RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL

OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

1865.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1865.)

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GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1865.

Introduction.

§ 1. *Buildings of the Magnetic Observatory.*

In consequence of a representation by the Astronomer Royal, and a memorial by the Board of Visitors of the Royal Observatory, addressed to the Lords Commissioners of the Admiralty, an additional space of ground on the south-east side of the former boundary of the Observatory grounds was inclosed from Greenwich Park for the site of a Magnetic Observatory, in the summer of 1837, and the Magnetic Observatory was erected in the spring of 1838. Its nearest angle in its present form is about 174 feet from the nearest point of the S.E. dome, and about 30 feet from the office of Clerk of Works. It is based on concrete and built of wood, united for the most part by pegs of bamboo; no iron was admitted in its construction, or in subsequent alterations. Its form, as originally built, was that of a cross with four equal arms, very nearly in the direction of the cardinal magnetic points as they were in 1838; the length within the walls, from the extremity of one arm of the cross to the extremity of the opposite arm, was 40 feet, the breadth of each arm 12 feet. In the spring of 1862, the northern arm was extended 8 feet. The height of the walls inside is 10 feet, and the ceiling of the room is about 2 feet higher. The northern arm of the cross is separated from the central square by a partition, so as to form an ante-room. The meridional magnet, for observations of absolute declination and of variations of declination (placed in its position in 1838), is mounted in the southern arm; and the theodolite by which the magnet collimator is viewed, and by which circumpolar stars for determination of the astronomical meridian are also observed (for which observation an opening is made in the roof, with proper shutters,) is in the southern arm, near the southern boundary of the central square. The bifilar magnet, for variations of horizontal magnetic force (erected at the end of 1840) was mounted near the northern wall of the eastern arm; and the balance-magnetometer, for variations of vertical magnetic force (erected in 1841) was mounted near the northern wall of the western arm. Important changes have lately been made in the positions of these instruments, as will be mentioned below. The sidereal time-clock is in the south arm, near the south-east re-entering angle. The fire-grate (constructed of copper, as far as possible,) is near the north end of the west side of the ante-room. Some of these fixtures may contain trifling quantities of iron, and, as the ante-room is used as a computing room

it is impossible to avoid the introduction of iron in small quantities; great care, however, is taken to avoid it as far as possible.

In 1864, a room, called the Magnetic Basement, was excavated below the whole of the Magnetic Observatory except the ante-room; the descent to it is by a staircase close to the south wall of the western arm of the building. For the theodolite, a brick pier was built from the ground below the floor of the basement, rising through the ceiling into the south arm of the upper room, and supporting the theodolite in exactly the same position as before.

Instead of a single meridional magnet performing the double functions of "magnet for determining absolute magnetic declination," and "magnet carrying a mirror for photographic register," there are now two meridional magnets, one in the upper room and one in the basement. The upper magnet is in a position about 10 inches north of the former position of the declination-magnet; it carries a collimator, for observation by the theodolite; but, in reversion of position of the collimator, the collimator is always either above or below the magnet, so that the magnet is always in the same vertical. The lower magnet, which is in the same vertical with the upper magnet, carries the mirror for the photographic register of the continual changes of declination. A massive brick pier is built in the south arm of the basement, covered by a stone slab; upon it is fixed the photographic lamp; from the stone slab rise three smaller piers, upon which crossed slates are placed; and from these rises a small pier through the ceiling, to the height of 18 inches above the upper floor, carrying the suspension of the lower magnet. Upon the tops of the three piers rest the feet of the original wooden stand carrying the suspension of the upper magnet.

The bifilar-magnetometer is in the basement, in a position vertically below its former position. A massive brick pier, surmounted by a thick slab of stone (upon which the photograph lamp is fixed) carries a pier consisting of a back and return-sides, which rises through the ceiling about 2 feet above the upper floor, and is crowned by a slate slab that carries the suspension of the bifilar-magnetometer.

The vertical-force magnetometer is in the basement, in a position vertically below its former position; it rests upon a brick pier, capped by a thick stone; to which also its photographic lamp is fixed.

To the theodolite-pier are fixed telescopes for eye-observation of the bifilar and vertical-force magnetometers.

At the south-east re-entering angle (which has been rebated for the purpose) is the horizontal photographic cylinder, which receives the traces of the movements of the declination-magnet and the bifilar-magnet. The angle is so far cut away that the straight line joining their suspensions passes a foot from the wall, and thus the cylinder receives the light from both instruments at right angles to its surface. The vertical cylinder which receives the traces of the movements of the vertical-force-magnet, and, of the self-registering barometer near it, is east of the vertical force pier.

In the south-west corner of the western arm, and partially beneath the staircase,

is the apparatus for self-registration of the spontaneous galvanic currents on the wires leading respectively to Croydon and to Dartford.

The mean-time-clock is on the west wall of the south arm of the basement.

Adjoining the north wall of the east arm is the table for photographic operations. As much water is used in these operations, a pump is provided in the grounds at a distance of about 30 feet from the nearest magnetometer, by which the water is withdrawn from the cistern at the east end of the photographic table and at once discharged into a covered drain.

The basement is warmed by a gas stove, and ventilated by a large copper tube nearly two feet in diameter, receiving the flues from the stove and all the lamps, and passing through the upper room to a revolving cowl above the roof. Each of the arms of the basement has a window facing the south, but in general they are closely stopped.

The variations in the temperature of the instruments have been greatly reduced by their location within this basement.

On the outside of the Magnetic Observatory, near the north-east corner of the ante-room, a pole 79 feet in height is fixed, for the support of the conducting wires to the electrometers; the electrometers, &c., are planted in the window-seat at the north-end of the ante-room.

The apparatus for naphthalizing the gas used in the photographic registration was formerly fixed in a corner of the ante-room, but is now (1865) mounted in a small detached zinc-built room, erected in 1863, near the west side of the ante-room.

A small wooden building, in the direction S.S.E. (magnetic) from the Magnetic Observatory, 64 feet from its nearest angle, and very near the southern boundary of the grounds, was used till 1863 for the observation of Magnetic Dip; and another small building, in the direction S. (magnetic) from the Magnetic Observatory, 50 feet from the western angle of the southern arm, was used till 1862 for the observation of Deflexions. In 1863, these buildings were removed, and a range of seven rooms, usually called the Magnetic Offices, was erected near the southern fence of the grounds. Since the summer of 1863, observations of Dip and Deflexion have been made in the westernmost of these rooms.

At the distance of 28 feet south (magnetic) from the south-east angle of the southern arm is a square shed about $10^{ft}\ 6^{in}$ square, supported by four posts at the height 8 feet, with an adjustable opening at the center of the top. Under this shed are placed the large dry-bulb and wet-bulb thermometers, with a photographic cylinder, axis vertical, between them; and external to these are the gas flames, whose light passing through the thermometer-tubes above the quicksilver makes photographic traces upon the paper which covers the cylinder.

For better understanding of these descriptions, the reader is referred to the Descriptions of Buildings and Grounds with accompanying Maps, attached to the Volumes of Astronomical Observations for the years 1845 and 1862.

§ 2. *Upper Declination-Magnet and Apparatus for observing it.*

The theodolite with which the meridional magnet is observed is by Simms: the radius of its horizontal circle is 8·3 inches: it is divided to 5′, and reads to 5″, by three verniers, carried by the revolving frame of the theodolite. The fixed frame stands upon three foot-screws, which rest in brass channels let into a stone pier, that stands upon the brick pier rising from the ground of the Magnetic Basement. The revolving frame carries the Y's (with vertical adjustment at one end) for a telescope with transit-axis: the length of the axis is $10\frac{1}{2}$ inches: the length of the telescope 21 inches: the aperture of the object glass 2 inches. The Y's are not carried immediately by the T head which crosses the vertical axis of the revolving frame, but by pieces supported by the ends of that T head, and projecting horizontally from it: the use of this construction is to allow the telescope to be pointed sufficiently high to see δ Ursæ Minoris above the pole. The eye-piece of the telescope carries only one fixed horizontal wire, and one vertical wire moved by a micrometer-screw. The opening in the roof of the building permits the observation of circumpolar stars, as high as δ Ursæ Minoris above the pole, and as low as β Cephei below the pole.

For supporting the magnet, a braced wooden tripod-stand is provided, whose mounting has been described above. Upon the cross-bars of the stand rests a double rectangular box (one box completely inclosed within another), both boxes being covered with gilt paper on their exterior and interior sides. On the southern side of the principal upright piece of the stand is a moveable upright bar, turning in the vertical E. and W. plane, upon a pin in its centre (which is fixed in the principal upright), and carrying at its top the pulleys for suspension of the magnet; this construction is adopted as convenient for giving an E. and W. movement (now very rarely required) to the point of suspension, by giving a motion to the lower end of the bar. The top of the upright piece carries a brass frame with two pulleys, whose axes are E. and W.: one of these pulleys projects beyond the north side of the principal upright, and from it depends the suspension skein: the other pulley projects on the south side: the suspension skein being brought from the magnet up to the north pulley is carried over it and over the south pulley, to a small windlass, carried by the lower part of the moveable upright. The height of the two pulleys above the floor is about 11 ft. $3\frac{3}{4}$ in., and the height of the magnet is about 2 ft. 10 in.; the length of the metal carrier which bears the magnet is 1 ft. 3 in.; so that the length of the free suspending skein is about 7 ft. $2\frac{3}{4}$ in.

The magnet was made by Meyerstein, of Göttingen: it is a bar 2 feet long, $1\frac{1}{2}$ inch broad, and about $\frac{1}{4}$ inch thick: it is of hard steel throughout. The magnet carrier was also made by Meyerstein, but it has since been altered by Simms. The magnet is inserted sideways and fixed by screws in a double square hook which constitutes the lower part of the magnet carrier. This lower part turns stiffly by a vertical axis with index in a graduated horizontal circle (usually called the torsion circle) attached to the upper part. The upper part of the magnet carrier is simply hooked into the skein.

The suspending skein was originally of silk fibre, in the state in which it is first

prepared by silk manufacturers for further operations; namely, when seven or more fibres from the cocoon are united by juxtaposition only (without twist) to form a single thread. The skein was strong enough to support perhaps three times the weight of the magnet, &c.

In the summer and autumn of 1864, an attempt was made to suspend the Magnet by a steel wire, capable of supporting the weight 15 lbs.; but the torsion force was found to be so large as greatly to diminish the value of the observations; and the skein was finally restored on 1865, January 20. A similar attempt was made for suspension of the lower magnet; the skein, however, was restored on January 30.

Upon the magnet there slide two brass frames, firmly fixed in their places by means of pinching-screws. One of these contains, between two plane glasses, a cross of delicate cobwebs; the other holds a lens of 13 inches focal length and nearly 2 inches aperture. This combination, therefore, serves as a collimator without a tube: the cross of cobwebs is seen very well with the theodolite-telescope, when the suspension-bar of the magnet is so adjusted as to place the object-glass of the collimator in front of the object-glass of the theodolite, their axes coinciding. The wires are illuminated by a lamp and lens in the night, and by a reflector in the day.

In the original mounting of this magnet the small vibrations were annihilated by a copper oval or "damper," thus constructed: A copper bar, about one inch square, is bent into a long oval form, intended to contain within itself the magnet (the plane of the oval curve being vertical). A lateral bend is made in the upper half of the oval, to avoid interference with the suspension-piece of the magnet. The effect of this damper is that, after every complete or double vibration of the magnet, the amplitude of the oscillation is reduced in the proportion of 5 : 2 nearly.

On mounting the photographic magnetometer in the basement, the damper was carried down to encircle it; and the upper magnet remained unchecked in its vibrations till 1866, January 23, when the lower part of the magnet-carrier was connected with a brass bar which vibrates in water.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE UPPER DECLINATION-MAGNET AND ITS THEODOLITE.

1. Determination of the inequality of the pivots of the theodolite-telescope.

1862, December 26. The theodolite was clamped, so that the transit axis was at right angles to the astronomical meridian. The illuminated end of the axis of the telescope was first placed to the East: the level was applied, and its scale was read; the level was then reversed, and its scale was again read; it was then again reversed, and again read, and so on successively six times. The illuminated end of the telescope was then placed to the West, and the level was applied and read as before. This process was repeated four times, and the result was that when the level indicates the axis to be horizontal, the axis at the illuminated end is really too low by $0''{\cdot}3$ nearly.

2. Value of one revolution of the micrometer-screw of the theodolite telescope.

1862, December 26. The magnet was made to rest on blocks of wood, and its

collimator was used as a fixed mark at an infinite distance. The micrometer was placed in different positions, and the telescope of the theodolite was then turned till the micrometer wire bisected the cross. The result of ten comparisons of theodolite-readings with large values and small values of the micrometer-reading was, that one revolution = 1′. 33″· 85. This agrees with the result of observations made in preceding years.

3. Determination of the micrometer-reading for the line of collimation of the theodolite-telescope.

1864, December 9. The vertical axis of the theodolite had been adjusted to verticality, and the transit axis was made horizontal. The declination-magnet was made to rest on blocks, and the cross-wires carried by it were used as a collimator for determining the line of collimation of the telescope of the theodolite. The telescope was reversed after each observation. The mean of 20 double observations was 100^{r}·110. This value was used to 1865, April 27, when the observations were repeated, giving the value 100^{r}·087, which is used to the end of the year.

4. Determination of the effect of the mean-time-clock on the declination-magnet.

The observations by which this has been determined are detailed in the volumes for 1840, 1841, 1844, and 1845. It appeared that it was necessary to add 9″·41 to every reading of the theodolite. The clock was removed to the basement in 1864, having now nearly the same relative position to the lower declination-magnet which formerly t had to the upper. No correction is now applied to the upper declination-magnet.

5. Determination of the compound effects of the vertical-force-magnet and the horizontal-force-magnet on the declination-magnet.

The details applying to the effect of the horizontal-force-magnet and first vertical-force-magnet will be found in the volumes for 1840, 1841, 1844, and 1845. It appeared that it was necessary to subtract 55″·22 from all readings of the theodolite. In 1848 a new vertical-force-magnet was introduced, and the subtractive quantity was then found to be 42″·2. A few experiments in 1865 seemed to show that the correction is now 36″·9. No numerical correction has been applied.

6. Determination of the error of collimation for the plane glass in front of the boxes of the declination-magnet.

1865, December 27. The magnet was made to rest entirely on blocks. The micrometer head of the telescope was to the East. The plane glass has the word "top" engraved on it, and, in ordinary use, this word is always kept east. The cross-wire carried by the collimator of the magnet was observed with the engraved word alternately east and west. The result of 20 double observations was, that in the ordinary position of the glass 18″·5 is to be added to all readings.

7. Determination of the error of collimation of the magnet-collimator, with reference to the magnetic axis of the magnet.

1865, February 17. Observations were made by placing the declination-magnet in its stirrup, with its collimator alternately above and below, and observing the col-

limator-wire by the theodolite-telescope; the windlass of the suspending skein being so moved that the collimator in each observation was in the line of the theodolite-telescope. Sixteen pairs of observations were taken. The mean half excess of reading with collimator above, (its usual position) above that with collimator below was 25′. 29″· 1. A repetition of the observations on April 27 gave 26′. 7″· 41. This value is used in the reductions.

8. Effect of the damper.

In the volume for 1841 observations are exhibited shewing that the oval copper bar, or damper, which then surrounded what is now the upper declination-magnet, had but little or no effect. Repeated observations, of less formal character, in succeeding years, have confirmed this result. The same bar has encircled the lower declination-magnet throughout the year 1865. The following observations were made in the year 1865, for ascertaining the effect of the damper on the lower declination-magnet under various circumstances.

On 1865, February 8 and 10, and March 2, the time of vibration of the magnet was observed :—

Mean of times with damper in usual position	23ˢ·888
Mean of times with damper reversed end for end	24ˢ·508
Mean of times when damper was removed	23ˢ·153

These seem to indicate a repulsion of the magnet by the damper, but the magnet came to rest so rapidly that the observations are very uncertain.

On several days from April 2 to May 12, observations were made for ascertaining the deflexion of the magnet produced by turning the damper through a small angle round a vertical axis, passing through its center.

DAMPER IN USUAL POSITION.

		′ ″
Damper turned through 2°	N. end towards E., increase of western declination	−1. 27
	N. end towards W., „ „ „	+1. 25
Damper turned through 4°	N. end towards E., „ „ „	−2. 16
	N. end towards W., „ „ „	+3. 11
Damper turned through 6°	N. end towards E., „ „ „	−3. 10
	N. end towards W., „ „ „	+2. 55
Damper turned through 8°	N. end towards E., „ „ „	−1. 22
	N. end towards W., „ „ „	+1. 45

DAMPER REVERSED END FOR END.

Damper turned through 2°	N. end towards E., increase of western declination	+0. 12
	N. end towards W., „ „ „	+0. 20
Damper turned through 4°	N. end towards E., „ „ „	0. 0
	N. end towards W., „ „ „	+0. 26
Damper turned through 6°	N. end towards E., „ „ „	+0. 5
	N. end towards W., „ „ „	+0. 5
Damper turned through 8°	N. end towards E., „ „ „	−0. 10
	N. end towards W., „ „ „	+0. 5

The first series shews clearly that the damper in its usual position drags the magnet; the second shews no certain effect. It seems that the damper possesses two kinds of

magnetism, one permanent, the other transiently induced, of nearly equal magnitude; their sum being about $\frac{1}{100}$ part of the terrestrial effect for the same deflexion.

From July 25 to August 9, observations were made to ascertain whether the effect of an external deflecting cause is the same with the damper present and the damper removed. The observation was extremely difficult, as the magnet was perpetually in vibration when the damper was removed. A small magnet on the east side of the N. end of the magnetometer, with its north end pointing towards the East (and therefore diminishing the western declination of the magnetometer), was moved to the distance (about five feet) at which it produced a deviation of 5′ nearly. The apparent western declination was observed, damper present, and damper removed. It appeared to be less with damper present than with damper removed, by 0′. 53″. The separate results are very discordant. If the conclusion has any validity, it tends to shew a repulsive power in the damper, opposite to that found in the preceding experiments. This experiment is regarded as inconclusive.

9. Calculation of the constant used in the reduction of the observations of the upper declination-magnet, the micrometer-head of the theodolite-telescope being East.

Micrometer equivalent for reading for line of collimation, 100r·087	−2°. 36′. 33″·2
Correction for the plane glass in front of the box, in its usual position.....	+ 18·5
The collimator above the magnet. Correction for error of collimation....	− 26. 7·4
Constant to be used in the reduction of the observations.....	−3. 2. 22·1

By inadvertence, the number −3°. 2′. 41″·9 has been used in the reductions.

10. Determination of the time of vibration of the upper declination-magnet under the action of terrestrial magnetism.

It is known, from constant observation, that the time of a single vibration is as nearly as possible 30s; but no observations are recorded which merit distinct reference.

11. Fraction expressing the proportion of the torsion-force to the earth's magnetic force.

By the same process which is described in the Magnetical Observations 1847, the proportion with the steel wire in use from 1864, June, to 1865, January 17, was found on January 17 to be $\frac{1}{8}$; and on January 18, with a new wire, $\frac{2}{21}$. With a silk skein, the proportion was found, on 1865, January 31, $\frac{1}{214}$; on February 17, $\frac{1}{227}$; on April 27, $\frac{1}{207}$; and on December 27, $\frac{1}{230}$.

DETERMINATION OF THE READINGS OF THE HORIZONTAL CIRCLE OF THE THEODOLITE CORRESPONDING TO THE ASTRONOMICAL MERIDIAN.

The error of the level is determined by application of the spirit-level at the time of observation: due regard being paid, in the reduction, to the inequality of pivots already found. One division of the level is considered = 1″·0526. The azimuth-reading is then corrected by this quantity;

Correction = Elevation of W. end of axis × tan star's altitude.

The readings of the azimuth circle increase as the instrument is turned from N. to E., S., and W.; from which it follows that the correction must have the same sign as the elevation of the W. end.

The correction for the azimuth of the star observed has been computed independently in every observation, by a peculiar method, of which the principle is fully explained in the volumes for 1840, 1841, 1843, 1844, 1845. The formula and table used are the following:—

Let $A_{''}$ = seconds of arc in star's azimuth,
C_s = seconds of time in star's hour-angle,
$a_{''}$ = seconds of arc in star's N.P.D. for the day of observation,

Then $\log. A_{''} = \log. C_s + \log. E + \log. (a_{''} + F) + \log. \cos \varphi.$

The values of log. E, F, and log. cos φ, are given in the following table:—

TABULATED VALUES of LOG. Cos ϕ, for DIFFERENT VALUES of C_s, and of the QUANTITIES LOG. E and F, for the STARS POLARIS and δ URSÆ MINORIS.

Hour Angle.	Log. Cos ϕ for			
	Polaris.	δ Ursæ Minoris.	Polaris S.P.	δ Ursæ Min. S.P.
m				
1	9·99999	9·99999	9·99999	9·99999
2	999	999	999	999
3	999	999	999	999
4	998	998	998	998
5	996	996	997	997
6	994	994	996	996
7	992	992	994	995
8	990	989	992	993
9	988	986	990	991
10	985	983	988	989
11	981	979	985	987
12	978	975	982	984
13	974	971	979	981
14	970	966	975	978
15	966	961	972	975
16	961	955	968	971
17	956	950	964	968
18	951	944	959	964
19	945	937	955	960
20	939	930	950	956
21	932	923	945	951
22	926	915	939	946
23	919	908	933	941
24	912	900	928	936
25	904	891	922	930
26	896	882	915	925
27	888	873	909	919
28	880	863	902	912
29	871	853	894	906
30	9·99862	9·99843	9·99887	9·99900
Log. E	6·09721	6·13638	−6·03899	−6·00617
F	−186″·79	−944″·71	+181″·57	+886″·86

Observations for determining the readings for the astronomical meridian were made on the following days in 1865:—January 4, February 9, 17, 20, March 16, 22, April 8, 21, May 5, 22, July 2, 19, August 11, 26, September 2, October 5, November 5, 10, 24, December 14, 30. As a check on the continued steadiness of the theodolite, observations of a fixed mark (a small hole in a plate of metal above the Observatory Library, illuminated by a reflector of sky-light in the day and by a lamp at night,) have been taken about thirty times at nearly equal intervals through the year.

The following is a description of the method of making and reducing the eye-observations of the declination-magnet:—

A fine horizontal wire (as stated above) is fixed in the field of view of the theodolite-telescope, and another fine vertical wire is fixed to a wire-plate, moved right and left by a micrometer screw. On looking into the telescope, the cross of the magnetometer is seen; and during the vibration of the magnet, this cross is seen to pass alternately right and left. The observation is made by turning the micrometer till its wire bisects the image of the magnet-cross at the pre-arranged times, and reading the micrometer. The verniers of the horizontal circle are read.

The mean-time clock is kept very nearly to Greenwich mean time (its error being ascertained each day), and the clock-time for each determination is arranged beforehand.

If the magnet is in a state of disturbance, the first observation is made by the observer applying his eye to the telescope about one minute before the pre-arranged time; he bisects the magnet-cross by the micrometer wire at 45^s, and again at 15^s before that time, also at 15^s and 45^s after that time. The intervals of these four observations are therefore the same as the time of vibration of the magnet, and the mean of all the times is the same as the Greenwich pre-arranged mean time.

The mean of each pair of adjacent readings of the micrometer is taken (giving three means), and the mean of these three is adopted as the result. In practice, this is done by adding the first and fourth readings to the double of the second and third, and dividing the sum by 6.

Through the year 1865, in which the upper magnet was unprovided with a damper, the magnet was usually in a state of vibration; but since the introduction of the water damper, on 1866, January 23, the number of instances of vibration has been very small. When it is found to be quite free from vibration, two bisections only of the cross are made, one about 15^s before the time recorded, the other about 15^s after that time, 30^s being nearly the time of a single vibration. (The lower magnet, furnished with the copper damper, never exhibits any troublesome vibrations.)

The adopted result is converted into arc, supposing $1^r = 1'.\ 33''{\cdot}85$, and the quantity thus deduced is added to the mean of the vernier-readings, from which is subtracted the constant given in article 9 of the permanent adjustments; the difference between this number and the adopted reading for the Astronomical South Meridian is taken;

and thus is deduced the magnetic declination, which is used in determining the zero for the photographic register.

§ 3. *Lower Declination-Magnet; and Photographic self-registering Apparatus for Continuous Record of Magnetic Declination.*

The lower declination magnet is made by Simms. It is 2 feet long, $1\frac{1}{2}$ inch broad, $\frac{1}{4}$ inch thick, of hard steel throughout, much harder than the upper declination magnet.

The magnet-frame consists of an upper piece, whose top is a hook, (to be hooked into the suspension-skein), and which carries a concave mirror 5 inches in diameter, used for the photographic record in the manner to be hereafter mentioned. The lower part of this upper piece turns in a graduated horizontal circle, similar to the torsion circle of the upper magnet, and attached to the lower piece or magnet-carrier proper. The lowest part of the carrier is a double square hook, in which the magnet is inserted and is kept in position by the pressure of three screws.

It has been mentioned in § 1 that a small pier built upon one of the crossed slates which are laid upon three piers rising from below, carries the suspension-pullies. The suspension-skein rises to one of these pullies, passes horizontally over a second pulley about 5 inches south of it, and then descends obliquely to a windlass which is fixed to the stone slab about 2 ft. 3 in. south of the center of the magnet.

The height of the pulley above the floor of the Basement is 10 ft. $4\frac{3}{4}$ in. As the height of the magnet above the floor is 2 ft. $10\frac{1}{2}$ in., and the length of the magnet frame is 1ft. 3 in., there remains 6 ft. $3\frac{1}{4}$ in. of free suspending skein.

The general principle adopted for all the photographic instruments is the same. The photographic paper is wrapped round a glass cylinder, and the axis of the cylinder is made parallel to the direction of the movement which is to be registered. The cylinder is turned by clock-work, with uniform velocity. The spot of light (for the magnets, the earth currents, and the barometer) or the boundary of the line of light (for the thermometers) moves, with the movements which are to be registered, in the direction of the axis of the cylinder, while the cylinder itself is turned round. Consequently, when the paper is unwrapped from its cylindrical form, there is traced upon it (though not visible till the proper chemical agents have been applied) a curve, of which the abscissa measured in the direction of a line surrounding the cylinder is proportional to the time, while the ordinate measured in the direction parallel to the axis of the cylinder is proportional to the movement which is the subject of measure.

In the instruments for registering the motions of the magnets and barometer, a line of abscissæ is actually traced on the paper, by a lamp giving a spot of light in an invariable position, the effect of which on the revolving paper is to trace a line surrounding the cylinder. For the thermometers this is not necessary, as the thermometer-scales are made to carry and to transfer to the photographic paper sufficient indications of the actual reading of the thermometers.

Every part of the cylinder-apparatus except those on which the spots of light fall

is covered with a double case of blackened zinc, having a slit for each moveable spot of light and a hole for the invariable spot; and every part of the path of the photographic light is protected by blackened zinc tubes from the admixture of extraneous light.

In all the instruments, the following method is used for attaching, to the sheet of photographic paper, indications of the time when certain parts of the photographic trace were actually made, and for giving the means of laying down a time-scale applicable to every part of the trace. By means of a small moveable plate, arranged expressly for this purpose, the light which makes the trace can at any moment be completely cut off. An assistant, therefore, occasionally cuts off the light (registering in the proper book the clock-time of doing so), and after a few minutes withdraws the plate (again registering the time). The effect of this is to make a visible interruption in the trace, corresponding to registered times. By drawing lines from these points of interruption parallel to the axis of the cylinder, to meet the photographic line of abscissæ, or an adopted line of abscissæ parallel to it, points are defined upon the line of abscissæ corresponding to registered times. The whole length of the photographic sheet (except where one end, in the cylindrical arrangement, laps over the other) corresponds to the known time of revolution of the cylinder. A scale being prepared beforehand, whose value for the time of revolution corresponds to the circumference of the cylinder, and the scale-reading for the registered time of interruption of light being applied to the foot of the ordinate corresponding to that interruption, the divisions of hours and minutes may be transferred at once from the scale to the line of abscissæ. In practice it is found that the length of the paper is not always the same, and it is necessary, therefore, to use a scale (a separate one for each separate instrument) which will admit of small expansion and contraction, preserving the proportion of its different parts unaltered. A scale of vulcanized caoutchouc, mounted on a small frame in which one end of the scale is fixed while the other is drawn by a screw, is found to answer extremely well.

One of the revolving cylinders is used for the photographic record of the Declination Magnet and the Horizontal Force Magnet. In the preparation of the basement in 1864, as has been stated, the south-eastern re-entering angle was cut away, so that the straight line from the suspending skein of the declination-magnet to the center of the bifilar magnet passes through a clear space, in which the registering apparatus is placed. The first thing to be described is the arrangement of glass cylinders. One glass cylinder with a hemispherical extremity (in all respects similar to those used as shades or protectors of small clocks, works of art, &c.), $11\frac{1}{2}$ inches long in its cylindrical part, and $14\frac{1}{2}$ inches in circumference, is covered internally with a black pigment, and is stopped at the open end by insertion in a metallic cap, in the center of which is a short spindle and winch-arm. Round this cylinder the photographic paper is wrapped, and the moisture on the photographic paper agglutinates its overlapping ends with sufficient firmness. The cylinder and mounted paper are then covered by another glass cylinder with hemispherical end, whose open end is fixed, by friction, on the rim of the metallic cap to which the inner cylinder is attached, a collar

of tape being inserted between. In this state the cylinders are placed in their working-mounting; the short spindle in the cap, and the large cylinder near its hemispherical end, rest upon friction-rollers, the axis of the cylinder being horizontal. The winch-arm is lodged in a fork at the end of the hour-hand of a timepiece, which is made for the purpose, not exceeding in size an ordinary box-chronometer, but with very strong wheels and powerful spring, and with duplex escapement. In order to avoid the ordinary shake of the hour-hand of a clock, due to the play of the motion-wheels under the dial, the hour-hand is placed upon the central axis, and the second wheel, which is usually placed in the center and carries the minute hand, is placed on one side. The cylinder was originally made to turn in twelve hours; but, as this construction sometimes required a change of the photographic sheet every twelve hours, the wheels of the time-piece were changed, to make the cylinder turn in twenty-four hours.

The light, by which the trace of the declination-magnet is made, originates in a lamp (formerly of camphine, but, since 1849, of coal-gas charged with the vapour of coal-naphtha) placed slightly out of the direction of a straight line drawn from the suspension-skein of the magnet to the center of the photographic sheet. Before the flame of the lamp is placed a small aperture, about $0^{in.}{\cdot}3$ high and $0^{in.}{\cdot}01$ broad, independent of the lamp, and supported by a part of the stone capping of the brick pier which carries the magnet. The light from the aperture falls upon a concave mirror of speculum-metal, 5 inches in diameter, and about 25·3 inches from the aperture. This concave mirror is above the top of the magnet box; it is carried by a part of the magnet-carrier, which, although it has a small movement of adjustment relative to the magnet-carrier, is in practice very firmly clamped to it, so that the mirror receives all the angular movements of the magnet. By the concave mirror, the light diverging from the aperture is made to converge to a place nearly on the surface of the cylinder of photographic paper whose distance from the mirror is about $11^{ft.}\ 0^{in.}{\cdot}1$. The form of the aperture, however, and the astigmatism caused by the inclined reflexion from the mirror, produce this effect, that the image is somewhat elongated in the vertical direction, and is at the same time slightly curved. To diminish the length there is placed near the cylinder a plano-convex cylindrical lens of glass, with its axis horizontal, and the image is thus reduced to a neat spot of light.

The spot of light from the concave mirror of the declination-magnet is received on the south side of the cylinder, near its west end.

Near the east end of the cylinder is placed a gas lamp, shining by reflexion through a small fixed aperture above the cylinder, from which the light falls upon a small cylindrical lens, by which a very delicate and well-defined photographic trace is marked upon the paper, in a fixed position, intermediate between the photographic curves of the declination and horizontal force magnets. This is the photographic base-line, or line of abscissæ, to which allusion has been made above.

For the declination-magnet, the values, in minutes and seconds of arc, of movements of the photographic spot in the direction of the ordinate, are thus deduced from a geometrical calculation founded on the measures of different parts of the apparatus.

The distance of the cylinder from the concave mirror is about $11^{ft.}\ 0^{in.}\cdot 1$, and a move ment of 1° of the mirror produces a movement of 2° in the reflected ray. From this it is found that 1° of movement of the mirror is represented by 4·611 inches upon the photographic paper. A small scale of pasteboard is prepared, whose graduations correspond in value to minutes and seconds so calculated. The zero of the ordinate-scale is found in the following manner. The time-scale having been laid down as is already described, and actual observations of the position of the magnet having been made with the eye and the telescope, (as has been fully described above), at certain registered times, there is no difficulty (by means of these registered times) in defining the points of the photographic trace which correspond to the observed positions. The pasteboard scale being applied as an ordinate to one of these points, and being slid up and down till the scale reading which represents the reading actually taken by the eye-observation falls on that point, the reading of the scale where it crosses the line of abscissæ is immediately found. The various readings given by different observations, so long as there is no instrumental change, will scarcely differ, and may be combined in groups, and thus an adopted reading for the line of abscissæ may be obtained. From this, with the assistance of the same pasteboard scale, there will be laid down without difficulty a new line, parallel to that line of abscissæ, whose ordinate would represent some whole number of degrees, or other convenient quantity.

§ 4. *Horizontal-Force-Magnet and Apparatus for observing it.*

The horizontal-force-magnet, furnished by Meyerstein of Göttingen, is, like the declination-magnet, 2 feet long, $1\frac{1}{2}$ inch broad, and about $\frac{1}{4}$ inch thick. For its support (as is mentioned above), a brick pier in the eastern arm of the Magnetic Observatory, built on the ground below the basement floor, rises through the floor of the upper room, and carries a slate slab, to the top of which a brass frame is attached, carrying two brass pulleys (with their axes in the same east and west line) in front of the pier, and two (in a similar position) at the back of the pier; these constitute the upper suspension-piece. A small windlass is attached to the back of the pier at a convenient height. The magnet-carrier consists of two parts; the upper part is a vertical plate, having a pair of small pulleys attached to it, (whose axes are perpendicular to the plate); carrying, below those two pulleys, the photographic concave mirror; and connected below with the torsion-circle; the lower part is the magnet-stirrup, turning by stiff friction in the torsion-circle, and bearing a pointer above for reading its graduations, and bearing also a small plane mirror below, to which a fixed telescope is directed for observing by reflexion the graduations of a fixed scale (to be mentioned shortly). Under the two small pulleys of the vertical plate passes a skein of silk; its two branches rise up and pass over the front pulleys of the suspension-piece, then over its back pulleys, and then descend and pass under a single large pulley, whose axis is attached to a string that passes down to the windlass. (A steel wire, capable of supporting about $7\frac{1}{2}$ lbs., was used instead of the skein in the latter half of the year 1864; but its torsion-force was found to be so great that it was dismounted, and the skein restored as formerly, on 1865 February 3.) Supported

by the two branches of the skein, the magnet swings freely, but the direction that it takes will depend on the angular position of its stirrup with respect to the vertical plate; it is intended that the index should be brought to such a position on the torsion-circle that the two suspending branches should not hang in one plane, but should be so twisted that their torsion-force will maintain the magnet in a direction very nearly E. and W. magnetic (its marked end being W.); in which state an increase of the earth's magnetic force draws the marked end towards the N., till the torsion-force is sufficiently increased to resist it; or a diminution allows the torsion-force to draw it towards the S. The vertical plane is continued downwards, carrying, above the magnet box, the concave mirror four inches in diameter, by which the light diverging from a small hole in front of a gaslamp, at the distance $21^{in.}\cdot25$, is made to converge nearly on the surface of the photographic cylinder, at the distance $11^{ft.}\,2^{in.}\cdot4$. The spot of light is received on the north side of the cylinder, near its east end. Below the concave mirror is the torsion-circle, at which the magnet-carrier is attached, with power of rotation, to the vertical plane. The magnet, with its plane mirror, hangs within a double rectangular box (one box completely inclosed within another) covered with gilt paper, similar to that used for the declination-magnet; in its S. side there is one long hole, covered with glass, through which the rays of light from the scale enter to fall on the plane mirror, and the rays reflected by the mirror pass to the fixed telescope. The vertical rod (below the pointer for indications of torsion-circle), which carries the magnet-stirrup, passes through a hole in the top of the box. The height of the brass pulleys of the suspension-piece above the floor is $11^{ft.}\,8^{in.}\,5$; that of the pulleys of the magnet-carrier is $4^{ft.}\,2^{in.}\,5$; and that of the center of the plane mirror is about $3^{ft.}\,1^{in.}$. The distance between the branches of the silk skein, where they pass over the upper pulleys, is $1^{in.}\cdot14$; at the lower part the distance between them is $0^{in.}\cdot80$.

An oval copper bar (exactly similar to that for the declination-magnet), embraces the magnet for the purpose of diminishing its vibrations.

The scale, which is observed by means of the plane mirror, is in a horizontal position, and is fixed to the South wall of the East arm of the magnetic basement. The numbers of the scale increase from East to West, so that when the magnet is inserted in the magnet-cell with its marked end towards the West, increasing readings of the scale (as seen with a fixed telescope directed to the mirror which the magnet carries) denote an increasing horizontal force. A normal from the plane-mirror to the scale meets it at the division 51 nearly; the distance from the center of the plane-mirror to the scale is $7^{ft.}\,6^{in.}\cdot8$.

The telescope is fixed on the east side of the brick pier which supports the stone pier of the declination-theodolite in the upper observing room. The angle between the normal to the scale (which usually coincides nearly with the normal to the axis of the magnet) and the axis of the telescope, is about 38^{c}, and the plane of the mirror is therefore inclined to the axis of the magnet about 19°.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE HORIZONTAL-FORCE-MAGNET.

1. Determination of the times of vibration and of the different readings of the scale for different readings of the torsion-circle, and of the reading of the torsion-circle and the time of vibration when the magnet is transverse to the magnetic meridian.

To render the process intelligible, it may be convenient to premise the following explanation.

Suppose that the magnet is suspended in its stirrup which is firmly connected with the small plane mirror, with its marked end in a magnetic westerly direction (not exactly W., but in any westerly direction between N. and S.), and suppose that, by means of the telescope directed towards that mirror, the scale is read, or (which is the same thing) the position of the plane mirror and of the stirrup, and therefore that of the axis of the magnet, are defined. Now let the magnet be taken out of the stirrup and replaced with its marked end easterly. The terrestrial magnetic power will now act, as regards torsion, in the direction opposite to that in which it acted before, and therefore the magnet will not take the same position as before. But by turning the torsion-circle, which changes the amount and direction of the torsion-power produced by the oblique tension of the suspending cords, the magnet may be made to take the same position as before (which will be proved by the reading of the scale, as viewed in the plane mirror, being the same as before). The reading of the torsion-circle will be different from what it was before. The effect of this operation then is, to give us the difference of torsion-circle-readings for the same position of the magnet-axis with the marked end opposite ways, but it gives no information as to whether the magnet-axis is transverse to the meridian, inasmuch as the same operation can be performed whether the magnet-axis is transverse or not.

But there is another observation which will inform us whether the magnet-axis is or is not transverse. Let the time of vibration be taken in each position of the magnet. Resolve the terrestrial magnetic force acting on the poles of the magnet into two parts, one transverse to the magnet, the other longitudinal. In the two positions of the magnet (marked end westerly and marked end easterly, with axis in the same position), the magnitude of the transversal force is the same, and the changes which the torsion undergoes in a vibration of given extent are the same, and the time of vibration (if there were no other force) would be the same. But there is another force, namely the longitudinal force; and when the marked end is northerly, this tends from the center of the magnet's length, and when it is southerly it tends towards the center of the magnet's length; and in a vibration of given extent this produces force, in one case increasing that from the torsion and in the other case diminishing it. The times of vibration therefore will be different. There is only one exception to this, which is when the magnet-axis is transverse to the magnetic meridian, in which case the longitudinal force vanishes.

The criterion then of the position truly transverse to the meridian (which position is

necessary in order that the indications of our instrument may apply truly to changes of the magnitude of terrestrial magnetic force without regard to changes of direction) is this. Find the readings of the torsion-circle which, with magnet in reversed positions, will give the same readings of the scale as viewed by reflexion in the plane mirror, and will also give the same time of vibration for the magnet. With these readings of the torsion-circle the magnet is transverse to the meridian; and the difference of the readings of the torsion-circle is the difference, between the position when terrestrial magnetism acting on the magnet twists it one way, and the position when the same force twists it the opposite way, and is therefore double the angle due to the torsion-force of the suspending lines when they neutralize the force of terrestrial magnetism.

The following table exhibits the elements of one of the determinations made in 1865:—

1865. Day.	The Marked end of the Magnet.							
	West.				East.			
	Torsion-Circle Reading.	Scale Reading.	Difference of Scale Readings for 1° of Torsion.	Mean of the Times of Vibration.	Torsion-Circle Reading.	Scale Reading.	Difference of Scale Readings for 1° of Torsion.	Mean of the Times of Vibration.
	°	div.	div.	s	°	div.	div.	s
February 7	141	17·00		21·42	223	20·51		20·00
	142	26 02	9·02	21·32	224	28·09	7·58	20·20
	143	34·72	8·70	20·96	225	35·91	7·82	20·36
	144	43·25	8·53	20·80	226	43·46	7·55	20·52
	145	52·09	8·84	20·68	227	51·86	8·40	20·66
	146	60·15	8·06	20·54	228	59·93	8·07	20·80
	147	68·73	8·58	20·42	229	68·39	8·46	20·86
	148	76·12	7·39	20·30	230	76·66	8·27	20·96
	149	84·10	7·98	20·14	231	85·26	8·60	21·18

The times of vibration and scale readings were sensibly the same, when the torsion-circle read 145°., marked end West, and 227°. 2′, marked end East, differing 82°. 2′. Half this difference, or 41°. 1′, is the angle of torsion when the magnet is transverse to the meridian.

The mean of several determinations gave 40°. 58′., and this value was adopted for the year 1865. The reading adopted for the torsion-circle, marked end of the magnet West, was 145° for the year.

2. Computation of the angle corresponding to one division of the scale, and of the variation of the horizontal force (in terms of the whole horizontal force) which moves the magnet through a space corresponding to one division of the scale.

It was found by accurate measurements, on 1864, November 3, that the distance from $51^{div.}$ on the scale to the center of the face of the plane mirror is $7^{ft.}\ 6^{in.}\cdot 84$, and that the length of $30^{div.}\cdot 85$ of the scale is exactly 12 inches; consequently the angle at the mirror subtended by one division of the scale is 14′. 43″·25, or, for one division of the scale, the magnet is turned through an arc of 7′. 21″·625.

The adopted angle of torsion as mentioned above is 40°. 58′; consequently the variation of horizontal force (in terms of the whole horizontal force) for a disturbance through one division of the scale, computed by the formula, "Cotan. angle of torsion × value of one division in terms of radius," is 0·002466. This number has been used in the year 1865, from February to the end of the year.

3. Determination of the compound effect of the vertical-force-magnet and the declination-magnet on the horizontal-force-magnet, when suspended with its marked end towards the West.

The details of the experiments, made while the old vertical-force-magnet was in use, will be found in the volumes for 1841, 1842, 1843, 1844, 1845. The effect was to increase the readings by $0^{div.}\cdot 487$. On mounting a new vertical-force-magnet in 1848, similar experiments were made, and the resulting number was $0^{div.}\cdot 45$. These quantities are totally unimportant in their influence on the registers of changes of horizontal force. No experiments have been made since the magnets were placed in the basement.

4. Effect of the damper.

From May 17 to May 25, observations were made for ascertaining the deflection of the magnet produced by turning the damper through a small angle round a vertical axis passing through its center.

DAMPER IN USUAL POSITION.

			div.
Damper turned through 2°	W. end towards S., increase of scale-reading	.....	−0·251
	W. end towards N., „ „	.....	+0·050
Damper turned through 4°	W. end towards S., „ „	.....	−0·34
	W. end towards N., „ „	.....	+0·16

DAMPER REVERSED END FOR END.

Damper turned through 2°	W. end towards S., increase of scale-reading	.....	−0·15
	W. end towards N., „ „	.....	−0·02
Damper turned through 4°	W. end towards S., „ „	.....	−0·12
	W. end towards N., „ „	.....	+0·08

On July 25, observations were made to ascertain whether the effect of an external deflecting cause is the same with the damper present and the damper removed. A small magnet was placed with its marked end pointing N. at the distance 4 feet S. of the unmarked end of the horizontal-force-magnet, deflecting the magnet through $1^{div.}$ of the scale, and the scale-readings were observed with the damper in its usual place and the damper away. Three experiments were made, containing twenty-four observations of position. Not the smallest difference of position of the horizontal-force-magnet was produced by the presence or absence of the damper. The observations were very easy, and the result is certain.

5. Determination of the correction for the effect of temperature on the horizontal force magnet.

In the Introduction to the volume of Magnetical and Meteorological Observations

for 1847 will be found a detailed account of observations made in the years 1846 and 1847 for determination of this element. The principle adopted was that of observing the deflection which the magnet (to be tried) produces on another magnet; the magnet (to be tried) being carried by the same frame which carries the telescope that is directed to the plane mirror attached to the other magnet, and which also carries the scale that is viewed in these experiments by reflection in that plane mirror. The rotation of the frame was measured by a graduated circle about 23 inches in diameter. The magnet (to be tried) was always on the eastern side of the other magnet. It was enclosed in a copper trough, which was filled with water at different temperatures. One end of the magnet (to be tried) was directed towards the other magnet. The values found for correction of the results as to horizontal force determined with the magnet at temperature $t°$ in order to reduce them to what they would have been if the temperature of the magnet had been 32°, expressed as multiples of the whole horizontal force, were,*

When the marked end of the magnet (to be tried) was West,

$$0{\cdot}00007137\ (t-32) + 0{\cdot}000000898\ (t-32)^2.$$

When the marked end of the magnet (to be tried) was East,

$$0{\cdot}00009050\ (t-32) + 0{\cdot}000000626\ (t-32)^2.$$

The mean, or

$$0{\cdot}00008093\ (t-32) + 0{\cdot}000000762\ (t-32)^2$$

has been embodied in tables which have been used in the computation of the "Reduction of Magnetic Observations 1848–1857," attached to the Volume of Observations 1859, and in the computation for "Days of Great Magnetic Disturbance 1841–1857," attached to the volume for 1862. The same formula is employed in the Reduction of Magnetic Observations 1858–1863, now in progress.

In the year 1864 observations were made for ascertaining the temperature-co-efficient by heating the magnet by hot air. The deflecting magnet was placed in a copper box planted upon the top of a copper gas-stove, whose heat could be regulated by manipulation of a tap, and from which rose a stream of heated air (not the air vitiated by combustion) through a large opening in the bottom of the box. With this apparatus, the force that acted upon a deflected magnet was measured by the tangent of the angle of deflection. The apparent effect of the temperature was so great (five or six times that found by use of water) that I imagine that some untraced cause of error existed in the operation, and I therefore abstain from publishing it.

The method of observing with the horizontal-force magnet is the following:—

A fine vertical wire is fixed in the field of view of the telescope, which is directed to the plane mirror carried by the magnet. On looking into the telescope, the graduations

* By inadvertence in printing the Introduction 1847, the letter t has been used in two different senses.

of the fixed scale, mentioned in page xvii, are seen; and during the oscillations of the magnet, the divisions of the scale are seen to pass alternately right and left across the wire. The clock-time, for which the position of the magnet is to be determined, is the same as that for the observation of declination. The first observation is made by the observer applying his eye to the telescope 40^s before that time, and, if the magnet is in a state of vibration, he observes the next four extreme points of vibration of the scale, and the mean of these is adopted in the same manner as for the declination-observations; but if it is at rest, then at 10^s before the pre-arranged time, he notes the division of the scale bisected by the wire; and 20^s afterwards he notes whether the same division continues bisected, and if it does, that reading is adopted as the result.

The number of instances when the magnet was observed in a state of vibration during the year 1865 is very small.

Within the double box is suspended a thermometer, which is read at every hour of observation. On two days also of every week, beginning with March 27, the readings of the thermometer were taken at 21^h, 22^h, 23^h, 0^h, 1^h, 2^h, 3^h, and 9^h. Commencing with the month of June 1863, self-registering maximum and minimum thermometers were placed outside the box, and were read twice every day. All these readings are printed in the tables, with this exception only, that, when there are two maxima and two minima, the absolute maximum and absolute minimum only are printed.

§ 5. *Photographic self-registering Apparatus for Continuous Record of Magnetic Horizontal Force.*

Much of the description of the photographic apparatus attached to the declination-magnet applies also to that which is attached to the horizontal-force-magnet. A concave mirror of speculum-metal, 4 inches in diameter, is carried by the magnet-carrier. The light of a lamp of naphthalized gas shines through a small aperture $0^{in.}{\cdot}3$ high, and $0^{in.}{\cdot}01$ broad (which is supported by the solid base of the brick pier carrying the magnet-support), at the distance of about 21·25 inches from the concave mirror, and is made to converge to a point, on the north surface and near the east end of the same revolving cylinder which receives the light from the concave mirror of the declination-magnet. A cylindrical lens parallel to the axis of the cylinder receives the somewhat elongated image of the source of light, and converts it into a well-defined spot. The motions of this spot parallel to the axis represent the angular movements of the magnet which are produced by an increase of terrestrial magnetic force overcoming more completely the torsion-force of the bifilar suspension, or by a diminution of terrestrial force yielding to the torsion-force.

As the spot of light from the horizontal-force-mirror falls on the side of the cylinder opposite to that on which the light from the declination-mirror falls, the same time-scale will not apply to both; it is necessary to prepare a time-scale independently for each.

The following is the calculation by which the scale of horizontal force on the photographic sheet is determined. The distance between the surface of the concave mirror and the surface of the cylinder is 134·436 inches; consequently, one degree of angular motion of the magnet, producing two degrees of angular motion of the reflected ray, moves the spot of light through 4·6927 inches. Now the variation of horizontal force (in terms of the whole horizontal force) corresponding to one degree of angular motion of the magnet = sin 1° × cotan 40°. 58′. = 0·020102 nearly. From these numbers it is immediately found that a movement of the spot of light through 2·3345 inches corresponds to a variation of horizontal force expressed by 0·01. With this fundamental number, the graduations of the pasteboard scale for measure of horizontal force have been prepared.

§ 6. *Vertical-Force-Magnet, and Apparatus for observing it.*

The vertical-force-magnet in use to 1848 was made by Robinson; that in use from 1848 to 1864, January 20, was probably by Barrow. The magnet now in use is by Simms. Its length is $1^{ft.}\ 6^{in.}$; it is pointed at the ends. After some trials, it was re-magnetized by Mr. Simms on 1864, June 15. Between 1864, August 27, and September 27, a new knife-edge was attached to it, to remedy a defect which, as was afterwards found, arose from a cause that had no relation to the knife-edge. Its supporting frame rests upon a solid pier, built of brick and capped with a thick block of Portland stone, in the western arm of the magnetic basement. Its position is as nearly as possible symmetrical with that of the horizontal-force-magnet in the eastern arm. Upon the stone block is fixed the supporting frame, consisting of two pillars (connected at their bases) on whose tops are the agate planes upon which vibrate the extreme parts of the knife-edge (to be mentioned immediately). The carrier of the magnet is an iron frame, to which is attached, by clamps and pinching screws, a steel knife-edge, about 8 inches long. The steel knife-edge passes through an aperture in the magnet. The axis of the magnet is as nearly as possible transverse to the meridian, its marked end being E. The axis of vibration is as nearly as possible N. and S. To the southern end of the iron frame, and projecting further south than the end of the knife-edge, is fixed a small plane mirror, whose plane makes with the axis of the magnet an angle of $52\frac{3}{4}°$ nearly. The fixed telescope (to be mentioned) is directed to this mirror, and by reflexion at the surface of the mirror it views a vertical scale (to be mentioned shortly). The height of this mirror above the floor is about $2^{ft.}\cdot 10^{in.}\cdot 6$. Before the introduction of the photographic methods, the magnet was placed in a perforation of a brass frame midway between its knife-edges. But since the photographic method was introduced, the magnet has been placed excentrically; the distance of its southern face from the nearest end of the southern knife-edge, being nearly 2 inches, and a space of $4\frac{1}{2}$ inches in the northern part of the iron frame being left disposable. In this disposable space there is attached to the iron frame by

three clips a concave mirror of speculum-metal, 4 inches in diameter, with its face at right angles to the length of the magnet; it is used in the photographic system (shortly to be described). Near the north end of the iron frame are fixed in it two screw-stalks, upon which are adjustible screw-weights; one stalk is horizontal, and the movement of its weight affects the position of equilibrium of the magnet (which depends on the equilibrium between the moments of the vertical force of terrestrial magnetism on the one hand and of the magnet's center of gravity on the other hand); the other stalk is vertical, and the movement of its weight affects the delicacy of the balance, and varies the magnitude of its change of position produced by a change in the vertical force of terrestrial magnetism.

The whole is inclosed in a double rectangular box, similar to those used for the declination-magnet and the horizontal-force-magnet. This box is based upon the stone block above mentioned; and in it, in a space separated from the rest by a thin partition, the magnet can vibrate freely in the vertical plane. In the south side of the box is a hole covered by glass, through which pass the rays of light from the scale to the plane mirror, and through which they are reflected from the plane mirror to the telescope. And at the east end is a large hole covered by glass, through which passes the light from the lamp to the concave mirror, and through which it is reflected to the photographic cylinder (to be described hereafter).

The telescope is fixed to the west side of the brick pier which supports the stone pier in the upper room carrying the declination-theodolite. Its position is symmetrical with that of the telescope by which the horizontal-force-magnet is observed; so that a person seated in a convenient position can, by an easy motion of the head left and right, observe the vertical-force and horizontal-force-magnets.

The scale is vertical: it is fixed to the pier which carries the telescope, and is at a very small distance from the object-glass of the telescope. The wire in the field of view of the telescope is horizontal. The telescope being directed towards the mirror, the observer sees in it the divisions of the scale passing upwards and downwards over the fixed wire as the magnet vibrates. The numbers of the scale increase from top to bottom; so that, when the magnet is placed with its marked end towards the East, increasing readings (as seen with the fixed telescope) denote an increasing vertical force.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE VERTICAL-FORCE-MAGNET.

1. Determination of the compound effect of the declination-magnet, the horizontal-force-magnet, and the iron affixed to the electrometer pole, on the vertical-force-magnet.

The experiments applying to the magnets are given in the volumes for 1840–1841 to 1845: and those applying to the electrometer pole in the volume for 1842. It

appeared that no sensible disturbance was produced on the magnet formerly in use. No experiments have been made with the new magnet.

2. Determination of the time of vibration of the vertical-force-magnet in the vertical plane.

In the year 1865, vibrations of the vertical-force-magnet were observed on 144 different days, and with readings of various divisions of the scale. The mean times of vibration adopted were, from 1864, October 19, to 1865, January 1, $12^{s}\cdot67$; January 2 to January 31, $15^{s}\cdot00$; February 1 to February 12, $14^{s}\cdot69$; February 13 to February 27, $14^{s}\cdot47$; February 28, $14^{s}\cdot69$; March 1 to October 16, $13^{s}\cdot12$; October 17 to December 31, $12^{s}\cdot88$.

3. Determination of the time of vibration of the vertical-force-magnet in the horizontal plane.

1864, October 10. The magnet with all its apparatus was suspended from a tripod in the Record Room, its broad side being in a plane parallel to the horizon; therefore, its moment of inertia was the same as when it is in observation. A telescope, with a wire in its focus, was directed to the reflector carried by the magnet. A scale of numbers was placed on the floor of the Record Room, at right angles to the long axis of the magnet, or parallel to the mirror. The magnet was observed only at times when it was swinging through a small arc. From 800 vibrations, the mean time of one vibration $=14^{s}\cdot5966$. This number is used through the year 1865.

4. Computation of the angle through which the magnet moves for a change of one division of the scale; and calculation of the disturbing force producing a movement through one division, in terms of the whole vertical force.

The distance from the scale to the mirror is 186·07 inches, and each division of the scale $=\frac{12}{30\cdot85}$ inches. Hence the angle which one division subtends, as seen from the mirror, is $7'.11''\cdot19$; and therefore the angular movement of the normal to the mirror, corresponding to a change of one division of the scale, is half this quantity, or $3'.35''\cdot60$.

But the angular movement of the normal to the mirror is not the same as the angular movement of the magnet; but is less in the proportion of unity to the cosine of the angle which the normal to the mirror makes with the magnet, or in the proportion of unity to the sine of the angle which the plane of the mirror makes with the magnet. This angle has been found to be $52\frac{3}{4}°$: therefore, dividing the result just obtained by sine $52\frac{3}{4}°$, we have, for the angular motion of the magnet corresponding to a change of one division of the scale, $4'.30''\cdot85$.

From this, the value, in terms of the whole vertical force, of the disturbing force producing a change of one division, is to be computed by the formula, "Value of Division in terms of radius $\times$ cotan. dip $\times \frac{T'^2}{T^2}$," where T′ is the time of vibration in the horizontal plane, and T the time of vibration in the vertical plane.

For 1865, January 1, T′ was assumed = $14^{s}{\cdot}60$, T = $12^{s}{\cdot}67$, dip = 68°.2′. From January 2 to January 31 the numbers were $14^{s}{\cdot}60$, $15^{s}{\cdot}00$, 68°. 3′. 22″. From February 1 to 12, $14^{s}{\cdot}60$, $14^{s}{\cdot}69$, 68°. 3′. From February 13 to 27, $14^{s}{\cdot}60$, $14^{s}{\cdot}47$, 68°. 1′. 23″. On February 28, $14^{s}{\cdot}60$, $14^{s}{\cdot}69$, 68°. 3′. From March 1 to October 16, $14^{s}{\cdot}60$, $13^{s}{\cdot}12$, 68°. 2′. From October 17 to December 31, $14^{s}{\cdot}60$, $12^{s}{\cdot}88$, 68°. 4′.

From these are found the following values of the change of vertical force (in terms of the whole vertical force) corresponding to a change of one division of the scale. For January 1, 0·00070296; January 2 to January 31, 0·00050096; February 1 to 12, 0·00052248; February 13 to February 27, 0·00053922; February 28, 0·00052248; March 1 to October 16, 0·00065556; October 17 to December 31, 0·00067908.

5. Investigation of the temperature-correction of the vertical-force-magnet.

The only attempt which has been made to investigate the thermometric correction of the new vertical-force-magnet is by the use of heated air, at the same time and in the same manner as for the horizontal-force-magnet (mentioned on page *xxi*). The results were so much larger than I expected, that I conceive some unknown cause of error to have affected them. In consequence of this, no correction has been applied to the observations with the new vertical-force magnet.

The method of observing with the vertical-force-magnet is the following:—

A fine horizontal wire is fixed in the field of view of the telescope, which is directed to the small plane mirror carried by the magnet. On looking into the telescope, the graduations of the fixed vertical scale are seen; and during the oscillations of the magnet, the divisions of the scale are seen to pass alternately upwards and downwards across the wire. The clock-time, for which the position of the magnet is to be determined, is the same as that for the other two magnets. The observer applies his eye to the telescope about two vibrations before the arranged time, and if the magnet is in motion he observes its places at four extreme vibrations; and the mean of these is taken as for the horizontal-force-magnet. But if the magnet is at rest, then at one-half time of vibration before the arranged time, and at an equal interval after the arranged time, the division of the scale is noted; if there is a slight difference, the mean is taken.

The number of instances in 1865 in which the magnet was found in a state of vibration is very small.

Within the double box is suspended a thermometer, which is read at every hour of observation, and also, on two days of every week, commencing with March 27, at the hours 21^{h}, 22^{h}, 23^{h}, 0^{h}, 1^{h}, 2^{h}, 3^{h}, and 9^{h}, in the same manner as that of the horizontal-force-instrument.

A maximum and a minimum thermometer are attached to the outside of the box, and are read twice daily; the absolute maximum and absolute minimum derived from these are printed, as well as the thermometer readings above-mentioned, in the same manner as those for the horizontal force.

§ 7. *Photographic self-registering Apparatus for Continuous Record of Magnetic Vertical Force.*

The concave mirror which is carried by the vertical-force-magnet has been described in the last article. At the distance of about 22 inches from that mirror, and external to the box, is the horizontal aperture, about $0^{in}\cdot3$ in length and $0^{in}\cdot01$ in breadth, carried by the same stone block which carries the supports of the agate planes. The lamp which shines through this aperture is carried by the same block. The light reflected from the mirror passes through a cylindrical lens with its axis vertical, very near to the cylinder carrying the photographic paper, and finally forms a well-defined spot of light on the cylinder of paper, at the distance of 100·18 inches from the mirror. As the movements of the magnet are vertical, the axis of the cylinder is vertical. The cylinder is about 15½ inches in circumference, or somewhat larger than that used for the declination and horizontal-force magnets. The forms of the exterior and interior cylinders, and the method of mounting the paper, are in all respects the same as for the declination and horizontal-force magnets; but the cylinder is supported by being merely planted upon a circular horizontal plate (its position being defined by fitting a central hole in the metallic cap of the cylinder upon a central pin in the plate), which is turned by watchwork once in twenty-four hours. The trace of the vertical-force-magnet is on the west side of the cylinder.

On the east side, the cylinder receives the trace produced by the barometer (to be described hereafter). A pencil of light from the lamp which is used for the barometer shines through a fixed aperture with a small cylindrical lens, for tracing a photographic base-line upon the cylinder of paper, similar to that for the cylinder of the declination and horizontal-force magnets.

The scale for the ordinates of the photographic curve of the vertical force is thus computed. Remarking that the radius which determines the range of the motion of the spot of light is double the distance 100·18 inches, and is therefore = 200·36 inches, the formula used in the last section, when applied to $\frac{\text{disturbing force}}{\text{whole vertical force}} = 0\cdot01$, gives value of division = $200\cdot36 \times \text{tan. dip.} \times \left(\frac{T}{T'}\right)^2 \times 0\cdot01$. The values of the ordinate of the photographic curve for $\frac{\text{disturbing force}}{\text{whole vertical force}} = 0\cdot01$, thus obtained, are for the several portions of the year mentioned in the last section, in inches, 3·7425, 5·2515, 5·0352, 4·8789, 5·0352, 4·0131, 3·8741. With these values, the pasteboard scales used for measuring the photographic ordinates have been prepared.

§ 8. *Dipping Needles, and Method of observing the Magnetic Dip.*

The instrument with which all the dips in the year 1865 have been observed, is that which, for distinction, is called Airy's instrument. The following description will probably suffice to convey an idea of its peculiarities:—

The form of the needles, the form of their axes, the form of the agate bearings, and the general arrangement of the relieving apparatus, are precisely the same as those in

Robinson's and other needles. But the form of the observing apparatus is greatly modified, in order to secure the following objects :—

I. To obtain a microscopic view of the points of the needles, as in the instruments introduced by Dr. Lloyd and Lieut.-General Sabine.

II. To possess at the same time the means of observing the needles while in a state of vibration.

III. To have the means of observing needles of different lengths.

IV. To give an illumination to the field of view of each microscope, directed from the side opposite to the observer's eye, so that the light may enter past the point of the needle into the object glass of the microscope, forming a black image of the needle-point in a bright field of view.

V. To give facility for observing by day or night.

With these views, the following form is given to the apparatus :—

The needle, and the bodies of the microscopes, are inclosed in a square box. The base of the box, two vertical sides, and the top, are made of gun-metal (carefully selected to insure its freedom from iron); but the sides parallel to the plane of vibration of the needle are of glass. Of the two glass sides, that which is next the observer is firmly fixed; it is hereafter called "the graduated glass-plate." The other glass side can be withdrawn, to open the box, for inserting the needle, &c.

An axis, whose length is perpendicular to the plane of vibration of the needles, and is as nearly as possible in the line of the axis of the needle, supported on two bearings (of which one is cemented in a hole in the graduated glass-plate, the other being upon a horizontal bar near to the agate support of the needle-axis), carries a transverse arm, about 11 inches long, or rather two arms, projecting about $5\frac{1}{2}$ inches on each side of the axis. Each of these projecting arms has a long opening, or slot, about 1 inch wide, extending from the neighbourhood of the center-work nearly to the end of the arm. Through this opening the tube of a microscope passes, in a direction parallel to the axis of the needle, and is firmly fixed by a shoulder-bearing on one side of the arm, and a circular nut, working in a thread cut upon the microscope-tube, on the other side of the arm. The microscope can thus be fixed at any distance from the central axis, within the limits of the length of the projecting arm. In 1863, between February 24 and May 11, the slot for a single moveable microscope on each side was changed for three fixed microscopes on each side, adapted in position to the lengths of the needles to be mentioned shortly.

The microscope-tube thus carried is not the entire microscope, but so much as contains the object-glass and the field-glass. Upon the plane side of the field-glass (which is turned towards the object-glass), a series of parallel lines is engraved by etching with fluoric acid. The object-glass is so adjusted that the image of the needle-point is formed upon the plane side of the field-glass; and thus the parallel lines can be used for observing the needle in a state of vibration; and, one of them being

adopted as standard, the lines can be used for reference to the graduated circle (to be mentioned). All this requires that there be an eye-glass also for the microscope.

The axis of which we have spoken is continued through the graduated glass-plate, and there it carries another transverse arm parallel to the former, and generally similar to it. In each part of this slides a short eye-piece, carrying the eye-glass. In 1863, at the time mentioned above, the slotted arm and moveable eye-socket were changed for an arm with three sockets and eye-glasses. Thus, reckoning from the observer's eye, there are the following parts:—

(1.) The eye-glass.

(2.) The graduated glass-plate (its graduations, however, not intervening in this part of the glass, the graduated circle being so large as to include all the microscopes).

(3.) The field-glass, on the further surface of which the parallel lines are engraved.

(4.) The object-glass.

(5.) The needle.

(6.) The removeable glass side of the box.

(7.) The illuminating reflector, to be described hereafter.

The optical part of the apparatus being thus described, we may proceed to speak of the graduated circle.

The graduations of the circle (whose diameter is about $9\frac{3}{4}$ inches) are etched on the inner surface of the graduated glass-plate. These divisions (as well as the parallel lines on the field glasses of the microscopes) are beautifully neat and regular, and are, I think, superior to any that I have seen on metal. The same piece of metal, which carries the transverse arms supporting the microscope bodies, carries also two arms with verniers for reading their graduations. These verniers (being adapted to transmitted light) are thin plates of metal, with notches instead of lines. The reading of the verniers is very easy. The portion of the axis which is external to the graduated glass-plate (towards the observer), and which has there, as already stated, two arms for carrying the microscope eye-glasses, has also two arms for carrying the lenses by which the verniers and glass-plate graduations are viewed. These four arms are the radii of a circle, which can be fixed in position by a clamp, attached to the gun-metal casing of the graduated glass-plate, and furnished with the usual slow-motion screw.

The entire system of the two arms carrying the microscope-bodies, the two arms carrying the microscope eye-glasses, the two arms carrying the verniers, and the two arms carrying the reading-glasses for the verniers, is turned rapidly by means of a button on the external side of the graduated glass-plate, or is moved slowly by means of the slow-motion screw just mentioned.

It now remains only to describe the illuminating apparatus. On the outside of the removeable glass plate, there are supports for the axis of a metallic circle turning in a plane parallel to the plane of needle-vibration. This circle has four slotted radii, and in these slots or openings there slide small frames carrying prismatic glass

reflectors, each of which can turn on an axis, in the plane of the circle but transverse to the radius. Two of these reflectors are for the purpose of sending light through the verniers, and therefore are fixed in radial distance; the other two were intended for sending light past the ends of the needle through the microscopes, and therefore required adjustment on change of needle and corresponding change of position of microscopes. In 1863 these were changed for fixed reflectors, corresponding to the fixed microscopes. The circle was originally turned by a small winch near the observer's hand; at present, the winch is removed, as its axis was found to be slightly magnetic. At each observation, it is necessary to turn the circle which carries the reflectors; but this is the work of an instant.

The light which illuminates the whole is a gas-burner, in the line of the axis of rotation. Its rays fall upon the glass prisms, and each of these is adjusted, by turning on its axis, to throw the reflected light in the required direction.

The whole of the apparatus, as thus described, is planted upon a horizontal plate admitting of rotation in azimuth: the plate is graduated in azimuth, and verniers are fixed to the gun-metal tripod stand. The gas-pipe is led down the central vertical axis, and there communicates by a rotatory joint with the fixed gas-pipes.

The needles which are used with this instrument are—

B_1, a plain needle	each 9 inches long.
B_2, a plain needle	
B_3, a loaded needle with adjustible load	
B_4, a needle whose plane passes through the axis of the needle	
C_1, a plain needle	each 6 inches long.
C_2, a plain needle	
C_3, a loaded needle with adjustible load	
C_4, a needle whose plane passes through the axis of the needle	
D_1, a plain needle	each 3 inches long.
D_2, a plain needle	
D_3, a loaded needle with adjustible load	
D_4, a needle whose plane passes through the axis of the needle	

In discussing carefully the observations taken with this instrument (as well as with other dip-instruments), great trouble was experienced in determining the zenith-point (or reading of the vertical circle when the points of the needle are in the same vertical). To remedy this, a "zenith-point-needle" was constructed under my instructions by Mr. Simms; and it has been used as need required in 1864 and 1865. It is a flat bar of brass; with pivots similar to those of the dip-needles; and with three pairs of points corresponding to the three lengths of needles used; loaded at one end so as to take a position perfectly definite with respect to the direction of gravity; observed with the microscopes, and reversed for another observation, exactly as the dip-needles. For each of the different lengths of dip-needles, the zenith-point is determined by observation of that pair of points of the zenith-point-needle whose interval is the same as the length of the dip-needle.

Discordances, of which no satisfactory explanation could be given, had been found in the ordinary use of the instrument for determination of dip, as well as in the change of readings when a needle was raised and lowered, and in the change of readings when, without raising the needle, the instrument was turned completely in azimuth. Between November 10 and November 19, 1864, Mr. Simms reground the agate edges on which the needle-pivots rotate; and the discordances have entirely or in great measure disappeared. The process of regrinding was merely the following. A brass tool was provided which nearly fitted the agates, and which permitted lengthwise-strokes but scarcely permitted cross-strokes; and this tool carried, in succession, the different powders required for shaping and polishing the agate edges. As the edges were pretty well shaped, it was scarcely necessary to use coarse emery; but fine emery was used in the tool to give a final figure, and tin-oxide to give the ultimate polish. The process scarcely differs from that by which the edges had been ground originally; except that a tool had formerly been used which perhaps admitted of too much cross-stroke, and that rotten-stone powder had been used instead of tin-oxide.

The flat needles B_4, C_4, D_4, were used with the object of determining whether any part of the discordances of results arose from the position of the principal plane of the magnetized needle. But with the increased harmony of results, an error showed itself which is peculiar to their form. The small flexure of the needle, produced by the resolved part of gravity in the direction perpendicular to the needle's length, changes the position of its centre of gravity in such a manner that the action of gravity is necessarily opposed to that of the magnetic vertical force; and thus the apparent dip is made too small. This error is perhaps insensible in the 3-inch needle D_4, but it is visible in the 6-inch needle C_4, and conspicuous in the 9-inch needle B_4. In the tables of results, therefore, while I have included all the separate results from these needles, I have omitted them in the formation of means. After 1865, July, the flat needles were not used for dip observations.

On 1865, December 30, every part of the instrument was carefully examined by Mr. Simms, and needles C_1 and D_1 were removed for further examination.

§ 9. *Observations for the absolute Measure of the Horizontal Force of Terrestrial Magnetism.*

In the spring of 1861, a Unifilar Instrument, similar in all respects (as is understood) to those used in and issued by the Kew Observatory, was procured by the courteous application of Lieut.-General Sabine, from the makers, Messrs. J. T. Gibson and Son; and after having been subjected to the usual examinations, at the Kew Observatory, for determination of its constants (for which I am indebted to the kindness of Balfour Stewart, Esq.), was mounted at the Royal Observatory. Observations with this instrument commenced on 1861, June 11, and were continued

through the year; and, after some slight modifications of its verniers, it is still maintained in use (1867).

The deflected magnet (whose use is merely to ascertain the proportion which the power of the deflecting magnet at a given distance bears to the power of terrestrial magnetism) is 3 inches long, carrying a small plane mirror. The deflecting magnet is 4 inches long; it is a hollow cylinder, carrying in its internal tube a collimator, by means of which its time of vibration is observed in another apparatus. The frame which supports the suspension-piece of the deflected magnet carries also the telescope directed to the magnet-mirror; it rotates round the vertical axis of a horizontal graduated circle whose external diameter is 10 inches. The deflecting magnet is always placed on the E. or W. side of the deflected magnet, with one end towards the deflected magnet. In the reduction of the observations, the precepts contained in the Skeleton Form prepared by the Kew Observatory have received the strictest attention.

The following is the explanation of the method of reduction.

The distance of the centers of the deflected and deflecting magnet being known, it is supposed (from observations made at Kew, of which the details have not reached me) that the magnetism of the deflecting magnet is so altered by induction that the following multipliers ought to be used in computing the Absolute Force:—

At distance 1·0 foot, factor is	1·00031
1·1	1·00023
1·2	1·00018
1·3	1·00014
1·4	1·00011
1·5	1·00009

The correction of the magnetic power for temperature t_0 of Fahrenheit, reducing all to 35° of Fahrenheit, is

$$0\cdot00013126\,(t_0-35)+0\cdot0000025\,(t_0-35)^2$$

A_1 is $\frac{1}{2}$(distance)^3 × sine deflection, corrected by the two last-mentioned quantities, for distance 1 foot; A_2 is the similar expression for distance 1·3 foot; A'_2 is $\frac{A_2}{(1\cdot3)^2}$: P is $\frac{A_1-A_2}{A_1-A'_2}$. A mean value of P is adopted from various observations; then $\frac{m}{X}=A_1\times\left(1-\frac{P}{1}\right)$ for smaller distance, or $=A_2\times\left(1-\frac{P}{1\cdot69}\right)$ for larger distance. The mean of these is usually adopted for the true value of $\frac{m}{X}$.

For computing the value of mX from observed vibrations, it is necessary to know K, the moment of inertia of the magnet as mounted. The value of log. π^2K furnished by Mr. Stewart is 1·66073 at temperature 30° and 1·66109 at temperature 90°. Then, putting T for the time of the magnet's vibration as corrected for induction, temperature, and torsion-force, the value of mX is $=\frac{\pi^2K}{T^2}$. From the combination of this value of mX with the former value of $\frac{m}{X}$, m and X are immediately found.

It appears, from a comparison of observations given in the Introduction to the *Magnetical and Meteorological Observations*, 1862, that the determinations with the Old Instrument (in use to 1861) ought to be diminished by $\frac{1}{117}$ part, to make them comparable with those of the Kew Unifilar.

The computation of the values of m and X has, to the year 1857, been made in reference to English measure only, using the foot and the grain as the units of length and weight; but, for comparison with foreign observations of the Absolute Intensity of Magnetism, it is desirable that X should be expressed also in reference to French measure, in terms of the millimètre and milligramme. If an English foot be supposed equal to α times the millimètre, and a grain be equal to β times the milligramme, then it is seen that, for the reduction of $\frac{m}{X}$ and mX to French measure, these must be multiplied by α^3 and $\alpha^2\beta$ respectively. Hence X^2 must be multiplied by $\frac{\beta}{\alpha}$, and X by $\sqrt{\frac{\beta}{\alpha}}$. Assuming that the mètre is equal to 39·37079 inches, and the gramme equal to 15·43249 grains, log. $\sqrt{\frac{\beta}{\alpha}}$ will be found to be $= 9{\cdot}6637805$, and the factor for reducing the English values of X to French values will be 0·46108 or $\frac{1}{2{\cdot}1689}$. The values of X in French measure thus derived from those in English measure are given in the proper table.

§ 10. *Explanation of the Tables of Indications of the Magnetometers.*

The Indications are derived entirely from the measures of the ordinates of the Photographic Curves, except in a few instances in which the results are marked with an asterisk, in which case the results are those given by eye-observations, usually because the photographic process has failed.

Telescope-observations of the Magnetometers have usually been made four times every day, except on Sundays, on whieh days two or three observations only have been taken; but, though these observations are employed in forming the base lines on the photographic sheets, their immediate results are not necessarily given in the Tables.

For each photographic record, a new base-line, representing a convenient reading in round numbers of the element to which it applies, has been drawn on the sheet. Then the Assistant, who is charged with the translation of the curve-ordinates into numbers, remarks the salient points of the curve, or the points which if connected by straight lines would produce a polygon not sensibly differing from the photographic curve; to each of these he applies the pasteboard scale proper for the element under consideration; the base of the pasteboard scale determines the time on the time-scale, and the reading of the pasteboard scale for the point of the photographic curve gives the quantity which is to be added to the value for the new base-line. The ordinate-reading so formed is printed without alteration in the Tables. It is particularly to be

remarked that the indications for horizontal force and vertical force are *not corrected for temperature.*

In measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally, though rarely, been felt. Apparently without cause, the curve is dislocated; one part being raised above or depressed below the contiguous part, in the direction of the ordinate, usually by small quantities. In all cases the displacement is accompanied by vibration, the original position being at the extremity of the arc of vibration, and the new position being at its center; showing that there has been no want of delicacy in the movement, and that the change is precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet.

In translating the ordinates into numbers on these occasions, two ordinates have been taken for the same abscissa; these are connected, in the printed Indications, by a brace, and the difference of the numbers indicates the amount of the disturbance.

§ 11. *Wires and Photographic self-registering Apparatus for continuous Record of Spontaneous Terrestrial Galvanic Currents.*

In order to obtain an exhibition of the spontaneous galvanic currents which in some measure are almost always discoverable in the earth, and which occasionally are very powerful, it was necessary to extend two insulated wires from an earth connexion at the Royal Observatory, in two directions nearly at right angles to each other, to considerable distances, where they would again make connexion with the earth. By the kindness of the Directors of the South Eastern Railway Company, to whom the Royal Observatory has on several occasions been deeply indebted, two connexions are made; one to a station near Dartford, at the direct distance $9\frac{3}{4}$ miles nearly, in azimuth (measured from North, to East, South, West), 102° astronomical or 122° magnetical, the length of the connecting wire being about $15\frac{2}{3}$ miles; the other to a station near Croydon, at the direct distance 8 miles, in azimuth, 209° astronomical, or 229° magnetical, the length of the connecting wire being about $10\frac{1}{2}$ miles. At these two stations connexion is made with earth. The details of the course are as follows. The wires are soldered to a water pipe in the Magnetic Ground at the Royal Observatory. Thence they enter the Magnetic Basement, and pass through the photographic self-registering apparatus (to be shortly described). From it they are led up the electrometer mast to a height exceeding 50 feet, and thence they are swung across the grounds to a chimney above the Octagon Room. They descend thence, and are led to a terminal board in the Computing Room, to which an intermediate galvanometer can be attached for eye-observation of the currents. From this point they are led to the "Battery Basement," and, with other wires, pass under the Park to the Greenwich Railway Station, and upon the telegraph poles. One wire branches off at the junction with the North Kent Railway to Dartford, the other at the junction with the Croydon Branch Railway to Croydon. At both places their connexion with earth is made by soldering to waterpipes, as at the Royal Observatory.

The apparatus for receiving the effects of the galvanic currents consists essentially of two magnetic needles (one for each wire), each suspended by a hair so as to vibrate horizontally within a galvanic coil, exactly as in the ordinary speaking telegraph; these coils being respectively in the courses of the two long wires. A current of one kind, in either wire, causes the corresponding needle to turn itself through an angle nearly proportioned to the strength of the current, in one direction; a current of the opposite kind causes it to turn in the opposite direction. These turnings are registered by the following apparatus.

The carrier of each magnet carries also a small plane mirror, which receives all the azimuthal motions of the magnet. The light of a gas-lamp passes through a minute aperture, and shines upon it; the divergent pencil is converted into a convergent pencil by refraction through crossed cylindrical lenses (with axes vertical before the pencil reaches the mirror, and with axes horizontal where the pencil is received from the mirror), which, under the circumstances, were more convenient than spherical lenses. A spot of light is thus formed upon the photographic paper wrapped upon a cylinder of ebonite, covered by a glass cylinder, and made to rotate in twenty-four hours by clock-work, exactly as for the register of the magnetic elements. As in the case of declination and horizontal-force, the two earth currents make their registers upon opposite sides of the same barrel, and upon different parts of the sheet; the same gas-light serving for the illumination of both.

A portion of a base-line for either record is obtained at any time by simply breaking the galvanic communication.

The photographic records have been regularly made since 1865, March 15; but no actual reduction of the results, or numerical comparison of earth-currents with magnetic disturbances, has yet been made.

§ 12. *Standard Barometer.*

The Barometer is a standard, by Newman, mounted in 1840. It is fixed on the South wall of the West arm of the Magnetic Observatory. The graduated scale which measures the height of the mercury is made of brass, and to it is affixed a brass rod, passing down the inside of one of the upright supports, and terminating in a conical point of ivory; this point in observation is made just to touch the surface of the mercury in the cistern, and the contact is easily seen by the reflected and the actual point appearing *just* to meet each other. The rod and scale are made to slide up and down by means of a slow-motion screw. The scale is divided to $0^{in.}05$.

The vernier subdivides the scale divisions to $0^{in.}002$; it is moved by a slow-motion screw, and in observation is adjusted so that the ray of light, passing under the back and front of the semi-cylindrical plate carried by the vernier, is a tangent to the highest part of the convex surface of the mercury in the tube.

The tube is $0^{in.}565$ in diameter; the correction for the effect of capillary attraction is therefore only $+ 0^{in.}002$. The cistern is of glass.

At the bottom of the instrument are three screws, turning in the fixed part of the

support, and acting on the piece in which the lower pivot of the barometer-frame turns, for adjustment to verticality: this adjustment is examined weekly.

The readings of this barometer are considered to be coincident with those of the Royal Society's flint-glass standard barometer.

All observations of this barometer have been corrected for the difference of temperature of the mercury in the tube at the time of observation from 32°, by the application of the corrections contained in the table for barometers whose scales are engraved upon a rod of brass reaching from the level of the mercury to the vernier. (See the report of the Committee of Physics and Meteorology approved by the Royal Society.)

The height of the cistern above the mean level of the sea is 159 feet. This element is founded upon the determination of Mr. Lloyd, in the *Phil. Trans.*, 1831; the elevation of the cistern above the brass piece inserted in a stone in the transit-room (to which Mr. Lloyd refers) being $5^{ft}.2^{in}$.

The barometer has been read at 21^h, 0^h, 3^h, 9^h (astronomical), on every day, excepting on Sundays, and on Good Friday and Christmas Day, on which days fewer observations have been taken. Every reading has been reduced to the reading which would have been obtained at the temperature 32° of the mercury and scale, by application of the correction given in Table II. (pages 82 to 87) of the Report of the Committee of Physics of the Royal Society. The mean of the reduced readings has then been taken for each civil day, and finally converted into mean daily reading, by application of the correction inferred from Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, Part I, Table I, page 127.

In the printed record of the barometrical and all other meteorological observations, the day is to be understood, generally, as defined in civil reckoning.

§ 13. *Photographic self-registering Apparatus for continuous Record of the Readings of the Barometer.*

The Photographic self-registering Apparatus for continuous Record of Magnetic Vertical Force is furnished (as has been stated) with a vertical cylinder covered with photographic paper and revolving in 24 hours. North of the surface of this cylinder, at the distance of about 30 inches, is a large syphon barometer, the bore of the upper and lower extremities of its arms being about 1·1 inch. A glass float in the quicksilver of the lower extremity is partially supported by a counterpoise acting on a light lever (which turns on delicate pivots), so that the wire supporting the float is constantly stretched, leaving a definite part of the weight of the float to be supported by the quicksilver. This lever is lengthened to carry a vertical plate of opaque mica with a small aperture, whose distance from the fulcrum is eight times the distance of the point of attachment of the float wire, and whose movement, therefore, is four times the movement of the column of a cistern-barometer. Through this hole the light of a lamp, collected by a cylindrical lens, shines upon the photographic paper.

The scale of time is established by means of occasional interruptions of the light, and the scale of measure is established by comparison with occasional eye-observations.

This barometer was brought into use in 1848, but its indications were not satisfactory till the mercury was boiled in the tube by Messrs. Negretti and Zambra on 1853, August 18, since which time they have appeared unexceptionable. Results of the indications are printed in the *Maxima and Minima of the Barometer*, near the end of the Meteorological Results.

§ 14. *Thermometers for ordinary Observation of the Temperature of the Air and Evaporation.*

The Dry-Bulb Thermometer, the Wet-Bulb Thermometer, the Maximum Self-Registering Thermometers, both dry and wet, and the Minimum Self-Registering Thermometers, dry and wet, all for determination of the temperature of the air and of evaporation, are mounted on a revolving frame whose fixed vertical axis is planted in the ground. From the year 1846 to 1863 the post forming the vertical axis was about 23 feet south (magnetic) of the S.S.E. angle of the south arm of the Magnetic Observatory; in 1863 it was moved to a position about 35 feet south (astronomical) of the south angle. A frame revolves on this post, consisting of a horizontal board as base, of a vertical board projecting upwards from it connected with one edge of the horizontal board, and of two parallel inclined boards (separated about three inches) connected at the top with the vertical board, and at the bottom with the other edge of the horizontal board. The outer inclined board is covered with zinc. The air passes freely between all these boards.

The dry and wet-bulb thermometers are attached to the outside, and near the center of the vertical board; the maximum and minimum thermometers for air towards one vertical edge, and those for evaporation towards the other vertical edge, with their bulbs at almost the same level, and near to those of the dry and wet-bulb thermometers; their bulbs are about 4 feet above the ground and projecting from 2 inches to 3 inches below the horizontal board. Above the thermometers is a small projecting roof to protect them from rain. The frame is always turned with the inclined side towards the sun. It is presumed that the thermometers are thus sufficiently protected.

The graduations of all the thermometers used in the Royal Observatory rest fundamentally upon those of a Standard Thermometer, the property of Mr. Glaisher, which derives its authority from comparison with original thermometers constructed by the late Rev. R. Sheepshanks about the years 1840–1843, in the course of his preparations for the construction of the National Standard of Length. The whole of the radical determinations of Freezing Point, Boiling Point, and Subdivision of Volume of Tube, were made by Mr. Sheepshanks with the utmost care: it is believed that these were the first original thermometers that had been constructed in England for many years. Mr. Glaisher's thermometer has been adopted as the standard of reference for all the thermometers used in the Royal Observatory since 1840.

The Dry-Bulb Thermometer is by Newman. The corrections required for its readings, as found by comparison with the standard above-mentioned, are as follows:—

Below	32°	subtract 0°5
Between 32 and	43°	0·6
44 and	47	0·7
48 and	56	0·9
57 and	61	1·1
62 and	74	1·3
75 and	80	1·5
81 and	86	1·8
87 and	95	2·0
96 and	100	2·2

These corrections are used throughout the year 1865.

The Wet-Bulb Thermometer is by Negretti and Zambra. The bulb of the thermometer used till 1865, February 9, was of the same size as that of the Dry-Bulb Thermometer. A piece of muslin is wrapped round the bulb, and a skein of cotton is led from it into a cup of rain-water, by which it is maintained in a state of moisture. In frosty weather the muslin is moistened some time before each observation. The corrections which the readings of this thermometer were found to require are as follows:

Below	32°	subtract 0°4
Between 32 and	36°	0·3
37 and	40	0·2
41 and	55	0·1
56 and	75	0·0
Above	75	add 0·1

This thermometer was broken on 1865, February 10; and, through the remainder of the year, a small pea-bulb thermometer by Negretti and Zambra, No. 764, was used. No correction has been made to the indications of this thermometer.

The eye-readings of the dry-bulb and wet-bulb thermometers have usually been taken at the hours (astronomical reckoning) 21^h, 0^h, 3^h, 9^h, and corrected by application of the numbers given above.

A dry-bulb and a wet-bulb thermometer, with pea-bulbs and porcelain scales, Negretti and Zambra 795, are also mounted on the roof of the library, 4 feet above the leads. Their readings are not printed in the present volume.

The dew-point has been inferred exclusively from the simultaneous observations of the dry-bulb and wet-bulb thermometers, by multiplying the difference between the readings of these thermometers by a factor peculiar to the temperature of the air, and subtracting the product from the reading of the dry-bulb thermometer. These factors have been found by Mr. Glaisher from the comparison of a great number of dew-point determinations, obtained by use of Daniell's hygrometer, with simultaneous observations of dry-bulb and wet-bulb thermometers. The first part of this investigation was published in full, in the volume of *Magnetical and Meteorological Observations* for 1844, pages 67–72; it was based upon all the observations made up to that time. Subsequently, the comparison was extended to include all the

simultaneous observations of these instruments made at the Royal Observatory, Greenwich, from 1841 to 1854, with some observations taken at high temperatures in India, and others at low and medium temperatures at Toronto. The results at the same temperature were found to be the same at these different localities, so far as the climatic circumstances permitted comparison. (See Glaisher's Hygrometrical Tables, 4th Edition). The following table exhibits the result of the entire comparison; it has been used in forming the dew-points in the present volume.

TABLE OF FACTORS by which the DIFFERENCE of READINGS of the DRY-BULB and WET-BULB THERMOMETERS is to be MULTIPLIED in order to PRODUCE the DIFFERENCE between the READINGS of the DRY-BULB and DEW-POINT THERMOMETERS.

Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.
°		°		°		°	
10	8·78	33	3·01	56	1·94	79	1·69
11	8·78	34	2·77	57	1·92	80	1·68
12	8·78	35	2·60	58	1·90	81	1·68
13	8·77	36	2·50	59	1·89	82	1·67
14	8·76	37	2·42	60	1·88	83	1·67
15	8·75	38	2·36	61	1·87	84	1·66
16	8·70	39	2·32	62	1·86	85	1·65
17	8·62	40	2·29	63	1·85	86	1·65
18	8·50	41	2·26	64	1·83	87	1·64
19	8·34	42	2·23	65	1·82	88	1·64
20	8·14	43	2·20	66	1·81	89	1·63
21	7·88	44	2·18	67	1·80	90	1·63
22	7·60	45	2·16	68	1·79	91	1·62
23	7·28	46	2·14	69	1·78	92	1·62
24	6·92	47	2·12	70	1·77	93	1·61
25	6·53	48	2·10	71	1·76	94	1·60
26	6·08	49	2·08	72	1·75	95	1·60
27	5·61	50	2·06	73	1·74	96	1·59
28	5·12	51	2·04	74	1·73	97	1·59
29	4·63	52	2·02	75	1·72	98	1·58
30	4·15	53	2·00	76	1·71	99	1·58
31	3·70	54	1·98	77	1·70	100	1·57
32	3·32	55	1·96	78	1·69		

The maximum self-registering thermometer is a mercurial thermometer, of the construction invented by Messrs. Negretti and Zambra. There is a small detached piece of glass in the tube, just above a bent part of the tube (near the bulb), through which the piece of glass cannot pass down. The column of mercury in rising lifts the glass up and passes freely; but in descending it is unable to pass the glass, and the lower mass of mercury descends, leaving a vacant space below the glass, and leaving a portion of the mercury above it. The piece of glass operates as an efficient valve. The graduation of this thermometer is sensibly correct. There is a similar thermometer for the maximum wet-bulb reading; its readings are too high by 0°·4.

The minimum self-registering thermometer is an alcohol thermometer, of the construction known as Rutherford's. A sliding glass index allows the alcohol in rising to pass above it, but is drawn down by the peculiar action of the bounding surface of the

fluid when it sinks. The readings of that which gives the minimum temperature of the air require an additive correction 0°·5; those of the minimum wet-bulb temperature require corrections varying from +2°·2 at 24° to −0°·2 at 71°.

The mean daily values of dry thermometer in the printed columns are found by combining two results derived from different sources. The first and simpler result is the mean of the maximum and minimum, corrected by a small quantity depending on the month, given in Table III. of Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, page 130. The second result is formed by taking the means of the four eye-observations at 21^h, 0^h, 3^h, 9^h, and applying a correction thus investigated. The daily range being found by taking the difference between the maximum and minimum, this daily range is multiplied by the mean of the factors in Table IV. corresponding to the hours of observation; the application of this correction to the mean of the eye-observations gives the second result. (It is evident that this process is applicable to any number of eye-observations.) These two results are then combined to form a mean, weights being given proportional to the number of observations contributing to each result.

For the mean daily value of dew point, the usual process is,—by observing the difference between dry and wet thermometers, and by use of the table of factors printed above, to form the difference between dry thermometer and dew point at each of the hours of reading; to take their mean; to apply a correction which is the mean of the corrections in Mr. Glaisher's Table VIII. for the several hours of observation; and to apply this corrected mean difference of dry thermometer and dew point to the mean value of dry thermometer found above. Sometimes, however, the following process is used. The correction for diurnal range applicable to the mean of the eye-observations of the dry thermometer having been found (as is described above), this correction is multiplied by a fraction, whose numerator is the mean of corrections to wet bulb thermometer in Table VII. for the hours of observations, and whose denominator is the mean of corrections to dry thermometer in Table II. for the same hours; and thus a correction is found which is applied to the mean of the eye-observations of wet bulb thermometer, to form the mean wet bulb for the day. Then by use of the mean dry bulb for the day and the mean wet bulb for the day and the table of factors above, the mean dew point for the day is formed.

§ 15. *Photographic self-registering Apparatus for continuous Record of the Readings of the Dry-Bulb and Wet-Bulb Thermometers.*

About 28 feet south (magnetic) of the south-east angle of the south arm of the Magnetic Observatory, and about 25 feet east of the thermometers for eye-observations, is a shed 10 ft. 6 in. square, standing upon posts 8 feet high, under which are placed the photographic thermometers, the dry-bulb thermometer towards the east, and the wet-bulb thermometer towards the west. The bulbs of the thermometers are 8 inches in length, and 0·4 inch internal bore, and their centers are about 4 feet above the ground. The bulb of one of the thermometers is covered with muslin throughout

its whole length, which is kept moist by means of capillary passage of water along cotton wicks leading to a vessel filled with water.

There are small adjustments admitting the raising or dropping of the thermometers, so that the register of their changing readings may be on a convenient part of the paper. The thermometer frames are covered by plates having longitudinal apertures, so narrow, that any light which may pass through them is completely, or almost completely, intercepted by the broad flat column of mercury in the thermometer-tube. Across these plates a fine wire is placed at every degree; and at the decades of the degrees, and also at 32°, 52°, and 72°, a coarser wire is placed. A gas lamp is placed about 9 inches from each thermometer (east of the dry bulb and west of the wet bulb), and its light, condensed by a cylindrical lens, whose axis is vertical, shines through the thermometer-tube above the surface of the mercury, and forms a well-defined line of light upon the photographic paper, which is wrapped around the cylinder. As the cylinder revolves under this light, it receives a broad sheet of photographic trace, whose breadth (in the direction of the axis of the cylinder) varies with the varying height of the mercury in the thermometer-tube. The light in its passage is intercepted by the wires placed across the tube at every degree, and there are, therefore, left upon the paper corresponding lines in which there is no photogenic action.

The cylinder revolves in 48 hours; the daily photographic traces of the two thermometers are thus simultaneously registered on opposite sides of the cylinder without intermixing. The length of the cylinder is $13\frac{1}{2}$ inches, and its circumference is 19 inches.

§ 16. *Thermometers for Solar Radiation and Radiation to the Sky.*

The thermometer for Solar Radiation, which to the end of the year 1864 was placed in an open box about 10 feet south of the south-west angle of the south arm of the Magnetic Observatory, is now laid on the grass, near the same place.

The thermometer is a self-registering maximum mercurial thermometer of Negretti and Zambra's construction; its bulb is blackened, and enclosed in a glass sphere from which the air has been exhausted. Its graduations are correct, and the numbers inserted in the tables are those read from the instrument without alteration. The thermometer is read at 9^h a.m., noon, 3^h p.m., and occasionally at 9^h p.m.; the highest of these readings is adopted as the maximum for the day.

Within the box above-mentioned, and at the height 10 inches above the bottom of the box, is placed a thermometer with blackened bulb, which is not enclosed in an exhausted sphere: its readings are taken every day to the end of 1865. An instrument of this form and in this position was exclusively used to the year 1859. Simultaneous readings of both instruments have been taken, with the view of rendering the series of observations which terminated in 1859 (made with exposed bulb) comparable with that which commenced in 1859, and was continued to the end of 1864 (made with bulb inclosed in an exhausted sphere).

The thermometer for radiation to the sky is placed near to the Solar Radiation thermometer, with its bulb resting on short grass, and fully exposed to the sky. It is a self-registering minimum spirit thermometer of Rutherford's construction, made by Negretti and Zambra. Its graduation is correct, and the numbers inserted in the table are those read from the scale without alteration. It is read every day at 9^h a.m., and occasionally at 9^h p.m.

This thermometer was out of order on February 6, March 19, April 16, May 26, June 3, August 21 and 27, and November 1.

§ 17. *Thermometers sunk below the Surface of the Soil at different Depths.*

These thermometers were made by Messrs. Adie of Edinburgh, under the immediate superintendence of Professor (now Principal) J. D. Forbes. The graduation was made by Professor Forbes himself.

The thermometers are four in number. They are all placed in one hole in the ground, the diameter of which in its upper half is 1 foot, and in its lower half about 6 inches. Each thermometer is attached in its whole length to a slender piece of wood, which is planted in the hole with it. The place of the hole is 20 feet south of the extremity of the south arm of the Magnetic Observatory, and opposite the center of its south front.

The soil consisted of beds of sand; of flint-gravel with a large proportion of sand; and of flints with a small proportion of sand, cemented almost to the consistency of pudding-stone. Every part of the gravel and sand extracted from the hole was perfectly dry.

The bulbs of the thermometers are cylindrical, 10 or 12 inches long and 2 or 3 inches in diameter. The bore of the principal part of the tubes, from the bulb to the graduated scale, is very small. In that part to which the scale is attached, the tube is larger.

The thermometer No. 1 was dropped into the hole to such a depth that the center of its bulb was 24 French feet (25·6 English feet) below the surface: then dry sand was poured in till the hole was filled to nearly half its height. Then No. 2 was dropped in till the center of its bulb was 12 French feet below the surface; No. 3 and No. 4 till the centers of their bulbs were respectively 6 and 3 French feet below the surface; and the hole was then completely filled with dry sand. The upper parts of the tubes, carrying the scales, were left projecting above the surface: No. 1 by 27·5 inches, No. 2 by 28·0 inches, No. 3 by 30·0 inches, and No. 4 by 32·0 inches. Of these lengths, the parts 8·5, 10·0, 11·0, and 14·5 inches, respectively are tube with narrow bore.

The projecting parts of the tubes are protected by a wooden case or box fixed to the ground; the sides of the box are perforated with numerous holes, and it has a double roof. In the North face of this box is a large plate of glass through which the thermometers are read. Within the box are two smaller thermometers, one (No. 5)

whose bulb is sunk one inch in the ground, and one (No. 6) whose bulb is in the free air nearly in the center of the box.

The fluid of the four long thermometers is alcohol tinged with a red colour.

The values of 1° on the scales of Nos. 1, 2, 3 and 4, are respectively $2^{in.}$, $1^{in.}1$, $0^{in.}9$, and $0^{in.}55$; and the ranges of the scales, as first mounted, were, 43°·0 to 52°·7, 42°·0 to 56°·8, 39°·0 to 57°·5, and 34°·2 to 64°·5.

These ranges for Nos. 2, 3, and 4, were found to be insufficient in some years, particularly those of Nos 3 and 4, or the thermometers sunk to the depth of 6 feet and 3 feet.

In 1857, June 22, Messrs. Negretti and Zambra removed from Nos. 3 and 4 a quantity of fluid corresponding to the extent of 5° on their scales, and the scales of these two thermometers were then lowered by that linear extent, making the readings the same as before. Their ranges are now, respectively, 44° to 62°·5, and 39°·2 to 69°·5.

In subsequent years it was found that the amount of fluid removed was somewhat too great, for now at the lower end of the scale the 6-foot thermometer sometimes falls below the limit of its scale or 44°; and the 3-foot thermometer below 39°·0; in which cases the alcohol sinks into the capillary tube.

The readings at the early part of the series were at times defective at high temperatures, but always complete at low temperatures; now, they are always complete at high temperatures, and are at times defective at low temperatures. The two combined, however, will enable us to complete all readings.

These thermometers are read once a day, at noon, and the readings appear in the printed volumes as read from their scales without correction.

§ 18. *Thermometers immersed in the Water of the Thames.*

The self-registering maximum and minimum thermometers for determining the highest and lowest temperatures of the water of the Thames are by Messrs. Negretti and Zambra, and are observed every day at 9^{h} a. m.

A strong wooden trunk is firmly fixed to the side of the Dreadnought Hospital Ship, about 5 feet in length, and closed at the bottom; the bottom and the sides, to the height of 3 feet, are perforated with a great number of holes, so that the water can easily flow through; the thermometers are suspended within this trunk so as to be about 2 feet below the surface of the water, and 1 foot from the bottom of the trunk.

The regular observations are made under the superintendence of the Medical Officers of the Ship.

The thermometer for maximum temperature was out of order January 1 to January 6, and both thermometers were out of order on July 9, 10, 13; August 23, 29; September 14, 15, 21; October 15, 16, 17, 18; November 22 to December 4.

§ 19. *Osler's Anemometer.*

This anemometer is self-registering: it was made by Newman, but has received several changes since it was originally constructed. A large vane, which is turned by the wind, and from which a vertical spindle proceeds down nearly to the table in the north-western turret of the ancient part of the Observatory, gives motion by a pinion upon the spindle to a rackwork carrying a pencil. This pencil makes a mark upon a paper affixed to a board which is moved uniformly in a direction transverse to the direction of the rack-motion. The movement of the board is effected by means of a second rack connected with the pinion of a clock. The paper has lines printed upon it corresponding to the positions which the pencil must take when the direction of the vane is N., E., S., or W.; and also has transversal lines corresponding to the positions of the pencil at every hour. The first adjustment for azimuth was obtained by observing from a certain point the time of passage of a star behind the vane-shaft, and computing from that observation the azimuth; then on a calm day drawing the vane by a cord to that position, and adjusting the rack, &c., so that the pencil position on the sheet corresponded to that azimuth.

For measuring the pressure of the wind, the shaft of the vane carries a plate one foot square, which is supported by horizontal rods sliding into grooves, and is urged in opposition to the wind by three springs, so arranged that only one comes into play when the wind is light, and the others necessarily act in conjunction with the first as the plate is driven further and further by the force of the wind. A cord from this plate passes over a pulley, and communicates with a copper wire passing through the center of the spindle, which at the bottom communicates with another cord passing under a pulley and held in tension by a slight spring: and by this a pencil is moved transversely to the direction in which the paper fixed to the board is carried by the clock. Lines are printed upon the paper corresponding to different values of the pressure; the intervals of these lines were adjusted by applying weights of 1 lb., 2 lbs., &c., to move the pressure-plate in the same manner as if the wind pressed it.

A rain gauge of peculiar construction is carried by this instrument, by which the fall of rain is registered with reference to the time of the fall. It is described in § 21.

A fresh sheet of paper is applied to this instrument every day at 22^h mean solar time.

§ 20. *Robinson's Anemometer.*

This anemometer is self-registering, (not continuously self-registering, but requiring to be read from time to time), and was made by Messrs. Negretti and Zambra on the principles described by Dr. Robinson in the Transactions of the Royal Irish Academy, vol xxii. It is furnished with four hemispherical cups [each being 3·75 inches in diameter], attached to the extremities of two arms at right angles to each other, and revolving in a horizontal plane by the excess of pressure of the wind on their concave over that on their convex surfaces.

The distance between the centers of opposite cups is 13·45 inches, and their centers describe 42·24 inches in each revolution, indicating, according to the theory, a hori-

zontal movement of the air of 126·72 inches for each revolution, and of one mile for 500 revolutions. The accuracy of this theory was verified by experiments made in 1860 (to be described immediately). The horizontal arms are connected with a vertical spindle, upon which is an endless screw, working in a toothed wheel connected with a train of wheels, furnished with indices capable of registering one mile and decimal multiples of a mile up to 1,000 miles. The instrument is read every day at 22^h.

In the year 1860, on July 3, 4, and 13, experiments were made in Greenwich Park to ascertain the correctness of the theory of Robinson's anemometer; the point to be verified being that the scale of the instrument, founded on the supposition that the horizontal motion of the air is about three times the space described by the centers of the cups, is correct.

A post about 5 feet high with a vertical spindle in the top was erected, and on this spindle turned a horizontal arm, carrying at the extremity of its longer portion Robinson's anemometer, and on its shorter portion a counterpoise. The distance from the vertical spindle of the post to the vertical axis of the anemometer was $17^{ft.}\ 8^{in.}\cdot7$. The reading of the dial was taken, and then the arm was made to revolve in the horizontal plane 50 or 100 times, an attendant counting the number of revolutions, and the reading of the dial was again taken. In this manner 1,000 revolutions were made in the direction N.E.S.W.N., and 1,000 revolutions in the direction N.W.S.E.N. In some of the experiments the air was sensibly quiet, and in others there was a little wind; the result was,

For a movement of the instrument through one mile,

Beam revolving N.E.S.W. (opposite to the direction of rotation of the Anemometer-cups)	1·15 was registered
Beam revolving N.W.S.E. (in the same direction as the Anemometer-cups)	0·97 was registered.

The results from rapid revolutions and from slow revolutions were sensibly the same.

This may be considered as confirming in a very high degree the accuracy of the theory.

§ 21. *Rain Gauges.*

The rain-gauge connected with Osler's anemometer is 50 feet 8 inches above the ground, and 205 feet 6 inches above the mean level of the sea. It exposes to the rain an area of 200 square inches (its horizontal dimensions being 10 by 20 inches).

The collected water passes through a tube into a vessel suspended in a frame by spiral springs, which lengthen as the water increases, until 0·24 of an inch is collected in the receiver; it then discharges itself by means of the following modification of the syphon. A copper tube, open at both ends, is fixed in the receiver, in a vertical position, with its end projecting below the bottom. Over the top of this tube a larger tube, closed at the top, is placed loosely. The smaller tube thus forms the longer

leg, and the larger tube the shorter leg, of a syphon. The water, having risen to the top of the smaller tube, gradually falls through it into the uppermost portion of a tumbling bucket, fixed in a globe under the receiver. When full, the bucket falls over, throwing the water into a small pipe at the lower part of the globe; the water completely fills the bore of the pipe; its descent causes an imperfect vacuum in the globe, sufficient to cause a draught in the longer leg of the syphon, and the whole contents run off. After leaving the globe, the water is received in a pipe attached to the building, which carries it away. The springs then shorten and raise the receiver. The ascent and descent of the water-vessel move a radius-bar which carries a pencil; and this pencil makes a trace upon the paper carried by the sliding-board of the self-registering anemometer.

The scale of the printed paper was adjusted by repeatedly filling the water-vessel until it emptied itself, then weighing the water, and thus ascertaining its bulk, and dividing this bulk by the area of the surface of the rain receiver.

A second gauge, with an area 77 square inches nearly, is placed close to the preceding, the receiving surface of both being on the same horizontal plane.

A third gauge is placed on the roof of the Octagon room, at 38 feet $4\frac{1}{2}$ inches above the ground, and 193 feet $2\frac{1}{2}$ inches above the mean level of the sea. It is a simple cylinder gauge, 8 inches in diameter and about $50\frac{1}{4}$ inches in area. The height of the cylinder is $13\frac{1}{2}$ inches; at the depth of 1 inch from the top within the cylinder is fixed a funnel (an inverted cone) of 6 inches perpendicular height; with the point of this funnel is connected a tube, $\frac{1}{5}$ of an inch in diameter, and $1\frac{1}{2}$ inch in length; $\frac{3}{4}$ of an inch of this tube is slightly curved, and the remaining $\frac{3}{4}$ of an inch is bent upwards, terminating in an aperture of $\frac{1}{8}$ of an inch in diameter. By this arrangement, the last few drops of water remain in the bent part of the tube, and the water is some days evaporating. The upper part of the funnel or bore of the cone is connected with a brass ring, which has been turned in a lathe, and this is connected with a circular piece 6 inches in depth, which passes outside the cylinder, and rests in a water joint, attached to the inner cylinder, and extending all round.

A fourth gauge is placed on the top of the Library; it is a funnel, whose top has a diameter of 6 inches; its exposed area is $28\frac{1}{4}$ inches nearly. The receiving surface of the gauge is 22 feet 4 inches above the ground, and 177 feet 2 inches above the mean level of the sea.

A fifth gauge is planted on the roof of the Photographic Thermometer stand, 10 feet above the ground, and 164 feet 10 inches above the mean level of the sea. Its construction is the same as that of the third gauge.

A sixth gauge is a self-registering rain-gauge on Crosley's construction, made by Watkins and Hill. The surface exposed to the rain is 100 square inches. The collected water falls into a vibrating bucket, whose receiving concavity is entirely above the center of motion, and which is divided into two equal parts by a partition whose plane passes through the axis of motion. The pipe from the rain-receiver terminates immediately above the axis. Thus that part of the concavity which is highest

is always in the position for receiving water from the pipe. When a certain quantity of water has fallen into it, it preponderates, and, falling, discharges its water into a cistern below; then the other part of the concavity receives the rain, and after a time preponderates. Thus the bucket is kept in a state of vibration. To its axis is attached an anchor with pallets, which acts upon a toothed wheel by a process exactly the reverse of that of a clock-escapement. This wheel communicates motion to a train of wheels, each of which carries a hand upon a dial-plate; and thus inches, tenths, and hundredths are registered. Sometimes, when the escapement has obviously failed, the water which has descended to the lower cistern has again been passed through the gauge, in order to enable an assistant to observe the indication of the dial-plates without fear of an imperfection in the machinery escaping notice. The gauge is placed on the ground, 21 feet South of the Magnetic Observatory, and 156 feet 6 inches above the mean level of the sea.

The seventh and eighth gauges are placed near together, about 16 feet south of the Magnetic Observatory, 5 inches above the ground, and 155 feet 3 inches above the mean level of the sea. They are similar in construction and area to No. 3. These cylinders are sunk about 8 inches in the ground.

All these gauges, except No. 7, are read at 22^h daily; in addition, Crosley's gauge and No. 8 are read daily at 9^h p.m., and No. 7 at the end of each month only, to check the summation of the daily readings of No. 8. All are read at midnight of the last day of each month.

Gauges Nos. 1, 2, 3, 5, 8 were made by Messrs. Negretti and Zambra; No. 4 by Troughton; No. 6 by Watkins and Hill; and No. 7 is an old gauge.

§ 22. *The Actinometer.*

The actinometer consists of a hollow cylinder of glass 7 inches in length, and 1·22 inch in diameter, united at one end to a tube similar to a thermometer tube, 7 inches in length, which is terminated at its upper end by a ball 1·1 inch in diameter, the upper part of which is drawn out to a point, and broken off, so as to leave the end open, merely stopped by wax, and covered by a brass cap. The other end of the cylinder is closed by a silver plated cap, cemented on it, and furnished with a screw of silver, with 16 threads to an inch, passing through a collar of waxed leather. The axis of this screw is perforated through its entire length, to allow the stem of a thermometer to pass through it, (the bulb of which is nearly central within the cylinder), for the purpose of determining the temperature of the inclosed liquid. This liquid is of a deep blue colour (ammonio-sulphate of copper). When the actinometer is used in observation, the ball at the top is left full of air, and, according to the position of the screw, the liquid mounts into the first-mentioned tube, and its elevation can be read off on an attached scale which is divided into 100 parts. The cylinder is enclosed in a chamber which is blackened on three sides, and is covered on the fourth side or front by plate glass, to defend the chamber from currents of air; this glass is removeable at pleasure.

The screw is used to diminish or increase the capacity of the cylindrical cistern, and thus to drive into the ball, which acts as a reservoir, all air out of the tube, and then to draw back from the reservoir such a quantity as shall leave the top of the liquid at the zero of the scale or elsewhere at pleasure, leaving no bubble of air in the cylinder, and no blebs of liquid in the tube.

For using the instrument a wooden table is prepared, with a moveable part, on which the instrument is placed, and on which it can very readily be exposed perpendicularly to the rays of the Sun; and where a screen can momentarily be placed so as to cut off all the rays of the Sun from the chamber of the instrument, and can be quickly withdrawn, so as fully to expose the cylindrical chamber to the Sun's radiation.

The method of observation is as follows:

The liquid being adjusted to zero of the scale by the screw, will mount into the stem, as soon as exposed to the Sun. It is allowed to do so for a minute or two, taking care, by the use of the screw, that it does not mount into the ball. When all is ready for observation, the liquid is drawn down to the zero of the scale, slowly and steadily, the thermometer is read for the temperature of the liquid, at the beginning of a minute the scale is read, and at the end of a minute it is read again: the screen is placed before the instrument: at the following 30^s the scale is read for the first shade-observation, and at one minute afterwards is again read for the second shade-observation; the instrument is then exposed to the Sun at the beginning of the next minute, and read as before: and so on successively.

A delicate blackened bulb thermometer for solar radiation has also been frequently read during each series of experiments, for collection of comparative observation of the two instruments.

It is found by experiment that the fluid is driven up the tube 100 divisions by one-tenth of a turn of the screw. One inch in length of the screw including 16 threads, the distance between two contiguous threads is therefore 0·0625 inch.

A fine piece of silk was carefully passed round the bottom of 18 threads; its length was found to be 25·2 inches. Therefore the circumference of the screw at the bottom of the thread was 1·4 inch and its diameter 0·445 inch nearly. The depth of the thread is fully 0·05 inch.

These measures will give the means of converting the observed readings of the liquid in the slender tube into actual expressions of the proportion to the general store of liquid in the cylindrical chamber.

§ 23. *Electrical Apparatus.*

The electrical apparatus consists of two parts, namely, the Moveable Apparatus, which is connected with a pole nearly 80 feet high planted 7 feet North and 2 feet East of the north-east angle of the north arm of the Magnetic Observatory (as extended in 1862); and the Fixed Apparatus, which is mounted in a projecting window in the ante-room of the Magnetic Observatory.

On the top of the pole is fixed a projecting cap, to which are fastened the ends of two iron rods, which terminate in a pit sunk in the ground, and are kept in tension by attached weights. These rods are to guide the moveable apparatus in its ascents and descents. Near the bottom of the pole is fixed a windlass; the rope upon which it acts passes over a pulley in the cap, and is used to raise the moveable apparatus, which when raised to the top is suspended on a hook.

The moveable apparatus consists of the following parts:—A plank in a nearly vertical position is attached to perforated iron bars, which slide upon the iron rods. On the upper part of this plank is a cubical box. The box incloses a stout pillar of glass, having a conical hollow in its lower part. In the bottom of the box there is a large hole through which a cone of copper passes into the conical hollow of the glass pillar. In a space below the box a gas-lamp is placed, by the flame of which the copper cone and the lower part of the glass pillar are kept in a state of warmth. A copper wire is fastened round the glass pillar; its end is carried to a similar glass pillar, warmed in the same manner, near the north-western turret of the Octagon room; by this wire, whose length is about 400 feet, the atmospheric electricity is collected. To this wire, near the box, is attached another copper wire now covered with gutta percha 0·1 inch in diameter, and about 73 feet long, at the end of which is a hook; a loaded brass lever connected with the fixed apparatus presses upon this hook, and thus keeps the wire in a state of tension, and at the same time establishes the electrical communication between the long horizontal wire and the fixed apparatus.

The fixed apparatus consists of these parts:—A glass bar, nearly 3 feet long, and thickest at its middle, is supported in a horizontal position, its ends being fixed in pieces of wood projecting downwards from the roof of the projecting window. Near to each end is placed a small gas-lamp, whose chimney encircles the glass, and whose heat keeps the glass in a state of warmth proper for insulation. A brass collar surrounds the center of the glass bar; it carries one brass rod, projecting vertically upwards through a hole in the roof of the window-recess, to which rod are attached a small metallic umbrella and the loaded lever above-mentioned; and it carries another rod projecting vertically downwards, to which is attached a horizontal brass tube in an East and West direction. On the North and South sides of this tube there project four horizontal rods, through the ends of which there pass vertical rods, which can be fixed by screws at any elevation; these are placed in connexion with the electrometers, which rest on the window seat.

The electrometers during the year 1865 consisted of a Double Gold Leaf Electrometer of the ordinary construction; two Volta's Electrometers, denoted by Nos. 1 and 2; a Henley's Electrometer; a Ronalds' Spark Measurer; a Dry-pile Apparatus; and a Galvanometer.

Volta 1 and Volta 2 are of the same construction; each is furnished with a pair of straws 2 Paris inches in length; those of the latter being much heavier than those of the former: each instrument is furnished with a graduated ivory scale, whose radius is

2 Paris inches, and it is graduated into half Paris lines. In the original construction of these instruments it was intended that each division of No. 2 should correspond to five of No. 1: the actual relation between them has not yet been determined by observations at the Royal Observatory. The straws are suspended by hooks of fine copper wire to the suspension-piece, and they are separated by an interval of half a line.

Henley's Electrometer is supported on the West end of the large horizontal tube by means of a vertical rod fixed in it. On each side of the upper part of this rod is affixed a semicircular plate of ivory, whose circumference is graduated; at the centers of these ivory plates two pieces of brass are fixed, which are drilled to receive fine steel pivots, carrying a brass axis, into which the index or pendulum is inserted; the pendulum terminates with a pith ball. The relation between the graduations of this instrument and those of the other electrometers has not been determined. This instrument has seldom been affected till Volta 2 has risen to above 100 divisions of its scale.

The spark measurer consists of a vertical sliding rod terminated by a brass ball, which ball can be brought into contact with one of the vertical rods before referred to, also terminating in a ball; and it can be moved from it or towards it by means of a lever, with a wooden handle. During the operation of separating the balls, an index runs along a graduated scale, and exhibits the distance between the balls, and this distance measures the length of the spark.

The electrometers and the spark measurer were originally constructed under the superintendence of Francis Ronalds, Esq., but have since received small alterations.

The dry-pile apparatus was made by Watkins and Hill; it is placed in connexion with the brass bar by a system of wires and brass rods. The indicator, which vibrates between the two poles, is a small piece of gold leaf. This instrument is very delicate, and it indicates at once the quality of the electricity. When the inclination of the gold leaf is such that it is directed towards the top of either pile, it remains there as long as the quantity of electricity continues the same or becomes greater: the position is sometimes expressed in the notes by the words "as far as possible." The angle which the gold leaf makes with the vertical at this time is about 40°.

The galvanometer was made by Gourjon of Paris, and consists of an astatic needle, composed of two large sewing needles, suspended by a split silk fibre, one of the needles of the pair vibrating within a ring formed by 2,400 coils of fine copper wire. The connexions of the two portions of wire forming these 2,400 coils are so arranged that it is possible to use a single system of 1,200 coils of single wire, or a system of 1,200 coils of double wire, or a system of 2,400 coils of single wire: in practice the last has always been used. A small ball communicating by a wire with one end of the coils is placed in contact at pleasure with the electric conductor, and a wire leading from the other end of the coil communicates with the earth. An adjustible circular card, graduated to degrees, is placed immediately below the upper needle; the numeration

of its divisions proceeds in both directions from a zero. One of these directions is distinguished by the letter A, and the other by the letter B; and the nature of the indication represented by the deflection of the needle towards A or towards B will be ascertained from the following experiment. A voltaic battery being formed by means of a silver coin and a copper coin, having a piece of blotting paper moistened with saliva between them: when the copper touches the small ball, and the wire which usually communicates with the earth is made to touch the silver, the needle turns towards A; when the silver touches the small ball, and the wire is made to touch the copper, the needle turns towards B.

§ 24. *Explanation of the Tables of Meteorological Observations.*

The mean daily value of the difference between dew-point temperature and air-temperature is the difference between the two numbers in the sixth and seventh columns. The Greatest and Least are the greatest and least among the differences corresponding to the times of observation in the civil day, or they are found from the absolute maxima and minima, as determined by comparing the observations of the self-registering wet-bulb thermometers with those of the self-registering dry-bulb thermometers.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of fifty years, is found by comparison with a table of results deduced by Mr. Glaisher from fifty years' observations, made at the Royal Observatory, ending 1863.

Little explanation of the results deduced from Osler's Anemometer appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Robinson's Anemometer is read off every day at 22^h (10^h A.M.) and the difference between consecutive readings is entered opposite to the civil day on which the first reading is taken.

The register of rain ends generally at 9^h P.M.; the amounts recorded at 10^h A.M. and at 9^h P.M. being added together to form the rain fall for the day. This applies to the Cylinder Rain-gauge partly sunk in the ground, described above as the "eighth." If, however, there appears to be any doubt as to the correctness of the results, reference is made to a Rain-gauge of similar construction and placed near to it, called above the "seventh."

For understanding the divisions of time under the heads of Electricity and Weather, the following remarks are necessary:—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is roughly subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the remarks before it apply (roughly) to the

interval from midnight to 6 A.M., and those following it to the interval from 6 A.M. to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

The following is the explanation of the notation employed for record of electrical observations, it being premised that the quality of the Electricity is always to be supposed positive when no indication of quality is given:—

g cur.	denotes *galvanic currents*	s	denotes *strong*
m	... *moderate*	sp	... *sparks*
N	... *negative*	v	... *variable*
P	... *positive*	w	... *weak*

The duplication of the letter denotes an intensity of the modification described thus, s s is very strong; v v, very variable.

The Clouds and Weather are described generally by Howard's Nomenclature; the figure denotes the proportion of sky covered by clouds, the whole sky being represented by 10. The notation is as follows:

a	denotes *aurora borealis*	r	denotes *rain*
ci	... *cirrus*	th-r	... *thin rain*
ci-cu	... *cirro-cumulus*	oc-r	... *occasional rain*
ci-s	... *cirro-stratus*	fr-r	... *frozen rain*
cu	... *cumulus*	h-r	... *heavy rain*
cu-s	... *cumulo-stratus*	shs-r	... *showers of rain*
d	... *dew*	c-r	... *continued rain*
h-d	... *heavy dew*	c-h-r	... *continued heavy rain*
f	... *fog*	m-r	... *misty rain*
sl-f	... *slight fog*	fr-m-r	... *frequent misty rain*
th-f	... *thick fog*	sl-r	... *slight rain*
fr	... *frost*	h-shs	... *heavy showers*
glm	... *gloom*	fr-shs	... *frequent showers*
gt-glm	.. *great gloom*	fr-h-shs	... *frequent heavy showers*
h-fr	... *hoar frost*	li-shs	... *light showers*
h	... *haze*	oc-shs	... *occasional showers*
hl	... *hail*	oc-h-shs	... *occasional heavy showers*
so-ha	... *solar halo*	sq	... *squall*
l	... *lightning*	sqs	... *squalls*
li-cl	... *light clouds*	fr-sqs	... *frequent squalls*
lu-co	... *lunar corona*	h-sqs	... *heavy squalls*
lu-ha	... *lunar halo*	fr-h-sqs	... *frequent heavy squalls*
m	... *meteor*	sc	... *scud*
ms	... *meteors*	li-sc	... *light scud*
n	... *nimbus*	sl	... *sleet*

sn	denotes	*snow*	th-cl	denotes	*thin clouds*
oc-sn	...	*occasional snow*	v	...	*variable*
sl-sn	...	*slight snow*	vv	...	*very variable*
s	...	*stratus*	w	...	*wind*
t	...	*thunder*	st-w	...	*strong wind*
t-s	...	*thunder storm*			

The foot-notes show the means and extremes of readings, and their departure in each month from average values, as found from the preceding Twenty-four Years Observations; those relating to Humidity have been calculated from the Third Edition of Glaisher's Hygrometrical Tables.

The observations with the Actinometer are sufficiently explained in the description of the instrument in § 22.

§ 25. *Observations of Luminous Meteors.*

In arranging for the observations of meteors, the directions circulated by the Committee of the British Association have received the most careful attention. The observers have been educated in the knowledge of the principal stars by observations of the stars themselves, and by means of globes and maps. The general instruction to all observers has been, to look out for meteors on every clear night; but the observer specially appointed for the evening's duties has been more particularly charged with this observation.

On the nights specially mentioned in the directions of the British Association Committee, greater attention was given to the sky, and the observations of meteors were made more systematically. These nights are, January 2 and 10; February 6; March 1; April 19; May 18; June 6 and 20; July 17, 20, and 29; August 3, August 7–13; September 10; October 1 and 23; November 9–14, November 19, 28, and 30; December 8–14, especially December 11.

Special arrangements were made in the August period for observing till the morning; and in the November period for observing through the night, one or two observers being on duty till midnight, and then all the observers till daybreak. The observers were so stationed as to command different views of the sky, to secure observation of all the meteors which might present themselves, and to guard against the observation of the same meteor by different observers.

The observers in the year 1865 were Mr. Nash, Mr. Harding, Mr. Trapaud, Mr. Jones, Mr. Wright, and Lieut. Rikatcheff of the Imperial Russian Navy. Their observations are distinguished by the initials N., A.H., F. T., E.J., T.W., and M.R., respectively.

§ 26. *Details of the Chemical Operations for the Photographic Records.*

Mr. Glaisher has drawn up the following account of the Chemical Processes

employed in the Photographic Operations for the self-registration of the Magnetical and Meteorological Indications.

CHEMICAL PREPARATION AND TREATMENT OF THE PHOTOGRAPHIC PAPER FOR PRIMARIES.

The paper used is similar to that made by Whatman; it is made by his successor Hollingsworth; it is strong and of even texture, and is prepared expressly for Photographic purposes.

First Operation.—Preliminary Preparation of the Paper.

The chemical solutions used in this process are the following:—

(1.) Sixteen grains of Iodide of Potassium are dissolved in one ounce of distilled water.

(2.) Twenty-four grains of Bromide of Potassium are dissolved in one ounce of distilled water.

(3.) When the crystals are dissolved, the two solutions are mixed together, forming the iodising solution. The mixture will keep through any length of time. Immediately before use, it is filtered through filtering paper.

A quantity of the paper, sufficient for the consumption of several weeks, is treated in the following manner, sheet after sheet.

The sheet of paper is pinned by its four corners to a horizontal board. Upon the paper, a sufficient quantity (about 50 minims, or $\frac{5}{48}$ of an ounce troy) of the iodising solution is applied, by pouring it upon the paper in front of a glass rod, which is then moved to and fro till the whole surface is uniformly wetted by the solution. Or, the solution may be evenly distributed by means of a camel-hair brush.

The paper thus prepared is allowed to remain in a horizontal position for a few minutes, and is then hung up to dry in the air; when dry, it is placed in a drawer, and may be kept through any length of time.

Second Operation.—Rendering the Paper sensitive to the Action of Light.

A solution of Nitrate of Silver is prepared by dissolving 50 grains of crystallized Nitrate of Silver in one ounce of distilled water. Since the magnetic basement has been used for photography, 15 grains of Acetic Acid have always been added to the solution.

Then the following operation is performed in a room illuminated by yellow light.

The paper is pinned as before upon a board somewhat smaller than itself, and (by means of a glass rod, as before,) its surface is wetted with 50 minims of the Nitrate of Silver solution. It is allowed to remain a short time in a horizontal position, and, if any part of the paper still shines from the presence of a part of the solution unabsorbed into its texture, the superfluous fluid is taken off by the application of blotting paper.

The paper, still damp, is immediately placed upon the interior glass cylinder, and is covered by the exterior glass cylinder, and the united cylinders are mounted upon the revolving apparatus, to receive the spot of light formed by the mirror, which is carried by the magnet; or to receive the line of light passing through the thermometer tube.

Third Operation.—Development of the Photographic Trace.

When the paper is removed from the cylinder, it is placed as before upon a board, and a saturated solution of Gallic Acid, to which a few drops of Aceto-Nitrate of Silver are occasionally added, is spread over the paper by means of a glass rod, and this action is continued until the trace is fully developed. The solutions are kept in the magnetic basement, and are always used at the temperature of that room. When the trace is well developed, the paper is placed in a vessel with water, and repeatedly washed with several waters; a brush being passed lightly over both sides of the paper to remove any crystalline deposit.

Fourth Operation.—Fixing the Photographic Trace.

The Photograph is placed in a solution of Hyposulphite of Soda, made by dissolving four or five ounces of the Hyposulphite in a pint of water; it is plunged completely in the liquid, and allowed to remain from one to two hours, until the yellow tint of the Iodide of Silver is removed. After this the sheet is washed repeatedly with water, allowed to remain immersed in water for 24 hours, and afterwards placed within folds of cotton cloths till nearly dry. Finally it is placed between sheets of blotting-paper, and is pressed.

CHEMICAL PREPARATION AND TREATMENT OF THE PHOTOGRAPHIC PAPER FOR SECONDARIES.

Before taking a Secondary, the Primary is examined to ascertain whether the tint of the photographic curve is sufficiently dark. If it is not, the Primary is laid, face downwards, upon a desk of transparent plate-glass, below which is a large silvered plane mirror, so placed that the light from the sky is reflected upwards through the transparent glass and through the Primary; and the photographic curve is seen from the upper side or back with perfect distinctness. An assistant then darkens the back of the photographic curve by the application of sepia; the original photograph being untouched.

The paper used for the Secondaries is made by Rive; it is a strong wove paper, of tolerably even texture, thin, but able to bear a great deal of wear.

First Operation.—Preliminary Preparation of the Paper.

The chemical solution required for this purpose is as follows:—

Two grains of Chloride of Ammonium are dissolved in one ounce of distilled water. A sufficient quantity of this solution is placed in a flat-bottomed porcelain dish, and

sheets of paper, one by one, are plunged within it; care being taken that no air bubbles remain between the paper and the solution; this may be prevented by slight pressure over the sheet by means of a bent glass rod. When a few sheets are thus immersed, they are turned over, and are taken out and hung to dry. Any number of sheets may thus be prepared.

An equally good result is obtained, by spreading over one side by means of a glass rod, as in the preparation of the Primaries, a solution of Chloride of Ammonium made by dissolving five grains of the chloride in one ounce of distilled water.

Second Operation.—Rendering the Paper sensitive to the Action of Light.

The solution required for this purpose is as follows:—

To a filtered solution of Nitrate of Silver (made by dissolving 50 grains of Crystallized Nitrate of Silver in one ounce of distilled water) some strong solution of Ammonia is added; the whole becomes at first of a dark brown colour, but when a sufficient quantity of Ammonia is added the solution becomes perfectly clear; a few crystals of Nitrate of Silver are then added till the solution is a little dull, forming "Ammoniacal Nitrate of Silver"; it is then ready for use.

The following operation is performed in a room illuminated by yellow light:—

By means of a glass rod this solution is spread over the paper, whilst pinned on a board; the paper is dried before a fire, and is then in a fit state to be used for producing a Secondary.

Third Operation.—Formation of the Photographic Copy.

A sheet of the paper so prepared is placed in a printing frame with its prepared side upwards, upon a bed of blotting paper resting upon a sheet of plate-glass; the Primary is then placed on the paper with its own face downwards; and as it is necessary, for obtaining a correct copy of the Primary, that it should be in close contact with the prepared surface, a second sheet of plate-glass is placed over it, and the two are pressed together by clamps and screws. The whole is then exposed to the light (the Primary to be copied being above the paper on which the copy is to be made). The time required to produce a copy depends, in a great measure, upon the thickness of the paper on which the Primary is made, and on the actinic quality of the light; a period of five minutes in a bright sunshine, or one hour in clear daylight, is generally sufficient.

Fourth Operation.—Fixing the Photographic Secondary.

When an impression has been thus obtained, it is necessary that the undecomposed Salts of Silver remaining in the paper be removed.

For this purpose the Secondary is at once plunged into water and well washed on both sides, passing a camel-hair brush over every part of it; it is then plunged into

a solution of Hyposulphite of Soda (made by dissolving two or three ounces of the Hyposulphite in a pint of water), and is left through a period varying from half an hour to an hour. It is then removed, and washed in plain water several times; and running water is allowed to pass over it for twenty-four hours.

The sheets are then placed within the folds of drying cloths, till nearly dry, and finally between sheets of blotting paper.

The process of obtaining a Tertiary from a Secondary is in every respect the same as that of obtaining a Secondary from a Primary.

§ 27. *Personal Establishment.*

The personal establishment during the year 1865 has consisted of James Glaisher, Esq., F.R.S., Superintendent of the Magnetical and Meteorological Department, and Mr. William Carpenter Nash, Assistant.

Three or four computers have usually been attached to the Department.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS.

1865.

ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1865.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 1 h m		Jan. 1 h m	°	°
				0. 0	·03194	1. 0	55·4	56·0
				1. 55	·03190	Max.	55·6	59·0
				3. 59	·03209	7. 30	55·3	58·6
				6. 36	·03215	Min.	54·0	55·7
				11. 22	·03204	21. 0	54·5	56·0
				11. 30	·03210			
				11. 43	·03198			
				13. 26	·03200			
				18. 45	·03175			
				22. 8	·03150			
				23. 59	·03130			
				Jan. 2		Jan. 2		
				0. 0	·03130	1. 0	54·7	57·2
				0. 30	·03130	3. 0	54·2	56·8
					(†)	Min.	54·0	56·2
				1. 38	·03670	9. 0	54·4	57·0
				2. 57	·03639	21. 0	55·1	58·0
					·03625	Max.	55·4	58·8
				9. 20	·03618			
				10. 30	·03615			
				11. 15	·03618			
				13. 15	·03615			
				14. 34	·03618			
				15. 50	·03615			
				19. 20	·03620			
				21. 10	·03628			
				22. 12	·03637			
				23. 45	·03642			
				23. 59	·03638			
				Jan. 3		Jan. 3		
				0. 0	·03638	1. 0	..	59·2
				0. 17	·03642	3. 0	57·5	59·3
				0. 27	·03650	Max.	57·5	59·7
				1. 40	·03650	9. 0	56·6	59·1
				2. 9	·03646	Min.	55·3	57·9
				4. 0	·03667	21. 0	55·5	58·2
				6. 50	·03685			
				7. 1	·03680			
				7. 36	·03690			
				8. 0	·03685			
				9. 26	·03692			
				12. 7	·03675			
				14. 0	·03665			
				14. 46	·03657			
				20. 0	·03664			
				22. 0	·03665			
				23. 22	·03664			
				23. 59	·03665			
				Jan. 4		Jan. 4		
				0. 0	·03665	1. 0	..	61·0
				0. 36	·03675	3. 0	59·6	61·8
				1. 8	·03694	Max.	60·3	61·9
				2. 0	·03710	9. 0	56·8	58·0
				2. 15	·03720	Min.	56·4	57·6
				2. 24	·03735	21. 0	56·8	58·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 4 h m		h m	°	°
				2. 45	·03735			
				3. 18	·03745			
				4. 16	·03805			
				4. 45:	·03800			
				5. 37	·03830			
				5. 45	·03823			
				6. 22	·03825			
				6. 42	·03809			
				7. 36	·03785			
				8. 48	·03762			
				9. 30	·03755			
				10. 22	·03747			
				12. 3	·03743			
				13. 0	·03739			
				15. 9	·03735			
				16. 9	·03736			
				18. 35	·03725			
				19. 40	·03720			
				22. 46	·03724			
				23. 45	·03713			
				23. 59	·03715			
				Jan. 5		Jan. 5		
				0. 0	·03715	1. 0	56·7	58·9
				2. 30	·03722	3. 0	57·8	60·0
				5. 22	·03738	Max.	59·4	62·8
				6. 48	·03750	9. 0	58·4	62·0
				7. 52	·03764	Min.	56·6	57·8
				8. 42	·03784	21. 0	57·2	58·0
				9. 16	·03815			
				9. 30	·03805			
				9. 51	·03810			
				10. 6	·03800			
				10. 39	·03765			
				11. 4	·03774			
				11. 37	·03780			
				12. 18	·03765			
				12. 25	·03771			
				12. 51	·03735			
				14. 19	·03750			
				15. 15	·03745			
				15. 39	·03740			
				16. 37	·03748			
				17. 0	·03750			
				17. 35	·03763			
				18. 0	·03758			
				18. 39	·03750			
				19. 36	·03762			
				20. 25	·03763			
				22. 0	·03765			
				23. 45	·03755			
				23. 59	·03761			
				Jan. 6		Jan. 6		
				0. 0	·03761	1. 0	..	58·2
				0. 50	·03782	3. 0	59·6	59·2
				1. 15	·03786	Max.	59·7	60·0
				1. 36	·03810	9. 0	57·4	57·4

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

January 2. Between $0^h.\ 30^m.$ and $1^h.\ 38^m.$, the Vertical Force Magnet was adjusted, and its time of vibration lengthened, and a new series began at $1^h.\ 38^m.$

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 6 h m		Jan. 6 h m	°	°
				2. 26	·03780	Min.	55 ·6	55 ·8
				3. 11	·03778	21. 0	56 ·1	56 ·0
					·03795			
				5. 3	·03777			
				5. 33	·03780			
				6. 13	·03780			
				6. 39	·03790			
				7. 34	·03775			
				8. 30	·03770			
				9. 9	·03768			
				10. 9	·03763			
				10. 39	·03757			
				11. 30	·03747			
				11. 34	·03760			
				11. 52	·03735			
				12. 30	·03725			
				12. 48	·03711			
				13. 30	·03715			
				14. 7	·03704			
				14. 37	·03710			
				15. 9	·03700			
				15. 53	·03695			
				16. 45	·03701			
				17. 33	·03693			
				19. 0	·03685			
				20. 0	·03680			
				20. 45	·03677			
					***			
				23. 13	·03664			
				23. 42	·03650			
				23. 59	·03677			
				Jan. 7		Jan. 7		
				0. 0	·03677	1. 0	55 ·9	57 ·6
				0. 30	·03679	3. 0	56 ·5	58 ·2
				2. 28	·03685	Max.	57 ·8	60 ·2
				4. 56	·03690	9. 0	56 ·5	58 ·6
				5. 15	·03717	Min.	56 ·5	57 ·9
				5. 42	·03700	22. 10	56 ·8	58 ·0
				6. 54	·03711			
				8. 0	·03700			
				10. 36	·03670			
				11. 9	·03680			
				11. 35	·03670			
				12. 15	·03678			
				12. 37	·03672			
				12. 54	·03677			
				13. 20	·03662			
				14. 47	·03668			
				15. 30	·03664			
				18. 40	·03680			
				19. 38	·03675			
				21. 49	·03683			
				22. 26	·03690			
				22. 57	·03690			
					(†)			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 8 h m		Jan. 8 h m	°	°
					(†)	1. 0	57 ·0	58 ·0
				0. 32	·03687	Max.	58 ·2	60 ·3
				2. 5	·03695	8. 0	57 ·2	59 ·2
				2. 55	·03707	Min.	56 ·0	58 ·0
				3. 47	·03710	21. 6	56 ·9	59 ·1
				4. 0	·03716			
				5. 7	·03719			
				5. 24	·03712			
				5. 45	·03725			
				6. 15	·03716			
				7. 36	·03705			
				8. 40	·03703			
				12. 8	·03690			
				12. 52	·03687			
				13. 12	·03683			
				19. 48	·03695			
				20. 24	·03690			
				21. 26	·03710			
				22. 0	·03700			
				22. 54	·03705			
				23. 40	·03720			
				23. 59	·03736			
				Jan. 9		Jan. 9		
				0. 0	·03736	3. 0	58 ·4	61 ·9
				0. 20	·03728	Max.	59 ·6	62 ·0
				0. 30	·03745	9. 0	59 ·4	61 ·8
				0. 43	·03739	Min.	58 ·5	61 ·4
				1. 15	·03746	21. 0	59 ·6	62 ·0
				1. 37	·03762			
				2. 20	·03777			
				2. 23	·03769			
				2. 36	·03780			
				4. 0	·03810			
				4. 24	·03795			
				5. 20	·03797			
				5. 45	·03820			
				6. 36	·03830			
				6. 41	·03821			
				7. 10	·03830			
				7. 35	·03795			
				8. 6	·03805			
				10. 44	·03786			
				12. 24	·03792			
				12. 38	·03765			
				13. 21	·03737			
				13. 35	·03720			
				13. 49	·03735			
				14. 45	·03760			
				17. 55	·03795			
				19. 30	·03793			
				21. 28	·03800			
				22. 0	·03810			
				23. 59	·03796			
				Jan. 10		Jan. 10		
				0. 0	·03796	1. 0	..	57 ·5
				1. 24	·03805	3. 0	56 ·4	57 ·6

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

The suspension of the Declination Magnet until January 22, and that of the Horizontal Force Magnet until February 4, were of steel wire, with a very large co-efficient of torsion. The results given by the magnetometers during these periods have therefore been suppressed. From the dates above-mentioned, silk skeins were employed, as in former years.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 10 h m		Jan. 10 h m	°	°
				2. 4	·03815	Max.	59 ·1	60 ·4
				2. 49	·03800	9. 0	58 ·6	59 ·4
				4. 52	·03825	Min.	57 ·4	58 ·4
				5. 54	·03815	21. 0	58 ·0	58 ·4
				6. 40	·03809			
				7. 14	·03818			
				8. 23	·03805			
				8. 35	·03811			
				9. 19	·03790			
				12. 0	·03795			
				12. 48	·03756			
				13. 26	·03770			
				13. 50	·03776			
				14. 7	·03760			
				14. 35	·03748			
				15. 39	·03761			
				16. 20	·03750			
				17. 6	·03766			
				18. 53	·03770			
				20. 15	·03760			
				21. 5	·03755			
				21. 37	·03749			
				23. 59	·03750			
				Jan. 11		Jan. 11		
				0. 0	·03750	1. 0.	. .	58 ·5
				1. 15	·03775	3. 0	58 ·8	59 ·0
				1. 50	·03790	Max.	59 ·5	59 ·8
				2. 24	·03775	9. 12	58 ·0	59 ·4
				3. 15	·03775	Min.	56 ·3	57 ·0
				3. 32	·03789	21. 0	57 ·0	57 ·5
				4. 0	·03780			
				4. 38	·03795			
				5. 9	·03775			
				5. 27	·03790			
				6. 24	·03784			
				8. 0	·03760			
				9. 57	·03750			
				10. 34	·03742			
				12. 44	·03738			
				13. 11	·03730			
				14. 38	·03725			
				15. 22	·03720			
				16. 25	·03725			
				18. 30	·03710			
				20. 30	·03690			
				22. 0	·03685			
				22. 32	·03682			
				23. 32	·03690			
				23. 59	·03700			
				Jan. 12		Jan. 12		
				0. 0	·03700	1. 0	58 ·0	58 ·6
				1. 6	·03715	3. 0	57 ·6	58 ·0
				1. 30	·03727	Min.	57 ·6	58 ·0
				2. 6	·03740	Max.	59 ·0	59 ·8
				2. 30	·03745	9. 0	57 ·1	59 ·0
				4. 33	·03726	Min.	56 ·8	59 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 12 h m		h m	°	°
				5. 2	·03738	21. 0	57 ·5	59 ·0
				5. 34	·03725			
				6. 19	·03735			
				6. 33	·03730			
				6. 45	·03713			
				6. 55	·03715			
				7. 6	·03705			
				7. 22	·03710			
				7. 36	·03695			
				11. 25	·03692			
				12. 15	·03705			
				12. 40	·03685			
				14. 14	·03695			
				16. 35	·03680			
				19. 7	·03687			
				20. 10	·03680			
				21. 0	·03685			
				22. 22	·03685			
				22. 36	·03690			
				23. 14	·03680			
				23. 59	·03682			
				Jan. 13		Jan. 13		
				0. 0	·03682	1. 0	. .	58 ·7
				2. 13	·03676	3. 0	58 ·8	60 ·5
				4. 7	·03705	Max.	59 ·7	60 ·6
				6. 0	·03700	9. 0	56 ·8	57 ·5
				7. 46	·03682	Min.	56 ·2	57 ·0
				8. 28	·03680	21. 0	56 ·8	58 ·2
				9. 19	·03657			
				10. 18	·03655			
				11. 24	·03664			
				11. 34	·03657			
				11. 43	·03660			
				12. 6	·03658			
				12. 25	·03660			
				12. 40	·03655			
				14. 46	·03668			
				16. 30	·03670			
				18. 27	·03665			
				19. 55	·03660			
				22. 30	·03650			
				23. 59	·03645			
				Jan. 14		Jan. 14		
				0. 0	·03645	1. 0	57 ·8	59 ·1
				0. 11	·03650	Max.	58 ·0	60 ·0
				0. 45	·03655	9. 0	56 ·8	60 ·0
				1. 5	·03650	Min.	56 ·8	58 ·0
					(†)	22. 0	57 ·0	58 ·0
				2. 23	·03670			
				5. 24	·03681			
				7. 28	·03675			
				9. 39	·03670			
				10. 49	·03660			
				18. 50	·03660			
				19. 51	·03655			
				22. 17	·03660			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	° ′ ″	h m	

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 14 h m	
23. 28	·03658
23. 39	·03667
23. 59	·03660
Jan. 15	
0. 0	·03660
0. 23	·03670
0. 35	·03665
0. 54	·03670
0. 59	·03679
1. 22	·03672
1. 26	·03675
2. 18	·03710
2. 45	·03734
3. 8	·03738
3. 24	·03745
3. 34	·03742
3. 41	·03748
3. 56	·03755
4. 8	·03750
4. 35	·03773
4. 54	·03770
5. 15	·03785
5. 36	·03816
5. 46	·03810
6. 14	·03770
6. 30	·03750
6. 56	·03736
7. 11	·03730
7. 46	·03722
7. 58	·03715
8. 19	·03705
8. 35	·03714
9. 5	·03687
9. 27	·03695
9. 53	·03688
10. 24	·03679
10. 57	·03685
11. 7	·03675
11. 23	·03669
11. 54	·03683
12. 30	·03665
13. 6	·03658
13. 26	·03654
14. 40	·03650
15. 6	·03657
15. 30	·03661
15. 51	·03665
18. 4	·03660
18. 39	·03650
19. 52	·03656
20. 33	·03650
21. 56	·03648
22. 34	·03650
23. 52	·03660
23. 59	·03663

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Jan. 15		
0. 30	57 ·1	59 ·0
Max.	57 ·2	59 ·9
8. 0	57 ·0	59 ·0
Min.	56 ·6	59 ·0
21. 0	56 ·9	59 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	° ′ ″	h m	

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 16 h m	
0. 0	·03663
0. 51	·03670
1. 6	·03680
1. 25	·03691
1. 37	·03685
1. 53	·03697
4. 41	·03815
4. 55	·03840
5. 0	·03850
5. 18	·03836
5. 39	·03840
6. 30	·03804
6. 47	·03800
7. 30	·03788
7. 50	·03780
8. 23	·03767
8. 36	·03760
8. 45	·03745
9. 18	·03705
9. 40	·03700
9. 50	·03685
10. 11	·03633
10. 23	·03647
10. 38	·03630
10. 55	·03605
11. 9	·03600
11. 23	·03600
11. 33	·03567
11. 50	·03557
12. 39	·03537
12. 45	·03513
12. 54	·03487
13. 9	·03505
13. 20	·03530
13. 24	·03506
13. 38	·03495
14. 32	·03538
14. 50	·03530
15. 15	·03565
15. 26	·03585
15. 40	·03580
16. 50	·03586
17. 4	·03595
17. 49	·03584
18. 24	·03595
19. 23	·03585
21. 53	·03580
23. 34	·03585
23. 59	·03570
Jan. 17	
0. 0	·03570
1. 24	·03556
1. 41	·03560
	·03585
3. 7	·03600
3. 53	·03607
4. 11	·03619

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Jan. 16 h m	°	°
1. 0	56 ·8	59 ·0
3. 0	57 ·1	60 ·0
Max.	57 ·6	60 ·2
9. 0	57 ·6	60 ·2
Min.	54 ·3	54 ·5
21. 0	55 ·1	55 ·1
Jan. 17		
1. 0	55 ·0	58 ·5
3. 0	55 ·4	58 ·2
Max.	55 ·7	58 ·5
9. 0	55 ·5	57 ·9
Min.	54 ·0	56 ·8
21. 0	54 ·9	57 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 17 h m		h m	°	°
				5. 10	·03640			
				5. 30	·03652			
				5. 54	·03675			
				6. 8	·03677			
				6. 24	·03692			
				6. 34	·03689			
				6. 53	·03705			
				7. 4	·03710			
				7. 39	·03738			
				8. 0	·03725			
				8. 24	·03710			
				8. 30	·03730			
				8. 41	·03685			
				9. 25	·03617			
				10. 4	·03624			
				10. 40	·03612			
				11. 8	·03548			
				12. 40	·03587			
				13. 21	·03593			
				13. 36	·03588			
				15. 46	·03583			
				22. 30	·03567			
				22. 54	·03561			
				23. 59	·03558			
				Jan. 18		Jan. 18		
				0. 0	·03558	Min.	53·8	56·8
				1. 50	·03565	1. 0	53·9	57·0
				6. 13	·03578	3. 0	54·6	57·8
				10. 8	·03570	Max.	55·3	58·4
				11. 44	·03565	9. 0	54·9	58·0
				21. 45	·03565	Min.	54·9	57·4
				23. 59	·03565	21. 0	55·2	57·4
				Jan. 19		Jan. 19		
				0. 0	·03565	1. 0	55·8	58·4
				1. 46	.03565	3. 0	55·9	58·3
				2. 44	·03575	Max.	56·3	59·2
				2. 53	·03572	9. 0	55·9	58·2
				3. 40	·03595	Min.	55·4	58·2
				4. 7	·03603	21. 0	56·0	58·8
				4. 15	·03596			
				6. 0	·03605			
				8. 1	·03593			
				10. 24	·03585			
				12. 44	·03584			
				13. 9	·03536			
				13. 27	·03545			
				13. 53	·03542			
				14. 21	·03555			
				14. 45	·03570			
				16. 49	·03575			
				17. 21	·03570			
				20. 11	·03568			
				21. 27	·03560			
				21. 54	·03554			
				23. 15	·03565			
				23. 59	·03568			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 20 h m		Jan. 20 h m	°	°
				0. 0	·03568	1. 0	56·1	59·0
				2. 15	{·03564 ·03595	3. 0	56·1	59·1
						Max.	56·6	59·7
				7. 26	·03597	9. 25	56·1	59·0
				7. 50	·03605	Min.	53·8	56·0
				10. 22	·03590	21. 0	53·9	56·0
				10. 53	·03595			
				11. 23	·03573			
				12. 45	·03585			
				13. 40	·03580			
				14. 42	·03570			
				15. 11	·03559			
				15. 30	·03552			
				16. 30	·03565			
				17. 0	·03572			
				19. 40	·03560			
				21. 0	·03554			
				21. 44	{·03551 ·03519			
				23. 2	·03523			
				23. 45	·03515			
				23. 57	{·03513 ·03552			
				23. 59	·03542			
				Jan. 21		Jan. 21		
				0. 0	·03542	1. 0	53·9	56·0
				4. 0	·03551	3. 0	54·2	56·3
				5. 14	·03545	Max.	54·2	56·9
				7. 21	·03555	9. 0	53·9	56·0
				10. 37	·03540	Min.	53·5	56·0
				12. 10	·03535	22. 0	53·8	56·0
				15. 19	·03525			
				17. 44	·03515			
				18. 11	·03509			
				20. 11	·03500			
				21. 45	·03495			
				22. 46	{·03492 ·03465			
				23. 15	·03465			
				23. 59	·03472			
				Jan. 22		Jan. 22		
Jan. 22				0. 0	·03472	1. 0	53·8	56·6
0. 0	20. 34. 40			2. 6	·03500	Max.	54·3	57·7
0. 29	34. 55			3. 0	·03515	9. 30	53·9	57·0
0. 48	34. 20			4. 0	·03505	Min.	53·5	56·5
1. 44	35. 30			5. 54	·03516	21. 0	53·9	57·3
1. 55	34. 55			6. 22	·03509			
2. 3	35. 45			9. 26	·03500			
2. 11	34. 10			10. 5	·03493			
	***			11. 23	·03486			
2. 49	32. 45			13. 6	·03478			
2. 56	33. 30			13. 53	·03485			
3. 4	33. 0			14. 26	·03460			
3. 26:	35. 30			14. 51	·03472			
3. 44	35. 50			15. 23:	·03446			
4. 27	34. 10			17. 0	·03465			
4. 57	35. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Jan. 22				Jan. 22				
h m	° ′ ″	h m		h m		h m	°	°
5. 10	20. 34. 30			19. 31	·03470			
5. 33	28. 0			20. 11	·03466			
5. 41	26. 35			23. 7	·03473			
6. 6	30. 5			23. 59	·03470			
6. 24	30. 30							
6. 35	31. 50							
6. 52	31. 30							
6. 59	31. 30							
7. 10	32. 35							
7. 26	31. 20							
8. 3	29. 50							
8. 53	29. 30							
9. 8	30. 20							
9. 24	29. 50							
9. 56	31. 30							
10. 23	28. 35							
10. 38	28. 30							
10. 47	30. 20							
12. 2	30. 30							
12. 29	31. 30							
12. 54	30. 30							
13. 14	29. 20							
13. 36	30. 0							
14. 1	33. 30							
14. 23	28. 30							
14. 48	33. 30							
15. 46	28. 55							
17. 8	31. 20							
17. 26	30. 50							
17. 57	31. 40							
18. 56	32. 15							
19. 8	32. 50							
19. 19	31. 40							
19. 38	32. 30							
21. 12	32. 20							
22. 52	34. 5							
23. 23	35. 10							
23. 38	34. 50							
23. 54	35. 50							
23. 59	35. 30							
Jan. 23				Jan. 23		Jan. 23		
0. 0	20. 35. 20			0. 0	·03470	1. 0	54·0	57·2
0. 18	35. 30			2. 30	·03480	3. 0	54·2	58·9
0. 39	36. 15			8. 8	·03486	9. 0	54·3	59·0
1. 38	36. 20			9. 21	·03480	Max.	54·6	59·0
3. 11	34. 25			12. 0	·03485	21. 0	54·6	58·0
3. 26	34. 20			12. 41	·03474			
3. 56	31. 25			15. 26	·03476			
4. 8	30. 35			16. 17	·03448			
4. 27	32. 30			17. 11	·03461			
5. 2	33. 30			23. 59	·03464			
6. 10	32. 50							
6. 36	33. 20							
6. 47	32. 30							
6. 56	30. 20							
7. 10	28. 20							
7. 19	28. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Jan. 23								
h m	° ′ ″	h m		h m		h m	°	°
7. 28	20. 28. 20							
7. 46	27. 20							
8. 7	29. 45							
8. 19	30. 0							
8. 48	32. 20							
9. 23	31. 40							
11. 38	30. 40							
11. 47	34. 20							
12. 11	33. 30							
13. 47	32. 5							
14. 46	31. 0							
15. 12	33. 55							
15. 38	33. 40							
16. 13	29. 10							
16. 43	30. 50							
16. 56	30. 20							
17. 8	31. 35							
17. 41	32. 45							
19. 59	32. 30							
21. 31	32. 20							
22. 34	33. 35							
22. 57	33. 50							
23. 19	35. 5							
23. 59	36. 10							
Jan. 24				Jan. 24		Jan. 24		
0. 0	20. 36. 10			0. 0	·03464	1. 0	54·9	58·1
0. 25	35. 35			2. 2	·03470	3. 0	55·1	58·4
0. 31	34. 30			2. 26	·03480	Max.	55·3	58·9
0. 41	34. 50			2. 50	·03477	9. 0	54·9	58·4
0. 50	34. 5			5. 33	·03486	Min.	54·9	58·2
1. 58	34. 35			10. 38	·03513	21. 0	54·9	58·3
2. 23	36. 15			10. 51	·03516			
	***			11. 11	·03495			
3. 38	34. 10			12. 53	·03515			
4. 36	34. 30			14. 17	·03505			
4. 57	33. 35			14. 45	·03515			
6. 12	33. 5			15. 36	·03488			
6. 24	33. 50			16. 24	·03506			
6. 56	32. 55			18. 18	·03502			
7. 13	33. 10			19. 7	·03496			
7. 49	33. 5			23. 59	·03500			
8. 9	32. 20							
8. 21	32. 55							
8. 38	32. 45							
8. 49	33. 5							
9. 9	32. 0							
9. 27	31. 30							
9. 48	31. 35							
9. 59	32. 30							
10. 19	29. 35							
10. 39	31. 30							
10. 56	24. 35							
11. 10	24. 30							
11. 41	29. 20							
11. 56	28. 35							
12. 7	30. 20							
12. 37	31. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Jan.24								
h m	° ′ ″	h m		h m		h m	°	°
13. 14	20. 31. 50							
13. 31	29. 40							
14. 10	28. 30							
14. 31	31. 25							
15. 24	25. 10							
15. 44	25. 30							
16. 17	30. 30							
16. 43	29. 55							
16. 54	31. 0							
17. 4	30. 0							
17. 57	31. 55							
18. 12	34. 0							
18. 34	34. 30							
19. 6	32. 55							
19. 14	33. 0							
19. 28	32. 20							
19. 57	33. 5							
20. 19	32. 50							
20. 47	33. 55							
20. 55	33. 30							
22. 35	38. 10							
22. 54	37. 35							
23. 8	37. 55							
23. 26	36. 25							
23. 59	39. 25							
Jan.25				Jan.25		Jan.25		
0. 0	20. 39. 25			0. 0	·03500	1. 0	54 ·9	58 ·0
0. 24	39. 30			0. 8	·03495	3. 0	54 ·8	59 ·0
0. 28	38. 20			0. 16	·03512	Max.	55 ·3	59 ·0
0. 49	39. 55			1. 50	·03513	9. 0	54 ·9	58 ·0
0. 53	39. 40			1. 59	·03527	Min.	54 ·8	58 ·0
1. 25	39. 15			2. 24	·03536	21. 0	55 ·0	58 ·0
1. 41	40. 5			3. 45	·03600			
1. 49	39. 0			4. 7	·03596			
1. 55	39. 30			4. 47	·03552			
2. 9	38. 35			5. 52	·03540			
2. 19	41. 0			6. 40	·03538			
2. 27	40. 30			7. 0	·03556			
2. 50	46. 55			7. 17	·03582			
	***			7. 30	·03586			
3. 9	46. 30			7. 39	·03607			
3. 23	45. 55			8. 0	·03596			
3. 30	47. 15			8. 11	·03578			
3. 56	35. 35			8. 23	·03583			
4. 6	37. 15			8. 49	·03570			
4. 11	36. 0			9. 24	·03580			
4. 41	39. 35			10. 38	·03534			
5. 13	35. 50			11. 5	·03540			
5. 34	35. 10			11. 30	·03530			
5. 54	35. 35			12. 11	·03536			
6. 8	35. 0			12. 40	·03497			
6. 24	34. 55			13. 21:	·03520			
6. 52	39. 5			13. 54	·03504			
7. 18	37. 25			15. 9	·03520			
7. 36	25. 55			15. 30	·03510			
7. 44	26. 5			16. 18	·03523			
7. 49	20. 0			16. 31	·03513			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Jan.25				Jan.25				
h m	° ′ ″	h m		h m		h m	°	°
8. 1	20. 21. 35			17. 0	·03520			
8. 8	20. 55			18. 54	·03510			
8. 24	22 30			20. 58	·03505			
8. 36	21. 55			22. 59	·03490			
8. 55	24. 20				·03467			
9. 36	31. 50			23. 59	·03475			
9. 38	31. 20							
9. 56	33. 35							
10. 23	31. 20							
10. 35	26. 35							
10. 42	26. 45							
11. 7	32. 25							
11. 23	29. 10							
11. 44	29. 25							
12. 1	36. 25							
12. 9	38. 35							
12. 34	35. 20							
12. 38	31. 55							
	***							
13. 30	32. 0							
13. 36	29. 35							
13. 44	28. 20							
14. 1	30. 55							
14. 26	33. 20							
14. 36	32. 55							
14. 54	33. 50							
15. 2	34. 40							
15. 9	34. 10							
15. 23	32. 25							
15. 41	33. 55							
15. 56	33. 40							
16. 9:	34. 55							
16. 24	32. 0							
16. 55	33. 55							
17. 8	32. 50							
17. 41	33. 55							
18. 3	33. 0							
18. 26	33. 25							
18. 37	32. 55							
19. 23	33. 45							
19. 47	33. 25							
20. 25	34. 20							
20. 41	35. 25							
20. 53	37. 55							
21. 8	39. 40							
21. 36	37. 45							
21. 53	37. 30							
22. 5	38. 10							
22. 23	36. 20							
22. 41	37. 55							
22. 53	38. 0							
23. 8	34. 10							
23. 24	37. 25							
23. 33	37. 45							
23. 59	37. 25							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Jan. 26				Jan. 26		Jan. 26		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 25			0. 0	·03475	1. 0	55·7	58·4
0. 58	38. 0			2. 11	·03518	3. 0	55·7	58·0
1. 23	37. 55			8. 8	·03517	Max.	55·7	59·0
1. 36	36. 0			9. 14	·03521	9. 0	55·5	59·0
2. 26	37. 0			11. 0	·03518	Min.	55·0	57·8
2. 30	38. 0			11. 24	·03505	21. 0	55·2	57·8
2. 40	36. 20			12. 9	·03500			
3. 12	34. 10			13. 30	·03505			
3. 55	35. 0			13. 49	·03495			
4. 9	36. 10			16. 35	·03496			
4. 53	34. 25			22. 10	·03483			
5. 40	34. 20			23. 59	·03495			
6. 1	32. 0							
6. 35	33. 25							
7. 24	34. 30							
7. 52	33. 50							
8. 19	33. 25							
8. 44	31. 30							
9. 12	31. 25							
9. 48	29. 10							
9. 54	30. 15							
10. 9	29. 55							
10. 39	32. 30							
10. 44	32. 50							
11. 9	35. 0							
11. 27	33. 5							
11. 38	35. 0							
11. 52	36. 0							
12. 3	33. 30							
12. 11	33. 35							
12. 43	32. 0							
13. 1	31. 45							
13. 26	33. 0							
13. 38	36. 20							
14. 13	32. 30							
14. 35	33. 25							
15. 9	32. 50							
15. 56	33. 0							
16. 39	33. 50							
20. 11	34. 30							
21. 45	34. 45							
22. 26	35. 20							
	(†)							
Jan. 27				Jan. 27		Jan. 27		
	(†)			0. 0	·03495	1. 0	..	58·4
1. 0	20. 34. 39*			1. 59	·03510	3. 0	55·1	58·8
3. 0	31. 28*			3. 44	·03520	Max.	55·8	59·2
3. 14	31. 20			4. 45	·03525	9. 0	55·1	57·0
3. 39	32. 25			5. 0	·03515	Min.	53·4	55·6
3. 56	32. 5			5. 38	·03520	21. 0	54·0	56·0
4. 10	32. 55			6. 39	·03511			
4. 36	30. 55			7. 42	·03505			
4. 39	30. 0			9. 53	·03495			
4. 58	29. 40			10. 11	·03490			
5. 13	26. 0			11. 40	·03487			
	***			12. 38	·03500			
6. 9	30. 25			13. 27:	·03470			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Jan. 27				Jan. 27				
h m	° ′ ″	h m		h m		h m	°	°
7. 39	20. 29. 55			14. 29	·03480			
8. 8	29. 10			16. 0	·03485			
8. 31	29. 25			16. 15	·03475			
8. 53	28. 35			19. 5	·03479			
	***			21. 29	·03455			
9. 40	29. 40				(†)			
10. 23	28. 35			23. 12	·03410			
10. 39	29. 30			23. 30	·03414			
11. 8	29. 50			23. 59	·03405			
11. 43	26. 55							
12. 22	25. 35							
12. 37	27. 25							
12. 45	28. 0							
12. 57	32. 40							
13. 38	28. 25							
14. 23	28. 35							
14. 38	29. 20							
15. 3	29. 30							
15. 13	30. 40							
15. 47	29. 45							
16. 9	30. 50							
16. 24	29. 30							
16. 41	29. 30							
16. 57	30. 20							
17. 32	29. 15							
19. 2	29. 10							
19. 56	30. 0							
20. 39	29. 0							
21. 36	29. 50							
	(†)							
Jan. 28				Jan. 28		Jan. 28		
	(†)			0. 0	·03405	1. 0	54·9	54·3
1. 0	20. 33. 51*			0. 50	·03400	3. 0	52·5	55·9
1. 39	33. 30			1. 11	·03425	Max.	55·0	56·2
2. 3	32. 50			3. 6	·03447	9. 0	53·4	55·0
2. 39	34. 20			6. 27	·03450	Min.	51·7	53·5
	(†)			6. 52	·03464	22. 30	52·2	53·8
2. 45	36. 10			7. 0	·03475			
2. 58	39. 35			7. 22	·03485			
3. 18	36. 35			7. 29	·03500			
3. 42	35. 20			7. 40	·03528			
	***			8. 16	·03538			
4. 27	38. 0			8. 51	·03500			
4. 53	34. 45			9. 32	·03496			
5. 39	32. 20			9. 52	·03465			
6. 24	33. 25			10. 23	·03461			
6. 49	35. 15			10. 37	·03450			
6. 58	34. 30			10. 46	·03470			
7. 8	35. 55			11. 7	·03447			
7. 46	23. 5			11. 21	·03425			
7. 56	17. 25			11. 34	·03423			
8. 33	27. 50			14. 15:	·03428			
8. 54	28. 25			16. 52	·03415			
9. 8	25. 55			17. 53	·03405			
9. 29	25. 50			18. 41	·03400			
9. 43	32. 0			19. 59	·03370			
10. 1	29. 25			23. 0	·03370			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 28				Jan. 28				
h m	° ′ ″	h m		h m		h m	°	°
10. 8	20. 31. 30			23. 18	·03376			
10. 12	31. 35			23. 59	·03365			
10. 24	32. 5							
10. 39	19. 30							
10. 53	19. 30							
11. 12	23. 25							
11. 26	27. 20							
11. 41	26. 30							
12. 26	26. 35							
12. 45	29. 25							
13. 4	30. 15							
14. 24	29. 0							
15. 8	30. 40							
15. 37	29. 50							
16. 41	30. 25							
17. 2	31. 15							
17. 40	30. 55							
18. 48	34. 40							
19. 53	34. 30							
20. 44	32. 55							
	***							
22. 13	33. 0							
23. 10	34. 25							
23. 53	36. 0							
23. 59	35. 20							
Jan. 29				Jan. 29		Jan. 29		
0. 0	20. 35. 20			0. 0	·03365	1. 0	51 ·9	53 ·5
0. 15	34. 55			0. 7	·03365	Max.	53 ·5	56 ·5
0. 35	32. 40				(†)	8. 0	52 ·6	56 ·2
1. 4	32. 40			1. 0	·03403*	Min.	52 ·2	55 ·4
2. 0	36. 5			8. 0	·03438*	21. 0	52 ·5	56 ·0
2. 41	34. 55			9. 32	·03432			
3. 4	35. 0			9. 44	·03430			
3. 15	34. 25				(†)			
3. 42	34. 25			12. 23	·03376			
4. 25	35. 30			12. 32	·03385			
4. 54	33. 30			13. 19	·03380			
5. 22	34. 20			13. 34	·03359			
5. 30	33. 25			14. 8	·03362			
5. 54	34. 5			14. 21	·03345			
6. 5	33. 30			15. 0	·03355			
6. 29	33. 50			15. 34	·03368			
7. 1	31. 45			16. 37	·03375			
7. 38	29. 40			18. 38:	·03377			
7. 53	30. 25			20. 50	·03365			
7. 56	30. 0			22. 49	·03370			
8. 12	30. 30			23. 59	·03365			
8. 30	28. 55							
8. 53	28. 20							
9. 14	25. 30							
9. 26	26. 45							
	***							
10. 1	27. 20							
10. 24	30. 5							
10. 37	30. 10							
10. 46	31. 30							
11. 8	27. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 29								
h m	° ′ ″	h m		h m		h m	°	°
11. 40	20. 23. 0							
11. 49	23. 45							
12. 0	22. 55							
12. 36:	27. 30							
12. 56	27. 30							
13. 10	31. 45							
13. 38	27. 25							
14. 7	31. 50							
14. 24	26. 30							
14. 53	28. 50							
15. 6	27. 55							
15. 54	29. 0							
16. 11	28. 45							
16. 44	30. 30							
19. 39	33. 5							
20. 7	35. 25							
20. 23	34. 55							
20. 39	33. 35							
20. 54	33. 0							
21. 1	31. 35							
21. 46	33. 55							
22. 25	33. 25							
22. 58	33. 20							
23. 4	34. 30							
23. 23	34. 50							
23. 47	33. 40							
23. 59	34. 20							
Jan. 30				Jan. 30		Jan. 30		
0. 0	20. 34. 20			0. 0	·03365	1. 0	52 ·4	57 ·0
0. 7	34. 35				(†)	3. 0	53 ·0	57 ·4
	(†)			1. 0	·03400	9. 0	53 ·9	58 ·0
1. 0	33. 18*			1. 21	·03405	21. 0	54 ·6	58 ·1
3. 24	32. 0			2. 20	·03421	Max.	55 ·0	58 ·1
4. 38	31. 30			7. 30	·03442			
4. 49	30. 25			9. 14	·03455			
5. 9	31. 0			10. 51	·03465			
5. 27	31. 5			16. 21	·03485			
5. 48	30. 25			18. 38	·03485			
6. 25	30. 50			19. 52	·03478			
7. 12	31. 0			20. 55	·03468			
7. 44	30. 30			21. 32	·03473			
8. 27	30. 25			22. 0	·03450			
9. 0	30. 0			22. 36	·03445			
9. 56	29. 30			22. 55	·03467			
	***				(†)			
18. 6	29. 15			23. 59	·03525			
18. 35	28. 45							
18. 40	29. 30							
18. 49	28. 30							
19. 48	29. 20							
	***							
20. 33	29. 25							
	***							
20. 39	30. 30							
	***							
20. 46	29. 55							
21. 36	32. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Jan. 30	
h m	° ′ ″
21. 50	20. 31. 35
21. 54	34. 30
	***
22. 22	34. 0
	***
22. 55	33. 10
	(†)
Jan. 31	
	(†)
1. 0	20. 34. 13*
3. 0	32. 57*
3. 12	30. 0
3. 34	31. 55
3. 55	30. 55
4. 14	32. 30
4. 30	32. 0
4. 44	32. 30
4. 53	31. 25
5. 4	32. 30
6. 14	32. 0
6. 28	33. 20
6. 43	30. 55
7. 9	30. 25
7. 34	28. 30
7. 55	27. 50
8. 14	30. 25
8. 24	26. 0
8. 29	19. 30
8. 39	23. 0
8. 44	24. 30
8. 55	19. 20
9. 9	22. 25
9. 26	19. 30
9. 43	21. 35
9. 52	23. 50
9. 55	21. 0
10. 2	26. 25
10. 9	26. 5
10. 26	31. 50
10. 34	31. 50
10. 42	34. 0
10. 56	28. 45
11. 1	28. 35
11. 18	22. 35
11. 33	21. 30
12. 9	28. 5
12. 57	27. 15
13. 9	28. 10
	***
13. 50	28. 10
14. 3	27. 25
14. 19	28. 15
14. 28	27. 20
14. 33	28. 0
15. 30	28. 10
	***
18. 8	29. 20
21. 9	29. 35

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Jan. 31	
0. 0	·03525
0. 55	·03520
4. 7	·03530
5. 52	·03547
7. 46	·03554
8. 57	·03528
9. 53	·03534
11. 30	·03505
13. 57	·03535
16. 55	·03548
20. 27	·03538
21. 10	·03548
21. 38	·03540
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Jan. 31		
1. 0	55·8	59·0
3. 0	54·9	59·0
Min.	54·6	58·5
9. 0	55·8	59·0
21. 0	55·7	59·3
Max.	56·4	59·6

Greenwich Mean Solar Time.	Western Declination.
Jan. 31	
h m	° ′ ″
21. 48	20. 29. 30
	(†)
Feb. 1	
	(†)
1. 0	20. 28. 24*
3. 0	30. 31*
3. 34	24. 15
4. 5	24. 5
4. 19	16. 50
4. 24	18. 25
4. 38	15. 30
4. 47	18. 0
4. 56	19. 45
5. 7	19. 30
5. 29	23. 55
5. 42	24. 0
5. 56	25. 35
6. 7	24. 55
6. 19	24. 35
6. 42	20. 25
7. 3	21. 30
7. 19	16. 10
7. 26	14. 35
7. 35	14. 30
7. 52	16. 40
8. 3	16. 0
8. 14	17. 50
8. 35	18. 0
8. 54	22. 25
9. 24	22. 55
9. 36	22. 10
9. 44	23. 50
10. 10	22. 30
10. 23	21. 25
11. 4	22. 10
11. 23	19. 40
11. 27	20. 5
11. 34	19. 25
11. 46	20. 30
12. 2	18. 10
12. 11	18. 10
12. 23	17. 0
12. 54	20. 30
13. 46	22. 25
14. 43	23. 30
14. 52	22. 45
14. 55	24. 0
15. 8	23. 30
	***
15. 31	24. 10
17. 10	23. 55
17. 23	23. 10
17. 55	24. 30
18. 8	23. 5
19. 25	23. 40
19. 39	23. 25
20. 10	23. 55

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Feb. 1	
	(†)
4. 25	·03108
4. 39	·03100
5. 51	·03030
6. 23	·03010
6. 38	·03002
7. 18	·03006
8. 24	·02990
9. 56	·02983
11. 19	·02978
12. 15	·02960
13. 6	·02970
15. 52	·02980
20. 44	·02970
21. 15	·02965
21. 54	·02960
23. 6	·02956
23. 45	·02951
23. 59	·02950

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Feb. 1		
Min.	55·2	57·5
1. 0	55·2	..
3. 0	55·6	..
9. 0	57·1	58·0
21. 0	57·5	61·8
Max.	58·2	61·8

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 1d. 4h.—VERTICAL FORCE.—The adjustments were altered, so that the readings were decreased by 6·80 divisions, or by 0·00355 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 1								
h m	° ′ ″	h m		h m		h m	°	°
20. 41	20. 24. 0							
20. 52	25. 5							
21. 0	23. 55							
	***							
21. 29	24. 55							
21. 54	26. 0							
22. 11	23. 50							
22. 53	24. 25							
22. 56	26. 35							
23. 12	26. 35							
23. 18	25. 25							
23. 59	27. 5							
Feb. 2				Feb. 2		Feb. 2		
0. 0	20. 27. 5			0. 9	·02950	Max.	..	61 5
0. 13	27. 0			1. 6	·02960	1. 0	..	60 ·0
0. 26	25. 55			2. 25	·02974	3. 0	..	59 ·0
0. 41	28. 25			2. 40	·02984	9. 0	..	58 ·1
	***			7. 23	·02970	Min.	..	56 ·4
1. 27	30. 0			7. 44	·02988	21. 0	..	57 ·0
	***			7. 48	·02982			
1. 54	30. 45			8. 13	·02994			
2. 23	29. 40			8. 45	·02975			
2. 34	31. 35			10. 29	·02968			
2. 47	29. 55			10. 45	·02960			
2. 56	30. 5			11. 5	·02960			
3. 15	26. 50			11. 45	·02923			
3. 39	26. 35			12. 57	·02940			
3. 59	28. 5			13. 44	·02920			
	***			16. 28	·02918			
6. 0	24. 35			19. 40	·02900			
6. 24	26. 5			20. 23	·02890			
6. 44	25. 10			21. 24	·02880			
7. 8	25. 20			21. 36	·02866			
7. 26	15. 35			22. 45	·02877			
7. 43	18. 50			23. 59	·02870			
7. 51	13. 0							
8. 3	3. 50							
8. 14	6. 5							
8. 26	9. 30							
9. 8	22. 45							
9. 25	21. 35							
9. 39	22. 40							
9. 54	22. 55							
10. 8	23. 0							
10. 18	24. 55							
10. 30	22. 0							
10. 49	16. 50							
11. 5	17. 30							
11. 26	22. 20							
11. 39	21. 35							
11. 54	16. 25							
12. 8	17. 20							
12. 11	17. 0							
12. 41	20. 0							
12. 53	22. 30							
13. 13	26. 35							
13. 23	29. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 2								
h m	° ′ ″	h m		h m		h m	°	°
13. 52	20. 22. 50							
14. 1	21. 45							
14. 7	20. 30							
14. 23	20. 0							
14. 35	20. 50							
14. 41	22. 5							
15. 16	22. 0							
15. 38	20. 45							
16. 8	20. 55							
16. 27	22. 30							
	***							
18. 14	22. 25							
18. 19	22. 35							
18. 27	23. 50							
	***							
20. 7	30. 15							
	***							
21. 48	27. 10							
21. 55	26. 20							
22. 2	27. 25							
22. 9	26. 55							
22. 23	28. 5							
22. 26	26. 30							
22. 45	27. 50							
23. 2	30. 0							
23. 10	29. 30							
	***							
23. 33	31. 35							
23. 59	30. 30							
Feb. 3				Feb. 3		Feb. 3		
0. 0	20. 30. 30			0. 0	·02870	1. 0	..	59 ·5
2. 56	27. 5			1. 23	·02880	3. 0	..	60 ·0
3. 1	26. 20			2. 25	·02872	Max.	..	60 ·2
3. 24	26. 50			2. 34	·02880	9. 0	..	60 ·0
3. 27	27. 30			3. 19	·02910	Min.	..	57 ·7
3. 36	26. 30			3. 28	·02920	21. 0	..	57 ·7
4. 4	26. 10			6. 57	·02919			
4. 34	27. 5			7. 36	·02932			
4. 41	26. 15			8. 27	·02920			
4. 50	26. 30			10. 32	·02925			
4. 54	25. 40			10. 53	·02910			
	***			13. 4	·02920			
5. 17	27. 0			15. 23	·02914			
6. 6	26. 20			17. 57	·02900			
6. 9	25. 30			18. 38	·02910			
	***			19. 19	·02860			
6. 31	24. 40			19. 56	·02870			
6. 56	15. 10			20. 15	·02860			
7. 25	21. 50			20. 46	·02870			
7. 38	23. 55			21. 7	·02887			
7. 56	25. 25			21. 45	·02882			
9. 23	25. 30				***			
10. 18	24. 40			23. 19	·02910			
10. 39	26. 50			23. 59	·02910			
10. 48	25. 55							
10. 57	26. 0							
11. 9	25. 20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 3								
h m	° ′ ″	h m		h m		h m	°	°
11. 26	20. 25. 40							
11. 40	23. 45							
12. 6	24. 20							
12. 21	24. 5							
12. 39	23. 50							
12. 51	24. 40							
13. 40	24. 0							
13. 47	24. 45							
14. 16	24. 30							
14. 21	25. 0							
14. 46	24. 35							
15. 9	24. 30							
15. 21	25. 10							
15. 24	24. 45							
15. 51	24. 20							
16. 0	22. 30							
16. 7	23. 50							
16. 14	23. 25							
16. 23	23. 40							
16. 26	24. 55							
16. 29	23. 40							
	***							
17. 8	24. 20							
17. 40	22. 30							
17. 52	23. 40							
17. 54	22. 5							
18. 9	22. 55							
18. 24	30. 35							
18. 26	30. 30							
18. 43	45. 15							
18. 53	44. 25							
18. 56	45. 30							
	***							
19. 11	41. 45							
19. 23	38. 50							
19. 26	38. 50							
19. 38	42. 20							
19. 40	40. 50							
19. 54	44. 35							
20. 4	45. 0							
20. 10	41. 30							
20. 27	36. 20							
20. 39	33. 0							
20. 49	32. 25							
20. 54	34. 30							
21. 0	35. 0							
21. 4	37. 30							
21. 24	39. 45							
21. 31	38. 30							
	***							
21. 53	29. 15							
22. 8	31. 35							
	***							
22. 38	27. 30							
	***							
22. 56	27. 35							
23. 11	28. 0							
23. 23	29. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 3								
h m	° ′ ″	h m		h m		h m	°	°
23. 44	20. 30. 45							
23. 59	30. 40							
Feb. 4		Feb. 4		Feb. 4		Feb. 4		
0. 0	20. 30. 40		(†)	0. 0	·02910	1. 0	..	60 ·0
0. 25	31. 0	2. 40	·1194	1. 26	·02937	Max.	..	61 ·0
	***		***		(†)	3. 0	57 ·8	59 ·1
0. 49	34. 30	3. 41	·1207	2. 15	·03730	9. 0	56 ·9	59 ·0
0. 56	34. 20	3. 52	·1204	4. 11	·03728	Min.	55 ·3	56 ·5
1. 7	35. 55	3. 57	·1209	5. 54	·03748	22. 0	55 ·9	56 ·7
1. 23	30. 30	4. 23	·1204	6. 13	·03713			
1. 26	30. 30	5. 0	·1208	7. 24	·03730			
1. 39	27. 50	5, 22	·1198	8. 56	·03740			
2. 1	30. 25	5. 44	·1201	9. 9	·03720			
2. 23	30. 5	6. 12	·1211	9. 41	·03727			
3. 10	26. 30	6. 53	·1209	10. 45	·03687			
	***	7. 28	·1212	11. 30	·03686			
3. 53	26. 30	7. 52	·1210	12. 8	·03692			
4. 24	26. 10	8. 4	·1206	12. 55	·03670			
4. 55	26. 0	8. 27	·1198	13. 54	·03690			
5. 3	25. 30	8. 35	·1200	15. 28	·03688			
5. 16	23. 0	8. 41	·1197	16. 4	·03680			
5. 23	23. 30	9. 4	·1204	16. 54	·03640			
5. 39	22. 5	9. 13	·1201	19. 11	·03670			
5. 47	21. 55	9. 30	·1211	22. 28	·03672			
6. 2	24. 20	9. 40	·1207	22. 41	·03663			
6. 10	23. 10	9. 48	·1210	23. 59	·03665			
6. 34	24. 5	9. 56	·1208					
6. 45	23. 30	10. 11	·1224					
7. 4	24. 55	10. 28	·1215					
7. 10	24. 30	10. 40	·1239					
7. 26	25. 0	10. 48	·1240					
7. 54	24. 30	11. 12	·1218					
8. 6	23. 30	11. 19	·1219					
8. 23	21. 20	11. 40	·1193					
8. 31	22. 30	11. 58	·1205					
8. 41	20. 30	12. 7	·1203					
8. 54	20. 25	12. 44	·1213					
9. 12	11. 30	12. 57	·1207					
9. 39	17. 0	13. 29	·1206					
9. 51	24. 30	13. 49	·1209					
9. 54	24. 50	14. 7	·1206					
10. 0	23. 55	14. 26	·1208					
10. 8	24. 30	14. 41	·1204					
10. 23	17. 30	15. 18	·1208					
10. 35	10. 25	16. 27	·1222					
10. 51	14. 30	16. 44	·1229					
11. 0	15. 5	17. 4	·1224					
11. 9	12. 10	17. 24	·1231					
11. 26	14. 20	17. 40	·1220					
11. 39	13. 25	18. 11	·1213					
12. 1	20. 30	18. 22	·1216					
12. 15	24. 30	18. 28	·1212					
12. 38	22. 30	18. 40	·1216					
13. 3	21. 50	18. 49	·1215					
13. 25	22. 25	19. 18	·1226					
13. 49	24. 15	19. 26	·1218					
14. 17	23. 30	19. 47	·1216					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 4^{d}. 2^{h}.—VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 15·85 divisions, or by 0·00828 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Feb. 4		Feb. 4						
h m	° ′ ″	h m		h m		h m	°	°
14. 33	20. 25. 30	20. 25	·1222					
14. 39	24. 55	20. 40	·1217					
15. 0	26. 20	22. 12	·1215					
15. 14	25. 30	22. 26	·1219					
15. 23	26. 0	22. 54	·1215					
15. 38	25. 30	23. 46	·1218					
16. 7	28. 10	23. 59	·1213					
16. 21	32. 30							
16. 27	33. 20							
17. 6	25. 0							
17. 25	24. 20							
17. 37	22. 45							
17. 46	22. 0							
18. 3	23. 30							
18. 23	22. 45							
18. 31	24. 0							
18. 39	23. 0							
18. 50	23. 50							
19. 6	23. 50							
19. 12	25. 30							
19. 24	25. 20							
19. 27	24. 5							
19. 55	23. 45							
20. 16	24. 40							
20. 26	26. 45							
21. 8	24. 50							
21. 14	24. 0							
21. 24	24. 25							
21. 36	25. 0							
21. 44	24. 45							
22. 12	25. 25							
22. 34	28. 20							
22. 53	25. 50							
23. 34	28. 35							
23. 53	32. 5							
23. 59	31. 10							
Feb. 5		Feb. 5		Feb. 5		Feb. 5		
0. 0	20. 31. 10	0. 0	·1213	0. 0	·03665	Min.	55 ·8	56 ·9
0. 14	31. 40	0. 20	·1215	1. 36	·03672	1. 0	55 ·8	57 ·0
0. 23	30. 30		***	2. 39	·03700	9. 0	56 ·0	58 ·3
0. 39	29. 45	1. 18	·1199	2. 45	·03710	21. 0	56 ·2	59 ·2
0. 46	30. 30	1. 26	·1196	2. 53	·03700	Max.	56 ·7	59 ·3
0. 55	32. 35	1. 56	·1207	3. 3	·03710			
1. 2	31. 0	2. 0	·1203	3. 16	·03770			
1. 13	34. 10	2. 23	·1202	3. 45	·03766			
1. 23	33. 30	2. 30	·1209	4. 24:	·03743			
1. 42	34. 0	2. 40	·1207	5. 4	·03740			
1. 53	35. 15	2. 45	·1182	5. 42	·03750			
1. 56	34. 0	2. 55	·1194	6. 30	·03720			
2. 22	33. 40	2. 57	·1184	6. 46	·03726			
2. 37	38. 0	3. 12	·1201	8. 4	·03710			
2. 41	27. 35	3. 23	·1185	9. 26	·03690			
2. 47	28. 40	3. 47	·1201	10. 3	·03685			
2. 49	26. 0	4. 11	·1208	10. 53	·03670			
2. 55	24. 25	4. 36	·1194	11. 6	·03680			
3. 7	31. 30	4. 44	·1198	12. 39	·03684			
3. 9	30. 25	5. 0	·1180	13. 26	·03675			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Feb. 5		Feb. 5		Feb. 5				
h m	° ′ ″	h m		h m		h m	°	°
3. 11	20. 28. 50	5. 27	·1204	14. 30	·03670			
3. 24	26. 0	6. 8	·1211	15. 41	·03680			
	***	6. 24	·1197	16. 39	·03667			
3. 40	28. 20	7. 11	·1202	17. 53	·03680			
	***	7. 48	·1215	19. 6	·03670			
4. 6	30. 10	8. 13	·1212	23. 47	·03685			
4. 19	29. 30	9. 13	·1216	23. 59	·03682			
4. 24	30. 25	9. 36	·1210					
4. 35	27. 40	9. 45	·1218					
4. 41	27. 30	10. 14	·1225					
4. 53	21. 40	10. 30	·1218					
5. 16	11. 55	10. 55	·1209					
6. 2	20. 50	11. 14	·1215					
6. 13	21. 0	11. 28	·1217					
6. 24	20. 30	12. 7	·1209					
6. 37	22. 20	12. 26	·1211					
6. 39	24. 25	12. 42	·1218					
6. 56	25. 0	13. 43	·1210					
7. 3	25. 30	14. 12	·1217					
7. 16	24. 25	15. 23	·1213					
7. 36	23. 25	15. 58	·1205					
7. 47	22. 40	16. 37	·1219					
7. 55	22. 50	17. 13	·1212					
8. 3	21. 30	17. 53	·1220					
8. 24	22. 0	18. 11	·1221					
8. 44	25. 5	18. 44	·1227					
9. 23	25. 25	19. 14	·1221					
9. 34	24. 10	20. 13	·1222					
9. 53	21. 5	20. 25	·1218					
10. 2	22. 20	20. 45	·1220					
10. 13	22. 30	21. 11	·1210					
10. 26	23. 15	22. 4	·1195					
10. 39	22. 40	22. 28	·1198					
10. 44	21. 55	22. 58	·1190					
10. 55	22. 50	23. 48	·1201					
11. 6	24. 10	23. 59	·1205					
11. 41	25. 35							
11. 55	25. 0							
12. 9	26. 50							
12. 16	25. 55							
12. 40	26. 0							
12. 48	27. 5							
12. 57	25. 30							
13. 39	25. 35							
13. 48	25. 0							
14. 0	26. 5							
	***							
14. 34	24. 10							
14. 48	23. 50							
15. 4	25. 10							
15. 23	25. 45							
15. 30	26. 30							
15. 46	29. 55							
16. 0	29. 55							
16. 8	29. 5							
16. 38	25. 30							
16. 45	26. 35							
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 5								
h m	° ′ ″	h m		h m		h m	°	°
17. 8	20. 26. 30							
17. 13	26. 0							
17. 24	26. 35							
17. 41	25. 20							
17. 53	26. 0							
18. 8	25. 50							
18. 15	26. 45							
18. 43	25. 5							
19. 1	25. 30							
19. 9	24. 25							
19. 34	24. 0							
19. 45	25. 5							
19. 51	24. 55							
20. 11	26. 10							
20. 24	25. 5							
22. 12	28. 50							
	***							
22. 24	30. 15							
22. 36	30. 0							
22. 51	31. 45							
22. 54	31. 10							
23. 10	33. 10							
23. 34	30. 0							
23. 59	32. 30							
Feb. 6		Feb. 6		Feb. 6		Feb. 6		
0. 0	20. 32. 30	0. 0	·1205	0. 0	·03682	1. 0	56 ·1	59 ·0
0. 7	31. 25	0. 35	·1196	1. 29	·03700	3. 0	56 ·4	58 ·8
0. 23	29. 55	0. 52	·1202		***	Min.	55 ·7	58 ·4
	***	1. 43	·1206	2. 39	·03728	9. 0	56 ·8	59 ·0
0. 41	32. 30	2. 9	·1184	4. 7	·03710	21. 0	57 ·2	59 ·8
0. 52	32. 25	2. 40	·1212	4. 28	·03735	Max.	57 ·2	59 ·8
1. 1	31. 5	3. 11	·1215	5. 53	·03710			
1. 25	30. 25	3. 42	·1206	9. 14	·03700			
1. 31	29. 5	4. 3	·1180	10. 9	·03690			
1. 40	31. 0	4. 29	·1215	12. 40	·03690			
1. 57	30. 30	4. 50	·1213	13. 15	·03660			
2. 6	27. 30	5. 10	·1205	14. 50	·03680			
2. 10	26. 45	5. 23	·1212	15. 51	·03690			
	***	5. 41	·1206	18. 8	·03679			
2. 31	23. 35	5. 49	·1208	20. 50	·03684			
2. 52	26. 25	6. 2	·1205	22. 34	·03682			
3. 16	27. 0	6. 30	·1208	23. 59	·03690			
3. 35	29. 35	7. 4	·1202					
3. 41	29. 40	7. 13	·1209					
3. 52	30. 55	7. 25	·1204					
3. 58	17. 25	7. 30	·1206					
4. 11	15. 40	7. 46	·1203					
4. 23	19. 5	8. 12	·1206					
4. 38	22. 55	8. 16	·1204					
4. 41	22. 45	8. 57	·1214					
4. 53	24. 30	9. 11	·1212					
5. 1	23. 50	9. 40	·1229					
5. 21	26. 10	10. 25	·1212					
5. 34	26. 30	10. 36	·1214					
5. 39	25. 0	10. 46	·1209					
6. 18	25. 20	11. 12	·1205					
6. 38	23. 50	11. 41	·1209					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 6		Feb. 6						
h m	° ′ ″	h m		h m		h m	°	°
6. 47	20. 23. 50	11. 54	·1204					
6. 58	21. 55	12. 45	·1215					
7. 9	23. 25	13. 14	·1208					
7. 25	23. 50	13. 40	·1212					
7. 34	24. 5	13. 55	·1206					
7. 41:	22. 20	14. 6	·1209					
8. 8:	24. 25	14. 54	·1206					
	***	15. 23	·1210					
8. 46	22. 35	16. 1	·1206					
9. 1	20. 55	16. 57	·1216					
9. 16	17. 0	17. 28	·1211					
9. 27	15. 5	17. 42	·1214					
9. 56	19. 15	18. 14	·1205					
10. 28	19. 30	19. 44	·1219					
11. 6	23. 20	21. 12	·1216					
11. 18	23. 0	21. 40	·1205					
11. 25	24. 20	21. 59	·1207					
11. 39	24. 25		(†)					
11. 47	22. 35							
12. 32	27. 25							
12. 39	27. 45							
12. 54	31. 5							
13. 0	31. 50							
13. 37	25. 30							
13. 47	26. 35							
14. 0	25. 0							
	***							
14. 36	25. 45							
14. 44	26. 30							
15. 0	25. 25							
	***							
15. 54	26. 25							
16. 3	27. 5							
16. 48	25. 30							
17. 11	26. 5							
17. 30	26. 0							
17. 38	27. 5							
	***							
17. 56	28. 25							
18. 17	28. 0							
18. 36	29. 5							
18. 41	28. 40							
19. 4	26. 55							
19. 11	27. 10							
19. 24	26. 55							
19. 33	27. 30							
19. 53	26. 35							
20. 3	27. 25							
20. 26	26. 30							
20. 46	26. 50							
21. 14	27. 25							
21. 43	27. 15							
21. 55	27. 30							
22. 11	28. 55							
22. 25	27. 5							
22. 39	29. 20							
	***							
23. 23	28. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 6								
h m	° ′ ″	h m		h m		h m	°	°
23. 47	20. 32. 25							
23. 59	32. 30							
Feb. 7		Feb. 7		Feb. 7		Feb. 7		
0. 0	20. 32. 30		(†)	0. 0	·03690	1. 0	..	61. 3
0. 10	34. 25	3. 37	·1294	0. 45	·03710	3. 0	..	61. 6
0. 24	34. 55	4. 7	·1297	2. 28	·03760	Max.	58 ·2	61. 8
0. 39	33. 25	4. 26	·1287	3. 8	·03758	9. 0	58 ·2	61. 8
0. 45	30. 30	4. 31	·1290	4. 24	·03780	Min.	57 ·8	59 ·0
1. 4	31. 50	4. 54	·1287	5. 0	·03790	21. 0	58 ·5	59 ·4
1. 53	29. 55	5. 15	·1298	5. 40	·03780			
2. 25	27. 0	5. 44	·1292	6. 9	·03790			
2. 53	27. 50	5. 56	·1294	6. 30	·03770			
2. 56	29. 0	6. 16	·1288	6. 49	·03800			
3. 9	27. 25	6. 30	·1272	7. 18	·03775			
	***	6. 44	·1306	8. 41	·03770			
4. 8	22. 55	6. 55	·1328	10. 40	·03775			
4. 23	20. 5	7. 6	·1315	11. 24	·03750			
	***	7. 13	·1309	13. 4	·03748			
5. 24	24. 40	7. 17	·1309	14. 22:	·03760			
5. 33	22. 50	7. 38	·1294	15. 6	·03750			
5. 48	22. 35	7. 48	·1292	17. 0:	·03770			
6. 6	22. 50	8. 0	·1298	18. 33	·03777			
6. 25	0. 10	8. 15	·1295	22. 24	·03760			
6. 39	9. 30	8. 28	·1298	23. 59	·03760			
6. 49	14. 25	9. 37	·1297					
7. 6	15. 55	9. 47	·1301					
7. 23	20. 35	10. 15	·1298					
7. 56:	24. 15	10. 22	·1303					
8. 55	24. 45	10. 49	·1325					
9. 25	23. 55	11. 10	·1313					
9. 34	22. 35	11. 15	·1313					
9. 45	22. 20	11. 17	·1309					
10. 5	18. 30	11. 26	·1313					
10. 10	17. 20	11. 40	·1303					
10. 26	17. 55	12. 8	·1306					
10. 38	15. 55	12. 34	·1298					
10. 55	18. 50	12. 46	·1302					
11. 8	15. 30	13. 3	·1292					
11. 29	20. 25	13. 16	·1295					
12. 7	21. 20	13. 25	·1291					
12. 13	20. 45	13. 34	·1291					
12. 24	22. 10	13. 43	·1294					
12. 55	22. 25	13. 52	·1288					
13. 12	23. 55	14. 0	·1290					
13. 38	24. 5	14. 5	·1288					
13. 46	25. 25	14. 16	·1287					
13. 55	24. 45	14. 52	·1301					
14. 12	30. 55	15. 0	·1296					
14. 23	32. 50	15. 15	·1300					
14. 25	32. 35	15. 19	·1298					
14. 33	31. 0	15. 53	·1301					
14. 39	29. 20	16. 1	·1297					
14. 52	28. 10	16. 11	·1300					
14. 55	25. 25	16. 15	·1296					
15. 8	25. 5	17. 43	·1305					
15. 19	23. 20		***					
15. 24	23. 20	19. 21	·1300					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 7		Feb. 7						
h m	° ′ ″	h m		h m		h m	°	°
15. 40	20. 22. 10	20. 15	·1305					
16. 3	23. 40	20. 25	·1302					
16. 7	24. 35	21. 47	·1302					
16. 19	23. 50	21. 55	·1295					
16. 34	24. 45	22. 1	·1302					
17. 9	24. 20	22. 12	·1299					
	***		***					
17. 59	25. 0	22. 57	·1300					
18. 6	24. 25	23. 5	·1305					
18. 25	25. 30	23. 18	·1300					
18. 46	24. 45	23. 59	·1292					
19. 14	25. 40							
19. 24	25. 0							
19. 45	25. 30							
19. 57	26. 0							
20. 11	25. 30							
20. 24	26. 35							
20. 36	25. 30							
20. 55	24. 50							
21. 39	26. 5							
22. 3	26. 50							
22. 15	26. 30							
	***							
22. 42	27. 45							
23. 1	26. 50							
23. 9	27. 35							
	***							
23. 39	28. 0							
23. 59	29. 5							
Feb. 8		Feb. 8		Feb. 8		Feb. 8		
0. 0	20. 29. 5	0. 0	·1292	0. 0	·03760	1. 0	58 ·2	59 ·2
0. 23	28. 0	0. 40	·1290	3. 25	·03770	3. 0	58 ·0	60 ·0
0. 46	27. 45	0. 50	·1294	4. 14	·03790	Max.	58 ·8	60 ·5
	(†)	1. 5	·1290	4. 57	·03788	10. 0	58 ·0	59 ·6
1. 0	26. 6*	1. 38	·1294	6. 0	·03780	Min.	56 ·0	57 ·5
3. 0	25. 12*	1. 59	·1293	8. 0	·03766	21. 0	56 ·8	57 ·5
3. 10	27. 55	2. 43	·1288	10. 31	·03765			
3. 23	26. 50	2. 48	·1290	11. 30	·03746			
3. 36	27. 30	3. 0	·1285	11. 49	·03752			
3. 58	26. 20	3. 8	·1287	12. 34	·03720			
4. 18	25. 45	3. 23	·1279	12. 54	·03716			
4. 23	25. 15	3. 30	·1286	13. 40	·03727			
4. 37	25. 0	3. 43	·1272	15. 3	·03720			
4. 53	26. 10	3. 58	·1268	17. 4	·03710			
5. 6	25. 30	4. 12	·1282	18. 25	·03700			
5. 17	23. 25	4. 24	·1280	21. 26	·03676			
5. 39	23. 0	4. 45	·1287	23. 9	·03627			
5. 48	22. 30	5. 12	·1280	23. 59	·03632			
6. 5	23. 15	5. 18	·1285					
6. 31	25. 55	5. 40	·1281					
6. 44	25. 10	5. 59	·1289					
7. 8	26. 25	6. 15	·1290					
8. 36	25. 30	6. 20	·1288					
8. 44	25. 45	6. 31	·1290					
8. 57	24. 50	6. 41	·1288					
9. 18	22. 55	6. 58	·1291					
9. 36	23. 45	7. 11	·1289					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

February 7. The Horizontal Force Magnet was under adjustment until $3^{h}.37^{m}.$, and a new series commences at that time, which is quite distinct from the series ending February $6^{d}.\ 23^{h}.\ 59^{m}.$

February 8. From $1^{h}.$ to $3^{h}.\ 10^{m}.$ observations of the time of vibration of the Declination Magnet were made, with the Damper in different positions.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Feb. 8	° ′ ″	Feb. 8		h m		h m	°	°
h m		h m						
10. 23	20. 23. 10	7. 18	·1287					
10. 52	16. 20	7. 30	·1291					
10. 57	16. 50	7. 49	·1290					
11. 10	16. 30	7. 57	·1293					
11. 48	29. 0	8. 20	·1289					
12. 29	21. 30	8. 38	·1286					
12. 36	23. 30	8. 40	·1290					
12. 49	23. 0	8. 59	·1286					
13. 24	24. 15	9. 28	·1291					
13. 39	22. 35	10. 3	·1282					
13. 54	24. 10	10. 17	·1283					
14. 18	26. 55	10. 43	·1305					
14. 33	26. 20	11. 19	·1278					
14. 51	25. 35	11. 37	·1291					
15. 22	24. 50	12. 15	·1311					
16. 8	30. 30	12. 38	·1292					
16. 53	26. 30	12. 55	·1284					
17. 14	26. 35	13. 15	·1288					
17. 30	24. 30	13. 41	·1284					
18. 0	25. 5	14. 4	·1291					
18. 38	25. 10	14. 32	·1288					
18. 47	24. 25	15. 7	·1290					
19. 23	25. 0	15. 10	·1285					
19. 47	25. 5	15. 58	·1291					
20. 9	24. 35	17. 25	·1295					
20. 24	25. 55	17. 50	·1302					
20. 30	24. 30	18. 14	·1299					
21. 26	26. 30	18. 20	·1303					
22. 10	26. 35	18. 28	·1295					
23. 11	29. 30	18. 40	·1298					
23. 59	27. 30	19. 42	·1294					
		19. 48	·1290					
		20. 22	·1281					
		20. 43	·1284					
		21. 4	·1291					
		21. 22	·1289					
		21. 46	·1292					
		22. 22	·1288					
		22. 30	·1293					
		23. 59	·1286					
Feb. 9		Feb. 9		Feb. 9		Feb. 9		
0. 0	20. 27. 30	0. 0	·1286	0. 0	·03632	1. 0	56·3	58·4
1. 4	27. 30	0. 17	·1288	0. 30	·03640	3. 0	56·7	58·8
1. 38	27. 0	0. 48	·1290	2. 38	·03655	Max.	56·8	58·8
2. 7	25. 30	0. 57	·1289	5. 3	·03690	9. 0	56·1	57·6
2. 27	24. 45	1. 5	·1297	6. 26	·03672	Min.	54·9	56·4
2. 36	25. 30	1. 24	·1290	9. 5	·03665	21. 0	55·3	56·6
2. 57	23. 10	1. 37	·1298	10. 4	·03658			
3. 22	22. 0	1. 44	·1290	10. 30	·03660			
3. 40	20. 55	1. 52	·1297	11. 10	·03635			
3. 54	19. 0	1. 57	·1292	13. 30	·03645			
4. 9	17. 50	2. 6	·1296	20. 7	·03610			
4. 24	17. 30	2. 15	·1291	21. 9	·03600			
4. 46	19. 35	2. 38	·1292	21. 51	·03580			
5. 0	21. 30	2. 43	·1297	22. 44	·03570			
5. 23	21. 20	2. 51	·1289	23. 41	·03560			
5. 38	22. 25	3. 0	·1286	23. 59	·03570			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Feb. 9	° ′ ″	Feb. 9		h m		h m	°	°
h m		h m						
5. 56	20. 19. 45	3. 28	·1291					
6. 12	20. 30	3. 44	·1288					
6. 23	20. 30	3. 50	·1295					
6. 34	18. 25	3. 59	·1287					
6. 39	18. 25	4. 26	·1284					
6. 48	18. 55	5. 12	·1291					
6. 55	16. 30	5. 20	·1290					
7. 13	20. 10	5. 35	·1292					
7. 27	21. 30	5. 50	·1287					
7. 39	20. 35	6. 2	·1292					
8. 4	21. 0	6. 37	·1287					
8. 10	20. 30	7. 10	·1302					
8. 23	21. 5	7. 37	·1289					
8. 54	21. 0	7. 56	·1294					
9. 4	19. 30	8. 8	·1289					
9. 16	18. 40	8. 17	·1292					
9. 29	18. 30	8. 22	·1288					
9. 41	16. 20	8. 44	·1292					
9. 54	18. 25	9. 3	·1289					
10. 3	19. 30	9. 9	·1295					
10. 13	18. 25	9. 16	·1292					
10. 29	19. 5	9. 22	·1295					
10. 54	18. 30	9. 34	·1288					
11. 8	20. 0	9. 49	·1299					
11. 24	21. 10	10. 14	·1313					
11. 30	21. 10	10. 30	·1303					
11. 39	20. 25	10. 34	·1304					
11. 54	20. 25	10. 47	·1293					
12. 3	20. 0	11. 1	·1295					
12. 27	20. 20	11. 7	·1290					
13. 11	22. 30	11. 30	·1290					
13. 30	21. 25	11. 36	·1292					
13. 33	21. 45	11. 55	·1291					
14. 49	21. 30	12. 11	·1288					
15. 13	23. 0	12. 21	·1292					
16. 7	21. 25	12. 30	·1288					
	***	12. 46	·1292					
20. 41	21. 20	13. 10	·1288					
21. 10	22. 30	13. 20	·1290					
21. 56	22. 55	13. 28	·1287					
22. 45	24. 30	13. 40	·1292					
23. 29	25. 50	14. 2	·1288					
23. 37	25. 45	14. 19	·1293					
23. 43	26. 10	15. 18	·1290					
	(†)	16. 14	·1295					
		16. 32	·1293					
		16. 56	·1296					
		17. 13	·1292					
		19. 31	·1298					
		19. 50	·1295					
		20. 12	·1292					
		20. 19	·1293					
		20. 29	·1289					
		20. 40	·1293					
		20. 55	·1288					
		21. 13	·1290					
		21. 14	·1277					
		21. 34	·1279					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
h m	° ′ ″	Feb. 9 h m		h m		h m	°	°
		21. 46	·1282					
		21. 50	·1279					
		22. 20	·1278					
		22. 29	·1282					
		22. 38	·1279					
		23. 31	·1285					
		23. 56	·1285					
			(†)					
Feb. 10		Feb. 10		Feb. 10		Feb. 10		
	(†)	0. 0	·1300	0. 0	·03570	1. 0	55 ·2	57 ·1
1. 10	20. 35. 5	0. 10	·1303	0. 25	·03580	3. 0	55 ·3	57 ·7
1. 41	34. 55	0. 26	·1301		·03548	Max.	55 ·6	57 ·9
2. 35	34. 0	1. 5	·1306	1. 45	·03545	9. 0	55 ·5	57 ·0
3. 4	33. 30	1. 26	·1300		·03582	Min.	53 ·6	54 ·6
3. 18	33. 15	1. 34	·1303	3. 4	·03600	21. 0	54 ·0	55 ·1
3. 27	33. 0	2. 32	·1304		·03608			
3. 54	33. 30	3. 7	·1299	5. 7	·03630			
4. 4	32. 50	3. 14	·1311	6. 9	·03620			
4. 12	32. 0	3. 42	·1309	9. 13	·03612			
4. 24	31. 0	3. 48	·1312		·03594			
4. 39	29. 45	4. 12	·1309	9. 51	·03600			
5. 11	32. 30	4. 18	·1304	12. 56	·03580			
5. 51	32. 50	4. 34	·1309	15. 24	·03574			
5. 57	33. 5	4. 40	·1304	19. 0	·03550			
	***	4. 47	·1311	21. 0	·03535			
6. 23	30. 25	5. 22	·1312	22. 30	·03520			
6. 43	30. 0	5. 38	·1316	23. 38	·03500			
7. 4	31. 50	5. 47	·1316	*	(†)			
7. 33	32. 0	6. 21:	·1310					
7. 56	31. 30	6. 57	·1316					
10. 4	31. 45	7. 14	·1314					
10. 32	30. 5	8. 41	·1315					
10. 45	31. 15	8. 55	·1312					
11. 13	30. 20	8. 59	·1301					
11. 25	31. 0	9. 27	·1304					
11. 36	30. 55	10. 3	·1301					
12. 54	32. 0	10. 10	·1304					
13. 14	33. 5	10. 17	·1303					
14. 40	33. 0	10. 25	·1306					
15. 23	32. 40	10. 36	·1300					
15. 48	32. 30	10. 44	·1304					
16. 14	34. 5	10. 53	·1301					
16. 48	33. 30	11. 5	·1304					
17. 22	32. 35	11. 11	·1300					
17. 34	32. 35	13. 1	·1300					
18. 9	31. 30	13. 9	·1304					
19. 9	31. 30	13. 40	·1301					
19. 53	31. 30	14. 57	·1305					
19. 57	30. 45	15. 54	·1301					
20. 8	31. 30	16. 30	·1307					
20. 47	31. 25	17. 10	·1305					
22. 9	32. 50	17. 48	·1308					
22. 25	32. 45	18. 31	·1305					
22. 45	33. 30		***					
23. 0	34. 50	19. 58	·1307					
23. 15	36. 5	20. 38	·1304					
23. 24	36. 25	21. 4	·1304					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Feb. 10 h m	° ′ ″	Feb. 10 h m		h m		h m	°	°
23. 36	20. 35. 50	23. 0	·1300					
23. 47	36. 40	23. 3	·1305					
23. 55	37. 20	23. 14	·1301					
23. 59	38. 5	23. 20	·1307					
		23. 27	·1299					
		23. 59	·1307					
Feb. 11		Feb. 11		Feb. 11		Feb. 11		
0. 0	20. 38. 5	0. 0	·1307		(†)	1. 0	53 ·8	55 ·2
0. 23	36. 55	0. 34	·1301	0. 19	·03510	Min.	53 ·0	53 ·4
0. 41	36. 15	1. 28	·1308	2. 26	·03510	3. 0	53 ·6	53 ·4
1. 9	38. 0	1. 43	·1304	11. 40	·03523	Max.	53 ·9	56 ·0
1. 39	35. 55	2. 16	·1310	16. 10	·03510	9. 0	53 ·9	55 ·3
2. 38	35. 10	2. 34	·1307	19. 3	·03490	Min.	52 ·5	53 ·8
3. 8	34. 30	2. 49	·1309	22. 9	·03480	22. 14	53 ·5	54 ·0
3. 47	33. 25	3. 6	·1305	23. 14	·03472			
3. 55	33. 0	3. 10	·1315	23. 59	·03480			
6. 23	32. 0	3. 27	·1314					
8. 53	31. 15	3. 36	·1317					
9. 37	31. 40	3. 44	·1315					
10. 30	31. 30	3. 49	·1318					
10. 53	30. 0	3. 56	·1314					
11. 6	30. 35	4. 6	·1319					
11. 18	30. 20	4. 21	·1314					
11. 53	31. 45	5. 40	·1314					
12. 34	32. 50	5. 51	·1316					
13. 1	32. 25	6. 49	·1316					
14. 4	32. 35	7. 22	·1313					
14. 44	32. 15	8. 4	·1314					
15. 31	32. 30	8. 41	·1313					
15. 53	31. 55	9. 0	·1315					
16. 10	32. 25	9. 30	·1312					
16. 26	31. 30	9. 56	·1314					
16. 53	31. 20	10. 14	·1311					
17. 18	32. 10	10. 35	·1311					
18. 12	31. 45	11. 0	·1318					
18. 57	32. 10	11. 15	·1314					
19. 30	32. 5	11. 59	·1312					
20. 16	31. 50	12. 13	·1318					
20. 52	31. 35	13. 6	·1313					
21. 8	32. 25	13. 24	·1316					
21. 19	31. 50	14. 0	·1315					
21. 27	32. 15	16. 11	·1318					
21. 38	31. 45	16. 50	·1316					
21. 46	32. 35	17. 22	·1319					
21. 57	31. 55	17. 40	·1315					
22. 37	34. 5	18. 4	·1319					
22. 42	34. 0	19. 19	·1319					
22. 51	34. 55	20. 18	·1316					
22. 55	34. 30	21. 34	·1309					
23. 11	35. 10	22. 10	·1312					
23. 30	36. 15	22. 36	·1307					
23. 51	35. 35	22. 50	·1311					
23. 59	36. 5	23. 5	·1308					
		23. 29	·1310					
		23. 43	·1308					
		23. 59	·1311					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

February 10. Between 0^h. and 1^h. 10^m. the time of vibration of the Declination Magnet, with the Damper in different positions, was determined.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 12		Feb. 12		Feb. 12		Feb. 12		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 5	0. 0	·1311	0. 0	·03480	1. 0	53·6	54·2
0. 23	37. 20	0. 7	·1314	3. 4	·03510	Max.	54·0	55·9
0. 34	36. 50	2. 13	·1311	15. 0	·03484	8. 40	53·9	55·0
0. 53	36. 45	2. 45	·1313	16. 5	·03480	Min.	51·4	52·0
1. 19	37. 40	3. 0	·1310	17. 40	·03470	21. 10	52·0	52·5
2. 21	35. 35		***	19. 39	·03460			
2. 40	34. 50	4. 53	·1317	21. 55	·03450			
3. 16	33. 40	8. 49	·1317	23. 20	·03410			
4. 39	31. 55	10. 21	·1315	23. 59	·03395			
4. 54	32. 35	18. 40	·1321					
5. 10	32. 15	21. 55	·1312					
5. 53	31. 55	23. 59	·1312					
6. 9	31. 30							
6. 35	31. 45							
7. 23	31. 25							
8. 18	31. 35							
8. 34	30. 45							
8. 53	31. 30							
9. 4	31. 35							
9. 15	30. 45							
13. 58	31. 35							
14. 13	31. 35							
15. 9	32. 30							
15. 34:	31. 40							
16. 19	32. 30							
16. 39	31. 30							
17. 4	30. 55							
17. 39	31. 0							
17. 56	31. 35							
19. 54	31. 10							
20. 35	30. 30							
22. 8	31. 10							
23. 59	35. 20							
Feb. 13		Feb. 13		Feb. 13		Feb. 13		
0. 0	20. 35. 20	0. 0	·1312	0. 0	·03395	Min.	51·5	54·0
0. 10	35. 0	1. 40	·1319	1. 35	·03428	1. 0	51·7	54·8
0. 44	35. 55	4. 12	·1315	2. 14	·03442	3. 0	53·0	55·8
1. 36	36. 5	7. 31	·1317	4. 23	·03450	9. 0	53·1	55·9
2. 9	34. 15	10. 4	·1315	8. 10	·03460	21. 0	54·2	57·0
3. 51	31. 50		***	10. 24	·03470	Max.	54·6	58·0
4. 18	31. 45	13. 52	·1316	11. 56	·03490			
5. 18	31. 25	14. 10	·1319	15. 30	·03510			
5. 48	31. 50	19. 38	·1321	17. 53	·03530			
6. 10	31. 45	20. 57	·1318	19. 36	·03530			
6. 39	31. 30	22. 11	·1320	21. 35	·03540			
6. 53	30. 55	23. 59	·1313	22. 53	·03512			
10. 34	31. 0			23. 27	·03500			
10. 39	30. 35			23. 59	·03506			
10. 55	31. 0							
11. 16	30. 40							
11. 30	31. 0							
16. 28	32. 0							
18. 9	31. 25							
19. 56	32. 5							
21. 39	31. 50							
22. 51	32. 25							
23. 59	35. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 14		Feb. 14		Feb. 14		Feb. 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 35. 35	0. 0	·1313	0. 0	·03506	1. 0	54·1	55·8
0. 26	36. 30	1. 43	·1319	2. 53	·03534	3. 0	54·1	56·9
1. 18	36. 25	2. 30	·1317	6. 39	·03520	Max.	54·6	57·1
1. 26	35. 30	2. 43	·1321	8. 38	·03530	9. 0	54·0	56·2
1. 41	35. 25	3. 0	·1319	11. 38	·03520	Min.	51·8	53·3
1. 51	34. 50	3. 9	·1323	13. 36	·03500	21. 0	52·8	54·0
2. 27	34. 0	3. 14	·1319	14. 26	·03510			
2. 34	34. 30	3. 22	·1322	17. 6	·03515			
	***	3. 30	·1318	19. 58	·03500			
3. 23	33. 15	3. 57	·1319	21. 26	·03470			
3. 45	32. 40	4. 8	·1317	22. 56	·03450			
3. 55	32. 5	4. 26	·1317	23. 59	·03450			
	***	4. 42	·1322					
4. 43	32. 45	4. 54	·1320					
5. 8	33. 15	5. 1	·1323					
5. 39	32. 30	5. 25	·1325					
6. 12	33. 25	5. 52	·1319					
6. 31	32. 10	6. 3	·1321					
6. 48	33. 15	6. 41	·1309					
7. 8	32. 0	7. 33	·1310					
7. 41	32. 50	7. 51	·1308					
7. 56	32. 30	8. 6	·1309					
8. 12	33. 5	8. 22	·1305					
8. 24	32. 0	9. 39	·1313					
9. 0	30. 30	10. 6	·1311					
9. 25	30. 0	10. 31	·1316					
9. 40	30. 50	11. 19	·1311					
10. 41	30. 30	11. 34	·1313					
10. 56	31. 0	11. 55	·1312					
11. 53	30. 25	12. 10	·1317					
12. 38	32. 50	12. 26	·1317					
13. 7	29. 10	12. 39	·1314					
13. 22	33. 30	12. 55	·1323					
13. 39	32. 0	13. 11	·1319					
14. 4	28. 25	13. 31	·1321					
14. 23	28. 25	14. 14:	·1310					
14. 51	31. 30	14. 54	·1314					
15. 9	30. 0	15. 32	·1309					
15. 26	28. 20	16. 6	·1315					
15. 55	29. 45	16. 21	·1312					
16. 27	28. 50	16. 38	·1318					
16. 37	26. 55	16. 59	·1313					
16. 48	27. 35	19. 44	·1321					
16. 54	27. 0	20. 42	·1315					
17. 31	30. 0	22. 35	·1312					
18. 14	29. 50	22. 42	·1318					
18. 31	28. 55	23. 7	·1319					
18. 56	30. 5	23. 15	·1315					
19. 11	29. 25	23. 27	·1323					
19. 41	29. 40	23. 41	·1317					
19. 55	30. 45	23. 52	·1319					
20. 8	30. 45		(†)					
20. 23	31. 35							
20. 56	31. 10							
21. 30	31. 40							
	***							
22. 35	32. 55							
23. 9	35. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 14								
h m	° ′ ″	h m		h m		h m	°	°
23. 21	20. 35. 30							
23. 30	39. 0							
23. 54	39. 25							
23. 59	38. 25							
Feb. 15		Feb. 15		Feb. 15		Feb. 15		
0. 0	20. 38. 25		(†)	0. 0	·03450	1. 0	52 ·9	55 ·9
0. 14	36. 35	0. 15	·1315	0. 40	·03460	3. 0	53 ·0	56 ·3
0. 48	40. 5	0. 32	·1313	2. 0	·03480	Max.	53 ·8	57 ·4
0. 56	39. 0	0. 48	·1317	2. 40	·03490	9. 0	53 ·8	57 ·0
1. 4	38. 15	0. 56	·1316	4. 26	·03510	Min.	53 ·1	54 ·0
1. 26	41. 50	1. 6	·1320	5. 19	·03520	21. 0	53 ·8	54 ·0
1. 53	41. 25	1. 19	·1313	5. 50	·03528			
2. 11	42. 30	1. 22	·1316	6. 46	·03583			
2. 30	40. 10	2. 3	·1322	7. 41	·03574			
2. 54	39. 35	2. 8	·1319	8. 25	·03592			
3. 11	41. 0	2. 17	·1323	8. 57	·03550			
3. 25	40. 20	2. 55	·1313	9. 21	·03552			
3. 43	40. 30	3. 12	·1316	9. 40	·03540			
3. 53	39. 25	3. 39	·1318	11. 23	·03536			
4. 9	40. 10	3. 50	·1321	12. 38	·03500			
4. 27	40. 35	4. 6	·1318	13. 42:	·03490			
4. 41	42. 30	4. 23	·1320	14. 24	·03420			
4. 56	41. 35	4. 39	·1316	14. 56	·03420			
5. 9	42. 30	4. 50	·1318	16. 25:	·03470			
5. 26	41. 25	5. 5	·1314	17. 45	·03480			
5. 54	40. 0	5. 9	·1315	18. 6	·03470			
6. 21	32. 35	5. 23	·1307	20. 0	·03487			
6. 34	30. 0	5. 45	·1313	20. 44	·03482			
6. 42	32. 5	5. 53	·1308	23. 28	·03460			
6. 55	33. 0	6. 0	·1310	23. 59	·03460			
7. 6	34. 0	6. 6	·1305					
7. 11	32. 0	6. 15	·1306					
7. 28	36. 10	6. 40	·1288					
7. 38	35. 25	6. 47	·1295					
7. 53	38. 30	6. 51	·1293					
8. 6	37. 25	6. 55	·1298					
8. 19	34. 0	7. 8	·1293					
8. 50	8. 30	7. 22	·1303					
9. 7	13. 25	7. 34	·1295					
9. 23	13. 55	7. 42	·1299					
9. 53	22. 35	7. 55	·1285					
10. 1	22. 30	8. 4	·1281					
10. 23	23. 55	8. 15	·1284					
10. 26	23. 30	8. 24	·1282					
10. 40	24. 10	8. 50	·1300					
10. 49	23. 0	9. 4	·1275					
11. 9	23. 5	9. 17	·1270					
11. 21	21. 0	9. 29	·1279					
11. 33	23. 30	9. 42	·1273					
11. 41	25. 5	9. 45	·1274					
12. 1	28. 55	9. 56	·1269					
12. 33	26. 40	10. 18	·1278					
12. 58	26. 30	10. 57	·1287					
13. 13	26. 30	11. 34	·1303					
13. 24	27. 35	12. 6	·1301					
13. 31	31. 30	12. 17	·1304					
13. 50	21. 50	12. 45	·1295					
14. 12	17. 10	13. 16	·1290					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 15		Feb. 15						
h m	° ′ ″	h m		h m		h m	°	°
14. 25	20. 19. 0	13. 24	·1283					
14. 34	18. 50	14. 1	·1326					
15. 39	30. 0	14. 19	·1305					
15. 54	32. 55	14. 42	·1288					
	***	15. 9	·1295					
16. 53	31. 40	15. 25	·1299					
17. 19	31. 30	15. 50	·1297					
17. 54	33. 5	16. 52	·1307					
18. 8	30. 35	17. 51	·1308					
18. 37	31. 50	18. 2	·1304					
19. 10	31. 25	18. 11	·1307					
19. 41	31. 50	18. 55	·1304					
19. 54	30. 30	19. 26	·1303					
20. 7	32. 10	19. 48	·1298					
20. 51	32. 35	20. 3	·1305					
21. 25	32. 0	20. 43	·1295					
21. 38	31. 5	20. 54	·1299					
22. 9	30. 50	21. 3	·1297					
22. 34	32. 10	21. 30	·1301					
22. 40	30. 50	21. 40	·1295					
23. 17	32. 55	22. 34	·1296					
23. 36	33. 5	22. 41	·1293					
23. 59	35. 0	23. 0	·1296					
		23. 56	·1294					
		23. 59	·1296					
Feb. 16		Feb. 16		Feb. 16		Feb. 16		
0. 0	20. 35. 0	0. 0	·1296	0. 0	·03460	1. 0	53 ·1	56 ·0
0. 23	35. 40	0. 42	·1300	2. 23	·03490	3. 0	53 ·4	56 ·1
0. 53	35. 30	1. 8	·1303	10. 30	·03515	Max.	54 ·9	57 ·4
1. 23	36. 20	1. 47	·1304	12. 28	·03496	9. 0	54 ·7	57 ·2
1. 49	35. 25	2. 5	·1309	13. 15	·03465	Min.	52 ·1	53 ·0
2. 23	35. 30	3. 5	·1308	15. 18	·03475	21. 0	53 ·4	53 ·0
3. 2	34. 55	3. 47	·1304	16. 40	·03470			
3. 45	33. 20	7. 21	·1311	17. 51	·03450			
4. 9	33. 30	7. 48	·1307	18. 6	·03460			
5. 21	32. 25	8. 25	·1312	18. 14	·03450			
7. 19	31. 30	9. 4	·1309	18. 25	·03460			
8. 0	30. 25	9. 39	·1311	18. 40	·03450			
8. 28	30. 25	9. 56	·1305	20. 45	·03470			
8. 41	31. 5	10. 15	·1313	21. 27	·03460			
9. 4	31. 10	10. 46	·1306	22. 5	·03450			
9. 38	29. 45	11. 19	·1308	22. 26	·03456			
10. 3	25. 25	11. 30	·1305	23. 26	·03446			
10. 19	26. 30	11. 43	·1307	23. 45	·03430			
10. 33	26. 25	11. 48	·1305	23. 59	·03460			
10. 48	25. 30	12. 1	·1309					
11. 14	28. 25	12. 17	·1305					
11. 26	27. 20	12. 52	·1311					
12. 8	28. 0	13. 7	·1305					
12. 44	33. 0	13. 54	·1320					
12. 56	33. 20	14. 37	·1307					
13. 9	29. 35	15. 23	·1305					
13. 41	27. 40	15. 43	·1312					
14. 11	27. 30	16. 16	·1313					
14. 32	29. 5	16. 48	·1323					
15. 26	30. 30	17. 32	·1317					
15. 31	31. 25	17. 53	·1308					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 16		Feb. 16						
h m	° ′ ″	h m		h m		h m	°	°
16. 8	20. 28. 50	18. 4	·1313					
16. 35	30. 15	18. 16	·1306					
16. 42	29. 45	18. 29	·1318					
17. 25	32. 40	18. 40	·1314					
17. 46	31. 30	19. 18	·1329					
18. 1	35. 35	19. 37	·1322					
18. 10	34. 0	19. 52	·1323					
18. 23	35. 55	20. 22	·1318					
18. 41	32. 30	20. 32	·1321					
18. 57	32. 10	20. 54	·1317					
19. 8	33. 35	21. 9	·1322					
19. 24	32. 45	21. 18	·1317					
19. 52	33. 20	22. 5	·1314					
20. 23	31. 55	22. 16	·1320					
20. 36	31. 5	22. 31	·1308					
20. 55	31. 50	23. 9	·1312					
21. 15	32. 5	23. 20	·1306					
21. 24	31. 0	23. 28	·1316					
21. 54	32. 0	23. 40	·1317					
21. 56	33. 25		***					
22. 8	33. 30	23. 59	·1292					
22. 13	31. 45							
22. 23	31. 30							
22. 34	32. 45							
22. 39	32. 50							
22. 44	31. 0							
23. 1	34. 5							
23. 9	34. 0							
23. 25	40. 25							
23. 28	41. 5							
	***							
23. 59	40. 0							
Feb. 17		Feb. 17		Feb. 17		Feb. 17		
0. 0	20. 40. 0	0. 0	·1292	0. 0	·03460	Min.	53·2	56·0
	***	0. 13	·1273	1. 9	·03490	1. 0	53·2	56·2
0. 26	38. 30	0. 15	·1279	2. 10	·03500	3. 0	53·9	57·0
0. 39	47. 30	0. 22	·1268	3. 1	·03520	9. 0	54·8	57·0
0. 45	49. 35	0. 33	·1274	3. 50	·03532	21. 0	54·9	57·0
0. 54	44. 10		***	3. 57	·03546	Max.	55·1	58·2
1. 37	39. 45	0. 48	·1268	4. 9	·03580			
2. 48	39. 55	0. 56	·1276	4. 28	·03572			
2. 56	43. 30	1. 19	·1273	4. 46	·03550			
3. 4	44. 55	1. 49	·1286	4. 55	·03550			
3. 42	42. 30	2. 30	·1297	5. 16	·03540			
3. 53	41. 30	2. 43	·1305	6. 9	·03560			
4. 0	43. 35	2. 58	·1316	6. 22	·03600			
4. 11	42. 30	3. 9	·1313	6. 41	·03570			
4. 23	44. 30	3. 15	·1316	7. 29	·03530			
4. 31	45. 40	3. 29	·1300	8. 0	·03580			
4. 38	42. 35	3. 40	·1301	8. 12	·03570			
4. 52	41. 30	3. 50	·1295	8. 26	·03603			
4. 56	41. 5	4. 1	·1299	8. 30	·03600			
5. 3	42. 0	4. 13	·1288	8. 56	·03630			
5. 9	41. 10	4. 18	·1285	9. 20	·03650			
5. 23	41. 30	4. 28	·1293	9. 37	·03640			
5. 47	39. 15	4. 41	·1285	10. 15	·03680			
5. 56	39. 0	4. 50	·1292	10. 30	·03710			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 17		Feb. 17		Feb. 17				
h m	° ′ ″	h m		h m		h m	°	°
6. 9	20. 40. 5	5. 4	·1284	10. 38	·03680			
6. 23	43. 30	5. 19	·1291	10. 54	·03640			
6. 29	39. 35	5. 31	·1286	11. 23	·03630			
6. 38	37. 10	5. 38	·1295	11. 42:	·03600			
6. 44	33. 20	5. 49	·1301	12. 11	·03603			
6. 56	18. 30	5. 59	·1301	12. 25	·03570			
7. 8	27. 30	6. 3	·1305		***			
7. 23	21. 50	6. 20	·1285	12. 55	·03580			
7. 34	22. 10	6. 36	·1292	13. 15	·03570			
7. 36	19. 0	6. 49	·1311	14. 11	·03580			
7. 53	15. 20	7. 0	·1331	14. 26	·03560			
8. 7	21. 0	7. 12	·1302	15. 23	·03564			
8. 22	38. 5	7. 18	·1302	16. 17	·03556			
8. 26	39. 45	7. 34	·1278	16. 56	·03557			
8. 34	38. 10	7. 46	·1289	17. 18	·03543			
8. 39	36. 50	7. 50	·1286	19. 33	·03550			
8. 48	39. 45	8. 3	·1297	21. 8	·03540			
9. 4	44. 30		***		·03563			
9. 23	34. 10	8. 26	·1289	22. 0	·03560			
9. 39	37. 5	8. 34	·1295	23. 21	·03545			
9. 44	35. 40	8. 48	·1286	23. 59	·03545			
9. 58	29. 30	8. 56	·1273					
10. 11	33. 50	9. 18	·1282					
10. 24	30. 40	9. 42	·1263					
10. 35	22. 30	9. 53	·1270					
10. 37	25. 15	10. 9	·1265					
10. 48	8. 20	10. 18	·1269					
11. 0	22. 25	10. 24	·1285					
11. 4	22. 30	10. 33	·1260					
11. 30	33. 35	10. 42	·1272					
11. 37	33. 30	10. 49	·1255					
11. 41	33. 35	10. 58	·1260					
11. 54	32. 50	11. 6	·1259					
12. 8	37. 40	11. 19	·1283					
12. 16	36. 50	11. 43	·1279					
12. 23	35. 20	11. 46	·1275					
	***	11. 56	·1285					
12. 52	35. 5	12. 0	·1299					
13. 1	35. 5	12. 7	·1301					
13. 4	35. 30	12. 17	·1288					
13. 10	33. 55	12. 22	·1293					
13. 24	36. 30	12. 26	·1280					
13. 29	32. 25	12. 34	·1289					
13. 39	34. 5	12. 39	·1282					
13. 56	34. 30	12. 42	·1287					
14. 9	34. 30	12. 45	·1284					
14. 13	37. 35	12. 49	·1287					
14. 24	32. 5	12. 52	·1282					
	***	13. 1	·1288					
14. 47	31. 30	13. 12	·1275					
15. 17	33. 5	13. 21	·1287					
16. 6	31. 25	13. 32	·1279					
16. 44	36. 0	14. 5	·1282					
16. 55	36. 55	14. 15	·1294					
17. 4	36. 25	14. 26	·1286					
17. 9	36. 55	14. 42	·1282					
17. 21	35. 0	14. 46	·1288					
17. 30	36. 10	14. 53	·1282					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 17		Feb. 17						
h m	° ′ ″	h m		h m		h m	°	°
17. 37	20. 35. 50	15. 51	·1284					
17. 41	36. 30	16. 32	·1267					
17. 51	35. 45		***					
18. 18	34. 50	17. 30	·1288					
18. 25	34. 40		***					
18. 39	34. 25	18. 15	·1285					
	***	18. 27	·1288					
19. 38	34. 45	18. 41	·1284					
19. 46	33. 30	19. 1	·1289					
20. 2	34. 25	19. 10	·1283					
20. 9	34. 35		***					
20. 21	33. 40	20. 35	·1292					
20. 32	34. 35	20. 39	·1288					
20. 38	33. 30	20. 50	·1295					
20. 51	35. 5	21. 8	·1291					
21. 9	34. 0	21. 16	·1306					
21. 26	34. 5	22. 5	·1300					
21. 43	33. 55	22. 16	·1294					
22. 8	35. 5	23. 15	·1298					
22. 38	37. 50	23. 27	·1293					
23. 8	38. 45	23. 59	·1298					
23. 11	40. 25							
23. 22	40. 15							
23. 25	40. 45							
23. 31	39. 30							
23. 38	39. 45							
23. 49	44. 30							
23. 59	44. 20							
Feb. 18		Feb. 18		Feb. 18		Feb. 18		
0. 0	20. 44. 0	0. 0	·1298	0. 0	·03545	1. 0	54 ·9	57 ·0
0. 8	42. 45	0. 13	·1307	1. 5	·03540	3. 0	54 ·9	57 ·9
0. 23	43. 55	0. 16	·1300	1. 30	·03557	Max.	56 ·0	58 ·7
	(†)	0. 20	·1302	2. 3	·03590	9. 0	55 ·9	58 ·1
1. 0	46. 28*	0. 30	·1298	2. 30	·03610	Min.	54 ·2	56 ·0
1. 25	46. 0	0. 43	·1304	2. 46	·03648	22. 30	54 ·9	56 ·0
1. 29	44. 35		(†)	2. 54	·03640			
1. 48	45. 20	1. 0	·1298*	3. 5	·03650			
2. 3	46. 35	2. 7	·1305	3. 15	·03690			
2. 11	46. 25	2. 15	·1312	3. 21	·03670			
2. 24	48. 10	2. 19	·1308	3. 26	·03700			
2. 33	47. 15	2. 26	·1308	3. 30	·03670			
2. 47	49. 30	2. 32	·1315	3. 40	·03710			
2. 54	50. 25	2. 44	·1304	3. 45	·03720			
3. 4	57. 30	2. 50	·1309	3. 55	·03750			
3. 9	50. 30	2. 57	·1306	4. 9	·03790			
3. 17	53. 0	3. 6	·1308	4. 15	·03825			
3. 23	51. 5	3. 14	·1325	4. 24	·03810			
3. 28	53. 20	3. 24	·1300	4. 40	·03850			
3. 33	50. 55	3. 27	·1306	4. 45	·03870			
3. 37	40. 50	3. 35	·1287	4. 56	·03890			
3. 40	47. 20	3. 43	·1295	5. 10	·03850			
3. 42	53. 35	3. 47	·1282	5. 22	·03870			
3. 43	47. 25	3. 52	·1295	5. 30	·03910			
3. 44	41. 0	3. 55	·1266	5. 41	·03840			
3. 46	35. 10	4. 4	·1286	6. 0	·03808			
3. 57	42. 5	4. 14	·1286	6. 4	·03816			
4. 8	32. 0	4. 16	.1276	6. 9	.03820			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 18		Feb. 18		Feb. 18				
h m	° ′ ″	h m		h m		h m	°	°
4. 23	20. 49. 55	4. 30	·1310	6. 15	·03800			
4. 26	46. 40	4. 36	·1294	6. 38	·03810			
4. 29	37. 25	4. 44	·1282	6. 53	·03750			
4. 34	42. 30	4. 46	·1298	7. 4	·03740			
4. 40	39. 5	4. 51	·1270	7. 26	·03710			
4. 46	30. 30	5. 5	·1295	7. 33	·03713			
5. 3	47. 25	5. 13	·1270	7. 42	·03690			
5. 8	44. 35	5. 19	·1247	7. 53	·03680			
5. 14	26. 0	5. 31	·1274	8. 9	·03660			
5. 23	30. 35	5. 36	·1283	8. 39	·03635			
5. 32	41. 30	5. 44	·1263	9. 19	·03645			
5. 38	35. 20	5. 49	·1271	11. 0	·03652			
5. 47	40. 55	5. 55	·1260	12. 7	·03610			
5. 53	37. 50	6. 2	·1267	12. 16	·03610			
5. 58	38. 0	6. 8	·1262	12. 37	·03590			
6. 8	31. 5	6. 15	·1269	12. 53	·03546			
6. 11	32. 40	6. 20	·1253	13. 12	·03540			
6. 16	21. 30	6. 35	·1278	13. 30	·03500			
6. 23	17. 15	6. 40	·1284	13. 46	·03470			
6. 39	29. 50	6. 44	·1277	14. 8	·03510			
6. 42	31. 45	6. 50	·1283	14. 30	·03526			
6. 48	33. 50	7. 14	·1269	15. 9	·03560			
7. 4	33. 40	7. 24	·1298	16. 4	·03580			
7. 11	21. 35	7. 28	·1295	17. 39	·03586			
7. 22	14. 25	7. 32	·1299	18. 36	·03570			
7. 26	15. 50	7. 37	·1293	19. 4	·03556			
7. 31	18. 0	7. 43	·1304	19. 42	·03565			
7. 36	16. 35	7. 48	·1280	20. 25	·03580			
7. 44	26. 35	8. 0	·1301	21. 40	·03565			
7. 55	21. 0	8. 8	·1303	22. 9	·03560			
8. 17	35. 35	8. 23	·1284	22. 53	·03570			
8. 36	31. 0	8. 30	·1284	23. 25	·03576			
	***	8. 42	·1296		(†)			
9. 9	32. 5	8. 56	·1286					
9. 23	31. 0	9. 4	·1297					
	***	9. 16	·1290					
9. 41	32. 40		***					
9. 53	31. 0	9. 25	·1294					
	***	9. 34	·1280					
10. 8	32. 35	9. 43	·1279					
10. 13	31. 55	9. 49	·1287					
10. 26	32. 45	9. 58	·1285					
10. 36	32. 30	10. 4	·1291					
10. 43	33. 5	10. 9	·1287					
10. 48	32. 50	10. 15	·1290					
11. 4	33. 45	10. 27	·1286					
11. 15	33. 35		***					
11. 24	32. 40	10. 52	·1297					
11. 39	34. 45	11. 17	·1301					
12. 23	30. 30		***					
12. 32	33. 10	11. 52	·1285					
12. 40	31. 50	11. 58	·1275					
12. 56	34. 10	12. 16	·1290					
13. 12	37. 25	12. 27	·1322					
13. 17	43. 35	12. 42	·1336					
13. 24	39. 55	12. 50	·1329					
13. 34	39. 5	13. 4	·1336					
13. 53	26. 20	13. 16	·1305					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 18		Feb. 18						
h m	° ′ ″	h m		h m		h m	°	°
14. 9	20. 23. 5	13. 26	·1303					
	***	13. 36	·1282					
14. 26	24. 45	13. 53	·1281					
14. 55	30. 25	14. 14	·1300					
15. 17	30. 20	14. 25	·1302					
15. 26	31. 5	14. 48	·1290					
15. 56	29. 30	15. 12	·1291					
16. 19	30. 0	15. 16	·1296					
16. 23	30. 20	15. 44	·1301					
16. 26	29. 15	16. 9	·1296					
16. 38	31. 10	16. 26	·1300					
16. 46	29. 35	16. 30	·1295					
16. 54	31. 40	16. 38	·1301					
16. 56	31. 10	16. 44	·1296					
17. 4	30. 20	16. 48	·1302					
17. 10	33. 30	16. 59	·1299					
17. 23	32. 10	17. 8	·1304					
17. 46	25. 0	17. 15	·1299					
18. 11	41. 55	17. 26	·1305					
18. 24	41. 30	18. 1	·1297					
18. 33	42. 45	18. 12	·1304					
18. 40	40. 30	18. 31	·1301					
	***	19. 5	·1319					
19. 16	34. 35	19. 9	·1308					
19. 20	35. 30	19. 26	·1315					
19. 41	33. 45	19. 41	·1309					
20. 8	35. 20		***					
20. 16	37. 5	20. 14	·1312					
20. 36	34. 45		***					
20. 45	35. 15	20. 49	·1306					
20. 56	37. 10	21. 17	·1314					
21. 10	37. 10		***					
21. 21	39. 35	22. 0	·1291					
21. 24	38. 40	22. 12	·1299					
21. 38	39. 25	22. 16	·1287					
21. 45	40. 30	22. 21	·1293					
	***	22. 28	·1276					
22. 23	36. 40	22. 42	·1266					
22. 28	40. 25	23. 3	·1290					
22. 44	42. 30	23. 59	·1287					
22. 48	39. 5							
22. 59	39. 30							
23. 23	44. 25							
23. 25	43. 35							
23. 30	41. 5							
23. 38	43. 30							
23. 47	41. 0							
23. 59	44. 5							
Feb. 19		Feb. 19		Feb. 19		Feb. 19		
0. 0	20. 44. 5	0. 0	·1287		(†)	1. 0	54·9	56·0
0. 8	38. 25	0. 18	·1297	0. 13	·03590	Max.	55·0	56·4
0. 23	38. 35	0. 26	·1278	0. 36	·03625	9. 0	54·1	53·9
0. 53	43. 55	0. 37	·1290	1. 20	·03611	Min.	53·1	53·9
1. 38	40. 35	1. 14	·1296	2. 30	·03620	21. 0	53·7	55·0
1. 47	40. 25	1. 45	·1298	2. 50	·03620			
1. 54	40. 0	1. 59	·1304	3. 4	·03628			
2. 18	40. 25	2. 27	·1306	3. 40	·03680			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 19		Feb. 19		Feb. 19				
h m	° ′ ″	h m		h m		h m	°	°
2. 25	20. 41. 50	2. 33	·1303	4. 10	·03700			
2. 46	39. 40	2. 40	·1309	4. 52	·03660			
2. 55	41. 30	2. 50	·1300	5. 26	·03653			
3. 3	40. 5	2. 56	·1300	6. 20	·03620			
3. 10	29. 30	2. 59	·1291	8. 7	·03610			
3. 16	23. 35	3. 12	·1299	9. 14	·03608			
3. 23	18. 10	3. 24	·1268	10. 4	·03590			
	***	3. 30	·1276	10. 26	·03570			
3. 46	13. 0	3. 44	·1276	10. 42	·03580			
3. 49	13. 40	3. 52	·1291	11. 15	·03540			
3. 52	12. 25	4. 16	·1319	11. 30	·03530			
3. 56	13. 5	4. 27	·1319	12. 1	·03550			
4. 9	20. 20	4. 29	·1305	13. 15	·03560			
4. 34	28. 0	4. 33	·1308	14. 50	·03570			
4. 39	27. 30	4. 47	·1300	20. 45	·03580			
4. 48	27. 45	4. 51	·1303	21. 30	·03584			
5. 8	30. 20	5. 3	·1298	22. 17	·03560			
5. 24	35. 15	5. 12	·1302	23. 59	·03550			
5. 35	34. 45	5. 20	·1296					
5. 46	36. 35	5. 28	·1296					
6. 0	35. 50	5. 34	·1289					
6. 11	34. 10	6. 12	·1304					
6. 25	35. 0	6. 23	·1296					
6. 34	33. 35	6. 38	·1304					
6. 54	35. 40	7. 0	·1300					
7. 16	35. 0	7. 12	·1305					
7. 54	33. 55	7. 26	·1302					
8. 3	33. 20	8. 12	·1305					
8. 23	33. 50	8. 44	·1302					
8. 41	31. 35	9. 18	·1308					
9. 10	31. 55	9. 36	·1303					
9. 26	32. 30	9. 50	·1308					
9. 43	31. 25	10. 12	·1300					
10. 0	32. 40	10. 20	·1310					
10. 23	19. 0	10. 25	·1327					
10. 53	28. 15	10. 40	·1341					
11. 6	27. 50	10. 49	·1336					
11. 13	25. 25	11. 0	·1325					
11. 29	22. 35	11. 8	·1328					
11. 40	32. 15	11. 25	·1294					
12. 1	30. 30	11. 30	·1297					
12. 13	31. 25	11. 42	·1297					
12. 25	30. 30	11. 49	·1293					
12. 36	31. 40	12. 3	·1296					
12. 45	31. 30	12. 26	·1307					
12. 53	33. 20	12. 37	·1303					
13. 8	33. 25	12. 45	·1303					
13. 36	35. 0	12. 49	·1303					
13. 49	34. 35	12. 55	·1299					
14. 23	34. 50	13. 3	·1303					
14. 42	33. 45	13. 14	·1298					
15. 34	33. 20	13. 27	·1302					
15. 45	34. 5	13. 52	·1299					
16. 4	32. 55	14. 43	·1305					
16. 7	33. 50	16. 16	·1304					
16. 24	32. 5	16. 28	·1313					
16. 39	33. 0	16. 39	·1307					
	***	16. 43	·1310					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 19		Feb. 19						
h m	° ′ ″	h m		h m		h m	°	°
19. 39	20. 32. 30	16. 48	·1308					
19. 56	31. 55		***					
20. 23	32. 20	18. 22	·1307					
	***		***					
21. 6	33. 25	19. 53	·1314					
21. 28	34. 30	20. 7	·1312					
21. 40	34. 20	20. 15	·1316					
21. 54	35. 0	21. 4	·1304					
22. 8	34. 25	21. 10	·1308					
22. 12	35. 30	21. 27	·1307					
22. 24	35. 30	21. 35	·1309					
22. 39	37. 35	21. 52	·1300					
22. 52	37. 30	22. 5	·1306					
23. 23	40. 35		***					
23. 59	41. 15	22. 36	·1282					
		22. 44	·1286					
		22. 50	·1282					
		23. 22	·1296					
		23. 59	·1303					
Feb. 20		Feb. 20		Feb. 20		Feb. 20		
0. 0	20. 41. 15	0. 0	·1303	0. 0	·03550	1. 0	53 ·7	55 ·2
0. 14	40. 45	0. 5	·1305	1. 10	·03560	3. 0	53 ·7	55 ·2
0. 56	44. 15	0. 17	·1305	2. 5	·03580	Max.	54 ·1	56 ·3
1. 0	44. 20	0. 43	·1309	2. 44	·03587	9. 0	54 ·1	56 ·0
1. 8	44. 45	1. 14	·1294	3. 43	·03610	Min.	52 ·8	55 ·1
1. 36	46. 10	1. 40	·1300	5. 10	·03622	21. 0	53 ·2	55 ·3
1. 45	44. 50	1. 47	·1298	5. 53	·03630			
1. 56	46. 15	2. 6	·1308	6. 38	·03618			
2. 12	45. 0	2. 22	·1297	7. 17	·03620			
2. 16	44. 25	2. 31	·1300	7. 30	·03610			
2. 26	44. 25	2. 40	·1296	8. 3	·03650			
	***	3. 20:	·1308	8. 27	·03640			
3. 1	40. 30	3. 53	·1301	9. 15	·03650			
	***		***	10. 4	·03630			
3. 42	43. 0	4. 30	·1302	10. 45	·03620			
3. 53	42. 25	4. 43	·1293	11. 14	·03580			
3. 57	42. 25	4. 56	·1291	11. 45	·03560			
4. 2	41. 5	5. 15	·1295	12. 22	·03490			
4. 9	41. 5	5. 26	·1294	12. 38	·03500			
4. 14	39. 55	5. 40	·1308	12. 45	·03460			
4. 26	41. 35	5. 57	·1304	13. 5	·03420			
4. 38	41. 35	6. 6	·1305	13. 24	·03416			
4. 46	42. 5	6. 23	·1300	14. 14	·03470			
4. 53	40. 55	6. 37	·1307	14. 36	·03426			
5. 5	40. 25	6. 57	·1304	15. 14	·03500			
5. 9	41. 0	7. 4	·1306	17. 57	·03513			
5. 24	36. 50	7. 13	·1300	19. 56	·03504			
5. 39	38. 25	7. 20	·1302	22. 28	·03510			
6. 0:	39. 5	7. 36	·1288	23. 14	·03530			
6. 23	37. 30	7. 42	·1291	23. 59	·03520			
6. 34	37. 20	7. 53	·1289					
6. 53	38. 0	8. 12	·1295					
7. 4	36. 35	8. 20	·1288					
7. 8	33. 35	8. 27	·1291					
7. 19	33. 35	8. 36	·1285					
7. 30	37. 20	8. 54	·1287					
7. 40	38. 55	9. 4	·1280					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 20		Feb. 20						
h m	° ′ ″	h m		h m		h m	°	°
7. 51	20. 35. 35	9. 19	·1287					
8. 4	32. 25	9. 34	·1283					
8. 12	34. 20	9. 40	·1286					
8. 24	33. 0	9. 52	·1278					
8. 44	29. 0	10. 24	·1287					
8. 56	30. 5	10. 50	·1275					
9. 3	29. 10	11. 12	·1287					
9. 15	28. 5	11. 30	·1323					
9. 25	25. 30	11. 45	·1307					
9. 31	23. 55	11. 57	·1284					
9. 38	24. 50	12. 14	·1304					
9. 49	24. 0	12. 25	·1292					
10. 1	21. 35	12. 34	·1288					
10. 23	26. 30	12. 51	·1295					
10. 51	22. 5	13. 2	·1290					
11. 6	18. 30	13. 43	·1311					
11. 48	23. 20	14. 7	·1301					
12. 4	24. 30	14. 22	·1295					
12. 23	21. 55	14. 49	·1290					
12. 26	38. 15	15. 5	·1294					
12. 29	39. 25	15. 15	·1294					
12. 53	32. 55	15. 34	·1301					
13. 0	33. 5	15. 56	·1300					
13. 16	25. 30	16. 23	·1309					
13. 27	22. 20	16. 31	·1308					
13. 41	20. 40	16. 44	·1312					
13. 56	23. 30	17. 19	·1309					
14. 9	23. 20	18. 31	·1314					
14. 21	25. 5	19. 9	·1309					
14. 35	25. 30	19. 15	·1312					
14. 58	27. 10	20. 17	·1297					
15. 14	30. 0	20. 29	·1301					
15. 28	29. 20	20. 37	·1296					
15. 53	29. 25	21. 3	·1299					
16. 5	30. 30	22. 10	·1301					
16. 23	29. 5	22. 18	·1295					
16. 34	29. 0	22. 47	·1298					
17. 13	30. 5	23. 12	·1294					
17. 54	33. 20	23. 18	·1295					
18. 23	36. 35	23. 41	·1291					
18. 28	35. 55	23. 59	·1295					
19. 3	37. 30							
19. 9	37. 0							
19. 41	38. 10							
19. 55	37. 30							
20. 30	40. 0							
20. 38	39. 35							
20. 55	41. 5							
21. 23	41. 35							
22. 1	42. 40							
22. 8	43. 15							
22. 22	42. 5							
22. 33	42. 20							
22. 54	42. 50							
23. 24	42. 30							
23. 39	42. 50							
23. 59	45. 50							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 21		Feb. 21		Feb. 21		Feb. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 45. 50	0. 0	·1295	0. 0	·03520	1. 0	53·6	55·9
0. 5	44. 55	0. 55	·1290	0. 17	·03530	Min.	53·5	55·0
0. 10	43. 25	1. 9	·1297	0. 55	·03540	3. 0	53·5	55·0
0. 26	45. 25	1. 40	·1298	1. 40	·03570	Max.	56·4	61·4
0. 45	45. 30	1. 46	·1291	1. 50	·03570	9. 0	55·3	60. 0
0. 55	44. 10	1. 53	·1295	2. 19	·03600	21. 0	54·9	56·0
1. 8	46. 0	2. 4	·1289	3. 8	·03606			
1. 39	47. 30	2. 14	·1298	3. 24	·03630			
1. 45	46. 10	2. 26	·1307	3. 53	·03650			
1. 53	46. 0	2. 35	·1300	4. 49	·03675			
2. 5	39. 30	2. 46	·1306	5. 56:	·03660			
2. 24	42. 10	3. 1	·1298	7. 23	·03670			
2. 33	45. 55	3. 20	·1296	8. 0	·03690			
2. 48	45. 55	3. 24	·1299	8. 40	·03710			
2. 54	46. 40	3. 37	·1285	8. 50	·03696			
3. 11	44. 30	3. 46	·1292	9. 22	·03700			
3. 23	47. 25	4. 0	·1274	9. 54	·03715			
3. 32	44. 30	4. 11	·1282	10. 22	·03710			
3. 38	39. 50	4. 16	·1278	10. 33	·03725			
3. 42	39. 50	4. 26	·1288	10. 45	·03700			
3. 51	42. 15	4. 32	·1290	11. 6	·03670			
3. 56	40. 10	4. 42	·1299	11. 24	·03680			
4. 4	40. 55	4. 46	·1295	11. 46:	·03660			
4. 13	36. 30	4. 53	·1297	12. 25	·03675			
4. 23	36. 0	5. 8	·1289	13. 5	·03650			
4. 30	34. 40	5. 27	·1295	13. 28	·03626			
4. 38	37. 35	5. 33	·1290	13. 54	·03520			
4. 53	41. 10	5. 40	·1294	14. 18	·03586			
5. 0	41. 20	5. 50	·1291	15. 6	·03625			
5. 6	40. 45	6. 0	·1295	16. 55	·03650			
5. 13	40. 20	6. 6	·1294	18. 40	·03657			
5. 24	42. 50	6. 35	·1302	18. 55	·03649			
5. 34	41. 0	6. 52	·1298	22. 3	·03650			
5. 39	41. 35	7. 13	·1289	22. 45	·03640			
5. 47	39. 55	7. 34	·1286	23. 59	·03645			
6. 2	40. 5	7. 45	·1295					
6. 13	38. 55	8. 14	·1278					
6. 43	42. 30	8. 26	·1291					
7. 4	42. 30	9. 19	·1281					
7. 11	38. 45	9. 29	·1274					
7. 25	36. 55	9. 40	·1274					
7. 38	32. 50	9. 44	·1268					
7. 48	34. 30	10. 2	·1287					
7. 59	34. 10	10. 26	·1337					
8. 7	34. 40	10. 45	·1293					
8. 14	32. 30	10. 56	·1297					
8. 23	30. 0	11. 0	·1296					
8. 30	31. 0	11. 12	·1312					
8. 36	31. 45	11. 36	·1288					
8. 55	27. 25	11. 43	·1289					
9. 9	27. 30	11. 49	·1281					
9. 16	28. 55	12. 3	·1287					
9. 35	26. 10	12. 7	·1296					
9. 55	7. 0	12. 13	·1289					
10. 25	30. 5	12. 20	·1295					
10. 40	20. 30	12. 25	·1291					
10. 51	22. 0	12. 30	·1294					
11. 3	22. 45	12. 32	·1289					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 21		Feb. 21						
h m	° ′ ″	h m		h m		h m	°	°
11. 9	20. 22. 0	12. 42	·1290					
11. 16	23. 5	13. 0	·1282					
11. 23	20. 35	13. 18	·1297					
11. 38	21. 0	13. 29	·1289					
11. 40	21. 0	13. 32	·1290					
11. 54	25. 10	13. 42	·1281					
12. 17	29. 25	13. 52	·1259					
12. 23	25. 55	14. 17	·1304					
12. 48	22. 30	14. 40	·1285					
12. 58	25. 0		***					
13. 16	41. 30	15. 18	·1296					
13. 31	35. 0		***					
13. 50	12. 20	18. 0	·1301					
14. 11	20. 55	18. 53	·1309					
14. 25	24. 40	20. 4	·1294					
	***	20. 47	·1298					
14. 51	28. 30	20. 49	·1295					
14. 58	28. 0	22. 14	·1309					
15. 9	29. 5	22. 20	·1303					
15. 14	28. 20	22. 28	·1308					
15. 27	28. 35	23. 9	·1299					
15. 40	29. 45	23. 30	·1304					
15. 55	29. 40	23. 37	·1301					
16. 5	30. 25	23. 59	·1306					
16. 37	29. 40							
16. 53	28. 55							
17. 2	29. 10							
17. 6	28. 30							
17. 44	30. 5							
17. 54	29. 45							
17. 59	30. 25							
	***							
18. 34	30. 30							
18. 43	32. 45							
19. 9	31. 35							
	***							
20. 8	34. 5							
20. 18	33. 30							
20. 30	35. 0							
20. 36	34. 0							
20. 41	34. 35							
20. 54	33. 40							
21. 8	32. 0							
21. 39	35. 30							
21. 54	33. 20							
22. 3	33. 30							
22. 11	36. 45							
22. 38	38. 5							
	***							
23. 1	35. 30							
23. 9	36. 0							
23. 24	36. 40							
23. 30	37. 35							
23. 59	38. 30							
Feb. 22		Feb. 22		Feb. 22		Feb. 22		
0. 0	20. 38. 30	0. 0	·1306	0. 0	·03645	Min.	54·7	57·0
	***	0. 8	·1309	1. 9	·03670	1. 0	54·7	57·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 22		Feb. 22		Feb. 22		Feb. 22		
h m	° ′ ″	h m		h m		h m	°	°
0. 26	20. 39. 45	0. 25	·1305	1. 58	·03680	3. 0	54·7	57·6
0. 40	41. 45	0. 39	·1312	2. 19	·03700	Max.	56·5	59·9
0. 48	41. 15	0. 51	·1309	2. 48	·03690	9. 0	55·9	59·8
0. 49	42. 40	1. 4	·1317	2. 59	·03700	21. 0	55·5	58·3
0. 56	41. 40	1. 13	·1313	4. 11	·03710			
1. 3	42. 50	1. 30	·1315	5. 50	·03720			
1. 11	42. 10	2. 3	·1298	6. 11	·03730			
	***	2. 16	·1300	6. 23	·03728			
1. 45	42. 25		***	6. 38	·03740			
1. 55	43. 5	2. 37	·1296	6. 49	·03728			
2. 7	42. 40	2. 50	·1295	7. 5	·03760			
2. 13	44. 5	3. 4	·1308	7. 45	·03740			
2. 19	43. 10	3. 19	·1300	8. 26	·03733			
2. 26	40. 35	3. 22	·1305	9. 30	·03770			
2. 42	36. 40	4. 5	·1317	9. 45	·03780			
2. 46	37. 15	4. 27	·1311	9. 53	·03770			
2. 51	35. 25	4. 41	·1316	10. 3	·03780			
2. 58	35. 5	4. 59	·1307	10. 22	·03710			
3. 7	35. 45	5. 26	·1314	10. 33	·03720			
3. 17	35. 30	5. 40	·1305	11. 0	·03730			
3. 28	34. 30	6. 4	·1310	11. 24	·03740			
3. 45	35. 25	6. 14	·1290	12. 19	·03735			
4. 15	37. 15	6. 18	·1297	13. 0	·03740			
4. 27	36. 30	6. 31	·1275	13. 24	·03730			
4. 45	37. 45	6. 46	·1336	13. 40	·03740			
4. 56	36. 50	7. 2	·1332	14. 19	·03730			
5. 11	36. 55	7. 7	·1320	15. 0	·03732			
5. 16	37. 5	7. 14	·1321	15. 18	·03720			
5. 26	36. 30	7. 22	·1311	15. 54	·03710			
5. 35	36. 35	7. 41	·1316	16. 37:	·03720			
5. 41	35. 25	7. 54	·1309	17. 24	·03700			
5. 55	35. 45	8. 5	·1313	18. 38	·03720			
6. 6	34. 10	8. 42	·1300	22. 0	·03720			
6. 17	34. 55	9. 0	·1303	22. 30	·03710			
6. 23	31. 0	9. 23	·1296	23. 59	·03710			
6. 31	30. 50	9. 33	·1304					
6. 45	1. 10	9. 44	·1326					
7. 16	23. 45	9. 49	·1329					
7. 31	30. 20	9. 55	·1364					
7. 55	32. 30	10. 8	·1310					
8. 10	32. 40	10. 18	·1319					
8. 14	31. 5	10. 30	·1295					
8. 29	28. 55	10. 45	·1316					
8. 54	28. 15	10. 56	·1304					
9. 4	29. 0	11. 11	·1310					
9. 9	27. 35	11. 20	·1305					
9. 30	32. 5	11. 33	·1311					
9. 41	34. 35	12. 31	·1306					
9. 45	33. 5	13. 3	·1314					
9. 51	35. 30	13. 27	·1305					
9. 56	29. 10	13. 57	·1313					
10. 5	37. 30	14. 54	·1302					
10. 18	26. 25	15. 45	·1317					
10. 28	30. 30	15. 56	·1312					
10. 38	21. 30	16. 4	·1315					
10. 56	26. 35	16. 22	·1309					
11. 2	26. 25	16. 30	·1314					
11. 8	27. 30	16. 37	·1309					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 22		Feb. 22						
h m	° ′ ″	h m		h m		h m	°	°
11. 13	20. 29. 55	17. 6	·1333					
11. 26	28. 30	17. 47:	·1307					
11. 35	28. 30	18. 19	·1311					
11. 49	30. 10	18. 49	·1317					
11. 56	28. 45	19. 23	·1321					
12. 38	30. 40		***					
13. 0	32. 5	20. 38	·1311					
13. 23	29. 20	20. 47	·1315					
13. 54	34. 10	21. 7	·1308					
14. 18	28. 30	21. 21	·1304					
14. 39	32. 30	21. 53	·1308					
14. 42	33. 5	22. 31	·1304					
15. 37	42. 10	22. 53	·1310					
	***	23. 0	·1306					
15. 54	32. 45	23. 15	·1312					
16. 17	32. 25	23. 42	·1304					
16. 35	34. 30	23. 50	·1313					
16. 48	33. 25	23. 59	·1304					
17. 9	32. 40							
17. 31	29. 30							
17. 49	30. 25							
18. 13	33. 50							
18. 26	32. 40							
18. 42	31. 55							
18. 58	32. 45							
19. 13	33. 10							
	***							
20. 23	33. 20							
21 4	33. 50							
21. 33	33. 30							
22. 19	36. 50							
22. 34	36. 20							
22. 54	37. 0							
23. 6	36. 35							
23. 39	38. 50							
23. 46	38. 15							
23. 59	39. 30							
Feb. 23		Feb. 23		Feb. 23		Feb. 23		
0. 0	20. 39. 30	0. 0	·1304	0. 0	·03710	1. 0	55·5	57·9
	***	0. 35	·1308	3. 7	·03760	3. 0	55·9	58·0
1. 8	41. 10	0. 42	·1306	4. 37	·03780	Max.	57·0	59·6
1. 40	39. 40	0. 50	·1309	6. 56	·03773	9. 0	56·4	59·3
1. 52	40. 15	0. 57	·1304	7. 9	·03795	Min.	55·3	56·0
2. 6	38. 55	1. 19	·1315	7. 26	·03784	21. 0	55·9	56·4
	***	1. 59	·1307	8. 45	·03790			
2. 49	39. 30	2. 9	·1312	9. 9	·03800			
3. 0	37. 55	2. 18	·1304	10. 4	·03810			
3. 10	37. 35	2. 47	·1316	10. 38	·03817			
3. 26	37. 55	3. 14	·1310	10. 49	·03810			
3. 43	36. 55	3. 31	·1317	11. 40	·03816			
	***	3. 41	·1311	12. 23	·03812			
4. 18	32. 0	3. 49	·1317	12. 38	·03790			
4. 30	31. 30	4. 27	·1303	13. 9	·03800			
5. 11	34. 35	5. 0	·1319	13. 50	·03780			
5. 27	33. 30	5. 18	·1324	14. 18	·03790			
5. 48	30. 10	5. 51	·1315	14. 55	·03800			
6. 9	34. 0	6. 6	·1323	15. 17	·03810			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 23		Feb. 23		Feb. 23		h m	°	°
h m	° ′ ″	h m		h m				
6. 23	20. 34. 50	6. 32	·1314	17. 30	·03812			
6. 44	32. 25	6. 43	·1317	19. 38	·03800			
7. 0	19. 30	7. 3	·1307	21. 4	·03790			
7. 19	26. 50	7. 14	·1349	23. 0	·03782			
7. 26	24. 35	7. 27	·1330	23. 59	·03816			
7. 34	25. 30	7. 34	·1332					
7. 38	25. 35	7. 46	·1329					
7. 55	27. 55	8. 2	·1317					
8. 4	26. 30	8. 11	·1320					
8. 11	27. 15	8. 19	·1316					
8. 23	23. 55	8. 42	·1330					
8. 39	23. 15	9. 4	·1308					
8. 55	26. 0	9. 14	·1313					
9. 11	26. 50	9. 56	·1308					
9. 17	27. 55	10. 21	·1320					
9. 32	30. 30	10. 44	·1307					
9. 45	30. 30	10. 59	·1313					
9. 54	31. 5	11. 14	·1302					
10. 8	29. 45	11. 18	·1305					
10. 36	32. 25	11. 30	·1300					
10. 54	28. 35	11. 40	·1307					
11. 1	26. 50	11. 43	·1304					
11. 19	29. 30	11. 54	·1313					
11. 30	29. 35	12. 16	·1314					
11. 41	27. 30	12. 26	·1294					
11. 48	28. 50	12. 36	·1297					
11. 56	27. 10	12. 42	·1293					
12. 11	29. 15	13. 5	·1307					
12. 23	29. 20	13. 10	·1303					
12. 30	33. 45	13. 19	·1302					
12. 35	27. 30	13. 37	·1313					
12. 42	24. 0	13. 50	·1307					
13. 14	33. 50	14. 2	·1311					
13. 24	33. 30	14. 16	·1303					
13. 36	33. 50	14. 30	·1309					
13. 48	30. 35	14. 42	·1300					
14. 14	31. 5	14. 55	·1300					
14. 33	33. 35	15. 15	·1308					
14. 54:	33. 15	17. 11	·1307					
15. 16	34. 55	18. 25	·1316					
15. 48	33. 45	18. 54	·1318					
16. 4	33. 55	19. 19	·1322					
16. 12	32. 35	19. 27	·1318					
17. 8	33. 0	19. 36	·1321					
17. 15	32. 30	20. 12	·1313					
17. 36	33. 25	20. 28	·1320					
17. 39	34. 0	21. 4	·1312					
18. 0	33. 25	21. 43	·1316					
18. 23	33. 35	21. 50	·1310					
18. 38	32. 55	21. 53	·1315					
18. 54	33. 30	22. 3	·1308					
19. 26	32. 25	22. 22	·1316					
19. 41	32. 20	22. 48	·1308					
20. 5	33. 5	23. 45	·1316					
20. 26	33. 30	23. 59	·1312					
20. 58	32. 45							
21. 35	33. 5							
21. 53	34. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 23								
h m	° ′ ″	h m		h m		h m	°	°
22. 5	20. 33. 0							
22. 18	35. 15							
22. 34	35. 30							
22. 41	36. 30							
22. 51	35. 0							
23. 41	37. 10							
23. 59	37. 20							
Feb. 24		Feb. 24		Feb. 24		Feb. 24		
0. 0	20. 37. 20	0. 0	·1312	0. 0	·03816	1. 0	55·9	57·2
0. 19	36. 50	0. 11	·1313	0. 30	·03825	3. 0	56·1	57·4
0. 44	37. 55	0. 16	·1310	2. 9	·03840	Max.	56·3	58·7
1. 8	37. 30	0. 34	·1317	3. 0	·03850	9. 0	56·1	57·0
2. 6	39. 10	1. 5	·1314	3. 22	·03858	Min.	53·8	54·8
2. 31	38. 5	1. 29	·1318	4. 40	·03850	21. 0	54·8	55·0
3. 10	36. 5	2. 20	·1316	6. 41	·03860			
3. 38	37. 0	3. 4:	·1314	10. 42	·03854			
4. 13	35. 55	3. 32	·1324	13. 30	·03865			
4. 20	36. 15	4. 3	·1316	17. 30	·03865			
4. 55	34. 40	5. 12	·1316	19. 22	·03857			
5. 18	34. 25	5. 36	·1322	20. 15	·03850			
6. 0	33. 5	6. 3	·1315	21. 51	·03835			
6. 10	31. 40	6. 33	·1321	22. 27	·03820			
6. 30	31. 20	7. 0	·1317	23. 27	·03824			
6. 55	33. 25	9. 42	·1320	23. 59	·03825			
7. 11	33. 35	9. 50	·1330					
7. 34	33. 10	10. 4	·1325					
8. 34	33. 25	10. 35	·1322					
8. 48	32. 15	13. 12	·1324					
9. 30	33. 25	13. 56	·1320					
10. 6	33. 0	15. 29	·1324					
10. 12	34. 10	18. 48	·1327					
10. 41	33. 55	19. 30	·1321					
10. 56	33. 15	19. 53	·1329					
12. 43	33. 45	20. 30	·1323					
13. 28	33. 50	20. 42	·1327					
13. 46	32. 45	21. 2	·1316					
15. 33	32. 50	21. 23	·1318					
15. 54	33. 35	21. 34	·1315					
16. 56	32. 55		***					
18. 19	33. 5	22. 40	·1323					
19. 33	33. 45	22. 55	·1316					
19. 39	32. 40	23. 41	·1323					
20. 15	34. 30		(†)					
20. 39	33. 25							
21. 8	32. 50							
21. 36	34. 35							
21. 41	33. 30							
22. 8	36. 0							
22. 15	35. 35							
22. 23	35. 0							
22. 43	36. 25							
23. 0	35. 35							
23. 9	36. 30							
23. 21	36. 15							
23. 59	36. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 25		Feb. 25		Feb. 25		Feb. 25		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 20		(†)	0. 0	·03825	1. 0	54 ·2	55 ·3
0. 37	37. 5	0. 32	·1324	1. 2	·03830	3. 0	54 ·7	56 ·3
0. 41	36. 30	2. 25	·1324	2. 33	·03845	Max.	55 ·6	58 ·1
0. 48	36. 55	3. 12	·1314	4. 15	·03850	9. 0	55 ·4	57 ·5
1. 11	36. 20	3. 49	·1322	5. 40	·03860	Min.	53 ·8	54 ·9
1. 34	36. 5	4. 23	·1318	7. 15	·03867	22. 30	54 ·5	55 ·0
1. 39	36. 50	4. 51	·1322	8. 3	·03880			
1. 47	36. 25	5. 16	·1318	8. 39	·03890			
2. 0	36. 35	7. 4	·1319	10. 38	·03882			
2. 34	36. 0	7. 47	·1308	13. 8	·03872			
2. 45	34. 30	8. 0	·1311	13. 22:	·03878			
3. 1	35. 15	8. 13	·1308	13. 56	·03810			
4. 8	35. 0	8. 42	·1317	14. 19	·03806			
4. 40	35. 0	9. 5	·1314	14. 55:	·03840			
5. 9	33. 50	9. 36	·1321	15. 48	·03870			
5. 41	34. 30	9. 54	·1318	16. 8	·03860			
5. 56:	33. 35	11. 49	·1326	16. 49	·03870			
6. 25	35. 10	12. 41	·1319	17. 21	·03860			
6. 40	34. 55	12. 58	·1319	17. 53	·03866			
7. 26	29. 40	13. 16	·1334	19. 0	·03855			
7. 41	29. 50	13. 35	·1350	20. 23	·03870			
7. 53	29. 0	13. 57	·1332	21. 27	·03860			
8. 6	29. 30	14. 7	·1335	22. 23	·03850			
8. 13	29. 25	14. 27	·1318	23. 21	·03840			
8. 26	28. 35	14. 33	·1318	23. 59	·03850			
8. 58	36. 30	14. 42	·1315					
9. 40	32. 30	15. 34	·1321					
9. 54	32. 0	15. 41	·1315					
10. 41	33. 20	15. 52	·1321					
11. 41	33. 35	16. 19	·1321					
12. 36	31. 0	16. 38	·1317					
12. 53	31. 55	17. 13	·1328					
13. 23	43. 40	17. 32	·1316					
13. 38	35. 55	17. 46	·1314					
14. 11	24. 30	18. 17	·1326					
14. 26	24. 30	18. 25	·1322					
14. 44	27. 30	18. 30	·1326					
	***	19. 20	·1323					
15. 40	29. 45	19. 30	·1326					
15. 51	26. 55	19. 37	·1323					
16. 9	29. 25	20. 29	·1320					
	***	20. 48	·1326					
16. 39	28. 30	22. 12	·1312					
16. 41	26. 55	23. 34	·1322					
17. 1	27. 50	23. 59	·1314					
17. 7	27. 15							
17. 38	31. 30							
17. 58	33. 20							
18. 14	33. 30							
18. 23	34. 30							
18. 28	33. 5							
18. 36	33. 35							
19. 0	32. 5							
19. 11	32. 35							
19. 23	31. 55							
19. 39	32. 30							
19. 45	32. 0							
20. 0	32. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 25								
h m	° ′ ″	h m		h m		h m	°	°
20. 24	20. 32. 0							
20. 34	31. 20							
	***							
21. 7	33. 45							
21. 11	32. 40							
21. 26	32. 55							
22. 3	32. 30							
22. 10	33. 10							
22. 16	33. 0							
22. 24	33. 45							
23. 7	35. 30							
23. 24	38. 50							
23. 45	40. 0							
23. 50	38. 30							
23. 59	39. 5							
Feb. 26		Feb. 26		Feb. 26		Feb. 26		
0. 0	20. 39. 5	0. 0	·1314	0. 0	·03850	1. 0	54 ·1	54 ·9
0. 14	38. 55	0. 12	·1313	2. 19	·03860	Max.	54 ·2	55 ·2
0. 24	39. 35	0. 19	·1318	2. 23	·03870	7. 15	53 ·9	55 ·2
0. 49	40. 15	0. 35	·1314	2. 31	·03860	Min.	53 ·0	54 ·0
1. 15	40. 25	1. 17	·1317	2. 53	·03870	21. 0	53 ·0	54 ·0
1. 30	39. 55	1. 27	·1314	3. 35	·03890			
1. 39	40. 30	1. 41	·1319	3. 50	·03886			
1. 46	40. 5	1. 47	·1313	4. 25	·03910			
1. 55	40. 35	2. 6	·1319	5. 52	·03900			
2. 3	40. 55	2. 17	·1314	6. 42	·03906			
2. 16	40. 0	2. 30	·1318	7. 7	·03890			
2. 29	40. 30	2. 43	·1312	9. 0	·03892			
2. 34	38. 45	2. 55	·1323	9. 30	·03900			
2. 41	38. 35	3. 7	·1317	10. 43	·03890			
2. 49	40. 30	3. 14	·1319	11. 20	·03880			
3. 8	39. 25	3. 18	·1316	11. 33	·03870			
3. 11	38. 30	3. 43	·1321	12. 55	·03870			
3. 24	38. 0	4. 3	·1311	15. 26	·03880			
3. 35	39. 55	4. 35	·1319	16. 26	·03890			
3. 42	39. 5	4. 45	·1315	19. 3	·03886			
3. 51	36. 35	4. 52	·1319	19. 44	·03880			
3. 56	36. 25		***	21. 40	·03866			
4. 8	34. 55	6. 27	·1313	23. 0	·03870			
4. 19	32. 55	6. 46	·1324	23. 15	·03875			
4. 38	34. 30	7. 2	·1316	23. 59	·03875			
4. 41	33. 55	7. 14	·1338					
4. 52	35. 55	7. 26	·1326					
4. 56	35. 55	8. 5	·1318					
5. 2	37. 0	8. 20	·1320					
5. 11	35. 50	8. 53	·1313					
5. 44	35. 40	9. 6	·1305					
6. 10	33. 55	9. 18	·1308					
6. 24	34. 0	9. 38	·1310					
6. 33	31. 50	9. 53	·1304					
6. 40	33. 0	10. 21	·1313					
6. 48	33. 0	10. 47	·1318					
7. 8	26. 20	11. 27	·1317					
7. 19	30. 0	11. 36	·1314					
7. 30	29. 45	12. 4	·1322					
7. 45	31. 20	12. 27	·1316					
	***	12. 36	·1320					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 26		Feb. 26						
h m	° ′ ″	h m		h m		h m	°	°
8. 26	20. 33. 10	12. 43	·1317					
8. 49	32. 55	13. 30	·1319					
9. 11	29. 40	13. 49	·1312					
9. 30	30. 0	14. 34	·1315					
9. 43	32. 35	14. 50	·1320					
9. 48	32. 35	16. 8	·1315					
9. 55	30. 55	17. 20	·1323					
10. 8	31. 30	17. 30	·1320					
10. 16	31. 30	18. 24	·1321					
10. 24	32. 10	18. 31	·1324					
10. 38	30. 30	19. 5	·1317					
10. 56	30. 35	20. 3	·1328					
11. 9	32. 10	20. 32	·1322					
11. 56	28. 15	22. 6	·1323					
12. 13	29. 30	23. 15	·1309					
12. 31	28. 40	23. 59	·1314					
12. 43	30. 55							
12. 54	29. 45							
13. 2	27. 35							
	***							
13. 46	28. 35							
14. 8	30. 45							
14. 28	31. 40							
14. 51	31. 50							
15. 19	29. 45							
15. 56	30. 40							
16. 9	30. 15							
16. 17	31. 50							
16. 24	31. 45							
16. 28	32. 15							
16. 40	30. 10							
17. 27	30. 25							
17. 48	32. 25							
18. 27	32. 25							
19. 4	33. 40							
19. 41	33. 30							
19. 55	34. 5							
20. 51	32. 25							
	***							
21. 34	32. 35							
22. 30	34. 55							
23. 0	35. 50							
23. 59	37. 15							
Feb. 27		Feb. 27		Feb. 27		Feb. 27		
0. 0	20. 37. 15	0. 0	·1314	0. 0	·03875	Min.	53 ·3	55 ·3
0. 48	37. 30	0. 46	·1320	0. 51	·03900	1. 0	54 ·0	57 ·0
0. 56	39. 30	0. 57	·1326	1. 4	·03910	3. 0	54 ·8	58 ·0
1. 3	38. 15	1. 0	·1317	1. 35	·03920	9. 0	55 ·7	58 ·0
1. 13	39. 35	1. 6	·1325	2. 1	·03930	21. 0	55 ·9	58 ·0
1. 48	38. 25	1. 11	·1319	2. 25	·03944	Max.	56 ·0	58 ·2
2. 16	38. 35	1. 44	·1315	3. 11	·03960			
2. 30	38. 0	2. 22	·1322	3. 54	·03980			
2. 52	37. 20	2. 55	·1317	4. 23	·04006			
4. 59	34. 40	3. 10	·1320	7. 30	·04040			
6. 48	33. 30	4. 41	·1325	9. 9	·04060			
8. 4	33. 30	5. 3	·1323	11. 1	·04080			
10. 23	32. 5	7. 30	·1325	17. 27	·04127			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	(Of V. F. Magnet.
Feb. 27		Feb. 27		Feb. 27				
h m	° ′ ″	h m		h m		h m	°	°
10. 46	20 31. 0	7. 35	·1321	19. 30	·04140			
10. 56	31. 0	7. 56	·1323		(†)			
11. 9	31. 50	10. 2	·1316	21. 0	·04156*			
11. 18	31. 10	11. 1	·1325		(†)			
11. 58	31. 30	11. 13	·1321	23. 29	·03790			
13. 9	33. 0	11. 26	·1324	23. 59	·03750			
17. 17	33. 25	11. 50	·1320					
18. 57	33. 5	19. 1	·1325					
20. 55	31. 10	20. 22	·1326					
21. 34	31. 20	21. 4	·1320					
23. 13	35. 5	22. 41	·1313					
23. 37	36. 45	23. 15	·1316					
23. 59	39. 10	23. 59	·1317					
Feb. 28		Feb. 28		Feb. 28		Feb. 28		
0. 0	20. 39. 10	0. 0	·1317	0. 0	·03750	1. 0	56 ·8	59 ·0
0. 43	39. 0	1. 12	·1316	0. 30	·03756	3. 0	56 ·7	59 ·2
1. 9	38. 10		(†)	1. 4	·03724	Max.	57 ·3	59 ·6
	(†)	2. 56	·1306	1. 23	·03746	9. 0	56 ·9	58 ·8
2. 46	38. 15	3. 37	·1321	2. 9	·03748	21. 0	56 ·0	57 ·0
3. 26	37. 45	4. 41	·1318	2. 45	·03765	22. 0	56 ·0	56 ·7
4. 9	35. 45	5. 36	·1315	3. 38	·03775	Min.	55 ·9	56 ·7
5. 56	35. 0	5. 56	·1317	9. 30	·03850	23. 0	55 ·9	57 ·4
7. 7	33. 35	10. 57	·1321	13. 52	·03890			
8. 18	34. 15	14. 39	·1320	21. 16	·03930			
8. 48	33. 45	15. 11	·1325		(†)			
10. 10	32. 55	17. 40	·1330					
10. 24	31. 55	18. 43	·1324					
10. 54	33. 0	19. 14	·1327					
14. 41	34. 0	21. 4	·1321					
15. 23	33. 40	21. 27	·1317					
15. 49	32. 35	21. 45	·1313					
16. 11	33. 30	21. 49	·1324					
20. 21	31. 55	22. 3	·1312					
20. 30	32. 25	22. 27	·1320					
21. 10	33. 35	22. 30	·1316					
	***	23. 43	·1315					
23. 10	33. 0	23. 59	·1318					
23. 18	34. 30							
23. 25	33. 30							
23. 38	34. 35							
23. 47	33. 30							
23. 56	35. 20							
23. 59	35. 25							
Mar. 1		Mar. 1		Mar. 1		Mar. 1		
0. 0	20. 35. 25	0. 0	·1318	0. 0	·03168	0. 0	55 ·9	58 ·0
0. 9	35. 30	0. 15	·1313	2. 33	·03163	1. 0	56 ·0	58 ·1
0. 19	34. 25	0. 42	·1317	3. 41	·03190	3. 0	56 ·2	59 ·0
	***	1. 29	·1312	4. 10	·03190	Max.	57 ·4	60 ·0
1. 31	38. 55	1. 38	·1316	4. 54	·03204	9. 0	56 ·7	59 ·0
1. 39	40. 30	1. 49	·1308	12. 22	·03167	21. 0	55 ·9	57 ·0
2. 28	37. 25	2. 0	·1308	12. 45	·03170	22. 0	55 ·9	56 ·9
	***	2. 11	·1312	13. 32	·03150	Min.	55 ·9	56 ·9
2. 55	38. 10	2. 31	·1310	14. 53	·03140	23. 30	55 ·9	57 ·3
2. 58	37. 50	3. 12	·1319	16. 38	·03140			
3. 56	37. 30	3. 51	·1317	22. 18	·03115			
4. 9	35. 50	4. 6	·1308	23. 59	·03100			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 27d. 22h. 43m. Vertical Force. The adjustments were altered so that the readings were diminished by 9.22 divisions, or by 0·004817 parts of the whole Vertical Force.

February 28d. 22h. The Vertical Force Magnet was removed from its box and carefully examined and cleaned. Upon being replaced upon the agate planes, it was found that the readings had been diminished by 7.88 divisions, or by 0·005166 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 1		Mar. 1						
h m	° ′ ″	h m		h m		h m	°	°
4. 15	20. 35. 45	4. 50	·1316					
4. 25	34. 40	5. 9	·1313					
4. 40	33. 55	6. 34	·1319					
5. 24	34. 0	6. 56	·1310					
6. 45	31. 30	7. 22	·1324					
6. 59	28. 20		***					
7. 6	28. 15	8. 25	·1320					
7. 15	24. 30	8. 54	·1315					
	***	10. 4	·1319					
8. 18	27. 0	10. 47	·1313					
8. 41	30. 35	11. 12	·1318					
10. 13	30. 55	11. 27	·1315					
10. 27	30. 30	11. 50	·1321					
12. 3	30. 30	12. 11	·1316					
12. 26	29. 10	12. 24	·1316					
12. 56	32. 5	12. 48	·1325					
13. 18	30. 30	13. 54	·1315					
13. 28	30. 45	14. 25	·1317					
13. 40	30. 0	14. 45	·1314					
14. 18	29. 55	15. 28	·1314					
14. 48	30. 55	15. 50	·1318					
15. 8	29. 45	16. 48	·1312					
15. 16	30. 25	16. 55	·1317					
15. 26	29. 35	17. 5	·1313					
15. 55	29. 5		***					
16. 4	28. 10	19. 29	·1326					
16. 23	27. 35	19. 34	·1322					
16. 41	27. 25	20. 27	·1325					
17. 16	28. 30	22. 21	·1313					
18. 9	31. 45	23. 11	·1313					
19. 18	30. 45		(†)					
19. 32	31. 0							
20. 4	30. 15							
	***							
20. 51	30. 10							
21. 4	29. 45							
21. 46	30. 20							
	(†)							
Mar. 2		Mar. 2		Mar. 2		Mar. 2		
	(†)		(†)	0. 0	·03100	0. 0	55 ·9	57 ·5
1. 0	20. 37. 44*	1. 0	·1315*	0. 58	·03115	1. 0	56 ·0	57 ·9
2. 3	37. 35	2. 0	·1322	2. 4	·03142	3. 0	56 ·6	58 ·0
2. 38	37. 15	2. 40	·1324	4. 53	·03200	Max.	57 ·5	58 ·5
2. 56	36. 50	2. 43	·1331	8. 11	·03165	9. 0	56 ·0	56 ·4
3. 9	35. 35	3. 3	·1323	10. 7	·03166	Min.	54 ·9	56 ·0
3. 26	35. 35	4. 21	·1331	12. 19	·03130	21. 0	55 ·8	56 ·7
4. 10	34. 25	4. 50	·1326	16. 0	·03128			
4. 44	34. 35	5. 39	·1326	18. 40	·03110			
6. 8	33. 0	5. 59	·1331	21. 10	·03107			
6. 16	32. 15	6. 4	·1329	21. 20	·03090			
6. 31	32. 30	6. 26	·1338	22. 54	·03080			
6. 41	33. 30	6. 51	·1326	23. 32	·03060			
7. 14	28. 25	7. 6	·1327	23. 59	·03057			
7. 23	27. 30	7. 16	·1333					
7. 26	28. 5	7. 25	·1330					
7. 36	27. 25	7. 42	·1334					
7. 56	31. 5	8. 0	·1327					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 2		Mar. 2						
h m	° ′ ″	h m		h m		h m	°	°
8. 16	20. 28. 15	8. 5	·1319					
8. 32	30. 50	8. 29	·1329					
8. 46	31. 25	8. 48	·1315					
9. 13	29. 30	9. 12	·1319					
9. 28	27. 20	9. 23	·1316					
9. 56	29. 0	9. 34	·1321					
10. 41	29. 45	9. 45	·1316					
10. 49	31. 5	10. 25	·1323					
11. 16	27. 25	10. 30	·1321					
11. 39	28. 40	10. 52	·1328					
11. 56	28. 30	11. 22	·1339					
14. 4	33. 5	11. 29	·1338					
14. 23	32. 25	11. 50	·1329					
14. 55	32. 0	12. 28	·1321					
15. 18	32. 25	13. 54	·1323					
15. 55	31. 35	14. 0	·1321					
16. 14	32. 30	16. 15	·1326					
16. 21	31. 25	16. 22	·1321					
18. 11	31. 25	16. 30	·1326					
18. 51	32. 30	17. 25	·1328					
19. 34	33. 5	17. 34	·1323					
20. 9	31. 25	18. 24	·1331					
20. 24	31. 40	18. 52:	·1324					
20. 44	31. 55	19. 29	·1331					
21. 7	31. 0	20. 5	·1328					
21. 38	31. 0	20. 16	·1334					
22. 24	32. 5	21. 11	·1331					
22. 38	32. 5	21. 26	·1324					
22. 56	33. 25	22. 25	·1322					
23. 24	34. 5	22. 45	·1309					
23. 59	35. 30	23. 11	·1314					
		23. 26	·1320					
		23. 37	·1305					
		23. 49	·1306					
			(†)					
Mar. 3		Mar. 3		Mar. 3		Mar. 3		
0. 0	20. 35. 30		(†)	0. 0	·03057	1. 0	56 ·5	57 ·6
0. 58	38. 10	0. 8	·1315	2. 1	·03086	3. 0	55 ·9	58 ·6
1. 24	38. 15	1. 12	·1323	5. 8:	·03160	Max.	57 ·0	59 ·6
2. 57	37. 30	2. 6	·1320	8. 19	·03190	9. 0	56 ·9	59 ·0
4. 39	34. 5	2. 24	·1323	14. 25	·03216	Min.	55 ·5	56 ·9
5. 2	32. 55	3. 25	·1320	21. 13	·03200	21. 0	55· 8	57 ·0
5. 27	32. 15	4. 32	·1323		(†)			
5. 44	33. 0	4. 53	·1318					
6. 29	33. 20		***					
7. 11	33. 5	6. 44	·1331					
7. 24	32. 30	7. 8	·1328					
7. 44	32. 25	7. 14	·1322					
8. 7	28. 30	7. 30	·1327					
8. 35	32. 15	7. 49	·1325					
8. 40	31. 50	7. 58	·1318					
8. 59	32. 30	8. 46	·1326					
9. 26	31. 0	9. 33	·1319					
9. 51	30. 40	9. 45	·1322					
9. 55	31. 20	10. 22	·1316					
10. 14	31. 0	10. 38	·1320					
10. 26	29. 55	11. 0	·1319					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

March 1d. 22h. to March 2d. 2h. Between these times the time of vibration of the Declination Magnet, with its damper in different positions, and also with the damper of the Horizontal Force Magnet, was determined.

March 3d. 23h. The V.F. Magnet was examined by the Astronomer Royal. Photographic lamp not in action, from March 3d. 21h. 37m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 3		Mar. 3						
h m	° ′ ″	h m		h m		h m	°	°
10. 40	20. 31. 5	11. 11	·1323					
11. 6	30. 5	12. 33	·1314					
11. 22	31. 0	12. 49	·1320					
12. 26	31. 10	13. 17	·1317					
12. 31	30. 50	14. 18	·1316					
12. 52	32. 5	14. 25	·1322					
13. 27	31. 55	17. 14	·1323					
13. 39	31. 35	19. 11	·1327					
14. 0	32. 15	20. 43	·1324					
14. 38	32. 50	21. 2	·1322					
14. 56	32. 5	21. 8	·1313					
16. 23	32. 45	21. 34	·1312					
16. 39	32. 20		(†)					
17. 8	31. 55							
19. 40	31. 40							
20. 24	30. 40							
21. 36	30. 35							
	(†)							
Mar. 4		Mar. 4		Mar. 4		Mar. 4		
	(†)		(†)		(†)	1. 0	54 ·6	55 ·2
1. 0	20. 38. 17*	1. 0	·1320*	1. 0	·03092*	3. 0	54 ·6	55 ·1
2. 4	38. 50	2. 11	·1317	3. 0	·03099*	Min.	53 ·2	54 ·3
3. 47	35. 30	2. 36	·1321	9. 0	·03188*	9. 0	55 ·0	57 ·8
4. 11	35. 15	2. 44	·1314	10. 30	·03192	22. 10	55 ·8	57 ·7
4. 19	34. 55		***	11. 53	·03190	Max.	56 ·2	58 ·2
4. 49	33. 25	3. 24	·1324	12. 4	·03207			
8. 41	32. 50	4. 2	·1321	12. 24	·03196			
9. 1	29. 35	4. 24	·1324	13. 19	·03210			
9. 26	29. 35	4. 31	·1318	15. 10	·03220			
10. 13	32. 35	4. 44	·1320	16. 39	·03240			
10. 36	30. 40	4. 50	·1315	22. 38	·03233			
10. 58	32. 40	5. 29	·1322	23. 18	·03216			
11. 43	29. 50	5. 58	·1322		(†)			
12. 4	33. 40	6. 8	·1319					
12. 38	30. 30	7. 43	·1324					
12. 56	30. 20	8. 11	·1323					
13. 26	32. 40	8. 19	·1324					
13. 56	31. 30	9. 4	·1319					
14. 4	32. 20	9. 10	·1323					
15. 0	30. 30	9. 51	·1316					
15. 23	30. 25	10. 7	·1328					
15. 38	31. 0	10. 16	·1328					
	***	10. 43	·1318					
16. 39	31. 10	10. 52	·1323					
17. 23	33. 0	10. 59	·1320					
17. 38	32. 25	11. 17	·1327					
18. 2	33. 5	11. 46	·1319					
18. 25	32. 15	12. 5	·1330					
18. 43	32. 25	12. 28	·1317					
18. 54	31. 30	12. 56	·1316					
19. 10	32. 25	13 17	·1323					
19. 34	31. 5	13. 53	·1316					
20. 0	31. 40	14. 3	·1323					
20. 13	30. 25	14. 8	·1319					
20. 25	31. 15	15. 22	·1316					
21. 18	31. 0	17. 13	·1320					
21. 26	31. 35	18. 41	·1332					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 4		Mar. 4						
h m	° ′ ″	h m		h m		h m	°	°
21. 42	20. 31. 5	18. 46	·1327					
22. 11	31. 30	19. 6	·1335					
22. 24	32. 30	19. 27	·1328					
22. 40	32. 20	19. 35	·1329					
23. 7	34. 30		***					
23. 15	33. 30	20. 5	·1323					
23. 34	34. 20	20. 19	·1327					
23. 52	35. 0	20 51	·1315					
23. 59	36. 35	21. 20	·1320					
		21. 41	·1314					
		22. 15	·1317					
		22. 27	·1308					
		23. 0	·1317					
		23. 8	·1307					
		23. 59	·1311					
Mar. 5		Mar. 5		Mar. 5		Mar. 5		
0. 0	20. 36. 40	0. 0	·1311		(†)	1. 0	56 ·3	59 ·0
0. 14	39. 0	0. 19	·1317	0. 46	·03210	Max.	57 ·5	60 ·2
0. 45	35. 0	0. 45	·1298	1. 19	·03230	9. 0	57 ·0	59 ·1
0. 56	36. 15	1. 14	·1306	1. 33	·03230	Min.	56 ·2	57 ·9
1. 18	36. 0	1. 33	·1316	2. 37	·03280	21. 0	56 ·5	58 ·0
1. 34	39. 35	2. 10	·1300	4. 36	·03300			
	***	2. 43	·1301	5. 19	·03327			
2. 53	37. 0		***	8. 56	·03340			
3. 25	35. 25	3. 37	·1310	15. 19	·03318			
3. 44	36. 10	3. 54	·1309	19. 48	·03300			
4. 41	34. 0	4. 4	·1305	23. 59	·03310			
5. 22	33. 30	4. 26	·1307					
5. 38	34. 0	4. 38	·1302					
5. 44	33. 25	4. 49	·1301					
6. 0	29. 55	5. 36	·1309					
6. 26	29. 55	5. 48	·1304					
6. 47	28. 0	6. 1	·1305					
7. 0	28. 25	6. 31	·1314					
7. 11	28. 10	6. 39	·1310					
7. 26	29. 55	6. 55	·1313					
7. 40	29. 35	7. 4	·1310					
7. 42	27. 30	7. 18	·1315					
8. 0	25. 40	7. 35	·1308					
8. 17	27. 0	7. 56	·1308					
9. 18	33. 25	8. 26	·1317					
12. 58	32. 0	8. 42	·1313					
13. 41	32. 20	9. 11	·1318					
14. 2	33. 15	9. 22	·1314					
14. 38	30. 50	9. 49	·1316					
14. 53	30. 50	11. 49	·1312					
15. 26	32. 25	12. 10	·1317					
16. 3	30. 30	12. 53	·1311					
16. 30	30. 45	13. 3	·1318					
16. 56	31. 0	13. 12	·1314					
17. 13	31. 5	13. 39	·1314					
17. 33	31. 30	14. 20	·1322					
18. 4	36. 0	15. 15	·1313					
18. 33	35. 55	15. 53	·1319					
18. 39	35. 10	16. 26	·1316					
18. 56	32. 40	16. 59	·1320					
	***	17. 39	·1316					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 5		Mar. 5						
h m	° ′ ″	h m		h m		h m	°	°
19. 24	20. 32. 10	17. 51	·1309					
19. 27	33. 5	18. 41	·1323					
19. 39	33. 30		***					
19. 59	31. 50	19. 44	·1328					
20. 26	32. 30	20. 0	·1318					
20. 38	31. 45	20. 27	·1324					
21. 33	31. 40	20. 42	·1317					
22. 4	33. 5	21. 4	·1314					
22. 52	34. 0	21. 26	·1315					
23. 26	34. 50	21. 43	·1310					
23. 59	36. 55	21. 58	·1316					
		22. 15	·1309					
		23. 31	·1303					
			(†)					
Mar. 6		Mar. 6		Mar. 6		Mar. 6		
0. 0	20. 36. 55		(†)	0. 0	·03310	1. 0	56·8	59·1
0. 9	36. 20	0. 10	·1304	3. 10	·03340	3. 0	56·3	59·0
0. 23	36. 5	0. 47	·1310	4. 0	·03350	Max.	57·1	59·4
0. 39	37. 10	0. 55	·1305	4. 17	·03343	9. 0	56·8	59·0
0. 48	38. 5	1. 33	·1307	4. 53	·03340	Min.	55·5	57·5
0. 56	37. 0	1. 49	·1313	5. 25	·03353	21. 0	55·8	57·8
1. 39	37. 5	3. 51	·1316	5. 52	·03340			
1. 54	37. 35	4. 11	·1316	6. 25	·03350			
3. 28	35. 15	4. 36	·1307	6. 40	·03340			
3. 54	34. 30	4. 49	·1310	8. 41	·03330			
4. 56	31. 45	5. 4	·1304	17. 42	·03300			
5. 10	29. 10	5. 33	·1316	18. 10	·03290			
5. 36	30. 45	5. 44	·1311	18. 41	·03300			
5. 54	28. 35	5. 53	·1314	19. 40	·03310			
5. 59	28. 40	6. 11	·1306	22. 13	·03290			
6. 19	27. 30	6. 32:	·1317	23. 59	·03290			
6. 43	30. 0	6. 46	·1311					
7. 4	26. 10	7. 2	·1316					
7. 53	32. 15	8. 34	·1317					
8. 38	31. 40	8. 42	·1319					
8. 53	30. 15	10. 0	·1315					
9. 26	32. 10	10. 20	·1322					
10. 21	32. 10	10. 47	·1314					
10. 38	30. 55	11. 40	·1319					
10. 59	31. 35	12. 16	·1312					
11. 24	32. 15	12. 53	·1317					
11. 55	30. 55	13. 41	·1314					
13. 39	31. 30	13. 52	·1319					
13. 55	32. 5	14. 7	·1314					
14. 10	30. 55	14. 46	·1319					
14. 24	31. 50	14. 56	·1315					
14. 56	30. 45	17. 15	·1327					
15. 10	31. 45	17. 41	·1333					
	***	18. 10	·1320					
16. 27	31. 30	18. 30	·1312					
	***	19. 10	·1317					
17. 4	31. 20	19. 19	·1315					
	***	19. 37	·1320					
17. 41	36. 25	19. 56	·1320					
17. 51	34. 10	20. 16	·1313					
17. 54	34. 30	21. 11	·1308					
18. 14	30. 35	21. 55	·1303					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 6		Mar. 6						
h m	° ′ ″	h m		h m		h m	°	°
18. 33	20. 31. 55	22. 39	·1304					
18. 54	31. 30	23. 14	·1309					
19. 16	31. 55	23. 44	·1303					
19. 31	31. 0	23. 59	·1308					
20. 11	31. 35							
20. 34	30. 30							
21. 3	30. 30							
21. 54	32. 45							
22. 4	32. 0							
22. 41	32. 40							
22. 55	33. 30							
23. 11	34. 55							
23. 34	34. 30							
23. 59	36. 55							
Mar. 7		Mar. 7		Mar. 7		Mar. 7		
0. 0	20. 36. 55	0. 0	·1308	0. 0	·03290	1. 0	55·7	58·0
0. 40	37. 5	0. 32	·1305	2. 51	·03320	3. 0	55·7	58·9
0. 56	37. 5	0. 57	·1312	5. 37	·03340	Max.	56·7	59·0
1. 7	37. 45		***	7. 19	·03330	9. 0	55·8	57·9
1. 38	36. 55	1. 54	·1309	9. 22	·03340	Min.	55·5	56·0
1. 41	37. 10	2. 18	·1314	10. 29	·03300	21. 0	55·9	56·0
1. 55	36. 45	2. 30	·1311	12. 15	·03307			
2. 9	36. 30	2. 40	·1316	14. 0	·03300			
2. 24	36. 20	2. 47	·1312	14. 16	·03282			
2. 31	35. 50	3. 16	·1312	14. 37	·03280			
2. 41	36. 35	3. 26	·1304	15. 0	·03276			
3. 20	34. 30	3. 44	·1309	17. 24	·03290			
3. 45	34. 15	4. 22	·1302	20. 3	·03280			
4. 9	32. 55	4. 31	·1305	22. 11	·03270			
4. 33	33. 10	4. 43	·1299	23. 59	·03270			
4. 53	31. 5		***					
5. 11	31. 30	5. 36	·1314					
5. 28	31. 5	5. 43	·1310					
5. 40	32. 10	5. 52	·1312					
5. 44	32. 0	6. 5	·1305					
5. 57	33. 5	6. 15	·1306					
6. 11	32. 30	6. 47	·1318					
6. 26	33. 30	7. 2	·1313					
6. 36	32. 50	7. 50	·1307					
6. 54	33. 20	8. 0	·1309					
7. 4	33. 10	8. 16	·1316					
7. 41	34. 45	8. 28	·1312					
8. 11	30. 30	8. 56	·1317					
8. 27	32. 25	9. 22	·1333					
8. 41	32. 40	9. 44	·1322					
9. 15	30. 35	9. 56	·1326					
9. 24	29. 20	10. 10	·1316					
9. 31	31. 25	10. 18	·1316					
9. 41	32. 40	10. 28	·1320					
9. 54	30. 0	11. 57	·1314					
10. 11	33. 15	12. 20	·1317					
10. 26	31. 0	12. 43	·1312					
10. 46	33. 5	13. 26	·1308					
11. 9	32. 55	13. 40	·1317					
11. 31	33. 5	13. 54	·1311					
12. 14	31. 25	14. 16	·1327					
12. 26	31. 25	14. 23	·1324					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 7		Mar. 7						
h m	° ′ ″	h m		h m		h m	°	°
12. 39	20. 30. 25	14. 36	·1325					
12. 55	30. 25	14. 59	·1314					
13. 14	29. 40	15. 10	·1317					
13. 26	31. 50	16. 30	·1315					
13. 38	34. 50	16. 35	·1310					
13. 54	35. 35	16. 46	·1315					
14. 0	34. 30	17. 10	·1313					
14. 12	33. 30	17. 16	·1318					
14. 31	34. 35	17. 24	·1313					
14. 43	30. 0	18. 17	·1317					
15. 10	30. 0	18. 30	·1309					
15. 16	30. 35	18. 41	·1316					
15. 26	30. 35		***					
15. 44	30. 0	19. 23	·1308					
15. 52	30. 30	19. 48	·1313					
16. 0	29. 55	20. 6	·1302					
16. 10	30. 30		***					
16. 22	30. 0	21. 24	·1307					
16. 42	30. 0	21. 38	·1299					
16. 54	30. 35	22. 25	·1306					
17. 9	30. 55	22. 52	·1300					
17. 24	30. 40	23. 44	·1296					
17. 26	31. 45	23. 59	·1303					
17. 28	30. 55							
17. 34	30. 10							
17. 47	31. 20							
18. 11	30. 35							
18. 27	31. 30							
18. 38	30. 0							
	***							
19. 23	30. 55							
19. 39	29. 20							
19. 56	30. 0							
21. 5	30. 25							
21. 23	32. 0							
21. 27	31. 15							
21. 33	32. 5							
21. 40	31. 20							
21. 54	32. 20							
22. 14	33. 0							
22. 36	34. 30							
22. 53	34. 55							
23. 11	37. 0							
23. 23	37. 15							
23. 26	38. 20							
23. 38	37. 15							
23. 54	37. 15							
23. 59	38. 30							
Mar. 8		Mar. 8		Mar. 8		Mar. 8		
0. 0	20. 38. 30	0. 0	·1303	0. 0	·03270	1. 0	56 ·0	58 ·8
0. 15	39. 45	0. 40	·1304	2. 12	·03306	3. 0	56 ·3	59 ·0
0. 34	40. 5	0. 50	·1297	6. 57	·03313	Max.	56 ·3	59 ·0
0. 41	38. 10	1. 27	·1305	7. 30	·03320	9. 0	56 ·2	58 ·5
1. 23	38. 5	1. 33	·1303	10. 23	·03300	Min.	54 ·8	57 ·2
1. 34	37. 30	2. 0	·1309	10. 45	·03282	21. 0	55 ·4	57 ·4
1. 47	38. 15	2. 26	·1307	12. 21	·03290			
2. 4	37. 10	2. 42	·1313	13. 25	·03274			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 8		Mar. 8		Mar. 8				
h m	° ′ ″	h m		h m		h m	°	°
2. 10	20. 37. 25	2. 49	·1307	16. 32	·03280			
2. 17	36. 50	4. 30	·1311	23. 35	·03260			
2. 32	37. 30	4. 50	·1317	23. 59	·03290			
2. 56	36. 5	5. 8	·1313					
3. 26	35. 10	5. 25	·1317					
4. 30	32. 0	5. 34	·1312					
5. 6	31. 0	6. 2	·1315					
5. 27	31. 50	6. 14	·1318					
5. 42	31. 15	6. 36	·1315					
6. 6	31. 55	7. 1	·1299					
6. 10	30. 50	7. 12	·1313					
6. 38	31. 15	7. 18	·1307					
6. 50	30. 30	7. 29	·1313					
7. 6	21. 10	7. 46	·1303					
7. 9	23. 0	8. 30	·1309					
7. 27	27. 30	8. 46	·1301					
7. 39	29. 5	9. 16	·1310					
7. 50	28. 30	9. 27	·1309					
8. 15	30. 30	9. 42	·1317					
8. 38	30. 45	9. 50	·1315					
8. 49	30. 0	10. 10	·1323					
9. 44	31. 30	10. 30	·1329					
9. 56	32. 25	10. 57	·1316					
10. 6	32. 5	11. 7	·1319					
10. 23	33. 30	11. 25	·1313					
11. 34	30. 25	11. 40	·1317					
11. 49	31. 20	11. 50	·1312					
12. 15	33. 0	12. 24	·1318					
12. 30	32. 25	12. 33	·1314					
14. 23	32. 50	12. 57	·1318					
16. 46	31. 25	13. 22	·1310					
17. 32	32. 5	13. 53	·1314					
20. 0	30. 5	14. 42	·1310					
20. 27	29. 50		***					
20. 34	30. 30	16. 54	·1318					
20. 46	29. 35	17. 27	·1313					
20. 51	30. 10	19. 0	·1316					
21. 25	30. 5		***					
22. 30	32. 50	20. 11	·1312					
23. 30	36. 30	20. 27	·1307					
23. 59	37. 0	22. 54	·1300					
		23. 42	·1302					
		23. 59	·1305					
Mar. 9		Mar. 9		Mar. 9		Mar. 9		
0. 0	20. 37. 0	0. 0	·1305	0. 0	·03290	1. 0	55 ·7	58 ·7
0. 18	37. 0	0. 21	·1308	2. 6	·03300	3. 0	55 ·9	58 ·8
0. 30	38. 30	1. 37	·1307	7. 23	·03310	Max.	56 ·1	58 ·9
0. 39	38. 0	2. 15	·1315	9. 34	·03300	9. 0	55 ·9	58 ·6
0. 54	38. 55		***	18. 58	·03280	Min.	55 ·1	57 ·5
1. 55	38. 0	3. 0	·1311	21. 0	·03278	21. 0	55 ·4	57 ·9
2. 11	38. 30	4. 2	·1313	22. 24	·03256			
4. 4	34. 40	4. 14	·1318	23. 59	·03265			
4. 40	33. 35	4. 26	·1318					
4. 57	32. 0	4. 57	·1304					
5. 31	30. 40	5. 14	·1312					
5. 45	30. 50	5. 25	·1309					
5. 59	30. 0	5. 42	·1315					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 9		Mar. 9						
h m	° ′ ″	h m		h m		h m	°	°
6. 6	20. 30. 5	6. 18	·1309					
6. 19	28. 55	7. 7	·1317					
6. 31	29. 20	7. 45	·1313					
6. 58	31. 0	10. 25	·1317					
7. 13	32. 20	10. 43	·1322					
7. 41	32. 0	11. 6	·1316					
7. 59	31. 25	11. 19	·1318					
8. 24	31. 50	11. 26	·1314					
8. 38	31. 35	12. 15	·1313					
9. 9	31. 25	12. 29	·1317					
9. 24	30. 0	13. 23	·1313					
10. 3	30. 35	13. 45	·1319					
10. 18	29. 0	13. 48	·1316					
10. 41	29. 10	14. 56	·1312					
10. 58	30. 15	17. 45:	·1318					
11. 10	30. 15	21. 9	·1303					
11. 24	31. 20	22. 32	·1299					
11. 54	32. 5	23. 14	·1301					
12. 25	32. 30	23. 59	·1300					
12. 40	31. 35							
13. 2	32. 35							
13. 23	32. 30							
13. 41	33. 20							
14. 18	32. 0							
14. 48	31. 55							
15. 9	32. 5							
15. 38	33. 10							
15. 57	33. 20							
16. 11	32. 30							
19. 40	30. 35							
20. 39:	29. 50							
21. 37	30. 30							
23. 59	37. 55							
Mar. 10		Mar. 10		Mar. 10		Mar. 10		
0. 0	20. 37. 55	0. 0	·1300	0. 0	·03265	Min.	55 ·4	58 ·0
0. 40	38. 50	1. 4	·1307	0. 57	·03300	1. 0	55 ·4	58 ·6
1. 24	38. 30	5. 14	·1314	2. 19	·03320	3. 0	55 ·9	58 ·5
1. 43	38. 30	6. 3	·1314	2. 30	·03305	Max.	56 ·5	58 ·8
3. 4	37. 0	6. 20	·1309	9. 15	·03303	9. 0	55 ·9	58 ·0
4. 14	34. 30	7. 3	·1316	11. 6	·03292	21. 0	56 ·0	58 ·5
4. 36	33. 30	7. 11	·1314	13. 14	·03290			
5. 48	32. 25	8. 45	·1315	16. 0	·03275			
6. 0	32. 45	9. 10	·1319	19. 38	·03280			
6. 11	31. 30	9. 27	·1318	21. 8	·03270			
6. 33	30. 30	9. 39	·1322	22. 56	·03256			
8. 25	32. 30	9. 56	·1322	23. 59	·03260			
9. 9	31. 55	10. 12	·1318					
9. 24	31. 5	10. 28	·1321					
9. 39	31. 30	10. 42	·1317					
9. 56	30. 45	11. 47	·1318					
10. 12	31. 0	12. 8	·1314					
10. 38	29. 55	14. 15	·1321					
11. 0	30. 50	15. 14	·1316					
11. 24	30. 50	19. 43	·1320					
11. 38	31. 25	20. 20	·1315					
12. 50	31. 55	20. 36	·1315					
12. 53	32. 50	21. 23	·1303					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 10		Mar. 10						
h m	° ′ ″	h m		h m		h m	°	°
13. 10	20. 32. 55	21. 37	·1305					
13. 17	34. 20	22. 30	·1302					
13. 38	34. 0	22. 44	·1308					
13. 48	33. 30	23. 22	·1294					
13. 57	33. 55	23. 59	·1306					
14. 8	33. 30							
14. 23	33. 35							
14. 39	33. 5							
15. 6	32. 0							
17. 9	31. 15							
18. 49	30. 40							
20. 32	29. 45							
21. 10	30. 25							
21. 27	29. 50							
21. 45	31. 30							
22. 11	32. 25							
22. 30	33. 15							
22. 45	35. 30							
22. 58	36. 30							
23. 8	36. 25							
23. 18	37. 20							
23. 24	37. 10							
23. 59	40. 0							
Mar. 11		Mar. 11		Mar. 11		Mar. 11		
0. 0	20. 40. 0	0. 0	·1306	0. 0	·03260	1. 0	56 ·4	59 ·3
0. 26	38. 30	0. 27	·1305	3. 12	·03303	3. 0	56 ·9	59 ·0
0. 40	40. 5	0. 40	·1310	3. 25	·03310	Max.	56 ·9	59 ·3
0. 43	39. 0	0. 58	·1307	3. 51	·03300	9. 0	56 ·7	59 ·0
0. 55	38. 50	1. 38	·1315	5. 30	·03310	Min.	55 ·4	57 ·5
1. 23	39. 35	2. 0	·1311	12. 30	·03290	21. 55	55 ·5	58 ·0
1. 39	40. 55	3. 27	·1317	13. 51:	·03260			
1. 57	39. 35	3. 42	·1323	14. 18	·03270			
3. 27	37. 30	3. 54	·1311	15. 24	·03280			
3. 38	37. 40	5. 0	·1316	16. 30	·03290			
3. 44	36. 0	5. 56	·1316	21. 18	·03280			
4. 17	35. 40	6. 13	·1323	22. 42	·03250			
4. 38	35. 0		***	23. 59	·03240			
4. 56	34. 30	6. 35	·1319					
5. 30	32. 30	6. 56	·1325					
5. 45	33. 0	8. 17	·1317					
6. 16	32. 35	8. 25	·1320					
6. 44	32. 40	8. 41	·1313					
7. 8	31. 35	8. 57	·1321					
7. 45	32. 30	9. 30	·1314					
8. 10	32. 0		***					
8. 30	30. 5	10. 32	·1319					
8. 45	30. 10	10. 41	·1315					
9. 2	28. 30	11. 40	·1319					
9. 37	31. 25	11. 45	·1315					
10. 30	31. 10	11. 56	·1317					
11. 34	32. 30	12. 29	·1330					
11. 53	32. 10	12. 50	·1326					
12. 10	34. 20	13. 14	·1330					
12. 40	36. 25	13. 49	·1316					
12. 47	35. 35	14. 12	·1319					
12. 56	35. 50	14. 24	·1316					
13. 44	28. 55	15. 11	·1313					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 11		Mar. 11						
h m	° ′ ″	h m		h m		h m	°	°
13. 59	20. 28. 35	16. 58	·1318					
14. 17	32. 5	18. 45	·1316					
15. 0	30. 35	20. 27	·1315					
16. 59	31. 30	20. 54	·1308					
17. 4	31. 25	21. 5	·1310					
19. 11	31. 45	21. 25	·1305					
19. 45	31. 20	21. 58	·1308					
	***	22. 36	·1299					
20. 41	30. 25	23. 59	·1305					
21. 4	29. 30							
21. 40	29. 50							
22. 41	33. 10							
23. 1	35. 20							
23. 59	38. 10							
Mar. 12		Mar. 12		Mar. 12		Mar. 12		
0. 0	20. 38. 10	0. 0	·1305	0. 0	·03240	1. 0	55 ·8	57 ·3
1. 1	38. 45	1. 30	·1315	1. 18	·03275	Min.	55 ·0	57 ·0
1. 24	40. 5	1. 44	·1306	2. 0	·03280	9. 0	55 ·3	57 ·0
1. 32	38. 25	1. 54	·1311	4. 19	·03300	Max.	56 ·3	58 ·4
1. 44	38. 5	2. 8	·1313	9. 5	·03290	21. 0	56 ·3	58 ·1
1. 54	39. 0	2. 25	·1306	9. 37	·03277			
2. 3	39. 5	3. 57	·1317	15. 24	·03300			
2. 23	37. 40	6. 30	·1319	21. 6	·03278			
2. 38	37. 0	6. 50	·1315	22. 46	·03250			
2. 54	37. 0	7. 8	·1318	23. 59	·03270			
4. 54	33. 35	7. 23	·1311					
5. 39	33. 0	8. 6	·1324					
6. 11	32. 30	8. 27	·1318					
7. 9	32. 25	8. 48	·1317					
7. 31	28. 50	9. 12	·1324					
7. 44	30. 0	9. 45	·1314					
8. 3	27. 55	10. 40	·1322					
8. 52	31. 30	11. 30	·1318					
9. 9	30. 5	18. 48	·1316					
9. 41	28. 50	18. 57	·1321					
10. 3	30. 0	19. 14	·1316					
10. 36	29. 30	19. 36	·1321					
11. 8	30. 15	20. 7	·1312					
11. 24	31. 5	20. 40	·1314					
11. 33	30. 30	21. 46	·1304					
12. 26	32. 40	22. 12	·1304					
15. 24	32. 5	23. 16	·1300					
15. 54	31. 45	23. 59	·1303					
16. 24	31. 55							
16. 51	31. 20							
17. 16	31. 50							
18. 8	31. 30							
18. 32	30. 35							
18. 39	29. 50							
18. 52	30. 30							
19. 4	29. 30							
19. 41	29. 35							
20. 6	28. 25							
21. 40	29. 30							
22. 41	34. 5							
23. 54	38. 20							
23. 59	38. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 13		Mar. 13		Mar. 13		Mar. 13		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 38. 20	0. 0	·1303	0. 0	·03270	1. 0	56 ·5	59 ·0
0. 18	39. 30	0. 53	·1309	2. 57	·03300	3. 0	56 ·4	58 ·8
0. 36	39. 15	1. 3	·1314	9. 2	·03290	Max.	56 ·8	59 ·0
0. 46	39. 55	1. 19	·1312	18. 27	·03270	9. 0	56 ·7	58 ·5
0. 55	39. 45	1. 47	·1316	21. 0	·03270	Min.	55 ·4	57 ·2
0. 59	41. 0	3. 16	·1316	23. 11	·03240	21. 0	55 ·8	57 ·4
1. 23	40. 20	4. 40	·1319	23. 59	·03250			
1. 48	40. 35	4. 52	·1316					
3. 5	37. 30	5. 14	·1319					
3. 38	37. 0	6. 57	·1318					
4. 51	33. 55	7. 17	·1312					
6. 23	33. 35	7. 40	·1316					
6. 46	31. 55	7. 52	·1321					
6. 56	31. 50	8. 21	·1316					
7. 23	26. 5	8. 56	·1322					
7. 38	27. 0	9. 17	·1317					
8. 16	31. 15	10. 48	·1321					
9. 10	30. 55	12. 43	·1319					
9. 17	30. 30	14. 7	·1322					
9. 48	31. 35	15. 29	·1319					
11. 30	32. 10	17. 19	·1322					
12. 51	32. 10	17. 47	·1319					
12. 58	32. 35	19. 40	·1319					
14. 9	32. 30	22. 16	·1296					
14. 42	31. 45	22. 45	·1294					
15. 11	31. 50	23. 59	·1301					
15. 26	32. 20							
16. 23	32. 20							
16. 27	31. 45							
16. 41	32. 50							
17. 12	31. 55							
17. 25	32. 5							
17. 33	31. 55							
18. 0	32. 50							
18. 39	30. 40							
19. 13	29. 50							
19. 34	28. 25							
19. 51	28. 45							
20. 30	28. 0							
21. 29	28. 45							
22. 44	32. 10							
23. 23	36. 0							
23. 59	38. 0							
Mar. 14		Mar. 14		Mar. 14		Mar. 14		
0. 0	20. 38. 0	0. 0	·1301	0. 0	·03250	1. 0	55 ·8	58 ·2
0. 56	40. 35	0. 58	·1309	3. 24	·03300	3. 0	56 ·0	58 ·8
1. 11	40. 35	1. 11	·1306	5. 38	·03290	Max.	56 ·6	59 ·1
1. 25	39. 30	1. 52	·1313	8. 45	·03300	9. 0	56 ·6	58 ·0
1. 40	39. 30	2. 15	·1311	12. 43	·03270	Min.	54 ·8	57 ·1
1. 45	40. 5	3. 7	·1315	13. 8	·03210	21. 0	54 ·9	57 ·3
1. 55	40. 30	3. 14	·1319	14. 20	·03240			
3. 4	37. 20	3. 42	·1319	15. 25	·03230			
3. 17	37. 40	4. 18	·1323	17. 41	·03236			
3. 36	36. 30	5. 28	·1321	18. 1	·03225			
4. 45	34. 0	6. 4	·1325	18. 43	·03250			
6. 9	32. 55	6. 35	·1322	19. 14	·03240			
6. 48	32. 55	6. 42	·1325	20. 6	·03250			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.14		Mar.14		Mar.14				
h m	° ′ ″	h m		h m		h m	°	°
7. 11	20. 32. 25	7. 15	·1319	21. 19	·03246			
7. 39	32. 25	7. 36	·1318	21. 59	·03220			
8. 9	28. 30	8. 5	·1311	23. 59	·03230			
8. 25	30. 0	8. 32	·1315					
8. 38	30. 40	8. 38	·1322					
8. 41	32. 0	8. 49	·1318					
8. 56	32. 30	9. 39	·1325					
9. 23	30. 35	10. 1	·1321					
9. 44	31. 30	10. 9	·1324					
	***	10. 18	·1321					
11. 10	31. 0	10. 30	·1324					
11. 24	31. 35	10. 50	·1319					
11. 30	30. 50	11. 16	·1322					
11. 43	30. 45	11. 26	·1328					
12. 17	28. 10	11. 41	·1319					
12. 23	30. 0	11. 49	·1323					
12. 40	40. 50	12. 9	·1315					
12. 56	30. 30	12. 32	·1316					
13. 8	23. 40	12. 41	·1321					
13. 25	15. 35	12. 58	·1310					
13. 57	15. 15	13. 4	·1313					
14. 31	22. 55	13. 30	·1317					
14. 47	22. 30	13. 53	·1305					
15. 8	23. 0	14. 0	·1305					
15. 30	24. 30	15. 0	·1318					
15. 41	26. 15	15. 20	·1315					
16. 11	25. 0	15. 36	·1318					
16. 37	25. 0	15. 52	·1317					
16. 54	25. 30	16. 14	·1321					
17. 12	27. 20	17. 13	·1319					
17. 26	29. 10	17. 36	·1315					
17. 38	30. 30	17. 45	·1315					
17. 46	30. 40	18. 28	·1302					
17. 55	29. 30	18. 38	·1302					
18. 11	29. 0	18. 58	·1310					
18. 29	30. 5	19. 21	·1303					
18. 43	32. 35	20. 3	·1309					
19. 7	32. 30	21. 0	·1307					
19. 14	32. 30	21. 44	·1297					
19. 27	31. 15	21. 56	·1293					
19. 37	32. 0	22. 12	·1282					
19. 40	31. 30	22. 37:	·1277					
19. 54	32. 0	23. 17	·1285					
20. 1	33. 0	23. 59	·1286					
20. 11	33. 30							
20. 24	31. 55							
20. 39	33. 0							
20. 48	32. 0							
20. 54	32. 0							
21. 18	30. 35							
21. 33	30. 30							
21. 39	31. 45							
22. 9	33. 30							
	***							
22. 41	38. 20							
23. 7	39. 50							
23. 11	39. 50							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.14								
h m	° ′ ″	h m		h m		h m	°	°
23. 43	20. 43. 5							
23. 59	43. 25							
Mar.15		Mar.15		Mar.15		Mar.15		
0. 0	20. 43. 25	0. 0	·1286	0. 0	·03230	1. 0	55·2	58·0
0. 13	42. 50	1. 45	·1305	7. 0	·03304	3. 0	55·5	57·8
0. 55	45. 10	2. 7	·1295	7. 13	·03295	Max.	56·0	58·2
1. 23	44. 35	2. 29	·1307	7. 35	·03320	9. 0	55·5	57·6
1. 47	44. 35	2. 36	·1308	7. 50	·03300	Min.	55·2	57·5
1. 59	42. 30	2. 41	·1315	8. 13	·03280	21. 0	55·8	57·5
2. 5	40. 25	3. 27	·1316	9. 33	·03280			
2. 24	40. 25	3. 40	·1312	9. 45	·03260			
2. 40	40. 45	3. 54	·1315	10. 6	·03222			
2. 47	41. 30	4. 13	·1307	12. 20	·03242			
2. 55	40. 25	4. 28	·1314	12. 47	·03233			
3. 18	40. 55	4. 42	·1315	13. 8	·03244			
3. 35	40. 0	5. 35	·1302	13. 40:	·03208			
3. 40	38. 10	6. 4	·1317	14. 2	·03200			
3. 53	37. 15	6. 14	·1310	14. 26	·03180			
3. 59	37. 30	6. 25	·1307	15. 23:	·03220			
4. 11	35. 50	6. 43	·1314	17. 56	·03240			
4. 38	37. 0	6. 55	·1296	19. 37	·03250			
4. 55	37. 10	7. 17	·1348	20. 45	·03240			
5. 11	36. 35	7. 34	·1322		(†)			
5. 18	37. 5	7. 52	·1302	21. 0	·03237*			
5. 31	36. 55	8. 6	·1305					
5. 45	33. 10	8. 17	·1299					
5. 58	33. 0	8. 32	·1305					
6. 19	33. 55	8. 45	·1300					
6. 25	33. 0	9. 16	·1304					
6. 34	33. 40	9. 38	·1351					
6. 39	33. 45	9. 51	·1321					
6. 43	34. 5	10. 14	·1310					
6. 57	34. 0	10. 25	·1315					
7. 8	27. 20	10. 38	·1310					
7. 19	7. 20	10. 47	·1313					
7. 39	24. 0	11. 13	·1303					
7. 55	27. 25	11. 20	·1306					
8. 3	27. 40	11. 40	·1301					
8. 13	24. 25	11. 51	·1304					
8. 31	27. 30	11. 57	·1301					
8. 39	27. 30	12. 7	·1307					
8. 54	29. 30	12. 16	·1307					
9. 10	28. 25	12. 35	·1300					
9. 32	30. 50	12. 51	·1304					
9. 43	24. 35	12. 57	·1317					
9. 55	29. 0	13. 4	·1320					
10. 6	25. 55	13. 9	·1318					
10. 12	27. 5	13. 29	·1339					
10. 31	23. 40	13. 39	·1339					
10. 43	25. 25	13. 52	·1347					
10. 53	24. 35	14. 30	·1302					
11. 1	24. 10	14. 38	·1302					
11. 10	25. 0	14. 57	·1310					
11. 26	24. 50	15. 14	·1303					
11. 33	25. 10	15. 43	·1309					
11. 56	23. 55	16. 4	·1306					
12. 3	25. 50	16. 19	·1312					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 15		Mar. 15						
h m	° ′ ″	h m		h m		h m	°	°
12. 16	20. 27. 10	16. 28	·1309					
12. 35	26. 0	16. 41	·1308					
12. 55:	26. 0	17. 14	·1315					
13. 9	32. 25	18. 22	·1303					
13. 25	26. 0	18. 29	·1305					
13. 36	25. 0	19. 34	·1309					
13. 48	22. 30	20. 11	·1299					
13. 56	27. 20	20. 40	·1302					
14. 14	27. 45	20. 43	·1297					
14. 25	24. 35	20. 49	·1304					
14. 42	23. 45	21. 8	·1296					
15. 8	29. 35	21. 25	·1294					
15. 31	32. 5	21. 34	·1299					
15. 52	30. 35	21. 41	·1293					
16. 8	28. 25	22. 6	·1296					
16. 16	29. 0	22. 29	·1294					
16. 23	30. 5	22. 40	·1287					
16. 29	29. 55	22. 48	·1293					
16. 39	29. 30	23. 18	·1295					
16. 49	28. 15	23. 46	·1302					
17. 41	28. 40		(†)					
18. 4	30. 30							
	***							
18. 58	28. 30							
19. 19	28. 50							
19. 26	30. 0							
19. 49	29. 15							
20. 3	29. 30							
20. 11	30. 10							
	***							
20. 34	30. 5							
20. 40	29. 5							
20. 49	30. 35							
21. 8	30. 35							
21. 24	31. 25							
21. 36	32. 50							
21. 40	32. 15							
22. 7	34. 50							
22. 26	34. 50							
22. 38	34. 0							
22. 41	33. 10							
22. 54	35. 40							
23. 1	37. 20							
23. 17	36. 30							
23. 25	36. 20							
23. 59	40. 30							
Mar. 16		Mar. 16		Mar. 16		Mar. 16		
0. 0	20. 40. 30		(†)		(†)	1. 0	56·1	58·4
0. 16	38. 45	0. 6	·1307	1. 0	·03226*	Max.	56·3	58·5
0. 30	42. 5	0. 19	·1301	1. 24	·03240	3. 0	55·9	58·5
0. 54	44. 25	0. 30	·1311	2. 38	·03304	9. 0	55·9	58·0
1. 7	44. 15	0. 51	·1314	2. 52	·03290	Min.	55·1	56·7
1. 30	46. 20	1. 30	·1300	3. 54	·03300	21. 0	55·4	57·0
1. 39	45. 30	1. 49	·1287	5. 6	·03320			
1. 48	44. 30	2. 16	·1306	5. 31	·03340			
1. 59	43. 30	2. 26	·1304	5. 45	·03330			
2. 19	44. 45	3. 1	·1315	6. 18	·03340			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 16		Mar. 16		Mar. 16				
h m	° ′ ″	h m		h m		h m	°	°
2. 45	20. 40. 15	3. 12	·1310	6. 53	·03330			
2. 55	40. 15	3. 35	·1317	7. 22	·03340			
3. 10	38. 0	4. 2	·1313	10. 42	·03290			
3. 19	38. 40	4. 30	·1318	10. 57	·03305			
3. 24	38. 10	4. 48	·1315	11. 31	·03240			
3. 36	38. 25	5. 9	·1305	12. 7	·03230			
3. 45	38. 0	5. 24	·1319	12. 43:	·03262			
3. 56	38. 30	5. 45	·1303	13. 25	·03270			
4. 19	37. 10	5. 58	·1301	15. 3	·03268			
4. 25	37. 40	6. 6	·1305	15. 38	·03260			
4. 36	37. 0	6. 10	·1302	17. 4	·03280			
4. 44	37. 30	6. 24	·1306	18. 37	·03270			
4. 56	35. 45	6. 44	·1296	19. 0	·03269			
5. 10	29. 5	6. 49	·1295	20. 33	·03260			
5. 16	28. 55	6. 55	·1292	21. 7	·03266			
5. 36	33. 10	7. 31	·1307	23. 15	·03250			
5. 46	30. 25	7. 46	·1303	23. 59	·03260			
5. 56	29. 0	8. 19	·1304					
6. 23	30. 30	8. 30	·1309					
6. 28	33. 25	8. 48	·1304					
6. 38	34. 30	9. 0	·1314					
6. 56	31. 50	9. 23	·1307					
7. 9	31. 50	9. 36	·1306					
7. 38	32. 55	9. 47	·1299					
8. 9	31. 20	10. 21	·1306					
8. 28	31. 30	10. 31	·1313					
8. 42	32. 45	10. 49	·1310					
9. 0	29. 30	11. 8	·1352					
9. 12	31. 0	11. 34	·1317					
9. 23	30. 30	11. 40	·1319					
9. 31	30. 50	12. 15	·1297					
9. 51	29. 35	12. 28	·1306					
10. 5	29. 35	12. 42	·1307					
10. 16	30. 30	12. 51	·1311					
10. 38	32. 40	13. 16	·1308					
10. 54	30. 0	13. 26	·1303					
11. 6	37. 20	13. 37	·1307					
11. 13	37. 15	14. 0	·1304					
11. 31	31. 40	14. 24	·1304					
11. 41	32. 15	14. 38	·1300					
11. 54	31. 0	14. 49	·1301					
12. 30	24. 40	15. 0	·1297					
12. 39	28. 45	15. 27:	·1307					
12. 52	29. 30	15. 50	·1302					
13. 24	28. 10	16. 25	·1304					
13. 47	29. 25	16. 35	·1303					
14. 11	27. 40	17. 10	·1310					
14. 30	27. 40	17. 19	·1307					
14. 46	29. 30	17. 56	·1313					
15. 19	30. 25	18. 28	·1308					
15. 28	29. 5		***					
15. 56	28. 30	19. 11	·1312					
16. 9	30. 10	19. 30	·1311					
16. 23	29. 10	19. 46	·1307					
17. 0	32. 15	20. 33	·1289					
17. 19	32. 35	21. 24	·1298					
17. 36	31. 5	21. 38	·1294					
17. 40	31. 20	21. 55	·1300					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 16		Mar. 16						
h m	o ′ ″	h m		h m		h m	o	o
17. 49	20. 30. 45	22. 4	·1296					
17. 56	31. 5	22. 13	·1291					
18. 37	30. 0	22. 51	·1288					
	***	23. 4	·1292					
19. 7	29. 50	23. 19	·1288					
19. 25	28. 45	23. 59	·1295					
19. 44	28. 25							
19. 49	29. 35							
19. 54	29. 15							
20. 14	29. 20							
20. 25	31. 0							
20. 30	32. 30							
20. 33	31. 35							
20. 56	32. 25							
21. 8	31. 30							
21. 24	33. 25							
21. 31	33. 15							
21. 38	33. 45							
21. 40	32. 20							
21. 55	35. 50							
22. 8	36. 20							
22. 46	36. 10							
23. 38	38. 15							
23. 41	35. 20							
	***							
23. 59	36. 25							
Mar. 17		Mar. 17		Mar. 17		Mar. 17		
0. 0	20. 36. 25	0. 0	·1295	0. 0	·03260	1. 0	55 ·8	58 ·0
0. 8	36. 25	0. 38	·1305	0. 53	·03257	3. 0	55 ·7	58 ·0
0. 21	38. 5	0. 48	·1304	1. 24	·03270	Max.	56 ·1	58 ·8
0. 53	36. 0	1. 17	·1315	1. 53	·03266	9. 0	55 ·8	58 ·0
1. 9	36. 50	1. 40	·1310	2. 25	·03293	Min.	54 ·7	57 ·0
1. 22	40. 0	1. 52	·1303	4. 32	·03300	21. 0	54 ·8	57 ·0
1. 40	41. 5	2. 14	·1312	5. 26	·03330			
1. 49	40. 35	2. 27	·1306	5. 54	·03340			
2. 7	39. 10	2. 49	·1304	6. 4	·03333			
2. 16	39. 35	3. 8	·1313	6. 15	·03357			
2. 38	38. 5	3. 36	·1308	6. 30	·03360			
2. 41	37. 20	3. 56	·1316	6. 43	·03350			
2. 55	37. 10	4. 10	·1313	7. 0	·03360			
3. 7	38. 30	4. 50	·1325	8. 11	·03330			
3. 36	36. 5	4. 58	·1320	8. 32	·03317			
3. 51	35. 35	5. 3	·1320	8. 50	·03320			
4. 8	34. 20	5. 21	·1309	9. 4	·03300			
5. 4	34. 40	5. 37	·1307	10. 26	·03280			
5. 12	34. 15	5. 51	·1311	10. 55	·03290			
5. 23	34. 25	6. 8	·1297	12. 30	·03280			
5. 38	32. 5		***	13. 40	·03260			
5. 48	32. 30	6. 35	·1303	14. 26	·03250			
5. 57	30. 30	6. 42	·1294	15. 39	·03270			
6. 11	25 0	6. 53	·1306	19. 55	·03260			
6. 23	24. 0	7. 2	·1302	20. 41	·03250			
6. 28	25. 15	7. 10	·1306	22. 15	·03230			
6. 39	25. 25	7. 20	·1302	23. 59	·03230			
6. 45	22. 35	7. 43	·1307					
6. 56	25. 25	7. 49	·1312					
7. 7	24. 45	7. 57	·1307					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Mar. 17		Mar. 17						
h m	o ′ ″	h m		h m		h m	o	o
7. 15	20. 27. 0	8. 12	·1320					
7. 24	28. 30	8. 23	·1306					
7. 38	29. 35	8. 44	·1299					
7. 46	28. 15	9. 2	·1314					
7. 56	29. 45	9. 11	·1311					
8. 9	27. 30	9. 20	·1316					
8. 16	29. 55	9. 30	·1311					
8. 24	29. 20	9. 54	·1312					
8. 30	28. 15	10. 3	·1318					
8. 39	29. 30	10. 24	·1307					
8. 48	26. 0	10. 33	·1306					
9. 1	29. 0	10. 52	·1314					
9. 12	29. 0	11. 6	·1307					
9. 28	30. 0	11. 16	·1313					
9. 43	27. 0	11. 42	·1311					
9. 56	26. 25	11. 49	·1314					
10. 14	27. 30	12. 2	·1308					
10. 31	24. 55	12. 8	·1311					
10. 38	24. 50	12. 33	·1313					
10. 54	25. 30	12. 45	·1308					
11. 5	27. 5	12. 54	·1310					
11. 13	26. 0	13. 7	·1307					
11. 34	28. 0	13. 41	·1311					
12. 25	29. 30	14. 4	·1316					
12. 38	28. 30	14. 42	·1309					
12. 46	28. 30	14. 55	·1312					
13. 11	29. 50	15. 28	·1308					
13. 23	29. 35	16. 29	·1312					
13. 33	30. 30	17. 56	·1304					
13. 56	34. 0	18. 37	·1312					
14. 31	29. 30	19. 24	·1305					
14. 53	29. 0	19. 51	·1309					
15. 10	26. 50	20. 16	·1304					
15. 31	26. 50	20. 22	·1311					
15. 57	29. 10	20. 39	·1305					
16. 18	28. 30	20. 58	·1313					
16. 24	28. 45	21. 52	·1302					
16. 46	26. 25	22. 3	·1306					
17. 18	27. 30	22. 14	·1300					
17. 32	27. 5	22. 28	·1301					
17. 54	29. 0	22. 34	·1298					
18. 54	27. 0	23. 0	·1307					
19. 7	27. 55	23. 15	·1304					
19. 12	27. 30	23. 59	·1304					
19. 23	28. 5							
19. 30	28. 5							
19. 40	27. 25							
19. 43	28. 15							
20. 10	28. 10							
20. 18	27. 0							
20. 30	28. 10							
20. 41	27. 10							
21. 0	29. 35							
21. 48	30. 5							
22. 0	31. 20							
22. 8	31. 20							
22. 25	31. 55							
22. 41	31. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Mar. 17								
h m	° ′ ″	h m		h m		h m	°	°
22. 49	20. 32. 0							
22. 56	33. 10							
23. 4	32. 30							
23. 28	33. 30							
23. 36	32. 25							
23. 43	33. 30							
23. 51	32. 45							
23. 59	33. 10							
Mar. 18		Mar. 18		Mar. 18		Mar. 18		
0. 0	20. 33. 10	0. 0	·1304	0. 0	·03230	1. 0	55 ·4	57 ·8
0. 14	34. 35	0. 22	·1310	0. 41	·03226	Max.	55 ·5	58 ·0
0. 24	36. 5	1. 0	·1302	2. 41	·03260	3. 0	55 ·5	58 ·0
0. 49	35. 25	1. 43	·1299	6. 30	·03290	9. 0	55 ·2	57 ·5
0. 58	36. 0	2. 16	·1308	6. 53	·03280	Min.	53 ·5	55 ·9
1. 18	37. 25	2. 23	·1316	7. 11	·03290	22. 15	54 ·2	56 ·6
1. 35	37. 5	2. 41	·1305	9. 34:	·03246			
1. 40	35. 55	2. 57	·1313	11. 53	·03225			
2. 2	37. 5	3. 24	·1310	12. 3	·03230			
2. 12	36. 30	3. 56	·1314	12. 30	·03217			
2. 24	37. 35	4. 37	·1310	13. 41	·03210			
2. 31	36. 0	5. 11	·1313	14. 52	·03196			
2. 48	33. 50	5. 26	·1309	18. 37	·03201			
2. 54	34. 10	5. 37	·1316	21. 3	·03180			
3. 26	33. 30	5. 43	·1312	23. 11	·03150			
3. 56	33. 35	5. 54	·1312	23. 59	·03125			
4. 13	33. 0	6. 12	·1303					
4. 39	32. 15		***					
5. 0	30. 30	6. 36	·1311					
5. 8	30. 30	6. 57	·1293					
5. 26	26. 0	7. 5	·1302					
5. 38	27. 30	7. 18	·1302					
5. 46	26. 0	7. 41	·1310					
6. 0	26. 55	8. 15	·1307					
6. 16	23. 0	8. 39	·1308					
6. 25	23. 0	10. 25	·1316					
6. 40	25. 40	11. 21	·1315					
6. 55	23. 35	11. 40	·1312					
7. 7	20. 15	11. 57	·1319					
7. 23	26. 0	12. 50	·1313					
7. 47	29. 15	13. 17:	·1317					
7. 54	29. 10	13. 50	·1308					
8. 7	30. 25	14. 12	·1317					
8. 18	30. 40	14. 41	·1312					
8. 27	30. 10	16. 26	·1313					
10. 27	30. 10	16. 49	·1317					
10. 41	28. 50	17. 36	·1313					
11. 24	29. 35	18. 21	·1316					
11. 35	28. 15	21. 53	·1306					
11. 46	28. 15	23. 59	·1300					
12. 2	31. 30							
12. 34	29. 20							
13. 0	30. 20							
13. 35	28. 0							
13. 43	30. 5							
13. 54	30. 10							
14. 12	32. 5							
14. 30	31. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Mar. 18								
h m	° ′ ″	h m		h m		h m	°	°
14. 40	20. 32. 0							
14. 56	30. 20							
15. 28	29. 0							
17. 8	28. 30							
17. 45	28. 30							
18. 40	28. 0							
19. 49	27. 40							
20. 7	27. 30							
20. 19	27. 10							
21. 18	28. 5							
	***							
23. 8	33. 30							
23. 26	35. 15							
	***							
23. 59	35. 25							
Mar. 19		Mar. 19		Mar. 19		Mar. 19		
0. 0	20. 35. 25	0. 0	·1300	0. 0	·03125	1. 0	53 ·9	55 ·9
1. 41	36. 25	0. 12	·1298	1. 8	·03120	Max.	53 ·9	56 ·2
5. 38	31. 0	1. 30	·1308	4. 26:	·03160	7. 0	53 ·9	56 ·2
6. 37	30. 40	2. 22	·1311	8. 0	·03138	Min.	51 ·2	52 ·8
7. 4	29. 25	3. 34	·1313	10. 23	·03125	21. 0	51 ·8	52 ·9
7. 23	30. 5	4. 25	·1315	10. 31	·03132			
8. 24	30. 5	5. 23	·1313	10. 54	·03110			
8. 36:	29. 35	6. 35	·1319	13. 10	·03112			
8. 55	30. 20	6. 58	·1317	13. 39	·03100			
10. 8	29. 55	7. 15	·1321	20. 42	·03047			
10. 12	31. 0	8. 12	·1318	22. 23	·03010			
10. 34	29. 35	8. 39	·1321	22. 41	·03020			
10. 41	30. 40	8. 47	·1319	23. 33	·03017			
10. 59	28. 5	10. 12	·1317		(†)			
11. 14	28. 0	10. 29	·1335					
11. 32	26. 40	10. 47	·1325					
12. 4	27. 20	10. 57	·1325					
12. 40	27. 20	11. 31	·1317					
13. 11	28. 55	12. 34	·1314					
13. 29	27. 20	12. 56	·1321					
13. 53	27. 20	13. 55	·1317					
14. 4	27. 0	14. 5	·1321					
14. 10	27. 30	14. 15	·1316					
14. 22	27. 0	14. 24	·1318					
14. 26	27. 45	14. 46	·1313					
14. 38	26. 55	15. 47	·1321					
15. 0	28. 0	15. 57	·1314					
15. 22	26. 30	16. 3	·1318					
15. 38	25. 50	16. 12	·1319					
15. 47	26. 30	16. 35	·1312					
15. 58	25. 55	17. 7	·1308					
16. 8	27. 0	17. 13	·1312					
16. 34	25. 15	17. 48	·1313					
16. 48	26. 20	18. 19	·1320					
16. 57	26. 20	18. 45	·1317					
17. 8	25. 50	19. 16	·1323					
17. 22	26. 10	21. 4	·1307					
17. 33	25. 50	21. 14	·1314					
17. 47	26. 25	22. 20	·1298					
18. 4	26. 5	22. 38	·1304					
18. 31	27. 30	23. 19	·1308					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.19		Mar.19						
h m	° ′ ″	h m		h m		h m	°	°
18. 54	20. 28. 0	23. 40	·1300					
19. 23	28. 40	23. 59	·1300					
20. 8	28. 35							
20. 33	28. 45							
20. 40	28. 30							
21. 32	29. 5							
22. 16	33. 10							
22. 34	35. 40							
23. 24	39. 0							
23. 41	40. 10							
23. 47	40. 55							
23. 59	40. 10							
Mar.20		Mar.20		Mar.20		Mar.20		
0. 0	20. 40. 10	0. 0	·1300		(†)	1. 0	52 ·0	55 ·0
0. 11	39. 10	0. 20	·1310	1. 0	·03027*	3. 0	52 ·5	56 ·0
0. 25	40. 0	0. 47	·1318	1. 24	·03060	Max.	52 ·8	56 ·0
0. 43	44. 40	1. 12	·1292	2. 11	·03065	9. 0	52 ·6	55 ·4
0. 51	43. 30	1. 29	·1293	2. 23	·03080	Min.	51 ·7	53 ·8
1. 7	44. 45	2. 4	·1310	2. 26	·03075	21. 0	52 ·5	54 ·5
1. 31	43. 20	2. 15	·1309	2. 54	·03105			
2. 0	49. 0	2. 25	·1299	3. 29	·03122			
2. 8	49. 35	2. 35	·1306	5. 6	·03117			
2. 17	52. 40	2. 40	·1294	5. 43:	·03116			
2. 24	51. 50	2. 56	·1305	6. 25	·03157			
2. 34	53. 55	3. 17	·1290		***			
2. 42	47. 35	3. 43	·1317	7. 4	·03160			
2. 53	47. 35	3. 56	·1317	7. 13	·03140			
2. 56	48. 10	4. 29	·1297	7. 22	·03150			
3. 4	45. 50	4. 43	·1304	7. 40	·03075			
3. 21	37. 35	4. 55	·1301	7. 54	·03065			
3. 38	38. 55	5. 12	·1309	8. 23	·03010			
3. 53	42. 0	5. 18	·1305	8. 55	·03060			
4. 8	41. 25	5. 33	·1309	9. 3	·03050			
4. 24	42. 10	5. 44	·1305	9. 25	·03080			
4. 35	39. 25	5. 47	·1308	10. 15	·03080			
4. 41	39. 35	5. 56	·1309	10. 39	·03040			
5. 4	37. 0	6. 13	·1296	11. 12	·02990			
5. 33	36. 5	6. 25	·1302	11. 46:	·03020			
5. 41	34. 25	6. 41	·1297	12. 15	·02990			
5. 55	33. 30	6. 47	·1304	13. 26	·02990			
6. 2	31. 55	6. 55	·1301	13. 33	·02980			
6. 8	31. 45	6. 57	·1308	13. 54	·02980			
6. 17	29. 0	7. 3	·1296	14. 0	·02990			
6. 38	30. 50	7. 14	·1336	14. 20	·02950			
6. 41	29. 30	7. 24	·1336	15. 25	·02970			
6. 48	32. 0	7. 32	·1291	15. 45	·02965			
7. 2	32. 55	7. 50	·1341	16. 12	·02930			
7. 8	21. 0	8. 11:	·1323	16. 56	·02980			
7. 12	16. 35	8. 21	·1269	17. 16	·02980			
7. 18	20. 5	8. 30	·1287	17. 40	·03002			
7. 28	32. 30	8. 41	·1279	18. 14	·03010			
7. 34	16. 20	8. 50	·1283	20. 8	·03016			
7. 40	8. 25	8. 56	·1277	21. 7	·03007			
7. 57	19. 55	9. 21	·1298	21. 53	·02990			
8. 16	35. 0	9. 48	·1299	23. 19	·03000			
8. 29	22. 40	10. 2	·1306	23. 59	·02990			
8. 39	29. 5	10. 11	·1304					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.20		Mar.20						
h m	° ′ ″	h m		hm		h m	°	°
8. 50	20. 26. 30	10. 24	·1319					
8. 55	26. 45	10. 30	·1317					
9. 8	19. 5	10. 41	·1321					
9. 16	19. 5	10. 46	·1316					
9. 39	25. 25	10. 54	·1317					
9. 55	26. 5	11. 13	·1289					
10. 9	29. 10	11. 44	·1330					
10. 24	22. 0	12. 11	·1306					
	***	12. 34	·1295					
10. 51	22. 0	12. 44	·1295					
11. 5	29. 5	12. 56	·1290					
11. 16	19. 30	13. 10	·1291					
11. 29	14. 0	13. 22	·1286					
11. 48	22. 30	13. 36	·1295					
11. 58	22. 45	13. 46	·1294					
12. 8	20. 30	14. 3	·1319					
12. 31	19. 20	14. 19	·1306					
12. 35	17. 30	14. 31	·1308					
12. 51	17. 30	14. 52	·1292					
12. 57	19. 20	15. 11	·1290					
13. 10	22. 0	15. 30	·1303					
13. 23	22. 40	15. 43	·1305					
13. 35	27. 30	16. 3	·1293					
13. 47	28. 55	16. 18	·1280					
13. 56	31. 10	16. 45	·1297					
14. 17	24. 30	16. 59	·1294					
14. 53	31. 30	17. 12	·1290					
	***	17. 30	·1295					
15. 24	32. 0	17. 54	·1300					
15. 29	30. 35	18. 5	·1296					
15. 39	30. 35	18. 18	·1303					
15. 46	28. 20	18. 29	·1300					
15. 51	28. 20	18. 47	·1303					
15. 56	26. 30	18. 59	·1298					
16. 8	26. 30	19. 6	·1300					
16. 22:	25. 5	19. 14	·1295					
16. 44	32. 5	19. 25	·1294					
16. 51	31. 55	20. 0	·1300					
17. 7	27. 25	20. 26	·1291					
17. 16	27. 0	20. 57	·1293					
17. 32	27. 0	21. 23	·1287					
17. 52	29. 15	21. 35	·1291					
17. 59	28. 25	21. 52	·1284					
18. 8	27. 15		***					
18. 17	28. 50	22. 42	·1276					
18. 31	26. 50	23. 0	·1278					
18. 52	26. 25	23. 24	·1287					
18. 59	25. 30	23. 32	·1285					
19. 11	27. 20	23. 49	·1290					
19. 23	27. 20	23. 59	·1289					
19. 34	25. 35							
19. 38	26. 50							
19. 47	26. 0							
20. 0	28. 0							
20. 10	28. 25							
20. 18	29. 35							
20. 36	28. 55							
21. 23	30. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 20								
h m	° ′ ″	h m		h m		h m	°	°
21. 38	20. 32. 35							
21. 49	32. 35							
21. 53	34. 0							
22. 10	33. 0							
22. 25	34. 35							
22. 31	34. 15							
22. 57	35. 30							
23. 6	37. 10							
23. 11	37. 5							
23. 43	39. 0							
23. 54	39. 25							
23. 59	37. 30							
Mar. 21		Mar. 21		Mar. 21		Mar. 21		
0. 0	20. 37. 30	0. 0	·1289	0. 0	·02990	Min.	52 ·4	55 ·4
0. 10	36. 30	0. 4	·1288	4. 34	·03100	1. 0	52 ·4	55 ·5
0. 17	37. 30	0. 50	·1305	5. 34	·03110	3. 0	52 ·5	56 ·4
0. 38	35. 30	1. 0	·1304	7. 14	·03106	Max.	53 ·8	56 ·6
0. 58	36. 5	1. 36	·1326	8. 52	·03105	9. 0	53 ·5	55 ·6
1. 16	35. 30	1. 50	·1318	9. 45	·03070	21. 0	53 ·1	55 ·9
1. 26	36. 25	2. 5	·1319	10. 4	·03080			
1. 33	38. 30	2. 15	·1313	10. 39:	·03067			
1. 40	39. 0		***	11. 7	·03076			
1. 56	38. 5	2. 42	·1319	11. 38	·03080			
2. 4	39. 10	2. 56	·1306	12. 8	·03040			
2. 12	37. 25	3. 43	·1319	13. 4	·03070			
2. 17	38. 5	4. 19	·1310	14. 27	·03089			
2. 23	37. 15	5. 19	·1322	20. 41	·03080			
2. 29	37. 15	5. 30	·1315	22. 25	·03070			
2. 38	38. 5	5. 38	·1321	23. 59	·03050			
3. 4	34. 25	5. 50	·1325					
3. 35	34. 15	6. 6	·1318					
3. 58	34. 55	6. 13	·1322					
4. 13	32. 0	6. 43	·1321					
4. 39	30. 45	7. 2	·1326					
5. 23	30. 45	7. 19	·1321					
5. 31	29. 0	7. 40	·1321					
5. 50	30. 30	7. 57	·1326					
6. 11	30. 0	8. 11	·1324					
6. 32	30. 30	8. 19	·1332					
6. 40	31. 0	8. 29	·1329					
7. 1	30. 40	8. 36	·1331					
7. 11	30. 0	8. 48	·1322					
7. 25	29. 10	8. 58	·1331					
7. 34	30. 0	9. 5	·1328					
7. 47	29. 50	9. 26	·1340					
8. 5	29. 50	10. 4	·1319					
8. 10	30. 20	10. 22	·1322					
8. 23	26. 0	10. 45	·1343					
8. 39	29. 25	11. 3	·1334					
8. 51	32. 15	11. 13	·1334					
9. 4	32. 15	11. 42	·1310					
9. 23	25. 30	12. 12	·1317					
9. 26	24. 30	12. 32	·1312					
9. 51	28. 50	12. 47	·1314					
10. 1	28. 55	13. 6	·1310					
10. 9	28. 0	13. 16	·1311					
10. 33	28. 0	13. 38	·1318					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 21		Mar. 21						
h m	° ′ ″	h m		h m		h m	°	°
10. 56	20. 30. 5	13. 58	·1312					
11. 23	26. 25	14. 46	·1316					
11. 29	26. 30	15. 44	·1316					
11. 35	26. 0	16. 33	·1321					
11. 39	25. 5	17. 4	·1319					
11. 40	24. 10	18. 6	·1325					
12. 12	20. 0	19. 17	·1320					
12. 29	23. 30	20. 0	·1314					
12. 52	27. 20	21. 1	·1307					
13. 26	28. 5	21. 12	·1294					
13. 37	28. 55	22. 4	·1290					
13. 56	26. 55		***					
14. 25	29. 5	23. 30	·1293					
15. 16	26. 10	23. 59	·1296					
15. 45	28. 45							
16. 24	28. 45							
16. 33	28. 35							
16. 53	28. 30							
17. 7	29. 5							
17. 51	28. 25							
18. 44	28. 25							
19. 3	28. 0							
19. 33	28. 35							
19. 47	28. 25							
20. 9	29. 40							
	***							
21. 3	30. 30							
21. 7	31. 25							
	***							
22. 13	33. 0							
22. 41	34. 30							
22. 53	35. 10							
23. 0	35. 10							
23. 12	35. 40							
23. 23	35. 25							
23. 31	35. 25							
23. 59	36. 30							
Mar. 22		Mar. 22		Mar. 22		Mar. 22		
0. 0	20. 36. 30	0. 0	·1296	0. 0	·03050	1. 0	53 ·9	56 ·7
0. 10	39. 35	1. 0	·1298	5. 18	·03126	3. 0	53 ·9	56 ·5
0. 16	40. 0	1. 26	·1303	11. 57	·03130	Max.	54 ·6	57 ·9
	***	1. 46	·1309	15. 45	·03110	9. 0	54 ·5	57 ·6
0. 56	40. 0	2. 7	·1306	16. 25	·03095	Min.	53 ·3	55 ·9
1. 25	38. 15	4. 31	·1309	20. 19	·03095	21. 0	53 ·9	56 ·0
	***	4. 52	·1303	23. 26	·03060			
1. 51	38. 30	5. 25	·1308	23. 59	·03070			
1. 56	39. 5	7. 30	·1314					
2. 10	38. 0	7. 54	·1312					
2. 55	37. 50	9. 19	·1314					
3. 54	36. 5	9. 33	·1309					
4. 52	33. 55	9. 52	·1313					
5. 10	32. 30	10. 12	·1308					
5. 31	32. 10	10. 44	·1314					
6. 55	32. 35	11. 3	·1307					
8. 43	31. 35	11. 32	·1309					
9. 51	32. 30	12. 10	·1306					
10. 9	31. 0	12. 30	·1310					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Mar.22		Mar.22						
h m	° ′ ″	h m		h m		h m	°	°
10. 24	20. 29. 5	13. 3	·1305					
10. 28	29. 5	13. 15	·1309					
10. 46	27. 25	13. 28	·1306					
11. 25	30. 5	13. 43	·1309					
12. 13	29. 40	14. 0	·1305					
12. 43	31. 0	15. 5	·1309					
12. 55	30. 35	16. 0	·1315					
13. 25	31. 40	16. 15	·1311					
13. 43	30. 30	16. 24	·1317					
13. 56	30. 40	16. 33	·1313					
14. 23	30. 0	16. 46	·1319					
14. 53	30. 10	17. 20	·1315					
15. 22	29. 25		***					
15. 28	31. 5	18. 32	·1322					
15. 38	33. 30	19. 53	·1309					
15. 51	33. 50	23. 59	·1298					
15. 57	32. 30							
16. 9	32. 40							
16. 27	31. 30							
16. 38	30. 25							
16. 54	29. 50							
17. 0	28. 35							
17. 19	29. 45							
17. 48	29. 50							
17. 56	29. 25							
18. 7	29. 25							
18. 16	30. 0							
19. 10	30. 0							
	***							
19. 38	29. 40							
21. 11	33. 50							
21. 24	32. 40							
21. 58	33. 30							
22. 39	35. 50							
22. 46	35. 25							
23. 59	40. 40							
Mar.23		Mar.23		Mar.23		Mar.23		
0. 0	20. 40. 40	0. 0	·1298	0. 0	·03070	1. 0	54 ·1	57 ·5
0. 24	41. 5	0. 12	·1300	1. 52	·03100	3. 0	54 ·2	57 ·7
0. 27	40. 55	0. 17	·1296	3. 21	·03140	Max.	54 ·8	58 ·0
0. 39	41. 55	0. 30	·1300	5. 10	·03166	9. 0	54 ·6	58 ·0
0. 55	42. 30	0. 36	·1296	11. 30	·03150	Min.	53 ·6	55 ·9
1. 57	41. 45	0. 53	·1306	13. 17	·03140	21. 0	53 ·9	56 ·5
2. 4	42. 50	1. 11	·1302	13. 34	·03150			
2. 9	40. 20	1. 56	·1306	14. 5	·03120			
2. 17	40. 20	2. 10	·1309	18. 6	·03124			
2. 25	40. 55	2. 17	·1297	19. 25	·03116			
2. 36	40. 55	2. 30	·1307	23. 59	·03110			
2. 54	39. 5	2. 40	·1306					
3. 5	38. 20	2. 52	·1300					
3. 19	38. 30	3. 32	·1309					
3. 44	37. 40	3. 52	·1308					
3. 57	37. 40	4. 10	·1311					
4. 17	36. 35	4. 49	·1300					
4. 23	36. 35	5. 16	·1311					
4. 53	33. 40	5. 32	·1310					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Mar.23		Mar.23						
h m	° ′ ″	h m		h m		h m	°	°
5. 11	20. 33. 50	5. 44	·1316					
5. 43	32. 55	7. 8	·1315					
7. 56	32. 35	7. 38	·1319					
8. 17	31. 45	8. 19	·1314					
8. 30	32. 40	8. 34	·1317					
8. 40	31. 50	9. 3	·1308					
8. 48	31. 50	9. 16	·1313					
9. 1	29. 25	9. 30	·1309					
9. 9	29. 25	9. 47	·1314					
9. 39	30. 35	10. 9	·1312					
10. 8	27. 30	10. 26	·1316					
10. 26	29. 10	10. 55	·1312					
11. 5	31. 0	11. 6	·1314					
12. 13	30. 35	11. 35	·1308					
12. 26	31. 30	12. 12	·1315					
12. 42	30. 35	12. 28	·1312					
13. 7	30. 55	12. 40	·1313					
13. 22	31. 10	12. 56	·1318					
13. 46	37. 40	13. 17	·1313					
14. 10	34. 0	13. 43	·1321					
15. 22	30. 30	14. 37	·1313					
16. 17	30. 30	15. 35	·1311					
17. 38	29. 0	16. 17	·1313					
18. 23	31. 0	16. 56	·1319					
18. 38	30. 35	17. 28	·1314					
18. 56	31. 5	18. 28	·1308					
19. 21	29. 50	19. 10:	·1315					
19. 30	29. 20	19. 28	·1309					
20. 8	29. 15	20. 41	·1305					
20. 14	30. 40	21. 0	·1306					
20. 35	30. 0		***					
	***	21. 26	·1319					
21. 28	30. 15	22. 25	·1317					
21. 40	30. 15		***					
21. 43	31. 35	23. 37	·1326					
21. 51	31. 0	23. 59	·1325					
22. 19	32. 5							
23. 11	34. 55							
23. 33	37. 50							
23. 59	38. 55							
Mar.24		Mar.24		Mar.24		Mar.24		
0. 0	20. 38. 55	0. 0	·1325	0. 0	·03110	1. 0	54 ·1	57 ·6
0. 24	38. 5	0. 28	·1314	1. 54	·03138	3. 0	54 ·8	58 ·0
0. 39	39. 10	1. 5	·1319	2. 36	·03160	Max.	55 ·8	59 ·0
1. 24	39. 30	2. 0	·1320	5. 49	{·03210	9. 0	55 ·1	58 ·0
1. 44	38. 15	2. 40	·1324		{·03200	Min.	54 ·0	55 ·9
2. 8	37. 55	3. 7	·1320	7. 0	·03200	21. 0	54 ·9	55 ·9
2. 41	38. 30	3. 18	·1324	8. 56	·03217			
3. 4	36. 50	3. 47	·1320	11. 41	·03176			
3. 30	37. 10		***	12. 1	·03184			
3. 51	36. 0	4. 49	·1330	13. 11	·03180			
4. 24	35. 35	5. 32	·1327	13. 40	·03160			
4. 57	34. 0	6. 10	·1334	13. 52	·03157			
5. 19	32. 5	6. 57	·1330	14. 37	·03170			
5. 46	28. 15	7. 13	·1325	19. 55	·03160			
6. 7	29. 10	7. 34	·1331	22. 36:	·03115			
6. 31	32. 10	7. 53	·1325	23. 59	·03120			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 24 h m	° ′ ″	Mar. 24 h m		h m		h m	°	°
7. 0	20. 32. 10	8. 36	·1326					
7. 10	32. 45	9. 9	·1342					
7. 19	32. 10	9. 19	·1330					
7. 47	32. 10	9. 54	·1323					
8. 1	30. 55	10. 15	·1333					
8. 11	30. 55	11. 16	·1330					
8. 21	31. 30	11. 40	·1321					
8. 37	30. 25	12. 0	·1320					
8. 51	28. 25	12. 17	·1319					
9. 17	33. 5	12. 45	·1324					
9. 39	30. 25	13. 0	·1318					
9. 42	30. 35	13. 21	·1325					
10. 0	29. 55	13. 29	·1323					
10. 17	28. 30	13. 35	·1328					
10. 58	28. 35	13. 42	·1323					
11. 12	27. 20	13. 56	·1326					
11. 28	28. 35	14. 21	·1317					
11. 39	27. 15	14. 34	·1320					
11. 56	29. 0	15. 0	·1314					
12. 9	29. 0	15. 29	·1323					
12. 25	29. 50	17. 9	·1324					
12. 34	29. 25	17. 54	·1326					
12. 41	29. 55	18. 20	·1323					
12. 57	29. 0	18. 42	·1326					
13. 32	28. 50	19. 17	·1316					
14. 0	19. 50	19. 34	·1319					
14. 38	25. 5	19. 52	·1314					
15. 4	26. 25	20. 25	·1318					
15. 24.	29. 30	20. 35	·1313					
15. 40	28. 5	20. 43	·1316					
16. 25	27. 50	21. 48	·1314					
16. 38	27. 0	22. 30	·1305					
16. 42	27. 55	22. 53	·1309					
18. 8	27. 15	23. 6	·1302					
18. 17	28. 55	23. 50	·1311					
18. 36	26. 35	23. 59	·1315					
19. 39	27. 5							
19. 45	29. 10							
20. 6	28. 0							
20. 11	28. 20							
20. 17	27. 45							
20. 23	29. 55							
20. 37	28. 25							
20. 46	29. 0							
20. 57	28. 45							
22. 8	34. 25							
22. 53	37. 0							
23. 0	36. 55							
23. 22	37. 45							
23. 27	37. 15							
23. 43	38. 10							
23. 59	38. 50							
Mar. 25		Mar. 25		Mar. 25		Mar. 25		
0. 0	20. 38. 50	0. 0	·1315	0. 0	·03120	1. 0	54·9	57·4
0. 7	39. 20	0. 19	·1318	0. 13	·03127	3. 0	54·9	57·5
0. 23	39. 10	0. 30	·1312		·03156	Max.	55·1	57·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 25 h m	° ′ ″	Mar. 25 h m		Mar. 25 h m		Mar. 25 h m	°	°
0. 35	20. 38. 5	1. 31	·1324	0. 43	·03162	9. 0	54·5	56·4
1. 6	38. 55	2. 9	·1320		·03135	M n	53·7	55·8
1. 28	38. 55	2. 40	·1324	2. 49	·03150	22. 20	54·1	55·9
1. 42	39. 45	3. 7	·1318		·03137			
1. 58	38. 35	4. 24	·1322	6. 23	·03155			
2. 11	39. 20	4. 42	·1328	6. 53	·03180			
2. 42	37. 50	5. 15	·1325	7. 3	·03170			
4. 14	34. 45	5. 39	·1333	7. 22	·03190			
4. 27	34. 45	6. 8	·1326	8. 41	·03165			
5. 9	33. 15	6. 37	·1313	11. 10	·03146			
6. 9	33. 35	6. 56	·1321	12. 48	·03144			
6. 23	33. 5	7. 15	·1308	14. 42	·03125			
6. 38	30. 30	7. 35	·1323	18. 34	·03130			
6. 55	31. 35	7. 56	·1306	20. 24	·03120			
7. 9	26. 15	8. 40	·1320	23. 11	·03080			
7. 13	26. 50	9. 22	·1319	23. 59	·03082			
7. 23	24. 0	10. 4	·1325					
7. 28	26. 5	10. 30	·1321					
7. 43	27. 30	10. 36	·1329					
7. 56	26. 0	10. 44	·1325					
8. 41	31. 45	10. 55	·1327					
9. 27	29. 55	11. 26	·1318					
9. 41	29. 55	12. 29	·1322					
9. 57	28. 50	12. 43	·1318					
10. 17	29. 20	13. 7	·1325					
10. 31	28. 20	13. 34	·1319					
10. 55	29. 30	13. 49	·1323					
11. 47	30. 0	14. 1	·1320					
12. 7	31. 20	14. 28	·1323					
12. 25	31. 45	15. 14	·1320					
12. 40	32. 30	15. 28	·1326					
13. 7	31. 50		***					
13. 29	34. 35	17. 52	·1318					
13. 41	33. 15	18. 45	·1324					
13. 57	35. 20	19. 19	·1318					
14. 11	36. 0	19. 50	·1307					
14. 55	33. 5	20. 8	·1307					
15. 11	33. 5	20. 34	·1313					
15. 21	31. 45	21. 22	·1307					
15. 26	31. 45	21. 30	·1312					
15. 31	30. 15	21. 40	·1303					
15. 38	30. 15	22. 24	·1306					
16. 2	29. 10	22. 50	·1313					
16. 38	28. 35	23. 13	·1305					
16. 53	29. 5	23. 59	·1313					
18. 11	29. 25							
18. 24	28. 50							
18. 48	28. 20							
	***							
19. 39	28. 45							
19. 59	27. 25							
20. 36	29. 30							
20. 40	29. 25							
20. 46	30. 40							
20. 55	29. 55							
21. 0	31. 0							
21. 11	30. 50							
21. 16	30. 15							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Mar.25								
h m	° ′ ″	h m		h m		h m	°	°
21. 26	20. 29. 45							
21. 39	31. 35							
21. 47	30. 20							
22. 23	32. 30							
22. 28	31. 55							
22. 57	35. 35							
23. 1	35. 40							
23. 11	34. 50							
23. 40	36. 10							
23. 46	35. 35							
23. 59	36. 35							
Mar.26		Mar.26		Mar.26		Mar.26		
0. 0	20. 36. 35	0. 0	·1313	0. 0	·03082	Max.	54·3	55·8
0. 11	37. 10	0. 28	·1323	1. 25	·03090	1. 0	54·3	55·7
0. 24	39. 5	0. 34	·1318	5. 39	·03130	8. 30	53·9	55·4
0. 27	39. 5	0. 44	·1323	10. 5	·03096	21. 0	53·0	54·2
0. 33	38. 0	0. 58	·1323	11. 10	·03090	22. 0	53·3	54·1
0. 40	38. 55	1. 30	·1320	11. 33	·03080	23. 0	53·0	53·9
0. 53	38. 45	2. 6	·1329	12. 4	·03080	Min.	53·0	53·9
0. 58	37. 30	2. 25	·1323	12. 30	·03060			
1. 56	39. 20	3. 4	·1321	14. 3	·03066			
2. 17	38. 0	3. 56	·1329	18. 3	·03050			
2. 33	38. 10	4. 41	·1325	19. 41	·03040			
	***	4. 52	·1319	22. 53	·02985			
2. 55	37. 5	5. 41	·1324	23. 59	·02986			
2. 58	37. 35	6. 9	·1321					
3. 24	35. 55	6. 34	·1326					
4. 29	33. 25	6. 55	·1319					
4. 47	32. 15	8. 4	·1329					
4. 56	32. 45	8. 47	·1325					
5. 21	32. 30	9. 4	·1329					
5. 43	33. 35	9. 42	·1323					
5. 57	33. 0	9. 51	·1329					
6. 11	32. 50	10. 42	·1325					
6. 23	32. 5	11. 5	·1334					
7. 23	32. 30	11. 15	·1328					
8. 41	31. 50	11. 22	·1331					
8. 56	31. 0	11. 29	·1329					
9. 41	31. 35	11. 52	·1340					
9. 48	30. 50	12. 9	·1343					
10. 3	31. 30	12. 53	·1325					
10. 17	30. 30	14. 11	·1323					
10. 42	30. 40	15. 25	·1326					
10. 56	30. 25	15. 40	·1323					
11. 8	30. 35	18. 4:	·1329					
11. 19	32. 50	21. 5	·1312					
11. 27:	29. 15	21. 38	·1307					
11. 48	31. 40	22. 15	·1308					
11. 56	31. 30	23. 9	·1313					
12. 14	28. 55	23. 59	·1312					
12. 35	29. 0							
12. 55	30. 15							
13. 56	30. 0							
14. 27	30. 30							
14. 59	29. 45							
15. 24	30. 35							
15. 38	30. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Mar.26								
h m	° ′ ″	h m		h m		h m	°	°
17. 8	20. 30. 0							
17. 25	30. 20							
19. 54	27. 5							
20. 36	27. 15							
22. 10	31. 0							
23. 48	38. 5							
23. 56	38. 5							
23. 59	39. 30							
Mar.27		Mar.27		Mar.27		Mar.27		
0. 0	20. 39. 30	0. 0	·1312	0. 0	·02986	0. 0	53·0	55·0
0. 40	40. 45	0. 39	·1313	3. 2	·03050	1. 0	53·2	55·8
0. 53	39. 55	0. 45	·1309	5. 52	·03100	2. 0	53·6	56·0
1. 41	39. 55	1. 18	·1315	8. 3	·03110	3. 0	53·2	55·8
1. 46	40. 5	1. 36	·1312	8. 14	·03092	Max.	54·0	56·5
2. 4	39. 25	2. 4	·1321	8. 20	·03098	9. 0	53·8	56·0
2. 26	37. 50	2. 47	·1324	8. 37	·03080	Min.	52·0	54·0
2. 41	37. 50	2. 58	·1323	9. 25	·03096	21. 0	53·0	54·0
2. 56	36. 55	3. 15	·1329	10. 41	·03072	22. 0	52·6	54·2
3. 8	37. 30		***	11. 7	·03055	23. 0	52·9	54·5
3. 19	36. 50	3. 58	·1328	11. 42	·03050			
4. 9	36. 55	4. 8	·1331	12. 21	·03057			
4. 39	35. 35	4. 36:	·1329	12. 56	·03040			
4. 54	35. 50	5. 0	·1318	16. 5	·03044			
5. 38	31. 35	5. 20	·1323	21. 9	·03000			
5. 41	30. 30	5. 29	·1321	22. 43	·02972			
5. 58	29. 30	5. 38	·1325	23. 59	·02960			
6. 26	32. 0	5. 51	·1321					
6. 40	32. 25	6. 12	·1327					
7. 4	31. 45	6. 27	·1323					
7. 16	30. 20	6. 36	·1324					
7. 29	29. 0	7. 14	·1315					
7. 44	26. 20	7. 28	·1321					
7. 53	27. 5	7. 41	·1318					
7. 58	27. 30	7. 49	·1321					
8. 11	29. 50	8. 0	·1319					
8. 22	29. 10	8. 11	·1325					
8. 27	30. 25	8. 19	·1317					
8. 51	24. 30	8. 22	·1320					
8. 58	24. 15	8. 34	·1310					
9. 4	23. 0	8. 43	·1307					
9. 25	26. 15	9. 4	·1313					
9. 41	27. 10	9. 20	·1309					
9. 46	28. 10	9. 36	·1317					
9. 58	25. 25	10. 6	·1323					
10. 11	26. 30	10. 35	·1337					
10. 17	25. 45	10. 48	·1329					
10. 21	25. 45	11. 4	·1335					
10. 25	24. 55	11. 22	·1322					
10. 41	26. 35	11. 41	·1318					
11. 2	22. 30	12. 8	·1325					
11. 27	25. 55	12. 31:	·1316					
11. 56	26. 20	12. 52	·1326					
12. 10	29. 30	13. 9	·1323					
12. 21	34. 15	13. 40	·1325					
12. 29	34. 55	13. 52	·1323					
12. 41	33. 50	16. 29	·1324					
12. 49	31. 55	16. 48	·1328					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Mar.27		Mar.27						
h m	° ′ ″	h m		h m		h m	°	°
12. 54	20. 32. 5	17. 3	·1325					
13. 1	33. 10	17. 35	·1329					
13. 20	33. 0	19. 8	·1319					
13. 36	31. 55	20. 12	·1317					
13. 59	31. 10	21. 12	·1318					
14. 10	31. 10	21. 15	·1306					
14. 47	30. 0	22. 19	·1300					
	***	23. 0	·1308					
15. 48	29. 30	23. 12	·1306					
16. 6	30. 10	23. 30	·1311					
16. 25	30. 10	23. 59	·1311					
16. 38	29. 50							
16. 57	30. 30							
17. 9	29. 50							
17. 41	29. 50							
18. 10	28. 40							
18. 44	28. 15							
19. 8	28. 55							
19. 22	28. 5							
19. 41	28. 40							
20. 0	28. 5							
20. 9	26. 55							
20. 11	27. 30							
20. 16	26. 55							
20. 26	27. 45							
21. 8	27. 55							
21. 16	29. 0							
21. 33	28. 55							
22. 43	32. 10							
22. 53	33. 15							
22. 56	33. 25							
22. 59	34. 5							
23. 8	33. 50							
23. 59	36. 30							
Mar.28		Mar.28		Mar.28		Mar.28		
0. 0	20. 36. 30	0. 0	·1311	0. 0	·02960	0. 0	52 ·6	53 ·8
0. 18	38. 5	0. 41	·1319	1. 54	·02970	1. 0	52 ·5	53 ·6
0. 26	39. 35	0. 45	·1327	4. 3	·02990	2. 0	52 ·4	53 ·2
0. 39	39. 15	1. 22	·1321	4. 38	·03000	3. 0	52 ·8	54 ·0
0. 44	41. 10	2. 7	·1327	6. 33	·03020	Max.	53 ·1	55 ·5
0. 53	40. 35	2. 42	·1323	9. 0	·03010	9. 0	52 ·9	54 ·5
1. 11	41. 0	3. 7	·1326	15. 0	·03000	21. 0	52 ·3	53 ·6
1. 25	40. 40	3. 22	·1324	17. 58	·02990	22. 0	52 ·1	53 ·0
1. 55	41. 0	3. 26	·1316	19. 56	·02990	Min.	52 ·0	53 ·0
2. 3	40. 50	3. 38	·1325	23. 35	·02920			
2. 14	41. 35	3. 47	·1317	23. 59	·02910			
2. 40	40. 30	4. 11	·1313					
2. 56	40. 15	4. 27	·1313					
3. 6	40. 35	4. 38	·1320					
3. 22	39. 55	5. 12	·1327					
3. 27	39. 55	5. 34	·1327					
3. 34	38. 30	6. 4	·1322					
3. 40	39. 50	6. 45	·1327					
3. 49	38. 45	7. 20	·1322					
3. 54	38. 50	8. 39	·1326					
4. 11	37. 0	10. 57	·1323					
4. 18	37. 15	11. 9	·1328					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Mar.28		Mar.28						
h m	° ′ ″	h m		h m		h m	°	°
4. 27	20. 36. 5	11. 30	·1323					
5. 33	35. 0	11. 41	·1328					
5. 56	33. 55	12. 3	·1327					
6. 23	34. 5	12. 19	·1321					
7. 2	32. 50	12. 26	·1325					
7. 11	33. 30	13. 20	·1324					
7. 30	31. 30	13. 31	·1328					
8. 26	32. 5	13. 40	·1325					
10. 11	30. 50	13. 48	·1327					
11. 3	31. 5	14. 31	·1322					
11. 11	32. 0	15. 40	·1326					
11. 32	30. 5	16. 2	·1322					
11. 47	31. 0	17. 52	·1324					
12. 18	29. 20	18. 40	·1328					
12. 32	30. 30	21. 26	·1303					
13. 23	31. 20	21. 59	·1307					
13. 57	29. 50	22. 8	·1303					
14. 25	29. 40	23. 59	·1312					
14. 54	32. 30							
15. 36	30. 30							
16. 1	31. 50							
16. 18	32. 0							
17. 4	33. 15							
18. 41	30. 10							
18. 53	29. 15							
19. 4	28. 50							
19. 41	27. 35							
	***							
20. 10	27. 35							
20. 26	26. 55							
20. 41	27. 30							
20. 51	27. 30							
20. 55	28. 40							
21. 8	28. 0							
	***							
22. 3	30. 35							
23. 59	37. 40							
Mar.29		Mar.29		Mar.29		Mar.29		
0. 0	20. 37. 40	0. 0	·1312	0. 0	·02910	0. 0	52 ·1	54 ·3
0. 13	38. 5	1. 14	·1318	0. 31	·02915	1. 0	52 ·0	54 ·2
0. 38	39. 30	1. 35	·1326	4. 48	·02970	3. 0	52 ·2	54 ·8
1. 10	40. 10	1. 52	·1324	6. 30	·02977	Min.	51 ·6	53 ·5
1. 27	42. 5	2. 0	·1321	8. 9	·02966	9. 0	52 ·0	54 ·0
1. 40	42. 30	2. 12	·1325	9. 11	·02970	21. 0	52 ·1	55 ·1
1. 56	39. 30	2. 37	·1321	9. 34	·02940	Max.	52 ·3	55 ·2
2. 9	40. 25	2. 46	·1326	15. 52	·02967			
2. 51	38. 45	2. 53	·1326	19. 30	·02960			
2. 57	37. 30	2. 57	·1319	21. 9	·02940			
3. 4	38. 35	3. 11	·1326	22. 15	·02935			
3. 11	37. 20	3. 14	·1320		(†)			
3. 33	36. 35	3. 39	·1324					
3. 41	35. 40	3. 48	·1318					
3. 50	36. 0	4. 6	·1324					
5. 38	33. 0	4. 33	·1325					
6. 4	33. 0	4. 42	·1321					
6. 25	32. 25	5. 7	·1323					
7. 24	33. 35	5. 37	·1317					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 29		Mar. 29						
h m	° ′ ″	h m		h m		h m	°	°
7. 30	20. 33. 0	6. 27	·1327					
7. 58	33. 50	7. 7	·1321					
8. 17	32. 50	7. 38	·1325					
8. 53	32. 30	8. 45	·1319					
9. 7	27. 45	9. 7	·1343					
9. 24	31. 0	9. 12	·1337					
9. 39	27. 40	9. 16	·1344					
9. 52	28. 25	9. 36	·1329					
10. 5	27. 0	9. 48	·1327					
10. 23	26. 40	10. 12	·1319					
10. 34	27. 40	10. 24	·1322					
10. 40	27. 40	11. 25	·1315					
11. 41	31. 30	12. 7	·1319					
13. 50	30. 55	13. 58	·1317					
14. 18	31. 10	16. 53	·1321					
14. 42	30. 15	17. 11	·1318					
14. 57	31. 0	17. 43	·1323					
15. 21	30. 30	18. 16	·1324					
15. 27	31. 5	18. 19	·1321					
15. 41	30. 30	18. 45	·1318					
16. 47	30. 30	18. 57	·1321					
17. 9	31. 5	19. 4	·1317					
17. 39	30. 20	19. 17	·1323					
18. 57	30. 0	19. 21	·1317					
19. 11	28. 35	19. 35	·1323					
19. 17	29. 30		***					
19. 34	27. 35	20. 27	·1319					
19. 54	29. 35	20. 30	·1315					
20. 1	28. 40	20. 45	·1318					
20. 12	29. 30	21. 34	·1311					
20. 28	29. 5	22. 24	·1299					
20. 39	28. 15	22. 30	·1301					
20. 55	29. 40	22. 43	·1298					
21. 10	30. 0	22. 55	·1303					
22. 23	35. 10	23. 59	·1298					
22. 44	36. 0							
23. 23	38. 35							
23. 34	39. 55							
23. 59	40. 5							
Mar. 30		Mar. 30		Mar. 30		Mar. 30		
0. 0	20. 40. 5	0. 0	·1298		(†)	Min.	52 ·8	56 ·0
0. 18	43. 0	0. 12	·1309	1. 0	·02956*	1. 0	52 ·9	56 ·2
1. 10	43. 15	1. 32	·1317	1. 57	·03000	2. 0	53 ·0	56 ·4
1. 23	44. 5	1. 47	·1313	3. 25	·03040	3. 0	53 ·5	56 ·9
1. 26	43. 40	1. 51	·1315	6. 40	·03080	9. 0	54 ·9	58 ·0
1. 48	44. 50	2. 15	·1303	7. 8	·03100	Max.	55 ·0	58 ·8
1. 55	44. 15	2. 46	·1318	7. 25	·03090	21. 0	54 ·8	57 ·4
2. 11	39. 40	3. 29	·1322	7. 39	·03100	22. 30	54 ·5	56 ·8
2. 35	39. 20	3. 43	·1321	7. 50	·03096	23. 0	54 ·6	57 ·0
3. 5	36. 30	3. 56	·1325	9. 3	·03110			
3. 29	36. 10	4. 12	·1322	9. 55	·03090			
3. 46	36. 25	4. 38	·1325	10. 15	·03097			
3. 57	36. 5	5. 7	·1321	10. 33	·03090			
4. 11	36. 30	5. 40	·1325	11. 3	·03098			
6. 4	33. 50	5. 54	·1321	11. 43	·03070			
6. 25	32. 20	6. 4	·1323	12. 8:	·03076			
6. 33	32. 35	6. 19	·1320	12. 34	·03060			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 30		Mar. 30		Mar. 30				
h m	° ′ ″	h m		h m		h m	°	°
6. 55	20. 29. 30	6. 36	·1323	13. 35	·03080			
7. 12	31. 50	6. 53	·1316	15. 22:	·03110			
7. 31	27. 30	7. 7	·1322	17. 24	·03076			
7. 47	28. 40	7. 18	·1324	19. 3	·03085			
7. 56	25. 30	7. 26	·1320	21. 34	·03080			
8. 2	25. 30	7. 42	·1327	22. 58	·03060			
8. 11	24. 10	7. 53	·1321	23. 59	·03075			
8. 26	26. 30	8. 20	·1326					
9. 3	28. 55	8. 35	·1320					
9. 11	28. 25	8. 42	·1321					
9. 21	31. 0	8. 58	·1313					
9. 38	31. 30	9. 5	·1317					
9. 41	29. 15	9. 10	·1314					
9. 53	31. 50	9. 22	·1323					
10. 10	25. 40	9. 39	·1317					
10. 23	26. 35	9. 50	·1320					
10. 40	22. 30	10. 2	·1307					
10. 52	22. 20	10. 18	·1318					
11. 11	27. 5	10. 39	·1301					
11. 26	27. 35	10. 56	·1306					
11. 48	20. 50	11. 10	·1313					
12. 4	27. 0	11. 14	·1308					
12. 23	23. 15	11. 20	·1313					
12. 41	22. 45	11. 30	·1313					
13. 13	25. 5	12. 0	·1327					
13. 53	26. 30	12. 18	·1327					
14. 9	29. 0	12. 33	·1314					
14. 38	27. 35		***					
14. 57	29. 0	12. 55	·1309					
15. 38	27. 15	13. 22	·1314					
15. 57	31. 30	13. 56	·1302					
16. 19	31. 30	14. 13	·1309					
16. 42	34. 35	14. 32	·1303					
17. 4	31. 45	15. 17	·1311					
17. 17	30. 30	15. 38	·1309					
17. 26	29. 30	16. 3	·1297					
17. 33	30. 0	17. 11	·1328					
17. 42	30. 0		***					
17. 55	28. 30	18. 35	·1313					
18. 36	27. 25	18. 50	·1312					
19. 9	29. 30	19. 13	·1315					
19. 56	28. 5	20. 10	·1301					
20. 1	29. 40	20. 28	·1307					
20. 8	28. 50		***					
	***	22. 27	·1310					
20. 31	30. 0	22. 43	·1304					
21. 11	29. 45	23. 11	·1309					
	***	23. 17	·1306					
22. 19	32. 20	23. 59	·1308					
22. 29	33. 20							
23. 59	36. 0							
Mar. 31		Mar. 31		Mar. 31		Mar. 31		
0. 0	20. 36. 0	0. 0	·1308	0. 0	·03075	Min.	54 ·7	57 ·7
0. 48	36. 45	0. 50	·1313	0. 31	·03090	0. 0	54 ·8	58 ·0
0. 53	35. 40	1. 5	·1307	2. 0	·03150	1. 0	55 ·0	58 ·8
1. 0	36. 5	1. 17	·1314	2. 30	·03157	2. 0	55 ·3	59 ·1
1. 2	37. 20	2. 15	·1317	3. 17	·03193	3. 0	55 ·6	59 ·3

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 31	° ′ ″	Mar. 31		Mar. 31		Mar. 31	°	°
h m		h m		h m		h m		
1. 7	20. 39. 5	2. 51	·1304	4. 18	·03205	9. 0	56 ·3	60 ·3
1. 21	37. 55	3. 15	·1309	7. 38	·03250	Max.	58 ·1	61 ·2
2. 5	39. 30	3. 18	·1315	12. 4	·03240	21. 0	57 ·9	59 ·0
2. 17	38. 35	3. 29	·1316	12. 26	·03230	22. 0	57 ·2	59 ·4
3. 1	37. 10	3. 56	·1309	13. 52	·03250	23. 0	57 ·1	59 ·4
3. 11	37. 40	4. 44	·1318	14. 54	·03260			
3. 47	35. 30	5. 31	·1315	15. 26	·03250			
6. 30	32. 25	5. 38	·1319	18. 57:	·03280			
6. 51	29. 35	5. 58	·1315	21. 54	·03274			
7. 11	25. 30	6. 15	·1318	23. 59	·03240			
7. 51	30. 0	6. 55	·1313					
8. 39	30. 0	7. 38	·1327					
8. 52	25. 30	8. 4	·1320					
9. 6	25. 20	8. 26	·1310					
10. 31	31. 5	8. 42	·1310					
10. 58	30. 20	9. 11	·1328					
11. 14	30. 35	9. 49	·1312					
11. 34	29. 30	10. 13	·1313					
11. 58	33. 45	11. 9	·1316					
13. 11	30. 5	11. 20	·1324					
13. 41	32. 30	11. 33	·1324					
13. 58	30. 35·	11. 58	·1334					
14. 17:	29. 55	12. 24	·1320					
14. 58	33. 30	12. 33	·1322					
15. 34	30. 0		***					
15. 42	30. 35	13. 12	·1313					
15. 53	29. 30	13. 49	·1317					
16. 47	29. 0	14. 26	·1311					
17. 11	31. 0	14. 46	·1312					
17. 35	30. 35	15. 3	·1317					
17. 43	30. 35	15. 56	·1314					
19. 17	28. 50	16. 11	·1311					
19. 56	28. 50	16. 38	·1315					
22. 44	33. 20	16. 43	·1312					
22. 48	33· 50	17. 24	·1309					
23. 12	33. 50	19. 22	·1311					
23. 31	36. 30	21. 18	·1305					
23. 43	36. 0	22. 52	·1310					
23. 59	37. 5	23. 13	·1305					
		23. 35	·1316					
		23. 48	·1310					
		23. 59	·1314					
Apr. 1		Apr. 1		Apr. 1		Apr. 1		
0. 0	20. 37. 5	0. 0	·1314	0. 0	·03240	0. 0	57 ·7	59 ·0
0. 39	38. 30	0. 33	·1318	0. 54	·03247	1. 0	57 ·6	59 ·7
0. 58	40. 30	0. 44	·1312	4. 1	·03290	2. 0	57 ·4	59 ·4
1. 23	39. 0	1. 26	·1305	4. 39	·03310	3. 0	57 ·2	59 ·5
1. 40	39. 25	1. 44	·1315	5. 9	·03300	Max.	58 ·3	60 ·8
1. 56	38. 50	2. 5	·1314	6. 9	·03325	9. 0	57 ·6	60 ·2
2. 56	39. 10		***	7. 18	·03340	Min.	55 ·9	57 ·4
3. 6	40. 25	2. 52	·1323	10. 0	·03317	22. 36	56 ·8	58 ·0
3. 11	38. 35	3. 0	·1320	10. 54	·03307			
	***	3. 10	·1328	11. 29	·03295			
3. 57	38. 20	3. 28	·1319	12. 39	·03290			
4. 12	34. 30	3. 40	·1323	12. 55	·03295			
4. 39	33. 35	3. 47	·1314	13. 46	·03290			
5. 11	35. 0	4. 3	·1314	16. 19	·03286			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 1	° ′ ″	Apr. 1		Apr. 1		h m	°	°
h m		h m		h m				
5. 27	20. 33. 35	4. 11	·1311	18. 57	·03270			
5. 49	33. 25	4. 23	·1316	22. 0	·03230			
6. 7	33. 30	4. 27	·1312	23. 59	·03230			
6. 29	32. 30	4. 41	·1316					
6. 42	30. 30	5. 5	·1312					
7. 23	30. 35	5. 15	·1300					
7. 39	27. 50	5. 20	·1302					
7. 56	28. 0	5. 26	·1299					
8. 12	29. 45	5. 38	·1309					
8. 29	28. 30	5. 59	·1316					
8. 45	29. 35	6. 14	·1313					
8. 56	29. 35	6. 19	·1316					
9. 4	27. 35	6. 57	·1300					
9. 11	27. 35	7. 13	·1299					
9. 15	27. 0	7. 21	·1303					
9. 35	26. 20	7. 30	·1299					
9. 43	27. 10	8. 5	·1307					
10. 0	26. 50	8. 25	·1305					
10. 26	28. 55	9. 0	·1313					
10. 35	23. 0	9. 26	·1319					
10. 56:	28. 30	9. 56	·1312					
11. 23	30. 40	10. 5	·1315					
11. 34	29. 50	10. 17	·1314					
12. 13	30. 45	10. 28	·1310					
12. 25	29. 30	10. 48	·1326					
12. 34	31. 15	11. 18	·1314					
13. 0	31. 30	11. 28	·1320					
13. 11	33. 5	11. 41	·1314					
13. 26	32. 40	11. 48	·1318					
13. 38	33. 15	11. 51	·1316					
14. 38	30. 40	12. 20	·1315					
14. 47	29. 25	12. 31	·1304					
15. 2	29. 50	12. 45	·1313					
15. 10	29. 25	12. 53:	·1309					
15. 48	29. 50	13. 10	·1314					
15. 56	28. 55	13. 18	·1311					
16. 7	30. 5	13. 35	·1314					
16. 25	28. 0	13. 55	·1311					
17. 26	29. 30		***					
17. 47	28. 50	14. 42	·1315					
17. 53	29. 25	14. 52	·1311					
18. 39	27. 55	15. 5	·1315					
19. 2	30. 25	15. 13	·1310					
19. 25	30. 25	15. 19	·1313					
19. 40	32. 5	15. 38	·1311					
	***	15. 59	·1315					
20. 11	30. 30	16. 3	·1312					
20. 40	31. 25	16. 9	·1317					
20. 52	31. 5	16. 15	·1313					
21. 10	32. 45	16. 37	·1317					
21. 33	31. 30	17. 25	·1313					
22. 1	33. 40	17. 58	·1315					
23. 59	37. 25	18. 52	·1318					
		19. 34	·1309					
		20. 0	·1311					
		20. 8	·1307					
		20. 32	·1313					
		20. 42	·1314					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	Apr. 1 h m		h m		h m	°	
		21. 24	·1307					
		21. 51	·1311					
		22. 16	·1306					
		23. 30	·1303					
		23. 49	·1309					
			(†)					
Apr. 2		Apr. 2		Apr. 2		Apr. 2		
0. 0	20. 37. 25		(†)	0. 0	·03230	1. 0	56 ·8	58 ·6
0. 26	36. 50	0. 19	·1305	0. 38	·03230	Max.	57 ·4	59 ·4
1. 1	38. 15	0. 49	·1305	1. 33	·03250	9. 0	56 ·6	58 ·2
1. 26	38. 15	1. 4	·1309	4. 55	·03280	Min.	55 ·9	58 ·0
1. 38	39. 50	1. 24	·1308	9. 33	·03285	21. 0	56 ·3	58 ·8
2. 23	37. 5	1. 39	·1315	15. 19	·03270	22. 0	56 ·3	58 ·8
6. 0	32. 20	2. 4	·1306	17. 26	·03265	23. 0	56 ·4	58 ·8
9. 39	30. 55		***	19. 41	·03270			
9. 55	31. 45	3. 56	·1315	22. 56	·03226			
10. 8	31. 15	4. 6	·1312	23. 59	·03235			
10. 38	27. 10	4. 24	·1317					
11. 25	31. 0	4. 51	·1315					
14. 5	29. 55	5. 11	·1319					
15. 8	30. 5	5. 29	·1313					
15. 24	31. 15	5. 37	·1316					
15. 54	30. 20	5. 46	·1313					
16. 11	29. 25		***					
16. 56	31. 25	7. 12	·1320					
17. 48	28. 55	7. 24	·1325					
20. 39	28. 15	7. 47	·1316					
22. 10	30. 35	8. 13	·1317					
23. 15	33. 0	8. 30	·1322					
	(†)	8. 45	·1317					
		9. 6	·1320					
		9. 25	·1313					
		9. 39	·1313					
		10. 7	·1325					
		11. 5	·1312					
		11. 15	·1316					
		11. 34	·1317					
		11. 54	·1313					
		13. 41	·1311					
		15. 17	·1312					
		16. 3	·1317					
		16. 39	·1312					
		17. 25	·1319					
		20. 0	·1309					
		20. 30	·1311					
			***					
		22. 43	·1304					
		23. 59	·1307					
Apr. 3		Apr. 3		Apr. 3		Apr. 3		
	(†)	0. 0	·1307	0. 0	·03235	0. 0	56 ·5	59 ·3
1. 0	20. 36. 52*	0. 19	·1308	1. 1	·03240	1. 0	56 ·9	59 ·7
1. 23	36. 5	1. 25	·1311	2. 59	·03295	3. 0	57 ·1	60 ·2
3. 19	32. 40	2. 20	·1309	7. 53	·03317	Max.	58 ·0	60 ·8
6. 14	30. 30	3. 47	·1309	12. 27	·03300	9. 0	57 ·7	59 ·8
6. 26	30. 35	4. 45	·1312	17. 45	·03285	21. 0	56 ·8	58 ·2
7. 5	29. 40	5. 6	·1310	20. 18	·03280	22. 0	56 ·6	58 ·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 3 h m	° ′ ″	Apr. 3 h m		Apr. 3 h m		Apr. 3 h m		
7. 23	20. 29. 55	5. 38	·1316	22. 23:	·03235	23. 0	56 °4	58 °1
7. 38	27. 40	5. 45	·1314	23. 59	·03242	Min.	56 ·4	58 ·1
8. 24:	30. 15	6. 22	·1315					
9. 4	30. 0	6. 45	·1319					
17. 9	27. 30	7. 25	·1320					
17. 39	27. 55	7. 39	·1314					
20. 0	25. 40	9. 17	·1321					
20. 41	25. 55	10. 7	·1318					
22. 19	31. 10	10. 32	·1320					
23. 3	34. 50	10. 45	·1317					
23. 8	34. 50	11. 15	·1318					
23. 59	37. 50		(†)					
		14. 4	·1317					
		17. 2	·1316					
		17. 30	·1318					
		18. 29	·1319					
		20. 22	·1308					
		21. 28	·1305					
		22. 32	·1304					
		23. 0	·1308					
		23. 15	·1305					
		23. 59	·1305					
Apr. 4		Apr. 4		Apr. 4		Apr. 4		
0. 0	20. 37. 50	0. 0	·1305	0. 0	·03242	0. 0	56 ·7	59 ·0
0. 9	38. 5	1. 7	·1313	3. 7	·03300	Min.	56 ·5	59 ·0
0. 21	37. 5	1. 35	·1308	4. 25	·03310	1. 0	56 ·5	59 ·3
0. 28	38. 15		***	5. 1	·03326	2. 0	56 ·6	59 ·9
0. 35	38. 20	4. 13	·1315	5. 44	·03320	3. 0	56 ·6	60 ·0
	(†)	4. 27	·1305	10. 25	·03317	9. 0	58 ·0	60 ·1
0. 46	43. 35	4. 51	·1318	10. 53	·03290	Max.	58 ·6	60 ·9
1. 8	43. 20	5. 40	·1314	12. 27	·03300	21. 0	57 ·8	59 ·8
1. 11	44. 30	5. 56	·1315	15. 9	·03296	22. 0	58 ·0	59 ·2
1. 39	41. 45	6. 8	·1313	16. 24	·03320	23. 0	57 ·7	58 ·9
1. 48	42. 10	6. 26	·1317	16. 41	·03303			
2. 58	39. 50	7. 19	·1313	20. 55	·03310			
4. 15	37. 0	7. 34	·1307	22. 56	·03270			
4. 26	35. 0	7. 54	·1314	23. 59	·03272			
4. 35	34. 30	8. 6	·1323					
4. 42	33. 15	8. 24	·1320					
5. 49	34. 20	8. 41	·1312					
6. 41	34. 0	9. 16	·1311					
7. 13	33. 5	9. 48	·1310					
7. 37	30. 5	10. 4	·1314					
7. 43	30. 5	10. 19	·1315					
7. 54	26. 0	10. 35	·1343					
8. 7	27. 35	11. 11	·1317					
8. 16	27. 0	11. 37	·1315					
8. 47	31. 10	11. 56	·1311					
9. 23	32. 45	14. 31	·1312					
9. 34	32. 30	14. 42	·1315					
10. 10	33. 5	16. 14	·1308					
10. 25	30. 35	16. 26	·1318					
10. 38	32. 5	17. 33	·1313					
10. 43	32. 5	17. 59	·1319					
11. 55	33. 0	18. 36	·1312					
12. 18	33. 55	19. 14	·1317					
12. 39	33. 20	20. 58	·1306					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 2. From $22^h.\ 15^m.$ to $23^h.\ 15^m.$, damper experiments with the Declination Magnet were in progress; and from April $2^d.\ 23^h.\ 30^m.$ to April $3^d.\ 1^h.\ 10^m.$ the damper was in contact with the photographic magnet.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 4	° ′ ″	Apr. 4		h m		h m	°	°
h m		h m						
13. 25	20. 33 20	21. 59	·1304					
13. 42	34. 0	22. 15	·1300					
13. 49	33. 50	22. 26	·1303					
14. 24	35. 20	23. 8	·1300					
14. 29	34. 15	23. 59	·1310					
15. 8	33. 20							
15. 24	32. 0							
15. 52	33. 45							
16. 8	33. 20							
16. 27	34. 5							
16. 40	32. 55							
17. 8	32. 45							
17. 16	34. 0							
17. 28	33. 45							
17. 40	34. 25							
18. 8	33. 0							
18. 17	33. 15							
18. 26	33. 0							
18. 57	33. 30							
19. 31	30. 25							
20. 38	29. 55							
20. 53	30. 35							
21. 4	30. 15							
23. 59	41. 15							
Apr. 5		Apr. 5		Apr. 5		Apr. 5		
0. 0	20. 41. 15	0. 0	·1310	0. 0	·03272	0. 0	57 ·8	59 ·2
0. 24	42. 15	0. 17	·1311	0. 20	·03266	1. 0	57 ·8	59 ·4
0. 31	41. 0	0. 25	·1302	2. 25	·03307	2. 0	57 ·8	59 ·2
1. 10	41. 35	1. 26	·1314	4. 40	·03340	3. 0	58 ·4	61 ·3
1. 55	39. 50	1. 49	·1311	7. 39	·03330	Max.	59 ·4	62 ·2
2. 12	39. 25	2. 14	·1315	14. 5	·03307	9. 0	58 ·5	60 ·0
2. 31	37. 40	2. 29	·1309	14. 26	·03320	Min.	57 ·4	58 ·8
3. 0	36. 50	3. 26	·1317	15. 11	·03300	21. 0	58 ·0	58 ·9
4. 20	33. 45	4. 9	·1313	15. 54	·03310	22. 0	57 ·8	59 ·4
5. 57	32. 30	4. 44	·1321	16. 2	·03295	23. 0	58 ·2	59 ·4
7. 17	33. 40	5. 3	·1317	18. 27	·03307			
9. 10	33. 35	8. 42	·1326	23. 59	·03290			
9. 30	33. 20	8. 44	·1322					
10. 53	33. 45	9. 42	·1323					
12. 47	33. 20	9. 50	·1329					
13. 23	32. 10	10. 9	·1323					
14. 0	32. 25	10. 27	·1327					
14. 47	37. 55	10. 48	·1323					
15. 9	34. 35	10. 57	·1327					
15. 43	35. 40	11. 47	·1325					
16. 21	32. 45	11. 50	·1322					
16. 26	33. 35	12. 49	·1325					
17. 25	31. 30	14. 15	·1315					
18. 17	29. 35	14. 34	·1319					
18. 25	30. 45	14. 40	·1315					
18. 28	30. 15	14. 52	·1319					
18. 38	31. 5	15. 17	·1315					
19. 27	27. 50	15. 53	·1323					
19. 38	28. 20	16. 16	·1318					
19. 43	27. 25	18. 11	·1316					
19. 56	28. 30	18. 22	·1321					
20. 9	27. 50	18. 26	·1317					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 5	° ′ ″	Apr. 5		h m		h m	°	°
h m		h m						
20. 50	20. 29. 25	18. 33	·1320					
22. 9	37. 35	20. 6	·1314					
22. 27	36. 50	20. 51	·1303					
23. 4	37. 10	21. 26	·1308					
23. 20	38. 30	21. 58	·1306					
23. 59	40. 0	23. 59	·1316					
Apr. 6		Apr. 6		Apr. 6		Apr. 6		
0. 0	20. 40. 0	0. 0	·1316	0. 0	·03290	0. 0	58 ·3	59 ·8
0. 39	41. 40	1. 6	·1319	3. 55	·03230	1. 0	58 ·4	59 ·8
0. 43	41. 20	1. 27	·1315	7. 38	·03370	2. 0	58 ·4	59 ·8
1. 22	41. 20	3. 11	·1325	11. 4	·03360	3. 0	58 ·7	60 ·0
2. 9	39. 30	3. 30	·1321	12. 45	·03340	Max.	59 ·8	61 ·8
2. 23	39. 30	4. 17	·1318	12. 56	·03340	9. 0	59 ·1	61 ·1
4. 27	33. 55	4. 48	·1322	13. 15	·03330	21. 0	57 ·5	57 ·6
5. 57	31. 45	6. 8	·1319	14. 57	·03317	Min.	57 ·3	57 ·6
6. 18	31. 45	6. 26	·1315	18. 3	·03300	22. 0	57 ·3	57 ·6
7. 1	30. 30	7. 57	·1324	20. 26	·03280	23. 0	57 ·6	58 ·5
7. 29	31. 30	8. 10	·1321	22. 55	·03240			
7. 52	31. 0	8. 18	·1327	23. 59	·03255			
7. 57	32. 5	8. 47	·1323					
8. 9	31. 30	9. 26	·1328					
8. 27	32. 10	9. 59	·1324					
10. 56	31. 50	10. 10	·1324					
11. 36	33. 30	10. 21	·1328					
11. 53	33. 0	11. 30	·1323					
12. 30	33. 0	11. 42	·1327					
12. 41	34. 45	12. 32	·1328					
12. 52	32. 30	12. 46	·1335					
13. 29	32. 45	13. 0	·1329					
14. 41	33. 40	13. 11	·1330					
15. 0	32. 25	13. 30	·1325					
15. 22	33. 10	14. 2	·1327					
15. 41	31. 40	14. 5	·1325					
16. 35	32. 10	14. 52	·1329					
16. 58	31. 5	15. 3	·1325					
17. 21	31. 50	15. 35	·1330					
17. 39	30. 35	15. 45	·1328					
17. 53	31. 0	16. 15	·1328					
18. 12	30. 45	16. 47	·1333					
18. 24	31. 50	17. 25	·1330					
19. 25	29. 25	17. 58	·1333					
20. 41	28. 20	18. 26	·1327					
21. 29	29. 15	19. 8	·1331					
23. 0	33. 45	21. 56	·1317					
23. 11	32. 40	22. 30	·1323					
	***	23. 41	·1318					
23. 59	36. 45	23. 59	·1322					
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
0. 0	20. 36. 45	0. 0	·1322	0. 0	·03255	0. 0	57 ·6	58 ·9
1. 9	39. 10	0. 12	·1315	1. 10	·03280	1. 0	57 ·4	59 ·2
1. 23	38. 35	0. 34	·1323	6. 37	·03246	2. 0	57 ·8	60 ·4
1. 38	39. 5	0. 49	·1326	7. 0	·03250	3. 0	58 ·0	60 ·3
1. 56	37. 50	1. 21	·1324	9. 3	·03277	Max.	59 ·0	61 ·1
2. 27	37. 15	1. 45	·1331	9. 15	·03270	9. 0	58 ·4	60 ·2
3. 11	37. 5	2. 3	·1327	9. 48	·03280	Min.	57 ·0	58 ·2
3. 31	38. 0	3. 21	·1338	11. 23	·03250	21. 0	57 ·8	58 ·3

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
h m	° ′ ″	h m		h m		h m	°	°
5. 17	20. 34. 55	3. 31	·1333	11. 30	·03250	23. 0	57 ·8	58 ·7
6. 29	33. 10	3. 39	·1336	12. 4	·03240			
6. 39	33. 25	4. 8	·1327	13. 3	·03230			
6. 55	32. 0		***	15. 13	·03240			
7. 2	32. 35	5. 8	·1337	19. 57	·03220			
7. 11	31. 40	5. 12	·1333	23. 32	·03180			
7. 44	31. 50	5. 21	·1337	23. 59	·03175			
8. 1	30. 35	5. 49	·1340					
8. 25	30. 50	6. 9	·1337					
8. 51	31. 55	6. 26	·1341					
9. 10	29. 20	6. 41	·1330					
9. 24	29. 20	7. 2	·1339					
9. 30	28. 35	7. 12	·1335					
9. 55	31. 50	7. 24	·1338					
10. 10	30. 55	7. 44	·1335					
10. 43	23. 55	7. 57	·1329					
11. 12	26. 0	8. 7	·1333					
11. 25	28. 55	8. 30	·1327					
11. 51	31. 50	8. 38	·1331					
11. 58	30. 30	8. 48	·1323					
12. 33	30. 0	9. 13	·1330					
13. 8	30. 20	9. 27	·1322					
13. 40	31. 50	9. 40	·1326					
14. 0	31. 20	9. 48	·1333					
14. 9	32. 25	10. 2	·1335					
14. 39	31. 40	10. 12	·1329					
	***	10. 34	·1331					
15. 25	31. 30	10. 49	·1337					
16. 13	32. 45	11. 18	·1329					
17. 25	32. 0	11. 25	·1331					
17. 33	31. 20	11. 35	·1327					
18. 27	30. 30	12. 25	·1337					
18. 37	29. 55	13. 12	·1328					
19. 1	29. 30	13. 33	·1327					
19. 9	28. 35	14. 44	·1329					
19. 16	29. 30	14. 52	·1333					
19. 24	28. 35	14. 57	·1329					
19. 28	29. 15	15. 24	·1333					
19. 38	27. 20	15. 40	·1330					
19. 43	29. 15	16. 29	·1335					
20. 0	29. 15	17. 36	·1332					
20. 9	28. 25	18. 24	·1336					
20. 16	28. 40		***					
20. 29	28. 5	19. 23	·1330					
20. 47	29. 25	19. 32	·1333					
20. 56	28. 50		***					
21. 37	30. 30	20. 45	·1330					
22. 10	32. 30	21. 7	·1324					
22. 50	33. 25	21. 42	·1319					
22. 59	34. 30	22. 13	·1323					
23. 10	34. 30	23. 0	·1316					
23. 53	37. 0	23. 10	·1323					
23. 59	37. 5	23. 42	·1318					
		23. 59	·1320					
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
0. 0	20. 37. 5	0. 0	·1320	0. 0	·03175	0. 0	58 ·2	59 ·3
0. 28	38. 15	0. 45	·1323	2. 32	·03225	1. 0	58 ·3	59 ·8

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
h m	° ′ ″	h m		h m		h m	°	°
0. 47	20. 38. 25	2. 16	·1318	3. 11	·03230	2. 0	58 ·0	59 ·9
0. 54	39. 40	3. 5	·1327		·03215	3. 0	58 ·0	60 ·0
1. 51	37. 45	3. 31	·1325	5. 12	·03240	Max.	59 ·3	61 ·7
2. 32	37. 30	3. 49	·1333	5. 31	·03235	9. 0	58 ·8	61 ·0
4. 57	34. 40	4. 40	·1326	6. 5	·03257	Min.	57 ·2	58 ·0
5. 10	33. 30	4. 44	·1330	8. 1:	·03245	22. 0	57 ·8	58 ·0
5. 30	27. 40	5. 2	·1325	11. 53	·03255			
5. 41	27. 30	5. 13	·1327	19. 0	·03217			
6. 42	33. 10	5. 34	·1316	20. 30	·03206			
11. 0	32. 40	5. 56	·1332	22. 54	·03170			
11. 31	32. 55	6. 11	·1333	23. 59	·03160			
12. 9	31. 30	6. 27	·1329					
12. 52	31. 55	6. 40	·1332					
13. 34	33. 5	6. 48	·1328					
13. 42	32. 30	7. 35	·1335					
14. 10	32. 30	7. 56	·1332					
14. 23	32. 45	8. 6	·1336					
15. 9	32. 20	9. 18	·1331					
16. 7	32. 40	10. 36	·1334					
16. 46	32. 25	11. 15	·1331					
18. 54	30. 15	11. 29	·1335					
19. 3	29. 25	12. 40	·1336					
20. 9	28. 50	13. 8	·1330					
21. 0	29. 25	13. 39	·1333					
22. 15	33. 30	13. 49	·1330					
22. 25	33. 25	15. 0	·1331					
22. 54	35. 30	15. 20	·1327					
22. 58	35. 15	16. 56	·1333					
23. 8	36. 30	18. 50	·1333					
23. 59	38. 20	19. 15	·1327					
		19. 40	·1331					
		20. 59	·1321					
		21. 39	·1319					
		22. 3	·1309					
		22. 16	·1314					
		22. 32	·1310					
		23. 59	·1315					
Apr. 9		Apr. 9		Apr. 9		Apr. 9		
0. 0	20. 38. 20	0. 0	·1315	0. 0	·03160	Min.	57 ·4	58 ·6
0. 26	38. 40	2. 38	·1328	3. 45.	·03215	1. 0	57 ·8	59 ·4
1. 25	40. 30	2. 47	·1324	9. 33	·03235	9. 0	58 ·0	59 ·9
2. 28	39. 0	3. 8	·1329	15. 22	·03230	21. 0	58 ·4	59 ·3
2. 46	38. 5	3. 32	·1325	19. 26	·03220	Max.	59 ·2	61 ·1
6. 26	33. 0	3. 49	·1329	23. 59	·03170			
6. 41	33. 30	4. 12	·1323					
7. 11	32. 25	4. 47	·1329					
7. 53	32. 0	5. 33	·1327					
11. 4	32. 45	6. 15	·1332					
12. 11	33. 5	6. 42	·1330					
14. 38	32. 55	7. 38	·1335					
14. 57	33. 40	10. 17	·1331					
15. 31	32. 25	11. 21	·1334					
16. 9	33. 35	11. 57	·1331					
16. 28	32. 30	12. 28	·1332					
16. 40	32. 55	13. 49	·1328					
16. 54	32. 0	15. 10	·1331					
17. 24	32. 35	15. 48	·1331					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 9		Apr. 9						
h m	° ′ ″	h m		h m		h m	°	°
19. 14	20. 28. 30	16. 40	·1332					
20. 21:	28. 0	17. 13	·1330					
21. 26	29. 15	18. 5	·1334					
23. 59	39. 40	19. 43	·1329					
		21. 56:	·1313					
		23. 59	·1318					
Apr. 10		Apr. 10		Apr. 10		Apr. 10		
0. 0	20. 39. 40	0. 0	·1318	0. 0	·03170	1. 0	58 ·7	60 ·3
0. 39	41. 15	2. 12	·1331	2. 15	·03220	3. 0	58 ·7	60 ·5
2. 24	39. 10	2. 53	·1331	5. 34	·03250	Max.	59 ·2	61 ·2
3. 10	37. 5	3. 17	·1334	12. 11	·03240	9. 0	58 ·6	60 ·1
4. 43	34. 5	3. 43	·1331	17. 15	·03210	Min.	56 ·6	57 ·8
6. 1	32. 25	5. 17	·1332	18. 34	·03205	21. 0	57 ·4	58 ·0
12. 0	33. 5	6. 10	·1336	22. 27	·03140			
17. 23	31. 50	6. 19	·1334	23. 59	·03135			
20. 40	26. 35	6. 38	·1335					
21. 26	28. 30	7. 13	·1333					
23. 59	39. 25	8. 31	·1336					
		8. 49	·1331					
		9. 59	·1336					
		12. 11	·1332					
		16. 0	·1333					
		18. 36:	·1337					
		22. 8	·1312					
		23. 2	·1311					
		23. 59	·1319					
Apr. 11		Apr. 11		Apr. 11		Apr. 11		
0. 0	20. 39. 25	0. 0	·1319	0. 0	·03135	1. 0	57 ·8	59 ·8
0. 28	40. 5	3. 12	·1334	0. 24	·03140	3. 0	58 ·2	59 ·7
1. 39	41. 30	3. 34	·1340	3. 15	·03210	Max.	58 ·7	60 ·7
2. 13	40. 30	3. 53	·1337	4. 54	·03212	9. 0	58 ·1	59 ·9
3. 14	38. 5	4. 11	·1339	9. 10	·03220	21. 0	57 ·3	58 ·0
3. 24	38. 55	4. 25	·1337	14. 56	·03210	Min.	57 ·1	57 ·8
5. 30	33. 45	6. 0	·1340	15. 8	·03200	22. 0	57 ·1	57 ·8
6. 18	33. 20	6. 12	·1341	15. 16	·03208	23. 0	57 ·1	57 ·9
7. 26	33. 5	6. 19	·1340	16. 30	·03200			
8. 18	33. 25	6. 57	·1343	17. 25:	·03175			
11. 12	32. 55	7. 11	·1342	18. 28	·03180			
11. 40	29. 35	8. 51	·1345	20. 24	·03170			
11. 58	29. 25	9. 39	·1342	21. 53	·03140			
12. 42	31. 0	9. 46	·1345	22. 40	·03130			
13. 9	31. 0	11. 18	·1343	23. 59	·03140			
13. 23	31. 50	11. 30	·1339					
13. 55	30. 0	11. 35	·1343					
14. 31	30. 30	11. 41	·1341					
14. 52	30. 10	11. 48	·1345					
14. 58	30. 30	11. 57	·1340					
15. 2	29. 5	12. 4	·1343					
15. 23	31. 30	12. 27	·1339					
15. 27	30. 30	12. 33	·1342					
15. 53	30. 30	12. 49	·1336					
16. 26	33. 35	13. 48	·1339					
16. 54	31. 20	13. 53	·1334					
17. 25	30. 30	14. 10	·1336					
17. 37	29. 30	14. 13	·1333					
17. 52	29. 50	14. 19	·1337					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 11		Apr. 11						
h m	° ′ ″	h m		h m		h m	°	°
18. 24	20. 28. 30	14. 50	·1333					
18. 31	26. 30	14. 54	·1336					
18. 39	27. 10	15. 1	·1325					
18. 40	27. 0	15. 16	·1335					
18. 52	27. 50	15. 18	·1328					
18. 59	26. 10	15. 26	·1332					
19. 11	26. 35	15. 33	·1330					
19. 38	25. 40	16. 13	·1330					
19. 58	26. 20	16. 32	·1339					
20. 27	26. 20	16. 45	·1337					
	***	17. 6	·1339					
21. 26	29. 0	17. 49	·1333					
21. 59	31. 0	18. 28	·1330					
22. 9	32. 5	18. 41	·1335					
22. 13	32. 5	19. 2	·1331					
22. 27	34. 50	19. 12	·1333					
22. 50	36. 30	20. 1	·1331					
22. 56	35. 35	20. 57	·1320					
23. 9	37. 5	21. 6	·1322					
23. 11	37. 5	21. 26	·1316					
23. 39	42. 30	21. 45	·1319					
23. 59	43. 20	22. 4	·1312					
		22. 21	·1319					
		22. 48	·1314					
		22. 53	·1304					
		23. 6	·1311					
		23. 10	·1306					
		23. 34	·1318					
		23. 47	·1316					
		23. 59	·1317					
Apr. 12		Apr. 12		Apr. 12		Apr. 12		
0. 0	20. 43. 20	0. 0	·1317	0. 0	·03140	0. 0	57 ·2	58 ·6
0. 26	43. 35	0. 18	·1312	1. 55	·03190	1. 0	57 ·6	59 ·1
0. 41	45. 30	0. 35	·1317	4. 34	·03223	2. 0	57 ·6	59 ·4
0. 58	44. 25	0. 53	·1311	5. 3:	·03255	3. 0	57 ·5	59 ·6
1. 9	44. 50	1. 4	·1317	5. 41	·03240	Max.	58 ·0	60 ·2
1. 22	44. 30	1. 32	·1318	6. 0	·03244	9. 0	57 ·7	59 ·0
1. 41	43. 55	1. 43	·1323	6. 16	·03235	Min.	56 ·1	57 ·8
1. 56	43. 40	2. 0	·1335	8. 36	·03235	21. 0	56 ·5	57 ·8
	(†)	2. 19	·1334	9. 34	·03210	22. 0	57 ·1	58 ·0
3. 20	44. 41*	2. 39	·1343	9. 41	·03210	23. 0	57 ·1	58 ·4
3. 22	44. 45	2. 46	·1333	9. 57	·03182			
3. 31	44. 45	2. 48	·1334	10. 2	·03190			
3. 46	42. 5	3. 9	·1322	10. 50	·03156			
4. 7	40. 25	3. 14	·1329	11. 21:	·03135			
4. 16	40. 25	3. 34	·1341	12. 3	·03150			
4. 23	40. 50	3. 52	·1323	12. 33	·03150			
4. 32	37. 55	4. 11	·1319	12. 41	·03140			
4. 52	29. 30	4. 19	·1323	13. 4	·03080			
5. 16	35. 5	4. 44	·1313	13. 50	·03100			
5. 31	34. 25	5. 11	·1342	14. 11	·03110			
5. 41	35. 30	5. 33	·1331	15. 6	·03115			
5. 47	35. 30	5. 44	·1331	15. 21	·03110			
6. 3	36. 40	5. 51	·1329	16. 21	·03123			
6. 11	36. 25	6. 4	·1333	17. 11	·03130			
6. 16	35. 20	6. 18	·1322	17. 40	·03120			
6. 41	36. 0	6. 45	·1318	19. 0:	·03135			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 12d. 2h. 0m. to 3h. 15m. The Declination Magnet was removed from its stirrup and the brass bar was inserted.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 12		Apr. 12		Apr. 12				
h m	° ′ ″	h m		h m		h m	°	°
7. 12	20. 34. 10	7. 15	·1322	20. 59	·03110			
7. 27	34. 30	7. 47	·1318	23. 59	·03110			
7. 57	31. 20	7. 59	·1321					
8. 21	32. 45	8. 13	·1317					
8. 39	31. 25	8. 26	·1321					
9. 1	31. 15	8. 49	·1315					
9. 13	33. 50	8. 56	·1318					
9. 22	18. 30	9. 25	·1313					
9. 42	25. 20	9. 42	·1354					
9. 57	19. 30	9. 56	·1327					
10. 44	26. 20	10. 13	·1336					
11. 13	15. 55	10. 19	·1333					
11. 34	20. 30	10. 26	·1335					
11. 49	21. 45	10. 40	·1327					
12. 53	36. 50	10. 49	·1328					
13. 14	35. 35	11. 0	·1316					
13. 52	29. 35	11. 16	·1307					
14. 4	26. 40	11. 33	·1308					
14. 32	25. 55	11. 50	·1302					
15. 11	32. 5	12. 0	·1304					
15. 38	28. 20	12. 26	·1303					
15. 50	28. 35	12. 46	·1352					
16. 21	27. 30	13. 18	·1322					
16. 32	29. 30	13. 39	·1323					
17. 10	33. 25	13. 55:	·1318					
17. 25	33. 25	14. 18	·1324					
17. 39	34. 30	14. 50	·1316					
17. 43	34. 0	14. 57	·1320					
18. 11	34. 20	15. 7	·1317					
18. 40	30. 40	15. 34	·1325					
18. 55	31. 25	16. 0	·1323					
19. 9	30. 35	16. 6	·1320					
19. 38	31. 30	16. 23	·1319					
20. 9	30. 0	16. 47	·1304					
20. 28	32. 5	16. 58	·1304					
20. 40	32. 30	17. 30	·1329					
20. 51	31. 55	18. 8	·1325					
22. 25	37. 35	18. 14	·1321					
23. 3	38. 25	18. 49	·1323					
23. 37	40. 25	19. 55	·1315					
23. 40	41. 45	20. 38	·1315					
23. 51	41. 5	21. 2	·1312					
23. 59	41. 30	21. 56	·1304					
		23. 32	·1307					
		23. 41	·1311					
		23. 48	·1307					
		23. 59	·1310					
Apr. 13		Apr. 13		Apr. 13		Apr. 13		
0. 0	20. 41. 30	0. 0	·1310	0. 0	·03110	0. 0	57 ·6	59 ·0
1. 33	43. 25	0. 32	·1313	1. 23	·03140	1. 0	57 ·6	59 ·6
2. 4	42. 5	1. 7	·1318	2. 30	·03180	2. 0	57 ·7	59 ·8
2. 21	42. 5	1. 21	·1316	3. 31	·03200	3. 0	57 ·9	59 ·8
2. 40	40. 45	1. 50	·1317	5. 11	·03210	Max.	58 ·3	60 ·4
3. 3	41. 30	2. 29	·1322	9. 47	·03210	9. 0	57 ·8	59 ·7
3. 54	38. 20	2. 52	·1315	10. 2	·03205	Min.	57 ·0	58 ·3
4. 4	38. 35	3. 25	·1328	10. 17	·03210	21. 30	57 ·4	58 ·5
4. 38	38. 20	4. 43	·1330	10. 54:	·03195			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 13		Apr. 13		Apr. 13				
h m	° ′ ″	h m		h m		h m	°	°
5. 1	20. 37. 40	4. 58	·1326	11. 38	·03204			
5. 28	37. 55	5. 30	·1332	12. 50	·03200			
6. 1	36. 25	5. 46	·1320	17. 39	·03190			
6. 38	37. 0	6. 0	·1318	19. 27	·03180			
8. 25	35. 30	6. 20	·1323	22. 3	·03150			
8. 47	35. 30	6. 36	·1330	23. 59	·03150			
9. 13	29. 50	7. 25	·1324					
9. 40	28. 25	8. 2	·1330					
9. 56	31. 40	8. 30	·1326					
10. 9	30. 25	9. 4	·1329					
10. 26:	32. 55	9. 17	·1323					
10. 54	28. 40	9. 30	·1331					
11. 39	34. 0	9. 47	·1326					
12. 8	35. 10	10. 8	·1317					
12. 55	34. 30	10. 32	·1333					
13. 42	35. 20	11. 23	·1315					
15. 0	35. 0	12. 20	·1324					
15. 40	33. 25	14. 44	·1319					
15. 56	34. 0	16. 4	·1321					
16. 40	34. 15	16. 27	·1318					
17. 11	35. 30	17. 21	·1321					
18. 30	33. 40	17. 41	·1328					
19. 7	32. 20	18. 41	·1322					
19. 51	33. 5	19. 16	·1326					
20. 40	32. 30	21. 51	·1315					
22. 32	37. 40	22. 17	·1310					
22. 47	37. 40	23. 59	·1316					
23. 9	38. 30							
23. 29	40. 0							
23. 41	39. 45							
23. 47	40. 30							
23. 59	40. 30							
Apr. 14		Apr. 14		Apr. 14		Apr. 14		
0. 0	20. 40. 30	0. 0	·1316	0. 0	·03150	1. 0	57 ·4	58 ·6
0. 26	40. 30	0. 25	·1314	2. 43	·03190	Max.	58 ·2	59 ·7
0. 54	41. 30	0. 54	·1321	3. 50	·03190	8. 0	57 ·4	58 ·8
0. 57	42. 10	1. 4	·1319	5. 40	·03210	Min.	56 ·4	57 ·9
1. 8	41. 20	2. 17	·1325	6. 15	·03220	21. 0	57 ·2	58 ·5
2. 40	39. 35	2. 19	·1323	7. 11	·03230			
3. 55	36. 55	2. 53	·1327	10. 28	·03210			
4. 27	36. 25	4. 0	·1325	11. 1	·03190			
5. 38	36. 10	4. 10	·1329	13. 55	·03195			
5. 51	36. 50	4. 29	·1325	15. 46	·03170			
6. 10	37. 0	5. 32	·1334	16. 7	·03172			
6. 25	37. 40	5. 44	·1331	16. 54	·03165			
6. 39	37. 10	6. 12	·1339	19. 47	·03170			
6. 47	37. 35	6. 49	·1318	21. 31	·03146			
6. 54	36. 50	6. 57	·1319	23. 59	·03115			
7. 3	36. 50	7. 12	·1314					
7. 13	38. 10	7. 19	·1319					
7. 21	37. 5	7. 43	·1321					
7. 27	36. 45	7. 57	·1314					
7. 36	35. 10	8. 12	·1322					
7. 55	37. 45	8. 37	·1319					
8. 8	35. 35	9. 16	·1326					
8. 13	35. 35	10. 14	·1321					
8. 22	36. 5	10. 26	·1325					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. E. Magnet.
Apr. 14		Apr. 14						
h m	° ′ ″	h m		h m		h m	°	°
8. 40	20. 35. 40	10. 44:	·1344					
9. 13	36. 20	11. 13	·1322					
9. 57	34. 35	11. 36	·1318					
10. 13	35. 30	11. 40	·1321					
10. 25	33. 0	12. 15	·1317					
10. 35	26. 35	12. 27	·1321					
10. 54	31. 10	13. 43	·1317					
10. 59	31. 25	14. 12	·1325					
11. 12	33. 15	14. 29	·1320					
11. 29	32. 55	15. 31	·1326					
11. 40	32. 25	15. 50	·1321					
12. 25	34. 55	16. 32	·1326					
12. 58	34. 20	16. 43	·1322					
13. 29	34. 35	17. 25	·1327					
13. 40	35. 30	19. 40	·1320					
13. 53	37. 30	19. 53	·1317					
14. 9	37. 30	21. 59	·1307					
14. 16	38. 20	23. 18	·1308					
14. 26	36. 45	23. 59	·1314					
14. 59	36. 0							
15. 23	33. 55							
15. 41	33. 30							
16. 2	36. 10							
16. 26	34. 25							
17. 18	34. 35							
17. 31	33. 30							
18. 9	32. 25							
18. 21	32. 30							
18. 35	32. 0							
18. 41	32. 30							
19. 9	31. 30							
19. 37	32. 50							
20. 2	32. 0							
20. 54	34. 0							
21. 12	34. 0							
21. 47	35. 30							
21. 58	35. 0							
22. 57	37. 5							
23. 27	37. 30							
23. 43	38. 35							
23. 59	39. 5							
Apr. 15		Apr. 15		Apr. 15		Apr. 15		
0. 0	20. 39. 5	0. 0	·1314	0. 0	·03115	1. 0	57 ·0	58 ·9
1. 4	40. 0	0. 53	·1319	0. 59	·03142	3. 0	57 ·4	59 ·0
1. 33	43. 5	1. 18	·1337	1. 55	·03170	Max.	57 ·4	59 ·1
1. 55	43. 5	1. 43	·1331	2. 26	·03160	9. 0	57 ·2	59 ·0
2. 11	43. 45	1. 57	·1330	2. 48	·03180	Min.	55 ·8	57 ·0
2. 26	42. 0	2. 12	·1334	3. 10	·03170	22. 0	55 ·8	57 ·2
2. 37	40. 55	2. 46	·1320		·03190			
2. 47	41. 0	3. 12	·1332	5. 30	·03230			
2. 56	42. 10	3. 26	·1323	6. 3	·03250			
3. 9	41. 35		***	7. 19	·03265			
3. 57	41. 20	4. 14	·1331	7. 28	·03252			
4. 8	40. 30	4. 25	·1339	7. 35	·03257			
4. 24	41. 10	4. 37	·1338	8. 2	·03217			
4. 31	40. 30	4. 52	·1343	10. 27	·03206			
4. 47	41. 35	5. 3	·1340	10. 54	·03170			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. E. Magnet.
Apr. 15		Apr. 15		Apr. 15				
h m	° ′ ″	h m		h m		h m	°	°
4. 54	20. 41. 0	5. 11	·1341	11. 7	·03174			
5. 11	42. 0	5. 49	·1329	11. 49	·03165			
5. 27	41. 40	6. 26	·1334	11. 58	·03170			
5. 54	39. 25	6. 29	·1330	12. 18	·03150			
6. 30	37. 10	6. 45	·1329	14. 46	·03176			
6. 38	37. 10	6. 58	·1320	15. 30	·03170			
7. 11	30. 40	7. 7	·1322	15. 46	·03146			
7. 19	31. 20	7. 10	·1316	16. 41	·03100			
7. 26	27. 15	7. 33	·1328	18. 18	·03085			
7. 39	34. 20	7. 48	·1359	18. 28	·03100			
7. 55	35. 50	8. 15	·1320	19. 17	·03100			
8. 5	34. 0	8. 23	·1325	19. 45	·03097			
8. 22	35. 15	8. 48	·1327	20. 8	·03110			
9. 9	33. 0	8. 56	·1325	22. 0	·03097			
9. 28	30. 0	9. 12	·1329	23. 59	·03100			
9. 58	31. 0	9. 37	·1321					
10. 18	35. 10	10. 17	·1322					
10. 25	35. 25	10. 36:	·1330					
10. 33	30. 5	10. 52	·1325					
10. 48	22. 55	11. 18:	·1339					
10. 56	22. 55	11. 34	·1318					
11. 13	28. 5	11. 48	·1311					
11. 38	35. 15	12. 11:	·1332					
11. 54	31. 0	12. 40	·1335					
12. 8	28. 50	13. 4	·1327					
13. 9	29. 10	13. 14	·1330					
13. 11	27. 55	13. 39	·1322					
13. 29	27. 55	14. 2	·1320					
13. 55	30. 50	14. 30	·1323					
14. 27	32. 20	14. 39	·1318					
14. 33	31. 15	15. 0	·1325					
14. 43	32. 10	15. 6	·1323					
15. 9	32. 20	15. 14	·1325					
15. 35	39. 40	15. 18	·1322					
15. 43	38. 20	16. 4	·1339					
15. 55	39. 20	16. 7	·1337					
16. 8	42. 50	16. 27	·1348					
16. 11	42. 50	16. 35	·1346					
16. 18	43. 55	17. 3:	·1351					
16. 32	43. 55	17. 35	·1335					
16. 52	38. 15	18. 2:	·1340					
17. 5	37. 25	18. 22	·1329					
17. 17	38. 10	18. 41	·1331					
17. 32	39. 30	19. 17	·1325					
17. 49	36. 0	19. 30	·1316					
18. 8	31. 25	19. 43	·1304					
18. 13	30. 30	20. 7	·1305					
18. 22	29. 30	20. 23	·1295					
18. 43	31. 5	20. 32	·1295					
18. 58	31. 5	21. 10	·1272					
19. 17	33. 0	22. 4	·1287					
19. 23	34. 30	22. 25	·1282					
19. 27	32. 5	23. 2	·1288					
19. 36	32. 45	23. 43	·1305					
19. 42	31. 30	23. 59	·1304					
19. 54	31. 35							
19. 58	31. 0							
20. 6	33. 5							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Apr. 15 h m	° ′ ″
20. 13	20. 31. 55
20. 43	33. 35
21. 25	44. 40
21. 38	45. 30
21. 59	43. 50
22. 32	42. 30
22. 43	43. 5
23. 24	45. 0
23. 54	48. 5
23. 59	48. 5
Apr. 16	
0. 0	20. 48. 5
0. 26	48. 5
0. 38	47. 25
1. 13	50. 20
1. 31	49. 35
1. 58	47. 10
2. 11	47. 45
2. 28	47. 0
2. 44	46. 0
2. 53	46. 30
3. 6	46. 55
3. 12	45. 20
3. 28	45. 35
3. 39	45. 25
3. 47	44. 45
3. 54	44. 45
4. 13	42 50
4. 24	42. 55
4. 29	44. 30
4. 41	43. 5
4. 45	43. 35
4. 54	43. 0
5. 2	43. 40
5. 11	42. 30
5. 22	42. 40
5. 26	41. 30
5. 35	41. 30
5. 40	39. 25
5. 57	39. 25
6. 8	38. 55
6. 16	35. 0
6. 24	34. 35
6. 41	40. 0
6. 56	36. 45
6. 59	36. 45
7. 14	33. 5
7. 24	33. 35
7. 38	31. 25
7. 42	31. 55
7. 55	31. 35
8. 30⁝	33. 5
8. 41	28. 5
8. 53	22. 55
9. 0	27. 5
9. 11	30. 30
9. 17	29. 5

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Apr. 16	
0. 0	·1304
0. 10	·1300
0. 20	·1306
0. 31	·1302
	***
1. 15	·1312
1. 45	·1304
2. 0	·1307
2. 18	·1317
2. 27	·1312
3. 8	·1327
3. 11	·1315
3. 18	·1313
3. 36	·1324
3. 43	·1320
3. 54	·1323
4. 10	·1314
4. 29	·1327
4. 37	·1318
	***
5. 2	·1324
5. 12	·1315
5. 19	·1319
5. 30	·1314
5. 38	·1318
5. 41	·1314
5. 53	·1321
5. 56	·1319
6. 12	·1322
6. 35	·1338
6. 46	·1318
7. 3	·1321
7. 14	·1311
7. 25	·1315
7. 36	·1308
7. 48	·1309
7. 58	·1317
8. 23	·1309
8. 32	·1312
8. 48	·1303
8. 54	·1312
9. 3	·1318
9. 12	·1312
9. 21	·1315
9. 27	·1312
9. 38	·1313

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Apr. 16	
0. 0	·03100
1. 37	·03140
3. 1	·03200
3. 15	·03185
3. 31	·03205
5. 13	·03243
5. 48	·03270
6. 33	·03290
6. 45	·03277
7. 30	·03290
8. 7	·03280
8. 25	·03275
8. 39	·03265
9. 3	·03260
9. 14	·03260
9. 30	·03256
9. 35	·03251
10. 2	·03230
10. 24	·03220
10. 35	·03230
10. 53	·03220
11. 5	·03227
11. 48	·03175
12. 15	·03195
12. 25	·03180
12. 33	·03175
12. 40	·03180
12. 53	·03170
13. 24	·03106
13. 55	·03125
14. 16	·03122
14. 27	·03135
14. 45	·03100
15. 7	·03090
15. 41⁝	·03150
17. 38	·03180
18. 50	·03190
18. 55	·03195
20. 57	·03170
21. 53	·03140
23. 59	·03160

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Apr. 16		
Min.	56 ·0	58 ·0
1. 0	56 ·4	58 ·9
8. 0	57 ·0	59 ·4
21. 0	57 ·2	59 ·1
Max.	57 ·9	59 ·8

Greenwich Mean Solar Time.	Western Declination.
Apr. 16 h m	° ′ ″
9. 25	20. 27. 30
9. 31	27. 40
9. 38	26. 20
9. 43	22. 55
9. 52	23. 10
10. 8	21. 25
10. 23	22. 0
10. 29	25. 5
10. 44	30. 35
11. 2	27. 55
11. 27	28. 50
11. 40	26. 5
11. 59	26. 5
12. 9	27. 45
12. 19	25. 30
12. 46	35. 35
13. 0	38. 40
13. 9	36. 30
13. 24	26. 30
13. 40	18. 35
14. 28	25. 35
14. 53	16. 0
15. 4	16. 0
15. 43	28. 50
15. 59	30. 25
16. 8	29. 20
16. 22	27. 55
16. 30	25. 40
17. 0	28. 10
17. 8	27. 10
17. 13	28. 0
17. 31	28. 15
17. 40	28. 50
17. 55	28. 15
18. 10	29. 55
18. 26	33. 40
18. 52	34. 50
19. 9	30. 35
19. 39	33. 5
20. 13	32. 30
20. 28	33. 25
20. 47	32. 50
21. 16	35. 30
22. 10	35. 25
22. 39	38. 0
22. 51	38. 30
23. 10	42. 35
23. 59	46. 5
Apr. 17	
0. 0	20. 46. 5
0. 10	44. 50
0. 24	44. 50
0. 38	49. 25
0. 45	48. 40
0. 54	48. 10
0. 59	50. 35
1. 8	48. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 16 h m	
9. 55	·1316
10. 7	·1307
10. 17	·1303
10. 25	·1294
10. 35	·1296
10. 54	·1291
11. 24	·1339
11. 50	·1309
11. 56	·1310
12. 4	·1307
12. 16	·1322
12. 21	·1319
12. 47	·1349
13. 25	·1292
13. 42	·1306
13. 57	·1315
14. 16	·1308
14. 40	·1322
15. 13	·1305
15. 46	·1314
16. 13	·1311
16. 35	·1313
16. 48	·1318
	***
17. 44	·1314
17. 57	·1309
18. 30	·1310
18. 47	·1305
19. 14	·1310
19. 25	·1316
20. 3	·1311
20. 36	·1317
20. 49	·1313
21. 8	·1315
22. 0	·1302
22. 26	·1301
22. 31	·1295
22. 41	·1298
22. 48	·1288
23. 0	·1297
23. 10	·1294
23. 44	·1297
	(†)
Apr. 17	
	(†)
0. 5	·1300
0. 13	·1289
0. 34	·1321
0. 46	·1322
0. 55	·1315
1. 4	·1328
1. 9	·1311

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Apr. 17	
0. 0	·03160
0. 8	·03150
0. 28	·03175
0. 46	·03170
0. 55	·03180
1. 7	·03178
1. 56	·03270
2. 8	·03270

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Apr. 17		
Min.	57 ·6	60 ·0
1. 0	57 ·8	60 ·2
3. 0	58 ·0	60 ·8
9. 0	58 ·4	61 ·0
Max.	59 ·4	61 ·9
21. 0	58 ·7	61 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁝ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Apr. 17		Apr. 17		Apr. 17				
h m	° ′ ″	h m		h m		h m	°	°
1. 23	20. 53. 25	1. 23	·1310	2. 29	·03255			
1. 35	44. 40	1. 41	·1291	2. 37	·03282			
1. 48	41. 0	1. 52	·1293	2. 55	·03300			
1. 57	39. 15	2. 5	·1308		***			
2. 1	40. 30	2. 25	·1327	3. 9	·03306			
2. 19	41. 35	2. 31	·1320	3. 24	·03340			
2. 31	47. 0	2. 42	·1345	3. 32	·03392			
2. 53	51. 35	3. 3	·1357	3. 37	·03407			
3. 5	51. 55	3. 18	·1336	3. 39	·03400			
3. 11	55. 40	3. 25	·1346	3. 45	·03425			
3. 24	56. 0	3. 31	·1330		***			
3. 29	54. 0	3. 36	·1348	4. 0	·03440			
3. 38	47. 25	3. 45	·1308	4. 48	·03380			
3. 42	50. 0	3. 53	·1323	5. 47	·03360			
3. 56	29. 35	4. 2	·1313	7. 25	·03360			
4. 1	33. 30	4. 18	·1347	7. 53	·03340			
4. 39	39. 25	4. 45	·1313	8. 21	·03336			
4. 44	41. 25	4. 58	·1319	8. 45	·03340			
4. 56	41. 40	5. 6	·1325	9. 3	·03310			
5. 8	40. 30	5. 26	·1311	9. 48	·03312			
5. 11	40. 35	5. 46	·1320	10. 14	·03310			
5. 13	40. 10	6. 0	·1326	11. 0	·03280			
5. 34	40. 30	6. 26	·1325	11. 31	·03230			
5. 39	39. 55	6. 41	·1317	11. 48	·03250			
6. 0	39. 55	6. 47	·1320	12. 40	·03257			
6. 10	39. 30	7. 0	·1317	13. 2	·03270			
6. 39	36. 35	7. 24:	·1324	13. 39	·03280			
6. 57	36. 55		***	14. 25	·03290			
7. 11	35. 55	7. 56	·1315	14. 45	·03270			
7. 38	36. 5		***	15. 0	·03250			
7. 43	35. 30	8. 30	·1316	15. 16	·03250			
7. 56	35. 30	8. 52	·1339	15. 53:	·03210			
8. 8	33. 25	9. 13	·1312	16. 18	·03220			
8. 11	33. 25		***	17. 3	·03272			
8. 26	29. 5	9. 41	·1309	17. 37	·03270			
8. 31	29. 5	9. 52	·1314	18. 46	·03285			
8. 40	30. 35	10. 11	·1299	19. 11:	·03275			
8. 59	26. 20	10. 16	·1306	20. 5	·03296			
9. 4	20. 10	10. 27	·1298	20. 30	·03307			
9. 11	21. 5	10. 53	·1287	22. 1	·03310			
9. 26	19. 35	11. 24	·1323	22. 32	·03310			
9. 43	22. 40	11. 32	·1316	23. 9	·03317			
9. 52	21. 25	11. 46	·1321	23. 59	·03310			
10. 3	24. 5	11. 56	·1317					
10. 10	28. 10	12. 12	·1334					
10. 35	32. 5	12. 24	·1326					
10. 40	34. 55	12. 38	·1314					
10. 52	36. 10	12. 44	·1313					
10. 55	35. 30	12. 52	·1310					
10. 58	36. 10	13. 7	·1322					
11. 10	32. 25	13. 40	·1318					
11. 23	32. 25	13. 56	·1314					
11. 30	25. 35		***					
11. 41	22. 25	14. 41	·1310					
12. 57	25. 0	15. 2	·1289					
13. 13	32. 5	15. 39	·1325					
13. 29	31. 35	15. 53	·1322					
13. 35	30. 50	16. 4	·1327					
Apr. 17		Apr. 17						
h m	° ′ ″	h m		h m		h m	°	°
13. 41	20. 30. 50	16. 12	·1324					
14. 10	28. 25	16. 37	·1326					
14. 13	27. 5	16. 52	·1319					
14. 23	27. 5	17. 12	·1330					
14. 27	28. 5	17. 41	·1308					
14. 43	27. 5	17. 54	·1292					
14. 58	25. 50	18. 12	·1284					
15. 23	42. 45	18. 14	·1289					
15. 40	39. 30	18. 26	·1289					
15. 56	33. 30	18. 48	·1303					
16. 23	27. 5	18. 55	·1298					
16. 38	26. 55	19. 32	·1318					
16. 53	29. 5	19. 51	·1310					
16. 59	28. 30	20. 5	·1315					
17. 8	29. 55	20. 41	·1308					
17. 16	29. 55	20. 52	·1313					
17. 25	31. 0	21. 15	·1302					
17. 31	30. 25	21. 27	·1306					
17. 44	30. 55	22. 19	·1299					
17. 55	32. 30	22. 30	·1307					
17. 58	31. 35	22. 56	·1292					
18. 9	36. 0	23. 14	·1301					
18. 13	35. 5	23. 25	·1293					
18. 41	40. 30	23. 41	·1296					
18. 47	40. 55	23. 45	·1292					
18. 57	43. 10	23. 59	·1309					
19. 10	40. 40							
19. 13	40. 50							
19. 25	38. 5							
19. 55	33. 40							
	***							
21. 6	34. 35							
21. 10	33. 30							
22. 10	35. 0							
22. 26	37. 30							
22. 39	37. 50							
22. 56	36. 45							
23. 4	39. 35							
23. 59	40. 10							
Apr. 18		Apr. 18		Apr. 18		Apr. 18		
0. 0	20. 40. 10	0. 0	·1309	0. 0	·03310	1. 0	59 ·1	61 ·8
0. 10	40. 10	0. 41	·1301	0. 53	·03310	3. 0	59 ·6	62 ·3
0. 12	43. 0	0. 46	·1294	3. 0	·03410	Max.	60 ·0	62 ·3
0. 41	44. 15	1. 25	·1315	4. 33	·03488	9. 0	59 ·6	62 ·2
0. 53	41. 50	1. 40	·1316	4. 48	·03510	Min.	58 ·4	60 ·2
0. 58	41. 50	1. 50	·1323	5. 15	·03470	21. 0	58 ·8	60 ·3
1. 11	43. 0	2. 2	·1319	6. 0	·03450	22. 0	59 ·0	60 ·5
1. 17	45. 0	2. 11	·1303	6. 46	·03450	23. 0	58 ·7	60 ·2
1. 26	43. 10	2. 18	·1302	7. 56	·03448			
1. 41	42. 30	2. 39	·1326	8. 25	·03440			
1. 52	43. 20	2. 46	·1320	9. 19	·03450			
1. 59	43. 20	2. 53	·1328	9. 35	·03438			
2. 9	41. 5	2. 55	·1323	11. 25	·03430			
2. 25	39. 55	3. 2	·1326	11. 40	·03412			
2. 39	40. 0	3. 7	·1323	11. 48	·03410			
2. 42	39. 10	3. 27	·1345	12. 11	·03355			
3. 5	39. 30	3. 52	·1322	12. 37	·03340			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 18		Apr. 18		Apr. 18				
h m	° ′	h m		h m		h m	°	°
3. 32	20. 43 0	4. 12	·1336	13. 18	·03370			
3. 47	43. 30	4. 34	·1334	14. 25	·03400			
3. 53	42. 40	4. 53	·1388	15. 15	·03390			
4. 9	44. 0	4. 58	·1367	15. 33	·03395			
4. 23	42. 55	5. 19	·1330	16. 30:	·03340			
4. 28	39. 5	5. 30	·1334	17. 11	·03360			
4. 39	19. 45	5. 39	·1328	18. 4	·03380			
4. 54	34. 20	6. 27	·1331	18. 49	·03390			
4. 58	34. 20	6. 42	·1337		***			
5. 2	35. 5	7. 4	·1331	19. 33	·03400			
5. 9	35. 5	7. 14	·1337	20. 37	·03390			
5. 13	36. 55	7. 29	·1331	22. 3	·03400			
5. 24	36. 55	7. 57	·1336	23. 59	·03382			
5. 30	38. 15	8. 10	·1334					
5. 43	38. 40	8. 21	·1325					
5. 56	37. 35	8. 40	·1339					
6. 9	37. 40	9. 10	·1322					
6. 25	36. 25	9. 39	·1331					
6. 39	36. 35	9. 58	·1327					
6. 57	36. 0	10. 12	·1331					
7. 14	35. 50	10. 26	·1326					
7. 29	34. 10	11. 35	·1339					
7. 57	35. 0	11. 41	·1334					
8. 8	33. 0	11. 47	·1343					
8. 11	33. 0	12. 4	·1331					
8. 29	24. 30	12. 25	·1357					
8. 43	27. 5	12. 40	·1337					
9. 8	28. 15	12. 56	·1329					
9. 23	30. 35	13. 11	·1330					
9. 31	29. 30	13. 22	·1335					
9. 58	31. 50	13. 46	·1322					
10. 6	33. 5	14. 4	·1325					
10. 45	33. 25	14. 23	·1325					
11. 44	37. 20	14. 40	·1331					
11. 59	43. 55	14. 54	·1328					
12. 15	34. 10	15. 5	·1320					
12. 38	37. 20	15. 20	·1319					
12. 54	33. 0	16. 10	·1328					
13. 10	31. 25	16. 43	·1319					
13. 24	32. 35	16. 53	·1327					
13. 52	31. 30	17. 11	·1334					
13. 59	29. 55	17. 17	·1327					
14. 13	30. 25	18. 2	·1337					
14. 26	29. 10	18. 13	·1325					
14. 41	26. 50	18. 26	·1331					
15. 6	32. 15	18. 38	·1319					
15. 14	33. 20	18. 45	·1320					
15. 29	36. 55	19. 2	·1310					
15. 41	37. 20	19. 13	·1315					
16. 0	39. 30	19. 17	·1310					
16. 24	39. 50	19. 24	·1316					
16. 40	33. 50	19. 49	·1310					
16. 57	33. 35	20. 12	·1317					
17. 8	36. 5	21. 0	·1312					
17. 11	33. 10	21. 19	·1303					
17. 41	30. 30	21. 26	·1308					
17. 58	31. 40	21. 37	·1297					
18. 9	29. 20	21. 46	·1297					
Apr. 18		Apr. 18						
h m	° ′ ″	h m		h m		h m	°	°
18. 17	20. 31. 25	22. 10	·1319					
18. 28	30. 45	22. 14	·1315					
18. 39	31. 35	22. 24	·1320					
18. 54	28. 55	22. 41	·1315					
19. 6	29. 30	22. 55	·1319					
19. 9	28. 30	23. 26	·1317					
	***	23. 41	·1315					
20. 14	33. 40	23. 59	·1323					
20. 47	32. 0							
21. 21	33. 0							
21. 26	35. 50							
21. 34	34. 0							
21. 39	35. 0							
21. 53	32. 5							
22. 0	32. 30							
22. 5	34. 35							
22. 10	33. 35							
22. 26	35. 50							
	(†)							
Apr. 19		Apr. 19		Apr. 19		Apr. 19		
	(†)	0. 0	·1323	0. 0	·03382	0. 0	58 ·8	60 ·6
0. 26	20. 39. 0	0. 26	·1317	0. 55	·03404	1. 0	59 ·0	60 ·9
0. 55	39. 55	0. 38	·1322	2. 57	·03410	2. 0	59 ·0	61 ·3
1. 1	39. 0	1. 4	·1325	3. 13	·03453	3. 0	59 ·1	61 ·1
1. 56	39. 30	1. 35	·1313	3. 17	·03446	Max.	60 ·0	61 ·4
2. 4	38. 55		***	3. 39	·03460	9. 0	59 ·5	61 ·2
2. 28	40. 15	2. 4	·1305	4. 30	·03435	21. 0	58 ·6	59 ·7
2. 46	39. 25	2. 40	·1313	5. 32	·03427	22. 0	58 ·7	59 ·9
2. 58	30. 55	2. 58	·1283	6. 33	·03437	23. 0	58 ·3	59 ·6
3. 11	29. 30	3. 11	·1316	7. 43	·03455	Min.	58 ·3	59 ·5
3. 14	27. 35		***	8. 46	·03430			
3. 39	33. 55	3. 29	·1323	8. 57	·03437			
3. 55	35. 30	3. 49	·1316	9. 15	·03420			
4. 31	37. 0	4. 28	·1315	9. 41	·03410			
4. 40	36. 40	4. 40	·1323	10. 3	·03370			
4. 53	37. 0	4. 49	·1318	10. 28	·03366			
4. 56	36. 35	5. 12	·1317	10. 57	·03390			
5. 13	36. 35	5. 25	·1321	12. 8	·03398			
5. 59	35. 40	5. 31	·1318	12. 53	·03395			
6. 9	34. 35	5. 46	·1325	15. 10	·03390			
6. 22	34. 45	6. 22	·1323	16. 50	·03385			
6. 39	31. 10	6. 34	·1317	18. 35	·03392			
6. 59	31. 30	6. 43	·1321	19. 13	·03390			
7. 11	27. 30	7. 14	·1306	20. 38	·03370			
7. 16	28. 35	7. 40	·1310	21. 7	{·03365			
7. 26	28. 40	7. 52	·1322		{·03386			
7. 38	28. 0	8. 12	·1317	23. 13	·03360			
8. 4	32. 45	8. 35	·1318	23. 59	·03370			
8. 39	33. 35	8. 50	·1313					
8. 55	25. 30	9. 10	·1331					
9. 9	27. 50	9. 22	·1320					
9. 13	27. 55	9. 27	·1323					
9. 25	33. 5	9. 34	·1318					
9. 29	34. 35	9. 49	·1357					
9. 38	29. 10	10. 10	·1324					
9. 44	36. 0	10. 14	·1324					
9. 58	37. 30	10. 31	·1312					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 18d. After 22h. 30m. damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 19		Apr. 19						
h m	° ′ ″	h m		h m		h m	°	°
10. 10	20. 33. 25	10. 43	·1317					
10. 16	33. 10	10. 48	·1314					
10. 36	26. 30	11. 1	·1320					
10. 46	25. 30	11. 25	·1309					
11. 13	29. 25	12 8	·1310					
11. 26	29. 30	12. 51	·1317					
11. 49	30. 25	13. 14	·1311					
12. 12	33. 30	13. 37	·1316					
12. 25	33. 0	14. 26	·1313					
12. 56	33. 30	14. 35	·1315					
13. 16	35. 35	15. 12	·1313					
13. 55	33. 5	15. 23	·1307					
14. 17	33. 0	16. 19	·1308					
14. 25	32. 35	17. 17	·1315					
14. 27	33. 35	17. 25	·1312					
14. 35	33. 35	17. 35	·1314					
14. 41	32. 5	18. 20	·1304					
15. 9	33. 0	18. 39	·1309					
15. 16	32. 15	18. 50	·1308					
15. 28	33. 40	19. 35	·1313					
15. 56	34. 10		***					
16. 24	32. 35	21. 7	·1305					
16. 39	33. 30	21. 17	·1319					
16. 56	32. 0	23. 40	·1319					
17. 38	31. 35	23. 59	·1324					
17. 55	30. 20							
18. 5	31. 20							
18. 9	31. 20							
18. 17	29. 25							
18. 38	30. 35							
18. 51	29. 30							
19. 11	29. 35							
19. 20	29. 5							
19. 54	30. 0							
20. 11	30. 0							
20. 41	31. 5							
20. 47	32. 25							
20. 58	32. 35							
21. 9	32. 5							
21. 12	33. 20							
22. 13	35. 30							
	(†)							
Apr. 20		Apr. 20		Apr. 20		Apr. 20		
	(†)	0. 0	·1324	0. 0	·03370	0. 0	58 ·4	59 ·2
0. 26	20. 37. 30	0. 27	·1306	0. 39	·03380	1. 0	58 ·7	60 ·7
1. 1	37. 30	1. 25	·1315	2. 54	·03417	2. 0	59 ·2	62 ·8
1. 43	36. 0	1. 51	·1310	3. 40	·03440	3. 0	59 ·1	62 ·9
2. 9	36. 0	2. 27	·1318	5. 26	·03456	Max.	60 ·0	63 ·5
2. 26	36. 35		***	6. 45	·03467	9. 0	59 ·7	62 ·0
2. 54	36. 0	3. 34	·1313	7. 47	·03460	Min.	57 ·6	59 ·2
3. 11	35. 30	3. 48	·1317	8. 56	·03457	21. 0	57 ·8	59 ·5
3. 27	35. 15	4. 32	·1314	9. 55	·03430			
4. 29	35. 30	4. 51	·1308	16. 49	·03395			
4. 43	34. 40	5. 7	·1311	18. 3	·03380			
5. 8	33. 50	5. 18	·1314	22. 15	·03350			
5. 16	34. 15	5. 26	·1311	23. 59	·03350			
5. 55	33. 25	5. 40	·1317					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 20		Apr. 20						
h m	° ′ ″	h m		h m		h m	°	°
6. 17	20. 35. 0	5. 51	·1313					
6. 25	34. 55	6. 16	·1319					
6. 38	35. 5	6. 54	·1312					
6. 52	33. 55	6. 57	·1315					
7. 8	34. 5	7. 10	·1309					
7. 12	33. 30	7. 21	·1309					
7. 24	34. 0	7. 26	·1305					
7. 29	33. 30	7. 34	·1309					
7. 38	34. 0	7. 45	·1310					
7. 57	32. 35	8. 8	·1319					
8. 11	34. 0	8. 54	·1306					
8. 55	33. 25	9. 15	·1319					
9. 9	30. 55	9. 34	·1319					
9. 16	30. 55	9. 49:	·1326					
9. 26	25. 30	10. 4	·1317					
9. 40	26. 15	10. 20	·1316					
9. 58	28. 35	10. 42	·1304					
10. 10	27. 30	10. 57	·1307					
10. 27	30. 25	11. 28	·1303					
10. 41	29. 35	11. 38	·1308					
10. 56	30. 5	11. 42	·1303					
10. 59	31. 0		***					
11. 24	30. 55	16. 24	·1310					
11. 28	31. 50	17. 8	·1305					
11. 43	31. 35	18. 7	·1311					
12. 0	32. 30	18. 14	·1308					
12. 58	33. 20	19. 10	·1314					
13. 31	33. 0	20. 1	·1304					
14. 0	32. 20	20. 42	·1303					
14. 46	32. 10	21. 6	·1307					
15. 21	31. 50	22. 41	·1303					
15. 38	30. 50	23. 59	·1306					
15. 47	31. 10							
16. 35	30. 30							
16. 54	32. 40							
17. 9	32. 55							
17. 13	33. 30							
17. 38	33. 0							
17. 56	33. 55							
18. 9	32. 50							
18. 26	32. 25							
18. 35	32. 55							
19. 8	31. 35							
19. 25	31. 20							
19. 39	30. 0							
19. 54	30. 35							
20. 14	30. 55							
21. 24	33. 15							
21. 53	33. 5							
22. 57	36. 0							
	(†)							
23. 59	37. 35							
Apr. 21		Apr. 21				21		
0. 0	20. 37. 35	0. 0	·1306	0. 0	·03350	1. 0	58 ·7	61 ·6
1. 11	38. 55	1. 18	·1304	3. 1	·03417	3. 0	58 ·8	61 ·8
2. 28	36. 55	3. 25	·1311	3. 37	·03412	Max.	60 ·2	62 ·0
3. 13	36. 30	3. 52	·1306	7. 18	·03435	9. 0	59 ·5	62 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 19d. 22h. 20m. to April 20d. 0h. 20m. Damper experiments with the Declination Magnet were in progress.

April 20d. 23h. 0m. to 23h. 59m. A series of damper experiments with the Declination Magnet.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 21		Apr. 21		Apr. 21		Apr. 21		
h m	° ′ ″	h m		h m		h m	°	°
3. 39	20. 35. 30	4. 43	·1315	9. 12	·03440	Min.	58 ·2	59 ·7
4. 27	35. 30	5. 16	·1312	9. 24	·03440	21. 0	59 ·4	60 ·6
5. 5	34. 45	6. 43	·1318	9. 41	·03440			
7. 4	34. 30	7. 0	·1316	10. 9	·03450			
7. 11	34. 45	7. 14	·1318	11. 0:	·03442			
7. 47	33. 30	7. 23	·1325	11. 48	·03450			
9. 11	33. 10	8. 5	·1312	12. 46:	·03425			
9. 37	25. 25	8. 52	·1316	13. 50	·03423			
9. 52	27. 10	9. 46	·1314	15. 33	·03420			
9. 57	27. 10	9. 54	·1309	17. 23	·03410			
10. 24	29. 30	10. 4	·1312	19. 56	·03400			
10. 55	30. 0	10. 26	·1315	20. 48	·03390			
11. 25	32. 25	11. 4:	·1306	23. 59	·03390			
12. 4	31. 40	11. 43	·1310					
12. 38	32. 20	12. 25	·1309					
13. 12	31. 0	12. 42	·1314					
13. 38	32. 5	13. 10	·1309					
13. 45	31. 30	13. 40	·1313					
13. 57	32. 35	13. 45	·1310					
14. 23	32. 55	15. 19	·1313					
14. 38	32. 25	15. 41	·1307					
15. 1	32. 0	16. 45	·1309					
15. 23	31. 30	18. 17	·1304					
16. 8	32. 35		***					
16. 43	32. 25	19. 52	·1305					
16. 56	31. 20	20. 11	·1299					
17. 10	31. 10	21. 12	·1291					
17. 13	31. 40	21. 42	·1291					
17. 30	31. 10	22. 5	·1297					
17. 42	29. 30	22. 50	·1294					
17. 59	30. 5	23. 43	·1303					
18. 23	29. 0	23. 59	·1301					
19. 41	29. 0							
19. 55	30. 15							
19. 59	29. 40							
20. 13	30. 5							
20. 43	30. 5							
20. 56	31. 30							
21. 42	33. 35							
22. 20	36. 20							
″	(†)							
Apr. 22		Apr. 22		Apr. 22		Apr. 22		
0. 0	20. 40. 0	0. 0	·1301	0. 0	·03390	1. 0	59 ·1	62 ·0
0. 29	39. 30	0. 38	·1304	2. 14	·03430	3. 0	59 ·2	62 ·0
0. 51	40. 35	1. 26	·1313	3. 5	·03440	Max.	60 ·3	62 ·3
1. 50	38. 50	1. 30	·1304		·03430	9. 0	59 ·6	61 ·0
2. 14	39. 0	1. 36	·1312	5. 16	·03455	Min.	57 ·5	58 ·9
2. 53	36. 55	1. 40	·1307	5. 30	·03448	21. 35	58 ·8	60 ·3
3. 0	37. 20	2. 11	·1312	5. 55	·03453			
3. 9	36. 30	2. 46	·1307	6. 4	·03450			
3. 18	37. 20	3. 13	·1315	7. 30	·03456			
4. 3	36. 35		***	10. 53	·03422			
4. 26	36. 50	3. 49	·1316	11. 42	·03420			
4. 41	36. 35	4. 2	·1307	12. 8:	·0341C			
4. 57	35. 30		***	12. 54	·03413			
5. 25	36. 0	4. 33	·1312	15. 46	·03395			
5. 40	33. 25	4. 52	·1306	20. 57	·03360			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 22		Apr. 22		Apr. 22				
h m	° ′ ″	h m		h m		h m	°	°
6. 9	20. 33. 30	5. 19	·1321	21. 20	·03345			
6. 26	30. 40	5. 25	·1317	21. 44	·03350			
7. 0	31. 40	5. 34	·1317	22. 41	·03346			
7. 24	31. 20	5. 43	·1323	23. 59	·03350			
7. 40	32. 55	5. 48	·1316					
8. 23	32. 45	5. 56	·1318					
8. 29	33. 20	6. 10	·1306					
8. 39	32. 50	6. 21	·1305					
8. 59	33. 30	6. 42	·1319					
9. 25	32. 35	7. 6:	·1314					
9. 34	30. 50	7. 20	·1320					
9. 41	30. 50	7. 41	·1313					
9. 58	29. 25	8. 28	·1317					
10. 9	29. 30	9. 7	·1310					
10. 21	31. 0	9. 49	·1312					
10. 38	32. 5	10. 4	·1310					
10. 57	31. 35	10. 27	·1316					
11. 33	37. 30	10. 34	·1313					
11. 51	34. 30	11. 3	·1313					
12. 14	32. 0	11. 30	·1318					
13. 59	32. 5	12. 8	·1316					
14. 51	32. 55	12. 26	·1312					
15. 43	31. 0	14. 37	·1313					
15. 53	31. 20	15. 2	·1316					
16. 9	30. 5	15. 26	·1316					
17. 8	30. 30	15. 34	·1319					
18. 0	27. 30	15. 42	·1315					
18. 56	26. 25	16. 20	·1315					
19. 15	27. 10	17. 42	·1324					
19. 24	26. 10		***					
19. 27	27. 10	19. 20	·1318					
19. 33	25. 30	19. 28	·1322					
19. 41	26. 30	19. 50	·1312					
19. 54	26. 0		***					
20. 0	26. 0	20. 40	·1313					
20. 9	26. 55	20. 48	·1308					
20. 11	26. 0	20. 58	·1310					
20. 23	26. 35	21. 32	·1298					
20. 26	26. 0	22. 33	·1297					
20. 38	26. 0	22. 49	·1303					
20. 43	27. 55	23. 1	·1297					
20. 51	26. 0	23. 32	·1306					
21. 0	28. 5	23. 59	·1299					
21. 16	27. 35							
21. 25	29. 30							
	***							
22. 13	33. 20							
22. 41	34. 30							
22. 52	36. 0							
22. 56	36. 55							
22. 59	36. 0							
23. 56	39. 35							
23. 59	40. 0							
Apr. 23		Apr. 23		Apr. 23		Apr. 23		
0. 0	20. 40. 0	0. 0	·1299	0. 0	·03350	1. 0	58 ·4	61 ·8
0. 17	40. 55	0. 23	·1307	3. 39	·03420	Max.	59 ·5	62 ·8
0. 46	41. 15	1. 0	·1302	7. 7	·03436	8. 30	59 ·3	62 ·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 21. From $22^h.\ 20^m.$ to $23^h.\ 59^m.$, damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 23		Apr. 23		Apr. 23		Apr. 23		
h m	° ′ ″	h m		h m		h m	°	°
0. 51	20. 41. 35	1. 43	·1306	7. 13	·03430	Min.	57 ·3	59 ·2
1. 16	39. 0	2. 1	·1321	10. 11	·03433	21. 0	57 ·8	60· 0
1. 44	39. 30	2. 40	·1313	13. 52	·03417			
1. 57	40. 50	3. 12	·1315	15. 46	·03395			
2. 16	40. 0	3. 30	·1312	18. 48	·03375			
2. 27	39. 50	3. 44	·1318	18. 57	·03380			
2. 35	39. 10	3. 59	·1313	22. 26	·03346			
3. 31	37. 35		***	23. 59	·03370			
3. 40	37. 50	7. 11	·1326					
3. 51	36. 55	7. 25	·1319					
4. 50	35. 0	7. 38	·1321					
5. 34	34. 30	9. 4	·1321					
6. 8	33. 35	9. 15	·1327					
6. 55	33. 30	9. 22	·1324					
7. 8	34. 5	9. 27	·1325					
7. 24	33. 30	9. 38	·1317					
9. 9	33. 25	9. 43	·1321					
9. 27	32. 35	10. 7	·1324					
10. 3	33. 40	10. 19	·1331					
10. 54	31. 35	10. 48	·1330					
11. 1	32. 30	11. 3	·1325					
12. 16	30. 30	11. 9	·1319					
12. 55	31. 55	11. 26	·1322					
14. 3	32. 0	11. 43	·1319					
14. 18	32. 55	12. 5	·1325					
14. 39	31. 35	12. 15	·1321					
15. 24	31. 25	12. 44	·1323					
15. 29	32. 10	12. 57	·1317					
15. 41	31. 25	14. 9	·1322					
15. 58	31. 25	15. 8	·1319					
16. 13	30. 35	15. 32	·1324					
17. 11	30. 25	16. 7	·1318					
18. 10	28. 30	18. 35	·1316					
18. 16	28. 55		***					
18. 46	27. 5	21. 24	·1303					
18. 57	28. 40		***					
19. 41	27. 35	23. 40	·1309					
20. 40	29. 0	23. 59	·1313					
21. 10	31. 25							
22. 18	33. 55							
23. 59	38. 15							
Apr. 24		Apr. 24		Apr. 24		Apr. 24		
0. 0	20. 38. 15	0. 0	·1313	0. 0	·03370	1. 0	58 ·3	61 ·1
0. 23	39. 20	0. 30	·1319	4. 5	·03418	3. 0	58 ·7	62 ·0
0. 34	38. 35	0. 34	·1317	6. 46	·03430	Max.	60 ·2	62 ·2
0. 46	39. 10	0. 48	·1323	9. 8	·03430	9. 0	58 ·8	61 ·0
	(†)		(†)	10. 7	·03410	Min.	56 ·8	58 ·0
1. 0	38. 36*	1. 0	·1326*	11. 23	·03390	21. 0	57 ·2	58 ·9
2. 22	40. 5	2. 13	·1325	12. 8	·03387			
2. 34	40. 10		***	14. 31	·03376			
3. 0	39. 30	3. 4	·1318	15. 39	·03355			
3. 14	38. 20		***	16. 40	·03350			
3. 48	37. 20	3. 34	·1330	19. 40	·03330			
4. 11	37. 35	3. 56	·1326	22. 15	·03280			
4. 53	36. 30	4. 5	·1328	23. 59	·03290			
5. 11	36. 35	4. 31	·1317					
5. 33	36. 0	4. 45	·1324					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 24		Apr. 24						
h m	° ′ ″	h m		h m		h m	°	°
5. 53	20. 36. 0	4. 52	·1320					
6. 23	35. 25	5. 12	·1325					
6. 31	36. 0	5. 36	·1320					
6. 34	35. 25	5. 44	·1323					
6. 41	35. 30	6. 25	·1323					
7. 29	30. 30	6. 37	·1330					
7. 41	30. 20	7. 3	·1321					
7. 54	31. 30	7. 12	·1323					
8. 16	31. 5	7. 24	·1319					
8. 35	31. 55	7. 39	·1319					
9. 24	32. 0	7. 55	·1323					
9. 39	31. 25	8. 4	·1322					
9. 54	31. 25	8. 11	·1324					
10. 9	33. 5	8. 40	·1317					
10. 38	31. 45	8. 51	·1322					
10. 56	33. 50	8. 54	·1319					
11. 9	31. 35	9. 9	·1320					
11. 38	31. 30	10. 8	·1333					
12. 14	32. 5	10. 27	·1328					
14. 12	30. 30	10. 48	·1325					
14. 28	30. 30	10. 56	·1331					
14. 46	32. 0	11. 12	·1328					
15. 17	32. 0	13. 43	·1327					
15. 42	30. 0	14. 27	·1323					
16. 11	30. 35	15. 20	·1328					
16. 38	30. 5	15. 51	·1325					
16. 40	30. 40	16. 4	·1329					
17. 10	29. 25	17. 2	·1322					
17. 40	29. 25	17. 46	·1323					
19. 57	28. 0	20. 54	·1311					
21. 0	29. 25	21. 55	·1310					
21. 56	32. 0	22. 20	·1313					
23. 51	37. 20	22. 49	·1308					
23. 59	38. 45		***					
		23. 59	·1314					
Apr. 25		Apr. 25		Apr. 25		Apr. 25		
0. 0	20. 38. 45	0. 0	·1314	0. 0	·03290	1. 0	57 ·7	60 ·7
0. 26	39. 30	0. 44	·1322	1. 45	·03330	3. 0	57 ·8	60 ·9
1. 6	39. 20	0. 48	·1318	1. 49	·03326	Max.	59 ·1	61 ·1
2. 2	39. 5	1. 38	·1324	1. 59	·03340	9. 0	58 ·2	61 ·0
2. 40	37. 35	1. 48	·1331	3. 18	·03350	Min.	56 ·5	58 ·4
3. 1	38. 5	1. 54	·1323	4. 39	·03370	21. 0	57 ·2	60 ·0
3. 40	35. 45	2. 0	·1326	5. 15	·03366	22. 30	57 ·2	59 ·8
4. 7	35. 25	2. 4	·1337	7. 23	·03380	23. 0	57 ·3	59 ·5
4. 14	35. 40	2. 7	·1327	10. 25	·03375			
4. 26	34. 50	2. 42	·1318	13. 23	·03360			
4. 54	34. 50	3. 10	·1325	20. 24	·03320			
5. 16	34. 10		***	22. 18	·03295			
6. 9	34. 10	3. 53	·1314	23. 59	·03316			
7. 8	33. 0	4. 44	·1329					
7. 14	33. 15	5. 26	·1324					
7. 23	32. 40	6. 13	·1330					
7. 28	33. 15	6. 21	·1328					
7. 39	32. 35	6. 32	·1332					
8. 43	32. 20	7. 0	·1329					
9. 52	33. 5	7. 18	·1333					
10. 37	32. 0	7. 42	·1326					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.25		Apr.25						
h m	° ′ ″	h m		h m		h m	°	°
10. 41	20. 32. 35	8. 15	·1329					
11. 25	31. 40	8. 45	·1326					
13. 8	34. 0	9. 0	·1328					
13. 17	32. 45	9. 42	·1325					
13. 39	33. 10	10. 9	·1329					
15. 1	31. 5	10. 50	·1325					
16. 16	30. 15	11. 14	·1328					
17. 22	30. 0	11. 20	·1327					
17. 30	29. 30	11. 52	·1329					
17. 39	29. 50	12. 43	·1326					
17. 45	29. 20	12. 57	·1330					
18. 40	28. 0	13. 14	·1326					
19. 41	28. 10	13. 37	·1330					
20. 25	29. 15	13. 43	·1325					
22. 26	36. 0	13. 53	·1329					
22. 38	37. 35	14. 10	·1326					
23. 8	39. 0	14. 25	·1329					
23. 26	41. 5	14. 57	·1323					
23. 59	41. 30	15. 3	·1326					
		15. 34	·1322					
		16. 4	·1324					
		16. 16	·1322					
		17. 35	·1325 ***					
		21. 35	·1304 ***					
		23. 59	·1309					
Apr.26		Apr.26		Apr.26		Apr.26		
0. 0	20. 41. 30	0. 0	·1309	0. 0	·03316	0. 0	57 ·3	59 ·8
0. 40	41. 35	0. 48	·1322	3. 14	·03357	1. 0	57 ·4	60 ·1
0. 42	40. 10	1. 27	·1310	7. 18	·03390	2. 0	57 ·4	60 ·2
1. 27	41. 0		***	8. 36	·03400	3. 0	57 ·8	60 ·4
2. 8	40. 20	4. 1	·1310	10. 53	·03386	Max.	59 ·6	61 ·7
4. 5	36. 25	4. 13	·1314	20. 6	·03355	9. 0	58 ·9	61 ·0
4. 11	36. 30	5. 25	·1312	22. 54	·03317	Min.	57 ·3	59 ·4
5. 22	34. 25	5. 30	·1319	23. 59	·03315	21. 0	58 ·4	59 ·8
5. 29	34. 55	5. 36	·1314			22. 0	58 ·0	59 ·9
5. 38	34. 0	6. 13	·1316			23. 0	58 ·7	60 ·6
6. 12	33. 50	6. 29	·1314					
6. 43	33. 0	6. 48	·1316					
6. 59	32. 35	7. 7	·1312					
7. 23	31. 10	9. 24	·1317					
7. 53	31. 45	10. 28	·1321					
8. 9	31. 45	10. 55	·1317					
8. 22	31. 25	11. 52	·1313					
8. 38	32. 15	12. 24	·1317					
8. 55	32. 50	15. 48	·1312					
9. 56	32. 30	16. 0	·1314					
10. 8	33. 30	17. 22	·1313					
10. 38	31. 30	17. 39	·1316					
10. 57	31. 30	19. 6	·1311					
11. 4	32. 10	20. 14	·1300					
11. 8	31. 35	21. 39	·1297					
13. 9	33. 30	22. 8	·1293					
13. 23	35. 15	23. 59	·1309					
14. 1	35. 0							
14. 43	33. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.26								
h m	° ′ ″	h m		h m		h m	°	°
15. 40	20. 32. 40							
15. 48	33. 10							
15. 54	32. 15							
17. 9	31. 0							
17. 14	30. 5							
17. 25	30. 20							
17. 38	30. 5							
17. 46	29. 5							
18. 0	29. 0							
18. 10	28. 15							
18. 13	29. 0							
18. 21	28. 10							
18. 38	28. 15							
18. 42	28. 40 ***							
19. 28	27. 20 ***							
20. 9	27. 55							
21. 39	32. 40							
22. 9	35. 50							
22. 39	37. 30							
23. 59	42. 40							
Apr.27		Apr.27		Apr.27		Apr.27		
0. 0	20. 42. 40	0. 0	·1309	0. 0	·03315	0. 0	58 ·8	61 ·0
0. 59	43. 5	0. 27	·1323	0. 24	·03330	1. 0	59 ·1	61 ·7
2. 28	39. 35	0. 34	·1320		·03365	3. 0	59 ·3	62 ·2
4. 7	36. 10	1. 18	·1318	7. 29	·03435	Max.	60 ·7	63 ·2
4. 55	35. 15	1. 33	·1321	9. 30	·03440	9. 0	59 ·8	62 ·0
5. 9	34. 0	2. 0	·1317	10. 48:	·03410	Min.	57 ·0	59 ·8
5. 16	34. 30	4. 8	·1316	12. 27	·03413	21. 0	58 ·7	60 ·4
5. 40	34. 25	4. 58	·1320	19. 0	·03400			
5. 46	33. 50	5. 15	·1314	21. 30	·03370			
6. 48	33. 20	5. 45	·1325	23. 59	·03375			
7. 7	33. 40	6. 8:	·1322					
7. 41	32. 45	6. 21	·1325					
8. 1	33. 25	6. 56	·1323					
11. 7	32. 5	7. 16	·1328					
11. 37	30. 0	7. 41	·1325					
11. 54	29. 50	9. 12	·1322					
12. 26	31. 20	9. 56	·1325					
17. 17	30. 35	11. 12	·1321					
18. 25	29. 0	11. 45	·1326					
18. 37	30. 0	12. 24	·1320					
19. 11	30. 0	13. 20	·1326					
20. 56	30. 35	13. 33	·1321					
21. 3	31. 30	13. 52	·1323					
21. 26	32. 0	14. 51	·1318					
22. 14	36. 55	17. 26	·1323					
23. 17	38. 5	18. 13	·1323					
23. 59	39. 35	18. 44	·1317					
		19. 27	·1319					
		21. 17	·1310					
		21. 47	·1301					
		23. 37	·1302					
		23. 59	·1308					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 28		Apr. 28		Apr. 28		Apr. 28		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 35	0. 0	·1308	0. 0	·03375	1. 0	59 ·3	62 ·2
0. 42	41. 0	0. 40	·1317	1. 18	·03395	3. 0	59 ·7	62 ·4
1. 12	40. 20	0. 55	·1312	2. 45	·03420	Max.	60 ·8	62 ·9
1. 46	41. 50	1. 42	·1321	3. 2	·03418	9. 0	59 ·8	60 ·8
2. 4	41. 0	2. 0	·1313	3. 46	·03436	Min.	57 ·6	59 ·0
2. 29	41. 0	2. 23	·1314	6. 6	·03465	21. 0	58 ·4	59 ·0
2. 54	41. 25	2. 46	·1325	6. 9	·03457			
3. 27	39. 30	3. 11	·1313	6. 30	·03470			
3. 44	39. 5	3. 37	·1311	12. 49	·03440			
3. 55	39. 30	3. 43	·1316	19. 28	·03410			
3. 58	39. 5	3. 45	·1313	20. 29	·03385			
5. 6	38. 5	3. 55	·1324	20. 44	·03392			
6. 2	35. 35		***	23. 47	·03360			
6. 6	34. 50	4. 36	·1319	23. 59	·03360			
6. 22	34. 30	4. 45	·1323					
6. 36	34. 30	4. 48	·1319					
6. 51	35. 0	5. 11	·1325					
9. 39	33. 0	5. 15	·1323					
9. 51	33. 20	6. 3	·1325					
9. 57	32. 40	6. 8	·1317					
10. 17	32. 10	6. 17	·1323					
10. 30	32. 40	6. 52	·1324					
10. 38	32. 10	7. 10	·1328					
10. 47	32. 25	7. 20	·1322					
11. 30	30. 50	7. 48	·1327					
12. 17	32. 30	7. 53	·1325					
12. 55	31. 20	8. 6	·1330					
14. 38	33. 50	8. 19	·1328					
15. 11	33. 10	8. 32	·1333					
15. 31	33. 40	8. 54	·1329					
16. 9	32. 40	9. 6	·1333					
17. 25	31. 40	9. 16	·1327					
17. 32	31. 10	9. 40	·1332					
17. 36	31. 30	9. 48	·1327					
17. 55	31. 15	10. 0	·1328					
18. 14	29. 40	10. 5	·1324					
18. 24	30. 30	10. 26	·1324					
18. 28	29. 40	10. 35	·1329					
18. 39	30. 15	11. 23	·1321					
19. 8	28. 5	11. 58	·1321					
19. 26	29. 25	12. 28	·1326					
19. 38	28. 5	12. 38	·1321					
19. 56	29. 25	12. 45	·1324					
20. 1	28. 35	13. 24	·1324					
20. 11	28. 35	13. 49	·1319					
20. 16	29. 30	14. 0	·1322					
20. 27	28. 5	14. 17	·1319					
20. 46	31. 30	16. 5	·1320					
20. 56	30. 35	17. 12	·1321					
21. 2	30. 35	18. 24	·1316					
21. 19	32. 10		***					
21. 39	31. 55	20. 9	·1320					
21. 55	32. 30	20. 26	·1314					
22. 39	36. 25	20. 42	·1317					
22. 53	38. 20	21. 15	·1303					
23. 18	39. 5	21. 46	·1301					
23. 31	38. 30	22. 2	·1304					
23. 43	40. 30	22. 30	·1301					
Apr. 28		Apr. 28						
h m	° ′ ″	h m		h m		h m		
23. 59	20. 40. 30	22. 41	·1308					
		23. 27	·1293					
		23. 39	·1298					
		23. 44	·1293					
		23. 59	·1294					
Apr. 29		Apr. 29		Apr. 29		Apr. 29		
0. 0	20. 40. 30	0. 0	·1294	0. 0	·03360	1. 0	58 ·3	59 ·9
0. 39	39. 30	0. 25	·1296	2. 12	·03390	3. 0	58 ·3	59 ·9
0. 43	41. 30	0. 43	·1315	3. 10	·03410	Max.	58 ·9	60 ·2
0. 54	40. 55	0. 56	·1309	4. 26	·03458	9. 0	58 ·3	58 ·7
1. 34	42. 50	1. 17	·1308	6. 2	·03470	Min.	56 ·4	57 ·9
1. 56	41. 0	1. 35	·1315	10. 39	·03400	22. 35	56 ·6	58 ·0
2. 14	42. 25	2. 2	·1305	17. 55	·03380			
2. 25	41. 10		***	20. 26	·03350			
2. 31	41. 10	2. 14	·1318	23. 59	·03320			
2. 40	40. 30	2. 32	·1307					
3. 9	40. 30		***					
3. 27	38. 5	3. 40	·1305					
3. 37	38. 5	4. 48	·1314					
3. 41	37. 25	5. 18	·1311					
3. 58	37. 5	5. 25	·1318					
4. 43	35. 40	5. 45	·1319					
5. 8	35. 0	5. 56	·1322					
5. 25	33. 30	6. 17	·1315					
5. 33	32. 25	6. 49	·1314					
6. 25	32. 30	7. 3	·1317					
7. 13	31. 55	8. 11	·1320					
7. 53	33. 30	8. 18	·1316					
8. 6	32. 55	8. 50	·1319					
8. 13	33. 25	8. 56	·1315					
8. 23	32. 50	9. 25	·1320					
8. 31	33. 0	9. 42	·1315					
9. 19	32. 30	10. 19	·1311					
9. 31	33. 20	12. 12	·1317					
9. 52	32. 30	12. 40	·1313					
10. 25	32. 35	14. 26	·1319					
12. 17	31. 30	14. 41	·1313					
13. 51	31. 15	15. 2	·1318					
14. 46	32. 0	17. 12	·1312					
15. 11	31. 5	17. 37	·1317					
15. 46	31. 10	18. 26	·1312					
17. 9	29. 40	19. 58	·1314					
17. 23	30. 30	20. 10	·1310					
17. 26	30. 30	21. 24	·1300					
17. 38	29. 55	22. 17	·1301					
17. 55	29. 55	22. 51	·1305					
18. 8	29. 25	23. 8	·1300					
18. 22	30. 0	23. 26	·1304					
18. 27	28. 55	23. 59	·1302					
18. 40	29. 30							
20. 8	29. 20							
20. 16	28. 40							
20. 31	29. 35							
20. 52	29. 35							
21. 0	29. 40							
21. 9	30. 30							
21. 11	30. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 29								
h m	° ′ ″	h m		h m		h m	°	°
21. 39	20. 30. 30							
21. 48	31. 25							
21. 57	30. 55							
23. 0	34. 20							
23. 59	38. 0							
Apr. 30		Apr. 30		Apr. 30		Apr. 30		
0. 0	20. 38. 0	0. 0	·1302	0. 0	·03320	1. 0	56·6	59·0
0. 46	40. 5	0. 45	·1305	1. 28	·03350	Max.	57·9	59·9
0. 57	39. 20	1. 3	·1302	1. 38	·03340	9. 0	57·0	59·0
1. 25	41. 40	1. 25	·1316	1. 45	·03350	Min.	56·4	58·9
1. 33	40. 0	1. 37	·1300	1. 54	·03345	21. 0	56·8	59·0
1. 46	39. 35	1. 55	·1297	2. 39	·03375			
1. 57	37. 30	2. 34	·1315	4. 30	·03390			
2. 45	38. 30	2. 58	·1309	5. 7	·03395			
3. 8	38. 30	3. 24	·1309	6. 54	·03390			
3. 18	37. 50		***	13. 37	·03370			
3. 37	37. 50	4. 3	·1318	14. 15	·03360			
4. 15	33. 20	4. 34	·1309	19. 25	·03360			
4. 25	34. 0	4. 48	·1319	23. 59	·03320			
4. 38	32. 50	5. 13	·1312					
5. 3	34. 50	5. 24	·1314					
5. 23	34. 50	5. 38	·1308					
5. 53	33. 35	5. 45	·1312					
6. 8	33. 35	5. 59	·1310					
6. 40	32. 55	6. 52	·1318					
7. 39	32. 50	9. 26	·1314					
13. 0	33. 0	9. 44	·1318					
13. 16	35. 5	10. 31	·1313					
13. 31	35. 5		***					
14. 0	32. 5	12. 42	·1312					
14. 16	32. 30	13. 27	·1315					
14. 46	34. 25	13. 44	·1319					
15. 28	32. 0	14. 17	·1311					
15. 44	32. 30	17. 12	·1314					
16. 18	32. 0	17. 45	·1317					
16. 40	30. 40	18. 34	·1311					
16. 56	30. 20	20. 0	·1309					
17. 11	30. 35	21. 39	·1298					
17. 23	29. 55	21. 49	·1303					
17. 41	30. 5	23. 41	·1299					
18. 26	27. 30	23. 59	·1306					
18. 41	27. 55							
19. 8	27. 15							
19. 16	28. 0							
19. 38	27. 5							
20. 28	27. 35							
20. 41	27. 0							
21. 25	30. 0							
21. 39	29. 5							
23. 29	35. 35							
23. 59	39. 25							
May 1		May 1		May 1		May 1		
0. 0	20. 39. 25	0. 0	·1306	0. 0	·03320	Min.	56·5	58·1
1. 2	40. 45	0. 22	·1310	1. 11	·03310	1. 0	56·7	58·4
1. 10	39. 35	1. 3	·1313	3. 25	·03330	3. 0	56·5	58·9
2. 15	39. 0	1. 23	·1312		·03350	Max.	58·2	60·3

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 1		May 1		May 1		May 1		
h m	° ′ ″	h m		h m		h m	°	°
2. 34	20. 39. 0	1. 42	·1317	5. 1	·03370	9. 0	57·5	59·6
2. 42	39. 40	1. 56	·1315	13. 0	·03376	21. 0	56·8	58·9
3. 8	39. 15	2. 8	·1317	14. 26	·03360			
3. 23	39. 10	2. 18	·1310	19. 30	·03363			
3. 30	37. 55	2. 35	·1311	21. 3	·03350			
3. 58	37. 50	2. 50	·1320	22. 57	·03335			
4. 38	34. 40	3. 8	·1313	23. 59	·03337			
4. 58	34. 30	3. 27	·1320					
6. 16	32. 5	3. 34	·1333					
6. 42	31. 30	3. 55	·1335					
6. 56	32. 5	4. 36	·1324					
7. 9	31. 40		***					
9. 4	31. 50	6. 42	·1339					
10. 5	30. 30	6. 51	·1337					
10. 31	30. 50	7. 8	·1341					
11. 57	30. 35	7. 41	·1336					
13. 13	32. 50	7. 52	·1341					
13. 38	30. 20	9. 20	·1334					
14. 1	29. 20		***					
14. 25	30. 40	12. 4	·1332					
14. 55	29. 40	12. 55	·1333					
15. 34	31. 10	13. 37	·1339					
15. 54	30. 0	13. 58	·1332					
16. 11	29. 15	14. 9	·1332					
17. 41	29. 10	14. 22	·1336					
18. 0	28. 20	14. 55	·1332					
18. 9	29. 10	15. 35:	·1338					
18. 26	27. 40	16. 21	·1332					
19. 11	26. 15	16. 41	·1334					
19. 55	25. 50	17. 51	·1330					
19. 58	28. 5	18. 8	·1332					
21. 9	30. 30	19. 47	·1326					
22. 38	36. 30	21. 27	·1317					
23. 56	40. 45	21. 45	·1318					
23. 59	41. 30	22. 2	·1314					
		22. 34	·1317					
		23. 10	·1312					
		23. 56	·1318					
		23. 59	·1321					
May 2		May 2		May 2		May 2		
0. 0	20. 41. 30	0. 0	·1321	0. 0	·03337	Min.	57·5	59·6
0. 38	42. 45	0. 31	·1328	3. 49	·03410	1. 0	57·6	59·9
1. 11	41. 30	0. 55	·1323	5. 15	·03420	3. 0	57·8	60·3
1. 39	41. 30	1. 13	·1321	18. 55	·03424	Max.	59·0	61·2
1. 56	41. 45	1. 56	·1331	20. 47	·03410	9. 0	58·5	60·5
2. 47	40. 5	2. 36	·1329	22. 24	·03387	Min.	57·6	59·7
3. 9	37. 35	2. 51	·1333	22. 54	·03390	21. 0	58·2	59·7
3. 25	37. 5	3. 35	·1325	23. 59	·03373	22. 0	58·3	60·0
3. 37	36. 0	4. 35	·1334			23. 0	58·8	60·2
3. 50	35. 25	4. 51	·1332					
5. 11	34. 10	5. 13	·1335					
5. 24	34. 40	5. 25	·1343					
6. 44	33. 35	5. 44	·1336					
7. 38	34. 5		***					
7. 52	33. 35	6. 35	·1340					
8. 23	33. 25	6. 44	·1335					
8. 28	32. 35	7. 19	·1337					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 2		May 2						
h m	° ′ ″	h m		h m		h m	°	°
8. 38	20. 33. 25	7. 43	·1341					
9. 35	32. 50	8. 27	·1332					
9. 52	33. 5	9. 4	·1338					
11. 53	32. 0	10. 35	·1332					
13. 9	32. 50	11. 41	·1334					
13. 54	32. 0	11. 50	·1331					
14. 16	32. 40	14. 59	·1333					
15. 38	31. 5	16. 10	·1327					
15. 56	31. 50	18. 2	·1331					
16. 28	30. 25	19. 21	·1329					
17. 47	29. 35	19. 37	·1325					
18. 1	30. 0	21. 0	·1322					
18. 9	29. 30	21. 18	·1324					
19. 43	29. 30	22. 47	·1314					
20. 1	30. 5	23. 59	·1333					
21. 8	30. 0							
21. 44	32. 10							
22. 39	33. 55							
22. 45	33. 30							
22. 54	34. 10							
23. 4	34. 50							
23. 28	34. 50							
23. 59	37. 0							
May 3		May 3		May 3		May 3		
0. 0	20. 37. 0	0. 0	·1333	0. 0	·03373	0. 0	58 ·8	60 ·9
0. 40	38. 30	0. 19	·1330	2. 40	·03450	1. 0	59 ·0	61 ·0
2. 10	36. 30	1. 32	·1325	3. 56	·03475	2. 0	59 ·0	61 ·7
2. 22	37. 0	2. 13	·1330	5. 15	·03486	3. 0	59 ·4	61 ·9
2. 30	36. 0	2. 21	·1333	9. 34	·03500	Max.	60 ·3	62 ·7
2. 39	36. 15	2. 34	·1330	12. 8	·03480	9. 0	59 ·5	60 ·5
4. 30	33. 50	2. 45	·1334	17. 43	·03490	Min.	58 ·6	58 ·8
6. 27	32. 35	3. 21	·1327	19. 41	·03475	21. 0	59 ·5	61 ·0
7. 26	33. 30	3. 30	·1330	23. 37	·03446	22. 0	59 ·7	61 ·0
8. 0	33. 20	3. 43	·1326	23. 59	·03450	23. 0	59 ·6	60 ·5
8. 33	33. 35	4. 16	·1331					
8. 53	33. 5	4. 33	·1328					
9. 4	31. 25	5. 9	·1334					
10. 38	32. 0	5. 24	·1329					
10. 46	31. 30	6. 44	·1338					
11. 55	31. 55	6. 52	·1335					
12. 9	31. 10	7. 3	·1338					
15. 8	31. 20	7. 41	·1334					
18. 55	27. 55		***					
19. 2	28. 5	9. 6	·1337					
19. 13	27. 50	10. 26	·1328					
20. 53	29. 0	10. 57	·1332					
22. 41	35. 10	11. 25	·1329					
23. 11	35. 40	12. 2	·1335					
23. 25	37. 0	12. 12	·1332					
23. 46	37. 0	12. 21	·1335					
23. 59	38. 30	13. 0	·1329					
		13. 36	·1327					
		14. 52	·1327					
		15. 53	·1328					
			***					
		19. 51	·1319					
		21. 22	·1314					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
		May 3						
h m	° ′ ″	h m		h m		h m	°	°
		21. 50	·1313					
		23. 25	·1322					
		23. 42	·1318					
		23. 50	·1323					
		23. 59	·1325					
May 4		May 4		May 4		May 4		
0. 0	20. 38. 30	0. 0	·1325	0. 0	·03450	Min.	59 ·5	60 ·5
0. 11	38. 30	0. 57	·1332	3. 15	·03490	0. 0	59 ·5	60 ·5
0. 23	39. 5	1. 21	·1326	6. 3	·03500	1. 0	59 ·5	60 ·9
0. 39	38. 30	1. 55	·1329	10. 49	·03495	2. 0	59 ·7	61 ·4
1. 42	37. 50	2. 14	·1324	15. 36	·03490	3. 0	59 ·8	61 ·5
1. 55	38. 20	2. 34	·1326	18. 24	·03500	Max.	60 ·5	62 ·2
2. 24	37. 0	3. 6	·1321	21. 3	·03480	9. 0	59 ·8	60 ·1
2. 36	37. 0	3. 19	·1326	22. 54	·03475	Min.	58 ·9	60 ·0
4. 41	33. 0	4. 2	·1321	23. 59	·03467	21. 0	59 ·8	61 ·8
5. 9	32. 25	4. 22	·1323			Max.	60 ·2	62 ·5
6. 52	32. 25	5. 21	·1322					
7. 1	33. 5	5. 40	·1326					
7. 16	32. 35	6. 45	·1324					
9. 57	32. 30	7. 3	·1328					
10. 27	31. 50	8. 32	·1328					
11. 26	32. 10	8. 53	·1331					
13. 24	31. 35	9. 46	·1327					
13. 40	31. 0	10. 2	·1330					
13. 55	32. 0	13. 35	·1324					
14. 31	30. 45	13. 45	·1327					
14. 52	31. 20	14. 47	·1324					
15. 11	31. 25	15. 7	·1328					
15. 51	30. 20	16. 59	·1324					
16. 8	30. 30	17. 21	·1326					
16. 39	29. 40		***					
17. 9	29. 55	18. 17	·1321					
17. 38	29. 20	20. 0	·1321					
18. 13	29. 30	21. 9	·1314					
18. 25	28. 55	21. 25	·1300					
18. 38	30. 5	22. 22	·1294					
18. 41	28. 55	23. 18	·1302					
18. 57	29. 5	23. 59	·1303					
19. 25	28. 5							
19. 58	28. 20							
20. 8	29. 0							
20. 34	28. 10							
21. 11	29. 0							
21. 13	30. 20							
21. 38	30. 35							
22. 50	34. 10							
	(†)							
23. 59	38. 20							
May 5		May 5		May 5		May 5		
0. 0	20. 38. 20	0. 0	·1303	0. 0	·03467	1. 0	60 ·3	63 ·0
0. 19	39. 30	0. 56	·1304	2. 18	·03500	3. 0	60 ·6	63 ·2
1. 33	39. 0	1. 21	·1306	4. 19	·03540	Max.	60 ·6	63 ·2
1. 42	39. 0	1. 43	·1313	5. 54	·03550	9. 0	60 ·3	60 ·3
3. 2	35. 25	2. 25	·1307	7. 18	·03550	Min.	58 ·4	58 ·5
3. 57	33. 55	2. 51	·1309	8. 1	·03540	21. 0	59 ·5	60 ·7
7. 7	33. 40	3. 21	·1305	9. 11	·03540			
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

May 4. Between $22^h.\ 50^m.$ and $23^h.\ 59^m.$ Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 5		May 5		May 5				
h m	° ′ ″	h m		h m		h m	°	°
7. 16	20. 33. 20	3. 52	·1310	9. 53	·03523			
8. 2	34. 0	4. 36	·1308	10. 41	·03490			
8. 25	33. 55	5. 13	·1312	13. 41	·03500			
8. 47	34. 5	5. 43	·1309	18. 40	·03500			
9. 56	33. 0	6. 34	·1317	21. 15	·03480			
10. 10	33. 50	6. 52	·1315	23. 30	·03460			
10. 53	31. 35	7. 35	·1320	23. 59	·03460			
11. 40	32. 25	8. 0	·1317					
11. 56	32. 5	8. 34	·1321					
12. 35	32. 30	9. 19	·1317					
12. 54	33. 25	9. 30	·1319					
13. 3	32. 40	10. 16	·1323					
13. 35	32. 20	10. 36	·1315					
13. 41	33. 0	10. 57	·1320					
14. 19	33. 0	11. 21	·1314					
17. 24	30. 0	11. 34	·1318					
17. 38	29. 5	11. 39	·1316					
17. 53	29. 0	13. 25	·1310					
17. 56	28. 30	13. 36	·1313					
18. 11	28. 30	13. 50	·1310					
	***	14. 12	·1313					
18. 54	30. 30	17. 7	·1311					
18. 59	30. 0	17. 34	·1308					
19. 8	30. 40	17. 45	·1310					
19. 13	30. 30	18. 7	·1305					
19. 24	31. 5	19. 30	·1299					
19. 56	29. 35	19. 52	·1298					
20. 6	29. 50	20. 1	·1301					
20. 10	29. 25	20. 6	·1297					
20. 18	29. 25	20. 20	·1301					
20. 26	29. 5	20. 33	·1300					
23. 44	37. 10	21. 37	·1295					
23. 50	38. 25	22. 6	·1291					
23. 59	38. 25	22. 28	·1291					
		23. 6	·1294					
		23. 39	·1291					
		23. 47	·1295					
		23. 59	·1293					
May 6		May 6		May 6		May 6		
0. 0	20. 38. 25	0. 0	·1293	0. 0	·03460	1. 0	60 ·0	62 ·4
0. 32	38. 5		***	3. 1	·03516	3. 0	60 ·6	62 ·7
0. 41	39. 10	1. 14	·1304	4. 10	·03550	Max.	61 ·4	62 ·9
0. 54	39. 0	1. 41	·1294		***	9. 0	60 ·4	62 ·4
0. 58	40. 0	1. 49	·1298	5. 15	·03260	Min.	58 ·5	60 ·3
1. 3	39. 30	2. 4	·1293		***	22. 0	59 ·4	61 ·0
	***	2. 32	·1295	5. 46	·03575			
2. 11	39. 0	2. 58	·1304	6. 15	·03563			
2. 55	38. 0	3. 13	·1309	6. 45	·03570			
2. 56	37. 55		***	7. 28	·03570			
3. 2	38. 10	3. 46	·1300	9. 25	·03580			
3. 25	37. 25	4. 36	·1317	11. 7	·03560			
3. 59	35. 5	5. 0	·1316	14. 21	·03535			
5. 9	35. 5	5. 7	·1311	15. 46	·03496			
5. 37	33. 30	5. 12	·1316	16. 34	·03510			
5. 53	33. 5	5. 15	·1312	21. 40	·03490			
5. 58	34. 0	5. 29	·1312	23. 59	·03486			
6. 14	33. 15	5. 45	·1321					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F Magnet.
May 6		May 6						
h m	° ′ ″	h m		h m		h m	°	°
6. 38	20. 31. 30	5. 49	·1332					
6. 47	31. 30	5. 52	·1318					
7. 8	32. 30	5. 58	·1318					
7. 40	32. 20	6. 8	·1308					
7. 53	33. 15	6. 21	·1306					
8. 9	31. 45	6. 38	·1309					
8. 26	31. 5	6. 50	·1319					
8. 39	28. 15	7. 8	·1314					
8. 51	28. 15	7. 26	·1316					
9. 4	25. 0		***					
10. 9	32. 40	7. 48	·1325					
10. 23	32. 30	7. 57	·1317					
10. 44	33. 30	8. 21	·1316					
10. 57	32. 45	8. 33	·1308					
11. 25	32. 0	8. 41	·1307					
12. 1	33. 0	8. 55	·1295					
12. 39	32. 0	9. 10	·1302					
13. 42	32. 30	9. 19	·1296					
14. 0	33. 15	9. 34	·1304					
14. 13	34. 20	9. 40	·1303					
14. 41	32. 20	10. 9	·1311					
15. 2	33. 30	10. 13	·1306					
15. 13	31. 50	10. 26	·1310					
15. 26	28. 5	10. 35	·1309					
15. 41	26. 0	10. 44	·1316					
16. 38	28. 5	10. 56	·1310					
17. 25	28. 5	11. 9	·1312					
18. 26	27. 30	11. 19	·1309					
19. 56	28. 40	11. 49	·1313					
20. 3	28. 10	12. 40	·1309					
20. 24	29. 25	12. 49	·1312					
20. 45	29. 35	13. 4	·1309					
21. 36	32. 10	13. 47	·1310					
21. 53	32. 0	14. 9	·1315					
22. 39	33. 5	14. 26	·1316					
22. 41	34. 10	14. 52 :	·1311					
23. 59	38. 20	15. 17	·1317					
		15. 39	·1314					
		16. 12	·1307					
		17. 30	·1308					
		18. 30	·1306					
		18. 42	·1309					
		19. 37	·1306					
		20. 26	·1306					
		21. 12	·1298					
		21. 50	·1294					
		22. 34	·1293					
		22. 52	·1301					
		23. 5	·1297					
		23. 59	·1305					
May 7		May 7		May 7		May 7		
0. 0	20. 38. 20	0. 0	·1305	0. 0	·03486	0. 30	59 ·5	61 ·3
0. 33	40. 5	0. 28	·1307	1. 46	·03510	Max.	60 ·3	61 ·9
0. 41	39. 10	0. 43	·1305	3. 11	·03520	9. 0	59 ·3	60 ·5
1. 23	37. 30	1. 25	·1299	5. 57	·03535	Min.	57 ·4	58 ·8
1. 30	37. 55	1. 44	·1307	15. 32	·03490	21. 0	58 ·2	59 ·0
1. 39	37. 30	2. 6	·1300	15. 53	·03475			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings, The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
May 7		May 7		May 7				
h m	° ′ ″	h m		h m		h m	°	°
1. 42	20. 38. 10	2. 24	·1303	17. 40	·03460			
2. 2	37. 0	2. 56	·1321	18. 16	·03450			
2. 23	36. 50	3. 9	·1322	18. 47	·03440			
2. 55	38. 5	3. 49	·1311	19. 15	·03450			
3. 38	38. 5	3. 55	·1311	20. 13	·03420			
3. 42	37. 25	4. 15	·1320	20. 30	·03410			
4. 11	37. 25	4. 27	·1315	23. 59	·03430			
4. 31	36. 50	4. 39	·1318					
4. 42	36. 10	4. 53	·1310					
4. 58	36. 10	5. 25	·1319					
5. 38	34. 0	5. 36	·1314					
6. 47	32. 35	5. 53	·1321					
7. 9	33. 20	6. 12	·1318					
7. 38	33. 5	6. 18	·1320					
8. 8	33. 35	6. 34	·1312					
9. 25	32. 50	6. 51	·1317					
9. 41	32. 30	7. 37	·1314					
10. 26	32. 40	8. 10	·1315					
10. 55	32. 15	8. 41	·1313					
11. 5	32. 35	9. 14	·1316					
13. 8	31. 50	10. 52	·1314					
13. 11	32. 35	11. 6	·1318					
13. 31	33. 5	12. 47	·1319					
13. 41	31. 40	12. 56	·1314					
14. 42	31. 30	13. 31	·1318					
15. 9	30. 30	15. 19	·1316					
15. 25	32. 40	15. 26	·1319					
15. 53	29. 30	15. 44	·1320					
16. 37	31. 40	15. 50	·1317					
16. 42	30. 30	16. 36	·1320					
17. 8	30. 50	16. 43	·1317					
17. 11	30. 0	17. 38	·1319					
17. 23	30. 50	17. 51	·1322					
17. 38	28. 40	18. 12	·1315					
17. 54	30. 40	18. 22	·1318					
	***	18. 50	·1304					
18. 4	28. 5	19. 10	·1307					
	***	19. 19	·1305					
18. 26	31. 50	19. 46	·1311					
18. 34	29. 55	20. 21	·1305					
18. 54	29. 35	20. 34	·1307					
19. 8	33. 30	20. 42	·1301					
19. 16	33. 30	20. 53	·1303					
19. 29	36. 10	21. 11	·1298					
19. 56	36. 5	21. 41	·1301					
20. 0	34. 30	22. 41	·1299					
20. 14	32. 35	23. 40	·1307					
20. 26	32. 5	23. 49	·1309					
20. 58	34. 30	23. 59	·1314					
21. 9	34. 10							
21. 27	36. 15							
21. 39	35. 40							
22. 28	36. 5							
23. 11	39. 0							
23. 59	39. 10							
May 8		May 8		May 8		May 8		
0. 0	20. 39. 10	0. 0	·1314	0. 0	·03430	Min.	58 ·6	60 ·0
1. 9	38. 30	0. 11	·1308	2. 4	·03490	1. 0	58 ·8	60 ·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
May 8		May 8		May 8		May 8		
h m	° ′ ″	h m		h m		h m	°	°
1. 44	20. 39. 35	0. 24	·1309	5. 19	·03510	3. 0	58 ·8	61 ·3
1. 55	39. 0	0. 32	·1303	7. 33	·03510	Max.	60 ·0	61 ·6
2. 21	38. 35	0. 59	·1306	12. 33	·03523	9. 0	59 ·6	61 ·2
2. 46	36. 35	1. 25	·1299	17. 8	·03520	21. 0	59 ·5	61 ·0
3. 4	35. 40	1. 41	·1308	19. 45	·03500			
3. 9	36. 30	1. 52	·1299	20. 11	·03495			
3. 16	35. 5	2. 5	·1302	23. 59	·03485			
4. 42	34. 20	2. 12	·1307					
5. 28	32. 40	2. 47	·1298					
5. 35	33. 10	4. 4	·1309					
13. 9	32. 0	4. 21	·1307					
13. 11	32. 15	4. 52	·1314					
13. 28	31. 20	5. 2	·1309					
15. 31	30. 45	5. 25	·1308					
16. 38	30. 0	5. 40	·1316					
16. 43	29. 30	6. 2	·1314					
18. 11	29. 30	9. 13	·1313					
18. 27	29. 0	9. 32	·1318					
18. 41	29. 25	11. 8	·1314					
18. 52	28. 50	11. 24	·1317					
18. 58	29. 35	13. 2	·1313					
19. 23	28. 55	13. 14	·1316					
19. 53	30. 0	13. 29	·1312					
20. 10	29. 30	14. 23	·1313					
21. 25	33. 0	17. 55	·1310					
22. 40	34. 25	20. 50	·1301					
	(†)	21. 13	·1303					
23. 59	36. 15	21. 32	·1299					
		22. 39	·1304					
		23. 59	·1310					
May 9		May 9		May 9		May 9		
	(†)	0. 0	·1310	0. 0	·03485	1. 0	59 ·9	62 ·6
0. 13	20. 36. 40	0. 16	·1314	2. 3	·03520	3. 0	61 ·0	63 ·0
0. 54	37. 10	1. 54	·1321	4. 16	·03560	Max.	61 ·4	63 ·7
	(†)	2. 37	·1317	6. 35	·03580	9. 0	60 ·5	62 ·3
2. 52	34. 50	3. 24	·1316	9. 2	·03585	21. 0	59 ·8	61 ·0
3. 25	34. 10	4. 38	·1319	10. 53	·03575	22. 0	59 ·0	58 ·7
4. 56	33. 10	5. 10	·1314	17. 36	·03570	Min.	58 ·7	58 ·7
5. 24	32. 35	5. 53	·1315	19. 34	·03560	23. 0	58 ·7	59 ·2
6. 24	33. 10	6. 30	·1318	21. 8	·03530			
6. 59	33. 5	8. 52	·1317	22. 2	·03515			
9. 22	33. 20	9. 13	·1321	23. 34	·03472			
9. 54	32. 30	9. 57	·1316	23. 59	·03460			
10. 3	31. 40	10. 12	·1321					
10. 31	32. 5	10. 48	·1313					
10. 53	31. 10	11. 37	·1317					
11. 38	32. 40	11. 55	·1313					
11. 55	32. 10	16. 29	·1313					
15. 45	31. 50	20. 4	·1307					
18. 27	28. 35	20. 44	·1309					
19. 15	28. 35	21. 26	·1303					
19. 44	29. 50	23. 27	·1309					
20. 9	29. 55	23. 59	·1308					
21. 30	33. 15							
	(†)							
23. 59	39. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Damper experiments were in progress with the Declination Magnet, on May 8d. from 22h. 40m. to 23h. 59m. and also on May 9 from 0h. 55m. to 2h. 50m., and from 21h. 30m. to 23h. 59m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 10		May 10		May 10		May 10		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 0	0. 0	·1308	0. 0	·03460	0. 0	58·7	60·0
0. 36	40. 0	0. 5	·1304	4. 40	·03530	1. 0	58·8	60·4
1. 12	39. 20	1. 45	·1312	9. 10	·03516	2. 0	59·0	60·4
4. 22	33. 10	3. 5	·1313	10. 9	·03490	3. 0	59·1	61·4
5. 25	32. 15	3. 47	·1327	15. 27	·03470	Max.	59·1	61·4
8. 39	31. 35	4. 49:	·1326	16. 2	·03445	9. 0	58·8	58·4
9. 9	30. 30	6. 18	·1335	16. 40	·03440	Min.	56·6	57·8
10. 53	32. 0	6. 27	·1332	19. 16	·03430	21. 0	57·0	58·0
12. 6	32. 30	6. 40	·1335	21. 4	·03380	22. 0	57·2	58·4
12. 45	32. 0	6. 57	·1331	22. 6	·03350	23. 0	57·2	58·6
13. 0	32. 20	7. 17	·1337	23. 24	·03342			
13. 23	32. 0	8. 30	·1333	23. 59	·03346			
13. 58	31. 40	9. 5	·1327					
14. 3	30. 55	11. 48	·1331					
14. 58	30. 0	12. 0	·1329					
15. 24	30. 30	12. 16	·1331					
15. 56	28. 5	12. 44	·1328					
16. 35	28. 20	14. 51	·1331					
16. 39	28. 0		***					
16. 56	28. 35	15. 19	·1333					
17. 11	28. 20	16. 9	·1331					
17. 25	27. 0	17. 27	·1335					
19. 0	23. 25	19. 4	·1330					
19. 53	23. 0	21. 1	·1320					
19. 57	23. 20	21. 6	·1308					
20. 58	24. 25	22. 37	·1301					
21. 40	28. 30	23. 59	·1301					
23. 35	37. 10							
23. 47	37. 10							
23. 59	38. 20							
May 11		May 11		May 11		May 11		
0. 0	20. 38. 20	0. 0	·1301	0. 0	·03346	0. 0	57·2	58·6
1. 28	40. 50	0. 35	·1309	2. 30	·03385	1. 0	57·2	58·8
2. 24	39. 20	2. 15	·1318	2. 39	·03390	2. 0	57·2	58·8
2. 58	39. 0	2. 41	·1320	3. 57	·03405	3. 0	57·2	58·9
3. 24	36. 50	3. 0	·1329	4. 9	·03395	Max.	58·0	59·2
3. 34	36. 50	3. 14	·1324	4. 54	·03400	9. 0	57·5	58·0
3. 40	36. 20	3. 34	·1323	6. 10	·03395	Min.	56·3	57·5
4. 11	36. 20	3. 38	·1325	6. 25	·03405	21. 0	56·6	57·9
4. 22	35. 0	3. 49	·1322	7. 16	·03395			
4. 38	35. 15	4. 17	·1333	7. 42	·03405			
4. 53	34. 40	4. 26	·1327	8. 24	·03395			
5. 0	35. 0	4. 38	·1325	9. 2	·03400			
5. 28	33. 55	5. 9	·1335	10. 53	·03380			
6. 2	34. 30	5. 28	·1334	11. 2	·03370			
6. 18	33. 30	5. 41	·1330	11. 38	·03325			
6. 31	34. 5	6. 14	·1331	12. 8	·03337			
6. 44	33. 40	6. 23	·1327	13. 4	·03310			
6. 59	33. 40	6. 35	·1337	13. 12	·03290			
7. 11	32. 55	6. 44	·1338	13. 23	·03316			
7. 25	28. 0	6. 53	·1333	13. 48	·03110			
7. 41	28. 0	7. 5	·1339	14. 11:	·03190			
8. 0	29. 25	7. 24	·1333	14. 37	·03230			
8. 14	29. 0	7. 49	·1347	14. 45	·03230			
8. 38	26. 30	8. 8	·1339	14. 56	·03262			
9. 7	28. 10	8. 18	·1339	15. 58	·03295			
9. 12	27. 55	8. 32	·1329	17. 26	·03320			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 11		May 11		May 11				
h m	° ′ ″	h m		h m		h m	°	°
9. 24	20. 28. 35	8. 37	·1334	17. 57	·03317			
9. 38	28. 15	8. 51	·1325	19. 14	·03335			
9. 51	29. 10	9. 4	·1331	19. 57	·03320			
10. 2	28. 0	9. 42	·1321	20. 39	·03316			
10. 11	27. 40	9. 48	·1323	21. 19	·03310			
10. 43	29. 35	10. 6	·1319	23. 11	·03310			
11. 21	15. 40	10. 20	·1320	23. 59	·03325			
11. 39	17. 10	10. 32	·1325					
11. 56	21. 30	10. 48	·1320					
12. 16	24. 30	11. 18	·1343					
12. 42	23. 25	11. 41	·1326					
13. 8	25. 30	11. 57	·1327					
13. 19	47. 35	12. 25	·1316					
13. 25	47. 30	12. 35	·1322					
13. 43	25. 0	12. 41	·1318					
13. 56	24. 40	12. 56	·1321					
14. 11	28. 5	13. 3	·1329					
14. 22	27. 25	13. 16	·1320					
14. 26	27. 10	13. 23	·1332					
14. 39	21. 15	13. 28	·1327					
14. 46	21. 0	13. 44	·1287					
15. 4	23. 10	13. 56	·1287					
15. 10	23. 10	14. 4	·1295					
15. 17	24. 30	14. 15	·1293					
15. 27	24. 15	14. 29	·1299					
15. 41	25. 35	14. 37	·1293					
15. 44	25. 25	14. 59	·1318					
15. 54	26. 0	15. 20	·1313					
16. 8	25. 0	15. 51	·1321					
16. 40	24. 5	16. 8	·1316					
17. 1	25. 0	16. 24	·1319					
17. 16	27. 30	17. 0	·1308					
17. 31	28. 10	17. 22	·1309					
17. 39	27. 35	17. 45	·1316					
17. 46	27. 20	17. 57	·1311					
17. 54	25. 30	18. 21	·1321					
18. 9	27. 0	18. 44	·1309					
18. 24	29. 40	19. 19	·1311					
18. 41	27. 0	19. 45	·1306					
18. 58	27. 0	20. 10	·1294					
19. 29	28. 30	20. 37	·1295					
19. 41	28. 20	20. 50	·1293					
19. 43	29. 5	21. 24	·1297					
19. 54	28. 10	22. 33	·1293					
20. 3	28. 35	23. 59	·1299					
20. 12	28. 25							
20. 23	28. 50							
20. 35	29. 30							
20. 53	29. 5							
21. 9	29. 20							
23. 4	37. 40							
23. 59	38. 55							
May 12		May 12		May 12		May 12		
0. 0	20. 38. 55	0. 0	·1299	0. 0	·03325	1. 0	56·8	58·9
1. 30	39. 30	0. 55	·1302	5. 0	·03400	3. 0	57·0	59·6
1. 53	39. 0	1. 44	·1301	10. 59	·03360	Max.	58·3	60·1
2. 23	39. 0	2. 13	·1309	16. 6	·03335	9. 0	56·8	58·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 10d. From 21h. 25m. to 23h. 59m. the damper of the Declination Magnet was placed experimentally in various positions, but no difficulty has been experienced in measuring the ordinates of the photographic curve during this time.

May 11d. 21h. 25m. to 12d. 0h. 13m. Damper experiments with the Declination Magnet were in progress, but the position of the Magnet was very slightly affected, and the ordinates have therefore been read out as usual.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 12	° ′ ″	May 12		May 12		May 12	°	°
h m		h m		h m		h m		
3. 29	20. 37. 15	2. 35	·1303	19. 1	·03320	Min.	55 ·8	56 ·9
5. 53	32. 0	3. 12	·1310	19. 30	·03316	21. 0	56 ·0	57 ·0
7. 6	31. 20	4. 6	·1308	21. 9	·03300			
8. 29	31. 0	4. 17	·1312	23. 59	·03278			
9. 19	32. 35	5. 13	·1319					
9. 32	32. 0		***					
10. 39	32. 0	7. 0	·1322					
11. 9	31. 30	8. 55	·1314					
12. 53	32. 0	9. 18	·1318					
13. 43	31. 35	9. 41	·1314					
14. 54	31. 20	10. 27	·1318					
16. 52	31. 35	11. 14	·1314					
18. 38	28. 55	14. 40	·1316					
18. 57	28. 55	15. 12	·1315					
19. 22	27. 5	17. 10:	·1318					
19. 28	27. 5	21. 57	·1291					
19. 39	27. 35	22. 21	·1291					
20. 1	27. 5	23. 8	·1300					
20. 11	27. 35	23. 47	·1303					
20. 27	26. 30	23. 59	·1297					
20. 42	28. 0							
21. 16	29. 0							
21. 26	30. 0							
22. 1	33. 30							
22. 8	35. 0							
23. 15	39. 20							
23. 49	39. 40							
	(†)							
May 13		May 13		May 13		May 13		
	(†)	0. 0	·1297	0. 0	·03278	Min.	56 ·7	58 ·3
1. 0	20. 46. 28*	0. 12	·1309	1. 2	·03295	1. 0	56 ·9	58 ·8
1. 47	48. 40	1. 48	·1325	3. 18	·03355	3. 0	57 ·0	59 ·0
2. 23	47. 0	2. 21	·1316		·03370	9. 0	57 ·7	59 ·0
2. 41	47. 20		***	5. 3	·03395	Max.	58 ·7	60 ·2
3. 11	46. 35	3. 9	·1319	5. 12	·03410	22. 0	57 ·7	59 ·0
	***	3. 49	·1303	5. 33	·03400			
3. 43	43. 30	4. 26	·1314	6. 3	·03412			
4. 26	41. 20	4. 44	·1327	6. 34	·03420			
4. 53	42. 5	4. 56	·1326	6. 43	·03415			
5. 6	43. 0	5. 17	·1342	7. 3	·03430			
5. 23	42. 25	5. 31	·1333	7. 11	·03422			
5. 30	43. 0	5. 52	·1339	7. 33	·03450			
5. 45	43. 0	6. 11	·1333	8. 21	·03440			
5. 56	42. 10	6. 12	·1338	8. 39	·03430			
6. 5	41. 20	6. 17	·1333	8. 44	·03440			
6. 11	40. 45	6. 28	·1345	10. 2	·03380			
6. 23	41. 35	6. 40	·1342	10. 19	·03390			
6. 32	40. 40	6. 53	·1346	10. 46	·03290			
6. 47	41. 0	7. 8	·1333	10. 49	·03290			
6. 56	36. 0	7. 12	·1335	10. 57	·03230			
7. 0	36. 0	7. 28	·1327	11. 18	·03310			
7. 9	33. 5	7. 53	·1319	11. 29	·03295			
7. 33	35. 20	8. 4	·1323	11. 47	·03290			
7. 43	34. 50	8. 30	·1307	12. 25	·03310			
8. 0	29. 5	8. 44	·1319	12. 31	·03310			
8. 16	30. 10	8. 55	·1315	12. 39	·03340			
8. 28	25. 0	9. 16	·1321	13. 14	·03370			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 13	° ′ ″	May 13		May 13		h m	°	°
h m		h m		h m				
8. 53	20. 28. 50	9. 33	·1320	16. 38	·03396			
9. 3	29. 55	9. 42	·1315	16. 47	·03380			
9. 12	29. 55	9. 54	·1299	17. 10	·03362			
9. 31	30. 15	10. 14	·1312	17. 23	·03370			
9. 55	28. 20	10. 38	·1349	17. 54	·03367			
10. 9	31. 30	10. 49	·1282	18. 1	·03360			
10. 14	29. 5	11. 5	·1331	18. 9	·03370			
10. 24	22. 0	11. 18	·1301	18. 23	·03360			
10. 27	25. 40	11. 25	·1297	18. 39	·03350			
10. 30	22. 10	11. 40	·1303	19. 10	·03350			
10. 40	28. 35	11. 45	·1295	19. 20	·03358			
10. 54	13. 35	11. 56	·1295	20. 15	·03330			
11. 13	29. 55	12. 9	·1305	20. 25	·03310			
11. 33	23. 45	12. 13	·1296	20. 37	·03320			
11. 44	27. 50	12. 23	·1309	20. 58	·03330			
11. 48	27. 50	12. 44	·1303	21. 43	·03350			
11. 55	28. 25	12. 49	·1309	23. 59	·03360			
11. 59	27. 30	13. 7	·1306					
12. 4	28. 10	13. 44	·1312					
12. 13	25. 30	13. 52	·1308					
12. 34	24. 30	14. 4	·1311					
13. 11	32. 0	14. 13	·1308					
13. 39	32. 30	14. 20	·1311					
14. 9	31. 20	14. 37	·1305					
14. 37	31. 10	14. 44	·1307					
15. 53	28. 50	15. 7	·1301					
16. 11	33. 5	15. 15	·1309					
16. 23	31. 30	15. 23	·1304					
16. 36	33. 0	15. 27	·1306					
16. 43	31. 50	15. 39	·1302					
16. 53	31. 40	15. 54	·1309					
	***	16. 9	·1305					
17. 9	28. 55	16. 20	·1313					
17. 23	31. 30	16. 31	·1309					
17. 27	29. 40	16. 40	·1315					
17. 52	29. 0	17. 0	·1310					
17. 54	25. 15	17. 7	·1317					
18. 3	28. 15	17. 13	·1308					
18. 9	27. 30		***					
18. 23	31. 25	17. 52	·1317					
18. 26	29. 10	17. 56	·1306					
18. 34	31. 35	18. 5	·1317					
18. 40	30. 0	18. 47	·1306					
18. 52	31. 40	19. 8	·1295					
19. 4	29. 40	19. 13	·1298					
19. 12	32. 5	19. 49	·1264					
19. 38	31. 10	20. 17	·1285					
19. 53	37. 20	20. 26	·1261					
20. 9	39. 30	20. 35	·1272					
20. 12	38. 15	20. 42	·1266					
20. 22	38. 5	20. 44	·1275					
20. 28	34. 15	20. 56	·1265					
20. 41	34. 15	21. 18	·1267					
21. 11	43. 30	21. 48	·1296					
21. 24	42. 40	22. 0	·1301					
21. 27	40. 10	22. 8	·1286					
21. 44	39. 30	22. 11	·1297					
22. 29	45. 15	22. 16	·1277					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 13		May 13						
h m	° ′ ″	h m		h m		h m	°	°
22. 45	20. 44. 55	22. 25	·1285					
22. 53	46. 40	22. 32	·1276					
23. 1	46. 0	22. 37	·1286					
23. 11	49. 0	22. 42	·1281					
23. 23	48. 0	22. 52	·1296					
23. 47	49. 50		***					
23. 59	50. 0	23. 13	·1275					
		23. 20	·1285					
		23. 24	·1276					
		23. 47	·1293					
		23. 59	·1283					
May 14		May 14		May 14		May 14		
0. 0	20. 50. 0	0. 0	·1282	0. 0	·03360	1. 0	57 ·8	59 ·9
0. 7	48. 35	0. 5	·1275	0. 34	·03387	Max.	58 ·5	60 ·6
0. 14	50. 0	0. 14	·1286	0. 41	·03380	9. 0	57 ·8	57 ·8
0. 22	49. 5	0. 31	·1291	1. 2	·03415	Min.	55 ·8	57 ·8
0. 34	49. 55	0. 43	·1267	1. 23	·03420	21. 0	57 ·1	59 ·4
0. 45	48. 0	1. 5	·1295	1. 37	·03457			
1. 0	49. 55	1. 25	·1262	1. 40	·03450			
	(†)	1. 40	·1291	1. 53	·03460			
1. 4	50. 30	1. 54	·1268	2. 11	·03490			
1. 28	47. 5	2. 9	·1286	2. 19	·03465			
1. 40	51. 45	2. 21	·1252	2. 30	·03484			
1. 46	49. 5	2. 32	·1271	2. 59	·03480			
1. 55	49. 5	2. 50	·1279		***			
1. 58	45. 30	3. 4	·1293	3. 33	·03480			
2. 9	46. 0	3. 9	·1292		***			
2. 16	49. 30	3. 17	·1299	3. 45	·03490			
2. 26	44. 40		***	4. 14	·03480			
2. 33	45. 0	3. 37	·1294	4. 29	·03490			
2. 52	45. 0	3. 48	·1309	5. 11	·03487			
2. 55	42. 40	4. 6	·1298	5. 25	·03500			
3. 8	42. 40	4. 13	·1303	6. 25	·03490			
3. 23	44. 50	4. 18	·1301	6. 41	·03475			
3. 32	41. 40		***	7. 3	·03486			
3. 40	38. 30	4. 34	·1315	7. 24	·03460			
4. 1	40. 5	4. 44	·1310	7. 31	·03500			
4. 8	38. 45	5. 9	·1315	7. 38	·03450			
4. 10	38. 45	5. 15	·1309	7. 47	·03425			
4. 13	36. 0	5. 21	·1318	7. 59	·03430			
4. 25	36. 0	5. 33	·1311	8. 8	·03415			
4. 31	38. 10	5. 44	·1314	8. 19	·03430			
	***	6. 5	·1309	8. 37	·03410			
5. 11	40. 0	6. 18	·1318	9. 23	·03380			
5. 22	36. 40	6. 21	·1316	9. 54	·03342			
5. 30	38. 30	6 28	·1323	10. 54	·03337			
5. 38	37. 0	6. 42	·1309	11. 19	·03310			
5. 41	37. 0	6. 49	·1311	11. 28	·03315			
5. 43	38. 5	7. 4	·1326	11. 41	·03270			
5. 56	37. 30	7. 22	·1308	11. 48	·03280			
6. 7	36. 25	7. 33	·1377	11. 55	·03272			
6. 14	36. 25	7. 51	·1316	12. 10	·03300			
6. 23	35. 30	8. 1	·1326	12. 42	·03317			
6. 30	37. 25	8. 11	·1314	13. 46:	·03380			
6. 56	31. 30	8. 19	·1334	16. 1	·03400			
7. 11	36. 25	8. 30	·1322	16. 27	·03410			
7. 23	21. 10	8. 38	·1322	17. 48	·03400			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 14		May 14		May 14				
h m	° ′ ″	h m		h m		h m	°	°
7. 32	20. 38. 40	8. 43	·1327	19. 52	·03382			
7. 41	39. 5	9. 14	·1313	21. 1	03370			
7. 53	34. 0	9. 17	·1317	21. 30	·03380			
7. 58	33. 40	9. 34	·1297	23. 59	·03370			
8. 9	25. 40	9. 55	·1297					
8. 22	28. 40	10. 0	·1307					
8. 37	20. 40	10. 11	·1309					
8. 41	20. 40	10. 18	·1303					
9. 16	30. 5	10. 25	·1309					
9. 25	29. 55	10. 41	·1307					
9. 39	25. 40	10. 49	·1294					
9. 45	22. 0	11. 4	·1293					
9. 58	22. 20	11. 15	·1286					
10. 11	19. 20	11. 19	·1278					
10. 32	26. 50	11. 26	·1288					
10. 41	27. 5	11. 40	·1275					
10. 54	29. 10	11. 51	·1296					
11. 8	25. 30	12. 13	·1314					
11. 24	37. 50	12. 34	·1307					
11. 33	33. 30	12. 41	·1300					
12. 24	33. 0	13. 11	·1295					
12. 27	29. 40	13. 21	·1303					
12. 30	29. 40	13. 33	·1299					
12. 53	29. 0	13. 43	·1303					
13. 8	30. 0	14. 4	·1298					
13. 11	32. 45	14. 14	·1302					
13. 23	32. 20	14. 34	·1300					
	***	15. 1	·1304					
13. 56	36. 0	16. 41	·1300					
14. 54	33. 5	16. 49	·1302					
15. 37	31. 30	17. 4	·1298					
15. 55	31. 40	17. 19	·1299					
16. 0	32. 30	17. 25	·1294					
16. 12	31. 20	17. 58	·1285					
17. 2	31. 45	18. 34	·1271					
17. 17	29. 50	19. 4	·1280					
17. 30	31. 45	19. 12	·1273					
17. 38	31. 0	19. 27	·1282					
17. 52	34. 0	19. 55	·1286					
	***	20. 15	·1278					
18. 14	36. 0	20. 42	·1276					
18. 24	35. 10	20. 55	·1266					
18. 31	37. 40	21. 15	·1264					
18. 47	39. 0	21. 47	·1291					
18. 54	38. 10	22. 10	·1290					
19. 1	39. 30	22. 23	·1298					
19. 9	38. 30	22. 29	·1287					
19. 14	39. 30	22. 55	·1284					
19. 22	36. 30		***					
19. 27	37. 15	23. 59	·1286					
19. 37	36. 20							
19. 59	38. 45							
20. 9	37. 30							
20. 24	37. 30							
20. 40	38. 25							
21. 9	38. 0							
21. 11	39. 0							
21. 23	37. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 14								
h m	° ′ ″	h m		m		h m	°	°
21. 41	20. 39. 5							
22. 11	38. 5							
22. 25	40. 5							
23. 24	41. 40							
23. 35	43. 50							
23. 59	43. 25							
May 15		May 15		May 15		May 15		
0. 0	20. 43. 25	0. 0	·1286	0. 0	·03370	1. 0	58 ·0	60 ·0
0. 16	43. 55	0. 20	·1303	3. 15	·03417	3. 0	58 ·2	60 ·0
	***	0. 34	·1310	5. 11	·03465	Max.	58 ·3	60 ·2
1. 9	45. 30	0. 49	·1304	9. 36	·03420	9. 0	58 ·2	59 ·0
1. 29	43. 25	1. 15	·1306	10. 8	·03395	Min.	56 ·4	58 ·0
1. 40	43. 50		***	12. 15	·03406	21. 0	57 ·1	58 ·6
1. 52	43. 0	1. 32	·1294	12. 38	·03390			
	***	1. 43	·1298	12. 53	·03370			
2. 25	43. 50	2. 2	·1293	13. 29	·03350			
3. 24	39. 0	2. 34	·1304	13. 55	·03342			
3. 33	39. 0		***	14. 32	·03360			
3. 52	37. 5	3. 25	·1290	15. 4	·03355			
3. 59	37. 40	3. 41	·1301	15. 31	·03340			
4. 9	37. 25	3. 53	·1306	15. 40	·03350			
4. 37	39. 0	4. 0	·1301	16. 30	·03360			
4. 53	38. 25	4. 23	·1316	17. 2	·03370			
5. 0	38. 40	4. 43	·1317	18. 39	·03376			
5. 28	35. 35	5. 4	·1307	19. 13	·03370			
5. 37	35. 30	5. 10	·1311	20. 25	·03360			
	***	5. 29	·1299	21. 1	·03355			
5. 53	32. 40	5. 47	·1313	22. 54	·03320			
6. 9	32. 40	5. 54	·1307	23. 59	·03330			
6. 32	36. 0	6. 18	·1334					
6. 53	37. 30	6. 24	·1334					
7. 9	36. 50	6. 41	·1326					
7. 40	36. 50	6. 52	·1324					
8. 3	36. 0	6. 56	·1326					
8. 30	36. 25	7. 37	·1314					
8. 40	35. 50	7. 40	·1317					
8. 56	31. 35	7. 56	·1313					
9. 9	31. 20	8. 35	·1321					
9. 28	34. 30	9. 5	·1316					
9. 35	34. 5	9. 18	·1319					
9. 46	35. 35	9. 25	·1315					
10. 1	32. 30	9. 40	·1321					
10. 6	31. 55	9. 55	·1311					
10. 15	33. 5	10. 19	·1317					
10. 39	30. 30	10. 29	·1314					
11. 5	30. 0	10. 55	·1316					
11. 17	30. 45	11. 4	·1313					
11. 25	30. 45	11. 18	·1314					
11. 34	30. 5	11. 22	·1309					
11. 54	32. 0	11. 30	·1311					
11. 58	36. 30	11. 48	·1304					
12. 28	41. 30	12. 23	·1304					
12. 44	39. 30	12. 34	·1313					
13. 8	37. 40	12. 40	·1311					
13. 19	34. 20	12. 51	·1315					
13. 57	32. 0	13. 4	·1312					
14. 25	34. 20	13. 29	·1314					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 15		May 15						
h m	° ′ ″	h m		h m		h m	°	°
14. 39	20. 35. 45	13. 57	·1308					
14. 54	35. 45	14. 19	·1310					
14. 58	37. 20	14. 56	·1303					
15. 7	37. 30	15. 11	·1308					
15. 24	34. 30	15. 22	·1303					
15. 38	35. 40	15. 28	·1308					
16. 23	32. 40	15. 58	·1305					
16. 53	32. 30	16. 29	·1304					
17. 0	31. 20	16. 35	·1307					
17. 11	32. 15	17. 4	·1305					
17. 45	31. 5	17. 24	·1311					
	***	17. 50	·1302					
18. 40	30. 20	18. 9	·1305					
19. 9	31. 40	18. 44	·1299					
19. 42	31. 40	19. 5	·1304					
19. 45	31. 0	19. 30	·1297					
20. 9	32. 40	19. 43	·1298					
	***	19. 53	·1296					
20. 55	33. 20	20. 11	·1298					
21. 12	33. 0	20. 41	·1293					
21. 42	34. 45	21. 4	·1292					
21. 54	34. 30	21. 31	·1282					
21. 58	35. 25	21. 54	·1275					
22. 59	38. 30	22. 25	·1284					
23. 14	38. 30	22. 46	·1280					
23. 54	41. 30	23. 43	·1304					
23. 59	41. 30	23. 59	·1296					
May 16		May 16		May 16		May 16		
0. 0	20. 41. 30	0. 0	·1296	0. 0	·03330	1. 0	57 ·8	59 ·8
0. 11	41. 30	0. 25	·1302	1. 20	·03390	3. 0	56 ·8	59 ·0
0. 24	39. 25	0. 34	·1310	2. 38	·03410	9. 0	56 ·8	60 ·0
0. 42	41. 30	0. 51	·1297	2. 44	·03395	Max.	58 ·0	60 ·0
1. 9	39. 50	1. 11	·1300	2. 55	·03405	21. 0	57 ·1	58 ·9
1. 29	40. 0	1. 30	·1310	3. 24	·03395	Min.	56 ·7	58 ·4
1. 40	39. 35	1. 45	·1308	5. 49	·03430	22. 0	57 ·1	59 ·0
2. 10	41. 50	2. 0	·1313	6. 1	·03410	23 0	57 ·3	59 ·3
2. 24	41. 20	2. 25	·1300	6. 18	·03416			
2. 40	42. 0	3. 4	·1306	10. 54	·03390			
2. 53	41. 0	3. 38	·1302	11. 23	·03370			
3. 0	42. 5	3. 47	·1300	11. 46	·03360			
3. 24	41. 40	3. 55	·1304	12. 6	·03340			
3. 31	40. 25	4. 4	·1303	12. 30	·03325			
3. 54	40. 45	4. 7	·1307	12. 48	·03312			
4. 24	39. 45	4. 13	·1305	13. 8	·03307			
4. 54	40. 35	4. 21	·1306	13. 46	·03310			
5. 2	39. 50	4. 45	·1313	15. 4	·03335			
5. 8	40. 5	4. 55	·1319	16. 3	·03310			
5. 34	35. 5	5. 10	·1314	17. 13	·03330			
5. 54	37. 0	5. 20	·1303	17. 56	·03350			
6. 1	34. 35	5. 30	·1302		***			
6. 11	34. 0	5. 46	·1310	19. 24	·03340			
6. 39	36. 5	5. 52	·1316	19. 54	·03335			
6. 53	36. 35	6. 0	·1307	20. 14	·03345			
7. 4	36. 0	6. 10	·1308	20. 32	·03340			
7. 30	36. 35	6. 20	·1317	20. 44	·03332			
7. 54	36. 50	6. 34	·1316	22. 25	·03326			
8. 9	36. 0	6. 50	·1322	23. 23	·03340			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
May 16		May 16		May 16				
h m	° ′ ″	h m		h m		h m	°	°
8. 39	20. 36. 20	7. 10	·1314	23. 59	·03355			
10. 11	35. 15	7. 14	·1316					
10. 27	35. 35	7. 22	·1314					
10. 34	35. 5	7. 26	·1318					
10. 42	33. 45	7. 38	·1316					
11. 1	33. 30	7. 50	·1321					
11. 32	24. 20	8. 9	·1316					
11. 54	28. 0	8. 34	·1317					
12. 10	23. 5	9. 2	·1314					
12. 23	22. 40	9. 54	·1315					
12. 29	24. 15	10. 5	·1311					
12. 37	24. 15	10. 21	·1314					
12. 42	23. 30	10. 30	·1318					
13. 0	24. 0	10. 40	·1317					
13. 32	29. 0	10. 56	·1327					
13. 48	29. 30	11. 20	·1316					
14. 6	33. 0	11. 36	·1324					
14. 27	32. 30	11. 45	·1336					
14. 32	34. 0	12. 11	·1317					
14. 54	33. 0	12. 28	·1323					
15. 11	34. 5	12. 49	·1306					
15. 27	36. 0	13. 3	·1307					
15. 37	36. 0	13. 12	·1303					
15. 42	36. 50	13. 24	·1307					
15. 46	36. 30	13. 44	·1298					
15. 57	37. 45	13. 51	·1300					
16. 8	36. 30	13. 58	·1298					
16. 12	37. 0	14. 29	·1304					
16. 23	35. 5	14. 56	·1301					
16. 29	35. 15	15. 15	·1300					
16. 37	34. 5	15. 35	·1292					
16. 45	34. 0	15. 42	·1295					
17. 11	32. 0	15. 47	·1293					
17. 40	31. 30	16. 0	·1297					
17. 56	32. 25	16. 8	·1294					
18. 13	31. 0	16. 32	·1304					
18. 33	31. 35	16. 42	·1302					
18. 36	30. 15	16. 51	·1306					
	***	17. 41	·1301					
18. 56	32. 0	17. 52	·1304					
18. 58	30. 40	18. 17	·1302					
19. 8	30. 0	18. 33	·1305					
19. 13	31. 0	18. 44	·1300					
19. 19	28. 25	19. 6	·1294					
19. 56	28. 35	19. 17	·1296					
20. 3	31. 30	19. 25	·1290					
	***	19. 40	·1286					
20. 26	31. 30	19. 47	·1287					
	***	20. 9	·1280					
20. 39	29. 40		***					
	***	22. 10	·1296					
20. 57	32. 30	22. 39	·1294					
21. 29	32. 25	22. 45	·1301					
21. 53	33. 10		(†)					
22. 6	33. 20	23. 59	·1316					
22. 38	34. 30							
22. 54	36. 0							
23. 8	36. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
May 16								
h m	° ′ ″	h m		h m		h m	°	°
23. 54	20. 40. 0							
23. 59	38. 40							
May 17		May 17		May 17		May 17		
0. 0	20. 38. 40	0. 0	·1316	0. 0	·03355	0. 0	57 ·7	60 ·2
0. 24	40. 0	0. 30	·1308	3. 34	·03417	1. 0	58 ·6	60 ·5
0. 31	40. 35	0. 52	·1313	4. 45	·03435	2. 0	58 ·8	60 ·6
0. 42	40. 0	1. 13	·1309	4. 56	·03422	3. 0	59 ·1	60 ·8
0. 53	41. 5	1. 23	·1314	5. 25	·03450	Max.	60 ·0	61 ·0
1. 5	40. 0	1. 40	·1310	8. 32	·03430	9. 0	58 ·8	60 ·5
1. 24	40. 10	1. 47	·1313	8. 41	·03420	Min.	58 ·0	59 ·6
1. 33	39. 50	1. 56	·1310	9. 32	·03410	21. 0	58 ·1	59 ·8
1. 44	39. 50		***	12. 3	·03406	23. 0	59 ·6	60 ·9
1. 53	39. 15	2. 36	·1320	12. 29	·03392			
2. 0	39. 15	2. 47	·1318	13. 0	·03395			
2. 6	39. 35	3. 3	·1320	13. 43:	·03370			
2. 22	38. 40	3. 12	·1315	14. 14	·03370			
2. 33	39. 25	3. 18	·1318	14. 49	·03380			
	***	3. 29	·1314	15. 21	·03380			
3. 23	38. 0	3. 35	·1317	15. 48	·03370			
	***	3. 41	·1317	16. 19	·03370			
4. 8	38. 40	4. 15	·1328	17. 0:	·03350			
4. 23	38. 0	4. 32	·1325	18. 28	·03380			
4. 39	38. 20	4. 50	·1327	19. 38	·03370			
4. 53	37. 25	4. 58	·1325	20. 37	·03385			
4. 56	37. 30	5. 6	·1310	21. 59	·03370			
5. 3	34. 40	5. 17	·1310	23. 59	·03390			
5. 14	32. 0	5. 35	·1325					
5. 27	31. 5	5. 44	·1323					
5. 34	31. 35	5. 50	·1322					
5. 44	31. 30	6. 4	·1327					
6. 9	33. 40	6. 19	·1323					
6. 18	34. 0	6. 28	·1324					
6. 36	35. 0	6. 40	·1322					
7. 10	35. 50	7. 8	·1322					
7. 41	35. 5	7. 14	·1326					
7. 57	31. 35	7. 34	·1323					
8. 13	30. 50	7. 40	·1325					
8. 29	29. 45	7. 48	·1323					
8. 37	30. 20	8. 6	·1326					
8. 53	27. 15	8. 30	·1322					
9. 0	30. 30	8. 40	·1318					
9. 26	33. 55	8. 56	·1330					
9. 39	33. 10	9. 25	·1323					
9. 54	33. 55	9. 36	·1316					
10. 3	33. 20	9. 55	·1313					
10. 15	34. 30	10. 28	·1314					
10. 38	34. 10	10. 41	·1318					
10. 44	34. 35	10. 56	·1314					
11. 0	33. 15	11. 4	·1317					
11. 33	35. 40	11. 22	·1313					
11. 43	35. 30	11. 32	·1317					
11. 54	37. 45	12. 19	·1318					
12. 24	35. 0	12. 40	·1314					
12. 39	34. 45	12. 54	·1322					
12. 55	37. 40	13. 3	·1319					
13. 8	37. 30	13. 9	·1321					
13. 11	36. 45	13. 34	·1315					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 16. Damper experiments with the Horizontal Force Magnet were made after $22^h. 45^m$.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 17		May 17						
h m	° ′ ″	h m		h m		h m	°	°
13. 25	20. 36. 35	14. 41	·1318					
13. 42	34. 5	15. 13	·1316					
14. 4	30. 30	15. 17	·1318					
14. 19	30. 30	15. 52	·1296					
14. 35	29. 30	16. 47:	·1328					
14. 54	28. 25	17. 35	·1304					
15. 13	28. 10	17. 47	·1307					
15. 24	28. 40	18. 7	·1304					
15. 41	30. 0	18. 30	·1309					
15. 54	32. 20	18. 42	·1306					
16. 12	36. 5	19. 1	·1309					
16. 23	35. 10	19. 57	·1296					
17. 0	29. 40	20. 4	·1299					
17. 26	29. 25	20. 52	·1294					
17. 41	27. 30	21. 25	·1295					
17. 44	28. 5		(†)					
17. 53	27. 30							
	***							
18. 34	31. 30							
18. 40	30. 55							
19. 2	30. 55							
19. 15	30. 10							
19. 23	29. 25							
19. 44	30. 0							
19. 58	29. 5							
20. 17	31. 55							
20. 26	31. 35							
21. 10	33. 15							
21. 36	33. 15							
22. 11	36. 5							
22. 23	37. 0							
22. 30	36. 20							
23. 3	37. 25							
23. 12	38. 30							
23. 35	38. 0							
23. 39	36. 45							
23. 52	36. 45							
23. 54	38. 10							
23. 59	38. 10							
May 18		May 18		May 18		May 18		
0. 0	20. 38. 10	0. 0	·1291	0. 0	·03390	0. 0	59 ·8	61 ·7
0. 9	38. 40	0. 56	·1296	3. 19	·03465	1. 0	59 ·8	62 ·2
0. 22	38. 0	1. 27	·1310	3. 46	·03470	2. 0	60 ·0	62 ·1
0. 38	38. 40	2. 29	·1298	5. 3	·03465	Max.	60 ·0	62 ·2
0. 40	38. 0	2. 41	·1292	9. 14	·03456	3. 0	60 ·0	61 ·6
1. 10	38. 45	2. 59	·1294	11. 2	·03430	9. 0	59 ·3	60 ·7
1. 23	39. 40	3. 22	·1306	13. 23	·03420	Min.	57 ·5	59 ·2
1. 38	40. 0	3. 30	·1308	14. 34	·03400	21. 0	57 ·8	59 ·9
2. 29	42. 0	3. 39	·1306	18. 14	·03390			
2. 40	40. 5	3. 47	·1316	20. 10	·03380			
2. 45	40. 5	3. 58	·1315	23. 59	·03400			
3. 0	38. 0	4. 10	·1319					
3. 23	37. 35	4. 40	·1308					
3. 39	36. 30	4. 46	·1308					
3. 54	37. 5	4. 57	·1316					
4. 1	36. 40	5. 5	·1312					
4. 18	37. 25	5. 15	·1316					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 18		May 18						
h m	° ′ ″	h m		h m		h m	°	°
4. 45	20. 36. 0	5. 40	·1310					
4. 57	36. 45	6. 15	·1319					
5. 10	35. 50	6. 37	·1315					
5. 40	35. 35	6. 49	·1318					
6. 6	36. 10	6. 57	·1314					
6. 39	35. 35	7. 42	·1309					
7. 56	34. 40	8. 0	·1312					
8. 12	35. 35	8. 10	·1310					
8. 40	35. 35	9. 2	·1312					
8. 56	34. 25	9. 42	·1310					
9. 16	33. 35	10. 11	·1316					
9. 43	34. 10	11. 16	·1310					
9. 57	34. 50	11. 34	·1312					
10. 10	34. 30	12. 11	·1307					
10. 36	35. 45	13. 26	·1312					
11. 18	34. 30	13. 32	·1309					
11. 40	35. 30	14. 47	·1308					
12. 23	33. 40	15. 27	·1306					
12. 53	33. 5	16. 52	·1309					
13. 12	34. 0	18. 21	·1304					
13. 25	32. 50	18. 41	·1306					
13. 51	34. 45	21. 38	·1301					
14. 37	31. 30	21. 49	·1298					
14. 54	31. 20	22. 15	·1300					
15. 16	30. 15	22. 30	·1297					
15. 50	29. 20	23. 45	·1299					
16. 39	30. 10		(†)					
18. 6	28. 20							
18. 53	29. 35							
20. 9	30. 20							
21. 54	33. 5							
23. 40	37. 30							
23. 59	38. 40							
May 19		May 19		May 19		May 19		
0. 0	20. 38. 40		(†)	0. 0	·03400	1. 0	60 ·6	62 ·0
0. 40	39. 35	1. 49	·1304	4. 48	·03465	3. 0	60 ·6	62 ·4
	(†)	2. 20	·1303	6. 15	·03459	Max.	60 ·8	62 ·7
1. 0	41. 52*	3. 9	·1310	9. 0	·03476	9. 0	59 ·6	62 ·7
1. 43	38. 30	3. 23	·1303	10. 53	·03480	Min.	58 ·9	60 ·8
2. 52	38. 5	4. 0	·1302	12. 11	·03481	21. 0	60 ·3	61 ·6
3. 8	38. 30	4. 28	·1305	14. 9	·03482			
3. 19	37. 0	4. 46	·1314	14. 42:	·03469			
3. 36	36. 50	5. 1	·1327	15. 24	·03467			
3. 45	37. 5	5. 25	·1323	16. 0	·03452			
4. 23	36. 25	5. 44	·1324	16. 53	·03457			
4. 45	36. 35	5. 51	·1320	17. 45	·03443			
4. 58	37. 50	6. 7	·1327	18. 4	·03450			
5. 10	37. 0	6. 13	·1319	19. 3	·03435			
5. 46	36. 25	6. 22	·1322	19. 42	·03449			
5. 54	37. 15	6. 33	·1318	21. 52	·03428			
6. 8	36. 45		***	23. 9	·03436			
6. 12	36. 45	7. 17	·1325	23. 36	·03443			
6. 23	35. 50	7. 50	·1320	23. 59	·03445			
6. 40	35. 10	8. 11	·1322					
7. 30	36. 5	8. 24	·1320					
7. 46	35. 25	8. 46	·1324					
8. 33	35. 25	9. 22	·1317					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.
From May 17^{d}. 21^{h}. 30^{m}. to 23^{h}. 59^{m}., and from May 18^{d}. 23^{h}. 45^{m}. to May 19^{d}. 1^{h}. 49^{m}., Damper experiments with the Horizontal Force Magnet were made.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 19		May 19						
h m	° ′ ″	h m		h m		h m	°	°
8. 55	20. 35. 40	12. 48	·1316					
9. 38	34. 50	13. 44	·1313					
10. 33	33. 55	14. 6	·1320					
11. 54	34. 20	14. 55	·1314					
12. 0	33. 55	15. 14	·1315					
12. 9	34. 25	16. 25	·1303					
13. 8	33. 10	16. 43	·1307					
13. 44	33. 35	17. 41	·1301					
13. 57	35. 45	18. 19	·1314					
14. 42	31. 45	18. 45	·1313					
15. 17	33. 40	19. 6	·1308					
15. 27	32. 30	19. 28	·1309					
15. 54	30. 40	19. 50	·1301					
16. 17	31. 35	20. 3	·1301					
16. 25	30. 55	20. 11	·1297					
16. 41	32. 30	21. 43	·1291					
16. 55	31. 55	21. 50	·1296					
17. 4	32. 45	22. 4	·1294					
	***	23. 38	·1301					
17. 26	31. 40	23. 52	·1307					
18. 23	34. 50	23. 59	·1306					
18. 54	33. 45							
18. 57	32. 45							
19. 23	31. 25							
19. 29	32. 45							
19. 55	31. 40							
20. 3	32. 30							
20. 10	31. 55							
20. 24	32. 5							
20. 29	32. 45							
20. 54	32. 30							
21. 7	33. 30							
21. 36	33. 40							
21. 44	33. 10							
21. 54	34. 20							
23. 59	41. 20							
May 20		May 20		May 20		May 20		
0. 0	20. 41. 20	0. 0	·1306	0. 0	·03445	1. 0	61 ·4	63 ·4
1. 39	40. 25	0. 30	·1306	1. 53	·03486	3. 0	61 ·6	64 ·0
1. 57	40. 45	0. 45	·1327	2. 8	·03483*	Max.	61 ·8	64 ·0
2. 7	39. 45	1. 44	·1328	2. 28	·03495	9. 0	61 ·3	63 ·2
2. 17	39. 20	1. 55	·1331	3. 14	·03527	Min.	60 ·1	61 ·1
2. 59	39. 50	2. 11	·1320		·03548	22. 7	61 ·3	63 ·0
3. 29	38. 5	2. 19	·1321	4. 16	·03569			
3. 55	35. 35	2. 48	·1334	4. 53	·03577			
4. 22	36. 30	3. 4	·1330	5. 24	·03590			
4. 36	35. 40	3. 11	·1337	8. 21	·03572			
4. 58	35. 5	3. 15	·1329	8. 32	·03567			
5. 9	36. 0	3. 29	·1328	8. 56	·03575			
5. 25	36. 30	3. 38	·1331	9. 10	·03570			
6. 11	35. 30	3. 44	·1326	9. 46	·03550			
6. 40	36. 20	4. 14	·1336	16. 37	·03540			
7. 54	35. 35	4. 30	·1332	18. 25	·03543			
8. 13	33. 55	4. 49	·1336	21. 25	·03522			
8. 26	32. 30	4. 53	·1330	22. 11	·03510			
8. 42	26. 30	5. 10	·1334	23. 59	·03517			
8. 57	29. 50	5. 19	·1341					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 20		May 20						
h m	° ′ ″	h m		h m		h m	°	°
9. 8	20. 30. 30	5. 33	·1336					
9. 24	36. 50	5. 57	·1336					
9. 44	34. 5	6. 13	·1333					
9. 59	34. 35	6. 31	·1338					
10. 11	33. 30	6. 41	·1336					
	***	7. 19	·1338					
10. 55	32. 45	7. 52	·1334					
11. 23	33. 55	8. 3	·1335					
11. 54	33. 20	8. 27	·1327					
12. 45	33. 35	8. 34	·1327					
12. 58	33. 0	8. 46	·1341					
13. 16	33. 30	9. 0	·1330					
13. 47	33. 30	9. 7	·1333					
13. 56	34. 15	9. 35	·1324					
14. 9	33. 20	9. 53	·1333					
14. 22	33. 35	10. 3	·1331					
16. 23	32. 5	10. 14	·1335					
16. 36	31. 5	10. 24	·1332					
16. 41	31. 5	10. 39	·1334					
16. 46	31. 55	10. 54	·1329					
16. 55	31. 0	11. 12	·1328					
17. 8	31. 40	11. 35	·1331					
17. 11	30. 35	12. 6	·1328					
17. 38	30. 35	12. 26	·1330					
18. 6	30. 0	12. 45	·1329					
18. 16	30. 10	12. 55	·1324					
18. 33	31. 35	13. 8	·1327					
18. 59	30. 20	13. 15	·1324					
19. 11	31. 0	13. 34	·1324					
19. 22	29. 45	13. 48	·1329					
19. 36	29. 30	13. 52	·1326					
19. 41	30. 5	14. 3	·1326					
20. 9	29. 5	14. 12	·1328					
20. 16	29. 35	14. 22	·1326					
20. 36	29. 15	16. 39	·1325					
21. 28	30. 35	16. 45	·1326					
22. 8	32. 0	18. 0	·1322					
23. 24	36. 0	18. 29	·1318					
23. 59	37. 35	18. 53	·1320					
		19. 17	·1315					
		19. 41	·1319					
		19. 48	·1318					
		20. 17	·1321					
			***					
		21. 14	·1319					
		21. 36	·1321					
		21. 54	·1318					
		22. 40	·1322					
		22. 52	·1318					
		23. 59	·1326					
May 21		May 21		May 21		May 21		
0. 0	20. 37. 35	0. 0	·1326	0. 0	·03517	Min.	61 ·5	64 ·0
1. 26	38. 25	0. 39	·1328	2. 19	·03570	1. 0	61 ·6	64 ·2
1. 53	37. 50	1. 42	·1327	5. 9	·03610	9. 0	62 ·6	65 ·2
2. 4	38. 5	2. 8	·1332	6. 0	·03610	Max.	63 ·0	65 ·6
2. 44	37. 0	2. 44	·1332	11. 38	·03646	21. 0	62 ·7	64 ·7
2. 54	37. 35	2. 56	·1338	12. 3	·03643			
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 21		May 21		May 21				
h m	° ′ ″	h m		h m		h m	°	°
4. 6	20. 36. 0	3. 21	·1341	13. 38	·03641			
6. 56	34. 45	3. 31	·1338	14. 9	·03634			
7. 54	35. 20	3. 40	·1342	15. 15	·03650			
8. 42	35. 0	3. 50	·1339	15. 38	·03643			
9. 3	34. 30	4. 3	·1348	17. 4	·03655			
9. 31	34. 25	4. 9	·1343	17. 38	·03640			
10. 12	33. 30	4. 33	·1344	20. 0	·03641			
11. 10	32. 50	4. 49	·1341	22. 4	·03629			
11. 14	32. 20	5. 10	·1345	23. 59	·03635			
11. 26	32. 5	5. 44	·1342					
11. 42	30. 55	7. 52	·1351					
12. 1	31. 5	8. 27	·1349					
12. 14	28. 35	8. 47	·1352					
12. 48	32. 30	9. 3	·1348					
13. 24	33. 50	9. 30	·1349					
13. 58	30. 5	9. 34	·1345					
14. 28	31. 55	9. 39	·1349					
15. 9	31. 30	9. 46	·1345					
15. 28	29. 50	10. 14	·1343					
15. 41	28. 45	10. 20	·1345					
15. 54	29. 30	11. 18	·1341					
16. 1	28. 35	11. 31	·1344					
16. 8	30. 5	11. 37	·1340					
16. 23	30. 5	11. 56	·1335					
16. 39	31. 45	12. 7	·1339					
17. 3	31. 50	12. 24	·1334					
17. 25	30. 5	12. 41	·1337					
17. 29	29. 0	12. 50	·1334					
17. 36	29. 45	13. 25	·1344					
17. 54	28. 25	14. 4	·1332					
18. 1	29. 5	14. 57	·1331					
18. 15	29. 5	15. 13	·1333					
18. 37	28. 0	16. 24	·1322					
19. 9	29. 25	17. 6	·1332					
19. 23	29. 5	18. 51	·1322					
19. 27	30. 10	19. 13	·1316					
19. 54	29. 55	19. 48	·1317					
	***	20. 48	·1310					
21. 23	33. 30	21. 24	·1313					
21. 38	35. 15	22. 18	·1309					
21. 41	34. 45	22. 38	·1318					
21. 54	36. 10	22. 42	·1312					
22. 45	36. 35	22. 59	·1319					
22. 54	37. 30	23. 1	·1317					
23. 14	37. 50	23. 44	·1323					
23. 59	39. 30	23. 59	·1322					
May 22		May 22		May 22		May 22		
0. 0	20. 39. 30	0. 0	·1322	0. 0	·03635	1. 0	64 ·0	66 ·0
0. 9	39. 40	0. 28	·1316	1. 58	·03677	3. 0	64 ·1	66 ·6
0. 15	40. 10	1. 26	·1330	2. 34	·03700	Max.	64 ·3	67 ·0
0. 24	39. 35	1. 44	·1326	3. 0	·03700	9. 0	64 ·1	66 ·6
0. 38	39. 0	1. 58	·1327	4. 15	·03728	Min.	61 ·6	63 ·6
1. 24	40. 5	2. 8	·1325	6. 19	·03734	21. 0	63 ·0	65 ·0
1. 55	39. 30	2. 25	·1328	7. 16	·03730			
2. 26	39. 30	2. 44	·1337	9. 38	·03747			
2. 42	40. 40	3. 11	·1323	12. 21	·03718			
2. 46	39. 50	3. 39	·1335	17. 33	·03698			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 22		May 22		May 22				
h m	° ′ ″	h m		h m		h m	°	°
2. 54	20. 39. 35	3. 44	·1333	18. 36	·03697			
3. 2	38. 30	4. 12	·1338	22. 8	·03677			
3. 11	38. 5	4. 42	·1332	23. 59	·03680			
3. 31	38. 30	4. 56	·1334					
3. 41	37. 25	5. 12	·1332					
4. 0	36. 50	5. 34	·1336					
4. 9	37. 25	5. 44	·1334					
4. 53	36. 50	6. 18	·1340					
5. 26	35. 25	6. 24	·1338					
6. 21	34. 35	7. 2	·1341					
6. 39	34. 40	7. 8	·1345					
7. 9	34. 40		***					
7. 39	33. 30	7. 31	·1334					
7. 57	34. 5	8. 10	·1336					
9. 9	33. 30	9. 17	·1334					
9. 44	32. 5		***					
10. 4	33. 0	10. 10	·1336					
10. 41	32. 25	10. 40	·1343					
11. 39	33. 25	10. 52	·1339					
14. 27	32. 25	11. 3	·1343					
14. 38	33. 5	11. 8	·1339					
14. 42	32. 35	12. 3	·1331					
15. 23	32. 35	12. 20	·1335					
15. 53	31. 45	18. 27	·1329					
16. 17	30. 45	18. 43	·1326					
17. 26	30. 5	19. 18	·1327					
17. 38	29. 5	19. 41	·1319					
17. 43	29. 40	20. 15	·1323					
17. 59	28. 45	20. 27	·1319					
18. 26	27. 50	20. 41	·1322					
19. 31	29. 0	21. 28	·1320					
19. 39	28. 20	22. 19	·1324					
20. 22	29. 15	22. 38	·1319					
20. 37	29. 5	23. 7	·1321					
22. 13	34. 25	23. 32	·1318					
22. 38	36. 15	23. 59	·1319					
23. 2	37. 35							
23. 59	39. 30							
May 23		May 23		May 23		May 23		
0. 0	20. 39. 30	0. 0	·1319	0. 0	·03680	1. 0	63 ·8	66 ·0
0. 16	40. 35	0. 30	·1325	2. 48	·03737	3. 0	63 ·6	66 ·0
1. 11	41. 40	1. 49	·1331	6. 34	·03779	Max.	65 ·0	66 ·5
3. 8	37. 50	2. 10	·1329	10. 54	·03763	9. 0	63 ·6	65 ·2
4. 16	34. 45	2. 28	·1333	14. 32	·03691	Min.	59 ·5	60 ·8
4. 27	35. 0	3. 10	·1334	17. 23	·03652	21. 0	60 ·2	61 ·0
4. 56	34. 25	3. 43	·1331	21. 6	·03560	22. 0	61 ·1	62 ·4
6. 11	33. 35	4. 14	·1334	23. 0	·03502	23. 0	61 ·8	63 ·0
6. 41	33. 55	4. 21	·1332	23. 59	·03570			
7. 10	33. 35	4. 27	·1335					
7. 29	34. 15	4. 38	·1336					
8. 5	33. 0	4. 45	·1332					
8. 28	33. 50	5. 41	·1340					
9. 25	34. 0	5. 52	·1337					
10. 42	34. 10	6. 16	·1344					
10. 59	33. 35	7. 36	·1347					
12. 18	34. 0	8. 6	·1344					
12. 39	33. 10	8. 30	·1347					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 23		May 23						
h m	° ′ ″	h m		h m		h m	°	°
12. 51	20. 33. 20	9. 20	·1344					
12. 57	34. 35	9. 25	·1347					
13. 9	33. 35	9. 45	·1344					
13. 39	34. 35	9. 53	·1347					
13. 46	34. 30	10. 2	·1345					
14. 11	32. 35	10. 45	·1344					
15. 54	31. 40	11. 4	·1341					
16. 46	30. 0	12. 50	·1345					
17. 6	30. 40	13. 17	·1340					
17. 16	29. 45	13. 47	·1344					
17. 29	30. 10	14. 39	·1338					
17. 56	28. 40	17. 7	·1342					
18. 9	29. 30	18. 0	·1337					
18. 16	28. 35	18. 42	·1337					
18. 30	29. 5	20. 36	·1322					
18. 56	28. 35	21. 44	·1318					
19. 29	29. 30	21. 51	·1320					
19. 39	29. 0	22. 4	·1319					
20. 29	31. 30	22. 46	·1326					
20. 38	31. 5	23. 25	·1331					
21. 33	33. 35	23. 59	·1333					
21. 39	34. 35							
21. 48	35. 0							
22. 31	37. 35							
23. 32	41. 0							
23. 56	40. 30							
23. 59	41. 5							
May 24		May 24		May 24		May 24		
0. 0	20. 41. 5	0. 0	·1333	0. 0	·03570	0. 0	61 ·7	63 ·0
0. 18	41. 10	1. 23	·1343	3. 35	·03663	1. 0	61 ·9	63 ·7
1. 26	39. 55	1. 27	·1341	4. 53	·03676	3. 0	62 ·0	63 ·9
1. 37	40. 30	1. 38	·1345	9. 22	·03668	Max.	62 ·3	64 ·2
2. 22	39. 10	1. 48	·1341	10. 33	·03635	9. 0	61 ·1	62 ·0
2. 29	39. 5	2. 24	·1341	14. 30	·03590	Min.	58 ·5	60 ·2
2. 45	37. 55	2. 44	·1345	16. 0	·03580	21. 0	60 ·6	61 ·8
3. 5	37. 50	2. 56	·1340	18. 45	·03544	22. 0	61 ·0	62 ·7
3. 13	37. 10	3. 15	·1341	20. 31	·03535	23. 0	61 ·7	63 ·4
4. 30	35. 25	4. 7	·1335	22. 21	·03500			
4. 45	35. 25	4. 39	·1337	23. 59	·03528			
4. 57	35. 40	5. 9	·1348					
5. 14	34. 55		***					
5. 58	34. 55	6. 8	·1341					
6. 31	35. 15	6. 46	·1348					
7. 13	34. 25	6. 57	·1347					
8. 0	35. 0	7. 36	·1355					
9. 28	34. 0	7. 50	·1353					
9. 34	34. 20	7. 57	·1356					
9. 49	33. 35	8. 3	·1353					
10. 0	33. 35	8. 15	·1354					
10. 11	33. 15	8. 40	·1349					
11. 56	33. 5	8. 45	·1354					
12. 12	33. 45	9. 15	·1350					
12. 24	33. 5	9. 34	·1353					
12. 29	33. 35	9. 42	·1349					
12. 41	32. 30	9. 56	·1355					
12. 46	33. 5	10. 14	·1351					
13. 14	32. 30	11. 17	·1349					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 24		May 24						
h m	° ′ ″	h m		h m		h m	°	°
14. 7	20. 33. 15	12. 11	·1352					
14. 53	32. 35	12. 44	·1347					
16. 46	30. 10	17. 10	·1342					
16. 58	30. 35	17. 18	·1344					
17. 11	29. 40	17. 29	·1343					
17. 24	30. 20	18. 19	·1344					
17. 30	29. 30	20. 5	·1335					
17. 58	30. 10	20. 57	·1335					
18. 14	28. 50	21. 16	·1331					
18. 35	28. 50	21. 33	·1331					
18. 45	28. 20	22. 24	·1325					
19. 37	29. 35	23. 24	·1335					
20. 23	29. 55	23. 30	·1327					
20. 30	30. 35	23. 59	·1327					
21. 14	32. 25							
21. 52	35. 0							
22. 50	39. 55							
23. 42	42. 15							
23. 55	44. 10							
23. 59	44. 10							
May 25		May 25		May 25		May 25		
0. 0	20. 44. 10	0. 0	·1327	0. 0	·03528	0. 0	63 ·0	64 ·4
0. 12	44. 10	0. 36	·1329	1. 53	·03600	1. 0	63 ·6	65 ·2
0. 26	42. 45	1. 24	·1338	2. 38	·03614	2. 0	64 ·1	65 ·4
1. 39	40. 0	1. 34	·1335	4. 28	·03662	3. 0	64 ·4	65 ·6
1. 42	40. 30	1. 44	·1339	6. 59	·03690	Max.	64 ·6	65 ·6
1. 55	39. 55		(†)	9. 28	·03677	9. 0	61 ·0	61 ·6
2. 10	40. 20	3. 30	·1333	9. 44	·03655	Min.	58 ·4	58 ·8
2. 40	39. 5	4. 10	·1335	11. 26:	·03595	21. 0	60 ·8	62 ·5
3. 6	38. 40	4. 37	·1333	12. 33	·03586			
3. 47	36. 35	4. 53	·1336	12. 42	·03590			
4. 14	35. 35	5. 11	·1341	13. 13	·03555			
4. 56	34. 25	5. 30	·1337	15. 8	·03549			
5. 9	34. 35	6. 32	·1346	16. 0	·03532			
6. 39	33. 5	6. 45	·1346	16. 11	·03523			
7. 12	33. 25	6. 57	·1343	16. 30	·03530			
7. 30	33. 45	7. 3	·1347	17. 6	·03510			
8. 5	33. 45	7. 12	·1343	19. 42	·03517			
8. 17	34. 10	8. 5	·1344	20. 29	·03507			
8. 46	34. 5	8. 36	·1340	21. 55	·03500			
9. 9	34. 30	8. 58	·1346	23. 59	·03509			
9. 23	33. 25	9. 23	·1343					
9. 38	33. 25	9. 35	·1347					
9. 42	32. 55	9. 44	·1343					
10. 29	33. 30	11. 11	·1353					
11. 9	32. 55	11. 28	·1350					
11. 26	32. 15	11. 39	·1354					
11. 48	33. 5	11. 50	·1350					
12. 0	33. 5	12. 16	·1355					
12. 31	34. 30	12. 33	·1354					
12. 47	37. 35	12. 51	·1366					
12. 56	36. 30	13. 22	·1354					
13. 12	31. 0	13. 52	·1357					
13. 25	30. 15	14. 27	·1342					
13. 38	28. 10	14. 56	·1353					
13. 44	29. 35	15. 13	·1352					
13. 55	29. 0	15. 29	·1356					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 25. Damper experiments with the Horizontal Force Magnet were made between $1^h.\ 45^m.$ and $3^h.\ 30^m.$

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Therm-meters. Of H. F. Magnet.	Of V. F. Magnet.
May 25		May 25						
h m	° ′ ″	h m		h m		h m	°	°
13. 59	20. 29. 50	15. 42	·1352					
14. 9	29. 40	15. 45	·1353					
14. 42	31. 0	16. 12	·1337					
14. 56	30. 35	16. 43	·1344					
15. 9	28. 30	16. 58	·1344					
15. 26	29. 5	17. 17	·1349					
15. 53	28. 25	17. 24	·1344					
15. 59	30. 30	17. 32	·1348					
16. 10	30. 30	17. 36	·1346					
16. 37	35. 0	17. 56	·1354					
16. 52	33. 40	20. 19	·1325					
17. 12	32. 30	20. 29	·1319					
17. 19	33. 35		***					
17. 31	33. 20	20. 49	·1319					
17. 39	32. 25	21. 7	·1315					
18. 3	31. 25	21. 29	·1322					
18. 11	30. 20	21. 52	·1320					
18. 28	28. 35		***					
18. 41	28. 35	22. 40	·1327					
19. 6	27. 0	23. 17	·1332					
19. 15	27. 25	23. 36	·1336					
19. 26	26. 30	23. 49	·1334					
19. 37	28. 0	23. 59	·1338					
19. 42	27. 5							
19. 55	28. 0							
20. 6	28. 0							
20. 17	27. 30							
	***							
20. 53	31. 25							
21. 6	31. 55							
21. 23	34. 35							
21. 26	33. 40							
21. 39	34. 0							
21. 55	33. 25							
23. 16	38. 15							
23. 24	38. 5							
23. 27	39. 0							
23. 54	39. 20							
23. 59	39. 55							
May 26		May 26		May 26		May 26		
0. 0	20. 39. 55	0. 0	·1338	0. 0	·03509	Min.	61 ·6	63 ·5
0. 9	40. 10	0. 11	·1345	1. 0	·03521	1. 0	61 ·6	63 ·7
0. 17	41. 25	0. 26	·1351	2. 43	·03600	3. 0	61 ·8	64 ·6
1. 25	41. 0	0. 40	·1346	3. 0	·03616	9. 0	62 ·5	65 ·0
1. 52	41. 10	1. 4	·1336	3. 4	·03610	21. 0	62 ·8	64 ·8
2. 16	40. 35	1. 22	·1339	3. 43	·03664	Max.	63 ·0	65 ·2
2. 25	42. 50	1. 46	·1351	3. 54	·03635			
2. 38	42. 30	2. 13	·1350	4. 13	·03669			
2. 49	39. 20	2. 24	·1371	4. 39	·03662			
3. 1	39. 20	2. 41	·1368		***			
3. 11	37. 35	3. 2	·1341	5. 34	·03680			
3. 16	38. 20	3. 9	·1347	5. 49	·03674			
3. 24	37. 10	3. 12	·1339	6. 33	·03680			
3. 27	36. 50		***	6. 52	·03680			
3. 39	37. 5	3. 35	·1337	10. 11	·03672			
3. 54	40. 15	3. 48	·1347	12. 54	·03690			
4. 11	38. 5	4. 0	·1326	15. 29	·03682			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
May 26		May 26		May 26				
h m	° ′ ″	h m		h m		h m	°	°
4. 24	20. 39. 10	4. 18	·1341	18. 54	·03698			
4. 49	38. 0	4. 26	·1336	20. 53	·03686			
5. 5	38. 35	4. 40	·1333	23. 59	·03690			
5. 11	37. 15	5. 3	·1350					
5. 28	38. 0	5. 4	·1344					
6. 23	35. 35	5. 26	·1356					
6. 45	36. 30	5. 30	·1350					
7. 9	33. 10	5. 34	·1356					
7. 25	33. 10	5. 40	·1345					
7. 42	35. 25	5. 51	·1342					
8. 0	35. 15	6. 10	·1348					
8. 28	35. 40	6. 21	·1346					
8. 47	34. 50	6. 30	·1351					
8. 56	36. 0	7. 12	·1346					
9. 0	35. 25	7. 22	·1353					
9. 12	33. 5	7. 36	·1348					
9. 24	33. 30	8. 15	·1346					
9. 31	33. 0	8. 22	·1348					
9. 42	33. 25	8. 30	·1344					
9. 53	34. 35	8. 45	·1348					
10. 7	33. 35	9. 4	·1341					
10. 25	33. 35	9. 16	·1347					
10. 44	35. 20	9. 21	·1345					
11. 25	34. 55	9. 26	·1349					
11. 33	35. 35	10. 4	·1340					
11. 48	34. 40		***					
12. 3	34. 25	11. 18	·1343					
12. 14	35. 35	11. 53	·1338					
12. 28	36. 5	12. 10	·1342					
12. 37	35. 0	12. 17	·1344					
12. 40	36. 5	12. 26	·1341					
12. 45	35. 50	12. 41	·1346					
12. 58	34. 5		***					
13. 39	35. 15	14. 33	·1338					
13. 45	34. 55	14. 56	·1340					
14. 9	36. 40	15. 38	·1336					
14. 28	34. 50	16. 5	·1339					
14. 45	36. 0	16. 36	·1334					
15. 7	34. 40	17. 6	·1335					
15. 10	35. 5	17. 25	·1331					
15. 27	33. 20	18. 30	·1335					
15. 38	33. 40	19. 33	·1328					
15. 48	32. 5	20. 4	·1322					
16. 12	31. 35	20. 23	·1324					
16. 23	32. 55	20. 28	·1321					
16. 43	33. 30	20. 44	·1324					
16. 57	32. 40	21. 1	·1314					
17. 9	33. 25	21. 20	·1316					
17. 52	32. 15	21. 46	·1306					
18. 5	32. 40	22. 8	·1311					
18. 9	31. 35	22. 38	·1308					
18. 32	31. 35		***					
18. 44	30. 25	23. 23	·1323					
19. 4	31. 30	23. 59	·1322					
19. 25	31. 45							
19. 44	30. 35							
20. 1	30. 25							
20. 36	32. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 26								
h m	° ′ ″	h m		h m		h m	°	°
20. 57	20. 32. 25							
21. 26	37. 40							
21. 36	36. 35							
21. 45	35. 5							
21. 58	37. 10							
22. 9	37. 25							
22. 25	41. 0							
22. 42	40. 25							
22. 56	41. 0							
23. 47	41. 30							
23. 59	41. 5							
May 27		May 27		May 27		May 27		
0. 0	20. 41. 5	0. 0	·1322	0. 0	·03690	Max.	63· 0	66· 0
0. 8	41. 40	0. 27	·1332	0. 44	·03717	1. 0	63· 0	66· 0
0. 14	41. 25	0. 48	·1337	1. 34	·03718	3. 0	61· 8	62· 3
1. 1	39. 40	1. 5	·1331	2. 4	·03742	9. 0	61· 8	62· 3
1. 12	39. 55	1. 45	·1338	3. 11	·03765	Min.	60· 5	61· 2
1. 44	42. 40	2. 4	·1346	4. 33	·03800	22. 0	62· 2	63· 9
2. 8	42. 30	2. 10	·1351	6. 55	·03812			
2. 11	42. 50	2. 14	·1347	8. 54	·03820			
2. 38	41. 30	2. 20	·1347	11. 15	·03755			
2. 55	40. 50	2. 42	·1333	11. 57	·03760			
3. 23	39. 5	3. 8	·1330	12. 23	·03757			
3. 50	37. 0	3. 22	·1346	12. 32	·03770			
3. 55	37. 15	3. 43	·1343	13. 12	·03755			
3. 59	36. 40	3. 48	·1348	14. 16	·03772			
4. 39	36. 30	4. 0	·1344	16. 54	·03786			
4. 43	37. 5	4. 36	·1350	19. 9	·03793			
4. 53	36. 30	4. 43	·1359	20. 38	·03770			
6. 14	34. 30	4. 51	·1355	21. 34	·03746			
6. 52	34. 40	5. 11	·1353	21. 57	·03743			
7. 6	33. 55	5. 19	·1355	22. 24	·03730			
	***	5. 25	·1351	23. 59	·03758			
8. 30	34. 10	6. 12	·1351					
8. 40	33. 45	6. 48	·1360					
10. 18	32. 35	7. 11	·1356					
11. 40	33. 45	8. 12	·1355					
12. 27	32. 35	8. 42	·1351					
12. 50	37. 55	11. 34	·1347					
13. 11	33. 35	11. 51	·1354					
13. 22	34. 10	12. 25	·1350					
13. 37	33. 30	12. 38	·1356					
13. 43	33. 45	13. 4	·1354					
14. 13	32. 55	13. 20	·1348					
14. 27	32. 35	16. 20	·1352					
14. 39	33. 5	17. 10	·1349					
15. 38	31. 25	17. 52	·1351					
16. 16	31. 5	19. 30	·1342					
16. 39	30. 20	19. 53	·1343					
16. 56	31. 5	20. 15	·1340					
17. 23	31. 0	20. 21	·1342					
17. 42	31. 55	20. 30	·1339					
18. 54	30. 0	21. 6	·1338					
19. 13	30. 25	21. 41	·1326					
19. 34	29. 25	22. 3	·1330					
19. 55	30. 30	22. 39	·1332					
20. 14	30. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 27		May 27						
h m	° ′ ″	h m		h m		h m	°	°
20. 25	20. 31. 10	22. 57	·1327					
20. 28	30. 25	23. 3	·1335					
20. 55	31. 5	23. 59	·1335					
21. 3	30. 50							
21. 21	31. 15							
21. 55	33. 45							
22. 25	34. 10							
22. 29	33. 50							
23. 0	36. 0							
23. 24	38. 50							
23. 55	39. 10							
23. 59	39. 35							
May 28		May 28		May 28		May 28		
0. 0	20. 39. 35	0. 0	·1335	0. 0	·03758	1. 0	62· 8	64· 3
0. 39	41. 0	0. 38	·1343	5. 4	·03856	Max.	63· 1	64· 7
2. 6	41. 0	0. 48	·1342	9. 2	·03861	9. 0	61· 2	61· 5
2. 26	39. 40	1. 30	·1344	10. 31:	·03819	Min.	60· 5	60· 4
2. 56	38. 25	1. 43	·1342	11. 24	·03821	21. 0	62· 0	63· 5
3. 26	38. 50		***	11. 53	·03810			
3. 54	37. 50	2. 24	·1346	12. 24	·03828			
4. 58	35. 35	2. 50	·1347	13. 22	·03819			
5. 7	36. 10	3. 10	·1357	13. 54	·03828			
5. 11	35. 35	3. 17	·1348	15. 11	·03836			
5. 26	35. 35	3. 23	·1352	16. 45	·03843			
5. 39	35. 5	3. 37	·1348	19. 56	·03833			
5. 48	35. 5	3. 44	·1349	21. 39	·03806			
6. 18	34. 20	3. 51	·1347	23. 59	·03804			
6. 52	34. 25	4. 11	·1351					
7. 9	33. 30	4. 34	·1350					
7. 59	33. 5	5. 6	·1357					
8. 24	32. 35	5. 41	·1356					
8. 57	32. 35	6. 10	·1362					
9. 22	33. 20	6. 27	·1358					
9. 38	32. 35	6. 59	·1359					
10. 4	33. 20	7. 9	·1355					
11. 0	32. 45	9. 7	·1362					
11. 28	32. 30	9. 20	·1356					
11. 47	27. 30	10. 0	·1358					
12. 1	27. 50	10. 7	·1355					
12. 26	30. 30	10. 17	·1356					
12. 37	28. 55	10. 48	·1353					
12. 56	30. 35	10. 53	·1356					
13. 13	29. 20	11. 8	·1354					
13. 49	32. 10	11. 39	·1363					
14. 0	32. 20	11. 50	·1355					
14. 39	30. 35	12. 19	·1354					
14. 55	31. 45	12. 49	·1364					
15. 38	29. 30	13. 24	·1351					
15. 54	29. 55	14. 35	·1353					
16. 9	29. 10	14. 43	·1351					
16. 41	32. 0	15. 24	·1358					
17. 30	29. 5	16. 4	·1348					
17. 38	29. 45	16. 49	·1346					
18. 11	28. 5	17. 44	·1350					
	***		***					
19. 11	28. 45	19. 55	·1340					
	***	20. 10	·1342					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number; in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 28		May 28						
h m	° ′ ″	h m		h m		h m	°	°
19. 56	20. 28. 5	20. 19	·1337					
20. 10	29. 40	20. 49	·1323					
20. 21	34. 35		***					
22. 59	35. 5	22. 51	·1341					
23. 3	35. 35	23. 59	·1350					
23. 11	35. 0							
23. 22	36. 5							
23. 59	37. 50							
May 29		May 29		May 29		May 29		
0. 0	20. 37. 50	0. 0	·1350	0. 0	·03804	1. 0	63 ·1	64 ·4
0. 54	37. 50	0. 17	·1348	3. 10	·03900	3. 0	62 ·8	64 ·7
1. 23	38. 45	0. 55	·1343	6. 14	·03963	Max.	64 ·4	65 ·6
1. 36	37. 30	1. 31	·1349	9. 12	·03971	9. 0	64 ·0	65 ·1
1. 53	37. 30	1. 48	·1351	13. 3	·03973	Min.	61 ·7	62 ·7
2. 4	36. 55	2. 14	·1350	13. 57	·03970	21. 0	62 ·6	63 ·0
2. 9	37. 10	2. 49	·1354	17. 24	·03981			
2. 23	36. 30	3. 18	·1350	19. 53	·03975			
3. 1	36. 20	3. 48	·1352	21. 24	·03930			
3. 34	36. 30	4. 13	·1360	22. 15	·03906			
3. 52	35. 45	4. 26	·1357	23. 59	·03934			
4. 2	35. 50	4. 36	·1361					
4. 29	35. 30	4. 50	·1354					
4. 36	35. 30	5. 2	·1354					
4. 55	34. 35	5. 8	·1359					
5. 8	35. 5	5. 20	·1352					
5. 30	33. 55	5. 30	·1356					
5. 41	34. 35	5. 39	·1355					
6. 0	33. 40	5. 46	·1360					
6. 40	33. 40	5. 54	·1356					
6. 55	33. 50	6. 4	·1356					
7. 14	33. 10	6. 11	·1360					
7. 29	33. 35	6. 24	·1359					
7. 41	33. 40	6. 46	·1356					
7. 56	34. 30	7. 42	·1363					
8. 29	33. 50	7. 52	·1369					
8. 51	33. 25	8. 26	·1360					
9. 25	36. 30	9. 10	·1370					
9. 56	33. 25	9. 49	·1359					
10. 7	33. 50	11. 33	·1356					
10. 29	33. 30	11. 49	·1358					
11. 23	34. 5	12. 27	·1354					
11. 51	33. 50	13 13	·1357					
12. 19	32. 35	15. 12	·1351					
12. 26	32. 35	15. 42	·1353					
12. 36	32. 5	15. 52	·1350					
13. 1	33. 55	16. 12	·1354					
13. 25	34. 20	17. 0	·1353					
13. 51	32. 5	17. 26	·1347					
14. 21	33. 0	18. 14	·1351					
14. 38	32. 15	20. 49	·1340					
15. 16	31. 50	21. 37	·1342					
15. 43	31. 35		***					
15. 55	30. 40	23. 59	·1351					
16. 23	31. 35							
17. 7	31. 10							
17. 23	30. 15							
17. 52	31. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 29								
h m	° ′ ″	h m		h m		h m	°	°
18. 32	20. 30. 30							
18. 39	30. 45							
18. 44	29. 50							
20. 23	30. 5							
20. 36	30. 35							
20. 41	30. 20							
21. 26	32. 40							
21. 39	34. 0							
22. 4	34. 20							
23. 5	37. 25							
23. 11	37. 0							
23. 32	38. 15							
23. 39	37. 25							
23. 59	39. 5							
May 30		May 30		May 30		May 30		
0. 0	20. 39. 5	0. 0	·1351	0. 0	·03934	1. 0	62 ·8	64 ·2
1. 28	40. 30	1. 4	·1350	3. 22	·04034	3. 0	63 ·5	65 ·0
2. 24	40. 40	1. 40	·1356	5. 22	·04062	Max.	64 ·2	65 ·8
2. 33	41. 5	1. 52	·1350	5. 45	·04057	9. 0	62 ·5	64 ·0
3. 7	39. 50	2. 15	·1354	6. 57	·04066	Min.	60 ·6	62 ·3
3. 40	39. 30	2. 20	·1353	14. 46	·04018	21. 0	62 ·3	63 ·2
3. 56	38. 45	2. 33	·1356	16. 3	·04022	22. 0	63 ·6	63 ·5
4. 16	38. 5	2. 41	·1354	18. 34	·04017	23. 0	63 ·8	63 ·5
4. 34	38. 5	2. 50	·1347	23. 59	·04029			
5. 26	37. 0	3. 4	·1344					
5. 55	36. 40	3. 41	·1350					
7. 11	34. 35	4. 12	·1344					
8. 37	35. 0		***					
9. 8	34. 25	5. 22	·1355					
9. 17	34. 40	5. 48	·1354					
10. 36	34. 5	6. 9	·1360					
10. 54	33. 50	6. 21	·1359					
11. 31	34. 5	6. 36	·1356					
12. 1	32. 40	7. 2	·1361					
12. 12	33. 30	7. 24	·1358					
12. 24	32. 30	8. 27	·1363					
12. 39	31. 55	8. 55	·1361					
13. 7	33. 5	9. 24	·1364					
13. 22	33. 10	10. 15	·1360					
13. 53	31. 40	10. 40	·1364					
14. 11	33. 5	11. 18	·1362					
14. 45	31. 5	11. 23	·1367					
15. 36	30. 5	11. 56	·1365					
15. 45	30. 35	12. 10	·1361					
16. 1	29. 35	12. 16	·1367					
16. 38	30. 5	12. 27	·1358					
16. 41	29. 0	13. 12	·1362					
17. 9	30. 5	13. 46	·1357					
17. 30	28. 40	14. 4	·1358					
17. 41	30. 10	14. 50	·1355					
17. 54	29. 45	15. 4	·1358					
17. 58	30. 35	15. 23	·1355					
18. 23	29. 0	15. 42	·1358					
18. 29	29. 55	15. 56	·1356					
18. 46	29. 10	16. 38	·1359					
18. 57	30. 10	16. 45	·1357					
19. 4	29. 35	19. 0	·1353					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 30		May 30						
h m	° ′ ″	h m		h m		h m	°	°
19. 48	20. 30. 15	19. 25	·1351					
20. 25	31. 10	19. 48	·1348					
20. 33	31. 40	20. 13	·1352					
20. 48	31. 10	21. 10	·1345					
21. 39	32. 20	21. 30	·1352					
23. 11	35. 0	22. 1	·1346					
23. 24	34. 5		***					
23. 38	35. 5	23. 32	·1345					
23. 59	35. 30	23. 59	·1355					
May 31		May 31		May 31		May 31		
0. 0	20. 35. 30	0. 0	·1355	0. 0	·04029	0. 0	63 ·8	63 ·8
0. 14	37. 0	0. 25	·1362	1. 46	·04050	1. 0	64 ·0	64 ·4
0. 26	36. 5	0. 34	·1357	6. 25	·04119	2. 0	64 ·0	64 ·8
1. 25	38. 10	0. 54	·1351	9. 6	·04120	3. 0	63 ·9	64 ·8
2. 12	37. 45	2. 38	·1352	13. 11	·04069	Max.	64 ·0	65 ·0
2. 26	38. 5	2. 40	·1358	17. 23	·04061	9. 0	62 ·2	63 ·8
3. 53	37. 30	3. 14	·1351	18. 38	·04061	Min.	61 ·2	62 ·9
4. 11	36. 55	3. 27	·1353	20. 29	·04074	21. 0	62 ·6	63 ·9
4. 49	36. 30	3. 40	·1348	21. 14	·04055	22. 0	63 ·6	64 ·6
5. 1	35. 35		***	22. 4	·04060	23. 0	63 ·9	64 ·8
5. 58	34. 30	4. 28	·1352	22. 24	·04048			
6. 18	34. 30	4. 44	·1356	23. 35	·04050			
6. 26	34. 0	5. 3	·1355		(†)			
7. 57	33. 35	5. 25	·1357					
8. 11	33. 0	6. 22	·1363					
8. 26	33. 30	6. 34	·1368					
8. 53	33. 30	8. 8	·1360					
9. 24	34. 0	8. 51	·1360					
9. 39	33. 10	9. 9	·1367					
9. 58	33. 10	9. 25	·1363					
10. 6	33. 35	9. 38	·1365					
10. 23	33. 5	9. 57	·1363					
10. 29	32. 5	10. 7	·1365					
11. 6	31. 40	11. 4	·1362					
11. 18	30. 55	11. 30	·1368					
11. 29	31. 15	11. 41	·1366					
11. 53	29. 30	11. 46	·1368					
12. 9	30. 5	11. 48	·1367					
13. 54	31. 5	12. 7	·1371					
14. 44	30. 55	12. 20	·1366					
15. 53	29. 55	12. 43	·1364					
16. 24	30. 15	13. 9	·1357					
16. 55	29. 35	15. 15	·1361					
17. 3	30. 5	16. 48	·1361					
17. 24	30. 10	17. 56	·1359					
17. 40	29. 50	18. 45	·1352					
17. 54	30. 0		***					
18. 4	29. 30	21. 4	·1346					
18. 13	29. 30	21. 9	·1334					
18. 44	31. 10	22. 11	·1335					
19. 8	30. 50	22. 40	·1341					
19. 13	31. 15	23. 0	·1360					
19. 16	30. 0	23. 13	·1340					
19. 26	30. 30	23. 34	·1347					
19. 37	30. 0	23. 59	·1342					
19. 42	30. 40							
19. 57	29. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 31								
h m	° ′ ″	h m		h m		h m	°	°
20. 26	20. 30. 30							
21. 30	28. 25							
21. 58	33. 5							
22. 26	33. 30							
23. 3	34. 55							
23. 15	34. 30							
23. 36	36. 35							
23. 59	36. 35							
June 1		June 1		June 1		June 1		
0. 0	20. 36. 35	0. 0	·1342		(†)	0. 0	63 ·9	66 ·0
0. 53	34. 5	0. 43	·1344	1. 0	·04142*	1. 0	64 ·8	66 ·0
1. 39	34. 15	1. 2	·1340	3. 0	·04283*	3. 0	65 ·0	66 ·0
1. 41	36. 30	1. 49	·1333	3. 40	·03227	Max.	65 ·0	66 ·0
1. 54	34. 0	2. 0	·1338	4. 7	·03218	9. 0	62 ·7	63 ·5
2. 7	34. 0	2. 5	·1335	5. 48	·03196	Min.	61 ·6	62 ·6
2. 15	34. 30	2. 18	·1343	6. 38	·03192	21. 0	61 ·6	62 ·8
2. 23	33. 35	2. 21	·1351	9. 3	·03165			
2. 43	33. 15	2. 47	·1344	12. 42:	·03137			
2. 48	32. 30	2. 51	·1347	17. 58	·03130			
2. 56	33. 25	3. 18	·1343	19. 46	·03093			
3. 9	33. 25	4. 42	·1352	23. 59	·03087			
3. 12	32. 55	5. 25	·1355					
3. 27	33. 5	5. 42	·1361					
3. 36	33. 35	6. 21:	·1357					
3. 54	34. 0	7. 3	·1369					
4. 24	34. 35	8. 12	·1363					
5. 10	34. 25	8. 46	·1365					
5. 24	33. 35	10. 52	·1360					
5. 40	33. 50	15. 9	·1361					
5. 53	33. 20	15. 36	·1359					
6. 42	32. 5	17. 24	·1361					
7. 0	32. 30	18. 34	·1359					
7. 16	31. 0	19. 28	·1358					
9. 9	30. 30	19. 42	·1359					
9. 22	30. 50		***					
10. 9	30. 0	20. 50	·1350					
10. 42	30. 0	21. 1	·1353					
12. 29	29. 30	22. 5	·1347					
13. 0	29. 45	23. 34	·1357					
13. 51	29. 20	23. 47	·1348					
14. 24	29. 30	23. 50	·1354					
14. 54	29. 30	23. 56	·1348					
16. 8	29. 5	23. 59	·1353					
16. 38	29. 30							
17. 8	28. 0							
17. 15	28. 10							
17. 37	26. 30							
18. 3	27. 55							
18. 23	25. 35							
18. 43	26. 0							
18. 55	25. 35							
19. 12	26. 5							
19. 24	25. 40							
19. 38	25. 40							
20. 0	24. 35							
20. 21	25. 10							
20. 25	24. 5							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

June 1d. 3h. 15m. VERTICAL FORCE.—The adjustments were altered, so that the readings were diminished by 16div·62, or by 0·010895 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 1								
h m	° ′ ″	h m		h m		h m	°	°
20. 36	20. 24. 45							
21. 5	25. 35							
21. 24	27. 0							
21. 53	27. 55							
22. 54	29. 25							
23. 17	30. 55							
23. 39	32. 55							
23. 43	32. 5							
23. 59	32. 40							
June 2		June 2		June 2		June 2		
0. 0	20. 32. 40	0. 0	·1353	0. 0	·03087	1. 0	62 ·1	63 ·0
0. 16	33. 45	0. 15	·1355	5. 28	·03118	3. 0	62 ·1	63 ·0
0. 26	33. 10	0. 30	·1347	15. 19	·03068	Max.	62 ·8	63 ·7
0. 38	33. 50	0. 52	·1354	17. 30	·03067	9. 0	61 ·5	62 ·9
1. 10	34. 30	1. 26	·1359	19. 31	·03058	Min.	61 ·0	61 ·7
1. 28	35. 15	1. 45	·1366	21. 1	·03018	21. 0	61 ·8	62 ·0
1. 39	35. 0	2. 19	·1362	23. 59	·03027			
1. 47	35. 45	3. 18	·1360					
1. 57	35. 5	4. 10	·1366					
2. 35	35. 45	5. 24	·1364					
5. 8	32. 50	5. 52	·1367					
5. 17	33. 10	6. 11	·1365					
5. 35	32. 45	7. 45	·1365					
6. 23	31. 50	12. 51	·1361					
6. 49	32. 5	16. 47	·1364					
7. 3	31. 50	19. 11	·1354					
8. 6	31. 50	22. 8	·1354					
8. 17	31. 10	22. 35	·1356					
9. 14	31. 50	23. 59	·1352					
10. 16	31. 35							
11. 54	31. 50							
12. 24	31. 35							
13. 0	31. 20							
13. 33	31. 25							
15. 30	30. 15							
15. 51	30. 15							
16. 11	29. 40							
16. 54	29. 25							
16. 57	28. 55							
17. 9	29. 10							
17. 15	28. 30							
17. 26	28. 30							
17. 48	27. 25							
18. 19	27. 50							
18. 33	27. 20							
18. 40	27. 20							
18. 54	27. 0							
19. 27	25. 55							
19. 52	25. 30							
20. 23	26. 30							
20. 54	26. 30							
21. 39	28. 20							
22. 12	30. 30							
22. 42	33. 5							
23. 59	36. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 3		June 3		June 3		June 3		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 10	0. 0	·1352	0. 0	·03027	3. 0	63 ·0	65 ·1
1. 54	37. 40	1. 3	·1354	0. 50	·03041	Max.	65 ·8	68 ·7
2. 14	36. 30	2. 0	·1363	2. 3	·03017	9. 0	63 ·8	65 ·4
3. 16	35. 5	2. 12	·1358	5. 25	·03240	Min.	62 ·0	63 ·6
3. 29	34. 20	2. 35	·1359	6. 26	·03258	22. 0	63 ·2	64 ·0
4. 10	34. 35	3. 16	·1365	15. 0	·03205			
4. 31	33. 40	3. 36	·1360	18. 32	·03183			
4. 58	33. 25	4. 17	·1370	20. 1	·03185			
5. 11	33. 0	4. 51	·1363	21. 29	·03158			
5. 31	33. 0	5. 19	·1364	23. 59	·03159			
5. 50	32. 25	5. 40	·1368					
6. 49	32. 0	6. 49	·1365					
7. 11	32. 40	7. 44	·1370					
7. 46	32. 15	7. 56	·1366					
8. 0	32. 30	8. 4	·1368					
8. 51	32. 25	8. 17	·1366					
9. 17	31. 40	8. 45	·1369					
9. 42	32. 25	9. 15	·1364					
10. 9	32. 30	9. 48	·1369					
10. 38	31. 30	10. 32	·1366					
10. 56	31. 55	10. 59	·1368					
11. 43	32. 5	11. 45	·1362					
12. 4	31. 0	13. 7	·1360					
12. 24	31. 10	13. 23	·1363					
13. 8	30. 25	16. 27	·1362					
13. 14	31. 25	17. 49	·1351					
13. 55	30. 30	18. 18	·1355					
15. 9	30. 10	19. 33	·1346					
15. 39	29. 20	20. 30	·1346					
16. 6	30. 5	21. 26	·1342					
16. 18	29. 50	22. 44	·1348					
16. 33	29. 45	23. 48	·1356					
16. 42	28. 35	23. 59	·1355					
16. 59	28. 0							
17. 24	27. 20							
17. 39	27. 50							
17. 56	29. 5							
18. 16	28. 40							
18. 44	27. 30							
19. 23	27. 30							
19. 31	26. 40							
19. 40	27. 25							
20. 31	28. 45							
20. 47	28. 35							
21. 14	29. 5							
22. 56	34. 0							
23. 30	37. 25							
23. 59	38. 55							
June 4		June 4		June 4		June 4		
0. 0	20. 38. 55	0. 0	·1355	0. 0	·03159	1. 0	63 ·6	64 ·5
0. 26	39. 45	0. 48	·1346	1. 54	·03210	Max.	63 ·9	65 ·2
0. 55	39. 10	1. 18	·1356	1. 58	·03198	9. 0	63 ·2	64 ·6
1. 24	39. 30	1. 19	·1357	2. 5	·03224	Min.	60 ·7	62 ·9
1. 51	38. 25	1. 53	·1352	2. 33	·03207	21. 0	63 ·1	64 ·0
1. 56	38. 45	1. 59	·1362	2. 53	·03212			
2. 0	38. 10	2. 1	·1352	3. 24	·03224			
2. 12	39. 35	2. 12	·1374	3. 38	·03218			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 4		June 4		June 4				
h m	° ′ ″	h m		h m		h m	°	°
2. 28	20. 38. 40	2. 40	·1354	3. 42	·03225			
2. 51	37. 50	3. 10	·1369	4. 1	·03233			
3. 1	38. 5	3. 30	·1365	5. 18	·03237			
	***	3. 40	·1355	6. 52	·03226			
3. 33	36. 0	3. 47	·1358	9. 0	·03241			
3. 41	36. 10	4. 0	·1359	12. 18	·03228			
3. 59	35. 55	4. 33	·1353	14. 8	·03217			
4. 23	34. 30	5. 34	·1364	14. 54	·03203			
4. 49	34. 30	6. 6	·1365	17. 28	·03205			
4. 59	33. 55	6. 16	·1369	23. 59	·03184			
5. 11	34. 5	6. 51	·1357					
6. 0	33. 10	7. 21	·1367					
6. 9	33. 30	7. 47	·1367					
6. 38	32. 40	8. 3	·1364					
6. 55	33. 0	8. 18	·1367					
7. 37	32. 35	8. 38	·1365					
7. 42	33. 0	9. 27	·1366					
7. 59	32. 10	10. 22	·1361					
8. 24	32. 25	11. 58	·1358					
8. 39	32. 5	12. 21	·1360					
9. 26	32. 5	14. 5	·1357					
10. 9	32. 30	14. 33	·1362					
10. 31	32. 0	16. 10	·1357					
11. 3	31. 55	16. 19	·1359					
11. 39	31. 0	17. 9	·1354					
11. 55	31. 0	18. 19	·1354					
12. 34	31. 30	19. 6	·1351					
13. 27	31. 40	20. 53	·1343					
14. 5	30. 35	20. 59	·1347					
14. 31	31. 30	21. 47	·1345					
15. 3	29. 30	22. 27	·1336					
15. 39	30. 5	23. 59	·1345					
15. 57	29. 40							
16. 42	29. 15							
17. 6	27. 35							
17. 29	27. 45							
17. 46	27. 0							
17. 58	26. 30							
18. 39	27. 10							
19. 9	27. 0							
19. 13	26. 35							
20. 11	26. 55							
20. 23	26. 5							
20. 43	27. 10							
20. 54	26. 30							
21. 0	27. 45							
21. 7	27. 0							
21. 30	28. 55							
21. 41	29. 0							
22. 9	31. 5							
22. 14	30. 40							
22. 23	31. 10							
22. 29	31. 35							
23. 59	36. 25							
June 5		June 5		June 5		June 5		
0. 0	20. 36. 25	0. 0	·1345	0. 0	·03184	1. 0	64 ·1	65 ·3
1. 46	38. 35	0. 55	·1352	4. 19	·03288	3. 0	64 ·1	66 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 5		June 5		June 5		June 5		
h m	° ′ ″	h m		h m		h m	°	°
2. 1	20. 38. 30	1. 53	·1358	4. 33	·03277	Max.	64 ·2	66 ·2
2. 24	38. 45	2. 8	·1356	5. 45	·03283	9. 0	64 ·1	65 ·6
2. 34	38. 0	2. 19	·1361	5. 56	·03292	Min.	63 ·6	64 ·8
2. 51	38. 0	2. 47	·1358	6. 46	·03279	21. 0	64 ·2	65 ·8
3. 25	36. 30	2. 57	·1361	8. 14	·03284			
3. 41	36. 30	3. 20	·1348	8. 39	·03280			
4. 9	34. 40	3. 36	·1348	12. 1	·03287			
4. 29	33. 35	4. 0	·1361	12. 11	·03278			
4. 40	33. 45	4. 15	·1363	12. 23	·03283			
4. 52	33. 0	4. 26	·1357	13. 9	·03261			
5. 4	33. 25	4. 42	·1362	13. 25	·03263			
5. 54	32. 30	4. 55	·1355	14. 4	·03242			
6. 9	32. 50	5. 18	·1362	14. 53	·03257			
6. 27	32. 20	5. 44	·1361	15. 3	·03249			
7. 26	32. 35	5. 59	·1356	15. 29	·03263			
7. 41	32. 20	6. 19	·1368	15. 39	·03257			
8. 9	32. 5	7. 3	·1358	16. 11	·03270			
8. 31	32. 40	7. 28	·1371	17. 3	·03223			
8. 40	32. 5	7. 56	·1364	23. 24	·03284			
8. 54	32. 15	8. 5	·1365	23. 59	·03300			
9. 9	31. 5	8. 11	·1364					
9. 40	33. 10	8. 29	·1370					
9. 46	33. 0	8. 43	·1361					
9. 58	33. 30	8. 50	·1364					
10. 13	33. 30	9. 3	·1362					
10. 31	32. 40	9. 36	·1364					
11. 0	32. 40	9. 45	·1368					
11. 12	32. 25	9. 54	·1364					
11. 25	33. 5	10. 13	·1366					
12. 0	33. 5	10. 34	·1363					
12. 9	32. 25	10. 47	·1366					
12. 42	34. 20	11. 0	·1364					
12. 45	32. 0	11. 51	·1368					
13. 14	30. 20	12. 0	·1364					
13. 35	33. 0	12. 17	·1365					
13. 42	32. 5	12. 22	·1359					
13. 53	31. 45	12. 51	·1369					
14. 9	29. 55	13. 6	·1366					
14. 32	29. 10	13. 18	·1353					
14. 53	35. 55	13. 47	·1365					
15. 8	28. 55	14. 5	·1363					
15. 24	31. 40	14. 28	·1353					
15. 39	32. 40	14. 44	·1352					
15. 44	30. 30	14. 59	·1354					
16. 7	30. 55	15. 21	·1345					
16. 39	42. 0	15. 40	·1348					
16. 45	42. 0	15. 48	·1346					
17. 11	35. 35	16. 28	·1348					
17. 31	33. 45	16. 59	·1366					
17. 40	34. 10	17. 4	·1364					
18. 6	33. 10	17. 13	·1366					
18. 34	33. 30	17. 25	·1362					
18. 40	32. 45	17. 40	·1366					
18. 56	32. 30	18. 12	·1354					
19. 47	29. 10	18. 47	·1345					
20. 12	29. 30	19. 34	·1346					
20. 31	28. 0	20. 32	·1335					
21. 8	29. 30	21. 27	·1340					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 5		June 5						
h m	° ′ ″	h m		h m		h m	°	°
21. 16	20. 29. 30	22. 6	·1337					
22. 14	33. 20	22. 12	·1339					
22. 29	33. 30	22. 32	·1335					
23. 15	36. 40	23. 15	·1342					
23. 39	36. 40	23. 26	·1335					
23. 56	38. 0	23. 30	·1339					
23. 59	38. 5	23. 40	·1337					
		23. 59	·1340					
June 6		June 6		June 6		June 6		
0. 0	20. 38. 5	0. 0	·1340	0. 0	·03300	1. 0	65 ·3	66 ·8
0. 56	38. 30	0. 59	·1349	1. 44	·03337	3. 0	65 ·3	67 ·0
1. 39	39. 25	1. 44	·1353	2. 12	·03331	Max.	65 ·3	67 ·0
2. 0	40. 10	1. 55	·1358	3. 2	·03369	9. 0	65 ·1	66 ·9
2. 14	38. 35	2. 15	·1358	3. 18	·03392	Min.	63 ·7	64 ·3
2. 43	38. 35	2. 24	·1336	3. 42	·03383	21. 0	64 ·8	66 ·0
3. 12	37. 55	2. 50	·1354	5. 0	·03420	22. 0	64 ·5	65 ·8
3. 27	39. 55	3. 8	·1353	8. 31	·03416	23. 0	64 ·5	65 ·9
3. 53	36. 0	3. 26	·1356	11. 55	·03403			
4. 1	36. 25	3. 45	·1380	12. 26	·03370			
4. 29	35. 10	4. 6	·1336	15. 23	·03382			
4. 41	36. 0	4. 19	·1327	15. 44	·03375			
4. 53	35. 30	4. 52	·1339	16. 28	·03376			
5. 7	36. 35	5. 9	·1336	16. 48	·03366			
5. 12	36. 5	5. 19	·1351	17. 36	·03378			
5. 31	37. 0	5. 25	·1343	18. 24	·03361			
5. 46	35. 35	5. 30	·1350	23. 59	·03363			
6. 13	35. 5	5. 43	·1355					
6. 44	33. 30	5. 58	·1352					
7. 8	33. 30	6. 25	·1358					
7. 19	32. 55	6. 40	·1355					
7. 42	32. 45	6. 50	·1363					
7. 59	31. 10	7. 9	·1363					
8. 9	30. 5	7. 27	·1351					
8. 34	33. 5	7. 56	·1353					
8. 54	33. 5	8. 4	·1352					
9. 9	30. 50	8. 18	·1362					
9. 30	32. 30	8. 41	·1354					
9. 48	33. 5	8. 50	·1358					
10. 4	32. 30	9. 8	·1353					
10. 15	32. 55	9. 55	·1359					
10. 29	32. 35	10. 6	·1357					
10. 48	33. 25	10. 15	·1361					
11. 10	31. 30	10. 33	·1359					
11. 25	32. 5	10. 46	·1362					
11. 37	31. 20	11. 9	·1351					
11. 43	31. 10	11. 19	·1359					
11. 54	31. 45	11. 33	·1354					
12. 3	34. 30	11. 49	·1355					
12. 37	33. 20	12. 10	·1378					
12. 41	28. 20	12. 35	·1364					
13. 4	29. 50	12. 44	·1365					
13. 42	28. 10	13. 25	·1353					
13. 53	26. 45	13. 46	·1357					
14. 8	26. 45	14. 58	·1350					
14. 11	27. 50	15. 33	·1355					
14. 24	27. 25	16. 26	·1349					
15. 25	30. 0	16. 41	·1350					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 6		June 6						
h m	° ′ ″	h m		h m		h m	°	°
15. 37	20. 28. 30	17. 4	·1344					
16. 7	27. 25	17. 13	·1345					
16. 32	29. 30	17. 30	·1339					
16. 51	27. 25	17. 56	·1350					
17. 11	28. 30	18. 14	·1350					
17. 16	29. 50	18. 35	·1342					
17. 25	29. 50	19. 31	·1344					
17. 40	32. 30	20. 39	·1339					
17. 46	32. 5	22. 45	·1340					
18. 10	31. 10	23. 15	·1342					
18. 24	30. 25	23. 59	·1342					
18. 28	29. 15							
19. 14	28. 30							
19. 27	28. 55							
19. 37	28. 30							
19. 56	28. 55							
20. 9	29. 40							
20. 51	30. 20							
20. 56	30. 50							
21. 12	30. 50							
21. 26	32. 5							
21. 31	31. 45							
21. 39	32. 5							
21. 57	32. 30							
22. 25	33. 50							
22. 38	33. 50							
23. 39	35. 20							
23. 59	36. 0							
June 7		June 7		June 7		June 7		
0. 0	20. 36. 0	0. 0	·1342	0. 0	·03363	0. 0	64· 6	66· 0
0. 46	36. 30	0. 18	·1341	4. 24	·03413	1. 0	64· 8	66· 0
1. 28	36. 25	1. 12	·1344	8. 56	·03382	2. 0	64· 7	66 ·0
1. 56	36. 50	1. 29	·1342	19. 9	·03267	3. 0	64· 7	66· 0
2. 10	36. 5	2. 10	·1350	21. 33	·03210	Max.	64· 8	66· 0
2. 27	36. 35	2. 25	·1353	23. 59	·03233	9. 0	63· 6	64· 8
2. 29	35. 15	2. 43	·1355			Min.	61· 5	61· 7
3. 13	33. 55	2. 50	·1353			21. 0	62· 6	62· 7
4. 15	32. 35	3. 34	·1355			22. 0	62· 8	62· 8
4. 32	32. 25	3. 45	·1352			23. 0	62· 8	63· 0
4. 58	31. 30	3. 57	·1356					
5. 7	31. 40	4. 18	·1355					
5. 11	31. 10	4. 39	·1360					
6. 37	31. 30	5. 0	·1354					
7. 29	31. 5	5. 11	·1357					
8. 13	30. 55	5. 20	·1356					
8. 56	31. 5	5. 38	·1360					
9. 9	30. 20	5. 47	·1359					
9. 26	30. 40	5. 52	·1363					
9. 37	30. 35	6. 15	·1362					
9. 53	31. 10	6. 25	·1359					
10. 11	30. 25	6. 34	·1363					
10. 25	30. 40	7. 4	·1359					
11. 9	29. 25	7. 19	·1362					
11. 16	29. 35	8. 49	·1360					
11. 29	29. 5	9. 8	·1355					
12. 7	29. 5	9. 27	·1359					
12. 43	31. 0	10. 3	·1356					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 7		June 7						
h m	° ′ ″	h m		h m		h m	°	°
13. 7	20. 30. 50	10. 42	·1359					
13. 42	28. 35	12. 12	·1354					
14. 33	29. 5	13. 4	·1357					
15. 17	28. 45	13. 57	·1354					
15. 26	29. 25	14. 54	·1359					
15. 34	28. 50	15. 31	·1356					
15. 42	29. 0	15. 50	·1357					
15. 54	28. 40	16. 10	·1354					
16. 4	29. 5	17. 52	·1353					
16. 39	27. 35	20. 12	·1339					
17. 13	26. 50	20. 25	·1343					
17. 24	27. 0	20. 39	·1341					
17. 34	26. 0	20. 44	·1342					
17. 44	25. 10	20. 56	·1340					
17. 56	25. 30	21. 23	·1342					
18. 7	24. 40	21. 47	·1339					
18. 16	23. 40	22. 34	·1345					
18. 28	24. 15	23. 39	·1344					
18. 38	23. 55	23. 45	·1347					
18. 53	24. 50	23. 59	·1346					
18. 58	24. 50							
19. 11	25. 10							
19. 23	24. 35							
19. 40	25. 0							
19. 56	25. 50							
20. 5	24. 40							
20. 16	24. 40							
20. 25	25. 20							
20. 31	25. 20							
20. 42	26. 35							
20. 58	26. 25							
22. 29	30. 35							
23. 11	32. 45							
23. 39	33. 10							
23. 43	33. 40							
23. 52	33. 25							
23. 59	34. 10							
June 8		June 8		June 8		June 8		
0. 0	20. 34. 10	0. 0	·1346	0. 0	·03233	Min.	62 ·9	63 ·2
1. 45	35. 55	0. 47	·1352	3. 3	·03281	0. 0	63 ·0	63 ·3
1. 58	35. 35	1. 26	·1353	5. 39	·03293	1. 0	63 ·8	63 ·8
2. 13	36. 5	2. 29	·1359	6. 11	·03289	3. 0	64 ·1	64 ·2
2. 37	35. 30	2. 57	·1357	8. 52	·03309	Max.	64 ·1	64 ·5
2. 54	36. 5	3. 17	·1360	12. 3	·03288	9. 0	63 ·6	64 ·5
3. 58	34. 25	4. 56	·1357	13. 14	·03300	Min.	62 ·9	63 ·5
4. 5	33. 55	5. 19	·1362	17. 22	·03297	21. 0	63 ·6	63 ·6
4. 15	33. 55	5. 34	·1361	18. 46	·03285			
4. 41	32. 50	5. 57	·1367	21. 8	·03262			
4. 56	32. 30	6. 26	·1363	23. 10	·03257			
6. 59	31. 55	6. 57	·1370	23. 59	·03265			
7. 35	31. 40	7. 15	·1367					
7. 43	31. 50	7. 22	·1370					
8. 43	31. 15	7. 39	·1369					
9. 11	30. 40	8. 13	·1367					
9. 39	30. 50	8. 35	·1370					
9. 55	29. 50	9. 22	·1365					
10. 12	29. 5	9. 34	·1369					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 8		June 8						
h m	° ′ ″	h m		h m		h m	°	°
10. 29	20. 29. 35	10. 3	·1366					
10. 41	30. 5	10. 7	·1368					
11. 4	29. 35	10. 30	·1366					
11. 11	28. 50	10. 56	·1372					
11. 23	28. 30	11. 6	·1371					
11. 38	29. 40	11. 20	·1378					
12. 10	27. 35	12. 6	·1364					
12. 24	27. 30	12. 39	·1361					
12. 38	27. 50	12. 52	·1365					
12. 46	27. 50	15. 13	·1362					
13. 11	28. 40	16. 27	·1366					
15. 59	27. 40	17. 48	·1356					
16. 14	27. 10	18. 40	·1354					
16. 41	25. 40	19. 11	·1342					
17. 17	25. 5	20. 48	·1352					
17. 42	24. 35	21. 11	·1347					
17. 53	23. 30	21. 33	·1351					
17. 57	23. 50	21. 59	·1344					
18. 4	23. 5	22. 37	·1349					
18. 11	23. 50	23. 9	·1349					
18. 17	23. 30	23. 50	·1357					
18. 33	24. 35	23. 59	·1356					
18. 39	24. 20							
18. 46	22. 0							
19. 9	21. 40							
19. 26	24. 55							
19. 45	25. 35							
19. 58	25. 5							
20. 6	26. 10							
21. 28	27. 30							
21. 40	28. 35							
22. 25	30. 30							
23. 40	34. 55							
23. 47	35. 5							
23. 59	35. 55							
June 9		June 9		June 9		June 9		
0. 0	20. 35. 55	0. 0	·1356	0. 0	·03265	1. 0	64 ·8	65 ·0
0. 52	36. 10	0. 12	·1354	2. 2	·03303	3. 0	64 ·6	66 ·5
1. 9	41. 5	0. 28	·1360	3. 5	·03310	Max.	65 ·0	66 ·5
1. 22	39. 0	1. 18	·1365	7. 46	·03393	9. 0	64 ·5	64 ·7
1. 31	38. 35	1. 33	·1364	9. 14	·03389	Min.	63 ·2	63 ·3
1. 38	37. 40	1. 49	·1366	10. 33	·03370	21. 0	63 ·7	64 ·0
1. 45	37. 40	2. 9	·1365	10. 48	·03376			
2. 8	36. 35	2. 23	·1369	11. 9	·03335			
2. 14	36. 55	2. 57	·1368	11. 33	·03314			
2. 38	36. 25	3. 19	·1372	12. 4	·03337			
2. 52	36. 5	3. 42	·1367	13. 6	·03280			
3. 26	36. 20	3. 51	·1376	13. 13	·03287			
3. 33	35. 55	4. 4	·1367	13. 31	·03252			
3. 49	36. 20	4. 17	·1367	13. 42	·03275			
3. 55	35. 45	4. 22	·1364	14. 0	·03263			
4. 23	34. 35	4. 51	·1366	14. 21	·03255			
5. 39	33. 50	5. 4	·1373	14. 44	·03287			
5. 57	34. 5	5. 13	·1370	15. 27	·03275			
6. 17	32. 50	5. 36	·1373	16. 1	·03293			
6. 32	31. 30	5. 52	·1371	16. 19	·03285			
6. 41	29. 5	6. 4	·1376	16. 31	·03290			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 9		June 9		June 9		h m	o	o
h m	° ′ ″	h m		h m				
7. 10	20. 27. 55	6. 14	·1371	16. 46	·03275			
7. 33	28. 55	6. 22	·1376	17. 39	·03302			
7. 56	31. 5	6. 41	·1368	18. 32	·03290			
8. 15	31. 25	7. 2	·1375	19. 38	·03300			
8. 27	30. 50	7. 23	·1377	19. 53	·03305			
8. 49	31. 0	7. 43	·1368	21. 1	.03290			
8. 56	30. 40	7. 58	·1375	23. 9	·03292			
9. 3	30. 40	9. 7	·1369	23. 26	·03278			
9. 9	30. 20	9. 40	·1373	23. 53	·03293			
9. 44	30. 35	9. 49	·1366	23. 59	·03301			
9. 56	29. 35	10. 12	·1370					
10. 8	29. 10	10. 22	·1360					
10. 25	27. 45	10. 29	·1367					
10. 36	29. 50	10. 38	·1366					
10. 42	28. 35	10. 55	·1388					
10. 57	20. 10	11. 33	·1345					
11. 9	18. 30	11. 43	·1355					
11. 32	14. 20	11. 53	·1359					
11. 39	15. 25	12. 27	·1349					
11. 57	22. 0	12. 56	·1343					
12. 8	22. 10	13. 12	·1363					
12. 25	21. 25	13. 26	·1343					
12. 31	22. 0	13. 36	·1354					
12. 53	20. 50	14. 2	·1349					
13. 8	20. 50	14. 18	·1334					
13. 11	18. 30	14. 27	·1330					
13. 23	12. 35	14. 38	·1333					
13. 40	16. 15	14. 43	·1332					
13. 53	13. 5	15. 9	·1350					
13. 59	11. 15	15. 33	·1336					
14. 8	10. 55	15. 50	·1337					
14. 23	15. 40	16. 5	·1344					
14. 26	15. 55	16. 13	·1342					
14. 40	18. 30	16. 30	·1349					
15. 8	19. 35	16. 40	·1346					
15. 15	19. 5	16. 45	·1348					
15. 27	20. 5	17. 7	·1341					
15. 43	23. 5	17. 29	·1340					
15. 54	27. 30	17. 41	·1343					
16. 1	28. 0	17. 51	·1340					
16. 8	27. 55	18. 12	·1344					
16. 12	27. 20	18. 28	·1342					
16. 19	28. 5	18. 54	·1346					
	***	19. 9	·1344					
16. 39	26. 10	19. 20	·1346					
16. 52	27. 0	20. 0	·1337					
	***	20. 19	·1338					
17. 8	24. 50	20. 25	·1336					
17. 12	25. 5	20. 53	·1337					
17. 25	21. 40	21. 47	·1327					
17. 37	22. 5	21. 53	·1333					
17. 52	25. 30	22. 8	·1331					
17. 57	28. 15	22. 19	·1340					
18. 8	28. 10	22. 40	·1338					
18. 12	30. 40	23. 14	·1349					
18. 26	28. 35	23. 38	·1334					
18. 41	28. 35	23. 49	·1333					
18. 52	26. 40	23. 59	·1332					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 9								
h m	° ′ ″	h m		h m		h m	o	o
19. 9	20. 26. 30							
19. 18	25. 25							
19. 32	24. 30							
19. 45	26. 10							
20. 9	24. 0							
	***							
20. 24	25. 5							
	***							
21. 8	28. 0							
21. 27	27. 30							
21. 37	29. 25							
21. 47	30. 50							
21. 56	30. 35							
22. 55	33. 50							
23. 11	36. 0							
23. 16	37. 30							
	***							
23. 56	36. 25							
23. 59	36. 35							
June 10		June 10		June 10		June 10		
0. 0	20. 36. 35	0. 0	·1332	0. 0	·03301	1. 0	64·6	64·7
0. 8	38. 0	0. 21	·1350	2. 2	·03341	3. 0	64·7	66·0
0. 16	38. 45	0. 34	·1343	2. 12	·03333	Max.	64·8	67·0
0. 23	40. 0	0. 41	·1354		***	9. 0	64·4	66·0
0. 27	40. 50	1. 27	·1320	4. 33	·03422	Min.	62·4	63·0
0. 30	41. 0	1. 40	·1330	5. 10	·03437	22. 30	63·1	64·0
0. 38	42. 50	2. 15	·1349	5. 26	·03419			
0. 47	41. 50	2. 27	·1339	5. 48	·03439			
0. 56	41. 50	2. 31	·1339	6. 1	·03425			
1. 3	40. 20	3. 0	·1361	6. 23	·03437			
1. 41	39. 55	3. 8	·1360	7. 30	·03437			
1. 56	41. 25	3. 18	·1338	7. 48	·03423			
2. 0	40. 50	3. 33	·1357	8. 31	·03429			
2. 8	41. 45	3. 44	·1363	10. 19	·03333			
2. 13	40. 15	3. 47	·1370	10. 31	·03337			
2. 30	40. 15	4. 0	·1366	10. 50	·03350			
2. 38	41. 55	4. 18	·1368	11. 23	·03320			
2. 49	42. 15	4. 35	·1356	12. 42	·03297			
3. 9	39. 30	4. 41	·1360	13. 3	·03260			
3. 23	40. 5	4. 55	·1357	13. 57	·03239			
3. 26	41. 10	5. 29	·1377	14. 25	·03249			
3. 34	40. 55	5. 41	·1358	14. 33	·03237			
3. 41	40. 0	5. 59	·1379	14. 54	·03239			
3. 52	41. 5	6. 13	·1368	15. 24	·03198			
3. 56	40. 5	6. 26	·1374	15. 42	·03197			
4. 8	36. 0	6. 33	·1381	15. 53	·03192			
	***	6. 47	·1374	16. 18	·03168			
4. 24	34. 30	6. 48	·1376	16. 23	·03168			
4. 31	31. 35	7. 35	·1364	16. 33	·03127			
4. 56	31. 25	7. 51	·1348	16. 53	·03156			
5. 12	34. 55	8. 17	·1357	17. 11	·03110			
5. 28	34. 20	8. 30	·1356	17. 27	·03125			
5. 39	34. 30	8. 45	·1355	17. 36	·03163			
5. 49	35. 30	8. 53	·1352	17. 46	·03150			
6. 0	34. 5	9. 16	·1363	19. 5	·03230			
6. 10	34. 5	9. 24	·1360	19. 25	·03231			
6. 27	32. 50	9. 32	·1369	20. 3	·03240			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 10		June 10		June 10		h m	°	°
h m	° ′ ″	h m		h m				
6. 38	20. 33. 25	9. 48	·1365	20. 29	·03258			
6. 42	33. 25	9. 50	·1367	21. 0	·03269			
6. 53	30. 55	9. 59	·1359	21. 25	·03303			
7. 10	29. 25	10. 14	·1365	23. 59	·03368			
7. 14	30. 35	10. 24	·1360					
7. 25	30. 30	10. 50	·1387					
7. 39	30. 30	11. 15	·1357					
7. 53	28. 10	11. 39	·1345					
8. 1	27. 40	11. 57	·1359					
8. 14	27. 25	12. 25	·1351					
8. 41	28. 30	12. 46	·1364					
8. 59	27. 30	13. 45	·1344					
9. 17	30. 35	14. 4	·1336					
9. 28	29. 10	14. 19	·1333					
9. 46	30. 55	14. 32	·1319					
9. 55	30. 55	15. 5	·1366					
10. 3	28. 25	15. 24	·1364					
10. 11	30. 5	15. 41	·1377					
10. 27	20. 20	15. 44	·1376					
10. 33	20. 20	15. 51	·1379					
11. 0	27. 15	16. 40	·1302					
11. 8	27. 15	16. 44	·1311					
11. 23	23. 35	17. 10	·1268					
11. 27	23. 0	17. 20	·1288					
11. 38	18. 10	17. 34	·1328					
11. 51	16. 40	17. 44	·1328					
12. 30	21. 0	17. 50	·1338					
12. 41	21. 25	18. 2	·1335					
12. 47	18. 5	18. 12	·1314					
13. 11	15. 50	18. 27	·1308					
13. 27	17. 30	18. 39	·1295					
13. 40	14. 5	18. 49	·1305					
14. 8	17. 5	19. 0	·1298					
14. 23	25. 0	19. 7	·1299					
14. 39	33. 5	19. 18	·1282					
14. 56	37. 5	19. 24	·1286					
15. 6	38. 0	19. 30	·1285					
15. 11	36. 40	19. 49	·1300					
15. 16	36. 40	20. 24	·1280					
15. 24	34. 45	20. 35	·1284					
15. 31	36. 15	20. 50	·1276					
15. 38	34. 50	21. 12	·1269					
15. 47	38. 15	21. 30	·1289					
15. 53	37. 50	21. 41	·1285					
16. 0	39. 20	22. 0	·1301					
16. 7	39. 50	22. 8	·1301					
16. 12	42. 35	22. 16	·1311					
16. 16	42. 20	22. 25	·1305					
16. 23	44. 5	22. 49	·1317					
16. 37	38. 50	23. 4	·1315					
16. 53	48. 45	23. 7	·1324					
16. 59	47. 10	23. 45	·1331					
17. 8	46. 55	23. 59	·1327					
17. 12	43. 35							
17. 17	42. 5							
17. 26	45. 50							
17. 28	44. 30							
17. 37	45. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 10		h m		h m		June 11		
h m	° ′ ″					h m	°	°
17. 43	20. 40. 0							
17. 53	42. 40							
17. 58	41. 10							
18. 9	38. 30							
18. 12	38. 30							
18. 23	35. 10							
18. 30	39. 5							
18. 37	36. 55							
18. 44	31. 0							
18. 53	29. 45							
18. 58	30. 25							
19. 13	28. 35							
19. 26	34. 20							
19. 37	31. 10							
	***							
19. 56	30. 55							
20. 8	31. 55							
20. 9	31. 30							
20. 11	34. 5							
20. 22	35. 45							
20. 26	34. 55							
20. 41	38. 30							
21. 9	37. 5							
21. 15	37. 5							
21. 26	35. 35							
21. 40	34. 50							
21. 43	33. 30							
21. 56	34. 35							
22. 5	34. 20							
22. 11	35. 25							
22. 23	34. 5							
22. 53	34. 30							
22. 57	33. 20							
23. 13	34. 50							
23. 19	34. 20							
23. 56	36. 5							
23. 59	36. 55							
June 11		June 11		June 11		June 11		
0. 0	20. 36. 55	0. 0	·1327	0. 0	·03368	1. 0	63 ·8	64 ·6
	***	0. 12	·1330	0. 28	·03364	Max.	64 ·2	65 ·2
1. 0	41. 20	0. 29	·1309		***	9. 0	62 ·0	63 ·0
1. 24	41. 35	0. 38	·1314	1. 30	·03377	Min.	59 8	60 ·5
1. 39	41. 50	0. 41	·1309	3. 2	·03438	21. 0	60 ·9	61 ·6
1. 48	43. 5	0. 47	·1316	3. 39	·03445			
1. 56	42. 30	0. 49	·1309	4. 14	·03440			
2. 3	42. 40	0. 56	·1313	4. 53	·03408			
2. 9	41. 40	1. 32	·1323	6. 0	·03390			
2. 24	41. 40	2. 7	·1344	6. 56	·03359			
2. 37	42. 50	2. 42	·1348	7. 9	·03366			
2. 51	41. 45	2. 53	·1346	8. 53	·03354			
2. 58	39. 35	3. 7	·1324	11. 52	·03292			
3. 3	40. 30	3. 14	·1330	12. 51	·03278			
3. 9	39. 25	3. 23	·1325	13. 14	·03258			
3. 12	37. 0	3. 41	·1321	13. 39	·03254			
3. 23	35. 25	3. 48	·1326	13. 53	·03268			
3. 31	39. 30	3. 53	·1324	14. 10	·03241			
3. 40	40. 20	4. 18	·1364	14. 39	·03209			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 11		June 11		June 11		h m	°	°
h m	° ′ ″	h m		h m				
3. 47	20. 37. 55	4. 49	·1355	16. 26	·03210			
3. 57	34. 30	5. 16	·1359	17. 33	·03174			
4. 8	33. 25	5. 24	·1356	18. 24	·03183			
4. 12	35. 0	5. 33	·1363	18. 41	·03172			
4. 38	35. 50	5. 48	·1360	19. 53	·03177			
4. 43	34. 55	5. 51	·1353	21. 57	·03152			
5. 1	35. 10	6. 6	·1359	23. 59	·03173			
5. 11	34. 55	6. 24	·1361					
5. 23	33. 50	6. 29	·1366					
5. 38	33. 30	6. 52	·1353					
5. 44	33. 10	7. 11	·1362					
5. 52	32. 0	7. 17	·1360					
6. 11	31. 55	8. 25	·1364					
6. 25	32. 10	8. 35	·1353					
6. 39	32. 50	8. 44	·1356					
6. 53	31. 25	9. 17	·1353					
7. 9	30. 55	10. 15	·1358					
7. 24	30. 30	10. 32	·1356					
7. 46	30. 30	11. 56	·1359					
8. 11	29. 25	12. 12	·1355					
8. 23	30. 5	12. 45	·1357					
8. 27	30. 5	13. 18	·1366					
8. 37	29. 0	13. 26	·1360					
8. 42	28. 30	13. 42	·1358					
8. 57	28. 0	13. 51	·1371					
9. 8	26. 55	14. 2	·1367					
9. 12	24. 30	14. 17	·1378					
9. 23	23. 30	14. 53	·1362					
9. 38	23. 30	15. 21	·1359					
10. 8	27. 35	15. 26	1363					
10. 24	29. 0	16. 0	·1354					
10. 53	29. 30	16. 26	·1357					
11. 9	29. 30	17. 11	·1345					
12. 15	28. 45	17. 15	·1347					
12. 33	29. 5	17. 38	·1343					
12. 43	28. 30	17. 52	·1350					
12. 53	29. 30	18. 31	·1364					
13. 6	26. 30	18. 55	·1361					
13. 10	24. 5	19. 4	·1358					
13. 28	24. 5	19. 18	·1361					
13. 38	23. 5	20. 30	·1348					
13. 42	24. 25	20. 41	·1350					
13. 54	29. 0	22. 3	·1335					
14. 8	28. 50	22. 32	·1340					
14. 14	29. 10	22. 42	·1336					
14. 30	25. 30	23. 59	·1356					
14. 41	26. 5							
15. 3	25. 55							
15. 22	23. 10							
15. 26	25. 0							
15. 34	24. 10							
15. 52	25. 30							
16. 7	25. 0							
16. 12	26. 10							
16. 24	26. 5							
16. 39	25. 10							
16. 44	25. 35							
16. 54	24. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 11								
h m	° ′ ″	h m		h m		h m	°	°
17. 3	20. 25. 55							
17. 9	24. 55							
17. 24	27. 0							
17. 38	26. 35							
17. 45	27. 30							
17. 53	25. 35							
18. 1	25. 0							
18. 9	23. 55							
18. 13	24. 50							
18. 26	27. 55							
18. 29	26. 20							
18. 39	24. 45							
18. 52	24. 15							
18. 57	21. 30							
19. 2	23. 25							
19. 14	24. 5							
19. 25	23. 30							
19. 34	23. 30							
19. 39	24. 55							
19. 42	23. 50							
19. 55	24. 30							
19. 59	23. 40							
20. 11	25. 0							
20. 26	23. 30							
20. 37	23. 50							
20. 41	23. 10							
20. 53	24. 0							
21. 8	23. 35							
21. 11	25. 30							
21. 26	25. 30							
21. 39	27. 0							
22. 6	27. 30							
22. 47	30. 10							
23. 11	32. 25							
23. 22	32. 25							
23. 38	33. 35							
23. 43	33. 35							
23. 59	36. 5							
June 12		June 12		June 12		June 12		
0. 0	20. 36. 5	0. 0	·1356	0. 0	·03173	1. 0	61 ·2	63 ·0
0. 13	35. 50	0. 14	·1353	5. 45	·03243	3. 0	61 ·6	63 ·4
0. 25	36. 15	1. 48	·1363	5. 54	·03238	Max.	62 ·4	63 ·9
0. 30	36. 0	2. 3	·1361	8. 23	·03257	9. 0	60 ·6	61 ·0
0. 41	36. 25	3. 19	·1367	8. 56	·03270	Min.	60 ·0	60 ·3
0. 49	36. 15	4. 45	·1364	10. 44	·03210	21. 0	60 ·5	61 ·8
0. 57	36. 30	5. 0	·1371	11. 53	·03207			
1. 24	36. 50	5. 6	·1367	15. 26	·03184			
1. 46	37. 35	5. 13	·1372	16. 4	·03173			
1. 58	37. 25	5. 24	·1365	16. 33	·03185			
2. 9	37. 40	5. 27	·1375	17. 12	·03181			
3. 58	35. 55	5. 43	·1372	17. 33	·03176			
4. 41	34. 0	5. 55	·1377	17. 40	·03182			
4. 56	34. 25	6. 21	·1372	19. 7	·03186			
5. 3	33. 55	6. 42	·1374	22. 42	·03158			
5. 15	33. 15	6. 52	·1384	23. 59	·03162			
5. 31	33. 15	7. 34	·1376					
5. 56	33. 35	7. 58	·1388					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 12		June 12						
h m	° ′ ″	h m		h m		h m	°	°
6. 1	20. 33. 0	8. 8	·1388					
6. 17	32. 30	8. 39	·1366					
6. 32	32. 20	8. 51	·1388					
6. 38	31. 40	9. 32	·1364					
6. 56	32. 10	9. 56	·1359					
7. 30	30. 30	10. 11	·1365					
7. 52	30. 30	11. 14	·1357					
8. 8	30. 5	11. 35	·1362					
8. 12	30. 5	11. 52	·1357					
8. 23	29. 5	12. 13	·1360					
8. 27	29. 5	12. 21	·1358					
8. 41	27. 5	13. 11	·1362					
8. 46	25. 0	13. 32	·1356					
8. 55	19. 30	14. 5	·1364					
9. 0	19. 30	14. 52	·1363					
9. 15	22. 30	15. 47	·1367					
9. 26	19. 55	16. 15	·1362					
9. 35	19. 55	16. 34	·1363					
9. 56	26. 10	17. 24	·1357					
10. 8	26. 10	17. 33	·1358					
10. 11	27. 5	17. 46	·1349					
10. 15	27. 5	17. 57	·1348					
10. 26	27. 35.	18. 42	·1354					
10. 33	26. 10	19. 21	·1353					
10. 44	25. 30	20. 12	·1350					
10. 55	26. 0	20. 47	·1352					
10. 59	25. 25	21. 42	·1345					
11. 14	26. 30	22. 34	·1348					
11. 26	26. 30	22. 57	·1347					
11. 41	27. 35	23. 13	·1354					
11. 55	27. 30	23. 59	·1355					
12. 5	28. 0							
12. 12	28. 30							
12. 41	28. 40							
13. 13	29. 55							
13. 23	31. 30							
13. 29	31. 30							
13. 34	32. 35							
14. 14	31. 0							
14. 30	31. 5							
14. 39	30. 5							
14. 55	29. 25							
15. 15	29. 55							
15. 38	27. 40							
15. 56	27. 0							
16. 11	26. 50							
16. 27	28. 35							
16. 39	28. 0							
16. 50	26. 55							
17. 3	26. 55							
17. 9	27. 10							
17. 15	26. 5							
17. 26	27. 30							
17. 30	27. 30							
17. 39	28. 25							
17. 50	26. 50							
18. 4	26. 50							
18. 16	27. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 12								
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 27. 30							
18. 58	25. 35							
19. 15	29. 10							
19. 56	25. 40							
20. 18	27. 5							
21. 11	27. 0							
21. 39	28. 0							
23. 11	32. 40							
23. 23	34. 5							
23. 43	34. 35							
23. 56	34. 10							
23. 59	35. 15							
June 13		June 13		June 13		June 13		
0. 0	20. 35. 15	0. 0	·1355	0. 0	·03162	1. 0	61·6	63·3
0. 11	35. 0	0. 41	·1355	2. 46	·03210	3. 0	61·9	63·9
1. 55	36. 5	1. 8	·1353	4. 29	·03260	Max.	63·4	65·1
2. 9	35. 45		***	4. 46	·03258	9. 0	62·4	64·6
2. 38	36. 5	2. 35	·1357	6. 16	·03295	Min.	61·5	62·6
2. 43	35. 35	2. 40	·1354	6. 45	·03318	21. 0	61·6	63·7
3. 9	35. 35	3. 5	·1359	7. 11	·03307	22. 0	61·6	63·8
3. 23	35. 5	3. 43	·1358	8. 43	·03313	23. 0	61·6	63·9
3. 54	34. 5	4. 9	·1373	11. 57	·03284			
4. 11	34. 40	4. 18	·1375	12. 48	·03271			
4. 28	33. 10	4. 30	·1366	13. 16	·03242			
4. 45	32. 40	4. 38	·1367	14. 18	·03253			
5. 9	33. 0	4. 44	·1364	15. 26	·03248			
	***	5. 10	·1370	16. 39	·03263			
5. 46	31. 5	5. 14	·1368	17. 38	·03247			
6. 1	29. 35	5. 33	·1370	18. 29	·03253			
6. 23	28. 50	5. 40	·1365	23. 59	·03249			
6. 43	31. 0	5. 58	·1363					
7. 6	29. 5	6. 23	·1371					
7. 19	28. 55	6. 35	·1378					
7. 28	29. 5	6. 56	·1365					
7. 37	28. 40	7. 10	·1368					
8. 26	29. 55	7. 24	·1366					
8. 42	29. 25	7. 45	·1370					
9. 9	30. 0	8. 4	·1367					
9. 27	29. 50	8. 22	·1369					
9. 45	30. 10	8. 51	·1361					
10. 11	29. 35	9. 37	·1365					
10. 54	29. 5	10. 10	·1362					
11. 3	29. 35	11. 13	·1365					
11. 11	29. 5	11. 41	·1370					
11. 44	30. 0	12. 20	·1364					
11. 56	28. 50	12. 35	·1377					
12. 13	29. 30	12. 42	·1378					
12. 25	29. 5	13. 12	·1365					
12. 41	33. 5	13. 53	·1362					
13. 10	30. 30	14. 36	·1371					
13. 43	27. 5	15. 2	·1367					
13. 55	27. 10	15. 11	·1370					
14. 9	26. 55	15. 48	·1356					
14. 15	25. 10	16. 45	·1363					
14. 38	26. 0	17. 2	·1360					
14. 41	25. 5	17. 13	·1362					
14. 55	25. 5	17. 40	·1348					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V. F. Magnet.
June 13		June 13						
h m	° ′ ″	h m		h m		h m	°	°
15. 0	20. 25. 40	18. 14	·1353					
15. 18	23. 55	18. 46	·1351					
16. 13	25. 40	19. 55	·1354					
16. 23	26. 50	20. 39	·1345					
16. 28	26. 20	20. 50	·1346					
16. 44	27. 5	21. 9	·1343					
16. 58	26. 0	21. 16	·1345					
17. 9	26. 30	21. 46	·1337					
17. 12	27. 40	22. 40	·1344					
17. 25	28. 10	22. 58	·1342					
17. 33	27. 25	23. 21	·1346					
17. 44	28. 5	23. 35	·1344					
17. 52	29. 30	23. 45	·1349					
18. 7	27. 0	23. 59	·1346					
18. 32	25. 15							
18. 52	25. 0							
19. 2	26. 5							
19. 11	25. 55							
19. 14	26. 40							
19. 26	26. 40							
19. 49	25. 10							
20. 7	26. 5							
20. 27	25. 45							
20. 36	26. 0							
20. 41	26. 55							
20. 59	27. 10							
21. 26	29. 30							
21. 41	30. 5							
21. 56	31. 0							
22. 13	31. 30							
22. 24	31. 5							
22. 34	32. 0							
22. 43	32. 15							
23. 22	33. 50							
23. 27	33. 35							
23. 41	34. 30							
23. 55	34. 0							
23. 59	34. 30							
June 14		June 14		June 14		June 14		
0. 0	20. 34. 30	0. 0	·1346	0. 0	·03249	0. 0	62 ·1	64 ·0
0. 23	34. 10	0. 43	·1355	3. 1	·03307	1. 0	62 ·6	64 ·8
1. 4	34. 55	1. 12	·1362	3. 12	·03339	2. 0	62 ·6	64 ·2
1. 23	36. 30	1. 24	·1357	3. 18	·03318	3. 0	62 ·6	65 ·0
1. 30	38. 5	1. 39	·1364		***	Max.	63 ·1	65 ·9
1. 48	39. 0	2. 5	·1365	3. 45	·03323	9. 0	61 ·8	63 ·3
2. 9	38. 40	2. 19	·1347	4. 9	·03342	Min.	60 ·2	62 ·2
2. 15	41. 25	2. 24	·1359	4. 18	·03337	21. 0	60 ·6	63 ·0
2. 27	38. 35	2. 39	·1345	6. 17	·03350	22. 0	61 ·3	63 ·0
2. 46	37. 10	2. 45	·1351	6. 19	·03342	23. 0	61 ·4	63 ·2
2. 56	37. 20	2. 53	·1347	6. 35	·03350			
3. 11	36. 0	3. 16	·1354	8. 43	·03351			
3. 23	38. 55	3. 19	·1348	11. 11	·03279			
3. 30	37. 35	3. 27	·1379	11. 44	·03272			
3. 39	38. 0	3. 41	·1362	13. 0	·03266			
3. 48	37. 30	4. 7	·1353	13. 33	·03243			
4. 11	38. 0	4. 8	·1360	14. 1	·03257			
4. 22	38. 55	4. 14	·1359	14. 24	·03248			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 14		June 14		June 14				
h m	° ′ ″	h m		h m		h m	°	°
4. 26	20. 37. 30	4. 28	·1371	15. 11	·03248			
4. 42	36. 25	4. 41	·1359	16. 1	·03266			
4. 53	35. 40	4. 52	·1356	18. 55	·03248			
5. 18	34. 5	5. 11	·1360	19. 44	·03251			
6. 0	33. 5	5. 25	·1357	20. 38	·03232			
6. 17	33. 40	5. 34	·1365	22. 8	·03229			
6. 25	32. 30	5. 56	·1366	23. 59	·03221			
6. 56	32. 10	6. 21	·1371					
7. 24	31. 30	6. 31	·1363					
7. 41	31. 0	6. 46	·1370					
7. 57	30. 20	7. 0	·1367					
8. 15	31. 5	7. 48	·1365					
8. 55	30. 30	8. 6	·1369					
9. 26	30. 30	9. 4:	·1366					
9. 52	27. 35	10. 14	·1377					
10. 1	27. 30	10. 43	·1389					
10. 14	28. 5	10. 53	·1389					
10. 26	27. 10	11. 11	·1378					
10. 40	28. 25	11. 22	·1378					
10. 48	27. 55	11. 23	·1383					
10. 58	28. 40	12. 18	·1364					
11. 18	26. 20	12. 41	·1362					
11. 26	26. 20	12. 52	·1366					
11. 45	22. 40	13. 0	·1363					
12. 6	23. 30	13. 21:	·1374					
12. 26	26. 5	13. 47	·1363					
12. 45	27. 0	13. 55	·1370					
13. 11	27. 0	14. 7	·1362					
13. 23	28. 55	14. 13	·1359					
13. 41	26. 30	14. 50	·1368					
13. 44	25. 0	15. 5	·1365					
13. 51	27. 35	15. 14	·1366					
13. 55	27. 50	15. 26	·1361					
14. 8	31. 20	16. 33	·1366					
14. 15	30. 35	16. 50	·1360					
14. 26	31. 40	17. 22	·1357					
14. 35	30. 55	18. 41	·1359					
14. 41	31. 40	19. 17	·1353					
14. 45	31. 0	19. 25	·1356					
15. 2	30. 25	19. 50	·1347					
15. 12	28. 55	20. 1	·1348					
15. 40	28. 0	20. 11	·1345					
15. 52	28. 0	20. 36	·1346					
16. 55	24. 40	20. 44	·1337					
17. 0	25. 45	20. 52	·1340					
17. 8	24. 30	21. 12	·1336					
17. 25	24. 45	21. 32	·1346					
17. 30	26. 0	21. 52	·1335					
17. 39	26. 40	22. 15	·1337					
17. 46	25. 10	22. 43	·1331					
17. 51	26. 0	23. 2	·1337					
17. 56	24. 35	23. 16	·1328					
18. 2	25. 40	23. 34	·1330					
18. 8	25. 5	23. 40	·1326					
18. 24	26. 20	23. 47	·1335					
18. 35	25. 55	23. 51	·1328					
18. 41	26. 10	23. 59	·1334					
18. 53	25. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
June 14								
h m	° ′ ″	h m		h m		h m	°	°
18. 56	20. 26. 0							
19. 38	29. 35							
19. 46	29. 0							
19. 56	30. 5							
20. 25	30. 10							
20. 33	31. 5							
20. 41	30. 10							
20. 58	33. 30							
21. 28	35. 10							
21. 42	34. 35							
21. 56	35. 40							
22. 12	35. 5							
22. 34	36. 5							
22. 39	35. 30							
22. 45	36. 10							
23. 11	36. 30							
23. 24	38. 5							
23. 40	37. 5							
23. 43	37. 55							
23. 52	37. 30							
23. 59	38. 55							
June 15		June 15		June 15		June 15		
0. 0	20. 38. 55	0. 0	·1334	0. 0	·03221	0. 0	61·8	63·5
0. 14	39. 25	0. 23	·1348	1. 3	·03233	Min.	61·8	63·5
0. 25	40. 40	0. 44	·1344	2. 4	·03246	1. 0	62·0	64·0
0. 34	39. 45	1. 26	·1361	2. 40	·03284	2. 0	62·0	64·3
0. 42	38. 15	1. 36	·1356	2. 54	·03280	3. 0	62·6	64·6
0. 56	37. 0	2. 8	·1352	4. 8	·03337	9. 0	62·6	65·0
1. 23	38. 30	2. 21	·1357	5. 19	·03361	Max.	64·0	65·6
1. 30	37. 55	2. 26	·1353	5. 34	·03352	21. 0	62·4	63·8
2. 9	37. 0	2. 43	·1377	5. 48	·03357			
2. 15	38. 5	2. 59	·1362	11. 23	·03319			
2. 26	37. 35	3. 28	·1353	12. 34	·03278			
2. 41	38. 40	3. 41	·1343	12. 55	·03284			
2. 53	36. 30	3. 51	·1349	13. 0	·03271			
3. 23	38. 10	4. 2	·1342	13. 9	·03268			
3. 39	37. 20	4. 11	·1352	13. 38	·03229			
3. 50	38. 0	4. 18	·1349	13. 53	·03221			
4. 1	36. 5	4. 27	·1356	14. 24	·03243			
4. 8	36. 50	4. 41	·1346	14. 29	·03239			
4. 12	35. 45	4. 45	·1353	14. 37	·03257			
4. 27	35. 30	5. 18	·1374	14. 48	·03254			
4. 39	30. 35	5. 31	·1361	15. 7	·03231			
4. 46	30. 25	5. 40	·1366	15. 58	·03228			
5. 1	33. 5	6. 4	·1350	17. 3	·03261			
5. 14:	36. 0	6. 29	·1364	17. 58	·03268			
5. 26	33. 50	7. 2	·1369	18. 38	·03281			
5. 39	33. 30	7. 24	·1368	21. 8	·03279			
5. 55	32. 50	7. 41	·1376	23. 48	·03252			
6. 57	31. 10	7. 49	·1371	23. 59	·03257			
7. 23	31. 40	8. 0	·1375					
7. 35	30. 55	8. 22	·1364					
7. 57	31. 5	9. 2	·1362					
8. 12	31. 30		***					
8. 41	30. 55	9. 57	·1371					
9. 10	30. 30	10. 19	·1363					
9. 29	30. 0	10. 29	·1366					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
June 15		June 15						
h m	° ′ ″	h m		h m		h m	°	°
9. 46	20. 30. 5	10. 39	·1359					
10. 1	30. 55	10. 45	·1361					
10. 9	29. 5	10. 51	·1354					
10. 14	29. 5	11. 3	·1359					
10. 22	27. 40	11. 7	·1357					
10. 38	24. 10	11. 15	·1365					
10. 52	20. 10	11. 19	·1360					
10. 59	19. 25	11. 30	·1366					
11. 38	29. 25	11. 33	·1364					
11. 56	29. 25	11. 41	·1366					
12. 11	25. 25	12. 9	·1353					
12. 23	25. 25	12. 21	·1355					
12. 27	27. 0	12. 36	·1354					
13. 14	31. 0	12. 54	·1365					
13. 24	28. 10	12. 56	·1374					
13. 28	26. 55	13. 0	·1371					
13. 43	25. 30	13. 18	·1389					
13. 55	23. 10	13. 24	·1385					
14. 9	21. 55	13. 28	·1390					
14. 16	24. 5	13. 38	·1382					
14. 24	26. 55	13. 45	·1379					
14. 31	26. 15	14. 17	·1347					
14. 52	32. 10	14. 19	·1355					
15. 26	31. 55	14. 35	·1345					
15. 37	29. 45	14. 51	·1360					
15. 41	30. 35	15. 17	·1343					
15. 56	28. 10	15. 26	·1346					
16. 6	26. 30	15. 45	·1355					
16. 13	26. 45	15. 50	·1358					
16. 23	25. 40	16. 4	·1356					
16. 32	28. 0	16. 11	·1359					
16. 41	27. 20	16. 45	·1343					
17. 4	27. 30	16. 50	·1342					
17. 12	28. 50	17. 12	·1353					
17. 17	26. 30	17. 17	·1347					
17. 25	28. 0	17. 49	·1353					
17. 37	27. 25	17. 57	·1349					
17. 45	27. 40	18. 45	·1344					
17. 54	26. 10	18. 51	·1347					
18. 29	24. 50		***					
19. 26	26. 50	19. 42	·1340					
19. 32	26. 0	19. 49	·1342					
19. 38	26. 50	20. 16	·1332					
19. 52	25. 5	20. 37	·1336					
20. 1	24. 55	20. 41	·1330					
20. 9	27. 5	21. 10	·1332					
20. 25	27. 50	22. 0	·1344					
20. 32	29. 35	22. 37	·1346					
20. 39	28. 55	22. 48	·1343					
20. 54	28. 45	23. 39	·1344					
21. 8	27. 0	23. 54	·1327					
21. 41	28. 35	23. 59	·1329					
21. 52	28. 5							
22. 32	31. 0							
23. 38	33. 55							
23. 52	33. 30							
23. 59	34. 55							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 16 h m	° ′ ″	June 16 h m		June 16 h m		June 16 h m	°	°
0. 0	20. 34. 55	0. 0	·1329	0. 0	·03257	1. 0	62·6	64·6
0. 12	35. 0	0. 11	·1335	2. 31	·03336	3. 0	62·8	66·0
0. 29	33. 35	0. 19	·1329	2. 44	·03322	Max.	63·0	66·0
0. 43	33. 15	0. 46	·1328	3. 25	·03359	9. 0	62·6	64·2
1. 8	34. 35	0. 52	·1334	3. 42	·03348	Min.	61·6	62·8
1. 26	36. 20	1. 4	·1342	4. 44	·03331	21. 0	61·6	63·4
1. 36	38. 5	1. 40	·1345	6. 4	·03335			
1. 44	37. 0	1. 46	·1341	6. 14	·03341			
1. 56	39. 20	1. 49	·1352	6. 19	·03333			
2. 12	40. 5	1. 56	·1349	8. 7	·03338			
2. 23	37. 10	2. 14	·1358	10. 33	·03318			
2. 27	38. 5	2. 22	·1345	11. 18	·03257			
2. 39	38. 5		***	11. 45	·03253			
2. 41	39. 0	2. 53	·1359	13. 33	·03276			
2. 47	38. 35	3. 13	·1334	15. 3	·03283			
2. 57	39. 35	3. 22	·1335	18. 11	·03250			
3. 7	36. 50	3. 27	·1346	20. 53	·03253			
3. 12	37. 10	3. 34	·1345	23. 59	·03259			
3. 25	37. 10	3. 49	·1363					
3. 28	38. 5	3. 58	·1357					
3. 33	37. 30	4. 15	·1367					
3. 41	38. 25	4. 39	·1366					
3. 53	37. 30	4. 47	·1369					
4. 0	35. 45	5. 16	·1363					
4. 41	34. 30	5. 37	·1368					
5. 41	33. 10	5. 42	·1365					
6. 4	33. 20	5. 49	·1371					
6. 15	32. 35	6. 1	·1369					
6. 29	32. 50	6. 14	·1374					
6. 41	32. 0	6. 24	·1368					
6. 54	32. 0	6. 31	·1377					
7. 37	30. 55	6. 41	·1368					
8. 8	31. 0	7. 7	·1370					
8. 12	30. 20	7. 14	·1375					
8. 15	31. 35	7. 26	·1370					
8. 23	30. 30	7. 39	·1374					
8. 41	31. 5	7. 53	·1372					
9. 4	28. 5	8. 0	·1379					
9. 13	28. 35	8. 31	·1373					
9. 26	27. 35	8. 38	·1367					
9. 37	28. 40	8. 54	·1369					
9. 46	17. 25	9. 5	·1361					
9. 56	17. 25	9. 13	·1366					
10. 23	26. 30	9. 44	·1346					
10. 29	29. 35	10. 4	·1371					
10. 42	30. 10	10. 30	·1359					
11. 0	35. 30	10. 56	·1389					
11. 12	34. 25	11. 26	·1370					
11. 27	31. 30	11. 51	·1364					
11. 35	30. 55	12. 7	·1366					
11. 54	25. 10	12. 21	·1363					
12. 6	24. 50	12. 34	·1360					
12. 23	25. 45	12. 41	·1365					
12. 31	26. 0	13. 4	·1356					
12. 33	24. 55	13. 7	·1361					
12. 40	25. 55	13. 25	·1356					
13. 13	27. 45	14. 10	·1361					
13. 22	27. 5	15. 18	·1359					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 16 h m	° ′ ″	June 16 h m		h m		h m	°	°
13. 47	20. 30. 0	15. 23	·1363					
14. 1	28. 30	15. 56	·1354					
14. 36	26. 40	17. 15	·1358					
15. 4	28. 45	17. 42	·1354					
15. 14	26. 10	17. 48	·1357					
15. 27	26. 55	18. 12	·1348					
15. 42	29. 25	18. 32	·1353					
15. 52	28. 50	18. 42	·1347					
15. 57	28. 50	18. 57	·1352					
16. 12	27. 10	19. 23	·1350					
16. 35	27. 35	20. 7	·1360					
16. 49	29. 30	20. 19	·1355					
16. 58	28. 0	20. 43	·1362					
17. 6	29. 5		***					
17. 24	28. 0	22. 29	·1344					
17. 31	28. 15	22. 56	·1347					
17. 43	30. 50	23. 32	·1343					
17. 55	29. 40	23. 49	·1347					
18. 3	30. 25	23. 59	·1343					
18. 12	28. 50							
18. 23	30. 40							
18. 27	29. 50							
18. 33	30. 40							
18. 40	28. 20							
18. 44	28. 0							
18. 53	28. 35							
19. 26	26. 10							
19. 35	26. 20							
19. 51	24. 30							
20. 5	25. 40							
20. 9	24. 20							
20. 18	25. 55							
20. 26	25. 25							
20. 54	27. 35							
21. 7	27. 5							
21. 11	28. 0							
21. 27	27. 10							
21. 38	28. 30							
21. 56	29. 55							
22. 2	30. 35							
22. 23	31. 15							
22. 44	31. 40							
22. 58	32. 30							
23. 4	33. 15							
23. 10	32. 30							
23. 39	33. 35							
23. 52	34. 30							
23. 59	36. 5							
June 17		June 17		June 17		June 17		
0. 0	20. 36. 5	0. 0	·1343	0. 0	·03259	1. 0	62·6	64·4
0. 11	35. 30	0. 12	·1352	2. 16	·03309	3. 0	62·7	65·0
0. 18	36. 50	0. 25	·1344	3. 59	·03337	Max.	63·8	65·7
0. 38	36. 10	0. 41	·1359		***	9. 0	62·6	64·2
0. 41	37. 20	1. 4	·1353	7. 52	·03348	Min.	60·8	62·3
0. 48	37. 35	1. 34	·1360	11. 46	·03273	21. 30	60·8	62·7
0. 55	36. 30	1. 50	·1369	12. 55	·03269			
1. 26	38. 0	1. 57	·1365	18. 6	·03248			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 17		June 17		June 17				
h m	° ′ ″	h m		h m		h m	°	°
1. 35	20. 38. 35	2. 20	·1354	20. 47	·03211			
1. 41	38. 20	2. 41	·1367	22. 59	·03203			
1. 51	37. 0	2. 44	·1366	23. 59	·03210			
2. 23	36. 15	2. 49	·1368					
2. 27	36. 25	3. 12	·1359					
2. 38	34. 5	3. 23	·1367					
2. 59	33. 45	3. 35	·1363					
3. 9	34. 25		***					
	***	3. 54	·1353					
3. 39	34. 10		***					
3. 42	33. 35	4. 46	·1371					
3. 53	33. 5		***					
3. 58	31. 30	5. 35	·1368					
4. 16	30. 35	6. 0	·1380					
4. 42	31. 20	6. 15	·1370					
	***	6. 22	·1376					
5. 5	31. 5	6. 44	·1368					
5. 9	31. 50	7. 27	·1372					
5. 26	31. 15	9. 4	·1363					
	***	9. 41	·1368					
5. 55	32. 30	10. 21	·1361					
6. 9	31. 20	10. 32	·1363					
6. 27	31. 55	11. 6:	·1360					
6. 53	31. 30	11. 40	·1369					
6. 56	31. 55	12. 45	·1362					
7. 8	31. 25	12. 53	·1367					
7. 15	31. 35	13. 49	·1361					
7. 36	30. 30	14. 53	·1360					
7. 52	30. 45	14. 58	·1364					
8. 2	30. 20	16. 32	·1357					
8. 29	31. 10		***					
8. 41	30. 15	17. 10	·1360					
8. 52	30. 35		***					
8. 57	29. 50	19. 58	·1356					
9. 9	30. 25	20. 57	·1357					
9. 27	29. 0	21. 40	·1354					
9. 38	30. 35	22. 20	·1356					
9. 42	28. 45	22. 40	·1348					
9. 55	28. 45	23. 5	·1352					
10. 3	29. 35	23. 10	·1347					
10. 9	28. 40	23. 59	·1359					
10. 23	28. 40							
10. 34	29. 20							
10. 47	29. 5							
11. 16	29. 20							
11. 32	29. 55							
11. 39	29. 10							
11. 44	28. 55							
12. 2	29. 15							
12. 28	28. 20							
12. 38	28. 45							
12. 43	28. 0							
13. 44	27. 55							
14. 12	29. 45							
14. 25	28. 30							
14. 53	27. 40							
15. 8	28. 40							
15. 26	27. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 17								
h m	° ′ ″	h m		h m		h m	°	°
15. 38	20. 27. 40							
15. 41	27. 5							
16. 2	28. 10							
16. 23	26. 35							
16. 51	26. 40							
16. 58	25. 45							
17. 22	26. 50							
17. 35	24. 45							
17. 42	26. 0							
17. 48	24. 45							
18. 9	25. 50							
18. 54	24. 45							
19. 56	26. 0							
20. 9	25. 35							
20. 49	27. 30							
21. 13	27. 20							
21. 38	28. 5							
21. 42	27. 20							
21. 48	28. 5							
22. 12	29. 40							
22. 39	31. 5							
22. 42	32. 10							
22. 59	32. 35							
23. 11	32. 25							
23. 27	33. 20							
23. 59	33. 10							
June 18		June 18		June 18		June 18		
0. 0	20. 33. 10	0. 0	·1359	0. 0	·03210	1. 0	61 ·6	63 ·1
0. 26	33. 35	0. 40	·1352	0. 45	·03220	Max.	62 ·2	63 ·7
0. 37	34. 10	0. 55	·1362	2. 37	·03233	9. 0	61 ·3	63 ·2
0. 41	33. 25	1. 8	·1363	3. 38	·03251	Min.	60 ·5	62 ·0
0. 53	34. 55	1. 34	·1368	3. 56	·03242	21. 0	60 ·5	62 ·0
0. 59	34. 55	1. 44	·1363	4. 30	·03236			
1. 29	36. 45	2. 9	·1366	5. 43	·03262			
1. 43	36. 5	2. 20	·1355	8. 38	·03257			
2. 4	35. 55	2. 35	·1354	14. 48	·03211			
2. 11	35. 5	2. 52	·1335	19. 58	·03183			
2. 38	36. 50	3. 0	·1356	20. 53	·03169			
2. 53	36. 35	3. 45	·1372	23. 59	·03170			
3. 16	32. 20	4. 4	·1366					
3. 27	32. 20	4. 22	·1369					
3. 41	33. 0	4. 36	·1377					
3. 57	32. 30	4. 55	·1371					
4. 10	32. 45	5. 11	·1379					
4. 22	32. 30	5. 35	·1385					
4. 31	33. 5	5. 48	·1392					
4. 46	32. 40	6. 12	·1373					
4. 58	33. 5	6. 24	·1377					
5. 31	32. 5	6. 30	·1374					
5. 45	32. 40	6. 45	·1379					
6. 9	31. 25	6. 55	·1374					
6. 24	31. 30	7. 13	·1374					
6. 35	31. 0	7. 34	·1378					
6. 45	31. 15	7. 45	·1373					
6. 53	30. 45	8. 53	·1370					
7. 11	30. 20	9. 22	·1374					
7. 30	30. 45	9. 39	·1372					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
June 18		June 18						
h m	° ′ ″	h m		h m		h m	°	°
7. 41	20. 30. 10	10. 2	·1374					
7. 48	30. 35	10. 22	·1370					
8. 8	30. 35	10. 32	·1371					
8. 25	29. 35	10. 52	·1366					
8. 44	30. 30	11. 28	·1368					
9. 1	27. 40	11. 39	·1366					
9. 14	27. 40	13. 7	·1370					
9. 36	26. 30	13. 32	·1367					
9. 42	27. 5	13. 49	·1369					
10. 3	26. 40	14. 23	·1366					
10. 24	25. 30	14. 41	·1370					
10. 55	28. 30	15. 5	·1364					
12. 8	29. 15	15. 40	·1362					
12. 25	29. 30	16. 25	·1365					
12. 59	29. 10	16. 38	·1366					
13. 16	28. 0	17. 14	·1362					
13. 32	28. 5	18. 2	·1363					
13. 41	28. 40		***					
14. 2	28. 5	21. 10	·1354					
14. 22	28. 0	21. 29	·1355					
14. 33	28. 35		***					
14. 48	27. 10	23. 24	·1359					
15. 26	26. 35	23. 59	·1351					
15. 47	28. 30							
16. 11	27. 35							
16. 23	25. 40							
16. 32	25. 40							
16. 46	24. 0							
17. 12	23. 55							
17. 31	24. 10							
18. 9	22. 30							
18. 26	23. 55							
18. 40	23. 20							
18. 56	23. 35							
	***							
19. 24	23. 0							
19. 46	24. 35							
20. 26	24. 35							
21. 13	26. 0							
22. 35	30. 35							
22. 41	32. 15							
22. 55	32. 0							
23. 26	34. 55							
23. 59	34. 55							
June 19		June 19		June 19		June 19		
0. 0	20. 34. 55	0. 0	·1351	0. 0	·03170	1. 0	60 ·9	62 ·8
0. 14	35. 35	0. 26	·1356	2. 53	·03198	3. 0	61 ·0	62 ·8
0. 41	34. 30	1. 13	·1358	5. 24	·03222	Max.	62 ·4	63 ·9
0. 55	34. 15	1. 25	·1366	6. 2	·03237	9. 0	61 ·2	63 ·0
1. 10	33. 10	1. 30	·1362	6. 38	·03224	Min.	59 ·9	61 ·2
1. 26	33. 40	1. 42	·1367	7. 38	·03243	21. 0	60 ·6	62 ·0
1. 36	34. 15	2. 2	·1362	7. 55	·03240			
1. 41	33. 50	2. 18	·1364	8. 10	·03244			
2. 9	33. 5	2. 33	·1360	11. 23	·03205			
2. 15	33. 35	2. 46	·1355	12. 25	·03207			
2. 25	33. 10	3. 3	·1362	12. 56	·03186			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
June 19		June 19		June 19				
h m	° ′ ″	h m		h m		h m	°	°
2. 38	20. 34. 0	3. 25	·1360	16. 43	·03171			
2. 42	33. 10		***	18. 33	·03148			
2. 48	33. 10	3. 58	·1373	19. 59	·03152			
2. 56	33. 50	4. 16	·1371	23. 26	·03137			
3. 18	33. 0	4. 31	·1374	23. 59	·03144			
3. 46	33. 35	4. 45	·1368					
4. 12	33. 30	4. 54	·1370					
4. 41	32. 15	5. 22	·1366					
5. 14	30. 20	5. 35	·1367					
5. 26	27. 30	6. 0	·1390					
5. 31	27. 20	6. 14	·1391					
5. 38	25. 40	6. 49	·1375					
5. 42	25. 15	7. 8	·1383					
6. 10	29. 35	7. 17	·1382					
6. 17	29. 35	7. 25	·1387					
6. 27	30. 35	8. 0	·1374					
6. 36	30. 25	8. 6	·1377					
7. 2	31. 30	10. 32	·1372					
7. 17	31. 0	10. 58	·1377					
7. 35	31. 30	11. 24	·1370					
7. 57	28. 40	12. 6	·1368					
8. 42	30. 25	12. 33	·1375					
9. 5	29. 30	14. 9	·1363					
9. 22	29. 55	15. 7	·1369					
9. 31	30. 55	17. 8	·1366					
9. 40	30. 25	17. 19	·1362					
10. 28	30. 35	18. 22	·1368					
10. 36	30. 5	19. 10	·1366					
11. 4	30. 35	19. 41	·1368					
11. 32	29. 10	20. 30	·1363					
12. 10	29. 20	21. 47	·1366					
12. 26	32. 5		***					
12. 55	29. 55	23. 16	·1360					
13. 26	28. 0	23. 24	·1363					
13. 42	28. 10	23. 59	·1359					
13. 57	28. 50							
14. 10	30. 15							
14. 28	30. 25							
14. 55	28. 55							
15. 58	26. 10							
16. 11	26. 45							
16. 33	26. 10							
17. 16	25. 30							
17. 25	26. 5							
18. 24	27. 0							
18. 41	25. 50							
19. 22	26. 20							
20. 38	28. 5							
20. 52	27. 55							
20. 58	28. 25							
21. 11	27. 55							
21. 36	28. 50							
22. 27	31. 35							
23. 25	32. 5							
23. 44	32. 30							
23. 59	32. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 20		June 20		June 20		June 20		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 32. 30	0. 0	·1359	0. 0	·03144	1. 0	61 ·6	63 ·0
0. 11	32. 10	0. 14	·1361	2. 24	·03199	3. 0	62 ·4	64 ·0
0. 26	33. 15	0. 43	·1362	2. 48	·03193	Max.	63 ·1	65 ·0
0. 37	33. 5	1. 24	·1359	2. 56	·03209	9. 0	61 ·8	64 ·1
0. 57	33. 55	2. 23	·1375	6. 5	·03226	Min.	61 ·4	62 ·0
1. 38	34. 35	2. 46	·1361	10. 44	·03242	21. 0	61 ·4	62 ·8
1. 56	34. 35	3. 5	·1377	11. 58	·03235	22. 0	61 ·6	63 ·0
2. 8	35. 10	3. 49	·1366	12. 38	·03213			
2. 26	35. 0	4. 25	·1370	13. 11	·03218			
2. 35	34. 20	5. 22	·1365	14. 3	·03202			
2. 40	34. 20	5. 45	·1367	14. 16	·03203			
2. 46	33. 55	6. 3	·1365	14. 43	·03194			
2. 57	34. 35	6. 15	·1369	15. 44	·03210			
3. 19	33. 0	6. 22	·1367	19. 19	·03190			
3. 42	33. 25	6. 31	·1371	19. 33	·03176			
4. 53	32. 5	6. 56	·1368	19. 44	·03187			
5. 10	31. 25	7. 9	·1370	20. 26	·03177			
5. 29	30. 45	8. 14	·1369	20. 53	·03182			
5. 53	31. 10	8. 23	·1372	23. 59	·03169			
6. 1	30. 40	8. 32	·1370					
6. 38	31. 30	8. 47	·1374					
7. 0	30. 30	9. 33	·1377					
7. 23	30. 55	9. 53	·1375					
7. 48	31. 0	10. 8	·1377					
8. 8	31. 0	10. 18	·1375					
8. 27	30. 40	10. 40	·1380					
8. 42	31. 5	10. 46	·1377					
9. 14	30. 5	11. 41	·1375					
9. 23	30. 20	11. 58	·1384					
9. 44	30. 5	12. 51	·1380					
10. 0	29. 45	13. 12	·1384					
10. 8	29. 55	13. 30	·1382					
10. 15	29. 50	13. 59	·1375					
10. 42	30. 35	14. 14	·1376					
11. 1	29. 20	14. 40	·1370					
11. 39	27. 5	15. 10	·1363					
12. 4	29. 55	15. 33	·1366					
12. 30	24. 50	15. 56	·1363					
12. 40	24. 50	16. 29	·1366					
12. 44	25. 35	16. 45	·1364					
12. 53	25. 25	17. 18	·1369					
13. 7	26. 30	17. 26	·1367					
13. 32	27. 0	17. 46	·1369					
13. 40	26. 20	18. 9	·1367					
13. 55	25. 20	19. 7	·1360					
14. 13	25. 20	19. 19	·1363					
14. 40	23. 20	19. 35	·1353					
15. 7	24. 30		***					
15. 26	25. 55	19. 59	·1358					
15. 41	28. 0		***					
16. 6	26. 0	20. 32	·1354					
16. 27	25. 30	21. 25	·1357					
16. 39	24. 55	21. 38	·1362					
16. 43	24. 55	22. 24	·1357					
16. 48	25. 35	22. 44	·1362					
16. 57	25. 45	23. 48	·1356					
17. 24	25. 25	23. 59	·1358					
17. 45	26. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 20								
h m	° ′ ″	h m		h m		h m	°	°
18. 7	20. 24. 50							
18. 12	25. 10							
18. 22	24. 25							
18. 42	26. 0							
18. 54	25. 30							
18. 58	26. 0							
19. 5	25. 30							
19. 11	25. 30							
19. 23	24. 55							
19. 27	22. 0							
19. 41	26. 0							
19. 55	26. 35							
19. 58	25. 55							
20. 22	26. 20							
20. 28	25. 10							
20. 43	26. 30							
21. 26	27. 5							
21. 38	29. 0							
21. 56	30. 30							
22. 0	31. 20							
22. 25	32. 25							
22. 29	32. 5							
22. 56	33. 40							
23. 13	34. 55							
23. 28	35. 25							
23. 55	35. 5							
23. 59	35. 0							
June 21		June 21		June 21		June 21		
0. 0	20. 35. 0	0. 0	·1358	0. 0	·03169	0. 0	62 ·0	63 ·5
0. 15	35. 0	0. 18	·1362	1. 53	·03202	Min.	62 ·0	63 ·5
0. 29	34. 25	0. 29	·1359	2. 32	·03218	1. 0	62 ·6	64 ·5
0. 42	34. 45	0. 40	·1361	2. 53	·03236	2. 0	62 ·7	64 ·7
1. 8	36. 20	0. 48	·1358	3. 48	·03253	3. 0	63 ·1	65 ·3
1. 26	35. 5	1. 5	·1365	4. 19	·03278	9. 0	64 ·4	66 ·8
1. 39	35. 50	1. 19	·1359	4. 53	·03276	Max.	64 ·7	67 ·0
1. 46	35. 25	1. 34	·1366	5. 1	·03289	21. 0	63 ·6	64 ·5
1. 59	36. 30	1. 48	·1362		***	22. 0	63 ·6	64 ·5
2. 9	36. 10	2. 5	·1368	5. 30	·03284	23. 0	63 ·7	64 ·9
2. 26	36. 25	2. 27	·1359	5. 50	·03308			
2. 42	35. 30	2. 44	·1354	6. 0	·03301			
2. 47	35. 40	3. 3	·1366	6. 46	·03318			
2. 56	34. 55	3. 23	·1367	7. 0	·03309			
3. 11	34. 20	3. 32	·1385	7. 11	·03315			
3. 24	35. 0	3. 49	·1380	7. 16	·03310			
3. 35	34. 45	3. 59	·1382	7. 32	·03322			
3. 41	33. 30	4. 14	·1374	7. 56	·03316			
3. 54	33. 45	4. 20	·1374	8. 16	·03318			
4. 8	33. 0	4. 36	·1382	9. 58	·03278			
4. 12	33. 0	5. 4	·1381	11. 2	·03291			
4. 36	34. 30	5. 15	·1398	11. 25	·03269			
4. 44	33. 40	5. 24	·1392	11. 42	·03264			
4. 57	33. 25	5. 35	·1394	12. 11	·03283			
5. 7	34. 30	5. 43	·1378	13. 42	·03291			
5. 31	30. 55	5. 46	·1381	14. 24	·03282			
5. 43	31. 10	5. 58	·1383	15. 2	·03285			
6. 1	31. 10	6. 12	·1372	15. 38	·03281			
6. 21	32. 40	6. 18	·1374	15. 56	·03291			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 21 h m	° ′ ″	June 21 h m		June 21 h m		h m	°	°
6. 37	20. 32. 20	6. 26	·1370	16. 40	·03277			
6. 41	31. 5	6. 38	·1374	17. 3	·03266			
6. 58	33. 30	6. 47	·1372	17. 24	·03266			
7. 9	33. 0	7. 8	·1361	17. 48	·03271			
7. 13	33. 35	7. 13	·1364	18. 12	·03265			
7. 23	28. 50	7. 22	·1363	19. 12	·03279			
7. 29	26. 45	7. 36	·1379		***			
7. 41	28. 30	8. 3	·1374	20. 41	·03268			
7. 52	28. 30	8. 20	·1381	23. 59	·03262			
7. 57	29. 10	8. 41	·1368					
8. 5	28. 30	9. 10	·1373					
8. 16	28. 55	9. 19	·1368					
8. 23	30. 15	9. 27	·1372					
8. 28	30. 15	9. 33	·1369					
8. 58	28. 0	9. 49	·1376					
9. 5	28. 35	9. 54	·1379					
9. 11	30. 0	10. 11	·1366					
9. 16	29. 50	10. 19	·1372					
9. 26	30. 25	10. 39	·1362					
9. 31	29. 5	11. 11	·1378					
9. 36	28. 0	11. 52	·1352					
9. 47	24. 25	12. 23	·1359					
9. 56	24. 25	12. 52	·1357					
10. 9	20. 55	13. 3	·1360					
10. 24	24. 55	13. 41	·1363					
10. 31	25. 25	13. 54	·1360					
10. 35	25. 5	14. 19	·1365					
10. 38	26. 5	14. 44	·1360					
10. 41	26. 50	15. 11	·1364					
10. 54	26. 5	15. 51	·1354					
11. 2	27. 20	16. 17	·1353					
11. 10	27. 40	16. 43	·1356					
11. 17	25. 35	17. 34	·1344					
11. 26	24. 55	17. 38	·1348					
11. 34	25. 35	17. 42	·1345					
11. 41	23. 50	17. 48	·1353					
11. 49	23. 10	18. 3	·1351					
12. 6	26. 5	18. 8	·1353					
12. 26	27. 25	18. 18	·1350					
12. 34	29. 55	18. 28	·1352					
12. 44	31. 30	19. 12	·1345					
13. 24	29. 5	19. 22	·1348					
13. 34	32. 20	20. 12	·1336					
13. 41	32. 5	20. 18	·1339					
13. 42	34. 0	20. 44	·1324					
13. 50	34. 45	20. 59	·1335					
14. 25	30. 45	21. 30	·1338					
14. 52	29. 5	21. 54	·1332					
14. 56	29. 40	22. 23	·1324					
15. 6	29. 40	23. 23	·1351					
15. 11	28. 35		***					
15. 27	29. 20	23. 39	·1347					
15. 44	28. 0	23. 59	·1358					
16. 6	31. 20							
	***							
16. 35	33. 5							
16. 42	34. 30							
16. 56	34. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 21 h m	° ′ ″	h m		h m		h m		
17. 12	20. 31. 40							
17. 26	30. 45							
17. 36	28. 40							
17. 47	29. 25							
17. 53	31. 20							
17. 57	29. 35							
18. 11	28. 35							
18. 15	27. 10							
18. 46	27. 10							
18. 56	26. 5							
19. 2	26. 45							
19. 5	25. 50							
19. 9	27. 10							
19. 11	26. 5							
19. 24	26. 55							
19. 29	26. 15							
19. 42	28. 40							
19. 49	27. 55							
19. 56	29. 10							
20. 9	29. 20							
20. 31	30. 10							
20. 46	29. 25							
20. 59	32. 5							
21. 11	30. 30							
22. 2	32. 5							
22. 11	31. 0							
22. 18	31. 25							
22. 26	30. 20							
22. 39	31. 5							
22. 41	31. 0							
22. 55	33. 30							
23. 7	33. 30							
23. 28	34. 35							
23. 38	34. 5							
23. 42	33. 30							
23. 56	33. 30							
23. 59	34. 5							
June 22		June 22		June 22		June 22		
0. 0	20. 34. 5	0. 0	·1358	0. 0	·03262	0. 0	64 ·3	65 ·2
0. 42	34. 30	0. 17	·1359	1. 45	·03298	1. 0	64 ·5	65 ·5
1. 9	36. 5	0. 35	·1360	4. 29	·03333	3. 0	64 ·7	66 ·0
1. 44	37. 30	0. 48	·1357	5. 34	·03359	Max.	65 ·4	66 ·9
2. 0	38. 25	1. 12	·1361	7. 17	·03365	9. 0	64 ·6	66 ·0
2. 14	37. 20	1. 25	·1356	7. 55	·03380	Min.	63 ·7	64 ·7
2. 23	36. 0	1. 30	·1357	8. 26	·03374	21. 0	64 ·0	65 ·0
3. 2	33. 30	2. 10	·1347	8. 43	·03379			
3. 55	33. 5	2. 16	·1351	14. 10	·03342			
4. 0	33. 35	2. 22	·1346	15. 28	·03336			
4. 26	32. 55	2. 43	·1361	15. 58	·03318			
4. 39	33. 30		***	17. 2	·03323			
4. 56	32. 0	3. 33	·1374	17. 23	·03316			
6. 15	31. 35	3. 40	·1369	22. 47	·03298			
6. 53	30. 40	3. 55	·1369	23. 59	·03309			
7. 2	30. 40	4. 14	·1376					
7. 12	28. 35	4. 26	·1365					
7. 23	28. 35	4. 44	·1370					
7. 28	28. 20	4. 58	·1365					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
June 22 h m	° ′ ″	June 22 h m		h m		h m	°	°
7. 42	20. 28. 55	5. 19	·1362					
7. 49	29. 10	5. 28	·1364					
8. 0	28. 5	5. 48	·1363					
8. 11	26. 25	6. 39	·1376					
8. 18	23. 5	7. 12	·1360					
8. 27	23. 40	7. 20	·1366					
8. 34	25. 30	7. 27	·1365					
8. 56	25. 5	7. 41	·1373					
9. 4	25. 50	8. 7	·1366					
9. 15	25. 35	8. 17	·1356					
9. 39	26. 40	8. 34	·1368					
9. 56	28. 40	8. 52	·1364					
10. 10	27. 55	9. 14	·1367					
10. 41	29. 5	9. 40	·1360					
10. 45	29. 50	9. 52	·1363					
11. 11	28. 35	10. 10	·1358					
11. 44	29. 10	10. 48	·1361					
13. 25	29. 35	11. 2	·1357					
13. 31	30. 15		***					
14. 11	28. 50	12. 16	·1364					
14. 30	31. 20	12. 58	·1362					
14. 48	30. 5	13. 18	·1363					
15. 10	29. 25	14. 9	·1357					
15. 17	28. 30	14. 16	·1363					
15. 33:	30. 10	14. 24	·1360					
15. 45	28. 35	14. 30	·1363					
15. 50	28. 35	14. 58	·1361					
16. 9	26. 55	15. 48	·1372					
16. 41	25. 20	16. 14	·1362					
16. 54	25. 50	16. 55	·1357					
17. 3	25. 25	17. 2	·1362					
17. 9	26. 30	17. 7	·1356					
17. 37	24. 30	17. 24	·1353					
17. 52	26. 10	17. 32	·1356					
17. 57	26. 10	17. 38	·1353					
18. 11	26. 40	18. 4	·1357					
18. 32	26. 45	18. 34	·1350					
18. 43	28. 5	18. 49	·1349					
18. 59	28. 35	18. 58	·1352					
19. 12	27. 30		***					
19. 26	28. 10	19. 49	·1342					
	***	20. 0	·1344					
19. 48	25. 30		***					
20. 2	27. 25	21. 7	·1336					
20. 6	27. 0	21. 30	·1340					
20. 15	28. 20	21. 49	·1336					
20. 27	27. 55	22. 24	·1344					
20. 38	29. 0	22. 43	·1339					
20. 41	28. 30		***					
20. 45	29. 45	23. 36	·1350					
20. 58	29 0	23. 59	·1356					
21. 9	29. 55							
21. 12	26. 0							
21. 26	30. 10							
21. 32	29. 30							
21. 56	31. 50							
22. 8	31. 10							
22. 13	32. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
June 22 h m	° ′ ″	h m		h m		h m	°	°
22. 25	20. 31. 30							
22. 31	32. 40							
22. 42	32. 25							
22. 59	33. 30							
23. 23	33. 50							
23. 39	33. 10							
23. 47	34. 5							
23. 59	33. 55							
June 23		June 23		June 23		June 23		
0. 0	20. 33. 55	0. 0	·1356	0. 0	·03309	Min.	64 ·5	65 ·8
0. 10	34. 30	0. 51	·1365	2. 38	·03341	1. 0	64 ·7	66 ·1
0. 13	35. 25	1. 42	·1358	4. 23	·03374	3. 0	65 ·3	67 ·0
0. 23	34. 0	2. 34	·1366	5. 38	·03382	9. 0	65 ·6	67 ·0
1. 35	36. 20	2. 58	·1375	6. 33	·03368	Max.	66 ·1	67 ·5
1. 43	35. 40	3. 15	·1365	7. 14	·03376	21. 0	65 ·4	66 ·5
1. 52	36. 0	3. 43	·1365	8. 33	·03388			
2. 55	35. 0	4. 10	·1361	12. 59	·03369			
3. 4	34. 10	4. 18	·1366	13. 38	·03336			
3. 23	34. 0	4. 55	·1358	15. 28	·03337			
3. 41	33. 5	5. 41	·1365	15. 56	·03324			
3. 55	31. 55	5. 47	·1371	16. 42	·03347			
4. 4	31. 30	6. 52	·1364	17. 42	·03343			
4. 11	30. 0	7. 11	·1372	19. 1	·03354			
4. 26	30. 40	7. 22	·1373	20. 1	·03351			
4. 55	30. 40	7. 39	·1363	22. 33	·03329			
5. 9	30. 20	7. 44	·1372	23. 59	·03333			
5. 33	30. 35	7. 57	·1366					
5. 41	31. 30	8. 35	·1369					
5. 46	30. 50	8. 49	·1363					
6. 8	31. 20	9. 14	·1367					
6. 30	31. 20	10. 6	·1366					
6. 43	30. 35	10. 15	·1362					
7. 4	30. 55	10. 22	·1366					
7. 12	30. 40	10. 34	·1362					
7. 40	31. 35	10. 44	·1365					
8. 0	30. 30	10. 46	·1362					
8. 33	29. 40	10. 58	·1362					
8. 42	30. 20	11. 17	·1365					
9. 0	29. 35	11. 41	·1364					
9. 11	29. 35	11. 44	·1367					
9. 33	27. 55	12. 12	·1363					
9. 44	26. 5	12. 23	·1367					
9. 58	26. 35	12. 31	·1364					
10. 17	26. 35	12. 47	·1364					
10. 29	28. 5	13. 0	·1372					
10. 38	28. 5	13. 10	·1368					
10. 42	28. 25	13. 13	·1371					
10. 53	27. 30	13. 41	·1366					
11. 0	27. 20	13. 58	·1367					
11. 28	28. 35	14. 37	·1364					
11. 43	28. 35	15. 36	·1370					
11. 52	29. 5	16. 24	·1352					
11. 59	28. 20	16. 48	·1354					
12. 4	28. 40	17. 10	·1352					
12. 11	27. 50	17. 22	·1354					
12. 51	32. 45	18. 3	·1345					
13. 2	36. 5	18. 35	·1347					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 23		June 23						
h m	° ′ ″	h m		h m		h m	°	°
13. 8	20. 34. 30	19. 7	·1344					
13. 13	35. 55	19. 49	·1348					
13. 38	32. 50	20. 22	·1345					
13. 43	31. 45	21. 22	·1346					
13. 56	31. 55	21. 55	·1342					
14. 8	29. 50	22. 24	·1339					
14. 23	29. 50	22. 35	·1341					
14. 38	31. 0	22. 54	·1336					
14. 54	32. 45	23. 14	·1345					
15. 9	33. 5	23. 34	·1345					
15. 25	34. 40	23. 39	·1340					
15. 33	32. 55	23. 59	·1343					
15. 40	33. 0							
15. 51	30. 35							
16. 1	28. 30							
16. 11	27. 40							
16. 22	28. 15							
16. 25	27. 40							
16. 33	28. 30							
16. 41	28. 10							
16. 53	29. 40							
17. 1	28. 35							
17. 8	27. 55							
17. 12	28. 20							
17. 23	27. 5							
17. 42	25. 30							
17. 53	26. 45							
18. 2	24. 55							
19. 4	23. 15							
19. 13	23. 30							
19. 37	23. 0							
19. 46	24. 5							
20. 17	23. 25							
20. 41	23. 35							
20. 57	23. 50							
21. 43	27. 55							
21. 55	27. 55							
22. 9	29. 20							
22. 42	31. 35							
23. 26	34. 50							
	***							
23. 56	37. 25							
23. 59	37. 25							
June 24		June 24		June 24		June 24		
0. 0	20. 37. 25	0. 0	·1343	0. 0	·03333	1. 0	65·7	66·7
0. 28	37. 35	0. 24	·1351	2. 11	·03368	3. 0	65·6	66·5
0. 40	38. 25	1. 14	·1363	3. 56	·03360	Max.	66·2	67·2
1. 10	38. 10	1. 22	·1360	6. 7	·03387	9. 0	65·6	66·7
1. 23	37. 30	1. 31	·1364	6. 48	·03371	Min.	63·8	65·1
1. 39	36. 55	1. 36	·1361	7. 23	·03378	22. 0	65·2	65·1
1. 55	38. 0	2. 14	·1377	14. 7	·03338			
2. 6	37. 30	2. 22	·1374	14. 47	·03345			
2. 26	37. 30	2. 26	·1378	18. 43	·03327			
2. 39	36. 50	2. 40	·1370	19. 13	·03310			
2. 42	37. 30	2. 43	·1379	21. 59	·03310			
2. 56	36. 25	3. 2	·1372		·03188			
3. 9	36. 25	3. 34	·1374	23. 59	·03181			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 24		June 24						
h m	° ′ ″	h m		h m		h m	°	°
3. 36	20. 35. 30	4. 4	·1367					
3. 39	36. 10	4. 38	·1370					
3. 42	34. 30	4. 51	·1379					
3. 53	34. 30	4. 56	·1376					
4. 23	33. 25	5. 14	·1382					
4. 39	32. 55	5. 20	·1372					
4. 45	33. 25	5. 29	·1363					
4. 53	32. 35	5. 49	·1373					
5. 9	32. 35	6. 3	·1368					
	***	6. 12	·1372					
5. 41	30. 0	6. 37	·1367					
5. 54	30. 30	6. 46	·1370					
6. 1	30. 20	6. 56	·1379					
6. 29	31. 30	7. 18	·1368					
6. 43	30. 55	7. 40	·1367					
7. 10	31. 10	8. 2	·1373					
7. 21	30. 35	8. 12	·1371					
7. 30	31. 0	8. 32	·1376					
8. 11	29. 35	9. 13	·1382					
8. 26	27. 45	9. 29	·1374					
8. 39	27. 30	9. 49	·1379					
8. 44	28. 25	10. 25	·1371					
8. 53	28. 0	11. 5	·1370					
9. 23	28. 40	11. 14	·1366					
9. 33	28. 30	11. 19	·1370					
9. 56	29. 5	11. 34	·1366					
10. 14	27. 20	11. 41	·1369					
10. 28	27. 40	11. 52	·1367					
10. 42	28. 30	12. 50	·1372					
11. 8	28. 50	13. 10	·1365					
11. 26	28. 30	13. 25	·1369					
	***	13. 59	·1365					
12. 26	30. 0	14. 42	·1368					
12. 53	29. 15	15. 34	·1362					
13. 18	29. 15	16. 27	·1370					
13. 26	30. 5		***					
13. 43	29. 35	17. 3	·1363					
13. 57	27. 30		***					
14. 39	31. 35	17. 49	·1362					
14. 56	31. 45	18. 23	·1352					
15. 6	31. 0	18. 48	·1360					
15. 11	31. 0		***					
15. 23	30. 30	19. 20	·1356					
15. 37	30. 30	20. 4	·1357					
15. 53	31. 10	20. 14	·1354					
16. 32	28. 5		***					
16. 41	27. 40	21. 40	·1356					
	***	22. 33	·1348					
17. 13	28. 20	22. 41	·1350					
17. 24	27. 25	22. 53	·1344					
17. 39	29. 25	23. 20	·1350					
17. 44	28. 55	23. 29	·1352					
17. 56	29. 25	23. 43	·1354					
17. 58	28. 40	23. 59	·1350					
18. 6	30. 0							
18. 11	29. 25							
18. 19	30. 20							
18. 27	29. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 24								
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 29. 50							
18. 56	31. 30							
19. 19	27. 35							
19. 38	27. 35							
19. 59	26. 30							
20. 11	26. 30							
20. 15	25. 45							
20. 41	26. 40							
21. 8	26. 30							
22. 5	28. 10							
22. 31	31. 20							
22. 46	33. 25							
22. 56	33. 15							
23. 11	34. 10							
23. 26	34. 50							
23. 59	37. 35							
June 25		June 25		June 25		June 25		
0. 0	20. 37. 35	0. 0	·1350	0. 0	·03181	1. 0	64 ·9	66 ·3
0. 41	39. 30	0. 18	·1347	4. 24	·03223	Max.	65 ·5	66 ·9
1. 8	39. 30		***	5. 3	·03218	9. 0	65 ·5	66 ·3
1. 12	39. 5	1. 49	·1366	5. 30	·03227	Min.	63 ·8	64 ·7
1. 16	39. 35		***	6. 25	·03226	21. 0	63 ·8	65 ·1
1. 20	38. 50	2. 46	·1367	7. 39	·03231			
1. 27	39. 35	3. 41	·1376	12. 0	·03214			
2. 41	38. 5	3. 45	·1373	13. 6	·03207			
2. 56	37. 25	3. 52	·1379	13. 18	·03210			
3. 12	37. 10	4. 17	·1368	13. 55	·03189			
3. 26	38. 0	4. 33	·1373	15. 24	·03180			
3. 39	37. 30	4. 42	·1372	16. 10	·03193			
4. 1	37. 5	4. 52	·1366	23. 59	·03162			
4. 14	36. 25	5. 5	·1372					
4. 28	36. 20	5. 16	·1365					
4. 38	36. 35	5. 27	·1364					
5. 27	35. 0	5. 41	·1372					
6. 42	33. 55	6. 13	·1363					
6. 57	34. 5	6. 25	·1366					
7. 29	31. 35	6. 48	·1361					
7. 58	32. 45	7. 8	·1366					
8. 9	32. 25	7. 14	·1364					
8. 23	32. 45	7. 55	·1375					
9. 7	31. 50	8. 8	·1373					
9. 21	32. 25	8. 14	·1377					
9. 44	32. 0	8. 56	·1368					
9. 56	31. 30	9. 17	·1372					
10. 22	31. 40	9. 45	·1373					
10. 38	31. 5	10. 4	·1368					
10. 53	31. 25	10. 40	·1371					
11. 41	31. 5	11. 52	·1366					
11. 57	30. 10	12. 19	·1373					
12. 9	30. 30	12. 39	·1366					
12. 18	31. 15	12. 49	·1367					
12. 41	31. 0	13. 5	·1364					
12. 58	30. 0	13. 23	·1371					
13. 14	30. 50	13. 47	·1372					
13. 22	33. 5	14. 0	·1368					
13. 37	34. 30	14. 9	·1371					
13. 55	32. 25	14. 16	·1368					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 25		June 25						
h m	° ′ ″	h m		h m		h m	°	°
14. 8	20. 32. 15	14. 22	·1371					
14. 16	33. 5	15. 0	·1368					
14. 26	31. 5	15. 13	·1370					
14. 40	30. 30	15. 41	·1363					
15. 1	30. 20	16. 17	·1367					
15. 23	31. 0	17. 7	·1364					
15. 39	29. 20	17. 45	·1366					
16. 8	30. 25	18. 38	·1359					
16. 27	29. 20	19. 18	·1360					
16. 45	29. 10	19. 36	·1356					
	***	19. 48	·1357					
17. 26	27. 5	20. 17	·1347					
17. 43	28. 25		***					
18. 7	26. 50	21. 48	·1342					
18. 36	27. 20	22. 4	·1331					
18. 41	26. 30	22. 18	·1341					
18. 53	28. 5	22. 49	·1340					
19. 26	28. 0	23. 13	·1345					
19. 38	28. 35	23. 32	·1341					
20. 6	27. 55	23. 46	·1346					
20. 12	28. 35		(†)					
20. 23	27. 55							
20. 31	28. 20							
20. 39	27. 25							
20. 53	28. 50							
21. 1	29. 55							
21. 8	29. 0							
21. 58	31. 25							
22. 9	30. 40							
22. 23	32. 5							
22. 54	36. 10							
23. 26	36. 55							
23. 59	38. 10							
June 26		June 26		June 26		June 26		
0. 0	20. 38. 10		(†)	0. 0	·03162	1. 0	65 ·3	65 ·5
0. 14	36. 20	1. 0	·1379*	1. 57	·03232	3. 0	64 ·8	65 ·7
0. 42	36. 15	1. 25	·1372	2. 23	·03226	Max.	66 ·1	67 ·2
1. 55	38. 5	1. 54	·1371	5. 39	·03263	9. 0	65 ·1	66 ·0
2. 9	39. 55	2. 4	·1366	9. 3	·03262	Min.	63 ·4	63 ·5
2. 29	39. 20	2. 18	·1385	10. 40	·03242	21. 0	64 ·2	65 ·1
2. 46	38. 0	2. 28	·1376	11. 6	·03192			
3. 7	33. 40	2. 47	·1350	11. 32	·03184			
3. 12	33. 10	3. 2	·1359	12. 7	·03209			
3. 54	34. 30	3. 18	·1379	13. 11	·03224			
4. 8	34. 45	3. 45	·1376	17. 46	·03225			
4. 23	33. 40	4. 12	·1381	18. 57	·03231			
4. 27	34. 25	4. 22	·1377	20. 8	·03213			
4. 54	33. 45	4. 34	·1385	20. 28	·03210			
4. 57	34. 40	4. 58	·1381	20. 59	·03205			
5. 29	32. 55	5. 22	·1371	22. 23	{ ·03203			
5. 38	33. 45	6. 22	·1379		{ ·03238			
5. 56	32. 45	6. 38	·1375	22. 38	{ ·03238			
6. 6	33. 5	6. 42	·1378		{ ·03208			
6. 27	32. 20	6. 44	·1376	22. 48	·03202			
6. 38	32. 45	6. 51	·1384	22. 57	·03230			
6. 43	32. 10	7. 11	·1374	23. 59	·03200			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 26		June 26						
h m	° ′ ″	h m		h m		h m	°	°
6. 55	20. 32. 30	7. 24	·1374					
7. 18	31. 20	7. 34	·1379					
7. 53	31. 45	7. 41	·1376					
8. 11	28. 20	7. 56	·1379					
8. 15	28. 20	8. 16	·1375					
8. 28	24. 30	8. 27	·1380					
8. 38	23. 0	8. 36	·1378					
9. 9	26. 30	8. 49	·1380					
9. 22	26. 15	9. 30	·1379					
9. 56	30. 20	9. 46	·1374					
10. 8	29. 50	10. 24	·1377					
10. 28	28. 5	10. 40	·1372					
10. 46	34. 30	11. 4	·1380					
10. 57	33. 25	11. 16	·1374					
11. 9	28. 30	11. 32	·1374					
11. 22	27. 30	11. 49	·1365					
11. 38	23. 40	12. 10	·1371					
11. 45	23. 20	12. 30	·1371					
12. 41	27. 5	12. 44	·1366					
13. 40	29. 25	13. 3	·1370					
14. 12	30. 0	13. 20	·1370					
14. 28	29. 40	13. 24	·1367					
14. 52	30. 35	13. 34	·1370					
14. 58	30. 20	14. 12	·1370					
15. 11	31. 5	14. 50	·1366					
15. 45	28. 20	14. 58	·1370					
16. 24	28. 25	15. 34	·1366					
16. 54	27. 0	16. 50	·1368					
16. 58	27. 30		***					
17. 24	25. 45	18. 39	·1364					
17. 40	26. 25	19. 5	·1366					
17. 44	25. 30	19. 45	·1360					
17. 56	26. 0	20. 13	·1354					
18. 3	24. 45	21. 48	·1344					
18. 17	25. 15	22. 21	·1345					
18. 26	24. 40	22. 45	·1337					
18. 36	27. 0	23. 2	·1343					
18. 53	27. 45	23. 11	·1339					
19. 1	27. 0	23. 16	·1344					
19. 9	24. 20	23. 37	·1337					
19. 16	26. 40	23. 59	·1343					
19. 26	27. 10							
19. 37	24. 55							
19. 46	24. 55							
	***							
20. 9	23. 50							
20. 28	26. 50							
20. 42	27. 0							
20. 46	24. 40							
20. 56	30. 30							
21. 13	28. 0							
21. 43	28. 30							
22. 11	31. 10							
22. 26	31. 50							
22. 39	33. 0							
22. 48	34. 30							
23. 8	36. 20							
23. 12	36. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 26								
h m	° ′ ″	h m		h m		h m	°	°
23. 48	20. 38. 0							
23. 59	38. 0							
June 27		June 27		June 27		June 27		
0. 0	20. 38. 0	0. 0	·1343	0. 0	·03200	1. 0	65 ·1	66 ·0
0. 18	38. 35	0. 23	·1352	0. 30	·03206	3. 0	65 ·6	66 ·9
0. 24	38. 25	0. 31	·1350	4. 4	·03277	Max.	65 ·7	67 ·0
0. 35	38. 25	0. 44	·1358	8. 52	·03256	9. 0	64 ·6	66 ·0
0. 41	39. 40	1. 14	·1358	11. 24	·03232	Min.	63 ·0	63 ·7
1. 32	38. 0	1. 24	·1364	13. 48	·03220	21. 0	63 ·7	65 ·1
1. 42	36. 55	1. 49	·1357	17. 9	·03202	22. 30	63 ·8	65 ·1
1. 58	37. 45	2. 9	·1368	19. 18	·03155	23. 0	63 ·8	65 ·1
2. 16	37. 15	2. 38	·1372	20. 26	·03162			
3. 8	36. 50	2. 52	·1369	22. 44	·03157			
3. 26	36. 0	2. 58	·1373	23. 3	·03167			
3. 41	35. 30	3. 21	·1366	23. 32	·03156			
4. 5	35. 30	3. 34	·1368	23. 59	·03167			
4. 36	34. 10	3. 45	·1365					
5. 14	33. 45	4. 2	·1367					
5. 24	33. 15	4. 12	·1366					
5. 42	33. 50	4. 24	·1371					
5. 54	33. 0	4. 40	·1369					
6. 7	33. 0	4. 50	·1374					
6. 26	32. 25	4. 58	·1366					
6. 43	32. 25	5. 17	·1371					
7. 11	33. 30	5. 28	·1368					
7. 24	33. 10	5. 40	·1371					
7. 32	33. 45	5. 49	·1377					
7. 39	33. 20	6. 4	·1375					
7. 43	33. 45	6. 13	·1377					
7. 54	32. 50	6. 42	·1374					
8. 53	31. 10	6. 57	·1377					
8. 59	30. 30	7. 36	·1374					
9. 16	31. 20	8. 10	·1380					
9. 56	31. 20	8. 50	·1374					
10. 24	29. 30	9. 25	·1378					
10. 42	30. 30	9. 55	·1374					
11. 3	29. 30	10. 19	·1381					
11. 23	32. 30	10. 56	·1373					
11. 30	31. 15	11. 17	·1383					
11. 43	30. 10	11. 35	·1374					
12. 9	30. 35	11. 54	·1368					
12. 17	30. 10	12. 6	·1369					
12. 52	29. 30	12. 45	·1366					
13. 0	30. 20	13. 2	·1369					
13. 24	29. 35	13. 14	·1367					
14. 26	29. 50	16. 19	·1373					
14. 38	29. 25	17. 23	·1374					
14. 56	29. 25	18. 26	·1354					
15. 27	30. 30	19. 5	·1378					
15. 39	30. 30	19. 23	·1375					
15. 58	29. 25	19. 26	·1379					
16. 8	29. 25	20. 4	·1374					
16. 23	28. 0	20. 24	·1370					
16. 54	29. 5	20. 41	·1359					
	***	20. 52	·1360					
17. 22	29. 30	22. 20	·1343					
17. 38	29. 30	22. 27	·1352					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 27		June 27						
h m	° ′ ″	h m		h m		h m	°	°
17. 52	20. 32. 20	22. 52	·1345					
18. 12	35. 30	23. 29	·1349					
18. 26	35. 30	23. 50	·1340					
18. 42	36. 50	23. 53	·1342					
19. 35	31. 50	23. 59	·1343					
20. 14	30. 0							
20. 26	30. 0							
20. 33	28. 50							
20. 44	28. 50							
20. 56	29. 30							
22. 8	29. 30							
22. 12	29. 50							
22. 16	29. 25							
22. 26	31. 5							
22. 58	32. 45							
23. 39	36. 30							
23. 43	36. 10							
23. 59	37. 0							
June 28		June 28		June 28		June 28		
0. 0	20. 37. 0	0. 0	·1343	0. 0	·03167	0. 0	64·6	65·1
0. 26	37. 45	0. 33	·1341	5. 11	·03242	1. 0	64·8	65·4
0. 55	37. 0	0. 42	·1346	5. 34	·03236	3. 0	64·9	65·8
1. 8	39. 10	0. 52	·1341	6. 2	·03243	Max.	64·9	66·7
1. 26	38. 25	1. 8	·1358	6. 26	·03238	9. 0	64·6	66·7
1. 45	38. 50	1. 41	·1345	7. 45	·03249	Min.	63·0	64·1
2. 8	37. 10	2. 19	·1359	9. 0	·03231	21. 0	63·8	65·4
2. 34	36. 40	3. 35	·1368	11. 11	·03228	22. 0	63·6	64·9
2. 39	35. 30	3. 41	·1375	12. 28	·03205	23. 0	63·6	64·9
3. 8	34. 35	3. 52	·1372	13. 9	·03196			
4. 22	35. 10	3. 55	·1381	13. 30	·03176			
5. 11	34. 35	4. 4	·1375	14. 9	·03174			
5. 33	34. 55	4. 17	·1381	14. 48:	·03168			
5. 43	34. 5	4. 32	·1373	15. 44	·03192			
6. 3	33. 40	4. 38	·1376	18. 42	·03209			
6. 17	34. 10		***	19. 54	·03197			
6. 41	32. 30	4. 56	·1364	23. 59	·03184			
6. 56	32. 30	5. 11	·1372					
7. 44	30. 25	5. 19	·1368					
7. 58	30. 5	5. 48	·1368					
8. 22	30. 30	6. 15	·1380					
8. 32	30. 15	6. 26	·1376					
8. 53	30. 30	6. 35	·1372					
10. 8	30. 0	7. 3	·1366					
10. 41	24. 30	7. 13	·1369					
10. 52	25. 10	7. 19	·1366					
11. 5	25. 0	7. 52	·1378					
11. 28	30. 0	8. 20	·1377					
11. 46	30. 10	8. 24	·1379					
12. 51	27. 0	8. 42	·1374					
12. 56	27. 0	8. 56	·1377					
13. 23	29. 10	9. 21	·1375					
13. 38	26. 50	9. 39	·1388					
13. 58	30. 5	10. 29	·1381					
14. 23	31. 0	10. 52	·1392					
14. 39	29. 5	11. 19	·1384					
14. 53	28. 30	11. 54	·1383					
15. 2	29. 30	12. 22	·1390					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 28		June 28						
h m	° ′ ″	h m		h m		h m	°	°
15. 26	20. 29. 20	13. 4	·1383					
15. 53	29. 30	13. 20	·1388					
15. 59	28. 35	13. 58	·1376					
16. 43	25. 50	14. 24	·1386					
16. 59	25. 30	14. 56	·1381					
17. 9	26. 10	15. 18	·1372					
17. 13	25. 30	16. 29	·1376					
17. 23	26. 35	19. 4	·1375					
17. 46	26. 0	19. 19	·1374					
18. 22	27. 30	20. 20	·1363					
18. 58	26. 35	21. 20	·1369					
19. 9	26. 5	21. 53	·1365					
19. 26	25. 40	23. 59	·1366					
19. 40	25. 40							
19. 58	26. 30							
20. 38	26. 30							
21. 40	28. 35							
22. 11	29. 5							
22. 15	29. 0							
22. 43	31. 20							
23. 26	34. 20							
23. 59	35. 45							
June 29		June 29		June 29		June 29		
0. 0	20. 35. 45	0. 0	·1366	0. 0	·03184	0. 0	64·1	66·0
0. 9	36. 0	0. 56	·1371	3. 23	·03225	Max.	64·8	66·0
0. 58	36. 45	1. 31	·1384	4. 46	·03220	1. 0	64·8	65·7
1. 9	36. 5	2. 0	·1387	6. 39	·03216	2. 30	64·0	65·1
1. 30	35. 25	2. 22	·1385	6. 58	·03218	3. 0	64·4	65·2
2. 3	34. 50	3. 28	·1392	13. 11	·03196	Min.	63·1	64·3
3. 8	35. 0	3. 58	·1390	14. 57	·03189	9. 0	63·7	65·0
3. 52	33. 0	4. 7	·1399	17. 3	·03201	21. 0	64·2	65·2
4. 11	33. 0	4. 22	·1399	19. 3	·03199			
4. 35	31. 40	4. 41	·1392	19. 18	·03214			
4. 59	32. 50	5. 6	·1398	19. 27	·03203			
5. 23	31. 55	5. 18	·1395	20. 30	·03203			
6. 32	31. 25	5. 51	·1401	21. 58	·03183			
6. 53	29. 55	6. 23	·1400	22. 23	·03182			
7. 4	30. 30	6. 32	·1403	22. 29	·03191			
7. 41	29. 55	6. 53	·1400	22. 35	·03178			
7. 58	30. 30	7. 6	·1405	23. 59	·03178			
8. 11	30. 5	7. 18	·1400					
8. 26	30. 30	7. 40	·1399					
8. 59	29. 50	7. 48	·1401					
9. 56	30. 55	8. 5	·1396					
10. 8	32. 0	8. 25	·1395					
10. 23	30. 30	9. 42	·1396					
10. 28	30. 30	9. 56	·1404					
10. 38	30. 50	10. 12	·1398					
10. 53	30. 25	12. 9	·1394					
10. 58	30. 25	16. 20	·1398					
11. 12	29. 40	18. 42	·1390					
11. 38	29. 30	19. 52	·1377					
11. 46	30. 10	20. 34	·1373					
12. 6	29. 50	20. 48	·1379					
12. 18	30. 30	21. 21	·1381					
12. 34	29. 40	21. 33	·1367					
14. 13	30. 0	22. 12	·1368					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 29		June 29						
h m	° ′ ″	h m		h m		h m	°	°
14. 29	20. 29. 35	23. 4	·1372					
14. 46	29. 30	23. 21	·1368					
15. 24	30. 20	23. 48	·1372					
16. 12	28. 20		(†)					
16. 22	28. 30							
17. 11	25. 30							
17. 26	26. 25							
17. 42	25. 20							
17. 53	25. 20							
18. 4	26. 5							
18. 24	25. 10							
18. 40	25. 5							
18. 43	25. 35							
18. 53	25. 5							
19. 23	25. 0							
19. 39	25. 30							
20. 12	24. 15							
20. 36	26. 55							
20. 52	27. 5							
21. 9	27. 50							
21. 34	27. 25							
21. 58	27. 30							
22. 28	29. 5							
22. 53	30. 50							
23. 23	33. 0							
23. 59	34. 30							
June 30		June 30		June 30		June 30		
0. 0	20. 34. 30		(†)	0. 0	·03178	1. 0	64 ·7	66 ·4
0. 21	35. 0	0. 19	·1374	1. 7	·03200	Max.	64 ·7	66 ·4
0. 27	35. 0	0. 45	·1379		·03121	3. 0	63 ·8	65 ·0
0. 42	36. 10	1. 0	·1377	2. 15	·03107	9. 0	63 ·6	64 ·7
0. 56	35. 55	1. 19	·1380	2. 49	·03119	Min.	62 ·2	62 ·7
1. 9	37. 10	1. 25	·1371	5. 10	·03142	21. 0	62 ·7	63 ·0
1. 23	37. 25	1. 30	·1374	6. 43	·03142			
1. 26	38. 35	1. 34	·1365	7. 25	·03133			
1. 32	38. 0	1. 40	·1368	16. 13	·03077			
1. 39	38. 35	1. 50	·1365	18. 25	·03056			
1. 44	38. 10	2. 30	·1373	21. 16	·03011			
2. 15	38. 20	2. 42	·1372	23. 59	·03010			
2. 43	37. 0	3. 20	·1377					
2. 59	37. 30	3. 35	·1380					
3. 16	37. 0	3. 42	·1375					
3. 31	37. 20	3. 49	·1377					
4. 29	34. 25	3. 59	·1374					
4. 40	34. 25	4. 18	·1380					
5. 9	33. 30	4. 33	·1376					
5. 24	33. 50	4. 43	·1380					
5. 28	33. 10	4. 52	·1378					
5. 44	32. 40	5. 4	·1380					
6. 46	32. 0	5. 12	·1378					
7. 14	32. 15	5. 24	·1382					
7. 56	30. 50	5. 32	·1377					
8. 13	30. 50	5. 39	·1380					
8. 32	30. 30	5. 45	·1377					
9. 9	30. 30	6. 39	·1377					
9. 29	29. 55	6. 51	·1379					
9. 46	30. 35	7. 44	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 30		June 30						
h m	° ′ ″	h m		h m		h m	°	°
10. 16	20. 29. 40	8. 14	·1383					
10. 51	29. 40	8. 30	·1380					
11. 13	30. 30	9. 9	·1380					
14. 24	30. 20	9. 49	·1382					
15. 13	29. 25	10. 0	·1381					
15. 28	29. 25	10. 34	·1383					
15. 38	29. 0	10. 42	·1380					
15. 53	29. 25	10. 52	·1383					
16. 11	28. 40	11. 2	·1381					
16. 37	28. 50	12. 4	·1382					
16. 58	27. 15	12. 14	·1380					
17. 9	28. 20	12. 41	·1381					
17. 53	28. 0	13. 6	·1379					
18. 7	27. 5	14. 20	·1382					
18. 14	27. 20	14. 46	·1381					
18. 26	25. 20	14. 54	·1384					
18. 44	25. 20	15. 25	·1383					
19. 10	24. 30	16. 16	·1386					
19. 22	23. 25	16. 34	·1381					
19. 31	24. 30	16. 51	·1380					
19. 40	26. 35		***					
20. 53	26. 35	19. 38	·1375					
20. 58	27. 30	20. 0	·1377					
21. 32	27. 50		***					
21. 39	28. 55	22. 44	·1363					
22. 14	31. 50	23. 59	·1374					
23. 59	36. 0							
July 1		July 1		July 1		July 1		
0. 0	20. 36. 0	0. 0	·1374	0. 0	·03010	1. 0	63· 6	63· 8
0. 11	36. 30	0. 27	·1376	1. 38	·03019	3. 0	63· 6	64· 2
1. 26	37. 0	1. 10	·1378	4. 53	·03072	Max.	63· 9	64· 8
1. 52	37. 15	1. 33	·1375	7. 9	·03072	9. 0	63· 3	64· 0
2. 11	37. 30	1. 40	·1380	12. 39	·03041	Min.	61· 8	62· 4
2. 32	36. 50	2. 4	·1378	16. 38	·03025	22. 35	63· 4	63· 9
2. 41	37. 10	2. 38	·1378	17. 15	·03031			
2. 55	36. 45	2. 46	·1382	18. 46	·03007			
3. 5	36. 45	2. 58	·1384	22. 37	·02991			
3. 11	36. 15	3. 47	·1377	23. 59	·02997			
3. 25	36. 15	4. 3	·1381					
3. 41	35. 25	4. 13	·1378					
3. 58	35. 25	5. 12	·1383					
4. 11	34. 50	5. 42	·1379					
4. 26	34. 40	6. 4	·1381					
6. 17	31. 50	6. 36	·1378					
6. 55	31. 30	7. 0	·1382					
7. 2	32. 5	7. 9	·1386					
7. 11	31. 30	7. 19	·1383					
7. 35	32. 0	7. 35	·1385					
10. 39	31. 10	8. 15	·1383					
10. 56	31. 35	8. 35	·1385					
11. 11	30. 30	10. 33	·1383					
11. 57	30. 30	11. 15	·1386					
14. 56	29. 30	12. 36	·1380					
15. 24	29. 30	16. 4	·1383					
16. 44	27. 0	18. 19	·1379					
17. 53	26. 0	21. 39	·1363					
17. 57	26. 35	21. 54	·1359					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 1		July 1						
h m	° ′ ″	h m		h m		h m	°	°
18. 22	20. 25. 50	22. 10	·1361					
19. 2	27. 0	22. 30	·1360					
19. 26	26. 0	23. 4	·1367					
19. 33	26. 35	23. 59	·1371					
20. 26	26. 10							
20. 40	25. 50							
21. 7	26. 35							
21. 23	26. 55							
21. 53	28. 50							
22. 17	31. 30							
22. 33	31. 30							
23. 59	35. 0							
July 2		July 2		July 2		July 2		
0. 0	20. 35. 0	0. 0	·1371	0. 0	·02997	1. 0	63 ·8	64 ·5
0. 59	36. 35	0. 39	·1374	2. 30	·03031	Max.	64 ·7	65 ·8
2. 3	36. 15	1. 38	·1369	4. 41	·03057	9. 0	64 ·3	65 ·1
2. 15	35. 55	2. 6	·1374	6. 50	·03068	Min.	62 ·4	63 ·2
2. 29	36. 5	2. 18	·1373	10. 30	·03072	21. 0	63 ·9	64 ·8
3. 28	34. 5	2. 36	·1376	11. 5	·03063			
3. 39	34. 30	2. 44	·1374	11. 33	·03063			
4. 11	33. 30	3. 27	·1373	15. 2	·03042			
4. 37	33. 30	3. 45	·1378	17. 52	·03017			
4. 41	32. 50	4. 22	·1376	18. 43	·03016			
5. 7	33. 30	4. 54	·1379	21. 57	·03028			
5. 12	32. 50	5. 8	·1378	22. 39	·03024			
6. 12	31. 50	5. 21	·1383	23. 59	·03016			
6. 33	32. 5	5. 59	·1379					
7. 38	30. 30	6. 34	·1385					
7. 45	31. 25	6. 52	·1382					
8. 8	31. 35	7. 20	·1386					
8. 14	30. 45	7. 34	·1385					
8. 41	31. 20	7. 43	·1379					
9. 47	30. 50	8. 4	·1384					
10. 24	29. 30	8. 29	·1379					
10. 38	29. 45	10. 15	·1375					
10. 55	28. 0	10. 29	·1385					
11. 8	28. 0	11. 13	·1373					
11. 40	29. 30	11. 51	·1378					
12. 48	28. 30	12. 41	·1373					
13. 11	29. 35	14. 4	·1379					
13. 56	30. 0	14. 21	·1377					
14. 7	30. 35	14. 58	·1378					
14. 22	29. 50	15. 18	·1382					
14. 39	30. 25	16. 4	·1379					
15. 1	29. 45	16. 38	·1384					
15. 23	30. 50	17. 43	·1378					
15. 44	29. 35	20. 0	·1372					
15. 57	30. 50	21. 24	·1363					
16. 10	31. 20	22. 18	·1356					
16. 14	32. 10	23. 28	·1357					
16. 39	31. 5	23. 59	·1364					
16. 58	27. 0							
17. 27	25. 15							
17. 34	25. 25							
17. 42	24. 50							
18. 21	25. 35							
18. 26	25. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 2								
h m	° ′ ″	h m		h m		h m	°	°
18. 35	20. 25. 30							
18. 44	24. 45							
19. 8	25. 20							
19. 23	25. 50							
20. 36	27. 20							
20. 41	27. 10							
21. 39	28. 50							
21. 43	28. 50							
22. 14	30. 35							
23. 12	32. 50							
23. 47	32. 50							
23. 57	33. 55							
23. 59	33. 55							
July 3		July 3		July 3		July 3		
0. 0	20. 33. 55	0. 0	·1364	0. 0	·03016	1. 0	64 ·8	65 5
0. 16	34. 55	0. 28	·1348	5. 23	·03110	3. 0	64 ·6	66 ·0
1. 54	35. 45	0. 56	·1366	6. 37	·03111	Max.	65 ·5	66 ·7
2. 38	35. 10	1. 45	·1374	7. 48	·03119	9. 0	64 ·6	66 ·0
2. 58	35. 20	2. 27:	·1369	10. 14	·03121	Min.	63 ·4	64 ·7
3. 45	33. 40	2. 57	·1376	13. 16	·03084	21. 0	64 ·6	65 ·1
4. 2	33. 40	3. 22	·1370	14. 5	·03091			
4. 17	32. 45	3. 46	·1370	18. 23	·03076			
4. 51	31. 55	4. 7	·1376	20. 59	·03076			
5. 18	32. 5	4. 19	·1375	22. 33	·03064			
5. 26	31. 35	4. 34	·1378	23. 59	·03075			
6. 25	31. 0	4. 56	·1375					
7. 11	30. 30	6. 2	·1385					
7. 27	31. 30	6. 43	·1380					
8. 24	32. 35	6. 54	·1387					
8. 41	31. 35	7. 3	·1389					
9. 22	32. 25	7. 20	·1382					
9. 44	31. 10	7. 44	·1385					
9. 54	31. 20	7. 53	·1378					
10. 1	30. 35	8. 18	·1382					
10. 9	31. 10	10. 28	·1376					
10. 23	31. 10	10. 52	·1380					
10. 35	29. 45	11. 43	·1378					
10. 53	30. 30	12. 36	·1384					
11. 14	31. 5	12. 45	·1379					
11. 39	29. 25	13. 20	·1374					
11. 52	30. 5	15. 8	·1377					
11. 58	29. 25	18. 24	·1371					
12. 11	30. 10	19. 41	·1364					
12. 26	28. 25	20. 5	·1359					
12. 42	30. 10	21. 52	·1358					
13. 10	31. 15	23. 59	·1371					
13. 27	30. 20							
14. 1	30. 20							
14. 12	32. 20							
15. 48	28. 30							
16. 2	29. 5							
16. 26	27. 55							
17. 7	27. 30							
17. 43	26. 0							
18. 5	26. 25							
18. 13	25. 55							
18. 39	26. 25							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 3								
h m	° ′ ″	h m		h m		h m	°	°
18. 59	20. 26. 5							
19. 14	26. 45							
19. 33	26. 5							
20. 7	27. 30							
20. 41	28. 20							
20. 47	29. 5							
20. 56	28. 50							
21. 24	30. 5							
21. 29	29. 50							
21. 39	30. 30							
21. 55	30. 40							
22. 2	31. 35							
22. 13	31. 30							
23. 59	37. 15							
July 4		July 4		July 4		July 4		
0. 0	20. 37. 15	0. 0	·1371	0. 0	·03075	Min.	65 ·4	66 ·5
0. 11	38. 5	0. 15	·1376	0. 30	·03077	1. 0	65 ·7	67 ·0
2. 25	35. 30	1. 31	·1372	3. 1	·03141	3. 0	65 ·6	67 ·2
2. 58	35. 20	2. 27	·1374		·03293	Max.	66 ·5	68 ·2
3. 8	33. 0	3. 13	·1382	12. 33	·03317	9. 0	66 ·2	67 ·7
3. 56	31. 50	4. 2	·1373	13. 7	·03310	21. 0	66 ·5	67 ·0
4. 23	30. 10	4. 51	·1372	16. 39	·03309	22. 0	66 ·3	67 ·3
4. 41	29. 35	5. 11	·1376	18. 1	·03300	23. 0	66 ·4	67 ·4
6. 14	30. 30	5. 24	·1374	20. 53	·03275			
6. 54	30. 0	5. 54	·1376	21. 10	·03266			
8. 27	30. 0	6. 21	·1374	23. 59	·03280			
8. 46	30. 20	6. 48	·1381					
10. 8	29. 20	8. 42	·1380					
10. 55	30. 10	8. 52	·1383					
12. 12	29. 5	9. 54	·1378					
12. 26	29. 35	10. 4	·1380					
13. 23	28. 25	10. 12	·1378					
13. 39	28. 40	10. 22	·1380					
13. 55	28. 0	10. 30	·1378					
14. 15	28. 10	10. 58	·1381					
14. 54	27. 30	12. 24	·1379					
15. 23	28. 5	12. 49	·1382					
16. 55:	24. 10	13. 10	·1383					
17. 52	23. 5	14. 45:	·1376					
18. 21	23. 25	15. 56	·1379					
18. 35	22. 30	19. 53	·1366					
19. 2	22. 50	22. 30	·1371					
19. 40	23. 25	23. 59	·1382					
21. 14	26. 55							
21. 59	27. 30							
22. 44	29. 0							
22. 59	30. 5							
23. 28	30. 30							
23. 41	31. 5							
23. 59	31. 5							
July 5		July 5		July 5		July 5		
0. 0	20. 31. 5	0. 0	·1382	0. 0	·03280	0. 0	66 ·8	67 ·8
0. 56	32. 0	2. 9	·1389	6. 33	·03363	1. 0	67 ·0	68 ·2
1. 8	31. 45	4. 24	·1379	6. 42	·03360	2. 0	67 ·3	68 ·5
1. 57	32. 30	4. 33	·1382	11. 47	·03377	3. 0	67 ·6	68 ·8
3. 9	31. 50	4. 38	·1379	15. 16	·03365	Max.	67 ·6	69 ·6

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 5		July 5		July 5		July 5		
h m	° ′ ″	h m		h m		h m	°	°
3. 36	20. 31. 50	5. 16	·1377	16. 53	·03369	9. 0	67 ·4	68 ·7
4. 28	30. 35	5. 33	·1381	19. 46	·03351	Min.	66 ·5	67 ·6
4. 37	31. 5	5. 46	·1379	23. 59	·03350	21. 0	67 ·1	68 ·8
4. 41	30. 35	6. 34	·1383			22. 0	66 ·7	68 ·5
5. 9	30. 0	6. 44	·1379			23. 0	67 ·4	68 ·7
5. 38	30. 25	7. 11	·1383					
8. 3	30. 25	10. 15	·1381					
8. 23	30. 5	11. 4	·1376					
9. 39	30. 15	11. 43	·1375					
9. 56	29. 35	13. 24	·1379					
10. 22	29. 35	14. 4	·1375					
10. 38	28. 55	15. 19	·1379					
11. 0	28. 35	19. 36	·1371					
11. 9	28. 0	21. 0	·1365					
11. 23	28. 35	22. 22	·1371					
11. 31	28. 25	23. 11	·1376					
11. 45	29. 5	23. 24	·1375					
12. 17	28. 30	23. 59	·1380					
14. 8	27. 35							
14. 23	29. 15							
14. 44	27. 30							
15. 16	26. 25							
16. 22	25. 55							
17. 33	23. 50							
17. 39	24. 10							
17. 43	23. 50							
18. 41	24. 50							
19. 8	24. 25							
19. 12	25. 10							
19. 26	24. 40							
19. 43	24. 50							
19. 52	24. 10							
19. 59	25. 20							
20. 41	25. 30							
21. 27	26. 25							
22. 16	28. 30							
23. 7	30. 50							
23. 13	31. 35							
23. 59	32. 35							
July 6		July 6		July 6		July 6		
0. 0	20. 32. 35	0. 0	·1380	0. 0	·03350	0. 0	67 ·7	68 ·9
0. 24	33. 45	0. 50	·1392	5. 18	·03409	1. 0	67 ·7	70 ·0
0. 59	34. 5	1. 8	·1387	5. 57	·03422	3. 0	68 ·1	69 ·8
2. 8	36. 45	1. 25	·1385	6. 13	·03421	Max.	68 ·7	71 ·4
2. 28	34. 30	1. 34	·1391	8. 1	·03457	9. 0	68 ·3	69 ·4
2. 41	35. 30	1. 39	·1387	8. 16	·03448	Min.	66 ·8	68 ·0
2. 56	35. 30	2. 7	·1400	12. 18	·03429	21. 0	67 ·3	68 ·0
3. 22	33. 0	2. 10	·1407	12. 35	·03419			
3. 39	33. 45	2. 34	·1374	12. 57	·03422			
3. 43	33. 30	3. 4	·1395	13. 25	·03402			
3. 56	33. 55	3. 18	·1383	13. 37	·03397			
4. 7	33. 25	3. 31	·1380	13. 54	·03383			
4. 28	33. 40	4. 9	·1399	14. 2	·03372			
4. 39	32. 30	4. 18	·1394	14. 14	·03353			
4. 45	32. 45	4. 41	·1402	14. 41	·03339			
4. 56	31. 25	4. 50	·1385	15. 1	·03351			
5. 18	30. 50	4. 57	·1387	15. 11	·03330			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 6 h m	° ′ ″	July 6 h m		July 6 h m		h m	°	°
5. 27	20. 30. 0	5. 10	·1377	15. 24	·03311			
5. 44	31. 55	5. 25	·1381	16. 23	·03328			
6. 11	32. 35	5. 42	·1374	16. 39	·03322			
6. 23	31. 45	6. 3	·1400	17. 1	·03342			
6. 41	31. 45	6. 12	·1402	17. 39	·03334			
6. 53	30. 50	6. 26	·1393	18. 44	·03357			
7. 8	30. 50	6. 52	·1397	18. 58	·03349			
7. 23	32. 0	7. 4	·1395	20. 38	·03362			
7. 32	33. 20	7. 18	·1395	21. 4	·03351			
7. 56	29. 45	7. 49	·1377	22. 6	·03368			
8. 13	28. 30	7. 57	·1379	23. 59	·03364			
8. 26	28. 30	8. 8	·1393					
8. 38	27. 30	8. 24	·1373					
8. 56	28. 15	8. 40	·1370					
9. 11	27. 55	8. 49	·1384					
9. 23	28. 25	9. 8	·1379					
9. 42	27. 10	9. 19	·1383					
10. 0	28. 0	9. 31	·1382					
10. 38	27. 5	9. 41	·1383					
10. 56	27. 40	9. 52	·1376					
11. 8	27. 20	10. 18	·1377					
11. 12	28. 5	10. 26	·1381					
11. 24	27. 10	10. 41	·1376					
11. 37	27. 30	10. 50	·1378					
11. 43	26. 0	10. 56	·1377					
12. 8	26. 20	11. 16	·1385					
12. 14	27. 30	11. 25	·1377					
12. 25	27. 10	11. 36	·1379					
12. 38	24. 40	12. 4	·1374					
12. 59	28. 30	12. 26	·1378					
13. 22	25. 45	12. 43	·1373					
13. 42	26. 20	13. 12	·1388					
13. 53	24. 30	13. 27	·1385					
14. 8	24. 50	13. 44	·1389					
14. 13	23. 20	14. 4	·1378					
14. 38	23. 20	14. 11	·1382					
14. 52	30. 0	14. 24	·1374					
14. 58	30. 0	14. 28	·1377					
15. 30	16. 0	14. 39	·1378					
15. 53	12. 35	14. 52	·1364					
16. 1	12. 15	15. 6	·1377					
16. 10	12. 45	15. 12	·1373					
16. 16	15. 5	15. 22	·1376					
16. 23	15. 5	15. 34	·1374					
16. 37	18. 5	15. 46	·1370					
16. 42	17. 50	16. 4	·1356					
17. 14	24. 25	16. 22	·1348					
17. 26	24. 10	16. 28	·1348					
17. 38	25. 30	16. 39	·1342					
17. 59	23. 5	17. 12	·1354					
18. 11	24. 5	17. 19	·1353					
18. 24	22. 15	17. 41	·1360					
18. 27	24. 5	17. 48	·1363					
18. 39	24. 5	17. 59	·1361					
18. 42	26. 15	18. 14	·1365					
18. 51	26. 15	18. 24	·1361					
18. 56	23. 30	18. 31	·1364					
19. 6	22. 50	18. 50	·1365					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 6 h m	° ′ ″	July 6 h m		h m		h m	°	°
19. 23	20. 25. 50	19. 10	·1355					
19. 43	26. 55	19. 24	·1353					
19. 56	29. 10	19. 50	·1333					
19. 59	28. 30	20. 29	·1357					
20. 12	29. 25	21. 24	·1346					
20. 23	29. 10	21. 49	·1345					
20. 32	32. 30	22. 15	·1357					
21. 0	29. 40	22. 51	·1356					
21. 26	31. 5	23. 0	·1360					
21. 56	34. 15	23. 59	·1362					
22. 41	34. 15							
22. 54	34. 5							
22. 59	34. 5							
23. 7	34. 30							
23. 26	34. 35 ***							
23. 59	37. 0							
July 7		July 7		July 7		July 7		
0. 0	20. 37. 0	0. 0	·1362	0. 0	·03364	1. 0	67 ·7	68 ·9
0. 11	37. 55		***	0. 33	·03379	3. 0	67 ·6	68 ·6
0. 14	37. 0	0. 19	·1364	0. 56	·03381	Max.	68 ·3	69 ·2
0. 23	38. 10	0. 28	·1376	2. 24	·03428	9. 0	66 ·6	68 ·3
0. 26	37. 25	0. 50	·1367	4. 42	·03431	Min.	64 ·8	65 ·8
0. 31	38. 55	1. 2	·1368	5. 31	·03449	21. 0	65 ·3	66 ·8
0. 41	38. 35	1. 11	·1376	5. 54	·03451			
0. 57	38. 5	1. 19	·1362	6. 14	·03473			
1. 11	39. 0	1. 52	·1372	8. 6	·03431			
1. 26	36. 50	1. 55	·1370	9. 8	·03410			
1. 53	36. 0	2. 15	·1386	10. 10	·03302			
2. 9	37. 15	2. 27	·1386	11. 3	·03272			
2. 27	40. 5	2. 41	·1371	11. 23	·03287			
2. 56	39. 10		***	11. 44	·03271			
3. 26	37. 10	3. 19	·1366	12. 3	·03282			
3. 38	37. 0	3. 25	·1373	13. 18	·03272			
3. 49	35. 55	3. 45	·1363	13. 33	·03257			
4. 11	34. 45	3. 52	·1369	13. 54	·03264			
4. 19	35. 5	4. 13	·1364	14. 26	·03243			
4. 24	34. 35	4. 39	·1386	14. 45	·03248			
4. 29	36. 5	4. 46	·1383	15. 1	·03217			
4. 44	35. 30	4. 58	·1399	15. 22:	·03208			
4. 56	37. 50	5. 9	·1394	15. 49	·03240			
5. 11	36. 30	5. 22	·1402	16. 44	·03279			
5. 23	36. 55	5. 27	·1397	17. 56	·03295			
5. 28	36. 30	5. 33	·1400	18. 55	·03291			
5. 37	38. 5	6. 2	·1360	19. 8	·03298			
5. 42	36. 20	6. 25	·1387	19. 47	·03283			
5. 54	36. 20	6. 44	·1376	22. 44	·03293			
6. 6	33. 45	7. 4	·1377	23. 59	·03290			
6. 12	28. 5	7. 11	·1374					
6. 21	25. 50	7. 20	·1379					
6. 30	26. 55	7. 55	·1376					
6. 41	25. 55	8. 12	·1370					
6. 54	25. 25	8. 38	·1372					
7. 8	26. 10	9. 15	·1365					
7. 11	25. 30	9. 39	·1383					
7. 24	26. 5	10. 6	·1347					
7. 31	26. 0	10. 13	·1362					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 7		July 7						
h m	° ′ ″	h m		h m		h m	°	°
7. 57	20. 27. 50	10. 17	·1361					
8. 7	27. 30	10. 34	·1386					
8. 13	25. 50	10. 50	·1355					
8. 23	25. 50	11. 11	·1347					
8. 41	27. 55	11. 24	·1366					
8. 48	27. 5	11. 40	·1357					
9. 0	28. 15	12. 4	·1352					
9. 16	27. 40	12. 20	·1355					
9. 41	40. 20	12. 27	·1360					
9. 58	29. 10	12. 47	·1352					
10. 11	18. 35	13. 12	·1353					
10. 18	20. 10	13. 21	·1349					
10. 26	19. 20	13. 28	·1364					
10. 44	31. 55	13. 40	·1352					
11. 6	24. 0	13. 48	·1352					
11. 23	15. 50	14. 5	·1358					
11. 27	18. 35	14. 12	·1355					
11. 56	14. 45	14. 26	·1355					
12. 11	20. 40	14. 57	·1377					
12. 23	18. 45	15. 14	·1371					
12. 41	15. 35	15. 31	·1349					
12. 57	18. 20	15. 45	·1345					
13. 31	16. 25	16. 6	·1356					
13. 57	15. 55	16. 55	·1362					
14. 27	21. 35	17. 20	·1353					
14. 34	21. 35	17. 33	·1355					
14. 41	23. 20	18. 39	·1350					
15. 10	15. 35	18. 52	·1344					
15. 26	12. 35	19. 14	·1352					
15. 38	13. 30	19. 35	·1350					
15. 42	13. 30	20. 12	·1354					
16. 36	19. 15	20. 47	·1348					
16. 41	17. 55	21. 48	·1334					
16. 54	19, 30	21. 53	·1337					
16. 57	19. 30	22. 9	·1337					
17. 6	20. 45	22. 30	·1350					
17. 13	20. 35	22. 41	·1350					
17. 18	19. 30	22. 58	·1359					
17. 28	20. 45	23. 59	·1363					
17. 47	21. 5							
18. 7	20. 25							
18. 27	20. 0							
18. 37	21. 30							
18. 55	22. 0							
19. 7	25. 55							
19. 23	26. 40							
19. 29	26. 0							
19. 56	25. 30							
20. 12	26. 5							
20. 38	25. 35							
20. 57	28. 5							
21. 39	28. 35							
21. 44	28. 10							
21. 56	29. 20							
22. 9	29. 30							
22. 13	28. 35							
22. 19	29. 10							
22. 26	29. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 7								
h m	° ′ ″	h m		h m		h m	°	°
22. 32	20. 30. 0							
22. 43	29. 20							
23. 23	32. 5							
23. 59	33. 10							
July 8		July 8		July 8		July 8		
0. 0	20. 33. 10	0. 0	·1363	0. 0	·03290	1. 0	66·9	67·9
0. 38	34. 45	0. 44	·1368	5. 17	·03352	3. 0	66·9	68·0
0. 49	35. 50	1. 3	·1366	5. 25	·03347	Max.	67·1	68·1
1. 1	35. 30	1. 20	·1376	6. 55	·03361	9. 0	66·4	67·0
1. 23	37. 5	1. 50	·1369	8. 18	·03362	Min.	64·7	65·7
1. 29	36. 45		***	8. 30	·03349	22. 15	65·6	66·7
1. 39	36. 45	2. 38	·1376	8. 39	·03358			
1. 56	36. 10	3. 13	·1368	13. 3	·03310			
2. 25	36. 35	3. 20	·1375	16. 23	·03291			
3. 11	35. 20	3. 28	·1370	18. 56	·03271			
3. 24	36. 30	3. 32	·1372	19. 2	·03277			
3. 40	35. 40	4. 23	·1381	19. 18	·03268			
3. 58	35. 40	4. 32	·1375	19. 41	·03256			
4. 24	36. 30	4. 40	·1381	22. 10	·03242			
4. 28	35. 45	5. 33	·1376		(†)			
4. 38	35. 35	6. 18	·1391					
4. 41	34. 55	6. 25	·1389					
4. 57	34. 55	6. 56	·1395					
5. 9	34. 0	7. 21	·1386					
5. 18	34. 25	7. 50	·1395					
5. 37	33. 0	8. 29	·1381					
5. 43	33. 0	8. 48	·1423					
6. 12	32. 5	8. 58	·1438					
6. 39	32. 5	9. 9	·1409					
6. 43	32. 40	9. 25	·1405					
6. 56	32. 40	9. 33	·1386					
7. 11	32. 10	9. 42	·1384					
7. 28	32. 50	9. 58	·1372					
7. 45	31. 0	10. 12	·1375					
8. 0	31. 35	10. 19	·1371					
8. 11	30. 45	10. 48	·1374					
8. 26	31. 30	11. 8	·1372					
8. 38	20. 50	11. 25	·1379					
9. 5	27. 5	11. 50	·1376					
9. 12	25. 45	12. 36	·1381					
9. 27	29. 10	13. 50	·1375					
9. 39	26. 50	14. 52	·1379					
9. 45	27. 10	15. 6	·1375					
10. 6	26. 35	15. 13	·1381					
10. 13	27. 35	15. 23	·1379					
10. 29	27. 25	16. 13	·1380					
10. 56	27. 35	17. 6	·1378					
11. 11	25. 30	17. 52	·1376					
11. 31	26. 45	18. 6	·1369					
12. 0	25. 55	18. 14	·1372					
12. 58	25. 40	18. 22	·1369					
13. 11	24. 20	18. 35	·1372					
13. 37	24. 35	19. 0	·1369					
13. 41	25. 40	19. 12	·1363					
13. 56	25. 5	19. 20	·1367					
14. 0	25. 45	19. 34	·1365					
14. 27	24. 5	20. 0	·1365					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 8		July 8						
h m	° ′ ″	h m		h m		h m	°	°
14. 39	20. 25. 30	20. 14	·1370					
14. 57	26. 25	20. 41	·1366					
15. 2	25. 30	20. 49	·1371					
15. 11	25. 45	21. 4	·1363					
15. 15	26. 35	21. 14	·1368					
15. 26	26. 10		***					
16. 4	25. 30	22. 18	·1363					
16. 22	26. 40		***					
16. 29	24. 15	22. 55	·1366					
16. 41	25. 0	23. 19	·1361					
17. 19	24. 30	23. 41	·1374					
17. 27	23. 30	23. 59	·1364					
17. 36	24. 20							
17. 41	23. 5							
17. 54	23. 35							
17. 58	21. 30							
18. 11	23. 15							
18. 23	22. 25							
18. 32	25. 40							
18. 53	23. 10							
18. 59	24. 20							
19. 5	21. 10							
19. 13	25. 15							
19. 38	22. 40							
19. 55	25. 20							
20. 8	24. 30							
20. 11	26. 0							
20. 32	26. 25							
20. 41	25. 0							
20. 57	28. 0							
21. 4	26. 0							
21. 11	25. 30							
21. 24	26. 25							
21. 41	25. 55							
22. 1	27. 20							
22. 10	28. 0							
22. 18	27. 30							
22. 54	29. 50							
23. 2	31. 5							
23. 10	31. 0							
23. 27	32. 30							
23. 38	32. 15							
23. 52	34. 20							
23. 59	33. 20							
July 9		July 9		July 9		July 9		
0. 0	20. 33. 20	0. 0	·1364		(†)	1. 0	65·7	67·5
0. 27	31. 30	0. 19	·1367	0. 30	·03272	Max.	67·1	68·5
1. 41	34. 30	0. 27	·1364	4. 42	·03319	9. 0	65·8	67·0
1. 59	32. 35	1. 36	·1385	4. 53	·03304	Min.	64·2	65·2
2. 12	32. 45	1. 59	·1372	5. 24	·03335	21. 0	64·7	65·6
2. 38	34. 45	2. 35	·1391	6. 4	·03312			
2. 58	34. 25	2. 49	·1391	6. 40	·03307			
3. 12	32. 50	3. 24	·1372	7. 51	·03292			
3. 32	32. 50	3. 30	·1375	14. 32	·03258			
3. 44	33. 30	3. 40	·1373	15. 26	·03239			
3. 59	34. 50	4. 13	·1399	17. 47	·03241			
	***		***	19. 55	·03219			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 9		July 9		July 9				
h m	° ′ ″	h m		h m		h m	°	°
4. 41	20. 32. 30	4. 26	·1392	20. 41	·03225			
4. 55	28. 25	4. 34	·1394	23. 4	·03205			
5. 7	24. 30	4. 48	·1363	23. 59	·03217			
5. 26	28. 5	5. 18	·1399					
5. 57	30. 10	5. 45	·1382					
6. 41	31. 30	5. 52	·1385					
6. 57	30. 40	6. 7	·1380					
7. 45	29. 55	6. 35	·1384					
7. 56	30. 30	6. 54	·1382					
8. 27	29. 10	7. 27	·1385					
8. 55	27. 55	7. 44	·1382					
8. 59	27. 20	7. 58	·1387					
9. 11	27. 45	8. 16	·1389					
9. 26	24. 0	9. 22	·1378					
9. 41	25. 40	9. 40	·1387					
9. 52	25. 40	9. 48	·1384					
10. 8	26. 50	10. 4	·1386					
10. 13	25. 50	10. 14	·1383					
10. 53	26. 15	10. 22	·1384					
12. 40	29. 10	10. 47	·1378					
12. 54	28. 30	11. 4	·1380					
13. 2	27. 55	11. 14	·1378					
13. 23	27. 35	11. 34	·1381					
13. 31	27. 30	11. 54	·1376					
13. 39	28. 20	12. 29	·1380					
14. 11	28. 5	13. 23	·1375					
14. 38	30. 30	13. 39	·1381					
14. 52	29. 30	14. 25	·1376					
15. 11	29. 20	14. 35	·1378					
15. 28	28. 30	14. 42	·1376					
15. 58	29. 25	15. 5	·1383					
16. 39	27. 30	15. 35	·1374					
16. 45	27. 30	15. 46	·1378					
16. 55	26. 15	16. 11	·1373					
17. 11	25. 35	16. 55	·1378					
17. 13	26. 30		***					
17. 24	25. 20	20. 55	·1363					
17. 39	25. 20	23. 10	·1368					
17. 44	27. 30	23. 18	·1362					
17. 55	26. 10	23. 59	·1376					
	***							
19. 9	23. 30							
20. 26	25. 30							
20. 39	26. 55							
20. 56	26. 55							
21. 30	29. 0							
21. 55	29. 20							
22. 26	30. 30							
23. 11	33. 30							
23. 18	33. 5							
23. 54	34. 0							
23. 59	35. 10							
July 10		July 10		July 10		July 10		
0. 0	20. 35. 10	0. 0	·1376	0. 0	·03217	1. 0	65·8	66·4
0. 27	35. 5	1. 5	·1376	1. 33	·03228	3. 0	65·7	66·3
0. 41	36. 0	2. 7	·1384	5. 41	·03255	Max.	66·2	66·7
2. 8	35. 20	2. 43	·1378	5. 49	·03242	9. 0	64·6	66·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 10 h m	° ′ ″	July 10 h m		July 10 h m		July 10 h m	°	°
2. 11	20. 35. 0	3. 16	·1384	6. 29	·03261	Min.	63·2	64·2
2. 31	35. 0	3. 27	·1380	9. 3	·03243	21. 0	64·4	65·0
2. 42	34. 30	3. 43	·1384	11. 57	·03207			
3. 20	34. 50	3. 55	·1379	17. 56	·03175			
3. 28	34. 0	4. 19	·1381	23. 59	·03143			
3. 44	34. 35	4. 58	·1375					
4. 8	33. 55	5. 33	·1379					
4. 15	34. 20	5. 41	·1372					
5. 1	33. 25	6. 24	·1387					
5. 11	33. 40	7. 10	·1382					
5. 41	32. 20	7. 50	·1386					
5. 46	30. 25	8. 21	·1384					
5. 55	30. 10	9. 54	·1386					
6. 8	29. 20	10. 23	·1384					
6. 24	30. 15	11. 20	·1389					
6. 41	30. 25	12. 18	·1381					
7. 18	29. 35	13. 43	·1383					
7. 34	30. 0	15. 34	·1380					
7. 42	29. 10	16. 33	·1382					
8. 9	29. 30	18. 0	·1379					
8. 29	28. 40	21. 11	·1365					
8. 46	29. 0	23. 59	·1374					
9. 12	28. 50							
9. 47	29. 20							
10. 8	28. 30							
10. 13	29. 10							
10. 32	28. 55							
10. 55	29. 45							
11. 11	28. 30							
11. 34	29. 5							
12. 9	28. 0							
12. 27	27. 50							
12. 41	28. 10							
13. 44	26. 55							
14. 20	27. 50							
14. 39	27. 25							
14. 56	28. 20							
15. 22	27. 40							
15. 52	28. 35							
16. 13	28. 0							
16. 26	26. 55							
16. 45	26. 20							
17. 0	26. 50							
17. 23	26. 0							
17. 39	26. 5							
17. 42	25. 35							
17. 53	25. 50							
17. 57	26. 20							
18. 8	25. 25							
18. 56	25. 25							
19. 52	26. 20							
20. 34	26. 0							
21. 53	28. 0							
22. 20	29. 0							
23. 8	32. 15							
23. 59	34. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 11 h m	° ′ ″	July 11 h m		July 11 h m		July 11 h m	°	°
0. 0	20. 34. 10	0. 0	·1374	0. 0	·03143	1. 0	65·7	66·2
0. 38	34. 5	0. 12	·1370	0. 25	·03142	3. 0	65·8	66·0
0. 48	34. 45	0. 27	·1368	2. 54	·03178	Max.	65·8	66·4
1. 5	34. 10	1. 18	·1378	4. 32	·03192	9. 0	64·8	65·5
1. 11	34. 55	1. 25	·1376	5. 16	·03189	Min.	62·8	63·7
2. 36	34. 40	2. 6	·1384	6. 8	·03201	21. 0	63·3	64·0
3. 5	34. 0	2. 19	·1383	8. 7	·03200	22. 0	63·4	64·1
3. 38	33 25	2. 37	·1385	11. 0	·03170	23. 0	63·6	64·0
3. 47	32. 30	2. 53	·1383	11. 41	·03156			
3. 59	33. 5	3. 41	·1384	13. 20	·03157			
4. 11	32. 35	3. 48	·1379	14. 27	·03151			
4. 37	33. 5	3. 57	·1383	15. 8	·03142			
5. 12	32. 25	4. 12	·1380	16. 21	·03147			
5. 31	31. 30	4. 41	·1385	20. 36	·03122			
5. 51	30. 30	4. 50	·1383	23. 59	·03088			
6. 10	30. 55	5. 11	·1385					
6. 41	30. 30	5. 21	·1382					
6. 59	30. 30	5. 53	·1386					
7. 11	29. 40	6. 4	·1384					
7. 26	29. 40	6. 49	·1387					
7. 41	28. 35	6. 54	·1385					
8. 6	28. 55	7. 12	·1388					
8. 24	28. 45	7. 27	·1387					
8. 53	29. 0	7. 38	·1383					
8. 58	28. 35	7. 56	·1386					
9. 11	28. 35	8. 13	·1382					
9. 24	27. 55	8. 53	·1384					
9. 41	28. 45	9. 20	·1378					
10. 8	27. 25	10. 49	·1377					
10. 38	28. 0	11. 10	·1392					
10. 45	25. 5	11. 25	·1388					
10. 58	25. 40	12. 5	·1376					
12. 46	26. 25	13. 13	·1375					
13. 21	26. 40	13. 34	·1380					
13. 45	27. 15	13. 50	·1379					
14. 12	25. 30	14. 11	·1376					
14. 39	27. 20	14. 59	·1380					
15. 11	25. 5	15. 22	·1379					
15. 30	24. 40	16. 40	·1381					
15. 39	25. 0	22. 0	·1362					
15. 51	24. 30	23. 59	·1376					
16. 8	24. 30							
16. 13	25. 5							
16. 40	24. 35							
17. 11	24. 20							
17. 24	24. 50							
17. 58	25. 5							
18. 14	24. 30							
18. 53	24. 45							
19. 23	24. 35							
19. 30	24. 45							
19. 41	24. 35							
21. 11	26. 30							
21. 26	30. 30							
22. 44	32. 15							
22. 56	32. 30							
23. 27	34. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 11	° ′ ″	h m		h m		h m	°	°
h m 23. 56	20. 36. 35							
23. 59	36. 50							
July 12		July 12		July 12		July 12		
0. 0	20. 36. 50	0. 0	·1376	0. 0	·03088	0. 0	63·7	64·1
0. 53	38. 35	1. 30	·1385	1. 6	·03096	1. 0	64·0	64·5
1. 26	38. 25	1. 52	·1383	1. 23	·03094	2. 0	64·4	64·8
1. 29	41. 30	4. 21	·1390	5. 36	·03148	3. 0	64·4	65·0
1. 56	40. 40	4. 48	·1385	8. 8	·03139	Max.	65·0	65·9
2. 8	40. 50	5. 22	·1392	10. 34	·03120	9. 0	63·6	64·7
2. 25	39. 25	6. 1	·1393	10. 39	·03133	Min.	62·6	63·8
2. 38	39. 30	6. 25	·1389	10. 45	·03120	21. 0	63·2	63·9
2. 46	37. 25	7. 14	·1393	11. 18	·03103	23. 0	63·6	64·6
3. 8	37. 25	10. 25	·1389	11. 40	·03111			
3. 39	35. 45	10. 31	·1418	12. 49	·03080			
3. 54	35. 20	10. 43	·1408	12. 54	·03090			
3. 58	37. 0	10. 49	·1410		***			
4. 11	36. 20	11. 14	·1401	13. 41	·03091			
4. 29	36. 50	11. 26	·1403	13. 46	·03057			
4. 38	35. 50	11. 39	·1408	13. 49	·03086			
6. 38	29. 35	12. 2	·1407	14. 15	·03099			
10. 36	28. 30	12. 22	·1409	15. 2	·03090			
10. 38	28. 55	12. 38	·1397	15. 4	·03078			
10. 42	28. 55	12. 44	·1405	15. 8	·03091			
10. 57	24. 50	12. 48	·1400	15. 33	·03097			
11. 9	24. 25	12. 51	·1409	18. 0	·03085			
11. 18	23. 30	12. 54	·1403	18. 11	·03076			
11. 31	24. 35	13. 8	·1415	18. 51	·03080			
11. 41	25. 55	13. 10	·1412	18. 58	·03057			
12. 55	18. 35	13. 18	·1419	19. 4	·03080			
12. 59	20. 30	13. 20	·1413	19. 14	·03091			
	***	13. 32	·1425	19. 33	·03077			
13. 27	22. 55	13. 36	·1387	19. 48	·03062			
13. 41	23. 5	13. 41	·1395	20. 7	·03077			
13. 43	24. 30	13. 51	·1400	20. 15	·03066			
13. 46	19. 5	14. 0	·1395	20. 21	·03072			
13. 54	20. 50	14. 10	·1399	20. 49	·03066			
14. 10	23. 30	14. 12	·1407	21. 2	·03058			
14. 12	24. 55	14. 22	·1401	21. 16	·03071			
14. 34	24. 55	14. 28	·1408		***			
14. 39	23. 50	14. 33	·1404	22. 30	·03042			
14. 47	23. 50	14. 52	·1409	22. 43	·03052			
14. 51	23. 25	14. 57	·1387		***			
14. 57	24. 25	15. 10	·1396	23. 59	·03070			
15. 6	22. 0	15. 19	·1399					
15. 9	23. 0	15. 31	·1396					
15. 12	23. 0	15. 54	·1400					
15. 24	25. 30	16. 4	·1407					
16. 6	26. 55	16. 18	·1398					
16. 8	24. 20	16. 41	·1406					
16. 25	24. 45	16. 46	·1403					
16. 29	23. 50	16. 55	·1408					
16. 38	25. 0	17. 53	·1404					
	***	18. 12	·1382					
16. 56	24. 35	18. 24	·1392					
17. 9	22. 30	18. 48	·1390					
17. 13	23. 35	18. 57	·1370					
17. 19	23. 20	19. 17	·1403					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 12	° ′ ″	July 12		h m		h m	°	°
h m 17. 29	20. 23. 20	h m 19. 39	·1402					
17. 36	22. 30	19. 45	·1395					
17. 44	24. 35	20. 10	·1399					
17. 54	27. 30	20. 20	·1384					
18. 8	26. 20	20. 29	·1391					
18. 25	28. 0	20. 50	·1388					
	***	21. 4	·1373					
18. 44	29. 0	21. 18	·1382					
18. 56	22. 30	21. 34	·1371					
19. 11	33. 0	21. 44	·1384					
19. 22	31. 25	21. 51	·1376					
19. 26	29. 20	22. 4	·1385					
19. 37	29. 10	22. 25	·1373					
19. 46	27. 0	22. 37	·1384					
19. 56	28. 0	22. 43	·1376					
20. 6	29. 55	22. 53	·1384					
20. 14	27. 15		***					
20. 26	29. 30	23. 59	·1378					
20. 38	29. 30							
20. 42	31. 5							
20. 56	29. 0							
21. 2	30. 20							
21. 11	33. 0							
21. 13	35. 50							
21. 26	36. 5							
21. 34	34. 10							
21. 41	37. 30							
21. 55	35. 10							
22. 9	36. 50							
22. 24	32. 45							
22. 54	36. 30							
	***							
23. 26	36. 45							
	***							
23. 28	35. 30							
23. 59	37. 0							
July 13		July 13		July 13		July 13		
0. 0	20. 37. 0	0. 0	·1378	0. 0	·03070	0. 0	63·7	64·6
0. 9	37. 0	0. 44	·1384	0. 54	·03083	1. 0	64·2	65·1
0. 16	36. 30		(†)	1. 33	·03092	3. 0	63·9	65·5
0. 25	37. 30	1. 0	·1379*	1. 46	·03083	Max.	64·4	65·9
0. 40	36. 20	1. 50	·1387	2. 1	·03112	9. 0	63·7	64·6
0. 45	37. 5	1. 59	·1399	2. 16	·03112	Min.	62·7	63·8
1. 25	35. 35	2. 22	·1379	2. 25	·03142	21. 0	63·8	64·8
1. 37	36. 30	2. 34	·1388	4. 53	·03233			
1. 42	35. 20	2. 57	·1365	5. 13	·03210			
1. 46	36. 25	3. 12	·1379	5. 26	·03229			
2. 9	36. 35	3. 26	·1355		·03197			
2. 18	37. 40	3. 34	·1354	6. 34	·03191			
2. 26	37. 40	3. 48	·1385	7. 3	·03210			
2. 29	37. 0	3. 52	·1369	7. 35	·03175			
2. 53	41. 15	4. 10	·1385	10. 0	·03144			
2. 57	40. 50	4. 13	·1379	10. 57	·03117			
3. 8	41. 30	4. 25	·1395	11. 11	·03084			
3. 25	38. 5	4. 39	·1376	11. 26	·03072			
3. 41	34. 40	4. 55	·1396	12. 33	·03099			
3. 44	34. 40	5. 11	·1378	12. 45	·03090			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
July 13		July 13		July 13		h m	°	°
h m	° ′ ″	h m		h m				
3. 53	20. 33. 50	5. 25	·1386	13. 43	·03101			
3. 57	33. 35	5. 27	·1384	14. 46	·03097			
4. 8	34. 30	5. 34	·1393	15. 11	·03079			
4. 13	34. 0	5. 44	·1396	15. 24	·03079			
4. 25	34. 35	5. 53	·1388	15. 53	·03052			
4. 35	33. 30	6. 10	·1400	16. 18	·03052			
4. 41	34. 30	6. 34	·1386	19. 4	·03091			
4. 55	36. 40	6. 50	·1408	20. 0	·03101			
5. 9	34. 45	7. 9	·1416	20. 41	·03090			
5. 14	35. 10	7. 16	·1414	20. 59	·03081			
5. 23	34. 30	7. 30	·1395	23. 16	·03100			
5. 41	35. 15	7. 42	·1396	23. 59	·03092			
5. 54	33. 35	7. 51	·1392					
5. 59	34. 5	8. 3	·1398					
6. 11	33. 30	8. 20	·1385					
6. 24	32. 0	9. 0	·1390					
6. 37	24. 30	9. 33	·1382					
6. 41	21. 20	10. 10	·1390					
7. 5	26. 30	10. 19	·1387					
7. 11	26. 35	10. 41	·1392					
7. 24	30. 5	10. 46	·1399					
7. 41	29. 15	10. 59	·1402					
7. 44	29. 30	11. 26	·1384					
7. 56	27. 25	11. 42	·1383					
8. 4	27. 45	11. 56	·1389					
8. 16	26. 20	12. 39	·1393					
8. 24	27. 30	12. 55	·1383					
8. 37	26. 55	13. 10	·1381					
9. 8	28. 30	13. 41	·1386					
9. 24	27. 0	13. 52	·1383					
9. 40	26. 10	14. 53	·1387					
9. 59	28. 30	15. 11	·1382					
10. 19	29. 30	15. 26	·1387					
10. 30	29. 35	15. 45	·1383					
10. 41	31. 0	16. 4	·1387					
10. 53	31. 35	16. 58	·1380					
10. 58	33. 5	17. 24	·1382					
11. 11	29. 25		***					
11. 26	24. 30	17. 53	·1370					
11. 31	23. 0	18. 33	·1378					
11. 54	24. 40	19. 13	·1377					
12. 14	25. 10		***					
12. 26	27. 5	19. 48	·1366					
12. 39	25. 30	20. 4	·1362					
12. 43	25. 30	20. 23	·1346					
12. 56	26. 50	20. 41	·1347					
13. 17	26. 30	20. 54	·1343					
13. 32	28. 0	21. 23	·1352					
14. 9	26. 20	22. 10	·1343					
14. 22	27. 40	22. 31	·1368					
14. 41	31. 50	22. 50	·1372					
15. 21	34. 45	22. 56	·1368					
15. 26	35. 40	23. 12	·1377					
15. 29	35. 25	23. 54	·1374					
15. 33	36. 5	23. 59	·1365					
15. 53	32. 55							
15. 56	31. 25							
16. 11	28. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
July 13								
h m	° ′ ″	h m		h m		h m	°	°
16. 23	20. 28. 0							
16. 33	29. 25							
16. 53	29. 45							
17. 0	28. 30							
17. 11	28. 30							
	***							
18. 22	25. 25							
18. 28	26. 20							
18. 38	25. 15							
18. 43	25. 40							
	***							
19. 26	24. 30							
19. 46	29. 5							
20. 22	29. 55							
20. 28	31. 20							
20. 54	30. 30							
21. 1	31. 30							
21. 25	32. 5							
21. 34	32. 30							
21. 54	33. 25							
22. 11	34. 0							
22. 15	32. 0							
22. 24	30. 20							
22. 28	29. 50							
22. 37	31. 5							
22. 46	30. 0							
22. 57	30. 0							
23. 8	29. 5							
23. 16	30. 30							
23. 41	32. 10							
23. 59	34. 10							
July 14		July 14		July 14		July 14		
0. 0	20. 34. 10	0. 0	·1365	0. 0	·03092	1. 0	65 ·1	66 ·0
0. 9	35. 0	0. 12	·1372	1. 34	·03111	3. 0	65 ·8	66 ·8
0. 12	33. 20	0. 53	·1379	4. 16	·03204	Max.	66 ·0	67 ·2
0. 18	34. 10	1. 8	·1374	4. 27	·03207	9. 0	65 ·2	66 ·5
0. 38	33. 50	2. 4	·1380	4. 31	·03198	Min.	63 ·4	64 ·5
0. 47	34. 10	2. 10	·1386	4. 44	·03207	21. 0	64 ·4	65 ·3
0. 54	35. 5	2. 16	·1374	5. 1	·03200			
1. 3	33. 50	2. 42	·1391	5. 12	·03211			
1. 23	36. 5	3. 30	·1357	5. 23	·03197			
1. 34	35. 35	3. 41	·1356	5. 46	·03211			
1. 48	35. 30	3. 50	·1372	6. 48	·03198			
1. 56	36. 10	4. 13	·1381	9. 0	·03191			
2. 0	35. 30	4. 23	·1403		·03053			
2. 8	36. 30	4. 26	·1399	10. 7	·03036			
2. 11	36. 0	4. 37	·1407	10. 59	·03002			
2. 24	35. 50	4. 43	·1398	11. 33	·03010			
2. 37	36. 50	4. 50	·1408	13. 41	·03016			
2. 59	36. 20	5. 10	·1395	15. 57	·02992			
3. 11	37. 0	5. 19	·1407	16. 33	·03000			
3. 34	36. 0	5. 30	·1387	17. 11	·02997			
3. 41	34. 50	5. 49	·1403	17. 53	·02982			
3. 43	34. 5	6. 19	·1392	19. 52	·02977			
3. 56	32. 35	6. 40	·1387	20. 39	·02984			
4. 8	32. 10	6. 54	·1392	21. 7	·02977			
4. 12	34. 0	7. 20	·1389	23. 59	·02990			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
July 14		July 14						
h m	° ′ ″	h m		h m		h m	°	°
4. 26	20. 34. 50	7. 27	·1394					
4. 31	36. 5	7. 40	·1389					
4. 38	37. 5	7. 51	·1388					
4. 39	36. 20	8. 10	·1390					
4. 53	37. 20	8. 27	·1386					
4. 59	35. 45	8. 30	·1392					
5. 13	31. 10	8. 45	·1384					
5. 26	33. 45	8. 52	·1388					
5. 33	29. 30	9. 22	·1382					
5. 41	30. 5	9. 40	·1384					
6. 8	34. 30	10. 16	·1411					
6. 38	34. 30	11. 2	·1374					
6. 55	33. 35	11. 17	·1376					
7. 46	34. 30	12. 44	·1372					
7. 56	34. 10	13. 13	·1374					
8. 2	34. 10	13. 30	·1372					
8. 9	33. 30	13. 48	·1376					
8. 13	34. 10	14. 8	·1374					
8. 23	33. 30	14. 29	·1362					
8. 35	32. 55	15. 11	·1375					
8. 47	33. 30	15. 48	·1377					
9. 0	33. 0	16. 21	·1367					
9. 29	31. 40	17. 2	·1372					
9. 43	30. 20	17. 25	·1378					
10. 7	26. 40	18. 8	·1370					
10. 16	26. 0	18. 48	·1369					
10. 34	28. 55	19. 19	·1362					
10. 59	29. 40	19. 25	·1365					
11. 23	27. 55	19. 41	·1359					
11. 37	29. 0	20. 40	·1356					
11. 42	28. 30	20. 51	·1359					
12. 1	28. 55	21. 42	·1349					
13. 24	28. 50	21. 47	·1352					
13. 38	30. 5	22. 26	·1352					
13. 44	28. 35	22. 47	·1364					
13. 59	29. 15	23. 21	·1356					
14. 8	31. 10	23. 30	·1360					
14. 13	31. 0	23. 41	·1354					
14. 23	31. 30	23. 59	·1353					
14. 38	31. 55							
14. 56	30. 35							
15. 2	31. 25							
15. 12	30. 35							
15. 28	30. 30							
15. 41	31. 35							
15. 53	30. 20							
16. 11	30. 30							
16. 26	29. 45							
16. 41	29. 20							
16. 57	28. 20							
17. 23	28. 50							
18. 8	26. 35							
18. 16	26. 35							
18. 27	26. 0							
18. 33	26. 25							
18. 42	27. 20							
18. 56	27. 30							
19. 23	30. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
July 14								
h m	° ′ ″	h m		h m		h m	°	°
19. 39	20. 29. 20							
19. 46	28. 0							
19. 56	28. 45							
20. 9	28. 0							
20. 45	30. 30							
21. 9	30. 30							
21. 38	31. 20							
22. 14	34. 10							
22. 39	32. 5							
22. 56	33. 30							
23. 3	33. 0							
23. 38	34. 30							
23. 54	33. 30							
23. 59	34. 20							
July 15		July 15		July 15		July 15		
0. 0	20. 34. 20	0. 0	·1353	0. 0	·02990	1. 0	65·7	67·9
0. 3	32. 30	0. 36	·1362	3. 24	·03068	3. 0	65·7	68·1
0. 25	33. 15	1. 4	·1374	4. 9	·03103	Max.	67·0	68·7
0. 45	34. 0	1. 20	·1366	5. 19	·03114	9. 0	66·6	67·9
0. 59	33. 30	1. 52	·1377	6. 18	·03137	Min.	65·6	67·0
1. 9	34. 0	2. 1	·1371	6. 39	·03126	22. 0	66·6	67·6
1. 25	33. 30	2. 15	·1370	7. 0	·03139			
1. 39	34. 30	2. 26	·1376	7. 40	·03127			
1. 44	34. 30	2. 37	·1370	10. 35	·03111			
1. 54	34. 0	2. 41	·1374	11. 19	·03086			
1. 57	35. 10		***	11. 56	·03085			
2. 8	34. 45	3. 39	·1351	12. 39	·03076			
2. 28	35. 15	3. 57	·1380	14. 15	·03085			
2. 39	34. 30	4. 7	·1387	15. 11	·03077			
2. 57	34. 30	4. 21	·1375	18. 16	·03101			
3. 16	33. 50	4. 50	·1386	21. 33	·03083			
3. 28	32. 50	4. 57	·1382	23. 59	·03086			
3. 44	29. 30	5. 20	·1377					
3. 57	29. 20	5. 30	·1386					
4. 2	28. 35	5. 53	·1378					
4. 11	29. 30	6. 11	·1388					
4. 26	29. 30	6. 30	·1370					
5. 2	32. 20	6. 40	·1369					
5. 27	32. 35	6. 55	·1392					
6. 12	33. 0	7. 36	·1378					
6. 23	33. 10	8. 7	·1374					
6. 34	31. 0	8. 24	·1372					
6. 42	28. 30	8. 40	·1375					
6. 54	24. 30	8. 49	·1373					
7. 13	29. 35	9. 6	·1385					
7. 26	31. 0	9. 27	·1372					
8. 0	31. 30	9. 41	·1377					
8. 39	30. 30	9. 54	·1372					
9. 26	31. 45	10. 5	·1374					
9. 47	30. 30	10. 37	·1373					
9. 59	28. 50	11. 20	·1380					
10. 10	28. 50	11. 28	·1376					
10. 24	28. 30	11. 42	·1375					
10. 28	29. 25	11. 50	·1371					
10. 41	29. 35	12. 2	·1373					
10. 54	27. 50	12. 12	·1372					
11. 26	28. 0	12. 24	·1373					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 15		July 15						
h m	° ′ ″	h m		h m		h m	°	°
11. 37	20. 28. 20	12. 34	·1371					
11. 58	31. 10	12. 41	·1373					
12. 10	31. 0	12. 44	·1369					
12. 22	31. 30	13 8	·1365					
12. 56	29. 35	13. 22	·1368					
13. 25	29. 55	13. 41	·1365					
13. 55	29. 20	14. 25	·1371					
14. 10	28. 55	15. 29	·1365					
14. 26	29. 15	16. 17	·1373					
14. 38	28. 5	16. 41	·1369					
14. 58	28. 0		***					
15. 11	27. 30	17. 59	·1371					
15. 23	28. 5	18. 25:	·1370					
15. 43	28. 5	18. 54	·1361					
15. 59	28. 30	19. 12	·1364					
16. 25	27. 10	19. 26	·1357					
17. 9	26. 30	19. 43	·1360					
	***	20. 4	·1355					
17. 39	26. 20	20. 40	·1364					
	***	21. 39	·1368					
17. 59	25. 0	22. 0	·1358					
18. 15	26. 50	22. 46	·1359					
18. 29	26. 25	23. 11	·1348					
18. 39	26. 35	23. 59	·1353					
18. 45	25. 5							
19. 7	28. 25							
19. 12	28. 25							
19. 38	30. 0							
19. 53	29. 30							
20. 16	31. 30							
20. 34	31. 30							
21. 15	28. 50							
21. 39	30. 30							
	***							
22. 12	30. 30							
23. 26	34. 55							
23. 30	34. 35							
23. 59	35. 25							
July 16		July 16		July 16		July 16		
0. 0	20. 35. 25	0. 0	·1353	0. 0	·03086	Min.	67 ·3	68 ·0
0. 10	35. 25	0. 14	·1361	0. 38	·03092	1. 0	67 ·6	68 ·2
0. 43	36. 5	0. 40	·1359	1. 2	·03092	9. 0	67 ·6	68 ·7
0. 53	36. 40	1. 43	·1369	1. 53	·03104	Max.	68 ·0	69 ·6
1. 2	36. 0	1. 56	·1367	4. 18	·03158	21. 0	67 ·5	68 ·8
1. 15	37. 0	2. 10	·1377	4. 27	·03147			
1. 44	36. 40	2. 34	·1366	5. 48	·03180			
1. 56	36. 20	2. 41	·1373	6. 53	·03172			
2. 8	36. 50	2. 45	·1367	8. 29	·03172			
2. 24	36. 0	2. 48	·1375	8. 56	·03155			
2. 28	36. 0	3. 6	·1365	14. 19	·03149			
2. 31	35. 30	3. 20	·1377	14. 45	·03154			
2. 39	36. 5		***	15. 16	·03142			
2. 43	35. 30	3. 48	·1365	15. 57	·03147			
2. 56	35. 30	3. 53	·1372	16. 11	·03139			
3. 2	34. 35	4. 14	·1369	16. 46	·03148			
3. 16	35. 30	4. 25	·1371	17. 6	·03132			
	***	4. 34	·1364	18. 26	·03137			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 16		July 16		July 16				
h m	° ′ ″	h m		h m		h m	°	°
3. 57	20. 32. 50	4. 43	·1371	19. 14	·03126			
4. 16	32. 30	4. 46	·1368	20. 37	·03137			
4. 25	32. 5	5. 12	·1378	23. 59	·03146			
4. 31	31. 5	5. 20	·1376					
4. 58	31. 5	5. 39	·1383					
5. 14	30. 30	5. 54	·1379					
5. 27	30. 30	6. 39	·1371					
5. 39	31. 30	6. 57	·1378					
6. 16	31. 30	7. 14	·1377					
6. 41	30. 50	7. 28	·1383					
6. 57	31. 35	8. 23	·1381					
7. 10	31 35	8. 38	·1391					
7. 14	31. 55	9. 19	·1376					
7. 28	31. 55	10. 13	·1385					
7. 53	29. 55	10. 16	·1381					
7. 58	30. 20	10. 59	·1378					
8. 10	30. 20	12. 14	·1378					
8. 41	33. 0	12. 27	·1382					
9. 12	31. 25	13. 19	·1371					
9. 38	32. 0	13. 30	·1377					
9. 44	31. 45	13. 41	·1374					
9. 58	32. 50	13. 50	·1377					
10. 10	31. 40	14. 29	·1370					
10. 14	32. 10	14. 57	·1375					
10. 24	31. 40	15. 57	·1370					
10. 39	32. 5	16. 25:	·1359					
11. 6	30. 25	17. 6	·1372					
11. 38	30. 25	17. 34	·1369					
11. 51	31. 30	18. 26	·1370					
12. 8	31. 0	18. 40	·1378					
12. 17	31. 30	20. 15	·1356					
12. 38	30. 30	20. 23	·1358					
12. 55	31. 30	21. 6	·1349					
12. 59	31. 10	21 53	·1347					
13. 26	32. 10	22. 6	·1352					
13. 39	31. 15	22. 25	·1347					
13. 46	31. 25	23. 15	·1356					
13. 58	30. 30	23. 59	·1336					
14. 16	30. 30							
14. 29	31. 5							
14. 45	33. 0							
14. 53	31. 40							
14. 59	31. 30							
15. 11	30. 5							
15. 34	29. 20							
15. 54	30. 30							
16. 8	32. 10							
16. 16	29. 55							
16. 28	31. 0							
16. 40	31. 0							
16. 53	32. 50							
16. 58	32. 10							
17. 4	30. 0							
17. 11	29. 10							
17. 26	28. 0							
17. 37	28. 30							
17. 56	28. 30							
18. 7	29. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 16								
h m	° ′ ″	h m		h m		h m	°	°
18. 11	20. 28. 30							
18. 15	29. 40							
18. 23	29. 0							
18. 30	30. 55							
18. 38	30. 55							
18. 55	29. 50							
19. 14	29. 45							
19. 24	27. 50							
19. 28	29. 0							
19. 41	28. 0							
19. 48	28. 50							
19. 56	28. 10							
20. 8	28. 50							
20. 11	28. 20							
20. 17	29. 5							
20. 27	28. 40							
20. 41	30. 30							
21. 23	29. 40							
22. 1	30. 30							
22. 11	29. 45							
22. 26	31. 10							
22. 32	30. 30							
23. 12	33. 25							
23. 24	32. 30							
23. 32	33. 0							
23. 44	32. 35							
23. 56	32. 15							
23. 59	33. 35							
July 17		July 17		July 17		July 17		
0. 0	20. 33. 35	0. 0	·1336	0. 0	·03146	1. 0	67 ·6	69 ·2
0. 14	33. 25	0. 10	·1338	1. 16	{·03148	3. 0	67 ·9	69 ·2
0. 39	34. 0	0. 18	·1356		{·03169	Max.	68 ·4	69 ·4
0. 58	33. 25	0. 52	·1364		***	9. 0	68 ·1	69 ·0
1. 9	35. 40	1. 3	·1379	3. 3	·03218	Min.	66 ·0	66 ·6
1. 19	35. 30	1. 30	·1380	4. 20	·03237	21. 0	66 ·7	67 ·5
1. 56	35. 35	1. 42	·1373	4. 29	·03229			
1. 59	36. 50	2. 5	·1356	5. 4	·03254			
2. 26	32. 30	2. 12	·1371	5. 12	·03243			
2. 42	33. 5	2. 22	·1361	8. 8	·03221			
2. 53	32. 30	2. 25	·1369	8. 24	·03200			
3. 11	34. 25	2. 48	·1372	8. 33	·03204			
3. 24	32. 30	3. 4	·1366	9. 7	·03183			
4. 2	34. 30	3. 18	·1361	12. 19	·03164			
4. 11	34. 30	3. 34	·1371	12. 34	·03142			
4. 14	34. 50	3. 44	·1366	12. 46	·03142			
4. 26	34. 20	4. 4	·1386	13. 13	·03092			
4. 39	34. 20	4. 10	·1388	13. 37	·03087			
4. 42	26. 30	4. 22	·1398	14. 6	·03111			
4. 48	23. 30	4. 28	·1383	15. 16	·03113			
5. 7	27. 50		***	15. 56	·03134			
5. 10	27. 50	4. 45	·1374	17. 11	·03142			
5. 18	28. 25	4. 57	·1401	18. 30	·03136			
5. 25	27. 30	5. 6	·1405	19. 0	·03119			
5. 33	29. 30	5. 13	·1387	21. 8	·03117			
5. 41	30. 0	5. 22	·1393		(†)			
5. 44	29. 0	5. 42	·1388					
5. 59	29. 35	5. 49	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 17		July 17						
h m	° ′ ″	h m		h m		h m	°	°
6. 6	20. 28. 40	6. 6	·1379					
6. 43	31. 25	6. 8	·1375					
6. 53	32. 30	6. 16	·1381					
6. 57	31. 30	6. 20	·1377					
7. 11	31. 20	6. 33	·1381					
7. 39	28. 0	6. 46	·1376					
7. 46	28. 50	7. 0	·1392					
7. 56	26. 45		***					
8. 10	31. 0	7. 26	·1384					
8. 17	24. 30	7. 29	·1387					
8. 29	27. 10	7. 35	·1381					
8. 39	26. 35	7. 42	·1384					
8. 56	30. 0	7. 57	·1382					
9. 1	30. 35	8. 9	·1385					
9. 24	29. 10	8. 21	·1379					
9. 41	30. 30	8. 34	·1393					
9. 56	30. 20	8. 42	·1386					
10. 7	29. 45	8. 50	·1388					
10. 18	30. 30	9. 25	·1368					
10. 41	31. 0	9. 42	·1372					
10. 53	31. 20	10. 11	·1370					
11. 9	30. 30	10. 22	·1375					
11. 26	31. 10	10. 44	·1372					
11. 38	32. 5	11. 15	·1371					
11. 42	31. 25	11. 42	·1380					
11. 54	28. 35	11. 48	·1378					
12. 11	31. 25	11. 56	·1381					
12. 27	28. 30	12. 3	·1380					
12. 38	31. 30	12. 25	·1388					
12. 49	39. 55	12. 57	·1376					
13. 39	28. 0	13. 27	·1389					
13. 54	28. 0	14. 4	·1373					
13. 58	26. 40	14. 12	·1377					
14. 11	29. 20	14. 24	·1373					
14. 23	27. 45	14. 51	·1376					
14. 28	27. 45	15. 27	·1362					
14. 41	29. 0	15. 42	·1361					
15. 26	24. 35	15. 53	·1368					
15. 41	24. 55	16. 18	·1368					
15. 54	27. 30	16. 44	·1363					
16. 9	25. 30	17. 49	·1373					
16. 23	26. 30	18. 27	·1367					
16. 29	26. 25	18. 39	·1369					
17. 7	26. 55	18. 46	·1368					
17. 56	24. 40	19. 14	·1327					
18. 9	24. 40	19. 28	·1340					
18. 32	29. 20	19. 36	·1340					
18. 46	30. 30	19. 50	·1347					
19. 3	30. 30	20. 32	·1344					
19. 11	32. 5	20. 59	·1331					
19. 13	31. 0	21. 8	·1340					
19. 26	32. 10		(†)					
19. 29	31. 40							
19. 39	32. 30							
19. 56	31. 40							
20. 7	31. 40							
20. 13	32. 30							
20. 26	31. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 17	° ′ ″							
h m		h m		h m		h m	°	°
20. 29	20. 32. 30							
20. 43	31. 40							
20. 59	32. 55							
21. 15	32. 30							
	(†)							
July 18		July 18		July 18		July 18		
1. 0	20. 36. 17*	1. 0	·1369*	1. 0	·03082*	Max.	67·0	67·0
3. 0	35. 6*	3. 0	·1381*	3. 0	·03085*	1. 0	66·4	66·2
9. 0	31. 58*	9. 0	·1430*	9. 0	·02956*	3. 0	64·3	64·7
21. 0	32. 21*	21. 0	·1366*	21. 0	·02802*	9. 0	62·2	62·5
						Min.	61·0	61·4
						21. 0	62·6	62·2
						22. 0	62·6	62·0
						23. 0	63·6	62·1
July 19		July 19		July 19		July 19		
	(†)		(†)		(†)	0. 0	62·7	62·4
1. 0	20. 38. 53*	1. 0	·1384*	1. 0	·02802*	1. 0	62·8	62·4
2. 42	37. 0	3. 0	·1381*	3. 7	·02799	2. 0	63·0	62·2
3. 12	36. 20	3. 15	·1382	5. 16	·02848	3. 0	63·2	63·0
3. 38	35. 30	3. 25	·1388		·02863	Max.	64·1	64·8
3. 57	35. 30	3. 34	·1384	7. 16	·02884	9. 0	63·8	64·4
4. 13	34. 0	3. 41	·1386	7. 32	·02878	Min.	60·5	61·9
4. 54	34. 30	3. 49	·1379	7. 53	·02889	21. 0	62·6	63·9
5. 14	32. 30	4. 9	·1392	8. 34	·02890	22. 0	62·5	63·0
5. 32	32. 40	4. 23	·1386	9. 4	·02883	23. 0	63·1	63·4
5. 44	32. 0	4. 36	·1391	12. 46	·02792			
6. 6	32. 30	4. 44	·1394	14. 0	·02801			
6. 26	31. 0	5. 9	·1408	15. 15	·02784			
6. 42	31. 30	5. 33	·1396	15. 46	·02789			
7. 9	29. 30	5. 40	·1399	16. 41	·02774			
7. 23	29. 30	5. 49	·1397	17. 56	·02779			
7. 41	25. 40	6. 0	·1406	18. 27	·02763			
7. 56	27. 10	6. 10	·1406	19. 9	·02781			
8. 1	26. 55	6. 27	·1397	21. 14	·02800			
8. 11	27. 0	6. 39	·1400		(†)			
8. 29	29. 5	6. 49	·1396					
9. 16	30. 50	6. 58	·1400					
9. 37	29. 35	7. 10	·1394					
9. 56	30. 30	7. 16	·1401					
10. 8	30. 30	7. 23	·1401					
10. 13	29. 55	7. 30	·1388					
10. 18	29. 55	7. 43	·1389					
10. 26	29. 20	7. 51	·1395					
10. 39	30. 55	8. 5	·1392					
10. 54	30. 50	8. 34	·1393					
10. 57	30. 0	8. 43	·1390					
11. 1	30. 0	9. 4	·1395					
11. 23	28. 0	9. 20	·1393					
11. 42	32. 30	10. 5	·1398					
12. 26	27. 20	10. 16	·1396					
12. 46	24. 30	10. 26	·1398					
13. 39	28. 30	10. 32	·1406					
13. 46	30. 10	10. 54	·1398					
13. 54	30. 10	11. 5	·1400					
14. 3	31. 45	11. 19	·1397					
14. 17	31. 0	11. 45	·1410					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 19	° ′ ″	July 19						
h m		h m		h m		h m	°	°
14. 26	20. 31. 10	11. 53	·1407					
14. 39	32. 5	12. 4	·1409					
15. 9	30. 0	13. 13	·1008					
15. 34	29. 10	13. 42	·1393					
15. 57	30. 15	13. 51	·1389					
16. 9	29. 55	14. 4	·1393					
16. 24	27. 35	14. 20	·1393					
16. 42	27. 35	14. 37	·1397					
16. 54	25. 30	15. 10	·1391					
17. 29	27. 0	16. 2	·1396					
17. 45	27. 20	16. 10	·1399					
18. 7	30. 45	16. 34	·1400					
18. 41	27. 30	17. 13	·1389					
18. 57	30. 0		***					
19. 10	33. 15	17. 52	·1379					
19. 16	33. 5	18. 11	·1387					
19. 33	34. 10	18. 48	·1379					
19. 39	32. 35	18. 59	·1379					
19. 43	33. 10	19. 25	·1361					
19. 54	32. 50	19. 36	·1364					
20. 11	34. 0	19. 44	·1359					
20. 41	33. 45	20. 6	·1374					
20. 45	31. 30		***					
21. 12	30. 0	21. 12	·1381					
	(†)		(†)					
July 20		July 20		July 20		July 20		
	(†)		(†)		(†)	0. 0	65·6	67·0
1. 0	20. 35. 18*	1. 0	·1379*	1. 0	·02759*	1. 0	66·6	65·3
3. 0	37. 23*	3. 0	·1377*	3. 0	·02866	2. 0	67·6	65·2
3. 24	35. 20	3. 36	·1386	4. 32	·02883	Max.	67·8	68·2
4. 27	32. 30	3. 56	·1375	7. 12	·02936	3. 0	65·7	66·0
4. 43	30. 5	4. 11	·1383	7. 30	·02924	9. 0	65·1	67·0
5. 13	31. 30	4. 22	·1378	12. 42	·02874	Min.	62·6	63·7
5. 47	30. 35	4. 36	·1385	13. 33	·02839	21. 0	64·4	65·6
6. 14	30. 50	4. 47	·1381	13. 56	·02831			
6. 40	30. 0	4. 59	·1387	16. 0	·02858			
6. 53	28. 50	5. 25	·1394	18. 23	·02846			
6. 57	28. 35	5. 59	·1390	19. 54	·02857			
7. 11	25. 10	6. 17	·1403	22. 56	·02875			
7. 26	28. 20	6. 34	·1388	23. 59	·02896			
7. 31	28. 20	7. 5	·1404					
7. 41	28. 55	7. 19	·1419					
7. 53	28. 25	7. 30	·1407					
7. 59	28. 50	7. 39	·1407					
8. 8	28. 0	7. 48	·1400					
8. 14	28. 0	7. 55	·1403					
8. 38	29. 20	8. 5	·1399					
8. 53	27. 50	8. 21	·1407					
8. 59	27. 40	8. 52	·1397					
9. 13	26. 40	9. 19	·1401					
9. 27	26. 50	10. 0	·1393					
9. 42	26. 25	10. 12	·1390					
9. 56	27. 5	10. 17	·1392					
10. 12	26. 20	10. 42	·1387					
10. 29	26. 55	11. 10	·1391					
10. 41	26. 55	11. 16	·1389					
10. 47	26. 15	11. 25	·1392					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

July 18. There were no photographic records for the three Magnetometers, owing to the gas being cut off throughout the day.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 20		July 20						
h m	° ′ ″	h m		h m		h m	°	°
11. 28	20. 26. 40	11. 41	·1389					
11. 39	26. 25	11. 52	·1392					
11. 59	26. 30	12. 6	·1388					
12. 41	30. 30	12. 54	·1387					
12. 53	32. 45	13. 26	·1401					
12. 58	32. 20	14. 49	·1386					
13. 25	32. 40	15. 50	·1390					
13. 57	27. 50	17. 22	·1390					
14. 31	26. 20	17. 39	·1387					
14. 56	27. 20	18. 1	·1390					
15. 40	27. 30	18. 41	·1383					
16. 41	26. 20		***					
16. 47	26. 35	21. 10	·1378					
16. 57	26. 5	21. 20	·1374					
17. 26	26. 15		***					
17. 33	25. 30	22. 22	·1376					
18. 23	27. 10	22. 51	·1368					
18. 34	28. 40	23. 0	·1343					
18. 41	28. 25	23. 51	·1346					
18. 54	30. 5	23. 59	·1353					
18. 58	29. 55							
19. 8	30. 30							
19. 43	29. 50							
19. 58	30. 40							
20. 11	30. 15							
20. 26	30. 50							
20. 54	30. 0							
21. 25	31. 30							
21. 34	33. 0							
21. 54	33. 20							
21. 57	33. 20							
22. 0	34. : 0							
22. 5	33. 30							
22. 12	34. 55							
22. 13	33. 0							
22. 24	34. 5							
22. 29	34. 5							
22. 43	36. 10							
22. 54	36. 0							
22. 59	37. 20							
23. 11	36. 55							
23. 28	38. 10							
23. 59	38. 30							
July 21		July 1		July 21		July 21		
0. 0	20. 38. 30	0. 0	·1353	0. 0	·02896	1. 0	65·8	67·3
0. 17	37. 40	0. 4	·1360	2. 2	·02928	3. 0	65·4	67·0
1. 39	38. 20	0. 38	·1367	4. 27	·02950	Max.	66·4	67·9
1. 53	37. 45	0. 44	·1342	6. 14	·02966	9. 0	65·8	67·4
2. 9	38. 10	1. 36	·1337	10. 0	·02970	Min.	63·8	65·2
2. 19	37. 35	2. 6	·1345	11. 15	·02957	21. 0	64·6	65·5
3. 26	36. 30	2. 33	·1338	11. 29	·02962			
3. 53	37. 0	2. 58	·1343	11. 57	·02924			
3. 59	36. 30	3. 16	·1352	12. 33	·02907			
4. 57	34. 30	3. 34	·1346	13. 2	·02895			
5. 24	33. 5	3. 55	·1357	14. 33	·02898			
6. 8	31. 30	4. 17	·1337	14. 48	·02907			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 21		July 21		July 21				
h m	° ′ ″	h m		h m		h m	°	
6. 38	20. 31. 50	4. 26	·1337	15. 12	·02886			
6. 53	31. 20	4. 45	·1346	17. 4:	·02919			
7. 13	31. 0	5. 4	·1344	18. 6	·02942			
8. 10	31. 5	5. 13	·1338	18. 39	·02961			
8. 28	30. 30	5. 26	·1338	20. 24	·02929			
9. 7	29. 45	5. 35	·1354	21. 39	·02924			
9. 56	25. 30	6. 20	·1374	23. 12	·02891			
10. 9	26. 5	6. 40	·1365		(†)			
10. 12	27. 0	7. 25	·1371					
10. 16	27. 0	7. 39	·1368					
10. 27	24. 55	8. 12	·1371					
10. 39	24. 55	8. 18	·1375					
10. 45	25. 25	9. 7	·1365					
11. 0	24. 55	9. 18	·1366					
11. 12	28. 30	9. 35	·1364					
11. 27	39. 40	10. 18	·1369					
11. 34	40. 0	10. 38:	·1365					
11. 48	35. 5	10. 50	·1368					
11. 58	34. 30	11. 27	·1356					
12. 13	30. 20	11. 39	·1359					
12. 29	30. 50	11. 52	·1351					
12. 56	24. 35	12. 49	·1384					
13. 28	25. 5	13. 14	·1374					
13. 40	27. 0	13. 19	·1374					
13. 43	26. 40	13. 47	·1356					
13. 56	27. 45	13. 57	·1355					
14. 34	28. 40	14. 6	·1357					
14. 58	40. 55	14. 32	·1353					
15. 31:	30. 10	15. 5	·1350					
16. 8	26. 10	15. 23	·1356					
16. 53	25. 0	15. 38	·1355					
17. 24	25. 30	16. 24	·1360					
17. 27	25. 0	16. 30	·1358					
17. 39	25. 50	18. 8	·1361					
18. 8	25. 30	19. 6	·1356					
18. 38	24. 55	19. 14	·1358					
18. 41	25. 40	20. 54	·1346					
18. 53	24. 15	22. 15	·1346					
19. 8	26. 45	23. 11	·1349					
19. 16	25. 30	23. 23	·1356					
19. 40	26. 0	23. 59	·1345					
	***							
20. 2	27. 20							
20. 9	26. 30							
	***							
20. 38	29. 0							
20. 56	28. 0							
21. 9	28. 50							
21. 26	27. 30							
21. 40	28. 40							
22. 8	28. 30							
23. 0	31. 55							
23. 9	32. 0							
23. 29	34. 20							
23. 41	34. 20							
23. 59	36. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 22 h m	° ′ ″	July 22 h m		July 22 h m		July 22 h m	°	°
0. 0	20. 36. 30	0. 0	·1345		(†)	1. 0	65·6	66·5
0. 11	37. 0	0. 52	·1352	1. 0	·02931*	3. 0	66·6	67·4
	(†)	1. 11	·1359	1. 46	·02954	Max.	67·2	67·7
1. 0	38. 37*	1. 39	·1360	2. 43	·03004	9. 0	64·6	65·9
2. 26	38. 0	1. 49	·1373	5. 8	·03007	Min.	63·6	65·1
2. 53	39. 5	1. 56	·1366	5. 36	·03019	23. 0	65·8	67·2
3. 9	37. 10	2. 4	·1372	6. 13	·03008			
3. 13	37. 10	2. 8	·1368	7. 36	·03027			
3. 38	35. 5	2. 14	·1374	8. 19	·03023			
3. 56	35. 0	2. 35	·1361	11. 16	·02931			
4. 13	33. 30	2. 52	·1373	12. 47	·02932			
4. 41	34. 40	3. 12	·1352	13. 45	·02917			
4. 56	34. 30	3. 36	·1354	14. 16	·02920			
5. 41	33. 45	3. 58	·1377	14. 53	·02898			
5. 48	34. 50	4. 14	·1361	15. 38	·02895			
6. 7	33. 0	4. 24	·1368	16. 23.	·02874			
6. 23	32. 45	4. 34	·1365	18. 23	·02941			
6. 41	29. 25	4. 43	·1370	19. 6	·02939			
6. 53	30. 0	5. 18	·1358	20. 15	·02958			
6. 57	29. 10	5. 45	·1374	21. 14	·02937			
7. 5	29. 10	5. 52	·1367	23. 0	·02941			
7. 11	28. 20	6. 26	·1358	23. 29	·02952			
7. 31	29. 0	6. 50	·1362		(†)			
8. 16	31. 0	7. 2	·1367					
8. 56	31. 20	7. 8	·1365					
9. 11	32. 5	7. 19	·1370					
9. 18	31. 10	7. 58	·1362					
9. 38	32. 40	8. 13	·1364					
9. 53	30. 10	8. 36	·1363					
10. 0	31. 0	8. 57	·1368					
10. 23	26. 0	9. 39	·1379					
10. 39	32. 30	10. 22	·1363					
10. 58	33. 0	10. 40	·1387					
11. 18	31. 30	11. 11	·1374					
11. 30	31. 0	12. 4	·1364					
11. 41	29. 0	12. 23	·1370					
11. 57	24. 20	12. 24	·1362					
12. 14	24. 20	13. 11	·1367					
12. 41	25. 30	13. 22	·1362					
13. 9	32. 20	13. 46	·1359					
13. 38	32. 30	14. 34	·1386					
14. 12	33. 15	14. 53	·1384					
14. 28	29. 5	15. 6	·1379					
14. 45	25. 30	15. 24	·1374					
15. 10	26. 30	15. 51	·1360					
15. 26	31. 20	16. 9	·1362					
15. 39	33. 50	16. 50	·1363					
15. 56	33. 5	16. 56	·1358					
16. 14	35. 35	17. 11	·1359					
16. 26	35. 35	17. 22	·1356					
16. 56	29. 50	17. 43	·1363					
17. 13	27. 45	18. 8	·1356					
17. 26	27. 10	18. 26	·1363					
17. 38	28. 20	19. 11	·1338					
17. 43	27. 30	19. 42	·1342					
17. 53	26. 20	20. 17	·1348					
17. 57	28. 0	21. 19.	·1339					
18. 2	25. 30	22. 18	·1341					
18. 24	20. 31. 0	22. 59	·1301					
18. 41	31. 45	23. 59	·1344					
18. 56	30. 30							
19. 5	29. 0							
19. 19	29. 45							
19. 26	28. 55							
19. 34	29. 30							
19. 41	28. 25							
19. 56	28. 35							
20. 13	32. 5							
20. 28	31. 50							
20. 41	33. 0							
21. 8	30. 0							
21. 42	30. 25							
22. 23	32. 10							
22. 56	34. 15							
23. 55	37. 0							
23. 59	36. 0							
July 23		July 23		July 23		July 23		
0. 0	20. 36. 0	0. 0	·1344		(†)	1. 0	66·8	67·8
0. 14	35. 10	0. 15	·1353	1. 0	·02986*	Max.	67·3	68·9
0. 25	35. 20	0. 56	·1358	6. 7	·03036	8. 0	67·1	68·3
0. 43	33. 50	1. 46	·1354	7. 10	·03043	Min.	65·0	65·6
1. 26	37. 0	2. 5	·1361	7. 43	·03037	21. 0	65·9	67·2
2. 8	38. 10	2. 12	·1357	15. 28	·03000			
2. 13	37. 50	2. 27	·1360	18. 0	·02987			
2. 37	37. 0	2. 32	·1357	19. 1	·02978			
2. 56	37. 50	2. 41	·1365	19. 53	·02964			
3. 5	36. 40	3. 4	·1350	21. 9	·02962			
3. 24	36. 5	3. 30	·1353		(†)			
4. 8	36. 45	3. 54	·1362					
4. 23	35. 35	4. 2	·1356					
4. 29	34. 25	4. 9	·1364					
4. 42	32. 20	4. 12	·1356					
5. 23	33. 25	4. 36	·1348					
6. 0	32. 30	4. 50	·1360					
6. 56	30. 10	5. 21	·1362					
7. 53	31. 5	5. 56	·1370					
9. 38	29. 50	6. 35	·1361					
10. 0	30. 10	6. 56	·1365					
10. 24	27. 5	9. 57	·1355					
10. 57	29. 30	10. 10	·1360					
11. 11	28. 5	11. 4	·1362					
11. 40	30. 0	11. 20	·1356					
11. 57	32. 5	12. 3	·1357					
13. 48	28. 35	12. 25	·1361					
14. 2	29. 5	14. 42	·1360					
14. 18	28. 40	15. 27	·1357					
14. 53	31. 0	16. 10	·1362					
15. 29	31. 25	16. 37	·1360					
16. 25	27. 30	16. 49	·1362					
16. 57	31. 25	17. 12	·1356					
17. 6	31. 0	17. 45	·1345					
17. 26	33. 10		(†)					
17. 39	32. 30	19. 32	·1337					
17. 48	34. 25	20. 37	·1340					
17. 56	34. 35	21. 5	·1336					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 23		July 23						
h m	° ′ ″	h m		h m		h m	°	°
18. 8	20. 35. 20	21. 20	·1332					
18. 19	34. 5	21. 44	·1331					
18. 36	34. 0	22. 21	·1339					
18. 53	35. 30	22. 27	·1336					
19. 33	28. 0	22. 48	·1344					
19. 46	29. 5	23. 29	·1344					
19. 56	28. 5	23. 59	·1348					
20. 8	29. 10							
20. 25	28. 0							
20. 54	31. 10							
21. 9	29. 30							
21. 54	30. 30							
22. 9	29. 50							
23. 14	33. 0							
23. 26	34. 20							
23. 59	35. 35							
July 24		July 24		July 24		July 24		
0. 0	20. 35. 35	0. 0	·1348		(†)	1. 0	67 ·2	67 ·3
0. 37	37. 45	0. 20	·1345	c. 54	·03002	3. 0	67 ·2	69 ·0
1. 11	37. 55	1. 44	·1349	2. 9	·03038	Max.	67 ·9	69 ·7
1. 18	37. 0	2. 10	·1342	6. 18	·03069	9. 0	66 ·4	69 ·0
1. 45	37. 0	2. 45	·1360	6. 41	·03081	Min.	66 ·1	67 ·3
2. 23	34. 15	3. 19	·1354	7. 13	·03079	21. 0	67 ·2	68 ·3
2. 29	36. 50	3. 25	·1359	11. 57	·03074			
3. 3	35. 50	4. 20	·1358	12. 39	·03035			
3. 26	34. 20	4. 32	·1368	13. 23	·03037			
4. 18	33. 10	5. 0	·1356	13. 53	·03018			
4. 29	33. 50	5. 10	·1356	15. 59:	·03047			
5. 8	33. 5	5. 15	·1366	18. 53	·03038			
5. 12	33. 50	5. 28	·1361	19. 54	·03040			
5. 23	33. 0	5. 41	·1365	21. 12	·03034			
5. 32	33. 0	5. 54	·1359	23. 59	·03051			
5. 43	32. 0	6. 9	·1359					
5. 59	32. 0	6. 24	·1349					
6. 11	30. 55	6. 43	·1362					
6. 27	28. 50	6. 56	·1356					
6. 43	29. 55	7. 15	·1367					
6. 58	28. 20	7. 35	·1359					
7. 23	30. 10	8. 23	·1356					
7. 43	30. 45	8. 44	·1362					
7. 58	30. 0	9. 10	·1359					
8. 27	29. 30	9. 19	·1362					
8. 53	30. 30	9. 41	·1359					
10. 9	31. 0	9. 53	·1362					
10. 25	30. 25	11. 33	·1356					
10. 32	29. 20	12. 4	·1378					
11. 2	28. 40	13. 0	·1330					
11. 32	28. 40	13. 56	·1361					
12. 0:	29. 25	14. 34	·1350					
12. 23	25. 50	15. 32	·1352					
12. 33	23. 20	18. 38	·1346					
12. 55	28. 50		***					
13. 18	33. 10	21. 11	·1338					
14. 11	24. 25	21. 23	·1333					
14. 26	26. 5	22. 3	·1336					
15. 28	28. 50		(†)					
17. 23	26. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 24								
h m	° ′ ″	h m		h m		h m	°	°
19. 2	20. 25. 55							
19. 26	26. 55							
20. 12	26. 35							
20. 41	26. 55							
20. 56	27. 55							
21. 30	28. 35							
22. 44	31. 50							
23. 41	36. 20							
23. 56	36. 55							
23. 59	37. 20							
July 25		July 25		July 25		July 25		
0. 0	20. 37. 20		(†)	0. 0	·03051	1. 0	69 ·8	70 ·5
1. 45	39. 20	1. 0	·1357	1. 38	{·03095	3. 0	69 ·6	70 ·8
	(†)	2. 36	·1381		{·03137	Max.	71 ·0	71 ·3
3. 19	38. 50	2. 50	·1376	4. 30	·03218	9. 0	69 ·1	70 ·2
3. 39	37. 45	3. 24	·1382	4. 39	{·03218	Min.	65 ·3	66 ·5
3. 56	37. 25	3. 56	·1364		{·03191	21. 0	66 ·6	68 ·0
4. 12	34. 20	4. 20	·1371	5. 42	·03192	22. 0	67 ·5	68 ·7
4. 25	34. 40	4. 43	·1366	7. 4	·03176	23. 8	68 ·2	69 ·0
4. 52	34. 40	4. 56	·1369	9. 30	·03163			
5. 9	33. 55	5. 30	·1362	10. 12	·03136			
5. 26	34. 55	5. 49	·1367	11. 35	·03106			
5. 38	34. 10	5. 55	·1365	14. 43	·03066			
6. 12	35. 25	6. 2	·1370	17. 7	·03050			
6. 56	34. 30	6. 31	·1363	18. 56	·03021			
7. 11	33. 0	6. 54	·1365	20. 11	·03024			
7. 33	34. 30	7. 19	·1373	20. 40	·03032			
8. 2	34. 30	8. 5	·1369	21. 13	·03018			
8. 44	32. 30	8. 17	·1371	22. 7	·03051			
9. 9	33. 30	8. 40	·1368	22. 38	·03065			
9. 18	31. 20	8. 47	·1369	23. 59	·03092			
9. 43	32. 30	9. 4	·1366					
10. 11	31. 20	9. 21	·1368					
10. 58	33. 5	9. 52	·1367					
12. 26	31. 55		***					
12. 39	31. 35	12. 57	·1373					
13. 28	32. 5	13. 19	·1371					
13. 41	31. 30	13. 42	·1375					
14. 11	31. 55	13. 52	·1371					
14. 30	30. 30	13. 58	·1374					
14. 42	32. 5	15. 0	·1374					
14. 55	31. 50	15. 22	·1370					
15. 8	33. 0	17. 5	·1370					
15. 23	33. 20	17. 12	·1373					
15. 26	36. 0	17. 28	·1368					
15. 43	35. 10	18. 5	·1371					
15. 59	35. 15	18. 30	·1365					
16. 9	34. 35	18. 42	·1364					
16. 26	33. 10	19. 12	·1350					
16. 43	31. 25	20. 3	·1365					
17. 6	32. 0	20. 49	·1359					
17. 24	29. 30	21. 50	·1361					
17. 35	30. 5	22. 25	·1357					
17. 42	30. 0	22. 42	·1350					
18. 11	31. 55	22. 51	·1357					
18. 23	31. 20	23. 14	·1350					
18. 39	33. 10		(†)					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

July 24^{d}. 22^{h}. 3^{m}. to July 25^{d}. 1^{h}. 0^{m}. Damper experiments with the Horizontal Force Magnet were in progress.

July 25^{d}. 1^{h}. 45^{m}. to 3^{h}. 10^{m}. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 25								
h m	° ′ ″	h m		h m		h m	°	°
18. 44	20. 32. 25							
19. 8	32. 25							
19. 29	33. 35							
19. 59	32. 30							
	***							
21. 8	33. 10							
21. 53	34. 30							
22. 26	37. 0							
22. 37	37. 0							
22. 56	39. 40							
23. 47	42. 30							
23. 59	42. 5							
July 26		July 26		July 26		July 26		
0. 0	20. 42. 5		(†)	0. 0	·03092	0. 0	68 ·5	69 ·2
0. 9	42. 15	0. 11	·1365	2. 7	·03142	1. 0	68 ·5	69 ·7
0. 38	41. 30	1. 14	·1369	3. 21	·03139	2. 10	68 ·5	69 ·7
0. 53	42. 15	1. 26	·1359	6. 39	·03167	3. 0	68 ·5	69 ·9
1. 1	41. 50	1. 31	·1364	6. 53	·03158	Max.	69 ·7	70 ·9
1. 38	42. 30	1. 40	·1362	7. 11	·03171	9. 0	66 ·0	68 ·0
2. 8	39. 50	2. 19	·1381	7. 45	·03162	Min.	59 ·8	61 ·7
2. 33	39. 15	3. 16	·1379	8. 40	·03151	21. 0	64 ·1	66 ·0
4. 11	39. 10	3. 27	·1381	13. 46	·02967	22. 0	64 ·6	66. 1
4. 28	38. 0	3. 40	·1378	13. 59	·02962	23. 0	64 ·8	67 ·0
4. 47	38. 40	4. 3	·1381	15. 30:	·02891			
5. 23	37. 25	4. 33	·1374	16. 22	·02882			
5. 41	37. 20	5. 0	·1377	17. 30	·02835			
5. 48	36. 50	5. 4	·1374	18. 34	·02831			
6. 12	37. 25	5. 14	·1368	20. 26	·02843			
6. 37	36. 30	5. 52	·1367	21. 19	·02864			
6. 41	36. 55	6. 28:	·1385		(†)			
6. 56	27. 35	6. 49	·1371					
7. 11	31. 0	7. 3	·1391					
7. 34	31. 35	7. 25	·1376					
7. 43	33. 30	7. 40	·1377					
8. 8	33. 10	7. 46	·1371					
8. 24	35. 5	8. 6	·1369					
8. 56	35. 45	9. 39	·1377					
9. 33	35. 20	11. 32	·1379					
10. 11	36. 0	12. 58	·1381					
10. 25	35. 10	14. 3	·1389					
10. 41	35. 40	14. 52	·1388					
10. 54	34. 55	15. 44	·1379					
11. 46	35. 45	17. 13	·1383					
12. 8	33. 40	18. 13	·1375					
12. 43	34. 5	18. 35	·1379					
12. 54	34. 30	19. 32	·1369					
13. 9	35. 50	19. 54	·1362					
13. 14	35. 50	20. 30	·1361					
13. 24	34. 55	21. 2	·1364					
13. 52	39. 0	21. 42	·1358					
14. 8	38. 15	22. 20	·1366					
14. 12	36. 25	22. 48	·1364					
14. 25	37. 55	23. 48	·1367					
14. 41	36. 0		(†)					
15. 9	31. 40							
15. 41	30. 55							
16. 7	31. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 26								
h m	° ′ ″	h m		h m		h m	°	°
16. 55	20. 30. 5							
17. 37	29. 50							
17. 58	30. 20							
18. 16	28. 55							
18. 39	31. 10							
18. 53	31. 20							
19. 52	34. 10							
20. 25	36. 15							
21. 8	36. 35							
21. 30	34. 45							
	(†)							
23. 26	37. 35							
23. 59	39. 50							
July 27		July 27		July 27		July 27		
0. 0	20. 39. 50		(†)		(†)	0. 0	65 ·7	67 ·0
2. 30	38. 5	0. 33	·1363	1. 0	·02981*	1. 0	65 ·7	68 ·0
2. 43	38. 25	1. 11	·1361	2. 25	·02975	2. 0	66 ·7	68 ·2
3. 11	37. 10	2. 34	·1370	4. 16	·03011	3. 0	66 ·7	69 ·0
3. 26	37. 20	2. 45	·1373	6. 54	·03040	Max.	68 ·1	70 ·0
3. 43	36. 30	3. 19	·1368	8. 54	·03053	9. 0	67 ·5	68 ·8
5. 0	36. 0	3. 33	·1372	13. 0	·02977	Min.	62 ·3	63 ·3
5. 56	33. 45	3. 48	·1370	18. 33	·02881	21. 0	63 ·8	65 ·0
7. 11	34. 5	3. 57	·1374	19. 27	·02884			
10. 39	33. 45	4. 18	·1371	22. 14	·02837			
10. 56	34. 10	4. 36	·1375	23. 59	·02849			
11. 38	33. 45	5. 12	·1373					
11. 58	33. 40	5. 40	·1375					
12. 18	32. 25	5. 56	·1382					
13. 44	32. 0	6. 44	·1380					
13. 56	32. 30	7. 4	·1382					
15. 9	32. 30	7. 26	·1379					
15. 45:	33. 10	9. 12	·1373					
16. 37	31. 15	9. 43	·1373					
17. 13	29. 50	10. 14	·1369					
17. 52	30. 0	10. 44	·1372					
18. 11	29. 25	11. 35	·1369					
19. 56	30. 0	12. 26	·1377					
23. 59	39. 0	13. 40	·1371					
		15. 8	·1374					
		15. 26	·1372					
		16. 46	·1376					
		19. 40	·1370					
		21. 18	·1359					
		21. 49	·1358					
		23. 59	·1368					
July 28		July 28		July 28		July 28		
0. 0	20. 39. 0	0. 0	·1368	0. 0	·02849	1. 0	65 ·6	66 ·4
1. 27	39. 30	0. 50	·1370	2. 33	·02910	3. 0	66 ·0	67 ·5
2. 44	37. 10	1. 45	·1369	7. 41	·02967	Max.	67 ·9	68 ·1
3. 36	36. 25	2. 26	·1366	8. 54	·02967	9. 0	65 ·6	67 ·0
6. 30	35. 30	3. 6	·1367	11. 55	·02881	Min.	61 ·2	62 ·3
6. 45	36. 10	3. 17	·1369	13. 39	·02869	21. 0	63 ·5	64 ·8
7. 9	34. 0	3. 37	·1368	15. 56	·02823			
7. 56	35. 0	4. 21	·1369	18. 47	·02793			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

July 26d. 21h. 30m to 23h. 24m. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 28		July 28		July 28				
h m	° ′ ″	h m		h m		h m	°	°
8. 28	20. 36. 0	4. 42	·1375	20. 56	·02794			
8. 56	35. 0	6. 18	·1383	22. 58	·02821			
9. 35	35. 20	6. 52	·1378	23. 59	·02832			
10. 42	34. 30	7. 23	·1379					
10. 58	33. 10	7. 47	·1382					
11. 11	34. 35	9. 26	·1377					
11. 25	32. 30	9. 58	·1380					
11. 41	31. 30	10. 26	·1378					
12. 3	32. 30	10. 38	·1383					
12. 26	32. 50	10. 52	·1380					
12. 39	32. 5	11. 3	·1383					
13. 11	33. 0	11. 20	·1378					
15. 4	32. 55	12. 25	·1380					
15. 36	32. 0	14. 48	·1388					
15. 45	32. 0	16. 52	·1383					
16. 11	30. 40	17. 26	·1384					
17. 41	28. 40	18. 35	·1377					
18. 40	28. 15	21. 59	·1367					
18. 57	29. 0	22. 12	·1369					
19. 53	29. 40	23. 2	·1364					
21. 40	33. 35 (†)	23. 59	·1370					
23. 55	37. 0							
23. 59	37. 35							
July 29		July 29		July 29		July 29		
0. 0	20. 37. 35	0. 0	·1370	0. 0	·02832	1. 0	65 ·0	66 ·5
1. 8	39. 25	1. 32	·1363	5. 13	·02912	3. 0	65 ·6	67 ·2
1. 43	38. 15	2. 40	·1377	5. 33	·02930	Max.	66 ·8	68 ·4
2. 36	37. 45	3. 12	·1378	5. 58	·02922	9. 0	65 ·9	67 ·2
3. 8	37. 0	3. 30	·1385	9. 3	·02957	Min.	63 ·8	65 ·2
3. 23	37. 20	3. 52	·1381	11. 24	·02917	22. 30	65 ·0	66 ·5
4. 7	36. 40	3. 57	·1383	15. 27	·02883			
4. 12	35. 50	4. 9	·1376	18. 26	·02892			
4. 25	35. 50	4. 35	·1389	20. 26	·02893			
4. 34	36. 25	4. 40	·1386	23. 59	·02865			
4. 41	35. 45	4. 57	·1391					
4. 49	35. 55	5. 24	·1377					
5. 18	34. 25	5. 34	·1385					
5. 25	35. 30	5. 38	·1384					
5. 37	35. 45	5. 56	·1364					
6. 0	34. 25	6. 34	·1379					
6. 25	33. 30	7. 23	·1382					
6. 45	34. 35	9. 19	·1381					
7. 5	34. 55	9. 35	·1387					
7. 14	34. 30	9. 46	·1384					
7. 56	35. 5	10. 12	·1387					
8. 26	33. 50	10. 18	·1386					
9. 8	33. 25	10. 37	·1387					
9. 28	33. 40	11. 12	·1382					
9. 42	34. 5	11. 27	·1385					
9. 58	34. 5	11. 41	·1380					
10. 25	33. 0		***					
10. 41	33. 10	13. 8	·1383					
10. 53	32. 30	13. 19	·1380					
11. 9	32. 35	13. 41	·1383					
11. 14	31. 55	14. 8	·1384					
11. 33	32. 35	14. 54	·1380					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 29		July 29						
h m	° ′ ″	h m		h m		h m	°	°
11. 46	20. 31. 10	15. 11	·1385					
12. 7	31. 30	16. 48	·1384					
12. 26	31. 15	17. 11	·1379					
12. 40	32. 10	17. 24	·1384					
12. 58	31. 35	17. 49	·1384					
13. 16	29. 30	19. 27	·1371					
14. 26	31. 10	21. 39	·1368					
14. 42	33. 30	22. 10	·1364					
15. 10	33. 40	22. 44	·1373					
15. 43	30. 55	23. 10	·1370					
16. 49	28. 50	23. 15	·1372					
16. 57	28. 50	23. 25	·1367					
17. 8	28. 10	23. 40	·1368					
17. 14	29. 0	23. 59	·1359					
17. 26	28. 5							
17. 40	28. 50							
17. 45	28. 10							
18. 9	28. 50							
18. 15	27. 55							
18. 27	28. 30							
18. 42	27. 55							
19. 16	28. 50							
19. 55	29. 30							
20. 13	30. 50							
20. 43	31. 5							
21. 9	30. 30							
21. 26	32. 0							
21. 43	32. 30							
23. 13	38. 0							
23. 59	40. 30							
July 30		July 30		July 30		July 30		
0. 0	20. 40. 30	0. 0	·1359	0. 0	·02865	1. 0	65 ·6	66 ·1
0. 22	41. 30	0. 12	·1363	4. 57	·02938	Max.	66 ·4	67 ·8
0. 34	41. 5	0. 23	·1359	6. 39	·02952	8. 0	64 ·8	66 ·4
0. 59	41. 30	0. 42	·1371	11. 51	·02846	Min.	60 ·5	61 ·0
1. 11	40. 35	1. 14	·1363	13. 31	·02789	21. 0	63 ·4	64 ·2
1. 29	40. 25	1. 24	·1367	16. 8	·02737			
2. 12	37. 50	1. 52	·1365	16. 54	·02731			
2. 43	37. 35	2. 32	·1376	21. 56	·02759			
2. 58	37. 55	2. 45	·1379	23. 59	·02777			
3. 28	36. 50	2. 59	·1385					
4. 29	36. 15	3. 22	·1382					
5. 9	36. 20	4. 10	·1384					
5. 34	35. 5	4. 34	·1381					
6. 9	34. 35	5. 10	·1386					
6. 56	34. 15	5. 40	·1380					
7. 16	34. 25	6. 41	·1386					
9. 59	32. 30	6. 51	·1384					
10. 14	31. 30	8. 1	·1387					
10. 45	32. 5	8. 34	·1381					
11. 30	30. 45	9. 14	·1384					
13. 7	31. 30	12. 8	·1380					
13. 41	30. 20	13. 13	·1386					
14. 29	29. 50	14. 22	·1384					
14. 52	30. 20	16. 24	·1384					
15. 12	29. 40	20. 45	·1372					
16. 24	29. 30	21. 19	·1376					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

July 28, Damper experiments with the Declination Magnet were in progress from $21^h.\ 40^m.$ to $23^h.\ 50^m.$

DECLINATION MAGNET.—Damper experiments were made between July $30^d.\ 21^h.\ 45^m.$ and July $31^d.\ 0^h.\ 15^m.$, and also from $31^d.\ 21^h.\ 45^m.$ to $31^d.\ 23^h.\ 59^m.$

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 30		July 30						
h m	° ′ ″	h m		h m		h m	°	°
16. 41	20. 31. 30	21. 48	·1374					
16. 59	31. 15	22. 49	·1379					
17. 38	30. 50	23. 34	·1376					
17. 55	31. 30	23. 59	·1380					
18. 3	30. 50							
19. 4	31. 50							
19. 16	31. 10							
20. 26	32. 5							
21. 45	34. 30							
	(†)							
July 31		July 31		July 31		July 31		
	(†)	0. 0	·1380	0. 0	·02777	1. 0	64 ·4	66 ·0
0. 17	20. 37. 35	0. 27	·1379	3. 2	·02831	3. 0	64 ·9	66 ·3
1. 0	38. 30	1. 18	·1375	8. 59	·02862	Max.	65 ·2	66 ·3
1. 41	37. 30	1. 28	·1378	10. 46	·02813	9. 0	63 ·7	65 ·0
2. 9	37. 40	1. 40	·1377	13. 34	·02784	Min.	61 ·5	62 ·4
2. 58	35. 50	2. 15	·1387	16. 56	·02764	21. 0	62 ·4	63 ·8
3. 57	34. 30	2. 53	·1383	19. 11	·02782			
4. 56	34. 30	3. 0	·1386	22. 33	·02720			
5. 13	33. 50	3. 14	·1384	23. 59	·02683			
5. 33	34. 10	3. 55	·1386					
5. 54	33. 50	4. 56	·1391					
6. 24	33. 50	5. 3	·1387					
6. 39	33. 20	5. 8	·1390					
7. 27	33. 45	5. 18	·1388					
8. 18	33. 30	5. 37	·1391					
8. 44	32. 30	5. 46	·1388					
9. 29	32. 30	6. 19	·1387					
9. 43	32. 40	6. 32	·1384					
10. 6	32. 20	6. 41	·1385					
11. 29	32. 15	6. 48	·1384					
14. 41	30. 45	7. 52	·1384					
15. 8	31. 10	8. 12	·1387					
15. 56	30. 10	8. 37	·1384					
16. 46	30. 0	9. 20	·1387					
17. 13	29. 5	9. 36	·1389					
17. 43	29. 35	14. 35	·1384					
18. 44	29. 20	14. 49	·1387					
19. 58	30. 10	16. 43	·1387					
21. 45	33. 30	17. 14	·1385					
	(†)	18. 9	·1386					
23. 59	34. 30	20. 12	·1382					
		21. 43	·1375					
		22. 52	·1384					
		23. 59	·1381					
Aug. 1		Aug. 1		Aug. 1		Aug. 1		
0. 0	20. 34. 30	0. 0	·1381	0. 0	·02683	1. 0	61 ·7	63 ·0
1. 38	36. 35	1. 0	·1384	2. 27	·02729	3. 0	61 ·8	63 ·0
2. 28	35. 40	2. 39	·1377	6. 48	·02718	Max.	63 ·2	64 ·3
2. 38	35. 0	3. 19	·1385	8. 28	·02722	9. 0	60 ·0	62 ·0
4. 46	31. 40	3. 49	·1386	11. 31	·02675	Min.	60 ·0	61 ·3
5. 24	31. 20	4. 12	·1391	18. 38	·02676	21. 0	61 ·6	62 ·7
5. 53	32. 5	4. 46	·1388	21. 56	·02662	22. 0	60 ·4	60 ·7
6. 44	33. 20	6. 4	·1396	22. 59	·02610	23. 30	61 ·2	61 ·8
7. 38	33. 35	6. 22	·1396	23. 59	·02618			
8. 15	32. 50	7. 25	·1405					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 1		Aug. 1						
h m	° ′ ″	h m		h m		h m	°	°
8. 57	20. 33. 20	8. 20	·1399					
9. 26	32. 30	8. 48	·1398					
9. 32	32. 50	9. 7	·1400					
9. 43	32. 5	9. 19	·1397					
10. 14	32. 40	9. 54	·1399					
10. 26	32. 25	10. 10	·1398					
11. 7	32. 0	11. 14	·1401					
11. 55	32. 30	12. 0	·1398					
12. 0	33. 5	12. 23	·1403					
12. 11	31. 50	13. 9	·1399					
12. 19	32. 5	13. 25	·1402					
12. 30	31. 10	13. 55	·1404					
13. 7	31. 15	14. 38	·1396					
13. 28	32. 50	14. 56	·1393					
13. 46	31. 10	15. 14	·1386					
13. 58	31. 0	15. 44	·1392					
14. 12	29. 35	16. 3	·1389					
14. 26	28. 50	16. 30	·1394					
15. 0	29. 5	17. 33	·1389					
15. 44	30. 55	18. 22	·1389					
16. 8	29. 35	19. 40	·1383					
16. 14	29. 35	19. 46	·1385					
16. 43	28. 10	20. 20	·1381					
16. 56	28. 10	20. 51	·1389					
17. 8	27. 30	21. 26	·1384					
17. 17	28. 10	22. 45	·1389					
17. 44	27. 0	22. 59	·1392					
18. 3	26. 40	23. 6	·1391					
18. 33	27. 30	23. 35	·1402					
18. 42	27. 0	23. 42	·1396					
19. 23	27. 0	23. 59	·1404					
19. 42	28. 10							
19. 56	27. 55							
20. 13	29. 5							
20. 25	28. 40							
20. 57	31. 35							
21. 35	31. 50							
	(†)							
Aug. 2		Aug. 2		Aug. 2		Aug. 2		
	(†)	0. 0	·1404	0. 0	·02618	0. 0	61 ·2	61 ·2
0. 20	20. 39. 35	0. 16	·1411	2. 2	·02678	1. 0	61 ·8	63 ·0
0. 38	42. 35	0. 25	·1399	3. 43	·02738	2. 0	62 ·1	63 ·4
0. 43	40. 25	0. 39	·1418	4. 48	·02736	3. 0	62 ·1	63 ·7
0. 57	39. 55	0. 56	·1390	5. 39	·02715	Max.	62 ·3	63 ·7
1. 11	41. 30	1. 5	·1402	5. 46	·02752	9. 0	60 ·8	62 ·3
1. 41	41. 20	1. 34	·1404	5. 54	·02700	21. 0	60 ·5	62 ·0
1. 49	42. 30	1. 41	·1398	6. 4	·02723	22. 20	57 ·9	59 ·6
1. 56	42. 50	1. 55	·1408	6. 7	·02702	23. 0	57 ·4	58 ·7
2. 11	43. 25	1. 58	·1407	6. 18	·02732	Min.	57 ·4	58 ·7
2. 18	42. 55	2. 15	·1418	6. 23	·02717			
2. 34	44. 10	2. 23	·1416	6. 27	·02748			
2. 42	43. 45	2. 28	·1419	6. 43	·02605			
2. 53	43. 45	2. 38	·1424	6. 54	·02674			
2. 56	43. 5	2. 50	·1426	6. 58	·02542			
3. 2	43. 20	3. 5	·1416	7. 0	·02553			
3. 11	41. 55	3. 11	·1420	7. 8	·02321			
3. 25	43. 0	3. 13	·1415	7. 16	·02522			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

August 1^{d}. 21^{h}. 35^{m} to August 2^{d}. 0^{h}. 15^{m}. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 2		Aug. 2		Aug. 2		h m	°	°
h m	° ′ ″	h m		h m				
3. 33	20. 40. 50	3. 19	·1416	7. 22	·02526			
3. 41	38. 40	3. 22	·1414	7. 29	·02570			
3. 53	40. 20	3. 25	·1415	7. 35	·02637			
3. 59	38. 30	3. 30	·1413	7. 39	·02578			
4. 11	39. 0	3. 38	·1417	7. 46	·02729			
4. 20	37. 25	3. 43	·1414	7. 54	·02518			
4. 43	38. 55	3. 46	·1425	7. 56	·02609			
4. 55	40. 40	3. 51	·1422	7. 59	·02609			
5. 4	41. 50	3. 57	·1429	8. 11	·02864			
5. 12	40. 5	4. 10	·1399	8. 14	·02798			
5. 32	40. 45	4. 16	·1383	8. 19	·02807			
5. 53	40. 20	4. 36	·1394	8. 26	·02752			
5. 56	45. 10	4. 42	·1393	8. 41	·02789			
6. 8	41. 0	4. 53	·1407	9. 49	·02661			
6. 12	45. 0	4. 55	·1406		***			
6. 14	39. 40	5. 7	·1420	10. 48	·02696			
6. 24	40. 55	5. 12	·1411	11. 1	·02682			
6. 27	36. 5	5. 18	·1411	11. 9	·02688			
6. 35	37. 40	5. 24	·1406	11. 31	·02639			
6. 42	28. 50	5. 34	·1408	11. 54	·02638			
6. 56	40. 40	5. 48	·1403	12. 9	·02572			
7. 0	39. 15	5. 56	·1429	12. 13	·02579			
7. 8	27. 0	6. 4	·1401	12. 22	·02543			
7. 16	42. 15	6. 19	·1430	12. 43	·02557			
7. 23	31. 55	6. 43	·1524	12. 59	·02468			
7. 43	46. 30	6. 49	·1476	13. 6	·02437			
7. 45	51. 10	6. 59	·1406	13. 11	·02339			
7. 54	26. 15	7. 4	·1416	13. 16	·02326			
8. 3	55. 50	7. 10	·1374	13. 23	·02265			
8. 8	51. 20	7. 18	·1365	13. 32	·02155			
8. 14	27. 10	7. 36	·1420	13. 38	·02141			
8. 20	23. 10	7. 45	·1437	14. 0	·02400			
8. 29	30. 10	7. 46	·1390	14. 9	·02432			
8. 38	29. 30	8. 0	·1441	14. 22	·02406			
8. 43	30. 5	8. 10	·1382	15. 3:	·02576			
8. 56	29. 10	8. 19	·1409	15. 31:	·02632			
9. 11	29. 35	8. 21	·1404	16. 28	·02682			
9. 14	28. 5	8. 30	·1409	16. 55	·02671			
9. 23	26. 35	8. 39	·1394	16. 59	·02660			
9. 33	28. 30	8. 46	·1384	17. 3	·02684			
9. 39	21. 20	8. 51	·1370		***			
9. 56	27. 55	9. 5	·1365	17. 36	·02663			
10. 9	30. 40	9. 10	·1365	17. 38	·02704			
10. 23	27. 30	9. 12	·1357	17. 42	·02642			
10. 29	27. 40	9. 16	·1358	17. 54	·02693			
10. 36	25. 40	9. 24	·1356	17. 57	·02618			
10. 42	27. 35	9. 40	·1365	18. 2	·02581			
10. 53	26. 20	9. 46	·1362		***			
10. 58	27. 25	9. 56	·1368	18. 24	·02575			
11. 8	27. 25	10. 2	·1362	18. 36	·02504			
11. 21	30. 30	10. 5	·1364	18. 59	·02583			
11. 42	28. 0	10. 14	·1359	19. 33	·02518			
11. 56	28. 50	10. 19	·1365		***			
12. 2	35. 5	10. 23	·1364	20. 9	·02511			
12. 10	30. 10	10. 33	·1378	20. 18	·02469			
12. 23	26. 5	10. 41	·1365	20. 31	·02511			
12. 28	29. 5	10. 44	·1368	20. 39	·02371			
12. 37	29. 5	10. 52	·1366		(†)			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 2		Aug. 2		Aug. 2		h m	°	°
h m	° ′ ″	h m		h m				
12. 54	20. 34. 10	10. 56	·1372	21. 0	·02646*			
13. 5	33. 10	11. 5	·1368	21. 42	·02600			
13. 11	35. 5	11. 12	·1371	22. 1	·02669			
13. 18	40. 30	11. 22	·1368		***			
13. 26	41. 25	11. 41	·1363	22. 23	·02669			
13. 28	42. 50	11. 49	·1365	22. 32	·02717			
13. 46	34. 30	12. 6	·1385	22. 56	·02723			
13. 54	31. 10	12. 9	·1375		***			
13. 57	31. 10	12. 15	·1387	23. 14	·02667			
14. 13	43. 20	12. 25	·1378		***			
14. 26	36. 0	12. 32	·1382	23. 44	·02640			
14. 31	36. 10	12. 41	·1368	23. 59	·02670			
14. 43	30. 0	13. 10	·1328					
15. 17	28. 0	13. 12	·1331					
15. 33	28. 30	13. 19	·1309					
15. 53	28. 0	13. 29	·1299					
16. 2	29. 5	13. 50	·1250					
16. 25	27. 30	14. 19	·1314					
16. 28	25. 5	14. 25	·1326					
16. 33	30. 25	14. 40	·1353					
16. 45	24. 0	15. 4	·1364					
16. 58	21. 30	15. 13	·1362					
17. 4	18. 5	15. 27	·1366					
17. 11	29. 30	15. 38	·1364					
17. 12	26. 30	15. 56	·1369					
17. 19	23. 0	16. 4	·1366					
17. 21	18. 25	16. 20	·1367					
17. 27	27. 50	16. 24	·1364					
17. 28	22. 10	16. 33	·1371					
17. 32	18. 35	16. 41	·1369					
17. 34	22. 10	17. 9	·1383					
17. 41	16. 20	17. 14	·1370					
17. 45	25. 50	17. 26	·1383					
17. 51	12. 30	17. 32	·1377					
17. 59	38. 30	17. 42	·1381					
18. 3	28. 25	17. 44	·1365					
18. 7	23. 30	17. 48	·1385					
18. 12	25. 0	17. 52	·1368					
18. 24	43. 10	17. 56	·1413					
18. 26	32. 0	18. 8	·1300					
18. 28	43. 10	18. 24	·1328					
18. 29	35. 50	18. 26	·1347					
18. 34	37. 55	18. 28	·1325					
18. 36	16. 10	18. 35	·1330					
18. 43	8. 5	18. 43	·1299					
18. 59	22. 10	18. 52	·1338					
19. 11	25. 55	19. 6	·1386					
19. 14	33. 0	19. 19	·1329					
19. 29	38. 40	19. 40	·1252					
19. 40	27. 50		(†)					
19. 42	40. 10	21. 0	·1254*					
19. 45	31. 15	21. 1	·1267					
19. 46	13. 35	21. 8	·1248					
20. 0	50. 0		(†)					
20. 2	46. 0	21. 20	·1320					
20. 7	51. 30	21. 26	·1248					
20. 10	22. 40	21. 40	·1254					
20. 13	19. 30		(†)					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 2		Aug. 2						
h m	° ′ ″	h m		h m		h m	°	°
20. 15	20. 15. 15	22. 22	·1250					
20. 28	37. 10	22. 39	·1300					
20. 29	27. 30	22. 42	·1291					
20. 38	28. 55	22. 48	·1302					
20. 43	3. 50	22. 53	·1296					
21. 0	54. 0	23. 16	·1346					
21. 9	24. 5	23. 25	·1326					
21. 24	51. 30	23. 41	·1359					
21. 26	46. 10	23. 46	·1345					
21. 29	42. 10	23. 59	·1366					
21. 34	40. 10							
21. 39	37. 15							
21. 40	34. 10							
21. 43	31. 5							
21. 45	20. 7. 15							
22. 11	21. 1. 0							
22. 13	20. 47. 50							
22. 25	59. 5							
22. 26	30. 0							
22. 43	59. 20							
22. 44	43. 25							
22. 57	59. 45							
22. 58	45. 0							
22. 59	46. 40							
23. 0	33. 35							
23. 8	52. 0							
23. 10	45. 30 ***							
23. 42	38. 15							
23. 47	44. 10							
23. 54	40. 50							
23. 55	44. 30							
23. 57	44. 0							
23. 59	44. 35							
Aug. 3		Aug. 3		Aug. 3		Aug. 3		
0. 0	20. 44. 35	0. 0	·1366	0. 0	·02670	Min.	58 ·8	59 ·5
0. 11	47. 0	0. 11	·1341	0. 28	·02858	0. 0	58 ·8	59 ·5
0. 20	42. 30	0. 21	·1365	0. 46	·02886	1. 0	59 ·8	61 ·0
0. 27	37. 30	0. 25	·1358	0. 59	·02809	2. 0	60 ·3	61 ·6
0. 46	49. 40	0. 34	·1374	1. 24	·02898	3. 0	60 ·7	61 ·4
0. 56	20. 47. 5		(†)	1. 56	·02928	Max.	61 ·5	62 ·7
1. 11	21. 5. 0	1. 0	·1361*	2. 16	·02969	9. 0	59 ·6	61 ·2
1. 12	20. 55. 50	3. 0	·1415*	2. 41	·02923	Min.	59 ·4	60 ·5
1. 17	48. 45	3. 19	·1420	3. 3	·03151	21. 0	59 ·7	61 ·0
1. 25	50. 5	3. 21	·1316	3. 17	·02972			
1. 30	57. 35		(†)	3. 48	·02949			
1. 42	40. 50	4. 4	·1466	4. 13	·02908			
1. 46	38. 40	4. 8	·1476	4. 19	·02867			
2. 7	50. 30		(†)	4. 28	·02910			
2. 12	20. 59. 10	4. 30	·1460	4. 36	·02851			
2. 17	21. 2. 5	4. 38	·1489	5. 4	·02789			
2. 24	20. 59. 5	4. 43	·1440	5. 12	·02733			
2. 26	21. 2. 5	4. 56	·1460	5. 18	·02765			
2. 30	21. 6. 5	5. 4	·1454	5. 24	·02753			
2. 38	20. 39. 50	5. 7	·1462	5. 27	·02776			
2. 41	50. 10	5. 18	·1449	5. 34	·02750			
2. 44	48. 5	5. 21	·1467	5. 39	·02704			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 3		Aug. 3		Aug. 3				
h m	° ′ ″	h m		h m		h m	°	°
2. 50	20. 52. 50	5. 34	·1444	5. 47	·02733			
2. 58	49. 50	5. 40	·1441	5. 57	·02686			
3. 7	52. 20	5. 55	·1354	6. 6	·02704			
3. 11	48. 10	6. 10	·1421	6. 15	·02668			
3. 13	51. 10	6. 18	·1362	6. 33	·02677			
3. 15	49. 15	6. 25	·1386	6. 46	·02744			
3. 26	55. 35	6. 44	·1398	6. 54:	·02733			
3. 31	52. 10	6. 48	·1406	7. 12	·02771			
3. 38	43. 25	7. 7	·1390	7. 22	·02736			
3. 39	20. 32. 30	7. 16	·1362	7. 25	·02762			
3. 50	21. 12. 0	7. 40	·1342	7. 35	·02700			
3. 57	20. 17. 10	7. 48	·1354	7. 39	·02713			
4. 10	30. 5	7. 59	·1351	7. 40	·02641			
4. 15	37. 15	8. 12	·1368	7. 43	·02656			
4. 24	51. 20	8. 21	·1409	7. 54	·02597			
4. 26	44. 0	8. 39	·1336	8. 0	·02649			
4. 28	46. 20	8. 50	·1346	8. 11	·02603			
4. 31	34. 5	9. 3	·1338	8. 14	·02629			
4. 35	41. 10	9. 20	·1334	8. 21	·02622			
4. 41	45. 0	9. 31	·1354	8. 29	·02653			
4. 44	49. 25	9. 42	·1337	8. 37	·02660			
4. 54	34. 10	9. 49	·1343	8. 48	·02688			
4. 57	34. 30	10. 3	·1338		(†)			
4. 59	31. 45	10. 11	·1342	9. 0	·02684*			
5. 0	34. 55	10. 21	·1334	10. 18	·02709			
5. 7	32. 40	10. 25	·1317	10. 34	·02709			
5. 9	38. 50	10. 28	·1326	10. 53	·02667			
5. 12	25. 10	10. 35	·1325	11. 6	·02671			
5. 22	0. 30	10. 42	·1355	11. 21	·02649			
5. 29	36. 0	10. 48	·1343	11. 53	·02649			
5. 31	42. 5	10. 59	·1377	12. 3	·02638			
5. 33	48. 50	11. 7	·1379	12. 12	·02647			
5. 38	42. 55	11. 17	·1343	12. 46	·02629			
5. 40	35. 5	11. 25	·1362	13. 11	·02665			
5. 46	31. 10	11. 40	·1356	13. 38	·02671			
5. 53	36. 10	11. 44	·1348	15. 1	·02705			
5. 55	27. 40	11. 49	·1356	15. 34	·02700			
5. 57	18. 50	12. 2	·1355	15. 44	·02688			
6. 6	33. 0	12. 11	·1351	15. 59	·02688			
6. 9	21. 10	12. 23	·1335	16. 14	·02698			
6. 17	37. 55	12. 36	·1352	16. 46	·02723			
6. 22	15. 5	12. 41	·1350	17. 13	·02721			
6. 27	29. 50	12. 54	·1366	18. 10	·02752			
6. 29	24. 10	13. 11	·1363	20. 5	·02769			
6. 41	39. 5	13. 22	·1368	20. 33	·02758			
6. 42	24. 50	13. 34	·1363	22. 4	·02721			
6. 45	30. 45	13. 57	·1354	23. 16	·02703			
6. 53	25. 15	14. 11	·1359	23. 59	·02729			
6. 57	32. 0	14. 45	·1360					
7. 2	13. 50	14. 55	·1357					
7. 8	18. 10	15. 11	·1360					
7. 10	17. 10	15. 17	·1358					
7. 24	26. 50	15. 19	·1361					
7. 26	25. 10	15. 35	·1349					
7. 29	27. 5	15. 44	·1326					
7. 39	20. 21. 0	16. 2	·1315					
7. 49	19. 53. 35	16. 7	·1325					
7. 59	20. 32. 5	16. 11	·1325					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Aug. 3		Aug. 3						
h m	° ′ ″	h m		h m		h m	°	°
8. 7	20. 32. 5	16. 19	·1339					
8. 9	34. 50	16. 32	·1342					
8. 13	30. 20	16. 43	·1344					
8. 14	18. 10	17. 0	·1351					
8. 19	15. 50	17. 8	·1350					
8. 26	30. 45	17. 11	·1352					
8. 30	17. 0	17. 19	·1351					
8. 34	22. 0	17. 24	·1353					
8. 39	13. 30	17. 37	·1349					
8. 50	19. 20	17. 42	·1351					
8. 53	17. 5	18. 1	·1346					
8. 58	19. 10	18. 16	·1350					
9. 3	16. 55	18. 32	·1345					
9. 13	23. 0	18. 41	·1347					
9. 38	29. 40	19. 0	·1348					
9. 42	27. 30	19. 10	·1350					
9. 54	28. 0	19. 27	·1347					
9. 59	27. 25	19. 40	·1351					
10. 7	0. 10	20. 21	·1354					
10. 10	4. 10	20. 41	·1353					
10. 18	5. 5	21. 12	·1344					
10. 24	12. 50	21. 36	·1347					
10. 27	15. 5	21. 51	·1344					
10. 32	5. 5	22. 1	·1347					
10. 58	25. 10	22. 12	·1344					
11. 8	17. 0	22. 28	·1346					
11. 9	14. 5	22. 45	·1348					
11. 15	19. 0	23. 12	·1353					
11. 25	23. 0	23. 23	·1357					
11. 38	16. 50	23. 26	·1354					
11. 42	18. 30	23. 33	·1354					
11. 45	18. 5	23. 44	·1353					
11. 55	19. 10	23. 49	·1358					
12. 0	21. 50	23. 55	·1356					
12. 7	21. 55	23. 59	·1360					
12. 9	18. 30							
12. 12	18. 35							
12. 14	16. 40							
12. 23	18. 15							
12. 25	18. 15							
12. 36	20. 30							
12. 43	25. 5							
12. 47	22. 10							
12. 58	20. 0							
13. 30	23. 20							
13. 39	24. 35							
13. 54	23. 25							
14. 13	26. 25							
14. 39	26. 35 ***							
14. 56	26. 5							
15. 5	23. 30							
15. 9	21. 15							
15. 11	23. 25							
15. 25	24. 10							
15. 37	26. 20							
15. 53	33. 0							
16. 7	34. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Aug. 3								
h m	° ′ ″	h m		h m		h m	°	°
16. 9	20. 30. 55							
16. 11	34. 0							
16. 14	34. 10							
16. 23	32. 30							
16. 41	32. 30							
16. 47	31. 30							
16. 57	32. 0							
17. 2	31. 20							
17. 9	31. 20							
17. 22	29. 30							
17. 38	27. 15 ***							
17. 55	27. 15							
18. 8	27. 0							
18. 22	28. 5							
18. 29	26. 10							
18. 43	26. 10							
18. 55	26. 50							
19. 9	26. 30							
19. 14	27. 5							
19. 30	26. 25							
19. 56	27. 10							
20. 8	28. 0							
20. 38	28. 25							
20. 42	29. 50							
20. 53	28. 40							
20. 58	29. 30							
21. 26	29. 50							
21. 58	29. 30							
22. 16	30. 25							
22. 26	31. 30							
22. 43	31. 20							
23. 26	34. 15							
23. 43	34. 50							
23. 54	35. 5							
23. 59	36. 20							
Aug. 4		Aug. 4		Aug. 4		Aug. 4		
0. 0	20. 36. 20	0. 0	·1360	0. 0	·02729	1. 0	60·8	61·2
0. 11	36. 20	0. 4	·1364	1. 6	·02767	3. 0	61·0	62·0
0. 24	38. 10	0. 12	·1359	3. 1	·02783	Max.	61·7	62·9
0. 38	38. 30	0. 19	·1365	3. 58	·02817	9. 0	58·8	60·7
0. 42	37. 50	0. 40	·1359	4. 41	·02804	Min.	55·4	55·7
1. 10	39. 10	0. 45	·1353	5. 23	·02817	21. 0	58·6	59·8
1. 39	38. 5	0. 55	·1358	5. 39	·02822			
1. 44	37. 0	1. 4	·1357	6. 0	·02846			
1. 53	36. 50	1. 9	·1363	6. 11	·02829			
2. 13	38. 5	1. 15	·1359	7. 6	·02823			
2. 24	37. 30	1. 43	·1366	7. 33	·02801			
2. 28	37. 30	1. 57	·1364	7. 54	·02809			
2. 42	38. 25	2. 23	·1371	8. 6	·02796			
2. 48	38. 35	2. 37	·1369	8. 11	·02823			
3. 40	31. 10	2. 54	·1379	8. 14	·02800			
3. 53	30. 30	2. 56	·1377	8. 23	·02776			
3. 58	32. 0	3. 2	·1378	8. 39	·02757			
4. 8	31. 30	3. 9	·1374	10. 27	·02691			
4. 50	34. 35	3. 15	·1376	10. 42	·02709			
5. 9	32. 35	3. 18	·1372	11. 8	·02642			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 4 h m	° ′ ″	Aug. 4 h m		Aug. 4 h m		h m	°	°
5. 15	20. 33. 0	3. 21	·1374	11. 17	·02655			
5. 27	29. 0	3. 32	·1375	11. 37	·02611			
5. 47	29. 0	3. 47	·1394	12. 18	·02509			
5. 58	31. 10	4. 4	·1402	12. 32	·02518			
6. 8	30. 40	4. 6	·1392	12. 53	·02492			
6. 12	31. 0	4. 13	·1396	13. 6	·02531			
6. 25	32. 0	4. 34	·1390	13. 31	·02536			
6. 37	32. 0	4. 41	·1384	13. 57	·02428			
6. 56	30. 5	4. 48	·1384	14. 0	·02438			
7. 9	32. 0	5. 0	·1380	14. 10	·02319			
7. 14	32. 20	5. 7	·1380	14. 28	·02263			
7. 24	31. 30	5. 16	·1375	14. 33	·02291			
7. 37	30. 5	5. 20	·1376	14. 46	·02278			
7. 43	31. 0	5. 31	·1370	14. 58	·02121			
7. 54	30. 35	5. 40	·1373	15. 1	·01923			
7. 56	25. 20	5. 57	·1389	15. 18	·02031			
7. 59	35. 45	6. 6	·1382	15. 22	·02123			
8. 12	32. 40	6. 19	·1386	15. 28	·02152			
8. 17	32. 50	6. 39	·1376	15. 31	·02051			
8. 24	36. 30	6. 48	·1375	15. 39	·02117			
8. 29	30. 25	7. 2	·1380	15. 50	·02066			
8. 41	27. 45	7. 10	·1377	15. 57	·02123			
8. 56	28. 40	7. 15	·1378	16. 15	·02196			
9. 11	28. 0	7. 27	·1374	16. 24	·02157			
9. 22	28. 15	7. 45	·1385	16. 38	·02242			
9. 28	33. 15	7. 56	·1379	16. 54	·02242			
9. 43	34. 35	8. 4	·1419	17. 23	·02309			
9. 57	30. 30	8. 16	·1386	17. 35	·02184			
10. 8	30. 30	8. 18	·1388	17. 38	·02161			
10. 10	31. 10	8. 21	·1384	17. 41	·02217			
10. 14	30. 30	8. 34	·1388	17. 43	·02203			
10. 23	30. 30	8. 45	·1381	17. 52	·02244			
10. 26	29. 15	8. 57	·1383	17. 56	·02229			
10. 28	29. 15	9. 3	·1378	18. 1	·02271			
10. 31	30. 50	9. 25	·1374	18. 4	·02255			
10. 39	28. 30	9. 36	·1376	18. 18	·02326			
10. 53	22. 10	9. 54	·1369	18. 20	·02358			
11. 0	14. 10	10. 9	·1378	18. 33	·02318			
11. 11	19. 40	10. 26	·1374	19. 1	·02363			
11. 27	10. 55	10. 35	·1376	19. 18	·02355			
11. 54	22. 35	10. 39	·1409	19. 41	·02403			
12. 9	14. 5	10. 42	·1402	20. 1	·02397			
12. 19	21. 5	10. 46	·1406	20. 13	·02446			
12. 54	18. 25	10. 49	·1402	20. 28	·02452			
13. 9	19. 10	10. 55	·1415	20. 31	·02452			
13. 23	16. 0	11. 3	·1410	20. 41	·02459			
	***	11. 12	·1433	20. 47	·02496			
13. 42	22. 10	11. 30	·1419	20. 53	·02476			
13. 57	12. 0	11. 44	·1445	20. 57	·02507			
14. 11	11. 20	11. 56	·1425	20. 59	·02474			
14. 36	32. 0	12. 12	·1365	23. 21	·02651			
14. 44	41. 20	12. 20	·1376	23. 40	·02655			
14. 56	33. 30	12. 40	·1355	23. 53	·02682			
15. 9	28. 25	12. 47	·1358	23. 59	·02667			
15. 13	32. 30	12. 54	·1366					
15. 20	25. 30	12. 57	·1365					
15. 28	24. 5	13. 10	·1377					
15. 43	6. 45	13. 13	·1375					
15. 54	5. 20	13. 19	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 4 h m	° ′ ″	Aug. 4 h m		h m		h m	°	°
16. 8	20. 8. 20	13. 30	·1374					
16. 25	25. 30	13. 37	·1376					
16. 30	27. 40	13. 42	·1369					
16. 39	25. 30	13. 48	·1351					
16. 42	22. 25	14. 3	·1313					
16. 54	23. 40	14. 12	·1310					
17. 1	20. 50	14. 17	·1314					
17. 8	25. 40	14. 28	·1335					
17. 12	25. 40	14. 41	·1314					
17. 14	29. 50	14. 51	·1257					
17. 25	19. 10	15. 16	·1341					
17. 34	23. 30	15. 20	·1333					
17. 38	18. 40	15. 26	·1341					
17. 41	23. 50	15. 39	·1319					
17. 47	21. 25	15. 45	·1323					
18. 8	36. 50	15. 52	·1321					
18. 10	33. 0	16. 2	·1314					
18. 12	36. 15	16. 16	·1280					
	***	16. 35	·1319					
18. 25	22. 15	16. 52	·1306					
18. 29	25. 45	17. 5	·1329					
18. 38	33. 30	17. 7	·1318					
18. 42	36. 50	17. 11	·1326					
18. 44	34. 0	17. 19	·1306					
18. 57	38. 5	17. 26	·1275					
19. 15	23. 0	17. 36	·1303					
19. 28	33. 10	17. 41	·1280					
19. 37	37. 25	17. 42	·1316					
19. 41	38. 0	17. 48	·1286					
19. 46	37. 35	17. 50	·1318					
19. 53	34. 25	17. 55	·1308					
	***	18. 3	·1344					
20. 33	44. 30	18. 6	·1320					
20. 38	41. 10	18. 12	·1348					
20. 43	50. 30	18. 22	·1286					
20. 53	44. 25	18. 27	·1302					
20. 56	47. 25	18. 34	·1287					
21. 13	41. 0	18. 40	·1250					
21. 38	35. 0		(†)					
21. 41	28. 25	18. 50	·1250					
21. 54	37. 50	18. 59	·1284					
21. 58	34. 15	19. 12	·1269					
22. 8	37. 50	19. 24	·1291					
22. 12	36. 15	19. 26	·1283					
22. 20	43. 0	19. 30	·1288					
22. 25	38. 45	19. 38	·1259					
22. 36	44. 5	19. 42	·1250					
22. 43	42. 10		(†)					
22. 54	40. 10	19. 54	·1250					
22. 57	42. 0	20. 10	·1276					
22. 59	41. 0	20. 13	·1270					
23. 9	40. 0	20. 18	·1279					
23. 17	53. 20	20. 19	·1274					
23. 23	44. 15	20. 26	·1310					
23. 25	47. 0	20. 35	·1295					
23. 37	44. 45	20. 39	·1303					
23. 39	47. 10	20. 42	·1292					
23. 44	43. 15	20. 49	·1276					
23. 56	48. 0	20. 52	·1289					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 4		Aug. 4						
h m	° ′ ″	h m		h m		h m	°	°
23. 59	20. 45. 10	21. 3	·1264					
		21. 12	·1283					
		21. 31	·1284					
		21. 39	·1277					
		21. 42	·1287					
		21. 49	·1277					
		21. 54	·1292					
		22. 12	·1282					
		22. 25	·1292					
		22. 41	·1273					
		22. 56	·1269					
			(†)					
		23. 3	·1268					
		23. 5	·1275					
		23. 21	·1305					
		23. 25	·1299					
		23. 36	·1304					
		23. 41	·1296					
		23. 56	·1338					
		23. 59	·1326					
Aug. 5		Aug. 5		Aug. 5		Aug. 5		
0. 0	20. 45. 10	0. 0	·1326	0. 0	·02667	Min.	60· 2	61· 6
0. 12	44. 40	0. 14	·1339	0. 24	·02697	1. 0	60· 9	62· 2
0. 15	46. 55	0. 21:	·1328	0. 33	·02756	3. 0	60· 7	62· 9
0. 24	43. 10	0. 28	·1332	0. 40	·02751	9. 0	61· 8	62· 9
0. 31	46. 25	0. 40	·1381	0. 49	·02819	21. 0	62· 6	63· 9
0. 40	55. 50	0. 43	·1356	0. 57	·02780	Max.	63· 4	64· 9
0. 43	46. 30	0. 48	·1385	2. 23	·02836			
0. 45	44. 30	0. 56	·1357	2. 44	·02744			
0. 47	47. 10	1. 5	·1388	3. 11	·02832			
0. 56	42. 0	1. 16	·1379	3. 23	·02814			
0. 58	40. 5	1. 22	·1385	3. 41	·02798			
1. 16	45. 0	1. 26	·1368	3. 53	·02767			
1. 25	48. 35	1. 42	·1396	4. 31	·02790			
1. 28	46. 35	1. 46	·1384	6. 9	·02776			
1. 38	50. 50	1. 56	·1402	9. 23	·02822			
1. 43	48. 45	2. 4	·1388	10. 1	·02797			
1. 44	50. 30	2. 16	·1414	10. 11	·02811			
1. 56	52. 50	2. 19	·1404	10. 42	·02795			
1. 58	50. 35	2. 23	·1412	10. 54	·02777			
2. 11	56. 55	2. 28	·1404	12. 9:	·02796			
2. 14	59. 50	2. 34	·1409	12. 34	·02704			
2. 23	50. 30	2. 36	·1398	12. 52	·02666			
2. 28	35. 5	2. 42	·1404	13. 8	·02670			
2. 36	34. 5	2. 46	·1366	13. 28	·02648			
2. 42	42. 5	2. 50	·1370	13. 39	·02652			
2. 45	39. 0	3. 4	·1355	13. 57	·02696			
2. 58	41. 5	3. 9	·1350	14. 38	·02706			
3. 8	40. 50	3. 19	·1392	15. 1	·02683			
3. 12	36. 0	3. 24	·1382	15. 26	·02709			
3. 40	34. 55	3. 26	·1386	15. 48	·02752			
3. 46	37. 0	3. 35	·1366	16. 15	·02758			
3. 50	36. 10	3. 42	·1376	19. 18	·02809			
3. 57	38. 50	3. 48	·1372	20. 19	·02821			
4. 2	36. 5	3. 52	·1378	21. 39	·02820			
4. 23	34. 5	3. 56	·1354	23. 15	·02810			
4. 29	34. 50	4. 8	·1359	23. 59	·02829			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5						
h m	° ′ ″	h m		h m		h m	°	°
4. 38	20. 33. 10	4. 12	·1366					
4. 41	34. 5	4. 14	·1362					
4. 44	33. 5	4. 23	·1368					
4. 57	32. 30	4. 31	·1362					
5. 8	33. 5	4. 39	·1368					
5. 15	31. 55	4. 50	·1361					
5. 26	32. 30	5. 2	·1369					
5. 29	32. 25	5. 10	·1364					
5. 57	33. 15	5. 22	·1368					
6. 6	32. 35	5. 34	·1369					
6. 38	33. 35	5. 46	·1363					
6. 43	33. 15	6. 43	·1367					
6. 54	34. 0	6. 52	·1364					
7. 7	33. 50	7. 14	·1368					
7. 35	35. 25	7. 20	·1366					
7. 58	34. 30	7. 28	·1374					
8. 16	35. 25	8. 4	·1371					
8. 26	34. 55	8. 41	·1381					
8. 31	34. 0	9. 3	·1376					
8. 38	34. 0	9. 12	·1379					
8. 58	32. 30	9. 39	·1376					
9. 10	33. 10	9. 48	·1381					
9. 23	32. 0	9. 53	·1373					
9. 27	32. 0	9. 59	·1373					
9. 38	30. 30	10. 8	·1363					
9. 56	30. 15	10. 15	·1380					
10. 8	26. 35	10. 24	·1377					
10. 11	28. 0	10. 40	·1392					
10. 23	25. 25	10. 56	·1372					
10. 28	25. 5	11. 11	·1361					
11. 7	26. 55	11. 20	·1364					
11. 11	26. 30	11. 42	·1366					
11. 16	26. 35	11. 46	·1372					
11. 22	25. 10	12. 7	·1379					
11. 29	25. 20	12. 42	·1345					
11. 44	26. 50	12. 52	·1344					
11. 58	29. 30	13. 11	·1362					
12. 8	33. 35	13. 28	·1345					
12. 12	35. 30	13. 39	·1344					
12. 29	35. 55	13. 48	·1357					
12. 43	32. 15	13. 57	·1368					
12. 55	33. 25		***					
13. 8	31. 55	14. 19	·1374					
13. 17	36. 0	14. 42	·1366					
13. 27	34. 0	15. 10	·1348					
13. 42	25. 0	15. 15	·1348					
13. 52	25. 0	15. 26	·1345					
13. 56	24. 10	15. 36	·1350					
14. 10	26. 5	15. 52	·1356					
14. 19	26. 5	15. 56	·1353					
14. 23	24. 30	16. 27	·1362					
14. 30	24. 30	16. 41	·1358					
14. 44	28. 35	16. 59	·1365					
15. 0	24. 40	17. 8	·1360					
15. 12	22. 5	17. 30	·1357					
15. 28	25. 0	17. 39	·1360					
15. 39	25. 0	17. 49	·1353					
16. 0	28. 30	18. 14	·1344					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5						
h m	° ′ ″	h m		h m		h m	°	°
16. 6	20. 28. 5	18. 20	·1345					
16. 12	27. 55		***					
16. 35	29. 40	18. 41	·1341					
16. 38	28. 35	19. 34	·1347					
16. 42	29. 10	19. 42	·1343					
16. 50	28. 5	19. 55	·1346					
17. 8	28. 20	20. 19	·1343					
17. 13	27. 5		***					
17. 33	27. 15	20. 46	·1338					
17. 41	29. 0	21. 5	·1338					
17. 49	28. 15	21. 19	·1333					
18. 9	29. 15	21. 28	·1337					
18. 30	30. 55	21. 44	·1336					
18. 38	30. 0	21. 56	·1340					
18. 55	30. 0	22. 44	·1342					
19. 10	31. 15	22. 54	·1337					
19. 23	30. 5	23. 5	·1337					
19. 31	30. 0	23. 19	·1330					
19. 41	30. 55	23. 37	·1341					
19. 43	29. 40	23. 43	·1348					
19. 53	30. 45	23. 50	·1346					
20. 3	29. 30	23. 59	·1351					
20. 6	30. 20							
20. 24	30. 20							
20. 30	31. 50							
20. 40	30. 55							
20. 49	31. 50							
20. 56	31. 35							
21. 37	31. 50							
21. 45	32. 50							
22. 35	35. 20							
22. 46	35. 30							
22. 56	34. 55							
23. 11	36. 0							
23. 18	35. 25							
23. 42	37. 15							
23. 55	36. 50							
23. 59	37. 30							
Aug. 6		Aug. 6		Aug. 6		Aug. 6		
0. 0	20. 37. 30	0. 0	·1351	0. 0	·02829	0. 0	63·4	65·0
0. 28	37. 0	0. 15	·1356	3. 24	·02898	Max.	64·3	65·6
0. 33	36. 5	0. 33	·1353	6. 36	·02919	9. 0	62·5	64·8
0. 39	35. 20	0. 49	·1357	7. 9	·02935	Min.	61·9	63·2
1. 28	37. 0	1. 26	·1366	8. 8	·02932	21. 0	63·7	65·5
2. 36	36. 30	2. 29	·1373	9. 18	·02940			
2. 44	35. 55	2. 38	·1372	11. 15	·02902			
3. 9	35. 55	2. 50	·1376	11. 43	·02877			
3. 24	35. 0	2. 58	·1375	14. 9	·02891			
4. 56	32. 0	3. 8	·1380	14. 32	·02883			
5. 39	32. 0	3. 14	·1371	16. 31	·02903			
6. 13	30. 55	3. 20	·1375	23. 59	·02908			
6. 41	30. 25	3. 24	·1372					
7. 11	31. 45	3. 29	·1375					
7. 27	31. 20	3. 38	·1371					
7. 43	31. 45	3. 43	·1373					
7. 56	30. 30	4. 15	·1372					
8. 11	31. 0	4. 21	·1374					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 6		Aug. 6						
h m	° ′ ″	h m		h m		h m	°	°
8. 39	20. 31. 10	4. 41	·1373					
8. 54	30. 5	4. 51	·1368					
9. 26	31. 25	5. 45	·1369					
9. 41	29. 50	5. 52	·1364					
9. 56	30. 15	6. 20	·1362					
10. 6	29. 15	6. 34	·1369					
10. 51	34. 50	6. 41	·1367					
10. 56	34. 10	6. 55	·1370					
11. 10	34. 10	7. 15	·1368					
11. 31	32. 0	7. 39	·1370					
11. 41	31. 50	7. 51	·1367					
11. 52	30. 50	8. 3	·1372					
12. 9	30. 5	8. 10	·1370					
12. 15	30. 5	8. 28	·1369					
12. 40	29. 25	9. 3	·1373					
13. 11	28. 55	9. 33	·1370					
13. 22	30. 0	9. 39	·1372					
13. 38	30. 0	9. 44	·1370					
14. 7	31. 10	9. 54	·1373					
14. 40	29. 55	10. 10	·1368					
15. 23	29. 10	10. 19	·1371					
15. 42	29. 25	10. 39	·1361					
16. 10	28. 30	10. 49	·1364					
17. 58	27. 40	11. 10	·1378					
18. 26	27. 0	11. 36	·1370					
18. 36	27. 40	11. 43	·1371					
18. 42	26. 55	12. 11	·1366					
19. 25	27. 40	13. 14	·1367					
20. 14	26. 50	13. 32	·1364					
23. 53	38. 30	13. 43	·1368					
23. 56	38. 30	14. 4	·1365					
23. 59	39. 15	14. 24	·1367					
		16. 0	·1369					
		18. 55	·1356					
		21. 43	·1350					
		22. 6	·1351					
		22. 29	·1355					
		22. 38	·1354					
		23. 39	·1360					
		23. 52	·1364					
		23. 59	·1362					
Aug. 7		Aug. 7		Aug. 7		Aug. 7		
0. 0	20. 39. 15	0. 0	·1362	0. 0	·02908	1. 0	64·3	66·0
0. 24	38. 50	0. 8	·1364	4. 32	·02972	3. 0	64·8	66·7
0. 36	39. 40	0. 23	·1362	7. 27	·02993	Max.	65·4	68·0
1. 20	38. 0	0. 33	·1367	7. 54	·02989	9. 0	65·0	67·0
1. 26	38. 10	1. 8	·1363	10. 42	·02991	Min.	62·5	64·8
1. 34	37. 30	1. 48	·1367	13. 27	·02953	21. 0	63·6	66·8
1. 41	37. 30	2. 20	·1366	16. 59	·02936			
2. 7	36. 10	2. 40	·1372	19. 57	·02969			
2. 12	36. 30	2. 49	·1370	23. 59	·02938			
2. 23	36. 0	2. 54	·1373					
2. 38	36. 30	3. 8	·1367					
2. 58	34. 55	3. 40	·1367					
3. 23	34. 35	3. 46	·1370					
4. 12	33. 0	4. 6	·1367					
5. 9	32. 30	4. 39	·1371					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 7		Aug. 7						
h m	o / //	h m		h m		h m	o	o
5. 36	20. 32. 40	5. 4	·1370					
5. 54	31. 45	5. 41	·1374					
6. 7	31. 30	5. 52	·1371					
6. 11	30. 5	6. 6	·1373					
6. 27	29. 10	6. 11	·1367					
6. 39	29. 10	6. 26	·1369					
7. 11	30. 50	6. 31	·1374					
8. 5	30. 10	6. 50	·1372					
8. 24	30. 30	7. 8	·1377					
9. 56	30. 30	7. 49	·1374					
10. 3	30. 50	9. 39	·1371					
10. 19	30. 10	9. 57	·1368					
10. 28	30. 0	10. 17	·1373					
10. 40	31. 0	10. 39	·1370					
10. 56	31. 15	10. 50	·1372					
11. 13	30. 30	10. 57	·1371					
11. 43	31. 5	11. 10	·1373					
11. 59	32. 50	11. 33	·1372					
12. 12	32. 50	11. 49	·1369					
13. 8	31. 30	12. 57	·1372					
14. 52	30. 35	13. 32	·1370					
15. 24	30. 20	16. 3	·1371					
15. 45	30. 35	16. 26	·1370					
16. 10	30. 20	17. 59	·1371					
18. 40	29. 15	20. 52	·1353					
19. 26	28. 0	21. 54	·1347					
20. 23	28. 15	23. 2	·1348					
20. 41	28. 25	23. 49	·1352					
20. 52	28. 55	23. 59	·1356					
21. 26	29. 40							
21. 53	30. 35							
23. 47	38. 20							
23. 59	39. 30							
Aug. 8		Aug. 8		Aug. 8		Aug. 8		
0. 0	20. 39. 30	0. 0	·1356	0. 0	·02938	1. 0	64·1	66·0
0. 36	40. 35	1. 26	·1370	1. 59	·02964	3. 0	64·3	66·4
1. 2	40. 35	2. 10	·1372	5. 18	·02982	Max.	65·5	67·2
1. 44	39. 35	2. 21	·1375	8. 57	·02982	9. 0	64·1	66·0
2. 12	38. 55	2. 39	·1375	11. 4	·02931	Min.	59·8	61·9
2. 22	39. 5	2. 52	·1377	11. 56	·02896	21. 0	62·4	64·2
3. 4	37. 30	3. 33	·1374	14. 46	·02863	22. 0	62·8	64·3
3. 28	35. 35	3. 40	·1376	16. 19	·02834	23. 0	63·3	65·0
3. 53	35. 10	3. 49	·1375	17. 35	·02836			
4. 41	33. 5	4. 0	·1377	19. 2	·02845			
4. 58	32. 45	4. 37	·1376	21. 5	·02841			
5. 11	32. 35	5. 12	·1380	23. 59	·02859			
5. 19	32. 10	5. 14	·1378					
5. 28	32. 10	5. 26	·1381					
6. 11	30. 40	6. 26	·1374					
7. 12	30. 0	6. 59	·1377					
7. 39	30. 35	7. 6	·1374					
8. 53	30. 0	7. 14	·1378					
9. 7	30. 25	8. 8	·1377					
9. 43	30. 5	8. 19	·1380					
9. 56	29. 30	9. 10	·1377					
10. 11	29. 30	9. 40	·1378					
10. 26	30. 35	10. 11	·1375					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 8		Aug. 8						
h m	o / //	h m		h m		h m	o	o
10. 37	20. 29. 30	10. 34	·1379					
10. 59	30. 0	10. 49	·1376					
11. 56	28. 15	11. 10	·1385					
12. 11	28. 55	11. 26	·1386					
12. 23	28. 35	12. 12	·1372					
12. 44	29. 10	12. 48	·1376					
13. 25	28. 30	15. 19	·1379					
14. 7	27. 30	17. 48	·1373					
14. 39	28. 5	20. 34	·1357					
14. 52	27. 45	21. 25:	·1354					
15. 24	27. 55	22. 37	·1357					
17. 26	28. 10	22. 55	·1360					
17. 38	27. 30	23. 59	·1366					
18. 28	27. 30							
18. 54	27. 0							
19. 22	27. 35							
19. 28	27. 25							
20. 28	28. 30							
20. 40	28. 30							
21. 37	30. 30							
	(†)							
23. 27	36. 15							
23. 59	37. 25							
Aug. 9		Aug. 9		Aug. 9		Aug. 9		
0. 0	20. 37. 25	0. 0	·1366	0. 0	·02859	0. 0	63·6	65·3
2. 1	39. 5	1. 41	·1377	9. 23	·02820	1. 0	64·4	65·8
2. 25	38. 5	2. 57	·1382	11. 31	·02804	2. 0	63·9	66·0
	(†)	3. 18	·1372	11. 36	·02811	3. 0	64·8	66·3
3. 13	40. 0	4. 19	·1376	11. 45	·02799	Max.	65·3	67·2
5. 7	36. 35	4. 49	·1372	13. 8	·02791	9. 0	65·3	67·2
5. 36	36. 25	5. 55	·1377	15. 23	·02763	Min.	62·2	64·6
6. 12	36. 25	7. 19	·1378	16. 57	·02742	21. 0	64·4	66·0
6. 54	35. 35	7. 45	·1375	17. 16	·02733	22. 0	64·6	66·0
7. 28	36. 0	8. 46	·1374	18. 12	·02736	23. 0	64·6	66·0
7. 47	35. 30	9. 56	·1371	18. 33	·02745			
8. 9	35. 30	10. 13	·1374	19. 5	·02736			
8. 58	35. 50	10. 17	·1371	20. 7	·02751			
9. 11	35. 25	11. 16	·1371	21. 4	·02745			
11. 18	35. 0	11. 31	·1376	22. 9	·02769			
11. 30	35. 35	11. 39	·1389	22. 45	·02735			
11. 39	36. 55	11. 55	·1384	23. 59	·02763			
11. 56	33. 5	12. 23	·1378					
12. 33	31. 25	12. 52	·1376					
13. 0	32. 10	13. 4	·1377					
13. 20	31. 30	13. 14	·1376					
13. 30	31. 50	13. 42	·1378					
13. 41	31. 10	14. 6	·1375					
13. 54	31. 40	15. 18	·1376					
14. 20	30. 40	15. 50	·1369					
15. 24	31. 15	16. 50	·1378					
15. 30	32. 20	17. 0	·1382					
15. 42	32. 15	17. 12	·1378					
16. 3	34. 10	17. 46	·1375					
16. 11	34. 10	18. 13	·1361					
16. 23	33. 0	18. 28	·1362					
16. 32	31. 40	18. 51:	·1378					
16. 54	31. 20	19. 50	·1365					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

August 8d. 21h. 37m. to 23h. 26m. Damper experiments with the Declination Magnet were in progress.

August 9. Damper experiments with the Declination Magnet were made between 2h. 25m. and 3h. 13m., and also between 21h. 40m. and 23h. 59m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 9		Aug. 9						
h m	° ′ ″	h m		h m		h m	°	°
17. 8	20. 31. 50	20. 0	·1365					
17. 12	29. 50	20. 27	·1361					
17. 23	29. 35	20. 42	·1364					
17. 37	30. 10	21. 8	·1361					
17. 53	31. 40	21. 42	·1363					
17. 58	31. 25	21. 55	·1361					
18. 10	32. 45	22. 23	·1368					
18. 23	31. 50	22. 54	·1366					
18. 38	34. 5	23. 14	·1358					
19. 0	30. 30	23. 21	·1359					
19. 23	30. 30	23. 37	·1352					
19. 32	32. 0	23. 41	·1341					
19. 45	30. 55	23. 59	·1347					
20. 9	31. 35							
20. 23	31. 45							
20. 31	32. 5							
20. 44	34. 10							
21. 11	33. 25							
21. 40	32. 40 (†)							
23. 59	41. 40							
Aug. 10		Aug. 10		Aug. 10		Aug. 10		
0. 0	20. 41. 40	0. 0	·1347	0. 0	·02763	0. 0	64 ·8	66 ·4
0. 12	42. 35	0. 3	·1339	1. 10	·02803	1. 0	64 ·7	66 ·1
0. 25	42. 35	0. 14	·1345	1. 18	·02802	Min.	64 ·7	66 ·1
0. 32	40. 30	0. 24	·1325	2. 37	·02859	2. 0	64 ·7	66 ·1
0. 56	40. 0	0. 52	·1350	3. 23	·02919	3. 0	64 ·8	67 ·0
1. 4	41. 55	1. 5	·1340	3. 39	·02926	Max.	66 ·1	67 ·4
1. 24	42. 10	1. 38	·1378	3. 54	·02967	9. 0	65 ·7	67 ·4
1. 33	44. 40	1. 47	·1373	4. 39	·03011	Min.	65 ·2	66 ·5
1. 41	44. 5	1. 53	·1383	5. 3	·03049	21. 0	65 ·3	67 ·0
1. 54	45. 45	1. 58	·1381	5. 9	·03036			
2. 13	45. 55	2. 6	·1383	5. 46	·03071			
2. 25	49. 5	2. 21	·1375	5. 54	·03062			
2. 33	49. 55	2. 35	·1393	6. 1	·03077			
2. 42	48. 50	2. 49	·1406	6. 12	·03062			
2. 56	52. 0	3. 5	·1380	6. 23	·03077			
3. 2	50. 0	3. 10	·1346	6. 48	·03081			
3. 14	48. 0	3. 15	·1351	6. 52	·03090			
3. 26	47. 50	3. 19	·1349	6. 55	·03137			
3. 43	43. 40	3. 48	·1374	7. 4	·03063			
3. 53	44. 10	4. 5	·1365	7. 13	·03038			
3. 56	42. 0	4. 20	·1408	7. 24	·02975			
4. 11	47. 45	4. 24	·1412	7. 33	·02975			
4. 15	46. 25	4. 34	·1390	7. 48	·02932			
4. 26	49. 45	4. 43	·1399	7. 53	·02934			
4. 28	48. 30	4. 49	·1398	8. 3	·02891			
4. 31	46. 35	5. 3	·1409	9. 36	·02893			
4. 41	49. 5	5. 12	·1378	10. 10	·02859			
4. 47	44. 10	5. 26	·1408	10. 26	·02784			
4. 57	51. 20	5. 36	·1387	10. 41	·02791			
5. 9	45. 5	5. 44	·1393	10. 53	·02776			
5. 11	46. 50	5. 53	·1380	11. 7	·02748			
5. 13	45. 45	6. 0	·1376	11. 30	·02813			
5. 23	49. 0	6. 10	·1362	11. 54	·02829			
5. 26	46. 50	6. 19	·1375	12. 3	·02812			
5. 31	42. 55	6. 26	·1363	12. 23	·02829			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 10		Aug. 10		Aug. 10				
h m	° ′ ″	h m		h m		h m	°	°
5. 41	20. 45. 35	6. 45	·1368	13. 6	·02865			
5. 44	42. 35	6. 52	·1364	13. 16	·02862			
5. 57	45. 50	7. 2	·1368	13. 31	·02873			
6. 11	38. 0	7. 8	·1355	13. 39	·02852			
6. 14	42. 50	7. 10	·1368	13. 58	·02866			
6. 26	37. 30	7. 16	·1372	14. 16	·02864			
6. 42	35. 30	7. 18	·1368	14. 41	·02810			
6. 56	29. 30	7. 29	·1399	14. 58	·02798			
6. 59	29. 0	7. 35	·1365	15. 8	·02804			
7. 11	11. 55	7. 49	·1409	15. 24	·02776			
7. 17	9. 30	8. 2	·1387	15. 53	·02785			
7. 23	4. 5	8. 9	·1397	16. 11	·02809			
7. 32	16. 20	8. 21	·1350	16. 24	·02834			
7. 39	9. 0	8. 42	·1367	17. 1	·02861			
7. 56	30. 0	8. 54	·1363	17. 53	·02866			
7. 59	30. 0	9. 7	·1367	18. 18	·02866			
8. 12	42. 5	9. 14	·1365	18. 38	·02871			
8. 28	26. 0	9. 26	·1366	18. 49	·02855			
8. 59	32. 0	9. 30	·1364	20. 44	·02861			
9. 12	31. 45	9. 40	·1366	22. 1	·02863			
9. 23	30. 55	9. 50	·1364	22. 10	·02878			
9. 26	31. 20	10. 4	·1370	22. 23	·02863			
9. 33	29. 30	10. 18	·1365	22. 34	·02876			
9. 42	29. 40	10. 37	·1395	23. 59	·02865			
9. 56	28. 55	10. 43	·1387					
10. 23	30. 10	10. 57	·1437					
10. 33	23. 5	11. 22	·1342					
10. 43	27. 0	11. 38	·1363					
10. 55	14. 50	11. 43	·1371					
11. 12	39. 50	11. 48	·1367					
11. 26	24. 5	11. 54	·1376					
11. 41	27. 40	12. 7	·1380					
11. 50	27. 10	12. 12	·1371					
11. 58	31. 50	12. 30	·1361					
12. 26	25. 30	12. 39	·1368					
13. 11	28. 30	12. 49	·1372					
13. 23	30. 15	12. 59	·1369					
13. 27	28. 0	13. 4	·1371					
13. 41	29. 55	13. 9	·1368					
13. 56	26. 20	13. 13	·1374					
14. 7	29. 30	13. 33	·1360					
14. 23	35. 10	13. 42	·1367					
14. 33	41. 55	13. 54	·1361					
14. 39	42. 30	14. 6	·1360					
14. 51	36. 15	14. 14	·1363					
14. 58	36. 25	14. 25	·1356					
15. 7	35. 35	14. 39	·1359					
15. 25	38. 35	14. 51	·1355					
	***	15. 4	·1357					
15. 51	35. 30	15. 10	·1355					
16. 11	26. 10	15. 23	·1362					
16. 22	27. 30	15. 30	·1361					
16. 24	26. 0	15. 41	·1363					
16. 41	27. 50	15. 46	·1367					
16. 56	26. 20	15. 55	·1372					
17. 8	28. 5		***					
17. 13	26. 10	16. 11	·1366					
17. 38	28. 15	16. 19	·1374					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Aug. 10		Aug. 10						
h m	° ′ ″	h m		h m		h m	°	°
17. 39	20. 29. 25	16. 27	·1364					
17. 42	30. 5	16. 35	·1369					
17. 53	28. 50	16. 58	·1363					
17. 56	32. 30	17. 7	·1370					
18. 5	34. 55	17. 10	·1366					
18. 11	32. 30	17. 27	·1377					
18. 16	32. 30	17. 38	·1376					
18. 18	30. 20	17. 56	·1365					
18. 24	33. 5	18. 6	·1367					
18. 28	28. 20	18. 37	·1343					
18. 31	26. 10	18. 49	·1361					
18. 43	33. 5	19. 3	·1343					
18. 56	29. 20	19. 39	·1342					
19. 11	34. 50	19. 52	·1334					
19. 22	32. 40	20. 18	·1343					
19. 29	30. 10	20. 43	·1340					
19. 41	31. 50	20. 56	·1341					
19. 43	29. 0	21. 27	·1322					
20. 3	33. 35	21. 55	·1340					
20. 7	31. 20	22. 10	·1330					
	***	22. 14	·1336					
20. 29	34. 0	22. 37	·1325					
20. 39	32. 30	22. 45	·1334					
20. 53	37. 0	22. 59	·1325					
21. 2	36. 10	23. 16	·1337					
21. 11	40. 0	23. 28	·1328					
21. 27	39. 0	23. 34	·1333					
21. 49	33. 0	23. 41	·1331					
21. 57	34. 35	23. 56	·1346					
22. 2	32. 0	23. 59	·1346					
22. 14	37. 50							
22. 26	36. 25							
22. 40	40. 0							
22. 58	39. 40							
23. 39	43. 0							
23. 47	42. 30							
23. 59	44. 0							
Aug. 11		Aug. 11		Aug. 11		Aug. 11		
0. 0	20. 44. 0	0. 0	·1346	0. 0	·02865	1. 0	65·8	66·7
0. 11	45. 25	0. 7	·1339	3. 7	·03020	3. 0	66·0	68·5
0. 37	45. 15	0. 13	·1355	3. 56	·03045	Max.	67·0	69·0
0. 44	46. 15	0. 34	·1327	4. 9	·03061	9. 0	64·6	67·4
0. 53	45. 10	0. 42	·1331	4. 24	·03052	Min.	60·2	60·7
0. 59	49. 10	1. 11	·1340	4. 33	·03038	21. 0	62·5	64·2
1. 9	44. 30	1. 25	·1362	4. 59	·03069			
1. 16	42. 50	1. 38	·1354	5. 37	·03055			
1. 25	43. 25	2. 2	·1374	5. 42	·03044			
1. 37	40. 55	2. 5	·1370	5. 56	·03037			
1. 48	43. 10	2. 24	·1373	6. 13	·03056			
1. 54	41. 50	2. 35	·1362	6. 53	·03034			
2. 1	42. 55	2. 49	·1371	7. 23	·03051			
2. 10	41. 30	2. 51	·1369	7. 41	·03032			
2. 38	42. 30	2. 56	·1392	7. 54	·03029			
2. 46	40. 30	3. 4	·1389	8. 9	·03007			
2. 56	33. 0	3. 8	·1392	8. 57	·03011			
3. 9	34. 50	3. 21	·1359	10. 48	·02897			
3. 24	35. 5	3. 42	·1386		·02949			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Aug. 11		Aug. 11		Aug. 11				
h m	° ′ ″	h m		h m		h m	°	°
3. 37	20. 36. 50	3. 46	·1380	12. 30	·02913			
3. 41	36. 20	3. 50	·1385	13. 35	·02884			
3. 59	39. 50	3. 55	·1368	15. 9	·02842			
4. 11	34. 45	4. 0	·1369	15. 53	·02795			
4. 25	35. 40	4. 10	·1362	16. 23	·02788			
4. 33	37. 50	4. 13	·1365	17. 16	·02761			
4. 39	35. 0	4. 30	·1358	17. 35	·02761			
4. 49	31. 50	4. 33	·1357	18. 43	·02780			
4. 57	31. 50	4. 41	·1348	19. 31	·02813			
5. 2	33. 0	5. 10	·1376	20. 18	·02817			
5. 11	32. 50	5. 20	·1383	20. 53	·02818			
5. 23	34. 0	5. 25	·1380	21. 9	·02825			
5. 32	34. 0	5. 40	·1393	22. 53	·02821			
5. 41	34. 50	5. 48	·1380	23. 59	·02869			
5. 47	33. 30	6. 0	·1374					
5. 56	33. 30	6. 18	·1403					
6. 3	30. 50	6. 25	·1395					
6. 19	33. 55	6. 37	·1390					
6. 26	33. 30	6. 41	·1394					
6. 30	34. 10	6. 51	·1386					
6. 41	32. 30	7. 3	·1373					
6. 44	30. 5	7. 7	·1380					
6. 54	30. 5	7. 9	·1378					
6. 59	22. 10	7. 24	·1408					
7. 7	21. 50	7. 44	·1385					
7. 11	18. 35	7. 56	·1393					
7. 26	25. 50	8. 15	·1370					
7. 38	29. 20	8. 35	·1378					
7. 47	28. 25	9. 11	·1382					
8. 9	34. 0	9. 19	·1380					
8. 25	29. 30	9. 27	·1386					
9. 11	32. 30	9. 42	·1387					
9. 42	33. 30	9. 54	·1382					
9. 58	29. 5	10. 10	·1395					
10. 7	29. 30	10. 33	·1410					
10. 16	22. 20	10. 59	·1385					
10. 38	27. 30	11. 16	·1391					
10. 56	31. 40	11. 27	·1383					
11. 11	29. 0	11. 34	·1389					
11. 23	29. 0	11. 52	·1380					
11. 30	27. 10	12. 3	·1382					
11. 46	28. 55	12. 18	·1373					
12. 2	26. 30	12. 32	·1378					
12. 13	28. 40	13. 25	·1384					
12. 26	28. 25	13. 40	·1379					
12. 33	29. 30	14. 13	·1375					
12. 58	29. 30	14. 19	·1377					
13. 8	28. 40	14. 42	·1377					
13. 26	30. 5	14. 56:	·1373					
13. 39	29. 0	15. 21	·1381					
13. 48	29. 55	15. 26	·1378					
14. 9	32. 5	15. 34	·1382					
14. 13	32. 5	15. 49	·1377					
14. 27	33. 45	16. 3	·1367					
14. 38	33. 20	16. 12	·1372					
14. 52	34. 5	16. 30	·1373					
15. 7	32. 40	16. 56	·1387					
15. 13	34. 30	17. 16	·1385					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 11		Aug. 11						
h m	° ′ ″	h m		h m		h m	°	°
15. 32	20. 32. 10	17. 41	·1378					
15. 43	35. 10	17. 48	·1367					
15. 53	35. 15	18. 35	·1358					
16. 11	35. 0	18. 53	·1362					
16. 23	33. 5	19. 3	·1357					
16. 42	32. 40	19. 8	·1363					
17. 11	35. 10	19. 16	·1354					
17. 23	36. 50	19. 32	·1368					
17. 32	35. 30	19. 51	·1354					
17. 42	36. 25	20. 12	·1353					
17. 56	37. 0	20. 20	·1358					
18. 8	35. 30	20. 33	·1346					
18. 24	37. 40	20. 41	·1347					
18. 38	37. 40	20. 50	·1343					
18. 53	34. 50	21. 11	·1362					
18. 57	35. 25	21. 20	·1360					
19. 6	31. 55	21. 52	·1366					
19. 13	32. 50	22. 18	·1365					
19. 23	30. 30	22. 44	·1358					
19. 26	29. 55	23. 1	·1338					
19. 39	31. 45	23. 11	·1329					
19. 47	31. 35	23. 26	·1328					
20. 4	35. 25	23. 41	·1342					
20. 18	35. 25	23. 59	·1360					
20. 28	38. 0							
20. 41	35. 30							
20. 44	35. 30							
20. 57	31. 45							
21. 3	30. 45							
21. 11	32. 0							
21. 26	32. 0							
21. 38	33. 30							
21. 54	32. 35							
22. 23	36. 10							
22. 46	35. 50							
23. 1	37. 5							
23. 26	35. 5							
23. 31	38. 0							
23. 42	37. 25							
23. 59	37. 50							
Aug. 12		Aug. 12		Aug. 12		Aug. 12		
0. 0	20. 37. 50	0. 0	·1360	0. 0	·02869	1. 0	64·4	66·2
0. 8	37. 50	0. 13	·1356	1. 33	·02872	3. 0	64·5	66·1
0. 22	36. 55	0. 33	·1365	2. 14	·02933	Max.	64·5	66·2
0. 40	36. 30	0. 39	·1363	4. 24	·02917	9. 0	63·7	65·0
0. 55	38. 40	0. 55	·1375	5. 5	·02944	Min.	60·7	61·5
0. 58	37. 55	1. 3	·1367	5. 29	·02933	22. 40	63·6	65·2
1. 28	40. 30	1. 32	·1382	6. 10	·02958			
1. 56	38. 30	2. 8	·1347	6. 28	·02935			
2. 6	38. 30	2. 18	·1360	6. 54	·02951			
2. 13	36. 0	2. 34	·1376	7. 11	·02934			
2. 32	33. 25	2. 48	·1384	7. 34	·02943			
2. 56	33. 25	2. 58	·1375	7. 48	·02935			
3. 13	34. 30	3. 8	·1380	9. 3	·02942			
3. 38	34. 10	3. 20	·1389	10. 49	·02886			
3. 54	35. 5	3. 39	·1372	11. 9	·02883			
4. 9	33. 0	3. 53	·1385	11. 52	·02841			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 12		Aug. 12		Aug. 12				
h m	° ′ ″	h m		h m		h m	°	°
4. 35	20. 32. 30	4. 12	·1366	12. 42	·02835			
5. 9	33. 10	4. 26	·1371	14. 49	·02827			
5. 16	32. 50	4. 42	·1382	15. 23:	·02812			
5. 24	32. 55	4. 48	·1382	16. 8	·02752			
5. 32	31. 0	5. 9	·1393	17. 24:	·02774			
5. 53	28. 50	5. 26	·1371	18. 9	·02753			
5. 57	28. 50	5. 48	·1388	19. 3	·02823			
6. 8	28. 0	6. 13	·1400	21. 6	·02835			
6. 23	29. 30	6. 29	·1385	21. 49	·02807			
6. 28	29. 30	6. 43	·1403	22. 47	·02831			
6. 38	26. 10	6. 48	·1403	23. 59	·02840			
6. 53	29. 0	6. 56	·1408					
7. 5	29. 5	7. 35	·1386					
7. 17	28. 20	7. 45	·1377					
7. 26	28. 30	7. 58	·1380					
7. 39	30. 0	8. 10	·1379					
7. 43	29. 0	8. 22	·1384					
7. 56	28. 0	8. 59	·1378					
8. 12	27. 25	9. 12	·1382					
8. 38	29. 30	9. 19	·1380					
8. 50	30. 0	9. 34	·1386					
8. 59	28. 50	9. 42	·1383					
9. 12	29. 35	10. 8	·1389					
9. 25	29. 35	10. 20	·1386					
9. 38	30. 30	10. 28	·1387					
10. 2	29. 50	10. 48	·1382					
10. 17	28. 50	11. 6	·1384					
10. 28	30. 20	11. 28:	·1399					
10. 53	30. 20	11. 45	·1385					
11. 2	29. 0	12. 39	·1380					
11. 11	29. 0	12. 52	·1385					
11. 30	33. 50	13. 24	·1387					
11. 42	32. 25		***					
11. 56	32. 15	14. 45	·1376					
12. 14	28. 50	14. 55	·1377					
12. 32	28. 50	15. 19	·1374					
12. 42	30. 20	15. 36	·1365					
12. 57	30. 50	16. 16	·1386					
13. 24	28. 5	16. 55	·1378					
13. 51	25. 40	17. 35	·1388					
14. 13	27. 0	17. 56	·1384					
14. 25	29. 5	18. 19:	·1374					
14. 43	29. 5	18. 37	·1372					
15. 6	32. 30	18. 49	·1371					
15. 11	32. 50	19. 1	·1377					
15. 24	36. 0	19. 12	·1375					
15. 35	36. 0	19. 19	·1378					
15. 53	36. 40	19. 39	·1379					
16. 30	27. 5	19. 42	·1375					
16. 56	26. 40	19. 49	·1378					
17. 9	28. 10	20. 11	·1372					
17. 16	28. 10	20. 18	·1375					
17. 43	33. 10	20. 40	·1372					
17. 59	32. 30	20. 50	·1375					
18. 8	30. 30	20. 57	·1382					
18. 26	29. 40	21. 1	·1374					
18. 29	28. 30	21. 20	·1376					
18. 39	28. 30	21. 39	·1369					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 12		Aug. 12						
h m	° ′ ″	h m		h m		h m	°	°
18. 47	20. 27. 35	21. 42	·1368					
18. 56	29. 5	22. 0	·1351					
19. 9	27. 30	22. 11	·1355					
19. 13	28. 50	22. 22	·1351					
19. 26	28. 50	23. 18	·1372					
19. 31	30. 10	23. 59	·1379					
19. 40	28. 10							
19. 46	29. 20							
19. 56	29. 30							
20. 12	28. 10							
20. 26	30. 5							
20. 34	30. 20							
20. 40	29. 30							
20. 53	30. 0							
20. 57	32. 0							
21. 6	31. 0							
21. 20	32. 10							
21. 38	33. 5							
21. 56	33. 5							
22. 7	34. 30							
22. 22	35. 10							
22. 30	34. 5							
23. 24	36. 0							
23. 28	35. 35							
23. 59	36. 10							
Aug. 13		Aug. 13		Aug. 13		Aug. 13		
0. 0	20. 36. 10	0. 0	·1379	0. 0	·02840	1. 0	64 ·2	66 ·3
1. 42	37. 20	0. 27	·1382	2. 1	·02865	Max.	65 ·0	66 ·3
2. 6	36. 25	1. 41	·1388	3. 13	·02918	9. 0	62 ·6	65 ·0
2. 12	36. 25	2. 28	·1371	4. 26	·02936	Min.	60 ·7	63 ·4
3. 11	32. 30	2. 49	·1369	4. 45	·02936	21. 0	62 ·4	64 ·3
3. 27	31. 30	3. 12	·1377	5. 16	·02953			
3. 37	32. 15	3. 25	·1383	5. 33	·02935			
3. 58	32. 25	3. 34	·1378	5. 43	·02953			
4. 11	33. 35	3. 41	·1385	6. 53	·02929			
4. 50	31. 30	3. 43	·1381	8. 2	·02908			
5. 0	28. 55	3. 56	·1385	9. 6	·02908			
5. 13	30. 5	4. 6	·1384	11. 47	·02828			
5. 25	28. 10	4. 15	·1393	13. 23	·02828			
5. 34	24. 5	4. 29	·1392	13. 54	·02809			
5. 39	26. 25	4. 52	·1377	15. 36	·02809			
5. 43	26. 15	5. 21	·1394	16. 22	·02798			
6. 11	29. 30	5. 38	·1380	19. 47	·02825			
6. 33	29. 55	5. 49	·1398	20. 10	·02826			
6. 53	31. 20	6. 0	·1401	20. 39	·02817			
7. 37	31. 30	6. 25	·1399	23. 0	·02828			
7. 58	32. 5	6. 41	·1390	23. 59	·02831			
8. 27	31. 30	6. 52	·1386					
8. 46	32. 5	6. 58	·1383					
9. 32	30. 30	7. 19	·1387					
9. 42	30. 30	7. 28	·1385					
9. 58	24. 55	7. 35	·1389					
10. 9	29. 10	7. 43	·1386					
10. 17	28. 5	7. 51	·1387					
10. 43	30. 0	7. 57	·1385					
10. 56	30. 30	8. 4	·1387					
11. 9	28. 40	8. 15	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 13		Aug. 13						
h m	° ′ ″	h m		‡h m		h m	°	°
11. 26	20. 28. 0	8. 31	·1386					
11. 39	26. 50	9. 34	·1386					
11. 46	26. 50	9. 46	·1393					
12. 26	28. 30	9. 59	·1388					
12. 54	32. 10	10. 15	·1414					
12. 58	32. 10	10. 41	·1388					
13. 9	34. 35	11. 22	·1393					
13. 18	34. 35	12. 21	·1372					
13. 40	32. 15	13. 7	·1374					
13. 53	32. 15	13. 34	·1382					
14. 8	30. 10	13. 57	·1377					
14. 56	30. 10	14. 12	·1379					
15. 11	29. 25	14. 25	·1377					
15. 24	29. 30	15. 51	·1389					
15. 34	29. 10	16. 31	·1378					
16. 11	29. 30	16. 55	·1381					
16. 27	28. 25	17. 11	·1379					
16. 55	28. 55	17. 27	·1383					
17. 17	28. 50	17. 43	·1380					
	***	17. 50	·1384					
18. 16	28. 0	17. 57	·1381					
18. 32	28. 20	20. 27	·1377					
18. 47	27. 35	21. 35	·1340					
19. 42	29. 10	22. 23	·1359					
20. 3	31. 5		***					
20. 23	30. 25	23. 59	·1376					
20. 53	30. 10							
21. 29	35. 30							
22. 6	37. 35							
22. 9	37. 25							
22. 13	38. 50							
22. 53	35. 5							
22. 57	35. 15							
23. 5	34. 55							
23. 12	36. 0							
23. 59	35. 50							
Aug. 14		Aug. 14		Aug. 14		Aug. 14		
0. 0	20. 35. 50	0. 0	·1376	0. 0	·02831	1. 0	64 ·9	65 ·8
0. 13	36. 55	0. 41	·1374	2. 37	·02866	3. 0	64 ·0	66 ·3
0. 50	37. 25	0. 53	·1378	2. 44	·02878	Max.	64 ·9	66 ·4
0. 56	36. 55	1. 23	·1378	2. 58	·02875	9. 0	64 ·4	66 ·4
0. 58	37. 10	1. 36	·1383	5. 53	·02893	Min.	62 ·4	63 ·8
1. 8	37. 0	1. 53	·1379	7. 14	·02923	21. 0	63 ·3	65 ·0
1. 11	38. 0	2. 22	·1387	7. 33	·02917			
1. 54	36. 30	2. 29	·1384	7. 40	·02898			
2. 24	35. 50	2. 47	·1398	7. 54	·02898			
2. 27	34. 55	3. 0	·1384	8. 11	·02856			
2. 46	36. 5	3. 22	·1385	8. 43	·02862			
2. 55	35. 10	3. 26	·1380	9. 17	·02828			
3. 23	34. 50	3. 52	·1386	9. 56	·02856			
3. 27	34. 30	4. 13	·1400	10. 33	·02837			
3. 38	34. 50	4. 29	·1384	11. 9	·02809			
4. 12	34. 35	4. 43	·1379	11. 32	·02751			
4. 26	33. 20	4. 53	·1379	11. 47	·02765			
4. 42	33. 40	4. 56	·1387	11. 58	·02762			
4. 57	33. 30	5. 19	·1384	12. 9	·02705			
5. 15	32. 0	5. 35	·1388	12. 34	·02691			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁝ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers Of H.F. Magnet.	Readings of Thermometers Of V. F. Magnet.
Aug. 14		Aug. 14		Aug. 14		h m	o	o
h m	o ′ ″	h m		h m				
5. 41	20. 33. 50	5. 42	·1397	12. 57	·02752			
5. 43	32. 45	5. 50	·1390	13. 11	·02736			
5. 53	32. 35	6. 0	·1389	13. 46	·02751			
5. 56	32. 5	6. 4	·1400	14. 38	·02709			
6. 0	32. 50	6. 12	·1393	14. 53	·02709			
6. 11	31. 35	6. 16	·1400	16. 1	·02673			
6. 13	32. 5	6. 28	·1391	16. 23:	·02681			
6. 26	31. 30	6. 36	·1393	16. 38	·02663			
6. 38	31. 40	6. 45	·1385	17. 35	·02672			
6. 54	30. 20	6. 56	·1386	18. 57	·02760			
7. 8	26. 35	7. 18	·1407	19. 23	·02781			
7. 14	27. 50	7. 24	·1399	22. 12	·02829			
7. 26	30. 10	7. 39	·1413	23. 59	·02834			
7. 29	27. 5	7. 43	·1400					
7. 39	30. 50	7. 57	·1411					
7. 41	29. 45	8. 5	·1398					
8. 2	35. 0	8. 12	·1398					
8. 11	27. 0	8. 20	·1388					
8. 15	24. 0	8. 47	·1421					
8. 27	19. 20	8. 58	·1397					
8. 57	36. 50	9. 7	·1390					
9. 3	36. 5	9. 25	·1357					
9. 12	37. 50	9. 39	·1370					
9. 30	24. 15	9. 45	·1368					
9. 39	24. 5	9. 57	·1377					
9. 53	19. 0	10. 3	·1375					
10. 8	14. 15	10. 13	·1382					
10. 23	20. 0	10. 37	·1363					
10. 30	22. 15	11. 11	·1373					
10. 41	24. 30	11. 19	·1366					
11. 12	29. 50	11. 42	·1362					
11. 16	25. 30	11. 55	·1383					
11. 27	22. 35	12. 6	·1388					
11. 57	34. 45	12. 13	·1378					
12. 8	24. 10	12. 42	·1352					
12. 13	25. 10	12. 58	·1403					
12. 24	22. 50	13. 19	·1379					
12. 35	13. 20	13. 42	·1385					
12. 58	25. 40	14. 10	·1384					
13. 9	23. 0	14. 26	·1377					
13. 17	23. 0	14. 48	·1380					
13. 26	21. 50	15. 10	·1392					
13. 43	25. 30	15. 25	·1392					
13. 59	25. 30	15. 51	·1379					
14. 11	23. 50	16. 19:	·1363					
14. 26	23. 50	16. 40	·1375					
14. 38	24. 5	16. 46	·1375					
14. 42	23. 10	17. 13	·1394					
14. 58	28. 30	17. 28	·1395					
15. 41	23. 30	18. 2	·1349					
16. 29	40. 10	18. 8	·1355					
16. 41	40. 10	18. 26	·1352					
16. 57	44. 5	18. 38	·1353					
17. 26	40. 10	19. 13	·1377					
17. 30	40. 25	20. 27	·1369					
17. 35	38. 0	20. 44	·1364					
17. 41	38. 45	21. 20	·1354					
17. 46	37. 0	21. 26	·1358					
17. 56	20. 37. 10	21. 42	·1349					
18. 0	34. 30	21. 49	·1352					
18. 8	35. 50	21. 57	·1345					
18. 11	35. 10	22. 15	·1351					
18. 14	36. 25	22. 26	·1340					
18. 23	35. 30	22. 42	·1342					
18. 27	34. 30	22. 49	·1339					
18. 42	31. 0	23. 12	·1342					
19. 9	31. 5		***					
	***	23. 48	·1356					
19. 43	28. 10	23. 59	·1357					
19. 52	29. 0							
19. 54	27. 30							
20. 37	29. 0							
20. 55	28. 40							
21. 9	29. 5							
21. 17	28. 0							
21. 56	31. 40							
21. 58	30. 35							
22. 23	32. 30							
22. 26	32. 0							
23. 9	34. 25							
23. 17	34. 25							
23. 28	35. 40							
23. 33	35. 5							
23. 46	37. 30							
23. 59	38. 10							
Aug. 15		Aug. 15		Aug. 15		Aug. 15		
0. 0	20. 38. 10	0. 0	·1357	0. 0	·02834	1. 0	64 ·8	66 ·4
0. 23	40. 20	0. 17	·1363	0. 42	·02856	3. 10	64 ·7	66 ·8
0. 56	42. 30	0. 22	·1361	2. 34	·02946	Max.	64 ·9	67 ·1
1. 8	39. 0	0. 32	·1359	3. 1	·03061	9. 0	63 ·6	66 ·2
1. 10	34. 25	0. 41	·1365		·02968	Min.	63 ·4	65 ·4
1. 24	37. 30	0. 56	·1362	4. 34	·03012	21. 0	63 ·7	66 ·0
1. 30	37. 20	1. 4	·1349		***	22. 0	63 ·9	66 ·0
1. 42	40. 0	1. 20	·1369	5. 30	·03021	23. 20	64 ·2	66 ·5
1. 49	41. 50	1. 32	·1356	5. 44	·03007			
1. 55	39. 45	1. 38	·1361	6. 1	·03031			
2. 3	39. 25	1. 41	·1360	6. 16	·02993			
2. 8	40. 25	1. 44	·1376	6. 23	·02996			
2. 30	43. 0	1. 52	·1367	7. 1	·02948			
2. 37	44. 5	2. 6	·1374	7. 59	·02935			
2. 41	41. 5	2. 11	·1374		·02899			
2. 43	35. 30	2. 20	·1360	9. 2	·02891			
2. 45	38. 0	2. 41	·1351	10. 31	·02743			
2. 56	39. 55	2. 49	·1373	10. 53	·02768			
2. 59	23. 0	2. 57	·1355	11. 16	·02758			
3. 8	22. 10	3. 18	·1399	13. 38	·02821			
3. 23	29. 55	3. 22	·1396	15. 16	·02832			
3. 33	34. 30	3. 40	·1374	19. 0	·02819			
3. 41	36. 5	3. 43	·1375	21. 7	·02792			
3. 52	37. 50	3. 51	·1366	23. 59	·02780			
3. 56	35. 55	4. 5	·1389					
4. 3	36. 0	4. 12	·1379					
4. 9	33. 10	4. 22	·1390					
4. 24	33. 55	4. 32	·1392					
4. 28	35. 50	4. 41	·1406					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Aug. 15		Aug. 15						
h m	° ′ ″	h m		h m		h m	°	°
4. 36	20. 35. 0	4. 46	·1400					
4. 43	35. 0	4. 52	·1408					
4. 47	32. 30	5. 0	·1400					
4. 54	33. 50	5. 16	·1407					
4. 58	36. 10	5. 35	·1407					
5. 13	34. 25	5. 52	·1385					
5. 22	35. 15	6. 6	·1391					
5. 35	34. 5	6. 12	·1403					
5. 43	36. 5	6. 20	·1397					
5. 53	32. 5	6. 39	·1405					
5. 59	28. 30	6. 50	·1381					
6. 9	29. 0	7. 4	·1361					
6. 12	26. 50	7. 25	·1374					
6. 25	32. 0	7. 30	·1365					
6. 29	29. 0	7. 45	·1356					
6. 54	33. 30	7. 56	·1356					
7. 8	31. 40	7. 58	·1365					
7. 23	24. 40	8. 14	·1364					
7. 37	28. 35	8. 34	·1360					
7. 43	29. 50	8. 54	·1366					
7. 54	27. 0	9. 19	·1359					
7. 58	26. 35	9. 37	·1375					
8. 12	29. 25	9. 53	·1418					
8. 23	28. 10	9. 59	·1406					
8. 38	30. 0	10. 4	·1413					
8. 43	30. 0	10. 15	·1408					
9. 11	34. 0	10. 33	·1373					
9. 30	33. 15	10. 40	·1372					
9. 41	25. 40	10. 53	·1393					
9. 44	17. 55	11. 9	·1386					
9. 56	22. 50	11. 21	·1370					
9. 58	21. 40	12. 37	·1365					
10. 9	29. 0	12. 43	·1360					
10. 11	29. 20	12. 49	·1365					
10. 23	37. 0	13. 11	·1363					
10. 25	37. 30	13. 20	·1354					
10. 38	40. 30	13. 39	·1365					
10. 42	39. 50	14. 28	·1363					
10. 46	36. 0	14. 56	·1366					
10. 56	29. 0	15. 10	·1361					
11. 38	34. 30	15. 21	·1365					
11. 53	29. 0	15. 39	·1363					
12. 13	29. 0	16. 8	·1365					
12. 40	30. 5	17. 15	·1360					
12. 46	29. 30	17. 50	·1362					
13. 9	31. 0	18. 36	·1350					
13. 14	30. 45	19. 6	·1349					
13. 26	29. 40	19. 39	·1344					
13. 40	32. 0	20. 18	·1349					
14. 1	30. 35	20. 48	·1342					
14. 17	30. 20	21. 29	·1346					
14. 29	30. 20	22. 18	·1348					
14. 44	30. 35	22. 43	·1354					
14. 54	30. 0	23. 19	·1356					
14. 59	30. 30	23. 37	·1363					
15. 12	29. 50	23. 48	·1361					
15. 23	30. 30	23. 59	·1364					
16. 13	30. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 15								
h m	° ′ ″	h m		h m		h m	°	°
16. 39	20. 29. 40							
16. 42	31. 10							
16. 52	30. 0							
16. 58	30. 35							
17. 15	31. 0							
17. 27	30. 10							
17. 37	30. 55							
17. 41	29. 50							
17. 45	30. 50							
17. 56	30. 20							
18. 2	31. 15							
18. 13	30. 20							
18. 21	31. 50							
18. 27	30. 45							
18. 40	32. 0							
18. 43	33. 10							
18. 56	33. 10							
19. 13	34. 5							
19. 27	33. 30							
19. 41	34. 5							
20. 12	32. 45							
20. 38	33. 0							
21. 0	31. 35							
21. 12	32. 50							
22. 22	34. 50							
22. 37	34. 50							
22. 56	36. 0							
23. 24	36. 50							
23. 38	36. 50							
23. 52	38. 0							
23. 59	38. 0							
Aug. 16		Aug. 16		Aug. 16		Aug. 16		
0. 0	20. 38. 0	0. 0	·1364	0. 0	·02780	0. 0	64·8	66·4
0. 26	38. 15	0. 20	·1370	3. 14	·02836	1. 0	64·6	67·0
0. 59	42. 0	0. 28	·1367		·02918	2. 0	64·8	67·0
1. 8	41. 50	0. 34	·1371	4. 28	·02931	3. 0	64·6	67·0
1. 13	42. 25	0. 41	·1370	4. 35	·02942	Max.	65·0	68·1
1. 38	40. 50	0. 48	·1374	5. 9	·02957	9. 0	64·6	67·0
1. 43	42. 30	1. 0	·1374	5. 16	·02945	Min.	61·4	63·8
1. 53	42. 30	1. 4	·1368	5. 24	·02971	21. 0	62·8	64·7
1. 58	43. 0	1. 12	·1372	5. 35	·02965	22. 0	63·3	65·0
2. 23	41. 20	1. 34	·1354	5. 44	·02982	23. 0	63·6	65·3
2. 26	41. 20	1. 44	·1365	6. 13	·02978			
2. 39	40. 5	1. 48	·1363	7. 24	·02949			
2. 56	38. 50	1. 56	·1369	8. 47	·02937			
3. 0	38. 55	2. 1	·1365	11. 31	·02902			
3. 10	37. 35	2. 11	·1363	12. 0	·02836			
3. 22	37. 35	2. 20	·1351	13. 3	·02855			
3. 26	36. 45	2. 32	·1344	13. 39	·02844			
4. 30	36. 10	3. 0	·1365	14. 33	·02849			
4. 40	37. 5	3. 11	·1363	17. 26	·02835			
4. 56	36. 20	3. 19	·1367	18. 53	·02842			
5. 9	36. 30	3. 21	·1374	20. 6	·02831			
5. 19	33. 0	3. 49	·1379	23. 59	·02829			
5. 24	33. 0	3. 58	·1378					
5. 35	26. 35	4. 28	·1374					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 16		Aug. 16						
h m	° ′ ″	h m		h m		h m	°	°
5. 52	20. 27. 45	4. 40	·1389					
5. 56	28. 0	4. 48	·1387					
6. 24	31. 0	4. 50	·1383					
6. 52	32. 30	4. 55	·1385					
6. 58	32. 0	5. 5	·1382					
7. 46	31. 35	5. 10	·1383					
8. 14	32. 10	5. 15	·1363					
8. 33	32. 0	5. 22	·1377					
8. 53	31. 15	5. 34	·1362					
9. 8	31. 20	5. 47	·1379					
9. 21	31. 40	6. 1	·1385					
9. 37	31. 0	6. 22	·1376					
9. 56	31. 30	6. 43	·1375					
10. 24	31. 0	7. 44	·1383					
10. 54	31. 10	7. 59	·1377					
11. 11	30. 35	8. 7	·1378					
11. 29	36. 10	8. 13	·1376					
12. 8	32. 10	8. 25	·1379					
12. 15	31. 5	9. 4	·1377					
12. 37	30. 0	11. 21	·1378					
13. 9	32. 35	11. 40	·1399					
13. 44	29. 10	12. 19	·1383					
14. 13	28. 40	12. 20	·1386					
14. 28	29. 30	12. 32	·1379					
14. 49	28. 0	12. 52	·1374					
15. 7	27. 45	13. 13	·1382					
15. 23	28. 15	14. 11	·1377					
15. 39	28. 30	14. 33	·1379					
15. 48	28. 5	14. 54	·1376					
16. 3	28. 45	15. 49	·1379					
16. 24	27. 30	16. 1	·1376					
16. 55	29. 30	16. 12	·1382					
17. 8	29. 30	16. 21	·1376					
17. 15	30. 10	16. 42	·1373					
17. 26	29. 20	17. 13	·1378					
17. 38	30. 5	17. 36	·1376					
17. 41	29. 5	18. 10	·1380					
18. 6	29. 30	18. 29	·1378					
18. 11	28. 5	18. 41	·1379					
18. 22	28. 45	19. 41	·1371					
18. 29	28. 10	19. 52	·1372					
18. 39	27. 0	20. 7	·1363					
18. 53	28. 30	20. 14	·1364					
19. 0	27. 50	20. 20	·1359					
19. 10	28. 20	20. 41	·1358					
19. 19	27. 50	21. 27	·1366					
19. 25	28. 30	21. 54	·1362					
19. 38	27. 30	22. 39	·1361					
19. 58	29. 20	23. 18	·1368					
20. 9	28. 40	23. 59	·1374					
20. 28	29. 55							
20. 39	31. 5							
20. 45	30. 10							
21. 34	32. 25							
21. 57	32. 15							
22. 38	32. 40							
23. 2	33. 40							
23. 24	35. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 16								
h m	° ′ ″	h m		h m		h m	°	°
23. 29	20. 35. 30							
23. 59	37. 0							
Aug. 17		Aug. 17		Aug. 17		Aug. 17		
0. 0	20. 37. 0	0. 0	·1374	0. 0	·02829	0. 0	63·9	65·7
1. 13	38. 10	0. 11	·1373	2. 44	·02875	1. 0	64·8	66·2
2. 12	36. 30	0. 22	·1376	4. 24	·02889	2. 0	64·9	66·4
3. 22	34. 30	0. 35	·1374	7. 3	·02884	3. 0	64·6	66·5
4. 26	32. 50	0. 46	·1376	8. 53	·02890	Max.	64·9	66·5
5. 28	32. 0	3. 30	·1379	12. 2	·02861	9. 0	63·7	66·0
5. 42	32. 0	4. 26	·1376	16. 12	·02872	Min.	62·9	65·0
5. 56	31. 30	5. 45	·1382	20. 34	·02865	21. 0	63·7	65·2
6. 53	32. 0	6. 51	·1379	22. 16	·02782			
7. 19	32. 15	7. 22	·1383	23. 59	·02782			
7. 29	32. 0	7. 44	·1382					
8. 24	32. 10	8. 39	·1384					
9. 23	32. 10	9. 52	·1383					
9. 31	31. 45	10. 6	·1388					
10. 9	30. 50	10. 42	·1383					
10. 50	31. 40	11. 39	·1385					
11. 0	32. 0	11. 56	·1381					
11. 11	31. 30	15. 55	·1382					
11. 29	31. 30	18. 39	·1376					
11. 56	32. 35	18. 57	·1377					
12. 8	32. 0	20. 30	·1372					
12. 27	32. 0	20. 51	·1373					
12. 42	31. 30	21. 29	·1352					
13. 56	31. 45	21. 43	·1354					
14. 12	31. 20	21. 56	·1353					
15. 31	31. 0	22. 18	·1356					
18. 41	29. 10	22. 39	·1352					
18. 56	28. 35	22. 42	·1354					
19. 18	29. 0	22. 54	·1350					
19. 28	28. 30	23. 0	·1356					
19. 30	28. 30	23. 14	·1347					
19. 40	28. 20	23. 21	·1349					
20. 26	29. 55	23. 34	·1346					
20. 54	28. 50	23. 41	·1354					
21. 20	31. 0	23. 59	·1355					
21. 36	31. 55							
22. 6	36. 30							
22. 25	36. 30							
22. 56	35. 30							
23. 22	38. 50							
23. 35	38. 20							
23. 59	38. 50							
Aug. 18		Aug. 18		Aug. 18		Aug. 18		
0. 0	20. 38. 50	0. 0	·1355	0. 0	·02782	1. 0	64·4	66·0
0. 26	41. 50	0. 40	·1365	0. 48	·02784	3. 0	64·4	66·0
0. 28	41. 35	0. 43	·1364	2. 4	·02834	Max.	64·7	66·5
0. 38	42. 10	0. 52	·1370	5. 13	·02807	9. 0	63·8	66·0
0. 43	41. 30	1. 12	·1367	6. 23	·02811	Min.	61·8	63·2
0. 56	42. 25	1. 49	·1381	6. 52	·02793	21. 0	63·1	65·0
1. 35	39. 40	1. 51	·1378	7. 18	·02810			
1. 46	40. 0	2. 13	·1382	8. 13	·02792			
2. 5	40. 0		***	10. 26	·02771			
2. 41	42. 10	2. 43	·1395	11. 27	·02711			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 18		Aug. 18		Aug. 18				
h m	° ′ ″	h m		h m		h m	°	°
2. 54	20. 39. 55	2. 54	·1385	11. 53	·02667			
3. 0	41. 30	3. 0	·1390	12. 36	·02693			
3. 6	41. 5	3. 7	·1386	13. 54	·02711			
3. 9	42. 10	3. 12	·1390	14. 38	·02711			
3. 19	36. 45	3. 18	·1374	15. 46	·02649			
3. 29	38. 10	3. 28	·1379	16. 33	·02653			
3. 56	30. 30	3. 35	·1366	16. 55	·02642			
4. 2	30. 50	3. 51	·1397		***			
4. 26	34. 30	4. 4	·1412	19. 26	·02680			
4. 42	35. 20	4. 11	·1414	19. 45	·02675			
4. 52	35. 10	4. 30	·1383	21. 30	·02709			
5. 4	35. 10	4. 59	·1371	22. 36	·02703			
5. 23	35. 0	5. 15	·1374	23. 59	·02718			
5. 44	31. 30	5. 30	·1367					
6. 2	32. 35	5. 45	·1374					
6. 17	32. 35	6. 11	·1383					
6. 26	33. 30	6. 16	·1379					
6. 32	33. 15	6. 23	·1391					
6. 42	33. 5	6. 54	·1372					
6. 54	32. 0	7. 2	·1373					
7. 11	26. 10	7. 21	·1388					
7. 34	31. 5	7. 41	·1384					
7. 58	33. 0	7. 51	·1387					
8. 13	33. 0	8. 14	·1384					
8. 41	33. 50	8. 27	·1385					
8. 49	33. 35	8. 41	·1384					
9. 8	33. 45	9. 7	·1388					
9. 32	33. 0	9. 27	·1384					
9. 53	32. 15	10. 20	·1385					
10. 16	32. 30	10. 34	·1400					
10. 34	34. 30	10. 41	·1396					
10. 43	30. 0	10. 52	·1405					
10. 55	29. 0	10. 56	·1406					
11. 4	28. 45	11. 9	·1419					
11. 11	27. 35	11. 21	·1428					
11. 17	29. 30	11. 40	·1420					
11. 32	31. 0	12. 4	·1373					
11. 39	33. 5	12. 24	·1363					
11. 59	25. 55	12. 35	·1366					
12. 9	28. 10	12. 43	·1364					
12. 52	28. 5	12. 50	·1365					
13. 14	32. 10	13. 7	·1362					
13. 26	30. 20	13. 15	·1362					
13. 38	31. 50	13. 27	·1368					
13. 52	31. 0	13. 51	·1374					
14. 16	33. 45	14. 3	·1372					
14. 40	31. 30	14. 31	·1375					
14. 56	33. 10	14. 37	·1373					
15. 2	31. 45	14. 46	·1378					
15. 12	31. 35	15. 0	·1377					
15. 23	31. 50	15. 22	·1391					
15. 27	30. 0	15. 27	·1389					
15. 37	31. 5	15. 55	·1335					
15. 54	36. 30	16. 26	·1370					
16. 9	38. 55	16. 42	·1386					
16. 22	38. 55	17. 0	·1392					
16. 30	37. 35	17. 19	·1388					
16. 53	39. 50	17. 28	·1382					
Aug. 18		Aug. 18						
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 37. 50	17. 41	·1384					
17. 26	38. 0	17. 43	·1377					
17. 32	37. 0	17. 50	·1376					
17. 40	37. 0	18. 4	·1374					
17. 47	35. 0	18. 25	·1367					
18. 2	34. 35	18. 26	·1370					
18. 11	32. 40	18. 34	·1360					
18. 21	33. 30	18. 40	·1365					
18. 26	35. 50	18. 42	·1362					
18. 30	33. 0	19. 0	·1366					
18. 41	32. 10	19. 12	·1360					
18. 44	34. 25	19. 27	·1366					
18. 53	34. 50	19. 50	·1359					
18. 56	36. 20	20. 4	·1358					
19. 8	31. 15	20. 13	·1362					
19. 12	33. 50	20. 35	·1356					
19. 21	33. 30	21. 6	·1362					
19. 27	34. 55	21. 20	·1360					
19. 40	33. 30	21. 39	·1363					
20. 9	30. 5	21. 46	·1358					
20. 28	32. 0	21. 59	·1362					
20. 52	31. 5	23. 9	·1349					
21. 9	32. 25	23. 40	·1356					
21. 15	32. 0	23. 59	·1365					
21. 29	33. 0							
21. 39	33. 50							
21. 43	32. 50							
21. 54	34. 30							
21. 57	33. 55							
22. 12	36. 15							
22. 23	36. 15							
22. 31	37. 30							
22. 53	37. 40							
23. 59	40. 5							
Aug. 19		Aug. 19		Aug. 19		Aug. 19		
0. 0	20. 40. 5	0. 0	·1365	0. 0	·02718	1. 0	64 ·1	66 ·0
0. 42	42. 10	0. 19	·1374	1. 32	·02764	3. 0	63 ·8	66 ·0
0. 58	42. 0	0. 26	·1371	1. 45	·02772	Max.	65 ·0	67 ·0
1. 23	42. 50	0. 39	·1377	2. 15	·02798	9. 0	63 ·6	66 ·0
1. 38	41. 10	0. 50	·1370	5. 19	·02775	Min.	59 ·5	61 ·9
1. 44	35. 15		***	7. 27	·02787	22. 0	63 ·2	65 ·0
1. 57	37. 5	1. 16	·1380	8. 30	·02776			
2. 9	35. 0	1. 37	·1355	8. 49	·02791			
2. 13	35. 0	1. 52	·1396	9. 10	·02763			
2. 23	36. 5	2. 0	·1398	11. 1	·02710			
2. 28	34. 40	2. 9	·1394	11. 33:	·02644			
2. 33	35. 20	2. 20	·1398	11. 59	·02654			
2. 40	34. 30	2. 27	·1397	14. 21	·02628			
3. 1	36. 50	2. 37	·1403	15. 53	·02630			
3. 32	35. 10	2. 48	·1385	17. 18	·02616			
3. 41	35. 25	3. 29	·1384	19. 1	·02641			
4. 2	34. 55	3. 41	·1390	20. 9	·02637			
4. 11	34. 55	4. 4	·1386	20. 33	·02649			
4. 14	34. 15	4. 10	·1388	20. 52	·02638			
4. 28	34. 15	4. 18	·1386	21. 6	·02651			
4. 39	34. 35	4. 41	·1389	21. 33	·02638			
5. 8	33. 0	5. 3	·1385	23. 59	·02669			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.19		Aug.19						
h m	° ′ ″	h m		h m		h m	°	°
5. 23	20. 32. 5	5. 11	·1387					
5. 29	32. 30	5. 25	·1383					
5. 56	32. 45	5. 36	·1387					
6. 7	32. 0	5. 47	·1383					
6. 26	31. 0	5. 53	·1385					
6. 33	29. 25	6. 21	·1376					
6. 53	30. 15	6. 41	·1379					
6. 58	29. 30	7. 1	·1373					
7. 23	31. 10	7. 34	·1377					
7. 38	33. 0	7. 41	·1375					
7. 58	31. 0	8. 0	·1378					
8. 8	31. 0	8. 33	·1368					
8. 14	31. 10	8. 44	·1401					
8. 33	21. 55	8. 52	·1412					
8. 58	32. 50	9. 20	·1392					
9. 8	33. 0	9. 32	·1394					
9. 24	30. 0	9. 59	·1370					
9. 50	33. 50	10. 13	·1379					
10. 9	27. 0	10. 37	·1372					
10. 24	28. 5	10. 58	·1387					
10. 38	26. 40	11. 13	·1381					
11. 4	41. 20	11. 34	·1377					
11. 44	30. 25	12. 10	·1396					
12. 13	31. 40	13 4	·1379					
12. 23	32. 45	13. 30	·1383					
12. 38	32. 30	13. 55	·1376					
12. 54	31. 50	14. 5	·1377					
13. 0	30. 45	14. 43	·1371					
13. 8	31. 10	15. 9	·1376					
13. 23	30. 20	15. 32	·1377					
13. 31	30. 20	15. 46	·1375					
13. 42	29. 15	16. 45	·1381					
14. 7	29. 15	17. 19	·1375					
14. 12	28. 20	17. 34	·1377					
14. 52	30. 10	17. 52	·1370					
15. 7	29. 20	18. 0	·1372					
15. 43	29. 20	18. 27	·1363					
15. 58	31. 45	19. 37	·1366					
16. 28	28. 5	19. 54	·1362					
16. 58	34. 10	20. 9	·1354					
17. 21	28. 30	20. 26	·1355					
17. 37	29. 0	20. 50	·1344					
17. 44	27. 55	21. 4	·1350					
18. 10	27. 10	21 39	·1348					
18. 21	28. 10	21. 57	·1355					
18. 30	27. 30	22. 6	·1351					
18. 39	28. 20	22. 43	·1358					
18. 44	27. 10	22. 55	·1364					
18. 53	28. 40	23. 10	·1358					
19. 9	28. 40	23. 21	·1367					
19. 16	28. 0	23. 59	·1376					
19. 42	28. 15							
19. 54	27. 35							
20. 7	28. 10							
20. 14	30. 50							
20. 38	31. 35							
20. 43	30. 0							
20. 47	30. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.19								
h m	° ′ ″	h m		h m		h m	°	°
20. 58	20. 32. 50							
21. 12	32. 20							
21. 36	34. 0							
21. 43	34. 0							
21. 53	34. 45							
21. 59	34. 10							
22. 4	34. 45							
22. 7	33. 15							
22. 14	34. 30							
22. 26	34. 20							
23. 0	38. 25							
23. 11	37. 50							
23. 48	39. 30							
23. 59	41. 20							
Aug.20		Aug.20		Aug.20		Aug.20		
0. 0	20. 41. 20	0. 0	·1376	0. 0	·02669	Min.	63·9	65·9
0. 24	40. 20	0. 4	·1381	0. 28	·02670	1. 0	64·2	66·3
0. 28	39. 25	0. 20	·1368	1. 38	·02722	8. 0	65·1	67·2
0. 43	39. 20	0. 26	·1371		***	Max.	65·5	67·4
0. 50	37. 45	0. 29	·1362	3. 34	·02740	21. 0	65·1	67·0
1. 7	36. 55	0. 40	·1362	4. 3	·02767			
1. 15	39. 0	1. 4	·1375	4. 18	·02756			
1. 26	38. 0	1. 8	·1371	7. 5	·02766			
1. 35	38. 40	1. 17	·1385	7. 30	·02752			
1. 39	37. 30	1. 26	·1373	8. 55	·02763			
2. 6	39. 30	1. 37	·1379	9. 33	·02763			
2. 14	38. 45	1. 40	·1375	9. 52	·02749			
2. 39	40. 0	1. 53	·1383	11. 31	·02736			
2. 45	38. 5	2. 12	·1377	11. 59	·02723			
2. 54	39. 20	2. 22	·1374	14. 30	·02745			
3. 6	38. 35	2. 30	·1378	15. 16	·02700			
3. 11	39. 45	2. 49	·1374	15. 40	·02691			
3. 15	38. 5	2. 58	·1384	17. 57	·02772			
3. 26	37. 0	3. 6	·1384	19. 53	·02772			
3. 38	33. 10	3. 14	·1390	23. 59	·02770			
3. 50	32. 50	3. 41	·1376					
4. 1	34. 5	4. 4	·1394					
4. 11	35. 10	4. 16	·1389					
4. 25	33. 35	4. 26	·1380					
4. 44	34. 20	4. 44	·1386					
5. 11	33. 30	4. 49	·1384					
5. 28	33. 15	5. 5	·1386					
5. 43	33. 20	5. 18	·1377					
6. 9	30. 50	5. 30	·1375					
6. 24	32. 0	5. 37	·1377					
6. 28	31. 40	6. 5	·1376					
6. 52	33. 0	6. 21	·1385					
7. 2	33. 0	6. 30	·1383					
7. 23	33. 25	7. 10	·1389					
7. 32	31. 10	7. 34	·1384					
7. 43	32. 0	7. 49	·1390					
7. 56	31. 50	8. 26	·1379					
8. 2	31. 20	8. 48	·1383					
8. 23	31. 30	9. 10	·1378					
8. 28	30. 30	9. 26	·1379					
8. 56	31. 25	9. 39	·1387					
9. 3	30. 55	9. 50	·1385					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 20		Aug. 20						
h m	° ′ ″	h m		h m		h m	°	°
9. 38	20. 32. 45	10. 41	·1391					
9. 46	31. 45	11. 10	·1388					
9. 56	32. 0	11. 41	·1398					
10. 4	32. 0	12. 25	·1384					
10. 33	34. 20	13. 6	·1386					
10. 42	33. 45	13. 15	·1381					
10. 53	32. 10	14. 19	·1372					
11. 12	30. 40	14. 34	·1377					
11. 28	31. 0	14. 57	·1404					
11. 53	31. 50	15. 21	·1394					
12. 11	33. 50	15. 39	·1392					
12. 17	32. 35	15. 43	·1394					
12. 39	32. 0	16. 4	·1389					
13. 2	29. 50	16. 42	·1370					
13. 14	30. 15	17. 4	·1367					
13. 29	29. 30	17. 14	·1363					
13. 47	29. 30	17. 42	·1362					
14. 14	37. 30	17. 51	·1367					
14. 28	38. 25	17. 59	·1363					
14. 46	45. 0	18. 42	·1365					
15. 11	38. 0	19. 6	·1362					
15. 38	32. 0	19. 13	·1364					
15. 52	31. 50	19. 26	·1358					
16. 14	27. 30	20. 5	·1346					
16. 37	26. 45	20. 14	·1347					
17. 0	28. 0	20. 36	·1336					
17. 9	27. 45	20. 53	·1337					
17. 30	28. 20	21. 2	·1338					
17. 41	27. 55	21. 11	·1335					
17. 52	29. 50	21. 22	·1338					
17. 56	27. 45	21. 50	·1336					
	***	22. 13	·1353					
18. 26	27. 0	22. 57	·1362					
18. 42	27. 50	23. 12	·1365					
18. 56	26. 20	23. 34	·1364					
	***	23. 59	·1376					
19. 9	28. 30							
19. 26	28. 30							
19. 39	31. 0							
20. 8	31. 0							
20. 14	32. 5							
20. 30	32. 5							
21. 2	35. 0							
21. 16	37. 30							
21. 43	38. 5							
22. 1	35. 10							
22. 14	38. 0							
22. 51	38. 55							
23. 9	38. 45							
23. 19	40. 5							
23. 35	39. 30							
23. 59	41. 10							
Aug. 21		Aug. 21		Aug. 21		Aug. 21		
0. 0	20. 41. 10	0. 0	·1376	0. 0	·02770	1. 0	65·6	67·1
0. 23	40. 35	0. 11	·1373	2. 40	·02824	3. 0	65·7	66·9
0. 27	41. 40	0. 20	·1378	4. 43	·02832	Max.	66·1	68·0
0. 43	41. 40	0. 36	·1380	6. 53	·02853	9. 0	63·6	66·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug. 21		Aug. 21		Aug. 21		Aug. 21		
h m	° ′ ″	h m		h m		h m		
0. 58	20. 40. 35	0. 51	·1378	7. 19	·02837	Min.	62·6	65·0
1. 28	39. 30	1. 17	·1381	8. 30	·02841	21. 0	64·4	66·0
1. 48	39. 30	1. 27	·1379	10. 23	·02792			
2. 9	37. 50	1. 51	·1386	11. 9	·02753			
3. 30	34. 0	2. 6	·1383	13. 4	·02729			
3. 43	34. 0	2. 15	·1384	13. 59	·02737			
4. 58	32. 30	3. 40	·1380	17. 22	·02729			
5. 9	32. 5	4. 6	·1378	19. 31	·02748			
5. 22	32. 30	5. 10	·1376	22. 8	·02745			
5. 28	32. 10	5. 18	·1382	23. 59	·02732			
5. 41	32. 10	5. 25	·1380					
5. 57	31. 25	5. 45	·1388					
6. 11	32. 20	5. 56	·1377					
6. 24	31. 0	6. 1	·1378					
6. 56	33. 0	6. 10	·1382					
7. 11	33. 0	6. 19	·1385					
7. 53:	30. 15	6. 41	·1379					
8. 14	31. 30	6. 50	·1380					
8. 45	32. 5	7. 25	·1373					
8. 58	32. 5	7. 35	·1378					
9. 12	32. 30	8. 18	·1376					
9. 39	32. 10	8. 29	·1377					
9. 57	30. 10	8. 46	·1376					
10. 2	30. 5	8. 56	·1380					
10. 14	27. 25	9. 25	·1377					
10. 29	27. 40	9. 46	·1384					
10. 39	26. 30	9. 55	·1379					
10. 54	28. 25	10. 12	·1382					
11. 8	28. 50	10. 44	·1404					
11. 17	28. 20	11. 12	·1389					
11. 54	29. 35	11. 21	·1396					
12. 11	28. 50	11. 42	·1382					
12. 26	27. 25	11. 54	·1384					
12. 54	27. 25	12. 11	·1380					
13. 8	26. 5	12. 23	·1382					
13. 24	26. 5	12. 52	·1374					
13. 45	30. 0	13. 7	·1374					
13. 58	30. 50	13. 25	·1368					
14. 9	32. 10	13. 45	·1368					
14. 26	31. 0	13. 49	·1366					
14. 37	32. 30	14. 4	·1373					
14. 54	31. 50	14. 12	·1368					
15. 0	33. 20	14. 34	·1372					
15. 12	32. 0	14. 58	·1376					
15. 27	32. 20	15. 11	·1373					
15. 56	30. 30	16. 9	·1379					
16. 3	30. 30	16. 24	·1377					
16. 26	29. 10	16. 38	·1378					
16. 37	29. 35	16. 52	·1376					
16. 56	28. 50	17. 22	·1378					
17. 10	29. 30	17. 27	·1375					
17. 18	29. 30	18. 1	·1378					
17. 25	29. 0	18. 13	·1372					
17. 42	29. 10	18. 39	·1366					
18. 26	29. 40	19. 12	·1367					
18. 53	29. 5	19. 21	·1363					
19. 22	28. 30	19. 29	·1366					
19. 43	29. 50	19. 50	·1363 ***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 21		Aug. 21						
h m	° ′ ″	h m		h m		h m	°	°
20. 2	20. 30. 20	20. 12	·1358					
20. 41	30. 0	20. 33	·1355					
21. 33	31. 35	22. 4	·1356					
21. 39	31. 0	22. 21	·1356					
22. 53	35. 0	22. 57	·1355					
23. 14	37. 20	23. 17	·1356					
23. 27	37. 35	23. 41	·1347					
23. 34	36. 50	23. 49	·1348					
23. 45	36. 35		(†)					
23. 59	37. 30							
Aug. 22		Aug. 22		Aug. 22		Aug. 22		
0. 0	20. 37. 30		(†)	0. 0	·02732	1. 0	65 ·3	67 ·2
0. 11	37. 30	0. 5	·1355	1. 3	·02751	3. 0	65 ·7	67 ·8
0. 50	40. 30	0. 29	·1371	4. 32	·02837	Max.	66 ·3	68 ·4
1. 4	38. 45	0. 52	·1379	4. 51	·02872	9. 0	65 ·8	68 ·0
1. 9	40. 50	1. 3	·1368	5. 51	·02837	Min.	64 ·9	66 ·2
1. 25	40. 45	1. 22	·1376	9. 3	·02832	21. 0	65 ·1	66 ·9
1. 59	38. 20	1. 27	·1372	9. 51	·02784	22. 0	65 ·3	67 ·0
2. 5	38. 50	1. 40	·1375	10. 18	·02791	23. 0	65 ·5	67 ·0
2. 13	38. 15	2. 7	·1367	10. 42	·02780			
2. 24	39. 0	2. 13	·1371	11. 33	·02792			
2. 29	39. 0		***	17. 33	·02754			
2. 43	37. 5	2. 29	·1377	18. 37	·02775			
3. 4	37. 30	2. 43	·1370	23. 59	·02756			
3. 12	37. 5	3. 18	·1391					
3. 23	36. 30	3. 29	·1383					
3. 39	37. 50	3. 42	·1388					
3. 57	38. 0	3. 55	·1386					
4. 9	36. 30	4. 4	·1389					
4. 22	33. 35	4. 12	·1378					
4. 31	29. 30	4. 17	·1374					
4. 40	28. 50	4. 26	·1358					
5. 0	31. 50	4. 54	·1402					
5. 32	33. 25	5. 16	·1387					
6. 3	33. 5	5. 52	·1377					
6. 18	33. 30	6. 18	·1384					
6. 39	32. 55	7. 29	·1374					
7. 8	32. 30	7. 44	·1379					
7. 14	32. 30	8. 10	·1378					
7. 29	30. 25	8. 25	·1379					
7. 44	32. 25	8. 42	·1386					
7. 57	32. 25	9. 5	·1382					
8. 11	33. 20	9. 14	·1399					
8. 22	32. 40	9. 33	·1392					
8. 39	32. 30	9. 56	·1370					
8. 54	33. 25	10. 19	·1381					
9. 9	30. 0	11. 11	·1375					
9. 25	33. 0	11. 40	·1380					
9. 38	34. 55	12. 24	·1376					
9. 53	32. 30	12. 43	·1379					
9. 57	32. 0	13. 39	·1374					
10. 10	33. 30	14. 12	·1378					
10. 23	33. 25	15. 26	·1374					
10. 40	32. 0	15. 49	·1376					
10. 47	32. 0	16. 5	·1373					
11. 29	31. 0	16. 32	·1377					
11. 53	31. 5	17. 21	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 22		Aug. 22						
h m	° ′ ″	h m		h m		h m	°	°
12. 41	20. 33. 25	17. 39	·1373					
13. 16	32. 20	18. 4	·1370					
13. 31	32. 35		***					
13. 54	34. 50	19. 54	·1365					
14. 26	32. 55	20. 12	·1366					
14. 41	32. 30	21. 40	·1356					
14. 53	33. 0	21. 52	·1357					
15. 6	32. 30	22. 3	·1356					
15. 24	32. 10	22. 42	·1362					
15. 38	33. 25	22. 56	·1359					
15. 52	31. 40	23. 12	·1364					
16. 12	32. 35	23. 35	·1361					
16. 23	32. 10	23. 43	·1364					
16. 42	32. 50	23. 59	·1362					
17. 9	31. 20							
17. 26	31. 25							
17. 44	29. 20							
18. 31	30. 45							
18. 54	29. 55							
19. 9	30. 35							
19. 15	30. 30							
19. 26	31. 15							
19. 38	30. 30							
19. 48	30. 40							
19. 58	29. 40							
21. 10	31. 30							
21. 58	33. 25							
22. 10	33. 10							
22. 39	34. 40							
22. 56	34. 40							
23. 14	36. 40							
23. 36	37. 0							
23. 48	38. 20							
23. 59	38. 50							
Aug. 23		Aug. 23		Aug. 23		Aug. 23		
0. 0	20. 38. 50	0. 0	·1362	0. 0	·02756	0. 0	65 ·6	67 ·2
1. 13	40. 0	0. 18	·1365	4. 30	·02819	1. 0	65 ·6	67 ·7
1. 30	38. 35	0. 40	·1360	6. 8	·02808	3. 0	65 ·6	67 ·0
1. 41	39. 5	1. 16	·1366	8. 48	·02813	Max.	65 ·9	67 ·7
2. 30	37. 5	1. 30	·1363	11. 9	·02768	9. 0	65 ·0	67 ·6
2. 43	37. 30	1. 40	·1366	15. 27	·02793	Min.	64 ·0	66 ·7
3. 18	36. 25	1. 46	·1362	18. 37	·02796	21. 0	64 ·9	67 ·2
3. 26	36. 50	2. 25	·1372	22. 5	·02755	22. 0	64 ·8	67 ·1
3. 39	35. 40	3. 4	·1383	23. 2	·02748	23. 0	64 ·9	67 ·1
4. 8	35. 30	3. 20	·1380	23. 59	·02752			
4. 27	34. 30	3. 29	·1384					
4. 38	34. 30	3. 44	·1378					
4. 54	33. 55	3. 54	·1378					
5. 44	32. 40	4. 13	·1386					
5. 56	33. 5	4. 26	·1382					
6. 8	32. 30	4. 40	·1385					
6. 27	32. 45	4. 52	·1379					
6. 38	32. 10	5. 4	·1377					
6. 43	32. 45	5. 14	·1379					
7. 11	32. 5	5. 34	·1378					
7. 23	33. 10	5. 42	·1378					
7. 26	32. 0	6. 3	·1385					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug.23		Aug.23						
h m	° ′ ″	h m		h m		h m	°	°
7. 31	20. 32. 30	6. 26	·1378					
7. 43	30. 50	6. 41	·1380					
7. 54	31. 45	7. 8	·1379					
7. 57	31. 0	7. 21	·1382					
8. 9	31. 30	7. 40	·1375					
8. 29	28. 25	7. 50	·1381					
8. 54	31. 30	8. 5	·1380					
9. 8	28. 50	8. 19	·1373					
9. 25	29. 55	8. 40	·1378					
9. 40	29. 5	8. 50	·1376					
9. 57	27. 0	9. 13	·1389					
10. 13	29. 50	9. 46	·1384					
10. 32	29. 50	10. 6	·1391					
10. 43	28. 50	10. 22	·1380					
10. 58	29. 30	10. 43	·1377					
11. 12	28. 50	10. 52	·1378					
11. 32	30. 0	11. 14	·1373					
11. 55	31. 10	12. 55	·1370					
12. 27	30. 15	13. 14	·1373					
12. 48	31. 5	13. 28	·1369					
12. 58	32. 10	14. 27	·1374					
14. 17	32. 40	16. 16	·1373					
15. 17	31. 30	16. 29	·1376					
15. 27	32. 25	16. 43	·1372					
15. 53	31. 30	16. 57	·1374					
16. 7	31. 30	17. 8	·1373					
16. 23	32. 25	17. 28	·1374					
16. 45	32. 0	17. 55	·1366					
16. 56	30. 30	18. 20	·1367					
17. 11	30. 55	18. 56	·1362					
17. 26	30. 30	19. 18	·1362					
17. 39	30. 30	19. 41	·1365					
17. 56	32. 35	20. 20	·1363					
18. 8	32. 10	20. 43	·1360					
18. 15	32. 20	21. 26	·1361					
18. 53	35. 25	21. 51	·1358					
18. 59	35. 10	22. 20	·1366					
19. 11	35. 10	23. 6	·1363					
19. 15	35. 30	23. 59	·1364					
19. 31	34. 25							
19. 40	34. 25							
20. 6	32. 10							
20. 16	32. 20							
20. 33	31. 25							
21. 9	32. 0							
21. 12	31. 15							
21. 45	32. 45							
22. 0	31. 40							
22. 41	34. 30							
23. 44	37. 35							
23. 59	38. 0							
Aug.24		Aug.24		Aug.24		Aug.24		
0. 0	20. 38. 0	0. 0	·1364	0. 0	·02752	0. 0	65 ·3	67 ·8
0. 10	38. 20	0. 31	·1367	4. 18	·02809	1. 0	65 ·6	67 ·0
0. 26	40. 5	0. 54	·1366	5. 29	·02824	2. 0	65 ·9	68 ·0
0. 30	39. 50	2. 32	·1372	10. 1	·02819	3. 0	65 ·6	68 ·1
0. 58	39. 50	3. 40	·1375	10. 27	·02810	Max.	66 ·4	69 ·1

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug.24		Aug.24		Aug.24		Aug.24		
h m	° ′ ″	h m		h m		h m	°	°
1. 30	20. 40. 30	4. 5	·1372	10. 52	·02791	9. 0	66 ·4	69 ·0
2. 55	38. 50	4. 38	·1383	12. 23	·02766	Min.	63 ·0	66 ·2
4. 11	36. 35	4. 56	·1384	16. 48	·02737	21. 0	64 ·7	67 ·1
4. 30	36. 40	5. 8	·1380	18. 16	·02762			
5. 25	33. 45	5. 13	·1382	21. 38	·02757			
6. 9	32. 50	5. 25	·1376	22. 15	·02732			
6. 23	33. 10	5. 40	·1378	22. 41	·02732			
7. 0	32. 0	5. 49	·1378	23. 59	·02762			
7. 17	32. 0	6. 4	·1372					
7. 33	32. 40	6. 39	·1380					
7. 54	32. 15	6. 53	·1378					
8. 25	33. 10	7. 56	·1384					
8. 44	32. 10	8. 14	·1381					
9. 28	32. 35	8. 24	·1383					
9. 44	31. 50	8. 50	·1379					
10. 6	32. 30	9. 4	·1384					
10. 18	31. 40	9. 44	·1378					
10. 53	32. 30	9. 57	·1381					
11. 10	30. 20	10. 10	·1379					
11. 35	31. 0	10. 21	·1383					
11. 43	31. 35	10. 30	·1382					
12. 11	30. 25	10. 43	·1396					
12. 56	30. 35	11. 8	·1386					
13. 11	31. 35	11. 18	·1388					
13. 23	31. 20	12. 14	·1380					
13. 40	31. 50	12. 44	·1378					
14. 5	30. 45	13. 26	·1387					
14. 45	31. 50	13. 48	·1382					
15. 1	31. 10	14. 12	·1385					
15. 15	32. 0	14. 51	·1384					
15. 29	30. 20	15. 5	·1388					
16. 12	30. 0	15. 42	·1384					
16. 42	30. 20	16. 9	·1386					
17. 9	29. 35	17. 39	·1380					
17. 26	30. 40	17. 49	·1378					
17. 53	29. 40	18. 18	·1370					
17. 58	30. 30	18. 42	·1366					
18. 41	33. 20	18. 57	·1369					
18. 53	32. 35	19. 21	·1360					
19. 23	35. 0	19. 54	·1371					
19. 35	37. 0	20. 3	·1368					
19. 41	36. 10	20. 18	·1369					
19. 56	35. 10	20. 56	·1364					
19. 58	35. 50	21. 11	·1364					
20. 13	33. 0	21. 41	·1361					
20. 33	32. 30	22. 2	·1354					
20. 42	31. 0	22. 28	·1358					
21. 8	31. 0	22. 44	·1354					
21. 33	33. 5	23. 3	·1358					
21. 57	33. 0	23. 26	·1354					
22. 24	34. 10	23. 59	·1366					
22. 41	35. 35							
22. 56	35. 35							
23. 2	38. 10							
23. 11	37. 15							
23. 27	37. 25							
23. 52	38. 30							
23. 59	39. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 25		Aug. 25		Aug. 25		Aug. 25		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 0	0. 0	·1366	0. 0	·02762	1. 0	65·1	67·6
0. 9	38. 50	0. 10	·1367	2. 7	·02803	3. 0	65·6	67·6
0. 14	39. 10	0. 37	·1369	6. 7	·02822	Max.	66·2	68·2
0. 40	38. 30	1. 10	·1377	6. 24	·02817	9. 0	64·8	67·0
0. 58	38. 30	1. 48	·1375	9. 1	·02834	Min.	62·7	65·4
1. 11	39. 35	2. 24	·1380	10. 7	·02783	21. 0	64·6	66·3
1. 37	39. 0	2. 32	·1378	11. 25	·02767			
1. 41	39. 50	2. 59	·1378	12. 7	·02738			
1. 53	38. 35	3. 35	·1384	13. 4	·02729			
2. 23	38. 35	4. 2	·1383	17. 31	·02710			
2. 26	38. 5	4. 12	·1384	20. 40	·02724			
2. 38	38. 5	4. 43	·1382	21. 3	·02702			
3. 23	36. 5	5. 24	·1383	22. 9	·02702			
4. 22	33. 5	5. 32	·1379	22. 13	·02718			
4. 57	31. 35	5. 56	·1379	22. 24	·02686			
5. 10	31. 40	6. 11	·1383	22. 46	·02710			
5. 25	32. 35	6. 19	·1379	22. 59	·02682			
5. 42	32. 0	6. 46	·1370	23. 59	·02721			
6. 25	32. 20	7. 14	·1379					
6. 38	32. 35	7. 50	·1378					
6. 42	32. 20	8. 6	·1373					
6. 56	30. 30	8. 20	·1371					
7. 13	30. 10	8. 33	·1375					
7. 30	30. 55	9. 25	·1374					
7. 41	30. 40	9. 50	·1386					
7. 56	31. 20	10. 8	·1383					
8. 8	30. 30	10. 37	·1378					
8. 46	31. 30	10. 56	·1385					
8. 55	30. 40	11. 13	·1378					
9. 10	30. 40	11. 36	·1385					
9. 34	28. 25	11. 53	·1382					
9. 56	31. 15	12. 5	·1386					
10. 9	31. 0	12. 14	·1384					
10. 32	29. 30	12. 30	·1385					
10. 58	30. 20	13. 11	·1380					
11. 7	30. 0	13. 36	·1381					
11. 13	30. 10	14. 15	·1376					
11. 34	32. 50	15. 54	·1380					
12. 0	33. 40	16. 58	·1386					
12. 11	31. 45	17. 27	·1381					
12. 56	27. 30	18. 10	·1383					
13. 31	29. 30	18. 54	·1379					
13. 57	28. 20	19. 25	·1372					
14. 23	28. 20	19. 46	·1366					
14. 40	28. 55	20. 11	·1373					
16. 4	29. 50	20. 52	·1368					
16. 43	28. 35	21. 23	·1327					
16. 56	28. 50	21. 30	·1339					
16. 58	28. 25	21. 34	·1337					
17. 23	29. 35	21. 44	·1361					
17. 40	29. 35	21. 57	·1337					
18. 10	31. 0	22. 6	·1342					
18. 22	30. 20	22. 18	·1352					
18. 28	30. 20	22. 26	·1374					
18. 39	29. 30	22. 40	·1347					
18. 55	28. 30	22. 49	·1364					
19. 28	29. 15	23. 2	·1378					
19. 46	29. 0	23. 10	·1352					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 25		Aug. 25						
h m	° ′ ″	h m		h m		h m	°	°
20. 15	20. 31. 50	23. 18	·1360					
20. 46	31. 30	23. 26	·1353					
20. 56	36. 10	23. 34	·1346					
21. 14	31. 40	23. 59	·1353					
21. 28	31. 0							
21. 39	29. 10							
21. 54	33. 50							
22. 1	31. 0							
22. 26	32. 50							
22. 33	36. 40							
22. 43	34. 0							
23. 9	42. 10							
23. 16	34. 15							
23. 28	37. 35							
23. 55	39. 0							
23. 59	44. 20							
Aug. 26		Aug. 26		Aug. 26		Aug. 26		
0. 0	20. 44. 20	0. 0	·1353	0. 0	·02721	1. 0	63·3	67·2
0. 10	42. 50	0. 5	·1343	0. 53	·02732	3. 0	65·3	67·4
0. 14	46. 0	0. 15	·1348	2. 15	·02778	Max.	65·6	68·1
0. 23	45. 30	0. 27	·1349	2. 26	·02801	9. 0	63·1	66·0
0. 27	44. 35	0. 35	·1358	2. 34	·02786	Min.	57·7	60·1
0. 41	44. 35	0. 47	·1356	3. 9	·02858	21. 0	61·6	63·9
1. 3	41. 0	0. 56	·1363	3. 23	·02836			
1. 27	41. 35	1. 4	·1358	3. 28	·02868			
1. 33	42. 50	1. 29	·1377	4. 10	·02973			
1. 39	42. 0	1. 41	·1385	4. 44	·02998			
1. 54	42. 0	1. 49	·1385	4. 47	·03032			
1. 58	41. 0	2. 1	·1367	4. 53	·03060			
2. 24	44. 15	2. 14	·1358	4. 56	·03047			
2. 30	44. 15	2. 27	·1367	5. 0	·03075			
2. 38	44. 50	2. 40	·1379	5. 14	·03038			
2. 41	42. 50	2. 49	·1368	5. 35	·03057			
	(†)	3. 4	·1376	5. 40	·03048			
3. 0	47. 56*	3. 12	·1379	6. 1	·03019			
3. 26	44. 30	3. 23	·1400	6. 12	·03026			
3. 43	42. 50	3. 30	·1381	6. 23	·03011			
3. 58	37. 30	3. 38	·1355	6. 31	·03052			
4. 11	37. 15	3. 43	·1363	6. 53	·02935			
4. 22	36. 0	4. 4	·1345	7. 26:	·02872			
4. 26	31. 5	4. 19	·1373	8. 19	·02868			
4. 33	31. 0	4. 37	·1365	8. 56	·02853			
4. 43	34. 30	4. 50	·1377	9. 43	·02802			
4. 54	37. 10	4. 51	·1374	9. 56	·02771			
4. 57	42. 15	4. 53	·1381	10. 6	·02771			
4. 58	34. 30	4. 56	·1366	10. 34	·02655			
5. 9	37. 25	5. 5	·1371	11. 2	·02676			
5. 13	32. 0	5. 11	·1367	11. 34:	·02638			
5. 24	30. 50	5. 24	·1379	11. 59	·02638			
5. 28	35. 25	5. 30	·1367	12. 24	·02607			
5. 31	35. 25	5. 35	·1367	13. 1	·02592			
5. 38	37. 50	5. 43	·1340	13. 52:	·02631			
5. 43	30. 40	6. 4	·1384	14. 28	·02573			
5. 53	31. 0	6. 25	·1357	15. 27	·02602			
6. 8	36. 45	6. 38	·1364	16. 58	·02556			
6. 11	35. 30	6. 40	·1342	18. 27	·02563			
6. 14	32. 30	6. 45	·1365	18. 34	·02551			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug.26		Aug.26		Aug.26		h m	o	o
h m	o ′ ″	h m		h m				
6. 38	20. 33. 30	6. 51	·1364	18. 56	·02563			
6. 40	18. 15	6. 55	·1394	19. 11	·02549			
6. 44	19. 25	7. 4	·1370	19. 24	·02571			
6. 53	16. 10	7. 10	·1373	19. 44	·02573			
6. 58	31. 40	7. 20	·1373	20. 3	·02564			
7. 7	30. 10	7. 39	·1364	22. 1	·02588			
7. 13	33. 20	7. 50	·1361	23. 6	·02578			
7. 22	33. 10	7. 57	·1364	23. 59	·02606			
7. 28	34. 30	8. 10	·1360					
7. 41	35. 10	8. 21	·1371					
7. 52	33. 50	8. 30	·1369					
7. 59	31. 30	8. 49	·1364					
8. 4	31. 20	9. 9	·1354					
8. 14	28. 30	9. 20	·1357					
8. 32	32. 55	9. 26	·1363					
8. 43	34. 0	9. 37	·1357					
8. 55	32. 20	9. 55	·1367					
9. 9	33. 30	10. 4	·1353					
9. 23	30. 40	10. 26	·1396					
9. 57	30. 30	10. 37	·1377					
10. 4	25. 0	10. 49	·1326					
10. 9	25. 0	11. 11	·1356					
10. 18	27. 40	11. 20	·1348					
10. 26	26. 15	11. 25:	·1352					
10. 38	27. 40	11. 56	·1341					
10. 53	10. 15	12. 12	·1344					
11. 13	22. 10	12. 35	·1329					
11. 18	22. 30	12. 56	·1347					
11. 32	26. 20	13. 10	·1362					
11. 53	23. 30	13. 41	·1362					
12. 4	23. 30	13. 50	·1359					
12. 25	28. 10	14. 9	·1366					
12. 50	29. 20	14. 32	·1356					
12. 58	28. 5	14. 56	·1361					
13. 16	23. 50	15. 33	·1359					
13. 41	30. 30	16. 3	·1371					
	***	16. 26	·1370					
14. 14	34. 5	16. 38	·1367					
14. 41	29. 25	16. 43	·1371					
14. 53	28. 5	17. 35	·1369					
14. 58	29. 30	17. 41	·1364					
15. 7	29. 30	17. 56	·1372					
15. 25	34. 0	18. 9	·1367					
15. 30	34. 0	18. 12	·1369					
15. 38	33. 15	18. 20	·1365					
15. 42	34. 25	18. 40	·1355					
15. 52	32. 30	18. 44	·1338					
15. 56	33. 5	18. 54	·1342					
15. 57	31. 35	18. 56	·1340					
16. 4	32. 25	19. 19	·1303					
16. 11	31. 30	19. 21	·1299					
16. 27	31. 15	19. 26	·1319					
16. 38	28. 50	19. 45	·1335					
16. 42	29. 40	19. 55	·1346					
17. 25	29. 0	20. 12	·1341					
17. 38	31. 50	20. 17	·1344					
17. 42	28. 0	20. 24	·1339					
17. 46	29. 5	20. 48	·1346					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Aug.26		Aug.26				h m	o	o
h m	o ′ ″	h m		h m				
17. 53	20. 28. 0	21. 12	·1342					
17. 57	29. 15	21. 21	·1347					
18. 3	29. 15	21. 34	·1344					
18. 9	27. 0	21. 54	·1348					
18. 13	29. 40	22. 2	·1355					
18. 22	27. 30	22. 42	·1356					
18. 28	29. 30	23. 12	·1359					
18. 41	33. 45	23. 48	·1355					
18. 43	29. 25	23. 59	·1358					
18. 53	32. 10							
18. 56	30. 55							
19. 9	38. 30							
19. 15	38. 30							
19. 23	36. 30							
19. 28	38. 25							
19. 56	41. 45							
20. 9	38. 0							
20. 22	38. 50							
20. 28	38. 25							
20. 41	40. 15							
20. 58	39. 30							
21. 12	36. 50							
21. 19	36. 35							
21. 41	32. 50							
21. 55	32. 10							
22. 9	33. 0							
22. 42	35. 10							
23. 9	36. 0							
23. 22	35. 45							
23. 28	35. 45							
23. 43	37. 0							
23. 50	37. 0							
23. 59	37. 10							
Aug.27		Aug.27		Aug.27		Aug.27		
0. 0	20. 37. 10	0. 0	·1358	0. 0	·02606	Min.	63·1	65·1
0. 43	38. 20	0. 15	·1362	0. 44	{·02626	0. 0	63·1	65·1
0. 58	37. 50	0. 29	·1370		{·02751	8. 0	64·8	67·4
1. 1	36. 30	0. 31	·1366	3. 16	·02793	Max.	65·5	68·2
1. 12	37. 10	0. 37	·1372	5. 43	·02813	21. 0	65·3	67·5
1. 39	36. 25	0. 45	·1363	9. 23	·02849			
1. 48	35. 50	1. 4	·1375	14. 34	·02844			
1. 56	35. 20	1. 13	·1373	17. 41	·02850			
2. 13	35. 10	1. 38	·1375	20. 2:	·02871			
2. 24	34. 50	1. 43	·1371	23. 59	·02866			
2. 40	35. 5	1. 59	·1375					
2. 43	34. 0	2. 11	·1371					
2. 59	33. 20	2. 22	·1375					
3. 9	33. 50	2. 27	·1372					
3. 26	32. 5	2. 38	·1377					
3. 39	32. 20	2. 46	·1371					
4. 30	31. 10	2. 59	·1377					
5. 44	30. 15	3. 8	·1371					
6. 15	30. 5	3. 22	·1368					
6. 46	30. 35	3. 38	·1378					
7. 39	30. 25	3. 49	·1375					
8. 12	30. 35	5. 24	·1377					
8. 29	30. 15	5. 30	·1375					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.27		Aug.27						
h m	° ′ ″	h m		h m		h m	°	°
8. 40	20. 30. 40	6. 42	·1377					
10. 8	30. 50	7. 29	·1374					
10. 43	30. 30	7. 41	·1376					
10. 54	30. 45	8. 25	·1372					
11. 56	31. 5	10. 57	·1371					
11. 59	30. 55	12. 44	·1373					
13. 12	31. 20	13. 9	·1375					
13. 43	31. 40	13. 25	·1372					
14. 6	31. 40	16. 56	·1377					
14. 23	31. 10		***					
14. 29	31. 25	18. 37	·1376					
14. 58	30. 20	19. 29	·1371					
15. 9	30. 20	20. 11	·1362					
15. 38:	30. 50	22. 23	·1356					
15. 53	29. 35	23. 34	·1361					
16. 15	30. 20	23. 59	·1361					
16. 33	29. 35							
16. 54	29. 10							
16. 57	28. 45							
17. 8	29. 5							
	***							
17. 39	28. 50							
17. 43	28. 10							
17. 53	29. 40							
18. 2	28. 30							
18. 42	28. 40							
18. 47	28. 10							
19. 9	28. 30							
19. 28	28. 30							
19. 38	27. 55							
	***							
19. 59	28. 50							
20. 9	28. 0							
20. 41	29. 25							
21. 0	28. 35							
21. 39	32. 0							
22. 1	31. 55							
22. 35	33. 0							
23. 8	34. 30							
23. 43	36. 5							
23. 59	36. 25							
Aug.28		Aug.28		Aug.28		Aug.28		
0. 0	20. 36. 25	0. 0	·1361	0. 0	·02866	1. 0	66·5	68·3
1. 8	39. 5	0. 49	·1365	2. 10	·02906	3. 0	66·2	68·5
1. 55	38. 0	0. 53	·1370	4. 28	·02937	Max.	66·8	69·2
2. 16	38. 0	1. 33	·1368	9. 3	·02949	9. 0	65·6	68·0
3. 23	35. 55	2. 19	·1373	11. 10	·02923	Min.	64·0	66·0
3. 43	35. 10	2. 41	·1370	13. 33	·02904	21. 0	64·5	66·4
3. 54	34. 50	3. 49	·1376	14. 9	·02892			
5. 42	30. 45	3. 55	·1373	16. 6	·02884			
5. 53	30. 55	5. 14	·1378	16. 51	·02877			
6. 6	30. 25	5. 48	·1376	18. 33:	·02896			
6. 10	30. 40	6. 10	·1380	20. 11	·02889			
6. 32	29. 30	6. 20	·1377	22. 55	·02811			
6. 46	29. 25	6. 49	·1380	23. 59	·02808			
7. 7	30. 30	7. 45	·1379					
7. 26	30. 20	9. 50	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.28		Aug.28						
h m	° ′ ″	h m		h m		h m	°	°
8. 8	20. 31. 0	9. 53	·1390					
8. 56	31. 0	10. 26	·1385					
9. 13	30. 50	10. 40	·1388					
9. 28	31. 0	11. 1	·1390					
9. 43	30. 50	11. 49	·1378					
10. 1	31. 10	12. 53	·1384					
10. 26	29. 45	13. 14	·1382					
10. 48	30. 0	13. 33	·1387					
10. 56	29. 0	14. 18	·1385					
11. 0	29. 0	14. 52	·1380					
11. 9	27. 35	15. 57	·1378					
11. 25	27. 35	16. 25	·1382					
11. 43	29. 10	17. 5	·1378					
12. 26	30. 30	17. 20	·1381					
12. 54	31. 30	17. 50	·1377					
13. 8	31. 15	18. 25	·1379					
13. 23	34. 0	21. 26	·1354					
13. 39	34. 35		***					
14. 13	30. 50	22. 22	·1358					
14. 38	30. 0	22. 40	·1357					
15. 11	30. 0		***					
15. 32	29. 35	23. 59	·1368					
15. 59	30. 5							
16. 14	30. 45							
16. 28	30. 0							
16. 50	30. 0							
17. 11	29. 30							
17. 44	28. 0							
17. 52	27. 30							
17. 58	27. 50							
18. 42	26. 55							
19. 24	25. 35							
19. 28	25. 50							
19. 55	25. 30							
20. 11	25. 50							
20. 26	25. 50							
21. 56	29. 30							
22. 26	31. 30							
22. 38	31. 30							
23. 14	34. 15							
23. 20	34. 35							
23. 36	35. 20							
23. 59	37. 15							
Aug.29		Aug.29		Aug.29		Aug.29		
0. 0	20. 37. 15	0. 0	·1368	0. 0	·02808	1. 0	64·5	66·1
0. 19	37. 25	0. 13	·1367	2. 29	·02839	Max.	64·8	66·2
0. 43	39. 30	0. 44	·1379	5. 46	·02807	3. 0	62·7	64·8
1. 8	39. 20	1. 7	·1375	6. 10	·02795	9. 0	61·3	63·0
1. 15	39. 40	1. 25	·1372	6. 45	·02780	Min.	60·5	63·0
1. 38	38. 30	1. 33	·1375	10. 39	·02741	21. 0	63·4	64·7
1. 42	37. 15	1. 40	·1366	12. 11	·02741	22. 0	63·3	64·8
1. 57	37. 30	2. 9	·1367	12. 22	·02732	23. 0	63·4	64·9
2. 23	36. 30	2. 24	·1374	14. 13	·02725			
2. 26	36. 50	2. 36	·1372	14. 49	·02701			
2. 56	34. 30	3. 29	·1378	17. 34	·02697			
4. 11	31. 55	3. 59	·1380	18. 26:	·02718			
4. 31	31. 55	4. 24	·1387	19. 16	·02718			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.29		Aug.29		Aug.29		h m	o	o
h m	o ′ ″	h m		h m				
4. 53	20. 31. 10	4. 59	·1377	19. 52	·02727			
5. 38	30. 25	5. 12	·1381	21. 10	·02713			
6. 57	31. 30	5. 20	·1378	23. 1	·02710			
7. 8	31. 30	5. 55	·1384	23. 59	·02708			
7. 13	31. 40	6. 11	·1383					
7. 25	30. 55	7. 0	·1386					
7. 44	31. 10	7. 14	·1384					
8. 7	30. 30	8. 11	·1386					
9. 8	30. 30	9. 16	·1387					
9. 42	30. 45	9. 51	·1386					
10. 27	30. 10	10. 24	·1387					
10. 42	31. 10	10. 39	·1394					
10. 59	30. 10	10. 52	·1387					
11. 24	30. 30	11. 21	·1391					
11. 42	30. 5	12. 2	·1387					
11. 58	28. 55	12. 12	·1394					
12. 11	29. 10	13. 4	·1386					
12. 43	26. 45	13. 12	·1391					
12. 58	26. 40	13. 29	·1386					
13. 10	26. 10	13. 39	·1389					
13. 26	26. 35	13. 55	·1383					
13. 54	26. 25	14. 3	·1385					
14. 8	29. 40	14. 11	·1379					
14. 13	29. 50	14. 15	·1387					
14. 23	32. 15	14. 25	·1386					
14. 38	32. 50	14. 37	·1396					
14. 43	31. 10	15. 12	·1390					
15. 52	25. 20	15. 21	·1393					
16. 8	26. 15	15. 52	·1392					
16. 23	25. 45	16. 0	·1395					
	***	16. 14	·1392					
17. 6	25. 25	16. 25	·1395					
17. 25	26. 5	16. 35	·1393					
17. 36	25. 30	17. 4	·1394					
17. 58	26. 15	17. 20	·1399					
18. 25	28. 50	17. 40	·1392					
18. 38	28. 40	18. 34	·1380					
18. 56	29. 20	19. 0	·1376					
19. 7	28. 30	19. 19	·1366					
19. 11	27. 15	19. 36	·1368					
19. 26	29. 20	19. 41	·1377					
19. 36	28. 45	19. 44	·1373					
19. 41	31. 0	19. 49	·1378					
19. 43	30. 25	19. 53	·1373					
19. 53	32. 5	19. 59	·1376					
19. 56	31. 25	20. 4	·1373					
19. 58	32. 10	20. 15	·1378					
20. 9	30. 15	20. 21	·1376					
20. 14	30. 55	20. 41	·1380					
20. 25	30. 25	22. 8	·1379					
20. 41	30. 5	22. 36	·1378					
21. 8	29. 25	22. 49	·1375					
21. 27	29. 35	23. 10	·1379					
22. 38	33. 5		***					
22. 53	34. 20	23. 59	·1374					
22. 56	33. 50							
23. 27	36. 15							
23. 43	36. 30							
23. 56	20. 37. 25							
23. 59	37. 0							
Aug.30		Aug.30		Aug.30		Aug.30		
0. 0	20. 37. 0	0. 0	·1374	0. 0	·02708	0. 0	64 ·2	65 ·3
0. 12	37. 30		***	4. 4	·02775	1. 0	64 ·1	65 ·5
0. 23	38. 30	1. 42	·1381	7. 21	·02796	2. 0	64 ·2	65 ·8
1. 43	39. 35	1. 43	·1387	8. 57	·02811	3. 0	64 ·3	66 ·0
2. 5	37. 25	1. 52	·1381	14. 38	·02612	Max.	64 ·5	66 ·8
2. 26	36. 15	2. 9	·1376	15. 38	·02592	9. 0	60 ·6	64 ·2
2. 53	35. 30	2. 26	·1375	17. 30:	·02556	Min.	59 ·1	60 ·8
3. 11	35. 5	3. 18	·1388	19. 53	·02597	21. 0	61 ·3	63 ·2
3. 23	35. 30	3. 25	·1381	23. 59	·02604	22. 0	62 ·0	64 ·0
3. 27	34. 10	3. 40	·1387			23. 0	62 ·0	64 ·0
3. 41	34. 35	3. 46	·1384					
3. 51	33. 50	4. 11	·1388					
4. 12	33. 50	4. 15	·1392					
4. 23	33. 15	4. 21	·1385					
4. 26	33. 50	4. 28	·1388					
4. 37	33. 50	4. 34	·1390					
4. 41	33. 0	4. 42	·1382					
4. 56	33. 0	4. 52	·1386					
4. 58	32. 25	5. 0	·1382					
5. 8	32. 50	5. 8	·1389					
6. 12	31. 10	5. 13	·1387					
6. 24	31. 40	5. 53	·1388					
6. 55	31. 5	6. 15	·1383					
7. 9	31. 20	6. 27	·1385					
7. 27	30. 35	6. 39	·1382					
7. 41	30. 55	7. 52	·1387					
8. 11	30. 30	8. 15	·1386					
8. 24	31. 5	8. 20	·1388					
8. 28	30. 30	8. 54	·1385					
9. 23	31. 10		***					
9. 41	30. 45	11. 26	·1390					
10. 24	30. 20	11. 49	·1387					
10. 29	30. 35	13. 45	·1394					
10. 58	30. 5	14. 40	·1389					
11. 26	30. 45	14. 51	·1392					
11. 40	29. 50	17. 4	·1386					
12. 53	30. 10	17. 18	·1389					
12. 57	30. 40	17. 45	·1387					
13. 16	29. 20	18. 36	·1392					
13. 27	30. 15	18. 44	·1391					
13. 45	29. 45	19. 19	·1394					
14. 3	28. 30	20. 35	·1386					
14. 11	28. 30	21. 15	·1376					
14. 28	27. 25	21. 25	·1379					
14. 42	27. 40	21. 53	·1373					
14. 53	28. 30	23. 59	·1376					
15. 9	28. 40							
15. 15	28. 25							
15. 29	28. 35							
15. 41	27. 55							
15. 57	28. 25							
16. 24	27. 35							
16. 41	27. 20							
17. 2	28. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 30								
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 28. 20							
17. 37	28. 50							
17. 51	28. 10							
18. 24	28. 15							
18. 37	27. 0							
18. 41	28. 15							
18. 59	27. 30							
19. 23	27. 40							
20. 4	26. 55							
20. 30	27. 50							
20. 39	27. 30							
21. 58	30. 50							
22. 11	30. 35							
22. 43	32. 0							
23. 37	35. 0							
23. 53	35. 15							
23. 59	35. 45							
Aug. 31		Aug. 31		Aug. 31		Aug. 31		
0. 0	20. 35. 45	0. 0	·1376	0. 0	·02604	Min.	62 ·9	64 ·5
0. 25	36. 30	0. 48	·1379	3. 46	·02682	0. 0	63 ·0	64 ·5
1. 26	37. 35	1. 49	·1385	9. 56	·02755	1. 0	63 ·7	65 ·0
1. 41	37. 20	1. 58	·1384	12. 23	·02755	2. 0	64 ·0	65 ·2
1. 54	37. 35	2. 21	·1387	13. 23	·02737	3. 0	63 ·4	65 ·1
4. 25	32. 50	2. 41	·1385	17. 21	·02748	9. 0	64 ·1	66 ·3
6. 9	31. 0	3. 23	·1387	19. 28	·02768	Max.	64 ·6	66 ·5
6. 23	31. 15	5. 15	·1392	22. 16	·02737	21. 0	64 ·2	66 ·0
6. 42	31. 0	8. 10	·1393	23. 59	·02735			
7. 23	31. 25	8. 22	·1396					
7. 26	31. 0	8. 51	·1392					
7. 44	30. 50	9. 24	·1394					
7. 57	31. 25	9. 59	·1390					
8. 8	30. 50	10. 26	·1395					
8. 15	31. 10	10. 52	·1390					
8. 23	30. 55	11. 13	·1389					
8. 37	31. 30	11. 27	·1394					
8. 44	30. 55	11. 44	·1390					
9. 28	30. 55	12. 4	·1391					
9. 53	30. 25	12. 24	·1388					
9. 58	30. 25	13. 7	·1392					
10. 18	28. 45	13. 17	·1395					
10. 43	29. 30	13. 32	·1390					
10. 57	29. 30	13. 41	·1392					
11. 14	28. 20	14. 11	·1388					
11. 28	29. 0	14. 42	·1392					
11. 44	28. 0	15. 28	·1388					
12. 31	32. 15	16. 25	·1390					
12. 43	33. 0	19. 4	·1386					
13. 8	30. 5		***					
13. 14	31. 30	22. 3	·1362					
13. 53	30. 5	23. 59	·1378					
14. 6	30. 5							
14. 41	29. 0							
15. 13	28. 35							
16. 12	29. 0							
16. 28	28. 50							
17. 38	28. 30							
18. 25	27. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 31								
h m	° ′ ″	h m		h m		h m	°	°
19. 6	20. 27. 0							
19. 56	27. 5							
20. 26	27. 10							
20. 43	26. 50							
22. 39	32. 10							
23. 29	34. 35							
23. 59	35. 50							
Sept. 1		Sept. 1		Sept. 1		Sept. 1		
0. 0	20. 35. 50	0. 0	·1378	0. 0	·02735	1. 0	64 ·6	66 ·1
0. 34	37. 30	0. 15	·1379	2. 5	·02766	3. 0	64 ·7	66 ·1
2. 11	34. 30	1. 10	·1387	7. 11	·02803	Max.	65 ·2	67 ·2
3. 25	33. 0	2. 55	·1384	9. 0	·02822	9. 0	64 ·6	66 ·0
3. 27	33. 20	3. 46	·1387	9. 59	·02809	Min.	63 ·3	65 ·8
3. 42	32. 35	4. 14	·1384	10. 21	·02804	21. 0	64 ·8	66 ·7
3. 53	33. 0	4. 25	·1386	10. 41	·02797			
3. 58	32. 40	4. 48	·1384	12. 25	·02792			
4. 23	33. 0	5. 56	·1390	13. 39	·02768			
4. 36	32. 30	6. 14	·1389	17. 2	·02771			
5. 0	32. 40	6. 30	·1392	18. 54	·02792			
5. 38	32. 25	6. 48	·1390	20. 33	·02792			
6. 46	32. 45	7. 24	·1394	23. 59	·02790			
6. 56	32. 5	7. 41	·1389					
7. 26	32. 30	8. 21	·1394					
7. 47	31. 25	9. 30	·1388					
8. 12	32. 5	10. 12	·1393					
8. 34	29. 0	10. 25	·1403					
8. 55	30. 50	10. 43	·1396					
9. 6	30. 50	11. 2	·1392					
9. 13	31. 35	11. 20	·1389					
9. 35	32. 5	11. 55	·1392					
9. 43	33. 0	12. 14	·1387					
9. 59	31. 55	12. 24	·1394					
10. 14	31. 30	13. 5	·1390					
10. 33	32. 40	13. 20	·1394					
10. 46	31. 30	13. 50	·1385					
11. 14	30. 35	13. 56	·1386					
11. 43	31. 5	14. 15	·1384					
11. 56	30. 30	15. 0	·1383					
12. 8	30. 50	15. 12	·1378					
12. 17	30. 30	15. 26	·1381					
12. 38	31. 10	15. 45	·1387					
12. 40	30. 50	16. 48	·1389					
13. 8	31. 45	17. 2	·1386					
13. 53	27. 45	22. 15	·1370					
14. 14	28. 30	22. 24	·1371					
14. 43	27. 15	23. 2	·1369					
15. 10	30. 35	23. 26	·1375					
15. 23	31. 30	23. 59	·1376					
15. 58	30. 25							
16. 23	30. 30							
17. 4	29. 35							
17. 41	29. 35							
18. 25	28. 40							
18. 38	28. 10							
18. 56	28. 35							
19. 51	27. 50							
21. 7	30. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 1								
h m	° ′ ″	h m		h m		h m	°	°
22. 13	20. 33. 10							
22. 25	33. 45							
23. 14	35. 45							
23. 28	37. 0							
23. 38	37. 0							
23. 59	38. 5							
Sept. 2		Sept. 2		Sept. 2		Sept. 2		
0. 0	20. 38. 5	0. 0	·1376	0. 0	·02790	1. 0	65 ·7	67 ·2
0. 14	38. 5	0. 45	·1381	2. 14	·02820	3. 0	65 ·7	67 ·7
0. 33	39. 10	1. 26	·1380	5. 40	·02864	Max.	67 ·1	69 ·2
1. 41	38. 30	1. 52	·1375	8. 34	·02901	9. 0	66 ·6	68 ·3
1. 53	37. 10	2. 19	·1381	9. 53	·02885	Min.	63 ·2	64 ·4
2. 7	37. 10	2. 26	·1387	11. 49	·02867	21. 30	65 ·3	67 ·0
2. 16	36. 20	2. 52	·1380	14. 13	·02808			
2. 25	36. 50	3. 19	·1380	14. 40	·02812			
2. 55	35. 0	3. 44	·1382	15. 10	·02799			
3. 56	34. 5	4. 6	·1380	16. 5	·02802			
4. 55	32. 20	5. 15	·1387	17. 3	·02793			
5. 18	32. 0	5. 38	·1383	19. 53:	·02826			
5. 39	30. 30	5. 49	·1385	23. 59	·02818			
5. 54	29. 45	6. 6	·1391					
6. 7	30. 25	6. 13	·1388					
6. 42	30. 5	6. 43:	·1393					
7. 17	31. 50	7. 18	·1387					
7. 55	30. 25	7. 27	·1389					
8. 10	31. 20	7. 44	·1386					
8. 40	31. 0	8. 5	·1387					
9. 9	28. 45	8. 19	·1381					
9. 15	28. 45	8. 40	·1386					
9. 28	20. 55	9. 22	·1380					
9. 53	25. 30	9. 41	·1411					
10. 7	23. 35	9. 56	·1392					
10. 23	25. 5	10. 26	·1381					
10. 28	25. 5	10. 40	·1382					
11. 9	28. 0	10. 57	·1379					
11. 23	28. 0	11. 44	·1383					
11. 44	30. 5	11. 55	·1389					
11. 56	29. 25	12. 15	·1390					
12. 9	30. 45	12. 44	·1387					
12. 28	29. 25	13. 10	·1389					
12. 44	29. 5	13. 19	·1386					
12. 58	30. 15	13. 42	·1391					
13. 12	30. 15	14. 11	·1390					
13. 53	33. 30	14. 29	·1383					
14. 9	30. 0	15. 2	·1388					
14. 25	28. 0	15. 36	·1385					
14. 40	29. 45	15. 42	·1386					
14. 52	31. 15	15. 51	·1384					
15 23	26. 30	16. 14	·1387					
15. 52	28. 15	18. 40	·1382					
15. 56	27. 20	18. 44	·1385					
16. 9	29. 0	18. 59	·1381					
16. 53	30. 45	20. 22	·1371					
17. 3	30. 10	21. 22	·1368					
17. 55	29. 0	22. 19	·1372					
18. 10	28. 15	22. 29	·1371					
18. 36	27. 55	22. 54	·1375					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 2		Sept. 2						
h m	° ′ ″	h m		h m		h m	°	°
18. 41	20. 26. 20	23. 59	·1383					
18. 48	28. 5							
18. 59	27. 0							
19. 26	27. 0							
19. 43	26. 50							
20. 33	27. 20							
22. 28	32. 25							
23. 43	36. 55							
23. 59	37. 5							
Sept. 3		Sept. 3		Sept. 3		Sept. 3		
0. 0	20. 37. 5	0. 0	·1383	0. 0	·02818	1. 0	66 ·3	68 ·0
0. 20	37 20	0. 4	·1382	3. 52	·02877	Max.	67 ·6	69 ·3
1. 31	37. 0	0. 41	·1386	8. 48	·02916	9. 0	66 ·6	68 ·8
1. 56	36. 10	1. 9	·1385	9. 54	·02909	Min.	62 ·4	64 ·3
2. 8	36. 45	1. 53	·1388	16. 41	·02788	21. 0	65 ·0	66 ·9
2. 23	35. 30	2. 6	·1394	17. 29	·02791			
2. 40	34. 50	2. 22	·1386	19. 40	·02811			
2. 47	35. 0	2. 39	·1385	23. 59	·02809			
3. 3	34. 30	2. 44	·1388					
3. 59	33. 35	2. 57	·1386					
4. 13	33. 50	3. 39	·1388					
4. 38	32. 55	3. 57	·1384					
5. 54	32. 25	4. 13	·1387					
7. 9	32. 35	4. 38	·1383					
7. 56	32. 10	5 14	·1387					
8. 56	31. 15	5. 50	·1385					
9. 9	30. 10	6. 9	·1389					
9. 40	31. 0	8. 43	·1388					
9. 53	29. 35	9. 5	·1386					
10. 3	29. 30	9. 14	·1388					
11. 10	30. 25	9. 25	·1386					
12. 53	31. 10	9. 40	·1388					
13. 0	30. 35	10. 3	·1384					
14. 4	30. 10	10. 42	·1385					
14. 43	30. 35	10. 52	·1388					
15. 3	29. 5	11. 35	·1385					
15. 20	29. 15	12. 52	·1390					
15. 41	29. 40	12. 57	·1388					
16. 0	29. 40	15. 11	·1387					
16. 11	29. 25	16. 52	·1390					
16. 36	29. 20	17. 3	·1387					
16. 43	28. 35	17. 29	·1389					
16. 55	29. 10	17. 57	·1384					
17. 26	28. 5	18. 49	·1379					
18. 41	28. 30	19. 18	·1380					
18. 52	27. 50	21. 19	·1370					
18. 59	27. 40	22. 56	·1379					
19. 23	28. 5	23. 38	·1385					
19. 44	27. 50	23. 52	·1384					
19. 59	28. 45	23. 59	·1387					
20. 26	28. 55							
20. 50	29. 45							
20. 58	30. 0							
22. 43	34. 50							
23. 20	37. 30							
23. 52	38. 20							
23. 59	39. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 4		Sept. 4		Sept. 4		Sept. 4		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 10	0. 0	·1387	0. 0	·02809	1. 0	66 ·6	68 ·2
0. 13	39. 35	0. 54	·1386	5. 16	·02886	3. 0	66 ·9	68 ·8
0. 55	39. 35	1. 18	·1387	5. 40	·02893	Max.	68 ·0	70 ·2
1. 11	40. 25	1. 41	·1384	5. 58	·02896	9. 0	67 ·6	69 ·0
1. 31	39. 15	2. 19	·1390	7. 31	·02901	Min.	63 ·9	66 ·1
1. 40	39. 30	2. 39	·1388	9. 14	·02937	21. 0	65 ·6	67 ·9
1. 50	38. 30	3. 6	·1391	12. 24	·02898			
2. 23	37. 30	3. 38	·1387	13. 13	·02898			
2. 47	35. 35	3. 54	·1392	14. 53	·02854			
3. 38	33. 30	4. 24	·1388	16. 35	·02833			
3. 43	33. 45	4. 41	·1393	17. 23	·02819			
4. 8	33. 35	4. 55	·1386	18. 44	·02832			
4. 23	33. 5	5. 10	·1383	20. 8	·02829			
4. 39	33. 40	5. 19	·1387	23. 59	·02823			
4. 43	33. 0	5. 39	·1390					
5. 6	32. 45	5. 42	·1399					
5. 42	33. 50	5. 55	·1394					
5. 54	33. 30	6. 0	·1395					
6. 29	33. 40	6. 6	·1392					
6. 41	33. 25	6. 41	·1396					
7. 9	33. 35	6. 51	·1394					
7. 28	32. 35	7. 3	·1396					
7. 40	33. 15	7. 22	·1394					
7. 53	32. 40	7. 37:	·1386					
8. 8	33. 10	7. 47	·1389					
8. 10	32. 30	8. 9	·1382					
8. 26	33. 5	8. 22	·1379					
8. 43	33. 0	8. 37	·1382					
8. 57	32. 15	8. 45	·1379					
10. 23	30. 45	9. 25	·1385					
10. 58	30. 55	9. 44	·1390					
11. 30	28. 50	10. 2	·1386					
11. 56	27. 5	10. 24	·1385					
12. 7	25. 30	11. 6	·1390					
12. 25	24. 25	11. 19	·1385					
12. 33	24. 35	11. 30	·1387					
12. 55	28. 0	11. 52	·1388					
12. 57	28. 0	12. 0	·1392					
13. 6	28. 30	12. 33	·1385					
13. 36	29. 50	12. 52	·1378					
14. 38	27. 0	14. 1	·1394					
14. 54	27. 35	15. 11	·1384					
14. 57	27. 0	16. 16	·1381					
15. 16	27. 50	16. 42	·1384					
15. 42	27. 20	17. 45	·1386					
16. 8	27. 35	18. 43	·1383					
16. 26	30. 0	19. 40	·1376					
16. 41	30. 45	21. 12	·1364					
17. 9	29. 35	21. 23	·1354					
17. 43	29. 20	21. 49	·1361					
18. 24	26. 30	22. 20	·1359					
19. 54	27. 45	23. 41	·1373					
21. 9	29. 35	23. 54	·1370					
21. 23	28. 30	23. 59	·1372					
21. 39	31. 0							
22. 40	35. 45							
23. 40	39. 10							
23. 44	39. 50							
23. 54	20. 39. 20							
23. 59	40. 25							
Sept. 5		Sept. 5		Sept. 5		Sept. 5		
0. 0	20. 40. 25	0. 0	·1372	0. 0	·02823	1. 0	66 ·6	68 ·1
0. 26	40. 40	0. 34	·1378	2. 19	·02873	3. 0	67 ·1	68 ·2
2. 9	38. 30	0. 54	·1382	8. 48	·02917	Max.	67 ·5	69 ·0
2. 33	38. 20	2. 16	·1388	10. 27	·02902	9. 0	66 ·6	69 ·0
3. 46	35. 0	2. 38	·1390	15. 42	·02821	Min.	62 ·6	65 ·2
4. 9	34. 30	3. 7	·1386	17. 53:	·02775	21. 0	65 ·1	67 ·2
4. 41	33. 35	4. 39	·1388	19. 52	·02802	22. 0	65 ·7	67 ·3
5. 26	32. 50	4. 55	·1387	19. 56	·02765	23. 0	65 ·7	67 ·5
6. 53	33. 20	5. 33	·1384	23. 59	·02768			
7. 10	33. 0	6. 48	·1388					
7. 25	33. 20	7. 8	·1387					
7. 29	32. 45	7. 40	·1389					
7. 51	33. 0	8. 14	·1386					
10. 23	31. 35	8. 25	·1388					
10. 50	30. 50	8. 49	·1386					
11. 33	31. 20	10. 24	·1387					
12. 53	32. 50	10. 37	·1391					
13. 14	31. 0	11. 5	·1387					
13. 50	31. 35	12. 49	·1392					
14. 8	31. 15	13. 46	·1388					
14. 23	31. 40	14. 11	·1390					
14. 44	31. 50	17. 25	·1388					
15. 28	31. 5	18. 45	·1384					
15. 55	31. 5	21. 37:	·1366					
16. 0	30. 30	22. 29	·1369					
16. 11	31. 0	23. 10	·1379					
16. 57	30. 20	23. 25	·1378					
17. 26	30. 10	23. 44	·1384					
18. 29	29. 35	23. 59	·1378					
18. 53	29. 15							
18. 57	29. 35							
19. 8	29. 5							
19. 51	28. 10							
20. 16	28. 25							
22. 37	34. 0							
22. 41	33. 10							
23. 13	34. 35							
23. 24	34. 0							
23. 30	35. 0							
23. 38	37. 30							
23. 43	38. 5							
23. 57	37. 20							
23. 59	39. 0							
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
0. 0	20. 39. 0	0. 0	·1378	0. 0	·02768	0. 0	65 ·9	67 ·8
0. 58	40. 0	0. 14	·1390	1. 6	·02777	1. 0	66 ·6	68 ·2
1. 6	41. 40	0. 48	·1395		·02668	2. 0	66 ·7	68 ·2
1. 26	41. 40	0. 59	·1390	3. 14	·02705	3. 0	68 ·8	68 ·6
1. 34	42. 30	1. 22	·1390	3. 23	·02732	Max.	68 ·8	70 ·0
1. 41	42. 0	1. 30	·1398		·02829	9. 0	67 ·5	69 ·7
1. 58	42. 0	1. 42	·1396	4. 33	·02820	Min.	64 ·0	66 ·9
2. 9	43. 5	1. 56	·1397		***	21. 0	66 ·0	67 ·5
2. 11	41. 50	2. 7	·1406	5. 19	·02844	22. 0	65 ·8	67 ·7
					·02900			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
h m	° ′ ″	h m		h m		h m	°	°
2. 13	20. 42. 10	2. 14	·1399	6. 8	·02923	23. 0	66·2	68·0
2. 26	38. 20	2. 27	·1398	6. 25	·02913			
2. 28	40. 20	2. 35	·1390	7. 24	·02951			
2. 38	39. 50	2. 38	·1411	7. 57	·02925			
2. 41	42. 35	2. 41	·1407	10. 22	·02896			
2. 43	41. 20	2. 45	·1419	10. 54	·02867			
2. 54	42. 10	3. 6	·1381	11. 42	·02863			
3. 7	38. 20	3. 9	·1407	12. 0	·02840			
3. 10	40. 50	3. 16	·1419	12. 13	·02843			
3. 15	40. 0	3. 32	·1410	12. 55:	·02820			
3. 27	40. 0	3. 45	·1382	14. 19:	·02844			
3. 40	40. 45	3. 49	·1384	16. 8	·02838			
3. 44	42. 50	3. 59	·1368	18. 3:	·02813			
3. 56	43. 55	4. 7	·1369	19. 39	·02849			
3. 58	42. 45	4. 11	·1382	23. 33	·02831			
4. 10	42. 45	4. 27	·1371	23. 59	·02840			
4. 13	44. 0	4. 34	·1375					
4. 24	43. 0	4. 38	·1364					
4. 28	39. 0	4. 42	·1365					
4. 38	38. 50	4. 48	·1354					
4. 42	37. 30	4. 53	·1358					
4. 43	38. 30	5. 4	·1367					
4. 55	37. 35	5. 6	·1366					
5. 9	37. 5	5. 12	·1384					
5. 11	37. 50		***					
5. 22	37. 5	5. 24	·1387					
5. 41	37. 30	5. 36	·1399					
5. 56	39. 5	5. 47	·1391					
6. 8	38. 50	5. 54	·1393					
6. 26	34. 25	6. 11	·1375					
6. 38	34. 10	6. 18	·1372					
6. 43	32. 35	6. 38	·1380					
7. 9	24. 10	6. 59	·1384					
7. 28	30. 5	7. 22	·1401					
7. 56	27. 0	7. 50	·1379					
8. 13	28. 50	8. 22	·1377					
8. 30	25. 35	8. 52	·1384					
8. 50	25. 35	9. 3	·1379					
9. 13	27. 15	9. 12	·1380					
9. 37	27. 5	9. 24	·1372					
9. 53	28. 35	9. 42	·1377					
9. 58	26. 20	9. 55	·1375					
10. 8	27. 20	10. 3	·1381					
10. 11	27. 5	10. 14	·1388					
10. 26	28. 30	10. 27	·1384					
10. 39	28. 35	10. 43	·1389					
10. 43	26. 30	11. 3	·1379					
11. 4	25. 40	11. 44	·1386					
11. 10	26. 25	12. 2	·1379					
11. 17	25. 25	12. 13	·1382					
11. 41	31. 50	12. 50	·1392					
11. 53	29. 30	13. 14	·1383					
12. 8	33. 10	13. 38	·1377					
12. 13	33. 20	13. 58	·1381					
13. 11	28. 35	14. 11	·1379					
13. 58	29. 50	14. 24	·1384					
14. 25	29. 30	14. 40	·1385					
14. 40	28. 50	15. 0	·1381					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 6		Sept. 6						
h m	° ′ ″	h m		h m		h m	°	°
14. 58	20. 29. 10	16. 4	·1382					
15. 7	28. 35	16. 22	·1384					
15. 15	29. 30	16. 55	·1382					
15. 41	28. 0	17. 40	·1388					
16. 4	28. 35	18. 0	·1383					
16. 25	30. 35	18. 24	·1384					
16. 55	32. 30	19. 4	·1366					
17. 6	31. 45	19. 50	·1370					
17. 28	30. 35	20. 43	·1364					
17. 39	29. 35	20. 54	·1370					
17. 56	29. 35	21. 11	·1371					
18. 5	29. 5	21. 26	·1363					
18. 13	29. 35	21. 40	·1360					
18. 27	29. 5	21. 50	·1372					
18. 37	29. 5	22. 8	·1363					
18. 39	27. 0	23. 4	·1358					
18. 42	28. 30	23. 25	·1340					
18. 55	28. 50	23. 41	·1332					
19. 8	25. 40	23. 59	·1336					
19. 15	27. 20							
19. 32	25. 30							
20. 37	25. 30							
20. 54	24. 30							
21. 4	26. 35							
21. 11	25. 15							
21. 26	28. 45							
21. 39	28. 20							
21. 53	30. 30							
21. 55	33. 45							
21. 57	32. 50							
22. 0	32. 0							
22. 14	33. 10							
22. 25	34. 50							
22. 27	27. 30							
22. 32	28. 10							
23. 7	32. 30							
23. 16	32. 50							
23. 43	36. 35							
23. 59	38. 40							
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
0. 0	20. 38. 40	0. 0	·1336	0. 0	·02840	0. 0	66·7	68·4
0. 38	38. 50	0. 27	·1355	2. 45	·02891	1. 0	66·9	69·0
0. 59	38. 5	1. 12	·1366	4. 22	·02918	3. 0	67·4	69·7
1. 8	42. 0	1. 32	·1364	10. 8	·02940	Max.	68·5	70·9
1. 42	40. 15	1. 46	·1370	10. 38	·02920	9. 0	68·5	70·8
1. 53	39. 35	1. 56	·1369	14. 42	·02913	Min.	65·5	68·5
2. 17	39. 35	2. 8	·1375	16. 21	·02893	21. 0	66·8	69·5
2. 26	38. 30	2. 23	·1384		***			
2. 45	38. 10	2. 32	·1385	21. 6	·02891			
2. 56	37. 30	2. 39	·1378	21. 52	·02845			
3. 9	38. 0	2. 48	·1379	22. 7	·02864			
3. 12	36. 25	2. 57	·1376	23. 59	·02873			
3. 27	34. 30	3. 11	·1377					
3. 35	34. 30	3. 19	·1375					
4. 13	31. 35	3. 38	·1377					
5. 12	31. 35	4. 3	·1370					
5. 16	32. 20	4. 21	·1371					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 7		Sept. 7						
h m	° ′ ″	h m		h m		h m	°	°
6. 44	20. 31. 25	5. 18	·1386					
7. 30	31. 35	5. 44	·1383					
8. 11	31. 0	8. 0	·1386					
8. 28	30. 10	8. 9	·1388					
8. 38	30. 10	9. 46	·1380					
9. 14	28. 55	10. 20	·1403					
9. 34	29. 5	11. 2	·1381					
9. 43	31. 40	11. 19	·1384					
9. 55	29. 0	12. 44	·1377					
10. 11	24. 50	13. 8	·1384					
10. 26	25. 25	13. 21	·1383					
10. 38	23. 40	13. 26	·1384					
10. 44	24. 5	13. 40	·1379					
10. 56	24. 0	13. 56	·1386					
11. 26	27. 0	14. 10	·1383					
11. 58	29. 20	14. 41	·1385					
12. 6	28. 50	15. 10	·1392					
12. 13	29. 25	15. 40	·1383					
12. 24	29. 5	16. 12	·1389					
12. 58	30. 50	17. 12	·1387					
13. 3	29. 30	17. 18	·1391					
13. 20	28. 30		***					
13. 38	29. 15	18. 59	·1382					
13. 42	29. 20	19. 9	·1376					
13. 50	30. 0	19. 31	·1384					
14. 3	29. 30	20. 26	·1366					
14. 38	29. 5	20. 33	·1369					
14. 55	29. 50	20. 54	·1351					
15. 25	28. 20	21. 0	·1356					
15. 52	30. 0	21. 14	·1349					
15. 56	29. 45	21. 26	·1351					
16. 8	31. 30	21. 40	·1359					
16. 24	29. 50	22. 10	·1349					
16. 40	29. 20	22. 18	·1356					
17. 10	30. 10	22. 34	·1351					
17. 13	31. 10	22. 40	·1353					
17. 24	30. 5	22. 50	·1350					
17. 28	30. 50	23. 0	·1355					
17. 38	29. 5	23. 18	·1354					
17. 42	29. 30	23. 29	·1362					
18. 1	29. 25	23. 44	·1356					
18. 9	28. 0	23. 59	·1357					
18. 12	28. 50							
18. 23	28. 20							
18. 27	29. 10							
18. 41	25. 10							
18. 57	28. 20							
19. 4	23. 5							
19. 11	24. 20							
19. 17	27. 30							
19. 27	28. 0							
19. 32	29. 50							
19. 50	29. 30							
20. 9	28. 0							
20. 28	33. 0							
20. 40	31. 20							
20. 46	34. 15							
20. 53	34. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 7								
h m	° ′ ″	h m		h m		h m	°	°
20. 55	20. 36. 35							
21. 39	41. 40							
22. 8	36. 50							
22. 23	42. 30							
22. 27	42. 5							
22. 33	43. 0							
22. 37	43. 10							
22. 41	44. 20							
22. 53	41. 55							
22. 59	44. 35							
	***							
23. 39	39. 30							
23. 47	42. 10							
23. 54	40. 30							
23. 59	41. 15							
Sept. 8		Sept. 8		Sept. 8		Sept. 8		
0. 0	20. 41. 15	0. 0	·1357	0. 0	·02873	0. 0	67 ·8	71 ·1
0. 15	43. 10	0. 14	·1359	1. 14	·02882	3. 0	67 ·7	71 ·0
0. 38	42. 35	0. 52	·1364	2. 32	·02949	Max.	69 ·1	71 ·7
0. 47	43. 30	1. 14	·1354	2. 40	·02938	9. 0	68 ·5	71 ·1
0. 51	43. 30	1. 24	·1374	3. 3	·02965	Min.	67 ·0	69 ·0
1. 0	45. 30	1. 43	·1361	4. 9	·02982	21. 0	67 ·8	69 ·6
1. 53	39. 0	2. 5	·1358	4. 13	·02991			
2. 26	40. 30	2. 13	·1368	4. 46	·02999			
2. 49	39. 0	2. 29	·1376	4. 55	·03003			
2. 58	41. 10	2. 40	·1366	5. 22	·03037			
3. 13	38. 45		***	6. 6	·02998			
3. 23	39. 35	2. 53	·1379	7. 5	·02991			
3. 27	38. 20	3. 11	·1367	7. 30	·02998			
3. 39	38. 40	3. 19	·1371	8. 7	·02978			
3. 55	37. 45	3. 29	·1369	8. 26	·02978			
4. 28	37. 50	4. 2	·1384	10. 23	·02902			
4. 44	34. 0	4. 15	·1395	10. 34	·02881			
4. 58	23. 35	4. 41	·1342	10. 46	·02888			
5. 9	23. 45	4. 52	·1338	11. 9	·02863			
5. 14	26. 5	5. 11	·1374	11. 23	·02876			
5. 56	33. 40	5. 30	·1385	11. 32	·02862			
6. 10	33. 10	5. 49	·1384	11. 53	·02857			
6. 25	32. 30	6. 4	·1375	12. 4	·02867			
6. 30	33. 10	6. 20	·1380	12. 37	·02831			
6. 54	31. 0	6. 41	·1377	12. 55	·02845			
7. 13	19. 55	6. 45	·1381	13. 34	·02851			
7. 30	23. 30	7. 1	·1366	13. 49	·02866			
7. 40	21. 35	7. 10	·1369	14. 16	·02859			
7. 55	27. 50	7. 24	·1390	14. 28	·02854			
8. 3	25. 0	7. 40	·1388	14. 51	·02867			
8. 11	24. 50	7. 52	·1398	15. 23	·02882			
8. 23	27. 50	8. 5	·1380	16. 16	·02882			
8. 28	26. 50	8. 24	·1392	16. 39	·02898			
8. 38	27. 15	8. 56	·1403	17. 16	·02897			
8. 40	26. 30	9. 19	·1389	18. 34	·02918			
8. 57	29. 0	9. 28	·1375	19. 41	·02902			
9. 8	26. 30	9. 41	·1383	20. 1	·02917			
9. 14	26. 45	9. 50	·1377	20. 40	·02903			
9. 27	21. 0	9. 57	·1377	22. 1	·02885			
9. 53	28. 30	10. 2	·1367	22. 47	·02904			
9. 58	28. 35	10. 14	·1379	23. 59	·02904			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 8		Sept. 8						
h m	° ′ ″	h m		h m		h m	°	°
10. 9	20. 25. 40	10. 24	·1380					
10. 21	27. 10	10. 40	·1359					
10. 26	26. 25	10. 52	·1365					
10. 39	21. 0	11. 8	·1363					
10. 58	23. 50	11. 15	·1355					
11. 7	23. 50	11. 26	·1362					
11. 29	33. 0	11. 41	·1360					
11. 39	33. 0	11. 52	·1372					
11. 57	27. 20	12. 11	·1400					
12. 24	37. 10	12. 23	·1392					
13. 2	22. 30	12. 40	·1371					
13. 9	20. 50	12. 59	·1376					
13. 24	20. 20	13. 25	·1397					
13. 46	25. 35	13. 45	·1395					
13. 53	25. 45	14. 1	·1383					
14. 9	29. 10	14. 11	·1382					
14. 23	27. 35	14. 26	·1363					
14. 41	31. 30	14. 40	·1357					
14. 58	30. 25	14. 51	·1356					
15. 9	32. 10	15. 22	·1367					
15. 38	32. 45	15. 41	·1381					
15. 43	31. 0	15. 50	·1383					
16. 11	29. 25	16. 13	·1375					
16. 26	32. 0	16. 22	·1370					
16. 39	30. 5	16. 41	·1372					
16. 54	30. 50	16. 52	·1383					
17. 28	29. 50	17. 3	·1385					
17. 45	31. 50	17. 14	·1378					
17. 56	31. 20	17. 28	·1373					
18. 28	34. 30	17. 40	·1376					
18. 41	36. 25	17. 59	·1371					
18. 54	36. 15	18. 11	·1374					
19. 11	37. 10	18. 19	·1371					
19. 23	36. 10	18. 25	·1372					
19. 32	33. 0	18. 40	·1368					
19. 38	28. 35	18. 44	·1371					
19. 42	29. 50	19. 5	·1366					
19. 56	35. 10	19. 41	·1339					
	***	19. 45	·1349					
20. 27	33. 0	19. 56	·1358					
20. 41	33. 40	20. 10	·1354					
20. 53	32. 50	20. 14	·1355					
21. 22	36. 10	20. 26	·1348					
21. 40	36. 45	20. 40	·1355					
21. 49	35. 50	20. 44	·1353					
22. 3	35. 30	21. 20	·1362					
22. 9	37. 10	21. 40	·1364					
22. 13	36. 5	21. 58	·1362					
22. 28	35. 50	22. 26	·1352					
22. 43	34. 20	23. 22	·1375					
23. 13	36. 30	23. 59	·1364					
23. 27	38. 20							
23. 42	38. 20							
23. 55	39. 50							
23. 59	38. 5							
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
0. 0	20. 38. 5	0. 0	·1364	0. 0	·02904	1. 0	68 ·5	70 ·3
0. 28	40. 40	0. 25	·1379	1. 9	·02932	3. 0	68 ·9	70 ·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
h m	° ′ ″	h m		h m		h m	°	°
0. 39	20. 40. 15	1. 10	·1373	1. 49	·02974	Max.	68 ·9	70 ·8
0. 53	41. 25	1. 40	·1380	2. 9	·02981	9. 0	65 ·8	67 ·1
1. 0	39. 30	1. 54	·1385	2. 33	·03002	Min.	64 ·1	66 ·4
1. 8	39. 45	1. 59	·1379	2. 53	·02989	22. 0	67 ·3	69 ·0
1. 24	36. 50	2. 10	·1379	4. 9	·03021			
1. 40	38. 15	2. 18	·1387	4. 35	·03011			
1. 55	41. 15	2. 25	·1380	4. 46	·03032			
2. 9	40. 55	2. 40	·1395	5. 23	·03028			
2. 13	42. 50	2. 52	·1377	5. 34	·03018			
2. 24	37. 20	3. 9	·1382	6. 27	·03021			
2. 27	37. 20	3. 12	·1370		***			
2. 32	38. 40	3. 16	·1375	7. 8	·03007			
2. 42	38. 15	3. 21	·1371	7. 34	·02996			
2. 58	40. 5	3. 32	·1382	7. 39	·02999			
3. 6	41. 55	3. 39	·1369	8. 9	·02977			
3. 9	37. 30	3. 40	·1370	9. 7	·02963			
3. 15	35. 45	3. 51	·1352	11. 6	·02881			
3. 24	38. 30	4. 4	·1365	11. 23	·02822			
3. 38	39. 50	4. 25	·1367	11. 33	·02830			
3. 56	34. 30	4. 39	·1361	11. 59	·02793			
4. 23	35. 5	4. 55	·1383	12. 27	·02797			
4. 36	31. 55	5. 11	·1388	12. 34	·02786			
4. 42	32. 5	5. 24	·1378	13. 11	·02812			
4. 54	31. 10	5. 37	·1367	13. 28	·02806			
5. 23	34. 10	5. 43	·1375	13. 54	·02815			
5. 27	34. 0	5. 51	·1371	14. 8	·02811			
5. 40	30. 0	6. 4	·1375	15. 3	·02823			
5. 43	29. 30	6. 18	·1373	15. 8	·02822			
5. 53	26. 50	6. 27	·1385	16. 37	·02867			
6. 3	27. 30	6. 48	·1373	17. 38	·02871			
6. 14	29. 35	6. 58	·1358	17. 58	·02867			
6. 26	30. 40	7. 4	·1357	18. 56	·02891			
6. 38	31. 25	7. 18	·1383	22. 41	·02880			
6. 41	30. 35	7. 29	·1373	23. 59	·02903			
6. 50	32. 20	7. 41	·1395					
6. 58	17. 5	8. 4	·1375					
7. 13	23. 0	8. 20	·1365					
7. 26	16. 30	8. 30	·1369					
7. 37	20. 40	8. 54	·1357					
7. 43	21. 50	9. 11	·1363					
7. 56	24. 0	9. 50	·1377					
8. 0	24. 0	10. 24	·1375					
8. 8	25. 5	10. 49	·1383					
8. 23	21. 30	11. 6	·1400					
8. 54	25. 0	11. 17	·1383					
9. 11	25. 0	11. 31	·1413					
9. 15	27. 55	11. 45	·1409					
9. 26	28. 5	12. 4	·1391					
9. 40	26. 50	12. 36	·1376					
9. 44	26. 50	12. 43	·1381					
10. 7:	29. 0	12. 49	·1378					
10. 21	28. 0	13. 13	·1382					
10. 42	33. 20	13. 42	·1369					
10. 54	33. 20	14. 0	·1376					
10. 59	36. 0	14. 39	·1377					
11. 8	42. 45	15. 34	·1386					
11. 15	32. 45	15. 51	·1384					
11. 44	37. 0	15. 58	·1386					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 9		Sept. 9						
h m	° ′ ″	h m		h m		h m	°	°
11. 58	20. 33. 25	16. 15	·1378					
12. 12	32. 30	16. 43	·1387					
12. 23	30. 30	17. 8	·1378					
12. 29	24. 50	17. 24	·1384					
12. 43	25. 20	17. 36	·1367					
12. 54	26. 30	17. 50	·1359					
13. 25	25. 30	18. 6	·1366					
13. 53	33. 30	18. 16	·1363					
14. 0	33. 30	18. 27	·1369					
14. 16	36. 45	19. 24	·1373					
14. 39	37. 15	19. 45	·1370					
14. 42	35. 50	20. 4	·1372					
14. 53	35. 50	20. 51	·1362					
14. 58	31. 20	21. 15	·1360					
15. 14	31. 5	21. 42	·1366					
15. 39	28. 35	22. 12	·1364					
15. 44	29. 5	22. 25	·1367					
16. 1	29. 15	22. 45	·1352					
16. 10	28. 30	22. 50	·1353					
16. 24	28. 30	23. 0	·1349					
16. 38	30. 5	23. 41	·1356					
17. 12	31. 0	23. 51	·1359					
17. 27	34. 40	23. 59	·1359					
17. 38	33. 40							
17. 41	34. 5							
17. 44	32. 50							
17. 55	31. 20							
18. 7	31. 20							
18. 10	32. 10							
18. 23	31. 0							
18. 30	31. 0							
18. 40	33. 5							
18. 43	31. 40							
18. 54	33. 5							
19. 25	29. 45							
19. 28	29. 35							
19. 34	28. 30							
19. 42	29. 45							
	***							
20. 28	29. 35							
20. 38	30. 25							
21. 12	29. 20							
21. 36	29. 50							
21. 57	31. 20							
22. 14	31. 40							
22. 24	33. 50							
22. 38	34. 20							
22. 42	34. 0							
22. 56	35. 0							
23. 8	34. 10							
23. 28	36. 0							
23. 36	37. 15							
23. 40	36. 30							
23. 53	36. 30							
23. 56	37. 30							
23. 59	37. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 10		Sept. 10		Sept. 10		Sept. 10		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 30	0. 0	·1359	0. 0	·02903	Min.	67 ·7	69 ·5
0. 15	37. 10	0. 21	·1369	2. 33	·02937	1. 0	67 ·9	69 ·7
0. 36	38. 30	0. 27	·1375	3. 4	·02936	Max.	69 ·1	71 ·4
0. 53	38. 50	0. 43	·1374	5. 9	·02986	9. 0	68 ·9	71 ·0
1. 24	39. 0	0. 51	·1377	5. 23	·02973	Min.	67 ·9	69 ·9
2. 5	37. 45	1. 26	·1373	5. 45	·03008	21. 0	68 ·0	70 ·0
2. 9	38. 50	2. 18	·1384	6. 16	·02996			
2. 22	38. 50	2. 50	·1372	11. 3	·02961			
2. 26	37. 50	3. 4	·1376	11. 10	·02972			
2. 39	37. 40	3. 15	·1374	12. 1	·02926			
2. 49	36. 35	3. 27	·1381	12. 9	·02917			
3. 6	36. 15	3. 49	·1377	12. 34	·02932			
3. 18	35. 20	4. 13	·1388	12. 46	·02924			
3. 25	35. 50	4. 27	·1379	13. 8	·02932			
3. 40	34. 45	4. 38	·1373	13. 41	·02904			
4. 9	34. 0	4. 49	·1375	14. 42	·02935			
4. 24	34. 5	5. 20	·1355	15. 7	·02943			
4. 27	33. 10	5. 43	·1395	16. 8	·02947			
4. 37	33. 20	6. 11	·1394	16. 53	·02935			
4. 44	32. 40	6. 22	·1384	17. 19	·02954			
4. 58	30. 50	6. 41	·1373	19. 38	·02962			
5. 11	31. 10	6. 46	·1377	21. 11	·02941			
5. 16	30. 25	7. 24	·1376		·02809			
5. 34	17. 50	7. 44	·1383	23. 59	·02794			
5. 39	17. 55	8. 24	·1382					
5. 51	20. 30	8. 43	·1384					
6. 8	23. 0	8. 55	·1399					
6. 14	22. 45	9. 14	·1392					
6. 24	21. 20	9. 30	·1388					
6. 39	23. 10	9. 41	·1394					
7. 23	29. 20	9. 53	·1388					
7. 29	30. 10	10. 11	·1384					
7. 58	31. 0	10. 44	·1380					
8. 17	30. 35	11. 0	·1385					
8. 40	31. 50	11. 12	·1403					
8. 45	31. 20	11. 19	·1398					
8. 56	29. 5	11. 41	·1394					
9. 9	31. 40	11. 49	·1387					
9. 29	32. 30	12. 22	·1382					
9. 40	30. 25	12. 25	·1383					
9. 53	31. 50	12. 38	·1378					
10. 10	29. 30	12. 56	·1391					
10. 39	30. 40	13. 5	·1392					
10. 55	30. 55	13. 14	·1386					
11. 3	31. 40	13. 28	·1385					
11. 22	37. 20	13. 51	·1382					
	(†)	14. 10	·1376					
12. 23	30. 35	14. 41	·1378					
12. 34	29. 55	14. 53	·1375					
12. 40	30. 25	15. 13	·1380					
12. 55	32. 50	15. 29	·1374					
13. 8	30. 30	15. 38	·1376					
13. 39	39. 20	15. 50	·1373					
14. 9	29. 30	16. 6	·1380					
14. 13	29. 30	16. 13	·1379					
14. 26	28. 0	16. 26	·1382					
14. 44	29. 10	16. 54	·1375					
14. 55	29. 10	17. 19	·1377					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Sept. 10		Sept. 10						
h m	° ′ ″	h m		h m		h m	°	°
14. 58	20. 28. 5	18. 10	·1375					
15. 11	28. 10	18. 26	·1378					
15. 31	30. 40	18. 52	·1370					
15. 52	30. 25		***					
15. 55	31. 30	19. 56	·1374					
16. 9	31. 35	20. 21	·1368					
16. 25	33. 50	20. 40	·1372					
16. 33	31. 10	20. 44	·1365					
16. 41	30. 5	21. 6	·1358					
16. 53	27. 15	21. 11	·1350					
16. 55	27. 15	21. 54	·1351					
17. 9	25. 50	22. 6	·1354					
17. 16	28. 10	22. 20	·1353					
17. 37	29. 45	22. 41	·1361					
17. 41	28. 50	23. 4	·1360					
18. 7	31. 30	23. 59	·1365					
18. 15	31. 30							
18. 31	30. 20							
18. 39	31. 50							
18. 50	30. 40							
19. 11	29. 20							
19. 39	29. 5							
20. 3	31. 40							
20. 12	30. 35							
20. 41	31. 25							
21. 9	29. 30							
21. 12	31. 50							
21. 29	31. 50							
21. 56	36. 20							
22. 5	33. 45							
22. 11	34. 55							
22. 30	33. 35							
23. 20	35. 35							
23. 30	37. 25							
23. 59	38. 20							
Sept. 11		Sept. 11		Sept. 11		Sept. 11		
0. 0	20. 38. 20	0. 0	·1365	0. 0	·02794	1. 0	69 ·0	70 ·1
0. 56	40. 40	0. 35	·1369	4. 23	·02875	3. 0	68 ·6	70 ·7
1. 18	39. 40	0. 55	·1373	6. 22	·02868	Max.	69 ·4	71 ·6
1. 56	39. 55	1. 11	·1372	7. 8	·02873	9. 0	68 ·5	70 ·8
2. 12	38. 50	1. 53	·1376	8. 23	·02860	Min.	67 ·7	70 ·0
2. 29	38. 50	1. 54	·1379	9. 35	·02857	21. 0	68 ·6	70 ·1
2. 38	39. 30	2. 13	·1372	10. 23	·02829			
2. 53	36. 15	2. 21	·1374	11. 3	·02828			
2. 57	34. 0	2. 34	·1371	13. 43	·02851			
3. 7	33. 15	2. 42	·1367	15. 46	·02797			
3. 13	32. 0	2. 58	·1363	17. 4	·02823			
3. 23	32. 50	3. 14	·1370	17. 45	·02809			
3. 29	31. 50	3. 24	·1374	21. 3	·02826			
3. 38	32. 30	3. 31	·1372	23. 59	·02829			
3. 49	31. 40	3. 41	·1377					
4. 13	33. 0	3. 50	·1372					
4. 30	36. 15	4. 5	·1378					
4. 53	36. 20	4. 34	·1371					
5. 0	35. 0	4. 40	·1372					
5. 25	34. 25	4. 43	·1366					
5. 44	34. 35	4. 55	·1367					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Sept. 11		Sept. 11						
h m	° ′ ″	h m		h m		h m	°	°
5. 59	20. 33. 45	5. 15	·1373					
6. 12	33. 45	5. 25	·1381					
6. 38	26. 50	5. 35	·1371					
6. 41	22. 0	5. 51	·1376					
6. 56	21. 35	5. 56	·1371					
7. 2	22. 50	6. 11	·1377					
7. 11	28. 55	6. 29	·1366					
7. 23	28. 55	6. 50	·1381					
7. 43	33. 20	7. 0	·1398					
7. 59	33. 50	7. 8	·1394					
8. 25	32. 5	7. 11	·1396					
8. 41	32. 25	7. 21	·1378					
9. 22	29. 50	7. 43	·1380					
9. 30	27. 0	7. 54	·1378					
9. 42	29. 35	8. 10	·1379					
9. 54	26. 30	8. 15	·1378					
10. 7	29. 5	8. 37	·1374					
10. 24	30. 0	8. 56	·1376					
10. 30	29. 45	9. 10	·1383					
10. 53	31. 30	9. 24	·1386					
11. 14	28. 20	9. 38	·1403					
11. 32	30. 0	9. 44	·1397					
11. 59	30. 0	9. 59	·1412					
12. 51	31. 15	10. 16	·1405					
13. 27	33. 15	10. 22	·1396					
13. 51	35. 50	10. 31	·1390					
14. 12	33. 30	10. 41	·1392					
14. 57	40. 20	11. 4	·1382					
15. 11	41. 10	11. 24	·1376					
15. 24	40. 40	11. 36	·1378					
15. 38	40. 40	11. 54	·1369					
15. 55	35. 0	12. 48	·1373					
16. 14	33. 45	12. 54	·1370					
16. 28	33. 45	13. 13	·1373					
16. 53	35. 0	13. 38	·1370					
17. 13	39. 25	13. 52	·1374					
17. 29	39. 25	14. 11	·1373					
17. 43	40. 25	14. 21	·1376					
18. 7	41. 15	14. 44	·1372					
18. 13	40. 20	15. 11	·1362					
18. 26	39. 0	15. 43	·1378					
18. 38	40. 30	15. 55	·1374					
18. 45	40. 0	16. 23	·1375					
18. 58	43. 30	16. 52	·1357					
19. 9	43. 10	17. 2	·1359					
19. 15	45. 25	17. 17	·1366					
19. 28	46. 35	18. 25	·1363					
19. 50	43. 35	18. 42	·1350					
19. 55	44. 45	18. 54	·1344					
20. 9	41. 50	18. 57	·1345					
20. 25	41. 30	19. 11	·1337					
20. 36	42. 10	19. 22	·1335					
20. 50	40. 0	19. 41	·1349					
21. 11	38. 50	19. 57	·1367					
21. 24	38. 50	20. 12	·1370					
21. 37	37. 25	20. 21	·1367					
21. 41	39. 5	20. 34	·1371					
21. 55	38. 45	20. 45	·1366					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 11		Sept. 11						
h m	° ′ ″	h m		h m		h m	°	°
21. 56	20. 37. 0	21. 44	·1356					
22. 23	38. 45	22. 25	·1362					
22. 48	37. 30	22. 42	·1360					
23. 11	37. 30	23. 24	·1362					
23. 53	41. 40	23. 59	·1359					
23. 59	41. 30							
Sept. 12		Sept. 12		Sept. 12		Sept. 12		
0. 0	20. 41. 30	0. 0	·1359	0. 0	·02829	1. 0	69 ·3	70 ·8
0. 13	41. 35	0. 17	·1366	2. 1	·02863	3. 0	69 ·1	71 ·1
0. 25	43. 0	0. 24	·1359	2. 46	·02919	Max.	69 ·5	71 ·7
0. 28	43. 20	0. 44	·1361	3. 53	·02901	9. 0	68 ·2	69 ·2
0. 33	43. 40	1. 22	·1367	5. 9	·02916	Min.	64 ·1	65 ·3
0. 39	43. 15	1. 36	·1374	5. 17	·02933	21. 0	66 ·6	68 ·0
1. 8	44. 15	1. 45	·1367	5. 31	·02916	22. 0	66 ·8	68 ·4
1. 10	44. 5	1. 58	·1336	5. 39	·02922	23. 0	67 ·0	68 ·8
1. 25	45. 40	2. 14	·1351	6. 40	·02887			
1. 48	42. 0	2. 25	·1347	8. 8	·02891			
1. 55	44. 55	2. 28	·1358	8. 27	·02882			
2. 6	41. 25	2. 35	·1367	8. 46	·02893			
2. 12	41. 25	2. 50	·1372	11. 51	·02777			
2. 19	38. 50	2. 55	·1368	13. 52	·02743			
2. 24	38. 50	3. 13	·1360	14. 39	·02711			
2. 26	40. 10	3. 26	·1367	17. 53	·02672			
2. 34	40. 25	3. 37	·1365	20. 3	·02700			
2. 41	40. 10	3. 43	·1370	21. 12	·02698			
2. 44	40. 30	3. 57	·1362		·02849			
3. 8	39. 20	4. 11	·1373	23. 59	·02842			
3. 22	40. 20	4. 40	·1378					
3. 26	40. 5	4. 49	·1370					
3. 40	40. 35	5. 7	·1370					
3. 56	39. 20	5. 15	·1385					
4. 37	39. 30	5. 21	·1404					
4. 41	38. 0	5. 32	·1385					
4. 54	37. 5	5. 41	·1391					
4. 58	35. 0	5. 50	·1373					
5. 12	27. 20	6. 0	·1378					
5. 23	31. 10	6. 10	·1374					
5. 27	28. 50	6. 15	·1377					
5. 40	32. 35	6. 42	·1370					
5. 44	32. 5	6. 56	·1368					
6. 1	34. 25	7. 10	·1374					
6. 11	33. 0	7. 25	·1372					
6. 25	33. 50	7. 42	·1378					
6. 41	33. 40	8. 11	·1373					
6. 50	32. 30	8. 20	·1367					
6. 59	30. 20	8. 27	·1385					
7. 18	30. 55	8. 43	·1397					
7. 32	30. 20	9. 5	·1382					
7. 41	31. 25	9. 29	·1376					
7. 53	31. 5	9. 38	·1378					
8. 4	31. 20	9. 55	·1367					
8. 24	23. 30	10. 43	·1374					
8. 44	30. 0	10. 51	·1382					
8. 57	31. 0	11. 20	·1381					
9. 8	30. 20	11. 42	·1377					
9. 14	31. 40	11. 52	·1380					
9. 26	31. 40	12. 51	·1376					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 12		Sept. 12						
h m	° ′ ″	h m		h m		h m	°	°
9. 42	20. 33. 15	13. 13	·1370					
9. 57	31. 25	14. 11	·1385					
10. 17	31. 10	15. 11	·1361					
10. 36	31. 10	15. 55	·1381					
10. 41	33. 0	16. 54	·1380					
11. 7	36. 0	17. 12	·1371					
11. 13	36. 20	17. 26	·1367					
11. 28	33. 30	18. 25	·1375					
11. 41	32. 0	18. 40	·1371					
11. 54	32. 0	18. 46	·1375					
12. 23	29. 10	19. 4	·1377					
12. 43	29. 50	19. 15	·1372					
13. 9	34. 15	21. 4	·1366					
13. 25	33. 30	21. 23	·1372					
13. 35	35. 20	22. 38	·1368					
13. 43	35. 20	22. 58	·1369					
14. 9	30. 45	23. 59	·1378					
14. 18	29. 50							
14. 49	33. 0							
14. 58	34. 30							
15. 23	36. 5							
15. 43	35. 10							
15. 54	33. 0							
16. 20	30. 55							
16. 26	31. 40							
17. 32	33. 0							
17. 41	34. 5							
17. 55	34. 5							
18. 11	33. 30							
18. 28	33. 20							
18. 39	32. 25							
18. 44	32. 25							
18. 54	33. 15							
19. 8	32. 20							
19. 14	34. 50							
19. 26	33. 0							
20. 59	33. 5							
21. 6	31. 55							
22. 41	35. 10							
22. 53	36. 40							
22. 56	35. 15							
23. 53	37. 20							
23. 59	37. 30							
Sept. 13		Sept. 13		Sept. 13		Sept. 13		
0. 0	20. 37. 30	0. 0	·1378	0. 0	·02842	0. 0	67 ·6	69 ·0
0. 12	37. 10	0. 45	·1383	2. 58	·02897	1. 0	67 ·8	69 ·1
0. 22	38. 0	0. 50	·1381	5. 56	·02920	2. 0	67 ·8	69 ·9
0. 26	37. 45	1. 24	·1380	6. 1	·02923	3. 0	67 ·8	69 ·1
0. 30	38. 5	1. 37	·1374	6. 34	·02934	Max.	68 ·9	71 ·5
0. 38	37. 50	1. 48	·1379	9. 3	·02934	9. 0	68 ·8	71 ·4
0. 41	38. 40	2. 0	·1367	11. 1	·02887	Min.	63 ·1	66 ·2
0. 52	38. 10	2. 10	·1379	18. 8	·02786	21. 0	66 ·1	68 ·1
0. 57	38. 35	2. 14	·1373	20. 51	·02811	22. 0	66 ·5	68 ·6
1. 41	37. 35	2. 21	·1373	23. 59	·02806	23. 0	66 ·7	68 ·8
1. 53	37. 50	2. 24	·1385					
1. 56	37. 20	2. 38	·1382					
2. 23	36. 35	3. 7	·1385					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 13		Sept. 13						
h m	° ′ ″	h m		h m		h m	°	°
2. 26	20. 37. 55	3. 25	·1377					
2. 37	37. 0	3. 44	·1382					
3. 7	36. 25	4. 23	·1383					
3. 26	34. 45	4. 30	·1387					
4. 23	33. 50	5. 11	·1383					
4. 30	34. 15	5. 17	·1384					
4. 40	34. 5	5. 43	·1378					
5. 9	32. 40	5. 50	·1381					
5. 28	32. 50	5. 57	·1378					
5. 44	30. 0	6. 14	·1382					
5. 54	29. 45	6. 28	·1388					
5. 58	28. 5	6. 55	·1379					
6. 23	26. 30	7. 40	·1385					
6. 38	29. 30	8. 0	·1382					
6. 53	31. 20	8. 15	·1384					
7. 6	31. 20	8. 27	·1383					
7. 26	32. 55	8. 58	·1388					
7. 29	32. 40	9. 13	·1384					
7. 55	32. 40	9. 20	·1387					
8. 3	32. 10	9. 41	·1383					
8. 26	32. 20	9. 50	·1385					
8. 38	31. 35	10. 4	·1383					
8. 42	31. 30	11. 8	·1380					
8. 56	30. 0	12. 14	·1381					
9. 9	30. 40	12. 41	·1384					
9. 23	29. 25	13. 58	·1381					
9. 30	29. 35	14. 42	·1387					
9. 41	29. 10	15. 14	·1383					
10. 9	30. 50	15. 42	·1386					
10. 26	30. 20	16. 5	·1385					
10. 44	30. 30	16. 42	·1387					
11. 6	29. 45	17. 42	·1388					
11. 13	30. 30	18. 20	·1380					
11. 25	30. 20	18. 54	·1377					
12. 28	31. 30	19. 12	·1378					
12. 41	30. 45	19. 27	·1376					
13. 24	30. 45	21. 19	·1375					
13. 36	30. 30	21. 40	·1378					
13. 42	30. 50		***					
14. 3	33. 20	23. 59	·1376					
14. 32	31. 20							
14. 43	31. 20							
14. 55	30. 40							
15. 10	31. 35							
15. 58	30. 20							
16. 39	30. 30							
16. 42	30. 20							
17. 24	30. 5							
17. 37	29. 30							
18. 9	29. 35							
18. 24	30. 30							
18. 56	30. 30							
19. 17	29. 55							
19. 36	28. 50							
20. 7	28. 15							
20. 52	29. 5							
20. 58	30. 0							
21. 39	30. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 13								
h m	° ′ ″	h m		h m		h m	°	°
21. 43	20. 31. 40							
21. 53	31. 25							
22. 42	33. 50							
22. 46	33. 35							
23. 4	34. 20							
23. 13	35. 15							
23. 59	37. 35							
Sept. 14		Sept. 14		Sept. 14		Sept. 14		
0. 0	20. 37. 35	0. 0	·1376	c. 0	·02806	0. 0	66·8	69·1
0. 48	39. 30	0. 24	·1380	5. 26	·02881	1. 0	67·6	69·4
1. 0	38. 50	0. 55	·1381	8. 56	·02910	2. 0	67·5	69·6
1. 26	39. 35	1. 3	·1376	14. 1	·02802	3. 0	67·4	69·2
2. 25	36. 15	1. 11	·1374	14. 45	·02767	Max.	68·2	70·5
2. 43	36. 0	1. 26	·1382	18. 33	·02762	9. 0	66·8	68·8
2. 56	36. 45	1. 44	·1379	19. 2	·02775	Min.	64·1	66·2
4. 3	35. 0	2. 9	·1377	19. 59	·02764	21. 0	66·6	67·7
4. 22	34. 20	2. 27	·1376	20. 5	·02772			
4. 35	34. 20	2. 50	·1378	23. 59	·02791			
5. 0	33. 5	2. 59	·1382					
5. 25	32. 35	3. 31	·1378					
5. 58	32. 50	4. 18	·1382					
6. 24	32. 25	4. 40	·1377					
7. 6	32. 35	4. 54	·1379					
7. 54	31. 50	5. 8	·1378					
7. 59	32. 5	5. 57	·1385					
8. 10	31. 0	6. 47	·1387					
8. 27	26. 55	7. 50	·1384					
8. 58	30. 30	8. 6	·1386					
9. 23	31. 40	8. 25	·1384					
9. 38	31. 40	8. 41	·1387					
9. 58	32. 0	9. 14	·1386					
11. 10	31. 45	9. 52	·1388					
11. 26	32. 5		***					
12. 23	31. 5	10. 29	·1389					
12. 43	31. 35	10. 59	·1387					
12. 57	32. 5	11. 24	·1393					
13. 12	31. 50	11. 48	·1390					
13. 53	37. 50	13. 23	·1394					
14. 9	36. 0	13. 53	·1392					
14. 11	33. 45	14. 10	·1396					
14. 36	31. 0	14. 14	·1395					
14. 44	29. 0	14. 39	·1402					
14. 58	28. 50	14. 47	·1394					
15. 23	27. 20	14. 57	·1396					
15. 38	27. 35	15. 14	·1392					
15. 52	26. 20	15. 28	·1394					
16. 8	26. 45	15. 54	·1392					
16. 26	27. 35	16. 9	·1395					
16. 29	27. 35	16. 20	·1392					
16. 40	28. 35	16. 47	·1395					
16. 55	27. 25	17. 21	·1396					
17. 22	27. 45	17. 52	·1400					
17. 43	30. 40	18. 12	·1394					
18. 13	30. 40	18. 43	·1376					
18. 27	33. 10	19. 17	·1385					
18. 38	33. 10	19. 30	·1392					
19. 3	38. 30	19. 52	·1397					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 14		Sept. 14						
h m	° ′ ″	h m		h m		h m	°	°
19. 11	20. 37. 20	20. 6	·1387					
19. 24	38. 0	20. 14	·1392					
19. 54	36. 0	20. 25	·1382					
20. 0	34. 15	20. 54	·1372					
20. 10	35. 50	21. 55	·1377					
20. 18	34. 35	22. 45	·1373					
20. 35	34. 0	23. 7	·1374					
21. 0	35. 40	23. 15	·1378					
21. 25	36. 30	23. 24	·1372					
21. 38	36. 30	23. 37	·1369					
22. 10	38. 45	23. 48	·1371					
22. 23	38. 45	23. 59	·1373					
22. 26	38. 10							
22. 37	39. 10							
22. 41	38. 35							
22. 54	39. 25							
23. 8	39. 25							
23. 13	41. 20							
23. 25	40. 0							
23. 39	39. 30							
23. 59	38. 10							
Sept. 15		Sept. 15		Sept. 15		Sept. 15		
0. 0	20. 38. 10	0. 0	·1373	0. 0	·02791	1. 0	67 ·6	69 ·2
0. 11	38. 10	0. 8	·1376	1. 34	·02842	3. 0	67 ·5	69 ·3
0. 22	37. 25	0. 19	·1373	2. 6	·02885	Max.	68 ·6	71 ·0
0. 29	39. 40	0. 34	·1384	2. 28	·02879	9. 0	67 ·5	70 ·0
0. 43	39. 20	0. 43	·1383	4. 14	·02912	Min.	64 ·2	66 ·4
0. 54	39. 45	0. 55	·1386	6. 7	·02890	21. 0	66 ·5	68 ·1
1. 9	39. 30	1. 10	·1382	7. 4	·02888			
1. 12	39. 50	1. 41	·1368	8. 59	·02901			
1. 23	37. 50	1. 51	·1372	10. 51	·02848			
1. 26	37. 50	2. 12	·1376	11. 0	·02861			
1. 38	36. 50	2. 26	·1370	11. 12	·02829			
1. 41	35. 35	2. 38	·1372	11. 56	·02814			
1. 56	34. 10	2. 42	·1369	12. 38	·02818			
2. 9	34. 55	3. 0	·1378	14. 40	·02817			
2. 11	34. 55	3. 17	·1375	14. 59	·02804			
2. 23	36. 20	3. 21	·1376	15. 28	·02800			
2. 41	35. 30	3. 31	·1372	17. 9	·02781			
3. 8	38. 25	3. 42	·1376	17. 41	·02769			
3. 19	37. 50	4. 5	·1375	18. 24	·02778			
3. 26	38. 15	4. 21	·1380	18. 59	·02772			
3. 38	37. 0	4. 34	·1370	19. 46	·02784			
3. 44	37. 10	4. 45	·1368	21. 3	·02790			
4. 7	37. 0	5. 13	·1379	23. 59	·02822			
4. 14	36. 20	5. 51	·1385					
4. 23	37. 20	6. 54	·1388					
4. 27	37. 30	7. 26	·1385					
4. 41	36. 15	7. 45	·1384					
4. 53	36. 0	8. 17	·1386					
4. 56	35. 10	8. 40	·1384					
5. 4	35. 10	9. 12	·1385					
5. 18	34. 30	9. 21	·1379					
5. 57	34. 45	10. 10	·1390					
6. 44	34. 5	10. 28	·1383					
7. 28	33. 30	10. 39	·1386					
7. 56	32. 30	11. 5	·1381					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 15		Sept. 15						
h m	° ′ ″	h m		h m		h m	°	°
8. 24	20. 32. 30	11. 12	·1389					
8. 39	31. 50	11. 24	·1389					
8. 58	32. 5	11. 43	·1409					
9. 14	31. 35		***					
9. 33	31. 40	12. 18	·1386					
9. 43	30. 30		***					
10. 9	28. 30	14. 13	·1383					
10. 15	28. 35	14. 36	·1384					
10. 30	27. 20	14. 53	·1388					
10. 44	28. 30		***					
10. 58	28. 30	15. 42	·1389					
11. 12	35. 45	16. 12	·1382					
11. 29	25. 0	16. 28	·1380					
11. 38	25. 0	17. 15	·1399					
12. 30	30. 10	17. 40	·1392					
12. 44	30. 35	17. 52	·1380					
13. 6	29. 45	18. 13	·1377					
13. 45	29. 55	18. 41	·1395					
14. 7	31. 10	18. 52	·1395					
14. 22	30. 45	20. 31	·1382					
14. 27	31. 20	20. 41	·1384					
14. 38	30. 50	20. 49	·1389					
14. 42	31. 30	20. 58	·1386					
14. 47	32. 50	21. 29	·1367					
15. 7	29. 30	21. 38	·1370					
15. 32	31. 10	21. 41	·1369					
15. 40	30. 55	21. 58	·1372					
15. 46	32. 0	22. 6	·1367					
16. 0	31. 40	22. 12	·1377					
16. 11	32. 0	22. 15	·1374					
16. 26	33. 30	22. 24	·1380					
16. 38	32. 50		***					
16. 46	33. 30	22. 44	·1371					
16. 56	33. 0	23. 6	·1373					
17. 8	33. 10	23. 23	·1356					
17. 10	32. 30	23. 26	·1359					
17. 28	34. 20	23. 38	·1347					
17. 33	34. 20	23. 50	·1358					
18. 10	38. 0		(†)					
18. 24	40. 35							
18. 33	40. 25							
19. 9	32. 0							
19. 14	31. 30							
19. 42	31. 10							
19. 56	30. 20							
20. 12	30. 20							
20. 27	29. 30							
20. 37	29. 30							
20. 40	28. 10							
20. 56	31. 50							
21. 7	32. 50							
21. 8	31. 30							
21. 12	32. 30							
21. 36	31. 30							
21. 53	31. 30							
21. 57	30. 50							
22. 3	31. 55							
22. 9	31. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 15								
h m	° ′ ″	h m		h m		h m	°	°
22. 13	20. 32. 45							
22. 24	32. 50							
22. 38	35. 40							
22. 48	34. 45							
23. 23	38. 0							
23. 28	37. 35							
23. 37	39. 45							
23. 50	35. 10							
23. 54	37. 50							
23. 56	35. 45							
23. 59	37. 30							
Sept. 16		Sept. 16		Sept. 16		Sept. 16		
0. 0	20. 37. 30		(†)	0. 0	·02822	1. 0	67·6	69·6
0. 23	39. 50	0. 28	·1373	2. 18	·02886	3. 0	68·0	69·8
0. 26	39. 35	0. 41	·1376	2. 31	·02911	Max.	69·2	70·8
0. 41	40. 40	0. 51	·1373	3. 4	·02933	9. 0	68·9	70·1
0. 52	40. 0	1. 6	·1379	3. 34	·02956	Min.	65·3	67·5
1. 2	41. 0	1. 22	·1377	5. 12	·02911	22. 0	67·5	69·0
1. 24	41. 0	1. 40	·1377	6. 29	·02903			
1. 40	40. 0	1. 52	·1390	7. 1	·02916			
1. 44	42. 0	2. 18	·1377	8. 23	·02893			
1. 56	43. 35	2. 23	·1380	8. 46	·02907			
2. 8	43. 0	2. 30	·1383	10. 39	·02910			
2. 12	37. 30	2. 42	·1376	11. 24	·02875			
2. 26	39. 10	3. 2	·1397	12. 28	·02856			
2. 41	33. 50	3. 22	·1375	12. 53	·02863			
2. 46	35. 0	3. 26	·1381	13. 45	·02848			
2. 58	38. 30	3. 35	·1374	14. 2	·02834			
3. 8	38. 50	3. 45	·1363	14. 23	·02837			
3. 21	36. 10	3. 55	·1370	15. 59	·02795			
3. 26	38. 35	4. 3	·1361	18. 28	·02802			
3. 39	39. 30	4. 18	·1391	20. 9	·02833			
3. 44	37. 0	4. 39	·1381	23. 59	·02859			
3. 53	37. 50	5. 26	·1384					
4. 1	30. 0	6. 5	·1382					
4. 10	31. 5	6. 40	·1384					
4. 24	35. 0	6. 53	·1393					
4. 31	34. 30	7. 19	·1384					
4. 50	33. 25	7. 40	·1417					
5. 11	34. 35	7. 53	·1398					
5. 26	33. 50	8. 0	·1392					
5. 40	33. 50	8. 22	·1363					
5. 56	33. 0	8. 54	·1377					
6. 6	33. 30	9. 15	·1373					
6. 14	32. 30	10. 32	·1379					
6. 25	32. 30	10. 50	·1394					
6. 31	31. 30	11. 13	·1397					
6. 41	29. 0	11. 27	·1386					
6. 55	30. 10	11. 55	·1392					
7. 15	12. 55	12. 26	·1378					
7. 38	23. 0	12. 33	·1383					
8. 9	32. 10	13. 12	·1382					
8. 16	30. 40	13. 44	·1385					
8. 26	24. 10	14. 4	·1367					
8. 39	25. 30	14. 22	·1360					
8. 46	25. 0	14. 50	·1377					
9. 8	28. 30	15. 45	·1389					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 16		Sept. 16						
h m	° ′ ″	h m		h m		h m	°	°
9. 12	20. 28. 30	16. 10	·1376					
9. 23	29. 20	16. 27	·1377					
9. 41	31. 0	16. 41	·1384					
10. 8	31. 0	16. 51	·1382					
10. 24	33. 10	17. 3	·1384					
10. 30	32. 5	17. 34	·1372					
10. 49	34. 30	17. 45	·1373					
10. 57	34. 30	18. 11	·1371					
11. 11	36. 45	18. 22	·1374					
11. 24	35. 15	19. 4	·1376					
11. 39	36. 30	19. 35	·1378					
11. 55	34. 30	20. 0	·1372					
	(†)	20. 10	·1375					
12. 58	30. 0	20. 41	·1366					
13. 14	33. 25	20. 51	·1361					
13. 28	33. 10	20. 58	·1362					
13. 43	33. 30	21. 8	·1356					
13. 54	33. 25	21. 39	·1347					
14. 7	31. 0	21. 46	·1351					
14. 17	31. 15	22. 4	·1344					
14. 34	37. 0	22. 30	·1341					
14. 39	37. 0	23. 4	·1358					
14. 42	37. 55	23. 39	·1375					
14. 57	35. 20	23. 59	·1373					
15. 11	34. 40							
15. 26	32. 10							
15. 40	31. 25							
16. 5	33. 20							
16. 27	33. 30							
16. 38	30. 30							
16. 51	32. 15							
16. 58	31. 25							
17. 16	31. 50							
17. 24	31. 0							
17. 38	32. 40							
17. 44	31. 30							
18. 0	32. 20							
18. 23	31. 20							
18. 29	31. 20							
18. 55	30. 15							
19. 6	29. 50							
19. 15	30. 20							
19. 26	29. 50							
19. 37	30. 0							
19. 45	31. 10							
19. 56	30. 30							
20. 2	31. 55							
20. 11	30. 25							
20. 26	31. 10							
20. 38	30. 50							
20. 52	32. 40							
21. 0	32. 40							
22. 2	37. 15							
22. 8	37. 15							
22. 40	41. 30							
22. 44	41. 30							
22. 54	42. 30							
23. 22	40. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 16								
h m	° ′ ″	h m		h m		h m	°	°
23. 41	20. 41. 15							
23. 52	40. 50							
23. 59	40. 40							
Sept. 17		Sept. 17		Sept. 17		Sept. 17		
0. 0	20. 40. 40	0. 0	·1373	0. 0	·02859	1. 0	68 ·4	69 ·7
0. 24	39. 55	0. 20	·1358	0. 11	·02869	Max.	68 ·8	71 ·2
0. 28	39. 0	0. 28	·1358	1. 9	·02904	9. 0	66 ·7	69 ·0
1. 7	37. 30	0. 44	·1369	3. 28	·02920	Min.	63 ·8	66 ·2
1. 12	38. 30	0. 53	·1367	4. 16	·02944	21. 0	66 ·6	66 ·7
1. 15	38. 30	1. 15	·1378	6. 29	·02936			
1. 37	39. 20	1. 29	·1377	7. 24	·02951			
1. 40	38. 30	1. 56	·1372	8. 59	·02943			
1. 44	39. 5	2. 25	·1376	11. 6	·02851			
2. 1	37. 45	2. 52	·1370	11. 19	·02862			
2. 42	37. 0	3. 5	·1371	11. 58	·02804			
2. 55	36. 30	3. 19	·1370	12. 4	·02799			
3. 0	36. 30	3. 28	·1374	12. 23	·02814			
3. 10	35. 50	3. 38	·1370	13. 15	·02806			
3. 24	35. 30	3. 41	·1372	15. 59	·02809			
3. 27	35. 50	3. 50	·1359	16. 48	·02777			
3. 29	34. 50	4. 11	·1368	19. 24	·02766			
3. 39	34. 50	4. 33	·1376	20. 31	·02792			
3. 42	33. 0	4. 45	·1375	23. 59	·02828			
3. 56	30. 15	4. 58	·1377					
3. 59	30. 15	5. 14	·1375					
4. 9	29. 20	5. 28	·1379					
4. 23	29. 20	5. 40	·1377					
4. 30	30. 5	6. 5	·1376					
4. 42	30. 5	6. 43	·1366					
5. 8	31. 30	7. 10	·1372					
5. 25	31. 50	7. 27	·1380					
5. 38	33. 5	7. 42	·1372					
5. 46	32. 35	8. 0	·1370					
6. 2	33. 0	8. 28	·1380					
6. 12	32. 30	8. 43	·1373					
6. 23	31. 30	8. 55	·1381					
6. 27	30. 50	9. 15	·1380					
6. 41	28. 0	9. 38	·1392					
6. 53	26. 0	9. 53	·1391					
6. 57	26. 0	11. 15	·1374					
7. 13	24. 0	11. 24	·1377					
7. 41	29. 0	11. 36	·1367					
7. 50	29. 0	11. 44	·1367					
8. 14	30. 25	11. 56	·1374					
8. 26	27. 50	12. 5	·1372					
8. 38	28. 5	12. 20	·1380					
8. 43	27. 0	12. 38	·1378					
8. 56	27. 0	12. 54	·1389					
9. 9	30. 0	13. 25	·1379					
9. 14	30. 20	13. 39	·1381					
9. 25	30. 0	13. 54	·1375					
9. 37	31. 10	14. 24	·1374					
9. 44	29. 30	14. 30	·1372					
9. 54	29. 5	14. 55	·1374					
9. 57	29. 30	15. 27	·1368					
10. 7	28. 40	15. 42	·1372					
10. 15	28. 20	16. 12	·1389					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 17		Sept. 17						
h m	° ′ ″	h m		h m		h m	°	°
10. 28	20. 29. 0	16. 30	·1394					
10. 58	21. 20	17. 54	·1382					
11. 26	34. 30	18. 21	·1373					
11. 43	28. 45	18. 47	·1382					
11. 57	25. 0	18. 59	·1383					
12. 7	25. 0	19. 22	·1380					
12. 23	29. 0	20. 6	·1371					
12. 44	28. 0	21. 20	·1369					
13. 12	23. 45	21. 36	·1371					
13. 28	22. 0	21. 40	·1368					
13. 54	24. 25	21. 46	·1372					
14. 7	28. 0	21. 54	·1370					
14. 14	29. 0	22. 0	·1373					
14. 24	28. 0	22. 9	·1368					
14. 28	28. 0	22. 37	·1376					
14. 37	27. 10	22. 48	·1370					
14. 42	27. 10	23. 4	·1373					
14. 58	29. 35	23. 45	·1371					
15. 10	29. 35	23. 59	·1375					
15. 38	33. 30							
16. 0	37. 0							
16. 24	34. 10							
16. 40	32. 30							
16. 56	32. 50							
17. 10	32. 5							
17. 22	32. 50							
17. 25	32. 30							
17. 39	32. 50							
18. 9	36. 15							
18. 39	40. 25							
19. 23	35. 0							
19. 43	30. 30							
20. 31	29. 35							
21. 0	30. 0							
21. 27	30. 45							
21. 37	30. 20							
21. 42	31. 35							
21. 46	31. 35							
21. 55	32. 15							
22. 3	31. 55							
22. 26	34. 50							
22. 40	34. 50							
23. 59	38. 40							
Sept. 18		Sept. 18		Sept. 18		Sept. 18		
0. 0	20. 38. 40	0. 0	·1375	0. 0	·02828	1. 0	67 ·3	68 ·8
0. 22	39. 45	0. 9	·1377	4. 24	·02898	3. 0	67 ·5	69 ·0
0. 36	39. 25	0. 14	·1379	9. 4	·02917	Max.	68 ·5	70 ·2
1. 9	40. 50	0. 22	·1375	10. 39	·02836	9. 0	65 ·6	67 ·5
1. 23	41. 5	1. 11	·1380	16. 40	·02683	Min.	61 ·0	62 ·6
1. 43	40. 20	2. 27	·1374	17. 32	·02647	21. 0	64 ·5	65 ·7
1. 58	39. 25	3. 11	·1378	18. 34	·02649			
2. 26	38. 0	3. 29	·1372	20. 32	·02682			
2. 41	38. 0	4. 7	·1383	23. 59	·02691			
2. 56	37. 10	4. 40	·1382					
3. 11	37. 30	5. 2	·1385					
3. 38	34. 0	5. 25	·1383					
4. 6	32. 45	5. 41	·1386					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 18		Sept. 18						
h m	° ′ ″	h m		h m		h m	°	°
4. 34	20. 33. 25	7. 51	·1384					
5. 29	32. 40	8. 41	·1387					
6. 16	32. 50	9. 4	·1382					
7. 8	32. 30	9. 31	·1385					
7. 24	32. 50	9. 52	·1390					
7. 37	32. 0	10. 40	·1388					
7. 53	31. 45	11. 10	·1387					
8. 5	32. 5	11. 31	·1386					
8. 24	32. 0	11. 49	·1392					
8. 27	31. 25	12. 10	·1386					
8. 52	32. 50	12. 44	·1389					
9. 9	32. 0	15. 55	·1391					
9. 25	32. 35	16. 25	·1381					
9. 40	31. 0	17. 10	·1409					
9. 58	34. 30	17. 34	·1394					
10. 12	33. 55	18. 20	·1392					
10. 39	30. 0	18. 30	·1395					
10. 58	29. 25	19. 13	·1392					
11. 6	30. 5	19. 41	·1387					
11. 23	29. 0	21. 22:	·1378					
11. 39	29. 55	22. 26	·1377					
12. 9	30. 25	23. 30	·1383					
12. 38	31. 30	23. 59	·1387					
12. 41	30. 50							
12. 54	31. 0							
13. 9	30. 0							
14. 8	30. 0							
14. 39	29. 45							
14. 59	28. 55							
15. 25	29. 0							
15. 41	30. 25							
15. 53	29. 50							
16. 8	31 0							
16. 39	34. 50							
16. 53	34. 0							
17. 7	31. 30							
17. 22	31. 15							
17. 46	33. 0							
18. 15	32. 0							
18. 24	32. 10							
18. 54	30. 45							
19. 51	29. 40							
20. 8	30. 25							
20. 55	30. 35							
21. 2	31. 20							
21. 22	31. 20							
23. 23	35. 50							
23. 59	36. 55							
Sept. 19		Sept. 19		Sept. 19		Sept. 19		
0. 0	20. 36. 55	0. 0	·1387	0. 0	·02691	1. 0	66· 0	67· 7
0. 28	36. 45	1. 12	·1391	4. 12	·02766	3. 0	66· 3	68· 1
1. 7	36. 30	2. 29	·1389	6. 54	·02788	Max.	67· 1	69· 2
2. 25	34. 15	2. 37	·1386	9. 3	·02813	9. 0	65· 5	67· 0
2. 38	33. 50	3. 9	·1389	11. 12	·02766	Min.	62· 5	66· 2
4. 8	32. 55	3. 42	·1387	15. 33	·02707	21. 0	64· 4	66· 4
4. 12	32. 35	5. 43	·1391	17. 51	·02656	22. 0	64· 6	66· 1
5. 26	32. 5	5. 54	·1393	18. 56	·02656	23. 0	65· 3	67· 2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 19		Sept. 19		Sept. 19				
h m	° ′ ″	h m		h m		h m	°	°
6. 42	20. 32. 15	6. 11	·1390	19. 39	·02663			
10. 15	31. 5	6. 34	·1392	23. 59	·02691			
10. 27	31. 30	8. 57	·1389					
11. 41	30. 40	10. 21	·1390					
12. 23	30. 20	10. 28	·1397					
12. 39	30. 0	10. 41	·1394					
12. 55	30. 0	11. 49	·1392					
13. 9	28. 10	11. 55	·1397					
13. 13	28. 45	12. 13	·1395					
13. 24	28. 45	12. 30	·1398					
13. 41	29. 20	12. 41	·1396					
14. 5	28. 15	12. 49	·1402					
14. 22	27. 45	12. 59	·1391					
14. 36	28. 10	13. 17	·1395					
15. 7	30. 20	13. 34	·1394					
15. 12	30. 5	13. 48	·1396					
15. 24	29. 30	14. 34	·1392					
15. 33	30. 40	15. 10	·1398					
16. 10	30. 10	15. 18	·1396					
16. 23	28. 55	15. 38	·1402					
16. 38	27. 5	15. 48	·1400					
16. 55	26. 5	16. 18	·1406					
17. 9	25. 30	16. 37	·1409					
17. 22	26. 35	17. 18	·1406					
17. 28	26. 35	17. 39	·1407					
17. 42	27. 10	17. 58	·1403					
18. 15	29. 30	18. 16	·1405					
18. 25	29. 0	18. 27	·1402					
18. 35	29. 50	18. 48	·1399					
18. 41	30. 35	18. 53	·1394					
18. 53	30. 30	19. 5	·1393					
19. 9	31. 20	19. 24	·1384					
19. 12	31. 10	19. 41	·1393					
19. 26	32. 40	19. 49	·1387					
19. 37	32. 45	20. 15	·1388					
19. 41	33. 25	20. 23	·1385					
19. 50	32. 20	20. 38	·1387					
19. 58	32. 50	21. 11	·1377					
20. 14	34. 30	21. 30	·1380					
20. 26	34. 0	21. 49	·1374					
20. 31	35. 10	22. 4	·1372					
20. 43	34. 25	22. 41	·1375					
20. 56	34. 25	22. 58	·1361					
21. 0	33. 50	23. 24	·1372					
21. 13	33. 50	23. 45	·1361					
21. 39	35. 30	23. 59	·1372					
21. 41	35. 10							
22. 28	37. 5							
22. 44	37. 30							
23. 0	38. 25							
23. 23	41. 10							
23. 37	44. 45							
23. 59	41. 40							
Sept. 20		Sept. 20		Sept. 20		Sept. 20		
0. 0	20. 41. 40	0. 0	·1372	0. 0	·02691	0. 0	65· 1	67· 9
0. 8	40. 0	0. 33	·1384	2. 33	·02775	1. 0	65· 8	67· 5
0. 56	41. 10	0. 41	·1386	3. 4	·02778	2. 0	65· 6	68· 0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 20		Sept. 20		Sept. 20		Sept. 20		
h m	° ′ ″	h m		h m		h m	°	°
1. 6	20. 40. 55	0. 56	·1384	4. 16	·02851	3. 0	65 ·6	68 ·0
1. 38	42. 30	1. 11	·1380	5. 1	·02848	Max.	67 ·0	68 ·8
1. 42	41. 50	1. 38	·1383	5. 13	·02867	9. 0	63 ·8	65 ·7
1. 50	42. 40	1. 42	·1382	6. 2	·02848	Min.	61 ·2	62 ·6
1. 58	42. 0	1. 49	·1387	6. 12	·02856	21. 0	64 ·6	66 ·0
2. 11	41. 50	2. 4	·1380	6. 24	·02831	22. 0	61 ·3	65 ·0
2. 23	40. 35	2. 14	·1382	6. 38	·02806	23. 0	61 ·6	64 ·3
2. 31	40. 25	2. 30	·1378	6. 57	·02815			
2. 49	42. 30	2. 46	·1385	7. 4	·02805			
2. 53	42. 5	2. 56	·1382	7. 40	·02822			
2. 56	42. 5	3. 12	·1381	8. 38	·02822			
3. 7	41. 30	3. 37	·1374	8. 54	·02823			
3. 12	42. 25	3. 46	·1380	9. 40	·02776			
3. 23	42. 15	3. 54	·1372	11. 15	·02716			
3. 27	42. 25	4. 5	·1368	13. 46	·02674			
3. 37	39. 15	4. 24	·1371		***			
3. 41	38. 50	4. 30	·1364	16. 47	·02683			
3. 54	39. 20	4. 41	·1369	21. 3	·02697			
3. 58	37. 0	4. 56	·1368	22. 13	·02678			
4. 9	34. 55	5. 4	·1364	23. 2	·02659			
4. 16	36. 0	5. 11	·1356	23. 59	·02662			
4. 27	34. 55	5. 26	·1379					
4. 30	33. 35	5. 58	·1374					
5. 5	33. 35	6. 14	·1373					
5. 11	28. 50	6. 26	·1396					
5. 23	28. 30	6. 32	·1395					
5. 42	32. 30	6. 40	·1404					
5. 53	33. 5	6. 48	·1373					
6. 10	31. 50	6. 59	·1384					
6. 23	24. 55	7. 15	·1365					
6. 28	31. 10	7. 45	·1380					
6. 33	30. 50	8. 14	·1374					
6. 39	32. 0	8. 35	·1379					
6. 54	24. 0	8. 45	·1376					
7. 9	30. 0	9. 0	·1382					
7. 23	26. 50	9. 34	·1377					
7. 34	28. 10	10. 11	·1389					
7. 40	28. 5	10. 57	·1389					
7. 55	30. 15	11. 13	·1393					
7. 58	29. 45	11. 30	·1390					
8. 13	29. 25	11. 54	·1396					
8. 36	29. 30	12. 15	·1393					
8. 43	28. 35	14. 4	·1389					
9. 10	29. 30	14. 25	·1396					
9. 26	26. 35	14. 42	·1391					
9. 54	28. 0	14. 47	·1395					
10. 0	27. 20	15. 11	·1395					
10. 13	28. 35	15. 19	·1399					
10. 24	28. 0	15. 39	·1395					
10. 30	28. 10	15. 56	·1397					
10. 43	29. 50	16. 34	·1396					
11. 2	29. 50	16. 53	·1384					
11. 25	28. 45	17. 16	·1386					
11. 37	29. 30	17. 37	·1384					
12. 11	26. 15	18. 10	·1389					
12. 20	26. 35	18. 41	·1384					
13. 8	24. 45	19. 22	·1388					
13. 28	24. 45	19. 42	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 20		Sept. 20						
h m	° ′ ″	h m		h m		h m	°	°
13. 39	20. 24. 20	19. 56	·1378					
13. 54	25. 30	20. 14	·1383					
14. 23	27. 10	20. 43	·1372					
14. 42	28. 25	21. 27	·1367					
14. 54	27. 40	22. 24	·1364					
15. 8	27. 40	23. 4	·1369					
15. 26	26. 20		***					
15. 39	26. 20	23. 44	·1370					
15. 58	29. 10	23. 59	·1375					
16. 30	29. 50							
16. 42	31. 30							
16. 52	31. 30							
17. 30	35. 30							
17. 41	35. 0							
18. 7	35. 30							
18. 11	36. 20							
18. 30	36. 5							
18. 52	37. 40							
19. 9	36. 45							
19. 26	34. 30							
19. 30	34. 30							
19. 41	33. 10							
19. 54	33. 40							
19. 57	32. 40							
20. 6	33. 5							
20. 11	32. 45							
20. 24	34. 0							
20. 41	34. 10							
20. 57	33. 10							
21. 28	34. 35							
21. 43	34. 40							
21. 55	37. 0							
21. 57	37. 0							
22. 18	40. 30							
22. 26	40. 45							
22. 43	39. 50							
23. 10	41. 30							
23. 54	38. 45							
23. 59	39. 30							
Sept. 21		Sept. 21		Sept. 21		Sept. 21		
0. 0	20. 39. 30	0. 0	·1375	0. 0	·02662	0. 0	63 ·7	65 ·8
0. 26	40. 45	0. 13	·1381	2. 4	·02704	1. 10	64 ·6	66 ·4
0. 45	40. 20	0. 42	·1375	3. 46	·02715	Max.	65 ·1	66 ·9
1. 11	44. 5	0. 56	·1363	4. 12	·02702	3. 0	63 ·6	66 ·1
1. 26	41. 15	1. 10	·1366	5. 8	·02721	9. 0	62 ·3	64 ·0
1. 41	40. 45	1. 13	·1362	7. 23	·02685	Min.	59 ·8	61 ·6
1. 44	39. 40	1. 30	·1379	8. 28	·02622	21. 0	61 ·9	64 ·0
2. 10	37. 25	2. 11	·1391	8. 41	·02609			
2. 15	37. 25	2. 49	·1393	9. 7	·02621			
2. 38	36. 50	2. 58	·1397	10. 56	·02613			
2. 54	36. 55	3. 15	·1390	15. 31	·02560			
3. 0	37. 50	3. 38	·1399	17. 33	·02532			
3. 14	36. 30	3. 46	·1390	18. 41	·02541			
3. 40	37. 10	3. 57	·1395	22. 43	·02545			
3. 51	36. 20	4. 15	·1379		(†)			
3. 57	36. 25	4. 24	·1376	23. 45	·02416			
4. 10	35. 20	4. 44	·1390	23. 59	·02418			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 21		Sept. 21						
h m	° ′ ″	h m		h m		h m	°	°
4. 38	20. 34. 35	4. 55	·1384					
4. 58	33. 0	5. 14	·1391					
5. 14	33. 0	5. 38	·1380					
5. 26	31. 50		***					
5. 43	33. 30	5. 52	·1374					
5. 56	32. 35	6. 10	·1380					
6. 13	32. 35	6. 17	·1377					
6. 25	31. 40	7. 13	·1394					
6. 39	32. 30	7. 23	·1392					
6. 42	32. 10	7. 42	·1403					
7. 9	32. 30	7. 52	·1396					
7. 23	31. 30	8. 14	·1423					
7. 32	28. 50	8. 26	·1418					
7. 43	29. 30	8. 35	·1422					
8. 10	20. 0	8. 49	·1377					
8. 28	27. 55	9. 11	·1413					
8. 37	28. 35	9. 16	·1405					
8. 43	31. 50	9. 25	·1405					
8. 53	24. 15	9. 48	·1393					
9. 0	20. 30	10. 10	·1397					
9. 12	25. 30		***					
9. 17	26. 10	10. 42	·1390					
9. 34	29. 40		***					
9. 43	28. 50	11. 57	·1394					
9. 55	28. 50	12. 26	·1393					
10. 11	30. 5		***					
10. 28	28. 50	13. 14	·1397					
10. 43	29. 25		***					
10. 56	29. 25	16. 26	·1395					
11. 36	31. 15	17. 3	·1400					
12. 42	30. 30	17. 42	·1387					
13. 8	31. 15	18. 46	·1396					
13. 37	30. 30	19. 12	·1394					
14. 9	30. 0	20. 10	·1390					
14. 14	30. 50	21. 25	·1377					
14. 25	30. 30	22. 45	·1373					
14. 37	31. 15	22. 56	·1367					
14. 50	31. 15	23. 38	·1372					
14. 56	30. 50	23. 59	·1376					
15. 26	31. 20							
15. 38	30. 55							
15. 56	30. 55							
16. 9	30. 20							
16. 41	31. 30							
17. 0	30. 20							
17. 13	30. 10							
17. 39	31. 30							
17. 51	31. 30							
18. 0	32. 15							
18. 25	30. 55							
18. 29	30. 0							
18. 40	29. 45							
19. 1	30. 10							
19. 12	29. 0							
19. 27	29. 30							
19. 52	29. 15							
20. 51	29. 30							
21. 30	30. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 21								
h m	° ′ ″	h m		h m		h m	°	°
22. 8	20. 31. 30							
23. 42	39. 10							
23. 54	38. 50							
23. 59	39. 30							
Sept. 22		Sept. 22		Sept. 22		Sept. 22		
0. 0	20. 39. 30	0. 0	·1376	0. 0	·02418	1. 0	64·2	66·2
0. 27	40. 5	0. 20	·1374	4. 34	·02521	3. 0	64·5	66·0
0. 38	40. 30	2. 24	·1381	4. 54	·02514	Max.	64·6	66·8
1. 58	39. 25	2. 44	·1386	5. 19	·02531	9. 0	61·6	63·8
2. 9	39. 25	4. 12	·1382	5. 53	·02526	Min.	57·6	60·3
2. 14	38. 40	4. 35	·1379	8. 4	·02533	21. 0	60·3	62·5
2. 41	38. 50	4. 52:	·1388	8. 13	·02532			
3. 26	37. 0	5. 11	·1377	8. 26	·02544			
3. 42	36. 50	5. 27	·1398	11. 57	·02422			
4. 6	35. 30	5. 48	·1394	12. 10	·02398			
4. 22	35. 30	6. 6	·1385	12. 53	·02372			
4. 38	33. 50	7. 29	·1391	13. 29	·02368			
4. 50	34. 0	8. 14	·1385	17. 12	·02302			
4. 59	32. 0	8. 40	·1406	20. 51	·02269			
5. 11	27. 20	8. 55	·1392	23. 59	·02296			
5. 53	33. 55	9. 26	·1381					
5. 59	33. 30	9. 44	·1387					
6. 11	34. 0	10. 25	·1391					
6. 59	34. 0	11. 6	·1392					
7. 10	33. 40	11. 20	·1394					
7. 14	33. 40	11. 29	·1391					
7. 25	33. 10	11. 39	·1396					
7. 37	33. 35	11. 44	·1394					
7. 57	32. 40	12. 11	·1400					
8. 23	22. 50	12. 27	·1413					
8. 57	28. 40	13. 3	·1392					
9. 8	28. 40	13. 14	·1389					
9. 23	30. 5	13. 43	·1391					
9. 30	30. 5	14. 9	·1389					
10. 9	32. 40	14. 25	·1390					
10. 29	33. 0	14. 49	·1394					
10. 56	32. 0	15. 5	·1392					
11. 11	32. 0	16. 44	·1396					
11. 29	30. 0	18. 36	·1394					
11. 38	32. 0	19. 0	·1391					
11. 58	36. 10	19. 24	·1385					
12. 23	28. 0	20. 14	·1387					
13. 12	26. 50	21. 24	·1380					
13. 41	28. 15	22. 49	·1374					
13. 56	28. 15	22. 57	·1377					
14. 8	28. 55	23. 38	·1376					
14. 10	28. 40	23. 59	·1380					
14. 41	30. 15							
15. 0	29. 35							
15. 14	30. 30							
15. 26	30. 0							
15. 41	30. 0							
15. 56	31. 15							
16. 8	30. 45							
16. 14	31. 10							
16. 36	31. 20							
16. 42	31. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 22								
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 31. 35							
17. 50	31. 35							
18. 2	31. 0							
18. 25	31. 35							
18. 38	31. 15							
18. 46	32. 0							
18. 54	31. 20							
18. 58	32. 0							
19. 27	31. 30							
19. 53	31. 50							
20. 41	33. 0							
21. 7	32. 35							
22. 44	36. 15							
23. 5	38. 0							
23. 23	38. 25							
23. 31	38. 25							
23. 59	39. 30							
Sept. 23		Sept. 23		Sept. 23		Sept. 23		
0. 0	20. 39. 30	0. 0	·1380	0. 0	·02296	1. 0	62·2	64·0
0. 28	40. 0	0. 14	·1383	4. 53	·02392	3. 0	62·5	64·0
0. 54	41. 0	0. 36	·1388	8. 48	·02397	Max.	62·9	65·2
1. 41	41. 30	1. 10	·1390	10. 12	·02348	9. 0	60·6	62·8
2. 11	40. 30	1. 50	·1394	12. 57	·02329	Min.	60·3	62·0
2. 24	40. 50	2. 12	·1391	18. 0	·02334	22. 0	62·6	65·0
2. 40	39. 30	2. 24	·1396	20. 26	·02362			
3. 12	38. 50	2. 41	·1392	23. 59	·02363			
4. 56	35. 10	3. 6	·1395					
5. 10	34. 40	3. 41	·1392					
5. 30	34. 30	3. 55	·1394					
5. 56	34. 50	4. 18	·1392					
6. 12	33. 45	5. 24	·1393					
6. 41	32. 50	6. 14	·1392					
7. 9	32. 50	6. 39	·1390					
7. 25	33. 20	7. 33	·1392					
7. 57	33. 0	8. 10	·1390					
8. 11	32. 0	8. 26	·1393					
8. 24	32. 30	8. 45	·1392					
8. 41	31. 30	9. 6	·1404					
8. 58	26. 10	9. 18	·1404					
9. 12	25. 50	9. 32	·1408					
9. 38	28. 0	10. 14	·1399					
10. 10	28. 55	11. 11	·1391					
10. 38	28. 25	12. 11	·1390					
11. 12	31. 0	12. 28	·1395					
11. 26	31. 0	12. 49	·1396					
12. 4	32. 50	13. 41	·1393					
12. 43	32. 0	14. 0	·1396					
12. 53	32. 15	14. 15	·1394					
13. 37	31. 55	14. 56	·1396					
13. 57	33. 10	15. 30	·1394					
14. 12	32. 0	15. 42	·1396					
	***	15. 56	·1394					
14. 38	32. 0	17. 21	·1395					
14. 40	31. 30	17. 28	·1398					
14. 55	32. 35	18. 0	·1390					
15. 20	32. 0	18. 37	·1393					
15. 41	33. 0	18. 54	·1390					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 23		Sept. 23						
h m	° ′ ″	h m		h m		h m	°	°
15. 57	20. 32. 5	19. 7	·1391					
17. 8	33. 0	20. 22	·1385					
17. 20	32. 45	20. 34	·1386					
18. 5	33. 40	22. 5	·1372					
18. 31	32. 20	22. 49	·1371					
18. 41	32. 30	23. 39	·1375					
18. 56	31. 45	23. 59	·1380					
19. 28	30. 45							
20. 12	30. 20							
20. 26	31. 10							
21. 8	31. 50							
21. 56	33. 35							
22. 41	36. 10							
22. 54	36. 10							
23. 59	40. 25							
Sept. 24		Sept. 24		Sept. 24		Sept. 24		
0. 0	20. 40. 25	0. 0	·1380	0. 0	·02363	1. 0	63·8	66·0
0. 29	41. 40	1. 19	·1386	4. 34	·02468	Max.	64·5	66·9
0. 53	42. 10	1. 45	·1389	8. 9	·02487	8. 0	63·1	65·8
1. 10	41. 55	1. 57	·1387	12. 30	·02352	Min.	56·1	59·1
1. 30	42. 10	3. 18	·1392	13. 0	·02326	21. 0	60·6	64·6
1. 55	41. 15	4. 34	·1393	15. 51	·02240			
2. 59	38. 20	4. 38	·1397	18. 12	·02218			
3. 41	37. 10	4. 45	·1392	20. 13	·02267			
4. 24	36. 0	5. 41	·1394	22. 11	·02261			
4. 28	36. 30	5. 59	·1392	23. 59	·02297			
5. 53	34. 30	7. 48	·1396					
6. 12	35. 5	8. 44	·1391					
6. 29	35. 15	9. 17	·1397					
7. 4	34. 50	9. 58	·1391					
7. 10	34. 10	10. 14	·1394					
8. 11	34. 10	11. 5	·1390					
8. 23	33. 45	11. 19	·1399					
8. 50	33. 30	11. 52	·1392					
9. 9	32. 30	12. 22	·1398					
9. 23	33. 0	12. 40	·1398					
9. 56	31. 10	13. 10	·1402					
10. 10	31. 30	13. 43	·1397					
10. 32	31. 10	14. 56	·1401					
10. 43	31. 30	16. 18	·1402					
10. 57	31. 0	17. 14	·1408					
11. 10	28. 25	18. 1	·1408					
11. 28	28. 20	18. 53	·1402					
11. 56	30. 0	19. 37	·1396					
12. 4	30. 20	20. 4	·1386					
	(†)	20. 41	·1380					
12. 42	32. 35	21. 12	·1379					
12. 53	31. 30	21. 27	·1372					
13. 5	29. 30	22. 14	·1368					
13. 22	28. 20	22. 41	·1372					
13. 38	28. 5	22. 54	·1370					
13. 42	29. 0	23. 14	·1375					
14. 9	30. 25	23. 35	·1377					
14. 59	31. 30	23. 59	·1379					
15. 26	31. 30							
15. 53	32. 15							
15. 58	32. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 24								
h m	° ′ ″	h m		h m		h m	°	°
16. 24	20. 32. 20							
16. 30	33. 15							
16. 57	31. 40							
17. 42	31. 25							
18. 14	32. 20							
18. 38	32. 10							
18. 54	32. 30							
19. 8	31. 50							
19. 24	32. 15							
19. 43	31. 20							
20. 12	31. 50							
20. 15	32. 45							
20. 23	32. 10							
20. 45	33. 30							
21. 4	34. 30							
21. 25	34. 30							
21. 41	34. 55							
21. 53	35. 45							
22. 23	36. 0							
22. 53	38. 10							
22. 57	37. 50							
23. 59	40. 50							
Sept. 25		Sept. 25		Sept. 25		Sept. 25		
0. 0	20. 40. 50	0. 0	·1379	0. 0	·02297	1. 0	62 ·6	65 ·0
0. 37	43. 10	0. 28	·1387	3. 34	·02381	3. 0	63 ·1	65 ·7
1. 11	42. 35	1. 3	·1379	4. 0	·02404	Max.	64 ·5	68 ·2
1. 29	42. 45	1. 34	·1381	7. 56	·02468	9. 0	64 ·1	65 ·5
1. 41	42. 25	1. 42	·1377	9. 4	·02472	Min.	59 ·8	63 ·3
2. 23	43. 0	2. 19	·1384	12. 21	·02408	21. 0	62 ·2	64 ·4
2. 41	41. 50	2. 41	·1379	12. 34	·02409			
2. 54	41. 55	3. 11	·1385	14. 39	·02375			
3. 10	42. 20	3. 40	·1372	18. 16	·02355			
3. 41	41. 45	3. 52	·1375	19. 54	·02361			
3. 50	42. 20	4. 44	·1374	21. 9	·02361			
4. 8	41. 30	6. 14	·1383	23. 59	·02394			
4. 42	41. 10	6. 33	·1380					
4. 55	39. 40	7. 7	·1385					
5. 22	38. 0	7. 28	·1384					
6. 9	36. 0	7. 41	·1387					
6. 22	35. 0	8. 11	·1385					
6. 27	34. 45	8. 34	·1387					
6. 44	33. 30	8. 54	·1384					
7. 12	34. 5	11. 25	·1387					
8. 30	34. 5	11. 52	·1396					
10. 8	33. 10	12. 36	·1387					
10. 56	32. 45	13. 10	·1386					
11. 12	32. 0	13. 16	·1387					
11. 23	32. 35	13. 57	·1386					
11. 42	32. 35	14. 22	·1388					
12. 28	30. 40	14. 49	·1389					
13. 13	32. 35	14. 55	·1388					
13. 58	32. 0	16. 34	·1392					
14. 16	32. 40	16. 46	·1397					
14. 43	32. 40	16. 53	·1392					
14. 56	32. 20	17. 15	·1394					
15. 44	32. 35	18. 25	·1394					
16. 40	32. 30	18. 38	·1392					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 25		Sept. 25						
h m	° ′ ″	h m		h m		h m	°	°
16. 44	20. 33. 20	18. 43	·1394					
16. 55	32. 5	22. 25	·1374					
18. 26	31. 45	23. 37	·1375					
18. 38	31. 10	23. 59	·1375					
19. 24	30. 30							
19. 27	30. 45							
19. 45	30. 10							
19. 58	30. 35							
20. 9	30. 0							
20. 13	30. 35							
20. 24	30. 20							
20. 54	30. 20							
22. 28	32. 50							
23. 26	35. 30							
23. 38	35. 20							
23. 56	36. 40							
23. 59	36. 30							
Sept. 26		Sept. 26		Sept. 26		Sept. 26		
0. 0	20. 36. 30	0. 0	·1375	0. 0	·02394	1. 0	63 ·9	65 ·8
0. 10	36. 30	0. 36	·1381	2. 50	·02410	3. 0	64 ·0	66 ·5
0. 22	37. 25	1. 13	·1385	4. 55	·02462	Max.	64 ·9	67 ·5
0. 27	37. 40	1. 48	·1387	5. 38	·02465	9. 0	64 ·3	66 ·5
0. 56	38. 20	2. 23	·1385	8. 59	·02534	Min.	59 ·4	63 ·3
1. 9	38. 35	2. 50	·1389	9. 18	·02530	21. 0	62 ·2	64 ·2
1. 26	38. 25	3. 20	·1388	12. 34	·02434			
1. 41	38. 40	3. 25	·1393	17. 3	·02365			
2. 4	38. 20	3. 44	·1384	18. 32	·02354			
2. 26	38. 20	4. 6	·1391	23. 9	·02368			
2. 37	39. 0	4. 24	·1384	23. 59	·02396			
2. 41	38. 30	4. 40	·1386					
2. 50	38. 50	4. 54	·1385					
2. 56	38. 30	5. 12	·1388					
3. 2	39. 15	5. 41	·1382					
3. 15	38. 50	6. 11	·1391					
3. 26	39. 30	6. 16	·1388					
3. 36	38. 40	6. 29	·1388					
4. 4	38. 50	6. 40	·1392					
4. 46	38. 0	6. 47	·1386					
5. 30	37. 25	6. 56	·1391					
5. 44	36. 45	7. 11	·1389					
6. 3	36. 45	7. 39	·1388					
6. 11	37. 5	7. 50	·1382					
6. 37	36. 0	8. 6	·1382					
6. 41	36. 25	8. 41	·1367					
6. 58	36. 25	9. 22	·1378					
7. 23	34. 30	9. 40	·1373					
7. 59	33. 10	10. 13	·1379					
8. 11	31. 0	10. 23	·1375					
8. 16	31. 0	11. 17	·1387					
8. 38	28. 50	11. 34	·1385					
9. 8	30. 0	12. 14	·1386					
9. 12	28. 55	14. 25	·1387					
9. 23	29. 45	14. 41	·1388					
9. 37	29. 25	14. 59	·1390					
9. 56	27. 20	17. 14	·1392					
10. 11	27. 55	17. 40	·1386					
10. 18	27. 35	18. 18	·1390					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.26		Sept.26						
h m	° ′ ″	h m		h m		h m	°	°
10. 27	20. 29. 20	18. 54	·1385					
10. 41	30. 20	19. 24	·1383					
11. 17	32. 35	20. 3	·1377					
11. 43	32. 35	21. 37	·1368					
12. 8	33. 0	22. 23	·1369					
13. 11	33. 10	22. 56	·1376					
14. 38	33. 10	23. 12	·1373					
14. 43	32. 30	23. 42	·1374					
15. 58	32. 50	23. 59	·1377					
16. 10	33. 15							
16. 39	32. 45							
17. 12	33. 15							
17. 26	32. 50							
17. 55	34. 25							
18. 8	34. 25							
18. 33	33. 0							
18. 55	33. 0							
19. 43	32. 30							
21. 23	33. 40							
22. 18	36. 25							
22. 58	40. 0							
23. 8	39. 45							
23. 52	41. 20							
23. 59	42. 10							
Sept.27		Sept.27		Sept.27		Sept.27		
0. 0	20. 42. 10	0. 0	·1377	0. 0	·02396	0. 0	62 ·6	65 ·0
1. 8	42. 25	0. 39	·1379	0. 43	·02402	1. 0	63 ·6	66 ·5
1. 11	40. 50	1. 10	·1382		·02543	2. 0	63 ·6	66 ·8
1. 58	39. 30	1. 12	·1387	5. 45	·02596	3. 0	63 ·9	67 ·2
4. 13	34. 35	1. 51	·1391	8. 46	·02647	Max.	64 ·6	67 ·2
5. 17	33. 35	4. 14	·1388	10. 38	·02601	9. 0	61 ·8	65 ·8
6. 41	33. 15	4. 24	·1389	12. 46	·02542	Min.	58 ·1	61 ·6
6. 52	32. 50	4. 42	·1387	13. 43	·02527	21. 0	60 ·6	62 ·2
8. 11	32. 25	5. 13	·1390	15. 29	·02470	22. 0	61 ·6	63 ·6
8. 56	31. 30	5. 30	·1388	18. 16	·02436	23. 0	61 ·9	63 ·9
9. 9	31. 40	5. 51	·1391	19. 7	·02435			
9. 13	32. 35	5. 56	·1390		·02420			
9. 24	31. 30	6. 48	·1392	22. 13	·02408			
10. 14	29. 0	8. 11	·1391	23. 59	·02433			
10. 41	26. 25	9. 0	·1386					
11. 27	27. 55	9. 15	·1389					
11. 49	27. 55	9. 50	·1386					
12. 15	25. 45	9. 58	·1387					
12. 42	26. 25	10. 15	·1393					
13. 40	29. 30	10. 44	·1388					
13. 43	29. 5	11. 21	·1390					
13. 56	29. 35	11. 46	·1388					
14. 42	29. 30	12. 18	·1394					
15. 13	29. 30	12. 43	·1387					
15. 55	30. 30	12. 53	·1388					
16. 9	30. 15	13. 12	·1386					
17. 8	30. 25		***					
18. 11	29. 20	13. 58	·1391					
18. 52	29. 20	14. 12	·1390					
19. 38	28. 10	14. 52	·1394					
19. 44	28. 45	16. 4	·1395					
20. 34	28. 35	17. 27	·1398					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.27		Sept.27						
h m	° ′ ″	h m		h m		h m	°	°
21. 43	20. 30. 30	19. 23	·1396					
22. 26	32. 40	19. 43	·1397					
22. 42	33. 25	20. 25	·1392					
22. 58	35. 0	20. 44	·1393					
23. 12	35. 25	21. 45	·1385					
23. 37	36. 30	21. 52	·1384					
23. 56	38. 50	22. 24	·1386					
23. 59	38. 35	22. 30	·1383					
		22. 57	·1386					
		23. 16	·1382					
		23. 35	·1383					
		23. 54	·1390					
		23. 59	·1384					
Sept.28		Sept.28		Sept.28		Sept.28		
0. 0	20. 38. 35	0. 0	·1384	0. 0	·02433	0. 0	62 ·5	64 ·1
0. 14	37. 50	0. 13	·1380	1. 49	·02454	1. 0	63 ·0	64 ·7
0. 28	39. 30	0. 23	·1386	2. 7	·02474	2. 0	63 ·5	65 ·0
0. 39	38. 35	0. 29	·1384	2. 12	·02471	3. 0	64 ·1	65 ·1
1. 8	40. 10	0. 50	·1389	2. 53	·02493	Max.	64 ·3	66 ·4
1. 55	39. 50	0. 56	·1388	3. 10	·02472	9. 0	63 ·6	64 ·9
1. 58	42. 30	1. 13	·1385	3. 25	·02498	Min.	60 ·2	63 ·4
2. 6	42. 20	1. 52	·1387	3. 34	·02500	21. 0	62 ·5	65 ·1
2. 9	42. 40	2. 1	·1402	3. 43	·02513			
2. 14	41. 40	2. 9	·1405	4. 18	·02511			
2. 38	43. 30	2. 17	·1397	4. 19	·02532			
2. 42	43. 20	2. 40	·1401	4. 44	·02516			
2. 50	44. 0	2. 48	·1396	4. 54	·02535			
3. 0	43. 0	2. 55	·1399	5. 25	·02542			
3. 9	41. 30	3. 6	·1394	5. 42	·02578			
3. 12	42. 10	3. 14	·1377	5. 51	·02568			
3. 23	42. 10	3. 22	·1378	6. 7	·02591			
3. 30	40. 15	3. 27	·1392	6. 26	·02587			
3. 42	40. 45	3. 40	·1385	6. 42	·02592			
3. 53	39. 50	3. 49	·1399	6. 45	·02590			
3. 57	41. 40	3. 56	·1398	6. 58	·02604			
4. 6	41. 50	4. 5	·1399	7. 49	·02591			
4. 15	44. 5	4. 11	·1393	9. 26	·02591			
4. 23	45. 25	4. 13	·1396	10. 13	·02583			
4. 28	46. 5	4. 20	·1392	10. 41	·02561			
4. 39	44. 0	4. 38	·1416	10. 57	·02539			
4. 43	44. 30	4. 49	·1381	11. 9	·02549			
5. 6	44. 20	4. 56	·1389	11. 31	·02488			
5. 13	42. 15	5. 34	·1378	12. 9	·02466			
5. 24	42. 50	5. 45	·1395	12. 33	·02489			
5. 39	38. 30	6. 4	·1384	12. 47	·02472			
5. 43	37. 20	6. 14	·1392	13. 49	·02463			
5. 54	37. 35	6. 24	·1390	14. 9	·02476			
6. 8	36. 0	6. 32	·1384	14. 24	·02451			
6. 14	33. 0	6. 40	·1387	14. 33	·02456			
6. 23	33. 0	6. 45	·1366	14. 40	·02439			
6. 27	30. 55	6. 53	·1386	15. 11	·02446			
6. 38	30. 0	7. 0	·1383	16. 51	·02464			
6. 42	30. 15	7. 24	·1400		***			
6. 44	32. 40	7. 36	·1399	18. 49	·02466			
6. 50	30. 15	7. 44	·1406		***			
6. 58	32. 30	7. 52	·1397	20. 23	·02475			
7. 8	33. 50	8. 11	·1396	20. 53	·02463			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 28		Sept. 28		Sept. 28		h m	°	°
h m	° ′ ″	h m		h m				
7. 12	20. 33. 55	8. 19	·1399	21. 9	·02472			
7. 38	32. 0	8. 45	·1400	23. 59	·02491			
7. 46	32. 0	9. 22	·1398					
8. 11	31. 45	9. 30	·1401					
8. 33	30. 45	9. 43	·1397					
8. 44	31. 30	10. 10	·1396					
9. 10	30. 55	10. 18	·1401					
9. 14	31. 30	10. 36	·1397					
9. 25	31. 0	10. 45	·1403					
9. 39	31. 55	11. 4	·1394					
9. 52	30. 10	11. 20	·1427					
10. 11	30. 0	11. 42	·1390					
10. 21	30. 20	11. 50	·1392					
10. 25	29. 10	12. 14	·1372					
10. 38	25. 40	12. 41	·1380					
10. 56	29. 30	12. 59	·1394					
11. 9	25. 45	13. 12	·1399					
11. 23	32. 30	13. 26	·1398					
11. 28	34. 0	13. 35	·1394					
11. 43	25. 40	13. 41	·1396					
11. 55	24. 30	14. 6	·1374					
12. 3	22. 30	14. 22	·1398					
12. 14	18. 35	14. 34	·1395					
12. 23	18. 0	14. 40	·1403					
12. 45	24. 0	14. 54	·1395					
12. 56	25. 35	15. 4	·1397					
13. 9	24. 50	15. 12	·1396					
13. 14	21. 30	15. 19	·1399					
13. 35	18. 20	15. 29	·1395					
13. 53	18. 20	15. 40	·1397					
14. 4	26. 20	15. 43	·1395					
14. 13	27. 30	15. 58	·1398					
14. 25	27. 0	16. 26	·1390					
14. 28	28. 40	16. 50	·1391					
14. 39	27. 55	16. 56	·1394					
14. 45	30. 0	17. 6	·1389					
14. 54	31. 30	17. 13	·1393					
15. 0	30. 20	17. 39	·1395					
15. 7	30. 20	17. 45	·1394					
15. 14	28. 20	17. 56	·1399					
15. 27	26. 30	18. 14	·1394					
15. 38	25. 30	18. 22	·1397					
15. 40	26. 20	18. 32	·1388					
15. 43	25. 5	18. 36	·1392					
15. 55	26. 50	18. 57	·1376					
16. 8	27. 55	19. 12	·1374					
16. 26	27. 30	19. 24	·1366					
16. 38	28. 0	19. 42	·1369					
16. 43	28. 50	20. 10	·1371					
16. 51	29. 30	20. 21	·1366					
16. 56	27. 20	20. 43	·1371					
17. 0	29. 5	21. 11	·1365					
17. 9	28. 20	21. 39	·1367					
17. 12	29. 5	22. 4	·1380					
17. 22	28. 0	22. 22	·1379					
17. 28	29. 10	22. 42	·1382					
17. 29	28. 0	22. 55	·1389					
17. 41	29. 0	23. 0	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 28		Sept. 28						
h m	° ′ ″	h m		h m		h m	°	°
17. 43	20. 26. 50	23. 6	·1384					
17. 47	28. 10	23. 16	·1373					
17. 51	28. 50	23. 24	·1376					
18. 5	27. 10	23. 40	·1374					
18. 9	28. 40	23. 59	·1380					
18. 14	26. 10							
18. 36	32. 0							
18. 44	30. 25							
19. 3	32. 30							
19. 10	31. 20							
19. 24	34. 0							
19. 35	32. 35 ***							
19. 56	34. 0							
20. 6	35. 40							
20. 11	34. 0							
20. 14	35. 50							
20. 22	33. 10							
20. 26	36. 0							
20. 39	36. 0							
20. 54	32. 50							
20. 58	34. 0							
21. 17	31. 40							
21. 26	33. 45							
21. 43	33. 0 ***							
22. 9	34. 10 ***							
22. 28	35. 50							
22. 38	34. 15							
22. 46	36. 40							
23. 7	39. 50							
23. 13	37. 15							
23. 25	37. 50							
23. 39	37. 10							
23. 56	38. 15							
23. 59	38. 10							
Sept. 29		Sept. 29		Sept. 29		Sept. 29		
0. 0	20. 38. 10	0. 0	·1380	0. 0	·02491	1. 0	63 ·6	66 ·7
0. 10	37. 45	0. 13	·1377	4. 18	·02611	3. 0	63 ·7	66 ·8
0. 38	39. 0	0. 38	·1381	4. 29	·02604	Max.	64 ·2	67 ·2
0. 41	38. 20	0. 41	·1378	4. 46	·02610	9. 0	63 ·8	67 ·0
1. 9	38. 20	1. 11	·1382	6. 6	·02581	Min.	60 ·0	63 ·1
1. 44	37. 45	1. 37	·1379	9. 2	·02594	21. 0	61 ·8	64 ·6
2. 23	36. 50	1. 43	·1382	12. 41	·02517			
2. 37	37. 15	1. 59	·1379	13. 57	·02515			
2. 44	38. 20	2. 40	·1386	15. 31	·02456			
2. 57	38. 20	2. 46	·1392	15. 57	·02466			
3. 13	37. 10	2. 55	·1390	18. 32	·02458			
3. 23	38. 15	3. 0	·1392	19. 53	·02463			
3. 26	37. 10	3. 18	·1383	20. 52	·02472			
3. 34	37. 10	3. 24	·1385	22. 24	·02451			
3. 42	35. 30	3. 36	·1381	23. 33	·02448			
3. 46	33. 0	3. 44	·1382	23. 59	·02458			
3. 56	30. 30	3. 52	·1369					
4. 8	30. 30	4. 8	·1363					
4. 10	28. 55	4. 11	·1366					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V. F. Magnet.
Sept.29		Sept.29						
h m	° ′ ″	h m		h m		h m	°	°
4. 13	20. 27. 30	4. 14	·1358					
4. 24	28. 10	4. 26	·1364					
4. 28	26. 45	4. 32	·1360					
4. 42	28. 10	4. 53	·1386					
4. 56	31. 0	5. 10	·1390					
5. 24	33. 35	5. 28	·1392					
6. 9	33. 5	5. 35	·1391					
6. 26	33. 30	5. 44	·1393					
6. 40	33. 30	5. 50	·1392					
6. 56	32. 30	6. 6	·1395					
7. 31	33. 30	6. 20	·1394					
7. 47	32. 50	6. 30	·1397					
7. 58	33. 10	6. 38	·1395					
8. 20	32. 10	6. 46	·1398					
8. 31	32. 50	7. 7	·1392					
8. 39	32. 10		***					
8. 42	30. 50	8. 9	·1395					
8. 57	30. 50	8. 26	·1392					
9. 11	30. 25	8. 35	·1394					
9. 38	31. 30	8. 45	·1390					
9. 53	31. 5	9. 26	·1389					
9. 59	26. 30	9. 40	·1394					
10. 25	28. 50	9. 56	·1392					
10. 43	29. 40	10. 10	·1405					
11. 9	29. 15	10. 44	·1389					
11. 23	30. 50	10. 58	·1391					
11. 26	29. 20	11. 14	·1389					
11. 40	32. 30	11. 26	·1391					
11. 52	32. 30	11. 52	·1393					
11. 57	31. 10	12. 0	·1391					
12. 10	32. 25	12. 17	·1395					
12. 56	30. 0	12. 44	·1392					
13. 53	32. 15	12. 57	·1395					
13. 58	31. 20	13. 14	·1392					
14. 14	32. 50	13. 56	·1396					
14. 44	30. 30	14. 32	·1389					
15. 9	28. 30	14. 50	·1392					
15. 14	29. 25	15. 22	·1387					
15. 25	29. 30	15. 43	·1381					
15. 42	31. 30	16. 18	·1387					
16. 8	32. 5	16. 55	·1388					
16. 39	29. 30	17. 15	·1393					
16. 44	29. 30	17. 25	·1387					
16. 59	28. 10	17. 37	·1389					
17. 13	28. 10	18. 40	·1385					
17. 24	27. 30	18. 45	·1388					
17. 55	30. 0	18. 56	·1384					
18. 10	30. 0	19. 18	·1386					
18. 24	29. 25	19. 34	·1389					
18. 38	29. 25	21. 20	·1383					
18. 43	30. 30	22. 9	·1378					
18. 48	29. 5	23. 5	·1374					
18. 56	29. 50	23. 28	·1376					
19. 9	29. 0	23. 41	·1373					
19. 25	29. 35	23. 59	·1375					
19. 57	28. 40							
20. 38	29. 0							
22. 29	32. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V. F. Magnet.
Sept.29								
h m	° ′ ″	h m		h m		h m	°	°
22. 41	20. 33. 20							
23. 9	34. 30							
23. 23	35. 20							
23. 27	36. 50							
23. 41	35. 20							
23. 53	36. 10							
23. 59	36. 0							
Sept.30		Sept.30		Sept.30		Sept.30		
0. 0	20. 36. 0	0. 0	·1375	0. 0	·02458	1. 0	62 ·8	64 ·9
0. 37	37. 10	0. 34	·1381	4. 4	·02535	3. 0	63 ·3	65 ·7
0. 51	38. 15	0. 56	·1388	7. 6	·02530	Max.	63 ·5	65 ·7
0. 56	39. 10	1. 13	·1378	7. 28	·02541	9. 0	61 ·8	64 ·7
1. 3	38. 0	2. 13	·1382	8. 54	·02528	Min.	60 ·5	63 ·7
1. 41	37. 0	2. 29	·1381	10. 11	·02492	21. 0	62 ·1	65 ·0
2. 3	37. 0	2. 48	·1385	10. 57	·02478			
2. 26	35. 30	3. 40	·1384	14. 23	·02442			
2. 38	35. 40	3. 52	·1387	18. 22	·02442			
3. 38	34. 5	4. 6	·1385	19. 46	·02466			
3. 58	33. 30	4. 13	·1388	22. 17	·02457			
4. 6	33. 30	4. 50	·1386	23. 59	·02448			
4. 56	32. 15	5. 51	·1390					
5. 11	32. 15	6. 9	·1390					
5. 41	31. 30	6. 11	·1393					
6. 10	32. 0	6. 34	·1389					
6. 27	32. 0	6. 41	·1393					
6. 37	32. 50	6. 48	·1391					
6. 40	31. 45	7. 13	·1381					
6. 56	31. 45	7. 30	·1392					
7. 13	26. 40	8. 24	·1390					
7. 42	30. 30	8. 37	·1405					
8. 18	31. 25	9. 2	·1392					
8. 28	29. 0	9. 40	·1396					
8. 56	29. 30	9. 52	·1403					
9. 11	31. 0	10. 11	·1397					
9. 26	31. 30	10. 22	·1412					
9. 38	31. 20	10. 55	·1408					
9. 52	32. 5	11. 11	·1395					
10. 6	30. 45	11. 18	·1396					
10. 17	33. 5	11. 39	·1392					
10. 39	29. 35	12. 28	·1396					
10. 54	30. 50	13. 3	·1392					
11. 5	30. 10	13. 49	·1394					
11. 49	30. 45	14. 6	·1392					
11. 58	31. 10	14. 26	·1396					
12. 23	30. 45	14. 55	·1394					
12. 57	31. 5	15. 45	·1396					
13. 9	32. 10	16. 24	·1394					
13. 24	31. 50	17. 41	·1397					
13. 31	33. 30	21. 14	·1382					
13. 43	34. 5	22. 41	·1376					
13. 55	33. 40	23. 59	·1385					
14. 24	33. 5							
14. 44	31. 20							
15. 43	29. 50							
16. 19	30. 35							
16. 42	30. 10							
16. 53	30. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept. 30								
h m	° ′ ″	h m		h m		h m	°	°
17. 3	20. 30. 0							
19. 23	29. 20							
19. 38	28. 50							
20. 9	28. 45							
20. 28	29. 5							
20. 34	28. 45							
22. 23	32. 30							
23. 13	37. 10							
23. 41	37. 0							
23. 59	39. 10							
Oct. 1		Oct. 1		Oct. 1		Oct. 1		
0. 0	20. 39. 10	0. 0	·1385	0. 0	·02448	0. 0	63 ·1	65 ·5
0. 43	39. 10	0. 4	·1386	4. 16	·02529	Max.	64 ·3	67 ·3
1. 8	38. 10	0. 18	·1380	6. 23	·02536	8. 0	64 ·2	67 ·3
1. 27	38. 50	0. 46	·1382	8. 6	·02572	Min.	59 ·2	62 ·0
2. 7	37. 0	1. 12	·1379	9. 8	·02580	21. 0	61 ·8	64 ·3
2. 27	37. 0	1. 45	·1384	11. 40	·02483			
2. 39	36. 35	2. 9	·1383	12. 27	·02471			
2. 54	36. 35	3. 16	·1388	13. 24	·02442			
3. 6	36. 0	3. 50	·1387	14. 57	·02431			
3. 40	35. 30	4 10	·1389	17. 23	·02410			
3. 56	35. 30	4. 26	·1386	18. 46	·02392			
4. 22	35. 10	4. 39	·1390	22. 23	·02431			
4. 29	35. 30	4. 52	·1385	23. 59	·02433			
4. 42	35. 0	5. 24	·1390					
4. 59	35. 0	5. 42	·1392					
5. 8	34. 30	6. 12	·1387					
5. 52	35. 5	6. 25	·1395					
6. 6	34. 20	6. 52	·1391					
6. 12	32. 30	7. 16	·1399					
6. 23	32. 30	7. 27	·1394					
6. 28	32. 50	7. 53	·1377					
7. 5	30. 15	8. 24	·1389					
7. 26	33. 10	8. 54	·1382					
7. 39	30. 30	9. 12	·1389					
7. 56	24. 30	9. 24	·1386					
8. 28	25. 0	9. 51	·1387					
8. 58	29. 40	9. 57	·1385					
9. 13	29. 20	10. 20	·1395					
9. 30	28. 30	10. 41	·1390					
9. 58	29. 5	11. 0	·1387					
10. 12	29. 5	11. 19	·1391					
10. 26:	28. 0	11. 28	·1389					
10. 56	30. 20	11. 40	·1392					
11. 9	30. 20	12. 4	·1388					
11. 22	28. 35	12. 28	·1396					
12. 53	34. 10	12. 51	·1396					
13. 9	33. 0	13. 10	·1392					
13. 39	28. 0	13. 28	·1396					
13. 56	28. 0	13. 53	·1393					
14. 7	27. 15	14. 20	·1392					
14. 14	27. 15	14. 50	·1390					
15. 3	30. 50	18. 46	·1396					
15. 16	29. 45	20. 11	·1395					
15. 56	30. 30	22. 14	·1380					
16. 40	30. 30	23. 19	·1377					
16. 54	30. 5	23. 59	·1388					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 1								
h m	° ′ ″	h m		h m		h m	°	°
17. 43	20. 30. 5							
18. 26	30. 20							
19. 24	30. 0							
19. 41	29. 30							
20. 54	29. 30							
22. 11	32. 0							
22. 41	34. 10							
22. 56	37. 40							
23. 15	37. 20							
23. 43	38. 10							
23. 59	40. 0							
Oct. 2		Oct. 2		Oct. 2		Oct. 2		
0. 0	20. 40. 0	0. 0	·1388	0. 0	·02433	1. 0	63 ·4	66 ·2
0. 7	40. 35	0. 40	·1385	3. 25	·02491	3. 0	63 ·9	67 ·4
0. 42	39. 0	1. 24	·1389	7. 29	·02532	Max.	64 ·1	67 ·5
0. 53	39. 35	1. 44	·1390	8. 58	·02518	9. 0	62 ·8	64 ·1
1. 41	37. 45	2. 4	·1393	10. 47	·02463	Min.	59 ·6	61 ·1
1. 54	37. 55	2. 15	·1391	16. 14	·02426	21. 0	61 ·7	64 ·0
2. 13	37. 10	3. 19	·1393	18. 24	·02395			
2. 23	37. 10	3. 37	·1390	23. 59	·02448			
2. 57	36. 0	4. 56	·1392					
3. 20	35. 0	5. 11	·1391					
4. 54	33. 0	5. 57	·1396					
5. 56	33. 15	6. 43:	·1391					
6. 9	32. 45	7. 10	·1397					
6. 44	32. 30	7. 32	·1392					
6. 56	33. 20	7. 42	·1393					
7. 9	32. 20	8. 22	·1384					
7. 18	32. 5	8. 41	·1386					
7. 29	33. 0	8. 52	·1383					
7. 54	32. 25	9. 4	·1398					
8. 16	29. 30	9. 22	·1387					
8. 28	29. 30	9. 40	·1398					
8. 38	30. 50	9. 50	·1398					
8. 46	30. 15	10. 3	·1394					
8. 58	36. 40	10. 24	·1393					
9. 26	27. 0	11. 20	·1396					
10. 4	30. 20	12. 34	·1397					
10. 41	31. 40	12. 52	·1395					
11. 15	32. 5	13. 14	·1397					
11. 34	31. 0	13. 41	·1396					
11. 59	32. 5	14. 10	·1399					
13. 39	31. 40	14. 52	·1397					
14. 9	31. 50	15. 26	·1398					
14. 53	30. 50	15. 40	·1395					
15. 23	31. 10	15. 56	·1397					
15. 27	32. 15	16. 13	·1394					
15. 43	31. 30	16. 41	·1399					
15. 56	33. 50	16. 57	·1398					
16. 9	32. 40	17. 42	·1399					
16. 23	32. 40	18. 26	·1397					
16. 56	30. 50	19. 16	·1398					
17. 24	30. 15	19. 55	·1387					
17. 30	30. 25	21. 10	·1384					
17. 51	30. 15	21. 41	·1377					
17. 58	30. 25	22. 18	·1388					
18. 25	29. 50	22. 48	·1376					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 2		Oct. 2						
h m	° ′ ″	h m		h m		h m	°	°
18. 58	20. 29. 20	23. 42	·1380					
19. 10	29. 20	23. 59	·1384					
20. 17	28. 50							
20. 38	29. 40							
20. 44	29. 40							
21. 24	31. 30							
21. 29	31. 30							
22. 0	33. 10							
22. 54	35. 0							
23. 11	36. 40							
23. 22	36. 40							
23. 56	38. 15							
23. 59	38. 50							
Oct. 3		Oct. 3		Oct. 3		Oct. 3		
0. 0	20. 38. 50	0. 0	·1384	0. 0	·02448	1. 0	64 ·1	66 ·5
1. 11	37. 50	0. 20	·1383	4. 23	·02527	3. 0	64 ·1	67 ·1
1. 19	37. 5	1. 2	·1385	5. 40	·02520	Max.	64 ·5	67 ·2
1. 52	37. 5	1. 21	·1384	9. 14	·02555	9. 0	60 ·8	64 ·1
2. 14	36. 50	1. 54	·1389	11. 13	·02472	Min.	55 ·5	59 ·0
2. 37	36. 0	2. 12	·1390	13. 31	·02423	21. 0	59 ·5	62 ·0
2. 44	36. 0	2. 40	·1388	17. 24	·02304	22. 0	59 ·6	62 ·2
2. 58	35. 0	3. 41	·1390	18. 2	·02271	23. 0	59 ·8	62 ·5
3. 37	33. 30	4. 10	·1393	23. 59	·02311			
3. 44	33. 30	4. 41	·1386					
4. 38	33. 5	5. 20	·1390					
5. 9	32. 40	5. 49	·1393					
5. 39	33. 0	6. 25	·1392					
5. 57	32. 20	6. 41	·1393					
6. 44	32. 30	6. 54	·1390					
6. 56	32. 5	7. 40	·1393					
7. 23	32. 30	8. 58	·1392					
7. 40	32. 5	9. 14	·1390					
8. 11	32. 30	10. 21	·1395					
8. 29	32. 20	10. 53	·1396					
9. 28	32. 0	11. 13	·1393					
9. 51	31. 30	11. 39	·1396					
11. 4	30. 25	11. 44	·1395					
11. 23	30. 55	12. 0	·1398					
11. 34	30. 30	12. 41	·1394					
11. 43	30. 50	13. 52	·1396					
12. 11	30. 20	14. 6	·1398					
13. 28	30. 30	14. 13	·1396					
13. 56	30. 50	14. 27	·1398					
14. 9	30. 15	15. 21	·1401					
14. 17	30. 50	16. 4	·1399					
14. 37	30. 15	16. 11	·1393					
14. 39	30. 50	16. 22	·1396					
14. 44	30. 15	16. 31	·1394					
14. 57	30. 10	17. 15	·1405					
15. 6	29. 30	17. 49	·1404					
15. 12	30. 10	18. 6	·1396					
15. 26	29. 50	18. 15	·1393					
15. 56	29. 50	18. 37	·1396					
15. 59	31. 40	18. 42	·1393					
16. 11	31. 20		***					
16. 30	32. 40	19. 5	·1398					
17. 0	32. 40	19. 20	·1401					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 3		Oct. 3						
h m	° ′ ″	h m		h m		h m	°	°
17. 12	20. 30. 30	19. 40	·1399					
17. 24	29. 40	19. 51	·1396					
17. 41	29. 30		***					
17. 52	28. 45	20. 40	·1388					
18. 11	29. 30	21. 24	·1383					
18. 23	29. 10	21. 37	·1379					
18. 34	30. 30	21. 54	·1381					
18. 39	29. 45	22. 19	·1378					
18. 52	30. 0	22. 36	·1384					
19. 24	29. 40	22. 41	·1382					
19. 38	29. 40	23. 10	·1389					
19. 50	28. 10	23. 30	·1386					
20. 9	28. 45	23. 45	·1390					
	***	23. 59	·1388					
20. 39	28. 20							
20. 59	29. 10							
21. 12	29. 10							
21. 27	30. 50							
21. 37	29. 30							
22. 11	32. 0							
22. 26	32. 25							
22. 39	33. 30							
22. 56	33. 10							
23. 13	35. 30							
23. 23	35. 0							
23. 27	35. 20							
23. 39	34. 55							
23. 56	36. 15							
23. 59	36. 15							
Oct. 4		Oct. 4		Oct. 4		Oct. 4		
0. 0	20. 36. 15	0. 0	·1388	0. 0	·02311	0. 0	60 ·6	63 ·1
0. 11	36. 5	0. 12	·1387	4. 16	·02388	1. 0	61 ·1	63 ·8
0. 25	36. 20	0. 21	·1390	9. 41	·02446	2. 0	61 ·6	64 ·0
0. 39	36. 0	0. 27	·1389	10. 55	·02410	3. 0	63 ·0	64 ·5
1. 56	36. 0	0. 45	·1393	13. 34	·02363	Max.	63 ·0	65 ·5
2. 18	35. 0	0. 49	·1390	14. 6	·02344	9. 0	62 ·5	65 ·5
2. 56	34. 30	0. 56	·1397	16. 10	·02295	Min.	57 ·2	59 ·3
3. 14	34. 30	0. 59	·1394	18. 2	·02216	21. 0	59 ·4	61 ·3
3. 27	33. 50	1. 52	·1397	18. 18	·02221	22. 0	59 ·9	61 ·6
3. 44	34. 5	2. 22	·1396	19. 18	·02171	23. 0	60 ·2	62 ·8
4. 33	33. 0	2. 40	·1397	22. 34	·02227			
4. 52	32. 40	2. 49	·1399	23. 59	·02302			
5. 12	32. 55	3. 18	·1398					
5. 41	31. 50	3. 28	·1405					
6. 6	33. 5	3. 41	·1403					
6. 26	33. 5	4. 12	·1404					
6. 59	32. 0	4. 44	·1399					
7. 30	31. 5	5. 11	·1397					
7. 49	30. 0	5. 40	·1398					
8. 6	28. 10	6. 0	·1396					
8. 26	28. 50	6. 36	·1400					
9. 16	31. 30	7. 42	·1408					
9. 57	31. 30	7. 59	·1399					
10. 46	31. 55	8. 15	·1402					
11. 11	31. 30	8. 29	·1401					
11. 59	32. 5	8. 41	·1403					
12. 14	31. 0	8. 50	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Oct. 4		Oct. 4						
h m	° ′ ″	h m		h m		h m	°	°
13. 23	20. 31. 0	8. 57	·1406					
13. 30	31. 55	9. 23	·1404					
13. 42	31. 40	9. 30	·1409					
13. 59	28. 45	9. 55	·1407					
14. 26	29. 55	10. 40	·1406					
14. 38	28. 10	11. 14	·1402					
14. 53	27. 50	12. 19	·1408					
15. 0	25. 30	12. 37	·1404					
15. 6	26. 45	12. 43	·1406					
15. 13	26. 35	13. 4	·1405					
15. 41	27. 50	13. 29	·1406					
15. 56	30. 20	13. 42	·1411					
16. 8	30. 20	14. 12	·1409					
16. 23	30. 0	14. 22	·1408					
16. 39	27. 0	14. 50	·1414					
16. 54	28. 50	15. 11	·1409					
17. 6	30. 20	15. 24	·1411					
17. 14	33. 0	15. 43	·1406					
17. 23	33. 0	16. 8:	·1417					
17. 29	34. 50	16. 41	·1421					
17. 37	35. 0	16. 59	·1416					
17. 42	37. 0	17. 20	·1414					
17. 53	37. 0	17. 40	·1399					
18. 12	47. 0	18. 8	·1365					
18. 24	53. 50	18. 41	·1406					
18. 30	53. 30	18. 50	·1413					
18. 44	50. 50	19. 25	·1407					
18. 53	50. 50	19. 37	·1408					
18. 57	49. 40	20. 4	·1383					
19. 9	49. 40	20. 12	·1396					
19. 26	44. 10	20. 25	·1386					
19. 44	43. 0	20. 34	·1394					
19. 59	34. 5	21. 0	·1383					
20. 4	35. 50	21. 12	·1388					
20. 12	32. 30	21. 35	·1376					
20. 20	28. 20	21. 44	·1368					
20. 29	31. 30	21. 53	·1356					
20. 39	34. 0	21. 57	·1359					
20. 44	34. 0	22. 5	·1356					
20. 55	35. 10	22. 20	·1365					
21. 6	34. 40	22. 35	·1354					
21. 28	34. 10	22. 40	·1347					
21. 56	37. 0	22. 47	·1347					
21. 58	38. 50	22. 54	·1357					
22. 6	37. 15	23. 4	·1347					
22. 12	37. 5	23. 12	·1343					
22. 16	40. 10	23. 20	·1347					
22. 26	40. 10	23. 24	·1345					
22. 41	42. 40	23. 35	·1358					
22. 48	42. 20	23. 41	·1355					
22. 54	42. 40	23. 59	·1367					
22. 59	45. 30							
23. 11	43. 30							
23. 23	43. 30							
23. 26	42. 40							
23. 29	43. 10							
23. 59	49. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 49. 5	0. 0	·1367	0. 0	·02302	0. 0	60·6	62·4
0. 14	39. 10	0. 15	·1376	1. 49	·02242	1. 0	61·3	62·8
0. 27	42. 20	0. 30	·1369	2. 18	·02293	2. 0	61·1	63·0
0. 56	41. 40	0. 42	·1368	2. 25	·02281	3. 0	61·9	63·8
1. 9	43. 10	0. 52	·1370	2. 34	·02292	Max.	61·9	64·1
1. 26	40. 35	1. 9	·1384	2. 54	·02276	9. 0	60·6	62·9
1. 44	46. 50	1. 13	·1375	3. 41	·02286	Min.	57·0	60·5
1. 55	45. 20	1. 25	·1369	4. 25	·02331	21. 0	59·6	61·5
2. 3	39. 15	1. 38	·1376	4. 36	·02382			
2. 9	38. 40	1. 43	·1365	4. 40	·02366			
2. 25	40. 40	1. 56	·1356	4. 44	·02373			
2. 30	39. 15	2. 9	·1368	5. 1	·02338			
2. 42	43. 0	2. 13	·1368	5. 9	·02349			
2. 56	40. 20	2. 25	·1383	5. 31	·02314			
3. 6	40. 20	2. 30	·1372	5. 50	·02337			
3. 23	41. 40	2. 42	·1379	6. 24	·02341			
3. 37	40. 50	2. 52	·1360	6. 36	·02378			
3. 40	40. 5	3. 11	·1373	6. 45	·02347			
3. 43	40. 5	3. 37	·1379	7. 24	·02298			
3. 57	41. 45	3. 43	·1373	8. 16	·02291			
4. 23	42. 10	3. 56	·1383	8. 36	·02267			
4. 28	27. 0	4. 12	·1384	9. 1	·02282			
4. 39	20. 20	4. 15	·1379	9. 53	·02169			
4. 43	28. 0	4. 20	·1379	10. 9	·02102			
4. 56	30. 40	4. 27	·1355	10. 18	·02112			
4. 58	20. 10	4. 41	·1375	10. 24	·02062			
5. 17	33. 0	4. 45	·1395		(†)			
5. 28	35. 0	4. 56	·1382	10. 55	·02062			
5. 42	22. 45	5. 3	·1361	11. 8:	·02113			
5. 53	25. 30	5. 12	·1392	11. 19	·02096			
5. 58	25. 30	5. 19	·1398	12. 13	·02148			
6. 14	31. 10	5. 29	·1375	13. 3	·02156			
6. 18	29. 25	5. 40	·1359	13. 59	·02149			
6. 26	30. 50	5. 52	·1382	14. 27	·02135			
6. 30	15. 0	6. 0	·1376	14. 51	·02108			
6. 39	21. 0	6. 11	·1368	15. 13	·02111			
6. 43	12. 0	6. 14	·1357	15. 39	·02079			
6. 48	8. 10	6. 22	·1359	15. 55	·02090			
6. 56	14. 30	6. 29	·1346	16. 11	·02081			
7. 10	26. 30	6. 41	·1374	16. 26	·02102			
7. 14	27. 15	6. 44	·1364	17. 56	·02117			
7. 23	26. 30	6. 55	·1401	18. 31	·02071			
7. 30	27. 15	7. 11	·1412	19. 2	·02089			
7. 42	27. 30	7. 19	·1392	19. 34	·02108			
7. 49	20. 50	7. 26	·1383	19. 54	·02136			
7. 53	20. 20	7. 36	·1384	20. 25	·02149			
7. 59	20. 45	7. 46	·1371	21. 10	·02167			
8. 7	18. 40	7. 55	·1379	22. 23	·02182			
8. 12	18. 40	8. 6	·1379	23. 2	·02198			
8. 29	15. 0	8. 12	·1375	23. 34	·02239			
8. 55	21. 0	8. 25	·1382	23. 59	·02248			
9. 23	22. 30	8. 33	·1372					
9. 27	20. 0	8. 34	·1374					
9. 29	23. 0	8. 41	·1363					
9. 39	23. 0	8. 49	·1364					
9. 44	11. 0	9. 0	·1353					
9. 58	15. 30	9. 14	·1350					
10. 9	15. 0	9. 20	·1345					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 5		Oct. 5						
h m	° ′ ″	h m		h m		h m	°	°
10. 23	20. 25. 30	9. 36	·1350					
10. 37	28. 0	9. 43	·1334					
10. 43	3. 10	10. 12	·1367					
11. 2	28. 0	10. 26	·1389					
11. 13	31. 50	10. 39	·1327					
11. 25	29. 10	10. 45	·1320					
11. 28	29. 10	10. 59	·1412					
11. 30	27. 45	11. 11	·1418					
11. 38	28. 50	11. 19	·1402					
11. 43	27. 45	11. 29	·1375					
12. 10	22. 10	11. 41	·1370					
12. 20	26. 50	11. 54	·1367					
12. 29	28. 45	12. 11	·1369					
13. 5	32. 20	12. 20	·1379					
13. 11	34. 30	12. 31	·1376					
13. 14	34. 30	12. 44	·1373					
13. 28	37. 50	12. 56	·1376					
13. 43	35. 20	13. 11	·1378					
13. 59	35. 20	13. 24	·1377					
14. 11	34. 40	13. 30	·1374					
14. 26	37. 30	13. 42	·1377					
14. 40	39. 35	13. 51	·1375					
14. 56	36. 30	14. 6	·1380					
15. 11	36. 50	14. 21	·1381					
15. 35	36. 30	14. 41	·1390					
15. 53	38. 30	14. 52	·1393					
15. 57	36. 0	15. 19	·1382					
16. 8	36. 0	15. 46	·1372					
16. 11	30. 50	15. 54	·1375					
16. 22	32. 45	16. 1	·1382					
16. 25	31. 10	16. 13	·1377					
16. 28	32. 50	16. 24	·1361					
16. 38	34. 40	16. 26	·1373					
16 42	34. 40	16. 28	·1372					
16. 44	35. 50	16. 35	·1379					
16. 51	34. 50	17. 12	·1376					
16. 58	36. 50	17. 24	·1382					
17. 7	35. 50	17. 56	·1367					
17. 10	36. 50	18. 14	·1379					
17. 12	36. 10	18. 18	·1377					
17. 23	38. 0	18. 40	·1373					
17. 38	40. 0	18. 44	·1366					
18. 10	57. 40	19. 12	·1370					
18. 30	55. 50	19. 18	·1375					
18. 38	52. 20	19. 23	·1371					
18. 43	53. 20	19. 26	·1374					
18. 55	52. 20	19. 40	·1364					
18. 58	51. 40	19. 53	·1373					
19. 9	47. 50	20. 13	·1363					
19. 11	48. 45	20. 16	·1366					
19. 16	46. 0	20. 28	·1366					
19. 23	46. 0	20. 41	·1357					
19. 26	42. 0	20. 57	·1366					
19. 27	43. 40	21. 25	·1351					
19. 36	37. 20	21. 35	·1354					
19. 46	40. 30	21. 57	·1358					
20. 5	40. 30	22. 5	·1353					
20. 10	42. 15	22. 26	·1358					
20. 13	20. 40. 30	22. 42	·1349					
20. 23	40. 0	22. 53	·1350					
20. 28	37. 20	23. 0	·1345					
20. 43	37. 5	23. 11	·1349					
20. 54	39. 40	23. 19	·1344					
21. 10	39. 30	23. 27	·1351					
21. 24	37. 0	23. 36	·1340					
21. 39	37. 10	23. 42	·1358					
21. 43	35. 20	23. 48	·1361					
22. 9	40. 5	23. 59	·1367					
22. 26	39. 0							
22. 28	40. 0							
22. 41	39. 0							
22. 56	40. 30							
23. 5	39. 10							
23. 25	38. 40							
23. 27	38. 55							
23. 30	38. 0							
23. 40	36. 0							
23. 56	37. 20							
23. 59	38. 30							
Oct. 6		Oct. 6		Oct. 6		Oct. 6		
0. 0	20. 38. 30	0. 0	·1367	0. 0	·02248	1. 0	61·1	63·0
0. 5	38. 30	0. 3	·1368		***	3. 0	61·3	63·0
0. 9	41. 50	0. 14	·1365	0. 29	·02250	Max.	61·6	63·5
0. 13	38. 10	0. 26	·1384	1. 14	·02254	9. 0	58·7	60·6
0. 23	42. 0	0. 30	·1372		(†)	Min.	55·4	58·1
0. 26	45. 5	0. 33	·1376	1. 36	·02932	21. 0	58·7	60·0
0. 30	43. 5	0. 39	·1368	2. 14	·02941			
1. 8	44. 35	0. 47	·1357	3. 25	·02948			
1. 26	39. 10	0. 51	·1360	4. 21	·02977			
1. 39	39. 10	0. 56	·1365	4. 34	·03013			
2. 9	42. 20	1. 10	·1359	4. 46	·03013			
2. 23	40. 40	1. 32	·1374	5. 11	·02972			
2. 41	41. 20	1. 53	·1377	6. 27	·02938			
2. 59	39. 40	2. 16	·1366	7. 3	·02942			
3. 9	38. 30	2. 29	·1374	7. 56	·02944			
3. 21	38. 30	2. 41	·1367	8. 11	·02908			
3. 25	38. 5		***	8. 22	·02889			
3. 28	39. 0	2. 55	·1368	8. 42	·02871			
3. 41	38. 20	3. 11	·1375	8. 56	·02856			
3. 56	38. 20	3. 20	·1369	9. 51	·02832			
4. 5	37. 50	3. 44	·1377	10. 23	·02832			
4. 12	37. 30	3. 49	·1374	12. 6	·02791			
4. 26	36. 0	3. 55	·1378	12. 25	·02795			
4. 46	8. 5	4. 11	·1375	13. 19	·02773			
4. 55	7. 50	4. 22	·1361	17. 16	·02713			
5. 9	23. 10	4. 39	·1340	18. 8	·02711			
5. 18	25. 0	4. 56	·1402	19. 46	·02743			
5. 28	28. 20	5. 10	·1416	21. 39	·02756			
5. 41	27. 15	5. 15	·1403	22. 57	·02743			
5. 56	31. 0	5. 21	·1403	23. 59	·02775			
6. 17	33. 5	5. 38	·1384					
6. 36	32. 10	5. 48	·1385					
6. 43	32. 50	6. 4	·1381					
6. 52	33. 35	6. 25	·1389					
7. 11	30. 0	6. 42	·1384					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

October 6d. 1h. 15m. VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 10div·47, or by 0·006864 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 6		Oct. 6						
h m	° ′ ″	h m		h m		h m	°	°
7. 23	20. 27. 30	7. 7	·1375					
7. 27	27. 50	7. 48	·1380					
7. 38	27. 50	8. 10	·1416					
7. 56	29. 30	8. 16	·1409					
8. 4	28. 20	8. 21	·1415					
8. 11	33. 10	8. 29	·1414					
8. 26	26. 30	8. 57	·1395					
8. 35	27. 20	9. 18	·1412					
8. 54	38. 10	9. 44	·1381					
9. 10	26. 50	10. 2	·1377					
9. 24	30. 0	10. 12	·1383					
9. 39:	33. 35	10. 19	·1380					
9. 56	29. 0	10. 29	·1383					
10. 7	28. 0	10. 51	·1396					
10. 13	26. 15	11. 6	·1406					
10. 24	27. 0	11. 27	·1384					
10. 28	26. 25	11. 42	·1381					
10. 41	21. 0	11. 56	·1387					
10. 53	21. 55	12. 6	·1385					
10. 57	20. 25	12. 20	·1391					
11. 12	23. 30	12. 24	·1388					
11. 28	30. 25	12. 38	·1392					
11. 47	34. 30	12. 54	·1396					
11. 56	34. 20	13. 22	·1387					
12. 14	31. 15	13. 33	·1390					
12. 32	31. 15	13. 45	·1385					
13. 12	28. 0	14. 14	·1387					
13. 25	26. 20	14. 26	·1395					
13. 28	27. 25	14. 41	·1391					
14. 9	32. 20	16. 19	·1395					
14. 25	31. 15	16. 36	·1392					
14. 38	31. 55	16. 44	·1399					
14. 44	31. 25	16. 55	·1395					
15. 6	31. 10	17. 16	·1397					
15. 23	31. 45	17. 53	·1394					
15. 40	30. 40	18. 6	·1399					
15. 51	30. 25	18. 16	·1394					
16. 23	32. 20	18. 35	·1392					
16. 39	31. 40	18. 44	·1395					
16. 51	33. 10	19. 3	·1390					
17. 6	32. 0	19. 29	·1386					
17. 24	32. 40	19. 42	·1381					
17. 31	32. 20	19. 57	·1379					
18. 26	32. 20	20. 9	·1382					
18. 36	31. 50	20. 42	·1375					
19. 11	34. 25	21. 12	·1374					
19. 27	37. 10	21. 42	·1379					
19. 38	37. 10	21. 51	·1377					
19. 43	38. 5	22. 11	·1384					
20. 23	37. 0	22. 35	·1380					
20. 41	35. 20	22. 42	·1382					
20. 58	36. 25	23. 3	·1369					
21. 12	35. 20	23. 6	·1371					
21. 40	35. 20	23. 12	·1369					
21. 54	35. 50	23. 38	·1380					
22. 3	36. 50	23. 50	·1384					
22. 9	36. 50	23. 59	·1385					
22. 38	39. 55							
Oct. 6								
h m	° ′ ″	h m		h m		h m	°	°
22. 59	20. 39. 45							
23. 9	38. 30							
23. 13	38. 10							
23. 24	37. 0							
23. 39	38. 25							
23. 43	38. 25							
23. 59	40. 10							
Oct. 7		Oct. 7		Oct. 7		Oct. 7		
0. 0	20. 40. 10	0. 0	·1385	0. 0	·02775	1. 0	60·1	61·9
0. 8	40. 40	0. 14	·1383	1. 4	·02788	3. 0	60·6	62·8
0. 26	39. 10	0. 26	·1386	2. 23	·02846	Max.	60·8	63·0
0. 53	40. 30	0. 53	·1388	4. 6	·02877	9. 0	60·3	62·7
1. 22	39. 15	0. 56	·1385	4. 30	·02872	Min.	57·6	60·4
1. 28	40. 10	1. 11	·1386	4. 59	·02889	22. 0	59·6	61·6
1. 41	39. 55	1. 16	·1377	6. 18	·02875			
1. 58	41. 20	1. 52	·1387	7. 59	·02878			
2. 24	39. 35	2. 11	·1371	9. 48	·02866			
2. 57	37. 30	2. 25	·1377	10. 4	·02851			
3. 14	37. 40	2. 37	·1372	10. 19	·02846			
3. 29	38. 15	3. 5	·1382	10. 40	·02811			
3. 39	35. 50	3. 26	·1383	11. 18	·02803			
3. 43	35. 35	3. 39	·1376	11. 41	·02789			
3. 53	34. 30	4. 13	·1390	13. 59	·02751			
4. 9	33. 20	4. 34	·1382	14. 36	·02744			
4. 16	34. 10	4. 43	·1387	17. 34	·02773			
4. 26	33. 10	4. 48	·1385	19. 26	·02801			
4. 40	27. 0	4. 58	·1386	19. 53	·02814			
4. 44	26. 40	5. 12	·1382	22. 36	·02794			
4. 53	25. 0	5. 19	·1387	23. 59	·02816			
4. 56	25. 45	5. 26	·1385					
4. 59	24. 40	5. 45	·1387					
5. 8	25. 0	6. 7	·1392					
5. 14	23. 0	6. 20	·1381					
5. 24	25. 30	6. 42	·1382					
5. 43	27. 20	6. 52	·1378					
5. 51:	27. 35	7. 11	·1383					
6. 15	33. 0	7. 20	·1382					
6. 26	31. 50	7. 30	·1387					
6. 37	32. 5	7. 42	·1385					
6. 43	33. 0	8. 11	·1386					
6. 55	33. 30	8. 44	·1388					
7. 10	32. 30	8. 55	·1387					
7. 28	32. 15	9. 39	·1397					
7. 56	33. 40	9. 49	·1412					
9. 10	33. 40	10. 10	·1387					
9. 14	33. 0	10. 24	·1420					
9. 23	31. 55	10. 40	·1406					
9. 32	31. 55	10. 58	·1387					
9. 40	29. 10	11. 19	·1394					
9. 53	32. 0	11. 44	·1382					
10. 7	32. 50	12. 2	·1388					
10. 12	29. 40	12. 12	·1394					
10. 28	32. 0	12. 22	·1393					
10. 42	28. 0	12. 53	·1381					
10. 55	28. 45	13. 0	·1386					
10. 58	28. 10	13. 11	·1382					
11. 10	29. 30	13. 27	·1388					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 7		Oct. 7						
h m	° ′ ″	h m		h m		h m	°	°
11. 13	20. 29. 50	13. 42	·1393					
11. 26	31. 30	14. 11	·1396					
11. 41	30. 20	14. 42	·1386					
11. 53	30. 55	14. 52	·1387					
12. 8	30. 35	15. 0	·1385					
12. 11	31. 20	15. 20	·1388					
12. 17	30. 40	15. 27	·1387					
12. 51	32. 45	15. 43	·1389					
13. 7	31. 30	15. 56	·1387					
13. 11	35. 30	16. 26	·1391					
13. 25	34. 55	16. 54	·1387					
13. 37	35. 50	17. 24	·1390					
14. 0	36. 25	17. 35	·1388					
14. 18	34. 20	17. 52	·1392					
14. 37	33. 0	18. 13	·1399					
14. 41	33. 40	18. 41	·1396					
14. 44	33. 40	19. 0	·1389					
14. 56	34. 20	19. 30	·1369					
15. 25	34. 20	19. 54	·1377					
15. 39	33. 20	20. 0	·1379					
16. 40	34. 30	20. 24	·1376					
16. 44	33. 50	20. 50	·1382					
16. 55	35. 10	21. 40	·1377					
17. 12	34. 10	21. 44	·1380					
17. 28	34. 30	22. 10	·1378					
17. 37	33. 55	22. 24	·1382					
17. 44	34. 25	22. 50	·1374					
17. 56	33. 30	22. 55	·1370					
18. 28	34. 0	23. 11	·1374					
18. 39	34. 40	23. 16	·1371					
18. 44	34. 40	23. 41	·1383					
19. 9	36. 15	23. 59	·1389					
19. 18	35. 30							
19. 26	33. 20							
19. 32	34. 35							
19. 41	34. 20							
19. 54	35. 40							
19. 59	36. 30							
20. 9	35. 30							
20. 15	37. 0							
20. 39	34. 0							
20. 44	33. 30							
20. 56	33. 50							
21. 11	33. 20							
21. 25	34. 20							
21. 44	35. 0							
22. 28	38. 20							
22. 39	38. 10							
22. 42	37. 25							
22. 56	37. 45							
23. 9	39. 0							
23. 24	38. 40							
23. 54	41. 10							
23. 59	40. 30							
Oct. 8		Oct. 8		Oct. 8		Oct. 8		
0. 0	20. 40. 30	0. 0	·1389	0. 0	·02816	Min.	60 ·3	61 ·3
0. 13	41. 10	0. 12	·1391	2. 9	·02867	1. 0	60 ·7	62 ·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 8		Oct. 8		Oct. 8		Oct. 8		
h m	° ′ ″	h m		h m		h m	°	°
0. 22	20. 40. 50	0. 19	·1388	2. 53	·02876	9. 0	61 ·7	64 ·0
0. 36	41. 30	0. 41	·1393	3. 57	·02917	21. 0	62 ·0	64 ·0
0. 42	41. 45	0. 50	·1390	4. 12	·02914	Max.	62 ·4	64 ·3
0. 51	40. 55	1. 11	·1385	4. 41	·02935			
0. 55	40. 55	1. 27	·1393	6. 4	·02917			
1. 7	39. 50	1. 52	·1392	8. 36	·02936			
1. 40	39. 50	2. 9	·1396	10. 7	·02933			
1. 53	39. 25	2. 29	·1390	10. 19	·02937			
2. 9	40. 10	2. 54	·1389	10. 53	·02924			
2. 14	39. 20	3. 22	·1396	12. 53	·02938			
2. 43	38. 10	3. 43	·1389	14. 46	·02919			
2. 56	38. 30	3. 55	·1395	15. 45	·02920			
3. 16	38. 15	4. 26	·1374	18. 18	·02947			
3. 23	37. 25	4. 54	·1393	18. 56	·02962			
3. 28	37. 45	5. 32	·1399	20. 11	·02971			
3. 43	35. 25	6. 14	·1391	21. 25	·02958			
3. 55	36. 30	6. 46	·1394	23. 59	·02974			
4. 3	34. 0	7. 20	·1392					
4. 11	32. 10	7. 38	·1393					
4. 17	32. 10	7. 42	·1399					
4. 31	29. 50	7. 55	·1393					
4. 40	29. 40	8. 20	·1395					
4. 58	32. 40	8. 30	·1393					
5. 26	34. 30	9. 34	·1406					
5. 42	34. 30	9. 54	·1398					
6. 6	35. 10	10. 7	·1396					
6. 37	34. 40	10. 24	·1414					
6. 41	35. 0	10. 44	·1402					
6. 56	34. 10	11. 10	·1394					
7. 6	34. 40	11. 21	·1391					
7. 32	33. 40	11. 56	·1397					
7. 55	34. 10	12. 11	·1394					
8. 9	33. 30	12. 19	·1396					
8. 37	34. 5	12. 34	·1392					
8. 41	33. 10	13. 4	·1398					
8. 47	32. 15	13. 40	·1385					
9. 0	33. 15	14. 12	·1395					
9. 27	30. 50	14. 51	·1398					
9. 55	32. 5	15. 6	·1406					
10. 2	32. 5	15. 44	·1394					
10. 11	31. 10	15. 54	·1395					
10. 27	34. 20	16. 26	·1389					
10. 53	32. 30	17. 14	·1395					
11. 36	34. 25	17. 44	·1387					
12. 3	33. 40	18. 7	·1393					
12. 12	33. 10	18. 18	·1387					
12. 28	33. 10	18. 23	·1389					
12. 55	34. 20	18. 30	·1386					
13. 6	34. 10	19. 10	·1391					
13. 11	34. 10	19. 37	·1377					
13. 14	33. 25	19. 49	·1374					
14. 7	37. 50	19. 54	·1377					
14. 24	38. 5	20. 2	·1374					
14. 35	36. 30	20. 10	·1379					
14. 44	33. 40	20. 20	·1383					
14. 55	34. 10	20. 39	·1378					
15. 6	33. 30	20. 44	·1383					
15. 38	32. 10	20. 54	·1381					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 8		Oct. 8						
h m	° ′ ″	h m		h m		h m	°	°
15. 43	20. 31. 30	21. 0	·1383					
15. 53	32. 15	21. 33	·1376					
15. 58	31. 30	21. 58	·1365					
16. 24	33. 40	22. 4	·1365					
16. 39	34. 0	22. 20	·1357					
16. 43	33. 30	22. 49	·1359					
17. 9	33. 35	23. 15	·1363					
17. 37	37. 10		***					
18. 3	35. 30	23. 59	·1372					
18. 9	35. 0							
18. 21	35. 15							
18. 26	34. 30							
18. 43	34. 30							
18. 59	34. 10							
	***							
19. 21	34. 10							
19. 26	33. 30							
19. 44	32. 30							
19. 55	33. 0							
19. 57	31. 40							
20. 10	32. 5							
20. 14	33. 50							
20. 36	31. 40							
20. 39	33. 5							
20. 47	32. 30							
21. 2	33. 20							
21. 9	32. 50							
21. 27	33. 35							
21. 48	33. 50							
21. 56	34. 40							
22. 9	34. 40							
22. 14	34. 50							
22. 38	35. 50							
22. 56	37. 50							
23. 11	38. 15							
23. 18	39. 25							
23. 38	38. 0							
23. 43	39. 5							
23. 59	39. 50							
Oct. 9		Oct. 9		Oct. 9		Oct. 9		
0. 0	20. 39. 50	0. 0	·1372	0. 0	·02974	1. 0	62 ·7	64 ·7
0. 24	40. 0	0. 25	·1371	2. 56	·03018	3. 0	62 ·6	65 ·0
0. 38	40. 50	0. 40	·1375	4. 23	·03049	Max.	63 ·3	65 ·2
0. 43	40. 30	0. 50	·1372	5. 32	·03035	9. 0	62 ·7	64 ·9
0. 56	40. 40	1. 18	·1376	7. 3	·03037	Min.	62 ·0	64 ·0
1. 9	42. 0	1. 21	·1372	7. 24	·03051	21. 0	62 ·6	64 ·1
1. 39	39. 50	1. 41	·1376	7. 46	·03038			
1. 43	40. 35	1. 56	·1382	8. 6	·03044			
1. 53	40. 20	2. 0	·1382	11. 59	·03028			
2. 7	40. 40	2. 18	·1372	12. 25	·03033			
2. 25	40. 0	2. 29	·1374	12. 57	·03002			
2. 39	39. 20	2. 40	·1373	14. 16	·03012			
2. 54	39. 30	2. 54	·1378	14. 56	·02986			
3. 0	38. 0	3. 14	·1370	15. 9	·02978			
3. 16	32. 40	3. 40	·1390	15. 32	·02965			
3. 23	32. 40	3. 49	·1389	17. 3:	·02992			
3. 26	31. 40	3. 52	·1391	18. 53	·02971			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 9		Oct. 9		Oct. 9				
h m	° ′ ″	h m		h m.		h m	°	°
3. 36	20. 32. 15	4. 4	·1384	19. 2	·02972			
3. 42	31. 10	4. 12	·1387	20. 31	·02989			
3. 53	33. 0	4. 26	·1385	23. 59	·03002			
3. 57	32. 25	5. 4	·1389					
4. 28	33. 50	5. 20	·1384					
4. 49	34. 0	5. 44	·1386					
5. 11	35. 0	6. 20	·1385					
5. 37	34. 10	7. 6	·1378					
5. 44	33. 20	7. 16	·1393					
6. 3	33. 30	7. 29	·1398					
6. 26	34. 50	7. 50	·1382					
6. 39	34. 30	8. 11	·1387					
6. 53	32. 30	8. 40	·1372					
7. 6	25. 30	8. 54	·1379					
7. 36	29. 30	9. 19	·1383					
7. 43	26. 50	9. 32	·1388					
7. 58	30. 0	9. 43	·1386					
8. 15	32. 0	9. 54	·1387					
8. 29	31. 10	10. 0	·1392					
9. 11	33. 15	10. 15	·1387					
9. 44	32. 50	10. 34	·1386					
9. 58	33. 25	11. 13	·1390					
10. 15	32. 50	11. 54	·1388					
10. 52	33. 20	12. 6	·1390					
11. 12	33. 0	12. 13	·1388					
11. 26	33. 10	12. 15	·1392					
11. 40	32. 20	12. 34	·1399					
11. 54	32. 15	13. 6	·1391					
12. 27	39. 50	13. 50	·1386					
12. 55	33. 45	14. 12	·1384					
13. 9	33. 20	14. 20	·1395					
13. 26	31. 50	14. 37	·1397					
13. 43	31. 30	14. 44	·1399					
14. 9	33. 10	14. 52	·1406					
14. 17	35. 30	14. 57	·1406					
14. 28	37. 50	15. 24	·1415					
14. 51	39. 30	15. 39	·1408					
14. 56	38. 0	15. 45	·1406					
15. 10	38. 0	15. 57	·1395					
15. 35	30. 0	16. 6	·1396					
15. 40	29. 0	16. 20	·1385					
15. 47	29. 0	16. 28	·1390					
15. 56	28. 20	16. 40	·1392					
16. 9	29. 30	16. 52	·1387					
16. 13	29. 20	17. 13	·1397					
16. 24	28. 20	17. 20	·1391					
16. 56	31. 40	17. 30	·1394					
17. 9	32. 0	17. 49	·1384					
17. 12	33. 20	18. 0	·1379					
17. 23	33. 10	18. 19	·1381					
17. 34	34. 50	18. 42	·1396					
18. 4	41. 15	18. 56	·1390					
18. 15	45. 40	19. 7	·1383					
18. 26	45. 0	19. 24	·1387					
18. 39	43. 0	19. 36	·1384					
18. 49	38. 45	19. 43	·1386					
18. 57	38. 0	19. 52	·1380					
19. 6	34. 30	20. 0	·1386					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 9		Oct. 9						
h m	° ′ ″	h m		h m		h m	°	°
19. 12	20. 33. 0	20. 11	·1381					
19. 18	33. 0	20. 14	·1384					
19. 26	32. 20	20. 19	·1383					
19. 42	32. 30	20. 24	·1387					
19. 53	30. 50	20. 27	·1376					
19. 57	32. 40	20. 41	·1384					
20. 8	30. 50	20. 49	·1377					
20. 13	31. 45	20. 58	·1381					
20. 17	30. 40	21. 10	·1376					
20. 25	34. 5		***					
20. 28	31. 40	21. 30	·1374					
20. 41	33. 50	21. 42	·1376					
20. 43	31. 50	21. 53	·1383					
20. 47	33. 5	22. 17	·1367					
21. 0	32. 0	22. 28	·1373					
21. 14	32. 15	22. 57	·1367					
21. 25	33. 50	23. 9	·1375					
21. 28	33. 0	23. 20	·1349					
21. 41	33. 50	23. 40	·1337					
21. 56	37. 25	23. 59	·1342					
22. 9	35. 10							
22. 13	35. 10							
22. 27	37. 50							
22. 57	39. 45							
23. 7	42. 0							
23. 14	39. 20							
23. 41	45. 20							
23. 53	46. 50							
23. 59	44. 30							
Oct. 10		Oct. 10		Oct. 10		Oct. 10		
0. 0	20. 44. 30	0. 0	·1342	0. 0	·03002	1. 0	63 ·2	64 ·9
0. 11	44. 30	0. 9	·1334	1. 9	·03059	3. 0	64 ·2	64 ·5
0. 16	45. 40	0. 20	·1338	2. 34	·03051	Max.	64 ·5	65 ·6
0. 24	48. 0	0. 36	·1357	2. 59	·03083	9. 0	63 ·1	65 ·2
0. 27	49. 15	0. 51	·1344	3. 25	·03109	21. 0	63 ·0	65 ·0
0. 39	49. 50	0. 56	·1352	4. 24	·03084	Min.	62 ·6	64 ·3
0. 42	49. 0	1. 14	·1369	4. 35	·03077	22. 0	62 ·6	64 ·3
0. 49	44. 55	1. 46	·1392	5. 11	·03092	23. 0	62 ·7	64 ·9
1. 8	40. 30	2. 6	·1389	5. 23	·03078			
1. 14	40. 10	2. 24	·1382	5. 39	·03088			
1. 39	42. 40	2. 41	·1363	6. 23	·03067			
1. 45	42. 0	2. 46	·1365	7. 16	·03071			
1. 53	43. 30	2. 50	·1370	7. 31	·03055			
1. 59	42. 50	2. 57	·1371	7. 41	·03063			
2. 13	44. 0	3. 2	·1364	7. 54	·03051			
2. 18	43. 50	3. 13	·1360	8. 8	·03062			
2. 26	44. 10	3. 27	·1373	8. 44	·03030			
2. 39	41. 10	3. 49	·1369	10. 37	·02994			
2. 42	40. 20	4. 12	·1374	11. 45	·03015			
2. 56	40. 45	4. 23	·1380	12. 11	·02991			
3. 6	39. 0	4. 34	·1378	12. 29	·02998			
3. 14	36. 30	4. 50	·1366	12. 49	·02983			
3. 28	39. 45	5. 18	·1389	13. 21	·02990			
3. 47	39. 45	5. 33	·1380	13. 27	·02982			
4. 11	37. 10	5. 51	·1390	14. 7	·02987			
4. 16	36. 25	5. 56	·1386	15. 39	·03023			
4. 26	36. 5	6. 12	·1392	16. 23	·03016			
					***			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 10		Oct. 10		Oct. 10				
h m	° ′ ″	h m		h m		h m	°	°
4. 41	20. 33. 0	6. 27	·1378	20. 16	·03026			
4. 47	30. 0	6. 49	·1382	23. 59	·03043			
5. 4	27. 0	7. 6	·1376					
5. 11	26. 50	7. 14	·1383					
5. 18	29. 40	7. 26	·1387					
5. 26	28. 20	7. 39	·1377					
5. 38	27. 25	7. 43	·1388					
5. 46	31. 10	7. 53	·1394					
5. 55	31. 0	7. 56	·1392					
6. 11	32. 10	8. 14	·1419					
6. 26	30. 20	8. 40	·1402					
6. 39	31. 15	8. 56	·1397					
6. 51	32. 10	9. 10	·1382					
7. 0	30. 55	9. 13	·1385					
7. 23	33. 0	9. 26	·1367					
7. 37	23. 5	9. 40	·1383					
7. 41	23. 5	9. 50	·1397					
7. 56	16. 10	9. 56	·1391					
8. 14	26. 30	10. 9	·1406					
8. 27	26. 50	10. 20	·1410					
8. 51	20. 40	10. 30	·1400					
8. 57	25. 30	10. 40	·1399					
9. 6	26. 10	10. 55	·1377					
9. 14	34. 5	11. 10	·1378					
9. 27	33. 0	11. 25	·1374					
9. 35	33. 0	11. 51	·1387					
9. 49	25. 0	12. 9	·1378					
10. 0	14. 10	12. 12	·1381					
10. 11	17. 20	12. 19	·1375					
10. 25	17. 55	12. 26	·1376					
10. 49	23. 50	12. 40	·1387					
10. 57	23. 40	12. 42	·1385					
11. 10	27. 30	13. 14	·1386					
11. 39	31. 40	13. 25	·1388					
11. 42	31. 40	13. 39	·1381					
11. 54	33. 30	14. 12	·1371					
12. 11	26. 50	15. 9	·1383					
12. 26	31. 30	15. 12	·1381					
12. 38	33. 40	15. 20	·1387					
12. 49	32. 30	15. 29	·1383					
12. 55	33. 30	15. 49	·1386					
13. 11	35. 45	15. 55	·1392					
13. 27	35. 10	16. 12	·1391					
13. 51	36. 30	16. 30	·1394					
14. 13	35. 0	16. 52	·1386					
14. 27	35. 20	17. 19	·1388					
14. 54	33. 40	17. 34	·1385					
14. 57	33. 40	17. 52	·1389					
15. 7	32. 40	18. 15	·1383					
15. 19	33. 40		***					
15. 24	33. 0	18. 57	·1369					
15. 37	34. 20	19. 14	·1374					
15. 40	33. 30	19. 54	·1357					
15. 46	33. 30	20. 4	·1359					
15. 54	34. 35	20. 12	·1355					
16. 4	34. 20	20. 26	·1353					
16. 16	30. 45	20. 43	·1359					
16. 27	30. 45	20. 54	·1348					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 10		Oct. 10						
h m	° ′ ″	h m		h m		h m	°	°
16. 39	20. 33. 0	21. 8	·1355					
16. 41	32. 0	21. 11	·1342					
16. 53	33. 40	21. 19	·1352					
17. 8	33. 0	21. 51	·1347					
17. 28	35. 25	21. 54	·1373					
17. 38	34. 0	21. 57	·1367					
17. 53	35. 10	22. 9	·1371					
18. 1	35. 30	22. 12	·1364					
18. 13	38. 20	22. 16	·1374					
18. 28	40. 5	22. 20	·1360					
18. 53	40. 5	22. 24	·1367					
19. 12	42. 50	22. 34	·1353					
19. 27	41. 15	22. 40	·1366					
19. 38	41. 10	22. 42	·1355					
19. 41	42. 45	23. 0	·1367					
19. 59	40. 0	23. 12	·1365					
20. 11	38. 20	23. 19	·1366					
20. 14	40. 0	23. 28	·1361					
20. 23	40. 0	23. 42	·1357					
20. 27	39. 20	23. 59	·1356					
20. 35	41. 15							
20. 42	41. 30							
20. 46	38. 15							
21. 17	39. 10							
21. 26	38. 0							
21. 34	39. 55							
21. 43	37. 30							
21. 46	33. 55							
21. 54	39. 20							
21. 57	37. 40							
22. 9	38. 10							
22. 12	42. 40							
22. 16	38. 15							
22. 24	40. 0							
22. 42	38. 40							
22. 51	38. 20							
23. 4	41. 10							
23. 28	43. 0							
23. 39	44. 5							
23. 50	43. 30							
23. 55	42. 0							
23. 59	42. 10							
Oct. 11		Oct. 11		Oct. 11		Oct. 11		
0. 0	20. 42. 10	0. 0	·1356	0. 0	·03043	0. 0	63·8	65·0
0. 7	42. 20	0. 9	·1348	4. 1	·03087	1. 0	63·6	65·1
0. 24	39. 30	0. 15	·1341	***		2. 0	63·6	65·2
0. 44	40. 15	0. 30	·1362	5. 33	·03074	3. 0	63·6	65·5
0. 56	40. 15	0. 43	·1357	6. 46	·03065	Max.	63·8	65·7
1. 6	42. 45	0. 51	·1365	7. 3	·03056	9. 0	61·5	64·0
1. 12	42. 45	1. 13	·1366	7. 35	·03067	21. 0	61·8	63·7
1. 23	39. 0	1. 21	·1355	8. 29	·03036	22. 0	59·5	61·4
1. 29	39. 40	1. 38	·1364	8. 59	·03041	Min.	59·5	61·2
1. 39	39. 5	1. 53	·1377	11. 4	·02972	23. 0	59·9	61·2
1. 56	41. 10	2. 33	·1364	11. 23	·02980			
2. 29	39. 50	2. 41	·1374	11. 44	·02974			
2. 41	41. 30	2. 50	·1367	14. 46	·03008			
2. 53	40. 30	2. 57	·1375	17. 11	·02997			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 11		Oct. 11		Oct. 11				
h m	° ′ ″	h m		h m		h m	°	°
2. 58	20. 40. 30	3. 15	·1368	17. 52	·02982			
3. 29	38. 0	3. 41	·1372	20. 59	·02984			
3. 54	36. 45	3. 52	·1379	22. 51	·02945			
4. 15	36. 0	3. 57	·1377	23. 59	·02947			
	***	4. 14	·1384					
4. 42	35. 30	4. 20	·1383					
4. 51	34. 50	4. 34	·1385					
5. 6	34. 50	4. 41	·1384					
5. 41	29. 10		***					
5. 53	26. 50	5. 9	·1387					
6. 9	26. 50	5. 21	·1382					
6. 16	24. 45	5. 37	·1390					
6. 26	28. 10	5. 54	·1391					
6. 28	27. 20	6. 15	·1397					
6. 39	28. 35	6. 25	·1406					
6. 53	26. 0	6. 30	·1392					
6. 58	20. 40	6. 41	·1393					
7. 8	21. 50	7. 4	·1386					
7. 12	21. 50	7. 12	·1395					
7. 35	30. 0	7. 18	·1392					
7. 56	32. 0	7. 45	·1396					
8. 17	32. 0	8. 12	·1388					
8. 37	31. 0	8. 22	·1390					
8. 59	31. 55	8. 38	·1384					
9. 12	32. 30	9. 14	·1386					
9. 22	32. 30	9. 22	·1388					
9. 40	31. 30	9. 38	·1383					
9. 58	30. 55	9. 45	·1386					
10. 6	27. 10	9. 55	·1384					
10. 21	31. 25	10. 10	·1416					
10. 26	31. 25	10. 23	·1390					
10. 41	36. 0	10. 39	·1408					
11. 7	28. 15	11. 6	·1387					
11. 28	33. 50	11. 13	·1390					
11. 43	32. 20	12. 9	·1385					
11. 56	32. 45	12. 45	·1385					
12. 8	32. 25	12. 55	·1387					
12. 42	32. 50	14. 12	·1386					
12. 54	33. 40	14. 46	·1388					
13. 23	33. 40	16. 44	·1387					
13. 26	33. 0	17. 18	·1396					
13. 38	34. 20	17. 58	·1382					
15. 11	33. 25	18. 12	·1384					
15. 25	33. 25	18. 42	·1394					
15. 38	34. 20	19. 3	·1398					
15. 56	34. 0	19. 18	·1395					
16. 12	35. 5	19. 26	·1387					
16. 23	34. 55	19. 33	·1389					
16. 39	36. 50	19. 44	·1383					
16. 55	36. 45	20. 10	·1385					
17. 37	43. 0	20. 19	·1381					
17. 44	42. 10	20. 39	·1383					
17. 58	42. 45	21. 3	·1377					
18. 11	42. 30	21. 11	·1378					
18. 26	41. 10	21. 23	·1369					
18. 30	41. 5	21. 42	·1363					
18. 56	37. 55	22. 11	·1364					
19. 0	38. 45		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 11		Oct. 11						
h m	° ′ ″	h m		h m		h m	°	°
19. 6	20. 38. 0	22. 31	·1350					
19. 11	38. 0	22. 50	·1353					
19. 16	38. 40	23. 4	·1346					
19. 23	37. 15	23. 22	·1356					
19. 26	37. 15		***					
19. 28	38. 10	23. 59	·1358					
19. 32	37. 30							
19. 39	37. 30							
19. 43	36. 30							
19. 52	36. 30							
20. 6	35. 15							
20. 10	35. 20							
20. 22	33. 50							
20. 39	33. 25							
20. 56	35. 15							
21. 2	35. 5							
21. 11	36. 0							
21. 42	35. 25							
21. 53	36. 20							
22. 23	36. 20							
23. 6	42. 30							
23. 24	39. 50							
23. 46	42. 0							
23. 57	41. 30							
23. 59	41. 40							
Oct. 12		Oct. 12		Oct. 12		Oct. 12		
0. 0	20. 41. 40	0. 0	·1358	0. 0	·02947	0. 0	60 ·7	61 ·8
0. 14	43. 40	0. 4	·1356	3. 3	·03003	1. 0	61 ·6	63 ·1
0. 26	43. 10	0. 17	·1364	3. 53	·03054	2. 0	61 ·8	63 ·5
0. 30	43. 55	0. 25	·1361	4. 16	·03031	3. 0	62 ·0	64 ·0
0. 53	42. 50	0. 41	·1368	4. 31	·03038	Max.	62 ·4	64 ·5
1. 0	44. 50	0. 45	·1374	5. 9	·03016	9. 0	58 ·6	59 ·2
1. 9	43. 55	1. 19	·1366	6. 33	·03042	Min.	58 ·5	59 ·2
1. 23	43. 10	1. 44	·1372	7. 31	·03038	21. 0	59 ·3	60 ·5
1. 26	43. 50	1. 53	·1375	7. 53	·03011			
1. 38	43. 30	2. 10	·1371	8. 8	·03028			
1. 44	44. 0	2. 38	·1379	8. 25	·02997			
1. 53	44. 50	2. 52	·1365	9. 10	·02978			
2. 10	40. 20	3. 9	·1345	11. 24	·02913			
2. 23	41. 10	3. 15	·1373	13. 39	·02869			
2. 25	40. 50	3. 43	·1385	14. 9	·02851			
2. 37	42. 5	3. 54	·1381	16. 22	·02777			
2. 39	41. 45	4. 2	·1381	16. 31	·02753			
2. 42	42. 50	4. 15	·1365	16. 59	·02689			
2. 44	42. 0	4. 25	·1366	17. 23	·02734			
3. 0	25. 40	4. 37	·1376	17. 38	·02721			
3. 12	24. 55	4. 49	·1374	19. 24	·02793			
3. 24	26. 0	5. 12	·1365	21. 36	·02808			
3. 25	28. 0	5. 28	·1358	22. 38	·02784			
3. 37	30. 0	5. 44	·1366	23. 59	·02795			
3. 56	37. 30	6. 6	·1367					
4. 2	38. 15	6. 26	·1374					
4. 11	36. 15	6. 44	·1371					
4. 18	34. 50	6. 56	·1366					
4. 31	35. 45	7. 15	·1369					
4. 47	35. 45	7. 30	·1367					
4. 58	34. 0	7. 41	·1369					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 12		Oct. 12						
h m	° ′ ″	h m		h m		h m	°	°
5. 9	20. 34. 30	7. 49	·1367					
5. 25	30. 50	7. 55	·1360					
5. 39	32. 0	8. 14	·1413					
5. 53	31. 15	8. 28	·1393					
6. 9	32. 0	8. 45	·1391					
6. 23	33. 5	9. 10	·1380					
6. 28	35. 0	9. 21	·1378					
6. 34	35. 0	9. 57	·1379					
6. 40	35. 50	10. 35	·1386					
6. 52	32. 0	10. 50	·1396					
6. 56	32. 0	11. 0	·1390					
7. 9	30. 30	11. 10	·1391					
7. 28	30. 0	11. 32	·1384					
7. 41	25. 0	11. 43	·1388					
7. 53	10. 55	11. 56	·1386					
8. 16	28. 15	12. 12	·1389					
8. 24	27. 0	12. 24	·1386					
8. 38	28. 40	12. 39	·1389					
8. 47	32. 0	13. 12	·1384					
9. 9	33. 5	13. 18	·1389					
9. 26	31. 50	13. 31	·1383					
9. 58	31. 20	13. 51	·1388					
10. 52	34. 15	14. 39	·1389					
11. 7	31. 15	14. 55	·1395					
11. 24	29. 30	15. 18	·1397					
11. 30	29. 30	15. 25	·1403					
11. 41	30. 20	15. 35	·1399					
11. 48	30. 20	15. 39	·1401					
12. 11	32. 25	15. 44	·1394					
12. 51	32. 25	16. 1	·1399					
13. 6	32. 0	16. 21	·1407					
13. 28	34. 20	16. 29	·1426					
13. 38	34. 20	16. 39	·1419					
13. 43	36. 15	16. 46	·1424					
13. 56	36. 5	16. 55	·1409					
14. 7	37. 10	17. 11	·1372					
14. 32	34. 10	17. 18	·1378					
14. 43	34. 10	17. 28	·1397					
14. 56	35. 30	17. 44	·1386					
15. 11	33. 0	17. 58	·1385					
15. 24	32. 10	18. 12	·1391					
15. 27	33. 50	18. 30	·1378					
15. 36	32. 45	18. 54	·1382					
15. 38	34. 50	19. 13	·1381					
15. 43	33. 15	19. 24	·1384					
15. 51	35. 0	19. 44	·1382					
15. 57	36. 10	19. 51	·1383					
16. 6	36. 10	20. 11	·1377					
16. 11	37. 50	20. 16	·1383					
16. 22	35. 10	20. 41	·1378					
16. 27	41. 55	20. 50	·1381					
16. 37	39. 55	21. 10	·1377					
16. 51	49. 0	21. 26	·1382					
17. 6	45. 30	21. 40	·1377					
17. 14	40. 55	21 57	·1375					
17. 31	47. 40	22. 4	·1371					
17. 53	38. 10	22. 24	·1377					
17. 56	36. 0	22. 39	·1367					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 12		Oct. 12						
h m	° ′ ″	h m		h m		h m	°	°
18. 9	20. 35. 10	22. 56	·1377					
18. 23	36. 5	23. 25	·1364					
18. 44	33. 10	23. 43	·1363					
18. 55	34. 5	23. 56	·1356					
19. 10	32. 0	23. 59	·1357					
19. 37	33. 20							
19. 43	32. 40							
20. 5	33. 30							
20. 7	32. 55							
20. 14	33. 40							
20. 58	33. 20							
21. 32	36. 0							
21. 39	36. 0							
21. 55	37. 0							
22. 8	36. 20							
22. 25	39. 30							
22. 39	38. 25							
22. 59	42. 0							
23. 8	40. 5							
23. 21	40. 0							
23. 42	43. 40							
23. 59	42. 45							
Oct. 13		Oct. 13		Oct. 13		Oct. 13		
0. 0	20. 42. 45	0. 0	·1357	0. 0	·02795	1. 0	60 ·0	61 ·6
0. 28	45. 0	0. 8	·1364	0. 32	·02818	3. 0	59 ·6	61 ·5
0. 57	43. 0	0. 14	·1362	1. 4	·02835	Max.	60 ·6	62 ·2
1. 8	43. 55	0. 32	·1375	1. 14	·02832	9. 0	57 ·0	58 ·9
1. 11	42. 50	0. 50	·1371	2. 0	·02903	Min.	56 ·9	58 ·8
1. 14	43. 45	1. 9	·1373	5. 19	·02868	21. 0	59 ·6	61 ·0
1. 22	40. 0	1. 15	·1344	7. 30	·02798			
1. 27	42. 0	1. 27	·1366	9. 57	·02751			
1. 39	42. 10	1. 40	·1376	10. 5	·02746			
1. 41	43. 50	1. 49	·1372	12. 54	·02792			
1. 43	42. 0	2. 13	·1382	16. 39	·02783			
1. 55	38. 20	2. 26	·1375	18. 9	·02772			
1. 58	39. 40	2. 45	·1385	21. 57	·02801			
2. 9	38. 25		***		***			
2. 14	40. 0	3. 15	·1388	23. 59	·02808			
2. 26	38. 30	3. 37	·1386					
2. 38	38. 30	3. 50	·1390					
2. 55	39. 50		***					
3. 14	39. 0	4. 55	·1386					
3. 37	36. 50	5. 6	·1391					
3. 43	36. 50	5. 21	·1387					
4. 23	35. 50	5. 52	·1390					
4. 48	35. 0	6. 40	·1387					
5. 12	33. 45	7. 4	·1392					
5. 29	33. 25	8. 52	·1389					
5. 54	33. 35	9. 13	·1396					
6. 42	30. 50	9. 25	·1394					
7. 11	31. 30	9. 34	·1397					
7. 28	32. 30	9. 42	·1393					
7. 36	31. 50	10. 10	·1394					
7. 42	32. 10	12. 6	·1389					
7. 53	31. 30	12. 44	·1392					
8. 9	30. 55	13. 54	·1391					
8. 28	31. 30	14. 54	·1393					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 13		Oct. 13						
h m	° ′ ″	h m		h m		h m	°	°
9. 6	20. 29. 20	15. 34	·1394					
9. 11	30. 20	16. 12	·1399					
9. 23	30. 5	16. 26	·1403					
10. 30	32. 30	16. 40	·1400					
10. 44	32. 15	17. 15	·1403					
11. 39	33. 20	17. 34	·1405					
12. 7	34. 0	17. 53	·1404					
12. 23	33. 50	18. 22:	·1384					
12. 27	34. 15	18. 40	·1386					
12. 56	33. 55	18. 49	·1391					
13. 11	33. 30	19. 20	·1382					
13. 42	34. 30	19. 41	·1385					
14. 26	33. 20	19. 53	·1379					
14. 42	33. 20	19. 56	·1380					
14. 53	33. 50	20. 4	·1375					
15. 3	33. 0	20. 13	·1379					
15. 12	33. 0	20. 24	·1375					
15. 25	32. 30	21. 13	·1356					
15. 42	32. 5	21. 30	·1358					
15. 53	31. 30	21. 43	·1351					
16. 15	32. 0	21. 51	·1353					
16. 26	33. 0	22. 2	·1351					
16. 37	32. 25	22. 14	·1356					
17. 27	36. 15	22. 23	·1352					
17. 41	36. 0	22. 31	·1359					
17. 55	38. 0	22. 41	·1360					
18. 16	42. 0	23. 6	·1373					
18. 28	41. 30	23. 30	·1364					
18. 39	39. 30	23. 45	·1366					
18. 54	39. 30	23. 59	·1349					
19. 0	38. 40							
19. 17	39. 0							
19. 24	40. 0							
19. 27	39. 25							
19. 39	39. 40							
19. 44	38. 45							
19. 56	38. 50							
20. 9	40. 0							
20. 23	38. 0							
	***							
21. 8	34. 30							
21. 13	36. 20							
21. 26	34. 45							
21. 38	35. 30							
21. 53	39. 15							
22. 6	38. 30							
22. 12	40. 35							
22. 26	39. 30							
22. 34	40. 40							
22. 51	38. 50							
22. 57	39. 25							
23. 10	41. 30							
23. 16	41. 40							
23. 39	41. 0							
23. 43	44. 10							
23. 53	44. 10							
23. 59	44. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 14 h m	° ′ ″	Oct. 14 h m		Oct. 14 h m		Oct. 14 h m	°	°
0. 0	20. 44. 30	0. 0	·1349	0. 0	·02808	1. 0	60·6	62·0
0. 10	45. 0	0. 9	·1353	2. 38	·02968	3. 0	58·8	61·0
0. 22	46. 50	0. 12	·1346	2. 53	·02955	Max.	60·9	62·7
0. 26	46. 50	0. 20	·1355	3. 5	·02994	9. 0	57·8	59·6
0. 39	47. 40	0. 26	·1354	3. 26	·02979	Min.	57·8	59·6
0. 54	46. 30	0. 43	·1367	3. 37	·02998	22. 0	59·5	61·0
0. 58	45. 10	0. 52	·1361	3. 57	·02952			
1. 2	45. 0	1. 3	·1365	4. 14	·02995			
1. 9	44. 0	1. 8	·1364	4. 18	·02979			
1. 12	45. 50	1. 13	·1374	4. 39	·03006			
1. 22	44. 20	1. 23	·1368	4. 55	·02932			
1. 38	44. 45	1. 41	·1378	4. 59	·02937			
1. 41	48. 10	1. 52	·1371	5. 6	·02891			
1. 54	44. 20	2. 4	·1378	5. 26	·02913			
1. 58	48. 30	2. 19	·1355	5. 30	·02905			
2. 8	49. 15	2. 28	·1370	5. 34	·02913			
2. 23	43. 10	2. 37	·1374	6. 33	·02856			
2. 26	44. 20	2. 42	·1362	8. 58	·02791			
2. 29	44. 20	2. 49	·1371	13. 56	·02811			
2. 39	47. 50	2. 51	·1368	18. 6	·02806			
2. 43	42. 30	3. 4	·1380	20. 23	·02791			
2. 56	44. 0	3. 11	·1353	20. 43	·02791			
2. 57	46. 0	3. 21	·1369	20. 56	·02783			
3. 7	49. 45	3. 23	·1366	23. 0	·02784			
3. 10	39. 35	3. 27	·1373	23. 59	·02795			
3. 13	38. 50	3. 37	·1361					
3. 18	40. 0	3. 44	·1381					
3. 23	40. 0	3. 53	·1366					
3. 28	43. 55	3. 56	·1371					
3. 39	37. 0	4. 4	·1364					
3. 46	37. 0	4. 15	·1367					
3. 56	33. 0	4. 21	·1347					
4. 3	36. 25	4. 33	·1350					
4. 10	40. 0	4. 36	·1349					
4. 13	45. 20	4. 50	·1382					
4. 17	44. 20	4. 58	·1393					
4. 23	44. 20	5. 5	·1381					
4. 28	33. 0	5. 11	·1409					
4. 39	24. 10	5. 15	·1348					
4. 53	29. 55	5. 26	·1363					
4. 56	28. 40	5. 34	·1361					
4. 59	31. 0	5. 40	·1369					
5. 3	27. 0	5. 42	·1354					
5. 11	44. 0	5. 45	·1357					
5. 17	29. 5	5. 51	·1348					
5. 26	31. 20	5. 57	·1337					
5. 28	29. 0	6. 5	·1341					
5. 37	31. 10	6. 25	·1359					
5. 41	31. 20	6. 40	·1364					
5. 46	35. 20	7. 0	·1367					
5. 56	35. 20	7. 44	·1379					
5. 58	32. 20	7. 53	·1377					
6. 9	33. 0	8. 6	·1387					
6. 13	32. 30	8. 13	·1383					
6. 38	35. 35	8. 17	·1383					
6. 44	34. 50	8. 26	·1379					
6. 55	35. 15	8. 44	·1381					
7. 9	34. 50	8. 59	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 14 h m	° ′ ″	Oct. 14 h m		h m		h m	°	°
7. 24	20. 35. 10	9. 19	·1389					
7. 48	34. 0	9. 28	·1381					
7. 59	35. 0	9. 34	·1384					
8. 10	34. 10	9. 40	·1379					
8. 42	34. 10	9. 44	·1384					
8. 57	35. 25	9. 51	·1382					
9. 13	33. 10	10. 12	·1388					
9. 29	32. 50	10. 19	·1382					
10. 8	34. 0	10. 40	·1387					
10. 12	32. 55	10. 49	·1381					
10. 37	34. 0	11. 0	·1385					
10. 54	34. 0	11. 11	·1384					
11. 24	33. 0	11. 24	·1387					
11. 33	33. 40	11. 37	·1383					
12. 43	32. 50	11. 45	·1386					
	***	12. 19	·1384					
13. 38	33. 40	12. 50	·1387					
13. 59	33. 5	12. 56	·1383					
	***	13. 4	·1386					
14. 57	33. 5	13. 30	·1384					
15. 8	32. 30	13. 50	·1390					
15. 37	33. 20	13. 55	·1387					
15. 52	33. 20	14. 6	·1389					
15. 56	32. 50	14. 13	·1387					
16. 23	32. 40		***					
16. 42	33. 30	15. 6	·1391					
16. 53	33. 5	15. 19	·1389					
	***	16. 2	·1390					
17. 47	34. 30	16. 16	·1389					
18. 10	36. 20	16. 43	·1392					
18. 22	36. 20	17. 9	·1388					
18. 39	35. 25	17. 20	·1390					
18. 46	35. 20	17. 39	·1389					
19. 7	36. 15	17. 55	·1390					
19. 11	36. 5	18. 39	·1398					
19. 39	36. 30	18. 57	·1397					
	***	19. 55	·1387					
20. 9	36. 30	20. 20	·1379					
20. 12	37. 35	20. 25	·1376					
20. 22	37. 30	20. 44	·1378					
20. 40	41. 30	20. 54	·1383					
20. 55	41. 0	21. 14	·1367					
20. 57	40. 0	21. 39	·1379					
21. 3	40. 0	21. 59	·1382					
21. 14	37. 20	22. 14	·1378					
21. 24	38. 30	22. 20	·1380					
21. 26	38. 0	22. 43	·1375					
21. 40	39. 5	22. 52	·1377					
21. 47	38. 30	23. 11	·1371					
22. 8	39. 50	23. 34	·1375					
22. 11	39. 30	23. 54	·1376					
22. 24	40. 40	23. 59	·1373					
22. 38	40. 0							
22. 53	40. 40							
23. 8	40. 20							
23. 39	41. 45							
23. 54	42. 10							
23. 59	41. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 15		Oct. 15		Oct. 15		Oct. 15		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 41. 30	0. 0	·1373	0. 0	·02795	1. 0	60 ·4	61 ·0
0. 23	41. 40	0. 14	·1375	3. 9	·02846	Max.	60 ·6	62 ·4
0. 42	40. 0	0. 49	·1378	5. 34	·02842	8. 0	59 ·3	61 ·0
1. 28	39. 20	1. 27	·1379	5. 50	·02832	Min.	58 ·7	60 ·0
1. 42	39. 0	2. 9	·1384	8. 9	·02821	21. 0	59 ·0	60 ·3
1. 56	39. 0	2. 43	·1380	12. 42	·02809			
2. 7	38. 30	3. 11	·1383	12. 59	·02803			
2. 12	38. 30	3. 26	·1378	15. 9	·02781			
2. 43	37. 0	3. 45	·1382	16. 1	·02742			
3. 5	37. 5	4. 26	·1367	16. 20	·02753			
3. 14	36. 5	5. 2	·1374	17. 4:	·02735			
4. 0	34. 55	5. 13	·1379	18. 38	·02755			
4. 21	35. 40	5. 40	·1378	23. 59	·02786			
4. 23	35. 0	5. 52	·1374					
4. 53	34. 0	6. 15	·1378					
5. 6	33. 0	6. 41	·1384					
5. 26	34. 50	7. 58	·1387					
5. 43	32. 45	8. 12	·1399					
5. 53	32. 20	8. 14	·1389					
6. 11	33. 20	8. 40	·1393					
6. 38	33. 20	8. 49	·1388					
6. 41	32. 50	9. 16	·1386					
6. 56	33. 50	9. 39	·1393					
7. 41	33. 30	9. 51	·1385					
8. 7	34. 25	9. 55	·1391					
8. 41	33. 30	10. 28	·1387					
8. 56	32. 30	10. 41	·1394					
9. 16	31. 50	10. 58	·1395					
9. 37	33. 0	11. 42	·1385					
9. 41	32. 0	12. 0	·1387					
9. 48	31. 25	12. 13	·1384					
10. 9	33. 0	12. 41	·1385					
10. 15	32. 25	12. 45	·1388					
10. 28	29. 0	12. 57	·1386					
10. 56	27. 40	13. 13	·1387					
11. 8	28. 0	13. 51	·1384					
11. 27	30. 30	14. 26	·1386					
12. 13	30. 30	14. 41	·1382					
12. 31	32. 50	14. 45	·1384					
12. 39	32. 50	15. 10	·1381					
12. 55	30. 0	15. 25	·1383					
13. 6	28. 15	15. 58	·1377					
14. 11	28. 50	16. 49	·1404					
14. 22	28. 30	17. 15	·1396					
14. 28	30. 0	18. 4	·1384					
14. 42	28. 55	18. 24	·1383					
14. 58	31. 0	18. 42	·1390					
15. 13	34. 10	18. 54	·1389					
15. 41	37. 30	19. 6	·1392					
15. 53	37. 30	19. 42	·1386					
15. 59	34. 30	20. 11	·1380					
16. 11	37. 10	20. 19	·1374					
16. 26	38. 50	20. 40	·1376					
16. 51	36. 0	20. 45	·1378					
17. 17	36. 0	21. 20	·1373					
17. 26	36. 40	21. 27	·1367					
17. 44	35. 30	21. 38	·1367					
18. 10	34. 30	21. 55	·1373					
18. 43	20. 37. 0	22. 42	·1381					
18. 57	36. 30	22. 54	·1375					
19. 11	37. 20	23. 0	·1378					
19. 39	35. 0	23. 19	·1380					
19. 59	34. 15	23. 29	·1378					
20. 11	35. 0	23. 59	·1381					
20. 14	33. 55							
20. 38	32. 45							
21. 0	34. 10							
21. 37	33. 30							
22. 16	36. 0							
22. 46	38. 40							
22. 56	37. 0							
23. 2	37. 30							
23. 17	38. 5							
23. 28	37. 30							
23. 56	38. 30							
23. 59	38. 20							
Oct. 16		Oct. 16		Oct. 16		Oct. 16		
0. 0	20. 38. 20	0. 0	·1381	0. 0	·02786	1. 0	59 ·7	61 ·0
0. 8	38. 5	0. 27	·1388	1. 8	·02807	3. 0	59 ·9	61 ·6
0. 51	38. 50	0. 35	·1390	3. 1	·02836	Max.	60 ·4	62 ·1
0. 57	39. 5	0. 56	·1393	5. 57:	·02814	9. 0	58 ·7	60 ·1
1. 41	37. 20	1. 25	·1388	8. 40	·02809	Min.	58 ·7	60 ·0
2. 9	37. 20	1. 41	·1387	9. 49	·02783	21. 0	59 ·1	62 ·0
2. 24	36. 40	2. 13	·1392	10. 41	·02779			
2. 54	36. 20	3. 9	·1390	11. 13	·02794			
3. 12	35. 0	3. 25	·1387	11. 29	·02787			
3. 39	34. 40	3. 37	·1388	11. 59	·02800			
3. 57	34. 40	4. 12	·1385	13. 28	·02810			
4. 44	33. 30	5. 59	·1392	13. 31	·02821			
5. 51	32. 50	6. 5	·1390	13. 34	·02806			
5. 56	31. 55	6. 48	·1394	15. 53	·02810			
6. 24	31. 55	7. 25	·1388	18. 24	·02817			
6. 44	31. 20	7. 43	·1386	20. 19	·02814			
7. 37	32. 0	7. 56	·1388	22. 56	·02801			
7. 57	32. 50	8. 25	·1384	23. 59	·02811			
8. 9	32. 0	8. 56	·1390					
8. 21	32. 30	9. 24	·1404					
8. 36	32. 30	10. 0	·1399					
9. 8	28. 30	10. 24	·1395					
9. 35	30. 50	10. 43	·1387					
9. 54	29. 30	10. 54	·1391					
10. 26	33. 45	11. 8	·1387					
10. 32	33. 55	11. 13	·1388					
10. 51	31. 30	11. 40	·1379					
10. 56	33. 0	11. 56	·1387					
11. 6	33. 10	12. 12	·1386					
11. 24	37. 10	12. 27	·1387					
11. 39:	32. 15	13. 4	·1383					
11. 57:	33. 40	13. 38	·1384					
12. 14	32. 0	14. 11	·1383					
12. 45	34. 0	14. 20	·1386					
12. 53	35. 10	14. 51	·1384					
12. 58	34. 30	15. 14	·1387					
13. 11	32. 30	16. 19	·1389					
13. 24	33. 0	17. 27	·1386					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 16		Oct. 16						
h m	° ′ ″	h m		h m		h m	°	°
13. 38	20. 31. 20	18. 14	·1385					
14. 7	32. 40	18. 42	·1388					
14. 23	32. 10	22. 57	·1381					
14. 40	33. 0	23. 59	·1388					
15. 7	32. 30							
15. 43	33. 20							
15. 56	34. 10							
16. 14	33. 30							
16. 40	33. 20							
17. 26	33. 15							
19. 0	32. 20							
20. 6	30. 55							
20. 45	31. 15							
22. 53	36. 5							
23. 26	37. 30							
23. 59	38. 10							
Oct. 17		Oct. 17		Oct. 17		Oct. 17		
0. 0	20. 38. 10	0. 0	·1388	0. 0	·02811	1. 0	60 ·7	62 ·5
0. 14	38. 50	0. 18	·1392	3. 26	·02835	3. 0	61 ·0	62 ·8
1. 26	38. 0	0. 25	·1388	8. 59	·02827	Max.	61 ·0	63 ·9
1. 41	37. 0	0. 56	·1391	9. 39	·02798	9. 0	56 ·8	59 ·0
1. 57	37. 20	1. 25	·1393	12. 16	·02799	Min.	56 ·7	58 ·0
2. 41	36. 0	1. 41	·1390	14. 15	·02786	21. 0	59 ·6	61 ·0
2. 53	36. 0	1. 50	·1393	20. 57	·02778	22. 0	59 ·5	61 ·0
4. 24	34. 0	2. 15	·1388	22. 30	·02762	23. 0	59 ·6	61 ·0
4. 40	34. 30	2. 37	·1387	23. 59	·02772			
4. 52	34. 0	2. 50	·1391					
5. 0	34. 0	3. 43	·1390					
5. 11	34. 30	4. 25	·1387					
5. 40	34. 0	4. 45	·1393					
5. 54	34. 30	4. 57	·1390					
6. 36	35. 0	5. 11	·1387					
9. 11	33. 20	5. 41	·1389					
9. 31	33. 35	5. 51	·1393					
11. 10	33. 20	6. 26	·1392					
11. 36	33. 40	6. 34	·1394					
12. 10	33. 50	6. 57	·1392					
12. 28	35. 0	7. 11	·1394					
12. 56	32. 0	7. 48	·1392					
13. 4	32. 30	8. 6	·1393					
13. 11	32. 5	8. 57	·1389					
13. 38	33. 10	9. 44	·1392					
13. 47	32. 50	11. 9	·1390					
13. 56	32. 50	11. 46	·1392					
14. 11	31. 35	12. 11	·1392					
14. 42	32. 10	12. 36	·1397					
14. 56	31. 50	12. 57	·1394					
15. 10	32. 50	13. 39	·1398					
15. 27	33. 10	13. 49	·1395					
16. 0	34. 25	13. 57	·1396					
16. 23	33. 0	14. 39	·1393					
16. 40	33. 20	14. 50	·1394					
16. 53	32. 10	15. 0	·1390					
17. 11	32. 40	15. 14	·1392					
17. 28	32. 30	15. 36	·1389					
17. 40	33. 5	16. 40	·1395					
17. 43	32. 20	16. 54	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 17		Oct. 17						
h m	° ′ ″	h m		h m		h m	°	°
17. 55	20. 33. 5	17. 13	·1396					
18. 6	32. 20	17. 26	·1393					
18. 26	32. 0	18. 0	·1394					
18. 56	32. 0	18. 34	·1396					
19. 7	32. 45	18. 52	·1394					
19. 28	32. 45	19. 4	·1395					
19. 43	33. 15	19. 20	·1387					
	***	20. 4	·1385					
20. 16	32. 15	20. 12	·1384					
20. 27	33. 10	20. 20	·1387					
20. 42	32. 30	20. 41	·1384					
20. 46	32. 30	20. 55	·1385					
20. 54	31. 40	21. 30	·1382					
21. 12	33. 30	21. 43	·1384					
21. 26	32. 30	21. 51	·1378					
21. 43	33. 40	21. 56	·1380					
21. 51	33. 40	22. 10	·1377					
22. 35	35. 30	22. 26	·1381					
22. 43	35. 30	22. 41	·1377					
23. 9	37. 30	22 56	·1381					
23. 26	37. 30	23. 40	·1383					
23. 53	38. 30	23. 43	·1381					
23. 59	39. 40	23. 59	·1388					
Oct. 18		Oct. 18		Oct. 18		Oct. 18		
0. 0	20. 39. 40	0. 0	·1388	0. 0	·02772	0. 0	59 ·6	62 ·0
0. 11	39. 50	0. 6	·1385	3. 54	·02843	1. 0	60 ·1	61 ·5
0. 25	39. 20	0. 26	·1383	5. 34	·02842	2. 0	60 ·1	62 ·0
0. 28	40. 50	0. 39	·1385	6. 3	·02851	3. 0	60 ·6	62 ·0
0. 36	40. 10	0. 41	·1382	9. 18	·02817	Max.	60 ·6	62 ·2
0. 41	41. 0	0. 49	·1384	10. 57	·02751	9. 0	59 ·6	62 ·0
0. 58	39. 50	0. 51	·1380	11. 15	·02777	Min.	59 ·1	60 ·0
1. 8	40. 45	0. 56	·1381	11. 40	·02738	21. 0	59 ·6	60 ·7
1. 12	40. 0	1. 14	·1385	11. 53	·02708	22. 0	59 ·5	60 ·1
1. 16	41. 0	1. 20	·1383	12. 4	·02699	23. 0	59 ·4	60 ·3
1. 28	38. 55	1. 25	·1386	12. 29	·02643			
1. 54	39. 40	1. 40	·1378	13. 9	·02696			
1. 57	38. 50	1. 52	·1384	14. 49	·02768			
2. 23	39. 40	2. 9	·1376	15. 3	·02749			
	***	2. 25	·1382		***			
3. 11	37. 20	2. 42	·1380	15. 59	·02737			
3. 22	35. 45	3. 6	·1385	16. 9	·02702			
3. 26	35. 45	3. 26	·1376	16. 31	·02675			
3. 39	35. 10	3. 35	·1376	17. 15	·02723			
3. 57	37. 50	3. 52	·1382	18. 1	·02721			
4. 10	37. 10	4. 12	·1377	18. 14	·02729			
4. 13	35. 45	4. 26	·1382	19. 53	·02756			
4. 26	35. 10	4. 43	·1381	21. 34	·02760			
4. 37	36. 10	4. 56	·1386	22. 19	·02743			
4. 53	34. 50	5. 9	·1377	23. 59	·02743			
4. 58	34. 50	5. 12	·1378					
5. 9	33. 20	5. 24	·1372					
5. 11	33. 20	5. 44	·1365					
5. 23	31. 30	6. 20	·1380					
5. 43	29. 0	6. 27	·1378					
6. 8	31. 20	6. 59	·1384					
6. 12	31. 5	7. 24	·1385					
6. 26	32. 30	7. 56	·1388					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
6. 29	20. 31. 50	8. 11	·1385					
7. 0	33. 45	8. 30	·1387					
7. 38	33. 0	8. 53	·1379					
7. 59	31. 30	9. 24	·1380					
8. 25	27. 30	9. 43	·1389					
8. 38	28. 5	9. 47	·1387					
8. 44	26. 50	10. 9	·1396					
9. 7	27. 10	10. 45	·1383					
9. 11	27. 50	10. 55	·1375					
9. 25	25. 50	11. 13	·1368					
9. 34	26. 0	11. 40:	·1389					
9. 45	22. 5	11. 52	·1384					
10. 11	26. 40	11. 56	·1389					
10. 42	29. 0	12. 6	·1385					
10. 56	25. 40	12. 16	·1402					
11. 7	24. 30	12. 40	·1379					
11. 34	38. 0	12. 49	·1385					
11. 41	39. 5	13. 13	·1393					
11. 47	42. 10	13. 27	·1390					
11. 56	41. 0	13. 45	·1385					
12. 9	43. 10	14. 6	·1386					
12. 12	41. 0	14. 42	·1382					
12. 23	41. 50	14. 53	·1389					
12. 35	24. 0	14. 57	·1386					
13. 9	27. 0	15. 12	·1387					
13. 38	25. 35	15. 15	·1391					
13. 56	28. 0	15. 26	·1385					
14. 17	28. 30	15. 30	·1386					
14. 40	32. 40	15. 52	·1371					
14. 54	36. 20	16. 12	·1400					
15. 8	31. 0	16. 27	·1414					
15. 12	33. 5	16. 37	·1407					
15. 15	32. 50	16. 49	·1402					
15. 25	33. 40	16. 56	·1394					
15. 41	40. 0	17. 40	·1392					
15. 53	46. 20	18. 6	·1399					
16. 3	37. 40	18. 14	·1386					
16. 7	37. 40	18. 19	·1392					
16. 11	34. 10	18. 41	·1380					
16. 24	28. 50	19. 4	·1384					
16. 27	28. 20	19. 19	·1382					
16. 38	30. 40	19. 25	·1386					
16. 41	29. 45	19. 50	·1382					
16. 55	29. 30	20. 11	·1384					
17. 9	32. 10	20. 20	·1382					
17. 14	32. 0	20. 30	·1385					
17. 25	32. 0	20. 41	·1380					
17. 31	33. 30	20. 49	·1384					
17. 42	32. 50	21. 14	·1377					
17. 53	35. 0	21. 41	·1382					
18. 3	33. 0	21. 48	·1379					
18. 8	33. 30	22. 9	·1383					
18. 12	32. 10	22. 15	·1377					
18. 20	32. 10	22. 42	·1374					
18. 29	30. 35	22. 57	·1373					
18. 42	30. 35	23. 11	·1377					
18. 54	31. 15	23. 19	·1372					
19. 1	30. 10	23. 38	·1368					
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
19. 25	20. 31. 0	23. 50	·1376					
19. 42	30. 30	23. 59	·1372					
20. 11	30. 30							
20. 24	31. 40							
20. 33	30. 10							
20. 39	31. 40							
20. 53	31. 40							
20. 57	32. 30							
21. 8	31. 50							
	***							
21. 37	34. 20							
21. 42	34. 40							
22. 8	37. 30							
22. 23	37. 10							
22. 56	38. 15							
23. 8	39. 50							
23. 24	39. 30							
23. 27	40. 40							
23. 51	43. 50							
23. 54	43. 50							
23. 59	44. 25							
Oct. 19		Oct. 19		Oct. 19		Oct. 19		
0. 0	20. 44. 25	0. 0	·1372	0. 0	·02743	0. 0	59 ·4	60 ·3
0. 25	42. 55	0. 12	·1371	1. 9	·02771	1. 0	59 ·5	60 ·5
0. 39	43. 5	0. 24	·1357	1. 36	·02852	3. 0	59 ·5	60 ·4
0. 42	44. 55	0. 29	·1368	1. 54	·02829	Max.	60 ·1	62 ·4
0. 53	44. 55	0. 37	·1375	2. 11	·02868	9. 0	58 ·7	60 ·2
0. 57	49. 10	0. 42	·1372	2. 19	·02856	Min.	56 ·9	58 ·0
1. 6	48. 10	0. 45	·1378	2. 35	·03012	21. 0	57 ·0	58 ·6
1. 8	44. 30	0. 49	·1374	2. 41	·03036			
1. 12	44. 30	0. 56	·1387	2. 45	·02996			
1. 25	36. 0	0. 58	·1382	2. 47	·03009			
1. 41	37. 30	1. 11	·1360	2. 55	·02937			
1. 53	44. 0	1. 24	·1398	3. 53	·02908			
1. 58	37. 10	1. 30	·1384	3. 56	·02876			
2. 10	42. 10	1. 45	·1381	4. 19	·02911			
2. 14	47. 5	1. 58	·1348	4. 36	·02922			
2. 25	48. 45	2. 3	·1370	4. 48	·02897			
2. 27	45. 30	2. 17	·1400	4. 53	·02942			
2. 39	31. 10	2. 26	·1360	4. 56	·02953			
2. 41	34. 10	2. 38	·1384	5. 13	·02872			
2. 53	14. 40	2. 42	·1417	5. 31	·02870			
2. 58	27. 50	2. 49	·1360	5. 38	·02844			
3. 8	26. 40	2. 57	·1412	5. 53	·02891			
3. 22	42. 40	3. 10	·1393	6. 1	·02902			
3. 27	40. 5	3. 12	·1397	6. 19	·02835			
3. 32	42. 40	3. 22	·1386	6. 32	·02847			
3. 39	41. 10	3. 35	·1396	6. 53	·02818			
3. 55	51. 15	3. 39	·1396	7. 6	·02824			
3. 57	53. 50	3. 52	·1409	7. 10	·02793			
4. 2	52. 0	4. 5	·1379	7. 25	·02814			
4. 8	47. 0	4. 11	·1371	7. 40	·02793			
4. 13	43. 55	4. 26	·1385	8. 13	·02809			
4. 25	45. 0	4. 40	·1372	8. 19	·02832			
4. 40	40. 20	4. 45	·1383	8. 26	·02782			
4. 46	42. 40	5. 3	·1371	8. 32	·02793			
4. 57	32. 10	5. 7	·1362	8. 44	·02698			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 19		Oct. 19		Oct. 19				
h m	° ′ ″	h m		h m		h m	°	°
5. 7	20. 21. 20	5. 14	·1395	8. 53	·02718			
5. 13	40. 15	5. 24	·1374	8. 59	·02683			
5. 25	35. 45	5. 28	·1387	11. 13	·02729			
5. 28	41. 20	5. 35	·1361	13. 37	·02712			
5. 36	30. 0	5. 41	·1386	19. 3	·02661			
5. 45	38. 0	5. 56	·1345	20. 4	·02654			
5. 53	32. 0	6. 11	·1367	20. 54	·02643			
5. 57	15. 0	6. 24	·1391	22. 41	·02616			
6. 6	8. 10	6. 40	·1376	23. 59	·02626			
6. 26	15. 20	6. 49	·1388					
6. 38	16. 15	6. 52	·1385					
6. 41	18. 30	6. 56	·1389					
6. 45	26. 10	7. 11	·1367					
6. 53	23. 50	7. 15	·1374					
6. 58	29. 50	7. 23	·1346					
7. 6	28. 15	7. 42	·1366					
7. 11	34. 0	7. 51	·1356					
7. 14	30. 55	7. 57	·1358					
7. 22	31. 50	8. 0	·1355					
7. 25	29. 50	8. 20	·1357					
7. 31	32. 30	8. 34	·1393					
7. 41	33. 40	8. 37	·1388					
7. 55	32. 0	8. 43	·1409					
8. 10	32. 40	8. 54	·1363					
8. 22	18. 0	9. 4	·1393					
8. 31	31. 0	9. 12	·1366					
8. 39	40. 50	9. 24	·1353					
8. 53	31. 20	9. 39	·1370					
8. 59	40. 0	9. 50	·1377					
9. 11	31. 40	9. 56	·1372					
9. 13	31. 0	10. 10	·1374					
9. 24	21. 55	10. 13	·1373					
9. 28	22. 10	10. 21	·1374					
9. 39	21. 55	10. 35	·1370					
9. 53	25. 30	10. 52	·1372					
10. 10	28. 0	11. 0	·1369					
10. 25	31. 20	11. 24	·1377					
10. 28	31. 10	11. 31	·1372					
10. 39	31. 50	11. 43	·1377					
10. 43	31. 20	11. 54	·1375					
10. 55	31. 50	12. 15	·1380					
10. 58	30. 30	12. 27	·1376					
11. 23	31. 40	12. 34	·1378					
11. 27	31. 15	12. 43	·1376					
12. 10	34. 30	12. 50	·1377					
12. 13	33. 40	12. 53	·1374					
12. 16	34. 45	13. 12	·1378					
12. 25	33. 40	13. 19	·1376					
12. 42	33. 20	13. 26	·1379					
12. 55	33. 45	13. 30	·1377					
12. 59	34. 30	14. 13	·1381					
13. 11	33. 50	14. 55	·1379					
13. 19	35. 10	15. 40	·1382					
13. 29	34. 20	15. 52	·1380					
13. 33	34. 35	16. 11	·1385					
13. 43	34. 5	16. 41	·1381					
13. 47	34. 35	16. 46	·1385					
13. 53	33. 50	16. 58	·1382					
13. 57	20. 34. 20	17. 11	·1386					
14. 10	33. 55	17. 20	·1380					
14. 24	34. 20	17. 36	·1381					
15. 11	33. 40	17. 43	·1378					
15. 26	34. 5	17. 56	·1387					
15. 38	33. 20	18. 15	·1384					
15. 43	34. 5	18. 26	·1386					
15. 56	32. 30	18. 42	·1384					
	***	18. 56	·1385					
16. 34	33. 35	19. 23	·1379					
16. 39	32. 40	19. 45	·1380					
	***	19. 53	·1384					
16. 59	33. 40	20. 4	·1377					
17. 26	33. 10	20. 12	·1380					
17. 30	33. 35	21. 23	·1374					
17. 39	32. 30	21. 35	·1368					
18. 6	33. 30	21. 42	·1374					
18. 11	32. 45	22. 0	·1367					
18. 58	32. 25	22. 16	·1370					
19. 39	31. 45		***					
19. 41	31. 0	23. 15	·1366					
19. 44	32. 35	23. 54	·1369					
19. 54	31. 45	23. 59	·1366					
19. 57	30. 0							
20. 9	31. 25							
20. 28	30. 30							
21. 9	31. 35							
21. 23	31. 15							
21. 27	31. 45							
21. 38	30. 50							
21. 43	32. 25							
22. 13	32. 25							
22. 25	34. 0							
22. 44	34. 30							
23. 11	36. 20							
23. 24	36. 5							
23. 55	38. 15							
23. 59	38. 10							
Oct. 20		Oct. 20		Oct. 20		Oct. 20		
0. 0	20. 38. 10	0. 0	·1366	0. 0	·02626	1. 0	58·1	59·0
0. 41	40. 50	0. 25	·1362	2. 45	·02666	3. 0	57·6	59·0
0. 56	41. 5	0. 45	·1366	2. 56	·02664	Max.	58·2	60·2
1. 5	40. 0	0. 59	·1362	3. 39	·02709	9. 0	57·8	59·0
1. 9	40. 5	1. 10	·1363	6. 54	·02652	Min.	56·2	57·3
1. 15	39. 30	1. 15	·1358	7. 3	·02664	21. 0	56·3	57·5
1. 42	41. 35	1. 41	·1367	7. 34	·02627			
1. 57	40. 30	1. 52	·1366	7. 46	·02638			
2. 7	39. 40	2. 8	·1374	8. 9	·02619			
2. 26	39. 0	2. 43	·1383	9. 37	·02611			
2. 42	39. 0	2. 53	·1378	9. 56	·02588			
2. 45	38. 25	3. 4	·1368	11. 4	·02579			
2. 55	38. 50	3. 23	·1383	11. 46	·02601			
2. 59	36. 0	3. 41	·1390		***			
3. 10	32. 45	3. 45	·1387	15. 49	·02572			
3. 14	31. 0	3. 55	·1388	20. 38	·02538			
3. 26	29. 40	4. 9	·1387	23. 59	·02533			
3. 31	29. 10	4. 27	·1389					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 20		Oct. 20						
h m	° ′ ″	h m		h m		h m	°	°
3. 43	20. 32. 0	4. 45	·1381					
3. 56	33. 10	5. 4	·1383					
4. 10	32. 30	5. 13	·1381					
4. 16	32. 40	5. 28	·1384					
4. 27	33. 50	5. 43	·1374					
4. 31	33. 20	5. 56	·1376					
4. 43	34. 30	6. 16	·1384					
5. 8	32. 40	6. 27	·1381					
5. 23	31. 25	6. 45	·1386					
5. 40	35. 15	6. 55	·1383					
5. 55	34. 0	7. 12	·1407					
5. 59	34. 20	7. 20	·1399					
6. 12	34. 0	7. 26	·1399					
6. 39	35. 30	7. 40	·1388					
6. 45	35. 10	7. 56	·1409					
7. 0	27. 20	8. 20:	·1391					
7. 23	34. 30	8. 40	·1394					
7. 29	34. 30	8. 56	·1382					
7. 42	25. 50	9. 7	·1387					
7. 57	32. 40	9. 20	·1383					
8. 27	30. 55	9. 32	·1396					
8. 42	31. 35	9. 41	·1392					
8. 55	28. 50	9. 50	·1399					
9. 4	29. 0	10. 10	·1388					
9. 13	30. 40	10. 26	·1404					
9. 23	30. 40	10. 40	·1398					
9. 28	31. 35	10. 56	·1392					
9. 38	31. 35	11. 16	·1377					
9. 44	34. 45	11. 45	·1386					
9. 56	34. 45	11. 56	·1384					
10. 10	29. 30	12. 9	·1387					
10. 28	31. 30	12. 36	·1385					
10. 44	29. 55	13. 12	·1389					
10. 57	30. 5	13. 26	·1384					
11. 14	26. 50	13. 42	·1387					
11. 26	26. 50	13. 59	·1381					
11. 43	29. 30	14. 12	·1382					
11. 53	29. 30	14. 41	·1390					
11. 58	30. 30	14. 50	·1386					
12. 26	28. 10	14. 58	·1389					
12. 33	29. 0	15. 26	·1388					
13. 14	30. 10	16. 0	·1392					
13. 21	29. 5	16. 34	·1400					
13. 38	28. 50	16. 43	·1396					
13. 53	30. 45	17. 11	·1398					
14. 14	29. 50	17. 20	·1406					
14. 25	30. 25	17. 26	·1399					
14. 43	29. 50	17. 40	·1407					
14. 53	30. 20	17. 43	·1403					
14. 56	29. 55	17. 57	·1405					
15. 3	31. 0	18. 10	·1403					
15. 30	31. 30	18. 19	·1406					
15. 40	32. 5	18. 29	·1401					
15. 56	33. 30	18. 40	·1405					
16. 8	33. 0	18. 46	·1395					
16. 23	33. 10	18. 57	·1395					
16. 28	32. 30	19. 3	·1403					
16. 39	33. 0	19. 13	·1398					
16. 44	20. 32. 20	19. 36	·1400					
16. 55	32. 50	20. 5	·1396					
17. 9	32. 50	20. 43	·1394					
17. 23	33. 5	20. 49	·1396					
17. 26	36. 10	22. 2	·1386					
17. 41	33. 30	22. 30	·1387					
17. 51	32. 30	22. 56	·1385					
17. 54	32. 30	23. 30	·1394					
17. 56	31. 50	23. 59	·1389					
18. 3	33. 30							
18. 10	33. 20							
18. 13	32. 20							
18. 26	33. 0							
18. 30	32. 30							
18. 39	33. 10							
18. 56	31. 30							
19. 3	32. 30							
19. 15	32. 0							
19. 38	32. 5							
19. 50	33. 0							
20. 13	31. 30							
20. 26	31. 10							
21. 11	33. 0							
21. 14	32. 30							
22. 8	33. 45							
22. 40	35. 30							
22. 43	36. 10							
22. 53	35. 30							
23. 14	36. 25							
23. 23	37. 20							
23. 27	36. 30							
23. 40	38. 50							
23. 49	38. 30							
23. 56	37. 30							
23. 59	38. 10							
Oct. 21		Oct. 21		Oct. 21		Oct. 21		
0. 0	20. 38. 10	0. 0	·1389	0. 0	·02533	Min.	56 ·7	57 ·9
0. 26	38. 20	0. 25	·1390	1. 49	·02554	1. 0	56 ·8	58 ·0
0. 39	39. 30	0. 41	·1393	2. 32	·02591	3. 0	57 ·3	58 ·5
0. 44	38. 55	0. 45	·1391	2. 43	·02586	9. 0	57 ·8	59 ·0
0. 57	41. 20	0. 54	·1398	3. 0	·02605	21. 15	58 ·6	59 ·3
1. 8	40. 55	1. 11	·1394	3. 36	·02609	Max.	58 ·7	60 ·2
1. 28	41. 25	1. 19	·1396	4. 8	·02618			
1. 41	40. 10	1. 40	·1392	4. 40	·02636			
1. 53	40. 10	1. 51	·1393	5. 1	·02619			
1. 57	39. 55	1. 57	·1389	5. 30	·02637			
2. 8	41. 50	2. 11	·1394	5. 54	·02637			
2. 24	38. 50	2. 22	·1386	7. 15	·02610			
2. 39	38. 35	2. 40	·1391	8. 38	·02612			
2. 56	32. 30	2. 52	·1376	9. 3	·02606			
3. 3	32. 30	3. 4	·1386	19. 34	·02628			
3. 11	31. 40	3. 13	·1385	22. 9	·02604			
3. 27	32. 40	3. 28	·1393	23. 59	·02622			
3. 38	31. 25	3. 51	·1382					
3. 51	32. 50	4. 10	·1388					
3. 56	32. 20	4. 22	·1384					
4. 11	33. 0	4. 45	·1393					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 21		Oct. 21						
h m	° ′ ″	h m		h m		h m	°	°
4. 24	20. 31. 15	5. 0	·1377					
4. 29	31. 40	5. 13	·1367					
4. 41	33. 35	5. 25	·1374					
4. 52	36. 10	5. 41	·1379					
4. 58	33. 30	5. 56	·1385					
5. 12	27. 10	6. 11	·1379					
5. 27	26. 30	6. 41	·1390					
5. 38	28. 10	7. 33	·1394					
5. 41	28. 10	7. 54	·1391					
6. 2	34. 45	8. 11	·1393					
6. 14	34. 20	8. 22	·1392					
6. 40	35. 30	8. 42	·1401					
6. 53	35. 30	8. 57	·1392					
7. 9	34. 40	9. 12	·1386					
7. 26	34. 30	9. 28	·1387					
7. 43	35. 10	9. 40	·1391					
7. 55	33. 50	10. 12	·1386					
8. 7	34. 10	10. 31	·1392					
8. 13	30. 40	10. 48	·1389					
8. 26	29. 55	11. 10	·1391					
8. 41	33. 0	11. 18	·1394					
8. 50	33. 0	11. 34	·1389					
9. 12	29. 55	11. 43	·1393					
9. 28	29. 40	11. 57	·1389					
9. 55	32. 0	12. 25	·1392					
10. 8	31. 40	12. 54	·1391					
10. 27	33. 5	13. 12	·1394					
10. 43	32. 55	13. 24	·1392					
10. 53	33. 5	13. 56	·1395					
11. 8	32. 30	16. 10	·1394					
11. 23	34. 10	16. 20	·1396					
11. 34	32. 10	16. 34	·1392					
13. 26	33. 25	16. 43	·1396					
13. 41	34. 15	16. 54	·1394					
14. 23	33. 35	19. 24	·1393					
15. 54	33. 25	21. 23	·1387					
15. 56	33. 50	22. 12	·1382					
16. 9	33. 10	23. 22	·1385					
16. 22	33. 55	23. 42	·1389					
16. 27	33. 10	23. 59	·1390					
16. 40	33. 30							
16. 43	34. 20							
16. 51	33. 15							
17. 8	33. 5							
18. 13	32. 50							
19. 24	31. 55							
20. 32	31. 20							
21. 8	31. 20							
22. 59	36. 5							
23. 11	36. 5							
23. 59	37. 15							
Oct. 22		Oct. 22		Oct. 22		Oct. 22		
0. 0	20. 37. 15	0. 0	·1390	0. 0	·02622	1. 0	59 ·3	60 ·1
0. 50	38. 20	1. 10	·1394	4. 9	·02681	Max.	59 ·9	61 ·9
0. 59	38. 0	2. 14	·1396	7. 53	·02722	8. 0	59 ·6	61 ·3
1. 58	38. 10	2. 45	·1393	16. 13	·02698	Min.	57 ·9	59 ·5
2. 9	38. 10	3. 14	·1396	19. 54	·02676	21. 0	58 ·8	59 ·9

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 22		Oct. 22		Oct. 22				
h m	° ′ ″	h m		h m		h m	°	°
2. 44	20. 37. 0	5. 44	·1394	22. 27	·02641			
2. 56	37. 10	6. 2	·1397	23. 59	·02653			
3. 28	36. 30	6. 22	·1396					
4. 23	35. 40	6. 42	·1399					
4. 56	35. 30	6. 55	·1393					
5. 10	35. 50	7. 11	·1391					
5. 30	34. 45	7. 20	·1393					
6. 38	35. 5	7. 36	·1388					
6. 58	35. 40	8. 28	·1397					
7. 25	34. 35	8. 50	·1392					
7. 39	33. 45	9. 0	·1405					
7. 56	33. 20	9. 14	·1407					
8. 29	34. 5	9. 50	·1387					
8. 53	33. 55	10. 34	·1395					
8. 57	29. 30	10. 54	·1389					
9. 29	30. 40	11. 6	·1393					
9. 39	30. 10	11. 16	·1390					
9. 42	30. 30	11. 40	·1392					
9. 52	30. 30	11. 54	·1389					
9. 56	30. 15	13. 49	·1392					
10. 8	31. 0	14. 11	·1393					
10. 12	30. 50	17. 41	·1397					
10. 23	31. 30	18. 18	·1399					
10. 41	31. 30	19. 25	·1398					
10. 53	30. 55	20. 43	·1393					
11. 4	32. 15	21. 25	·1392					
11. 13	31. 0	21. 56	·1396					
11. 47	33. 20	22. 11	·1393					
11. 56	33. 0	22. 48	·1391					
12. 24	34. 0	23. 19	·1393					
12. 38	33. 25	23. 59	·1394					
14. 23	33. 10							
14. 31	33. 30							
14. 42	33. 45							
15. 8	33. 0							
15. 27	33. 35							
15. 41	33. 10							
16. 8	33. 10							
16. 12	32. 20							
16. 26	33. 35							
16. 44	33. 55							
16. 57	33. 20							
17. 29	34. 0							
18. 14	32. 25							
19. 25	33. 0							
19. 56	32. 20							
20. 23	32. 10							
20. 43	31. 40							
20. 57	31. 40							
21. 46	33. 0							
21. 57	34. 25							
22. 11	34. 0							
23. 8	36. 10							
23. 12	35. 50							
23. 25	36. 30							
23. 59	37. 5							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 23		Oct. 23		Oct. 23		Oct. 23		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 5	0. 0	·1394	0. 0	·02653	1. 0	58·6	59·6
0. 58	38. 15	0. 26	·1398	2. 29	·02664	3. 0	58·8	59·9
1. 54	38. 0	1. 57	·1400	3. 1	·02675	Max.	59·0	60·7
2. 28	36. 50	2. 14	·1397	6. 56	·02681	9. 0	58·8	60·0
2. 44	36. 35	2. 52	·1400	7. 19	·02676	Min.	57·5	58·8
2. 56	37. 5	2. 58	·1404	7. 53	·02697	21. 0	57·8	59·0
3. 7	36. 10	3. 12	·1398	8. 34	·02677			
3. 39	35. 30	3. 41	·1396	17. 44	·02664			
4. 12	35. 30	5. 14	·1402	19. 26	·02657			
4. 47	35. 50	5. 26	·1395	23. 59	·02622			
4. 55	35. 10	5. 50	·1399					
5. 0	36. 0	6. 11	·1398					
5. 12	35. 0	6. 25	·1401					
5. 25	35. 35	6. 43	·1398					
5. 30	35. 10	7. 7	·1403					
5. 44	35. 25	7. 27	·1385					
6. 3	35. 10	7. 59	·1394					
6. 11	34. 40	8. 12	·1406					
6. 43	34. 50	8. 39	·1404					
7. 9	35. 0	8. 55	·1396					
7. 30	30. 15	10. 12	·1397					
7. 57	33. 5	10. 56	·1396					
8. 8	30. 50	12. 11	·1394					
8. 13	31. 20	12. 27	·1397					
8. 23	31. 0	12. 53	·1394					
8. 28	29. 30	13. 22	·1398					
8. 41	29. 50	14. 6	·1397					
9. 12	33. 5	15. 15	·1398					
9. 56	32. 45	15. 35	·1399					
10. 13	33. 5	17. 0	·1398					
11. 6	32. 30	17. 52	·1396					
11. 56	32. 25	18. 3	·1401					
12. 16	32. 40	18. 13	·1398					
13. 0	32. 25	18. 34	·1403					
13. 12	33. 5	20. 0	·1398					
13. 38	32. 40	20. 20	·1399					
13. 56	32. 55	21. 27	·1390					
14. 11	32. 40	22. 40	·1387					
15. 26	33. 50	23. 37	·1386					
15. 38	33. 0	23. 59	·1392					
16. 38	33. 30							
16. 58	33. 0							
17. 14	33. 20							
17. 26	33. 5							
17. 41	32. 55							
17. 53	32. 45							
17. 56	34. 0							
18. 8	32. 15							
18. 14	32. 10							
18. 28	32. 40							
19. 53	31. 0							
20. 27	30. 50							
21. 11	30. 45							
23. 21	35. 15							
23. 44	36. 0							
23. 59	37. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 24		Oct. 24		Oct. 24		Oct. 24		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 5	0. 0	·1392	0. 0	·02622	1. 0	58·8	60·5
0. 31	37. 30	0. 43	·1395	2. 25	·02673	3. 0	58·8	60·5
0. 42	38. 10	0. 55	·1393	11. 57	·02679	Max.	59·5	61·4
0. 57	38. 10	1. 58	·1395	22. 16	·02622	9. 0	58·8	60·5
1. 24	38. 0	2. 22	·1397	23. 59	·02634	Min.	57·7	58·9
1. 44	38. 0	3. 11	·1390			21. 0	58·2	59·2
2. 9	37. 30	3. 48	·1393			22. 30	58·5	59·6
2. 28	37. 30	4. 19	·1388			23. 0	58·7	59·6
2. 58	36. 40	4. 55	·1394					
3. 14	35. 20	5. 14	·1392					
3. 39	36. 5	5. 44	·1396					
4. 39	34. 30	6. 13	·1395					
4. 56	35. 0	7. 12	·1398					
5. 24	33. 25	8. 22	·1394					
5. 53	34. 30	8. 56	·1396					
6. 8	34. 5	9. 40	·1394					
6. 36	35. 0	10. 28	·1396					
6. 41	34. 30	10. 44	·1395					
6. 58	34. 50	11. 42	·1395					
7. 30	34. 40	12. 5	·1393					
7. 42	34. 5	13. 41	·1395					
9. 11	33. 0	14. 13	·1394					
9. 23	33. 0	18. 29	·1400					
9. 28	33. 20	20. 0	·1398					
10. 14	32. 30	21. 30	·1391					
10. 26	33. 0	22. 52	·1388					
10. 51	32. 20	23. 59	·1394					
11. 6	32. 30							
11. 54	32. 5							
12. 24	33. 10							
13. 23	33. 10							
15. 8	33. 30							
15. 23	34. 10							
15. 43	33. 40							
16. 9	34. 0							
16. 24	33. 10							
16. 41	33. 40							
16. 56	33. 10							
17. 43	32. 25							
18. 7	33. 0							
18. 51	32. 45							
19. 28	32. 5							
21. 5	32. 20							
	***							
23. 15	37. 10							
23. 59	37. 40							
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
0. 0	20. 37. 40	0. 0	·1394	0. 0	·02634	0. 0	58·9	59·7
0. 30	39. 5	0. 29	·1398	2. 1	·02642	1. 0	58·9	59·9
0. 42	39. 0	0. 49	·1401	2. 16	·02668	3. 0	58·9	60·1
0. 54	39. 45	0. 57	·1402	3. 2	·02647	Max.	59·8	61·5
1. 12	38. 45	1. 11	·1400	4. 39	·02655	9. 0	58·8	60·0
1. 37	41. 50	1. 30	·1413	4. 44	·02662	Min.	57·2	58·2
1. 44	41. 0	1. 52	·1407	5. 35	·02691	21. 0	57·8	58·8
1. 54	39. 30	1. 57	·1403	6. 19:	·02737	22. 0	57·8	58·8
1. 58	39. 30	2. 8	·1412	7. 24	·02696	23. 0	57·8	58·8
2. 7	38. 20	2. 15	·1417	10. 54	·02671			

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct.25		Oct.25		Oct.25				
h m	° ′ ″	h m		h m		h m	°	°
2. 12	20. 42. 0	2. 35	·1406	11. 10	·02657			
2. 24	43. 10	2. 42	·1409	11. 54	·02659			
2. 28	41. 30	2. 45	·1405	12. 9	·02663			
2. 39	40. 40	2. 50	·1406	13. 6	·02644			
2. 43	40. 40	3. 6	·1393	23. 0	·02597			
2. 51	39. 45	3. 13	·1394	23. 59	·02599			
2. 56	40. 10	3. 32	·1404					
2. 57	37. 0	3. 41	·1413					
3. 9	39. 10	3. 45	·1403					
3. 16	39. 50	4. 19	·1406					
3. 42	42. 50	4. 41	·1412					
3. 44	40. 15	4. 54	·1419					
3. 55	40. 30	5. 11	·1413					
4. 9	39. 55	5. 35	·1394					
4. 12	40. 5	5. 49	·1372					
4. 26	39. 30	6. 0	·1377					
4. 45	40. 50	6. 11	·1374					
5. 8	40. 50	6. 53	·1388					
5. 28	45. 55	7. 15	·1396					
5. 39	44. 30	7. 26	·1403					
6. 7	32. 0	7. 44	·1395					
6. 14	30. 20	8. 11	·1393					
6. 24	30. 55	8. 41	·1396					
6. 42	36. 15	9. 0	·1394					
6. 44	35. 10	9. 30	·1392					
6. 56	36. 35	9. 41	·1394					
7. 13	36. 45	10. 22	·1387					
7. 53	35. 30	10. 46	·1388					
7. 58	35. 30	11. 12	·1396					
8. 14	34. 30	11. 18	·1393					
8. 25	34. 40	11. 30	·1400					
8. 51	33. 30	11. 43	·1392					
9. 24	33. 30	12. 11	·1381					
9. 54	32. 0	12. 57	·1394					
10. 14	30. 30	13. 26	·1390					
10. 51	30. 40	15. 40	·1395					
11. 9	30. 0	16. 27	·1398					
11. 23	22. 10	17. 44	·1397					
11. 38	24. 30	19. 14	·1403					
12. 6	27. 50	21. 32	·1394					
12. 42	34. 30	21. 43	·1397					
12. 55	34. 0	21. 54	·1394					
13. 0	34. 0	22. 25	·1396					
13. 13	33. 20	22. 55	·1394					
13. 26	34. 10	23. 23	·1398					
13. 39	33. 40	23. 40	·1397					
13. 56	33. 40	23. 53	·1403					
14. 10	33. 20	23. 59	·1401					
14. 23	33. 55							
14. 42	33. 55							
14. 52	33. 45							
14. 55	33. 45							
15. 10	33. 20							
15. 55	33. 55							
16. 37	32. 45							
17. 10	33. 15							
17. 41	32. 45							
19. 54	32. 20							
Oct.25								
h m	° ′ ″							
19. 58	20. 31. 50							
20. 9	32. 30							
	***							
20. 56	32. 30							
	***							
21. 26	33. 15							
21. 38	33. 0							
21. 43	34. 5							
21. 56	33. 50							
	***							
23. 25	37. 10							
23. 29	37. 10							
23. 42	37. 30							
23. 56	38. 30							
23. 59	38. 0							
Oct.26		Oct.26		Oct.26		Oct.26		
0. 0	20. 38. 0	0. 0	·1401	0. 0	·02599	0. 0	57 ·8	58 ·8
0. 30	38. 15	0. 40	·1404	1. 53	·02621	Min.	57 ·8	58 ·8
0. 48	43. 0	0. 52	·1413	2. 43	·02648	1. 0	58 ·1	59 ·2
0. 57	41. 55	1. 6	·1404	3. 9	·02673	3. 0	58 ·2	59 ·0
1. 26	41. 55	1. 34	·1399	3. 18	·02703	9. 0	59 ·3	61 ·0
1. 40	40. 15	1. 54	·1383	3. 32	·02815	Max.	60 ·0	61 ·7
1. 54	41. 45	2. 14	·1389	3. 35	·02804	21. 0	59 ·3	61 ·0
2. 11	46. 25	2. 25	·1393	3. 39	·02853			
2. 13	46. 5	2. 42	·1387	3. 40	·02795			
2. 27	47. 0		***	3. 54	·02802			
2. 34	46. 45	2. 56	·1382	4. 1	·02843			
2. 39	47. 50	3. 15	·1388	4. 14	·02852			
2. 53	46. 45	3. 25	·1385	4. 16	·02866			
3. 9	47. 10	3. 33	·1397	4. 18	·02849			
3. 23	48. 35	3. 41	·1425	4. 24	·02897			
3. 26	44. 5	3. 45	·1412	4. 31	·02861			
3. 38	51. 20	3. 50	·1382	4. 35	·02879			
3. 42	34. 0	3. 56	·1404	4. 41	·02863			
3. 44	37. 0	4. 11	·1384	4. 54	·02863			
3. 50	30. 0	4. 14	·1397	5. 9	·03011			
3. 52	32. 20	4. 21	·1372	5. 14	·03048			
3. 55	32. 20	4. 27	·1386	5. 18	·03020			
4. 5	40. 5	4. 40	·1367	5. 23	·03019			
4. 11	37. 5	4. 44	·1370	5. 24	·02988			
4. 13	43. 50	4. 50	·1389	5. 27	·03011			
4. 15	39. 0	5. 0	·1384	5. 34	·02862			
4. 18	37. 0	5. 4	·1388	5. 44	·02801			
4. 26	43. 50	5. 13	·1370	6. 28	·02762			
4. 29	44. 20	5. 25	·1392	6. 47	·02760			
4. 39	34. 10	5. 37	·1345	7. 25	·02809			
4. 55	43. 30	5. 43	·1356	7. 40	·02743			
4. 57	43. 10	5. 44	·1351	7. 48	·02745			
4. 59	46. 50	5. 53	·1367	7. 55	·02750			
5. 4	45. 15	6. 0	·1359	8. 6	·02732			
5. 9	39. 0	6. 7	·1342	8. 15	·02730			
5. 23	44. 0	6. 13	·1346	8. 26	·02711			
5. 33	15. 5	6. 27	·1375	9. 27	·02728			
5. 44	18. 0	6. 45	·1345	11. 9	·02712			
5. 56	25. 50	7. 2	·1353	11. 16	·02691			
6. 6	19. 0	7. 12	·1349	11. 55	·02682			
6. 11	17. 15	7. 24	·1353	12. 26	·02702			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 26		Oct. 26		Oct. 26				
h m	° ′ ″	h m		h m		h m	°	°
6. 39	20. 32. 10	7. 30	·1352	20. 55	·02709			
6. 53	23. 20	7. 43	·1371		·02760			
7. 11	30. 20	7. 48	·1402	23. 59	·02778			
7. 12	30. 10	7. 54	·1393					
7. 29	35. 10	8. 0	·1391					
7. 37	22. 25	8. 9	·1355					
7. 42	30. 10	8. 16	·1391					
7. 53	28. 30	8. 24	·1376					
7. 59	37. 0	8. 35	·1388					
8. 8	22. 0	8. 43	·1363					
8. 13	27. 10	8. 54	·1377					
8. 25	23. 10	9. 4	·1360					
8. 38	28. 50	9. 26	·1366					
8. 42	21. 50	9. 36	·1357					
8. 56	26. 45	9. 49	·1364					
8. 59	23. 40	10. 4	·1373					
9. 7	23. 15	10. 14	·1367					
9. 25	29. 10	10. 25	·1370					
9. 30	27. 55	10. 37	·1374					
9. 41	28. 55	10. 42	·1369					
9. 44	28. 30	10. 51	·1367					
9. 56	29. 45	11. 6	·1372					
10. 13	29. 45	11. 14	·1371					
10. 26	30. 20	11. 26	·1378					
10. 43	29. 25	11. 41	·1393					
10. 55	30. 0	11. 45	·1384					
10. 57	31. 35	11. 54	·1390					
11. 9	32. 5	12. 5	·1380					
11. 24	30. 15	12. 30	·1372					
11. 33	33. 10	12. 40	·1375					
11. 41	33. 0	12. 42	·1372					
11. 53	35. 25	12. 49	·1377					
12. 23	29. 40	12. 55	·1373					
12. 53	32. 0	13. 14	·1369					
13. 8	30. 25	13. 22	·1372					
13. 33	31. 40	13. 45	·1370					
13. 56	31. 50	14. 0	·1374					
14. 6	33. 20	14. 13	·1370					
14. 13	32. 0	14. 22	·1373					
14. 26	31. 40	14. 50	·1376					
14. 29	32. 10	14. 55	·1374					
14. 37	31. 30	15. 26	·1379					
14. 42	31. 40	15. 42	·1376					
14. 55	32. 40	16. 0	·1380					
15. 11	32. 40	16. 9	·1376					
15. 27	32. 0	16. 16	·1379					
15. 44	31. 50	16. 30	·1386					
16. 3	32. 45	16. 48	·1382					
16. 11	32. 45	16. 55	·1384					
16. 15	30. 0	17. 8	·1378					
16. 27	30. 10	17. 14	·1379					
16. 42	29. 20	17. 24	·1376					
16. 57	31. 40	17. 35	·1380					
17. 8	30. 30	17. 42	·1376					
17. 37	33. 15	18. 18	·1381					
17. 43	32. 45	18. 24	·1379					
17. 54	32. 45	18. 33	·1382					
18. 9	31. 45	18. 56	·1381					
18. 25	20. 33. 20	19. 4	·1386					
18. 43	32. 20	19. 9	·1381					
	***	19. 14	·1384					
18. 59	31. 45	19. 40	·1380					
19. 11	32. 20	20. 9	·1382					
19. 22	31. 40	20. 16	·1377					
	***	20. 25	·1382					
19. 58	33. 10	20. 41	·1379					
20. 13	31. 40	20. 48	·1383					
20. 24	32. 40	20. 56	·1375					
20. 29	32. 10		***					
20. 41	32. 10	21. 10	·1379					
20. 45	33. 45	21. 30	·1369					
20. 56	32. 10	21. 43	·1374					
20. 58	34. 10	21. 50	·1371					
21. 4	32. 55	22. 10	·1373					
21. 37	31. 30	22. 15	·1371					
21. 41	32. 55	22. 23	·1375					
21. 43	32. 20	22. 53	·1371					
21. 46	32. 20	23. 10	·1364					
21. 55	32. 50	23. 19	·1365					
21. 58	32. 15	23. 42	·1361					
22. 10	33. 0	23. 59	·1366					
22. 13	32. 30							
22. 23	34. 40							
22. 39	35. 50							
22. 42	35. 15							
22. 56	36. 40							
23. 1	35. 0							
23. 12	34. 5							
23. 27	33. 40							
23. 59	35. 30							
Oct. 27		Oct. 27		Oct. 27		Oct. 27		
0. 0	20. 35. 30	0. 0	·1366	0. 0	·02778	1. 0	60 ·1	61 ·5
0. 26	36. 20	0. 24	·1372	1. 44	·02790	3. 0	60 ·1	61 ·5
0. 43	37. 15	1. 16	·1378	4. 7	·02811	Max.	60 ·7	62 ·2
1. 19	36. 5	1. 38	·1378	5. 13	·02800	9. 0	58 ·8	60 ·5
1. 26	36. 55	1. 53	·1386	8. 38	·02792	Min.	57 ·4	58 ·4
1. 44	36. 30	2. 30	·1383		·02857	21. 0	57 ·8	59 ·0
2. 11	37. 20	2. 50	·1385	21. 56	·02762			
2. 34	36. 30	3. 14	·1382	23. 59	·02777			
2. 44	36. 40	3. 25	·1384					
3. 11	35. 50	3. 34	·1379					
3. 22	35. 50	3. 53	·1384					
3. 26	34. 50	4. 34	·1386					
3. 41	34. 0	5. 14	·1385					
4. 9	34. 0	5. 54	·1388					
4. 15	34. 40	6. 14	·1381					
4. 26	34. 20	6. 28	·1385					
4. 41	35. 5	6. 59	·1379					
4. 47	34. 30	7. 23	·1373					
5. 22	35. 5	7. 32	·1378					
5. 33	34. 30	7. 41	·1378					
5. 56	34. 30	7. 55	·1382					
6. 26	36. 0	8. 41	·1386					
6. 45	35. 20	8. 58	·1394					
6. 56	35. 45	9. 12	·1410					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 27		Oct. 27						
h m	° ′ ″	h m		h m		h m	°	°
7. 9	20. 34. 50	9. 36	·1400					
7. 29	31. 0	10. 4	·1397					
7. 40	31. 35	11. 13	·1391					
7. 44	31. 35	11. 36	·1395					
7. 58	33. 0	11. 52	·1389					
8. 8	33. 10	12. 10	·1392					
8. 12	33. 45	12. 41	·1393					
8. 23	33. 5	12. 54	·1395					
8. 40	34. 20	13. 11	·1393					
8. 42	33. 0	13. 22	·1396					
8. 57	29. 45	13. 40	·1392					
9. 4	26. 10	14. 29	·1394					
9. 15	30. 30	14. 41	·1393					
9. 27	30. 0	15. 22	·1398					
9. 44	31. 30	15. 56	·1394					
9. 55	31. 30	16. 13	·1390					
10. 10	30. 15	16. 25	·1393					
10. 13	30. 35	16. 40	·1392					
10. 39	28. 30	17. 15	·1396					
11. 12	30. 0	17. 21	·1394					
11. 24	31. 0	17. 33	·1396					
11. 40	29. 30	17. 40	·1393					
12. 11	31. 40	17. 59	·1398					
12. 44	31. 40	18. 24	·1404					
12. 57	31. 15	18. 39	·1400					
13. 16	31. 30	18. 45	·1403					
13. 26	32. 20	19. 12	·1392					
13. 42	30. 55	19. 37	·1398					
13. 56	30. 40	19. 42	·1396					
14. 10	31. 35	19. 56	·1398					
14. 23	31. 15	20. 26	·1396					
14. 40	32. 0	21. 10	·1395					
14. 54	31. 45	21. 14	·1386					
15. 7	32. 5	21. 25	·1393					
15. 28	30. 20	21. 49	·1390					
15. 54	32. 30	22. 44	·1388					
17. 14	32. 40	23. 11	·1389					
17. 28	31. 20	23. 27	·1388					
17. 43	30. 30	23. 59	·1390					
18. 14	32. 15							
18. 30	31. 0							
18. 41	31. 0							
18. 56	30. 10							
19. 12	31. 15							
19. 25	30. 30							
19. 28	31. 10							
19. 39	30. 30							
	***							
20. 14	30. 40							
20. 26	30. 0							
21. 6	30. 0							
21. 11	31. 10							
21. 25	31. 10							
21. 28	30. 30							
21. 39	31. 0							
21. 42	32. 15							
21. 52	31. 40							
22. 10	31. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 27								
h m	° ′ ″	h m		h m		h m	°	°
23. 38	20. 35. 20							
23. 59	35. 30							
Oct. 28		Oct. 28		Oct. 28		Oct. 28		
0. 0	20. 35. 30	0. 0	·1390	0. 0	·02777	1. 0	58·8	60·0
0. 7	35. 10	0. 14	·1394	2. 31	·02811	3. 0	59·2	60·5
0. 12	36. 15	0. 25	·1393		·02662	Max.	59·7	61·7
0. 21	35. 45	0. 45	·1397	10. 6	·02681	9. 0	59·2	60·5
0. 39	36. 10	1. 18	·1392	10. 52	·02670	Min.	57·1	57·9
0. 44	37. 0	2. 6	·1400	14. 2	·02652	21. 0	57·3	58·0
0. 58	36. 45	2. 12	·1398		(†)			
1. 11	36. 0	2. 26	·1400	21. 0	·02614*			
1. 41	35. 50	2. 39	·1399	22. 55	·02558			
2. 24	36. 15	2. 44	·1392	23. 59	·02562			
2. 38	35. 30	2. 59	·1394					
2. 41	36. 50	3. 24	·1392					
3. 26	36. 0	3. 29	·1394					
3. 51	35. 10	3. 42	·1392					
6. 12	34. 30	5. 14	·1391					
7. 26	35. 0	5. 44	·1390					
7. 53	34. 30	6. 51	·1389					
8. 13	34. 20	7. 52	·1387					
8. 24	33. 20	8. 4	·1390					
8. 30	33. 50	8. 12	·1388					
8. 56	28. 50	8. 24	·1391					
9. 3	29. 0	9. 0	·1384					
9. 23	31. 45	9. 18	·1391					
9. 39	30. 45	10. 12	·1382					
9. 55	29. 40	10. 35	·1390					
10. 8	30. 35	10. 54	·1391					
10. 44	29. 30	11. 11	·1385					
10. 53	29. 30	11. 19	·1386					
11. 8	30. 20	11. 26	·1383					
11. 25	30. 0	11. 45	·1387					
11. 37	30. 40	11. 59	·1380					
11. 41	31. 40	12. 39	·1384					
11. 53	31. 15		(†)					
12. 8	32. 5	21. 0	·1388*					
12. 23	31. 30	21. 36	·1383					
12. 40	32. 45	22. 25	·1385					
12. 47	32. 20	23. 25	·1387					
12. 59	33. 15	23. 59	·1390					
13. 29	32. 40							
13. 54	32. 40							
13. 59	31. 55							
14. 11	31. 55							
14. 30	34. 30							
14. 39	34. 30							
14. 45	33. 10							
15. 9	32. 5							
15. 26	32. 40							
15. 55	32. 20							
16. 30	31. 15							
17. 0	31. 40							
17. 17	31. 40							
17. 30	33. 10							
17. 43	33. 10							
18. 11	31. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct.28								
h m	° ′ ″	h m		h m		h m	°	°
19. 12	20. 34. 55							
19. 29	33. 10							
19. 45	34. 15							
19. 58	34. 15							
20. 56	32. 0							
21. 29	32. 40							
21. 56	35. 20							
21. 59	34. 40							
22. 23	33. 20							
22. 38	34. 40							
22. 42	34. 15							
22. 54	35. 10							
23. 25	33. 20							
23. 38	34. 20							
23. 59	34. 50							
Oct.29		Oct.29		Oct.29		Oct.29		
0. 0	20. 34. 50	0. 0	·1390	0. 0	·02562	0. 0	56·8	58·0
0. 29	35. 35	0. 55	·1394	1. 56	·02573	Min.	56·6	57·8
0. 38	35. 10	1. 3	·1392	3. 34	·02609	8. 0	59·8	61·5
0. 42	35. 30	1. 13	·1396	9. 40	·02672	Max.	60·3	62·0
0. 52	35. 10	1. 26	·1394	20. 42	·02658	21. 0	59·6	60·5
0. 58	36. 0	1. 42	·1396	22. 56	·02631			
1. 11	36. 0	2. 19	·1392	23. 4	·02623			
1. 14	36. 40	2. 39	·1394	23. 59	·02636			
1. 35	36. 5	3. 5	·1386					
1. 49	37. 20	3. 19	·1388					
2. 9	36. 55	3. 43	·1381					
2. 30	36. 35	3. 57	·1386					
3. 0	35. 30	4. 15	·1384					
3. 27	38. 0	5. 20	·1392					
3. 43	35. 40	5. 49	·1394					
3. 56	36. 5	6. 57	·1388					
4. 14	35. 20	7. 13	·1390					
4. 32	35. 40	7. 49	·1385					
4. 56	34. 40	10. 0	·1390					
5. 9	34. 55	10. 26	·1386					
5. 13	33. 45	10. 49	·1388					
5. 26	34. 5	11. 20	·1383					
5. 38	33. 45	12. 24	·1385					
5. 58	34. 30	12. 36	·1387					
6. 14	34. 0	12. 57	·1384					
6. 59	34. 0	13. 48	·1386					
7. 7	33. 40	15. 18	·1387					
9. 32	32. 50	16. 54	·1390					
9. 44	33. 10	17. 55	·1394					
9. 59	30. 50	18. 44	·1389					
10. 13	31. 20	18. 54	·1391					
10. 26	31. 5	19. 58	·1387					
10. 40	31. 50	21. 19	·1391					
10. 43	31. 30	22. 0	·1396					
10. 59	32. 10	22. 12	·1395					
11. 28	31. 30	22. 22	·1397					
11. 39	32. 25	22. 40	·1395					
11. 46	32. 25	22. 59	·1399					
11. 53	32. 0	23. 6	·1405					
12. 9	32. 30	23. 11	·1394					
12. 21	32. 10	23. 15	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct.29		Oct.29						
h m	° ′ ″	h m		h m		h m	°	°
12. 43	20. 32. 50	23. 23	·1395					
12. 56	32. 10	23. 42	·1400					
13. 21	33. 10	23. 59	·1402					
13. 53	33. 5							
14. 6	32. 15							
14. 28	32. 30							
14. 43	32. 15							
15. 44	33. 0							
15. 56	32. 30							
16. 11	32. 50							
16. 42	31. 30							
17. 6	32. 0							
17. 26	31. 15							
18. 11	31. 50							
18. 42	31. 50							
18. 57	31. 30							
19. 10	31. 15							
19. 14	31. 30							
19. 41	31. 20							
19. 56	31. 35							
20. 39	31. 20							
21. 23	31. 0							
21. 38	31. 20							
21. 42	30. 30							
22. 13	31. 50							
22. 29	33. 20							
22. 44	34. 0							
22. 59	37. 0							
23. 8	39. 40							
23. 14	34. 45							
23. 36	36. 10							
23. 59	36. 10							
Oct.30		Oct.30		Oct.30		Oct.30		
0. 0	20. 36. 10	0. 0	·1402	0. 0	·02636	1. 0	60·3	61·6
0. 27	37. 15	0. 22	·1406	2. 4	·02666	3. 0	60·1	61·7
0. 39	40. 30	0. 37	·1414	2. 59	·02729	Max.	60·3	61·8
0. 41	40. 50	0. 42	·1408	4. 5	·02730	9. 0	59·6	61·0
0. 44	39. 40	0. 51	·1412	4. 13	·02742	Min.	59·0	61·0
1. 8	40. 30	0. 58	·1408	5. 8	·02763	21. 0	59·6	61·0
1. 26	43. 5	1. 0	·1412	6. 1	·02881			
1. 30	42. 45	1. 25	·1419	6. 26	·02856			
1. 42	42. 40	1. 52	·1412	7. 24	·02786			
1. 55	44. 10	2. 10	·1374	8. 42	·02752			
2. 8	41. 10	2. 12	·1379	8. 56	·02742			
2. 11	43. 10	2. 15	·1363	9. 31	·02591			
2. 13	40. 50	2. 24	·1379	9. 39	·02639			
2. 26	46. 50	2. 35	·1370	9. 48	·02631			
2. 41	47. 10	2. 55	·1372	10. 6	·02681			
2. 46	48. 20	3. 15	·1364	10. 34	·02672			
2. 54	46. 10	3. 41	·1367	10. 51	·02702			
3. 9	44. 0	3. 49	·1360	12. 4	·02682			
3. 12	42. 15	4. 13	·1382	12. 15	·02568			
3. 38	43. 30	4. 26	·1393	12. 39	·02668			
3. 42	44. 50	4. 41	·1385	13. 4	·02637			
3. 54	43. 0	4. 53	·1394	13. 39	·02643			
3. 57	40. 40	4. 58	·1384	14. 1	·02640			
4. 9	40. 40	5. 6	·1386	14. 46	·02664			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 30		Oct. 30		Oct. 30				
h m	° ′ ″	h m		h m		h m	°	°
4. 14	20. 42. 55	5. 15	·1372	18. 47	·02677			
4. 23	42. 55	5. 38	·1378		***			
4. 39	45. 30	5. 54	·1356	21. 18	·02671			
5. 0	45. 50	6. 13	·1324	21. 58	·02683			
5. 23	40. 20	6. 32	·1358		***			
5. 28	43. 10	6. 42	·1371	23. 59	·02701			
5. 43	35. 10	6. 54	·1365					
5. 54	36. 50	6. 59	·1366					
6. 14	21. 45	7. 15	·1363					
6. 45	30. 0	7. 24	·1365					
7. 0	27. 40	7. 34	·1360					
7. 13	28. 0	7. 56	·1371					
7. 24	30. 20	8. 14	·1372					
7. 28	30. 20	8. 26	·1378					
7. 44	28. 0	8. 40	·1375					
8. 13	26. 20	8. 49	·1364					
8. 23	28. 0	9. 0	·1357					
8. 26	28. 10	9. 8	·1377					
8. 36	31. 50	9. 12	·1360					
8. 41	30. 0	9. 22	·1352					
8. 54	31. 10	9. 26	·1361					
8. 59	38. 0	9. 36	·1346					
9. 3	38. 15	9. 42	·1315					
9. 12	43. 50	9. 55	·1375					
9. 16	40. 10	10. 0	·1366					
9. 26	43. 50	10. 23:	·1394					
9. 30	22. 0	10. 39	·1376					
9. 44	27. 10	10. 44	·1364					
9. 56	21. 20	10. 58	·1379					
10. 26	30. 5	11. 0	·1377					
10. 39	24. 0	11. 13	·1380					
10. 54	28. 0	11. 22	·1374					
10. 57	28. 0	11. 38	·1380					
11. 11	31. 0	11. 42	·1375					
11. 14	30. 45	11. 52	·1378					
11. 28	34. 30	12. 16	·1376					
11. 40	33. 30	12. 29	·1383					
11. 53	34. 5	12. 42	·1381					
11. 58	38. 10	12. 53	·1384					
12. 9	39. 30	13. 9	·1376					
12. 14	37. 40	13. 18	·1369					
12. 26	37. 10	13. 36	·1376					
12. 37	37. 0	13. 58	·1379					
12. 39	35. 35	14. 1	·1377					
12. 48	39. 45	14. 24	·1384					
13. 9	40. 0	14. 42	·1382					
13. 24	37. 0	14. 51	·1388					
13. 41	42. 0	14. 56	·1384					
13. 55	42. 40	15. 11	·1386					
14. 10	36. 40	15. 42	·1396					
14. 15	36. 45	16. 7	·1393					
14. 30	35. 25	16. 19	·1384					
14. 41	34. 5	16. 26	·1388					
14. 44	36. 5	16. 42	·1379					
14. 56	35. 55	16. 49	·1384					
15. 9	34. 20	17. 11	·1373					
15. 22	34. 10	17. 30	·1383					
15. 27	34. 50	17. 39	·1379					
15. 38	20. 36. 30	17. 42	·1382					
15. 41	36. 20	18. 0	·1374					
15. 53	34. 0	18. 11	·1377					
16. 9	34. 45	18. 20	·1374					
16. 20	32. 0	18. 35	·1377					
16. 26	32. 15	18. 49	·1387					
16. 30	33. 45	18. 57	·1382					
16. 39	31. 30	19. 15	·1392					
17. 0	33. 40	19. 28	·1382					
17. 11	32. 0	19. 40	·1388					
17. 27	36. 30	19. 42	·1382					
17. 36	35. 15	19. 53	·1388					
17. 39	35. 25	20. 30	·1386					
17. 44	34. 5	20. 53	·1379					
17. 55	34. 5	20. 57	·1381					
17. 59	33. 0	21. 11	·1370					
18. 23	34. 5	21. 16	·1353					
18. 25	33. 15	21. 24	·1344					
18. 29	33. 40	21. 31	·1350					
18. 44	36. 45	21. 42	·1341					
18. 53	34. 40		***					
19. 12	38. 15	22. 6	·1342					
19. 14	38. 15	22. 16	·1347					
19. 26	33. 15	22. 36	·1358					
19. 30	34. 50		***					
19. 37	31. 50	23. 12	·1356					
19. 41	32. 50	23. 20	·1365					
	***	23. 26	·1359					
20. 43	34. 15	23. 50	·1373					
20. 58	36. 10	23. 55	·1362					
21. 8	37. 20	23. 59	·1367					
21. 11	36. 55							
21. 30	36. 15							
21. 39	35. 0							
21. 55	39. 0							
21. 59	37. 40							
22. 9	39. 50							
22. 14	39. 50							
22. 25	39. 25							
22. 29	40. 30							
	***							
23. 9	39. 10							
23. 37	40. 30							
23. 42	43. 20							
23. 46	41. 10							
23. 55	44. 30							
23. 59	40. 0							
Oct. 31		Oct. 31		Oct. 31		Oct. 31		
0. 0	20. 40. 0	0. 0	·1367	0. 0	·02701	1. 0	60 ·1	61 ·0
0. 23	30. 15	0. 11	·1352	0. 54	·02768	3. 0	60 ·1	61 ·0
0. 26	32. 0	0. 13	·1356	1. 52	·02768	Max.	60 ·5	61 ·7
0. 43	37. 40	0. 17	·1336		***	9. 0	59 ·6	61 ·0
0. 54	36. 15	0. 25	·1347	2. 26:	·02843	Min.	58 ·0	60 ·0
1. 22	41. 35	0. 32	·1355		***	21. 0	58 ·8	60 ·0
1. 26	46. 10	0. 45	·1369	3. 8	·02774	22. 0	58 ·4	60 ·0
1. 41	43. 30	1. 0	·1375	3. 56	·02776	23. 0	58 ·7	60 ·1
1. 51	44. 30	1. 14	·1385	4. 4	·02778			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Oct. 31		Oct. 31		Oct. 31				
h m	° ′ ″	h m		h m		h m	°	°
1. 56	20. 43. 0	1. 28	·1369	4. 18	·02791			
1. 58	39. 0	1. 42	·1366	5. 8	·02749			
2. 9	42. 50	1. 55	·1348	5. 53	·02756			
2. 12	43. 0	2. 11	·1368	6. 7	·02773			
2. 25	35. 10	2. 17	·1365	7. 11	·02781			
2. 28	37. 50	2. 23	·1369	7. 24	·02762			
2. 37	30. 20	2. 25	·1379	7. 35	·02767			
2. 42	35. 0	2. 35	·1358	8. 8	·02663			
2. 46	36. 15	2. 42	·1378	9. 40	·02692			
2. 53	34. 10	2. 53	·1364	11. 38	·02692			
3. 10	40. 50	3. 5	·1379	12. 1	·02667			
3. 21	36. 15	3. 15	·1358	12. 43	·02669			
3. 26	37. 5	3. 26	·1367	13. 1	·02648			
3. 34	33. 30	3. 32	·1363	14. 30	·02633			
3. 41	29. 15	3. 42	·1361	15. 49	·02607			
3. 58	32. 50	3. 56	·1379	16. 44	·02613			
4. 6	29. 55	4. 11	·1362	17. 41	·02592			
4. 11	30. 0	4. 23	·1374	18. 9	·02610			
4. 23	32. 40	4. 30	·1368	18. 36	·02592			
4. 36	30. 5	4. 43	·1376	19. 8	·02623			
4. 41	32. 20	4. 59	·1384	20. 19	·02612			
4. 57	34. 40	5. 11	·1371	21. 25	·02656			
5. 3	34. 0	5. 25	·1380		***			
5. 9	32. 10	5. 51	·1366	22. 36	·02643			
5. 12	31. 40	5. 57	·1354	23. 9	·02646			
5. 23	31. 40	6. 11	·1367	23. 59	·02696			
5. 29	32. 10	6. 13	·1366					
5. 38	29. 0	6. 24	·1374					
5. 40	28. 10	6. 41	·1365					
5. 45	28. 40	6. 44	·1368					
5. 56	22. 0	6. 53	·1363					
6. 8	23. 40	6. 58	·1366					
6. 10	21. 40	7. 14	·1346					
6. 14	26. 0	7. 19	·1349					
6. 26	26. 0	7. 24	·1336					
6. 37	22. 15	7. 44	·1433					
6. 42	21. 20	7. 52	·1444					
6. 59	25. 30	8. 11	·1374					
7. 14	20. 16. 30	8. 19	·1386					
7. 28	19. 56. 20	8. 26	·1378					
7. 40	20. 10. 0	8. 45	·1387					
7. 52	30. 0	8. 54	·1373					
7. 54	33. 0	8. 58	·1376					
7. 57	34. 45	9. 6	·1369					
8. 7	24. 40	9. 11	·1372					
8. 13	25. 40	9. 15	·1368					
8. 23	18. 0	9. 25	·1372					
8. 40	24. 40	9. 40	·1362					
8. 43	22. 35	9. 52	·1374					
8. 54	22. 35	9. 54	·1373					
9. 10	24. 0	10. 0	·1378					
9. 24	28. 5	10. 14	·1370					
9. 27	27. 50	10. 26	·1377					
9. 41	29. 20	10. 41	·1372					
9. 44	28. 30	10. 51	·1374					
9. 57	29. 20	11. 0	·1379					
10. 7	26. 0	11. 15	·1376					
10. 26	24. 50	11. 29	·1378					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Oct. 31		Oct. 31						
h m	° ′ ″	h m		h m		h m	°	°
10. 57	20. 28. 0	11. 41	·1373					
11. 6	29. 30	11. 54	·1394					
11. 9	29. 20	12. 12	·1383					
11. 26	34. 40	12. 41	·1381					
11. 32	34. 15	13. 4	·1389					
12. 6	35. 50	13. 20	·1379					
12. 23	34. 15	13. 41	·1386					
12. 26	34. 25	14. 5	·1383					
12. 28	34. 5	14. 26	·1386					
12. 37	35. 30	14. 56	·1388					
12. 41	34. 15	15. 26:	·1360					
13. 8	39. 30	15. 43	·1374					
13. 20	38. 10	16. 24	·1382					
13. 25	36. 50	17. 0	·1414					
13. 32	36. 5	17. 11	·1411					
13. 42	37. 20	17. 19	·1415					
13. 56	37. 30	17. 40	·1394					
14. 14	35. 10	17. 56	·1378					
14. 23	35. 40	18. 13	·1380					
14. 51	34. 0	18. 29	·1359					
15. 11	37. 0	18. 40	·1367					
15. 26	42. 20	18. 44	·1360					
15. 37	41. 50	18. 57	·1367					
15. 43	43. 50	19. 3	·1367					
15. 55	43. 20	19. 10	·1364					
16. 12	40. 35	19. 15	·1373					
16. 26	38. 55	19. 19	·1368					
16. 55	39. 20	19. 31	·1371					
17. 10	41. 0	19. 45	·1385					
17. 37	46. 50	20. 23	·1364					
17. 40	45. 25		***					
17. 44	42. 0	20. 41	·1361					
17. 53	42. 35	20. 45	·1363					
17. 58	42. 0	20. 48	·1361					
18. 11	45. 30	20. 56	·1366					
18. 26	47. 0	21. 14	·1362					
18. 38	43. 30	21. 36	·1378					
18. 43	38. 40	21. 40	·1375					
18. 55	39. 30		***					
19. 9	38. 0	21. 56	·1384					
19. 16	45. 40	22. 11	·1378					
19. 38	43. 20	22. 30	·1391					
19. 51	47. 0	22. 45	·1379					
20. 3	47. 40	22. 59	·1363					
20. 29	44. 30	23. 19	·1344					
20. 40	42. 20	23. 27	·1322					
20. 42	43. 40	23. 34	·1325					
20. 56	43. 20	23. 44	·1321					
20. 59	41. 30	23. 52	·1335					
21. 24	36. 40	23. 55	·1332					
21. 33	40. 0	23. 59	·1338					
21. 38	38. 20							
	***							
22. 10	38. 20							
22. 14	37. 30							
22. 24	37. 15							
22. 36	42. 0							
22. 43	43. 20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 31								
h m	° ′ ″	h m		h m		h m	°	°
23. 9	20. 42. 30							
23. 16	42. 50							
23. 26	46. 10							
23. 29	44. 30							
23. 39	44. 30							
23. 43	41. 55							
23. 52	43. 20							
23. 59	43. 10							
Nov. 1		Nov. 1		Nov. 1		Nov. 1		
0. 0	20. 43. 10	0. 0	·1338	0. 0	·02696	0. 0	58·8	60·1
0. 9	45. 0	0. 11	·1334	2. 25	·02738	1. 0	58·9	60·2
0. 14	43. 30	0. 19	·1327	2. 41	·02756	2. 0	58·9	60·3
0. 22	41. 15	0. 26	·1335	3. 6	·02819	3. 0	58·9	60·6
0. 28	42. 40	0. 34	·1353	3. 27	·02757	Max.	59·0	61·7
0. 39	44. 30	0. 51	·1369	4. 14	·02764	9. 0	58·8	59·5
0. 44	45. 40	0. 55	·1365	4. 39	·02738	Min.	56·3	57·0
0. 55	45. 15	1. 7	·1368	5. 4	·02728	21. 0	56·3	57·0
0. 57	46. 50	1. 12	·1362	5. 19	·02736	22. 0	56·5	57·4
0. 58	45. 5	1. 32	·1364	5. 56	·02677	23. 0	56·4	57·4
1. 11	45. 30	1. 38	·1369	7. 3	·02676			
1. 15	43. 55	1. 45	·1367	7. 13	·02684			
1. 39	44. 15	2. 0	·1380	7. 35	·02638			
1. 42	43. 55	2. 11	·1377	7. 56	·02646			
2. 0	40. 50	2. 24	·1385	8. 9	·02658			
2. 7	39. 50	2. 29	·1385	9. 5	·02636			
2. 11	40. 10	2. 40	·1398	9. 49	·02634			
2. 39	40. 0	2. 44	·1391	10. 13	·02591			
2. 50	43. 50	2. 55	·1397	10. 26	·02588			
2. 54	39. 10	2. 57	·1393	10. 45	·02550			
2. 57	29. 5	3. 13	·1417	10. 55	·02550			
3. 6	24. 40	3. 21	·1380	11. 8	·02536			
3. 12	33. 50	3. 25	·1395	12. 50	·02583			
3. 23	26. 15	3. 36	·1367	13. 33	·02562			
3. 27	32. 50	3. 43	·1382	14. 14	·02566			
3. 39	27. 0	3. 48	·1381	14. 54:	·02532			
3. 58	39. 5	4. 0	·1345	15. 33	·02541			
4. 8	31. 0	4. 22	·1367	15. 51	·02529			
4. 20	35. 50	4. 40	·1360	17. 2	·02536			
4. 27	36. 15	4. 44	·1365	18. 0	·02511			
4. 39	31. 50	4. 51	·1358	18. 18	·02529			
4. 42	31. 50	5. 0	·1360	18. 41	·02524			
4. 50	28. 10	5. 9	·1353	18. 54	·02536			
4. 56	28. 5	5. 24	·1398	19. 26	·02517			
5. 2	25. 0	5. 35	·1407	20. 53	·02506			
5. 9	11. 20	5. 45	·1395	23. 59	·02496			
5. 14	16. 0	6. 3	·1377					
5. 34	25. 55	6. 25	·1380					
5. 54	34. 20	6. 47	·1362					
5. 59	33. 45	6. 59	·1363					
6. 7	33. 45	7. 12	·1402					
6. 14	34. 40	7. 18	·1405					
6. 38	32. 40	7. 36	·1378					
6. 43	32. 50	7. 41	·1385					
6. 54	31. 10	7. 54	·1370					
7. 1	20. 40	8. 0	·1381					
7. 8	26. 30	8. 16	·1391					
7. 19	33. 0	8. 30	·1387					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 1		Nov. 1						
h m	° ′	h m		h m		h m	°	°
7. 26	20. 32. 40	8. 41	·1374					
7. 37	22. 50	8. 50	·1383					
7. 41	22. 50	8. 59	·1372					
7. 56	17. 10	9. 10	·1376					
8. 11	23. 5	9. 13	·1373					
8. 26	28. 50	9. 28	·1382					
8. 41	23. 30	9. 33	·1382					
8. 56	27. 30	9. 41	·1412					
9. 6	26. 55	10. 4	·1392					
9. 11	27. 50	10. 21	·1406					
9. 12	27. 50	10. 40	·1386					
9. 32	31. 45	10. 47	·1399					
9. 36	32. 0	10. 56	·1399					
9. 58	39. 30	11. 11	·1386					
10. 8	38. 30	11. 24	·1393					
10. 12	34. 15	11. 40	·1396					
10. 27	42. 10	11. 54	·1390					
10. 41	36. 10	11. 58	·1393					
10. 56	37. 50	12. 11	·1384					
11. 11	31. 0	12. 20	·1386					
11. 15	31. 20	12. 25	·1383					
11. 25	31. 0	12. 40	·1387					
11. 30	32. 0	12. 53	·1380					
11. 42	32. 15	13. 0	·1383					
11. 53	31. 40	13. 12	·1380					
11. 59	34. 0	13. 25	·1386					
12. 9	33. 40	13. 34	·1385					
12. 26	33. 50	13. 51	·1390					
12. 51	35. 0	14. 10	·1386					
12. 59	39. 0	14. 19	·1392					
13. 9	41. 10	14. 30	·1394					
13. 23	38. 50	14. 39	·1390					
13. 30	38. 50	14. 41	·1392					
13. 39	37. 10	14. 55	·1384					
13. 44	37. 10	15. 16	·1386					
13. 56	37. 40	15. 29	·1390					
14. 9	37. 10	15. 44	·1381					
14. 23	40. 10	15. 55	·1384					
14. 40	36. 40	16. 1	·1382					
14. 43	36. 30	16. 12	·1387					
14. 59	33. 20	16. 19	·1385					
15. 9	34. 15	16. 25	·1389					
15. 14	34. 5	16. 37	·1387					
15. 24	35. 5	16. 56	·1400					
15. 38	37. 20	17. 10	·1409					
15. 53	36. 10	17. 12	·1406					
15. 59	37. 30	17. 21	·1409					
16. 11	36. 45	18. 12	·1372					
16. 14	37. 50	18. 26	·1382					
16. 26	37. 15	18. 40	·1387					
16. 31	37. 45	18. 44	·1383					
16. 42	36. 30	19. 10	·1398					
16. 54	36. 50	19. 26	·1392					
16. 57	38. 50	19. 43	·1396					
16. 59	37. 20	20. 4	·1395					
17. 4	36. 50	20. 19	·1392					
17. 9	37. 40	20. 52	·1362					
17. 14	37. 0	21. 5	·1366					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 1		Nov. 1						
h m	° ′ ″	h m		h m		h m	°	°
17. 38	20. 39. 20	21. 23	·1348					
17. 40	40. 10	21. 52	·1346					
17. 43	39. 30	22. 4	·1356					
17. 53	39. 30	22. 11	·1349					
17. 58	38. 40	22. 23	·1359					
18. 6	38. 40	22. 41	·1378					
18. 13	36. 15	22. 59	·1384					
18. 26	37. 30	23. 11	·1383					
18. 34	36. 5	23. 22	·1387					
18. 51	36. 0		***					
18. 55	38. 15	23. 47	·1386					
18. 57	37. 40	23. 54	·1380					
19. 11	37. 40	23. 59	·1380					
19. 29	34. 45							
19. 56	36. 0							
20. 9	37. 25							
20. 14	37. 5							
20. 23	37. 15							
20. 39	37. 0							
20. 53	35. 20							
20. 59	36. 30							
21. 17	39. 20							
21. 26	38. 50							
21. 42	41. 15							
21. 51	41. 15							
21. 57	43. 20							
22. 0	43. 20							
22. 9	44. 40							
22. 12	42. 0							
22. 36	38. 40							
	***							
23. 38	42. 10							
23. 56	41. 15							
23. 58	42. 0							
23. 59	43. 40							
Nov. 2		Nov. 2		Nov. 2		Nov. 2		
0. 0	20. 43. 40	0. 0	·1380	0. 0	·02496	0. 0	56 ·5	57 ·5
0. 12	42. 20	0. 6	·1385	2. 4	·02556	Min.	56 ·5	57 ·5
0. 21	42. 10	0. 11	·1379	2. 40	·02610	1. 0	58 ·3	58 ·4
0. 23	41. 0	0. 15	·1387	3. 27	·02631	3. 0	58 ·2	58 ·5
0. 27	40. 0	0. 26	·1390	3. 52	·02686	9. 0	58 ·4	59 ·5
0. 43	40. 0	0. 41	·1388	4. 20	·02640	Max.	58 ·8	60 ·2
1. 13	42. 30	0. 52	·1391	5. 24	·02606	21. 0	58 ·8	59 ·0
1. 26	41. 55	0. 57	·1390	5. 31	·02617			
1. 42	45. 25	1. 12	·1399	6. 4	·02582			
1. 56	39. 55	1. 20	·1393	8. 9	·02579			
2. 4	40. 20	1. 41	·1393	8. 31	·02552			
2. 13	44. 20	1. 50	·1375	15. 5	·02603			
2. 18	40. 50	2. 11	·1397	15. 45	·02584			
2. 24	40. 20	2. 15	·1388	16. 18	·02589			
2. 31	36. 50	2. 23	·1398	16. 54	·02571			
2. 42	40. 5	2. 33	·1391	20. 26	·02588			
2. 44	38. 0	2. 41	·1395	22. 36	·02595			
2. 46	38. 10	2. 43	·1389	22. 44	·02611			
2. 53	33. 0	2. 45	·1393	23. 59	·02609			
2. 57	32. 10	2. 53	·1384					
3. 6	36. 10	3. 10	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 2		Nov. 2						
h m	° ′ ″	h m		h m		h m	°	°
3. 14	20. 33. 10	3. 19	·1385					
3. 28	40. 0	3. 26	·1389					
3. 56	16. 15	3. 40	·1358					
4. 6	20. 0	3. 52	·1372					
4. 25	25. 0	4. 1	·1395					
4. 43	28. 50	4. 24	·1379					
4. 51	28. 50	4. 49	·1373					
5. 0	31. 20	4. 56	·1375					
5. 7	33. 50	5. 0	·1373					
5. 11	33. 5	5. 7	·1378					
5. 18	36. 10	5. 12	·1376					
5. 27	25. 15	5. 19	·1384					
5. 41	35. 0	5. 25	·1367					
5. 51	33. 25	5. 40	·1401					
5. 56	34. 35	5. 49	·1386					
6. 8	35. 5	5. 55	·1389					
6. 15	32. 0	6. 11	·1386					
6. 28	33. 40	6. 15	·1378					
6. 39	35. 30	6. 25	·1381					
	***	6. 41	·1387					
6. 59	35. 30	6. 44	·1385					
7. 9	35. 5	7. 4	·1389					
7. 20	31. 40	7. 15	·1383					
7. 28	34. 30	7. 26	·1390					
7. 42	30. 40	7. 41	·1387					
8. 2	30. 30	7. 54	·1401					
8. 13	36. 25	8. 5	·1409					
8. 25	36. 40	8. 11	·1420					
8. 41	31. 30	8. 38	·1388					
8. 57	33. 0	8. 57	·1394					
9. 11	32. 45	9. 10	·1391					
9. 16	33. 30	9. 17	·1393					
9. 24	33. 30	9. 52	·1388					
9. 38	34. 20	10. 56	·1391					
10. 9	34. 0	11. 12	·1387					
10. 28	34. 0	11. 22	·1390					
10. 51	33. 25	12. 0	·1387					
11. 12	34. 5	14. 34	·1393					
11. 38	34. 5	15. 10	·1387					
11. 51	33. 30	15. 41	·1393					
13. 17	34. 0	16. 8	·1388					
14. 30	33. 15	16. 34	·1397					
14. 43	32. 0	16. 57	·1407					
14. 58	33. 45	17. 19	·1405					
15. 14	39. 15	17. 27	·1407					
15. 38	36. 30	18. 27	·1396					
15. 43	34. 40	19. 30	·1390					
16. 11	41. 10	19. 41	·1393					
16. 22	41. 40	19. 55	·1387					
16. 29	41. 15	20. 11	·1388					
16. 57	37. 0	21. 0	·1379					
17. 11	35. 50	21. 54	·1376					
17. 30	35. 30	22. 18	·1368					
17. 40	34. 40	22. 40	·1363					
17. 58	35. 10	22. 49	·1353					
18. 13	34. 20	23. 0	·1368					
18. 25	34. 55	23. 38	·1374					
18. 36	34. 20	23. 59	·1385					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 2								
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 35. 5							
19. 13	33. 20							
19. 22	34. 20							
19. 26	33. 45							
19. 34	33. 45							
19. 41	34. 45							
19. 45	34. 45							
20. 0	34. 10							
20. 17	34. 0							
20. 28	35. 40							
20. 34	34. 15							
20. 41	33. 50							
20. 45	35. 10							
20. 56	33. 40							
21. 8	34. 0							
21. 10	33. 20							
21. 41	35. 0							
21. 47	34. 45							
22. 0	37. 50							
22. 4	36. 30							
22. 41	37. 50							
22. 44	38. 40							
22. 54	36. 0							
22. 57	35. 20							
23. 9	37. 10							
23. 28	36. 30							
23. 42	35. 10							
23. 59	35. 30							
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
0. 0	20. 35. 30	0. 0	·1385	0. 0	·02609	1. 0	59·2	61·4
0. 14	35. 30	0. 21	·1388	1. 13	·02617	3. 0	59·2	61·5
0. 26	39. 55	0. 41	·1387	2. 1	·02656	Max.	59·7	61·8
0. 58	39. 40	0. 55	·1390	6. 2	·02701	9. 0	59·6	61·8
1. 8	40. 15	1. 12	·1386	8. 46	·02673	Min.	57·0	57·8
1. 12	39. 5	1. 24	·1380	9. 21:	·02630	21. 0	57·3	58·0
1. 22	39. 5	1. 42	·1374	9. 36	·02588			
1. 43	34. 30	2. 0	·1384	10. 23	·02629			
2. 9	38. 50	2. 11	·1377	10. 31	·02617			
2. 13	38. 10	2. 19	·1381	10. 53	·02635			
2. 26	38. 5	2. 26	·1377	12. 4	·02635			
2. 30	38. 20	2. 33	·1380	12. 41	·02583			
2. 42	34. 25	2. 41	·1374	14. 7:	·02616			
2. 52	35. 40	2. 50	·1380	15. 9	·02608			
2. 58	33. 55	3. 4	·1368	15. 53	·02617			
3. 9	33. 55	3. 14	·1366	23. 17	·02565			
3. 21	29. 25	3. 19	·1360	23. 59	·02571			
3. 28	32. 0	3. 41	·1382					
3. 51	33. 30	3. 53	·1388					
3. 57	33. 30	4. 7	·1387					
4. 3	34. 30	4. 26	·1362					
4. 13	34. 45	4. 54	·1383					
4. 26	32. 0	5. 10	·1352					
4. 42	30. 20	5. 23	·1368					
4. 55	31. 30	5. 26	·1367					
5. 14	19. 0	5. 41	·1392					
5. 26	8. 50	5. 53	·1382					
5. 41	14. 20	5. 56	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 44	20. 14. 20	6. 11	·1376					
6. 10	21. 15	6. 25	·1387					
6. 20	20. 45	6. 49	·1379					
6. 40	28. 30	7. 0	·1385					
6. 55	30. 40	7. 25	·1378					
7. 9	33. 10	7. 45	·1387					
7. 26	32. 20	7. 57	·1389					
7. 47	33. 20	8. 4	·1387					
8. 12	31. 30	8. 12	·1389					
8. 29	31. 30	8. 37	·1384					
8. 43	28. 30	8. 57	·1405					
8. 57	28. 50	9. 12	·1399					
9. 14	32. 10	9. 22	·1433					
9. 26	38. 50	9. 39	·1387					
9. 37	27. 10	9. 42	·1393					
9. 43	28. 0	9. 47	·1383					
9. 53	26. 10	9. 56	·1384					
10. 7	26. 30	10. 4	·1378					
10. 9	26. 5	10. 19	·1384					
10. 25	29. 15	10. 40	·1370					
10. 41:	25. 55	10. 54	·1379					
10. 55	28. 5	11. 12	·1374					
11. 8	27. 0	11. 39	·1378					
11. 18	26. 15	11. 42	·1376					
11. 37	27. 50	11. 56	·1378					
11. 41	27. 50	12. 13	·1396					
11. 56	31. 15	12. 18	·1394					
12. 12	36. 50	12. 25	·1397					
12. 29	39. 5	12. 41	·1382					
12. 55	34. 30	13. 6	·1381					
13. 8	34. 30	13. 23	·1387					
13. 15	32. 0	13. 45	·1383					
13. 42	34. 55	14. 42	·1398					
13. 47	35. 0	15. 24	·1379					
13. 58	35. 40	16. 6	·1386					
14. 40	34. 10	16. 45	·1398					
14. 54	34. 30	16. 49	·1392					
15. 8	33. 0	16. 54	·1397					
15. 26	34. 20	17. 23	·1398					
15. 29	34. 10	17. 27	·1394					
15. 39	35. 20	17. 35	·1397					
15. 51	36. 0	17. 39	·1393					
16. 0	36. 0	18. 19	·1391					
16. 11	35. 5	18. 35	·1386					
16. 23	35. 30	18. 56	·1392					
16. 36	34. 20	19. 10	·1385					
16. 40	34. 20	19. 27	·1393					
16. 43	35. 45	19. 42	·1392					
16. 52	33. 15	19. 54	·1394					
16. 59	33. 40	20. 30	·1384					
17. 8	33. 20	20. 41	·1386					
17. 13	34. 40	20. 57	·1375					
17. 25	34. 20	22. 8	·1370					
17. 29	34. 45	22. 25	·1376					
17. 39	36. 5	22. 38	·1374					
18. 3	37. 20	23. 9	·1376					
18. 21	40. 40	23. 25	·1372					
18. 44	40. 10	23. 39	·1376					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
18. 58	20. 39. 30	23. 53	·1366					
19. 10	40. 0	23. 59	·1371					
19. 28	38. 0							
19. 40	38. 20							
19. 57	36. 25							
20. 13	37. 25							
20. 31	36. 0							
20. 44	34. 30							
20. 55	34. 30							
20. 59	33. 50							
21. 14	34. 45							
21. 28	34. 45							
21. 38	33. 50							
21. 44	35. 15							
21. 59	36. 55							
22. 9	35. 40							
22. 37	39. 15 ***							
23. 23	38. 0							
23. 53	38. 45							
23. 59	36. 20							
Nov. 4		Nov. 4		Nov. 4		Nov. 4		
0. 0	20. 36. 20	0. 0	·1371	0. 0	·02571	1. 0	57 ·8	59 ·0
0. 11	36. 5	0. 20	·1386	3. 1	·02607	3. 0	58 ·5	60 ·0
0. 24	35. 0	0. 37	·1390	4. 38:	·02642	Max.	59 ·6	61 ·7
0. 59	36. 0	0. 48	·1393	5. 11	·02625	9. 0	58 ·8	60 ·1
1. 7	37. 30		(†)	5. 46	·02664	Min.	56 ·8	57 ·7
2. 11	36 10 ***	1. 0	·1392*	7. 28	·02652	22. 0	56 ·8	57 ·7
		1. 10	·1396	7. 36	·02654			
3. 9	33. 25	1. 15	·1392	7. 53	·02629			
3. 13	31. 30	1. 45	·1393	9. 41	·02616			
3. 26	31. 30	2. 16	·1398	9. 59	·02607			
3. 42	31. 45	2. 26	·1397	10. 17	·02616			
3. 56	28. 50	2. 42	·1391	10. 36	·02605			
4. 13	29. 50	3. 4	·1394	12. 46	·02615			
4. 18	30. 50	3. 16	·1391	13. 54	·02595			
4. 25	30. 55	3. 44	·1381	14. 52:	·02549			
4. 44	34. 30	4. 12	·1384	15. 23	·02567			
4. 55	33. 50	4. 31	·1392	16. 9	·02556			
5. 5	33. 5	4. 56	·1388	18. 7	·02543			
5. 27	16. 50	5. 14	·1356	23. 59	·02552			
6. 0	28. 30	5. 43	·1386					
6. 7	28. 40	6. 4	·1397					
6. 13	31. 30	6. 13	·1390					
6. 28	33. 10	6. 27	·1383					
6. 45	32. 10	7. 9	·1388					
7. 13	33. 20	7. 19	·1384					
7. 24	32. 0	7. 42	·1414					
7. 27	28. 25	7. 54	·1408					
7. 40	31. 50	8. 4	·1416					
7. 53	28. 0	8. 40	·1387					
8. 9	29. 55	8. 54	·1391					
8. 20	30. 20	9. 11	·1378					
8. 29	28. 0	9. 24	·1384					
8. 57	28. 15	9. 35	·1392					
9. 11	25. 0	9. 57	·1363					
9. 26	25. 10	10. 11	·1373					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 4		Nov. 4						
h m	° ′ ″	h m		h m		h m	°	°
9. 30	20. 26. 25	10. 18	·1386					
9. 39	26. 35	10. 35	·1379					
9. 44	28. 50	10. 44	·1385					
9. 59	22. 20	11. 6	·1388					
10. 16	31. 30	11. 24	·1383					
10. 25	31. 30	12. 9	·1386					
10. 29	30. 0	12. 32	·1385					
11. 6	33. 0	12. 54	·1393					
11. 12	30. 55	13. 12:	·1388					
11. 17	31. 0	13. 32	·1392					
11. 39	29. 10	13. 36	·1390					
12. 8	29. 40	13. 53	·1395					
12. 32	31. 5	14. 11	·1411					
12. 43	34. 0	14. 23	·1412					
13. 11	31. 10	14. 46	·1398					
14. 14	39. 40	15. 10	·1392					
14. 40	33. 5	15. 14	·1393					
14. 53	31. 15	15. 53	·1409					
14. 58	31. 10	16. 10	·1402					
15. 10	33. 15	16. 19	·1403					
15. 38	32. 5	16. 30	·1399					
15. 53	32. 15	17. 11	·1409					
16. 0	31. 10	17. 44	·1406					
16. 14	33. 15	18. 19	·1392					
16. 28	33. 20	18. 50	·1396					
16. 41	32. 30 ***	19. 20	·1392					
		19. 41	·1381					
17. 14	33. 30	20. 26	·1389					
17. 26	33. 30	20. 42	·1383					
17. 50	37. 20		(†)					
18. 11	34. 10	22. 0	·1373*					
18. 23	34. 25	22. 14	·1378 ***					
18. 27	33. 35							
18. 39	33. 0	22. 52	·1370					
18. 45	33. 20	22. 54	·1363					
18. 55	32. 10	23. 11	·1370					
19. 14	33. 0	23. 48	·1377					
19. 26	31. 45	23. 59	·1385					
19. 36	32. 25							
19. 42	31. 45							
19. 54	33. 10							
19. 57	33. 10							
20. 8	34. 45							
20. 26	34. 35							
20. 29	33. 15							
20. 38	35. 15							
20. 45	33. 0 ***							
21. 7	34. 20							
21. 32	33. 0							
21. 41	33. 20							
21. 44	32. 45							
22. 11	34. 35							
22. 24	33. 30							
22. 40	36. 10							
22. 42	34. 0							
22. 44	34. 40							
22. 53	33. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 4								
h m	° ′ ″	h m		h m		h m	°	°
22. 57	20. 33. 50							
23. 5	33. 0							
23. 12	33. 50							
23. 23	35. 10							
23. 44	34. 0							
23. 58	35. 20							
23. 59	37. 15							
Nov. 5		Nov. 5		Nov. 5		Nov. 5		
0. 0	20. 37. 15	0. 0	·1385	0. 0	·02552	1. 0	57 ·6	58 ·3
0. 11	36. 40	0. 18	·1388	0. 55	·02564	Max.	58 ·7	60 ·0
0. 28	38. 30	0. 29	·1390	2. 46	·02635	9. 0	58 ·6	60 ·0
0. 37	38. 15	0. 43	·1382	2. 57	·02630	Min.	56 ·3	57 ·5
0. 43	41. 10	0. 45	·1366	3. 11	·02643	21. 0	56 ·8	57 ·6
0. 52	37. 0	0. 56	·1379	6. 30	·02610			
0. 57	36. 30	1. 11	·1367	6. 52	·02621			
1. 21	31. 0	1. 25	·1377	8. 4	·02610			
1. 27	32. 15	1. 39	·1371	8. 25	·02616			
1. 29	32. 15	1. 58	·1384	8. 39	·02609			
1. 40	34. 0	2. 19	·1378	9. 2	·02622			
1. 54	35. 5	2. 27	·1367	10. 0	·02583			
2. 8	37. 50	2. 44	·1379	11. 56	·02576			
2. 14	40. 20	3. 0	·1370	14. 9	·02544			
2. 23	40. 5	3. 19	·1382	15. 8	·02551			
2. 39	36. 10	3. 35	·1378	16. 25	·02537			
2. 54	38. 5	3. 49	·1386	22. 36	·02502			
2. 58	35. 0	4. 10	·1383	23. 59	·02500			
3. 18	37. 30	4. 41	·1393					
3. 28	37. 40	4. 49	·1389					
3. 38	36. 20	4. 56	·1394					
3. 44	35. 50	5. 10	·1392					
3. 57	36. 0	5. 40	·1397					
4. 9	35. 5	6. 26	·1385					
4. 14	36. 10	6. 51	·1396					
4. 26	34. 40	7. 6	·1393					
4. 44	35. 10	7. 15	·1397					
5. 3	34. 40	7. 27	·1397					
5. 11	33. 30	7. 50	·1389					
5. 26	34. 25	8. 5	·1382					
5. 37	34. 0	8. 20	·1386					
5. 56	34. 55	8. 36	·1377					
6. 0	34. 25	8. 48	·1388					
6. 11	34. 25	8. 56	·1417					
6. 23	33. 10	9. 14	·1403					
6. 30	29. 30	9. 29	·1408					
6. 41	29. 40	9. 44	·1400					
6. 56	32. 30	9. 59	·1386					
7. 13	32. 25	10. 25	·1387					
7. 23	31. 50	10. 40	·1390					
7. 26	32. 20	11. 22	·1382					
7. 31	31. 30	11. 40	·1387					
7. 51	32. 50	11. 42	·1385					
7. 56	32. 0	12. 20	·1393					
8. 0	30. 55	12. 28	·1389					
8. 25	30. 25	12. 44	·1391					
8. 43	19. 0	12. 54	·1396					
8. 56	18. 0	13. 5	·1392					
9. 0	21. 40	13. 25	·1398					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 5		Nov. 5						
h m	° ′ ″	h m		h m		h m	°	°
9. 12	20. 26. 5	13. 27	·1400					
9. 23	25. 30	13. 40	·1396					
9. 43	27. 0	14. 12	·1397					
10. 0	23. 0	14. 29	·1391					
10. 22	25. 0	14. 39	·1394					
10. 40	29. 0	14. 55	·1390					
10. 57	30. 5	15. 41	·1401					
11. 12	29. 10	15. 50	·1400					
11. 28	30. 0	16. 11	·1402					
11. 45	33. 10	16. 20	·1399					
12. 20	33. 0	16. 29	·1401					
12. 36	35. 5	16. 43	·1398					
12. 42	34. 15	16. 54	·1400					
13. 0	38. 0		***					
13. 27	36. 0	17. 45	·1403					
13. 54	32. 40	17. 54	·1399					
13. 58	33. 0	18. 5	·1403					
14. 10	31. 50	18. 56	·1406					
14. 14	33. 10	19. 27	·1404					
14. 26	32. 25	19. 50	·1393					
14. 58	37. 50	20. 11	·1387					
15. 14	38. 10	20. 23	·1390					
15. 28	35. 50	20. 27	·1388					
15. 40	35. 0	20. 41	·1393					
15. 46	33. 50	20. 48	·1392					
16. 13	32. 15	21. 11	·1396					
16. 26	33. 0	21. 54	·1392					
16. 41	31. 55	22. 12	·1387					
16. 45	32. 40	22. 25	·1388					
17. 13	33. 0	22. 40	·1397					
17. 37	32. 20	22. 45	·1388					
17. 43	32. 55	23. 3	·1390					
17. 50	31. 40	23. 15	·1387					
17. 56	31. 40	23. 30	·1395					
18. 0	32. 40	23. 45	·1389					
18. 39	31. 50	23. 59	·1393					
18. 54	32. 15							
19. 9	31. 25							
19. 27	33. 0							
20. 3	35. 0							
20. 9	34. 15							
20. 24	34. 40							
20. 28	33. 30							
20. 42	33. 30							
20. 57	31. 55							
21. 27	33. 30							
21. 39	32. 50							
22. 16	32. 30							
22. 29	33. 20							
22. 36	32. 25							
22. 42	35. 40							
22. 53	34. 0							
22. 56	34. 0							
22. 58	33. 30							
23. 8	33. 30							
23. 11	34. 0							
23. 23	33. 40							
23. 29	36. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov. 5 h m	° ′ ″
23. 43	20. 37. 10
23. 56	36. 30
23. 59	38. 50
Nov. 6	
0. 0	20. 38. 50
0. 23	36. 55
0. 27	38. 15
0. 40	39. 5
0. 42	38. 0
0. 58	37. 30
1. 11	38. 0
1. 13	39. 0
1. 37	39. 15
1. 41	40. 20
2. 7	39. 40
2. 14	40. 50
2. 35	38. 30
2. 44	37. 15
2. 57	38. 5
3. 5	37. 0
3. 23	37. 0
3. 39	36. 20
3. 41	32. 0
3. 52	28. 45
4. 0	32. 10
4. 11	31. 15
4. 22	31. 40
4. 26	28. 0
4. 41	31. 10
4. 58	33. 30
5. 23	34. 40
5. 32	34. 10
5. 45	34. 30
6. 9	33. 30
6. 39	33. 45
6. 43	33. 20
6. 56	33. 20
7. 7	30. 5
7. 13	31. 40
7. 23	31. 0
7. 30	31. 0
7. 42	28. 20
7. 53	28. 30
7. 59	30. 0
8. 8	30. 30
8. 15	29. 30
8. 32	31. 40
8. 53	19. 0
9. 0	22. 0
9. 12	22. 0
9. 22	23. 10
9. 42	25. 40
9. 51	28. 0
10. 3	30. 40
10. 25	24. 0
10. 51	27. 0
10. 59	28. 55

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m		°	°
Nov. 6			
0. 0	·1393	57 ·3	58 ·1
0. 18	·1381	57 ·5	58 ·2
0. 25	·1382	57 ·8	58 ·5
0. 42	·1386	59 ·3	60 ·7
1. 10	·1375	59 ·1	60 ·3
1. 26	·1377	58 ·8	60 ·0
1. 41	·1385		
1. 49	·1381		
1. 58	·1387		
2. 13	·1391		
2. 41	·1378		
2. 57	·1388		
3. 24	·1379		
3. 39	·1380		
3. 45	·1375		
4. 0	·1396		
4. 7	·1390		
4. 14	·1391		
4. 23	·1384		
4. 35	·1400		
4. 53	·1404		
5. 30	·1396		
6. 1	·1400		
6. 26	·1395		
6. 53	·1398		
7. 4	·1390		
7. 10	·1394		
7. 15	·1394		
7. 26	·1402		
7. 42	·1394		
7. 55	·1399		
8. 12	·1392		
8. 24	·1399		
8. 27	·1394		
8. 39	·1401		
8. 43	·1398		
8. 52	·1401		
9. 0	·1423		
9. 14	·1417		
9. 24	·1435		
9. 50	·1414		
9. 56	·1415		
10. 12	·1400		
10. 25	·1386		
10. 53:	·1409		
11. 30	·1385		
12. 8	·1391		
12. 22	·1384		
12. 38	·1386		
12. 42	·1383		
13. 10	·1384		
13. 19	·1381		
13. 37	·1386		

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Nov. 6	
Min.	·02500
1. 0	·02501
3. 0	·02552
Max.	·02547
9. 0	·02573
21. 0	·02582
	·02598
	·02582
	·02591
	·02573
	·02576
	·02589
	·02570
	·02576
	·02541
	·02551
	·02562
	·02544
	·02542
	·02601
	·02608
	·02581
	·02603

Greenwich Mean Solar Time.	Western Declination.
Nov. 6 h m	° ′ ″
11. 11	20. 29. 30
11. 28	25. 20
11. 44	25. 5
11. 56	25. 55
12. 11	25. 20
12. 44	32. 0
13. 8	39. 40
13. 21	39. 40
13. 27	38. 10
13. 39	39. 20
13. 46	38. 50
14. 2	35. 20
14. 9	35. 20
14. 16	33. 10
14. 26	33. 50
14. 28	33. 25
14. 43	33. 25
14. 46	33. 10
14. 58	33. 45
15. 9	33. 20
15. 13	33. 35
15. 25	32. 50
15. 40	33. 0
15. 43	34. 20
15. 53	33. 40
15. 57	33. 5
16. 8	33. 20
16. 22	33. 0
16. 53	33. 20
16. 57	32. 15
17. 22	32. 15
17. 37	33. 40
17. 42	33. 25
17. 55	33. 40
18. 1	33. 5
18. 12	33. 20
18. 40	32. 30
18. 55	32. 45
18. 59	30. 20
19. 26	33. 0
19. 39	30. 15
19. 41	31. 30
19. 56	31. 30
	***
20. 37	33. 0
20. 56	31. 0
21. 25	32. 45
21. 38	33. 50
21. 42	33. 50
22. 8	36. 55
22. 40	37. 25
23. 9	37. 35
23. 25	37. 20
23. 27	38. 25
23. 29	36. 50
23. 38	36. 40
23. 47	36. 40
23. 59	38. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 6 h m	
13. 51	·1395
14. 10	·1388
14. 14	·1390
14. 22	·1387
14. 30	·1391
15. 14	·1389
15. 41	·1392
15. 50	·1395
15. 57	·1390
16. 12	·1392
16. 55	·1394
17. 54	·1388
18. 54	·1395
19. 10	·1392
19. 25	·1398
19. 41	·1388
19. 48	·1396
19. 59	·1393
20. 11	·1396
20. 55	·1388
21. 17	·1395
21. 26	·1383
21. 36	·1384
21. 53	·1376
22. 5	·1364
22. 41	·1356
23. 24	·1366
	***
23. 59	·1384

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Nov. 7		Nov. 7		Nov. 7		Nov. 7		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 38. 40	0. 0	·1384	0. 0	·02603	Min.	59 ·2	60 ·8
0. 10	38. 40	0. 12	·1371	2. 9	·02642	1. 0	59 ·6	61 ·0
0. 13	41. 0	0. 25	·1364	2. 48	·02677	3. 0	59 ·6	61 ·0
0. 17	41. 5	0. 39	·1385	3. 53	·02671	9. 0	59 ·6	62 ·0
0. 27	37. 50	0. 46	·1384	4. 23	·02698	Max.	60 ·5	62 ·7
0. 37	39. 40	1. 25	·1390	4. 47	·02677	21. 0	60 ·1	62 ·0
0. 56	36. 40	1. 55	·1387	5. 9	·02701	22. 0	59 ·7	61 ·9
1. 41	39. 5	2. 15	·1370	5. 49	·02674	23. 0	59 ·6	61 ·5
1. 56	40. 10	2. 40	·1388	6. 46	·02679			
2. 11	36. 0	2. 59	·1396	6. 58	·02701			
2. 26	31. 0	3. 26	·1387	7. 25	·02662			
2. 32	31. 0	3. 33	·1387	7. 51	·02670			
2. 39	32. 5	4. 3	·1363	8. 19	·02658			
2. 43	31. 40	4. 20	·1381	8. 54	·02672			
2. 55	32. 50	4. 31	·1382	9. 27	·02631			
3. 14	36. 30	4. 40	·1373	12. 46	·02666			
3. 26	36. 0	4. 44	·1375	13. 14	·02652			
3. 30	36. 5	4. 53	·1371	14. 54	·02660			
3. 41	34. 30	5. 19	·1402	18. 38	·02678			
3. 53	34. 20	5. 30	·1391	23. 59	·02673			
3. 57	33. 55	5. 41	·1393					
4. 9	30. 0	5. 56	·1385					
4. 22	31. 35	6. 12	·1387					
4. 26	31. 0	6. 37	·1384					
4. 34	32. 40	6. 49	·1375					
4. 41	30. 0	7. 4	·1410					
4. 58	20. 50	7. 13	·1399					
5. 26	32. 20	7. 19	·1402					
5. 31	32. 30	7. 26	·1394					
5. 40	33. 50	7. 50	·1414					
5. 59	32. 0	8. 1	·1405					
6. 11	31. 40	8. 11	·1407					
6. 24	32. 50	8. 42	·1374					
6. 29	32. 50	8. 51	·1379					
6. 41	33. 20	8. 56	·1376					
6. 53	21. 10	9. 11	·1408					
7. 2	28. 30	9. 24	·1394					
7. 11	30. 5	9. 37	·1394					
7. 14	28. 15	9. 53	·1382					
7. 22	29. 40	10. 0	·1385					
7. 29	21. 0	10. 6	·1381					
7. 56	24. 50	10. 26	·1382					
8. 7	22. 50	10. 41	·1378					
8. 17	24. 45	10. 57	·1384					
8. 35	26. 5	11. 29	·1386					
8. 41	25. 30	11. 40	·1383					
8. 55	32. 10	12. 11	·1392					
9. 8	27. 20	12. 32	·1386					
9. 12	28. 30	13. 4	·1397					
9. 22	28. 45	13. 30	·1400					
9. 28	26. 0	13. 41	·1403					
9. 38	26. 0	13. 58	·1397					
9. 42	26. 40	14. 12	·1398					
9. 54	25. 0	14. 49	·1387					
9. 58	25. 30	15. 18	·1386					
10. 9	25. 30	15. 51	·1392					
10. 21	26. 40	16. 22	·1394					
10. 39	30. 0	17. 21	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Nov. 7		Nov. 7				Nov. 8		
h m	° ′ ″	h m		h m		h m	°	°
10. 44	20. 29. 40	17. 25	·1394			0. 0	59 ·6	61 ·5
11. 8	31. 40	17. 39	·1392			1. 0	60 ·1	61 ·9
11. 16	31. 5	18. 23	·1395			2. 0	59 ·6	62 ·0
11. 27	31. 20	18. 25	·1391			3. 0	59 ·6	62 ·0
11. 42	30. 40	18. 29	·1395					
11. 51	30. 50	19. 4	·1398					
11. 58	29. 0	20. 22	·1387					
12. 39	30. 30	20. 33	·1391					
12. 50	36. 50	20. 41	·1387					
13. 6	35. 0	21. 11	·1391					
13. 13	33. 5	22. 12	·1386					
13. 26	32. 10	22. 40	·1376					
13. 42	33. 15	22. 54	·1378					
14. 9	28. 30	23. 19	·1364					
14. 16	28. 30	23. 56	·1383					
14. 39	30. 15	23. 59	·1380					
15. 7	33. 10							
15. 23	32. 50							
15. 38	33. 15							
15. 51	33. 15							
16. 11	32. 10							
16. 37	33. 20							
16. 58	33. 30							
17. 26	33. 0							
17. 28	33. 15							
17. 38	32. 10							
17. 56	33. 0							
17. 59	32. 40							
18. 23	33. 30							
18. 26	32. 40							
18. 36	33. 15							
19. 21	32. 0							
19. 28	33. 5 ***							
19. 56	32. 40							
20. 21	32. 40							
20. 27	32. 5 ***							
21. 11	30. 15							
21. 26	35. 0							
21. 38	32. 50							
21. 43	33. 0							
21. 56	37. 5							
22. 1	32. 50							
22. 14	37. 30							
22. 39	35. 20							
22. 56	38. 5							
23. 0	36. 15							
23. 13	35. 55							
23. 41	36. 50							
23. 55	34. 40							
23. 59	37. 0							
Nov. 8		Nov. 8		Nov. 8		Nov. 8		
0. 0	20. 37. 0	0. 0	·1380	0. 0	·02673	0. 0	59 ·6	61 ·5
0. 4	39. 40	0. 17	·1391	1. 6	·02710	1. 0	60 ·1	61 ·9
0. 26	39. 30	0. 40	·1374	4. 27	·02662	2. 0	59 ·6	62 ·0
0. 36	38. 15 ***	0. 43	·1373	6. 31	·02687	3. 0	59 ·6	62 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov. 8		Nov. 8		Nov. 8		Nov. 8*		
h m	° ′ ″	h m		h m		h m	°	°
1. 9	20. 40. 30	0. 49	·1381	12. 30	·02641	Max.	60 ·5	62 ·3
1. 12	42. 50	0. 57	·1378	13. 2	·02615	9. 0	59 ·6	62 ·0
1. 26	38. 15	1. 9	·1378	15. 51	·02630	Min.	57 ·9	60 ·0
1. 37	39. 50	1. 20	·1365	19. 28	·02633	21. 0	58 ·6	60 ·2
1. 41	38. 15	1. 28	·1368	20. 24	·02620	22. 0	58 ·8	60 ·4
1. 53	41. 30	1. 40	·1363	20. 56	·02638	23. 0	58 ·8	60 ·4
2. 1	37. 30	1. 52	·1379		·02802			
2. 9	37. 30	1. 56	·1374	23. 1	·02797			
2. 14	36. 50	2. 13	·1381	23. 59	·02810			
2. 43	35. 50	2. 27	·1391					
2. 46	37. 30	2. 53	·1389					
2. 58	36. 30	3. 16	·1399					
3. 11	37. 15	3. 41	·1392					
3. 20	36. 30	3. 53	·1396					
3. 28	37. 20	4. 5	·1393					
3. 41	36. 20	4. 21	·1396					
3. 55	37. 10	5. 23	·1395					
3. 59	37. 10	5. 39	·1401					
4. 21	36. 0	5. 51	·1390					
4. 30	36. 0	5. 55	·1392					
4. 42	34. 30	6. 12	·1388					
4. 54	35. 0	6. 24	·1392					
5. 14	34. 50	6. 42	·1391					
5. 27	33. 20	6. 55	·1394					
5. 44	33. 55	7. 14	·1392					
5. 59	33. 55	7. 26	·1395					
6. 12	34. 15	7. 41	·1392					
6. 26	33. 30	7. 48	·1394					
6. 39	33. 50	8. 14	·1392					
7. 13	32. 50	8. 43	·1395					
7. 56	32. 50	8. 55	·1389					
8. 26	32. 5	9. 11	·1391					
8. 56	32. 5	9. 41	·1377					
9. 11	29. 30	9. 51	·1406					
9. 16	28. 55	9. 57	·1390					
9. 26	28 55	10. 9	·1392					
9. 41	28. 15	10. 16	·1407					
9. 53	37. 15	10. 42	·1385					
10. 3	23. 0	10. 56	·1380					
10. 11	17. 0	11. 17	·1388					
10. 29	25. 0	11. 41	·1391					
10. 53	30. 0	11. 47	·1393					
10. 59	29. 5	12. 12	·1390					
11. 11	29. 15	12. 28	·1395					
11. 34	31. 0	12. 39	·1394					
12. 4	28. 20	12. 52	·1398					
12. 11	28. 30	13. 11	·1389					
12. 27	32. 0	13. 23	·1393					
12. 56	38. 50	14. 4	·1390					
13. 11	36 0	14. 13	·1393					
13. 28	34. 5	14. 51	·1387					
13. 41	33. 15	15. 13	·1392					
13. 56	34. 0	15. 25	·1388					
14. 10	32. 0	15. 43	·1393					
14. 16	31. 45	16. 36	·1387					
14. 44	33. 0	17. 39	·1397					
14. 56	33. 45	17. 54	·1394					
15. 11	32. 40	17. 58	·1393					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov. 8		Nov. 8						
h m	° ′ ″	h m		h m		h m	°	°
15. 26	20. 32. 40	18. 25	·1395					
15. 38	33. 15	18. 34	·1392					
15. 41	34. 20	18. 44	·1394					
15. 53	31. 30	19. 26	·1393					
16. 8	33. 45	19. 52	·1391					
16. 11	33. 20	20. 11	·1378					
16. 26	34. 30	20. 19	·1376					
16. 41	34. 0	20. 32	·1379					
16. 54	35. 10	20. 52	·1384					
17. 10	34. 40	20. 59	·1382					
17. 33	33. 10	21. 12	·1387					
17. 51	33. 35	21. 25	·1384					
17. 59	33. 0	21. 50	·1378					
18. 23	33. 0	22. 20	·1382					
18. 27	34. 15	22. 24	·1383					
18. 36	32. 45	22. 40	·1379					
18. 53	33. 10	22. 53	·1375					
19. 25	32. 40	23. 3	·1380					
19. 40	34. 10	23. 13	·1375					
19. 54	33. 30	23. 20	·1378					
20. 3	34. 0	23. 27	·1373					
20. 13	32. 30	23. 43	·1376					
20. 26	32. 0	23. 54	·1373					
20. 29	33. 5	23. 59	·1374					
20. 39	32. 25							
20. 57	33. 40							
21. 26	32. 25							
21. 42	33. 40							
22. 11	34. 20							
22. 29	35. 10							
22. 43	34. 30							
22. 53	34. 35							
22. 58	34. 0							
23. 19	35. 50							
23. 27	37. 25							
23. 38	36. 50							
23. 41	37. 15							
23. 44	36. 15							
23. 56	37. 30							
23. 59	37. 0							
Nov. 9		Nov. 9		Nov. 9		Nov. 9		
0. 0	20. 37. 0	0. 0	·1374	0. 0	·02810	0. 0	58 ·9	60 ·4
0. 9	36. 20	0. 13	·1379	1. 5	·02808	Min.	58 ·9	60 ·4
0. 22	37. 5	0. 21	·1377		(†)	1. 0	59 ·1	61 ·0
0. 28	35. 15	0. 30	·1387	2. 19	·03500	2. 0	59 ·4	61 ·6
0. 45	36. 40	0. 38	·1388	3. 36	·03486	3. 0	59 ·6	62 ·0
0. 54	37. 55	0. 52	·1385	5. 30	·03481	9. 0	59 ·2	61 ·6
0. 57	37. 30	0. 57	·1379	6. 53	·03493	21. 0	59 ·9	62 ·6
1. 4	37. 50	1. 5	·1387	7. 26	·03509	Max.	60 ·6	62 ·6
1. 26	33. 10	1. 13	·1385	8. 9	·03491			
1. 43	34. 50	1. 25	·1392	8. 30	·03496			
1. 51	34. 35	2. 6	·1395	10. 9	·03467			
2. 13	35. 30	2. 30	·1399	11. 59	·03467			
3. 26	33. 30	2. 52	·1394	12. 54	·03463			
3. 54	31. 15	2. 59	·1396	15. 30	·03492			
4. 11	30. 30	3. 30	·1393	20. 59	·03509			
4. 22	31. 10	3. 42	·1395	23. 59	·03481			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

November 9^{d}. 1^{h}. 20^{m}. VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 8^{div}·55, or by 0·005806 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 9		Nov. 9						
h m	° ′ ″	h m		h m		h m	°	°
4. 35	20. 30. 0	3. 55	·1392					
4. 55	30. 0	4. 15	·1399					
5. 11	32 0	4. 42	·1390					
5. 14	31. 50	5. 0	·1392					
5. 26	30. 20	5. 22	·1382					
5. 40	30. 0	5. 40	·1388					
5. 51	28. 40	6. 4	·1387					
5. 56	28. 0	6. 42	·1382					
5. 59	27. 20	6. 56	·1368					
6. 11	28. 10	7. 12	·1383					
6. 21	28. 5	7. 20	·1379					
6. 39	30. 10	7. 30	·1383					
6. 42	30. 0	7. 42	·1377					
6. 55	23. 0	7. 53	·1378					
6. 59	17. 10	7. 59	·1371					
7. 11	19. 45	8. 19	·1366					
7. 17	19. 45	8. 42	·1390					
7. 27	20. 10	9. 0	·1385					
7. 41	24. 50	9. 15	·1388					
7. 53	27. 0	9. 27	·1386					
7. 58	27. 5	9. 54	·1398					
8. 26	19. 0	10. 11	·1391					
8. 43	28. 20	10. 24	·1394					
8. 56	29. 30	10. 41	·1390					
9. 8	29. 5	10. 58	·1393					
9. 27	30. 50	11. 12	·1388					
9. 45	30. 10	11. 24	·1392					
9. 57	31. 50	11. 43	·1388					
10. 9	31. 20	12. 7	·1397					
10. 21	32. 15	12. 31	·1388					
10. 41	31. 25	12. 46	·1391					
10. 53	32. 20	13. 22	·1388					
11. 12	30. 10	15. 59	·1393					
11. 28	31. 0	16. 26	·1395					
11. 38	30. 30	17. 11	·1397					
11. 54	30. 40	17. 34	·1392					
12. 9	33. 10	17. 58	·1394					
12. 21	33. 30	19. 56	·1392					
12. 56	31. 5	20. 19	·1393					
13. 8	31. 40	21. 0	·1385					
13. 24	31. 15	21. 11	·1389					
13. 28	31. 25	21. 54	·1379					
13. 42	31. 0	22. 11	·1383					
13. 55	31. 20	22. 22	·1379					
14. 59	31. 0	22. 39	·1384					
15. 34	31. 15	22. 43	·1379					
15. 43	31. 45	22. 53	·1384					
15. 53	31. 20	22. 55	·1382					
16. 8	31. 50	23. 4	·1385					
16. 59	31. 10	23. 9	·1385					
17. 26	32. 45	23. 13	·1393					
17. 58	32. 0	23. 25	·1395					
18. 9	32. 20	23. 51	·1390					
18. 24	31. 40	23. 59	·1393					
18. 38	32. 20							
18. 52	31. 50							
19. 27	31. 40							
19. 30	31. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 9								
h m	° ′ ″	h m		h m		h m	°	°
19. 40	20. 31. 55							
19. 44	31. 10							
19. 55	31. 10							
19. 58	32. 10							
20. 7	31. 40							
20. 13	32. 30							
20. 32	32. 0							
20. 41	31. 10							
20. 51	31. 35							
20. 56	30. 55							
	***							
21. 54	31. 30							
22. 2	31. 0							
22. 12	31. 30							
22. 43	31. 0							
22. 53	32. 0							
22. 57	32. 0							
23. 8	33. 15							
23. 11	33. 15							
23. 22	34. 10							
23. 26	36. 10							
23. 31	36. 15							
23. 39	36. 55							
23. 53	36. 15							
23. 59	36. 40							
Nov. 10		Nov. 10		Nov. 10		Nov. 10		
0. 0	20. 36. 40	0. 0	·1393	0. 0	·03481	1. 0	59 ·6	61 ·5
0. 26	33. 40	0. 15	·1385	2. 23	·03519	3. 0	59 ·2	61 ·3
0. 44	36. 5	0. 21	·1377	3. 42	·03484	Max.	60 ·7	62 ·2
0. 57	35. 10	0. 45	·1391	8. 4	·03486	9. 0	59 ·3	61 ·2
1. 8	36. 5	1. 4	·1391	8. 56	·03475	Min.	57 ·0	58 ·0
1. 31	36. 5	1. 24	·1400	12. 39	·03437	21. 0	57 ·3	58 ·0
1. 44	35. 50	1. 43	·1399	17. 9	·03390			
2. 6	32. 50	1. 56	·1395	17. 22	·03406			
2. 11	30. 40	2. 23	·1396	17. 41	·03375			
2. 23	31. 30	2. 25	·1394	18. 5	·03339			
2. 27	31. 0	3. 11	·1403	18. 21	·03344			
2. 56	33. 0	3. 52	·1402	18. 43	·03382			
3. 27	35. 5	4. 24	·1404	19. 23	·03361			
3. 43	35. 0	5. 14	·1406	19. 59	·03385			
3. 55	34. 15	5. 43	·1404	20. 23	·03371			
4. 26	34. 35	5. 56	·1406	20. 52	·03390			
5. 8	33. 0	6. 26	·1402	20. 59	·03382			
5. 12	33. 35	6. 50	·1404	21. 6	·03391			
5. 25	33. 0	7. 15	·1399	21. 23	·03370			
5. 44	33. 15	7. 39	·1409	22. 9	·03395			
6. 41	32. 5	8. 15	·1402	23. 2	·03403			
6. 57	32. 40	8. 26	·1420	23. 59	·03391			
7. 25	27. 30	8. 56	·1404					
7. 43	31. 0	9. 7	·1407					
8. 11	31. 50	9. 14	·1403					
8. 14	25. 10	9. 40	·1409					
8. 25	26. 20	10. 14	·1403					
8. 40	26. 30	10. 45	·1407					
8. 58	30. 50	10. 59	·1406					
9. 12	31. 25	11. 10	·1408					
9. 26	29. 0	11. 33	·1405					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 10		Nov. 10						
h m	° ′ ″	h m		h m		h m	°	°
9. 38	20. 29. 30	11. 42	·1406					
10. 12	30. 20	12. 19	·1403					
10. 27	31. 30	12. 44	·1406					
10. 39	30. 45	13. 41	·1403					
11. 0	30. 45	13. 56	·1400					
11. 24	30. 0	14. 20	·1405					
11. 39	30. 55	14. 41	·1401					
12. 41	32. 0	14. 54	·1403					
12. 56	31. 20	15. 41	·1399					
13. 21	30. 20	16. 19	·1404					
13. 38	32. 30	17. 20	·1406					
13. 53	30. 40	17. 34	·1419					
14. 9	30. 20	17. 50	·1406					
14. 13	31. 0	17. 56	·1406					
14. 28	30. 25	18. 26	·1355					
14. 43	31. 20	18. 34	·1351					
14. 56	31. 5	18. 45	·1368					
15. 9	33. 0	19. 1	·1360					
15. 12	33. 0	19. 17	·1379					
15. 23	33. 50	19. 40	·1360					
15. 28	33. 30	19. 42	·1364					
15. 40	33. 50	19. 55	·1370					
15. 56	32. 0	20. 4	·1367					
16. 41	32. 0	20. 15	·1371					
16. 56	31. 40	20. 25	·1363					
17. 8	31. 50	20. 29	·1366					
17. 11	31. 0	20. 42	·1364					
17. 26	43. 0	20. 54	·1365					
17. 41	55. 15	21. 6	·1353					
17. 56	46. 40	21. 12	·1367					
18. 10	42. 0	21. 25	·1356					
18. 22	37. 20	21. 39	·1374					
18. 29	37. 20	21. 45	·1366					
18. 41	43. 0	22. 4	·1372					
18. 56	48. 40	22. 26	·1390					
19. 4	46. 40	22. 52	·1378					
19. 9	41. 0	23. 11	·1377					
19. 18	36. 50	23. 25	·1391					
19. 26	35. 40	23. 43	·1382					
	***	23. 54	·1373					
19. 49	35. 10	23. 56	·1376					
20. 6	39. 25	23. 59	·1381					
20. 11	35. 20							
20. 24	34. 30							
20. 30	34. 40							
20. 54	38. 30							
20. 57	38. 0							
21. 9	39. 30							
21. 24	37. 0							
21. 29	38. 50							
21. 43	38. 15							
22. 27	41. 20							
22. 41	39. 5 (†)							
Nov. 11		Nov. 11		Nov. 11		Nov. 11		
0. 0	20. 37. 30	0. 0	·1381	0. 0	·03391	Min.	58 ·1	58 ·8
0. 11	38. 10	0. 12	·1379	5. 19	·03459	1. 0	58 ·3	59 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 11		Nov. 11		Nov. 11		Nov. 11		
h m	° ′ ″	h m		h m		h m	°	°
0. 38	20. 38. 10	0. 15	·1381	5. 26	·03476	3. 0	58 ·3	60 ·0
1. 36	34. 30	0. 23	·1380	5. 41	·03476	9. 0	58 ·8	60 ·5
1. 57	35. 0	0. 28	·1386	5. 57	·03451	22. 0	59 ·6	61 ·0
2. 33	36. 0	0. 44	·1380	6. 34	·03477	Max.	59 ·8	61 ·5
2. 42	34. 50	0. 49	·1382	6. 55	·03474			
2. 53	35. 10	1. 10	·1387	9. 8	·03481			
3. 11	33. 50	1. 14	·1392	9. 39	·03471			
3. 22	34. 25	1. 30	·1385	12. 22	·03462			
3. 37	33. 30	1. 45	·1389	13. 4	·03441			
3. 56	33. 50	2. 18	·1392	13. 44	·03432			
4. 9	32. 30	2. 45	·1388	14. 10	·03381			
4. 26	31. 50	2. 55	·1394	14. 36	·03344			
4. 38	30. 0	3. 11	·1384	14. 55	·03341			
4. 56	31. 15	3. 27	·1391	15. 29	·03390			
4. 57	30. 45	4. 12	·1386	16. 39	·03426			
5. 7	31. 10	4. 28	·1388	16. 54	·03416			
5. 23	23. 0	4. 41	·1386	17. 24	·03435			
5. 27	17. 10	4. 48	·1390	17. 26	·03418			
5. 39	22. 0	5. 23	·1377	17. 32	·03432			
5. 44	33. 15	5. 37	·1406	17. 58	·03434			
5. 56	33. 25	5. 41	·1405	18. 9	·03452			
6. 2	30. 50	5. 45	·1412	18. 19	·03416			
6. 9	28. 30	5. 55	·1370	18. 54	·03404			
6. 24	28. 20	6. 9	·1361	19. 25	·03411			
6. 42	31. 10	6. 54	·1383	19. 33	·03416			
6. 55	30. 40	7. 13	·1376	19. 45	·03420			
7. 9	31. 30	7. 22	·1378	19. 54	·03410			
7. 14	30. 50	7. 30	·1376	20. 25	·03441			
7. 22	30. 50	7. 40	·1381	21. 39	·03476			
7. 26	31. 40	7. 52	·1378	23. 59	·03503			
7. 38	31. 0	8. 11	·1383					
7. 44	32. 15	8. 31	·1377					
7. 56	31. 15	9. 6	·1381					
7. 58	31. 15	9. 9	·1386					
8. 8	30. 40	9. 24	·1380					
8. 14	30. 50	9. 43	·1386					
8. 31	30. 0	9. 57	·1384					
8. 39	29. 0	10. 40	·1387					
8. 56	29. 0	10. 55	·1385					
9. 13	30. 10	11. 24	·1387					
9. 23	29. 30	11. 34	·1385					
9. 38	29. 40	12. 12	·1389					
9. 52	30. 15	12. 56	·1377					
10. 26	30. 45	13. 43	·1398					
10. 41	31. 30	14. 13	·1394					
11. 11	30. 40	14. 22	·1388					
11. 26	30. 30	14. 41	·1393					
11. 55	31. 40	15. 14	·1375					
12. 3	31. 40	15. 39	·1377					
12. 12	33. 20	15. 55	·1376					
12. 26	33. 45	16. 12	·1378					
12. 37	33. 10	16. 24	·1376					
12. 57	24. 30	16. 41	·1378					
13. 8	23. 15	16. 54	·1372					
13. 20	23. 35	17. 24	·1383					
13. 37	29. 0	17. 27	·1366					
13. 53	32. 0	17. 35	·1376					
14. 20	23. 40	17. 57	·1367					
14. 37	24. 30	18. 11	·1379					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 11		Nov. 11						
h m	° ′ ″	h m		h m		h m	°	°
14. 56	20. 28. 25	18. 15	·1377					
14. 59	29. 5	18. 26	·1384					
15. 11	33. 30	18. 41	·1377					
15. 26	34. 20	18. 52	·1362					
15. 28	33. 50	19. 10	·1350					
15. 36	34. 15	19. 13	·1354					
15. 42	33. 30	19. 17	·1353					
15. 49	35. 25	19. 22	·1357					
16. 6	36. 25	19. 26	·1354					
16. 10	35. 0	19. 43	·1378					
16. 21	34. 40	19. 54	·1368					
16. 30	38. 50	20. 8	·1384					
16. 43	34. 15	20. 18	·1384					
16. 56	33. 50	20. 25	·1376					
17. 8	33. 0	20. 55	·1373					
17. 12	35. 50	21. 11	·1359					
17. 16	30. 55	21. 15	·1367					
17. 23	33. 0	21. 25	·1364					
17. 36	36. 0	21. 41	·1372					
17. 43	36. 20	22. 0	·1373					
18. 8	54. 15	22. 27	·1377					
18. 12	50. 0	22. 48	·1372					
18. 17	48. 50	22. 56	·1376					
18. 26	50. 5	23. 19	·1374					
18. 39	52. 40	23. 40	·1377					
18. 42	52. 0	23. 50	·1376					
18. 54	52. 0	23. 59	·1379					
18. 57	51. 5							
19. 11	53. 45							
19. 18	56. 50							
19. 25	54. 0							
19. 28	52. 0							
19. 36	52. 0							
19. 52	41. 15							
19. 57	40. 0							
19. 59	40. 0							
20. 9	39. 10							
20. 11	40. 0							
20. 14	37. 10							
20. 23	38. 50							
20. 27	38. 50							
20. 41	36. 0							
20. 52	36. 0							
20. 56	36. 40							
20. 58	34. 10							
21. 8	38. 10							
21. 12	38. 20							
21. 23	36. 40							
21. 36	40. 0							
21. 41	37. 55							
21. 43	38. 0							
22. 25	31. 40							
22. 40	30. 0							
22. 56	30. 10							
23. 11	27. 55							
23. 31	27. 15							
23. 42	27. 30							
23. 59	27. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 12		Nov. 12		Nov. 12		Nov. 12		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 27. 50	0. 0	·1379	0. 0	·03503	1. 0	60 ·3	62 ·1
0. 39	29. 30	1. 22	·1388	2. 4	·03532	Max.	60 ·7	62 ·4
0. 58	30. 0	1. 45	·1384	5. 16	·03514	9. 0	59 ·1	60 ·5
1. 37	31. 0	2. 31	·1381	12. 50	·03481	Min.	58 ·2	60 ·0
1. 41	30. 30	3. 25	·1388	15. 19	·03480	21. 0	59 ·0	61 ·0
1. 55	30. 30	4. 3	·1396	19. 33	·03457			
2. 42	28. 50	5. 12	·1397	23. 59	·03450			
3. 0	28. 50	6. 6	·1391					
3. 30	26. 40	8. 43	·1387					
4. 8	26. 30	10. 15	·1394					
4. 37	27. 10	11. 46	·1392					
4. 56	25. 0	13. 26	·1388					
5. 29	28. 50	14. 21	·1386					
6. 39	28. 35	15. 19	·1388					
8. 24	29. 40	15. 36	·1385					
9. 43	30. 15	15. 57	·1395					
10. 53	33. 0	16. 12	·1393					
11. 39	33. 20	16. 29	·1399					
13. 9	35. 50	17. 53	·1396					
13. 58	36. 35	18. 24	·1401					
14. 9	36. 50	18. 26	·1399					
15. 10	36. 50	18. 39	·1403					
15. 15	36. 20	18. 56	·1403					
15. 26	37. 0	19. 9	·1399					
15. 43	32. 45	19. 19	·1400					
15. 56	33. 20	19. 29	·1393					
16. 14	31. 50	19. 56	·1391					
17. 11	31. 5	20. 8	·1393					
17. 29	30. 55	20. 39	·1389					
17. 42	31. 5	20. 56	·1390					
17. 53	30. 20	21. 25	·1382					
18. 13	30. 50	21. 51	·1386					
18. 23	31. 5	23. 26	·1387					
18. 26	30. 0	23. 59	·1388					
18. 42	31. 10							
18. 47	30. 55							
19. 22	31. 50							
19. 38	31. 0							
19. 54	30. 30							
20. 7	30. 30							
20. 14	30. 10							
20. 29	30. 15							
20. 41	29. 45							
20. 58	30. 10							
21. 9	29. 50							
21. 41	30. 15							
22. 37	33. 20							
23. 8	34. 30							
23. 30	34. 40							
23. 54	35. 20							
23. 59	35. 10							
Nov. 13		Nov. 13		Nov. 13		Nov. 13		
0. 0	20. 35. 10	0. 0	·1388	0. 0	·03450	1. 0	59 ·8	61 ·9
1. 56	33. 50	0. 30	·1392	3. 14	·03481	3. 0	59 ·3	61 ·5
2. 38	32. 20	0. 55	·1395	11. 10	·03466	Max.	59 ·8	62 ·0
3. 13	31. 55	1. 0	·1394	14. 3	·03430	9. 0	59 ·6	62 ·0
3. 50	31. 40	1. 11	·1399	14. 41	·03416	Min.	57 ·4	59 ·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 13		Nov. 13		Nov. 13		Nov. 13		
h m	° ′ ″	h m		h m		h m	°	°
4. 26	20. 32. 0	1. 24	·1396	15. 44	·03422	21. 0	58·1	60·1
5. 39	31. 10	1. 57	·1397	21. 2	{·03401			
5. 52	31. 30	2. 18	·1395		{·03272			
6. 13	31. 5	2. 55	·1398	22. 52	·03221			
6. 53	31. 30	2. 57	·1404	23. 59	·03227			
7. 12	31. 0	3. 11	·1397					
7. 27	31. 40	3. 27	·1394					
7. 42	31. 0	4. 19	·1397					
7. 53	31. 30	5. 44	·1399					
8. 3	30. 40	7. 4	·1398					
8. 13	31. 10	8. 19	·1393					
9. 0	29. 25	8. 56	·1394					
9. 17	30. 0	9. 23	·1392					
9. 46	30. 0	9. 41	·1395					
9. 56	30. 25	10. 1	·1393					
10. 27	28. 0	10. 18	·1395					
10. 40	28. 10	10. 37	·1391					
10. 47	29. 0	10. 55	·1394					
10. 55	28. 40	11. 1	·1392					
11. 0	29. 0	11. 26	·1397					
11. 9	28. 40	12. 4	·1391					
11. 30	29. 40	12. 30	·1401					
11. 54	27. 20	12. 54	·1397					
11. 59	28. 0	13. 2	·1399					
12. 9	27. 10	13. 41:	·1384					
12. 28	27. 25	13. 54	·1389					
12. 39	28. 0	14. 12	·1403					
12. 41	27. 5	14. 18	·1402					
13. 6	27. 50	14. 34	·1405					
13. 9	27. 30	15. 10	·1394					
13. 24	29. 30	15. 23	·1395					
13. 47	33. 55	16. 13	·1404					
13. 59	31. 15	17. 4	·1407					
14. 12	33. 35	17. 24	·1405					
14. 38	31. 5	17. 34	·1407					
14. 41	31. 5	17. 50	·1403					
14. 53	30. 0	17. 56	·1405					
15. 8	30. 0	18. 12	·1400					
15. 17	31. 0	18. 43	·1401					
15. 42	31. 0	19. 10	·1398					
15. 53	31. 20	19. 22	·1397					
16. 9	30. 25	19. 43	·1400					
16. 24	30. 0	20. 0	·1394					
16. 57	30. 30	20. 9	·1404					
17. 29	30. 30	20. 12	·1401					
17. 41	31. 10	20. 18	·1404					
17. 46	30. 0	20. 41	·1398					
17. 58	31. 40	20. 50	·1401					
18. 9	31. 10	21. 14	·1389					
18. 26	31. 0	21. 43	·1392					
18. 36	30. 0	21. 57	·1389					
18. 44	30. 50	22. 24	·1393					
19. 16	31. 0		***					
19. 26	30. 10	23. 4	·1389					
19. 42	30. 45	23. 37	·1390					
19. 55	30. 45	23. 47	·1395					
19. 59	28. 0	23. 50	·1392					
20. 9	30. 10	23. 59	·1395					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 13								
h m	° ′ ″	h m		h m		h m	°	°
20. 23	20. 31. 20							
20. 28	31. 20							
20. 40	30. 0							
20. 54	31. 25							
21. 7	31. 0							
21. 12	32. 55							
21. 38	32. 35							
21. 51	34. 20							
22. 11	35. 0							
22. 38	37. 30							
22. 41	37. 10							
22. 45	38. 0							
22. 56	37. 10							
23. 11	36. 55							
23. 23	38. 0							
23. 42	38. 0							
23. 44	37. 10							
23. 53	38. 15							
23. 56	37. 30							
23. 59	38. 0							
Nov. 14		Nov. 14		Nov. 14		Nov. 14		
0. 0	20. 38. 0	0. 0	·1395	0. 0	·03227	Min.	58·6	60·1
0. 8	37. 25	0. 15	·1396	2. 57	·03246	1. 0	58·8	60·1
0. 23	38. 40	0. 53	·1395	4. 46	·03347	3. 0	59·0	61·0
0. 39	38. 40	1. 11	·1399	5. 16	·03384	9. 0	60·3	63·0
0. 56	37. 10	1. 13	·1403	5. 39	·03381	Max.	60·9	63·2
1. 6	37. 0	1. 16	·1397	6. 6	·03416	21. 0	60·4	62·2
1. 11	37. 50	1. 48	·1406	6. 24	·03410	22. 0	60·1	63·0
1. 13	36. 40	2. 0	·1404	6. 56	·03417	23. 0	59·6	61·3
1. 37	36. 40	2. 4	·1408	9. 3	·03435			
1. 42	36. 0	2. 12	·1403	10. 11	·03410			
1. 46	37. 0	2. 19	·1407	10. 25	·03414			
2. 1	36. 20	2. 36	·1404	10. 41	·03395			
2. 8	37. 0	2. 42	·1407	12. 6	·03402			
2. 11	36. 0	2. 53	·1401	12. 24	·03393			
2. 16	37. 5	2. 57	·1405	20. 53	·03406			
2. 23	36. 40	3. 12	·1399	23. 59	·03392			
2. 41	36. 30	3. 19	·1405					
2. 45	38. 0	3. 39	·1403					
3. 8	37. 10	3. 55	·1387					
3. 11	37. 20	4. 19	·1398					
3. 14	36. 25	4. 54	·1367					
3. 41	36. 30	5. 26	·1378					
4. 11	37. 20	5. 34	·1372					
4. 27	36. 30	5. 43	·1355					
4. 44	33. 30	5. 54	·1361					
5. 4	26. 0	6. 0	·1360					
5. 33	20. 0	6. 14	·1366					
5. 43	14. 0	6. 23	·1365					
5. 54	11. 0	6. 39	·1376					
6. 7	12. 5	6. 42	·1375					
6. 11	11. 0	6. 55	·1377					
6. 22	12. 5	7. 11	·1367					
6. 36	8. 0	7. 24	·1368					
6. 47	15. 0	7. 34	·1361					
7. 6	26. 20	7. 55	·1379					
7. 9	26. 20	8. 11	·1366					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 14		Nov. 14						
h m	° ′ ″	h m		h m		h m	°	°
7. 13	20. 24. 45	8. 24	·1361					
7. 28	28. 30	8. 30	·1365					
7. 39	26. 30	8. 45	·1347					
7. 54	24. 30	8. 55	·1367					
8. 8	29. 0	9. 6	·1364					
8. 14	26. 30	9. 18	·1369					
8. 26	24. 20	9. 24	·1366					
8. 44	27. 50	9. 35	·1379					
8. 55	24. 0	9. 48	·1379					
9. 4	25. 30	10. 11	·1370					
9. 23	31. 10	10. 25	·1398					
9. 28	30. 15	10. 42	·1377					
9. 43	32. 10	10. 55	·1381					
9. 54	32. 10	11. 24	·1377					
10. 0	32. 30	11. 35	·1383					
10. 6	31. 45	11. 53	·1380					
10. 12	31. 35	12. 12	·1393					
10. 22	30. 20	12. 19	·1385					
10. 37	34. 0	12. 32	·1386					
10. 45	31. 15	13. 12	·1379					
10. 53	30. 50	13. 27	·1384					
11. 8	31. 40	14. 26	·1382					
11. 27	30. 40	15. 9	·1384					
11. 46	32. 10	15. 14	·1381					
11. 53	32. 0	15. 26	·1385					
11. 56	30. 50	16. 19	·1382					
12. 10	34. 25	16. 45	·1386					
12. 27	32. 45	18. 53	·1386					
12. 41	33. 5	21. 27	·1380					
12. 48	32. 40	21. 43	·1381					
12. 57	33. 10	21. 56	·1378					
13. 10	33. 0	22. 14	·1380					
13. 13	32. 30	22. 27	·1379					
13. 39	33. 30	22. 44	·1382					
13. 59	33. 0	23. 11	·1380					
14. 16	31. 30	23. 36	·1384					
14. 42	34. 0	23. 44	·1383					
14. 54	32. 30	23. 59	·1384					
15. 8	32. 45							
15. 12	33. 40							
15. 23	32. 20							
15. 41	33. 15							
15. 56	32. 10							
16. 15	31. 30							
16. 31	32. 40							
16. 40	32. 25							
16. 45	32. 40							
17. 6	31. 50							
17. 11	32. 10							
17. 22	31. 30							
17. 30	31. 20							
17. 56	31. 40							
18. 29	31. 15							
18. 41	31. 40							
18. 56	31. 25							
20. 32	31. 30							
20. 43	31. 10							
20. 55	31. 40							
20. 58	20. 31. 20							
21. 26	32. 50							
21. 30	32. 10							
21. 42	33. 0							
22. 6	33. 10							
22. 15	34. 0							
22. 25	33. 40							
22. 39	34. 20							
22. 43	35. 50							
22. 56	36. 0							
23. 7	35. 0							
23. 12	35. 15							
23. 21	35. 40							
23. 26	35. 40							
23. 39	36. 15							
23. 44	36. 0							
23. 56	36. 50							
23. 59	36. 50							
Nov. 15		Nov. 15		Nov. 15		Nov. 15		
0. 0	20. 36. 50	0. 0	·1384	0. 0	·03392	0. 0	59·9	61·5
0. 28	36. 30	0. 42	·1389	2. 28	·03421	1. 0	60·1	61·5
0. 56	37. 10	0. 57	·1400	8. 59	·03383	2. 0	60·1	61·5
1. 10	35. 55	1. 15	·1406	11. 9	·03346	3. 0	59·6	61·0
1. 23	35. 50	1. 22	·1399	12. 52	·03350	Max.	61·0	62·2
1. 28	35. 0	1. 36	·1404	13. 54	·03328	9. 0	58·3	59·5
1. 57	35. 0	2. 0	·1406	14. 44	·03329	Min.	57·0	59·0
2. 17	36. 25	2. 13	·1409	16. 23	·03317	21. 0	57·7	59·2
2. 24	36. 10	2. 26	·1402	17. 10	·03296	22. 0	57·5	59·2
2. 28	34. 25	2. 41	·1407	20. 59	·03267	23. 0	57·9	59·5
2. 41	35. 10	3. 26	·1400	23. 11	·03268			
2. 53	35. 10	3. 42	·1404	23. 59	·03286			
3. 23	34. 0	4. 48	·1407					
3. 38	33. 35	5. 0	·1405					
3. 44	34. 0	5. 16	·1409					
3. 56	33. 30	5. 31	·1404					
4. 16	33. 45	5. 50	·1407					
4. 54	33. 30	6. 40	·1405					
5. 11	33. 20	6. 44	·1409					
5. 26	33. 40	6. 56	·1407					
5. 51	32. 40	7. 28	·1409					
6. 9	33. 0	7. 52	·1400					
6. 42	32. 0	8. 0	·1406					
7. 54	31. 45	8. 11	·1411					
8. 10	32. 5	8. 14	·1405					
8. 32	31. 10	8. 23	·1406					
9. 37	31. 30	8. 43	·1402					
9. 55	30. 0	9. 0	·1405					
10. 9	30. 10	9. 12	·1403					
10. 39	26. 55	9. 15	·1407					
10. 53	28. 25	9. 25	·1401					
11. 11	29. 30	9. 36	·1407					
11. 15	29. 30	10. 12	·1399					
11. 39	31. 10	10. 43	·1405					
11. 55	31. 0	11. 11	·1400					
12. 9	30. 0	11. 13	·1401					
12. 26	30. 0	11. 19	·1399					
12. 39	29. 25	11. 30	·1401					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 15		Nov. 15						
h m	° ′ ″	h m		h m		h m	°	°
12. 46	20. 30. 30	11. 45	·1396					
13. 7	30. 0	12. 5	·1395					
13. 26	30. 30	12. 25	·1398					
13. 39	29. 10	12. 38	·1395					
13. 53	27. 20	12. 55	·1406					
14. 6	28. 5	13. 11	·1404					
14. 14	26. 25	13. 17	·1405					
14. 27	25. 50	13. 42	·1402					
14. 42	25. 40	13. 57	·1395					
15. 6	32. 30	14. 10	·1397					
15. 26	29. 0	14. 24	·1391					
15. 40	28. 40	14. 34	·1397					
15. 53	28. 50	14. 46	·1396					
16. 0	28. 0	15. 10	·1389					
16. 12	29. 40	15. 48	·1400					
16. 23	31. 15	16. 4	·1398					
16. 26	28. 45	16. 26	·1389					
16. 38	29. 50	16. 41	·1394					
16. 40	28. 50	16. 56	·1400					
16. 55	28. 50	17. 14	·1399					
17. 1	27. 0	17. 23	·1401					
17. 9	26. 40	17. 54	·1397					
17. 11	25. 40	18. 22	·1407					
17. 18	27. 0	18. 40	·1404					
17. 40	28. 10	18. 44	·1406					
17. 54	27. 0	18. 54	·1402					
18. 1	28. 20	19. 0	·1406					
18. 25	29. 40	19. 26	·1376					
18. 28	28. 40	19. 48	·1369					
18. 40	29. 20	20. 11	·1374					
18. 43	28. 40	20. 24	·1382					
18. 56	30. 30	20. 34	·1377					
19. 23	34. 20	20. 42	·1380					
19. 41	40. 0	20. 58	·1376					
19. 58	42. 50	21. 11	·1384					
20. 15	43. 15	21. 22	·1376					
20. 26	44. 20	21. 45	·1374					
20. 53	43. 0	22. 4	·1379					
20. 59	42. 10	22. 26	·1389					
21. 23	42. 0	22. 45	·1384					
21. 27	42. 25	22. 58	·1385					
21. 47	41. 10	23. 9	·1384					
21. 56	41. 40	23. 20	·1388					
22. 11	41. 30	23. 42	·1386					
22. 24	42. 50	23. 59	·1389					
22. 38	42. 25							
22. 56	42. 25							
23. 6	42. 40							
23. 10	42. 0							
23. 24	42. 30							
23. 40	40. 30							
23. 54	41. 15							
23. 59	40. 50							
Nov. 16		Nov. 16		Nov. 16		Nov. 16		
0. 0	20. 40. 50	0. 0	·1389	0. 0	·03286	0. 0	58 ·4	60 ·1
0. 11	41. 0	0. 13	·1393	2. 27	·03339	Min.	58 ·4	60 ·1
0. 37	40. 50	0. 26	·1390	3. 1	·03376	1. 0	58 ·9	60 ·1

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 16		Nov. 16		Nov. 16		Nov. 16		
h m	° ′ ″	h m		h m		h m	°	°
0. 56	20. 39. 20	0. 59	·1388	6. 30	·03337	2. 0	58 ·9	60 ·4
1. 10	40. 0	1. 12	·1393	9. 54	·03321	3. 0	59 ·1	60 ·6
1. 24	39. 25	1. 26	·1389	12. 40	·03350	9. 0	59 ·0	60 ·3
1. 38	38. 50	1. 44	·1394	13. 10	·03335	21. 0	61 ·1	63 ·0
1. 41	40. 5	2. 0	·1386	13. 59	·03358	Max.	61 ·5	63 ·2
1. 56	39. 40	2. 12	·1390	21. 57	·03423			
2. 8	38. 30	2. 30	·1374	23. 59	·03417			
2. 15	38. 30	3. 38	·1403					
2. 29	33. 15	3. 54	·1405					
2. 39	31. 40	4. 0	·1403					
2. 54	31. 10	4. 15	·1407					
3. 21	33. 10	4. 29	·1403					
3. 43	34. 25	4. 45	·1408					
4. 13	33. 50	5. 29	·1405					
4. 28	33. 40	6. 28	·1408					
4. 38	33. 0	6. 47	·1406					
4. 44	33. 0	6. 57	·1408					
4. 53	32. 40	7. 42	·1406					
5. 13	33. 5	7. 52	·1409					
5. 43	32. 40	8. 0	·1406					
5. 55	33. 5	8. 39	·1409					
6. 8	32. 0	9. 2	·1406					
6. 24	32. 30	9. 23	·1408					
6. 27	32. 0	9. 29	·1406					
6. 38	32. 35	11. 7	·1407					
6. 52	31. 50	11. 56	·1403					
6. 58	32. 10	12. 9	·1404					
7. 43	31. 45	12. 32	·1396					
7. 53	31. 30	12. 56:	·1428					
7. 58	32. 5	13. 23	·1397					
8. 14	31. 30	13. 44	·1394					
10. 27	31. 20	14. 11	·1399					
10. 41	30. 45	14. 59	·1403					
11. 53	30. 0	15. 30	·1402					
11. 58	30. 15	17. 7	·1406					
12. 9	29. 55	17. 39	·1404					
12. 17	30. 20	18. 11	·1406					
12. 26	25. 10	18. 29	·1403					
12. 31	24. 15	18. 54	·1406					
13. 10	31. 30	21. 12	·1399					
13. 17	29. 0	22. 8	·1396					
13. 27	27. 55	23. 59	·1400					
13. 54	30. 10							
14. 26	30. 30							
14. 53	31. 30							
15. 9	31. 30							
15. 12	30. 50							
15. 24	30. 30							
15. 38	30. 45							
15. 48	31. 40							
16. 23	31. 20							
16. 38	32. 0							
16. 56	31. 30							
17. 7	31. 55							
17. 11	31. 20							
17. 38	31. 0							
17. 43	31. 25							
17. 59	31. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 16								
h m	° ′ ″	h m		h m		h m	°	°
18. 11	20. 31. 40							
18. 17	31. 0							
18. 37	30. 40							
19. 9	31. 0							
19. 27	30. 40							
19. 42	31. 10							
20. 16	31. 0							
20. 34	30. 50							
21. 43	32. 0							
22. 9	32. 20							
23. 13	34. 30							
23. 40	34. 25							
23. 59	35. 0							
Nov. 17		Nov. 17		Nov. 17		Nov. 17		
0. 0	20. 35. 0	0. 0	·1400	0. 0	·03417	1. 0	60·6	62·0
0. 36	35. 10	0. 50	·1403	12. 18	·03425	3. 0	60·6	62·0
0. 43	36. 5	1. 54	·1402	21. 4	·03391	Max.	61·4	63·1
1. 59	34. 30	3. 14	·1404	22. 52	·03362	9. 0	60·6	62·0
2. 46	33. 10	3. 25	·1407		·03283	Min.	59·3	60·8
3. 11	33. 10	3. 43	·1405	23. 59	·03286	21. 0	60·8	61·1
3. 26	33. 30	4. 12	·1405					
3. 36	33. 5	5. 12	·1408					
3. 47	33. 30	5. 42	·1406					
4. 9	33. 20	6. 45	·1407					
4. 26	32. 55	7. 14	·1404					
5. 29	33. 10	7. 30	·1406					
5. 41	32. 55	7. 43	·1404					
6. 54	32. 25	8. 25	·1405					
7. 3	31. 20	8. 29	·1403					
7. 12	31. 30	8. 57	·1406					
7. 24	31. 10	10. 39	·1402					
7. 56	32. 20	10. 56	·1405					
8. 28	31. 25	11. 15	·1402					
9. 9	32. 0	11. 31	·1403					
9. 41	31. 30	11. 43	·1400					
10. 42	31. 40	12. 9	·1404					
10. 56	31. 0	12. 42	·1400					
11. 27	31. 0	13. 13	·1403					
12. 13	31. 30	13. 24	·1400					
12. 58	31. 25	13. 50	·1404					
13. 45	32. 30	14. 43	·1405					
14. 23	32. 10	14. 57	·1403					
14. 28	31. 45	15. 14	·1405					
14. 38	31. 45	16. 24	·1407					
14. 43	30. 45	16. 41	·1409					
15. 9	32. 0	17. 30	·1408					
15. 23	31. 45	18. 15	·1406					
15. 36	32. 15	18. 26	·1405					
16. 24	32. 5	19. 14	·1407					
16. 38	31. 10	20. 4	·1404					
16. 53	31. 55	21. 11	·1404					
17. 7	31. 20	22. 28	·1406					
17. 13	31. 55	22. 41	·1403					
17. 38	31. 55	23. 4	·1405					
17. 54	31. 20	23. 9	·1397					
18. 21	32. 20	23. 59	·1396					
18. 26	31. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 17								
h m	° ′ ″	h m		h m;		h m	°	°
18. 57	20. 31. 45							
19. 28	31. 45							
19. 44	32. 20							
21. 6	31. 30							
22. 14	32. 50							
22. 31	33. 40							
22. 39	33. 15							
22. 56	33. 45							
22. 58	33. 45							
23. 9	35. 0							
23. 39	35. 30							
23. 59	35. 35							
Nov. 18		Nov. 18		Nov. 18		Nov. 18		
0. 0	20. 35. 35	0. 0	·1396	0. 0	·03286	1. 0	59·8	61·2
1. 57	36. 10	0. 51	·1400	2. 3	·03312	3. 0	59·9	61·3
2. 11	35. 40	1. 41	·1402	13. 4	·03316	Max.	60·9	62·9
3. 29	34. 40	1. 53	·1399	17. 0	·03321	9. 0	59·6	60·9
5. 36	34. 5	3. 9	·1402	23. 59	·03320	Min.	59·1	60·8
5. 56	33. 40	5. 39	·1400			21. 0	59·6	62·0
6. 46	33. 40	6. 2	·1398					
6. 59	33. 10	7. 45	·1401					
7. 21	33. 30	8. 49	·1397					
7. 44	33. 10	9. 0	·1402					
8. 14	33. 30	10. 41	·1395					
8. 39	32. 20	10. 54	·1398					
8. 54	33. 0	11. 12	·1396					
8. 57	32. 30	12. 52	·1395					
9. 28	33. 15	14. 0	·1399					
9. 50	31. 40	14. 39	·1397					
10. 28	33. 15	17. 25	·1401					
10. 43	33. 0	20. 0	·1398					
11. 0	33. 30	21. 25	·1393					
11. 10	33. 0	22. 56	·1394					
11. 53	33. 0	22. 58	·1392					
12. 11	33. 25	23. 59	·1394					
12. 17	33. 0							
12. 56	33. 20							
13. 23	33. 50							
13. 38	33. 5							
13. 44	33. 50							
13. 58	33. 30							
14. 43	33. 5							
14. 54	33. 40							
15. 26	33. 5							
16. 27	33. 15							
16. 40	33. 0							
17. 29	33. 0							
19. 56	32. 40							
20. 2	32. 15							
20. 11	32. 30							
20. 57	32. 40							
21. 11	32. 5							
21. 45	33. 20							
22. 14	34. 30							
22. 24	34. 10							
23. 41	36. 10							
23. 59	36. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Nov.19		Nov.19		Nov.19		Nov.19		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 10	0. 0	·1394	0. 0	·03320	0. 0	60 ·1	62 ·0
0. 26	36. 10	0. 32	·1396	9. 3	·03288	Min.	59 ·2	60 ·6
0. 44	36. 40	2. 22	·1403	10. 35	·03290	9. 0	59 ·4	61 ·0
2. 0	35. 0	3. 40	·1404	10. 54	·03278	21. 0	60 ·7	62 ·7
2. 43	34. 30	4. 9	·1402	18. 25	·03310	Max.	61 ·2	62 ·9
3. 58	34. 30	5. 18	·1405	23. 59	·03318			
4. 21	34. 5	8. 10	·1402					
5. 28	34. 0	8. 30	·1401					
7. 16	32. 35	9. 6	·1402					
8. 0	32. 35	10. 27	·1399					
8. 28	32. 5	10. 45	·1409					
8. 55	32. 20	11. 12	·1404					
9. 9	32. 0	11. 59	·1398					
9. 26	32. 5	12. 25	·1401					
9. 38	32. 35	16. 0	·1403					
9. 52	32. 0	17. 37	·1406					
10. 21	32. 0	21. 4	·1397					
10. 42	32. 50	22. 18	·1394					
11. 8	31. 15	23. 59	·1396					
11. 26	31. 5							
11. 40	32. 30							
11. 57	32. 0							
12. 38	32. 30							
12. 45	33. 0							
12. 59	33. 0							
13. 27	33. 30							
13. 56	32. 30							
14. 10	33. 10							
14. 23	32. 55							
14. 32	33. 30							
15. 56	32. 55							
16. 9	33. 20							
18. 14	32. 30							
18. 27	32. 0							
19. 30	32. 5							
21. 5	31. 40							
23. 59	35. 40							
Nov.20		Nov.20		Nov.20		Nov.20		
0. 0	20. 35. 40	0. 0	·1396	0. 0	·03318	1. 0	61 ·3	63 ·6
1. 32	35. 30	0. 35	·1400	2. 19	·03346	3. 0	60 ·9	63 ·2
3. 39	34. 0	1. 32	·1403	3. 2	·03339	Max.	61 ·6	63 ·7
5. 39	33. 40	4. 32	·1405	11. 54	·03328	9. 0	60 ·9	63 ·2
8. 11	32. 40	9. 26	·1402	20. 27	·03296	Min.	59 ·8	60 ·9
11. 11	32. 0	10. 53	·1399	22. 38	·03271	21. 0	60 ·1	61 ·0
11. 26	32. 40	11. 20	·1400	23. 59	·03275			
12. 11	32. 20	12. 12	·1398					
12. 29	32. 30	13. 14	·1399					
13. 11	32. 20	13. 28	·1400					
13. 41	33. 10	13. 54	·1397					
13. 58	32. 15	15. 25	·1401					
16. 11	32. 30	16. 20	·1404					
16. 30	32. 10	17. 42	·1408					
16. 57	32. 10	18. 12	·1413					
17. 11	32. 30	18. 54	·1414					
17. 26	32. 0	19. 10	·1416					
17. 36	32. 30	20. 32	·1410					
18. 7	32. 0	21. 26	·1402					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Of V.F. Magnet.
Nov.20		Nov.20				Nov.21		
h m	° ′ ″	h m		h m		h m	°	°
18. 37	20. 32. 40	22. 12	·1398					
19. 41	31. 30	22. 44	·1400					
20. 41	31. 10	23. 4	·1398					
20. 54	31. 40	23. 18	·1400					
21. 0	31. 35	23. 26	·1398					
23. 39	35. 40	23. 59	·1403					
23. 45	36. 30							
23. 59	36. 40							
Nov.21		Nov.21		Nov.21		Nov.21		
0. 0	20. 36. 40	0. 0	·1403	0. 0	·03275	1. 0	60 ·1	61 ·5
1. 27	37. 0	0. 49	·1415	3. 1	·03311	3. 0	60 ·6	62 ·0
1. 36	36. 20	1. 15	·1412	8. 54	·03310	Max.	61 ·0	62 ·7
2. 39	35. 0	1. 24	·1414	17. 46	·03281	9. 0	60 ·1	62 ·5
3. 11	35. 0	1. 29	·1411	21. 28	·03260	Min.	59 ·2	61 ·0
3. 25	34. 40	1. 42	·1413		·03241	21. 0	59 ·6	61 ·5
4. 28	34. 15	2. 40	·1409	23. 59	·03240	22. 30	59 ·6	61 ·7
5. 39	34. 0	2. 55	·1413			23. 0	59 ·7	61 9
9. 56	31. 50	3. 24	·1409					
11. 10	32. 20	3. 27	·1410					
11. 40	32. 0	3. 49	·1408					
12. 57	33. 30	4. 42	·1411					
13. 38	33. 20	4. 54	·1409					
13. 53	32. 55	5. 2	·1411					
14. 27	33. 50	5. 42	·1408					
14. 41	33. 10	5. 53	·1411					
15. 37	33. 50	6. 13	·1407					
16. 39	33. 10	7. 12	·1406					
16. 42	32. 50	7. 58	·1407					
16. 53	33. 15	8. 51	·1402					
17. 10	33. 0	8. 56	·1405					
17. 28	32. 50	9. 13	·1402					
18. 21	33. 0	10. 8	·1404					
19. 54	32. 10	11. 18	·1401					
20. 14	31. 40	11. 55	·1403					
20. 25	32. 0	12. 53	·1400					
20. 44	31. 35	13. 49	·1402					
22. 36	34. 0	14. 27	·1404					
22. 56	34. 25	15. 30	·1405					
23. 25	36. 0	17. 22	·1407					
23. 59	37. 0	18. 4	·1406					
		19. 20	·1409					
		20. 0	·1407					
		20. 25	·1408					
		21. 40	·1397					
		23. 0	·1393					
		23. 12	·1395					
		23. 31	·1392					
		23. 50	·1394					
		23. 59	·1391					
Nov.22		Nov.22		Nov.22		Nov.22		
0. 0	20. 37. 0	0. 0	·1391	0. 0	·03240	0. 0	60 ·0	62 ·0
1. 27	38. 50	0. 25	·1394	3. 37	·03272	1. 0	59 ·6	62 ·4
1. 39	38. 30	0. 36	·1389	7. 1	·03281	2. 0	60 ·3	62 ·4
2. 7	37. 30	1. 11	·1393	8. 53	·03306	3. 0	60 ·4	62 ·4
2. 39	37. 0	1. 57	·1399	11. 19	·03273	Max.	61 ·2	63 ·0
2. 58	36. 50	2. 51	·1402	15. 18	·03241	9. 0	60 ·5	62 ·9

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ' attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.22		Nov.22		Nov.22		Nov.22		
h m	° ′ ″	h m		h m		h m	°	°
3. 13	20. 36. 20	3. 15	·1399	15. 31	·03253	Min.	59 ·2	61 ·5
3. 42	36. 5	3. 49	·1403	17. 19	·03237	21. 0	59 ·6	62 ·0
3. 59	37. 0	4. 11	·1399	17. 56	·03244	22. 0	59 ·6	62 ·0
4. 53	35. 25	4. 39	·1399	20. 57	·03227	23. 0	59 ·6	62 ·0
5. 51	36. 35	4. 49	·1398	23. 59	·03231			
6. 16	35. 0	5. 15	·1400					
6. 26	35. 15	5. 27	·1404					
6. 39	34. 30	5. 51	·1399					
6. 51	34. 40	6. 25	·1399					
7. 12	30. 20	6. 43	·1394					
7. 30	30. 35	6. 51	·1396					
7. 42	30. 30	6. 59	·1386					
7. 57	31. 55	7. 22	·1389					
8. 27	28. 50	7. 29	·1387					
8. 40	30. 0	7. 43	·1389					
8. 57	28. 55	7. 57	·1383					
9. 23	27. 20	8. 11	·1385					
9. 36	28. 15	8. 27	·1381					
9. 52	31. 0	8. 39	·1382					
9. 58	31. 35	9. 0	·1376					
10. 38	31. 35	9. 35	·1385					
10. 44	31. 5	9. 41	·1384					
10. 57	31. 30	9. 59	·1391					
11. 14	31. 50	10. 6	·1388					
11. 28	31. 25	10. 20	·1389					
11. 39	32. 30	10. 26	·1394					
11. 57	32. 45	10. 42	·1391					
12. 18	30. 50	11. 14	·1393					
12. 50	33. 10	11. 26	·1392					
12. 53	33. 50	11. 41	·1405					
13. 13	33. 15	12. 11	·1396					
13. 26	33. 40	12. 24	·1397					
13. 40	33. 40	12. 35	·1393					
13. 44	34. 25	12. 42	·1395					
13. 54	33. 40	12. 52	·1392					
14. 11	34. 30	13. 0	·1395					
14. 36	33. 55	13. 18	·1398					
14. 42	33. 55	13. 24	·1395					
14. 46	32. 10	13. 33	·1399					
15. 0	28. 50	13. 42	·1398					
15. 9	28. 50	13. 53	·1400					
15. 14	27. 40	14. 5	·1397					
15. 27	32. 30	14. 24	·1402					
15. 51	34. 0	14. 54	·1405					
15. 56	33. 30	15. 6	·1403					
16. 10	32. 30	15. 23	·1396					
16. 22	33. 10	15. 34	·1402					
16. 37	33. 10	15. 45	·1399					
16. 41	33. 40	15. 55	·1401					
16. 53	33. 15	16. 15	·1397					
17. 6	33. 15	16. 34	·1401					
17. 9	31. 40	17. 24	·1399					
17. 22	30. 50	17. 40	·1404					
17. 27	31. 50	17. 54	·1400					
17. 40	32. 50	17. 57	·1404					
17. 45	32. 50	18. 23	·1399					
17. 56	34. 30	18. 26	·1401					
18. 8	33. 0	18. 32	·1399					
18. 11	20. 33. 0	18. 50	·1400					
18. 30	31. 45	19. 10	·1397					
18. 54	32. 10	19. 12	·1400					
18. 59	31. 35	19. 16	·1397					
19. 11	33. 0	19. 26	·1400					
19. 13	31. 50	19. 40	·1399					
19. 27	33. 10		***					
19. 53	32. 0	20. 26	·1401					
19. 57	31. 40	20. 40	·1397					
20. 10	32. 40	20. 44	·1399					
20. 16	32. 20	20. 53	·1393					
20. 28	32. 35	21. 11	·1399					
20. 39	32. 10	21. 22	·1395					
20. 44	32. 40	21. 42	·1391					
20. 55	31. 30	22. 0	·1396					
21. 10	33. 0	22. 13	·1390					
21. 28	32. 10	22. 41	·1393					
21. 39	33. 0	22. 54	·1389					
21. 43	32. 30	23. 10	·1392					
22. 3	33. 30	23. 19	·1388					
22. 12	32. 40	23. 52	·1391					
23. 14	35. 0	23. 59	·1392					
23. 36	34. 50							
23. 53	36. 30							
23. 57	36. 30							
23. 59	37. 0							
Nov.23		Nov.23		Nov.23		Nov.23		
0. 0	20. 37. 0	0. 0	·1392	0. 0	·03231	0. 0	59 ·7	62 ·2
0. 9	38. 20	0. 10	·1395	0. 56	·03248	1. 0	60 ·6	62 ·1
0. 22	38. 30	0. 19	·1393	4. 26	·03278	3. 0	60 ·6	62 ·4
0. 50	35. 40	0. 30	·1396	4. 38	·03289	Max.	61 ·0	63 ·4
0. 58	37. 15	0. 40	·1398	13. 9	·03276	9. 0	60 ·6	63 ·0
1. 16	38. 0	0. 51	·1390	13. 57	·03267	Min.	59 ·7	62 ·0
	***	1. 2	·1398	18. 25	·03271	21. 0	60 ·2	62 ·5
1. 43	36. 30	1. 22	·1394	21. 39	·03254			
	***	1. 27	·1398	23. 59	·03250			
2. 38	37. 55	1. 37	·1394					
3. 0	36. 10	1. 41	·1398					
3. 9	36. 15	2. 2	·1394					
3. 15	37. 10	2. 24	·1396					
3. 26	36. 30	2. 44	·1392					
3. 29	36. 55	2. 57	·1393					
3. 54	36. 30	3. 13	·1396					
4. 1	36. 30	3. 26	·1393					
4. 23	34. 40	3. 40	·1395					
4. 32	32. 0	3. 44	·1393					
4. 44	32. 10	4. 1	·1394					
5. 9	34. 0	4. 26	·1381					
5. 13	33. 50	4. 45	·1392					
5. 26	34. 30	5. 13	·1400					
5. 33	34. 20	5. 34	·1398					
5. 46	35. 20	5. 40	·1399					
6. 29	33. 25	5. 54	·1392					
7. 9	33. 40	6. 25	·1396					
7. 21	32. 55	6. 42	·1398					
7. 26	33. 5	7. 8	·1391					
7. 39	32. 40	7. 40	·1394					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.23		Nov.23						
h m	° ′ ″	h m		h m		h m	°	°
7. 50	20. 31. 25	7. 55	·1397					
8. 11	33. 10	8. 54	·1396					
9. 4	31. 15	9. 14	·1398					
9. 11	31. 15	9. 26	·1395					
9. 24	30. 0	9. 52	·1398					
9. 39	28. 55	10. 47	·1393					
9. 56	30. 30	11. 19	·1401					
10. 8	30. 20	11. 41	·1399					
10. 38	31. 30	11. 49	·1392					
10. 44	31. 0	12. 4	·1390					
11. 9	29. 45	12. 14	·1392					
11. 24	28. 10	12. 26	·1392					
11. 39	31. 10	12. 42	·1387					
11. 44	31. 10	12. 57	·1388					
11. 57	30. 0	13. 38	·1399					
12. 11	31. 0	14. 9	·1395					
12. 29	31. 0	14. 22	·1398					
12. 41	30. 30	14. 30	·1393					
12. 51	31. 10	14. 57	·1394					
12. 59	30. 25	15. 55	·1398					
13 12	32. 30	16. 6	·1395					
13. 24	32. 55	16. 20	·1399					
13. 34	33. 40	16. 40	·1397					
13. 42	33. 15	17. 11	·1398					
13. 53	33. 15	17. 19	·1401					
14. 6	32. 10	17. 41	·1399					
14. 13	32. 10	17. 53	·1401					
14. 26	31. 30	18. 49	·1399					
14. 56	32. 45	19. 29	·1401					
15. 9	33. 20	20. 9	·1399					
15. 39	33. 30	20. 26	·1396					
15. 53	33. 0	20. 36	·1399					
15. 56	33. 40	20. 41	·1396					
16. 5	32. 30	23. 23	·1391					
16. 13	32. 50	23. 34	·1394					
16. 24	33. 40	23. 43	·1392					
16. 38	32. 40	23. 59	·1395					
16. 41	33. 5							
16. 47	32. 40							
16. 56	33. 5							
17. 10	32. 15							
17. 24	33. 5							
17. 28	32. 30							
17. 36	32. 50							
17. 41	32. 15							
17. 58	33. 10							
18. 11	32. 15							
18. 41	33. 0							
19. 54	32. 50							
20. 9	32. 10							
20. 15	32. 40							
20. 24	31. 55							
20. 38	32. 40							
20. 59	32. 20							
22. 14	34. 0							
23. 2	35. 30							
23. 11	35. 0							
23. 23	35. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.23								
h m	° ′ ″	h m		h m		h m	°	°
23. 26	20. 35. 0							
23. 41	36. 50							
23. 49	35. 55							
23. 59	36. 5							
Nov.24		Nov.24		Nov.24		Nov.24		
0. 0	20. 36. 5	0. 0	·1395	0. 0	·03250	1. 0	60.8	62 ·9
0. 30	36. 50	0. 23	·1396	7. 44	·03290	3. 0	60 ·7	63 ·1
0. 39	36. 20	0. 34	·1398	8. 3	·03281	Max.	61 ·2	63 ·7
0. 58	36. 40	0. 43	·1397	8. 34	·03293	9. 0	60 ·6	63 ·0
1. 9	37. 10	1. 10	·1402	10. 14	·03277	Min.	59 ·5	61 ·4
1. 25	36. 50	1. 21	·1398	14. 7	·03263	21. 0	60 ·1	62 ·0
1. 43	36. 55	1. 50	·1400	14. 41	·03250			
1. 56	36. 10	2. 6	·1401	23. 59	·03236			
2. 4	36. 20	2. 13	·1399					
2. 11	36. 0	2. 27	·1403					
2. 39	36. 0	2. 56	·1400					
2. 53	35. 20	3. 11	·1401					
3. 12	36. 0	3. 23	·1398					
3. 39	35. 30	3. 51	·1400					
4. 11	36. 10	4. 13	·1398					
4. 25	34. 55	4. 40	·1400					
4. 56	34. 20	4. 56	·1399					
6. 37	34. 20	5. 34	·1399					
6. 56	34. 35	5. 44	·1402					
7. 12	34. 0	6. 15	·1398					
7. 24	34. 40	6. 44	·1400					
7. 38	33. 40	7. 8	·1396					
7. 53	33. 40	7. 35	·1394					
8. 12	27. 15	8. 4	·1388					
8. 27	29. 30	8. 39	·1402					
8. 56	32. 0	8. 43	·1399					
9. 31	31. 45	8. 49	·1401					
9. 51	31. 5	9. 41	·1387					
10. 9	31. 40	10. 11	·1395					
10. 16	30. 35	10. 23	·1393					
10. 38	31. 40	10. 49	·1388					
10. 56	31. 0	11. 11	·1392					
11. 17	31. 20	11. 22	·1389					
11. 41	32. 30	11. 39	·1389					
11. 52	32. 5	11. 50	·1392					
12. 8	32. 30	12. 20	·1393					
12. 41	32. 20	12. 26	·1395					
13. 8	33. 40	12. 50	·1391					
13. 38	32. 50	14. 0	·1393					
13. 53	33. 20	14. 24	·1399					
14. 23	37. 55	14. 48	·1396					
14. 42	33. 35	15. 40	·1395					
15. 8	32. 30	17. 33	·1399					
15. 23	33. 40	18. 30	·1403					
15. 27	33. 20	18. 41	·1400					
15. 41	33. 35	19. 49	·1403					
15. 55	33. 25	21. 15	·1398					
16. 11	33. 10	21. 24	·1403					
16. 27:	32. 20	21. 42	·1397					
17. 8	33. 20	22. 13	·1393					
17. 57	33. 20	22. 27	·1395					
18. 9	32. 50	22. 54	·1393					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 24		Nov. 24						
h m	° ′ ″	h m		h m		h m	°	°
18. 23	20. 33. 20	23. 32	·1394					
18. 40	33. 0	23. 59	·1398					
18. 54	33. 20							
20. 39	32. 55							
22. 11	34. 0							
23. 7	35. 30							
23. 59	36. 20							
Nov. 25		Nov. 25		Nov. 25		Nov. 25		
0. 0	20. 36. 20	0. 0	·1398	0. 0	·03236	1. 0	60 ·1	62 ·0
0. 23	36. 50	0. 24	·1400	2. 48	·03250	3. 0	60 ·6	62 ·0
1. 58	35. 10	1. 15	·1403	8. 54	·03264	Max.	61 ·0	63 ·2
2. 10	35. 20	2. 16	·1400	10. 9	·03250	9. 0	60 ·1	62 ·0
2. 13	34. 40	2. 30	·1403	12. 11	·03237	Min.	59 ·8	62 ·0
2. 28	34. 55	3. 12	·1398	20. 32	·03236	22. 0	60 ·0	62 ·1
3. 9	34. 15	3. 27	·1400	22. 6	·03219			
3. 16	33. 55	3. 30	·1388	23. 59	·03221			
3. 28	34. 15	3. 39	·1400					
3. 59	34. 10	4. 34	·1399					
4. 11	33. 50	6. 0	·1401					
5. 13	34. 0	6. 19	·1399					
5. 38	33. 40	6. 27	·1400					
6. 23	33. 30	7. 10	·1395					
6. 41	33. 55	7. 26	·1397					
6. 56	33. 25	8. 55	·1396					
7. 21	32. 55	9. 7	·1401					
7. 43	33. 20	9. 15	·1396					
7. 56	32. 55	9. 52	·1410					
8. 33	32. 30	10. 14	·1402					
9. 14	33. 0	10. 44	·1395					
9. 37	29. 25	11. 11	·1398					
9. 45	29. 55	11. 53	·1396					
10. 9	28. 50	16. 13	·1400					
10. 23	31. 20	17. 52	·1403					
10. 40	32. 25	18. 40	·1405					
10. 57	32. 30	22. 0	·1398					
11. 10	32. 55	23. 19	·1396					
11. 26	32. 45	23. 59	·1400					
11. 28	32. 55							
12. 51	33. 0							
14. 53	33. 10							
15. 8	32. 55							
16. 7	33. 0							
16. 26	33. 20							
17. 12	33. 10							
17. 55	33. 35							
18. 39	33. 5							
19. 29	33. 30							
19. 43	33. 15							
20. 29	33. 40							
20. 45	33. 15							
20. 58	33. 40							
23. 41	36. 25							
23. 59	36. 15							
Nov. 26		Nov. 26		Nov. 26		Nov. 26		
0. 0	20. 36. 15	0. 0	·1400	0. 0	·03221	1. 0	60 ·6	61 ·6
0. 27	35. 50	0. 44	·1398	10. 25	·03243	Max.	61 ·1	63 ·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 26		Nov. 26		Nov. 26		Nov. 26		
h m	° ′ ″	h m		h m		h m	°	°
0. 53	20. 36. 5	1. 12	·1403	15. 15	·03210	8. 0	60 ·1	62 ·0
1. 28	35. 20	1. 23	·1400	21. 39	·03142	Min.	57 ·8	59 ·0
2. 9	35. 0	2. 42	·1404	22. 4	·03140	21. 0	57 ·8	59 ·0
2. 36	35. 35	3. 11	·1403	23. 59	·03210			
2. 41	35. 10	3. 41	·1405					
4. 9	34. 55	3. 57	·1403					
4. 26	35. 30	4. 39	·1407					
4. 35	35. 0	4. 53	·1405					
4. 56	36. 15	5. 23	·1400					
5. 4	36. 0	6. 36	·1405					
5. 18	36. 10	7. 11	·1399					
6. 9	34. 40	7. 25	·1401					
6. 27	34. 30	7. 40	·1399					
6. 39	34. 50	7. 55	·1409					
6. 51	33. 30	8. 10	·1408					
7. 11	34. 10	8. 22	·1396					
7. 38	33. 40	8. 52	·1399					
7. 53	31. 10	9. 13	·1396					
8. 9	33. 20	10. 0	·1398					
8. 28	32. 20	10. 15	·1399					
8. 41	32. 10	10. 26	·1396					
9. 9	33. 5	10. 54	·1399					
9. 21	32. 10	11. 3	·1397					
9. 42	31. 30	11. 15	·1400					
9. 56	32. 30	11. 26	·1398					
10. 6	31. 55	12. 40	·1399					
10. 22	32. 50	14. 18	·1397					
10. 26	32. 0	16. 32	·1403					
10. 43	31. 50	17. 15	·1403					
10. 55	32. 5	20. 10	·1410					
11. 8	31. 20	20. 39	·1408					
11. 14	32. 10	20. 53	·1410					
16. 53	32. 30	21. 6	·1408					
17. 4	32. 50	21. 10	·1413					
20. 10	32. 50	21. 41	·1406					
20. 53	32. 40	21. 46	·1408					
22. 27	33. 50		***					
23. 11	35. 10	22. 41	·1401					
23. 56	35. 30	23. 27	·1403					
23. 59	35. 40	23. 59	·1400					
Nov. 27		Nov. 27		Nov. 27		Nov. 27		
0. 0	20. 35. 40	0. 0	·1400	0. 0	·03210	1. 0	61 ·3	62 ·8
1. 10	36. 10	0. 24	·1405	9. 1	·03291	3. 0	61 ·0	63 ·0
1. 40	35. 0	1. 6	·1408	17. 56	·03210	Max.	61 ·7	63 ·7
1. 53	35. 10	1. 41	·1404		***	9. 0	61 ·6	63 ·6
2. 4	34. 40	1. 57	·1406	18. 40	·03192	Min.	59 ·1	61 ·5
2. 25	35. 25	3. 26	·1400	18. 57	·03203	21. 0	59 ·7	61 ·8
2. 41	35. 0	4. 36	·1402	20. 9	·03191			
3. 41	35. 15	4. 54	·1401	20. 38	·03213			
4. 11	34. 40	5. 4	·1405	23. 59	·03210			
4. 27	34. 40	5. 13	·1402					
4. 39	34. 20	5. 27	·1406					
5. 13	34. 40	6. 11	·1398					
5. 26	34. 10	7. 12	·1401					
5. 33	34. 30	8. 11	·1400					
5. 43	33. 50	8. 53	·1403					
5. 56	34. 5	9. 25	·1399					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov.27		Nov.27						
h m	° ′ ″	h m		h m		h m	°	°
6. 11	20. 34. 5	9. 34	·1401					
6. 26	33. 45	10. 24	·1397					
6. 44	34. 10	11. 2	·1402					
7. 10	33. 10	11. 30	·1399					
7. 56	33. 20	11. 44	·1400					
10. 9	31. 50	11. 56	·1399					
10. 53	32. 0	12. 19	·1402					
10. 58	31. 50	12. 41	·1399					
11. 12	32. 10	12. 55	·1402					
11. 30	31. 55	13. 13	·1400					
11. 43	32. 5	14. 27	·1405					
11. 58	31. 55	15. 10	·1404					
12. 42	33. 30	15. 19	·1411					
13. 9	33. 10	15. 24	·1409					
14. 26	33. 25	16. 23	·1413					
14. 40	33. 5	16. 30	·1410					
15. 8	33. 10	16. 36	·1413					
15. 12	34. 5	16. 52	·1414					
15. 14	32. 55	17. 30	·1407					
15. 39	33. 0	17. 49	·1404					
15. 56	32. 30	17. 55	·1409					
16. 52	32. 30	18. 0	·1406					
16. 57	32. 5	18. 12	·1415					
17. 9	32. 40	18. 30	·1419					
17. 12	32. 30	18. 52	·1404					
17. 27	34. 30	19. 18	·1419					
17. 42	37. 0	20. 12	·1382					
17. 47	38. 30	20. 23	·1364					
17. 58	36. 30	20. 31	·1365					
	***	20. 45	·1383					
18. 42	32. 50	20. 55	·1379					
18. 57	34. 25	21. 2	·1382					
19. 11	35. 0	21. 7	·1378					
19. 38	38. 5	21. 36	·1395					
19. 49	37. 30	21. 44	·1394					
20. 11	33. 10	21. 47	·1396					
	***	22. 26	·1395					
20. 36	34. 15	22. 40	·1399					
20. 52	40. 0	22. 44	·1398					
21. 9	42. 30	22. 55	·1399					
21. 12	44. 0	23. 7	·1397					
21. 28	40. 15	23. 15	·1401					
22. 13	35. 50	23. 42	·1397					
22. 39	38. 55	23. 45	·1399					
22. 43	37. 10	23. 59	·1395					
23. 0	37. 10							
23. 11	36. 40							
23. 30	37. 10							
23. 40	36. 50							
23. 55	37. 10							
23. 59	36. 15							
Nov.28		Nov.28		Nov.28		Nov.28		
0. 0	20. 36. 15	0. 0	·1395	0. 0	·03210	Min.	59 ·8	61 ·8
0. 13	37. 50	0. 10	·1400	2. 13	·03235	1. 0	59 ·8	61 ·9
0. 25	36. 20	0. 57	·1397	3. 52	·03332	3. 0	60 ·1	62 ·0
1. 9	35. 30	1. 42	·1400	4. 41	·03291	9. 0	60 ·6	62 ·0
1. 37	38. 20	2. 7	·1388	8. 38	·03291	Max.	61 ·0	63 ·3
1. 42	38. 0	2. 15	·1389	9. 41	·03186	21. 0	60 ·6	62 ·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov.28		Nov.28		Nov.28		Nov.28		
h m	° ′ ″	h m		h m		h m	°	°
1. 46	20. 38. 50	2. 34	·1380	10. 6	·03201	22. 0	60 ·6	62 ·6
2. 0	38. 0	2. 43	·1353	10. 14	·03191	23. 0	60 ·3	62 ·4
2. 11	37. 10	2. 48	·1351	10. 41	·03232			
2. 23	38. 50	3. 2	·1340	12. 27	·03238			
2. 26	42. 50	3. 16	·1357	12. 39	·03229			
2. 32	42. 15	3. 23	·1354	13. 32	·03223			
2. 39	42. 40	3. 45	·1382	14. 6	·03210			
2. 56	35. 40	3. 56	·1369	14. 44	·03210			
3. 10	37. 40	4. 8	·1366	15. 11	·03202			
3. 21	35. 0	4. 14	·1373	18. 47	·03227			
3. 28	32. 30	4. 24	·1366	20. 9	·03231			
3. 52	40. 0	4. 45	·1376	23. 59	·03242			
3. 56	38. 0	4. 53	·1375					
3. 58	36. 50	5. 12	·1380					
4. 11	38. 50	5. 25	·1371					
4. 18	37. 30	5. 36	·1382					
4. 27	36. 55	5. 47	·1373					
4. 40	37. 30	5. 56	·1372					
4. 56	36. 10	6. 15	·1379					
5. 9	36. 40	6. 25	·1375					
5. 15	33. 30	6. 39	·1380					
5. 27	34. 15	7. 17	·1376					
5. 41	31. 50	7. 27	·1381					
5. 44	31. 55	7. 56	·1374					
5. 56	30. 15	8. 14	·1379					
6. 6	30. 0	8. 18	·1376					
6. 11	30. 50	8. 33	·1377					
6. 23	30. 50	8. 54	·1387					
6. 39	34. 20	9. 11	·1403					
6. 53	34. 50	9. 15	·1399					
6. 59	33. 10	9. 27	·1412					
7. 12	30. 20	9. 40	·1427					
7. 24	31. 15	9. 42	·1434					
7. 28	30. 40	9. 55	·1395					
7. 42	31. 5	10. 7	·1403					
7. 52	30. 50	10. 23	·1361					
8. 6	32. 25	10. 28	·1359					
8. 11	32. 0	10. 51	·1386					
8. 24	32. 40	11. 10	·1372					
8. 42	29. 50	11. 13	·1378					
8. 54	29. 10	11. 22	·1377					
9. 6	31. 0	11. 55	·1384					
9. 18	20. 55	12. 15	·1381					
9. 26	25. 0	12. 41	·1395					
9. 36	30. 0	12. 52	·1390					
9. 42	23. 0	12. 57	·1390					
10. 6	30. 25	13. 13	·1384					
10. 23	23. 10	13. 28	·1383					
10. 38	29. 0	13. 48	·1389					
10. 46	31. 50	13. 57	·1387					
10. 55	29. 45	14. 12	·1388					
11. 6	30. 40	14. 28	·1382					
11. 11	30. 40	14. 36	·1385					
11. 23	31. 40	15. 2	·1378					
11. 31	30. 55	15. 22	·1366					
11. 42	28. 40	15. 52	·1384					
12. 0	29. 10	15. 56	·1383					
12. 12	30. 25	16. 20:	·1394					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov.28		Nov.28						
h m	° ′ ″	h m		h m		h m	°	°
12. 22	20. 30. 15	16. 27	·1392					
12. 27	31. 10	16. 37	·1397					
12. 51	29. 30	16. 46	·1392					
13. 8	29. 40	17. 8	·1389					
13. 24	32. 0	17. 40	·1391					
13. 37	33. 30	17. 44	·1396					
13. 43	33. 0	18. 10	·1384					
13. 53	31. 50	18. 18	·1385					
14. 23	29. 15	18. 28	·1389					
14. 37	32. 5	18. 44	·1380					
14. 42	34. 40	19. 21	·1383					
14. 52	33. 40	19. 56	·1388					
15. 8	35. 30	20. 10	·1393					
15. 11	34. 50	20. 13	·1384					
15. 18	35. 10	20. 39	·1387					
15. 26	36. 25	20. 53	·1381					
15. 38	36. 15	21. 0	·1385					
15. 42	36. 50		***					
15. 51	35. 0	21. 19	·1380					
15. 56	34. 30	21. 29	·1384					
16. 9	34. 30	21. 40	·1381					
16. 23	32. 50	21. 43	·1386					
16. 27	34. 10	21. 49	·1381					
16. 38	33. 50	22. 12	·1379					
16. 42	34. 25	22. 21	·1381					
16. 57	34. 0	22. 43	·1378					
17. 12	35. 0	22. 54	·1382					
17. 25	34. 40	23. 0	·1376					
17. 28	34. 0	23. 14	·1381					
17. 43	32. 55	23. 17	·1377					
17. 55	34. 20	23. 35	·1383					
18. 11	34. 35	23. 59	·1384					
18. 13	34. 10							
18. 23	35. 10							
18. 38	33. 20							
18. 41	33. 40							
19. 4	32. 50							
19. 25	33. 20							
19. 37	33. 10							
19. 56	33. 20							
19. 58	35. 5							
20. 8	33. 30							
20. 23	34. 15							
20. 39	33. 40							
20. 53	33. 25							
20. 57	33. 0							
21. 8	34. 40							
21. 23	33. 15							
21. 31	34. 20							
21. 54	34. 0							
22. 9	34. 30							
22. 31	36. 0							
22. 43	36. 15							
22. 49	36. 5							
22. 57	34. 20							
23. 12	35. 5							
23. 22	34. 45							
23. 59	36. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov.29		Nov.29		Nov.29		Nov.29		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 40	0. 0	·1384	0. 0	·03242	0. 0	60 ·6	62 ·5
0. 41	36. 55	0. 49	·1392	2. 2	·03251	1. 0	60 ·7	62 ·9
0. 43	36. 5	1. 0	·1391	2. 56	·03262	2. 0	60 ·6	62 ·7
0. 56	37. 5	1. 25	·1395	4. 53	·03302	3. 0	60 ·6	62 ·7
1. 0	36. 20	2. 17	·1397	5. 9	·03296	Max.	61 ·0	63 ·5
1. 36	37. 0	2. 26	·1393	5. 32	·03310	9. 0	60 ·3	62 ·1
2. 6	35. 40	2. 43	·1390	6. 13	·03281	Min.	59 ·3	61 ·3
2. 43	38. 15	3. 3	·1381	11. 52	·03252	21. 0	59 ·8	61 ·6
2. 56	37. 40	3. 13	·1353	21. 38	·03195	22. 0	59 ·8	61 ·6
3. 8	37. 10	3. 24	·1365	23. 59	·03209	23. 0	59 ·9	61 ·6
3. 13	33. 55	3. 40	·1357					
3. 26	35. 5	3. 44	·1363					
3. 42	29. 15	3. 55	·1371					
3. 53	30. 50	4. 10	·1368					
3. 56	30. 30	4. 21	·1372					
4. 6	30. 55	4. 29	·1371					
4. 11	29. 40	4. 49	·1382					
4. 26	29. 5	5. 6	·1367					
4. 43	31. 40	5. 12	·1371					
4. 55	31. 55	5. 18	·1364					
5. 6	27. 55	5. 36	·1389					
5. 10	28. 5	5. 41	·1385					
5. 23	23. 0	5. 55	·1391					
5. 38	29. 40	6. 10	·1384					
5. 40	29. 0	6. 16	·1394					
5. 43	29. 40	6. 25	·1394					
5. 56	29. 0	6. 44	·1380					
6. 9	25. 40	7. 0	·1385					
6. 22	28. 0	7. 10	·1384					
6. 31	32. 10	7. 24	·1388					
6. 43	33. 15	7. 43	·1382					
6. 52	32. 0	8. 11	·1386					
6. 58	32. 30	8. 15	·1388					
7. 12	32. 20	8. 34	·1384					
7. 22	31. 45	8. 55	·1388					
7. 36	32. 40	9. 33	·1386					
7. 53	32. 20	9. 53	·1390					
8. 12	33. 30	11. 11	·1388					
8. 41	31. 50	11. 39	·1391					
9. 11	33. 0	11. 46	·1395					
9. 23	31. 55	12. 39	·1392					
9. 39	31. 10	12. 56	·1390					
9. 42	31. 35	14. 58	·1393					
9. 53	31. 30	15. 10	·1392					
10. 9	32. 40	15. 26	·1394					
10. 38	32. 0	16. 30	·1393					
10. 43	32. 50	17. 45	·1397					
11. 27	33. 5	18. 18	·1394					
11. 42	34. 15	19. 14	·1396					
11. 56	33. 5	20. 10	·1390					
12. 11	33. 25	21. 25	·1391					
12. 39	33. 25	22. 57	·1394					
12. 57	34. 0	23. 29	·1393					
13. 27	34. 20	23. 59	·1396					
13. 40	34. 0							
14. 11	33. 25							
14. 27	33. 40							
15. 55	33. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov.29								
h m	° ′ ″	h m		h m		h m	°	°
16. 38	20. 33. 40							
16. 45	33. 0							
17. 16	33. 10							
17. 40	33. 0							
17. 44	33. 50							
17. 56	33. 0							
18. 9	33. 10							
18. 16	32. 40							
18. 26	32. 40							
18. 40	32. 10							
18. 44	32. 40							
18. 56	32. 20							
19. 10	33. 0							
19. 31	32. 20							
19. 53	32. 50							
19. 58	32. 50							
20. 8	32. 30							
20. 16	33. 0							
20. 37	32. 40							
20. 58	33. 0							
22. 27	34. 30							
22. 43	35. 10							
22. 58	35. 10							
23. 9	36. 30							
23. 26	35. 30							
23. 29	36. 10							
23. 40	35. 50							
23. 56	37. 20							
23. 59	37. 40							
Nov.30		Nov.30		Nov.30		Nov.30		
0. 0	20. 37. 40	0. 0	·1396	0. 0	·03209	0. 0	60 ·2	61 ·8
0. 4	37. 10	0. 26	·1398	2. 57	·03250	1. 0	60 ·6	62 ·2
0. 25	36. 0	1. 10	·1394	6. 39	·03243	2. 0	60 ·2	62 ·2
0. 55	38. 0	1. 56	·1383	6. 54	·03251	3. 0	60 ·6	62 ·9
0. 57	37. 0	2. 10	·1384	7. 26	·03240	Max.	60 ·8	63 ·4
1. 10	36. 20	2. 27	·1383	11. 53	·03236	9. 0	59 ·8	62 ·0
1. 43	37. 50	2. 42	·1379	12. 31	·03221	Min.	59 ·4	61 ·4
1. 58	37. 10	3. 6	·1386	12. 46	·03230	21. 0	59 ·8	62 ·0
2. 25	37. 0	3. 36	·1377	13. 41	·03209			
2. 39	35. 30	3. 53	·1384	14. 21	·03221			
2. 45	32. 30	3. 58	·1382	14. 51	·03206			
2. 56	32. 30	4. 12	·1385	15. 56	·03221			
3. 12	35. 20	4. 19	·1381	23. 59	·03211			
3. 27	36. 5	4. 39	·1388					
3. 37	35. 10	4. 48	·1386					
3. 42	35. 10	5. 24	·1390					
3. 45	35. 45	5. 56	·1394					
3. 56	35. 35	6. 21	·1386					
4. 11	34. 10	6. 48	·1395					
4. 24	33. 0	7. 25	·1388					
4. 40	34. 30	7. 56	·1396					
4. 53	34. 5	8. 23	·1392					
5. 8	34. 40	8. 50	·1393					
5. 17	34. 5	9. 0	·1396					
6. 12	33. 10	9. 19	·1391					
6. 37	28. 45	9. 30	·1393					
6. 44	30. 50	9. 50	·1389					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov.30		Nov.30						
h m	° ′ ″	h m		h m		h m	°	°
6. 57	20. 32. 50	10. 0	·1392					
7. 9	33. 5	10. 12	·1389					
7. 12	32. 0	10. 30	·1396					
7. 36	30. 0	10. 44	·1393					
7. 53	31. 40	10. 54	·1398					
7. 58	32. 10	11. 15	·1390					
8. 10	31. 40	11. 40	·1391					
8. 23	32. 50	11. 44	·1397					
8. 42	32. 15	12. 2	·1398					
9. 13	32. 45	12. 14	·1399					
9. 26	31. 50	12. 40	·1393					
9. 51	31. 50	12. 52	·1397					
9. 58	32. 10	13. 3	·1394					
10. 12	31. 30	13. 16	·1396					
10. 56	32. 40	13. 42	·1386					
10. 59	31. 50	14. 11	·1391					
11. 12	31. 10	14. 16	·1393					
11. 31	31. 50	14. 25	·1399					
11. 47	34. 10	14. 40	·1397					
12. 26	30. 20	14. 47	·1392					
12. 38	30. 50	14. 59	·1395					
12. 52	34. 20	15. 34	·1387					
13. 7	34. 0	15. 44	·1391					
13. 14	33. 10	15. 50	·1389					
13. 23	33. 40	16. 10	·1392					
13. 31	32. 55	16. 25	·1389					
13. 42	31. 15	16. 50	·1395					
13. 54	31. 25	17. 9	·1399					
14. 7	33. 15	17. 41	·1392					
14. 23	38. 0	18. 9	·1397					
14. 28	35. 10	18. 44	·1390					
14. 41	32. 50	19. 12	·1396					
14. 43	32. 50	19. 41	·1394					
14. 53	31. 30	19. 52	·1397					
15. 8	30. 40		***					
15. 14	32. 0	20. 43	·1393					
15. 32	33. 0	21. 12	·1396					
15. 40	33. 40	22. 10	·1391					
15. 43	34. 55	23. 59	·1392					
16. 0	34. 10							
16. 10	34. 40							
16. 26	32. 45							
16. 39	33. 20							
16. 56	32. 20							
17. 4	32. 50							
17. 11	32. 35							
17. 21	33. 0							
17. 26	32. 15							
17. 41	33. 20							
17. 55	32. 50							
18. 12	34. 0							
18. 56	32. 20							
	***							
19. 57	33. 0							
20. 11	32. 10							
20. 17	32. 10							
20. 26	31. 50							
20. 32	32. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 30								
h m	° ′ ″	h m		h m		h m	°	°
20. 42	20. 31. 40							
20. 53	32. 15							
21. 10	33. 0							
21. 23	32. 40							
23. 11	35. 0							
23. 26	35. 50							
23. 51	35. 0							
23. 56	35. 55							
23. 59	35. 40							
Dec. 1		Dec. 1		Dec. 1		Dec. 1		
0. 0	20. 35. 40	0. 0	·1392	0. 0	·03211	1. 0	60 ·5	62 ·0
0. 44	36. 30	0. 30	·1400	4. 56	·03242	3. 0	60 ·6	62 ·0
0. 57	37. 5	1. 25	·1402	5. 12	·03236	Max.	61 ·1	63 ·0
1. 8	36. 25	1. 42	·1399	5. 38	·03253	9. 0	60 ·6	62 ·7
1. 27	36. 15	2. 15	·1396	6. 26	·03247	Min.	59 ·0	60 ·0
1. 39	37. 0	2. 29	·1399	16. 1	·03216	21. 0	59 ·3	60 ·5
1. 54	35. 55	3. 0	·1394	17. 19	·03185			
1. 58	35. 55	3. 15	·1396	18. 8	·03193			
2. 25	34. 30	3. 29	·1393	23. 59	·03180			
2. 42	34. 20	3. 46	·1395					
2. 56	35. 0	4. 19	·1391					
3. 23	35. 0	4. 26	·1392					
3. 37	34. 10	4. 44	·1387					
3. 42	34. 25	4. 52	·1390					
3. 56	34. 5	5. 10	·1386					
4. 9	33. 15	5. 19	·1370					
4. 26	34. 45	5. 43	·1396					
4. 42	34. 35	6. 25	·1395					
4. 53	34. 10	6. 41	·1392					
4. 57	34. 50	7. 11	·1387					
5. 10	34. 20	7. 26	·1390					
5. 28	23. 0	7. 59	·1389					
5. 56	29. 50	8. 41	·1391					
6. 11	31. 10	9. 13	·1395					
6. 21	31. 10	9. 40	·1391					
6. 28	31. 40	9. 53	·1393					
6. 39	31. 40	10. 10	·1391					
6. 44	32. 5	10. 28	·1395					
6. 55	33. 0	10. 52	·1394					
7. 9	33. 40	11. 44	·1395					
	***	12. 2	·1396					
7. 59	33. 0	12. 26	·1395					
8. 27	31. 15	14. 6	·1398					
8. 39	32. 20	15. 12	·1402					
8. 57	32. 5	15. 52	·1398					
9. 8	33. 0	16. 38	·1409					
9. 14	32. 50	17. 12	·1419					
10. 32	34. 0	17. 55	·1404					
10. 57	33. 45	18. 15	·1403					
11. 43	33. 55	18. 25	·1406					
11. 59	34. 15	18. 43	·1403					
13. 25	34. 0	18. 51	·1405					
13. 37	34. 15	19. 5	·1406					
14. 8	33. 45	19. 25	·1399					
14. 25	34. 20	19. 42	·1394					
14. 39	33. 50	19. 53	·1398					
15. 0	34. 0	20. 14	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 1		Dec. 1						
h m	° ′ ″	h m		h m		h m	°	°
15. 19	20. 32. 55	20. 40	·1387					
15. 39	32. 55	21. 0	·1385					
16. 13	37. 20	21. 12	·1394					
16. 26	37. 5	21. 18	·1387					
16. 58	37. 30	21. 30	·1391					
17. 25	33. 20	22. 0	·1386					
17. 38	33. 5	22. 13	·1388					
17. 44	32. 10	22. 27	·1386					
17. 57	33. 10	23. 28	·1388					
18. 8	33. 5	23. 43	·1393					
18. 25	34. 30	23. 59	·1392					
18. 37	33. 55							
19. 21	34. 10							
19. 26	33. 15							
19. 41	32. 50							
19. 44	32. 0							
19. 55	33. 30							
20. 23	33. 50							
20. 38	33. 10							
20. 43	33. 0							
20. 56	33. 15							
21. 10	32. 55							
21. 37	34. 15							
21. 55	34. 5							
22. 9	34. 40							
22. 26	34. 25							
22. 43	36. 5							
23. 33	37. 50							
23. 43	36. 40							
23. 59	37. 40							
Dec. 2		Dec. 2		Dec. 2		Dec. 2		
0. 0	20. 37. 40	0. 0	·1392	0. 0	·03180	1. 0	59 ·6	60 ·5
0. 41	36. 30	0. 25	·1397	3. 1	·03211	3. 0	59 ·6	60 ·9
1. 6	39. 0	0. 52	·1400	8. 38	·03187	Max.	60 ·3	60 ·9
1. 27	38. 0	1. 10	·1399	10. 19	·03171	9. 0	59 ·1	60 ·0
1. 40	36. 0	1. 12	·1404	10. 52	·03139	Min.	58 ·2	58 ·0
2. 10	35. 50	1. 20	·1398	12. 42	·03146	22. 0	58 ·4	59 ·2
2. 21	35. 0		***	23. 59	·03111			
2. 42	35. 50	2. 13	·1400					
3. 17	34. 30	2. 26	·1401					
3. 46	34. 40	3. 14	·1403					
4. 37	34. 0	4. 24	·1400					
5. 18	33. 50	5. 0	·1400					
5. 56	33. 50	6. 12	·1398					
6. 2	33. 30	6. 24	·1390					
6. 15	33. 55	6. 55	·1401					
6. 28	31. 30	7. 0	·1398					
6. 36	31. 20	7. 14	·1400					
6. 52	27. 20	7. 41	·1396					
7. 3	30. 0	7. 53	·1397					
7. 26	33. 20	8. 11	·1392					
7. 44	32. 55	8. 57	·1394					
8. 9	33. 30	9. 26	·1403					
8. 15	32. 30	9. 42	·1402					
8. 27	33. 10	9. 46	·1397					
8. 43	33. 10	10. 3	·1395					
8. 56	33. 40	10. 12	·1403					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 2		Dec. 2						
h m	° ′ ″	h m		h m		h m	°	°
9. 12	20. 31. 25	10. 22	·1406					
9. 23	32. 5	10. 41	·1419					
9. 27	31. 40	11. 11	·1404					
9. 59	33. 5	11. 43	·1406					
10. 12	32. 50	12. 24	·1398					
10. 27	34. 10	13. 19	·1397					
10. 39	33. 50	14. 25	·1400					
10. 53	34. 15	14. 34	·1399					
11. 27	30. 20	14. 50	·1403					
11. 39	30. 20	15. 44	·1404					
12. 13	31. 0	15. 56	·1402					
12. 57	34. 0	17. 52	·1407					
13. 21	33. 20	18. 34	·1400					
13. 55	33. 45	18. 50	·1403					
14. 26	33. 55	19. 12	·1398					
14. 39	33. 10	19. 33	·1396					
14. 44	32. 55	20. 4	·1404					
14. 56	33. 20	20. 19	·1402					
15. 9	33. 0	20. 43	·1405					
15. 24	33. 0	23. 24	·1394					
15. 39	33. 45	23. 59	·1400					
15. 45	33. 35							
16. 14	33. 55							
16. 57	33. 25							
17. 43	32. 50							
18. 9	33. 0							
18. 39	34. 30							
18. 57	33. 20							
19. 12	33. 30							
19. 26	34. 5							
19. 42	33. 10							
20. 11	34. 5							
20. 25	33. 20							
20. 53	33. 55							
21. 13	33. 10							
21. 59	34. 0							
22. 11	33. 30							
22. 26	34. 15							
22. 38	33. 55							
22. 42	34. 40							
23. 54	35. 40							
23. 59	36. 20							
Dec. 3		Dec. 3		Dec. 3		Dec. 3		
0. 0	20. 36. 20	0. 0	·1400	0. 0	·03111	Min.	58·8	58·7
0. 13	36. 5	0. 50	·1399	4. 14	·03135	1. 0	59·0	59·9
0. 38	36. 55	0. 59	·1403	10. 16	·03137	9. 0	59·3	60·2
0. 56	35. 50	1. 13	·1400	13. 56	·03170	Max.	60·6	61·7
1. 26	36. 5	1. 44	·1396	21. 8	·03162	21. 0	60·0	61·7
2. 10	35. 20	2. 42	·1398		(†)			
2. 23	35. 0	3. 5	·1394					
2. 38	35. 50	3. 26	·1394					
2. 58	35. 50	3. 42	·1391					
3. 19	34. 30	4. 19	·1399					
3. 42	33. 55	5. 55	·1402					
3. 56	33. 45	6. 13	·1399					
4. 17	35. 0	7. 15	·1401					
4. 39	35. 10	7. 42	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 3		Dec. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 23	20. 34. 20	8. 22	·1396					
5. 27	34. 25	9. 19	·1393					
7. 12	33. 5	10. 0	·1394					
7. 40	33. 30	10. 12	·1398					
7. 56	33. 10	10. 24	·1395					
8. 23	33. 10	10. 58	·1397					
8. 58	32. 0	11. 26	·1404					
9. 10	32. 20	11. 44	·1400					
9. 13	31. 55	12. 16	·1400					
9. 45	32. 50	12. 28	·1395					
9. 56	32. 15	12. 59	·1394					
10. 6	33. 5	13. 40	·1398					
10. 19	31. 40	14. 27	·1396					
10. 54	31. 10	15. 26	·1398					
11. 10	31. 45	15. 53	·1402					
11. 27	31. 10	16. 27	·1403					
11. 42	31. 40	16. 40	·1399					
12. 24	31. 30	17. 11	·1404					
12. 47	33. 0	17. 40	·1402					
12. 59	32. 50	17. 43	·1405					
13. 11	34. 0	18. 17	·1403					
13. 32	34. 40	18. 58	·1410					
13. 43	34. 30	20. 4	·1405					
13. 54	34. 5	21. 13	·1402					
13. 58	34. 5		(†)					
14. 24	32. 55							
14. 33	33. 35							
14. 55	33. 35							
15. 11	32. 55							
15. 28	34. 0							
15. 55	33. 40							
15. 58	34. 5							
16. 12	33. 40							
16. 30	35. 0							
16. 42	34. 40							
17. 24	34. 10							
17. 30	32. 55							
17. 40	33. 35							
18. 13	32. 50							
18. 28	33. 15							
18. 47	33. 0							
18. 56	33. 40							
20. 12	32. 50							
20. 41	32. 25							
21. 8	33. 0							
	(†)							
Dec. 4		Dec. 4		Dec. 4		Dec. 4		
	(†)		(†)		(†)	1. 0	57·8	57·8
1. 0	20. 36. 38*	1. 0	·1401*	1. 0	·03093*	3. 0	57·4	57·0
3. 0	36. 15*	3. 0	·1383*	3. 0	·03071*	Min.	57·2	56·6
3. 28	34. 25	3. 27	·1400	3. 27	·03061	9. 0	59·3	60·4
3. 52	34. 25	4. 41	·1399	8. 57	·03132	21. 0	59·6	60·5
4. 11	33. 40	5. 43	·1402	10. 6	·03131	Max.	60·0	60·7
4. 55	34. 30	6. 12	·1398	10. 33	·03112			
5. 6	33. 55	7. 24	·1395	16. 23	·03133			
5. 14	33. 0	7. 41	·1396	21. 3	·03111			
5. 29	33. 40	8. 0	·1391	23. 18	·03091			
5. 39	33. 10	8. 21	·1395	23. 59	·03089			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 4		Dec. 4						
h m	° ′ ″	h m		h m		h m	°	°
5. 59	20. 34. 55	8. 49	·1393					
6. 43	33. 50	8. 59	·1398					
7. 23	33. 40	9. 16	·1394					
7. 26	33. 15	10. 4	·1396					
7. 49	33. 40	10. 15	·1410					
8. 9	30. 55	10. 23	·1410					
8. 23	31. 50	10. 41	·1404					
8. 32	31. 10	11. 0	·1402					
9. 10	32. 10	11. 21	·1396					
9. 14	31. 55	11. 41	·1395					
9. 27	32. 15	12. 8	·1399					
9. 56	32. 25	12. 44	·1398					
10. 9	31. 50	15. 53	·1401					
10. 22	32. 50	19. 4	·1404					
10. 44	29. 10	19. 36	·1406					
10. 59	30. 30	21. 11	·1398					
11. 5	30. 10	21. 13	·1402					
11. 14	31. 10	21. 35	·1396					
11. 23	30. 50	22. 17	·1395					
11. 50	32. 0	23. 42	·1399					
12. 9	33. 15	23. 59	·1398					
12. 25	32. 40							
12. 56	33. 10							
13. 13	33. 10							
13. 37	33. 45							
13. 55	33. 15							
14. 10	33. 55							
14. 17	33. 35							
14. 41	33. 20							
15. 29	33. 50							
15. 53	33. 50							
16. 9	34. 10							
16. 31	33. 45							
20. 18	33. 20							
20. 38	33. 0							
21. 57	34. 45							
22. 25	34. 45							
23. 39	36. 40							
23. 44	37. 10							
23. 59	36. 50							
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
0. 0	20. 36. 50	0. 0	·1398	0. 0	·03089	1. 0	59·6	61·0
0. 18	37. 20	0. 22	·1399	2. 53	·03136	Min.	59·6	61·0
0. 31	36. 50	0. 56	·1397	15. 39	·03172	3. 0	59·6	61·0
1. 25	37. 15	2. 12	·1399	21. 31	·03169	9. 0	60·1	61·4
2. 26	34. 50	2. 44	·1402	23. 59	·03182	21. 0	60·6	62·0
2. 59	36. 30	3. 56	·1398			22. 0	60·6	62·0
3. 42	35. 30	5. 28	·1400			23. 0	60·6	62·0
4. 33	34. 50	5. 45	·1397			Max.	61·0	62·2
4. 57	35. 20	6. 26	·1398					
5. 26	34. 55	6. 41	·1395					
5. 48	35. 40	7. 18	·1399					
6. 9	34. 50	7. 49	·1398					
6. 26	35. 10	8. 24	·1402					
6. 46	33. 30	8. 57	·1399					
6. 57	32. 40	9. 12	·1401					
7. 30	33. 25	9. 24	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 5		Dec. 5						
h m	° ′ ″	h m		h m		h m	°	°
7. 57	20. 33. 5	9. 42	·1400					
8. 38	33. 30	10. 53	·1397					
9. 22	32. 55	11. 12	·1398					
9. 38	32. 55	11. 26	·1408					
10. 11	32. 25	11. 47	·1399					
11. 9	32. 25	12. 42	·1400					
11. 23	30. 15	13. 40	·1397					
11. 53	32. 5	13. 56	·1402					
11. 58	31. 40	14. 20	·1400					
12. 29	31. 40	14. 47	·1404					
12. 44	32. 5	14. 56	·1402					
13. 5	32. 15	15. 11	·1406					
13. 29	34. 30	15. 38	·1402					
14. 14	32. 50	16. 19	·1401					
14. 27	33. 50	17. 43	·1404					
14. 42	33. 50	18. 40	·1405					
15. 0	32. 15	21. 23	·1399					
15. 11	32. 15	23. 18	·1398					
15. 27	31. 30	23. 59	·1400					
16. 18	32. 40							
16. 41	33. 25							
17. 26	33. 25							
17. 38	33. 50							
17. 41	33. 30							
18. 21	33. 15							
18. 27	32. 55							
18. 58	33. 30							
20. 14	33. 30							
20. 55	33. 45							
21. 9	33. 35							
22. 39	34. 50							
23. 59	36. 40							
Dec. 6		Dec. 6		Dec. 6		Dec. 6		
0. 0	20. 36. 40	0. 0	·1400	0. 0	·03182	0. 0	61·0	62·4
1. 45	35. 30	0. 15	·1404	9. 12	·03253	1. 0	61·1	62·5
2. 49	34. 25	1. 11	·1406	14. 26	·03196	2. 0	61·1	62·5
2. 59	34. 25	3. 5	·1403	23. 59	·03175	3. 0	..	62·7
3. 57	33. 55	3. 24	·1407			Max.	61·5	63·3
5. 43	34. 30	3. 41	·1406			9. 0	61·5	63·0
6. 54	34. 5	4. 23	·1408			21. 0	59·4	60·6
7. 21	34. 25	6. 0	·1404			22. 0	58·8	60·2
7. 43	32. 55	6. 53	·1405			Min.	58·8	60·2
7. 53	32. 55	7. 32	·1401			23. 0	59·4	60·2
8. 0	32. 15	7. 52	·1398					
8. 23	33. 50	8. 51	·1396					
8. 59	32. 0	9. 30	·1399					
9. 12	32. 50	9. 48	·1398					
9. 23	32. 50	10. 14	·1403					
9. 36	33. 10	10. 29	·1400					
9. 54	32. 25	12. 4	·1403					
10. 6	32. 35	12. 19	·1402					
10. 10	32. 5	14. 54	·1404					
10. 17	32. 50	16. 4	·1408					
10. 39	32. 0	17. 40	·1411					
13. 28	31. 50	17. 45	·1409					
16. 7	33. 30	17. 54	·1411					
17. 36	32. 55	20. 17	·1410					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 6		Dec. 6						
h m	° ′ ″	h m		h m		h m	°	°
17. 42	20. 33. 10	21. 25	·1404					
17. 56	32. 30	22. 26	·1402					
18. 42	33. 5	23. 10	·1404					
21. 9	33. 10	23. 29	·1402					
23. 59	36. 5	23. 59	·1404					
Dec. 7		Dec. 7		Dec. 7		Dec. 7		
0. 0	20. 36. 5	0. 0	·1404	0. 0	·03175	0. 0	60 ·0	61 ·6
0. 42	36. 15	0. 49	·1406	1. 43	·03148	1. 0	59 ·6	61 ·0
1. 22	37. 10	1. 11	·1405	3. 16	·03139	2. 0	59 ·6	61 ·0
1. 30	36. 20	1. 21	·1408	10. 41	·03151	3. 0	59 ·6	61 ·0
2. 14	35. 50	2. 11	·1405	12. 53	·03139	Max.	60 ·6	62 ·6
2. 29	35. 55	2. 56	·1403	13. 40	·03128	9. 0	60 ·0	62 ·2
3. 6	35. 0	5. 24	·1404	14. 28	·03130	Min.	58 ·8	59 ·0
3. 23	35. 0	6. 6	·1406	21. 46	·03107	21. 0	59 ·0	59 ·0
4. 56	34. 30	6. 12	·1403	23. 59	·03142			
6. 27	34. 20	7. 26	·1400					
8. 22	33. 30	7. 55	·1399					
8. 40	32. 50	8. 11	·1401					
9. 4	33. 10	8. 25	·1399					
9. 28	32. 20	9. 10	·1400					
10. 8	32. 55	9. 43:	·1394					
10. 41	30. 55	10. 19	·1398					
10. 57	31. 50	10. 33	·1394					
11. 26	30. 30	10. 42	·1393					
12. 26	32. 50	11. 8	·1397					
12. 45	32. 50	11. 41	·1394					
13. 6	36. 5	11. 53	·1396					
13. 38	32. 50	12. 12	·1393					
13. 58	31. 35	12. 48	·1398					
14. 27	32. 15	13. 40	·1405					
14. 52	33. 50	14. 12	·1400					
14. 56	33. 15	14. 24	·1398					
15. 28	32. 50	14. 42	·1402					
15. 55	32. 0	15. 0	·1399					
16. 12	31. 40	15. 38	·1402					
16. 41	32. 55	16. 14	·1405					
16. 56	32. 45	17. 24	·1406					
17. 14	33. 20	18. 57	·1404					
17. 26	33. 5	19. 28	·1403					
18. 8	33. 35	20. 19	·1395					
18. 27	33. 20	20. 43	·1396					
18. 56	33. 50	21. 43	·1392					
19. 56	33. 30	22. 18	·1390					
20. 24	34. 15	22. 42	·1387					
20. 40	34. 30	23. 26	·1387					
20. 58	33. 50	23. 59	·1390					
21. 41	34. 20							
22. 55	34. 40							
23. 59	35. 45							
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
0. 0	20. 35. 45	0. 0	·1390	0. 0	·03142	1. 0	60 ·6	61 ·0
0. 34	36. 0	0. 24	·1393	1. 56	·03181	3. 0	59 ·8	60 ·0
0. 41	36. 20	1. 11	·1400	6. 24	·03152	Min.	59 ·0	59 ·0
2. 9	35. 30	1. 34	·1412	8. 46	·03152	9. 0	59 ·4	59 ·0
2. 26	36. 15	1. 42	·1405	10. 23	·03137	Max.	61 ·0	63 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
h m	° ′ ″	h m		h m		h m	°	°
3. 30	20. 35. 20	1. 49	·1403	11. 42	·03148	21. 0	60 ·8	63 ·0
4. 56	36. 0	2. 55	·1399	12. 4	·03139			
5. 12	35. 15	3. 42	·1394	12. 55	·03154			
5. 42	35. 50	4. 10	·1392	14. 1	·03150			
6. 9	34. 20	4. 41	·1398	18. 55	·03172			
6. 23	34. 55	5. 22	·1397	23. 59	·03162			
6. 28	34. 5	5. 40	·1396					
6. 53	33. 40	6. 10	·1402					
6. 57	33. 15	6. 18	·1399					
7. 9	34. 0	6. 26	·1401					
7. 26	33. 40	6. 45	·1397					
7. 53	30. 50	6. 57	·1403					
8. 1	30. 25	7. 13	·1395					
	***	7. 35	·1394					
8. 39	32. 15	7. 56	·1392					
8. 56	31. 45	8. 10	·1389					
9. 26	32. 25	8. 26	·1381					
10. 0	31. 0	8. 40	·1384					
10. 13	31. 10	8. 53	·1382					
10. 28	30. 0	9. 26	·1391					
10. 42	29. 40	9. 57	·1394					
10. 56	30. 5	10. 11	·1392					
11. 6	29. 50	10. 24	·1397					
11. 14	30. 15	10. 40	·1392					
11. 37	28. 50	11. 10:	·1390					
11. 43	28. 50	11. 55	·1406					
11. 53	27. 40	12. 26	·1390					
12. 0	27. 25	12. 44	·1393					
12. 44	32. 30	12. 55	·1392					
13. 6	34. 50	13. 19	·1398					
13. 33	33. 30	13. 43	·1400					
13. 41	33. 45	14. 24	·1396					
13. 59	32. 0	14. 41	·1397					
14. 12	32. 0	14. 52	·1395					
15. 12	33. 30	16. 43	·1400					
15. 49	33. 30	17. 25	·1405					
16. 27	34. 20	18. 25	·1401					
16. 46	34. 10	18. 34	·1405					
17. 26	35. 15	18. 42	·1403					
17. 45	33. 30	18. 59	·1406					
18. 58	35. 20		***					
19. 14	34. 50	20. 8	·1405					
19. 26	35. 30	20. 13	·1407					
19. 42	35. 20	20. 39	·1402					
19. 53	36. 10	20. 55	·1403					
20. 9	35. 20	21. 22	·1397					
20. 25	35. 50	21. 30	·1400					
20. 41	34. 15	21. 44	·1396					
21. 10	34. 10	22. 7	·1398					
21. 38	36. 5	22. 24	·1396					
21. 47	34. 30	22. 40	·1397					
22. 10	33. 20	22. 47	·1395					
22. 16	34. 10	23. 12	·1396					
22. 26	33. 20	23. 59	·1395					
23. 8	33. 40							
23. 59	36. 50							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 9 h m	° ′ ″	Dec. 9 h m		Dec. 9 h m		Dec. 9 h m	°	°
0. 0	20. 36. 50	0. 0	·1395	0. 0	·03162	1. 0	60·6	62·6
0. 11	36. 50	0. 14	·1397	4. 8	·03191	3. 0	61·1	61·0
0. 23	38. 15	0. 41	·1396	6. 16	·03197	Max.	61·5	62·7
0. 27	37. 30	1. 15	·1400	6. 37	·03209	9. 0	60·2	60·5
0. 52	37. 40	1. 40	·1389	7. 26	·03196	Min.	59·0	60·5
1. 11	39. 5	1. 54	·1391	7. 57	·03202	22. 0	59·6	61·0
1. 42	36. 5	2. 18	·1384	8. 9	·03188			
2. 12	40. 40	3. 10	·1396	8. 23	·03193			
2. 30	37. 50	3. 44	·1399	9. 6	·03176			
3. 22	35. 50	4. 4	·1397	9. 36	·03162			
3. 39	35. 40	4. 22	·1400	10. 46	·03171			
3. 51	34. 55	4. 56	·1396	15. 24	·03153			
4. 0	35. 50	5. 12	·1397	17. 9	·03156			
4. 26	34. 30	5. 26	·1391	23. 59	·03121			
4. 42	35. 40	5. 42	·1394					
5. 17	35. 20	5. 59	·1392					
5. 31	34. 0	6. 19	·1384					
5. 53	34. 20	6. 40	·1388					
6. 8	33. 50		***					
6. 26	29. 50	6. 57	·1392					
6. 41	32. 20	7. 8	·1390					
6. 59	33. 30	7. 12	·1392					
7. 23	33. 50	7. 26	·1387					
7. 40	31. 0	7. 41	·1392					
8. 4	33. 10	8. 0	·1389					
8. 15	19. 15	8. 18	·1420					
8. 39	22. 10	8. 25	·1426					
8. 46	21. 55	8. 47	·1409					
8. 56	22. 30	8. 59	·1412					
9. 8	22. 30	9. 10	·1417					
9. 13	25. 15	9. 39	·1391					
9. 31	25. 55	9. 51	·1382					
9. 42	27. 40	10. 12	·1388					
9. 56	26. 10	10. 19	·1392					
10. 14	27. 0	10. 30	·1387					
10. 42	31. 10	11. 12	·1392					
11. 12	32. 50	11. 58	·1394					
11. 39	32. 50	12. 54	·1393					
12. 24	33. 50	14. 25	·1395					
13. 29	33. 30	14. 41	·1399					
13. 43	34. 5	14. 56	·1397					
13. 59	33. 20	16. 40	·1396					
14. 14	35. 20	17. 3	·1398					
14. 42	37. 5	17. 14	·1396					
	***	17. 41	·1402					
15. 56	33. 25	18. 24	·1399					
	***	18. 50	·1400					
16. 41	33. 0	19. 3	·1402					
16. 58	33. 30	19. 25	·1399					
17. 9	34. 40	20. 0	·1397					
17. 16	33. 15	20. 20	·1399					
17. 42	32. 40	20. 43	·1392					
18. 11	33. 50	21. 6	·1390					
18. 28	33. 25	21. 20	·1391					
18. 42	34. 15	21. 42	·1387					
18. 54	33. 20	21. 54	·1390					
20. 1	33. 20	22. 11	·1389					
20. 52	34. 25	22. 58	·1395					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 9 h m	° ′ ″	Dec. 9 h m		h m		h m	°	°
21. 14	20. 34. 15	23. 25	·1394					
21. 39	35. 20	23. 59	·1396					
22. 10	34. 40							
22. 44	35. 40							
22. 58	36. 25							
23. 46	36. 15							
23. 59	36. 50							
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
0. 0	20. 36. 50	0. 0	·1396	0. 0	·03121	1. 0	59·8	61·0
0. 45	37. 45	0. 40	·1399	3. 12	·03143	Max.	61·1	62·2
1. 3	37. 20	1. 20	·1397	6. 25	·03142	9. 0	59·8	61·3
1. 42	38. 0	1. 40	·1399	6. 57	·03153	Min.	58·9	59·0
1. 54	37. 40	2. 45	·1387	13. 9	·03144	21. 0	60·0	60·0
2. 13	37. 30	3. 0	·1389	13. 34	·03133			
2. 58	35. 45	3. 13	·1387	15. 4	·03139			
3. 11	36. 10	3. 42	·1386	18. 44	·03143			
3. 26	35. 30	4. 19	·1392	23. 59	·03126			
	***	4. 55	·1397					
4. 43	35. 55	5. 11	·1395					
4. 56	34. 40	5. 25	·1399					
5. 11	35. 0	6. 43	·1385					
5. 17	34. 30	7. 14	·1392					
5. 46	34. 50	7. 42	·1388					
6. 11	34. 30	7. 52	·1391					
6. 55	26. 20	8. 18	·1386					
6. 59	26. 20	8. 44	·1392					
7. 39	32. 10	9. 8	·1389					
7. 48	32. 0	9. 56	·1394					
8. 4	33. 35	11. 20	·1398					
8. 14	32. 50	12. 24	·1396					
8. 41	30. 5	12. 44	·1398					
9. 9	30. 50	12. 58	·1396					
9. 17	31. 55	13. 16	·1399					
10. 38	33. 15	13. 28	·1404					
11. 42	33. 20	14. 12	·1393					
11. 57	33. 40	15. 3	·1396					
13. 14	32. 30	16. 0	·1396					
13. 26	33. 15	16. 19	·1398					
13. 36	33. 15	17. 14	·1397					
13. 44	31. 0	17. 58	·1400					
14. 56	34. 0	19. 0	·1403					
15. 30	32. 40	19. 25	·1399					
16. 21	32. 50	19. 54	·1402					
17. 10	33. 50		***					
17. 25	33. 20	22. 20	·1396					
17. 38	33. 50	22. 57	·1384					
17. 54	32. 55	23. 24	·1391					
18. 14	33. 55	23. 59	·1392					
18. 27	33. 15							
18. 43	33. 15							
18. 58	33. 10							
19. 57	33. 25							
20. 11	33. 5							
20. 30	33. 0							
21. 20	34. 25							
21. 43	34. 35							
22. 28	35. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 10								
h m	° ′ ″	h m		h m		h m	°	°
23. 0	20. 35. 30							
23. 28	36. 50							
23. 59	36. 5							
Dec. 11		Dec. 11		Dec. 11		Dec. 11		
0. 0	20. 36. 5	0. 0	·1392	0. 0	·03126	1. 0	60 ·5	61 ·0
0. 53	35. 55	0. 10	·1396	3. 3	·03146	3. 0	60 ·5	61 ·0
1. 23	37. 30	1. 8	·1399	4. 31	·03148	Max.	60 ·9	61 ·9
1. 43	36. 40	2. 20	·1394	8. 30	·03161	9. 0	60 ·3	61 ·4
2. 9	37. 0	3. 56	·1399	10. 26	·03160	Min.	59 ·5	60 ·4
2. 24	36. 0	5. 40	·1397	10. 55	·03148	21. 0	60 ·1	61 ·0
2. 57	34. 50	5. 50	·1393	11. 26	·03156			
4. 27	34. 40	7. 10	·1392	15. 34	·03137			
4. 39	35. 5	7. 30	·1396	17. 11	·03126			
4. 54	34. 5	7. 43	·1393	18. 26	·03137			
4. 58	34. 30	8. 56	·1397	21. 59	·03118			
5. 9	34. 5	9. 24	·1393	22. 57	·03122			
5. 31	34. 40	9. 29	·1395	23. 59	·03122			
6. 9	33. 45	9. 50	·1392					
6. 56	34. 30	10. 25	·1391					
7. 6	34. 10	10. 45	·1409					
7. 37	34. 30	11. 19	·1391					
7. 49	34. 0	11. 41	·1398					
8. 23	33. 20	11. 54	·1394					
9. 11	33. 20	11. 59	·1396					
9. 56	30. 50	12. 11	·1394					
10. 13	31. 25	12. 40	·1397					
10. 27	26. 55	14. 41	·1399					
10. 43	26. 55	15. 4	·1396					
10. 57	29. 50	15. 38	·1395					
11. 9	28. 50	16. 11	·1401					
11. 26	31. 25	16. 46	·1406					
11. 29	31. 10	17. 15	·1404					
11. 40	32. 5	17. 52	·1401					
11. 48	31. 35	18. 10	·1403					
14. 11	33. 55	19. 41	·1405					
14. 27	33. 20	20. 28	·1400					
14. 40	33. 30	21. 22	·1396					
14. 53	32. 55	22. 24	·1399					
15. 11	34. 40	22. 59	·1400					
15. 25	33. 50	23. 49	·1399					
15. 40	36. 15	23. 59	·1400					
15. 59	35. 0							
16. 13	34. 5							
16. 38	33. 20							
16. 54	32. 40							
17. 28	32. 15							
18. 8	33. 10							
18. 39	32. 50							
19. 41	33. 30							
20. 14	33. 15							
20. 57	34. 20							
21. 28	34. 20							
22. 3	35. 50							
22. 13	35. 25							
22. 24	35. 50							
22. 53	35. 40							
23. 24	36. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 11								
h m	° ′ ″	h m		h m		h m	°	°
23. 43	20. 35. 20							
23. 56	35. 35							
23. 59	35. 10							
Dec. 12		Dec. 12		Dec. 12		Dec. 12		
0. 0	20. 35. 10	0. 0	·1400	0. 0	·03122	1. 0	60 ·1	61 ·0
1. 23	35. 15	1. 11	·1403	3. 23	·03137	3. 0	60 ·1	61 ·0
3. 25	33. 50	2. 25	·1399	8. 58	·03146	Max.	60 ·6	61 ·6
7. 14	34. 0	6. 45	·1401	14. 44	·03135	9. 0	59 ·8	60 ·8
10. 56	33. 15	12. 20	·1398	23. 59	·03084	21. 0	59 ·9	60 ·4
11. 36	32. 30	13. 13	·1396			22. 0	59 ·6	60 ·0
12. 29	33. 20	13. 28	·1398			Min.	59 ·6	60 ·0
14. 46	34. 5	13. 52	·1397			23. 0	59 ·6	60 ·2
15. 10	34. 50	14. 11	·1399					
15. 23	34. 10	14. 23	·1398					
15. 56	34. 10		***					
16. 8	34. 0	16. 4	·1404					
16. 14	33. 10	16. 20	·1403					
16. 56	33. 10	16. 40	·1405					
17. 27	34. 15	17. 5	·1402					
17. 50	34. 5	17. 27	·1405					
18. 36	32. 50	17. 49	·1403					
18. 42	33. 10	18. 13	·1406					
19. 53	33. 40	19. 23	·1412					
20. 9	34. 10	19. 56	·1410					
20. 38	35. 35	20. 10	·1408					
20. 40	34. 15	20. 23	·1407					
20. 53	35. 20	20. 34	·1411					
21. 11	34. 45	20. 39	·1406					
23. 12	36. 40	20. 54	·1412					
23. 26	37. 20	21. 18	·1410					
23. 59	37. 25	23. 12	·1404					
		23. 18	·1406					
		23. 28	·1404					
		23. 59	·1403					
Dec. 13		Dec. 13		Dec. 13		Dec. 13		
0. 0	20. 37. 25	0. 0	·1403	0. 0	·03084	0. 0	59 ·8	60 ·3
0. 39	36. 40	0. 11	·1402	1. 55	·03116	1. 0	59 ·8	60 ·3
1. 1	38. 15	0. 38	·1400	4. 54	·03124	2. 0	59 ·8	60 ·3
1. 14	38. 0	0. 58	·1411	7. 26	·03176	3. 0	60 ·0	60 ·5
1. 31	38. 30	1. 12	·1415	8. 41	·03184	9. 0	60 ·6	61 ·2
2. 12	38. 5	1. 22	·1407	8. 59	·03167	Max.	61 ·0	61 ·7
2. 24	36. 55	1. 43	·1411	14. 14	·03135	21. 0	59 ·8	60 ·7
2. 41	38. 20	1. 57	·1409	23. 59	·03088	22. 0	59 ·8	60 ·4
2. 54	38. 40	2. 10	·1413			23. 0	59 ·6	60 ·2
3. 12	37. 5	2. 28	·1410			Min.	59 ·5	60 ·2
3. 42	36. 15	2. 55	·1406					
4. 2	36. 30	3. 5	·1410					
4. 9	35. 50	3. 12	·1406					
4. 46	35. 10	3. 41	·1410					
4. 56	34. 30	3. 56	·1408					
5. 24	37. 30	4. 41	·1411					
5. 28	40. 15	4. 56	·1409					
5. 39	39. 0	5. 20	·1400					
5. 43	39. 20	5. 34	·1390					
6. 24	36. 30	5. 45	·1384					
6. 44	35. 45	6. 12	·1387					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 13		Dec. 13						
h m	° ′ ″	h m		h m		h m	°	°
6. 56	20. 35. 0	6. 39	·1392					
7. 23	36. 10	6. 43	·1389					
7. 51	35. 5	6. 49	·1393					
8. 12	31. 30	7. 11	·1389					
8. 27	18. 30	7. 44	·1391					
8. 56	29. 0	7. 55	·1388					
9. 26	33. 20	8. 6	·1393					
10. 10	32. 40	8. 12	·1390					
10. 27	33. 0	8. 22	·1398					
10. 58	32. 30	8. 42	·1425					
11. 24	32. 20	8. 55	·1407					
11. 42	33. 10	9. 13	·1395					
11. 53	33. 10	9. 55	·1399					
11. 56	32. 10	10. 11	·1397					
12. 26	33. 40	10. 51	·1400					
12. 39	32. 20	11. 22	·1398					
12. 58	33. 50	11. 43	·1403					
13. 58	33. 50	11. 47	·1401					
14. 17	32. 30	11. 54	·1402					
14. 55	33. 50	12. 4	·1396					
15. 1	32. 55	12. 29	·1397					
15. 16	32. 5	13. 43	·1400					
15. 39	31. 50	13. 55	·1398					
15. 51	33. 0	14. 19	·1396					
15. 57	32. 20	14. 43	·1398					
16. 23	34. 10	14. 54	·1400					
16. 27	33. 40	15. 27	·1395					
17. 11	34. 25		***					
17. 56	33. 30	16. 25	·1396					
18. 6	31. 50	16. 41	·1401					
18. 19	33. 20	16. 44	·1400					
18. 28	32. 25	17. 12	·1408					
18. 43	32. 10	17. 24	·1409					
19. 7	33. 5	17. 37	·1406					
19. 11	32. 25	17. 42	·1408					
19. 40	33. 15	17. 57	·1404					
20. 8	32. 20	18. 14	·1409					
20. 23	32. 35	18. 23	·1405					
20. 29	32. 5	18. 46	·1407					
20. 53	32. 30	19. 36	·1401					
21. 0	34. 0	19. 43	·1399					
21. 51	33. 56	19. 55	·1400					
22. 41	33. 10	20. 11	·1399					
22. 45	33. 30	20. 36	·1405					
23. 38	34. 0	20. 41	·1402					
23. 59	35. 10	20. 43	·1404					
		20. 52	·1400					
		20. 55	·1403					
		21. 29	·1392					
		22. 26	·1403					
		22. 40	·1400					
		22. 49	·1406					
		23. 12	·1404					
		23. 19	·1407					
		23. 49	·1403					
		23. 59	·1405					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 14		Dec. 14		Dec. 14		Dec. 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 35. 10	0. 0	·1405	0. 0	·03088	0. 0	59·6	60·2
0. 26	36. 10	1. 7	·1404	9. 1	·03122	1. 0	59·8	60·6
0. 39	36. 20	1. 26	·1400	9. 25	·03109	3. 0	59·7	60·4
0. 50	37. 50	1. 42	·1402	13. 27	·03105	Max.	60·5	61·7
2. 26	35. 30	2. 53	·1400	16. 28	·03096	9. 0	59·1	60·5
3. 40	33. 35	3. 11	·1396	17. 32	·03081	Min.	58·5	59·2
4. 22	33. 35	3. 30	·1400	22. 17	·03050	21. 0	58·8	59·5
4. 45	34. 0	3. 42	·1399	23. 59	·03049			
5. 8	33. 30	4. 28	·1405					
5. 25	33. 30	4. 58	·1402					
5. 44	34. 5	5. 26	·1404					
6. 13	33. 0	5. 40	·1401					
6. 27	33. 50	5. 49	·1399					
6. 42	33. 10	6. 35	·1396					
7. 3	30. 15	6. 44	·1399					
7. 23	32. 55	7. 6	·1394					
7. 39	30. 15	7. 43	·1399					
7. 53	30. 40	7. 54	·1396					
8. 7	26. 30	8. 23	·1404					
8. 11	25. 55	8. 50	·1399					
8. 39	32. 25	9. 10	·1403					
8. 58	33. 30	9. 22	·1396					
9. 12	32. 25	9. 51	·1403					
9. 28	26. 55	10. 16	·1398					
9. 39	27. 15	10. 35	·1394					
9. 58	30. 0	11. 41	·1398					
10. 16	29. 50	13. 11	·1400					
10. 26	30. 15	13. 52	·1397					
10. 52	30. 30	14. 12	·1399					
11. 14	31. 40	14. 31	·1398					
11. 41	32. 5	16. 43	·1398					
11. 56	32. 50	17. 18	·1405					
12. 12	32. 5	20. 27	·1406					
12. 28	33. 0	20. 49	·1409					
12. 53	34. 0	21. 5	·1405					
13. 14	32. 55	21. 12	·1409					
13. 26	33. 5	21. 19	·1402					
13. 42	32. 10	21. 41	·1404					
14. 8	33. 50	21. 45	·1401					
14. 19	33. 5	21. 57	·1404					
14. 38	33. 0	22. 55	·1401					
14. 53	33. 40	23. 11	·1404					
15. 11	33. 10	23. 34	·1402					
15. 40	32. 50	23. 59	·1403					
16. 14	32. 50							
16. 42	35. 55							
17. 23	31. 35							
17. 56	31. 35							
18. 57	32. 55							
19. 27	32. 10							
19. 43	32. 50							
20. 11	32. 25							
20. 27	32. 25							
20. 53	33. 35							
20. 55	33. 40							
20. 59	33. 5							
21. 23	32. 55							
21. 41	33. 45							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 14								
h m	° ′ ″	h m		h m		h m	°	°
21. 50	20. 33. 0							
22. 26	33. 45							
22. 39	33. 15							
22. 48	34. 0							
22. 58	33. 50							
23. 17	35. 10							
23. 26	34. 50							
23. 59	35. 35							
Dec. 15		Dec. 15		Dec. 15		Dec. 15		
0. 0	20. 35. 35	0. 0	·1403	0. 0	·03049	1. 0	59 ·6	60 ·5
0. 27	36. 30	0. 27	·1406	2. 15	·03082	3. 0	59 ·1	60 ·0
0. 43	35. 45	0. 42	·1403	4. 33	·03079	Max.	60 ·2	61 ·3
1. 10	36. 30	1. 11	·1408	9. 54	·03098	9. 0	59 ·9	61 ·0
1. 53	34. 20	1. 20	·1403	14. 9	·03081	Min.	58 ·2	59 ·0
2. 10	34. 50	1. 29	·1400	23. 59	·03008	21. 0	58 ·8	59 ·6
2. 38	34. 0	1. 59	·1407					
2. 49	34. 20	2. 13	·1404					
3. 26	33. 30	2. 43	·1407					
3. 39	33. 55	3. 10	·1404					
3. 44	33. 35	3. 55	·1406					
4. 8	34. 10	4. 23	·1402					
4. 12	34. 5	4. 35	·1403					
4. 24	34. 30	4. 51	·1402					
4. 32	33. 40	5. 11	·1405					
4. 56	33. 55	5. 42	·1403					
5. 9	33. 0	6. 1	·1398					
5. 31	34. 20	6. 18	·1400					
6. 2	33. 30	6. 41	·1398					
6. 26	33. 40	7. 13	·1401					
6. 43	33. 20	7. 41	·1400					
7. 13	33. 55	7. 51	·1402					
7. 39	33. 50	8. 12	·1397					
7. 53	33. 0	8. 39	·1399					
8. 10	33. 15	8. 57	·1396					
8. 26	32. 55	9. 43	·1400					
8. 39	32. 55	9. 55	·1398					
8. 56	31. 45	10. 11	·1403					
9. 15	31. 30	10. 24	·1408					
9. 29	32. 20	10. 57	·1398					
9. 42	32. 30	11. 16	·1404					
9. 56	31. 30	11. 26	·1402					
10. 11	31. 50	11. 34	·1404					
10. 23	33. 5	12. 18	·1398					
10. 28	33. 5	12. 59	·1397					
10. 39	32. 20	13. 12	·1401					
10. 43	32. 10	13. 22	·1399					
10. 56	31. 30	13. 41	·1403					
11. 8	32. 55	14. 8	·1399					
11. 43	31. 20	15. 35	·1401					
12. 8	31. 20	18. 29	·1404					
12. 22	32. 20	18. 43	·1405					
12. 26	32. 10	19. 26	·1403					
12. 41	33. 0	19. 39	·1404					
12. 45	32. 50	20. 30	·1402					
12. 54	33. 15	20. 51	·1406					
13. 26	32. 10	21. 0	·1403					
13. 34	32. 40	21. 10	·1408					
Dec. 15		Dec. 15						
h m	° ′ ″	h m		h m		h m	°	°
13. 42	20. 31. 55	21. 21	·1405					
14. 9	31. 25	22. 56	·1403					
14. 49	33. 5	23. 13	·1404					
14. 57	32. 50	23. 32	·1405					
15. 5	33. 10	23. 59	·1406					
16. 9	32. 50							
16. 25	33. 15							
16. 44	32. 40							
17. 25	32. 30							
17. 39	33. 15							
19. 6	32. 50							
19. 24	33. 5							
	***							
20. 39	31. 55							
21. 6	32. 5							
21. 10	32. 50							
21. 29	32. 20							
23. 22	34. 10							
23. 28	35. 10							
23. 41	35. 10							
23. 59	35. 50							
Dec. 16		Dec. 16		Dec. 16		Dec. 16		
0. 0	20. 35. 50	0. 0	·1406	0. 0	·03008	Min.	58 ·5	58 ·6
0. 17	35. 30	0. 14	·1407	8. 56	·03041	1. 0	58 ·5	58 ·6
1. 14	35. 40	1. 11	·1408	12. 43	·03041	3. 0	58 ·6	58 ·9
3. 56	33. 50	3. 8	·1407	23. 59	·03046	9. 0	59 ·1	59 ·7
8. 25	32. 55	9. 0	·1402			Max.	60 ·0	60 ·8
8. 38	32. 0	9. 43	·1404			21. 30	59 ·6	59 ·4
8. 59	32. 55	10. 2	·1402					
9. 37	32. 40	10. 41	·1402					
9. 43	32. 5	10. 55	·1407					
10. 26	32. 55	11. 39	·1402					
10. 35	32. 20	12. 11	·1404					
11. 39	33. 0	12. 32	·1402					
11. 48	33. 30	13. 4	·1404					
12. 9	32. 50	13. 55	·1403					
13. 8	33. 15	18. 0	·1407					
13. 22	33. 0	18. 12	·1406					
14. 44	33. 55	18. 22	·1408					
16. 51	33. 30	21. 53	·1403					
20. 43	32. 40	22. 3	·1406					
23. 26	34. 15	22. 23	·1404					
23. 55	35. 0	22. 41	·1406					
23. 59	34. 50	23. 59	·1407					
Dec. 17		Dec. 17		Dec. 17		Dec. 17		
0. 0	20. 34. 50	0. 0	·1407	0. 0	·03046	0. 0	59 ·3	59 ·4
1. 7	35. 20	1. 14	·1405	1. 12	·03046	Max.	59 ·9	60 ·6
1. 24	35. 20	4. 41	·1406	11. 41	·03041	9. 0	59 ·1	60 ·2
1. 51	35. 55	5. 30	·1405	23. 59	·02972	Min.	57 ·7	59 ·0
2. 53	34. 30	6. 8	·1406			21. 0	58 ·2	59 ·2
4. 50	34. 30	8. 24	·1403					
5. 29	34. 50	8. 41	·1405					
5. 40	34. 30	9. 8	·1402					
6. 13	34. 30	9. 12	·1406					
7. 11	33. 30	9. 25	·1402					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 17		Dec. 17						
h m	° ′ ″	h m		h m		h m	°	°
7. 32	20. 33. 10	10. 6	·1400					
8. 11	33. 10	10. 24	·1404					
8. 23	32. 55	10. 46	·1401					
11. 13	32. 50	11. 11	·1403					
11. 53	32. 30	11. 28	·1402					
13. 28	33. 45	12. 11	·1404					
14. 15	33. 30	12. 49	·1402					
14. 57	34. 20	13. 19	·1404					
15. 26	33. 55	13. 43	·1403					
15. 29	34. 40	13. 56	·1404					
15. 41	33. 30	14. 13	·1403					
16. 29	33. 50	15. 25	·1405					
16. 53	33. 20	15. 33	·1409					
17. 11	33. 40	15. 42	·1406					
18. 37	32. 45	17. 4	·1411					
18. 43	33. 5	18. 24	·1413					
19. 20	32. 30	20. 55	·1411					
20. 30:	32. 35	21. 36	·1408					
22. 23	33. 55	23. 21	·1410					
23. 43	34. 10	23. 59	·1413					
23. 59	34. 30							
Dec. 18		Dec. 18		Dec. 18		Dec. 18		
0. 0	20. 34. 30	0. 0	·1413	0. 0	·02972	1. 0	58 ·2	59 ·0
1. 9	36. 50	0. 50	·1416	1. 12	·02970	3. 0	58 ·2	59 ·1
1. 44	35. 55	1. 50	·1409	7. 14	·03003	Max.	59 ·7	60 ·7
2. 8	36. 40	2. 3	·1411	14. 31	·02991	9. 0	58 ·7	59 ·5
2. 12	36. 40	2. 15	·1407	23. 59	·02957	Min.	57 ·4	58 ·3
2. 28	37. 20	2. 26	·1409			21. 0	58 ·0	59 ·0
2. 42	36. 55	2. 40	·1405					
3. 43	37. 30	3. 26	·1407					
4. 39	39. 30	4. 13	·1399					
4. 58	39. 0	4. 27	·1400					
5. 16	36. 45	5. 13	·1398					
5. 56	35. 20	5. 43	·1403					
6. 25	35. 45	6. 26	·1398					
6. 39	35. 15	6. 44	·1400					
6. 44	35. 30	6. 57	·1398					
6. 59	33. 50	7. 35	·1404					
7. 27	33. 30	7. 58	·1405					
7. 40	33. 55	9. 24	·1403					
7. 58	33. 50	10. 23	·1400					
8. 10	33. 10	10. 42	·1401					
8. 24	33. 10	11. 53	·1399					
9. 26	32. 10	12. 12	·1406					
10. 39	32. 25	12. 50	·1400					
11. 2	31. 55	13. 13	·1399					
11. 11	32. 5	15. 42	·1403					
11. 26	31. 30	15. 55	·1402					
11. 42	32. 15	16. 24	·1405					
11. 56	30. 25	16. 35	·1403					
12. 8	31. 40	17. 18	·1405					
12. 37	31. 20	19. 35	·1404					
12. 42	32. 0	22. 26	·1402					
12. 56	31. 20	23. 13	·1404					
13. 12	31. 40	23. 59	·1407					
13. 23	31. 25							
14. 53	32. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 18								
h m	° ′ ″	h m		h m		h m	°	°
15. 26	20. 32. 40							
15. 39	33. 15							
15. 55	33. 5							
16. 25	34. 0							
16. 36	33. 40							
16. 43	34. 0							
18. 16	33. 30							
20. 25	32. 30							
22. 11	33. 30							
22. 42	34. 10							
22. 54	33. 50							
23. 55	36. 0							
23. 59	35. 25							
Dec. 19		Dec. 19		Dec. 19		Dec. 19		
0. 0	20. 35. 25	0. 0	·1407	0. 0	·02957	1. 0	58 ·6	59 ·4
0. 12	35. 25	1. 45	·1411	2. 53	·02991	3. 0	58 ·4	59 ·4
0. 53	36. 20	3. 29	·1410	8. 40	·03005	Max.	59 ·0	60 ·2
1. 42	35. 55	4. 28	·1406	10. 55	·03004	9. 0	58 ·7	59 ·8
1. 52	36. 20	4. 50	·1408	11. 44	·02991	Min.	57 ·0	57 ·8
2. 28	35. 40	5. 51	·1407	15. 14	·02976	21. 0	57 ·8	58 ·0
3. 11	35. 20	6. 19	·1406	22. 14	·02937	22. 0	57 ·8	60 ·0
4. 27	36. 15	6. 41	·1409	23. 59	·02941	23. 0	57 ·6	58 ·0
4. 41	35. 30	6. 52	·1406					
4. 59	36. 5	7. 11	·1405					
5. 28	35. 40	7. 20	·1403					
5. 53	35. 50	7. 34	·1403					
6. 28	34. 45	7. 47	·1408					
7. 13	35. 30	8. 18	·1401					
7. 24	34. 55	8. 56	·1405					
7. 30	35. 5	9. 11	·1402					
7. 39	34. 20	9. 21	·1405					
7. 56	35. 40	9. 45	·1403					
8. 11	34. 20	10. 6	·1399					
8. 27	33. 50	10. 42	·1398					
8. 43	34. 5	10. 55	·1406					
9. 2	33. 30	11. 30	·1403					
9. 14	34. 10	11. 42	·1409					
9. 33	33. 15	12. 11	·1403					
9. 47	33. 30	12. 19	·1404					
9. 56	32. 10	12. 44	·1400					
10. 8	32. 40	14. 15	·1399					
10. 13	32. 10	14. 59	·1404					
10. 42	24. 45	15. 43	·1403					
10. 51	27. 0	16. 15	·1407					
11. 8	30. 0	17. 10	·1409					
11. 14	30. 20	17. 22	·1408					
11. 37	32. 30	17. 30	·1410					
11. 42	31. 0	17. 52	·1408					
12. 39	30. 10	18. 40	·1405					
13. 9	31. 20	19. 15	·1406					
13. 14	31. 0	19. 42	·1404					
13. 27	31. 45	20. 3	·1408					
13. 55	31. 45	20. 13	·1405					
14. 29	33. 10	20. 18	·1407					
14. 42	33. 10	20. 58	·1404					
14. 54	32. 35	21. 12	·1409					
14. 58	32. 35	21. 40	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 19		Dec. 19						
h m	° ′ ″	h m		h m		h m	°	°
15. 22	20. 34. 40	22. 1	·1402					
15. 42	34. 20	22. 22	·1407					
15. 57	33. 40	22. 40	·1405					
16. 13	33. 15	23. 12	·1407					
16. 38	32. 50	23. 43	·1404					
	***	23. 59	·1407					
17. 13	32. 25							
17. 28	33. 5							
17. 43	33. 10							
17. 58	32. 50							
18. 30	33. 35							
18. 58	33. 35							
19. 9	34. 20							
19. 26	34. 20							
19. 58	35. 0							
20. 9	34. 30							
20. 41	33. 45							
21. 41	34. 40							
22. 26	36. 50							
22. 55	35. 30							
23. 10	36. 20							
23. 55	36. 0							
23. 59	36. 25							
Dec. 20		Dec. 20		Dec. 20		Dec. 20		
0. 0	20. 36. 25	0. 0	·1407	0. 0	·02941	0. 0	57 ·8	58 ·2
0. 54	38. 20	0. 41	·1410	1. 15	·02949	Min.	57 ·8	58 ·2
1. 26	37. 0	0. 56	·1408	2. 34	·02991	1. 0	58 ·8	59 ·5
1. 29	37. 35	1. 10	·1412	7. 41	·03046	2. 0	59 ·0	59 ·8
1. 43	36. 30	1. 28	·1405	12. 23	·03031	3. 0	59 ·3	60 ·0
2. 24	39. 5	2. 13:	·1409	15. 18	·03049	Max.	59 ·5	60 ·7
3. 9	37. 50	2. 45	·1405	15. 32	·03040	9. 0	58 ·8	59 ·5
3. 25	36. 50	3. 25	·1399	15. 43	·03049	Min.	58 ·4	59 ·4
3. 38	37. 5	3. 52	·1401	16. 34	·03033	21. 0	60 ·1	61 ·0
4. 8	39. 55	4. 22	·1394	19. 6	·03056	Max.	60 ·7	61 ·7
4. 13	39. 55	4. 54	·1392	21. 4	·03042	22. 0	59 ·9	60 ·9
4. 23	39. 10	5. 17	·1395	23. 59	·03057	23. 0	59 ·9	60 ·9
4. 36	40. 0	5. 26	·1391					
4. 42	39. 40	6. 0	·1392					
4. 46	40. 5	6. 15	·1388					
5. 10	38. 20	6. 42	·1385					
5. 23	38. 55	7. 5	·1377					
	***	7. 26	·1380					
5. 47	37. 50	7. 41	·1378					
5. 56	36. 35	7. 51	·1381					
6. 3	37. 0	8. 6	·1391					
6. 23	36. 20	8. 16	·1379					
	***	8. 34	·1385					
6. 39	36. 10	8. 43	·1382					
6. 56	37. 30	9. 0	·1387					
7. 11	34. 20	9. 14	·1387					
7. 23	33. 45	9. 27	·1383					
7. 28	34. 30	9. 42	·1391					
7. 39	33. 55	9. 59	·1384					
7. 56	30. 0	10. 21	·1394					
8. 11	33. 20	10. 28	·1392					
8. 14	33. 30	10. 41	·1394					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 20		Dec. 20						
h m	° ′ ″	h m		h m		h m	°	°
8. 27	20. 31. 20	10. 55	·1392					
8. 38	31. 30	11. 40	·1395					
8. 43	30. 25	11. 44	·1392					
9. 23	31. 40	11. 56	·1399					
9. 28	29. 40	12. 40	·1400					
9. 42	30. 30	12. 55	·1396					
9. 56	29. 0	13. 12	·1399					
10. 9	28. 20	13. 42	·1395					
10. 23	29. 25	13. 49	·1397					
10. 27	29. 25	13. 56	·1394					
10. 40	30. 40	14. 24	·1398					
10. 54	30. 10	14. 42	·1389					
11. 24	30. 55	14. 51	·1390					
11. 38	32. 40	15. 16:	·1405					
12. 8	33. 25	15. 36	·1401					
12. 56	33. 10	15. 44	·1406					
	***	15. 53	·1403					
14. 8	32. 55	16. 14	·1414					
14. 28	31. 40	16. 56	·1402					
14. 44	32. 35	17. 18	·1405					
14. 58	34. 0	17. 42	·1397					
15. 24	31. 20	17. 55	·1399					
15. 32	32. 30	18. 26	·1395					
15. 44	35. 50	18. 49	·1400					
15. 54	34. 50	19. 5	·1399					
15. 57	34. 50	19. 13	·1400					
16. 23	30. 0	19. 29	·1395					
16. 36	28. 55	19. 39	·1398					
16. 42	29. 50	19. 55	·1395					
16. 55	29. 50	20. 11	·1399					
17. 9	30. 45	20. 14	·1396					
17. 36	30. 35	20. 25	·1399					
17. 53	33. 15	20. 43	·1397					
18. 8	32. 45	21. 24	·1391					
18. 24	33. 30	21. 43	·1387					
18. 28	32. 40	21. 56	·1393					
18. 39	32. 55	22. 8	·1390					
19. 9	35. 50	22. 14	·1396					
19. 14	35. 15	22. 23	·1393					
19. 58	39. 20	22. 44	·1397					
20. 12	38. 0	23. 39	·1399					
20. 25	38. 15	23. 59	·1400					
20. 34	37. 10							
20. 42	36. 55							
21. 9	33. 30							
21. 25	35. 40							
21. 40	34. 0							
21. 43	33. 10							
21. 58	35. 55							
22. 9	35. 45							
22. 14	36. 55							
22. 25	35. 50							
22. 39	35. 50							
23. 17	33. 15							
23. 40	34. 30							
23. 59	34. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 21		Dec. 21		Dec. 21		Dec. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 34. 15	0. 0	·1400	0. 0	·03057	0. 0	59·6	60·6
0. 26	34. 55	0. 25	·1398	3. 3	·03066	1. 0	59·4	60·9
0. 54	36. 10	1. 25	·1402	4. 10	·03055	3. 0	59·4	60·9
1. 23	36. 40	1. 56	·1404	16. 34	·03040	Max.	60·5	61·6
1. 42	36. 20	2. 27	·1400	17. 44	·03036	9. 0	59·6	61·4
1. 58	37. 0	3. 11	·1406	19. 28	·03032	Min.	58·7	60·3
2. 13	36. 50	3. 29	·1403	23. 59	·03003	21. 0	58·9	60·3
2. 32	35. 10	3. 51	·1404					
2. 53	34. 55	4. 14	·1401					
3. 11	36. 45	6. 13	·1404					
3. 35	36. 30	10. 11	·1400					
3. 56	36. 50	12. 47	·1395					
4. 38	35. 0	13. 43	·1397					
4. 58	34. 35	14. 0	·1395					
5. 38	34. 50	15. 34	·1405					
6. 57	33. 50	15. 53	·1403					
10. 24	33. 15	16. 49	·1407					
11. 8	32. 45	17. 11	·1404					
12. 2	33. 0	17. 28	·1405					
12. 27	32. 30	17. 59	·1398					
13. 13	33. 20	18. 40	·1398					
13. 43	32. 55	19. 14	·1403					
14. 38	33. 55	19. 48	·1404					
15. 31	33. 50	20. 14	·1400					
16. 13	32. 50	21. 49	·1396					
16. 39	32. 50	22. 44	·1393					
17. 7	34. 30	23. 59	·1399					
17. 26	34. 5							
17. 38	34. 5							
17. 44	34. 55							
18. 8	35. 0							
18. 14	35. 50							
18. 58	33. 30							
19. 28	32. 55							
19. 41	32. 55							
20. 28	32. 25							
21. 38	33. 10							
22. 11	34. 10							
22. 27	33. 55							
22. 40	34. 5							
22. 56	34. 50							
23. 27	35. 20							
23. 38	36. 0							
23. 47	36. 10							
23. 56	36. 30							
23. 59	36. 20							
Dec. 22		Dec. 22		Dec. 22		Dec. 22		
0. 0	20. 36. 20	0. 0	·1399	0. 0	·03003	1. 0	58·8	60·0
1. 26	36. 55	0. 26	·1402	4. 26	·03017	3. 0	58·6	60·0
1. 43	37. 10	1. 51	·1405	9. 4	·03039	Max.	59·5	60·6
2. 11	36. 40	3. 8	·1403	22. 4	·02977	9. 0	58·8	60·4
2. 27	37. 0	3. 52	·1406	23. 59	·02971	Min.	57·8	59·2
2. 52	35. 55	4. 11	·1408			21. 0	58·6	60·0
3. 13	35. 55	5. 10	·1400					
	***	5. 12	·1402					
3. 58	36. 30	7. 12	·1398					
4. 24	37. 20	7. 24	·1403					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 22		Dec. 22						
h m	° ′ ″	h m		h m		h m	°	°
5. 3	20. 35. 25	7. 41	·1406					
5. 11	36. 0	7. 53	·1397					
5. 15	35. 20	8. 12	·1392					
5. 56	37. 5	8. 51	·1398					
6. 28	35. 55	9. 15	·1396					
6. 56	35. 0	9. 38	·1398					
7. 13	32. 20	10. 10	·1395					
7. 42	33. 50	10. 19	·1397					
8. 42	30. 55	10. 26	·1392					
9. 11	32. 0	10. 54	·1403					
10. 2	32. 10	11. 19	·1394					
10. 13	33. 0	11. 40	·1397					
10. 42	30. 50	11. 45	·1395					
11. 8	32. 5	11. 57	·1397					
11. 11	32. 5	12. 16	·1392					
11. 23	31. 15	12. 27	·1398					
11. 30	31. 40	12. 41	·1396					
11. 44	31. 15	12. 55	·1398					
11. 56	32. 10	13. 54	·1396					
12. 8	31. 40	14. 51	·1398					
12. 52	33. 0	15. 16	·1396					
14. 9	33. 0	15. 25	·1398					
14. 44	34. 5	15. 43	·1397					
15. 9	33. 10	18. 2	·1403					
19. 42	32. 50	20. 25	·1403					
20. 57	31. 45	21. 41	·1396					
22. 57	33. 10	23. 19	·1394					
23. 59	34. 45	23. 59	·1397					
Dec. 23		Dec. 23		Dec. 23		Dec. 23		
0. 0	20. 34. 45	0. 0	·1397	0. 0	·02971	1. 0	59·0	60·3
2. 11	35. 15	0. 40	·1402	2. 56	·03003	3. 0	58·8	60·3
3. 0	34. 0	1. 26	·1404	11. 27	·03002	Max.	59·2	60·5
5. 27	33. 40	4. 19	·1406	16. 56	·03002	9. 0	58·8	60·0
5. 53	34. 20	4. 41	·1408	20. 54	·02988	Min.	58·0	59·8
6. 38	33. 30	5. 10	·1406	23. 59	·02980	22. 20	58·8	60·0
6. 53	33. 45	5. 32	·1409					
8. 46	33. 10	6. 10	·1406					
10. 13	31. 50	6. 23	·1408					
10. 29	32. 25	7. 18	·1404					
10. 46	31. 10	8. 12	·1406					
11. 16	33. 20	8. 33	·1403					
11. 23	33. 0	8. 44	·1405					
11. 30	32. 55	8. 56	·1403					
11. 39	33. 35	9. 4	·1407					
11. 57	32. 25	9. 12	·1403					
12. 30	33. 10	9. 24	·1406					
13. 2	33. 50	9. 52	·1399					
13. 25	33. 40	10. 12	·1398					
13. 39	32. 55	10. 29	·1403					
14. 14	34. 0	10. 57	·1399					
14. 44	33. 25	11. 15	·1405					
14. 59	33. 50	11. 23	·1403					
16. 26	33. 0	11. 41	·1407					
16. 38	33. 30	12. 6	·1403					
17. 38	33. 10	12. 13	·1404					
17. 55	34. 0	12. 29	·1399					
18. 6	33. 30	13. 26	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 23		Dec. 23						
h m	° ′ ″	h m		h m		h m	°	°
19. 28	20. 33. 50	13. 54	·1401					
19. 56	33. 50	16. 34	·1406					
20. 3	33. 15	16. 42	·1408					
20. 28	33. 50	16. 52	·1406					
20. 38	33. 30	17. 7	·1408					
20. 58	33. 30	17. 24	·1405					
21. 25	34. 20	17. 30	·1408					
21. 42	34. 0	17. 42	·1405					
21. 58	35. 10	17. 55	·1408					
22. 11	34. 40	18. 9	·1406					
22. 30	34. 40	18. 14	·1409					
22. 53	35. 30	18. 54	·1408					
23. 37	36. 15	19. 17	·1411					
23. 59	35. 40	19. 50	·1406					
		21. 6	·1408					
		21. 23	·1406					
		21. 59	·1409					
		22. 15	·1407					
		23. 21	·1408					
		23. 59	·1415					
Dec. 24		Dec. 24		Dec. 24		Dec. 24		
0. 0	20. 35. 40	0. 0	·1415	0. 0	·02980	1. 5	59 ·0	60· 1
0. 44	35. 30	0. 24	·1413	1. 1	·02991	Max.	60 ·0	61 ·5
1. 8	35. 40	1. 11	·1417	4. 58	·02996	9. 0	59 ·6	61 ·1
2. 53	34. 10	1. 26	·1414	9. 39	·03019	Min.	57 ·6	59 ·0
5. 52	33. 50	2. 30	·1413	14. 40	·02981	22. 0	58 ·0	59 ·1
6. 2	34. 5	2. 43	·1411	23. 59	·02967			
7. 0	33. 30	3. 58	·1413					
8. 27	33. 10	5. 42	·1412					
8. 44	33. 35	5. 50	·1416					
9. 39	33. 10	7. 26	·1414					
10. 8	31. 50	10. 0	·1406					
10. 27	32. 30	11. 23	·1404					
11. 16	31. 0	11. 34	·1406					
11. 30	31. 55	11. 47	·1404					
11. 41	31. 40	13. 54	·1402					
12. 53	32. 40	14. 55	·1408					
13. 7	31. 50	17. 22	·1412					
13. 34	32. 15	19. 13	·1417					
13. 57	32. 0	19. 33	·1414					
14. 8	32. 10	19. 55	·1418					
14. 17	33. 30	21. 0	·1413					
15. 11	32. 30	21. 13	·1414					
15. 26	33. 5	21. 35	·1410					
16. 11	32. 40	21. 56	·1414					
17. 26	33. 0	22. 32	·1410					
17. 57	32. 30	22. 50	·1413					
20. 40	32. 30	23. 0	·1417					
21. 42	34. 10	23. 25	·1416					
22. 26	34. 5	23. 40	·1420					
22. 41	34. 25	23. 46	·1413					
22. 49	33. 50	23. 59	·1418					
23. 19	34. 50							
23. 26	34. 30							
23. 38	35. 5							
23. 44	34. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 24								
h m	° ′ ″	h m		h m		h m	°	°
23. 55	20. 35. 40							
23. 59	35. 15							
Dec. 25		Dec. 25		Dec. 25		Dec. 25		
0. 0	20. 35. 15	0. 0	·1418	0. 0	·02967	Min.	58 ·9	60 ·4
0. 43	36. 10	0. 11	·1414	2. 33	·03004	1. 0	59 ·4	61 ·0
1. 55	35. 20	0. 44	·1416	5. 16	·03023	7. 0	60 ·0	61 ·0
2. 3	34. 55	1. 13	·1419	5. 56	·03051	21. 0	60 ·1	60 ·5
2. 54	35. 10	1. 46	·1413	12. 15	·03037	Max.	60 ·5	61 ·7
3. 10	35. 0	2. 34	·1414	23. 59	·03062			
3. 22	35. 40	3. 33	·1405					
3. 28	36. 40	3. 46	·1406					
3. 50	35. 20	4. 11	·1404					
4. 38	35. 20	4. 14	·1407					
4. 53	35. 35	4. 30	·1404					
5. 8	35. 35	4. 41	·1404					
5. 16	32. 50	5. 24	·1389					
5. 28	29. 10	5. 40	·1389					
5. 44	28. 0	6. 13	·1400					
5. 58	30. 0	6. 41	·1405					
6. 10	31. 30	6. 49	·1404					
6. 56	34. 50	8. 11	·1407					
8. 17	33. 20	8. 32	·1410					
8. 43	33. 10	9. 10	·1405					
8. 57	32. 50	9. 39	·1406					
10. 13	32. 30	9. 50	·1408					
10. 42	32. 55	10. 36	·1404					
11. 12	33. 10	10. 51	·1410					
11. 37	34. 10	11. 14	·1405					
11. 57	33. 10	11. 35	·1410					
12. 27	33. 35	11. 45	·1406					
12. 42	33. 20	12. 30	·1401					
13. 8	33. 50	12. 41	·1404					
13. 32	32. 35	12. 44	·1402					
	***	13. 11	·1407					
15. 38	33. 10	13. 56	·1403					
15. 57:	32. 40	14. 8	·1407					
16. 43	33. 35	14. 22	·1405					
17. 38	33. 30	15. 1	·1408					
17. 46	32. 40	15. 11	·1406					
17. 56	33. 10	15. 18	·1408					
18. 4	32. 30	15. 21	·1406					
18. 34	32. 40	15. 29	·1409					
18. 52	32. 15	16. 42	·1408					
19. 9	33. 5	16. 50	·1410					
19. 23	32. 30	17. 12	·1408					
20. 19	32. 30	17. 40	·1412					
21. 28	35. 0	17. 52	·1410					
21. 53	37. 10	17. 57	·1413					
21. 57	37. 20	18. 13	·1410					
22. 13	37. 0	18. 30	·1412					
23. 8	40. 20	19. 12	·1413					
23. 53	39. 30	19. 41	·1408					
23. 59	39. 55	20. 3	·1404					
		20. 12	·1406					
		21. 11	·1403					
		21. 25	·1398					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	Dec. 25 h m		h m		h m	°	°
		22. 36	·1400					
		22. 40	·1395					
		23. 0	·1392					
		23. 18	·1396					
		23. 24	·1394					
		23. 40	·1398					
		23. 59	·1397					
Dec. 26		Dec. 26		Dec. 26		Dec. 26		
0. 0	20. 39. 55	0. 0	·1397	0. 0	·03062	1. 0	60 ·1	61 ·0
0. 20	39. 30	0. 19	·1396	0. 38	·03059	3. 0	60 ·6	61 ·9
0. 25	39. 30	0. 41	·1399		·03124	Max.	60 ·9	62 ·0
1. 24	35. 20	0. 46	·1396	7. 25	·03149	9. 0	60 ·5	61 ·5
2. 15	35. 20	0. 58	·1400	15. 19	·03098	Min.	58 ·3	59 ·5
3. 11	33. 40	1. 3	·1398	19. 27	·03080	21. 0	59 ·0	60 ·1
3. 26	33. 50	1. 11	·1403	23. 59	·03043	22. 0	58 ·8	60 ·0
4. 23	32. 55	1. 22	·1399			23. 0	58 ·7	59 ·8
5. 43	33. 30	3. 12	·1403					
5. 56	33. 10	3. 28	·1400					
6. 26	33. 20	3. 59	·1398					
6. 57	32. 10	4. 41	·1402					
7. 18	30. 25	4. 57	·1400					
7. 53	32. 25	6. 55	·1397					
8. 58	31. 50	7. 12	·1394					
12. 28	32. 5	7. 45	·1400					
12. 45	32. 40	8. 47	·1398					
13. 13	32. 55	9. 53	·1400					
13. 26	32. 25	10. 9	·1402					
13. 41	33. 0	10. 42	·1398					
13. 52	32. 50	10. 56	·1401					
14. 24	33. 10	11. 15	·1400					
14. 39	34. 20	11. 24	·1402					
14. 57	33. 15	11. 56	·1400					
15. 24	31. 50	12. 13	·1403					
15. 54	31. 15	12. 48	·1401					
16. 29	31. 50	13. 14	·1403					
16. 56	31. 40	13. 28	·1400					
17. 11	30. 45	14. 10	·1403					
17. 40	31. 30	14. 25	·1407					
17. 43	30. 55	14. 53	·1406					
17. 59	31. 40	15. 9	·1409					
18. 55	31. 40	15. 25	·1405					
19. 7	32. 10	18. 41	·1412					
19. 12	31. 50	19. 22	·1411					
19. 31	32. 20	19. 43	·1413					
19. 55	32. 10	20. 11	·1411					
20. 58	33. 5	20. 18	·1412					
21. 26	33. 5	21. 14	·1406					
21. 41	33. 35	21. 49	·1404					
21. 55	33. 25	22. 41	·1396					
22. 9	33. 50	23. 43	·1398					
22. 13	33. 20	23. 59	·1403					
22. 44	36. 40							
23. 28	37. 55							
23. 59	35. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 27 h m	° ′ ″	Dec. 27 h m		Dec. 27 h m		Dec. 27 h m	°	°
0. 0	20. 35. 15	0. 0	·1403	0. 0	·03043	0. 0	58 ·6	59 ·6
0. 12	35. 15	0. 13	·1407	5. 27	·03052	1. 0	58 ·6	59 ·0
0. 27	37. 0	0. 26	·1405	14. 44	·03022	2. 0	58 ·6	59 ·0
0. 41	37. 40	0. 43	·1406	15. 9	·03011	3. 0	58 ·6	59 ·0
0. 57	38. 5	1. 11	·1407	22. 3	·02994	Max.	59 ·5	60 ·4
2. 29	35. 40	1. 44	·1400	22. 24	·03002	9. 0	58 ·8	59 ·4
3. 9	35. 40	2. 26	·1402	23. 59	·02986	21. 0	57 ·9	58 ·5
3. 24	36. 10	2. 39	·1404			22. 0	57 ·9	58 ·1
3. 58	34. 30	2. 56	·1402			23. 0	57 ·4	57 ·9
4. 21	33. 50	3. 12	·1404			Min.	57 ·4	57 ·9
4. 38	32. 0	3. 30	·1396					
4. 59	32. 15	4. 13	·1399					
5. 14	32. 55	4. 27	·1393					
6. 26	33. 10	5. 12	·1405					
6. 43	32. 55	6. 24	·1406					
7. 28	32. 30	6. 59	·1403					
10. 54	32. 35	7. 24	·1406					
11. 11	32. 20	7. 54	·1404					
11. 44	32. 55	9. 0	·1405					
12. 26	32. 25	9. 11	·1408					
13. 57	33. 15	9. 21	·1405					
14. 28	33. 5	10. 48	·1403					
14. 53	36. 50	11. 0	·1405					
15. 12	32. 40	11. 25	·1402					
15. 28	32. 5	12. 26	·1403					
16. 26	33. 0	12. 52	·1401					
16. 39	32. 30	14. 41	·1403					
16. 58	32. 45	15. 2	·1412					
17. 11	32. 20	15. 24	·1407					
17. 50	32. 45	15. 39	·1408					
17. 58	32. 30	15. 56	·1404					
18. 10	33. 5	18. 11	·1419					
18. 56	32. 20	21. 0	·1406					
19. 10	33. 5	21. 14	·1412					
19. 23	32. 25	21. 39	·1404					
19. 43	32. 25	22. 12	·1405					
20. 32	31. 30	22. 42	·1387					
21. 26	32. 15	23. 38	·1398					
21. 39	32. 40	23. 59	·1403					
21. 46	32. 30 ***							
22. 54	33. 35 (†)							
Dec. 28		Dec. 28		Dec. 28		Dec. 28		
	(†)	0. 0	·1403	0. 0	·02986	0. 0	57 ·8	58 ·0
1. 0	20. 36. 55*	0. 10	·1407	1. 11	·03005	Min.	57 ·8	58 ·0
3. 0	34. 48*	0. 34	·1413	5. 24	·02997	1. 0	57 ·8	58 ·0
3. 29	32. 30	0. 57	·1412	12. 3	·03042	2. 0	57 ·8	58 ·0
3. 44	32. 25	1. 11	·1415	13. 57	·03021	3. 0	57 ·8	58 ·5
3. 59	33. 0	1. 55	·1408	21. 55	·03029	9. 0	58 ·8	60 ·0
5. 14	33. 10	2. 23	·1402	23. 59	·03065	21. 0	59 ·6	60 ·5
5. 41	33. 20	2. 43	·1406			Max.	59 ·7	60 ·5
5. 49	33. 0	3. 0	·1404					
6. 10	33. 40	3. 11	·1406					
6. 27	32. 50	3. 25	·1403					
6. 43	33. 25	4. 6	·1410					
7. 13	33. 5	4. 56	·1410					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Dec. 28	
h m	° ′ ″
7. 19	20. 33. 20
7. 41	32. 50
7. 58	33. 10
8. 26	32. 45
9. 11	33. 15
9. 27	31. 30
9. 38	31. 30
9. 44	32. 30
10. 12	31. 15
10. 26	30. 25
10. 56	31. 55
11. 8	31. 40
11. 21	32. 0
11. 32	33. 0
11. 39	33. 0
11. 44	33. 15
11. 54	33. 0
12. 10	35. 20
12. 26	34. 20
12. 43	34. 25
12. 58	31. 25
13. 9	32. 15
13. 28	31. 20
13. 38	31. 20
13. 51	29. 50
14. 0	31. 10
14. 13	31. 10
14. 28	32. 45
	***
14. 56	32. 0
15. 9	31. 30
15. 56	32. 55
16. 13	32. 25
16. 39	32. 40
17. 8	32. 45
17. 12	32. 25
17. 26	32. 55
17. 44	33. 0
17. 56	32. 45
18. 23	32. 55
18. 43	32. 30
18. 58	32. 45
19. 16	32. 30
19. 52	33. 15
19. 56	32. 50
20. 6	33. 25
20. 13	32. 35
20. 55	33. 40
21. 10	32. 30
21. 58	34. 40
22. 10	33. 15
22. 14	34. 30
22. 42	34. 55
	(†)
Dec. 29	
	(†)
1. 0	20. 37. 12*

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Dec. 28	
h m	
5. 14	·1413
5. 30	·1410
5. 45	·1412
6. 11	·1407
6. 28	·1409
6. 58	·1406
7. 15	·1409
7. 30	·1406
9. 11	·1404
9. 39	·1406
9. 52	·1403
10. 13	·1404
10. 52	·1399
11. 24	·1400
11. 42	·1399
11. 52	·1404
11. 56	·1403
12. 11	·1409
12. 46	·1403
13. 9	·1410
13. 41	·1403
13. 48	·1399
13. 54	·1402
14. 6	·1397
14. 25	·1403
14. 44	·1399
14. 54	·1402
15. 12	·1400
17. 58	·1409
19. 43	·1412
19. 53	·1409
19. 58	·1411
20. 7	·1406
20. 18	·1413
20. 57	·1407
21. 11	·1412
21. 24	·1411
21. 43	·1413
22. 5	·1404
22. 12	·1409
22. 24	·1406
22. 43	·1411
	(†)
Dec. 29	
	(†)
3. 0	·1365*

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Dec. 29. 0. 0	·03065
3. 31	·03101

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Dec. 29. 1. 0	61 ·6	62 ·5
3. 0	62 ·2	62 ·1

Greenwich Mean Solar Time.	Western Declination.
Dec. 29	
h m	° ′ ″
3. 0	20. 34. 20*
3. 9	33. 15
3. 30	32. 50
3. 56	33. 10
4. 14	32. 40
4. 26	33. 10
4. 44	32. 45
5. 12	33. 10
5. 43	33. 5
5. 54	32. 30
5. 59	33. 0
6. 14	32. 40
6. 30	33. 5
6. 53	32. 30
7. 11	33. 0
7. 24	32. 30
8. 3	33. 5
8. 12	32. 30
8. 26	32. 25
8. 37	29. 0
8. 42	27. 30
8. 58	28. 0
9. 14	30. 10
9. 28	29. 0
9. 40	30. 5
10. 11	31. 40
10. 23	30. 50
10. 32	31. 0
10. 55	26. 35
11. 40	23. 15
11. 50	23. 40
11. 56	22. 30
12. 2	23. 30
12. 24	21. 45
12. 42	25. 40
12. 55	25. 40
13. 8	26. 20
13. 10	26. 10
13. 39	28. 50
13. 52	28. 40
14. 28	31. 0
14. 39	31. 0
14. 55	32. 30
15. 2	32. 5
15. 13	32. 40
15. 55	31. 45
16. 26	32. 15
16. 51	30. 35
17. 27	31. 55
17. 39	31. 0
18. 56	32. 20
19. 13	34. 0
19. 41	33. 10
19. 53	33. 25
20. 25	32. 35
20. 56	31. 20
21. 43	32. 40
22. 26	32. 30
23. 9	33. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Dec. 29	
h m	
3. 5	·1365
3. 54	·1369
4. 32	·1367
5. 12	·1371
5. 43	·1369
6. 12	·1362
6. 34	·1367
7. 2	·1369
7. 41	·1367
8. 44	·1358
9. 18	·1360
9. 41	·1361
9. 58	·1358
10. 14	·1360
10. 30	·1357
10. 42	·1357
11. 18	·1368
11. 53	·1365
12. 41	·1351
12. 57	·1356
13. 17	·1353
13. 56	·1357
14. 20	·1355
14. 53	·1359
15. 9	·1357
15. 41	·1362
17. 11	·1368
17. 44	·1370
18. 43	·1366
19. 14	·1369
19. 44	·1372
20. 40	·1368
21. 13	·1361
21. 41	·1362
22. 41	·1363
22. 56	·1368
23. 13	·1372
23. 42	·1371
23. 59	·1369

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Dec. 29	
h m	
7. 9	·03082
10. 7	·03103
12. 23	·03088
12. 44	·03097
21. 14	·03048
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 29		
h m	°	°
Max.	62 ·3	62 ·7
9. 0	60 ·7	62 ·0
Min.	58 ·9	59 ·9
21. 0	59 ·3	60 ·2

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

December 29. The Horizontal Force Magnet was under adjustment till 3^h.

December 29^d. 22^h. The Vertical Force Magnet was examined by Mr. Simms.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 29								
h m	° ′ ″	h m		h m		h m	°	°
23. 24	20. 35. 0							
23. 41	35. 45							
23. 59	35. 0							
Dec. 30		Dec. 30		Dec. 30		Dec. 30		
0. 0	20. 35. 0	0. 0	·1369		(†)	1. 0	60 ·1	60 ·4
0. 59	36. 45	0. 37	·1375	0. 27	·03700	3. 0	59 ·6	60 ·0
1. 39	35. 40	1. 19	·1372	3. 19	·03722	Max.	60 ·5	61 ·2
1. 56	36. 10	1. 54	·1369		·03806	9. 0	59 ·3	59 ·5
2. 7	36. 10	2. 14	·1362	8. 41	·03798	Min.	58 ·2	59 ·4
2. 12	35. 40	2. 45	·1365	15. 31	·03748	22. 15	59 ·2	60 ·2
2. 29	35. 50	3. 3	·1362	23. 59	·03730			
3. 9	34. 15	3. 24	·1365					
3. 22	35. 20	3. 41	·1371					
3. 44	33. 20	3. 52	·1368					
4. 3	33. 50	4. 15	·1371					
4. 14	33. 50	4. 34	·1368					
4. 59	31. 45	4. 59	·1375					
5. 44	32. 30	6. 39	·1366					
5. 56	32. 30	6. 52	·1363					
6. 8	32. 55	7. 46	·1365					
6. 33	32. 0	8. 10	·1368					
6. 53	30. 25	8. 12	·1365					
7. 15	30. 15	8. 29	·1368					
7. 43	30. 55	9. 8	·1366					
7. 58	30. 40	9. 56	·1369					
8. 12	29. 30	11. 40	·1370					
8. 44	29. 40	12. 11	·1373					
9. 24	29. 15	12. 19	·1371					
9. 37	28. 55	12. 42	·1376					
9. 51	29. 25	12. 57	·1374					
10. 29	28. 25	13. 16	·1376					
10. 55	28. 40	13. 41	·1373					
11. 9	28. 10	18. 22	·1379					
11. 56	29. 20	19. 26	·1377					
12. 45	30. 15	22. 54	·1374					
12. 56	30. 40	23. 59	·1377					
13. 11	30. 20							
13. 45	31. 30							
15. 40	31. 30							
15. 46	30. 55							
16. 28	31. 30							
16. 42	30. 55							
18. 8	30. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 30								
h m	° ′ ″	h m		h m		h m	°	°
18. 13	20. 30. 10							
18. 28	30. 50							
18. 54	30. 0							
19. 40	30. 20							
21. 8	28. 30							
21. 54	29. 20							
21. 59	29. 5							
22. 14	29. 55							
22. 26	29. 35							
23. 59	32. 30							
Dec. 31		Dec. 31		Dec. 31		Dec. 31		
0. 0	20. 32. 30	0. 0	·1377	0. 0	·03730	1. 0	59 ·6	60 ·7
1. 44	33. 15	1. 0	·1379	3. 25	·03756	Max.	60 ·0	60 ·8
3. 23	31. 45	2. 57	·1377	14. 31	·03734	9. 0	59 ·4	60 ·3
7. 12	30. 30	6. 12	·1379	23. 1	·03692	Min.	58 ·2	58 ·9
7. 35	31. 10	7. 45	·1374	23. 59	·03686	21. 0	58 ·8	59 ·2
8. 9	30. 40	7. 55	·1376					
8. 15	29. 30	8. 13	·1374					
8. 37	30. 10	9. 29	·1373					
8. 57	28. 45	9. 54	·1375					
9. 25	30. 10	10. 12	·1374					
9. 53	29. 40	10. 27	·1376					
10. 11	30. 0	11. 2	·1374					
10. 23	29. 50	14. 27	·1376					
10. 43	30. 35	17. 44	·1384					
10. 58	30. 10	20. 4	·1382					
11. 37	30. 10	21. 50	·1374					
11. 43	29. 30	22. 56	·1375					
14. 11	30. 50	23. 15	·1383					
15. 8	31. 20	23. 35	·1379					
17. 11	30. 50	23. 59	·1382					
17. 45	30. 5							
20. 10	29. 10							
21. 0	28. 30							
21. 41	28. 30							
22. 29	30. 20							
22. 56	31. 10							
23. 1	31. 0							
23. 9	30. 15							
23. 18	31. 35							
23. 42	31. 45							
23. 59	33. 15							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

December 30d. 0h. 15m. VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 10div·68, or by 0·007253 parts of the whole Vertical Force.

TABLE showing the APPROXIMATE MEAN MONTHLY DECLINATION, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1865.

MONTH.	1865.
	° ′ ″
January	....
February	20. 31. 6
March	32. 25
April	33. 58
May	33. 51
June	30. 36
July	31. 27
August	33. 1
September	33. 1
October	34. 11
November	32. 56
December	33. 18
Mean	20. 32. 43

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

OBSERVATIONS

OF THE

MAGNETIC DIP.

1865.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, chiefly with AIRY'S DIP APPARATUS, in the Year 1865.

Day and Approximate Hour, 1865.	Needle.	Length of Needle.	Magnetic Dip.	Observer.
d h			° ′ ″	
January 9. 2	B 1	9 inches	68. 3. 41	N
23. 2	B 2	9 „	68. 5. 1	N
25. 0	B 1	9 „	68. 1. 24	N
25. 1	B 3	9 „	68. 4. 5	N
February 11. 2	C 1	6 „	68. 0. 43	N
14. 2	C 2	6 „	68. 1. 50	N
15. 0	C 4	6 „	(67. 58. 22)	N
15. 1	C 3	6 „	67. 49. 27	N
23. 2	C 1	6 „	68. 4. 28	N
27. 1	C 2	6 „	68. 2. 18	N
27. 2	C 4	6 „	(68. 0. 12)	N
28. 0	D 4	3 „	(68. 5. 52)	N
28. 0	C 1	6 „	68. 3. 14	N
28. 1	B 1	9 „	67. 55. 43	N
March 11. 2	D 1	3 „	68. 12. 56	N
16. 1	D 2	3 „	68. 4. 15	N
16. 2	D 4	3 „	(68. 2. 54)	N
21. 2	D 2	3 „	68. 8. 38	N
21. 23	D 4	3 „	(68. 4. 0)	N
21. 23	D 1	3 „	68. 10. 10	N
22. 2	D 2	3 „	68. 6. 27	N
31. 2	D 3	3 „	68. 4. 28	N
31. 3	B 1	9 „	68. 1. 13	N
April 6. 2	B 1	9 „	68. 2. 19	N
10. 2	B 2	9 „	68. 1. 37	N
18. 1	B 1	9 „	68. 3. 12	N
22. 2	C 1	6 „	67. 59. 59	N
26. 2	B 2	9 „	68. 0. 49	N
28. 23	B 3	9 „	68. 10. 16	N
29. 1	B 4	9 „	(67. 51. 32)	N
29. 2	D 4	3 „	(68. 1. 5)	N
May 12. 2	C 1	6 „	67. 57. 25	N
13. 2	C 2	6 „	68. 5. 46	N
18. 2	C 4	6 „	(68. 1. 1)	N
27. 2	C 1	6 „	67. 58. 44	N
29. 0	C 2	6 „	68. 2. 4	N
29. 1	C 3	6 „	68. 1. 32	N
29. 2	C 4	6 „	(67. 57. 46)	N
29. 23	D 4	3 „	(67. 56. 30)	N
30. 1	D 2	3 „	68. 4. 4	N
June 7. 2	D 4	3 „	(67. 55. 49)	N
7. 22	D 3	3 „	68. 3. 17	N
7. 23	D 2	3 „	68. 5. 17	N
8. 0	D 1	3 „	67. 45. 42	N
8. 1	C 2	6 „	68. 3. 10	N
14. 1	D 1	3 „	68. 20. 33	N
14. 2	D 2	3 „	68. 7. 24	N
16. 2	D 4	3 „	(67. 58. 34)	N
17. 1	C 4	6 „	(67. 55. 38)	N
June 20. 2	C 1	6 inches	68. 1. 4	N
21. 0	B 1	9 „	68. 0. 12	N
27. 1	B 2	9 „	68. 1. 2	N
July 1. 0	B 4	9 „	(67. 43. 35)	N
14. 1	B 1	9 „	68. 1. 50	N
19. 0	C 1	6 „	68. 0. 47	N
26. 1	C 2	6 „	68. 1. 33	N
26. 2	D 2	3 „	68. 2. 39	N
August 12. 0	C 1	6 „	67. 59. 16	N
12. 2	C 2	6 „	68. 3. 57	N
17. 0	D 2	3 „	68. 8. 26	N
17. 23	B 1	9 „	68. 4. 56	N
18. 0	B 2	9 „	68. 2. 38	N
30. 2	C 1	6 „	67. 55. 57	N
31. 2	C 2	6 „	68. 1. 42	N
September 5. 22	B 1	9 „	68. 0. 24	N
5. 23	B 2	9 „	68. 0. 35	N
6. 0	C 1	6 „	67. 55. 50	N
6. 1	C 2	6 „	68. 0. 3	N
6. 2	D 1	3 „	68. 15. 16	N
6. 2	D 2	3 „	67. 58. 33	N
15. 1	C 1	6 „	68. 4. 24	N
15. 1	C 2	6 „	68. 2. 21	N
15. 2	D 2	3 „	68. 1. 40	N
19. 23	B 1	9 „	68. 2. 37	N
20. 1	B 2	9 „	68. 3. 46	N
23. 0	D 2	3 „	68. 3. 17	N
27. 2	D 2	3 „	68. 0. 52	M R
27. 23	B 1	9 „	68. 1. 28	M R
October 12. 2	D 2	3 „	68. 4. 47	N
23. 2	C 2	6 „	67. 58. 1	N
24. 2	C 1	6 „	67. 57. 36	N
25. 1	B 1	9 „	68. 3. 41	N
25. 2	D 2	3 „	68. 2. 41	N
November 10. 0	D 2	3 „	68. 4. 10	M R
10. 1	C 2	6 „	68. 5. 19	M R
10. 2	D 2	3 „	68. 4. 31	N
11. 0	D 2	3 „	68. 5. 21	M R
12. 23	C 1	6 „	68. 5. 38	M R
15. 0	42, A 1	3½ „	68. 6. 0	N
16. 0	42, A 1	3½ „	68. 3. 53	N
16. 0	42, A 2	3½ „	68. 6. 53	N
16. 2	D 2	3 „	68. 5. 52	N
30. 2	C 2	6 „	68. 5. 45	N
December 11. 2	C 1	6 „	68. 7. 15	N
14. 1	D 2	3 „	68. 3. 48	N
14. 2	D 1	3 „	68. 6. 32	N
21. 0	B 1	9 „	68. 3. 4	N
21. 1	B 2	9 „	67. 59. 44	N
21. 2	C 2	6 „	68. 5. 42	N

The initials N and M R are respectively those of Mr W. C. Nash, and Lieut. M. Rikatcheff of the Russian Imperial Navy.

The flat needles B¹, C¹, and D¹ were not used for determination of the Dip after the month of July.

On November 15 and 16, three observations were made with a Kew Dip-Circle, marked 42, which had been brought to the Royal Observatory for trial, by Captain Belavenetz, Director of the Compass Observatory at Cronstadt.

December 30. The needles C¹ and D¹ were taken away by Mr Simms, for the purpose of setting their axes in perfect working order;—returned 1866, January 25.

MONTHLY MEANS of MAGNETIC DIPS at the ROYAL OBSERVATORY, GREENWICH, with AIRY'S DIP APPARATUS, in the Year 1865.

Month, 1865.	B 1, 9-inch Needle.	Number of Observations.	B 2, 9-inch Needle.	Number of Observations.	B 3, 9-inch Needle, loaded.	Number of Observations.	B 4, 9-inch Needle.	Number of Observations.	C 1, 6-inch Needle.	Number of Observations.	C 2, 6-inch Needle.	Number of Observations.
	° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″	
January...	68. 2. 32	2	68. 5. 1	1	68. 4. 5	1	....	..	....	..	....	..
February..	67. 55. 43	1	....	..	....	..	....	..	68. 2. 48	3	68. 2. 4	2
March	68. 1. 13	1	....	..	....	..	....	..	....	..	....	..
April	68. 2. 45	2	68. 1. 13	2	68. 10. 16	1	(67. 51. 32)	1	67. 59. 59	1	....	..
May	....	..	....	..	....	..	....	..	67. 58. 5	2	68. 3. 55	2
June	68. 0. 12	1	68. 1. 2	1	....	..	....	..	68. 1. 4	1	68. 3. 10	1
July.....	68. 1. 50	1	....	..	....	..	(67. 43. 35)	1	68. 0. 47	1	68. 1. 33	1
August ...	68. 4. 56	1	68. 2. 38	1	....	..	....	..	67. 57. 36	2	68. 2. 50	2
September.	68. 1. 30	3	68. 2. 10	2	....	..	....	..	68. 0. 7	2	68. 1. 12	2
October ...	68. 3. 41	1	....	..	....	..	....	..	67. 57. 36	1	67. 58. 1	1
November .	....	..	....	..	....	..	....	..	68. 5. 38	1	68. 5. 32	2
December .	68. 3. 4	1	67. 59. 44	1	....	..	....	..	68. 7. 15	1	68. 5. 42	1
Means.	68. 1. 50	Sum 14	68. 1. 54	Sum 8	....	..	....	..	68. 0. 49	Sum 15	68. 2. 49	Sum 14

Month, 1865.	C 3, 6-inch Needle, loaded.	Number of Observations.	C 4, 6-inch Needle.	Number of Observations.	D 1, 3-inch Needle.	Number of Observations.	D 2, 3-inch Needle.	Number of Observations.	D 3, 3-inch Needle, loaded.	Number of Observations.	D 4, 3-inch Needle.	Number of Observations.
	° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″	
January...	....	..	....	..	....	..	....	..	....	..	....	..
February..	67. 49. 27	1	(67. 59. 17)	2	....	..	....	..	....	..	(68. 5. 52)	1
March	....	..	....	..	68. 11. 33	2	68. 6. 27	3	68. 4. 28	1	(68. 3. 27)	2
April	....	..	....	..	....	..	....	..	....	..	(68. 1. 5)	1
May	68. 1. 32	1	(67. 59. 24)	2	....	..	68. 4. 4	1	....	..	(67. 56. 30)	1
June	....	..	(67. 55. 38)	1	68. 3. 8	2	68. 6. 20	2	68. 3. 17	1	(67. 57. 12)	2
July.....	....	..	....	..	....	..	68. 2. 39	1	....	..	....	..
August ...	....	..	....	..	....	..	68. 8. 26	1	....	..	....	..
September.	....	..	....	..	68. 15. 16	1	68. 1. 6	4	....	..	....	..
October ...	....	..	....	..	....	..	68. 3. 44	2	....	..	....	..
November .	....	..	....	..	....	..	68. 4. 59	4	....	..	....	..
December .	....	..	....	..	68. 6. 32	1	68. 3. 48	1	....	..	....	..
Means.	....	..	....	..	....	..	68. 4. 21	Sum 19	....	..	....	..

For this table the monthly means have been formed without reference to the hour at which the observation was made on each day, as in preceding years no certain difference was found between observations taken at 21^h and at 3^h.

In combining the monthly results, to form the annual means, weights have been given proportional to the number of observations.

YEARLY MEANS of MAGNETIC DIPS for each of the NEEDLES, and GENERAL MEAN for the Year 1865.

Lengths of the several Sets of Needles.	Needles.	Number of Observations with each Needle.	Mean Yearly Dip from Observations with each Needle.	Mean Yearly Dip from each Set of Needles.	Mean Yearly Dip from all the Sets of Needles.
			° ′ ″	° ′ ″	° ′ ″
9-inch Needles	B 1	14	68. 1. 50	68. 1. 51	68. 2. 40
	B 2	8	68. 1. 54		
6-inch Needles	C 1	15	68. 0. 49	68. 1. 47	
	C 2	14	68. 2. 49		
3-inch Needle	D 2	19	68. 4. 21	68. 4. 21	

In determining the Mean Yearly Dip from each set of needles, weights proportional to the number of observations with each needle have been given.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

DEFLEXION OF A MAGNET

FOR

ABSOLUTE MEASURE

OF

HORIZONTAL FORCE.

1865.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE, made with the KEW UNIFILAR INSTRUMENT.

Month and Day, 1865.	Distances of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature.	Observer.
	ft.	°	° ′ ″	s		°	
January 25	1·0	35·8	14 16. 58	5·021	100	39·1	N
	1·3		6. 27. 12	5·018	100	38·3	
February 23	1·0	46·1	14. 16. 0	5·038	100	48·8	N
	1·3		6. 26. 55	5·030	100	49·3	
February 28	1·0	51·1	14. 14. 2	5·023	100	56·6	N
	1·3		6. 25. 56	5·024	100	55·1	
March 28	1·0	42·8	14. 13. 46	5·024	100	45·0	N
	1·3		6. 26. 19	5·020	100	47·1	
April 11	1·0	65·7	14. 8. 22	5·031	100	69·6	N
	1·3		6. 23. 40	5·033	100	66·4	
April 28	1·0	72·9	14. 8. 35	5·027	100	74·4	N
	1·3		6. 23. 31	5·033	100	76·9	
May 26	1·0	72·7	14. 5. 35	5·031	100	74·7	N
	1·3		6. 22. 20	5·042	100	75·0	
June 7	1·0	74·1	14. 6. 55	5·052	100	75·4	N
	1·3		6. 22. 59	5·040	100	78·3	
June 20	1·0	72·8	14. 4. 48	5·047	100	72·9	N
	1·3		6. 22. 46	5·053	100	77·0	
August 16	1·0	67·9	12. 46. 36	5·299	100	68·9	N
	1·3		5. 47. 0	5·303	100	68·6	
August 31	1·0	70·2	12. 43. 30	5·298	100	70·0	N
	1·3		5. 45. 35	5·300	100	71·1	
September 21	1·0	63·1	12. 45. 50	5·304	100	64·0	N
	1·3		5. 46. 51	5·299	100	65·9	
October 16	1·0	58·7	12. 43. 28	5·314	100	66·4	M R
	1·3		5. 46. 4	5·318	100	63·4	
October 17	1·0	64·8	12. 43. 56	5·315	100	67·7	M R
	1·3		5. 45. 41	5·314	100	64·3	
October 28	1·0	51·5	12. 43. 56	5·310	100	52·0	M R
	1·3		5. 45. 50	5·316	100	52·0	
October 28	1·0	52·9	12. 43. 50	5·310	100	52·0	M R
	1·3		5. 45. 42	5·316	100	52·0	
October 31	1·0	50·4	12. 46. 0	5·317	100	54·3	N
	1·3		5. 46. 59	5·312	100	52·1	
October 31	1·0	50·0	12. 46. 6	5·317	100	54·3	N
	1·3		5. 46. 56	5·312	100	52·1	
November 29	1·0	48·8	12. 43. 55	5·300	100	50·0	N
	1·3		5. 46. 3	5·309	100	51·3	
December 20	1·0	48·0	12. 43. 35	5·304	100	48·4	N
	1·3		5. 45. 58	5·296	100	50·5	

The position of the Deflecting Magnet with regard to the suspended Magnet is always that which was formerly termed "Lateral." The Deflecting Magnet is placed on the East side of the suspended Magnet, with its marked pole alternately E. and W., and it is placed on the West side with its pole alternately E. and W.; and the deflexion in the table above is the mean of the four deflexions observed in those positions of the magnets.

The lengths of 1 foot and 1·3 foot answer to 304·8 and 396·2 millimètres respectively.

The initials N and M R are respectively those of Mr. W. C. Nash, and Lieutenant M. Rikatcheff of the Russian Imperial Navy.

In the following calculations, every observation is reduced to the temperature 35°.

COMPUTATION of the VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE, from OBSERVATIONS with the KEW UNIFILAR INSTRUMENT.

Month and Day, 1865.	In English Measure. Apparent Value of A^1.	Apparent Value of A^2.	Apparent Value of P.	Mean Value of P.	Log. A corrected by the Application of Mean Value of P. = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log. $m\,X$.	Value of X.	Value of m.	Value of X in French Measure.
						s				
January 25	+0·12336	0·12346	−0·00199		9·09256	5·0195	0·25885	3·830	0·4739	1·766
February 23	+0·12343	0·12358	−0·00298		9·09290	5·0340	0·25701	3·820	0·4731	1·761
28	+0·12325	0·12337	−0·00239		9·09223	5·0235	0·25925	3·833	0·4740	1·767
March 28	+0·12304	0·12332	−0·00559		9·09177	5·0220	0·25885	3·833	0·4735	1·767
April 11	+0·12276	0·12296	−0·00400		9·09064	5·0320	0·25864	3·837	0·4728	1·769
28	+0·12295	0·12307	−0·00239		9·09117	5·0300	0·25921	3·837	0·4734	1·769
May 26	+0·12252	0·12268	−0·00320		9·08972	5·0365	0·25799	3·838	0·4719	1·770
June 7	+0·12274	0·12292	−0·00360		9·09053	5·0460	0·25633	3·827	0·4714	1·765
20	+0·12241	0·12283	−0·00844		9·08979	5·0500	0·25552	3·827	0·4706	1·765
August 16	+0·11118	0·11129	−0·00243	−0·00355	9·04747	5·3010	0·21287	3·826	0·4268	1·764
31	+0·11078	0·11088	−0·00221		9·04590	5·2990	0·21335	3·835	0·4262	1·768
September 21	+0·11098	0·11115	−0·00376		9·04681	5·3015	0·21256	3·827	0·4263	1·765
October 16	+0·11056	0·11081	−0·00556		9·04532	5·3160	0·21010	3·823	0·4243	1·763
17	+0·11074	0·11081	−0·00155		9·04566	5·3145	0·21043	3·823	0·4247	1·763
28	+0·11049	0·11060	−0·00244		9·04477	5·3130	0·20971	3·824	0·4239	1·763
28	+0·11050	0·11059	−0·00199		9·04476	5·3130	0·20971	3·824	0·4239	1·763
31	+0·11076	0·11095	−0·00421		9·04599	5·3145	0·20956	3·818	0·4244	1·760
31	+0·11077	0·11093	−0·00355		9·04595	5·3145	0·20956	3·818	0·4244	1·760
November 29	+0·11044	0·11062	−0·00400		9·04470	5·3045	0·21100	3·830	0·4245	1·766
December 20	+0·11037	0·11058	−0·00467		9·04450	5·3000	0·21164	3·833	0·4247	1·768

Between June 20 and August 16, the Deflecting Magnet was frequently employed for deflecting the Declination and Horizontal Force Magnets in damper experiments, and during this time it lost magnetism; this accounts for the greater time of its vibration, and the permanent change in the values of Log. $\frac{m}{X}$, Log. $m\,X$, and m.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1865.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on all Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Jan. 1	..	29·794	37·4	28·3	31·7	24·2	59·5	22·8	..	36·7	7·5	10·6	1·5	— 5·6	NE	NE	0·0	0·0	0·0	106	0·03
2	..	29·551	34·0	22·2	28·9	24·3	39·9	19·0	..	35·7	4·6	8·3	1·4	— 8·1	Calm	S	1·4	0·0	0·0	167	0·01
3	In Equator	29·502	36·7	31·5	32·8	30·2	36·9	31·2	..	31·8	2·6	3·1	1·4	— 3·9	SW : NNE	N : SW	1·6	0·0	0·1	256	0·00
4	First Qr.	29·760	49·2	30·3	41·8	38·6	67·0	26·6	..	36·2	3·2	9·0	0·8	+ 5·4	SW	W : WSW	1·7	0·0	0·1	313	0·00
5	..	29·861	48·8	37·6	43·9	42·5	53·5	32·1	..	36·6	1·4	4·4	0·4	+ 7·7	WSW	SW	2·6	0·0	0·2	434	0·16
6	..	29·880	48·9	35·9	39·5	30·6	54·0	32·2	..	36·7	8·9	10·3	4·3	+ 3·5	WSW : WNW	WNW	21·0	0·0	1·5	360	0·03
7	..	30·149	43·8	32·4	38·2	33·9	66·8	28·6	36·9	36·6	4·3	8·4	1·1	+ 2·4	WSW	SW	0·0	0·0	0·0	338	0·00
8	..	29·686	46·2	36·8	41·7	36·3	71·2	31·2	37·9	36·7	5·4	9·2	1·3	+ 6·0	SW	SW	0·9	0·0	0·0	369	0·00
9	Greatest Declination N.	29·646	47·5	38·7	43·2	38·6	76·6	34·6	37·9	37·7	4·6	8·2	0·0	+ 7·4	WSW	WSW	5·0	0·0	0·5	500	0·03
10	..	29·629	50·2	43·2	47·7	45·2	51·9	43·0	38·4	37·7	2·5	5·3	1·9	+11·8	WSW	SW	4·0	0·0	0·6	352	0·00
11	Full	29·627	47·8	40·8	44·2	42·2	61·2	35·2	38·9	38·7	2·0	5·0	0·7	+ 8·2	SW	SSW	3·0	0·0	0·1	314	0·01
12	..	28·981	47·8	39·2	43·3	40·1	54·0	36·2	40·9	39·7	3·2	5·7	0·0	+ 7·2	S	SSW	15·0	0·0	3·2	366	0·12
13	..	28·907	46·1	32·0	37·9	34·9	62·2	32·0	41·8	40·6	3·0	6·2	0·0	+ 1·7	NNW : WSW	SW : SSW	17·5	0·0	1·6	493	0·71
14	..	28·551	49·5	36·3	41·7	36·3	63·5	31·7	41·8	40·6	5·4	8·4	1·5	+ 5·4	W : SW	SW : W	29·0	0·0	6·1	581	0·29
15	..	28·945	42·6	36·6	39·7	33·3	69·6	33·0	41·9	40·7	6·4	8·1	5·5	+ 3·3	WSW	WSW	6·0	0·0	1·3	378	0·00
16	In Equator	28·839	42·5	34·0	38·0	33·9	65·7	29·2	41·8	39·7	4·1	6·8	0·0	+ 1·5	WSW	W	0·7	0·0	0·0	218	0·00
17	Apogee	29·040	37·5	30·6	34·0	29·6	46·0	24·0	40·9	39·5	4·4	6·2	1·3	— 2·6	WNW	W : N : WSW	0·0	0·0	0·0	163	0·00
18	..	29·184	37·5	30·0	33·9	31·2	43·2	25·0	40·9	38·7	2·7	6·0	1·3	— 2·8	WSW	SW	0·0	0·0	0·0	147	0·03
19	..	29·310	37·4	33·2	35·0	32·5	42·8	31·3	40·9	38·7	2·5	3·0	1·3	— 1·9	WSW	N	0·0	0·0	0·0	142	0·00
20	Last Qr.	29·441	37·0	29·9	33·1	27·9	40·0	25·7	40·8	38·2	5·2	7·2	2·0	— 3·9	N : W	WSW	0·0	0·0	0·0	149	0·00
21	..	29·484	29·4	19·7	24·7	22·5	30·7	13·1	40·8	37·7	2·2	4·1	1·4	—12·5	WSW	SSW	0·0	0·0	0·0	71	0·00
22	..	29·484	34·2	19·6	28·4	26·4	47·0	13·8	41·9	40·7	2·0	5·9	0·0	— 9·0	Calm	N : WSW	0·0	0·0	0·0	163	0·00
23	..	29·646	38·0	26·1	31·9	26·6	60·6	19·8	40·9	39·7	5·3	9·5	3·0	— 5·8	SW	ESE	0·0	0·0	0·0	177	0·00
24	Greatest Declination S.	29·468	35·9	31·6	33·6	29·8	42·0	25·3	40·1	38·7	3·8	6·0	1·2	— 4·3	ENE	NE	0·0	0·0	0·0	180	0·04
25	..	29·508	34·2	31·8	32·7	27·4	35·9	31·2	40·9	38·7	5·3	7·3	2·6	— 5·4	NE	ENE	0·0	0·0	0·0	189	0·04
26	..	29·121	35·0	31·8	33·4	32·8	36·5	30·5	40·9	38·7	0·6	0·9	0·0	— 4·9	E	NE	0·0	0·0	0·0	219	0·20
27	New	29·006	33·6	31·9	32·4	30·3	35·4	31·4	38·9	36·7	2·1	4·0	0·6	— 6·0	NE : N	N	8·0	0·0	0·8	431	1·25
28	..	29·750	35·5	24·9	29·5	20·9	55·0	22·0	36·9	34·7	8·6	12·0	5·1	— 8·9	NNW	NW : WSW	3·0	0·0	0·4	180	0·00
29	Perigee	29·633	38·5	19·9	31·3	27·0	62·2	19·0	33·9	32·7	4·3	7·9	0·0	— 7·0	SW	S : SSE	2·0	0·0	0·1	223	0·00
30	In Equator	29·135	40·2	32·3	36·1	35·1	64·1	31·2	33·9	32·7	1·0	1·8	0·6	— 2·0	SE	SSE	2·7	0·0	0·1	159	0·17
31	..	29·013	44·5	36·3	40·3	38·5	67·8	31·0	34·9	33·7	1·8	4·2	0·0	+ 2·4	SW	S : SSE	2·2	0·0	0·1	256	0·20
																				Sum	Sum
Means	..	29·404	40·9	31·8	36·3	32·4	53·6	28·2	39·4	37·5	3·9	6·5	1·4	— 0·7	...	...	..	..	..	8394	3·32

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·860 on the 1st; the first minimum in the month was 29in·318 on the 3rd.
The second maximum ,, was 29in·956 on the 5th; the second minimum ,, was 29in·681 on the 5th.
The absolute maximum ,, was 30in·203 on the 7th; the third minimum ,, was 29in·554 on the 8th.
The fourth maximum ,, was 29in·705 on the 11th; the fourth minimum ,, was 28in·899 on the 12th.
The fifth maximum ,, was 29in·024 on the 13th; the absolute minimum ,, was 28in·393 on the 14th.
The sixth maximum ,, was 28in·967 on the 15th; the sixth minimum ,, was 28in·822 on the 16th.
The seventh maximum ,, was 29in·704 on the 23rd; the seventh minimum ,, was 28in·857 on the 27th.
The eighth maximum ,, was 29in·849 on the 28th.
The range in the month was 1in·810.
The mean for the month was 29in·404, being 0in·368 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 50°·2 on the 10th; the lowest was 19°·6 on the 22nd.
The range ,, was 30°·6.
The mean ,, of all the highest daily readings was 40°·9, being 2°·3 *lower* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 31°·8, being 1°·7 *lower* than the average of the preceding 24 years.
The mean daily range was 9°·1, being 0°·6 *less* than the average of the preceding 24 years.
The mean for the month was 36°·3, being 1°·9 *lower* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Jan. 1			sl.-sn, h.-fr, m : 6, ci.-s	o : o, h.-fr
2			th.-f, h.-fr : 7, ci.-s, li.-cl, h, f	10, ci.-s : 10 : 10, sl.-sn
3			10, ci.-s	10, ci.-s : 10
4			10 : 10 : v	8, ci, ci.-cu, cu: v, ci.-s, ci : o
5			3, ci, ci.-s	10, ci.-s, h.-r : 10, sc
6			st-w, sl.-r : 2, ci, ci.-s	8, ci, ci.-cu, ci.-s, cu.-s : 4, ci, ci.-cu
7		w : o	h.-fr : 6, ci, ci.-s	o : 2, ci : 8, ci,ci.-cu,ci.-s
8	o	o	5, ci, ci.-s, h	6, ci.-s, ci : 10 : 10
9	w	o	10, r : o	2, ci : 10, ci.-s : 10
10	o	o	10, ci.-s	10, ci.-s : 10, ci.-s
11	m	w : o	10, th.-cl	10, ci.-cu, ci.-s: 10, ci.-s, th.-r : 10
12	o	ss, N P sp, g-cur: o	10 : 10, w : 10, r, st.-w	10, hl, h.-r, w : vv, th.-r,ci.-cu,cu.-s: 10, v, oc.-shs
13	o	o	10, h.-r : 10, sn : o	10, ci.-s, ci : 10, h.-sqs : o, st.-w
14			h.-r, st.-w : 10, ci.-s, cu.-s, h.-sqs	10, oc.-r : v, w : 5, cu.-s, ci.-s
15			9, ci.-s, ci	v, ci, ci. cu : vv, m
16			h.-fr : 8, ci.-s, ci	10, ci.-s, cu.-s : 10, sl.-r
17			h.-fr : o : 10, ci.-s	10, ci.-s : 10, sn
18			sl.-sn : 4, ci, ci.-s, h	10, ci.-s : 8, ci, ci.-s : 10, sl.-f
19			10, gt.-glm	10 : 10 : o
20			10, ci.-s	10, ci.-s : 7, ci, ci.-s, h : o, h.-fr
21			o, h.-fr, f, h	10, ci.-s, h, sl-f : o, th.-f, h.-fr
22			h.-fr : 10, sl.-f	10, ci, ci.-s : o, h.-fr, sl.-f
23			h.-fr : o, h	o, h : 3, ci : 10, ci.-s, h.-fr
24			10, sl.-sn : 10	10 : 10, sl.-sn
25			sn : 10, ci.-s	10, ci.-s : 10, ci.-s
26			10, sn : 10, r	10, sl.-f : 10, ci.-s, r : 10, c.-r
27			c-r : 10, sl : 10, sn	10, sn : sl : 10
28			1, th.-cl, h	2, li.-cl : 2, li.-cl, h : o
29			o : o, h	10 : 10
30			sn : 10, th.-r	9, ci.-s : 10, sl.-r, sl.-f
31			4, ci	10, ci.-s : 10, r : 10, ci.-s, c.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 46°·4 on the 10th; and the lowest was 13°·5 on the 28th.

The mean ,, was 32°·4, being 2°·7 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot184$, being $0^{in}\cdot019$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{grs}\cdot1$, being $0^{gr}\cdot3$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 86 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 550 grains, being 4 grains *less* than the average of the preceding years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 7·2.

OZONE.

The mean amount for the month, on a scale ranging from o to 10, was 0·7.

WIND.

The proportions were of N. 5, S. 8, W. 13, E. 3, and Calm 2. The greatest pressure in the month was $29^{lbs}\cdot0$ on the square foot, on the 14th.

RAIN.

Fell on 16 days in the month, amounting to $3^{in}\cdot32$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot60$ *greater* than the average fall of the preceding 50 years.

ELECTRICITY.—January 1 to 6 and 14 to 31, the Electrical Apparatus was not in action.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Feb. 1	..	28·788	49·3	38·9	43·9	41·3	70·3	35·2	36·9	34·7	2·6	6·3	0·0	+ 6·1	SW	SW	1·2	0·0	0·0	315	0·03
2	..	28·967	52·1	42·6	46·8	42·3	99·2	40·0	37·9	35·7	4·5	7·6	2·0	+ 9·1	SW	SW	2·8	0·0	0·3	228	0·02
3	First Qr.	29·051	49·0	38·5	42·7	40·8	73·0	35·6	38·6	36·9	1·9	3·3	0·0	+ 4·9	SSW : S	S : SE	0·0	0·0	0·0	111	0·00
4	..	29·423	40·6	31·4	33·7	32·2	40·6	31·0	38·4	36·9	1·5	3·9	0·3	— 4·3	E : ENE	ENE	0·0	0·0	0·0	222	0·01
5	Greatest Dec. N.	29·636	38·0	31·2	34·5	31·9	40·5	31·0	39·9	37·7	2·6	3·4	2·4	— 3·8	ENE	E : SE	0·0	0·0	0·0	112	0·01
6	..	29·801	40·7	34·3	37·7	36·3	48·7	..	40·9	38·7	1·4	2·3	0·5	— 0·9	SE : SW	SW : SSE	0·0	0·0	0·0	220	0·12
7	..	29·670	50·2	39·6	45·1	44·0	55·6	38·0	41·1	38·8	1·1	4·8	0·4	+ 6·3	S : SW	SW	2·4	0·0	0·1	281	0·08
8	..	29·801	46·0	34·1	36·6	28·1	46·2	34·0	40·9	38·7	8·5	10·0	3·0	— 2·3	W : N	NNE	2·7	0·0	0·4	329	0·09
9	..	30·185	40·0	30·2	34·2	24·7	89·6	24·5	39·4	38·2	9·5	12·2	4·1	— 4·7	NNE	NE	4·0	0·0	0·5	297	0·00
10	Full	30·403	37·8	29·4	32·5	24·7	84·7	23·2	38·9	37·7	7·8	13·0	3·8	— 6·3	NE	NE : N	2·0	0·0	0·1	188	0·00
11	..	30·376	30·2	24·7	26·8	19·9	69·9	22·8	38·6	36·7	6·9	9·5	4·3	—11·8	N : SE	E : NNE	0·0	0·0	0·0	166	0·08
12	..	30·102	34·8	26·9	30·1	23·6	67·2	24·0	37·9	36·7	6·5	8·9	2 1	— 8·3	NNE	NE	2·7	0·0	0·2	256	0·00
13	In Equator : Apogee.	30·060	28·5	24·1	26·0	21·3	64·0	24·1	37·1	34·9	4·7	6·9	1·6	—12·3	ENE : SE	E : NE	1·5	0·0	0·1	207	0·09
14	..	30·046	31·5	26·5	28·2	22·1	41·2	26·1	35·9	33·7	6·1	10·2	3·5	—10·0	NE	E : Calm	1·7	0·0	0·0	136	0·00
15	..	29·753	32·8	15·5	24·0	19·7	82·6	15·3	34·9	33·2	4·3	10·9	0·0	—14·1	Calm	SSE : SW	0·0	0·0	0·0	130	0·00
16	..	29·189	39·2	26·4	32·3	30·1	45·9	26·4	36·1	33·9	2·2	5·4	0·2	— 5·8	SW	SE : SSW	0·0	0·0	0·0	249	0·16
17	..	29·226	40·3	28·8	33·7	28·1	84·1	28·0	36·9	34·7	5·6	8·9	0·3	— 4·5	NW : WNW	SW : WSW	5·0	0·0	0·5	417	0·24
18	Last Qr.	29·471	45·1	31·3	38·9	34·6	84·0	26·0	37·1	34·9	4·3	9·0	2·1	+ 0·6	W : WSW	SW	10·0	0·0	0·7	548	0·03
19	..	29·196	46·1	32·4	37·1	26·6	87·0	29·8	36·4	34·7	10·5	11·4	8·0	— 1·4	SW : WSW	WSW : NW	26·0	0·5	6·4	610	0·06
20	Greatest Declination S.	29·961	36·6	28·5	32·3	18·6	77·2	24·9	36·3	34·7	13·7	15·1	10·3	— 6·4	NW : W	NNW	12·5	0·0	3·4	435	0·01
21	..	30·171	35·2	29·4	32·0	26·8	43·5	24·6	36·2	34·3	5·2	11·3	0·6	— 6·8	NW : W	SW : S	1·6	0·0	0·1	114	0·08
22	..	30·124	43·0	32·5	38·1	37·3	54·5	30·2	36·0	35·3	0·8	2·9	0·0	— 0·9	Calm : WSW	SW : WSW	0·0	0·0	0·0	188	0·01
23	..	30·134	51·3	40·1	45·6	43·5	63·6	36·9	36·5	35·9	2·1	4·6	0·0	+ 6·4	WSW	SW	1·2	0·0	0·1	377	0·03
24	..	29·540	46·6	39·1	42·1	38·4	48·6	39·0	38·1	36·7	3·7	7·1	0·0	+ 2·7	SW	N : NW	6·0	0·0	1·1	317	0·46
25	New	30·035	49·6	33·2	41·0	34·9	92·0	33·0	39·4	38·7	6·1	12·4	0·0	+ 1·4	NW : N	N : SW	0·0	0·0	0·0	226	0·00
26	Perigee : In Equator.	29·746	43·5	35·7	40·6	39·9	47·2	35·2	38·9	38·2	0·7	2·4	0·0	+ 0·8	SSW	SW	2·4	0·0	0·2	294	0·14
27	..	29·959	50·4	35·7	42·4	35·8	87·6	30·6	41·9	39·7	6·6	13·0	0·0	+ 2·5	N	SSW	0·0	0·0	0·0	296	0·00
28	..	29·388	52·7	39·7	45·8	39·2	93·6	39·7	43·9	42·7	6·6	11·5	2·6	+ 5·7	SW	W : WSW	3·7	0·0	0·7	439	0·00
Means	..	29·722	42·2	32·2	36·6	31·7	67·2	30·0	38·2	36·6	4·9	8·1	1·9	— 2·1	...	...	..	..	..	Sum 7708	Sum 1·75

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute minimum in the month was 28in·728 on the 1st.

The first maximum in the month	was 29in·827 on the 6th;	the second minimum	,,	was 29in·666 on the 7th.
The absolute maximum	,, was 30in·432 on the 10th;	the third minimum	,,	was 28in·978 on the 16th.
The third maximum	,, was 29in·533 on the 18th;	the fourth minimum	,,	was 29in·034 on the 19th.
The fourth maximum	,, was 30in·266 on the 21st;	the fifth minimum	,,	was 30in·050 on the 21st.
The fifth maximum	,, was 30in·177 on the 23rd;	the sixth minimum	,,	was 29in·453 on the 24th.
The sixth maximum	,, was 30in·078 on the 25th;	the seventh minimum	,,	was 29in·717 on the 26th.
The seventh maximum	,, was 30in·029 on the 27th;	the eighth minimum	,,	was 29in·360 on the 28th.

The range in the month was 1in·704.

The mean for the month was 29in·722, being 0in·080 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·7 on the 28th; the lowest was 15°·5 on the 15th.

The range ,, was 37°·2.

The mean ,, of all the highest daily readings was 42°·2, being 2°·7 *lower* than the average of the preceding 24 years.

The mean ,, of all the lowest daily readings was 32°·2, being 1°·3 *lower* than the average of the preceding 24 years.

The mean daily range was 10°·0, being 1°·4 *less* than the average of the preceding 24 years.

The mean for the month was 36°·6, being 2°·1 *lower* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
Feb. 1			9, li.-cl	10, li.-cl, ci.-s, h : sl.-r, v : 10, fr.-shs
2			9, ci, ci.-cu, ci.-s, cu.-s	7, ci, ci.-cu, ci.-s, th.-r : 10, th.-r
3			10 : 10, ci.-s	9, cu, cu.-s, ci.-s, ci, sl.-r : 10
4			10, ci.-s	10, ci.-s : th.-r, fr.-r, sl : 10, sl
5			10 : 10	10 : 10, r
6			c.-r : 10, f	10 : 10
7			10, sl.-r	10, c.-r : 10, fr.-shs
8			10 : 10, fr.-r : 10	10 : 10, ci.-s
9			4, ci, ci.-cu	7, ci, ci.-cu, v : ci, ci.-cu : 3, th.-cl, vv
10			10 : 10, sl.-sn	10, ci, ci.-cu, cu : 10, ci.-s, cu.-s, vv, m : 0
11			10, sn	9, cu-s, ci.-cu, sn : 10 : 10
12			10, ci.-cu	6, ci, ci.-cu, v : 10, cu.-s : 10, sl
13			10, sn : 10, sl	8, ci, ci.-cu : 10, sl : 10, sl
14			10 : 10	10 : 8, v
15			h.-fr : 0, h	0, h : 0 : 10
16	w	w : vv, sN, g-cur, sp, wP	10 : 10	10, sn : 10, oc.-sn, th.-r : h.-r, h.-shs
17	w	0	10, c.-r, sn : 10, sn : 0	0 : 10, oc.-r : 0, a, m
18	0	sN, g-cur, sps : 0	0 : 0	10, ci, ci.-cu, ci.-s, r, v : 10, oc.-shs
19			10, r, st.-w : vv, st.-w, ci, ci.-cu	10, ci.-s, st.-w : 10, fr.-sqs, r, sn : 0, st.-w
20			10, sn : 0, h	0, w, ci : 0
21			10	10, sn : 10, th.-r : 10
22			10 : 10	10 : 10 : 7, h, f
23			10, r : 4, h, v	10, ci.-s, ci : 10, ci.-s
24			10 : 10, r	10, c.-r : 10, v : 0
25		0 : w	0 : 0, v	6, ci, ci.-cu, cu : 10, ci.-cu, cu.-s : 10
26	0	0	10 : 10 : 10, r	10, c.-r : 10 : 10
27	w : 0	w : 0	2, ci, li.-cl	8, ci, h : 10, cu.-s, ci.-s : 10, ci.-s
28	w	w : 0	10 : 10 : 10, r, sc	8, ci.-s, cu.-s, ci, v, sl.-r : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 47°·0 on the 23rd; and the lowest was 17°·0 on the 20th.

The mean ,, was 31°·7, being 3°·0 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·179, being 0^{in}·024 *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2^{grs}·1, being 0^{gr}·3 *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 83 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 555 grains, being 1 grain *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·8.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·3.

WIND.

The proportions were of N. 6, S. 7, W. 8, E. 4, and Calm 3. The greatest pressure in the month was 26^{lbs}·0 on the square foot on the 19th.

RAIN.

Fell on 19 days in the month, amounting to 1^{in}·75, as measured in the simple cylinder gauge partly sunk below the ground; being 0^{in}·23 *greater* than the average fall of the preceding 50 years.

ELECTRICITY.—February 1 to 15, and 19 to 24. The Electrical apparatus was not in action.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Mar. 1	..	29·498	50·0	39·3	43·9	38·0	59·2	39·2	43·9	41·7	5·9	11·0	2·3	+ 3·7	W : WNW	WNW : W	4·4	0·0	0·8	309	0·02
2	..	29·627	49·3	37·4	42·3	37·3	63·7	32·2	44·4	41·7	5·0	9·7	1·1	+ 2·1	WSW	NW	10·0	0·0	1·7	423	0·16
3	..	30·132	48·5	32·6	39·7	32·2	84·3	28·4	43·1	40·9	7·5	13·0	0·0	— 0·5	NW : W	WNW	1·8	0·0	0·1	229	0·00
4	First Qr.	29·884	46·9	30·9	39·7	35·1	61·4	27·0	42·9	40·7	4·6	9·0	0·0	— 0·4	SW : SSW	SW	8·0	0·0	1·0	441	0·00
5	Greatest Declination N.	29·367	46·6	32·3	39·1	32·9	80·3	28·1	43·7	42·5	6·2	12·0	0·0	— 1·0	WSW	WSW : SW	3·0	0·0	0·3	279	0·16
6	..	29·113	40·1	33·7	36·6	34·8	51·2	30·2	43·5	42·1	1·8	4·8	0·6	— 3·5	SSW : S	N	2·0	0·0	0·1	296	0·17
7	..	29·446	42·5	33·1	36·9	31·0	61·4	30·0	42·6	41·2	5·9	11·2	0·6	— 3·3	NNW	NW	0·8	0·0	0·0	189	0·00
8	..	29·540	43·0	30·2	35·9	30·7	78·0	29·0	43·4	42·1	5·2	11·4	0·0	— 4·4	NNW	N	2·5	0·0	0·2	415	0·02
9	..	29·783	43·2	34·2	37·6	30·0	69·2	31·0	43·5	42·7	7·6	10·1	3·4	— 2·8	N	N	3·0	0·0	0·6	303	0·00
10	..	29·628	42·5	30·8	36·2	31·3	69·0	28·4	42·9	41·2	4·9	9·0	0·0	— 4·4	N : SW	WSW : NW	1·5	0·0	0·1	387	0·00
11	..	29·596	43·7	36·0	38·5	34·1	60·0	34·1	41·8	39·5	4·4	8·6	0·0	— 2·4	NW : NNE	NNE	3·0	0·0	0·3	302	0·10
12	Full; In Equator.	29·906	41·9	33·4	36·9	31·5	65·2	32·0	39·9	39·2	5·4	9·5	0·3	— 4·3	NNE	N	0·0	0·0	0·0	115	0·00
13	Apogee	29·698	42·5	34·7	37·3	31·9	86·7	33·2	40·1	39·1	5·4	8·6	0·0	— 4·1	Calm : N	SE	0·0	0·0	0·0	149	0·00
14	..	29·735	42·6	33·7	36·3	30·7	69·4	32·2	40·1	39·1	5·6	10·6	0·0	— 5·2	NE	NE : NNE	2·5	0·0	0·3	324	0·00
15	..	29·880	39·1	32·4	35·2	28·4	48·0	31·3	40·0	38·9	6·8	9·5	1·6	— 6·5	NNE	NNE	1·3	0·0	0·0	146	0·00
16	..	29·872	44·6	32·6	36·4	28·0	108·0	26·5	40·1	39·2	8·4	13·6	2·5	— 5·5	N	NNE : Calm	0·0	0·0	0·0	103	0·00
17	..	29·784	44·8	33·0	37·3	32·0	67·0	29·4	40·2	39·5	5·3	11·2	3·0	— 4·7	ESE	ESE	0·0	0·0	0·0	186	0·00
18	..	29·838	40·7	29·5	34·6	31·0	69·8	26·3	40·3	39·2	3·6	8·5	0·0	— 7·5	ESE	ESE	2·2	0·0	0·3	253	0·00
19	Greatest Declination S.	29·669	39·7	31·9	35·1	30·1	80·5	..	39·4	38·7	5·0	7·8	0·3	— 7·1	ESE	E	17·0	0·2	3·0	573	0·00
20	Last Qr.	29·791	34·0	26·5	30·2	18·0	95·4	23·8	39·0	38·2	12·2	14·1	9·8	—12·0	E by N	E by N	15·6	0·0	3·7	428	0·00
21	..	29·843	40·2	23·7	31·6	21·3	104·0	21·6	38·9	37·9	10·3	13·9	3·5	—10·7	E : ENE	ENE : NE	0·0	0·0	0·0	346	0·00
22	..	29·779	45·8	28·5	35·5	26·8	98·6	25·0	38·8	37·2	8·7	16·5	1·0	— 6·7	NNE	NNE : N	5·0	0·0	0·2	202	0·00
23	..	29·677	45·8	30·9	35·9	28·9	84·2	26·8	38·6	36·7	7·0	14·1	1·7	— 6·3	NW : N	N	0·0	0·0	0·0	218	0·00
24	..	29·659	45·3	27·3	34·2	27·4	90·2	20·5	38·3	36·8	6·8	16·9	0·0	— 8·0	NW : N	N	2·7	0·0	0·0	214	0·00
25	..	29·499	44·3	25·1	35·7	32·8	87·8	20·6	38·4	37·3	2·9	11·9	0·0	— 6·6	NNW : WSW	SW : W	1·8	0·0	0·2	389	0·17
26	In Equator.	29·298	41·8	31·3	34·3	30·1	66·5	28·2	37·6	36·9	4·2	10·1	1·8	— 8·2	NW : N	NNE : N	14·5	0·0	0·9	441	0·01
27	Perigee; New.	29·902	44·6	27·3	32·9	27·2	102·8	24·5	37·3	37·0	5·7	11·3	1·3	—10·0	N	N	1·0	0·0	0·0	161	0·01
28	..	29·312	43·8	26·4	35·0	28·3	96·4	22·2	37·9	37·7	6·7	13·9	0·0	— 8·2	Calm : S	Calm : SSW	0·6	0·0	0·0	139	0·00
29	..	29·904	38·6	29·6	33·1	27·2	53·2	29·3	38·3	37·9	5·9	8·3	0·0	—10·5	SSE : S	Calm	0·0	0·0	0·0	104	0·03
30	..	30·106	49·0	26·8	36·0	28·4	105·6	22·4	38·4	37·9	7·6	13·9	0·0	— 8·0	Calm : SE	N : Calm	0·0	0·0	0·0	92	0·00
31	..	30·007	58·7	28·6	44·3	37·9	117·2	25·0	39·0	38·7	6·4	17·5	0·0	— 0·1	SW	W : SW	0·0	0·0	0·0	202	0·00
Means	..	29·722	44·0	31·1	36·6	30·5	78·5	27·9	40·5	39·3	6·1	11·3	1·1	— 5·1	...	...	..	..	..	Sum 8358	Sum 0·85

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30in·184 on the 3rd; the absolute minimum in the month was 29in·052 on the 6th.
The second maximum ,, was 29in·840 on the 9th; the second minimum ,, was 29in·400 on the 11th.
The third maximum ,, was 29in·927 on the 12th; the third minimum ,, was 29in·596 on the 13th.
The fourth maximum ,, was 29in·907 on the 16th; the fourth minimum ,, was 29in·649 on the 19th.
The fifth maximum ,, was 29in·889 on the 21st; the fifth minimum ,, was 29in·155 on the 26th.
The sixth maximum ,, was 30in·125 on the 30th.
The range in the month was 1in·132.
The mean for the month was 29in·722, being 0in·036 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·7 on the 31st; the lowest was 23°·7 on the 21st.
The range ,, was 35°·0.
The mean ,, of all the highest daily readings was 44°·0, being 6°·2 *lower* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 31°·1, being 4° 3 *lower* than the average of the preceding 24 years.
The mean daily range was 12c·9, being 1°·8 *less* than the average of the preceding 24 years.
The mean for the month was 36°·6, being 5°·4 *lower* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
March 1	o	o	10, r	10, oc.-r : 10, oc.-r
2	o	o	10 : 10, th.-r	10, th.-r : vv : o
3	o	o	10, th-cl, v	10, ci, ci.-cu, cu.-s: 8, th.-cl : o, h
4			10, th-cl	10, ci.-s, v : v, sl.-r
5			10, r : 2, ci, ci.-cu	10, cu.-s, ci.-cu : 10, th.-cl : o
6		mN : sN,sp,g-cur,	10, r : 10, glm	10, r : 10, sl.-r : 10, lu.-ha
7	w	w	10 : 10	10, ci.-s : 10
8	w	wN	10, ci.-s : 10, ci.-s : 10, sl	9, sl.-r : sn, sl.-r, v : 10
9	o	wN : o	6, ci, ci.-cu, sl.-sn, v	10 : 10, sl, th.-r
10	o	o	8, th-cl, h	10, sl.-sn : 10, oc.-r : 10
11	o	o	10 : 10, ci.-s	10, ci.-s : 10, oc.-shs
12	o	w	10, ci.-s	10, ci.-s : 10
13	o	o	10 : 10, ci.-s	10, gt.-glm : 10, ci.-s
14	o	o	10 : 10 : 10, sl.-sn, vv	10, sl.-sn : 10
15	o	o	10, ci.-s : 10, ci.-s	10, ci.-s : 10
16	o	w	10 : 10, th.-cl	6, ci, ci.-cu, ci.-s : o : 10, th.-cl
17	o : o	w : m	10 : 10	10, ci.-cu, ci.-s : 10, sl : vv
18	w : o	w : o	10 : 10 : 10, sl.-f	10, ci.-s, cu.-s : 10
19	o	o	8, ci, ci.-cu, cu.-s, ci.-s, w	10, st.-w : 10
20	w : o	w : o	o	2, ci, ci.-cu : v, ci.-s, cu.-s : o, a
21	o	w	4, ci, ci.-cu	o : 1, li.-cl : 10
22	o	sNP,sps,g-cur,vv: w	5, ci, ci.-cu	9, ci, ci.-cu, cu.-s, ci.-s, sl, sl.-sn : o
23	o	w : wN : o	10, sl.-sn	10, v : 1,
24	w	sNP,sps,g-cur,vv: w	o, h.-fr : 5, li.-cl	6, ci.-cu, oc.-sn : o
25	o : w	ss,sp,g-cur : o	o, h.-fr : o, li.-cl	10, th.-cl, r : 10, ci.-s, r : 10, c.-r
26	o	o : w	10 : 10 : 10, sl, sl.-r	10, v, hl : vv, shs.-r, hl
27	w	v,sps,g-cur : m	10, oc.-sn : 2, ci, ci.-cu	6, ci, ci.-cu : 5, oc.-sn : o, f
28	w	w : o	1, ci	8, ci.-s, ci.-cu : 10, ci.-s, cu.-s, sn : 10
29	w	w	10, sl.-sn : 10, oc.-sn	10, oc.-sn : 10 : 10
30	w	o : w	10 : 10, th.-cl, h, gt.-glm	6, ci, ci.-cu o
31	w	w	o : o, ci.	8, ci, ci.-s 10, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 44°·6 on the 2nd; and the lowest was 16°·6 on the 20th.

The mean ,, was 30°·5, being 6°·2 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot170$, being $0^{in}\cdot049$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{grs}\cdot0$, being $0^{gr}\cdot5$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 79 (that of Saturation being represented by 100), being 3 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 555 grains, being 5 grains *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10. was 7·7.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·4.

WIND.

The proportions were of N. 13, S. 3, W. 7, E. 5, and Calm 3. The greatest pressure in the month was $17^{lbs}\cdot0$ on the square foot on the 19th.

RAIN.

Fell on 10 days in the month, amounting to $0^{in}\cdot85$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot76$ *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The insulating lamp was not burning on March 4 and 5.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
April 1	Greatest Declination N.	29·904	55·2	43·9	47·6	39·7	115·9	38·0	40·0	39·7	7·9	13·9	0·0	+ 3·0	SW : NW	NW	0·0	0·0	0·0	150	0·04
2	..	29·812	57·2	31·9	43·2	36·4	96·1	26·8	40·0	39·8	6·8	16·0	0·0	— 1·6	Calm	SSW : SSE	1·0	0·0	0·0	185	0·00
3	First Quarter.	29·750	55·1	37·5	44·0	38·2	85·2	32·2	41·0	40·7	5·8	14·6	0·0	— 1·0	SE	E	1·4	0·0	0·1	150	0·00
4	..	30·055	59·0	35·8	44·8	37·5	105·3	35·2	41·9	41·6	7·3	19·4	0·0	— 0·4	E	SW	0·0	0·0	0·0	245	0·00
5	..	30·111	57·6	44·8	50·8	47·0	73·0	41·2	43·9	42·7	3·8	9·8	2·4	+ 5·4	WSW	W	0·0	0·0	0·0	289	0·08
6	..	30·116	64·3	45·7	52·2	44·4	111·2	41·6	45·9	44·7	7·8	18·1	0·2	+ 6·8	WSW	WSW	1·5	0·0	0·2	317	0·00
7	..	30·036	63·0	44·9	52·8	47·1	98·9	42·0	47·6	46·9	5·7	12·7	0·4	+ 7·4	WSW	WSW	0·0	0·0	0·0	141	0·00
8	In Equator	29·966	71·5	41·1	54·7	46·6	118·2	32·3	48·9	48·7	8·1	23·2	0·0	+ 9·3	SW	SW : Calm	0·0	0·0	0·0	62	0·00
9	Apogee	30·085	72·0	39·4	56·4	42·6	119·4	33·2	50·9	49·7	13·8	29·5	0·0	+11·1	Calm	SE : SSW	0·0	0·0	0·0	109	0·00
10	..	30·100	71·7	45·6	56·9	44·6	110·0	35·9	51·9	50·7	12·3	23·0	4·4	+11·7	SW : W	N : E	0·0	0·0	0·0	104	0·00
11	Full	30·060	70·0	37·4	52·1	43·0	122·4	31·9	52·9	51·7	9·1	22·0	0·0	+ 7·0	Calm	Variable	0·0	0·0	0·0	82	0·00
12	..	29·882	63·5	39·0	50·5	39·4	110·0	33·0	53·9	53·2	11·1	21·9	0·0	+ 5·5	SE	ESE	1·4	0·0	0·1	126	0·00
13	..	29·790	70·0	40·2	53·8	45·0	120·2	34·4	53·9	53·2	8·8	20·3	0·0	+ 8·9	Calm	SW	0·6	0·0	0·0	173	0·01
14	..	29·805	57·0	44·8	50·1	46·2	75·0	41·8	54·6	53·7	3·9	6·6	0·7	+ 5·1	SW	Calm : N	0·0	0·0	0·0	133	0·12
15	..	30·004	53·2	44·2	46·8	43·5	72·9	44·2	54·2	53·4	3·3	5·8	0·4	+ 1·5	N	NE	0·0	0·0	0·0	129	0·02
16	Greatest Declination S.	29·995	65·3	39·2	52·1	46·6	110·2	..	56·0	54·9	5·5	13·7	0·0	+ 6·6	Calm	E	2·7	0·0	0·3	197	0·00
17	..	29·777	72·6	48·6	59·9	51·6	93·4	46·3	56·0	55·7	8·3	20·9	1·0	+14·2	Calm	S	0·0	0·0	0·0	137	0·11
18	Last Quarter.	29·782	69·7	53·0	57·9	51·5	113·4	51·1	55·9	54·7	6·4	14·2	0·8	+11·9	S : SW	SSW : S	0·0	0·0	0·0	152	0·02
19	..	29·999	67·8	47·7	53·3	49·2	102·6	43·4	56·9	55·7	4·1	12·2	0·0	+ 6·9	Calm : N	N : NE	1·0	0·0	0·1	223	0·00
20	..	30·024	68·2	43·6	52·3	46·5	114·4	43·1	57·1	56·0	5·8	15·8	0·2	+ 5·6	NNE	NNE	1·0	0·0	0·1	212	0·00
21	..	29·960	74·5	43·4	57·5	48·9	122·6	41·0	57·9	56·7	8·6	20·1	0·4	+10·5	NNE	NE : E	0·4	0·0	0·0	164	0·00
22	In Equator	29·973	76·7	43·4	58·8	44·6	123·0	36·4	57·9	56·7	14·2	29·3	0·0	+11·6	NE	ESE	1·0	0·0	0·1	181	0·00
23	..	30·047	75·8	41·0	56·4	47·3	127·0	38·0	58·6	58·4	9·1	24·0	0·0	+ 9·0	N	NE : ESE	0·0	0·0	0·0	160	0·00
24	Perigee	30·086	72·4	38·2	53·3	44·6	126·0	32·4	58·9	57·7	8·7	23·0	0·0	+ 5·7	NNE	NE : ESE	0·0	0·0	0·0	141	0·00
25	New	30·037	70·1	36·1	50·5	44·2	125·0	30·3	59·4	58·2	6·3	23·4	0·0	+ 2·8	Calm	NNE	0·0	0·0	0·0	82	0·00
26	..	29·972	76·2	36·8	57·0	45·1	115·7	30·2	58·9	57·7	11·9	27·4	0·0	+ 9·1	Calm : SW	NNW : Calm	0·0	0·0	0·0	105	0·00
27	..	29·912	81·5	42·4	61·5	45·6	133·4	36·6	58·9	57·7	15·9	30·8	0·0	+13·4	SW	Variable	0·0	0·0	0·0	120	0·00
28	Greatest Declination N.	29·829	71·7	44·3	55·8	46·4	131·7	40·0	58·9	57·7	9·4	21·8	0·0	+ 7·4	Calm	E : ENE	1·5	0·0	0·1	290	0·00
29	..	29·886	54·3	38·0	44·6	34·2	106·0	33·8	58·6	57·2	10·4	17·4	3·5	— 4·2	ENE : ESE	ESE : ENE	2·2	0·0	0·3	312	0·00
30	..	29·855	52·4	34·0	42·4	33·5	113·2	28·6	58·8	57·0	8·9	17·4	1·1	— 6·9	NE : E	E	2·7	0·0	0·4	193	0·00
Means	..	29·954	66·3	41·5	52·3	44·0	109·7	37·1	53·0	52·1	8·3	18·9	0.5	+ 6·1	...	...	..	..	..	Sum 5064	Sum 0·40

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30in·169 on the 6th; the absolute minimum in the month was 29in·699 on the 3rd.
The second maximum ,, was 30in·137 on the 10th; the second minimum ,, was 29in·944 on the 8th.
The third maximum ,, was 30in·050 on the 15th; the third minimum ,, was 29in·775 on the 13th.
The fourth maximum ,, was 30in·053 on the 20th; the fourth minimum ,, was 29in·752 on the 18th.
The fifth maximum ,, was 30in·118 on the 24th; the fifth minimum ,, was 29in·936 on the 21st.
The sixth maximum ,, was 29in·931 on the 29th; the sixth minimum ,, was 29in·791 on the 28th.
The range in the month was 0in·470.
The mean for the month was 29in·954, being 0in·193 *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·5 on the 27th; the lowest was 31°·9 on the 2nd.
The range ,, was 49°·6.
The mean ,, of all the highest daily readings was 66°·3, being 9°·3 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 41°·5, being 2°·7 *higher* than the average of the preceding 24 years.
The mean daily range was 24°·8, being 6°·6 *greater* than the average of the preceding 24 years.
The mean for the month was 52°·3, being 5°·7 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
April 1	o	wN,mP : wN : w	10, r : 10, ci, ci.-cu, sl.-r	5, ci, ci.-cu : 5, sl.-r, li.-cl
2	w	w	4, ci, ci.-cu	9, ci.-s, ci.-cu, cu.-s : o
3	w	w	o : o, v	8, ci.-cu, ci, v : 10, ci.-s
4	w	w	10 : 10, v	2, ci, li.-cl : 10, th.-cl, lu.-ha
5	w	o : w	10 : 10	10, oc.-shs : 10, ci.-s, oc.-r : 10
6	w : o	o	10 : 10, li.-cl	7, ci, ci.-cu : v, ci, th.-cl
7	w	o : w	7, li.-cl, ci.-s	10, ci.-s, ci.-cu, th.-cl : 10, th.-cl
8	w	w	8, ci	o : 1, ci, ci.-cu : o, m
9	o	w	o : o	o, ci : o
10	w : o	w	o : o	o, li.-cl : o
11	w	o : w	o : o	o : o
12	w : o	w : m	o : o	o : 2, ci : 2, ci, ci.-s
13	m : o	w : m	1, ci, h	3, ci : 7, ci, ci.-cu, v : o, h
14	w	s N : w	10, th.-cl, h	10, ci.-s, r : 10, fr.-h.-shs : 10, ci.-s
15	w	w : m	10, sl.-r : 10	10, ci.-s : 10, ci.-s, cu.-s : 3, v
16	w	w	1, ci, ci.-cu	o, v : 10
17	w	w	10, h.-r : 8, ci, ci.-cu, ci.-s	10, sl.-r : 10, th.-r
18	w	w : m	10 : 10	10, ci, ci.-cu : 10, fr.-shs
19	w	w	10 : 10	10, ci.-cu, v : 10
20	w	w	10 : 10, v	o : o, ms
21	w	w	1, li.-cl	1, ci, ci.-cu : o
22	w	w	o : o	o : o
23	w	w	o : o	o : o
24	w	w	o : o	o : o
25	w	w : m	1, li.-cl, h	o : o
26	w	w N : w	o : o, h	7, th.-cl : o
27	w	w	7, li.-cl, h	o, h : 1, ci
28	w	w : o	8, ci	1, ci : o, v : 10
29	o	w N : w	7, ci-cu, ci	5, ci, ci.-cu : o : o
30	w	w	2, li.-cl	o : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 55°·8 on the 17th; and the lowest was 31°·8 on the 30th.

The mean ,, was 44°·0, being 3°·8 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot288$, being $0^{in}\cdot039$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{grs}\cdot3$, being $0^{gr}\cdot4$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 73 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 542 grains, being 1 grain *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 4·2.

OZONE.

The mean amount for the month, on a scale ranging from o to 10, was o·9.

WIND.

The proportions were of N. 6, S. 5, W. 5, E. 7, and Calm 7. The greatest pressure in the month was $2^{lbs}\cdot7$ on the square foot on the 16th and 30th.

RAIN.

Fell on 7 days in the month, amounting to $0^{in}\cdot40$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot34$ *less* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
May 1	..	29·806	62·0	31·4	46·9	39·2	87·8	20·3	58·6	56·8	7·7	19·0	0·0	— 2·9	Calm : SSE	S : SW	0·5	0·0	0·0	233	0·00
2	First Qr.	29·847	68·8	44·8	56·0	45·3	127·3	38·8	58·5	57·5	10·7	22·0	0·0	+ 5·7	SSW	SW : S	4·8	0·0	0·7	312	0·00
3	..	29·706	71·5	46·6	59·1	46·1	129·6	39·0	58·5	57·3	13·0	23·0	1·3	+ 8·3	Calm : SW	SW	3·5	0·0	0·4	315	0·02
4	..	29·707	64·0	51·1	55·7	50·6	83·4	47·1	58·6	57·1	5·1	10·3	2·0	+ 4·5	SW	SSW	1·5	0·0	0·0	181	0·05
5	..	29·549	74·0	53·6	61·0	51·0	132·9	49·0	58·9	57·7	10·0	20·4	0·8	+ 9·5	SE : S	SW	1·0	0·0	0·0	293	0·09
6	In Equator Apogee	29·850	72·3	47·0	57·9	44·6	132·2	41·4	58·9	57·7	13·3	24·5	0·0	+ 6·2	WSW	SW	0·0	0·0	0·0	174	0·00
7	..	29·821	60·2	40·5	50·9	47·3	76·5	34·0	59·8	58·4	3·6	13·7	0·0	— 0·8	Variable	SE : E	4·0	0·0	0·1	116	0·56
8	..	29·744	69·1	38·9	53·0	51·6	126·7	32·2	59·4	58·6	1·4	14·4	0·0	+ 1·3	Calm	NNE : E	0·0	0·0	0·0	164	0·00
9	..	29·466	70·0	48·3	57·1	51·3	122·0	47·3	59·3	58·3	5·8	14·4	0·0	+ 5·6	NE : WSW	SW	0·4	0·0	0·0	182	0·57
10	Full	29·357	51·1	46·8	47·9	45·9	69·5	45·0	59·0	57·9	2·0	3·2	0·4	— 3·4	NNW	N	0·0	0·0	0·0	164	0·98
11	..	29·500	48·8	43·6	45·4	42·7	63·0	43·6	58·9	57·7	2·7	2·9	0·0	— 5·8	NNE	N : SW	0·0	0·0	0·0	216	0·58
12	..	29·748	61·7	42·9	49·1	40·4	111·6	39·3	58·9	57·7	8·7	17·3	0·2	— 2·1	SW	SW	1·6	0·0	0·2	315	0·01
13	Greatest Declination S.	29·848	65·6	39·2	51·8	41·3	131·8	33·8	59·9	58·8	10·5	21·3	0·2	+ 0·4	SSW : SW	SW	0·6	0·0	0·0	158	0·00
14	..	29·704	60·9	46·8	52·0	46·5	107·0	46·6	58·9	57·7	5·5	11·6	0·6	+ 0·3	NE	NE : SE	0·0	0·0	0·0	87	0·06
15	..	29·496	60·6	44·4	50·0	45·7	95·8	38·5	57·9	56·7	4·3	8·4	0·0	— 2·0	Calm : SW	SW	2·5	0·0	0·2	271	0·02
16	..	29·694	62·1	39·2	48·8	40·4	127·9	30·9	57·4	56·2	8·4	18·1	1·6	— 3·5	SW	SW	0·7	0·0	0·0	285	0·00
17	..	29·766	63·0	43·2	52·8	48·7	104·2	37·8	57·3	56·2	4·1	13·7	2·8	+ 0·2	SW	SW	3·0	0·0	0·2	274	0·00
18	Last Qr.	29·980	66·1	46·0	54·9	42·2	110·2	45·9	57·9	56·7	12·7	20·7	1·1	+ 2·0	W	NNW	0·0	0·0	0·0	148	0·00
19	..	30·189	72·8	41·0	57·7	44·4	127·5	32·2	58·5	57·3	13·3	27·4	0·0	+ 4·5	WSW	WSW : NW	0·0	0·0	0·0	126	0·00
20	In Equator	30·143	72·8	45·9	59·6	45·1	130·2	38·3	58·9	57·7	14·5	25·0	0·0	+ 6·1	Variable	E	0·5	0·0	0·0	160	0·00
21	..	29·858	78·5	51·0	64·7	56·8	135·6	43·0	60·6	59·4	7·9	19·0	4·6	+10·9	ENE	E : SE	0·0	0·0	0·0	89	0·00
22	Perigee	29·810	76·2	53·6	64·6	54·8	137·2	45·6	61·4	59·7	9·8	19·7	0·0	+10·5	Calm : SW	SW	1·5	0·0	0·0	125	0·33
23	..	29·834	78·0	50·8	63·4	55·1	134·6	43·3	61·9	60·2	8·3	19·4	0·0	+ 9·1	SSE	SW	1·5	0·0	0·0	155	1·03
24	New	29·925	68·7	48·7	57·7	48·1	136·5	45·0	62·0	60·7	9·6	18·7	2·3	+ 3·1	SW	SW	1·0	0·0	0·1	179	0·00
25	..	29·967	72·2	44·4	58·1	49·2	136·2	36·4	62·9	61·7	8·9	18·0	0·0	+ 3·2	SW	SW	0·0	0·0	0·0	116	0·00
26	Greatest Declination N.	29·838	75·0	42·3	60·6	50·6	135·3	..	64·3	63·9	10·0	22·5	0·0	+ 5·4	Calm : SSW	S	0·0	0·0	0·0	138	0·00
27	..	29·733	74·8	53·0	62·9	51·4	136·6	44·8	65·0	63·8	11·5	19·3	2·6	+ 7·5	SW : WSW	SW	1·5	0·0	0·1	310	0·00
28	..	29·760	70·2	54·0	59·7	50·4	116·5	50·8	64·9	63·7	9·3	18·4	2·6	+ 4·0	SW	SW	3·0	0·0	0·5	331	0·07
29	..	29·702	73·8	51·4	61·5	54·3	121·3	45·6	65·2	64·2	7·2	16·4	1·4	+ 5·5	SW	SW	2·8	0·0	0·3	449	0·00
30	..	29·692	69·7	54·9	60·1	43·8	134·2	52·4	65·9	65·1	16·3	21·8	8·4	+ 3·8	WSW	WSW	10·0	0·0	2·9	306	0·00
31	..	29·786	71·7	49·2	58·4	48·5	124·7	45·0	64·3	62·7	9·9	19·6	2·9	+ 1·8	WSW	SW	0·0	0·0	0·0	160	0·00
																				Sum	Sum
Means	..	29·769	67·9	46·3	56·1	47·5	117·6	41·1	60·4	59·2	8·6	17·6	1·2	+ 3·2	...	...	..	..	..	6532	4·37

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·730 on the 4th; the first minimum in the month was 29in·651 on the 3rd.
The second maximum ,, was 29in·898 on the 6th; the second minimum ,, was 29in·527 on the 5th.
The third maximum ,, was 29in·871 on the 13th; the absolute minimum ,, was 29in·346 on the 10th.
The absolute maximum ,, was 30in·219 on the 20th; the fourth minimum ,, was 29in·455 on the 15th.
The fifth maximum ,, was 29in·984 on the 25th; the fifth minimum ,, was 29in·796 on the 22nd.
The sixth maximum ,, was 29in·822 on the 28th; the sixth minimum ,, was 29in·721 on the 28th.
The seventh maximum ,, was 29in·808 on the 31st; the seventh minimum ,, was 29in·573 on the 29th.
The range in the month was 0in·873.
The mean for the month was 29in·769, being 0in·005 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·5 on the 21st; the lowest was 31°·4 on the 1st.
The range ,, was 47°·1.
The mean ,, of all the highest daily readings was 67°·9, being 3°·4 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 46°·3, being 2°·1 *higher* than the average of the preceding 24 years.
The mean daily range was 21°·6, being 1°·4 *greater* than the average of the preceding 24 years.
The mean for the month was 56°·1, being 3°·2 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
May 1	o	w N : w	10 : 10, ci.-s	10, ci.-s, cu.-s : 10, v, sl.-r : o, ms
2	w N	w N : o	10, sl.-r : 8, ci, ci.-cu, ci.-s	8, ci, ci.-cu : 7, ci, ci.-cu : o
3	w N	w N : o : w	4, ci	5, ci, ci.-cu : 10, ci.-s, cu.-s, h.-shs
4	w	o : w	10 : 10, sl.-r	10, ci.-s, c.-r : 10, ci.-cu, ci.-s
5	s	w	10, r : 7, li.-cl, sl.-r	2, ci, ci.-cu : v r
6	w	w	3, ci, ci.-cu	6, ci, ci.-cu : o, m
7	w	m : o	10, th.-cl, r	10, h-r : 8, ci, ci.-s
8	o	w	10, th.-cl, h	10, th.-cl : 3, ci, v : 8, th.-cl, ci.-s, l
9	ss : o	w	10, t-s, h-r : 10, cu.-s, ci.-s	8, ci : 7, th.-cl : 5, lu.-co
10	m	m N : w : o	10, h-r	10, th.-r : 10
11	m N	m N : w N : w	10, r : 10, c.-r	10, c.-r : 10 : 10, oc.-r
12	w N	w : m	10 : 10, sl.-r	7, th.-cl, ci.-cu : v, th.-cl : o
13	w	w	6, ci, ci.-cu, cu	4, ci, ci.-cu, cu : 10, v, th.-r
14	w	w	10, r : 10, th.-cl : 10, th.-cl	10, th.-cl : 10, ci.-cu, cu.-s
15	w	w	10 : 10 : 10, sl.-r	10, sl.-r : 10, shs.-r : o
16	w	m : o	8, ci, ci.-cu	10 : v : o
17	o	o : w	10, sl.-r	10, ci.-s, cu.-s : 10, ci.-s, th.-cl : 10, th.-cl
18	w	w : o : w	7, li.-cl, h	5, ci, ci.-cu, h : 5, ci, ci.-cu, ci.-s, h
19	w	w : m	4, ci, h	4, ci.-h : v, ci, ci.-s
20	w	w	o : o	o : o
21	w	w : m	o : o, h	v, li.-cl : 10, ci.-s, oc.-r, t.-s
22	w	w : m	o : t.-s, h.-r : 7, ci.-h	4, ci, ci.-cu : o
23	m	s N, s P, g-cur, sps.: o	7, ci, ci.-cu	7, li.-cl, ci, ci.-cu : t.-s, h.-r, hl : t.-s, r : 10, r
24	o	w	6, ci, ci.-cu, cu, cu.-s	6, ci, ci.-cu : v : o
25	w	w	o	5, ci, ci.-cu, v : o, ci
26	o	w	o : o	2, ci : th.-cl, ci : o, h
27	w	w : m	o : o, h	4, th.-cl, ci : 7, th.-cl : 10, th.-cl
28	w	w	10 : 10 : 10, r, cu.-s	7, th.-cl, ci, ci.-cu : 6, th.-cl
29	w	w	10	10 : v : 10
30	w : w N		5, ci, ci.-cu	6, ci, ci.-cu : 9, th.-cl : 10, h
31		w : o	10 : 10, li-cl, h	10, ci, cu : 10, cu.-s, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 59°·1 on the 23rd; and the lowest was 37°·2 on the 1st.

The mean ,, was 47°·5, being 1°·9 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was 0in·329, being 0in·026 *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 3grs·6, being 0gr·1 *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 73 (that of Saturation being represented by 100), being 4 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 534 grains, being 8 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 6·4.

OZONE.

The mean amount for the month, on a scale ranging from o to 10, was 1·2.

WIND.

The proportions were of N. 3, S. 11, W. 11, E. 2, and Calm 4. The greatest pressure in the month was 10lbs·0 on the square foot, on the 30th.

RAIN.

Fell on 13 days in the month, amounting to 4in·37, as measured in the simple cylinder gauge partly sunk below the ground; being 2in·25 *greater* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a self-registering thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
June 1	First Qr.	29·672	68·0	47·2	55·9	50·7	112·4	40·8	64·6	62·7	5·2	16·0	0·0	— 1·1	ESE	E: ENE	3·8	0·0	0·9	357	0·62
2	In Equator	29·526	60·7	52·0	54·3	51·8	88·2	51·8	64·3	62·7	2·5	7·4	0·0	— 3·0	ENE: SW	SW	3·0	0·0	0·3	355	0·39
3	Apogee	29·824	70·2	51·2	58·1	54·6	109·5	..	63·9	62·7	3·5	11·0	0·0	+ 0·7	SW	W	0·0	0·0	0·0	169	0·03
4	..	30·117	70·8	51·1	59·9	51·1	111·4	44·4	63·9	63·2	8·8	18·0	0·0	+ 2·6	NNW	NNW: N	0·0	0·0	0·0	124	0·00
5	..	30·173	76·8	50·9	64·7	56·8	129·5	43·1	64·8	63·7	7·9	18·7	0·0	+ 7·5	SW	SW: NW	0·0	0·0	0·0	130	0·00
6	..	30·158	80·0	62·2	68·9	59·7	130·0	59·0	64·9	64·6	9·2	17·3	5·1	+11·9	NW: SW	WSW: NW	0·0	0·0	0·0	143	0·00
7	..	30·235	74·1	53·9	61·3	53·3	124·2	50·8	65·1	64·7	8·0	16·3	1·9	+ 4·3	NNW: N	NE: ESE	0·7	0·0	0·0	145	0·00
8	..	30·323	75·2	45·4	60·4	49·8	136·2	37·2	65·6	64·7	10·6	21·6	0·0	+ 3·1	Calm	SE	0·0	0·0	0·0	134	0·00
9	Full: Greatest Dec. S.	30·191	82·0	54·5	67·0	55·6	128·9	47·0	67·4	66·7	11·4	24·6	0·6	+ 9·3	SW: W	NW: ESE	0·0	0·0	0·0	109	0·00
10	..	29·971	76·4	52·8	63·3	52·5	123·1	47·1	67·6	66·7	10·8	19·9	0·0	+ 5·3	Calm: NNW	NNW	0·5	0·0	0·0	311	0·00
11	..	30·111	66·8	48·8	55·1	41·6	126·8	42·0	67·9	66·7	13·5	20·2	3·4	— 3·2	NNW	N	1·2	0·0	0·0	235	0·00
12	..	30·284	67·8	41·2	54·0	43·6	129·8	34·1	67·6	66·4	10·4	21·2	1·2	— 4·6	NNW: N	NNE: SE	0·0	0·0	0·0	156	0·00
13	..	30·259	77·0	44·3	60·5	49·6	124·8	35·8	67·6	66·2	10·9	23·0	0·0	+ 1·7	SW: Calm	N: E	0·0	0·0	0·0	101	0·00
14	..	30·218	75·2	46·5	60·2	52·7	126·1	40·3	66·4	66·2	7·5	19·6	0·0	+ 1·2	Calm	E	0·0	0·0	0·0	95	0·00
15	..	30·231	73·8	44·4	58·3	51·6	120·0	36·2	66·4	65·7	6·7	17·3	0·0	— 0·7	Calm	NE: ESE	0·0	0·0	0·0	144	0·00
16	In Equator: Last Quarter.	30·246	70·0	50·9	57·7	47·7	122·6	50·1	66·4	65·4	10·0	18·2	2·4	— 1·3	NE: N	NNE	0·0	0·0	0·0	263	0·00
17	..	30·194	73·7	48·8	58·7	49·1	132·0	44·6	66·8	65·7	9·6	21·4	2·9	— 0·3	NNE	N: NNE	0·0	0·0	0·0	246	0·00
18	Perigee.	30·143	60·8	46·9	52·6	47·5	76·4	39·2	66·4	64·7	5·1	9·5	1·5	— 6·5	N	N	0·0	0·0	0·0	221	0·00
19	..	30·191	70·7	48·8	54·8	48·5	133·2	48·1	65·4	64·2	6·3	17·1	0·8	— 4·4	NNE	NE: ESE	0·0	0·0	0·0	81	0·00
20	..	30·185	79·2	42·4	60·1	45·9	140·8	34·6	65·9	64·7	14·2	29·2	0·0	+ 0·6	Calm	NNE: ESE	0·0	0·0	0·0	74	0·00
21	..	30·178	85·4	43·3	65·8	50·3	140·5	33·1	66·1	64·8	15·5	34·3	0·0	+ 5·9	Calm	SE	0·0	0·0	0·0	112	0·00
22	Greatest Declination N.	30·148	77·7	51·4	62·6	52·5	111·8	43·8	66·8	65·2	10·1	21·4	0·0	+ 2·3	Calm	NNE: ESE	0·0	0·0	0·0	84	0·00
23	New	29·991	87·6	49·4	68·1	48·9	148·4	42·0	66·9	65·4	19·2	39·3	0·0	+ 7·4	Calm: WSW	W	0·0	0·0	0·0	269	0·00
24	..	30·008	73·8	58·8	64·0	43·7	137·2	54·1	66·9	65·4	20·3	28·1	14·3	+ 2·8	NW: N	NNW	0·0	0·0	0·0	225	0·00
25	..	29·937	76·5	52·1	61·8	46·0	107·2	51·2	65·9	65·7	15·8	26·0	7·8	+ 0·2	NNW: W	W	0·7	0·0	0·0	277	0·00
26	..	29·959	71·4	51·8	59·8	52·6	105·8	44·2	65·4	64·7	7·2	16·2	2·6	— 1·9	WSW: NW	W: N	0·0	0·0	0·0	154	0·00
27	..	30·026	74·8	51·5	61·7	51·5	121·5	45·6	65·7	64·7	10·2	17·7	0·4	+ 0·1	Calm	Calm: SE	0·0	0·0	0·0	90	0·00
28	..	29·862	77·0	47·0	60·2	50·2	138·7	38·9	65·9	64·7	10·0	22·6	0·0	— 1·3	SE	SSE: SE	0·0	0·0	0·0	154	0·00
29	In Equator	29·397	68·0	53·2	59·3	48·4	88·9	48·6	66·0	64·8	10·9	18·5	0·2	— 2·1	ESE	ESE: E	0·0	0·0	0·0	150	0·02
30		29·165	65·0	53·6	56·9	54·8	90·0	52·8	65·4	64·7	2·1	7·9	0·0	— 4·2	Calm: NE	WSW: NNE	0·0	0·0	0·0	327	1·39
Means	..	30·031	73·6	49·9	60·2	50·4	120·5	44·2	66·0	64·9	9·8	20·0	1·5	+ 1·1	...	...	..	..	..	Sum 5435	Sum 2·45

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30in·358 on the 8th; the first minimum in the month was 29in·479 on the 2nd.
The second maximum ,, was 30in·292 on the 12th; the second minimum ,, was 29in·938 on the 10th.
The third maximum ,, was 30in·014 on the 24th; the third minimum ,, was 29in·930 on the 23rd.
The fourth maximum ,, was 30in·063 on the 27th; the fourth minimum ,, was 29in·886 on the 25th.
The range in the month was 1in·238. the absolute minimum ,, was 29in·120 on the 30th.
The mean for the month was 30in·031, being 0in·244 *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 87°·6 on the 23rd; the lowest was 41°·2 on the 12th.
The range ,, was 46°·4.
The mean ,, of all the highest daily readings was 73°·6, being 2°·7 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 49°·9, being 0°·2 *lower* than the average of the preceding 24 years.
The mean daily range was 23°·7, being 3°·0 *greater* than the average of the preceding 24 years.
The mean for the month was 60°·2, being 1°·2 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
June 1	w	o : wN	5, ci, ci.-cu	10, th.-cl, ci, cu : 10, h.-r
2	o	o	10, h.-r : 10	10, th.-r : 10, c.-r
3	o	o : w	10, sl.-r : 10	10, oc.-shs : 10, sl.-r : 10
4	w	w	9, ci.-s, cu.-s, ci, ci.-cu, cu	8, ci, ci.-cu, h : o, h
5	o	w : o	o : o, h	o, h : v : 10
6	o	o : w	10 : 10, th.-cl, h	10, ci, ci.-cu, ci.-s, h : o
7	o	w : o	10	10, ci, ci.-cu : o
8	w	w	o : o	o : o, m
9	m	o : w	o : o, h	4, ci, ci.-cu, h : o, h : o, h
10	w	w : w N : w	10	10 : 9, cu, ci.-cu : 10, ci, ci.-s
11	w	o : w	7, ci, cu.-s, ci.-cu	7,ci.-cu,ci,ci.-s: 10 : 10, ci.-s
12	w	w : o	5, ci, ci.-cu	6, th.-cl, ci, ci.-cu : o, h, v
13	o	o : w	2, li.-cl, h	2, h, li.-cl : o, h : o
14	o	o : w	7, th.-cl, h	o, h : o, h
15	o	w	4, li.-cl, h	2, ci, h : 4, li.-cl, h : 10, l
16	w	w : o : w	9, cu.-s	9, ci, ci.-cu, cu, cu.-s : o
17	o	w	6, ci.-cu	8, ci, ci.-cu : 9 : o
18	o	o	10	10 : 10
19	o	w	10 : 10	10, v : o : o
20	w	w	o : o	o : o
21	w	w : o : w	o : o	o : o
22	w	o : w	o : o, h	o : o, h
23	w	wN : o : w	5, ci, h	4, ci : 7, ci, ci.-cu, v : 10, th.-cl, ci.-s
24	o	wN : o : w	4, li.-cl	5, ci, ci.-cu : 10, th.-cl
25	o	o : w	10, ci.-cu, ci.-s, cu.-s	9, ci, ci.-cu, h : 9, ci, ci.-cu, ci.-s
26	wN	w : o	10 : 10, sl.-r	10 : 8, v : 2
27	w	w	10, ci, ci.-cu	10, th.-cl, ci, ci.-cu : 10, v
28	o	w	10 : 10	7, th.-cl, ci, cu : 5, ci, cu
29	w	wP,mN : w	10, ci.-s	10, oc.-shs : 10, h.-r
30	o	sP,sN,sps,g-cur: o	10, c.-h.-r : 10	10, l, t, h.-r : 10, c.-h.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 63°·2 on the 6th; and the lowest was 41°·1 on the 11th.

The mean ,, was 50°·4, being 0°·3 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·366, being 0^{in}·006 *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4^{grs}·1, being 0^{gr}·1 *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 70 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 24 years

Weight of a Cubic Foot of Air.—The mean for the month was 534 grains, being 3 grains *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·9.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·6.

WIND.

The proportions were of N. 9, S. 3, W. 6, E. 6, and Calm 6. The greatest pressure in the month was 3^{lbs}·8 on the square foot on the 1st.

RAIN.

Fell on 5 days in the month, amounting to 2^{in}·45, as measured in the simple cylinder gauge partly sunk below the ground; being 0^{in}·50 *greater* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
July 1	First Quarter: Apogee	29·601	66·1	52·1	57·0	48·9	103·8	51·9	65·3	64·4	8·1	14·8	2·0	— 3·9	NNE	N	3·0	0·0	0·5	272	0·00
2	..	29·910	78·2	48·9	61·9	49·3	138·2	40·9	64·9	64·4	12·6	26·2	0·2	+ 0·8	W : NW	W	0·0	0·0	0·0	189	0·00
3	..	29·918	79·6	48·9	64·5	52·5	117·9	41·8	65·0	64·7	12·0	24·0	2·1	+ 3·2	WSW	SW	0·0	0·0	0·0	142	0·00
4	..	29·828	82·6	52·2	68·6	53·4	139·0	43·9	65·1	64·7	15·2	27·5	3·2	+ 7·1	Calm : SSW	SW	1·5	0·0	0·1	254	0·00
5	..	29·907	80·5	59·8	69·4	56·6	133·8	54·8	65·2	64·8	12·8	22·3	3·4	+ 7·7	WSW	WSW	1·5	0·0	0·0	209	0·00
6	..	29·706	84·2	60·9	69·6	62·6	116·7	60·5	65·2	64·8	7·0	21·8	1·0	+ 7·8	SW : SE	SW : SE	1·7	0·0	0·0	192	0·44
7	Greatest Declination S.	29·617	73·3	59·2	64·4	54·2	135·0	58·5	66·9	66·4	10·2	19·1	1·0	+ 2·5	SW	W	8·0	0·0	1·6	412	0·45
8	Full	29·655	73·1	56·3	64·2	54·6	136·7	53·6	66·8	65·3	9·6	16·9	1·2	+ 2·5	W : WSW	SW	8·0	0·0	1·3	360	0·00
9	..	29·745	75·5	54·1	61·8	55·2	133·7	47·1	..	..	6·6	18·5	1·6	+ 0·1	WSW	WSW	2·6	0·0	0·2	232	0·03
10	..	29·684	70·7	53·0	60·1	51·2	128·0	46·7	..	..	8·9	17·3	0·8	— 1·7	WSW	WNW : WSW	5·0	0·0	0·4	245	0·03
11	..	29·567	70·8	52·6	59·5	47·1	122·1	49·2	66·4	64·9	12·4	18·2	1·6	— 2·3	WSW : W	W : NW	4·0	0·0	0·6	277	0·00
12	..	29·875	71·4	47·0	58·2	48·1	120·2	39·2	66·5	65·6	10·1	22·7	1·0	— 3·8	NW : W	NW : W : SW	2·0	0·0	0·2	250	0·00
13	In Equator; Perigee.	29·773	66·6	52·2	58·1	55·2	88·0	44·8	..	..	2·9	9·0	0·0	— 4·2	SW	SW	6·0	0·0	1·3	335	0·04
14	..	29·757	76·6	54·1	64·2	55·1	133·2	49·8	65·4	64·7	9·1	19·6	0·6	+ 1·7	WSW	SW	0·6	0·0	0·0	235	0·00
15	Last Qr.	29·727	85·0	50·5	67·7	57·7	149·0	44·0	65·9	65·4	10·0	22·4	0·0	+ 5·2	S	SW	1·0	0·0	0·1	281	0·00
16	..	29·878	78·8	61·6	69·6	61·8	118·3	57·0	65·9	65·7	7·8	15·3	3·8	+ 7·2	SW	SW	0·0	0·0	0·0	152	0·00
17	..	29·763	75·7	61·3	67·1	62·8	109·0	58·6	66·4	66·4	4·3	12·1	0·2	+ 4·9	W : Calm	Calm : N : W	0·0	0·0	0·0	193	0·22
18	..	29·712	72·4	53·6	60·4	51·5	136·3	50·7	64·9	64·7	8·9	17·6	2·2	— 1·5	W	SW	0·5	0·0	0·0	219	0·10
19	..	29·641	69·6	53·2	60·4	51·4	112·2	49·0	65·9	65·7	9·0	17·3	0·0	— 1·2	SW	SW	0·0	0·0	0·0	194	0·01
20	Greatest Declination N.	29·685	74·7	51·2	63·0	52·2	139·0	46·0	66·0	65·7	10·8	22·1	0·0	+ 1·6	S : SW	SW	0·6	0·0	0·0	161	0·00
21	..	29·675	73·0	51·4	62·0	54·5	127·8	44·8	66·0	65·7	7·5	18·7	0·4	+ 0·5	Calm	E : Calm	0·0	0·0	0·0	174	0·00
22	New	29·598	71·3	58·4	62·5	52·5	113·7	47·1	66·9	66·7	10·0	17·3	5·7	+ 1·0	N	NE : SE	0·0	0·0	0·0	103	0·02
23	..	29·753	73·4	58·0	65·0	59·6	105·3	52·6	66·9	66·7	5·4	11·5	1·1	+ 3·4	Calm	NE : Calm	0·0	0·0	0·0	58	0·15
24	..	30·023	78·3	56·9	66·4	58·8	127·3	50·7	66·9	66·7	7·6	19·2	0·0	+ 4·7	Calm	S : W	0·0	0·0	0·0	56	0·00
25	..	30·112	78·0	58·3	66·8	57·5	135·0	54·2	66·9	66·7	9·3	18·0	0·0	+ 5·0	Calm	SE	0·0	0·0	0·0	97	0·00
26	..	30·179	81·6	55·6	66·4	55·8	149·0	48·5	66·7	66·6	10·6	24·7	0·0	+ 4·5	Calm	NE : SE	0·0	0·0	0·0	95	0·00
27	In Equator.	30·047	85·0	53·1	69·2	59·8	141·0	46·4	66·8	66·6	9·4	24·0	0·0	+ 7·2	Calm : W	W : NNW	0·0	0·0	0·0	282	0·00
28	Apogee	30·075	74·7	51·9	62·8	48·4	132·2	42·1	66·9	66·7	14·4	24·7	2·4	+ 0·6	N	NW : WNW	0·0	0·0	0·0	224	0·00
29	..	29·872	80·7	51·4	65·4	53·1	148·7	42·8	67·1	66·8	12·3	24·3	0·0	+ 3·1	WSW : W	W : WSW	2·0	0·0	0·2	310	0·00
30	First Qr.	29·843	75·8	54·5	62·4	48·3	139·4	47·6	67·0	66·7	14·1	25·2	1·2	0·0	W : NW	NW : Calm	2·8	0·0	0·1	153	0·00
31	..	29·573	70·1	50·3	58·7	51·6	103·8	41·6	66·5	65·8	7·1	15·5	0·4	— 3·7	SW : Calm	W : N	0·0	0·0	0·0	212	0·78
Means	..	29·797	75·7	54·3	63·8	54·2	126·9	48·6	66·1	65·7	9·6	19·6	1·2	+ 1·9	...	...	..	..	..	Sum 6568	Sum 2·27

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·957 on the 3rd; the first minimum in the month was 29in·810 on the 4th.
The second maximum ,, was 29in·916 on the 5th; the second minimum ,, was 29in·575 on the 7th.
The third maximum ,, was 29in·764 on the 9th; the third minimum ,, was 29in·540 on the 11th.
The fourth maximum ,, was 29in·902 on the 12th; the fourth minimum ,, was 29in·701 on the 15th.
The fifth maximum ,, was 29in·890 on the 16th; the fifth minimum ,, was 29in·634 on the 19th.
The sixth maximum ,, was 29in·723 on the 20th; the sixth minimum ,, was 29in·573 on the 22nd.
The absolute maximum ,, was 30in·202 on the 26th; the seventh minimum ,, was 30in·014 on the 27th.
The eighth maximum ,, was 30in·117 on the 28th; the absolute minimum ,, was 29in·443 on the 31st.
The range in the month was 0in·759.
The mean for the month was 29in·797, being 0in·006 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 85°·0 on the 15th and 27th; the lowest was 47°·0 on the 12th.
The range ,, was 38°·0.
The mean ,, of all the highest daily readings was 75°·7, being 2°·0 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 54°·3, being 1°·5 *higher* than the average of the preceding 24 years.
The mean daily range was 21°·4, being 0°·6 *greater* than the average of the preceding 24 years.
The mean for the month was 63°·8, being 2°·1 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
July 1	o	o	10 : 10	10, ci.-s : 8, cu, ci.-s : 7, ci
2	o	o : w	7, ci.-cu, ci, ci.-s, h	6, ci, ci.-cu, cu, cu.-s : o
3	w	w : o : w	3, ci, ci.-cu	5, li.-cl, ci, cu, ci.-cu : 4, li.-cl, h
4	o	o	3, ci	4, ci, ci.-cu : 4, li.-cl : 10, ci.-s, cu.-s
5	o	o	5, ci, ci.-cu	5, ci, ci.-cu : 7, th.-cl, ci, cu
6			10, h.-r : 8, cu, ci.-cu, r	10, ci.-cu, cu, sl.-r : 10, h.-r, l, t
7			10, h.-r : 8, ci, ci.-cu, cu, v	7, ci.-cu, cu, ci, w, v : o
8			6, th.-cl, sl.-r	5, ci, cu, th.-cl : 4, ci, ci.-cu
9			8, ci.-cu, cu, sl.-r	8, t, shs.-r : 10, t, l, s, cu.-s, sl.-r, v
10			7, cu.-s, ci.-cu, ci, t, oc.-shs	6, ci.-cu, cu.-s, oc.-shs : 8, cu, ci.-s, t : 8
11			10, sl.-r	10 : 7, cu.-s, ci.-s : o
12			2, ci, h	8, cu, ci.-cu, ci.-s : o
13		o : w	10, r : 10, oc.-r	10, oc.-r : 10, oc.-r
14	w	w : m	8, th.-cl, ci, cu	6, ci, ci.-cu : o
15	w	w	4, li.-cl, ci, v	o : o
16	w	w	10	10, cu.-s : v, ci, ci.-cu : 10, sl.-r, l, t, ci.-s
17	w	w : sP, sN, sps, g.-cur.	7, ci, ci.-cu, h	10, h.-r, t, l, cu, cu.-s : 10, oc.-r : 10
18			4, ci, ci.-cu	10, ci.-s, cu.-s, cu, oc.-r : 5, ci, ci.-s, cu.-s, v
19			10, sl.-r : 8, ci.-cu, cu, h	10, ci.-s, cu.-s, s: v : 1, ci, ms
20			6, ci, ci.-cu, cu	7, ci, ci.-cu, cu.-s : 3, ci, ci.-s
21			10, ci, th.-cl	10, ci, ci.-cu : 10, ci, ci.-s
22		o	10 : 10, th.-r	10, v : 7, ci, ci.-cu, cu : 6, ci, ci.-s
23	o	w	10, r : 10, c.-r	10, oc.-r : 10, ci, ci.-s, cu.-s
24	o	o : w	10, sl.-r : 6, li.-cl, h	6, li.-cl, ci, h : 10, sl.-r
25	w	w	3, li.-cl, h	2, ci, h : o, h : o
26	w	w	o : o, h	2, ci, h : o : o
27	w	w : o	o : o	5, li.-cl : 10, li.-cl, v : 10, cu, cu.-s
28	w	w : o	7, ci, ci.-cu	4, th.-cl, ci, ci.-cu : o
29	w	o : w	10, ci, ci.-cu	4, ci : 6, ci, ci.-cu : 10, cu.-s, v
30	o	o : w	10, ci	8, th.-cl, ci.-cu : v : 3, ci, ci.-s
31	m	w : o	10, sl-r : 10	10 : 10, h.-r : c.-h.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 65°·8 on the 17th; and the lowest was 44°·0 on the 11th.

The mean „ was 54°·2, being 0°·6 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·421, being 0^{in}·008 *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4^{grs}·7, being 0^{gr}·1 *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 72 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 527 grains, being 1 grain *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·5.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·7.

WIND.

The proportions were of N. 4, S. 7, W. 14, E. 1, and Calm 5. The greatest pressure in the month was 8^{lbs}·0 on the square foot on the 7th and 8th.

RAIN.

Fell on 11 days in the month, amounting to 2^{in}·27, as measured in the simple cylinder gauge partly sunk below the ground; being 0^{in}·32 *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The Electrical apparatus was not in action from July 6 to 12, and 18 to 22.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Aug. 1	..	29·598	64·5	49·3	54·4	46·4	103·5	40·8	65·9	65·7	8·0	13·7	0·0	— 8·0	NW	NW : W	2·5	0·0	0·1	238	0·09
2	..	29·507	60·5	45·0	52·4	49·4	125·8	36·1	65·4	64·2	3·0	7·4	0·0	—10·0	SW	SW : Calm	2·0	0·0	0·1	173	0·16
3	Greatest Declination S.	29·578	62·7	43·2	50·4	48·1	106·0	37·8	63·9	62·9	2·3	9·5	0·0	—12·0	Calm : NW	W : NW	3·0	0·0	0·1	346	0·62
4	..	29·825	65·8	49·0	54·3	48·4	118·0	49·0	63·0	62·7	5·9	15·3	1·3	— 8·0	NNW	N : Calm	2·5	0·0	0·3	171	0·05
5	..	29·926	72·6	44·2	58·6	49·7	127·8	38·7	63·6	63·5	8·9	20·7	0·0	— 3·6	Calm : WSW	WSW	0·0	0·0	0·0	175	0·00
6	..	29·852	74·1	52·1	62·9	56·2	132·4	46·0	64·3	63·7	6·7	17·7	0·0	+ 0·8	WSW	WSW : SW	0·8	0·0	0·0	274	0·00
7	Full	29·678	75·8	57·5	64·5	57·4	133·5	54·2	64·3	63·7	7·1	16·7	1·1	+ 2·5	SW : WSW	W : NW	0·8	0·0	0·0	243	0·22
8	..	29·817	71·2	51·2	60·6	50·8	106·9	46·4	63·9	63·8	9·8	18·7	0·0	— 1·4	WSW : NW	NW	0·0	0·0	0·0	103	0·00
9	Perigee ; In Equator.	29·729	76·2	47·5	61·8	51·4	129·0	41·1	63·8	63·7	10·4	21·1	0·0	— 0·3	Calm	SW	0·0	0·0	0·0	129	0·00
10	..	29·560	76·5	52·0	62·6	54·9	126·8	48·0	64·0	63·7	7·7	17·9	0·0	+ 0·5	Calm : SW	SW : Calm	0·0	0·0	0·0	124	0·51
11	..	29·445	71·0	57·8	61·9	57·1	99·4	55·3	64·9	64·7	4·8	11·5	1·1	— 0·2	Calm : SSW	SW	1·5	0·0	0·1	278	0·02
12	..	29·620	70·4	51·3	59·7	53·4	120·8	46·9	64·9	64·7	6·3	15·8	0·0	— 2·3	SSW	S : SW	3·0	0·0	0·2	295	0·03
13	Last Qr.	29·646	71·5	53·8	61·0	52·9	117·9	50·2	65·8	64·7	8·1	16·6	0·4	— 0·9	SW	SW	2·0	0·0	0·1	278	0·00
14	..	29·605	73·2	53·0	60·3	54·8	127·8	49·0	64·9	64·7	5·5	16·7	0·0	— 1·4	SSW : SW	WSW	2·2	0·0	0·1	293	0·09
15	..	29·411	67·1	53·0	59·9	59·0	85·4	52·8	62·9	62·7	0·9	4·0	0·0	— 1·6	SW	WSW	3·0	0·0	0·4	337	0·16
16	Greatest Declination N.	29·561	69·0	54·1	60·2	52·0	110·9	51·2	62·9	62·7	8·2	13·7	0·0	— 1·1	WNW	W	4·0	0·0	0·4	339	0·01
17	..	29·661	69·2	51·4	59·5	50·9	125·0	44·8	63·4	63·2	8·6	16·6	0·0	— 1·6	W	W	6·0	0·0	1·1	420	0·03
18	..	29·700	70·0	52·9	59·6	50·7	111·2	49·7	63·6	63·4	8·9	17·3	0·8	— 1·4	W : NW	NW : N	3·0	0·0	0·5	157	0·00
19	..	29·785	72·2	46·6	59·8	51·1	116·1	39·2	63·9	63·7	8·7	20·5	0·0	— 1·1	Calm	NE : SSW	0·0	0·0	0·0	96	0·00
20	..	29·627	75·5	52·9	62·6	55·2	121·2	47·4	64·3	63·7	7·4	16·2	0·4	+ 1·8	Calm : WSW	SW	0·5	0·0	0·0	223	0·00
21	New	29·595	74·7	54·8	63·2	55·6	125·9	..	64·4	64·2	7·6	17·3	0·0	+ 2·5	SW : WNW	W : SW	1·0	0·0	0·1	200	0·05
22	..	29·536	77·4	56·0	64·7	56·3	124·0	50·1	64·9	64·7	8·4	21·3	0·4	+ 4·0	SW : W	WSW : SW	0·0	0·0	0·0	120	0·00
23	In Equator.	29·350	62·4	52·0	56·8	56·7	72·5	47·4	..	..	0·1	1·9	0·0	— 3·8	Calm : SE	E : NE : W	0·0	0·0	0·0	179	1·79
24	..	29·682	74·5	56·3	63·8	56·1	127·9	54·4	63·9	63·7	7·7	16·2	1·1	+ 3·3	W	W : Variable	0·0	0·0	0·0	145	0·10
25	Apogee	29·938	71·0	53·4	60·2	56·7	114·6	46·9	64·2	64·0	3·5	10·8	0·0	— 0·3	NE	NE : E	0·0	0·0	0·0	111	0·01
26	..	30·116	73·4	50·7	60·8	54·7	127·1	48·9	65·1	64·7	6·1	19·1	0·0	+ 0·5	Calm	SE	0·0	0·0	0·0	72	0·00
27	..	29·986	78·0	45·7	61·9	56·1	126·0	..	65·3	64·7	5·8	20·2	0·0	+ 1·8	Calm	SW : Calm	0·0	0·0	0·0	89	0·00
28	..	29·688	74·0	57·0	64·4	62·0	102·0	51·9	65·9	65·7	2·4	10·9	1·1	+ 4·5	Calm : SW	WSW	3·0	0·0	0·3	258	0·03
29	First Qr.	29·884	62·4	53·3	56·6	48·1	90·0	50·1	..	..	8·5	11·4	4·4	— 3·1	W : N by E	N by E	0·0	0·0	0·0	214	0·00
30	Greatest Declination, S.	30·131	70·4	49·6	58·6	48·7	120·8	41·2	65·6	64·7	9·9	18·4	0·2	— 0·8	NW : N	NNE : Calm	0·0	0·0	0·0	161	0·00
31	..	30·017	71·0	48·9	59·6	55·5	124·0	41·0	64·9	64·7	4·1	14·8	0·0	+ 0·4	SW : W	W	0·0	0·0	0·0	276	0·00
																				Sum	Sum
Means	..	29·711	70·9	51·5	59·9	53·4	116·1	46·8	64·4	64·0	6·5	15·2	0·4	— 1·3	...	...	..	..	..	6517	3·97

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month	was	29in·637	on the 1st ;	the first minimum in the month	was 29in·495 on the 2nd.
The second maximum	,,	29in·945	on the 5th ;	the second minimum ,,	was 29in·647 on the 7th.
The third maximum	,,	29in·834	on the 8th ;	the third minimum ,,	was 29in·415 on the 11th.
The fourth maximum	,,	29in·699	on the 12th ;	the fourth minimum ,,	was 29in·568 on the 12th.
The fifth maximum	,,	29in·654	on the 13th ;	the fifth minimum ,,	was 29in·583 on the 14th.
The sixth maximum	,,	29in·662	on the 14th ;	the sixth minimum ,,	was 29in·392 on the 15th.
The seventh maximum	,,	29in·696	on the 17th ;	the seventh minimum ,,	was 29in·633 on the 17th.
The eighth maximum	,,	29in·814	on the 19th ;	the absolute minimum ,,	was 29in·301 on the 23rd.
The ninth maximum	,,	30in·136	on the 26th ;	the ninth minimum ,,	was 29in·678 on the 28th.
The absolute maximnm	,,	30in·166	on the 30th ;	the tenth minimum ,,	was 29in·951 on the 31st.

The range in the month was 0in·865.

The mean for the month was 29in·711, being 0in·083 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·0 on the 27th; the lowest was 43°·2 on the 3rd.

The range ,, was 34°·8.

The mean ,, of all the highest daily readings was 70°·9, being 1°·9 *lower* than the average of the preceding 24 years.

The mean ,, of all the lowest daily readings was 51°·5, being 1°·6 *lower* than the average of the preceding 24 years.

The mean daily range was 19°·4, being 0°·3 *less* than the average of the preceding 24 years.

The mean for the month was 59°·9, being 1°·4 *lower* than the average of the preceding 24 years

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
Aug. 1	o	o : w	10, c.-h.-r : 10 : 10, sl.-r	10, sl.-r : 8, v, cu, ci.-cu
2	s N, s P, g.-cur	w : sP, sN, sps, g-cur : m	10, cu, ci.-s, cu.-s h.-r	7,cu,ci.-cu,ci.-s,n : 7, oc.-h.-shs : 5, ci, ci.-cu, ci.-s
3	w N	w N : sP,sN,sps,g-cur : o	10, h.-r : 10, r	8, ci, ci.-cu, r : 10, h.-r, l, t : 10, r
4	o	o	10 : 10, oc.-r	10 : 6, ci, ci.-cu
5	m	o : w : w	5, ci, ci.-cu	5, ci, ci.-cu, cu : 7, cu, ci, ci.-cu: o, v
6	w	w	10, ci.-cu, cu, cu.-s	9, ci, ci.-cu, cu: v : 6, ci, ci.-s
7	w	o : w	10, h-r	10, cu, ci.-cu : v, ci, ci.-cu : 10
8	w	o : m	7, ci, ci.-cu, cu, h	10, cu, cu.-s : 7, ci, ci.-cu, cu
9	w	w : o : m	6, ci, cu, h	6, ci, ci.-cu : v, ci, ci.-cu : 10, ci, ci.-cu, m
10	m	w : sP,sN,sps,g-cur	9, ci, ci.-cu	10, ci.-s, cu.-s : 10, h.-r : 10, t.-s, h.-r
11	m	w : o	10 : 10, sl.-r	10, oc.-r : 10, oc.-r : o, ms
12	o	w : o : w	8, cu, ci.-cu	10, oc.-r : 10, oc.-shs : 9, l, ms
13	w	w	5, ci.-cu, ci	9, li.-cl, ci.-s : 9, li.-cl, th.-r, ms
14	o	w	10, h.-r : 7, ci, ci.-cu, shs.-r	6, ci, cu.-s : 8, oc.-r : 7, ci, ci.-s, m
15	o	o : w	10, shs.-r : 10, th.-r	10, th.-r : 10, oc.-r
16	m	w : s P : w	6, ci, ci.-cu, sl.-r	8, ci.-cu, ci.-s : o
17	w	w : sN,sps,g.-cur : w	8, ci.-s, cu.-s, cu	8, oc.-shs : vv, oc.-r : 7, ci, cu, cu.-s, m
18	o	o : sN,sps,g.-cur : m	8, ci, ci.-cu, cu, v	6, v, sl.-r, h : v : 3, sl.-f
19	m	w	sl.-f : o, h.-d, h	3, ci.-cu, ci : 7, li.-cl, h : 3, th.-cl, h
20	m	m	5, ci, ci.-cu	8, th.-cl, ci, ci.-cu : 9, ci, ci.-s, cu.-s, sl.-r
21	m	w	10, r : 5, ci.-cu, cu, ci	10, ci.-s, cu, v : vv, ci, ci.-cu : 10, vv, m
22	o	o : w	o : o : 1, ci	5, ci, cu, ci.-s : v : o, ms
23	w N	wN : sN,sp,g.-cur : w	10, h-r	10, c.-h.-r, gt.-glm : 10, c.-r
24	w	w : o	10, h.-r : 8, ci, ci.-cu, cu	6, cu, ci.-cu, ci: vv, l, t : o
25	o	wP, mN : w	10, ci.-s, v	7, oc.-shs, ci, ci.-cu, cu.-s : 5, ci, ci.-s, ms
26	w	m : o : w	m : 10, h	5, ci, ci.-cu, cu: o, v : o, ms
27	o	w : m	o : o, h.-d, h	o, v : 2, ci, ci.-cu
28	o	w : o : w	10, sl.-r : 10, s, ci.-s, sl.-r	10, ci, ci.-cu, ci.-s : 10
29	w	o	9, ci, ci.-cu, cu.-s	10, cu.-s, ci : 4, v, h, ci
30	o	o	4, ci, ci.-cu	5, ci, ci.-cu, ci.-s : o, d
31	w	o : w	3, ci, ci.-cu	10 : 10, ci.-s : 10,ci,ci.-cu,ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 65°·1 on the 28th; and the lowest was 45°·2 on the 1st.

The mean ,, was 53°·4, being 0°·4 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot409$, being $0^{in}\cdot009$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{grs}\cdot5$, being $0^{gr}\cdot1$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 80 (that of Saturation being represented by 100), being 3 *greater* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 529 grains, being *the same as* the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 7·0.

OZONE.

The mean amount for the month, on a scale ranging from o to 10, was 0·6.

WIND.

The proportions were of N. 4, S. 7, W. 13, E. 1, and Calm 6. The greatest pressure in the month was $6^{lbs}\cdot0$ on the square foot on the 17th.

RAIN.

Fell on 17 days in the month, amounting to $3^{in}\cdot97$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot60$ *greater* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 60 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Robinson's Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Sept. 1	..	29·969	70·6	55·2	61·4	51·2	118·0	49·1	64·8	64·2	10·2	18·7	0·0	+ 2·4	W : NW	NW : W	1·0	0·0	0·0	275	0·00
2	..	30·019	80·1	56·0	67·2	59·5	127·8	50·4	64·9	64·7	7·7	19·2	1·2	+ 8·5	W	NW : WSW	0·0	0·0	0·0	182	0·00
3	..	30·039	79·1	56·7	66·5	59·6	123·8	50·0	64·9	64·7	6·9	17·7	0·0	+ 8·1	WSW	WSW	0·0	0·0	0·0	105	0·00
4	..	29·978	81·7	54·9	66·1	61·6	131·8	50·3	65·9	65·3	4·5	18·9	0·0	+ 7·9	Calm	SW	0·0	0·0	0·0	136	0·00
5	Full	30·006	79·0	55·5	65·9	60·0	123·7	49·0	66·1	65·1	5·9	17·2	0·0	+ 7·9	WSW : W	WSW	0·0	0·0	0·0	160	0·00
6	In Equator: Perigee.	29·986	78·5	53·3	65·7	60·3	124·0	46·9	66·6	65·7	5·4	16·0	0·0	+ 7·8	SW	SW	0·0	0·0	0·0	81	0·00
7	..	29·882	83·7	56·7	69·4	62·3	124·5	50·4	66·9	66·7	7·1	19·7	0·0	+11·6	Calm	SW : Calm	0·0	0·0	0·0	96	0·00
8	..	29·789	86·0	59·3	72·1	58·8	130·5	57·7	66·9	66·9	13·3	27·2	0·0	+14·3	Calm	SW	0·0	0·0	0·0	232	0·00
9	..	29·933	76·1	58·7	66·2	54·4	123·8	54·2	67·8	67·6	11·8	18·2	2·9	+ 8·5	WSW : W	WSW	0·0	0·0	0·0	299	0·00
10	..	29·997	78·0	57·9	66·0	60·2	117·2	52·7	66·7	66·5	5·8	17·2	0·0	+ 8·3	WSW : W	W : WSW	3·0	0·0	0·3	353	0·00
11	..	30·182	76·6	63·0	67·8	62·2	106·2	59·4	66·5	66·3	5·6	11·4	2·7	+10·2	W	W	0·0	0·0	0·0	106	0·00
12	Last Quarter. Greatest Dec. N.	30·258	77·1	58·2	66·8	57·7	110·4	50·4	66·6	65·7	9·1	16·7	1·0	+ 9·3	Calm	SE : S	0·0	0·0	0·0	94	0·00
13	..	30·156	80·7	57·9	67·6	58·3	123·8	50·4	67·9	66·7	9·3	20·2	0·8	+10·3	SW	SW	0·0	0·0	0·0	80	0·00
14	..	30·109	80·0	52·3	65·6	57·0	125·3	47·0	..	..	8·6	20·7	0·0	+ 8·4	Calm	SE : E	0·0	0·0	0·0	141	0·00
15	..	30·038	84·5	54·8	69·0	54·5	127·3	44·4	..	..	14·5	30·9	0·0	+11·9	Calm : SSE	S by E	0·0	0·0	0·0	143	0·00
16	..	30·002	85·3	59·1	71·7	61·6	127·9	48·5	68·2	67·7	10·1	20·2	4·6	+14·8	S	W : N by E	0·0	0·0	0·0	133	0·00
17	..	30·140	79·1	56·6	66·6	57·7	124·0	56·6	67·9	67·7	8·9	19·2	0·0	+ 9·9	NNE	NNE : SE	0·0	0·0	0·0	99	0·00
18	..	30·274	77·6	52·8	63·6	55·7	123·3	52·8	67·4	66·7	7·9	19·6	0·0	+ 7·1	Calm	NE : SE	0·0	0·0	0·0	62	0·00
19	In Equator: New.	30·221	73·6	52·8	62·7	56·2	120·7	45·6	66·9	66·3	6·5	16·9	0·0	+ 6·5	Calm : SE	SE	0·0	0·0	0·0	124	0·00
20	..	29·958	81·2	49·6	64·1	52·1	127·0	42·6	66·4	65·7	12·0	26·4	0·0	+ 8·1	Calm	SW	0·0	0·0	0·0	205	0·00
21	..	30·053	63·7	54·0	57·0	52·6	77·0	47·5	..	..	4·4	10·3	0·8	+ 1·2	W : NNE	NNE	1·5	0·0	0·1	266	0·16
22	Apogee	30·217	66·2	51·6	57·5	48·8	111·2	45·0	65·9	65·4	8·7	15·6	2·8	+ 2·0	NNE	NNE	0·0	0·0	0·0	143	0·00
23	..	30·307	68·8	40·2	54·7	49·3	112·7	33·2	64·9	64·7	5·4	19·4	0·0	− 0·5	Calm : NE	NE	0·0	0·0	0·0	192	0·00
24	..	30·298	70·0	52·8	59·8	52·7	114·5	50·9	64·9	64·7	7·1	14·6	1·4	+ 4·8	NE : E	E	0·0	0·0	0·0	172	0·00
25	..	30·244	73·5	47·2	58·8	53·1	122·4	39·0	64·8	64·4	5·7	18·4	0·0	+ 4·0	Calm	ESE	0·0	0·0	0·0	157	0·00
26	..	30·089	76·0	49·8	61·3	52·6	120·3	42·4	64·6	64·4	8·7	22·3	0·0	+ 6·7	Calm	ESE	0·0	0·0	0·0	132	0·00
27	Greatest Declination S.	29·951	77·6	47·9	61·5	51·8	126·1	39·7	64·4	63·7	9·7	26·0	0·0	+ 7·1	Calm	ESE	0·0	0·0	0·0	88	0·00
28	First Qr.	30·046	74·0	43·5	57·7	51·7	115·3	34·8	63·9	63·7	6·0	19·7	0·0	+ 3·5	Calm	NE : SE	0·0	0·0	0·0	152	0·00
29	..	30·057	67·7	49·0	57·8	52·5	101·5	39·2	63·9	63·7	5·3	12·8	0·0	+ 3·7	Calm : ENE	ENE : Calm	0·0	0·0	0·0	160	0·00
30	..	29·943	67·4	52·3	58·5	51·4	113·4	45·1	63·4	63·2	7·1	12·8	2·2	+ 4·5	Calm : NE	NE : Calm	0·0	0·0	0·0	131	0·00
																				Sum	Sum
Means	..	30·071	76·4	53·6	63·9	55·9	119·2	47·5	65·9	65·5	8·0	18·8	0·7	+ 7·3	...	...	..	..	..	4699	0·16

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 30in·072 on the 3rd; the first minimum in the month was 29in·966 on the 4th.
The second maximum ,, was 30in·020 on the 5th; the absolute minimum ,, was 29in·762 on the 8th.
The third maximum ,, was 30in·286 on the 12th; the third minimum ,, was 29in·982 on the 16th.
The fourth maximum ,, was 30in·291 on the 19th; the fourth minimum ,, was 29in·880 on the 20th.
The absolute maximum ,, was 30in·323 on the 23rd; the fifth minimum ,, was 29in·933 on the 27th.
The sixth maximum ,, was 30in·081 on the 28th.
The range in the month was 0in·561.
The mean for the month was 30in·071, being 0in·254 *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 86°·0 on the 8th; the lowest was 40°·2 on the 23rd.
The range ,, was 45°·8.
The mean ,, of all the highest daily readings was 76°·4, being 9°·1 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 53°·6, being 4°·8 *higher* than the average of the preceding 24 years.
The mean daily range was 22°·8, being 4°·3 *greater* than the average of the preceding 24 years.
The mean for the month was 63°·9, being 7°·0 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Sept. 1	w	o : w	10, ci.-s, cu.-s, s, v	3, ci, ci.-cu, h : 10
2	o	o : w : m	10, ci, cu, ci.-s, cu.-s	6, ci, ci.-cu : 6, ci, ci-cu, ci.-s
3	w	o	o, h	3, ci, ci.-cu, h, v : o, d, h
4	w	o : w : o	3, ci, cu, h, d	4, ci, ci.-cu, cu : 4, ci, cu : o
5	w	w : o : w	10, ci.-s, s	7, ci, ci.-cu, h : vv, ci, ci.-cu : 2, lu.-co
6	m	o : w : o	o, h.-d	4, ci, ci.-cu : o : o, m
7	o	o : w	o : o, h	2, h, ci, ci.-cu : 3, ci, ci.-cu
8	o	o	o	o : o, v : v, th.-cl
9	o	w	v, t.-s, sl.-r : 4, ci, ci.-cu	4, ci, v : 10, th.-cl : 1, ci, ci.-cu
10	o	o	10, sl.-r : 10, ci, cu, ci.-s, cu.-s	8, ci, ci.-s, cu : v : o
11	o	o	10, cu.-s, sl.-r	10, ci, ci.-cu, cu.-s : 10, sl.-r, cu
12	o	o	10, th.-cl, ci, ci.-cu	7, ci, ci.-cu, cu, h, v : o
13	o	o	10, ci.-s, s	5, cu, ci.-cu, ci : o : o
14	w	w	o : o, h, sl.-f	o : o, ms
15	w	o : w	o, h.-d : o	o : o
16	w	o	9, ci, ci.-s, h	2, ci, ci.-cu, h, v : 8, li.-cl, h
17	w	w : o	1, ci, ci.-cu, h	o, h : o
18	o	o : w	o, h.-d, h	3, ci, ci.-cu, cu, h : o
19	w	o : w	o, th.-f : 2, ci, ci.-cu, h, d	1, ci, ci.-cu : o : o, m
20	w	w	o : o, h	o, h : o, h, ms
21	o	o	10, r : 10, sc, c.-r	10, ci.-s, cu.-s, ci, ci.-cu, v: 10
22	o	o	1, ci	2, ci, ci.-cu : o, m
23	o	o : w	o, f : 1, ci.-cu	4, ci, ci.-cu, cu.-s: o : 7, li.-cl
24	o	w : o	6, ci, ci.-cu, li.-cl	o : o, ms
25	o	o : w : o	o, f, h.-d	o : o
26	m	w : o	o, h.-d, f	o : o, ms
27	w	w	o, h.-d, f	o : o, m
28	w	o	o : o, h	o, h : 4, ci.-cu, cu, h : 4, ci.-cu, d, ms
29	o	o	10 : 10, cu, ci.-s, v	9, ci.-s, cu.-s, ci, ci.-cu : 6, cu, ci.-cu, m
30	o	o	9, ci, ci.-cu, cu.-s	8, ci, ci.-cu :v, ci, ci.-cu, cu.-s: o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 66°·3 on the 7th; and the lowest was 47°·8 on the 28th.

The mean „ was 55°·9, being 5°·0 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}·447$ being $0^{in}·069$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $5^{grs}·0$, being $0^{gr}·8$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 76 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 531 grains, being 3 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 3·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·4.

WIND.

The proportions were of N. 4, S. 6, W. 7, E. 5, and Calm 8. The greatest pressure in the month was $3^{lbs}·0$ on the square foot on the 10th.

RAIN.

Fell on 1 day in the month, amounting to $0^{in}·16$, as measured in the simple cylinder gauge partly sunk below the ground; being $2^{in}·28$ *less* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h AM. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h AM. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Oct. 1	..	29·812	70·6	52·3	59·0	52·2	118·2	48·7	62·9	62·7	6·8	20·9	0·2	+ 5·1	Calm	ESE	0·0	0·0	0·0	158	0·00
2	..	29·815	71·7	47·9	59·8	55·1	117·0	39·7	62·9	62·7	4·7	16·4	0·0	+ 6·0	Calm : ESE	ESE : E	0·0	0·0	0·0	164	0·00
3	In Equator	30·021	70·4	51·9	59·8	54·5	110·1	50·0	62·6	62·4	5·3	14·6	0·0	+ 6·1	E	ESE	0·0	0·0	0·0	133	0·00
4	Full	30·007	71·2	40·9	54·8	52·7	110·4	32·2	62·4	61·2	2·1	19·6	0·0	+ 1·3	Calm	ESE	0·0	0·0	0·0	163	0·00
5	Perigee	29·901	66·5	43·8	54·4	44·2	112·1	37·1	61·9	60·7	10·2	21·4	0·0	+ 1·1	Calm : ESE	ESE	0·5	0·0	0·0	156	0·00
6	..	29·861	66·4	41·5	54·2	46·5	110·7	30·4	60·8	59·7	7·7	14·8	0·0	+ 1·3	Calm : SE	SE : Calm	0·0	0·0	0·0	177	0·00
7	..	29·704	65·2	40·3	53·7	43·9	88·7	36·7	59·9	59·2	9·8	22·0	0·0	+ 1·2	Calm : SE	ESE	1·0	0·0	0·0	196	0·00
8	..	29·317	70·6	49·6	57·6	53·4	111·0	45·8	58·9	58·7	4·2	14·4	0·0	+ 5·5	Calm	SSE	1·5	0·0	0·0	143	0·10
9	Greatest Declination N.	29·207	66·2	54·6	58·9	57·6	81·7	50·7	59·9	59·7	1·3	6·8	0·0	+ 7·1	SSE	Calm : W	0·0	0·0	0·0	90	0·44
10	..	29·167	68·1	49·3	57·5	54·9	112·2	43·2	59·9	59·7	2·6	11·9	0·0	+ 5·9	Calm : SW	SW : S	0·0	0·0	0·0	200	0·18
11	Last Qr.	29·122	66·5	52·9	57·6	53·3	103·5	49·7	60·4	59·7	4·3	11·7	0·0	+ 6·2	SW	WSW	4·0	0·0	0·6	403	0·15
12	..	29·365	62·4	47·9	53·8	44·7	106·2	43·7	58·9	58·7	9·1	15·2	5·0	+ 2·6	W by S	W	10·0	0·0	1·0	261	0·00
13	..	29·526	62·6	39·4	50·9	47·7	104·1	31·0	57·9	57·7	3·2	12·9	0·0	0·0	W	W : N	0·0	0·0	0·0	124	0·00
14	..	29·790	61·8	43·9	51·1	48·5	108·0	36·9	57·4	57·2	2·6	11·8	0·0	+ 0·5	Variable	Calm	0·0	0·0	0·0	74	0·02
15	..	29·814	53·2	46·8	49·1	47·0	65·0	44·6	..	..	2·1	3·6	0·0	— 1·2	Calm	N	0·0	0·0	0·0	106	0·09
16	In Equator	29·686	58·8	41·0	49·8	47·8	81·2	37·8	..	..	2·0	8·0	0·0	— 0·2	WSW	SW	0·0	0·0	0·0	216	0·00
17	..	29·127	63·4	47·8	53·1	49·0	109·5	42·0	..	..	4·1	10·8	0·0	+ 3·3	SW : W	WSW : SW	3·0	0·0	0·4	207	0·34
18	..	28·909	54·5	43·8	49·0	49·0	72·0	36·5	..	..	0·0	3·2	0·0	— 0·6	SSW : Calm	NE	2·2	0·0	0·0	301	0·46
19	Apogee; New.	28·990	51·9	39·9	42·6	41·0	51·9	33·8	53·9	53·7	1·6	3·5	0·9	— 6·7	NNE : N	NW	5·0	0·0	1·2	338	1·06
20	..	29·349	53·1	33·5	42·9	37·8	97·2	28·2	52·9	52·7	5·1	11·8	0·0	— 6·2	W	WNW : W	2·5	0·0	0·2	219	0·00
21	..	29·486	46·6	34·6	41·3	41·1	55·7	25·3	51·9	51·7	0·2	2·5	0·0	— 7·6	W : Calm	ENE : Calm	0·0	0·0	0·0	140	0·14
22	..	29·252	51·0	42·1	46·4	46·4	53·5	40·0	50·9	50·7	0·0	0·8	0·0	— 2·3	E : ENE	NE	0·0	0·0	0·0	195	1·11
23	..	29·501	51·0	45·1	47·1	45·6	59·1	43·0	50·9	50·7	1·5	3·1	0·0	— 1·4	NE	NNE : Calm	0·0	0·0	0·0	124	0·19
24	Greatest Declination S.	29·412	59·8	45·4	51·4	47·7	116·0	44·1	50·8	50·6	3·7	10·8	0·0	+ 3·2	Calm : SW : W	W : SW	7·0	0·0	0·6	466	0·10
25	..	29·450	56·7	42·6	48·7	40·6	93·1	33·0	49·9	49·7	8·1	12·0	3·1	+ 0·8	W	WNW : NW	20·0	0·0	3·0	343	0·00
26	..	29·219	57·2	38·9	48·0	47·8	57·3	31·0	48·9	48·7	0·2	1·9	0·0	+ 0·4	SW : S	SW : WSW	7·0	0·0	0·7	380	0·72
27	First Qr.	28·865	57·7	42·2	47·7	44·4	104·8	36·1	49·8	49·4	3·3	11·2	0·2	+ 0·4	SW	WSW	12·5	0·0	0·3	321	0·06
28	..	29·557	46·3	33·9	39·1	32·7	87·0	28·7	49·9	49·7	6·4	9·9	2·5	— 7·9	N	NNW : SW	3·0	0·0	0·2	268	0·02
29	..	29·133	57·8	33·7	44·4	41·3	60·0	28·1	47·9	47·7	3·1	6·7	0·7	— 2·4	S : SSW	SW : WSW	13·0	0·0	2·1	425	0·13
30	..	29·039	51·6	44·0	47·0	44·0	67·7	39·7	47·9	47·7	3·0	5·9	0·9	+ 0·4	SW	SW	6·0	0·0	0·2	235	0·45
31	In Equator	29·243	49·6	43·3	45·9	44·6	56·7	40·7	47·8	47·6	1·3	4·8	0·0	— 0·6	NE	N	2·0	0·0	0·2	311	0·14
Means	..	29·440	60·0	43·7	50·9	47·0	89·7	38·3	55·6	55·2	3·9	10·5	0·4	+ 0·7	...	...	..	..	..	Sum 7037	Sum 5·90

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30in·074 on the 3rd; the second maximum ,, was 29in·870 on the 15th; the third maximum ,, was 29in·505 on the 21st; the fourth maximum ,, was 29in·561 on the 23rd; the fifth maximum ,, was 29in·722 on the 25th; the sixth maximum ,, was 29in·698 on the 28th; the seventh maximum ,, was 29in·150 on the 29th; the eighth maximum ,, was 28in·992 on the 30th.

The first minimum in the month was 29in·788 on the 1st.
The second minimum ,, was 29in·089 on the 11th.
The third minimum ,, was 28in·886 on the 18th.
The fourth minimum ,, was 29in·220 on the 22nd.
The fifth minimum ,, was 29in·258 on the 24th.
The absolute minimum ,, was 28in·849 on the 27th.
The seventh minimum ,, was 29in·003 on the 29th.
The eighth minimum ,, was 28in·992 on the 30th.

The range in the month was 1in·225.

The mean for the month was 29in·440, being 0in·256 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 71°·7 on the 2nd; the lowest was 33°·5 on the 20th; and the range in the month was 38°·2.

The mean ,, of all the highest daily readings was 60°·0, being 1°·3 *higher* than the average of the preceding 24 years.

The mean ,, of all the lowest daily readings was 43°·7, being 0°·4 *lower* than the average of the preceding 24 years.

The mean daily range was 16°·3, being 1°·7 *greater* than the average of the preceding 24 years.

The mean for the month was 50°·9, being 0°·4 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
Oct. 1	o	o	o, h.-d, h : 5, li.-cl, h	o : o
2	o	o	o, th.-f : 9, h.-d, v	o : o, h.-d
3	w	o : w	9, li.-cl, sc, h.-d	1, ci : o, li.-sc, h.-d
4	w	w : o	10, th.-f	2, li.-cl : o : o, h.-d
5	w	w	o : o	o : o, h.-d
6	w	o : w	o, d	o : o
7	w	o	o, h.-d : o	o : v, ci, ci.-cu, m
8	o	o	v : 10, oc.-r : 10, s, ci.-s, sl.-r	7, cu, ci.-cu, cu.-s : 10, l, r : 10, h.-r
9	o	o : w	7, ci.-cu, ci.-s, ci, sl.-r	10, oc.-r : 10, h.-r : 10, c.-h.-r
10	o	o : w : o	10, c.-r : 10, cu.-s, s	5, ci, ci.-cu, cu.-s, oc.-r : 10, c.-r
11	o	o	10, c.-r : vv, oc.-shs	10, cu.-s, cu, n, sl.-r : v, cu, ci : v, l
12	o	o	8, cu, ci.-cu, ci	6, cu, ci.-cu, ci.-s : o : o, m
13	o	w : o	o, h.-d, sl.-f, h	5, ci, ci.-cu, h : v, th.-cl, m : 10, th.-cl, h.-d
14	o	o	4, th.-f, h.-d, ci	9, ci.-cu : 10, th.-f : 10, oc.-r
15	o	o	10, sl.-r : 10	10 : 9, v : 8, ci, cu, ci.-s, h.-d
16	w	w : o	10, th.-f	10, ci, ci.-s : 10, sl.-r
17	o	sP, sN, sps, g.-cur : w	10, sl.-r : 10, h.-r : 8, ci.-cu, cu, ci	6, ci.-cu, cu, vv, r : o
18	o	o : wN	10, h.-d, sl.-f, r	10, c.-r : 10, c.-r, oc.-h.-shs
19	o	o	10, h.-r : 10, c.-h.-r, sc	10, c.-h.-r, sc : o, m
20			o, h	5, ci.-cu, ci.-s, cu : o
21			10, r	10, sl.-r : vv, ci.-cu : 10, sl.-f, h.-d
22			10 : 10, h.-r	10, th.-r sc : 10, h.-r : 10, c.-h.-r
23			10, c.-r : 10, c.-r	10, oc.-r : 10, oc.-r
24			10, r : 10, c.-r : 10	3, ci, ci.-cu : v, shs.-r : o
25			2 ci, ci.-cu, cu.-s	9, ci, ci.-s, cu.-s : o
26			o : 10, h.-r	10, c.-h.-r : o, v, l
27			2, ci	4, v, h.-r, w : v, ci.-s, ci.-cu, cu.-s, l : 7, ci.-s, l, sl.-r
28			10, r : 7, ci, ci.-s, ci.-cu	1, ci, ci.-cu, h : 10, ci.-s, lu.-co
29			10 : 10, r	10, c.-r : v : 4, ci
30			10, r	10, c.-r : v, th.-r, l : 10, h.-r
31			10, th.-r : 10, th.-r	10, oc.-r : 10 : 7, ci.-cu

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 60°·0 on the 9th; and the lowest was 30°·8 on the 28th.

The mean ,, was 47°·0, being 0°·7 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot323$, being $0^{in}\cdot007$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{grs}\cdot6$, being $0^{gr}\cdot1$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 87 (that of Saturation being represented by 100), being *the same as* the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 533 grains, being 6 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 6·2.

OZONE.

The mean amount for the month, on a scale ranging from o to 10, was 0·8.

WIND.

The proportions were of N. 3, S. 7, W. 8, E. 5, and Calm 8. The greatest pressure in the month was $20^{lbs}\cdot0$ on the square foot on the 25th.

RAIN.

Fell on 19 days in the month, amounting to $5^{in}\cdot90$, as measured in the simple cylinder gauge partly sunk below the ground; being $3^{in}\cdot14$ *greater* than the average fall of the preceding 50 years.

ELECTRICITY.—The electrical apparatus was out of action from October 20 to 31.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure in lbs. on the square foot. Least.	Pressure in lbs. on the square foot. Mean of 24 Obs.	Robinson's. Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Nov. 1	..	29·746	45·5	33·0	39·1	37·6	74·1	..	43·9	43·7	1·5	7·3	0·0	− 7·3	NW : W	W	0·0	0·0	0·0	160	0·01
2	Perigee	29·846	51·4	31·2	41·4	36·7	91·9	25·4	44·9	44·7	4·7	13·2	0·0	− 4·9	WSW	SW : S	0·0	0·0	0·0	149	0·00
3	Full	29·912	49·5	36·7	42·0	38·6	79·0	30·4	43·9	43·7	3·4	7·6	0·0	− 4·1	N : NW	NNW : WNW	0·0	0·0	0·0	139	0·19
4	..	30·026	47·2	31·7	37·8	35·6	67·8	24·0	43·9	43·7	2·2	8·0	0·0	− 8·1	W	Calm : NNE	0·0	0·0	0·0	61	0·00
5	..	30·054	49·6	31·0	38·9	36·7	95·0	25·1	43·9	43·7	2·2	8·8	0·0	− 6·8	Calm	NNE	0·0	0·0	0·0	169	0·00
6	Greatest Declination N.	30·028	47·8	32·7	41·3	37·9	60·0	25·0	43·4	42·7	3·4	8·0	0·0	− 4·2	NNE	NNE	1·0	0·0	0·0	274	0·00
7	..	29·933	45·5	37·9	42·3	38·8	50·5	35·0	43·4	42·7	3·5	5·3	1·4	− 3·0	NNE	NNE	3·0	0·0	0·4	327	0·01
8	..	29·815	51·9	41·3	46·1	42·5	94·9	40·1	43·9	43·7	3·6	6·1	0·4	+ 1·1	NNE : NE	NE	1·5	0·0	0·2	291	0·12
9	..	29·843	50·9	39·7	45·0	41·2	90·9	34·0	44·4	43·7	3·8	6·8	0·9	+ 0·3	NE	NE	1·7	0·0	0·2	242	0·02
10	Last Qr.	30·092	49·3	34·9	41·3	35·1	84·2	27·3	46·9	43·5	6·2	12·4	0·3	− 3·1	NNE	NNW : WSW	0·0	0·0	0·0	190	0·00
11	..	30·137	47·2	33·0	41·8	38·4	52·1	26·8	45·4	42·7	3·4	7·6	0·0	− 2·3	SW	WSW	0·0	0·0	0·0	172	0·00
12	..	30·294	50·2	40·5	44·7	40·1	80·9	34·5	44·9	43·2	4·6	8·4	0·0	+ 0·9	WSW : Calm	Calm : SE	0·0	0·0	0·0	182	0·00
13	In Equator	30·225	47·8	37·4	42·2	34·7	92·1	32·0	43·9	42·7	7·5	12·2	2·8	− 1·3	SE	SE	2·5	0·0	0·4	229	0·00
14	..	29·955	52·6	34·4	45·0	43·7	63·0	29·5	44·4	42·7	1·3	4·8	0·0	+ 1·8	SE	S : SSW	0·0	0·0	0·0	245	0·00
15	Apogee	30·098	52·8	37·3	45·3	41·4	66·0	32·0	44·4	42·7	3·9	9·9	0·0	+ 2·4	SW : NW	NW : SW	0·3	0·0	0·0	155	0·02
16	..	30·090	49·2	32·1	41·9	40·0	80·5	27·4	43·9	42·3	1·9	6·3	0·0	− 0·7	Calm	SSE	0·0	0·0	0·0	238	0·00
17	..	29·628	55·5	44·7	51·0	50·5	57·8	44·7	45·4	42·2	0·5	3·0	0·0	+ 8·7	SSW	SW : W	6·5	0·0	0·4	297	0·37
18	New	30·005	49·3	38·8	43·6	39·8	58·3	33·0	45·9	43·7	3·8	5·7	0·0	+ 1·6	WNW : W	SW : S	0·0	0·0	0·0	245	0·00
19	..	29·679	53·6	45·0	50·4	49·5	54·0	40·0	45·9	43·7	0·9	2·2	0·0	+ 8·6	S : SSW	SSW	3·0	0·0	1·1	469	0·18
20	Greatest Declination S.	29·438	56·2	48·9	52·3	49·6	64·1	46·9	44·9	42·7	2·7	4·8	0·0	+10·7	SW	SW	3·8	0·0	0·7	347	0·19
21	..	29·173	55·7	46·5	50·8	47·3	80·8	45·6	44·9	42·6	3·5	5·9	0·0	+ 9·4	SW	SSW	6·0	0·0	0·6	414	0·15
22	..	28·898	55·5	43·6	50·4	45·2	74·1	43·0	..	..	5·2	8·0	3·3	+ 9·2	SSW	SW	25·0	0·0	4·7	632	0·32
23	..	29·313	54·2	42·4	49·2	45·3	77·8	41·4	..	..	3·9	8·2	0·0	+ 8·1	WSW	SW : SSE	9·0	0·0	0·8	354	0·05
24	..	29·247	56·4	44·8	50·0	44·5	80·7	44·5	..	..	5·5	8·9	0·0	+ 9·0	SW	SW : SSW	21·0	0·0	2·2	440	0·01
25	..	29·051	54·0	44·7	50·8	46·1	61·6	44·6	..	..	4·7	8·2	2·3	+ 9·9	SSE	SSE : S	11·0	0·0	1·1	504	0·08
26	First Qr.	29·222	51·0	41·3	45·6	39·3	81·0	35·2	..	..	6·3	9·7	3·5	+ 4·7	SSW : SW	SW : S	11·5	0·0	0·3	220	0·30
27	In Equator	29·557	48·8	32·6	40·6	38·4	78·1	31·1	..	..	2·2	7·6	0·0	− 0·5	S : E	SE	0·0	0·0	0·0	237	0·00
28	..	29·051	49·5	43·5	46·4	44·3	61·0	39·9	..	..	2·1	3·6	0·0	+ 5·1	SE	SE	2·6	0·0	0·4	196	0·28
29	..	29·438	47·5	40·3	43·8	40·9	51·0	38·8	..	..	2·9	3·7	0·0	+ 2·2	WSW	WSW : SW	0·5	0·0	0·0	222	0·04
30	..	29·806	48·8	38·8	43·7	42·4	59·2	37·4	..	..	1·3	3·4	0·2	+ 1·8	SW : N	N	0·0	0·0	0·0	138	0·05
																				Sum	Sum
Means	..	29·720	50·8	38·7	44·8	41·4	72·1	35·0	44·6	43·2	3·4	7·2	0·5	+ 1·6	...	...	..	..	..	7938	2·39

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·877 on the 2nd; the first minimum in the month was 29in·814 on the 2nd.
The second maximum ,, was 30in·073 on the 5th; the second minimum ,, was 29in·798 on the 8th.
The absolute maximum ,, was 30in·325 on the 12th; the third minimum ,, was 29in·931 on the 14th.
The fourth maximum ,, was 30in·220 on the 15th; the fourth minimum ,, was 29in·543 on the 17th.
The fifth maximum ,, was 30in·024 on the 18th; the absolute minimum ,, was 28in·822 on the 22nd.
The sixth maximum ,, was 29in·357 on the 23rd; the sixth minimum ,, was 29in·157 on the 24th.
The seventh maximum ,, was 29in·430 on the 24th; the seventh minimum ,, was 28in·926 on the 25th.
The eighth maximum ,, was 29in·602 on the 27th; the eighth minimum ,, was 28in·990 on the 28th.

The range in the month was 1in·503.

The mean for the month was 29in·720, being 0in·029 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 56°·4 on the 24th; the lowest was 31°·0 on the 5th.
The range ,, was 25°·4.
The mean ,, of all the highest daily readings was 50°·8, being 1°·7 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 38°·7, being 1°·3 *higher* than the average of the preceding 24 years.
The mean daily range was 12°·1, being 0°·4 *greater* than the average of the preceding 24 years.
The mean for the month was 44°·8, being 0°·8 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Nov. 1			5, ci, cu : ci.-s, h.-fr, h	10, sl.-r : 10, h.-d, sl.-f
2		o : w	0, h, h.-fr	7, ci : 6, ci, ci.-s, v : 10, v
3	o	o : w	10, h.-r : 0, h, f	2, ci, h : 0, th.-f, h.-fr
4	o	w : o	0, th.-f, h.-fr	0, h, f : 0, f
5	o	w	0, th.-f : 6, ci.-s, ci.-cu, cu, f	3, v, ci, ci.-cu : o : 0, h.-fr
6	w	w	9, ci, ci.-s, h.-fr	10, sl.-r : v, ci.-s : 3, h.-d, ci.-s
7	w	o	10, d, sl.-r	10, ci.-s, oc.-shs : 10, oc.-shs
8	o	o : w	10, h.-shs : 0, ci, v	10, cu.-s, ci.-s : vv, th.-cl, m
9	o	o : sN,sp,g.-cur : w	2, li.-cl, ci	10, oc.-shs : 0, ms
10	o	w : o	0 : 0	0 : 2, ci, ci.-cu : 0, f
11	m	m	0, d : 10, cu.-s, s, sl.-f	10, ci.-s : 10, ci.-s
12	m	m	0, sl.-f	0 : 0 : 4, ci, ms
13	m	w : o	0, ms : 0	2, ci : 0
14	w	m : o : w	10, h.-fr	10 : 10, m.-r
15	w	w : o : w	10, oc.-shs : 10, oc.-shs, v	4, ci, ci.-cu, cu.-s : 0, m
16	w	m	10, ci, ci.-cu, s, h.-fr	10 : 9, ci, ci.-s : 10
17	o	wN : o	10, r	10, c.-r : 10 : 0, m
18	w	w : m	0 : 0, v	9, li.-cl, h : 0, ms : 0, m
19	w	w : o	10, sl.-r	10, w, shs.-r : 10, oc.-r
20			10, oc.-r : 10, sc, oc.-r	9, v, ci, ci.-s, cu : 10, sl.-r, cu, cu.-s, s
21			10, r : 10, r	10, ci,ci.-s,cu.-s,v,sl.-r,m: v, oc.-shs, m
22			8, cu.-s, ci.-s, sc, r, vv, st.-w	5, ci,ci.-cu,cu,st.-w,sc,shs.-r : 0, l, w, m
23			5, li.-cl, ci, w	10, ci, ci.-cu, ci.-s, h : 10, ci.-s, oc.-r
24			10, vv, oc.-shs, ci, li.-cl, sc, st.-w	2,li.-cl,st.-w,oc.-shs: 0, ms : 0, l, ms
25			10, ci, ci.-s, th.-cl	10, sc.-r : 10, oc.-shs, w
26			10, h.-sqs, r : 0, v, li.-cl	3, li.-cl : 1, li.-cl, d, m
27			0, f, h.-fr	4, li.-cl, ci : vv, th.-cl : 10, th.-cl, sl.-r
28	o	o : wN : w	8, ci.-s, oc.-shs	10, sc, r : 10, oc.-shs
29	o	o : m	10 : 10, oc.-r	10, oc.-r : 10, sl.-r
30	w	m	10 : gt.-glm	10 : 8, ci, cu, ci.-s : 10, th.-cl, v

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 53°·4 on the 17th; and the lowest was 32°·8 on the 4th.

The mean ,, was 41°·4, being 1°·5 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot261$, being $0^{in}\cdot009$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{grs}\cdot0$, being $0^{gr}\cdot2$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 546 grains, being 2 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·8.

WIND.

The proportions were of N. 5, S. 11, W. 7, E. 4, and Calm 3. The greatest pressure in the month was $25^{lbs}\cdot0$ on the square foot on the 22nd.

RAIN.

Fell on 18 days in the month, amounting to $2^{in}\cdot39$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot04$ *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The Electrical apparatus was not in action on November 1, and from November 20 to 27.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	Robinson's. Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Dec. 1	Perigee	29·858	48·5	40·8	44·3	41·9	67·8	38·0	..	..	2·4	4·8	0·0	+ 2·2	NNE	E	0·0	0·0	0·0	134	0·05
2	Full	29·622	45·0	37·6	41·6	37·5	70·0	31·8	..	..	4·1	5·5	0·7	+ 0·6	SE	SE	1·0	0·0	0·0	187	0·00
3	Greatest Declination N.	29·405	46·8	37·3	42·0	40·1	57·7	33·0	..	..	1·9	4·2	0·9	— 0·3	SE	SE	0·0	0·0	0·0	212	0·01
4	..	29·169	50·9	39·2	46·3	42·8	65·1	34·7	..	..	3·5	7·3	0·0	+ 4·1	SE	SSE : SW	4·0	0·0	0·4	291	0·03
5	..	29·543	49·5	41·3	45·9	42·9	56·1	37·4	46·0	43·7	3·0	5·3	0·0	+ 3·7	SW : S	S	0·0	0·0	0·0	186	0·01
6	..	29·860	51·9	44·9	48·7	47·2	58·5	44·1	46·0	42·7	1·5	4·0	0·0	+ 6·6	S	S	1·8	0·0	0·1	302	0·01
7	..	30·097	52·7	48·9	50·5	48·6	53·2	47·7	45·5	43·7	1·9	2·6	0·0	+ 8·5	SSW	SW	2·5	0·0	0·2	147	0·16
8	..	30·392	51·3	43·3	46·9	44·1	58·4	39·3	45·7	44·7	2·8	4·2	1·1	+ 5·2	W : Calm	SW : Calm	0·0	0·0	0·0	74	0·00
9	..	30·360	47·7	42·6	45·1	43·8	52·5	40·5	46·0	45·2	1·3	2·1	0·0	+ 3·8	W : Calm	Calm	0·0	0·0	0·0	62	0·00
10	Last Quarter; In Equator.	30·449	44·8	38·5	42·1	40·2	51·0	35·8	46·0	45·7	1·9	4·0	0·0	+ 1·1	Calm	WSW : Calm	0·0	0·0	0·0	68	0·00
11	..	30·528	46·9	35·0	41·9	37·5	63·9	31·0	46·0	45·2	4·4	6·4	0·0	+ 1·2	Calm	NE	0·0	0·0	0·0	137	0·00
12	..	30·446	43·3	34·5	39·9	34·0	52·8	31·8	45·0	44·7	5·9	8·1	0·3	— 0·7	NE	NE	1·0	0·0	0·0	151	0·00
13	Apogee	30·330	40·5	32·7	36·9	32·7	57·8	26·8	45·0	43·7	4·2	6·0	0·3	— 3·6	NNE	N by E	0·0	0·0	0·0	121	0·00
14	..	30·298	44·6	34·9	40·4	35·8	52·2	28·4	45·5	43·4	4·6	6·8	0·5	0·0	N : NW	NNW	0·6	0·0	0·0	265	0·00
15	..	30·555	42·7	35·1	38·4	32·9	48·9	30·7	45·0	42·7	5·5	9·0	2·6	— 1·8	N by E	N	1·0	0·0	0·0	188	0·00
16	..	30·500	43·5	29·9	38·4	35·0	48·2	24·2	43·0	41·7	3·4	5·5	0·0	— 1·6	W by S	W : NW	0·0	0·0	0·0	144	0·00
17	..	30·465	45·2	40·0	43·5	36·6	45·5	39·1	42·0	40·7	6·9	8·1	1·4	+ 3·7	Calm : N	N	0·0	0·0	0·0	83	0·00
18	Greatest Dec. S. New.	30·318	44·3	38·9	41·2	37·6	49·2	33·3	42·0	40·7	3·6	5·7	1·2	+ 1·6	Calm	SE	0·0	0·0	0·0	58	0·00
19	..	30·119	47·0	37·7	42·6	40·1	78·5	35·0	42·0	40·7	2·5	4·8	0·0	+ 3·2	Calm : SE	S by E	0·0	0·0	0·0	227	0·00
20	..	30·081	48·5	39·0	44·7	43·2	53·4	37·1	43·9	41·2	1·5	3·4	0·0	+ 5·6	SW	SW	2·6	0·0	0·3	262	0·00
21	..	30·160	51·3	42·1	47·6	44·5	79·0	39·0	44·0	41·7	3·1	5·7	0·0	+ 8·8	SW	SW	1·5	0·0	0·1	264	0·00
22	..	30·196	48·9	37·5	40·3	35·3	49·0	36·6	42·0	41·2	5·0	9·3	2·8	+ 1·8	S : SSE	SW	0·0	0·0	0·0	155	0·00
23	..	30·253	42·0	34·8	38·7	35·2	47·0	34·8	41·2	40·3	3·5	5·7	1·8	+ 0·6	SW : S	S	0·0	0·0	0·0	87	0·00
24	In Equator.	30·276	35·7	29·2	32·3	31·6	39·2	29·1	41·0	40·6	0·7	2·2	0·0	— 5·5	SSE	Calm	0·0	0·0	0·0	112	0·00
25	First Qr.	30·255	47·2	34·7	42·4	41·1	51·8	34·7	42·0	40·7	1·3	2·5	0·3	+ 4·8	SW	SW	0·5	0·0	0·0	305	0·00
26	..	30·090	48·8	39·5	45·5	43·5	56·2	36·0	43·0	41·7	2·0	5·0	0·0	+ 8·1	SW	SSW : SW	1·5	0·0	0·2	226	0·02
27	..	30·161	43·7	34·1	36·9	35·8	46·0	28·1	43·0	41·7	1·1	2·3	0·0	— 0·4	NW : Calm	Calm	0·0	0·0	0·0	144	0·00
28	..	29·769	48·7	37·3	44·3	41·8	51·0	35·4	43·3	41·8	2·5	4·6	0·0	+ 7·1	S : SW	SW	8·8	0·0	0·8	578	0·04
29	Perigee	29·246	50·9	41·4	47·1	43·8	62·8	40·0	43·9	42·9	3·3	7·4	0·0	+ 9·8	SW	SW	22·5	0·0	4·8	589	0·31
30	..	29·585	43·8	36·0	40·2	33·2	80·0	31·0	44·0	43·2	7·0	9·2	2·3	+ 2·8	WSW	WSW : SW	10·0	0·0	0·2	633	0·00
31	Greatest Declination N.	29·332	50·8	43·8	47·7	41·9	53·8	35·4	43·7	42·2	5·8	10·6	3·0	+10·2	SW	SW	22·5	0·0	6·0	451	0·23
Means	..	30·055	46·7	38·1	42·7	39·4	56·7	34·8	43·9	42·5	3·3	5·6	0·6	+ 2·9	...	...	..	..	..	Sum 6843	Sum 0·87

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·912 on the 1st; the first minimum in the month was 29in·145 on the 4th.
The second maximum ,, was 30in·404 on the 8th; the second minimum ,, was 30in·341 on the 9th.
The third maximum ,, was 30in·539 on the 11th; the third minimum ,, was 30in·284 on the 14th.
The absolute maximum ,, was 30in·610 on the 15th; the fourth minimum ,, was 30in·042 on the 20th.
The fifth maximum ,, was 30in·296 on the 25th; the fifth minimum ,, was 30in·069 on the 26th.
The sixth maximum ,, was 30in·243 on the 27th; the absolute minimum ,, was 29in·023 on the 29th.
The seventh maximum ,, was 29in·682 on the 30th; the seventh minimum ,, was 29in·318 on the 31st.
The range in the month was 1in·587.
The mean for the month was 30in·055, being 0in·232 *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·7 on the 7th; the lowest was 29°·2 on the 24th.
The range ,, was 23°·5.
The mean ,, of all the highest daily readings was 46°·7, being 1°·5 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 38°·1, being 2°·5 *higher* than the average of the preceding 24 years.
The mean daily range was 8°·6, being 1°·0 *less* than the average of the preceding 24 years.
The mean for the month was 42°·7, being 2°·4 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Dec. 1	w N	w : ss,v,g.-cur,sps : w	10, cu.-s, oc.-r	10, cu.-s, ci.-s, ci.-cu, oc.-r : 10, ci, cu, cu.-s, sl.-r
2	m	w	6, ci, ci.-s	6, ci, ci.-cu, ci.-s, v : vv, m
3	o	w	10, sl.-r	5, ci, ci.-cu, cu.-s, v, sl.-r : v, ci, ci.-cu
4	w	w	10	9, ci, ci.-s : 10, sqs, r, w, cu.-s
5			10, s, ci.-s, ci, sl.-r	10, s, cu.-s, ci.-s, v : 10, ci.-s : 10, ci.-s
6			10 : 10	10, sl.-r : 10, sl.-r
7			10 : 10, th.-r, glm	10, r : 10, glm : 10
8		w : w	10, glm	10, ci.-s, cu.-s : 10
9	w	o : w	10, glm	10, sl.-f, gt.-glm : 10
10	m	m : o	10, ci.-cu, cu.-s, glm	10, ci.-cu, cu.-s, ci.-s : 10, f
11	m	w : m	10 : 10, cu.-s, ci.-cu, ci.-s, h	2, ci.-cu, ci : 9, th.-cl, v, ms : 10, li.-cl
12	w	m	10 : 9, li.-cl	10, ci, ci.-cu, ci.-s : 10, ci, ci.-s, cu.-s : 5, ci, ci.-s
13	w	m	2, ci, h	2, h, ci : 10 : 10, th.-r
14	w	m : w	3, li.-cl, h, sl.-f	3, li.-cl, h : 3, ci, ci.-cu, sl.-f : 0, ms
15	o	w : o	9, ci, ci.-cu, ci.-s	10, ci, -cu, cu.-s, ci : s, v : 10, li.-cl, h
16	m	w : o	10, sl.-f	10, li.-cl, h : 10, th.-cl, h, glm : 10
17	o	w	10, f, li.-cl	10, f : 10, f
18	w	m	10, li.-cl, ci, ci.-cu, sl.-f	10, ci, ci.-s, sl.-f : 7, li.-cl, ci : 10, f
19	w	m : w	8, ci, ci.-s, ci.-cu, cu.-s	10, ci, ci.-s, v : 10, ci.-s, v
20	w	w	10, sl.-r	6, ci.-s, cu.-s, sc, v : 0, m : 10, sl.-r, f
21	w	o : w : o	0	10, s, ci.-s : 8, s, cu.-s, ci.-s : 10, li.-cl
22	w	o : w : o	10, s, ci.-s	10, th.-cl : 10, ci.-s
23	w	w	10 : 10, ci, ci.-cu	10 : 10
24	w	w : m	10 : 10, f	10, sl.-f : 10, f
25	o	w	10	10 : 8, th.-cl
26	o	w	10, sc	10, sc : v, h, sc, th.-r : 8, ci, ci.-cu, sc, h, lu.-co
27	m	m	6, li.-cl, h, f	6, li.-cl, ci, sl.-f : v, th.-cl, ci, ci.-cu : 10, th.-cl, sl.-f
28	o	o	10, r : 10, sc, s, v	10, v, sc : 4, ci, ci.-cu, oc.-r : 10, th.-r, w
29			10, r, w : v, h.-shs, w, sc	vv, c.-r, sc, st.-w : 10, c.-r, fr.-sqs, w
30			0, ci	0 : 0 : 1, ci, ci.-cu, lu.-ha
31			10, fr.-sqs, r, st.-w	10, oc.-shs, st.-w : 10, oc.-shs

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 49°·4 on the 7th; and the lowest was 30°·4 on the 24th.

The mean „ was 39°·4, being 2°·4 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot241$, being $0^{in}\cdot019$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{grs}\cdot8$, being $0^{grs}\cdot2$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being *the same as* the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 554 grains, being 2 grains *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 8·3.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·8.

WIND.

The proportions were of N. 5, S. 11, W. 8, E. 3, and Calm 4. The greatest pressure in the month was $22^{lbs}\cdot5$ on the square foot on the 29th and 31st.

RAIN.

Fell on 10 days in the month, amounting to $0^{in}\cdot87$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot02$ *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The Electrical apparatus was not in action from December 5 to 7, and December 29 to 31.

MAXIMA AND MINIMA READINGS OF THE BAROMETER.

The following table contains the highest and lowest readings of the Barometer, reduced to 32° Fahrenheit, extracted from the photographic records. The readings are accurate; but the times are liable to great uncertainty, as the barometer frequently remains at its highest or lowest point through several hours. The time given is the middle of the stationary period. Where the symbol : follows the time, it denote that the quicksilver has been sensibly stationary through a period of more than one hour.

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Approximate Mean Solar Time, 1865.	Reading.	Approximate Mean Solar Time, 1865.	Reading.	Approximate Mean Solar Time, 1865.	Reading.	Approximate Mean Solar Time, 1865.	Reading.
d h m	in.	d h m	in.	d h m	in.	d h m	in.
January 1. 9. 30:	29·860	January 2. 17. 20:	29·235	April 20. 10. 40:	30·061	April 21. 5. 40:	29·928
4. 22. 15:	29·962	5. 14. 45:	29·560	23. 21. 50:	30·126	28. 3. 10	29·776
6. 22. 40:	30·207	8. 14. 30:	29·534	28. 21. 15	29·938	May 3. 10. 35:	29·642
10. 21. 15	29·718	12. 16. 5:	28·842	May 3. 22. 20	29·737	5. 1. 45	29·512
13. 2. 10	29·026	13. 23. 55	28·390	6. 10. 25:	29·906	7. 1. 0	29·796
14. 22. 30	28·979	16. 2. 55	28·809	7. 1. 42	29·839	7. 2. 7	29·711
20. 22. 20:	29·517	21. 19. 10:	29·415	7. 4. 47	29·834	7. 5. 15	29·699
22. 22. 45:	29·706	23. 17. 40	29·414	7. 9. 22	29·833	9. 23. 50	29·343
24. 22. 15:	29·555	26. 20. 25:	28·841	12. 21. 20	29·876	15. 3. 40	29·446
28. 10. 30:	29·865	February 0. 18. 20:	28·718	19. 19. 45	30·225	22. 4. 55	29·771
February 6. 0. 0	29·827	7. 3. 5	29·665	22. 21. 45	29·858	23. 3. 43	29·775
10. 0. 0	30·432	16. 13. 45:	28·916	24. 21. 35:	29·984	27. 15. 45	29·676
17. 0. 35	29·280	17. 6. 5:	29·190	28. 10. 35:	29·851	29. 16. 40	29·487
17. 23. 35	29·551	19. 2. 50	29·007	30. 19. 36	29·807	June 1. 17. 25:	29·428
20. 21. 55	30·266	21. 11. 50:	30·050	June 7. 21. 0	30·358	10. 6. 15:	29·936
22. 23. 20	30·185	24. 1. 45	29·425	12. 11. 50:	30·292	23. 7. 45:	29·930
25. 8. 0:	30·078	26. 6. 10:	29·712	24. 11. 20:	30·023	25. 16. 40:	29·874
26. 23. 0	30·065	28. 14. 0:	29·360	26. 22. 30	30·070	29. 21. 0	29·120
March 3. 12. 0:	30·204	March 5. 21. 55	29·042	July 2. 21. 0	29·957	July 4. 2. 0	29·806
9. 13. 30:	29·840	10. 17. 25:	29·305	5. 9. 45:	29·925	6. 16. 35:	29·542
12. 8. 40	29·930	13. 12. 25:	29·596	7. 9. 30	29·685	8. 3. 25	29·625
15. 15. 0:	29·907	17. 3. 5	29·758	8. 22. 30	29·774	11. 4. 25:	29·526
17. 23. 55:	29·875	19. 7. 45	29·615	12. 10. 30:	29·902	14. 23. 25	29·689
20. 22. 30:	29·900	25. 21. 30:	29·155	15. 23. 0	29·900	19. 7. 0:	29·630
30. 10. 20:	30·135	April 2. 17. 45:	29·680	20. 10. 25:	29·738	21. 19. 45:	29·566
April 5. 21. 10	30·170	8. 4. 55:	29·932	25. 21. 0	30·202	27. 7. 20	30·005
10. 15. 10:	30·145	13. 2. 40	29·775	27. 18. 15	30·108	31. 14. 50:	29·416
15. 9. 25	30·057	17. 17. 50:	29·735	August 1. 2. 43	29·639	August 2. 0. 50	29·480

MAXIMA AND MINIMA READINGS OF THE BAROMETER—*concluded.*

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Approximate Mean Solar Time, 1865.	Reading.	Approximate Mean Solar Time, 1865.	Reading.	Approximate Mean Solar Time, 1865.	Reading.	Approximate Mean Solar Time, 1865.	Reading.
d h m	in.	d h m	in.	d h m	in.	d h m	in.
August 4. 21. 25	29·948	August 7. 4. 10:	29·643	October 25. 12. 40	29·745	October 27. 2. 0	28·824
8. 10. 5:	29·834	11. 2. 50	29·410	28. 10. 5:	29·705	29. 3. 25	28·964
11. 21. 10	29·699	12. 4. 30	29·536	29. 11. 52	29·173	30. 0. 30	28·984
13. 9. 5	29·669	13. 21. 25	29·575	November 1. 22. 0	29·877	November 2. 10. 45:	29·814
14. 11. 0:	29·674	15. 5. 35:	29·385	4. 21. 35:	30·073	8. 15. 40	29·782
16. 22. 0:	29·696	17. 14. 30	29·605	12. 10. 35:	30·325	14. 4. 36	29·922
18. 21. 30	29·816	23. 2. 52	29·300	15. 11. 35:	30·229	17. 2. 45	29·537
26. 10. 0:	30·139	28. 5. 10	29·657	18. 0. 0	30·024	21. 21. 54	28·794
30. 9. 12	30·172	31. 16. 20	29·920	23. 2. 30	29·362	23. 14. 8	29·119
September 2. 21. 45	30·073	September 4. 6. 0	29·941	24. 11. 5:	29·454	25. 13. 23	28·908
5. 10. 55:	30·024	8. 4. 5:	29·750	26. 22. 45:	29·609	28. 3. 50:	28·988
11. 22. 15	30·290	16. 3. 7	29·966	30. 21. 50	29·912	December 4. 4. 40	29·126
18. 11. 45:	30·295	20. 13. 25:	29·876	December 8. 7. 50:	30·404	9. 1. 30	30·340
22. 21. 35:	30·323	27. 5. 15:	29·926	10. 22. 40:	30·543	14. 2. 38	30·276
28. 11. 15:	30·087	October 1. 16. 10:	29·766	15. 10. 30:	30·610	19. 18. 15:	30·031
October 3. 9. 30:	30·081	10. 19. 5:	29·082	24. 22. 35	30·297	26. 2. 25	30·040
15. 10. 45:	29·873	18. 15. 30	28·865	26. 21. 35	30·254	29. 7. 15	29·005
20. 20. 30:	29·505	22. 2. 30	29·201	30. 7. 26	29·716	31. 1. 5	29·300
23. 10. 35:	29·573	24. 18. 25	29·250	31. 6. 45	29·418	31. 15. 15	29·124

ABSOLUTE MAXIMA AND MINIMA READINGS OF THE BAROMETER, for each Month in the Year 1865.
[Extracted from the preceding Table.]

1865, MONTH.	Readings of the Barometer.		Range of Reading in each Month.
	Maxima.	Minima.	
	in.	in.	in.
January	30·207	28·390	1·817
February	30·432	28·718	1·714
March	30·204	29·042	1·162
April	30·170	29·680	0·490
May	30·225	29·343	0·882
June	30·358	29·120	1·238
July	30·202	29·416	0·786
August	30·172	29·300	0·872
September	30·323	29·750	0·573
October	30·081	28·824	1·257
November	30·325	28·794	1·531
December	30·610	29·005	1·605

The highest reading in the year was 30in·610 in the month of December. The lowest reading in the year was 28in·390 in the month of January.
The range of reading in the year was 2in·220.

MONTHLY MEANS of RESULTS for METEOROLOGICAL ELEMENTS at the ROYAL OBSERVATORY, GREENWICH, in the Year 1865.

1865, Month.	Mean Reading of the Barometer.	Temperature of the Air.							Mean Temperature of Dew Point.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.				
	in.	°	°	°	°	°	°	°	°	in.	gr.	gr.
January ..	29·404	50·2	19·6	30·6	40·9	31·8	9·1	36·3	32·4	0·184	2·1	0·4
February..	29·722	52·7	15·5	37·2	42·2	32·2	10·0	36·6	31·7	0·179	2·1	0·5
March	29·722	58·7	23·7	35·0	44·0	31·1	12·9	36·6	30·5	0·170	2·0	0·6
April	29·954	81·5	31·9	49·6	66·3	41·5	24·8	52·3	44·0	0·288	3·3	1·1
May	29·769	78·5	31·4	47·1	67·9	46·3	21·6	56·1	47·5	0·329	3·6	1·4
June	30·031	87·6	41·2	46·4	73·6	49·9	23·7	60·2	50·4	0·366	4·1	1·7
July.....	29·797	85·0	47·0	38·0	75·7	54·3	21·4	63·8	54·2	0·421	4·7	1·9
August ...	29·711	78·0	43·2	34·8	70·9	51·5	19·4	59·9	53·4	0·409	4·5	1·2
September.	30·071	86·0	40·2	45·8	76·4	53·6	22·8	63·9	55·9	0·447	5·0	1·6
October...	29·440	71·7	33·5	38·2	60·0	43·7	16·3	50·9	47·0	0·323	3·6	0·6
November .	29·720	56·4	31·0	25·4	50·8	38·7	12·1	44·8	41·4	0·261	3·0	0·4
December .	30·055	52·7	29·2	23·5	46·7	38·1	8·6	42·7	39·4	0·241	2·8	0·4
Means	29·783	69·9	32·3	37·6	59·6	42·7	16·9	50·3	44·0	0·302	3·4	1·0

1865, Month.	Mean Degree of Humidity. (Sat. = 100.)	Mean Weight of a Cubic Foot of Air.	Mean Amount of Cloud. 0–10	Rain.			Wind.										
				Number of Rainy Days.	Amount collected on the Ground.		From Osler's Anemometer.									From Robinson's Anemometer.	
					Gauge read Daily.	Gauge read Monthly.	Number of Days for Mean Direction of the Wind referred to different Points of Azimuth.								Number of Calm Days and Days on which the Pressure of the Wind was less than ½ lb. on the Sq. Foot.	Mean Daily Pressure in lbs. on Square Foot.	Mean Daily Horizontal Movement of Wind in Miles.
							N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
		gr.			in.	in.											
January.....	86	550	7·2	16	3·32	3·34	3	3	1	1	3	10	7	1	2	0·40	271
February.....	83	555	7·8	19	1·75	1·90	3	4	2	1	2	8	3	2	3	0·43	275
March	79	555	7·7	10	0·85	0·88	10	2	3	2	1	3	3	4	3	0·44	270
April.....	73	542	4·2	7	0·40	0·38	4	3	4	3	1	6	1	1	7	0·07	169
May.....	73	534	6·4	13	4·37	4·20	1	2	1	1	2	17	2	1	4	0·18	211
June.....	70	534	5·9	5	2·45	2·20	6	3	2	4	0	3	3	3	6	0·04	181
July.....	72	527	6·5	11	2·27	2·18	2	1	0	1	1	11	7	3	5	0·21	212
August	80	529	7·0	17	3·97	3·96	2	1	0	1	1	10	7	3	6	0·16	210
September.....	76	531	3·2	1	0·16	0·16	1	4	2	3	1	6	4	1	8	0·01	157
October.....	87	533	6·2	19	5·90	6·00	2	2	2	3	3	5	5	1	8	0·34	227
November.....	88	546	6·2	18	2·39	2·45	3	3	1	4	5	7	3	1	3	0·45	265
December	88	554	8·3	10	0·87	0·90	3	2	0	4	4	11	2	1	4	0·42	221
Means	80	541	6·4	Sum 146	Sum 28·70	Sum 28·55	Sum 40	Sum 30	Sum 18	Sum 28	Sum 24	Sum 97	Sum 47	Sum 22	Sum 59	..	..

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

WITH THE

ACTINOMETER.

1865.

OBSERVATIONS WITH THE ACTINOMETER.

Day 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute, B–A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Feb. 9	1. 22. 0	Sun	6·3	12·0	5·7	..				53·5	45·4	Dense clouds.	N
											43·5		
	23. 30	Shade	12·7	13·5	0·8	9·7				..	42·2	,,	,,
	25. 0	Sun	13·8	29·2	15·4	15·1				..	43·0	Thin cloud 10secs., Sun free from cloud 50secs.	,,
											46·1		
	26. 30	Shade	29·9	29·7	−0·2	17·3	14·7	1. 27. 0	15	..	44·8	A little sleet falling.	,,
	28. 0	Sun	29·2	48·0	18·8	19·4				..	44·6	Clear about the Sun, dense clouds elsewhere.	,,
											48·5		
	29. 30	Shade	48·0	47·0	−1·0	11·8				..	..	,, ,, ,,	,,
	1. 31. 0	Sun	46·8	49·6	2·8	..				53·7	44·0	Cloudy about the Sun.	N
											41·5		
Feb. 9	2. 29. 0	Sun	3·6	19·0	15·4	..				48·8	44·6	Clear about the Sun.	N
											45·8		
	30. 30	Shade	18·6	16·0	−2·6	17·8				..	..	,,	,,
	32. 0	Sun	15·0	30·0	15·0	17·6				..	45·5	,,	,,
											46·4		
	33. 30	Shade	29·5	27·0	−2·5	16·4	16·7	2. 34. 0	9	..	..	,,	,,
	35. 0	Sun	25·6	38·3	12·7	15·1				..	48·4	,,	,,
											48·7		
	36. 30	Shade	37·8	35·5	−2·3	16·6				..	..	,,	,,
	2. 38. 0	Sun	34·4	50·4	16·0	..				50·0	50·0	Light clouds were prevalent after this.	N
											48·0		
Feb. 11	2. 39. 0	Sun	8·0	23·8	15·8	..				48·0	33·0	Clear about the Sun. The ground is covered with snow.	N
	40. 30	Shade	25·1	26·1	1·0	14·7				..	32·8	,,	,,
	42. 0	Sun	26·2	41·8	15·6	15·0				..	33·7	,,	,,
	43. 30	Shade	42·5	42·8	0·3	14·0				..	..	,,	,,
	45. 0	Sun	42·8	55·8	13·0	12·8	14·0	2. 44. 0	8	..	33·0	,,	,,
											33·4		
	46. 30	Shade	56·1	56·1	0·0	13·6				..	..	,,	,,
	2. 48. 0	Sun	55·8	70·0	14·2	..				48·2	34·0	,,	N
											34·0		
Feb. 14	22. 50. 0	Sun	5·2	9·2	4·0	..				17·0	34·6	Cloudless, slight haze. Bright Sun.	N
											34·1		
	51. 30	Shade	10·0	10·8	0·8	3·4				..	..	,,	,,
	53. 0	Sun	11·0	15·5	4·5	3·5				..	34·0	,,	,,
											33·8		
	54. 30	Shade	16·1	17·3	1·2	3·2				18·4	..	,,	,,
	56. 0	Sun	17·8	22·0	4·2	3·1				..	33·0	,,	,,
											33·0		
	57. 30	Shade	23·0	24·0	1·0	4·0	3·7	22. 58. 0	20	..	..	,,	,,
	22. 59. 0	Sun	24·8	30·5	5·7	4·4				..	34·0	,,	,,
											34·0		
	23. 0. 30	Shade	31·2	32·8	1·6	3·9				20·1	..	Haze and thin clouds in S.	,,
	2. 0	Sun	33·6	39·0	5·4	3·7				..	31·5	,,	,,
											31·5		
	3. 30	Shade	40·0	41·9	1·9	3·8				21·2	..	,,	,,
	5. 0	Sun	42·8	48·8	6·0	4·0				..	32·0	,,	,,
											32·4		
	6. 30	Shade	50·0	52·0	2·0	4·6				22·0	..	,,	,,
	8. 0	Sun	52·8	60·0	7·2	5·3	5·4	23. 9. 15	20	..	32·4	Bright Sun.	,,
											33·0		
	9. 30	Shade	61·4	63·2	1·8	6·4				23·0	..	,,	,,
	23. 11. 0	Sun	64·2	73·5	9·3	..				24·0	35·6	,,	N
											35·6		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Feb. 15	0. 32. 0	Sun	1·6	14·4	12·8	..				29·8	37·8	Cloudless; bright warm Sun.	N
											39·0		
	33. 30	Shade	15·2	15·9	0·7	12·5				..	..	,,	,,
	35. 0	Sun	16·0	29·7	13·7	12·8				..	41·3	,,	,,
											41·8		
	36. 30	Shade	30·5	31·5	1·0	13·0	13·1	0. 37. 0	20	..	..	,,	,,
	38. 0	Sun	31·8	46·0	14·2	13·4				..	42·7	,,	,,
	39. 30	Shade	47·7	48·3	0·6	13·7				..	..	,,	,,
	0. 41. 0	Sun	49·2	63·6	14·4	..				32·7	44·1	,,	N
											44·0		
Mar. 21	1. 56. 0	Sun	6·6	27·6	21·0	..				38·0	58·3	Cloudless.	N
											56·3		
	57. 30	Shade	30·0	32·8	2·8	19·0				..	..	,,	,,
	1. 59. 0	Sun	33·8	56·4	22·6	20·0				..	55·8	,,	,,
											55·3		
	2. 0. 30	Shade	58·7	61·0	2·3	20·2	19·8	2. 1. 0	31	..	..	,,	,,
	2. 0	Sun	62·2	84·6	22·4	19·7				..	54·0	,,	,,
	3. 30	Shade	5·2	8·4	3·2	20·2				41·0	58·4	,,	,,
	2. 5. 0	Sun	9·6	34·1	24·5	..				42·0	59·6	,,	N
											61·3		
Mar. 30	2. 4. 0	Sun	6·7	24·2	17·5	..				37·7	59·7	Light clouds.	N
	5. 30	Shade	27·0	32·0	5·0	8·2				..	63·0	Clouds passing over the Sun.	,,
	7. 0	Sun	33·0	41·8	8·8	4·6				..	59·1	Denser clouds.	,,
	8. 30	Shade	43·5	47·0	3·5	4·1	4·6	2. 9. 0	32	..	57·8	,,	,,
	10. 0	Sun	49·2	55·6	6·4	3·2				..	55·6	,,	,,
	11. 30	Shade	56·2	59·2	3·0	2·9				..	53·2	,,	,,
	2. 13. 0	Sun	60·8	66·1	5·3	..				40·0	52·2	,,	N
											51·0		
April 4	0. 42. 0	Sun	4·0	29·3	25·3	..				44·0	74·5	Light clouds and haze.	N
	43. 30	Shade	34·7	39·3	4·6	20·1				..	72·8	,,	,,
	45. 0	Sun	41·0	65·2	24·2	19·4				..	73·0	,,	,,
	46. 30	Shade	68·8	73·8	5·0	19·4				..	74·2	,,	,,
	48. 0	Sun	1·5	26·1	24·6	19·7	19·8	0. 47. 0	40	..	74·2	,,	,,
	49. 30	Shade	30·0	34·8	4·8	20·0				..	76·1	,,	,,
	51. 0	Sun	37·1	62·1	25·0	20·1				..	76·5	,,	,,
	52. 30	Shade	65·1	70·0	4·9	17·3				..	74·8	,,	,,
	54. 0	Sun	4·3	23·6	19·3	14·5	14·9	0. 55. 15	40	..	74·0	,,	,,
	55. 30	Shade	28·0	32·6	4·6	13·0				..	..	Denser clouds.	,,
	0. 57. 0	Sun	35·2	51·0	15·8	..				51·3	71·7	,,	N
											70·2		
April 8	1. 21. 0	Sun	6·8	50·2	43·4	..				73·0	88·0	Clear.	N
	22. 30	Shade	54·0	59·0	5·0	37·9				..	92·0	,,	,,
	24. 0	Sun	2·2	44·6	42·4	38·0				..	93·2	,,	,,
	25. 30	Shade	47·4	51·2	3·8	36·8				..	91·7	,,	,,
	27. 0	Sun	53·2	92·0	38·8	35·0				..	90·6	,,	,,
	28. 30	Shade	5·0	8·8	3·8	36·0	37·2	1. 29. 0	38	77·7	92·0	,,	,,
	30. 0	Sun	10·0	50·8	40·8	37·1				..	92·9	,,	,,
	31. 30	Shade	53·2	56·8	3·6	37·6				..	94·0	,,	,,
	33. 0	Sun	0·4	42·1	41·7	38·5				..	90·4	Clear; slight breeze.	,,
	34. 30	Shade	44·1	46·8	2·7	37·7				..	90·1	,,	,,
	1. 36. 0	Sun	47·8	87·0	39·2	..				81·0	90·6	,,	N
											89·0		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
April 10	1. 25. 0	Sun	5·5	32·9	27·4	..				60·4	80·0	Very light clouds here and there.	N
	26. 30	Shade	36·2	41·5	5·3	20·5				..	82·7	,,	,,
	28. 0	Sun	43·8	68·1	24·3	19·1				..	83·2	,,	,,
	29. 30	Shade	71·0	76·0	5·0	19·6	20·0	1. 30. 0	38	..	81·3	,,	,,
	31. 0	Sun	3·0	27·9	24·9	19·9				..	81·1	,,	,,
	32. 30	Shade	31·1	36·1	5·0	20·8				..	81·4	,,	,,
	1. 34. 0	Sun	38·7	65·4	26·7	..				64·0	82·0	,,	N
											83·4		
April 10	1. 37. 0	Sun	4·2	36·2	32·0	..				64·0	84·0	A little cloud about the Sun.	AH
											82·7		
	38. 30	Shade	40·1	46·2	6·1	24·8				..	..	,,	,,
	40. 0	Sun	49·3	79·2	29·9	24·1				..	..	,,	,,
											83·9		
	41. 30	Shade	82·9	88·4	5·5	24·4				67·8	84·0	,,	,,
											83·9		
	43. 0	Sun	4·0	33·8	29·8	24·0				..	84·1	,,	,,
											84·6		
	44. 30	Shade	37·6	43·7	6·1	24·4	24·9	1. 45. 0	36	..	85·9	Sun nearly free from clouds.	,,
											86·0		
	46. 0	Sun	46·7	77·8	31·1	25·0				..	..	,,	,,
											85·2		
	47. 30	Shade	81·8	87·9	6·1	25·4				70·6	..	,,	,,
	49. 0	Sun	8·0	40·0	32·0	25·9				..	84·7	,,	,,
											84·5		
	50. 30	Shade	44·0	50·1	6·1	26·1				..	..	Clear about the Sun.	,,
	1. 52. 0	Sun	53·1	85·6	32·5	..				71·9	84·3	,,	AH
											85·5		
April 11	21. 27. 0	Sun	1·0	23·4	22·4	..				42·2	79·6	Clear.	AH
	28. 30	Shade	26·8	31·9	5·1	18·3				..	76·3	,,	,,
	30. 0	Sun	34·7	59·2	24·5	19·3				..	77·5	,,	,,
	31. 30	Shade	62·7	68·1	5·4	19·8				44·3	77·6	,,	,,
	33. 0	Sun	2·0	27·9	25·9	20·1				..	78·7	,,	,,
	34. 30	Shade	32·0	38·2	6·2	20·7	20·8	21. 35. 0	36	..	80·0	,,	,,
											81·2		
	36. 0	Sun	41·3	69·2	27·9	21·3				..	81·4	,,	,,
	37. 30	Shade	73·4	80·3	6·9	22·0				48·6	81·0	,,	,,
	39. 0	Sun	3·7	33·6	29·9	22·8				..	80·6	,,	,,
	40. 30	Shade	38·2	45·4	7·2	22·8				..	81·5	,,	,,
											82·0		
	21. 42. 0	Sun	49·2	79·2	30·0	..				51·6	82·5	,,	AH
											82·7		
April 11	22. 48. 0	Sun	1·4	38·0	36·6	..				70·3	92·0	Clear.	AH
											93·4		
	49. 30	Shade	41·3	43·4	2·1	34·1				..	94·2	,,	,,
	51. 0	Sun	45·1	80·8	35·7	33·2				..	93·8	,,	,,
											94·2		
	52. 30	Shade	83·1	86·1	3·0	33·0				75·0	94·1	,,	,,
	54. 0	Sun	2·6	39·0	36·4	33·2				..	94·0	,,	,,
											91·6		
	55. 30	Shade	41·5	45·0	3·5	33·7	33·7	22. 56. 0	42	..	90·4	,,	,,
	57. 0	Sun	46·3	84·2	37·9	34·6				..	90·6	,,	,,
											87·1		
	22. 58. 30	Shade	86·6	89·7	3·1	33·9				..	86·6	,,	,,
	23. 0. 0	Sun	11·6	47·8	36·2	33·4				..	85·0	,,	,,
	1. 30	Shade	50·0	52·6	2·6	34·3				..	84·8	,,	,,
	23. 3. 0	Sun	54·1	91·7	37·6	..				78·4	86·3	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
April 12	2. 21. 0	Sun	5·7	30·0	24·3	..				70·0	72·6	Light clouds about the Sun.	AH
	22. 30	Shade	30·5	30·2	−0·3	25·1				..	73·1	,,	,,
	24. 0	Sun	30·2	55·4	25·2	25·0				..	76·2	,,	,,
	25. 30	Shade	56·2	57·0	0·8	25·2				..	76·6	,,	,,
	27. 0	Sun	57·4	84·1	26·7	25·6				..	77·2	,,	,,
	28. 30	Shade	85·7	87·0	1·3	26·2	25·9	2. 29. 0	33	..	76·7	,,	,,
	30. 0	Sun	1·0	29·2	28·2	26·5				..	76·4	,,	,,
	31. 30	Shade	30·7	32·9	2·2	26·3				..	76·4	,,	,,
	33. 0	Sun	33·7	62·5	28·8	26·5				..	76·2	,,	,,
	34. 30	Shade	64·1	66·4	2·3	26·8				..	77·1	,,	,,
	2. 36. 0	Sun	2·0	31·5	29·5	..				75·8	77·3	,,	AH
April 20	23. 12. 0	Sun	2·8	35·4	32·6	..				49·7	89·4	Clear about the Sun.	AH
	13. 30	Shade	39·3	46·1	6·8	26·3				..	90·4	,,	,,
	15. 0	Sun	49·7	83·3	33·6	26·8				..	89·9	,,	,,
	16. 30	Shade	87·5	94·4	6·9	28·0				53·8	90·0	,,	,,
	18. 0	Sun	0·1	36·2	36·1	28·1				..	90·8	,,	,,
	19. 30	Shade	41·7	50·7	9·0	28·0				..	91·3	,,	,,
	21. 0	Sun	2·2	40·0	37·8	28·5				..	92·1	,,	,,
							28·6	23. 21. 30	47		93·3		
	22. 30	Shade	45·9	55·6	9·7	28·5				57·7	93·4	,,	,,
	24. 0	Sun	4·0	42·6	38·6	29·1				..	92·2	,,	,,
											91·8		
	25. 30	Shade	48·2	57·4	9·2	30·1				..	92·0	,,	,,
	27. 0	Sun	3·1	43·1	40·0	30·6				..	92·4	,,	,,
	28. 30	Shade	48·9	58·4	9·5	30·8				60·0	93·4	,,	,,
											93·2		
	23. 30. 0	Sun	4·2	44·8	40·6	..				62·7	92·6	,,	AH
											93·1		
April 21	23. 31. 0	Sun	2·2	38·6	36·4	..				63·8	97·8	Cloudless.	AH
											96·7		
	32. 30	Shade	41·6	45·9	4·3	33·4				..	96·9	,,	,,
											98·0		
	34. 0	Sun	2·2	41·2	39·0	34·0				..	98·0	,,	,,
	35. 30	Shade	44·9	50·7	5·8	33·8				..	98·6	,,	,,
	37. 0	Sun	8·0	48·3	40·3	34·3				..	100·2	,,	,,
	38. 30	Shade	52·1	58·2	6·1	34·4				..	101·0	,,	,,
											101·0		
	40. 0	Sun	3·5	44·1	40·6	34·1	34·3	23. 40. 30	48	..	100·6	,,	,,
	41. 30	Shade	48·2	55·0	6·8	34·0				..	99·0	,,	,,
											99·9		
	43. 0	Sun	18·7	59·8	41·1	33·9				..	100·2	,,	,,
											99·6		
	44. 30	Shade	64·0	71·6	7·6	34·4				72·0	100·4	,,	,,
	46. 0	Sun	7·7	50·7	43·0	35·3				..	102·6	,,	,,
											103·0		
	47. 30	Shade	55·4	63·2	7·8	35·6				73·9	102·3	,,	,,
	23. 49. 0	Sun	4·0	47·7	43·7	..				74·6	100·0	,,	A H
											100·6		

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	h m s		div.	div.	div.	div.	div.	h m s	°		°		
April 22	1. 51. 0	Sun	0·5	38·2	37·7	..				68·0	95·5	Cloudless.	AH
											97·0		
	52. 30	Shade	39·2	39·5	0·3	38·6				..	97·0	„	„
											97·5		
	54. 0	Sun	2·3	42·3	40·0	39·2				..	97·7	„	„
											99·0		
	55. 30	Shade	43·5	44·8	1·3	39·1				..	99·7	„	„
											99·5		
	57. 0	Sun	1·4	42·2	40·8	39·5				..	99·0	„	„
							39·3	1. 59. 0	40		99·2		
	1. 58. 30	Shade	43·7	44·9	1·2	40·2				..	98·8	„	„
											98·5		
	2. 0. 0	Sun	5·2	47·2	42·0	40·1				..	99·4	„	„
	1. 30	Shade	50·0	52·6	2·6	39·1				..	99·0	„	„
											98·1		
	3. 0	Sun	0·4	41·8	41·4	38·5				..	98·0	„	„
	4. 30	Shade	44·0	47·2	3·2	39·0				..	99·2	„	„
											98·5		
	2. 6. 0	Sun	10·0	53·1	43·1	..				84·0	97·5	„	AH
											97·0		
April 24	0. 43. 0	Sun	2·3	39·0	36·7	..				56·2	96·2	Cloudless.	AH
	44. 30	Shade	43·1	49·3	6·2	31·3				59·5	96·9	„	„
	46. 0	Sun	7·0	45·2	38·2	31·8				..	99·6	„	„
											101·0		
	47. 30	Shade	49·1	55·8	6·7	32·1				60·6	101·2	„	„
											101·6		
	49. 0	Sun	3·1	42·4	39·3	32·4				..	103·0	„	„
											102·1		
	50. 30	Shade	46·7	53·8	7·1	33·0	32·7	0. 51. 0	46	..	100·3	„	„
										62·0	99·0		
	52. 0	Sun	6·3	47·2	40·9	33·5				..	97·7	„	„
											98·5		
	53. 30	Shade	52·0	59·6	7·6	33·3				63·9	99·4	„	„
											101·6		
	55. 0	Sun	3·8	44·7	40·9	32·8				..	100·2	„	„
											100·6		
	56. 30	Shade	50·3	58·9	8·6	33·9				..	98·8	„	„
											99·3		
	0. 58. 0	Sun	5·5	49·6	44·1	..				66·6	99·2	„	AH
											99·4		
April 27	1. 20. 0	Sun	9·1	44·7	35·6	..				66·3	101·8	Light clouds and haze.	AH
											103·0		
	21. 30	Shade	48·0	53·1	5·1	31·5				..	103·0	„	„
											102·2		
	23. 0	Sun	1·7	39·2	37·5	32·3				..	102·0	„	„
											102·6		
	24. 30	Shade	42·3	47·6	5·3	33·1				69·6	103·2	„	„
											103·0		
	26. 0	Sun	6·2	45·6	39·4	33·8	33·2	1. 25. 45	44	..	103·0	„	„
											103·5		
	27. 30	Shade	49·2	55·1	5·9	33·9				..	104·3	„	„
											105·6		
	29. 0	Sun	5·2	45·5	40·3	33·8				..	105·4	„	„
											103·8		
	1. 30. 30	Shade	49·6	56·6	7·0	34·3				72·8	104·5	„	AH
											104·5		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
April 27 *cont.*	1. 32. 0	Sun	6·0	48·4	42·4	35·2				..	103·8	Light clouds and haze.	AH
							35·5	1. 34. 0	44		105·5		
	33. 30	Shade	52·9	60·2	7·3	35·7				..	106·7	,,	,,
											107·5		
	1. 35. 0	Sun	14·6	58·3	43·7	..				76·2	108·0	,,	AH
											107·6		
May 9	1. 39. 0	Sun	5·2	28·3	23·1	..				61·9	94·1	Clouds passing over the Sun.	AH
											86·4		
	40. 30	Shade	30·6	32·4	1·8	29·7				..	83·7	,,	,,
											87·7		
	42. 0	Sun	35·3	75·3	40·0	37·6	30·7	1. 41. 45	46	..	90·3	Generally clear about the Sun.	,,
											92·2		
	43. 30	Shade	77·7	80·8	3·1	24·8				..	86·5	,,	,,
											81·2		
	45. 0	Sun	2·4	18·1	15·7	12·4				..	78·2	Sun obscured by clouds.	,,
											79·0		
	46. 30	Shade	20·2	23·7	3·5	10·2				..	78·4	,,	,,
											78·0		
	48. 0	Sun	25·6	37·2	11·6	8·4				..	75·3	,,	,,
							14·0	1. 50. 0	45		74·5		
	49. 30	Shade	38·9	41·7	2·8	12·4				64·7	74·1	,,	,,
											74·0		
	51. 0	Sun	3·2	21·9	18·7	15·9				..	76·3	,,	,,
											76·0		
	52. 30	Shade	23·7	26·5	2·8	24·7				..	75·3	,,	,,
											74·2		
	1. 54. 0	Sun	27·8	64·2	36·4	..				..	75·4	Partially clear about the Sun.	AH
May 18	23. 23. 0	Sun	3·3	40·4	37·1	..				53·9	91·3	Light clouds scattered over the sky.	AH
											92·1		
	24. 30	Shade	44·6	51·0	6·4	30·8				..	93·0	,,	,,
											94·1		
	26. 0	Sun	1·8	39·0	37·2	31·0				..	94·0	,,	,,
											93·6		
	27. 30	Shade	42·8	48·7	5·9	31·4	31·0	23. 27. 15	45	59·6	93·8	,,	,,
											94·0		
	29. 0	Sun	1·3	38·7	37·4	31·0				..	94·2	,,	,,
											93·8		
	30. 30	Shade	42·8	49·7	6·9	30·9				..	94·0	,,	,,
											93·2		
	32. 0	Sun	1·0	39·2	38·2	31·5				61·1	93·0	,,	,,
											93·3		
	33. 30	Shade	42·9	49·5	6·6	31·9	31·9	23. 34. 0	45	..	93·6	,,	,,
										63·7	93·0		
	35. 0	Sun	2·4	41·2	38·8	32·2				..	92·4	,,	,,
											94·0		
	36. 30	Shade	45·2	51·8	6·6	33·0				64·3	95·2		,,
											94·8		
	38. 0	Sun	1·6	42·1	40·5	33·7	33·5	23. 39. 15	45	66·0	94·6	,,	,,
											94·8		
	39. 30	Shade	46·4	53·4	7·0	33·8				..	94·5	,,	,,
											92·4		
	23. 41. 0	Sun	1·8	42·9	41·1	..				67·7	92·8	,,	AH
											94·1		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
May 20	3. 0. 0	Sun	0·0	33·3	33·3	..				69 8	87·0	Cloudless.	AH
											90·7		
	1. 30	Shade	34·6	35·3	0·7	31·8				..	92·1	„	„
											94·0		
	3. 0	Sun	35·6	67·4	31·8	30·9				..	95·5	„	„
											95·7		
	4. 30	Shade	69·3	70·5	1·2	32·3				..	96·5	„	„
											95·7		
	6. 0	Sun	1·0	36·2	35·2	33·6	32·9	3. 6. 30	38	..	95·6	„	„
											96·6		
	7. 30	Shade	37·9	39·8	1·9	34·1				73·6	96·7	„	„
											96·5		
	9. 0	Sun	0·8	37·6	36·8	34·5				..	95·8	„	„
											95·5		
	10. 30	Shade	39·5	42·3	2·8	33·3				..	96·0	„	„
											96·2		
	3. 12. 0	Sun	43·4	78·8	35·4	..				76·0	95·8	„	A H
											93·6		
May 22	0. 50. 0	Sun	8·0	48·0	40·0	..				70·0	93·0	Cloudless about the Sun; very	N
											98·4	bright.	„
	51. 30	Shade	51·7	56·3	4·6	35·6				..	..	„	„
	53. 0	Sun	2·6	43·0	40·4	35·5				..	100·5	„	„
	54. 30	Shade	46·7	52·0	5·3	34·5	34·8	0. 55. 0	53	..	100·8	„	„
	56. 0	Sun	54·5	93·6	39·1	33·7				..	101·6	„	„
	57. 30	Shade	5·5	11·0	5·5	34·9				..	98·6	„	„
	0. 59. 0	Sun	14·0	55·7	41·7	..				74·0	97·4	„	N
May 22	22. 7. 0	Sun	5·0	43·6	38·6	..				68·7	94·4	Clear about the Sun.	AH
											96·8		
	8. 30	Shade	46·2	49·6	3·4	34·3				70·0	97·9	„	„
											99·8		
	10. 0	Sun	0·4	37·3	36·9	33·4	31·8	22. 9. 45	51	..	100·0	Light clouds about the Sun.	„
											96·3		
	11. 30	Shade	40·5	44·1	3·6	27·6				..	93·6	„	„
											94·0		
	13. 0	Sun	0·9	26·4	25·5	21·7				..	94·0	Light clouds over the Sun.	„
											92·6		
	14. 30	Shade	29·2	33·3	4·1	19·6	19·7	22. 15. 0	52	..	92·0	„	„
											90·8		
	16. 0	Sun	35·7	57·6	21·9	17·9				..	89·0	„	„
											89·3		
	17. 30	Shade	59·9	63·8	3·9	23·4				73·2	90·1	„	„
											91·6		
	19. 0	Sun	2·4	35·0	32·6	28·4	25·6	22. 20. 15	52	..	94·4	Light clouds scattered about.	„
											94·9		
	20. 30	Shade	37·8	42·2	4·4	25·1				..	95·0	„	„
											95·5		
	22. 22. 0	Sun	44·4	70·7	26·3	..				76·3	94·0	„	AH
											94·0		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
May 25	2. 49. 0	Sun	1·6	37·9	36·3	..				72·0	99·0 100·3	Light clouds scattered over the sky.	AH
	50. 30	Shade	39·6	41·5	1·9	34·6				..	99·8 100·7	„ „	„
	52. 0	Sun	42·3	79·0	36·7	34·7				..	99·6 99·7	„ „	„
	53. 30	Shade	80·6	82·7	2·1	34·9				74·0	100·6 101·0	„ „	„
	55. 0	Sun	0·6	37·9	37·3	34·9	35·1	2. 55. 30	40	..	102·0 103·0	„ „	„
	56. 30	Shade	40·0	42·8	2·8	35·1				..	102·8 102·3	„ „	„
	58. 0	Sun	44·3	82·8	38·5	35·5				..	102·5 104·3	„ „	„
	2. 59. 30	Shade	85·0	88·3	3·3	36·2				76·6	104·4 102·0	„ „	„
	3. 1. 0	Sun	6·7	47·3	40·6	..				77·9	102·4 104·0	„ „	AH
June 7	21. 30. 0	Sun	1·7	34·7	33·0	..				54·9	90·8 91·8	Cloudless.	AH
	31. 30	Shade	37·4	42·4	5·0	28·0				..	93·0 93·6	„	„
	33. 0	Sun	2·2	35·1	32·9	27·9				..	93·4 94·8	„	„
	34. 30	Shade	38·4	43·4	5·0	28·2				58·0	95·7 95·7	„	„
	36. 0	Sun	6·7	40·1	33·4	28·2	28·5	21. 36. 30	49	..	95·3 95·6	„	„
	37. 30	Shade	43·7	49·2	5·5	28·8				..	96·3 96·3	„	„
	39. 0	Sun	2·1	37·4	35·3	29·3				..	96·5 96·0	„	„
	40. 30	Shade	41·2	47·8	6·6	29·2				61·2	96·7 96·4	„	„
	21. 42. 0	Sun	5·6	42·0	36·4	..				..	96·0 97·2	„	AH
June 7	22. 43. 0	Sun	1·6	37·1	35·5	..				68·1	93·6 95·4	Cloudless.	AH
	44. 30	Shade	38·6	40·2	1·6	34·5				68·7	96·0 97·4	„	„
	46. 0	Sun	0·1	36·8	36·7	34·1				..	98·3 101·7	„	„
	47. 30	Shade	37·0	40·7	3·7	33·9	34·8	22. 48. 0	56	70·3	100·8 100·2	„	„
	49. 0	Sun	4·1	42·6	38·5	35·2				..	98·6 99·0	„	„
	50. 30	Shade	44·8	47·8	3·0	36·2				70·9	99·2 100·4	„	„
	22. 52. 0	Sun	4·1	44·0	39·9	..				71·6	99·7 98·6	„	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 7	23. 42. 0	Sun	−0·3	35·0	35·3	..				74·1	99·0 99·1	Cloudless.	AH
	43. 30	Shade	35·3	34·7	−0·6	36·3				..	99·6 99·6	„	„
	45. 0	Sun	34·3	70·3	36·0	36·3				..	99·4 100·5	„	„
	46. 30	Shade	70·8	70·8	0·0	37·6	37·3	23. 47. 0	58	76·2	100·7 101·5	„	„
	48. 0	Sun	0·6	39·8	39·2	38·6				..	102·3 102·0	„	„
	49. 30	Shade	41·1	42·2	1·1	37·8				..	102·4 103·0	„	„
	23. 51. 0	Sun	43·0	81·6	38·6	..				78·3	103·3 102·7	„	AH
June 8	1. 40. 0	Sun	1·0	36·7	35·7	..				76·4	96·3 100·5	Cloudless.	AH
	41. 30	Shade	37·4	37·2	−0·2	36·5				..	101·6 103·1	„	„
	43. 0	Sun	37·2	74·0	36·8	36·6				..	104·0 103·6	„	„
	44. 30	Shade	74·8	75·3	0·5	37·7	37·3	1. 45. 0	51	77·8	104·0 105·3	„	„
	46. 0	Sun	1·2	40·8	39·6	38·4				..	105·3 104·9	„	„
	47. 30	Shade	42·1	43·9	1·8	37·3				..	104·6 103·2	„	„
	1. 49. 0	Sun	44·8	83·4	38·6	..				79·9	102·8 103·6	„	AH
June 14	1. 38. 0	Sun	5·6	31·6	26·0	..				68·4	87·7 90·4	Light clouds about the Sun.	AH
	39. 30	Shade	34·1	37·6	3·5	26·5				..	92·4 95·4	„ „	„
	41. 0	Sun	39·2	73·2	34·0	30·7				..	96·9 99·0	„ „	„
	42. 30	Shade	75·4	78·6	3·2	32·3				71·6	99·7 100·2	„ „	„
	44. 0	Sun	1·4	38·3	36·9	33·1	30·9	1. 44. 30	51	..	101·4 102·9	Clear about the Sun.	„
	45. 30	Shade	40·7	45·0	4·3	31·5				..	103·0 103·6	Light clouds.	„
	47. 0	Sun	47·3	82·1	34·8	30·2				..	105·2 106·2	„	„
	48. 30	Shade	84·8	89·7	4·9	32·1				74·1	104·7 106·0	„	„
	1. 50. 0	Sun	1·2	40·5	39·3	..				75·8	106·0	„	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°		°		
June 19	2. 10. 0	Sun	7·2	32·8	25·6	..				58·0	79·0	Light clouds about the Sun.	AH
											84·2		
	11. 30	Shade	35·6	39·1	3·5	26·5				..	89·0	"	"
											91·5		
	13. 0	Sun	40·8	75·1	34·3	30·7				..	93·6	Clear about the Sun.	"
											95·6		
	14. 30	Shade	77·5	81·3	3·8	31·8				60·1	95·4	"	"
											96·3		
	16. 0	Sun	2·0	38·9	36·9	32·3	30·5	2. 16. 30	48	..	97·2	"	"
											98·4		
	17. 30	Shade	40·9	46·3	5·4	30·8				..	99·3	"	"
											98·6		
	19. 0	Sun	49·0	84·4	35·4	30·0				..	96·3	"	"
											97·0		
	20. 30	Shade	87·5	93·0	5·5	31·7				62·6	98·2	"	"
											98·0		
	2. 22. 0	Sun	3·2	42·1	38·9	..				64·3	96·3	"	AH
											96·7		
June 19	23. 33. 0	Sun	12·0	49·5	37·5	..				62·4	106·6	Cloudless.	AH
											107·5		
	34. 30	Shade	52·0	56·3	4·3	34·3				63·8	108·3	"	"
											108·3		
	36. 0	Sun	1·5	41·1	39·6	35·0				..	108·0	"	"
											109·1		
	37. 30	Shade	44·2	49·0	4·8	35·0				65·7	108·5	"	"
											108·3		
	39. 0	Sun	1·8	41·8	40·0	34·6	35·3	23. 39. 30	59	..	108·3	"	"
											108·0		
	40. 30	Shade	45·1	51·1	6·0	35·3				67·8	108·0	"	"
	42. 0	Sun	0·6	43·2	42·6	36·2				..	108·2	"	"
											108·3		
	43. 30	Shade	47·3	54·1	6·8	37·0				..	110·6	"	"
											111·7		
	23. 45. 0	Sun	1·5	46·5	45·0	..				69·2	112·0	"	AH
											111·0		
June 20	2. 2. 0	Sun	1·1	38·7	37·6	..				76·4	104·0	Cloudless.	AH
											105·5		
	3. 30	Shade	40·2	41·0	0·8	37·3				..	107·8	"	"
											110·3		
	5. 0	Sun	0·5	39·1	38·6	37·4				..	111·5	"	"
											112·8		
	6. 30	Shade	40·7	42·3	1·6	37·3				78·9	112·5	"	"
											112·7		
	8. 0	Sun	4·6	43·8	39·2	37·2	37·5	2. 8. 30	49	..	112·0	"	"
											112·4		
	9. 30	Shade	45·6	48·1	2·5	37·4				79·6	113·0	"	"
											114·4		
	11. 0	Sun	1·4	42·0	40·6	37·6				..	113·3	"	"
											113·7		
	12. 30	Shade	44·8	48·3	3·5	38·2				80·7	113·0	"	"
											112·2		
	2. 14. 0	Sun	1·2	44·0	42·8	..				82·2	111·6	"	AH
											110·3		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 20	22. 22. 0	Sun	2·8	47·0	44·2	..				71·0	102·2 107·2	Cloudless; very bright.	N
	23. 30	Shade	52·5	60·1	7·6	37·4				..	..	,,	,,
	25. 0	Sun	2·0	47·8	45·8	38·0				..	111·8 112·0	,,	,,
	26. 30	Shade	53·5	61·5	8·0	39·2	38·6	22. 28. 30	55	..	112·8	,,	,,
	28. 0	Sun	1·5	50·0	48·5	40·0				..	115·2	,,	,,
	29. 30	Shade	57·5	66·5	9·0	38·7				..	115·4	,,	,,
	31. 0	Sun	5·0	51·9	46·9	37·9				78·6	114·7	,,	,,
	32. 30	Shade	57·0	66·0	9·0	39·0				..	..	,,	,,
	22. 34. 0	Sun	6·0	55·0	49·0	..				80·4	114·0 113·2	,,	N
June 20	23. 39. 0	Sun	0·0	35·8	35·8	..				83·7	101·0 104·7	Cloudless.	AH
	40. 30	Shade	36·2	35·2	−1·0	37·0				..	104·3 105·2	,,	,,
	42. 0	Sun	34·8	71·0	36·2	36·9				..	106·5 108·2	,,	,,
	43. 30	Shade	71·3	71·0	−0·3	38·7				86·2	110·0 112·5	,,	,,
	45. 0	Sun	0·0	40·6	40·6	40·4	39·5	23. 45. 30	59	..	114·0 116·0	,,	,,
	46. 30	Shade	41·7	42·3	0·6	40·9				87·8	116·6 116·6	,,	,,
	48. 0	Sun	−0·2	42·2	42·4	41·1				..	117·2 117·6	,,	,,
	49. 30	Shade	43·8	45·8	2·0	41·4				88·7	117·4 118·0	,,	,,
	23. 51. 0	Sun	3·4	47·7	44·3	..				90·0	116·8	,,	AH
June 21	2. 1. 0	Sun	0·5	33·6	33·1	..				87·5	101·6 104·6	Clear about the Sun.	AH
	2. 30	Shade	34·0	33·4	−0·6	34·6				87·8	105·2 107·0	,,	,,
	4. 0	Sun	33·1	68·0	34·9	35·2				..	108·0 109·5	,,	,,
	5. 30	Shade	68·6	68·6	0·0	35·8				88·2	109·8 111·2	,,	,,
	7. 0	Sun	1·0	37·8	36·8	36·3	35·7	2. 7. 30	49	..	111·5 111·5	,,	,,
	8. 30	Shade	38·9	39·8	0·9	36·1				89·2	111·6 113·0	,,	,,
	10. 0	Sun	40·4	77·5	37·1	35·8				..	112·8 113·0	,,	,,
	11. 30	Shade	78·7	80·5	1·8	35·8				90·3	112·4 111·7	,,	,,
	2. 13. 0	Sun	3·9	42·0	38·1	..				92·0	111·0 109·0	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 23	1. 53. 0	Sun	6·0	51·2	45·2	..				84·0	114·2	Clear about the Sun; light clouds elsewhere.	AH
											115·3		
	54. 30	Shade	53·8	57·0	3·2	41·8				84·3	114·0	"	"
											113·6		
	56. 0	Sun	4·2	48·9	44·7	41·5				..	114·2	"	"
											114·0		
	57. 30	Shade	51·1	54·3	3·2	41·6				85·6	113·5	"	"
											113·5		
	1. 59. 0	Sun	4·0	48·9	44·9	41·1	40·4	1. 59. 30	50	..	115·0	"	"
											114·0		
	2. 0. 30	Shade	51·3	55·6	4·3	39·0				87·7	113·6	"	"
											112·2		
	2. 0	Sun	3·7	45·3	41·6	37·2				..	110·6	Light clouds near the Sun.	"
										88·3	111·5		
	3. 30	Shade	48·2	52·7	4·5	40·7				..	113·0	"	"
											112·6		
	2. 5. 0	Sun	10·0	58·8	48·8	..				89·7	112·0	Clear about the Sun.	AH
											112·5		
June 28	1. 37. 0	Sun	19·0	62·0	43·0	..				66·8	96·1	A few light clouds near the Sun.	N
											103·0		
	38. 30	Shade	65·6	71·1	5·5	36·9				..	..	"	"
	40. 0	Sun	8·7	50·4	41·7	35·9	36·8	1. 41. 15	51	..	103·2	"	"
	41. 30	Shade	54·5	60·6	6·1	36·9				..	103·4	"	"
	43. 0	Sun	3·0	47·2	44·2	37·5				70·0	104·4	"	"
	1. 44. 30	Shade	51·9	59·2	7·3	..				72·7	107·2	Cloudy after this time.	N
July 2	22. 2. 0	Sun	9·0	44·9	35·9	..				67·0	94·0	Clear about the Sun; light clouds elsewhere.	AH
	3. 30	Shade	47·0	50·1	3·1	33·6				..	93·2	"	"
	5. 0	Sun	0·9	38·5	37·6	34·4				..	94·0	"	"
	6. 30	Shade	41·1	44·4	3·3	34·6	34·3	22. 7. 0	53	68·4	93·8	"	"
	8. 0	Sun	2·6	40·7	38·1	34·5				..	96·7	"	"
										70·2	97·3		
	9. 30	Shade	43·5	47·5	4·0	34·6				..	97·1	"	"
	22. 11. 0	Sun	1·0	40·2	39·2	..				72·0	95·0	"	AH
July 24	23. 33 0	Sun	2·8	39·4	36·6	..				73·5	102·6	Clear about the sun; light clouds and haze are generally prevalent.	AH
	34. 30	Shade	41·6	44·0	2·4	33·9				..	105·1	"	"
	36. 0	Sun	45·1	81·0	35·9	33·3				..	105·4	"	"
	37. 30	Shade	82·7	85·5	2·8	33·9	33·8	23. 38. 0	55	75·8	106·7	"	"
	39. 0	Sun	1·2	38·7	37·5	34·3				..	109·0	"	"
	40. 30	Shade	40·9	44·5	3·6	33·6				..	109·6	"	"
	23. 42. 0	Sun	46·3	83·1	36·8	..				78·0	110·7	"	AH
July 29	1. 15. 0	Sun	2·0	40·3	38·3	..				73·1	92·4	Light high cirrus scattered over the sky.	AH
											98·0		
	16. 30	Shade	42·8	46·2	3·4	35·7				..	100·3	"	"
	18. 0	Sun	1·2	41·1	39·9	36·2				..	102·6	"	"
	19. 30	Shade	43·2	47·2	4·0	37·0				75·6	103·0	"	"
	21. 0	Sun	2·7	44·8	42·1	37·8	36·9	1. 21. 30	50	..	103·6	"	"
	22. 30	Shade	47·7	52·3	4·6	37·5				..	102·0	"	"
	24. 0	Sun	1·9	44·0	42·1	37·2				78·0	103·0	"	"
	25. 30	Shade	47·0	52·2	5·2	37·2				..	104·2	"	"
	1. 27. 0	Sun	1·3	44·0	42·7	..				79·7	105·0	"	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°				
Aug. 15	21. 54. 0	Sun	5·7	43·3	37·6	..				64·0	81·9	A few light clouds.	N
											82·1		
	55. 30	Shade	45·9	49·2	3·3	31·4				..	..	,,	,,
	57. 0	Sun	50·7	82·4	31·7	28·5				..	80·7	,,	,,
											79·6		
	21. 58. 30	Shade	84·8	87·9	3·1	24·9	27·3	21. 59. 0	44	66·0	..	,,	,,
	22. 0. 0	Sun	7·2	31·5	24·3	21·6				..	84·7	Sun obscured for 35 seconds.	,,
											78·0		
	1. 30	Shade	33·8	36·1	2·3	30·3				..	..	,,	,,
	22. 3. 0	Sun	37·4	78·2	40·8	..				68·0	81·9	Sun free from cloud.	N
											83·5		
Aug. 18	21. 49. 0	Sun	2·4	30·7	28·3	..				56·3	77·2	Cloudless.	N
	50. 30	Shade	34·7	39·7	5·0	22·8				..	78·7	,,	,,
	52. 0	Sun	41·7	69·0	27·3	22·2				..	80·6	,,	,,
	53. 30	Shade	72·5	77·7	5·2	23·1	22·9	21. 54. 0	42	..	80·5	,,	,,
	55. 0	Sun	4·0	33·4	29·4	23·7				..	80·8	,,	,,
	56. 30	Shade	36·8	43·0	6·2	22·8				..	81·6	,,	,,
	21. 58. 0	Sun	44·5	73·0	28·5	..				61·3	86·1	,,	N
											86·8		
Aug. 29	22. 34. 0	Sun	17·7	64·2	46·5	..				58·2	88·6	Light clouds.	AH
	35. 30	Shade	69·0	76·2	7·2	38·8				..	88·4	,,	,,
	37. 0	Sun	7·0	52·6	45·6	37·9				..	93·6	,,	,,
	38. 30	Shade	57·2	65·4	8·2	36·7	37·4	22. 39. 0	42	63·0	91·8	,,	,,
	40. 0	Sun	8·0	52·2	44·2	36·0				..	86·8	,,	,,
	41. 30	Shade	57·2	65·5	8·3	37·6				63·9	89·1	,,	,,
	22. 43. 0	Sun	8·3	55·8	47·5	..				65·4	89·0	,,	AH
Aug. 30	22. 18. 0	Sun	9·4	54·0	44·6	..				61·0	80·6	Cloudy.	AH
	19. 30	Shade	58·5	64·8	6·3	39·3				..	81·3	,,	,,
	21. 0	Sun	13·4	60·0	46·6	39·4	40·2	22. 20. 45	40	62·1	86·3	,,	,,
	22. 30	Shade	64·3	72·3	8·0	41·9				63·4	91·2	,,	,,
	24. 0	Sun	5·4	58·6	53·2	45·0				64·3	93·0	Clear about the Sun.	,,
	25. 30	Shade	64·1	72·6	8·5	46·7	45·9	22. 26. 0	41	..	95·1	,,	,,
	22. 27. 0	Sun	9·0	66·1	57·1	..				65·9	96·7	,,	AH
Sept. 1	23. 39. 0	Sun	15·0	65·9	50·9	..				69·0	90·0	Cloudy generally; clear at present about the Sun.	AH ,,
	40. 30	Shade	73·1	84·8	11·7	35·5				71·2	94·5	,,	,,
	42. 0	Sun	8·2	51·6	43·4	31·1				..	95·9	Light clouds about the Sun.	,,
	43. 30	Shade	58·2	71·1	12·9	19·3	24·0	23. 44. 0	42	73·0	98·0	,,	,,
	45. 0	Sun	7·2	28·3	21·1	8·9				..	91·2	Sun obscured.	,,
	46. 30	Shade	34·5	46·0	11·5	25·0				73·9	87·7	,,	,,
	23. 48. 0	Sun	5·5	57·5	52·0	..				..	88·3	Light clouds about the Sun.	AH
											94·7		
Sept. 5	1. 53. 0	Sun	11·0	59·8	48·8	..				70·6	97·2	Thin clouds about the Sun.	AH
	54. 30	Shade	64·3	71·1	6·8	41·2				71·3	100·0	,,	,,
	56. 0	Sun	5·8	53·0	47·2	40·5				..	94·6	,,	,,
	57. 30	Shade	57·0	63·6	6·6	43·1	42·6	1. 58. 0	36	72·2	90·6	,,	,,
	1. 59. 0	Sun	9·1	61·2	52·1	44·8				..	93·8	,,	,,
	2. 0. 30	Shade	66·0	74·1	8·1	43·2				73·6	94·8	,,	,,
	2. 2. 0	Sun	7·9	58·4	50·5	..				74·4	94·8	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept. 5	23. 2. 0	Sun	20·8	67·6	46·8	..				67·3	87·2	Clear about the Sun.	AH
											91·7		
	3. 30	Shade	71·6	78·4	6·8	42·3				68·0	93·8	,,	,,
	5. 0	Sun	1·6	53·0	51·4	44·6				..	96·5	,,	,,
	6. 30	Shade	57·4	64·3	6·9	45·5				69·0	98·4	,,	,,
	8. 0	Sun	8·4	61·8	53·4	46·0	45·5	23. 8. 30	42	..	99·9	,,	,,
	9. 30	Shade	66·4	74·4	8·0	47·2				70·4	101·0	,,	,,
	11. 0	Sun	4·6	61·5	56·9	48·2				..	101·5	,,	,,
	12. 30	Shade	67·2	76·6	9·4	44·4				72·0	101·5	,,	,,
	23. 14. 0	Sun	13·5	64·1	50·6	..				73·2	100·0	Light clouds about the Sun.	AH
Sept. 6	1. 12. 0	Sun	0·0	47·4	47·4	..				76·1	91·8	Clear about the Sun.	AH
	13. 30	Shade	49·3	52·2	2·9	31·4				76·2	92·5	,,	,,
	15. 0	Sun	2·3	23·6	21·3	18·5				..	92·0	Cloudy.	,,
	16. 30	Shade	25·3	28·0	2·7	13·5	20·2	1. 17. 0	38	76·8	89·0	,,	,,
	18. 0	Sun	3·0	14·0	11·0	8·4				..	84·3	Sun obscured by cloud.	,,
	19. 30	Shade	15·3	17·9	2·6	29·2				77·0	82·9	,,	,,
	1. 21. 0	Sun	18·5	71·0	52·5	..				77·5	88·0	Clear about the Sun.	AH
											94·0		
Sept. 6	2. 48. 0	Sun	0·0	41·2	41·2	..				77·0	88·0	Clear about the Sun.	AH
	49. 30	Shade	41·8	41·7	−0·1	42·8				78·3	93·6	,,	,,
	51. 0	Sun	1·0	45·2	44·2	43·5				..	96·0	,,	,,
											97·6	,,	,,
	52. 30	Shade	46·1	47·6	1·5	42·8				79·2	98·0	,,	,,
	54. 0	Sun	1·0	45·4	44·4	42·8	43·0	2. 54. 30	28	..	98·9	,,	,,
	55. 30	Shade	47·3	49·1	1·8	43·2				80·1	99·0	,,	,,
	57. 0	Sun	4·0	49·6	45·6	43·1				..	100·0	,,	,,
	2. 58. 30	Shade	52·8	56·0	3·2	42·6				80·8	99·6	,,	
	3. 0. 0	Sun	8·1	54·0	45·9	..				81·3	99·0	,,	AH
Sept. 6	23. 6. 0	Sun	2·0	43·2	41·2	..				67·0	86·8	Cloudless, light haze.	N
	7. 30	Shade	46·0	49·8	3·8	38·5				..	87·8	,,	,,
	9. 0	Sun	51·4	94·8	43·4	39·1				..	90·3	,,	,,
	10. 30	Shade	8·3	13·1	4·8	40·0				69·1	91·1	,,	,,
	12. 0	Sun	16·1	62·2	46·1	39·4				..	94·3	,,	,,
	13. 30	Shade	67·0	75·5	8·5	40·4	40·1	23. 14. 0	41	..	97·2	,,	,,
	15. 0	Sun	4·6	56·3	51·7	42·4				71·0	98·2	,,	,,
	16. 30	Shade	61·8	72·0	10·2	41·1				..	98·6	,,	,,
	18. 0	Sun	5·0	56·0	51·0	40·1				72·5	99·5	,,	,,
	19. 30	Shade	62·2	73·8	11·6	39·9				73·8	104·5	,,	,,
	23. 21. 0	Sun	12·1	64·0	51·9	..				74·7	104·9	Light clouds.	N
											102·2		
Sept. 7	2. 49. 0	Sun	7·0	59·8	52·8	..				82·0	99·2	Clear about the Sun.	AH
											102·8		
	50. 30	Shade	62·9	67·0	4·1	48·7				82·2	103·8	,,	,,
	52. 0	Sun	0·3	53·0	52·7	48·3				..	107·6	,,	,,
											109·2		
	53. 30	Shade	56·9	61·6	4·7	49·3				83·0	108·0	,,	,,
	55. 0	Sun	5·8	61·0	55·2	50·3				..	108·2	,,	,,
	56. 30	Shade	64·3	69·3	5·0	51·0	50·1	2. 57. 0	27	84·0	108·0	,,	,,
											108·9		
	58. 0	Sun	1·8	58·6	56·8	51·6				..	110·8	,,	,,
											109·8		
	2. 59. 30	Shade	62·6	67·9	5·3	51·3				85·0	110·0	,,	,,
	3. 1. 0	Sun	4·4	60·7	56·3	50·5				..	111·0	,,	,,
	2. 30	Shade	64·9	71·3	6·4	50·0				86·3	109·7	,,	,,
	3. 4. 0	Sun	10·6	67·1	56·5	..				87·0	109·0	,,	AH
											109·8		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept. 7	21. 49. 0	Sun	6·8	57·2	50·4	..				70·0	89·3	Cloudless. A very fine bright morning.	N
											90·5		
	50. 30	Shade	61·5	68·8	7·3	44·3				..	..	,,	,,
	52. 0	Sun	8·9	61·7	52·8	44·5				71·0	90·5	,,	,,
	53. 30	Shade	64·2	73·5	9·3	43·3	43·7	21. 52. 30	36	..	91·1	,,	,,
	55. 0	Sun	8·5	60·8	52·3	42·7				72·7	97·1	,,	,,
	56. 30	Shade	65·0	75·0	10·0	46·6				..	98·4	,,	,,
	58. 0	Sun	7·8	68·7	60·9	50·3				73·9	101·7	,,	,,
											102·1		
	21. 59. 30	Shade	76·6	87·9	11·3	48·7	48·3	22. 0. 45	37	..	..	,,	,,
	22. 1. 0	Sun	12·5	71·7	59·2	47·3				75·5	101·2	,,	,,
	22. 2. 30	Shade	78·0	90·5	12·5	48·8				..	99·0	,,	,,
	22. 4. 0	Sun	16·7	80·1	63·4	..				76·5	101·6	,,	N
										77·5	103·0		
Sept. 7	22. 57. 0	Sun	0·0	50·0	50·0	..				82·1	100·5	Cloudless.	AH
	22. 58. 30	Shade	51·0	51·5	0·5	50·9				83·1	105·5	,,	,,
	23. 0. 0	Sun	0·2	53·0	52·8	51·8	52·1	22. 59. 45	41	..	106·8	,,	,,
	1. 30	Shade	55·1	56·5	1·4	53·6				84·0	105·3	,,	,,
	3. 0	Sun	1·2	58·3	57·1	54·9				..	107·4	,,	,,
	4. 30	Shade	61·0	64·0	3·0	54·9				85·0	106·6	,,	,,
	6. 0	Sun	1·2	60·0	58·8	55·4				..	106·6	,,	,,
	7. 30	Shade	63·4	67·3	3·9	54·4	54·6	23. 8. 0	41	86·0	105·8	,,	,,
	9. 0	Sun	1·0	58·9	57·9	53·7				..	106·6	,,	,,
											107·0		
	10. 30	Shade	61·5	66·0	4·5	54·7				87·0	107·3	,,	,,
	23. 12. 0	Sun	7·8	68·3	60·5	..				87·9	109·6	,,	AH
Sept. 8	0. 36. 0	Sun	3·5	56·8	53·3	..				86·0	100·8	Clear near the Sun; light clouds here and there.	N
	37. 30	Shade	56·5	54·5	−2·0	55·4				..	107·0		,,
	39. 0	Sun	10·2	63·6	53·4	54·9				86·2	110·6	,,	,,
	40. 30	Shade	64·0	63·0	−1·0	55·7	56·8	0. 41. 0	40	..	106·8	,,	,,
	42. 0	Sun	9·7	65·8	56·1	58·5				87·3	107·4	,,	,,
	43. 30	Shade	67·2	63·5	−3·7	59·5				88·0	106·6	,,	,,
	0. 45. 0	Sun	9·7	65·2	55·0	..				89.0	105·4	,,	N
											105·8		
Sept. 8	0. 54. 0	Sun	9·5	74·8	65·3	..				89·8	105·2	A few light cirrus clouds near the Sun.	N
	55. 30	Shade	77·5	80·0	2·5	61·7				..	104·8		,,
	57. 0	Sun	14·0	77·0	63·0	61·0				90·2	104·8	Clear near the Sun.	,,
	0. 58. 30	Shade	79·1	80·5	1·4	60·6				..	105·7	,,	,,
	1. 0. 0	Sun	13·0	74·0	61·0	59·6	61·4	1. 0. 30	39	..	106·2	,,	,,
	1. 30	Shade	76·0	77·4	1·4	61·6				92·0	105·1	,,	,,
	3. 0	Sun	12·0	77·1	65·1	63·9				92·2	107·8	,,	,,
	4. 30	Shade	78·9	80·0	1·1	61·1				93·8	105·0	,,	,,
	1. 6. 0	Sun	5·4	64·6	59·2	..				94·1	100·0	,,	N
											104·8		
Sept. 8	2. 7. 0	Sun	0·8	50·2	49·4	..				92·0	98·7	Cloudless.	AH
	8. 30	Shade	48·5	43·1	−5·4	55·5				92·6	98·2	,,	,,
	10. 0	Sun	2·2	53·0	50·8	55·6				..	99·6	,,	,,
	11. 30	Shade	51·6	47·4	−4·2	55·3				93·2	100·0	,,	,,
	13. 0	Sun	1·6	53·0	51·4	55·4				..	100·2	,,	,,
	14. 30	Shade	51·8	48·1	−3·7	55·6	55·8	2. 15. 0	32	93·9	101·2	,,	,,
	16. 0	Sun	1·5	54·0	52·5	56·2				..	101·0	,,	,,
	17. 30	Shade	52·9	49·3	−3·6	56·3				94·4	101·0	,,	,,
	19. 0	Sun	2·2	55·2	53·0	56·1				..	101·0	,,	,,
	20. 30	Shade	53·5	50·9	−2·6	56·4				95·0	101·0	,,	,,
	2. 22. 0	Sun	4·3	59·0	54·7	..				95·7	100·7	,,	AH
											100·3		

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.
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	h m s		div.	div	div.	div.	div.	h m s	°	°	°		
Sept. 8	2. 53. 0		0·0	44·5	44·5	..				94·3	100·0	Cloudless.	AH
	54. 30	Shade	42·0	35·3	−6·7	50·9				..	98·8	,,	,,
	56. 0	Sun	0·7	44·6	43·9	50·9				94·8	99·6	,,	,,
	57. 30	Shade	41·9	34·6	−7·3	52·6	52·2	2. 58. 0	27	..	98·8	,,	,,
	2. 59. 0	Sun	1·4	48·2	46·8	53·6				95·3	99·6	,,	,,
	3. 0. 30	Shade	45·5	39·3	−6·2	53·2				95·6	98·8	,,	,,
	3. 2. 0	Sun	5·0	52·2	47·2	..				96·0	98·0	,,	AH
Sept. 14	2. 40. 0	Sun	8·8	50·3	41·5	..				71·0	90·4	Cloudless.	AH
	41. 30	Shade	54·1	59·4	5·3	37·5				71·3	92·2	,,	,,
	43. 0	Sun	2·1	46·3	44·2	38·4				..	95·0	,,	,,
	44. 30	Shade	51·0	57·2	6·2	39·2	39·0	2. 45. 0	27	72·4	96·9	,,	,,
	46. 0	Sun	5·3	51·8	46·5	39·5				..	96·8	,,	,,
	47. 30	Shade	56·7	64·6	7·9	40·6				73·7	98·1	,,	,,
	2. 49. 0	Sun	4·4	55·0	50·6	..				74·3	99·0	,,	AH
Sept. 14	23. 47. 0	Sun	9·0	55·8	46·8	..				66·8	95·5	Cloudless.	N
	48. 30	Shade	59·1	63·8	4·7	44·3				..	97·0	,,	,,
	50. 0	Sun	8·8	60·0	51·2	44·9				67·0	102·0	,,	,,
	51. 30	Shade	64·1	72·0	7·9	44·7	44·8	23. 52. 0	38	..	104·0	,,	,,
	53. 0	Sun	9·1	63·1	54·0	44·7				..	103·0	,,	,,
	54. 30	Shade	69·2	80·0	10·8	44·7				70·0	102·7	,,	,,
	56. 0	Sun	6·5	63·6	57·1	45·4				..	104·0	,,	,,
	57. 30	Shade	69·4	82·0	12·6	46·7				71·7	105·7	,,	,,
	23. 59. 0	Sun	9·4	71·0	61·6	47·9	47·3	0. 0. 15	39	..	107·7	,,	,,
15	0. 0. 30	Shade	79·6	94·4	14·8	47·2				73·2	106·5	,,	,,
	0. 2. 0	Sun	9·4	71·8	62·4	..				74·4	106·0	,,	N
											106·8		
Sept. 15	2. 16. 0	Sun	7·8	68·1	60·3	..				85·1	101·0	Cloudless.	AH
	17. 30	Shade	73·2	81·1	7·9	53·1				87·0	101·4	,,	,,
	19. 0	Sun	4·6	66·2	61·6	54·0				..	102·2	,,	,,
	20. 30	Shade	71·8	79·1	7·3	54·0	54·0	2. 20. 15	29	88·1	100·9	,,	,,
	22. 0	Sun	4·0	65·1	61·1	53·9				..	101·3	,,	,,
	23. 30	Shade	69·9	77·0	7·1	54·8				89·3	102·4	,,	,,
	25. 0	Sun	2·3	65·1	62·8	56·2	56·2	2. 27. 0	28	..	101·4	,,	,,
	26. 30	Shade	69·4	75·5	6·1	56·2				90·4	99·8	,,	,,
	2. 28. 0	Sun	12·9	74·8	61·9	..				91·0	99·2	,,	AH
Sept. 19	23. 19. 0	Sun	2·0	46·8	44·8	..				62·2	90·2	Cloudless.	AH
	20. 30	Shade	50·3	55·1	4·8	42·1				63·0	94·0	,,	,,
	22. 0	Sun	1·9	50·9	49·0	43·3				..	98·5	,,	,,
	23. 30	Shade	54·5	61·1	6·6	42·8				64·0	102·0	,,	,,
	25. 0	Sun	4·4	54·2	49·8	42·3	43·5	23. 25. 30	36	..	101·5	,,	,,
	26. 30	Shade	59·8	68·1	8·3	43·7				65·2	103·4	,,	,,
	28. 0	Sun	8·9	63·0	54·1	44·9				..	103·4	,,	,,
	29. 30	Shade	69·4	79·4	10·0	45·7				67·1	104·8	,,	,,
	23. 31. 0	Sun	12·4	69·7	57·3	..				68·2	105·0	,,	AH
Sept. 26	2. 55. 0	Sun	4·2	43·9	39·7	..				67·0	81·6	Cloudless.	AH
	56. 30	Shade	46·4	50·3	3·9	36·2				67·6	83·8	,,	,,
	58. 0	Sun	4·4	44·9	40·5	36·5				..	86·6	,,	,,
	2. 59. 30	Shade	47·9	51·9	4·0	36·8	36·4	3. 0. 0	20	68·4	87·0	,,	,,
	3. 1. 0	Sun	3·1	44·3	41·2	36·4				..	86·8	,,	,,
	2. 30	Shade	48·0	53·7	5·7	36·3				69·6	87·3	,,	,,
	3. 4. 0	Sun	16·3	59·0	42·7	..				70·0	85·4	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept.26	23. 19. 0	Sun	14·2	56·1	41·9	..				60·1	88·6	Cloudless.	AH
	20. 30	Shade	59·1	63·9	4·8	38·3				61·0	94·6	,,	,,
	22. 0	Sun	4·8	49·1	44·3	39·0				..	99·3	,,	,,
	23. 30	Shade	54·6	60·4	5·8	40·2				62·1	101·3	,,	,,
	25. 0	Sun	3·1	50·9	47·8	40·5	40·3	23. 25. 30	33	..	101·2	,,	,,
	26. 30	Shade	56·0	64·8	8·8	40·7				63·0	103·3	,,	,,
	28. 0	Sun	1·6	52·8	51·2	41·3				..	103·9	,,	,,
	29. 30	Shade	59·0	70·0	11·0	42·0				64·8	103·9	,,	,,
	23. 31. 0	Sun	5·8	60·7	54·9	..				66·0	104·2	,,	AH
Oct. 3	2. 29. 0	Sun	18·1	58·0	39·9	..				66·2	78·7	Light cirrus scattered over the sky.	AH
	30. 30	Shade	62·3	66·6	4·3	35·9				66·9	80·0	,,	,,
	32. 0	Sun	5·8	46·3	40·5	36·0				..	83·3	,,	,,
	33. 30	Shade	50·0	54·6	4·6	36·5	36·2	2. 34. 0	22	67·8	84·3	,,	,,
	35. 0	Sun	10·0	51·8	41·8	36·7				..	83·6	,,	,,
	36. 30	Shade	55·4	61·0	5·6	35·9				68·7	82·0	,,	,,
	2. 38. 0	Sun	4·0	45·1	41·1	..				69·4	80·7	,,	AH
Oct. 12	1. 54. 0	Sun	7·8	48·1	40·3	..				59·0	71·7	Clear about the Sun.	AH
	55. 30	Shade	50·5	53·8	3·3	36·4				60·0	72·3	,,	,,
	57. 0	Sun	0·0	39·0	39·0	35·4				..	73·9	,,	,,
	1. 58. 30	Shade	41·8	45 7	3·9	37·0				60·9	74·6	,,	,,
	2. 0. 0	Sun	12·1	54·9	42·8	38·8	37·7	2. 0. 30	22	..	74·1	,,	,,
	1. 30	Shade	58·0	62·1	4·1	38·7				61·9	73·3	,,	,,
	3. 0	Sun	4·7	47·6	42·9	38·8				..	72·7	,,	,,
	4. 30	Shade	51·0	55·1	4·1	39·1				63·0	72·6	,,	,,
	2. 6. 0	Sun	5·0	48·5	43·5	..				63·6	73·1	,,	AH
Oct. 12	22. 26. 0	Sun	0·0	15·8	15·8	..				49·4	61·2	Haze; thin clouds over the Sun.	AH
	27. 30	Shade	17·4	19·0	1·6	18·7				..	64·0	,,	,,
	29. 0	Sun	20·0	44·8	24·8	22·8	22·8	22. 28. 45	25	..	66·4	,,	,,
	30. 30	Shade	46·9	49·2	2·3	27·0				50·1	68·0	,,	,,
	32. 0	Sun	50·4	84·3	33·9	30·9				..	69·7	,,	,,
	33. 30	Shade	87·0	90·6	3·6	31·4	31·2	22. 35. 30	25	52·3	72·2	,,	,,
	35. 0	Sun	2·8	38·9	36·1	32·0				..	73·5	,,	,,
	36. 30	Shade	42·6	47·2	4·6	30·5				52·6	72·8	,,	,,
	22. 38. 0	Sun	49·7	83·7	34·0	..				53·2	72·8	,,	AH
Oct. 24	1. 50. 0	Sun	6·7	37·0	30·3	..				58·0	67·0	Clear near the Sun.	N
	51. 30	Shade	39·0	41·1	2·1	27·9				..	68·3	,,	,,
	53. 0	Sun	42·1	71·9	29·8	27·3				..	69·5	,,	,,
	54. 30	Shade	74·0	77·0	3·0	26·6	26·7	1. 55. 0	18	59·0	68·0	,,	,,
	56. 0	Sun	8·7	38·1	29·4	26·2				59·0	68·0	,,	,,
	57. 30	Shade	39·5	43·0	3·5	25·3				..	69·2	,,	,,
	1. 59. 0	Sun	44·3	72·4	28·1	..				60·0	68·4	,,	N
											68·0	,,	
Oct. 24	21. 57. 0	Sun	10·8	18·0	7·2	..				54·8	54·6	Dense clouds; strong wind.	N
	21. 58. 30	Shade	19·1	21·4	2·3	5·4				..	55·2	,, ,,	,,
	22. 0. 0	Sun	22·0	30·2	8·2	6·4				..	55·7	,, ,,	,,
	1. 30	Shade	31·2	32·6	1·4	8·9	8·4	22. 2. 0	19	..	55·7	,, ,,	,,
	3. 0	Sun	33·0	45·5	12·5	11·3				..	56·2	,, gleams of sunshine for 5 seconds.	,,
	4. 30	Shade	46·4	47·3	0·9	9·9				..	59·2	,, sun shining.	,,
	22. 6. 0	Sun	47·8	57·0	9·2	..				55·0	59·8	Dense clouds.	N

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Oct. 30	2. 41. 0	Sun	22·0	39·5	17·5	..				56·0	52·0	Sun shining through thin clouds.	N
	42. 30	Shade	41·1	43·5	2·4	10·5				..	52·2	,,	,,
	44. 0	Sun	44·7	53·0	8·3	6·3				..	51·8	Denser clouds; occasional gleams of sunshine.	,,
	45. 30	Shade	53·9	55·6	1.7	5·5	6·1	2. 46. 0	11	56·2	51·2	,,	,,
	47. 0	Sun	56·2	62·2	6·0	4·8				..	51·1	,,	,,
	48. 30	Shade	62·8	63·5	0·7	3·5				..	50·8	Dense cirro-stratus, Sun entirely obscured.	,,
						..							
	2. 50. 0	Sun	63·8	66·1	2·3					56·3	50·0	,,	N
Nov. 3	23. 34. 0	Sun	34.2	50·4	16·2	..				45·0	43·0	Cloudless; fog.	AH
	35. 30	Shade	54·2	60·7	6·5	8·1				..	43·4	,,	,,
	37. 0	Sun	38·8	51·8	13·0	7·2				..	44·0	,,	,,
	38. 30	Shade	55·4	60·6	5·2	9·1	8·5	23. 39. 0	20	47·5	44·8	,,	,,
	40. 0	Sun	10.0	25·3	15·3	10·0				..	45·0	,,	,,
	41. 30	Shade	27·2	32·5	5·3	8·2				..	46·7	,,	,,
	23. 43. 0	Sun	34·4	46·2	11·8	..				48·3	46·0	,,	AH
Nov. 22	22. 29. 0	Sun	22·0	49·2	27·2	..				52·1	56·0	Partially cloudy.	AH
	30. 30	Shade	52·0	55·6	3·6	(15·0)				..	57·2	,,	,,
	32. 0	Sun	14·2	24·2	10·0	6·7				52·5	55·5	Sun obscured by clouds.	,,
	33. 30	Shade	25·9	29·0	3·1	6·1	5·7	22. 35. 30	14	..	54·4	,,	,,
	35. 0	Sun	30·9	39·3	8·4	5·6				53·2	53·3	,,	,,
	36. 30	Shade	39·8	42·4	2·6	4·4				..	52·8	,,	,,
	22. 38. 0	Sun	43·6	49·2	5·6	..				53·5	52·3	,,	AH
Nov. 27	2. 39. 0	Sun	39·5	61·1	21·6	..				51·0	50·7	Clear about the Sun.	N
	40. 30	Shade	63·9	67·4	3·5	17·4				..	51·2	,,	,,
	42. 0	Sun	69·0	89·3	20·3	17·2				..	49·7	,,	,,
	43. 30	Shade	91·1	93·8	2·7	16·0	16·1	2. 44. 0	6	52·0	50·0	,,	,,
	45. 0	Sun	9·5	26·7	17·2	14·9				..	49·6	,,	,,
	46. 30	Shade	28·4	30·3	1·9	15·2				..	49·8	,,	,,
	2. 48. 0	Sun	31·0	48·0	17·0	..				52·2	49·2	,,	N
Dec. 1	21. 53. 0	Sun	5·0	24·7	19·7	..				48·0	45·5	Cloudless about the Sun.	AH
	54. 30	Shade	26·0	27·6	1·6	18·2				..	47·3	,,	,,
	56. 0	Sun	28·1	48·0	19·9	18·3				..	48·4	,,	,,
	57. 30	Shade	49·5	51·1	1·6	18·4				..	49·0	,,	,,
	21. 59. 0	Sun	51·6	71·7	20·1	18·7	18·9	21. 59. 30	11	..	49·0	,,	,,
	22. 0. 30	Shade	73·0	74·1	1·1	19·4				..	49·0	,,	,,
	2. 0	Sun	8·7	29·7	21·0	19·8				..	49·2	,,	,,
	3. 30	Shade	31·2	32·5	1·3	19·5				..	49·3	,,	,,
	22. 5. 0	Sun	32·9	53·6	20·7	..				49·8	49·2	,,	AH
Dec. 11	2. 33. 0	Sun	5·6	15·8	10·2	..				51·0	46·2	Clear about the Sun.	AH
	34. 30	Shade	17·4	20·0	2·6	5·8				..	45·8	,,	,,
	36. 0	Sun	21·2	27·9	6·7	4·6	4·7	2. 36. 30	5	..	45·2	Light clouds about the Sun.	,,
	37. 30	Shade	29·3	30·9	1·6	3·7				..	44·7	,,	,,
	2. 39. 0	Sun	31·7	35·6	3·9	..				51·2	44·3	Sun obscured.	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Dec. 20	21. 28. 0	Sun	6·5	20·1	13·6	..				51·5	51·0	Generally cloudless.	AH
	29. 30	Shade	20·9	21·3	0·4	13·9				..	50·0	,,	,,
	31. 0	Sun	21·2	36·2	15·0	14·8				..	50·7	,,	,,
	32. 30	Shade	36·9	37·0	0·1	14·9	14·9	21. 32. 15	8	..	50·8	,,	,,
	34. 0	Sun	37·0	52·0	15·0	15·0				..	51·1	,,	,,
	35. 30	Shade	52·6	52·5	−0·1	15·7				..	51·0	,,	,,
	37. 0	Sun	52·3	68·6	16·3	16·5				..	51·4	,,	,,
	38. 30	Shade	69·0	68·7	−0·3	15·5				..	51·8	,,	,,
	40. 0	Sun	68·7	84·8	16·1	16·5				..	52·2	,,	,,
	41. 30	Shade	85·2	84·7	−0·5	17·0				53·0	52·2	,,	,,
	43. 0	Sun	8·2	25·0	16·8	17·3	16·9	21. 43. 30	9	..	52·4	,,	,,
	44. 30	Shade	25·3	24·8	−0·5	17·1				..	52·4	,,	,,
	46. 0	Sun	24·5	40·9	16·4	16·9				..	52·6	,,	,,
	47. 30	Shade	41·3	40·9	−0·4	17·0				..	52·5	,,	,,
	21. 49. 0	Sun	40·6	57·3	16·7	..				54·4	52·6	,,	AH
Dec. 29	23. 27. 0	Sun	34·9	62·8	27·9	..				49·0	47·7	Cloudless.	AH
	28. 30	Shade	65·2	68·3	3·1	25·0				49·3	48·2	,,	,,
	30. 0	Sun	8·2	36·5	28·3	25·9				..	49·0	,,	,,
	31. 30	Shade	38·4	40·0	1·6	25·6				..	49·2	,,	,,
	33. 0	Sun	41·0	67·0	26·0	24·8	25·1	23. 33. 30	13	..	49·2	,,	,,
	34. 30	Shade	68·6	69·5	0·9	25·3				50·6	49·2	,,	,,
	36. 0	Sun	5·0	31·5	26·5	25·9				..	49·4	,,	,,
	37. 30	Shade	33·0	33·4	0·4	23·1				..	48·7	,,	,,
	23. 39. 0	Sun	33·5	54·0	20·5	..				51·6	48·6	,,	AH
Dec. 30	2. 38. 0	Sun	14·0	32·5	18·5	..				52·0	45·6	Cloudless.	AH
	39. 30	Shade	34·2	36·5	2·3	15·5				..	46·0	,,	,,
	41. 0	Sun	37·0	54·0	17·0	15·5				..	45·8	,,	,,
	42. 30	Shade	55·2	55·9	0·7	15·4	15·2	2. 43. 0	5	52·0	45·7	,,	,,
	44. 0	Sun	11·6	26·8	15·2	15·0				..	45·5	,,	,,
	45. 30	Shade	27·0	26·7	−0·3	14·7				..	45·6	,,	,,
	2. 47. 0	Sun	26·0	39·6	13·6	..				52·5	45·5	,,	AH

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.
The "Apparent Effect of the Sun's Radiation" is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.
The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

READINGS OF THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day, except Sundays, Good Friday and Christmas Day.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	51·01	50·20	49·27	48·58	48·40	48·85	49·75	50·83	*S*	52·51	52·86
2	51·63	50·98	50·16	*S*	48·57	48·40	*S*	49·78	50·89	51·78	52·61	52·87
3	51·62	50·96	50·24	49·22	48·58	48·43	48·91	49·80	*S*	51·81	52·66	*S*
4	51·65	50·91	50·10	49·19	48·58	*S*	48·96	49·85	50·97	51·82	52·57	52·88
5	51·63	*S*	*S*	49·18	48·55	48·40	48·97	49·91	51·00	51·85	*S*	52·88
6	51·59	50·86	50·01	49·17	48·53	48·47	49·00	*S*	51·02	51·88	52·62	52·88
7	51·58	50·77	49·95	49·13	*S*	48·47	49·02	49·96	51·07	51·91	52·67	52·88
8	*S*	50·80	49·90	49·12	48·50	48·47	49·04	50·00	51·10	*S*	52·67	52·88
9	51·57	50·78	49·93	*S*	48·47	48·51	*S*	50·04	51·12	51·97	52·68	52·86
10	51·55	50·73	49·88	49·07	48·45	48·51	49·10	50·07	*S*	51·98	52·70	*S*
11	51·53	50·69	49·87	49·04	48·45	*S*	49·10	50·10	51·18	52·02	52·70	52·88
12	51·48	*S*	*S*	49·02	48·44	48·50	49·15	50·14	51·22	52·04	*S*	52·84
13	51·46	50·63	49·80	48·98	48·43	48·55	49·16	*S*	51·26	52·06	52·76	52·80
14	51·44	50·61	49·77	GoodFriday.	*S*	48·55	49·20	50·20	51·28	52·16	52·75	52·79
15	*S*	50·57	49·72	48·92	48·41	48·56	49·26	50·23	51·32	*S*	52·78	52·78
16	51·39	50·55	49·72	*S*	48·40	48·58	*S*	50·30	51·36	52·12	52·78	52·77
17	51·37	50·53	49·68	48·92	48·40	48·59	49·32	50·31	*S*	52·16	52·80	*S*
18	51·34	50·52	49·64	48·96	48·40	*S*	49·32	50·34	51·40	52·16	52·75	52·77
19	51·32	*S*	*S*	48·84	48·39	48·60	49·36	50·39	51·43	52·16	*S*	52·76
20	51·30	50·45	49·57	48·83	48·40	48·64	49·40	*S*	51·46	52·21	52·85	52·75
21	51·25	50·41	49·58	48·82	*S*	48·68	49·35	50·47	51·44	52·21	52·85	52·77
22	*S*	50·39	49·53	48·81	48·40	48·68	49·44	50·49	51·48	*S*	52·80	52·71
23	51·22	50·40	49·49	*S*	48·40	48·72	*S*	50·50	51·51	52·27	52·80	52·70
24	51·18	50·36	49·43	48·75	48·38	48·72	49·54	50·56	*S*	52·34	52·88	*S*
25	51·16	50·32	49·45	48·73	48·40	*S*	49·56	50·60	51·59	52·35	52·90	ChristmasDay.
26	51·14	*S*	*S*	48·71	48·40	48·74	49·59	50·64	51·64	52·38	*S*	52·68
27	51·11	50·25	49·38	48·70	48·40	48·78	49·65	*S*	51·65	52·41	52·86	52·63
28	51·07	50·27	49·35	48·67	*S*	48·80	49·64	50·71	51·67	52·41	52·86	52·64
29	*S*		49·32	48·62	48·40	48·82	49·68	50·73	51·70	*S*	52·88	52·64
30	51·04		49·29	*S*	48·41	48·83	*S*	50·77	51·73	52·48	52·88	52·62
31	51·03		49·28		48·40		49·74	50·83		52·50		*S*
Means.	51·37	50·61	49·71	48·95	48·45	48·59	49·28	50·28	51·32	52·13	52·75	52·78

At temperatures exceeding 52° ·8 the fluid of this thermometer enters the upper bulb; the estimated readings from November 20 to December 12 are therefore liable to some uncertainty.

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	47·50	45·81	45·02	46·02	48·86	51·89	54·39	55·84	*S*	56·25	53·64
2	49·79	47·42	45·76	*S*	46·16	48·91	*S*	54·45	55·94	57·00	56·25	53·55
3	49·73	47·32	45·65	44·95	46·26	49·04	52·15	54·48	*S*	57·00	56·14	*S*
4	49·69	47·23	45·67	44·89	46·34	*S*	52·28	54·61	56·01	57·00	56·08	53·45
5	49·59	*S*	*S*	44·90	46·48	49·28	52·35	54·75	56·03	57·00	*S*	53·38
6	49·50	47·08	45·58	44·87	46·58	49·40	52·47	*S*	56·05	57·00	55·90	53·32
7	49·40	47·05	45·53	44·85	*S*	49·48	52·51	54·90	56·12	57·20	55·82	53·30
8	*S*	46·95	45·53	44·81	46·76	49·58	52·60	54·96	56·18	*S*	55·80	53·21
9	49·26	46·89	45·51	*S*	46·86	49·62	*S*	55·03	56·14	..	55·69	53·14
10	49·17	46·82	45·44	44·82	46·90	49·81	52·75	55·10	*S*	57·10	55·59	*S*
11	49·07	46·74	45·48	44·81	47·00	*S*	52·83	55·13	56·21	57·20	55·47	53·02
12	48·97	*S*	*S*	44·80	47·15	49·98	52·92	55·16	56·25	57·20	*S*	52·90

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet)—*concluded.*

Days of the Month 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
13	48·89	46·65	45·45	44·82	47·23	50·10	53·00	*S*	56·30	56·99	55·34	52·82
14	48·80	46·62	45·41	Good Friday.	*S*	50·21	53·10	55·24	56·33	57·00	55·19	52·78
15	*S*	46·57	45·37	44·84	47·38	50·32	53·25	55·26	56·41	*S*	55·13	52·70
16	48·62	46·54	45·40	*S*	47·54	50·40	*S*	55·34	56·47	..	55·00	52·66
17	48·54	46·51	45·36	44·97	47·65	50·54	53·40	55·35	*S*	..	54·94	*S*
18	48·45	46·47	45·32	45·02	47·74	*S*	53·43	55·38	56·52	56·85	54·78	52·56
19	48·40	*S*	*S*	45·06	47·78	50·68	53·50	55·46	56·55	..	*S*	52·50
20	48·35	46·35	45·27	45·13	47·92	50·85	53·60	*S*	56·61	..	54·64	52·43
21	48·26	46·30	45·25	45·17	*S*	51·00	53·69	55·52	56·52	56·76	54·54	52·42
22	*S*	46·27	45·28	45·28	48·04	51·06	53·73	55·55	56·60	*S*	54·42	52·28
23	48·20	46·25	45·24	*S*	48·12	51·21	*S*	55·62	56·68	56·78	54·33	52·23
24	48·10	46·18	45·25	45·44	48·19	51·25	53·95	55·63	*S*	56·80	54·24	*S*
25	48·05	46·07	45·22	45·48	48·25	*S*	54·00	55·65	56·80	56·75	54·15	Christmas Day
26	48·02	*S*	*S*	45·58	48·35	51·43	54·08	55·69	56·90	56·69	*S*	52·05
27	47·93	45·94	45·13	45·69	48·45	51·55	54·20	*S*	56·95	56·66	53·92	51·92
28	47·81	45·80	45·13	45·76	*S*	51·65	54·17	55·74	..	56·53	53·85	51·90
29	*S*		45·08	45·84	48·57	51·83	54·28	55·72	56·90	*S*	53·76	51·86
30	47·69		45·06	*S*	48·65	51·80	*S*	55·78	56·95	56·43	53·69	51·75
31	47·65		45·04		48·75		54·38	55·84		56·36		*S*
Means.	48·69	46·65	45·38	45·12	47·45	50·38	53·25	55·25	56·41	(56·87)	55·03	52·71

At temperatures above 56°·8 the fluid of this thermometer enters the upper bulb; the inserted estimated readings from September 26 to October 20 are liable to some uncertainty.

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	..	..	..	49·20	53·45	57·66	60·08	60·03	*S*	55·62	51·93
2	46·40	..	..	..	49·39	53·64	*S*	60·15	60·10	60·70	55·58	51·85
3	46·30	..	..	..	49·52	53·85	57·87	60·14	*S*	60·60	55·39	*S*
4	46·22	..	..	..	49·63	*S*	57·89	60·19	60·05	60·48	55·15	51·70
5	46·10	..	..	..	49·60	54·16	57·88	60·18	60·12	60·48	*S*	51·61
6	45·97	..	..	..	49·88	54·27	57·91	*S*	60·17	60·40	54·77	51·50
7	45·85	..	..	..	*S*	54·37	57·97	60·10	60·29	60·32	54·53	51·39
8	*S*	..	..	..	50·12	54·50	58·12	59·82	60·44	*S*	54·31	51·31
9	45·75	..	..	..	50·30	54·73	*S*	59·77	60·46	60·05	54·07	51·22
10	45·71	..	..	..	50·42	54·90	58·42	59·73	*S*	59·90	53·87	*S*
11	45·67	..	..	..	50·65	*S*	58·55	59·73	60·66	59·78	53·68	51·22
12	45·63	..	..	44·52	50·84	55·23	58·67	59·71	60·77	59·65	*S*	51·20
13	45·70	..	..	44·78	50·91	55·48	58·66	*S*	60·90	59·56	53·35	51·12
14	45·60	..	..	Good Friday.	*S*	55·60	58·78	59·73	60·96	59·48	53·16	51·09
15	*S*	..	..	45·35	50·92	55·70	58·91	59·73	61·09	*S*	53·05	50·98
16	45·62	..	..	*S*	50·95	55·84	*S*	59·75	61·20	59·18	52·88	50·84
17	45·62	..	..	45·90	51·02	55·96	58·91	59·73	*S*	59·09	52·80	*S*
18	45·60	..	..	46·10	51·08	*S*	58·94	59·71	61·25	58·89	52·60	50·57
19	45·54	..	..	46·31	51·18	56·12	59·03	59·74	61·29	58·67	*S*	50·41
20	45·30	..	..	46·58	51·14	56·34	59·18	*S*	61·36	58·56	52·45	50·30
21	45·38	..	..	46·79	*S*	56·46	59·26	59·71	61·21	58·34	52·35	50·18
22	*S*	..	..	47·11	51·42	56·49	59·26	59·68	61·30	*S*	52·26	50·01
23	45·20	..	..	*S*	51·50	56·64	*S*	59·60	61·30	57·50	52·21	49·97
24	45·06	..	..	47·58	51·74	56·59	59·40	59·97	*S*	57·40	52·25	*S*
25	44·90	..	..	47·84	52·00	*S*	59·43	59·90	61·25	57·21	52·30	Christmas Day
26	44·70	..	..	48·11	52·24	56·98	59·50	59·90	61·18	57·04	*S*	49·80

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet)—*concluded.*

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
27	44·22	..	..	48·30	52·48	57·20	59·67	*S*	61·11	56·63	52·18	49·58
28	..	..	..	48·58	*S*	57·36	59·67	59·96	60·96	56·48	52·19	49·60
29	..		..	48·78	52·84	57·46	59·85	59·90	60·90	*S*	52·10	49·55
30	..		..	*S*	53·05	57·56	*S*	59·98	60·80	56·25	52·00	49·44
31	..		..		53·24		60·06	60·07		55·92		*S*
Means .	45·57	...	...	(47·20)	51·01	55·65	58·82	59·88	60·81	58·79	53·35	50·73

At temperatures below 44° the fluid of this thermometer descends below the scale ; the readings from January 28 to April 11 were less than 44°.

(IV.)—Reading of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	..	40·64	..	51·75	57·38	61·00	63·73	61·58	*S*	52·08	48·87
2	41·62	..	40·99	*S*	51·50	57·38	*S*	63·13	61·72	61·52	51·81	48·70
3	41·32	..	41·10	40·54	51·50	57·22	60·51	62·35	*S*	61·45	51·28	*S*
4	41·02	40·30	41·02	40·92	51·72	*S*	60·65	61·61	62·39	61·30	50·90	48·24
5	40·92	*S*	*S*	41·43	52·10	57·20	61·00	61·22	62·72	61·10	*S*	48·07
6	41·20	40·32	40·90	42·03	52·40	57·52	61·62	*S*	63·08	60·68	50·09	48·05
7	41·57	40·43	40·75	42·88	*S*	58·18	62·16	61·11	63·24	60·20	49·70	48·17
8	*S*	40·68	40·55	43·53	52·62	58·56	62·51	61·40	63·50	*S*	49·52	48·51
9	41·50	41·04	40·42	*S*	52·50	58·84	*S*	61·54	63·68	59·53	49·50	48·73
10	41·70	40·72	40·25	45·03	52·84	59·28	62·41	61·51	*S*	59·55	49·55	*S*
11	42·20	40·34	40·24	45·77	52·96	*S*	62·28	61·62	63·98	59·50	49·43	48·64
12	42·60	*S*	*S*	46·14	52·41	59·50	62·11	61·77	64·16	59·44	*S*	48·41
13	42·88	39·60	40·20	46·53	52·08	59·32	61·71	*S*	64·30	59·28	49·07	48·10
14	42·49	39·41	40·28	Good Friday	*S*	59·32	61·60	61·52	64·31	58·80	48·90	47·67
15	*S*	..	40·30	46·98	52·06	59·48	61·75	61·44	64·33	*S*	48·65	47·28
16	42·27	..	40·16	*S*	52·27	59·58	*S*	61·48	64·33	58·09	48·80	46·78
17	42·05	..	40·10	47·33	52·04	59·81	62·57	61·42	*S*	57·80	48·70	*S*
18	41·80	..	40·20	47·85	51·97	*S*	62·78	61·30	64·44	57·59	48·91	46·31
19	41·46	..	*S*	48·42	52·20	59·70	62·62	61·22	64·32	57·13	*S*	46·28
20	41·35	..	40·03	48·82	52·53	59·73	62·39	*S*	64·21	56·60	49·16	46·25
21	41·00	..	39·75	49·20	*S*	59·86	62·20	61·26	63·78	55·74	49·58	46·33
22	*S*	..	39·50	49·67	53·86	60·09	62·13	61·50	63·58	*S*	49·81	46·42
23	40·20	..	39·43	*S*	54·58	60·69	*S*	61·58	63·20	53·78	49·90	46·55
24	39·90	..	39·46	50·61	55·31	60·94	62·52	61·81	*S*	54·00	49·97	*S*
25	39·60	..	39·10	50·89	55·54	*S*	62·78	61·69	62·50	54·12	50·08	Christmas Day
26	39 50	*S*	*S*	51·10	55·67	61·46	63·22	61·93	62·30	54·10	*S*	45·91
27	..	39·87	..	51·38	55·82	61·57	63·71	*S*	62·28	53·51	49·80	45·90
28	..	40·10	..	51·60	*S*	61·52	63·88	62·10	61·97	53·40	49·41	45·91
29	..		..	51·85	56·58	61·45	64·07	62·14	61·82	*S*	49·08	45·85
30	..		..	*S*	56·90	61·34	*S*	62·10	61·68	52·71	48·99	46·05
31	..		..		57·19		64·10	61·81		52·20		*S*
Means .	41·37	(40·26)	40·24	46·98	53·37	59·50	62·31	61·75	63·21	57·43	49·72	47·28

At temperatures below 39°·70 the fluid of this thermometer descends below the scale ; the readings were below this value from January 27 to February 3, Febuary 15 to 25, and March 27 to April 1. The readings less than this value which appear in the above table are estimated readings only, and therefore liable to some uncertainty.

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, within the case which covers the tops of the deep-sunk Thermometers, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	c	°
1	*S*	41·3	43·6	45·5	53·4	63·0	60·3	59·5	62·8	*S*	46·0	46·5
2	33·8	45·3	44·2	*S*	56·4	59·2	*S*	60·3	66·6	62·9	45·0	45·2
3	37·0	43·3	41·0	45·6	58·3	60·3	63·9	55·7	*S*	63·2	45·5	*S*
4	41·3	40·0	40·8	43·8	57·2	*S*	67·3	56·5	68·0	58·3	43·0	46·5
5	42·2	*S*	*S*	49·1	59·5	63·2	68·5	60·2	68·5	58·2	*S*	46·8
6	41·7	39·3	40·6	50·9	58·3	67·3	69·5	*S*	67·0	57·3	43·8	48·2
7	38·7	44·7	39·5	51·5	*S*	66·1	67·4	63·8	68·6	56·4	45·0	50·0
8	*S*	41·1	38·8	57·1	54·0	62·4	66·5	63·4	70·5	*S*	47·1	49·2
9	43·4	38·5	39·3	*S*	58·0	66·8	*S*	62·8	68·3	61·5	47·5	47·7
10	46·3	36·8	39·3	54·5	53·6	66·5	65·0	64·7	*S*	59·9	46·1	*S*
11	45·1	34·2	41·4	52·5	51·0	*S*	64·2	65·5	67·4	60·2	44·5	45·8
12	45·6	*S*	*S*	52·7	51·8	60·2	61·9	63·4	68·8	58·0	*S*	44·4
13	40·0	33·2	41·5	53·5	52·5	62·7	62·4	*S*	68·5	55·4	45·5	41·7
14	42·2	34·2	39·5	Good Friday.	*S*	60·4	64·8	62·5	67·6	55·1	44·0	41·4
15	*S*	31·2	38·4	50·4	54·8	63·3	66·9	63·3	67·9	*S*	49·2	41·5
16	40·0	35·0	40·5	*S*	53·6	63·7	*S*	62·8	69·6	53·3	44·3	40·5
17	38·8	35·4	39·6	56·4	54·7	63·8	69·5	62·3	*S*	57·3	51·0	*S*
18	37·0	37·2	39·4	56·6	55·4	*S*	65·2	62·2	66·7	53·9	47·1	44·0
19	38·1	*S*	*S*	53·6	56·2	59·3	64·8	61·3	66·0	50·0	*S*	44·2
20	37·8	36·1	36·0	53·5	60·2	63·3	64·1	*S*	65·5	48·6	52·4	45·1
21	33·8	35·2	36·2	55·5	*S*	66·0	65·8	64·4	62·0	47·4	52·0	47·2
22	*S*	36·6	37·9	58·0	63·5	65·7	64·8	65·2	62·6	*S*	51·5	45·2
23	35·0	42·8	37·8	*S*	63·9	67·9	*S*	63·4	59·6	50·3	52·7	44·1
24	36·0	44·5	37·4	56·1	60·4	67·0	67·5	62·9	*S*	52·3	52·2	*S*
25	35·5	40·8	38·0	54·1	60·3	*S*	68·6	64·1	62·1	51·6	50·5	Christmas Day
26	36·5	*S*	*S*	56·7	61·3	64·7	68·3	63·9	63·0	51·0	*S*	45·2
27	33·7	42·5	37·0	59·2	63·5	66·8	70·1	*S*	63·2	52·2	45·0	42·0
28	34·1	45·0	37·5	58·6	*S*	65·0	66·4	66·2	60·9	47·5	48·5	44·2
29	*S*		36·9	54·2	63·2	65·4	67·8	62·3	62·1	*S*	48·2	47·8
30	36·4		37·0	*S*	62·8	63·6	*S*	61·5	61·9	49·7	46·2	43·4
31	39·5		41·8		62·5		66·5	62·8		49·5		*S*
Means.	38·8	38·9	39·3	53·3	57·8	64·4	66·1	62·5	65·6	54·7	47·5	45·1

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	45·2	46·2	52·8	58·8	69·5	62·5	58·6	66·1	*S*	43·7	47·7
2	31·3	49·8	47·8	*S*	64·0	59·1	*S*	60·0	75·7	73·2	49·2	45·3
3	33·9	47·7	45·5	53·8	68·5	65·4	75·4	53·3	*S*	71·1	47·0	*S*
4	47·4	36·2	45·2	50·3	58·4	*S*	79·9	58·1	79·4	61·9	42·5	49·1
5	46·2	*S*	*S*	56·5	67·0	73·3	77·2	69·6	74·5	67·6	*S*	47·5
6	41·5	38·2	40·3	59·4	68·6	76·7	77·4	*S*	75·4	66·9	45·2	49·0
7	40·9	44·8	40·2	60·0	*S*	73·9	70·9	68·9	79·6	65·5	44·5	51·4
8	*S*	37·7	40·7	63·7	64·2	71·5	71·0	67·4	82·7	*S*	50·9	48·5
9	46·6	38·3	42·2	*S*	66·5	80·0	*S*	71·0	75·0	65·7	49·3	47·1
10	49·9	36·2	40·5	68·3	51·2	64·8	68·9	71·1	*S*	65·9	49·0	*S*
11	46·7	32·1	42·5	67·3	48·7	*S*	68·5	67·8	72·2	62·9	44·8	45·8
12	45·9	*S*	*S*	64·3	56·5	66·4	66·5	67·8	76·3	61·7	*S*	42·9
13	39·4	30·3	42·9	67·7	60·4	72·2	62·3	*S*	77·7	61·7	49·5	39·2
14	42·3	32·1	41·3	Good Friday.	*S*	73·2	72·0	67·7	77·8	61·2	47·3	40·2
15	*S*	30·3	37·0	51·3	55·4	72·6	79·8	66·4	80·5	*S*	50·5	39·4

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	40·8	35·5	44·4	*S*	59·9	67·1	*S*	67·0	82·6	55·7	46·7	38·8
17	36·6	37·8	43·2	67·3	61·0	72·2	76·0	68·2	*S*	61·4	54·0	*S*
18	35·7	42·8	41·0	63·0	62·7	*S*	68·6	66·1	75·6	53·9	46·4	42·1
19	36·3	*S*	*S*	55·7	68·5	58·9	68·5	69·4	75·2	45·8	*S*	46·0
20	35·3	36·2	36·7	60·1	73·7	73·7	71·4	*S*	76·4	52·1	55·0	46·4
21	34·1	34·5	40·0	68·0	*S*	80·6	74·0	70·7	59·8	45·0	54·0	49·5
22	*S*	39·2	40·6	72·6	72·8	73·3	68·3	72·0	66·5	*S*	53·4	41·0
23	34·5	48·4	41·0	*S*	74·8	80·9	*S*	63·2	66·9	48·7	50·2	42·0
24	35·3	45·8	40·5	66·6	66·0	72·3	75·9	69·9	*S*	56·4	54·3	*S*
25	33·8	45·9	42·2	65·0	69·8	*S*	76·8	69·6	73·9	55·0	53·1	Christmas Day
26	34·9	*S*	*S*	70·0	73·0	65·6	75·7	71·6	74·9	52·5	*S*	47·4
27	36·2	47·2	39·4	75·8	73·2	73·2	81·9	*S*	77·5	56·3	45·7	36·0
28	32·7	50·0	42·8	71·7	*S*	72·1	71·0	70·6	68·4	46·0	47·9	45·0
29	*S*		37·0	56·0	69·4	68·1	75·6	61·8	69·0	*S*	47·1	49·5
30	37·5		43·1	*S*	68·3	66·2	*S*	67·3	68·2	49·3	46·5	43·0
31	43·2		54·5		70·0		70·8	70·5		49·0		*S*
Means.	39·2	40·1	42·2	62·8	64·9	70·9	72·6	66·9	74·2	58·2	48·8	44·8

WEEKLY MEANS of READINGS of THERMOMETERS.

1865. Period.				Thermometers sunk in the ground. Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales.
	d		d	°	°	°	°	°	°
January	1	to January	7	51·62	49·62	46·14	41·28	39·1	40·2
	8	to	14	51·51	49·03	45·68	42·23	43·8	45·1
	15	to	21	51·33	48·44	45·51	41·66	37·6	36·5
	22	to	28	51·15	48·02	44·82	39·80	35·1	34·6
	29	to February	4	50·99	47·47	...	40·30	41·0	43·3
February	5	to	11	50·77	46·92	...	40·59	39·1	37·9
	12	to	18	50·57	46·56	...	39·50	34·4	34·8
	19	to	25	50·39	46·24	...	...	39·3	41·7
	26	to March	4	50·20	45·77	...	40·62	42·9	47·0
March	5	to	11	49·92	45·51	...	40·52	39·8	41·1
	12	to	18	49·72	45·39	...	40·21	39·8	41·6
	19	to	25	49·51	45·25	...	39·55	37·2	40·2
	26	to April	1	49·32	45·08	...	...	39·3	34·9
April	2	to	8	49·17	44·88	...	41·89	49·7	57·3
	9	to	15	49·01	44·82	44·88	46·09	52·7	63·8
	16	to	22	48·86	45·11	46·46	48·55	55·6	64·4
	23	to	29	48·70	45·63	48·20	51·24	56·5	67·5
	30	to May	6	48·56	46·31	49·54	51·83	57·2	64·2
May	7	to	13	48·46	46·98	50·54	52·57	53·5	57·9
	14	to	20	48·40	47·67	51·05	52·18	55·8	63·5
	21	to	27	48·40	48·23	51·90	55·13	62·2	71·6
	28	to June	3	48·41	48·80	53·34	57·11	61·8	66·9
June	4	to	10	48·47	49·53	54·49	58·26	65·4	73·4
	11	to	17	48·55	50·26	55·63	59·50	62·4	70·6
	18	to	24	48·67	51·01	56·44	60·17	64·9	73·3
	25	to July	1	48·80	51·69	57·37	61·39	64·3	67·9
July	2	to	8	48·98	52·39	57·94	61·41	67·2	75·3
	9	to	15	49·16	52·97	58·66	61·94	64·2	69·7
	16	to	22	49·36	53·56	59·10	62·45	65·7	71·1
	23	to	29	49·61	54·11	59·59	63·36	68·1	76·1
	30	to August	5	49·80	54·51	60·13	62·69	59·8	61·7
August	6	to	12	50·05	55·05	59·81	61·49	63·9	69·0
	13	to	19	50·30	55·34	59·73	61·40	62·4	67·5
	20	to	26	50·54	55·61	59·79	61·63	64·0	69·5
	27	to September	2	50·79	55·81	60·01	61·91	63·7	68·7
September	3	to	9	51·05	56·09	59·25	63·10	68·5	77·8
	10	to	16	51·27	56·33	60·93	64·23	68·3	77·8
	17	to	23	51·45	56·58	61·29	63·92	63·7	70·1
	24	to	30	51·66	56·90	61·03	62·09	62·2	72·0
October	1	to October	7	51·84	57·03	60·50	61·04	59·4	67·7
	8	to	14	52·04	57·10	59·74	59·35	58·3	63·2
	15	to	21	52·17	56·80	58·79	57·16	51·7	52·3
	22	to	28	52·36	56·70	57·04	53·82	50·8	52·5
	29	to November	4	52·55	56·25	55·65	51·83	46·4	46·8
November	5	to	11	52·67	55·71	54·21	49·63	45·7	47·3
	12	to	18	52·77	55·06	52·97	48·84	46·8	49·1
	19	to	25	52·85	54·39	52·30	49·75	51·9	53·3
	26	to December	2	52·87	53·74	52·04	49·14	46·6	46·7
December	3	to	9	52·88	53·30	51·46	48·29	48·1	48·8
	10	to	16	52·81	52·81	51·08	47·81	42·6	41·1
	17	to	23	52·74	52·40	50·24	46·36	45·0	44·5
	24	to	31	52·64	51·90	49·59	45·92	44·5	44·2

ABSTRACT OF THE CHANGES OF THE DIRECTION OF THE WIND, AS DERIVED FROM OSLER'S ANEMOMETER.

By *direct* motion, in the following statements, is meant that the change of the direction of the wind was in the order N., E., S., W., N., &c., by *retrograde* is meant in the order N., W., S., E., N., &c.

1864. Dec. 31. 12. The direction of the wind was E.N.E.
1865. Jan. 31. 12. ,, ,, W.S.W., which implies a retrograde motion of 180°.
On Jan. 2. 3, the trace was shifted to the next set of lines downwards; on Jan. $12^d.\ 22^h$, $21^d.\ 22^h$, $23^d.\ 22^h$, the trace was shifted to the next set of lines upwards, implying direct motion of 360°, and retrograde motion of 1080°.
Therefore the whole excess of retrograde motion in the month of January was 900°.

1865. Jan. 31. 12. The direction of the wind was W.S.W.
Feb. 28. 12. ,, ,, W., which implies a direct motion of $22\frac{1}{2}°$.
On Feb. 3. 22, the trace was shifted to the next set of lines upwards; on Feb. $5^d.\ 22^h$, $15^d.\ 22^h$, $27^d.\ 4^h$, the trace was shifted to the next set of lines downwards, implying retrograde motion of 360°, and direct motion of 1080°.
Therefore the whole excess of direct motion in the month of February was $742\frac{1}{2}°$.

1865. Feb. 28. 12. The direction of the wind was W.
March 31. 12. ,, ,, S., which implies a retrograde motion of 90°.
On March 5. 22, the trace was shifted to the next set of lines upwards; on March $30^d.\ 22^h$, the trace was shifted to the next set of lines downwards, implying retrograde motion of 360°, and direct motion of 360°.
Therefore the whole excess of retrograde motion in the month of March was 90°.

1865. March 31. 12. The direction of the wind was S.
April 30. 12. ,, ,, E., which implies a direct motion of 270°.
On April 10. 23, $11^d.\ 3^h$, $11^d.\ 3^h.\ 40^m$, $16^d.\ 22^h$, $25^d.\ 22^h$, $26^d.\ 22^h$, the trace was shifted to the next set of lines downwards; on April $18^d.\ 22^h$, the trace was shifted to the next set of lines upwards, implying direct motion of 2160°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of April was 2070°.

1865. April 30. 12. The direction of the wind was E.
May 31. 12. ,, ,, S.S.W., which implies a retrograde motion of $247\frac{1}{2}°$.
On May 6. 22, $9^d.\ 22^h$, $19^d.\ 22^h$, $21^d.\ 2^h$, the trace was shifted to the next set of lines upwards; on May $0^d.\ 22^h$, $7^d.\ 22^h$, $8^d.\ 22^h$, $15^d.\ 0^h.\ 30^m$, $18^d.\ 22^h$, $21^d.\ 9^h.\ 30^m$, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1440°, and direct motion of 2160°.
Therefore the whole excess of direct motion in the month of May was $472\frac{1}{2}°$.

1865. May 31. 12. The direction of the wind was S.S.W.
June 30. 12. ,, ,, N.N.E., which implies a direct motion of 180°.
On June 4. 22, $7^d.\ 2^h.\ 30^m$, $12^d.\ 22^h$, $13^d.\ 22^h$, $22^d.\ 22^h$, $27^d.\ 22^h$, $29^d.\ 22^h$, the trace was shifted to the next set of lines downwards; and on June $21^d.\ 3^h.\ 15^m$, to the second set of lines downwards; on June $22^d.\ 3^h$, the trace was shifted to the next set of lines upwards, implying direct motion of 3240°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of June was 3060°.

1865. June 30. 12. The direction of the wind was N.N.E.
July 31. 12. ,, ,, N., which implies a retrograde motion of $22\frac{1}{2}°$.
On July 17. 3. 20^m, $22^d.\ 3^h.\ 30^m$, $31^d.\ 9^h.\ 40^m$, the trace was shifted to the next set of lines downwards; on July $21^d.\ 22^h$, the trace was shifted to the next set of lines upwards, implying direct motion of 1080° and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of July was $697\frac{1}{2}°$.

1865. July 31. 12. The direction of the wind was N.
Aug. 31. 12. ,, ,, W., which implies a retrograde motion of 90°.
On Aug. 4. 22, $19^d.\ 2^h.\ 30^m$, $19^d.\ 9^h.\ 30^m$, $22^d.\ 22^h$, $24^d.\ 21\frac{1}{2}^h$, $26^d.\ 3^h.\ 20^m$, $30^d.\ 22^h$, the trace was shifted to the next set of lines downwards; on Aug. $9^d.\ 0^h$, $23^d.\ 9^h.\ 40^m$, the trace was shifted to the next set of lines upwards, implying direct motion of 2520°, and retrograde motion of 720°.
Therefore the whole excess of direct motion in the month of August was 1710°.

1865. Aug. 31. 12. The direction of the wind was W.
Sept. 30. 12. ,, ,, E.N.E., which implies a direct motion of $157\frac{1}{2}$°.
On Sept. 12. 3. 10^m, $14^d.\ 22^h$, $20^d.\ 3^h.\ 15^m$, the trace was shifted to the next set of lines downwards; on Sept. $14^d.\ 9^h.\ 30^m$, the trace was shifted to the next set of lines upwards, implying direct motion of 1080°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of September was $877\frac{1}{2}$°.

1865. Sept. 30. 12. The direction of the wind was E.N.E.
Oct. 31. 12. ,, ,, N., which implies a retrograde motion of $67\frac{1}{2}$°.
On Oct. 8. 0. 40^m, the trace was shifted to the next set of lines downwards; on Oct. $18^d.\ 3^h.\ 30^m$, $22^d.\ 0^h.\ 50^m$, the trace was shifted to the next set of lines upwards, implying direct motion of 360°, and retrograde motion of 720°.
Therefore the whole excess of retrograde motion in the month of October was $427\frac{1}{2}$°.

1865. Oct. 31. 12. The direction of the wind was N.
Nov. 30. 12. ,, ,, N., which implies no change.
On Nov. 2. 3. 10^m, $4^d.\ 22^h$, $13^d.\ 2^h.\ 40^m$, $28^d.\ 22^h$, the trace was shifted to the next set of lines downwards; on Nov. $27^d.\ 22^h$, the trace was shifted to the next set of lines upwards, implying direct motion of 1440°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of November was 1080°.

1865. Nov. 30. 12. The direction of the wind was N.
Dec. 31. 12. ,, ,, E., which implies a retrograde motion of 270°.
On Dec. 1. 2. 30^m, the trace was shifted to the next set of lines downwards, implying direct motion of 360°.
Therefore the whole excess of direct motion in the month of December was 90°.

The whole excess of direct motion to the end of the year was $9382\frac{1}{2}$°.

The revolution-counter which is attached to the vertical spindle of the vane, whose readings increase with change of direction of the wind in the order N., E., S., W., &c., or in *direct* motion, and decrease with change of direction in the order N., W., S., E., &c., or in *retrograde* motion, gave the following readings:—

	revs.
On 1864, December $31^d.\ 12^h$	17·20
On 1865, December $31^d.\ 12^h$	43·25

Implying an excess of direct motion, during the year, of 26 05 revolutions, or 9378°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1865.

1865, MONTH.	Monthly Amount of Rain collected in each Gauge.							
	Self-registering Gauge of Osler's Anemometer.	Second Gauge at Osler's Anemometer.	On the Roof of the Octagon Room.	On the Roof of the Library.	On the Roof of the Photographic Thermometer Shed.	Crosley's.	Cylinder partly sunk in the Ground read daily.	Cylinder partly sunk in the Ground read Monthly.
	in.	in.	in.	in.	in.	in.	in.	in.
January	1·73	1·70	2·25	2·63	3·31	2·76	3·32	3·34
February	0·82	0·78	1·02	1·32	1·56	1·61	1·75	1·90
March	0·26	0·23	0·52	0·57	0·79	0·86	0·85	0·88
April	0·24	0·27	0·32	0·33	0·37	0·41	0·40	0·38
May	3·47	3·50	3·86	4·10	4·32	3·90	4·37	4·20
June	1·96	1·97	2·19	2·27	2·38	2·35	2·45	2·20
July	1·79	1·78	1·95	2·10	2·25	2·13	2·27	2·18
August	3·06	3·15	3·40	3·58	3·80	3·48	3·97	3·96
September	0·09	0·09	0·10	0·17	0·16	0·18	0·16	0·16
October	4·02	4·14	4·77	5·30	5·79	5·00	5·90	6·00
November	1·23	1·29	1·45	1·41	2·18	2·23	2·39	2·45
December	0·35	0·39	0·37	0·42	0·81	0·81	0·87	0·90
Sums	19·02	19·29	22·20	24·20	27·72	25·72	28·70	28·55

The heights of the receiving surfaces are as follows:

	Above the Mean Level of the Sea. Ft.	In.		Above the Ground. Ft.	In.
The Two Gauges at Osler's Anemometer	205	6		50	8
Gauge on the Roof of the Octagon Room	193	2½		38	4½
Gauge on the Roof of the Library	177	2		22	4
Gauge on the Roof of the Photographic Thermometer Shed	164	10		10	0
Crosley's Gauge	156	6		1	8
The Two Cylinder Gauges partly sunk in the Ground	155	3		0	5

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

LUMINOUS METEORS.

1865.

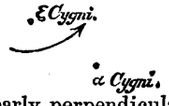
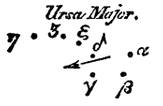
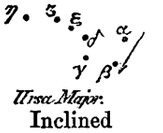
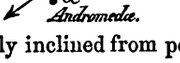
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
January 0	12. 3. 30	= 2nd Mag. *	Bluish-white	. . .	No train	..	Inclined
January 15	11. 54. 0	= 1st Mag. *	Brilliant	Less than 1 s.	No train	15	Inclined
February 10	6. 40. 0	= Mars	Blue	. . .	Faint train	25	Perpendicular
February 17	10. 4. 0	= 3rd Mag. *	Blue	½ second	No train	..	σ Draconis δ Draconis α Cephei.
April 8	9. 49. 0	= 2nd Mag. *	White	. . .	No train	..	. . .
April 15	11. 25. 0	= 2nd Mag. *	Blue	Less than 1 s.	No train	12	Inclined
April 20	10. 21. 0	= 1st Mag. *	Bluish-white	Momentary	A flash only	1	Northwards
„	10. 27. 0	= 4th Mag. *	Blue	Less than 1 s.	No train	15	Nearly horizontal
„	10. 35. 0	= 3rd Mag. *	Bluish-white	Less than 1 s.	No train	15	Almost perpendicular
„	10. 46. 0	= 1st Mag. *	Brilliant white	. . .	Slight train	6	Horizontal
„	10. 57. 0	= 1st Mag. *	Bright blue	Less than 1 s.	Slight train	10 to 12	
May 1	9. 40. 0	= 1st Mag. *	Bluish-white	½ second	Faint train	10 ±	Perpendicular
„	10. 30. 0	= 2nd Mag. *	Blue	Less than 1 s.	. . .	8 to 10	Inclined
„	10. 31. 0	= 1st Mag. *	Bright blue	0·7 second	Train	16	Horizontal
May 6	11. 53. 0	> 1st Mag. *	Bright	About 1 s.	Fine train	25	Inclined
June 7	12. 8. 0	= Venus	Yellowish-white	2 seconds	Train	40 ±	Perpendicular
July 19	10. 26. 0 ±	= 2nd Mag. *	Blue	Less than 1 s.	No train	10 or 12	Inclined
„	10. 32. 0	= Capella	Bluish-white	Less than 1 s.	Fine train	20	. . .
August 9	11. 37. 0	= 2nd Mag. *	Bluish-white	½ second	No train	15	. . .
August 11	9. 41. 15	= 4th Mag. *	Blue	¾ second	No train	8	Inclined
„	9. 48. 0 ±	= 3rd Mag. *	Reddish	Less than 1 s.	No train	10	Inclined
„	9. 48. 10	= 3rd Mag. *	Bluish-white	½ second	No train	7	Inclined
„	9. 51. 45	= 4th Mag. *	Bluish-white	Less than 0·5 s.	No train	2	α Lyræ γ Draconis β Draconis.
„	10. 0. 5	= 4th Mag. *	Bluish-white	Less than 1 s.	No train	12	Slightly inclined from hor.
„	10. 1. 5	= 4th Mag. *	Bluish-white	Rapid motion	No train	10	Perpendicular
„	10. 7. 30	= 1st Mag. *	Blue	More than 1 s.	Fine train, 1 s.	25	From the direction of β Pegasi
„	10. 10. 30	= 1st Mag. *	Bluish-white	1 second	Fine train	..	
„	10. 19. 15	= 1st Mag. *	Bluish-white	1 second	Fine train	..	Almost perpendicular in W.
„	10. 19. 42	= 1st Mag. *	Bluish-white	1 second	Fine train	..	. . .
„	10. 21. 30	= 2nd Mag. *	Bluish-white	½ second	Small train	..	. . .
„	10. 23. 41	= 1st Mag. *	Bluish-white	1 second	Train	12	. . .
„	10. 31. 30	= 2nd Mag. *	Bluish-white	1 second	Fine train	..	12 Canum Venaticorum.
„	10. 33. 34	= 1st Mag. *	Bluish-white	1 second	Train	10	. . .

in the YEAR 1865.

Position, or Altitude and Azimuth.	Remarks.	Observer.
From direction of β Geminorum, passed between η and α Leonis.	Partially clear	N.
From a point a few degrees from η Leonis, towards α Cancri.	Above the Moon	N.
From space midway between Ursa Major and Gemini, vertically down.	Full Moon, hazy	N.
From a point $\frac{1}{3}$rd of the distance from σ Draconis towards α Cephei, curved below δ Draconis.	Faint Aurora	N.
		A. H.
Across α Draconis to γ Draconis.	Bright moonlight	N.
From direction of χ to ι Ursæ Majoris.	. . .	N.
Altitude $51\frac{1}{2}°$, point of appearance 10° W. of Polaris.	Very brilliant, disappeared instantaneously.	N.
From the direction of β Ursæ Minoris, passed across o Ursæ Majoris. Point of appearance 5° W. of preceding meteor.	. . .	N.
From the direction of β Ursæ Minoris, fell almost perpendicularly towards N horizon. Point of appearance 7° E. of Polaris (same altitude).	. . .	N.
Between Coma Berenices and 12 Canum Venaticorum.	. . .	N.
From θ Ursæ Majoris towards W. horizon.	. . .	N.
From direction of α Ursæ Majoris, disappeared near τ Ursæ Majoris.	. . .	N.
From direction of α Lyræ, disappeared near α Cephei.	. . .	N.
From ν Draconis, passed horizontally a few degrees above α Lyræ.	. . .	N.
From a point between α Cygni and o Cygni, passed towards zenith across λ Lyræ, disappearing 1° or 2° beyond that star.	. . .	N.
From a point a little below δ Draconis fell vertically across β Cephei and γ Cassiopeiæ, and disappeared 5° beyond the latter star.	Very brilliant	N.
Appeared midway between δ Ursæ Majoris and α Draconis, moved rapidly towards Capella.	Path parallel to a line joining δ and α Ursæ Majoris.	N.
From a little below ε Ursæ Majoris to ψ Ursæ Majoris.	Scintillated considerably, and disappeared very suddenly.	N.
Across Draco towards α Lyræ.	. . .	N.
From the direction of μ Boötis to a point North of ρ Boötis.	A fine clear night	A. H.
From a point North of γ Boötis to a point near D Boötis.	. . .	A. H.
From a point midway between γ and δ Boötis to ψ Boötis.	. . .	N.
Between γ and β Draconis.	. . .	N.
From the vicinity of σ Cygni, disappeared near γ Cygni.	. . .	N.
Fell vertically through Equuleus towards horizon.	. . .	N.
Passed across Delphinus and α Aquilæ to a point 5° beyond the latter star.	A very brilliant meteor	N.
In N.N.W., altitude 60°, directed towards West.	. . .	E. J.
From a point 10° below α Lyræ, passed across γ Ophiuchi.	Very brilliant	N.
From the zenith in the vicinity of η Draconis to a point 12° West of η Ursæ Majoris.	Very brilliant meteor	N.
From the direction of Coma Berenices, disappeared near ε Boötis.	. . .	E. J.
Moved rapidly from a point 6° below η Ursæ Majoris towards Arcturus.	. .	N.
From a point 5° West of 12 Canum Venaticorum towards W. horizon, disappeared at altitude 10° $\pm$.	. . .	E. J.
From the direction of γ Persei towards o Ursæ Majoris. Center of path midway between those stars.	. . .	N.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
August 11	10. 40. 15	= 3rd Mag. *	Blue	More than 1 s.	No train	15	Inclined
,,	10. 47. 15	= 2nd Mag. *	Bluish-white	1 second	Slight train	25	Nearly horizontal
,,	10. 52. 0	= 4th Mag. *	Blue	½ second	No train	5	Perpendicular
,,	10. 58. 45	= 3rd Mag. *	Blue	Rapid motion	No train	7	Inclined
,,	11. 1. 45	= 1st Mag. *	Blue	More than 1 s.	No train	20	. . .
,,	11. 6. 30	= 3rd Mag. *	White	Momentary	No train	10	Almost perpendicular
,,	11. 10. 15	= 2nd Mag. *	Blue	½ second	No train	12	Inclined
,,	11. 17. 45	= 2nd Mag. *	Blue	Slow motion	. . .	..	
,,	11. 26. 0	= 1st Mag *	Bluish-white	1 second	Train	20	Nearly perpendicular
,,	11. 27. 30	= 1st Mag. *	Blue	1½ second	Train	15	Inclined
,,	11. 33. 30	= 1st Mag. *	Bluish-white	1 second	Train	10	Inclined
,,	11. 39. 47	= 3rd Mag. *	Bluish-white	Less than 1 s.	No train	17	
,,	11. 40. 0	= 2nd Mag. *	Blue	¾ second	No train	12	
August 12	11. 31. 0	= 2nd Mag. *	Bluish-white	Rapid motion	No train	..	Almost perpendicular
,,	11. 36. 0	= 1st Mag. *	Bluish	½ second	Slight train	15	Inclined
August 13	10. 2. 15	= 2nd Mag. *	Blue	1 second	No train	5	Almost perpendicular
,,	10. 6. 0	= 3rd Mag. *	Blue	¾ second	No train	..	Perpendicular
,,	11. 30. 50	= 1st Mag. *	Bluish-white	1 second	Train	5	Almost perpendicular
August 14	10. 23. 0	. . .	Bluish-white	1 second	Fine train	..	. . .
August 17	9. 12. 0	= 3rd Mag. *	Bluish-white	Less than 1 s.	No train	12	E. to W. nearly horizontal
August 21	9. 12. 18	= 2nd Mag. *	Blue	1½ second	No train	15	Almost perpendicular
August 22	8. 55. 30	= Venus	Blue	5 seconds	Faint train	..	Nearly horizontal
,,	8. 59. 0	= 4th Mag. *	White	½ second	No train	6	Perpendicular
August 25	8. 58. 30	= 2nd Mag. *	Brilliant blue	Rapid motion	No train	5	Inclined
,,	9. 34. 0	= 1st Mag. *	White	1 second	No train	10	
,,	9. 35. 30	= 2nd Mag. *	Blue	¾ second	No train	11	Inclined
,,	9. 41. 0	= 4th Mag. *	Bluish-white	Rapid motion	No train	6	Nearly horizontal towards N.
,,	10. 43. 30	= 3rd Mag. *	Blue	1 second	No train	10	Inclined
,,	12. 6. 0	= 2nd Mag. *	Blue	½ second	No train	5	Inclined
August 26	9. 10. 0	= 2nd Mag. *	Blue	½ second	No train	7	Inclined
,,	9. 35. 0	= 3rd Mag. *	Bluish-white	Rapid motion	No train	7	
,,	9. 52. 30	= Venus	Blue	6 seconds	Slight train	20	Slightly inclined from perp.
,,	10. 4. 0	= 3rd Mag. *	Blue	½ second	No train	5	. . .
,,	10. 25. 0	= 4th Mag. *	Blue	Rapid motion	No train	10	Inclined
September 6	10. 0. 0	= 1st Mag, *	Bluish-white	Momentary	No train	..	Inclined
September 14	9. 24. 30	= 4th Mag. *	White	Rapid motion	No train	6	. . .
,,	9. 45. 0	= 2nd Mag. *	Blue	1 second	No train	8	Perpendicular
September 19	9. 28. 0	= 1st Mag. *	Blue	2 seconds	. . .	12	Nearly horizontal
September 20	9. 43. 0	= 1st Mag. *	Bluish-white	Rapid motion	. . .	8	Perpendicular
,,	9. 44. 0	= 3rd Mag. *	Blue	½ second	. . .	10	Inclined
September 22	9. 30. 0	= 2nd Mag. *	Blue	1 second	No train	15	. . .
September 24	7. 48. 45	> Jupiter	Bluish-white	2 to 3 seconds	Faint train	30+	Path parallel to the ecliptic
,,	8. 30. 0±	= 3 × Jupiter.	Flame colour	. . .	Train; sparks	..	. . .
September 26	9. 0. 0	= 1st Mag. *	White	1 second	No train	10	Inclined
,,	9. 18. 0	= Jupiter	Bluish-white	3 seconds	No train	25	Inclined
,,	9. 21. 0	> Jupiter	Brilliant blue	5 seconds	No train	30	Inclined

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
From the direction of κ Draconis to a point between α Draconis and η Ursæ Majoris.	. . .	A. H.
From a point between α Ursæ Majoris and Polaris to a point North of κ Draconis.	. . .	A. H.
From the direction of λ Boötis.	. . .	A. H.
Passed below ι Draconis from the direction of ι Ursæ Minoris.	. . .	A. H.
From the direction of γ Draconis to a point South of δ Cygni.	. . .	A. H.
From a point West of Polaris.	. . .	A. H.
From β Cygni towards α Ophiuchi.	. . .	A. H.
From a point East of ξ Cygni, curved between that star and α Cygni.	. . .	A. H.
From Cassiopeia towards Capella.	. . .	N.
From the direction of β Ursæ Minoris to a point between ι Draconis and η Ursæ Majoris.	Brilliant meteor	A. H.
From a point above Capella, disappeared 5° below β Aurigæ.	. . .	N.
From a point 5° West of α Ursæ Majoris, passed below δ Ursæ Majoris to a point about 7′ below ϵ Ursæ Majoris.	. . .	N.
From the direction of λ Draconis, passed above ϵ Ursæ Majoris to a point below ζ Ursæ Majoris.	. . .	A. H.
Fell almost perpendicularly in the West, and disappeared near Corona Borealis.	Very cloudy	N.
From the direction of Sagitta, disappeared near o Herculis.	. . .	N.
From the direction of ι Ursæ Minoris, passed between ι and α Draconis.	. . .	A. H.
Fell vertically from a point a little to the left of Arcturus.	. . .	A. H.
Fell almost perpendicularly in West from near γ Serpentis.	Bright meteor	N.
From a point a little below ζ Draconis to ι Draconis.	. . .	E. J.
In N.N.W. at altitude 20°.	Very cloudy; no stars discernible.	N.
From the zenith to a point 5° on the right of α Draconis.	. . .	N.
From a point near ψ Pegasi to β Trianguli.	Burst about 1 second before disappearance, throwing off a shower of sparks.	A. H.
Fell vertically from a point in the vicinity of α Persei.	. . .	A. H.
From the direction of ψ Cassiopeiæ to a point above ϵ Cassiopeiæ.	. . .	A. H.
From a point 2° East of α Ursæ Majoris, fell past β Ursæ Majoris towards horizon :—path parallel to line joining α and β Ursæ Majoris.	. . .	A. H.
From a point 2° left of η Ursæ Majoris towards ϵ Boötis.	. . .	A. H.
Passed between γ and ι Serpentis towards γ Boötis.	. . .	A. H.
Passed above α Coronæ Borealis towards α Serpentis.	. . .	A. H.
From direction of α Cephei, disappeared near γ Draconis.	. . .	N.
From the direction of η Ursæ Majoris to ϵ Boötis.	. . .	N.
Passed a few degrees above α Andromedæ towards γ Andromedæ.	Center of track α Andromedæ.	A. H.
From ι Cassiopeiæ, disappeared in the neighbourhood of α Persei.	. . .	A. H.
From the direction of β Cephei, disappeared near ϵ Coronæ Borealis.	. . .	N.
From the direction of σ Ursæ Minoris to a point above α Draconis.	. . .	A. H.
From a point about 5° above ζ Ursæ Majoris to a point as much beneath η Ursæ Majoris.	. . .	F. T. E. J.
Directed from Polaris to a point 2° below δ Persei.	. . .	A. H.
Fell perpendicularly from a point 3° East of γ Boötis.	. . .	A. H.
From a point about 2° below α Draconis towards α Ursæ Majoris.	. . .	A. H.
Fell vertically from a point about 3° East of α Aquilæ.	. . .	A. H.
From the direction of θ Coronæ Borealis to a point between ϵ and γ Boötis.	. . .	A. H.
From a point about 3° East of θ Pegasi to a point 2° above ϵ Pegasi.	. . .	A. H.
First seen near γ Aquarii, disappeared near α Capricorni.	Very bright meteor	N.
From above Arcturus towards North-West, disappeared below Ursa Major.	. . .	T. W.
From a point near ϕ Aquarii, passed midway between γ and δ Aquarii.	. . .	A. H.
Directed from Polaris to a point just below δ Ursæ Majoris.	. . .	A. H.
From a point about 3° East of ϵ Herculis, passed to the right of α Herculis, and disappeared in the neighbourhood of ι and κ Ophiuchi.	. . .	A. H.

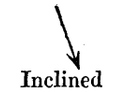
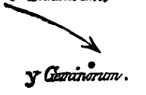
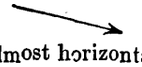
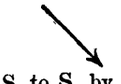
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
September 26	9. 54. 0	= 2nd Mag. *	White	1 second	No train	15	Nearly perpendicular
September 27	9. 35. 30	= 3rd Mag. *	White	Rapid motion	No train	12	Inclined
September 28	11. 11. 0	= 3rd Mag. *	Bluish-white	Less than 1 s.	No train	10	. . .
,,	11. 22. 0	= 1st Mag. *	Blue	1 second	No train	12+	. . .
,,	11. 46. 0	= 1st Mag. *	Bluish-white	½ second	Faint train	12	Perpendicular
September 29	6. 56. 0	= 1st Mag. *	Bluish-white	½ second	Train	8	Perpendicular
October 7	8. 38. 0	= 2nd Mag. *	Blue	½ second	. . .	8	Slightly inclined from hor.
October 12	9. 25. 0	= 2nd Mag. *	White	1 second	Faint train	15	Perpendicular
October 13	6. 30. 0±	= 2nd Mag. *	Blue	1½ second	Train	..	Curved slightly
October 19	10. 15. 0	= 2nd Mag. *	Bluish-white	Less than 1 s.	Train	6	Perpendicular
November 8	7. 26. 0+	= 2nd Mag. *	Yellow	Momentary	A flash	..	←
November 9	7. 40. 30+	= 3rd Mag. *	Yellow	0·3 second	. . .	7	↙
,,	9. 46. 45	= 4th Mag. *	Bluish	0·1 second	No train	2	Perpendicular
November 12	6. 2. 0	= 3rd Mag. *	Bluish-white	1 second	No train	3	↑
,,	7. 44. 40	= 2nd Mag. *	Bluish-white	2 seconds	No train	7	Inclined
,,	12. 12. 0	= 2nd Mag. *	White	2 seconds	. . .	35	S.E. to S.S.W., inclined 10° from horizontal.
,,	12. 16. 38	= 2nd Mag. *	Yellow	. . .	Train	..	Fell vertically
,,	12. 24. 35	> 2nd Mag. *	Bluish-white	2 seconds	Fine train	23	↘
,,	12. 28. 15	= Jupiter	Yellow	3 seconds	Veryfine train, 1½ second	25	In S., directed from E. to W. Inclined
,,	12. 36. 0	= 4th Mag. *	Bluish	Momentary	. . .	2	Inclined about 30° from perp.
,,	12. 40. 4	= 3rd Mag. *	Blue	Rapid motion	No train	6	Inclined
,,	12. 40. 45	= 3rd Mag. *	Bluish-white	1 second	Faint train	12	Nearly horizontal
,,	12. 41. 17	= 2nd Mag. *	Yellowish	1 second	Faint train	18	Inclined, slightly curved
,,	12. 41. 30	= 2nd Mag. *	Bluish	Momentary	Small train	30	Perpendicular
,,	12. 42. 0	= 3rd Mag. *	White	1 s. to 2 s.	. . .	20	S.E. to S.S.W., inclined 15° from horizontal.
,,	12. 42. 0	= 2nd Mag. *	Yellow	1 second	Train, 2 s.	..	. . .
,,	12. 43. 0	Very small	Blue	1 second	No train	21	. . .
,,	12. 43. 30	= 1st Mag. *	Bluish	About 2 s.	Fine train	30	Perpendicular
,,	12. 44. 7	= 1st Mag. *	Bluish	2 seconds	Fine train, 1 s.	20	↘
,,	12. 45. 0	= 3rd Mag. *	White	1 s. to 2 s.	. . .	20	S.E. to S.S.W., inclined 15° from horizontal.
,,	12. 45. 0	. . .	Yellow	2 seconds	No train	22	. . .
,,	12. 46. 5	= 1st Mag. *	Reddish	2 seconds	Fine train, 1 s.	30	Inclined
,,	12. 46. 17	= 1st Mag. *	Blue	½ second	No train	10	Perpendicular
,,	12. 49. 0	= 2nd Mag. *	White	1 s. to 2 s.	Train, 3 s.	25	Inclined 10° from perp.
,,	12. 49. 0	. . .	Yellow	1 s, rapid motion	. . .	26	. . .
,,	12. 49. 30	= 1st Mag. *	Bluish-white	1 second	Train	15	5° inclination from perp.
,,	12. 53. 30	= 2nd Mag. *	Blue	2 seconds	Long train	20	Horizontal
,,	12. 53. 50	= 2nd Mag. *	White	Less than 1 s.	Train	10	Inclined
,,	12. 54. 18	= 1st Mag. *	Bluish	1 second	Fine train	10	↘
,,	12. 54. 45	= 2nd Mag. *	Bluish	1 second	Train, momentary.	14	Curved towards horizon

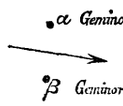
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Directed from γ Draconis to η Herculis.	. . .	A. H.
Directed from α Aquilæ to a point a little West of α and β Capricorni.	. . .	A. H.
From the direction of ζ Cygni to a point near ζ Aquilæ.	. . .	N.
From the direction of ε Cygni, fell 5° below and beyond α Lyræ.	. . .	N.
Fell vertically in the North, from the direction of Polaris, disappearing at γ Ursæ Majoris.	. . .	N.
Fell perpendicularly in the West, from the direction of γ Boötis, disappeared at the same altitude as Arcturus.	. . .	N.
From the direction of ε Cassiopeiæ towards Polaris.	. . .	N.
Fell vertically from a point just below θ Draconis.	. . .	A. H.
Passed across ε Cassiopeiæ to a point 10° below Polaris.	Time correct to 1^m or 2^m	N.
From the direction of δ Cygni passed across λ Lyræ.	. . .	N.
Directed from a point about 3° above o Herculis towards β Lyræ.	. . .	T. W.
From a point a little above and to the N. of α Coronæ Borealis towards horizon.	. . .	T. W.
Appeared near γ Eridani.	. . .	T. W.
Disappeared near δ Aurigæ.	The sky was perfectly clear from 6^h. to 8^h., yet five observers saw only the two meteors here recorded.	F. T.
From a point near ε Aurigæ, passed a little above Capella to a point nearly midway between Capella and δ Aurigæ.	Cloudy from 8^h. to midnight.	F. T.
From a point a little above α Orionis, passed midway between δ and γ Orionis towards Eridanus.	Cloudy	M. R.
In W.N.W.; no stars could be seen in the track of the meteor.	Cloudy	E. J.
Appeared near α Leporis, moved to γ Eridani.	Partially cloudy	N.
Across β Tauri, shot beneath the Pleiades (at a distance of 3°) towards the West.	Partially cloudy	J. G.
		N.
		A. H.
Appeared a few degrees W.S.W. of Sirius, moved towards S. horizon, disappearing a few degrees W. of β Canis Majoris.	Nearly clear	T. W.
Moved towards S.S.W. horizon, passing just below Sirius.	Clear	A. H.
In S. at altitude 16°, commenced near α Leporis, and moved 12° Westward.	. . .	N.
From near β Leporis curved towards S.W. horizon.	. . .	N.
From a point between β and μ Andromedæ, fell vertically towards horizon, passing within a few degrees of δ Andromedæ.	. . .	E. J.
Point of appearance η Orionis.	. . .	M. R.
Midway between Rigel and α Orionis towards Sirius.	. . .	J. G.
From α Andromedæ to α Pegasi.	. . .	J. G.
Appeared midway between β and μ Andromedæ, fell vertically towards horizon, passing close to δ Andromedæ.	This meteor was very similar to that at $12^h.\ 41^m.\ 30^s$.	E. J.
From the vicinity of α Leporis, shot towards S.W. horizon.	. . .	N.
Point of appearance near β Orionis, directed towards Eridanus.	. . .	M. R.
From β Pegasi to γ Pegasi.	. . .	J. G.
From direction of λ Ursæ Majoris to Capella.	. . .	A. H.
From a point about 2° E. of λ Draconis, fell vertically towards ζ Ursæ Majoris.	. . .	F. T.
Center of track at β Orionis.		M. R.
From Castor to Procyon.	. . .	J. G.
Directed from Pleiades, disappeared near γ Eridani.	. . .	N.
Appeared near ψ Ursæ Majoris, passed midway between α and δ Ursæ Majoris, and disappeared a few degrees from R Draconis.	. . .	F. T.
From ψ Ursæ Majoris to a point midway between γ and β Ursæ Majoris,	. . .	A. H.
In S.E.—same altitude as Sirius, moved towards S. horizon.	. . .	N.
From λ Draconis towards ε Ursæ Majoris.	. . .	T. W.

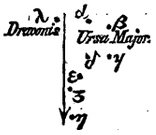
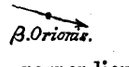
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	12. 55. 0	= 1st Mag. *	Bluish	About 2 s.	Fine train	8	Horizontal, E. to W.
,,	12. 59. 0	= 3rd Mag. *	White	0·5 second	No train	4	Horizontal
,,	12. 59. 10	= 2nd Mag. *	Blue	Rapid motion	No train	12	E. to W. Horizontal
,,	13. 0. 35	= 2nd Mag. *	Bluish-white	. . .	Faint train	7	
,,	13. 0. 50	= 1st Mag. *	Blue	1 second	Long train	20	Inclined slightly from hor.
,,	13. 0. 59	= Sirius	Blue	2 seconds	Very fine train	25	Inclined
,,	13. 1. 21	= 2nd Mag. *	Blue	1 second	No train	10	Perpendicular
,,	13. 1. 35	= 3rd Mag. *	Bluish	1 second	No train	7	
,,	13. 2. 18	= 2nd Mag. *	Blue	0·5 second	No train	7	Inclined
,,	13. 2. 45	= 2nd Mag. *	Bluish	2 seconds	No train	13	
,,	13. 3. 49	= 3rd Mag. *	White	0·2 second	No train	10	Inclined
,,	13. 4. 0	= 2nd Mag. *	Blue	1 second	Small train	8	
,,	13. 7. 15	= 2nd Mag. *	Blue	Rapid motion	Faint train	10	
,,	13. 7. 16	= 2nd Mag. *	Blue	1 second	No train	25	Inclined
,,	13. 10. 0	= 3rd Mag. *	Bluish-white	1½ second	Train	8	
,,	13. 10. 37	= 4th Mag. *	Blue	0·1 second	. . .	15	. . .
,,	13. 10. 38	= 2nd Mag. *	Blue	½ second	No train	20	Inclined
,,	13. 10. 40	= 3rd Mag. *	Blue	Rapid motion	No train	10	Inclined
,,	13. 12. 10	= 2nd Mag. *	Blue	½ second	No train	12	Inclined
,,	13. 12. 38	= 4th Mag. *	White	1 second	No train	5	Inclined
,,	13. 14. 30	= 2nd Mag. *	White	2 seconds	Train 3 s.	12+	
,,	13. 14. 35	= 3rd Mag. *	Blue	1 second	No train	12	
,,	13. 16. 24	= 5th Mag. *	Bluish	1 second	No train	3	Inclined
,,	13. 16. 45	= Procyon	Blue	2 seconds	Slight train	20	
,,	13. 16. 50	= 3rd Mag. *	Bluish	1 second	No train	6	Almost horizontal
,,	13. 17. 30	= 1st Mag. *	Rose	. . .	. . .	23	
,,	13. 17. 40	= 2nd Mag. *	Blue	1 second	Train	6	Horizontal E. to W.
,,	13. 17. 55	= 2nd Mag. *	Blue	. . .	Faint train	..	
,,	13. 17. 59	= 2nd Mag. *	White	2 seconds	. . .	22	From S. to S. by E. Inclined 15° from perp.

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed a few degrees above Sirius.	. . .	E. J.
About 5° or 6° above S.E. horizon.	Trees intervening	T. W.
Passed below Sirius. Center of track immediately beneath that star.	. . .	A. H.
In S., from altitude 12° to altitude 5°. From direction of κ Orionis.	. . .	N.
Passed midway between α and β Geminorum, directed towards ν Geminorum.		F. T.
Directed from β Orionis towards W.S.W. horizon; disappeared at an altitude of 25°.	. . .	A. H.
From a point a little above and to the E. of δ Orionis, passed vertically between that star and ϵ Orionis.	. . .	F. T.
About 6° below the Pleiades.	. . .	T. W.
From β Canis Majoris towards S.W. horizon.	. . .	A. H.
3° below β Orionis.	. . .	T. W.
Passed below δ Leporis towards S.W. horizon.	. . .	A. H.
Passed between Procyon and β Canis Minoris.	. . .	F. T.
At altitude of 40°, directed towards W.N.W. horizon.	. . .	A. H.
From β Persei to a point about 3° to the left of γ Pegasi.	. . .	A. H.
Passed midway between α and β Geminorum, center of track between those stars.	. . .	F. T.
Inclined to N.W. horizon from direction of γ Arietis.	. . .	A. H.
From γ Pegasi towards N. horizon.	. . .	A. H.
From Aldebaran towards γ Arietis.	. . .	A. H.
From Aldebaran towards γ Eridani.	. . .	A. H.
From a point 1° below δ Leporis to a little below γ Leporis.	. . .	T. W.
From a point a little below δ Geminorum, curved to a point as much above γ Geminorum.	. . .	M. R.
Passed below ϵ Orionis, directed towards S.W. horizon.	. . .	F. T.
About 5° above N. horizon, just below ι Draconis.	. . .	T. W.
From a point about 8° below Procyon towards S.S.W. horizon.	. . .	A. H.
From about 5° below λ Draconis towards ϵ Ursæ Majoris.	. . .	T. W.
Commenced near ρ Oricnis, passed between ι and β Orionis towards horizon.	. . .	M. R.
Passed midway between λ and γ Orionis, center of track midway between those stars.	. . .	F. T.
In S.S.E. at altitude 20°.	. . .	N.
Center of track a few degrees below β Orionis; path parallel to line of Orion's Belt.		M. R.

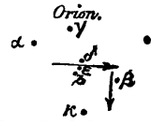
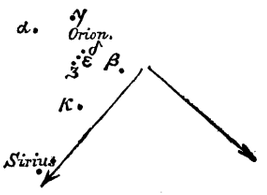
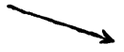
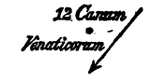
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	13. 18. 50	= Sirius	Blue	2 to 3 seconds	Wavy train, 2^{s}.	45	From E. to the zenith
,,	13. 20. 20	= 1st Mag. *	Blue	2 seconds	Fine train	6	Inclined
,,	13. 21. 10	= 3rd Mag. *	Bluish-white	1 to 2 seconds	. . .	16	S.E. to S.S.E. Inclined 5° from horizontal.
,,	13. 21. 27	= 1st Mag. *	Blue	2 seconds	Very fine train	30	
,,	13. 22. 37	= 2nd Mag. *	Blue	. . .	. . .	22	S.E. to S.S.E. Inclined 15° from horizontal.
,,	13. 24. 3	= 1st Mag. *	Blue	2 seconds	Train, 1^{s}.	25	Nearly perpendicular
,,	13. 24. 15	= 2nd Mag. *	Blue	1 second	Train	14	Inclined slightly from vertical.
,,	13. 25. 18	= 1st Mag. *	Blue	2 seconds	Train, 2^{s}.	35	Nearly perpendicular
,,	13. 25. 33	= Sirius	Blue	3 seconds	Fine train, 2^{s}. or 3^{s}.	50	Perpendicular
,,	13. 26. 30	= 1st Mag. *	Bluish	1 second	Fine train	10	Curved
,,	13. 26. 59	= 1st Mag. *	Bluish	3 seconds	Fine train	35	Curved from α Geminorum
,,	13. 27. 45	= 1st Mag. *	Blue	. . .	Fine train	10	Inclined
,,	13. 28. 22	= 2nd Mag. *	Blue	1 to 2 seconds	. . .	25	Perpendicular
,,	13. 28. 25	= 3rd Mag. *	Blue	1 to 2 seconds	. . .	15	Perpendicular
,,	13. 29. 25	= 1st Mag. *	Bluish-white	Rapid motion	No train	20	Horizontal
,,	13. 30. 0	= 1st Mag. *	Blue	2 seconds	Long train	12	Horizontal
,,	13. 30. 0	= 3rd Mag. *	White	= 2 seconds	Fine train	20	Almost perpendicular
,,	13. 30. 50	= 1st Mag. *	Blue	1 second	Faint train	12	. . .
,,	13. 30. 54	= 1st Mag. *	White	2 to 3 seconds	Train, 3^{s}.	25	S.E. to S. by W. Inclined
,,	13. 31. 0	= 1st Mag. *	Blue	2 seconds	Fine train, 2^{s}.	20	Almost horizontal
,,	13. 31. 15	= 2nd Mag. *	Bluish-white	2 seconds	. . .	20	S. to S.S.W.
,,	13. 32. 16	= 2nd Mag. *	Bluish-white	2 to 3 seconds	. . .	25	S.E. to S. by E.
,,	13. 33. 36	= 1st Mag. *	Bluish-white	. . .	Train	40	
,,	13. 34. 18	= 3rd Mag. *	Bluish	1 second	No train	10	Inclined
,,	13. 35. 30	> 1st Mag. *	Brilliant blue	2 seconds	Fine train, 1^{s}.	37	Inclined
,,	13. 36. 0	= 1st Mag. *	Blue	1 second	Fine train	10	
,,	13. 37. 10	> 1st Mag. *	Blue	3 seconds	Fine train, 2^{s}.	15	Nearly perpendicular
,,	13. 37. 17	= 2nd Mag. *	Bluish-white	2 seconds	Train	30	S. by W. to S.W.
,,	13. 38. 10	= 1st Mag. *	Blue	1½ second	Train.	10	Inclined
,,	13. 39. 36	= Jupiter	Reddish	3 seconds	No train	5	Nearly perpendicular
,,	13. 41. 4	= 3rd Mag. *	Blue	. . .	Train	14	W. to E. inclined.

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Appeared at an altitude of 40° (directed from Regulus), moved directly to the zenith to a point 5° N. of Capella.	A magnificent meteor.	N. A. H.
From a point near *b* Orionis, passed between λ and γ Orionis.	. . .	F. T.
From a point a little below and to the E. of ζ Orionis towards β Eridani.	. . .	M. R.
Appeared near λ Draconis (about 8° N. of α Ursæ Majoris), fell perpendicularly towards horizon, passing within 5° of ζ Ursæ Majoris.	. . .	N. F. T.
From a point near Procyon to a point a few degrees above Sirius.	. . .	M. R.
From direction of ε Tauri across β Arietis.	. . .	A. H.
From a point 1° or 2° N. of λ Draconis, fell almost perpendicularly towards horizon, disappearing about 6° North and below η Ursæ Majoris.	. . .	F. T.
Fell almost vertically from a point West of the Pleiades to γ Pegasi.	. . .	N. A. H. M. R.
Fell vertically from α Persei.	. . .	A. H.
From the direction of ξ Ursæ Majoris, curved between 12 and *m* Canum Venaticorum.	. . .	E. J.
Disappeared close to α Orionis.	Path much curved	T. W.
From a point in the vicinity of θ Ceti to a point a few degrees West of η Ceti.	Disappeared at altitude 8°	N.
Fell vertically from a point West and below η Tauri.	. . .	M. R.
Fell vertically from direction of η Tauri.	Path almost parallel to that of preceding meteor.	M. R.
From direction of Polaris towards α Cassiopeiæ.	. . .	A. H.
Passed a few degrees above *d* Canum Venaticorum, and midway between ε and ζ Ursæ Majoris.	. . .	F. T.
Fell towards horizon from the direction of β Ursæ Minoris, disappeared close to θ Draconis.	. . .	T. W. E. J.
From a point 2° N. of η Draconis towards γ Draconis.	. . .	A. H.
Appeared about 5° above α Orionis, passed about the same distance above δ Orionis towards γ Eridani.	Very brilliant	M. R.
Appeared 6° above α Orionis, and moved almost horizontally towards W. passing about 4° below Aldebaran.	. . .	N.
Directed from ε Orionis towards S.W. horizon.		M. R.
From a point midway between Procyon and Sirius, passed above Sirius towards S. horizon.		M. R.
From a point a little S. of α Arietis, directed towards horizon.	. . .	M. R.
From about 3° below Sirius, disappeared about 5° S. of δ Canis Majoris.	. . .	T. W.
From γ Cassiopeiæ to a point midway between η and β Pegasi.	. . .	A. H.
From ι Orionis, passed across β Orionis, center of track β Orionis.	. . .	N.
In W.S.W.; from direction of the Pleiades, across δ Arietis.	Slow motion	N.
From a point S. of α Arietis, directed towards horizon.		M. R.
From a point near η Ursæ Majoris to a point 4° below Polaris.	. . .	F. T.
From a point about 10° to the left of γ Pegasi, directed almost vertically towards horizon.	Moved very slowly	A. H.
From β Tauri to μ Geminorum.	. . .	N.

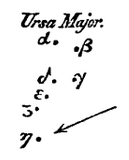
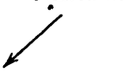
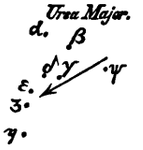
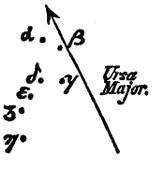
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Soiar Time.	Apparent Size.	Colour.	Duration.	Appearance ; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction ; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	13. 41. 45	= 2nd Mag. *	Bluish-white	2 seconds	Faint streak	10	
,,	13. 41. 45	= 1st Mag. *	Blue	1 second	Fine train	12	
,,	13. 42. 6	= 2nd Mag. *	Bluish-white	2 seconds	Train, 3s.	16	
,,	13. 42. 13	> Sirius	Blue	2 seconds	Fine train	15	Inclined
,,	13. 42. 58	> 1st Mag. *	Blue	1 second	Fine train	20	
,,	13. 42. 58	= 1st Mag. *	Blue	1 second	Fine train	10	Inclined 5° from perp.
,,	13. 43. 52	= 2nd Mag. *	White	2 seconds	Train	25	
,,	13. 43. 52	= 3rd Mag. *	White	3 seconds	. . .	23	. . .
,,	13. 45. 59	= 1st Mag. *	Red	2 seconds	Enlarging until disappearance.	40	S.S.W. to S.W. Inclined 40°.
,,	13. 46. 50	= 2nd Mag. *	Blue	Rapid motion	No train	20	Inclined
,,	13. 47. 0	= 1st Mag. *	Bluish	1 second	Fine train	12	
,,	13. 48. 55	= 1st Mag. *	White	2 to 3 seconds	. . .	30	S.S.W. to S.W. Inclined
,,	13. 49. 2	= 1st Mag. *	Yellow	5 seconds	Fine train, pink.	50	
,,	13. 50. 53	= 3rd Mag. *	Blue	1 to 2 seconds	Slight train	10	
,,	13. 50. 56	= 2nd Mag. *	White	1 second	No train	8	
,,	13. 51. 30	= 2nd Mag. *	Bluish-white	1 second	Small train	6	Inclined slightly from hor.
,,	13. 52. 17	= 2nd Mag. *	Bluish-white	1 to 2 seconds	. . .	40	
,,	13. 52. 25	> 1st Mag. *	Blue	1 second	Faint train	25	Inclined
,,	13. 53. 0	= 1st Mag. *	Blue	2 seconds	Fine train, 2s.	25	
,,	13. 54. 35	= 1st Mag. *	Blue	1 second	No train	15	Inclined.
,,	13. 54. 45	= 2nd Mag. *	Blue	1 second	No train	13	Inclined slightly from hor.
,,	13. 55. 20	= 2nd Mag. *	White	2 seconds	. . .	20	

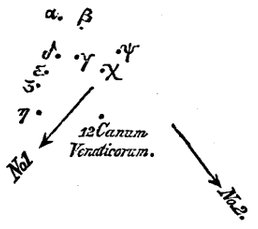
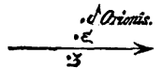
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Towards S.S.W. horizon from λ Tauri.	. . .	A. H.
From a point a few degrees below θ Ceti, passed towards W.S.W. horizon below η Ceti; center of track opposite η Ceti.	. . .	N.
Center of track a few degrees above δ Orionis; from direction of α Orionis towards μ Eridani.	. . .	M. R.
From a point midway between ζ Orionis and Sirius to α Leporis.	. . .	A. H.
Passed midway between δ and ε Orionis towards West; center of track δ Orionis.	These meteors appeared at the same instant and pursued paths exactly at right angles (*See* diagram.)	N.
From a point about 2° E. of β Orionis, fell towards horizon nearly vertically.	. . .	N.
From a point close to β Orionis to a point a little below Sirius.	These meteors appeared *simultaneously* nearly at the same spot, and pursued paths exactly at right angles.	A. H. M. R.
See the sketch and following note.	. . .	M. R.
From a point near Aldebaran towards S.W. horizon.		M. R.
Directed from Sirius towards S.S.W. horizon.	. . .	A. H.
Center of path about 2° below the Pleiades.	. . .	E. J.
From a point just below η Tauri towards horizon.		M. R.
Appeared between Aldebaran and the Pleiades, and moved towards the West.	. . .	A. H.
From a few degrees below β Persei towards W. Horizon.	. . .	M. R.
From about 6° E. of 12 Canum Venaticorum towards horizon.	Center of track opposite 12 Canum Venaticorum.	T. W.
From a point a few degrees E. of ψ Ursæ Majoris, passed a few degrees from γ towards ζ Ursæ Majoris.	. . .	E. J.
From the direction of Polaris, passed close to β Cassiopeiæ towards horizon.	. . .	M. R.
From direction of Polaris, passed 3° above α Cygni towards ζ Cygni.	. . .	A. H.
From direction of γ Geminorum, passed across the belt of Orion towards S.W. horizon.	. . .	N.
From a point between λ and μ Ursæ Majoris to a point 3 degrees below β Ursæ Majoris.	. . .	A. H.
From a point near ψ Ursæ Majoris to *l* Ursæ Majoris.	. . .	F. T.
From a point a little below δ Geminorum across ζ Geminorum and a few degrees beyond.	. . .	M. R.

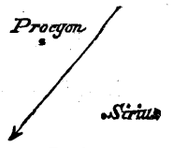
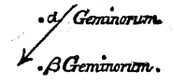
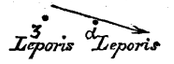
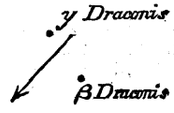
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	13. 55. 26	> 1st Mag. *	Blue	2 seconds	Fine train, 2s.	15	
,,	13. 55. 40	= 1st Mag. *	White	2 econds	No train	12	
,,	13. 56. 59	= 1st Mag. *	Blue	1 second	Faint train	20	
,,	13. 57. 30	= 2nd Mag. *	Blue	1 second	Train	10	
,,	13. 58. 2	= 1st Mag. *	Bluish	1 second	Fine train	20	Horizontal
,,	13. 58. 36	> 1st Mag. *	Blue	1 second	. . .	12	Inclined
,,	14. 0. 40	= 3rd Mag. *	Blue	Less than 1 s.	No train	12	Inclined
,,	14. 0. 42	= 3rd Mag. *	Blue	Less than 1 s.	No train	12	Inclined. Directed from χ Ursæ Majoris.
,,	14. 2. 25	= 2nd Mag. *	Blue	1 second	No train	6	Inclined slightly towards hor.
,,	14. 2. 45	= 2nd Mag. *	Bluish	1 second	No train	10	
,,	14. 3. 38	> 1st Mag. *	Bright blue	2 seconds	Wavy train	35	. . .
,,	14. 3. 45	= 2nd Mag. *	Blue	2 seconds	Small train	6	
,,	14. 4. 48	> 1st Mag. *	Blue	1½ second	Fine train, 1s.	15	Inclined
,,	14. 4. 50	= 1st Mag. *	Bluish-white	2 seconds	Long train	20	Horizontal, E. to W.
,,	14. 5. 29	> 1st Mag. *	Brilliant blue	1 second	Fine train, bluish.	30	Almost perpendicular
,,	14. 8. 20	= 1st Mag. *	Blue	More than 1 s.	Train	25	Nearly horizontal
,,	14. 8. 40	= 2nd Mag. *	Bluish-white	1 second	No train	15	Inclined
,,	14. 8. 43	= 2nd Mag. *	Bluish-white	Less than 1 s.	No train	15	Inclined
,,	14. 8. 58	= 2nd Mag. *	Blue	2 seconds	Fine train	17	
,,	14. 9. 0	= 2nd Mag. *	Blue	2 seconds	Small train	35	

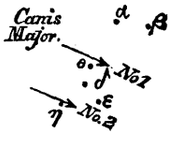
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed a few degrees above α Geminorum towards γ Tauri.	. . .	N.
Towards S. horizon, disappeared about 5° above Sirius.	. . .	T. W.
From a point 10° below β Orionis towards S.S.W. horizon.	. . .	A. H.
From the direction of ξ Ursæ Majoris to η Ursæ Majoris.	. . .	N. F. T.
From δ Ursæ Majoris, disappeared just below y Ursæ Majoris.	. . .	T. W.
Passed from direction of Polaris, to the West of γ Cephei, towards β Cassiopeiæ.	. . .	A. H.
From the direction of χ Ursæ Majoris, disappeared about 5° below η Ursæ Majoris, passing midway between that star and 12 Canum Venaticorum.		N.
Appeared at the same altitude as 12 Canum Venaticorum, and pursued a path inclined to that of preceding meteor at an angle of 65°. (*See* sketch).	. . .	N.
Immediately below Sirius, moving westward.	. . .	F. T.
From a point just below τ Herculis, towards horizon.	. . .	T. W.
From direction of γ Cassiopeiæ to a point midway between η and β Pegasi.	This meteor was very similar to that at $13^h.\ 35^m.\ 30^s$.	A. H.
Passed between Capella and ϵ Aurigæ, towards β Aurigæ.	. . .	E. J.
From the direction of ν Geminorum, disappeared between β Cancri and Procyon.	. . .	N.
Passed between ζ and ε Orionis.		F. T.
From direction of Aldebaran, moved on a path parallel to α and o Ceti.	. . .	A. H.
From a point 2° above λ Ursæ Majoris, passed between β and γ Ursæ Majoris.	. . .	A. H.
From χ Ursæ Majoris, passed above ε Ursæ Majoris.	. . .	A. H.
From *d* Canum Venaticorum passed above η Ursæ Majoris.	The path of this meteor was almost parallel to that of the preceding.	A. H.
From a point between ψ and β Ursæ Majoris, passed close to γ, towards ε Ursæ Majoris.	. . .	E. J.
From the direction of Coma Berenices, passed towards zenith close to β Ursæ Majoris, and disappeared a few degrees above α Ursæ Majoris.	. . .	E. J.

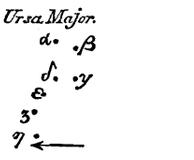
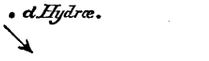
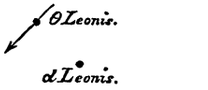
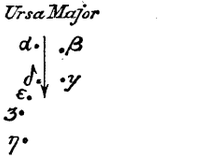
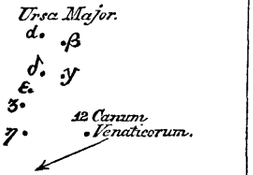
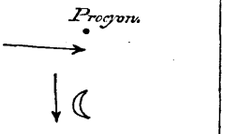
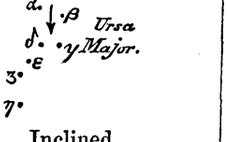
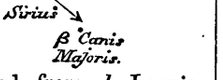
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	14. 9. 26	= 1st Mag. *	Blue	3 seconds	Fine train	40	
,,	14. 9. 27	= Sirius	Blue	2 seconds	Fine train, 2s.	20+	Inclined
,,	14. 9. 39	= Sirius	Bright blue	1 second	Fine train	35	Inclined
,,	14. 14. 59	= Jupiter	Blue	4 seconds	Fine train	18	Inclined
,,	14. 18. 35	= 1st Mag. *	Blue	1 second	No train	25	Almost perpendicular
,,	14. 19. 0	= 1st Mag. *	Blue	2 seconds	Fine train	8	
,,	14. 20. 24	= 1st Mag. *	Blue	2 seconds	Fine train	20	Almost horizontal
,,	14. 20. 59	= 1st Mag. *	Blue	2 seconds	Fine train	12	
,,	14. 23. 22	= 1st Mag. *	Bluish	1 second	No train	20	Inclined
,,	14. 23. 55	= 2nd Mag. *	Blue	1 second	Fine train	10	
,,	14. 24. 36	=2 × Sirius	Brilliant blue	More than 1 s.	Train	25	Inclined
,,	14. 25. 2	= Sirius	Blue	1 second	Fine train, 1s.	6	Inclined at an angle of 45°
,,	14. 25. 50	= 2nd Mag. *	White	1 second	No train	10	Slightly inclined towards hor.
,,	14. 27. 0	= 1st Mag. *	Blue	2 seconds	Fine train	10	Curved
,,	14. 27. 22	= 1st Mag. *	Blue	1 second	Train	10	
,,	14. 28. 30	= 2nd Mag. *	Blue	1 second	Faint train	12	
,,	14. 28. 45	= 2nd Mag. *	White	1 second	Train	10	
,,	14. 28. 52½	= 2nd Mag. *	Bluish-white	½ second	No train	15	. . .
,,	14. 30. 0	= 1st Mag. *	Blue	2 seconds	Fine train	15	Inclined
,,	14. 30. 11	> Sirius	Blue	1 second	Train	8±	Inclined
,,	14. 30. 58	= 1st Mag. *	Blue	1 second	Fine train, 1s.	..	From the direction of δ Orionis towards W.S.W. horizon.
,,	14. 31. 3	= Jupiter	Brilliant blue	2 seconds	No train	..	. . .
,,	14. 33. 2	= 1st Mag. *	Blue	2 seconds	Fine train, 2s.	35	. . .
,,	14. 33. 8	= 1st Mag. *	Blue	More than 1 s.	Train	20	Inclined
,,	14. 34. 26	= 4th Mag. *	Blue	Less than 1 s.	Faint train	10	Inclined
,,	14. 34. 38	= 3rd Mag. *	Blue	Less than 1 s.	Faint train	10	Inclined. Directed from ξ Argûs.
,,	14. 34. 41	= Sirius	Blue	2 seconds	Fine train	12	

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed midway between Procyon and Sirius; centre of track between those stars; line joining those stars at right angles to track of meteor.		T. W.
Passed from 5° below Procyon, disappeared near Sirius.		N.
From a point midway between Procyon and α Hydræ towards Sirius.		A. H.
From a point a little East and below β Ursæ Majoris towards North horizon, disappearing a few degrees East of η Ursæ Majoris.		E. J.
From direction of Polaris towards ζ Cygni.		A. H.
Passed between Castor and Pollux, from a point a few degrees above and to the West of the former, to a point a few degrees East of the latter star.		E. J.
From a point just below α Ursæ Majoris towards y Ursæ Majoris.		T. W.
From a point in the vicinity of δ Ursæ Majoris, passed on the East side of ϵ Ursæ Majoris to a point a few degrees below and to the East of η Ursæ Majoris.		E. J.
From direction of Polaris towards η Cephei.		A. H.
From a point 2° above ζ Leporis, passed immediately above α Leporis towards the West.		N.
From δ Draconis towards ξ Draconis.		A. H.
Very low down, near Southern horizon, appeared at a point perpendicularly below κ Orionis, disappeared about altitude of 5°.		N.
From Castor towards γ Geminorum.		T. W.
Passed through Cassiopeia.		E. J.
Directed towards N. horizon from a point near γ Draconis.		A. H.
From near α Cancri towards horizon.		N.
Towards horizon from 2° below 12 Canum Venaticorum.		T. W.
From α Ursæ Majoris towards Polaris (15°).		A. H.
From a point a few degrees East of β Ursæ Majoris, passed almost midway between δ and ϵ Ursæ Majoris.		E. J.
Directed from Procyon to a point about 5° beyond Sirius.		A. H.
		T. W.
Appeared at a point about the same altitude as β Orionis, but 10° West of that star.		N.
Stationary. Due W. at altitude 20°.		A. H.
From a point slightly below Procyon, passed below γ Orionis.		N.
From Aldebaran, directed towards W. horizon.		A. H.
		T. W.
Passed above o Canis Majoris. No. 1 in sketch.		N.
Passed about 1° above η Canis Majoris, and disappeared about 3° below δ Canis Majoris. No. 2 in sketch.		N.
Center of track opposite Sirius, passed about 3° below that star, directed towards S.S.W. horizon.		A. H.

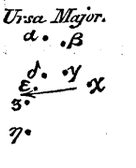
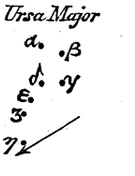
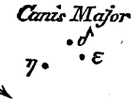
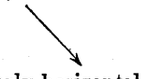
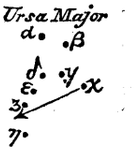
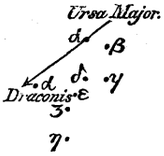
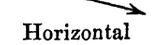
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	14. 36. 12	= 2nd Mag. *	Brilliant blue	1 second	Train	10	Inclined
,,	14. 36. 25	= 2nd Mag. *	Blue	1 second	Train	8	Inclined. Directed from α Leonis
,,	14. 37. 10	= 1st Mag. *	Blue	1 second	Train	10	Inclined. Directed from α Leonis
,,	14. 37. 15	= 1st Mag. *	Blue	3 seconds	Fine train	8	
,,	14. 38. 48	= 2nd Mag. *	Blue	1 second	No train	3	
,,	14. 40. 0	= 1st Mag. *	Blue	1 second	Train	6	
,,	14. 40. 20	= 3rd Mag. *	Blue	Less than 1 s.	. . .	12	
,,	14. 41. 21	= 2nd Mag. *	Blue	1 second	No train	18	
,,	14. 41. 39	= 1st Mag. *	Bluish	2 seconds	Fine train	10	Perpendicular
,,	14. 42. 15	> Sirius	Blue	2 seconds	Brilliant train	35	Almost horizontal
,,	14. 45. 37	= 2nd Mag. *	Blue	More than 1 s.	No train	12	Almost perpendicular
,,	14. 46. 24	= 1st Mag. *	Blue	1 second	No train	6	Perpendicular
,,	14. 46. 53	= 1st Mag. *	Blue	1 second	Train, 3 s.	10	
,,	14. 47. 18	= 2nd Mag. *	Bluish	1 second	No train	8	
,,	14. 48. 23	= 2nd Mag. *	White	1 second	No train	10	Slightly inclined. Directed from Procyon.
,,	14. 49. 35	= 1st Mag. *	Bluish	1 second	No train	10	Perpendicular
,,	14. 51. 13	= 3rd Mag. *	White	½ second	No train	6	
,,	14. 51. 55	= 2nd Mag. *	White	1 second	No train	12	Inclined
,,	14. 52. 1	= 1st Mag. *	Blue	1 second	Fine train	15	Nearly horizontal
,,	14. 52. 22	= 1st Mag. *	Blue	1 second	. . .	12	. . .
,,	14. 54. 11	= 2nd Mag. *	White	½ second	No train	3	Horizontal, moving Westward
,,	14. 54. 41	= 2nd Mag. *	White	½ second	No train	3	Horizontal, moving Westward
,,	14. 55. 16	= 3rd Mag. *	Blue	1 second	Train	8	Perpendicular
,,	14. 56. 21	= 2nd Mag. *	White	1 second	No train	10	
,,	14. 57. 9	= 1st Mag. *	Blue	Less than 1 s.	No train	10	Directed from l Leonis Minoris.

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
From β Orionis towards S.S.W. horizon.	. . .	A. H.
From a few degrees below α Leonis, passed slightly on the E. side of α Hydræ, and 1° or 2° beyond that star.	. . .	N.
Passed a few degrees W. of α Hydræ, and about 7° beyond, towards horizon.	. . .	N.
Disappeared about 3° below η Ursæ Majoris. (*See* sketch.)	. . .	E. J.
From a point just below α Hydræ towards S. horizon.	. .	T. W.
Across θ Leonis towards S.E. horizon. (Line connecting θ and α Leonis at right-angles to track of meteor.)	. . .	N.
From a point a few degrees above and E. of α Ursæ Majoris to a point as much below and E. of δ Ursæ Majoris.	. . .	N.
From a point about 4° E. of 12 Canum Venaticorum, passed below that star towards horizon. Point of disappearance about 20° vertically below ε Ursæ Majoris.	. . .	A. H.
From Sirius to ν Canis Majoris.	. . .	T. W.
From λ Ursæ Majoris, moved parallel to α and β Ursæ Majoris towards Polaris.	. . .	A. H.
From the direction of μ Ursæ Majoris, fell almost vertically towards horizon.	. . .	A. H.
From a point midway between 12 Canum Venaticorum and β Leonis towards E. horizon.	. . .	A. H.
Disappeared 1° or 2° below Procyon moving Westward.	. . .	A. H.
From a point 6° above and N. of the Moon, fell vertically within 5° of the Moon.	No loss of brightness from proximity to the Moon.	T. W.
Disappeared about 5° W. of Sirius.	. . .	T. W.
About midway between α and γ Orionis towards δ Orionis.	. . .	T. W.
From a point midway between α and β Ursæ Majoris, fell vertically to a point situated centrally between the four stars α, β, γ, and δ Ursæ Majoris.	. . .	A. H.
From δ Orionis towards horizon, past β Eridani.	. . .	T. W.
From the direction of ψ Ursæ Majoris, passed between β and γ Ursæ Majoris.	. . .	A. H.
Passed just above Polaris towards γ Cassiopeiæ.	. . .	A. H.
About 4° above S. horizon, directly below Orion.	Trees intervening	T. W.
In exactly the same position as meteor $14^h.\ 54^m.\ 11^s$.	Trees intervening	T. W.
From a point 2° left of Procyon vertically down.	. . .	A. H.
From a point 3° above and West of Sirius to a point similarly situated with reference to β Canis Majoris.	. . .	T. W.
Path parallel to a line joining δ and β Leonis, passed about 3° above those stars.	. . .	A. H.

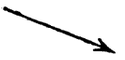
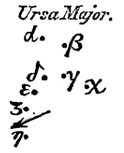
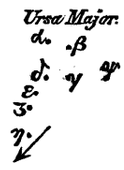
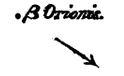
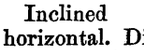
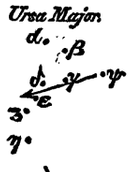
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	15. 0. 0	= 2nd Mag. *	Bluish	2 seconds	Fine train	4	Inclined slightly from hor.
,,	15. 0. 35	= 1st Mag. *	Bluish-white	1 second	Train, 1 s.	25	Perpendicular
,,	15. 2. 40	= 3rd Mag. *	Blue	1 second	No train	6	
,,	15. 4. 53	= 2nd Mag. *	Blue	Rapid motion	No train	10	. . .
,,	15. 5. 0	= 1st Mag. *	Blue	1 second	Train	25	
,,	15. 5. 30	= 1st Mag. *	Blue	Less than 1 s.	. .	5	
,,	15. 5. 45	= 1st Mag. *	Blue	2 seconds	Fine train, 3s.	30	Inclined 45° from horizontal
,,	15. 7. 18	= 1st Mag. *	Blue	1 second	Fine train	18	
,,	15. 8. 30	= 1st Mag. *	Blue	2 seconds	Long train	25	Nearly horizontal
,,	15. 10. 30	= 3rd Mag. *	Blue	Less than 1 s.	. .	2	E. to W., nearly horizontal
,,	15. 10. 56	= 2nd Mag. *	Bluish	1 second	No train	6	Inclined
,,	15. 11. 45	= 1st Mag. *	Blue	1 second	Fine train	10	
,,	15. 11. 53	= 2nd Mag. *	Blue	1½ second	No train	15	
,,	15. 12. 0	= 2nd Mag. *	Blue	. .	. .	12	Perpendicular
,,	15. 13. 18	= 3rd Mag. *	Blue	Less than 1 s.	Faint train	10	
,,	15. 14. 32	= 1st Mag. *	Blue	1 second	Fine train	16	Inclined at an angle of 45°
,,	15. 15. 5	= 1st Mag. *	Blue	2 seconds	Long train	30+	
,,	15. 15. 26	= 1st Mag. *	Blue	2 seconds	Fine train	20	. . .
,,	15. 16. 18	= 1st Mag. *	Blue	1 second	Fine train	20	Inclined at an angle of 45°
,,	15. 17. 30	= 1st Mag. *	Blue	2 seconds	Bright train	18	
,,	15. 19. 45	= 1st Mag. *	Bluish-white	4 seconds	Fine train	10	Horizontal
,,	15. 20. 0	= 1st Mag. *	Blue	1 second	Fine train	6	Directed from δ Ursæ Majoris
,,	15. 20. 35	= 1st Mag. *	Blue	. .	. .	4	
,,	15. 21. 45	= Sirius	Blue	2 seconds	Bright train, 2 s.	20+	. . .
,,	15. 21. 58	= 1st Mag. *	White	2 seconds	Fine train	8	Inclined

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed between θ and γ Ursæ Minoris (2° below the former), from the direction of δ Ursæ Majoris.	. . .	E. J.
Vertically down, across α Arietis.	. . .	N.
Passed close to ϵ Ursæ Majoris from the direction of χ Ursæ Majoris.	. . .	F. T.
From direction of γ Ursæ Minoris, passed between θ and η Draconis.	. . .	A. H.
From the direction of l Leonis Minoris, passed close to η Ursæ Majoris to a point a few degrees beyond.	. . .	F. T.
In due S. near horizon; point of appearance 10° or 12° E. of η Canis Majoris.	. . .	N.
Passed across Aldebaran towards W. horizon.	. . .	N.
Across β Orionis.	. . .	N.
From a point near ψ Ursæ Majoris, passed just below γ and δ Ursæ Majoris towards α Draconis.	. . .	F. T.
Directed towards η Canis Majoris; point of appearance 10° E. of that star.	Very short path low down near S. horizon.	N.
About 3° above ξ Argûs, towards ϵ Canis Majoris.	Very near to the horizon.	T. W.
Appeared at altitude 20° in N.W., at a point midway between Aries and β Andromedæ, directed towards horizon.	. . .	N.
From a point near χ Ursæ Majoris, passed about 1° below ζ Ursæ Majoris.	. . .	F. T.
From a point 15° below Cassiopeia vertically down towards N. horizon.	. . .	N.
Passed a few degrees below Sirius; center of track opposite that star.	. . .	N. T. W.
From the direction of β Orionis towards W. horizon.	. . .	N.
Passed from a point a few degrees above β Ursæ Majoris, across α Ursæ Majoris, to a point a few degrees N. of α Draconis.	. . .	F. T.
From a point just below ζ Orionis to between β and κ Orionis.	. . .	T. W.
Appeared about 6° above α Orionis, and passed across γ Orionis towards horizon.	. . .	N.
From δ Leonis, passed above α Leonis to ϵ Leonis.	. . .	N.
From a point near ψ Draconis, disappeared a few degrees below γ Ursæ Minoris.	. . .	F. T.
Passed between β and γ Ursæ Minoris (about 2° below the former).	. . .	E. J.
In Magnetic S.; altitude 10° at commencement. Point of appearance 15° E. of η Canis Majoris.	. . .	N.
From the direction of γ Geminorum, passed about 3° above α and γ Orionis towards S.W. horizon.	. . .	N.
A little above ξ Argûs towards δ Canis Majoris.	. . .	T. W.

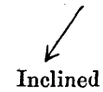
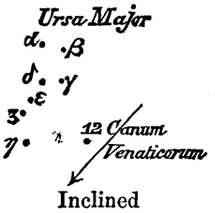
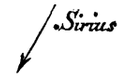
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	15. 23. 55	= 1st Mag. *	White	2 seconds	Fine train	20	
,,	15. 23. 59	= 1st Mag. *	Blue	1 second	Fine train	6	Inclined. Directed from a point a few degrees above δ Ursæ Majoris.
,,	15. 24. 0	= 2nd Mag. *	Blue	1 second	Train	4	
,,	15. 25. 31	= 1st Mag. *	Bluish	3 seconds	Fine train	10	
,,	15. 28. 25	= 2nd Mag. *	Bluish-white	1 second	Train	6	
,,	15. 29. 40	= 1st Mag. *	Blue	2 seconds	Fine train	20	
,,	15. 30. 55	= 3rd Mag. *	Blue	1 second	No train	10	
,,	15. 32. 30	= 3rd Mag. *	Blue	Less than 1s.	Faint train	10	
,,	15. 33. 13	= 1st Mag. *	Blue	1 second	Fine train	25	Inclined
,,	15. 35. 53	= 2nd Mag. *	Blue	1 second	. .	12	
,,	15. 37. 48	= Sirius	Blue	2 seconds	Fine train	10+	Inclined
,,	15. 42. 30	= 1st Mag. *	Blue	2 seconds	Fine train	20	Nearly horizontal. Directed from φ Ursæ Majoris.
,,	15. 42. 38	= Sirius	Blue	. .	Fine train	20	
,,	15. 43. 33	= 1st Mag. *	Light green	3 seconds	Greenish train, 2 s.	15	Inclined
,,	15. 44. 30	= 2nd Mag. *	Bluish	1 second	Fine train	18	
,,	15. 45. 50	= 3rd Mag. *	Blue	. .	No train	6	
,,	15. 45. 52	= 1st Mag. *	Blue	1 second	Train	15	
,,	15. 47. 0	= 1st Mag. *	Blue	2 seconds	Fine train	12	Horizontal
,,	15. 51. 27	= 1st Mag. *	White	2 seconds	Fine train	20	Inclined
,,	15. 57. 0	= 1st Mag. *	Blue	2 seconds	Fine train	8	
,,	15. 57. 10	= 1st Mag. *	Blue	1 second	Train	20	Inclined
,,	15. 57. 58	= 1st Mag. *	Blue	1 second	Faint train	30	Perpendicular
,,	16. 0. 1	= 2nd Mag. *	Blue	1 second	. .	10	Perpendicular

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
A little below β Orionis.	. . .	T. W.
Passed midway between θ and γ Ursæ Minoris.	. . .	E. J.
Passed between ζ and η Ursæ Majoris, directed from χ Ursæ Majoris.	. . .	F. T.
Passed about midway between β and κ Orionis.	. . .	T. W.
Passed one or two degrees below η Ursæ Majoris, directed from ψ Ursæ Majoris.	. . .	F. T.
From the direction of β Tauri, across the Pleiades, to a point 10° beyond.	. . .	N.
Passed within a few degrees of the Moon, from the direction of β Leonis.	. . .	F. T.
Directed from β Orionis towards West horizon; point of appearance 15° W. by S. of that star.	. . .	N.
From α Cancri to a point 15° East of Sirius; same altitude as that star.	. . .	N.
From λ Ursæ Majoris to a point just beyond β Ursæ Majoris.	. . .	A. H.
From a point above τ Canis Majoris to a point East and below ϵ Canis Majoris.	. . .	N.
Passed 2° above Polaris; center of track opposite that star.	. . .	E. J.
From a point 3° East and below α Orionis, passed Westward, 4° below γ Orionis.	. . .	N. F. T. T. W.
Passed between δ and ϵ Orionis, and disappeared about 5° West and below β Orionis.	. . .	T. W.
From a point near ψ Ursæ Majoris to a point a few degrees beyond ϵ Ursæ Majoris.	. . .	E. J.
From a point 10° below α Cancri.	. . .	N.
Towards West; passed one or two degrees below Sirius.	. . .	F. T.
Passed through Cassiopeia.	. . .	E. J.
From about 5° E. of 12 Canum Venaticorum towards γ Boötis.	. . .	T. W.
From a point a few degrees below Sirius, passed above β Canis Majoris.	. .	E. J.
From α Leonis towards α Hydræ.	. . .	A. H.
From a point between β and α Cassiopeiæ (nearer the former), fell vertically towards horizon.	. . .	A. H.
From a point 5° W. of α Leonis.	. . .	A. H.

OBSERVATIONS of LUMINOUS METEORS

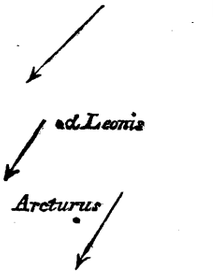
Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	16. 2. 15	= 1st Mag. *	Blue	2 seconds	No train	6	
,,	16. 2. 27	= Jupiter	Brilliant blue	2 seconds	. .	2	. . .
,,	16. 4. 0	= 1st Mag. *	Blue	1 second	No train	9	Inclined slightly from horizontal W. to E.
,,	16. 5. 10	= 3rd Mag. *	Blue	1 second	No train	12	Inclined
,,	16. 5. 28	= 3rd Mag. *	White	Rapid motion	No train	6	
,,	16. 6. 0	= 1st Mag. *	White	2 seconds	Fine train	20	Inclined
,,	16. 6. 15	= 1st Mag. *	Blue	1 second	Fine train	7	
,,	16. 6. 20	= 1st Mag. *	Bluish-white	2 seconds	Fine train, 2s.	40	S. to N.
,,	16. 6. 50	= 1st Mag. *	Blue	2 seconds	Fine train, 4s.	18	
,,	16. 7. 36	> 1st Mag. *	Blue	1 second	Train	20	Inclined
,,	16. 8. 0	= 1st Mag. *	Blue	1 second	Fine train	8	
,,	16. 9. 43	= 1st Mag. *	White	2 seconds	No train	10	
,,	16. 10. 15	= 2nd Mag. *	Blue	1 second	Fine train	8	Perpendicular
,,	16. 10. 56	= 1st Mag. *	Blue	1 second	Train	10	
,,	16. 12. 11	= 1st Mag. *	Blue	1 second	Fine train	30	Inclined
,,	16. 12. 20	= 4th Mag. *	Blue	1 second	. .	18	. . .
,,	16. 13. 43	= 2nd Mag. *	Blue	2 seconds	Train	25	Inclined
,,	16. 14. 11	= 3rd Mag. *	Blue	Rapid motion	. .	6	
,,	16. 14. 37	= 2nd Mag. *	Blue	1 second	Train	15	Center of track nearly at τ Ursæ Majoris.
,,	16. 15. 0	= 1st Mag. *	Bluish-white	1 second	Train	8	Inclined
,,	16. 15. 12	= 1st Mag. *	White	3 seconds	. .	20	Inclined
,,	16. 15. 12	= 1st Mag. *	Bluish	2 seconds	. .	10	
,,	16. 16. 30	= 1st Mag. *	Bluish-white	1 second	Train	8	Inclined
,,	16. 17. 0	= 1st Mag. *	Blue	More than 1 s.	Fine train	40	. . .
,,	16. 17. 46	= 2nd Mag. *	Bluish-white	1 second	Train	20	Inclined
,,	16. 18. 17	= 1st Mag. *	Blue	More than 1 s.	Fine train	15	. . .
,,	16. 18. 27	= 1st Mag. *	Blue	1 second	White train, 2s.	18	Inclined
,,	16. 19. 6	= 1st Mag. *	White	1 second	No train	10	Inclined
,,	16. 21. 40	= 1st Mag. *	Blue	1 second	Faint train	20	Inclined

in the YEAR 1865—*continued.*

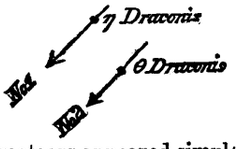
Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed a few degrees below Procyon.	. . .	E. J.
Very low down near Southern horizon.	No stars near	A. H.
Passed just below δ Canis Majoris to a point a few degrees above η Canis Majoris.	Center of track δ Canis Majoris	E. J.
From a point 2° W. of Sirius to δ Canis Majoris.	. . .	A. H.
From a point about 4° E. of α Hydræ.	. .	A. H.
From about 5° East of 12 Canum Venaticorum towards γ Boötis.	. . .	T. W.
From the vicinity of η Canis Majoris towards horizon, path nearly parallel to line joining δ and ϵ Canis Majoris.	. . .	E. J.
Passed across the zenith, across θ Ursæ Majoris.	. . .	N.
Passed 5° East of 12 Canum Venaticorum; center of track opposite that star. Directed from ν Ursæ Majoris.	. . .	N.
From direction of Polaris, passed between γ and β Cephei.	. . .	A. H.
From a point midway between Sirius and o Canis Majoris, curved towards horizon.	. . .	E. J.
From about 5° above Sirius, passed on West side of that star towards horizon.	Center of track opposite Sirius	T. W.
Fell vertically from a point a little West of γ Leonis to a point as much East of α Leonis.	. . .	E. J.
From a point 2° above Sirius towards horizon.	. . .	A. H.
From the direction of β Ursæ Minoris towards α Cassiopeiæ.	. . .	A. H.
Passed across Polaris and γ Cephei to 5° beyond the latter star.	. . .	N.
Passed between Aldebaran and the Pleiades from the direction of β Tauri.	. . .	A. H.
		E. J.
Point of disappearance a little East of η Canis Majoris.	. . .	A. H.
Passed near τ Ursæ Majoris in a due North direction.	. . .	N.
Passed a few degrees below the Pleiades.	Directed from Gemini	E. J.
From ϵ Orionis, passed 12° beyond β Eridani.	. . .	T. W.
About 12° below κ Orionis.	. . .	T. W.
Passed a few degrees above α and γ Orionis.	Same distance from each star	E. J.
From near θ Ursæ Majoris, passed to a point 4° North of 12 Canum Venaticorum.	. . .	N.
From a point midway between Procyon and α Hydræ towards Sirius.	. . .	A. H.
Passed 15° in a due North direction from ζ Ursæ Majoris.	. . .	N.
From direction of α Leonis towards α Hydræ.	. . .	A. H.
From about 3° above and North of ϵ Ursæ Majoris past ζ Ursæ Majoris.	. . .	T. W.
From a point a few degrees West of Procyon to a similar position with regard to Sirius.	. . .	A. H.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	16. 24. 30	= 1st Mag. *	Bluish	Momentary	Train	4	Inclined. Directed from δ Ursæ Majoris.
,,	16. 25. 40	= 1st Mag. *	Bluish	2 seconds	No train	8	Horizontal E. to W.
,,	16. 26. 2	= 1st Mag. *	Bluish	2 seconds	Fine train	20	
,,	16. 26. 13	= 2nd Mag. *	Blue	Rapid motion	No train	10	
,,	16. 26. 40	= 1st Mag. *	Bluish	2 seconds	Fine train	15	
,,	16. 37. 28	> 1st Mag. *	Blue	More than 1 s.	Faint train	30	
,,	16. 38. 30	= 1st Mag. *	Bluish	2 seconds	Fine train	18	Inclined. Directed from δ Ursæ Majoris.
,,	16. 45	= 1st Mag. *	Blue	1 second	Bright train	15	Inclined at an angle of 35° from hor.
,,	16. 45	= 1st Mag. *	Blue	1 second	Bright train	15	Nearly the same inclination as preceding meteor.
,,	16. 46½	= 1st Mag. *	Blue	1 second	Faint train	15	Inclined
,,	16. 47½	= 1st Mag. *	Reddish	More than 1 s.	Train	25	Inclined
,,	16. 48	= Sirius	Blue	1 second	Fine train, 2 s.	20+	Inclined at an angle of 45°
November 13	9. 20. 0	= 5th Mag. *	White	0·4 second	No train	1	Perpendicular
,,	10. 29. 5	= 4th Mag. *	White	1 second	No train	30	Perpendicular
November 15	8. 38+	= 2nd Mag. *	Bluish-white	1 second	No train	10	
November 17	8. 30	= 1st Mag. *	Bluish-white	Less than 1 s.	No train	7	
November 18	6. 4. 30	= 3rd Mag. *	White	1 second	No train	5	Perpendicular
,,	6. 14. 30+	= 3rd Mag. *	White	3 seconds	Faint train	10	Inclined
,,	6. 59. 30+	= 2nd Mag. *	Bluish	2 seconds	Faint train	16	Slightly inclined from perp.
,,	9. 23. 0	= 2nd Mag. *	Blue	3 seconds	Faint train	20	Inclined
November 21	7. 11. 45	= 1st Mag. *	Blue	2 seconds	Faint train	10	Inclined
,,	10. 1. 0	= 2nd Mag. *	Bluish-white	1 second	No train	6	Nearly perpendicular
November 22	11. 11. 15	= 2nd Mag. *	Blue	1 second	No train	10	Inclined
November 24	6. 39. 0	= 3rd Mag. *	Bluish-white	½ second	No train	6	Inclined
,,	6. 45. 0	= 2nd Mag. *	Blue	1 second	Train	10	Inclined
,,	8. 20. 0	= 2 × Venus	Yellow	4 seconds	Train	30	Inclined
,,	8. 37. 0	= 3rd Mag. *	Blue	1 second	No train	7	Inclined
November 26	8. 30. 0	= 1st Mag. *	Yellow	1 second	Fine train	30	Inclined
December 2	9. 47. 30	= 1st Mag. *	Bright blue	1 second	No train	25	Inclined
December 11	6. 4. 57	= Aldebaran	Yellow	3 seconds	Fine train, 1 s.	36	Inclined
,,	6. 17. 36	= 2nd Mag. *	Bluish	2 seconds	No train	17	Almost horizontal
,,	6. 20. 42	= 1st Mag. *	Yellow	3 seconds	No train	15	Inclined
,,	6. 25. 49	= 2 × Jupiter	Bright yellow	5 seconds	No train	15	Almost perpendicular
,,	6. 28. 2	= 2 × Jupiter	Bright yellow	5 seconds	Yellow train, 3 s.	40	Inclined



in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed midway between β and γ Ursæ Minoris.	. . .	E. J.
A little below Sirius; center of track opposite that star.	. . .	E. J.
Directed towards East horizon; center of track between Arcturus and ε Virginis.	. . .	N.
From a point a little East of α Leonis towards horizon.	. . .	A. H.
Passed within a few degrees of Arcturus (S. side of that star) towards E. horizon.	Center of track opposite to Arcturus	E. J.
From direction of η Ursæ Majoris towards β Draconis.	. . .	A. H.
Passed midway between β and γ Ursæ Minoris; center of track between those stars.	. . .	E. J.
Passed across η Draconis towards North horizon. (No. 1 in sketch.)		N.
Passed across θ Draconis towards North horizon. (No. 2 in sketch.)	These two meteors appeared simultaneously, and pursued nearly parallel paths.	N.
From η Ursæ Majoris towards β Draconis.	. . .	A. H.
From the direction of Aldebaran across the Belt of Orion.	. . .	A. H.
Passed across Aldebaran towards W. horizon.	Center of track Aldebaran	N.
Close to β Orionis.	A flash only	T. W.
Fell past ε Orionis.	. . .	T. W.
From a point about 3° above β Aurigæ, disappeared a little to the S. of θ Aurigæ.	. . .	T. W.
Passed across α Aquarii from the direction of β Equulei.	. . .	N.
Fell vertically past R Draconis towards ψ Ursæ Majoris.	Center of track opposite R Draconis	T. W.
Passed midway between μ and R Lyræ towards θ Draconis.	. . .	T. W.
From γ Cygni to a point near β Cygni.	. . .	T. W.
From the direction of Capella towards α Orionis.	. . .	A. H.
Passed between β and ε Delphini, and disappeared a little below α Aquilæ.	Descended with a wavering motion	T. W.
Appeared near b Orionis, passed by ζ, and disappeared a little above L Orionis.	. . .	T. W.
From τ Cygni towards γ Cygni.	. . .	A. H.
From the direction of ι Herculis, disappeared near γ Draconis.	. . .	F. T.
Directed from ε Persei to a point a little below β Aurigæ.	. . .	F. T.
From the direction of u Lyncis, passed across χ Ursæ Majoris, and a few degrees beyond.	. . .	F. T.
From the direction of the Pleiades towards ζ Tauri.	. . .	A. H.
From a point midway between Capella and β Aurigæ to a point a little below the Pleiades.	. . .	F. T.
From direction of α Cassiopeiæ towards η Pegasi.	. . .	A. H.
From a point about 3° below and South of α Andomedæ, passed between β and τ Pegasi, and disappeared a few degrees above ε Pegasi.	Very wavy motion	T. W.
From a point about 1° below Polaris, disappeared about 2° above τ Draconis.	. . .	T. W.
From a point about 3° above α Draconis, disappeared about 2° above ε Ursæ Majoris.	Very slow motion	T. W.
From about 3° West of τ Aquarii, past δ Aquarii, and disappeared about 8° West of Fomalhaut.	A most splendid meteor	T. W.
From about 1° below β Cygni, passing West of α Aquilæ, and disappeared 10° below and East of λ Antinoi.	Very slow motion	T. W.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
December 11	7. 0. 15	= 4th Mag. *	Bluish-white	0·3 second	No train	7	Nearly horizontal
,,	7. 4. 58	= 3rd Mag. *	Bluish	Momentary	No train	6	Inclined
December 14	8. 9. 6	= 2nd Mag. *	Blue	2 seconds	Faint train	20	
,,	8. 21. 53	= 3rd Mag. *	Blue	1 second	No train	7	Inclined at an angle of 45°
,,	8. 37. 40	= 4th Mag. *	Blue	Momentary	No train	5	Inclined at an angle of about 10° from horizontal.
,,	8. 44. 46	= 2nd Mag. *	Blue	2 seconds	No train	10	Inclined
,,	9. 6. 28	= 3rd Mag. *	Blue	Rapid motion	No train	4	Inclined
,,	9. 38. 15	= 3rd Mag. *	Bluish	Momentary	No train	4	. . .
,,	10. 15. 0	= 2nd Mag. *	Bluish-white	More than 1 s.	Faint train	12	Almost perpendicular
,,	10. 17. 0	= 4th Mag. *	Bluish	Momentary	No train	3	↙ • α Geminorum
,,	10. 19. 0	= 2 × 1st Mag. *	Blue	5 seconds	Train	35	Almost perpendicular
December 20	6. 56. 30	= 1st Mag. *	Bluish	2 seconds	No train	10	. . .

in the YEAR 1865—*concluded.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
In E.—from a point a few degrees above the Pleiades to a point a few degrees below α Arietis.	Clouds rising in the East	N.
From about 3° above χ Cygni, disappeared about 3° below that star.	Cloudy through the remainder of the night	T. W.
From a point a little to the left of ρ Ursæ Majoris, passed about 2° left of i Ursæ Majoris, and disappeared about 4° above i Ursæ Majoris.	. . .	A. H.
From direction of E Lyncis, disappeared a little above D Lyncis.	Slow in motion	A. H. T. W.
Passed parallel to a line joining ι and θ Ursæ Majoris, and about 2° above those stars.	. . .	A. H.
From θ Orionis towards α Leporis.	Very slow motion	A. H.
Passed parallel to a line joining L and p Camelopardali.	. . .	A. H.
From the direction of β Cassiopeiæ, passed τ Cassiopeiæ.	. . .	T. W.
From a point 2° East of ε Geminorum, passed between ζ and δ Geminorum, and disappeared 3° below the latter star.	. . .	A. H. T. W.
From a point about 1° above Castor, passed that star towards N.E. horizon.	. . .	T. W.
From a point 1° or 2° West of c Lacertæ, moved parallel to a line joining τ and ε Cygni (West side of those stars), to about 10° beyond the latter star.	A very fine meteor. Slow motion	A. H.
From a point about 4° above β Pegasi, passed between that star and η Pegasi, and disappeared about 3° above λ Pegasi.	Foggy	T. W.