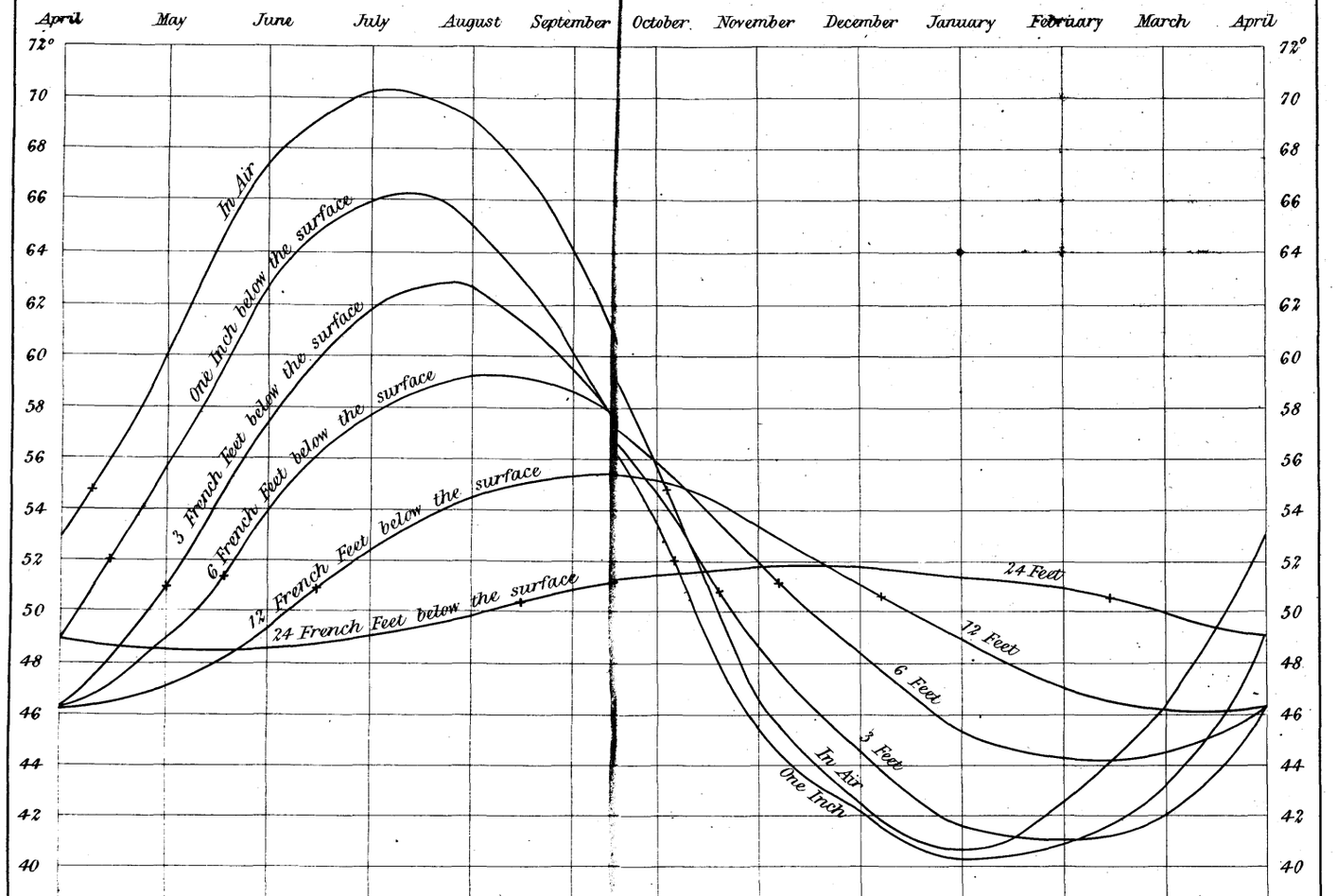
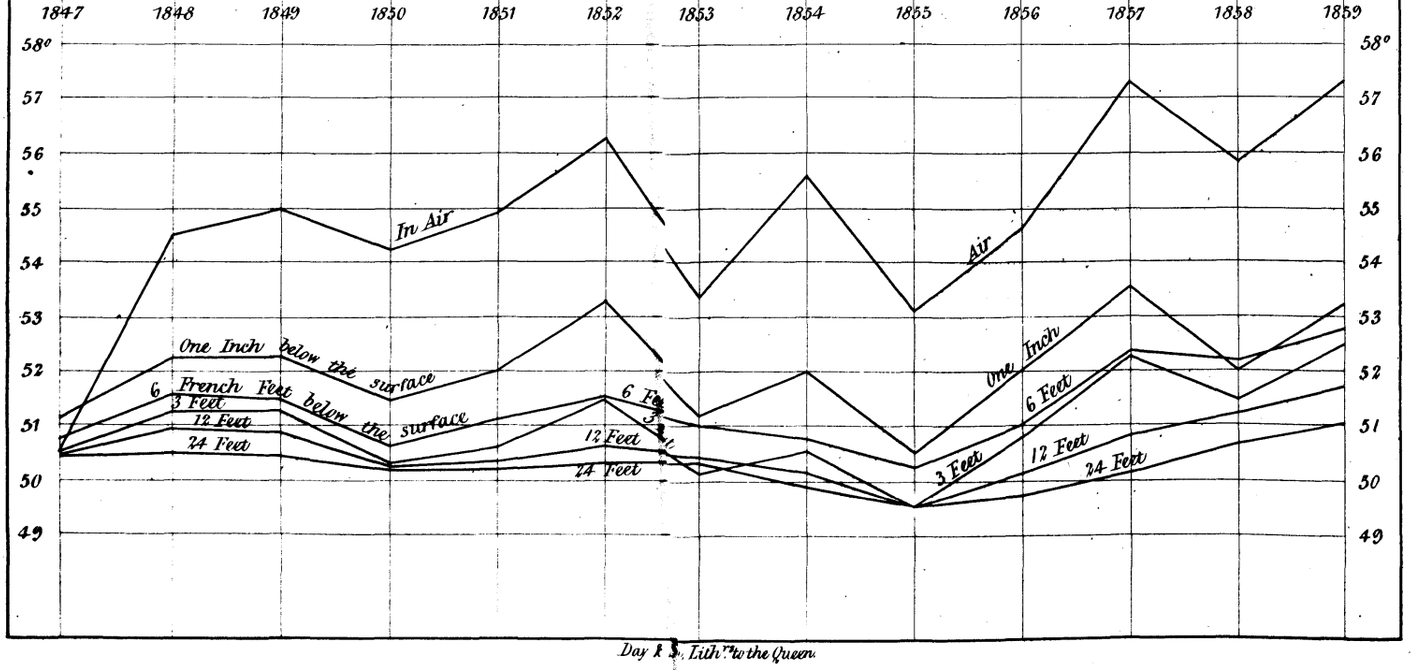
# GREENWICH OBSERVATIONS 860, METEOROLOGICAL RESULTS.

MONTHLY TEMPERATURES OF THE DEEP-SUNK THERMOMETER FROM THE MEAN OF OBSERVATIONS EXTENDING FROM 1847 TO 1859.

*(The crosses indicate the points corresponding the mean annual temperature for each thermometer.)*




MEAN ANNUAL TEMPERATURES OF THE DEEP SUNK THERMOMETERS.




Day & S. Lith.rs to the Queen

# RESULTS

OF TH

# MAGNETICAL AND METEOROLOGICAL

# OBSERVATIONS

MADE AT

# THE ROYAL OBSERVATORY, GREENWICH,

## 1860

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1860.)

ROYAL OBSERVATORY, GREENWICH.

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# RESULTS

OF

# MAGNETICAL AND METEOROLOGICAL

# OBSERVATIONS.

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1860.

ROYAL OBSERVATORY, GREENWICH.

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# INDICATIONS

OF

# MAGNETOMETERS.

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1860.

The establishment of Assistants in the Magnetical and Meteorological Department of the Royal Observatory consisted during the year 1860, of Mr. James Glaisher, the Superintendant, and Mr. Thomas Downs; with three supernumerary assistants, to aid in the observations and reductions.

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For description of the three Magnetometers, the method of observing by the Telescope, and the method of reducing the observations, the reader is referred to the *Greenwich Magnetical and Meteorological Observations* for 1847, Introduction, page i to xlii; and to corresponding parts of the preceding volumes.

During the year 1860, Telescope-Observations of the Magnetometers have usually been made four times every day, except on Sundays, on which 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 following pages.

Observations were made of the Horizontal Circle of the Theodolite by which the DECLINATION MAGNET is observed, corresponding to the Astronomical Meridian, on February 3, 16, 25, March 14, May 2, June 7, August 4, 7, September 1, October 27, November 15, and December 5.

Observations were made of the Collimation of the DECLINATION MAGNETOMETER; of the Torsion-force of its Suspension skein; and of the Collimation of the Theodolite-Telescope; on 1859, December 29, and 1860, January 12, 23, and 24.

Observations of the Angle of Torsion of the HORIZONTAL FORCE MAGNETOMETER were made on 1860, January 2, 3, and 4. The angle determined was 43°. 15′. Observations were made for the times of vibration and readings of the scale for different readings of the torsion-circle on the same days, and the general conclusion was, that the scale-readings and the times of vibration, had nearly the same value when the reading of the torsion-circle was 144°. 0′ (marked end West); and 230°. 30′ (marked end East). The reading adopted for the adjustment of the torsion-circle throughout the year (marked end West) was 143°. 0′.

The number used for the variation of horizontal force for a disturbance through one division of the scale, in parts of the whole horizontal force, is 0·0020524.

The correction for temperature is $0{\cdot}0000809 \times (t-32) + 0{\cdot}000000762\ (t-32)^2$, where $t$ is the temperature in degrees of Fahrenheit's scale. This formula, which represents the mean of the results deduced from temperature-experiments made with each end of the magnet alternately near the measuring apparatus, is preferable to that given in the volumes before 1850, which were based on experiments made in one position of the magnet. The correction for temperature is *not* applied to any of the results of observations.

Observations of the times of vibration of the VERTICAL FORCE MAGNETOMETER have usually been made three or four times a week. The adopted time of vibration for the year was 15″·72.

Observations for the time of vibration in a horizontal plane were made in 1859, April 19, when the time of vibration was found to be 24″·258 from 700 vibrations.

The value of the disturbing force, in terms of the whole vertical force, for one division of the scale, is inferred to be 0·001498 for the year: and this number has been used throughout the year.

The correction for temperature is $0{\cdot}00013845 \times (t-32) + 0{\cdot}000004054 + (t-32)^2$. This formula, like that for the Horizontal Force Magnetometer, is deduced from temperature-experiments made in both positions of the magnet. The correction is *not* applied to any of the results of observation.

The methods adopted in the use of the Photographic Apparatus; in the determination of zeros, both for time and for magnetic indications; and in the translation into numbers of the indications given by the Photographic Traces for arbitrary times; are in every respect the same as those described in the Addendum to the Introduction to the *Greenwich Magnetical and Meteorological Observations*, 1847, pages lxxxiii to xc. The only important alterations that have been made are, that (as mentioned at the end of that Introduction) coal-gas charged with the vapour of coal-naphtha is used to give the light required for forming the Photographic Trace; and that the cylinders carrying the Photographic paper (both that which receives the traces of the Declination Magnet and the Horizontal Force Magnet, and that which receives the traces of the Vertical Force Magnet and the Barometer), are now made to revolve in $24^h$. It may be mentioned also that, commencing with the year 1858, the observations are referred to Greenwich Mean Time instead of Göttingen Mean Time as heretofore.

It is proper to add, that, in measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally 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 general the ordinates of the Photographic Curves have been measured so frequently, including all maxima and minima, that a reader, laying down a succession of points by means of the given times as abscissæ and the given measures of force as ordinates, connecting these points by straight lines, and attending to the symbols as explained in the foot notes, will very nearly produce the original curves.

At the times when the Vertical Force Trace is dislocated, two ordinates have been taken for the same abscissa; these are connected by a brace, and the difference of the numbers indicates the amount of the disturbance.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 1 h m | | Jan. 1 h m | ° | ° |
| | | | | | (†) | 7. 0 | 58 ·0 | 58 ·0 |
| | | | | 0. 47 | ·02400 | 21. 0 | 52 ·6 | 53 ·1 |
| | | | | 6. 11 | ·02207 | | | |
| | | | | 8. 7 | ·02220 | | | |
| | | | | 9. 46 | ·02156 | | | |
| | | | | 13. 34 | ·02169 | | | |
| | | | | 16. 13 | ·02344 | | | |
| | | | | 20. 40 | ·02481 | | | |
| | | | | 22. 30 | ·02628 | | | |
| | | | | 23. 48 | ·02625 | | | |
| | | | | | (†) | | | |
| | | | | Jan. 2 | | Jan. 2 | | |
| | | | | | (†) | 1. 0 | | 54 ·3 |
| | | | | 0. 57 | ·02620 | 3. 0 | | 55 ·8 |
| | | | | 2. 11 | ·02531 | 9. 0 | | 55 ·7 |
| | | | | 5. 36 | ·02137 } ·02240 | 21. 0 | | 53 ·9 |
| | | | | 8. 30 | ·02206 | | | |
| | | | | 16. 13 | ·02343 | | | |
| | | | | 18. 52 | ·02462 | | | |
| | | | | | (†) | | | |
| | | | | 21. 0 | ·02486* | | | |
| | | | | Jan. 3 | | Jan. 3 | | |
| | | | | 1. 0 | ·02515* | 1. 0 | | 54 ·8 |
| | | | | 3. 0 | ·02486* | 3. 0 | | 55 ·6 |
| | | | | 9. 0 | ·02156* | 9. 0 | | 57 ·0 |
| | | | | 21. 0 | ·02171* | 21. 0 | | 53 ·6 |
| | | | | Jan. 4 | | Jan. 4 | | |
| | | | | 0. 0 | ·02418 | 1. 0 | | 53 ·0 |
| | | | | 1. 52 | ·02406 | 3. 0 | | 54 ·0 |
| | | | | 4. 0 | ·02296 | 9. 0 | | 52 ·2 |
| | | | | 4. 9 | ·02360 | 21. 0 | | 47 ·0 |
| | | | | 4. 42 | ·02320 | | | |
| | | | | 5. 10 | ·02365 | | | |
| | | | | 7. 45 | ·02410 | | | |
| | | | | 11. 45 | ·02591 | | | |
| | | | | 20. 0 | ·03120 | | | |
| | | | | 23. 59 | ·03159 | | | |
| | | Jan. 5 | | Jan. 5 | | Jan. 5 | | |
| | | | (†) | 0. 0 | ·03159 | 1. 0 | | 48 ·8 |
| | | 1. 8 | ·0868 *** | 1. 28 | ·03120 } ·03200 | 3. 0 | 50 ·0 | 51 ·0 |
| | | | | | | 9. 0 | 50 ·0 | 51 ·0 |
| | | 2. 45 | ·0871 | 6. 58 | ·02682 | 21. 0 | 46 ·7 | 47 ·9 |
| | | 3. 6 | ·0874 | 13. 35 | ·02693 | | | |
| | | 3. 18 | ·0871 | 17. 7 | ·02770 | | | |
| | | 4. 26 | ·0871 | 22. 25 | ·02968 | | | |
| | | 6. 3 | ·0883 | 23. 59 | ·02960 | | | |
| | | 7. 17 | ·0884 | | | | | |
| | | 7. 40 | ·0881 | | | | | |
| | | 7. 52 | ·0875 | | | | | |
| | | 8. 30 | ·0882 | | | | | |
| | | 8. 44 | ·0882 | | | | | |
| | | 9. 9 | ·0894 | | | | | |
| | | 9. 32 | ·0895 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Jan 5 h m | | h m | | h m | ° | ° |
| | | 9. 48 | ·0883 | | | | | |
| | | 10. 2 | ·0881 | | | | | |
| | | 10. 25 | ·0885 | | | | | |
| | | 10. 41 | ·0880 | | | | | |
| | | 10. 56 | ·0882 | | | | | |
| | | 11. 20 | ·0877 | | | | | |
| | | 12. 13 | ·0887 | | | | | |
| | | 12. 45 | ·0882 | | | | | |
| | | 13. 0 | ·0882 | | | | | |
| | | 13. 13 | ·0885 | | | | | |
| | | 14. 18 | ·0886 | | | | | |
| | | 15. 37 | ·0894 | | | | | |
| | | 15. 57 | ·0899 | | | | | |
| | | 16. 43 | ·0899 | | | | | |
| | | 17. 4 | ·0907 | | | | | |
| | | 17. 21 | ·0900 | | | | | |
| | | 17. 56 | ·0895 *** | | | | | |
| | | 20. 8 | ·0894 *** | | | | | |
| | | 22. 2 | ·0880 *** | | | | | |
| | | 22. 35 | ·0872 | | | | | |
| | | 23. 27 | ·0877 | | | | | |
| | | 23. 45 | ·0874 | | | | | |
| | | 23. 59 | ·0876 | | | | | |
| | | Jan. 6 | | Jan. 6 | | Jan. 6 | | |
| | | 0. 0 | ·0876 | 0. 0 | ·02960 | 1. 0 | 49 ·5 | 50 ·7 |
| | | 1. 56 | ·0870 | 7. 0 | ·02486 | 3. 0 | 51 ·0 | 52 ·0 |
| | | 2. 25 | ·0877 *** | 11. 21 | ·02530 | 9. 0 | 49 ·0 | 50 ·7 |
| | | | | 12. 47 | ·02600 | 21. 0 | 41 ·0 | 44 ·0 |
| | | 3. 26 | ·0877 *** | 21. 10 | ·03228 | | | |
| | | | | 23. 14 | ·03200 | | | |
| | | 3. 57 | ·0868 | | (†) | | | |
| | | 4. 16 | ·0868 | | | | | |
| | | 4. 40 | ·0873 | | | | | |
| | | 4. 48 | ·0872 | | | | | |
| | | 5. 7 | ·0864 | | | | | |
| | | 5. 39 | ·0872 | | | | | |
| | | 5. 45 | ·0869 | | | | | |
| | | 6. 15 | ·0873 | | | | | |
| | | 6. 36 | ·0870 | | | | | |
| | | 7. 5 | ·0874 *** | | | | | |
| | | 7. 36 | ·0863 *** | | | | | |
| | | 8. 27 | ·0865 | | | | | |
| | | 9. 3 | ·0871 | | | | | |
| | | 9. 20 | ·0868 *** | | | | | |
| | | 10. 3 | ·0873 | | | | | |
| | | 10. 24 | ·0871 | | | | | |
| | | 11. 11 | ·0888 | | | | | |
| | | 11. 26 | ·0873 | | | | | |
| | | 11. 32 | ·0875 | | | | | |
| | | 11. 36 | ·0871 | | | | | |
| | | 11. 51 | ·0881 | | | | | |

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.

The Horizontal Force Magnet was undergoing adjustments to January 5, and the Declination Magnet to January 12.

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|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Jan. 6 h m | | h m | | h m | ° | ° |
| | | 12. 2 | ·0876 | | | | | |
| | | 12. 30 | ·0896 | | | | | |
| | | 12. 56 | ·0891 | | | | | |
| | | 13. 14 | ·0895 | | | | | |
| | | | *** | | | | | |
| | | 14. 17 | ·0896 | | | | | |
| | | 14. 46 | ·0893 | | | | | |
| | | 15. 45 | ·0896 | | | | | |
| | | 16. 5 | ·0894 | | | | | |
| | | 16. 43 | ·0898 | | | | | |
| | | 17. 20 | ·0896 | | | | | |
| | | 18. 6 | ·0899 | | | | | |
| | | 19. 30 | ·0899 | | | | | |
| | | 20. 18 | ·0897 | | | | | |
| | | 21. 35 | ·0880 | | | | | |
| | | 21. 50 | ·0882 | | | | | |
| | | 22. 34 | ·0878 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0879 | | | | | |
| | | Jan. 7 | | Jan. 7 | | Jan. 7 | | |
| | | 0. 0 | ·0879 | | (†) | 1. 0 | 44 ·0 | 45 ·4 |
| | | 0. 32 | ·0884 | 0. 57 | ·02770 | 3. 0 | 47 ·0 | 48 ·0 |
| | | 1. 45 | ·0883 | 2. 4 | ·02750 | 9. 0 | 46 ·6 | 48 ·0 |
| | | | *** | 9. 12: | ·02186 | 22. 45 | 46 ·0 | 47 ·6 |
| | | 2. 36 | ·0876 | 16. 47 | ·02451 | | | |
| | | 3. 3 | ·0876 | 23. 59 | ·02769 | | | |
| | | 3. 29 | ·0887 | | | | | |
| | | 3. 33 | ·0885 | | | | | |
| | | 3. 47 | ·0886 | | | | | |
| | | 4. 0 | ·0884 | | | | | |
| | | 6. 54 | ·0897 | | | | | |
| | | 17. 38 | ·0911 | | | | | |
| | | 20. 20 | ·0908 | | | | | |
| | | 21. 3 | ·0904 | | | | | |
| | | 21. 48 | ·0895 | | | | | |
| | | 22. 15 | ·0894 | | | | | |
| | | 23. 2 | ·0883 | | | | | |
| | | 23. 59 | ·0884 | | | | | |
| | | Jan. 8 | | Jan. 8 | | Jan. 8 | | |
| | | 0. 0 | ·0884 | 0. 0 | ·02769 | 7. 0 | 47 ·0 | 48 ·5 |
| | | 2. 16 | ·0895 | 7. 10 | ·02405 | 21. 0 | 42 ·0 | 45 ·0 |
| | | 3. 15 | ·0894 | 13. 11: | ·02230 | | | |
| | | 6. 36 | ·0900 | 21. 44 | ·02503 | | | |
| | | 8. 33 | ·0900 | 23. 59 | ·02600 | | | |
| | | 9. 49 | ·0898 | | | | | |
| | | 12. 50 | ·0901 | | | | | |
| | | 15. 21 | ·0907 | | | | | |
| | | 19. 15 | ·0913 | | | | | |
| | | 20. 25 | ·0912 | | | | | |
| | | 21. 10 | ·0909 | | | | | |
| | | 21. 43 | ·0899 | | | | | |
| | | 23. 32 | ·0893 | | | | | |
| | | 23. 59 | ·0895 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Jan. 9 h m | | Jan. 9 h m | | Jan. 9 h m | ° | ° |
| | | 0. 0 | ·0895 | 0. 0 | ·02600 | 1. 0 | 44 ·8 | 46 ·0 |
| | | 0. 36 | ·0892 | 2. 10 | ·02538 | 3. 0 | 46 ·0 | 47 ·3 |
| | | 0. 56 | ·0896 | 6. 28 | ·02190 | 9. 0 | 48 ·0 | 48 ·5 |
| | | 1. 32 | ·0891 | | ·02223 | 21. 0 | 42 ·0 | 44 ·7 |
| | | 1. 53 | ·0892 | 13. 38: | ·02262 | | | |
| | | 2. 20 | ·0890 | 21. 42 | ·02628 | | | |
| | | 2. 37 | ·0891 | 23. 59 | ·02687 | | | |
| | | 3. 42 | ·0885 | | | | | |
| | | | *** | | | | | |
| | | 7. 30 | ·0898 | | | | | |
| | | | *** | | | | | |
| | | 11. 17 | ·0897 | | | | | |
| | | 11. 39 | ·0904 | | | | | |
| | | 12. 8 | ·0897 | | | | | |
| | | 12. 25 | ·0897 | | | | | |
| | | 12. 39 | ·0901 | | | | | |
| | | 13. 12 | ·0900 | | | | | |
| | | 16. 52 | ·0912 | | | | | |
| | | 20. 30 | ·0909 | | | | | |
| | | 21. 41 | ·0896 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0893 | | | | | |
| | | Jan. 10 | | Jan. 10 | | Jan. 10 | | |
| | | 0. 0 | ·0893 | 0. 0 | ·02687 | 1. 0 | 45 ·0 | 47 ·0 |
| | | 1. 45 | ·0890 | 1. 27 | ·02637 | 3. 0 | 48 ·0 | 49 ·0 |
| | | 3. 30 | ·0883 | 5. 0 | ·02216 | 9. 0 | 48 ·2 | 50 ·5 |
| | | | *** | 11. 53 | ·02290 | 21. 0 | 44 ·0 | 46 ·0 |
| | | 4. 56 | ·0891 | 17. 37 | ·02448 | | | |
| | | 6. 17 | ·0896 | 22. 6 | ·02664 | | | |
| | | 6. 53 | ·0892 | 23. 59 | ·02685 | | | |
| | | 8. 45 | ·0897 | | | | | |
| | | 10. 0 | ·0896 | | | | | |
| | | 11. 46 | ·0903 | | | | | |
| | | | *** | | | | | |
| | | 14. 12 | ·0906 | | | | | |
| | | 14. 18 | ·0915 | | | | | |
| | | 14. 36 | ·0912 | | | | | |
| | | | *** | | | | | |
| | | 16. 33 | ·0921 | | | | | |
| | | 16. 54 | ·0919 | | | | | |
| | | 17. 38 | ·0941 | | | | | |
| | | | *** | | | | | |
| | | 18. 50 | ·0919 | | | | | |
| | | 19. 0 | ·0920 | | | | | |
| | | 19. 11 | ·0915 | | | | | |
| | | 19. 22 | ·0916 | | | | | |
| | | 19. 33 | ·0914 | | | | | |
| | | 19. 56 | ·0918 | | | | | |
| | | | *** | | | | | |
| | | 20. 33 | ·0914 | | | | | |
| | | 20. 45 | ·0907 | | | | | |
| | | | *** | | | | | |
| | | 22. 3 | ·0899 | | | | | |
| | | | *** | | | | | |
| | | 23. 20 | ·0884 | | | | | |
| | | 23. 46 | ·0887 | | | | | |
| | | | (†) | | | | | |

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 | ° ′ ″ | Jan. 11 h m | | Jan. 11 h m | | Jan. 11 h m | ° | ° |
| | | | (†) | 0. 0 | ·02685 | 0. 0 | 48 ·8 | 49 ·5 |
| | | 0. 8 | ·0883 | 1. 57 | ·02560 | 1. 0 | 48 ·8 | 49 ·5 |
| | | 0. 22 | ·0890 | 4. 37 | {·02300 | 3. 0 | 50 ·0 | 51 ·0 |
| | | 0. 35 | ·0887 | | {·02362 | 6. 0 | 52 ·0 | 52 ·0 |
| | | 1. 0 | ·0882* | 6. 30 | ·02443 | 9. 0 | 50 ·8 | 51 ·0 |
| | | | (†) | 8. 10 | ·02384 | 12. 0 | 49 ·7 | 50 ·5 |
| | | 3. 0 | ·0879* | 11. 51 | ·02396 | 18. 0 | 47 ·5 | 48 ·2 |
| | | 3. 43 | ·0869 | 12. 38 | ·02340 | 21. 0 | 47 ·0 | 48 ·3 |
| | | | *** | 15. 6 | ·02463 | | | |
| | | 4. 15 | ·0865 | 16. 10 | ·02437 | | | |
| | | | *** | 16. 36 | ·02470 | | | |
| | | 4. 39 | ·0854 | 16. 55 | ·02457 | | | |
| | | 5. 0 | ·0856 | 21. 11 | ·02590 | | | |
| | | 5. 9 | ·0853 | 22. 30 | ·02681 | | | |
| | | 5. 26 | ·0856 | 23. 59 | ·02672 | | | |
| | | 5. 33 | ·0852 | | | | | |
| | | 5. 39 | ·0852 | | | | | |
| | | 5. 45 | ·0846 | | | | | |
| | | 5. 55 | ·0850 | | | | | |
| | | 6. 3 | ·0844 | | | | | |
| | | 6. 20 | ·0855 | | | | | |
| | | 6. 38 | ·0854 | | | | | |
| | | 6. 46 | ·0859 | | | | | |
| | | 7. 1 | ·0855 | | | | | |
| | | | *** | | | | | |
| | | 7. 20 | ·0862 | | | | | |
| | | 7. 23 | ·0858 | | | | | |
| | | 7. 32 | ·0866 | | | | | |
| | | 7. 35 | ·0864 | | | | | |
| | | 7. 40 | ·0867 | | | | | |
| | | 7. 50 | ·0858 | | | | | |
| | | 8. 0 | ·0860 | | | | | |
| | | 8. 4 | ·0856 | | | | | |
| | | | *** | | | | | |
| | | 8. 25 | ·0862 | | | | | |
| | | | *** | | | | | |
| | | 9. 10 | ·0846 | | | | | |
| | | 9. 32 | ·0852 | | | | | |
| | | 9. 42 | ·0847 | | | | | |
| | | 10. 0 | ·0856 | | | | | |
| | | 10. 7 | ·0854 | | | | | |
| | | 10. 39 | ·0858 | | | | | |
| | | 10. 54 | ·0873 | | | | | |
| | | 11. 12 | ·0856 | | | | | |
| | | 11. 21 | ·0852 | | | | | |
| | | 11. 33 | ·0854 | | | | | |
| | | 11. 55 | ·0873 | | | | | |
| | | 12. 3 | ·0862 | | | | | |
| | | 12. 30 | ·0886 | | | | | |
| | | 12. 41 | ·0882 | | | | | |
| | | 12. 45 | ·0884 | | | | | |
| | | 12. 56 | ·0878 | | | | | |
| | | 13. 18 | ·0878 | | | | | |
| | | 13. 30 | ·0877 | | | | | |
| | | 13. 40 | ·0866 | | | | | |
| | | 14. 2 | ·0872 | | | | | |
| | | | *** | | | | | |
| | | 14. 28 | ·0873 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Jan. 11 h m | | h m | | h m | ° | ° |
| | | 15. 15 | ·0889 | | | | | |
| | | 15. 27 | ·0886 | | | | | |
| | | 15. 45 | ·0889 | | | | | |
| | | 16. 4 | ·0898 | | | | | |
| | | 16. 18 | ·0893 | | | | | |
| | | 16. 45 | ·0913 | | | | | |
| | | 17. 0 | ·0907 | | | | | |
| | | 17. 18 | ·0910 | | | | | |
| | | 18. 17 | ·0890 | | | | | |
| | | 18. 46 | ·0897 | | | | | |
| | | | *** | | | | | |
| | | 22. 12 | ·0865 | | | | | |
| | | 22. 33 | ·0868 | | | | | |
| | | 23. 4 | ·0863 | | | | | |
| | | 23. 45 | ·0853 | | | | | |
| | | 23. 55 | ·0855 | | | | | |
| | | 23. 59 | ·0853 | | | | | |
| Jan. 12 | | Jan. 12 | | Jan. 12 | | Jan. 12 | | |
| 2. 45 | 21. 15. 0 | 0. 0 | ·0853 | 0. 0 | ·02672 | 1. 0 | 51 ·0 | 51 ·7 |
| 4. 24 | 13. 35 | | *** | | {·02307 | 3. 0 | 53 ·0 | 54 ·0 |
| 6. 11 | 14. 50 | 1. 2 | ·0859 | 3. 42 | {·02364 | 9. 0 | 51 ·5 | 52 ·0 |
| 8. 39 | 13. 45 | | *** | 9. 51 | ·02443 | 21. 0 | 43 ·3 | 45 ·3 |
| 10. 11 | 14. 50 | 1. 47 | ·0867 | 20. 56 | ·03251 | | | |
| 10. 40 | 12. 35 | 2. 6 | ·0864 | 23. 59 | ·03240 | | | |
| 11. 12 | 16. 10 | 7. 10 | ·0882 | | | | | |
| 11. 38 | 15. 0 | 10. 21 | ·0885 | | | | | |
| 13. 7 | 16. 0 | 10. 49 | ·0891 | | | | | |
| 13. 29 | 15. 25 | 11. 17 | ·0887 | | | | | |
| 13. 54 | 16. 40 | 14. 45 | ·0896 | | | | | |
| 14. 18 | 15. 55 | 15. 19 | ·0901 | | | | | |
| 14. 36 | 17. 0 | 20. 43 | ·0905 | | | | | |
| 15. 49 | 14. 20 | 21. 37 | ·0894 | | | | | |
| 17. 22 | 15. 20 | | *** | | | | | |
| 17. 43 | 14. 30 | 22. 47 | ·0885 | | | | | |
| 18. 4 | 15. 0 | | (†) | | | | | |
| 18. 23 | 14. 30 | 23. 42 | ·0880 | | | | | |
| 20. 0 | 15. 40 | 23. 59 | ·0881 | | | | | |
| 20. 40 | 17. 0 | | | | | | | |
| 22. 25 | 17. 20 | | | | | | | |
| 22. 36 | 18. 30 | | | | | | | |
| 23. 30 | 17. 30 | | | | | | | |
| 23. 44 | 19. 25 | | | | | | | |
| 23. 59 | 18. 50 | | | | | | | |
| Jan. 13 | | Jan. 13 | | Jan. 13 | | Jan. 13 | | |
| 0. 0 | 21. 18. 50 | 0. 0 | ·0881 | 0. 0 | ·03240 | 1. 0 | 47 ·0 | 48 ·0 |
| 4. 32 | 14. 10 | 0. 32 | ·0880 | 2. 0 | ·03162 | 3. 0 | 49 ·0 | 49 ·7 |
| 5. 49 | 14. 0 | 0. 45 | ·0886 | 7. 24: | ·02591 | 9. 0 | 50 ·3 | 51 ·0 |
| | *** | 1. 3 | ·0881 | 13. 11 | ·02493 | 21. 0 | 47 ·0 | 48 ·0 |
| 7. 28 | 16. 15 | 2. 58 | ·0880 | 22. 24 | ·02760 | | | |
| 7. 56 | 14. 0 | 3. 7 | ·0883 | 23. 59 | ·02748 | | | |
| 8. 9 | 15. 0 | 3. 36 | ·0881 | | | | | |
| 8. 36 | 14. 0 | 5. 32 | ·0885 | | | | | |
| 9. 29 | 15. 50 | 9. 41 | ·0889 | | | | | |
| 10. 29 | 15. 0 | 13. 27 | ·0894 | | | | | |
| | *** | 19. 55 | ·0903 | | | | | |
| 17. 15 | 16. 20 | 20. 50 | ·0901 | | | | | |
| | *** | | *** | | | | | |

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.

The Declination Magnet was under adjustment till January 12.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 13 | | Jan. 13 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 45 | 21. 15. 0 | 22. 18 | ·0883 | | | | | |
| | | | *** | | | | | |
| 21. 6 | 13. 30 | | | | | | | |
| 23. 59 | 18. 15 | 23. 59 | ·0880 | | | | | |
| Jan. 14 | | Jan. 14 | | Jan. 14 | | Jan. 14 | | |
| 0. 0 | 21. 18. 15 | 0. 0 | ·0880 | 0. 0 | ·02748 | 1. 0 | 50 ·0 | 51 ·0 |
| 1. 0 | 21. 30* | 1. 33 | ·0878 | 3. 29 | ·02559 | 3. 0 | 52 ·5 | 52 ·7 |
| 3. 0 | 17. 18* | 2. 4 | ·0874 | 6. 19 | ·02216 | 9. 6 | 53 ·0 | 53 ·2 |
| 9. 6 | 11. 27* | 3. 17 | ·0881 | 12. 22 | ·02230 | 23. 0 | 49 ·0 | 50 ·0 |
| 23. 0 | 17. 4* | 3. 34 | ·0877 | 23. 59 | ·02760 | | | |
| | | 4. 18 | ·0880 | | | | | |
| | | 5. 19 | ·0885 | | | | | |
| | | 7. 34 | ·0882 | | | | | |
| | | 10. 55 | ·0888 | | | | | |
| | | 11. 25 | ·0897 | | | | | |
| | | 11. 38 | ·0893 | | | | | |
| | | 12. 27 | ·0891 | | | | | |
| | | 18. 46 | ·0900 | | | | | |
| | | 22. 25 | ·0887 | | | | | |
| | | 23. 3 | ·0887 | | | | | |
| | | 23. 59 | ·0871 | | | | | |
| Jan. 15 | | Jan. 15 | | Jan. 15 | | Jan. 15 | | |
| 9. 0 | 21. 13. 48* | 0. 0 | ·0871 | 0. 0 | ·02760 | 9. 0 | 52 ·0 | 53 ·0 |
| 21. 0 | 18. 16* | 0. 25 | ·0876 | 3. 10 | ·02872 | 21. 0 | 49 ·0 | 50 ·0 |
| | | 0. 48 | ·0872 | 8. 59 | ·02765 | | | |
| | | 1. 40 | ·0875 | 11. 43 | ·02656 | | | |
| | | 2. 45 | ·0872 | 15. 9 | ·02613 | | | |
| | | 5. 12 | ·0891 | 19. 54 | ·02842 | | | |
| | | | *** | 21. 37 | ·02996 | | | |
| | | 9. 6 | ·0897 | 23. 59 | ·03009 | | | |
| | | 9. 18 | ·0914 | | | | | |
| | | 9. 33 | ·0908 | | | | | |
| | | 10. 17 | ·0896 | | | | | |
| | | | *** | | | | | |
| | | 11. 49 | ·0898 | | | | | |
| | | 12. 7 | ·0903 | | | | | |
| | | | *** | | | | | |
| | | 12. 38 | ·0897 | | | | | |
| | | 12. 46 | ·0903 | | | | | |
| | | | *** | | | | | |
| | | 13. 20 | ·0903 | | | | | |
| | | 13. 32 | ·0897 | | | | | |
| | | 13. 36 | ·0899 | | | | | |
| | | 13. 50 | ·0886 | | | | | |
| | | 14. 17 | ·0904 | | | | | |
| | | 14. 42 | ·0893 | | | | | |
| | | 15. 10 | ·0887 | | | | | |
| | | 15. 32 | ·0892 | | | | | |
| | | 15. 47 | ·0905 | | | | | |
| | | | *** | | | | | |
| | | 16. 46 | ·0894 | | | | | |
| | | | *** | | | | | |
| | | 19. 15 | ·0906 | | | | | |
| | | | *** | | | | | |
| | | 20. 13 | ·0906 | | | | | |
| | | 20. 35 | ·0899 | | | | | |
| | | 21. 9 | ·0899 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 16 | | Jan. 16 | | Jan. 16 | | Jan. 16 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| | (†) | 0. 0 | ·0884 | 0. 0 | ·03009 | 1. 0 | 50 ·0 | 51 ·0 |
| 0. 54 | 21. 22. 10 | | *** | 1. 59 | ·03000 | 3. 0 | 53 ·0 | 53 ·0 |
| 1. 37 | 21. 30 | 0. 27 | ·0881 | 5. 51 | ·02509 | 9. 0 | 52 ·0 | 51 ·5 |
| | *** | 1. 30 | ·0870 | 8. 48 | ·02338 | 21. 0 | 44 ·3 | 45 ·2 |
| 2. 13 | 23. 55 | 2. 7 | ·0875 | 12. 22 | ·02512 | | | |
| 2. 22 | 21. 0 | 2. 25 | ·0864 | 20. 39 | ·03149 | | | |
| 2. 30 | 22. 10 | 2. 36 | ·0868 | 22. 16 | ·03240 | | | |
| 2. 42 | 21. 30 | 2. 54 | ·0859 | 23. 59 | ·03069 | | | |
| 2. 57 | 25. 10 | 3. 3 | ·0862 | | | | | |
| 3. 51 | 17. 20 | 3. 17 | ·0851 | | | | | |
| 4. 43 | 20. 40 | 3. 46 | ·0868 | | | | | |
| 4. 50 | 20. 10 | 4. 28 | ·0874 | | | | | |
| 5. 44 | 26. 0 | 4. 45 | ·0871 | | | | | |
| 6. 5 | 24. 30 | 5. 6 | ·0875 | | | | | |
| 6. 19 | 19. 15 | | *** | | | | | |
| 6. 31 | 22. 50 | 5. 37 | ·0874 | | | | | |
| 6. 56 | 16. 0 | 5. 45 | ·0865 | | | | | |
| 7. 13 | 20. 10 | 5. 51 | ·0866 | | | | | |
| 7. 34 | 17. 30 | 6. 4 | ·0856 | | | | | |
| 7. 43 | 19. 20 | 6. 20 | ·0863 | | | | | |
| 8. 0 | 9. 30 | 6. 40 | ·0853 | | | | | |
| 8. 11 | 14. 0 | | *** | | | | | |
| 8. 30 | 10. 0 | 7. 6 | ·0874 | | | | | |
| 8. 44 | 15. 0 | 7. 19 | ·0869 | | | | | |
| 9. 9 | 9. 0 | 7. 33 | ·0871 | | | | | |
| 9. 47 | 13. 0 | 7. 45 | ·0866 | | | | | |
| | (†) | 7. 57 | ·0895 | | | | | |
| 12. 0 | 14. 30 | 8. 15 | ·0881 | | | | | |
| 14. 15 | 18. 10 | 8. 25 | ·0895 | | | | | |
| 14. 36 | 17. 20 | 8. 46 | ·0867 | | | | | |
| 16. 22 | 17. 5 | 9. 21 | ·0884 | | | | | |
| 17. 14 | 18. 0 | 9. 38 | ·0878 | | | | | |
| 18. 45 | 15. 10 | 9. 47 | ·0881 | | | | | |
| 19. 59 | 14. 55 | 10. 3 | ·0877 | | | | | |
| 20. 11 | 16. 0 | | *** | | | | | |
| 20. 30 | 14. 0 | 13. 12 | ·0891 | | | | | |
| 20. 54 | 15. 30 | 13. 27 | ·0889 | | | | | |
| 21. 15 | 13. 15 | 13. 52 | ·0896 | | | | | |
| 23. 44 | 19. 45 | 14. 3 | ·0891 | | | | | |
| 23. 54 | 21. 10 | 14. 47 | ·0894 | | | | | |
| 23. 59 | 21. 0 | 15. 2 | ·0900 | | | | | |
| | | 15. 13 | ·0896 | | | | | |
| | | | *** | | | | | |
| | | 17. 36 | ·0907 | | | | | |
| | | 17. 43 | ·0903 | | | | | |
| | | 20. 10 | ·0905 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0875 | | | | | |
| Jan. 17 | | Jan. 17 | | Jan. 17 | | Jan. 17 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0875 | 0. 0 | ·03069 | 1. 0 | 47 ·5 | 47 ·8 |
| 0. 15 | 20. 40 | | *** | 1. 57 | ·02991 | 3. 0 | 49 ·7 | 49 ·8 |
| 0. 25 | 21. 35 | 4. 15 | ·0880 | 8. 48: | ·02622 | 9. 0 | 48 ·3 | 49 ·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. |
|---|---|---|---|---|---|---|---|---|
| Jan. 17 | | Jan. 17 | | Jan. 17 | | Jan. 17 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 54 | 21. 21. 20 | 9. 53 | ·0900 | 19. 14 | ·03170 | 21. 9 | 40 ·0 | 42 ·0 |
| 1. 12 | 23. 0 | | *** | 23. 59 | ·03128 | | | |
| 1. 56 | 20. 40 | 10. 53 | ·0897 | | | | | |
| 2. 28 | 20. 0 | 11. 40 | ·0901 | | | | | |
| 2. 40 | 20. 20 | 13. 52 | ·0902 | | | | | |
| 3. 15 | 18. 40 | | *** | | | | | |
| 4. 14 | 17. 15 | 19. 25 | ·0913 | | | | | |
| 4. 39 | 17. 30 | 20. 43 | ·0910 | | | | | |
| 5. 28 | 19. 15 | 21. 36 | ·0897 | | | | | |
| 6. 43 | 19. 20 | 22. 32 | ·0888 | | | | | |
| 10. 4 | 17. 35 | 22. 56 | ·0884 | | | | | |
| 13. 15 | 19. 40 | | *** | | | | | |
| 13. 45 | 19. 0 | 23. 59 | ·0888 | | | | | |
| 15. 47 | 20. 50 | | | | | | | |
| 17. 3 | 20. 30 | | | | | | | |
| 18. 0 | 21. 0 | | | | | | | |
| 18. 45 | 19. 15 | | | | | | | |
| 20. 38 | 17. 0 | | | | | | | |
| 21. 10 | 13. 40 | | | | | | | |
| | *** | | | | | | | |
| 22. 39 | 18. 30 | | | | | | | |
| 22. 44 | 18. 0 | | | | | | | |
| 23. 6 | 19. 10 | | | | | | | |
| 23. 59 | 19. 55 | | | | | | | |
| Jan. 18 | | Jan. 18 | | Jan. 18 | | Jan. 18 | | |
| 0. 0 | 21. 19. 55 | 0. 0 | ·0888 | 0. 0 | ·03128 | 0. 0 | 41 ·2 | 42 ·2 |
| 0. 25 | 20. 30 | 0. 12 | ·0891 | 1. 23 | ·03098 | 1. 0 | 42 ·1 | 43 ·0 |
| 0. 40 | 17. 0 | | *** | 7. 47 | ·02729 | 3. 0 | 44 ·0 | 45 ·2 |
| 0. 52 | 18. 0 | 2. 7 | ·0895 | 17. 11 | ·02710 | 6. 0 | 46 ·1 | 46 ·2 |
| 1. 9 | 17. 30 | 3. 39 | ·0884 | 21. 54 | ·02678 | 9. 0 | 45 ·6 | 46 ·1 |
| 2. 0 | 18. 0 | 5. 5 | ·0897 | 23. 59 | ·02616 | 12. 0 | 45 ·0 | 45 ·9 |
| 3. 42 | 14. 40 | | *** | | | 18. 0 | 44 ·8 | 46 ·5 |
| 6. 14 | 14. 25 | 12. 50 | ·0906 | | | 21. 0 | 45 ·8 | 47 ·0 |
| 6. 43 | 16. 20 | 14. 39 | ·0907 | | | | | |
| 6. 55 | 15. 40 | | *** | | | | | |
| 8. 22 | 16. 15 | 18. 4 | ·0913 | | | | | |
| 9. 10 | 14. 30 | 19. 32 | ·0912 | | | | | |
| 9. 49 | 16. 30 | 22. 4 | ·0887 | | | | | |
| 10. 45 | 15. 40 | | *** | | | | | |
| 11. 18 | 16. 30 | 23. 15 | ·0889 | | | | | |
| 13. 0 | 16. 30 | 23. 59 | ·0877 | | | | | |
| 15. 22 | 14. 10 | | | | | | | |
| 17. 11 | 13. 30 | | | | | | | |
| 17. 23 | 13. 50 | | | | | | | |
| 17. 39 | 13. 0 | | | | | | | |
| 18. 45 | 13. 45 | | | | | | | |
| | *** | | | | | | | |
| 20. 5 | 12. 35 | | | | | | | |
| 20. 53 | 16. 30 | | | | | | | |
| 21. 39 | 15. 0 | | | | | | | |
| 21. 44 | 16. 5 | | | | | | | |
| 22. 57 | 17. 30 | | | | | | | |
| | (†) | | | | | | | |
| Jan. 19 | | Jan. 19 | | Jan. 19 | | Jan. 19 | | |
| | (†) | 0. 0 | ·0877 | 0. 0 | ·02616 | 0. 0 | 48 ·0 | 49 ·0 |
| 0. 14 | 21. 15. 30 | | *** | 3. 30 | ·02185 | 1. 0 | 50 ·0 | 51 ·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. |
|---|---|---|---|---|---|---|---|---|
| Jan. 19 | | Jan. 19 | | Jan. 19 | | Jan. 19 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 33 | 21. 16. 10 | 2. 21 | ·0885 | 11. 25 | ·02258 | 3. 0 | 52 ·5 | 52 ·9 |
| 0. 52 | 15. 0 | | *** | 22. 30 | ·03016 | 9. 0 | 51 ·8 | 52 ·0 |
| 1. 44 | 15. 10 | 6. 32 | ·0884 | 23. 59 | ·03050 | 21. 0 | 46 ·0 | 47 ·0 |
| 1. 53 | 14. 30 | 8. 43 | ·0896 | | | | | |
| 2. 7 | 15. 0 | 9. 56 | ·0892 | | | | | |
| 3. 8 | 13. 30 | 10. 25 | ·0897 | | | | | |
| 5. 29 | 11. 55 | 10. 48 | ·0897 | | | | | |
| 6. 49 | 13. 30 | 11. 15 | ·0904 | | | | | |
| 8. 57 | 13. 0 | 12. 2 | ·0899 | | | | | |
| 9. 40 | 13. 45 | 12. 20 | ·0903 | | | | | |
| 10. 43 | 13. 20 | 12. 33 | ·0896 | | | | | |
| 11. 25 | 9. 40 | 12. 47 | ·0906 | | | | | |
| 12. 14 | 13. 0 | 13. 7 | ·0902 | | | | | |
| 12. 38 | 12. 30 | | *** | | | | | |
| 14. 27 | 14. 0 | 15. 2 | ·0904 | | | | | |
| 15. 54 | 12. 20 | 16. 19 | ·0908 | | | | | |
| | *** | | *** | | | | | |
| 16. 30 | 12. 0 | 16. 45 | ·0907 | | | | | |
| 17. 7 | 13. 20 | 17. 0 | ·0910 | | | | | |
| 17. 15 | 12. 0 | 17. 7 | ·0906 | | | | | |
| 17. 39 | 12. 15 | 17. 39 | ·0912 | | | | | |
| 18. 7 | 11. 30 | | *** | | | | | |
| 18. 25 | 12. 0 | 20. 55 | ·0907 | | | | | |
| 18. 43 | 11. 30 | | *** | | | | | |
| 18. 54 | 12. 20 | 22. 21 | ·0894 | | | | | |
| 20. 51 | 10. 10 | | *** | | | | | |
| 21. 0 | 12. 30 | 23. 59 | ·0887 | | | | | |
| 22. 26 | 14. 40 | | | | | | | |
| 22. 59 | 17. 30 | | | | | | | |
| 23. 15 | 16. 50 | | | | | | | |
| | *** | | | | | | | |
| 23. 59 | 17. 30 | | | | | | | |
| Jan. 20 | | Jan. 20 | | Jan. 20 | | Jan. 20 | | |
| 0. 0 | 21. 17. 30 | 0. 0 | ·0887 | 0. 0 | ·03050 | 1. 0 | 48 ·9 | 48 ·8 |
| 0. 28 | 19. 30 | 0. 37 | ·0885 | 2. 57 | ·02908 | 3. 0 | 51 ·0 | 51 ·3 |
| 0. 45 | 17. 30 | 0. 46 | ·0890 | 5. 28 | ·02551 | 9. 0 | 52 ·6 | 52 ·6 |
| 0. 51 | 18. 0 | 1. 5 | ·0886 | 7. 51 | ·02350 | 21. 0 | 45 ·0 | 46 ·3 |
| 1. 11 | 16. 20 | 1. 25 | ·0893 | 8. 17 | ·02357 | | | |
| 1. 41 | 20. 40 | | *** | 8. 40 | ·02300 | | | |
| 2. 11 | 18. 10 | 1. 57 | ·0885 | 13. 11 | ·02231 | | | |
| 2. 23 | 20. 25 | 2. 13 | ·0890 | 14. 39 | ·02253 | | | |
| 2. 53 | 20. 45 | 2. 19 | ·0885 | 17. 43 | ·02488 | | | |
| 3. 28 | 19. 20 | 2. 38 | ·0885 | 22. 43 | ·03038 | | | |
| 3. 39 | 20. 20 | 2. 58 | ·0880 | 23. 59 | ·03077 | | | |
| 4. 15 | 18. 30 | | *** | | | | | |
| 4. 36 | 20. 0 | 3. 56 | ·0885 | | | | | |
| 5. 12 | 20. 15 | 4. 4 | ·0882 | | | | | |
| 5. 59 | 15. 0 | 4. 50 | ·0889 | | | | | |
| 6. 45 | 15. 0 | 5. 17 | ·0882 | | | | | |
| 7. 30 | 18. 0 | | *** | | | | | |
| 8. 13 | 10. 0 | 6. 32 | ·0894 | | | | | |
| 8. 30 | 22. 0 | | *** | | | | | |
| 8. 51 | 12. 0 | 7. 10 | ·0895 | | | | | |
| 9. 12 | 13. 15 | | *** | | | | | |
| 9. 37 | 11. 0 | 7. 25 | ·0886 | | | | | |
| 10. 7 | 13. 20 | | *** | | | | | |
| 10. 44 | 13. 10 | 7. 55 | ·0886 | | | | | |

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. 20 | | Jan. 20 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 11. 11 | 21. 12. 0 | 8. 18 | ·0923 | | | | | |
| 11. 28 | 9. 0 | 8. 36 | ·0876 | | | | | |
| 12. 12 | 4. 55 | 9. 0 | ·0891 | | | | | |
| 12. 22 | 5. 30 | 9. 12 | ·0884 | | | | | |
| | | | *** | | | | | |
| 12. 30 | 4. 30 | | | | | | | |
| 12. 45 | 4. 45 | 10. 3 | ·0895 | | | | | |
| | (†) | 10. 47 | ·0892 | | | | | |
| 13. 57 | 14. 20 | 11. 1 | ·0897 | | | | | |
| | | | *** | | | | | |
| 14. 13 | 12. 30 | | | | | | | |
| 14. 28 | 14. 30 | 11. 42 | ·0890 | | | | | |
| | | | *** | | | | | |
| 14. 57 | 9. 0 | | | | | | | |
| 15. 14 | 11. 0 | 12. 12 | ·0893 | | | | | |
| | | | *** | | | | | |
| 15. 29 | 9. 30 | | | | | | | |
| 15. 41 | 12. 20 | 12. 45 | ·0883 | | | | | |
| 17. 24 | 16. 30 | 13. 6 | ·0886 | | | | | |
| 17. 50 | 15. 50 | 13. 37 | ·0886 | | | | | |
| 18. 9 | 17. 20 | 13. 48 | ·0882 | | | | | |
| 18. 25 | 16. 20 | 14. 15 | ·0903 | | | | | |
| 18. 42 | 16. 45 | 14. 26 | ·0904 | | | | | |
| | | | *** | | | | | |
| 19. 0 | 16. 0 | | | | | | | |
| 19. 30 | 16. 0 | 14. 50 | ·0896 | | | | | |
| | | | *** | | | | | |
| 21. 9 | 13. 30 | | | | | | | |
| | *** | 16. 44 | ·0899 | | | | | |
| | | | *** | | | | | |
| 23. 27 | 16. 30 | | | | | | | |
| 23. 44 | 18. 30 | 18. 53 | ·0909 | | | | | |
| | | | *** | | | | | |
| 23. 59 | 17. 35 | | | | | | | |
| | | 20. 35 | ·0906 | | | | | |
| | | | *** | | | | | |
| | | 22. 25 | ·0888 | | | | | |
| | | | *** | | | | | |
| | | 23. 32 | ·0887 | | | | | |
| | | 23. 45 | ·0892 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0887 | | | | | |
| Jan. 21 | | Jan. 21 | | Jan. 21 | | Jan. 21 | | |
| 0. 0 | 21. 17. 35 | 0. 0 | ·0887 | 0. 0 | ·03077 | 1. 0 | 47 ·0 | 47 ·7 |
| 1. 13 | 17. 30 | 0. 15 | ·0885 | 2. 29: | ·03158 | 3. 0 | 48 ·0 | 48 ·0 |
| 2. 21 | 21. 35 | | *** | 5. 45 | ·02882 | 9. 0 | 48 ·0 | 48 ·0 |
| 2. 50: | 18. 0 | 0. 38 | ·0889 | 7. 46 | ·02850 | 22. 50 | 44 ·7 | |
| 3. 15 | 20. 50 | 0. 47 | ·0885 | 10. 27 | ·02890 | | | |
| 4. 13 | 18. 30 | 2. 16 | ·0892 | 13. 31 | ·03080 | | | |
| 4. 49 | 21. 0 | 2. 37 | ·0885 | 14. 6 | ·03065 | | | |
| 5. 18 | 20. 45 | 2. 56 | ·0887 | 17. 36 | ·03172 | | | |
| 5. 39 | 19. 0 | 3. 20 | ·0897 | 23. 25 | {·03150 | | | |
| 6. 0 | 19. 30 | | *** | | {·03105 | | | |
| 6. 22 | 17. 35 | 4. 15 | ·0892 | 23. 59 | ·03115 | | | |
| | | | *** | | | | | |
| 7. 0 | 21. 30 | | | | | | | |
| | (†) | 5. 18 | ·0896 | | | | | |
| 9. 0 | 17. 42* | 5. 37 | ·0902 | | | | | |
| 11. 45 | 14. 50 | 6. 0 | ·0898 | | | | | |
| | | | *** | | | | | |
| 12. 19 | 12. 0 | | | | | | | |
| 12. 30 | 13. 10 | 6. 45 | ·0905 | | | | | |
| 12. 49 | 9. 0 | 7. 2 | ·0899 | | | | | |
| 13. 13 | 14. 40 | 7. 20 | ·0907 | | | | | |
| 13. 40 | 7. 30 | 7. 33 | ·0896 | | | | | |
| 13. 51 | 7. 0 | 7. 44 | ·0904 | | | | | |
| 14. 13 | 8. 30 | 7. 47 | ·0898 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 21 | | Jan. 21 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 14. 30 | 21. 7. 30 | 8. 0 | ·0908 | | | | | |
| 14. 53 | 10. 20 | | (†) | | | | | |
| 15. 6 | 10. 15 | 8. 10 | ·0880 | | | | | |
| 15. 25 | 13. 2 | 8. 20 | ·0885 | | | | | |
| | *** | | (†) | | | | | |
| 16. 45 | 14. 0 | 8. 36 | ·0879 | | | | | |
| 17. 12 | 12. 40 | 8. 45 | ·0887 | | | | | |
| 17. 19 | 13. 45 | 8. 57 | ·0882 | | | | | |
| 17. 43 | 13. 30 | 9. 22 | ·0898 | | | | | |
| 17. 57 | 14. 0 | 9. 45 | ·0902 | | | | | |
| 18 51 | 22. 0 | | *** | | | | | |
| 19. 13 | 17. 45 | 11. 27 | ·0901 | | | | | |
| 19. 52 | 13. 50 | 11. 41 | ·0905 | | | | | |
| 20. 29 | 17. 55 | 11. 48 | ·0901 | | | | | |
| 21. 1 | 16. 15 | 12. 3 | ·0906 | | | | | |
| 22. 12 | 22. 40 | 12. 25 | ·0900 | | | | | |
| 22. 26 | 19. 0 | 12. 32 | ·0903 | | | | | |
| 22. 44 | 18. 0 | 12. 44 | ·0901 | | | | | |
| | (†) | 12. 50 | ·0907 | | | | | |
| 23. 45 | 22. 10 | 13. 2 | ·0906 | | | | | |
| 23. 59 | 20. 0 | 13. 10 | ·0920 | | | | | |
| | | 13. 17 | ·0925 | | | | | |
| | | 13. 42 | ·0908 | | | | | |
| | | | *** | | | | | |
| | | 14. 50 | ·0913 | | | | | |
| | | 14. 56 | ·0910 | | | | | |
| | | 15. 15 | ·0909 | | | | | |
| | | 15. 33 | ·0902 | | | | | |
| | | | *** | | | | | |
| | | 17. 5 | ·0904 | | | | | |
| | | 17. 14 | ·0909 | | | | | |
| | | 17. 43 | ·0907 | | | | | |
| | | 17. 46 | ·0909 | | | | | |
| | | 18. 6 | ·0897 | | | | | |
| | | | *** | | | | | |
| | | 19. 1 | ·0905 | | | | | |
| | | 20. 18 | ·0903 | | | | | |
| | | 20. 56 | ·0888 | | | | | |
| | | 21. 34 | ·0886 | | | | | |
| | | 22. 10 | ·0890 | | | | | |
| | | 23. 39 | ·0891 | | | | | |
| | | 23. 59 | ·0893 | | | | | |
| Jan. 22 | | Jan. 22 | | Jan. 22 | | Jan. 22 | | |
| 0. 0 | 21. 20. 0 | 0. 0 | ·0893 | 0. 0 | ·03115 | 6. 38 | 46 ·0 | 46 ·3 |
| 0. 8 | 21. 0 | 0. 37 | ·0887 | 1. 51 | ·03106 | 21. 0 | 41 ·0 | 42 ·0 |
| 0. 31 | 17. 35 | 1. 30 | ·0898 | 7. 43 | ·02856 | | | |
| 0. 48 | 20. 20 | 3. 7 | ·0899 | 12. 30 | ·02900 | | | |
| 1. 29 | 18. 0 | 4. 46 | ·0891 | 20. 4 | ·03200 | | | |
| 1. 44 | 18. 30 | 5. 47 | ·0903 | 23. 59 | ·03208 | | | |
| 2. 0 | 17. 50 | 7. 18 | ·0908 | | | | | |
| 2. 22 | 17. 20 | 8. 3 | ·0905 | | | | | |
| 2. 37 | 18. 10 | 8. 17 | ·0910 | | | | | |
| 2. 53 | 17. 0 | 8. 36 | ·0908 | | | | | |
| 4. 22 | 16. 55 | 8. 48 | ·0912 | | | | | |
| 4. 40 | 15. 40 | 9. 3 | ·0908 | | | | | |
| 4. 51 | 15. 35 | 9. 15 | ·0911 | | | | | |
| 5. 49: | 10. 30 | 10. 20 | ·0904 | | | | | |

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. 22 | | Jan. 22 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 6. 42 | 21. 15. 50 | 10. 43 | ·0914 | | | | | |
| 8. 5 | 14. 30 | 11. 0 | ·0900 | | | | | |
| 8. 18 | 15. 5 | 11. 55 | ·0911 | | | | | |
| 9. 8 | 11. 30 | 12. 22 | ·0899 | | | | | |
| | | | *** | | | | | |
| 10. 7 | 14. 0 | | | | | | | |
| 10. 45 | 12. 35 | 13. 40 | ·0900 | | | | | |
| 11. 6 | 12. 40 | 13. 51 | ·0904 | | | | | |
| 11. 30 | 17. 25 | 14. 15 | ·0904 | | | | | |
| | (†) | 14. 27 | ·0909 | | | | | |
| | | | *** | | | | | |
| 17. 58 | 15. 15 | | | | | | | |
| 19. 43 | 15. 25 | 18. 4 | ·0913 | | | | | |
| 20. 55 | 13. 0 | 20. 36 | ·0904 | | | | | |
| 21. 42 | 13. 30 | 22. 3 | ·0886 | | | | | |
| | | | *** | | | | | |
| 22. 10 | 17. 40 | | | | | | | |
| 22. 41 | 16. 20 | 23. 38 | ·0886 | | | | | |
| 23. 59 | 19. 10 | 23. 59 | ·0883 | | | | | |
| Jan. 23 | | Jan. 23 | | Jan. 23 | | Jan. 23 | | |
| 0. 0 | 21. 19. 10 | 0. 0 | ·0883 | 0. 0 | ·03208 | 1. 0 | 45 ·0 | 45 ·3 |
| | | | *** | | | | | |
| 0. 13 | 19. 45 | | | 2. 0: | ·03088 | 3. 0 | 48 ·5 | 48 ·4 |
| 0. 53 | 19. 5 | 1. 2 | ·0878 | 7. 37: | ·02296 | 9. 0 | 49 ·0 | 48 ·7 |
| | | | *** | | | | | |
| 1. 16 | 21. 0 | | | 13. 7 | ·02467 | 21. 0 | 47 ·0 | 47 ·3 |
| 1. 28 | 19. 30 | 4. 45 | ·0897 | 20. 10 | ·02392 | | | |
| 4. 30 | 15. 45 | 5. 0 | ·0891 | 23. 59 | ·02493 | | | |
| 5. 32 | 14. 15 | 5. 21 | ·0894 | | | | | |
| | | | *** | | | | | |
| 6. 42 | 15. 35 | | | | | | | |
| 7. 40 | 15. 40 | 11. 23 | ·0901 | | | | | |
| | (†) | 11. 44 | ·0907 | | | | | |
| 9. 0 | 15. 41* | 12. 7 | ·0899 | | | | | |
| 10. 58 | 11. 30 | 12. 23 | ·0899 | | | | | |
| 11. 29 | 8. 40 | 12. 38 | ·0896 | | | | | |
| 11. 51 | 10. 0 | 13. 39 | ·0904 | | | | | |
| 11. 59 | 10. 0 | 14. 20 | ·0900 | | | | | |
| | | | *** | | | | | |
| 12. 16 | 12. 20 | | | | | | | |
| 13. 44 | 12. 45 | 20. 25 | ·0903 | | | | | |
| 14. 36 | 15. 20 | 22. 15 | ·0878 | | | | | |
| | | | *** | | | | | |
| 16. 44 | 15. 20 | | | | | | | |
| 17. 39 | 13. 45 | 22. 46 | ·0874 | | | | | |
| 17. 56 | 14. 45 | 23. 59 | ·0881 | | | | | |
| 18. 20 | 14. 0 | | | | | | | |
| 19. 29 | 14. 55 | | | | | | | |
| 21. 4 | 13. 30 | | | | | | | |
| 21. 57 | 15. 30 | | | | | | | |
| | (†) | | | | | | | |
| Jan. 24 | | Jan. 24 | | Jan. 24 | | Jan. 24 | | |
| | (†) | 0. 0 | ·0881 | 0. 0 | ·02493 | 1. 0 | 49 ·0 | 48 ·8 |
| 2. 30 | 21. 17. 40 | 0. 26 | ·0885 | 4. 29 | ·02222 | 3. 0 | 51 ·0 | 50 ·3 |
| 2. 46 | 18. 10 | 0. 38 | ·0880 | 7. 12 | ·02226 | 9. 0 | 49 ·5 | 49 ·5 |
| 4. 56 | 15. 0 | 1. 47 | ·0881 | 7. 24 | ·02252 | 21. 0 | 44 ·0 | 45 ·0 |
| | | | *** | 10. 57 | ·02330 | | | |
| 5. 10 | 13. 20 | | | | | | | |
| 5. 40 | 14. 30 | 2. 50 | ·0895 | 14. 56 | ·02610 | | | |
| | *** | 3. 5 | ·0891 | 23. 59 | ·02948 | | | |
| 8. 29 | 13. 0 | 4. 2 | ·0889 | | | | | |
| 8. 55 | 9. 30 | 4. 50 | ·0893 | | | | | |
| 9. 26 | 13. 0 | 5. 15 | ·0887 | | | | | |
| | | | *** | | | | | |
| 10. 0 | 12. 40 | | | | | | | |
| 10. 13 | 13. 30 | 6. 25 | ·0897 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H.F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Jan. 24 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 35 | 21. 12. 40 | 6. 37 | ·0901 | | | | | |
| | | | *** | | | | | |
| 11. 40 | 13. 20 | | | | | | | |
| 12. 30 | 15. 20 | 7. 16 | ·0899 | | | | | |
| | | | *** | | | | | |
| 12. 55 | 13. 50 | | | | | | | |
| 14. 43 | 13. 30 | 10. 52 | ·0904 | | | | | |
| 14. 51 | 14. 10 | 11. 7 | ·0902 | | | | | |
| | | | *** | | | | | |
| 15. 28 | 12. 20 | | | | | | | |
| 16. 14 | 13. 15 | 11 43 | ·0906 | | | | | |
| 18. 14 | 13. 5 | 11. 55 | ·0902 | | | | | |
| | | | *** | | | | | |
| 19. 24 | 14. 0 | | | | | | | |
| 20. 58 | 12. 45 | 12. 33 | ·0907 | | | | | |
| 23. 45 | 17. 0 | 12. 50 | ·0903 | | | | | |
| 23. 59 | 18. 15 | 13. 12 | ·0909 | | | | | |
| | | | *** | | | | | |
| | | 14. 47 | ·0907 | | | | | |
| | | 17. 56 | ·0914 | | | | | |
| | | 20. 54 | ·0905 | | | | | |
| | | 21. 50 | ·0896 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0883 | | | | | |
| Jan. 25 | | Jan. 25 | | Jan. 25 | | Jan. 25 | | |
| 0. 0 | 21. 18. 15 | 0. 0 | ·0883 | 0. 0 | ·02948 | 0. 0 | 44 ·8 | 45 ·7 |
| 0. 16 | 17. 20 | 0. 7 | ·0883 | 1. 45 | ·02940 | 1. 0 | 46 ·0 | 47 ·0 |
| 0. 30 | 18. 30 | 0. 17 | ·0885 | 5. 52 | ·02687 | 3. 0 | 47 ·8 | 48 ·0 |
| 0. 54 | 19. 0 | 0. 39 | ·0881 | 8. 48 | ·02569 | 6. 0 | 48 ·2 | 48 ·2 |
| 1. 8 | 21. 30 | 1. 18 | ·0883 | 12. 18 | ·02556 | 9. 0 | 47 ·3 | 47 ·8 |
| 1. 16 | 20. 40 | 1. 37 | ·0886 | 21. 6 | ·02970 | 12. 0 | 46 ·0 | 47 ·0 |
| 1. 50 | 21. 0 | 2. 15 | ·0885 | 23. 37 | ·03168 | 18. 0 | 42 ·5 | 44 ·4 |
| | | | *** | 23. 59 | ·03164 | 21. 0 | 41 ·0 | 43 ·7 |
| 1. 56 | 21. 30 | | | | | | | |
| 2. 8 | 21. 5 | 3. 3 | ·0882 | | | | | |
| 2. 55 | 19. 35 | 3. 30 | ·0884 | | | | | |
| 3. 19 | 20. 15 | 3. 38 | ·0882 | | | | | |
| | | | *** | | | | | |
| 3. 54 | 17. 35 | | | | | | | |
| 4. 11 | 18. 40 | 4. 44 | ·0893 | | | | | |
| 4. 28 | 18. 30 | 4. 53 | ·0888 | | | | | |
| 4. 45 | 14. 20 | 5. 10 | ·0899 | | | | | |
| 4. 56 | 17. 30 | 5. 45 | ·0897 | | | | | |
| 4. 59 | 17. 5 | 5. 50 | ·0893 | | | | | |
| | | | *** | | | | | |
| 5. 15 | 18. 50 | | | | | | | |
| 5. 29 | 19. 30 | 6. 21 | ·0897 | | | | | |
| 5. 43 | 17. 55 | 6. 40 | ·0886 | | | | | |
| | | | *** | | | | | |
| 5. 49 | 18. 50 | | | | | | | |
| 5. 55 | 18. 30 | 7. 15 | ·0888 | | | | | |
| | | | *** | | | | | |
| 6. 14 | 22. 10 | | | | | | | |
| 6. 44 | 18. 30 | 7. 33 | ·0891 | | | | | |
| | | | *** | | | | | |
| 6. 49 | 18. 50 | | | | | | | |
| 7. 0 | 18. 0 | 7. 46 | ·0900 | | | | | |
| | | | *** | | | | | |
| 7. 28 | 13. 40 | | | | | | | |
| 7. 43 | 15. 30 | 8. 15 | ·0899 | | | | | |
| 7. 51 | 16. 50 | 8. 26 | ·0903 | | | | | |
| 8. 11 | 13. 0 | 8. 37 | ·0893 | | | | | |
| 8. 15 | 13. 25 | 8. 48 | ·0894 | | | | | |
| 8. 27 | 11. 10 | 9. 37 | ·0903 | | | | | |
| | | | *** | | | | | |
| 8. 38 | 12. 30 | | | | | | | |
| 8. 51 | 12. 45 | 10. 45 | ·0904 | | | | | |
| 11. 15 | 13. 0 | 11. 42 | ·0900 | | | | | |
| 12. 15 | 13. 15 | 12. 26 | ·0903 | | | | | |

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. 25 | | Jan. 25 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 13. 31 | 21. 10. 0 | 12. 55 | ·0901 | | | | | |
| 13. 50 | 11. 0 | 13. 26: | ·0904 | | | | | |
| 13. 58 | 10. 35 | 13. 47 | ·0901 | | | | | |
| 14. 12 | 12. 30 | 14. 5 | ·0901 | | | | | |
| 14. 40 | 13. 30 | 14. 30 | ·0905 | | | | | |
| 15. 27 | 12. 35 | 16. 33 | ·0907 | | | | | |
| 16. 22 | 12. 50 | 17. 42 | ·0911 | | | | | |
| 16. 40 | 11. 50 | 19. 26 | ·0915 | | | | | |
| 16. 53 | 12. 30 | 20. 18 | ·0911 | | | | | |
| 17. 16 | 12. 30 | 22. 32 | ·0885 | | | | | |
| 17. 35 | 11. 30 | 22. 47 | ·0885 | | | | | |
| 18. 15 | 13. 30 | 23. 19 | ·0884 | | | | | |
| 19. 40 | 12. 50 | 23. 59 | ·0885 | | | | | |
| 19. 53 | 13. 30 | | | | | | | |
| 21. 37 | 12. 40 | | | | | | | |
| 23. 1 | 15. 30 | | | | | | | |
| 23. 59 | 17. 45 | | | | | | | |
| Jan. 26 | | Jan. 26 | | Jan. 26 | | Jan. 26 | | |
| 0. 0 | 21. 17. 45 | 0. 0 | ·0885 | 0. 0 | ·03164 | 0. 0 | 42 ·3 | 43 ·5 |
| 0. 14 | 18. 30 | 0. 33 | ·0881 | 2. 11 | ·03120 | 1. 0 | 44 ·0 | 45 ·0 |
| 0. 28 | 17. 40 | 0. 47 | ·0882 | 6. 44: | ·02756 | 3. 0 | 46 ·0 | 47 ·0 |
| 0. 52 | 18. 0 | 1. 6 | ·0880 | 10. 0 | ·02811 | 9. 0 | 47 ·5 | 47 ·3 |
| 1. 17 | 16. 30 | 1. 57 | ·0883 | 12. 0 | ·02820 | 21. 0 | 47 ·5 | 48 ·7 |
| 1. 41 | 17. 35 | 3. 46 | ·0891 | 15. 42 | ·02752 | | | |
| 1. 55 | 16. 30 | 4. 11: | ·0888 | 22. 49 | ·02735 | | | |
| 2. 42 | 16. 0 | 4. 48 | ·0895 | 23. 59 | ·02672 | | | |
| 2. 54 | 17. 0 | 5. 36 | ·0892 | | | | | |
| 3. 45 | 16. 0 | 6. 3 | ·0897 | | | | | |
| 4. 19 | 14. 5 | 6. 50 | ·0896 | | | | | |
| 6. 45 | 14. 0 | 8. 49 | ·0907 | | | | | |
| 8. 35 | 12. 30 | 9. 18 | ·0899 | | | | | |
| 9. 0 | 13. 0 | | (†) | | | | | |
| 10. 11 | 4. 5 | 9. 51 | ·0900 | | | | | |
| 10. 21 | 7. 20 | 10. 15 | ·0915 | | | | | |
| 11. 40 | 12. 10 | 10. 43 | ·0901 | | | | | |
| 12. 18 | 12. 20 | 10. 51 | ·0903 | | | | | |
| 13. 29 | 10. 50 | 11. 2 | ·0899 | | | | | |
| 13. 53 | 12. 10 | | *** | | | | | |
| 14. 40 | 10. 0 | 11. 43 | ·0904 | | | | | |
| 15. 25 | 12. 50 | | *** | | | | | |
| 16. 5 | 12. 30 | 13. 38 | ·0903 | | | | | |
| 16. 30 | 13. 20 | 13. 56 | ·0900 | | | | | |
| 17. 0 | 11. 30 | 14. 33 | ·0903 | | | | | |
| 17. 22 | 12. 20 | 15. 10 | ·0897 | | | | | |
| 17. 44 | 12. 10 | 15. 45 | ·0896 | | | | | |
| 18. 9 | 13. 20 | 16. 43 | ·0902 | | | | | |
| 18. 30 | 12. 40 | | *** | | | | | |
| 19. 39 | 11. 50 | 20. 27 | ·0902 | | | | | |
| 20. 10 | 13. 0 | 20. 55 | ·0899 | | | | | |
| 20. 54 | 11. 25 | 21. 33 | ·0886 | | | | | |
| 21. 21 | 13. 0 | 22. 0 | ·0885 | | | | | |
| 21. 44 | 13. 0 | | (†) | | | | | |
| 21. 51 | 8. 5 | 23. 45 | ·0891 | | | | | |
| 22. 0 | 15. 0 | 23. 59 | ·0892 | | | | | |
| 22. 14 | 11. 0 | | | | | | | |
| 22. 22 | 17. 20 | | | | | | | |
| 22. 31 | 16. 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. |
|---|---|---|---|---|---|---|---|---|
| Jan. 26 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 22. 40 | 21. 17. 0 | | | | | | | |
| 22. 51 | 14. 30 | | | | | | | |
| 23. 0 | 16. 35 | | | | | | | |
| 23. 22 | 14. 30 | | | | | | | |
| 23. 42 | 18. 15 | | | | | | | |
| 23. 51 | 17. 40 | | | | | | | |
| 23. 59 | 18. 0 | | | | | | | |
| Jan. 27 | | Jan. 27 | | Jan. 27 | | Jan. 27 | | |
| 0. 0 | 21. 18. 0 | 0. 0 | ·0892 | 0. 0 | ·02672 | 1. 0 | 51 ·0 | 51 ·2 |
| 0. 13 | 16. 30 | | *** | 4. 7 | ·02240 | 3. 0 | 53 ·7 | 53 ·6 |
| 0. 25 | 17. 0 | 0. 29 | ·0891 | 6. 48 | ·02275 | 9. 0 | 52 ·4 | 52 ·5 |
| 0. 32 | 16. 30 | | *** | 8. 28 | ·02390 | 21. 0 | 42 ·0 | 44 ·7 |
| 1. 13 | 19. 0 | 1. 47 | ·0881 | 10. 40 | ·02393 | | | |
| 1. 31 | 23. 30 | 2. 2 | ·0878 | 14. 0 | ·02500 | | | |
| 1. 59 | 18. 40 | 2. 26 | ·0883 | 22. 42 | ·03227 | | | |
| | *** | 2. 47 | ·0882 | 23. 59 | ·03148 | | | |
| 3. 12 | 19. 30 | 3. 11 | ·0885 | | | | | |
| 3. 21 | 23. 0 | 3. 35 | ·0901 | | | | | |
| 3. 31 | 19. 40 | 4. 3 | ·0885 | | | | | |
| 3. 42 | 21. 0 | 4. 18 | ·0895 | | | | | |
| 4. 0 | 18. 40 | 5. 17 | ·0886 | | | | | |
| 4. 13 | 20. 0 | 5. 21 | ·0890 | | | | | |
| 4. 27 | 19. 0 | | *** | | | | | |
| 4. 40 | 20. 0 | 5. 43 | ·0885 | | | | | |
| 4. 58 | 18. 40 | 5. 56 | ·0892 | | | | | |
| 5. 34 | 18. 15 | 6. 15 | ·0886 | | | | | |
| 5. 52 | 19. 20 | 6. 42 | ·0895 | | | | | |
| 6. 38 | 19. 0 | 6. 47 | ·0888 | | | | | |
| 6. 52 | 20. 40 | 7. 2 | ·0891 | | | | | |
| 7. 21 | 18. 30 | 7. 15 | ·0887 | | | | | |
| 7. 39 | 15. 0 | 7. 20 | ·0881 | | | | | |
| 7. 54 | 17. 40 | 7. 33 | ·0886 | | | | | |
| 8. 15 | 7. 45 | 7. 47 | ·0872 | | | | | |
| 8. 28 | 8. 15 | 7. 58 | ·0874 | | | | | |
| 8. 57 | 15. 55 | 8. 7 | ·0871 | | | | | |
| 9. 12 | 13. 0 | | *** | | | | | |
| 9. 27 | 10. 25 | 8. 40 | ·0882 | | | | | |
| 10. 42 | 15. 30 | 9. 3 | ·0877 | | | | | |
| 10. 56 | 13. 30 | 9. 32 | ·0889 | | | | | |
| 11. 28 | 13. 15 | 9. 42 | ·0887 | | | | | |
| 11. 41 | 14. 10 | 10. 27 | ·0895 | | | | | |
| 11. 55 | 12. 5 | 10. 38 | ·0885 | | | | | |
| 12. 15 | 13. 10 | 10. 52 | ·0885 | | | | | |
| 12. 29 | 11. 10 | 11. 17 | ·0893 | | | | | |
| 12. 55 | 16. 45 | 11. 31 | ·0891 | | | | | |
| 13. 8 | 16. 15 | 12. 6 | ·0892 | | | | | |
| 13. 39 | 6. 20 | 12. 11 | ·0888 | | | | | |
| 14. 0 | 11. 0 | 12. 27 | ·0894 | | | | | |
| 14. 37 | 7. 50 | 12. 42 | ·0890 | | | | | |
| 14. 44 | 8. 30 | | *** | | | | | |
| 15. 0 | 7. 15 | 13. 30 | ·0894 | | | | | |
| 15. 18 | 12. 10 | 13. 48 | ·0912 | | | | | |
| 15. 59 | 11. 30 | 14. 33 | ·0898 | | | | | |
| 16. 30 | 13. 0 | 14. 45 | ·0902 | | | | | |
| 16. 54 | 12. 40 | | *** | | | | | |
| 17. 11 | 13. 20 | 15. 33 | ·0897 | | | | | |
| 17. 24 | 13. 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. |
|---|---|---|---|---|---|---|---|---|
| Jan. 27 | | Jan. 27 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 17. 48 | 21. 14. 20 | 17. 25 | ·0908 | | | | | |
| 18. 28 | 13. 35 | | *** | | | | | |
| 18. 54 | 15. 10 | 18. 12 | ·0903 | | | | | |
| 19. 24 | 22. 30 | 18. 38 | ·0907 | | | | | |
| 19. 39 | 22. 30 | 19. 4 | ·0902 | | | | | |
| 20. 12 | 14. 30 | | *** | | | | | |
| 20. 28 | 14. 0 | 20. 52 | ·0923 | | | | | |
| 20. 44 | 15. 40 | 21. 47 | ·0907 | | | | | |
| 22. 8 | 11. 10 | 23. 3 | ·0901 | | | | | |
| | *** | 23. 17 | ·0896 | | | | | |
| 22. 43 | 14. 0 | 23. 47 | ·0903 | | | | | |
| 23. 14 | 13. 50 | 23. 59 | ·0891 | | | | | |
| 23. 38 | 20. 30 | | | | | | | |
| 23. 45 | 19. 40 | | | | | | | |
| 23. 59 | 24. 0 | | | | | | | |
| Jan. 28 | | Jan. 28 | | Jan. 28 | | Jan. 28 | | |
| 0. 0 | 21. 24. 0 | 0. 0 | ·0892 | 0. 0 | ·03148 | 1. 0 | 43 ·5 | 44 ·8 |
| 0. 14 | 17. 0 | 0. 14 | ·0899 | 3. 1 | ·03170 | 3. 0 | 45 ·0 | 46 ·0 |
| 0. 27 | 22. 30 | 0. 19 | ·0875 | 12. 13: | ·02720 | 9. 0 | 45 ·0 | 45 ·0 |
| 0. 32 | 20. 0 | 0. 25 | ·0878 | 21. 49 | ·03165 | 21. 50 | 43 ·7 | 45 ·3 |
| 0. 39 | 21. 30 | 0. 47 | ·0856 | 23. 59 | ·03180 | | | |
| 0. 44 | 17. 40 | | *** | | | | | |
| 0. 55 | 22. 50 | 1. 13 | ·0847 | | | | | |
| 1. 6 | 20. 50 | 2. 10 | ·0876 | | | | | |
| 1. 11 | 21. 10 | 2. 21 | ·0876 | | | | | |
| 1. 20 | 17. 45 | 2. 37 | ·0883 | | | | | |
| 2. 10 | 15. 0 | 2. 46 | ·0872 | | | | | |
| 2. 44 | 17. 10 | | *** | | | | | |
| 2. 58 | 15. 40 | 3. 15 | ·0879 | | | | | |
| 3. 16 | 17. 0 | 3. 45 | ·0872 | | | | | |
| 4. 12 | 14. 40 | 3. 50 | ·0876 | | | | | |
| | *** | 4. 2 | ·0872 | | | | | |
| 6. 12 | 12. 30 | | *** | | | | | |
| | *** | 4. 43 | ·0874 | | | | | |
| 8. 22 | 12. 0 | 5. 6 | ·0884 | | | | | |
| 10. 57 | 11. 45 | 5. 17 | ·0878 | | | | | |
| 13. 55 | 13. 40 | 5. 32 | ·0880 | | | | | |
| 18. 22 | 13. 0 | 5. 45 | ·0877 | | | | | |
| 19. 0 | 16. 0 | 6. 6 | ·0882 | | | | | |
| 20. 0 | 13. 30 | 6. 27 | ·0882 | | | | | |
| 20. 21 | 14. 20 | 6. 45 | ·0880 | | | | | |
| 20. 52 | 13. 0 | 7. 18 | ·0884 | | | | | |
| 21. 51 | 13. 30 | 7. 30 | ·0897 | | | | | |
| 22. 15 | 15. 30 | 7. 35 | ·0889 | | | | | |
| 22. 43 | 14. 30 | 7. 43 | ·0892 | | | | | |
| 22. 54 | 15. 35 | | *** | | | | | |
| 23. 4 | 14. 40 | 8. 25 | ·0886 | | | | | |
| 23. 25 | 14. 30 | | *** | | | | | |
| 23. 59 | 16. 0 | 15. 15 | ·0903 | | | | | |
| | | | *** | | | | | |
| | | 18. 20 | ·0912 | | | | | |
| | | 19. 7 | ·0907 | | | | | |
| | | | *** | | | | | |
| | | 20. 18 | ·0913 | | | | | |
| | | 20. 45 | ·0909 | | | | | |
| | | | *** | | | | | |
| | | 21. 14 | ·0909 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| | | 21. 41 | ·0905 | | | | | |
| | | 22. 12 | ·0891 | | | | | |
| | | 23. 59 | ·0894 | | | | | |
| Jan. 29 | | Jan. 29 | | Jan. 29 | | Jan. 29 | | |
| 0. 0 | 21. 16. 0 | 0. 0 | ·0894 | 0. 0 | ·03180 | 8. 40 | 47 ·3 | 48 ·8 |
| 0. 12 | 17. 15 | 0. 33 | ·0893 | 1. 17 | ·03220 | 21. 0 | 42 ·0 | 44 ·0 |
| 0. 23 | 17. 20 | | *** | 2. 58 | ·03167 | | | |
| 0. 30 | 18. 30 | 1. 15 | ·0883 | 7. 11: | ·02912 | | | |
| 1. 8 | 17. 20 | 1. 42 | ·0884 | 13. 57 | ·03227 | | | |
| 1. 44 | 21. 25 | 1. 52 | ·0880 | 23. 59 | ·03260 | | | |
| 1. 49 | 19. 0 | 1. 59 | ·0880 | | | | | |
| 2. 0 | 21. 0 | 2. 20 | ·0877 | | | | | |
| 2. 14 | 18. 25 | 3. 2 | ·0889 | | | | | |
| 3. 4 | 18. 55 | 3. 11 | ·0887 | | | | | |
| 3. 15 | 17. 50 | 4. 13 | ·0893 | | | | | |
| 3. 33 | 18. 20 | 5. 27 | ·0894 | | | | | |
| 3. 51 | 16. 30 | 5. 46 | ·0882 | | | | | |
| 5. 57 | 13. 0 | 6. 52 | ·0897 | | | | | |
| 6. 25 | 13. 40 | | *** | | | | | |
| 9. 38 | 10. 25 | 8. 10 | ·0898 | | | | | |
| 14. 10 | 14. 55 | | *** | | | | | |
| 14. 22 | 16. 20 | 9. 27 | ·0896 | | | | | |
| 14. 31 | 15. 30 | | *** | | | | | |
| 15. 15 | 15. 0 | 13. 50 | ·0905 | | | | | |
| 15. 43 | 16. 0 | | *** | | | | | |
| 16. 30 | 13. 0 | 16. 15 | ·0913 | | | | | |
| 17. 15 | 13. 50 | | *** | | | | | |
| 20. 7 | 12. 50 | 16. 50 | ·0911 | | | | | |
| 20. 28 | 11. 30 | | *** | | | | | |
| 20. 44 | 12. 0 | 18. 53 | ·0917 | | | | | |
| 21. 0 | 10. 50 | 20. 50 | ·0909 | | | | | |
| | *** | 21. 51 | ·0891 | | | | | |
| 22. 44 | 14. 30 | | *** | | | | | |
| 23. 39 | 18. 35 | 23. 18 | ·0891 | | | | | |
| 23. 59 | 17. 10 | | (†) | | | | | |
| Jan. 30 | | Jan. 30 | | Jan. 30 | | Jan. 30 | | |
| 0. 0 | 21. 17. 10 | | (†) | 0. 0 | ·03260 | 1. 0 | 45 ·0 | 46 ·0 |
| 0. 14 | 19. 30 | 0. 12 | ·0881 | 2. 28 | ·03071 | 3. 0 | 48 ·0 | 49 ·0 |
| 0. 43 | 16. 55 | 0. 27 | ·0878 | 7. 47: | ·02410 | 9. 0 | 50 ·0 | 51 ·0 |
| 0. 52 | 17. 50 | 0. 48 | ·0876 | 12. 0: | ·02260 | 21. 5 | 45 ·0 | 47 ·0 |
| 1. 8 | 17. 20 | 1. 5 | ·0882 | 14. 46 | ·02283 | | | |
| 1. 24 | 20. 0 | 2. 54 | ·0872 | 22. 58 | ·02600 | | | |
| 1. 32 | 20. 0 | 3. 55 | ·0876 | 23. 59 | ·02606 | | | |
| 1. 41 | 18. 0 | 5. 45 | ·0888 | | | | | |
| 2. 0 | 17. 20 | 9. 24 | ·0891 | | | | | |
| 2. 21 | 18. 30 | 9. 45 | ·0896 | | | | | |
| 2. 41 | 16. 20 | 10. 3 | ·0892 | | | | | |
| 2. 58 | 15. 30 | | *** | | | | | |
| 3. 24 | 16. 30 | 13. 48 | ·0896 | | | | | |
| 5. 39 | 13. 10 | 14. 33 | ·0900 | | | | | |
| 10. 12 | 12. 0 | 15. 47 | ·0897 | | | | | |
| 13. 26 | 14. 0 | | *** | | | | | |
| 13. 41 | 13. 35 | 18. 46 | ·0907 | | | | | |
| 13. 59 | 14. 30 | 20. 40 | ·0906 | | | | | |
| 14. 44 | 13. 40 | | *** | | | | | |
| 19. 45 | 12. 45 | 22. 13 | ·0895 | | | | | |

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. 30 | | Jan. 30 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 0 | 21. 10. 50 | 23. 10 | ·0882 | | | | | |
| 21. 43 | 10. 50 | 23. 37 | ·0881 | | | | | |
| 23. 34 | 16. 55 | 23. 47 | ·0877 | | | | | |
| 23. 59 | 17. 0 | 23. 59 | ·0879 | | | | | |
| Jan. 31 | | Jan. 31 | | Jan. 31 | | Jan. 31 | | |
| 0. 0 | 21. 17. 0 | 0. 0 | ·0879 | 0. 0 | ·02606 | 1. 0 | 48 ·0 | 49 ·0 |
| 0. 50 | 16. 20 | 0. 18 | ·0879 | 1. 57 | ·02520 | 3. 0 | 49 ·5 | 51 ·0 |
| 0. 55 | 16. 50 | 0. 49 | ·0885 | 4. 56 | ·02205 | 9. 0 | 47 ·4 | 59 ·5 |
| 1. 11 | 16. 10 | 1. 6 | ·0882 | 9. 44 | ·02210 | 21. 0 | 38 ·0 | 42 ·0 |
| 1. 27 | 17. 0 | 1. 48 | ·0879 | 15. 30 | ·02565 | | | |
| 1. 59 | 15. 15 | 2. 10 | ·0886 | 23. 4 | ·03250 | | | |
| 2. 12 | 16. 45 | 2. 55: | ·0880 | 23. 59 | ·03223 | | | |
| 2. 30 | 15. 30 | 3. 43 | ·0887 | | | | | |
| 2. 42 | 15. 45 | 4. 38 | ·0886 | | | | | |
| 2. 54 | 15. 0 | 5. 11: | ·0871 | | | | | |
| 3. 45 | 15. 45 | 5. 46 | ·0889 | | | | | |
| | | | *** | | | | | |
| 4. 41 | 14. 0 | | | | | | | |
| 5. 8 | 10. 0 | 6. 37 | ·0890 | | | | | |
| 5. 12 | 10. 30 | 7. 6 | ·0898 | | | | | |
| 5. 31 | 8. 40 | 7. 25 | ·0890 | | | | | |
| | | | *** | | | | | |
| 6. 0 | 13. 50 | | | | | | | |
| 6. 25 | 14. 30 | 8. 30 | ·0885 | | | | | |
| 7. 4 | 13. 20 | 9. 20 | ·0903 | | | | | |
| | | | *** | | | | | |
| 7. 29: | 14. 40 | | | | | | | |
| 8. 17 | 12. 0 | 10. 38 | ·0897 | | | | | |
| | | | *** | | | | | |
| 8. 44 | 5. 40 | | | | | | | |
| 9. 6 | 11. 35 | 15. 42 | ·0908 | | | | | |
| | | | *** | | | | | |
| 9. 15 | 10. 0 | | | | | | | |
| 9. 24 | 10. 30 | 16. 33 | ·0905 | | | | | |
| | | | *** | | | | | |
| 9. 41 | 9. 0 | | | | | | | |
| 10. 28 | 11. 50 | 18. 18 | ·0919 | | | | | |
| | | | *** | | | | | |
| 12. 16 | 13. 10 | | | | | | | |
| 12. 39 | 14. 5 | 18. 45 | ·0916 | | | | | |
| 13. 57 | 13. 10 | 19. 7 | ·0919 | | | | | |
| 14. 16 | 14. 0 | 19. 45 | ·0915 | | | | | |
| | | | *** | | | | | |
| 14. 39 | 13. 35 | | | | | | | |
| 16. 3 | 13. 55 | 20. 13 | ·0917 | | | | | |
| | | | *** | | | | | |
| 17. 0 | 15. 10 | | | | | | | |
| 17. 21 | 14. 15 | 22. 29 | ·0894 | | | | | |
| 17. 41 | 14. 50 | 22. 42 | ·0897 | | | | | |
| | | | *** | | | | | |
| 17. 49 | 13. 40 | | | | | | | |
| 18. 13 | 13. 30 | 23. 21 | ·0897 | | | | | |
| 18. 21 | 14. 0 | 23. 34 | ·0893 | | | | | |
| 18. 28 | 13. 15 | 23. 42 | ·0898 | | | | | |
| | *** | | (†) | | | | | |
| 21. 10 | 11. 45 | | | | | | | |
| 21. 26 | 13. 0 | | | | | | | |
| 21. 39 | 11. 30 | | | | | | | |
| 22. 12 | 13. 0 | | | | | | | |
| 22. 28 | 12. 30 | | | | | | | |
| 22. 41 | 14. 25 | | | | | | | |
| 22. 49 | 13. 55 | | | | | | | |
| 22. 58 | 15. 0 | | | | | | | |
| 23. 9 | 17. 0 | | | | | | | |
| 23. 16 | 16. 15 | | | | | | | |
| 23. 21 | 17. 30 | | | | | | | |
| 23. 30 | 16. 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. |
|---|---|---|---|---|---|---|---|---|
| Jan. 31 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 23. 43 | 21. 20. 40 | | | | | | | |
| 23. 55 | 18. 0 | | | | | | | |
| 23. 59 | 18. 35 | | | | | | | |
| Feb. 1 | | Feb. 1 | | Feb. 1 | | Feb. 1 | | |
| 0. 0 | 21. 18. 35 | | (†) | 0. 0 | ·03223 | 0. 0 | 39 ·0 | 41 ·3 |
| 0. 13 | 19. 30 | 0. 20 | ·0890 | 2. 0 | ·03218 | 1. 0 | 40 ·0 | 43 ·0 |
| 0. 20 | 19. 0 | 0. 38 | ·0891 | 10. 19: | ·02552 | 3. 0 | 43 ·0 | 45 ·3 |
| 0. 28 | 19. 50 | 0. 48 | ·0885 | 16. 43 | ·02660 | 6. 0 | 45 ·2 | 47 ·0 |
| 0. 39 | 18. 45 | 1. 19 | ·0884 | 21. 4 | ·02799 | 9. 0 | 44 ·2 | 46 ·4 |
| 0. 44 | 19. 35 | | (†) | 23. 25 | ·02968 | 12. 0 | 43 ·8 | 46 ·0 |
| 0. 59 | 18. 20 | 3. 0 | ·0895* | 23. 59 | ·02950 | 18. 0 | 40 ·0 | 42 ·2 |
| 2. 19 | 18. 30 | 3. 10 | ·0894 | | | 21. 0 | 39 ·0 | 42 ·0 |
| 2. 27 | 17. 0 | 3. 33 | ·0898 | | | | | |
| 4. 18 | 13. 40 | 4. 15 | ·0895 | | | | | |
| 6. 14 | 13. 0 | 5. 47 | ·0902 | | | | | |
| 6. 30 | 12. 10 | 7. 20 | ·0902 | | | | | |
| 16. 48 | 13. 30 | 11. 39 | ·0907 | | | | | |
| 17. 40 | 13. 50 | 11. 47 | ·0906 | | | | | |
| 20. 57 | 12. 30 | 18. 22 | ·0919 | | | | | |
| 21. 15 | 12. 0 | 20. 33 | ·0913 | | | | | |
| 21. 43 | 12. 40 | 22. 15 | ·0898 | | | | | |
| 21. 49 | 12. 5 | 23. 59 | ·0897 | | | | | |
| 22. 30 | 14. 0 | | | | | | | |
| 22. 41 | 13. 50 | | | | | | | |
| 22. 54 | 15. 20 | | | | | | | |
| 23. 14 | 15. 20 | | | | | | | |
| 23. 27 | 16. 45 | | | | | | | |
| 23. 59 | 16. 25 | | | | | | | |
| Feb. 2 | | Feb. 2 | | Feb. 2 | | Feb. 2 | | |
| 0. 0 | 21. 16. 25 | 0. 0 | ·0897 | 0. 0 | ·02950 | 0. 0 | 41 ·5 | 43 ·5 |
| 1. 42 | 17. 45 | 0. 57 | ·0892 | 2. 22 | ·02878 | 1. 0 | 42 ·3 | 43 ·5 |
| 1. 56 | 16. 55 | 1. 30 | ·0887 | 6. 15: | ·02590 | 3. 0 | 44 ·0 | 46 ·0 |
| 2. 51 | 16. 30 | | *** | 11. 45 | ·02546 | 9. 0 | 43 ·0 | 45 ·5 |
| 3. 8 | 15. 20 | 4. 10 | ·0897 | 22. 15 | ·02948 | 21. 0 | 40 ·0 | 42 ·0 |
| 4. 12 | 13. 50 | | *** | 23. 59 | ·02920 | | | |
| 4. 29 | 13. 0 | 4. 45 | ·0897 | | | | | |
| 5. 9 | 13. 15 | | *** | | | | | |
| 6. 10 | 12. 10 | 5. 42 | ·0903 | | | | | |
| 6. 44 | 15. 0 | | *** | | | | | |
| 6. 58 | 14. 20 | 6. 45 | ·0899 | | | | | |
| 7. 24 | 14. 45 | | *** | | | | | |
| 8. 24 | 13. 15 | 8. 15 | ·0906 | | | | | |
| 8. 51 | 11. 55 | 8. 42 | ·0903 | | | | | |
| 9. 16 | 12. 15 | 9. 18 | ·0913 | | | | | |
| 10. 42 | 11. 20 | | *** | | | | | |
| 12. 10 | 12. 20 | 11. 13 | ·0914 | | | | | |
| 12. 40 | 13. 30 | 11. 42 | ·0924 | | | | | |
| 14. 14 | 14. 30 | | *** | | | | | |
| 16. 19 | 13. 35 | 12. 40 | ·0918 | | | | | |
| 16. 44 | 15. 10 | 18. 25 | ·0927 | | | | | |
| 21. 7 | 10. 25 | 18. 36 | ·0931 | | | | | |
| 22. 43 | 13. 0 | 19. 37 | ·0929 | | | | | |
| 23. 59 | 16. 40 | | *** | | | | | |
| | | 23. 59 | ·0899 | | | | | |

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

| Greenwich Mean Solar Time. | Western Declination. |
|---|---|
| Feb. 3 | |
| h m | ° ′ ″ |
| 0. 0 | 21. 16. 40 |
| 0. 8 | 16. 0 |
| 0. 11 | 16. 40 |
| 0. 16 | 16. 0 |
| 0. 39 | 18. 0 |
| 0. 57: | 16. 30 |
| 1. 14 | 18. 15 |
| 1. 28 | 17. 30 |
| 1. 57 | 20. 20 |
| 2. 11 | 18. 0 |
| 2. 52 | 16. 0 |
| 3. 7 | 16. 35 |
| 3. 36 | 14. 40 |
| 3. 43 | 15. 10 |
| 4. 0 | 14. 5 |
| 5. 9 | 13. 30 |
| 8. 39 | 13. 10 |
| 9. 27 | 12. 0 |
| 9. 45 | 12. 40 |
| 10. 14 | 9. 5 |
| 10. 37 | 10. 45 |
| 10. 57 | 15. 45 |
| 11. 52 | 9. 0 |
| 12. 9 | 10. 5 |
| 12. 30 | 8. 5 |
| 14. 13 | 13. 0 |
| 14. 53 | 12. 30 |
| 15. 0 | 13. 40 |
| 15. 46 | 14. 15 |
| 16. 0 | 13. 30 |
| 16. 56 | 14. 40 |
| 17. 11 | 14. 0 |
| 18. 22 | 13. 20 |
| 18. 42 | 14. 0 |
| 18. 56 | 13. 30 |
| 19. 28 | 14. 10 |
| 21 4 | 12. 10 |
| 21. 56 | 12. 40 |
| 22. 30 | 15. 0 |
| | *** |
| 23. 13 | 14. 30 |
| 23. 59 | 17. 0 |
| Feb. 4 | |
| 0. 0 | 21. 17. 0 |
| 0. 28 | 17. 30 |
| 1. 9 | 16. 0 |
| 1. 15 | 16. 15 |
| 1. 28 | 15. 40 |
| 1. 50 | 17. 20 |
| 2. 4 | 16. 45 |
| 2. 11 | 18. 0 |
| 2. 26 | 17. 50 |
| 2. 37 | 17. 0 |
| 2. 56 | 16. 50 |
| 3. 7 | 17. 20 |
| 3. 40 | 16. 0 |
| 4. 35 | 15. 0 |

| Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. |
|---|---|
| Feb. 3 | |
| h m | |
| 0. 0 | ·0899 |
| 0. 48 | ·0897 |
| 1. 45 | ·0899 |
| 2. 4 | ·0897 |
| 3. 47 | ·0899 |
| | *** |
| 5. 10 | ·0906 |
| | *** |
| 7. 19 | ·0909 |
| 7. 40 | ·0906 |
| 8. 51 | ·0910 |
| 9. 42 | ·0906 |
| | *** |
| 10. 0 | ·0907 |
| 10. 15 | ·0903 |
| 10. 42 | ·0907 |
| 10. 55 | ·0913 |
| 11. 13 | ·0914 |
| | *** |
| 11. 52 | ·0909 |
| | *** |
| 14. 57 | ·0917 |
| 15. 6 | ·0922 |
| 15. 17 | ·0920 |
| | *** |
| 18. 45 | ·0932 |
| 20. 17 | ·0931 |
| 21. 46 | ·0913 |
| 22. 28 | ·0914 |
| | *** |
| 23. 12 | ·0906 |
| 23. 59 | ·0909 |
| Feb. 4 | |
| 0. 0 | ·0909 |
| 0. 45 | ·0911 |
| 1. 24 | ·0905 |
| 2. 7 | ·0907 |
| 2. 21 | ·0912 |
| | *** |
| 2. 52 | ·0912 |
| | *** |
| 3. 25 | ·0906 |
| 4. 47 | ·0913 |
| 4. 56 | ·0910 |
| 7. 7 | ·0919 |
| 8. 18 | ·0920 |
| 11. 13 | ·0914 |

| Greenwich Mean Solar Time. | Vertical Force in parts of the whole V. F. uncorrected for Temperature. |
|---|---|
| Feb. 3 | |
| h m | |
| 0. 0 | ·02920 |
| 1. 11 | ·02890 |
| 9. 24: | ·02217 |
| 15. 45 | ·02423 |
| 22. 48 | ·02940 |
| | (†) |
| Feb. 4 | |
| | (†) |
| 0. 15 | ·02934 |
| 1. 33 | ·02893 |
| 8. 48 | ·02160 |
| 12. 40 | ·02218 |
| 15. 13 | ·02203 |
| 23. 59 | ·02245 |

| Greenwich Mean Solar Time. | Readings of Thermometers. Of H. F. Magnet. | Of V. F. Magnet. |
|---|---|---|
| Feb. 3 | | |
| h m | ° | ° |
| 1. 0 | 43 ·0 | 44 ·0 |
| 3. 0 | 45 ·8 | 47 ·0 |
| 9. 0 | 45 ·4 | 46 ·7 |
| 21. 0 | 39 ·0 | 41 ·0 |
| Feb. 4 | | |
| 1. 0 | 42 ·7 | 43 ·5 |
| 3. 0 | 45 ·0 | 46 ·2 |
| 9. 0 | 47 ·5 | 48 ·0 |
| 22. 40 | 47 ·5 | 48 ·7 |

| Greenwich Mean Solar Time. | Western Declination. |
|---|---|
| Feb. 4 | |
| h m | ° ′ ″ |
| 5. 7 | 21. 13. 0 |
| 7. 16 | 13. 25 |
| 11. 7 | 12. 0 |
| 11. 15 | 10. 15 |
| 11. 59 | 12. 30 |
| 12. 42 | 13. 0 |
| 13. 16 | 11. 5 |
| 14. 10 | 14. 10 |
| 14. 49 | 12. 55 |
| 15. 22 | 13. 35 |
| 16. 0 | 12. 45 |
| 16. 42 | 13. 50 |
| 18. 23 | 13. 15 |
| 20. 23 | 11. 30 |
| 20. 50 | 12. 55 |
| 21. 10 | 13. 0 |
| 21. 49 | 15. 0 |
| 22. 13 | 15. 15 |
| | (†) |
| 23. 35 | 15. 30 |
| 23. 43 | 14. 35 |
| 23. 51 | 16. 0 |
| 23. 59 | 15. 30 |
| Feb. 5 | |
| 0. 0 | 21. 15. 30 |
| 0. 32 | 15. 50 |
| 0. 47 | 17. 45 |
| 0. 54 | 17. 25 |
| 1. 43 | 20. 10 |
| 3. 31 | 17. 30 |
| 4. 0 | 17. 50 |
| 4. 45 | 16. 30 |
| 5. 30 | 16. 15 |
| 6. 50 | 14. 20 |
| 15. 45 | 14. 25 |
| 16. 21 | 15. 0 |
| 17. 9 | 14. 0 |
| 21. 19 | 11. 30 |
| 21. 41 | 13. 0 |
| 21. 57 | 12. 30 |
| 22. 28 | 12. 50 |
| 23. 50 | 16. 0 |
| 23. 59 | 16. 0 |
| Feb. 6 | |
| 0. 0 | 21. 16. 0 |
| 0. 44 | 16. 20 |
| 0. 57 | 15. 25 |
| 1. 16 | 17. 0 |
| 1. 29 | 16. 20 |
| 1. 38 | 17. 15 |
| 1. 59 | 16. 10 |
| 2. 19 | 17. 0 |
| 3. 45 | 13. 50 |
| 5. 10 | 13. 20 |
| 7. 0 | 14. 0 |
| 10. 22 | 13. 0 |

| Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. |
|---|---|
| Feb. 4 | |
| h m | |
| 11. 52 | ·0911 |
| | *** |
| 12. 40 | ·0911 |
| 13. 27 | ·0920 |
| 14. 3 | ·0915 |
| 20. 42 | ·0924 |
| 23. 59 | ·0900 |
| Feb. 5 | |
| 0. 0 | ·0900 |
| 1. 37 | ·0903 |
| 2. 43 | ·0900 |
| 3. 46 | ·0892 |
| 5. 0 | ·0899 |
| 5. 16 | ·0903 |
| 6. 10 | ·0905 |
| 6. 47 | ·0910 |
| | *** |
| 11. 30 | ·0914 |
| | *** |
| 16. 8 | ·0917 |
| 17. 7 | ·0922 |
| 20. 20 | ·0919 |
| | *** |
| 22. 41 | ·0903 |
| | *** |
| 23. 59 | ·0907 |
| Feb. 6 | |
| 0. 0 | ·0907 |
| 1. 5 | ·0904 |
| 1. 46 | ·0909 |
| 2. 7 | ·0904 |
| 4. 14 | ·0903 |
| 5. 48 | ·0907 |
| | *** |
| 9. 42 | ·0923 |
| | *** |
| 19. 3 | ·0935 |
| 20. 30 | ·0932 |
| 21. 52 | ·0919 |

| Greenwich Mean Solar Time. |
|---|
| h m |

| Greenwich Mean Solar Time. | Vertical Force in parts of the whole V. F. uncorrected for Temperature. |
|---|---|
| Feb. 5 | |
| 0. 0 | ·02245 |
| 0. 58 | ·02260 |
| 3. 23 | ·02173 |
| 4. 9 | ·02207 |
| 4. 27 | ·02311 |
| 9. 13 | ·02308 |
| 14. 15 | ·02480 |
| 19. 16 | ·02562 |
| 23. 59 | ·02764 |
| Feb. 6 | |
| 0. 0 | ·02764 |
| 1. 43 | ·02790 |
| 5. 49: | ·02467 |
| 9. 37 | ·02470 |
| 19. 54 | ·03072 |
| 22. 15 | ·03272 |
| 23. 59 | ·03244 |

| Greenwich Mean Solar Time. | Readings of Thermometers. Of H. F. Magnet. | Of V. F. Magnet. |
|---|---|---|
| Feb. 5 | | |
| h m | ° | ° |
| 7. 20 | 49 ·7 | 50 ·5 |
| 21. 5 | 45 ·7 | 47 ·0 |
| Feb. 6 | | |
| 1. 0 | 47 ·3 | 48 ·0 |
| 3. 0 | 48 ·6 | 48 ·3 |
| 9. 0 | 45 ·4 | 47 ·2 |
| 21. 0 | 38 ·7 | 41 ·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.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 16. 52 | 21. 14. 0 | 23. 7 | ·0927 | | | | | |
| 18. 51 | 12. 55 | 23. 59 | ·0919 | | | | | |
| 20. 39 | 13. 5 | | | | | | | |
| 21. 7 | 12. 20 | | | | | | | |
| 21. 56 | 11. 45 | | | | | | | |
| 23. 22 | 13. 45 | | | | | | | |
| | (†) | | | | | | | |
| Feb. 7 | | Feb. 7 | | Feb. 7 | | Feb. 7 | | |
| | (†) | 0. 0 | ·0919 | 0. 0 | ·03244 | 1. 0 | 42 ·5 | 43 ·0 |
| 1. 26 | 21. 16. 30 | 0. 52 | ·0922 | 1. 37 | ·03157 | 3. 0 | 45 ·0 | 46 ·0 |
| 2. 30 | 17. 0 | 2. 43 | ·0914 | 6. 13: | ·02680 | 9. 0 | 47 ·0 | 48 ·0 |
| 2. 51 | 16. 10 | 4. 32 | ·0916 | 12. 24 | ·02433 | 21. 0 | 46 ·0 | 47 ·0 |
| 3. 0 | 16. 25 | 6. 17 | ·0927 | 20. 0 | ·02412 | | | |
| 5. 7 | 13. 20 | 11. 15 | ·0929 | 22. 48 | ·02465 | | | |
| 11. 21 | 12. 0 | 11. 48 | ·0927 | 23. 59 | ·02435 | | | |
| 11. 45 | 12. 15 | 12. 2 | ·0936 | | | | | |
| 11. 57 | 13. 0 | 12. 21 | ·0938 | | | | | |
| 12. 12 | 12. 45 | 12. 55 | ·0931 | | | | | |
| 12. 29 | 10. 0 | | *** | | | | | |
| 14. 52 | 14. 10 | 14. 29 | ·0927 | | | | | |
| 15. 15 | 13. 40 | 17. 34 | ·0928 | | | | | |
| 16. 52 | 14. 30 | 18. 40 | ·0935 | | | | | |
| 17. 12 | 13. 40 | 19. 15 | ·0932 | | | | | |
| 17. 51 | 14. 30 | 19. 52 | ·0933 | | | | | |
| 18. 39 | 12. 40 | 22. 10 | ·0909 | | | | | |
| 19. 22 | 13. 30 | 22. 30 | ·0910 | | | | | |
| 20. 59 | 11. 30 | 22. 55 | ·0900 | | | | | |
| 23. 59 | 16. 35 | 23. 59 | ·0896 | | | | | |
| Feb. 8 | | Feb. 8 | | Feb. 8 | | Feb. 8 | | |
| 0. 0 | 21. 16. 35 | 0. 0 | ·0896 | 0. 0 | ·02435 | 0. 0 | 48 ·7 | 49 ·0 |
| 0. 43 | 18. 0 | 0. 6 | ·0895 | 3. 15 | ·02233 | 1. 0 | 49 ·8 | 49 ·7 |
| 1. 12 | 17. 15 | 0. 18 | ·0899 | 4. 39 | ·02277 | 3. 0 | 52 ·0 | 52 ·7 |
| 2. 6 | 17. 40 | 0. 43 | ·0899 | 12. 45 | ·02320 | 6. 0 | 52 ·9 | 52 ·3 |
| 4. 9 | 14. 40 | 1. 27 | ·0894 | 16. 47 | ·02470 | 9. 0 | 52 ·3 | 52 ·5 |
| 11. 54 | 13. 0 | 4. 48 | ·0904 | 22. 7 | ·02833 | 12. 0 | 51 ·0 | 52 ·0 |
| 16. 25 | 14. 15 | | *** | 23. 59 | ·02944 | 18. 0 | 46 ·8 | 48 ·8 |
| 16. 43 | 15. 20 | 14. 27 | ·0919 | | | 21. 0 | 45 ·0 | 47 ·0 |
| 17. 26 | 14. 0 | 17. 15 | ·0929 | | | | | |
| 17. 43 | 14. 40 | 17. 28 | ·0926 | | | | | |
| 18. 30 | 13. 15 | 18. 40: | ·0935 | | | | | |
| 21. 39 | 9. 10 | 21. 50 | ·0913 | | | | | |
| 22. 15 | 9. 30 | 22. 41 | ·0908 | | | | | |
| 23. 45 | 12. 20 | 23. 42 | ·0900 | | | | | |
| 23. 59 | 14. 0 | 23. 59 | ·0902 | | | | | |
| Feb. 9 | | Feb. 9 | | Feb. 9 | | Feb. 9 | | |
| 0. 0 | 21. 14. 0 | 0. 0 | ·0902 | 0. 0 | ·02944 | 0. 0 | 46 ·0 | 47 ·0 |
| 0. 8 | 13. 55 | 1. 36 | ·0901 | 1. 35 | ·02980 | 1. 0 | 46 ·5 | 47 ·3 |
| 0. 45 | 16. 20 | 2. 2 | ·0908 | 7. 35: | ·02777 | 3. 0 | 48 ·0 | 48 ·8 |
| 1. 10 | 15. 45 | 2. 38 | ·0908 | 15. 7 | ·03260 | 9. 0 | 44 ·7 | 46 ·4 |
| 1. 27 | 17. 0 | | *** | 23. 59 | ·03113 | 21. 0 | 34 ·0 | 38 ·0 |
| 1. 32 | 16. 15 | 3. 17 | ·0902 | | | | | |
| 1. 45 | 18. 50 | 3. 46 | ·0909 | | | | | |
| 3. 15 | 17. 0 | 5. 7 | ·0909 | | | | | |
| 3. 23 | 17. 45 | 5. 45 | ·0906 | | | | | |
| 3. 54 | 16. 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. |
|---|---|---|---|---|---|---|---|---|
| Feb. 9 | | Feb. 9 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 4. 12 | 21. 15. 10 | 7. 40 | ·0917 | | | | | |
| 4. 45 | 15. 0 | | *** | | | | | |
| 5. 4 | 15. 45 | 8. 23 | ·0915 | | | | | |
| 7. 26 | 14. 10 | | *** | | | | | |
| 7. 55 | 14. 30 | 9. 27 | ·0921 | | | | | |
| 8. 15 | 13. 30 | 10. 11 | ·0918 | | | | | |
| 9. 53 | 11. 55 | 10. 32 | ·0910 | | | | | |
| 10. 31 | 0. 50 | 10. 46 | ·0913 | | | | | |
| 11. 16 | 10. 10 | 11. 33 | ·0911 | | | | | |
| 12. 19 | 13. 20 | | *** | | | | | |
| 12. 52 | 13. 5 | 12. 20 | ·0921 | | | | | |
| 13. 13 | 15. 0 | 13. 6 | ·0924 | | | | | |
| 13. 30 | 14. 0 | 13. 21 | ·0931 | | | | | |
| 15. 18 | 15. 20 | 14. 8 | ·0927 | | | | | |
| 18. 28 | 13. 45 | 16. 42 | ·0937 | | | | | |
| 18. 40 | 13. 20 | 18. 15 | ·0946 | | | | | |
| 18. 51 | 13. 35 | 19. 3 | ·0944 | | | | | |
| 20. 18 | 11. 0 | 19. 52 | ·0947 | | | | | |
| 21. 5 | 10. 15 | 20. 42 | ·0943 | | | | | |
| 22. 15 | 11. 45 | 21. 46 | ·0927 | | | | | |
| 23. 51 | 18. 0 | | *** | | | | | |
| 23. 59 | 16. 55 | 22. 15 | ·0931 | | | | | |
| | | | *** | | | | | |
| | | 23. 37 | ·0922 | | | | | |
| | | 23. 59 | ·0929 | | | | | |
| Feb. 10 | | Feb. 10 | | Feb. 10 | | Feb. 10 | | |
| 0. 0 | 21. 16. 55 | 0. 0 | ·0929 | 0. 0 | ·03113 | 1. 0 | 38 ·0 | 40 ·3 |
| 0. 21 | 16. 50 | 0. 15 | ·0920 | 1. 43 | ·03107 | 3. 0 | 41 ·0 | 43 ·0 |
| 0. 37 | 18. 0 | | *** | 7. 13: | ·02470 | 9. 0 | 41 ·0 | 43 ·0 |
| 1. 29 | 18. 30 | 0. 43 | ·0921 | 12. 26 | ·02500 | 21. 0 | 33 ·7 | 37 ·2 |
| 1. 42 | 17. 20 | | *** | 20. 57 | ·03138 | | | |
| 1. 53 | 18. 5 | 3. 15 | ·0908 | 23. 59 | ·03060 | | | |
| 2. 15 | 18. 0 | 4. 13 | ·0918 | | | | | |
| 2. 51 | 16. 40 | 4. 24 | ·0916 | | | | | |
| 3. 27 | 16. 40 | 4. 38 | ·0922 | | | | | |
| 5. 10 | 14. 10 | 4. 45 | ·0919 | | | | | |
| 5. 35 | 14. 15 | 5. 20 | ·0925 | | | | | |
| 6. 29 | 12. 20 | 5. 49 | ·0921 | | | | | |
| 7. 0 | 14. 0 | | *** | | | | | |
| 7. 43 | 6. 15 | 7. 7 | ·0923 | | | | | |
| 8. 11 | 8. 50 | 7. 15 | ·0914 | | | | | |
| 8. 21 | 8. 40 | 7. 22 | ·0913 | | | | | |
| 8. 49 | 11. 30 | 7. 36 | ·0909 | | | | | |
| 9. 15 | 8. 0 | 7. 53 | ·0920 | | | | | |
| 9. 30 | 8. 50 | 8. 12 | ·0911 | | | | | |
| 9. 51 | 6. 20 | 8. 33 | ·0915 | | | | | |
| 10. 24 | 0. 50 | 8. 56 | ·0907 | | | | | |
| 11. 12 | 7. 30 | | *** | | | | | |
| 11. 24 | 5. 50 | 10. 2 | ·0913 | | | | | |
| 11. 32 | 6. 0 | 10. 20 | ·0921 | | | | | |
| 11. 43 | 4. 50 | 10. 24 | ·0917 | | | | | |
| 12. 13 | 9. 0 | 10. 32 | ·0919 | | | | | |
| 12. 47 | 3. 35 | 10. 47 | ·0912 | | | | | |
| 13. 40 | 11. 25 | | *** | | | | | |
| 13. 54 | 12. 10 | 11. 33 | ·0925 | | | | | |
| 14. 12 | 13. 50 | 11. 52 | ·0921 | | | | | |
| 14. 28 | 12. 45 | 12. 7 | ·0921 | | | | | |

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. 10 | | Feb. 10 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 14. 40 | 21. 13. 0 | 12. 50 | ·0929 | | | | | |
| 14. 58 | 11. 50 | 13. 2 | ·0924 | | | | | |
| 15. 24 | 12. 10 | | *** | | | | | |
| 15. 42 | 13. 15 | 13. 43 | ·0920 | | | | | |
| 16. 37 | 12. 20 | 14. 15 | ·0931 | | | | | |
| 17. 1 | 13. 20 | 14. 26 | ·0927 | | | | | |
| 17. 14 | 13. 0 | 14. 45 | ·0930 | | | | | |
| 17. 45 | 13. 30 | 15. 20 | ·0929 | | | | | |
| | *** | 16. 48 | ·0936 | | | | | |
| 21. 21 | 11. 30 | 17. 5 | ·0935 | | | | | |
| 22. 15 | 13. 0 | | *** | | | | | |
| 22. 43 | 15. 10 | 18. 29 | ·0944 | | | | | |
| 22. 51 | 15. 0 | | *** | | | | | |
| 23. 59 | 17. 45 | 19. 45 | ·0943 | | | | | |
| | | | *** | | | | | |
| | | 20. 43 | ·0947 | | | | | |
| | | 22. 2 | ·0936 | | | | | |
| | | | *** | | | | | |
| | | 23. 0 | ·0917 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0911 | | | | | |
| Feb. 11 | | Feb. 11 | | Feb. 11 | | Feb. 11 | | |
| 0. 0 | 21. 17. 45 | 0. 0 | ·0911 | 0. 0 | ·03060 | 1. 0 | 38 ·0 | 39 ·0 |
| 0. 14 | 16. 50 | 6. 45 | ·0927 | 1. 50 | ·02920 | 3. 0 | 41 ·0 | 41 ·7 |
| 0. 52 | 18. 0 | 7. 3 | ·0934 | 12. 5: | ·02215 | 9. 0 | 42 ·7 | 43 ·8 |
| 1. 2 | 17. 10 | 7. 26 | ·0931 | 23. 59 | ·02693 | 22. 48 | 36 ·0 | 38 ·0 |
| 1. 21 | 18. 30 | | *** | | | | | |
| 2. 10 | 18. 55 | 9. 23 | ·0934 | | | | | |
| 3. 44 | 15. 45 | 10. 2 | ·0931 | | | | | |
| 5. 41 | 13. 40 | 12. 15 | ·0931 | | | | | |
| 11. 28 | 13. 0 | | *** | | | | | |
| 11. 57 | 12. 15 | 14. 52 | ·0937 | | | | | |
| 12. 28 | 13. 10 | 16. 7 | ·0936 | | | | | |
| 14. 24 | 14. 35 | 18. 10 | ·0945 | | | | | |
| 14. 46 | 13. 20 | 19. 27 | ·0947 | | | | | |
| 16. 10 | 13. 45 | 20. 26 | ·0942 | | | | | |
| 16. 30 | 14. 55 | 21. 13 | ·0925 | | | | | |
| 16. 45 | 14. 10 | 21. 44 | ·0923 | | | | | |
| 16. 58 | 15. 20 | 21. 55 | ·0925 | | | | | |
| 18. 3 | 13. 20 | | *** | | | | | |
| 19. 51 | 12. 30 | 23. 59 | ·0911 | | | | | |
| 20. 1 | 13. 20 | | | | | | | |
| 20. 13 | 12. 20 | | | | | | | |
| 20. 21 | 13. 0 | | | | | | | |
| 20. 40 | 12. 0 | | | | | | | |
| 21. 37 | 18. 50 | | | | | | | |
| 21. 55 | 16. 15 | | | | | | | |
| 22. 22 | 18. 20 | | | | | | | |
| 23. 19 | 17. 30 | | | | | | | |
| 23. 51 | 18. 30 | | | | | | | |
| 23. 59 | 18. 15 | | | | | | | |
| Feb. 12 | | Feb. 12 | | Feb. 12 | | Feb. 12 | | |
| 0. 0 | 21. 18. 15 | 0. 0 | ·0911 | 0. 0 | ·02693 | 9. 0 | 41 ·0 | 42 ·5 |
| 0. 29 | 17. 20 | 0. 40 | ·0917 | 1. 56 | ·02750 | 21. 0 | 35 ·0 | 37 ·0 |
| 0. 45 | 20. 10 | 1. 7 | ·0909 | 12. 38: | ·02280 | | | |
| 1. 3 | 18. 50 | 2. 10 | ·0912 | 22. 50 | ·02780 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 2. 15 | 21. 22. 40 | 2. 21 | ·0909 | 23. 59 | ·02785 | | | |
| 2. 30 | 20. 35 | | *** | | | | | |
| 2. 44 | 22. 5 | 3. 22 | ·0920 | | | | | |
| 3. 23 | 22. 55 | 3. 36 | ·0909 | | | | | |
| 3. 30 | 24. 15 | 3. 48 | ·0909 | | | | | |
| 3. 46 | 22. 15 | 4. 13 | ·0925 | | | | | |
| 3. 57 | 20. 0 | 4. 28 | ·0912 | | | | | |
| 4. 10 | 19. 0 | 4. 36 | ·0918 | | | | | |
| 4. 21 | 24. 30 | | *** | | | | | |
| 4. 30 | 22. 10 | 4. 57 | ·0915 | | | | | |
| 4. 41 | 22. 20 | 5. 31 | ·0898 | | | | | |
| 4. 49 | 21. 0 | 5. 40 | ·0892 | | | | | |
| 5. 10 | 25. 5 | 5. 46 | ·0897 | | | | | |
| 5. 24 | 25. 50 | 6. 0 | ·0896 | | | | | |
| 5. 45 | 21. 30 | 6. 9 | ·0906 | | | | | |
| 5. 53 | 22. 10 | 6. 33 | ·0891 | | | | | |
| 6. 15 | 21. 0 | 6. 47 | ·0896 | | | | | |
| 6. 45 | 16. 0 | | *** | | | | | |
| 7. 6 | 13. 50 | 7. 10 | ·0893 | | | | | |
| 7. 11 | 14. 0 | 7. 22 | ·0900 | | | | | |
| 7. 25 | 12. 50 | 7. 50 | ·0903 | | | | | |
| 7. 39 | 13. 40 | 8. 10 | ·0897 | | | | | |
| 8. 0 | 13. 30 | 8. 26 | ·0904 | | | | | |
| 8. 29 | 11. 20 | 8. 48 | ·0905 | | | | | |
| 8. 41 | 11. 20 | 8. 56 | ·0902 | | | | | |
| 9. 6 | 1. 55 | 9. 10 | ·0887 | | | | | |
| 9. 21 | 2. 0 | 9. 28 | ·0887 | | | | | |
| 10. 4 | 9. 30 | 10. 2 | ·0903 | | | | | |
| 10. 18 | 8. 0 | 10. 25 | ·0905 | | | | | |
| | *** | 11. 10 | ·0915 | | | | | |
| 11. 52 | 13. 30 | | *** | | | | | |
| 12. 9 | 12. 50 | 12. 52 | ·0919 | | | | | |
| 12. 51 | 14. 0 | 16. 10 | ·0921 | | | | | |
| 14. 14 | 14. 0 | 17. 11 | ·0927 | | | | | |
| 15. 7 | 14. 55 | 19. 15 | ·0925 | | | | | |
| 18. 54 | 14. 0 | 20. 38 | ·0919 | | | | | |
| 19. 13 | 13. 15 | 22. 2 | ·0894 | | | | | |
| 20. 40 | 12. 30 | 22. 15 | ·0897 | | | | | |
| 20. 53 | 11. 20 | 22. 50 | ·0890 | | | | | |
| 21. 50 | 14. 30 | 23. 26 | ·0893 | | | | | |
| 21. 55 | 16. 0 | | *** | | | | | |
| 22. 1 | 14. 45 | 23. 59 | ·0883 | | | | | |
| 22. 21 | 17. 30 | | | | | | | |
| | *** | | | | | | | |
| 23. 0 | 18. 20 | | | | | | | |
| 23. 26 | 21. 0 | | | | | | | |
| 23. 38 | 20. 20 | | | | | | | |
| 23. 59 | 22. 15 | | | | | | | |
| Feb. 13 | | Feb. 13 | | Feb. 13 | | Feb. 13 | | |
| 0. 0 | 21. 22. 15 | 0. 0 | ·0883 | 0. 0 | ·02785 | 1. 0 | 40 ·0 | 41 ·3 |
| 0. 17 | 23. 20 | 0. 17 | ·0878 | 1. 20 | ·02670 | 3. 0 | 43 ·0 | 44 ·0 |
| 1. 3 | 20. 5 | | (†) | 6. 45 | ·02049 | 9. 0 | 39 ·0 | 41 ·5 |
| 1. 28 | 21. 0 | 1. 0 | ·0886* | 9. 30 | ·02108 | 21. 0 | 31 ·3 | 35 ·7 |
| 2. 6 | 18. 0 | 3. 0 | ·0894* | 21. 7 | ·02873 | | | |
| 2. 23 | 20. 20 | 3. 16 | ·0891 | 22. 53 | ·02967 | | | |
| 3. 5 | 20. 10 | 4. 8 | ·0898 | 23. 59 | ·02929 | | | |
| 3. 41 | 18. 0 | 4. 27 | ·0895 | | | | | |

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. 13 | | Feb. 13 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 51 | 21. 18. 30 | 5. 51 | ·0911 | | | | | |
| 4. 40 | 13. 40 | | *** | | | | | |
| 6. 58 | 15. 0 | 6. 52 | ·0913 | | | | | |
| 16. 37 | 13. 40 | 7. 11 | ·0907 | | | | | |
| 21. 29 | 10. 20 | | *** | | | | | |
| 23. 51 | 17. 30 | 13. 47 | ·0917 | | | | | |
| | | 18. 3 | ·0927 | | | | | |
| | | 19. 39 | ·0925 | | | | | |
| | | 23. 0 | ·0899 | | | | | |
| | | 23. 30 | ·0897 | | | | | |
| | | | (†) | | | | | |
| Feb. 14 | | Feb. 14 | | Feb. 14 | | Feb. 14 | | |
| | (†) | | (†) | 0. 0 | ·02929 | 1. 0 | 36 ·0 | 38 ·0 |
| 0. 28 | 21. 16. 35 | 0. 46 | ·0899 | 1. 43 | ·02833 | 3. 0 | 39 ·4 | 41 ·5 |
| 1. 58 | 16. 45 | 3. 0 | ·0894 | 5. 24 | ·02240 | 9. 0 | 41 ·0 | 43 ·0 |
| 4. 12 | 13. 30 | 4. 34 | ·0898 | 7. 15 | ·02050 | 21. 0 | 35 ·0 | 38 ·0 |
| 8. 52 | 12. 30 | 4. 56 | ·0891 | | ·02089 | | | |
| 15. 7 | 14. 35 | 10. 2 | ·0908 | 12. 14 | ·02110 | | | |
| 15. 37 | 13. 20 | 13. 51 | ·0916 | 20. 21 | ·02438 | | | |
| 15. 54 | 13. 20 | 15. 33 | ·0924 | 23. 59 | ·02623 | | | |
| 16. 20 | 12. 25 | 16. 0 | ·0920 | | | | | |
| 17. 45 | 12. 20 | 16. 42 | ·0924 | | | | | |
| 17. 58 | 12. 55 | 18. 20 | ·0925 | | | | | |
| 18. 23 | 15. 0 | 18. 50 | ·0929 | | | | | |
| 18. 51 | 13. 40 | 19. 21 | ·0923 | | | | | |
| 19. 15 | 16. 0 | 19. 43 | ·0924 | | | | | |
| 20. 10 | 12. 30 | 21. 40 | ·0913 | | | | | |
| 21. 54 | 10. 40 | 23. 17 | ·0891 | | | | | |
| 23. 59 | 15. 45 | 23. 59 | ·0887 | | | | | |
| Feb. 15 | | Feb. 15 | | Feb. 15 | | Feb. 15 | | |
| 0. 0 | 21. 15. 45 | 0. 0 | ·0887 | 0. 0 | ·02623 | 0. 0 | 37 ·3 | 39 ·7 |
| 0. 55 | 15. 55 | 0. 36 | ·0888 | 1. 36 | ·02617 | 1. 0 | 39 ·0 | 41 ·0 |
| 1. 37 | 15. 20 | | (†) | 5. 45 | ·02130 | 3. 0 | 42 ·5 | 44 ·0 |
| 2. 12 | 15. 45 | 1. 0 | ·0890* | | ·02162 | 6. 0 | 44 ·0 | 45 ·5 |
| 2. 23 | 17. 30 | 3. 0 | ·0896* | 8. 37 | ·02192 | 9. 0 | 43 ·5 | 45 ·2 |
| 2. 37 | 17. 5 | 3. 27 | ·0893 | 13. 40 | ·02140 | 12. 0 | 43 ·0 | 45 ·1 |
| 2. 45 | 17. 50 | 4. 10 | ·0894 | 21. 36 | ·02309 | 18. 0 | 41 ·0 | 44 ·0 |
| 4. 9 | 16. 0 | 4. 48 | ·0899 | 22. 58 | ·02360 | 21. 0 | 41 ·2 | 43 ·8 |
| 4. 25 | 17. 0 | 5. 32 | ·0892 | 23. 59 | ·02349 | | | |
| 5. 2 | 15. 20 | 5. 49 | ·0892 | | | | | |
| 5. 21 | 15. 40 | 6. 18 | ·0901 | | | | | |
| 5. 55 | 9. 0 | 6. 42 | ·0885 | | | | | |
| 6. 21 | 11. 25 | 6. 50 | ·0887 | | | | | |
| 6. 46 | 16. 40 | 7. 7 | ·0883 | | | | | |
| 6. 56 | 15. 30 | 7. 33 | ·0889 | | | | | |
| 7. 9 | 17. 0 | 7. 55 | ·0889 | | | | | |
| 7. 51 | 15. 5 | 8. 6 | ·0886 | | | | | |
| 7. 58 | 16. 0 | 8. 33 | ·0892 | | | | | |
| 8. 29 | 13. 40 | 9. 17 | ·0895 | | | | | |
| 9. 15 | 14. 0 | 9. 38 | ·0907 | | | | | |
| 9. 40 | 5. 5 | 10. 0 | ·0885 | | | | | |
| 9. 51 | 10. 30 | 11. 9 | ·0898 | | | | | |
| 10. 14 | 9. 30 | 11. 58 | ·0899 | | | | | |
| 10. 49 | 13. 0 | 12. 15 | ·0897 | | | | | |
| 12. 12 | 14. 0 | 12. 46 | ·0910 | | | | | |
| 12. 48 | 12. 50 | 14. 7 | ·0901 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 15 | | Feb. 15 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 13. 21 | 21. 15. 5 | 14. 43 | ·0907 | | | | | |
| 13. 59 | 11. 50 | 16. 26 | ·0911 | | | | | |
| 14. 30 | 11. 20 | 16. 47 | ·0910 | | | | | |
| 15. 12 | 13. 0 | 17. 17 | ·0918 | | | | | |
| 15. 19 | 15. 15 | 17. 30 | ·0920 | | | | | |
| 15. 39 | 13. 5 | | (†) | | | | | |
| 15. 51 | 11. 30 | 21. 0 | ·0902* | | | | | |
| 16. 21 | 8. 40 | | | | | | | |
| 16. 56 | 10. 10 | | | | | | | |
| 17. 21 | 13. 45 | | | | | | | |
| 17. 28 | 13. 30 | | | | | | | |
| 17. 50 | 14. 15 | | | | | | | |
| 18. 37 | 14. 0 | | | | | | | |
| 18. 53 | 12. 30 | | | | | | | |
| 19. 24 | 12. 0 | | | | | | | |
| 19. 37 | 12. 20 | | | | | | | |
| 19. 49 | 11. 20 | | | | | | | |
| | *** | | | | | | | |
| 20. 19 | 12. 40 | | | | | | | |
| 20. 38 | 11. 5 | | | | | | | |
| | *** | | | | | | | |
| 21. 50 | 13. 20 | | | | | | | |
| 23. 59 | 19. 0 | | | | | | | |
| Feb. 16 | | Feb. 16 | | Feb. 16 | | Feb. 16 | | |
| 0. 0 | 21. 19. 0 | | (†) | 0. 0 | ·02349 | 0. 0 | 43 ·6 | 45 ·1 |
| 3. 26 | 15. 50 | 1. 0 | ·0890* | 0. 57 | ·02293 | 1. 0 | 44 ·8 | 46 ·5 |
| 4. 11 | 14. 20 | 3. 0 | ·0902* | 2. 42 | ·02156 | 3. 0 | 47 ·0 | 48 ·2 |
| | *** | 5. 50 | ·0904 | 3. 39 | ·02205 | 9. 0 | 44 ·0 | 46 ·2 |
| 9. 15 | 14. 15 | | *** | 9. 24 | ·02306 | 21. 0 | 38 ·7 | 41 ·2 |
| 10. 41 | 12. 50 | 7. 1 | ·0911 | 20. 58 | ·02954 | | | |
| | *** | 10. 20 | ·0926 | 22. 52 | ·03043 | | | |
| 13. 9 | 12. 20 | 11. 52 | ·0925 | 23. 59 | ·03053 | | | |
| 13. 21 | 14. 0 | 12. 16 | ·0930 | | | | | |
| 13. 31 | 12. 50 | | *** | | | | | |
| 13. 46 | 14. 20 | 14. 0 | ·0926 | | | | | |
| 14. 9 | 11. 30 | 14. 40 | ·0919 | | | | | |
| 14. 29 | 12. 0 | 15. 15 | ·0922 | | | | | |
| 15. 13 | 8. 20 | 15. 43 | ·0915 | | | | | |
| 15. 43 | 8. 0 | 16. 6 | ·0918 | | | | | |
| 16. 12 | 11. 0 | 17. 25 | ·0911 | | | | | |
| 16. 36 | 8. 15 | 19. 20 | ·0922 | | | | | |
| 16. 43 | 8. 50 | | *** | | | | | |
| 17. 0 | 8. 0 | 21. 20 | ·0914 | | | | | |
| 17. 43 | 9. 10 | 22. 2 | ·0913 | | | | | |
| 17. 57 | 8. 30 | 22. 17 | ·0909 | | | | | |
| | *** | 22. 49 | ·0914 | | | | | |
| 18. 58 | 12. 0 | 23. 0 | ·0906 | | | | | |
| 19. 15 | 13. 30 | 23. 7 | ·0909 | | | | | |
| 19. 55 | 13. 30 | 23. 25 | ·0904 | | | | | |
| 20. 10 | 12. 20 | 23. 47 | ·0916 | | | | | |
| | *** | 23. 56 | ·0904 | | | | | |
| 21. 39 | 13. 0 | 23. 59 | ·0906 | | | | | |
| 22. 1 | 15. 30 | | | | | | | |
| 22. 15 | 15. 15 | | | | | | | |
| 23. 10 | 19. 10 | | | | | | | |
| 23. 26 | 17. 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. |
|---|---|---|---|---|---|---|---|---|
| Feb. 16 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 23. 45 | 21. 25. 30 | | | | | | | |
| 23. 59 | 24. 30 | | | | | | | |
| Feb. 17 | | Feb. 17 | | Feb. 17 | | Feb. 17 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0906 | 0. 0 | ·03053 | 1. 0 | 42 ·5 | 43 ·8 |
| 0. 15 | 23. 0 | 0. 16 | ·0903 | 2. 22 | ·02928 | 3. 0 | 45 ·7 | 47 ·0 |
| 0. 36 | 26. 20 | 0. 24 | ·0906 | 7. 11 | ·02310 | 9. 0 | 47 ·2 | 48 ·0 |
| 0. 43 | 25. 50 | | (†) | 8. 27 | ·02320 | 21. 8 | 42 ·8 | 44 ·2 |
| 1. 10 | 27. 50 | 1. 0 | ·0896* | 12. 19 | ·02237 | | | |
| 1. 51 | 24. 20 | 3. 0 | ·0896* | 23. 0 | ·02681 | | | |
| 1. 59 | 29. 20 | 5. 15 | ·0866 | | (†) | | | |
| 2. 12 | 27. 5 | 5. 29 | ·0875 | | | | | |
| 2. 25 | 27. 20 | | *** | | | | | |
| 2. 51 | 17. 20 | 6. 10 | ·0886 | | | | | |
| 3. 12 | 20. 50 | 6. 22 | ·0884 | | | | | |
| 3. 23 | 18. 45 | 6. 31 | ·0887 | | | | | |
| 3. 44 | 21. 20 | | *** | | | | | |
| 4. 4 | 18. 30 | 7. 40 | ·0885 | | | | | |
| 4. 19 | 18. 0 | 7. 56 | ·0890 | | | | | |
| 4. 30 | 19. 10 | 8. 13 | ·0888 | | | | | |
| 4. 39 | 18. 35 | 9. 15 | ·0899 | | | | | |
| 4. 51 | 21. 20 | | *** | | | | | |
| 5. 0 | 18. 20 | 10. 47 | ·0899 | | | | | |
| 5. 10 | 19. 45 | 11. 2 | ·0908 | | | | | |
| 5. 30 | 12. 40 | 11. 13 | ·0902 | | | | | |
| 6. 0 | 15. 20 | 11. 28 | ·0920 | | | | | |
| 6. 41 | 13. 30 | 11. 42 | ·0909 | | | | | |
| 7. 27 | 13. 45 | 11. 51 | ·0921 | | | | | |
| 7. 52 | 11. 20 | | *** | | | | | |
| 7. 57 | 11. 40 | 12. 38 | ·0908 | | | | | |
| 8. 19 | 8. 45 | 12. 55 | ·0912 | | | | | |
| 8. 47 | 9. 30 | | *** | | | | | |
| 9. 54 | 12. 45 | 14. 10 | ·0901 | | | | | |
| 10. 54 | 12. 10 | | *** | | | | | |
| 11. 5 | 13. 0 | 15. 14 | ·0896 | | | | | |
| 11. 14 | 12. 0 | | *** | | | | | |
| 11. 45 | 15. 20 | 16. 35 | ·0901 | | | | | |
| 11. 55 | 14. 30 | 16. 50 | ·0898 | | | | | |
| 12. 7 | 15. 20 | 17. 3 | ·0900 | | | | | |
| 12. 44 | 8. 0 | | *** | | | | | |
| 12. 55 | 10. 0 | 18. 12 | ·0906 | | | | | |
| 13. 13 | 9. 30 | 19. 4 | ·0903 | | | | | |
| 13. 30 | 8. 0 | 19. 54 | ·0907 | | | | | |
| 13. 45 | 10. 10 | 20. 29 | ·0903 | | | | | |
| 14. 13 | 9. 30 | 20. 45 | ·0909 | | | | | |
| 14. 31 | 12. 20 | 20. 57 | ·0901 | | | | | |
| 15. 6 | 12. 50 | 21. 10 | ·0907 | | | | | |
| 15. 31 | 8. 15 | 21. 55 | ·0895 | | | | | |
| 16. 10 | 13. 20 | 22. 37 | ·0894 | | | | | |
| 16. 27 | 10. 40 | 22. 50 | ·0888 | | | | | |
| 16. 45 | 10. 15 | | *** | | | | | |
| 17. 3 | 12. 40 | 23. 43 | ·0888 | | | | | |
| 18. 4 | 12. 0 | | (†) | | | | | |
| 18. 17 | 13. 20 | | | | | | | |
| 18. 44 | 12. 15 | | | | | | | |
| | *** | | | | | | | |
| 20. 48 | 11. 45 | | | | | | | |
| 20. 57 | 10. 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. |
|---|---|---|---|---|---|---|---|---|
| Feb. 17 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 12 | 21. 11. 45 | | | | | | | |
| 22. 0 | 10. 20 | | | | | | | |
| | *** | | | | | | | |
| 23. 59 | 15. 30 | | | | | | | |
| Feb. 18 | | Feb. 18 | | Feb. 18 | | Feb. 18 | | |
| 0. 0 | 21. 15. 30 | | (†) | | (†) | 1. 0 | 45 ·0 | |
| 0. 14 | 19. 30 | 1. 0 | ·0888* | 3. 30 | ·02590 | 3. 0 | 47 ·5 | 48 ·2 |
| 0. 36 | 16. 30 | 3. 0 | ·0876* | 5. 12 | ·02368 | 9. 0 | 47 ·0 | 48 ·0 |
| 0. 54 | 18. 40 | 3. 56 | ·0893 | 6. 22 | ·02372 | 22. 30 | 42 ·0 | 43 ·2 |
| 1. 10 | 17. 15 | 4. 27 | ·0894 | 6. 45 | ·02430 | | | |
| 1. 25 | 18. 30 | 4. 58 | ·0891 | 10. 55 | ·02407 | | | |
| 1. 50 | 20. 40 | 5. 20 | ·0895 | 14. 29 | ·02465 | | | |
| 1. 59 | 19. 0 | 5. 36 | ·0893 | 15. 37 | ·02411 | | | |
| 2. 26 | 22. 30 | | *** | 20. 24 | ·02793 | | | |
| 2. 43 | 21. 30 | 6. 37 | ·0903 | 23. 59 | ·02805 | | | |
| 3. 8 | 14. 20 | 6. 42 | ·0894 | | | | | |
| 3. 21 | 13. 0 | 6. 58 | ·0903 | | | | | |
| 4. 24 | 16. 30 | 7. 22 | ·0917 | | | | | |
| 5. 14 | 16. 15 | 7. 37 | ·0908 | | | | | |
| 5. 43 | 13. 20 | 7. 46 | ·0907 | | | | | |
| 5. 54 | 13. 55 | 8. 0 | ·0909 | | | | | |
| 6. 10 | 13. 10 | 8. 17 | ·0905 | | | | | |
| 6. 19 | 14. 0 | 8. 43 | ·0907 | | | | | |
| 6. 36 | 13. 20 | 10. 15 | ·0899 | | | | | |
| 6. 51 | 9. 20 | | (†) | | | | | |
| 6. 57 | 11. 15 | 11. 5 | ·0896 | | | | | |
| 7. 14 | 6. 50 | 11. 22 | ·0899 | | | | | |
| 7. 30 | 11. 15 | 11. 36 | ·0910 | | | | | |
| 7. 54 | 10. 20 | 11. 47 | ·0916 | | | | | |
| 8. 11 | 12. 30 | 12. 5 | ·0907 | | | | | |
| 9. 39 | 10. 30 | 12. 30 | ·0911 | | | | | |
| 10. 0 | 6. 0 | 12. 47 | ·0904 | | | | | |
| 10. 13 | 9. 5 | | *** | | | | | |
| 10. 21 | 1. 10 | 14. 0 | ·0901 | | | | | |
| 10. 45 | 8. 15 | 14. 12 | ·0904 | | | | | |
| 10. 54 | 6. 20 | 14. 25 | ·0903 | | | | | |
| 11. 7 | 6. 45 | 14. 44 | ·0912 | | | | | |
| 11. 19 | 6. 0 | 14. 54 | ·0909 | | | | | |
| 11. 29 | 4. 0 | | (†) | | | | | |
| 11. 42 | 6. 30 | 15. 47 | ·0913 | | | | | |
| 12. 0 | 7. 0 | 16. 16 | ·0903 | | | | | |
| 12. 12 | 8. 10 | 16. 28 | ·0905 | | | | | |
| 12. 40 | 5. 30 | 16. 33 | ·0902 | | | | | |
| 13. 0 | 8. 30 | 17. 13 | ·0913 | | | | | |
| 13. 26 | 10. 20 | 17. 45 | ·0909 | | | | | |
| 14. 10 | 9. 50 | 18. 41 | ·0921 | | | | | |
| 14. 19 | 11. 5 | 19. 3 | ·0915 | | | | | |
| 14. 44 | 9. 0 | 19. 51 | ·0911 | | | | | |
| 14. 55 | 10. 55 | 20. 8 | ·0918 | | | | | |
| 15. 31 | 4. 50 | 21. 2 | ·0900 | | | | | |
| 16. 13 | 13. 30 | | (†) | | | | | |
| 16. 54 | 11. 10 | 21. 47 | ·0916 | | | | | |
| 17. 20 | 13. 50 | 22. 32 | ·0914 | | | | | |
| | *** | | (†) | | | | | |
| 17. 54 | 12. 30 | | | | | | | |
| 18. 9 | 13. 55 | | | | | | | |
| 18. 20 | 13. 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.

February 18. On this day the adjustments, &c. of the Vertical Force Magnet were examined.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 18 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 19. 15 | 21. 14. 30 | | | | | | | |
| 19. 39 | 12. 30 | | | | | | | |
| 19. 53 | 14. 50 | | | | | | | |
| 20. 0 | 14. 0 | | | | | | | |
| 20. 31 | 15. 10 | | | | | | | |
| 20. 54 | 13. 20 | | | | | | | |
| 21. 44 | 14. 30 | | | | | | | |
| 21. 54 | 13. 35 | | | | | | | |
| 22. 15 | 15. 30 (†) | | | | | | | |
| Feb. 19 | | Feb. 19 | | Feb. 19 | | Feb. 19 | | |
| 6. 57 | 21. 7. 46* | 6. 57 | ·0909* | 0. 0 | ·02805 | 6. 57 | 44 ·2 | 45 ·0 |
| 21. 0 | 9. 57* | 21. 0 | ·0913* | 3. 39 | ·02853 | 21. 0 | 35 ·0 | 38 ·0 |
| | | | | 9. 18 | ·02680 | | | |
| | | | | 11. 9 | ·02684 | | | |
| | | | | 13. 51 | ·02805 | | | |
| | | | | 23. 59 | ·02710 | | | |
| Feb. 20 | | Feb. 20 | | Feb. 20 | | Feb. 20 | | |
| 1. 0 | 21. 11. 41* | 1. 0 | ·0900* | 0. 0 | ·02710 | 1. 0 | 39 ·0 | 40 ·4 |
| 3. 0 | 17. 26* | 3. 0 | ·0884* | 2. 30 | ·02649 | 3. 0 | 41 ·5 | 42 ·2 |
| 9. 0 | 14. 18* | 9. 0 | ·0912* | 6. 52 | ·02164 | 9. 0 | 42 ·3 | 44 ·0 |
| 21. 0 | 11. 54* | 21. 0 | ·0908* | 12. 43 | ·02040 | 21. 0 | 39 ·0 | 41 ·7 |
| | | | | 23. 59 | ·02257 | | | |
| Feb. 21 | | Feb. 21 | | Feb. 21 | | Feb. 21 | | |
| 1. 0 | 21. 29. 16* | 1. 0 | ·0912* | 0. 0 | ·02257 | 1. 0 | 42 ·0 | 43 ·0 |
| 3. 0 | 27. 32* | 3. 0 | ·0904* | 0. 55 | ·02300 | 3. 0 | 44 ·0 | 45 ·3 |
| 9. 0 | 10. 23* | 9. 0 | ·0853* | 3. 56 | ·02155 | 9. 0 | 45 ·0 | 46 ·5 |
| 21. 0 | 15. 50* | 21. 0 | ·0862* | 4. 42 | ·02220 | 21. 0 | 40 ·8 | 43 ·0 |
| | | | | 5. 0 | ·02328 | | | |
| | | | | 5. 10 | ·02280 | | | |
| | | | | 7. 10 | ·02225 | | | |
| | | | | 9. 12 | ·02264 | | | |
| | | | | 10. 25 | ·02207 | | | |
| | | | | 10. 37 | ·02122 | | | |
| | | | | 11. 7 | ·01977 | | | |
| | | | | 11. 12 | ·02008 | | | |
| | | | | 11. 19 | ·01965 | | | |
| | | | | 11. 30 | ·02074 | | | |
| | | | | 11. 45 | ·02040 | | | |
| | | | | 12. 15 | ·02130 | | | |
| | | | | 13. 12 | ·02152 | | | |
| | | | | 13. 30 | ·02110 | | | |
| | | | | 15. 54 | ·02118 | | | |
| | | | | 16. 28 | ·02187 | | | |
| | | | | 23. 59 | ·02648 | | | |
| Feb. 22 | | Feb. 22 | | Feb. 22 | | Feb. 22 | | |
| 1. 0 | 21. 25. 58* | 1. 0 | ·0861* | 0. 0 | ·02648 | 0. 0 | 42 ·3 | 43 ·8 |
| 3. 0 | 25. 11* | 3. 0 | ·0882* | 1. 37 | ·02650 | 1. 0 | 43 ·6 | 45 ·0 |
| 9. 0 | 7. 21* | 9. 0 | ·0896* | 5. 15 | ·02292 | 3. 0 | 46 ·7 | 47 ·8 |
| 21. 0 | 9. 39* | 21. 0 | ·0903* | 9. 37 | ·02200 | 6. 0 | 48 ·2 | 49 ·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. |
|---|---|---|---|---|---|---|---|---|
| | | | | Feb. 22 | | Feb. 22 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| | | | | 13. 51 | ·02303 | 9. 0 | 47 ·1 | 47 ·5 |
| | | | | 20. 24 | ·02904 | 12. 0 | 44 ·5 | 46 ·0 |
| | | | | 23. 59 | ·02888 | 18. 0 | 39 ·0 | 41 ·4 |
| | | | | | | 21. 0 | 37 ·0 | 40 ·0 |
| Feb. 23 | | Feb. 23 | | Feb. 23 | | Feb. 23 | | |
| 1. 0 | 21. 21. 11* | 1. 0 | ·0892* | 0. 0 | ·02888 | 0. 0 | 41 ·0 | 42 ·0 |
| 3. 0 | 18. 16* | 3. 0 | ·0889* | 1. 53 | ·02760 | 1. 0 | 42 ·1 | 43 ·0 |
| 9. 0 | 8. 19* | 9. 0 | ·0904* | 6. 5 | ·02092 | 3. 0 | 46 ·0 | 47 ·0 |
| 21. 0 | 10. 44* | 21. 0 | ·0923* | 10. 21 | ·02163 | 9. 0 | 45 ·0 | 45 ·7 |
| | | | | 18. 39 | ·02872 | 21. 0 | 34 ·0 | 37 ·2 |
| | | | | 23. 59 | ·02791 | | | |
| Feb. 24 | | Feb. 24 | | Feb. 24 | | Feb. 24 | | |
| 1. 0 | 21. 19. 52* | 1. 0 | ·0895* | 0. 0 | ·02791 | 1. 0 | 40 ·0 | 41 ·2 |
| 3. 0 | 18. 50* | 3. 0 | ·0906* | 1. 35 | ·02693 | 3. 0 | 44 ·7 | 46 ·0 |
| 9. 0 | 5. 33* | 9. 0 | ·0903* | 5. 27 | ·02006 | 9. 0 | 45 ·0 | 45 ·8 |
| 21. 0 | 9. 54* | 21. 0 | ·0919* | 11. 10 | ·02079 | 21. 0 | 35 ·0 | 38 ·0 |
| | | | | 16. 15 | ·02420 | | | |
| | | | | 21. 29 | ·02900 | | | |
| | | | | 23. 59 | ·02773 | | | |
| Feb. 25 | | Feb. 25 | | Feb. 25 | | Feb. 25 | | |
| 1. 0 | 21. 19. 32* | 1. 0 | ·0909* | 0. 0 | ·02773 | 1. 0 | 39 ·8 | 40 ·7 |
| 3. 0 | 19. 3* | 3. 0 | ·0911* | 2. 22 | ·02670 | 3. 0 | 43 ·0 | 44 ·0 |
| 9. 0 | 10. 42* | 9. 0 | ·0908* | 6. 42 | ·02028 | 9. 0 | 44 ·0 | 45 ·0 |
| 22. 0 | 12. 31* | 22. 0 | ·0913* | 10. 27 | ·02070 | 22. 0 | 42 ·3 | 43 ·8 |
| | | | | 19. 50 | ·02532 | | | |
| | | | | 23. 59 | ·02569 | | | |
| Feb. 26 | | Feb. 26 | | Feb. 26 | | Feb. 26 | | |
| 9. 0 | 21. 11. 42* | 9. 0 | ·0914* | 0. 0 | ·02569 | 9. 0 | 49 ·0 | 50 ·0 |
| 21. 0 | 11. 7* | 21. 0 | ·0904* | 5. 10 | ·02084 | 21. 0 | 45 ·7 | 47 ·5 |
| | | | | 8. 26 | ·02130 | | | |
| | | | | 12. 44 | ·02084 | | | |
| | | | | 16. 58 | ·02123 | | | |
| | | | | 23. 28 | ·02387 | | | |
| | | | | 23. 59 | ·02360 | | | |
| Feb. 27 | | Feb. 27 | | Feb. 27 | | Feb. 27 | | |
| 1. 0 | 21. 24. 19* | 1. 0 | ·0885* | 0. 0 | ·02360 | 1. 0 | 48 ·0 | 49 ·0 |
| 3. 0 | 21. 57* | 3. 0 | ·0886* | 2. 24 | ·02420 | 3. 0 | 49 ·0 | 49 ·0 |
| 9. 0 | 16. 59* | 9. 0 | ·0902* | 5. 43 | ·02087 | 9. 0 | 47 ·2 | 48 ·5 |
| 21. 0 | 10. 32* | 21. 0 | ·0931* | 11. 21 | ·02222 | 21. 0 | 42 ·7 | 44 ·2 |
| | | | | 15. 30 | ·02452 | | | |
| | | | | 19. 28 | ·02740 | | | |
| | | | | 21. 5 | ·02931 | | | |
| | | | | 22. 40 | ·02920 | | | |
| | | | | 23. 59 | ·02832 | | | |
| Feb. 28 | | Feb. 28 | | Feb. 28 | | Feb. 28 | | |
| 1. 0 | 21. 21. 16* | 1. 0 | ·0875* | 0. 0 | ·02832 | 1. 0 | 48 ·0 | 49 ·0 |
| 3. 0 | 18. 18* | 3. 0 | ·0871* | 1. 50 | ·02604 | 3. 0 | 51 ·2 | 51 ·5 |

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

From February 19 to March 21, the time-piece giving motion to the Horizontal Force and Declination Cylinder was away for repair.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 28 | | Feb. 28 | | Feb. 28 | | Feb. 28 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 0 | 21. 10. 5* | 9. 0 | ·0893* | 4. 43 | ·02080 | 9. 0 | 49 ·0 | 50 ·8 |
| 21. 0 | 12. 43* | 21. 0 | ·0908* | 6. 12 | ·02100 | 21. 0 | 41 ·0 | 43 ·6 |
| | | | | 7. 8 | ·02152 | | | |
| | | | | 12. 30: | ·02338 | | | |
| | | | | 19. 30 | ·02956 | | | |
| | | | | 23. 59 | ·02757 | | | |
| Feb. 29 | | Feb. 29 | | Feb. 29 | | Feb. 29 | | |
| 1. 0 | 21. 19. 19* | 1. 0 | ·0896* | 0. 0 | ·02757 | 0. 0 | 43 ·0 | 44 ·0 |
| 3. 0 | 17. 43* | 3. 0 | ·0888* | 0. 47: | ·02770 | 1. 0 | 44 ·0 | 45 ·0 |
| 9. 0 | 5. 38* | 9. 0 | ·0903* | 8. 45: | ·01972 | 3. 0 | 47 ·8 | 48 ·3 |
| 21. 0 | 11. 14* | 21. 0 | ·0910* | 21. 28 | ·02870 | 6. 0 | 49 ·2 | 51 ·2 |
| | | | | 23. 59 | ·02825 | 9. 0 | 48 ·2 | 49 ·5 |
| | | | | | | 12. 0 | 46 ·8 | 47 ·5 |
| | | | | | | 18. 0 | 40 ·5 | 42 ·5 |
| | | | | | | 21. 0 | 40 ·0 | 42 ·0 |
| Mar. 1 | | Mar. 1 | | Mar. 1 | | Mar. 1 | | |
| 1. 0 | 21. 19. 47* | 1. 0 | ·0876* | 0. 0 | ·02825 | 0. 0 | 43 ·0 | 44 ·0 |
| 3. 0 | 18. 18* | 3. 0 | ·0876* | 1. 27 | ·02740 | 1. 0 | 44 ·7 | 45 ·8 |
| 9. 0 | 13. 49* | 9. 0 | ·0898* | 6. 3 | ·01930 | 3. 0 | 48 ·5 | 49 ·0 |
| 21. 0 | 9. 54* | 21. 0 | ·0890* | 9. 15 | ·01972 | 9. 0 | 49 ·5 | 49 ·5 |
| | | | | 9. 48 | ·02012 | 21. 0 | 43 ·0 | 44 ·0 |
| | | | | 10. 57 | ·02000 | | | |
| | | | | 14. 6 | ·02152 | | | |
| | | | | 21. 0 | ·02695 | | | |
| | | | | 23. 41 | ·02810 | | | |
| | | | | | (†) | | | |
| Mar. 2 | | Mar. 2 | | Mar. 2 | | Mar. 2 | | |
| 1. 0 | 21. 22. 29* | 1. 0 | ·0876* | | (†) | 1. 0 | 47 ·0 | 47 ·0 |
| 3. 0 | 20. 52* | 3. 0 | ·0882* | 0. 26 | ·02790 | 3. 0 | 49 ·0 | 49 ·6 |
| 9. 0 | 13. 52* | 9. 0 | ·0896* | 2. 9 | ·02744 | 9. 0 | 49 ·8 | 51 ·0 |
| 21. 0 | 10. 2* | 21. 0 | ·0904* | 5. 57 | ·02237 | 21. 0 | 42 ·0 | 43 ·0 |
| | | | | 8. 43 | ·01972 | | | |
| | | | | 11. 23 | ·02012 | | | |
| | | | | | ·02703 | | | |
| | | | | 14. 42 | ·02922 | | | |
| | | | | 18. 23 | ·02832 | | | |
| | | | | 21. 41 | ·02680 | | | |
| | | | | | ·02577 | | | |
| | | | | 23. 59 | ·02520 | | | |
| Mar. 3 | | Mar. 3 | | Mar. 3 | | Mar. 3 | | |
| 1. 0 | 21. 22. 56* | 1. 0 | ·0873* | 0. 0 | ·02520 | 1. 0 | 46 ·5 | 46 ·8 |
| 3. 0 | 21 40* | 3. 0 | ·0880* | 2. 12 | ·02326 | 3. 0 | 49 ·0 | 50 ·0 |
| 9. 0 | 17. 4* | 9. 0 | ·0898* | 7. 52: | ·01788 | 9. 0 | 50 ·0 | 50 ·2 |
| 22. 30 | 12. 53* | 22. 30 | ·0896* | 14. 48 | ·02000 | 22. 30 | 45 ·0 | 46 ·7 |
| | | | | 18. 13 | ·02018 | | | |
| | | | | 23. 59 | ·02240 | | | |
| Mar. 4 | | Mar. 4 | | Mar. 4 | | Mar. 4 | | |
| 6. 45 | 21. 16. 50* | 6. 45 | ·0911* | 0. 0 | ·02240 | 6. 45 | 48 ·0 | 49 ·0 |
| 21. 0 | 14. 6* | 21. 0 | ·0905* | 3. 21 | ·02302 | 21. 0 | 41 ·8 | 44 ·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. |
|---|---|---|---|---|---|---|---|---|
| | | | | Mar. 4 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| | | | | 7. 59 | ·02210 | | | |
| | | | | 10. 45 | ·02212 | | | |
| | | | | 13. 43 | ·02292 | | | |
| | | | | 17. 8 | ·02492 | | | |
| | | | | 22. 49 | ·02530 | | | |
| | | | | | ·02442 | | | |
| | | | | 23. 59 | ·02392 | | | |
| Mar. 5 | | Mar. 5 | | Mar. 5 | | Mar. 5 | | |
| 1. 0 | 21. 20. 46* | 1. 0 | ·0892* | 0. 0 | ·02392 | 1. 0 | 47 ·0 | 47 ·7 |
| 3. 0 | 18. 51* | 3. 0 | ·0890* | 1. 30 | ·02300 | 3. 0 | 49 ·0 | 50 ·5 |
| 9. 0 | 17. 33* | 9. 0 | ·0908* | 7. 56: | ·01624 | 9. 0 | 49 ·0 | 50 ·3 |
| 21. 0 | 9. 47* | 21. 0 | ·0913* | 16. 52 | ·01972 | 21. 0 | 40 ·0 | 43 ·6 |
| | | | | 22. 51 | ·02418 | | | |
| | | | | 23. 59 | ·02405 | | | |
| Mar. 6 | | Mar. 6 | | Mar. 6 | | Mar. 6 | | |
| 1. 0 | 21. 26. 8* | 1. 0 | ·0902* | 0. 0 | ·02405 | 1. 0 | 44 ·8 | 45 ·3 |
| 3. 0 | 20. 56* | 3. 0 | ·0898* | 1. 15 | ·02390 | 3. 0 | 48 ·0 | 48 ·8 |
| 9. 0 | 11. 10* | 9. 0 | ·0913* | 6. 27: | ·01905 | 9. 0 | 49 ·5 | 51 ·0 |
| 21. 0 | 10. 14* | 21. 0 | ·0914* | 11. 7 | ·01693 | 21. 0 | 45 ·0 | 47 ·7 |
| | | | | 15. 43 | ·01707 | | | |
| | | | | 20. 57 | ·01790 | | | |
| | | | | 23. 59 | ·01932 | | | |
| Mar. 7 | | Mar. 7 | | Mar. 7 | | Mar. 7 | | |
| 1. 0 | 21. 20. 1* | 1. 0 | ·0902* | 0. 0 | ·01932 | 0. 0 | 45 ·8 | 46 ·8 |
| 3. 0 | 18. 54* | 3. 0 | ·0900* | 2. 16 | ·02008 | 1. 0 | 46 ·0 | 47 ·0 |
| 9. 0 | 12. 11* | 9. 0 | ·0914* | 5. 57 | ·02000 | 3. 0 | 47 ·3 | 47 ·5 |
| 21. 0 | 8. 53* | 21. 0 | ·0908* | 6. 47 | ·02025 | 6. 0 | 45 ·8 | 46 ·3 |
| | | | | 17. 48 | ·02542 | 9. 0 | 43 ·7 | 44 ·9 |
| | | | | 19. 40 | ·02520 | 12. 0 | 42 ·0 | 42 ·8 |
| | | | | 23. 59 | ·02379 | 18. 0 | 39 ·6 | 42 ·0 |
| | | | | | | 21. 0 | 39 ·0 | 42 ·0 |
| Mar. 8 | | Mar. 8 | | Mar. 8 | | Mar. 8 | | |
| 1. 0 | 21. 28. 16* | 1. 0 | ·0892* | 0. 0 | ·02379 | 0. 0 | 42 ·0 | 43 ·2 |
| 3. 0 | 19. 30* | 3. 0 | ·0877* | 2. 13 | ·02342 | 1. 0 | 43 ·6 | 44 ·4 |
| 9. 0 | 5. 45* | 9. 0 | ·0903* | 8. 30: | ·01860 | 3. 0 | 46 ·0 | 46 ·5 |
| 21. 0 | 16. 56* | 21. 0 | ·0885* | 21. 4 | ·02433 | 9. 0 | 43 ·5 | 45 ·0 |
| | | | | 22. 57 | ·02292 | 21. 0 | 37 ·3 | 40 ·2 |
| | | | | 23. 59 | ·02289 | | | |
| Mar. 9 | | Mar. 9 | | Mar. 9 | | Mar. 9 | | |
| 1. 0 | 21. 22. 50* | 1. 0 | ·0894* | 0. 0 | ·02289 | 1. 0 | 42 ·7 | 43 ·0 |
| 3. 0 | 19. 5* | 3. 0 | ·0897* | 3. 43 | ·01938 | 3. 0 | 45 ·8 | 46 ·2 |
| 9. 0 | 16. 37* | 9. 0 | ·0906* | 6. 42: | ·01660 | 9. 0 | 45 ·0 | 46 ·2 |
| 21. 0 | 9. 4* | 21. 0 | ·0892* | 10. 56 | ·01572 | 21. 0 | 36 ·5 | 38 ·8 |
| | | | | 12. 50 | ·01610 | | | |
| | | | | 22. 18 | ·02273 | | | |
| | | | | 23. 59 | ·02265 | | | |
| Mar. 10 | | Mar. 10 | | Mar. 10 | | Mar. 10 | | |
| 1. 0 | 21. 22. 2* | 1. 0 | ·0879* | 0. 0 | ·02265 | 1. 0 | 41 ·0 | 42 ·0 |
| 3. 0 | 21. 45* | 3. 0 | ·0888* | 1. 39 | ·02195 | 3. 0 | 44 ·0 | 45 ·0 |
| 9. 0 | 13. 53* | 9. 0 | ·0896* | 10. 13: | ·01480 | 9. 0 | 46 ·3 | 46 ·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.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Mar. 10 | | Mar. 10 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 22. 34 | 21. 12. 0* | 22. 34 | ·0882* | 20. 22 | ·01862 | 22. 34 | 40 ·0 | 42 ·0 |
| | | | | 23. 59 | ·01928 | | | |
| Mar. 11 | | Mar. 11 | | Mar. 11 | | Mar. 11 | | |
| 8. 45 | 21. 13. 50* | 8. 45 | ·0898* | 0. 0 | ·01928 | 8. 45 | 48 ·2 | 47 ·8 |
| 21. 0 | 7. 23* | 21. 0 | ·0900* | 1. 37 | ·01903 | 21. 0 | 42 ·8 | 43 ·7 |
| | | | | 6. 15 | ·01472 | | | |
| | | | | 7. 29 | ·01513 | | | |
| | | | | 12. 27 | ·01574 | | | |
| | | | | 17. 12 | ·01700 | | | |
| | | | | 22. 39 | ·01907 (†) | | | |
| Mar. 12 | | Mar. 12 | | Mar. 12 | | Mar. 12 | | |
| 1. 0 | 21. 21. 44* | 1. 0 | ·0891* | | (†) | 1. 0 | 46 ·0 | 46 ·3 |
| 3. 0 | 30. 29* | 3. 0 | ·0868* | 0. 25 | ·01870 | 3. 0 | 48 ·7 | 48 ·6 |
| 9. 0 | 12. 47* | 9. 0 | ·0874* | 2. 39 | ·01789 | 9. 0 | 49 ·0 | 49 ·0 |
| 21. 0 | 9. 15* | 21. 0 | ·0886* | 3. 19 | ·01730 | 21. 0 | 42 ·3 | 43 ·9 |
| | | | | 5. 20 | ·01707 | | | |
| | | | | 7. 0 | ·01808 | | | |
| | | | | 9. 15 | ·01850 | | | |
| | | | | 9. 40 | ·01776 | | | |
| | | | | 14. 3 | ·01838 | | | |
| | | | | 18. 10 | ·02085 | | | |
| | | | | 22. 34 | ·02360 | | | |
| | | | | 23. 59 | ·02344 | | | |
| Mar. 13 | | Mar. 13 | | Mar. 13 | | Mar. 13 | | |
| 1. 0 | 21. 22. 40* | 1. 0 | ·0873* | 0. 0 | ·02344 | 1. 0 | 47 ·3 | 48 ·5 |
| 3. 0 | 22. 26* | 3. 0 | ·0876* | 1. 35 | ·02260 | 3. 0 | 50 ·6 | 50 ·8 |
| 9. 0 | 10. 13* | 9. 0 | ·0894* | 4. 15 | ·01928 | 9. 0 | 48 ·0 | 49 ·0 |
| 21. 0 | 8. 42* | 21. 0 | ·0892* | 4. 55 | ·01900 | 21. 0 | 42 ·0 | 43 ·7 |
| | | | | 5. 28 | ·01923 | | | |
| | | | | 6. 29 | ·01850 | | | |
| | | | | 9. 45 | ·01830 | | | |
| | | | | 10. 25 | ·01774 | | | |
| | | | | 12. 26 | ·01852 | | | |
| | | | | 12. 45 | ·01809 | | | |
| | | | | 17. 15 | ·02157 | | | |
| | | | | 19. 28 | ·02370 | | | |
| | | | | 23. 59 | ·02560 | | | |
| Mar. 14 | | Mar. 14 | | Mar. 14 | | Mar. 14 | | |
| 1. 0 | 21. 21. 38* | 1. 0 | ·0881* | 0. 0 | ·02560 | 0. 0 | 45 ·0 | 45 ·7 |
| 3. 0 | 21. 0* | 3. 0 | ·0864* | 1. 15 | ·02498 | 1. 0 | 46 ·8 | 47 ·0 |
| 9. 0 | 7. 28* | 9. 0 | ·0890* | 6. 16 | ·01910 | 3. 0 | 50 ·0 | 50 ·0 |
| 21. 0 | 10. 5* | 21. 0 | ·0885* | 7. 36 | ·01812 | 6. 0 | 53 ·0 | 52 ·0 |
| | | | | 8. 46 | ·01830 | 9. 0 | 51 ·2 | 50 ·7 |
| | | | | | ·02090 | 12. 0 | 48 ·2 | 49 ·0 |
| | | | | 10. 28 | ·02048 | 18. 0 | 43 ·8 | 46 ·0 |
| | | | | 11. 30 | ·01960 | 21. 0 | 40 ·5 | 42 ·8 |
| | | | | 12. 36 | ·01994 | | | |
| | | | | 13. 4 | ·01967 | | | |
| | | | | 20. 39 | ·02773 | | | |
| | | | | 23. 59 | ·02650 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Mar. 15 | | Mar. 15 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 1. 0 | 21. 20. 55* | 1. 0 | ·0876* | 0. 0 | ·02650 | 0. 0 | 42 ·c | 43 ·c |
| 3. 0 | 19. 14* | 3. 0 | ·0892* | 1. 30 | ·02563 | 1. 0 | 44 ·c | 45 ·2 |
| 9. 0 | 13. 30* | 9. 0 | ·0896* | 6. 59: | ·01963 | 3. 0 | 46 ·7 | 48 ·o |
| 21. 0 | 10. 31* | 21. 0 | ·0888* | 10. 57 | ·01850 | 9. 0 | 48 ·c | 48 ·7 |
| | | | | 23. 59 | ·02312 | 21. 0 | 44 ·c | 45 ·1 |
| Mar. 16 | | Mar. 16 | | Mar. 16 | | Mar. 16 | | |
| 1. 0 | 21. 17. 8* | 1. 0 | ·0886* | 0. 0 | ·02312 | 1. 0 | 48 ·2 | 48 ·5 |
| 3. 0 | 20. 34* | 3. 0 | ·0894* | 1. 57 | ·02222 | 3. 0 | 51 ·4 | 51 ·7 |
| 9. 0 | 14. 31* | 9. 0 | ·0906* | 5. 39 | ·01712 | 9. 0 | 53 ·0 | 53 ·5 |
| 21. 0 | 8. 40* | 21. 0 | ·0891* | 7. 10 | ·01788 | 21. 0 | 47 ·5 | 48 ·o |
| | | | | 12. 14 | ·01738 | | | |
| | | | | 14. 15 | ·01847 | | | |
| | | | | 18. 43 | ·02312 | | | |
| | | | | 22. 36 | ·02558 | | | |
| | | | | 23. 45 | ·02555 (†) | | | |
| Mar. 17 | | Mar. 17 | | Mar. 17 | | Mar. 17 | | |
| 1. 0 | 21. 23. 37* | 1. 0 | ·0887* | | (†) | 1. 0 | 52 ·0 | 53 ·0 |
| 3. 0 | 22. 14* | 3. 0 | ·0856* | 0. 57 | ·02493 | 3. 0 | 55 ·0 | 55 ·1 |
| 9. 0 | 8. 15* | 9. 0 | ·0868* | 2. 31 | ·02403 | 9. 0 | 54 ·5 | 55 ·5 |
| 22. 43 | 19. 15* | 22. 43 | ·0840* | 4. 28 | ·02137 | 22. 43 | 51 ·6 | 52 ·3 |
| | | | | 8. 12 | ·01830 | | | |
| | | | | 11. 41 | ·01764 | | | |
| | | | | 11. 54 | ·01714 | | | |
| | | | | 12. 22 | ·01693 | | | |
| | | | | 13. 41 | ·01755 | | | |
| | | | | 14. 42 | ·01712 | | | |
| | | | | 21. 30 | ·02200 | | | |
| | | | | 23. 59 | ·02237 | | | |
| Mar. 18 | | Mar. 18 | | Mar. 18 | | Mar. 18 | | |
| 8. 45 | 21. 11. 31* | 8. 45 | ·0870* | 0. 0 | ·02237 | 8. 45 | 52 ·2 | 53 ·8 |
| 21. 0 | 15. 19* | 21. 0 | ·0866* | 2. 13: | ·02328 | 21. 0 | 45 ·0 | 46 ·8 |
| | | | | 4. 37 | ·02110 | | | |
| | | | | 8. 30 | ·01800 | | | |
| | | | | 9. 30 | ·01830 | | | |
| | | | | 9. 49 | ·01807 | | | |
| | | | | 15. 31 | ·02200 | | | |
| | | | | 16. 56 | ·02362 | | | |
| | | | | 21. 8 | ·02698 | | | |
| | | | | 23. 59 | ·02690 | | | |
| Mar. 19 | | Mar. 19 | | Mar. 19 | | Mar. 19 | | |
| 1. 0 | 21. 26. 17* | 1. 0 | ·0865* | 0. 0 | ·02690 | 1. 0 | 50 ·5 | 51 ·7 |
| 3. 0 | 20. 37* | 3. 0 | ·0859* | 1. 11 | ·02688 | 3. 0 | 53 ·0 | 53 ·7 |
| 9. 0 | 5. 48* | 9. 0 | ·0877* | 3. 30 | ·02408 | 9. 0 | 53 ·2 | 53 ·0 |
| 21. 0 | 11. 29* | 21. 0 | ·0876* | 3. 53 | ·02413 | 21. 0 | 48 ·0 | 49 ·0 |
| | | | | 5. 39 | ·02148 | | | |
| | | | | 5. 59 | ·02150 | | | |
| | | | | 7. 15 | ·02008 | | | |
| | | | | 9. 37 | ·01911 | | | |
| | | | | 10. 51 | ·01920 | | | |
| | | | | 11. 12 | ·01877 | | | |
| | | | | 11. 39 | ·01920 | | | |
| | | | | 12. 30 | ·01920 | | | |
| | | | | 15. 29 | ·02146 | | | |

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 | | Mar. 19 h m | | h m | ° | ° |
| | | | | 22. 22 | ·02572 | | | |
| | | | | 23. 59 | ·02580 | | | |
| Mar. 20 | | Mar. 20 | | Mar. 20 | | Mar. 20 | | |
| 1. 0 | 21. 18. 43* | 1. 0 | ·0876* | 0. 0 | ·02580 | 1. 0 | 52 ·0 | 51 ·2 |
| 3. 0 | 18. 13* | 3. 0 | ·0877* | 2. 12 | ·02437 | 3. 0 | 54 ·0 | 53 ·7 |
| 9. 0 | 8. 30* | 9. 0 | ·0886* | 5. 21 | ·02066 | 9. 0 | 53 ·0 | 53 ·0 |
| 21. 0 | 9. 19* | 21. 0 | ·0869* | 8. 58 | ·01952 | 21. 0 | 50 ·0 | 51 ·3 |
| | | | | 12. 40 | ·01994 | | | |
| | | | | 13. 16 | ·02030 | | | |
| | | | | 13. 55 | ·02018 | | | |
| | | | | 15. 46 | ·02138 | | | |
| | | | | 20. 30 | ·02310 | | | |
| | | | | 22. 20 | ·02322 | | | |
| | | | | 23. 59 | ·02228 | | | |
| Mar. 21 | | Mar. 21 | | Mar. 21 | | Mar. 21 | | |
| 1. 0 | 21. 23. 9* | 1. 0 | ·0878* | 0. 0 | ·02228 | 0. 0 | 52 ·3 | 52 ·8 |
| 3. 0 | 21. 56* | 3. 0 | ·0878* | 2. 13 | ·02278 | 1. 0 | 53 ·0 | 53 ·0 |
| 9. 0 | 9. 43* | 9. 0 | ·0883* | 9. 12: | ·01890 | 3. 0 | 54 ·8 | 54 ·3 |
| 21. 0 | 8. 49* | 21. 0 | ·0876* | 17. 5 | ·02282 | 6. 0 | 54 ·0 | 54 ·0 |
| | | | | 21. 25 | ·02712 | 9. 0 | 52 ·0 | 53 ·0 |
| | | | | 23. 59 | ·02627 | 12. 0 | 49 ·7 | 51 ·6 |
| | | | | | | 18. 0 | 43 ·7 | 46 ·9 |
| | | | | | | 21. 0 | 43 ·4 | 45 ·3 |
| Mar. 22 | | Mar. 22 | | Mar. 22 | | Mar. 22 | | |
| | (†) | | (†) | 0. 0 | ·02627 | 0. 0 | 46 ·0 | 47 ·0 |
| 0. 15 | 21. 22. 0 | 1. 0 | ·0876* | 1. 54 | ·02570 | 1. 0 | 47 ·0 | 48 ·0 |
| 0. 28 | 21. 45 | 3. 0 | ·0867* | 6. 55 | ·02132 | 3. 0 | 49 ·6 | 51 ·0 |
| 1. 15 | 26. 0 | 6. 30 | ·0882 | 10. 2 | ·01947 | 9. 0 | 49 ·8 | 51 ·0 |
| 1. 45 | 23. 0 | 6. 46 | ·0884 | 16. 7 | ·02312 | 21. 0 | 44 ·0 | 45 ·0 |
| 2. 7 | 22. 10 | 7. 5 | ·0882 | 21. 14 | ·02711 | | | |
| 2. 19 | 24. 50 | 7. 36 | ·0885 | 22. 58 | ·02606 | | | |
| 2. 40 | 23. 30 | 7. 50 | ·0882 | 23. 59 | ·02580 | | | |
| 2. 49 | 24. 15 | 8. 22 | ·0884 | | | | | |
| 3. 12 | 22. 10 | 8. 40 | ·0894 | | | | | |
| 3. 23 | 22. 20 | 8. 51 | ·0892 | | | | | |
| 3. 54 | 20. 15 | 9. 15 | ·0880 | | | | | |
| 4. 4 | 17. 0 | 9. 32 | ·0909 | | | | | |
| 4. 42 | 15. 10 | 9. 43 | ·0903 | | | | | |
| 4. 51 | 16. 10 | 9. 52 | ·0903 | | | | | |
| 5. 53 | 14. 30 | 10. 10 | ·0878 | | | | | |
| 6. 44 | 14. 0 | 10. 37 | ·0891 | | | | | |
| 6. 55 | 14. 45 | 10. 48 | ·0885 | | | | | |
| 7. 30 | 13. 30 | 11. 20 | ·0894 | | | | | |
| 7. 53 | 14. 30 | 14. 42 | ·0899 | | | | | |
| 8. 11 | 13. 40 | 15. 18: | ·0897 | | | | | |
| 8. 19 | 15. 0 | 16. 7 | ·0903 | | | | | |
| 8. 39 | 11. 15 | 18. 36 | ·0907 | | | | | |
| 9. 9 | 17. 30 | 20. 2 | ·0900 | | | | | |
| 9. 15 | 16. 20 | | *** | | | | | |
| 9. 39 | 7. 10 | 22. 0 | ·0871 | | | | | |
| 9. 45 | 13. 10 | 23. 59 | ·0874 | | | | | |
| 9. 55 | 13. 25 | | | | | | | |
| 10. 13 | 16. 45 | | | | | | | |
| 10. 40 | 8. 30 | | | | | | | |
| 12. 15 | 14. 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. |
|---|---|---|---|---|---|---|---|---|
| Mar. 22 h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 12. 42 | 21. 13. 50 | | | | | | | |
| 13. 15 | 15. 10 | | | | | | | |
| 13. 52 | 14. 0 | | | | | | | |
| 14. 37 | 14. 10 | | | | | | | |
| 15. 39 | 16. 40 | | | | | | | |
| 16. 21 | 13. 20 | | | | | | | |
| 17. 30 | 12. 20 | | | | | | | |
| 17. 42 | 11. 30 | | | | | | | |
| 17. 51 | 11. 50 | | | | | | | |
| 19. 0 | 9. 0 | | | | | | | |
| 20. 43 | 7. 10 | | | | | | | |
| 21. 42 | 10. 45 | | | | | | | |
| 23. 22 | 23. 0 | | | | | | | |
| 23. 59 | 25. 15 | | | | | | | |
| Mar. 23 | | Mar. 23 | | Mar. 23 | | Mar. 23 | | |
| 0. 0 | 21. 25. 15 | 0. 0 | ·0874 | 0. 0 | ·02580 | 1. 0 | 48 ·3 | 48 ·0 |
| 1. 6 | 28. 5 | 1. 11 | ·0881 | 2. 0 | ·02528 | 3. 0 | 50 ·0 | 49 ·0 |
| 1. 17 | 25. 20 | 1. 20 | ·0885 | 5. 42 | ·02388 | 9. 0 | 48 ·6 | 48 ·5 |
| 1. 26 | 26. 30 | 1. 38 | ·0879 | 8. 12 | ·02430 | 21. 0 | 43 ·1 | 44 ·8 |
| 1. 51 | 26. 10 | | *** | 10. 43 | ·02379 | | | |
| 2. 12 | 24. 20 | 2. 21 | ·0885 | 15. 4 | ·02448 | | | |
| 2. 37 | 20. 40 | 2. 47 | ·0883 | 18. 44 | ·02630 | | | |
| 2. 55 | 21. 30 | 3. 0 | ·0889 | 21. 15 | { ·02507 | | | |
| 3. 23 | 18. 35 | 3. 22 | ·0885 | | { ·02070 | | | |
| 3. 40 | 19. 20 | 4. 0 | ·0889 | 23. 59 | ·02063 | | | |
| 4. 18 | 16. 0 | 4. 22 | ·0884 | | | | | |
| 5. 20 | 14. 30 | | *** | | | | | |
| 6. 10 | 14. 20 | 5. 3 | ·c887 | | | | | |
| 6. 54 | 12. 55 | 5. 10 | ·0891 | | | | | |
| 7. 5 | 13. 35 | 5. 27 | ·0888 | | | | | |
| 7. 31 | 10. 45 | 6. 20 | ·0894 | | | | | |
| 7. 43 | 11. 10 | 6. 42 | ·0891 | | | | | |
| 8. 13 | 6. 15 | 7. 5 | ·0899 | | | | | |
| 8. 40 | 8. 45 | 7. 23 | ·0897 | | | | | |
| 8. 52 | 8. 30 | 7. 45 | ·0898 | | | | | |
| 9. 10 | 5. 5 | 7. 52 | ·0897 | | | | | |
| 9. 56 | 9. 20 | 8. 20 | ·0911 | | | | | |
| 10. 23 | 11. 0 | 9. 7 | ·0897 | | | | | |
| 11. 0 | 11. 30 | 9. 25 | ·0898 | | | | | |
| 11. 55 | 14. 20 | 9. 47 | ·0892 | | | | | |
| 12. 33 | 12. 20 | 10. 11 | ·0897 | | | | | |
| 12. 54 | 13. 20 | 10. 33 | ·0893 | | | | | |
| 13. 27 | 11. 40 | | *** | | | | | |
| 14. 5 | 10. 50 | 11. 50 | ·0896 | | | | | |
| 14. 26 | 15. 0 | 12. 20 | ·0901 | | | | | |
| 15. 16: | 8. 20 | 12. 43 | ·0897 | | | | | |
| 15. 42 | 10. 0 | | *** | | | | | |
| 15. 50 | 8. 20 | 13. 40 | ·0899 | | | | | |
| 16. 44 | 8. 55 | 13. 52 | ·0895 | | | | | |
| 17. 30 | 11. 30 | 15. 16 | ·0911 | | | | | |
| 19. 1 | 8. 35 | 15. 47 | ·0901 | | | | | |
| 20. 20 | 7. 45 | 16. 8 | ·0901 | | | | | |
| 21. 26 | 12. 15 | 16. 17 | ·0897 | | | | | |
| 22. 15 | 16. 45 | | *** | | | | | |
| 22. 41 | 20. 0 | 19. 15 | ·0899 | | | | | |
| 23. 32 | 23. 30 | 22. 17 | ·0876 | | | | | |
| 23. 59 | 24. 20 | 22. 36 | ·0877 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Mar.23 h m | | h m | | h m | ° | ° |
| | | 23. 49 | ·0870 | | | | | |
| | | 23. 59 | ·0871 | | | | | |
| Mar.24 | | Mar.24 | | Mar.24 | | Mar.24 | | |
| 0. 0 | 21. 24. 20 | 0. 0 | ·0871 | 0. 0 | ·02063 | 1. 0 | 47 ·3 | 47 ·0 |
| 0. 45 | 24. 5 | | *** | 1. 51 | ·01972 | 3. 0 | 50 ·0 | 48 ·8 |
| 1. 44 | 23. 0 | 2. 4 | ·0884 | 5. 17. | ·01620 | 9. 10 | 51 ·0 | 49 ·7 |
| 2. 1 | 21. 50 | 2. 37 | ·0881 | 9. 12 | ·01430 | 21. 50 | 44 ·0 | 45 ·3 |
| 2. 13 | 22. 0 | 3. 6 | ·0887 | 14. 45 | ·01482 | | | |
| 2. 22 | 21. 10 | 3. 45 | ·0883 | 23. 59 | ·01882 | | | |
| 4. 7 | 15. 30 | 4. 18 | ·0885 | | | | | |
| 5. 10 | 14. 20 | 5. 43 | ·0882 | | | | | |
| 6. 52 | 13. 50 | 6. 54 | ·0890 | | | | | |
| 7. 41 | 8. 0 | 7. 17 | ·0887 | | | | | |
| 7. 55 | 10. 0 | | *** | | | | | |
| 8. 14 | 11. 0 | 8. 20 | ·0899 | | | | | |
| 8. 39 | 10. 30 | 8. 33 | ·0896 | | | | | |
| 8. 55 | 11. 45 | 8. 47 | ·0897 | | | | | |
| 10. 7 | 11. 10 | 9. 6 | ·0890 | | | | | |
| 10. 22 | 13. 0 | 9. 42 | ·0895 | | | | | |
| 11. 5 | 12. 50 | 9. 51 | ·0888 | | | | | |
| 11. 29 | 14. 20 | | *** | | | | | |
| 12. 7 | 13. 20 | 11. 50 | ·0896 | | | | | |
| 13. 36 | 12. 50 | 12. 32 | ·0891 | | | | | |
| 14. 0 | 9. 30 | 13. 27 | ·0901 | | | | | |
| 14. 25 | 18. 10 | 13. 53 | ·0891 | | | | | |
| 15. 9 | 11. 30 | 14. 42 | ·0907 | | | | | |
| 19. 12 | 10. 20 | 15. 8 | ·0899 | | | | | |
| 19. 21 | 9. 30 | | *** | | | | | |
| 20. 21 | 8. 45 | 19. 8 | ·0902 | | | | | |
| 21. 30 | 10. 30 | 22. 57 | ·0877 | | | | | |
| 23. 59 | 18. 20 | 23. 59 | ·0880 | | | | | |
| Mar.25 | | Mar.25 | | Mar.25 | | Mar.25 | | |
| 0. 0 | 21. 18. 20 | 0. 0 | ·0880 | 0. 0 | ·01882 | 8. 55 | 48 ·7 | 50 ·2 |
| 0. 14 | 21. 0 | | *** | 0. 45 | ·01870 | 21. 0 | 44 ·0 | 46 ·0 |
| 1. 10 | 22. 40 | 3. 15 | ·0891 | 11. 12. | ·01430 | | | |
| 3. 36 | 19. 0 | 4. 10 | ·0893 | 22. 16 | ·01812 | | | |
| 5. 11 | 16. 20 | 4. 27 | ·0889 | 23. 59 | ·01798 | | | |
| 6. 30 | 15. 40 | 4. 43 | ·0892 | | | | | |
| 6. 44 | 16. 20 | 5. 9 | ·0890 | | | | | |
| 7. 7 | 14. 30 | 5. 23 | ·0892 | | | | | |
| 8. 12 | 14. 10 | 5. 47 | ·0885 | | | | | |
| 9. 25 | 12. 45 | 6. 10 | ·0891 | | | | | |
| 9. 51 | 10. 25 | 6. 25 | ·0886 | | | | | |
| 10. 7 | 10. 50 | 6. 44 | ·0894 | | | | | |
| 10. 29 | 9. 30 | 6. 52 | ·0894 | | | | | |
| 11. 38 | 12. 0 | 7. 3 | ·0891 | | | | | |
| 13. 1 | 13. 45 | 7. 32 | ·0897 | | | | | |
| 17. 55 | 11. 30 | 7. 45 | ·0894 | | | | | |
| 19. 51 | 6. 0 | 8. 3 | ·0899 | | | | | |
| 20. 39 | 5. 40 | 8. 16 | ·0895 | | | | | |
| 21. 15 | 7. 55 | 8. 45 | ·0899 | | | | | |
| 22. 29 | 15. 0 | 9. 22 | ·0899 | | | | | |
| 23. 28 | 23. 0 | 9. 40 | ·0897 | | | | | |
| 23. 59 | 24. 45 | | *** | | | | | |
| | | 10. 28 | ·0897 | | | | | |
| | | 11. 30 | ·0896 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Mar.25 h m | | h m | | h m | ° | ° |
| | | 18. 7 | ·0906 | | | | | |
| | | 19. 15 | ·0903 | | | | | |
| | | 21. 43 | ·0874 | | | | | |
| | | | *** | | | | | |
| | | 23. 40 | ·0866 | | | | | |
| | | 23. 59 | ·0870 | | | | | |
| Mar.26 | | Mar.26 | | Mar.26 | | Mar.26 | | |
| 0. 0 | 21. 24. 45 | 0. 0 | ·0871 | 0. 0 | ·01798 | 1. 0 | 49 ·0 | 49 ·0 |
| 0. 30 | 25. 40 | | *** | 1. 44 | ·01677 | 3. 0 | 51 ·8 | 51 ·0 |
| 1. 49 | 24. 50 | 0. 46 | ·0881 | 5. 40 | ·01310 | 9. 0 | 51 ·5 | 51 ·2 |
| 4. 10 | 16. 35 | 1. 15 | ·0878 | 8. 32 | ·01516 | 21. 0 | 43 ·0 | 45 ·0 |
| 7. 0 | 12. 30 | 2. 14 | ·0887 | 11. 29 | ·01544 | | | |
| 7. 40 | 12. 45 | 2. 43 | ·0888 | 14. 39 | ·01674 | | | |
| 8. 12 | 8. 10 | 3. 8 | ·0885 | 14. 45 | ·01640 | | | |
| 9. 28 | 10. 0 | 3. 51 | ·0888 | 15. 31 | ·01775 | | | |
| 9. 43 | 8. 30 | 4. 7 | ·0885 | 20. 21 | ·02192 | | | |
| 10. 9 | 7. 45 | | *** | 22. 19 | ·02310 | | | |
| 10. 32 | 11. 0 | 6. 18 | ·0894 | 23. 59 | ·02270 | | | |
| 11. 40 | 13. 5 | 6. 37 | ·0890 | | | | | |
| 13. 35 | 12. 50 | 7. 17 | ·0889 | | | | | |
| | (†) | 7. 36 | ·0892 | | | | | |
| 15. 13 | 21. 1. 0 | 7. 50 | ·0887 | | | | | |
| 15. 30 | 20. 59. 30 | 8. 13 | ·0887 | | | | | |
| 15. 43 | 21. 2. 10 | 9. 2 | ·0871 | | | | | |
| 16. 5 | 8. 30 | 9. 42 | ·0883 | | | | | |
| 16. 11 | 7. 30 | 10. 3 | ·0883 | | | | | |
| 16. 17 | 9. 50 | 10. 37 | ·0897 | | | | | |
| 16. 31 | 9. 15 | | *** | | | | | |
| 16. 45 | 11. 25 | 12. 43 | ·0899 | | | | | |
| 17. 11 | 8. 0 | 12. 49 | ·0897 | | | | | |
| 17. 16 | 11. 50 | | *** | | | | | |
| 17. 37 | 9. 45 | 13. 2 | ·0899 | | | | | |
| 17. 45 | 11. 15 | | *** | | | | | |
| 17. 59 | 10. 20 | 13. 40 | ·0900 | | | | | |
| 18. 8 | 10. 55 | 14. 0 | ·0918 | | | | | |
| 18. 26 | 6. 40 | 14. 10 | ·0911 | | | | | |
| 18. 40 | 12. 30 | | *** | | | | | |
| 18. 47 | 10. 40 | 14. 43 | ·0902 | | | | | |
| 19. 4 | 12. 10 | 14. 50 | ·0918 | | | | | |
| 19. 12 | 11. 30 | 15. 28 | ·0894 | | | | | |
| 19. 21 | 16. 55 | 15. 42 | ·0901 | | | | | |
| 19. 27 | 16. 20 | | *** | | | | | |
| 19. 41 | 19. 30 | 16. 1 | ·0900 | | | | | |
| 20. 21 | 10. 0 | | *** | | | | | |
| 20. 37 | 7. 40 | 16. 42 | ·0908 | | | | | |
| 20. 58 | 7. 10 | 16. 50 | ·0905 | | | | | |
| 21. 9 | 8. 30 | 16. 54 | ·0907 | | | | | |
| 21. 22 | 6. 55 | 17. 3 | ·0903 | | | | | |
| 21. 43 | 11. 40 | 17. 17 | ·0911 | | | | | |
| 21. 54 | 11. 0 | | *** | | | | | |
| 22. 13 | 14. 45 | 18. 13 | ·0912 | | | | | |
| 22. 20 | 14. 5 | 18. 28 | ·0917 | | | | | |
| | *** | 18. 40 | ·0911 | | | | | |
| 23. 37 | 18. 55 | 18. 51 | ·0911 | | | | | |
| | (†) | 19. 2 | ·0908 | | | | | |
| | | | *** | | | | | |
| | | 20. 6 | ·0913 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Mar.26 h m | | h m | | h m | ° | ° |
| | | 20. 48 | ·0901 | | | | | |
| | | 21. 5 | ·0903 | | | | | |
| | | 21. 30 | ·0897 | | | | | |
| | | 21. 45 | ·0885 | | | | | |
| | | 21. 57 | ·0885 | | | | | |
| | | 22. 23 | ·0874 | | | | | |
| | | 22. 47 | ·0873 | | | | | |
| | | 23. 35 | ·0866 | | | | | |
| | | | (†) | | | | | |
| Mar.27 | | Mar.27 | | Mar.27 | | Mar.27 | | |
| 1. 0 | 21. 22. 40* | 1. 0 | ·0870* | 0. 0 | ·02270 | 1. 0 | 47 ·0 | 47 ·3 |
| 3. 0 | 21. 39* | 3. 0 | ·0882* | 1. 29 | ·02236 | 3. 0 | 49 ·5 | 49 ·7 |
| 9. 0 | 9. 38* | 9. 0 | ·0894* | 8. 24: | ·01657 | 9. 0 | 50 ·0 | 51 ·0 |
| 21. 0 | 6. 14* | 21. 0 | ·0868* | 14. 14 | ·01724 | 21. 0 | 50 ·0 | 51 ·3 |
| | | | | 16. 30 | ·01713 | | | |
| | | | | 17. 11 | ·01650 | | | |
| | | | | 18. 27 | ·01644 | | | |
| | | | | 18. 50 | ·01673 | | | |
| | | | | 19. 22 | ·01648 | | | |
| | | | | 19. 43 | ·01691 | | | |
| | | | | 20. 37 | ·01672 | | | |
| | | | | 20. 52 | ·01700 | | | |
| | | | | 21. 11 | ·01640 | | | |
| | | | | 23. 59 | ·01707 | | | |
| Mar.28 | | Mar.28 | | Mar.28 | | Mar.28 | | |
| 1. 0 | 21. 28. 7* | 1. 0 | ·0852* | 0. 0 | ·01707 | 0. 0 | 53 ·7 | 53 ·8 |
| 3. 0 | 25. 23* | 3. 0 | ·0819* | 0. 37 | ·01712 | 1. 0 | 54 ·8 | 54 ·7 |
| 9. 0 | 5. 50* | 9. 0 | ·0826* | 1. 45 | ·01557 | 3. 0 | 57 ·0 | 58 ·0 |
| 21. 0 | 21. 8* | 21. 0 | ·0768* | 3. 43 | ·01820 | 6. 0 | 59 ·5 | 59 ·0 |
| | | | | 8. 24 | {·01884 | 9. 0 | 58 ·7 | 58 ·5 |
| | | | | | {·02264 | 12. 0 | 57 ·2 | 57 ·0 |
| | | | | 11. 42 | ·02107 | 18. 0 | 53 ·2 | 54 ·0 |
| | | | | 12. 12 | ·01980 | 21. 0 | 53 ·0 | 54 ·0 |
| | | | | 13. 7 | ·02090 | | | |
| | | | | 13. 40 | ·02011 | | | |
| | | | | 14. 37 | ·02000 | | | |
| | | | | 14. 50 | ·02090 | | | |
| | | | | 14. 58 | ·02030 | | | |
| | | | | 15. 42 | ·02130 | | | |
| | | | | 16. 12 | ·02040 | | | |
| | | | | 16. 30 | ·02092 | | | |
| | | | | 16. 41 | ·02052 | | | |
| | | | | 16. 57 | ·02077 | | | |
| | | | | 17. 12 | ·02200 | | | |
| | | | | 17. 24 | ·02140 | | | |
| | | | | 17. 40 | ·02190 | | | |
| | | | | 17. 50 | ·02270 | | | |
| | | | | 18. 7 | ·02206 | | | |
| | | | | 18. 25 | ·02309 | | | |
| | | | | 18. 40 | ·02288 | | | |
| | | | | 19. 25 | ·02342 | | | |
| | | | | 20. 39 | ·02612 | | | |
| | | | | 21. 22 | ·02650 | | | |
| | | | | | (†) | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 h m | ° ′ ″ | Mar.29 h m | | Mar.29 h m | | Mar.29 h m | ° | ° |
| 1. 0 | 21. 28. 9* | 1. 0 | ·0839* | | (†) | 0. 0 | 55 ·0 | 55 ·3 |
| 3. 0 | 44. 23* | 3. 0 | ·0871* | 0. 13 | ·01622 | 1. 0 | 56 ·0 | 56 ·0 |
| 9. 0 | 9. 27* | 9. 0 | ·0835* | 1. 10 | ·01696 | 3. 0 | 58 ·0 | 58 ·0 |
| 21. 0 | 13. 21* | 21. 0 | ·0822* | 1. 27 | ·01660 | 9. 0 | 57 ·8 | 58 ·1 |
| | | | | | (†) | 21. 0 | 51 ·5 | 52 ·7 |
| | | | | 2. 41 | ·01632 | | | |
| | | | | 2. 54 | ·01677 | | | |
| | | | | 3. 2 | ·01670 | | | |
| | | | | 3. 30 | ·01820 | | | |
| | | | | 4. 39 | ·01864 | | | |
| | | | | 4. 45 | ·01957 | | | |
| | | | | 5. 11 | ·01922 | | | |
| | | | | 5. 30 | ·01950 | | | |
| | | | | 5. 54 | ·01887 | | | |
| | | | | 6. 54 | ·01876 | | | |
| | | | | 7. 15 | ·01748 | | | |
| | | | | 7. 40 | ·01848 | | | |
| | | | | 8. 15 | ·01790 | | | |
| | | | | 8. 40 | ·01800 | | | |
| | | | | 9. 24 | ·01713 | | | |
| | | | | 10. 5 | ·01806 | | | |
| | | | | 10. 37 | ·01922 | | | |
| | | | | 10. 47 | ·01780 | | | |
| | | | | 11. 42 | ·01750 | | | |
| | | | | 14. 43 | ·01912 | | | |
| | | | | 15. 11 | ·01872 | | | |
| | | | | 17. 37 | ·02141 | | | |
| | | | | 21. 43 | ·02412 | | | |
| | | | | 22. 40 | ·02337 | | | |
| | | | | 23. 59 | ·02290 | | | |
| Mar.30 | | Mar.30 | | Mar.30 | | Mar.30 | | |
| | (†) | | (†) | 0. 0 | ·02290 | 1. 0 | 54 ·8 | 54 ·5 |
| 1. 0 | 21. 24. 22* | 0. 27 | ·0836 | 4. 7 | ·02230 | 3. 0 | 56 ·0 | 55 ·0 |
| 1. 30 | 23. 30 | 0. 46 | ·0832 | 8. 0 | ·02079 | 9. 0 | 55 ·2 | 54 ·0 |
| 1. 48 | 21. 40 | 1. 48 | ·0844 | 13. 43 | ·02323 | 21. 0 | 51 ·0 | 51 ·8 |
| 1. 55 | 21. 55 | 2. 17 | ·0846 | 23. 59 | ·01851 | | | |
| 2. 37 | 19. 20 | 2. 38 | ·0844 | | | | | |
| 2. 50 | 18. 20 | | (†) | | | | | |
| 3. 0 | 19. 0 | 3. 0 | ·0852* | | | | | |
| 3. 39 | 15. 0 | 3. 46 | ·0867 | | | | | |
| 3. 44 | 15. 20 | 4. 17 | ·0878 | | | | | |
| 4. 0 | 10. 30 | 5. 25 | ·0866 | | | | | |
| 4. 28 | 12. 30 | 6. 8 | ·0868 | | | | | |
| 5. 15 | 12. 40 | 6. 20 | ·0873 | | | | | |
| 6. 23 | 8. 45 | 6. 40 | ·0861 | | | | | |
| 6. 37 | 11. 15 | 6. 58 | ·0867 | | | | | |
| 6. 52 | 10. 0 | 7. 34 | ·0861 | | | | | |
| 7. 12 | 12. 15 | 8. 0 | ·0871 | | | | | |
| 7. 25 | 12. 25 | 8. 19 | ·0864 | | | | | |
| 7. 50 | 9. 0 | 14. 45 | ·0870 | | | | | |
| 8. 23 | 14. 0 | 15. 30 | ·0868 | | | | | |
| 12. 42 | 14. 0 | 18. 30 | ·0877 | | | | | |
| 14. 0 | 12. 40 | | *** | | | | | |
| 15. 28 | 13. 0 | 20. 15 | ·0855 | | | | | |
| 15. 52 | 13. 50 | 21. 36 | ·0841 | | | | | |
| 17. 30 | 12. 45 | 22. 15 | ·0842 | | | | | |
| 17. 52 | 13. 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. |
|---|---|---|---|---|---|---|---|---|
| Mar. 30 | | Mar. 30 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 18. 21 | 21. 12. 45 | 23. 46 | ·0853 | | | | | |
| 18. 30 | 11. 40 | | *** | | | | | |
| 18. 44 | 12. 20 | 23. 59 | ·0853 | | | | | |
| 20. 6 | 9. 15 | | | | | | | |
| 20. 25 | 10. 0 | | | | | | | |
| 20. 39 | 9. 30 | | | | | | | |
| 22. 0 | 12. 20 | | | | | | | |
| 23. 29 | 19. 0 | | | | | | | |
| 23. 59 | 21. 55 | | | | | | | |
| Mar. 31 | | Mar. 31 | | Mar. 31 | | Mar. 31 | | |
| 0. 0 | 21. 21. 55 | 0. 0 | ·0853 | 0. 0 | ·01851 | 1. 0 | 53 ·0 | 52 ·7 |
| 0. 28 | 21. 30 | 2. 27 | ·0864 | 3. 5 | ·01850 | 3. 0 | 55 ·0 | 53 ·8 |
| 0. 42 | 23. 0 | 2. 38 | ·0861 | 5. 22 | ·01772 | 9. 0 | 53 ·9 | 53 ·4 |
| 1. 11 | 22. 30 | 2. 47 | ·0863 | 6. 49 | ·01765 | 22. 20 | 51 ·0 | 51 ·4 |
| 1. 17 | 24. 35 | 2. 58 | ·0861 | 10. 58 | ·01890 | | | |
| 2. 9 | 23. 40 | 4. 0 | ·0875 | | ·01827 | | | |
| 2. 29 | 19. 50 | 4. 47 | ·0871 | 12. 21 | ·01850 | | | |
| 2. 53 | 18. 25 | 5. 49 | ·0878 | 12. 52 | ·01832 | | | |
| 3. 2 | 18. 40 | 6. 50 | ·0874 | 15. 15 | ·01862 | | | |
| 3. 38 | 16. 45 | 8. 36 | ·0883 | 15. 40 | ·01837 | | | |
| 6. 8 | 12. 30 | 9. 2 | ·0881 | 20. 14 | ·01810 | | | |
| 6. 30 | 12. 20 | 10. 23 | ·0886 | | ·01772 | | | |
| 7. 37 | 10. 15 | 10. 40 | ·0881 | 23. 59 | ·01776 | | | |
| 7. 51 | 11. 0 | 11. 10 | ·0879 | | | | | |
| 10. 8 | 13. 10 | 11. 21 | ·0881 | | | | | |
| 10. 52 | 10. 30 | 11. 33 | ·0877 | | | | | |
| 12. 11 | 9. 40 | 12. 15 | ·0877 | | | | | |
| 12. 29 | 13. 40 | 12. 37 | ·0888 | | | | | |
| 13. 16 | 6. 45 | 12. 44 | ·0885 | | | | | |
| 13. 54 | 8. 10 | 12. 58 | ·0891 | | | | | |
| 14. 9 | 9. 50 | 13. 23 | ·0890 | | | | | |
| 14. 15 | 8. 30 | 13. 30 | ·0884 | | | | | |
| 14. 43 | 11. 5 | 14. 4 | ·0877 | | | | | |
| 15. 15 | 18. 30 | 14. 45 | ·0878 | | | | | |
| 15. 43 | 14. 20 | 15. 10 | ·0875 | | | | | |
| 15. 50 | 14. 45 | 15. 42 | ·0889 | | | | | |
| 16. 21 | 10. 50 | | *** | | | | | |
| 16. 42 | 12. 30 | 17. 0 | ·0892 | | | | | |
| 16. 54 | 13. 0 | | *** | | | | | |
| 17. 15 | 11. 45 | 19. 15 | ·0865 | | | | | |
| 17. 57 | 13. 20 | 20. 3 | ·0864 | | | | | |
| 18. 29 | 12. 30 | 20. 18 | ·0859 | | | | | |
| 19. 11 | 9. 20 | 21. 2 | ·0860 | | | | | |
| 20. 0 | 13. 0 | 22. 4 | ·0851 | | | | | |
| 20. 45 | 10. 30 | 23. 59 | ·0856 | | | | | |
| 21. 4 | 11. 45 | | | | | | | |
| 21. 12 | 11. 20 | | | | | | | |
| 21. 16 | 11. 50 | | | | | | | |
| 21. 30 | 11. 20 | | | | | | | |
| 21. 57 | 13. 15 | | | | | | | |
| 22. 10 | 13. 0 | | | | | | | |
| 23. 59 | 19. 30 | | | | | | | |
| Apr. 1 | | Apr. 1 | | Apr. 1 | | Apr. 1 | | |
| 0. 0 | 21. 19. 30 | 0. 0 | ·0856 | 0. 0 | ·01776 | 8. 0 | 54 ·0 | 53 ·5 |
| 0. 44 | 19. 45 | 1. 3 | ·0860 | 1. 55 | ·01769 | 21. 0 | 48 ·0 | 48 ·0 |
| 1. 13 | 21. 40 | 1. 45 | ·0856 | 9. 30: | ·01422 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 2. 13 | 21. 19. 50 | 2. 17 | ·0867 | 19. 36 | ·01830 | | | |
| 2. 31 | 20. 35 | 3. 26 | ·0868 | 20. 43 | ·01720 | | | |
| 3. 14 | 18. 20 | 3. 40 | ·0872 | 23. 59 | ·01622 | | | |
| 4. 54 | 15. 20 | 4. 15 | ·0869 | | | | | |
| 5. 7 | 15. 30 | 5. 47 | ·0872 | | | | | |
| 5. 17 | 14. 40 | 6. 5 | ·0876 | | | | | |
| 6. 44 | 14. 25 | 6. 21 | ·0874 | | | | | |
| 7. 16 | 13. 20 | 7. 43 | ·0881 | | | | | |
| 9. 50 | 14. 30 | 8. 0 | ·0875 | | | | | |
| 10. 25 | 13. 45 | 8. 37 | ·0881 | | | | | |
| 11. 0 | 15. 5 | 11. 46 | ·0887 | | | | | |
| 12. 43 | 12. 15 | 13. 36 | ·0899 | | | | | |
| 12. 54 | 12. 40 | 13. 53 | ·0894 | | | | | |
| 13. 16 | 11. 50 | 18. 15 | ·0897 | | | | | |
| 13. 45 | 13. 0 | 20. 3 | ·0892 | | | | | |
| 14. 14 | 11. 40 | 21. 41: | ·0869 | | | | | |
| | *** | 22. 15 | ·0880 | | | | | |
| 18. 11 | 10. 30 | 23. 43 | ·0861 | | | | | |
| 19. 44 | 6. 0 | 23. 59 | ·0864 | | | | | |
| 20. 2 | 7. 0 | | | | | | | |
| 20. 50 | 6. 40 | | | | | | | |
| 21. 38 | 11. 40 | | | | | | | |
| 21. 54 | 11. 40 | | | | | | | |
| 23. 59 | 21. 0 | | | | | | | |
| Apr. 2 | | Apr. 2 | | Apr. 2 | | Apr. 2 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0864 | 0. 0 | ·01622 | 1. 0 | 50 ·0 | 49 ·3 |
| 1. 10 | 22. 20 | 0. 34 | ·0869 | 2. 16 | ·01597 | 3. 0 | 52 ·0 | 51 ·0 |
| 1. 16 | 21. 35 | 1. 6 | ·0866 | 8. 14 | ·01360 | 9. 0 | 49 ·0 | 50 ·0 |
| 2. 0 | 22. 10 | 4. 22 | ·0885 | 11. 3 | ·01380 | 21. 0 | 43 ·8 | 45 ·3 |
| 2. 57 | 19. 30 | 4. 48 | ·0881 | 12. 0 | ·01344 | | | |
| 4. 6 | 18. 20 | | *** | 14. 12 | ·01530 | | | |
| 4. 56 | 15. 30 | 5. 50 | ·0891 | 16. 49 | ·01643 | | | |
| 5. 51 | 14. 0 | 6. 53 | ·0889 | 20. 57 | ·01650 | | | |
| 6. 15 | 14. 55 | 7. 40 | ·0896 | 23. 59 | ·01507 | | | |
| 6. 30 | 14. 0 | 8. 7 | ·0897 | | | | | |
| 7. 12 | 15. 0 | 8. 23 | ·0901 | | | | | |
| 9. 41 | 15. 30 | 9. 0 | ·0893 | | | | | |
| 10. 30 | 13. 40 | | *** | | | | | |
| 11. 13 | 1. 15 | 10. 10 | ·0895 | | | | | |
| 11. 32 | 7. 0 | 10. 33 | ·0908 | | | | | |
| 11. 52 | 1. 0 | 10. 47 | ·0902 | | | | | |
| 12. 0 | 5. 50 | 11. 5 | ·0921 | | | | | |
| 14. 21 | 14. 20 | 11. 37 | ·0881 | | | | | |
| 15. 1 | 13. 45 | 11. 49 | ·0904 | | | | | |
| 15. 13 | 14. 20 | 12. 10 | ·0860 | | | | | |
| 15. 24 | 13. 30 | 12. 36 | ·0874 | | | | | |
| 16. 0 | 18. 45 | 16. 7 | ·0903 | | | | | |
| 16. 30 | 15. 30 | 16. 45 | ·0897 | | | | | |
| 16. 39 | 15. 40 | 17. 33 | ·0907 | | | | | |
| 16. 55 | 13. 5 | 17. 50 | ·0898 | | | | | |
| 17. 26 | 12. 45 | 18. 7 | ·0905 | | | | | |
| 17. 35 | 14. 5 | 18. 40 | ·0892 | | | | | |
| 17. 55 | 12. 20 | 18. 50 | ·0896 | | | | | |
| 18. 17 | 13. 45 | 19. 16 | ·0895 | | | | | |
| 18. 30 | 10. 40 | 21. 25 | ·0873 | | | | | |
| 18. 50 | 16. 0 | 21. 38 | ·0876 | | | | | |
| 19. 11 | 11. 10 | 22. 19 | ·0857 | | | | | |

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. 2 | | Apr. 2 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 19. 27 | 21. 10. 30 | 22. 50 | ·0864 | | | | | |
| 19. 59 | 12. 50 | 23. 15 | ·0846 | | | | | |
| 20. 51 | 12. 50 | 23. 39 | ·0851 | | | | | |
| 21. 6 | 15. 50 | | (†) | | | | | |
| 21. 43 | 14. 25 | | | | | | | |
| 21. 51 | 16. 15 | | | | | | | |
| 21. 56 | 15. 30 | | | | | | | |
| 23. 15 | 27. 10 | | | | | | | |
| 23. 30 | 26. 10 | | | | | | | |
| 23. 39 | 27. 30 | | | | | | | |
| 23. 59 | 25. 0 | | | | | | | |
| Apr. 3 | | Apr. 3 | | Apr. 3 | | Apr. 3 | | |
| 0. 0 | 21. 25. 0 | | (†) | 0. 0 | ·01507 | 1. 0 | 49 ·0 | 50 ·0 |
| 1. 4 | 27. 20 | 1. 0 | ·0861* | 1. 51 | ·01447 | 3. 0 | 53 ·0 | 53 ·8 |
| 1. 40 | 25. 10 | 3. 0 | ·0873* | 4. 29 | ·01007 | 9. 0 | 54 ·5 | 54 ·8 |
| 1. 44 | 26. 30 | 9. 0 | ·0875* | 5. 21 | ·01195 | 21. 0 | 46 ·0 | 47 ·0 |
| 1. 58 | 25. 0 | 12. 12 | ·0881 | 9. 11 | ·01529 | | | |
| 2. 10 | 25. 10 | 15. 47 | ·0886 | 11. 14 | ·01552 | | | |
| 2. 40 | 20. 40 | 16. 23 | ·0881 | 11. 52 | ·01570 | | | |
| 3. 21 | 17. 45 | 17. 34 | ·0889 | 21. 52 | ·02256 | | | |
| 3. 51 | 18. 0 | 18. 16 | ·0888 | 23. 59 | ·02207 | | | |
| 4. 50 | 13. 30 | 18. 30 | ·0892 | | | | | |
| 5. 14 | 12. 20 | 19. 53 | ·0881 | | | | | |
| 8. 7 | 13. 30 | 20. 17 | ·0883 | | | | | |
| 8. 40 | 11. 0 | 20. 54 | ·0863 | | | | | |
| 9. 30 | 13. 50 | 21. 22 | ·0868 | | | | | |
| 10. 16 | 11. 20 | 22. 10 | ·0862 | | | | | |
| 10. 28 | 12. 20 | 22. 36 | ·0850 | | | | | |
| 10. 46 | 10. 0 | 23. 8 | ·0859 | | | | | |
| 10. 52 | 11. 15 | 23. 23 | ·0854 | | | | | |
| 11. 12 | 10. 40 | 23. 59 | ·0860 | | | | | |
| 11. 30 | 12. 30 | | | | | | | |
| 12. 6 | 11. 0 | | | | | | | |
| 13. 55 | 11. 40 | | | | | | | |
| 14. 10 | 10. 30 | | | | | | | |
| 14. 43 | 13. 10 | | | | | | | |
| 14. 58 | 12. 15 | | | | | | | |
| 15. 28 | 15. 45 | | | | | | | |
| 16. 0 | 12. 30 *** | | | | | | | |
| 17. 58 | 8. 55 | | | | | | | |
| 18. 10 | 10. 20 | | | | | | | |
| 18. 22 | 7. 30 | | | | | | | |
| 18. 30 | 9. 30 *** | | | | | | | |
| 19. 11 | 7. 50 | | | | | | | |
| 19. 21 | 5. 0 | | | | | | | |
| 19. 37 | 8. 10 | | | | | | | |
| 20. 12 | 6. 20 | | | | | | | |
| 20. 36 | 8. 30 *** | | | | | | | |
| 21. 2 | 8. 20 | | | | | | | |
| 21. 55 | 14. 10 | | | | | | | |
| 22. 15 | 18. 30 | | | | | | | |
| 22. 30 | 17. 5 | | | | | | | |
| 23. 10 | 22. 30 | | | | | | | |
| 23. 28 | 20. 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. Mag net. |
|---|---|---|---|---|---|---|---|---|
| Apr. 3 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 23. 41 | 21. 22. 50 | | | | | | | |
| 23. 50 | 21. 40 | | | | | | | |
| 23. 59 | 23. 55 | | | | | | | |
| Apr. 4 | | Apr. 4 | | Apr. 4 | | Apr. 4 | | |
| 0. 0 | 21. 24. 5 | 0. 0 | ·0860 | 0. 0 | ·02207 | 0. 0 | 50 ·0 | 51 ·0 |
| 0. 7 | 25. 30 | 0. 16 | ·0855 | 1. 28 | ·02130 | 1. 0 | 51 ·9 | 52 ·8 |
| 0. 27 | 23. 35 | 0. 36 | ·0860 | 3. 52 | ·01748 | 3. 0 | 55 ·0 | 56 ·0 |
| 0. 53 | 24. 50 | 1. 20 | ·0850 | 5. 39 | ·01550 | 6. 0 | 58 ·0 | 57 ·6 |
| 1. 51 | 18. 35 | 2. 0 | ·0864 | 8. 0 | ·01806 | 9. 0 | 56 ·0 | 56 ·3 |
| 2. 15 | 18. 50 | 2. 7 | ·0861 | 10. 22 | ·01848 | 12. 0 | 53 ·6 | 54 ·8 |
| 2. 45 | 15. 40 | 2. 11 | ·0864 | 13. 0 | ·01947 | 18. 0 | 47 ·5 | 50 ·0 |
| 3. 27 | 14. 45 | 2. 40 | ·0855 | 21. 12 | ·02590 | 21. 0 | 47 ·5 | 49 ·0 |
| 4. 10 | 11. 50 | 4. 50 | ·0872 | 23. 59 | ·02522 | | | |
| 4. 17 | 12. 5 | | (†) | | | | | |
| 4. 30 | 10. 30 | 12. 0 | ·0885 | | | | | |
| 5. 8 | 9. 30 | 17. 40: | ·0896 | | | | | |
| 5. 26 | 10. 50 | 18. 45 | ·0884 | | | | | |
| 6. 9 | 8. 20 | 19. 49 | ·0890 | | | | | |
| 6. 56 | 11. 20 | 21. 7 | ·0867 *** | | | | | |
| 7. 15 | 10. 30 | | | | | | | |
| 7. 29 | 11. 30 | 23. 0 | ·0851 | | | | | |
| 7. 55 | 8. 35 | 23. 55 | ·0861 | | | | | |
| 8. 14 | 10. 45 | | (†) | | | | | |
| 8. 26 | 10. 10 | | | | | | | |
| 9. 19 | 12. 20 | | | | | | | |
| 9. 58 | 12. 20 | | | | | | | |
| 10. 18 | 17. 30 | | | | | | | |
| 10. 46 | 13. 0 | | | | | | | |
| 15. 59 | 13. 45 | | | | | | | |
| 18. 6 | 10. 0 | | | | | | | |
| 18. 54 | 9. 40 | | | | | | | |
| 19. 14 | 7. 30 | | | | | | | |
| 19. 42 | 7. 0 | | | | | | | |
| 19. 51 | 5. 30 | | | | | | | |
| 20. 30 | 9. 0 | | | | | | | |
| 20. 42 | 8. 35 | | | | | | | |
| 20. 54 | 10. 30 | | | | | | | |
| 21. 25 | 10. 0 *** | | | | | | | |
| 23. 59 | 19. 30 | | | | | | | |
| Apr. 5 | | Apr. 5 | | Apr. 5 | | Apr. 5 | | |
| 0. 0 | 21. 19. 30 | | (†) | 0. 0 | ·02522 | 0. 0 | 51 ·7 | 52 ·3 |
| 0. 39 | 22. 40 | 0. 25 | ·0868 | 2. 15 | ·02390 | 1. 0 | 52 ·7 | 52 ·8 |
| 1. 38 | 20. 20 | 1. 15 | ·0855 | 6. 55 | ·01847 | 3. 0 | 54 ·8 | 55 ·0 |
| 2. 0 | 21. 0 | 2. 0 | ·0865 | 10. 47 | ·01860 | 9. 0 | 56 ·2 | 56 ·5 |
| 3. 14 | 16. 10 | 3. 7 | ·0856 | 14. 10 | ·01984 | 22. 30 | 50 ·0 | 50 ·5 |
| 4. 59 | 12. 0 | 4. 50 | ·0874 | 20. 15 | ·02285 | | | |
| 5. 26 | 10. 10 | 5. 25 | ·0866 *** | 23. 59 | ·02338 | | | |
| 6. 41 | 10. 5 | | | | | | | |
| 7. 24 | 11. 30 | 8. 35 | ·0878 *** | | | | | |
| 11. 52 | 13. 0 | | | | | | | |
| 12. 49 | 12. 0 | 13. 30 | ·0887 | | | | | |
| 14. 40 | 14. 35 | 13. 56 | ·0882 | | | | | |
| 16. 28 | 12. 50 | 14. 35 | ·0887 | | | | | |
| 16. 56 | 11. 30 | 16. 0: | ·0886 | | | | | |
| 17. 24 | 12. 0 | 18. 45: | ·0891 | | | | | |

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. 5 | | Apr. 5 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 18. 58 | 21. 8. 5 | 21. 30: | ·0862 | | | | | |
| 19. 17 | 8. 40 | 23. 0 | ·0864 | | | | | |
| 19. 28 | 10. 10 | 23. 59 | ·0862 | | | | | |
| 19. 42 | 7. 50 | | | | | | | |
| 21. 9 | 9. 45 | | | | | | | |
| 21. 28 | 11. 40 | | | | | | | |
| 22. 10 | 10. 20 | | | | | | | |
| 23. 7 | 14. 30 | | | | | | | |
| 23. 20 | 17. 0 (†) | | | | | | | |
| Apr. 6 | | Apr. 6 | | Apr. 6 | | Apr. 6 | | |
| 0. 0 | 21. 20. 55 | 0. 0 | ·0862 | 0. 0 | ·02338 | 7. 10 | 57 ·0 | 58 ·0 |
| 1. 10 | 23. 50 | 0. 5 | ·0865 | 2. 39: | ·02355 | 21. 5 | 51 ·4 | 52 ·8 |
| 2. 27 | 21. 40 | 0. 39 | ·0859 | 7. 42 | ·01864 | | | |
| 4. 28 | 14. 40 | 1. 0 | ·0865 | 9. 11 | ·01992 | | | |
| 6. 19 | 12. 0 | 2. 7 | ·0867 | 12. 44 | ·01970 | | | |
| 10. 36 | 12. 40 | 2. 38 | ·0875 | 21. 14 | ·02600 | | | |
| 11. 42 | 16. 0 | 3. 20 | ·0869 | 22. 43 | ·02637 | | | |
| 11. 58 | 13. 50 | 3. 45 | ·0872 | 23. 59 | ·02572 | | | |
| 12. 13 | 16. 20 | 3. 58 | ·0877 | | | | | |
| 13. 10 | 12. 20 | 4. 30 | ·0873 | | | | | |
| 16. 59 | 12. 5 | | *** | | | | | |
| 17. 14 | 13. 10 | 6. 22 | ·0882 | | | | | |
| 17. 43 | 12. 30 | | *** | | | | | |
| 17. 55 | 13. 20 | 9. 12 | ·0879 | | | | | |
| 18. 45 | 9. 20 | | *** | | | | | |
| 19. 10 | 9. 50 | 11. 15 | ·0883 | | | | | |
| 19. 53 | 8. 0 | 11. 30 | ·0890 | | | | | |
| 20. 43 | 9. 30 | 11. 46 | ·0890 | | | | | |
| 21. 9 | 12. 50 | 12. 7 | ·0898 | | | | | |
| 21. 29 | 12. 0 | | *** | | | | | |
| 22. 13 | 16. 40 | 13. 7 | ·0884 | | | | | |
| 22. 44 | 16. 50 | 14. 19 | ·0880 | | | | | |
| 22. 54 | 17. 40 | 16. 15 | ·0888 | | | | | |
| 23. 11 | 17. 30 | 17. 15 | ·0882 | | | | | |
| 23. 59 | 20. 10 | 17. 40 | ·0888 | | | | | |
| | | 18. 0 | ·0884 | | | | | |
| | | 18. 16 | ·0888 | | | | | |
| | | | *** | | | | | |
| | | 19. 38 | ·0885 | | | | | |
| | | 20. 52 | ·0862 | | | | | |
| | | 21. 15 | ·0861 | | | | | |
| | | 21. 32 | ·0864 | | | | | |
| | | 22. 35 | ·0846 | | | | | |
| | | 22. 53 | ·0850 | | | | | |
| | | 23. 59 | ·0848 | | | | | |
| Apr. 7 | | Apr. 7 | | Apr. 7 | | Apr. 7 | | |
| 0. 0 | 21. 20. 10 | 0. 0 | ·0848 | 0. 0 | ·02572 | 1. 0 | 57 ·0 | 57 ·2 |
| 0. 43 | 22. 35 | 1. 30 | ·0860 | 2. 3 | ·02442 | 3. 0 | 59 ·5 | 59 ·8 |
| 2. 11 | 22. 50 | 2. 13 | ·0866 | 5. 10 | ·01963 | 9. 0 | 61 ·8 | 61 ·0 |
| 4. 21 | 13. 0 | 2. 40 | ·0860 | 6. 4 | ·02008 | 21. 12 | 52 ·0 | 52 ·3 |
| 5. 54 | 12. 0 | 4. 5 | ·0858 | | ·02263 | | | |
| 10. 44 | 12. 30 | 4. 41 | ·0862 | 8. 31 | ·02063 | | | |
| 11. 15 | 11. 50 | 5. 4 | ·0859 | 10. 11 | ·02056 | | | |
| 13. 45 | 11. 50 | 6. 6 | ·0868 | 10. 49 | ·02106 | | | |
| 14. 12 | 13. 0 | 6. 20 | ·0865 | 11. 43 | ·02110 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 7 | | Apr. 7 | | Apr. 7 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 14. 54 | 21. 11. 10 | 7. 25 | ·0870 | 11. 57 | ·02169 | | | |
| 15. 22 | 12. 30 | | *** | 13. 47 | ·02303 | | | |
| 16. 3 | 12. 0 | 12. 10 | ·0870 | 17. 4 | ·02709 | | | |
| 16. 30 | 12. 40 | | *** | 23. 11 | ·02040 | | | |
| 18. 8 | 11. 10 | 14. 31 | ·0878 | 23. 59 | ·02017 | | | |
| 18. 29 | 8. 20 | 15. 0 | ·0876 | | | | | |
| 18. 50 | 9. 30 | 15. 45 | ·0881 | | | | | |
| 19. 41 | 6. 0 | 16. 30 | ·0880 | | | | | |
| 20. 51 | 5. 40 | 17. 45: | ·0885 | | | | | |
| 22. 20 | 12. 30 | 18. 30 | ·0884 | | | | | |
| 22. 37 | 16. 30 | 19. 35 | ·0875 | | | | | |
| 22. 52 | 16. 45 | 21. 45 | ·0858 | | | | | |
| 23. 59 | 21. 30 | 23. 59 | ·0848 | | | | | |
| Apr. 8 | | Apr. 8 | | Apr. 8 | | Apr. 8 | | |
| 0. 0 | 21. 21. 30 | 0. 0 | ·0848 | 0. 0 | ·02017 | 8. 32 | 56 ·0 | 55 ·5 |
| 0. 12 | 23. 0 | 0. 22 | ·0843 | 2. 13 | ·02012 | 21. 0 | 51 ·2 | 50 ·9 |
| 0. 45 | 21. 10 | 2. 10 | ·0871 | 8. 0 | ·01900 | | | |
| 2. 0 | 21. 50 | 4. 40 | ·0882 | 11. 11 | ·01938 | | | |
| 4. 0 | 16. 30 | 4. 54 | ·0879 | 14. 36: | ·01917 | | | |
| 5. 37 | 13. 20 | 5. 0 | ·0884 | 19. 27 | ·02092 | | | |
| 11. 9 | 11. 35 | 5. 38 | ·0876 | 21. 42 | ·01927 | | | |
| 17. 0 | 13. 30 | | *** | 22. 42 | ·01810 | | | |
| 17. 12 | 12. 40 | 7. 7 | ·0886 | 23. 59 | ·01770 | | | |
| 17. 18 | 13. 20 | 9. 0 | ·0889 | | | | | |
| 18. 24 | 12. 5 | | *** | | | | | |
| 18. 37 | 13. 10 | 12. 25 | ·0885 | | | | | |
| 19. 27 | 9. 20 | 13. 30 | ·0889 | | | | | |
| 19. 44 | 10. 20 | 15. 16: | ·0888 | | | | | |
| 19. 55 | 9. 25 | 16. 40 | ·0891 | | | | | |
| 20. 16 | 13. 20 | 18. 0: | ·0900 | | | | | |
| 20. 43 | 12. 50 | 18. 36 | ·0907 | | | | | |
| 20. 46 | 13. 40 | 20. 30 | ·0886 | | | | | |
| 21. 21 | 8. 0 | 20. 53 | ·0885 | | | | | |
| 21. 35 | 14. 0 | 21. 40 | ·0860 | | | | | |
| 21. 45 | 12. 20 | 22. 4 | ·0868 | | | | | |
| 21. 54 | 14. 40 | 22. 21 | ·0865 | | | | | |
| 22. 18 | 14. 0 | 22. 45 | ·0868 | | | | | |
| 23. 14 | 21. 55 | 23. 35 | ·0860 | | | | | |
| 23. 37 | 22. 0 | | *** | | | | | |
| 23. 59 | 26. 10 | 23. 59 | ·0863 | | | | | |
| Apr. 9 | | Apr. 9 | | Apr. 9 | | Apr. 9 | | |
| 0. 0 | 21. 26. 10 | 0. 0 | ·0863 | 0. 0 | ·01770 | 1. 0 | 54 ·0 | 53 ·0 |
| 0. 12 | 27. 0 | 0. 30 | ·0873 | | *** | 3. 0 | 56 ·0 | 54 ·8 |
| 0. 30 | 26. 30 | 0. 57 | ·0883 | 4. 29 | ·01672 | 9. 0 | 54 ·0 | 53 ·9 |
| 0. 37 | 27. 40 | 1. 6 | ·0871 | 4. 57 | ·01718 | 21. 0 | 44 ·3 | 46 ·5 |
| 0. 42 | 27. 20 | | *** | 5. 26 | ·01663 | | | |
| 0. 59 | 31. 55 | 1. 39 | ·0871 | 6. 7 | ·01669 | | | |
| 1. 5 | 30. 5 | 1. 50 | ·0867 | 7. 12 | ·01517 | | | |
| 1. 14 | 31. 30 | 1. 58 | ·0874 | 7. 43 | ·01518 | | | |
| 1. 26 | 29. 10 | 2. 7 | ·0892 | 8. 25 | ·01290 | | | |
| 1. 30 | 30. 0 | | *** | 8. 55 | ·01422 | | | |
| 1. 37 | 29. 0 | 2. 26 | ·0881 | 9. 43 | ·01267 | | | |
| 1. 42 | 30. 5 | 2. 40 | ·0902 | 10. 4 | ·01330 | | | |
| 1. 52 | 27. 55 | 2. 50 | ·0886 | 10. 15 | ·01187 | | | |
| 1. 59 | 27. 40 | 2. 58 | ·0899 | 11. 10 | ·01382 | | | |
| 2. 10 | 31. 20 | 3. 6 | ·0893 | 11. 24 | ·01300 | | | |

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. 9 | | Apr. 9 | | Apr. 9 | | h m | ° | ° |
| h m | ° ′ ″ | h m | | h m | | | | |
| 2. 27 | 21. 30. 0 | 3. 9 | ·0897 | 13. 13 | ·01500 | | | |
| 2. 44 | 37. 40 | 3. 17 | ·0882 | 14. 14 | ·01497 | | | |
| 2. 49 | 36. 40 | 3. 20 | ·0866 | 15. 41 | ·01590 | | | |
| 3. 0 | 38. 0 | 3. 28 | ·0882 | 18. 31 | ·01922 | | | |
| 3. 15 | 29. 0 | 3. 33 | ·0858 | 22. 11 | ·01600 | | | |
| 3. 20 | 32. 45 | 3. 42 | ·0850 | 23. 59 | ·01552 | | | |
| 3. 29 | 28. 0 | 4. 4 | ·0882 | | | | | |
| 3. 46 | 23. 20 | 4. 7 | ·0868 | | | | | |
| 3. 56 | 27. 0 | 4. 21 | ·0886 | | | | | |
| 4. 11 | 27. 20 | 4. 28 | ·0878 | | | | | |
| 4. 16 | 33. 0 | 5. 1 | ·0918 | | | | | |
| 4. 29 | 30. 0 | 5. 20 | ·0889 | | | | | |
| 4. 43 | 33. 10 | 5. 36 | ·0919 | | | | | |
| 4. 59 | 29. 0 | 5. 58 | ·0882 | | | | | |
| 5. 1 | 29. 50 | 6. 6 | ·0891 | | | | | |
| 5. 16 | 21. 0 | 6. 20 | ·0859 | | | | | |
| 5. 22 | 21. 20 | 6. 24 | ·0863 | | | | | |
| 5. 28 | 20. 30 | 6. 33 | ·0856 | | | | | |
| 5. 49 | 27. 5 | | *** | | | | | |
| 5. 59 | 23. 30 | 7. 2 | ·0872 | | | | | |
| 6. 2 | 22. 30 | 7. 10 | ·0864 | | | | | |
| 6. 11 | 28. 50 | 7. 16 | ·0868 | | | | | |
| 6. 26 | 18. 20 | | *** | | | | | |
| 6. 30 | 22. 10 | 7. 30 | ·0858 | | | | | |
| 6. 53 | 12. 0 | 7. 52 | ·0870 | | | | | |
| 7. 7 | 9. 50 | 8. 7 | ·0897 | | | | | |
| 7. 14 | 12. 10 | 8. 15 | ·0870 | | | | | |
| 7. 21 | 11. 20 | 8. 21 | ·0875 | | | | | |
| 7. 26 | 11. 50 | 8. 36 | ·0831 | | | | | |
| 7. 37 | 10. 0 | 8. 46 | ·0845 | | | | | |
| 7. 40 | 10. 30 | 8. 52 | ·0842 | | | | | |
| 7. 59 | 6. 20 | 9. 5 | ·0867 | | | | | |
| 8. 14 | 23. 0 | 9. 8 | ·0853 | | | | | |
| 8. 22 | 18. 30 | 9. 11 | ·0856 | | | | | |
| 8. 30 | 25. 30 | 9. 38 | ·0855 | | | | | |
| 8. 53 | 21. 9. 50 | 9. 51 | ·0828 | | | | | |
| 9. 10 | 20. 55. 40 | 10. 5 | ·0854 | | | | | |
| 9. 20 | 21. 5. 30 | 10. 14 | ·0814 | | | | | |
| 9. 28 | 2. 10 | 10. 50 | ·0846 | | | | | |
| 9. 41 | 10. 0 | 10. 54 | ·0837 | | | | | |
| 9. 48 | 5. 20 | 11. 18 | ·0888 | | | | | |
| 9. 58 | 9. 10 | 11. 30 | ·0898 | | | | | |
| 10. 10 | 4. 0 | 11. 55 | ·0864 | | | | | |
| 10. 16 | 25. 40 | 12. 10 | ·0875 | | | | | |
| 11. 0 | 21. 8. 20 | | *** | | | | | |
| 11. 24 | 20. 49. 30 | 12. 24 | ·0871 | | | | | |
| 11. 30 | 57. 15 | 12. 30 | ·0879 | | | | | |
| 11. 37 | 20. 55. 30 | 12. 38 | ·0858 | | | | | |
| 11. 54 | 21. 6. 0 | 12. 44 | ·0866 | | | | | |
| 12. 0 | 21. 3. 55 | 12. 50 | ·0856 | | | | | |
| 12. 14 | 20. 57. 30 | 13. 8 | ·0864 | | | | | |
| 12. 20 | 56. 0 | 13. 12 | ·0858 | | | | | |
| 12. 25 | 58. 50 | 13. 25 | ·0865 | | | | | |
| 12. 41 | 20. 59. 0 | 13. 32 | ·0860 | | | | | |
| 12. 51 | 21. 3. 0 | 13. 40 | ·0865 | | | | | |
| 12. 55 | 2. 35 | 13. 51 | ·0854 | | | | | |
| 13. 0 | 5. 20 | 14. 16 | ·0842 | | | | | |
| 13. 10 | 3. 10 | 14. 35 | ·0840 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 13. 20 | 21. 9. 0 | 15. 10 | ·0882 | | | | | |
| 13. 44 | 3. 30 | 15. 24 | ·0883 | | | | | |
| 14. 0 | 4. 20 | | *** | | | | | |
| 14. 14 | 3. 10 | 15. 58 | ·0857 | | | | | |
| 14. 41 | 15. 50 | 16. 15 | ·0854 | | | | | |
| 14. 47 | 15. 0 | 16. 35 | ·0880 | | | | | |
| | *** | 16. 47 | ·0872 | | | | | |
| 15. 12 | 15. 0 | 17. 10 | ·0866 | | | | | |
| 15. 18 | 11. 30 | | *** | | | | | |
| 15. 38 | 13. 50 | 18. 19 | ·0869 | | | | | |
| 15. 57 | 10. 40 | 18. 30 | ·0864 | | | | | |
| 16. 40 | 15. 50 | 18. 33 | ·0868 | | | | | |
| 17. 2 | 12. 30 | 18. 46 | ·0866 | | | | | |
| | *** | 18. 55 | ·0858 | | | | | |
| 18. 9 | 11. 0 | | *** | | | | | |
| 18. 42 | 16. 0 | 20. 23 | ·0852 | | | | | |
| 19. 4 | 13. 0 | 20. 53 | ·0830 | | | | | |
| 19. 20 | 15. 0 | 20. 59 | ·0835 | | | | | |
| 19. 30 | 13. 0 | 21. 5 | ·0834 | | | | | |
| 20. 25 | 12. 5 | 21. 47 | ·0838 | | | | | |
| 20. 50 | 15. 40 | 22. 2 | ·0827 | | | | | |
| 20. 54 | 14. 30 | 22. 8 | ·0836 | | | | | |
| 20. 58 | 16. 20 | 22. 15 | ·0827 | | | | | |
| 21. 10 | 17. 0 | 22. 25 | ·0824 | | | | | |
| 21. 24 | 14. 30 | 22. 34 | ·0832 | | | | | |
| 22. 0 | 17. 20 | | *** | | | | | |
| 22. 12 | 20. 0 | 23. 10 | ·0842 | | | | | |
| 22. 25 | 20. 0 | 23. 59 | ·0849 | | | | | |
| 23. 29 | 24. 0 | | | | | | | |
| 23. 59 | 22. 0 | | | | | | | |
| Apr. 10 | | Apr. 10 | | Apr. 10 | | Apr. 10 | | |
| 0. 0 | 21. 22. 0 | 0. 0 | ·0850 | 0. 0 | ·01552 | 1. 0 | 49 ·0 | 49 ·4 |
| 0. 16 | 22. 50 | | *** | 2. 7 | ·01438 | 3. 0 | 52 ·3 | 52 ·7 |
| 0. 40 | 21. 10 | 2. 25 | ·0886 | 8. 17 | ·00827 | 9. 0 | 52 ·0 | 52 ·4 |
| 0. 54 | 22. 30 | 2. 55: | ·0872 | 9. 45 | ·00795 | 21. 0 | 43 ·0 | 45 ·0 |
| 1. 15 | 22. 50 | | *** | 10. 52 | ·00800 | | | |
| 1. 50 | 18. 30 | 3. 30 | ·0880 | 15. 12: | ·01029 | | | |
| 1. 54 | 19. 20 | 3. 40 | ·0872 | 21. 15 | ·01563 | | | |
| 2. 11 | 17. 10 | 3. 52 | ·0876 | 23. 59 | ·01358 | | | |
| 2. 29 | 17. 55 | 4. 16 | ·0868 | | | | | |
| 2. 44 | 15. 15 | 4. 35 | ·0874 | | | | | |
| 3. 30 | 15. 20 | | *** | | | | | |
| 3. 43 | 14. 35 | 5. 9 | ·0905 | | | | | |
| 4. 12 | 15. 0 | 5. 23 | ·0905 | | | | | |
| 4. 30 | 13. 40 | 5. 36 | ·0881 | | | | | |
| 5. 9 | 6. 40 | 5. 59 | ·0906 | | | | | |
| 5. 30 | 12. 30 | 6. 9 | ·0894 | | | | | |
| 5. 50 | 6. 0 | | *** | | | | | |
| 6. 9 | 11. 30 | 6. 36 | ·0893 | | | | | |
| 6. 33 | 12. 30 | 6. 50 | ·0883 | | | | | |
| 7. 0 | 9. 45 | 7. 30 | ·0878 | | | | | |
| 7. 21 | 12. 20 | 7. 40 | ·0897 | | | | | |
| 7. 40 | 6. 30 | 7. 51 | ·0893 | | | | | |
| 7. 49 | 11. 40 | 8. 5 | ·0906 | | | | | |
| 7. 57 | 9. 0 | 8. 25 | ·0883 | | | | | |
| 8. 16 | 16. 0 | | *** | | | | | |
| 8. 36 | 12. 0 | 9. 16 | ·0898 | | | | | |

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. 10 | | Apr. 10 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ,0 | 0 |
| 9. 14 | 21. 13. 40 | 9. 43 | ·0887 | | | | | |
| 9. 25 | 15. 40 | 10. 5 | ·0878 | | | | | |
| 9. 43 | 14. 0 | 10. 37 | ·0900 | | | | | |
| 9. 50 | 14. 45 | 11. 6 | ·0886 | | | | | |
| 10. 13 | 10. 5 | | *** | | | | | |
| 10. 30 | 10. 0 | 12. 0: | ·0881 | | | | | |
| 10. 46 | 13. 40 | 13. 0 | ·0888 | | | | | |
| 11. 27 | 10. 15 | | *** | | | | | |
| 11. 54 | 11. 40 | 14. 15 | ·0884 | | | | | |
| 12. 15 | 10. 20 | 15. 0: | ·0894 | | | | | |
| 12. 49 | 12. 35 | 16. 5 | ·0889 | | | | | |
| 12. 55 | 12. 20 | 16. 24 | ·0894 | | | | | |
| 13. 34 | 16. 30 | | *** | | | | | |
| 14. 4 | 14. 30 | 18. 10 | ·0888 | | | | | |
| 15. 1 | 12. 0 | 19. 7: | ·0893 | | | | | |
| 15. 43 | 12. 20 | | *** | | | | | |
| 17. 7 | 9. 30 | 21. 2 | ·0886 | | | | | |
| 17. 14 | 10. 10 | 21. 25 | ·0876 | | | | | |
| 18. 7 | 11. 0 | 21. 46 | ·0875 | | | | | |
| 18. 39 | 9. 20 | 22. 1 | ·0863 | | | | | |
| 19. 9 | 11. 30 | 22. 25 | ·0852 | | | | | |
| 19. 30 | 9. 0 | 22. 55 | ·0856 | | | | | |
| 20. 10 | 7. 55 | 23. 10 | ·0866 | | | | | |
| 20. 30 | 11. 0 | | (†) | | | | | |
| 20. 52 | 8. 0 | | | | | | | |
| 21. 22 | 11. 30 | | | | | | | |
| 21. 37 | 11. 0 | | | | | | | |
| 23. 37 | 16. 20 | | | | | | | |
| 23. 46 | 15. 30 | | | | | | | |
| 23. 59 | 16. 30 | | | | | | | |
| Apr. 11 | | Apr. 11 | | Apr. 11 | | Apr. 11 | | |
| 0. 0 | 21. 16. 30 | | (†) | 0. 0 | ·01358 | 0. 0 | 45 ·7 | 46 ·8 |
| 0. 12 | 16. 30 | 0. 15 | ·0872 | 3. 44 | ·01122 | 1. 0 | 47 ·0 | 48 ·0 |
| 1. 13 | 20. 30 | 1. 7 | ·0878 | 8. 27 | ·00721 | 3. 0 | 49 ·0 | 50 ·0 |
| 1. 50 | 18. 40 | 1. 30 | ·0873 | 9. 30 | ·00717 | 6. 0 | 51 ·5 | 52 ·2 |
| 2. 3 | 18. 40 | 1. 47 | ·0875 | 10. 40 | ·00600 | 9. 0 | 51 ·5 | 51 ·5 |
| 2. 15 | 20. 10 | 2. 0 | ·0883 | 11. 4 | ·00643 | 12. 0 | 50 ·5 | 51 ·0 |
| 2. 46 | 17. 30 | 2. 18 | ·0885 | 13. 19 | ·00644 | 18. 0 | 47 ·0 | 48 ·0 |
| 3. 35 | 17. 55 | 2. 51 | ·0899 | 16. 54 | ·00783 | 21. 0 | 46 ·5 | 48 ·3 |
| 5. 39 | 13. 40 | 3. 22 | ·0905 | 20. 12 | ·00947 | | | |
| 5. 51 | 12. 50 | | *** | 21. 59 | ·00988 | | | |
| 6. 2 | 13. 30 | 4. 25 | ·0901 | 23. 59 | ·00929 | | | |
| 6. 40 | 13. 5 | 5. 7 | ·0906 | | | | | |
| 6. 51 | 10. 40 | 5. 36 | ·0904 | | | | | |
| 7. 6 | 11. 35 | 5. 45 | ·0907 | | | | | |
| 7. 15 | 10. 30 | 6. 3 | ·0900 | | | | | |
| 7. 20 | 11. 30 | 6. 13 | ·0901 | | | | | |
| 7. 43 | 6. 5 | 6. 25 | ·0898 | | | | | |
| 8. 0 | 8. 45 | 6. 42 | ·0904 | | | | | |
| 8. 17 | 5. 50 | 6. 54 | ·0912 | | | | | |
| 8. 26 | 8. 10 | 7. 1 | ·0908 | | | | | |
| 8. 53 | 3. 10 | 7. 23 | ·0911 | | | | | |
| 9. 28 | 7. 10 | 7. 32 | ·0910 | | | | | |
| 9. 40 | 7. 30 | 7. 40 | ·0913 | | | | | |
| 9. 57 | 11. 20 | 8. 7 | ·0899 | | | | | |
| 10. 6 | 7. 0 | 8. 16 | ·0901 | | | | | |
| 10. 29 | 17. 20 | 8. 40 | ·0885 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | 0 | 0 |
| 10. 49 | 21. 2. 5 | 8. 57 | ·0886 | | | | | |
| 11. 11 | 7. 35 | 9. 22: | ·0880 | | | | | |
| 11. 26 | 6. 0 | 9. 51 | ·0887 | | | | | |
| 11. 41 | 8. 0 | 10. 8 | ·0919 | | | | | |
| 11. 48 | 7. 10 | 10. 39 | ·0873 | | | | | |
| 11. 58 | 9. 30 | 11. 0 | ·0905 | | | | | |
| 12. 0 | 9. 0 | 11. 43 | ·0875 | | | | | |
| 12. 7 | 10. 0 | 11. 55 | ·0880 | | | | | |
| 12. 18 | 5. 45 | 12. 20 | ·0882 | | | | | |
| 12. 45 | 11. 0 | 12. 53 | ·0908 | | | | | |
| 12. 50 | 10. 0 | 13. 12 | ·0894 | | | | | |
| 13. 2 | 13. 10 | 13. 35 | ·0895 | | | | | |
| 13. 41 | 3. 0 | | *** | | | | | |
| 13. 51 | 3. 20 | 14. 7 | ·0884 | | | | | |
| 13. 54 | 2. 50 | 14. 16 | ·0882 | | | | | |
| 14. 15 | 13. 5 | 14. 55 | ·0900 | | | | | |
| 14. 28 | 10. 10 | 15. 8 | ·0894 | | | | | |
| 14. 41 | 10. 50 | 15. 33 | ·0891 | | | | | |
| 14. 50 | 9. 20 | 16. 5 | ·0898 | | | | | |
| 15. 8 | 10. 20 | 16. 37 | ·0900 | | | | | |
| 15. 43 | 6. 10 | 16. 58 | ·0892 | | | | | |
| 15. 56 | 7. 10 | 17. 50 | ·0901 | | | | | |
| 16. 1 | 6. 40 | 18. 1 | ·0895 | | | | | |
| 16. 12 | 7. 10 | 18. 25 | ·0897 | | | | | |
| 16. 29 | 6. 20 | 18. 54 | ·0894 | | | | | |
| 17. 25 | 11. 0 | 20. 11 | ·0906 | | | | | |
| 17. 48 | 8. 40 | 22. 15 | ·0871 | | | | | |
| 17. 58 | 10. 0 | | *** | | | | | |
| 18. 11 | 7. 40 | 23. 15 | ·0867 | | | | | |
| 18. 25 | 7. 0 | 23. 35 | ·0859 | | | | | |
| 18. 54 | 8. 45 | 23. 54 | ·0866 | | | | | |
| 19. 4 | 8. 0 | 23. 59 | ·0863 | | | | | |
| 19. 18 | 10. 15 | | | | | | | |
| 19. 40 | 8. 30 | | | | | | | |
| 20. 13 | 10. 0 | | | | | | | |
| 20. 59 | 7. 45 | | | | | | | |
| | *** | | | | | | | |
| 22. 21 | 11. 30 | | | | | | | |
| 23. 11 | 16. 45 | | | | | | | |
| 23. 27 | 15. 15 | | | | | | | |
| 23. 59 | 17. 10 | | | | | | | |
| Apr. 12 | | Apr. 12 | | Apr. 12 | | Apr. 12 | | |
| 0. 0 | 21. 17. 10 | 0. 0 | ·0863 | 0. 0 | ·00929 | 0. 0 | 49 ·8 | 50 ·3 |
| 0. 13 | 17. 50 | 1. 24 | ·0858 | 3. 15 | ·00707 | 1. 0 | 51 ·4 | 51 ·3 |
| 0. 25 | 16. 55 | 2. 25 | ·0886 | 5. 42 | ·00970 | 3. 0 | 53 ·8 | 53 ·5 |
| 0. 52 | 20. 0 | | *** | 8. 43 | ·01113 | 9. 3 | 53 ·7 | 53 ·8 |
| 1. 55 | 20. 40 | 3. 23 | ·0895 | 10. 27 | ·01067 | 21. 0 | 46 ·6 | 48 ·3 |
| 2. 19 | 18. 10 | 3. 45 | ·0888 | 11. 59 | ·01075 | | | |
| 2. 30 | 19. 0 | 3. 56 | ·0896 | 12. 43 | ·00950 | | | |
| 3. 7 | 17. 30 | 4. 13 | ·0896 | 13. 22 | ·01044 | | | |
| 3. 28 | 19. 10 | 4. 25 | ·0918 | 16. 10 | ·01327 | | | |
| 3. 43 | 17. 0 | 4. 50 | ·0920 | 20. 10 | ·01500 | | | |
| 3. 54 | 17. 10 | 5. 6 | ·0902 | 22. 45 | ·01717 | | | |
| 4. 15 | 13. 20 | 5. 17 | ·0905 | 23. 59 | ·01648 | | | |
| 4. 24 | 13. 45 | 5. 45 | ·0891 | | | | | |
| 4. 39 | 12. 20 | | *** | | | | | |
| 4. 54 | 14. 0 | 6. 40 | ·0884 | | | | | |

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. 12 | | Apr. 12 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 5. 13 | 21. 9. 50 | 7. 0 | ·0888 | | | | | |
| 5. 34 | 13. 20 | 7. 31 | ·0884 | | | | | |
| 5. 51 | 12. 30 | 7. 55 | ·0893 | | | | | |
| 5. 58 | 12. 40 | 8. 14 | ·0877 | | | | | |
| 6. 13 | 10. 40 | 8. 25 | ·0881 | | | | | |
| 6. 45 | 11. 40 | 8. 40 | ·0874 | | | | | |
| 7. 11 | 13. 10 | 9. 21 | ·0894 | | | | | |
| 7. 29 | 11. 50 | 9. 29 | ·0893 | | | | | |
| 7. 45 | 11. 50 | 9. 50 | ·0906 | | | | | |
| 8. 7 | 18. 10 | 10. 0 | ·0905 | | | | | |
| 8. 22 | 15. 20 | 10. 15 | ·0896 | | | | | |
| 8. 30 | 16. 15 | 10. 27 | ·0899 | | | | | |
| 9. 13 | 7. 5 | 10. 52 | ·0890 | | | | | |
| 9. 28 | 9. 30 | 11. 10 | ·0897 | | | | | |
| 9. 31 | 8. 15 | 11. 28 | ·0881 | | | | | |
| 10. 11 | 13. 25 | 11. 57 | ·0870 | | | | | |
| 10. 41 | 10. 50 | 12. 9 | ·0882 | | | | | |
| 10. 58 | 7. 20 | 12. 15 | ·0878 | | | | | |
| 11. 10 | 21. 8. 0 | 12. 21 | ·0882 | | | | | |
| 11. 44 | 20. 58. 10 | 12. 30 | ·0876 | | | | | |
| 11. 49 | 21. 0. 10 | 12. 38 | ·0878 | | | | | |
| 12. 6 | 20. 59. 0 | 12. 50 | ·0862 | | | | | |
| | (†) | 13. 11 | ·0892 | | | | | |
| 13. 7 | 21. 1. 50 | 13. 25 | ·0869 | | | | | |
| 13. 25 | 0. 20 | 13. 48 | ·0886 | | | | | |
| 13. 42 | 21. 5. 40 | 14. 22 | ·0880 | | | | | |
| 14. 6 | 20. 53. 20 | 14. 40 | ·0886 | | | | | |
| 15. 5 | 21. 8. 30 | | *** | | | | | |
| 15. 29 | 8. 40 | 15. 40 | ·0883 | | | | | |
| 15. 40 | 7. 40 | 16. 7 | ·0890 | | | | | |
| 16. 11 | 11. 10 | 16. 34 | ·0888 | | | | | |
| 16. 38 | 11. 50 | | *** | | | | | |
| 16. 57 | 11. 0 | 17. 5 | ·0878 | | | | | |
| 17. 18 | 12. 20 | | *** | | | | | |
| 17. 42 | 11. 0 | 18. 51 | ·0896 | | | | | |
| 18. 27 | 19. 20 | | *** | | | | | |
| 18. 43 | 16. 30 | 19. 47 | ·0880 | | | | | |
| 18. 57 | 14. 30 | 19. 59 | ·0882 | | | | | |
| 19. 37 | 14. 20 | 20. 20 | ·0863 | | | | | |
| 20. 13 | 10. 40 | | (†) | | | | | |
| 20. 30 | 12. 30 | 21. 0 | ·0868* | | | | | |
| 20. 44 | 11. 30 | | | | | | | |
| 20. 59 | 13. 25 | | | | | | | |
| 21. 30 | 13. 0 | | | | | | | |
| 22. 52 | 14. 50 | | | | | | | |
| 23. 26 | 17. 20 | | | | | | | |
| 23. 45 | 21. 30 | | | | | | | |
| 23. 55 | 21. 30 | | | | | | | |
| 23. 59 | 21. 10 | | | | | | | |
| Apr. 13 | | Apr. 13 | | Apr. 13 | | Apr. 13 | | |
| 0. 0 | 21. 21. 10 | | (†) | 0. 0 | ·01648 | 1. 0 | 51 ·3 | 51 ·8 |
| 0. 14 | 18. 55 | 0. 3 | ·0852 | 4. 18 | ·01408 | 3. 0 | 53 ·3 | 53 ·8 |
| 0. 51 | 19. 35 | 1. 48 | ·0866 | 8. 45 | ·01145 | 9. 0 | 54 ·0 | 54 ·0 |
| 0. 59 | 20. 55 | 2. 15 | ·0878 | 9. 41 | ·01152 | 21. 0 | 44 ·8 | 47 ·0 |
| 1. 6 | 19. 45 | 2. 38 | ·0872 | 9. 56 | ·01102 | | | |
| 1. 13 | 21. 30 | 2. 46 | ·0880 | 10. 16 | ·01090 | | | |
| 1. 48 | 21. 40 | 3. 5 | ·0864 | 10. 30 | ·01132 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 13 | | Apr. 13 | | Apr. 13 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 2. 2 | 21. 21. 0 | 3. 15 | ·0870 | 11. 0 | ·01095 | | | |
| 2. 25 | 22. 20 | 3. 25 | ·0867 | 12. 5 | ·01107 | | | |
| 2. 43 | 20. 30 | 3. 55 | ·0890 | 12. 45 | ·01150 | | | |
| 2. 53 | 22. 30 | 4. 46 | ·0891 | 13. 21 | ·01143 | | | |
| 3. 15 | 20. 0 | 5. 26 | ·0896 | 13. 37 | ·01070 | | | |
| 3. 39 | 19. 0 | 5. 49 | ·0881 | 15. 11 | ·01252 | | | |
| 3. 59 | 14. 30 | 6. 10 | ·0896 | 15. 19 | ·01222 | | | |
| 4. 43 | 13. 40 | 6. 27 | ·0910 | 15. 29 | ·01247 | | | |
| 5. 0 | 16. 10 | 6. 36 | ·0907 | 16. 5 | ·01094 | | | |
| 5. 46 | 14. 50 | 6. 43 | ·0892 | 16. 11 | ·01111 | | | |
| 5. 56 | 11. 50 | 6. 54 | ·0908 | 16. 22 | ·01069 | | | |
| 6. 13 | 13. 20 | 7. 8 | ·0891 | 16. 57 | ·01152 | | | |
| 6. 44 | 11. 20 | 7. 24 | ·0884 | 19. 16 | ·01679 | | | |
| 6. 57 | 4. 50 | 7. 45 | ·0895 | 21. 19 | ·01905 | | | |
| 7. 5 | 7. 50 | 8. 8 | ·0881 | 23. 15 | ·01830 | | | |
| 7. 13 | 5. 10 | 8. 30 | ·0888 | 23. 32 | ·01758 | | | |
| 7. 27 | 6. 0 | 8. 51 | ·0868 | 23. 48 | ·01749 | | | |
| 7. 41 | 3. 50 | 9. 16 | ·0882 | | (†) | | | |
| 8. 10 | 11. 20 | 9. 21 | ·0880 | | | | | |
| 8. 23 | 9. 0 | 9. 35 | ·0900 | | | | | |
| 8. 44 | 12. 0 | 10. 0 | ·0862 | | | | | |
| 9. 12 | 6. 30 | 10. 9 | ·0850 | | | | | |
| 9. 30 | 10. 30 | 10. 30 | ·0906 | | | | | |
| 9. 40 | 9. 0 | 10. 53 | ·0872 | | | | | |
| 9. 47 | 14. 30 | | *** | | | | | |
| 10. 0 | 21. 17. 0 | 11. 26 | ·0890 | | | | | |
| 10. 30 | 20. 50. 0 | 11. 41 | ·0890 | | | | | |
| 10. 44 | 21. 8. 0 | 11. 52 | ·0878 | | | | | |
| 10. 51 | 10. 10 | 12. 15 | ·0870 | | | | | |
| 11. 6 | 5. 30 | 12. 51 | ·0874 | | | | | |
| 11. 25 | 3. 20 | 13. 25 | ·0866 | | | | | |
| 11. 31 | 5. 25 | 13. 41 | ·0888 | | | | | |
| 11. 50 | 4. 50 | 14. 0 | ·0874 | | | | | |
| 11. 58 | 3. 5 | 14. 8 | ·0874 | | | | | |
| 12. 26 | 2. 20 | 14. 14 | ·0862 | | | | | |
| 12. 44 | 5. 0 | 14. 39 | ·0876 | | | | | |
| 13. 0 | 4. 30 | 14. 50 | ·0876 | | | | | |
| 13. 27 | 15. 30 | 15. 11 | ·0898 | | | | | |
| 14. 15 | 6. 30 | 15. 24 | ·0881 | | | | | |
| 14. 39 | 4. 20 | 15. 34 | ·0900 | | | | | |
| 14. 42 | 21. 5. 10 | 15. 55 | ·0833 | | | | | |
| 15. 6 | 20. 58. 40 | 16. 10 | 0890 | | | | | |
| 15. 10 | 21. 6. 0 | 16. 20 | ·0878 | | | | | |
| 15. 39 | 20. 53. 55 | 16. 34 | ·0912 | | | | | |
| 15. 42 | 57. 0 | 16. 51 | ·0931 | | | | | |
| 15. 44 | 20. 56. 30 | 17. 11 | ·0867 | | | | | |
| 15. 55 | 21. 11. 0 | 17. 31 | ·0900 | | | | | |
| 16. 0 | 10. 20 | 18. 15 | ·0871 | | | | | |
| 16. 10 | 13. 10 | | *** | | | | | |
| 16. 29 | 0. 30 | 18. 50 | ·0864 | | | | | |
| 16. 42 | 20. 45 | | *** | | | | | |
| 16. 47 | 20. 5 | 19. 20 | ·0869 | | | | | |
| 16. 51 | 22. 30 | 19. 48 | ·0860 | | | | | |
| 16. 57 | 20. 0 | 20. 3 | ·0866 | | | | | |
| 17. 0 | 20. 45 | | *** | | | | | |
| 17. 28 | 8. 40 | 20. 30 | ·0854 | | | | | |
| 17. 35 | 10. 30 | 21. 15 | ·0852 | | | | | |
| 17. 39 | 10. 10 | 21. 27 | ·0845 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| Apr. 13 | | Apr. 13 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 17. 45 | 21. 14. 0 | 21. 35 | ·0823 | | | | | |
| 17. 54 | 9. 50 | 21. 55 | ·0838 | | | | | |
| 18. 0 | 15. 5 | 22. 10 | ·0834 | | | | | |
| 18. 12 | 14. 55 | 22. 40 | ·0843 | | | | | |
| 18. 21 | 12. 30 | 22. 55 | ·0836 | | | | | |
| 18. 29 | 14. 20 | 23. 5 | ·0842 | | | | | |
| 18. 38 | 11. 10 | 23. 17 | ·0820 | | | | | |
| 18. 44 | 14. 0 | 23. 34 | ·0838 | | | | | |
| 19. 16 | 12. 45 | 23. 39 | ·0831 | | | | | |
| 19. 27 | 13. 50 | 23. 59 | ·0850 | | | | | |
| 19. 47 | 14. 0 | | | | | | | |
| 19. 54 | 12. 50 | | | | | | | |
| 20. 0 | 14. 30 | | | | | | | |
| 20. 6 | 13. 10 | | | | | | | |
| 20. 11 | 15. 0 | | | | | | | |
| 20. 14 | 13. 15 | | | | | | | |
| 20. 19 | 14. 50 | | | | | | | |
| 20. 23 | 13. 55 | | | | | | | |
| 20. 29 | 14. 50 | | | | | | | |
| 21. 28 | 15. 40 | | | | | | | |
| 21. 39 | 8. 0 | | | | | | | |
| 21. 58 | 18. 30 | | | | | | | |
| | *** | | | | | | | |
| 22. 30 | 17. 30 | | | | | | | |
| 22. 52 | 19. 0 | | | | | | | |
| 23. 11 | 17. 0 | | | | | | | |
| 23. 15 | 18. 5 | | | | | | | |
| 23. 23 | 16. 0 | | | | | | | |
| 23. 29 | 20. 10 | | | | | | | |
| | *** | | | | | | | |
| 23. 50 | 19. 50 | | | | | | | |
| 23. 59 | 20. 55 | | | | | | | |
| Apr. 14 | | Apr. 14 | | Apr. 14 | | Apr. 14 | | |
| 0. 0 | 21. 20. 55 | 0. 0 | ·0850 | | (†) | 1. 0 | 48·8 | 49·0 |
| 0. 15 | 20. 0 | | (†) | 0. 23 | ·01772 | 3. 0 | 51·3 | 51·7 |
| 0. 19 | 20. 30 | 1. 0 | ·0868* | 5. 55 | ·01428 | 9. 0 | 49·4 | 51·0 |
| 0. 39 | 18. 0 | 2. 30 | ·0854 | 6. 43 | ·01440 | 21. 5 | 46·0 | 48·0 |
| 2. 14 | 17. 0 | 2. 53 | ·0866 | 8. 45 | ·01372 | | | |
| 2. 20 | 17. 50 | 3. 0 | ·0862 | 14. 56 | ·01470 | | | |
| 2. 30 | 15. 0 | 3. 15 | ·0872 | 19. 24 | ·01752 | | | |
| 2. 37 | 15. 30 | 3. 22 | ·0881 | 23. 59 | ·01546 | | | |
| 2. 42 | 14. 50 | 3. 30 | ·0871 | | | | | |
| 2. 51 | 16. 0 | 3. 37 | ·0876 | | | | | |
| 3. 9 | 14. 0 | 3. 50 | ·0890 | | | | | |
| 3. 21 | 10. 45 | | *** | | | | | |
| 3. 39 | 12. 0 | 4. 15 | ·0881 | | | | | |
| 3. 54 | 10. 25 | 4. 26 | ·0892 | | | | | |
| 4. 21 | 12. 15 | 4. 32 | ·0883 | | | | | |
| 5. 0 | 11. 30 | 4. 40 | ·0890 | | | | | |
| 5. 21 | 12. 30 | 5. 3 | ·0900 | | | | | |
| 5. 58 | 7. 0 | 5. 42: | ·0885 | | | | | |
| 6. 11 | 7. 30 | 6. 15 | ·0893 | | | | | |
| 6. 28 | 4. 0 | | *** | | | | | |
| 6. 43 | 10. 0 | 6. 45 | ·0883 | | | | | |
| 6. 54 | 10. 25 | 7. 4 | ·0904 | | | | | |
| 7. 11 | 9. 30 | 7. 13 | ·0900 | | | | | |
| 7. 19 | 10. 20 | 7. 36 | ·0922 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 14 | | Apr. 14 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 7. 27 | 21. 10. 0 | 7. 48 | ·0907 | | | | | |
| 7. 39 | 12. 10 | 7. 52 | ·0909 | | | | | |
| 7. 45 | 10. 30 | 8. 0 | ·0903 | | | | | |
| 8. 19 | 10. 20 | 8. 10 | ·0905 | | | | | |
| 8. 42 | 13. 10 | 8. 21 | ·0898 | | | | | |
| 8. 54 | 12. 50 | | *** | | | | | |
| 9. 4 | 13. 35 | 8. 36 | ·0903 | | | | | |
| 9. 30 | 12. 40 | 8. 45 | ·0900 | | | | | |
| 10. 2 | 16. 30 | | *** | | | | | |
| 10. 36 | 14. 50 | 9. 0 | ·0906 | | | | | |
| 10. 45 | 16. 50 | 9. 10 | ·0901 | | | | | |
| 11. 6 | 16. 20 | 9. 17 | ·0904 | | | | | |
| 11. 27 | 14. 0 | 9. 36 | ·0891 | | | | | |
| 11. 44 | 13. 45 | 9. 51 | ·0896 | | | | | |
| 12. 31 | 11. 30 | | *** | | | | | |
| | (†) | 11. 0 | ·0884 | | | | | |
| 14. 14 | 13. 20 | 11. 15 | ·0887 | | | | | |
| 14. 37 | 15. 5 | 11. 36 | ·0885 | | | | | |
| 14. 52 | 14. 40 | 13. 0 | ·0899 | | | | | |
| 15. 5 | 16. 25 | 13. 32: | ·0884 | | | | | |
| 15. 54 | 11. 0 | 13. 51 | ·0899 | | | | | |
| 16. 11 | 11. 10 | 14. 10 | ·0883 | | | | | |
| 16. 45 | 14. 30 | 14. 56: | ·0895 | | | | | |
| 17. 21 | 13. 45 | 15. 17 | ·0890 | | | | | |
| 18. 11 | 9. 50 | 15. 33 | ·0892 | | | | | |
| 18. 31 | 9. 50 | 16. 24 | ·0881 | | | | | |
| 18. 50 | 7. 30 | 16. 53 | ·0884 | | | | | |
| 18. 55 | 8. 0 | 17. 22 | ·0895 | | | | | |
| 19. 2 | 7. 0 | | *** | | | | | |
| 19. 13 | 8. 0 | 18. 4 | ·0888 | | | | | |
| 19. 26 | 6. 30 | 18. 27 | ·0893 | | | | | |
| 19. 54 | 8. 40 | | *** | | | | | |
| 20. 18 | 7. 30 | 19. 38 | ·0885 | | | | | |
| 21. 12 | 13. 20 | | *** | | | | | |
| 22. 11 | 13. 40 | 20. 0 | ·0871 | | | | | |
| 23. 1 | 18. 0 | | *** | | | | | |
| 23. 20 | 21. 10 | 20. 52 | ·0865 | | | | | |
| 23. 59 | 23. 30 | | *** | | | | | |
| | | 22. 47 | ·0863 | | | | | |
| | | 23. 30 | ·0861 | | | | | |
| | | 23. 59 | ·0856 | | | | | |
| Apr. 15 | | Apr. 15 | | Apr. 15 | | Apr. 15 | | |
| 0. 0 | 21. 23. 30 | 0. 0 | ·0855 | 0. 0 | ·01546 | 6. 45 | 55·0 | 55·3 |
| 0. 15 | 22. 30 | 0. 20 | ·0851 | 1. 39 | ·01478 | 21. 0 | 50·3 | 52·7 |
| 1. 3 | 24. 0 | 1. 17 | ·0871 | 6. 4 | ·01025 | | | |
| 2. 36 | 18. 45 | 2. 38 | ·0875 | 8. 52 | ·00867 | | | |
| 3. 12 | 18. 0 | 3. 15 | ·0882 | 13. 11 | ·00840 | | | |
| 3. 24 | 16. 30 | 3. 40 | ·0879 | 15. 17 | ·00884 | | | |
| 3. 51 | 16. 0 | 4. 10 | ·0882 | 16. 44 | ·00865 | | | |
| 4. 41 | 11. 20 | 4. 33 | ·0878 | 18. 7 | ·00970 | | | |
| 7. 13 | 12. 40 | 5. 7 | ·0903 | 22. 50 | ·01144 | | | |
| 7. 28 | 11. 45 | 5. 30 | ·0891 | 23. 59 | ·01122 | | | |
| 7. 46 | 12. 0 | 5. 50 | ·0886 | | | | | |
| 8. 19 | 10. 20 | | *** | | | | | |
| 8. 43 | 13. 30 | 8. 26 | ·0890 | | | | | |
| 8. 56 | 7. 30 | 8. 40 | ·0893 | | | | | |
| 9. 5 | 8. 0 | 8. 52 | ·0883 | | | | | |

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. 15 | | Apr. 15 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 21 | 21. 6. 35 | 9. 7 | ·0890 | | | | | |
| 9. 37 | 7. 40 | 9. 24 | ·0885 | | | | | |
| 9. 46 | 7. 0 | 9. 40 | ·0892 | | | | | |
| 11. 15 | 8. 0 | | *** | | | | | |
| 11. 40 | 10. 0 | 10. 22 | ·0883 | | | | | |
| 12. 16 | 11. 20 | | *** | | | | | |
| 12. 47 | 13. 40 | 11. 17 | ·0883 | | | | | |
| 12. 59 | 13. 5 | 11. 33 | ·0881 | | | | | |
| 13. 21 | 14. 40 | 11. 45 | ·0884 | | | | | |
| 14. 28 | 13. 45 | 12. 3 | ·0882 | | | | | |
| 15. 6 | 10. 30 | 12. 30 | ·0885 | | | | | |
| 15. 26 | 15. 10 | 12. 50 | ·0893 | | | | | |
| 15. 45 | 12. 35 | 13. 21 | ·0886 | | | | | |
| 16. 11 | 15. 45 | 13. 52 | ·0894 | | | | | |
| 17. 13 | 7. 30 | 14. 17 | ·0892 | | | | | |
| | *** | 14. 47 | ·0896 | | | | | |
| 19. 14 | 9. 30 | 15. 21 | ·0895 | | | | | |
| 19. 43 | 8. 20 | 15. 46 | ·0887 | | | | | |
| 19. 51 | 10. 20 | 16. 3 | ·0892 | | | | | |
| 20. 10 | 9. 40 | 16. 37 | ·0891 | | | | | |
| 20. 14 | 11. 30 | 16. 51 | ·0887 | | | | | |
| 20. 29 | 11. 20 | 17. 38 | ·0894 | | | | | |
| 20. 44 | 13. 0 | 18. 43 | ·0893 | | | | | |
| 21. 13 | 11. 30 | 19. 23 | ·0877 | | | | | |
| 23. 59 | 23. 0 | 19. 45 | ·0874 | | | | | |
| | | 20. 0 | ·0877 | | | | | |
| | | 20. 22 | ·0868 | | | | | |
| | | 20. 40 | ·0871 | | | | | |
| | | 21. 17 | ·0864 | | | | | |
| | | 21. 33 | ·0865 | | | | | |
| | | 22. 10 | ·0854 | | | | | |
| | | 22. 26 | ·0855 | | | | | |
| | | 22. 40 | ·0860 | | | | | |
| | | 22. 51 | ·0860 | | | | | |
| | | | *** | | | | | |
| | | 23. 20 | ·0854 | | | | | |
| | | 23. 43 | ·0852 | | | | | |
| | | 23. 59 | ·0859 | | | | | |
| Apr. 16 | | Apr. 16 | | Apr. 16 | | Apr. 16 | | |
| 0. 0 | 21. 23. 0 | 0. 0 | ·0859 | 0. 0 | ·01122 | 1. 0 | 53 ·0 | 54 ·0 |
| 0. 36 | 24. 45 | | *** | 1. 51 | ·01078 | 3. 0 | 57 ·0 | 57 ·7 |
| 0. 57 | 25. 15 | 2. 13 | ·0869 | 4. 52 | ·00790 | 9. 0 | 58 ·3 | 58 ·5 |
| 1. 7 | 24. 30 | 2. 36 | ·0879 | 8. 41: | ·01192 | 21. 0 | 49 ·0 | 50 ·0 |
| 1. 28 | 25. 0 | | *** | 9. 45 | ·01165 | | | |
| 2. 48 | 20. 5 | 3. 37 | ·0870 | 14. 10: | ·01405 | | | |
| 3. 5 | 20. 0 | 3. 46 | ·0866 | 20. 59 | ·02085 | | | |
| 3. 40: | 17. 30 | 4. 30 | ·0886 | 23. 59 | ·01888 | | | |
| 3. 58 | 18. 30 | 4. 36 | ·0884 | | | | | |
| 4. 22 | 15. 30 | 4. 49 | ·0900 | | | | | |
| 4. 30 | 11. 30 | 5. 7 | ·0910 | | | | | |
| 4. 40 | 13. 45 | 5. 50 | ·0881 | | | | | |
| 4. 46 | 11. 10 | 6. 56 | ·0870 | | | | | |
| 4. 58 | 13. 25 | 7. 47 | ·0866 | | | | | |
| 5. 10 | 12. 55 | 8. 17 | ·0869 | | | | | |
| 5. 20 | 13. 30 | 8. 40 | ·0864 | | | | | |
| 5. 45 | 13. 0 | 8. 52 | ·0864 | | | | | |
| 6. 22 | 10. 30 | 9. 10 | ·0876 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 16 | | Apr. 16 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 7. 27 | 21. 11. 15 | 9. 25 | ·0867 | | | | | |
| 7. 55 | 10. 30 | 9. 33 | ·0879 | | | | | |
| 8. 21 | 11. 20 | 9. 45 | ·0870 | | | | | |
| 8. 36 | 10. 10 | 9. 51 | ·0872 | | | | | |
| 8. 58 | 9. 0 | 10. 2 | ·0867 | | | | | |
| 9. 15 | 12. 0 | 10. 30 | ·0875 | | | | | |
| 9. 46 | 8. 30 | 10. 45 | ·0871 | | | | | |
| 9. 53 | 10. 20 | | *** | | | | | |
| 10. 11 | 7. 10 | 11. 20 | ·0875 | | | | | |
| 10. 58 | 12. 20 | 11. 45 | ·0874 | | | | | |
| 11. 52 | 13. 5 | 12. 6 | ·0877 | | | | | |
| 12. 3 | 12. 30 | 12. 24 | ·0877 | | | | | |
| 13. 12 | 12. 30 | | *** | | | | | |
| 13. 29 | 11. 30 | 14. 17 | ·0885 | | | | | |
| 13. 32 | 12. 30 | 14. 46 | ·0879 | | | | | |
| 13. 46 | 11. 30 | 15. 20 | ·0877 | | | | | |
| 14. 11 | 11. 50 | 15. 46 | ·0883 | | | | | |
| 14. 22 | 10. 50 | 16. 36 | ·0884 | | | | | |
| 15. 28 | 12. 0 | 17. 15 | ·0889 | | | | | |
| 15. 53 | 10. 45 | 17. 40 | ·0889 | | | | | |
| 16. 30 | 13. 20 | 18. 10 | ·0883 | | | | | |
| 17. 26 | 10. 50 | 18. 22 | ·0886 | | | | | |
| 17. 53 | 6. 20 | 18. 43 | ·0883 | | | | | |
| 18. 28 | 10. 45 | 19. 3: | ·0874 | | | | | |
| 19. 2 | 7. 0 | 19. 34 | ·0877 | | | | | |
| 19. 30: | 10. 40 | 20. 13 | ·0866 | | | | | |
| 20. 10 | 8. 20 | 20. 24 | ·0868 | | | | | |
| 20. 52 | 10. 0 | 20. 53 | ·0866 | | | | | |
| 21. 13 | 12. 20 | | *** | | | | | |
| 21. 52 | 13. 40 | 22. 2 | ·0848 | | | | | |
| 23. 0 | 18. 40 | | *** | | | | | |
| 23. 59 | 18. 30 | 22. 50 | ·0851 | | | | | |
| | | 23. 10 | ·0857 | | | | | |
| | | 23. 59 | ·0851 | | | | | |
| Apr. 17 | | Apr. 17 | | Apr. 17 | | Apr. 17 | | |
| 0. 0 | 21. 18. 30 | 0. 0 | ·0851 | 0. 0 | ·01888 | 1. 0 | 54 ·8 | 55 ·0 |
| 1. 0 | 19. 30 | | *** | 0. 56 | ·01832 | 3. 0 | 58 ·0 | 58 ·0 |
| 3. 35 | 14. 30 | 2. 50 | ·0868 | 6. 27 | ·01111 | 9. 0 | 58 ·3 | 57 ·8 |
| 5. 4 | 11. 30 | 3. 4 | ·0873 | 8. 27 | ·01288 | 21. 0 | 49 ·0 | 50 ·0 |
| 7. 2 | 10. 20 | 3. 22 | ·0868 | 11. 42 | ·01366 | | | |
| 9. 28 | 11. 30 | | *** | 20. 5 | ·02100 | | | |
| 9. 43 | 10. 20 | 4. 28 | ·0870 | 21. 28 | ·02167 | | | |
| 9. 59 | 10. 20 | 4. 47 | ·0875 | 23. 59 | ·01997 | | | |
| 10. 13 | 9. 0 | 5. 18 | ·0875 | | | | | |
| 10. 24 | 9. 30 | 5. 52: | ·0880 | | | | | |
| 10. 57 | 5. 50 | 6. 39 | ·0875 | | | | | |
| 11. 32 | 6. 10 | 6. 45 | ·0868 | | | | | |
| 11. 54 | 8. 0 | 7. 7 | ·0869 | | | | | |
| 12. 7 | 10. 50 | 7. 36 | ·0874 | | | | | |
| 12. 17 | 9. 50 | 9. 0 | ·0872 | | | | | |
| 12. 39 | 10. 15 | 9. 30 | ·0875 | | | | | |
| 12. 55 | 8. 50 | 9. 50 | ·0872 | | | | | |
| 14. 43 | 11. 10 | 10. 10 | ·0878 | | | | | |
| 15. 22 | 9. 15 | 10. 28 | ·0882 | | | | | |
| 16. 36 | 11. 10 | 10. 53 | ·0881 | | | | | |
| 18. 0 | 10. 10 | 11. 6 | ·0883 | | | | | |
| 18. 40 | 5. 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. |
|---|---|---|---|---|---|---|---|---|
| Apr. 17 | ° ′ ″ | Apr. 17 | | | | | | |
| h m | | h m | | h m | | h m | ° | ° |
| 19. 11 | 21. 6. 55 | 11. 28 | ·0876 | | | | | |
| 19. 42 | 10. 10 | 11. 38 | ·0878 | | | | | |
| 20. 43 | 8. 0 | 11. 54 | ·0871 | | | | | |
| 22. 42 | 14. 0 | 12. 38 | ·0887 | | | | | |
| 23. 2 | 17. 10 | 12. 51 | ·0882 | | | | | |
| 23. 14 | 16. 20 | | *** | | | | | |
| 23. 37 | 17. 20 | 17. 38 | ·0895 | | | | | |
| 23. 59 | 17. 0 | 18. 51 | ·0891 | | | | | |
| | | 19. 38 | ·0879 | | | | | |
| | | 20. 10 | ·0881 | | | | | |
| | | 22. 42 | ·0863 | | | | | |
| | | 22. 51 | ·0863 | | | | | |
| | | 23. 2 | ·0870 | | | | | |
| | | 23. 20 | ·0858 | | | | | |
| | | 23. 36 | ·0861 | | | | | |
| | | 23. 59 | ·0859 | | | | | |
| Apr. 18 | | Apr. 18 | | Apr. 18 | | Apr. 18 | | |
| 0. 0 | 21. 17. 0 | 0. 0 | ·0859 | 0. 0 | ·01997 | 0. 0 | 53 ·2 | 53 ·8 |
| 0. 40 | 19. 30 | 0. 40 | ·0872 | 1. 41 | ·01865 | 1. 0 | 55 ·0 | 55 ·1 |
| 0. 55 | 17. 35 | 0. 52 | ·0864 | 4. 41 | ·01447 | 3. 0 | 59 ·0 | 58 ·4 |
| 1. 47 | 22. 0 | 1. 10 | ·0870 | 6. 42 | ·01285 | 6. 0 | 59 ·0 | 58 ·0 |
| 2. 29 | 16. 50 | 1. 28 | ·0870 | 8. 57 | ·01300 | 9. 16 | 56 ·0 | 56 ·3 |
| 3. 5 | 19. 5 | 1. 50 | ·0880 | | ·01354 | 12. 0 | 53 ·2 | 54 ·0 |
| | *** | 2. 2 | ·0880 | 9. 52 | ·01347 | 18. 0 | 46 ·8 | 49 ·3 |
| 4. 13 | 15. 30 | 2. 28 | ·0859 | 11. 44 | ·01450 | 21. 0 | 47 ·0 | 49 ·0 |
| 5. 54 | 14. 30 | 3. 20 | ·0878 | 19. 57 | ·02186 | | | |
| 6. 55 | 12. 40 | 3. 45 | ·0877 | 22. 38 | ·01927 | | | |
| 8. 29 | 13. 5 | 4. 24 | ·0868 | | (†) | | | |
| 9. 10 | 10. 30 | 4. 52 | ·0874 | | | | | |
| 10. 0 | 13. 20 | 5. 8 | ·0872 | | | | | |
| 10. 30 | 2. 45 | 6. 20 | ·0882 | | | | | |
| 10. 44 | 5. 20 | | *** | | | | | |
| 10. 54 | 5. 0 | 7. 16 | ·0877 | | | | | |
| 11. 11 | 7. 25 | | *** | | | | | |
| 11. 20 | 5. 20 | 8. 38 | ·0887 | | | | | |
| 11. 30 | 21. 7. 40 | 9. 3: | ·0882 | | | | | |
| 12. 2 | 20. 59. 0 | 9. 45 | ·0912 | | | | | |
| 14. 53 | 21. 10. 30 | 10. 11 | ·0869 | | | | | |
| 15. 28 | 12. 45 | 10. 36 | ·0888 | | | | | |
| 16. 15 | 11. 30 | | *** | | | | | |
| 16. 53 | 11. 50 | 10. 53 | ·0887 | | | | | |
| 17. 7 | 10. 10 | 11. 10 | ·0876 | | | | | |
| 17. 41 | 11. 30 | 11. 23 | ·0884 | | | | | |
| 18. 21 | 8. 20 | 11. 54 | ·0898 | | | | | |
| 19. 12 | 10. 0 | 12. 45: | ·0874 | | | | | |
| 19. 25 | 11. 20 | 13. 36 | ·0883 | | | | | |
| 20. 58 | 7. 0 | | *** | | | | | |
| 23. 0 | 16. 0 | 14. 57 | ·0885 | | | | | |
| 23. 11 | 15. 50 | | *** | | | | | |
| 23. 45 | 17. 0 | 16. 15 | ·0895 | | | | | |
| | (†) | | *** | | | | | |
| | | 18. 37 | ·0895 | | | | | |
| | | 18. 52 | ·0890 | | | | | |
| | | 19. 10 | ·0893 | | | | | |
| | | 20. 20 | ·0896 | | | | | |
| | | 20. 45 | ·0891 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Apr. 18 h m | | h m | | h m | ° | ° |
| | | 21. 4 | ·0893 | | | | | |
| | | | *** | | | | | |
| | | 22. 9 | ·0869 | | | | | |
| | | 22. 50: | ·0877 | | | | | |
| | | 23. 10 | ·0870 | | | | | |
| | | 23. 59 | ·0878 | | | | | |
| Apr. 19 | | Apr. 19 | | Apr. 19 | | Apr. 19 | | |
| 1. 0 | 21. 22. 42* | 0. 0 | ·0879 | 1. 0 | ·01674* | 0. 0 | 49 ·0 | 49 ·7 |
| 3. 0 | 20. 29* | 1. 0 | ·0881* | 3. 0 | ·01607* | 1. 0 | 49 ·3 | 50 ·0 |
| 9. 0 | 14. 17* | 3. 0 | ·0896* | 9. 0 | ·01457* | 3. 0 | 51 ·4 | 51 ·8 |
| 21. 0 | 9. 15* | 9. 0 | ·0901* | 21. 0 | ·01518* | 9. 0 | 50 ·0 | 51 ·8 |
| | | 21. 0 | ·0880* | | | 21. 0 | 46 ·0 | 47 ·0 |
| Apr. 20 | | Apr. 20 | | Apr. 20 | | Apr. 20 | | |
| | (†) | | (†) | | (†) | 1. 0 | 50 ·3 | 51 ·0 |
| 0. 12 | 21. 21. 50 | 0. 38 | ·0871 | 0. 15 | ·01287 | 3. 0 | 53 ·0 | 53 ·0 |
| 0. 41 | 26. 0 | 1. 40 | ·0877 | 3. 4 | ·01108 | 9. 0 | 54 ·0 | 53 ·7 |
| 2. 17 | 25. 45 | | *** | 9. 30: | ·00705 | 21. 0 | 44 ·8 | 46 ·3 |
| 2. 29 | 24. 55 | 3. 20 | ·0900 | 20. 58 | ·01433 | | | |
| 2. 50 | 24. 55 | 4. 0: | ·0891 | 23. 59 | ·01267 | | | |
| 3. 37 | 17. 40 | 4. 26 | ·0897 | | | | | |
| 4. 0 | 17. 0 | 4. 45 | ·0896 | | | | | |
| 4. 26 | 18. 35 | 5. 7 | ·0899 | | | | | |
| 4. 58 | 17. 30 | 6. 15 | ·0888 | | | | | |
| 5. 28 | 15. 25 | 6. 38 | ·0896 | | | | | |
| 6. 7 | 14. 0 | 6. 53 | ·0892 | | | | | |
| 6. 29 | 10. 0 | 7. 6 | ·0894 | | | | | |
| 6. 44 | 10. 40 | 7. 30 | ·0882 | | | | | |
| 7. 5 | 9. 20 | 7. 45 | ·0885 | | | | | |
| 7. 17 | 12. 0 | 8. 8 | ·0883 | | | | | |
| 7. 38 | 12. 0 | | *** | | | | | |
| 9. 25 | 15. 0 | 9. 28 | ·0894 | | | | | |
| 9. 44 | 14. 0 | | *** | | | | | |
| 10. 2 | 14. 0 | 10. 27 | ·0895 | | | | | |
| 11. 1 | 5. 15 | 10. 40 | ·0892 | | | | | |
| 12. 13 | 13. 5 | 10. 56 | ·0897 | | | | | |
| 12. 59 | 15. 40 | 11. 9 | ·0897 | | | | | |
| 14. 17 | 15. 40 | 11. 46 | ·0886 | | | | | |
| 14. 44 | 14. 30 | 12. 30 | ·0889 | | | | | |
| 15. 11 | 15. 30 | 12. 46 | ·0894 | | | | | |
| 17. 44 | 13. 55 | | *** | | | | | |
| 20. 0 | 6. 50 | 15. 6 | ·0894 | | | | | |
| 20. 10 | 7. 10 | 16. 22 | ·0901 | | | | | |
| 20. 18 | 6. 20 | 17. 24 | ·0898 | | | | | |
| 22. 9 | 11. 0 | 17. 53 | ·0899 | | | | | |
| 23. 59 | 19. 40 | 19. 13 | ·0896 | | | | | |
| | | 20. 32 | ·0888 | | | | | |
| | | 22. 36 | ·0871 | | | | | |
| | | 23. 10 | ·0870 | | | | | |
| | | 23. 30 | ·0872 | | | | | |
| | | 23. 42 | ·0870 | | | | | |
| | | 23. 52 | ·0873 | | | | | |
| | | 23. 59 | ·0872 | | | | | |
| Apr. 21 | | Apr. 21 | | Apr. 21 | | Apr. 21 | | |
| 0. 0 | 21. 19. 40 | 0. 0 | ·0872 | 0. 0 | ·01267 | 1. 0 | 49 ·0 | 50 ·0 |
| 0. 37 | 21. 20 | 0. 15 | ·0871 | 3. 45 | ·00974 | 3. 0 | 52 ·0 | 52 ·4 |

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

April 19. The Photographic Traces for the Declination, Horizontal Force, and Vertical Force Magnets were too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 0. 54 | 21. 22. 10 | 0. 50 | ·0874 | 9. 10: | ·00600 | 9. 0 | 53 ·0 | 53 ·0 |
| 1. 44 | 22. 50 | 1. 4 | ·0873 | 14. 0 | ·00707 | 22. 25 | 44 ·5 | 46 ·0 |
| 2. 52 | 20. 45 | 5. 7 | ·0900 | 19. 11 | ·01172 | | | |
| 3. 26 | 17. 10 | 5. 40 | ·0889 | 21. 26 | ·01342 | | | |
| 4. 14 | 15. 45 | 6. 46 | ·0899 | 23. 59 | ·01193 | | | |
| 4. 51 | 13. 20 | 6. 58 | ·0897 | | | | | |
| 5. 11 | 14. 30 | 7. 16 | ·0897 | | | | | |
| 5. 28 | 13. 25 | 7. 36 | ·0894 | | | | | |
| 7. 5 | 12. 15 | 8. 8 | ·0902 | | | | | |
| 7. 21 | 13. 0 | 8. 30 | ·0895 | | | | | |
| 8. 0 | 10. 20 | 9. 10 | ·0897 | | | | | |
| 8. 27 | 11. 10 | 9. 32: | ·0895 | | | | | |
| 8. 45 | 10. 5 | 10. 13 | ·0901 | | | | | |
| 9. 26 | 12. 40 | 11. 3: | ·0899 | | | | | |
| 9. 54 | 12. 0 | 11. 33 | ·0901 | | | | | |
| 12. 7 | 16. 20 | 11. 46 | ·0901 | | | | | |
| 12. 45 | 13. 45 | 11. 55 | ·0905 | | | | | |
| 13. 11 | 13. 40 | | *** | | | | | |
| 13. 42 | 18. 0 | 12. 50 | ·0902 | | | | | |
| 14. 26 | 14. 10 | 13. 36 | ·0907 | | | | | |
| 14. 57 | 13. 20 | | *** | | | | | |
| 15. 37 | 16. 0 | 14. 47 | ·0902 | | | | | |
| | *** | 15. 13: | ·0895 | | | | | |
| 17. 11 | 12. 55 | 15. 46 | ·0902 | | | | | |
| 17. 26 | 13. 30 | 15. 58 | ·0897 | | | | | |
| 17. 37 | 11. 40 | | *** | | | | | |
| 18. 12 | 10. 45 | 18. 6 | ·0907 | | | | | |
| 18. 26 | 9. 20 | 18. 43 | ·0902 | | | | | |
| 18. 30 | 9. 35 | 18. 54 | ·0902 | | | | | |
| 18. 38 | 8. 45 | 19. 42: | ·0887 | | | | | |
| 18. 44 | 10. 50 | 20. 28 | ·0891 | | | | | |
| 18. 51 | 9. 0 | 20. 52: | ·0888 | | | | | |
| 18. 56 | 10. 0 | 21. 17 | ·0891 | | | | | |
| 19. 9 | 8. 50 | 22. 33 | ·0878 | | | | | |
| 19. 16 | 10. 50 | | (†) | | | | | |
| 19. 28 | 10. 0 | | | | | | | |
| 19. 43 | 11. 0 | | | | | | | |
| 19. 56 | 10. 20 | | | | | | | |
| 20. 12 | 11. 15 | | | | | | | |
| 21. 0 | 7. 20 | | | | | | | |
| 21. 17 | 9. 30 | | | | | | | |
| 23. 59 | 18. 10 | | | | | | | |
| Apr. 22 | | Apr. 22 | | Apr. 22 | | Apr. 22 | | |
| 0. 0 | 21. 18. 10 | 8. 0 | ·0902* | 0. 0 | ·01193 | 8. 0 | 49 ·6 | 51 ·0 |
| 1. 11 | 21. 0 | 21. 0 | ·0880* | 2. 0 | ·01200 | 21. 0 | 44 ·0 | 45 ·3 |
| 2. 26 | 20. 30 | | | 11. 11: | ·00792 | | | |
| 4. 53 | 14. 30 | | | 19. 42 | ·01257 | | | |
| 5. 35 | 13. 40 | | | 19. 57 | ·01200 | | | |
| 6. 10 | 11. 20 | | | 22. 0 | ·01200 | | | |
| 6. 43 | 12. 30 | | | 23. 59 | ·01093 | | | |
| 12. 48 | 14. 0 | | | | | | | |
| 13. 19 | 15. 30 | | | | | | | |
| 14. 7 | 14. 30 | | | | | | | |
| 16. 23 | 14. 40 | | | | | | | |
| 16. 54 | 13. 25 | | | | | | | |
| 18. 30 | 11. 35 | | | | | | | |
| 18. 44 | 10. 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. |
|---|---|---|---|---|---|---|---|---|
| Apr. 22 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 19. 25 | 21. 9. 20 | | | | | | | |
| 20. 5 | 6. 30 | | | | | | | |
| 20. 12 | 7. 0 | | | | | | | |
| 20. 30 | 6. 15 | | | | | | | |
| 21. 40 | 12. 50 | | | | | | | |
| 21. 54 | 12. 50 | | | | | | | |
| 23. 59 | 20. 45 | | | | | | | |
| Apr. 23 | | Apr. 23 | | Apr. 23 | | Apr. 23 | | |
| 0. 0 | 21. 20. 45 | 0. 0 | ·0866 | 0. 0 | ·01093 | 1. 0 | 49 ·0 | 50 ·0 |
| 0. 27 | 23. 0 | 0. 13 | ·0868 | 9. 52: | ·00375 | 3. 0 | 52 ·0 | 52 ·7 |
| 0. 52 | 22. 50 | 0. 27 | ·0863 | 20. 36 | ·00830 | 9. 0 | 54 ·0 | 53 ·5 |
| 4. 40 | 15. 20 | 0. 46 | ·0865 | 23. 59 | ·00970 | 21. 0 | 46 ·0 | 48 ·0 |
| 8. 10 | 13. 15 | 1. 20 | ·0866 | | | | | |
| 8. 39 | 11. 50 | 2. 28 | ·0877 | | | | | |
| 9. 52 | 14. 30 | 4. 15 | ·0885 | | | | | |
| 10. 54 | 15. 0 | 4. 46 | ·0879 | | | | | |
| 11. 36 | 11. 45 | 5. 10 | ·0884 | | | | | |
| 12. 38 | 13. 30 | 5. 53 | ·0884 | | | | | |
| 14. 52 | 14. 10 | 6. 13 | ·0888 | | | | | |
| 15. 15 | 13. 30 | 6. 39 | ·0887 | | | | | |
| 16. 14 | 16. 30 | 7. 0 | ·0885 | | | | | |
| 16. 27 | 16. 0 | 7. 22 | ·0885 | | | | | |
| 16. 43 | 16. 40 | 7. 43 | ·0890 | | | | | |
| 18. 27 | 11. 45 | 8. 5 | ·0886 | | | | | |
| 18. 43 | 13. 0 | 8. 16 | ·0886 | | | | | |
| 19. 12 | 11. 20 | 8. 38 | ·0881 | | | | | |
| | *** | 9. 5 | ·0887 | | | | | |
| 20. 10 | 9. 45 | 9. 22 | ·0885 | | | | | |
| 20. 36 | 10. 0 | 10. 20 | ·0888 | | | | | |
| 21. 25 | 11. 40 | 10. 43 | ·0887 | | | | | |
| 22. 11 | 15. 45 | 11. 16 | ·0892 | | | | | |
| 23. 45 | 20. 30 | 11. 58 | ·0893 | | | | | |
| | (†) | 13. 15 | ·0890 | | | | | |
| | | 15. 58 | ·0896 | | | | | |
| | | 16. 22 | ·0895 | | | | | |
| | | 17. 38 | ·0902 | | | | | |
| | | 21. 50 | ·0867 | | | | | |
| | | 22. 30 | ·0876 | | | | | |
| | | 23. 7 | ·0873 | | | | | |
| | | 23. 26 | ·0866 | | | | | |
| | | 23. 5 | ·0861 | | | | | |
| Apr. 24 | | Apr. 24 | | Apr. 24 | | Apr. 24 | | |
| | (†) | 0. 0 | ·0861 | 0. 0 | ·00970 | 1. 0 | 47 ·6 | 48 ·4 |
| 0. 13 | 21. 20. 50 | 1. 5 | ·0871 | 2. 13 | ·01003 | 3. 0 | 49 ·0 | 50 ·0 |
| 1. 36 | 21. 15 | 2. 10 | ·0883 | 8. 30 | ·00908 | 9. 0 | 50 ·0 | 50 ·7 |
| 4. 35 | 16. 0 | 4. 30 | ·0893 | 17. 12 | {·01130 | 21. 0 | 46 ·5 | 47 ·3 |
| 6. 55 | 13. 45 | | *** | | {·01088 | | | |
| 7. 42 | 14. 50 | 11. 6 | ·0899 | 21. 22 | ·01157 | | | |
| 14. 5 | 14. 35 | 11. 52 | ·0903 | 23. 59 | ·01053 | | | |
| 14. 55 | 15. 45 | 12. 34 | ·0899 | | | | | |
| 15. 56 | 14. 45 | 13. 47 | ·0904 | | | | | |
| 16. 58 | 15. 5 | 14. 8 | ·0903 | | | | | |
| 19. 23 | 10. 30 | 15. 26 | ·0910 | | | | | |
| 19. 30 | 11. 20 | 16. 52 | ·0908 | | | | | |
| 19. 58 | 8. 30 | 17. 56 | ·0911 | | | | | |
| 20. 12 | 10. 20 | 19. 50 | ·0900 | | | | | |

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 22. The Photographic Trace for the Horizontal Force Magnet was too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | | | | | |
| 21. 55 | 21. 13. 20 | 21. 38 | ·0874 | | | | | |
| 23. 15 | 18. 15 | 23. 59 | ·0865 | | | | | |
| | (†) | | | | | | | |
| Apr.25 | | Apr.25 | | Apr.25 | | Apr.25 | | |
| | (†) | 0. 0 | ·0865 | 0. 0 | ·01053 | 0. 0 | 49 ·0 | 49 ·7 |
| 3. 0 | 21. 31. 45 | 0. 33 | ·0872 | 1. 40 | ·00937 | 1. 0 | 51 ·0 | 51 ·3 |
| 5. 40 | 24. 15 | 3. 0 | ·0885 | 6. 54 | ·00360 | 3. 0 | 54 ·0 | 54 ·0 |
| 8. 9 | 21. 55 | 3. 6 | ·0887 | 9. 9 | ·00612 | 6. 0 | 57 ·0 | 58 ·0 |
| 8. 43 | 22. 20 | 3. 22 | ·0880 | 13. 26 | ·00775 | 9. 0 | 56 ·0 | 56 ·8 |
| 8. 59 | 23. 45 | 3. 47 | ·0878 | 21. 12 | ·01205 | 12. 0 | 54 ·0 | 54 ·5 |
| 14. 19 | 23. 40 | | *** | 23. 59 | ·01250 | 18. 0 | 49 ·0 | 51 ·0 |
| 14. 30 | 25. 0 | 6. 14 | ·0885 | | | 21. 10 | 48 ·0 | 50 ·0 |
| 14. 45 | 24. 0 | 7. 18 | ·0881 | | | | | |
| 14. 54 | 25. 0 | 7. 30 | ·0886 | | | | | |
| 15. 10 | 24. 0 | 8. 3 | ·0884 | | | | | |
| 16. 0 | 26. 10 | | *** | | | | | |
| 16. 29 | 23. 0 | 8. 42 | ·0888 | | | | | |
| 17. 16 | 22. 50 | 9. 43 | ·0884 | | | | | |
| 17. 35 | 20. 5 | 10. 8 | ·0890 | | | | | |
| | *** | | *** | | | | | |
| 18. 15 | 22. 10 | 12. 45 | ·0890 | | | | | |
| 18. 44 | 21. 30 | | *** | | | | | |
| 18. 56 | 22. 30 | 16. 16 | ·0899 | | | | | |
| 19. 10 | 21. 30 | | *** | | | | | |
| 19. 18 | 21. 20 | 19. 40 | ·0893 | | | | | |
| 20. 11 | 17. 30 | | *** | | | | | |
| 20. 30 | 18. 20 | 22. 17 | ·0862 | | | | | |
| 20. 54 | 18. 0 | | *** | | | | | |
| 21. 12 | 19. 45 | 23. 32 | ·0857 | | | | | |
| 22. 30 | 24. 40 | 23. 59 | ·0875 | | | | | |
| 23. 17 | 29. 55 | | | | | | | |
| 23. 59 | 31. 0 | | | | | | | |
| Apr.26 | | Apr.26 | | Apr.26 | | Apr.26 | | |
| 0. 0 | 21. 31. 0 | 0. 0 | ·0875 | 0. 0 | ·01250 | 0. 0 | 50 ·0 | 51 ·2 |
| 0. 29 | 33. 30 | | *** | 2. 43 | ·01170 | 1. 0 | 51 ·0 | 52 ·0 |
| 2. 30 | 31. 50 | 0. 58 | ·0856 | 4. 56 | ·00990 | 3. 0 | 53 ·3 | 54 ·0 |
| 4. 10 | 25. 5 | 2. 37 | ·0888 | 10. 17: | ·00864 | 9. 0 | 54 ·0 | 54 ·4 |
| 6. 2 | 19. 20 | 3. 17 | ·0880 | 15. 0 | ·01035 | 21. 0 | 49 ·0 | 49 ·6 |
| 6. 54 | 20. 40 | 3. 53 | ·0880 | 21. 51 | ·01420 | | | |
| 7. 21 | 19. 10 | 4. 35 | ·0898 | 23. 59 | ·01350 | | | |
| 7. 56 | 19. 30 | 4. 52 | ·0884 | | | | | |
| 8. 28 | 17. 25 | 5. 30 | ·0897 | | | | | |
| 9. 41 | 22. 0 | 6. 20 | ·0879 | | | | | |
| 9. 54 | 21. 30 | 6. 47 | ·0894 | | | | | |
| 10. 13 | 22. 40 | 7. 7 | ·0884 | | | | | |
| 10. 29 | 20. 50 | 7. 53 | ·0886 | | | | | |
| 10. 44 | 22. 20 | 8. 36 | ·0872 | | | | | |
| 11. 9 | 21. 0 | 10. 15 | ·0885 | | | | | |
| 11. 43 | 22. 50 | 11. 0 | ·0880 | | | | | |
| 13. 55 | 25. 30 | | *** | | | | | |
| 14. 10 | 24. 0 | 12. 21 | ·0890 | | | | | |
| 14. 24 | 25. 30 | 13. 10 | ·0886 | | | | | |
| 14. 41 | 23. 50 | | *** | | | | | |
| 14. 57 | 27. 55 | 14. 35 | ·0896 | | | | | |
| 15. 31 | 22. 0 | 14. 44 | ·0892 | | | | | |
| 16. 45 | 20. 50 | 15. 6 | ·0901 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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.26 | ° ′ ″ | Apr.26 | | h m | | h m | ° | ° |
| h m | | h m | | | | | | |
| 17. 31 | 21. 25. 20 | 15. 40 | ·0897 | | | | | |
| 18. 12 | 21. 50 | | *** | | | | | |
| 19. 7 | 19. 20 | 16. 30 | ·0899 | | | | | |
| 19. 58 | 18. 20 | 17. 7: | ·0881 | | | | | |
| 20. 12 | 15. 30 | 18. 23 | ·0899 | | | | | |
| 20. 25 | 18. 30 | 20. 17 | ·0890 | | | | | |
| 21. 11 | 20. 30 | 21. 43 | ·0865 | | | | | |
| 21. 57 | 24. 10 | 23. 20 | ·0877 | | | | | |
| 22. 45 | 23. 15 | 23. 59 | ·0866 | | | | | |
| 23. 16 | 26. 30 | | | | | | | |
| 23. 59 | 27. 0 | | | | | | | |
| Apr.27 | | Apr.27 | | Apr.27 | | Apr.27 | | |
| 0. 0 | 21. 27. 0 | 0. 0 | ·0866 | 0. 0 | ·01350 | 1. 0 | 52 ·5 | 52 ·8 |
| 1. 56 | 26. 40 | 2. 22 | ·0877 | 6. 46 | ·00685 | 3. 0 | 55 ·5 | 55 ·2 |
| 3. 11 | 23. 15 | 2. 46 | ·0881 | 12. 11 | ·00855 | 9. 0 | 57 ·0 | 57 ·0 |
| 5. 52: | 18. 0 | 3. 40 | ·0885 | 21. 22 | ·01639 | 21. 0 | 48 ·0 | 48 ·8 |
| 8. 23 | 18. 30 | 4. 17 | ·0884 | 23. 59 | ·01580 | | | |
| 10. 13 | 21. 5 | 5. 40 | ·0885 | | | | | |
| 14. 36 | 22. 0 | 6. 41 | ·0882 | | | | | |
| 14. 58 | 23. 0 | 7. 17 | ·0884 | | | | | |
| 15. 52 | 22. 10 | 7. 52 | ·0880 | | | | | |
| 16. 11 | 24. 0 | 9. 28 | ·0881 | | | | | |
| 16. 29 | 23. 55 | 9. 46 | ·0880 | | | | | |
| 18. 0 | 20. 0 | 14. 25 | ·0893 | | | | | |
| 18. 50 | 20. 0 | 14. 40 | ·0896 | | | | | |
| 19. 8 | 18. 45 | | *** | | | | | |
| 20. 27 | 18. 30 | 15. 50 | ·0898 | | | | | |
| 22. 15 | 21. 45 | 16. 7 | ·0896 | | | | | |
| 23. 55 | 26. 0 | 17. 17: | ·0901 | | | | | |
| | (†) | 19. 14 | ·0896 | | | | | |
| | | 21. 33 | ·0876 | | | | | |
| | | 21. 44 | ·0876 | | | | | |
| | | 23. 3 | ·0869 | | | | | |
| | | 23. 47 | ·0872 | | | | | |
| Apr.28 | | Apr.28 | | Apr.28 | | Apr.28 | | |
| 1. 0 | 21. 30. 41* | 1. 0 | ·0872* | 1. 0 | ·01537* | 1. 0 | 52 ·0 | 52 ·7 |
| 3. 0 | 26. 9* | 3. 0 | ·0873* | 3. 0 | ·01280* | 3. 0 | 55 ·8 | 56 ·0 |
| 9. 0 | 15. 53* | 9. 0 | ·0892* | 9. 0 | ·00782* | 9. 0 | 58 ·5 | 57 ·8 |
| 22. 20 | 21. 6* | 22. 20 | ·0870* | 22. 20 | ·01707* | 22. 20 | 49 ·0 | 51 ·0 |
| Apr.29 | | Apr.29 | | Apr.29 | | Apr.29 | | |
| 9. 22 | 21. 21. 26* | 9. 22 | ·0896* | 0. 0 | ·01638 | 9. 22 | 58 ·0 | 61 ·0 |
| 21. 0 | 17. 10* | 21. 0 | ·0880* | 1. 48 | ·01497 | 21. 0 | 52 ·3 | 53 ·8 |
| | | | | 6. 9 | ·00848 | | | |
| | | | | 6. 48 | ·00935 | | | |
| | | | | 10. 22 | ·01037 | | | |
| | | | | 16. 27 | ·01411 | | | |
| | | | | 21. 6 | ·01811 | | | |
| | | | | 23. 59 | ·01820 | | | |
| Apr.30 | | Apr.30 | | Apr.30 | | Apr.30 | | |
| | (†) | 1. 0 | ·0880* | 1. 0 | ·01767* | 1. 0 | 58 ·0 | 58 ·3 |
| 0. 58 | 21. 29. 0 | 3. 0 | ·0870* | 3. 0 | ·01479* | 3. 0 | 61 ·3 | 61 ·8 |
| 1. 10 | 28. 10 | 9. 0 | ·0885* | 9. 0 | ·01245* | 9. 0 | 64 ·7 | 64 ·5 |
| 1. 14 | 29. 10 | 21. 0 | ·0877* | 21. 0 | ·01699* | 21. 0 | 55 ·0 | 56 ·0 |
| 1. 28 | 27. 20 | | | | | | | |

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

April 28 and 29. The Photographic Traces for the Declination Magnet were too faint for use.
April 28, 29, and 30. The Photographic Traces for the Horizontal Force Magnet were too faint for use.
April 28 and 30. The Photographic Traces for the Vertical Force Magnet were too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 30 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 1. 43 | 21. 28. 0 | | | | | | | |
| 2. 30 | 24. 0 | | | | | | | |
| 2. 45 | 24. 5 | | | | | | | |
| 3. 1 | 20. 50 | | | | | | | |
| 3. 30 | 19. 20 | | | | | | | |
| 3. 43 | 20. 0 | | | | | | | |
| 4. 58 | 18. 0 | | | | | | | |
| 5. 14 | 18. 30 | | | | | | | |
| 5. 39 | 16. 35 | | | | | | | |
| 6. 54 | 16. 30 | | | | | | | |
| 7. 9 | 15. 30 | | | | | | | |
| 8. 4 | 14. 10 | | | | | | | |
| 9. 10 | 17. 30 | | | | | | | |
| 9. 35 | 19. 35 | | | | | | | |
| 10. 9 | 18. 20 | | | | | | | |
| 12. 22 | 20. 45 | | | | | | | |
| 13. 0 | 20. 0 | | | | | | | |
| | (†) | | | | | | | |
| 21. 0 | 21. 14* | | | | | | | |
| May 1 | | May 1 | | May 1 | | May 1 | | |
| | (†) | 1. 0 | ·0867* | | (†) | 1. 0 | 60 ·3 | 60 ·0 |
| 0. 52 | 21. 23. 30 | 3. 0 | ·0872* | 1. 0 | ·01340 | 3. 0 | 63 ·0 | 62 ·3 |
| 2. 6 | 23. 50 | 9. 0 | ·0883* | 6. 52 | ·00549 | 9. 0 | 64 ·5 | 64 ·0 |
| 3. 13 | 21. 10 | 21. 0 | ·0878* | 8. 52 | {·00727 | 21. 0 | 56 ·3 | 56 ·2 |
| 3. 30 | 21. 20 | | | | {·00880 | | | |
| 3. 43 | 20. 25 | | | 11. 7 | ·00904 | | | |
| 3. 45 | 21. 20 | | | 14. 32 | ·01183 | | | |
| 4. 10 | 19. 25 | | | 19. 27 | ·01627 | | | |
| 6. 7 | 17. 20 | | | 23. 0 | ·01274 | | | |
| 7. 48 | 16. 30 | | | | (†) | | | |
| 8. 30 | 11. 50 | | | | | | | |
| 8. 43 | 12. 30 | | | | | | | |
| 8. 57 | 11. 55 | | | | | | | |
| 9. 50 | 17. 10 | | | | | | | |
| 10. 13 | 16. 50 | | | | | | | |
| 10. 54 | 18. 35 | | | | | | | |
| 11. 28 | 17. 45 | | | | | | | |
| 13. 31 | 18. 0 | | | | | | | |
| 13. 51 | 19. 15 | | | | | | | |
| 14. 28 | 18. 10 | | | | | | | |
| 15. 14 | 19. 55 | | | | | | | |
| 16. 27 | 17. 20 | | | | | | | |
| 18. 36 | 15. 10 | | | | | | | |
| 18. 52 | 16. 10 | | | | | | | |
| 19. 43 | 13. 50 | | | | | | | |
| 20. 4 | 16. 20 | | | | | | | |
| 20. 39 | 13. 40 | | | | | | | |
| 21. 5 | 16. 30 | | | | | | | |
| 22. 40 | 21. 50 | | | | | | | |
| 23. 22 | 23. 30 | | | | | | | |
| | (†) | | | | | | | |
| May 2 | | May 2 | | May 2 | | May 2 | | |
| 1. 0 | 21. 25. 16* | | (†) | | (†) | 0. 0 | 58 ·2 | 58 ·0 |
| 3. 0 | 21. 45* | 1. 0 | ·0879* | 0. 42 | ·00910 | 1. 0 | 59 ·8 | 59 ·2 |
| 9. 0 | 12. 57* | 2. 46 | ·0872 | 6. 19 | ·00205 | 3. 0 | 62 ·5 | 61 ·8 |
| 21. 0 | 13. 26* | 3. 20 | ·0874 | 7. 40 | ·00360 | 6. 0 | 64 ·0 | 64 ·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 | ° ′ ″ | May 2 h m | | May 2 h m | | May 2 h m | ° | ° |
| | | 4. 43 | ·0888 | 10. 20 | {·00397 | 9. 0 | 65 ·3 | 65 ·2 |
| | | | *** | | {·00570 | 12. 0 | 63 ·7 | 64 ·8 |
| | | 8. 7 | ·0881 | 13. 40 | ·00780 | 18. 0 | 56 ·3 | 57 ·1 |
| | | 8. 24 | ·0875 | 17. 35: | ·01274 | 21. 0 | 56 ·0 | 56 ·9 |
| | | | *** | | {·00760 | | | |
| | | 13. 40 | ·0887 | 22. 0 | {·00628 | | | |
| | | 16. 41 | ·0885 | 23. 59 | ·00524 | | | |
| | | 21. 16 | ·0872 | | | | | |
| | | 21. 52 | ·0875 | | | | | |
| | | | (†) | | | | | |
| May 3 | | May 3 | | May 3 | | May 3 | | |
| | (†) | | (†) | 0. 0 | ·00524 | 0. 0 | 58 ·3 | 58 ·0 |
| 0. 15 | 21. 25. 0 | 0. 24 | ·0872 | 1. 5 | ·00520 | 1. 0 | 59 ·8 | 60 ·3 |
| 1. 7 | 26. 10 | 0. 46 | ·0873 | 2. 45 | ·00300 | 3. 0 | 62 ·0 | 64 ·0 |
| 3. 51 | 18. 30 | 0. 51 | ·0868 | | (†) | 9. 0 | 64 ·5 | 67 ·0 |
| 5. 40: | 15. 30 | 1. 7 | ·0871 | 3. 0 | ·00282* | 21. 0 | 52 ·3 | 53 ·8 |
| 8. 41 | 16. 30 | 1. 20 | ·0864 | 9. 0 | ·00005* | | | |
| 11. 20 | 20. 0 | | *** | 11. 52 | ·00310 | | | |
| 14. 37 | 19. 0 | 4. 55 | ·0880 | 17. 22 | ·01005 | | | |
| 14. 52 | 21. 35 | 5. 8 | ·0874 | 20. 52 | ·00524 | | | |
| 15. 12 | 20. 35 | | *** | 23. 59 | ·00345 | | | |
| 15. 31 | 22. 40 | 7. 10 | ·0877 | | | | | |
| 16. 9 | 20. 5 | 7. 45 | ·0875 | | | | | |
| 16. 15 | 20. 30 | | *** | | | | | |
| 16. 40 | 17. 0 | 13. 36 | ·0894 | | | | | |
| 17. 39 | 15. 30 | 13. 45 | ·0902 | | | | | |
| 17. 52 | 16. 0 | 14. 8 | ·0899 | | | | | |
| 18. 12 | 13. 20 | 14. 14 | ·0906 | | | | | |
| 18. 25 | 14. 50 | 14. 30 | ·0900 | | | | | |
| 18. 30 | 14. 0 | 15. 0 | ·0906 | | | | | |
| 18. 43 | 15. 20 | 15. 18 | ·0904 | | | | | |
| 18. 51 | 13. 15 | 15. 35 | ·0897 | | | | | |
| | *** | 16. 30: | ·0908 | | | | | |
| 19. 55 | 12. 55 | | *** | | | | | |
| 20. 11 | 11. 10 | 18. 15 | ·0910 | | | | | |
| 20. 43 | 12. 40 | 18. 51 | ·0900 | | | | | |
| 23. 0 | 27. 0 | | *** | | | | | |
| 23. 59 | 27. 0 | 20. 22 | ·0896 | | | | | |
| | | 22. 10 | ·0878 | | | | | |
| | | | *** | | | | | |
| | | 23. 30 | ·0871 | | | | | |
| | | 23. 59 | ·0874 | | | | | |
| May 4 | | May 4 | | May 4 | | May 4 | | |
| 0. 0 | 21. 27. 0 | 0. 0 | ·0874 | 0. 0 | ·00345 | 1. 0 | 55 ·8 | 57 ·2 |
| 1. 0 | 27. 40 | 0. 6 | ·0875 | 1. 40 | ·00265 | 3. 0 | 60 ·0 | 62 ·0 |
| 3. 15 | 21. 0 | 0. 27 | ·0873 | 4. 5 | –·00120 | 9. 0 | 65 ·0 | 66 ·0 |
| 3. 30 | 18. 20 | 0. 53 | ·0879 | | (†) | 21. 0 | 55 ·0 | 57 ·0 |
| | *** | 1. 10 | ·0873 | 9. 0 | –·00287 | | | |
| 6. 14 | 15. 15 | | *** | 14. 27 | –·00025 | | | |
| 10. 3 | 15. 25 | 1. 52 | ·0872 | 18. 0 | ·00390 | | | |
| | *** | 2. 10 | ·0877 | 21. 56: | ·00704 | | | |
| 17. 12 | 19. 55 | | *** | 23. 59 | ·00612 | | | |
| 17. 21 | 18. 10 | 2. 45 | ·0878 | | | | | |
| 18. 0 | 18. 10 | 3. 13 | ·0888 | | | | | |
| 18. 40 | 21. 30 | 3. 30 | ·0872 | | | | | |
| 19. 40 | 17. 0 | 4. 2 | ·0884 | | | | | |
| 19. 46 | 17. 35 | 4. 13 | ·0880 | | | | | |

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.

On May 1, the Photographic Trace for the Horizontal Force Magnet, and on May 2 that for the Declination Magnet, were too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 4 | | May 4 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 6 | 21. 16. 30 | 4. 23 | ·0887 | | | | | |
| 20. 14 | 14. 0 | 4. 32 | ·0884 | | | | | |
| 20. 28 | 21. 30 | 4. 38 | ·0888 | | | | | |
| | | | *** | | | | | |
| 21. 10 | 17. 0 | | | | | | | |
| 21. 52 | 18. 50 | 4. 54 | ·0881 | | | | | |
| | | | *** | | | | | |
| 22. 39 | 26. 0 | | | | | | | |
| 22. 56 | 25. 30 | 5. 57 | ·0878 | | | | | |
| | | | *** | | | | | |
| 23. 24 | 30. 40 | | | | | | | |
| 23. 41 | 28. 30 | 6. 20 | ·0881 | | | | | |
| | | | *** | | | | | |
| 23. 55 | 31. 0 | | | | | | | |
| 23. 59 | 30. 30 | 6. 53 | ·0875 | | | | | |
| | | 7. 26 | ·0878 | | | | | |
| | | | *** | | | | | |
| | | 8. 47 | ·0875 | | | | | |
| | | 9. 33 | ·0879 | | | | | |
| | | 9. 50 | ·0874 | | | | | |
| | | 10. 22 | ·0875 | | | | | |
| | | | *** | | | | | |
| | | 11. 3 | ·0878 | | | | | |
| | | 12. 6 | ·0885 | | | | | |
| | | 12. 20 | ·0893 | | | | | |
| | | 12. 45: | ·0887 | | | | | |
| | | 13. 8 | ·0894 | | | | | |
| | | | *** | | | | | |
| | | 14. 26 | ·0898 | | | | | |
| | | | *** | | | | | |
| | | 15. 17 | ·0906 | | | | | |
| | | | *** | | | | | |
| | | 15. 45 | ·0904 | | | | | |
| | | | *** | | | | | |
| | | 16. 43 | ·0915 | | | | | |
| | | 16. 54 | ·0912 | | | | | |
| | | | *** | | | | | |
| | | 19. 45 | ·0904 | | | | | |
| | | 19. 54 | ·0908 | | | | | |
| | | | *** | | | | | |
| | | 20. 17 | ·0904 | | | | | |
| | | 20. 28 | ·0910 | | | | | |
| | | | *** | | | | | |
| | | 20. 56 | ·0903 | | | | | |
| | | 21. 7 | ·0905 | | | | | |
| | | 23. 6 | ·0874 | | | | | |
| | | 23. 24 | ·0896 | | | | | |
| | | | (†) | | | | | |
| May 5 | | May 5 | | May 5 | | May 5 | | |
| 0. 0 | 21. 30. 30 | | (†) | 1. 0 | ·02528* | 1. 0 | 56 ·7 | 58 ·0 |
| 0. 33 | 28. 0 | 1. 0 | ·0869* | 3. 0 | ·02702* | 3. 0 | 58 ·2 | 59 ·1 |
| 0. 49 | 30. 50 | 2. 30 | ·0856 | 9. 0 | ·02672* | 9. 0 | 57 ·2 | 58 ·3 |
| 1. 3 | 29. 40 | 2. 47 | ·0856 | 22. 0 | ·02941* | 22. 0 | 49 ·3 | 51 ·0 |
| 1. 28 | 33. 40 | 3. 10 | ·0872 | | | | | |
| 2. 14 | 32. 20 | 3. 18 | ·0873 | | | | | |
| 2. 58 | 32. 30 | 3. 40 | ·0887 | | | | | |
| 3. 41 | 30. 35 | 3. 50 | ·0886 | | | | | |
| 3. 53 | 28. 0 | 4. 6 | ·0868 | | | | | |
| 4. 9 | 30. 40 | 4. 48 | ·0879 | | | | | |
| | | | *** | | | | | |
| 4. 43 | 21. 45 | | | | | | | |
| 5. 21 | 22. 40 | 5. 29 | ·0876 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 5 | | May 5 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 6. 39 | 21. 19. 30 | 5. 40 | ·0880 | | | | | |
| 7. 15 | 20. 50 | 5. 49 | ·0878 | | | | | |
| 8. 28 | 20. 55 | 6. 0: | ·0882 | | | | | |
| 8. 48 | 22. 35 | 6. 43 | ·0878 | | | | | |
| 9. 48 | 18. 0 | 7. 4 | ·0887 | | | | | |
| 10. 10 | 19. 25 | 7. 38 | ·0887 | | | | | |
| 10. 18 | 19. 0 | 7. 52 | ·0893 | | | | | |
| 10. 54 | 23. 15 | 8. 4 | ·0889 | | | | | |
| 11. 15 | 23. 10 | 8. 23 | ·0889 | | | | | |
| 12. 13: | 17. 0 | 9. 5 | ·0899 | | | | | |
| 12. 50 | 18. 15 | 9. 25 | ·0885 | | | | | |
| | (†) | | *** | | | | | |
| 14. 43 | 14. 30 | 10. 10 | ·0885 | | | | | |
| 15. 13 | 14. 55 | 10. 58 | ·0900 | | | | | |
| 15. 43 | 17. 0 | 11. 24 | ·0901 | | | | | |
| 16. 15 | 16. 20 | 11. 40 | ·0897 | | | | | |
| 16. 56 | 21. 10 | 12. 10 | ·0897 | | | | | |
| 17. 18 | 19. 15 | 12. 47 | ·0881 | | | | | |
| 17. 25 | 19. 55 | 12. 58 | ·0884 | | | | | |
| 17. 42 | 17. 30 | 13. 23 | ·0900 | | | | | |
| 17. 55 | 22. 0 | 13. 45 | ·0893 | | | | | |
| 19. 5 | 13. 40 | 14. 10 | ·0885 | | | | | |
| 19. 22 | 14. 0 | 15. 22 | ·0903 | | | | | |
| 19. 35 | 15. 30 | 16. 21 | ·0901 | | | | | |
| 19. 44 | 14. 10 | 17. 0 | ·0884 | | | | | |
| 19. 59 | 13. 50 | 17. 36 | ·0896 | | | | | |
| 20. 11 | 14. 15 | 17. 50 | ·0897 | | | | | |
| 20. 28 | 12. 40 | 18. 9 | ·0905 | | | | | |
| 21. 50 | 18. 50 | 18. 44 | ·0898 | | | | | |
| | (†) | 19. 0 | ·0899 | | | | | |
| | | 19. 10 | ·0893 | | | | | |
| | | 19. 40 | ·0898 | | | | | |
| | | 20. 11 | ·0897 | | | | | |
| | | 20. 35 | ·0884 | | | | | |
| | | 21. 45 | ·0879 | | | | | |
| | | | (†) | | | | | |
| May 6 | | May 6 | | May 6 | | May 6 | | |
| 8. 26 | 21. 10. 23* | 8. 26 | ·0886* | 8. 26 | ·02764* | 8. 26 | 58 ·0 | 59 ·0 |
| 21. 0 | 20. 41* | 21. 0 | ·0850* | 21. 0 | ·03012* | 21. 0 | 51 ·8 | 51 ·7 |
| May 7 | | May 7 | | May 7 | | May 7 | | |
| 1. 0 | 21. 28. 22* | 1. 0 | ·0856* | 0. 0 | ·02735 | 1. 0 | 57 ·2 | 57 ·3 |
| 3. 0 | 23. 17* | 3. 0 | ·0869* | 1. 15 | ·02668 | 3. 0 | 60 ·0 | 61 ·0 |
| 9. 0 | 13. 38* | 9. 0 | ·0893* | 3. 11 | ·02380 | 9. 0 | 58 ·0 | 60 ·0 |
| 21. 0 | 18. 51* | 21. 0 | ·0881* | 6. 32 | ·02649 | 21. 0 | 54 ·0 | 55 ·7 |
| | | | | 9. 15 | ·02715 | | | |
| | | | | 13. 1 | ·02966 | | | |
| | | | | 16. 18 | ·03292 | | | |
| | | | | 19. 37 | ·03120 | | | |
| | | | | | (†) | | | |
| | | | | 21. 0 | ·02959* | | | |
| | | | | 21. 42 | ·02870 | | | |
| | | | | 23. 59 | ·02833 | | | |
| May 8 | | May 8 | | y 8 | | May 8 | | |
| 1. 0 | 21. 30. 21* | 1. 0 | ·0882* | 1. 0 | ·02761* | 1. 0 | 57 ·3 | 58 ·0 |
| 3. 0 | 30. 18* | 3. 0 | ·0884* | 3. 0 | ·02651* | 3. 0 | 59 ·4 | 59 ·7 |

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

May 5, 6, 8 and 10. The Photographic Traces for the Vertical Force Magnet were too faint for use.

VERTICAL FORCE.—May 5. The adjustments were altered so that the scale reading was increased by about 13 divisions, or by 0·01947 parts of the whole Vertical Force.

May 6 to 10. Owing to defects in the paper, the Photographic Traces for the Horizontal Force and Declination Magnets were too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 9. 0 | 21. 29. 27* | 9. 0 | ·0881* | 9. 0 | ·02334* | 9. 0 | 60·3 | 61·8 |
| 21. 0 | 27. 52* | 21. 0 | ·0871* | 21. 0 | ·02719* | 21. 0 | 57·5 | 59·8 |
| May 9 | | May 9 | | May 9 | | May 9 | | |
| 1. 0 | 21. 4. 52* | 1. 0 | ·0874* | | (†) | 0. 0 | 59·5 | 60·3 |
| 3. 0 | 28. 16* | 3. 0 | ·0881* | 1. 0 | ·02654* | 1. 0 | 60·0 | 61·3 |
| 21. 0 | 20. 5* | 9. 0 | ·0891* | 1. 49 | ·02570 | 3. 0 | 61·3 | 62·1 |
| | | 21. 0 | ·0888* | 3. 45 | ·02517 | 6. 0 | 63·0 | 63·8 |
| | | | | 8. 53 | ·02223 | 9. 0 | 62·7 | 63·0 |
| | | | | 12. 54 | ·02325 | 12. 0 | 60·0 | 60·7 |
| | | | | 14. 59 | ·02477 | 18. 0 | 53·3 | 55·1 |
| | | | | 17. 10 | ·02736 | 21. 0 | 54·0 | 55·4 |
| | | | | 19. 7 | ·02790 | | | |
| | | | | | (†) | | | |
| | | | | 21. 0 | ·02786* | | | |
| May 10 | | May 10 | | May 10 | | May 10 | | |
| 1. 0 | 21. 24. 33* | 1. 0 | ·0873* | 1. 0 | ·02743* | 0. 0 | 57·0 | 58·0 |
| 3. 0 | 20. 12* | | | 3. 0 | ·02968* | 1. 0 | 57·3 | 58·2 |
| 9. 0 | 19. 51* | | | 9. 0 | ·02279* | 3. 0 | 59·0 | 60·2 |
| 21. 0 | 18. 7* | | | 21. 0 | ·02609* | 9. 0 | 61·8 | 63·0 |
| | | | | | | 21. 0 | 59·3 | 61·2 |
| May 11 | | May 11 | | May 11 | | May 11 | | |
| | (†) | | (†) | | (†) | 1. 0 | 61·3 | 62·4 |
| 1. 0 | 21. 28. 52* | 1. 0 | ·0946* | 1. 0 | ·02609* | 3. 0 | 62·0 | 63·7 |
| 3. 0 | 25. 40* | 2. 10 | ·0944 | 3. 0 | ·02594* | 9. 30 | 63·0 | 64·3 |
| 4. 25 | 21. 0 | 2. 51 | ·0942 | 4. 56 | ·02607 | 21. 0 | 62·0 | 63·0 |
| 4. 44 | 22. 0 | 3. 51 | ·0952 | 5. 43 | ·02627 | | | |
| 5. 0 | 19. 55 | 4. 6 | ·0950 | 8. 36 | ·02525 | | | |
| 5. 8 | 21. 10 | 4. 24 | ·0962 | 11. 27 | ·02505 | | | |
| 5. 24 | 20. 5 | 4. 35 | ·0958 | 14. 0 | ·02610 | | | |
| 6. 0 | 19. 30 | | *** | 15. 12 | ·02567 | | | |
| 6. 24 | 17. 50 | 5. 25 | ·0965 | 16. 17 | ·02625 | | | |
| 6. 32 | 19. 10 | | *** | 16. 42 | ·02588 | | | |
| 7. 11 | 15. 20 | 6. 0 | ·0961 | 19. 33 | ·02650 | | | |
| 7. 15 | 16. 0 | 6. 13 | ·0958 | | (†) | | | |
| 7. 29 | 15. 20 | 6. 25 | ·0949 | 21. 0 | ·02571* | | | |
| 7. 42 | 19. 0 | 6. 36 | ·0954 | | | | | |
| 7. 54 | 17. 10 | | (†) | | | | | |
| 8. 16 | 17. 0 | 8. 30 | ·0945 | | | | | |
| 8. 35 | 18. 50 | 8. 46 | ·0940 | | | | | |
| 8. 49 | 18. 20 | 9. 7 | ·0948 | | | | | |
| 8. 56 | 19. 50 | 9. 20 | ·0946 | | | | | |
| 9. 13 | 17. 5 | 9. 39 | ·0947 | | | | | |
| 9. 30 | 18. 15 | 10. 10 | ·0958 | | | | | |
| 10. 0 | 18. 10 | 10. 40 | ·0946 | | | | | |
| 10. 8 | 19. 0 | 10. 50 | ·0950 | | | | | |
| 10. 26 | 14. 20 | | *** | | | | | |
| 10. 54 | 19. 0 | 12. 15 | ·0944 | | | | | |
| 11. 13 | 16. 15 | 13. 7 | ·0944 | | | | | |
| | (†) | 13. 21 | ·0947 | | | | | |
| 12. 11 | 19. 0 | | *** | | | | | |
| 14. 52 | 15. 0 | 15. 0 | ·0950 | | | | | |
| 15. 17 | 15. 25 | 15. 24 | ·0945 | | | | | |
| 15. 44 | 18. 40 | 15. 50 | ·0949 | | | | | |
| 16. 10 | 16. 40 | 16. 23 | ·0944 | | | | | |
| 16. 30 | 18. 0 | 16. 46 | ·0950 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 11 | | May 11 | | | | May 12 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 17. 18 | 21. 16. 10 | 17. 40 | ·0945 | | | | | |
| 17. 42 | 17. 10 | 18. 10 | ·0947 | | | | | |
| 17. 56 | 15. 50 | 19. 0 | ·0941 | | | | | |
| 18. 10 | 17. 0 | 19. 16 | ·0945 | | | | | |
| 18. 35 | 15. 40 | 20. 30 | ·0931 | | | | | |
| | (†) | | *** | | | | | |
| 21. 0 | 15. 38* | 21. 52 | ·0930 | | | | | |
| | | 22. 21 | ·0921 | | | | | |
| | | 22. 33 | ·0923 | | | | | |
| | | 22. 52 | ·0917 | | | | | |
| | | | (†) | | | | | |
| May 12 | | May 12 | | May 12 | | May 12 | | |
| | (†) | | (†) | | (†) | 1. 0 | 64·0 | 65·0 |
| 0. 54 | 21. 24. 45 | 1. 0 | ·0930 | 1. 0 | ·02264* | 3. 0 | 65·3 | 66·2 |
| 1. 52 | 22. 50 | 1. 28 | ·0926 | 2. 13 | ·02550 | 9. 0 | 65·0 | 66·0 |
| 2. 10 | 24. 0 | 2. 22 | ·0937 | 3. 39 | ·02478 | 21. 45 | 59·3 | 60·6 |
| 2. 59 | 20. 40 | 2. 30 | ·0933 | 6. 0 | ·02590 | | | |
| 3. 42 | 19. 50 | 2. 50 | ·0938 | 10. 22 | ·02612 | | | |
| 4. 27 | 20. 10 | 3. 22 | ·0935 | 14. 36 | ·02772 | | | |
| 5. 9 | 19. 0 | 3. 35 | ·0938 | 17. 30 | ·03008 | | | |
| 6. 10 | 15. 20 | 3. 45 | ·0933 | | ·02937 | | | |
| 7. 25 | 15. 15 | 4. 51 | ·0948 | 23. 59 | ·03033 | | | |
| 7. 30 | 16. 5 | 5. 27 | ·0940 | | | | | |
| 7. 44 | 15. 40 | 6. 16 | ·0948 | | | | | |
| 8. 30 | 16. 30 | 6. 31 | ·0946 | | | | | |
| 8. 50 | 18. 30 | 7. 16 | ·0951 | | | | | |
| 9. 40 | 14. 0 | 7. 40 | ·0946 | | | | | |
| 10. 21 | 14. 40 | 7. 52 | ·0948 | | | | | |
| 10. 40 | 13. 30 | 8. 17 | ·0944 | | | | | |
| 10. 58 | 14. 30 | 8. 47 | ·0947 | | | | | |
| 11. 43 | 13. 40 | 9. 30 | ·0941 | | | | | |
| 12. 12 | 11. 10 | 10. 6 | ·0945 | | | | | |
| 12. 43 | 13. 40 | 10. 52 | ·0944 | | | | | |
| 13. 10 | 11. 20 | 11. 18 | ·0938 | | | | | |
| 13. 24 | 12. 30 | 11. 35 | ·0944 | | | | | |
| 13. 41 | 12. 10 | 12. 0 | ·0944 | | | | | |
| 14. 18 | 13. 15 | 12. 22 | ·0934 | | | | | |
| 15. 10 | 8. 0 | 12. 40 | ·0940 | | | | | |
| 16. 3 | 12. 30 | 12. 50 | ·0939 | | | | | |
| 17. 13 | 13. 50 | | *** | | | | | |
| 17. 45 | 12. 40 | 14. 5 | ·0954 | | | | | |
| 17. 58 | 14. 0 | | *** | | | | | |
| 19. 6 | 11. 30 | 14. 57 | ·0956 | | | | | |
| 19. 44 | 13. 10 | 15. 27 | ·0941 | | | | | |
| 19. 51 | 12. 30 | 16. 16 | ·0940 | | | | | |
| 20. 39 | 16. 15 | 16. 36 | ·0934 | | | | | |
| 21. 17 | 17. 0 | | *** | | | | | |
| 21. 36 | 18. 40 | 17. 45 | ·0946 | | | | | |
| 21. 49 | 18. 20 | 18. 30 | ·0947 | | | | | |
| 23. 59 | 24. 0 | | *** | | | | | |
| | | 20. 45 | ·0934 | | | | | |
| | | 21. 45 | ·0928 | | | | | |
| | | | *** | | | | | |
| | | 22. 55 | ·0932 | | | | | |
| | | 23. 14 | ·0939 | | | | | |
| | | 23. 55 | ·0038 | | | | | |
| | | | (†) | | | | | |

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 10 and 11. Workmen were engaged in the room and deranged the adjustments of the Horizontal Force Magnet, and thus interrupted the series.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | May 13 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 24. 0 | 0. 0 | ·0934 | 0. 0 | ·03033 | 8. 0 | 64 ·0 | 65 ·0 |
| 1. 30 | 25. 40 | 0. 34 | ·0931 | 3. 14 | ·03082 | 21. 0 | 58 ·7 | 60 ·8 |
| 2. 14 | 24. 0 | | *** | 9. 2 | ·02600 | | | |
| 3. 24 | 23. 0 | 1. 42 | ·0940 | 13. 41 | ·02764 | | | |
| 3. 30 | 23. 40 | | *** | 19. 7 | ·03172 | | | |
| 4. 32 | 19. 55 | 2. 50 | ·0939 | 23. 59 | ·03210 | | | |
| 4. 54 | 20. 10 | | *** | | | | | |
| 5. 14 | 18. 30 | 3. 41 | ·0949 | | | | | |
| 5. 43 | 18. 55 | | *** | | | | | |
| 6. 15 | 17. 30 | 4. 20 | ·0949 | | | | | |
| 6. 52 | 17. 50 | 4. 38 | ·0946 | | | | | |
| 8. 5 | 14. 0 | 4. 51 | ·0948 | | | | | |
| 8. 43 | 16. 30 | 5. 4 | ·0955 | | | | | |
| 8. 52 | 16. 20 | 5. 11 | ·0950 | | | | | |
| 9. 12 | 17. 15 | 5. 29 | ·0948 | | | | | |
| 13. 11 | 17. 0 | 5. 55 | ·0961 | | | | | |
| 13. 49 | 15. 30 | 6. 16 | ·0943 | | | | | |
| 14. 10 | 17. 20 | | *** | | | | | |
| 14. 52 | 15. 0 | 7. 0 | ·0950 | | | | | |
| 15. 12 | 15. 20 | 7. 25 | ·0943 | | | | | |
| 15. 52 | 13. 0 | 7. 46 | ·0931 | | | | | |
| 16. 30 | 13. 5 | | *** | | | | | |
| 16. 50 | 10. 50 | 9. 10 | ·0936 | | | | | |
| 17. 4 | 10. 20 | 9. 30: | ·0932 | | | | | |
| 17. 54 | 11. 35 | 11. 7: | ·0939 | | | | | |
| 18. 10 | 13. 0 | 11. 46 | ·0935 | | | | | |
| 18. 17 | 11. 55 | | *** | | | | | |
| 18. 51 | 15. 0 | 14. 0 | ·0940 | | | | | |
| 19. 52 | 15. 30 | 14. 22 | ·0936 | | | | | |
| 20. 12 | 18. 0 | 15. 14 | ·0940 | | | | | |
| 21. 24 | 20. 0 | | *** | | | | | |
| 23. 29 | 27. 55 | 17. 50 | ·0941 | | | | | |
| 23. 40 | 27. 30 | | *** | | | | | |
| 23. 44 | 28. 0 | 19. 9 | ·0936 | | | | | |
| 23. 59 | 27. 0 | 20. 8 | ·0948 | | | | | |
| | | | *** | | | | | |
| | | 22. 10 | ·0938 | | | | | |
| | | 22. 29 | ·0945 | | | | | |
| | | 22. 45 | ·0938 | | | | | |
| | | 23. 59 | ·0930 | | | | | |
| May 14 | | May 14 | | May 14 | | May 14 | | |
| 0. 0 | 21. 27. 0 | 0. 0 | ·0930 | 0. 0 | ·03210 | 1. 0 | 61 ·3 | 62 ·8 |
| 0. 58 | 24. 20 | 0. 47 | ·0931 | 5. 14 | ·02977 | 3. 0 | 63 ·2 | 64 ·7 |
| 1. 30 | 26. 10 | 1. 28 | ·0944 | 7. 16 | ·02828 | 9. 0 | 63 ·5 | 66 ·0 |
| 2. 42 | 22. 35 | 2. 8 | ·0931 | 10. 11 | ·02764 | 21. 0 | 58 ·3 | 60 ·2 |
| 3. 44 | 22. 25 | 2. 31 | ·0928 | 11. 52 | ·02780 | | | |
| 4. 15 | 21. 0 | 4. 0 | ·0943 | 14. 47 | ·02930 | | | |
| 4. 52 | 20. 30 | 4. 15 | ·0943 | 20. 15 | {·03290 | | | |
| 5. 33 | 18. 25 | 5. 20 | ·0961 | | {·03250 | | | |
| 5. 41 | 18. 45 | 5. 40 | ·0952 | 21. 40 | ·03280 | | | |
| 6. 30 | 13. 50 | 5. 50 | ·0952 | 23. 59 | ·03174 | | | |
| 7. 29 | 17. 0 | 6. 17 | ·0960 | | | | | |
| 13. 8 | 16. 40 | 6. 55 | ·0945 | | | | | |
| 13. 40 | 18. 5 | | *** | | | | | |
| 14. 0 | 17. 45 | 8. 12 | ·0947 | | | | | |
| 14. 17 | 19. 5 | 9. 36 | ·0942 | | | | | |
| 15. 22 | 13. 55 | 12. 6 | ·0950 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 15. 52 | 21. 14. 50 | 13. 9 | ·0947 | | | | | |
| 16. 39 | 14. 20 | 14. 0: | ·0952 | | | | | |
| 16. 52 | 13. 15 | 14. 58 | ·0950 | | | | | |
| 18. 0 | 13. 0 | 15. 25 | ·0944 | | | | | |
| 18. 35 | 14. 40 | 16. 57 | ·0944 | | | | | |
| 18. 43 | 14. 0 | 17. 30 | ·0959 | | | | | |
| 19. 9 | 13. 50 | 18. 15 | ·0948 | | | | | |
| 19. 27 | 11. 35 | 18. 30 | ·0942 | | | | | |
| 20. 21 | 13. 20 | | *** | | | | | |
| 22. 17 | 20. 30 | 22. 0 | ·0928 | | | | | |
| 23. 54 | 22. 0 | | *** | | | | | |
| 23. 59 | 22. 45 | 23. 59 | ·0935 | | | | | |
| May 15 | | May 15 | | May 15 | | May 15 | | |
| 0. 0 | 21. 22. 45 | 0. 0 | ·0935 | 0. 0 | ·03174 | 1. 0 | 63 ·0 | 64 ·0 |
| 0. 12 | 23. 30 | 0. 22 | ·0939 | 2. 58 | ·02992 | 3. 0 | 64 ·0 | 65 ·3 |
| 0. 27 | 23. 0 | 1. 24 | ·0931 | 6. 59 | ·02643 | 9. 0 | 67 ·7 | 68 ·2 |
| 0. 43 | 24. 20 | | *** | 9. 12 | ·02793 | 21. 0 | 58 ·3 | 60 ·1 |
| 1. 39 | 21. 40 | 3. 0 | ·0936 | 11. 51 | ·02844 | | | |
| 4. 45 | 15. 0 | 3. 15 | ·0934 | 14. 7 | ·02963 | | | |
| 5. 51 | 14. 15 | | *** | 20. 13 | ·03566 | | | |
| 6. 52 | 15. 10 | 4. 42 | ·0935 | 23. 59 | ·03294 | | | |
| 7. 57 | 14. 20 | 5. 23 | ·0943 | | | | | |
| 8. 58 | 16. 0 | 5. 50 | ·0938 | | | | | |
| 9. 14 | 15. 10 | 6. 15 | ·0944 | | | | | |
| 9. 28 | 15. 50 | | *** | | | | | |
| 9. 50 | 13. 45 | 7. 16 | ·0942 | | | | | |
| 10. 10 | 14. 30 | 7. 37 | ·0939 | | | | | |
| 10. 39 | 14. 30 | | *** | | | | | |
| 10. 54 | 15. 45 | 8. 48 | ·0940 | | | | | |
| 11. 45 | 12. 50 | 9. 11 | ·0953 | | | | | |
| 12. 10 | 9. 30 | 9. 51 | ·0942 | | | | | |
| 12. 27 | 10. 0 | 10. 17 | ·0939 | | | | | |
| 12. 43 | 10. 20 | 10. 43 | ·0941 | | | | | |
| 13. 27 | 14. 30 | 11. 37 | ·0935 | | | | | |
| 15. 4 | 17. 20 | | *** | | | | | |
| 15. 48 | 15. 10 | 11. 56 | ·0937 | | | | | |
| 16. 15 | 16. 20 | 12. 37 | ·0926 | | | | | |
| | *** | | *** | | | | | |
| 17. 54 | 12. 0 | 13. 33 | ·0937 | | | | | |
| 18. 12 | 12. 30 | 17. 12: | ·0948 | | | | | |
| 19. 18 | 10. 45 | | *** | | | | | |
| 19. 30 | 11. 30 | 23. 7 | ·0931 | | | | | |
| 19. 50 | 10. 20 | 23. 59 | ·0930 | | | | | |
| 20. 12 | 10. 30 | | | | | | | |
| 20. 23 | 12. 10 | | | | | | | |
| 22. 12 | 16. 20 | | | | | | | |
| 23. 59 | 23. 30 | | | | | | | |
| May 16 | | May 16 | | May 16 | | May 16 | | |
| 0. 0 | 21. 23. 30 | 0. 0 | ·0930 | 0. 0 | ·03294 | 0. 0 | 59 ·7 | 60 ·6 |
| 0. 40 | 25. 10 | 1. 47 | ·0930 | 2. 57 | ·03260 | 1. 0 | 60 ·0 | 60 ·8 |
| 2. 21 | 23. 45 | 2. 40 | ·0934 | 5. 23 | ·03105 | 3. 0 | 62 ·3 | 62 ·2 |
| 4. 10 | 17. 30 | | *** | 10. 0 | ·03005 | 6. 0 | 63 ·0 | 62 ·8 |
| 5. 8 | 15. 40 | 4. 18 | ·0948 | 14. 10 | ·03140 | 9. 0 | 62 ·2 | 62 ·2 |
| 5. 59 | 15. 35 | 5. 3 | ·0948 | 17. 52 | ·03373 | 12. 0 | 61 ·2 | 61 ·7 |
| 6. 27 | 14. 20 | 5. 57 | ·0961 | 18. 10 | ·03338 | 18. 0 | 58 ·1 | 59 ·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. |
|---|---|---|---|---|---|---|---|---|
| May 16 | | May 16 | | May 16 | | May 16 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 7. 15 | 21. 14. 50 | 6. 15 | ·0967 | 18. 52 | ·03350 | 21. 0 | 58 ·0 | 59 ·0 |
| 7. 54 | 16. 20 | 7. 10 | ·0947 | | ·03190 | | | |
| 9. 30 | 18. 0 | | *** | 21. 58 | ·03253 | | | |
| 10. 12 | 14. 10 | 7. 40 | ·0947 | 23. 59 | ·03198 | | | |
| 10. 35 | 16. 15 | 7. 55 | ·0952 | | | | | |
| 10. 56 | 14. 45 | 8. 13 | ·0952 | | | | | |
| 11. 20 | 16. 0 | 8. 20 | ·0950 | | | | | |
| 13. 16 | 17. 30 | 9. 6 | ·0956 | | | | | |
| 13. 30 | 17. 30 | 9. 26 | ·0955 | | | | | |
| 14. 10 | 17. 20 | 9. 36 | ·0968 | | | | | |
| 14. 41 | 15. 0 | 10. 22 | ·0957 | | | | | |
| 15. 0 | 13. 30 | 10. 47 | ·0940 | | | | | |
| 15. 37 | 15. 15 | 11. 2 | ·0941 | | | | | |
| 16. 10 | 15. 45 | 11. 25 | ·0947 | | | | | |
| 16. 41 | 13. 30 | | *** | | | | | |
| 17. 14 | 12. 30 | 12. 54 | ·0944 | | | | | |
| 17. 52 | 12. 20 | 13. 53 | ·0951 | | | | | |
| 18. 7 | 13. 0 | 14. 15 | ·0960 | | | | | |
| 19. 10 | 10. 25 | 15. 20 | ·0948 | | | | | |
| 19. 24 | 11. 40 | 17. 17 | ·0948 | | | | | |
| 20. 27 | 10. 30 | 17. 45 | ·0946 | | | | | |
| 22. 28 | 18. 45 | 18. 22 | ·0947 | | | | | |
| 23. 59 | 26. 50 | 22. 3 | ·0937 | | | | | |
| | | 23. 10 | ·0940 | | | | | |
| | | 23. 59 | ·0939 | | | | | |
| May 17 | | May 17 | | May 17 | | May 17 | | |
| 0. 0 | 21. 26. 50 | 0. 0 | ·0939 | 0. 0 | ·03198 | 0. 0 | 59 ·5 | 60 ·0 |
| 0. 44 | 25. 30 | 0. 18 | ·0931 | 2. 57 | ·03186 | 1. 0 | 60 ·0 | 60 ·5 |
| 0. 54 | 26. 15 | 1. 20 | ·0938 | 6. 13 | ·03078 | 3. 0 | 61 ·5 | 62 ·3 |
| 1. 28 | 24. 10 | 1. 56 | ·0948 | 10. 6 | ·03040 | 9. 0 | 61 ·8 | 62 ·0 |
| 2. 1 | 24. 40 | 2. 27 | ·0937 | 13. 57 | ·03228 | 21. 0 | 56 ·0 | 57 ·3 |
| 2. 43 | 20. 40 | | *** | 15. 10 | ·03255 | | | |
| 5. 17 | 17. 0 | 5. 11 | ·0970 | 16. 26 | ·03330 | | | |
| 5. 43 | 15. 35 | | *** | | ·03303 | | | |
| 6. 44 | 14. 10 | 6. 13 | ·0968 | 17. 26 | ·03370 | | | |
| 7. 27 | 12. 0 | 6. 30 | ·0960 | 18. 40 | ·03360 | | | |
| 7. 54 | 12. 0 | 6. 45 | ·0962 | | ·03238 | | | |
| 9. 16 | 16. 45 | 7. 7: | ·0955 | 22. 19 | ·03288 | | | |
| 9. 40 | 19. 30 | 7. 27 | ·0958 | 23. 59 | ·03230 | | | |
| 10. 30 | 16. 30 | 7. 40 | ·0954 | | | | | |
| 12. 55 | 18. 20 | | *** | | | | | |
| 13. 30 | 17. 45 | 9. 5 | ·0951 | | | | | |
| 13. 51 | 19. 35 | 9. 22 | ·0956 | | | | | |
| 14. 21 | 17. 20 | 10. 45 | ·0958 | | | | | |
| 14. 51 | 13. 50 | | *** | | | | | |
| 15. 14 | 13. 20 | 11. 42 | ·0954 | | | | | |
| 15. 52 | 16. 30 | 12. 37 | ·0955 | | | | | |
| 16. 14 | 14. 30 | 13. 15 | ·0960 | | | | | |
| 16. 42 | 12. 30 | 13. 47 | ·0959 | | | | | |
| 16. 59 | 12. 10 | 14. 40 | ·0977 | | | | | |
| 17. 14 | 13. 30 | 15. 40 | ·0949 | | | | | |
| 17. 44 | 10. 35 | 16. 15 | ·0957 | | | | | |
| 18. 54 | 9. 40 | 16. 38 | ·0954 | | | | | |
| 19. 10 | 11. 30 | | *** | | | | | |
| 19. 16 | 10. 20 | 17. 15 | ·0956 | | | | | |
| 19. 30 | 10. 30 | | *** | | | | | |
| 19. 43 | 12. 30 | 21. 8 | ·0932 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 20. 28 | 21. 13. 40 | 22. 5 | ·0938 | | | | | |
| 20. 43 | 13. 25 | | *** | | | | | |
| 21. 50 | 20. 30 | 23. 59 | ·0936 | | | | | |
| 22. 41 | 24. 30 | | | | | | | |
| 23. 59 | 27. 30 | | | | | | | |
| May 18 | | May 18 | | May 18 | | May 18 | | |
| 0. 0 | 21. 27. 30 | 0. 0 | ·0936 | 0. 0 | ·03230 | 1. 0 | 59 ·2 | 59 ·6 |
| 1. 0 | 29. 45 | 0. 56 | ·0950 | 1. 54 | ·02760 | 3. 0 | 61 ·5 | 61 ·5 |
| 2. 36 | 25. 0 | 2. 6: | ·0942 | 4. 44 | ·02518 | 9. 0 | 63 ·2 | 64 ·0 |
| 3. 16 | 25. 0 | 2. 50 | ·0955 | 7. 37 | ·02730 | 21. 0 | 57 ·0 | 58 ·0 |
| 3. 44 | 22. 5 | 3. 18 | ·0960 | 14. 35 | ·02917 | | | |
| 5. 12 | 19. 20 | 3. 53 | ·0947 | 20. 43 | ·03322 | | | |
| 5. 21 | 19. 50 | 4. 46 | ·0957 | 22. 28 | ·03370 | | | |
| 6. 23 | 17. 10 | 5. 6 | ·0955 | 23. 59 | ·03333 | | | |
| 6. 43 | 14. 0 | 5. 45: | ·0964 | | | | | |
| 7. 27 | 13. 20 | 6. 21 | ·0960 | | | | | |
| 7. 52 | 15. 35 | 6. 30 | ·0962 | | | | | |
| 8. 39 | 17. 20 | 6. 46 | ·0953 | | | | | |
| 10. 30 | 17. 40 | | *** | | | | | |
| 12. 14 | 17. 0 | 7. 38 | ·0966 | | | | | |
| 12. 44 | 18. 0 | | *** | | | | | |
| 14. 11 | 15. 10 | 8. 47 | ·0949 | | | | | |
| 14. 55 | 11. 0 | | *** | | | | | |
| 15. 26 | 13. 0 | 12. 15 | ·0952 | | | | | |
| 15. 57 | 16. 55 | | *** | | | | | |
| 16. 24 | 14. 10 | 13. 8 | ·0958 | | | | | |
| 16. 50 | 15. 0 | 13. 27 | ·0954 | | | | | |
| 17. 8 | 13. 40 | 14. 15 | ·0958 | | | | | |
| 17. 12 | 14. 10 | 14. 52 | ·0954 | | | | | |
| 17. 27 | 12. 50 | 15. 10 | ·0948 | | | | | |
| 17. 54 | 13. 30 | 15. 20 | ·0951 | | | | | |
| 18. 19 | 12. 30 | 15. 35 | ·0946 | | | | | |
| 18. 48 | 12. 15 | | *** | | | | | |
| 18. 57 | 13. 0 | 16. 13 | ·0954 | | | | | |
| 19. 10 | 12. 0 | 16. 23 | ·0948 | | | | | |
| 19. 26 | 13. 30 | 17. 48 | ·0949 | | | | | |
| 19. 51 | 11. 40 | 18. 12 | ·0944 | | | | | |
| 20. 0 | 12. 55 | | *** | | | | | |
| 20. 53 | 13. 40 | 20. 51 | ·0944 | | | | | |
| 22. 39 | 22. 30 | | *** | | | | | |
| 23. 21 | 22. 45 | 22. 7 | ·0932 | | | | | |
| 23. 59 | 25. 0 | 22. 20 | ·0934 | | | | | |
| | | | *** | | | | | |
| | | 22. 45 | ·0927 | | | | | |
| | | | *** | | | | | |
| | | 23. 47 | ·0939 | | | | | |
| | | 23. 59 | ·0938 | | | | | |
| May 19 | | May 19 | | May 19 | | May 19 | | |
| 0. 0 | 21. 25. 0 | 0. 0 | ·0939 | 0. 0 | ·03333 | 1. 0 | 60 ·3 | 61 ·1 |
| 1. 7 | 26. 5 | 0. 11 | ·0937 | 0. 41 | ·03330 | 3. 0 | 63 ·7 | 64 ·8 |
| 1. 39 | 24. 45 | 1. 4 | ·0947 | 2. 51 | ·03133 | 9. 0 | 65 ·8 | 67 ·2 |
| 2. 12 | 25. 0 | 1. 13 | ·0942 | 4. 59 | ·02785 | 22. 0 | 63 ·0 | 63 ·5 |
| 2. 22 | 26. 45 | 1. 36 | ·0939 | 6. 37 | ·03155 | | | |
| 2. 58 | 22. 40 | 2. 2 | ·0946 | 9. 12 | ·03487 | | | |
| 5. 9 | 17. 50 | 2. 17 | ·0962 | 14. 10 | ·03652 | | | |
| | (†) | | *** | 20. 40 | ·04050 | | | |

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 19. The Declination Magnet was in contact with some portion of its apparatus from $5^h.\ 10^m$.

| 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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | May 19 h m | | May 19 h m | | h m | ° | ° |
| | | 2. 53 | ·0946 | 22. 27 | ·04038 | | | |
| | | | *** | 23. 59 | ·03880 | | | |
| | | 3. 37 | ·0951 | | | | | |
| | | 3. 45 | ·0958 | | | | | |
| | | 3. 52 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 4. 16 | ·0953 | | | | | |
| | | 4. 22 | ·0957 | | | | | |
| | | 4. 45 | ·0953 | | | | | |
| | | | (†) | | | | | |
| | | 9. 0 | ·0941* | | | | | |
| | | 16. 8 | ·0947 | | | | | |
| | | 17. 47 | ·0949 | | | | | |
| | | 18. 50 | ·0932 | | | | | |
| | | 19. 9 | ·0935 | | | | | |
| | | | *** | | | | | |
| | | 22. 13 | ·0923 | | | | | |
| | | | (†) | | | | | |
| | | May 20 | | May 20 | | May 20 | | |
| | | | (†) | 0. 0 | ·03880 | 7. 0 | 68 ·5 | 70 ·0 |
| | | 7. 0 | ·0928* | 2. 45 | ·03522 | 21. 0 | 62 ·0 | 63 ·0 |
| | | 13. 30 | ·0939 | 5. 43 | ·04080 | | | |
| | | | *** | 8. 27 | ·04253 | | | |
| | | 17. 15: | ·0942 | 10. 12 | ·04260 | | | |
| | | | *** | 11. 56 | ·04315 | | | |
| | | 20. 47 | ·0911 | | (†) | | | |
| | | 21. 22: | ·0917 | 21. 0 | ·05021* | | | |
| | | 22. 0 | ·0913 | | | | | |
| | | | *** | | | | | |
| | | 23. 17 | ·0914 | | | | | |
| | | 23. 46 | ·0919 | | | | | |
| | | 23. 59 | ·0915 | | | | | |
| | | May 21 | | May 21 | | May 21 | | |
| | | 0. 0 | ·0915 | 1. 0 | ·04639* | 1. 0 | 66 ·4 | 68 ·0 |
| | | 1. 53 | ·0918 | 3. 0 | ·05168* | 3. 0 | 69 ·0 | 71 ·0 |
| | | 2. 30 | ·0929 | 9. 0 | ·05505* | 9. 0 | 70 ·7 | 71 ·8 |
| | | | *** | 21. 8 | ·05545* | 21. 8 | 63 ·0 | 63 ·7 |
| | | 2. 50 | ·0928 | | | | | |
| | | 3. 13 | ·0936 | | | | | |
| | | 3. 40: | ·0928 | | | | | |
| | | 4. 2 | ·0931 | | | | | |
| | | 4. 22 | ·0931 | | | | | |
| | | | (†) | | | | | |
| | | 9. 0 | ·0931* | | | | | |
| | | 10. 18 | ·0932 | | | | | |
| | | | *** | | | | | |
| | | 17. 15 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 18. 17 | ·0949 | | | | | |
| | | 19. 40 | ·0932 | | | | | |
| | | | *** | | | | | |
| | | 23. 0 | ·0923 | | | | | |
| | | 23. 59 | ·0918 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 22 h m | ° ′ ″ | May 22 h m | | May 22 h m | | May 22 h m | ° | ° |
| | (†) | 0. 0 | ·0918 | 0. 0 | ·01970 | 1. 0 | 67 ·5 | 68 ·2 |
| 0. 44 | 21. 20. 50 | | *** | 1. 36 | ·01980 | 3. 0 | 70 ·0 | 70 ·8 |
| 1. 0 | 21. 30 | 0. 47 | ·0923 | 3. 5 | ·02145 | 9. 0 | 70 ·5 | 72 ·0 |
| 2. 14 | 19. 20 | 1. 0 | ·0930 | | ·02205 | 21. 0 | 61 ·6 | 62 ·0 |
| 2. 22 | 19. 55 | | *** | 5. 40 | ·02628 | | | |
| 4. 43 | 13. 10 | 2. 50 | ·0923 | 7. 12 | ·02810 | | | |
| 5. 22 | 12. 0 | 3. 17 | ·0926 | 8. 24 | ·02792 | | | |
| 5. 31 | 15. 0 | | *** | 8. 29 | ·02845 | | | |
| 5. 48 | 13. 30 | 3. 58 | ·0921 | 9. 11 | ·02828 | | | |
| 6. 14 | 12. 20 | 4. 40 | ·0923 | 12. 34 | ·02911 | | | |
| 6. 26 | 13. 15 | 4. 51 | ·0920 | 16. 21 | ·03363 | | | |
| 6. 51 | 12. 20 | 5. 17 | ·0925 | 21. 12 | ·02800 | | | |
| 7. 10 | 13. 0 | 5. 31 | ·0922 | 23. 59 | ·02670 | | | |
| 7. 43 | 11. 45 | 5. 40 | ·0924 | | | | | |
| 7. 56 | 12. 0 | 5. 52 | ·0947 | | | | | |
| 8. 13 | 10. 30 | 6. 17 | ·0928 | | | | | |
| 8. 59 | 12. 0 | 6. 42 | ·0948 | | | | | |
| 9. 36 | 11. 0 | 7. 16 | ·0925 | | | | | |
| 9. 57 | 8. 15 | 7. 58 | ·0934 | | | | | |
| 10. 26 | 10. 40 | 8. 8 | ·0931 | | | | | |
| 11. 13 | 6. 0 | 8. 30 | ·0936 | | | | | |
| 11. 27 | 7. 20 | 9. 4 | ·0928 | | | | | |
| 11. 57 | 3. 50 | | *** | | | | | |
| 12. 35 | 16. 30 | 10. 15 | ·0925 | | | | | |
| 13. 0 | 5. 25 | 10. 26 | ·0930 | | | | | |
| 13. 40 | 8. 45 | 10. 45 | ·0927 | | | | | |
| 14. 2 | 7. 20 | 11. 4 | ·0931 | | | | | |
| 14. 56 | 12. 10 | 11. 16 | ·0924 | | | | | |
| 17. 58 | 7. 0 | 11. 30 | ·0924 | | | | | |
| 19. 18 | 7. 0 | 11. 45 | ·0935 | | | | | |
| 20. 51 | 8. 40 | 12. 15 | ·0916 | | | | | |
| 22. 28 | 16. 0 | 12. 30 | ·0932 | | | | | |
| 23. 36 | 23. 35 | 12. 46 | ·0909 | | | | | |
| 23. 59 | 23. 55 | 13. 17 | ·0934 | | | | | |
| | | | *** | | | | | |
| | | 14. 16 | ·0928 | | | | | |
| | | 14. 30 | ·0933 | | | | | |
| | | | *** | | | | | |
| | | 17. 6 | ·0937 | | | | | |
| | | | *** | | | | | |
| | | 22. 27 | ·0905 | | | | | |
| | | 22. 46 | ·0912 | | | | | |
| | | | *** | | | | | |
| | | 23. 17 | ·0914 | | | | | |
| | | 23. 30 | ·0930 | | | | | |
| | | 23. 59 | ·0922 | | | | | |
| May 23 | | May 23 | | May 23 | | May 23 | | |
| 0. 0 | 21. 23. 55 | 0. 0 | ·0922 | 0. 0 | ·02670 | 0. 0 | 63 ·5 | 64 ·7 |
| 1. 43 | 23. 0 | | *** | 1. 43 | ·02590 | 1. 0 | 64 ·4 | 65 ·2 |
| 1. 53 | 24. 30 | 0. 47 | ·0930 | 5. 15 | ·02193 | 3. 0 | 67 ·2 | 68 ·0 |
| 2. 13 | 22. 40 | 0. 52 | ·0935 | 5. 58 | ·02380 | 6. 0 | 71 ·2 | 71 ·9 |
| 2. 27 | 23. 30 | 1. 3 | ·0929 | 7. 57 | ·02660 | 9. 0 | 70 ·7 | 71 ·6 |
| 2. 51 | 21. 20 | 1. 25 | ·0933 | 8. 25 | ·02603 | 12. 0 | 68 ·8 | 69 ·9 |
| 3. 12 | 21. 30 | 1. 46 | ·0952 | 9. 54 | ·02600 | 18. 0 | 63 ·7 | 64 ·0 |
| 3. 21 | 20. 30 | 1. 57 | ·0952 | 14. 18 | ·02817 | 21. 0 | 64 ·2 | 64 ·3 |
| 3. 43 | 23. 10 | | *** | 14. 44 | ·02790 | | | |
| 4. 9 | 21. 15 | 2. 15 | ·0936 | 18. 31 | ·03285 | | | |

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

May 20 and 21. The Declination Magnet was in contact with some part of its apparatus; the results therefore are omitted, not being trustworthy.

VERTICAL FORCE.—May 20d. 12h. After this time the Photographic Trace was lost, owing to the pencil of light falling beyond the paper. On May 22d. at 0h. the adjustments were altered, so that the scale-reading was diminished by 22div.7 or by 0·034005 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. |
|---|---|---|---|---|---|---|---|---|
| May 23 | | May 23 | | May 23 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 4. 37 | 21. 20. 50 | 2. 26 | ·0947 | 19. 30 | ·03190 | | | |
| 4. 52 | 23. 0 | | *** | 23. 59 | ·02900 | | | |
| 5. 13 | 18. 30 | 2. 45 | ·0947 | | | | | |
| 5. 37 | 21. 10 | 3. 0 | ·0958 | | | | | |
| 6. 15 | 14. 15 | 3. 7 | ·0950 | | | | | |
| 6. 28 | 16. 30 | 3. 13 | ·0961 | | | | | |
| 6. 57 | 8. 40 | 3. 26 | ·0926 | | | | | |
| 7. 44 | 15. 20 | 3. 47 | ·0956 | | | | | |
| 7. 55 | 14. 0 | 4. 2 | ·0953 | | | | | |
| 8. 44 | 15. 0 | 4. 10 | ·0960 | | | | | |
| 8. 53 | 16. 10 | 4. 15 | ·0956 | | | | | |
| 9. 25 | 13. 30 | 4. 20 | ·0960 | | | | | |
| 9. 46 | 15. 10 | 4. 26 | ·0937 | | | | | |
| 10. 26 | 7. 0 | 4. 40 | ·0949 | | | | | |
| 10. 40 | 8. 25 | 4. 43 | ·0946 | | | | | |
| 11. 0 | 4. 0 | 4. 58 | ·0963 | | | | | |
| 11. 44 | 10. 50 | 5. 7 | ·0937 | | | | | |
| 11. 57 | 7. 0 | 5. 20 | ·0926 | | | | | |
| 12. 11 | 7. 40 | 5. 40 | ·0961 | | | | | |
| 12. 17 | 5. 40 | 5. 58: | ·0965 | | | | | |
| 12. 26 | 6. 10 | 6. 16 | ·0959 | | | | | |
| 12. 34 | 3. 20 | 6. 26 | ·0964 | | | | | |
| 12. 43 | 7. 10 | 6. 38 | ·0959 | | | | | |
| 14. 0 | 10. 0 | 6. 52 | ·0911 | | | | | |
| 14. 15 | 9. 15 | | *** | | | | | |
| 14. 55 | 22. 20 | 7. 27 | ·0929 | | | | | |
| 15. 28 | 4. 20 | 7. 36 | ·0925 | | | | | |
| 16. 5 | 9. 30 | 7. 45 | ·0930 | | | | | |
| 16. 41 | 9. 30 | 8. 10 | ·0919 | | | | | |
| | *** | 8. 29 | ·0923 | | | | | |
| 19. 0 | 5. 30 | 8. 47 | ·0919 | | | | | |
| 19. 11 | 7. 0 | 9. 10: | ·0930 | | | | | |
| 19. 39 | 5. 0 | 9. 27 | ·0920 | | | | | |
| 20. 0 | 8. 0 | 10. 2 | ·0933 | | | | | |
| 20. 14 | 8. 10 | 10. 12 | ·0930 | | | | | |
| 20. 43 | 11. 10 | 10. 20 | ·0916 | | | | | |
| 20. 55 | 11. 0 | 10. 43 | ·0927 | | | | | |
| 21. 30 | 12. 35 | 11. 0 | ·0915 | | | | | |
| 23. 30 | 22. 10 | | *** | | | | | |
| 23. 59 | 23. 0 | 11. 45 | ·0924 | | | | | |
| | | 11. 52 | ·0919 | | | | | |
| | | 12. 0 | ·0924 | | | | | |
| | | 12. 5 | ·0919 | | | | | |
| | | 12. 8 | ·0922 | | | | | |
| | | 12. 13 | ·0911 | | | | | |
| | | 12. 22 | ·0928 | | | | | |
| | | | *** | | | | | |
| | | 12. 43 | ·0926 | | | | | |
| | | 12. 50 | ·0913 | | | | | |
| | | 13. 0 | ·0923 | | | | | |
| | | 13. 5 | ·0919 | | | | | |
| | | 13. 17 | ·0926 | | | | | |
| | | 13. 25 | ·0921 | | | | | |
| | | 13. 40 | ·0926 | | | | | |
| | | 14. 16 | ·0917 | | | | | |
| | | 14. 52 | ·0935 | | | | | |
| | | | *** | | | | | |
| | | 16. 0 | ·0924 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| | | 18. 40 | ·0920 | | | | | |
| | | | *** | | | | | |
| | | 19. 45 | ·0910 | | | | | |
| | | | *** | | | | | |
| | | 23. 16 | ·0898 | | | | | |
| | | 23. 40 | ·0907 | | | | | |
| | | 23. 52 | ·0902 | | | | | |
| | | 23. 59 | ·0903 | | | | | |
| May 24 | | May 24 | | May 24 | | May 24 | | |
| 0. 0 | 21. 23. 0 | 0. 0 | ·0904 | 0. 0 | ·02900 | 0. 0 | 65 ·0 | 65 ·2 |
| 0. 15 | 24. 30 | 0. 27 | ·0918 | 5. 9 | ·02666 | 1. 0 | 65 ·4 | 65 ·8 |
| 0. 52 | 19. 50 | 0. 51 | ·0900 | 7. 40 | ·02337 | 3. 0 | 67 ·0 | 67 ·4 |
| 1. 50 | 22. 0 | | *** | 9. 10 | {·02395 | 9. 0 | 69 ·0 | 70 ·0 |
| 2. 12 | 21. 40 | 2. 6 | ·0938 | | {·02480 | 21. 0 | 62 ·2 | 62 ·2 |
| 2. 21 | 22. 30 | 2. 15 | ·0932 | 10. 40 | ·02444 | | | |
| 3. 43 | 18. 50 | 2. 33 | ·0943 | 13. 41 | ·02630 | | | |
| 3. 57 | 22. 0 | | *** | 18. 0 | ·03128 | | | |
| 4. 37 | 15. 30 | 3. 12 | ·0945 | 21. 9 | {·02700 | | | |
| 4. 52 | 11. 40 | 3. 43 | ·0933 | | {·02320 | | | |
| 5. 10 | 11. 45 | 4. 10 | ·0962 | 23. 59 | ·02260 | | | |
| 5. 15 | 13. 30 | 4. 22 | ·0947 | | | | | |
| 5. 30 | 14. 20 | 4. 46 | ·0965 | | | | | |
| 5. 45 | 13. 0 | | *** | | | | | |
| 5. 54 | 14. 0 | 5. 52 | ·0958 | | | | | |
| 6. 29 | 14. 30 | | *** | | | | | |
| 6. 59 | 12. 20 | 6. 28 | ·0939 | | | | | |
| 7. 11 | 13. 20 | 6. 50 | ·0945 | | | | | |
| 7. 30 | 10. 55 | | *** | | | | | |
| 7. 51 | 13. 30 | 7. 26 | ·0927 | | | | | |
| 8. 13 | 12. 0 | 7. 45 | ·0930 | | | | | |
| 8. 39 | 12. 45 | 8. 4 | ·0924 | | | | | |
| 9. 14 | 5. 0 | 8. 30 | ·0925 | | | | | |
| 9. 35 | 11. 0 | 8. 43 | ·0915 | | | | | |
| 9. 44 | 11. 50 | 8. 53 | ·0914 | | | | | |
| 9. 57 | 17. 5 | 9. 2 | ·0911 | | | | | |
| 10. 28 | 5. 10 | 9. 23 | ·0924 | | | | | |
| 10. 49 | 18. 30 | 9. 45: | ·0915 | | | | | |
| 11. 4 | 11. 45 | 9. 54 | ·0927 | | | | | |
| 11. 14 | 14. 0 | 10. 12 | ·0911 | | | | | |
| 11. 39 | 10. 30 | 10. 36 | ·0943 | | | | | |
| 12. 0 | 13. 40 | 10. 57 | ·0906 | | | | | |
| 12. 55 | 13. 20 | 11. 10 | ·0912 | | | | | |
| 13. 13 | 11. 55 | 11. 16 | ·0909 | | | | | |
| 13. 36 | 17. 20 | | *** | | | | | |
| 13. 45 | 15. 0 | 13. 30 | ·0933 | | | | | |
| 14. 1 | 15. 0 | 13. 52 | ·0926 | | | | | |
| 14. 30 | 17. 25 | 14. 33 | ·0930 | | | | | |
| 14. 52 | 16. 20 | | *** | | | | | |
| 15. 21 | 19. 20 | 15. 8 | ·0925 | | | | | |
| 15. 56 | 15. 15 | | *** | | | | | |
| 16. 14 | 15. 20 | 16. 40 | ·0950 | | | | | |
| 16. 39 | 12. 40 | | *** | | | | | |
| 16. 43 | 14. 10 | 17. 8 | ·0939 | | | | | |
| 16. 54 | 12. 30 | | *** | | | | | |
| 17. 43 | 12. 30 | 18. 37 | ·0937 | | | | | |
| 18. 24 | 11. 30 | 18. 50 | ·0945 | | | | | |
| 18. 39 | 9. 0 | 19. 8 | ·0926 | | | | | |

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 24 | | May 24 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 18. 58 | 21. 10. 5 | 21. 5 | ·0913 | | | | | |
| 19. 10 | 12. 0 | 22. 15 | ·0916 | | | | | |
| 19. 25 | 9. 0 | 23. 4 | ·0911 | | | | | |
| 20. 30 | 9. 30 | 23. 37 | ·0915 | | | | | |
| 20. 50 | 11. 30 | 23. 59 | ·0914 | | | | | |
| 21. 28 | 9. 30 | | | | | | | |
| 23. 59 | 18. 15 | | | | | | | |
| May 25 | | May 25 | | May 25 | | May 25 | | |
| 0. 0 | 21. 18. 15 | 0. 0 | ·0914 | 0. 0 | ·02260 | 1. 0 | 64 ·0 | 64 ·0 |
| 0. 15 | 20. 25 | 0. 26 | ·0921 | 4. 9 | ·02225 | 3. 0 | 65 ·2 | 65 ·0 |
| 0. 37 | 21. 50 | 0. 45 | ·0915 | 8. 51 | ·02126 | 9. 0 | 65 ·1 | 65 ·1 |
| 1. 0 | 20. 50 | 1. 10 | ·0921 | 13. 11 | ·02352 | 21. 0 | 59 ·8 | 60 ·7 |
| 1. 18 | 21. 40 | 1. 45 | ·0916 | 23. 59 | ·02088 | | | |
| 2. 44 | 20. 35 | 2. 10 | ·0924 | | | | | |
| 3. 33 | 18. 5 | 2. 37 | ·0913 | | | | | |
| 5. 56 | 17. 0 | 3. 22 | ·0936 | | | | | |
| 6. 18 | 15. 55 | | *** | | | | | |
| 6. 28 | 16. 10 | 4. 0 | ·0931 | | | | | |
| 7. 6 | 15. 5 | 4. 26 | ·0949 | | | | | |
| 7. 55 | 16. 0 | 4. 37 | ·0941 | | | | | |
| 8. 11 | 19. 20 | 4. 58 | ·0956 | | | | | |
| 8. 43 | 16. 20 | 5. 15 | ·0947 | | | | | |
| 9. 13 | 18. 30 | 5. 33 | ·0941 | | | | | |
| 9. 16 | 17. 20 | 5. 40 | ·0942 | | | | | |
| 9. 27 | 19. 0 | 6. 2 | ·0935 | | | | | |
| 9. 41 | 17. 20 | 6. 8 | ·0937 | | | | | |
| 10. 42 | 14. 30 | 6. 17 | ·0934 | | | | | |
| 11. 0 | 18. 0 | 6. 35 | ·0944 | | | | | |
| 11. 44 | 15. 30 | 6. 47 | ·0944 | | | | | |
| 14. 44 | 18. 0 | 7. 0 | ·0936 | | | | | |
| 16. 10 | 16. 0 | 7. 10 | ·0941 | | | | | |
| 16. 39 | 14. 0 | 7. 26 | ·0950 | | | | | |
| 18. 38 | 13. 40 | 7. 42 | ·0940 | | | | | |
| 18. 44 | 13. 0 | 7. 57 | ·0978 | | | | | |
| 19. 0 | 14. 30 | 8. 10 | ·0947 | | | | | |
| 19. 12 | 13. 55 | | *** | | | | | |
| 20. 40 | 15. 30 | 8. 45 | ·0948 | | | | | |
| 20. 54 | 14. 30 | 9. 7 | ·0968 | | | | | |
| 21. 37 | 20. 30 | 9. 10 | ·0946 | | | | | |
| 21. 44 | 19. 10 | 9. 21 | ·0964 | | | | | |
| 21. 58 | 23. 30 | 9. 40 | ·0953 | | | | | |
| 22. 25 | 22. 30 | 9. 46 | ·0956 | | | | | |
| 22. 30 | 24. 10 | 9. 53 | ·0955 | | | | | |
| 22. 43 | 23. 20 | 10. 2 | ·0949 | | | | | |
| 22. 59 | 26. 0 | 10. 10 | ·0956 | | | | | |
| 23. 10 | 25. 40 | 10. 26 | ·0945 | | | | | |
| 23. 15 | 27. 0 | 10. 30 | ·0933 | | | | | |
| 23. 59 | 27. 50 | 10. 42 | ·0941 | | | | | |
| | | 11. 28 | ·0946 | | | | | |
| | | | *** | | | | | |
| | | 17. 4 | ·0932 | | | | | |
| | | | *** | | | | | |
| | | 18. 47 | ·0918 | | | | | |
| | | 23. 10 | ·0916 | | | | | |
| | | 23. 27 | ·0922 | | | | | |
| | | 23. 45 | ·0920 | | | | | |
| | | 23. 59 | ·0923 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | May 26 | | May 26 | | May 26 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 27. 50 | 0. 0 | ·0923 | | (†) | 1. 0 | 62 ·4 | 62 ·7 |
| 0. 41 | 25. 50 | 0. 37 | ·0913 | 1. 0 | ·02043* | 3. 0 | 64 ·2 | 65 ·0 |
| 1. 0 | 28. 30 | | *** | 3. 0 | ·01972* | 9. 0 | 63 ·2 | 65 ·0 |
| 1. 19 | 27. 15 | 3. 20 | ·0936 | 3. 57 | ·01920 | 22. 40 | 57 ·0 | 58 ·0 |
| 2. 7 | 27. 50 | 3. 33 | ·0935 | 8. 26 | ·01554 | | | |
| 2. 57 | 25. 0 | | *** | 13. 12 | ·01793 | | | |
| 4. 0 | 19. 10 | 4. 17 | ·0949 | 17. 26 | ·02188 | | | |
| 5. 7 | 16. 10 | | *** | 18. 40 | ·02090 | | | |
| 6. 15 | 15. 0 | 5. 47 | ·0948 | 19. 26 | ·02109 | | | |
| 6. 29 | 15. 30 | 6. 8: | ·0946 | 23. 59 | ·01870 | | | |
| 6. 49 | 14. 30 | 6. 32 | ·0952 | | | | | |
| 7. 10 | 15. 20 | 6. 54 | ·0944 | | | | | |
| 7. 45 | 14. 30 | | *** | | | | | |
| 8. 7 | 15. 0 | 7. 52 | ·0951 | | | | | |
| 8. 20 | 14. 10 | 8. 42 | ·0945 | | | | | |
| 9. 15 | 15. 10 | 9. 3 | ·0949 | | | | | |
| 10. 11 | 14. 10 | 9. 15 | ·0946 | | | | | |
| 10. 42 | 15. 20 | 9. 46 | ·0946 | | | | | |
| 11. 8 | 14. 30 | 10. 2 | ·0948 | | | | | |
| 11. 15 | 15. 5 | 10. 26 | ·0944 | | | | | |
| 12. 10 | 14. 30 | | *** | | | | | |
| 12. 24 | 16. 10 | 13. 45 | ·0939 | | | | | |
| 12. 31 | 15. 30 | 14. 17 | ·0945 | | | | | |
| 13. 28 | 17. 40 | 16. 40 | ·0945 | | | | | |
| 14. 15 | 16. 0 | 18. 36 | ·0938 | | | | | |
| 14. 39 | 16. 30 | 19. 17 | ·0926 | | | | | |
| 15. 11 | 18. 20 | 22. 10 | ·0925 | | | | | |
| 15. 50 | 15. 0 | 22. 24 | ·0919 | | | | | |
| 16. 42 | 14. 20 | 22. 53 | ·0929 | | | | | |
| 17. 10 | 12. 30 | | (†) | | | | | |
| 17. 38 | 11. 10 | | | | | | | |
| 17. 49 | 12. 10 | | | | | | | |
| 18. 44 | 11. 20 | | | | | | | |
| 19. 0 | 13. 10 | | | | | | | |
| 19. 40 | 17. 55 | | | | | | | |
| 20. 10 | 16. 20 | | | | | | | |
| 20. 41 | 19. 10 | | | | | | | |
| 20. 59 | 18. 15 | | | | | | | |
| 21. 5 | 19. 5 | | | | | | | |
| 21. 28 | 19. 0 | | | | | | | |
| 22. 45 | 25. 25 | | | | | | | |
| 22. 57 | 24. 20 | | | | | | | |
| 23. 59 | 27. 30 | | | | | | | |
| May 27 | | May 27 | | May 27 | | May 27 | | |
| 0. 0 | 21. 27. 30 | 0. 0 | ·0918 | 0. 0 | ·01870 | 8. 30 | 60 ·0 | 61 ·7 |
| 0. 41 | 27. 40 | 0. 37 | ·0932 | 4. 18 | ·01588 | 21. 0 | 58 ·0 | 58 ·6 |
| 1. 18 | 25. 30 | 1. 13 | ·0936 | 9. 35: | ·01194 | | | |
| 1. 52 | 27. 0 | 1. 42 | ·0956 | 16. 40 | ·01682 | | | |
| 2. 17 | 25. 10 | 2. 0 | ·0959 | 23. 59 | ·01790 | | | |
| 3. 14 | 22. 30 | 2. 15 | ·0948 | | | | | |
| 3. 46 | 18. 0 | 2. 42 | ·0945 | | | | | |
| | (†) | 3. 7 | ·0955 | | | | | |
| 5. 42 | 13. 0 | 3. 40 | ·0938 | | | | | |
| 6. 55 | 13. 10 | 4. 4 | ·0920 | | | | | |
| 8. 58 | 16. 10 | 4. 33 | ·0957 | | | | | |
| 9. 47 | 15. 10 | 5. 0 | ·0963 | | | | | |
| 10. 7 | 16. 30 | 5. 30 | ·0949 | | | | | |

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 27 | | May 27 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 45 | 21. 12. 20 | 5. 53 | ·0949 | | | | | |
| 11. 45 | 14. 15 | 6. 20 | ·0945 | | | | | |
| 12. 32 | 16. 30 | 7. 6 | ·0951 | | | | | |
| 13. 11 | 14. 50 | | *** | | | | | |
| 13. 30 | 20. 20 | 8. 58 | ·0955 | | | | | |
| 14. 0 | 16. 30 | 9. 15 | ·0952 | | | | | |
| 14. 44 | 17. 20 | 10. 0 | ·0957 | | | | | |
| 15. 12 | 19. 10 | | *** | | | | | |
| 15. 28 | 18. 30 | 11. 36 | ·0949 | | | | | |
| 16. 8 | 22. 30 | | *** | | | | | |
| 16. 42 | 21. 30 | 12. 50 | ·0951 | | | | | |
| 16. 45 | 23. 0 | 13. 12 | ·0946 | | | | | |
| 17. 36 | 15. 30 | 13. 27 | ·0959 | | | | | |
| 17. 46 | 15. 30 | 14. 4 | ·0926 | | | | | |
| 18. 11 | 12. 0 | 14. 47 | ·0916 | | | | | |
| | *** | | (†) | | | | | |
| 19. 8 | 13. 20 | 21. 0 | ·0926* | | | | | |
| 19. 15 | 11. 30 | | | | | | | |
| 19. 29 | 12. 30 | | | | | | | |
| 19. 47 | 10. 30 | | | | | | | |
| 19. 54 | 12. 20 | | | | | | | |
| | *** | | | | | | | |
| 21. 44 | 15. 0 | | | | | | | |
| 21. 56 | 16. 30 | | | | | | | |
| 22. 12 | 15. 55 | | | | | | | |
| 23. 0 | 20. 30 | | | | | | | |
| | (†) | | | | | | | |
| May 28 | | May 28 | | May 28 | | May 28 | | |
| | (†) | 0. 0 | ·0935 | 0. 0 | ·01790 | 1. 0 | 58 ·2 | 58 ·4 |
| 0. 11 | 21. 24. 20 | | *** | 2. 15 | ·01753 | 3. 0 | 59 ·3 | 60 ·0 |
| 0. 51 | 22. 0 | 2. 26 | ·0944 | 8. 57: | ·01512 | 9. 0 | 58 ·2 | 59 ·6 |
| 2. 59 | 21. 5 | 2. 47 | ·0943 | 15. 32 | ·01911 | 21. 0 | 53 ·9 | 54 ·1 |
| 5. 40 | 13. 10 | 3. 9 | ·0949 | 17. 21 | ·01788 | | | |
| 6. 41 | 13. 20 | 3. 27 | ·0943 | 18. 20 | ·01785 | | | |
| 6. 55 | 15. 0 | 3. 45 | ·0950 | 23. 59 | ·01498 | | | |
| 9. 49 | 16. 0 | 4. 7 | ·0950 | | | | | |
| 10. 42 | 13. 40 | 4. 20 | ·0943 | | | | | |
| 11. 4 | 15. 30 | 4. 47 | ·0957 | | | | | |
| | *** | 5. 10 | ·0950 | | | | | |
| 12. 59 | 15. 30 | 5. 30 | ·0954 | | | | | |
| | *** | 5. 51 | ·0950 | | | | | |
| 15. 12 | 17. 10 | | *** | | | | | |
| | *** | 8. 45 | ·0954 | | | | | |
| 16. 54 | 13. 30 | 9. 10 | ·0959 | | | | | |
| | *** | | *** | | | | | |
| 17. 24 | 15. 0 | 14. 45 | ·0961 | | | | | |
| 17. 57 | 12. 50 | 15. 15 | ·0957 | | | | | |
| 18. 35 | 11. 25 | 16. 0 | ·0965 | | | | | |
| 19. 8 | 15. 10 | | *** | | | | | |
| 19. 35 | 14. 45 | 17. 16 | ·0965 | | | | | |
| 19. 47 | 13. 5 | | *** | | | | | |
| 19. 59 | 14. 30 | 20. 16 | ·0938 | | | | | |
| 20. 31 | 12. 0 | 20. 32 | ·0930 | | | | | |
| 20. 51 | 16. 0 | 20. 46 | ·0937 | | | | | |
| 21. 21 | 15. 0 | | *** | | | | | |
| 21. 31 | 16. 30 | 21. 30 | ·0942 | | | | | |
| 21. 42 | 15. 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. | Of V.F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| May 28 | | May 28 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 22. 18 | 21. 19. 0 | 23. 0 | ·0936 | | | | | |
| 22. 30 | 18. 30 | | *** | | | | | |
| 22. 40 | 20. 0 | 23. 59 | 0944 | | | | | |
| 23. 11 | 19. 0 | | | | | | | |
| 23. 59 | 22. 0 | | | | | | | |
| May 29 | | May 29 | | May 29 | | May 29 | | |
| 0. 0 | 21. 22. 0 | 0. 0 | ·0944 | 0. 0 | ·01498 | 1. 0 | 56 ·4 | 56 ·8 |
| 0. 40 | 24. 50 | | *** | 2. 51 | ·01328 | 3. 0 | 57 ·9 | 58 ·8 |
| 1. 28 | 21. 50 | 1. 10 | ·0943 | 10. 12: | ·00862 | 9. 0 | 59 ·3 | 60 ·7 |
| 2. 12 | 23. 0 | 1. 27 | ·0949 | 20. 29 | ·01342 | 21. 0 | 56 ·7 | 57 ·2 |
| 2. 30 | 21. 0 | | *** | 23. 59 | ·01248 | | | |
| 5. 10 | 15. 30 | 2. 7 | ·0953 | | | | | |
| 9. 54 | 15. 20 | | *** | | | | | |
| 10. 54 | 13. 30 | 2. 26 | ·0947 | | | | | |
| 12. 25 | 15. 0 | | *** | | | | | |
| 13. 18 | 13. 10 | 3. 33 | ·0957 | | | | | |
| 14. 45 | 15. 10 | 3. 53 | ·0951 | | | | | |
| | *** | | *** | | | | | |
| 17. 13 | 12. 0 | 5. 2 | ·0958 | | | | | |
| | *** | 5. 15 | ·0956 | | | | | |
| 18. 56 | 10. 50 | 5. 33 | ·0959 | | | | | |
| | *** | 6. 20 | ·0954 | | | | | |
| 21. 51 | 18. 40 | 6. 33 | ·0959 | | | | | |
| 22. 31 | 19. 10 | 6. 50 | ·0959 | | | | | |
| 23. 30 | 22. 30 | 7. 15 | ·0957 | | | | | |
| 23. 59 | 22. 55 | 7. 23 | ·0959 | | | | | |
| | | 7. 34 | ·0956 | | | | | |
| | | 8. 4 | ·0960 | | | | | |
| | | 8. 17 | ·0957 | | | | | |
| | | 8. 46 | ·0960 | | | | | |
| | | | *** | | | | | |
| | | 9. 51 | ·0962 | | | | | |
| | | | *** | | | | | |
| | | 10. 40 | ·0955 | | | | | |
| | | | *** | | | | | |
| | | 12. 37 | ·0959 | | | | | |
| | | | *** | | | | | |
| | | 13. 17 | ·0956 | | | | | |
| | | | *** | | | | | |
| | | 16. 46 | ·0957 | | | | | |
| | | | *** | | | | | |
| | | 18. 50 | ·0938 | | | | | |
| | | 19. 50 | ·0942 | | | | | |
| | | | *** | | | | | |
| | | 20. 2 | ·0936 | | | | | |
| | | | *** | | | | | |
| | | 23. 30 | ·0941 | | | | | |
| | | 23. 45 | ·0948 | | | | | |
| | | 23. 59 | ·0949 | | | | | |
| May 30 | | May 30 | | May 30 | | May 30 | | |
| 0. 0 | 21. 22. 55 | 0. 0 | ·0949 | 0. 0 | ·01248 | 0. 0 | 58 ·0 | 58 ·6 |
| 0. 47 | 23. 30 | 0. 46 | ·0954 | 1. 22 | ·01203 | 1. 0 | 58 ·7 | 58 ·8 |
| 4. 4 | 15. 20 | 1. 10 | ·0952 | 6. 44 | ·00780 | 3. 0 | 60 ·0 | 61 ·5 |
| 6. 7 | 14. 30 | 1. 46 | ·0959 | 9. 30 | ·00920 | 6. 0 | 62 ·4 | 63 ·0 |
| 6. 57 | 15. 50 | 2. 10 | ·0957 | 12. 30 | ·01008 | 9. 0 | 61 ·5 | 62 ·4 |
| 9. 43 | 16. 0 | 2. 37 | ·0960 | 17. 16 | ·01342 | 12. 0 | 60 ·0 | 61 ·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.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | May 30 | | May 30 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 58 | 21. 17. 20 | 3. 20 | ·0954 | 22. 30 | ·01608 | 18. 0 | 56·0 | 58·0 |
| 10. 51 | 15. 30 | | *** | 23. 59 | ·01603 | 21. 0 | 56·4 | 58·5 |
| 12. 55 | 15. 0 | 4. 16 | ·0962 | | | | | |
| 13. 9 | 16. 10 | 4. 33 | ·0956 | | | | | |
| 13. 16 | 15. 30 | | *** | | | | | |
| 13. 24 | 16. 10 | 6. 32 | ·0955 | | | | | |
| 13. 47 | 14. 30 | | *** | | | | | |
| 15. 21 | 17. 10 | 9. 46 | ·0954 | | | | | |
| 16. 0 | 14. 30 | 10. 11 | ·0960 | | | | | |
| 16. 47 | 10. 30 | 11. 0: | ·0954 | | | | | |
| 17. 27 | 8. 45 | | *** | | | | | |
| 17. 43 | 10. 30 | 11. 58 | ·0957 | | | | | |
| 17. 58 | 9. 0 | | *** | | | | | |
| | *** | 13. 37 | ·0955 | | | | | |
| 18. 30 | 8. 30 | | *** | | | | | |
| 19. 41 | 9. 50 | 15. 24 | ·0967 | | | | | |
| 22. 9 | 19. 5 | | *** | | | | | |
| 23. 43 | 27. 10 | 17. 15 | ·0960 | | | | | |
| 23. 59 | 27. 20 | 17. 32: | ·0964 | | | | | |
| | | 18. 15 | ·0948 | | | | | |
| | | 20. 32 | ·0915 | | | | | |
| | | 23. 8 | ·0913 | | | | | |
| | | | (†) | | | | | |
| May 31 | | May 31 | | May 31 | | May 31 | | |
| 0. 0 | 21. 27. 20 | | (†) | 0. 0 | ·01603 | 0. 0 | 57·6 | 57·7 |
| 0. 43 | 27. 40 | 1. 32 | ·0987 | 3. 15 | ·01630 | 1. 0 | 58·1 | 58·3 |
| 0. 57 | 26. 0 | 2. 2 | ·1002 | 8. 27 | ·01560 | 3. 0 | 59·0 | 59·4 |
| 1. 12 | 26. 45 | 2. 30 | ·0982 | 14. 39 | ·01672 | 9. 0 | 60·0 | 61·0 |
| 1. 50 | 24. 50 | | *** | 14. 51 | ·01643 | 21. 0 | 59·0 | 59·3 |
| 2. 11 | 25. 15 | 3. 31 | ·0994 | 15. 37 | ·01672 | | | |
| 2. 35 | 23. 0 | 3. 58 | ·1005 | 23. 59 | ·01340 | | | |
| 3. 49 | 20. 35 | 4. 9 | ·1001 | | | | | |
| 3. 58 | 21. 0 | 4. 18 | ·1003 | | | | | |
| 4. 14 | 19. 55 | 4. 56 | ·0990 | | | | | |
| 4. 22 | 20. 10 | 5. 0 | ·0998 | | | | | |
| 4. 53 | 18. 30 | 5. 7 | ·0994 | | | | | |
| 5. 7 | 19. 30 | 5. 24 | ·0996 | | | | | |
| 5. 46 | 17. 40 | 5. 45 | ·0985 | | | | | |
| 6. 51 | 17. 20 | 6. 5 | ·0981 | | | | | |
| 9. 44 | 22. 0 | 6. 59 | ·0995 | | | | | |
| 10. 13 | 21. 10 | 7. 17 | ·0988 | | | | | |
| 10. 36 | 18. 30 | 8. 4 | ·0992 | | | | | |
| 10. 55 | 18. 50 | | *** | | | | | |
| 11. 30 | 15. 50 | 9. 20 | ·0990 | | | | | |
| 12. 30 | 19. 0 | | *** | | | | | |
| 14. 26 | 19. 55 | 9. 55 | ·0995 | | | | | |
| 14. 55 | 18. 50 | 10. 5 | ·0990 | | | | | |
| 15. 48 | 18. 30 | 10. 20 | ·0991 | | | | | |
| | *** | 10. 55 | ·0980 | | | | | |
| 16. 51 | 16. 0 | 11. 4 | ·0985 | | | | | |
| 17. 20 | 15. 50 | 11. 23 | ·0979 | | | | | |
| 18. 10 | 13. 10 | | *** | | | | | |
| 18. 47 | 13. 45 | 16. 45 | ·0984 | | | | | |
| 19. 12 | 12. 30 | 17. 46 | ·0979 | | | | | |
| 19. 44 | 14. 5 | | *** | | | | | |
| 20. 39 | 15. 0 | 19. 10 | ·0962 | | | | | |
| 22. 0 | 21. 20 | 19. 40 | ·0969 | | | | | |
| 22. 36 | 21. 30 | 20. 22 | ·0961 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | May 31 | | | | June 1 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 23. 59 | 21. 26. 0 | 23. 10 | ·0948 | | | | | |
| | | 23. 59 | ·0961 | | | | | |
| June 1 | | June 1 | | June 1 | | June 1 | | |
| 0. 0 | 21. 26. 0 | 0. 0 | ·0962 | 0. 0 | ·01340 | 1. 0 | 63·0 | 63·0 |
| 1. 0 | 23. 35 | 1. 28 | ·0969 | 1. 15 | ·01293 | 3. 0 | 64·7 | 66·0 |
| 3. 27 | 17. 30 | 2. 11 | ·0976 | 10. 25: | ·00722 | 9. 0 | 65·2 | 66·6 |
| 4. 12 | 16. 10 | 2. 32 | ·0971 | 19. 42 | ·012 0 | 21. 0 | 59·8 | 61·7 |
| 4. 54 | 11. 40 | 2. 53 | ·0972 | 23. 0 | ·01312 | | | |
| 5. 15 | 13. 10 | 3. 10 | ·0979 | 23. 59 | ·01300 | | | |
| 7. 11 | 14. 15 | 3. 19 | ·0977 | | | | | |
| 7. 40. | 16. 0 | 3. 45 | ·0986 | | | | | |
| 8. 47 | 16. 0 | 4. 10 | ·0988 | | | | | |
| 10. 12 | 17. 30 | 4. 30 | ·0979 | | | | | |
| 10. 25 | 16. 20 | 4. 40 | ·0977 | | | | | |
| 10. 36 | 17. 5 | 4. 47 | ·0982 | | | | | |
| 10. 51 | 16. 10 | 4. 55 | ·0978 | | | | | |
| 15. 13 | 16. 30 | 5. 35 | ·0993 | | | | | |
| 16. 44 | 14. 50 | 5. 58 | ·0984 | | | | | |
| 16. 53 | 14. 30 | 6. 7 | ·0989 | | | | | |
| 18. 15 | 11. 10 | | *** | | | | | |
| 19. 25 | 10. 50 | 7. 53 | ·0968 | | | | | |
| 20. 30 | 13. 0 | 8. 16 | ·0971 | | | | | |
| 22. 17 | 19. 0 | 9. 8 | ·0966 | | | | | |
| 23. 11 | 24. 30 | | *** | | | | | |
| | (†) | 10. 45 | ·0973 | | | | | |
| | | 11. 15 | ·0970 | | | | | |
| | | 15. 40: | ·0978 | | | | | |
| | | 18. 30 | ·0972 | | | | | |
| | | 21. 0: | ·0956 | | | | | |
| | | 22. 20 | ·0956 | | | | | |
| | | 23. 0 | ·0961 | | | | | |
| | | | (†) | | | | | |
| June 2 | | June 2 | | June 2 | | June 2 | | |
| | (†) | | (†) | 0. 0 | ·01300 | 1. 0 | 61·0 | 62·0 |
| 1. 0 | 21. 25. 39* | 1. 0 | ·0971* | | (†) | 3. 0 | 62·3 | 63·2 |
| 3. 0 | 23. 32* | 3. 0 | ·0984* | 1. 0 | ·01416* | 9. 0 | 61·0 | 60·7 |
| 5. 54 | 16. 50 | 6. 0 | ·0976 | 3. 0 | ·01407* | 22. 30 | 56·2 | 56·8 |
| 7. 0 | 16. 45 | 7. 8 | ·0976 | 5. 45 | ·01360 | | | |
| 9. 15 | 18. 50 | 7. 29 | ·0980 | 7. 28 | ·01452 | | | |
| 10. 56 | 19. 30 | 9. 55 | ·0979 | 8. 29 | ·01373 | | | |
| 15. 28 | 17. 20 | 11. 16 | ·0983 | 13. 42 | {·01178 | | | |
| 16. 43 | 15. 0 | 16. 50 | ·0987 | | {·01026 | | | |
| 17. 0 | 13. 0 | 20. 48 | ·0963 | 16. 30 | ·01183 | | | |
| 18. 51 | 9. 30 | 21. 55 | ·0962 | 23. 59 | ·00738 | | | |
| 19. 19 | 10. 30 | 22. 15 | ·0966 | | | | | |
| 19. 29 | 9. 30 | 22. 31 | ·0963 | | | | | |
| 20. 45 | 13. 0 | 23. 25 | ·0969 | | | | | |
| 21. 28 | 16. 20 | 23. 59 | ·0970 | | | | | |
| 22. 4 | 16. 30 | | | | | | | |
| 23. 51 | 24. 50 | | | | | | | |
| 23. 59 | 24. 20 | | | | | | | |
| June 3 | | June 3 | | June 3 | | June 3 | | |
| 0. 0 | 21. 24. 20 | 0. 0 | ·0970 | 0. 0 | ·00738 | 8. 30 | 60·2 | 61·2 |
| 1. 20 | 26. 0 | 0. 41 | ·0969 | 0. 7 | {·00740 | 21. 0 | 61·0 | 59·8 |
| 1. 35 | 25. 30 | 1. 25 | ·0980 | | {·00958 | | | |

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 3 | | June 3 | | June 3 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 2. 41 | 21. 25. 20 | 1. 45 | ·0977 | 3. 45 | ·00943 | | | |
| 3. 54 | 23. 0 | 2. 35 | ·0987 | 11. 41: | ·00639 | | | |
| 5. 11 | 18. 50 | 3. 30 | ·0988 | 20. 43 | ·00924 | | | |
| 5. 29 | 18. 55 | 4. 10 | ·0995 | 23. 59 | ·00770 | | | |
| 6. 57 | 16. 0 | 4. 23 | ·0988 | | | | | |
| 13. 13 | 17. 15 | 5. 15 | ·0988 | | | | | |
| 15. 29 | 16. 5 | 5. 45 | ·0999 | | | | | |
| 16. 45 | 13. 35 | | *** | | | | | |
| 17. 29 | 8. 45 | 6. 8 | ·0988 | | | | | |
| 18. 2 | 12. 30 | 6. 25 | ·0995 | | | | | |
| 18. 25 | 10. 30 | 6. 45 | ·0987 | | | | | |
| 18. 45 | 13. 20 | 7. 11 | ·0996 | | | | | |
| 19. 23 | 11. 0 | | *** | | | | | |
| 19. 48 | 12. 30 | 10. 30 | ·0987 | | | | | |
| 20. 14 | 11. 30 | | *** | | | | | |
| 20. 44 | 13. 55 | 17. 0 | ·0984 | | | | | |
| 21. 7 | 13. 30 | | *** | | | | | |
| 22. 44 | 21. 20 | 18. 25 | ·0972 | | | | | |
| 23. 59 | 27. 50 | 18. 39 | ·0980 | | | | | |
| | | 18. 45 | ·0976 | | | | | |
| | | 18. 50 | ·0981 | | | | | |
| | | 19. 15 | ·0970 | | | | | |
| | | 20. 16 | ·0958 | | | | | |
| | | 22. 43 | ·0941 | | | | | |
| | | 23. 59 | ·0952 | | | | | |
| June 4 | | June 4 | | June 4 | | June 4 | | |
| 0. 0 | 21. 27. 50 | 0. 0 | ·0952 | 0. 0 | ·00770 | 1. 0 | 63 ·2 | 62 ·9 |
| 0. 20 | 28. 55 | 0. 35 | ·0952 | 5. 57 | ·00450 | 3. 0 | 64 ·3 | 64 ·4 |
| 1. 45 | 28. 40 | 1. 30 | ·0963 | 7. 40 | ·00526 | 9. 0 | 63 ·9 | 64 ·8 |
| 2. 5 | 28. 15 | 2. 5 | ·0976 | 12. 27: | ·00633 | 21. 0 | 57 ·3 | 58 ·5 |
| 5. 54 | 16. 40 | 2. 55 | ·0980 | 17. 37 | ·00982 | | | |
| 5. 58 | 16. 55 | 3. 6 | ·0976 | 21. 11 | ·01183 | | | |
| 6. 28 | 14. 35 | 3. 42 | ·0982 | 23. 59 | ·01100 | | | |
| 7. 11 | 14. 0 | 3. 48 | ·0980 | | | | | |
| 7. 51 | 15. 50 | 4. 40 | ·0986 | | | | | |
| 8. 43 | 16. 40 | 5. 0 | ·0981 | | | | | |
| 8. 57 | 10. 0 | 5. 13 | ·0991 | | | | | |
| 9. 28 | 10. 20 | 5. 46 | ·0979 | | | | | |
| 11. 7 | 15. 40 | 6. 9 | ·0988 | | | | | |
| 11. 16 | 15. 6 | | *** | | | | | |
| 11. 37 | 16. 20 | 7. 2 | ·0978 | | | | | |
| 11. 44 | 15. 40 | 7. 17 | ·0986 | | | | | |
| 11. 57 | 17. 0 | 7. 52 | ·0981 | | | | | |
| 12. 10 | 16. 30 | 8. 37 | ·0988 | | | | | |
| 12. 26 | 17. 20 | 9. 15 | ·0970 | | | | | |
| 13. 51 | 16. 10 | | *** | | | | | |
| 14. 28 | 19. 0 | 11. 6 | ·0967 | | | | | |
| 15. 44 | 15. 30 | | *** | | | | | |
| 16. 27 | 15. 0 | 12. 38 | ·0975 | | | | | |
| 17. 1 | 13. 45 | | *** | | | | | |
| 17. 26 | 16. 20 | 13. 15 | ·0970 | | | | | |
| 17. 48 | 14. 5 | 13. 57 | ·0977 | | | | | |
| 17. 53 | 14. 30 | | *** | | | | | |
| 18. 10 | 13. 30 | 17. 56 | ·0972 | | | | | |
| 18. 23 | 13. 10 | 19. 30 | ·0950 | | | | | |
| 19. 11 | 8. 30 | 20. 33 | ·0953 | | | | | |
| 19. 47 | 7. 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. |
|---|---|---|---|---|---|---|---|---|
| June 4 | | June 4 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 10 | 21. 9. 0 | 21. 36 | ·0937 | | | | | |
| 20. 45 | 13. 30 | | *** | | | | | |
| 21. 6 | 14. 30 | 23. 0 | ·0946 | | | | | |
| 21. 21 | 13. 40 | 23. 10 | ·0941 | | | | | |
| 22. 40 | 19. 0 | | *** | | | | | |
| 23. 59 | 27. 0 | 23. 59 | ·0940 | | | | | |
| June 5 | | June 5 | | June 5 | | June 5 | | |
| 0. 0 | 21. 27. 0 | 0. 0 | ·0940 | 0. 0 | ·01100 | 1. 0 | 61 ·2 | 61 ·8 |
| 0. 49 | 27. 5 | | *** | 9. 45: | ·00624 | 3. 0 | 63 ·0 | 63 ·0 |
| 0. 57 | 26. 10 | 0. 55 | ·0944 | 20. 22 | ·01330 | 9. 0 | 63 ·7 | 64 ·1 |
| 1. 56 | 27. 45 | 1. 17 | ·0959 | 21. 6 | {·01265 | 21. 0 | 56 ·3 | 57 ·2 |
| 2. 43 | 24. 0 | 1. 52 | ·0966 | | {·01128 | | | |
| 3. 11 | 22. 50 | 2. 20 | ·0957 | 23. 59 | ·01203 | | | |
| 3. 19 | 23. 30 | 2. 45 | ·0971 | | | | | |
| 3. 44 | 20. 25 | 3. 17 | ·0977 | | | | | |
| 4. 10 | 19. 0 | 4. 20: | ·0959 | | | | | |
| 5. 33 | 18. 0 | 5. 56 | ·0977 | | | | | |
| 6. 30 | 16. 20 | 6. 17 | ·0976 | | | | | |
| 7. 0 | 15. 0 | 6. 36 | ·0979 | | | | | |
| 7. 38 | 15. 35 | 7. 17 | ·0960 | | | | | |
| 7. 51 | 14. 50 | 7. 40 | ·0968 | | | | | |
| 8. 22 | 14. 55 | 8. 20 | ·0968 | | | | | |
| 9. 7 | 9. 30 | 8. 37 | ·0959 | | | | | |
| 9. 42 | 14. 10 | 9. 10 | ·0968 | | | | | |
| 9. 58 | 14. 15 | 9. 51 | ·0962 | | | | | |
| 10. 11 | 15. 45 | 10. 23 | ·0969 | | | | | |
| 11. 5 | 15. 55 | 11. 50 | ·0971 | | | | | |
| 11. 53 | 14. 20 | 12. 22 | ·0960 | | | | | |
| 12. 26 | 19. 0 | 12. 56 | ·0970 | | | | | |
| 13. 0 | 13. 45 | 17. 40 | ·0977 | | | | | |
| 14. 24 | 16. 20 | | *** | | | | | |
| 15. 43 | 16. 0 | 19. 52 | ·0962 | | | | | |
| | *** | 22. 33 | ·0963 | | | | | |
| 18. 18 | 9. 50 | 23. 15: | ·0956 | | | | | |
| 18. 30 | 10. 30 | 23. 59 | ·0967 | | | | | |
| 18. 41 | 9. 40 | | | | | | | |
| 18. 44 | 10. 5 | | | | | | | |
| 18. 50 | 9. 0 | | | | | | | |
| 18. 58 | 10. 0 | | | | | | | |
| 19. 15 | 7. 40 | | | | | | | |
| 19. 30 | 9. 30 | | | | | | | |
| 19. 42 | 8. 50 | | | | | | | |
| | *** | | | | | | | |
| 20. 41 | 12. 15 | | | | | | | |
| 20. 59 | 12. 10 | | | | | | | |
| 21. 40 | 14. 55 | | | | | | | |
| 21. 51 | 14. 30 | | | | | | | |
| 23. 17 | 25. 0 | | | | | | | |
| 23. 33 | 25. 0 | | | | | | | |
| 23. 46 | 26. 10 | | | | | | | |
| 23. 59 | 26. 40 | | | | | | | |
| June 6 | | June 6 | | June 6 | | June 6 | | |
| 0. 0 | 21. 26. 40 | 0. 0 | ·0967 | 0. 0 | ·01203* | 0. 0 | 57 ·3 | 58 ·1 |
| 0. 19 | 26. 45 | | *** | 1. 0 | ·01186* | 1. 0 | 58 ·0 | 58 ·3 |
| | (†) | 3. 4 | ·0979 | 3. 0 | ·01108* | 3. 0 | 59 ·0 | 60 ·0 |
| 1. 0 | 27. 1* | 3. 38 | ·0971 | 9. 0 | ·00710* | 6. 0 | 62 ·0 | 62 ·0 |

These 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 6. The Photographic Trace for the Vertical Force Magnet was too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | June 6 | | June 6 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 0 | 21. 25. 56* | 3. 51 | ·0983 | 21. 0 | ·01099* | 9. 0 | 62 ·5 | 62 ·5 |
| 6. 10 | 16. 0 | 4. 13 | ·0979 | | | 12. 0 | 62 ·0 | 61 ·9 |
| 8. 38 | 15. 50 | 4. 40 | ·0983 | | | 18. 0 | 58 ·0 | 58 ·8 |
| 10. 55 | 17. 55 | 4. 52 | ·0979 | | | 21. 0 | 58 ·0 | 59 ·0 |
| 11. 18 | 15. 30 | | *** | | | | | |
| 11. 33 | 16. 20 | 6. 45 | ·0986 | | | | | |
| 11. 59 | 12. 40 | | *** | | | | | |
| | *** | 10. 0 | ·0969 | | | | | |
| 12. 43 | 14. 15 | 11. 33 | ·0972 | | | | | |
| 13. 3 | 12. 30 | 12. 10 | ·0977 | | | | | |
| 14. 11 | 15. 45 | | (†) | | | | | |
| 14. 28 | 14. 50 | 19. 15 | ·0966 | | | | | |
| 15. 2 | 17. 45 | | *** | | | | | |
| 15. 17 | 16. 40 | 22. 5 | ·0948 | | | | | |
| 15. 30 | 17. 25 | 22. 23 | ·0952 | | | | | |
| 16. 10 | 14. 10 | | *** | | | | | |
| 16. 15 | 16. 0 | 23. 15 | ·0951 | | | | | |
| 16. 32 | 14. 0 | 23. 59 | ·0963 | | | | | |
| 16. 41 | 14. 55 | | | | | | | |
| 17. 24 | 11. 45 | | | | | | | |
| 18. 10 | 14. 0 | | | | | | | |
| | *** | | | | | | | |
| 19. 26 | 8. 30 | | | | | | | |
| | *** | | | | | | | |
| 20. 4 | 10. 20 | | | | | | | |
| 20. 16 | 9. 30 | | | | | | | |
| | *** | | | | | | | |
| 21. 50 | 14. 50 | | | | | | | |
| 23. 0 | 21. 20 | | | | | | | |
| | (†) | | | | | | | |
| June 7 | | June 7 | | June 7 | | June 7 | | |
| | (†) | 0. 0 | ·0963 | | (†) | 0. 0 | 58 ·3 | 58 ·8 |
| 0. 30 | 21. 26. 40 | 1. 37 | ·0970 | 0. 29 | ·01193 | 1. 0 | 58 ·7 | 58 ·2 |
| 1. 12 | 29. 30 | 1. 51 | ·0967 | 1. 30 | ·01228 | 3. 0 | 59 ·8 | 59 ·3 |
| 1. 46 | 29. 30 | | *** | 4. 45 | ·01140 | 9. 0 | 60 ·0 | 60 ·3 |
| 3. 42 | 22. 20 | 2. 34 | ·0971 | 11. 42 | ·01050 | 21. 0 | 57 ·0 | 58 ·0 |
| 4. 24 | 18. 30 | 2. 53 | ·0967 | 18. 13 | ·01360 | | | |
| 6. 44 | 16. 40 | 3. 16 | ·0973 | 18. 22 | ·01322 | | | |
| 9. 28 | 17. 30 | 3. 35 | ·0969 | 20. 13 | ·01360 | | | |
| 9. 59 | 9. 30 | 4. 4 | ·0989 | 21. 0 | {·01300 | | | |
| 10. 30 | 14. 20 | 4. 17 | ·0991 | | {·01128 | | | |
| 10. 44 | 14. 30 | 5. 20 | ·0979 | 23. 59 | ·00961 | | | |
| 11. 15 | 12. 20 | 5. 43 | ·0983 | | | | | |
| 11. 30 | 12. 55 | 6. 7 | ·0979 | | | | | |
| 12. 2 | 11. 10 | 7. 4 | ·0984 | | | | | |
| 13. 30 | 15. 15 | 7. 47 | ·0982 | | | | | |
| 15. 0 | 15. 20 | 8. 2 | ·0977 | | | | | |
| 15. 49 | 17. 10 | 8. 25 | ·0981 | | | | | |
| 16. 16 | 16. 0 | 9. 46 | ·0971 | | | | | |
| 16. 42 | 16. 15 | 10. 7 | ·0979 | | | | | |
| 17. 41 | 11. 30 | 10. 25 | ·0971 | | | | | |
| 18. 13 | 9. 45 | 10. 40 | ·0972 | | | | | |
| 19. 14 | 11. 0 | 11. 5 | ·0966 | | | | | |
| 19. 41 | 9. 55 | 11. 24 | ·0971 | | | | | |
| 19. 50 | 11. 0 | 11. 46 | ·0963 | | | | | |
| 20. 17 | 10. 40 | 13. 15 | ·0964 | | | | | |
| 20. 30 | 12. 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. |
|---|---|---|---|---|---|---|---|---|
| June 7 | | June 7 | | | | June 8 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 45 | 21. 12. 0 | 14. 4 | ·0970 | | | | | |
| 23. 59 | 24. 30 | 15. 0 | ·0971 | | | | | |
| | | 15. 47 | ·0976 | | | | | |
| | | 16. 40 | ·0973 | | | | | |
| | | 17. 6 | ·0974 | | | | | |
| | | 19. 33 | ·0959 | | | | | |
| | | 20. 53 | ·0955 | | | | | |
| | | | *** | | | | | |
| | | 22. 20 | ·0937 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0958 | | | | | |
| June 8 | | June 8 | | June 8 | | June 8 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0958 | 0. 0 | ·00961 | 1. 0 | 61 ·0 | 61 ·3 |
| 0. 16 | 25. 15 | 0. 32 | ·0966 | 4. 26 | ·00590 | 3. 0 | 63 ·3 | 63 ·7 |
| 0. 30 | 22. 20 | 0. 48 | ·0964 | 7. 39 | ·00874 | 9. 0 | 64 ·8 | 65 ·2 |
| 1. 14 | 24. 40 | 1. 46 | ·0984 | 10. 16 | ·00995 | 21. 0 | 59 ·0 | 60 ·0 |
| 1. 54 | 22. 50 | | *** | 12. 27 | ·01111 | | | |
| 2. 40 | 23. 0 | 2. 17 | ·0974 | 13. 56 | ·01070 | | | |
| 5. 41 | 14. 0 | 2. 30 | ·0979 | 20. 29 | ·01442 | | | |
| 8. 59 | 14. 15 | 3. 3 | ·0984 | 23. 59 | ·01488 | | | |
| 9. 45 | 10. 30 | | *** | | | | | |
| 10. 15 | 15. 20 | 3. 45 | ·0977 | | | | | |
| 10. 45 | 8. 40 | 5. 0 | ·0986 | | | | | |
| 11. 16 | 16. 5 | 5. 21 | ·0991 | | | | | |
| 11. 57 | 10. 30 | 6. 35 | ·0990 | | | | | |
| 12. 20 | 12. 20 | 6. 54 | ·0984 | | | | | |
| 12. 48 | 11. 30 | 7. 5 | ·0987 | | | | | |
| 15. 39 | 11. 50 | 7. 26 | ·0979 | | | | | |
| 16. 17 | 14. 30 | 7. 50 | ·0986 | | | | | |
| 17. 39 | 11. 30 | | *** | | | | | |
| 17. 52 | 10. 25 | 10. 5 | ·0965 | | | | | |
| 18. 9 | 11. 0 | 10. 40 | ·0971 | | | | | |
| 18. 21 | 9. 20 | 11. 2 | ·0965 | | | | | |
| 19. 30 | 8. 30 | 11. 19 | ·0968 | | | | | |
| 20. 12 | 10. 20 | 11. 40 | ·0965 | | | | | |
| 20. 39 | 9. 0 | 12. 5 | ·0974 | | | | | |
| 20. 55 | 14. 15 | 13. 13 | ·0971 | | | | | |
| 21. 56 | 11. 40 | 13. 40 | ·0976 | | | | | |
| 23. 18 | 18. 30 | 15. 4 | ·0974 | | | | | |
| 23. 45 | 22. 30 | 15. 55 | ·0978 | | | | | |
| 23. 59 | 21. 55 | 16. 51 | ·0970 | | | | | |
| | | | *** | | | | | |
| | | 18. 8 | ·0972 | | | | | |
| | | 19. 50 | ·0961 | | | | | |
| | | 21. 21 | ·0961 | | | | | |
| | | | *** | | | | | |
| | | 23. 23 | ·0975 | | | | | |
| | | 23. 47 | ·0988 | | | | | |
| | | 23. 59 | ·0980 | | | | | |
| June 9 | | June 9 | | June 9 | | June 9 | | |
| 0. 0 | 21. 21. 55 | 0. 0 | ·0979 | 0. 0 | ·01488 | 1. 0 | 59 ·3 | 60 ·2 |
| 0. 36 | 22. 0 | 0. 8 | ·0973 | 2. 14 | ·01508 | 3. 0 | 60 ·0 | 60 ·8 |
| 0. 45 | 23. 30 | 0. 35 | ·0973 | 4. 12 | ·01450 | 9. 0 | 60 ·5 | 61 ·5 |
| 1. 49 | 23. 0 | 0. 46 | ·0984 | 10. 9 | ·01474 | 22. 15 | 58 ·2 | 58 ·6 |
| 2. 44 | 21. 0 | 1. 38 | ·0966 | 13. 54 | ·01520 | | | |
| 3. 0 | 21. 20 | 2. 22 | ·0975 | 15. 45 | ·01630 | | | |

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 9 | | June 9 | | June 9 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 15 | 21. 20. 30 | 2. 37 | ·0974 | 17. 38 | ·01688 | | | |
| 3. 31 | 21. 0 | 3. 32 | ·0987 | 20. 39 | ·01802 | | | |
| 4. 27 | 18. 0 | 3. 49 | ·0982 | 23. 59 | ·01633 | | | |
| 8. 10 | 15. 0 | 4. 4 | ·0984 | | | | | |
| 10. 45 | 16. 0 | 4. 26 | ·0981 | | | | | |
| 10. 59 | 14. 55 | | *** | | | | | |
| 11. 51 | 14. 5 | 5. 36 | ·0997 | | | | | |
| 11. 59 | 15. 0 | | *** | | | | | |
| 12. 29 | 14. 30 | 6. 8 | ·0984 | | | | | |
| 13. 15 | 16. 15 | | *** | | | | | |
| 13. 40 | 18. 20 | 7. 25 | ·0989 | | | | | |
| 14. 14 | 19. 0 | | *** | | | | | |
| 14. 48 | 10. 30 | 11. 43 | ·0981 | | | | | |
| 15. 9 | 10. 0 | | *** | | | | | |
| 15. 43 | 12. 50 | 13. 30: | ·0992 | | | | | |
| 16. 29 | 10. 50 | 13. 52 | ·0985 | | | | | |
| 16. 54 | 12. 30 | 14. 23 | ·0987 | | | | | |
| 17. 12 | 18. 0 | 14. 50 | ·0977 | | | | | |
| 17. 44 | 13. 30 | | *** | | | | | |
| 17. 51 | 15. 50 | 16. 6 | ·0983 | | | | | |
| 17. 57 | 14. 0 | | *** | | | | | |
| 18. 0 | 14. 30 | 18. 17 | ·0986 | | | | | |
| 18. 47 | 10. 30 | | *** | | | | | |
| 19. 19 | 9. 30 | 21. 30 | ·0959 | | | | | |
| | *** | | *** | | | | | |
| 20. 54 | 12. 20 | 23. 7 | ·0969 | | | | | |
| 22. 44 | 18. 30 | 23. 23 | ·0960 | | | | | |
| 23. 11 | 21. 20 | 23. 40 | ·0948 | | | | | |
| 23. 59 | 22. 30 | 23. 59 | ·0964 | | | | | |
| June 10 | | June 10 | | June 10 | | June 10 | | |
| 0. 0 | 21. 22. 30 | 0. 0 | ·0965 | 0. 0 | ·01633 | 8. 20 | 61 ·8 | 63 ·0 |
| 0. 38 | 24. 40 | 0. 38 | ·0978 | 2. 11 | ·01625 | 21. 0 | 57 ·0 | 58 ·0 |
| 1. 54 | 24. 50 | 1. 15 | ·0985 | 6. 27 | ·01424 | | | |
| 2. 27 | 22. 30 | | *** | 10. 15 | ·01300 | | | |
| 3. 19 | 22. 10 | 2. 10 | ·0996 | 13. 23 | ·01349 | | | |
| 5. 34 | 17. 30 | 2. 43 | ·0981 | 14. 18 | ·01315 | | | |
| 12. 45 | 15. 30 | | *** | 16. 35 | ·01510 | | | |
| 12. 49 | 18. 30 | 5. 17 | ·0991 | 19. 0 | ·01701 | | | |
| 13. 4 | 14. 0 | | *** | 21. 15 | ·01518 | | | |
| 13. 24 | 21. 17. 0 | 8. 45 | ·0981 | 23. 59 | ·01500 | | | |
| 14. 20 | 20. 58. 40 | | *** | | | | | |
| 14. 43 | 21. 17. 0 | 12. 40 | ·0981 | | | | | |
| 15. 17 | 6. 30 | 12. 47 | ·1008 | | | | | |
| 15. 59 | 3. 25 | 13. 6 | ·0989 | | | | | |
| 16. 30 | 7. 0 | | *** | | | | | |
| 16. 48 | 6. 15 | 13. 33 | ·1010 | | | | | |
| 17. 10 | 8. 30 | 14. 36 | ·0949 | | | | | |
| 17. 28 | 14. 30 | 14. 56 | ·0978 | | | | | |
| 17. 42 | 12. 30 | | *** | | | | | |
| 17. 59 | 15. 50 | 16. 11 | ·0994 | | | | | |
| 18. 13 | 12. 10 | | *** | | | | | |
| 18. 44 | 10. 30 | 17. 15: | ·0969 | | | | | |
| 18. 51 | 13. 20 | | *** | | | | | |
| 19. 12 | 13. 20 | 18. 6: | ·0991 | | | | | |
| 19. 27 | 10. 30 | | *** | | | | | |
| | *** | 19. 27 | ·0944 | | | | | |
| 20. 50 | 21. 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. |
|---|---|---|---|---|---|---|---|---|
| June 10 | | June 10 | | | | June 11 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 5 | 21. 20. 30 | 20. 30 | ·0946 | | | | | |
| | *** | 20. 48 | ·0955 | | | | | |
| 22. 44 | 25. 30 | | *** | | | | | |
| 23. 3 | 28. 10 | 21. 47: | ·0940 | | | | | |
| 23. 39 | 26. 30 | | *** | | | | | |
| 23. 45 | 28. 0 | 22. 40 | ·0950 | | | | | |
| 23. 54 | 26. 15 | 22. 51 | ·0941 | | | | | |
| 23. 59 | 26. 15 | | *** | | | | | |
| | | 23. 27 | ·0945 | | | | | |
| | | 23. 46 | ·0960 | | | | | |
| | | | (†) | | | | | |
| June 11 | | June 11 | | June 11 | | June 11 | | |
| 0. 0 | 21. 26. 15 | 1. 0 | ·0987* | 1. 0 | ·01203* | 1. 0 | 60 ·0 | 61 ·0 |
| 1. 0 | 28. 45* | 3. 0 | ·0968* | 3. 0 | ·01335* | 3. 0 | 62 ·7 | 63 ·0 |
| 3. 0 | 20. 52* | 9. 0 | ·0957* | 9. 0 | ·00754* | 9. 0 | 65 ·0 | 65 ·0 |
| 9. 0 | 13. 46* | 21. 0 | ·0938* | 21. 0 | ·01248* | 21. 0 | 61 ·0 | 60 ·7 |
| 21. 0 | 12. 14* | | | | | | | |
| June 12 | | June 12 | | June 12 | | June 12 | | |
| 1. 0 | 21. 19. 7* | 0. 0 | ·0950 | 0. 0 | ·01280 | 1. 0 | 61 ·6 | 61 ·7 |
| 3. 0 | 19. 29* | 0. 15 | ·0954 | 3. 57 | ·01451 | 3. 0 | 62 ·2 | 62 ·3 |
| 9. 0 | 12. 19* | 0. 50 | ·0945 | 10. 51 | ·01356 | 9. 0 | 62 ·3 | 62 ·9 |
| 21. 0 | 12. 21* | 3. 47 | ·0961 | 12. 52 | ·01410 | 21. 0 | 58 ·9 | 58 ·6 |
| | | | (†) | 17. 50 | ·01696 | | | |
| | | 9. 0 | ·0970* | 19. 51 | {·01590 | | | |
| | | 21. 0 | ·0979* | | {·01448 | | | |
| | | | | 22. 27 | ·01440 | | | |
| | | | | 23. 59 | ·01388 | | | |
| June 13 | | June 13 | | June 13 | | June 13 | | |
| | (†) | | (†) | 0. 0 | ·01388 | 0. 0 | 61 ·2 | 60 ·8 |
| 0. 31 | 21. 18. 30 | 0. 23 | ·0958 | 1. 30 | ·01250 | 1. 0 | 62 ·2 | 61 ·6 |
| 2. 22 | 21. 0 | 0. 52 | ·0967 | 7. 9 | ·00782 | 3. 0 | 64 ·0 | 63 ·7 |
| 3. 23 | 19. 50 | 1. 52 | ·0959 | 8. 57 | ·00868 | 6. 0 | 64 ·5 | 63 ·6 |
| 4. 17 | 16. 10 | 2. 19 | ·0966 | 13. 18 | ·01000 | 9. 10 | 64 ·0 | 63 ·3 |
| 5. 11 | 14. 10 | 2. 42 | ·0959 | 20. 28 | ·01522 | 12. 0 | 62 ·5 | 62 ·5 |
| 5. 57 | 14. 0 | 3. 17 | ·0968 | 23. 59 | ·01426 | 18. 0 | 56 ·7 | 57 ·2 |
| 6. 26 | 12. 35 | | *** | | | 21. 0 | 58 ·9 | 58 ·3 |
| 9. 15 | 13. 45 | 4. 46 | ·0965 | | | | | |
| 9. 45 | 15. 45 | | *** | | | | | |
| 10. 14 | 10. 15 | 6. 52 | ·0959 | | | | | |
| 10. 53 | 12. 20 | 7. 45 | ·0947 | | | | | |
| 11. 58 | 10. 30 | 8. 17 | ·0950 | | | | | |
| 12. 25 | 11. 30 | 8. 42 | ·0947 | | | | | |
| 13. 10 | 10. 0 | 9. 40 | ·0960 | | | | | |
| 15. 19 | 11. 30 | | *** | | | | | |
| 15. 38 | 10. 20 | 11. 20 | ·0952 | | | | | |
| 17. 5 | 9. 10 | | *** | | | | | |
| 18. 40 | 9. 30 | 17. 20 | ·0965 | | | | | |
| 19. 7 | 8. 0 | | *** | | | | | |
| | *** | 19. 15 | ·0945 | | | | | |
| 19. 56 | 9. 50 | | *** | | | | | |
| 20. 15 | 12. 30 | 21. 46 | ·0936 | | | | | |
| 20. 24 | 12. 0 | 22. 20 | ·0941 | | | | | |
| 21. 15 | 14. 10 | 23. 59 | ·0939 | | | | | |
| 21. 28 | 16. 30 | | | | | | | |
| 23. 59 | 21. 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 readings 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 11. The Photographic Traces were too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 14 h m | ° ′ ″ | June 14 h m | | June 14 h m | | June 14 h m | ° | ° |
| 0. 0 | 21. 21. 15 | 0. 0 | ·0939 | 0. 0 | ·01426 | 0. 0 | 61·0 | 60·4 |
| 0. 23 | 22. 10 | | *** | 0. 59 | ·01390 | 1. 0 | 61·7 | 61·2 |
| 2. 30 | 21. 15 | 3. 45 | ·0957 | 6. 13 | ·00886 | 3. 0 | 63·3 | 62·6 |
| 3. 27 | 18. 10 | | *** | 7. 46 | ·01011 | 9. 0 | 64·2 | 64·3 |
| 3. 44 | 18. 10 | 6. 2 | ·0960 | 12. 0 | ·01147 | 21. 0 | 57·0 | 57·7 |
| 4. 52 | 14. 55 | | *** | 19. 29 | ·01730 | | | |
| 6. 51 | 11. 50 | 8. 40 | ·0952 | 21. 10 | {·01788 | | | |
| 9. 10 | 13. 30 | 10. 46 | ·0957 | | {·01862 | | | |
| 10. 19 | 13. 20 | 11. 50 | ·0954 | 23. 59 | ·01850 | | | |
| 10. 30 | 14. 10 | | *** | | | | | |
| 11. 35 | 13. 20 | 14. 32 | ·0960 | | | | | |
| 11. 58 | 11. 30 | 14. 53 | ·0968 | | | | | |
| 12. 14 | 12. 30 | | *** | | | | | |
| 12. 28 | 11. 30 | 17. 34 | ·0961 | | | | | |
| 14. 21 | 12. 0 | | *** | | | | | |
| 14. 56 | 15. 0 | 18. 37 | ·0968 | | | | | |
| 15. 19 | 12. 30 | 20. 11 | ·0968 | | | | | |
| 16. 40 | 8. 30 | 22. 1 | ·0952 | | | | | |
| 16. 52 | 8. 40 | | *** | | | | | |
| 17. 28 | 5. 50 | 23. 59 | ·0956 | | | | | |
| 18. 10 | 12. 30 | | | | | | | |
| 18. 24 | 12. 35 | | | | | | | |
| | *** | | | | | | | |
| 18. 43 | 14. 30 | | | | | | | |
| 18. 54 | 13. 0 | | | | | | | |
| 19. 0 | 15. 0 | | | | | | | |
| 19. 14 | 12. 30 | | | | | | | |
| | *** | | | | | | | |
| 21. 11 | 12. 0 | | | | | | | |
| 21. 58 | 15. 0 | | | | | | | |
| 22. 14 | 13. 50 | | | | | | | |
| 22. 41 | 16. 50 | | | | | | | |
| 23. 59 | 19. 30 | | | | | | | |
| June 15 | | June 15 | | June 15 | | June 15 | | |
| 0. 0 | 21. 19. 30 | 0. 0 | ·0956 | 0. 0 | ·01850 | 1. 0 | 59·0 | 60·0 |
| 1. 23 | 22. 20 | 0. 56 | ·0970 | 3. 16 | ·01733 | 3. 0 | 61·0 | 61·7 |
| 3. 43 | 17. 55 | | *** | 6. 29 | ·01395 | 9. 0 | 64·0 | 65·0 |
| 6. 0 | 15. 0 | 2. 32 | ·0979 | 10. 8 | {·01137 | 21. 0 | 60·7 | 60·8 |
| 6. 11 | 16. 20 | | *** | | {·01170 | | | |
| 6. 50 | 15. 10 | 3. 26 | ·0978 | 13. 40 | ·01240 | | | |
| 8. 2 | 14. 45 | 3. 40 | ·0987 | 20. 24 | ·01552 | | | |
| 8. 13 | 13. 45 | | *** | 22. 41 | ·01590 | | | |
| | *** | 5. 50 | ·0979 | 23. 59 | ·01466 | | | |
| 15. 21 | 12. 50 | 6. 2 | ·0995 | | | | | |
| 15. 32 | 11. 30 | | *** | | | | | |
| 18. 0 | 6. 50 | 6. 53 | ·0976 | | | | | |
| | *** | | *** | | | | | |
| 20. 40 | 12. 30 | 7. 46 | ·0978 | | | | | |
| 21. 33 | 12. 30 | 8. 2 | ·0978 | | | | | |
| 23. 59 | 19. 20 | 8. 11 | ·0976 | | | | | |
| | | | *** | | | | | |
| | | 9. 22 | ·0968 | | | | | |
| | | 9. 33 | ·0978 | | | | | |
| | | 9. 40 | ·0969 | | | | | |
| | | 9. 52 | ·0977 | | | | | |
| | | 10. 2 | ·0968 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | June 15 h m | | h m | | June 16 h m | ° | ° |
| | | 13. 6 | ·0977 | | | | | |
| | | | *** | | | | | |
| | | 16. 33 | ·0976 | | | | | |
| | | | *** | | | | | |
| | | 21. 0 | ·0958 | | | | | |
| | | 23. 59 | ·0957 | | | | | |
| June 16 | | June 16 | | June 16 | | June 16 | | |
| 0. 0 | 21. 19. 20 | 0. 0 | ·0957 | 0. 0 | ·01466 | 1. 0 | 64·0 | 64·7 |
| 1. 40 | 21. 0 | | *** | 3. 6 | {·01170 | 3. 0 | 65·0 | 66·0 |
| 3. 15 | 18. 30 | 1. 40 | ·0960 | | {·01242 | 9. 0 | 65·6 | 66·2 |
| 5. 45 | 11. 30 | 3. 4 | ·0971 | 3. 41 | {·01222 | 22. 45 | 60·0 | 61·7 |
| 7. 24 | 10. 10 | 4. 32 | ·0971 | | {·01268 | | | |
| | *** | 5. 20 | ·0965 | 5. 22 | ·01300 | | | |
| 12. 58 | 13. 0 | 5. 50 | ·0970 | 8. 32 | ·01400 | | | |
| 15. 10 | 12. 30 | | *** | 12. 9 | ·01502 | | | |
| | *** | 7. 32 | ·0964 | 15. 43 | ·01642 | | | |
| 18. 14 | 5. 30 | | *** | 21. 1 | ·01967 | | | |
| 18. 31 | 6. 30 | 17. 20 | ·0974 | 23. 59 | ·02102 | | | |
| 18. 45 | 5. 50 | | *** | | | | | |
| 19. 14 | 8. 20 | 20. 36 | ·0956 | | | | | |
| 19. 24 | 7. 30 | 22. 10 | ·0954 | | | | | |
| 19. 49 | 10. 15 | 23. 17 | ·0960 | | | | | |
| 20. 20 | 8. 40 | 23. 59 | ·0961 | | | | | |
| 23. 10 | 20. 40 | | | | | | | |
| 23. 59 | 22. 20 | | | | | | | |
| June 17 | | June 17 | | June 17 | | June 17 | | |
| 0. 0 | 21. 22. 20 | 0. 0 | ·0961 | 0. 0 | ·02102 | 8. 5 | 59·7 | 60·2 |
| 0. 41 | 22. 30 | 0. 30 | ·0958 | 7. 22 | ·02470 | 21. 0 | 57·6 | 58·2 |
| 1. 47 | 24. 20 | 1. 42 | ·0971 | 22. 30 | {·01872 | | | |
| 3. 26 | 21. 30 | 2. 37 | ·0972 | | {·01820 | | | |
| 4. 27 | 18. 0 | 3. 2 | ·0964 | 23. 59 | ·01803 | | | |
| 4. 52 | 17. 55 | 3. 57 | ·0972 | | | | | |
| 5. 43 | 14. 0 | 4. 6 | ·0970 | | | | | |
| | *** | 5. 8 | ·0991 | | | | | |
| 8. 55 | 15. 5 | 5. 33 | ·0988 | | | | | |
| 9. 14 | 16. 15 | 6. 0 | ·0988 | | | | | |
| 14. 21 | 13. 40 | 6. 10 | ·0993 | | | | | |
| 14. 43 | 16. 0 | | *** | | | | | |
| 15. 0 | 15. 0 | 6. 43 | ·1001 | | | | | |
| 15. 29 | 15. 0 | | *** | | | | | |
| 16. 15 | 12. 30 | 9. 32 | ·0989 | | | | | |
| 16. 43 | 13. 10 | | *** | | | | | |
| | *** | 13. 45 | ·0984 | | | | | |
| 17. 37 | 9. 20 | | *** | | | | | |
| | *** | 15. 50 | ·0995 | | | | | |
| 17. 59 | 10. 0 | | *** | | | | | |
| 18. 25 | 7. 30 | 17. 10 | ·0990 | | | | | |
| | *** | | *** | | | | | |
| 19. 25 | 7. 20 | 22. 15 | ·0950 | | | | | |
| 20. 58 | 12. 0 | 23. 59 | ·0963 | | | | | |
| 22. 5 | 19. 0 | | | | | | | |
| 23. 59 | 23. 30 | | | | | | | |
| June 18 | | June 18 | | June 18 | | June 18 | | |
| 0. 0 | 21. 23. 30 | 0. 0 | ·0963 | 0. 0 | ·01803 | 1. 0 | 61·0 | 61·7 |
| 1. 27 | 26. 15 | 0. 26 | ·0967 | 1. 23 | ·01700 | 3. 0 | 64·0 | 65·0 |
| | | | *** | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| June 18 | | June 18 | | June 18 | | June 18 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 5. 0 | 21. 16. 0 | 1. 40 | ·0960 | 2. 13 | ·01618 | 9. 20 | 68 ·2 | 68 ·8 |
| 5. 52 | 15. 45 | 2. 24 | ·0967 | 5. 57 | ·00922 | 21. 0 | 59 ·8 | 60 ·7 |
| 6. 44 | 13. 15 | | *** | 8. 41 | ·01228 | | | |
| 7. 28 | 13. 20 | 3. 4 | ·0956 | 12. 42: | ·01369 | | | |
| 7. 45 | 12. 15 | | *** | 19. 32 | ·01728 | | | |
| 8. 26 | 13. 50 | 4. 50 | ·0965 | 23. 59 | ·02103 | | | |
| 8. 55 | 11. 30 | 5. 32 | ·0984 | | | | | |
| 9. 12 | 12. 40 | | *** | | | | | |
| 9. 19 | 11. 30 | 7. 5 | ·0985 | | | | | |
| 9. 24 | 13. 10 | 7. 22 | ·0978 | | | | | |
| 10. 7 | 12. 0 | 7. 40 | ·0984 | | | | | |
| 10. 23 | 13. 40 | 8. 36 | ·0964 | | | | | |
| 10. 51 | 11. 20 | 8. 45 | ·0970 | | | | | |
| 11. 14 | 6. 20 | 9. 0 | ·0955 | | | | | |
| 11. 44 | 11. 30 | 9. 13 | ·0964 | | | | | |
| 11. 59 | 10. 0 | 9. 27 | ·0958 | | | | | |
| 12. 44 | 13. 30 | | *** | | | | | |
| 13. 10 | 13. 45 | 10. 11 | ·0964 | | | | | |
| 13. 29 | 11. 30 | 10. 33 | ·0956 | | | | | |
| 13. 58 | 14. 30 | 11. 2 | ·0974 | | | | | |
| 14. 16 | 14. 30 | 11. 15 | ·0964 | | | | | |
| 14. 39 | 12. 0 | 11. 36 | ·0953 | | | | | |
| 15. 16 | 12. 30 | 11. 45 | ·0960 | | | | | |
| 15. 45 | 11. 0 | 12. 3 | ·0955 | | | | | |
| 16. 15 | 13. 15 | | *** | | | | | |
| 16. 36 | 10. 25 | 12. 50 | ·0967 | | | | | |
| 16. 43 | 11. 0 | | *** | | | | | |
| 17. 27 | 8. 0 | 13. 18 | ·0966 | | | | | |
| 17. 42 | 9. 30 | 13. 27 | ·0956 | | | | | |
| 18. 44 | 8. 0 | 13. 45 | ·0967 | | | | | |
| 18. 51 | 6. 40 | 14. 28 | ·0973 | | | | | |
| 19. 15 | 8. 45 | 16. 28 | ·0968 | | | | | |
| 19. 41 | 8. 30 | 17. 30 | ·0974 | | | | | |
| 20. 26 | 9. 0 | 18. 15 | ·0965 | | | | | |
| 21. 6 | 13. 45 | 20. 20 | ·0960 | | | | | |
| 21. 40 | 13. 0 | 21. 27 | ·0949 | | | | | |
| 22. 22 | 13. 50 | 21. 46 | ·0952 | | | | | |
| 23. 59 | 23. 40 | 22. 7 | ·0949 | | | | | |
| | | 23. 10 | ·0953 | | | | | |
| | | 23. 59 | ·0957 | | | | | |
| June 19 | | June 19 | | June 19 | | June 19 | | |
| 0. 0 | 21. 23. 40 | 0. 0 | ·0957 | 0. 0 | ·02103 | 1. 0 | 61 ·3 | 62 ·2 |
| 1. 11 | 24. 30 | 0. 43 | ·0970 | 1. 30 | ·02110 | 3. 0 | 63 ·0 | 63 ·7 |
| 4. 7 | 17. 0 | 1. 0 | ·0964 | 6. 37 | ·01927 | 9. 0 | 64 ·0 | 64 ·8 |
| 6. 26 | 13. 45 | 1. 26 | ·0969 | 12. 44 | ·01922 | 21. 0 | 62 ·0 | 62 ·4 |
| 7. 50 | 13. 30 | 2. 0 | ·0976 | 19. 13: | ·02228 | | | |
| 8. 13 | 14. 15 | 2. 26 | ·0977 | 23. 59 | ·02185 | | | |
| 8. 46 | 13. 30 | 2. 52 | ·0971 | | | | | |
| 10. 14 | 16. 20 | 3. 46 | ·0977 | | | | | |
| 11. 21 | 15. 45 | 4. 6 | ·0975 | | | | | |
| 12. 5 | 10. 30 | 4. 32 | ·0983 | | | | | |
| 12. 58 | 14. 15 | 5. 36 | ·0984 | | | | | |
| 13. 59 | 15. 5 | 6. 4 | ·0990 | | | | | |
| 14. 51 | 14. 5 | 6. 42: | ·0975 | | | | | |
| 15. 12 | 14. 50 | 7. 17 | ·0983 | | | | | |
| 15. 51 | 13. 20 | | *** | | | | | |
| 16. 16 | 13. 10 | 9. 15 | ·0973 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 16. 52 | 21. 10. 30 | 11. 46 | ·0974 | | | | | |
| 18. 41 | 8. 30 | 12. 20 | ·0978 | | | | | |
| 20. 25 | 10. 0 | 13. 0 | ·0966 | | | | | |
| 23. 59 | 21. 0 | 17. 30 | ·0976 | | | | | |
| | | 21. 7 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0953 | | | | | |
| June 20 | | June 20 | | June 20 | | June 20 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0953 | 0. 0 | ·02185 | 0. 0 | 64 ·0 | 64 ·8 |
| 1. 11 | 22. 5 | | *** | 1. 20 | {·02112 | 1. 0 | 64 ·7 | 65 ·0 |
| 3. 24 | 20. 10 | 3. 32 | ·0968 | | {·02164 | 3. 0 | 66 ·0 | 67 ·0 |
| 5. 15 | 16. 0 | 3. 58 | ·0960 | 3. 49 | ·01980 | 6. 0 | 67 ·3 | 67 ·5 |
| 7. 42 | 14. 0 | 5. 17 | ·0972 | 10. 55: | ·01660 | 9. 0 | 67 ·8 | 68 ·0 |
| 9. 58 | 16. 30 | 5. 30 | ·0970 | 19. 5 | ·02148 | 12. 0 | 66 ·5 | 66 ·3 |
| 13. 35 | 14. 50 | 6. 26 | ·0976 | 23. 59 | ·02257 | 18. 0 | 61 ·7 | 62 ·1 |
| 15. 42 | 12. 50 | | *** | | | 21. 0 | 61 ·3 | 62 ·2 |
| 16. 11 | 11. 5 | 9. 0 | ·0968 | | | | | |
| 16. 29 | 11. 40 | 12. 30 | ·0967 | | | | | |
| 17. 54 | 7. 50 | 12. 40 | ·0976 | | | | | |
| 18. 16 | 9. 0 | 12. 50 | ·0970 | | | | | |
| 18. 32 | 7. 40 | 16. 40: | ·0977 | | | | | |
| 20. 28 | 11. 0 | 20. 33 | ·0954 | | | | | |
| 21. 46 | 14. 0 | 21. 47 | ·0950 | | | | | |
| 22. 11 | 16. 30 | 22. 30 | ·0945 | | | | | |
| 23. 43 | 21. 10 | | *** | | | | | |
| 23. 59 | 21. 20 | 23. 59 | ·0962 | | | | | |
| June 21 | | June 21 | | June 21 | | June 21 | | |
| 0. 0 | 21. 21. 20 | 0. 0 | ·0962 | 0. 0 | ·02257 | 0. 0 | 63 ·6 | 64 ·0 |
| 0. 12 | 21. 50 | 0. 30 | ·0962 | 8. 57 | ·01769 | 1. 0 | 64 ·7 | 64 ·9 |
| 0. 19 | 26. 30 | 0. 54 | ·0979 | 11. 30 | ·01720 | 3. 0 | 66 ·0 | 67 ·0 |
| 1. 0 | 23. 45 | 1. 46: | ·0970 | 12. 45 | ·01748 | 9. 0 | 67 ·2 | 68 ·1 |
| 1. 14 | 22. 40 | 2. 40 | ·0985 | 13. 11 | ·01712 | 21. 0 | 62 ·0 | 63 ·0 |
| 1. 39 | 22. 50 | 3. 45: | ·0950 | 14. 36 | ·01784 | | | |
| 1. 51 | 23. 45 | 4. 26 | ·0967 | 17. 26 | ·02046 | | | |
| 2. 50 | 22. 50 | | *** | 20. 21 | ·02210 | | | |
| 3. 35 | 19. 30 | 5. 10 | ·0967 | 20. 42 | ·02250 | | | |
| 4. 15 | 18. 45 | | *** | 23. 59 | ·02180 | | | |
| 5. 57 | 13. 30 | 6. 0 | ·0974 | | | | | |
| 6. 10 | 14. 0 | 6. 36 | ·0989 | | | | | |
| 7. 5 | 12. 30 | 7. 3 | ·0971 | | | | | |
| 8. 44 | 19. 30 | | *** | | | | | |
| 9. 20 | 13. 50 | 8. 36 | ·0973 | | | | | |
| 9. 46 | 14. 30 | 9. 0 | ·0965 | | | | | |
| 10. 13 | 16. 50 | 10. 20 | ·0973 | | | | | |
| 11. 14 | 13. 30 | 10. 36 | ·0970 | | | | | |
| 11. 21 | 14. 55 | 10. 47 | ·0973 | | | | | |
| 11. 54 | 12. 10 | 11. 2 | ·0967 | | | | | |
| | *** | 11. 17 | ·0973 | | | | | |
| 12. 42 | 14. 30 | | *** | | | | | |
| 12. 57 | 20. 25 | 12. 36 | ·0966 | | | | | |
| 13. 28 | 13. 30 | 12. 54 | ·0979 | | | | | |
| 13. 42 | 14. 15 | 13. 37 | ·0960 | | | | | |
| 14. 9 | 12. 0 | 14. 28 | ·0969 | | | | | |
| 14. 13 | 13. 0 | 15. 6 | ·0960 | | | | | |
| 14. 26 | 11. 15 | 18. 30 | ·0966 | | | | | |
| 14. 36 | 12. 0 | 19. 6 | ·0964 | | | | | |

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 | | June 21 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 15. 0 | 21. 8. 30 | 19. 38 | ·0956 | | | | | |
| | *** | | *** | | | | | |
| 15. 39 | 12. 0 | 23. 15 | ·0934 | | | | | |
| | *** | | (†) | | | | | |
| 16. 22 | 10. 0 | | | | | | | |
| 19. 5 | 8. 0 | | | | | | | |
| 19. 27 | 10. 30 | | | | | | | |
| 19. 45 | 10. 0 | | | | | | | |
| 19. 56 | 11. 0 | | | | | | | |
| 20. 1 | 10. 0 | | | | | | | |
| 20. 23 | 12. 30 | | | | | | | |
| 20. 54 | 12. 0 | | | | | | | |
| 21. 42 | 13. 5 | | | | | | | |
| 22. 11 | 15. 10 | | | | | | | |
| 23. 30 | 22. 45 | | | | | | | |
| 23. 59 | 23. 40 | | | | | | | |
| June 22 | | June 22 | | June 22 | | June 22 | | |
| 0. 0 | 21. 23. 40 | 1. 0 | ·0939* | 0. 0 | ·02180 | 1. 0 | 65 ·3 | 66 ·0 |
| 0. 29 | 23. 0 | 3. 0 | ·0956* | 1. 10 | ·02135 | 3. 0 | 67 ·7 | 68 ·0 |
| 0. 44 | 23. 50 | 9. 0 | ·0953* | 5. 37 | ·01570 | 9. 0 | 68 ·1 | 68 ·5 |
| 2. 48 | 21. 40 | 21. 0 | ·0950* | 8. 22 | ·01346 | 21. 0 | 62 ·7 | 63 ·0 |
| 6. 16 | 11. 10 | | | 12. 42 | ·01470 | | | |
| 9. 39 | 12. 20 | | | 19. 29 | ·01948 | | | |
| 10. 10 | 13. 15 | | | 23. 59 | ·02138 | | | |
| 15. 30 | 13. 10 | | | | | | | |
| 17. 19 | 9. 5 | | | | | | | |
| 17. 41 | 6. 0 | | | | | | | |
| 17. 58 | 8. 0 | | | | | | | |
| 18. 10 | 6. 50 | | | | | | | |
| 19. 7 | 4. 55 | | | | | | | |
| 19. 18 | 5. 50 | | | | | | | |
| 19. 26 | 5. 35 | | | | | | | |
| 19. 44 | 7. 0 | | | | | | | |
| 19. 54 | 6. 0 | | | | | | | |
| 20. 39 | 10. 0 | | | | | | | |
| 21. 28 | 10. 0 | | | | | | | |
| 22. 55 | 17. 45 | | | | | | | |
| 23. 59 | 21. 50 | | | | | | | |
| June 23 | | June 23 | | June 23 | | June 23 | | |
| 0. 0 | 21. 21. 50 | | (†) | 0. 0 | ·02138 | 1. 0 | 64 ·7 | 64 ·8 |
| 0. 38 | 23. 30 | 0. 4 | ·0954 | 1. 49 | ·02126 | 3. 0 | 66 ·5 | 67 ·2 |
| 1. 9 | 23. 50 | 2. 13 | ·0970 | 11. 48: | ·01516 | 9. 0 | 69 ·0 | 69 ·2 |
| 1. 51 | 22. 0 | 2. 22 | ·0967 | 19. 36 | ·01775 | 21. 25 | 65 ·0 | 66 ·0 |
| 2. 13 | 22. 0 | 2. 47 | ·0975 | 23. 59 | ·01808 | | | |
| 2. 25 | 21. 0 | | *** | | | | | |
| 2. 56 | 20. 55 | 3. 36 | ·0973 | | | | | |
| 3. 34 | 19. 0 | 3. 50 | ·0980 | | | | | |
| 3. 44 | 19. 30 | | *** | | | | | |
| 4. 40 | 17. 30 | 6. 56 | ·0982 | | | | | |
| 5. 12 | 17. 15 | 8. 22 | ·0971 | | | | | |
| 5. 39 | 16. 10 | 13. 50 | ·0971 | | | | | |
| 8. 24 | 14. 10 | 16. 43 | ·0977 | | | | | |
| 15. 50 | 13. 10 | 19. 41 | ·0954 | | | | | |
| 16. 45 | 11. 45 | 20. 3 | ·0955 | | | | | |
| 18. 7 | 7. 10 | 21. 22 | ·0946 | | | | | |
| 18. 40 | 6. 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 23 | | June 23 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 13 | 21. 7. 50 | 23. 59 | ·0951 | | | | | |
| 23. 59 | 20. 15 | | | | | | | |
| June 24 | | June 24 | | June 24 | | June 24 | | |
| 0. 0 | 21. 20. 15 | 0. 0 | ·0951 | 0. 0 | ·01808 | 8. 29 | 69 ·4 | 69 ·7 |
| 1. 27 | 22. 40 | | *** | 2. 52 | ·01696 | 21. 0 | 62 ·3 | 63 ·0 |
| 3. 13 | 20. 30 | 0. 57 | ·0953 | 5. 46 | ·01506 | | | |
| 3. 44 | 18. 10 | 1. 26 | ·0968 | 10. 0 | ·01400 | | | |
| 4. 28 | 18. 55 | 2. 10 | ·0956 | 14. 48 | ·01633 | | | |
| 4. 47 | 16. 50 | 2. 52 | ·0976 | 23. 21 | ·02410 | | | |
| | *** | 3. 5 | ·0970 | 23. 59 | ·02340 | | | |
| 6. 45 | 16. 10 | 3. 26 | ·0990 | | | | | |
| 7. 10 | 17. 30 | 3. 45 | ·0975 | | | | | |
| 7. 55 | 15. 30 | 3. 52 | ·0984 | | | | | |
| 8. 15 | 16. 10 | 4. 17 | ·0976 | | | | | |
| 8. 31 | 15. 30 | 4. 36 | ·0982 | | | | | |
| 8. 47 | 17. 15 | 4. 53 | ·0964 | | | | | |
| 9. 15 | 15. 30 | | *** | | | | | |
| 9. 45 | 16. 30 | 5. 40 | ·0976 | | | | | |
| 10. 0 | 15. 50 | | *** | | | | | |
| 11. 44 | 16. 50 | 10. 37 | ·0958 | | | | | |
| 12. 39 | 13. 40 | | *** | | | | | |
| 13. 9 | 18. 0 | 12. 10 | ·0971 | | | | | |
| 13. 18 | 16. 30 | 12. 33 | ·0962 | | | | | |
| 13. 55 | 18. 10 | 13. 10 | ·0970 | | | | | |
| 14. 13 | 16. 0 | 13. 36 | ·0965 | | | | | |
| | *** | | *** | | | | | |
| 14. 51 | 17. 55 | 17. 15 | ·0976 | | | | | |
| 15. 10 | 16. 0 | | *** | | | | | |
| 15. 30 | 15. 0 | 18. 40 | ·0974 | | | | | |
| 15. 47 | 17. 0 | | *** | | | | | |
| 16. 13 | 13. 30 | 19. 52 | ·0956 | | | | | |
| 16. 39 | 14. 55 | | *** | | | | | |
| | *** | 23. 59 | 0952 | | | | | |
| 17. 21 | 14. 50 | | | | | | | |
| 17. 45 | 12. 0 | | | | | | | |
| 17. 54 | 12. 50 | | | | | | | |
| 18. 12 | 9. 50 | | | | | | | |
| 18. 25 | 11. 20 | | | | | | | |
| 18. 41 | 10. 0 | | | | | | | |
| 18. 49 | 11. 50 | | | | | | | |
| 19. 14 | 12. 0 | | | | | | | |
| 19. 31 | 10. 20 | | | | | | | |
| 20. 0 | 13. 30 | | | | | | | |
| 20. 18 | 11. 30 | | | | | | | |
| 20. 36 | 13. 40 | | | | | | | |
| 21. 11 | 13. 0 | | | | | | | |
| 21. 42 | 15. 5 | | | | | | | |
| 22. 40 | 17. 20 | | | | | | | |
| 23. 28 | 23. 0 | | | | | | | |
| 23. 59 | 23. 30 | | | | | | | |
| June 25 | | June 25 | | June 25 | | June 25 | | |
| 0. 0 | 21. 23. 30 | 0. 0 | ·0952 | 0. 0 | ·02340 | 1. 0 | 62 ·8 | 63 ·0 |
| 0. 27 | 24. 40 | 0. 53 | ·0961 | 1. 48 | ·02180 | 3. 0 | 64 ·0 | 65 ·0 |
| 0. 48 | 24. 0 | 1. 10 | ·0966 | 2. 42 | ·02157 | 9. 0 | 66 ·4 | 67 ·0 |
| 1. 18 | 27. 30 | 1. 22 | ·0959 | 10. 26: | ·01564 | 21. 0 | 61 ·0 | 62 ·0 |
| 2. 5 | 23. 55 | 1. 50 | ·0966 | 22. 4 | ·02053 | | | |
| | *** | | | | | | | |

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

June 22. The Photographic Trace for the Horizontal Force Magnet was too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. |
|---|---|---|---|---|---|---|---|---|
| June25 | | June25 | | June25 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 5. 30 | 21. 17. 50 | 1. 57 | ·0962 | 23. 59 | ·02047 | | | |
| 6. 57 | 14. 10 | 2. 13 | ·0967 | | | | | |
| 8. 30 | 13. 0 | 2. 27 | ·0965 | | | | | |
| 9. 29 | 15. 15 | | *** | | | | | |
| | *** | 3. 53 | ·0967 | | | | | |
| 10. 57 | 10. 30 | | *** | | | | | |
| 11. 19 | 14. 0 | 5. 32 | ·0980 | | | | | |
| 11. 41 | 12. 0 | 5. 53 | ·0969 | | | | | |
| | *** | 6. 45 | ·0982 | | | | | |
| 14. 14 | 13. 30 | 7. 7 | ·0972 | | | | | |
| 14. 31 | 15. 20 | 7. 32 | ·0977 | | | | | |
| 15. 10 | 12. 20 | 7. 56 | ·0970 | | | | | |
| 15. 16 | 13. 0 | | *** | | | | | |
| | *** | 10. 45 | ·0967 | | | | | |
| 17. 13 | 11. 0 | 11. 15 | ·0974 | | | | | |
| 18. 7 | 13. 30 | 11. 26 | ·0968 | | | | | |
| 18. 32 | 7. 5 | | *** | | | | | |
| | *** | 12. 52 | ·0960 | | | | | |
| 19. 44 | 8. 0 | 13. 40 | ·0964 | | | | | |
| 20. 7 | 13. 20 | 14. 7 | ·0956 | | | | | |
| 20. 49 | 9. 0 | 14. 40 | ·0963 | | | | | |
| 22. 44 | 16. 30 | | *** | | | | | |
| 23. 59 | 19. 0 | 18. 10 | ·0972 | | | | | |
| | | | *** | | | | | |
| | | 19. 53 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 21. 46 | ·0957 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0947 | | | | | |
| June26 | | June26 | | June26 | | June26 | | |
| 0. 0 | 21. 19. 0 | 0. 0 | ·0947 | 0. 0 | ·02047 | 1. 0 | 64 ·0 | 64 ·4 |
| 0. 11 | 18. 25 | | *** | 9. 51: | ·01274 | 3. 0 | 66 ·3 | 67 ·0 |
| 0. 50 | 20. 50 | 6. 52 | ·0965 | 19. 13 | ·01930 | 9. 0 | 67 ·0 | 68 ·0 |
| 2. 49 | 20. 30 | 9. 7 | ·0961 | 22. 21 | ·02052 | 21. 0 | 60 ·8 | 61 ·3 |
| 3. 42 | 18. 10 | 9. 43 | ·0966 | 23. 59 | ·02071 | | | |
| 5. 44 | 16. 0 | | *** | | | | | |
| 7. 12 | 13. 0 | 15. 8 | ·0968 | | | | | |
| 9. 39 | 13. 20 | | *** | | | | | |
| 12. 11 | 15. 10 | 16. 43 | ·0975 | | | | | |
| 12. 29 | 14. 10 | | *** | | | | | |
| 13. 5 | 16. 15 | 19. 4 | ·0970 | | | | | |
| | (†) | 19. 22 | ·0960 | | | | | |
| 16. 19 | 9. 30 | 19. 40 | ·0966 | | | | | |
| 16. 45 | 9. 0 | | *** | | | | | |
| 17. 13 | 7. 15 | 20. 6 | ·0960 | | | | | |
| 17. 28 | 7. 50 | 20. 33 | ·0954 | | | | | |
| 17. 36 | 7. 0 | 20. 47 | ·0942 | | | | | |
| 17. 44 | 7. 50 | 21. 6 | ·0948 | | | | | |
| 17. 59 | 5. 45 | | *** | | | | | |
| 18. 37 | 6. 0 | 22. 6 | ·0940 | | | | | |
| 18. 43 | 4. 20 | 23. 18 | ·0957 | | | | | |
| 18. 54 | 5. 30 | 23. 59 | ·0969 | | | | | |
| 19. 8 | 2. 0 | | | | | | | |
| 19. 14 | 21. 3. 45 | | | | | | | |
| 19. 29 | 20. 59. 20 | | | | | | | |
| 19. 44 | 21. 4. 15 | | | | | | | |
| 19. 57 | 6. 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. |
|---|---|---|---|---|---|---|---|---|
| June26 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 11 | 21. 5. 20 | | | | | | | |
| 20. 21 | 7. 0 | | | | | | | |
| 20. 30 | 5. 45 | | | | | | | |
| 20. 41 | 5. 20 | | | | | | | |
| 21. 11 | 11. 50 | | | | | | | |
| 21. 30 | 11. 0 | | | | | | | |
| 22. 4 | 15. 45 | | | | | | | |
| 22. 21 | 15. 15 | | | | | | | |
| 23. 14 | 18. 10 | | | | | | | |
| | (†) | | | | | | | |
| June27 | | June27 | | June27 | | June27 | | |
| | (†) | 0. 0 | ·0969 | 0. 0 | ·02071 | 0. 0 | 61 ·7 | 62 ·3 |
| 1. 0 | 21. 21. 59* | 0. 56 | ·0967 | 5. 19 | ·02017 | 1. 0 | 62 ·0 | 62 ·7 |
| 2. 40 | 27. 30 | 1. 15 | ·0960 | 10. 14 | ·01900 | 3. 0 | 62 ·8 | 63 ·5 |
| 3. 39 | 22. 0 | 1. 34 | ·0963 | 20. 15 | ·02169 | 6. 0 | 63 ·3 | 63 ·5 |
| 5. 11 | 18. 5 | 1. 43 | ·0959 | 23. 59 | ·02070 | 9. 0 | 63 ·0 | 64 ·0 |
| 7. 12 | 15. 0 | 1. 56 | ·0973 | | | 12. 0 | 62 ·6 | 63 ·5 |
| 7. 46 | 15. 40 | 2. 17 | ·0958 | | | 18. 0 | 59 ·8 | 60 ·5 |
| 8. 42 | 14. 55 | 3. 17 | ·0984 | | | 21. 0 | 63 ·0 | 62 ·0 |
| 11. 25 | 15. 40 | 3. 58 | ·0976 | | | | | |
| | *** | 5. 45 | ·0989 | | | | | |
| 12. 11 | 14. 30 | 6. 32 | ·0981 | | | | | |
| | *** | 6. 53 | ·0987 | | | | | |
| 16. 24 | 13. 40 | 8. 11 | ·0982 | | | | | |
| 16. 47 | 12. 20 | 11. 50 | ·0977 | | | | | |
| 18. 43: | 9. 50 | 13. 15 | ·0983 | | | | | |
| 19. 59 | 11. 0 | 17. 26 | ·0980 | | | | | |
| 20. 40 | 10. 50 | 19. 43 | ·0950 | | | | | |
| 23. 59 | 19. 10 | 21. 56 | ·0942 | | | | | |
| | | 23. 18 | ·0957 | | | | | |
| | | 23. 59 | ·0961 | | | | | |
| June28 | | June28 | | June28 | | June28 | | |
| 0. 0 | 21. 19. 10 | 0. 0 | ·0961 | 0. 0 | ·02070 | 0. 0 | 64 ·3 | 64 ·5 |
| 0. 59 | 21. 50 | | *** | 0. 57 | ·02021 | 1. 0 | 65 ·0 | 65 ·3 |
| 1. 39 | 20. 30 | 1. 20 | ·0954 | 3. 14 | ·01780 | 3. 0 | 66 ·5 | 67 ·2 |
| | *** | | *** | 6. 20 | ·01572 | 9. 0 | 64 ·5 | 65 ·0 |
| 4. 55 | 17. 55 | 1. 54 | ·0961 | 12. 3 | ·01666 | 21. 0 | 59 ·0 | 59 ·0 |
| | *** | | *** | 14. 30 | ·01811 | | | |
| 7. 28 | 13. 30 | 3. 24 | ·0956 | 18. 34 | ·02148 | | | |
| | *** | 4. 6 | ·0965 | 20. 50 | ·02253 | | | |
| 8. 45 | 15. 0 | 4. 37 | ·0961 | 23. 59 | ·02203 | | | |
| 9. 18 | 12. 10 | 5. 17 | ·0965 | | | | | |
| 9. 45 | 16. 10 | 5. 40 | ·0959 | | | | | |
| 10. 21 | 10. 20 | 6. 20 | ·0968 | | | | | |
| 11. 10 | 17. 50 | 6. 36 | ·0986 | | | | | |
| 11. 50 | 20. 30 | 6. 43 | ·0981 | | | | | |
| 12. 28 | 13. 20 | 6. 56 | ·1000 | | | | | |
| 12. 45 | 15. 50 | 7. 17 | ·0987 | | | | | |
| 13. 39 | 10. 30 | 7. 36 | ·0995 | | | | | |
| 13. 44 | 11. 30 | 7. 53 | ·0991 | | | | | |
| | (†) | 8. 13 | ·0998 | | | | | |
| 14. 39 | 11. 0 | 9. 10 | ·0981 | | | | | |
| 14. 56 | 9. 50 | 9. 42 | ·0984 | | | | | |
| 15. 20 | 10. 20 | | *** | | | | | |
| 16. 19 | 9. 30 | 10. 15 | ·0975 | | | | | |
| 16. 43 | 7. 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. |
|---|---|---|---|---|---|---|---|---|
| June 28 | | June 28 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 17. 26 | 21. 10. 10 | 10. 52 | ·0975 | | | | | |
| 17. 55 | 10. 0 | 11. 13 | ·0970 | | | | | |
| 18. 40 | 11. 0 | 11. 32 | ·0969 | | | | | |
| 19. 21 | 9. 50 | 12. 4 | ·0976 | | | | | |
| 20. 58 | 12. 20 | 12. 43 | ·0970 | | | | | |
| 23. 59 | 24. 0 | 12. 59 | ·0973 | | | | | |
| | | 13. 15 | ·0968 *** | | | | | |
| | | 14. 22 | ·0978 *** | | | | | |
| | | 15. 0 | ·0965 *** | | | | | |
| | | 15. 47 | ·0980 | | | | | |
| | | 17. 46 | ·0976 *** | | | | | |
| | | 21. 17 | ·0952 *** | | | | | |
| | | 23. 59 | ·0954 | | | | | |
| June 29 | | June 29 | | June 29 | | June 29 | | |
| 0. 0 | 21. 24. 0 | 0. 0 | ·0954 | 0. 0 | ·02203 | 1. 0 | 61 ·0 | 61 ·4 |
| 1. 31 | 24. 50 | 0. 33 | ·0960 | 5. 21 | ·01410 | 3. 0 | 62 ·3 | 63 ·2 |
| 4. 21 | 18. 0 | | (†) | 8. 55 | ·01243 | 9. 0 | 63 ·2 | 64 ·3 |
| 6. 30 | 14. 5 | 1. 0 | ·0956* | 11. 0 | ·01207 | 21. 0 | 59 ·0 | 60 ·1 |
| 7. 29 | 15. 0 | 3. 15 | ·0962 | 12. 23 | ·01255 | | | |
| 8. 56 | 15. 0 | 4. 7 | ·0963 | 13. 29 | ·01182 | | | |
| 9. 4 | 16. 0 | 4. 10 | ·0956 | 14. 55 | ·01222 | | | |
| 9. 18 | 14. 0 | 4. 30 | ·0965 *** | 16. 28 | ·01360 | | | |
| 9. 27 | 14. 30 | | | 17. 47 | ·01382 | | | |
| 9. 40 | 13. 55 | 7. 46 | ·0967 | 18. 2 | ·01330 | | | |
| 9. 47 | 17. 30 | 8. 7 | ·0961 *** | 19. 0 | ·01449 | | | |
| 9. 54 | 16. 35 | | | 19. 30 | ·01460 | | | |
| 10. 14 | 17. 0 | 9. 22 | ·0959 | 19. 43 | ·01508 | | | |
| 10. 30 | 18. 0 | 9. 33 | ·1008 | 20. 3 | ·01492 | | | |
| 10. 51 | 16. 45 | 9. 47 | ·0982 | 22. 2 | ·01647 | | | |
| 10. 57 | 18. 0 | 9. 58 | ·0989 | 23. 2 | ·01644 | | | |
| 11. 18 | 6. 5 | 10. 10 | ·0985 | 23. 16 | ·01682 | | | |
| 11. 25 | 7. 20 | 10. 20 | ·0991 | 23. 31 | ·01657 | | | |
| 11. 29 | 6. 20 | 10. 36 | ·0986 | 23. 59 | ·01700 | | | |
| 11. 44 | 9. 30 | 10. 47 | ·0992 | | | | | |
| 11. 52 | 9. 55 | 10. 56 | ·0968 *** | | | | | |
| 11. 56 | 8. 0 | | | | | | | |
| 12. 0 | 8. 45 | 11. 23 | ·0956 | | | | | |
| 12. 6 | 7. 30 | 11. 30 | ·0970 | | | | | |
| 12. 11 | 8. 50 | 11. 40 | ·0961 | | | | | |
| 12. 21 | 7. 10 | 11. 46 | ·0965 | | | | | |
| 12. 51 | 15. 45 | 11. 51 | ·0956 | | | | | |
| 13. 10 | 21. 13. 55 | 12. 3 | ·0970 *** | | | | | |
| 13. 42 | 20. 53. 50 | | | | | | | |
| 13. 51 | 57. 30 | 12. 17 | ·0971 | | | | | |
| 13. 54 | 56. 30 | 12. 21 | ·0986 | | | | | |
| 13. 59 | 57. 50 | 12. 30 | ·0974 | | | | | |
| 14. 5 | 57. 10 | 12. 36 | ·0983 | | | | | |
| 14. 19 | 57. 50 | 13. 5 | ·0961 | | | | | |
| | (†) | 13. 10 | ·0965 | | | | | |
| 15. 45 | 57. 20 | 13. 15 | ·0954 | | | | | |
| 16. 11 | 20. 57. 10 | 13. 37 | ·0989 | | | | | |
| 16. 19 | 21. 0. 45 | 13. 45 | ·0976 *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 16. 30 | 20. 57. 0 | 14. 17 | ·0960 | | | | | |
| 16. 45 | 59. 30 | 14. 26 | ·0973 | | | | | |
| 16. 58 | 20. 56. 50 | 14. 43 | ·0953 | | | | | |
| 17. 15 | 21. 0. 25 | 14. 52 | ·0959 | | | | | |
| 17. 22 | 20. 59. 45 | 15. 6 | ·0953 *** | | | | | |
| 17. 38 | 21. 4. 45 | | | | | | | |
| 17. 44 | 21. 2. 50 | 15. 47 | ·0974 | | | | | |
| 18. 6 | 20. 43. 15 | 16. 20 | ·0948 | | | | | |
| 18. 11 | 44. 40 | 16. 35 | ·0959 | | | | | |
| 18. 13 | 43. 55 | 16. 47 | ·0950 | | | | | |
| 18. 26 | 48. 40 | 17. 2 | ·0950 | | | | | |
| 18. 40 | 42. 20 | 17. 4 | ·0943 | | | | | |
| 18. 56 | 55. 10 | 17. 51 | ·0973 | | | | | |
| 19. 11 | 20. 52. 50 | 18. 8 | ·0966 | | | | | |
| 19. 30 | 21. 4. 10 | 18. 52 | ·0911 *** | | | | | |
| 19. 45 | 20. 50 | | | | | | | |
| 19. 54 | 14. 20 | 19. 13 | ·0914 | | | | | |
| 20. 0 | 16. 10 | 19. 36 | ·0942 | | | | | |
| 20. 4 | 15. 20 | 19. 42 | ·0935 | | | | | |
| 20. 13 | 19. 55 | 19. 50 | ·0952 | | | | | |
| 20. 20 | 17. 40 | 20. 6 | ·0911 | | | | | |
| 20. 31 | 20. 45 | 20. 13 | ·0918 | | | | | |
| 20. 35 | 20. 25 | 20. 17 | ·0910 | | | | | |
| 20. 42 | 21. 30 | 20. 30 | ·0921 | | | | | |
| 20. 49 | 15. 50 | 20. 36 | ·0928 | | | | | |
| 20. 52 | 16. 10 | 20. 47 | ·0923 | | | | | |
| 20. 55 | 14. 50 | 21. 3 | ·0906 | | | | | |
| 21. 0 | 16. 0 | 21. 10 | ·0920 *** | | | | | |
| 21. 7 | 15. 20 | | | | | | | |
| 21. 11 | 17. 40 | 21. 53 | ·0896 | | | | | |
| 21. 14 | 14. 45 | 22. 7 | ·0913 | | | | | |
| 21. 21 | 16. 45 | 22. 33 | ·0895 | | | | | |
| 21. 29 | 13. 50 | 22. 46 | ·0919 | | | | | |
| 21. 43 | 16. 20 | 23. 11 | ·0896 | | | | | |
| 21. 48 | 16. 10 | 23. 26 | ·0948 | | | | | |
| 22. 13 | 22. 0 | 23. 50 | ·0896 | | | | | |
| 22. 22 | 21. 20 (†) | 23. 59 | ·0900 | | | | | |
| June 30 | | June 30 | | June 30 | | June 30 | | |
| | (†) | 0. 0 | ·0901 | 0. 0 | ·01705 | 1. 0 | 60 ·0 | 60 ·7 |
| 0. 28 | 21. 28. 10 | 0. 26 | ·0909 | 2. 30 | ·01790 | 3. 0 | 61 ·0 | 61 ·8 |
| 0. 35 | 29. 30 | 0. 43 | ·0899 | 8. 42 | ·01500 | 9. 0 | 61 ·8 | 62 ·2 |
| 1. 11 | 28. 40 | 1. 17 | ·1000 | 9. 22 | ·01440 | 21. 43 | 57 ·0 | 57 ·2 |
| 1. 39 | 34. 55 | 1. 26 | ·0992 | 10. 42 | ·01445 | | | |
| 1. 43 | 34. 10 | 1. 30 | ·0999 | 11. 47 | ·01373 | | | |
| 1. 49 | 35. 30 | 1. 37 | ·0982 | 12. 3 | ·01428 | | | |
| 1. 59 | 35. 25 | 1. 43 | ·0995 | 12. 26 | ·01300 | | | |
| 2. 23 | 30. 0 | 1. 45 | ·0987 | 12. 46 | ·01368 | | | |
| 2. 43 | 32. 5 | 1. 50 | ·0996 | 13. 13 | ·01264 | | | |
| 3. 0 | 28. 20 *** | 2. 20 | ·0962 | 13. 32 | ·01410 | | | |
| | | 2. 43: | ·0989 | 14. 14 | ·01407 | | | |
| 3. 51 | 23. 40 *** | 3. 9 | ·0971 | 14. 22 | ·01450 | | | |
| | | 3. 17 | ·0978 | 15. 8 | ·01348 | | | |
| 5. 19 | 23. 30 | 3. 20 | ·0964 | 15. 17 | ·01364 | | | |
| 5. 27 | 21. 30 *** | 3. 24 | ·0969 | 15. 30 | ·01322 | | | |
| | | 3. 30 | ·0961 *** | 15. 49 | ·01380 | | | |

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 30 | | June 30 | | June 30 | | h m | ° | ° |
| h m | ° ′ ″ | h m | | h m | | | | |
| 5. 44 | 21. 20. 30 | 3. 52 | ·0959 | 16. 11 | ·01362 | | | |
| | *** | 4. 4 | ·0966 | 17. 37 | ·01700 | | | |
| 5. 56 | 21. 5o | 4. 13 | ·0961 | 18. 48 | ·01782 | | | |
| 6. 12 | 19. 30 | 4. 33 | ·0979 | 19. 27 | ·01763 | | | |
| 6. 37 | 20. 10 | | *** | 21. 44 | ·01851 | | | |
| 7. 10 | 17. 10 | 4. 56 | ·0968 | 22. 45 | ·01713 | | | |
| 7. 29 | 18. 5 | | *** | 23. 59 | ·01830 | | | |
| 7. 41 | 17. 30 | 5. 7 | ·0973 | | | | | |
| 7. 56 | 21. 30 | 5. 13 | ·0960 | | | | | |
| 8. 18 | 14. 20 | 5. 16 | ·0970 | | | | | |
| 8. 28 | 19. 0 | 5. 23 | ·0960 | | | | | |
| 8. 42 | 13. 5 | | *** | | | | | |
| 9. 15 | 20. 0 | 5. 47 | ·0962 | | | | | |
| 9. 31 | 13. 30 | | *** | | | | | |
| 9. 43 | 12. 30 | 6. 18 | ·0975 | | | | | |
| 9. 59 | 15. 5o | | *** | | | | | |
| 10. 5 | 15. 40 | 6. 58 | ·0964 | | | | | |
| 10. 21 | 17. 30 | 7. 15 | ·0973 | | | | | |
| 10. 43 | 12. 30 | 7. 33 | ·0966 | | | | | |
| 11. 21 | 21. 6. 25 | 7. 45 | ·0975 | | | | | |
| 11. 43 | 20. 57. 15 | 8. 6 | ·0960 | | | | | |
| 12. 8 | 21. 18. 0 | 8. 18 | ·0979 | | | | | |
| 12. 18 | 7. 0 | 8. 32 | ·0963 | | | | | |
| 12. 49 | 20. 45 | 9. 4 | ·0978 | | | | | |
| 13. 0 | 2. 30 | 9. 23 | ·0948 | | | | | |
| 13. 11 | 21. 4. 10 | 9. 52 | ·0961 | | | | | |
| 13. 30 | 20. 54. 0 | 10. 30 | ·0942 | | | | | |
| 14. 17 | 21. 15. 45 | 10. 36 | ·0979 | | | | | |
| 14. 39 | 10. 20 | 10. 42 | ·0968 | | | | | |
| 14. 57 | 19. 30 | 10. 46 | ·0972 | | | | | |
| 15. 9 | 18. 20 | | *** | | | | | |
| 15. 15 | 21. 5o | 11. 37 | ·0920 | | | | | |
| 15. 22 | 21. 0 | | *** | | | | | |
| 15. 29 | 17. 0 | 11. 54 | ·0938 | | | | | |
| 15. 34 | 18. 5o | 12. 10 | ·0944 | | | | | |
| 15. 42 | 13. 40 | 12. 36 | ·0972 | | | | | |
| 15. 45 | 18. 5o | 12. 5o | ·0899 | | | | | |
| 15. 55 | 11. 25 | 13. 9 | ·0946 | | | | | |
| 16. 30 | 2. 20 | 13. 40 | ·0970 | | | | | |
| | *** | 13. 47 | ·0948 | | | | | |
| 16. 56 | 10. 0 | 13. 58 | ·0955 | | | | | |
| 17. 3 | 7. 0 | 14. 15 | ·0902 | | | | | |
| 17. 20 | 15. 5o | | *** | | | | | |
| | *** | 14. 46 | ·0928 | | | | | |
| 17. 43 | 19. 5o | 14. 53 | ·0911 | | | | | |
| 17. 48 | 19. 0 | 15. 17 | ·0946 | | | | | |
| 18. 15 | 31. 20 | 15. 26 | ·0930 | | | | | |
| 18. 25 | 29. 0 | 15. 32 | ·0937 | | | | | |
| 18. 30 | 29. 5o | 15. 37 | ·0926 | | | | | |
| 18. 43 | 25. 30 | 15. 51 | ·0959 | | | | | |
| 19. 9 | 16. 0 | | *** | | | | | |
| 19. 27 | 18. 20 | 16. 18 | ·0942 | | | | | |
| 19. 36 | 17. 10 | | *** | | | | | |
| 19. 44 | 18. 30 | 17. 4 | ·0968 | | | | | |
| 20. 12 | 12. 30 | 17. 8 | ·0954 | | | | | |
| 20. 27 | 12. 0 | 17. 13 | ·0965 | | | | | |
| 20. 43 | 14. 0 | 18. 7 | ·0900 | | | | | |
| 20. 54 | 5. 30 | 18. 26 | ·0917 | | | | | |
| | *** | | | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 21. 51 | 21. 13. 20 | 18. 33 | ·0908 | | | | | |
| | (†) | 18. 51 | ·0924 | | | | | |
| 23. 46 | 27. 0 | | *** | | | | | |
| 23. 59 | 32. 45 | 19. 26 | ·0928 | | | | | |
| | | | *** | | | | | |
| | | 20. 45 | ·0918 | | | | | |
| | | 20. 51 | ·0884 | | | | | |
| | | 21. 7 | ·0920 | | | | | |
| | | | *** | | | | | |
| | | 21. 38 | ·0922 | | | | | |
| | | 22. 6 | ·0950 | | | | | |
| | | 22. 37 | ·0986 | | | | | |
| | | 22. 45 | ·0983 | | | | | |
| | | 22. 5o | ·0986 | | | | | |
| | | 23. 4 | ·0989 | | | | | |
| | | 23. 10 | ·0903 | | | | | |
| | | 23. 17 | ·0898 | | | | | |
| | | 23. 33 | ·0903 | | | | | |
| | | 23. 40 | ·0932 | | | | | |
| | | 23. 46 | ·0916 | | | | | |
| | | 23. 52 | ·0918 | | | | | |
| | | 23. 59 | ·0900 | | | | | |
| July 1 | | July 1 | | July 1 | | July 1 | | |
| 0. 0 | 21. 32. 45 | 0. 0 | ·0900 | 0. 0 | ·01830 | 8. 34 | 66·0 | 66·5 |
| 0. 15 | 32. 30 | 0. 20 | ·0930 | 0. 39 | ·01791 | 21. 0 | 64·8 | 64·5 |
| 0. 31 | 35. 30 | 0. 27 | ·0915 | 1. 39 | ·01786 | | | |
| 0. 42 | 33. 25 | 0. 33 | ·0926 | 1. 57 | ·01823 | | | |
| 1. 12 | 34. 20 | 0. 37 | ·0916 | 2. 35 | ·01780 | | | |
| 1. 45 | 30. 30 | 0. 40 | ·0928 | 2. 46 | ·01792 | | | |
| 1. 53 | 36. 0 | 0. 45 | ·0911 | 3. 57 | ·01588 | | | |
| 2. 3 | 31. 10 | 1. 7 | ·0949 | 4. 21 | ·01620 | | | |
| 2. 13 | 25. 5o | 1. 16 | ·0928 | 4. 46 | ·01718 | | | |
| 2. 19 | 27. 55 | 1. 32 | ·0960 | 7. 7 | ·01210 | | | |
| 2. 30 | 22. 45 | 1. 36 | ·0951 | 7. 13 | ·01260 | | | |
| 2. 42 | 26. 0 | 1. 46 | ·1007 | 7. 28 | ·01172 | | | |
| 2. 59 | 23. 30 | | *** | 7. 43 | ·01221 | | | |
| 3. 15 | 24. 15 | 1. 54 | ·1002 | 7. 56 | ·01193 | | | |
| 3. 52 | 23. 0 | 2. 10 | ·0952 | 8. 8 | ·01090 | | | |
| 4. 14 | 31. 20 | 2. 17 | ·0969 | 8. 20 | ·01052 | | | |
| 4. 45 | 20. 15 | 2. 30 | ·0933 | 8. 27 | ·01113 | | | |
| 4. 57 | 18. 55 | 2. 47 | ·0986 | 9. 37 | ·01070 | | | |
| 5. 11 | 23. 30 | 3. 0 | ·0958 | 10. 11 | ·01047 | | | |
| 5. 21 | 17. 20 | 3. 7 | ·0963 | 11. 13 | ·01090 | | | |
| 5. 26 | 17. 40 | 3. 13 | ·0946 | 12. 49 | ·01234 | | | |
| 5. 42 | 11. 20 | 3. 17 | ·0958 | 13. 40 | ·01225 | | | |
| 6. 9 | 20. 0 | 3. 24 | ·0938 | 14. 21 | ·01260 | | | |
| 6. 18 | 20. 0 | 3. 32 | ·0952 | 14. 56 | ·01228 | | | |
| 6. 33 | 21. 30 | | *** | 16. 7 | ·01325 | | | |
| 6. 57 | 20. 15 | 3. 51 | ·0940 | 21. 4 | ·01488 | | | |
| 7. 14 | 14. 0 | 4. 33 | ·1064 | 23. 2 | ·01428 | | | |
| 7. 21 | 13. 30 | 5. 0 | ·1006 | 23. 59 | ·01366 | | | |
| 7. 43 | 0. 10 | 5. 4 | ·1013 | | | | | |
| 7. 54 | 7. 10 | 5. 17 | ·0969 | | | | | |
| 7. 58 | 3. 45 | 5. 33 | ·0952 | | | | | |
| 8. 0 | 21. 9. 20 | 5. 45 | ·0973 | | | | | |
| 8. 12 | 20. 53. 30 | 5. 5o | ·0962 | | | | | |
| 8. 15 | 21. 2. 0 | 6. 4 | ·0954 | | | | | |

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 1 | | July 1 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 8. 21 | 20. 58. 5 | 6. 6 | ·0972 | | | | | |
| 8. 42 | 21. 13. 50 | 6. 22 | ·0939 | | | | | |
| | *** | 6. 33 | ·0944 | | | | | |
| 9. 19 | 20. 58. 50 | 6. 40 | ·0936 | | | | | |
| 9. 30 | 21. 4. 10 | 6. 52 | ·0946 | | | | | |
| | *** | 7. 15 | ·0998 | | | | | |
| 9. 44 | 5. 30 | | (†) | | | | | |
| 9. 53 | 10. 30 | 8. 34 | ·1083* | | | | | |
| 9. 59 | 10. 0 | 9. 38 | ·0946 | | | | | |
| 10. 21 | 18. 10 | | *** | | | | | |
| 10. 31 | 11. 30 | 9. 57 | ·0944 | | | | | |
| 10. 45 | 19. 0 | 10. 3 | ·0958 | | | | | |
| 11. 3 | 15. 30 | 10. 11 | ·0940 | | | | | |
| | *** | 10. 36 | ·0969 | | | | | |
| 11. 45 | 12. 50 | | *** | | | | | |
| 12. 17 | 13. 0 | 10. 47 | ·0970 | | | | | |
| 12. 29 | 16. 0 | 10. 53 | ·0949 | | | | | |
| | *** | | *** | | | | | |
| 13. 6 | 15. 0 | 11. 40 | ·0947 | | | | | |
| 13. 20 | 12. 30 | 11. 51 | ·0931 | | | | | |
| 13. 41 | 14. 40 | 12. 4 | ·0935 | | | | | |
| 13. 57 | 24. 20 | 12. 17 | ·0928 | | | | | |
| 14. 44 | 14. 30 | 12. 42 | ·0941 | | | | | |
| 14. 56 | 13. 5 | 12. 50 | ·0941 | | | | | |
| 15. 2 | 13. 30 | 13. 4 | ·0935 | | | | | |
| 15. 16 | 11. 30 | 13. 15 | ·0941 | | | | | |
| | *** | 13. 20 | ·0930 | | | | | |
| 17. 33 | 11. 30 | 13. 37 | ·0934 | | | | | |
| 17. 54 | 9. 30 | 13. 52 | ·0925 | | | | | |
| | *** | 14. 13 | ·0940 | | | | | |
| 18. 36 | 8. 30 | 14. 45 | ·0929 | | | | | |
| 18. 48 | 15. 0 | | *** | | | | | |
| 19. 47 | 9. 0 | 16. 13 | ·0942 | | | | | |
| | (†) | | *** | | | | | |
| 21. 0 | 8. 38* | 17. 17 | ·0937 | | | | | |
| | | | *** | | | | | |
| | | 18. 22 | ·0907 | | | | | |
| | | 18. 45 | ·0922 | | | | | |
| | | | (†) | | | | | |
| | | 21. 0 | ·0881* | | | | | |
| July 2 | | July 2 | | July 2 | | July 2 | | |
| | (†) | | (†) | 0. 0 | ·01366 | 1. 0 | 68 ·2 | 68 ·3 |
| 0. 58 | 21. 26. 0 | 1. 0 | ·0997* | 0. 46 | ·01303 | 3. 0 | 69 ·8 | 70 ·0 |
| 1. 7 | 27. 0 | 3. 0 | ·0925* | | (†) | 9. 0 | 69 ·5 | 70 ·2 |
| 1. 24 | 26. 40 | 9. 0 | ·0938* | 1. 0 | ·01252* | 21. 0 | 63 ·2 | 64 ·3 |
| 2. 20 | 27. 45 | 15. 18 | ·0931 | 3. 0 | ·01334* | | | |
| 3. 22 | 24. 45 | 16. 4 | ·0915 | 3. 20 | ·01310 | | | |
| 3. 41 | 22. 30 | 16. 17 | ·0926 | 4. 57 | ·01552 | | | |
| 4. 45 | 18. 45 | 16. 22 | ·0921 | 5. 41 | ·01567 | | | |
| 5. 0 | 20. 0 | 16. 37 | ·0929 | 6. 14 | ·01668 | | | |
| | *** | 16. 46 | ·0922 | 8. 39 | ·01744 | | | |
| 6. 13 | 14. 20 | 17. 0 | ·0929 | 11. 28 | ·01730 | | | |
| | *** | | *** | 13. 10 | ·01796 | | | |
| 6. 43 | 16. 45 | 18. 40 | ·0914 | 14. 15 | ·01877 | | | |
| | *** | 18. 57 | ·0916 | 15. 7 | ·01640 | | | |
| 7. 53 | 13. 50 | 19. 35 | ·0896 | 15. 15 | ·01672 | | | |
| 8. 7 | 16. 0 | | *** | 16. 10 | ·01937 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 2 | | July 2 | | July 2 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 8. 30 | 21. 13. 45 | 20. 4 | ·0884 | 17. 26 | ·02111 | | | |
| | *** | 20. 40 | ·0903 | 21. 7 | ·02330 | | | |
| 10. 16 | 15. 5 | | *** | 23. 59 | ·02466 | | | |
| | *** | 21. 45 | ·0906 | | | | | |
| 10. 41 | 17. 55 | 22. 10 | ·0890 | | | | | |
| | *** | | *** | | | | | |
| 11. 28 | 12. 45 | 23. 15 | ·0921 | | | | | |
| | *** | 23. 20 | ·0914 | | | | | |
| 12. 33 | 11. 0 | 23. 59 | ·0930 | | | | | |
| 12. 44 | 16. 0 | | | | | | | |
| 12. 57 | 9. 30 | | | | | | | |
| | *** | | | | | | | |
| 13. 14 | 8. 20 | | | | | | | |
| 13. 24 | 4. 20 | | | | | | | |
| 13. 37 | 9. 30 | | | | | | | |
| 13. 43 | 8. 20 | | | | | | | |
| 13. 49 | 23. 30 | | | | | | | |
| 14. 14 | 16. 55 | | | | | | | |
| 14. 22 | 21. 21. 0 | | | | | | | |
| 14. 53 | 20. 51. 55 | | | | | | | |
| 15. 14 | 21. 2. 40 | | | | | | | |
| 15. 25 | 1. 10 | | | | | | | |
| 15. 42 | 3. 30 | | | | | | | |
| 15. 56 | 0. 30 | | | | | | | |
| 16. 5 | 3. 15 | | | | | | | |
| 16. 15 | 0. 25 | | | | | | | |
| 16. 26 | 2. 0 | | | | | | | |
| 17. 16 | 2. 30 | | | | | | | |
| 17. 30 | 4. 5 | | | | | | | |
| 18. 12 | 2. 20 | | | | | | | |
| 18. 30 | 4. 30 | | | | | | | |
| 18. 53 | 2. 55 | | | | | | | |
| 19. 4 | 6. 30 | | | | | | | |
| 19. 29 | 6. 50 | | | | | | | |
| 19. 55 | 13. 0 | | | | | | | |
| 20. 21 | 10. 0 | | | | | | | |
| 20. 28 | 14. 10 | | | | | | | |
| | *** | | | | | | | |
| 21. 28 | 13. 15 | | | | | | | |
| 22. 15 | 20. 45 | | | | | | | |
| 22. 50 | 21. 45 | | | | | | | |
| 23. 13 | 19. 50 | | | | | | | |
| | (†) | | | | | | | |
| 23. 54 | 19. 10 | | | | | | | |
| 23. 59 | 19. 45 | | | | | | | |
| July 3 | | July 3 | | July 3 | | July 3 | | |
| 0. 0 | 21. 19. 45 | 0. 0 | ·0930 | 0. 0 | ·02466 | 1. 0 | 65 ·0 | 66 ·5 |
| 0. 59 | 23. 0 | 0. 22 | ·0923 | 3. 15 | ·02290 | 3. 0 | 66 ·5 | 68 ·0 |
| 2. 7 | 18. 50 | 0. 50 | ·0948 | 7. 29 | ·01876 | 9. 0 | 69 ·0 | 69 ·6 |
| 2. 42 | 20. 0 | 1. 17 | ·0934 | 7. 43 | ·01990 | 21. 0 | 65 ·0 | 64 ·0 |
| 3. 59 | 17. 0 | 1. 47 | ·0945 | 10. 11 | ·01875 | | | |
| 4. 35 | 13. 20 | | *** | 13. 43 | ·01957 | | | |
| 4. 55 | 15. 40 | 2. 22 | ·0949 | 19. 15 | ·02440 | | | |
| 5. 13 | 13. 50 | 2. 36 | ·0938 | 21. 51 | ·02565 | | | |
| | *** | | *** | 23. 59 | ·02488 | | | |
| 6. 35 | 15. 0 | 2. 56 | ·0947 | | | | | |
| | *** | 3. 4 | ·0936 | | | | | |
| | | | *** | | | | | |

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 3 | | July 3 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 8. 31 | 21. 14. 10 | 3. 40 | ·0935 | | | | | |
| 8. 54 | 11. 55 | | *** | | | | | |
| 9. 21 | 19. 0 | 5. 6 | ·0957 | | | | | |
| 9. 51 | 14. 10 | | *** | | | | | |
| 9. 59 | 15. 10 | 5. 50 | ·0950 | | | | | |
| 11. 6 | 15. 10 | 6. 40: | ·0955 | | | | | |
| 11. 22 | 14. 30 | 7. 7 | ·0940 | | | | | |
| 14. 43 | 14. 0 | 7. 26 | ·0951 | | | | | |
| 14. 50 | 13. 0 | 8. 0: | ·0931 | | | | | |
| 15. 24 | 14. 0 | 8. 20 | ·0939 | | | | | |
| 15. 38 | 12. 0 | 8. 34 | ·0933 | | | | | |
| 15. 57 | 11. 30 | | *** | | | | | |
| 16. 13 | 8. 50 | 12. 42 | ·0940 | | | | | |
| | *** | | *** | | | | | |
| 18. 15 | 6. 20 | 14. 34 | ·0956 | | | | | |
| 18. 51 | 6. 30 | | *** | | | | | |
| 19. 14 | 9. 10 | 16. 10 | ·0951 | | | | | |
| 20. 13 | 8. 35 | | *** | | | | | |
| 21. 37 | 18. 5 | 19. 30 | ·0899 | | | | | |
| 22. 19 | 17. 30 | 22. 0 | ·0918 | | | | | |
| 22. 44 | 18. 10 | 22. 48 | ·0932 | | | | | |
| 23. 59 | 24. 0 | 23. 15 | ·0935 | | | | | |
| | | 23. 22 | ·0942 | | | | | |
| | | 23. 45 | ·0930 | | | | | |
| | | | (†) | | | | | |
| July 4 | | July 4 | | July 4 | | July 4 | | |
| 0. 0 | 21. 24. 0 | | (†) | 0. 0 | ·02488 | 0. 0 | 66 ·0 | 67 ·0 |
| 0. 41 | 25. 55 | 1. 0 | ·0920* | 5. 29 | ·02089 | 1. 0 | 67 ·0 | 68 ·0 |
| 0. 53 | 25. 10 | 1. 17 | ·0931 | 6. 52 | ·02013 | 3. 0 | 68 ·7 | 69 ·0 |
| 1. 42 | 27. 45 | | *** | 10. 29 | ·01968 | 6. 0 | 69 ·2 | 70 ·0 |
| 2. 57 | 24. 30 | 2. 40 | ·0950 | 10. 52 | ·01920 | 9. 0 | 67 ·8 | 69 ·0 |
| 3. 12 | 27. 0 | 3. 32 | ·0988 | 11. 45 | ·01927 | 12. 0 | 66 ·0 | 67 ·7 |
| 3. 20 | 25. 0 | 3. 40 | ·0978 | 11. 52 | ·01875 | 18. 0 | 57 ·5 | 61 ·0 |
| 3. 30 | 25. 55 | 3. 47 | ·0981 | 12. 30 | ·01823 | 21. 0 | 60 ·7 | 58 ·8 |
| 3. 51 | 23. 25 | 3. 54 | ·0976 | 13. 11 | ·02043 | | | |
| 4. 57 | 20. 30 | 4. 4 | ·0980 | 13. 15 | ·02010 | | | |
| 5. 21 | 16. 5 | 4. 17 | ·0974 | 13. 43 | ·02108 | | | |
| 5. 49 | 18. 35 | 4. 36 | ·0978 | 14. 28 | ·02228 | | | |
| 5. 53 | 16. 0 | 5. 13 | ·0964 | 14. 57 | ·02156 | | | |
| 6. 15 | 16. 30 | 5. 54 | ·1005 | 15. 16 | ·02190 | | | |
| 6. 36 | 12. 40 | 6. 33 | ·0981 | 15. 50 | ·02137 | | | |
| 6. 45 | 16. 10 | 6. 37 | ·0991 | 16. 31 | ·02290 | | | |
| 6. 56 | 11. 30 | 6. 45 | ·0962 | 16. 45 | ·02269 | | | |
| 7. 42 | 15. 10 | 6. 56 | ·0971 | 17. 14 | ·02492 | | | |
| 7. 51 | 17. 15 | 7. 7 | ·0962 | 19. 30 | ·02954 | | | |
| | *** | | *** | 22. 41 | ·02712 | | | |
| 9. 52 | 17. 30 | 7. 30 | ·0955 | 23. 11 | ·02729 | | | |
| 10. 1 | 15. 30 | 7. 43 | ·0965 | 23. 59 | ·02662 | | | |
| 10. 40 | 20. 40 | 7. 50 | ·0958 | | | | | |
| 11. 0 | 12. 55 | | *** | | | | | |
| 11. 28 | 17. 25 | 8. 37 | ·0954 | | | | | |
| 11. 44 | 13. 30 | 9. 3 | ·0971 | | | | | |
| 11. 50 | 16. 10 | | *** | | | | | |
| 12. 7 | 4. 0 | 9. 48 | ·0937 | | | | | |
| 12. 17 | 2. 40 | 10. 5 | ·0955 | | | | | |
| 12. 30 | 21. 7. 50 | 10. 17 | ·0962 | | | | | |
| 12. 42 | 20. 55. 0 | 10. 26 | ·0975 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 4 | | July 4 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 12. 51 | 21. 4. 50 | 10. 45 | ·0959 | | | | | |
| 12. 54 | 20. 56. 10 | | *** | | | | | |
| 12. 59 | 21. 7. 30 | 11. 6 | ·0973 | | | | | |
| 13. 6 | 4. 15 | | *** | | | | | |
| 13. 17 | 12. 40 | 11. 44 | ·0943 | | | | | |
| 13. 22 | 1. 10 | 11. 50 | ·0975 | | | | | |
| 13. 26 | 5. 10 | 11. 56 | ·0949 | | | | | |
| 13. 48 | 21. 2. 10 | 12. 17 | ·0967 | | | | | |
| 14. 0 | 20. 54. 0 | 12. 34 | ·0934 | | | | | |
| 14. 30 | 21. 12. 10 | 12. 36 | ·0941 | | | | | |
| 14. 57 | 20. 56. 30 | 12. 40 | ·0926 | | | | | |
| 15. 39 | 21. 21. 30 | 12. 46 | ·0951 | | | | | |
| 15. 59 | 12. 20 | 12. 50 | ·0922 | | | | | |
| 16. 8 | 13. 5 | 13. 10 | ·0983 | | | | | |
| 16. 17 | 0. 0 | 13. 20 | ·0923 | | | | | |
| 16. 27 | 21. 2. 20 | 13. 26 | ·0935 | | | | | |
| 16. 41 | 20. 59. 0 | | *** | | | | | |
| 16. 45 | 21. 5. 50 | 13. 40 | ·0926 | | | | | |
| 16. 56 | 20. 52. 10 | | *** | | | | | |
| 17. 2 | 57. 5 | 13. 50 | ·0935 | | | | | |
| 17. 10 | 56. 0 | | *** | | | | | |
| 17. 14 | 57. 20 | 14. 13 | ·0922 | | | | | |
| 17. 18 | 56. 50 | 14. 27 | ·0926 | | | | | |
| 17. 29 | 57. 40 | 14. 48 | ·0956 | | | | | |
| 17. 37 | 20. 56. 45 | 14. 55 | ·0950 | | | | | |
| 17. 51 | 21. 16. 40 | 15. 10 | ·0959 | | | | | |
| 18. 0 | 10. 20 | 15. 19 | ·0975 | | | | | |
| 18. 9 | 12. 45 | 15. 30 | ·0970 | | | | | |
| 18. 14 | 2. 5 | 15. 35 | ·0956 | | | | | |
| 18. 22 | 7. 0 | 15. 42 | ·0963 | | | | | |
| 18. 30 | 2. 10 | 15. 47 | ·0931 | | | | | |
| 18. 40 | 6. 50 | 16. 0 | ·0913 | | | | | |
| 18. 51 | 4. 30 | 16. 30: | ·0948 | | | | | |
| 19. 0 | 6. 30 | 16. 46 | ·0905 | | | | | |
| 19. 11 | 1. 5 | 16. 52 | ·0920 | | | | | |
| 19. 20 | 6. 55 | 16. 54 | ·0900 | | | | | |
| 19. 28 | 4. 20 | 17. 25 | ·0962 | | | | | |
| 19. 39 | 10. 0 | 17. 30 | ·0930 | | | | | |
| 19. 52 | 4. 40 | | *** | | | | | |
| 19. 56 | 6. 30 | 17. 35 | ·0914 | | | | | |
| 20. 0 | 3. 40 | | *** | | | | | |
| 20. 10 | 6. 45 | 18. 2 | ·0936 | | | | | |
| 20. 14 | 2. 40 | 18. 7 | ·0885 | | | | | |
| 20. 17 | 9. 50 | 18. 23 | ·0922 | | | | | |
| 20. 26 | 5. 55 | 18. 36 | ·0931 | | | | | |
| 20. 51 | 16. 0 | 18. 39 | ·0920 | | | | | |
| 21. 10 | 12. 0 | | *** | | | | | |
| | *** | 19. 4 | ·0906 | | | | | |
| 22. 14 | 14. 0 | 19. 13 | ·0920 | | | | | |
| 22. 25 | 17. 20 | 19. 18 | ·0895 | | | | | |
| 22. 30 | 16. 30 | 19. 36 | ·0910 | | | | | |
| 22. 49 | 20. 30 | | *** | | | | | |
| 22. 57 | 19. 30 | 20. 7 | ·0873 | | | | | |
| 23. 5 | 23. 35 | | *** | | | | | |
| 23. 27 | 22. 0 | 20. 38 | ·0904 | | | | | |
| 23. 42 | 18. 40 | | *** | | | | | |
| 23. 49 | 21. 45 | 22. 12 | ·0890 | | | | | |
| 23. 59 | 21. 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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | July 4 h m | | h m | | h m | ° | ° |
| | | 22. 35 | ·0905 *** | | | | | |
| | | 22. 48 | ·0877 *** | | | | | |
| | | 23. 6 | ·0880 | | | | | |
| | | 23. 16 | ·0893 *** | | | | | |
| | | 23. 37 | ·0875 *** | | | | | |
| | | 23. 53 | ·0910 | | | | | |
| | | 23. 59 | ·0914 | | | | | |
| July 5 | | July 5 | | July 5 | | July 5 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0912 | 0. 0 | ·02662 | 0. 0 | 63 ·0 | 62 ·7 |
| 0. 12 | 25. 5 | 0. 5 | ·0874 | 1. 19 | ·02620 | 1. 0 | 64 ·3 | 64 ·3 |
| 0. 18 | 24. 10 | | (†) | 1. 47 | ·02649 | 3. 0 | 67 ·7 | 68 ·2 |
| 0. 41 | 31. 45 | 1. 0 | ·0902* | 2. 20 | ·02844 | 9. 14 | 71 ·0 | 71 ·6 |
| 0. 50 | 24. 0 | 3. 0 | ·0939* | 3. 54 | ·02187 | 21. 0 | 64 ·0 | 65 ·0 |
| 0. 56 | 25. 30 | 3. 5 | ·0952 | 4. 40 | ·02057 | | | |
| 1. 0 | 24. 30 | 3. 12 | ·0959 | 5. 30 | ·01800 | | | |
| 1. 7 | 26. 50 | 3. 30 | ·0951 | 6. 7 | ·01902 | | | |
| 1. 15 | 25. 30 | 3. 42 | ·0970 | 8. 43 | ·02041 | | | |
| | (†) | 3. 48 | ·0955 | 8. 50 | ·02100 | | | |
| 2. 30 | 23. 20 | 4. 0 | ·0968 | 9. 10 | ·01960 | | | |
| 2. 36 | 22. 10 | 4. 6 | ·0956 | 10. 19 | ·02041 | | | |
| 2. 53 | 32. 40 | | (†) | 14. 16: | ·02147 | | | |
| 3. 4 | 29. 30 | 4. 45 | ·0958 | 20. 11 | ·02663 | | | |
| 3. 12 | 30. 10 | 5. 13 | ·0924 | 23. 59 | ·02787 | | | |
| 3. 28 | 26. 20 | 5. 20 | ·0932 | | | | | |
| 3. 54 | 30. 50 | 5. 41 | ·0898 | | | | | |
| 4. 36 | 18. 50 | 5. 50 | ·0912 | | | | | |
| | *** | 6. 8 | ·0906 | | | | | |
| 4. 55 | 21. 30 | 6. 18 | ·0914 | | | | | |
| 5. 12 | 18. 30 | 6. 23 | ·0909 | | | | | |
| 5. 19 | 19. 20 | 6. 36 | ·0917 | | | | | |
| 5. 41 | 14. 15 | 6. 42 | ·0912 *** | | | | | |
| 6. 9 | 12. 50 | | | | | | | |
| 6. 30 | 15. 10 | 7. 15 | ·0921 *** | | | | | |
| 6. 46 | 14. 15 | | | | | | | |
| 7. 27 | 17. 10 | 7. 42 | ·0914 | | | | | |
| 7. 40 | 16. 50 | 7. 48 | ·0905 | | | | | |
| 7. 45 | 15. 0 | 7. 53 | ·0908 | | | | | |
| 8. 40 | 21. 14. 30 | 8. 12 | ·0913 | | | | | |
| 8. 57 | 20. 53. 10 | 8. 24 | ·0907 | | | | | |
| 9. 10 | 21. 22. 30 | 8. 45 | ·0914 | | | | | |
| 9. 15 | 14. 20 | 8. 48 | ·0998 | | | | | |
| 9. 30 | 26. 50 | 9. 7 | ·0936 | | | | | |
| 9. 46 | 16. 30 | 9. 17 | ·0957 | | | | | |
| 9. 57 | 18. 30 | 9. 38 | ·0899 | | | | | |
| 10. 15 | 12. 15 *** | 9. 46 | ·0919 | | | | | |
| | | 10. 0 | ·0904 | | | | | |
| 11. 42 | 13. 10 | 10. 15 | ·0916 | | | | | |
| 12. 9 | 15. 20 *** | 10. 19 | ·0913 | | | | | |
| | | 10. 25 | ·0924 | | | | | |
| 13. 10 | 10. 45 *** | 10. 31 | ·0916 *** | | | | | |
| 13. 51 | 19. 0 | 10. 53 | ·0926 *** | | | | | |
| 14. 16 | 14. 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. |
|---|---|---|---|---|---|---|---|---|
| July 5 h m | ° ′ ″ | July 5 h m | | h m | | h m | ° | ° |
| 14. 44 | 21. 13. 10 | 11. 40 | ·0919 | | | | | |
| 14. 54 | 14. 35 | 11. 50 | ·0925 | | | | | |
| 15. 0 | 12. 0 *** | 11. 56 | ·0920 | | | | | |
| | | 12. 9 | ·0926 | | | | | |
| 15. 25 | 11. 30 | 12. 15 | ·0919 | | | | | |
| 15. 28 | 14. 0 *** | 12. 30 | ·0932 | | | | | |
| | | 12. 42 | ·0924 | | | | | |
| 15. 45 | 7. 30 | 12. 47 | ·0930 *** | | | | | |
| 15. 51 | 11. 30 | | | | | | | |
| 15. 55 | 8. 10 | 13. 48 | ·0918 *** | | | | | |
| 15. 59 | 10. 0 | | | | | | | |
| 16. 7 | 8. 30 | 16. 9 | ·0938 *** | | | | | |
| 16. 13 | 11. 0 | | | | | | | |
| 16. 17 | 7. 50 | 17. 17 | ·0920 *** | | | | | |
| 16. 22 | 10. 10 | | | | | | | |
| 16. 26 | 7. 20 *** | 18. 25 | ·0924 *** | | | | | |
| 17. 39 | 11. 0 *** | 21. 58 | ·0906 *** | | | | | |
| 19. 20 | 6. 55 *** | 23. 59 | ·0911 | | | | | |
| 21. 37 | 12. 30 | | | | | | | |
| 23. 59 | 20. 10 | | | | | | | |
| July 6 | | July 6 | | July 6 | | July 6 | | |
| 0. 0 | 21. 20. 10 | 0. 0 | ·0911 | 0. 0 | ·02787 | 1. 0 | 64 ·6 | 65 ·8 |
| 1. 29 | 28. 30 *** | 0. 40 | ·0916 | 3. 26 | ·02766 | 3. 0 | 66 ·3 | 67 ·2 |
| | | 1. 29 | ·0925 | 9. 51: | ·02487 | 9. 0 | 66 ·0 | 67 ·2 |
| 2. 41 | 28. 15 | 1. 40 | ·0917 | 18. 11 | ·03192 | 21. 0 | 58 ·2 | 58 ·8 |
| 3. 17 | 24. 20 | 2. 6 | ·0934 | 21. 27 | ·02831 | | | |
| 3. 21 | 26. 0 | 2. 18 | ·0915 | 23. 59 | ·02684 | | | |
| 3. 42 | 21. 30 | 2. 30 | ·0944 | | | | | |
| 4. 47 | 21. 55 | 2. 38 | ·0934 | | | | | |
| 5. 36 | 20. 0 | 2. 50 | ·0954 | | | | | |
| 8. 20 | 17. 0 | 2. 58 | ·0931 | | | | | |
| 15. 47 | 18. 15 *** | | *** | | | | | |
| | | 3. 17 | ·0940 | | | | | |
| 17. 17 | 15. 40 *** | 3. 26 | ·0973 | | | | | |
| | | 3. 37 | ·0949 | | | | | |
| 19. 13 | 15. 50 | 3. 42 | ·0968 | | | | | |
| 19. 31 | 14. 30 *** | 3. 45 | ·0948 | | | | | |
| | | 3. 48 | ·0959 | | | | | |
| 20. 55 | 15. 30 | 3. 55 | ·0924 | | | | | |
| 23. 59 | 25. 55 | 4. 7 | ·0935 | | | | | |
| | | 4. 28 | ·0927 | | | | | |
| | | 5. 56 | ·0940 | | | | | |
| | | 8. 40 | ·0932 *** | | | | | |
| | | 16. 18 | ·0955 | | | | | |
| | | 20. 0 | ·0945 | | | | | |
| | | 22. 15 | ·0923 *** | | | | | |
| | | 23. 59 | ·0931 | | | | | |
| July 7 | | July 7 | | July 7 | | July 7 | | |
| 0. 0 | 21. 25. 55 | 0. 0 | ·0931 | 0. 0 | ·02684 | 1. 0 | 60 ·0 | 61 ·3 |
| 1. 0 | 21. 30 | 0. 57 | ·0938 | 2. 12 | ·02588 | 3. 0 | 63 ·0 | 64 ·0 |
| 1. 44 | 20. 50 | 1. 36: | ·0935 | 11. 15: | ·01842 | 9. 0 | 66 ·0 | 67 ·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. |
|---|---|---|---|---|---|---|---|---|
| July 7 | ° ′ ″ | July 7 | | July 7 | | July 7 | ° | ° |
| h m | | h m | | h m | | h m | | |
| 2. 12 | 21. 22. 30 | 2. 15 | ·0949 | 19. 54 | ·02530 | 21. 25 | 58·2 | 59·3 |
| 3. 7 | 21. 45 | | *** | 21. 51 | ·02628 | | | |
| 6. 52 | 13. 50 | 2. 50 | ·0947 | 23. 59 | ·02479 | | | |
| 7. 25 | 14. 30 | 3. 47 | ·0955 | | | | | |
| 7. 51 | 12. 50 | | *** | | | | | |
| 13. 15 | 15. 0 | 4. 40 | ·0954 | | | | | |
| 13. 35 | 16. 0 | 5. 17: | ·0947 | | | | | |
| 14. 12 | 14. 55 | 6. 4 | ·0956 | | | | | |
| 14. 42 | 16. 0 | 6. 32 | ·0947 | | | | | |
| | *** | 6. 53 | ·0952 | | | | | |
| 16. 9 | 12. 0 | | *** | | | | | |
| 16. 29 | 12. 30 | 7. 50 | ·0944 | | | | | |
| 16. 44 | 13. 45 | | *** | | | | | |
| 17. 4 | 13. 10 | 11. 15 | ·0941 | | | | | |
| 17. 15 | 14. 10 | | *** | | | | | |
| 17. 30 | 13. 0 | 15. 11 | ·0954 | | | | | |
| 17. 37 | 14. 0 | | *** | | | | | |
| 17. 54 | 11. 30 | 16. 47 | ·0947 | | | | | |
| 17. 58 | 12. 40 | 18. 36: | ·0952 | | | | | |
| 18. 15 | 11. 0 | 22. 12 | ·0927 | | | | | |
| 20. 40 | 8. 30 | 22. 55 | ·0929 | | | | | |
| 21. 43 | 10. 30 | 23. 12 | ·0935 | | | | | |
| 22. 10 | 14. 55 | 23. 35 | ·0931 | | | | | |
| 22. 21 | 15. 10 | 23. 46 | ·0934 | | | | | |
| | (†) | 23. 59 | ·0930 | | | | | |
| July 8 | | July 8 | | July 8 | | July 8 | | |
| | (†) | 0. 0 | ·0930 | 0. 0 | ·02479 | 9. 29 | 64·2 | 65·5 |
| 2. 27 | 21. 25. 30 | 0. 59: | ·0941 | 2. 17: | ·02444 | 21. 0 | 59·8 | 60·4 |
| 5. 14 | 16. 30 | 1. 40 | ·0930 | 8. 42: | ·01680 | | | |
| 7. 10 | 15. 0 | 2. 21 | ·0950 | 15. 39 | ·01930 | | | |
| 7. 47 | 13. 40 | 2. 46 | ·0954 | 23. 59 | ·02291 | | | |
| 13. 39 | 13. 30 | 3. 12 | ·0946 | | | | | |
| 14. 37 | 14. 10 | 4. 2 | ·0955 | | | | | |
| 14. 57 | 13. 30 | 4. 15 | ·0948 | | | | | |
| 15. 26 | 15. 0 | | *** | | | | | |
| 16. 17 | 12. 20 | 4. 53 | ·0956 | | | | | |
| 16. 38 | 12. 30 | 5. 8 | ·0951 | | | | | |
| 17. 52 | 7. 35 | 5. 47 | ·0950 | | | | | |
| 18. 30 | 7. 50 | 6. 21 | ·0957 | | | | | |
| 18. 52 | 6. 55 | 8. 25 | ·0945 | | | | | |
| 19. 14 | 7. 25 | 16. 56 | ·0949 | | | | | |
| | (†) | 21. 53 | ·0931 | | | | | |
| 21. 0 | 9. 7* | 22. 11 | ·0934 | | | | | |
| | | 22. 56 | ·0924 | | | | | |
| | | 23. 35 | ·0930 | | | | | |
| | | 23. 59 | ·0928 | | | | | |
| July 9 | | July 9 | | July 9 | | July 9 | | |
| | (†) | 0. 0 | ·0928 | 0. 0 | ·02291 | 1. 0 | 61·7 | 62·6 |
| 1. 2 | 21. 22. 20 | | *** | 2. 27 | ·02216 | 3. 0 | 64·3 | 65·0 |
| 2. 40 | 20. 0 | 1. 45 | ·0945 | 7. 21 | ·01623 | 9. 0 | 67·3 | 68·0 |
| 3. 30 | 17. 45 | | *** | 9. 2 | ·01490 | 21. 0 | 59·8 | 60·7 |
| 3. 46 | 18. 0 | 2. 58 | ·0947 | 13. 46 | ·01600 | | | |
| 4. 21 | 16. 10 | | *** | 19. 30 | ·02008 | | | |
| 4. 29 | 17. 30 | 4. 17 | ·0956 | 22. 45 | ·02200 | | | |
| 4. 43 | 14. 0 | 4. 25 | ·0964 | 23. 59 | ·02189 | | | |
| 5. 40 | 12. 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. | Of V. F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| July 9 | ° ′ ″ | July 9 | | h m | | h m | ° | ° |
| h m | | h m | | | | | | |
| 6. 1 | 21. 13. 50 | 4. 56 | ·0959 | | | | | |
| 6. 21 | 12. 40 | 5. 10 | ·0964 | | | | | |
| 7. 10 | 13. 30 | 5. 45 | ·0956 | | | | | |
| 7. 40 | 9. 45 | 6. 3 | ·0964 | | | | | |
| 8. 14 | 14. 0 | | *** | | | | | |
| 8. 24 | 14. 30 | 6. 47 | ·0948 | | | | | |
| 11. 55 | 12. 20 | | *** | | | | | |
| 12. 59 | 15. 40 | 8. 3 | ·0962 | | | | | |
| 13. 49 | 11. 30 | | *** | | | | | |
| 15. 0 | 9. 20 | 9. 2 | ·0948 | | | | | |
| 15. 58 | 13. 0 | | *** | | | | | |
| 17. 0 | 11. 0 | 11. 24 | ·0951 | | | | | |
| 20. 14 | 11. 45 | 12. 5 | ·0944 | | | | | |
| 20. 26 | 10. 30 | 13. 40 | ·0948 | | | | | |
| 21. 59 | 13. 40 | 14. 52 | ·0944 | | | | | |
| 22. 43 | 17. 25 | 15. 35 | ·0950 | | | | | |
| 23. 59 | 21. 50 | 16. 20 | ·0949 | | | | | |
| | | 17. 12 | ·0954 | | | | | |
| | | 20. 15 | ·0936 | | | | | |
| | | | *** | | | | | |
| | | 22. 47 | ·0929 | | | | | |
| | | 23. 59 | ·0936 | | | | | |
| July 10 | | July 10 | | July 10 | | July 10 | | |
| 0. 0 | 21. 21. 50 | 0. 0 | ·0936 | 0. 0 | ·02189 | 1. 0 | 60·2 | 61·7 |
| 1. 39 | 22. 30 | 1. 47 | ·0950 | 2. 26 | ·02272 | 3. 0 | 61·3 | 62·0 |
| 1. 49 | 22. 0 | 2. 9 | ·0961 | 6. 27 | ·02165 | 9. 0 | 62·0 | 62·9 |
| 1. 58 | 23. 20 | | *** | 12. 7 | ·02137 | 21. 0 | 60·0 | 61·2 |
| 2. 12 | 22. 0 | 3. 12 | ·0952 | 13. 45 | ·02146 | | | |
| 4. 12 | 18. 25 | 3. 33 | ·0964 | 15. 46 | ·02257 | | | |
| 5. 37 | 18. 50 | | *** | 21. 30 | ·02440 | | | |
| 6. 52 | 17. 20 | 4. 15 | ·0960 | 23. 59 | ·02410 | | | |
| 7. 12 | 18. 0 | | *** | | | | | |
| 8. 12 | 17. 20 | 5. 0 | ·0970 | | | | | |
| 8. 49 | 14. 40 | | *** | | | | | |
| | *** | 5. 40 | ·0971 | | | | | |
| 10. 10 | 14. 20 | | *** | | | | | |
| 10. 55 | 11. 0 | 6. 23 | ·0963 | | | | | |
| 11. 51 | 13. 10 | 6. 47 | ·0965 | | | | | |
| 12. 10 | 10. 50 | 7. 30 | ·0988 | | | | | |
| 12. 24 | 10. 0 | 7. 46 | ·0989 | | | | | |
| 13. 12 | 15. 20 | 8. 40 | ·0969 | | | | | |
| 13. 55 | 8. 30 | | *** | | | | | |
| 14. 38 | 13. 0 | 11. 26 | ·0972 | | | | | |
| 15. 14 | 13. 40 | | *** | | | | | |
| 15. 22 | 12. 50 | 12. 42 | ·0962 | | | | | |
| 15. 40 | 13. 45 | 13. 18 | ·0989 | | | | | |
| 17. 38 | 12. 30 | | *** | | | | | |
| 17. 54 | 13. 20 | 14. 46 | ·0967 | | | | | |
| 18. 10 | 12. 0 | | *** | | | | | |
| 18. 14 | 13. 0 | 17. 47: | ·0972 | | | | | |
| 18. 54 | 13. 20 | 22. 12 | ·0943 | | | | | |
| 19. 12 | 12. 40 | 23. 59 | ·0945 | | | | | |
| 19. 40 | 12. 40 | | | | | | | |
| 20. 30 | 11. 10 | | | | | | | |
| 21. 52 | 13. 20 | | | | | | | |
| 23. 59 | 20. 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. |
|---|---|---|---|---|---|---|---|---|
| July 11 | | July 11 | | July 11 | | July 11 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 20. 0 | 0. 0 | ·0945 | 0. 0 | ·02410 | 0. 0 | 62 ·2 | 63 ·7 |
| 1. 56 | 23. 30 | 2. 8 | ·0949 | 2. 27 | ·02248 | 1. 0 | 63 ·0 | 64 ·0 |
| 2. 12 | 22. 30 | | *** | 5. 40 | ·01820 | 3. 0 | 65 ·3 | 67 ·0 |
| 2. 40 | 24. 10 | 3. 30 | ·0965 | 9. 10 | ·01507 | 6. 0 | 68 ·0 | 69 ·0 |
| 5. 12 | 17. 0 | | *** | 10. 0 | ·01565 | 9. 0 | 68 ·5 | 69 ·5 |
| 6. 5 | 13. 45 | 3. 47 | ·0952 | 11. 31 | ·01571 | 12. 0 | 67 ·4 | 68 ·2 |
| 6. 55 | 15. 40 | 4. 8 | ·0970 | 14. 28 | ·01677 | 18. 0 | 62 ·0 | 63 ·8 |
| 9. 7 | 15. 0 | 4. 17 | ·0962 | 15. 24 | ·01723 | 21. 0 | 61 ·6 | 62 ·7 |
| 9. 40 | 12. 20 | 4. 19 | ·0969 | 19. 25 | ·02024 | | | |
| 10. 21 | 16. 20 | 5. 10 | ·0964 | 19. 42 | ·02095 | | | |
| 11. 0 | 11. 40 | 5. 29 | ·0942 | 19. 53 | ·02077 | | | |
| 11. 30 | 4. 30 | 5. 46 | ·0954 | 20. 50 | ·02118 | | | |
| 12. 10 | 10. 0 | 5. 53 | ·0946 | 22. 15 | ·02282 | | | |
| 12. 47 | 9. 0 | 6. 10 | ·0965 | 23. 59 | ·02341 | | | |
| 14. 13 | 10. 20 | 6. 18 | ·0951 | | | | | |
| 14. 25 | 9. 40 | 6. 39 | ·0960 | | | | | |
| 14. 30 | 10. 30 | | *** | | | | | |
| 14. 48 | 8. 0 | 7. 17 | ·0951 | | | | | |
| 14. 58 | 10. 50 | 7. 50 | ·0951 | | | | | |
| 15. 27 | 10. 30 | 8. 7 | ·0957 | | | | | |
| 15. 43 | 7. 0 | | *** | | | | | |
| 15. 54 | 9. 45 | 8. 30 | ·0953 | | | | | |
| 16. 0 | 9. 10 | | *** | | | | | |
| 16. 14 | 18. 10 | 10. 24 | ·0952 | | | | | |
| 16. 40 | 11. 0 | 10. 46 | ·0962 | | | | | |
| 16. 43 | 12. 0 | 11. 6 | ·0959 | | | | | |
| 16. 53 | 9. 30 | 11. 7 | ·1003 | | | | | |
| 17. 0 | 11. 40 | 11. 18 | ·0973 | | | | | |
| 17. 13 | 9. 50 | 11. 23 | ·0979 | | | | | |
| 17. 21 | 11. 30 | 11. 30 | ·0954 | | | | | |
| 17. 37 | 9. 0 | 11. 37 | ·0969 | | | | | |
| 17. 43 | 12. 0 | | *** | | | | | |
| 17. 48 | 7. 20 | 13. 35 | ·0978 | | | | | |
| 17. 54 | 11. 30 | 13. 45 | ·0986 | | | | | |
| 18. 14 | 4. 10 | 13. 48 | ·0975 | | | | | |
| 18. 30 | 12. 30 | 13. 53 | ·0989 | | | | | |
| 18. 40 | 7. 20 | | *** | | | | | |
| 18. 45 | 12. 45 | 14. 13 | ·0976 | | | | | |
| 19. 7 | 3. 10 | 14. 17 | ·0988 | | | | | |
| 19. 45 | 42. 15 | 14. 21 | ·0976 | | | | | |
| 20. 7 | 24. 40 | | *** | | | | | |
| 20. 12 | 27. 15 | 14. 45 | ·0988 | | | | | |
| 20. 15 | 25. 30 | | *** | | | | | |
| 20. 19 | 26. 30 | 15. 12 | ·0980 | | | | | |
| 20. 25 | 24. 40 | | *** | | | | | |
| 20. 40 | 23. 40 | 16. 8 | ·0952 | | | | | |
| 20. 58 | 16. 30 | | *** | | | | | |
| 21. 3 | 17. 35 | 17. 20 | ·0968 | | | | | |
| 21. 30 | 13. 30 | | *** | | | | | |
| 21. 47 | 14. 30 | 17. 57 | ·0954 | | | | | |
| 21. 55 | 13. 50 | 18. 12 | ·0935 | | | | | |
| 23. 25 | 25. 30 | 18. 26 | ·0972 | | | | | |
| 23. 40 | 25. 15 | 18. 37 | ·0952 | | | | | |
| 23. 55 | 27. 10 | 18. 42 | ·0966 | | | | | |
| 23. 59 | 26. 45 | 18. 53 | ·0910 | | | | | |
| | | 19. 12 | ·0892 | | | | | |
| | | 19. 33 | ·0826 | | | | | |
| | | 19. 47 | ·0940 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | July 11 h m | | h m | | h m | ° | ° |
| | | 20. 22 | ·0966 | | | | | |
| | | 20. 45 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 23. 7 | ·0934 | | | | | |
| | | 23. 21 | ·0941 | | | | | |
| | | 23. 43 | ·0921 | | | | | |
| | | 23. 59 | ·0926 | | | | | |
| July 12 | | July 12 | | July 12 | | July 12 | | |
| 0. 0 | 21. 26. 45 | 0. 0 | ·0926 | 0. 0 | ·02341 | 0. 0 | 63 ·0 | 63 ·8 |
| 0. 25 | 23. 10 | 0. 12 | ·0901 | 1. 41 | ·02386 | 1. 0 | 64 ·0 | 65 ·0 |
| 0. 52 | 26. 0 | 2. 7 | ·0954 | 2. 27 | ·02369 | 3. 0 | 66 ·5 | 67 ·7 |
| 1. 5 | 25. 0 | 2. 30 | ·0942 | 3. 41 | ·02280 | 9. 0 | 69 ·5 | 70 ·5 |
| 1. 40 | 27. 0 | 2. 51 | ·0964 | 7. 11 | ·01751 | 21. 0 | 61 ·4 | 62 ·2 |
| 1. 51 | 25. 10 | 3. 33 | ·0935 | 9. 30 | ·01577 | | | |
| 2. 51 | 23. 50 | 3. 48 | ·0952 | 12. 12 | ·01672 | | | |
| 3. 33 | 16. 30 | 3. 51 | ·0945 | 17. 17 | ·01980 | | | |
| 3. 50 | 17. 5 | 4. 0 | ·0958 | 22. 16 | ·02405 | | | |
| 4. 12 | 16. 15 | 4. 12 | ·0974 | 23. 59 | ·02494 | | | |
| 4. 50 | 17. 50 | 4. 30 | ·0961 | | | | | |
| 6. 22 | 15. 45 | 5. 2 | ·0948 | | | | | |
| 8. 7 | 15. 50 | | *** | | | | | |
| 8. 13 | 14. 45 | 6. 0 | ·0949 | | | | | |
| 9. 40 | 15. 20 | 6. 22 | ·0958 | | | | | |
| 10. 51 | 14. 20 | | *** | | | | | |
| 11. 7 | 13. 20 | 7. 4 | ·0957 | | | | | |
| 11. 17 | 13. 30 | 7. 53 | ·0944 | | | | | |
| 11. 28 | 12. 30 | | *** | | | | | |
| 11. 53 | 13. 5 | 9. 20 | ·0939 | | | | | |
| 12. 6 | 10. 50 | | *** | | | | | |
| 12. 29 | 10. 20 | 11. 15 | ·0940 | | | | | |
| 13. 24 | 16. 30 | 11. 40 | ·0948 | | | | | |
| 14. 0 | 13. 30 | 11. 51 | ·0942 | | | | | |
| 14. 11 | 14. 20 | 12. 12 | ·0939 | | | | | |
| 14. 14 | 13. 55 | 12. 20 | ·0946 | | | | | |
| 15. 17 | 15. 40 | 12. 27 | ·0938 | | | | | |
| 16. 15 | 15. 30 | 12. 35 | ·0942 | | | | | |
| 16. 45 | 18. 40 | 12. 46 | ·0934 | | | | | |
| 17. 43 | 14. 30 | 13. 3 | ·0942 | | | | | |
| 18. 6 | 15. 0 | 13. 12 | ·0934 | | | | | |
| 18. 43 | 13. 15 | 13. 42 | ·0950 | | | | | |
| | *** | 14. 12 | ·0950 | | | | | |
| 20. 43 | 12. 30 | 14. 22 | ·0944 | | | | | |
| 21. 1 | 14. 0 | 14. 30 | ·0948 | | | | | |
| 21. 27 | 13. 20 | | *** | | | | | |
| 23. 59 | 21. 0 | 15. 40 | ·0955 | | | | | |
| | | | *** | | | | | |
| | | 16. 45 | ·0946 | | | | | |
| | | 17. 22 | ·0953 | | | | | |
| | | 19. 35 | ·0950 | | | | | |
| | | 22. 46 | ·0923 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0933 | | | | | |
| July 13 | | July 13 | | July 13 | | July 13 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0933 | 0. 0 | ·02494 | 1. 0 | 63 ·0 | 64 ·0 |
| 0. 54 | 22. 45 | | *** | 2. 12 | ·02492 | 3. 0 | 65 ·8 | 67 ·0 |
| 3. 13 | 19. 50 | 1. 46 | ·0944 | 4. 42 | ·02180 | 9. 0 | 69 ·7 | 70 ·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. | Readings of Thermometers. Of V. F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| July 13 | | July 13 | | July 13 | | July 13 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 26 | 21. 20. 10 | 3. 2 | ·0958 | 6. 46 | ·01807 | 21. 0 | 62 ·7 | 63 ·8 |
| 4. 10 | 16. 10 | 3. 20 | ·0980 | 8. 44 | ·01610 | | | |
| 4. 24 | 15. 30 | 4. 5 | ·0954 | 12. 26 | ·01757 | | | |
| 4. 55 | 15. 45 | | *** | 19. 0 | ·02300 | | | |
| 5. 51 | 12. 25 | 4. 30 | ·0950 | 22. 38 | ·02512 | | | |
| 7. 13 | 13. 45 | 4. 42 | ·0961 | 23. 59 | ·02551 | | | |
| 10. 4 | 13. 30 | | *** | | | | | |
| 12. 25 | 15. 50 | 5. 6 | ·0964 | | | | | |
| 12. 46 | 14. 5 | 5. 43 | ·0945 | | | | | |
| 13. 25 | 14. 30 | | *** | | | | | |
| 13. 51 | 15. 30 | 6. 10 | ·0949 | | | | | |
| 15. 10 | 14. 30 | 6. 29 | ·0939 | | | | | |
| 15. 16 | 13. 30 | | *** | | | | | |
| | *** | 8. 15 | ·0944 | | | | | |
| 17. 30 | 12. 20 | 9. 13 | ·0938 | | | | | |
| 17. 51 | 13. 20 | | *** | | | | | |
| 18. 7 | 12. 20 | 12. 22 | ·0948 | | | | | |
| 18. 40 | 12. 50 | | *** | | | | | |
| 18. 46 | 11. 30 | 15. 30 | ·0950 | | | | | |
| 19. 21 | 14. 0 | 17. 6 | ·0957 | | | | | |
| 19. 47 | 12. 45 | 18. 25 | ·0957 | | | | | |
| 20. 14 | 13. 20 | 22. 33 | ·0938 | | | | | |
| 23. 29 | 25. 20 | | *** | | | | | |
| 23. 59 | 25. 35 | 23. 59 | ·0945 | | | | | |
| July 14 | | July 14 | | July 14 | | July 14 | | |
| 0. 0 | 21. 25. 35 | 0. 0 | ·0945 | 0. 0 | ·02551 | 1. 0 | 64 ·0 | 65 ·0 |
| 0. 52 | 27. 0 | 0. 37 | ·0954 | 1. 54 | ·02566 | 3. 0 | 66 ·5 | 67 ·6 |
| 3. 55 | 17. 45 | | *** | 10. 40: | ·01950 | 9. 0 | 69 ·3 | 70 ·2 |
| 5. 25 | 16. 0 | 1. 16 | ·0953 | 19. 31 | ·02432 | 22. 40 | 67 ·4 | 67 ·5 |
| 16. 10 | 14. 0 | 1. 40 | ·0959 | 23. 59 | ·02480 | | | |
| 19. 15: | 9. 55 | | *** | | | | | |
| 21. 43 | 15. 0 | 9. 36 | ·0952 | | | | | |
| 21. 51 | 14. 20 | 17. 43 | ·0958 | | | | | |
| 23. 14 | 20. 0 | 20. 27 | ·0952 | | | | | |
| 23. 59 | 20. 10 | 21. 33 | ·0943 | | | | | |
| | | 23. 59 | ·0936 | | | | | |
| July 15 | | July 15 | | July 15 | | July 15 | | |
| 0. 0 | 21. 20. 10 | 0. 0 | ·0936 | 0. 0 | ·02480 | 9. 5 | 70 ·0 | 70 ·5 |
| 1. 29 | 20. 50 | 3. 36 | ·0946 | 2. 48 | ·02424 | 21. 0 | 64 ·6 | 65 ·7 |
| 4. 55 | 17. 0 | 3. 48 | ·0951 | 5. 40 | ·02233 | | | |
| 11. 22 | 15. 55 | 5. 27 | ·0946 | 10. 12 | ·02040 | | | |
| 12. 35 | 14. 20 | 6. 24 | ·0952 | 13. 47 | ·02090 | | | |
| 13. 44 | 15. 50 | 10. 33 | ·0951 | 21. 12 | ·02470 | | | |
| 14. 45 | 14. 55 | 11. 0 | ·0955 | | (†) | | | |
| 15. 14 | 15. 10 | 13. 30 | ·0952 | | | | | |
| 15. 55 | 14. 0 | 15. 7 | ·0954 | | | | | |
| 19. 55 | 13. 30 | 18. 18 | ·0953 | | | | | |
| 20. 28 | 14. 20 | 20. 47 | ·0941 | | | | | |
| 21. 11 | 14. 10 | | (†) | | | | | |
| | (†) | 21. 0 | ·0941* | | | | | |
| July 16 | | July 16 | | July 16 | | July 16 | | |
| | (†) | 1. 0 | ·0952* | | (†) | 1. 0 | 66 ·0 | 67 ·0 |
| 0. 40 | 21. 20. 40 | 3. 0 | ·0967* | 1. 0 | ·02493* | 3. 0 | 66 ·3 | 67 ·2 |
| 1. 54 | 20. 50 | 9. 0 | ·0975* | 3. 0 | ·02515* | 9. 0 | 65 ·8 | 66 ·7 |
| 2. 28 | 19. 40 | 21. 0 | ·0947* | 5. 54 | ·02220 | 21. 0 | 63 ·3 | 64 ·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 16 | | | | July 16 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 46 | 21. 20. 10 | | | 14. 53 | ·02297 | | | |
| 5. 30 | 18. 0 | | | 20. 45 | {·02219 | | | |
| 6. 6 | 16. 40 | | | | {·02145 | | | |
| 6. 14 | 17. 0 | | | 22. 21 | ·02184 | | | |
| 6. 36 | 15. 0 | | | 23. 59 | ·02149 | | | |
| 7. 0 | 17. 5 | | | | | | | |
| 7. 12 | 16. 30 | | | | | | | |
| 9. 17 | 17. 40 | | | | | | | |
| 9. 35 | 16. 45 | | | | | | | |
| | *** | | | | | | | |
| 14. 56 | 16. 45 | | | | | | | |
| 15. 50 | 16. 0 | | | | | | | |
| 16. 17 | 13. 40 | | | | | | | |
| 16. 40 | 14. 10 | | | | | | | |
| 17. 11 | 13. 25 | | | | | | | |
| 17. 43 | 14. 50 | | | | | | | |
| 18. 40 | 13. 20 | | | | | | | |
| 19. 43 | 13. 20 | | | | | | | |
| 19. 59 | 14. 5 | | | | | | | |
| 20. 17 | 13. 20 | | | | | | | |
| 20. 39 | 15. 40 | | | | | | | |
| 20. 54 | 14. 15 | | | | | | | |
| 21. 26 | 16. 20 | | | | | | | |
| 23. 40 | 20. 30 | | | | | | | |
| 23. 59 | 20. 25 | | | | | | | |
| July 17 | | July 17 | | July 17 | | July 17 | | |
| 0. 0 | 21. 20. 25 | 1. 0 | ·0939* | 0. 0 | ·02149 | 1. 0 | 67 ·0 | 68 ·0 |
| 0. 30 | 19. 50 | 3. 0 | ·0952* | 2. 40 | ·01930 | 3. 0 | 68 ·7 | 69 ·3 |
| 0. 51 | 19. 0 | 9. 0 | ·0953* | 4. 45 | ·01660 | 9. 0 | 69 ·8 | 70 ·0 |
| 1. 12 | 20. 0 | 21. 0 | ·0930* | 6. 29 | ·01548 | 21. 0 | 63 ·3 | 63 ·7 |
| 1. 56 | 17. 30 | | | | {·01556 | | | |
| 3. 59 | 16. 50 | | | 7. 41 | {·01744 | | | |
| 6. 26 | 13. 0 | | | 14. 34 | ·01790 | | | |
| 8. 7 | 15. 0 | | | 16. 45 | ·01948 | | | |
| 8. 28 | 14. 20 | | | 19. 2 | ·02209 | | | |
| 8. 53 | 15. 0 | | | 21. 27 | ·02360 | | | |
| 10. 45 | 13. 50 | | | 22. 57 | ·02362 | | | |
| 11. 15 | 10. 20 | | | 23. 59 | ·02312 | | | |
| 11. 37 | 11. 30 | | | | | | | |
| 11. 55 | 10. 5 | | | | | | | |
| 12. 12 | 10. 40 | | | | | | | |
| 12. 25 | 9. 35 | | | | | | | |
| 12. 52 | 12. 20 | | | | | | | |
| 13. 40 | 8. 20 | | | | | | | |
| 14. 4 | 9. 20 | | | | | | | |
| 14. 14 | 8. 40 | | | | | | | |
| 14. 28 | 9. 0 | | | | | | | |
| 15. 10 | 8. 45 | | | | | | | |
| 16. 13 | 13. 30 | | | | | | | |
| 16. 55 | 9. 45 | | | | | | | |
| 17. 43 | 6. 50 | | | | | | | |
| 18. 25 | 8. 0 | | | | | | | |
| 18. 44 | 7. 40 | | | | | | | |
| 20. 42 | 11. 20 | | | | | | | |
| 23. 59 | 21. 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.

July 16 and 17. The Photographic Traces for the Horizontal Force Magnet were too faint for use.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 18 h m | ° ′ ″ | July 18 h m | | July 18 h m | | July 18 h m | ° | ° |
| 0. 0 | 21. 21. 30 | | (†) | 0. 0 | ·02312 | 0. 0 | 64 ·5 | 65 ·0 |
| 1. 17 | 22. 20 | 0. 55 | ·0940 | 1. 57 | ·02294 | 1. 0 | 66 ·0 | 66 ·3 |
| 3. 5 | 18. 20 | 1. 32 | ·0939 | 8. 12 | ·01590 | 3. 0 | 68 ·0 | 68 ·0 |
| 3. 39 | 18. 30 | | *** | 12. 40 | ·01710 | 6. 0 | 68 ·5 | 68 ·3 |
| 4. 48 | 16. 40 | 2. 34 | ·0952 | 15. 41 | ·01852 | 9. 0 | 67 ·1 | 67 ·2 |
| 4. 56 | 18. 5 | 2. 53 | ·0945 | 16. 11 | ·01837 | 12. 0 | 65 ·8 | 66 ·7 |
| 5. 18 | 16. 15 | 3. 17 | ·0947 | 19. 34 | ·02070 | 18. 0 | 63 ·0 | 63 ·2 |
| 6. 24 | 14. 40 | 3. 45 | ·0943 | 23. 59 | ·02218 | 21. 0 | 63 ·0 | 63 ·7 |
| 7. 26 | 16. 10 | | *** | | | | | |
| 8. 43 | 14. 45 | 4. 42 | ·0950 | | | | | |
| 9. 42 | 12. 20 | 4. 51 | ·0972 | | | | | |
| 9. 54 | 13. 35 | 5. 8 | ·0959 | | | | | |
| 10. 12 | 11. 40 | | *** | | | | | |
| 10. 58 | 16. 15 | 5. 27 | ·0953 | | | | | |
| 11. 37 | 16. 0 | 5. 36 | ·0959 | | | | | |
| 11. 59 | 13. 20 | 5. 46 | ·0959 | | | | | |
| 12. 21 | 16. 30 | 6. 0 | ·0965 | | | | | |
| 12. 45 | 15. 50 | 6. 13 | ·0958 | | | | | |
| 12. 57 | 14. 10 | 6. 40 | ·0961 | | | | | |
| 13. 11 | 15. 10 | 6. 48 | ·0957 | | | | | |
| 13. 22 | 12. 50 | 7. 0 | ·0960 | | | | | |
| 13. 32 | 13. 30 | 7. 26 | ·0949 | | | | | |
| 14. 8 | 6. 20 | 8. 20 | ·0971 | | | | | |
| 14. 27 | 11. 0 | 8. 52 | ·0957 | | | | | |
| 14. 51 | 9. 50 | 9. 17 | ·0965 | | | | | |
| 15. 11 | 11. 20 | | *** | | | | | |
| 15. 26 | 21. 20 | 9. 54 | ·0956 | | | | | |
| 15. 50 | 13. 0 | 10. 20 | ·0966 | | | | | |
| 16. 27 | 8. 55 | | *** | | | | | |
| 17. 5 | 10. 0 | 12. 0 | ·0968 | | | | | |
| 17. 31 | 7. 0 | 12. 20 | ·0977 | | | | | |
| 18. 27 | 12. 5 | 12. 51 | ·0966 | | | | | |
| 18. 30 | 11. 45 | 13. 13 | ·0973 | | | | | |
| 18. 42 | 12. 50 | | *** | | | | | |
| 19. 0 | 11. 10 | 14. 3 | ·0967 | | | | | |
| 19. 13 | 12. 20 | 14. 40 | ·0993 | | | | | |
| 19. 43 | 11. 0 | 15. 17 | ·0960 | | | | | |
| 19. 49 | 12. 15 | 15. 46 | ·0974 | | | | | |
| 19. 55 | 10. 20 | | *** | | | | | |
| 19. 58 | 12. 10 | 17. 7 | ·0976 | | | | | |
| 20. 17 | 7. 50 | 18. 24 | ·0957 | | | | | |
| 20. 26 | 9. 40 | | *** | | | | | |
| 20. 29 | 9. 0 | 19. 43 | ·0958 | | | | | |
| 20. 40 | 11. 20 | | *** | | | | | |
| 20. 49 | 8. 20 | 21. 30 | ·0935 | | | | | |
| 20. 58 | 12. 30 | 21. 40 | ·0939 | | | | | |
| 21. 10 | 12. 0 | 21. 53 | ·0927 | | | | | |
| 21. 19 | 13. 40 | 22. 4 | ·0934 | | | | | |
| 21. 30 | 13. 30 | 22. 17 | ·0909 | | | | | |
| 21. 43 | 15. 0 | 22. 56 | ·0939 | | | | | |
| 22. 17 | 14. 55 | 23. 5 | ·0933 | | | | | |
| 22. 30 | 20. 35 | | *** | | | | | |
| 22. 49 | 17. 50 | 23. 59 | ·0943 | | | | | |
| 23. 5 | 21. 50 | | | | | | | |
| 23. 59 | 22. 50 | | | | | | | |
| July 19 | | July 19 | | July 19 | | July 19 | | |
| 0. 0 | 21. 22. 50 | 0. 0 | ·0943 | 0. 0 | ·02218 | 0. 0 | 63 ·0 | 63 ·6 |
| | *** | | *** | 1. 55 | ·02250 | 1. 0 | 63 ·2 | 63 ·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. |
|---|---|---|---|---|---|---|---|---|
| July 19 h m | ° ′ ″ | July 19 h m | | July 19 h m | | July 19 h m | ° | ° |
| 1. 45 | 21. 26. 30 | 1. 45 | ·0962 | 7. 42 | ·01863 | 3. 0 | 64 ·3 | 64 ·8 |
| 4. 13 | 20. 0 | 1. 52 | ·0956 | 9. 16 | ·01830 | 9. 10 | 65 ·0 | 66 ·0 |
| 4. 21 | 22. 30 | 2. 3 | ·0960 | 11. 30 | ·01888 | 21. 10 | 61 ·4 | 61 ·3 |
| 4. 30 | 20. 5 | 2. 7 | ·0944 | 11. 57 | ·01932 | | | |
| 6. 15 | 15. 50 | 2. 17 | ·0952 | 13. 15 | ·01917 | | | |
| 6. 51 | 15. 20 | 2. 40 | ·0946 | 14. 14 | ·01960 | | | |
| 6. 56 | 16. 55 | 3. 16 | ·0958 | 14. 34 | ·01908 | | | |
| 7. 7 | 14. 10 | 3. 30 | ·0952 | 15. 42 | ·02047 | | | |
| 7. 15 | 15. 50 | | *** | 17. 43 | ·02140 | | | |
| 7. 23 | 14. 20 | 4. 6 | ·0950 | 20. 9 | ·02383 | | | |
| 7. 34 | 15. 55 | 4. 17 | ·0942 | 21. 45 | ·02335 | | | |
| 8. 39 | 15. 0 | 4. 21 | ·0902 | | ·02190 | | | |
| 8. 53 | 16. 10 | 4. 32 | ·0976 | 23. 59 | ·02169 | | | |
| 9. 13 | 14. 30 | 4. 37 | ·0984 | | | | | |
| 9. 45 | 16. 15 | 4. 46 | ·0972 | | | | | |
| 10. 24 | 14. 20 | | *** | | | | | |
| 10. 59 | 17. 30 | 5. 10 | ·0962 | | | | | |
| 11. 14 | 14. 0 | 5. 33 | ·0966 | | | | | |
| 11. 22 | 15. 0 | 5. 47 | ·0963 | | | | | |
| 11. 47 | 2. 0 | 6. 7 | ·0971 | | | | | |
| | (†) | 6. 20 | ·0969 | | | | | |
| 12. 54 | 6. 30 | 6. 32 | ·0974 | | | | | |
| 13. 14 | 3. 40 | | *** | | | | | |
| 13. 39 | 10. 45 | 6. 53 | ·0970 | | | | | |
| 14. 0 | 7. 30 | 6. 58 | ·0976 | | | | | |
| 14. 24 | 24. 30 | 7. 6 | ·0959 | | | | | |
| 14. 54 | 13. 20 | 7. 17 | ·0972 | | | | | |
| 14. 58 | 16. 50 | | *** | | | | | |
| 15. 10 | 16. 15 | 7. 46 | ·0965 | | | | | |
| 15. 13 | 19. 0 | 8. 21 | ·0965 | | | | | |
| 15. 22 | 16. 55 | 8. 40 | ·0977 | | | | | |
| 15. 35 | 18. 40 | 9. 0 | ·0962 | | | | | |
| 16. 5 | 14. 20 | 9. 16 | ·0971 | | | | | |
| 16. 11 | 15. 50 | 9. 30 | ·0966 | | | | | |
| 16. 17 | 14. 20 | 9. 40 | ·0971 | | | | | |
| 16. 42 | 16. 20 | 10. 3 | ·0962 | | | | | |
| 17. 21 | 11. 20 | 10. 10 | ·0967 | | | | | |
| | *** | 10. 20 | ·0994 | | | | | |
| 18. 14 | 9. 50 | 10. 40 | ·0972 | | | | | |
| | *** | 10. 56 | ·0972 | | | | | |
| 18. 38 | 13. 0 | 11. 7 | ·0967 | | | | | |
| 18. 49 | 11. 30 | 11. 17 | ·0977 | | | | | |
| 19. 7 | 13. 25 | 11. 33 | ·0958 | | | | | |
| 19. 20 | 11. 50 | 11. 56 | ·0988 | | | | | |
| 20. 27 | 10. 30 | 12. 6 | ·0980 | | | | | |
| | *** | 12. 10 | ·1009 | | | | | |
| 20. 57 | 14. 30 | 12. 17 | ·0999 | | | | | |
| | *** | 12. 30 | ·1015 | | | | | |
| 21. 44 | 17. 15 | 12. 40 | ·1027 | | | | | |
| | *** | 12. 45 | ·1013 | | | | | |
| 22. 12 | 16. 10 | 12. 47 | ·1018 | | | | | |
| | *** | 12. 52 | ·1013 | | | | | |
| 22. 50 | 17. 50 | 13. 3 | ·1019 | | | | | |
| 23. 10 | 19. 30 | 13. 17 | ·0990 | | | | | |
| 23. 21 | 18. 50 | 14. 3 | ·0959 | | | | | |
| 23. 57 | 22. 0 | 14. 21 | ·0976 | | | | | |
| 23. 59 | 21. 45 | 14. 33 | ·0968 | | | | | |
| | | | *** | | | | | |
| | | 15. 10 | ·0958 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | July 19 h m | | h m | | h m | ° | ° |
| | | 15. 23 | ·0969 | | | | | |
| | | 15. 37 | ·0956 | | | | | |
| | | 16. 8 | ·0978 *** | | | | | |
| | | 17. 15 | ·0966 *** | | | | | |
| | | 18. 4 | ·0970 *** | | | | | |
| | | 19. 3 | ·0948 *** | | | | | |
| | | 20. 7 | ·0941 *** | | | | | |
| | | 20. 36 | ·0946 *** | | | | | |
| | | 21. 45 | ·0932 *** | | | | | |
| | | 22. 40 | ·0930 *** | | | | | |
| | | 23. 59 | ·0945 | | | | | |
| July 20 | | July 20 | | July 20 | | July 20 | | |
| 0. 0 | 21. 21. 45 | 0. 0 | ·0945 *** | 0. 0 | ·02169 | 1. 0 | 63·7 | 64·0 |
| 0. 10 | 21. 20 | | | 2. 43 | ·02090 | 3. 0 | 65·7 | 65·8 |
| 0. 40 | 23. 55 | 2. 10 | ·0948 *** | 3. 16 | ·02004 | 9. 0 | 65·4 | 66·0 |
| 1. 43 | 24. 0 | | | | ·01950 | 21. 0 | 60·0 | 60·6 |
| 2. 17 | 22. 0 | 2. 40 | ·0961 | 7. 32 | ·01720 | | | |
| 2. 38 | 23. 0 | 2. 52 | ·0956 | 9. 43 | ·01697 | | | |
| 3. 21 | 20. 20 | 3. 46 | ·0975 *** | 11. 20 | ·01740 | | | |
| 3. 55 | 20. 10 | | | 15. 25 | ·02011 | | | |
| 4. 30 | 17. 50 | 4. 47 | ·0955 | 18. 40 | ·02320 | | | |
| 5. 10 | 13. 10 | 5. 40 | ·0978 | 20. 20 | ·02308 | | | |
| 6. 16 | 15. 50 | 5. 47 | ·0969 | | ·02100 | | | |
| 6. 49 | 15. 0 | 6. 18 | ·0982 *** | 23. 59 | ·02007 | | | |
| 7. 58 | 16. 30 | | | | | | | |
| 8. 19 | 13. 30 | 7. 36 | ·0973 | | | | | |
| 9. 14 | 17. 50 | 7. 47 | ·0978 | | | | | |
| 9. 45 | 14. 0 | 8. 3 | ·0971 *** | | | | | |
| 10. 8 | 16. 10 | | | | | | | |
| 10. 44 | 15. 0 | 8. 38 | ·0976 | | | | | |
| 11. 13 | 17. 0 | 8. 50 | ·0967 | | | | | |
| 11. 28 | 14. 15 | 9. 8 | ·0975 | | | | | |
| 11. 40 | 14. 30 | 9. 33 | ·0961 | | | | | |
| 12. 6 | 11. 10 | 9. 47 | ·0969 | | | | | |
| 12. 51 | 14. 20 | 10. 30 | ·0955 | | | | | |
| 13. 7 | 12. 0 | 11. 0 | ·0968 | | | | | |
| 13. 40 | 13. 20 | 11. 15 | ·0961 | | | | | |
| 13. 56 | 16. 40 | 11. 34 | ·0970 *** | | | | | |
| 14. 13 | 14. 20 | | | | | | | |
| 14. 55 | 18. 0 | 12. 30 | ·0961 | | | | | |
| 15. 42 | 11. 0 | 12. 53 | ·0967 *** | | | | | |
| 16. 37 | 15. 5 | | | | | | | |
| 17. 9 | 14. 0 | 13. 37 | ·0960 *** | | | | | |
| 17. 15 | 15. 50 *** | 14. 17 | ·0963 *** | | | | | |
| 18. 3 | 18. 15 | | | | | | | |
| 18. 29 | 14. 10 | 14. 58 | ·0983 | | | | | |
| 18. 36 | 14. 30 | 15. 6 | ·0977 | | | | | |
| 19. 10 | 10. 20 | 15. 22 | ·0987 *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 20 h m | ° ′ ″ | July 20 h m | | h m | | h m | ° | ° |
| 19. 58 | 21. 10. 30 | 16. 45 | ·0986 *** | | | | | |
| 20. 40 | 15. 0 | | | | | | | |
| 20. 54 | 13. 50 | 17. 17 | ·0968 *** | | | | | |
| 21. 14 | 13. 50 | | | | | | | |
| 21. 22 | 14. 45 | 19. 40 | ·0953 | | | | | |
| 21. 40 | 13. 45 | 20. 22 | ·0936 *** | | | | | |
| 21. 58 | 15. 55 | | | | | | | |
| 22. 27 | 15. 55 | 23. 0 | ·0934 | | | | | |
| 22. 36 | 17. 0 | 23. 30 | ·0946 | | | | | |
| 22. 58 | 16. 15 | 23. 46 | ·0940 | | | | | |
| 23. 59 | 20. 30 | 23. 59 | ·0940 | | | | | |
| July 21 | | July 21 | | July 21 | | July 21 | | |
| 0. 0 | 21. 20. 30 | 0. 0 | ·0940 | 0. 0 | ·02007 | 1. 0 | 60·8 | 60·9 |
| 0. 20 | 22. 40 | 1. 6 | ·0948 | 3. 43 | ·02070 | 3. 0 | 62·0 | 62·0 |
| 2. 12 | 24. 20 | 1. 10 | ·0944 | 6. 27 | ·01928 | 9. 0 | 64·0 | 63·6 |
| 2. 19 | 23. 40 | 1. 21 | ·0948 | 10. 30 | ·01720 | 22. 42 | 59·5 | 60·6 |
| 2. 42 | 23. 40 | 1. 33 | ·0945 | 14. 45 | ·01807 | | | |
| 3. 39 | 21. 30 | 2. 47 | ·0968 | 20. 59 | ·02049 | | | |
| 3. 43 | 22. 20 | 3. 7 | ·0961 | 23. 59 | ·02017 | | | |
| 4. 11 | 19. 40 | 3. 15 | ·0965 | | | | | |
| 4. 29 | 20. 0 | 3. 27 | ·0960 | | | | | |
| 5. 15 | 18. 40 | 3. 46 | ·0972 | | | | | |
| 6. 29 | 14. 0 | 4. 8 | ·0953 | | | | | |
| 6. 54 | 14. 40 | 4. 32 | ·0967 | | | | | |
| 7. 9 | 13. 40 | 4. 45 | ·0961 | | | | | |
| 7. 44 | 12. 40 | 4. 50 | ·0966 | | | | | |
| 8. 22 | 15. 0 | 5. 6 | ·0957 | | | | | |
| 8. 45 | 13. 40 | 5. 23 | ·0963 | | | | | |
| 10. 6 | 14. 40 | 5. 46 | ·0952 | | | | | |
| 10. 21 | 12. 30 | 6. 7 | ·0961 | | | | | |
| 10. 31 | 13. 35 | 6. 15 | ·0959 | | | | | |
| 11. 0 | 11. 50 | 6. 45 | ·0982 *** | | | | | |
| 11. 19 | 13. 20 | | | | | | | |
| 11. 37 | 12. 20 | 7. 17 | ·0983 *** | | | | | |
| 11. 50 | 12. 30 | | | | | | | |
| 12. 11 | 14. 30 | 7. 40 | ·0971 *** | | | | | |
| 12. 29 | 15. 45 | | | | | | | |
| 13. 25 | 12. 30 *** | 8. 32 | ·0963 *** | | | | | |
| 13. 58 | 13. 50 | 10. 17 | ·0974 *** | | | | | |
| 14. 37 | 22. 20 | | | | | | | |
| 15. 10 | 18. 30 | 11. 33 | ·0966 *** | | | | | |
| 15. 13 | 19. 20 | | | | | | | |
| 15. 30 | 18. 20 | 13. 8 | ·0971 *** | | | | | |
| 16. 0 | 14. 55 | | | | | | | |
| 16. 27 | 15. 10 | 14. 17 | ·0962 *** | | | | | |
| 16. 45 | 14. 10 | | | | | | | |
| 17. 6 | 15. 0 | 17. 7 | ·0979 | | | | | |
| 17. 22 | 14. 0 | 17. 46 | ·0968 | | | | | |
| 17. 37 | 12. 30 *** | 18. 6 | ·0970 *** | | | | | |
| 18. 0 | 14. 30 | 20. 6 | ·0960 | | | | | |
| 18. 18 | 13. 45 | 21. 25 | ·0937 | | | | | |
| 18. 47 | 14. 0 | 23. 0 | ·0929 *** | | | | | |
| 19. 14 | 10. 45 | | | | | | | |
| 19. 57 | 8. 20 | 23. 59 | ·0938 | | | | | |
| 20. 11 | 11. 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. |
|---|---|---|---|---|---|---|---|---|
| July 21 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 15 | 21. 10. 10 | | | | | | | |
| 20. 26 | 10. 25 | | | | | | | |
| 20. 33 | 9. 30 | | | | | | | |
| 20. 58 | 13. 30 | | | | | | | |
| 21. 30 | 13. 50 | | | | | | | |
| 21. 51 | 15. 45 | | | | | | | |
| 22. 8 | 15. 20 | | | | | | | |
| 22. 36 | 18. 25 | | | | | | | |
| 23. 25 | 21. 0 | | | | | | | |
| 23. 59 | 23. 30 | | | | | | | |
| July 22 | | July 22 | | July 22 | | July 22 | | |
| 0. 0 | 21. 23. 30 | 0. 0 | ·0938 | 0. 0 | ·02017 | 8. 33 | 64 ·0 | 64 ·4 |
| 0. 30 | 25. 15 | 0. 30 | ·0948 | 2. 55 | ·01870 | 21. 0 | 59 ·0 | 60 ·0 |
| | *** | 0. 45 | ·0940 | 6. 43 | ·01504 | | | |
| 2. 10 | 23. 50 | 1. 7 | ·0950 | 11. 17 | ·01372 | | | |
| 2. 39 | 21. 45 | 1. 52 | ·0955 | 15. 46 | ·01500 | | | |
| 2. 50 | 22. 30 | 2. 6 | ·0964 | 20. 29 | ·01850 | | | |
| 3. 11 | 21. 0 | | *** | 22. 3 | ·01906 | | | |
| 3. 52 | 20. 30 | 2. 33 | ·0964 | 23. 59 | ·01865 | | | |
| 4. 39 | 17. 15 | 2. 45 | ·0972 | | | | | |
| 5. 54 | 15. 0 | 3. 20 | ·0958 | | | | | |
| 8. 40 | 14. 55 | | *** | | | | | |
| 9. 45 | 13. 0 | 4. 10 | ·0975 | | | | | |
| 10. 10 | 11. 30 | 4. 37 | ·0966 | | | | | |
| 11. 15 | 15. 50 | 5. 5 | ·0970 | | | | | |
| 12. 2 | 14. 0 | 5. 15 | ·0976 | | | | | |
| 12. 41 | 13. 20 | 5. 33 | ·0962 | | | | | |
| 13. 14 | 15. 55 | | *** | | | | | |
| 13. 50 | 15. 20 | 6. 57 | ·0966 | | | | | |
| 14. 11 | 17. 40 | | *** | | | | | |
| 14. 52 | 14. 20 | 7. 38 | ·0977 | | | | | |
| 15. 19 | 19. 20 | 7. 47 | ·0971 | | | | | |
| 15. 46 | 16. 0 | | *** | | | | | |
| 16. 5 | 16. 20 | 9. 46 | ·0971 | | | | | |
| 16. 21 | 13. 50 | 10. 6 | ·0977 | | | | | |
| 17. 7 | 9. 40 | | *** | | | | | |
| 17. 36 | 8. 30 | 12. 10 | ·0965 | | | | | |
| 17. 43 | 9. 10 | | *** | | | | | |
| 18. 4 | 7. 50 | 15. 25 | ·0967 | | | | | |
| 18. 13 | 8. 10 | 15. 46 | ·0974 | | | | | |
| 18. 24 | 6. 15 | | *** | | | | | |
| 18. 57 | 8. 10 | 17. 50 | ·0973 | | | | | |
| 19. 7 | 7. 5 | | *** | | | | | |
| 19. 55 | 8. 50 | 19. 47 | ·0960 | | | | | |
| 20. 15 | 8. 0 | | *** | | | | | |
| 20. 38 | 11. 10 | 22. 6 | ·0937 | | | | | |
| 20. 54 | 10. 15 | | *** | | | | | |
| 21. 15 | 11. 50 | 23. 32 | ·0938 | | | | | |
| 22. 6 | 17. 20 | | *** | | | | | |
| 22. 15 | 17. 10 | 23. 59 | ·0946 | | | | | |
| 22. 35 | 19. 15 | | | | | | | |
| 22. 58 | 18. 55 | | | | | | | |
| 23. 26 | 21. 0 | | | | | | | |
| 23. 40 | 20. 40 | | | | | | | |
| 23. 59 | 21. 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 23 | | July 23 | | July 23 | | July 23 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0946 | 0. 0 | ·01865 | 1. 0 | 60 ·8 | 61 ·0 |
| 0. 15 | 22. 0 | | *** | 6. 40 | ·01949 | 3. 0 | 61 ·7 | 61 ·9 |
| 0. 24 | 21. 20 | 0. 46 | ·0955 | 14. 39 | ·01867 | 9. 0 | 62 ·0 | 62 ·5 |
| 0. 39 | 22. 5 | 1. 40 | ·0955 | 20. 27 | ·02152 | 21. 0 | 59 ·0 | 58 ·8 |
| 1. 21 | 22. 30 | 2. 4 | ·0961 | 23. 23 | ·02094 | | | |
| 2. 10 | 24. 50 | 2. 52 | ·0958 | | (†) | | | |
| 5. 24 | 16. 30 | | *** | | | | | |
| 6. 29 | 14. 0 | 5. 22 | ·0985 | | | | | |
| 6. 54 | 15. 5 | 5. 43 | ·0982 | | | | | |
| 9. 22 | 15. 40 | 6. 6 | ·0994 | | | | | |
| 9. 57 | 14. 0 | 6. 30 | ·0981 | | | | | |
| 10. 31 | 9. 0 | | *** | | | | | |
| 11. 29 | 14. 20 | 9. 20 | ·0985 | | | | | |
| 11. 41 | 13. 40 | 9. 46 | ·0983 | | | | | |
| 11. 51 | 15. 30 | 10. 30 | ·0993 | | | | | |
| 12. 18 | 13. 45 | | *** | | | | | |
| 12. 43 | 16. 10 | 11. 38 | ·0975 | | | | | |
| 12. 51 | 14. 20 | 11. 49 | ·0978 | | | | | |
| 13. 9 | 15. 0 | 12. 20 | ·0975 | | | | | |
| 13. 36 | 14. 10 | 12. 40 | ·0980 | | | | | |
| 13. 47 | 17. 20 | | *** | | | | | |
| 14. 44 | 12. 5 | 13. 36 | ·0973 | | | | | |
| 16. 3 | 12. 30 | | *** | | | | | |
| 17. 30 | 8. 40 | 14. 17 | ·0989 | | | | | |
| | *** | 15. 4 | ·0969 | | | | | |
| 18. 58 | 8. 0 | | *** | | | | | |
| 19. 13 | 6. 30 | 16. 52 | ·0977 | | | | | |
| 19. 28 | 8. 40 | 18. 15 | ·0972 | | | | | |
| 20. 10 | 10. 25 | 19. 0 | ·0962 | | | | | |
| 20. 21 | 8. 25 | 19. 45 | ·0963 | | | | | |
| 20. 33 | 12. 0 | | *** | | | | | |
| 20. 51 | 11. 15 | 22. 15 | ·0932 | | | | | |
| 21. 4 | 13. 30 | | *** | | | | | |
| 22. 22 | 14. 10 | 23. 59 | ·0940 | | | | | |
| 22. 45 | 17. 30 | | | | | | | |
| 23. 45 | 20. 40 | | | | | | | |
| 23. 54 | 20. 15 | | | | | | | |
| 23. 59 | 21. 10 | | | | | | | |
| July 24 | | July 24 | | July 24 | | July 24 | | |
| 0. 0 | 21. 21. 10 | 0. 0 | ·0940 | | (†) | 1. 0 | 60 ·4 | 60 ·3 |
| 0. 10 | 21. 50 | 0. 22 | ·0930 | 1. 0 | ·01238* | 3. 0 | 61 ·0 | 61 ·0 |
| 0. 27 | 20. 55 | | *** | 3. 0 | ·01400 | 9. 0 | 62 ·0 | 63 ·0 |
| 1. 45 | 24. 40 | 2. 10 | ·0965 | 7. 20 | ·01326 | 21. 0 | 58 ·2 | 58 ·3 |
| 2. 55 | 25. 0 | 2. 30 | ·0962 | 13. 15 | ·01390 | | | |
| 3. 30 | 21. 30 | 2. 47 | ·0968 | 20. 0 | ·01728 | | | |
| 3. 55 | 22. 10 | 3. 15 | ·0960 | 22. 0 | ·01780 | | | |
| 4. 28 | 19. 0 | 3. 46 | ·0977 | 23. 59 | ·01730 | | | |
| 4. 36 | 19. 10 | | *** | | | | | |
| 5. 14 | 16. 15 | 4. 22 | ·0964 | | | | | |
| 6. 37 | 13. 40 | | *** | | | | | |
| 7. 14 | 14. 30 | 5. 47 | ·0972 | | | | | |
| 7. 44 | 14. 0 | | *** | | | | | |
| 10. 10 | 16. 5 | 7. 8 | ·0969 | | | | | |
| | *** | 8. 34 | ·0973 | | | | | |
| 12. 3 | 14. 0 | 9. 30 | ·0969 | | | | | |
| 12. 30 | 16. 0 | | *** | | | | | |
| 13. 7 | 14. 40 | 12. 7 | ·0970 | | | | | |

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 24 | | July 24 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 13. 45 | 21. 14. 45 | 12. 48 | ·0976 | | | | | |
| 14. 0 | 13. 20 | 13. 48 | ·0969 | | | | | |
| 15. 12 | 12. 5 | | *** | | | | | |
| 16. 23 | 12. 20 | 17. 33 | ·0975 | | | | | |
| 18. 28 | 8. 10 | | *** | | | | | |
| 19. 48 | 7. 40 | 21. 20 | ·0940 | | | | | |
| 20. 57 | 9. 20 | | *** | | | | | |
| 22. 21 | 14. 40 | 22. 13 | ·0937 | | | | | |
| 23. 33 | 18. 40 | | *** | | | | | |
| | (†) | 23. 36 | ·0948 | | | | | |
| | | 23. 59 | ·0940 | | | | | |
| July 25 | | July 25 | | July 25 | | July 25 | | |
| | (†) | 0. 0 | ·0940 | 0. 0 | ·01730 | 0. 0 | 59 ·0 | 58 ·5 |
| 0. 13 | 21. 19. 10 | 0. 47 | ·0941 | 0. 14 | ·01732 | 1. 0 | 59 ·8 | 59 ·2 |
| 1. 53 | 21. 30 | | *** | | ·01760 | 3. 0 | 60 ·0 | 60 ·0 |
| 3. 58 | 18. 50 | 1. 35 | ·0940 | 5. 30 | ·01366 | 6. 0 | 61 ·7 | 61 ·9 |
| 5. 26 | 14. 30 | | *** | 6. 45 | ·01420 | 9. 0 | 61 ·4 | 61 ·9 |
| 6. 33 | 12. 55 | 5. 4 | ·0956 | 13. 27 | ·01532 | 12. 0 | 60 ·8 | 61 ·5 |
| 7. 10 | 11. 0 | 5. 47 | ·0968 | 21. 5 | ·01944 | 18. 0 | 55 ·8 | 57 ·0 |
| 7. 28 | 12. 10 | 6. 50 | ·0971 | 23. 59 | ·01850 | 21. 0 | 57 ·3 | 56 ·8 |
| 7. 51 | 11. 40 | | *** | | | | | |
| 8. 13 | 12. 50 | 12. 46 | ·0972 | | | | | |
| 10. 24 | 14. 50 | 13. 17 | ·0982 | | | | | |
| 11. 0 | 14. 10 | 14. 16 | ·0973 | | | | | |
| 12. 28 | 15. 15 | | *** | | | | | |
| 13. 0 | 16. 55 | 16. 4 | ·0971 | | | | | |
| 13. 17 | 16. 10 | | *** | | | | | |
| 13. 39 | 18. 30 | 17. 4 | ·0976 | | | | | |
| 14. 9 | 15. 0 | 17. 50 | ·0972 | | | | | |
| 15. 12 | 14. 0 | 20. 6 | ·0941 | | | | | |
| 15. 40 | 14. 50 | | *** | | | | | |
| 15. 55 | 13. 20 | 22. 5 | ·0938 | | | | | |
| | *** | | *** | | | | | |
| 17. 45 | 10. 0 | 23. 3 | ·0945 | | | | | |
| | *** | | *** | | | | | |
| 18. 17 | 11. 30 | 23. 59 | ·0940 | | | | | |
| 18. 43 | 11. 15 | | | | | | | |
| 18. 51 | 9. 0 | | | | | | | |
| 18. 56 | 10. 0 | | | | | | | |
| 19. 14 | 10. 30 | | | | | | | |
| 19. 55 | 9. 45 | | | | | | | |
| 21. 58 | 15. 10 | | | | | | | |
| 22. 22 | 17. 15 | | | | | | | |
| 23. 26 | 19. 45 | | | | | | | |
| 23. 59 | 22. 45 | | | | | | | |
| July 26 | | July 26 | | July 26 | | July 26 | | |
| 0. 0 | 21. 22. 45 | 0. 0 | ·0940 | 0. 0 | ·01850 | 0. 0 | 59 ·3 | 58 ·7 |
| 0. 29 | 24. 50 | | *** | 3. 43 | ·01496 | 1. 0 | 60 ·0 | 60 ·0 |
| 1. 28 | 24. 0 | 0. 50 | ·0946 | 8. 50 | ·01850 | 3. 0 | 61 ·7 | 61 ·8 |
| 2. 30 | 21. 50 | 1. 17 | ·0940 | 13. 27: | ·01948 | 9. 7 | 63 ·0 | 63 ·0 |
| 3. 51 | 16. 20 | 2. 30 | ·0954 | 20. 11 | ·02291 | 21. 0 | 59 ·0 | 58 ·7 |
| 5. 40 | 11. 45 | 2. 53 | ·0951 | 23. 0 | ·02367 | | | |
| 8. 12 | 11. 10 | | *** | 23. 59 | ·02328 | | | |
| 9. 0 | 11. 50 | 4. 24 | ·0956 | | | | | |
| 9. 37 | 10. 15 | | *** | | | | | |
| 10. 0 | 11. 40 | 5. 9 | ·0966 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | July 26 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 21 | 21. 9. 50 | 10. 29 | ·0973 | | | | | |
| 10. 52 | 9. 50 | | *** | | | | | |
| 11. 30 | 11. 40 | 12. 40 | ·0967 | | | | | |
| 12. 29 | 12. 20 | | *** | | | | | |
| 12. 45 | 13. 40 | 16. 40 | ·0978 | | | | | |
| 12. 55 | 12. 30 | | *** | | | | | |
| 14. 42 | 13. 0 | 17. 50 | ·0973 | | | | | |
| | *** | 19. 16 | ·0956 | | | | | |
| 15. 12 | 14. 55 | | *** | | | | | |
| | *** | 20. 47 | ·0951 | | | | | |
| 17. 42 | 7. 50 | 21. 20 | ·0956 | | | | | |
| 17. 59 | 9. 20 | 22. 40 | ·0943 | | | | | |
| 18. 28 | 8. 40 | 23. 59 | ·0950 | | | | | |
| 18. 49 | 10. 50 | | | | | | | |
| 19. 45 | 10. 20 | | | | | | | |
| 20. 7 | 12. 20 | | | | | | | |
| 21. 2 | 11. 50 | | | | | | | |
| 22. 13 | 17. 30 | | | | | | | |
| 23. 0 | 19. 40 | | | | | | | |
| 23. 50 | 24. 0 | | | | | | | |
| 23. 59 | 23. 55 | | | | | | | |
| July 27 | | July 27 | | July 27 | | July 27 | | |
| 0. 0 | 21. 23. 55 | 0. 0 | ·0950 | 0. 0 | ·02328 | 1. 0 | 61 ·7 | 61 ·6 |
| | *** | 1. 54 | ·0977 | 0. 55 | ·02280 | 3. 0 | 63 ·8 | 64 ·0 |
| 3. 53 | 18. 0 | 2. 7 | ·0966 | 4. 21 | ·01908 | 9. 0 | 65 ·0 | 65 ·9 |
| 4. 57 | 15. 5 | | *** | 6. 0 | ·02280 | 21. 0 | 60 ·0 | 60 ·7 |
| 9. 30 | 13. 30 | 2. 36 | ·0970 | | ·02527 | | | |
| 9. 51 | 11. 40 | | *** | 8. 13 | ·02640 | | | |
| 10. 40 | 13. 35 | 3. 47 | ·0970 | 10. 42 | ·02677 | | | |
| 11. 0 | 12. 40 | | *** | 14. 39 | ·02780 | | | |
| 13. 30 | 14. 10 | 4. 45 | ·0956 | 16. 30 | ·02922 | | | |
| 13. 45 | 16. 30 | | *** | 21. 51 | ·03193 | | | |
| 14. 7 | 13. 30 | 6. 5 | ·0970 | 23. 59 | ·03234 | | | |
| 14. 20 | 16. 30 | 6. 39 | ·0965 | | | | | |
| 15. 19 | 9. 30 | | *** | | | | | |
| 15. 56 | 10. 30 | 7. 50 | ·0974 | | | | | |
| | *** | 8. 20 | ·0973 | | | | | |
| 18. 9 | 8. 0 | 8. 47 | ·0976 | | | | | |
| | *** | | *** | | | | | |
| 19. 21 | 11. 10 | 9. 33 | ·0972 | | | | | |
| 19. 43 | 10. 20 | 10. 23 | ·0979 | | | | | |
| 21. 6 | 12. 40 | 10. 47 | ·0974 | | | | | |
| 23. 4 | 19. 30 | 11. 6 | ·0977 | | | | | |
| 23. 59 | 22. 5 | | *** | | | | | |
| | | 12. 50 | ·0965 | | | | | |
| | | 13. 36 | ·0972 | | | | | |
| | | 13. 47 | ·0979 | | | | | |
| | | 14. 4 | ·0971 | | | | | |
| | | 14. 20 | ·0980 | | | | | |
| | | 14. 45 | ·0973 | | | | | |
| | | 15. 5 | ·0974 | | | | | |
| | | 15. 33 | ·0968 | | | | | |
| | | 16. 17 | ·0971 | | | | | |
| | | | *** | | | | | |
| | | 22. 40 | ·0954 | | | | | |
| | | 23. 32 | ·0960 | | | | | |
| | | 23. 59 | ·0960 | | | | | |

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 28 h m | ° ′ ″ | July 28 h m | | July 28 h m | | July 28 h m | ° | ° |
| 0. 0 | 21. 22. 5 | 0. 0 | ·0960 | 0. 0 | ·03234 | 1. 0 | 61·3 | 61·2 |
| 1. 52 | 26. 15 | 1. 30 | ·0962 | 2. 10 | ·03240 | 3. 0 | 62·7 | 62·9 |
| 2. 51 | 20. 40 | 1. 48 | ·0967 | 7. 19 | ·02950 | 9. 0 | 63·7 | 63·2 |
| 5. 20 | 15. 5 | 2. 22 | ·0969 | 12. 17 | ·02954 | 22. 24 | 60·0 | 60·0 |
| 7. 15 | 16. 5 | 2. 57 | ·0959 | 20. 45 | ·03320 | | | |
| 8. 13 | 14. 10 | | *** | 23. 59 | ·03364 | | | |
| 9. 52 | 16. 40 | 5. 9 | ·0973 | | | | | |
| 10. 0 | 16. 0 | 5. 26 | ·0971 | | | | | |
| 10. 45 | 15. 30 | | *** | | | | | |
| 11. 13 | 10. 0 | 7. 17 | ·0979 | | | | | |
| 11. 39 | 12. 40 | 8. 10 | ·0975 | | | | | |
| 12. 10 | 10. 30 | 8. 52 | ·0979 | | | | | |
| 13. 57 | 14. 40 | 9. 17 | ·0975 | | | | | |
| 14. 42 | 13. 30 | 9. 52 | ·0978 | | | | | |
| 15. 32 | 14. 50 | 10. 0 | ·0976 | | | | | |
| 17. 45 | 10. 20 | 10. 10 | ·0981 | | | | | |
| 18. 58 | 9. 40 | 10. 22 | ·0975 | | | | | |
| 19. 17 | 12. 15 | 10. 57 | ·0984 | | | | | |
| 19. 45 | 11. 0 | 11. 6 | ·0982 | | | | | |
| 19. 54 | 9. 0 | 11. 26 | ·0993 | | | | | |
| 20. 0 | 9. 30 | 11. 52 | ·0974 | | | | | |
| 20. 11 | 11. 40 | 12. 15 | ·0970 | | | | | |
| 20. 21 | 10. 30 | 12. 47 | ·0976 | | | | | |
| 20. 55 | 14. 30 | | *** | | | | | |
| 21. 9 | 13. 15 | 15. 53 | ·0977 | | | | | |
| 21. 20 | 13. 30 | 18. 36 | ·0966 | | | | | |
| 22. 0 | 19. 10 | 18. 58 | ·0970 | | | | | |
| 22. 17 | 18. 30 | | *** | | | | | |
| 23. 18 | 26. 10 | 20. 40 | ·0955 | | | | | |
| 23. 27 | 25. 50 | 20. 51 | ·0960 | | | | | |
| 23. 46 | 28. 20 | 21. 7 | ·0953 | | | | | |
| 23. 59 | 27. 50 | 22. 30 | ·0961 | | | | | |
| | | 23. 30 | ·0964 | | | | | |
| | | 23. 46 | ·0974 | | | | | |
| | | 23. 59 | ·0968 | | | | | |
| July 29 | | July 29 | | July 29 | | July 29 | | |
| 0. 0 | 21. 27. 50 | 0. 0 | ·0967 | 0. 0 | ·03364 | 9. 0 | 63·0 | 63·5 |
| | *** | | *** | 1. 17 | ·03330 | 21. 0 | 59·0 | 60·0 |
| 1. 0 | 27. 0 | 0. 36 | ·0966 | 3. 22 | ·03117 | | | |
| 1. 47 | 24. 50 | | *** | 4. 30 | ·02930 | | | |
| 2. 7 | 26. 10 | 1. 46 | ·0970 | 6. 40 | ·02822 | | | |
| 2. 27 | 24. 30 | | *** | 19. 0 | ·03360 | | | |
| 2. 40 | 25. 20 | 2. 17 | ·0984 | 21. 20 | ·03418 | | | |
| 4. 7 | 17. 30 | 2. 26 | ·0977 | | ·03309 | | | |
| 6. 7 | 14. 50 | 2. 45 | ·0986 | 23. 59 | ·03300 | | | |
| 9. 29 | 16. 20 | | *** | | | | | |
| 10. 12 | 15. 0 | 3. 18 | ·0977 | | | | | |
| 10. 44 | 7. 20 | 4. 4 | ·0950 | | | | | |
| 11. 10 | 10. 30 | | *** | | | | | |
| 11. 26 | 8. 20 | 6. 30 | ·0972 | | | | | |
| 12. 57 | 13. 30 | | *** | | | | | |
| 13. 29 | 12. 40 | 8. 8 | ·0978 | | | | | |
| 13. 41 | 14. 30 | 8. 30 | ·0973 | | | | | |
| 14. 10 | 12. 30 | 9. 17 | ·0982 | | | | | |
| 14. 57 | 15. 0 | | *** | | | | | |
| 15. 11 | 14. 20 | 10. 15 | ·0988 | | | | | |
| 15. 25 | 15. 10 | 10. 27 | ·0982 | | | | | |
| | *** | | | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 h m | ° ′ ″ | July 29 h m | | h m | | h m | ° | ° |
| 17. 7 | 21. 9. 0 | 10. 40 | ·0989 | | | | | |
| 17. 15 | 10. 0 | 11. 15 | ·0969 | | | | | |
| 18. 10 | 7. 20 | | *** | | | | | |
| 18. 25 | 8. 40 | 11. 48 | ·0974 | | | | | |
| 18. 45 | 6. 30 | 12. 17 | ·0967 | | | | | |
| 19. 11 | 8. 20 | | *** | | | | | |
| 19. 35 | 7. 5 | 16. 42 | ·0978 | | | | | |
| 23. 36 | 20. 30 | | *** | | | | | |
| 23. 42 | 22. 30 | 20. 3 | ·0951 | | | | | |
| 23. 59 | 24. 0 | | *** | | | | | |
| | | 23. 6 | ·0948 | | | | | |
| | | 23. 59 | ·0958 | | | | | |
| July 30 | | July 30 | | July 30 | | July 30 | | |
| 0. 0 | 21. 24. 0 | 0. 0 | ·0958 | 0. 0 | ·03300 | 1. 0 | 62·3 | 62·4 |
| 0. 27 | 25. 0 | 1. 6 | ·0950 | 2. 51 | ·03090 | 3. 0 | 63·7 | 63·9 |
| 1. 28 | 24. 30 | 1. 27 | ·0960 | 6. 57 | ·02664 | 9. 0 | 65·0 | 66·0 |
| 1. 56 | 21. 50 | 1. 48 | ·0951 | 8. 49 | ·02792 | 21. 0 | 60·3 | 60·8 |
| 2. 52 | 21. 50 | 2. 56 | ·0977 | | ·02961 | | | |
| 4. 35 | 14. 10 | | *** | 11. 13 | ·02958 | | | |
| 5. 45 | 12. 0 | 4. 22 | ·0957 | 19. 23 | ·03472 | | | |
| 7. 42 | 15. 0 | | *** | 22. 45 | ·03473 | | | |
| 8. 15 | 14. 20 | 5. 33 | ·0976 | 23. 59 | ·03413 | | | |
| 9. 7 | 15. 0 | 6. 0 | ·0968 | | | | | |
| 9. 18 | 14. 10 | | *** | | | | | |
| 9. 52 | 14. 40 | 7. 8 | ·0961 | | | | | |
| 10. 29 | 11. 10 | 7. 40 | ·0970 | | | | | |
| 10. 43 | 11. 20 | 8. 10 | ·0965 | | | | | |
| 11. 0 | 9. 0 | | *** | | | | | |
| 11. 15 | 8. 0 | 9. 46 | ·0970 | | | | | |
| 11. 40 | 13. 15 | 9. 58 | ·0966 | | | | | |
| | *** | 10. 17 | ·0973 | | | | | |
| 14. 13 | 14. 30 | | *** | | | | | |
| | *** | 11. 12 | ·0961 | | | | | |
| 15. 15 | 13. 0 | | *** | | | | | |
| | *** | 15. 56 | ·0974 | | | | | |
| 15. 51 | 14. 5 | 17. 58 | ·0972 | | | | | |
| | *** | 21. 53 | ·0941 | | | | | |
| 16. 35 | 11. 40 | | *** | | | | | |
| | *** | 22. 37 | ·0928 | | | | | |
| 16. 56 | 12. 30 | 22. 58 | ·0931 | | | | | |
| | *** | 23. 59 | ·0926 | | | | | |
| 18. 42 | 8. 30 | | | | | | | |
| | *** | | | | | | | |
| 19. 56 | 9. 0 | | | | | | | |
| 21. 40 | 14. 55 | | | | | | | |
| 23. 59 | 28. 45 | | | | | | | |
| July 31 | | July 31 | | July 31 | | July 31 | | |
| 0. 0 | 21. 28. 50 | 0. 0 | ·0926 | 0. 0 | ·03413 | 1. 0 | 63·2 | 62·8 |
| 0. 50 | 30. 20 | 1. 7 | ·0943 | 2. 15 | ·03330 | 3. 0 | 64·0 | 64·6 |
| 1. 27 | 29. 30 | 1. 56 | ·0952 | 5. 43 | ·03053 | 9. 0 | 64·7 | 65·2 |
| 1. 52 | 30. 0 | | *** | 8. 26 | ·02950 | 21. 0 | 61·7 | 62·0 |
| 4. 56 | 17. 30 | 3. 57 | ·0949 | 9. 0 | ·02960 | | | |
| 6. 37 | 14. 20 | 4. 22 | ·0945 | | ·03302 | | | |
| 7. 54 | 13. 30 | | *** | 12. 53 | ·03347 | | | |
| 11. 21 | 15. 5 | 5. 46 | ·0947 | 19. 54 | ·03590 | | | |
| | | | *** | | | | | |

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 31 | | July 31 | | July 31 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 11. 49 | 21. 16. 20 | 8. 17 | ·0964 | 23. 15 | ·03590 | | | |
| 12. 23 | 14. 10 | 10. 40 | ·0959 | | (†) | | | |
| 12. 51 | 16. 15 | 12. 7 | ·0965 | | | | | |
| 13. 29 | 14. 0 | 12. 32 | ·0961 | | | | | |
| 15. 15 | 14. 30 | 13. 5 | ·0966 | | | | | |
| 16. 13 | 13. 5 | 13. 40 | ·0962 | | | | | |
| | *** | 18. 50 | ·0964 | | | | | |
| 20. 26 | 11. 20 | 22. 35 | ·0940 | | | | | |
| 21. 51 | 13. 40 | | *** | | | | | |
| 23. 59 | 25. 0 | 23. 59 | ·0945 | | | | | |
| Aug. 1 | | Aug. 1 | | Aug. 1 | | Aug. 1 | | |
| 0. 0 | 21. 25. 5 | 0. 0 | ·0945 | | (†) | 0. 0 | 62 ·2 | 62 ·8 |
| 0. 14 | 26. 10 | 0. 22 | ·0952 | 1. 0 | ·03563* | 1. 0 | 63 ·0 | 63 ·5 |
| 1. 20 | 27. 0 | 0. 36 | ·0950 | 1. 52 | ·03510 | 3. 0 | 64 ·9 | 65 ·7 |
| 3. 15 | 21. 0 | 1. 40 | ·0965 | 2. 39 | ·03453 | 6. 0 | 66 ·0 | 66 ·7 |
| 3. 20 | 25. 0 | | *** | 3. 51 | ·03238 | 9. 0 | 66 ·3 | 67 ·1 |
| 3. 35 | 21. 20 | 3. 7 | ·0967 | 5. 42 | {·03184 | 12. 0 | 63 ·2 | 64 ·4 |
| 3. 52 | 21. 10 | 3. 15 | ·0996 | | {·03294 | 18. 0 | 62 ·0 | 62 ·8 |
| 3. 56 | 22. 0 | 3. 27 | ·0982 | 6. 34 | {·03280 | 21. 0 | 61 ·3 | 62 ·2 |
| 4. 30 | 18. 30 | 3. 36 | ·0986 | | {·03344 | | | |
| 5. 50 | 14. 30 | 3. 47 | ·0974 | 8. 28 | ·03282 | | | |
| 8. 38 | 13. 30 | 3. 52 | ·0987 | 11. 45 | ·03310 | | | |
| 9. 28 | 12. 0 | 4. 17 | ·0966 | 18. 26 | ·03565 | | | |
| 9. 51 | 14. 40 | | *** | 19. 6 | ·03648 | | | |
| 10. 47 | 12. 30 | 5. 18 | ·0965 | 22. 48 | ·03788 | | | |
| 11. 14 | 10. 50 | 5. 54 | ·0976 | | (†) | | | |
| 14. 40 | 11. 30 | | *** | | | | | |
| 15. 16 | 14. 30 | 6. 36 | ·0972 | | | | | |
| 16. 43 | 8. 30 | 6. 46 | ·0983 | | | | | |
| 17. 7 | 12. 10 | 7. 0 | ·0972 | | | | | |
| 17. 21 | 10. 50 | 7. 10 | ·0973 | | | | | |
| 17. 43 | 13. 20 | 7. 16 | ·0989 | | | | | |
| 18. 1 | 10. 20 | 7. 40 | ·0971 | | | | | |
| 18. 14 | 11. 30 | | *** | | | | | |
| 18. 29 | 5. 30 | 8. 20 | ·0975 | | | | | |
| 18. 38 | 7. 0 | | *** | | | | | |
| 18. 43 | 6. 30 | 8. 47 | ·0971 | | | | | |
| 19. 12 | 21. 30 | 9. 14 | ·0984 | | | | | |
| 19. 24 | 18. 30 | 9. 45 | ·0969 | | | | | |
| | *** | | *** | | | | | |
| 20. 0 | 16. 55 | 10. 46 | ·0973 | | | | | |
| 20. 11 | 14. 40 | 11. 7 | ·0967 | | | | | |
| 20. 52 | 15. 10 | | *** | | | | | |
| 21. 10 | 16. 30 | 12. 8 | ·0973 | | | | | |
| 21. 35 | 14. 10 | | *** | | | | | |
| | *** | 14. 4 | ·0971 | | | | | |
| 22. 14 | 16. 30 | 15. 5 | 0976 | | | | | |
| 22. 40 | 21. 15 | 15. 29 | ·0973 | | | | | |
| 22. 48 | 20. 20 | | *** | | | | | |
| 22. 59 | 22. 30 | 16. 56 | ·0982 | | | | | |
| 23. 13 | 20. 40 | | *** | | | | | |
| 23. 24 | 22. 5 | 17. 20 | ·0982 | | | | | |
| 23. 43 | 21. 15 | 17. 52 | ·0964 | | | | | |
| 23. 59 | 22. 30 | 18. 30 | ·0948 | | | | | |
| | | 19. 4 | ·0970 | | | | | |
| | | 19. 17 | ·0977 | | | | | |
| | | 19. 28 | ·0971 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Aug. 1 h m | | h m | | Aug. 2 h m | ° | ° |
| | | 19. 44 | ·0974 | | | | | |
| | | 20. 0 | ·0967 | | | | | |
| | | 20. 16 | ·0969 | | | | | |
| | | 20. 52 | ·0965 | | | | | |
| | | 21. 28 | ·0949 | | | | | |
| | | | *** | | | | | |
| | | 21. 50 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 22. 10 | ·0940 | | | | | |
| | | 22. 20 | ·0942 | | | | | |
| | | 22. 40 | ·0927 | | | | | |
| | | 22. 52 | ·0927 | | | | | |
| | | 23. 4 | ·0914 | | | | | |
| | | 23. 22 | ·0929 | | | | | |
| | | 23. 54 | ·0935 | | | | | |
| | | 23. 59 | ·0940 | | | | | |
| Aug. 2 | | Aug. 2 | | Aug. 2 | | Aug. 2 | | |
| 0. 0 | 21. 22. 30 | 0. 0 | ·0942 | | (†) | 0. 0 | 62 ·3 | 62 ·9 |
| 0. 10 | 24. 0 | 0. 5 | ·0948 | 1. 0 | ·03848* | 1. 0 | 62 ·7 | 63 ·2 |
| 2. 37 | 22. 0 | 0. 17 | ·0940 | 2. 10 | ·03819 | 3. 0 | 63 ·2 | 63 ·9 |
| 3. 57 | 19. 5 | 1. 15 | ·0949 | 2. 44 | {·03810 | 9. 0 | 63 ·7 | 64 ·4 |
| 4. 16 | 18. 55 | | *** | | {·03606 | 21. 0 | 61 ·7 | 61 ·3 |
| 4. 39 | 17. 0 | 1. 50 | ·0947 | 9. 10 | ·03377 | | | |
| 4. 57 | 17. 30 | 2. 33 | ·0963 | 13. 45 | ·03355 | | | |
| 5. 24 | 14. 50 | 3. 5 | ·0959 | 20. 10 | ·03702 | | | |
| 7. 22 | 14. 0 | 3. 16 | ·0965 | 21. 23 | {·03730 | | | |
| 7. 55 | 14. 45 | 3. 40 | ·0966 | | {·03592 | | | |
| 8. 14 | 12. 20 | 3. 46 | ·0959 | 22. 15 | ·03562 | | | |
| 8. 42 | 10. 0 | 4. 6 | ·0964 | | (†) | | | |
| 9. 41 | 13. 20 | 4. 16 | ·0974 | | | | | |
| 10. 30 | 13. 15 | 4. 30 | ·0960 | | | | | |
| 10. 51 | 15. 0 | 5. 0 | ·0979 | | | | | |
| 11. 19 | 12. 0 | 5. 17 | ·0967 | | | | | |
| 11. 35 | 12. 40 | 5. 30 | ·0973 | | | | | |
| 11. 55 | 12. 0 | | *** | | | | | |
| 12. 14 | 13. 15 | 6. 15 | ·0968 | | | | | |
| 12. 36 | 12. 30 | 6. 24 | ·0974 | | | | | |
| 12. 45 | 14. 15 | 6. 40 | ·0967 | | | | | |
| 13. 10 | 14. 0 | 7. 15 | ·0976 | | | | | |
| 13. 18 | 15. 10 | | *** | | | | | |
| 13. 58 | 10. 20 | 7. 46 | ·0979 | | | | | |
| 14. 9 | 11. 0 | 8. 4 | ·0972 | | | | | |
| 14. 58 | 9. 40 | | *** | | | | | |
| 15. 43 | 11. 40 | 9. 8 | ·0969 | | | | | |
| 16. 7 | 10. 30 | 9. 17 | ·0973 | | | | | |
| 16. 58 | 9. 40 | | *** | | | | | |
| 17. 25 | 11. 0 | 10. 7 | ·0963 | | | | | |
| 17. 59 | 9. 10 | 10. 30 | ·0963 | | | | | |
| 19. 15 | 9. 20 | 10. 45 | ·0968 | | | | | |
| 19. 43 | 7. 30 | 10. 54 | ·0964 | | | | | |
| 20. 11 | 10. 45 | 11. 18 | ·0969 | | | | | |
| 20. 51 | 9. 40 | 11. 40 | ·0965 | | | | | |
| 21. 30 | 12. 40 | | *** | | | | | |
| 21. 40 | 12. 15 | 12. 20 | ·0965 | | | | | |
| 23. 25 | 20. 5 | 12. 37 | ·0969 | | | | | |
| 23. 59 | 20. 0 | 13. 8: | ·0962 | | | | | |
| | | 13. 38 | ·0972 | | | | | |
| | | | *** | | | | | |

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 | ° ′ ″ | Aug. 2 h m | | h m | | h m | ° | ° |
| | | 14. 43 | ·0960 | | | | | |
| | | | *** | | | | | |
| | | 15. 52 | ·0965 | | | | | |
| | | 18. 36 | ·0959 | | | | | |
| | | 19. 42 | ·0946 | | | | | |
| | | 21. 35 | ·0936 | | | | | |
| | | | *** | | | | | |
| | | 22. 15 | ·0938 | | | | | |
| | | | (†) | | | | | |
| Aug. 3 | | Aug. 3 | | Aug. 3 | | Aug. 3 | | |
| 0. 0 | 21. 20. 0 | | (†) | | (†) | 1. 0 | 64 ·0 | 64 ·6 |
| 0. 55 | 19. 30 | 0. 47 | ·0948 | 1. 35 | ·03416 | 3. 0 | 66 ·3 | 66 ·2 |
| 1. 45 | 21. 20 | | *** | 2. 28 | ·03377 | 9. 0 | 67 ·0 | 68 ·0 |
| 2. 25 | 21. 0 | 1. 20 | ·0955 | 6. 11 | ·03070 | 21. 0 | 63 ·2 | 63 ·8 |
| 4. 9 | 15. 20 | | *** | 8. 28 | ·03022 | | | |
| | (†) | 2. 15 | ·0943 | 13. 15 | ·03032 | | | |
| 6. 11 | 12. 40 | | *** | 18. 35 | ·03297 | | | |
| 9. 10 | 14. 40 | 4. 6 | ·0947 | 21. 54 | ·03433 | | | |
| 10. 28 | 12. 45 | | (†) | 23. 59 | ·03416 | | | |
| 10. 54 | 12. 45 | 6. 14 | ·0960 | | | | | |
| 11. 14 | 13. 40 | 6. 46 | ·0970 | | | | | |
| 12. 13 | 12. 40 | 7. 7 | ·0964 | | | | | |
| 12. 31 | 14. 0 | | *** | | | | | |
| 13. 10 | 13. 30 | 8. 23 | ·0967 | | | | | |
| 13. 13 | 14. 30 | | *** | | | | | |
| 14. 0 | 14. 10 | 9. 16 | ·0961 | | | | | |
| 14. 30 | 15. 40 | 9. 40 | ·0965 | | | | | |
| 15. 13 | 13. 10 | | *** | | | | | |
| 15. 58 | 9. 45 | 10. 22 | ·0958 | | | | | |
| 17. 0 | 11. 30 | | *** | | | | | |
| 17. 36 | 8. 15 | 11. 7 | ·0963 | | | | | |
| 18. 5 | 10. 50 | 11. 34 | ·0956 | | | | | |
| 18. 12 | 9. 30 | | *** | | | | | |
| 18. 25 | 11. 0 | 12. 10 | ·0956 | | | | | |
| 19. 56 | 10. 0 | 12. 23 | ·0959 | | | | | |
| 20. 42 | 12. 20 | 12. 46 | ·0956 | | | | | |
| 21. 57 | 19. 40 | | *** | | | | | |
| 23. 59 | 24. 40 | 13. 28 | ·0961 | | | | | |
| | | 14. 6 | ·0954 | | | | | |
| | | 14. 42 | ·0961 | | | | | |
| | | 14. 57 | ·0958 | | | | | |
| | | 15. 53 | ·0962 | | | | | |
| | | 16. 30 | ·0958 | | | | | |
| | | | *** | | | | | |
| | | 17. 20 | ·0961 | | | | | |
| | | | *** | | | | | |
| | | 20. 45 | ·0944 | | | | | |
| | | 21. 27 | ·0943 | | | | | |
| | | 21. 56 | ·0935 | | | | | |
| | | | *** | | | | | |
| | | 23. 7 | ·0933 | | | | | |
| | | | *** | | | | | |
| | | 23. 40 | ·0941 | | | | | |
| | | 23. 46 | ·0936 | | | | | |
| | | 23. 59 | ·0938 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Aug. 4 h m | ° | ° |
| 0. 0 | 21. 24. 40 | 0. 0 | ·0938 | 0. 0 | ·03416 | 1. 0 | 65 ·0 | 66 ·0 |
| 0. 58 | 26. 0 | 0. 30 | ·0945 | 4. 52 | ·03083 | 3. 0 | 66 ·7 | 67 ·3 |
| 1. 48 | 25. 30 | 0. 41 | ·0940 | 6. 15 | ·03282 | 9. 0 | 67 ·0 | 68 ·0 |
| 2. 58 | 22. 30 | 1. 4 | ·0947 | 6. 28 | ·03380 | 21. 45 | 59 ·8 | 60 ·2 |
| 3. 45 | 20. 40 | 1. 36 | ·0952 | 9. 14 | {·03313 | | | |
| 4. 20 | 17. 45 | | (†) | | {·03344 | | | |
| 6. 42 | 13. 10 | 2. 52 | ·0957 | 11. 56 | ·03312 | | | |
| 7. 0 | 13. 40 | 3. 4 | ·0955 | 13. 13 | ·03384 | | | |
| | *** | | *** | 19. 0 | ·04008 | | | |
| 8. 21 | 9. 50 | 3. 40 | ·0964 | 21. 13 | ·03882 | | | |
| | *** | 3. 47 | ·0956 | 23. 59 | ·03540 | | | |
| 9. 40 | 13. 30 | 3. 52 | ·0960 | | | | | |
| | *** | 4. 15 | ·0942 | | | | | |
| 10. 11 | 12. 50 | | *** | | | | | |
| 10. 39 | 15. 40 | 5. 20 | ·0944 | | | | | |
| 11. 5 | 9. 20 | | *** | | | | | |
| 11. 25 | 12. 40 | 6. 4 | ·0956 | | | | | |
| 11. 54 | 8. 0 | | *** | | | | | |
| 12. 25: | 6. 30 | 6. 28 | ·0947 | | | | | |
| 12. 59 | 13. 40 | | *** | | | | | |
| 13. 15 | 12. 40 | 7. 17: | ·0961 | | | | | |
| 13. 54 | 15. 15 | 7. 50 | ·0953 | | | | | |
| 14. 16 | 12. 10 | | *** | | | | | |
| | *** | 10. 4 | ·0958 | | | | | |
| 17. 44 | 6. 30 | 10. 23 | ·0974 | | | | | |
| 17. 54 | 9. 0 | 10. 47 | ·0969 | | | | | |
| | *** | 11. 8 | ·0977 | | | | | |
| 19. 55 | 7. 40 | 11. 42 | ·0969 | | | | | |
| 20. 10 | 6. 20 | 12. 7 | ·0950 | | | | | |
| 21. 5 | 10. 0 | | *** | | | | | |
| 23. 59 | 24. 50 | 13. 16 | ·0950 | | | | | |
| | | 13. 52 | ·0965 | | | | | |
| | | | *** | | | | | |
| | | 18. 30 | ·0962 | | | | | |
| | | | *** | | | | | |
| | | 21. 42 | ·0927 | | | | | |
| | | | *** | | | | | |
| | | 23. 36 | ·0937 | | | | | |
| | | 23. 59 | ·0945 | | | | | |
| Aug. 5 | | Aug. 5 | | Aug. 5 | | Aug. 5 | | |
| 0. 0 | 21. 24. 50 | 0. 0 | ·0945 | 0. 0 | ·03540 | 8. 55 | 66 ·3 | 67 ·2 |
| 0. 19 | 26. 0 | | *** | 2. 4 | ·03353 | 21. 0 | 63 ·0 | 64 ·0 |
| 1. 30 | 25. 5 | 0. 56 | ·0943 | 4. 9 | ·03060 | | | |
| 1. 52 | 23. 50 | | *** | 4. 40 | ·03130 | | | |
| 2. 37 | 22. 20 | 2. 36 | ·0967 | 4. 51 | ·03112 | | | |
| 4. 43 | 13. 50 | | *** | 4. 58 | ·03172 | | | |
| 6. 45 | 9. 45 | 3. 24 | ·0957 | 5. 37 | ·03120 | | | |
| 7. 24 | 10. 40 | | *** | 5. 56 | ·03160 | | | |
| 8. 30 | 9. 20 | 5. 5 | ·0950 | 6. 4 | ·03192 | | | |
| 9. 14 | 11. 20 | | *** | 6. 37 | ·03150 | | | |
| 9. 37 | 10. 5 | 6. 13 | ·0959 | 7. 0 | ·03210 | | | |
| 11. 0 | 11. 40 | | *** | 7. 40 | ·03173 | | | |
| 11. 20 | 12. 30 | 8. 17 | ·0962 | 8. 10 | ·03230 | | | |
| 12. 5 | 11. 50 | 8. 56 | ·0957 | 10. 40 | ·03211 | | | |
| 12. 26 | 13. 10 | 9. 52 | ·0966 | 18. 11 | ·03665 | | | |
| 12. 52 | 10. 40 | 10. 30 | ·0959 | 23. 59 | ·03780 | | | |
| 13. 51 | 9. 30 | 13. 9 | ·0962 | | | | | |

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. 5 | | Aug. 5 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 14. 7 | 21. 10. 0 | 14. 18 | ·0970 | | | | | |
| 16. 36 | 6. 30 | 15. 7 | ·0965 | | | | | |
| 17. 10 | 7. 30 | 15. 32 | ·0969 | | | | | |
| 17. 55 | 6. 40 | 17. 40 | ·0965 | | | | | |
| 18. 36 | 8. 0 | 21. 15 | ·0943 | | | | | |
| 20. 12 | 16. 20 | 23. 17 | ·0946 | | | | | |
| 20. 26 | 16. 20 | 23. 59 | ·0950 | | | | | |
| 21. 15 | 20. 0 | | | | | | | |
| 21. 45 | 20. 20 | | | | | | | |
| 22. 24 | 21. 50 | | | | | | | |
| 22. 48 | 22. 0 | | | | | | | |
| | (†) | | | | | | | |
| Aug. 6 | | Aug. 6 | | Aug. 6 | | Aug. 6 | | |
| | (†) | 0. 0 | ·0950 | 0. 0 | ·03780 | 1. 0 | 63 ·8 | 64 ·7 |
| 0. 21 | 21. 22. 0 | 0. 46 | ·0962 | 4. 8 | ·03669 | 3. 0 | 64 ·0 | 65 ·0 |
| 0. 44 | 23. 30 | | *** | 11. 6 | ·03810 | 9. 0 | 61 ·5 | 63 ·0 |
| 1. 44 | 20. 40 | 1. 30 | ·0956 | | (†) | 21. 0 | 56 ·0 | 55 ·3 |
| 1. 57 | 21. 20 | 2. 0 | ·0966 | 20. 35 | ·03110 | | | |
| 3. 14 | 17. 5 | | *** | 21. 15 | { ·03088 | | | |
| 4. 55 | 15. 45 | 3. 47 | ·0969 | | { ·02900 | | | |
| 5. 40: | 11. 0 | 4. 6 | ·0978 | 23. 23 | ·02945 | | | |
| 6. 27 | 13. 20 | 4. 13 | ·0971 | | (†) | | | |
| 8. 51 | 13. 0 | 4. 40 | ·0978 | | | | | |
| 10. 29 | 21. 14. 10 | 4. 47 | ·0974 | | | | | |
| | (†) | | *** | | | | | |
| 21. 0 | 20. 57. 1* | 5. 50: | ·0998 | | | | | |
| 21. 35 | 21. 0. 0 | 6. 15 | ·0987 | | | | | |
| 21. 48 | 21. 8. 0 | | *** | | | | | |
| 21. 57 | 20. 54. 30 | 9. 40 | ·0969 | | | | | |
| 22. 12 | 21. 16. 30 | | *** | | | | | |
| 22. 15 | 12. 20 | 10. 20 | ·0970 | | | | | |
| 22. 40 | 32. 45 | | (†) | | | | | |
| | *** | 21. 0 | ·0819* | | | | | |
| 23. 7 | 21. 40 | 21. 30 | ·0830 | | | | | |
| 23. 12 | 22. 30 | 21. 42 | ·0844 | | | | | |
| 23. 21 | 19. 30 | 21. 46 | ·0809 | | | | | |
| 23. 33 | 24. 0 | 21. 48 | ·0833 | | | | | |
| 23. 51 | 17. 0 | 22. 2 | ·0813 | | | | | |
| | *** | 22. 36 | ·0916 | | | | | |
| 23. 59 | 16. 50 | 22. 40 | ·0908 | | | | | |
| | | 22. 47 | ·0922 | | | | | |
| | | 22. 50 | ·0904 | | | | | |
| | | 23. 6 | ·0922 | | | | | |
| | | 23. 10 | ·0904 | | | | | |
| | | 23. 15 | ·0911 | | | | | |
| | | 23. 17 | ·0902 | | | | | |
| | | 23. 35 | ·0941 | | | | | |
| | | 23. 40 | ·0922 | | | | | |
| | | 23. 59 | ·0956 | | | | | |
| Aug. 7 | | Aug. 7 | | Aug. 7 | | Aug. 7 | | |
| 0. 0 | 21. 16. 50 | 0. 0 | ·0956 | | (†) | 1. 0 | 61 ·3 | 60 ·7 |
| 0. 14 | 19. 30 | 0. 4 | ·0961 | 0. 11 | ·02883 | 3. 0 | 62 ·7 | 63 ·2 |
| 0. 27 | 14. 40 | 0. 7 | ·0941 | 1. 22 | ·02720 | 9. 0 | 63 ·6 | 64 ·9 |
| | *** | 0. 18 | ·0975 | 2. 0 | ·02883 | 21. 0 | 57 ·8 | 58 ·3 |
| 0. 48 | 32. 0 | 0. 38 | ·0920 | 2. 15 | ·02870 | | | |
| 1. 7 | 29. 50 | 0. 45 | ·0948 | 3, 14 | ·03144 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Aug. 7 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 1. 52 | 21. 20. 0 | 0. 54 | ·0931 | 4. 13 | ·02543 | | | |
| 1. 58 | 29. 30 | | (†) | 6. 48 | { ·02920 | | | |
| 2. 17 | 21. 40 | 1. 0 | ·0936* | | { ·03103 | | | |
| 2. 30 | 25. 0 | 3. 0 | ·1057* | 7. 42 | ·03063 | | | |
| 2. 51 | 17. 50 | 3. 42 | ·0960 | 8. 42 | ·03112 | | | |
| 2. 58 | 21. 10 | 4. 2 | ·0994 | 11. 23 | ·03176 | | | |
| 3. 7 | 14. 30 | 4. 5 | ·0982 | 11. 46 | ·03110 | | | |
| 3. 24 | 20. 0 | 4. 17 | ·0997 | 12. 46 | ·03183 | | | |
| 3. 30 | 10. 40 | 4. 23 | ·0964 | 17. 0 | ·03622 | | | |
| | *** | 4. 32 | ·0970 | 21. 0 | ·03893 | | | |
| 3. 55 | 16. 0 | 4. 43 | ·0956 | 23. 59 | ·03830 | | | |
| 4. 13 | 21. 50 | 5. 15 | ·0967 | | | | | |
| 4. 21 | 20. 30 | | *** | | | | | |
| 4. 26 | 22. 30 | 5. 46 | ·0937 | | | | | |
| 4. 51 | 16. 0 | | *** | | | | | |
| 4. 57 | 17. 0 | 6. 13 | ·0920 | | | | | |
| | *** | 6. 18 | ·0928 | | | | | |
| 6. 50 | 13. 20 | 6. 36 | ·0914 | | | | | |
| 7. 44 | 17. 30 | 6. 46 | ·0924 | | | | | |
| 8. 59 | 17. 0 | | *** | | | | | |
| 9. 13 | 13. 40 | 8. 0 | ·0923 | | | | | |
| 9. 28 | 16. 0 | 8. 13 | ·0935 | | | | | |
| 9. 52 | 6. 45 | 8. 27 | ·0926 | | | | | |
| 10. 7 | 12. 0 | | *** | | | | | |
| 10. 27 | 13. 50 | 9. 6 | ·0935 | | | | | |
| 10. 51 | 13. 0 | 9. 10 | ·0923 | | | | | |
| 11. 15 | 20. 30 | | *** | | | | | |
| 11. 45 | 7. 0 | 9. 37 | ·0922 | | | | | |
| 12. 0 | 16. 30 | 9. 57 | ·0945 | | | | | |
| | *** | | *** | | | | | |
| 13. 50 | 12. 30 | 10. 26 | ·0921 | | | | | |
| 14. 14 | 13. 40 | | *** | | | | | |
| | *** | 11. 5 | ·0919 | | | | | |
| 18. 35 | 9. 20 | 11. 16 | ·0943 | | | | | |
| 19. 20 | 12. 0 | 11. 36 | ·0915 | | | | | |
| 20. 11 | 10. 30 | 11. 50 | ·0948 | | | | | |
| | *** | | *** | | | | | |
| 21. 25 | 16. 0 | 12. 13 | ·0928 | | | | | |
| 22. 7 | 15. 0 | | *** | | | | | |
| 22. 14 | 16. 50 | 14. 26 | ·0923 | | | | | |
| 22. 22 | 15. 30 | | *** | | | | | |
| 22. 52 | 17. 30 | 15. 20 | ·0934 | | | | | |
| 23. 59 | 23. 0 | | *** | | | | | |
| | | 19. 6 | ·0917 | | | | | |
| | | | *** | | | | | |
| | | 19. 50 | ·0925 | | | | | |
| | | | *** | | | | | |
| | | 21. 2 | ·0918 | | | | | |
| | | | *** | | | | | |
| | | 22. 13 | ·0928 | | | | | |
| | | 22. 26 | ·0918 | | | | | |
| | | 22. 58 | ·0927 | | | | | |
| | | 23. 10 | ·0939 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0938 | | | | | |
| Aug. 8 | | Aug. 8 | | Aug. 8 | | Aug. 8 | | |
| 0. 0 | 21. 23. 0 | 0. 0 | ·0938 | 0. 0 | ·03830 | 0. 0 | 58 ·6 | 59 ·7 |
| | *** | 0. 7 | ·0944 | 1. 41 | ·03540 | 1. 0 | 59 ·0 | 59 ·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.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Aug. 8 | | Aug. 8 | ° | ° |
| h m | | h m | | h m | | h m | | |
| 0. 43 | 21. 23. 30 | 0. 13 | ·0929 | 2. 35 | ·03878 | 3. 0 | 60 ·0 | 61 ·0 |
| | (†) | 0. 20 | ·0934 | | *** | 6. 0 | 61 ·6 | 62 ·0 |
| 1. 39 | 5. 40 | 0. 26 | ·0927 | 3. 11 | ·03579 | 9. 10 | 62 ·0 | 63 ·0 |
| 1. 45 | 16. 30 | 0. 37 | ·0935 | | *** | 12. 0 | 61 ·6 | 62 ·0 |
| 1. 51 | 24. 40 | | (†) | 3. 17 | ·03696 | 18. 0 | 59 ·8 | 62 ·3 |
| 1. 58 | 19. 50 | 1. 0 | ·0917* | 3. 30 | ·03570 | 21. 0 | 60 ·0 | 61 ·3 |
| 2. 8 | 22. 0 | 3. 0 | ·1074* | 3. 56 | ·03840 | | | |
| 2. 11 | 36. 30 | 7. 17 | ·0995 | 4. 11 | ·03532 | | | |
| 2. 28 | 15. 0 | 7. 30 | ·0978 | 4. 24 | ·03943 | | | |
| 2. 34 | 22. 30 | 7. 35 | ·1005 | 4. 30 | ·03850 | | | |
| 2. 44 | 16. 15 | 7. 47 | ·0961 | 4. 37 | ·03880 | | | |
| 2. 52 | 23. 40 | 7. 59 | ·0951 | 4. 41 | ·03853 | | | |
| 2. 57 | 22. 0 | 8. 7 | ·0969 | 4. 44 | ·03922 | | | |
| 3. 15 | 36. 0 | 8. 16 | ·0949 | 4. 50 | ·03750 | | | |
| | (†) | 8. 20 | ·0976 | | *** | | | |
| 3. 54 | 36. 10 | | *** | 5. 30 | ·03670 | | | |
| 4. 0 | 40. 20 | 8. 37 | ·0946 | 5. 35 | ·03562 | | | |
| 4. 20 | 28. 15 | 8. 46 | ·0976 | | *** | | | |
| 4. 24 | 32. 0 | 9. 15 | ·0918 | 6. 43 | ·03573 | | | |
| 4. 30 | 35. 15 | 9. 40 | ·0943 | 6. 52 | ·03680 | | | |
| 4. 42 | 19. 30 | 9. 47 | ·0930 | 7. 21 | ·03441 | | | |
| 4. 45 | 24. 0 | 10. 3 | ·0947 | 7. 51 | ·03292 | | | |
| 4. 54 | 15. 30 | 10. 6 | ·0938 | 8. 15 | ·03233 | | | |
| 5. 0 | 17. 0 | 10. 16 | ·0960 | 8. 26 | ·03260 | | | |
| 5. 6 | 13. 20 | 10. 24 | ·0942 | 8. 37 | ·03222 | | | |
| 5. 15 | 29. 0 | | *** | 8. 43 | ·03250 | | | |
| 5. 29 | 15. 30 | 11. 0 | ·0960 | 9. 15 | ·03090 | | | |
| 5. 30 | 21. 15 | | *** | | *** | | | |
| | *** | 11. 30 | ·0942 | 13. 56 | ·03067 | | | |
| 6. 11 | 30. 30 | | *** | 14. 39 | ·02997 | | | |
| 6. 16 | 27. 50 | 11. 46 | ·0958 | 14. 58 | ·03000 | | | |
| 6. 21 | 38. 0 | 11. 58 | ·0939 | 15. 12 | ·03052 | | | |
| 6. 30 | 25. 15 | 12. 7 | ·0933 | | *** | | | |
| 6. 36 | 21. 25. 50 | 12. 17 | ·0946 | 21. 10 | ·03290 | | | |
| 7. 10 | 20. 51. 30 | | *** | 23. 59 | ·03328 | | | |
| 7. 44 | 21. 25. 0 | 12. 36 | ·0933 | | | | | |
| 7. 59 | 18. 15 | 12. 40 | ·0964 | | | | | |
| | *** | 12. 45 | ·0940 | | | | | |
| 8. 26 | 22. 40 | 12. 53 | ·0966 | | | | | |
| 8. 40 | 14. 30 | 13. 4 | ·0952 | | | | | |
| 9. 7 | 30. 45 | 13. 6 | ·0964 | | | | | |
| 9. 42 | 13. 30 | 13. 14 | ·0948 | | | | | |
| 9. 51 | 17. 30 | 13. 17 | ·0964 | | | | | |
| 9. 58 | 16. 0 | 13. 26 | ·0958 | | | | | |
| | *** | 13. 35 | ·0966 | | | | | |
| 10. 15 | 17. 10 | 13. 40 | ·0954 | | | | | |
| | *** | 13. 46 | ·0967 | | | | | |
| 10. 52 | 13. 5 | 13. 57 | ·0932 | | | | | |
| | *** | | *** | | | | | |
| 11. 28 | 16. 0 | 14. 16 | ·0947 | | | | | |
| | *** | | *** | | | | | |
| 11. 40 | 13. 0 | 14. 47 | ·0910 | | | | | |
| | *** | | *** | | | | | |
| 12. 58 | 17. 20 | 15. 38 | ·0946 | | | | | |
| | *** | | *** | | | | | |
| 13. 41 | 12. 50 | 15. 50 | ·0932 | | | | | |
| 13. 51 | 16. 30 | 16. 7 | ·0955 | | | | | |
| 14. 0 | 13. 20 | 16. 14 | ·0935 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | h m | ° | ° |
| h m | | h m | | | | | | |
| 14. 11 | 21. 15. 20 | 16. 26 | ·0940 | | | | | |
| 14. 28 | 8. 10 | 16. 32 | ·0951 | | | | | |
| 15. 7 | 20. 30 | 16. 35 | ·0896 | | | | | |
| | *** | 16. 37 | ·0960 | | | | | |
| 16. 21 | 15. 0 | 16. 40 | ·0912 | | | | | |
| 16. 29 | 19. 30 | 16. 46 | ·0952 | | | | | |
| | (†) | 16. 50 | ·0904 | | | | | |
| 19. 12 | 17. 0 | 16. 56 | ·0943 | | | | | |
| | *** | 17. 2 | ·0905 | | | | | |
| 20. 40 | 13. 30 | 17. 6 | ·0956 | | | | | |
| | *** | 17. 8 | ·0922 | | | | | |
| 21. 40 | 19. 30 | 17. 16 | ·0954 | | | | | |
| | *** | 17. 18 | ·0915 | | | | | |
| 21. 48 | 17. 0 | 17. 26 | ·0948 | | | | | |
| | *** | 17. 35 | ·0920 | | | | | |
| 22. 12 | 23. 40 | 17. 42 | ·0952 | | | | | |
| | *** | | *** | | | | | |
| 22. 16 | 20. 0 | 18. 26 | ·0918 | | | | | |
| | *** | 18. 32 | ·0925 | | | | | |
| 22. 58 | 19. 30 | 18. 44 | ·0864 | | | | | |
| | *** | 18. 47 | ·0928 | | | | | |
| 23. 13 | 10. 30 | 18. 50 | ·0892 | | | | | |
| 23. 26 | 19. 40 | 18. 57 | ·0918 | | | | | |
| | *** | 18. 59 | ·0862 | | | | | |
| 23. 59 | 17. 40 | 19. 3 | ·0912 | | | | | |
| | | 19. 7 | ·0882 | | | | | |
| | | 19. 13 | ·0932 | | | | | |
| | | 19. 17 | ·0886 | | | | | |
| | | 19. 19 | ·0922 | | | | | |
| | | 19. 30 | ·0910 | | | | | |
| | | | *** | | | | | |
| | | 19. 47 | ·0896 | | | | | |
| | | | *** | | | | | |
| | | 20. 10 | ·0905 | | | | | |
| | | 20. 16 | ·0888 | | | | | |
| | | | *** | | | | | |
| | | 20. 36 | ·0916 | | | | | |
| | | | *** | | | | | |
| | | 21. 40 | ·0928 | | | | | |
| | | 21. 43 | ·0912 | | | | | |
| | | | *** | | | | | |
| | | 21. 52 | ·0946 | | | | | |
| | | 21. 57 | ·0920 | | | | | |
| | | 22. 2 | ·0937 | | | | | |
| | | | *** | | | | | |
| | | 22. 8 | ·0896 | | | | | |
| | | 22. 18 | ·0935 | | | | | |
| | | | *** | | | | | |
| | | 22. 30 | ·0893 | | | | | |
| | | 22. 46 | ·0926 | | | | | |
| | | 22. 47 | ·0893 | | | | | |
| | | 22. 50 | ·0928 | | | | | |
| | | 23. 0 | ·0891 | | | | | |
| | | 23. 5 | ·0931 | | | | | |
| | | 23. 7 | ·0904 | | | | | |
| | | 23. 18 | ·0946 | | | | | |
| | | 23. 20 | ·0914 | | | | | |
| | | 23. 27 | ·0946 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Aug. 8 h m | | h m | | h m | ° | ° |
| | | 23. 30 | ·0915 | | | | | |
| | | 23. 40 | ·0945 | | | | | |
| | | 23. 43 | ·0930 | | | | | |
| | | | (†) | | | | | |
| Aug. 9 | | Aug. 9 | | Aug. 9 | | Aug. 9 | | |
| 0. 0 | 21. 17. 40 | | (†) | 0. 0 | ·03328 | 0. 0 | 60 ·8 | 61 ·7 |
| | *** | 1. 0 | ·0935* | 2. 25 | ·03292 | 1. 0 | 61 ·3 | 62 ·0 |
| 0. 28 | 17. 35 | 3. 0 | ·0902* | 2. 51 | ·03486 | 3. 0 | 63 ·0 | 64 ·0 |
| 0. 40 | 24. 30 | 9. 0 | ·0971* | 3. 6 | ·03420 | 9. 0 | 63 ·0 | 64 ·0 |
| | *** | 9. 25 | ·0962 | 3. 12 | ·03470 | 21. 0 | 58 ·2 | 59 ·9 |
| 1. 10 | 21. 0 | 9. 32 | ·0971 | 3. 29 | ·03391 | | | |
| 1. 36 | 25. 0 | 9. 37 | ·0941 | 3. 45 | ·03222 | | | |
| | *** | 9. 40 | ·0961 | 3. 52 | ·03270 | | | |
| 1. 45 | 30. 30 | 9. 46 | ·0924 | 4. 0 | ·03218 | | | |
| 1. 58 | 27. 0 | 10. 0 | ·0956 | 4. 54 | ·03220 | | | |
| | *** | 10. 7 | ·0946 | 5. 20 | ·03084 | | | |
| 2. 9 | 27. 40 | 10. 16: | ·0958 | 7. 0 | ·02986 | | | |
| | *** | 10. 35 | ·0930 | 7. 15 | ·03178 | | | |
| 2. 14 | 26. 10 | 10. 47 | ·0944 | 7. 42 | ·02810 | | | |
| 2. 19 | 29. 50 | | *** | 8. 10 | ·02823 | | | |
| 2. 25 | 28. 30 | 11. 8: | ·0932 | 8. 20 | ·02898 | | | |
| 2. 39 | 35. 50 | 11. 30: | ·0948 | 8. 45 | ·02790 | | | |
| 2. 49 | 15. 40 | 11. 52 | ·0946 | 12. 12 | ·02892 | | | |
| 3. 0 | 19. 20 | 12. 4 | ·0937 | 12. 48 | ·02868 | | | |
| 3. 11 | 15. 40 | 12. 9 | ·0948 | 13. 39 | ·02850 | | | |
| 3. 14 | 22. 45 | 12. 14 | ·0940 | 22. 43 | ·03307 | | | |
| 3. 27 | 14. 0 | 12. 17 | ·0959 | 23. 59 | ·03300 | | | |
| 3. 40 | 20. 40 | 12. 20 | ·0934 | | | | | |
| 3. 45 | 19. 30 | | *** | | | | | |
| 4. 0 | 27. 15 | 12. 38 | ·0947 | | | | | |
| 4. 13 | 27. 0 | 12. 45 | ·0981 | | | | | |
| 4. 17 | 35. 40 | | *** | | | | | |
| 4. 30 | 26. 50 | 12. 48 | ·0955 | | | | | |
| 4. 34 | 30. 20 | 12. 53 | ·0971 | | | | | |
| 4. 53 | 17. 30 | | *** | | | | | |
| 4. 56 | 20. 30 | 13. 30 | ·0952 | | | | | |
| 5. 7 | 20. 5 | 13. 33 | ·0972 | | | | | |
| 5. 22 | 25. 30 | 13. 37 | ·0951 | | | | | |
| 5. 43 | 18. 0 | 13. 44 | ·0964 | | | | | |
| 5. 57 | 23. 50 | 13. 48 | ·0945 | | | | | |
| 6. 14 | 13. 30 | 13. 50 | ·0958 | | | | | |
| 7. 0 | 17. 10 | | *** | | | | | |
| 7. 14 | 3. 10 | 15. 16 | ·0970 | | | | | |
| 7. 22 | 25. 0 | 15. 24 | ·0980 | | | | | |
| 7. 27 | 22. 30 | | *** | | | | | |
| 7. 37 | 36. 0 | 16. 7 | ·0956 | | | | | |
| 7. 46 | 22. 30 | | *** | | | | | |
| 8. 0 | 28. 50 | 16. 33 | ·0960 | | | | | |
| | (†) | 16. 37 | ·0976 | | | | | |
| 8. 45 | 18. 20 | 16. 43 | ·0946 | | | | | |
| 8. 51 | 22. 50 | 16. 46 | ·0964 | | | | | |
| 8. 54 | 21. 20 | 17. 5 | ·0934 | | | | | |
| 8. 56 | 24. 30 | | *** | | | | | |
| 9. 0 | 20. 0 | 17. 37 | ·0954 | | | | | |
| 9. 13 | 15. 20 | 17. 40 | ·0942 | | | | | |
| | *** | 17. 46 | ·0971 | | | | | |
| 9. 28 | 21. 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. 9 h m | ° ′ ″ | Aug. 9 h m | | h m | | h m | ° | ° |
| 9. 41 | 21. 19. 0 | 17. 48 | ·0934 | | | | | |
| | *** | | *** | | | | | |
| 9. 44 | 20. 30 | | | | | | | |
| 10. 0 | 12. 0 | 18. 5 | ·0967 | | | | | |
| 10. 14 | 17. 30 | 18. 8 | ·0940 | | | | | |
| 10. 28 | 17. 30 | 18. 14 | ·0960 | | | | | |
| | | | *** | | | | | |
| 10. 45 | 15. 40 | | | | | | | |
| 10. 51 | 18. 0 | 19. 5 | ·0941 | | | | | |
| | *** | 19. 13 | ·0964 | | | | | |
| 11. 41 | 14. 0 | 19. 27 | ·0940 | | | | | |
| 11. 56 | 20. 0 | 19. 40 | ·0957 | | | | | |
| | *** | | *** | | | | | |
| 13. 29 | 11. 30 | 20. 4 | ·0932 | | | | | |
| 13. 50 | 18. 35 | 20. 10 | ·0968 | | | | | |
| 14. 7 | 13. 40 | 20. 17 | ·0941 | | | | | |
| 14. 17 | 17. 40 | 20. 32 | ·0958 | | | | | |
| 14. 28 | 16. 45 | | *** | | | | | |
| 14. 39 | 20. 10 | 20. 42 | ·0926 | | | | | |
| | *** | 20. 47 | ·0954 | | | | | |
| 15. 30 | 13. 0 | 20. 53 | ·0928 | | | | | |
| | *** | 21. 6 | ·0946 | | | | | |
| | | | *** | | | | | |
| 16. 40 | 13. 30 | | | | | | | |
| 17. 0 | 18. 30 | 21. 41 | ·0950 | | | | | |
| | | | *** | | | | | |
| 17. 15 | 12. 15 | | | | | | | |
| | *** | 23. 0 | ·0939 | | | | | |
| 17. 28 | 15. 45 | 23. 30 | ·0915 | | | | | |
| | *** | | (†) | | | | | |
| 17. 56 | 10. 0 | | | | | | | |
| | *** | | | | | | | |
| 18. 39 | 16. 40 | | | | | | | |
| | *** | | | | | | | |
| 18. 57 | 10. 30 | | | | | | | |
| | *** | | | | | | | |
| 19. 13 | 23. 0 | | | | | | | |
| | *** | | | | | | | |
| 19. 55 | 17. 40 | | | | | | | |
| 20. 7 | 7. 30 | | | | | | | |
| 20. 25 | 20. 20 | | | | | | | |
| 20. 45 | 12. 15 | | | | | | | |
| 20. 57 | 17. 0 | | | | | | | |
| 21. 21 | 17. 0 | | | | | | | |
| 21. 27 | 20. 30 | | | | | | | |
| 21. 42 | 21. 0 | | | | | | | |
| 21. 49 | 24. 25 | | | | | | | |
| | *** | | | | | | | |
| 22. 27 | 21. 0 | | | | | | | |
| 22. 37 | 24. 0 | | | | | | | |
| | *** | | | | | | | |
| 23. 7 | 21. 10 | | | | | | | |
| 23. 19 | 27. 30 | | | | | | | |
| 23. 30 | 25. 30 | | | | | | | |
| | (†) | | | | | | | |
| Aug. 10 | | Aug. 10 | | Aug. 10 | | Aug. 10 | | |
| | (†) | | (†) | 0. 0 | ·03300 | 1. 0 | 61 ·9 | 62 ·7 |
| 0. 12 | 21. 26. 30 | 1. 0 | ·0926* | 1. 9 | ·03300 | 3. 0 | 64 ·0 | 65 ·7 |
| | *** | 3. 0 | ·0974* | 2. 11 | ·03202 | 9. 0 | 65 ·7 | 66 ·5 |
| 0. 52 | 21. 50 | 5. 50 | ·0955 | 2. 39 | ·03230 | 21. 0 | 60 ·0 | 60 ·2 |
| | *** | 5. 54 | ·0943 | 4. 24 | ·02948 | | | |
| | | | | | *** | | | |

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. 10 | ° ′ ″ | Aug. 10 | | Aug. 10 | | h m | ° | ° |
| h m | | h m | | h m | | | | |
| 1. 30 | 21. 28. 50 | 6. 15 | ·0970 | 4. 57 | ·02990 | | | |
| 1. 43 | 24. 0 | 6. 29 | ·0958 | 5. 6 | ·03100 | | | |
| 1. 49 | 25. 0 | | *** | 5. 24 | ·02926 | | | |
| 1. 57 | 26. 40 | 7. 20 | ·0978 | 6. 53 | ·03080 | | | |
| 2. 8 | 28. 30 | | *** | 8. 22 | {·03145 ·03280 | | | |
| 2. 27 | 20. 15 | 7. 36 | ·0950 | | | | | |
| 2. 37 | 17. 0 | | *** | 10. 56 | ·03240 | | | |
| 2. 50 | 21. 20 | 8. 46 | ·0945 | 11. 13 | ·03172 | | | |
| 3. 2 | 16. 40 | | *** | 11. 23 | ·02930 | | | |
| 3. 18 | 16. 35 | 9. 20 | ·0965 | 11. 30 | ·03020 | | | |
| | *** | 9. 23 | ·0954 | 12. 0 | ·02438 | | | |
| 3. 50 | 29. 0 | 9. 27 | ·0964 | 12. 43 | ·03139 | | | |
| 4. 0 | 22. 20 | 9. 32 | ·0956 | 12. 50 | ·03045 | | | |
| 4. 13 | 25. 20 | 9. 40 | ·0964 | 12. 56 | ·03090 | | | |
| 4. 19 | 19. 40 | 9. 46 | ·0954 | 13. 7 | ·03020 | | | |
| 4. 28 | 22. 30 | | *** | 13. 29 | ·03048 | | | |
| 4. 39 | 19. 40 | 10. 16 | ·0974 | 13. 57 | ·03270 | | | |
| 4. 41 | 31. 0 | | *** | 14. 35 | ·03368 | | | |
| 4. 45 | 28. 20 | 10. 32 | ·0957 | 14. 43 | ·03322 | | | |
| 4. 48 | 31. 5 | | *** | | (†) | | | |
| 5. 6 | 12. 0 | 10. 51 | ·0988 | 21. 0 | ·03810 | | | |
| 5. 12 | 19. 40 | 11. 5 | ·0966 | 21. 55 | ·03844 | | | |
| 5. 26 | 12. 0 | 11. 13 | ·1088 | 23. 59 | ·03750 | | | |
| 5. 28 | 14. 10 | 11. 17 | ·1050 | | | | | |
| 5. 39 | 10. 20 | 11. 20 | ·1102 | | | | | |
| 5. 44 | 14. 30 | 11. 26 | ·1050 | | | | | |
| 5. 56 | 15. 55 | 11. 37 | ·0916 | | | | | |
| 6. 6 | 14. 30 | 11. 45 | ·0971 | | | | | |
| 6. 22 | 17. 30 | 11. 50 | ·0884 | | | | | |
| | *** | 11. 56 | ·0898 | | | | | |
| 6. 54 | 19. 0 | 12. 5 | ·0844 | | | | | |
| 7. 9 | 17. 0 | 12. 17 | ·0910 | | | | | |
| | *** | 12. 36 | ·0978 | | | | | |
| 7. 40 | 22. 5 | 12. 38 | ·0960 | | | | | |
| 8. 12 | 17. 30 | | *** | | | | | |
| | *** | 13. 10 | ·0914 | | | | | |
| 8. 28 | 18. 0 | | *** | | | | | |
| 8. 40 | 16. 30 | 13. 45 | ·0946 | | | | | |
| | *** | | *** | | | | | |
| 9. 44 | 19 30 | 14. 0 | ·0944 | | | | | |
| 10. 17 | 2. 10 | 14. 8 | ·0950 | | | | | |
| 10. 40 | 15. 20 | | (†) | | | | | |
| 11. 6 | 20. 0 | 21. 0 | ·0911* | | | | | |
| | (†) | | | | | | | |
| 11. 44 | 31. 30 | | | | | | | |
| 11. 53 | 39. 30 | | | | | | | |
| 12. 2 | 24. 50 | | | | | | | |
| 12. 7 | 27. 10 | | | | | | | |
| 12. 29 | 12. 0 | | | | | | | |
| 12. 31 | 13. 10 | | | | | | | |
| 12. 39 | 5. 10 | | | | | | | |
| 12. 42 | 16. 30 | | | | | | | |
| 13. 0 | 30. 0 | | | | | | | |
| 13. 27 | 12. 20 | | | | | | | |
| 13. 41 | 6. 30 | | | | | | | |
| 13. 45 | 9. 20 | | | | | | | |
| 13. 55 | 6. 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. |
|---|---|---|---|---|---|---|---|---|
| Aug. 10 | ° ′ ″ | h m | | h m | | h m | ° | ° |
| h m | | | | | | | | |
| 14. 25 | 21. 20. 0 | | | | | | | |
| | (†) | | | | | | | |
| 21. 0 | 11. 40* | | | | | | | |
| Aug. 11 | | Aug. 11 | | Aug. 11 | | Aug. 11 | | |
| | (†) | | (†) | 0. 0 | ·03750 | | 1. 0 | 63 ·0 | 63 ·1 |
| 1. 0 | 21. 21. 40* | 1. 0 | ·0938* | 0. 3 | {·03745 ·03492 | | 3. 0 | 64 ·3 | 65 ·0 |
| 1. 7 | 21. 30 | 1. 57 | ·0940 | | *** | | 9. 0 | 65 ·6 | 66 ·1 |
| | *** | | *** | | | | 22. 30 | 61 ·5 | 62 ·3 |
| 3. 8 | 18. 40 | 2. 50 | ·0946 | 2. 45 | ·03368 | | | | |
| 3. 20 | 21. 10 | 2. 56 | ·0931 | | *** | | | | |
| 3. 31 | 18. 30 | 3. 7 | ·0978 | 5. 21 | ·03130 | | | | |
| | *** | 3. 10 | ·0952 | 10. 9 | ·02912 | | | | |
| 5. 43 | 16. 45 | 3. 15 | ·0966 | 11. 0 | ·02940 | | | | |
| 6. 0 | 8. 45 | 3. 17 | ·0982 | 11. 44 | ·02880 | | | | |
| | *** | 3. 24 | ·0932 | 11. 49 | ·02890 | | | | |
| 7. 15 | 14. 50 | | *** | 19. 14 | ·03234 | | | | |
| 7. 50 | 14. 30 | 3. 37 | ·0946 | 21. 38 | ·03308 | | | | |
| 8. 7 | 17. 5 | 3. 40 | ·0920 | 21. 52 | ·03120 | | | | |
| 8. 15 | 14. 20 | 3. 46 | ·0959 | 22. 4 | ·03450 | | | | |
| 8. 26 | 16. 30 | 3. 48 | ·0938 | 22. 13 | ·03100 | | | | |
| 8. 43 | 12. 0 | 3. 52 | ·0974 | 22. 20 | ·03518 | | | | |
| 9. 11 | 1. 10 | | *** | | *** | | | | |
| 9. 26 | 21. 8. 0 | 4. 6 | ·0941 | 23. 59 | ·03480 | | | | |
| 9. 45 | 20. 52. 50 | | *** | | | | | | |
| 9. 57 | 21. 11. 35 | 4. 17 | ·0962 | | | | | | |
| 10. 10 | 13. 40 | 4. 20 | ·0979 | | | | | | |
| 10. 21 | 11. 20 | 4. 24 | ·0956 | | | | | | |
| 10. 44 | 13. 40 | 4. 33 | ·0974 | | | | | | |
| 11. 17 | 24. 0 | 4. 36 | ·0957 | | | | | | |
| 11. 48 | 14. 30 | 4. 40 | ·0962 | | | | | | |
| 12. 0 | 13. 10 | 4. 44 | ·0946 | | | | | | |
| 12. 35 | 17. 50 | 4. 47 | ·0999 | | | | | | |
| 12. 51 | 12. 0 | 4. 50 | ·0966 | | | | | | |
| 12. 58 | 13. 40 | 4. 56 | ·0997 | | | | | | |
| 13. 12 | 11. 0 | 5. 4 | ·0950 | | | | | | |
| 14. 5 | 12. 30 | 5. 16 | ·0974 | | | | | | |
| 14. 28 | 17. 30 | 5. 20 | ·0946 | | | | | | |
| 14. 40 | 17. 50 | 5. 26 | ·0971 | | | | | | |
| 15. 12 | 13. 0 | 5. 32 | ·0956 | | | | | | |
| 15. 52 | 12. 20 | 5. 37 | ·0984 | | | | | | |
| 16. 15 | 13. 30 | 5. 40 | ·0967 | | | | | | |
| 16. 40 | 16. 30 | 5. 46 | ·0941 | | | | | | |
| 17. 12 | 16. 45 | 5. 55 | ·0962 | | | | | | |
| 17. 26 | 13. 40 | 6. 6 | ·0980 | | | | | | |
| 17. 39 | 16. 0 | | *** | | | | | | |
| 18. 11 | 15. 50 | 6. 30 | ·0956 | | | | | | |
| 18. 25 | 12. 0 | 6. 37 | ·0968 | | | | | | |
| 18. 43 | 14. 50 | 6. 45 | ·0948 | | | | | | |
| 18. 51 | 12. 30 | 6. 50 | ·0961 | | | | | | |
| 19. 9 | 17. 50 | | *** | | | | | | |
| 19. 13 | 15. 10 | 7. 7 | ·0966 | | | | | | |
| 19. 19 | 18. 40 | 7. 15 | ·0954 | | | | | | |
| 19. 57 | 14. 30 | | *** | | | | | | |
| 20. 7 | 18. 30 | 7. 30 | ·0980 | | | | | | |
| 20. 14 | 15. 25 | 7. 36 | ·0950 | | | | | | |
| 20. 39 | 11. 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. |
|---|---|---|---|---|---|---|---|---|
| Aug. 11 | | Aug. 11 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 50 | 21. 19. 10 | 7. 50 | ·0970 | | | | | |
| | (†) | 7. 53 | ·0987 | | | | | |
| 22. 30 | 20. 2* | 8. 4 | ·0958 | | | | | |
| | | 8. 16 | ·0981 | | | | | |
| | | 8. 20 | ·0967 | | | | | |
| | | 8. 36 | ·0968 | | | | | |
| | | 8. 45 | ·0954 | | | | | |
| | | 9. 5 | ·0977 | | | | | |
| | | 9. 16 | ·1000 | | | | | |
| | | 9. 30 | ·0960 | | | | | |
| | | 9. 43 | ·1028 | | | | | |
| | | 9. 47 | ·0972 | | | | | |
| | | 10. 5 | ·0941 | | | | | |
| | | 10. 22 | ·0950 | | | | | |
| | | 10. 45 | ·0943 | | | | | |
| | | | *** | | | | | |
| | | 11. 17 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 11. 43 | ·0942 | | | | | |
| | | | *** | | | | | |
| | | 12. 28 | ·0964 | | | | | |
| | | 12. 36 | ·0942 | | | | | |
| | | 12. 58 | ·0956 | | | | | |
| | | 13. 2 | ·0947 | | | | | |
| | | | *** | | | | | |
| | | 13. 57 | ·0955 | | | | | |
| | | | *** | | | | | |
| | | 14. 36 | ·0945 | | | | | |
| | | | *** | | | | | |
| | | 15. 30 | ·0956 | | | | | |
| | | | *** | | | | | |
| | | 16. 18 | ·0951 | | | | | |
| | | | *** | | | | | |
| | | 16. 53 | ·0930 | | | | | |
| | | | *** | | | | | |
| | | 17. 26 | ·0912 | | | | | |
| | | 18. 15 | ·0925 | | | | | |
| | | 18. 34 | ·0910 | | | | | |
| | | 18. 43 | ·0891 | | | | | |
| | | 18. 52 | ·0863 | | | | | |
| | | 18. 56 | ·0870 | | | | | |
| | | | *** | | | | | |
| | | 19. 27 | ·0882 | | | | | |
| | | 19. 32 | ·0866 | | | | | |
| | | 19. 43 | ·0882 | | | | | |
| | | | *** | | | | | |
| | | 19. 51 | ·0845 | | | | | |
| | | 20. 4 | ·0872 | | | | | |
| | | | *** | | | | | |
| | | 20. 16 | ·0854 | | | | | |
| | | 20. 22 | ·0863 | | | | | |
| | | 20. 36 | ·0842 | | | | | |
| | | 20. 46 | ·0875 | | | | | |
| | | | (†) | | | | | |
| | | 22. 30 | ·0914* | | | | | |
| Aug. 12 | | Aug. 12 | | Aug. 12 | | Aug. 12 | | |
| | (†) | | (†) | 0. 0 | ·03480 | 8. 0 | 64·5 | 64·5 |
| 0. 45 | 21. 32. 50 | 4. 30 | ·0956 | | *** | 21. 0 | 61·2 | 62·3 |

| 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. |
|---|---|---|---|---|---|---|---|---|
| Aug. 12 | | Aug. 12 | | Aug. 12 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 51 | 21. 34. 30 | 4. 46 | ·1002 | 0. 42 | ·03442 | | | |
| 1. 14 | 20. 30 | 4. 48 | ·1090 | 1. 9 | ·03608 | | | |
| 1. 16 | 22. 30 | 4. 52 | ·1104 | | *** | | | |
| 1. 20 | 21. 30 | 4. 57 | ·1060 | 1. 21 | ·03525 | | | |
| 1. 27 | 24. 0 | 5. 5 | ·1116 | 1. 30 | ·03608 | | | |
| 1. 33 | 22. 0 | 5. 15 | ·1091 | 1. 35 | ·03557 | | | |
| 1. 41 | 23. 5 | 5. 22 | ·1139 | | *** | | | |
| 1. 43 | 21. 30 | 5. 36 | ·1114 | 2. 10 | ·03750 | | | |
| 1. 47 | 22. 30 | 5. 43 | ·1098 | 2. 18 | ·03718 | | | |
| 1. 59 | 34. 0 | 5. 46 | ·1120 | 2. 59 | ·04160 | | | |
| 2. 6 | 30. 50 | 5. 57 | ·1034 | | *** | | | |
| 2. 15 | 36. 45 | | *** | 3. 43 | ·03882 | | | |
| 2. 19 | 33. 45 | 6. 7 | ·1055 | 3. 50 | ·03980 | | | |
| 2. 23 | 34. 30 | 6. 22 | ·1026 | 4. 8 | ·03780 | | | |
| 2. 36 | 30. 45 | 6. 26 | ·1043 | | *** | | | |
| 2. 44 | 36. 20 | 6. 40 | ·0969 | 4. 42 | ·03851 | | | |
| 2. 53 | 34. 0 | 6. 46 | ·0994 | 4. 49 | ·03795 | | | |
| | (†) | 6. 58 | ·0957 | 4. 58 | ·04080 | | | |
| 3. 38 | 31. 40 | 7. 6 | ·0965 | 5. 19 | ·03530 | | | |
| 3. 59 | 14. 20 | 7. 13 | ·0932 | 5. 29 | ·03563 | | | |
| 4. 11 | 14. 10 | 7. 16 | ·0946 | 5. 45 | ·03510 | | | |
| 4. 15 | 12. 0 | 7. 26 | ·0920 | 5. 51 | ·03620 | | | |
| 4. 33 | 27. 40 | 7. 35 | ·0962 | 6. 22 | ·03369 | | | |
| 4. 44 | 23. 0 | 7. 42 | ·0907 | 6. 30 | ·03407 | | | |
| 4. 48 | 34. 0 | 7. 45 | ·0924 | 6. 39 | ·03340 | | | |
| 4. 56 | 27. 15 | 7. 47 | ·0882 | 6. 57 | ·03304 | | | |
| 4. 59 | 29. 0 | 7. 49 | ·0894 | 7. 22 | ·03360 | | | |
| 5. 1 | 26. 50 | 7. 52 | ·0870 | 7. 28 | ·03163 | | | |
| 5. 7 | 21. 28. 10 | 8. 6 | ·0955 | 7. 31 | ·03222 | | | |
| 5. 31 | 20. 58. 0 | 8. 8 | ·0882 | 7. 43 | ·02828 | | | |
| 5. 39 | 21. 27. 15 | 8. 17 | ·0936 | 7. 48 | ·02880 | | | |
| 5. 45 | 17. 0 | 8. 36 | ·0910 | 7. 52 | ·02822 | | | |
| 5. 48 | 32. 10 | | *** | 8. 15 | ·03220 | | | |
| 5. 55 | 24. 45 | 8. 51 | ·0931 | 9. 10 | ·03333 | | | |
| 6. 0 | 29. 50 | 9. 4 | ·0905 | 9. 26 | ·03200 | | | |
| 6. 13 | 10. 0 | 9. 10 | ·0987 | | *** | | | |
| 6. 21 | 20. 50 | 9. 17 | ·0960 | 10. 15 | ·03051 | | | |
| 6. 24 | 19. 30 | 9. 22 | ·0998 | 10. 46 | ·03144 | | | |
| 6. 43 | 23. 45 | 9. 37 | ·0943 | 11. 10 | ·02900 | | | |
| 6. 47 | 21. 30 | 9. 46 | ·0979 | 11. 14 | ·02955 | | | |
| 6. 54 | 25. 0 | | *** | 11. 44 | ·02622 | | | |
| 7. 0 | 21. 20 | 10. 5 | ·0920 | 11. 56 | ·02790 | | | |
| 7. 12 | 26. 0 | 10. 8 | ·0942 | 12. 9 | ·02771 | | | |
| 7. 23 | 20. 5 | 10. 17 | ·0903 | 12. 56 | ·03030 | | | |
| 7. 28 | 23. 0 | | *** | 13. 5 | ·03010 | | | |
| | *** | 10. 30 | ·0916 | 13. 21: | ·03156 | | | |
| 7. 41 | 23. 30 | 10. 35 | ·0904 | 13. 54 | ·02864 | | | |
| 7. 43 | 22. 0 | 10. 40 | ·0922 | 17. 21: | ·03360 | | | |
| 7. 45 | 21. 30. 50 | 10. 42 | ·0903 | 21. 30 | ·03490 | | | |
| 7. 54 | 20. 57. 55 | 10. 47 | ·0927 | 22. 22 | ·03548 | | | |
| 7. 58 | 21. 29. 0 | 11. 7 | ·0780 | 23. 46 | ·03690 | | | |
| 8. 11 | 20. 40 | 11. 32 | ·0878 | 23. 59 | ·03673 | | | |
| 8. 14 | 32. 55 | 11. 40 | ·0854 | | | | | |
| 8. 27 | 11. 15 | 12. 1 | ·0930 | | | | | |
| 8. 31 | 15. 30 | | *** | | | | | |
| 8. 43 | 11. 30 | 12. 25 | ·0898 | | | | | |
| 8. 57 | 14. 30 | | *** | | | | | |
| 9. 0 | 13. 0 | 13. 2 | ·0924 | | | | | |
| 9. 13 | 19. 20 | 13. 10 | ·0898 | | | | | |

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. 12 | | Aug. 12 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 17 | 21. 17. 20 | 13. 23 | ·0924 | | | | | |
| 9. 22 | 21. 40 | 13. 30 | ·0918 | | | | | |
| 9. 28 | 17. 30 | 13. 45 | ·0958 | | | | | |
| 9. 42 | 25. 30 | 13. 55 | ·0897 | | | | | |
| 9. 46 | 18. 20 | 14. 4 | ·0923 | | | | | |
| | | | *** | | | | | |
| 9. 52 | 21. 5 | | | | | | | |
| 9. 59 | 17. 20 | 14. 25 | ·0940 | | | | | |
| 10. 3 | 18. 30 | 14. 39 | ·0918 | | | | | |
| 10. 12 | 12. 40 | 15. 3 | ·0938 | | | | | |
| 10. 15 | 14. 30 | 15. 20 | ·0934 | | | | | |
| 10. 29 | 6. 30 | 15. 40 | ·0911 | | | | | |
| 10. 43 | 10. 30 | 16. 10 | ·0924 | | | | | |
| 10. 46 | 9. 50 | 16. 17 | ·0917 | | | | | |
| 11. 11 | 29. 30 | 16. 30 | ·0931 | | | | | |
| | | | *** | | | | | |
| 11. 17 | 26. 55 | | | | | | | |
| 11. 30 | 31. 40 | 17. 40 | ·0934 | | | | | |
| | | | *** | | | | | |
| 11. 52 | 31. 10 | | | | | | | |
| 12. 4 | 27. 0 | 18. 41 | ·0922 | | | | | |
| | | | *** | | | | | |
| 12. 15 | 34. 30 | | | | | | | |
| 12. 49 | 15. 20 | 20. 0 | ·0923 | | | | | |
| | | | *** | | | | | |
| 12. 55 | 14. 0 | | | | | | | |
| 12. 59 | 14. 40 | 20. 52 | ·0889 | | | | | |
| 13. 9 | 6. 10 | 21. 34 | ·0834 | | | | | |
| 13. 43 | 41. 30 | 21. 43 | ·0858 | | | | | |
| | | | *** | | | | | |
| 14. 16 | 10. 30 | | | | | | | |
| 14. 25 | 10. 40 | 22. 20 | ·0866 | | | | | |
| 14. 40 | 21. 2. 30 | 22. 26 | ·0883 | | | | | |
| 14. 57 | 20. 59. 0 | 22. 33 | ·0871 | | | | | |
| 15. 13 | 21. 1. 30 | 22. 45 | ·0898 | | | | | |
| 15. 27 | 0. 20 | 22. 53 | ·0911 | | | | | |
| 15. 40 | 5. 15 | 23. 10 | ·0928 | | | | | |
| 15. 45 | 4. 0 | 23. 30 | ·0915 | | | | | |
| 16. 12 | 8. 0 | 23. 36 | ·0944 | | | | | |
| 16. 21 | 6. 10 | 23. 42 | ·0932 | | | | | |
| 16. 42 | 8. 30 | | (†) | | | | | |
| | *** | | | | | | | |
| 17. 15 | 8. 0 | | | | | | | |
| 17. 29 | 5. 50 | | | | | | | |
| | *** | | | | | | | |
| 18. 38 | 11. 0 | | | | | | | |
| | *** | | | | | | | |
| 19. 14 | 9. 30 | | | | | | | |
| 19. 21 | 12. 20 | | | | | | | |
| | *** | | | | | | | |
| 20. 34 | 12. 20 | | | | | | | |
| 20. 40 | 13. 45 | | | | | | | |
| 20. 48 | 13. 20 | | | | | | | |
| 21. 10 | 16. 30 | | | | | | | |
| | *** | | | | | | | |
| 21. 40 | 10. 40 | | | | | | | |
| 21. 52 | 15. 30 | | | | | | | |
| 21. 58 | 14. 45 | | | | | | | |
| 22. 12 | 18. 20 | | | | | | | |
| 22. 15 | 16. 0 | | | | | | | |
| 22. 22 | 17. 10 | | | | | | | |
| | *** | | | | | | | |
| 22. 46 | 12. 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. 12 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 23. 10 | 21. 14. 30 | | | | | | | |
| 23. 18 | 13. 30 | | | | | | | |
| 23. 26 | 14. 40 | | | | | | | |
| 23. 37 | 10. 45 | | | | | | | |
| 23. 43 | 14. 0 | | | | | | | |
| 23. 45 | 14. 20 | | | | | | | |
| 23. 59 | 14. 30 | | | | | | | |
| Aug. 13 | | Aug. 13 | | Aug. 13 | | Aug. 13 | | |
| 0. 0 | 21. 14. 30 | | (†) | 0. 0 | ·03673 | 1. 0 | 63·2 | 64·0 |
| 0. 9 | 15. 20 | 1. 0 | ·0982* | 0. 26 | ·03728 | 3. 0 | 64·7 | 66·0 |
| 0. 14 | 12. 30 | 1. 40 | ·0959 | 0. 40 | ·03670 | 9. 0 | 65·5 | 66·0 |
| | | | *** | | | | | |
| 0. 19 | 11. 30 | | | 0. 46 | ·03708 | 21. 0 | 61·7 | 62·3 |
| 0. 29 | 13. 30 | 2. 26 | ·0953 | 2. 7 | ·03590 | | | |
| 0. 44 | 18. 0 | 2. 45 | ·0968 | 4. 45 | ·03272 | | | |
| 0. 51 | 12. 30 | 3. 7 | ·0940 | 5. 57 | ·03200 | | | |
| 0. 57 | 18. 20 | 3. 26 | ·0999 | 7. 10 | {·03070 | | | |
| 1. 11 | 14. 15 | 3. 53 | ·0944 | | {·03203 | | | |
| | | | *** | | | | | |
| 1. 44 | 19. 30 | | | 8. 52 | ·03037 | | | |
| 1. 58 | 20. 40 | 4. 7 | ·0938 | 9. 45 | ·03018 | | | |
| 2. 10 | 18. 50 | 4. 36 | ·0959 | 10. 13 | ·02944 | | | |
| 2. 14 | 19. 55 | 4. 48 | ·0938 | 10. 58 | ·03000 | | | |
| | | | *** | | | | | |
| 2. 36 | 17. 40 | | | 11. 22 | ·02966 | | | |
| 2. 48 | 19. 50 | 5. 43 | ·0952 | 21. 40 | ·03470 | | | |
| 3. 26 | 16. 45 | 5. 59 | ·0970 | 23. 59 | ·03420 | | | |
| 3. 36 | 13. 20 | 6. 6 | ·0982 | | | | | |
| 3. 47 | 17. 30 | 6. 10 | ·0974 | | | | | |
| 4. 11 | 14. 45 | 6. 15 | ·0988 | | | | | |
| 4. 22 | 16. 45 | 6. 22 | ·0967 | | | | | |
| 4. 29 | 15. 30 | 6. 37 | ·0960 | | | | | |
| 4. 31 | 16. 30 | 6. 46 | ·0979 | | | | | |
| 4. 43 | 12. 30 | 7. 0 | ·0971 | | | | | |
| 5. 28 | 11. 20 | 7. 5 | ·0978 | | | | | |
| 6. 3 | 16. 10 | 7. 8 | ·0967 | | | | | |
| 6. 44 | 9. 30 | 7. 10 | ·0976 | | | | | |
| 7. 0 | 12. 50 | 7. 16 | ·0965 | | | | | |
| 7. 28 | 6. 0 | 7. 21 | ·0976 | | | | | |
| | | | *** | | | | | |
| 7. 41 | 5. 20 | | | | | | | |
| 7. 49 | 10. 10 | 7. 47 | ·0954 | | | | | |
| 7. 58 | 5. 30 | 8. 0 | ·0980 | | | | | |
| 8. 5 | 12. 40 | 8. 5 | ·0962 | | | | | |
| 8. 11 | 10. 40 | 8. 10 | ·0977 | | | | | |
| 8. 19 | 16. 0 | 8. 26 | ·0963 | | | | | |
| 8. 44 | 13. 45 | 8. 47 | ·0963 | | | | | |
| 8. 59 | 17. 30 | 9. 17 | ·0933 | | | | | |
| 9. 43 | 5. 0 | 9. 32 | ·0930 | | | | | |
| 9. 54 | 6. 0 | 9. 45 | ·0946 | | | | | |
| | | | *** | | | | | |
| 10. 9 | 17. 30 | | | | | | | |
| 10. 18 | 20. 25 | 10. 15 | ·0950 | | | | | |
| 10. 40 | 15. 0 | 10. 26 | ·0934 | | | | | |
| | | | *** | | | | | |
| 10. 49 | 13. 45 | | | | | | | |
| 11. 28 | 21. 30 | 11. 5 | ·0949 | | | | | |
| 11. 44 | 17. 30 | 11. 11 | ·0960 | | | | | |
| 11. 47 | 18. 20 | 11. 35 | ·0940 | | | | | |
| | | | *** | | | | | |
| 12. 12 | 14. 50 | | | | | | | |
| 12. 26 | 16. 30 | 12. 22 | ·0950 | | | | | |
| | *** | | *** | | | | | |
| 13. 55 | 13. 20 | 12. 54 | ·0941 | | | | | |
| | *** | | | | | | | |

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.13 | | Aug.13 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 15. 20 | 21. 16. 20 | 13. 20 | ·0950 | | | | | |
| | *** | 13. 45 | ·0942 | | | | | |
| 19. 17 | 9. 10 | | *** | | | | | |
| | *** | 16. 46 | ·0949 | | | | | |
| 20. 28 | 10. 10 | | *** | | | | | |
| 20. 40 | 12. 0 | 21. 37 | ·0925 | | | | | |
| 20. 48 | 11. 20 | | *** | | | | | |
| 23. 15 | 23. 0 | 23. 59 | ·0950 | | | | | |
| 23. 59 | 24. 0 | | | | | | | |
| Aug.14 | | Aug.14 | | Aug.14 | | Aug.14 | | |
| 0. 0 | 21. 24. 0 | 0. 0 | ·0950 | 0. 0 | ·03420 | 1. 0 | 64 ·0 | 65 ·5 |
| 0. 28 | 25. 20 | 0. 46 | ·0957 | 6. 15 | ·03021 | 3. 0 | 66 ·0 | 67 ·0 |
| 0. 44 | 24. 15 | 2. 3 | ·0958 | 8. 0 | { ·03062 | 9. 0 | 67 ·8 | 67 ·9 |
| 2. 5 | 24. 0 | 4. 7 | ·0948 | | { ·03444 | 21. 0 | 61 ·6 | 62 ·0 |
| 4. 12 | 18. 10 | 4. 42 | ·0969 | 10. 27 | ·03400 | | | |
| 4. 22 | 21. 30 | 4. 57 | ·0966 | 14. 0 | ·03580 | | | |
| 4. 39 | 18. 5 | 5. 15 | ·0975 | 20. 21 | ·04022 | | | |
| 6. 14 | 14. 30 | | *** | | | | | |
| 7. 9 | 15. 0 | 6. 6 | ·0956 | 21. 10 | { ·03992 | | | |
| 7. 36 | 13. 20 | | *** | | { ·03738 | | | |
| 8. 7 | 15. 10 | 7. 2 | ·0964 | 23. 59 | ·03690 | | | |
| 8. 39 | 15. 0 | 7. 16 | ·0961 | | | | | |
| 9. 3 | 16. 10 | 7. 43 | ·0964 | | | | | |
| 15. 41 | 13. 40 | 7. 58 | ·0964 | | | | | |
| 16. 29 | 11. 50 | 8. 17 | ·0958 | | | | | |
| 17. 0 | 12. 55 | 8. 40 | ·0961 | | | | | |
| 18. 6 | 11. 30 | | *** | | | | | |
| 18. 14 | 10. 15 | 10. 15 | ·0955 | | | | | |
| 19. 8 | 10. 40 | | *** | | | | | |
| 19. 28 | 9. 0 | 16. 53 | ·0960 | | | | | |
| 20. 51 | 11. 0 | | *** | | | | | |
| 20. 55 | 9. 30 | 18. 54 | ·0957 | | | | | |
| 21. 10 | 12. 0 | | *** | | | | | |
| 22. 45 | 16. 45 | 20. 5 | ·0939 | | | | | |
| 23. 59 | 22. 50 | | *** | | | | | |
| | | 22. 46 | ·0930 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0944 | | | | | |
| Aug.15 | | Aug.15 | | Aug.15 | | Aug.15 | | |
| 0. 0 | 21. 22. 50 | 0. 0 | ·0944 | 0. 0 | ·03690 | 0. 0 | 63 ·0 | 63 ·6 |
| 0. 45 | 24. 40 | | *** | 7. 37 | ·03207 | 1. 0 | 63 ·8 | 64 ·0 |
| 1. 38 | 24. 10 | 1. 30 | ·0945 | 11. 52 | ·03130 | 3. 0 | 65 ·3 | 65 ·3 |
| 1. 56 | 25. 30 | 1. 51 | ·0962 | 16. 30 | ·03211 | 6. 0 | 66 ·5 | 67 ·0 |
| 2. 26 | 23. 15 | 2. 17 | ·0950 | 21. 39 | ·03403 | 9. 0 | 66 ·0 | 67 ·0 |
| 2. 45 | 23. 40 | 3. 0 | ·0967 | 23. 59 | ·03330 | 12. 0 | 65 ·5 | 66 ·0 |
| 3. 15 | 20. 45 | 3. 15 | ·0957 | | | 18. 0 | 64 ·0 | 64 ·7 |
| 3. 47 | 19. 30 | | *** | | | 21. 0 | 64 ·7 | 65 ·2 |
| 4. 44 | 14. 40 | 3. 45 | ·0963 | | | | | |
| 6. 48 | 13. 0 | | *** | | | | | |
| 11. 0 | 15. 30 | 5. 36 | ·0951 | | | | | |
| 11. 36 | 14. 30 | 5. 46 | ·0956 | | | | | |
| 15. 40 | 16. 50 | 6. 15 | ·0949 | | | | | |
| 16. 21 | 14. 0 | | *** | | | | | |
| 16. 39 | 14. 50 | 12. 7 | ·0964 | | | | | |
| | *** | | *** | | | | | |
| 19. 13 | 8. 0 | 18. 40 | ·0954 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 19. 28 | 21. 10. 20 | 21. 28: | ·0929 | | | | | |
| 20. 6 | 9. 55 | | *** | | | | | |
| 22. 13 | 18. 0 | 23. 59 | ·0933 | | | | | |
| 22. 21 | 17. 50 | | | | | | | |
| 23. 59 | 23. 35 | | | | | | | |
| Aug.16 | | Aug.16 | | Aug.16 | | Aug.16 | | |
| 0. 0 | 21. 23. 35 | 0. 0 | ·0933 | 0. 0 | ·03330 | 0. 0 | 67 ·0 | 68 ·0 |
| 1. 0 | 25. 30 | | *** | 2. 15 | ·03222 | 1. 0 | 67 ·8 | 68 ·3 |
| 1. 34 | 24. 40 | 1. 27 | ·0946 | | *** | 3. 0 | 68 ·2 | 68 ·5 |
| 1. 44 | 25. 55 | | *** | 6. 9 | ·03230 | 9. 0 | 67 ·0 | 67 ·0 |
| 2. 12 | 23. 30 | 2. 3 | ·0975 | 6. 15 | ·03266 | 21. 0 | 59 ·8 | 60 ·0 |
| 2. 29 | 27. 30 | 2. 13 | ·0964 | 7. 15 | ·03267 | | | |
| 2. 48 | 22. 0 | 2. 20 | ·0970 | 7. 31 | ·03295 | | | |
| 2. 57 | 22. 30 | 2. 47 | ·0986 | 7. 59 | ·03226 | | | |
| 3. 3 | 21. 30 | 3. 4 | ·1001 | 8. 13 | ·03067 | | | |
| 3. 26 | 24. 10 | 3. 7 | ·0993 | 8. 30 | { ·03110 | | | |
| 3. 44 | 15. 30 | 3. 18 | ·1025 | | { ·03393 | | | |
| | *** | 3. 30 | ·1016 | 11. 56 | ·03437 | | | |
| 4. 2 | 16. 0 | 3. 35 | ·1026 | 12. 33 | ·0342c | | | |
| 4. 12 | 11. 50 | 3. 46 | ·0988 | 12. 57 | ·03444 | | | |
| 4. 28 | 17. 15 | | *** | 13. 14 | ·03400 | | | |
| 4. 44 | 11. 50 | 4. 5 | ·1009 | 19. 22 | ·04002 | | | |
| 5. 2 | 15. 50 | 4. 13 | ·1034 | 21. 12 | { ·03910 | | | |
| 5. 13 | 15. 45 | 4. 40 | ·0979 | | { ·03637 | | | |
| 5. 21 | 19. 30 | 5. 5 | ·1031 | 22. 37 | { ·03622 | | | |
| 5. 41 | 13. 20 | | *** | | { ·03518 | | | |
| 6. 0 | 23. 10 | 5. 20 | ·1025 | 23. 59 | ·03530 | | | |
| 6. 21 | 14. 20 | 5. 33 | ·1008 | | | | | |
| 6. 39 | 18. 45 | | *** | | | | | |
| 7. 15 | 17. 30 | 5. 56 | ·1010 | | | | | |
| 7. 45 | 7. 0 | 6. 7 | ·0980 | | | | | |
| 8. 0 | 9. 30 | 6. 26 | ·0993 | | | | | |
| 8. 12 | 33. 20 | 6. 52 | ·0969 | | | | | |
| 8. 28 | 21. 30 | 7. 7 | ·0980 | | | | | |
| 8. 50 | 12. 30 | 7. 18 | ·0967 | | | | | |
| 9. 13 | 11. 20 | | *** | | | | | |
| 9. 40 | 15. 30 | 7. 52 | ·0956 | | | | | |
| | *** | 8. 0 | ·0984 | | | | | |
| 10. 15 | 16. 0 | 8. 7 | ·0918 | | | | | |
| 10. 23 | 17. 30 | 8. 26 | ·0935 | | | | | |
| 10. 48 | 15. 50 | 8. 35 | ·0920 | | | | | |
| 11. 12 | 17. 30 | 9. 32 | ·0945 | | | | | |
| 11. 28 | 16. 20 | 9. 45 | ·0936 | | | | | |
| 12. 0 | 22. 40 | | *** | | | | | |
| 12. 30 | 22. 0 | 11. 12 | ·0936 | | | | | |
| 12. 43 | 19. 30 | 11. 46 | ·0941 | | | | | |
| 12. 54 | 21. 0 | 12. 6 | ·0936 | | | | | |
| 13. 12 | 15. 40 | 12. 20 | ·0940 | | | | | |
| 13. 20 | 19. 45 | 12. 36 | ·0931 | | | | | |
| 13. 43 | 17. 20 | 12. 53 | ·0950 | | | | | |
| 13. 58 | 17. 30 | 13. 6 | ·0934 | | | | | |
| 15. 20 | 11. 30 | 13. 20 | ·0927 | | | | | |
| 17. 21 | 12. 0 | 14. 0 | ·0948 | | | | | |
| 17. 40 | 11. 0 | 14. 16 | ·0944 | | | | | |
| 19. 21 | 9. 30 | | *** | | | | | |
| 19. 36 | 8. 20 | 15. 40 | ·0950 | | | | | |
| 23. 59 | 26. 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.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Aug. 16 h m | | h m | | h m | ° | ° |
| | | 17. 30 | ·0948 *** | | | | | |
| | | 19. 51 | ·0929 *** | | | | | |
| | | 21. 35 | ·0925 *** | | | | | |
| | | 23. 59 | ·0937 | | | | | |
| Aug. 17 | | Aug. 17 | | Aug. 17 | | Aug. 17 | | |
| 0. 0 | 21. 26. 5 | 0. 0 | ·0937 | 0. 0 | ·03530 | 1. 0 | 61 ·9 | 61 ·7 |
| 1. 50 | 25. 0 | 2. 6 | ·0948 | 6. 53 | ·02947 | 3. 0 | 62 ·0 | 63 ·0 |
| 1. 56 | 25. 50 | 2. 20 | ·0942 *** | 7. 38 | ·02910 | 9. 0 | 63 ·6 | 63 ·9 |
| 4. 28 | 14. 30 | | | | ·02953 | 21. 0 | 57 ·3 | 58 ·2 |
| 6. 17 | 12. 40 | 4. 43 | ·0942 *** | 11. 11 | ·03016 | | | |
| 7. 0 | 13. 35 | | | 19. 49 | ·03547 | | | |
| 7. 42 | 12. 30 | 6. 26 | ·0949 | 22. 37 | ·03600 | | | |
| 9. 30 | 13. 30 | 6. 50 | ·0959 | | ·03512 | | | |
| 19. 16 | 12. 0 | 7. 17 | ·0950 *** | 23. 59 | ·03523 | | | |
| 20. 28 | 13. 10 | | | | | | | |
| 23. 39 | 24. 45 | 16. 18 | ·0964 | | | | | |
| 23. 59 | 24. 30 | 18. 56 | ·0951 *** | | | | | |
| | | 22. 56 | ·0942 | | | | | |
| | | 23. 59 | ·0951 | | | | | |
| Aug. 18 | | Aug. 18 | | Aug. 18 | | Aug. 18 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0951 | 0. 0 | ·03523 | 1. 0 | 58 ·0 | 58 ·2 |
| 0. 12 | 23. 55 | 0. 36 | ·0955 | 0. 10 | ·03530 | 3. 0 | 59 ·0 | 58 ·8 |
| 0. 42 | 23. 50 | 1. 20 | ·0970 *** | | ·03367 | 9. 0 | 61 ·0 | 61 ·3 |
| 1. 17 | 24. 55 | | | 5. 13: | ·03453 | 22. 27 | 61 ·0 | 61 ·2 |
| 3. 39 | 18. 45 | 2. 13 | ·0969 *** | 12. 12 | ·03175 | | | |
| 3. 45 | 19. 0 | | | 15. 7 | ·03160 | | | |
| 4. 51 | 16. 0 | 3. 2 | ·0974 | 20. 15 | ·03295 | | | |
| 5. 30 | 15. 30 | 3. 16 | ·0968 | 23. 59 | ·03164 | | | |
| 7. 13 | 16. 10 | 3. 19 | ·0974 | | | | | |
| 7. 58 | 15. 45 | 3. 28 | ·0964 *** | | | | | |
| 8. 12 | 14. 30 | | | | | | | |
| 9. 28 | 13. 40 | 3. 40 | ·0969 | | | | | |
| 9. 39 | 12. 0 | 3. 47 | ·0978 *** | | | | | |
| 10. 0 | 12. 30 | | | | | | | |
| 10. 45 | 7. 45 | 4. 46 | ·0969 | | | | | |
| 11. 27 | 8. 30 | 5. 7 | ·0981 | | | | | |
| 11. 48 | 16. 40 | 5. 15 | ·0974 | | | | | |
| 12. 28 | 7. 55 | 5. 17 | ·0982 *** | | | | | |
| 12. 38 | 8. 20 | | | | | | | |
| 12. 45 | 7. 30 | 5. 56 | ·0972 | | | | | |
| 13. 17 | 10. 15 | 6. 10 | ·0986 | | | | | |
| 13. 28 | 9. 0 | 6. 20 | ·0978 | | | | | |
| 13. 50 | 11. 0 | 6. 26 | ·0982 | | | | | |
| 13. 58 | 8. 0 | 6. 33 | ·0974 *** | | | | | |
| 14. 13 | 7. 30 | | | | | | | |
| 14. 38 | 11. 40 | 6. 47 | ·0982 *** | | | | | |
| 14. 42 | 10. 45 | | | | | | | |
| 14. 51 | 11. 0 | 7. 20 | ·0974 *** | | | | | |
| 15. 14 | 7. 45 | | | | | | | |
| 15. 28 | 9. 20 | 7. 50 | ·0977 | | | | | |
| 15. 50 | 9. 40 | 8. 4 | ·0991 *** | | | | | |
| 16. 15 | 7. 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. | Readings of Thermometers. Of V. F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| Aug. 18 h m | ° ′ ″ | Aug. 18 h m | | h m | | h m | ° | ° |
| 16. 43 | 21. 11. 50 | 8. 33 | ·0988 | | | | | |
| 17. 5 | 10. 45 | 8. 50 | ·0974 | | | | | |
| 17. 44 | 20. 20 | 9. 4 | ·0978 | | | | | |
| 17. 56 | 19. 0 | 9. 8 | ·0970 | | | | | |
| 18. 7 | 20. 10 | 9. 33 | ·0989 | | | | | |
| 18. 45 | 16. 5 | 9. 36 | ·0970 | | | | | |
| 18. 52 | 17. 0 | 9. 45 | ·0974 *** | | | | | |
| 19. 14 | 13. 20 | | | | | | | |
| 19. 21 | 14. 50 | 10. 46 | ·0956 | | | | | |
| 19. 30 | 15. 15 | 10. 53 | ·0959 *** | | | | | |
| 19. 40 | 13. 50 | | | | | | | |
| 20. 14 | 21. 20 | 11. 21 | ·0958 | | | | | |
| | *** | 11. 36 | ·0949 | | | | | |
| 21. 28 | 16. 30 | 12. 5 | ·0977 *** | | | | | |
| 21. 58 | 20. 45 | | | | | | | |
| 22. 30 | 21. 30 | 12. 56 | ·0979 | | | | | |
| 22. 54 | 24. 45 | 13. 28 | ·0961 | | | | | |
| 23. 59 | 25. 20 | 14. 4: | ·0968 | | | | | |
| | | 14. 26 | ·0961 | | | | | |
| | | 14. 45 | ·0969 | | | | | |
| | | 15. 6 | ·0969 | | | | | |
| | | 15. 14 | ·0963 | | | | | |
| | | 15. 33 | ·0977 | | | | | |
| | | 15. 45 | ·0969 | | | | | |
| | | 15. 50 | ·0972 | | | | | |
| | | 16. 15 | ·0962 | | | | | |
| | | 16. 40: | ·0975 | | | | | |
| | | 17. 3 | ·0961 *** | | | | | |
| | | 17. 36 | ·0958 *** | | | | | |
| | | 18. 15 | ·0967 | | | | | |
| | | 18. 30 | ·0956 | | | | | |
| | | 18. 49 | ·0946 | | | | | |
| | | 19. 15 | ·0946 | | | | | |
| | | 19. 36 | ·0933 | | | | | |
| | | 19. 45 | ·0937 | | | | | |
| | | 19. 50 | ·0931 | | | | | |
| | | 20. 15 | ·0946 *** | | | | | |
| | | 20. 40 | ·0945 *** | | | | | |
| | | 21. 7 | ·0933 | | | | | |
| | | 21. 17 | ·0937 *** | | | | | |
| | | 23. 0 | ·0917 *** | | | | | |
| | | 23. 50 | ·0933 | | | | | |
| | | 23. 59 | ·0929 | | | | | |
| Aug. 19 | | Aug. 19 | | Aug. 19 | | Aug. 19 | | |
| 0. 0 | 21. 25. 20 | 0. 0 | ·0929 *** | 0. 0 | ·03164 | 8. 35 | 65 ·3 | 65 ·6 |
| 0. 59 | 25. 50 | | | 4. 39 | ·03044 | 21. 0 | 64 ·0 | 65 ·0 |
| 1. 28 | 24. 30 | 0. 53 | ·0942 *** | 6. 56 | ·02845 | | | |
| 2. 18 | 25. 30 | | | 8. 40 | ·02830 | | | |
| 2. 57 | 24. 30 | 1. 26 | ·0934 *** | | ·02912 | | | |
| 3. 26 | 22. 30 | | | 12. 2 | ·02822 | | | |
| 3. 40 | 23. 20 | 3. 4 | ·0955 | 21. 4 | ·02956 | | | |

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. 19 | | Aug. 19 | | Aug. 19 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 4. 41 | 21. 16. 30 | 3. 20 | ·0950 | 23. 59 | ·02860 | | | |
| 4. 51 | 17. 45 | 3. 42 | ·0959 | | | | | |
| 5. 10 | 12. 20 | 4. 0 | ·0957 | | | | | |
| 5. 29 | 15. 20 | 4. 26 | ·0963 | | | | | |
| 6. 10 | 17. 20 | 4. 40 | ·0975 | | | | | |
| 6. 58 | 17. 30 | 4. 53 | ·0940 | | | | | |
| 7. 17 | 16. 20 | 5. 5 | ·0946 | | | | | |
| 7. 27 | 17. 0 | 5. 17 | ·0945 | | | | | |
| 8. 22 | 14. 30 | 5. 48 | ·0956 | | | | | |
| 9. 2 | 7. 45 | | *** | | | | | |
| 9. 30 | 12. 20 | 6. 59 | ·0965 | | | | | |
| 11. 13 | 15. 50 | | *** | | | | | |
| 11. 27 | 17. 45 | 8. 5 | ·0969 | | | | | |
| 11. 42 | 15. 20 | 8. 42: | ·0954 | | | | | |
| 12. 4 | 14. 40 | 9. 4 | ·0962 | | | | | |
| 12. 29 | 17. 40 | | *** | | | | | |
| 12. 52 | 15. 30 | 9. 53 | ·0956 | | | | | |
| 16. 37 | 12. 50 | | *** | | | | | |
| 18. 45 | 9. 20 | 10. 20 | ·0958 | | | | | |
| 19. 30 | 9. 15 | 10. 26 | ·0962 | | | | | |
| 21. 20 | 13. 55 | 10. 45 | ·0955 | | | | | |
| 21. 34 | 13. 20 | 10. 52 | ·0959 | | | | | |
| 23. 59 | 23. 35 | 11. 26 | ·0961 | | | | | |
| | | 11. 45 | ·0956 | | | | | |
| | | | *** | | | | | |
| | | 12. 53 | ·0959 | | | | | |
| | | 17. 32 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 21. 45 | ·0916 | | | | | |
| | | 22. 46 | ·0913 | | | | | |
| | | 23. 50 | ·0927 | | | | | |
| | | 23. 59 | ·0935 | | | | | |
| Aug. 20 | | Aug. 20 | | Aug. 20 | | Aug. 20 | | |
| 0. 0 | 21. 23. 40 | 0. 0 | ·0935 | 0. 0 | ·02860 | 1. 0 | 65 ·0 | 65 ·7 |
| 0. 35 | 27. 0 | 0. 25 | ·0939 | 5. 15 | ·03248 | 3. 0 | 65 ·8 | 66 ·7 |
| 0. 43 | 26. 15 | 0. 45 | ·0925 | 8. 37 | ·03370 | 9. 0 | 66 ·4 | 67 ·0 |
| 1. 16 | 26. 10 | 1. 5 | ·0933 | 12. 41 | ·03356 | 21. 0 | 61 ·7 | 62 ·3 |
| 2. 15 | 23. 25 | 1. 36 | ·0928 | 20. 14 | ·03762 | | | |
| 2. 26 | 24. 0 | 2. 20 | ·0949 | 21. 16 | ·03760 | | | |
| 2. 50 | 21. 30 | 2. 48 | ·0935 | 23. 59 | ·03890 | | | |
| 3. 12 | 22. 0 | 3. 10 | ·0961 | | | | | |
| 3. 37 | 19. 0 | 3. 34 | ·0945 | | | | | |
| 3. 57 | 17. 45 | 3. 47 | ·0938 | | | | | |
| 4. 28 | 17. 10 | 4. 15 | ·0949 | | | | | |
| 5. 29 | 12. 45 | 4. 33 | ·0945 | | | | | |
| 8. 32 | 12. 40 | 4. 50 | ·0946 | | | | | |
| 9. 37 | 14. 20 | 5. 17 | ·0962 | | | | | |
| 9. 54 | 13. 30 | | *** | | | | | |
| 10. 42 | 14. 0 | 6. 46 | ·0955 | | | | | |
| 11. 45 | 11. 50 | 7. 0 | ·0960 | | | | | |
| 12. 13 | 17. 45 | 7. 11 | ·0957 | | | | | |
| 12. 52 | 13. 45 | | *** | | | | | |
| 13. 12 | 13. 10 | 8. 21 | ·0957 | | | | | |
| 14. 10 | 12. 50 | 8. 37 | ·0952 | | | | | |
| 14. 21 | 13. 20 | | *** | | | | | |
| 14. 41 | 12. 50 | 11. 0 | ·0953 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 20 | | Aug. 20 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 15. 14 | 21. 18. 0 | 11. 15 | ·0961 | | | | | |
| 15. 52 | 15. 30 | | *** | | | | | |
| 16. 43 | 12. 45 | 11. 42 | ·0956 | | | | | |
| 17. 35 | 13. 50 | 12. 4 | ·0966 | | | | | |
| 18. 15 | 13. 0 | 12. 17 | ·0958 | | | | | |
| 18. 55 | 9. 5 | 12. 50 | ·0961 | | | | | |
| 19. 5 | 9. 20 | | *** | | | | | |
| 19. 25 | 8. 25 | 15. 7 | ·0950 | | | | | |
| 20. 0 | 8. 55 | 16. 50 | ·0963 | | | | | |
| 20. 12 | 10. 0 | 17. 42: | ·0952 | | | | | |
| 20. 22 | 9. 55 | 18. 35 | ·0956 | | | | | |
| 21. 28 | 14. 0 | 21. 53 | ·0922 | | | | | |
| 23. 35 | 23. 0 | 23. 59 | ·0935 | | | | | |
| 23. 59 | 23. 30 | | | | | | | |
| Aug. 21 | | Aug. 21 | | Aug. 21 | | Aug. 21 | | |
| 0. 0 | 21. 23. 30 | 0. 0 | ·0935 | 0. 0 | ·03890 | 1. 0 | 63 ·0 | 63 ·7 |
| 1. 2 | 25. 10 | 2. 48 | ·0952 | 1. 46 | ·03896 | 3. 0 | 64 ·7 | 65 ·8 |
| 2. 11 | 23. 55 | | *** | 7. 0 | ·03410 | 9. 8 | 66 ·0 | 67 ·0 |
| 4. 46 | 15. 15 | 3. 27 | ·0963 | | ·03460 | 21. 0 | 60 ·8 | 61 ·3 |
| 6. 20 | 12. 40 | 3. 38 | ·0960 | 11. 20 | ·03472 | | | |
| 7. 11 | 13. 45 | 3. 52 | ·0965 | 11. 39 | ·03410 | | | |
| 7. 40 | 13. 30 | 4. 30 | ·0960 | 12. 46 | ·03433 | | | |
| 8. 18 | 14. 55 | | *** | 23. 59 | ·04192 | | | |
| 9. 11 | 12. 50 | 5. 40 | ·0965 | | | | | |
| 9. 28 | 13. 45 | 6. 7 | ·0956 | | | | | |
| 9. 58 | 12. 0 | 7. 0 | ·0960 | | | | | |
| 10. 19 | 13. 30 | 7. 6 | ·0969 | | | | | |
| 10. 40 | 12. 30 | | *** | | | | | |
| 10. 48 | 13. 0 | 9. 40 | ·0953 | | | | | |
| 11. 11 | 11. 20 | 10. 17 | ·0969 | | | | | |
| 11. 26 | 16. 30 | 10. 45 | ·0956 | | | | | |
| 11. 35 | 14. 20 | | *** | | | | | |
| 12. 4 | 17. 25 | 11. 21 | ·0960 | | | | | |
| 12. 16 | 14. 0 | 11. 40 | ·0979 | | | | | |
| 12. 40 | 13. 30 | 12. 1 | ·0958 | | | | | |
| 13. 16 | 5. 45 | 12. 6 | ·0941 | | | | | |
| 13. 40 | 7. 50 | 12. 36 | ·0970 | | | | | |
| 13. 58 | 7. 20 | 13. 7 | ·0954 | | | | | |
| 14. 51 | 12. 40 | 13. 30 | ·0958 | | | | | |
| 15. 44 | 9. 55 | | *** | | | | | |
| 16. 14 | 10. 45 | 14. 32: | ·0950 | | | | | |
| 16. 44 | 13. 20 | | *** | | | | | |
| 18. 3 | 5. 20 | 15. 30 | ·0956 | | | | | |
| 18. 16 | 10. 30 | 15. 46 | ·0952 | | | | | |
| 18. 51 | 4. 45 | 16. 20 | ·0960 | | | | | |
| | *** | | *** | | | | | |
| 19. 10 | 6. 45 | 17. 45 | ·0958 | | | | | |
| 19. 13 | 5. 30 | | *** | | | | | |
| 19. 16 | 7. 10 | 18. 17 | ·0967 | | | | | |
| 19. 54 | 6. 15 | | *** | | | | | |
| 20. 25 | 8. 55 | 18. 42 | ·0955 | | | | | |
| 20. 50 | 6. 30 | | *** | | | | | |
| 23. 42 | 27. 0 | 19. 42 | ·0949 | | | | | |
| 23. 48 | 26. 0 | | *** | | | | | |
| 23. 55 | 27. 30 | 20. 20 | ·0951 | | | | | |
| 23. 59 | 27. 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. | Readings of Thermometers. Of V. F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Aug.21 h m | | h m | | h m | ° | ° |
| | | 22. 17 | ·0920 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0948 | | | | | |
| Aug.22 | | Aug.22 | | Aug.22 | | Aug.22 | | |
| 0. 0 | 21. 27. 15 | 0. 0 | ·0948 | 0. 0 | ·04192 | 0. 0 | 61 ·3 | 61 ·2 |
| 0. 15 | 28. 45 | 0. 45 | ·0946 | 0. 37 | ·04233 | 1. 0 | 61 ·8 | 61 ·2 |
| 1. 36 | 29. 20 | 0. 58 | ·0955 | 1. 26 | ·04210 | 3. 0 | 62 ·7 | 62 ·9 |
| 1. 50 | 32. 0 | 1. 30 | ·0958 | | ·04138 | 6. 0 | 63 ·2 | 63 ·0 |
| 3. 10 | 24. 45 | 1. 48 | ·0975 | 2. 56 | ·04135 | 9. 0 | 63 ·0 | 64 ·1 |
| 3. 15 | 25. 0 | 2. 11 | ·0962 | | ·03974 | 12. 0 | 62 ·3 | 62 ·9 |
| 4. 30 | 20. 0 | | *** | 5. 30 | ·03940 | 18. 0 | 57 ·1 | 57 ·7 |
| 6. 58 | 16. 30 | 2. 56 | ·0950 | 11. 16: | ·03692 | 21. 0 | 57 ·0 | 57 ·8 |
| 9. 20 | 15. 0 | 3. 22 | ·0960 | 19. 55 | ·04112 | | | |
| 9. 40 | 13. 30 | 3. 40 | ·0958 | 21. 33 | ·04010 | | | |
| 12. 10 | 15. 0 | 4. 15 | ·0969 | | ·03718 | | | |
| | *** | 4. 40 | ·0960 | 23. 59 | ·03714 | | | |
| 14. 45 | 14. 15 | | *** | | | | | |
| 15. 10 | 18. 35 | 7. 36 | ·0968 | | | | | |
| 15. 14 | 17. 45 | 7. 47 | ·0962 | | | | | |
| 15. 22 | 18. 40 | | *** | | | | | |
| 15. 40 | 18. 45 | 9. 26 | ·0955 | | | | | |
| 16. 21 | 14. 5 | 9. 47 | ·0961 | | | | | |
| 16. 54 | 12. 40 | | *** | | | | | |
| 17. 5 | 13. 15 | 10. 46 | ·0956 | | | | | |
| 17. 39 | 9. 45 | | *** | | | | | |
| 17. 54 | 11. 40 | 13. 42 | ·0961 | | | | | |
| 18. 10 | 9. 30 | 13. 56 | ·0967 | | | | | |
| 18. 41 | 9. 25 | | *** | | | | | |
| 19. 12 | 12. 30 | 14. 45 | ·0960 | | | | | |
| 19. 43 | 10. 45 | | *** | | | | | |
| | *** | 15. 37 | ·0961 | | | | | |
| 21. 45 | 17. 55 | 16. 8 | ·0970 | | | | | |
| | *** | 16. 40 | ·0963 | | | | | |
| 23. 59 | 21. 0 | 17. 2 | ·0967 | | | | | |
| | | 17. 15 | ·0962 | | | | | |
| | | 17. 33 | ·0966 | | | | | |
| | | 21. 0 | ·0936 | | | | | |
| | | | *** | | | | | |
| | | 22. 20 | ·0931 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0943 | | | | | |
| Aug.23 | | Aug.23 | | Aug.23 | | Aug.23 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0943 | 0. 0 | ·03714 | 0. 0 | 59 ·0 | 59 ·7 |
| 0. 27 | 20. 45 | 0. 18 | ·0946 | 7. 5 | ·03152 | 1. 0 | 60 ·0 | 60 ·4 |
| 0. 47 | 24. 10 | 0. 45 | ·0958 | 11. 40 | ·03120 | 3. 0 | 62 ·7 | 62 ·9 |
| 1. 10 | 22. 55 | 1. 0 | ·0945 | 12. 24 | ·03084 | 9. 0 | 64 ·0 | 64 ·0 |
| 1. 20 | 24. 45 | 1. 17 | ·0956 | 14. 12 | ·03120 | 21. 0 | 58 ·2 | 58 ·6 |
| 1. 55 | 24. 30 | | *** | 20. 0: | ·03592 | | | |
| 2. 28 | 21. 45 | 1. 45 | ·0956 | 23. 59 | ·03684 | | | |
| 2. 41 | 20. 5 | 2. 2 | ·0942 | | | | | |
| 3. 9 | 20. 0 | 2. 20 | ·0946 | | | | | |
| 4. 7 | 16. 50 | 2. 32 | ·0941 | | | | | |
| 4. 42 | 17. 5 | | *** | | | | | |
| 5. 13 | 15. 0 | 3. 22 | ·0959 | | | | | |
| 5. 55 | 15. 0 | 3. 42: | ·0955 | | | | | |
| 6. 39 | 13. 30 | 4. 36 | ·0971 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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.23 h m | ° ′ ″ | Aug.23 h m | | h m | | h m | ° | ° |
| 7. 0 | 21. 14. 30 | 5. 17 | ·0962 | | | | | |
| 7. 32 | 5. 55 | 5. 38 | ·0971 | | | | | |
| 8. 10 | 10. 50 | 5. 46 | ·0962 | | | | | |
| 8. 40 | 15. 0 | 6. 16 | ·0970 | | | | | |
| 10. 51 | 13. 55 | | *** | | | | | |
| 11. 14 | 11. 15 | 6. 46 | ·0964 | | | | | |
| 11. 25 | 12. 10 | 7. 15 | ·0950 | | | | | |
| 11. 39 | 10. 30 | 7. 35 | ·0968 | | | | | |
| 11. 45 | 14. 30 | | *** | | | | | |
| 12. 12 | 4. 30 | 8. 40 | ·0961 | | | | | |
| 12. 19 | 5. 20 | 11. 17 | ·0966 | | | | | |
| 12. 54 | 3. 30 | 11. 36 | ·0957 | | | | | |
| 13. 40 | 13. 30 | 11. 45 | ·0972 | | | | | |
| | *** | 12. 3 | ·0966 | | | | | |
| 14. 43 | 7. 30 | 12. 30 | ·0976 | | | | | |
| | *** | | *** | | | | | |
| 16. 22 | 13. 0 | 13. 40 | ·0948 | | | | | |
| 16. 56 | 11. 30 | 14. 10 | ·0969 | | | | | |
| 17. 11 | 12. 30 | | *** | | | | | |
| 17. 45 | 11. 5 | 15. 53 | ·0954 | | | | | |
| 17. 56 | 11. 30 | | *** | | | | | |
| 18. 21 | 9. 0 | 17. 10 | ·0961 | | | | | |
| 18. 44 | 10. 40 | | *** | | | | | |
| 19. 58 | 10. 50 | 21. 16 | ·0927 | | | | | |
| 20. 13 | 12. 20 | | *** | | | | | |
| 20. 40 | 10. 0 | 22. 5 | ·0939 | | | | | |
| 20. 58 | 11. 30 | 22. 27: | ·0930 | | | | | |
| 21. 25 | 15. 0 | | *** | | | | | |
| 21. 54 | 16. 10 | 23. 40 | ·0944 | | | | | |
| 22. 10 | 17. 40 | 23. 59 | ·0954 | | | | | |
| 22. 15 | 17. 20 | | | | | | | |
| 23. 41 | 21. 30 | | | | | | | |
| 23. 55 | 24. 0 | | | | | | | |
| 23. 59 | 23. 30 | | | | | | | |
| Aug.24 | | Aug.24 | | Aug.24 | | Aug.24 | | |
| 0. 0 | 21. 23. 25 | 0. 0 | ·0954 | 0. 0 | ·03684 | 1. 0 | 60 ·0 | 60 ·7 |
| 0. 12 | 22. 30 | 0. 26 | ·0943 | 5. 46 | ·03637 | 3. 0 | 61 ·7 | 61 ·9 |
| 1. 43 | 22. 10 | | *** | 8. 11 | ·03460 | 9. 0 | 64 ·0 | 65 ·0 |
| 1. 52 | 21. 20 | 1. 35 | ·0958 | 12. 55 | ·03277 | 21. 0 | 63 ·0 | 64 ·0 |
| 2. 13 | 22. 0 | 1. 48 | ·0953 | 19. 15 | ·03372 | | | |
| 3. 0 | 21. 0 | 2. 10 | ·0962 | 23. 27 | ·03329 | | | |
| 3. 42 | 18. 20 | | *** | | (†) | | | |
| 5. 7 | 16. 25 | 2. 25 | ·0955 | | | | | |
| 5. 29 | 13. 20 | | *** | | | | | |
| 5. 45 | 6. 40 | 3. 4 | ·0964 | | | | | |
| 6. 12 | 11. 40 | 3. 30 | ·0956 | | | | | |
| 6. 42 | 9. 0 | 4. 10 | ·0978 | | | | | |
| 7. 13 | 11. 10 | | *** | | | | | |
| 7. 39 | 10. 45 | 4. 40 | ·0977 | | | | | |
| 8. 13 | 12. 20 | | *** | | | | | |
| 8. 25 | 10. 50 | 5. 16 | ·0984 | | | | | |
| 8. 39 | 13. 40 | 5. 26 | ·0993 | | | | | |
| 9. 1 | 12. 0 | 5. 34 | ·0989 | | | | | |
| 9. 12 | 13. 35 | 5. 46 | ·1009 | | | | | |
| 9. 24 | 13. 0 | 6. 25 | ·0967 | | | | | |
| 9. 31 | 11. 0 | | *** | | | | | |
| 9. 44 | 10. 40 | 7. 18 | ·0971 | | | | | |

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.24 | | Aug.24 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 7 | 21. 16. 5 | 8. 7 | ·0965 | | | | | |
| 10. 30 | 10. 40 | 8. 16 | ·0960 | | | | | |
| 10. 44 | 12. 50 | 8. 20 | ·0965 | | | | | |
| 10. 51 | 12. 20 | 8. 45 | ·0953 | | | | | |
| 11. 7 | 12. 50 | 9. 12 | ·0955 | | | | | |
| 12. 8 | 10. 40 | 9. 36 | ·0950 | | | | | |
| 12. 17 | 13. 45 | 10. 3 | ·0967 | | | | | |
| 12. 27 | 13. 30 | 10. 17 | ·0959 | | | | | |
| 12. 53 | 16. 30 | 10. 33 | ·0967 | | | | | |
| 13. 52 | 12. 0 | 10. 47 | ·0956 | | | | | |
| 16. 37 | 10. 0 | 10. 56 | ·0962 | | | | | |
| 16. 54 | 11. 30 | | *** | | | | | |
| 17. 58 | 10. 20 | 11. 40 | ·0966 | | | | | |
| 18. 11 | 9. 0 | 12. 7 | ·0964 | | | | | |
| 18. 18 | 10. 20 | 12. 26 | ·0946 | | | | | |
| 18. 29 | 10. 0 | 12. 45 | ·0973 | | | | | |
| 18. 38 | 10. 20 | | *** | | | | | |
| 18. 52 | 8. 40 | 13. 20 | ·0959 | | | | | |
| 19. 12 | 11. 40 | | *** | | | | | |
| 19. 18 | 10. 35 | 13. 52 | ·0959 | | | | | |
| 19. 40 | 10. 40 | 14. 3 | ·0963 | | | | | |
| 19. 45 | 9. 40 | 14. 17 | ·0958 | | | | | |
| 20. 6 | 12. 20 | | *** | | | | | |
| 20. 20 | 12. 35 | 14. 46 | ·0954 | | | | | |
| 20. 29 | 13. 55 | 14. 52 | ·0959 | | | | | |
| 20. 45 | 13. 30 | 15. 0 | ·0955 | | | | | |
| 22. 6 | 19. 0 | | *** | | | | | |
| 23. 59 | 24. 30 | 16. 11 | ·0954 | | | | | |
| | | | *** | | | | | |
| | | 22. 5 | ·0924 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0936 | | | | | |
| Aug.25 | | Aug.25 | | Aug.25 | | Aug.25 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0936 | | (†) | 1. 0 | 64 ·0 | 64 ·7 |
| 0. 52 | 24. 30 | | *** | 0. 33 | ·03530 | 3. 0 | 64 ·7 | 65 ·4 |
| 1. 51 | 23. 55 | 0. 45 | ·0943 | 2. 9 | { ·03522 | 9. 0 | 64 ·5 | 65 ·2 |
| 2. 17 | 21. 20 | | *** | | { ·03868 | 21. 8 | 62 ·0 | 62 ·2 |
| 2. 33 | 21. 20 | 1. 45 | ·0950 | 9. 43 | ·03785 | | | |
| 3. 37 | 18. 20 | 2. 4 | ·0949 | 15. 55 | ·03909 | | | |
| 4. 22 | 17. 0 | | *** | 17. 56 | ·03890 | | | |
| 4. 45 | 15. 15 | 2. 46 | ·0959 | 22. 30 | ·04055 | | | |
| 5. 20 | 15. 40 | | *** | 23. 59 | ·04023 | | | |
| 5. 39 | 14. 40 | 3. 22 | ·0956 | | | | | |
| 6. 54 | 15. 35 | | *** | | | | | |
| 8. 15 | 14. 15 | 4. 30 | ·0964 | | | | | |
| 8. 39 | 14. 45 | 4. 44 | ·0959 | | | | | |
| 9. 11 | 13. 20 | 5. 7 | ·0958 | | | | | |
| 9. 40 | 14. 30 | 5. 24 | ·0962 | | | | | |
| 11. 24 | 14. 0 | 5. 40 | ·0954 | | | | | |
| 12. 43 | 11. 45 | 5. 50 | ·0959 | | | | | |
| 13. 43 | 11. 20 | 6. 15 | ·0957 | | | | | |
| 14. 0 | 12. 30 | 6. 47: | ·0962 | | | | | |
| 14. 22 | 12. 35 | 7. 13: | ·0960 | | | | | |
| 14. 52 | 10. 0 | 7. 37 | ·0965 | | | | | |
| 15. 13 | 9. 30 | 8. 45 | ·0956 | | | | | |
| 15. 40 | 10. 50 | 9. 25 | ·0959 | | | | | |
| 15. 55 | 13. 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. | Readings of Thermometers. Of V. F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| Aug.25 | | Aug.25 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 17. 40 | 21. 9. 55 | 10. 17 | ·0955 | | | | | |
| 17. 56 | 11. 30 | | *** | | | | | |
| | *** | 12. 24 | ·0960 | | | | | |
| 18. 45 | 10. 0 | 12. 37 | ·0955 | | | | | |
| 19. 12 | 11. 20 | 13. 10 | ·0961 | | | | | |
| 19. 32 | 9. 40 | | *** | | | | | |
| 20. 47 | 11. 20 | 13. 42 | ·0956 | | | | | |
| 21. 44 | 16. 15 | 14. 40 | ·0960 | | | | | |
| 21. 55 | 16. 0 | 15. 27 | ·0955 | | | | | |
| | (†) | 15. 49 | ·0962 | | | | | |
| | | | *** | | | | | |
| | | 16. 58 | ·0954 | | | | | |
| | | | *** | | | | | |
| | | 22. 3 | ·0921 | | | | | |
| | | | *** | | | | | |
| | | 22. 36 | ·0930 | | | | | |
| | | 22. 45 | ·0924 | | | | | |
| | | | *** | | | | | |
| | | 23. 18 | ·0937 | | | | | |
| | | 23. 30 | ·0934 | | | | | |
| | | 23. 46 | ·0943 | | | | | |
| | | 23. 59 | ·0939 | | | | | |
| Aug.26 | | Aug.26 | | Aug.26 | | Aug.26 | | |
| | (†) | 0. 0 | ·0937 | 0. 0 | ·04023 | 8. 37 | 66 ·3 | 66 ·6 |
| 2. 15 | 21. 18. 40 | 0. 18 | ·0934 | 1. 39 | ·03930 | 21. 0 | 60 ·3 | 61 ·2 |
| 3. 20 | 16. 5 | | *** | 2. 52 | ·03722 | | | |
| 3. 30 | 16. 15 | 1. 20 | ·0941 | 6. 18 | { ·03760 | | | |
| 4. 17 | 12. 20 | | *** | | { ·04137 | | | |
| 5. 30 | 10. 0 | 3. 6 | ·0935 | 9. 21 | ·04070 | | | |
| 7. 29 | 10. 40 | 3. 17 | ·0940 | 14. 43 | ·04274 | | | |
| 8. 37 | 12. 38* | 3. 40 | ·0932 | 23. 59 | ·04184 | | | |
| 10. 25 | 12. 30 | 4. 4 | ·0934 | | | | | |
| 11. 24 | 7. 50 | 4. 12 | ·0941 | | | | | |
| 12. 15 | 10. 20 | 4. 17 | ·0935 | | | | | |
| 12. 24 | 12. 0 | | *** | | | | | |
| 12. 45 | 11. 10 | 9. 46 | ·0956 | | | | | |
| 13. 43 | 15. 0 | 10. 7 | ·0950 | | | | | |
| 14. 28 | 11. 30 | | *** | | | | | |
| 15. 18 | 11. 35 | 11. 10 | ·0956 | | | | | |
| 15. 25 | 12. 25 | | *** | | | | | |
| 15. 54 | 9. 40 | 12. 4 | ·0950 | | | | | |
| 17. 3 | 10. 0 | | *** | | | | | |
| | *** | 13. 14 | ·0955 | | | | | |
| 18. 45 | 8. 15 | 13. 47 | ·0962 | | | | | |
| 18. 54 | 7. 20 | | *** | | | | | |
| 19. 13 | 10. 5 | 14. 20 | ·0956 | | | | | |
| 19. 30 | 9. 0 | 15. 6 | ·0955 | | | | | |
| 19. 57 | 11. 30 | 15. 17 | ·0960 | | | | | |
| 20. 30 | 9. 40 | 15. 28 | ·0957 | | | | | |
| 21. 20 | 12. 15 | 18. 45 | ·0953 | | | | | |
| 21. 56 | 15. 20 | 19. 30 | ·0948 | | | | | |
| 23. 5 | 19. 50 | 19. 40 | ·0942 | | | | | |
| | (†) | 19. 53 | ·0947 | | | | | |
| | | 20. 12 | ·0942 | | | | | |
| | | 20. 39 | ·0944 | | | | | |
| | | 20. 56 | ·0939 | | | | | |
| | | | *** | | | | | |

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.

DECLINATION.—August 26. The times throughout this day are approximate only.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Aug.26 h m | | h m | | h m | ° | ° |
| | | 21. 37 | ·0942 | | | | | |
| | | 21. 45 | ·0934 | | | | | |
| | | 22. 27 | ·0941 | | | | | |
| | | 22. 50 | ·0938 | | | | | |
| | | 23. 36 | ·0948 | | | | | |
| | | 23. 59 | ·0942 | | | | | |
| Aug.27 | | Aug.27 | | Aug.27 | | Aug.27 | | |
| | (†) | 0. 0 | ·0942 | 0. 0 | ·04184 | 1. 0 | 63·0 | 63·6 |
| 0. 30 | 21. 24. 20 | 0. 30 | ·0945 | 4. 45 | ·03550 | 3. 0 | 64·7 | 65·4 |
| 0. 55 | 23. 40 | 0. 48 | ·0942 | 8. 36 | ·03624 | 9. 0 | 65·4 | 65·8 |
| 1. 10 | 25. 0 | 1. 20 | ·0951 | 11. 39: | ·03650 | 21. 0 | 59·8 | 60·3 |
| 1. 52 | 26. 10 | 1. 47 | ·0945 | 19. 0 | ·04291 | | | |
| 2. 33 | 19. 30 | 2. 15 | ·0946 | 21. 17 | ·04250 | | | |
| 2. 52 | 19. 50 | 2. 40 | ·0942 | | ·04187 | | | |
| 4. 53 | 11. 35 | 3. 6 | ·0948 | 23. 59 | ·04078 | | | |
| 6. 25 | 10. 40 | | *** | | | | | |
| 7. 13 | 11. 0 | 3. 40 | ·0941 | | | | | |
| | (†) | 3. 51 | ·0943 | | | | | |
| 9. 0 | 13. 45 | 3. 55 | ·0941 | | | | | |
| 11. 15 | 12. 10 | 4. 20 | ·0948 | | | | | |
| 12. 45 | 12. 50 | 4. 47 | ·0942 | | | | | |
| 14. 50 | 9. 50 | 5. 46 | ·0953 | | | | | |
| 16. 45 | 10. 20 | | *** | | | | | |
| 18. 51 | 8. 20 | 6. 35 | ·0951 | | | | | |
| 19. 52 | 9. 30 | | *** | | | | | |
| 22. 30 | 18. 45 | 7. 10 | ·0959 | | | | | |
| 23. 13 | 22. 0 | 7. 45 | ·0950 | | | | | |
| 23. 59 | 23. 50 | | *** | | | | | |
| | | 13. 36 | ·0959 | | | | | |
| | | 13. 45 | ·0956 | | | | | |
| | | 14. 33 | ·0965 | | | | | |
| | | 16. 47 | ·0957 | | | | | |
| | | 18. 40 | ·0956 | | | | | |
| | | 21. 46 | ·0928 | | | | | |
| | | 22. 35 | ·0923 | | | | | |
| | | 23. 59 | ·0930 | | | | | |
| Aug.28 | | Aug.28 | | Aug.28 | | Aug.28 | | |
| 0. 0 | 21. 23. 50 | 0. 0 | ·0930 | 0. 0 | ·04078 | 1. 0 | 63·5 | 63·2 |
| 1. 1 | 24. 40 | | *** | 6. 43 | ·03600 | 3. 0 | 64·0 | 64·6 |
| 3. 52 | 14. 30 | 1. 25 | ·0947 | 9. 57 | ·03571 | 9. 0 | 63·9 | 64·0 |
| 4. 0 | 19. 0 | 2. 27 | ·0954 | 13. 0 | ·03630 | 21. 0 | 62·3 | 62·7 |
| 4. 20 | 13. 20 | 3. 15 | ·0944 | 17. 29: | ·04071 | | | |
| 4. 55 | 10. 15 | | *** | 21. 25 | ·04144 | | | |
| 6. 11 | 9. 30 | 4. 5 | ·0962 | 23. 43 | ·04033 | | | |
| | *** | 4. 42 | ·0966 | | (†) | | | |
| 7. 33 | 10. 40 | 5. 15 | ·0960 | | | | | |
| 8. 7 | 12. 30 | | *** | | | | | |
| | *** | 5. 46 | ·0959 | | | | | |
| 15. 21 | 13. 40 | | *** | | | | | |
| 18. 12 | 8. 0 | 6. 5 | ·0954 | | | | | |
| 19. 14 | 8. 30 | | *** | | | | | |
| 19. 56 | 7. 45 | 7. 33 | ·0958 | | | | | |
| 23. 59 | 23. 10 | 8. 37 | ·0966 | | | | | |
| | | 9. 16 | ·0961 | | | | | |
| | | 9. 57 | ·0964 | | | | | |
| | | 10. 8 | ·0962 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Aug.28 h m | | h m | | h m | ° | ° |
| | | 10. 25 | ·0967 | | | | | |
| | | | *** | | | | | |
| | | 12. 6 | ·0960 | | | | | |
| | | | *** | | | | | |
| | | 15. 45 | ·0969 | | | | | |
| | | | *** | | | | | |
| | | 21. 36 | ·0945 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0948 | | | | | |
| Aug.29 | | Aug.29 | | Aug.29 | | Aug.29 | | |
| 0. 0 | 21. 23. 10 | 0. 0 | ·0948 | | (†) | 0. 0 | 64·0 | 65·0 |
| 0. 45 | 22. 40 | 0. 57 | ·0957 | 0. 36 | ·04035 | 1. 0 | 64·7 | 65·5 |
| 0. 58 | 23. 55 | 1. 37 | ·0952 | 1. 30 | ·03937 | 3. 0 | 66·7 | 67·3 |
| 2. 30 | 19. 45 | | *** | 3. 12 | ·03590 | 6. 0 | 66·4 | 67·3 |
| 3. 52 | 14. 30 | 2. 20 | ·0957 | 5. 46 | ·03650 | 9. 0 | 65·0 | 66·5 |
| 5. 0 | 10. 40 | | *** | | ·03958 | 12. 0 | 63·8 | 65·0 |
| 7. 17 | 11. 10 | 4. 18 | ·0936 | 9. 51 | ·03994 | 18. 0 | 61·8 | 62·2 |
| 9. 15 | 13. 40 | 4. 46 | ·0944 | 13. 4 | ·04093 | 21. 0 | 62·7 | 63·0 |
| 10. 15 | 13. 20 | 5. 45 | ·0937 | 16. 28 | ·04358 | | | |
| 11. 11 | 14. 15 | 6. 50 | ·0942 | 19. 54 | ·04300 | | | |
| 11. 41 | 13. 0 | | *** | 22. 31 | ·04193 | | | |
| 12. 43 | 11. 45 | 10. 15 | ·0951 | | ·04089 | | | |
| 12. 56 | 14. 0 | 11. 40 | ·0960 | 23. 59 | ·04061 | | | |
| 13. 27 | 8. 0 | 12. 46 | ·0958 | | | | | |
| 14. 2 | 11. 20 | 13. 0 | ·0984 | | | | | |
| | *** | 13. 26 | ·0968 | | | | | |
| 17. 21 | 6. 40 | | *** | | | | | |
| 17. 44 | 10. 0 | 16. 25 | ·0972 | | | | | |
| 18. 40 | 7. 10 | 16. 45 | ·0967 | | | | | |
| 19. 0 | 8. 30 | 16. 58 | ·0970 | | | | | |
| 19. 21 | 8. 20 | 17. 21 | ·0959 | | | | | |
| 19. 39 | 10. 0 | 18. 0 | ·0966 | | | | | |
| 21. 25 | 14. 0 | | *** | | | | | |
| 22. 27 | 19. 0 | 21. 45 | ·0931 | | | | | |
| 23. 14 | 21. 30 | | *** | | | | | |
| 23. 50 | 26. 10 | 22. 51 | ·0930 | | | | | |
| 23. 59 | 26. 0 | 23. 15 | ·0936 | | | | | |
| | | 23. 26 | ·0935 | | | | | |
| | | 23. 50 | ·0944 | | | | | |
| | | 23. 59 | ·0942 | | | | | |
| Aug.30 | | Aug.30 | | Aug.30 | | Aug.30 | | |
| 0. 0 | 21. 26. 0 | 0. 0 | ·0942 | 0. 0 | ·04061 | 0. 0 | 64·0 | 64·4 |
| 0. 59 | 27. 35 | 1. 10 | ·0940 | 0. 54 | ·04060 | 1. 0 | 65·0 | 65·0 |
| 1. 56 | 24. 20 | 1. 18 | ·0934 | 1. 40 | ·04012 | 3. 0 | 66·5 | 67·7 |
| 2. 5 | 25. 30 | 1. 36 | ·0940 | 4. 11 | ·03590 | 9. 0 | 64·0 | 65·0 |
| 2. 21 | 25. 10 | 1. 40 | ·0935 | 4. 55 | ·03574 | 21. 0 | 59·0 | 60·0 |
| 2. 28 | 26. 40 | 1. 53 | ·0943 | | ·03737 | | | |
| 3. 17 | 14. 10 | 2. 0 | ·0941 | 5. 39 | ·03700 | | | |
| 3. 36 | 14. 20 | 2. 15 | ·0955 | | ·03928 | | | |
| 3. 44 | 16. 30 | 2. 26 | ·0952 | 8. 35 | ·03820 | | | |
| 3. 48 | 15. 30 | 2. 33 | ·0959 | 10. 30 | ·03880 | | | |
| 3. 56 | 17. 0 | 2. 47 | ·0945 | 11. 28 | ·03774 | | | |
| 4. 10 | 15. 0 | 2. 50 | ·0949 | 11. 47 | ·03850 | | | |
| 4. 45 | 13. 0 | 3. 7 | ·0926 | 16. 2 | ·04262 | | | |
| 5. 9 | 13. 20 | 3. 16 | ·0920 | 17. 46 | ·04259 | | | |
| 5. 20 | 12. 0 | | *** | 23. 59 | ·04117 | | | |

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.30 | | Aug.30 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 5. 32 | 21. 12. 0 | 3. 40 | ·0925 | | | | | |
| 5. 45 | 13. 30 | 4. 6 | ·0957 | | | | | |
| 5. 59 | 12. 0 | | *** | | | | | |
| | *** | 4. 46 | ·0924 | | | | | |
| 7. 0 | 10. 0 | 5. 15 | ·0942 | | | | | |
| | *** | | *** | | | | | |
| 9. 47 | 14. 5 | 5. 39 | ·0938 | | | | | |
| 9. 58 | 21. 14. 0 | 5. 50 | ·0954 | | | | | |
| 10. 41 | 20. 52. 30 | | *** | | | | | |
| 10. 55 | 21. 6. 45 | 6. 7 | ·0942 | | | | | |
| 11. 9 | 2. 40 | 6. 13 | ·0946 | | | | | |
| 11. 22 | 19. 30 | 6. 26 | ·0942 | | | | | |
| 11. 44 | 6. 30 | 6. 37 | ·0948 | | | | | |
| 12. 24 | 11. 15 | 6. 50 | ·0945 | | | | | |
| 13. 21 | 11. 30 | | *** | | | | | |
| 13. 44 | 9. 15 | 9. 40 | ·0954 | | | | | |
| 14. 18 | 10. 20 | 9. 46 | ·0973 | | | | | |
| 14. 42 | 13. 30 | 9. 50 | ·0966 | | | | | |
| 14. 59 | 11. 0 | 10. 0 | ·0971 | | | | | |
| 15. 51 | 8. 50 | 10. 13 | ·0958 | | | | | |
| 17. 15 | 9. 0 | 10. 40 | ·1034 | | | | | |
| | *** | 10. 45 | ·1018 | | | | | |
| 18. 56 | 5. 40 | 10. 52 | ·1024 | | | | | |
| 20. 29 | 6. 5 | 11. 5 | ·1011 | | | | | |
| 20. 39 | 8. 10 | 11. 10 | ·1009 | | | | | |
| 20. 51 | 7. 30 | 11. 16 | ·1001 | | | | | |
| 23. 40 | 24. 50 | 11. 20 | ·1007 | | | | | |
| 23. 59 | 24. 30 | 11. 33 | ·0928 | | | | | |
| | | 11. 50 | ·0943 | | | | | |
| | | 12. 10 | ·0928 | | | | | |
| | | | *** | | | | | |
| | | 14. 5 | ·0947 | | | | | |
| | | 14. 10 | ·0943 | | | | | |
| | | 14. 46 | ·0958 | | | | | |
| | | 14. 50 | ·0952 | | | | | |
| | | 15. 7 | ·0958 | | | | | |
| | | | *** | | | | | |
| | | 17. 46 | ·0955 | | | | | |
| | | | *** | | | | | |
| | | 20. 17 | ·0934 | | | | | |
| | | 20. 30 | ·0938 | | | | | |
| | | 20. 46 | ·0931 | | | | | |
| | | 21. 4 | ·0935 | | | | | |
| | | 21. 16 | ·0931 | | | | | |
| | | | *** | | | | | |
| | | 23. 20 | ·0951 | | | | | |
| | | 23. 26 | ·0946 | | | | | |
| | | 23. 37 | ·0954 | | | | | |
| | | 23. 59 | ·0950 | | | | | |
| Aug.31 | | Aug.31 | | Aug.31 | | Aug.31 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0950 | 0. 0 | ·04117 | 1. 0 | 61 ·7 | 61 ·8 |
| 2. 7 | 22. 10 | 2. 0 | ·0945 | 1. 30 | ·04050 | 3. 0 | 64 ·0 | 65 ·0 |
| 2. 42 | 23. 0 | 2. 30 | ·0957 | 5. 41 | ·03471 | 9. 0 | 64 ·7 | 66 ·4 |
| 5. 59 | 13. 0 | 2. 51 | ·0958 | 8. 10 | ·03500 | 21. 0 | 57 ·8 | 58 ·7 |
| 6. 58 | 11. 30 | 3. 40 | ·0942 | 11. 51 | ·03487 | | | |
| 7. 43 | 13. 10 | 3. 50 | ·0945 | 21. 44 | ·04288 | | | |
| 9. 37 | 13. 15 | 4. 17 | ·0936 | 23. 59 | ·04218 | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Aug.31 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 0 | 21. 8. 0 | 6. 15 | ·0950 | | | | | |
| 10. 27 | 11. 30 | 6. 42 | ·0943 | | | | | |
| 10. 51 | 12. 20 | 7. 45 | ·0950 | | | | | |
| 11. 0 | 10. 30 | 8. 15 | ·0949 | | | | | |
| 11. 12 | 11. 10 | 8. 40 | ·0955 | | | | | |
| 11. 29 | 9. 20 | | *** | | | | | |
| 11. 54 | 9. 20 | 9. 26 | ·0952 | | | | | |
| 12. 15 | 6. 30 | 9. 45 | ·0955 | | | | | |
| 12. 29 | 7. 30 | 10. 4 | ·0981 | | | | | |
| 12. 43 | 7. 0 | 10. 46 | ·0965 | | | | | |
| 13. 40 | 12. 30 | 10. 56 | ·0967 | | | | | |
| 14. 43 | 13. 20 | 11. 13 | ·0960 | | | | | |
| | *** | 11. 43 | ·0968 | | | | | |
| 19. 43 | 9. 25 | 12. 6 | ·0955 | | | | | |
| 20. 32 | 11. 10 | 12. 17 | ·0953 | | | | | |
| 23. 45 | 24. 0 | 12. 44 | ·0943 | | | | | |
| 23. 59 | 24. 30 | 13. 58 | ·0954 | | | | | |
| | | | *** | | | | | |
| | | 16. 37 | ·0958 | | | | | |
| | | | *** | | | | | |
| | | 18. 46 | ·0952 | | | | | |
| | | 21. 6 | ·0933 | | | | | |
| | | 21. 34 | ·0935 | | | | | |
| | | 21. 52 | ·0929 | | | | | |
| | | 23. 59 | ·0933 | | | | | |
| Sept. 1 | | Sept. 1 | | Sept. 1 | | Sept. 1 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0933 | 0. 0 | ·04218 | 1. 0 | 62 ·6 | 63 ·0 |
| 0. 12 | 24. 50 | 0. 25 | ·0942 | 0. 29 | {·04200 | 3. 0 | 64 ·0 | 65 ·7 |
| 0. 22 | 26. 30 | 0. 46 | ·0938 | | {·04244 | 9. 0 | 65 ·4 | 66 ·0 |
| 2. 27 | 21. 0 | 1. 5 | ·0945 | 5. 5 | {·03565 | 21. 30 | 58 ·2 | 58 ·6 |
| | *** | | *** | | {·03660 | | | |
| 4. 59 | 10. 15 | 2. 30 | ·0952 | 6. 13 | {·03544 | | | |
| 6. 28 | 10. 10 | 2. 46 | ·0947 | | {·03708 | | | |
| 6. 51 | 6. 30 | | *** | 7. 9 | {·03617 | | | |
| 7. 15 | 11. 0 | 3. 15 | ·0946 | | {·03700 | | | |
| 7. 39 | 10. 0 | 3. 30 | ·0950 | 8. 23 | {·03623 | | | |
| 9. 7 | 12. 0 | 3. 37 | ·0946 | | {·03675 | | | |
| 9. 52 | 9. 20 | | *** | 13. 7: | ·03740 | | | |
| 10. 0 | 10. 30 | 3. 53 | ·0945 | 19. 28 | ·04312 | | | |
| 10. 51 | 5. 50 | 4. 15 | ·0952 | 23. 59 | ·04295 | | | |
| 11. 40 | 8. 50 | 4. 40 | ·0935 | | | | | |
| 12. 8 | 7. 15 | 4. 52 | ·0942 | | | | | |
| | *** | | *** | | | | | |
| 13. 13 | 8. 10 | 5. 24 | ·0936 | | | | | |
| 13. 52 | 17. 30 | 6. 4 | ·0945 | | | | | |
| 14. 23 | 13. 30 | 6. 30 | ·0945 | | | | | |
| 15. 9 | 10. 30 | 6. 33 | ·0942 | | | | | |
| 15. 55 | 12. 10 | 6. 46 | ·0946 | | | | | |
| | *** | 7. 0 | ·0953 | | | | | |
| 18. 0 | 6. 0 | 7. 6 | ·0945 | | | | | |
| 18. 29 | 8. 30 | 7. 20 | ·0942 | | | | | |
| | *** | 8. 0 | ·0951 | | | | | |
| 19. 55 | 5. 30 | | *** | | | | | |
| 20. 52 | 6. 45 | 9. 0 | ·0949 | | | | | |
| 23. 15 | 22. 0 | 9. 20: | ·0956 | | | | | |
| 23. 40 | 25. 30 | 9. 39 | ·0951 | | | | | |
| 23. 59 | 25. 45 | 10. 10 | ·0960 | | | | | |

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 | ° ′ ″ | Sept. 1 h m | | h m | | h m | ° | ° |
| | | 10. 20 | ·0957 | | | | | |
| | | 10. 33 | ·0959 | | | | | |
| | | 10. 46 | ·0954 | | | | | |
| | | 11. 6 | ·0959 | | | | | |
| | | | *** | | | | | |
| | | 13. 13 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 14. 40 | ·0958 | | | | | |
| | | | *** | | | | | |
| | | 15. 42 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 17. 20 | ·0957 | | | | | |
| | | | *** | | | | | |
| | | 22. 6 | ·0928 | | | | | |
| | | 22. 17 | ·0934 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0937 | | | | | |
| Sept. 2 | | Sept. 2 | | Sept. 2 | | Sept. 2 | | |
| 0. 0 | 21. 25. 45 | 0. 0 | ·0937 | 0. 0 | ·04295 | 8. 45 | 63 ·7 | 64 ·3 |
| 0. 37 | 24. 20 | 1. 37 | ·0955 | 1. 56 | ·04256 | 21. 0 | 58 ·0 | 58 ·5 |
| 0. 50 | 24. 0 | 1. 52 | ·0950 | 2. 30 | ·04274 | | | |
| 1. 27 | 25. 30 | 2. 20 | ·0979 | 8. 10: | ·03717 | | | |
| 1. 41 | 24. 40 | 2. 36 | ·0981 | 12. 55 | ·03610 | | | |
| 1. 55 | 36. 10 | 2. 52 | ·0961 | 19. 28 | ·04028 | | | |
| 2. 52 | 23. 30 | 3. 15 | ·0958 | 21. 18 | ·04111 | | | |
| 3. 19 | 19. 30 | 3. 42 | ·0961 | 22. 29 | ·04188 | | | |
| 4. 39 | 14. 20 | 3. 50 | ·0957 | 23. 59 | ·04228 | | | |
| 5. 25 | 8. 45 | 4. 10 | ·0956 | | | | | |
| 5. 36 | 9. 30 | 4. 20 | ·0959 | | | | | |
| | | | *** | | | | | |
| 6. 9 | 8. 0 | | | | | | | |
| 6. 29 | 9. 10 | 5. 6 | ·0948 | | | | | |
| 6. 40 | 8. 50 | 5. 33 | ·0961 | | | | | |
| 6. 59 | 10. 50 | 5. 37 | ·0957 | | | | | |
| 7. 21 | 10. 30 | 5. 46 | ·0957 | | | | | |
| 7. 42 | 11. 15 | 6. 3 | ·0952 | | | | | |
| 8. 55 | 10. 25 | 6. 8 | ·0955 | | | | | |
| 11. 38 | 12. 20 | 6. 42 | ·0948 | | | | | |
| | | | *** | | | | | |
| 11. 51 | 15. 30 | | | | | | | |
| 13. 15 | 11. 0 | 7. 37 | ·0955 | | | | | |
| | | | *** | | | | | |
| 13. 42 | 12. 0 | | | | | | | |
| 13. 54 | 10. 40 | 11. 3 | ·0956 | | | | | |
| 14. 19 | 10. 5 | 12. 16 | ·0968 | | | | | |
| 14. 56 | 13. 25 | 12. 50 | ·0967 | | | | | |
| 15. 21 | 11. 50 | 13. 11 | ·0960 | | | | | |
| 15. 55 | 14. 30 | 14. 16 | ·0962 | | | | | |
| 16. 43 | 10. 40 | 15. 3 | ·0958 | | | | | |
| 17. 0 | 11. 0 | 15. 17 | ·0960 | | | | | |
| | *** | 15. 30 | ·0956 | | | | | |
| 18. 11 | 7. 55 | 16. 15 | ·0964 | | | | | |
| 18. 30 | 9. 10 | 17. 18 | ·0954 | | | | | |
| 19. 0 | 8. 10 | 18. 7 | ·0952 | | | | | |
| 19. 20 | 9. 20 | 18. 46 | ·0941 | | | | | |
| 19. 50 | 8. 0 | 19. 6 | ·0945 | | | | | |
| | | | *** | | | | | |
| 21. 44 | 15. 25 | | | | | | | |
| 22. 46 | 21. 5 | 21. 30 | ·0929 | | | | | |
| 23. 59 | 24. 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 | ° ′ ″ | Sept. 2 h m | | h m | | h m | ° | ° |
| | | 22. 46 | ·0934 | | | | | |
| | | 23. 59 | ·0936 | | | | | |
| Sept. 3 | | Sept. 3 | | Sept. 3 | | Sept. 3 | | |
| 0. 0 | 21. 24. 0 | | (†) | 0. 0 | ·04228 | 1. 0 | 61 ·3 | 62 ·2 |
| 1. 37 | 23. 15 | 1. 0 | ·0941* | 1. 40 | ·04186 | 3. 0 | 63 ·0 | 64 ·6 |
| 1. 57 | 20. 20 | 1. 46 | ·0943 | 4. 41 | ·03684 | 9. 0 | 64 ·0 | 64 ·9 |
| 3. 38 | 16. 0 | 2. 45 | ·0945 | 6. 17 | ·03537 | 21. 0 | 58 ·0 | 59 ·0 |
| 4. 27 | 11. 0 | 3. 40 | ·0958 | 13. 19: | ·03580 | | | |
| 5. 50 | 9. 45 | 4. 20 | ·0942 | 21. 52 | ·04145 | | | |
| 6. 54 | 11. 45 | 4. 53 | ·0951 | 23. 37 | ·04213 | | | |
| 8. 58 | 12. 20 | | *** | | (†) | | | |
| 9. 25 | 10. 50 | 5. 50 | ·0946 | | | | | |
| 10. 44 | 10. 45 | 8. 17 | ·0955 | | | | | |
| 11. 12 | 12. 15 | | *** | | | | | |
| 14. 51 | 13. 15 | 10. 46 | ·0954 | | | | | |
| 18. 52 | 8. 30 | 15. 6 | ·0960 | | | | | |
| 19. 15 | 7. 10 | 17. 30 | ·0959 | | | | | |
| 20. 26 | 7. 30 | 20. 33 | ·0938 | | | | | |
| 21. 48 | 11. 40 | 22. 36: | ·0932 | | | | | |
| 23. 45 | 19. 20 | 23. 59 | ·0939 | | | | | |
| 23. 59 | 19. 0 | | | | | | | |
| Sept. 4 | | Sept. 4 | | Sept. 4 | | Sept. 4 | | |
| 0. 0 | 21. 19. 0 | 0. 0 | ·0939 | | (†) | 1. 0 | 60 ·8 | 61 ·3 |
| 0. 41 | 20. 45 | 0. 47 | ·0950 | 0. 30 | ·01792* | 3. 0 | 62 ·8 | 63 ·2 |
| 1. 34 | 20. 30 | 1. 33 | ·0949 | 2. 31 | ·01788 | 9. 0 | 64 ·0 | 64 ·7 |
| 1. 42 | 22. 35 | 1. 40 | ·0971 | 4. 28 | ·01828 | 21. 0 | 57 ·0 | 57 ·4 |
| | *** | 2. 3 | ·0965 | 6. 22 | ·01974 | | | |
| 2. 17 | 20. 20 | | *** | 6. 49 | ·02066 | | | |
| 2. 28 | 21. 10 | 2. 26 | ·0971 | 7. 15 | ·02004 | | | |
| 2. 41 | 19. 30 | 3. 0: | ·0966 | 10. 10 | ·01865 | | | |
| 3. 13 | 17. 20 | 3. 28 | ·0975 | 13. 50 | ·01912 | | | |
| 3. 29 | 17. 30 | 3. 37 | ·0973 | 19. 0 | ·02406 | | | |
| 3. 43 | 16. 0 | 3. 46 | ·0985 | 23. 59 | ·02300 | | | |
| 3. 49 | 17. 20 | 3. 58 | ·0982 | | | | | |
| 4. 0 | 15. 45 | 4. 7 | ·0991 | | | | | |
| 4. 10 | 16. 30 | 4. 10 | ·0985 | | | | | |
| 4. 15 | 14. 40 | 4. 22 | ·1014 | | | | | |
| 4. 19 | 16. 0 | 4. 33 | ·1004 | | | | | |
| 4. 30 | 12. 30 | 4. 40 | ·1020 | | | | | |
| 4. 44 | 11. 40 | 5. 6 | ·0984 | | | | | |
| 5. 13 | 15. 30 | | *** | | | | | |
| 5. 39 | 17. 0 | 5. 33 | ·0992 | | | | | |
| 5. 52 | 12. 30 | 5. 36 | ·0960 | | | | | |
| 6. 12 | 15. 40 | 6. 0 | ·0975 | | | | | |
| 6. 21 | 21. 14. 50 | 6. 22 | ·0934 | | | | | |
| 6. 54 | 20. 57. 20 | 6. 58 | ·0959 | | | | | |
| 7. 10 | 21. 1. 30 | 7. 15 | ·0938 | | | | | |
| 7. 16 | 8. 50 | 7. 22 | ·0943 | | | | | |
| 7. 24 | 6. 50 | 7. 30 | ·0940 | | | | | |
| 8. 25 | 13. 30 | 7. 56 | ·0947 | | | | | |
| 8. 40 | 11. 50 | | *** | | | | | |
| 9. 25 | 0. 30 | 8. 45 | ·0947 | | | | | |
| 9. 54 | 13. 10 | 9. 7 | ·0956 | | | | | |
| 10. 13 | 6. 30 | 9. 16 | ·0950 | | | | | |
| 10. 28 | 5. 20 | 9. 36 | ·0955 | | | | | |
| 10. 54 | 10. 40 | 10. 6 | ·0930 | | | | | |
| | | | *** | | | | | |

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

VERTICAL FORCE.—September 4 at 0h. 30m. the adjustments were altered so that the scale-reading was diminished by 15·8 divisions, or by 0·023668 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. |
|---|---|---|---|---|---|---|---|---|
| Sept. 4 | | Sept. 4 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 11. 26 | 21. 7. 30 | 10. 40 | ·0933 | | | | | |
| | *** | 10. 46 | ·0928 | | | | | |
| 12. 15 | 11. 30 | 11. 2 | ·0937 | | | | | |
| 12. 36 | 10. 20 | 11. 15 | ·0933 | | | | | |
| 12. 43 | 11. 0 | 11. 53 | ·0948 | | | | | |
| 12. 59 | 15. 0 | | *** | | | | | |
| 13. 26 | 12. 45 | 12. 37 | ·0944 | | | | | |
| 13. 45 | 18. 0 | 13. 0 | ·0956 | | | | | |
| 14. 36 | 9. 30 | | *** | | | | | |
| 14. 43 | 10. 20 | 13. 43 | ·0957 | | | | | |
| 15. 6 | 8. 0 | | *** | | | | | |
| 15. 28 | 7. 30 | 13. 50 | ·0947 | | | | | |
| | *** | | *** | | | | | |
| 16. 55 | 11. 30 | 14. 20 | ·0942 | | | | | |
| 17. 8 | 10. 15 | 15. 17 | ·0956 | | | | | |
| 18. 51 | 8. 10 | | *** | | | | | |
| 19. 12 | 10. 50 | 16. 26 | ·0960 | | | | | |
| 19. 30 | 7. 45 | | *** | | | | | |
| 19. 51 | 9. 30 | 16. 42 | ·0952 | | | | | |
| 19. 58 | 8. 50 | 16. 50 | ·0959 | | | | | |
| 20. 28 | 12. 10 | 17. 0 | ·0955 | | | | | |
| 20. 51 | 10. 40 | 17. 17 | ·0958 | | | | | |
| 22. 7 | 18. 0 | | *** | | | | | |
| 23. 43 | 24. 25 | 18. 53 | ·0956 | | | | | |
| 23. 59 | 24. 10 | | *** | | | | | |
| | | 21. 0 | ·0939 | | | | | |
| | | 21. 26 | ·0941 | | | | | |
| | | | *** | | | | | |
| | | 22. 25 | ·0930 | | | | | |
| | | 22. 40 | ·0933 | | | | | |
| | | 23. 59 | ·0937 | | | | | |
| Sept. 5 | | Sept. 5 | | Sept. 5 | | Sept. 5 | | |
| 0. 0 | 21. 24. 10 | 0. 0 | ·0937 | 0. 0 | ·02300 | 0. 0 | 59 ·0 | 60 ·0 |
| 0. 44 | 25. 20 | 0. 37 | ·0946 | 1. 39 | ·02298 | 1. 0 | 60 ·3 | 61 ·4 |
| | *** | 0. 50 | ·0940 | 4. 52 | ·01852 | 3. 0 | 62 ·7 | 63 ·2 |
| 1. 37 | 21. 0 | 1. 4 | ·0932 | 11. 14 | ·01886 | 6. 0 | 64 ·7 | 65 ·9 |
| 2. 27 | 22. 40 | 1. 13 | ·0939 | | ·02200 | 9. 0 | 65 ·0 | 65 ·8 |
| 2. 47 | 21. 10 | 1. 30 | ·0944 | 14. 9 | ·02137 | 12. 0 | 64 ·3 | 65 ·8 |
| 3. 5 | 21. 20 | 1. 47 | ·0936 | 22. 36 | ·02428 | 18. 0 | 62 ·5 | 63 ·4 |
| 4. 30 | 13. 40 | 2. 10 | ·0942 | 23. 59 | ·02408 | 21. 0 | 62 ·3 | 63 ·2 |
| 5. 0 | 13. 50 | | *** | | | | | |
| 6. 10 | 11. 45 | 3. 17 | ·0939 | | | | | |
| 7. 20 | 12. 20 | 3. 26 | ·0944 | | | | | |
| 8. 0 | 10. 0 | 3. 47 | ·0925 | | | | | |
| 8. 17 | 10. 30 | | *** | | | | | |
| 8. 51 | 9. 45 | 5. 15 | ·0943 | | | | | |
| 10. 10 | 11. 40 | 5. 33 | ·0942 | | | | | |
| 10. 26 | 13. 0 | 5. 56 | ·0949 | | | | | |
| 11. 46 | 12. 30 | 6. 47 | ·0946 | | | | | |
| 11. 59 | 14. 10 | 7. 6 | ·0952 | | | | | |
| 12. 30 | 10. 40 | | *** | | | | | |
| 12. 46 | 11. 30 | 10. 40 | ·0947 | | | | | |
| 12. 55 | 10. 50 | | *** | | | | | |
| 13. 7 | 11. 45 | 11. 41 | ·0952 | | | | | |
| 13. 13 | 11. 0 | 11. 53 | ·0961 | | | | | |
| 13. 21 | 12. 20 | 12. 30 | ·0950 | | | | | |
| 13. 35 | 11. 0 | 12. 57 | ·0965 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 5 | | Sept. 5 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 13. 55 | 21. 13. 40 | 13. 26 | ·0944 | | | | | |
| 14. 27 | 8. 50 | 13. 48 | ·0957 | | | | | |
| 14. 42 | 7. 50 | 14. 50 | ·0942 | | | | | |
| 15. 30 | 11. 10 | 15. 56 | ·0944 | | | | | |
| 15. 53 | 10. 30 | | *** | | | | | |
| 16. 10 | 11. 40 | 18. 40 | ·0952 | | | | | |
| 16. 52 | 11. 15 | 22. 35 | ·0922 | | | | | |
| 18. 15 | 7. 20 | | *** | | | | | |
| 20. 5 | 7. 5 | 23. 6 | ·0931 | | | | | |
| 20. 45 | 8. 10 | 23. 15 | ·0928 | | | | | |
| 22. 10 | 12. 40 | 23. 59 | ·0930 | | | | | |
| 23. 59 | 20. 50 | | | | | | | |
| Sept. 6 | | Sept. 6 | | Sept. 6 | | Sept. 6 | | |
| 0. 0 | 21. 20. 50 | 0. 0 | ·0930 | 0. 0 | ·02408 | 0. 0 | 62 ·7 | 63 ·2 |
| 1. 5 | 24. 0 | | *** | 2. 53 | ·02470 | 1. 0 | 63 ·3 | 63 ·0 |
| 2. 25 | 21. 20 | 1. 11 | ·0946 | 8. 46 | ·02123 | 3. 0 | 63 ·5 | 64 ·3 |
| 4. 51 | 12. 10 | | *** | 9. 45 | ·02000 | 9. 0 | 64 ·8 | 66 ·2 |
| 7. 44 | 11. 40 | 1. 56 | ·0938 | 10. 14 | ·01987 | 21. 0 | 58 ·3 | 59 ·0 |
| 8. 11 | 5. 15 | 2. 47 | ·0956 | 10. 39 | ·02070 | | | |
| 8. 28 | 1. 10 | 3. 15 | ·0955 | 11. 0 | ·02012 | | | |
| 9. 11 | 26. 30 | 3. 33 | ·0943 | 11. 11 | ·02044 | | | |
| 9. 24 | 21. 21. 0 | 3. 57 | ·0937 | 11. 20 | ·01967 | | | |
| 9. 50 | 20. 59. 30 | 5. 0 | ·0951 | 11. 41 | ·02018 | | | |
| 9. 59 | 21. 4. 0 | 5. 8 | ·0946 | 12. 2 | ·01983 | | | |
| 10. 11 | 20. 58. 20 | 7. 11 | ·0957 | 12. 27 | ·02033 | | | |
| 10. 30 | 21. 16. 0 | 7. 26 | ·0964 | 12. 52 | ·01950 | | | |
| 10. 45 | 12. 10 | 7. 45 | ·0961 | 13. 46: | ·02074 | | | |
| 10. 48 | 13. 25 | 8. 20 | ·1009 | 14. 40 | ·01990 | | | |
| 11. 11 | 0. 45 | 8. 34 | ·1002 | 14. 59 | ·01440 | | | |
| 11. 21 | 11. 10 | | *** | 15. 17 | ·01730 | | | |
| 11. 39 | 5. 0 | 8. 40 | ·1007 | 15. 26 | ·01638 | | | |
| 11. 57 | 18. 30 | 9. 3 | ·0908 | 15. 33 | ·01742 | | | |
| 12. 26 | 6. 30 | 9. 18 | ·0872 | | *** | | | |
| 12. 46 | 14. 10 | 9. 37 | ·0908 | 16. 21 | ·01366 | | | |
| 12. 54 | 13. 0 | 9. 50 | ·0896 | 17. 18 | ·02130 | | | |
| 12. 59 | 15. 0 | 10. 14 | ·0920 | | *** | | | |
| 13. 13 | 9. 10 | 10. 25 | ·0906 | 21. 39 | ·02540 | | | |
| 13. 29 | 24. 0 | 10. 37 | ·0891 | 21. 53 | ·02486 | | | |
| 13. 41 | 40. 10 | 10. 46 | ·0919 | 23. 59 | ·02452 | | | |
| 13. 46 | 20. 30 | 10. 53 | ·0910 | | | | | |
| 14. 0 | 49. 0 | 11. 12 | ·0925 | | | | | |
| 14. 43 | 6. 45 | 11. 34 | ·0903 | | | | | |
| 15. 7 | 52. 45 | | *** | | | | | |
| 15. 15 | 35. 10 | 12. 3 | ·0938 | | | | | |
| 15 18 | 43. 20 | 12. 15 | ·0923 | | | | | |
| 15. 21 | 41. 0 | | *** | | | | | |
| 15. 24 | 47. 30 | 12. 48 | ·0934 | | | | | |
| 15. 40 | 19. 0 | | *** | | | | | |
| 15. 46 | 21. 29. 30 | 13. 7 | ·0927 | | | | | |
| 16. 15 | 20. 59. 30 | 13. 18 | ·0965 | | | | | |
| | *** | 13. 32 | ·0950 | | | | | |
| 16. 51 | 21. 6. 10 | | *** | | | | | |
| 16. 57 | 15. 55 | 13. 46 | ·0941 | | | | | |
| 17. 11 | 1. 10 | 13. 56 | ·0904 | | | | | |
| | (†) | 14. 6 | ·0935 | | | | | |
| 20. 42 | 16. 10 | 14. 18 | ·0796 | | | | | |
| | *** | 14. 30 | ·0847 | | | | | |

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. 6 | | Sept. 6 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 15 | 21. 21. 20 | 14. 35 | ·0816 | | | | | |
| | *** | 14. 38 | ·0840 | | | | | |
| 21. 39 | 16. 50 | 14. 43 | ·0826 | | | | | |
| | *** | 14. 50 | ·0862 | | | | | |
| 23. 59 | 24. 0 | | (†) | | | | | |
| | | 21. 0 | ·0834* | | | | | |
| Sept. 7 | | Sept. 7 | | Sept. 7 | | Sept. 7 | | |
| 0. 0 | 21. 24. 0 | | (†) | 0. 0 | ·02452 | 1. 0 | 61 ·3 | 62 ·0 |
| | *** | 1. 0 | ·0904* | | *** | 3. 0 | 64 ·7 | 65 ·4 |
| 1. 37 | 30. 0 | 3. 0 | ·0923* | 1. 26 | ·02516 | 9. 0 | 66 ·7 | 67 ·2 |
| | *** | 3. 7 | ·0926 | 2. 12 | ·02337 | 21. 0 | 59 ·3 | 60 ·2 |
| 2. 26 | 25. 30 | | *** | 2. 29 | ·02342 | | | |
| 2. 40 | 36. 45 | 3. 50 | ·0945 | 2. 39 | ·02291 | | | |
| 2. 44 | 31. 30 | 4. 20 | ·0902 | 3. 11 | ·02233 | | | |
| 2. 48 | 36. 0 | 4. 26 | ·0906 | 3. 24 | ·02337 | | | |
| 2. 52 | 33. 30 | | *** | 3. 40 | ·02312 | | | |
| 2. 56 | 35. 50 | 4. 49 | ·0889 | 4. 36 | ·02022 | | | |
| 3. 12 | 30. 30 | 5. 10 | ·0904 | 5. 13 | ·01988 | | | |
| 3. 25 | 35. 50 | 5. 18 | ·0894 | 5. 40 | ·02104 | | | |
| 3. 38 | 22. 0 | 5. 43 | ·0968 | 6. 12 | ·01950 | | | |
| 3. 41 | 25. 50 | 5. 47 | ·0951 | 6. 25 | ·01980 | | | |
| 3. 43 | 27. 30 | 5. 52 | ·0959 | 6. 45 | ·01942 | | | |
| 3. 45 | 28. 15 | 6. 13 | ·0883 | 6. 53 | ·02045 | | | |
| 4. 0 | 16. 30 | 6. 34 | ·0927 | 7. 30 | ·01980 | | | |
| 4. 14 | 19. 0 | 6. 47 | ·0900 | 10. 16 | ·01880 | | | |
| 4. 29 | 15. 0 | 7. 2 | ·0909 | 10. 39 | ·01902 | | | |
| 5. 19 | 21. 17. 25 | 7. 10 | ·0938 | 11. 11 | ·01790 | | | |
| 5. 45 | 20. 53. 30 | 7. 17 | ·0909 | 11. 43 | ·01803 | | | |
| 5. 52 | 21. 6. 30 | 7. 38 | ·0913 | 12. 0 | ·01864 | | | |
| 5. 55 | 5. 0 | | *** | 13. 37 | ·01952 | | | |
| 6. 12 | 16. 15 | 8. 7 | ·0910 | 13. 54 | ·01920 | | | |
| 6. 23 | 5. 30 | | *** | 15. 44 | ·02136 | | | |
| 6. 42 | 12. 40 | 9. 4 | ·0918 | 19. 14 | ·02542 | | | |
| 6. 55 | 9. 20 | | *** | 23. 59 | ·02430 | | | |
| 7. 11 | 9. 10 | 9. 26 | ·0939 | | | | | |
| 7. 15 | 12. 15 | | *** | | | | | |
| 7. 29 | 8. 30 | 9. 40 | ·0937 | | | | | |
| 8. 7 | 15. 50 | 9. 49 | ·0954 | | | | | |
| 8. 18 | 13. 30 | | *** | | | | | |
| | *** | 10. 25 | ·0918 | | | | | |
| 9. 29 | 13. 10 | 10. 42 | ·1024 | | | | | |
| 9. 49 | 9. 20 | 10. 46 | ·1010 | | | | | |
| 10. 0 | 15. 0 | 10. 48 | ·1025 | | | | | |
| 10. 15 | 13. 50 | 10. 51 | ·1013 | | | | | |
| 10. 27 | 0. 40 | 11. 0 | ·1024 | | | | | |
| 10. 30 | 12. 0 | 11. 15 | ·0963 | | | | | |
| 10. 37 | 19. 0 | 11. 27 | ·0937 | | | | | |
| | *** | 11. 42 | ·0896 | | | | | |
| 11. 0 | 26. 0 | 12. 6 | ·0940 | | | | | |
| 11. 7 | 18. 30 | 12. 30 | ·0919 | | | | | |
| | *** | | *** | | | | | |
| 11. 25 | 21. 21. 20 | 12. 39 | ·0921 | | | | | |
| 11. 48 | 20. 57. 20 | | *** | | | | | |
| 12. 10 | 21. 5. 0 | 13. 18 | ·0905 | | | | | |
| 12. 40 | 3. 0 | | *** | | | | | |
| 13. 14 | 10. 40 | 13. 41 | ·0912 | | | | | |
| 13. 43 | 22. 0 | 13. 46 | ·0930 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 13. 56 | 21. 16. 30 | 13. 53 | ·0908 | | | | | |
| 14. 11 | 18. 0 | 14. 13 | ·0919 | | | | | |
| 14. 27 | 13. 20 | 14. 30 | ·0907 | | | | | |
| 14. 57 | 14. 45 | 14. 46 | ·0919 | | | | | |
| | *** | 14. 54 | ·0913 | | | | | |
| 16. 55 | 9. 0 | 15. 6 | ·0918 | | | | | |
| | *** | 15. 17 | ·0909 | | | | | |
| 17. 43 | 10. 40 | | *** | | | | | |
| | *** | 16. 16 | ·0925 | | | | | |
| 18. 21 | 8. 30 | | *** | | | | | |
| | *** | 17. 43 | ·0933 | | | | | |
| 19. 13 | 9. 30 | | *** | | | | | |
| 19. 16 | 4. 45 | 18. 17 | ·0930 | | | | | |
| | *** | 18. 26 | ·0935 | | | | | |
| 19. 40 | 10. 30 | 18. 33 | ·0927 | | | | | |
| | *** | 18. 40 | ·0933 | | | | | |
| 20. 9 | 9. 30 | | *** | | | | | |
| 20. 15 | 12. 10 | 19. 30 | ·0924 | | | | | |
| 20. 20 | 10. 30 | | *** | | | | | |
| | *** | 19. 47 | ·0928 | | | | | |
| 22. 10 | 14. 0 | | *** | | | | | |
| 22. 27 | 16. 25 | 21. 26 | ·0914 | | | | | |
| 22. 30 | 13. 0 | | *** | | | | | |
| 22. 40 | 15. 30 | 21. 37 | ·0922 | | | | | |
| 22. 55 | 15. 20 | | *** | | | | | |
| 23. 59 | 18. 0 | 21. 51 | ·0915 | | | | | |
| | | 22. 33 | ·0915 | | | | | |
| | | 22. 47 | ·0928 | | | | | |
| | | 22. 49 | ·0917 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0925 | | | | | |
| Sept. 8 | | Sept. 8 | | Sept. 8 | | Sept. 8 | | |
| 0. 0 | 21. 18. 0 | 0. 0 | ·0925 | 0. 0 | ·02430 | 1. 0 | 62 ·4 | 62 ·3 |
| | *** | 1. 6 | ·0927 | 0. 29 | ·02414 | 3. 0 | 64 ·7 | 65 ·4 |
| 1. 12 | 20. 50 | 1. 17 | ·0916 | 1. 0 | ·02450 | 9. 0 | 66 ·0 | 67 ·0 |
| 1. 26 | 16. 50 | 1. 46 | ·0932 | 4. 26 | ·02200 | 22. 30 | 58 ·0 | 58 ·4 |
| 2. 10 | 17. 30 | 1. 50 | ·0921 | 6. 11 | ·01918 | | | |
| 2. 14 | 16. 40 | 2. 2 | ·0928 | 6. 24 | ·01935 | | | |
| 2. 44 | 18. 40 | 2. 4 | ·0921 | 7. 11 | ·01818 | | | |
| 2. 54 | 17. 10 | 2. 30 | ·0934 | 13. 21 | ·01825 | | | |
| 3. 9 | 18. 40 | 2. 46 | ·0919 | 15. 43 | ·01946 | | | |
| 3. 17 | 15. 30 | 3. 3 | ·0941 | 22. 11 | ·02492 | | | |
| 3. 29 | 14. 30 | 3. 10 | ·0930 | 23. 59 | ·02462 | | | |
| 3. 41 | 15. 20 | 3. 33 | ·0953 | | | | | |
| 4. 21 | 3. 20 | 4. 0 | ·0915 | | | | | |
| 4. 51 | 11. 30 | 4. 20 | ·0958 | | | | | |
| 4. 57 | 9. 30 | 4. 33 | ·0950 | | | | | |
| 5. 14 | 12. 30 | 4. 40 | ·0964 | | | | | |
| 5. 30 | 10. 30 | 4. 47 | ·0950 | | | | | |
| 5. 44 | 12. 20 | 4. 52 | ·0956 | | | | | |
| 6. 0 | 21. 12. 30 | 5. 10 | ·0944 | | | | | |
| 6. 30 | 20. 52. 0 | 5. 26 | ·0948 | | | | | |
| 7. 0 | 21. 3. 30 | 5. 40 | ·0935 | | | | | |
| 7. 39 | 11. 55 | 6. 7 | ·0904 | | | | | |
| 7. 45 | 10. 15 | 6. 30 | ·0958 | | | | | |
| 8. 26 | 13. 50 | 6. 46 | ·0945 | | | | | |
| 16. 17 | 10. 50 | 6. 56 | ·0947 | | | | | |

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. 8 | | Sept. 8 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 17. 26 | 21. 12. 0 | 7. 4 | ·0938 | | | | | |
| | | | *** | | | | | |
| 17. 42 | 14. 10 | | | | | | | |
| 17. 51 | 13. 30 | 7. 34 | ·0928 | | | | | |
| | | | *** | | | | | |
| 18. 31 | 19. 10 | | | | | | | |
| | *** | 8. 4 | ·0932 | | | | | |
| | | | *** | | | | | |
| 20. 14 | 12. 0 | | | | | | | |
| | *** | 8. 33 | ·0928 | | | | | |
| 21. 43 | 15. 40 | 9. 7 | ·0933 | | | | | |
| 21. 51 | 13. 55 | 9. 20 | ·0925 | | | | | |
| 23. 40 | 17. 20 | 9. 40 | ·0930 | | | | | |
| | | | *** | | | | | |
| 23. 45 | 16. 5 | | | | | | | |
| 23. 54 | 18. 30 | 14. 53 | ·0938 | | | | | |
| | | | *** | | | | | |
| 23. 59 | 17. 45 | | | | | | | |
| | | 15. 20 | ·0944 | | | | | |
| | | | *** | | | | | |
| | | 16. 35 | ·0938 | | | | | |
| | | 16. 45 | ·0943 | | | | | |
| | | | *** | | | | | |
| | | 17. 33 | ·0935 | | | | | |
| | | 17. 45 | ·0919 | | | | | |
| | | | *** | | | | | |
| | | 18. 17 | ·0905 | | | | | |
| | | | *** | | | | | |
| | | 18. 40 | ·0915 | | | | | |
| | | 19. 10 | ·0933 | | | | | |
| | | | *** | | | | | |
| | | 20. 20 | ·0927 | | | | | |
| | | | *** | | | | | |
| | | 20. 47 | ·0914 | | | | | |
| | | 21. 30 | ·0919 | | | | | |
| | | 21. 46 | ·0912 | | | | | |
| | | 22. 45 | ·0921 | | | | | |
| | | 23. 3 | ·0916 | | | | | |
| | | 23. 59 | ·0919 | | | | | |
| Sept. 9 | | Sept. 9 | | Sept. 9 | | Sept. 9 | | |
| 0. 0 | 21. 17. 45 | 0. 0 | ·0919 | 0. 0 | ·02462 | 7. 0 | 61 ·0 | 62 ·0 |
| 0. 7 | 17. 15 | 0. 26 | ·0921 | 2. 10 | ·02455 | 21. 0 | 53 ·3 | 54 ·0 |
| 0. 18 | 18. 30 | 0. 45 | ·0933 | 9. 54: | ·02143 | | | |
| 0. 24 | 17. 50 | 1. 4 | ·0925 | 16. 42 | ·02474 | | | |
| 0. 45 | 20. 50 | 1. 47 | ·0925 | 19. 41 | ·02312 | | | |
| 0. 57 | 19. 5 | | *** | 22. 33 | ·02077 | | | |
| 1. 6 | 20. 0 | 2. 35 | ·0934 | 23. 59 | ·02012 | | | |
| 1. 15 | 18. 40 | 2. 46 | ·0930 | | | | | |
| 1. 37 | 18. 25 | | *** | | | | | |
| 1. 56 | 19. 0 | 4. 2 | ·0941 | | | | | |
| 2. 16 | 18. 40 | | *** | | | | | |
| 2. 45 | 15. 50 | 6. 50 | ·0946 | | | | | |
| 4. 12 | 13. 20 | 7. 6 | ·0937 | | | | | |
| | *** | 8. 0 | ·0947 | | | | | |
| 15. 57 | 11. 20 | 8. 16 | ·0941 | | | | | |
| 16. 10 | 12. 30 | 8. 38 | ·0946 | | | | | |
| 17. 10 | 10. 40 | 8. 46 | ·0943 | | | | | |
| | | | *** | | | | | |
| 17. 48 | 11. 30 | | | | | | | |
| 20. 7 | 8. 0 | 18. 53 | ·0948 | | | | | |
| | *** | | *** | | | | | |
| 22. 18 | 17. 30 | 20. 37 | ·0934 | | | | | |
| | *** | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 23. 30 | 21. 18. 15 | 22. 20 | ·0930 | | | | | |
| | (†) | 23. 59 | ·0935 | | | | | |
| Sept. 10 | | Sept. 10 | | Sept. 10 | | Sept. 10 | | |
| | (†) | 0. 0 | ·0935 | 0. 0 | ·02012 | 1. 0 | 56 ·8 | 57 ·2 |
| 1. 0 | 21. 20. 56* | 1. 2 | ·0936 | 0. 41 | ·02010 | 3. 0 | 58 ·4 | 58 ·8 |
| 3. 0 | 18. 19* | | *** | 2. 15 | ·01868 | 9. 0 | 60 ·0 | 60 ·6 |
| 3. 16 | 16. 20 | 1. 33 | ·0947 | 6. 41 | ·01477 | 21. 0 | 53 ·0 | 53 ·6 |
| 3. 40 | 13. 40 | 2. 17 | ·0941 | 11. 42 | ·01344 | | | |
| 4. 11 | 13. 0 | | *** | 13. 14 | ·01392 | | | |
| 4. 30 | 14. 10 | 3. 10 | ·0955 | 13. 52 | ·01377 | | | |
| 5. 7 | 12. 45 | 3. 32 | ·0946 | 14. 14 | ·01328 | | | |
| 6. 43 | 12. 45 | 4. 7: | ·0943 | 14. 45 | ·01350 | | | |
| 7. 27 | 9. 10 | 4. 33 | ·0950 | 16. 20 | ·01562 | | | |
| 7. 45 | 8. 50 | 4. 42 | ·0947 | 21. 45 | ·02044 | | | |
| 8. 7 | 10. 0 | 4. 56 | ·0949 | 23. 2 | ·01948 | | | |
| 8. 28 | 7. 30 | 5. 17 | ·0943 | | (†) | | | |
| 9. 27 | 11. 20 | 5. 46 | ·0940 | | | | | |
| 10. 12 | 10. 10 | 6. 36 | ·0944 | | | | | |
| 10. 25 | 11. 10 | 6. 54 | ·0950 | | | | | |
| 10. 39 | 10. 40 | 7. 6 | ·0957 | | | | | |
| 10. 52 | 12. 10 | 7. 24 | ·0944 | | | | | |
| 11. 42 | 9. 15 | 8. 46 | ·0950 | | | | | |
| 11. 58 | 10. 35 | 9. 5 | ·0949 | | | | | |
| 12. 14 | 8. 50 | 9. 17 | ·0959 | | | | | |
| 12. 30 | 8. 45 | 9. 45 | ·0951 | | | | | |
| 12. 51 | 12. 30 | 10. 33 | ·0966 | | | | | |
| 13. 13 | 11. 30 | 10. 47 | ·0955 | | | | | |
| 13. 30 | 16. 20 | 11. 20 | ·0968 | | | | | |
| 13. 49 | 13. 50 | 11. 47 | ·0961 | | | | | |
| 14. 11 | 22. 10 | 12. 18 | ·0962 | | | | | |
| 14. 22 | 22. 0 | 13. 22 | ·0955 | | | | | |
| 15. 13 | 21. 5. 10 | 13. 45 | ·0963 | | | | | |
| 15. 45 | 20. 58. 30 | 14. 36 | ·0939 | | | | | |
| 15. 59 | 20. 58. 25 | 15. 3 | ·0942 | | | | | |
| 16. 39 | 21. 6. 40 | | *** | | | | | |
| 17. 7 | 8. 0 | 16. 4 | ·0953 | | | | | |
| 17. 52 | 6. 30 | 16. 26 | ·0952 | | | | | |
| 18. 21 | 8. 0 | 17. 0 | ·0958 | | | | | |
| 18. 45 | 6. 40 | | *** | | | | | |
| 18. 55 | 8. 30 | 18. 37 | ·0938 | | | | | |
| 19. 13 | 8. 30 | 18. 46 | ·0946 | | | | | |
| 19. 42 | 6. 50 | 19. 21: | ·0943 | | | | | |
| 20. 11 | 9. 5 | 19. 47 | ·0948 | | | | | |
| 20. 16 | 8. 30 | 20. 16 | ·0940 | | | | | |
| 21. 51 | 18. 15 | 23. 2 | ·0938 | | | | | |
| 21. 59 | 16. 10 | 23. 59 | ·0943 | | | | | |
| 22. 50 | 22. 0 | | | | | | | |
| 23. 6 | 20. 20 | | | | | | | |
| | (†) | | | | | | | |
| Sept. 11 | | Sept. 11 | | Sept. 11 | | Sept. 11 | | |
| | (†) | 0. 0 | ·0943 | | (†) | 1. 0 | 56 ·3 | 57 ·2 |
| 0. 27 | 21. 17. 0 | | *** | 0. 28 | ·01810 | 3. 0 | 59 ·0 | 59 ·6 |
| 0. 46 | 17. 20 | 1. 10 | ·0946 | 1. 13 | ·01764 | 9. 0 | 61 ·1 | 62 ·0 |
| 0. 54 | 16. 30 | 1. 20 | ·0949 | 3. 49 | ·01422 | 21. 0 | 53 ·0 | 53 ·8 |
| 1. 20 | 17. 30 | | *** | 6. 19 | ·01163 | | | |

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 | | Sept. 11 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 1. 46 | 21. 16. 15 | 2. 32 | ·0944 | 7. 10 | ·01200 | | | |
| 3. 5 | 15. 30 | | *** | | ·01296 | | | |
| 3. 30 | 13. 55 | 3. 7 | ·0950 | 12. 54 | ·01422 | | | |
| 5. 7 | 11. 30 | 3. 32 | ·0939 | 17. 34 | ·01710 | | | |
| 5. 58 | 13. 15 | | *** | 22. 47 | ·02172 | | | |
| 6. 13 | 12. 30 | 4. 47 | ·0937 | | ·02087 | | | |
| 12. 42 | 11. 30 | | *** | 23. 59 | ·02108 | | | |
| 13. 13 | 13. 0 | 6. 45 | ·0946 | | | | | |
| 13. 31 | 11. 0 | | *** | | | | | |
| 13. 55 | 11. 55 | 7. 45 | ·0943 | | | | | |
| 20. 14 | 10. 15 | 8. 2 | ·0952 | | | | | |
| 23. 0 | 16. 50 | | *** | | | | | |
| 23. 59 | 17. 0 | 8. 17 | ·0943 | | | | | |
| | | 8. 46 | ·0950 | | | | | |
| | | 9. 15 | ·0947 | | | | | |
| | | 9. 33 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 12. 5 | ·0950 | | | | | |
| | | 12. 30 | ·0946 | | | | | |
| | | 12. 48 | ·0961 | | | | | |
| | | 13. 22 | ·0950 | | | | | |
| | | 17. 0 | ·0956 | | | | | |
| | | 20. 46 | ·0944 | | | | | |
| | | | *** | | | | | |
| | | 22. 15 | ·0942 | | | | | |
| | | 23. 59 | ·0954 | | | | | |
| Sept. 12 | | Sept. 12 | | Sept. 12 | | Sept. 12 | | |
| 0. 0 | 21. 17. 0 | 0. 0 | ·0954 | 0. 0 | ·02108 | 0. 0 | 54 ·0 | 55 ·0 |
| 1. 14 | 16. 20 | 1. 50 | ·0955 | 2. 0 | ·02033 | 1. 0 | 55 ·4 | 56 ·0 |
| 2. 59 | 11. 10 | 2. 51 | ·0948 | 11. 12: | ·01335 | 3. 0 | 58 ·0 | 58 ·0 |
| 3. 32 | 10. 0 | 3. 4 | ·0952 | 21. 37 | ·01952 | 6. 0 | 60 ·5 | 62 ·0 |
| 5. 28 | 11. 30 | | *** | 23. 49 | ·01960 | 9. 0 | 60 ·5 | 60 ·5 |
| 10. 13 | 11. 10 | 3. 26 | ·0943 | | ·01765 | 12. 0 | 60 ·0 | 60 ·7 |
| 12. 29 | 11. 45 | | *** | 23. 59 | ·01763 | 18. 0 | 54 ·5 | 56 ·5 |
| 13. 0 | 11. 5 | 4. 15 | ·0939 | | | 21. 0 | 54 ·0 | 55 ·0 |
| 13. 24 | 8. 50 | 4. 32 | ·0945 | | | | | |
| 16. 47 | 12. 10 | | *** | | | | | |
| 17. 11 | 11. 0 | 5. 16 | ·0935 | | | | | |
| 17. 28 | 11. 15 | | *** | | | | | |
| 18. 32 | 9. 30 | 6. 52 | ·0949 | | | | | |
| 18. 56 | 10. 0 | | *** | | | | | |
| 19. 43 | 8. 30 | 11. 37 | ·0955 | | | | | |
| 21. 3 | 11. 50 | | *** | | | | | |
| 21. 39 | 16. 25 | 12. 54 | ·0952 | | | | | |
| 22. 43 | 19. 30 | 13. 53 | ·0957 | | | | | |
| | (†) | | *** | | | | | |
| | | 18. 46 | ·0957 | | | | | |
| | | | *** | | | | | |
| | | 22. 45 | ·0933 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0935 | | | | | |
| Sept. 13 | | Sept. 13 | | Sept. 13 | | Sept. 13 | | |
| | (†) | 0. 0 | ·0935 | 0. 0 | ·01763 | 0. 0 | 57 ·2 | 57 ·8 |
| 0. 30 | 21. 17. 30 | 1. 15 | ·0942 | 1. 26 | ·01620 | 1. 0 | 59 ·6 | 59 ·3 |
| 4. 53 | 8. 30 | 2. 57 | ·0936 | 3. 11 | ·01370 | 3. 0 | 62 ·7 | 63 ·9 |
| 6. 48 | 10. 25 | 3. 52 | ·0938 | | ·01746 | 9. 0 | 63 ·2 | 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. |
|---|---|---|---|---|---|---|---|---|
| Sept. 13 | | Sept. 13 | | Sept. 13 | | Sept. 13 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 7. 14 | 21. 9. 10 | 5. 13 | ·0935 | 5. 19 | ·01478 | 21. 0 | 59 ·8 | 60 ·3 |
| 9. 20 | 11. 15 | 8. 45 | ·0941 | 5. 57 | ·01610 | | | |
| 15. 10 | 11. 30 | 9. 6 | ·0946 | | ·01682 | | | |
| 17. 13 | 9. 30 | 9. 35 | ·0944 | 9. 0 | ·01703 | | | |
| 17. 42 | 7. 50 | 10. 2 | ·0949 | | ·01840 | | | |
| 18. 27 | 8. 30 | | *** | 13. 42: | ·01910 | | | |
| 20. 24 | 7. 20 | 13. 56 | ·0959 | 20. 41 | ·02385 | | | |
| 23. 59 | 16. 50 | 18. 52 | ·0956 | 23. 59 | ·02293 | | | |
| | | 22. 59 | ·0924 | | | | | |
| | | 23. 59 | ·0925 | | | | | |
| Sept. 14 | | Sept. 14 | | Sept. 14 | | Sept. 14 | | |
| 0. 0 | 21. 16. 50 | 0. 0 | ·0925 | 0. 0 | ·02293 | 1. 0 | 62 ·7 | 63 ·8 |
| 1. 8 | 18. 0 | 2. 6 | ·0936 | 2. 21 | ·02095 | 3. 0 | 65 ·0 | 66 ·0 |
| 3. 51 | 11. 30 | 2. 57 | ·0936 | 4. 40 | ·01708 | 9. 0 | 64 ·5 | 64 ·5 |
| 5. 21 | 10. 50 | 4. 6: | ·0930 | | ·02077 | 21. 0 | 58 ·3 | 58 ·8 |
| 6. 13 | 7. 50 | 5. 20 | ·0941 | 10. 9 | ·02160 | | | |
| 11. 27 | 12. 40 | 5. 51: | ·0934 | 13. 57 | ·02380 | | | |
| 16. 15 | 11. 0 | 6. 15 | ·0938 | 20. 46 | ·02318 | | | |
| 19. 29 | 7. 45 | 7. 5 | ·0935 | | ·02237 | | | |
| 20. 27 | 8. 50 | | *** | 23. 59 | ·02242 | | | |
| 22. 15 | 18. 45 | 10. 26 | ·0952 | | | | | |
| 23. 59 | 23. 0 | 10. 47 | ·0952 | | | | | |
| | | 11. 6 | ·0955 | | | | | |
| | | 11. 25 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 15. 40 | ·0959 | | | | | |
| | | 17. 8 | ·0957 | | | | | |
| | | 22. 24 | ·0929 | | | | | |
| | | 23. 59 | ·0941 | | | | | |
| Sept. 15 | | Sept. 15 | | Sept. 15 | | Sept. 15 | | |
| 0. 0 | 21. 23. 0 | 0. 0 | ·0941 | 0. 0 | ·02242 | 1. 0 | 61 ·0 | 61 ·2 |
| 0. 56 | 22. 0 | 0. 46 | ·0946 | 1. 15 | ·02220 | 3. 0 | 62 ·3 | 62 ·2 |
| | *** | 1. 33 | ·0954 | | ·02158 | 9. 0 | 63 ·0 | 63 ·3 |
| 3. 11 | 14. 0 | 2. 2 | ·0951 | 6. 10 | ·01880 | 21. 50 | 58 ·0 | 58 ·8 |
| 3. 54 | 13. 0 | 2. 10 | ·0954 | 9. 25 | ·01750 | | | |
| 4. 0 | 14. 0 | 2. 40 | ·0946 | 9. 59 | ·01702 | | | |
| 4. 19 | 12. 20 | 3. 7: | ·0949 | 11. 0 | ·01696 | | | |
| 4. 29 | 13. 50 | 3. 30 | ·0946 | 11. 40 | ·01737 | | | |
| 4. 48 | 12. 20 | | *** | 12. 24 | ·01735 | | | |
| 5. 7 | 13. 15 | 3. 46 | ·0954 | 12. 52 | ·01690 | | | |
| 7. 43 | 11. 30 | 3. 54 | ·0949 | 14. 9 | ·01752 | | | |
| 8. 5 | 9. 40 | | *** | 15. 52 | ·01625 | | | |
| 8. 41 | 9. 50 | 4. 15 | ·0950 | 17. 3 | ·01789 | | | |
| 9. 6 | 1. 30 | 4. 40 | ·0935 | 19. 55 | ·01909 | | | |
| 9. 51 | 12. 30 | 5. 17 | ·0951 | 23. 59 | ·02284 | | | |
| 10. 13 | 5. 40 | | *** | | | | | |
| 10. 37 | 7. 30 | 6. 2 | ·0938 | | | | | |
| 10. 42 | 6. 45 | | *** | | | | | |
| 10. 49 | 8. 20 | 6. 46 | ·0950 | | | | | |
| 11. 13 | 2. 30 | 6. 56 | ·0946 | | | | | |
| 11. 27 | 3. 0 | 7. 20 | ·0951 | | | | | |
| 11. 42 | 6. 30 | 8. 17 | ·0952 | | | | | |
| 11. 51 | 6. 20 | 8. 52 | ·0988 | | | | | |
| 12. 14 | 15. 15 | 9. 6 | ·0987 | | | | | |
| 12. 53 | 1. 10 | 9. 10 | ·1008 | | | | | |
| 13. 7 | 0. 0 | 9. 27 | ·0990 | | | | | |

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 | | Sept.15 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 13. 13 | 20. 57. 0 | 9. 33 | ·0995 | | | | | |
| 13. 39 | 20. 58. 55 | 9. 45 | ·0978 | | | | | |
| 14. 10 | 21. 5. 20 | | *** | | | | | |
| 14. 15 | 2. 0 | 10. 10 | ·0969 | | | | | |
| 14. 17 | 6. 50 | 10. 17 | ·0973 | | | | | |
| 14. 21 | 2. 30 | | *** | | | | | |
| 14. 26 | 21. 4. 0 | 10. 40 | ·0967 | | | | | |
| 14. 30 | 20. 57. 0 | 10. 46 | ·0951 | | | | | |
| 14. 35 | 58. 10 | | *** | | | | | |
| 14. 42 | 20. 55. 30 | 11. 10 | ·0939 | | | | | |
| 14. 53 | 21. 12. 30 | 11. 32 | ·0954 | | | | | |
| 14. 58 | 11. 15 | 11. 46 | ·0950 | | | | | |
| 15. 7 | 14. 30 | 11. 49 | ·0937 | | | | | |
| 15. 13 | 6. 30 | 12. 10 | ·c960 | | | | | |
| | *** | 12. 15 | ·0956 | | | | | |
| 15. 39 | 1. 30 | 12. 18 | ·0959 | | | | | |
| 15. 42 | 9. 0 | 12. 36 | ·0954 | | | | | |
| 15. 54 | 1. 20 | | *** | | | | | |
| 15. 58 | 4. 30 | 12. 50 | ·0966 | | | | | |
| 16. 12 | 4. 20 | 13. 3 | ·0954 | | | | | |
| 16. 28 | 0. 0 | | *** | | | | | |
| 16. 40 | 0. 5 | 13. 40 | ·0953 | | | | | |
| 16. 48 | 2. 10 | 13. 46 | ·0961 | | | | | |
| 16. 55 | 1. 30 | 13. 48 | ·0956 | | | | | |
| 17. 10 | 4. 30 | 14. 2 | ·0977 | | | | | |
| 17. 36 | 14. 0 | 14. 15 | ·0955 | | | | | |
| 17. 49 | 12. 50 | | *** | | | | | |
| 18. 13 | 17. 50 | 14. 23 | ·0962 | | | | | |
| 18. 24 | 16. 20 | 14. 37 | ·0920 | | | | | |
| | *** | 15. 2 | ·0943 | | | | | |
| 19. 21 | 22. 30 | 15. 6 | ·0926 | | | | | |
| 19. 40 | 17. 40 | 15. 17 | ·0936 | | | | | |
| 19. 58 | 17. 0 | 15. 25 | ·0919 | | | | | |
| 20. 5 | 18. 15 | 15. 33 | ·0928 | | | | | |
| 20. 13 | 14. 30 | 15. 37 | ·0923 | | | | | |
| 20. 24 | 16. 30 | 15. 46 | ·0941 | | | | | |
| 20. 30 | 14. 0 | | *** | | | | | |
| 20. 37 | 16. 30 | 16. 4 | ·0939 | | | | | |
| 20. 43 | 14. 30 | 16. 25 | ·0915 | | | | | |
| 20. 46 | 18. 15 | 16. 46 | ·0937 | | | | | |
| 20. 58 | 16. 50 | 17. 0 | ·0933 | | | | | |
| 21. 15 | 26. 0 | 17. 10 | ·0946 | | | | | |
| 21. 28 | 27. 30 | 17. 35 | ·0944 | | | | | |
| 22. 11 | 22. 30 | 17. 40 | ·0936 | | | | | |
| | *** | 17. 47 | 0938 | | | | | |
| 23. 0 | 25. 0 | 18. 6 | ·0923 | | | | | |
| | *** | 18. 17 | ·0924 | | | | | |
| 23. 36 | 21. 0 | 18. 33 | ·0912 | | | | | |
| 23. 46 | 25. 0 | 19. 4 | ·0912 | | | | | |
| 23. 59 | 24. 30 | 19. 26 | ·0900 | | | | | |
| | | 19. 40 | ·0886 | | | | | |
| | | 19. 46 | ·0892 | | | | | |
| | | 19. 48 | ·0886 | | | | | |
| | | 20. 3 | ·0892 | | | | | |
| | | 20. 7 | ·0878 | | | | | |
| | | 20. 10 | ·0891 | | | | | |
| | | 20. 16 | ·0879 | | | | | |
| | | 20. 30 | ·0898 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Sept.15 h m | | h m | | h m | ° | ° |
| | | 20. 52 | ·0862 | | | | | |
| | | 21. 25 | ·0881 | | | | | |
| | | 21. 36 | ·0877 | | | | | |
| | | 21. 45 | ·0881 | | | | | |
| | | 21. 47 | ·0871 | | | | | |
| | | 22. 46 | ·0854 | | | | | |
| | | 23. 7 | ·0872 | | | | | |
| | | 23. 18 | ·0859 | | | | | |
| | | 23. 40 | ·0878 | | | | | |
| | | 23. 47 | ·0869 | | | | | |
| | | 23. 59 | ·0871 | | | | | |
| Sept.16 | | Sept.16 | | Sept.16 | | Sept.16 | | |
| 0. 0 | 21. 24. 30 | 0. 0 | ·0871 | 0. 0 | ·02284 | 6. 50 | 62 ·0 | 62 ·8 |
| 0. 15 | 20. 30 | 0. 17 | ·0868 | 0. 30 | ·02340 | 21. 0 | 62 ·6 | 63 ·2 |
| | *** | 0. 50 | ·0899 | 3. 15 | ·02237 | | | |
| 0. 59 | 21. 30 | | *** | 3. 49 | ·02280 | | | |
| | *** | 2. 7 | ·0913 | 5. 30 | ·02170 | | | |
| 2. 10 | 20. 0 | | *** | 8. 39 | ·02084 | | | |
| 2. 30 | 17. 0 | 2. 36 | ·0904 | 13. 55 | ·02107 | | | |
| 2. 43 | 17. 45 | | *** | 18. 20 | {·02180 | | | |
| 2. 55 | 16. 50 | 3. 7 | ·0916 | | {·01925 | | | |
| 3. 9 | 19. 0 | 3. 20: | ·0900 | 23. 59 | ·01983 | | | |
| 3. 24 | 11. 30 | 3. 40 | ·0928 | | | | | |
| | *** | | *** | | | | | |
| 3. 52 | 12. 15 | 3. 47 | ·0925 | | | | | |
| 4. 1 | 10. 0 | 3. 52 | ·0935 | | | | | |
| 5. 14 | 15. 0 | 4. 6 | ·0918 | | | | | |
| 5. 54 | 11. 0 | | *** | | | | | |
| 6. 27 | 15. 10 | 5. 10 | ·0925 | | | | | |
| 6. 58 | 10. 30 | | *** | | | | | |
| 7. 22 | 13. 10 | 5. 45 | ·0916 | | | | | |
| 7. 39 | 12. 30 | 5. 56 | ·0932 | | | | | |
| 7. 51 | 8. 15 | 6. 17 | ·0938 | | | | | |
| 8. 13 | 10. 20 | 6. 32 | ·0928 | | | | | |
| 8. 35 | 6. 10 | 6. 53 | ·0926 | | | | | |
| 8. 45 | 10. 10 | 7. 40 | ·0945 | | | | | |
| 8. 59 | 8. 30 | 8. 7 | ·0942 | | | | | |
| 9. 25 | 9. 55 | 8. 26 | ·0968 | | | | | |
| 9. 40 | 8. 20 | 8. 52 | ·0943 | | | | | |
| | *** | 9. 7 | ·0946 | | | | | |
| 11. 51 | 11. 50 | 9. 15 | ·0960 | | | | | |
| 12. 18 | 10. 30 | 9. 26 | ·0954 | | | | | |
| 12. 42 | 11. 30 | | *** | | | | | |
| 12. 53 | 10. 30 | 10. 40 | ·0956 | | | | | |
| 13. 12 | 12. 0 | 10. 56 | ·0948 | | | | | |
| 13. 29 | 10. 30 | 11. 7 | ·0954 | | | | | |
| 18. 22 | 9. 20 | 11. 13 | ·0944 | | | | | |
| 18. 39 | 7. 0 | | *** | | | | | |
| 18. 53 | 9. 30 | 12. 32 | ·0950 | | | | | |
| 19. 14 | 7. 40 | 13. 35 | ·0946 | | | | | |
| 20. 22 | 9. 0 | 14. 7 | ·0950 | | | | | |
| 20. 30 | 7. 45 | 14. 33 | ·0945 | | | | | |
| 22. 37 | 14. 10 | 14. 37 | ·0948 | | | | | |
| 23. 59 | 18. 50 | | *** | | | | | |
| | | 15. 33 | ·0945 | | | | | |
| | | 17. 56 | ·0945 | | | | | |
| | | 19. 5 | ·0939 | | | | | |

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 | ° ′ ″ | Sept. 16 h m | | h m | | h m | ° | ° |
| | | 20. 20 | ·0919 | | | | | |
| | | 20. 36 | ·0921 | | | | | |
| | | 20. 50 | ·0912 | | | | | |
| | | 21. 2 | ·0915 | | | | | |
| | | 22. 3 | ·0909 | | | | | |
| | | | *** | | | | | |
| | | 22. 46 | ·0918 | | | | | |
| | | 23. 59 | ·0926 | | | | | |
| Sept. 17 | | Sept. 17 | | Sept. 17 | | Sept. 17 | | |
| 0. 0 | 21. 18. 50 | 0. 0 | ·0927 | 0. 0 | ·01983 | 1. 0 | 63·8 | 64·5 |
| 0. 14 | 21. 10 | | *** | 1. 45 | ·01980 | 3. 0 | 64·0 | 64·8 |
| 1. 8 | 19. 30 | 0. 30 | ·0931 | 6. 30 | ·01870 | 9. 0 | 64·0 | 65·0 |
| 1. 25 | 20. 40 | | *** | 10. 16 | ·01947 | 21. 0 | 62·2 | 63·8 |
| 4. 16 | 15. 15 | 0. 51 | ·0948 | 12. 28 | ·01940 | | | |
| | *** | | *** | 14. 12 | ·02000 | | | |
| 7. 59 | 15. 0 | 3. 36 | ·0952 | 20. 30 | ·02086 | | | |
| 8. 8 | 13. 30 | | *** | 23. 59 | ·02090 | | | |
| 9. 29 | 10. 50 | 4. 2 | ·0957 | | | | | |
| 9. 54 | 4. 20 | | *** | | | | | |
| 10. 22 | 10. 40 | 4. 26 | ·0953 | | | | | |
| 10. 47 | 11. 30 | 4. 32 | ·0958 | | | | | |
| 11. 15 | 5. 20 | 4. 36 | ·0952 | | | | | |
| 11. 30 | 4. 30 | | *** | | | | | |
| 12. 7 | 12. 5 | 4. 53 | ·0957 | | | | | |
| 12. 30 | 8. 30 | 5. 20 | ·0953 | | | | | |
| 13. 10 | 8. 40 | 5. 36 | ·0959 | | | | | |
| 13. 40 | 5. 50 | 5. 45 | ·0954 | | | | | |
| 13. 52 | 6. 15 | 5. 52 | ·0961 | | | | | |
| 14. 19 | 10. 0 | 6. 3 | ·0958 | | | | | |
| 14. 31 | 13. 30 | 6. 15 | ·0966 | | | | | |
| | *** | 6. 18 | ·0954 | | | | | |
| 17. 54 | 11. 15 | 6. 33 | ·0965 | | | | | |
| 18. 10 | 10. 0 | | *** | | | | | |
| 21. 5 | 8. 30 | 6. 50 | ·0957 | | | | | |
| 23. 59 | 18. 50 | | *** | | | | | |
| | | 7. 7 | ·0960 | | | | | |
| | | 7. 15 | ·0972 | | | | | |
| | | | *** | | | | | |
| | | 7. 35 | ·0960 | | | | | |
| | | | *** | | | | | |
| | | 7. 46 | ·0981 | | | | | |
| | | 7. 48 | ·0973 | | | | | |
| | | 7. 53 | ·0986 | | | | | |
| | | 8. 2 | ·0946 | | | | | |
| | | 8. 10 | ·0962 | | | | | |
| | | 8. 17 | ·0954 | | | | | |
| | | 8. 33 | ·0964 | | | | | |
| | | | *** | | | | | |
| | | 9. 7 | ·0956 | | | | | |
| | | | *** | | | | | |
| | | 9. 42 | ·0958 | | | | | |
| | | 9. 46 | ·0961 | | | | | |
| | | 10. 11 | ·0951 | | | | | |
| | | | *** | | | | | |
| | | 10. 40 | ·0956 | | | | | |
| | | 11. 2 | ·0978 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Sept. 17 h m | | h m | | h m | ° | ° |
| | | 11. 7 | ·0973 | | | | | |
| | | 11. 15 | ·0977 | | | | | |
| | | 11. 36 | ·0959 | | | | | |
| | | 11. 45 | ·0961 | | | | | |
| | | 11. 50 | ·0953 | | | | | |
| | | 12. 0 | ·0958 | | | | | |
| | | 12. 6 | ·0954 | | | | | |
| | | 12. 20 | ·0960 | | | | | |
| | | | *** | | | | | |
| | | 14. 33 | ·0940 | | | | | |
| | | 15. 6 | ·0949 | | | | | |
| | | | *** | | | | | |
| | | 16. 13 | ·0947 | | | | | |
| | | | *** | | | | | |
| | | 17. 50 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 22. 40 | ·0926 | | | | | |
| | | | *** | | | | | |
| | | 23. 41 | ·0931 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0939 | | | | | |
| Sept. 18 | | Sept. 18 | | Sept. 18 | | Sept. 18 | | |
| 0. 0 | 21. 18. 50 | 0. 0 | ·0939 | 0. 0 | ·02090 | 1. 0 | 61·3 | 62·2 |
| 0. 11 | 18. 20 | | *** | 4. 39 | ·02104 | 3. 0 | 61·0 | 62·0 |
| 0. 59 | 19. 40 | 3. 10 | ·0952 | 6. 15 | ·02050 | 9. 0 | 59·8 | 61·0 |
| 4. 16 | 17. 0 | 3. 17 | ·0948 | | ·01832 | 21. 0 | 54·7 | 56·5 |
| 5. 45 | 13. 40 | 3. 50 | ·0956 | 11. 27 | ·01850 | | | |
| 7. 54 | 13. 30 | 4. 7 | ·0053 | 21. 33 | ·01538 | | | |
| 8. 26 | 11. 30 | 4. 33 | ·0959 | | (†) | | | |
| 8. 57 | 13. 0 | 4. 47 | ·0954 | | | | | |
| 9. 51 | 11. 20 | 5. 2 | ·0958 | | | | | |
| 16. 15 | 12. 20 | 5. 20 | ·0952 | | | | | |
| 16. 54 | 10. 30 | 5. 46 | ·0958 | | | | | |
| 17. 40 | 11. 30 | | *** | | | | | |
| 17. 57 | 9. 50 | 6. 37 | ·0955 | | | | | |
| 18. 15 | 11. 15 | 7. 17 | ·0961 | | | | | |
| 19. 44 | 9. 5 | 7. 52 | ·0961 | | | | | |
| | *** | 8. 13 | ·0958 | | | | | |
| 20. 57 | 8. 30 | | *** | | | | | |
| | *** | 8. 47 | ·0962 | | | | | |
| 22. 14 | 11. 50 | | *** | | | | | |
| 23. 15 | 19. 30 | 12. 6 | ·0960 | | | | | |
| 23. 29 | 18. 30 | | *** | | | | | |
| 23. 59 | 19. 15 | 16. 50 | ·0969 | | | | | |
| | | | *** | | | | | |
| | | 19. 7 | ·0970 | | | | | |
| | | | *** | | | | | |
| | | 21. 17 | ·0948 | | | | | |
| | | 21. 42 | ·0953 | | | | | |
| | | 22. 13 | ·0935 | | | | | |
| | | 22. 20 | ·0938 | | | | | |
| | | 22. 45 | ·0927 | | | | | |
| | | | *** | | | | | |
| | | 23. 40 | ·0928 | | | | | |
| | | 23. 59 | ·0935 | | | | | |

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.19 | | Sept.19 | | Sept.19 | | Sept.19 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 19. 15 | 0. 0 | ·0935 | | (†) | 0. 0 | 57 ·6 | 58 ·2 |
| 1. 20 | 20. 30 | | *** | 0. 43 | ·00809 | 1. 0 | 58 ·2 | 58 ·6 |
| | *** | 0. 46 | ·0949 | 3. 42 | ·00651 | 3. 0 | 60 ·6 | 60 ·7 |
| | | | *** | 5. 50: | ·00486 | 6. 0 | 61 ·5 | 61 ·8 |
| 3. 24 | 19. 0 | | | | | | | |
| 3. 56 | 16. 20 | 2. 10 | ·0945 | 9. 9 | ·00620 | 9. 0 | 61 ·5 | 63 ·0 |
| 7. 29 | 12. 40 | 2. 52 | ·0951 | 13. 13 | ·00580 | 12. 0 | 60 ·9 | 62 ·0 |
| 8. 53 | 21. 13. 30 | 3. 26 | ·0944 | 16. 50 | ·00730 | 18. 0 | 57 ·5 | 57 ·7 |
| 9. 30 | 20. 55. 30 | 4. 15 | ·0946 | 21. 15 | ·01010 | 21. 0 | 57 ·8 | 57 ·9 |
| 9. 52 | 21. 1. 0 | | *** | 22. 55 | ·00990 | | | |
| 10. 15 | 20. 58. 20 | 5. 40 | ·0956 | 23. 59 | ·01028 | | | |
| 11. 0 | 21. 7. 25 | 6. 5 | ·0950 | | | | | |
| 11. 14 | 2. 30 | | *** | | | | | |
| 11. 32 | 2. 20 | 7. 15 | ·0960 | | | | | |
| 11. 51 | 10. 0 | 7. 33 | ·0956 | | | | | |
| 11. 56 | 9. 0 | 7. 48 | ·0960 | | | | | |
| 12. 10 | 9. 30 | 8. 0 | ·0958 | | | | | |
| 12. 42 | 6. 20 | 8. 10 | ·0961 | | | | | |
| 12. 55 | 8. 15 | 8. 17 | ·0957 | | | | | |
| 13. 54 | 0. 50 | 8. 31 | ·0960 | | | | | |
| 14. 9 | 2. 15 | 8. 45 | ·0955 | | | | | |
| 14. 15 | 1. 20 | 9. 16 | ·0974 | | | | | |
| 14. 43 | 6. 0 | | *** | | | | | |
| 14. 56 | 6. 10 | 10. 20 | ·0940 | | | | | |
| 15. 12 | 3. 15 | 10. 33 | ·0942 | | | | | |
| 15. 20 | 3. 30 | 10. 46 | ·0931 | | | | | |
| 15. 57 | 11. 0 | | *** | | | | | |
| 16. 30 | 14. 30 | 11. 45 | ·0947 | | | | | |
| 17. 26 | 9. 40 | 12. 15 | ·0938 | | | | | |
| 17. 40 | 12. 30 | 12. 50: | ·0961 | | | | | |
| 17. 58 | 10. 45 | 13. 17 | ·0952 | | | | | |
| 18. 15 | 14. 20 | 13. 20 | ·0955 | | | | | |
| 18. 40 | 15. 0 | 13. 33 | ·0951 | | | | | |
| 18. 45 | 14. 0 | 13. 43 | ·0959 | | | | | |
| 18. 51 | 14. 40 | 14. 5 | ·0943 | | | | | |
| 18. 57 | 13. 40 | | *** | | | | | |
| 19. 15 | 13. 20 | 15. 12 | ·0951 | | | | | |
| 19. 22 | 14. 0 | 15. 45: | ·0944 | | | | | |
| 20. 12 | 9. 30 | 16. 38 | ·0964 | | | | | |
| 20. 27 | 11. 0 | | *** | | | | | |
| 20. 30 | 10. 0 | 18. 6 | ·0938 | | | | | |
| 20. 41 | 11. 15 | 18. 25 | ·0943 | | | | | |
| 20. 55 | 8. 30 | 18. 40 | ·0939 | | | | | |
| 21. 39 | 10. 40 | 19. 11 | ·0952 | | | | | |
| 21. 45 | 10. 0 | | *** | | | | | |
| 21. 57 | 12. 45 | 21. 17 | ·0933 | | | | | |
| 22. 13 | 12. 20 | 21. 40 | ·0942 | | | | | |
| 22. 53 | 16. 0 | | *** | | | | | |
| 23. 6 | 15. 30 | 22. 46 | ·0922 | | | | | |
| 23. 40 | 21. 40 | | *** | | | | | |
| 23. 59 | 22. 15 | 23. 5 | ·0921 | | | | | |
| | | | *** | | | | | |
| | | 23. 36 | ·0938 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0931 | | | | | |
| Sept.20 | | Sept.20 | | Sept.20 | | Sept.20 | | |
| 0. 0 | 21. 22. 15 | 0. 0 | ·0931 | 0. 0 | ·01028 | 0. 0 | 59 ·0 | 59 ·6 |
| 0. 14 | 20. 30 | 0. 15 | ·0920 | 1. 40 | ·00962 | 1. 0 | 59 ·8 | 60 ·2 |

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|---|---|---|---|---|---|---|---|---|
| Sept.20 | | Sept.20 | | Sept.20 | | Sept.20 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 42 | 21. 21. 30 | 2. 36 | ·0945 | 4. 7 | ·00788 | 3. 0 | 62 ·3 | 63 ·2 |
| 1. 18 | 16. 30 | 2. 45 | ·0935 | 7. 52 | ·01088 | 9. 0 | 63 ·3 | 64 ·0 |
| 1. 29 | 17. 40 | | *** | 10. 22 | ·01090 | 21. 0 | 61 ·3 | 62 ·0 |
| 1. 43 | 17. 20 | 3. 7 | ·0934 | 15. 28 | ·01270 | | | |
| 2. 25 | 20. 50 | 3. 15 | ·0927 | 19. 26 | ·01309 | | | |
| 2. 37 | 19. 50 | 3. 19 | ·0934 | 23. 59 | ·01252 | | | |
| 2. 54 | 21. 20 | 3. 43 | ·0920 | | | | | |
| 3. 14 | 16. 30 | 4. 35 | ·0948 | | | | | |
| 3. 21 | 18. 20 | 5. 7 | ·0933 | | | | | |
| 3. 47 | 14. 0 | 5. 38 | ·0946 | | | | | |
| 4. 38 | 15. 10 | 5. 50 | ·0940 | | | | | |
| 5. 7 | 13. 0 | | (†) | | | | | |
| 5. 29 | 13. 45 | 6. 46 | ·0941 | | | | | |
| 6. 3 | 21. 8. 30 | 6. 56 | ·0955 | | | | | |
| 6. 14 | 20. 58. 20 | | *** | | | | | |
| 6. 25 | 21. 9. 0 | 7. 20 | ·0950 | | | | | |
| 6. 30 | 7. 40 | 7. 33 | ·0945 | | | | | |
| 6. 39 | 9. 25 | 8. 5 | ·0942 | | | | | |
| 6. 52 | 2. 40 | | *** | | | | | |
| 6. 58 | 6. 30 | 9. 8 | ·0949 | | | | | |
| 7. 40 | 11. 15 | 9. 25 | ·0962 | | | | | |
| 8. 55 | 11. 20 | 10. 3 | ·0948 | | | | | |
| 9. 12 | 9. 30 | 10. 35 | ·0959 | | | | | |
| 9. 42 | 14. 0 | | *** | | | | | |
| | *** | 11. 26 | ·0951 | | | | | |
| 11. 0 | 7. 15 | 12. 30 | ·0953 | | | | | |
| 11. 52 | 12. 55 | 13. 26 | ·0959 | | | | | |
| 12. 30 | 11. 0 | | *** | | | | | |
| 13. 12 | 13. 10 | 18. 7 | ·0953 | | | | | |
| 13. 57 | 10. 50 | | *** | | | | | |
| 14. 19 | 11. 10 | 22. 3 | ·0920 | | | | | |
| 15. 51 | 7. 50 | | *** | | | | | |
| 17. 14 | 9. 45 | 22. 42 | ·0925 | | | | | |
| 19. 50 | 7. 0 | | *** | | | | | |
| 20. 39 | 8. 30 | 23. 10 | ·0921 | | | | | |
| 22. 15 | 16. 40 | 23. 36 | ·0930 | | | | | |
| 23. 12 | 17. 15 | | *** | | | | | |
| 23. 28 | 18. 40 | 23. 59 | ·0930 | | | | | |
| 23. 54 | 17. 15 | | | | | | | |
| 23. 59 | 17. 30 | | | | | | | |
| Sept.21 | | Sept.21 | | Sept.21 | | Sept.21 | | |
| 0. 0 | 21. 17. 30 | 0. 0 | ·0930 | 0. 0 | ·01252 | 1. 0 | 62 ·5 | 63 ·0 |
| 0. 49 | 18. 30 | 1. 13 | ·0943 | 1. 25 | ·01275 | 3. 0 | 64 ·0 | 64 ·4 |
| 1. 0 | 20. 0 | 2. 7 | ·0932 | 2. 51 | ·01148 | 9. 0 | 64 ·0 | 64 ·8 |
| 2. 10 | 19. 10 | 3. 5 | ·0946 | 4. 1 | ·01095 | 21. 0 | 60 ·8 | 61 ·3 |
| 2. 30 | 16. 45 | | *** | | ·01163 | | | |
| 4. 52 | 13. 40 | 4. 15 | ·0940 | 5. 30 | ·01228 | | | |
| 5. 10 | 11. 20 | 4. 47 | ·0943 | | ·01467 | | | |
| 5. 39 | 11. 20 | 5. 6 | ·0952 | 11. 49: | ·01488 | | | |
| 5. 45 | 9. 45 | 5. 30 | ·0952 | 19. 20 | ·01929 | | | |
| 6. 12 | 11. 40 | 5. 51 | ·0957 | 23. 59 | ·02013 | | | |
| 7. 42 | 11. 0 | 6. 17 | ·0953 | | | | | |
| 8. 10 | 11. 45 | 9. 20 | ·0949 | | | | | |
| 14. 4 | 12. 10 | 14. 0 | ·0961 | | | | | |
| 14. 30 | 14. 40 | 14. 37 | ·0960 | | | | | |
| 15. 20 | 10. 40 | 14. 40 | ·0965 | | | | | |
| 18. 26 | 9. 0 | 15. 37 | ·0961 | | | | | |

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.

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|---|---|---|---|---|---|---|---|---|
| Sept. 21 | | Sept. 21 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 18. 46 | 21. 7. 40 | 16. 15 | ·0963 | | | | | |
| 19. 10 | 8. 0 | 19. 37 | ·0956 | | | | | |
| 19. 24 | 7. 0 | | *** | | | | | |
| 19. 49 | 7. 50 | 22. 0 | ·0936 | | | | | |
| 20. 37 | 7. 0 | 22. 40 | ·0933 | | | | | |
| 21. 21 | 8. 40 | 23. 59 | ·0941 | | | | | |
| 21. 47 | 11. 30 | | | | | | | |
| 21. 57 | 11. 20 | | | | | | | |
| 23. 10 | 16. 15 | | | | | | | |
| 23. 59 | 18. 20 | | | | | | | |
| Sept. 22 | | Sept. 22 | | Sept. 22 | | Sept. 22 | | |
| 0. 0 | 21. 18. 20 | 0. 0 | ·0941 | 0. 0 | ·02013 | 1. 0 | 62 ·2 | 62 ·5 |
| 0. 11 | 18. 15 | 0. 33 | ·0941 | 1. 48 | {·02030 | 3. 0 | 63 ·0 | 63 ·0 |
| 0. 58 | 20. 10 | 0. 46 | ·0939 | | {·01660 | 9. 0 | 61 ·3 | 63 ·0 |
| 1. 14 | 22. 10 | 1. 12 | ·0946 | 9. 43: | ·01508 | 22. 35 | 56 ·0 | 58 ·0 |
| 1. 50 | 21. 50 | 1. 43 | ·0947 | 20. 29 | ·01900 | | | |
| 2. 46 | 17. 20 | 2. 0 | ·0942 | 23. 59 | ·01603 | | | |
| 3. 5 | 17. 50 | 2. 18 | ·0945 | | | | | |
| 4. 7 | 15. 15 | 2. 37 | ·0941 | | | | | |
| 4. 56 | 11. 0 | 3. 6 | ·0953 | | | | | |
| 5. 37 | 9. 50 | | *** | | | | | |
| 7. 54 | 11. 50 | 4. 47 | ·0953 | | | | | |
| 8. 12 | 11. 0 | 5. 46 | ·0960 | | | | | |
| 8. 48 | 11. 15 | 6. 17 | ·0959 | | | | | |
| 9. 11 | 9. 50 | 7. 15 | ·0963 | | | | | |
| 9. 54 | 9. 55 | | *** | | | | | |
| 10. 26 | 12. 40 | 8. 40 | ·0959 | | | | | |
| 10. 48 | 11. 30 | 9. 11 | ·0963 | | | | | |
| 11. 13 | 12. 40 | | *** | | | | | |
| 13. 21 | 12. 15 | 17. 45 | ·0967 | | | | | |
| 13. 29 | 13. 10 | 21. 17 | ·0948 | | | | | |
| 13. 43 | 12. 30 | 23. 59 | ·0959 | | | | | |
| 13. 55 | 13. 40 | | | | | | | |
| 15. 22 | 11. 40 | | | | | | | |
| 17. 7 | 12. 0 | | | | | | | |
| 19. 19 | 10. 0 | | | | | | | |
| 20. 46 | 11. 30 | | | | | | | |
| 23. 59 | 17. 10 | | | | | | | |
| Sept. 23 | | Sept. 23 | | Sept. 23 | | Sept. 23 | | |
| 0. 0 | 21. 17. 10 | 0. 0 | ·0959 | 0. 0 | ·01603 | 6. 11 | 58 ·0 | 58 ·8 |
| 1. 4 | 18. 40 | 0. 35 | ·0959 | 3. 0 | ·01628 | 21. 0 | 53 ·0 | 54 ·7 |
| 1. 27 | 20. 10 | 0. 56: | ·0958 | 9. 52: | ·01507 | | | |
| 2. 10 | 18. 40 | 1. 30 | ·0961 | 16. 29 | ·01650 | | | |
| 2. 36 | 18. 45 | 2. 3 | ·0957 | 19. 0 | ·01563 | | | |
| 3. 1 | 16. 50 | 2. 30 | ·0960 | 23. 40 | {·01238 | | | |
| 4. 52 | 13. 30 | 2. 56 | ·0957 | | {·01064 | | | |
| 12. 13 | 12. 55 | | *** | 23. 59 | ·01072 | | | |
| 12. 29 | 12. 10 | 14. 17 | ·0973 | | | | | |
| 12. 45 | 13. 45 | | *** | | | | | |
| 13. 40 | 12. 0 | 19. 8 | ·0971 | | | | | |
| 13. 59 | 13. 15 | | *** | | | | | |
| 14. 37 | 11. 55 | 21. 47 | ·0955 | | | | | |
| 15. 8 | 12. 50 | 23. 59 | ·0961 | | | | | |
| 16. 54 | 11. 20 | | | | | | | |
| 17. 19 | 12. 5 | | | | | | | |
| 19. 52 | 7. 15 | | | | | | | |
| 19. 58 | 8. 10 | | | | | | | |
| 20. 17 | 8. 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. |
|---|---|---|---|---|---|---|---|---|
| Sept. 23 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 28 | 21. 10. 0 | | | | | | | |
| 23. 59 | 20. 5 | | | | | | | |
| Sept. 24 | | Sept. 24 | | Sept. 24 | | Sept. 24 | | |
| 0. 0 | 21. 20. 5 | 0. 0 | ·0961 | 0. 0 | ·01072 | 1. 0 | 54 ·8 | 55 ·6 |
| 1. 11 | 22. 0 | 1. 17 | ·0969 | 1. 30: | ·01095 | 3. 0 | 57 ·3 | 57 ·2 |
| 1. 43 | 20. 30 | 1. 32 | ·0964 | 5. 19 | ·00810 | 9. 0 | 58 ·7 | 59 ·0 |
| 2. 35 | 19. 30 | 1. 56 | ·0967 | 12. 22: | ·00622 | 21. 0 | 52 ·3 | 54 ·0 |
| 3. 12 | 16. 30 | | *** | 23. 21 | ·01022 | | | |
| 4. 30 | 13. 40 | 2. 28 | ·0966 | | (†) | | | |
| 8. 0 | 12. 40 | 2. 47 | ·0956 | | | | | |
| 8. 31 | 7. 20 | 3. 2 | ·0955 | | | | | |
| 9. 13 | 11. 50 | 6. 0 | ·0969 | | | | | |
| 10. 41 | 12. 50 | | *** | | | | | |
| 13. 43 | 11. 10 | 7. 45 | ·0968 | | | | | |
| 15. 0 | 6. 30 | 8. 5 | ·0971 | | | | | |
| 16. 45 | 10. 15 | 8. 46 | ·0962 | | | | | |
| 18. 27 | 8. 45 | | *** | | | | | |
| 19. 43 | 5. 40 | 14. 56 | ·0973 | | | | | |
| 20. 47 | 9. 10 | 15. 52 | ·0966 | | | | | |
| 21. 16 | 8. 30 | | *** | | | | | |
| 23. 59 | 16. 30 | 18. 33: | ·0970 | | | | | |
| | | | *** | | | | | |
| | | 20. 30 | ·0954 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0955 | | | | | |
| Sept. 25 | | Sept. 25 | | Sept. 25 | | Sept. 25 | | |
| 0. 0 | 21. 16. 30 | 0. 0 | ·0955 | | (†) | 1. 0 | 53 ·0 | 54 ·0 |
| 1. 5 | 17. 30 | 3. 30 | ·0962 | 0. 25 | ·01083 | 3. 0 | 55 ·3 | 55 ·5 |
| 4. 12 | 12. 10 | 4. 0 | ·0966 | 2. 11 | ·01100 | 9. 0 | 56 ·3 | 57 ·4 |
| 5. 24 | 11. 10 | 4. 22 | ·0962 | 6. 42 | ·00789 | 21. 0 | 50 ·3 | 52 ·2 |
| 5. 56 | 14. 10 | 5. 5 | ·0970 | 8. 30 | ·00710 | | | |
| 6. 31 | 13. 0 | 5. 20 | ·0997 | 11. 27 | ·00712 | | | |
| 6. 49 | 13. 30 | 5. 36 | ·0993 | 12. 0 | ·00744 | | | |
| 7. 13 | 9. 50 | 5. 50 | ·0980 | 12. 55 | ·00720 | | | |
| 7. 50 | 13. 50 | 6. 0 | ·0982 | 13. 39 | ·00738 | | | |
| 8. 13 | 13. 45 | 6. 46: | ·0965 | 14. 10 | ·00685 | | | |
| 8. 31 | 14. 50 | 7. 33 | ·0984 | 15. 13 | ·00793 | | | |
| 9. 11 | 12. 50 | 7. 48: | ·0977 | 15. 45 | ·00768 | | | |
| 10. 2 | 13. 10 | 8. 10 | ·0989 | 16. 29 | ·00820 | | | |
| 10. 13 | 11. 15 | 8. 26 | ·0975 | 18. 32 | ·00864 | | | |
| 10. 24 | 12. 10 | | *** | 21. 51 | ·01060 | | | |
| 10. 43 | 11. 30 | 9. 5 | ·0974 | 22. 11 | ·01034 | | | |
| 10. 58 | 13. 30 | 9. 10 | ·0983 | 23. 59 | ·01069 | | | |
| 11. 21 | 12. 40 | | *** | | | | | |
| 11. 51 | 6. 0 | 10. 36 | ·0979 | | | | | |
| 11. 57 | 8. 0 | 10. 45 | ·0994 | | | | | |
| 12. 13 | 6. 30 | | *** | | | | | |
| 12. 17 | 21. 7. 30 | 11. 6 | ·0980 | | | | | |
| 13. 2 | 20. 59. 30 | | *** | | | | | |
| 13. 30 | 21. 6. 45 | 11. 42 | ·0965 | | | | | |
| 14. 11 | 20. 53. 0 | 11. 50 | ·0976 | | | | | |
| 14. 39 | 57. 40 | | *** | | | | | |
| 14. 43 | 20. 56. 45 | 13. 7 | ·0990 | | | | | |
| 15. 13 | 21. 8. 10 | 13. 26 | ·0974 | | | | | |
| 15. 50 | 1. 30 | 13. 33 | ·0991 | | | | | |
| 16. 9 | 5. 50 | 13. 47 | ·0964 | | | | | |
| 16. 13 | 5. 10 | | *** | | | | | |
| 16. 22 | 6. 55 | 14. 10 | ·0951 | | | | | |

**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. 25 | | Sept. 25 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 16. 43 | 21. 4. 40 | 14. 20 | ·0952 | | | | | |
| 16. 58 | 6. 30 | 14. 28 | ·0957 | | | | | |
| 17. 11 | 5. 40 | 14. 35 | ·0953 | | | | | |
| 17. 42 | 8. 0 | | *** | | | | | |
| 17. 55 | 11. 40 | 15. 2 | ·0965 | | | | | |
| | (†) | 15. 10 | ·0976 | | | | | |
| 19. 12 | 16. 0 | 15. 17 | ·0968 | | | | | |
| 19. 30 | 9. 40 | 15. 24 | ·0975 | | | | | |
| 19. 43 | 10. 25 | 15. 40 | ·0964 | | | | | |
| 19. 51 | 9. 0 | 15. 52 | ·0970 | | | | | |
| 20. 28 | 9. 10 | 16. 26 | ·0967 | | | | | |
| 21. 19 | 11. 30 | 16. 47 | ·0977 | | | | | |
| 21. 50 | 13. 50 | | *** | | | | | |
| 21. 57 | 13. 40 | 17. 45 | ·0976 | | | | | |
| 22. 11 | 15. 0 | 18. 7 | ·0985 | | | | | |
| 22. 16 | 14. 0 | | *** | | | | | |
| 22. 28 | 15. 5 | 18. 45 | ·0966 | | | | | |
| 22. 42 | 17. 15 | | *** | | | | | |
| 23. 6 | 16. 0 | 19. 5 | ·0958 | | | | | |
| 23. 41 | 19. 30 | 19. 17 | ·0962 | | | | | |
| 23. 59 | 20. 25 | 19. 30 | ·0951 | | | | | |
| | | | *** | | | | | |
| | | 20. 7 | ·0952 | | | | | |
| | | 20. 15 | ·0947 | | | | | |
| | | 20. 42 | ·0954 | | | | | |
| | | | *** | | | | | |
| | | 21. 33 | ·0947 | | | | | |
| | | | *** | | | | | |
| | | 22. 6 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 22. 37 | ·0943 | | | | | |
| | | 22. 50 | ·0950 | | | | | |
| | | 23. 0 | ·0944 | | | | | |
| | | 23. 36 | ·0957 | | | | | |
| | | 23. 51 | ·0952 | | | | | |
| | | 23. 59 | ·0957 | | | | | |
| Sept. 26 | | Sept. 26 | | Sept. 26 | | Sept. 26 | | |
| 0. 0 | 21. 20. 25 | 0. 0 | ·0957 | 0. 0 | ·01069 | 0. 0 | 53 ·0 | 53 ·8 |
| 0. 30 | 21. 30 | 0. 7 | ·0950 | 0. 26 | ·01050 | 1. 0 | 54 ·8 | 56 ·2 |
| 1. 37 | 20. 0 | 0. 40: | ·0957 | | ·00986 | 3. 0 | 57 ·3 | 58 ·2 |
| | *** | 1. 26 | ·0943 | 6. 9 | ·00523 | 6. 0 | 59 ·5 | 59 ·5 |
| 2. 47 | 16. 0 | 1. 57 | ·0959 | 9. 50 | ·00672 | 9. 0 | 58 ·9 | 59 ·0 |
| | *** | 2. 17 | ·0962 | | ·00735 | 12. 0 | 58 ·0 | 58 ·4 |
| 3. 42 | 16. 15 | 2. 26 | ·0960 | 11. 11 | ·00669 | 18. 0 | 56 ·3 | 57 ·3 |
| 3. 49 | 14. 50 | 2. 42 | ·0961 | 14. 15 | ·00701 | 21. 0 | 56 ·0 | 57 ·8 |
| 4. 51 | 14. 10 | 2. 46 | ·0957 | 15. 21 | ·00677 | | | |
| 5. 13 | 15. 10 | 3. 30 | ·0964 | 23. 59 | ·00850 | | | |
| 5. 24 | 14. 40 | | *** | | | | | |
| 5. 43 | 16. 0 | 3. 52 | ·0956 | | | | | |
| 6. 13 | 11. 30 | | *** | | | | | |
| 6. 44 | 8. 10 | 4. 50 | ·0957 | | | | | |
| 6. 54 | 8. 0 | 5. 11 | ·0967 | | | | | |
| 7. 17 | 11. 45 | 5. 35 | ·0963 | | | | | |
| 7. 42 | 11. 10 | 5. 47 | ·0968 | | | | | |
| 7. 52 | 14. 0 | 5. 58 | ·0963 | | | | | |
| 8. 26 | 9. 0 | | *** | | | | | |
| 9. 30 | 10. 0 | 6. 17 | ·0965 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 26 | | Sept. 26 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 54 | 21. 12. 45 | 6. 30 | ·0956 | | | | | |
| 10. 18 | 10. 50 | 6. 45 | ·0962 | | | | | |
| 10. 37 | 13. 40 | 6. 51 | ·0957 | | | | | |
| 10. 48 | 21. 12. 20 | 7. 7 | ·0965 | | | | | |
| 11. 15 | 20. 59. 20 | | *** | | | | | |
| 11. 30 | 21. 8. 0 | 7. 33: | ·0959 | | | | | |
| 11. 41 | 6. 10 | 7. 40 | ·0961 | | | | | |
| 12. 12 | 10. 50 | 7. 45 | ·0990 | | | | | |
| 12. 24 | 9. 20 | 8. 6 | ·0950 | | | | | |
| | *** | 8. 17 | ·0959 | | | | | |
| 13. 41 | 7. 0 | 8. 26 | ·0969 | | | | | |
| 13. 50 | 9. 10 | | *** | | | | | |
| 14. 9 | 9. 0 | 9. 0 | ·0957 | | | | | |
| 14. 45 | 14. 15 | 9. 11 | ·0966 | | | | | |
| 15. 13 | 12. 10 | 9. 25 | ·0949 | | | | | |
| 15. 27 | 13. 0 | 9. 33 | ·0958 | | | | | |
| 15. 37 | 10. 50 | 9. 37 | ·0950 | | | | | |
| 15. 54 | 10. 25 | 9. 48 | ·0961 | | | | | |
| 16. 0 | 12. 0 | | *** | | | | | |
| | *** | 10. 16 | ·0955 | | | | | |
| 18. 57 | 9. 10 | 10. 27 | ·0966 | | | | | |
| | *** | 10. 45 | ·0950 | | | | | |
| 21. 3 | 11. 45 | 10. 58 | ·0968 | | | | | |
| 23. 59 | 18. 50 | 11. 11 | ·0959 | | | | | |
| | | 11. 26 | ·0972 | | | | | |
| | | 11. 45 | ·0950 | | | | | |
| | | 12. 8 | ·0961 | | | | | |
| | | 12. 26 | ·0957 | | | | | |
| | | 13. 17: | ·0963 | | | | | |
| | | 14. 18: | ·0956 | | | | | |
| | | 15. 3 | ·0969 | | | | | |
| | | 15. 42 | ·0959 | | | | | |
| | | | *** | | | | | |
| | | 17. 45 | ·0958 | | | | | |
| | | 18. 43 | ·0954 | | | | | |
| | | 19. 35 | ·0943 | | | | | |
| | | | *** | | | | | |
| | | 23. 3 | ·0929 | | | | | |
| | | 23. 59 | ·0938 | | | | | |
| Sept. 27 | | Sept. 27 | | Sept. 27 | | Sept. 27 | | |
| 0. 0 | 21. 18. 50 | 0. 0 | ·0938 | 0. 0 | ·00850 | 0. 0 | 58 ·2 | 58 ·9 |
| 0. 49 | 19. 45 | 2. 5 | ·0944 | 3. 20 | ·00666 | 1. 0 | 59 ·0 | 59 ·5 |
| 4. 42 | 15. 10 | 3. 6 | ·0940 | 6. 57 | ·00990 | 3. 0 | 61 ·0 | 61 ·5 |
| 7. 7 | 13. 30 | | *** | 8. 52 | ·01092 | 9. 0 | 62 ·0 | 62 ·2 |
| | *** | 11. 5 | ·0959 | 17. 39 | ·01202 | 21. 0 | 58 ·3 | 59 ·8 |
| 17. 26 | 10. 15 | | *** | 23. 59 | ·01317 | | | |
| 20. 0 | 7. 40 | 14. 34 | ·0961 | | | | | |
| 21. 25 | 9. 10 | 14. 40 | ·0972 | | | | | |
| 23. 59 | 18. 40 | | *** | | | | | |
| | | 14. 47 | ·0963 | | | | | |
| | | | *** | | | | | |
| | | 15. 52 | ·0962 | | | | | |
| | | | *** | | | | | |
| | | 16. 16 | ·0968 | | | | | |
| | | | *** | | | | | |
| | | 18. 45 | ·0962 | | | | | |
| | | 21. 34 | ·0939 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Sept. 27 h m | | h m | | h m | ° | ° |
| | | 23. 7 | ·0936 | | | | | |
| | | 23. 59 | ·0939 | | | | | |
| Sept. 28 | | Sept. 28 | | Sept. 28 | | Sept. 28 | | |
| 0. 0 | 21. 18. 40 | 0. 0 | ·0939 | 0. 0 | ·01317 | 1. 0 | 59 ·3 | 60 ·7 |
| 0. 47 | 20. 50 | 1. 10 | ·0953 | 2. 37 | ·01315 | 3. 0 | 60 ·8 | 61 ·7 |
| 2. 45 | 17. 15 | 1. 25 | ·0951 | 9. 54: | ·01150 | 9. 0 | 59 ·8 | 61 ·5 |
| 3. 8 | 17. 30 | 2. 40 | ·0957 | 21. 5 | ·01623 | 21. 0 | 55 ·0 | 56 ·0 |
| 3. 13 | 18. 0 | 2. 53 | ·0961 | 23. 59 | ·01633 | | | |
| 3. 24 | 17. 30 | 3. 6 | ·0971 | | | | | |
| 3. 58 | 16. 20 | 3. 17 | ·0965 | | | | | |
| 13. 28 | 12. 30 | 3. 46 | ·0959 | | | | | |
| 13. 51 | 14. 0 | | *** | | | | | |
| 14. 15 | 12. 40 | 7. 43 | ·0969 | | | | | |
| 17. 12 | 12. 20 | 8. 0 | ·0965 | | | | | |
| 20. 18 | 8. 40 | | *** | | | | | |
| 22. 12 | 13. 20 | 13. 17 | ·0967 | | | | | |
| 23. 59 | 19. 30 | 14. 2 | ·0973 | | | | | |
| | | 18. 17 | ·0971 | | | | | |
| | | 21. 45 | ·0947 | | | | | |
| | | 23. 6 | ·0945 | | | | | |
| | | 23. 59 | ·0949 | | | | | |
| Sept. 29 | | Sept. 29 | | Sept. 29 | | Sept. 29 | | |
| 0. 0 | 21. 19. 30 | 0. 0 | ·0949 | 0. 0 | ·01633 | 1. 0 | 57 ·3 | 57 ·9 |
| 0. 35 | 20. 35 | | *** | 1. 40 | ·01622 | 3. 0 | 58 ·7 | 59 ·0 |
| 2. 22 | 18. 0 | 2. 10 | ·0961 | 9. 45: | ·01387 | 9. 0 | 58 ·0 | 59 ·0 |
| 4. 40 | 13. 50 | 4. 35 | ·0961 | 20. 10 | ·01620 | 21. 30 | 54 ·3 | 56 ·0 |
| 6. 27 | 12. 40 | 6. 46 | ·0971 | 23. 59 | ·01712 | | | |
| 11. 48 | 13. 10 | | *** | | | | | |
| 12. 27 | 11. 50 | 17. 57 | ·0973 | | | | | |
| 14. 5 | 13. 0 | | *** | | | | | |
| 19. 12 | 10. 40 | 21. 46 | ·0945 | | | | | |
| 20. 19 | 8. 15 | 22. 45 | ·0947 | | | | | |
| 21. 20 | 13. 15 | | (†) | | | | | |
| 21. 28 | 12. 30 | | | | | | | |
| | *** | | | | | | | |
| 22. 44 | 13. 35 | | | | | | | |
| | (†) | | | | | | | |
| Sept. 30 | | Sept. 30 | | Sept. 30 | | Sept. 30 | | |
| 6. 19 | 21. 9. 12* | 6. 19 | ·0978* | 0. 0 | ·01712 | 6. 19 | 57 ·0 | 58 ·4 |
| 21. 0 | 6. 19* | 21. 0 | ·0972* | 10. 34: | ·01508 | 21. 0 | 54 ·5 | 55 ·7 |
| | | | | 21. 50 | ·01624 | | | |
| | | | | 23. 59 | ·01657 | | | |
| Oct. 1 | | Oct. 1 | | Oct. 1 | | Oct. 1 | | |
| | (†) | | (†) | 0. 0 | ·01657 | 1. 0 | 56 ·3 | 57 ·2 |
| 0. 45 | 21. 21. 30 | 0. 37 | ·0952 | 3. 11 | ·01618 | 3. 0 | 58 ·2 | 58 ·8 |
| 0. 52 | 22. 15 | 0. 52 | ·0955 | 6. 16 | ·01400 | 9. 0 | 59 ·5 | 60 ·0 |
| 1. 14 | 19. 45 | 1. 7 | ·0951 | 8. 45 | ·01262 | 21. 0 | 55 ·0 | 56 ·3 |
| 1. 45 | 20. 20 | | *** | 12. 37 | ·01173 | | | |
| 1. 53 | 19. 15 | 1. 45 | ·0959 | 22. 29 | ·01543 | | | |
| 2. 16 | 19. 30 | | *** | 23. 59 | ·01517 | | | |
| 2. 25 | 20. 50 | 2. 15 | ·0953 | | | | | |
| 2. 53 | 16. 40 | 2. 17 | ·0959 | | | | | |
| 3. 14 | 20. 50 | 2. 46: | ·0941 | | | | | |
| 3. 51 | 16. 0 | 3. 17 | ·0966 | | | | | |
| 4. 1 | 16. 20 | 3. 36 | ·0962 | | | | | |
| 4. 16 | 14. 10 | 3. 47 | ·0947 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Oct. 1 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 4. 52 | 21. 14. 55 | 4. 0 | ·0948 | | | | | |
| 5. 55 | 12. 0 | 4. 10 | ·0937 | | | | | |
| 6. 40 | 9. 50 | 5. 2 | ·0954 | | | | | |
| 7. 12 | 0. 50 | 5. 15 | ·0955 | | | | | |
| 7. 26 | 0. 30 | 6. 10: | ·0967 | | | | | |
| 7. 30 | 21. 1. 30 | 7. 3 | ·0957 | | | | | |
| 7. 41 | 20. 59. 50 | | *** | | | | | |
| 8. 12 | 21. 6. 30 | 8. 4 | ·0973 | | | | | |
| 8. 42 | 20. 59. 20 | 8. 25 | ·0951 | | | | | |
| 9. 15 | 21. 5. 40 | 8. 51 | ·0963 | | | | | |
| 10. 11 | 20. 59. 20 | 9. 45 | ·0945 | | | | | |
| 10. 28 | 21. 1. 40 | | *** | | | | | |
| 10. 45 | 8. 45 | 10. 27 | ·0949 | | | | | |
| 11. 11 | 8. 30 | 11. 8 | ·0968 | | | | | |
| 11. 44 | 10. 15 | 11. 23 | ·0964 | | | | | |
| 12. 7 | 12. 10 | 11. 40 | ·0970 | | | | | |
| 12. 39 | 10. 10 | 12. 26 | ·0962 | | | | | |
| 12. 58 | 8. 0 | 13. 7 | ·0970 | | | | | |
| 13. 7 | 9. 10 | 13. 22 | ·0965 | | | | | |
| 13. 30 | 7. 0 | 13. 46 | ·0973 | | | | | |
| 14. 21 | 9. 50 | | *** | | | | | |
| 14. 55 | 8. 50 | 14. 33 | ·0964 | | | | | |
| 15. 15 | 9. 20 | | *** | | | | | |
| 15. 24 | 10. 45 | 15. 46 | ·0969 | | | | | |
| 15. 39 | 9. 50 | | *** | | | | | |
| 15. 54 | 11. 40 | 16. 47: | ·0962 | | | | | |
| 16. 15 | 10. 30 | | *** | | | | | |
| 16. 27 | 13. 50 | 18. 0 | ·0970 | | | | | |
| 16. 37 | 13. 20 | 19. 5 | ·0958 | | | | | |
| 16. 53 | 14. 50 | | *** | | | | | |
| 18. 30 | 10. 30 | 20. 3 | ·0956 | | | | | |
| 18. 45 | 11. 10 | 20. 47 | ·0943 | | | | | |
| 19. 11 | 10. 20 | 21. 5 | ·0944 | | | | | |
| 19. 45 | 11. 30 | 22. 4 | ·0935 | | | | | |
| 20. 0 | 9. 0 | 23. 7 | ·0936 | | | | | |
| 20. 12 | 9. 30 | 23. 59 | ·0947 | | | | | |
| 20. 30 | 8. 0 | | | | | | | |
| 21. 21 | 12. 0 | | | | | | | |
| 21. 41 | 11. 30 | | | | | | | |
| | *** | | | | | | | |
| 22. 55 | 18. 10 | | | | | | | |
| | *** | | | | | | | |
| 23. 14 | 17. 45 | | | | | | | |
| | *** | | | | | | | |
| 23. 59 | 20. 50 | | | | | | | |
| Oct. 2 | | Oct. 2 | | Oct. 2 | | Oct. 2 | | |
| 0. 0 | 21. 20. 55 | 0. 0 | ·0947 | 0. 0 | ·01517 | 1. 0 | 58 ·3 | 58 ·8 |
| 0. 15 | 23. 30 | 0. 9 | ·0944 | 1. 15 | ·01510 | 3. 0 | 60 ·7 | 61 ·2 |
| 1. 7 | 22. 0 | 0. 57 | ·0946 | 2. 50 | ·01452 | 9. 0 | 61 ·0 | 62 ·0 |
| 1. 13 | 21. 15 | 1. 25 | ·0936 | 4. 9 | ·01691 | 21. 0 | 56 ·3 | 57 ·2 |
| 1. 54 | 22. 30 | 1. 50 | ·0945 | 7. 21 | ·01749 | | | |
| 2. 43 | 21. 10 | 2. 17 | ·0936 | 11. 28 | ·01738 | | | |
| 3. 5 | 18. 20 | 2. 33 | ·0940 | 17. 12 | ·02012 | | | |
| 4. 37 | 12. 55 | | *** | 22. 11 | ·02265 | | | |
| 4. 53 | 10. 40 | 2. 56 | ·0936 | 23. 59 | ·02270 | | | |
| 5. 21 | 9. 10 | 3. 40 | ·0951 | | | | | |
| 6. 13 | 11. 15 | 4. 11 | ·0949 | | | | | |

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

September 30. Owing to some inadvertance, the time-piece was not in connexion with the cylinder upon which the movements of the Declination and Horizontal Force Magnets are registered.

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 6. 42 | 21. 9. 40 | 4. 22 | ·0951 | | | | | |
| 7. 9 | 11. 10 | 4. 37 | ·0946 | | | | | |
| 7. 59 | 10. 40 | 4. 47 | ·0951 | | | | | |
| 8. 13 | 9. 0 | 5. 6 | ·0951 | | | | | |
| | *** | 5. 47 | ·0963 | | | | | |
| 9. 16 | 11. 20 | 6. 36 | ·0957 | | | | | |
| 9. 45 | 9. 50 | 7. 3 | ·0956 | | | | | |
| 10. 9 | 10. 30 | 8. 15 | ·0964 | | | | | |
| 10. 32 | 10. 10 | | *** | | | | | |
| 11. 6 | 7. 45 | 10. 25 | ·0967 | | | | | |
| 11. 19 | 10. 0 | 10. 45 | ·0970 | | | | | |
| 11. 45 | 4. 30 | 11. 0 | ·0968 | | | | | |
| 12. 28 | 11. 50 | 11. 17 | ·0972 | | | | | |
| 12. 57 | 9. 10 | | *** | | | | | |
| 13. 38 | 11. 30 | 12. 7 | ·0963 | | | | | |
| 16. 51 | 11. 40 | 12. 50 | ·0969 | | | | | |
| 19. 12 | 8. 30 | 13. 7 | ·0967 | | | | | |
| 19. 26 | 9. 0 | 13. 50 | ·0971 | | | | | |
| 19. 50 | 8. 10 | 14. 33 | ·0968 | | | | | |
| 20. 8 | 8. 20 | 19. 0 | ·0969 | | | | | |
| 20. 19 | 9. 50 | 19. 33 | ·0957 | | | | | |
| 20. 51 | 11. 0 | | *** | | | | | |
| 21. 50 | 11. 15 | 20. 17 | ·0949 | | | | | |
| 22. 12 | 15. 0 | 20. 46 | ·0951 | | | | | |
| 22. 40 | 14. 0 | 21. 25 | ·0947 | | | | | |
| 22. 51 | 17. 45 | 21. 52 | ·0948 | | | | | |
| 23. 6 | 16. 30 | 22. 17 | ·0954 | | | | | |
| 23. 18 | 19. 15 | 22. 40 | ·0948 | | | | | |
| 23. 26 | 19. 0 | 22. 50 | ·0957 | | | | | |
| 23. 48 | 23. 40 | 23. 10 | ·0940 | | | | | |
| 23. 56 | 21. 15 | 23. 17 | ·0945 | | | | | |
| 23. 59 | 22. 0 | 23. 26 | ·0937 | | | | | |
| | | 23. 45 | ·0937 | | | | | |
| | | 23. 52 | ·0923 | | | | | |
| | | 23. 59 | ·0924 | | | | | |
| Oct. 3 | | Oct. 3 | | Oct. 3 | | Oct. 3 | | |
| 0. 0 | 21. 22. 5 | 0. 0 | ·0925 | 0. 0 | ·02270 | 0. 0 | 58 ·3 | 59 ·6 |
| 0. 11 | 23. 45 | 0. 50 | ·0949 | | (†) | 1. 0 | 60 ·0 | 60 ·7 |
| 0. 16 | 23. 30 | 1. 26 | ·0934 | 1. 0 | ·02262* | 3. 0 | 63 ·0 | 63 ·0 |
| 0. 45 | 27. 0 | 1. 53 | ·0948 | 3. 0 | ·02218 | 6. 0 | 62 ·8 | 63 ·2 |
| 0. 57 | 26. 20 | | *** | 4. 58 | ·01786 | 9. 0 | 61 ·0 | 61 ·7 |
| 1. 10 | 23. 40 | 2. 32 | ·0943 | 11. 52 | ·01835 | 12. 0 | 60 ·5 | 61 ·3 |
| 1. 19 | 25. 30 | 2. 46 | ·0964 | 14. 29 | ·01970 | 18. 0 | 53 ·1 | 55 ·0 |
| 1. 30 | 23. 0 | 3. 0 | ·0900 | 21. 6 | ·02493 | 21. 0 | 52 ·2 | 54 ·8 |
| 1. 54 | 26. 15 | 3. 10 | ·0921 | 21. 57 | ·02618 | | | |
| 2. 0 | 24. 35 | 3. 16 | ·0917 | 22. 14 | ·02590 | | | |
| 2. 7 | 26. 25 | 3. 42 | ·0928 | 23. 43 | ·02573 | | | |
| 2. 16 | 25. 0 | | *** | | (†) | | | |
| 2. 30 | 21. 0 | 4. 40 | ·0927 | | | | | |
| 2. 40 | 22. 15 | 5. 4 | ·0933 | | | | | |
| 2. 51 | 31. 30 | 5. 32 | ·0930 | | | | | |
| 3. 12 | 14. 20 | 5. 46 | ·0935 | | | | | |
| 3. 14 | 15. 15 | 6. 3 | ·0932 | | | | | |
| 3. 27 | 13. 40 | 7. 26 | ·0940 | | | | | |
| 4. 0 | 20. 0 | 7. 45 | ·0948 | | | | | |
| 4. 54 | 15. 0 | | *** | | | | | |
| 5. 33 | 13. 20 | 8. 33 | ·0942 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 7. 24 | 21. 12. 25 | 8. 46 | ·0944 | | | | | |
| 8. 6 | 13. 30 | 9. 23 | ·0938 | | | | | |
| | *** | 10. 46 | ·0950 | | | | | |
| 9. 26 | 9. 50 | 11. 3 | ·0947 | | | | | |
| 9. 40 | 7. 40 | 12. 6 | ·0955 | | | | | |
| 10. 26 | 10. 40 | 12. 15 | ·0951 | | | | | |
| | *** | 17. 3 | ·0961 | | | | | |
| 12. 7 | 11. 50 | 19. 7 | ·0959 | | | | | |
| 13. 10 | 11. 15 | 19. 43 | ·0946 | | | | | |
| 14. 18 | 15. 30 | 20. 7 | ·0950 | | | | | |
| 15. 39 | 12. 10 | | *** | | | | | |
| 18. 45 | 10. 15 | 21. 33 | ·0942 | | | | | |
| 19. 27 | 11. 5 | | *** | | | | | |
| 20. 11 | 15. 40 | 23. 8 | ·0926 | | | | | |
| 20. 21 | 14. 40 | 23. 33: | ·0931 | | | | | |
| 20. 30 | 15. 5 | 23. 47 | ·0925 | | | | | |
| 20. 49 | 14. 30 | 23: 59 | ·0928 | | | | | |
| 21. 10 | 17. 0 | | | | | | | |
| 21. 42 | 15. 0 | | | | | | | |
| 21. 56 | 16. 40 | | | | | | | |
| 22. 11 | 16. 30 | | | | | | | |
| 22. 45 | 18. 5 | | | | | | | |
| 22. 57 | 17. 20 | | | | | | | |
| 23. 22 | 20. 20 | | | | | | | |
| 23. 42 | 20. 0 | | | | | | | |
| 23. 59 | 24. 20 | | | | | | | |
| Oct. 4 | | Oct. 4 | | Oct. 4 | | Oct. 4 | | |
| 0. 0 | 21. 24. 20 | 0. 0 | ·0928 | | (†) | 0. 0 | 54 ·0 | 56 ·0 |
| 0. 15 | 21. 30 | 0. 15 | ·0926 | 0. 22 | ·02590 | 1. 0 | 55 ·0 | 55 ·7 |
| 0. 52 | 18. 30 | 0. 36 | ·0940 | 1. 24 | ·02573 | 3. 0 | 57 ·8 | 57 ·7 |
| | *** | | *** | 7. 42 | ·01920 | 9. 0 | 58 ·2 | 58 ·4 |
| 1. 51 | 20. 5 | 0. 54 | ·0936 | 10. 50 | ·01848 | 21. 0 | 53 ·2 | 54 ·6 |
| | *** | | *** | 11. 58 | ·01859 | | | |
| 2. 45 | 18. 45 | 1. 50 | ·0941 | 14. 15 | ·01890 | | | |
| | *** | | *** | 21. 10 | ·02304 | | | |
| 3. 13 | 16. 30 | 2. 46 | ·0932 | 23. 59 | ·02409 | | | |
| 3. 37 | 17. 20 | 3. 7 | ·0936 | | | | | |
| 3. 44 | 18. 50 | 3. 10 | ·0932 | | | | | |
| 3. 58 | 16. 30 | 3. 40 | ·0945 | | | | | |
| 4. 16 | 15. 15 | 4. 7 | ·0934 | | | | | |
| 4. 46 | 16. 30 | 4. 40 | ·0946 | | | | | |
| 5. 14 | 13. 10 | 5. 7: | ·0935 | | | | | |
| 5. 39 | 12. 40 | 5. 40 | ·0946 | | | | | |
| 5. 49 | 14. 15 | 5. 52 | ·0940 | | | | | |
| 6. 13 | 10. 50 | 6. 36 | ·0952 | | | | | |
| 6. 24 | 12. 20 | 6. 45 | ·0915 | | | | | |
| 6. 39 | 10. 0 | 7. 6 | ·0953 | | | | | |
| 6. 44 | 21. 16. 0 | | *** | | | | | |
| 6. 58 | 20. 55. 10 | 7. 17 | ·0952 | | | | | |
| 7. 14 | 21. 1. 30 | | *** | | | | | |
| 7. 21 | 1. 0 | 8. 0 | ·0941 | | | | | |
| 7. 36 | 7. 0 | | *** | | | | | |
| 9. 31 | 7. 15 | 9. 7 | ·0939 | | | | | |
| 9. 44 | 5. 45 | 9. 23 | ·0944 | | | | | |
| 9. 54 | 7. 15 | 9. 32 | ·0941 | | | | | |
| 10. 13 | 4. 15 | 9. 45 | ·0942 | | | | | |
| 10. 40 | 5. 30 | 10. 2 | ·0935 | | | | | |

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. 4 | | Oct. 4 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 11. 4 | 21. 3. 20 | 10. 33 | ·0944 | | | | | |
| 11. 13 | 4. 30 | 10. 50 | ·0939 | | | | | |
| 11. 22 | 3. 40 | 11. 36 | ·0954 | | | | | |
| 11. 50 | 6. 45 | 12. 21: | ·0946 | | | | | |
| 12. 15 | 3. 0 | 13. 0 | ·0955 | | | | | |
| 12. 41 | 5. 0 | | *** | | | | | |
| 13. 7 | 4. 0 | 13. 45 | ·0952 | | | | | |
| 13. 15 | 2. 50 | 14. 6 | ·0967 | | | | | |
| 13. 39 | 8. 0 | 14. 17 | ·0962 | | | | | |
| 13. 45 | 8. 10 | 14. 40 | ·0964 | | | | | |
| 13. 52 | 9. 30 | | *** | | | | | |
| 14. 26 | 2. 0 | 16. 4 | ·0959 | | | | | |
| 14. 57 | 2. 10 | 16. 33 | ·0963 | | | | | |
| 15. 41 | 7. 40 | | *** | | | | | |
| | *** | 17. 40 | ·0954 | | | | | |
| 17. 45 | 12. 15 | 18. 17 | ·0964 | | | | | |
| 17. 58 | 15. 0 | | *** | | | | | |
| 18. 13 | 14. 55 | 18. 50 | ·0956 | | | | | |
| 18. 33 | 10. 0 | 19. 10 | ·0960 | | | | | |
| 18. 45 | 11. 0 | | *** | | | | | |
| 18. 57 | 9. 30 | 20. 13 | ·0950 | | | | | |
| 19. 17 | 11. 0 | 20. 38 | ·0940 | | | | | |
| 20. 5 | 8. 50 | 21. 16 | ·0941 | | | | | |
| 21. 28 | 9. 50 | 21. 33 | ·0947 | | | | | |
| 21. 42 | 12. 10 | 21. 52 | ·0939 | | | | | |
| 21. 57 | 12. 0 | 22. 10 | ·0941 | | | | | |
| 22. 21 | 14. 10 | 22. 33 | ·0932 | | | | | |
| 22. 37 | 13. 30 | 23. 59 | ·0935 | | | | | |
| 23. 59 | 19. 0 | | | | | | | |
| Oct. 5 | | Oct. 5 | | Oct. 5 | | Oct. 5 | | |
| 0. 0 | 21. 19. 0 | 0. 0 | ·0935 | 0. 0 | ·02409 | 1. 0 | 56 ·0 | 56 ·8 |
| 0. 29 | 20. 40 | 0. 25 | ·0940 | 0. 43 | ·02418 | 3. 0 | 58 ·2 | 58 ·6 |
| 0. 45 | 19. 25 | 0. 37: | ·0935 | 3. 0 | ·02308 | 9. 0 | 60 ·5 | 61 ·5 |
| 1. 56 | 17. 40 | 1. 24 | ·0952 | 6. 11 | ·01888 | 21. 0 | 57 ·3 | 58 ·6 |
| 2. 15 | 20. 5 | 1. 47 | ·0952 | 7. 45 | ·01753 | | | |
| 2. 29 | 17. 30 | 2. 0 | ·0957 | 16. 9 | ·01822 | | | |
| 2. 39 | 18. 30 | 2. 7 | ·0953 | 23. 59 | ·02089 | | | |
| 2. 50 | 15. 50 | 2. 16 | ·0957 | | | | | |
| 3. 37 | 14. 45 | 2. 20 | ·0947 | | | | | |
| 4. 0 | 15. 0 | 2. 36 | ·0954 | | | | | |
| 4. 45 | 13. 40 | 2. 46 | ·0945 | | | | | |
| 9. 15 | 10. 0 | | *** | | | | | |
| 13. 30 | 11. 20 | 3. 47 | ·0943 | | | | | |
| 14. 54 | 10. 40 | 5. 30 | ·0945 | | | | | |
| 15. 50 | 11. 0 | 18. 17 | ·0966 | | | | | |
| 16. 12 | 12. 30 | 20. 5 | ·0962 | | | | | |
| 17. 45 | 10. 50 | 22. 48 | ·0942 | | | | | |
| 18. 27 | 11. 10 | 23. 59 | ·0936 | | | | | |
| 20. 54 | 7. 35 | | | | | | | |
| 21. 36 | 8. 0 | | | | | | | |
| 23. 56 | 15. 10 | | | | | | | |
| 23. 59 | 14. 40 | | | | | | | |
| Oct. 6 | | Oct. 6 | | Oct. 6 | | Oct. 6 | | |
| 0. 0 | 21. 14. 35 | 0. 0 | ·0936 | 0. 0 | ·02089 | 1. 0 | 60 ·0 | 60 ·7 |
| 0. 5 | 14. 15 | 7. 33 | ·0961 | 1. 36 | ·02070 | 3. 0 | 62 ·0 | 62 ·9 |
| 0. 13 | 15. 35 | 11. 16 | ·0960 | 4. 28 | ·01800 | 9. 0 | 63 ·8 | 64 ·3 |
| 2. 22 | 15. 50 | 11. 40 | ·0965 | 5. 25 | ·01812 | 22. 30 | 61 ·0 | 61 ·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. |
|---|---|---|---|---|---|---|---|---|
| Oct. 6 | | Oct. 6 | | Oct. 6 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 7. 55 | 21. 10. 40 | 17. 33 | ·0967 | 5. 37 | {·01848 ·01972 | | | |
| 11. 28 | 10. 20 | 21. 10 | ·0946 | | | | | |
| 12. 0 | 9. 15 | | *** | 12. 0: | ·01882 | | | |
| 12. 44 | 10. 15 | 23. 0 | ·0943 | 20. 5 | ·02072 | | | |
| 16. 30 | 10. 10 | 23. 59 | ·0947 | 23. 59 | ·02100 | | | |
| 16. 44 | 9. 20 | | | | | | | |
| 16. 59 | 10. 50 | | | | | | | |
| 17. 54 | 10. 15 | | | | | | | |
| 20. 30 | 7. 30 | | | | | | | |
| | *** | | | | | | | |
| 21. 49 | 10. 0 | | | | | | | |
| 23. 55 | 16. 30 | | | | | | | |
| 23. 59 | 16. 20 | | | | | | | |
| Oct. 7 | | Oct. 7 | | Oct. 7 | | Oct. 7 | | |
| 0. 0 | 21. 16. 20 | 0. 0 | ·0947 | 0. 0 | ·02100 | 10. 15 | 62 ·0 | 63 ·0 |
| 1. 42 | 18. 50 | | *** | 4. 49 | ·02096 | 21. 0 | 57 ·0 | 57 ·2 |
| 2. 20: | 17. 30 | 2. 46 | ·0951 | 11. 26: | ·01992 | | | |
| 2. 56 | 18. 25 | 3. 10 | ·0957 | 22. 50 | ·02456 | | | |
| 6. 0 | 13. 40 | | *** | 23. 59 | ·02481 | | | |
| 15. 54 | 11. 45 | 14. 36 | ·0969 | | | | | |
| 16. 6 | 12. 30 | | *** | | | | | |
| 17. 37 | 11. 0 | 18. 45 | ·0970 | | | | | |
| 17. 44 | 11. 30 | | *** | | | | | |
| 18. 41 | 9. 55 | 22. 46 | ·0941 | | | | | |
| 19. 9 | 10. 40 | 23. 59 | ·0943 | | | | | |
| 20. 12 | 7. 20 | | | | | | | |
| 21. 10 | 13. 0 | | | | | | | |
| 21. 24 | 11. 0 | | | | | | | |
| 23. 45 | 18. 0 | | | | | | | |
| 23. 59 | 17. 40 | | | | | | | |
| Oct. 8 | | Oct. 8 | | Oct. 8 | | Oct. 8 | | |
| 0. 0 | 21. 17. 40 | 0. 0 | ·0943 | 0. 0 | ·02481 | 1. 0 | 58 ·5 | 58 ·3 |
| 1. 5 | 19. 0 | | *** | 1. 40 | ·02470 | 3. 0 | 59 ·3 | 59 ·2 |
| 3. 12 | 17. 30 | 1. 36 | ·0944 | 3. 58 | {·02149 ·02192 | 9. 0 | 55 ·3 | 57 ·5 |
| | *** | 1. 50 | ·0938 | | | 21. 0 | 49 ·7 | 51 ·0 |
| 5. 57 | 13. 0 | 2. 46 | ·0948 | 5. 9 | ·02129 | | | |
| | *** | 3. 30 | ·0944 | 7. 0 | {·02100 ·02154 | | | |
| 10. 52 | 11. 30 | 4. 10 | ·0948 | | | | | |
| 11. 13 | 9. 45 | 4. 46 | ·0954 | 9. 25: | ·02252 | | | |
| | *** | 5. 24 | ·0961 | 13. 14 | ·02580 | | | |
| 11. 45 | 11. 15 | | *** | 21. 58 | ·02531 | | | |
| 12. 27 | 9. 50 | 9. 36 | ·0974 | 23. 59 | ·02500 | | | |
| 12. 42 | 11. 20 | 9. 50 | ·0976 | | | | | |
| 13. 43 | 3. 10 | | *** | | | | | |
| 13. 50 | 3. 30 | 10. 43 | ·0975 | | | | | |
| 14. 11 | 0. 30 | 10. 56 | ·0977 | | | | | |
| 14. 14 | 0. 15 | | *** | | | | | |
| 14. 54 | 6. 20 | 11. 20 | ·0969 | | | | | |
| 15. 10 | 4. 0 | 11. 53: | ·0979 | | | | | |
| 15. 15 | 8. 0 | 12. 13 | ·0975 | | | | | |
| 15. 44 | 5. 45 | 12. 45 | ·0987 | | | | | |
| 15. 52 | 7. 0 | 12. 48 | ·0985 | | | | | |
| 16. 5 | 5. 30 | 13. 7 | ·0992 | | | | | |
| 16. 21 | 8. 0 | 13. 20 | ·0981 | | | | | |
| 16. 30 | 7. 40 | 13. 33 | ·0988 | | | | | |
| 16. 43 | 9. 0 | 13. 53 | ·0980 | | | | | |
| 18. 0 | 9. 50 | 14. 3 | ·0984 | | | | | |

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 | ° | ° |
| 18. 30 | 21. 12. 0 | 14. 15 | ·0970 | | | | | |
| 18. 57 | 12. 0 | 14. 33 | ·0982 | | | | | |
| 19. 43 | 8. 30 | 14. 36 | ·0971 | | | | | |
| 19. 47 | 7. 0 | 15. 6 | ·0977 | | | | | |
| | | | *** | | | | | |
| 20. 0 | 9. 30 | | | | | | | |
| 20. 22 | 9. 0 | 15. 46 | ·0981 | | | | | |
| 20. 30 | 9. 40 | 16. 7 | ·0976 | | | | | |
| 20. 59 | 8. 10 | 16. 16 | ·0979 | | | | | |
| 21. 13 | 10. 30 | 16. 24 | ·0974 | | | | | |
| 21. 39 | 10. 30 | 17. 10 | ·0977 | | | | | |
| 22. 40 | 18. 0 | 17. 46 | ·0977 | | | | | |
| | | | *** | | | | | |
| 22. 57 | 15. 30 | | | | | | | |
| 23. 45 | 16. 30 | 18. 33 | ·0974 | | | | | |
| | | | *** | | | | | |
| 23. 56 | 18. 0 | | | | | | | |
| 23. 59 | 17. 5 | 20. 2 | ·0979 | | | | | |
| | | | *** | | | | | |
| | | 20. 50 | ·0971 | | | | | |
| | | 21. 13 | ·0973 | | | | | |
| | | 21. 46 | ·0959 | | | | | |
| | | 22. 3 | ·0964 | | | | | |
| | | | *** | | | | | |
| | | 22. 35 | ·0964 | | | | | |
| | | 23. 7 | ·0952 | | | | | |
| | | | *** | | | | | |
| | | 25. 59 | ·0954 | | | | | |
| Oct. 9 | | Oct. 9 | | Oct. 9 | | Oct. 9 | | |
| 0. 0 | 21. 17. 0 | 0. 0 | ·0954 | 0. 0 | ·02500 | 1. 0 | 51 ·8 | 52 ·5 |
| 0. 6 | 15. 50 | 1. 2 | ·0954 | 1. 40 | ·02501 | 3. 0 | 53 ·3 | 54 ·2 |
| 1. 4 | 21. 0 | 1. 12 | ·0960 | 9. 39: | ·02013 | 9. 0 | 52 ·0 | 54 ·5 |
| 1. 10 | 18. 30 | 2. 13 | ·0952 | 19. 7 | ·02572 | 21. 0 | 46 ·7 | 48 ·0 |
| | | | *** | 23. 54 | {·02486 | | | |
| 1. 46 | 21. 20 | | | | {·02400 | | | |
| 2. 7 | 18. 30 | 3. 24 | ·0957 | 23. 59 | ·02395 | | | |
| | *** | 3. 58 | ·0965 | | | | | |
| 3. 51 | 16. 50 | 4. 17 | ·0960 | | | | | |
| 4. 28 | 14. 20 | 4. 53 | ·0966 | | | | | |
| 5. 37 | 14. 50 | 5. 17 | ·0961 | | | | | |
| 6. 28 | 7. 20 | 5. 45 | ·0965 | | | | | |
| 7. 12 | 13. 40 | 5. 52 | ·0959 | | | | | |
| 9. 43 | 10. 0 | 6. 6 | ·0961 | | | | | |
| 9. 59 | 11. 30 | 6. 17 | ·0952 | | | | | |
| 12. 54 | 10. 30 | 6. 46 | ·0963 | | | | | |
| | | | *** | | | | | |
| 14. 34 | 12. 50 | | | | | | | |
| 15. 29 | 10. 30 | 7. 30 | ·0963 | | | | | |
| | | | *** | | | | | |
| 16. 15 | 14. 30 | | | | | | | |
| 16. 59 | 12. 10 | 8. 45 | ·0971 | | | | | |
| | | | *** | | | | | |
| 17. 27 | 12. 40 | | | | | | | |
| 18. 55 | 11. 0 | 15. 13 | ·0982 | | | | | |
| | | | *** | | | | | |
| 19. 52 | 7. 40 | | | | | | | |
| 20. 41 | 7. 30 | 15. 48 | ·0976 | | | | | |
| | *** | | *** | | | | | |
| 21. 57 | 9. 45 | 17. 7 | ·0988 | | | | | |
| 23. 0 | 14. 50 | 18. 56 | ·0988 | | | | | |
| 23. 10 | 13. 45 | 22. 33 | ·0970 | | | | | |
| | | | *** | | | | | |
| 23. 52 | 17. 20 | | | | | | | |
| 23. 57 | 16. 40 | 23. 7 | ·0969 | | | | | |
| | | | *** | | | | | |
| 23. 59 | 16. 55 | | | | | | | |
| | | 23. 50 | ·0975 | | | | | |
| | | 23. 59 | ·0970 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Oct. 10 | | Oct. 10 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 17. 0 | 0. 0 | ·0970 | 0. 0 | ·02395 | 0. 0 | 48 ·1 | 49 ·2 |
| 0. 13 | 16. 30 | 0. 37: | ·0978 | 2. 54 | ·02331 | 1. 0 | 49 ·0 | 50 ·1 |
| 0. 39 | 18. 0 | 1. 25 | ·0964 | 5. 26 | ·02309 | 3. 0 | 50 ·6 | 51 ·0 |
| 1. 0 | 19. 10 | 1. 46 | ·0970 | 11. 30 | ·01959 | 6. 0 | 52 .2 | 54 ·0 |
| | | | *** | | | | | |
| 1. 37 | 16. 15 | | | 17. 2 | ·01600 | 9. 0 | 53 ·8 | 54 ·5 |
| 1. 56 | 16. 50 | 4. 7 | ·0978 | 23. 59 | ·01610 | 12. 0 | 54 ·5 | 55 ·5 |
| 2. 41 | 15. 45 | 4. 33 | ·0971 | | | 18. 0 | 56 ·0 | 57 ·0 |
| 2. 55 | 16. 55 | 5. 0 | ·0981 | | | 21. 0 | 55 ·2 | 56 ·5 |
| 4. 27 | 13. 30 | 5. 8 | ·0976 | | | | | |
| 4. 42 | 12. 15 | 5. 30 | ·0984 | | | | | |
| | | | *** | | | | | |
| 4. 58 | 12. 10 | | | | | | | |
| 5. 20 | 7. 10 | 9. 47 | ·0986 | | | | | |
| | | | *** | | | | | |
| 6. 0 | 11. 20 | | | | | | | |
| 6. 19 | 11. 0 | 10. 47 | ·0981 | | | | | |
| | | | *** | | | | | |
| 6. 42 | 12. 15 | | | | | | | |
| 11. 23 | 9. 50 | 19. 30 | ·0976 | | | | | |
| 11. 48 | 10. 45 | 20. 3 | ·0969 | | | | | |
| | | | *** | | | | | |
| 16. 15 | 9. 20 | | | | | | | |
| 16. 39 | 10. 5 | 22. 15 | ·0964 | | | | | |
| 17. 22 | 8. 40 | 22. 45 | ·0956 | | | | | |
| 18. 6 | 9. 30 | 23. 59 | ·0957 | | | | | |
| 19. 26 | 8. 50 | | | | | | | |
| 19. 38 | 10. 0 | | | | | | | |
| | *** | | | | | | | |
| 20. 51 | 9. 20 | | | | | | | |
| 21. 11 | 8. 10 | | | | | | | |
| 21. 43 | 11. 0 | | | | | | | |
| 21. 54 | 10. 30 | | | | | | | |
| 22. 29 | 12. 55 | | | | | | | |
| 22. 40 | 12. 30 | | | | | | | |
| 23. 59 | 17. 20 | | | | | | | |
| Oct. 11 | | Oct. 11 | | Oct. 11 | | Oct. 11 | | |
| 0. 0 | 21. 17. 20 | 0. 0 | ·0957 | 0. 0 | ·01610 | 0. 0 | 55 ·5 | 56 ·4 |
| 0. 15 | 18. 15 | 1. 40 | ·0963 | 5. 30 | ·01564 | 1. 0 | 55 ·7 | 56 ·2 |
| 1. 43 | 19. 10 | 2. 20 | ·0961 | 10. 5 | ·01709 | 3. 0 | 56 ·0 | 56 ·5 |
| 4. 17 | 13. 40 | 3. 17 | ·0962 | 15. 30 | ·02109 | 9. 8 | 51 ·7 | 53 ·7 |
| 8. 40 | 13. 20 | 7. 3 | ·0975 | 19. 42 | ·02530 | 21. 0 | 42 ·5 | 45 ·3 |
| 9. 14: | 8. 30 | 7. 32 | ·0972 | 21. 32 | ·02517 | | | |
| 10. 23 | 12. 20 | 8. 0 | ·0977 | 23. 59 | ·02341 | | | |
| 11. 37 | 10. 55 | 8. 35 | ·0976 | | | | | |
| 12. 13 | 12. 50 | 9. 32 | ·0982 | | | | | |
| 12. 42 | 10. 25 | 9. 43 | ·0978 | | | | | |
| 13. 56 | 12. 30 | 9. 50 | ·0980 | | | | | |
| 14. 41 | 18. 45 | 10. 7 | ·0976 | | | | | |
| 15. 54 | 11. 45 | 10. 45 | ·0982 | | | | | |
| | | | *** | | | | | |
| 18. 48 | 11. 20 | | | | | | | |
| 20. 42 | 7. 30 | 11. 46 | ·0978 | | | | | |
| 22. 46 | 16. 10 | 12. 25 | ·0984 | | | | | |
| 22. 57 | 16. 5 | 13. 58 | ·0977 | | | | | |
| 23. 50 | 20. 20 | 15. 17 | ·0986 | | | | | |
| 23. 59 | 19. 15 | 16. 20 | ·0989 | | | | | |
| | | 17. 30 | ·0985 | | | | | |
| | | 18. 0 | ·0988 | | | | | |
| | | | *** | | | | | |
| | | 21. 40 | ·0981 | | | | | |
| | | | *** | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Oct. 11 h m | | h m | | h m | ° | ° |
| | | 23. 17 | ·0968 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0966 | | | | | |
| Oct. 12 | | Oct. 12 | | Oct. 12 | | Oct. 12 | | |
| 0. 0 | 21. 19. 10 | 0. 0 | ·0966 | 0. 0 | ·02341 | 1. 0 | 45 ·7 | 47 ·1 |
| 0. 37 | 17. 20 | 1. 3 | ·0970 | 1. 37 | ·02310 | 3. 0 | 48 ·3 | 49 ·2 |
| 1. 1 | 20. 30 | 2. 0 | ·0974 | 10. 36: | ·01794 | 9. 0 | 49 ·5 | 50 ·0 |
| 1. 30 | 17. 0 | 2. 17 | ·0969 | 18. 36 | ·01953 | 21. 0 | 49 ·0 | 50 ·3 |
| 2. 7 | 20. 30 | 4. 3 | ·0970 | 23. 59 | ·01847 | | | |
| 2. 30 | 17. 20 | 5. 20 | ·0977 | | | | | |
| 2. 43 | 18. 10 | 5. 36 | ·0975 | | | | | |
| 3. 9 | 16. 10 | 6. 17 | ·0979 | | | | | |
| 3. 16 | 16. 30 | | *** | | | | | |
| 4. 29 | 13. 30 | 8. 15 | ·0974 | | | | | |
| 5. 41 | 11. 30 | | *** | | | | | |
| 7. 54 | 11. 30 | 10. 45 | ·0979 | | | | | |
| 8. 1 | 10. 50 | 11. 17: | ·0976 | | | | | |
| 8. 13 | 11. 50 | 12. 6 | ·0989 | | | | | |
| 8. 28 | 10. 30 | 12. 33 | ·0984 | | | | | |
| 9. 27 | 10. 0 | 12. 52 | ·0987 | | | | | |
| 10. 22 | 10. 45 | 13. 36 | ·0981 | | | | | |
| 10. 46 | 9. 0 | | *** | | | | | |
| 11. 11 | 9. 50 | 16. 42 | ·0993 | | | | | |
| 11. 21 | 9. 10 | | *** | | | | | |
| 11. 43 | 11. 0 | 18. 33 | ·0993 | | | | | |
| 12. 12 | 9. 10 | 22. 40 | ·0967 | | | | | |
| 12. 15 | 10. 0 | 23. 16 | ·0967 | | | | | |
| 12. 40 | 8. 10 | 23. 32 | ·0964 | | | | | |
| 13. 11 | 7. 50 | 23. 59 | ·0970 | | | | | |
| 14. 39 | 12. 0 | | | | | | | |
| 15. 56 | 10. 40 | | | | | | | |
| 16. 4 | 11. 30 | | | | | | | |
| 17. 7 | 9. 10 | | | | | | | |
| 17. 15 | 10. 0 | | | | | | | |
| 17. 42 | 8. 15 | | | | | | | |
| 17. 54 | 8. 30 | | | | | | | |
| 18. 6 | 8. 10 | | | | | | | |
| 18. 50 | 8. 30 | | | | | | | |
| 19. 0 | 7. 25 | | | | | | | |
| 20. 22 | 6. 50 | | | | | | | |
| 20. 57 | 7. 10 | | | | | | | |
| 22. 14 | 12. 30 | | | | | | | |
| 23. 15 | 19. 30 | | | | | | | |
| 23. 39 | 18. 40 | | | | | | | |
| 23. 52 | 21. 10 | | | | | | | |
| 23. 59 | 21. 0 | | | | | | | |
| Oct. 13 | | Oct. 13 | | Oct. 13 | | Oct. 13 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0979 | 0. 0 | ·01847 | 1. 0 | 52 ·0 | 52 ·2 |
| 0. 19 | 22. 30 | 0. 45 | ·0968 | 2. 12 | ·01756 | 3. 0 | 54 ·0 | 54 ·0 |
| 1. 27 | 22. 30 | 3. 10 | ·0969 | 6. 43 | ·01430 | 9. 0 | 55 ·0 | 56 ·0 |
| 1. 59 | 20. 15 | 4. 46 | ·0974 | 8. 49 | ·01558 | 22. 25 | 50 ·0 | 52 ·0 |
| 2. 28 | 21. 0 | 5. 10: | ·0970 | 15. 10: | ·01570 | | | |
| 2. 50 | 19. 0 | 5. 36 | ·0980 | 20. 58 | ·01823 | | | |
| 3. 16 | 18. 50 | 5. 45 | ·0977 | 23. 40 | ·01908 | | | |
| 4. 0 | 15. 10 | 7. 15 | ·0982 | 23. 59 | ·01896 | | | |
| 4. 22 | 15. 20 | 7. 45 | ·0977 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 13 h m | ° ′ ″ | Oct. 13 h m | | h m | | h m | ° | ° |
| 4. 45 | 21. 14. 30 | 10. 36 | ·0982 | | | | | |
| 5. 28 | 5. 50 | 10. 45 | ·0998 | | | | | |
| 5. 49 | 7. 20 | 11. 10 | ·0997 | | | | | |
| 5. 54 | 7. 10 | 11. 32 | ·0990 | | | | | |
| 6. 18 | 10. 20 | 11. 36 | ·0992 | | | | | |
| 7. 28 | 11. 10 | 13. 46 | ·0986 | | | | | |
| 8. 2 | 10. 0 | 14. 5 | ·0978 | | | | | |
| 9. 43 | 12. 0 | 14. 36 | ·0986 | | | | | |
| 10. 10 | 11. 10 | | *** | | | | | |
| 10. 54 | 12. 15 | 19. 3 | ·0986 | | | | | |
| 11. 49 | 7. 50 | 21. 57 | ·0962 | | | | | |
| 12. 12 | 8. 50 | 22. 10 | ·0964 | | | | | |
| 12. 50 | 7. 30 | 22. 46 | ·0961 | | | | | |
| 13. 56 | 10. 15 | 23. 3 | ·0964 | | | | | |
| 15. 17 | 10. 40 | 23. 12 | ·0962 | | | | | |
| 15. 45 | 9. 10 | 23. 59 | ·0965 | | | | | |
| 16. 13 | 11. 0 | | | | | | | |
| | *** | | | | | | | |
| 17. 24 | 10. 25 | | | | | | | |
| 17. 42 | 11. 30 | | | | | | | |
| 17. 54 | 10. 30 | | | | | | | |
| 18. 11 | 10. 45 | | | | | | | |
| 20. 12 | 7. 0 | | | | | | | |
| 20. 48 | 6. 55 | | | | | | | |
| 22. 57 | 18. 45 | | | | | | | |
| 23. 59 | 21. 0 | | | | | | | |
| Oct. 14 | | Oct. 14 | | Oct. 14 | | Oct. 14 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0965 | 0. 0 | ·01896 | 10. 15 | 54 ·0 | 55 ·5 |
| 0. 27 | 20. 30 | 3. 7 | ·0967 | 2. 0: | ·01878 | 21. 0 | 49 ·7 | 51 ·0 |
| 0. 39 | 21. 10 | 3. 50 | ·0971 | 6. 22 | ·01562 | | | |
| 2. 12 | 19. 45 | 4. 15 | ·0969 | 12. 13 | ·01610 | | | |
| 4. 30 | 12. 35 | 4. 58 | ·0973 | 18. 4 | ·01947 | | | |
| 7. 56 | 12. 0 | 5. 46 | ·0972 | 23. 20 | ·02320 | | | |
| 8. 20 | 10. 40 | 6. 20 | ·0977 | 23. 59 | ·02317 | | | |
| 9. 40 | 11. 30 | 8. 21 | ·0977 | | | | | |
| 9. 45 | 10. 40 | | *** | | | | | |
| 9. 55 | 11. 20 | 8. 56 | ·0981 | | | | | |
| 11. 14 | 11. 30 | 9. 4 | ·0986 | | | | | |
| 11. 40 | 12. 50 | 9. 30 | ·0979 | | | | | |
| 12. 40 | 11. 20 | | *** | | | | | |
| 13. 30 | 13. 10 | 11. 26 | ·0986 | | | | | |
| | *** | 11. 45 | ·0994 | | | | | |
| 17. 33 | 12. 10 | 12. 7 | ·0998 | | | | | |
| 17. 47 | 11. 15 | 12. 42 | ·0986 | | | | | |
| 18. 51 | 10. 50 | 13. 8 | ·0981 | | | | | |
| 19. 28 | 9. 30 | | *** | | | | | |
| 19. 51 | 7. 40 | 14. 33 | ·0984 | | | | | |
| 20. 9 | 8. 30 | 14. 47 | ·0988 | | | | | |
| 20. 19 | 7. 30 | 15. 6 | ·0984 | | | | | |
| 20. 45 | 7. 20 | 15. 20 | ·0989 | | | | | |
| 20. 54 | 8. 10 | 15. 33 | ·0986 | | | | | |
| 21. 2 | 7. 10 | | *** | | | | | |
| 23. 50 | 19. 0 | 18. 16 | ·0992 | | | | | |
| 23. 59 | 18. 45 | | *** | | | | | |
| | | 19. 20 | ·0988 | | | | | |
| | | | *** | | | | | |
| | | 21. 3 | ·0971 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| h m | ° ′ ″ | Oct. 14 h m | | h m | | h m | ° | ° |
| | | 22. 15 | ·0968 | | | | | |
| | | 23. 59 | ·0971 | | | | | |
| Oct. 15 | | Oct. 15 | | Oct. 15 | | Oct. 15 | | |
| 0. 0 | 21. 18. 45 | 0. 0 | ·0971 | 0. 0 | ·02317 | 1. 0 | 53 ·0 | 53 ·8 |
| 0. 5 | 18. 30 | 0. 15 | ·0969 | 0. 57 | ·02312 | 3. 0 | 55 ·7 | 55 ·5 |
| 0. 40 | 19. 45 | | *** | 3. 48 | ·02190 | 9. 0 | 59 ·7 | 59 ·3 |
| 0. 57 | 19. 30 | 2. 47 | ·0979 | 8. 12 | ·01769 | 21. 0 | 59 ·7 | 59 ·7 |
| 1. 9 | 20. 30 | 3. 2 | ·0976 | 10. 21 | ·01625 | | | |
| 1. 45 | 17. 35 | 3. 46 | ·0980 | 20. 51 | ·01769 | | | |
| 4. 30 | 13. 50 | 3. 51 | ·0976 | 23. 59 | ·01686 | | | |
| 4. 42 | 14. 50 | 4. 6 | ·0979 | | | | | |
| 4. 50 | 14. 10 | 4. 30 | ·0978 | | | | | |
| 7. 13 | 13. 10 | 4. 38 | ·0985 | | | | | |
| 7. 54 | 13. 45 | | *** | | | | | |
| 8. 35 | 10. 45 | 5. 33 | ·0983 | | | | | |
| 8. 45 | 13. 40 | 6. 40 | ·0991 | | | | | |
| 9. 16 | 11. 30 | | *** | | | | | |
| 10. 11 | 11. 10 | 8. 10 | ·0974 | | | | | |
| 11. 30 | 12. 10 | 8. 33 | ·0979 | | | | | |
| 11. 50 | 11. 10 | 8. 47 | ·0969 | | | | | |
| 15. 36 | 11. 30 | | *** | | | | | |
| 15. 41 | 10. 40 | 10. 33 | ·0981 | | | | | |
| 15. 44 | 12. 15 | | *** | | | | | |
| 18. 41 | 10. 30 | 18. 4 | ·0983 | | | | | |
| 18. 48 | 9. 10 | | *** | | | | | |
| 18. 58 | 9. 0 | 18. 36 | ·0978 | | | | | |
| 19. 8 | 10. 30 | | *** | | | | | |
| 19. 30 | 8. 10 | 19. 0 | ·0981 | | | | | |
| 19. 42 | 8. 15 | | *** | | | | | |
| 19. 54 | 6. 50 | 22. 17 | ·0946 | | | | | |
| 20. 0 | 10. 30 | 23. 17 | ·0946 | | | | | |
| 20. 29 | 8. 0 | 23. 59 | ·0958 | | | | | |
| 20. 43 | 9. 30 | | | | | | | |
| 21. 56 | 12. 0 | | | | | | | |
| 23. 30 | 20. 0 | | | | | | | |
| 23. 43 | 19. 30 | | | | | | | |
| 23. 59 | 21. 0 | | | | | | | |
| Oct. 16 | | Oct. 16 | | Oct. 16 | | Oct. 16 | | |
| 0. 0 | 21. 21. 0 | 0. 0 | ·0958 | 0. 0 | ·01686 | 1. 0 | 60 ·0 | 60 ·0 |
| 0. 40 | 21. 10 | 0. 35 | ·0957 | 1. 26 | ·01640 | 3. 0 | 60 ·0 | 60 ·0 |
| 0. 50 | 22. 25 | 0. 46 | ·0962 | 7. 10 | ·01691 | 9. 0 | 57 ·0 | 57 ·2 |
| 1. 6 | 21. 40 | 1. 2 | ·0959 | 10. 56 | ·01863 | 21. 10 | 52 ·0 | 53 ·0 |
| 1. 24 | 22. 30 | 1. 20 | ·0965 | 16. 50 | ·02302 | | | |
| 1. 44 | 21. 30 | 1. 45 | ·0954 | 21. 46 | ·02480 | | | |
| 1. 52 | 19. 30 | 2. 3 | ·0969 | 23. 59 | ·02510 | | | |
| 2. 9 | 21. 45 | 2. 15 | ·0967 | | | | | |
| 4. 27 | 16. 15 | 3. 46 | ·0973 | | | | | |
| 4. 36 | 17. 30 | 3. 52 | ·0976 | | | | | |
| 4. 43 | 16. 40 | 4. 16 | ·0975 | | | | | |
| 5. 10 | 16. 0 | 4. 33 | ·0981 | | | | | |
| 5. 51 | 16. 40 | 5. 17 | ·0978 | | | | | |
| 6. 41 | 15. 35 | 5. 46 | ·0984 | | | | | |
| 7. 47 | 15. 20 | 6. 0 | ·0981 | | | | | |
| 8. 26 | 13. 45 | 6. 14 | ·0986 | | | | | |
| 8. 43 | 12. 0 | | *** | | | | | |
| 8. 59 | 12. 0 | 7. 25 | ·0982 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 16 h m | ° ′ ″ | Oct. 16 h m | | h m | | h m | ° | ° |
| 9. 15 | 21. 10. 20 | 7. 46 | ·0992 | | | | | |
| 9. 51 | 11. 40 | 7. 53 | ·0984 | | | | | |
| 10. 35 | 10. 50 | 8. 16: | ·0987 | | | | | |
| 10. 52 | 12. 40 | 8. 36 | ·0980 | | | | | |
| 11. 5 | 11. 0 | 9. 16 | ·0990 | | | | | |
| | *** | 9. 28 | ·0983 | | | | | |
| 12. 10 | 9. 40 | 9. 50: | ·0985 | | | | | |
| 13. 11 | 13. 40 | 10. 16 | ·0978 | | | | | |
| 13. 26 | 11. 15 | | *** | | | | | |
| 13. 30 | 11. 20 | 10. 45 | ·0980 | | | | | |
| 14. 9 | 6. 40 | 11. 0 | ·0976 | | | | | |
| 14. 54 | 10. 10 | 11. 16 | ·0984 | | | | | |
| 15. 26 | 10. 0 | 11. 43 | ·0980 | | | | | |
| 15. 48 | 11. 30 | 11. 52 | ·0983 | | | | | |
| 16. 0 | 10. 20 | 12. 3 | ·0981 | | | | | |
| 16. 12 | 10. 45 | 12. 15 | ·0986 | | | | | |
| 16. 36 | 8. 50 | 12. 46: | ·0978 | | | | | |
| 17. 10 | 8. 0 | 13. 30 | ·0995 | | | | | |
| 17. 26 | 8. 45 | | *** | | | | | |
| 17. 41 | 10. 0 | 14. 36 | ·0987 | | | | | |
| 18. 32 | 9. 0 | | *** | | | | | |
| | *** | 17. 6 | ·0997 | | | | | |
| 18. 45 | 11. 0 | | *** | | | | | |
| | *** | 19. 25 | ·0986 | | | | | |
| 20. 12 | 10. 0 | 21. 12 | ·0962 | | | | | |
| 21. 25 | 14. 40 | 21. 45 | ·0960 | | | | | |
| | (†) | | *** | | | | | |
| | | 23. 0 | ·0950 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0960 | | | | | |
| Oct. 17 | | Oct. 17 | | Oct. 17 | | Oct. 17 | | |
| | (†) | 0. 0 | ·0960 | 0. 0 | ·02510 | 0. 0 | 54 ·5 | 54 ·7 |
| 1. 0 | 21. 27. 46* | 0. 56 | ·0952 | 0. 39 | ·02512 | 1. 0 | 56 ·0 | 55 ·9 |
| 1. 13 | 26. 45 | 1. 17 | ·0956 | 1. 11 | ·02531 | 3. 0 | 57 ·5 | 57 ·5 |
| 1. 54 | 26. 0 | 1. 40 | ·0950 | 1. 56 | ·02450 | 6. 0 | 58 ·6 | 58 ·5 |
| 2. 9 | 23. 20 | 3. 20 | ·0961 | 10. 42: | ·01717 | 9. 0 | 57 ·9 | 57 ·8 |
| 2. 38 | 20. 40 | | *** | 19. 15 | ·02170 | 12. 0 | 57 ·0 | 57 ·0 |
| 3. 28 | 20. 15 | 3. 42 | ·0956 | 23. 59 | ·02298 | 18. 0 | 53 ·0 | 54 ·0 |
| 4. 0 | 17. 20 | 4. 10 | ·0961 | | | 21. 0 | 53 ·0 | 54 ·0 |
| 5. 8 | 14. 40 | | *** | | | | | |
| 6. 15 | 13. 30 | 5. 4 | ·0959 | | | | | |
| 6. 27 | 12. 20 | | *** | | | | | |
| 6. 59 | 12. 10 | 6. 18 | ·0969 | | | | | |
| 7. 50 | 12. 0 | 6. 33 | ·0967 | | | | | |
| 8. 6 | 11. 15 | | *** | | | | | |
| 8. 15 | 11. 50 | 7. 26 | ·0969 | | | | | |
| 8. 40 | 5. 0 | 7. 47 | ·0965 | | | | | |
| 8. 44 | 6. 0 | | *** | | | | | |
| 9. 3 | 5. 30 | 8. 46 | ·0969 | | | | | |
| 9. 30 | 7. 0 | 9. 15: | ·0979 | | | | | |
| 10. 11 | 14. 20 | 9. 34 | ·0970 | | | | | |
| 10. 52 | 7. 0 | | *** | | | | | |
| 11. 50 | 10. 0 | 10. 16 | ·0968 | | | | | |
| 13. 30 | 11. 40 | | *** | | | | | |
| 14. 0 | 10. 0 | 17. 5 | ·0987 | | | | | |
| 15. 43 | 13. 5 | | *** | | | | | |
| 17. 50 | 11. 40 | 18. 46 | ·0986 | | | | | |
| | | | *** | | | | | |

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 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. 17 | | Oct. 17 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 11 | 21. 7. 20 | 20. 27 | ·0974 | | | | | |
| 20. 54 | 8. 30 | 21. 3 | ·0964 | | | | | |
| 21. 46 | 12. 20 | 21. 45 | ·0963 | | | | | |
| 22. 15 | 12. 15 | | *** | | | | | |
| 23. 27 | 17. 30 | 22. 6 | ·0956 | | | | | |
| 23. 42 | 17. 20 | | *** | | | | | |
| 23. 47 | 18. 15 | 23. 59 | ·0960 | | | | | |
| 23. 59 | 18. 55 | | | | | | | |
| Oct. 18 | | Oct. 18 | | Oct. 18 | | Oct. 18 | | |
| 0. 0 | 21. 18. 55 | 0. 0 | ·0960 | 0. 0 | ·02298 | 0. 0 | 54 ·5 | 55 ·0 |
| 0. 44 | 19. 10 | 0. 47 | ·0962 | 2. 40 | ·02250 | 1. 0 | 55 ·0 | 55 ·3 |
| 1. 13 | 18. 15 | 1. 16 | ·0969 | 11. 56: | ·01809 | 3. 0 | 56 ·7 | 56 ·6 |
| 1. 30 | 18. 55 | | *** | 22. 43 | ·02058 | 9. 0 | 58 ·2 | 58 ·0 |
| 3. 43 | 15. 30 | 4. 58 | ·0980 | 23. 59 | ·02069 | 21. 0 | 55 ·0 | 56 ·0 |
| 3. 51 | 16. 10 | 18. 6 | ·0986 | | | | | |
| 4. 10 | 14. 55 | 21. 37 | ·0973 | | | | | |
| 6. 11 | 13. 30 | | *** | | | | | |
| 11. 29 | 11. 50 | 22. 2 | ·0975 | | | | | |
| 14. 57 | 13. 40 | 22. 8 | ·0966 | | | | | |
| 19. 0 | 13. 0 | | *** | | | | | |
| | *** | 23. 47 | ·0960 | | | | | |
| 20. 43 | 10. 15 | 23. 59 | ·0962 | | | | | |
| 21. 58 | 12. 30 | | | | | | | |
| 22. 10 | 13. 55 | | | | | | | |
| 22. 14 | 12. 0 | | | | | | | |
| 23. 21 | 19. 55 | | | | | | | |
| 23. 45 | 20. 30 | | | | | | | |
| 23. 59 | 19. 30 | | | | | | | |
| Oct. 19 | | Oct. 19 | | Oct. 19 | | Oct. 19 | | |
| 0. 0 | 21. 19. 30 | 0. 0 | ·0962 | 0. 0 | ·02069 | 1. 0 | 57 ·0 | 57 ·2 |
| 0. 14 | 19. 5 | 0. 18 | ·0965 | 1. 4 | ·02065 | 3. 0 | 59 ·0 | 59 ·0 |
| 0. 31 | 20. 20 | | *** | 2. 56 | {·01960 | 9. 0 | 57 ·0 | 57 ·2 |
| 4. 22 | 15. 20 | 2. 50 | ·0973 | | {·01877 | 21. 0 | 55 ·6 | 56 ·2 |
| 6. 44 | 15. 0 | | *** | 7. 51 | {·01620 | | | |
| 10. 56 | 12. 0 | 3. 46 | ·0971 | | {·01645 | | | |
| 18. 36 | 13. 15 | | *** | 17. 37 | ·01685 | | | |
| 20. 7 | 9. 30 | 5. 55 | ·0982 | 22. 28 | ·02033 | | | |
| | *** | 6. 17 | ·0978 | 23. 59 | ·02060 | | | |
| 21. 33 | 11. 30 | | *** | | | | | |
| | *** | 9. 4 | ·0975 | | | | | |
| 23. 42 | 17. 30 | 11. 9 | ·0977 | | | | | |
| 23. 56 | 20. 30 | 12. 5 | ·0973 | | | | | |
| 23. 59 | 19. 30 | 15. 36 | ·0975 | | | | | |
| | | 18. 38: | ·0981 | | | | | |
| | | 21. 35 | ·0967 | | | | | |
| | | | *** | | | | | |
| | | 22. 17 | ·0957 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0958 | | | | | |
| Oct. 20 | | Oct. 20 | | Oct. 20 | | Oct. 20 | | |
| 0. 0 | 21. 19. 30 | 0. 0 | ·0958 | 0. 0 | ·02060 | 1. 0 | 57 ·0 | 57 ·2 |
| 0. 12 | 20. 10 | 0. 17 | ·0962 | 1. 30 | ·02044 | 3. 0 | 58 ·4 | 58 ·5 |
| 0. 21 | 18. 0 | 0. 33 | ·0951 | 7. 42: | ·01656 | 9. 0 | 56 ·8 | 57 ·4 |
| 0. 43 | 17. 30 | 1. 2 | ·0963 | 16. 15 | ·02049 | 22. 22 | 49 ·0 | 50 ·8 |
| 1. 9 | 20. 40 | 1. 30 | ·0958 | 23. 59 | ·02724 | | | |
| 2. 54 | 20. 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. |
|---|---|---|---|---|---|---|---|---|
| Oct. 20 | | Oct. 20 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 44 | 21. 16. 30 | 4. 39 | ·0970 | | | | | |
| 9. 8 | 13. 50 | | *** | | | | | |
| 9. 52 | 7. 45 | 5. 17 | ·0966 | | | | | |
| 10. 51 | 11. 30 | 5. 53 | ·0974 | | | | | |
| 14. 49 | 12. 20 | 6. 10 | ·0972 | | | | | |
| 15. 15 | 10. 50 | | *** | | | | | |
| 15. 54 | 15. 50 | 6. 47 | ·0978 | | | | | |
| 16. 14 | 14. 30 | 7. 3 | ·0976 | | | | | |
| 16. 44 | 10. 5 | | *** | | | | | |
| 19. 5 | 11. 30 | 8. 18 | ·0982 | | | | | |
| 20. 26 | 8. 10 | 8. 37 | ·0979 | | | | | |
| 21. 24 | 8. 0 | 9. 5 | ·0983 | | | | | |
| 22. 7 | 11. 20 | | *** | | | | | |
| 22. 14 | 10. 50 | 10. 17 | ·0973 | | | | | |
| 22. 49 | 14. 0 | 11. 27 | ·0979 | | | | | |
| 22. 58 | 13. 30 | | *** | | | | | |
| 23. 59 | 16. 40 | 15. 12 | ·0984 | | | | | |
| | | 15. 25 | ·0981 | | | | | |
| | | 16. 17 | ·0991 | | | | | |
| | | | *** | | | | | |
| | | 17. 46 | ·0987 | | | | | |
| | | 18. 19 | ·0992 | | | | | |
| | | 19. 32 | ·0988 | | | | | |
| | | | *** | | | | | |
| | | 21. 47 | ·0972 | | | | | |
| | | 21. 52 | ·0975 | | | | | |
| | | 22. 13 | ·0967 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0974 | | | | | |
| Oct. 21 | | Oct. 21 | | Oct. 21 | | Oct. 21 | | |
| 0. 0 | 21. 16. 40 | 0. 0 | ·0974 | 0. 0 | ·02724 | 6. 7 | 53 ·0 | 53 ·0 |
| 1. 13 | 18. 10 | 1. 48 | ·0981 | 2. 13 | ·02730 | 21. 0 | 49 ·8 | 51 ·5 |
| 1. 26 | 17. 25 | 6. 20 | ·0988 | 12. 52: | ·02556 | | | |
| 2. 30 | 17. 0 | | *** | 21. 38 | ·02784 | | | |
| | (†) | 12. 45 | ·0987 | 23. 59 | ·02745 | | | |
| 5. 52 | 14. 0 | 15. 10 | ·0989 | | | | | |
| 7. 29 | 13. 0 | 18. 11: | ·0997 | | | | | |
| 17. 13 | 13. 30 | 20. 37 | ·0987 | | | | | |
| 19. 12 | 11. 50 | 22. 36 | ·0973 | | | | | |
| 20. 7 | 9. 15 | | *** | | | | | |
| 21. 0 | 12. 20 | 23. 18 | ·0969 | | | | | |
| | (†) | 23. 25 | ·0973 | | | | | |
| 23. 46 | 18. 30 | 23. 49 | ·0961 | | | | | |
| 23. 59 | 18. 40 | 23. 59 | ·0961 | | | | | |
| Oct. 22 | | Oct. 22 | | Oct. 22 | | Oct. 22 | | |
| 0. 0 | 21. 18. 40 | 0. 0 | ·0961 | 0. 0 | ·02745 | 1. 0 | 54 ·0 | 55 ·0 |
| 0. 21 | 20. 30 | | *** | 1. 21 | ·02680 | 3. 0 | 57 ·8 | 57 ·5 |
| 1. 26 | 21. 30 | 0. 33 | ·0964 | 8. 20: | ·02820 | 9. 0 | 57 ·0 | 58 ·0 |
| 2. 56 | 19. 0 | 1. 12 | ·0958 | 14. 15 | ·01936 | 21. 0 | 56 ·3 | 57 ·2 |
| 4. 15 | 14. 30 | | *** | 20. 11 | ·02030 | | | |
| 6. 11 | 13. 30 | 3. 57 | ·0967 | 23. 59 | ·02028 | | | |
| 11. 38 | 13. 25 | 4. 15 | ·0966 | | | | | |
| 18. 54 | 11. 15 | | *** | | | | | |
| 20. 21 | 7. 40 | 12. 18 | ·0984 | | | | | |
| 21. 44 | 9. 50 | 13. 47 | ·0984 | | | | | |
| 23. 5 | 17. 25 | 18. 43 | ·0989 | | | | | |
| 23. 14 | 21. 0 | 19. 14 | ·0987 | | | | | |
| 23. 27 | 16. 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. | Readings of Thermometers. Of V. F. Magnet. |
|---|---|---|---|---|---|---|---|---|
| Oct. 22 | | Oct. 22 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 23. 29 | 21. 18. 20 | 23. 32 | ·0954 | | | | | |
| 23. 39 | 16. 20 | 23. 35 | ·0965 | | | | | |
| 23. 59 | 17. 25 | 23. 44 | ·0947 | | | | | |
| | | 23. 48 | ·0955 | | | | | |
| | | 23. 53 | ·0946 | | | | | |
| | | 23. 59 | ·0948 | | | | | |
| Oct. 23 | | Oct. 23 | | Oct. 23 | | Oct. 23 | | |
| 0. 0 | 21. 17. 25 | 0. 0 | ·0949 | 0. 0 | ·02028 | 1. 0 | 59 ·7 | 59 ·6 |
| 2. 7 | 19. 45 | | *** | 5. 0 | ·01685 | 3. 0 | 60 ·7 | 60 ·8 |
| 3. 58 | 16. 40 | 1. 12 | ·0966 | 15. 45 | ·01718 | 9. 30 | 61 ·5 | 62 ·0 |
| 6. 12 | 14. 5 | | *** | 23. 59 | ·01862 | 21. 0 | 59 ·0 | 59 ·5 |
| 10. 42 | 13. 15 | 3. 15 | ·0963 | | | | | |
| 12. 0 | 13. 40 | | *** | | | | | |
| 18. 18 | 12. 40 | 10. 13 | ·0977 | | | | | |
| 21. 21 | 10. 0 | | *** | | | | | |
| 23. 17 | 18. 0 | 11. 12 | ·0973 | | | | | |
| 23. 59 | 20. 0 | | *** | | | | | |
| | | 14. 25 | ·0975 | | | | | |
| | | 18. 22 | ·0977 | | | | | |
| | | 20. 15 | ·0970 | | | | | |
| | | 21. 45 | ·0959 | | | | | |
| | | 22. 56 | ·0955 | | | | | |
| | | 23. 59 | ·0958 | | | | | |
| Oct. 24 | | Oct. 24 | | Oct. 24 | | Oct. 24 | | |
| 0. 0 | 21. 20. 0 | 0. 0 | ·0958 | 0. 0 | ·01862 | 0. 0 | 59 ·2 | 59 ·9 |
| 0. 23 | 21. 10 | | *** | 1. 41 | ·01884 | 1. 0 | 60 ·6 | 60 ·5 |
| 2. 3 | 19. 50 | 3. 7 | ·0971 | 4. 40 | ·01686 | 3. 0 | 62 ·3 | 62 ·2 |
| 2. 45 | 18. 0 | 3. 33 | ·0966 | 4. 54 | ·01710 | 6. 0 | 62 ·0 | 61 ·8 |
| 2. 59 | 18. 30 | | *** | | ·01864 | 9. 10 | 61 ·3 | 62 ·2 |
| 3. 30 | 17. 0 | 4. 47 | ·0973 | 7. 49 | ·01788 | 12. 0 | 60 ·9 | 61 ·7 |
| 4. 37 | 16. 0 | | *** | 14. 10 | ·01918 | 18. 0 | 59 ·0 | 59 ·8 |
| 6. 33 | 16. 0 | 5. 46 | ·0974 | 20. 4 | ·02130 | 21. 0 | 59 ·3 | 60 ·2 |
| 6. 52 | 13. 50 | 6. 17 | ·0970 | 23. 59 | ·02103 | | | |
| 7. 21 | 14. 0 | | *** | | | | | |
| 7. 56 | 11. 45 | 7. 18 | ·0973 | | | | | |
| 8. 41 | 15. 10 | 8. 17: | ·0964 | | | | | |
| 9. 17 | 13. 40 | 9. 30 | ·0972 | | | | | |
| 9. 40 | 14. 30 | | *** | | | | | |
| 12. 30 | 14. 20 | 11. 7 | ·0971 | | | | | |
| 12. 54 | 16. 15 | 12. 3 | ·0974 | | | | | |
| 13. 57 | 8. 15 | 12. 23 | ·0975 | | | | | |
| 15. 9 | 14. 0 | 12. 46 | ·0981 | | | | | |
| 17. 45 | 12. 10 | 13. 46 | ·0983 | | | | | |
| 18. 9 | 13. 10 | 14. 8 | ·0975 | | | | | |
| 19. 15 | 11. 0 | 14. 37 | ·0970 | | | | | |
| 20. 28 | 11. 10 | | *** | | | | | |
| 21. 30 | 15. 30 | 17. 45 | ·0975 | | | | | |
| 21. 44 | 15. 20 | 20. 11 | ·0965 | | | | | |
| 21. 52 | 17. 10 | 20. 45 | ·0956 | | | | | |
| 22. 21 | 17. 0 | 21. 50 | ·0956 | | | | | |
| 23. 3 | 19. 0 | 22. 3 | ·0948 | | | | | |
| 23. 13 | 18. 10 | | *** | | | | | |
| 23. 59 | 21. 15 | 23. 59 | ·0956 | | | | | |
| Oct. 25 | | Oct. 25 | | Oct. 25 | | Oct. 25 | | |
| 0. 0 | 21. 21. 15 | 0. 0 | ·0956 | 0. 0 | ·02103 | 0. 0 | 60 ·3 | 61 ·2 |
| 2. 0 | 21. 20 | 3. 0 | ·0967 | 1. 33 | ·02089 | 1. 0 | 60 ·9 | 61 ·6 |
| 5. 25 | 14. 55 | | *** | 5. 59 | ·01780 | 3. 0 | 62 ·3 | 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. 25 | | Oct. 25 | | Oct. 25 | | Oct. 25 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 19. 10 | 21. 11. 45 | 9. 2 | ·0987 | 8. 31 | {·01712 | 9. 0 | 61 ·0 | 61 ·5 |
| 20. 54 | 9. 0 | | *** | | ·01958 | 21. 6 | 59 ·6 | 60 ·0 |
| 21. 51 | 10. 45 | 16. 7 | ·0989 | 10. 52 | ·01955 | | | |
| 23. 20 | 18. 45 | 18. 18 | ·0984 | 17. 20 | ·02112 | | | |
| 23. 59 | 20. 45 | 21. 35 | ·0963 | 23. 59 | ·02316 | | | |
| | | 23. 59 | ·0961 | | | | | |
| Oct. 26 | | Oct. 26 | | Oct. 26 | | Oct. 26 | | |
| 0. 0 | 21. 20. 45 | 0. 0 | ·0961 | 0. 0 | ·02316 | 1. 0 | 61 ·8 | 61 ·8 |
| 1. 25 | 23. 30 | 0. 36 | ·0959 | 5. 20 | ·02051 | 3. 0 | 62 ·7 | 62 ·5 |
| 1. 41 | 21. 40 | 0. 45 | ·0957 | 7. 31 | ·01991 | 9. 0 | 61 ·0 | 61 ·2 |
| 1. 52 | 24. 30 | 0. 58 | ·0960 | 13. 48 | ·02132 | 21. 0 | 56 ·5 | 58 ·0 |
| 2. 2 | 22. 10 | 1. 3 | ·0959 | 23. 59 | ·02572 | | | |
| 2. 17 | 23. 0 | 1. 18 | ·0962 | | | | | |
| 5. 0 | 16. 30 | 1. 33 | ·0957 | | | | | |
| 8. 26 | 14. 20 | 1. 42 | ·0958 | | | | | |
| 10. 27 | 14. 45 | 1. 48 | ·0967 | | | | | |
| 10. 46 | 12. 20 | 2. 6 | ·0960 | | | | | |
| 11. 2 | 12. 30 | | *** | | | | | |
| 11. 21 | 14. 30 | 2. 47 | ·0956 | | | | | |
| 11. 55 | 6. 50 | | *** | | | | | |
| 12. 45 | 13. 15 | 3. 46 | ·0956 | | | | | |
| 13. 30 | 12. 45 | | *** | | | | | |
| 13. 51 | 14. 0 | 6. 25 | ·0973 | | | | | |
| 15. 28 | 13. 40 | | *** | | | | | |
| 15. 45 | 14. 30 | 9. 23 | ·0978 | | | | | |
| 17. 4 | 13. 0 | | *** | | | | | |
| 18. 12 | 13. 50 | 10. 32 | ·0977 | | | | | |
| 20. 21 | 11. 30 | 10. 47 | ·0984 | | | | | |
| 20. 54 | 14. 0 | 11. 18 | ·0975 | | | | | |
| 21. 11 | 14. 0 | 12. 3: | ·0986 | | | | | |
| 21. 27 | 15. 5 | 12. 40 | ·0973 | | | | | |
| 21. 36 | 13. 30 | | *** | | | | | |
| 22. 13 | 17. 15 | 13. 40 | ·0979 | | | | | |
| 22. 25 | 16. 45 | 14. 8 | ·0977 | | | | | |
| 22. 39 | 18. 30 | 16. 11 | ·0983 | | | | | |
| 23. 12 | 19. 0 | 16. 33 | ·0981 | | | | | |
| 23. 27 | 17. 10 | 17. 7 | ·0986 | | | | | |
| 23. 59 | 21. 20 | | *** | | | | | |
| | | 19. 33 | ·0986 | | | | | |
| | | 20. 8 | ·0981 | | | | | |
| | | | *** | | | | | |
| | | 20. 46 | ·0984 | | | | | |
| | | 21. 28 | ·0976 | | | | | |
| | | 21. 41 | ·0978 | | | | | |
| | | 21. 45 | ·0983 | | | | | |
| | | 21. 56 | ·0975 | | | | | |
| | | 22. 6 | ·0978 | | | | | |
| | | 22. 17 | ·0971 | | | | | |
| | | 22. 33 | ·0975 | | | | | |
| | | 22. 47 | ·0966 | | | | | |
| | | | *** | | | | | |
| | | 23. 30 | ·0961 | | | | | |
| | | 23. 59 | ·0967 | | | | | |
| Oct. 27 | | Oct. 27 | | Oct. 27 | | Oct. 27 | | |
| 0. 0 | 21. 21. 20 | 0. 0 | ·0967 | 0. 0 | ·02572 | 1. 0 | 59 ·3 | 59 ·2 |
| 0. 24 | 23. 40 | | *** | 2. 6 | ·02520 | 3. 0 | 61 ·8 | 61 ·1 |

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 | | Oct. 27 | | Oct. 27 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 50 | 21. 21. 20 | 1. 47 | ·0960 | 4. 42 | ·02322 | 9. 0 | 60 ·4 | 60 ·8 |
| 1. 7 | 22. 45 | 1. 52 | ·0961 | 8. 15 | ·02151 | 22. 15 | 58 ·2 | 58 ·9 |
| 1. 19 | 20. 45 | 2. 10 | ·0955 | 10. 38 | ·02113 | | | |
| 2. 6 | 23. 30 | | *** | 11. 11 | ·02130 | | | |
| 2. 21 | 20. 40 | 2. 40 | ·0967 | 12. 0 | ·02091 | | | |
| 2. 36 | 20. 0 | 2. 52 | ·0964 | 14. 40 | ·02169 | | | |
| 2. 42 | 21. 0 | | *** | 15. 14 | ·02144 | | | |
| 3. 0 | 18. 45 | 4. 0 | ·0971 | 20. 43 | ·02310 | | | |
| 5. 37 | 15. 0 | 4. 17 | ·0966 | 23. 59 | ·02343 | | | |
| 6. 54 | 14. 10 | | *** | | | | | |
| 7. 42 | 0. 15 | 7. 20 | ·0978 | | | | | |
| 8. 6 | 6. 10 | 7. 46 | ·1001 | | | | | |
| 8. 28 | 4. 20 | 8. 10 | ·0979 | | | | | |
| 8. 54 | 9. 30 | 8. 46 | ·0965 | | | | | |
| 9. 13 | 6. 20 | 9. 37 | ·0960 | | | | | |
| 10. 7 | 10. 30 | 10. 16 | ·0970 | | | | | |
| 10. 55 | 3. 10 | 10. 45 | ·0960 | | | | | |
| 11. 42 | 15. 45 | 11. 20 | ·0971 | | | | | |
| 12. 15 | 6. 50 | 12. 0 | ·0973 | | | | | |
| 12. 42 | 5. 0 | | *** | | | | | |
| 13. 13 | 7. 0 | 12. 42 | ·0980 | | | | | |
| 13. 26 | 5. 40 | | *** | | | | | |
| 13. 40 | 11. 20 | 13. 43 | ·0966 | | | | | |
| 14. 7 | 11. 10 | | *** | | | | | |
| 14. 32 | 19. 20 | 14. 46 | ·0977 | | | | | |
| 15. 19 | 8. 45 | | *** | | | | | |
| 15. 44 | 8. 30 | 15. 22 | ·0972 | | | | | |
| | *** | 15. 53 | ·0979 | | | | | |
| 17. 12 | 14. 0 | 16. 37 | ·0974 | | | | | |
| 17. 59 | 12. 15 | 17. 22 | ·0980 | | | | | |
| 19. 36 | 14. 55 | 19. 17 | ·0978 | | | | | |
| 20. 37 | 14. 30 | 20. 37 | ·0961 | | | | | |
| 20. 50 | 16. 20 | | *** | | | | | |
| 20. 56 | 16. 0 | 21. 42 | ·0966 | | | | | |
| | (†) | 22. 46 | ·0961 | | | | | |
| 22. 15 | 15. 47* | | *** | | | | | |
| 23. 59 | 22. 30 | 23. 59 | ·0959 | | | | | |
| Oct. 28 | | Oct. 28 | | Oct. 28 | | Oct. 28 | | |
| 0. 0 | 21. 22. 30 | 0. 0 | ·0959 | 0. 0 | ·02343 | 8. 0 | 63 ·0 | 64 ·5 |
| 0. 44 | 20. 50 | 0. 45 | ·0961 | 1. 20 | {·02330 | 21. 0 | 56 ·8 | 57 ·7 |
| 1. 14 | 23. 15 | | *** | | {·01764 | | | |
| 1. 55 | 20. 50 | 1. 32 | ·0955 | 6. 31 | ·01831 | | | |
| 2. 51 | 20. 40 | 2. 36 | ·0961 | 10. 10 | ·01824 | | | |
| 3. 27 | 18. 15 | 3. 17 | ·0955 | 10. 24 | ·01994 | | | |
| 5. 51 | 14. 30 | 5. 46 | ·0962 | 12. 55 | ·02050 | | | |
| 6. 15 | 10. 45 | 6. 6 | ·0959 | 23. 59 | ·02664 | | | |
| 7. 30 | 14. 30 | 6. 17 | ·0964 | | | | | |
| 9. 11 | 14. 10 | | *** | | | | | |
| 9. 29 | 12. 30 | 16. 18 | ·0977 | | | | | |
| 11. 0 | 14. 40 | 18. 52 | ·0977 | | | | | |
| 18. 38 | 13. 35 | | *** | | | | | |
| 21. 35 | 11. 30 | 23. 45 | ·0953 | | | | | |
| 22. 40 | 16. 0 | 23. 59 | ·0956 | | | | | |
| 23. 59 | 20. 0 | | | | | | | |
| Oct. 29 | | Oct. 29 | | Oct. 29 | | Oct. 29 | | |
| 0. 0 | 21. 20. 0 | 0. 0 | ·0956 | 0. 0 | ·02664 | 1. 0 | 59 ·0 | 59 ·7 |
| 1. 30 | 20. 0 | | *** | 2. 30 | ·02623 | 3. 0 | 61 ·6 | 62 ·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. |
|---|---|---|---|---|---|---|---|---|
| Oct. 29 | | Oct. 29 | | Oct. 29 | | Oct. 29 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 1. 58 | 21. 22. 50 | 2. 4 | ·0964 | 5. 22 | ·02286 | 9. 0 | 61 ·8 | 62 ·0 |
| 2. 11 | 21. 0 | 2. 33 | ·0972 | 7. 30 | ·02230 | 21. 0 | 55 ·0 | 56 ·8 |
| 2. 26 | 20. 10 | 2. 47 | ·0964 | 9. 38 | ·02064 | | | |
| 2. 30 | 21. 0 | 3. 23 | ·0966 | 11. 23 | ·02057 | | | |
| 2. 54 | 20. 25 | 3. 40 | ·0960 | 17. 0 | ·02341 | | | |
| 3. 1 | 19. 30 | 4. 7 | ·0973 | 22. 37 | ·02758 | | | |
| 4. 15 | 20. 15 | 4. 33 | ·0955 | 23. 59 | ·02745 | | | |
| 4. 43 | 16. 40 | 4. 43 | ·0960 | | | | | |
| 4. 58 | 15. 30 | 4. 48 | ·0955 | | | | | |
| 5. 17 | 19. 50 | 5. 11 | ·0985 | | | | | |
| 5. 26 | 18. 50 | 5. 26 | ·0976 | | | | | |
| 5. 40 | 24. 0 | 5. 46 | ·0951 | | | | | |
| 5. 48 | 13. 0 | 5. 48 | ·0960 | | | | | |
| 5. 53 | 14. 45 | 6. 0 | ·0951 | | | | | |
| 6. 0 | 14. 45 | 6. 6 | ·0954 | | | | | |
| 6. 10 | 17. 20 | 6. 16 | ·0935 | | | | | |
| 6. 17 | 11. 45 | 6. 20 | ·0940 | | | | | |
| | *** | 6. 33 | ·0929 | | | | | |
| 7. 8 | 13. 15 | 6. 45 | ·0933 | | | | | |
| 7. 14 | 15. 30 | | *** | | | | | |
| 7. 25 | 14. 50 | 6. 56 | ·0928 | | | | | |
| 7. 49 | 17. 0 | 7. 7 | ·0932 | | | | | |
| 8. 27 | 2. 0 | | *** | | | | | |
| 8. 33 | 3. 30 | 7. 22 | ·0925 | | | | | |
| 8. 43 | 1. 20 | | *** | | | | | |
| | *** | 7. 44 | ·0931 | | | | | |
| 9. 11 | 1. 55 | 7. 48 | ·0927 | | | | | |
| 9. 26 | 5. 45 | 8. 22 | ·0937 | | | | | |
| 9. 41 | 1. 40 | 8. 33 | ·0934 | | | | | |
| 9. 44 | 3. 10 | 8. 46 | ·0946 | | | | | |
| 9. 53 | 1. 35 | 9. 0 | ·0932 | | | | | |
| 10. 15 | 10. 25 | 9. 2 | ·0950 | | | | | |
| 11. 13 | 16. 0 | 9. 25 | ·0947 | | | | | |
| 17. 57 | 15. 0 | 9. 32 | ·0951 | | | | | |
| 18. 15 | 13. 20 | 9. 46 | ·0948 | | | | | |
| | *** | 9. 53 | ·0958 | | | | | |
| 19. 28 | 13. 15 | 10. 2 | ·0955 | | | | | |
| 19. 40 | 11. 0 | 10. 20 | ·0961 | | | | | |
| | *** | | *** | | | | | |
| 20. 29 | 13. 0 | 18. 15 | ·0980 | | | | | |
| 20. 54 | 10. 30 | | *** | | | | | |
| | *** | 19. 28 | ·0979 | | | | | |
| 22. 36 | 16. 40 | 19. 36 | ·0971 | | | | | |
| 22. 54 | 20. 20 | 19. 45 | ·0981 | | | | | |
| 23. 0 | 19. 55 | | *** | | | | | |
| 23. 13 | 22. 30 | 20. 7 | ·0981 | | | | | |
| 23. 31 | 22. 10 | | *** | | | | | |
| 23. 45 | 24. 40 | 20. 36 | ·0971 | | | | | |
| 23. 59 | 22. 30 | | *** | | | | | |
| | | 21. 2 | ·0973 | | | | | |
| | | | *** | | | | | |
| | | 22. 47 | ·0947 | | | | | |
| | | 22. 58 | ·0953 | | | | | |
| | | 23. 7 | ·0945 | | | | | |
| | | | *** | | | | | |
| | | 23. 46 | ·0955 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0949 | | | | | |

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. 30 | | Oct. 30 | | Oct. 30 | | Oct. 30 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 22. 30 | 0. 0 | ·0949 | 0. 0 | ·02745 | 1. 0 | 58 ·3 | 59 ·2 |
| 0. 23 | 21. 10 | | *** | 1. 45 | ·02743 | 3. 0 | 61 ·9 | 62 ·3 |
| 1. 13 | 24. 15 | 1. 0 | ·0961 | 6. 46 | ·01980 | 9. 0 | 62 ·5 | 63 ·0 |
| 2. 0 | 22. 10 | 1. 50 | ·0953 | 8. 14 | ·01890 | 21. 0 | 56 ·3 | 57 ·2 |
| 2. 15 | 23. 40 | 2. 53 | ·0960 | | ·02085 | | | |
| 2. 57 | 21. 0 | 3. 26 | ·0938 | 9. 54 | ·02063 | | | |
| 3. 14 | 21. 40 | 4. 13 | ·0959 | 14. 43 | ·02122 | | | |
| 3. 38 | 16. 40 | 4. 47 | ·0964 | 23. 59 | ·02629 | | | |
| 3. 55 | 17. 50 | 5. 11 | ·0959 | | | | | |
| 4. 6 | 16. 45 | 5. 30 | ·0966 | | | | | |
| 4. 37 | 18. 20 | 5. 47 | ·0961 | | | | | |
| 5. 40 | 15. 40 | 6. 3 | ·0968 | | | | | |
| 5. 57 | 11. 50 | 6. 13 | ·0965 | | | | | |
| 6. 8 | 12. 20 | 6. 33 | ·0979 | | | | | |
| 6. 16 | 11. 20 | 6. 46 | ·0947 | | | | | |
| 6. 41 | 18. 45 | 7. 6 | ·0964 | | | | | |
| 6. 57 | 9. 15 | 7. 42 | ·0970 | | | | | |
| 7. 50 | 12. 45 | 8. 18 | ·0969 | | | | | |
| 8. 41 | 8. 30 | 8. 33 | ·0966 | | | | | |
| 9. 21 | 11. 45 | 9. 15 | ·0976 | | | | | |
| 10. 12 | 7. 50 | 9. 30 | ·0971 | | | | | |
| 10. 44 | 9. 45 | 9. 40 | ·0973 | | | | | |
| 10. 59 | 12. 0 | 10. 0 | ·0966 | | | | | |
| 11. 12 | 11. 25 | 10. 23 | ·0967 | | | | | |
| 12. 15 | 13. 15 | 10. 52 | ·0974 | | | | | |
| 12. 43 | 12. 20 | | *** | | | | | |
| 13. 12 | 16. 30 | 12. 50 | ·0980 | | | | | |
| 13. 24 | 15. 20 | 13. 13 | ·0991 | | | | | |
| 13. 58 | 15. 0 | 13. 35 | ·0982 | | | | | |
| 14. 6 | 16. 0 | 14. 16: | ·0994 | | | | | |
| 14. 43 | 12. 30 | 14. 58 | ·0983 | | | | | |
| 15. 4 | 11. 15 | 15. 25 | ·0988 | | | | | |
| 15. 21 | 12. 15 | 16. 38 | ·0989 | | | | | |
| 16. 0 | 11. 25 | 16. 47 | ·0985 | | | | | |
| 16. 24 | 13. 25 | 17. 17 | ·0983 | | | | | |
| 16. 40 | 12. 50 | | *** | | | | | |
| 17. 39 | 15. 0 | 18. 40: | ·0992 | | | | | |
| 20. 20 | 12. 15 | | *** | | | | | |
| 20. 49 | 13. 0 | 20. 6 | ·0979 | | | | | |
| 21. 30 | 12. 15 | 21. 43 | ·0967 | | | | | |
| 21. 54 | 14. 50 | 21. 50 | ·0968 | | | | | |
| 22. 9 | 14. 15 | 22. 36: | ·0961 | | | | | |
| 22. 40 | 15. 15 | 23. 0 | ·0967 | | | | | |
| 23. 12 | 20. 30 | 23. 59 | ·0968 | | | | | |
| 23. 23 | 18. 0 | | | | | | | |
| 23. 54 | 20. 0 | | | | | | | |
| 23. 59 | 22. 10 | | | | | | | |
| Oct. 31 | | Oct. 31 | | Oct. 31 | | Oct. 31 | | |
| 0. 0 | 21. 22. 10 | 0. 0 | ·0968 | 0. 0 | ·02629 | 0. 0 | 56 ·3 | 57 ·2 |
| 0. 15 | 20. 35 | | *** | 2. 41 | ·02643 | 1. 0 | 56 ·8 | 57 ·6 |
| 0. 30 | 21. 40 | 1. 30 | ·0976 | 8. 18 | ·02430 | 3. 0 | 58 ·3 | 58 ·6 |
| 1. 8 | 21. 10 | | *** | 15. 5 | ·02609 | 6. 0 | 58 ·0 | 58 ·0 |
| 1. 17 | 23. 0 | 2. 36 | ·0967 | 18. 37 | ·02760 | 9. 0 | 56 ·5 | 57 ·0 |
| 1. 49 | 20. 30 | | *** | 23. 59 | ·02700 | 12. 0 | 56 ·0 | 57 ·0 |
| 2. 11 | 22. 15 | 3. 15 | ·0969 | | | 18. 0 | 52 ·0 | 54 ·0 |
| 3. 43 | 18. 30 | 3. 20 | ·0966 | | | 21. 0 | 52 ·9 | 53 ·8 |
| 3. 58 | 16. 35 | 3. 53 | ·0968 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | o | o |
| 4. 13 | 21. 17. 50 | 4. 3 | ·0974 | | | | | |
| 5. 18 | 16. 30 | 4. 26 | ·0973 | | | | | |
| 5. 54 | 12. 20 | 4. 58 | ·0979 | | | | | |
| 6. 58 | 14. 30 | 5. 26 | ·0978 | | | | | |
| | *** | 5. 40 | ·0973 | | | | | |
| 15. 12 | 13. 45 | 5. 58 | ·0981 | | | | | |
| 16. 9 | 11. 40 | | *** | | | | | |
| 17. 13 | 13. 40 | 7. 17 | ·0985 | | | | | |
| 17. 39 | 13. 30 | 7. 40 | ·0989 | | | | | |
| 17. 51 | 14. 30 | 8. 6 | ·0985 | | | | | |
| 20. 46 | 9. 30 | | *** | | | | | |
| 23. 59 | 21. 30 | 9. 20 | ·0990 | | | | | |
| | | | *** | | | | | |
| | | 11. 33 | ·0995 | | | | | |
| | | 13. 32 | ·0992 | | | | | |
| | | 13. 47 | ·0998 | | | | | |
| | | 14. 33 | ·0993 | | | | | |
| | | 16: 16 | ·0993 | | | | | |
| | | | *** | | | | | |
| | | 16. 45 | ·0989 | | | | | |
| | | | *** | | | | | |
| | | 18. 22 | ·0997 | | | | | |
| | | | *** | | | | | |
| | | 22. 6 | ·0984 | | | | | |
| | | 22. 17 | ·0977 | | | | | |
| | | | *** | | | | | |
| | | 22. 55 | ·0972 | | | | | |
| | | | *** | | | | | |
| | | 23. 11 | ·0977 | | | | | |
| | | 23. 59 | ·0977 | | | | | |
| Nov. 1 | | Nov. 1 | | Nov. 1 | | Nov. 1 | | |
| 0. 0 | 21. 21. 30 | 0. 0 | ·0977 | 0. 0 | ·02700 | 0. 0 | 53 ·0 | 54 ·0 |
| 0. 45 | 20. 10 | 1. 6 | ·0971 | 10. 11: | ·01917 | 1. 0 | 54 ·8 | 55 ·2 |
| 1. 5 | 21. 30 | 1. 17 | ·0967 | 21. 42 | ·02680 | 3. 0 | 57 ·5 | 57 ·7 |
| 1. 42 | 19. 45 | | *** | 23. 59 | ·02663 | 9. 0 | 57 ·3 | 57 ·2 |
| 4. 37 | 17. 20 | 3. 18 | ·0973 | | | 21. 0 | 48 ·2 | 50 ·8 |
| 5. 50 | 14. 20 | 3. 37 | ·0969 | | | | | |
| 6. 13 | 8. 30 | | *** | | | | | |
| 6. 55 | 6. 50 | 5. 46 | ·0978 | | | | | |
| 8. 8 | 12. 10 | 6. 10 | ·0967 | | | | | |
| 8. 21 | 11. 0 | | *** | | | | | |
| 8. 50 | 12. 30 | 7. 5 | ·0976 | | | | | |
| 9. 19 | 11. 20 | 7. 26 | ·0972 | | | | | |
| 9. 53 | 12. 20 | 7. 47 | ·0975 | | | | | |
| 10. 21 | 11. 0 | 8. 15 | ·0971 | | | | | |
| 10. 55 | 11. 50 | 8. 27 | ·0974 | | | | | |
| 11. 43 | 8. 45 | 9. 3 | ·0973 | | | | | |
| | *** | | *** | | | | | |
| 13. 11 | 12. 0 | 9. 48 | ·0981 | | | | | |
| 13. 39 | 15. 55 | 10. 32 | ·0979 | | | | | |
| 14. 30 | 11. 10 | | *** | | | | | |
| 15. 11 | 12. 15 | 11. 20 | ·0984 | | | | | |
| 15. 42 | 10. 20 | 11. 40 | ·0977 | | | | | |
| 16. 44 | 13. 0 | 12. 15 | ·0979 | | | | | |
| 18. 28 | 11. 35 | 12. 43 | ·0988 | | | | | |
| 19. 26 | 13. 0 | | *** | | | | | |
| 20. 21 | 8. 50 | 13. 12 | ·0985 | | | | | |

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. 1 | | Nov. 1 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 20. 26 | 21. 10. 0 | 13. 46 | ·0992 | | | | | |
| 20. 39 | 8. 30 | 14. 12 | ·0989 | | | | | |
| 21. 27 | 9. 15 | 17. 47 | ·0998 | | | | | |
| 22. 50 | 15. 20 | 19. 3 | ·0993 | | | | | |
| 23. 29 | 20. 35 | | *** | | | | | |
| 23. 59 | 20. 5 | 20. 20 | ·0996 | | | | | |
| | | | *** | | | | | |
| | | 21. 33 | ·0990 | | | | | |
| | | 22. 12 | ·0977 | | | | | |
| | | 23. 3 | ·0974 | | | | | |
| | | 23. 37 | ·0974 | | | | | |
| | | 23. 59 | ·0969 | | | | | |
| Nov. 2 | | Nov. 2 | | Nov. 2 | | Nov. 2 | | |
| 0. 0 | 21. 20. 0 | 0. 0 | ·0969 | 0. 0 | ·02663 | 1. 0 | 51 ·3 | 52 ·2 |
| 0. 55 | 20. 0 | 0. 33 | ·0976 | 1. 10 | ·02690 | 3. 0 | 53 ·8 | 55 ·0 |
| 1. 41 | 23. 20 | 1. 3 | ·0971 | 2. 50 | ·02569 | 9. 0 | 55 ·5 | 55 ·1 |
| 1. 45 | 27. 0 | 2. 5 | ·0982 | 4. 43 | ·02300 | 21. 0 | 45 ·0 | 47 ·6 |
| 1. 51 | 25. 15 | 2. 26 | ·0967 | 7. 15 | ·02090 | | | |
| 1. 55 | 25. 55 | | *** | 7. 28 | ·02119 | | | |
| 2. 12 | 24. 0 | 2. 52 | ·0970 | 7. 36 | ·02066 | | | |
| 2. 26 | 25. 30 | 3. 7 | ·0960 | 8. 15 | ·01954 | | | |
| 2. 41 | 22. 0 | 3. 21 | ·0969 | 10. 43 | ·01833 | | | |
| 2. 56 | 25. 30 | 3. 47 | ·0976 | 14. 44 | ·01886 | | | |
| 3. 4 | 25. 0 | | *** | 22. 43 | ·02691 | | | |
| 3. 12 | 26. 0 | 4. 15 | ·0980 | 23. 59 | ·02622 | | | |
| 3. 27 | 18. 30 | 4. 33 | ·0969 | | | | | |
| 3. 34 | 19. 35 | 4. 42 | ·0976 | | | | | |
| 3. 48 | 17. 0 | 4. 47 | ·0966 | | | | | |
| 4. 13 | 18. 15 | | *** | | | | | |
| 4. 22 | 17. 45 | 5. 42 | ·0977 | | | | | |
| 4. 37 | 18. 40 | 5. 56 | ·0964 | | | | | |
| 4. 43 | 17. 0 | 6. 13 | ·0959 | | | | | |
| 4. 51 | 19. 30 | 6. 30 | ·0971 | | | | | |
| 5. 0 | 16. 20 | 6. 37 | ·0968 | | | | | |
| 5. 15 | 20. 30 | 6. 45 | ·0976 | | | | | |
| 5. 24 | 19. 0 | 6. 56 | ·0960 | | | | | |
| 5. 36 | 20. 40 | 7. 6 | ·0969 | | | | | |
| 5. 43 | 20. 10 | 7. 17 | ·0941 | | | | | |
| 5. 51 | 21. 15 | 7. 25 | ·0972 | | | | | |
| 6. 2 | 18. 40 | 7. 32 | ·0954 | | | | | |
| 6. 12 | 19. 10 | 7. 45 | ·0967 | | | | | |
| 6. 26 | 17. 10 | | *** | | | | | |
| 6. 39 | 19. 10 | 8. 5 | ·0967 | | | | | |
| 6. 43 | 17. 45 | 8. 13 | ·0954 | | | | | |
| 6. 56 | 22. 10 | | *** | | | | | |
| 7. 10 | 18. 15 | 8. 45 | ·0972 | | | | | |
| 7. 13 | 20. 50 | 8. 50 | ·0966 | | | | | |
| 7. 45 | 3. 30 | | *** | | | | | |
| 8. 13 | 13. 0 | 9. 37 | ·0979 | | | | | |
| 8. 42 | 8. 20 | 9. 45 | ·0975 | | | | | |
| 8. 52 | 13. 0 | 10. 17 | ·0977 | | | | | |
| 9. 19 | 12. 30 | 10. 20 | ·0982 | | | | | |
| 9. 44 | 15. 0 | | *** | | | | | |
| 10. 0 | 11. 40 | 10. 47 | ·0980 | | | | | |
| 10. 27 | 13. 20 | 11. 17 | ·0987 | | | | | |
| 10. 44 | 11. 0 | | *** | | | | | |
| 11. 11 | 13. 15 | 12. 3 | ·0981 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Nov. 2 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 11. 41 | 21. 12. 10 | 12. 46 | ·0983 | | | | | |
| 11. 57 | 13. 10 | 12. 58 | ·0988 | | | | | |
| 12. 6 | 12. 20 | 13. 4 | ·0993 | | | | | |
| 12. 18 | 13. 45 | | *** | | | | | |
| 12. 40 | 13. 10 | 13. 17 | ·0989 | | | | | |
| 13. 14 | 15. 30 | 13. 40 | ·0997 | | | | | |
| 13. 30 | 13. 30 | 14. 0 | ·0989 | | | | | |
| 14. 20 | 16. 30 | 14. 7 | ·0993 | | | | | |
| 14. 30 | 14. 45 | 14. 23 | ·0985 | | | | | |
| 14. 37 | 16. 0 | 14. 46 | ·0982 | | | | | |
| 15. 25 | 8. 40 | 15. 8 | ·0977 | | | | | |
| 15. 51 | 7. 35 | 15. 37 | ·0980 | | | | | |
| 16. 32 | 9. 50 | | *** | | | | | |
| 16. 45 | 11. 30 | 16. 3 | ·0991 | | | | | |
| | *** | | *** | | | | | |
| 19. 0 | 12. 15 | 16. 20 | ·0984 | | | | | |
| 19. 51 | 11. 10 | 16. 33 | ·0988 | | | | | |
| 19. 57 | 12. 35 | | *** | | | | | |
| 20. 13 | 11. 15 | 16. 47 | ·0984 | | | | | |
| 20. 22 | 12. 15 | | *** | | | | | |
| 20. 30 | 10. 0 | 17. 3 | ·0991 | | | | | |
| 20. 37 | 12. 0 | 17. 17 | ·0989 | | | | | |
| 20. 45 | 11. 0 | 17. 26 | ·0996 | | | | | |
| 20. 53 | 13. 0 | 17. 33 | ·0987 | | | | | |
| 20. 58 | 10. 50 | 17. 45 | ·0993 | | | | | |
| 21. 8 | 12. 30 | | *** | | | | | |
| | *** | 19. 20 | ·0990 | | | | | |
| 21. 41 | 10. 5 | 19. 32 | ·0993 | | | | | |
| | *** | 19. 45 | ·0987 | | | | | |
| 22. 30 | 12. 20 | 20. 17 | ·0988 | | | | | |
| 23. 15 | 16. 35 | 20. 26 | ·0981 | | | | | |
| 23. 59 | 17. 10 | 20. 33 | ·0991 | | | | | |
| | | 20. 40 | ·0987 | | | | | |
| | | 20. 46 | ·0990 | | | | | |
| | | 20. 50 | ·0985 | | | | | |
| | | 20. 58 | ·0989 | | | | | |
| | | | *** | | | | | |
| | | 23. 6 | ·0978 | | | | | |
| | | 23. 59 | ·0978 | | | | | |
| Nov. 3 | | Nov. 3 | | Nov. 3 | | Nov. 3 | | |
| 0. 0 | 21. 17. 10 | 0. 0 | ·0978 | 0. 0 | ·02622 | 1. 0 | 48 ·0 | 49 ·0 |
| 0. 25 | 17. 30 | 0. 17 | ·0977 | 1. 21 | ·02640 | 3. 0 | 51 ·3 | 52 ·2 |
| 0. 44 | 20. 0 | 0. 33 | ·0983 | 2. 15 | ·02572 | 9. 0 | 51 ·0 | 52 ·2 |
| 1. 13 | 18. 20 | 1. 5 | ·0976 | 9. 43 | ·01934 | 22. 30 | 43 ·5 | 46 ·5 |
| | *** | 1. 20 | ·0982 | 22. 13 | ·02677 | | | |
| 3. 4 | 18. 30 | 1. 35 | ·0978 | 23. 59 | ·02618 | | | |
| | *** | 1. 47 | ·0979 | | | | | |
| 6. 0 | 13. 20 | 2. 5 | ·0972 | | | | | |
| 12. 42 | 11. 20 | 2. 15 | ·0978 | | | | | |
| 12. 57 | 11. 55 | 2. 30 | ·0975 | | | | | |
| 13. 26 | 10. 45 | | *** | | | | | |
| 17. 13 | 11. 45 | 3. 15 | ·0977 | | | | | |
| 18. 11 | 10. 30 | 3. 19 | ·0972 | | | | | |
| 19. 0 | 11. 45 | 3. 32 | ·0978 | | | | | |
| | *** | | *** | | | | | |
| 20. 51 | 9. 0 | 6. 0 | ·0985 | | | | | |
| | *** | 6. 17 | ·0993 | | | | | |

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. 3 | | Nov. 3 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 22. 11 | 21. 9. 55 | 6. 45 | ·0987 | | | | | |
| | *** | | *** | | | | | |
| 23. 30 | 15. 0 | 13. 39 | ·0997 | | | | | |
| 23. 59 | 15. 25 | | *** | | | | | |
| | | 16. 11 | ·0998 | | | | | |
| | | | *** | | | | | |
| | | 18. 46 | ·1005 | | | | | |
| | | | *** | | | | | |
| | | 21. 30 | ·0998 | | | | | |
| | | 22. 2 | ·0988 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0988 | | | | | |
| Nov. 4 | | Nov. 4 | | Nov. 4 | | Nov. 4 | | |
| 0. 0 | 21. 15. 25 | 0. 0 | ·0988 | 0. 0 | ·02618 | 9. 0 | 48 ·3 | 50 ·8 |
| | *** | 6. 25 | ·1001 | 2. 35 | ·02610 | 21. 0 | 45 ·3 | 47 ·2 |
| 2. 10 | 15. 10 | 6. 45 | ·0998 | 8. 25 | ·02307 | | | |
| 3. 58 | 12. 45 | | *** | 13. 30 | ·02219 | | | |
| 7. 0 | 10. 0 | 9. 15 | ·1005 | 14. 16 | ·02172 | | | |
| 8. 7 | 10. 45 | | *** | 15. 11 | ·02197 | | | |
| 9. 45 | 9. 0 | 9. 50 | ·1000 | 15. 35 | ·02146 | | | |
| 10. 12 | 13. 5 | | *** | 19. 14 | ·02317 | | | |
| 10. 44 | 6. 55 | 10. 18 | ·1002 | 23. 30 | ·02466 | | | |
| 10. 59 | 6. 35 | 10. 40 | ·0990 | | (†) | | | |
| 11. 7 | 21. 8. 20 | 11. 10 | ·0997 | | | | | |
| 11. 57 | 20. 56. 0 | 11. 41 | ·0988 | | | | | |
| 12. 13 | 56. 20 | 12. 15 | ·1000 | | | | | |
| 12. 21 | 55. 10 | 12. 33 | ·0999 | | | | | |
| 12. 37 | 56. 40 | 12. 50 | ·0988 | | | | | |
| 12. 59 | 54. 30 | | *** | | | | | |
| 13. 19 | 20. 59. 35 | 13. 21 | ·0988 | | | | | |
| 13. 30 | 21. 0. 20 | 13. 31 | ·0992 | | | | | |
| 13. 42 | 20. 59. 30 | 13. 47 | ·0992 | | | | | |
| 14. 15 | 21. 2. 40 | 14. 15 | ·0974 | | | | | |
| 14. 27 | 1. 0 | | *** | | | | | |
| 14. 43 | 13. 10 | 15. 17 | ·0976 | | | | | |
| 15. 15 | 2. 40 | 15. 46 | ·0991 | | | | | |
| 15. 41 | 7. 30 | 16. 3 | ·0982 | | | | | |
| 16. 11 | 4. 0 | 16. 20 | ·0992 | | | | | |
| 17. 15 | 8. 50 | 16. 45 | ·0994 | | | | | |
| 17. 47 | 12. 0 | | *** | | | | | |
| 18. 4 | 10. 45 | 17. 15 | ·0986 | | | | | |
| | *** | 17. 33 | ·0985 | | | | | |
| 19. 52 | 11. 5 | 17. 45 | ·0993 | | | | | |
| 20. 22 | 8. 20 | 18. 15 | ·0987 | | | | | |
| | *** | | *** | | | | | |
| 22. 15 | 14. 30 | 18. 45 | 0994 | | | | | |
| 22. 39 | 17. 20 | | *** | | | | | |
| 23. 7 | 12. 10 | 19. 20 | ·0991 | | | | | |
| 23. 14 | 16. 15 | 19. 33 | ·0982 | | | | | |
| 23. 59 | 14. 10 | 19. 52 | ·0984 | | | | | |
| | | | *** | | | | | |
| | | 20. 40 | ·0979 | | | | | |
| | | | *** | | | | | |
| | | 21. 18 | ·0982 | | | | | |
| | | | *** | | | | | |
| | | 22. 50 | ·0977 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° | ° |
| 23. 15 | | | ·0972 | | | | | |
| 23. 59 | | | ·0977 | | | | | |
| Nov. 5 | | Nov. 5 | | Nov. 5 | | Nov. 5 | | |
| 0. 0 | 21. 14. 10 | 0. 0 | ·0977 | | | 1. 0 | 47 ·4 | 48 ·2 |
| 0. 36 | 14. 15 | 0. 56 | ·0984 | | (†) | 3. 0 | 49 ·0 | 50 ·0 |
| 1. 35 | 18. 15 | | *** | 0. 55 | ·02556 | 9. 0 | 49 ·5 | 50 ·7 |
| 1. 45 | 16. 15 | 2. 33 | ·0975 | 3. 57 | ·02410 | 21. 0 | 47 ·8 | 48 ·6 |
| 3. 12 | 15. 15 | | *** | 6. 15 | ·02220 | | | |
| 3. 58 | 8. 50 | 3. 10 | ·0979 | 11. 41 | ·02049 | | | |
| 4. 49 | 13. 20 | 3. 40 | ·0971 | 23. 59 | ·02119 | | | |
| 5. 57 | 12. 10 | | *** | | | | | |
| 6. 45 | 8. 30 | 4. 7 | ·0982 | | | | | |
| 6. 54 | 9. 0 | | *** | | | | | |
| 7. 4 | 8. 20 | 5. 16 | ·0981 | | | | | |
| 7. 31 | 10. 30 | | *** | | | | | |
| 9. 30 | 11. 15 | 7. 7 | ·0990 | | | | | |
| 9. 54 | 8. 40 | 7. 32 | ·0987 | | | | | |
| 10. 10 | 9. 0 | | *** | | | | | |
| 10. 28 | 7. 10 | 10. 30 | ·0991 | | | | | |
| 10. 41 | 7. 15 | 10. 45 | ·0997 | | | | | |
| 10. 54 | 5. 0 | 11. 6 | ·1005 | | | | | |
| 11. 15 | 10. 10 | 11. 30 | ·0990 | | | | | |
| 11. 42 | 8. 10 | | *** | | | | | |
| 12. 14 | 11. 20 | 13. 15 | ·0987 | | | | | |
| 12. 41 | 9. 40 | 15. 0 | ·0990 | | | | | |
| 17. 11 | 11. 10 | 15. 16 | ·0995 | | | | | |
| 17. 24 | 10. 0 | | *** | | | | | |
| 17. 44 | 11. 10 | 17. 3 | ·0991 | | | | | |
| 20. 28 | 9. 30 | 17. 28 | ·0996 | | | | | |
| 22. 17 | 11. 0 | | *** | | | | | |
| 22. 57 | 16. 30 | 20. 56 | ·0987 | | | | | |
| 23. 13 | 13. 20 | | *** | | | | | |
| 23. 59 | 16. 20 | 22. 18 | ·0977 | | | | | |
| | | 23. 0 | ·0981 | | | | | |
| | | 23. 18 | ·0971 | | | | | |
| | | 23. 59 | ·0975 | | | | | |
| Nov. 6 | | Nov. 6 | | Nov. 6 | | Nov. 6 | | |
| 0. 0 | 21. 16. 20 | 0. 0 | ·0975 | 0. 0 | ·02119 | 1. 0 | 49 ·0 | 49 ·8 |
| 0. 43 | 17. 20 | 0. 16 | ·0980 | 1. 57 | ·02091 | 3. 0 | 51 ·4 | 52 ·1 |
| 0. 58 | 21. 0 | 0. 43 | ·0978 | 5. 43 | ·01769 | 9. 0 | 52 ·0 | 52 ·2 |
| | *** | | (†) | 10. 29 | ·01791 | 21. 0 | 47 ·3 | 49 ·0 |
| 1. 45 | 20. 15 | 1. 0 | ·0968* | 10. 42 | ·01869 | | | |
| 2. 12 | 18. 0 | 3. 0 | ·0967* | 15. 57 | ·01941 | | | |
| 2. 30 | 18. 30 | 9. 0 | ·0981* | 23. 59 | ·02217 | | | |
| 4. 28 | 11. 20 | 21. 0 | ·0984* | | | | | |
| 5. 45 | 13. 30 | | | | | | | |
| 8. 37 | 9. 30 | | | | | | | |
| 9. 19 | 10. 55 | | | | | | | |
| 12. 45 | 10. 0 | | | | | | | |
| 13. 13 | 8. 50 | | | | | | | |
| 13. 44 | 10. 5 | | | | | | | |
| 13. 51 | 11. 30 | | | | | | | |
| 15. 13 | 10. 45 | | | | | | | |
| 15. 44 | 8. 30 | | | | | | | |
| 16. 30 | 11. 0 | | | | | | | |
| 16. 52 | 10. 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. 6 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 19. 38 | 21. 10. 5 | | | | | | | |
| 20. 21 | 8.50 | | | | | | | |
| 21. 19 | 9. 30 | | | | | | | |
| 22. 48 | 17. 30 | | | | | | | |
| 23. 51 | 17. 0 | | | | | | | |
| 23. 59 | 18. 20 | | | | | | | |
| Nov. 7 | | Nov. 7 | | Nov. 7 | | Nov. 7 | | |
| 0. 0 | 21. 18. 25 | 0. 0 | ·0970 | 0. 0 | ·02217 | 0. 0 | 49 ·0 | 50 ·7 |
| 2. 9 | 19. 55 | 0. 40 | ·0961 | 1. 29 | ·02204 | 1. 0 | 50 ·0 | 51 ·2 |
| 2. 50 | 18. 45 | 1. 15 | ·0968 | 5. 10 | ·01830 | 3. 0 | 52 ·9 | 53 ·2 |
| 3. 52 | 14. 20 | 2. 17 | ·0965 | 5. 40 | ·01841 | 6. 0 | 53 ·6 | 54 ·0 |
| 4. 22 | 15. 0 | | *** | 5. 46 | ·01908 | 9. 0 | 53 ·0 | 53 ·4 |
| 5. 29 | 13. 10 | 3. 3 | ·0972 | 6. 30 | ·01878 | 12. 0 | 52 ·0 | 52 ·5 |
| 6. 35 | 13. 55 | | *** | 12. 57 | ·01941 | 18. 0 | 46 ·0 | 48 ·0 |
| 7. 43 | 12. 30 | 3. 42 | ·0967 | 17. 30 | ·02197 | 21. 0 | 45 ·0 | 47 ·0 |
| 8. 20 | 9. 50 | 4. 31 | ·0983 | 23. 59 | ·02710 | | | |
| 8. 37 | 10. 5 | | *** | | | | | |
| 9. 44 | 6. 10 | 6. 22 | ·0985 | | | | | |
| 10. 21 | 2. 20 | 6. 46 | ·0981 | | | | | |
| 10. 28 | 4. 0 | 7. 25 | ·0987 | | | | | |
| 10. 43 | 1. 30 | 7. 58 | ·0980 | | | | | |
| 11. 16 | 7. 0 | 9. 15 | ·0983 | | | | | |
| 11. 43 | 5. 30 | 9. 26 | ·0977 | | | | | |
| 12. 19 | 7. 20 | | *** | | | | | |
| 13. 12 | 6. 40 | 10. 15 | ·0975 | | | | | |
| 14. 16 | 12. 0 | 11. 0 | ·0967 | | | | | |
| 15. 54 | 9. 0 | 12. 2 | ·0975 | | | | | |
| 16. 35 | 12. 0 | | *** | | | | | |
| 20. 7 | 8. 5 | 13. 6 | ·0970 | | | | | |
| 21. 31 | 8. 30 | 14. 5 | ·0979 | | | | | |
| 21. 57 | 9. 30 | 17. 47 | ·0990 | | | | | |
| 22. 43 | 16. 15 | | *** | | | | | |
| 23. 0 | 14. 40 | 19. 42 | ·0994 | | | | | |
| 23. 59 | 17. 50 | 20. 36 | ·0993 | | | | | |
| | | 21. 33 | ·0984 | | | | | |
| | | 22. 2 | ·0986 | | | | | |
| | | 22. 56 | ·0974 | | | | | |
| | | 23. 45 | ·0975 | | | | | |
| | | 23. 59 | ·0980 | | | | | |
| Nov. 8 | | Nov. 8 | | Nov. 8 | | Nov. 8 | | |
| 0. 0 | 21. 17. 50 | 0. 0 | ·0980 | 0. 0 | ·02710 | 0. 0 | 46 ·0 | 47 ·5 |
| 1. 29 | 17. 0 | 0. 36 | ·0981 | 1. 48 | ·02746 | 1. 0 | 47 ·0 | 48 ·0 |
| 3. 26 | 14. 30 | | *** | 10. 54: | ·02218 | 3. 0 | 49 ·0 | 50 ·0 |
| 9. 38 | 10. 0 | 2. 10 | ·0974 | 22. 39 | ·02680 | 9. 0 | 50 ·0 | 52 ·0 |
| 10. 21 | 10. 50 | | *** | | (†) | 21. 0 | 45 ·0 | 47 ·0 |
| 11. 24 | 9. 20 | 7. 7 | ·0988 | | | | | |
| 12. 27 | 11. 0 | | *** | | | | | |
| 17. 12 | 10. 50 | 10. 4 | ·0993 | | | | | |
| 17. 40 | 13. 20 | 10. 30 | ·0989 | | | | | |
| 18. 10 | 11. 50 | | *** | | | | | |
| 20. 9 | 8. 55 | 17. 36 | ·0999 | | | | | |
| 21. 27 | 9. 10 | 18. 13 | ·1005 | | | | | |
| 22. 37 | 13. 25 | | *** | | | | | |
| | (†) | 19. 40 | ·1002 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Nov. 8 h m | | h m | | h m | ° | ° |
| | | 22. 36 | ·0977 | | | | | |
| | | | (†) | | | | | |
| Nov. 9 | | Nov. 9 | | Nov. 9 | | Nov. 9 | | |
| | (†) | | (†) | | (†) | 1. 0 | 46 ·3 | 47 ·2 |
| 1. 0 | 21. 19. 46* | 1. 0 | ·0986* | 1. 0 | ·02756* | 3. 0 | 46 ·8 | 47 ·1 |
| 2. 11 | 18. 30 | 1. 47 | ·0985 | 2. 0 | {·02790 | 9. 0 | 47 ·0 | 47 ·7 |
| 2. 52 | 15. 0 | | *** | | {·02641 | 21. 0 | 44 ·0 | 45 ·0 |
| 3. 13 | 15. 20 | 3. 26 | ·0974 | 9. 21 | ·02432 | | | |
| 5. 40 | 11. 40 | 4. 0 | ·0983 | 21. 22 | ·02730 | | | |
| 6. 21 | 11. 45 | 5. 40 | ·0989 | 23. 10 | {·02732 | | | |
| 6. 45 | 10. 55 | 5. 56 | ·0986 | | {·02691 | | | |
| 7. 43 | 10. 30 | 8. 50 | ·0994 | 23. 48 | ·02690 | | | |
| 8. 59 | 11. 0 | 17. 10 | ·1001 | | (†) | | | |
| 15. 56 | 11. 20 | 19. 25 | ·1001 | | | | | |
| 19. 4 | 9. 40 | | *** | | | | | |
| 20. 26 | 7. 55 | 23. 0 | ·0976 | | | | | |
| 21. 40 | 9. 15 | | *** | | | | | |
| 21. 54 | 8. 45 | 23. 59 | ·0979 | | | | | |
| 22. 29 | 11. 10 | | | | | | | |
| 22. 44 | 11. 5 | | | | | | | |
| 23. 30 | 15. 15 | | | | | | | |
| 23. 49 | 15. 10 | | | | | | | |
| | (†) | | | | | | | |
| Nov. 10 | | Nov. 10 | | Nov. 10 | | Nov. 10 | | |
| | (†) | 0. 0 | ·0979 | | (†) | 1. 0 | 46 ·0 | 47 ·0 |
| 0. 44 | 21. 16. 15 | 1. 7 | ·0981 | 0. 41 | ·02693 | 3. 0 | 48 ·0 | 48 ·0 |
| 1. 13 | 18. 30 | 1. 36 | ·0977 | 2. 4 | ·02690 | 9. 0 | 47 ·8 | 47 ·9 |
| 2. 14 | 18. 0 | 2. 45 | ·0977 | 5. 33 | ·02440 | 22. 55 | 44 ·2 | 45 ·5 |
| 5. 0 | 12. 40 | 4. 36 | ·0993 | 8. 52 | ·02380 | | | |
| 6. 10 | 11. 50 | 4. 45 | ·0991 | 16. 51 | ·02503 | | | |
| 6. 39 | 10. 0 | 5. 17 | ·0994 | 23. 59 | ·02696 | | | |
| 7. 26 | 12. 0 | 5. 40 | ·0993 | | | | | |
| 8. 48 | 11. 30 | 6. 3 | ·0995 | | | | | |
| 9. 28 | 8. 30 | 6. 38 | ·0987 | | | | | |
| 10. 7 | 9. 50 | 8. 33 | ·0999 | | | | | |
| 10. 43 | 9. 15 | 9. 4 | ·0997 | | | | | |
| 11. 11 | 10. 20 | 9. 32 | ·1000 | | | | | |
| 12. 45 | 9. 20 | 10. 2 | ·0999 | | | | | |
| 14. 10 | 10. 40 | 10. 26 | ·1004 | | | | | |
| 19. 12 | 8. 45 | 10. 58 | ·1000 | | | | | |
| 20. 45 | 6. 20 | | *** | | | | | |
| 21. 48 | 6. 25 | 14. 50 | ·1001 | | | | | |
| 23. 59 | 12. 30 | 17. 40 | ·1006 | | | | | |
| | | 20. 36 | ·1000 | | | | | |
| | | 22. 17 | ·0989 | | | | | |
| | | 23. 30 | ·0987 | | | | | |
| | | | (†) | | | | | |
| Nov. 11 | | Nov. 11 | | Nov. 11 | | Nov. 11 | | |
| 0. 0 | 21. 12. 30 | | (†) | 0. 0 | ·02696 | 6. 50 | 46 ·0 | 47 ·0 |
| 1. 13 | 17. 10 | 2. 10 | ·0986 | 1. 44 | ·02740 | 21. 6 | 41 ·7 | 43 ·1 |
| 1. 41 | 16. 0 | 5. 16 | ·1001 | 6. 29 | ·02618 | | | |
| 2. 14 | 16. 20 | 6. 16 | ·0997 | 11. 57 | ·02618 | | | |
| 5. 27 | 12. 0 | 6. 26 | ·1000 | 15. 56 | ·02744 | | | |
| 6. 28 | 3. 45 | 6. 46 | ·0995 | 16. 9 | ·02722 | | | |
| 7. 21 | 8. 40 | 7. 22 | ·1001 | 20. 46 | ·02730 | | | |

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. 11 | | Nov. 11 | | Nov. 11 | | h m | ° | ° |
| h m | ° ′ ″ | h m | | h m | | | | |
| 8. 7 | 21. 10. 5 | 8. 0 | ·0989 | 23. 59 | ·02680 | | | |
| 8. 37 | 5. 0 | 8. 46 | ·0997 | | | | | |
| 8. 55 | 8. 20 | 9. 10 | ·1010 | | | | | |
| 9. 15 | 5. 15 | 9. 30 | ·1003 | | | | | |
| 10. 52 | 10. 45 | 9. 47 | ·1009 | | | | | |
| 14. 15 | 11. 20 | 10. 36 | ·0998 | | | | | |
| 15. 30 | 8. 50 | | *** | | | | | |
| 15. 55 | 10. 0 | 15. 6 | ·1002 | | | | | |
| 16. 28 | 9. 0 | 17. 33 | ·1010 | | | | | |
| 19. 30 | 10. 10 | 18. 37 | ·0982 | | | | | |
| 20. 41 | 8. 30 | 19. 28 | ·0998 | | | | | |
| 23. 59 | 14. 15 | 20. 7 | ·1004 | | | | | |
| | | 20. 37 | ·0986 | | | | | |
| | | 20. 54 | ·0998 | | | | | |
| | | 21. 18 | ·0987 | | | | | |
| | | 21. 30 | ·0991 | | | | | |
| | | 21. 42 | ·0991 *** | | | | | |
| | | 23. 30 | ·1007 | | | | | |
| | | 23. 59 | ·1005 | | | | | |
| Nov. 12 | | Nov. 12 | | Nov. 12 | | Nov. 12 | | |
| 0. 0 | 21. 14. 15 | 0. 0 | ·1005 | 0. 0 | ·02680 | 1. 0 | 43·5 | 44·3 |
| 1. 27 | 16. 30 | 2. 10 | ·0997 | 2. 13 | ·02667 | 3. 0 | 46·0 | 46·6 |
| 1. 45 | 15. 20 | | *** | 10. 53: | ·02109 | 9. 0 | 48·5 | 49·0 |
| 2. 12 | 15. 45 | 4. 3 | ·0992 | 23. 59 | ·02140 | 21. 0 | 47·3 | 48·2 |
| 5. 49 | 11. 50 | | *** | | | | | |
| 8. 51 | 10. 50 | 7. 17 | ·1000 | | | | | |
| 9. 13 | 9. 20 | 9. 20 | ·0996 | | | | | |
| 16. 27 | 11. 20 | | *** | | | | | |
| 21. 18 | 8. 30 | 18. 46 | ·1004 | | | | | |
| 23. 28 | 15. 0 | 20. 13 | ·1000 | | | | | |
| 23. 44 | 13. 30 | 23. 3 | ·0973 | | | | | |
| 23. 52 | 15. 0 | 23. 59 | ·0974 | | | | | |
| 23. 59 | 13. 50 | | | | | | | |
| Nov. 13 | | Nov. 13 | | Nov. 13 | | Nov. 13 | | |
| 0. 0 | 21. 13. 50 | 0. 0 | ·0974 | 0. 0 | ·02140 | 1. 0 | 49·0 | 49·7 |
| 1. 2 | 17. 0 | 0. 35 | ·0979 | 1. 28 | ·02112 | 3. 0 | 51·7 | 51·4 |
| 1. 26 | 16. 40 | 1. 16 | ·0975 | 7. 27 | ·01661 | 9. 0 | 53·5 | 53·0 |
| 1. 39 | 17. 15 | 2. 30 | ·0979 | 17. 48 | ·01698 | 21. 0 | 50·4 | 51·0 |
| 5. 24 | 13. 20 | 4. 17 | ·0979 | 23. 59 | ·01797 | | | |
| 5. 45 | 11. 0 | 6. 10 | ·0985 | | | | | |
| 6. 22 | 13. 10 | 6. 32 | ·0983 | | | | | |
| 13. 30 | 10. 30 | | *** | | | | | |
| 16. 3 | 11. 10 | 14. 37 | ·0995 | | | | | |
| 21. 33 | 9. 0 | 18. 36 | ·0997 | | | | | |
| 23. 11 | 13. 30 | 19. 46 | ·0994 | | | | | |
| 23. 59 | 17. 30 | 22. 16 | ·0979 *** | | | | | |
| | | 23. 59 | ·0979 | | | | | |
| Nov. 14 | | Nov. 14 | | Nov. 14 | | Nov. 14 | | |
| 0. 0 | 21. 17. 30 | 0. 0 | ·0979 | 0. 0 | ·01797 | 0. 0 | 51·3 | 52·2 |
| 0. 27 | 15. 0 | | *** | 4. 44 | ·01718 | 1. 0 | 52·0 | 52·7 |
| 1. 26 | 16. 30 | 0. 50 | ·0983 | 10. 0 | ·01770 | 3. 0 | 52·8 | 52·5 |
| 2. 12 | 16. 0 | 1. 35 | ·0979 | 15. 58: | ·02038 | 6. 0 | 53·4 | 53·5 |
| 2. 38 | 14. 30 | | *** | 23. 59 | ·01942 | 9. 0 | 53·7 | 53·3 |

| 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. |
|---|---|---|---|---|---|---|---|---|
| Nov. 14 | | Nov. 14 | | h m | | Nov. 14 | | |
| h m | ° ′ ″ | h m | | | | h m | ° | ° |
| 2. 57 | 21. 15. 40 | 2. 46 | ·0987 | | | 12. 0 | 53·0 | 52·4 |
| 5. 10 | 13. 0 | 3. 37 | ·0981 | | | 18. 0 | 52·7 | 53·1 |
| 6. 22 | 13. 10 | 4. 16 | ·0981 | | | 21. 0 | 52·8 | 53·3 |
| 7. 9 | 11. 45 | 4. 36 | ·0979 | | | | | |
| 7. 21 | 12. 20 | 6. 16 | ·0987 | | | | | |
| 11. 30 | 9. 20 | 6. 37 | ·0983 *** | | | | | |
| 13. 13 | 10. 40 | | | | | | | |
| 13. 36 | 12. 50 | 7. 17 | ·0987 | | | | | |
| 14. 0 | 9. 40 | 8. 0 | ·0983 | | | | | |
| 15. 13 | 8. 50 | 8. 36 | ·0988 | | | | | |
| 16. 51 | 10. 30 | 9. 25 | ·0987 | | | | | |
| 19. 17 | 9. 20 | 12. 17 | ·0999 | | | | | |
| 21. 45 | 11. 30 | 13. 5 | ·0999 | | | | | |
| 23. 26 | 19. 20 | 13. 28 | ·1006 | | | | | |
| 23. 59 | 18. 10 | 13. 50 | ·1007 | | | | | |
| | | 14. 20 | ·1000 *** | | | | | |
| | | 19. 30 | ·1000 *** | | | | | |
| | | 23. 59 | ·0974 | | | | | |
| Nov. 15 | | Nov. 15 | | Nov. 15 | | Nov. 15 | | |
| 0. 0 | 21. 18. 10 | 0. 0 | ·0974 | 0. 0 | ·01942 | 0. 0 | 52·7 | 53·5 |
| 0. 12 | 17. 50 | | *** | 1. 25: | ·01951 | 1. 0 | 53·3 | 53·6 |
| 0. 50 | 20. 10 | 0. 40 | ·0974 | 4. 24 | ·01764 | 3. 0 | 54·7 | 54·2 |
| 1. 2 | 19. 0 | | *** | 9. 45 | ·01820 | 9. 0 | 53·0 | 52·7 |
| 2. 44 | 21. 20 | 3. 0 | ·0963 | 14. 12 | ·01912 | 21. 8 | 46·2 | 47·0 |
| 4. 43 | 15. 40 | | *** | 23. 59 | ·02671 | | | |
| 6. 23 | 16. 25 | 4. 26 | ·0970 | | | | | |
| 7. 29 | 12. 50 | | *** | | | | | |
| 8. 15 | 13. 45 | 5. 40 | ·0968 | | | | | |
| 9. 28 | 10. 0 | | *** | | | | | |
| 9. 51 | 11. 45 | 8. 3 | ·0980 | | | | | |
| 10. 40 | 6. 0 | 8. 36 | ·0979 | | | | | |
| 11. 18 | 3. 10 | 9. 30 | ·0989 | | | | | |
| 11. 45 | 6. 30 | 9. 40 | ·0979 | | | | | |
| 12. 0 | 3. 45 | 10. 36 | ·0993 | | | | | |
| 12. 43 | 6. 30 | 10. 58 | ·0983 | | | | | |
| 12. 58 | 5. 5 | 11. 27 | ·0986 | | | | | |
| 13. 30 | 5. 10 | 11. 48 | ·0976 | | | | | |
| 14. 6 | 9. 30 | 12. 4 | ·0983 | | | | | |
| 14. 29 | 5. 20 | 12. 22 | ·0979 *** | | | | | |
| 14. 47 | 3. 45 | | | | | | | |
| 16. 11 | 9. 25 | 13. 33 | ·0987 | | | | | |
| 16. 37 | 9. 30 | 13. 46 | ·0989 *** | | | | | |
| 17. 10 | 12. 0 | | | | | | | |
| 18. 9 | 10. 50 | 14. 30 | ·0986 *** | | | | | |
| 19. 43 | 12. 40 | | | | | | | |
| 21. 15 | 10. 0 | 15. 38 | ·0997 *** | | | | | |
| 23. 14 | 17. 50 | | | | | | | |
| 23. 27 | 16. 45 | 17. 46 | ·1004 *** | | | | | |
| 23. 59 | 18. 15 | | | | | | | |
| | | 19. 33 | ·0999 *** | | | | | |
| | | 21. 49 | ·0979 *** | | | | | |
| | | 23. 5 | ·0973 | | | | | |
| | | 23. 59 | ·0971 | | | | | |

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.16 | | Nov.16 | | Nov.16 | | Nov.16 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 0. 0 | 21. 18. 15 | 0. 0 | ·0971 | 0. 0 | ·02671 | 1. 0 | 48 ·0 | 48 ·0 |
| 0. 12 | 17. 55 | 3. 7 | ·0971 | 2. 8 | ·02674 | 3. 0 | 49 ·8 | 50 ·7 |
| 0. 20 | 21. 45 | 3. 38 | ·0976 | 7. 4 | ·02245 | 9. 0 | 51 ·8 | 51 ·6 |
| 1. 6 | 18. 30 | 3. 46 | ·0972 | 13. 48 | ·02111 | 21. 0 | 48 ·2 | 49 ·6 |
| 2. 6 | 19. 20 | 4. 16 | ·0971 | 14. 14 | ·02093 | | | |
| 2. 25 | 17. 30 | 6. 10 | ·0983 | 21. 56 | ·02300 | | | |
| 2. 41 | 18. 10 | | *** | 23. 59 | ·02325 | | | |
| 5. 44 | 13. 10 | 7. 0 | ·0979 | | | | | |
| 6. 54 | 13. 50 | | *** | | | | | |
| 9. 10 | 12. 50 | 7. 20 | ·0983 | | | | | |
| 10. 13 | 10. 10 | 7. 40 | ·0979 | | | | | |
| 11. 41 | 12. 0 | 8. 6 | ·0982 | | | | | |
| 13. 37 | 12. 5 | 8. 30 | ·0979 | | | | | |
| 13. 54 | 15. 50 | 9. 5 | ·0984 | | | | | |
| 14. 30 | 9. 50 | 9. 28 | ·0980 | | | | | |
| 17. 0 | 11. 15 | 10. 0 | ·0984 | | | | | |
| 20. 25 | 9. 0 | | *** | | | | | |
| 22. 7 | 10. 30 | 13. 17 | ·0987 | | | | | |
| 23. 59 | 15. 0 | 13. 41 | ·0991 | | | | | |
| | | | *** | | | | | |
| | | 15. 44 | ·0986 | | | | | |
| | | 17. 36 | ·0992 | | | | | |
| | | 20. 7 | ·0991 | | | | | |
| | | | *** | | | | | |
| | | 23. 25 | ·0977 | | | | | |
| | | 23. 59 | ·0977 | | | | | |
| Nov.17 | | Nov.17 | | Nov.17 | | Nov.17 | | |
| 0. 0 | 21. 15. 0 | 0. 0 | ·0977 | 0. 0 | ·02325 | 1. 0 | 48 ·2 | 49 ·5 |
| 0. 38 | 15. 10 | | *** | 5. 57 | ·02200 | 3. 0 | 50 ·8 | 51 ·2 |
| 0. 45 | 14. 10 | 2. 45 | ·0976 | 10. 7 | ·02391 | 9. 0 | 46 ·7 | 47 ·5 |
| 1. 12 | 17. 0 | 3. 29 | ·0983 | 15. 29 | ·02553 | 22. 15 | 41 ·8 | 44 ·3 |
| 1. 57 | 17. 30 | | *** | 19. 42 | ·02790 | | | |
| 3. 40 | 13. 20 | 6. 36 | ·0992 | 23. 59 | ·02748 | | | |
| 5. 27 | 13. 30 | 7. 3 | ·0983 | | | | | |
| 6. 11 | 15. 10 | 7. 20 | ·0993 | | | | | |
| 6. 30 | 14. 55 | 7. 35 | ·0993 | | | | | |
| 6. 51 | 13. 45 | 7. 45 | ·0989 | | | | | |
| 7. 14 | 10. 30 | 8. 5 | ·0997 | | | | | |
| 7. 26 | 10. 15 | 8. 14 | ·0991 | | | | | |
| 7. 30 | 11. 40 | 8. 38 | ·0990 | | | | | |
| 7. 43 | 10. 35 | 9. 47 | ·0993 | | | | | |
| 7. 50 | 11. 0 | 13. 2 | ·0992 | | | | | |
| 7. 59 | 10. 0 | 13. 14 | ·1000 | | | | | |
| 8. 26 | 11. 20 | 13. 25 | ·0997 | | | | | |
| 8. 44 | 13. 20 | 13. 47 | ·1000 | | | | | |
| 14. 58 | 8. 20 | | *** | | | | | |
| 16. 17 | 10. 40 | 18. 20 | ·1000 | | | | | |
| 16. 39 | 9. 5 | 18. 47 | ·0999 | | | | | |
| 17. 59 | 11. 15 | 20. 17 | ·1000 | | | | | |
| 18. 52 | 9. 30 | 20. 54 | ·0990 | | | | | |
| 19. 40 | 11. 0 | 21. 8 | ·0995 | | | | | |
| 20. 11 | 9. 20 | | *** | | | | | |
| 20. 54 | 10. 45 | 22. 11 | ·0987 | | | | | |
| 21. 1 | 9. 0 | | *** | | | | | |
| 21. 13 | 11. 0 | 23. 17 | ·0993 | | | | | |
| 21. 28 | 9. 50 | 23. 59 | ·0987 | | | | | |
| 21. 51 | 10. 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.17 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 22. 17 | 21. 15. 10 | | | | | | | |
| | *** | | | | | | | |
| 23. 29 | 13. 30 | | | | | | | |
| 23. 59 | 15. 10 | | | | | | | |
| Nov.18 | | Nov.18 | | Nov.18 | | Nov.18 | | |
| 0. 0 | 21. 15. 10 | 0. 0 | ·0987 | 0. 0 | ·02748 | 9. 5 | 44 ·3 | 44 ·2 |
| 0. 49 | 17. 30 | 0. 38 | ·0985 | 2. 51 | ·02780 | 21. 0 | 42 ·0 | 43 ·0 |
| 1. 10 | 20. 15 | 1. 6 | ·0989 | 8. 21 | ·02709 | | | |
| 1. 28 | 19. 0 | 1. 30 | ·0982 | 11. 24 | ·02757 | | | |
| 1. 42 | 20. 20 | | *** | 19. 24 | ·02750 | | | |
| 2. 4 | 20. 0 | 2. 7 | ·0983 | 23. 59 | ·02729 | | | |
| 2. 14 | 20. 50 | 2. 40 | ·0973 | | | | | |
| 2. 57 | 16. 25 | 3. 17 | ·0986 | | | | | |
| 9. 41 | 11. 40 | | *** | | | | | |
| 21. 4 | 9. 10 | 5. 26 | ·0997 | | | | | |
| 21. 51 | 12. 10 | 5. 47 | ·0993 | | | | | |
| 22. 2 | 11. 50 | 6. 7 | ·1001 | | | | | |
| 22. 38 | 15. 30 | | *** | | | | | |
| 23. 38 | 17. 50 | 7. 6 | ·0997 | | | | | |
| 23. 59 | 17. 20 | | *** | | | | | |
| | | 18. 47 | ·1006 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0984 | | | | | |
| Nov.19 | | Nov.19 | | Nov.19 | | Nov.19 | | |
| 0. 0 | 21. 17. 20 | 0. 0 | ·0984 | 0. 0 | ·02729 | 1. 0 | 44 ·0 | 45 ·0 |
| 1. 21 | 17. 0 | 1. 45 | ·0979 | 1. 29 | ·02675 | 3. 0 | 46 ·8 | 47 ·1 |
| 1. 37 | 18. 10 | 2. 50 | ·0976 | 12. 24 | ·01920 | 9. 0 | 49 ·0 | 49 ·0 |
| 2. 3 | 17. 30 | 3. 15 | ·0981 | 23. 59 | ·02237 | 21. 0 | 44 ·3 | 45 ·1 |
| 2. 12 | 19. 40 | 3. 44 | ·0979 | | | | | |
| 2. 43 | 17. 10 | 4. 0 | ·0987 | | | | | |
| 6. 57 | 16. 15 | | *** | | | | | |
| 10. 48 | 12. 30 | 4. 26 | ·0981 | | | | | |
| 16. 15 | 12. 10 | | *** | | | | | |
| 16. 43 | 11. 10 | 5. 26 | ·0984 | | | | | |
| 17. 21 | 13. 20 | | *** | | | | | |
| 17. 57 | 11. 15 | 10. 0 | ·0979 | | | | | |
| 21. 56 | 10. 20 | | *** | | | | | |
| 23. 59 | 16. 0 | 15. 6 | ·0987 | | | | | |
| | | 15. 38 | ·0990 | | | | | |
| | | 16. 37 | ·0988 | | | | | |
| | | | *** | | | | | |
| | | 18. 6 | ·0994 | | | | | |
| | | 19. 37 | ·0992 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0975 | | | | | |
| Nov.20 | | Nov.20 | | Nov.20 | | Nov.20 | | |
| 0. 0 | 21. 16. 0 | 0. 0 | ·0975 | 0. 0 | ·02237 | 1. 0 | 46 ·8 | 47 ·3 |
| 0. 52 | 17. 40 | 2. 26 | ·0974 | 2. 30 | ·02120 | 3. 0 | 49 ·3 | 50 ·1 |
| 1. 44 | 16. 50 | | *** | 6. 37 | ·01700 | 9. 0 | 51 ·0 | 50 ·5 |
| 1. 54 | 17. 30 | 5. 38 | ·0979 | 7. 56 | ·01629 | 21. 0 | 44 ·3 | 45 ·4 |
| 2. 39 | 17. 15 | 7. 36 | ·0975 | 13. 10 | ·01650 | | | |
| 2. 59 | 16. 10 | 8. 2 | ·0985 | 19. 21 | ·01864 | | | |
| 7. 57 | 13. 50 | 8. 13 | ·0976 | 23. 59 | ·02200 | | | |
| 8. 12 | 12. 30 | 8. 50 | ·0974 | | | | | |
| 9. 58 | 12. 20 | 9. 10 | ·0981 | | | | | |

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.20 | | Nov.20 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 40 | 21. 9. 20 | 9. 18 | ·0975 | | | | | |
| 11. 15 | 11. 10 | 10. 15 | ·0976 | | | | | |
| 18. 49 | 11. 15 | 10. 39 | ·0981 | | | | | |
| 21. 39 | 9. 40 | 10. 50 | ·0979 | | | | | |
| 22. 15 | 11. 50 | 11. 15 | ·0984 | | | | | |
| 22. 40 | 11. 45 | 11. 30 | ·0979 | | | | | |
| 23. 59 | 14. 40 | | *** | | | | | |
| | | 17. 40 | ·0995 | | | | | |
| | | 21. 4 | ·0993 | | | | | |
| | | 22. 32 | ·0983 | | | | | |
| | | 23. 59 | ·0984 | | | | | |
| Nov.21 | | Nov.21 | | Nov.21 | | Nov.21 | | |
| 0. 0 | 21. 14. 40 | 0. 0 | ·0984 | 0. 0 | ·02200 | 0. 0 | 45 ·0 | 45 ·3 |
| 0. 29 | 13. 10 | | *** | 1. 52 | ·02293 | 1. 0 | 45 ·8 | 46 ·3 |
| 0. 54 | 15. 30 | 1. 45 | ·0986 | 9. 19 | ·01969 | 3. 0 | 48 ·2 | 48 ·1 |
| 6. 7 | 12. 30 | 5. 2 | ·0991 | 15. 29 | ·01880 | 6. 0 | 50 ·5 | 50 ·0 |
| 7. 8 | 10. 30 | | *** | 20. 12 | ·01662 | 9. 0 | 52 ·0 | 51 ·5 |
| 12. 7 | 10. 5 | 13. 10 | ·0997 | 23. 59 | ·01732 | 12. 0 | 51 ·6 | 50 ·9 |
| 13. 0 | 11. 30 | 13. 48 | ·0992 | | | 18. 0 | 51 ·2 | 50 ·6 |
| 20. 7 | 10. 30 | 18. 16 | ·0994 | | | 21. 0 | 52 ·3 | 52 ·5 |
| 22. 0 | 12. 20 | 22. 42 | ·0980 | | | | | |
| 22. 55 | 16. 10 | 23. 59 | ·0980 | | | | | |
| 23. 59 | 17. 10 | | | | | | | |
| Nov.22 | | Nov.22 | | Nov.22 | | Nov.22 | | |
| 0. 0 | 21. 17. 10 | 0. 0 | ·0980 | 0. 0 | ·01732 | 0. 0 | 52 ·3 | 52 ·2 |
| 1. 7 | 18. 15 | 1. 36 | ·0983 | 2. 15 | ·01688 | 1. 0 | 52 ·8 | 53 ·0 |
| 2. 9 | 16. 0 | 3. 45 | ·0982 | | ·01742 | 3. 0 | 54 ·7 | 54 ·2 |
| 2. 29 | 16. 30 | 6. 6 | ·0983 | 8. 54 | ·01760 | 9. 0 | 54 ·5 | 55 ·0 |
| 7. 22 | 11. 10 | 7. 58 | ·0991 | 14. 7 | ·02003 | 21. 0 | 44 ·2 | 46 ·3 |
| 15. 58 | 10. 45 | | *** | 23. 59 | ·02825 | | | |
| 18. 40 | 8. 40 | 12. 10 | ·0998 | | | | | |
| 20. 0 | 10. 45 | | *** | | | | | |
| 21. 5 | 9. 30 | 14. 11 | ·0998 | | | | | |
| 22. 11 | 10. 45 | | *** | | | | | |
| 23. 37 | 15. 50 | 17. 58 | ·1012 | | | | | |
| 23. 44 | 18. 0 | | *** | | | | | |
| 23. 51 | 16. 55 | 20. 36 | ·1010 | | | | | |
| 23. 59 | 18. 10 | 21. 20 | ·1004 | | | | | |
| | | 21. 50 | ·1007 | | | | | |
| | | 22. 15 | ·1000 | | | | | |
| | | 22. 36 | ·1011 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0987 | | | | | |
| Nov.23 | | Nov.23 | | Nov.23 | | Nov.23 | | |
| 0. 0 | 21. 18. 5 | 0. 0 | ·0986 | 0. 0 | ·02825 | 1. 0 | 46 ·5 | 47 ·2 |
| 0. 11 | 17. 0 | 1. 48 | ·0975 | 1. 29 | ·02846 | 3. 0 | 49 ·6 | 49 ·7 |
| 0. 13 | 18. 0 | 2. 6 | ·0990 | 5. 21 | ·02486 | 9. 0 | 51 ·0 | 50 ·2 |
| 0. 52 | 17. 30 | 2. 36: | ·0987 | 8. 17 | ·02340 | 21. 0 | 47 ·8 | 48 ·3 |
| 1. 7 | 15. 20 | 3. 10 | ·0991 | 9. 43 | ·02252 | | | |
| 2. 15 | 18. 25 | 4. 6: | ·0973 | 13. 51 | ·02230 | | | |
| 3. 29 | 18. 40 | 5. 5 | ·0991 | 23. 59 | ·02505 | | | |
| 4. 5 | 15. 25 | 5. 36 | ·0974 | | | | | |
| 4. 15 | 16. 30 | | *** | | | | | |
| 4. 52 | 14. 20 | 6. 10 | ·0970 | | | | | |
| 5. 24 | 17. 0 | 6. 30 | ·0979 | | | | | |
| 5. 51 | 12. 0 | 6. 46 | ·0980 | | | | | |
| 5. 55 | 12. 10 | 7. 7 | ·0977 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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.23 | | Nov.23 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 6. 15 | 21. 6. 45 | 7. 18 | ·0967 | | | | | |
| 6. 31 | 9. 20 | 7. 36 | ·0967 | | | | | |
| 6. 42 | 9. 0 | 7. 58 | ·0976 | | | | | |
| 6. 54 | 10. 30 | 8. 11 | ·0977 | | | | | |
| 7. 15 | 8. 20 | | *** | | | | | |
| 7. 42 | 3. 40 | 8. 40 | ·0991 | | | | | |
| 8. 13 | 8. 50 | 8. 56 | ·0988 | | | | | |
| 8. 38 | 3. 20 | 9. 6 | ·0997 | | | | | |
| 8. 47 | 6. 30 | | *** | | | | | |
| 9. 11 | 3. 30 | 9. 35 | ·0981 | | | | | |
| 9. 14 | 4. 20 | 9. 46 | ·0983 | | | | | |
| 9. 28 | 3. 30 | 10. 6 | ·0977 | | | | | |
| 9. 37 | 3. 45 | 11. 30 | ·0988 | | | | | |
| 9. 48 | 1. 20 | 12. 7 | ·0988 | | | | | |
| 10. 10 | 0. 40 | | *** | | | | | |
| 11. 24 | 8. 0 | 13. 18 | ·0998 | | | | | |
| 11. 49 | 4. 45 | 13. 45 | ·0998 | | | | | |
| 12. 4 | 7. 15 | | *** | | | | | |
| 12. 30 | 7. 30 | 15. 4: | ·0990 | | | | | |
| 13. 0 | 9. 30 | 16. 15 | ·1000 | | | | | |
| 13. 51 | 7. 20 | | *** | | | | | |
| 15. 15 | 9. 10 | 19. 52 | ·0997 | | | | | |
| 16. 1 | 12. 40 | | *** | | | | | |
| 16. 12 | 11. 30 | 22. 25 | ·0982 | | | | | |
| 16. 19 | 12. 10 | 23. 40 | ·0979 | | | | | |
| 16. 43 | 9. 0 | 23. 51 | ·0974 | | | | | |
| 16. 49 | 10. 10 | 23. 59 | ·0979 | | | | | |
| 17. 29 | 8. 0 | | | | | | | |
| 17. 37 | 9. 20 | | | | | | | |
| 17. 45 | 7. 50 | | | | | | | |
| 17. 54 | 9. 40 | | | | | | | |
| 17. 58 | 8. 50 | | | | | | | |
| 18. 44 | 8. 10 | | | | | | | |
| 18. 51 | 9. 15 | | | | | | | |
| 18. 57 | 7. 20 | | | | | | | |
| 19. 8 | 9. 0 | | | | | | | |
| 19. 13 | 8. 10 | | | | | | | |
| | *** | | | | | | | |
| 20. 48 | 8. 50 | | | | | | | |
| | *** | | | | | | | |
| 22. 54 | 12. 0 | | | | | | | |
| 23. 21 | 15. 30 | | | | | | | |
| 23. 43 | 14. 0 | | | | | | | |
| 23. 46 | 15. 10 | | | | | | | |
| 23. 56 | 13. 40 | | | | | | | |
| 23. 59 | 14. 0 | | | | | | | |
| Nov.24 | | Nov.24 | | Nov.24 | | Nov.24 | | |
| 0. 0 | 21. 14. 0 | 0. 0 | ·0980 | 0. 0 | ·02505 | 1. 0 | 49 ·6 | 49 ·8 |
| 0. 29 | 15. 10 | 3. 52 | ·0980 | 1. 39 | ·02486 | 3. 0 | 51 ·0 | 51 ·2 |
| 0. 50 | 18. 30 | 4. 14 | ·0976 | 3. 12 | ·02420 | 9. 0 | 51 ·4 | 50 ·5 |
| 1. 13 | 16. 45 | 6. 5 | ·0988 | 3. 27 | ·02428 | 22. 26 | 45 ·0 | 45 ·4 |
| 3. 20 | 15. 55 | | *** | 9. 52: | ·02110 | | | |
| 3. 30 | 16. 50 | 10. 25 | ·0997 | 20. 1 | ·02372 | | | |
| 3. 51 | 16. 20 | 11. 0 | ·0996 | 23. 59 | ·02580 | | | |
| 4. 13 | 17. 10 | 13. 0 | ·1000 | | | | | |
| 6. 11 | 11. 40 | 13. 51 | ·0996 | | | | | |
| 7. 28 | 12. 0 | 14. 30 | ·1003 | | | | | |
| 8. 37 | 8. 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. |
|---|---|---|---|---|---|---|---|---|
| Nov.24 | | Nov.24 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 0 | 21. 10. 20 | 15. 30 | ·1002 | | | | | |
| 9. 21 | 10. 30 | 16. 15 | ·1007 | | | | | |
| 9. 35 | 9. 50 | 20. 30 | ·1010 | | | | | |
| | | | *** | | | | | |
| 12. 28 | 10. 40 | | | | | | | |
| 12. 47 | 9. 55 | 23. 59 | ·0997 | | | | | |
| 13. 44 | 12. 10 | | | | | | | |
| 14. 12 | 15. 20 | | | | | | | |
| 14. 52 | 11. 50 | | | | | | | |
| 15. 25 | 12. 10 | | | | | | | |
| 16. 58 | 10. 10 | | | | | | | |
| 19. 12 | 10. 20 | | | | | | | |
| 19. 45 | 11. 40 | | | | | | | |
| 21. 2 | 8. 50 | | | | | | | |
| 21. 12 | 9. 10 | | | | | | | |
| 21. 26 | 8. 40 | | | | | | | |
| 23. 43 | 12. 40 | | | | | | | |
| 23. 54 | 12. 20 | | | | | | | |
| 23. 59 | 13. 0 | | | | | | | |
| Nov.25 | | Nov.25 | | Nov.25 | | Nov.25 | | |
| 0. 0 | 21. 13. 5 | 0. 0 | ·0997 | 0. 0 | ·02580 | 10. 9 | 47 ·0 | 48 ·0 |
| 1. 6 | 16. 50 | 1. 5: | ·0992 | 2. 40 | ·02631 | 21. 0 | 44 ·0 | 45 ·0 |
| 1. 29 | 17. 20 | 2. 18 | ·0984 | 6. 0 | ·02584 | | | |
| 2. 22 | 15. 30 | 3. 9 | ·0988 | 13. 58 | ·02671 | | | |
| 2. 59 | 16. 40 | 3. 25 | ·0982 | 23. 59 | ·02829 | | | |
| 3. 50 | 14. 15 | 3. 40 | ·0989 | | | | | |
| | | | *** | | | | | |
| 5. 26 | 13. 20 | | | | | | | |
| 5. 54 | 8. 25 | 5. 30 | ·0998 | | | | | |
| 6. 21 | 7. 0 | 5. 45 | ·0990 | | | | | |
| 6. 45 | 11. 0 | 5. 56 | ·0998 | | | | | |
| 6. 57 | 10. 30 | 6. 6 | ·0994 | | | | | |
| 7. 30: | 11. 45 | 6. 23 | ·0999 | | | | | |
| 8. 18 | 7. 40 | 6. 46 | ·0990 | | | | | |
| 8. 42 | 9. 50 | 7. 36 | ·0998 | | | | | |
| | | | *** | | | | | |
| 9. 15 | 8. 45 | | | | | | | |
| 10. 52 | 8. 50 | 17. 10 | ·1010 | | | | | |
| 11. 15 | 8. 0 | 17. 57: | ·1013 | | | | | |
| 11. 42 | 8. 50 | 20. 0 | ·1007 | | | | | |
| 12. 14 | 8. 30 | 21. 30 | ·1009 | | | | | |
| 15. 43 | 11. 40 | 22. 40 | ·0995 | | | | | |
| | | | *** | | | | | |
| 16. 45 | 9. 45 | | | | | | | |
| 19. 16 | 9. 30 | 23. 59 | ·0990 | | | | | |
| 21. 37 | 13. 40 | | | | | | | |
| 21. 46 | 15. 30 | | | | | | | |
| 22. 45 | 17. 20 | | | | | | | |
| 23. 35 | 20. 40 | | | | | | | |
| | (†) | | | | | | | |
| Nov.26 | | Nov.26 | | Nov.26 | | Nov.26 | | |
| | (†) | 0. 0 | ·0990 | 0. 0 | ·02829 | 1. 0 | 46 ·3 | 46 ·8 |
| | | | *** | 2. 21 | ·02810 | 3. 0 | 48 ·3 | 48 ·6 |
| 0. 52 | 21. 17. 40 | | | | | | | |
| 1. 45 | 19. 0 | 0. 26 | ·0989 | 9. 22: | ·02408 | 9. 0 | 48 ·5 | 48 ·5 |
| | | | *** | | | | | |
| 2. 23 | 11. 40 | | | 17. 51 | ·02300 | 21. 0 | 47 ·3 | 47 ·7 |
| 2. 45 | 17. 20 | 1. 0 | ·0980 | 23. 59 | ·02471 | | | |
| 3. 10 | 17. 45 | 1. 18 | ·0988 | | | | | |
| 4. 0 | 14. 30 | 1. 40 | ·0978 | | | | | |
| 7. 14 | 11. 40 | 1. 46 | ·0973 | | | | | |
| | | | *** | | | | | |
| 7. 30 | 12. 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. |
|---|---|---|---|---|---|---|---|---|
| Nov.26 | | Nov.26 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 8. 37 | 21. 11. 20 | 2. 20 | ·0986 | | | | | |
| 11. 15 | 10. 45 | 2. 37 | ·0978 | | | | | |
| 13. 12 | 12. 30 | 3. 0 | ·0979 | | | | | |
| 14. 9 | 11. 0 | 4. 7 | ·0989 | | | | | |
| 14. 51 | 12. 40 | 7. 11 | ·0993 | | | | | |
| 15. 40 | 11. 20 | 7. 34 | ·0989 | | | | | |
| | | | *** | | | | | |
| 15. 55 | 12. 10 | | | | | | | |
| 16. 11 | 11. 50 | 16. 10 | ·1007 | | | | | |
| 16. 21 | 12. 50 | 16. 30 | ·1013 | | | | | |
| 16. 54 | 12. 10 | 16. 46 | ·1010 | | | | | |
| | | | *** | | | | | |
| 17. 11 | 13. 20 | | | | | | | |
| 17. 43 | 13. 0 | 17. 40 | ·1014 | | | | | |
| | | | *** | | | | | |
| 18. 0 | 11. 20 | | | | | | | |
| 18. 42 | 11. 40 | 19. 56 | ·0998 | | | | | |
| 19. 13 | 10. 50 | 20. 20 | ·1002 | | | | | |
| | *** | | *** | | | | | |
| 21. 6 | 10. 0 | 22. 20 | ·0990 | | | | | |
| | *** | 22. 46 | ·0979 | | | | | |
| 22. 15 | 12. 0 | 23. 17 | ·0986 | | | | | |
| 22. 30 | 11. 30 | 23. 35 | ·0977 | | | | | |
| 23. 16 | 16. 50 | 23. 47 | ·0981 | | | | | |
| 23. 37 | 15. 30 | 23. 59 | ·0979 | | | | | |
| 23. 50 | 16. 20 | | | | | | | |
| 23. 59 | 16. 15 | | | | | | | |
| Nov.27 | | Nov.27 | | Nov.27 | | Nov.27 | | |
| 0. 0 | 21. 16. 15 | 0. 0 | ·0979 | 0. 0 | ·02471 | 1. 0 | 50 ·3 | 50 ·8 |
| | | | *** | | | | | |
| 0. 51 | 16. 0 | | | 1. 59 | ·02350 | 3. 0 | 52 ·6 | 52 ·2 |
| 1. 12 | 17. 40 | 0. 30 | ·0975 | 5. 12 | ·02002 | 9. 0 | 52 ·7 | 52 ·5 |
| 1. 30 | 17. 10 | 0. 47 | ·0979 | 7. 30 | ·01825 | 21. 0 | 47 ·8 | 48 ·7 |
| 2. 37 | 18. 5 | 1. 3 | ·0978 | 11. 37 | ·01770 | | | |
| 2. 50 | 19. 0 | 1. 40 | ·0982 | 22. 13 | ·02080 | | | |
| 3. 15 | 17. 0 | 2. 17 | ·0983 | 23. 59 | ·02147 | | | |
| | | | *** | | | | | |
| 4. 21 | 14. 50 | | | | | | | |
| 4. 51 | 15. 0 | 2. 48 | ·0975 | | | | | |
| | | | *** | | | | | |
| 5. 1 | 13. 40 | | | | | | | |
| 5. 15 | 14. 0 | 3. 45 | ·0974 | | | | | |
| 5. 44 | 7. 20 | 4. 20 | ·0981 | | | | | |
| | | | *** | | | | | |
| 6. 40 | 9. 50 | | | | | | | |
| 6. 57 | 6. 30 | 4. 47 | ·0979 | | | | | |
| 7. 22 | 13. 40 | 5. 13 | ·0987 | | | | | |
| 7. 37 | 10. 0 | 5. 23 | ·0981 | | | | | |
| 7. 42 | 10. 50 | 5. 46 | ·0989 | | | | | |
| 7. 55 | 8. 30 | 6. 0 | ·0986 | | | | | |
| 8. 33 | 10. 5 | 6. 18 | ·0994 | | | | | |
| 8. 51 | 9. 40 | 6. 46 | ·0981 | | | | | |
| 9. 12 | 10. 50 | 6. 52 | ·0981 | | | | | |
| 9. 27 | 9. 35 | 7. 7 | ·0989 | | | | | |
| 12. 0 | 11. 40 | 7. 26 | ·0976 | | | | | |
| 12. 30 | 10. 50 | 7. 33 | ·0978 | | | | | |
| 13. 28 | 12. 10 | 7. 45 | ·0973 | | | | | |
| 20. 26 | 10. 20 | 7. 52 | ·0979 | | | | | |
| 21. 15 | 13. 0 | 8. 3 | ·0974 | | | | | |
| | | | *** | | | | | |
| 21. 36 | 11. 45 | | | | | | | |
| 23. 6 | 14. 50 | 9. 0 | ·0988 | | | | | |
| 23. 21 | 17. 10 | 18. 30 | ·1001 | | | | | |
| | | | *** | | | | | |
| 23. 37 | 16. 55 | | | | | | | |
| | (†) | 19. 47 | ·0998 | | | | | |
| | | | *** | | | | | |

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 | ° ′ ″ | Nov.27 h m | | h m | | h m | ° | ° |
| | | 21. 20 | ·0984 | | | | | |
| | | 21. 52 | ·0988 *** | | | | | |
| | | 23. 2 | ·0976 *** | | | | | |
| | | 23. 59 | ·0973 | | | | | |
| Nov.28 | | Nov.28 | | Nov.28 | | Nov.28 | | |
| | (†) | 0. 0 | ·0973 | 0. 0 | ·02147 | 0. 0 | 49 ·0 | 49 ·1 |
| 0. 10 | 21. 17. 30 | 1. 5 | ·0977 *** | 1. 30 | ·02140 | 1. 0 | 50 ·0 | 50 ·0 |
| 0. 18 | 18. 10 | | | 6. 0 | ·01857 | 3. 0 | 51 ·7 | 51 ·5 |
| 0. 37 | 17. 10 | 4. 45 | ·0971 | 9. 42 | ·01750 | 6. 0 | 52 ·0 | 51 ·0 |
| 1. 26 | 16. 30 | 5. 32 | ·0976 | 13. 51 | ·01767 | 9. 0 | 52 ·0 | 51 ·0 |
| 1. 49 | 18. 0 | 5. 47: | ·0973 | 22. 41 | ·02091 | 12. 0 | 51 ·5 | 51 ·0 |
| 2. 25 | 16. 40 | 6. 18 | ·0980 | 23. 59 | ·02057 | 18. 0 | 48 ·0 | 48 ·0 |
| 2. 59 | 17. 15 | 7. 2 | ·0975 | | | 21. 10 | 48 ·0 | 48 ·0 |
| 3. 20 | 16. 0 | 8. 15 | ·0982 *** | | | | | |
| 3. 35 | 16. 10 | | | | | | | |
| 4. 28 | 12. 40 | 13. 16 | ·0993 | | | | | |
| 5. 30 | 14. 10 | 13. 38 | ·0999 | | | | | |
| 5. 57 | 12. 20 | 14. 5 | ·0991 *** | | | | | |
| 6. 58 | 14. 0 | | | | | | | |
| 9. 21 | 11. 15 | 18. 47 | ·1005 | | | | | |
| 11. 11 | 11. 30 | 21. 13 | ·0991 *** | | | | | |
| 13. 21 | 10. 20 | | | | | | | |
| 13. 40 | 11. 50 | 23. 7 | ·0984 | | | | | |
| 14. 0 | 8. 0 | 23. 59 | ·0986 | | | | | |
| 14. 31 | 10. 0 | | | | | | | |
| 14. 56 | 8. 20 | | | | | | | |
| 15. 17 | 9. 40 | | | | | | | |
| 15. 35 | 8. 30 | | | | | | | |
| 15. 48 | 9. 45 | | | | | | | |
| 16. 9 | 8. 45 | | | | | | | |
| 17. 13 | 9. 20 | | | | | | | |
| 17. 50 | 11. 50 | | | | | | | |
| 18. 51 | 9. 30 | | | | | | | |
| 21. 40 | 9. 0 | | | | | | | |
| 22. 12 | 10. 30 | | | | | | | |
| 22. 30 | 12. 30 | | | | | | | |
| 22. 53 | 11. 20 | | | | | | | |
| 23. 51 | 14. 30 | | | | | | | |
| 23. 59 | 14. 20 | | | | | | | |
| Nov.29 | | Nov.29 | | Nov.29 | | Nov.29 | | |
| 0. 0 | 21. 14. 20 | 0. 0 | ·0986 *** | 0. 0 | ·02057 | 0. 0 | 49 ·2 | 49 ·1 |
| 0. 13 | 15. 30 | | | 6. 17 | ·01906 | 1. 0 | 50 ·0 | 49 ·8 |
| 1. 10 | 14. 50 | 1. 47 | ·0974 | 9. 42 | ·01710 | 3. 0 | 51 ·2 | 50 ·4 |
| 1. 22 | 17. 10 | 2. 4 | ·0982 | 13. 49 | ·01704 | 9. 0 | 52 ·5 | 53 ·0 |
| 1. 36 | 15. 20 | 3. 43 | ·0977 | 18. 22 | ·01820 | 21. 0 | 48 ·8 | 49 ·0 |
| 2. 52 | 15. 20 | 4. 15 | ·0984 | 23. 59 | ·01991 | | | |
| 3. 27 | 12. 45 | 4. 18 | ·0982 | | | | | |
| 4. 40 | 13. 30 | 4. 40 | ·0983 | | | | | |
| 4. 50 | 12. 45 | 5. 0 | ·0978 *** | | | | | |
| 5. 7 | 12. 50 | | | | | | | |
| 5. 22 | 10. 45 | 5. 50 | ·0978 | | | | | |
| 5. 30 | 10. 50 | 6. 16 | ·0990 | | | | | |
| 5. 51 | 8. 20 | 6. 30 | ·0979 *** | | | | | |
| 6. 7 | 12. 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.29 h m | ° ′ ″ | Nov.29 h m | | h m | | h m | ° | ° |
| 6. 43 | 21. 8. 45 | 7. 7 | ·0986 | | | | | |
| 6. 48 | 10. 0 | 7. 20 | ·0979 | | | | | |
| 6. 57 | 9. 0 | 8. 15 | ·0982 | | | | | |
| 7. 0 | 9. 30 | 8. 43 | ·0985 *** | | | | | |
| 7. 25 | 7. 20 | | | | | | | |
| 7. 31 | 7. 40 | 11. 22 | ·0995 | | | | | |
| 7. 53 | 3. 20 | 11. 45 | ·0991 *** | | | | | |
| 8. 16 | 6. 0 | | | | | | | |
| 8. 30 | 4. 30 | 12. 40 | ·0995 | | | | | |
| 9. 21 | 7. 20 | 13. 15 | ·1005 *** | | | | | |
| 10. 0 | 6. 45 | | | | | | | |
| 10. 12 | 7. 50 | 15. 7 | ·0998 *** | | | | | |
| 10. 40 | 8. 20 | | | | | | | |
| 10. 56 | 6. 40 | 16. 35 | ·1006 | | | | | |
| 11. 54 | 9. 20 | 17. 6 | ·1001 | | | | | |
| 12. 27 | 8. 0 | 17. 42 | ·1006 *** | | | | | |
| 12. 57 | 9. 30 | | | | | | | |
| 13. 10 | 8. 10 | 20. 37 | ·0993 *** | | | | | |
| 13. 28 | 8. 0 | | | | | | | |
| 13. 40 | 8. 50 | 22. 13 | ·0996 *** | | | | | |
| 13. 55 | 7. 40 | | | | | | | |
| 14. 28 | 9. 20 | 23. 59 | ·0981 | | | | | |
| 16. 5 | 7. 50 | | | | | | | |
| 16. 44: | 11. 45 | | | | | | | |
| 17. 35 | 9. 30 | | | | | | | |
| 18. 0 | 9. 10 | | | | | | | |
| 18. 7 | 10. 20 | | | | | | | |
| 18. 14 | 8. 30 | | | | | | | |
| 19. 25 | 7. 40 | | | | | | | |
| 19. 50 | 8. 40 | | | | | | | |
| 20. 40 | 8. 10 | | | | | | | |
| 20. 49 | 9. 30 | | | | | | | |
| 21. 13 | 9. 20 | | | | | | | |
| 21. 36 | 10. 45 | | | | | | | |
| 21. 55 | 14. 0 | | | | | | | |
| 23. 37 | 15. 0 | | | | | | | |
| 23. 59 | 18. 15 | | | | | | | |
| Nov.30 | | Nov.30 | | Nov.30 | | Nov.30 | | |
| 0. 0 | 21. 18. 20 | 0. 0 | ·0981 | 0. 0 | ·01991 | 1. 0 | 50 ·6 | 51 ·0 |
| 0. 15 | 15. 30 | 0. 20 | ·0972 | 1. 19 | ·02003 | 3. 0 | 53 ·0 | 52 ·7 |
| 0. 39 | 15. 45 | 0. 47 | ·0982 *** | 4. 36 | ·01781 | 9. 0 | 54 ·0 | 53 ·5 |
| 0. 58 | 18. 45 | | | 5. 5 | ·01810 | 21. 0 | 50 ·0 | 50 ·7 |
| 1. 45 | 16. 0 | 2. 33 | ·0980 | | ·02038 | | | |
| 2. 23 | 15. 30 | 3. 6 | ·0973 | 6. 20 | ·01970 | | | |
| 2. 44 | 16. 30 | 3. 16 | ·0974 | 11. 12 | ·01961 | | | |
| 3. 33 | 14. 40 | 3. 45 | ·0969 *** | 13. 7 | ·02032 | | | |
| 4. 26 | 15. 0 | | | 18. 24 | ·02382 | | | |
| 5. 29 | 10. 45 | 6. 16 | ·0986 | 23. 0 | ·02590 | | | |
| 6. 0 | 10. 0 | 6. 40 | ·0985 *** | 23. 59 | ·02574 | | | |
| 6. 26 | 5. 30 | | | | | | | |
| 6. 42 | 6. 30 | 8. 30 | ·0989 *** | | | | | |
| 6. 49 | 6. 0 | | | | | | | |
| 7. 19 | 10. 45 | 11. 46 | ·0992 *** | | | | | |
| 7. 39 | 11. 0 | | | | | | | |
| 7. 51 | 12. 0 | 14. 40 | ·0996 *** | | | | | |
| 9. 49 | 11. 15 | | | | | | | |
| 10. 0 | 10. 0 | 16. 26 | ·0998 | | | | | |

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 | | Nov. 30 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 43 | 21. 10. 45 | 17. 16 | ·1005 | | | | | |
| 11. 10 | 10. 5 | 20. 3 | ·1001 | | | | | |
| 11. 42 | 12. 40 | | *** | | | | | |
| 12. 13 | 11. 0 | 23. 59 | ·0977 | | | | | |
| 12. 45 | 10. 40 | | | | | | | |
| 13. 8 | 11. 40 | | | | | | | |
| 13. 51 | 10. 40 | | | | | | | |
| 14. 29 | 11. 30 | | | | | | | |
| 15. 24 | 10. 0 | | | | | | | |
| 16. 7 | 10. 30 | | | | | | | |
| 16. 29 | 12. 0 | | | | | | | |
| 17. 30 | 9. 10 | | | | | | | |
| 20. 44 | 8. 30 | | | | | | | |
| 21. 36 | 10. 0 | | | | | | | |
| | *** | | | | | | | |
| 23. 37 | 16. 0 | | | | | | | |
| 23. 59 | 15. 30 | | | | | | | |
| Dec. 1 | | Dec. 1 | | Dec. 1 | | Dec. 1 | | |
| 0. 0 | 21. 15. 30 | 0. 0 | ·0977 | 0. 0 | ·02574 | 1. 0 | 53 ·0 | 52 ·2 |
| 0. 20 | 17. 40 | 0. 47 | ·0985 | 6. 51 | ·02171 | 3. 0 | 54 ·0 | 53 ·2 |
| 0. 37 | 17. 0 | 1. 15 | ·0986 | 15. 55 | ·02300 | 9. 0 | 52 ·7 | 52 ·4 |
| 1. 5 | 18. 40 | 2. 0 | ·0989 | 23. 59 | ·02536 | 22. 30 | 49 ·4 | 51 ·0 |
| 2. 21 | 17. 40 | | *** | | | | | |
| 2. 28 | 18. 30 | 8. 18 | ·1006 | | | | | |
| 3. 40 | 15. 5 | | *** | | | | | |
| 4. 44 | 13. 20 | 18. 26 | ·1013 | | | | | |
| 10. 8 | 9. 40 | 18. 56 | ·1015 | | | | | |
| 10. 26 | 11. 30 | 21. 13 | ·1009 | | | | | |
| 10. 57 | 9. 20 | 23. 59 | ·0999 | | | | | |
| 11. 13 | 11. 0 | | | | | | | |
| 12. 30 | 10. 0 | | | | | | | |
| 12. 42 | 10. 50 | | | | | | | |
| 13. 29 | 9. 15 | | | | | | | |
| 13. 43 | 10. 5 | | | | | | | |
| 17. 21 | 10. 20 | | | | | | | |
| 18. 40 | 11. 20 | | | | | | | |
| 20. 39 | 9. 20 | | | | | | | |
| 22. 34 | 10. 50 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 2 | | Dec. 2 | | Dec. 2 | | Dec. 2 | | |
| 10. 13 | 21. 5. 45* | 0. 0 | ·0999 | 0. 0 | ·02536 | 10. 13 | 49 ·0 | 50 ·0 |
| 21. 8 | 8. 31* | 0. 18 | ·0999 | 6. 10 | ·02571 | 21. 8 | 49 ·0 | 49 ·7 |
| | | 0. 56 | ·0991 | 10. 44 | ·02653 | | | |
| | | 1. 40 | ·0974 | 19. 37 | ·02688 | | | |
| | | | *** | 23. 59 | ·02771 | | | |
| | | 2. 17 | ·0982 | | | | | |
| | | 2. 30 | ·0977 | | | | | |
| | | 2. 45 | ·0982 | | | | | |
| | | 2. 56 | ·0981 | | | | | |
| | | 3. 45 | ·0994 | | | | | |
| | | | *** | | | | | |
| | | 6. 43 | ·1006 | | | | | |
| | | | *** | | | | | |
| | | 9. 42 | ·0999 | | | | | |
| | | | *** | | | | | |
| | | 11. 50 | ·1010 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | ° ′ ″ | Dec. 2 h m | | h m | | h m | ° | ° |
| | | 12. 46 | ·1007 | | | | | |
| | | 13. 32 | ·1010 | | | | | |
| | | 13. 45 | ·1006 | | | | | |
| | | 14. 8 | ·1013 | | | | | |
| | | 14. 40 | ·1011 | | | | | |
| | | 15. 13 | ·1004 | | | | | |
| | | | *** | | | | | |
| | | 19. 30 | ·1001 | | | | | |
| | | 20. 15 | ·1009 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0995 | | | | | |
| Dec. 3 | | Dec. 3 | | Dec. 3 | | Dec. 3 | | |
| | (†) | 0. 0 | ·0995 | 0. 0 | ·02771 | 1. 0 | 50 ·0 | 50 ·0 |
| 0. 8 | 21. 12. 30 | 0. 48 | ·0989 | 3. 42 | ·02670 | 3. 0 | 51 ·4 | 51 ·0 |
| 0. 29 | 12. 0 | 2. 6 | ·1001 | 13. 46 | ·02210 | 9. 0 | 53 ·3 | 52 ·6 |
| 0. 41 | 15. 0 | | *** | 22. 13 | ·02433 | 21. 0 | 50 ·7 | 51 ·3 |
| 1. 42 | 16. 5 | 4. 36 | ·0998 | 23. 59 | ·02430 | | | |
| 1. 51 | 14. 40 | 4. 43 | ·1005 | | | | | |
| 3. 45 | 14. 30 | 5. 46 | ·0991 | | | | | |
| 4. 22 | 15. 50 | 6. 33 | ·0997 | | | | | |
| 4. 59 | 13. 50 | 10. 13 | ·1003 | | | | | |
| 5. 30 | 15. 0 | 10. 30 | ·0999 | | | | | |
| 6. 37 | 13. 0 | 10. 46 | ·1008 | | | | | |
| 9. 11 | 11. 40 | 11. 13 | ·1003 | | | | | |
| 9. 39 | 8. 0 | | *** | | | | | |
| 9. 54 | 11. 20 | 14. 40 | ·1001 | | | | | |
| 10. 13 | 10. 0 | | *** | | | | | |
| 10. 40 | 11. 20 | 17. 53 | ·1010 | | | | | |
| 12. 12 | 10. 25 | 20. 46 | ·1005 | | | | | |
| 14. 53 | 11. 20 | 23. 59 | ·0992 | | | | | |
| 20. 10 | 10. 30 | | | | | | | |
| 22. 42 | 14. 50 | | | | | | | |
| 23. 28 | 14. 10 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 4 | | Dec. 4 | | Dec. 4 | | Dec. 4 | | |
| | (†) | 0. 0 | ·0992 | 0. 0 | ·02430 | 1. 0 | 52 ·2 | 52 ·1 |
| 0. 43 | 21. 13. 0 | 1. 15 | ·1000 | 12. 4 | ·02051 | 3. 0 | 53 ·4 | 53 ·2 |
| 0. 59 | 13. 20 | 3. 0 | ·0997 | 23. 11 | ·02304 | 9. 10 | 53 ·4 | 53 ·7 |
| 1. 26 | 14. 30 | 5. 36 | ·1004 | 23. 59 | ·02312 | 21. 0 | 51 ·0 | 51 ·4 |
| 3. 53 | 14. 15 | | *** | | | | | |
| 10. 47 | 10. 20 | 10. 58 | ·1008 | | | | | |
| 10. 54 | 11. 40 | 11. 17 | ·1002 | | | | | |
| 11. 12 | 9. 30 | 11. 46 | ·1007 | | | | | |
| 20. 26 | 9. 40 | | *** | | | | | |
| 23. 50 | 15. 40 | 19. 58 | ·1010 | | | | | |
| 23. 59 | 14. 40 | | *** | | | | | |
| | | 22. 40 | ·0990 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0989 | | | | | |
| Dec. 5 | | Dec. 5 | | Dec. 5 | | Dec. 5 | | |
| 0. 0 | 21. 14. 40 | 0. 0 | ·0989 | 0. 0 | ·02312 | 0. 0 | 51 ·9 | 52 ·0 |
| 0. 52 | 14. 0 | 1. 10 | ·1000 | 2. 6 | ·02270 | 1. 0 | 52 ·3 | 52 ·6 |
| 2. 12 | 17. 20 | 2. 50 | ·0995 | 8. 27 | ·01932 | 3. 0 | 53 ·8 | 53 ·7 |
| 4. 42 | 13. 50 | 4. 23 | ·1002 | 14. 45 | ·01973 | 6. 0 | 55 ·5 | 54 ·5 |
| 7. 39 | 14. 30 | | *** | 22. 11 | ·02212 | 9. 0 | 55 ·0 | 53 ·9 |

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. 5 | | Dec. 5 | | Dec. 5 | | Dec. 5 | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 10. 51 | 21. 13. 15 | 8. 43 | ·0998 | 23. 59 | ·02242 | 12. 0 | 54 ·5 | 53 ·5 |
| 12. 43 | 10. 45 | | *** | | | 18. 0 | 52 ·6 | 52 ·0 |
| 13. 30 | 12. 0 | 12. 38 | ·0996 | | | 21. 0 | 52 ·7 | 52 ·5 |
| 20. 55 | 9. 50 | | *** | | | | | |
| 23. 59 | 15. 30 | 17. 10 | ·1007 | | | | | |
| | | 21. 20 | ·1003 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0990 | | | | | |
| Dec. 6 | | Dec. 6 | | Dec. 6 | | Dec. 6 | | |
| 0 0 | 21. 15. 30 | 0. 0 | ·0990 | 0. 0 | ·02242 | 0. 0 | 53 ·7 | 53 ·1 |
| 0. 14 | 13. 30 | 1. 0 | ·0999 | 9. 10 | ·01940 | 1. 0 | 54 ·3 | 53 ·7 |
| 0. 49 | 13. 45 | 1. 42 | ·0995 | 22. 29 | ·02210 | 3. 0 | 55 ·8 | 54 ·5 |
| 1. 12 | 16. 20 | 2. 16 | ·0998 | 23. 59 | ·02224 | 9. 0 | 56 ·2 | 54 ·5 |
| 2. 13 | 14. 20 | 2. 36 | ·0994 | | | 21. 0 | 52 .8 | 52 ·7 |
| 3. 53 | 13. 40 | 7. 15 | ·1006 | | | | | |
| 6. 11 | 10. 20 | 12. 15 | ·1008 | | | | | |
| 20. 52 | 9. 50 | 17. 17 | ·1013 | | | | | |
| 23. 59 | 15. 30 | 19. 52 | ·1011 | | | | | |
| | | 22. 3 | ·1000 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0998 | | | | | |
| Dec. 7 | | Dec. 7 | | Dec. 7 | | Dec. 7 | | |
| 0. 0 | 21. 15. 30 | 0. 0 | ·0998 | 0. 0 | ·02224 | 1. 0 | 54 ·7 | 53 ·9 |
| 0. 37 | 14. 0 | 0. 26 | ·0995 | 3. 12 | ·02140 | 3. 0 | 56 ·1 | 55 ·0 |
| 1. 12 | 15. 55 | 0. 50 | ·0999 | 7. 29 | ·01827 | 9. 0 | 56 ·9 | 55 ·7 |
| 2. 30 | 17. 0 | 2. 32 | ·0991 | 12. 0 | {·01744 | 21. 8 | 52 ·0 | 52 ·2 |
| 3. 10 | 15. 30 | 3. 15 | ·0997 | | {·01925 | | | |
| 10. 11 | 12. 10 | 3. 56 | ·0994 | 14. 40 | ·01922 | | | |
| 21. 12 | 10. 45 | 18. 6 | ·1011 | 23. 59 | ·02210 | | | |
| 23. 21 | 15. 45 | 19. 50 | ·1010 | | | | | |
| 23. 52 | 16. 0 | 23. 59 | ·0994 | | | | | |
| 23. 59 | 15. 15 | | | | | | | |
| Dec. 8 | | Dec. 8 | | Dec.8 | | Dec. 8 | | |
| 0. 0 | 21. 15. 15 | 0. 0 | ·0994 | 0. 0 | ·02210 | 1. 0 | 54 ·0 | 54 ·0 |
| 0. 10 | 14. 30 | 1. 47 | ·0993 | 0. 41 | ·02200 | 3. 0 | 54 ·7 | 55 ·0 |
| 0. 24 | 14. 50 | 4. 13 | ·0993 | 3. 17 | ·02117 | 9. 0 | 55 ·3 | 54 ·6 |
| 0. 37 | 16. 30 | 7. 50 | ·1011 | 5. 11 | ·01946 | 21. 12 | 51 ·0 | 51 ·0 |
| 1. 27 | 17. 0 | 9. 20 | ·1001 | 6. 52 | ·01867 | | | |
| 7. 0 | 12. 10 | | *** | 8. 0 | ·01861 | | | |
| 9. 26 | 13. 30 | 18. 46 | ·1017 | 8. 22 | ·01900 | | | |
| 15. 31 | 8. 40 | | *** | 13. 41 | ·01911 | | | |
| 15. 57 | 10. 20 | 20. 17 | ·1014 | 23. 59 | ·02273 | | | |
| 16. 15 | 9. 50 | 20. 45 | ·1011 | | | | | |
| 16. 45 | 11. 0 | 22. 15 | ·1013 | | | | | |
| 20. 49 | 9. 50 | 22. 47 | ·0994 | | | | | |
| 21. 45 | 11. 5 | 23. 18: | ·1003 | | | | | |
| 23. 59 | 16. 0 | 23. 59 | ·0997 | | | | | |
| Dec. 9 | | Dec. 9 | | Dec. 9 | | Dec. 9 | | |
| 0. 0 | 21. 16. 0 | 0. 0 | ·0997 | 0. 0 | ·02273 | 6. 41 | 51 ·4 | 51 ·2 |
| 0. 40 | 18. 0 | | *** | 1. 29 | ·02306 | 21. 0 | 58 ·0 | 58 ·3 |
| 1. 45 | 15. 30 | 0. 47 | ·0993 | 4. 41 | ·02240 | | | |
| 2. 9 | 18. 20 | | *** | 11. 45 | ·02279 | | | |
| 2. 45 | 17. 25 | 1. 46 | ·0997 | 23. 59 | ·02612 | | | |
| 3. 10 | 15. 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. |
|---|---|---|---|---|---|---|---|---|
| Dec. 9 | | Dec. 9 | | h m | | Dec. 10 | | |
| h m | ° ′ ″ | h m | | | | | ° | ° |
| 3. 23 | 21. 17. 30 | 2 .45 | ·0997 | | | | | |
| 3. 33 | 15. 30 | 3 .17 | ·1003 | | | | | |
| 3. 45 | 22. 30 | 4. 0 | ·1001 | | | | | |
| 4. 34 | 14. 0 | 4. 7 | ·1012 | | | | | |
| 5. 15 | 14. 20 | 4. 26 | ·1003 | | | | | |
| 5. 43 | 17. 30 | 5. 0 | ·1013 | | | | | |
| 5. 55 | 15. 5 | | *** | | | | | |
| 6. 27 | 15. 10 | 5. 25 | ·1012 | | | | | |
| 7. 51 | 11. 0 | 5. 44 | ·1005 | | | | | |
| 9. 14 | 10. 10 | 7. 20 | ·1016 | | | | | |
| 11. 23 | 11. 0 | 8. 18 | ·1018 | | | | | |
| 13. 45 | 7. 0 | | *** | | | | | |
| 15. 42 | 8. 10 | 10. 5 | ·1014 | | | | | |
| 16. 10 | 9. 40 | 10. 42 | ·1023 | | | | | |
| 16. 54 | 9. 20 | | *** | | | | | |
| 17. 0 | 12. 0 | 11. 46 | ·1018 | | | | | |
| 17. 30 | 7. 20 | 12. 30 | ·1005 | | | | | |
| 20. 22 | 9. 0 | 13. 21 | ·1010 | | | | | |
| 20. 55 | 12. 20 | | *** | | | | | |
| 21. 1 | 10. 50 | 16. 37 | ·1011 | | | | | |
| 21. 11 | 12. 0 | 17. 45 | ·1024 | | | | | |
| 21. 15 | 10. 40 | | *** | | | | | |
| 22. 18 | 16. 20 | 19. 27 | ·1025 | | | | | |
| 23. 19 | 18. 40 | 21. 7 | ·1013 | | | | | |
| 23. 48 | 17. 10 | 22. 5 | ·0995 | | | | | |
| 23. 59 | 18. 15 | 22. 33 | ·0994 | | | | | |
| | | | (†) | | | | | |
| Dec. 10 | | Dec. 10 | | Dec. 10 | | Dec. 10 | | |
| 0. 0 | 21. 18. 15 | | (†) | 0. 0 | ·02612 | 1. 0 | 49 ·0 | 50 ·0 |
| 0. 24 | 18. 0 | 0. 47 | ·1025 | 1. 47 | ·02591 | 3. 0 | 52 ·0 | 52 ·0 |
| 0. 39 | 24. 0 | | *** | 4. 57 | ·02330 | 9. 0 | 52 ·3 | 52 ·2 |
| 1. 3 | 16. 50 | 1. 20 | ·1016 | 5. 27 | ·02323 | 21. 0 | 46 ·3 | 47 ·2 |
| 1. 11 | 21. 10 | 1. 37 | ·1019 | 6. 10 | ·02266 | | | |
| 1. 25 | 20. 15 | 1. 46 | ·1016 | 6. 51 | ·02242 | | | |
| 1. 33 | 23. 30 | 2. 5 | ·0995 | 8. 43 | ·02012 | | | |
| 1. 40 | 22. 10 | | *** | 12. 40 | ·02012 | | | |
| 1. 58 | 28. 20 | 2. 18 | ·0976 | 13. 22 | ·01940 | | | |
| 2. 27 | 29. 0 | 2. 37 | ·0980 | 13. 42 | ·01983 | | | |
| 2. 53 | 26. 50 | 3. 2 | ·0974 | 14. 53 | ·01953 | | | |
| 3. 13 | 24. 30 | 3. 33 | ·0988 | 15. 12 | ·02011 | | | |
| 3. 44 | 26. 30 | | *** | 15. 29 | ·01953 | | | |
| 4. 26 | 21. 35 | 4. 5 | ·0979 | 20. 13 | ·02240 | | | |
| 4. 42 | 23. 30 | 4. 36 | ·0989 | 23. 59 | ·02550 | | | |
| 4. 56 | 25. 0 | 4. 55 | ·0972 | | | | | |
| 5. 11 | 23. 0 | | *** | | | | | |
| 5. 26 | 23. 35 | 5. 17 | ·0981 | | | | | |
| 5. 57 | 16. 30 | | *** | | | | | |
| 6. 16 | 15. 30 | 5. 40 | ·0971 | | | | | |
| 6. 41 | 7. 40 | | *** | | | | | |
| 6. 57 | 9. 40 | 6. 5 | ·0978 | | | | | |
| 7. 44 | 21. 8. 0 | 6. 26 | ·0960 | | | | | |
| 8. 10 | 20. 56. 0 | 6. 40 | ·0968 | | | | | |
| 8. 21 | 21. 4. 0 | | *** | | | | | |
| 8. 35 | 20. 59. 30 | 7. 38 | ·0967 | | | | | |
| 8. 43 | 21. 1. 30 | 8. 0 | ·0976 | | | | | |
| 8. 58 | 20. 52. 10 | 8. 12 | ·0998 | | | | | |
| 9. 10 | 21. 2. 30 | 8. 37 | ·0987 | | | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| Dec. 10 | | Dec. 10 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 41 | 21. 1. 40 | 8. 46 | ·0964 | | | | | |
| 9. 47 | 20. 59. 30 | 9. 5 | ·1001 | | | | | |
| 9. 56 | 21. 2. 20 | 9. 17 | ·0966 | | | | | |
| 10. 11 | 20. 59. 15 | 9. 37 | ·0977 | | | | | |
| 10. 29 | 21. 2. 30 | 9. 43 | ·0972 | | | | | |
| 10. 42 | 1. 15 | 9. 50 | ·0980 | | | | | |
| 10. 53 | 21. 1. 10 | 10. 5 | ·0972 | | | | | |
| 11. 25 | 20. 53. 40 | | *** | | | | | |
| 11. 45 | 59. 20 | 10. 40 | ·0978 | | | | | |
| 12. 7 | 20. 57. 40 | 10. 46 | ·0974 | | | | | |
| 12. 39 | 21. 7. 0 | 11. 0 | ·0981 | | | | | |
| 13. 15 | 20. 51. 0 | 11. 7 | ·0974 | | | | | |
| 13. 19 | 51. 30 | 11. 16 | ·0976 | | | | | |
| 13. 27 | 51. 5 | 11. 40 | ·0964 | | | | | |
| 13. 56 | 20. 54. 30 | 11. 52 | ·0969 | | | | | |
| 14. 15 | 21. 4. 30 | 12. 15 | ·0958 | | | | | |
| 14. 30 | 9. 0 | 12. 36 | ·0974 | | | | | |
| 14. 58 | 2. 20 | 13. 4 | ·0987 | | | | | |
| 15. 20 | 15. 30 | 13. 31 | ·0975 | | | | | |
| 15. 37 | 12. 30 | 13. 42 | ·0976 | | | | | |
| 15. 45 | 14. 20 | 14. 8 | ·0965 | | | | | |
| 16. 30 | 3. 30 | 14. 17 | ·0986 | | | | | |
| 16. 42 | 10. 50 | 14. 42 | ·0999 | | | | | |
| 16. 59 | 10. 30 | 15. 0 | ·0966 | | | | | |
| 17. 50 | 15. 50 | 16. 16 | ·1023 | | | | | |
| 17. 58 | 15. 20 | | *** | | | | | |
| 18. 12 | 18. 20 | 17. 13 | ·1007 | | | | | |
| 18. 31 | 18. 5 | 17. 45 | ·0985 | | | | | |
| 18. 52 | 14. 20 | 18. 11 | ·0997 | | | | | |
| 19. 8 | 17. 30 | 18. 33 | ·0979 | | | | | |
| 19. 24 | 15. 20 | | *** | | | | | |
| 19. 42 | 21. 10 | 19. 46 | ·0985 | | | | | |
| 20. 25 | 13. 40 | | *** | | | | | |
| 20. 54 | 19. 0 | 20. 17 | ·0975 | | | | | |
| 21. 9 | 18. 30 | | *** | | | | | |
| 21. 19 | 19. 30 | 21. 26 | ·0974 | | | | | |
| 21. 45 | 17. 5 | 21. 35 | ·0987 | | | | | |
| 21. 58 | 19. 30 | 21. 42 | ·0982 | | | | | |
| 22. 11 | 16. 0 | 21. 50 | ·0989 | | | | | |
| 22. 27 | 21. 0 | 22. 6 | ·0983 | | | | | |
| | *** | 22. 33 | ·0982 | | | | | |
| 23. 42 | 18. 55 | 22. 45 | ·0977 | | | | | |
| 23. 59 | 22. 10 | 23. 3 | ·0981 | | | | | |
| | | 23. 8 | ·0977 | | | | | |
| | | 23. 15 | ·0983 | | | | | |
| | | | (†) | | | | | |
| Dec. 11 | | Dec. 11 | | Dec. 11 | | Dec. 11 | | |
| 0. 0 | 21. 22. 10 | | (†) | 0. 0 | ·02550 | 1. 0 | 48·2 | 48·6 |
| 0. 17 | 20. 30 | 1. 42 | ·0985 | 2. 12 | ·02608 | 3. 0 | 49·6 | 50·3 |
| 0. 25 | 21. 40 | 2. 5 | ·0978 | 12. 14: | ·02113 | 9. 0 | 51·6 | 51·5 |
| 0. 31 | 20. 30 | 2. 17 | ·0988 | 21. 27 | ·02410 | 21. 0 | 47·0 | 47·7 |
| 0. 41 | 21. 25 | 2. 42 | ·0985 | 23. 59 | ·02469 | | | |
| 0. 53 | 19. 40 | 2. 50 | ·0978 | | | | | |
| 1. 54 | 19. 30 | 3. 36 | ·0988 | | | | | |
| 2. 13 | 14. 35 | 3. 52 | ·0977 | | | | | |
| 2. 43 | 19. 10 | 4. 4 | ·0976 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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 | | Dec. 11 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 3. 18 | 21. 16. 35 | 4. 15 | ·0983 | | | | | |
| 3. 42 | 17. 30 | 4. 40 | ·0988 | | | | | |
| 4. 17 | 13. 15 | 5. 0 | ·0977 | | | | | |
| 4. 42 | 15. 0 | 5. 47 | ·0994 | | | | | |
| 4. 55 | 13. 40 | 6. 35 | ·0988 | | | | | |
| 5. 40 | 12. 40 | | *** | | | | | |
| 6. 50 | 13. 45 | 8. 2 | ·0999 | | | | | |
| 7. 42 | 11. 20 | 8. 21 | ·0992 | | | | | |
| 8. 42 | 10. 40 | 9. 47 | ·0992 | | | | | |
| 8. 56 | 11. 30 | 10. 20 | ·1011 | | | | | |
| 10. 9 | 0. 20 | 10. 40 | ·0991 | | | | | |
| 10. 29 | 7. 30 | 11. 6 | ·1003 | | | | | |
| 10. 40 | 7. 30 | 11. 33 | ·0998 | | | | | |
| 10. 55 | 10. 40 | 12. 38 | ·0999 | | | | | |
| 11. 18 | 8. 30 | 17. 36 | ·1007 | | | | | |
| 11. 59 | 12. 10 | 20. 0 | ·1003 | | | | | |
| 20. 16 | 9. 50 | 22. 15 | ·0991 | | | | | |
| 23. 4 | 16. 0 | 23. 59 | ·0991 | | | | | |
| 23. 59 | 16. 30 | | | | | | | |
| Dec. 12 | | Dec. 12 | | Dec. 12 | | Dec. 12 | | |
| 0. 0 | 21. 16. 30 | 0. 0 | ·0991 | 0. 0 | ·02469 | 0. 0 | 48·5 | 48·4 |
| 3. 54 | 16. 35 | 6. 25 | ·0992 | 7. 12 | ·01964 | 1. 0 | 48·4 | 49·3 |
| 7. 7 | 13. 40 | 12. 34 | ·0999 | 9. 0 | ·01939 | 3. 0 | 51·0 | 51·3 |
| 10. 56 | 11. 45 | 18. 25 | ·1012 | 9. 21 | ·02042 | 6. 0 | 51·2 | 52·0 |
| 19. 21 | 10. 40 | 23. 59 | ·0994 | 14. 27: | ·02061 | 9. 0 | 49·9 | 51·5 |
| 20. 20 | 9. 20 | | | 23. 9 | ·02429 | 12. 0 | 49·0 | 50·5 |
| 22. 30 | 13. 40 | | | 23. 59 | ·02426 | 18. 0 | 46·5 | 47·0 |
| 23. 22 | 16. 10 | | | | | 21. 0 | 46·4 | 47·5 |
| 23. 59 | 15. 45 | | | | | | | |
| Dec. 13 | | Dec. 13 | | Dec. 13 | | Dec. 13 | | |
| 0. 0 | 21. 15. 50 | 0. 0 | ·0994 | 0. 0 | ·02426 | 0. 0 | 47·3 | 48·2 |
| 0. 13 | 16. 40 | 1. 0 | ·0994* | 6. 55 | ·02099 | 1. 0 | 48·2 | 49·0 |
| 0. 45 | 13. 50 | 3. 0 | ·0993* | 8. 28 | ·02070 | 3. 0 | 50·0 | 51·3 |
| 0. 55 | 15. 50 | 9. 40 | ·1004* | 22. 40 | ·02524 | 9. 40 | 49·2 | 50·0 |
| 1. 7 | 15. 30 | 21. 0 | ·1006* | 23. 59 | ·02523 | 21. 0 | 45·2 | 47·0 |
| 2. 0 | 16. 50 | | | | | | | |
| 6. 15 | 11. 20 | | | | | | | |
| 10. 7 | 9. 30 | | | | | | | |
| 15. 34 | 11. 0 | | | | | | | |
| 20. 22 | 9. 45 | | | | | | | |
| 23. 41 | 16. 40 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 14 | | Dec. 14 | | Dec. 14 | | Dec. 14 | | |
| | (†) | 0. 0 | ·0997 | 0. 0 | ·02523 | 1. 0 | 48·2 | 48·5 |
| 0. 40 | 21. 15. 30 | 1. 47 | ·1003 | 6. 41 | ·02170 | 3. 0 | 49·3 | 49·8 |
| 2. 37 | 16. 10 | 5. 5 | ·1006 | 11. 27 | ·02106 | 9. 0 | 49·7 | 49·5 |
| 6. 13 | 12. 20 | 7. 0 | ·1009 | 11. 52 | ·02180 | 21. 0 | 43·5 | 45·5 |
| 7. 12 | 13. 10 | 7. 21 | ·1005 | 13. 50 | ·02210 | | | |
| 7. 43 | 10. 5 | 7. 42 | ·1009 | 22. 37 | ·02695 | | | |
| 8. 21 | 12. 5 | 8. 13 | ·1005 | 23. 59 | ·02674 | | | |
| 10. 44 | 9. 5 | 8. 40 | ·1006 | | | | | |
| 15. 10 | 11. 45 | 9. 17 | ·1002 | | | | | |
| 20. 40 | 8. 40 | | *** | | | | | |
| 23. 59 | 15. 15 | 17. 34 | ·1027 | | | | | |

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 | ° ′ ″ | Dec. 14 h m | | h m | | h m | ° | ° |
| | | 19. 53 | ·1025 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·1007 | | | | | |
| Dec. 15 | | Dec. 15 | | Dec. 15 | | Dec. 15 | | |
| 0. 0 | 21. 15. 15 | 0. 0 | ·1007 | 0. 0 | ·02674 | 1. 0 | 45·8 | 46·1 |
| 2. 57 | 15. 10 | 0. 48 | ·0996 | 1. 40 | ·02693 | 3. 0 | 47·3 | 47·4 |
| 3. 12 | 13. 10 | 1. 16 | ·0999 | 6. 44 | ·02469 | 9. 0 | 46·7 | 47·1 |
| 3. 22 | 13. 35 | 2. 45 | ·1000 | 10. 42 | ·02430 | 22. 27 | 43·7 | 45·8 |
| 5. 43 | 10. 40 | 3. 17 | ·1005 | 11. 31 | ·02380 | | | |
| 8. 54 | 9. 0 | 7. 25 | ·1015 | 12. 1 | ·02461 | | | |
| 9. 45 | 9. 15 | 8. 47 | ·1016 | 12. 36 | ·02428 | | | |
| | (†) | | (†) | 13. 0 | ·02329 | | | |
| 11. 11 | 13. 40 | 9. 0 | ·1020* | 13. 43 | ·02335 | | | |
| 11. 39 | 13. 20 | 10. 42 | ·1043 | 14. 0 | ·02384 | | | |
| 11. 51 | 10. 20 | 10. 46 | ·1046 | 14. 20 | ·02370 | | | |
| 12. 7 | 13. 0 | 11. 5 | ·1036 | 15. 56 | ·02490 | | | |
| 12. 40 | 6. 50 | 11. 32 | ·0972 | 23. 59 | ·02705 | | | |
| 12. 44 | 7. 40 | 11. 55 | ·0990 | | | | | |
| 12. 57 | 1. 40 | | *** | | | | | |
| 13. 26 | 2. 30 | 12. 42 | ·0953 | | | | | |
| 13. 40 | 0. 45 | 13. 17 | ·0960 | | | | | |
| 13. 55 | 3. 0 | 13. 33 | ·0953 | | | | | |
| 14. 2 | 1. 30 | 13. 46 | ·0967 | | | | | |
| 14. 44 | 6. 25 | 14. 5 | ·0960 | | | | | |
| 15. 6 | 1. 30 | 14. 17 | ·0962 | | | | | |
| 15. 19 | 1. 50 | 14. 37 | ·0955 | | | | | |
| 15. 36 | 5. 30 | 14. 48 | ·0959 | | | | | |
| 16. 11 | 5. 50 | 15. 30 | ·0982 | | | | | |
| 16. 45 | 8. 10 | 15. 42 | ·0977 | | | | | |
| 17. 19 | 11. 40 | | *** | | | | | |
| 17. 28 | 11. 0 | 16. 37 | ·0983 | | | | | |
| 17. 43 | 11. 40 | 17. 15 | ·0993 | | | | | |
| 20. 22 | 10. 50 | 18. 33 | ·0993 | | | | | |
| 20. 37 | 9. 10 | | *** | | | | | |
| 20. 51 | 8. 45 | 19. 45 | ·1003 | | | | | |
| 21. 21 | 10. 10 | 20. 12 | ·1003 | | | | | |
| 21. 36 | 7. 15 | 20. 20 | ·1000 | | | | | |
| 21. 45 | 10. 45 | 20. 46 | ·1005 | | | | | |
| 21. 54 | 10. 0 | 21. 7 | ·1001 | | | | | |
| 22. 12 | 12. 30 | 21. 17 | ·1006 | | | | | |
| 22. 27 | 10. 25 | 21. 20 | ·1000 | | | | | |
| 22. 36 | 12. 30 | 21. 41 | ·1008 | | | | | |
| 23. 9 | 13. 0 | 21. 45 | ·1001 | | | | | |
| | (†) | 22. 6 | ·1020 | | | | | |
| | | | (†) | | | | | |
| Dec. 16 | | Dec. 16 | | Dec. 16 | | Dec. 16 | | |
| | (†) | | (†) | 0. 0 | ·02705 | 10. 13 | 45·0 | 47·0 |
| 0. 38 | 21. 14. 30 | 0. 57 | ·0992 | 1. 10 | ·02750 | 21. 9 | 42·0 | 43·2 |
| 0. 42 | 13. 40 | | *** | 5. 45 | ·02509 | | | |
| 1. 8 | 16. 40 | 1. 30 | ·0994 | 7. 28 | ·02560 | | | |
| 1. 24 | 16. 0 | 1. 46 | ·1009 | 7. 42 | ·02538 | | | |
| 1. 54 | 17. 45 | 2. 3 | ·0989 | 7. 51 | ·02569 | | | |
| 2. 12 | 20. 30 | 2. 15 | ·0997 | 8. 4 | ·02545 | | | |
| 2. 28 | 18. 40 | 2. 22 | ·0991 | 8. 20 | ·02570 | | | |
| 2. 42 | 19. 30 | 2. 32 | ·0995 | 9. 0 | ·02530 | | | |
| 4. 45 | 13. 50 | 2. 45 | ·0992 | 9. 12 | ·02570 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 16 h m | ° ′ ″ | Dec. 16 h m | | Dec. 16 h m | | h m | ° | ° |
| 5. 42 | 21. 13. 20 | 2. 58 | ·1000 | 9. 30 | ·02484 | | | |
| 5. 58 | 14. 45 | 3. 7 | ·0994 | 10. 14 | ·02428 | | | |
| 6. 18 | 14. 0 | 3. 16 | ·0998 | 10. 51 | ·02470 | | | |
| 6. 27 | 14. 45 | 3. 34 | ·0993 | 12. 9 | ·02466 | | | |
| 6. 44 | 10. 50 | 3. 46 | ·1002 | 12. 43 | ·02505 | | | |
| 7. 9 | 15. 30 | 4. 4 | ·0993 | 13. 4 | ·02498 | | | |
| 7. 19 | 12. 30 | 4. 33 | ·0999 | 18. 49 | ·02738 | | | |
| 7. 46 | 10. 15 | 4. 37 | ·1006 | 23. 59 | ·02797 | | | |
| 7. 55 | 11. 20 | 4. 46 | ·0999 | | | | | |
| 8. 15 | 3. 40 | 5. 13 | ·1000 | | | | | |
| | *** | 5. 23 | ·1014 | | | | | |
| 8. 43 | 11. 0 | 5. 42 | ·0997 | | | | | |
| 8. 52 | 10. 30 | 6. 0 | ·0990 | | | | | |
| 9. 9 | 12. 5 | 6. 18 | ·0976 | | | | | |
| 9. 18 | 21. 8. 30 | | *** | | | | | |
| 9. 37 | 20. 50. 30 | 6. 37 | ·0980 | | | | | |
| 9. 51 | 55. 10 | 6. 46 | ·0969 | | | | | |
| 10. 0 | 20. 50. 20 | | *** | | | | | |
| 10. 16 | 21. 6. 0 | 7. 5 | ·0977 | | | | | |
| 10. 45 | 20. 57. 20 | 7. 15 | ·0971 | | | | | |
| 11. 35 | 21. 0. 10 | 7. 26 | ·0979 | | | | | |
| 12. 22 | 12. 20 | 7. 42 | ·0969 | | | | | |
| 12. 37 | 9. 30 | 7. 50 | ·0990 | | | | | |
| 13. 19 | 12. 50 | 8. 3 | ·0974 | | | | | |
| 13. 43 | 11. 40 | | *** | | | | | |
| 14. 29 | 12. 20 | 8. 26 | ·0970 | | | | | |
| 14. 45 | 14. 10 | 8. 42 | ·0977 | | | | | |
| 15. 7 | 12. 0 | 8. 47 | ·0974 | | | | | |
| 15. 52 | 10. 0 | 8. 52 | ·0984 | | | | | |
| 17. 56 | 12. 0 | 9. 5 | ·0963 | | | | | |
| 20. 28 | 9. 0 | 9. 17 | ·1008 | | | | | |
| | *** | 9. 33 | ·0982 | | | | | |
| 21. 44 | 13. 0 | 9. 40 | ·0991 | | | | | |
| | *** | 10. 2 | ·0970 | | | | | |
| 22. 55 | 12. 20 | 10. 18 | ·0967 | | | | | |
| 23. 59 | 14. 30 | 10. 47 | ·0981 | | | | | |
| | | 11. 6 | ·0972 | | | | | |
| | | 11. 30 | ·0987 | | | | | |
| | | 11. 47 | ·1001 | | | | | |
| | | 12. 15 | ·0988 | | | | | |
| | | 12. 40 | ·1005 | | | | | |
| | | 12. 56 | ·0998 | | | | | |
| | | | *** | | | | | |
| | | 15. 45 | ·1003 | | | | | |
| | | 16. 25 | ·1007 | | | | | |
| | | 19. 12 | ·1009 | | | | | |
| | | | *** | | | | | |
| | | 20. 47 | ·1012 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·0996 | | | | | |
| Dec. 17 | | Dec. 17 | | Dec. 17 | | Dec. 17 | | |
| 0. 0 | 21. 14. 35 | 0. 0 | ·0996 | 0. 0 | ·02797 | 1. 0 | 44·5 | 45·0 |
| 1. 10 | 14. 45 | 1. 46 | ·0995 | 2. 0 | ·02740 | 3. 0 | 46·0 | 46·5 |
| 1. 19 | 18. 20 | 2. 10 | ·1001 | 8. 24 | ·02393 | 9. 0 | 45·5 | 47·0 |
| 1. 31 | 16. 30 | 2. 18 | ·0990 | 12. 25 | ·02338 | 21. 0 | 38·2 | 41·0 |
| 2. 22 | 15. 50 | 3. 2 | ·0997 | 20. 0 | ·02690 | | | |
| 3. 2 | 17. 0 | | *** | 21. 54 | ·02828 | | | |

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. |
|---|---|---|---|---|---|---|---|---|
| Dec. 17 | | Dec. 17 | | Dec. 17 | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 4. 36 | 21. 13. 30 | 3. 27 | ·0989 | 23. 59 | ·02869 | | | |
| 5. 6 | 15. 15 | 5. 3 | ·0994 | | | | | |
| 6. 41 | 14. 20 | 5. 18 | ·0991 | | | | | |
| 8. 15 | 11. 10 | 6. 22 | ·0995 | | | | | |
| 9. 16 | 11. 50 | | *** | | | | | |
| 9. 42 | 10. 30 | 9. 28 | ·0991 | | | | | |
| 11. 39 | 11. 30 | 9. 45 | ·0995 | | | | | |
| 11. 58 | 13. 10 | | *** | | | | | |
| 12. 39 | 8. 25 | 11. 38 | ·1001 | | | | | |
| 13. 43 | 10. 20 | 12. 0 | ·1008 | | | | | |
| 13. 55 | 9. 15 | 12. 17 | ·1003 | | | | | |
| 14. 21 | 9. 10 | | *** | | | | | |
| 14. 47 | 11. 50 | 14. 10 | ·0999 | | | | | |
| 17. 35 | 11. 30 | 17. 34 | ·1011 | | | | | |
| 18. 10 | 10. 5 | 20. 20 | ·1010 | | | | | |
| 19. 0 | 11. 10 | 21. 41 | ·1002 | | | | | |
| 20. 35 | 10. 50 | 21. 48 | ·1007 | | | | | |
| 22. 0 | 13. 50 | 22. 56 | ·1004 | | | | | |
| 22. 30 | 17. 30 | 23. 9 | ·1009 | | | | | |
| 22. 57 | 18. 0 | 23. 33 | ·1001 | | | | | |
| 23. 22 | 21. 20 | 23. 59 | ·1002 | | | | | |
| 23. 43 | 18. 40 | | | | | | | |
| 23. 59 | 18. 55 | | | | | | | |
| Dec. 18 | | Dec. 18 | | Dec. 18 | | Dec. 18 | | |
| 0. 0 | 21. 18. 55 | 0. 0 | ·1002 | 0. 0 | ·02869 | 1. 0 | 40 ·0 | 41 ·0 |
| 0. 26 | 20. 35 | 1. 26 | ·0998 | 2. 14 | ·02890 | 3. 0 | 42 ·2 | 43 ·0 |
| | (†) | 2. 8 | ·1004 | 10. 15: | ·02470 | 9. 0 | 43 ·0 | 43 ·0 |
| 1. 0 | 21. 1* | 3. 17 | ·1008 | 19. 55 | ·02927 | 21. 0 | 34 ·5 | 37 ·0 |
| 1. 7 | 18. 40 | 4. 35 | ·1000 | 21. 51 | {·02930 | | | |
| 1. 54 | 16. 50 | | *** | | {·02968 | | | |
| 3. 10 | 16. 10 | 7. 3 | ·1004 | 23. 6 | ·03000 | | | |
| 4. 18 | 16. 50 | 7. 17 | ·1001 | 23. 25 | ·02978 | | | |
| 6. 55 | 12. 40 | 7. 56 | ·1005 | 23. 59 | ·02980 | | | |
| 7. 25 | 10. 50 | 8. 30 | ·1011 | | | | | |
| 7. 44 | 11. 20 | 9. 23 | ·1007 | | | | | |
| 8. 19 | 7. 45 | | *** | | | | | |
| 9. 9 | 12. 10 | 10. 45 | ·1005 | | | | | |
| 12. 25 | 10. 25 | 12. 26 | ·1015 | | | | | |
| 12. 54 | 7. 0 | 13. 35 | ·1010 | | | | | |
| 13. 46 | 10. 10 | | *** | | | | | |
| 19. 45 | 11. 0 | 15. 14 | ·1010 | | | | | |
| | (†) | | *** | | | | | |
| 21. 0 | 10. 58* | 19. 51 | ·1019 | | | | | |
| | | | (†) | | | | | |
| Dec. 19 | | Dec. 19 | | Dec. 19 | | Dec. 19 | | |
| | (†) | | (†) | 0. 0 | ·02980 | 0. 0 | 36 ·0 | 38 ·0 |
| 0. 38 | 21. 19. 0 | 1. 0 | ·1018* | 4. 54 | ·02622 | 1. 0 | 37 ·6 | 39 ·0 |
| 0. 54 | 17. 45 | 1. 45 | ·1011 | 8. 49 | ·02340 | 3. 0 | 40 ·2 | 41 ·0 |
| 1. 22 | 19. 30 | 2. 50 | ·1008 | 15. 5 | ·02200 | 6. 0 | 42 ·4 | 42 ·6 |
| 1. 37 | 18. 45 | 3. 44 | ·1013 | 18. 52 | ·02250 | 9. 0 | 42 ·5 | 42 ·5 |
| 1. 54 | 19. 40 | 3. 50 | ·1009 | 21. 30 | ·02330 | 12. 0 | 42 ·7 | 42 ·8 |
| 3. 15 | 16. 45 | 4. 5 | ·1014 | 23. 18 | ·02512 | 18. 0 | 35 ·0 | 35 ·3 |
| 3. 30 | 17. 30 | | *** | 23. 59 | ·02540 | 21. 5 | 38 ·0 | 39 ·0 |
| 3. 55 | 16. 50 | 4. 44 | ·1005 | | | | | |
| 4. 29 | 18. 45 | 5. 7 | ·0988 | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 19 | | Dec. 19 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 5. 0 | 21. 8. 50 | 5. 35 | ·0999 | | | | | |
| 5. 21 | 13. 50 | 5. 56 | ·1000 | | | | | |
| 5. 45 | 15. 10 | 6. 17 | ·1008 | | | | | |
| 6. 14 | 15. 20 | 6. 32 | ·1005 | | | | | |
| 6. 30 | 14. 0 | 6. 47 | ·1009 | | | | | |
| 6. 54 | 14. 50 | | *** | | | | | |
| 7. 21 | 13. 40 | 7. 34 | ·1006 | | | | | |
| 9. 27 | 14. 20 | | *** | | | | | |
| 10. 29 | 11. 20 | 8. 58 | ·1011 | | | | | |
| 11. 52 | 13. 15 | 9. 12 | ·1003 | | | | | |
| 12. 29 | 11. 15 | 9. 18 | ·1016 | | | | | |
| 12. 39 | 11. 50 | 9. 35 | ·1010 | | | | | |
| 12. 55 | 7. 0 | 9. 48 | ·1018 | | | | | |
| 13. 15 | 7. 40 | | *** | | | | | |
| 13. 30 | 6. 25 | 11. 17 | ·1003 | | | | | |
| 13. 42 | 8. 55 | | *** | | | | | |
| 14. 9 | 5. 20 | 12. 46 | ·1011 | | | | | |
| 14. 42 | 14. 0 | 13. 7 | ·1025 | | | | | |
| 16. 0 | 9. 0 | 13. 20 | ·1015 | | | | | |
| 16. 59 | 12. 10 | 13. 47 | ·1025 | | | | | |
| 17. 51 | 10. 45 | | *** | | | | | |
| 18. 19 | 12. 0 | 15. 2 | ·1004 | | | | | |
| 18. 44 | 11. 20 | | *** | | | | | |
| 19. 37 | 14. 30 | 16. 30 | ·1022 | | | | | |
| | *** | | *** | | | | | |
| 21. 52 | 18. 20 | 17. 38 | ·1014 | | | | | |
| 22. 21 | 21. 30 | 18. 7 | ·1018 | | | | | |
| 23. 10 | 19. 5 | | *** | | | | | |
| 23. 41 | 20. 15 | 18. 45 | ·1014 | | | | | |
| | (†) | 19. 6 | ·1016 | | | | | |
| | | 20. 4 | ·1008 | | | | | |
| | | 21. 16 | ·1010 | | | | | |
| | | | *** | | | | | |
| | | 22. 18 | ·0999 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·1013 | | | | | |
| Dec. 20 | | Dec. 20 | | Dec. 20 | | Dec. 20 | | |
| | (†) | 0. 0 | ·1013 | 0. 0 | ·02540 | 0. 0 | 38 ·0 | 39 ·5 |
| 0. 43 | 21. 20. 10 | 2. 17 | ·1005 | 2. 41 | ·02528 | 1. 0 | 39 ·0 | 40 ·2 |
| 0. 54 | 20. 20 | 5. 18 | ·1009 | 6. 21 | ·02300 | 3. 0 | 41 ·0 | 42 ·0 |
| 1. 22 | 18. 30 | | *** | 8. 57 | ·02208 | 9. 0 | 40 ·8 | 43 ·0 |
| 4. 37 | 15. 15 | 6. 5 | ·1006 | 11. 55 | ·02200 | 21. 0 | 35 ·8 | 38 ·0 |
| 5. 52 | 16. 0 | 6. 18 | ·0997 | 23. 59 | ·02737 | | | |
| 6. 12 | 14. 30 | 6. 37 | ·0998 | | | | | |
| 6. 54 | 0. 25 | 6. 55 | ·1021 | | | | | |
| 7. 28 | 11. 50 | 7. 17 | ·1012 | | | | | |
| 8. 29 | 13. 15 | 7. 28 | ·1002 | | | | | |
| 9. 40 | 8. 5 | 7. 37 | ·1008 | | | | | |
| 10. 7 | 6. 15 | | *** | | | | | |
| 10. 32 | 11. 45 | 9. 46 | ·1004 | | | | | |
| 10. 54 | 10. 50 | 10. 17 | ·1019 | | | | | |
| 11. 0 | 11. 40 | | *** | | | | | |
| 11. 21 | 10. 30 | 11. 18 | ·1005 | | | | | |
| 11. 40 | 12. 10 | 11. 40 | ·1011 | | | | | |
| 16. 21 | 10. 50 | | *** | | | | | |
| 18. 56 | 11. 50 | 16. 20 | ·1022 | | | | | |
| | (†) | | *** | | | | | |

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. 20 | | Dec. 20 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 21. 0 | 21. 8. 14* | 19. 8 | ·1022 | | | | | |
| | | | (†) | | | | | |
| | | 21. 0 | ·1015* | | | | | |
| Dec. 21 | | Dec. 21 | | Dec. 21 | | Dec. 21 | | |
| | (†) | | (†) | 0. 0 | ·02737 | 1. 0 | 39 ·0 | 40 ·0 |
| 1. 0 | 21. 17. 5* | 1. 0 | ·1000* | 1. 40 | ·02636 | 3. 0 | 42 ·5 | 42 ·7 |
| 1. 15 | 13. 20 | 1. 45 | ·0999 | 4. 44 | ·02292 | 9. 0 | 42 ·2 | 42 ·1 |
| 1. 54 | 11. 55 | 2. 7 | ·0997 | 5. 45 | ·02217 | 21. 0 | 38 ·3 | 39 ·2 |
| 2. 1 | 12. 40 | 2. 45 | ·0999 | 10. 54 | ·02091 | | | |
| 3. 10 | 9. 10 | 2. 49 | ·0995 | 23. 15 | ·02420 | | | |
| 4. 15 | 11. 50 | | *** | 23. 59 | ·02405 | | | |
| 6. 55 | 10. 20 | 7. 34 | ·1001 | | | | | |
| 7. 29 | 5. 5 | 7. 45 | ·0996 | | | | | |
| 7. 39 | 6. 10 | 8. 16 | ·1015 | | | | | |
| 7. 51 | 2. 30 | 8. 44 | ·0999 | | | | | |
| 8. 47 | 9. 0 | | *** | | | | | |
| 10. 1 | 8. 20 | 10. 22 | ·1010 | | | | | |
| 10. 26 | 5. 50 | 10. 47 | ·1017 | | | | | |
| 10. 40 | 6. 40 | | *** | | | | | |
| 11. 0 | 4. 45 | 11. 36 | ·1018 | | | | | |
| 11. 12 | 6. 20 | 11. 48 | ·1013 | | | | | |
| 12. 30 | 9. 20 | | *** | | | | | |
| 13. 23 | 9. 35 | 14. 39 | ·1013 | | | | | |
| 13. 40 | 8. 40 | 15. 4 | ·1018 | | | | | |
| 13. 46 | 10. 10 | 15. 20 | ·1015 | | | | | |
| 14. 39 | 9. 30 | | *** | | | | | |
| 14. 58 | 7. 30 | 16. 34 | ·1019 | | | | | |
| 15. 12 | 7. 20 | 16. 56 | ·1015 | | | | | |
| 15. 45 | 9. 40 | 17. 26 | ·1024 | | | | | |
| 16. 0 | 12. 30 | | *** | | | | | |
| 16. 27 | 12. 0 | 19. 7 | ·1023 | | | | | |
| 16. 45 | 13. 20 | | *** | | | | | |
| 17. 21 | 10. 20 | 19. 56 | ·1020 | | | | | |
| 17. 54 | 10. 35 | | *** | | | | | |
| 19. 22 | 13. 10 | 21. 45 | ·1001 | | | | | |
| 20. 58 | 13. 10 | | *** | | | | | |
| 21. 12 | 11. 50 | 22. 17 | ·1007 | | | | | |
| 21. 15 | 13. 15 | | *** | | | | | |
| 21. 24 | 11. 40 | 23. 16 | ·1002 | | | | | |
| 21. 40 | 13. 15 | 23. 59 | ·1002 | | | | | |
| 22. 21 | 13. 0 | | | | | | | |
| 23. 22 | 15. 30 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 22 | | Dec. 22 | | Dec. 22 | | Dec. 22 | | |
| | (†) | 0. 0 | ·1002 | 0. 0 | ·02405 | 1. 0 | 41 ·0 | 41 ·3 |
| 0. 30 | 21. 15. 0 | 1. 4 | ·0995 | 2. 21 | ·02284 | 3. 0 | 44 ·0 | 43 ·4 |
| 1. 12 | 13. 20 | | *** | 3. 7 | ·02222 | 9. 0 | 45 ·8 | 47 ·0 |
| 1. 27 | 14. 0 | 1. 47 | ·0998 | 3. 14 | ·02236 | 22. 33 | 36 ·0 | 38 ·5 |
| 3. 48 | 10. 50 | 2. 18 | ·0992 | 6. 36 | ·01909 | | | |
| 4. 21 | 8. 50 | 3. 6 | ·0997 | 7. 25 | ·01874 | | | |
| 5. 46 | 11. 10 | 3. 32 | ·0992 | 8. 24 | ·01891 | | | |
| 6. 54 | 8. 10 | 5. 0 | ·0998 | 8. 41 | ·01938 | | | |
| 7. 27 | 9. 40 | 5. 50 | ·0990 | 9. 53 | ·01907 | | | |
| 7. 45 | 8. 50 | 7. 36 | ·0993 | 14. 20 | ·01984 | | | |
| 7. 54 | 9. 0 | 8. 42 | ·0987 | 21. 44 | ·02477 | | | |
| 8. 43 | 6. 0 | 9. 3 | ·1004 | 23. 59 | ·02686 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 22 | | Dec. 22 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 9. 2 | 20. 58. 45 | 9. 17 | ·1008 | | | | | |
| 9. 39 | 21. 6. 20 | 10. 5 | ·0993 | | | | | |
| 11. 0 | 5. 10 | 10. 17 | ·0993 | | | | | |
| 11. 59 | 8. 20 | 10. 46 | ·1001 | | | | | |
| 14. 18 | 11. 15 | 11. 8 | ·0999 | | | | | |
| 17. 57 | 10. 50 | | *** | | | | | |
| 19. 25 | 11. 45 | 18. 15 | ·1020 | | | | | |
| 20. 56 | 11. 0 | | *** | | | | | |
| 21. 30 | 13. 20 | 21. 35 | ·1017 | | | | | |
| 23. 13 | 11. 50 | | *** | | | | | |
| 23. 59 | 13. 30 | 22. 40 | ·1007 | | | | | |
| | | 23. 59 | ·1005 | | | | | |
| Dec. 23 | | Dec. 23 | | Dec. 23 | | Dec. 23 | | |
| 0. 0 | 21. 13. 30 | 0. 0 | ·1005 | 0. 0 | ·02686 | 8. 33 | 40 ·8 | 41 ·5 |
| 0. 19 | 13. 50 | 2. 47 | ·1001 | 1. 15 | ·02670 | 21. 0 | 34 ·0 | 35 ·7 |
| 0. 42 | 12. 55 | 3. 34 | ·0997 | 9. 59: | ·02206 | | | |
| 1. 58 | 13. 45 | 3. 45 | ·1000 | 22. 27 | ·02797 | | | |
| 2. 40 | 11. 40 | | *** | 23. 59 | ·02804 | | | |
| 4. 10 | 10. 0 | 4. 17 | ·0996 | | | | | |
| 5. 11 | 11. 25 | 5. 16 | ·1001 | | | | | |
| 5. 30 | 6. 25 | 5. 47 | ·0985 | | | | | |
| 5. 43 | 9. 30 | 6. 8 | ·0991 | | | | | |
| 6. 36 | 10. 40 | 6. 16 | ·0987 | | | | | |
| 8. 13 | 8. 20 | 6. 45 | ·0996 | | | | | |
| 8. 36 | 8. 40 | 8. 45 | ·1004 | | | | | |
| 8. 58 | 6. 40 | 9. 12 | ·1001 | | | | | |
| 9. 15 | 8. 20 | 9. 33 | ·1006 | | | | | |
| 9. 29 | 7. 45 | 9. 50 | ·1002 | | | | | |
| 9. 42 | 8. 10 | 10. 20 | ·1013 | | | | | |
| 9. 57 | 6. 15 | | *** | | | | | |
| 10. 50 | 9. 10 | 11. 46 | ·1012 | | | | | |
| 11. 14 | 7. 45 | 12. 16 | ·1017 | | | | | |
| 11. 52 | 9. 50 | 12. 46 | ·1014 | | | | | |
| 15. 11 | 12. 10 | | *** | | | | | |
| 22. 28 | 11. 45 | 15. 30 | ·1016 | | | | | |
| 22. 45 | 13. 30 | 15. 46 | ·1020 | | | | | |
| 23. 59 | 13. 0 | 20. 15 | ·1021 | | | | | |
| | | 21. 47 | ·1018 | | | | | |
| | | 23. 0 | ·1010 | | | | | |
| | | 23. 26 | ·1012 | | | | | |
| | | 23. 59 | ·1010 | | | | | |
| Dec. 24 | | Dec. 24 | | Dec. 24 | | Dec. 24 | | |
| 0. 0 | 21. 13. 0 | 0. 0 | ·1010 | 0. 0 | ·02804 | 1. 0 | 37 ·3 | 37 ·2 |
| | *** | 0. 7 | ·1012 | 9. 13: | ·02410 | 3. 0 | 39 ·0 | 39 ·5 |
| 2. 45 | 12. 40 | 1. 0 | ·1008* | 20. 0 | ·03090 | 9. 40 | 36 ·5 | 36 ·8 |
| 3. 22: | 8. 30 | 3. 0 | ·0996* | 22. 50 | ·03052 | 22. 30 | 29 ·0 | 30 ·0 |
| 4. 7 | 10. 35 | 9. 40 | ·1019* | | (†) | | | |
| 7. 30 | 10. 40 | 22. 30 | ·1012* | | | | | |
| 7. 57 | 9. 10 | | | | | | | |
| 8. 28 | 10. 10 | | | | | | | |
| 11. 1 | 11. 10 | | | | | | | |
| 11. 30 | 10. 30 | | | | | | | |
| 14. 12 | 12. 20 | | | | | | | |
| 15. 9 | 11. 40 | | | | | | | |
| 16. 45 | 12. 40 | | | | | | | |
| 20. 9 | 11. 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. |
|---|---|---|---|---|---|---|---|---|
| Dec. 24 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 22. 12 | 21. 15. 45 | | | | | | | |
| 22. 58 | 15. 30 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 25 | | Dec. 25 | | Dec. 25 | | Dec. 25 | | |
| 7. 30 | 21. 2. 50* | 7. 30 | ·1010* | | (†) | 7. 30 | 31 ·5 | 33 ·0 |
| 21. 10 | 10. 7* | 21. 10 | ·1014* | 0. 30 | ·02880 | 21. 10 | 33 ·0 | 34 ·4 |
| | | | | 2. 43 | ·02928 | | | |
| | | | | 6. 30 | ·02789 | | | |
| | | | | 8. 39 | ·02769 | | | |
| | | | | 10. 27 | ·02657 | | | |
| | | | | 11. 7 | ·02673 | | | |
| | | | | 16. 23 | ·02590 | | | |
| | | | | 21. 13 | ·02565 | | | |
| | | | | 22. 55 | ·02613 | | | |
| | | | | 23. 59 | ·02550 | | | |
| Dec. 26 | | Dec. 26 | | Dec. 26 | | Dec. 26 | | |
| | (†) | | (†) | 0. 0 | ·02550 | 0. 0 | 35 ·0 | 36 ·3 |
| 0. 58 | 21. 14. 15 | 1. 0 | ·1004* | 3. 5 | ·02320 | 1. 0 | 36 ·7 | 38 ·0 |
| 2. 26 | 15. 30 | 1. 56 | ·1005 | 6. 9 | ·01938 | 3. 0 | 39 ·8 | 40 ·7 |
| 3. 14 | 8. 45 | 2. 12 | ·1005 | 7. 52 | ·01992 | 6. 0 | 42 ·0 | 41 ·4 |
| 3. 44 | 12. 20 | 3. 26: | ·0992 | 16. 22 | ·02003 | 9. 0 | 41 ·8 | 42 ·3 |
| 5. 14 | 9. 35 | 3. 56 | ·1000 | 23. 59 | ·02193 | 12. 0 | 42 ·1 | 42 ·5 |
| 6. 23 | 9. 40 | 4. 33 | ·0999 | | | 21. 0 | 37 ·7 | 38 ·3 |
| 7. 8 | 7. 45 | 6. 3 | ·1006 | | | | | |
| 7. 29 | 5. 25 | | *** | | | | | |
| 8. 20 | 8. 20 | 8. 27 | ·0994 | | | | | |
| 10. 41 | 9. 10 | | *** | | | | | |
| 11. 54 | 8. 30 | 11. 42 | ·1006 | | | | | |
| 12. 25 | 10. 5 | | *** | | | | | |
| 12. 45 | 8. 50 | 12. 38 | ·1002 | | | | | |
| 12. 51 | 9. 0 | | *** | | | | | |
| 13. 21 | 8. 15 | 13. 45 | ·1012 | | | | | |
| 13. 40 | 10. 0 | 15. 17 | ·1011 | | | | | |
| 16. 11 | 11. 40 | 16. 7 | ·1016 | | | | | |
| 18. 40 | 11. 35 | 19. 26 | ·1022 | | | | | |
| 20. 29 | 10. 35 | 20. 36 | ·1022 | | | | | |
| 22. 0 | 12. 0 | 21. 47 | ·1013 | | | | | |
| | (†) | 23. 59 | ·1009 | | | | | |
| Dec. 27 | | Dec. 27 | | Dec. 27 | | Dec. 27 | | |
| | (†) | 0. 0 | ·1009 | 0. 0 | ·02193 | 0. 0 | 38 ·9 | 39 ·7 |
| 0. 20 | 21. 12. 0 | 1. 17 | ·0996 | 1. 39 | ·02228 | 1. 0 | 39 ·0 | 40 ·0 |
| 2. 21 | 14. 15 | 2. 32 | ·0999 | 5. 38 | ·02000 | 3. 0 | 41 ·0 | 42 ·2 |
| 3. 11 | 13. 30 | 3. 45 | ·0997 | 5. 52 | ·02030 | 9. 0 | 42 ·0 | 41 ·7 |
| 4. 10 | 9. 20 | 4. 18 | ·1001 | 15. 42 | ·02020 | 21. 0 | 39 ·0 | 40 ·3 |
| 4. 44 | 10. 50 | 4. 47 | ·1000 | 23. 59 | ·02157 | | | |
| 5. 14 | 8. 45 | 5. 58 | ·1006 | | | | | |
| 5. 41 | 10. 50 | 6. 45 | ·1001 | | | | | |
| 7. 21 | 9. 55 | 8. 17 | ·1002 | | | | | |
| 7. 41 | 8. 45 | 8. 46 | ·1005 | | | | | |
| 7. 54 | 9. 10 | 9. 47 | ·1004 | | | | | |
| 8. 43 | 6. 45 | 10. 15 | ·1008 | | | | | |
| 8. 59 | 8. 50 | 13. 46 | ·1010 | | | | | |
| 9. 37 | 9. 15 | 18. 47 | ·1017 | | | | | |
| 10. 6 | 8. 40 | | *** | | | | | |
| 10. 28 | 10. 0 | 22. 54 | ·1012 | | | | | |
| | | | *** | | | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 27 | | Dec. 27 | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 11. 9 | 21. 8. 20 | 23. 47 | ·1006 | | | | | |
| 11. 24 | 9. 50 | 23. 59 | ·1007 | | | | | |
| 13. 39 | 9. 20 | | | | | | | |
| 15. 52 | 11. 30 | | | | | | | |
| 20. 55 | 10. 40 | | | | | | | |
| 22. 12 | 11. 30 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 28 | | Dec. 28 | | Dec. 28 | | Dec. 28 | | |
| | (†) | 0. 0 | ·1007 | 0. 0 | ·02157 | 1. 0 | 41 ·5 | 41 ·8 |
| 2. 44 | 21. 11. 20 | 1. 43 | ·1004 | 3. 21 | ·02037 | 3. 0 | 43 ·2 | 43 ·1 |
| 4. 15 | 9. 40 | 4. 17 | ·0997 | | ·02142 | 9. 0 | 44 ·0 | 43 ·5 |
| 4. 39 | 10. 20 | 9. 7 | ·0999 | 13. 5 | ·02255 | 21. 0 | 33 ·0 | 34 ·7 |
| 5. 8 | 9. 40 | 9. 20 | ·0997 | 16. 13 | ·02422 | | | |
| 5. 26 | 10. 15 | 9. 37 | ·0999 | 21. 19 | ·02870 | | | |
| 8. 15 | 7. 50 | 10. 12 | ·0997 | 23. 34 | ·03120 | | | |
| 8. 47 | 8. 20 | | *** | 23. 59 | ·03117 | | | |
| 9. 45 | 7. 55 | 14. 30 | ·1015 | | | | | |
| 10. 42 | 9. 0 | | *** | | | | | |
| 10. 57 | 7. 50 | 16. 12 | ·1021 | | | | | |
| 12. 15 | 9. 10 | 19. 58 | ·1023 | | | | | |
| 17. 22 | 10. 40 | 23. 59 | ·1019 | | | | | |
| 17. 47 | 10. 10 | | | | | | | |
| 21. 0 | 11. 0 | | | | | | | |
| 22. 2 | 11. 55 | | | | | | | |
| | (†) | | | | | | | |
| Dec. 29 | | Dec. 29 | | Dec. 29 | | Dec. 29 | | |
| | (†) | 0. 0 | ·1019 | 0. 0 | ·03117 | 1. 0 | 35 ·3 | 36 ·0 |
| 2. 9 | 21. 12. 50 | 1. 6 | ·1018 | 2. 13 | ·03092 | 3. 0 | 38 ·2 | 37 ·5 |
| 2. 45 | 12. 20 | 1. 25 | ·1013 | 6. 52: | ·02752 | 9. 0 | 37 ·5 | 38 ·3 |
| 2. 57 | 11. 10 | 3. 3 | ·1009 | 14. 27 | ·02770 | 22. 55 | 36 ·7 | 38 ·3 |
| 7. 21 | 9. 45 | 3. 54 | ·1017 | 23. 59 | ·02882 | | | |
| 15. 0 | 10. 35 | 4. 45 | ·1014 | | | | | |
| 19. 57 | 10. 0 | 8. 7 | ·1019 | | | | | |
| | *** | 8. 34 | ·1016 | | | | | |
| 23. 39 | 13. 45 | 9. 40 | ·1020 | | | | | |
| 23. 59 | 13. 20 | 15. 17 | ·1025 | | | | | |
| | | 18. 36 | ·1028 | | | | | |
| | | | *** | | | | | |
| | | 23. 59 | ·1023 | | | | | |
| Dec. 30 | | Dec. 30 | | Dec. 30 | | Dec. 30 | | |
| 0. 0 | 21. 13. 20 | 0. 0 | ·1023 | 0. 0 | ·02882 | 6. 42 | 43 ·0 | 43 ·3 |
| 0. 51 | 13. 40 | 3. 38 | ·1005 | 2. 17 | ·02912 | 21. 0 | 41 ·8 | 43 ·7 |
| 2. 15 | 11. 40 | 6. 17 | ·1015 | 9. 26: | ·02388 | | | |
| 3. 42 | 12. 15 | 11. 43 | ·1009 | 18. 13 | ·02299 | | | |
| 4. 15 | 11. 10 | 17. 26 | ·1017 | 22. 30 | ·02421 | | | |
| 4. 39 | 11. 50 | 23. 59 | ·1001 | 23. 59 | ·02409 | | | |
| 5. 22 | 10. 50 | | | | | | | |
| 8. 13 | 9. 50 | | | | | | | |
| 12. 42 | 10. 0 | | | | | | | |
| 13. 7 | 9. 30 | | | | | | | |
| 15. 14 | 10. 40 | | | | | | | |
| 17. 41 | 9. 35 | | | | | | | |
| 18. 0 | 10. 20 | | | | | | | |
| 18. 56 | 9. 40 | | | | | | | |
| 19. 12 | 10. 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. |
|---|---|---|---|---|---|---|---|---|
| Dec. 30 | | | | | | | | |
| h m | ° ′ ″ | h m | | h m | | h m | ° | ° |
| 19. 22 | 21. 9. 40 | | | | | | | |
| 20. 21 | 10. 40 | | | | | | | |
| 22. 28 | 12. 20 (†) | | | | | | | |
| | | Dec. 31 | | Dec. 31 | | Dec. 31 | | |
| | | 0. 0 | ·1001 | 0. 0 | ·02409 | 1. 0 | 44 ·0 | 45 ·0 |
| | | 1. 53 | ·1000 | 1. 30 | ·02370 | 3. 0 | 46 ·0 | 46 ·0 |
| | | 3. 23 | ·0989 | 5. 42 | ·02090 | 9. 0 | 46 ·7 | 46 ·0 |
| | | 4. 4 | ·0995 | 8. 47 | ·01994 | 21. 0 | 46 ·6 | 47 ·2 |
| | | 5. 17 | ·1000 | 10. 44 | ·02028 | | | |
| | | 5. 45 | ·0997 | 3. 28 | ·02003 | | | |

| Greenwich Mean Solar Time. | Western Declination. | Greenwich Mean Solar Time. | Horizontal Force in parts of the whole H. F. uncorrected for Temperature. | Greenwich Mean Solar 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. 31 h m | | Dec. 31 h m | | h m | ° | ° |
| | | 7. 11 | ·1009 | 19. 13: | ·02174 | | | |
| | | | *** | 23. 59 | ·02110 | | | |
| | | 8. 18 | ·0991 | | | | | |
| | | 9. 20 | ·0996 | | | | | |
| | | 9. 42 | ·0992 | | | | | |
| | | 10. 0 | ·0995 | | | | | |
| | | 10. 26 | ·0987 | | | | | |
| | | 10. 42 | ·0993 | | | | | |
| | | 13. 2 | ·0996 | | | | | |
| | | 16. 45 | ·1008 | | | | | |
| | | | *** | | | | | |
| | | 18. 32 | ·1009 | | | | | |
| | | 23. 59 | ·0994 | | | | | |

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 31. The Declination Magnet was under adjustment.

ROYAL OBSERVATORY, GREENWICH.

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# RESULTS

OF

# OBSERVATIONS

OF THE

# MAGNETIC DIP.

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1860.

During the year 1860, the observations of the Magnetic Dip were made with the instrument by Robinson used in preceding years, and described in the volume of *Greenwich Magnetical and Meteorological Observations* for 1847, and in preceding volumes. With this instrument are used four nine-inch needles, two of which, marked A and A 2, were made by Barrow, and two, marked A 1 and A 3, were made by Dent. In the tabular statement of the values of the Magnetic Dip these needles are called Barrow A and Barrow A 2, and Dent A 1 and Dent A 3.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, in the Year 1860.

| Day and Approximate Hour, 1860. | Needle. | Magnetic Dip. | Observer. | Day and Approximate Hour, 1860. | Needle. | Magnetic Dip. | Observer. |
|---|---|---|---|---|---|---|---|
| d h | | ° ′ | | d h | | ° ′ | |
| January 17. 1 | Dent A 1 | 68. 24 ·00 | T D | June 26. 21 | Dent A 3 | 68. 26 ·75 | T D |
| 18. 23 | ,, A 3 | 68. 26 ·25 | T D | 29. 1 | ,, A 1 | 68. 30 ·75 | T D |
| 26. 21 | Barrow A 2 | 68. 32 ·75 | T D | | | | |
| 30. 22 | ,, A | 68. 30 ·25 | T D | July 1. 21 | Barrow A 2 | 68. 36 ·00 | T D |
| | | | | 4. 22 | Dent A 3 | 68. 28 ·50 | T D |
| February 6. 21 | Dent A 1 | 68. 25 ·25 | T D | 9. 21 | ,, A 1 | 68. 31 ·25 | T D |
| 9. 21 | Barrow A 2 | 68. 35 ·75 | T D | 10. 21 | Barrow A 2 | 68. 36 ·00 | T D |
| 13. 22 | Dent A 3 | 68. 27 ·00 | T D | 12. 22 | Dent A 3 | 68. 29 ·50 | T D |
| 16. 1 | ,, A 1 | 68. 24 ·75 | T D | 18. 22 | ,, A 1 | 68. 31 ·25 | T D |
| 22. 1 | Barrow A | 68. 29 ·00 | T D | 19. 22 | Barrow A 2 | 68. 36 ·50 | T D |
| 28. 23 | ,, A 2 | 68. 35 ·50 | T D | 24. 22 | Dent A 3 | 68. 27 ·75 | T D |
| | | | | 26. 1 | ,, A 1 | 68. 30 ·50 | T D |
| March 0. 22 | Dent A 3 | 68. 30 ·00 | T D | 30. 22 | Barrow A 2 | 68. 37 ·75 | T D |
| 6. 1 | ,, A 1 | 68. 28 ·00 | T D | 31. 21 | Dent A 3 | 68. 27 ·25 | T D |
| 8. 1 | Barrow A | 68. 18 ·75 | T D | | | | |
| 13. 21 | Dent A 1 | 68. 26 ·75 | T D | August 2. 21 | Dent A 1 | 68. 30 ·50 | T D |
| 15. 0 | Barrow A 2 | 68. 34 ·75 | T D | 6. 22 | Barrow A 2 | 68. 36 ·00 | T D |
| 17. 1 | Dent A 3 | 68. 27 ·75 | T D | 9. 21 | Dent A 3 | 68. 29 ·00 | T D |
| 19. 22 | ,, A 1 | 68. 30 ·50 | T D | 13. 21 | ,, A 1 | 68. 26 ·50 | T D |
| 22. 22 | Barrow A 2 | 68. 37 ·00 | T D | 14. 22 | Barrow A 2 | 68. 37 ·25 | T D |
| 26. 23 | Dent A 1 | 68. 30 ·00 | T D | 16. 22 | Dent A 3 | 68. 29 ·75 | T D |
| 28. 23 | Barrow A 2 | 68. 35 ·00 | T D | 19. 23 | ,, A 1 | 68. 31 ·00 | H |
| | | | | 28. 21 | ,, ,, | 68. 25 ·50 | T D |
| April 2. 23 | Dent A 3 | 68. 27 ·50 | T D | 30. 22 | Barrow A 2 | 68. 38 ·75 | T D |
| 5. 1 | Barrow A 2 | 68. 35 ·75 | T D | | | | |
| 10. 22 | Dent A 1 | 68. 31 ·00 | T D | September 3. 21 | Dent A 3 | 68. 29 ·00 | T D |
| 12. 23 | ,, A 3 | 68. 28 ·00 | T D | 6. 21 | ,, A 1 | 68. 33 ·75 | T D |
| 16. 22 | ,, A 1 | 68. 29 ·25 | T D | 11. 21 | Barrow A 2 | 68. 36 ·00 | T D |
| 18. 23 | Barrow A 2 | 68. 32 ·25 | T D | 19. 21 | Dent A 3 | 68. 29 ·25 | T D |
| 24. 23 | Dent A 1 | 68. 18 ·75 | T D | 25. 23 | ,, A 1 | 68. 25 ·75 | T D |
| 26. 22 | Barrow A 2 | 68. 32 ·50 | T D | | | | |
| 30. 22 | Dent A 3 | 68. 28 ·00 | T D | October 2. 23 | Barrow A 2 | 68. 35 ·25 | T D |
| | | | | 9. 1 | Dent A 3 | 68. 30 ·25 | T D |
| May 3. 0 | Dent A 1 | 68. 25 ·50 | T D | 11. 21 | ,, A 1 | 68. 25 ·00 | T D |
| 7. 23 | Barrow A 2 | 68. 32 ·75 | T D | 16. 22 | Barrow A 2 | 68. 37 ·00 | T D |
| 23. 22 | Dent A 1 | 68. 26 ·00 | T D | 17. 21 | Dent A 3 | 68. 30 ·50 | T D |
| 25. 23 | Barrow A 2 | 68. 36 ·25 | T D | 24. 1 | ,, A 1 | 68. 24 ·25 | T D |
| 29. 23 | Dent A 3 | 68. 27 ·50 | T D | 26. 0 | Barrow A 2 | 68. 34 ·75 | T D |
| 31. 23 | ,, A 1 | 68. 27 ·75 | T D | 30. 22 | Dent A 3 | 68. 31 ·00 | T D |
| | | | | | | | |
| June 4. 22 | Barrow A 2 | 68. 35 ·00 | T D | November 0. 22 | Dent A 1 | 68. 24 ·75 | T D |
| 8. 0 | Dent A 3 | 68. 28 ·25 | T D | 5. 22 | Barrow A 2 | 68. 36 ·00 | H |
| 11. 22 | ,, A 1 | 68. 29 ·75 | T D | 14. 22 | Dent A 3 | 68. 30 ·50 | H |
| 13. 22 | Barrow A 2 | 68. 36 ·00 | T D | 23. 1 | ,, A 1 | 68. 20 ·00 | T D |
| 14. 23 | Dent A 3 | 68. 28 ·50 | T D | 30. 22 | Barrow A 2 | 68. 25 ·50 | J G |
| 20. 21 | ,, A 1 | 68. 29 ·25 | T D | | | | |
| 25. 21 | Barrow A 2 | 68. 36 ·00 | T D | December 17. 21 | Dent A 3 | 68. 26 ·00 | T D |
| | | | | 20. 22 | ,, A 1 | 68. 17 ·50 | T D |

October 26. A damp day.

November 23. A very damp day.

The initials J G, T D, and H are those of Mr. Glaisher, Mr. Downs, and Mr. Howe respectively.

MONTHLY MEANS of MAGNETIC DIPS, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1860.

| Month, 1860. | Barrow, A. | Number of Observations. | Dent, A 1. | Number of Observations. | Barrow, A 2. | Number of Observations. | Dent, A 3. | Number of Observations. |
|---|---|---|---|---|---|---|---|---|
| January | 68° 30′·25 | 1 | 68° 24′·00 | 1 | 68° 32′·75 | 1 | 68° 26′·25 | 1 |
| February | 68. 29 ·00 | 1 | 68. 25 ·00 | 2 | 68. 35 ·63 | 2 | 68. 27 ·00 | 1 |
| March | 68. 18 ·75 | 1 | 68. 28 ·81 | 4 | 68. 35 ·58 | 3 | 68. 28 ·88 | 2 |
| April | .... | .. | 68. 26 ·33 | 3 | 68. 33 ·50 | 3 | 68. 27 ·75 | 3 |
| May | .... | .. | 68. 26 ·42 | 3 | 68. 34 ·50 | 2 | 68. 27 ·50 | 1 |
| June | .... | .. | 68. 29 ·92 | 3 | 68. 35 ·67 | 3 | 68. 27 ·83 | 3 |
| July | .... | .. | 68. 31 ·00 | 3 | 68. 36 ·56 | 4 | 68. 28 ·25 | 4 |
| August | .... | .. | 68. 28 ·38 | 4 | 68. 37 ·33 | 3 | 68. 29 ·38 | 2 |
| September | .... | .. | 68. 29 ·75 | 2 | 68. 36 ·00 | 1 | 68. 29 ·13 | 2 |
| October | .... | .. | 68. 24 ·63 | 2 | 68. 35 ·67 | 3 | 68. 30 ·58 | 3 |
| November | .... | .. | 68. 22 ·38 | 2 | 68. 30 ·75 | 2 | 68. 30 ·50 | 1 |
| December | .... | .. | 68. 17 ·50 | 1 | .... | .. | 68. 26 ·00 | 1 |
| Mean | .... | .. | 68. 27 ·16 | 30 | 68. 35 ·19 | 27 | 68. 28 ·48 | 24 |

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 $3^h$.

ROYAL OBSERVATORY, GREENWICH.

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# OBSERVATIONS

OF

# DEFLEXION OF A MAGNET

FOR

# ABSOLUTE MEASURE

OF

# HORIZONTAL FORCE.

---

1860.

The Apparatus used for observation of the Deflexion of a Magnet is described, and the method of computing the results is explained, in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlv, and in the preceding Volume for 1846. The Magnet marked $\frac{D}{XX}$ (the same which was used from September 1845), has been employed to produce the deflexion of another magnet, marked $\frac{H}{23}$ (of nearly the same dimensions): and the vibrations then observed are those of $\frac{D}{XX}$.

The weight of $\frac{D}{XX}$ is 507·302 grains, or 32·873 grammes.

The length of $\frac{D}{XX}$ is 0·3025 foot, or 92·198 millimètres.

The diameter of $\frac{D}{XX}$ is 0·025 foot, or 7·620 millimètres.

Its moment of inertia, therefore, (using the English grain and foot as the units of weight and measure,) is 3·88826.

The weight of the embracing frame and mirror is 108·242 grains, or 7·014 grammes; and, on examining the distribution of this weight, it was thought probable that its moment of inertia would be nearly the same as if it were uniformly distributed over the mirror, whose horizontal length is 0·0658 foot; its moment of inertia is therefore 0·03905.

The weight of the suspending stalk with a pulley is 39·377 grains, or 2·552 grammes, and its moment of inertia (estimated as probably the same as if it had been condensed on the pulley whose diameter is 0·0233 foot), is 0·00135.

The following is the explanation of the notation used:—

$m$ = the magnetic moment of the deflecting magnet $\frac{D}{XX}$.

$X$ = the absolute measure of horizontal magnetic force.

$K$ = the moment of inertia of $\frac{D}{XX}$ with its stirrup and pulley as suspended for vibration = 3·92866, using the English foot and grain as the unit of length and weight.

$\pi$ = the circumference of circle to diameter 1.

$T$ = the time of vibration in seconds of mean solar time.

Then when the natural sine of the observed deflexion (the Deflecting Magnet being in the Lateral Position) is expressed by the formula

$$\frac{a}{(\text{distance})^3} + \frac{b}{(\text{distance})^5}$$

we have for the formulæ of computation

$$\frac{m}{X} = \tfrac{1}{2} a$$

$$mX = \frac{\pi^2 K}{T^2}$$

from which $m$ and $X$ are found.

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 $\alpha$ times the millimètre, and a grain be equal to $\beta$ times the milligramme, then it is plain that, for the reduction of $\frac{m}{X}$ and $mX$ to French measure, these must be multiplied by $\alpha^3$ 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 15·432349 grains, $\log.\sqrt{\frac{\beta}{\alpha}}$ will be found to be = 9·6637805, and the factor for reducing the English values of $X$ to French values will be 0·46108, or $\frac{1}{2\cdot1689}$. The values of $X$ in French measure thus derived from those in English measure are given in the proper table.

The natural sine of the observed deflexion, when the Deflecting Magnet is in the Axial Position, is treated in the same manner as the former, for expressing it by the formula

$$\frac{a^1}{(\text{distance})^3} + \frac{b^1}{(\text{distance})^5}$$

but no further use is made of these deflexions.

For the determination of the Absolute Measure of Horizontal Force on those days on which vibrations, unaccompanied by Deflexions, were observed, it is assumed that the quantity $m$ (which is peculiar to the magnet) changes at a uniform rate from one observation of deflexion to the next; and the comparison of its interpolated value with the value of $mX$ given by the vibration determines the value of $X$.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE.

| Month and Day, 1860. | Position of Deflecting Magnet with regard to Suspended Magnet. | Distances of Centers of Magnets. | Temperature. | Observed Deflexion. | Mean of the Times of Vibration of Deflecting Magnet. | Number of Vibrations. | Temperature. | Observer. |
|---|---|---|---|---|---|---|---|---|
| | | ft. in. | ° | ° ′ ″ | s | | ° | |
| January 16 | Lateral ..... | 1. 0 | 43·1 | 8. 33. 0·57 | 5·956 | 100 | 40·4 | N |
| | Axial..... | | | 4. 29. 20·35 | | | | |
| | Lateral ..... | 1. 6 | | 2. 29. 52·03 | | | | |
| | Axial..... | | | 1. 18. 0·59 | 5·957 | 100 | 45·0 | |
| February 7 | Lateral ..... | 1. 0 | 39·3 | 8. 30. 47·96 | 5·937 | 100 | 35·5 | N |
| | Axial..... | | | 4. 31. 23·66 | | | | |
| | Lateral ..... | 1. 6 | | 2. 26. 21·84 | | | | |
| | Axial..... | | | 1. 13. 49·97 | 5·961 | 100 | 40·3 | |
| March 19 | Lateral ..... | 1. 0 | 51·2 | 8. 26. 43·89 | 5·934 | 100 | 48·0 | N |
| | Axial..... | | | 4. 29. 34·91 | | | | |
| | Lateral ..... | 1. 6 | | 2. 27. 51·13 | | | | |
| | Axial..... | | | 1. 17. 58·05 | 5·934 | 100 | 51·5 | |
| April 4 | Lateral ..... | 1. 0 | 52·7 | 8. 31. 17·89 | 5·946 | 100 | 50·8 | N |
| | Axial..... | | | 4. 30. 35·22 | | | | |
| | Lateral ..... | 1. 6 | | 2. 29. 29·72 | | | | |
| | Axial..... | | | 1. 14. 38·41 | 5·934 | 100 | 55·5 | |
| June 11 | Lateral ..... | 1. 0 | 65·1 | 8. 26. 34·50 | 5·922 | 100 | 62·3 | N |
| | Axial..... | | | 4. 28. 17·56 | | | | |
| | Lateral ..... | 1. 6 | | 2. 26. 16·20 | | | | |
| | Axial..... | | | 1. 16. 47·09 | 5·924 | 100 | 63·5 | |
| July 26 | Lateral ..... | 1. 0 | 62·1 | 8. 28. 41·90 | 5·937 | 100 | 60·8 | N |
| | Axial..... | | | 4. 28. 40·38 | | | | |
| | Lateral ..... | 1. 6 | | 2. 28. 27·37 | | | | |
| | Axial..... | | | 1. 16. 4·14 | 5·938 | 100 | 65·0 | |
| August 21 | Lateral ..... | 1. 0 | 67·3 | 8. 25. 27·56 | 5·949 | 100 | 63·7 | N |
| | Axial..... | | | 4. 27. 1·76 | | | | |
| | Lateral ..... | 1. 6 | | 2. 27. 56·18 | | | | |
| | Axial..... | | | 1. 15. 9·78 | 5·944 | 100 | 65·0 | |
| September 3 | Lateral ..... | 1. 0 | 64·3 | 8. 24. 31·65 | 5·963 | 100 | 64·0 | N |
| | Axial..... | | | 4. 26. 53·99 | | | | |
| | Lateral ..... | 1. 6 | | 2. 26. 41·19 | | | | |
| | Axial..... | | | 1. 15. 14·98 | 5·961 | 100 | 63·0 | |
| October 22 | Lateral ..... | 1. 0 | 59·8 | 8. 30. 37·15 | 5·938 | 100 | 53·3 | N |
| | Axial..... | | | 4. 29. 12·19 | | | | |
| | Lateral ..... | 1. 6 | | 2. 29. 6·07 | | | | |
| | Axial..... | | | 1. 17. 18·80 | 5·934 | 100 | 58·8 | |
| November 19 | Lateral ..... | 1. 0 | 42·2 | 8. 30. 47·09 | 5·934 | 100 | 39·7 | N |
| | Axial..... | | | 4. 29. 32·59 | | | | |
| | Lateral ..... | 1. 6 | | 2. 29. 35·67 | | | | |
| | Axial..... | | | 1. 18. 0·32 | 5·935 | 100 | 42·7 | |
| December 18 | Lateral ..... | 1. 0 | 33·5 | 8. 32. 15·14 | 5·940 | 100 | 32·8 | H C |
| | Axial..... | | | 4. 31. 46·84 | | | | |
| | Lateral ..... | 1. 6 | | 2. 31. 15·49 | | | | |
| | Axial..... | | | 1. 13. 34·01 | 5·940 | 100 | 34·5 | |

The lengths of 1 foot and 1 foot 6 inches answer to 304·8 and 457·2 millimètres respectively.
The initials H C and N are those of Mr. Henry Criswick and Mr. W. Nash.

## COMPUTATION of the VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE.

| Month and Day, 1860. | In English Measure. Apparent Value of $a$. | Apparent Value of $b$. | Apparent Value of $a^1$. | Apparent Value of $b^1$. | Adopted Value of $a$, assuming the Value of $b$ ($+0\cdot00293$) as applicable to all. | Log. $\frac{1}{2}a$ = 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. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| January 16 | +0·14581 | +0·00287 | 0·07522 | 0·00305 | +0·14831 | 8·86260 | 5·957 | 0·03848 | 3·872 | 0·2822 | 1·785 |
| February 7 | +0·14897 | −0·00093 | 0·06737 | 0·01149 | +0·14816 | 8·86214 | 5·949 | 0·03965 | 3·879 | 0·2824 | 1·789 |
| March 19 | +0·14370 | +0·00317 | 0·07510 | 0·00324 | +0·14647 | 8·85707 | 5·934 | 0·04185 | 3·912 | 0·2815 | 1·804 |
| April 4 | +0·14555 | +0·00263 | 0·06898 | 0·00965 | +0·14784 | 8·86119 | 5·940 | 0·04097 | 3·889 | 0·2825 | 1·793 |
| June 11 | +0·14094 | +0·00588 | 0·07331 | 0·00465 | +0·14608 | 8·85588 | 5·923 | 0·04346 | 3·925 | 0·2816 | 1·810 |
| July 26 | +0·14431 | +0·00313 | 0·07195 | 0·00612 | +0·14704 | 8·85880 | 5·938 | 0·04133 | 3·902 | 0·2819 | 1·799 |
| August 21 | +0·14414 | +0·00236 | 0·07074 | 0·00686 | +0·14620 | 8·85626 | 5·947 | 0·04002 | 3·907 | 0·2806 | 1·802 |
| September 3 | +0·14214 | +0·00410 | 0·07092 | 0·00664 | +0·14572 | 8·85481 | 5·962 | 0·03776 | 3·904 | 0·2794 | 1·800 |
| October 22 | +0·14501 | +0·00298 | 0·07403 | 0·00420 | +0·14761 | 8·86051 | 5·936 | 0·04155 | 3·895 | 0·2825 | 1·796 |
| November 19 | +0·14584 | +0·00220 | 0·07517 | 0·00316 | +0·14776 | 8·86095 | 5·935 | 0·04177 | 3·894 | 0·2827 | 1·796 |
| December 18 | +0·14844 | +0·00002 | 0·06681 | 0·01217 | +0·14818 | 8·86221 | 5·940 | 0·04097 | 3·885 | 0·2829 | 1·791 |
| | Mean - | +0·00293 | | | | | | | | | |

In determining the mean value of $b$ that for February 7 has been inadvertently omitted.

## VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE, from OBSERVATIONS of VIBRATION of the DEFLECTING MAGNET $\frac{D}{XX'}$, unaccompanied by DEFLEXION.

| Month and Day, 1860. | Adopted Time of Vibration. | Temperature. | Log. $m\,X$ in English Measure. | Value of $m$ interpolated from the Deflexion Observations. In English Measure. | Inferred Value of $X$ in English Measure. | Value of $X$ in French Measure. | Observer. |
|---|---|---|---|---|---|---|---|
| January 12 | 5·939 | 43°·5 | 0·04111 | 0·2820 | 3·898 | 1·797 | H |
| February 1 | 5·943 | 33·2 | 0·04053 | 0·2823 | 3·889 | 1·793 | H |
| 22 | 5·953 | 37·3 | 0·03907 | 0·2821 | 3·879 | 1·788 | H |
| March 12 | 5·939 | 40·3 | 0·04111 | 0·2816 | 3·904 | 1·800 | H |
| 30 | 5·941 | 49·0 | 0·04082 | 0·2822 | 3·893 | 1·795 | H |
| April 16 | 5·934 | 58·0 | 0·04185 | 0·2824 | 3·899 | 1·798 | H |
| May 4 | 5·941 | 62·2 | 0·04082 | 0·2821 | 3·894 | 1·796 | H |
| June 16 | 5·936 | 63·5 | 0·04155 | 0·2816 | 3·908 | 1·802 | H |
| 30 | 5·928 | 56·3 | 0·04272 | 0·2817 | 3·917 | 1·806 | H |
| July 5 | 5·928 | 69·5 | 0·04272 | 0·2818 | 3·916 | 1·805 | H |
| September 21 | 5·954 | 62·3 | 0·03892 | 0·2806 | 3·898 | 1·797 | H |
| 26 | 5·969 | 56·5 | 0·03674 | 0·2809 | 3·874 | 1·786 | H |
| October 2 | 5·954 | 58·8 | 0·03892 | 0·2812 | 3·890 | 1·793 | H |

The number of vibrations employed in each determination was 100.

The initial H is that of Mr. Howe.

It will be remarked that, as no correction has been applied for temperature, the result is affected with a slight error, unless the temperature in these vibration-observations coincide with the temperature interpolated between the deflexion-observations.

ROYAL OBSERVATORY, GREENWICH.

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# RESULTS

OF

# METEOROLOGICAL OBSERVATIONS.

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1860.

The day in the first column of the following tables is to be understood, generally, as defined in civil reckoning.

The barometer is described in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlviii, and in the corresponding parts of several preceding volumes. 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.

The positions of all the thermometers are described in the Introduction, 1847, page lxix.

The thermometers, used for determining the highest temperature of the air, and the highest state of the wet-bulb thermometer, are mercurial thermometers invented by Messrs. Negretti and Zambra, and described in the *Results of Meteorological Observations*, 1851, Introduction, page xcvi; and those for the lowest are of Rutherford's construction, described in the Introduction, 1847, page lxvii: they are self-registering. The readings given are corrected for index-errors.

The dry-bulb and wet-bulb thermometers are described in the Introduction, 1847, page xlix; their scales have been verified from time to time, in the manner there described.

A mean daily reading of the dry thermometer is inferred from the mean of observations taken at the same hours as the observations of the barometer, corrected by a quantity given in the *Phil. Trans.*, 1848, part I. Another mean daily reading is inferred from the mean of the maximum and minimum thermometers, also corrected by a small quantity given in the same paper. The mean daily value given in the tables is found by combining these two corrected means giving them weights proportional to the number of observations from which they are respectively derived.

The dew-point has been inferred exclusively from simultaneous observations of the dry-bulb and wet-bulb thermometers. In order to find the difference between the dry-bulb reading and the dew-point, the difference between the dry-bulb and the wet-bulb readings has been multiplied by a factor taken from the following table (deduced by Mr. Glaisher from the comparison of all the simultaneous readings of the dry-bulb, wet-bulb, and dew-point thermometers, from the year 1840 to the end of the year 1854).

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 the Dry-bulb Thermometer. | Factor. | Reading of the Dry-bulb Thermometer. | Factor. | Reading of the Dry-bulb Thermometer. | Factor. | Reading of the Dry-bulb Thermometer. | Factor. | Reading of the Dry-bulb Thermometer. | Factor. | Reading of the Dry-bulb Thermometer. | Factor. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ° | | ° | | ° | | ° | | ° | | ° | |
| 20 | 8·1 | 32 | 3·3 | 44 | 2·2 | 56 | 2·0 | 68 | 1·8 | 80 | 1·7 |
| 21 | 7·9 | 33 | 3·0 | 45 | 2·2 | 57 | 1·9 | 69 | 1·8 | 81 | 1·7 |
| 22 | 7·6 | 34 | 2·8 | 46 | 2·1 | 58 | 1·9 | 70 | 1·8 | 82 | 1·7 |
| 23 | 7·3 | 35 | 2·6 | 47 | 2·1 | 59 | 1·9 | 71 | 1·8 | 83 | 1·7 |
| 24 | 6·9 | 36 | 2·5 | 48 | 2·1 | 60 | 1·9 | 72 | 1·8 | 84 | 1·7 |
| 25 | 6·5 | 37 | 2·4 | 49 | 2·1 | 61 | 1·9 | 73 | 1·8 | 85 | 1·7 |
| 26 | 6·1 | 38 | 2·4 | 50 | 2·1 | 62 | 1·9 | 74 | 1·7 | 86 | 1·7 |
| 27 | 5·6 | 39 | 2·3 | 51 | 2·0 | 63 | 1·9 | 75 | 1·7 | 87 | 1·6 |
| 28 | 5·1 | 40 | 2·3 | 52 | 2·0 | 64 | 1·9 | 76 | 1·7 | 88 | 1·6 |
| 29 | 4·6 | 41 | 2·3 | 53 | 2·0 | 65 | 1·8 | 77 | 1·7 | 89 | 1·6 |
| 30 | 4·2 | 42 | 2·2 | 54 | 2·0 | 66 | 1·8 | 78 | 1·7 | 90 | 1·6 |
| 31 | 3·7 | 43 | 2·2 | 55 | 2·0 | 67 | 1·8 | 79 | 1·7 | | |

The dew-point being thus found for each individual observation, the mean is taken for each day (as defined from midnight to midnight), and this mean is corrected by application of the elements in the *Phil. Trans.*, 1848, part I.

The thermometers exhibiting the lowest temperature on the grass, and th highest and lowest temperatures of the water of the Thames, are described in the Introduction, 1847, pages lxix and lxxi. They are occasionally verified. They are read at $21^h$ ($9^h$ A.M.) every day; their readings are placed opposite to the day preceding the civil day on which the scales are actually read. The thermometer for the highest temperature in the sunshine is a mercurial thermometer with blackened bulb, of Negretti and Zambra's construction: it is read at $9^h$ P.M. every evening.

The thermometer for the minimum temperature on the grass was out of order on January 16, 26; March 13, 19; April 2, 30; May 10; July 10; October 12, 21; December 29.

The thermometer for the maximum temperature in the water of the Thames was out of order from January 22 to 31; February 5 to 13; March 23 to 26; April 4 to 6; on July 21; from July 23 to 28; December 23 to 29. That for the minimum temperature was out of order from January 15 to 31; February 5 to 13; March 23 to 26; April 4 to 6; on April 20, 29, 30; July 21, 23, 24; from December 23 to 29.

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 forty-three years, is found by comparison with a table of results deduced by Mr. Glaisher from forty-three years' observations, made at the Royal Observatory, ending 1856.

Osler's Anemometer is described in the Introduction, 1847, page lxxi. Little explanation of the results deduced from it appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Whewell's Anemometer is described in the Introduction, 1847, page lxxii. The amount of movement of air here exhibited is to be understood as from $22^h$ to $22^h$ ($10^h$ A.M. to $10^h$ A.M.), the numbers being placed opposite to the day preceding the civil day on which the instrument is read.

Robinson's Anemometer is described in the Introduction 1859, page cxli. The instrument is read off every day at $22^h$ ($10^h$ A.M.)

The register of rain is read at $9^h$ P.M. from Crosley's Rain-gauge, described in page lxxv of the Introduction, 1847. If, however, there appears to be any doubt as to the correctness of the results, reference is made to the Rain-gauge No. 2, described in the same place.

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 Electrical Apparatus is described in page lxxvii of the Introduction, 1847. The following is the explanation of the notation employed, 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* | N denotes *negative* | s denotes *strong* | v denotes *variable* |
| m .. *moderate* | P .. *positive* | sp .. *sparks* | 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* | hl denotes | *hail* | shs-r denotes | *showers of rain* | h-sqs denotes | *heavy squalls* |
| ci .. | *cirrus* | so-ha .. | *solar halo* | c-r .. | *continued rain* | fr-h-sqs .. | *frequent heavy squalls* |
| ci-cu .. | *cirro-cumulus* | l .. | *lightning* | c-h-r .. | *continued heavy rain* | sc .. | *scud* |
| ci-s .. | *cirro-stratus* | li-cl .. | *light clouds* | m-r .. | *misty rain* | li-sc .. | *light scud* |
| cu .. | *cumulus* | lu-co .. | *lunar corona* | fr-m-r .. | *frequent misty rain* | sl .. | *sleet* |
| cu-s .. | *cumulo-stratus* | lu-ha .. | *lunar halo* | sl-r .. | *slight rain* | sn .. | *snow* |
| d .. | *dew* | m .. | *meteor* | h-shs .. | *heavy showers* | sl-sn .. | *slight snow* |
| h-d .. | *heavy dew* | ms .. | *meteors* | fr-shs .. | *frequent showers* | s .. | *stratus* |
| f .. | *fog* | n .. | *nimbus* | fr-h-shs . | *frequent heavy showers* | t .. | *thunder* |
| th-f .. | *thick-fog* | r .. | *rain* | li-shs .. | *light showers* | t-s .. | *thunder storm* |
| fr .. | *frost* | th-r .. | *thin rain* | oc-shs .. | *occasional showers* | v .. | *variable* |
| gt-glm | *great gloom* | oc-r .. | *occasional rain* | sq .. | *squall* | w .. | *wind* |
| h-fr .. | *hoar frost* | fr-r .. | *frozen rain* | sqs .. | *squalls* | st-w .. | *strong wind* |
| h .. | *haze* | h-r .. | *heavy rain* | fr-sqs .. | *frequent squalls* | | |

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

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Wheewell's Amount of Horizontal Movement of the Air on each Day. | Robinson's Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Jan. 1 | First Qr. | 29·491 | 55·0 | 50·0 | 52·2 | 48·1 | 56·0 | 48·0 | 41·5 | 41·1 | 4·1 | 4·6 | 2·6 | +15·7 | SW | SW | 12·0 | 1·0 | 4·0 | 255 | .. | 0·05 |
| 2 | .. | 29·642 | 52·0 | 44·4 | 47·7 | 42·1 | 75·0 | 39·8 | 45·0 | 44·5 | 5·6 | 9·0 | 1·7 | +11·3 | SW | SW | 7·0 | 0·0 | 2·7 | 190 | .. | 0·12 |
| 3 | .. | 29·006 | 55·5 | 43·9 | 49·8 | 45·2 | 58·2 | 43·0 | 46·5 | 46·0 | 4·6 | 8·6 | 2·9 | +13·4 | S | SW | 12·0 | 0·0 | 3·6 | 245 | .. | 0·06 |
| 4 | .. | 28·802 | 49·2 | 38·9 | 43·0 | 37·4 | 67·0 | 37·0 | 48·0 | 47·0 | 5·6 | 9·7 | 4·2 | + 6·7 | SW | SW | 8·0 | 0·0 | 2·0 | 180 | .. | 0·02 |
| 5 | .. | 28·675 | 43·0 | 36·5 | 39·7 | 36·3 | 46·0 | 30·7 | 46·0 | 45·0 | 3·4 | 5·3 | 0·9 | + 3·6 | SW | SW | 3·0 | 0·0 | 1·0 | 80 | .. | 0·06 |
| 6 | Greatest Declination N. | 29·373 | 41·5 | 34·5 | 37·5 | 32·9 | 47·2 | 32·0 | 45·0 | 44·8 | 4·6 | 6·4 | 1·9 | + 1·5 | N | N | 4·0 | 0·0 | 1·0 | .. | 394 | 0·05 |
| 7 | .. | 30·067 | 41·0 | 29·5 | 34·8 | 30·4 | 51·6 | 23·0 | 44·5 | 43·8 | 4·4 | 7·4 | 2·7 | − 1·0 | NW; W | W | 2·5 | 0·0 | 0·4 | .. | 138 | 0·00 |
| 8 | Full | 30·194 | 46·0 | 33·0 | 40·4 | 37·1 | 48·0 | 26·2 | 42·8 | 41·0 | 3·3 | 6·7 | 2·7 | + 4·9 | SW | SW | 2·5 | 0·0 | 0·5 | .. | 206 | 0·00 |
| 9 | .. | 30·067 | 39·0 | 30·3 | 34·9 | 32·2 | 44·0 | 23·0 | 41·5 | 41·0 | 2·7 | 4·8 | 2·6 | − 0·5 | SW | S | 0·0 | 0·0 | 0·0 | .. | 143 | 0·00 |
| 10 | Perigee | 30·084 | 37·9 | 30·7 | 34·4 | 33·4 | 42·0 | 25·0 | 41·0 | 40·0 | 1·0 | 2·4 | 0·6 | − 1·3 | S | Calm | 0·0 | 0·0 | 0·0 | .. | 9 | 0·00 |
| 11 | .. | 29·983 | 43·5 | 32·3 | 38·0 | 35·9 | 60·0 | 29·7 | 40·5 | 39·2 | 2·1 | 7·0 | 1·1 | + 2·4 | Calm | E | 0·0 | 0·0 | 0·0 | .. | 67 | 0·00 |
| 12 | In Equator | 29·965 | 46·0 | 33·2 | 39·1 | 37·6 | 54·8 | 31·5 | 40·0 | 39·2 | 1·5 | 3·4 | 0·6 | + 3·5 | SSE | SE | 0·0 | 0·0 | 0·0 | .. | 28 | 0·00 |
| 13 | .. | 30·035 | 40·5 | 30·5 | 36·0 | 35·2 | 53·0 | 25·7 | 39·8 | 39·8 | 0·8 | 2·8 | 0·7 | + 0·4 | SE | SE | 0·0 | 0·0 | 0·0 | .. | 9 | 0·08 |
| 14 | .. | 29·896 | 46·0 | 37·5 | 42·5 | 41·8 | 48·0 | 32·0 | 40·0 | 39·8 | 0·7 | 2·9 | 0·0 | + 6·9 | SE | SW | 0·0 | 0·0 | 0·0 | .. | 59 | 0·00 |
| 15 | Last Qr. | 29·684 | 50·5 | 41·5 | 45·9 | 45·2 | 50·5 | 40·0 | 40·0 | .. | 0·7 | 1·5 | 0·0 | +10·4 | SW | SSW; W | 7·0 | 0·0 | 2·5 | .. | 408 | 0·11 |
| 16 | .. | 30·099 | 44·9 | 34·5 | 38·8 | 33·8 | 69·2 | .. | 41·0 | .. | 5·0 | 7·0 | 2·6 | + 3·3 | W | Calm | 5·0 | 0·0 | 0·8 | 95 | 180 | 0·07 |
| 17 | .. | 30·009 | 40·0 | 33·2 | 36·0 | 34·6 | 48·8 | 25·0 | 41·8 | .. | 1·4 | 3·0 | 0·3 | + 0·1 | SW | SW; SSE | 0·0 | 0·0 | 0·0 | 50 | 60 | 0·04 |
| 18 | .. | 29·631 | 39·4 | 27·9 | 32·9 | 30·9 | 39·4 | 18·3 | 41·8 | .. | 2·0 | 3·8 | 0·5 | − 3·4 | SE | ESE | 4·5 | 0·0 | 0·4 | 90 | 160 | 0·01 |
| 19 | Greatest Declination S. | 29·546 | 45·0 | 35·5 | 40·2 | 36·1 | 61·0 | 31·0 | 42·0 | .. | 4·1 | 7·0 | 2·6 | + 3·7 | SE; W | SW | 2·5 | 0·0 | 0·1 | 160 | 302 | 0·06 |
| 20 | .. | 29·194 | 47·0 | 35·5 | 42·8 | 42·5 | 47·0 | 31·0 | 41·0 | .. | 0·3 | 2·1 | 0·0 | + 6·0 | SSW | Var. | 6·0 | 0·0 | 2·0 | 150 | 304 | 0·35 |
| 21 | .. | 28·895 | 46·3 | 32·8 | 39·9 | 37·1 | 49·5 | 29·0 | 41·2 | .. | 2·8 | 5·8 | 1·5 | + 2·8 | SW; S | SW | 11·0 | 0·0 | 4·5 | 345 | 814 | 0·06 |
| 22 | .. | 29·148 | 45·0 | 36·5 | 40·2 | 31·1 | 58·8 | 34·2 | .. | .. | 9·1 | 12·3 | 6·2 | + 2·9 | W | SW | 17·0 | 1·0 | 6·5 | 235 | 361 | 0·00 |
| 23 | New | 29·190 | 45·0 | 33·5 | 40·0 | 34·4 | 69·5 | 29·0 | .. | .. | 5·6 | 10·6 | 3·3 | + 2·5 | SW | SW | 17·0 | 0·0 | 2·0 | 245 | 505 | 0·00 |
| 24 | .. | 28·583 | 47·0 | 35·0 | 39·7 | 35·1 | 68·0 | 31·0 | .. | .. | 4·6 | 8·4 | 2·5 | + 1·9 | SW | SW | 10·0 | 0·0 | 3·0 | 160 | 303 | 0·12 |
| 25 | Apogee | 29·189 | 42·5 | 34·3 | 37·9 | 32·5 | 50·0 | 29·7 | .. | .. | 5·4 | 7·9 | 2·9 | − 0·1 | NW | W | 4·0 | 0·0 | 1·0 | 110 | 272 | 0·05 |
| 26 | .. | 29·562 | 46·0 | 27·8 | 35·7 | 33·6 | 46·0 | .. | .. | .. | 2·1 | 5·5 | 0·4 | − 2·6 | NW; SW | SE; SW | 11·0 | 0·0 | 1·0 | 175 | 343 | 0·06 |
| 27 | In Equator | 29·235 | 49·0 | 37·0 | 42·7 | 38·7 | 67·0 | 36·0 | .. | .. | 4·0 | 6·5 | 2·9 | + 4·4 | SW | N | 6·0 | 0·0 | 2·5 | 140 | 341 | 0·10 |
| 28 | .. | 29·901 | 37·8 | 27·5 | 32·6 | 24·8 | 66·0 | 22·0 | .. | .. | 7·8 | 10·3 | 6·7 | − 5·5 | NW | SW | 4·0 | 0·0 | 0·5 | 150 | 314 | 0·00 |
| 29 | .. | 29·463 | 45·0 | 35·5 | 40·1 | 37·7 | 55·5 | 23·0 | .. | .. | 2·4 | 5·3 | 0·2 | + 2·2 | WSW | SW | 1·5 | 0·0 | 0·0 | 80 | 177 | 0·10 |
| 30 | .. | 28·907 | 45·7 | 32·0 | 39·8 | 39·2 | 66·7 | 27·0 | .. | .. | 0·6 | 5·5 | 0·0 | + 2·2 | SW; S | SW; N | 8·0 | 0·0 | 1·0 | 150 | 350 | 0·23 |
| 31 | First Qr. | 29·440 | 42·2 | 33·7 | 37·0 | 31·0 | 70·8 | 31·7 | .. | .. | 6·0 | 9·4 | 3·4 | − 0·3 | N | N | 7·0 | 0·0 | 1·5 | 55 | 187 | 0·01 |
| Means | .. | 29·515 | 45·0 | 34·8 | 39·7 | 36·2 | 56·0 | 30·5 | 21 days. 42·4 | 14 days. 42·3 | 3·5 | 6·2 | 2·0 | + 3·2 | ... | ... | .. | .. | .. | Sum 3340 | Sum 6434 | Sum. 1·81 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

| | | | | | |
|---|---|---|---|---|---|
| The first maximum in the month | was 29in·573 on the 1st; | the first minimum in the month | was 29in·385 on the 1st. |
| The second maximum | ,, was 29in·683 on the 2nd; | the second minimum | ,, was 28in·653 on the 5th. |
| The absolute maximum | ,, was 30in·208 on the 8th; | the third minimum | ,, was 29in·924 on the 11th. |
| The fourth maximum | ,, was 30in·052 on the 13th; | the fourth minimum | ,, was 29in·646 on the 15th. |
| The fifth maximum | ,, was 30in·125 on the 16th; | the fifth minimum | ,, was 29in·139 on the 20th. |
| The sixth maximum | ,, was 29in·304 on the 20th; | the sixth minimum | ,, was 28in·796 on the 21st. |
| The seventh maximum | ,, was 29in·280 on the 23rd; | the absolute minimum | ,, was 28in·560 on the 24th. |
| The eighth maximum | ,, was 29in·723 on the 26th; | the eighth minimum | ,, was 29in·075 on the 27th. |
| The ninth maximum | ,, was 29in·973 on the 28th; | the ninth minimum | ,, was 28in·782 on the 30th. |

The range in the month was 1in·648.

The mean for the month was 29in·515, being 0in·255 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·5 on the 3rd; the lowest was 27°·5 on the 28th; and the range in the month was 28°.

The mean ,, of all the highest daily readings was 45°·0, being 1°·9 *higher* than the average of the preceding 19 years.

The mean ,, of all the lowest daily readings was 34°·8, being 1°·2 *higher* than the average of the preceding 19 years.

The mean daily range was 10°·2, being 0°·7 *higher* than the average of the preceding 19 years.

The mean for the month was 39°·7, being 1°·5 *higher* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. | | CLOUDS AND WEATHER. | |
|---|---|---|---|---|
| | A.M. | P.M. | A.M. | P.M. |
| Jan. 1 | o | v | 10 | 10, cu.-s, ci.-s : 5, ci.-s, sc, sl.-r |
| 2 | o | o | 10, r : 3, ci-s,-ci | 3, ci : lu.-ha |
| 3 | o | o | 10, cu.-s, ci.-s, oc.-r | 10, cu.-s, ci.-s, oc.-r |
| 4 | o | s N, sps | o : 10, ci.-cu, cu.-s, ci.-s | 10 : hl, r : 9, ci.-cu, ci.-s |
| 5 | o | o | 10, cu.-s, ci.-s, oc.-r | 10, fr.-r |
| 6 | o | o | 10, sl.-r | 9, cu.-s, ci.-s, sl.-r : o |
| 7 | s | s : s, sps | o | 3, ci.-cu, ci : o : 10, lu.-ha |
| 8 | s | s | 10, ci.-s, h | 10, th.-r |
| 9 | s | s | 10, f | 10, cu.-s, ci.-s : ci.-cu, ci.-s |
| 10 | s | s : s, sps | 10 | 10 : cu.-s, ci.-s, th.-f |
| 11 | s | s | 5, ci.-cu, ci.-s : o | o : 10 |
| 12 | s | s | 10, cu.-s, ci.-s | 7, cu.-s, ci.-s : o, f |
| 13 | o | m | 10, r : 9, ci.-cu, ci | 9, ci.-cu, ci |
| 14 | o | o | 10, f | 10 |
| 15 | o | o : w | 10, fr.-r | 10, fr.-r |
| 16 | o | o : w | 5, ci.-cu, ci.-s | 5, ci.-cu, ci.-s : o |
| 17 | w | o | 10, r : o, h | 9 : 10 |
| 18 | o | o | 9, cu, cu.-s, ci.-s, h.-f : 10 | 10 : 10, r |
| 19 | o | o : w | 10, r | 10, ci.-cu, ci.-s |
| 20 | o | s N : s | 10, fr.-r | 10, fr.-r : 10 |
| 21 | m, N | o | 10, fr.-r, st.-w | 10, fr.-r, st.-w : o |
| 22 | o | o | o, st.-w | 5, st.-w : o |
| 23 | o | o | o | 10, cu.-s, ci.-s : r |
| 24 | o | s N, sps, gcur : o | o | 10, h.-shs.-r : o, l |
| 25 | o | o | o, l : 10 | 10, ci.-s : o, f |
| 26 | s | s | o, f | 10 : h.-r |
| 27 | o : w | o | 9, ci.-cu, ci.-s, oc.-r | 9, ci.-cu, ci.-s |
| 28 | o | o | 5, ci.-s, h : o, h | 10, ci.-cu, ci.-s : r |
| 29 | s | w | 5, ci.-s, ci | 10, ci.-cu, cu.-s, ci.-s : o, th.-f |
| 30 | w, N | s N, s P, sps, gcur | 10, r | 10, r : 7, ci.-su, ci.-s : 9, s, ci.-s, fr.-r |
| 31 | o | o | 10, s, ci.-s | 5, ci.-cu, ci.-s : sl.-sn |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 49°·7 on the 1st; and the lowest was 21°·0 on the 28th.
The mean ,, was 36°·2, being 0°·8 *higher* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was 0$^{in}$·214, being 0$^{in}$·009 *greater* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was 2$^{gr}$·5, being 0$^{gr}$·1 *greater* than the average of the preceding 19 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 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 548 grains, being 6 grains *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·9.

WIND.

The proportions were of N. 3, S. 13, W. 12, and E. 3. The greatest pressure in the month was 17$^{lbs}$·0 on the square foot on the 22nd and 23rd.

RAIN.

Fell on 21 days in the month, amounting to 1$^{in}$·8, as measured in the simple cylinder gauge partly sunk below the ground; being the same as the average fall of the preceding 45 years.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Whewell's. Amount of Horizontal Movement of the Air on each Day. | Robinson's. Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Feb. 1 | .. | 29·647 | 38·2 | 25·5 | 32·0 | 25·6 | 40·0 | 18·7 | 38·0 | 37·0 | 6·4 | 10·8 | 2·7 | — 5·2 | N | N | 3·0 | 0·0 | 0·3 | 120 | 327 | 0·00 |
| 2 | .. | 29·860 | 37·0 | 31·0 | 33·1 | 27·7 | 49·8 | 27·0 | 37·5 | 36·0 | 5·4 | 7·8 | 1·6 | — 3·9 | N | N | 8·0 | 1·0 | 3·0 | 155 | 374 | 0·00 |
| 3 | Greatest Declination N. | 30·156 | 40·2 | 30·5 | 34·8 | 29·1 | 50·0 | 26·5 | 37·5 | 36·0 | 5·7 | 8·9 | 4·3 | — 2·5 | NNE | N | 3·0 | 0·0 | 1·0 | 95 | 216 | 0·00 |
| 4 | .. | 30·113 | 44·0 | 29·2 | 37·3 | 35·8 | 58·0 | 23·0 | 37·5 | 36·0 | 1·5 | 3·9 | 1·0 | — 0·4 | SW | SW | 2·0 | 0·0 | 0·5 | 180 | 361 | 0·00 |
| 5 | .. | 29·809 | 49·0 | 41·7 | 44·9 | 38·5 | 68·3 | 32·0 | .. | .. | 6·4 | 8·2 | 4·2 | + 6·5 | W | SW | 7·0 | 0·0 | 3·0 | 215 | 435 | 0·00 |
| 6 | .. | 29·785 | 42·0 | 34·3 | 37·3 | 29·2 | 58·0 | 29·0 | .. | .. | 8·1 | 11·2 | 4·8 | — 1·7 | NW | NW | 12·0 | 0·0 | 3·5 | 180 | 398 | 0·34 |
| 7 | Full; Perigee | 29·985 | 44·0 | 29·5 | 36·6 | 32·8 | 47·0 | 23·0 | .. | .. | 3·8 | 6·5 | 2·9 | — 2·6 | W | SW | 6·0 | 0·0 | 1·2 | 225 | 542 | 0·01 |
| 8 | .. | 29·509 | 50·2 | 41·0 | 44·5 | 39·3 | 83·0 | 30·0 | .. | .. | 5·2 | 9·0 | 1·8 | + 5·3 | WSW | W | 10·0 | 0·0 | 3·0 | 190 | 313 | 0·00 |
| 9 | In Equator | 29·632 | 39·5 | 30·5 | 33·9 | 29·9 | 65·0 | 31·0 | .. | .. | 4·0 | 5·0 | 2·0 | — 5·1 | NE | N | 8·0 | 0·0 | 2·0 | 140 | 392 | 0·07 |
| 10 | .. | 29·944 | 35·0 | 25·0 | 28·5 | 20·1 | 63·0 | 9·5 | .. | .. | 8·4 | 11·2 | 5·4 | —10·2 | N | NW; SW | 3·0 | 0·0 | 0·3 | 40 | 30 | 0·00 |
| 11 | .. | 29·694 | 37·5 | 23·2 | 31·0 | 27·7 | 52·0 | 18·0 | .. | .. | 3·3 | 8·3 | 2·7 | — 7·5 | S | S; E | 7·0 | 0·0 | 0·3 | 60 | 107 | 0·03 |
| 12 | .. | 30·146 | 39·0 | 23·7 | 31·0 | 27·1 | 59·0 | 17·5 | .. | .. | 3·9 | 8·0 | 2·9 | — 7·3 | Calm | NE | 2·5 | 0·0 | 0·5 | 115 | 347 | 0·00 |
| 13 | Last Qr. | 30·391 | 35·0 | 24·5 | 27·7 | 21·7 | 61·0 | 20·6 | .. | .. | 6·0 | 7·1 | 3·6 | —10·5 | NE | NE | 11·0 | 0·0 | 2·0 | 160 | .. | 0·03 |
| 14 | .. | 30·415 | 37·0 | 23·5 | 29·4 | 22·2 | 69·0 | 18·3 | 32·0 | 30·8 | 7·2 | 11·8 | 6·9 | — 8·6 | NE | NE | 5·0 | 0·0 | 0·8 | 95 | .. | 0·00 |
| 15 | Greatest Declination S. | 30·292 | 42·6 | 26·0 | 33·5 | 30·2 | 65·0 | 19·5 | 35·0 | 33·0 | 3·3 | 5·3 | 1·0 | — 4·6 | NE | N | 2·5 | 0·0 | 0·3 | 125 | .. | 0·01 |
| 16 | .. | 29·991 | 42·7 | 32·5 | 35·6 | 31·9 | 72·0 | 30·0 | 36·0 | 34·5 | 3·7 | 6·8 | 0·3 | — 2·5 | N | NE | 8·0 | 0·0 | 3·0 | 185 | .. | 0·05 |
| 17 | .. | 30·268 | 42·8 | 32·5 | 37·4 | 32·3 | 85·0 | 26·0 | 35·5 | 34·0 | 5·1 | 8·6 | 1·9 | — 0·8 | NE | NE | 7·0 | 0·0 | 1·5 | 95 | .. | 0·01 |
| 18 | .. | 30·158 | 44·0 | 36·2 | 40·0 | 34·3 | 56·0 | 33·5 | 36·5 | 34·5 | 5·7 | 9·0 | 1·5 | + 1·7 | NE | N; NW | 4·0 | 0·0 | 0·3 | 125 | .. | 0·00 |
| 19 | .. | 29·488 | 48·0 | 34·3 | 39·1 | 33·0 | 74·0 | 30·0 | 37·5 | 35·3 | 6·1 | 10·1 | 2·5 | + 0·7 | W | W; NW | 17·0 | 0·0 | 3·0 | 220 | .. | 0·03 |
| 20 | .. | 29·342 | 38·0 | 28·5 | 33·4 | 27·2 | 55·0 | 22·0 | 37·5 | 35·5 | 6·2 | 9·8 | 3·8 | — 5·1 | NW | NW | 7·0 | 1·0 | 3·5 | 200 | .. | 0·00 |
| 21 | New; Apogee. | 29·612 | 40·1 | 33·7 | 36·1 | 29·8 | 55·0 | 29·0 | 37·5 | 35·0 | 6·3 | 9·2 | 3·2 | — 2·4 | NW | N | 4·0 | 0·0 | 0·8 | 75 | .. | 0·00 |
| 22 | .. | 29·876 | 44·2 | 32·0 | 35·5 | 31·9 | 68·0 | 27·7 | 37·5 | 35·0 | 3·6 | 5·0 | 1·6 | — 3·1 | NNE | E | 1·5 | 0·0 | 0·0 | 25 | 125 | 0·01 |
| 23 | In Equator | 30·076 | 41·5 | 25·5 | 31·8 | 26·9 | 73·0 | 19·8 | 38·0 | 36·5 | 4·9 | 7·9 | 3·3 | — 7·1 | E by S | S | 0·0 | 0·0 | 0·0 | 35 | 150 | 0·00 |
| 24 | .. | 30·057 | 40·5 | 24·3 | 31·5 | 25·9 | 76·0 | 18·0 | 38·5 | 36·5 | 5·6 | 8·2 | 3·6 | — 7·6 | S | S | .. | .. | .. | 25 | 120 | 0·00 |
| 25 | .. | 29·926 | 43·0 | 25·1 | 33·8 | 28·9 | 83·0 | 19·5 | 38·5 | 36·5 | 4·9 | 9·4 | 3·5 | — 5·7 | S | SW | .. | .. | .. | 140 | 318 | 0·00 |
| 26 | .. | 29·286 | 51·7 | 33·1 | 44·6 | 42·6 | 73·0 | 27·0 | 39·0 | 37·0 | 2·0 | 9·2 | 0·0 | + 4·9 | SW | SW; W | .. | .. | .. | 215 | 479 | 0·22 |
| 27 | .. | 29·229 | 45·8 | 33·7 | 39·7 | 32·2 | 79·0 | 25·5 | 39·4 | 37·4 | 7·5 | 12·4 | 5·3 | — 0·1 | WNW | WNW; W | 21·0 | 0·0 | 8·0 | .. | 597 | 0·22 |
| 28 | .. | 29·266 | 53·5 | 32·2 | 42·3 | 36·8 | 88·0 | 29·3 | 40·5 | 38·5 | 5·5 | 10·7 | 1·3 | + 2·3 | W; SW | W | 28·0 | 2·0 | 10·0 | .. | .. | 0·07 |
| 29 | First Qr. | 29·890 | 47·2 | 30·6 | 38·2 | 30·9 | 84·0 | 24·7 | 40·5 | 38·5 | 7·3 | 12·2 | 5·1 | — 1·8 | WNW | SW | 4·0 | 0·0 | 1·0 | .. | .. | 0·00 |
| Means | .. | 29·857 | 42·5 | 30·1 | 35·7 | 30·4 | 65·8 | 24·3 | 37·5 | 35·7 | 5·3 | 8·7 | 2·9 | — 2·9 | ... | ... | .. | .. | .. | Sum 3435 | Sum 5631 | Sum 1·10 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 30in·210 on the 3rd; the first minimum in the month was 29in·707 on the 6th.
The second maximum ,, was 30in·082 on the 7th; the second minimum ,, was 29in·442 on the 8th.
The third maximum ,, was 29in·968 on the 10th; the third minimum ,, was 29in·654 on the 11th.
The absolute maximum ,, was 30in·434 on the 14th; the fourth minimum ,, was 29in·960 on the 16th.
The fifth maximum ,, was 30in·279 on the 17th; the fifth minimum ,, was 29in·313 on the 20th.
The sixth maximum ,, was 30in·095 on the 23rd; the absolute minimum ,, was 29in·037 on the 27th.
The seventh maximum ,, was 29in·489 on the 27th; the seventh minimum ,, was 29in·133 on the 28th.
The range in the month was 1in·397.
The mean for the month was 29in·857, being 0in·074 *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 53°·5 on the 28th; the lowest was 23°·2 on the 11th; and the range in the month was 30°·3.
The mean ,, of all the highest daily readings was 42°·5, being 2°·2 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 30°·1, being 3°·3 *lower* than the average of the preceding 19 years.
The mean daily range was 12°·4, being 1°·1 *higher* than the average of the preceding 19 years.
The mean for the month was 35°·7, being 2°·8 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. | | CLOUDS AND WEATHER. | |
|---|---|---|---|---|
| | A.M. | P.M. | A.M. | P.M. |
| Feb. 1 | o | o : w | 10, f | o : 10 |
| 2 | o | o | 10, ci.-s, sn : 10 | 10 : 10, ci.-cu, ci.-s, sn |
| 3 | o | o | 10 | 10 : 5 : o |
| 4 | s | s | 10 | 7, ci.-cu, ci.-s : 10, s, ci.-s |
| 5 | v | v | 9 | 10, ci.-cu, ci.-s : 3, ci |
| 6 | o | o | 10, h.-r : 3, ci.-cu, ci, h | 9, ci.-cu, cu.-s, ci.-s : 10, oc.-sn : o |
| 7 | o | o : m | 5, ci.-s | 10, r : 10, oc.-r |
| 8 | o | o : w | 7, cu.-s, ci.-s, sc | 7, cu.-s, ci.-s, sc : 10, oc.-r : 8, ci-s |
| 9 | s N, s P | s N, s P : w | 10, sl, r | 10, cu.-s, ci.-s, sn, sl |
| 10 | o | s : o | 5, ci.-s, ci, h | 5, ci.-cu, ci.-s : o |
| 11 | v | o | 10, sn | 10, sn : 10 |
| 12 | o | o | 5, ci.-cu, ci.-s : o, h | o, h |
| 13 | o | o : s N, s P | o : 10, ci.-cu, ci.-s | 10, sn : o |
| 14 | o | o | 10, ci.-s | 10, cu.-s, ci.-s : o |
| 15 | o | o : s N, s P | 10 : 5, ci.-s, ci, h | 10, r : 7, ci.-s : 10 |
| 16 | o | s N, s P | 10 : 7, ci.-cu, ci.-s | 10, sn, hl, r : o |
| 17 | o | o : s N, s P | 7, s, ci.-s | 7, ci.-cu, ci.-s : 10, r |
| 18 | o | w | 10, sl.-r | 10 |
| 19 | o : w | o | 10, ci.-cu, ci.-s, oc.-r | 10, cu.-s, ci.-s : oc.-sn.-r |
| 20 | o | o | 5, ci.-s, ci : 10 | 10, sn, r : o |
| 21 | o | o | 10, oc.-r | 10 : o, h : 10 |
| 22 | o | o | 10, sh.-r : 10, s, ci.-s | 10, cu.-s, ci.-s : 1, s, ci |
| 23 | o | o | o, h.-fr : ci.-cu, ci | 7, cu, ci.-cu, ci : o |
| 24 | s | s | o, h.-fr | 5, cu, ci.-cu, ci : o |
| 25 | v | v | 10, cu.-s, ci.-s | 10, cu, ci.-cu, ci : o |
| 26 | | | 10, r : 7, cu, ci.-cu, ci | 7, cu, ci.-cu, ci : 10, r |
| 27 | | | 10, r : 2, ci.-s, sc : 10, sl, r | 3, ci.-s, sc : o, st.-w |
| 28 | | | 10, fr.-r, st.-w | 7, ci.-s, sc : 10, hl, r : o, st.-w |
| 29 | | | o, h : 5, ci, h | 7, cu, ci.-cu, ci, h : o |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 44°·3 on the 28th; and the lowest was 17°·7 on the 10th.

The mean ,, was 30°·4, being 4°·2 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was $0^{in}\cdot170$, being $0^{in}\cdot032$ *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $2^{gr}\cdot0$, being $0^{gr}\cdot3$ *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 80 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 559 grains, being 5 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 6·5.

WIND.

The proportions were of N. 11, S. 6, W. 8, and E. 4. The greatest pressure in the month was $28^{lbs}\cdot0$ on the square foot on the 28th.

RAIN.

Fell on 13 days in the month, amounting to $1^{in}\cdot1$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot5$ *less* than the average fall of the preceding 45 years.

ELECTRICITY.—The apparatus was under repair from February 26 to March 13.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Wind as deduced from Anemometers. Whewell's. Amount of Horizontal Movement of the Air on each Day. | Wind as deduced from Anemometers. Robinson's. Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles | miles. | in. |
| Mar. 1 | Greatest Declination N. | 29·916 | 48·7 | 30·1 | 39·5 | 32·0 | 87·0 | 23·0 | 41·2 | 39·2 | 7·5 | 16·8 | 3·8 | — 0·6 | SW | SW | 0·0 | 0·0 | 0·0 | .. | .. | 0·00 |
| 2 | .. | 29·860 | 48·6 | 34·7 | 40·0 | 35·5 | 74·0 | 30·0 | 41·5 | 40·2 | 4·5 | 7·4 | 2·6 | 0·0 | SSW | W | 3·5 | 0·0 | 0·3 | .. | 252 | 0·06 |
| 3 | .. | 29·917 | 52·c | 31·8 | 41·8 | 38·3 | 87·0 | 25·0 | 41·5 | 40·2 | 3·5 | 9·7 | 2·4 | + 1·9 | SW | SW | 6·0 | 0·0 | 1·0 | 190 | 421 | 0·11 |
| 4 | .. | 29·662 | 51·0 | 38·0 | 41·4 | 39·9 | 85·1 | 33·5 | 41·8 | 40·0 | 1·5 | 5·3 | 0·0 | + 1·5 | W; SW | NW; W | 8·0 | 0·0 | 2·5 | 140 | 332 | 0·00 |
| 5 | .. | 30·145 | 47·7 | 35·0 | 40·1 | 31·2 | 79·0 | 29·8 | 42·0 | 40·5 | 8·9 | 12·8 | 6·2 | + 0·1 | NW | N | 5·0 | 0·0 | 1·8 | 75 | 259 | 0·00 |
| 6 | Perigee. | 30·295 | 47·0 | 29·2 | 37·9 | 34·2 | 65·0 | 21·0 | 41·8 | 40·5 | 3·7 | 9·5 | 2·4 | — 2·2 | Calm | W | 3·0 | 0·0 | 0·2 | 130 | 336 | 0·00 |
| 7 | In Equator; Full. | 30·088 | 43·6 | 32·0 | 33·7 | 27·6 | 51·0 | 31·7 | 42·0 | 40·8 | 6·1 | 8·3 | 0·5 | — 6·4 | Var. | NE | 8·0 | 1·0 | 3·1 | 165 | 392 | 0·25 |
| 8 | .. | 30·081 | 42·2 | 31·5 | 35·0 | 29·0 | 76·7 | 28·0 | 41·5 | 40·0 | 6·0 | 6·9 | 5·3 | — 5·1 | N | NE | 10·0 | 0·0 | 4·0 | 150 | 352 | 0·08 |
| 9 | .. | 30·014 | 40·6 | 28·6 | 33·2 | 24·9 | 78·0 | 27·5 | 40·5 | 39·5 | 8·3 | 12·4 | 3·7 | — 7·0 | NE | NE | 2·5 | 0·0 | 0·2 | 20 | 105 | 0·08 |
| 10 | .. | 29·747 | 40·0 | 23·5 | 30·9 | 24·4 | 73·0 | 22·0 | 40·5 | 38·8 | 6·5 | 13·5 | 3·0 | — 9·4 | Calm | WSW | 0·0 | 0·0 | 0·0 | 40 | 145 | 0·06 |
| 11 | .. | 29·434 | 45·7 | 28·7 | 35·6 | 31·3 | 83·0 | 27·2 | 40·0 | 39·0 | 4·3 | 10·1 | 2·9 | — 4·9 | SW | SW | 0·0 | 0·0 | 0·0 | 30 | 98 | 0·00 |
| 12 | .. | 29·370 | 44·0 | 32·2 | 37·6 | 33·1 | 60·0 | 29·0 | 40·2 | 39·5 | 4·5 | 8·6 | 1·0 | — 3·0 | S | SW | 0·0 | 0·0 | 0·0 | 40 | 146 | 0·13 |
| 13 | .. | 29·416 | 47·5 | 32·6 | 39·3 | 31·2 | 84·0 | .. | 40·5 | 39·5 | 8·1 | 13·4 | 2·2 | — 1·7 | Calm; NE | NW | 3·0 | 0·0 | 0·5 | 100 | 257 | 0·16 |
| 14 | Greatest Dec. S. Last Qr. | 29·327 | 47·0 | 34·5 | 40·5 | 34·9 | 79·0 | 28·3 | 41·0 | 39·0 | 5·6 | 10·5 | 2·4 | — 0·8 | W | S; NE | 2·5 | 0·0 | 0·0 | 55 | 172 | 0·00 |
| 15 | .. | 29·723 | 47·0 | 30·5 | 38·1 | 28·4 | 72·0 | 22·0 | 41·5 | 39·8 | 9·7 | 15·0 | 7·4 | — 3·4 | N; NW | NW; W | 2·0 | 0·0 | 0·5 | 150 | 347 | 0·00 |
| 16 | .. | 29·888 | 51·8 | 32·5 | 42·3 | 34·8 | 90·7 | 30·2 | 41·5 | 40·0 | 7·5 | 13·7 | 6·4 | + 0·6 | N | N; NW | 4·5 | 0·0 | 1·3 | 90 | 249 | 0·00 |
| 17 | .. | 29·936 | 56·5 | 39·5 | 48·3 | 46·1 | 78·0 | 38·0 | 42·5 | 40·0 | 2·2 | 8·4 | 1·3 | + 6·5 | SW | WSW | 5·0 | 0·0 | 1·0 | 190 | 412 | 0·13 |
| 18 | .. | 29·885 | 55·0 | 42·3 | 46·2 | 38·8 | 97·0 | 45·0 | 43·5 | 41·5 | 7·4 | 12·4 | 4·2 | + 4·4 | SW | W | 5·0 | 0·0 | 1·6 | 145 | 331 | 0·00 |
| 19 | .. | 30·012 | 54·0 | 36·5 | 44·9 | 38·1 | 85·0 | .. | 45·0 | 42·5 | 6·8 | 12·8 | 1·4 | + 3·1 | W | SW | 3·5 | 0·0 | 1·0 | 220 | 451 | 0·00 |
| 20 | Apogee | 29·750 | 53·8 | 40·5 | 46·5 | 40·0 | 79·0 | 38·0 | 45·0 | 42·5 | 6·5 | 11·6 | 2·9 | + 4·6 | SW | SW | 10·5 | 3·0 | 5·0 | 245 | 635 | 0·00 |
| 21 | In Equator | 29·374 | 51·0 | 39·9 | 43·7 | 39·1 | 68·8 | 40·5 | 47·0 | 43·5 | 4·6 | 11·7 | 1·1 | + 1·8 | SW | W | 16·0 | 0·0 | 4·0 | 195 | 432 | 0·09 |
| 22 | New | 29·679 | 49·0 | 32·2 | 39·8 | 31·7 | 81·0 | 26·0 | 46·0 | 45·2 | 8·1 | 13·9 | 2·8 | — 2·1 | W | NW; W | 4·0 | 0·0 | 0·5 | 135 | 320 | 0·03 |
| 23 | .. | 29·295 | 47·2 | 34·5 | 40·8 | 37·4 | 61·3 | 32·0 | .. | .. | 3·4 | 9·7 | 3·2 | — 1·2 | SW | SW | 16·0 | 0·0 | 3·0 | 255 | 518 | 0·25 |
| 24 | .. | 28·904 | 49·0 | 33·3 | 39·8 | 31·9 | 69·0 | 29·0 | .. | .. | 7·9 | 14·1 | 2·7 | — 2·3 | W | W | 14·0 | 0·0 | 3·5 | 250 | 585 | 0·03 |
| 25 | .. | 29·220 | 49·5 | 35·5 | 42·0 | 32·0 | 77·0 | 31·0 | .. | .. | 10·0 | 16·2 | 2·0 | — 0·1 | W; NW | NW | 10·0 | 0·0 | 3·0 | 130 | 338 | 0·08 |
| 26 | .. | 29·529 | 49·0 | 35·7 | 40·3 | 32·4 | 86·0 | 29·5 | .. | .. | 7·9 | 13·5 | 3·3 | — 2·0 | NW | N; Calm | 5·0 | 0·0 | 0·5 | 105 | 247 | 0·00 |
| 27 | .. | 29·556 | 47·8 | 34·1 | 41·6 | 35·1 | 69·0 | 25·0 | 47·5 | 45·0 | 6·5 | 11·6 | 5·1 | — 0·8 | W | NW; W | 5·0 | 0·0 | 0·5 | 170 | 371 | 0·00 |
| 28 | Greatest Declination N. | 29·565 | 59·5 | 43·5 | 50·0 | 41·6 | 83·0 | 37·0 | 47·0 | 45·0 | 8·4 | 13·2 | 4·0 | + 7·4 | W | W | 8·0 | 0·5 | 2·5 | 220 | 459 | 0·03 |
| 29 | .. | 29·385 | 59·0 | 47·0 | 50·6 | 43·7 | 81·0 | 44·6 | 47·0 | 45·0 | 6·9 | 16·3 | 2·3 | + 7·8 | W | W | 8·0 | 0·0 | 3·0 | 125 | 332 | 0·09 |
| 30 | First Qr. | 29·529 | 51·0 | 41·2 | 45·4 | 40·8 | 71·0 | 38·0 | 47·0 | 45·0 | 4·6 | 7·8 | 1·8 | + 2·3 | Calm | SW | 4·0 | 0·0 | 0·8 | 165 | 339 | 0·03 |
| 31 | .. | 28·864 | 51·0 | 43·5 | 47·2 | 44·2 | 63·0 | 38·8 | 48·0 | 47·0 | 3·0 | 5·3 | 1·0 | + 3·8 | SW | SW | 8·0 | 1·0 | 3·5 | 300 | 620 | 0·16 |
| Means | .. | 29·657 | 49·2 | 35·0 | 41·1 | 35·0 | 76·6 | 31·1 | 43·1 | 41·4 | 6·1 | 11·4 | 2·9 | — 0·2 | ... | ... | .. | .. | .. | Sum 4225 | Sum 10253 | 8 um 1·85 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·953 on the 1st; the first minimum in the month was 29in·822 on the 2nd.
The second maximum ,, was 29in·971 on the 3rd; the second minimum ,, was 29in·620 on the 4th.
The absolute maximum ,, was 30in·397 on the 6th; the third minimum ,, was 29in·955 on the 7th.
The fourth maximum ,, was 30in·231 on the 7th; the fourth minimum ,, was 29in·332 on the 12th.
The fifth maximum ,, was 29in·498 on the 13th; the fifth minimum ,, was 29in·269 on the 14th.
The sixth maximum ,, was 30in·036 on the 19th; the sixth minimum ,, was 29in·285 on the 21st.
The seventh maximum ,, was 29in·766 on the 22nd; the seventh minimum ,, was 28in·899 on the 24th.
The eighth maximum ,, was 29in·608 on the 26th; the eighth minimum ,, was 29in·337 on the 29th.
The ninth maximum ,, was 29in·605 on the 30th; the absolute minimum ,, was 28in·625 on the 31st.
The range in the month was 1in·772. The mean for the month was 29·657, being 0in·143 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·5 on the 28th; the lowest was 23°·5 on the 10th; and the range in the month was 36°·0.
The mean ,, of all the highest daily readings was 49°·2, being 0°·8 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 35°·0, being 0°·3 *lower* than the average of the preceding 19 years.
The mean daily range was 14°·2, being 0°·5 *lower* than the average of the preceding 19 years.
The mean for the month was 41°·1, being 0°·7 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| Mar. 1 | | | 5, cu, ci.-cu, ci | 5, cu, ci.-cu, ci |
| 2 | | | 10 : 10, fr.-r | 7, ci.-cu, ci.-s : 0 |
| 3 | | | 10, hl, r : 5, ci-s, ci | 10, oc.-r : 5, cu, ci.-cu |
| 4 | | | 10, r | 10, f : 0, h |
| 5 | | | 3, cu, ci-.cu | 5, cu, ci.-cu : 0 |
| 6 | | | 10, f | 10, f : 10, m.-r |
| 7 | | | 10, sn, r | 10, sl |
| 8 | | | 10, cu.-s, ci.-s, sl | 10, cu.-s, ci.-s, hl, r : 10 |
| 9 | | | 0 : 7, ci.-s, ci | 7, cu, ci.-cu, ci, sn |
| 10 | | | 10, s, ci.-s | 10, ci.-s, ci : 10, sn |
| 11 | | | 5, ci.-s, ci, h | 5, cu, ci.-s : 10, oc.-r |
| 12 | | | 10, cu.-s, ci.-s | 10 : 10, r |
| 13 | | | 0 : 10, cu.-s, ci.-s | 10, ci.-cu, ci.-s : 0 : 10 |
| 14 | 0 | 0 | 5, ci.-cu, ci.-s : 10, cu, ci.-cu, ci | 10, cu.-s, ci.-s |
| 15 | 0 | 0 | 0 : 7, ci.-cu, ci, h | 5, ci.-cu, ci, h : 0 |
| 16 | 0 | 0 | 5, cu, ci.-cu, ci | 9, ci.-cu, ci.-s : 10, r |
| 17 | 0 | 0 | 10 | 10, cu.-s, ci.-s |
| 18 | 0 | 0 | 10, r | 10, ci.-cu, ci.-s : 0 |
| 19 | 0 | 0 | 0 : 10, ci.-cu, cu.-s, ci.-s | 10 |
| 20 | | | 10, oc.-r | 7, ci.-cu, ci.-s : 10 |
| 21 | | | 10, sh.-r | 10, sh.-r : 5, cu.-s, ci.-s : 0 |
| 22 | | | 0 : 5, cu.-s, ci.-s, sh.-hl | 5, cu, ci.-cu, ci, shs.-hl : 0 |
| 23 | | | 10, oc.-r | 10, oc.-r : v |
| 24 | | | 5, cu, ci.-cu, ci | 5, cu.-s, ci.-s, hl : 0 |
| 25 | 0 | 0 : s P, s N | 7, cu, ci.-cu, ci | 7 : 0, h |
| 26 | 0 | m : 0 | 10, cu, cu.-s | 10, ci.-cu, ci.-s, r : 0, h |
| 27 | 0 | 0 | 10 : 3, ci.-cu, ci.-s | 10, ci.-cu, ci.-s : 10 |
| 28 | 0 | 0 | 5, ci.-cu, ci.-s | 10 : 7, ci.-s, sc : 10, r |
| 29 | m : 0 | 0 : m | 10, oc.-r | 7, ci.-cu, ci.-s, sc, r : 10 |
| 30 | 0 | 0 | 6, cu, ci,-cu, ci | 10, s, ci.-s : oc.-r |
| 31 | m | m | 10 : 10, r | 10, r : 7 : 10, oc.-r |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 48°·6 on the 17th; and the lowest was 22°·2 on the 10th.

The mean ,, was 35°·0, being 1°·4 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was 0in·204, being 0in·013 *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was 2gr·4, being 0gr·1 *less* than the average of the preceding 19 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 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 549 grains, being 2 grains *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·5.

WIND.

The proportions were of N. 5, S. 6, W. 18, and E. 2. The greatest pressure in the month was 16lbs·0 on the square foot on the 21st and 23rd.

RAIN.

Fell on 18 days in the month, amounting to 1in·9, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·4 *greater* than the average fall of the preceding 45 years.

ELECTRICITY.—March 20 to 24. The insulating lamp was not burning.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h. A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Wheewell's. Amount of Horizontal Movement of the Air on each Day. | Robinson's. Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| April 1 | .. | 29·052 | 56·0 | 41·9 | 47·0 | 39·8 | 95·5 | 41·0 | 48·0 | 46·0 | 7·2 | 11·4 | 2·2 | + 3·4 | W | SW | 11·0 | 0·0 | 3·0 | 205 | 455 | 0·00 |
| 2 | .. | 28·998 | 46·8 | 35·5 | 38·8 | 35·5 | 55·0 | .. | 48·5 | 46·5 | 3·3 | 8·8 | 1·5 | — 5·3 | SW | W | 10·0 | 0·0 | 2·0 | 200 | 413 | 0·29 |
| 3 | .. | 29·426 | 55·0 | 35·9 | 44·1 | 36·7 | 97·0 | 31·0 | 48·0 | 46·0 | 7·4 | 15·2 | 1·8 | — 0·4 | W | SW | 5·0 | 0·0 | 1·0 | 100 | 239 | 0·00 |
| 4 | Perigee; In Equator. | 29·625 | 55·7 | 33·4 | 43·4 | 38·6 | 93·0 | 26·0 | .. | .. | 4·8 | 17·2 | 0·9 | — 1·4 | SW | E | 3·0 | 0·0 | 0·5 | 85 | 247 | 0·00 |
| 5 | Full | 29·720 | 56·0 | 38·5 | 46·1 | 38·6 | 77·0 | 34·0 | .. | .. | 7·5 | 18·2 | 2·2 | + 1·0 | NE | NE | 7·0 | 0·0 | 2·0 | 85 | 240 | 0·00 |
| 6 | .. | 29·700 | 61·0 | 41·3 | 48·0 | 44·0 | 76·0 | 37·8 | .. | .. | 4·0 | 10·2 | 3·1 | + 2·6 | NE | Calm | 0·0 | 0·0 | 0·0 | .. | 29 | 0·01 |
| 7 | .. | 29·773 | 62·0 | 47·9 | 52·2 | 43·3 | 92·0 | 35·0 | 47·0 | 45·5 | 8·9 | 13·7 | 6·2 | + 6·7 | Calm | W | 0·0 | 0·0 | 0·0 | 110 | 241 | 0·00 |
| 8 | .. | 29·543 | 57·2 | 41·5 | 49·0 | 45·1 | 88·0 | 33·7 | 48·0 | 45·8 | 3·9 | 9·4 | 2·9 | + 3·5 | SW | SW | 8·0 | 0·0 | 1·5 | 215 | 460 | 0·00 |
| 9 | .. | 29·480 | 50·8 | 35·5 | 40·8 | 31·5 | 78·0 | 32·0 | 48·0 | 46·5 | 9·3 | 16·0 | 1·7 | — 4·6 | W | NW | 9·0 | 0·0 | 3·0 | 165 | 390 | 0·06 |
| 10 | Greatest Declination S. | 29·684 | 51·0 | 32·4 | 39·3 | 31·1 | 92·0 | 26·0 | 47·5 | 45·8 | 8·2 | 16·6 | 3·6 | — 5·8 | W | N | 4·0 | 0·0 | 0·8 | 55 | 185 | 0·01 |
| 11 | .. | 30·041 | 46·0 | 28·2 | 37·1 | 30·0 | 61·0 | 19·8 | 47·3 | 45·5 | 7·1 | 14·7 | 4·1 | — 7·9 | NW | NW | 0·0 | 0·0 | 0·0 | 30 | 115 | 0·00 |
| 12 | .. | 29·974 | 48·0 | 35·8 | 40·5 | 34·3 | 62·0 | 32·2 | 46·5 | 45·5 | 6·2 | 13·0 | 3·6 | — 4·4 | SW | S | 0·0 | 0·0 | 0·0 | 20 | 94 | 0·00 |
| 13 | Last Qr. | 29·857 | 50·0 | 34·2 | 40·9 | 39·3 | 69·0 | 28·0 | 46·5 | 45·5 | 1·6 | 5·7 | 0·6 | — 4·3 | S | NE | 2·0 | 0·0 | 0·0 | 25 | 147 | 0·04 |
| 14 | .. | 30·053 | 46·0 | 30·8 | 37·6 | 36·8 | 62·0 | 22·0 | 46·0 | 45·0 | 0·8 | 4·2 | 0·0 | — 7·9 | NE | NE | 0·0 | 0·0 | 0·0 | 40 | 140 | 0·09 |
| 15 | .. | 30·128 | 57·0 | 35·0 | 44·5 | 41·5 | 88·0 | 31·2 | 46·5 | 44·8 | 3·0 | 12·2 | 1·6 | — 1·2 | N | NE; SE | 0·0 | 0·0 | 0·0 | 40 | 172 | 0·01 |
| 16 | Apogee. | 30·138 | 61·2 | 40·5 | 46·3 | 40·8 | 102·0 | 38·8 | 46·0 | 44·3 | 5·5 | 15·4 | 2·0 | + 0·3 | NE | E | 3·5 | 0·0 | 0·3 | 70 | 222 | 0·00 |
| 17 | In Equator | 30·059 | 58·6 | 35·5 | 44·9 | 34·9 | 104·0 | 25·7 | 46·0 | 45·0 | 10·0 | 19·2 | 2·8 | — 1·3 | E | NE | 5·0 | 0·0 | 1·0 | 145 | 352 | 0·00 |
| 18 | .. | 29·933 | 56·2 | 36·5 | 45·0 | 35·5 | 102·0 | 30·0 | 46·5 | 45·0 | 9·5 | 17·2 | 2·6 | — 1·4 | NE | NE | 11·0 | 1·0 | 4·0 | 230 | 539 | 0·00 |
| 19 | .. | 29·918 | 45·1 | 34·2 | 37·3 | 30·6 | 58·0 | 31·0 | 46·0 | 45·0 | 6·7 | 16·5 | 0·5 | — 9·2 | NE | NNE | 12·0 | 0·0 | 3·5 | 165 | .. | 0·03 |
| 20 | .. | 29·704 | 49·7 | 34·5 | 39·6 | 30·8 | 69·0 | 28·8 | 46·0 | .. | 8·8 | 13·2 | 5·5 | — 7·1 | N | N | 5·0 | 0·0 | 2·0 | 115 | .. | 0·02 |
| 21 | New | 29·605 | 49·8 | 30·8 | 38·7 | 30·5 | 87·0 | 23·0 | 45·5 | 45·5 | 8·2 | 15·1 | 3·5 | — 8·3 | NW | N; NW | 4·5 | 0·0 | 1·0 | 55 | .. | 0·01 |
| 22 | .. | 29·674 | 50·5 | 28·5 | 38·0 | 33·6 | 91·8 | 22·0 | 47·0 | 47·0 | 4·4 | 12·8 | 3·0 | — 9·5 | NW | NW | 3·0 | 0·0 | 0·0 | 60 | .. | 0·08 |
| 23 | .. | 29·571 | 49·2 | 31·3 | 39·9 | 36·3 | 84·0 | 26·7 | 47·0 | 47·0 | 3·6 | 11·1 | 1·4 | — 7·7 | WSW | Calm | 0·0 | 0·0 | 0·0 | 50 | .. | 0·06 |
| 24 | .. | 29·619 | 43·0 | 33·5 | 36·6 | 34·3 | 45·0 | 33·0 | 47·0 | 47·0 | 2·3 | 6·0 | 1·3 | —11·0 | NE | N | 4·0 | 0·0 | 1·5 | 185 | .. | 0·29 |
| 25 | Greatest Declination N. | 29·812 | 54·5 | 38·5 | 44·4 | 37·0 | 102·0 | 32·8 | 46·5 | 46·5 | 7·4 | 14·0 | 5·5 | — 3·2 | NE | NE | 7·0 | 0·0 | 3·5 | 160 | .. | 0·00 |
| 26 | .. | 30·026 | 55·0 | 39·5 | 43·6 | 36·1 | 85·4 | 34·2 | 46·8 | 46·8 | 7·5 | 10·4 | 6·4 | — 4·0 | NE | NE | 3·5 | 0·0 | 1·5 | 100 | .. | 0·00 |
| 27 | .. | 30·120 | 54·0 | 36·0 | 42·3 | 34·1 | 96·8 | 30·5 | 46·8 | 46·8 | 8·2 | 13·2 | 4·0 | — 5·7 | NNE | NNE | 2·5 | 0·0 | 0·5 | 70 | .. | 0·00 |
| 28 | First Qr. | 30·160 | 58·3 | 31·3 | 43·4 | 38·6 | 104·0 | 28·0 | 47·3 | 47·3 | 4·8 | 14·8 | 2·3 | — 5·1 | N by E | Calm | 0·0 | 0·0 | 0·0 | 5 | .. | 0·00 |
| 29 | .. | 30·204 | 63·0 | 31·0 | 47·4 | 39·9 | 116·0 | 24·5 | 46·5 | .. | 7·5 | 20·3 | 3·0 | — 1·7 | SE | SE | 0·0 | 0·0 | 0·0 | 40 | .. | 0·00 |
| 30 | .. | 30·273 | 65·0 | 38·0 | 50·4 | 42·1 | 116·0 | .. | 47·0 | .. | 8·3 | 18·6 | 1·9 | + 0·9 | SE | E | 1·0 | 0·0 | 0·0 | 50 | .. | 0·00 |
| | | | | | | | | | | | | | | | | | | | | Sum | Sum | Sum |
| Means | .. | 29·796 | 53·7 | 35·6 | 42·9 | 36·7 | 85·0 | 30·0 | 46·9 | 45·9 | 6·2 | 13·5 | 2·8 | — 3·3 | ... | ... | .. | .. | .. | 2875 | 4680 | 1·00 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·124 on the 1st; the absolute minimum in the month was 28in·955 on the 2nd.
The second maximum ,, was 29in·789 on the 7th; the second minimum ,, was 29in·381 on the 8th.
The third maximum ,, was 30in·062 on the 11th; the third minimum ,, was 29in·822 on the 13th.
The fourth maximum ,, was 30in·175 on the 16th; the fourth minimum ,, was 29in·593 on the 21st.
The fifth maximum ,, was 29in·691 on the 22nd; the fifth minimum ,, was 29in·545 on the 23rd.
The absolute maximum ,, was 30in·289 on the 30th.
The range in the month was 1in·334.
The mean for the month was 29in·796, being 0in·064 *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 65°·0 on the 30th; the lowest was 28°·2 on the 11th.
The range ,, was 36° ·8.
The mean ,, of all the highest daily readings was 53°·7, being 3°·3 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 35°·6, being 3°·2 *lower* than the average of the preceding 19 years.
The mean daily range was 18°·1, being 0°·1 *lower* than the average of the preceding 19 years.
The mean for the month was 42°·9, being 3°·6 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| April 1 | o | o | 10 | 5, ci.-cu : 10, s, ci.-s, oc.-r : 2 |
| 2 | s N, s P, sps, g cur | s N, : P, sps, g cur | 10, r | 10, hl, r : o |
| 3 | o | o : w | 5, cu, ci.-cu | 5, cu, ci.-cu, ci |
| 4 | o | w | 10, s, ci.-s, h | 9, s, ci.-s : 2, ci.-s, ci |
| 5 | o | w | 7, ci.-cu, ci | 10, ci.-cu, ci.-s |
| 6 | o | o : s | 10, oc.-r | 7, ci.-s, ci |
| 7 | o | o : w | 10, ci.-s, h | 7, cu, ci.-cu, ci : o |
| 8 | | | 10, cu.-s, ci.-s | 10, cu.-s, ci.-s : oc.-r |
| 9 | s : | | 10, cu.-s, ci.-s | 10, ci.-cu, ci.-s, hl, r : 10, hl, t, l : o, a |
| 10 | | | 7, cu, ci.-cu, ci | 10, ci.-cu, ci.-s, hl, sl : o |
| 11 | | | 10, ci.-cu, cu.-s | 7, ci.-cu, ci.-s : 2, ci.-s, h |
| 12 | | m | 10 | 10 : o |
| 13 | o | o : w | 10, oc.-r | 10, cu.-s, ci.-s : o, f |
| 14 | o | s | 10, oc.-r | 10, shs.-r : o : 10 |
| 15 | o | o | 10, ci.-s, ci | 10, cu, ci.-cu, ci : 10, oc.-r : 9 |
| 16 | o | o | 10, oc.-r : 8, ci.-cu, ci.-s | o |
| 17 | | | 3, cu, ci.-cu, ci | 3, cu, ci.-cu, ci : o |
| 18 | | | o | o : 7, cu, ci.-cu, ci |
| 19 | | | 10, cu.-s, ci.-s, sl, sn | 10, sl : 10, fr.-shs, r |
| 20 | o : N, w | o | 5, ci.-cu, ci.-s : 10, h.-shs.-hl.-r | 10 : 10, oc.-r |
| 21 | o | s N, s P, sps, g cur : o | 8, ci.-cu, ci.-s | 7, ci.-cu, ci.-s, oc.-r |
| 22 | o | s N, s P, sps, g cur | 10, ci.-cu, ci.-s : 10, sl.-r | 10, shs.-hl.-r |
| 23 | o | o : s N | 8, ci.-cu, ci.-s, h | 8, ci.-cu, cu.-s, ci.-s : 10, oc.-r |
| 24 | s N, s P, sps, g cur : o | o | 10, sn, hl, r | 10, r |
| 25 | o | o : m | 7, cu.-s, ci.-s | 10, cu.-s, ci.-s : 10, s, ci.-s |
| 26 | w | w : o | 10, cu.-s, ci.-s | 10, cu.-s, ci.-s |
| 27 | o | o | 10 : 9, ci.-cu, cu.-s, ci.-s | 10, ci.-cu, ci.-s : 10 |
| 28 | o | v | 7, ci.-cu, ci.-s | 7, cu, ci.-cu, ci.-s : o |
| 29 | v | v : s, sps | o | o : 5, s, lu.-ha |
| 30 | o | v | 10, ci.-cu, ci : o | o |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 47°·4 on the 16th; and the lowest was 27°·7 on the 11th.

The mean ,, was 36°·7, being 3°·4 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was 0$^{in}$·218, being 0$^{in}$·031 *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was 2$^{gr}$·5, being 0$^{gr}$·4 *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 79 (that of Saturation being represented by 100), being the same as the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 549 grains, being 5 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·0.

WIND.

The proportions were of N. 10, S. 5, W. 7, and E. 8. The greatest pressure in the month was 12$^{lbs}$·0 on the square foot on the 19th.

RAIN.

Fell on 13 days in the month, amounting to 1$^{in}$·0, as measured in the simple cylinder gauge partly sunk below the ground; being 0$^{in}$·8 *less* than the average fall of the preceding 45 years.

ELECTRICITY.—April 8 to 12 and 17 to 19. The insulating lamp was out.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M., next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h AM. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h AM. next morning. 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 43 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. | Whewell's / Robinson's. Amount of Horizontal Movement of the Air on each Day. Whewell's | Robinson's | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| May 1 | In Equator | 30·125 | 66·1 | 38·5 | 53·1 | 42·8 | 110·5 | 30·2 | 50·4 | 47·2 | 10·3 | 18·9 | 1·4 | + 3·1 | E | ENE | 8·0 | 0·0 | 1·5 | 130 | .. | 0·00 |
| 2 | Perigee | 29·951 | 68·0 | 42·7 | 54·8 | 39·1 | 117·0 | 35·0 | 49·5 | 47·5 | 15·7 | 26·5 | 5·5 | + 4·3 | ENE | NE | 5·0 | 0·0 | 2·0 | 145 | 352 | 0·00 |
| 3 | .. | 30·037 | 66·3 | 40·7 | 52·4 | 41·2 | 112·0 | 35·0 | 50·5 | 48·3 | 11·2 | 22·6 | 1·3 | + 1·5 | NE | E | 3·5 | 0·0 | 1·0 | 45 | 188 | 0·00 |
| 4 | .. | 30·034 | 68·5 | 38·3 | 51·3 | 41·6 | 114·0 | 33·0 | 52·5 | 50·5 | 9·7 | 22·1 | 1·4 | 0·0 | E | Calm | 0·0 | 0·0 | 0·0 | 25 | 136 | 0·00 |
| 5 | Full | 30·009 | 55·0 | 40·3 | 45·7 | 39·3 | 87·0 | 31·7 | 52·5 | 50·5 | 6·4 | 12·0 | 2·8 | — 5·9 | Calm | E | 2·0 | 0·0 | 0·3 | 75 | 237 | 0·00 |
| 6 | .. | 29·964 | 55·5 | 34·5 | 43·7 | 35·6 | 111·0 | 26·8 | 52·5 | 50·0 | 8·1 | 14·8 | 5·5 | — 8·1 | ESE | ESE | 2·0 | 0·0 | 0·0 | 45 | 168 | 0·00 |
| 7 | Greatest Declination S. | 29·621 | 63·0 | 32·5 | 48·6 | 42·0 | 108·0 | 27·0 | 52·5 | 50·0 | 6·6 | 15·2 | 1·9 | — 3·3 | ESE | ESE | 2·6 | 0·0 | 0·3 | 105 | 263 | 0·00 |
| 8 | .. | 29·449 | 65·3 | 45·0 | 52·8 | 46·6 | 107·0 | 39·7 | 52·5 | 50·0 | 6·2 | 10·8 | 2·0 | + 1·0 | W | SW | 4·0 | 0·0 | 1·3 | 140 | 319 | 0·03 |
| 9 | .. | 29·555 | 66·0 | 47·9 | 53·3 | 44·2 | 102·0 | 44·0 | 54·6 | 52·0 | 9·1 | 13·1 | 7·6 | + 1·7 | SW | W | 3·0 | 0·0 | 0·3 | 90 | 243 | 0·00 |
| 10 | .. | 29·686 | 64·7 | 39·0 | 52·7 | 52·5 | 81·0 | .. | 54·6 | 52·0 | 0·2 | 9·7 | 1·6 | + 1·3 | SW | SW | 3·5 | 0·0 | 0·5 | 100 | 275 | 0·13 |
| 11 | .. | 29·630 | 63·7 | 52·8 | 56·3 | 53·6 | 85·4 | 49·7 | 55·0 | 52·5 | 2·7 | 8·4 | 1·2 | + 5·0 | SW | SW | 3·5 | 0·0 | 0·5 | 90 | 249 | 0·09 |
| 12 | Last Qr. | 29·567 | 66·8 | 51·8 | 58·3 | 52·7 | 97·0 | 49·5 | 56·0 | 54·0 | 5·6 | 9·9 | 0·2 | + 7·0 | SW | SW | 0·0 | 0·0 | 0·0 | 95 | 288 | 0·43 |
| 13 | .. | 29·630 | 67·0 | 50·8 | 55·2 | 49·7 | 104·0 | 48·7 | 56·5 | 55·0 | 5·5 | 7·8 | 0·8 | + 3·8 | W | W | 4·0 | 0·0 | 1·5 | 85 | 244 | 0·82 |
| 14 | Apogee | 29·705 | 65·0 | 48·5 | 54·1 | 51·5 | 108·0 | 41·0 | 56·5 | 55·0 | 2·6 | 8·4 | 0·0 | + 2·3 | WSW | Calm | 0·0 | 0·0 | 0·0 | 10 | 89 | 1·04 |
| 15 | In Equator | 29·720 | 68·3 | 48·2 | 56·6 | 51·6 | 112·0 | 41·5 | 57·0 | 54·0 | 5·0 | 14·9 | 1·0 | + 4·4 | SE | SW | 2·0 | 0·0 | 0·0 | 80 | 217 | 0·02 |
| 16 | .. | 29·745 | 62·2 | 43·6 | 51·9 | 49·0 | 83·0 | 40·3 | 57·0 | 56·3 | 2·9 | 7·2 | 0·7 | — 0·7 | SW | SW | 3·0 | 0·0 | 0·5 | 140 | 320 | 0·02 |
| 17 | .. | 29·459 | 57·2 | 49·7 | 53·2 | 51·4 | 68·0 | 45·5 | 57·8 | 56·5 | 1·8 | 2·7 | 1·3 | + 0·4 | SW | SW | 6·0 | 0·0 | 0·8 | 100 | 244 | 0·21 |
| 18 | .. | 29·269 | 65·0 | 45·8 | 54·2 | 52·9 | 88·0 | 40·3 | 57·8 | 56·8 | 1·3 | 7·0 | 0·4 | + 1·1 | SW; SE | SW | 2·8 | 0·0 | 0·3 | 65 | 207 | 0·20 |
| 19 | .. | 29·669 | 69·8 | 43·8 | 55·3 | 46·3 | 113·0 | 38·0 | 57·3 | 56·3 | 9·0 | 19·1 | 1·1 | + 2·0 | SW | W | 0·0 | 0·0 | 0·0 | 15 | 122 | 0·00 |
| 20 | New | 30·046 | 72·8 | 46·5 | 59·5 | 50·6 | 116·7 | 40·2 | 58·0 | 56·0 | 8·9 | 18·4 | 1·1 | + 5·9 | W | NE; ESE | 0·0 | 0·0 | 0·0 | 15 | 77 | 0·00 |
| 21 | .. | 30·208 | 74·3 | 45·3 | 60·3 | 49·3 | 124·5 | 38·0 | 59·8 | 58·0 | 11·0 | 22·0 | 7·0 | + 6·5 | ESE | Calm | 0·0 | 0·0 | 0·0 | 35 | 123 | 0·00 |
| 22 | Greatest Declination N. | 30·083 | 74·0 | 47·1 | 61·4 | 47·4 | 119·5 | 39·0 | 60·0 | 59·0 | 14·0 | 23·9 | 2·5 | + 7·3 | SSW | SW | 0·0 | 0·0 | 0·0 | 55 | 156 | 0·00 |
| 23 | .. | 29·786 | 76·5 | 45·5 | 60·6 | 48·8 | 130·8 | 37·7 | 62·0 | 61·0 | 11·8 | 22·5 | 4·6 | + 6·3 | SW | SW | 2·8 | 0·0 | 0·3 | 125 | 297 | 0·00 |
| 24 | .. | 29·857 | 73·0 | 50·1 | 59·3 | 47·0 | 120·0 | 44·0 | 62·0 | 61·0 | 12·3 | 21·4 | 1·0 | + 4·9 | W | W | 2·5 | 0·0 | 0·2 | 55 | 192 | 0·00 |
| 25 | .. | 29·703 | 67·9 | 47·8 | 55·9 | 46·6 | 105·7 | 38·0 | 62·0 | 61·0 | 9·3 | 15·4 | 2·2 | + 1·3 | SW | SW | 3·5 | 0·0 | 0·5 | 115 | 275 | 0·03 |
| 26 | .. | 29·268 | 67·0 | 50·3 | 56·3 | 50·4 | 109·0 | 49·5 | 62·0 | 61·0 | 5·9 | 11·5 | 4·0 | + 1·6 | SW | SW; NW | 8·0 | 0·0 | 1·5 | 200 | 495 | 0·18 |
| 27 | First Qr. | 29·639 | 62·8 | 42·4 | 50·4 | 40·3 | 107·5 | 38·0 | 61·0 | 60·0 | 10·1 | 16·9 | 4·4 | — 4·5 | NW | W | 6·0 | 0·0 | 3·0 | 245 | 517 | 0·00 |
| 28 | In Equator | 29·531 | 57·0 | 44·0 | 49·0 | 37·5 | 98·0 | 45·0 | 60·3 | 59·0 | 11·5 | 16·0 | 5·7 | - 6·2 | SW; NW | NW; W | 23·0 | 0·0 | 9·0 | 190 | 459 | 0·12 |
| 29 | Perigee | 29·879 | 61·3 | 38·8 | 48·7 | 37·9 | 105·0 | 32·7 | 58·4 | 57·0 | 10·8 | 16·6 | 3·4 | — 6·7 | W | W | 5·0 | 0·0 | 2·0 | 120 | 299 | 0·00 |
| 30 | .. | 29·758 | 63·5 | 44·7 | 53·1 | 41·6 | 104·0 | 35·0 | 58·3 | 56·0 | 11·5 | 19·0 | 5·7 | — 2·6 | W | NW | 2·0 | 0·0 | 0·3 | 30 | 139 | 0·00 |
| 31 | .. | 29·555 | 55·7 | 44·5 | 49·7 | 49·2 | 65·0 | 39·0 | 58·0 | 57·0 | 0·5 | 2·8 | 0·0 | — 6·4 | Calm | Calm | 0·0 | 0·0 | 0·0 | 65 | 194 | 0·58 |
| Means | .. | 29·746 | 65·5 | 44·6 | 53·8 | 46·1 | 103·7 | 39·1 | 56·6 | 54·9 | 7·7 | 14·6 | 2·6 | + 0·9 | ... | ... | .. | .. | .. | Sum 2830 | Sum 7384 | Sum 3·90 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 30in·094 on the 4th; the first minimum in the month was 29in·929 on the 2nd.
The second maximum ,, was 29in·712 on the 10th; the second minimum ,, was 29in·427 on the 8th.
The third maximum ,, was 29in·788 on the 16th; the third minimum ,, was 29in·516 on the 12th.
The absolute maximum ,, was 30in·216 on the 21st; the fourth minimum ,, was 29in·228 on the 18th.
The fifth maximum ,, was 29in·892 on the 24th; the fifth minimum ,, was 29in·736 on the 23rd.
The sixth maximum ,, was 29in·651 on the 27th; the absolute minimum ,, was 29in·214 on the 26th.
The seventh maximum ,, was 29in·889 on the 29th; the seventh minimum ,, was 29in·388 on the 28th.
The range in the month was 1in·002.
The mean for the month was 29in·746, being 0in·016 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·5 on the 23rd; the lowest was 32°·5 on the 7th.
The range ,, was 44°·0.
The mean ,, of all the highest daily readings was 65°·5, being 1°·2 *higher* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 44°·6, being 0°·5 *higher* than the average of the preceding 19 years.
The mean daily range was 20°·9, being 0°·7 *higher* than the average of the preceding 19 years.
The mean for the month was 53°·8, being 1°·0 *higher* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| May 1 | o : s, N | w | o | o |
| 2 | o | o : w | o | o |
| 3 | v | v | o, ci, ci.-s : o | o |
| 4 | o | s : o | 10, ci.-s, h : o, h | o, h |
| 5 | o | o : s | 10 | 10 : 7, ci.-s |
| 6 | v | v | 3 : o | o |
| 7 | w | w : s | 7, ci.-s, ci | 7, ci.-s, ci : 10 : 10, r |
| 8 | o | o : w | 10 | 7, ci.-cu, ci.-s : 10 |
| 9 | o | o : w | 10, cu.-s., ci.-s : 10, sl.-r | 10 : o, h |
| 10 | o | o | 10, r | 10 : 10, h.-shs.-r |
| 11 | o | o : w | 10, r | 10, fr.-r : 3, ci.-s, ci |
| 12 | w | w : s | 10, ci.-cu, ci | 10, ci.-s, ci : 10, r |
| 13 | o | o : w | 10, oc.-r | 10 : o |
| 14 | o : N | N : o | 10 | 10, h.-r : 3, ci.-s, ci |
| 15 | o | o : s N, s P, sps, g cur | 8, ci.-cu, ci.-s, ci | 5, ci.-cu, ci.-s : 10, l, t, h.-r |
| 16 | o | w : o | 10, th -r | 10, cu.-s, ci.-s, oc.-r |
| 17 | o | o | 10, th.-r | 10, fr.-r |
| 18 | o | w : o | 10, th.-r | 10, cu.-s, ci.-s, r |
| 19 | o | w : o | 3, ci, h | 3, ci.-cu, ci |
| 20 | o | o : w | 5, cu | 5, cu, ci.-cu, ci.-s |
| 21 | w | w | o | o |
| 22 | m | m | 5, ci | 9, ci.-cu, ci.-s |
| 23 | w | w | 10, ci.-s, ci | 6, ci.-cu, ci : o |
| 24 | s | s | 10, cu.-s, ci.-s : 7, cu, ci.-cu, ci | 7, cu, ci.-cu, ci : 5, ci |
| 25 | v | v | 10, cu.-s, ci.-s | 10, cu.-s, ci.-s : 10, r |
| 26 | s N, s P, sps, g cur | s N, s P, sps, g cur | 10, ci.-cu, ci.-s | 6, cu.-s, ci.-s, shs.-r |
| 27 | o | o : s N : w | 7, cu.-s, ci.-s | 7, cu.-s, ci.-s, sl.-r : 10 |
| 28 | o | o | 5, ci.-cu, ci.-s | 9, cu.-s, ci.-s, shs.-hl.-r : o |
| 29 | o | o : w | 7, ci.-cu, ci.-s, sc | 10, ci.-cu, cu.-s, ci.-s : 3, ci |
| 30 | o | w | 7, ci.-cu, ci.-s | 7, ci.-cu, ci.-s : 8, ci.-s, h |
| 31 | o | o | 10, r | 10, r |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 57°·1 on the 26th; and the lowest was 34°·4 on the 6th.
The mean ,, was 46°·1, being 0°·7 *higher* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was $0^{in}\cdot312$, being $0^{in}\cdot012$ *greater* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $3^{gr}\cdot5$, being $0_{gr}\cdot1$ *greater* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 75 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 536 grains, being 2 grains *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·5.

WIND.

The proportions were of N. 1, S. 7, W. 16, and E. 7. The greatest pressure in the month was $23^{lbs}\cdot0$ on the square foot on the 28th.

RAIN.

Fell on 14 days in the month, amounting to $3^{in}\cdot9$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot8$ *greater* than the average fall of the preceding 45 years.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 Years. | Wind as deduced from Anemometers. Osler's. General Direction. A.M. | Osler's. General Direction. P.M. | Osler's. Pressure in lbs. on the square foot. Greatest. | Osler's. Pressure in lbs. on the square foot. Least. | Osler's. Amount of Horizontal Movement of the Air on each Day. Mean of 24 Obs. | Whewell's. Amount of Horizontal Movement of the Air on each Day. | Robinson's. Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| June 1 | .. | 29·542 | 66·3 | 47·5 | 55·4 | 49·3 | 110·0 | 42·0 | 58·0 | 57·0 | 6·1 | 11·0 | 1·2 | — 1·0 | SW | SW | 3·0 | 0·0 | 1·0 | 80 | 217 | 0·03 |
| 2 | .. | 29·144 | 63·0 | 47·7 | 52·7 | 52·0 | 79·0 | 41·0 | 58·0 | 57·0 | 0·7 | 4·0 | 0·0 | — 3·9 | SE | SE ; SW | 23·0 | 0·0 | 5·0 | 300 | 640 | 0·82 |
| 3 | Full | 29·322 | 59·7 | 50·0 | 52·7 | 47·6 | 86·0 | 47·0 | 57·0 | 56·0 | 5·1 | 9·3 | 3·6 | — 4·1 | SW | SW | 15·0 | 0·0 | 3·5 | 165 | 353 | 0·20 |
| 4 | Greatest Declination S. | 29·555 | 64·0 | 47·6 | 53·7 | 47·5 | 111·0 | 44·5 | 57·0 | 56·0 | 6·2 | 14·1 | 0·8 | — 3·4 | SW | SW | 8·0 | 0·0 | 1·5 | 140 | 302 | 0·40 |
| 5 | .. | 29·696 | 62·3 | 46·5 | 52·5 | 46·2 | 100·2 | 42·8 | 57·5 | 56·3 | 6·3 | 13·6 | 0·6 | — 4·6 | WSW | WSW | 5·0 | 0·0 | 0·5 | 100 | 247 | 0·25 |
| 6 | .. | 29·636 | 62·6 | 43·5 | 50·1 | 45·7 | 106·0 | 42·0 | 57·5 | 56·3 | 4·4 | 15·2 | 1·1 | — 7·1 | SW | SW | 5·0 | 0·0 | 0·7 | 130 | 291 | 0·29 |
| 7 | .. | 29·634 | 58·8 | 45·3 | 49·6 | 44·7 | 103·0 | 43·0 | 57·5 | 56·3 | 4·9 | 12·4 | 1·8 | — 7·7 | SW | SSW | 5·0 | 0·0 | 0·6 | 165 | 345 | 0·39 |
| 8 | .. | 29·712 | 64·3 | 44·8 | 53·3 | 45·2 | 112·0 | 35·0 | 58·0 | 57·0 | 8·1 | 13·3 | 3·1 | — 4·1 | WSW | SW | 6·0 | 0·0 | 1·0 | 110 | 251 | 0·00 |
| 9 | .. | 29·522 | 57·0 | 48·2 | 51·2 | 49·7 | 72·0 | 45·0 | 58·0 | 57·0 | 1·5 | 3·8 | 0·8 | — 6·3 | SW | Calm | 0·0 | 0·0 | 0·0 | 25 | 145 | 0·36 |
| 10 | .. | 29·576 | 64·2 | 47·7 | 51·9 | 46·5 | 98·0 | 45·5 | 58·0 | 57·0 | 5·4 | 14·1 | 1·0 | — 5·8 | Calm | SW | 1·0 | 0·0 | 0·0 | 25 | 180 | 0·08 |
| 11 | Apogee; Last qr. In Equator. | 29·696 | 66·0 | 44·3 | 54·2 | 47·9 | 109·8 | 38·0 | 58·0 | 57·0 | 6·3 | 13·9 | 2·0 | — 3·8 | SW | SW | 2·5 | 0·0 | 0·2 | 70 | 197 | 0·00 |
| 12 | .. | 29·353 | 60·0 | 50·7 | 54·0 | 52·7 | 74·0 | 46·0 | 57·5 | 56·5 | 1·3 | 5·1 | 0·5 | — 4·3 | SSE | SW | 5·0 | 0·0 | 0·6 | 190 | 393 | 0·25 |
| 13 | .. | 29·474 | 64·0 | 47·5 | 53·9 | 45·9 | 103·7 | 46·5 | 58·0 | 57·0 | 8·0 | 13·3 | 1·0 | — 4·6 | SW | SW | 8·0 | 0·0 | 2·3 | 180 | 370 | 0·00 |
| 14 | .. | 29·590 | 65·0 | 44·1 | 53·2 | 46·2 | 117·0 | 42·0 | 58·0 | 57·0 | 7·0 | 15·1 | 2·9 | — 5·6 | SW | SW | 4·0 | 0·0 | 0·8 | 105 | 240 | 0·03 |
| 15 | .. | 29·541 | 67·0 | 43·6 | 53·0 | 47·0 | 111·0 | 30·3 | 58·5 | 57·5 | 6·0 | 18·2 | 1·1 | — 6·0 | Calm | SW | 1·0 | 0·0 | 0·0 | 20 | 109 | 0·20 |
| 16 | .. | 29·502 | 67·0 | 48·4 | 57·0 | 50·9 | 93·0 | 44·6 | 59·0 | 58·0 | 6·1 | 13·3 | 1·1 | — 2·3 | Calm | ENE | 2·0 | 0·0 | 0·0 | 75 | 224 | 0·00 |
| 17 | .. | 29·412 | 56·5 | 49·7 | 50·8 | 50·8 | 80·5 | 46·0 | 59·0 | 58·0 | 0·0 | 1·2 | 0·0 | — 8·6 | NE | NW | 3·5 | 0·0 | 0·8 | 110 | 287 | 1·10 |
| 18 | Greatest Declination N. | 29·669 | 69·5 | 48·4 | 56·6 | 48·5 | 115·0 | 45·0 | 59·5 | 58·3 | 8·1 | 20·3 | 1·6 | — 2·9 | WNW | W ; Calm | 1·5 | 0·0 | 0·0 | 50 | 138 | 0·04 |
| 19 | New | 29·617 | 63·8 | 46·6 | 53·7 | 52·1 | 84·0 | 40·3 | 59·5 | 58·3 | 1·6 | 9·9 | 0·8 | — 5·9 | Calm | SE | 1·5 | 0·0 | 0·0 | 65 | 237 | 0·15 |
| 20 | .. | 29·510 | 67·5 | 52·7 | 58·6 | 54·1 | 99·0 | 49·6 | 59·0 | 58·3 | 4·5 | 8·8 | 2·1 | — 1·2 | SE ; SW | SW | 2·5 | 0·0 | 0·1 | 110 | 111 | 0·20 |
| 21 | .. | 29·669 | 69·2 | 49·5 | 57·6 | 54·5 | 110·8 | 43·7 | 60·0 | 59·0 | 3·1 | 8·5 | 1·0 | — 2·3 | SW | SW | 3·5 | 0·0 | 0·3 | 120 | 260 | 0·02 |
| 22 | .. | 29·856 | 71·0 | 50·9 | 58·1 | 50·2 | 119·0 | 47·0 | 60·0 | 59·0 | 7·9 | 14·4 | 3·2 | — 1·9 | SW | SW ; ESE | 2·5 | 0·0 | 0·2 | 150 | 326 | 0·00 |
| 23 | Perigee | 29·795 | 70·8 | 52·5 | 60·5 | 56·4 | 111·0 | 50·0 | 60·0 | 59·0 | 4·1 | 13·1 | 2·7 | + 0·3 | SW | SW | 6·0 | 0·0 | 1·5 | 120 | 250 | 0·00 |
| 24 | .. | 29·813 | 74·0 | 57·3 | 62·6 | 57·6 | 108·0 | 55·0 | 61·5 | 60·3 | 5·0 | 10·3 | 1·7 | + 2·2 | SW | SW | 2·0 | 0·0 | 0·0 | 60 | 211 | 0·02 |
| 25 | In Equator | 29·622 | 68·8 | 53·0 | 57·4 | 53·4 | 102·0 | 50·8 | 61·5 | 60·3 | 4·0 | 12·4 | 0·8 | — 3·2 | SW | SW | 7·0 | 0·0 | 0·8 | 135 | 292 | 0·18 |
| 26 | First Qr. | 29·785 | 69·7 | 49·5 | 57·3 | 50·2 | 117·0 | 47·7 | 62·0 | 61·0 | 7·1 | 14·4 | 1·2 | — 3·5 | SW ; NW | SW | 3·0 | 0·0 | 0·2 | 135 | 290 | 0·35 |
| 27 | .. | 29·731 | 63·2 | 50·3 | 56·0 | 51·0 | 85·0 | 46·2 | 62·0 | 61·0 | 5·0 | 10·0 | 1·8 | — 5·0 | SW | SW | 9·0 | 0·0 | 1·3 | 200 | 411 | 0·00 |
| 28 | .. | 29·643 | 68·9 | 51·3 | 57·6 | 50·0 | 111·0 | 48·8 | 62·5 | 61·5 | 7·6 | 16·7 | 1·8 | — 3·7 | W | SW | 7·0 | 0·0 | 2·0 | 185 | 399 | 0·18 |
| 29 | .. | 29·726 | 65·7 | 48·8 | 55·8 | 49·6 | 113·0 | 44·0 | 62·0 | 61·0 | 6·2 | 12·2 | 1·3 | — 5·7 | W | W | 5·0 | 0·0 | 1·0 | 50 | 223 | 0·08 |
| 30 | .. | 30·047 | 61·2 | 48·3 | 53·0 | 47·6 | 89·0 | 42·0 | 62·0 | 61·0 | 5·4 | 10·6 | 1·4 | — 8·5 | W | N | 0·0 | 0·0 | 0·0 | 50 | 138 | 0·08 |
| Means | .. | 29·613 | 65·0 | 48·5 | 54·8 | 49·7 | 101·0 | 44·4 | 59·2 | 58·2 | 5·1 | 11·7 | 1·5 | — 4·2 | ... | ... | .. | .. | .. | Sum 3460 | Sum 8077 | Sum 5·80 |

**BAROMETER READINGS FROM EYE-OBSERVATIONS.**

The first maximum in the month was $29^{in}\cdot738$ on the 5th; the absolute minimum in the month was $29^{in}\cdot027$ on the 2nd.
The second maximum ,, was $29^{in}\cdot730$ on the 8th; the second minimum ,, was $29^{in}\cdot623$ on the 6th.
The third maximum ,, was $29^{in}\cdot724$ on the 11th; the third minimum ,, was $29^{in}\cdot422$ on the 9th.
The fourth maximum ,, was $29^{in}\cdot600$ on the 14th; the fourth minimum ,, was $29^{in}\cdot298$ on the 12th.
The fifth maximum ,, was $29^{in}\cdot696$ on the 18th; the fifth minimum ,, was $29^{in}\cdot386$ on the 17th.
The sixth maximum ,, was $29^{in}\cdot862$ on the 22nd; the sixth minimum ,, was $29^{in}\cdot500$ on the 30th.
The seventh maximum ,, was $29^{in}\cdot841$ on the 26th; the seventh minimum ,, was $29^{in}\cdot566$ on the 25th.
The eighth minimum ,, was $29^{in}\cdot628$ on the 27th.
The highest reading took place on the 30th at midnight, and was $30^{in}\cdot125$, the readings still increasing.
The range in the month was $1^{in}\cdot098$.
The mean for the month was $29^{in}\cdot613$, being $0^{in}\cdot190$ *lower* than the average of the preceding 19 years.

**TEMPERATURE OF THE AIR.**

The highest in the month was 74°·0 on the 24th; the lowest was 43°·5 on the 6th; and the range in the month was 30°·5.
The mean ,, of all the highest daily readings was 65°·0, being 6°·5 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 48°·5, being 1°·8 *lower* than the average of the preceding 19 years.
The mean daily range was 16°·5, being 4°·8 *lower* than the average of the preceding 19 years.
The mean for the month was 54°·8, being 4°·4 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| June 1 | | | 7, cu, ci.-cu, ci.-s | 7, cu, ci.-cu, ci.-s : 10, sl.-r : 3, ci.-s |
| 2 | | | 10, h.-r | 10, h.-r : 10, r |
| 3 | | | 10, ci.-s, sc, r | 7, cu.-s, ci.-s, oc.-r : 10 |
| 4 | | | 10 : 10, cu.-s, ci.-s, r | 10, cu.-s, ci.-s, r : 10, hl, r |
| 5 | | | 10, cu.-s, ci.-s | 6, ci.-cu, ci.-s, oc.-r |
| 6 | | | 10, h.-r | 10, t, hl, h.-r : 7, ci.-cu, ci.-s, r |
| 7 | o | s N : o | 10, th.-r | 9, ci.-cu, ci.-s : o |
| 8 | o | s N : o | 5, ci.-cu, ci.-s | 5, ci.-cu, ci.-s : 10, oc.-r |
| 9 | s N | s N | 10, r | 10, r : 10 |
| 10 | o | o | 10, h.-r | 7, l, t, r : o, l |
| 11 | o | w | 10 | 9, ci.-cu, ci.-s, ci |
| 12 | o | o | 10, r | 10, r : 7 |
| 13 | o | o : w | 7, cu, ci.-cu | 7, cu, ci.-cu, ci : o |
| 14 | s N, s P, sps, g cur | v | o : 5, cu, ci.-cu, ci | 5, cu, cu.-s, ci.-s, shs-r : o |
| 15 | s N, s P, sps, g cur | m : s | 10, cu, ci.-cu, ci.-s, shs.-r | 5, cu, ci.-cu, ci : o |
| 16 | m | v | 10, ci.-s | 10, s, ci.-s, oc.-r |
| 17 | s N, s P | w | 10, h.-r | 10, r |
| 18 | o | w | 10, r : 5, cu, ci.-cu, ci | 5, cu, ci.-cu, ci |
| 19 | m | m | 10, h.-r | 10, oc.-r |
| 20 | v | v | 10, s, ci.-s : h.-shs.-r | 10, oc.-r : 5, cu, cu.-s, h.-shs.-r |
| 21 | s | s N : w | 9, cu, ci.-cu, ci | 10, r : 7, cu.-s, ci.-s : 10, t.-r |
| 22 | m | m : s N, s P | 8, ci.-cu, ci.-s | 8, cu, ci.-cu, ci : 10, r |
| 23 | o | o : s | 10, oc.-r | 10, cu, ci.-cu, ci |
| 24 | s | s | 10, cu.-s, ci.-s, r | 10, cu.-s, ci.-s : 5, ci.-s, ci |
| 25 | s N | w | 10, h.-r | 10, r : 9, cu.-s, ci.-s |
| 26 | o | o : s | 10, h.-r : 5, cu, ci.-cu, ci | 7, ci.-cu, ci.-s : 3, ci.-s |
| 27 | o | o | 10 | 10 : 10, oc.-r |
| 28 | o | w N : o | 5, cu.-s, ci.-s | 10, h.-r |
| 29 | w : s N, s P, sps, g cur | s N, s P, sps, g cur : o | 7, s, ci.-s, fr.-r, t | 10, cu.-s, ci.-s, h.-r, t |
| 30 | o | w | 10, r | 10 : 5, ci.-s, ci |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 60°·0 on the 24th ; and the lowest was 43°·1 on the 8th.

The mean ,, was 49°·7, being 1°·1 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was $0^{in}·357$, being $0^{in}·017$ *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $4^{gr}·0$, being $0_{gr}·2$ *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 82 (that of Saturation being represented by 100), being 9 *greater* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 532 grains, being 1 grain *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·9.

WIND.

The proportions were of N. 2, S. 13, W. 13, and E. 2. The greatest pressure in the month was $23^{lbs}·0$ on the square foot on the 2nd.

RAIN.

Fell on 23 days in the month, amounting to $5^{in}·8$ as measured in the simple cylinder gauge partly sunk below the ground; being $3^{in}·9$ *greater* than the average fall of the preceding 45 years.

ELECTRICITY.—June 1 to 6. The insulating lamp was not burning.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h. A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Whewell's / Robinson's. Amount of Horizontal Movement of the Air on each Day. Whewell's | Robinson's | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| July 1 | Greatest Declination S. | 30·165 | 70·0 | 43·5 | 55·7 | 51·7 | 104·0 | 37·0 | 62·0 | 61·0 | 4·0 | 12·4 | 0·7 | — 5·8 | NW | NW | 0·0 | 0·0 | 0·0 | 55 | 151 | 0·00 |
| 2 | .. | 30·234 | 71·9 | 53·7 | 61·9 | 54·3 | 111·0 | 49·0 | 62·0 | 61·0 | 7·6 | 14·9 | 2·2 | + 0·5 | N | NW | 0·0 | 0·0 | 0·0 | 40 | 143 | 0·00 |
| 3 | Full | 30·178 | 70·8 | 55·1 | 61·7 | 53·5 | 104·0 | 50·0 | 62·5 | 61·5 | 8·2 | 14·9 | 4·4 | + 0·3 | NNW | NNW | 0·0 | 0·0 | 0·0 | 45 | 140 | 0·00 |
| 4 | .. | 30·019 | 72·5 | 51·4 | 61·7 | 55·8 | 102·0 | 45·5 | 63·0 | 62·0 | 5·9 | 13·3 | 1·1 | + 0·2 | NW | NE | 3·0 | 0·0 | 0·2 | 50 | 141 | 0·00 |
| 5 | .. | 30·079 | 73·3 | 41·6 | 56·3 | 50·4 | 123·0 | 37·0 | 63·0 | 62·0 | 5·9 | 21·1 | 1·1 | — 5·3 | NE | W; NW | 0·0 | 0·0 | 0·0 | 60 | 188 | 0·00 |
| 6 | .. | 30·063 | 68·8 | 53·0 | 57·2 | 52·0 | 112·0 | 50·3 | 63·0 | 62·0 | 5·2 | 11·2 | 3·6 | — 4·5 | NW; N | N | 3·0 | 0·0 | 0·3 | 45 | 159 | 0·00 |
| 7 | .. | 30·145 | 69·0 | 44·5 | 55·1 | 52·0 | 115·0 | 38·8 | 63·5 | 62·5 | 3·1 | 10·6 | 2·8 | — 6·7 | NE | NE | 0·0 | 0·0 | 0·0 | 10 | 114 | 0·00 |
| 8 | In Equator; Apogee. | 30·075 | 71·6 | 44·6 | 54·8 | 49·3 | 112·0 | 38·8 | 63·5 | 62·5 | 5·5 | 16·2 | 1·1 | — 6·9 | NE | NE; E | 2·0 | 0·0 | 0·0 | 30 | 183 | 0·00 |
| 9 | .. | 29·984 | 69·0 | 50·6 | 56·8 | 50·8 | 121·5 | 47·0 | 63·0 | 62·0 | 6·0 | 14·8 | 2·4 | — 4·7 | NE | Calm | 0·0 | 0·0 | 0·0 | 25 | 148 | 0·00 |
| 10 | .. | 29·897 | 60·0 | 49·3 | 53·9 | 49·1 | 72·0 | .. | 63·0 | 62·0 | 4·8 | 8·4 | 2·5 | — 7·6 | NE | NE | 0·0 | 0·0 | 0·0 | 2 | 103 | 0·00 |
| 11 | Last Qr. | 29·866 | 71·5 | 51·3 | 59·5 | 53·9 | 123·0 | 47·5 | 63·0 | 62·0 | 5·6 | 14·2 | 1·8 | — 2·1 | NE | Calm | 0·0 | 0·0 | 0·0 | 5 | 89 | 0·00 |
| 12 | .. | 29·830 | 73·0 | 49·5 | 57·9 | 54·8 | 124·0 | 38·8 | 63·5 | 62·5 | 2·1 | 10·2 | 1·6 | — 3·8 | N | E; SE | 0·0 | 0·0 | 0·0 | 15 | 106 | 0·00 |
| 13 | .. | 29·768 | 73·3 | 48·7 | 58·2 | 54·1 | 121·0 | 41·2 | 63·0 | 62·0 | 4·1 | 15·7 | 0·6 | — 3·6 | Calm | Calm; S | 0·0 | 0·0 | 0·0 | 45 | 155 | 0·00 |
| 14 | .. | 29·668 | 74·3 | 52·5 | 60·4 | 55·9 | 118·0 | 48·0 | 63·0 | 62·0 | 4·5 | 14·5 | 2·5 | — 1·3 | SW | SW | 2·5 | 0·0 | 0·3 | 85 | 223 | 0·00 |
| 15 | .. | 29·745 | 73·8 | 55·8 | 62·7 | 58·1 | 105·3 | 50·5 | 63·5 | 62·5 | 4·6 | 15·3 | 0·8 | + 1·0 | SW | SW | 3·0 | 0·0 | 0·3 | 70 | 165 | 0·00 |
| 16 | Greatest Declination N. | 29·771 | 64·0 | 55·5 | 58·4 | 56·7 | 72·0 | 48·4 | 64·0 | 63·0 | 1·7 | 7·6 | 0·4 | — 3·3 | SW | Calm | 3·0 | 0·0 | 0·0 | 10 | 74 | 0·41 |
| 17 | .. | 29·738 | 75·0 | 55·5 | 62·3 | 55·5 | 107·0 | 51·7 | 64·5 | 63·5 | 6·8 | 16·8 | 1·8 | + 0·6 | Calm | SW | 3·5 | 0·0 | 0·2 | 60 | 183 | 0·00 |
| 18 | New | 29·700 | 72·0 | 50·2 | 58·1 | 52·6 | 121·0 | 38·0 | 64·5 | 63·5 | 5·5 | 11·0 | 1·6 | — 3·6 | SW | SW | 3·5 | 0·0 | 0·3 | 65 | 191 | 0·00 |
| 19 | .. | 29·552 | 69·2 | 52·7 | 57·4 | 52·7 | 107·0 | 32·0 | 64·5 | 63·5 | 4·7 | 13·1 | 1·5 | — 4·3 | S | SW | 4·0 | 0·0 | 0·5 | 105 | 271 | 0·26 |
| 20 | Perigee | 29·704 | 72·0 | 53·0 | 58·9 | 53·1 | 109·0 | 46·5 | 64·0 | 63·0 | 5·8 | 15·3 | 0·8 | — 2·7 | W | SW | 4·0 | 0·0 | 0·2 | 85 | 208 | 0·16 |
| 21 | .. | 29·567 | 67·2 | 50·5 | 55·6 | 51·7 | 85·0 | 46·0 | .. | .. | 3·9 | 12·6 | 1·2 | — 5·9 | S | SW | 3·0 | 0·0 | 0·4 | 85 | 242 | 0·03 |
| 22 | In Equator | 29·595 | 69·0 | 50·7 | 58·5 | 52·2 | 108·8 | 46·5 | 62·0 | 61·0 | 6·3 | 15·5 | 2·6 | — 3·0 | S; NW | NW | 4·0 | 0·0 | 0·6 | 110 | 283 | 0·15 |
| 23 | .. | 29·600 | 62·5 | 47·8 | 53·8 | 53·0 | 85·0 | 41·0 | .. | .. | 0·8 | 7·8 | 0·0 | — 7·7 | Calm; SW | SW | 6·0 | 0·0 | 0·5 | 135 | 274 | 0·40 |
| 24 | .. | 29·674 | 64·2 | 47·5 | 54·4 | 49·6 | 90·8 | 40·5 | .. | .. | 4·8 | 12·8 | 0·4 | — 7·2 | NW | NW | 5·0 | 0·0 | 0·7 | 130 | 307 | 0·02 |
| 25 | First Qr. | 29·855 | 62·7 | 47·7 | 53·6 | 45·5 | 83·0 | 41·0 | .. | 61·0 | 8·1 | 14·8 | 2·6 | — 8·2 | N | N | 2·0 | 0·0 | 0·2 | 40 | 123 | 0·00 |
| 26 | .. | 29·806 | 65·1 | 42·8 | 54·8 | 46·7 | 114·0 | 35·0 | .. | 62·0 | 8·1 | 17·5 | 2·0 | — 7·3 | NE | NW; SW | 0·0 | 0·0 | 0·0 | 40 | 190 | 0·00 |
| 27 | .. | 29·663 | 69·5 | 49·9 | 57·5 | 51·3 | 118·0 | 44·3 | .. | 62·0 | 6·2 | 14·0 | 2·4 | — 4·8 | WSW | SW | 2·5 | 0·0 | 0·0 | 35 | 152 | 0·00 |
| 28 | Greatest Declination S. | 29·601 | 67·0 | 51·8 | 56·4 | 52·7 | 95·0 | 50·0 | .. | 62·5 | 3·7 | 11·8 | 0·4 | — 6·1 | SW | Calm | 0·0 | 0·0 | 0·0 | 55 | 142 | 0·27 |
| 29 | .. | 29·776 | 71·2 | 51·7 | 57·5 | 52·7 | 118·8 | 49·8 | 62·0 | 61·0 | 4·8 | 13·7 | 0·0 | — 5·0 | NW | NE. | 3·5 | 0·0 | 0·0 | 85 | 181 | 1·09 |
| 30 | .. | 29·988 | 68·0 | 51·7 | 56·9 | 48·4 | 102·0 | 45·0 | 62·3 | 61·3 | 8·5 | 16·0 | 3·6 | — 5·6 | NE | Calm | 0·0 | 0·0 | 0·0 | 55 | 146 | 0·01 |
| 31 | .. | 29·899 | 64·6 | 51·1 | 57·3 | 50·8 | 89·0 | 46·5 | 62·5 | 61·5 | 6·5 | 12·0 | 3·4 | — 5·2 | SW | W | 0·0 | 0·0 | 0·0 | 75 | 144 | 0·00 |
| Means | .. | 29·845 | 69·2 | 50·1 | 57·6 | 52·3 | 105·6 | 44·1 | 63·1 | 62·1 | 5·3 | 13·5 | 1·8 | — 4·2 | ... | ... | .. | .. | .. | Sum 1752 | Sum 5319 | Sum 2·80 |

**BAROMETER READINGS FROM EYE-OBSERVATIONS.**

The absolute maximum in the month was 30in·253 on the 2nd; the first minimum in the month was 29in·997 on the 5th.
The second maximum ,, was 30in·162 on the 7th; the second minimum ,, was 29in·660 on the 14th.
The third maximum ,, was 29in·802 on the 16th; the third minimum ,, was 29in·526 on the 19th.
The fourth maximum ,, was 29in·730 on the 20th; the fourth minimum ,, was 29in·530 on the 22nd.
The fifth maximum ,, was 29in·696 on the 22nd; the absolute minimum ,, was 29in·504 on the 23rd.
The sixth maximum ,, was 29in·863 on the 25th; the sixth minimum ,, was 29in·582 on the 28th.
The seventh maximum ,, was 30in·003 on the 30th; the seventh minimum ,, was 29in·897 on the 30th.
The range in the month was 0in·749.
The mean for the month was 29in·845, being 0in·043 *higher* than the average of the preceding 19 years.

**TEMPERATURE OF THE AIR.**

The highest in the month was 75°·0 on the 17th; the lowest was 41°·6 on the 5th; and the range in the month was 33°·4.
The mean ,, of all the highest daily readings was 69°·2, being 4°·8 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 50°·1, being 3°·2 *lower* than the average of the preceding 19 years.
The mean daily range was 19°·1, being 1°·6 *lower* than the average of the preceding 19 years.
The mean for the month was 57°·6, being 4°·3 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. | | CLOUDS AND WEATHER. | |
|---|---|---|---|---|
| | A.M. | P.M. | A.M. | P.M. |
| July 1 | s | s | 10, ci.-cu, ci, h | 10, ci.-cu, ci.-s |
| 2 | s | mN : m | 0, h : 10, s, ci.-s | 10, |
| 3 | v | o : m | 10, ci.-s, | 10, cu.-s, ci.-s, h |
| 4 | m | s : o | 10, ci.-cu, ci.-s | 8, ci.-s, ci : 10 ci.-s, m.-r : o |
| 5 | ss, sps | o | 3, ci : o | o : 3, cu.-ci : o |
| 6 | o | s | 10 | 10 : o |
| 7 | o | o : s | 10, s, ci.-s | 10 : 7, ci.-cu, ci.-s |
| 8 | s | s | 10 | 7, ci.-cu, ci : 10, s, ci.-s |
| 9 | s | s | 10 : 3, ci.-cu, ci.-s | 3, ci.-cu, ci.-s |
| 10 | v | v | 10 : oc.-r | 10, cu.-s, ci.-s |
| 11 | v | v | 10 | 10 : 9, cu, ci.-cu, ci |
| 12 | s | o | 10, h : 5, cu, ci.-cu, ci | 6, ci.-cu, ci.-s |
| 13 | o | o | 10, : 7, ci.-s, ci | o : 5, ci, h |
| 14 | o | o | 10, th.-r | 10, cu, ci.-cu, ci : o |
| 15 | o | o | 10 : 7, cu.-s, ci.-s | 7, cu.-s, ci.-s |
| 16 | o | o | 10, r | 10, r : 10 |
| 17 | o | s | 10, ci.-cu, ci.-s | 10, ci.-s |
| 18 | v | v | 7, oc.-r | 7, ci.-cu, ci.-s : 10, oc.-r |
| 19 | o | o | 10, cu.-s, ci.-s, r | 10, r : 5, cu, ci.-cu, ci : ci.-s, r |
| 20 | o | sN : o | 10, ci.-s, h.-r | 10, r |
| 21 | o | o | 10, r | 10, r : 1, ci |
| 22 | o | o | 10, cu, cu.-s, s, r | 7, cu, ci.-cu, s, shs.-r |
| 23 | o | o | 10, ci.-cu, ci.-s, ci | 10, r |
| 24 | o | o | 10, ci.-cu, ci.-s | 10, cu.-s , ci.-s, cc.-r |
| 25 | o | o | 9, cu-s, ci.-s | 9, cu.-s, ci.-s |
| 26 | o | o | 3, ci.-cu, ci, h | 10, cu, ci.-cu, ci |
| 27 | o | o : m | 10, ci.-cu, ci.-s | 10, ci.-cu, ci |
| 28 | o | sN : o | 10, h | 10, h : 7, cu, ci.-cu, h : 10, l, t, r |
| 29 | o | w : o | 9, cu.-s, ci.-s | 9, ci.-s, ci : t.-s : 8, s, ci.-s |
| 30 | o | o : w | 5, ci.-cu, ci.-s | 5, ci.-cu, ci.-s, ci : 8, s, ci.-s |
| 31 | o | o | 10, ci.-cu, ci.-s, h | 10, ci.-cu, ci.-s, h |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 60°·1 on the 15th; and the lowest was 45°·1 on the 25th.

The mean ,, was 52°·3, being 1°·6 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was 0in·393, being 0in·025 *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was 4gr·4, being 0gr·2 *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 83 (that of Saturation being represented by 100), being 7 *greater* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 534 grains, being 7 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 8·3.

WIND.

The proportions were of N. 12, S. 7, W. 8, and E. 4. The greatest pressure in the month was 61bs·0 on the square foot on the 23rd.

RAIN.

Fell on 10 days in the month, amounting to 2in·8, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·1 *greater* than the average fall of the preceding 45 years.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames at Greenwich by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames at Greenwich by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Wheewell's Amount of Horizontal Movement of the Air on each Day. | Robinson's Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Aug. 1 | Full | 29·884 | 70·3 | 54·6 | 59·8 | 50·6 | 111·0 | 49·8 | 62·0 | 61·0 | 9·2 | 15·5 | 3·0 | — 2·7 | W | W | 3·0 | 0·0 | 0·0 | 90 | 183 | 0·00 |
| 2 | .. | 29·774 | 67·0 | 52·5 | 57·3 | 52·7 | 97·0 | 44·0 | 62·0 | 61·0 | 4·6 | 11·0 | 1·8 | — 5·0 | W | NW | 1·0 | 0·0 | 0·0 | 95 | 180 | 0·03 |
| 3 | .. | 29·532 | 67·8 | 52·4 | 59·1 | 55·4 | 99·0 | 46·0 | 62·0 | 61·0 | 3·7 | 8·4 | 0·4 | — 3·1 | W | SW | 0·0 | 0·0 | 0·0 | 110 | | 0·04 |
| 4 | .. | 29·408 | 70·8 | 53·3 | 59·9 | 54·0 | 111·0 | 46·5 | 62·5 | 61·5 | 5·9 | 13·9 | 1·4 | — 2·2 | WSW | W | 6·0 | 0·0 | 0·4 | 115 | | 0·04 |
| 5 | In Equator; Apogee. | 29·528 | 69·2 | 47·4 | 57·1 | 47·8 | 119·0 | 39·2 | 62·5 | 61·5 | 9·3 | 19·1 | 2·1 | — 4·9 | W | SW; S | 3·5 | 0·0 | 0·2 | 110 | | 0·00 |
| 6 | .. | 29·277 | 64·0 | 52·0 | 55·4 | 49·3 | 102·0 | 53·1 | 62·0 | 61·0 | 6·1 | 13·0 | 3·2 | — 6·6 | SW | SW; W | 6·0 | 0·0 | 1·7 | 165 | | 0·34 |
| 7 | .. | 29·699 | 68·0 | 45·5 | 55·7 | 46·9 | 115·0 | 39·0 | 62·5 | 61·5 | 8·8 | 18·7 | 2·9 | — 6·3 | WSW | W; SW | 5·0 | 0·0 | 0·6 | 120 | | 0·00 |
| 8 | .. | 29·554 | 65·0 | 47·8 | 53·9 | 53·1 | 71·0 | 39·7 | 62·0 | 61·0 | 0·8 | 3·2 | 0·0 | — 8·1 | SW; S | SW | 3·0 | 0·0 | 0·5 | 120 | | 0·20 |
| 9 | Last Qr. | 29·536 | 64·2 | 52·6 | 56·4 | 47·5 | 102·0 | 48·8 | 61·5 | 60·5 | 8·9 | 14·8 | 4·8 | — 5·5 | SW | WNW | 3·5 | 0·0 | 0·3 | 70 | | 0·00 |
| 10 | .. | 29·716 | 69·0 | 47·3 | 57·5 | 51·1 | 119·0 | 38·0 | 61·5 | 60·5 | 6·4 | 13·9 | 3·4 | — 4·3 | W | SW | 3·0 | 0·0 | 0·3 | 135 | | 0·01 |
| 11 | .. | 29·428 | 69·6 | 53·7 | 58·3 | 54·4 | 112·0 | 50·0 | 61·5 | 60·5 | 3·9 | 12·1 | 2·2 | — 3·4 | SW | W | 5·0 | 0·0 | 0·3 | 105 | | 0·48 |
| 12 | Greatest Declination N. | 29·595 | 65·0 | 53·1 | 57·9 | 53·0 | 87·5 | 51·5 | 61·0 | 60·0 | 4·9 | 10·6 | 4·2 | — 3·7 | W; NW | NW; N | 4·5 | 0·0 | 0·5 | 45 | | 0·02 |
| 13 | .. | 29·605 | 69·8 | 52·7 | 58·3 | 53·3 | 110·0 | 46·3 | 61·5 | 60·5 | 5·0 | 10·1 | 2·6 | — 3·2 | NNW | SW; S | 3·0 | 0·0 | 0·0 | 25 | | 0·02 |
| 14 | .. | 29·549 | 68·8 | 52·6 | 59·2 | 55·1 | 117·0 | 50·3 | 61·5 | 60·5 | 4·1 | 10·1 | 1·3 | — 2·3 | W | Calm | 0·0 | 0·0 | 0·0 | 5 | | 0·15 |
| 15 | .. | 29·518 | 67·8 | 51·1 | 59·3 | 54·6 | 103·0 | 45·4 | 61·5 | 60·5 | 4·7 | 11·2 | 0·0 | — 2·1 | SW | SW; SE | 3·0 | 0·0 | 0·0 | 85 | | 0·02 |
| 16 | New | 29·232 | 70·8 | 56·2 | 61·1 | 57·2 | 105·0 | 53·0 | 61·5 | 60·5 | 3·9 | 7·7 | 1·9 | — 0·3 | S | SW | 5·0 | 0·0 | 0·5 | 120 | | 0·09 |
| 17 | Perigee | 29·394 | 65·7 | 50·3 | 56·2 | 48·2 | 105·0 | 45·7 | 62·0 | 61·0 | 8·0 | 16·0 | 3·0 | — 5·1 | SW | SW | 5·0 | 0·0 | 1·0 | 155 | | 0·04 |
| 18 | In Equator | 29·448 | 60·0 | 48·8 | 52·9 | 51·3 | 69·0 | 42·4 | 61·5 | 60·5 | 1·6 | 4·9 | 1·4 | — 8·2 | SW | WSW | 5·0 | 0·0 | 2·0 | 240 | | 0·16 |
| 19 | .. | 29·702 | 65·5 | 54·4 | 58·7 | 55·1 | 91·8 | 53·0 | 61·0 | 60·0 | 3·6 | 9·9 | 0·0 | — 2·2 | W | WSW | 6·0 | 0·0 | 2·0 | 120 | | 0·12 |
| 20 | .. | 29·688 | 68·7 | 55·9 | 59·0 | 53·4 | 107·0 | 55·0 | 61·0 | 60·0 | 5·6 | 9·3 | 2·7 | — 1·8 | W | W | 3·5 | 0·0 | 0·3 | 85 | | 0·03 |
| 21 | .. | 29·791 | 70·1 | 53·5 | 58·9 | 53·1 | 115·0 | 48·8 | 61·5 | 60·5 | 5·8 | 14·6 | 2·2 | — 1·7 | WNW | W | 2·0 | 0·0 | 0·0 | 65 | | 0·00 |
| 22 | .. | 29·393 | 63·8 | 52·0 | 56·1 | 54·4 | 82·0 | 47·7 | 61·0 | 60·0 | 1·7 | 4·4 | 0·8 | — 4·3 | SW; S | SW; W | 6·0 | 0·0 | 1·5 | 190 | | 0·31 |
| 23 | First Qr. | 29·703 | 66·8 | 47·4 | 55·6 | 49·6 | 115·0 | 37·0 | 60·5 | 59·5 | 6·0 | 13·7 | 4·2 | — 4·7 | W | SW | 6·0 | 0·5 | 3·0 | 190 | | 0·03 |
| 24 | .. | 29·591 | 60·8 | 47·8 | 54·4 | 54·4 | 84·0 | 42·0 | 60·5 | 59·5 | 0·0 | 2·3 | 0·0 | — 5·9 | W | SW | 6·0 | 0·0 | 2·5 | 215 | | 0·48 |
| 25 | Greatest Declination S. | 29·581 | 64·0 | 58·3 | 59·8 | 58·4 | 77·0 | 50·2 | 60·5 | 59·5 | 1·4 | 4·6 | 0·4 | — 0·4 | SW | SW | 7·0 | 0·5 | 2·8 | 180 | | 0·36 |
| 26 | .. | 29·688 | 70·0 | 53·1 | 59·0 | 50·8 | 118·5 | 48·7 | 60·5 | 59·5 | 8·2 | 18·7 | 3·4 | — 0·9 | W | SW | 4·0 | 0·0 | 1·0 | 60 | 191 | 0·02 |
| 27 | .. | 29·713 | 68·0 | 50·7 | 56·8 | 51·2 | 110·0 | 46·0 | 60·5 | 59·5 | 5·6 | 15·1 | 1·6 | — 2·9 | SW | SW | 3·0 | 0·0 | 0·3 | 105 | 262 | 0·24 |
| 28 | .. | 29·664 | 66·8 | 50·2 | 57·2 | 53·4 | 111·0 | 39·7 | 61·0 | 60·0 | 3·8 | 8·8 | 0·0 | — 2·4 | SW | SW; S | 4·5 | 0·0 | 0·3 | 140 | 301 | 0·30 |
| 29 | .. | 29·391 | 69·1 | 52·6 | 59·7 | 55·5 | 110·0 | 46·2 | 61·0 | 60·0 | 4·2 | 10·3 | 2·4 | + 0·3 | SW | SW | 4·5 | 0·0 | 1·3 | 175 | 403 | 0·14 |
| 30 | .. | 29·225 | 67·2 | 53·2 | 59·2 | 52·5 | 113·0 | 46·0 | 61·0 | 60·0 | 6·7 | 13·7 | 2·8 | + 0·1 | SW | SW | 9·0 | 0·0 | 2·5 | 195 | 415 | 0·01 |
| 31 | Full | 29·425 | 69·0 | 51·4 | 57·4 | 50·9 | 121·0 | 44·0 | 61·0 | 60·0 | 6·5 | 13·3 | 2·6 | — 1·6 | SW | SW | 3·0 | 0·0 | 0·5 | 80 | 227 | 0·00 |
| Means | .. | 29·556 | 67·2 | 51·8 | 57·7 | 52·5 | 103·5 | 46·2 | 61·4 | 60·4 | 5·1 | 11·4 | 2·0 | — 3·4 | ... | ... | .. | .. | .. | Sum 3710 | Sum | Sum 3·68 |

**BAROMETER READINGS FROM EYE-OBSERVATIONS.**

The absolute maximum in the month was 29in·926 on the 1st; the first minimum in the month was 29in·390 on the 4th.
The second maximum ,, was 29in·564 on the 5th; the second minimum ,, was 29in·223 on the 6th.
The third maximum ,, was 29in·765 on the 7th; the third minimum ,, was 29in·483 on the 8th.
The fourth maximum ,, was 29in·737 on the 10th; the fourth minimum ,, was 29in·427 on the 11th.
The fifth maximum ,, was 29in·671 on the 12th; the fifth minimum ,, was 29in·217 on the 16th.
The sixth maximum ,, was 29in·806 on the 21st; the sixth minimum ,, was 29in·312 on the 22nd.
The seventh maximum ,, was 29in·737 on the 23rd; the seventh minimum ,, was 29in·514 on the 24th.
The eighth maximum ,, was 29in·747 on the 27th; the absolute minimum ,, was 29in·186 on the 30th.
The range in the month was 0in·740.
The mean for the month was 29in·556, being 0in·244 *lower* than the average of the preceding 19 years.

**TEMPERATURE OF THE AIR.**

The highest in the month was 70°·8 on the 4th and 16th; the lowest was 45°·5 on the 7th; and the range in the month was 25°·3.
The mean ,, of all the highest daily readings was 67°·2, being 5°·9 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 51°·8, being 1°·7 *lower* than the average of the preceding 19 years.
The mean daily range was 15°·4, being 4°·2 *lower* than the average of the preceding 19 years,
The mean for the month was 57°·7 being 3°·8 *lower* than the average of the preceding 19 years.

Robinson's Anemometer was away for repair from August 3 to 25.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| Aug. 1 | o | o : w | 10, h : 1, ci | 10, s, ci.-s : 10, h.-r |
| 2 | o | o | 10, th.-r : 10, h | 10, cu.-s, ci.-s, h |
| 3 | o | o | 10, s, ci.-s | 10, s, ci.-s |
| 4 | o | o | 10 | 7, cu, ci.-cu, ci, shs.-r : o |
| 5 | o | o | 7, ci.-cu, ci.-s | 7, ci.-cu, ci.-s : 10, oc.-r |
| 6 | o | o | 10, r | 7, ci.-cu, ci.-s, oc.-r : 10, s, ci.-s, n, r |
| 7 | o | w : o | 3, ci.-cu, ci.-s, sc | 3, ci.-cu, ci.-s, sc : 10, ci.-cu, ci.-s |
| 8 | o | o | 10, h.-r | 10, r : 7, s, ci.-s |
| 9 | m | m | 10, ci.-cu, ci.-s : 8, ci.-cu, ci.-s | 8, ci.-cu, ci : 10, cu.-s, ci.-s |
| 10 | o | o | 10, ci.-cu, ci.-s | 3, cu, ci.-cu, ci : 10, cu.-s, ci.-s |
| 11 | s N, s P, sps, g cur | o | 10, h.-r : 7, ci.-s, sc : 10, t, h.-r | 8, s, ci.-s, t, h.-r |
| 12 | o | o | 10 | 10 : shs.-r |
| 13 | o | o : s | 10 : 9, ci.-cu, ci.-s | 9 : 10, r |
| 14 | m | o | 10, s, ci.-s | 10, ci.-cu, ci.-s, r : 10, s, ci.-s |
| 15 | o | o | 10, ci.-cu, ci | 10, cu.-s, ci.-s : 10, r |
| 16 | o | o | 10, r : 9, ci.-cu, ci.-s : 10 | 10, oc.-r : 10, h.-r |
| 17 | s N, sps, g cur | o | 5, ci.-cu, ci.-s, ci | 7, ci.-cu, ci.-s, shs.-r : o |
| 18 | o | o | 10, r | 10, fr.-r |
| 19 | o : w | w : o | 10, cu.-s ci.-s | 10, ci.-s, fr.-r |
| 20 | o | o : w | 10 : 8, ci.-cu, ci.-s | 8, ci.-cu, ci.-s : 10, shs.-r |
| 21 | o | w | 10, s, ci.-s, h | 10, ci.-cu, ci.-s : 5 |
| 22 | o | o | 10, r | 10, r : s, ci,-s |
| 23 | o | o | o : 3, cu, ci.-cu, ci, sh.-r | 10, cu, cu.-s, shs.-r |
| 24 | o | o | 5, ci.-cu, ci.-s : 10, r | 10, r |
| 25 | o | o | 10, h.-r | 10, r |
| 26 | o | o | 5, ci.-cu, ci | 7, cu, cu.-s, ci.-s : 10 |
| 27 | o | o : s | 10, r : 10 | 7, cu, ci.-cu, ci : 2, cu.-s |
| 28 | s N, s P, sps, g cur | o | 9, ci.-cu, ci.-s | 10, fr.-shs.-r |
| 29 | o | o : s | 7, ci.-s, sc | 7, cu, ci.-cu, ci, oc.-r : 5 ci.-s, ci |
| 30 | o | o | 3, cu, cu.-s, sc | 3, cu, ci.-cu : 10, sh.-r : 5, ci.-s, sc |
| 31 | o | o : s | 8, ci.-s, ci, h | 8, cu, ci.-cu, ci : 3, ci.-s, ci |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 61°·2 on the 25th; and the lowest was 46°·8 on the 7th.

The mean ,, was 52°·5, being 1°·6 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was 0$^{in}$·396, being 0$^{in}$·027 *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was 4$^{gr}$·4, being 0$^{gr}$·3 *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 83 (that of Saturation being represented by 100), being 6 *greater* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 528 grains, being the same as the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 8·3.

WIND.

The proportions were; N. 1, S. 9, W. 21, and E. o. The greatest pressure in the month was 7$^{lbs}$·0 on the square foot on the 25th.

RAIN.

Fell on 25 days in the month, amounting to 3$^{in}$·7, as measured in the simple cylinder gauge partly sunk below the ground; being 1$^{in}$·3 *greater* than the average fall of the preceding 45 years.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h. A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 Years. | Wind as deduced from Anemometers. Osler's. General Direction. A.M. | Osler's. General Direction. P.M. | Osler's. Pressure in lbs. on the square foot. Greatest. | Osler's. Pressure in lbs. on the square foot. Least. | Osler's. Pressure in lbs. on the square foot. Mean of 24 Obs. | Whewell's. Amount of Horizontal Movement of the Air on each Day. | Robinson's. Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Sept. 1 | In Equator; Apogee. | 29·652 | 69·5 | 46·7 | 56·9 | 51·4 | 122·0 | 43·0 | 61·5 | 60·5 | 5·5 | 14·2 | 1·0 | — 1·9 | SW | Calm | 2·5 | 0·0 | 0·0 | 40 | 157 | 0·12 |
| 2 | .. | 29·788 | 68·8 | 44·1 | 54·4 | 49·3 | 114·0 | 39·8 | 61·0 | 60·0 | 5·1 | 11·8 | 1·3 | — 4·9 | W | W; NW | 0·0 | 0·0 | 0·0 | 15 | 109 | 0·00 |
| 3 | .. | 29·953 | 66·2 | 47·7 | 55·2 | 51·6 | 112·0 | 37·0 | 61·0 | 60·0 | 3·6 | 9·3 | 1·1 | — 3·3 | NW | Calm | 0·0 | 0·0 | 0·0 | 5 | 84 | 0·01 |
| 4 | .. | 30·052 | 66·3 | 46·0 | 54·8 | 51·1 | 109·0 | 39·8 | 61·0 | 60·0 | 3·7 | 10·8 | 0·8 | — 3·6 | Calm | Calm | 0·0 | 0·0 | 0·0 | .. | 144 | 0·00 |
| 5 | .. | 30·085 | 69·0 | 45·0 | 56·9 | 53·4 | 115·0 | 37·0 | 60·5 | 59·5 | 3·5 | 11·5 | 1·3 | — 1·3 | SW | NW | 0·0 | 0·0 | 0·0 | 40 | 164 | 0·00 |
| 6 | .. | 30·233 | 63·9 | 53·3 | 56·8 | 53·3 | 81·0 | 52·0 | 60·5 | 59·5 | 3·5 | 10·1 | 1·6 | — 1·2 | NW; N | NE | 0·0 | 0·0 | 0·0 | 15 | 130 | 0·00 |
| 7 | .. | 30·140 | 69·7 | 45·6 | 56·3 | 52·9 | 118·0 | 35·0 | 60·5 | 59·5 | 3·4 | 11·7 | 0·6 | — 1·5 | NE | NE | 0·0 | 0·0 | 0·0 | .. | 83 | 0·00 |
| 8 | Last Quarter; Greatest Dec. N. | 29·908 | 69·7 | 47·8 | 58·0 | 56·1 | 105·0 | 38·8 | 61·0 | 60·0 | 1·9 | 7·0 | 1·2 | + 0·3 | NE | NNE | 0·0 | 0·0 | 0·0 | 40 | 175 | 0·00 |
| 9 | .. | 29·977 | 60·5 | 49·3 | 52·6 | 46·7 | 83·0 | 51·1 | 60·5 | 59·5 | 5·9 | 8·0 | 2·9 | — 5·0 | NE | Calm | 0·0 | 0·0 | 0·0 | 10 | 118 | 0·00 |
| 10 | .. | 29·942 | 63·5 | 38·5 | 49·9 | 45·3 | 116·0 | 30·6 | 60·5 | 59·5 | 4·6 | 12·4 | 1·8 | — 7·6 | Calm; NE | Calm | 0·0 | 0·0 | 0·0 | 40 | 176 | 0·07 |
| 11 | .. | 30·134 | 64·3 | 37·7 | 50·1 | 45·5 | 115·0 | 33·9 | 60·5 | 59·5 | 4·6 | 13·7 | 1·7 | — 7·3 | Calm; NE | NE; SE | 2·5 | 0·0 | 0·1 | 25 | 110 | 0·00 |
| 12 | .. | 30·171 | 64·5 | 35·7 | 49·8 | 47·4 | 111·0 | 28·0 | 59·5 | 58·5 | 2·4 | 11·8 | 0·2 | — 7·5 | SE | SE | 0·0 | 0·0 | 0·0 | 55 | 151 | 0·00 |
| 13 | .. | 29·800 | 67·2 | 39·9 | 54·0 | 49·7 | 115·0 | 32·0 | 59·5 | 58·5 | 4·3 | 13·0 | 0·8 | — 3·2 | S | SW | 2·5 | 0·0 | 0·3 | 130 | 323 | 0·00 |
| 14 | .. | 29·460 | 67·2 | 47·8 | 56·4 | 50·4 | 115·0 | 39·6 | 58·5 | 57·5 | 6·0 | 14·2 | 1·5 | — 0·6 | SW | SW | 5·0 | 0·5 | 2·0 | 170 | 378 | 0·00 |
| 15 | In Equator; New; Perigee | 29·395 | 63·8 | 50·5 | 55·5 | 52·0 | 107·0 | 43·2 | 58·0 | 57·0 | 3·5 | 9·4 | 0·6 | — 1·2 | SW | SW | 4·0 | 0·0 | 1·0 | 110 | 286 | 0·02 |
| 16 | .. | 29·542 | 62·8 | 49·7 | 56·3 | 52·7 | 95·8 | 47·0 | 58·0 | 57·0 | 3·6 | 9·9 | 0·8 | — 0·2 | SW | SW | 4·0 | 0·0 | 0·6 | 175 | 405 | 0·07 |
| 17 | .. | 29·478 | 63·8 | 57·7 | 59·5 | 57·4 | 76·0 | 53·0 | 58·0 | 57·0 | 2·1 | 5·1 | 0·4 | + 3·2 | SW | SW | 4·5 | 0·0 | 1·3 | 105 | 260 | 0·18 |
| 18 | .. | 29·327 | 57·9 | 50·2 | 51·5 | 50·2 | 59·0 | 50·0 | 58·0 | 57·0 | 1·3 | 2·0 | 0·0 | — 4·5 | SW; NW | SW | 0·0 | 0·0 | 0·0 | 35 | 175 | 0·32 |
| 19 | .. | 29·352 | 63·0 | 42·8 | 51·8 | 49·3 | 89·0 | 35·0 | 58·0 | 57·0 | 2·5 | 10·3 | 0·2 | — 4·1 | Calm | ENE | 0·0 | 0·0 | 0·0 | 25 | 146 | 0·03 |
| 20 | .. | 29·673 | 68·0 | 45·7 | 55·1 | 51·4 | 109·0 | 36·0 | 58·5 | 57·5 | 3·7 | 9·5 | 0·8 | — 0·5 | SW | SW | 1·5 | 0·0 | 0·0 | 90 | 239 | 0·00 |
| 21 | Greatest Dec. S. First Quarter. | 29·854 | 65·0 | 51·3 | 55·6 | 49·9 | 99·0 | 49·5 | 58·5 | 57·5 | 5·7 | 9·9 | 1·6 | + 0·1 | NW | W | 1·5 | 0·0 | 0·0 | 135 | 248 | 0·11 |
| 22 | .. | 29·571 | 63·0 | 49·4 | 55·1 | 55·1 | 76·0 | 41·0 | 58·0 | 57·0 | 0·0 | 2·7 | 0·0 | — 0·3 | SW | SW | 5·0 | 0·0 | 1·3 | 70 | 236 | 0·22 |
| 23 | .. | 29·595 | 57·8 | 46·7 | 50·1 | 46·1 | 98·0 | 42·0 | 58·0 | 57·0 | 4·0 | 9·9 | 1·3 | — 5·2 | SW | SW | 0·0 | 0·0 | 0·0 | .. | 74 | 0·04 |
| 24 | .. | 29·554 | 59·0 | 41·4 | 48·9 | 46·2 | 96·0 | 34·3 | 58·0 | 57·0 | 2·7 | 8·6 | 0·6 | — 6·1 | SW | NNE | 6·0 | 0·0 | 0·3 | 140 | 337 | 0·38 |
| 25 | .. | 29·628 | 56·0 | 42·5 | 46·9 | 44·3 | 82·0 | 42·0 | 57·5 | 56·5 | 2·6 | 8·2 | 0·0 | — 8·0 | NNE; WNW; WSW | SW | 9·0 | 0·0 | 2·5 | 75 | 222 | 0·90 |
| 26 | .. | 29·641 | 59·5 | 37·5 | 49·4 | 49·2 | 99·0 | 30·3 | 57·5 | 56·5 | 0·2 | 9·5 | 0·0 | — 5·3 | SSW; SE | SE | 3·5 | 0·0 | 0·2 | 45 | 181 | 0·11 |
| 27 | .. | 29·571 | 65·7 | 45·8 | 53·6 | 52·7 | 106·2 | 38·0 | 57·0 | 56·0 | 0·9 | 6·5 | 0·0 | — 0·9 | SE | SSW | 0·0 | 0·0 | 0·0 | 40 | 140 | 0·30 |
| 28 | In Equator | 29·618 | 56·2 | 48·5 | 51·3 | 50·4 | 59·0 | 43·7 | 56·0 | 55·0 | 0·9 | 2·7 | 0·0 | — 3·0 | Calm | N | 3·0 | 0·0 | 0·3 | 135 | 352 | 0·20 |
| 29 | Apogee | 29·785 | 55·0 | 46·8 | 50·7 | 49·0 | 59·0 | 45·0 | 56·0 | 55·0 | 1·7 | 3·2 | 0·0 | — 3·1 | N | N | 4·0 | 0·0 | 0·5 | 80 | 263 | 0·02 |
| 30 | Full | 29·982 | 56·2 | 43·0 | 49·2 | 46·2 | 68·2 | 34·3 | 55·5 | 54·5 | 3·0 | 8·4 | 0·4 | — 4·6 | Calm | W | 0·0 | 0·0 | 0·0 | 20 | 134 | 0·00 |
| | | | | | | | | | | | | | | | | | | | | Sum | Sum | Sum |
| Means | .. | 29·762 | 63·4 | 45·8 | 53·4 | 50·2 | 97·0 | 40·1 | 58·9 | 57·9 | 3·2 | 9·2 | 0·8 | — 3·1 | ... | ... | .. | .. | .. | 1865 | 6000 | 3·10 |

**BAROMETER READINGS FROM EYE-OBSERVATIONS.**

The absolute maximum in the month was 30in·258 on the 6th; the first minimum in the month was 29in·890 on the 8th.
The second maximum ,, was 30in·250 on the 12th; the second minimum ,, was 29in·386 on the 15th.
The third maximum ,, was 29in·559 on the 16th; the absolute minimum ,, was 29in·305 on the 19th.
The fourth maximum ,, was 29in·879 on the 21st; the fourth minimum ,, was 29in·426 on the 24th.
The fifth maximum ,, was 29in·725 on the 25th; the fifth minimum ,, was 29in·566 on the 27th.
The range in the month was 0in·953.
The mean for the month was 29in·762, being 0in·070 *lower* than the average of the preceding 19 years.

**TEMPERATURE OF THE AIR.**

The highest in the month was 69°·7 on the 8th; the lowest was 35°·7 on the 12th.
The range ,, was 34°·0.
The mean ,, of all the highest daily readings was 63°·4, being 4°·3 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 45°·8, being 3°·3 *lower* than the average of the preceding 19 years.
The mean daily range was 17°·6, being 1°·0 *lower* than the average of the preceding 19 years.
The mean for the month was 53°·4, being 3°·7 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| Sept. 1 | o | o : s N, s P, sps, gcur | 3, ci.-cu, ci | 3, ci.-cu, ci : 10, r : o |
| 2 | o | w | 7, ci.-s, ci, h | 7, ci.-cu, ci.-s, h |
| 3 | s | o : s | o | 10, cu, ci.-cu, h.-shs. r : 10, gt.-glm |
| 4 | o | o | 7, ci.-cu, ci, h | 7, ci.-cu, ci.-s, h : 10, s, ci.-s : o, h |
| 5 | w | o | 3, ci.-cu, ci.-s, h | 10, cu.-s, ci.-s |
| 6 | o | w | 10, ci.-s | 10 : 2, ci |
| 7 | o | o : s | 8, ci.-cu, ci.-s | 5, cu, ci.-cu : o |
| 8 | o | o : m | 10, f : 8, ci.-cu, ci.-s, h | 7, ci.-cu, ci.-s : 10, s, ci-s |
| 9 | v | v | 10 | 10 |
| 10 | s | s : o | 2, ci.-cu, ci.-s | 9, cu, ci.-cu, ci, r : o |
| 11 | s | s | o | 7, cu, ci.-cu, ci : o |
| 12 | v | v | 10, ci.-cu, ci, h | 2, cu, ci : o |
| 13 | w | s | o | 2, cu, ci |
| 14 | o | o | 10, r : 5, ci.-s, sc | o |
| 15 | o | o : s | 10, s, ci.-s | 10, ci.-cu, ci.-s, oc.-r |
| 16 | m | o | 10, ci.-s, li.-cl | 10, s, ci.-s, th.-r |
| 17 | o | o : w | 10 | 10, oc.-r : 10, h.-r |
| 18 | o | o | 10, r | 10, fr.-r |
| 19 | v | v | 10, h.-r | 10 : o, f |
| 20 | s | s : o | 10 | 2, cu, ci.-cu : 8, ci.-cu, ci.-s |
| 21 | w | o : s | 10, ci.-cu, ci.-s, r | 10, cu.-s, ci.-s : o |
| 22 | o | m | 10, th.-r | 10, h.-r |
| 23 | o | s | 10 | 10 |
| 24 | s | s : w N | 7, ci.-s, ci, h : 10, s, ci.-s | 10 : 10, h.-r |
| 25 | s N | s N : s | 10, h.-r | 7, ci.-cu, ci.-s, h : o |
| 26 | v, sps, gcur | o : w | 10, ci.-cu, ci.-s | 10, h.-r : 2, ci.-cu, ci.-s : 10, h.-r |
| 27 | o : s N | s N : s | 10, h.-r : 8, ci.-cu, ci.-s, fr.-r | 10, cu.-s, ci.-s |
| 28 | o | m | 10, r | 10, r : 10 |
| 29 | o | w | 10, th.-r | 10, th.-r : 10 |
| 30 | m | m | 7, ci.-cu, ci, h | 10, ci.-s |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 59°·9 on the 8th; and the lowest was 42°·9 on the 25th.
The mean ,, was 50°·2, being 0°·9 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was $0^{in.}·364$, being $0^{in.}·019$ *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $4^{gr.}·1$, being $0^{gr.}·1$ *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 88 (that of Saturation being represented by 100), being 7 *greater* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 537 grains, being 3 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·4.

WIND.

The proportions were; N. 7, S. 8, W. 10, and E. 5. The greatest pressure in the month was $9^{lbs.}·0$ on the square foot on the 25th.

RAIN.

Fell on 17 days in the month, amounting to $3^{in.}·1$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in.}·7$ *greater* than the average fall of the preceding 45 years.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Wheewell's Amount of Horizontal Movement of the Air on each Day. | Robinson's Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Oct. 1 | .. | 30·110 | 57·0 | 46·5 | 50·9 | 48·6 | 66·0 | 45·5 | 55·5 | 54·5 | 2·3 | 6·4 | 1·4 | — 2·6 | NW | NW | 0·0 | 0·0 | 0·0 | 15 | 138 | 0·00 |
| 2 | .. | 30·173 | 61·0 | 46·0 | 53·1 | 50·2 | 96·0 | 36·0 | 55·5 | 54·5 | 2·9 | 9·5 | 0·0 | — 0·3 | W | W | 0·0 | 0·0 | 0·0 | 60 | 240 | 0·00 |
| 3 | .. | 30·005 | 63·8 | 46·5 | 53·7 | 47·3 | 109·0 | 38·3 | 54·5 | 53·5 | 6·4 | 12·6 | 3·4 | + 0·6 | SW | NW; W | 5·0 | 0·0 | 1·5 | 105 | 296 | 0·00 |
| 4 | .. | 30·239 | 58·0 | 38·6 | 47·6 | 42·9 | 95·0 | 30·0 | 54·0 | 53·0 | 4·7 | 14·1 | 1·8 | — 5·4 | W | SW | 4·0 | 0·0 | 0·3 | 155 | 364 | 0·00 |
| 5 | .. | 29·940 | 61·0 | 44·7 | 53·0 | 51·0 | 88·0 | 35·0 | 54·0 | 53·0 | 2·0 | 7·4 | 1·0 | + 0·2 | SW | W | 8·0 | 0·0 | 2·0 | 120 | 314 | 0·00 |
| 6 | Greatest Declination N. | 30·170 | 65·3 | 47·7 | 55·6 | 52·2 | 107·0 | 47·0 | 54·0 | 53·0 | 3·4 | 10·5 | 1·0 | + 3·1 | W | SW | 0·0 | 0·0 | 0·0 | 65 | 207 | 0·00 |
| 7 | Last Qr. | 30·062 | 60·0 | 52·3 | 54·9 | 50·2 | 80·0 | 47·0 | 54·0 | 53·0 | 4·7 | 5·3 | 5·0 | + 2·6 | SW | W | 3·0 | 0·0 | 0·0 | 85 | 249 | 0·00 |
| 8 | .. | 29·995 | 57·0 | 43·5 | 49·0 | 42·0 | 84·0 | 34·4 | 54·0 | 53·0 | 7·0 | 14·2 | 2·9 | — 3·1 | W | WSW | 3·0 | 0·0 | 0·3 | 120 | 309 | 0·00 |
| 9 | .. | 29·881 | 52·0 | 41·5 | 45·9 | 37·9 | 86·0 | 32·0 | 53·0 | 52·0 | 8·0 | 15·1 | 4·0 | — 6·0 | W | NW | 7·0 | 0·0 | 1·5 | 105 | 294 | 0·00 |
| 10 | .. | 29·755 | 53·5 | 36·7 | 43·6 | 43·5 | 53·7 | 27·0 | 53·0 | 52·0 | 0·1 | 2·2 | 0·0 | — 8·1 | NW; SW | SW | 5·0 | 0·0 | 1·3 | 150 | 354 | 0·33 |
| 11 | .. | 29·415 | 50·0 | 35·9 | 41·6 | 40·9 | 53·2 | 41·5 | 52·0 | 51·0 | 0·7 | 3·6 | 0·0 | — 9·8 | W; NE | NE; N | 4·0 | 0·0 | 0·8 | 115 | 312 | 0·25 |
| 12 | In Equator | 29·747 | 47·0 | 32·4 | 38·6 | 31·9 | 68·0 | .. | 52·0 | 51·0 | 6·7 | 14·9 | 5·5 | —12·4 | NW | SW | 3·0 | 0·0 | 0·3 | 85 | 240 | 0·00 |
| 13 | Perigee | 29·396 | 55·9 | 39·2 | 46·8 | 46·0 | 85·0 | 36·8 | 51·5 | 50·5 | 0·8 | 5·0 | 0·0 | — 3·7 | SW | SW | 4·0 | 0·0 | 1·6 | 175 | 383 | 0·04 |
| 14 | New | 29·531 | 54·0 | 42·1 | 46·6 | 42·7 | 72·5 | 37·0 | 51·0 | 50·0 | 3·9 | 9·2 | 0·9 | — 3·5 | WSW | W | 4·0 | 0·0 | 0·8 | 100 | 269 | 0·00 |
| 15 | .. | 29·521 | 57·0 | 39·5 | 49·7 | 49·7 | 60·0 | 31·0 | 50·5 | 49·5 | 0·0 | 2·7 | 0·0 | — 0·1 | SW | SW | 5·0 | 0·0 | 1·0 | 215 | 465 | 0·26 |
| 16 | .. | 29·468 | 58·0 | 46·3 | 49·5 | 48·3 | 62·0 | 50·0 | 50·5 | 49·5 | 1·2 | 3·8 | 0·4 | — 0·1 | SW | SW | 9·0 | 0·0 | 2·0 | 170 | 373 | 0·42 |
| 17 | .. | 29·832 | 56·8 | 45·7 | 50·0 | 43·4 | 94·6 | 36·0 | 50·5 | 49·5 | 6·6 | 13·7 | 3·8 | + 0·6 | SW; W | SW | 3·0 | 0·0 | 2·0 | 150 | 345 | 0·00 |
| 18 | Greatest Declination S. | 29·498 | 56·2 | 43·9 | 50·5 | 49·3 | 64·0 | 36·0 | 50·5 | 49·5 | 1·2 | 6·4 | 1·0 | + 1·3 | SW | SW; W | 10·0 | 0·0 | 2·5 | 220 | 450 | 0·13 |
| 19 | .. | 29·524 | 62·0 | 49·3 | 54·6 | 51·5 | 97·7 | 42·0 | 50·0 | 49·0 | 3·1 | 9·3 | 2·2 | + 5·5 | SW | SW | 6·0 | 0·0 | 2·0 | 230 | 519 | 0·03 |
| 20 | .. | 29·909 | 57·0 | 43·5 | 48·9 | 42·4 | 93·8 | 39·0 | 50·0 | 49·0 | 6·5 | 12·6 | 1·8 | — 0·2 | WSW | W | 7·0 | 0·0 | 1·8 | 105 | 272 | 0·00 |
| 21 | First Qr. | 30·068 | 54·0 | 39·0 | 46·1 | 44·7 | 68·0 | .. | 50·5 | 49·5 | 1·4 | 6·8 | 0·5 | — 2·8 | Calm | SW | 0·0 | 0·0 | 0·0 | 20 | 130 | 0·00 |
| 22 | .. | 29·913 | 60·5 | 40·5 | 50·5 | 48·6 | 102·0 | 32·6 | 50·5 | 49·5 | 1·9 | 11·2 | 0·0 | + 1·9 | S | SW | 0·0 | 0·0 | 0·0 | 75 | 229 | 0·00 |
| 23 | .. | 29·954 | 61·0 | 47·7 | 54·6 | 54·1 | 78·5 | 41·2 | 51·0 | 50·0 | 0·5 | 6·5 | 0·0 | + 6·3 | SW | SW | 1·0 | 0·0 | 0·0 | 50 | 194 | 0·03 |
| 24 | .. | 29·907 | 63·0 | 52·7 | 56·4 | 51·4 | 98·0 | 48·8 | 51·0 | 50·0 | 5·0 | 9·7 | 1·4 | + 8·5 | SW | SW | 2·0 | 0·0 | 0·1 | 80 | 230 | 0·00 |
| 25 | In Equator | 29·907 | 64·0 | 52·3 | 56·5 | 53·2 | 98·0 | 44·5 | 51·0 | 50·0 | 3·3 | 8·4 | 1·5 | + 9·0 | SW | WSW | 1·5 | 0·0 | 0·0 | 30 | 158 | 0·00 |
| 26 | Apogee | 29·806 | 61·0 | 49·9 | 54·7 | 53·6 | 75·5 | 50·7 | 51·5 | 50·5 | 1·1 | 5·5 | 0·6 | + 7·3 | SW | SW | 0·0 | 0·0 | 0·0 | 35 | 159 | 0·08 |
| 27 | .. | 29·819 | 59·6 | 47·6 | 53·4 | 52·4 | 69·0 | 37·0 | 52·0 | 51·0 | 1·0 | 6·3 | 0·8 | + 6·2 | SW | S | 0·0 | 0·0 | 0·0 | 40 | 154 | 0·03 |
| 28 | .. | 29·920 | 68·5 | 50·5 | 57·0 | 54·3 | 110·0 | 43·0 | 52·5 | 51·5 | 2·7 | 10·6 | 0·0 | +10·0 | S | S | 0·0 | 0·0 | 0·0 | .. | 59 | 0·00 |
| 29 | Full | 30·008 | 63·3 | 47·3 | 53·2 | 52·8 | 95·0 | 43·3 | 52·0 | 51·0 | 0·4 | 7·6 | 0·0 | + 6·4 | S by E | SSE | 0·0 | 0·0 | 0·0 | .. | 92 | 0·00 |
| 30 | .. | 30·060 | 66·0 | 43·7 | 53·8 | 51·9 | 103·0 | 38·0 | 52·0 | 51·0 | 1·9 | 10·8 | 0·0 | + 7·2 | SSE | SE | 0·0 | 0·0 | 0·0 | 40 | 140 | 0·00 |
| 31 | .. | 29·990 | 53·0 | 44·9 | 47·5 | 45·0 | 63·0 | 42·0 | 52·0 | 51·0 | 2·5 | 8·8 | 1·5 | + 1·0 | SE; NE | NE | 0·0 | 0·0 | 0·0 | 35 | 136 | 0·00 |
| Means | .. | 29·856 | 58·6 | 44·5 | 50·6 | 47·5 | 83·1 | 39·4 | 52·1 | 51·1 | 3·0 | 8·7 | 1·4 | + 0·6 | ... | ... | .. | .. | .. | Sum 2950 | Sum 8074 | Sum 1·60 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

| | | | | |
|---|---|---|---|---|
| The first maximum in the month | was 30in·185 on the 2nd; | the first minimum in the month | was 29in·958 on the 3rd. |
| The absolute maximum ,, | was 30in·276 on the 4th; | the second minimum ,, | was 29in·892 on the 5th. |
| The third maximum ,, | was 30in·183 on the 6th; | the third minimum ,, | was 29in·812 on the 9th. |
| The fourth maximum ,, | was 30in·038 on the 9th; | the fourth minimum ,, | was 29in·336 on the 11th. |
| The fifth maximum ,, | was 29in·773 on the 12th; | the absolute minimum ,, | was 29in·330 on the 13th. |
| The sixth maximum ,, | was 29in·693 on the 14th; | the sixth minimum ,, | was 29in·365 on the 16th. |
| The seventh maximum ,, | was 29in·884 on the 17th; | the seventh minimum ,, | was 25in·436 on the 18th. |
| The eighth maximum ,, | was 29in·600 on the 19th; | the eighth minimum ,, | was 29in·432 on the 19th. |
| The ninth maximum ,, | was 30in·100 on the 21st; | the ninth minimum ,, | was 29in·791 on the 26th. |
| The tenth maximum ,, | was 30 ·073 on the 30th. | | |

The range in the month was 0in·946.

The mean for the month was 29in·856, being 0in·174 *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 68°·5 on the 28th; the lowest was 32°·4 on the 12th; and the range in the month was 36°·1.

The mean ,, of all the highest daily readings was 58°·6, being 0°·3 *higher* than the average of the preceding 19 years.

The mean ,, of all the lowest daily readings was 44°·5, being 0°·8 *higher* than the average of the preceding 19 years.

The mean daily range was 14°·1, being 0°·5 *lower* than the average of the preceding 19 years.

The mean for the month was 50°·6, being 0°·9 *higher* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. | | CLOUDS AND WEATHER. | |
|---|---|---|---|---|
| | A.M. | P.M. | A.M. | P.M. |
| Oct. 1 | w | w | 10, f | 10, h |
| 2 | s | s | 8, ci.-cu, ci.-s | 2, ci.-cu, ci : 8, lu.-ha |
| 3 | m | o | 5, s, ci.-s, sc | 5, ci.-s, sc : 10, ci.-s : o |
| 4 | s | o : s | o, h | 7, ci.-cu, ci.-s : o |
| 5 | o | o : m | 10, s, ci.-s, sc | 10, ci.-s, sc : 2, ci, f |
| 6 | w | w | 10, cu.-s, ci.-s : 9, ci.-cu, ci | o |
| 7 | v | v | 10 | 5 : 10 |
| 8 | v | v | 7, ci.-cu, ci.-s | 7, ci.-cu, ci.-s : o |
| 9 | sN | s | 10, cu.-s, ci.-s, oc.-r | 7, cu, ci.-cu, ci |
| 10 | | | 10, ci.-s, oc.-r | 10, ci.-s, sc, r |
| 11 | | | 10, r | 10, h.-r : o |
| 12 | | | 3, ci, h, h.-fr | 3, ci.-s : 10 |
| 13 | | | 10, r : 9, ci.-s, ci : 10 | 10, r : 10 |
| 14 | | | 10, oc.-r | 10 : o |
| 15 | | | 10, oc.-r | 10, r |
| 16 | | | 10, r | 10, h.-r : o |
| 17 | | | o | 3, ci.-cu, ci : o |
| 18 | | | 10, r | 10, ci.-s, oc.-r : o |
| 19 | | | 10, cu.-s, ci.-s | 10, ci.-cu, ci.-s : 5 |
| 20 | | | o : 7, ci.-cu, ci | 3, ci.-cu, ci : o |
| 21 | | | 10, ci.-s | 10, cu.-s, ci.-s |
| 22 | | | 3, ci | 3, ci : o |
| 23 | | | 10 | 10, cu.-s, ci.-s : 10 |
| 24 | | | 10 : 2, ci.-s, ci | 10, ci.-s : 10, th.-r |
| 25 | o | o | 10 | 10, oc.-r : 3, ci : 10, ci.-s |
| 26 | o | o : w | 10, cu.-s, ci.-s | 8, ci.-s, ci |
| 27 | o | o : w | 8, ci.-s | 8, ci.-cu, ci.-s |
| 28 | o | o : s | 9, ci.-cu, ci.-s | 9, ci.-cu, ci.-s : o, f |
| 29 | s | s | 10, th.-f. : 9, ci.-cu, ci.-s | 7, ci.-s, ci : o |
| 30 | s | s : sps | 7, ci.-cu, ci.-s, f | o : 10, s, th.-f |
| 31 | s | s | 10 | 9, ci.-cu, ci.-s : 5 : 9, f |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 57°·5 on the 29th; and the lowest was 31°·5 on the 12th.

The mean „ was 47°·5 being 1°·6 *higher* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was $0^{in}\cdot329$ being $0^{in}\cdot018$ *greater* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $3^{gr}\cdot7$, being $0^{gr}\cdot2$ *greater* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 89 (that of Saturation being represented by 100), being 2 *greater* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 541 grains, being 2 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 6·8.

WIND.

The proportions were; N. 3, S. 11, W. 15, and E. 2. The greatest pressure in the month was $10^{lbs}\cdot0$ on the square foot on the 18th.

RAIN.

Fell on 10 days in the month, amounting to $1^{in}\cdot6$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot2$ *less* than the average fall of the preceding 45 years.

ELECTRICITY.—October 10 to 24. The insulating lamp was not burning.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 Years. | Wind as deduced from Anemometers. Osler's. General Direction. A.M. | Osler's. General Direction. P.M. | Osler's. Pressure in lbs. on the square foot. Greatest. | Osler's. Pressure in lbs. on the square foot. Least. | Osler's. Pressure in lbs. on the square foot. Mean of 24 Obs. | Whewell's. Amount of Horizontal Movement of the Air on each Day. | Robinson's. Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Nov. 1 | .. | 29·916 | 55·3 | 39·5 | 46·9 | 43·9 | 98·0 | 33·0 | 52·0 | 51·0 | 3·0 | 8·6 | 0·0 | + 0·5 | NE | NE | 0·0 | 0·0 | 0·0 | 45 | 186 | 0·00 |
| 2 | Greatest Declination N. | 29·953 | 52·0 | 35·5 | 43·3 | 40·3 | 96·0 | 28·8 | 51·5 | 50·5 | 3·0 | 13·4 | 0·0 | — 2·9 | NE | ENE | 4·0 | 0·0 | 0·2 | 30 | 130 | 0·00 |
| 3 | .. | 29·993 | 51·0 | 28·5 | 39·2 | 36·3 | 90·2 | 21·4 | 52·0 | 51·0 | 2·9 | 5·9 | 1·3 | — 6·9 | ENE | Calm | 0·0 | 0·0 | 0·0 | 30 | 125 | 0·00 |
| 4 | .. | 29·960 | 48·2 | 29·5 | 40·6 | 39·1 | 82·0 | 23·0 | 50·5 | 49·5 | 1·5 | 5·5 | 0·0 | — 5·3 | Calm | E | 3·5 | 0·0 | 0·7 | 45 | 193 | 0·00 |
| 5 | .. | 30·019 | 45·0 | 34·7 | 40·6 | 37·0 | 63·0 | 29·0 | 50·5 | 49·5 | 3·6 | 6·8 | 0·8 | — 5·1 | E ; SE | E | 4·5 | 0·0 | 1·5 | 100 | 264 | 0·00 |
| 6 | Last Qr. | 30·257 | 46·2 | 38·4 | 42·1 | 37·2 | 53·0 | 35·2 | 49·5 | 48·5 | 4·9 | 6·2 | 3·0 | — 3·4 | E | ENE | 6·0 | 0·0 | 2·2 | 65 | 181 | 0·00 |
| 7 | .. | 30·332 | 51·7 | 37·0 | 42·1 | 39·0 | 92·0 | 31·3 | 49·5 | 48·5 | 3·1 | 4·8 | 1·4 | — 3·0 | NE | NE | 0·0 | 0·0 | 0·0 | 45 | 92 | 0·00 |
| 8 | In Equator | 30·207 | 49·0 | 32·0 | 39·6 | 37·8 | 78·5 | 21·5 | 49·5 | 48·5 | 1·8 | 6·7 | 0·5 | — 5·2 | NE | Calm | 0·0 | 0·0 | 0·0 | 45 | 82 | 0·00 |
| 9 | .. | 30·142 | 42·9 | 32·2 | 37·5 | 35·3 | 63·0 | 28·0 | 48·0 | 47·0 | 2·2 | 7·1 | 0·2 | — 7·0 | Calm | E | 3·5 | 0·0 | 0·5 | 40 | 133 | 0·01 |
| 10 | .. | 29·879 | 41·7 | 33·5 | 38·0 | 37·6 | 47·0 | 25·3 | 47·5 | 46·5 | 0·4 | 2·1 | 0·0 | — 6·3 | E | ESE | 0·0 | 0·0 | 0·0 | 40 | 134 | 0·17 |
| 11 | Perigee | 29·667 | 42·3 | 36·7 | 38·4 | 35·9 | 50·0 | 36·7 | 47·5 | 46·5 | 2·5 | 3·0 | 1·4 | — 5·6 | SE | E | 0·0 | 0·0 | 0·0 | 25 | 134 | 0·00 |
| 12 | .. | 29·553 | 48·6 | 33·0 | 40·4 | 40·4 | 78·8 | 26·0 | 47·0 | 46·0 | 0·0 | 2·7 | 0·0 | — 3·5 | Calm | ENE | 0·0 | 0·0 | 0·0 | 50 | 168 | 0·00 |
| 13 | New | 29·430 | 48·0 | 35·7 | 42·4 | 41·0 | 69·0 | 36·0 | 47·0 | 46·0 | 1·4 | 4·0 | 0·0 | — 1·1 | E | E | 0·0 | 0·0 | 0·0 | 15 | 87 | 0·00 |
| 14 | .. | 29·404 | 49·3 | 35·5 | 43·7 | 43·3 | 53·0 | 40·9 | 47·0 | 46·0 | 0·4 | 4·4 | 0·0 | + 0·4 | Variable | SW ; S | 6·0 | 0·0 | 2·5 | 135 | 307 | 0·15 |
| 15 | Greatest Declination S. | 29·218 | 52·9 | 42·1 | 45·8 | 41·9 | 76·0 | 42·0 | 47·0 | 46·0 | 3·9 | 6·7 | 1·5 | + 2·8 | SW ; W | WSW | 6·0 | 0·0 | 2·5 | 165 | 338 | 0·23 |
| 16 | .. | 29·473 | 49·0 | 37·1 | 42·6 | 39·6 | 72·0 | 30·0 | 47·0 | 46·0 | 3·0 | 5·3 | 2·1 | 0·0 | SW | SW | 3·5 | 0·0 | 0·5 | 50 | 125 | 0·00 |
| 17 | .. | 29·166 | 44·0 | 33·5 | 38·3 | 37·4 | 44·0 | 34·3 | 46·5 | 45·5 | 0·9 | 2·2 | 0·0 | — 4·1 | SSE | N ; NW | 4·5 | 0·0 | 0·7 | 130 | 310 | 0·65 |
| 18 | .. | 29·752 | 39·5 | 33·1 | 36·6 | 29·7 | 53·0 | 28·0 | 45·5 | 44·5 | 6·9 | 9·7 | 4·5 | — 5·6 | NW | NW | 6·0 | 0·0 | 2·0 | 130 | 341 | 0·00 |
| 19 | .. | 29·967 | 42·8 | 33·3 | 37·8 | 34·5 | 52·0 | 30·0 | 45·0 | 44·0 | 3·3 | 7·9 | 1·3 | — 4·4 | NW | NW ; Calm | 3·0 | 0·0 | 0·5 | 45 | 171 | 0·00 |
| 20 | First Qr. | 29·857 | 48·0 | 34·4 | 41·1 | 39·3 | 68·0 | 28·6 | 45·0 | 44·0 | 1·8 | 4·0 | 0·0 | — 1·1 | Calm | SW | 0·0 | 0·0 | 0·0 | 40 | 158 | 0·00 |
| 21 | .. | 29·550 | 47·5 | 33·7 | 41·7 | 41·6 | 48·0 | 28·0 | 44·0 | 43·0 | 0·1 | 1·7 | 0·0 | — 0·3 | S | S | 7·0 | 0·0 | 1·8 | 180 | 371 | 0·25 |
| 22 | In Equator; Apogee. | 29·364 | 49·8 | 37·7 | 43·5 | 42·7 | 73·0 | 34·7 | 44·0 | 43·0 | 0·8 | 4·4 | 0·0 | + 1·8 | W | SW | 0·0 | 0·0 | 0·0 | 35 | 123 | 0·08 |
| 23 | .. | 29·536 | 44·6 | 31·5 | 37·6 | 37·5 | 75·0 | 26·4 | 44·0 | 43·0 | 0·1 | 1·3 | 0·0 | — 3·8 | Calm | Calm | 0·0 | 0·0 | 0·0 | 20 | 71 | 0·00 |
| 24 | .. | 29·600 | 42·8 | 37·5 | 39·9 | 38·6 | 48·0 | 29·0 | 44·0 | 43·0 | 1·3 | 3·5 | 0·0 | — 1·1 | Calm | Calm | 0·0 | 0·0 | 0·0 | 25 | 129 | 0·00 |
| 25 | .. | 29·361 | 42·5 | 35·3 | 38·5 | 36·3 | 47·6 | 28·5 | 43·5 | 42·5 | 2·2 | 3·7 | 1·2 | — 2·3 | NE | Calm | 0·0 | 0·0 | 0·0 | 55 | 183 | 0·05 |
| 26 | .. | 29·265 | 40·0 | 35·5 | 37·3 | 36·5 | 48·0 | 32·0 | 43·0 | 42·0 | 0·8 | 2·2 | 0·0 | — 3·6 | Calm | NE | 3·0 | 0·0 | 0·2 | 70 | 206 | 0·45 |
| 27 | .. | 29·313 | 47·2 | 35·6 | 42·3 | 41·4 | 69·0 | 33·0 | 43·0 | 42·0 | 0·9 | 2·7 | 0·0 | + 1·2 | NE | E | 2·5 | 0·0 | 0·1 | 60 | 188 | 0·00 |
| 28 | Full | 29·615 | 43·5 | 38·5 | 40·4 | 38·4 | 49·0 | 34·4 | 43·0 | 42·0 | 2·0 | 2·6 | 0·9 | — 1·1 | E | SE | 2·0 | 0·0 | 0·1 | 70 | 182 | 0·00 |
| 29 | Greatest Declination N. | 29·626 | 44·2 | 37·7 | 41·7 | 41·7 | 46·4 | 33·0 | 42·0 | 41·0 | 0·0 | 0·4 | 0·0 | + 0·1 | SE | E | 5·0 | 0·0 | 0·6 | 70 | 180 | 0·27 |
| 30 | .. | 29·502 | 50·0 | 40·9 | 45·3 | 44·9 | 53·7 | 40·0 | 42·0 | 41·0 | 0·4 | 3·2 | 0·0 | + 3·7 | Calm | WSW | 3·5 | 0·0 | 0·4 | 115 | 238 | 0·19 |
| Means | .. | 29·696 | 46·7 | 35·3 | 40·8 | 38·9 | 64·5 | 30·9 | 46·6 | 45·6 | 2·0 | 4·8 | 0·7 | — 2·4 | ... | ... | .. | .. | .. | Sum 1970 | Sum 5530 | Sum 2·50 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first minimum in the month was 29in·900 on the 1st.

The absolute maximum in the month was 30in·359 on the 7th; the second minimum ,, was 29in·139 on the 15th.
The second maximum ,, was 29in·484 on the 16th; the absolute minimum ,, was 29in·103 on the 17th.
The third maximum ,, was 29in·983 on the 19th; the fourth minimum ,, was 29in·351 on the 22nd.
The fourth maximum ,, was 29in·658 on the 24th; the fifth minimum ,, was 29in·252 on the 26th.
The fifth maximum ,, was 29in·712 on the 29th; the sixth minimum ,, was 29in·462 on the 30th.
The range in the month was 1in·256.
The mean for the month was 29in·696, being 0in·064 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·3 on the 1st; the lowest was 28°·5 on the 3rd; and the range in the month was 26°·8.
The mean ,, of all the highest daily readings was 46°·7, being 2°·7 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 35°·3, being 2°·6 *lower* than the average of the preceding 19 years.
The mean daily range was 11°·4, being 0°·2 *lower* than the average of the preceding 19 years.
The mean for the month was 40°·8, being 2°·7 *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. | | CLOUDS AND WEATHER. | |
|---|---|---|---|---|
| | A.M. | P.M. | A.M. | P.M. |
| Nov. 1 | v | v | 8, ci.-cu, ci.-s : 2, ci | 2, ci.-cu, ci : 10, cu, cu.-s |
| 2 | s | s | 0, h.-fr | 0 |
| 3 | s | s | 10, th.-f : 0 | 0 : f |
| 4 | w | w | 10 | 10 |
| 5 | w | w | 10, ci.-s, sc | 10 |
| 6 | w | w | 10 | 10 |
| 7 | w | w | 10, s, ci.-s | 10, ci.-cu, ci.-s : 0 |
| 8 | | | 10, h.-fr | 10, ci.-cu ci.-s : 0 |
| 9 | | | 10 | 10, oc.-r : 5, ci.-s, ci : 10 |
| 10 | | | 10, h.-r | 10, fr.-r |
| 11 | | | 10 | 10, ci.-s : 7, li.-cl |
| 12 | | | 10, ci.-cu, ci.-s, h.-fr | 10, cu.-s, ci.-s |
| 13 | | | 10, ci.-s, h | 10, ci.-s : 10, f |
| 14 | | | 10, th.-r | 10 : 10, h.-r |
| 15 | | | 10, h.-r : 7, ci.-cu, ci.-s | 5, ci.-cu, ci.-s : m |
| 16 | | | 5, ci.-cu, ci.-s | 5, ci.-cu, ci.-s : f |
| 17 | | | 10, r | 10, h.-r |
| 18 | | | 5, ci, h | 0 : 10, ci.-s |
| 19 | | | 7, ci.-cu, ci.-s, f | 7, ci.-cu, ci.-s |
| 20 | | | 10 | 10, ci.-cu, ci.-s |
| 21 | | | 10, oc.-r | 10, r |
| 22 | | w | 10, r : 5, ci.-cu, ci.-s | 7, ci.-s, ci, h |
| 23 | o | o | 10, th.-f : 7, ci.-cu, ci.-s | 0, h : 10, |
| 24 | o | o | 10 | 10 : 9, ci.-cu, ci : 0 ci.-s, sc |
| 25 | o | o | 7, s, ci, li.-cl : 10, oc.-r | 10, oc.-r |
| 26 | o | o | 10 : 10, r | 10, r |
| 27 | o | o | 10, ci.-s, sc | 7, ci.-s, sc : 10, ci.-s, sc |
| 28 | o | o | 10 | 10, sl.-r |
| 29 | o | w | 10, h | 10, oc.-r |
| 30 | o | o | 10 : 10, oc.-r | 10, oc.-r : 10 : 0 |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 48°·3 on the 30th; and the lowest was 29°·2 on the 18th.

The mean „ was 38°·9, being 1°·3 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was $0^{in}\cdot237$ being $0^{in}\cdot019$ *less* than the average of the preceding 19 years.

*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $2^{gr}\cdot7$, being $0^{gr}\cdot2$ *less* than the average of the preceding 19 years.

*Degree of Humidity.*—The mean for the month was 93 (that of the Saturation being represented by 100), being 4 *greater* than the average of the preceding 19 years.

*Weight of a Cubic Foot of Air.*—The mean for the month was 550 grains, being 3 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·9.

WIND.

The proportions were; N. 7, S. 5, W. 5, and E. 13. The greatest pressure in the month was $7^{lbs}\cdot0$ on the square foot on the 21st.

RAIN.

Fell on 11 days in the month, amounting to $2^{in}\cdot5$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot1$ *greater* thon the average fall of the preceding 45 years.

ELECTRICITY.—November 8 to 22. The insulating lamp was not burning.

| MONTH and DAY, 1860. | 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 shewn by a Self-Registering Thermometer read at 9h P.M. | Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest. | In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. 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 43 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. | Whewell's Amount of Horizontal Movement of the Air on each Day. | Robinson's Amount of Horizontal Movement of the Air on each Day. | Rain in Inches read at 9h P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | | lbs. | lbs. | lbs. | miles. | miles. | in. |
| Dec. 1 | .. | 29·639 | 49·8 | 37·6 | 45·5 | 44·4 | 66·0 | 33·0 | 42·0 | 41·0 | 1·1 | 3·4 | 0·6 | + 3·8 | SW ; S | SSE | 3·0 | 0·0 | 0·3 | 105 | 223 | 0·00 |
| 2 | .. | 29·473 | 17·8 | 40·5 | 45·0 | 43·8 | 49·0 | 41·5 | 42·5 | 41·5 | 1·2 | 2·5 | 1·1 | + 3·2 | SE | SE | 4·0 | 0·0 | 0·2 | 95 | 225 | 0·04 |
| 3 | .. | 29·303 | 46·0 | 40·9 | 43·6 | 42·9 | 55·5 | 37·5 | 43·0 | 42·0 | 0·7 | 1·5 | 0·0 | + 1·9 | E | E | 2·5 | 0·0 | 0·1 | 60 | 151 | 0·25 |
| 4 | .. | 29·215 | 46·9 | 41·3 | 44·6 | 44·6 | 48·0 | 39·0 | 43·0 | 42·0 | 0·0 | 0·7 | 0·0 | + 3·1 | E | E | 0·0 | 0·0 | 0·0 | 20 | 104 | 0·09 |
| 5 | Last Qr. | 29·286 | 48·2 | 40·8 | 44·6 | 44·0 | 50·0 | 36·5 | 43·0 | 42·0 | 0·6 | 2·0 | 0·0 | + 2·6 | E | SW | 0·0 | 0·0 | 0·0 | 90 | 205 | 0·02 |
| 6 | In Equator | 29·108 | 54·0 | 45·5 | 49·8 | 49·1 | 54·0 | 34·7 | 43·0 | 42·0 | 0·7 | 1·5 | 0·2 | + 8·0 | S | SW | 13·0 | 0·0 | 1·5 | 190 | 388 | 0·07 |
| 7 | .. | 28·974 | 52·2 | 47·3 | 49·9 | 46·2 | 58·0 | 43·0 | 43·5 | 42·5 | 3·7 | 5·2 | 2·5 | + 5·5 | SW | SW | 6·0 | 0·0 | 2·0 | 125 | 299 | 0·02 |
| 8 | Perigee | 28·702 | 48·1 | 41·5 | 44·8 | 44·1 | 57·0 | 34·0 | 44·5 | 43·5 | 0·7 | 2·5 | 0·4 | + 3·5 | S | S | 1·5 | 0·0 | 0·0 | 40 | 152 | 0·47 |
| 9 | .. | 28·858 | 46·5 | 39·8 | 42·7 | 41·6 | 58·0 | 34·5 | 45·0 | 44·0 | 1·1 | 1·8 | 0·2 | + 2·2 | SSE | W | 0·0 | 0·0 | 0·0 | 50 | 177 | 0·15 |
| 10 | .. | 29·536 | 46·2 | 36·7 | 41·4 | 39·8 | 63·0 | 30·0 | 44·5 | 43·5 | 1·6 | 3·1 | 0·9 | + 1·0 | W | W | 0·0 | 0·0 | 0·0 | 20 | 123 | 0·00 |
| 11 | .. | 29·528 | 44·0 | 33·8 | 39·6 | 39·2 | 46·0 | 30·0 | 44·5 | 43·5 | 0·4 | 2·5 | 0·0 | — 0·6 | W | NNE | 5·0 | 0·0 | 0·8 | 105 | 314 | 0·03 |
| 12 | New ; Greatest Dec. S. | 29·880 | 42·6 | 37·8 | 40·8 | 38·1 | 54·0 | 31·0 | 44·0 | 43·0 | 2·7 | 4·4 | 1·4 | + 0·8 | N | N | 3·5 | 0·0 | 0·4 | 55 | 217 | 0·00 |
| 13 | .. | 29·981 | 43·2 | 37·6 | 40·4 | 38·5 | 51·0 | 32·0 | 44·0 | 43·0 | 1·9 | 2·6 | 0·0 | + 0·8 | N | N ; NE | 0·0 | 0·0 | 0·0 | 10 | 93 | 0·00 |
| 14 | .. | 30·120 | 41·8 | 36·7 | 38·8 | 37·0 | 45·0 | 33·7 | 43·0 | 42·0 | 1·8 | 2·5 | 0·2 | — 0·9 | NE | NE | 0·0 | 0·0 | 0·0 | .. | 58 | 0·00 |
| 15 | .. | 30·113 | 41·2 | 31·3 | 36·2 | 36·0 | 42·0 | 27·6 | 42·5 | 41·5 | 0·2 | 2·3 | 0·0 | — 3·8 | N | NNW | 0·0 | 0·0 | 0·0 | 15 | 123 | 0·03 |
| 16 | .. | 29·811 | 41·0 | 35·2 | 38·4 | 35·7 | 45·0 | 29·3 | 42·0 | 41·0 | 2·7 | 3·5 | 1·5 | — 1·9 | NW | NW | 3·0 | 0·0 | 0·0 | 90 | 255 | 0·06 |
| 17 | .. | 29·513 | 37·8 | 33·3 | 35·4 | 33·2 | 50·0 | 29·0 | 41·5 | 40·5 | 2·2 | 3·4 | 0·3 | — 4·7 | N | NNW | 4·0 | 0·0 | 0·3 | 70 | 293 | 0·13 |
| 18 | .. | 29·414 | 34·6 | 26·7 | 30·5 | 27·2 | 42·0 | 15·5 | 40·5 | 39·5 | 3·3 | 4·2 | 2·3 | — 9·4 | NW | W | 0·0 | 0·0 | 0·0 | 10 | 65 | 0·00 |
| 19 | In Equator | 29·289 | 37·0 | 24·0 | 30·1 | 26·2 | 64·0 | 13·0 | 40·5 | 39·5 | 3·9 | 8·1 | 2·6 | — 9·4 | W | SE ; E | 0·0 | 0·0 | 0·0 | 10 | 122 | 0·00 |
| 20 | First Quarter; Apogee. | 29·663 | 32·5 | 24·9 | 29·0 | 25·6 | 46·3 | 14·0 | 39·5 | 38·5 | 3·4 | 5·6 | 2·7 | —10·0 | E | NNW | 3·0 | 0·0 | 0·2 | 75 | 292 | 0·00 |
| 21 | .. | 29·724 | 34·0 | 28·1 | 30·6 | 26·7 | 41·0 | 17·0 | 38·5 | 37·5 | 3·9 | 4·7 | 2·9 | — 7·8 | N by W | N | 5·0 | 0·0 | 2·0 | 145 | 390 | 0·10 |
| 22 | .. | 29·683 | 33·0 | 29·2 | 31·0 | 26·8 | 35·5 | 26·8 | 38·0 | 37·0 | 4·2 | 6·3 | 3·2 | — 6·9 | N by E | N | 4·0 | 0·0 | 1·5 | 45 | 236 | 0·00 |
| 23 | .. | 29·467 | 30·7 | 21·5 | 26·0 | 19·5 | 44·0 | 20·0 | .. | .. | 6·5 | 7·4 | 5·9 | —11·4 | W | SW | 0·0 | 0·0 | 0·0 | .. | 55 | 0·00 |
| 24 | .. | 29·315 | 28·2 | 16·5 | 22·4 | 17·1 | 30·0 | 15·2 | .. | .. | 5·3 | 7·2 | 4·6 | —14·6 | SW | WSW | 0·0 | 0·0 | 0·0 | .. | 80 | 0·00 |
| 25 | .. | 29·226 | 30·0 | 8·0 | 20·2 | 12·7 | 32·6 | 2·0 | .. | .. | 7·5 | 15·8 | 6·0 | —16·3 | Calm | Calm ; NE | 0·0 | 0·0 | 0·0 | 15 | 203 | 0·00 |
| 26 | Greatest Declination N. | 29·405 | 35·0 | 26·2 | 30·2 | 21·9 | 44·0 | 16·0 | .. | .. | 8·3 | 12·2 | 5·9 | — 6·2 | NE | SE | 3·0 | 0·0 | 0·2 | 95 | 225 | 0·00 |
| 27 | .. | 29·360 | 34·5 | 28·0 | 31·2 | 28·0 | 40·0 | 18·5 | .. | .. | 3·2 | 4·6 | 0·8 | — 5·3 | SE | E | 5·0 | 0·0 | 0·6 | 30 | 189 | 0·36 |
| 28 | Full | 29·883 | 35·0 | 24·4 | 28·2 | 18·8 | 40·0 | 20·0 | .. | .. | 9·4 | 12·1 | 7·4 | — 8·8 | NE | Calm | 0·0 | 0·0 | 0·0 | 5 | 36 | 0·00 |
| 29 | .. | 30·121 | 31·8 | 10·0 | 23·0 | 15·0 | 45·0 | .. | .. | .. | 8·0 | 15·8 | 6·7 | —14·3 | Calm | SE | 4·0 | 0·0 | 0·2 | 95 | 255 | 0·00 |
| 30 | .. | 29·290 | 44·7 | 32·0 | 38·3 | 38·3 | 46·0 | 15·8 | 34·0 | 33·0 | 0·0 | 1·0 | 0·0 | + 0·9 | S | W | 5·0 | 0·0 | 1·0 | 55 | 123 | 0·79 |
| 31 | .. | 29·511 | 39·8 | 33·5 | 35·5 | 34·4 | 42·0 | 28 8 | 34·0 | 33·0 | 1·1 | 4·4 | 0·3 | + 2·1 | N | N ; SE | 0·0 | 0·0 | 0·0 | 95 | 200 | 0·14 |
| Means | .. | 29·491 | 40·6 | 32·0 | 36·3 | 33·4 | 47·9 | 26·6 | 41·7 | 40·7 | 2·9 | 5·0 | 1·9 | — 3·0 | ... | ... | .. | .. | .. | Sum 1815 | Sum 5871 | Sum 2·75 |

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·672 on the 1st; the first minimum in the month was 29in·213 on the 4th.
The second maximum ,, was 29in·376 on the 5th; the absolute minimum ,, was 28in·632 on the 8th.
The third maximum ,, was 30in·134 on the 15th; the third minimum ,, was 29in·262 on the 19th.
The fourth maximum ,, was 29in·744 on the 21st; the fourth minimum ,, was 29in·177 on the 25th.
The fifth maximum ,, was 29in·435 on the 26th; the fifth minimum ,, was 29in·320 on the 27th.
The absolute maximum ,, was 30in·230 on the 29th; the sixth minimum ,, was 29in·253 on the 30th.
The seventh maximum ,, was 29in·554 on the 31st.
The range in the month was 1in·598. The mean for the month was 29in·491, being 0in·330 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 54° o on the 6th; the lowest was 8°·o on the 25th; and the range in the month was 46°·o.
The mean ,, of all the highest daily readings was 40°·6, being 4°·6 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 32°·o, being 3°·7 *lower* than the average of the preceding 19 years.
The mean daily range was 8°·6, being o°·9 *lower* than the average of the preceding 19 years.
The mean for the month was 36°·3, being 4°·o *lower* than the average of the preceding 19 years.

| MONTH and DAY, 1860. | ELECTRICITY. A.M. | ELECTRICITY. P.M. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|
| Dec. 1 | o | o | o | 10, ci.-s, ci : 10, h.-r |
| 2 | o | o | 7 | 7 : 10, r |
| 3 | o : s, N | s, N : o | 10, ci.-s | 10, ci.-s, oc.-r : 8 |
| 4 | o | o | 10, fr.-r | 10, r : 10, f |
| 5 | o | o | 10, f | 10, th.-r . : 10 : o |
| 6 | o | o | 10, th.-r | 10, h.-r |
| 7 | o | o | 7, ci.-cu, ci.-s | 10, oc.-r : 9, cu.-s, ci.-s : 10, h.-r |
| 8 | | | 10, s, ci.-s | 10, h.-r : 10, th,-r : o |
| 9 | | | 10, ci.-s, f | 5, ci, h : 10 |
| 10 | o | o : w | o | 5, ci.-cu, ci : o |
| 11 | o | s, N : o | 10, th.-f : 10, th.-r | 10, s, ci.-s, sc |
| 12 | w | o : m | 10, ci.-s, h | 10, ci.-s, ci, th.-r : 10, oc.-r |
| 13 | o | o | 10, f | 10 : o |
| 14 | o | o | 10 | 10 : 2, ci.-s, h |
| 15 | w : o | o | 10, th.-f | 10 : 10, oc.-r |
| 16 | o | o | 10, f | 10 : 10, h.-r |
| 17 | N, w : o | o | 10, oc.-r | o : 5 |
| 18 | o | o : w | o, h.-fr | 7, ci.-cu, ci : o, h.-fr |
| 19 | o | o : m | o, h.-fr | o : 6, ci : 9, ci.-s |
| 20 | o | o | o, h.-fr | 10, cu.-s, ci.-s |
| 21 | o | m | 10, ci.-s, sn | 10, ci.-s, oc.-sn |
| 22 | o | o | 10, sn | 10, sn, sl : 10, cu.-s, ci.-s, sc |
| 23 | s | s | 7, ci.-cu, ci, li.-cl | 7, ci.-s : o |
| 24 | o | o : w | 10, ci.-s, h | 10, ci.-s, h : o, f |
| 25 | o | o | o, h.-fr | 10, ci, so.-ha |
| 26 | o | w | o | o, : 10, ci.-s, lu.-ha |
| 27 | o | o : s | 10, sn | 10, sn |
| 28 | o | o | 7, ci.-cu, ci.-s | 8, ci.-cu, ci.-s, ci : o : ci.-s, f |
| 29 | o | s | 7, ci, h.-fr | 5, ci : 10, ci.-s |
| 30 | o | o : m | 10, sn, hl, r | 10, th.-r |
| 31 | o | s | 10 | 10, r |

HUMIDITY OF THE AIR.

*Temperature of the Dew Point.*

The highest in the month was 52°·4 on the 6th; and the lowest was −1°·3 on the 25th and 29th.
The mean ,, was 33°·4, being 3°·7 *lower* than the average of the preceding 19 years.

*Elastic Force of Vapour.*—The mean for the month was 0$^{in}$·191, being 0$^{in}$·036 *less* than the average of the preceding 19 years.
*Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was 2$^{gr}$·2, being 0$^{gr}$·4 *less* than the average of the preceding 19 years.
*Degree of Humidity.*—The mean for the month was 92 (that of Saturation being represented by 100), being 3 *greater* than the average of the preceding 19 years.
*Weight of a Cubic Foot of Air.*—The mean for the month was 551 grains, being 1 grain *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 7·9.

WIND.

The proportions were of N. 9, S. 7, W. 8, and E. 7. The greatest pressure in the month was 13$^{lbs}$·0 on the square foot on the 6th.

RAIN.

Fell on 16 days in the month, amounting to 2$^{in}$·8, as measured in the simple cylinder gauge partly sunk below the ground; being 0$^{in}$·9 *greater* than the average fall of the preceding 45 years.

ELECTRICITY.—December 8 and 9. The insulating lamp was out.

## 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 denotes that the quicksilver has been sensibly stationary through a period of more than one hour.

| MAXIMA. | | MINIMA. | | MAXIMA. | | MINIMA. | |
|---|---|---|---|---|---|---|---|
| Approximate Mean Solar Time, 1860. | Reading. | Approximate Mean Solar Time, 1860. | Reading. | Approximate Mean Solar Time, 1860. | Reading. | Approximate Mean Solar Time, 1860. | Reading. |
| d h m | in. | d h m | in. | d h m | in. | d h m | in. |
| January 2. 9. 0 | 29·683 | January 1. 6. 30: | 29·385 | April 22. 11. 0: | 29·691 | April 20. 22. 20: | 29·593 |
| 7. 22. 30: | 30·208 | 5. 3. 0: | 28·653 | 29. 17. 0: | 30·289 | 23. 7. 30: | 29·545 |
| 12. 22. 30 | 30·070 | 11. 15. 45: | 29·918 | May 3. 12. 30: | 30·110 | May 2. 3. 30: | 29·929 |
| 16. 6. 0: | 30·125 | 15. 8. 30 | 29·646 | 10. 0. 0 | 29·712 | 8. 3. 0 | 29·427 |
| 20. 13. 15: | 29·315 | 20. 1. 30: | 29·139 | 15. 15. 20: | 29·788 | 12. 15. 30 | 29·485 |
| 23. 3. 20: | 29·280 | 21. 1. 30 | 28·777 | 20. 23. 30: | 30·216 | 18. 1. 15: | 29·218 |
| 25. 22. 0: | 29·723 | 24. 1. 50 | 28·555 | 24. 9. 30 | 29·900 | 23. 8. 15: | 29·736 |
| 28. 0. 0 | 29·973 | 26. 20. 0: | 29·075 | 27. 2. 30: | 29·651 | 26. 1. 53 | 29·205 |
| February 3. 10. 0: | 30·210 | 30. 9. 0 | 28·782 | 29. 0. 30: | 29·889 | 27. 20. 0 | 29·363 |
| 6. 21. 0: | 30·082 | February 5. 15. 30: | 29·595 | June 1. 6. 0: | 29·551 | 31. 11. 30: | 29·447 |
| 10. 0. 0 | 29·968 | 8. 14. 0: | 29·425 | 5. 10. 30: | 29·738 | June 2. 6. 30 | 28·974 |
| 13. 21. 45: | 30·434 | 11. 1. 30: | 29·644 | 8. 9. 0 | 29·730 | 7. 6. 45 | 29·573 |
| 17. 9. 0: | 30·279 | 15. 21. 0: | 29·960 | 10. 22. 10: | 29·724 | 9. 12. 45: | 29·422 |
| 23. 0. 30: | 30·095 | 20. 5. 0: | 29·313 | 14. 10. 0: | 29·600 | 12. 4. 40: | 29·280 |
| 27. 14. 10: | 29·555 | 26. 19. 20: | 28·975 | 18. 9. 50: | 29·715 | 17. 0. 0: | 29·386 |
| March 0. 21. 0: | 29·953 | 27. 22. 45 | 29·113 | 21. 23. 0 | 29·880 | 20. 3. 0: | 29·500 |
| 2. 12. 30: | 29·977 | March 1. 22. 0: | 29·822 | 26. 10. 45: | 29·841 | 25. 0. 0 | 29·566 |
| 5. 22. 15: | 30·397 | 4. 2. 30: | 29·605 | July 2. 11. 30: | 30·253 | 27. 12. 0 | 29·606 |
| 7. 12. 0: | 30·242 | 6. 18. 30: | 29·880 | 4. 22. 20 | 30·145 | July 4. 0. 0 | 30·002 |
| 13. 9. 50: | 29·498 | 12. 16. 30: | 29·293 | 6. 21. 20: | 30·162 | 5. 17. 30: | 29·987 |
| 18. 23. 35: | 30·036 | 14. 4. 30: | 29·269 | 15. 22. 0: | 29·802 | 14. 1. 40: | 29·651 |
| 22. 10. 30: | 29·766 | 21. 1. 40 | 29·240 | 20. 10. 30: | 29·730 | 19. 3. 20 | 29·526 |
| 26. 10. 30: | 29·608 | 24. 4. 45: | 28·899 | 22. 11. 30 | 29·735 | 21. 18. 5: | 29·473 |
| 29. 22. 45 | 29·615 | 29. 3. 25 | 29·325 | 24. 23. 0: | 29·863 | 23. 9. 0 | 29·504 |
| April 1. 9. 0: | 29·124 | 31. 10. 30 | 28·595 | 29. 22. 40 | 30·015 | 28. 2. 40: | 29·582 |
| 7. 0. 30 | 29·789 | April 2. 4. 10: | 28·955 | August 5. 0. 0: | 29·564 | August 3. 23. 30: | 29·390 |
| 10. 22. 30: | 30·062 | 8. 11. 0: | 29·370 | 7. 11. 0: | 29·765 | 6. 3. 0: | 29·223 |
| 15. 21. 30 | 30·175 | 12. 23. 45: | 29·822 | 9. 21. 35: | 29·737 | 8. 5. 35: | 29·464 |

MAXIMA AND MINIMA READINGS OF THE BAROMETER—*concluded.*

| MAXIMA. | | MINIMA. | | MAXIMA. | | MINIMA. | |
|---|---|---|---|---|---|---|---|
| Approximate Mean Solar Time, 1860. | Reading. | Approximate Mean Solar Time. 1860. | Reading. | Approximate Mean Solar Time, 1860. | Reading. | Approximate Mean Solar Time, 1860. | Reading. |
| d h m | in. | d h m | in. | d h m | in. | d h m | in. |
| August 12. 9. 45: | 29·671 | August 11. 4. 0: | 29·427 | October 18. 21. 0 | 29·600 | October 18. 6. 45: | 29·425 |
| 21. 3. 0 | 29·806 | 16. 5. 40: | 29·217 | 20. 21. 30: | 30·100 | 19. 9. 45: | 29·432 |
| 22. 23. 0: | 29·737 | 22. 3. 30: | 29·312 | 29. 21. 40 | 30·073 | 26. 3. 0 | 29·791 |
| 27. 10. 15: | 29·747 | 24. 11. 10: | 29·514 | November 6. 21. 0: | 30·359 | November 1. 3. 30: | 29·900 |
| September 6. 11. 0: | 30·258 | 29. 16. 55 | 29·018 | 16. 0. 15: | 29·484 | 14. 17. 35: | 29·090 |
| 11. 15. 0: | 30·250 | September 8. 4. 0: | 29·890 | 19. 4. 45: | 29·983 | 17. 3. 30: | 29·103 |
| 16. 0. 45: | 29·559 | 15. 2. 30: | 29·386 | 23. 21. 0 | 29·658 | 21. 17. 0: | 29·249 |
| 21. 5. 30: | 29·879 | 18. 20. 45: | 29·305 | 28. 21. 50: | 29·712 | 26. 3. 45: | 29·252 |
| 25. 9. 30 | 29·725 | 24. 16. 0: | 29·135 | 30. 22. 30 | 29·680 | 30. 1. 40: | 29·462 |
| October 1. 23. 0: | 30·185 | 27. 4. 55: | 29·566 | December 5. 9. 0: | 29·376 | December 4. 1. 30 | 29·208 |
| 3. 22. 0: | 30·276 | October 2. 22. 0: | 29·958 | 14. 22. 45 | 30·144 | 8. 10. 30: | 28·632 |
| 5. 21. 30 | 30·193 | 5. 3. 0 | 29·892 | 20. 20. 0: | 29·744 | 19. 2. 0: | 29·262 |
| 9. 12. 15: | 30·100 | 8. 21. 30: | 29·812 | 26. 4. 30: | 29·435 | 25. 8. 20: | 29·177 |
| 12. 4. 0: | 29·773 | 10. 18. 0: | 29·295 | 28. 20. 45 | 30·230 | 26. 21. 25: | 29·320 |
| 14. 11. 45: | 29·693 | 13. 13. 0: | 29·330 | 31. 3. 30 | 29·554 | 30. 1. 0 | 29·253 |
| 17. 8. 20: | 29·884 | 15. 20. 15: | 29·365 | | | | |

MONTHLY MEANS of RESULTS for METEOROLOGICAL ELEMENTS at the ROYAL OBSERVATORY, GREENWICH, in the Year 1860.

| 1860, 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 .. | 29·515 | 55·5 | 27·5 | 28·0 | 45·0 | 34·8 | 10·2 | 39·7 | 36·2 | 0·214 | 2·5 | 0·4 |
| February.. | 29·857 | 53·5 | 23·2 | 30·3 | 42·5 | 30·1 | 12·4 | 35·7 | 30·4 | 0·170 | 2·0 | 0·4 |
| March .... | 29·657 | 59·5 | 23·5 | 36·0 | 49·2 | 35·0 | 14·2 | 41·1 | 35·0 | 0·204 | 2·4 | 0·6 |
| April..... | 29·796 | 65·0 | 28·2 | 36·8 | 53·7 | 35·6 | 18·1 | 42·9 | 36·7 | 0·218 | 2·5 | 0·7 |
| May..... | 29·746 | 76·5 | 32·5 | 44·0 | 65·5 | 44·6 | 20·9 | 53·8 | 46·1 | 0·312 | 3·5 | 1·1 |
| June ..... | 29·613 | 74·0 | 43·5 | 30·5 | 65·0 | 48·5 | 16·5 | 54·8 | 49·7 | 0·357 | 4·0 | 0·9 |
| July..... | 29·845 | 75·0 | 41·6 | 33·4 | 69·2 | 50·1 | 19·1 | 57·6 | 52·3 | 0·393 | 4·4 | 0·9 |
| August ... | 29·556 | 70·8 | 45·5 | 25·3 | 67·2 | 51·8 | 15·4 | 57·7 | 52·5 | 0·396 | 4·4 | 0·9 |
| September. | 29·762 | 69·7 | 35·7 | 34·0 | 63·4 | 45·8 | 17·6 | 53·4 | 50·2 | 0·364 | 4·1 | 0·5 |
| October... | 29·856 | 68·5 | 32·4 | 36·1 | 58·6 | 44·5 | 14·1 | 50·6 | 47·5 | 0·329 | 3·7 | 0·5 |
| November. | 29·696 | 55·3 | 28·5 | 26·8 | 46·7 | 35·3 | 11·4 | 40·8 | 38·9 | 0·237 | 2·7 | 0·3 |
| December . | 29·491 | 54·0 | 8·0 | 46·0 | 40·6 | 32·0 | 8·6 | 36·3 | 33·4 | 0·191 | 2·2 | 0·3 |
| Means .... | 29·699 | 64·8 | 30·9 | 33·9 | 55·6 | 40·7 | 14·9 | 47·0 | 42·4 | 0·282 | 3·2 | 0·6 |

| 1860, 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 Whewell's Anemometer. | From Robinson's Anemometer. |
| | | | | | | 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 ¼ 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. | | | | | | | | | | | | |
| January... | 88 | 548 | 6·9 | 21 | 1·8 | 2 | 0 | 1 | 4 | 5 | 12 | 4 | 3 | 0 | 1·44 | 159 | 247 |
| February.. | 80 | 559 | 6·5 | 13 | 1·1 | 6 | 7 | 1 | 0 | 3 | 4 | 5 | 3 | 0 | 1·82 | 132 | 313 |
| March .... | 79 | 549 | 7·5 | 18 | 1·9 | 2 | 3 | 0 | 0 | 1 | 11 | 8 | 6 | 0 | 1·57 | 146 | 342 |
| April..... | 79 | 549 | 7·0 | 13 | 1·0 | 3 | 10 | 3 | 2 | 1 | 3 | 4 | 4 | 0 | 1·09 | 99 | 260 |
| May..... | 75 | 536 | 6·5 | 14 | 3·9 | 0 | 2 | 5 | 2 | 1 | 11 | 7 | 2 | 1 | 0·89 | 91 | 246 |
| June..... | 82 | 532 | 7·9 | 23 | 5·8 | 2 | 1 | 0 | 2 | 1 | 19 | 5 | 0 | 0 | 0·85 | 115 | 269 |
| July..... | 83 | 534 | 8·3 | 10 | 2·8 | 6 | 7 | 1 | 0 | 0 | 10 | 1 | 5 | 1 | 0·15 | 57 | 172 |
| August ... | 83 | 528 | 8·3 | 25 | 3·7 | 1 | 0 | 0 | 0 | 2 | 17 | 9 | 2 | 0 | 0·85 | 120 | .. |
| September. | 88 | 537 | 7·4 | 17 | 3·1 | 4 | 4 | 1 | 2 | 1 | 10 | 5 | 1 | 2 | 0·35 | 69 | 200 |
| October... | 89 | 541 | 6·8 | 10 | 1·6 | 0 | 2 | 0 | 2 | 2 | 14 | 10 | 1 | 0 | 0·70 | 102 | 260 |
| November. | 93 | 550 | 7·9 | 11 | 2·5 | 0 | 8 | 8 | 2 | 2 | 5 | 1 | 2 | 2 | 0·57 | 66 | 184 |
| December . | 92 | 551 | 7·9 | 17 | 2·8 | 4 | 3 | 6 | 3 | 3 | 4 | 5 | 2 | 1 | 0·36 | 65 | 190 |
| Means .... | 84 | 543 | 7·4 | Sum 192 | Sum 32·0 | Sum 30 | Sum 47 | Sum 26 | Sum 19 | Sum 22 | Sum 120 | Sum 64 | Sum 31 | Sum 7 | .. | .. | .. |

During the greater part of the month of August, Robinson's Anemometer was under repair. Whewell's Anemometer was not at work during 10 days of January; and Robinson's Anemometer was not at work during 5 days of January, 11 days of February, and 12 days of April. The mean horizontal movement for these months has been formed from the remaining days.

## 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 generally, except Sundays, Good Friday, and Christmas Day.

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | *S* | 51·55 | 50·65 | *S* | 48·92 | 48·51 | *S* | 49·25 | 50·07 | 50·76 | 51·29 | 51·35 |
| 2 | 52·48 | 51·52 | 50·60 | 49·57 | 48·90 | 48·44 | 48·65 | 49·26 | *S* | 50·80 | 51·27 | *S* |
| 3 | 52·48 | 51·49 | 50·58 | 49·55 | 48·88 | *S* | 48·66 | 49·30 | 50·12 | 50·83 | 51·27 | 51·34 |
| 4 | 52·42 | 51·46 | *S* | 49·55 | 48·83 | 48·50 | 48·70 | 49·32 | 50·15 | 50·83 | *S* | 51·35 |
| 5 | 52·40 | *S* | 50·52 | 49·51 | 48·83 | 48·49 | 48·70 | *S* | 50·18 | 50·86 | 51·27 | 51·35 |
| 6 | 52·37 | 51·40 | 50·48 | GoodFriday. | *S* | 48·47 | 48·72 | 49·38 | 50·20 | 50·90 | 51·30 | 51·36 |
| 7 | 52·34 | 51·35 | 50·32 | 49·47 | 48·80 | 48·47 | 48·72 | 49·39 | 50·22 | *S* | 51·30 | 51·35 |
| 8 | *S* | 51·35 | 50·35 | *S* | 48·78 | 48·47 | *S* | 49·40 | 50·26 | 50·90 | 51·29 | 51·34 |
| 9 | 52·28 | 51·30 | 50·35 | 49·40 | 48·77 | 48·46 | 48·76 | 49·44 | *S* | 50·88 | 51·28 | *S* |
| 10 | 52·50 | 51·25 | 50·33 | 49·36 | 48·77 | *S* | 48·78 | 49·48 | 50·29 | 50·90 | 51·28 | 51·32 |
| 11 | 52·23 | 51·23 | *S* | 49·35 | 48·75 | 48·47 | 48·80 | 49·50 | 50·32 | 50·91 | *S* | 51·30 |
| 12 | 52·22 | *S* | 50·28 | 49·30 | 48·73 | 48·45 | 48·80 | *S* | 50·34 | 50·91 | 51·30 | 51·26 |
| 13 | 51·50 | 51·17 | 50·24 | 49·27 | *S* | 48·47 | 48·80 | 49·55 | 50·36 | 50·96 | 51·31 | 51·29 |
| 14 | 52·15 | 51·12 | 50·20 | 49·26 | 48·72 | 48·47 | 48·87 | 49·58 | 50·40 | *S* | 51·32 | 51·26 |
| 15 | *S* | 51·10 | 50·17 | *S* | 48·70 | 48·47 | *S* | 49·56 | 50·40 | 51·00 | 51·33 | 51·23 |
| 16 | 52·08 | 51·07 | 50·15 | 49·20 | 48·63 | 48·49 | 48·90 | 49·64 | *S* | 51·03 | 51·30 | *S* |
| 17 | 52·05 | 51·05 | 50·12 | 49·20 | 48·60 | *S* | 48·92 | 49·65 | 50·45 | 51·05 | 51·32 | 51·20 |
| 18 | 51·97 | 51·02 | *S* | 49·18 | 48·60 | 48·50 | 48·92 | 49·66 | 50·40 | 51·05 | *S* | 51·17 |
| 19 | 52·00 | *S* | 50·05 | 49·12 | 48·60 | 48·50 | 48·95 | *S* | 50·48 | 51·06 | 51·32 | 51·15 |
| 20 | 51·97 | 50·93 | 50·02 | 49·10 | *S* | 48·50 | 48·97 | 49·73 | 50·52 | 51·10 | 51·30 | 51·13 |
| 21 | 51·93 | 50·91 | 49·96 | 49·10 | 48·60 | 48·51 | 48·97 | 49·77 | 50·52 | *S* | 51·34 | 51·12 |
| 22 | *S* | 50·87 | 49·93 | *S* | 48·60 | 48·52 | *S* | 49·77 | 50·56 | 51·07 | 51·35 | 51·12 |
| 23 | 51·86 | 50·85 | 49·90 | 49·03 | 48·54 | 48·53 | 49·03 | 49·80 | *S* | 51·16 | 51·28 | *S* |
| 24 | 51·83 | 50·80 | 49·85 | 49·00 | 48·54 | *S* | 49·00 | 49·83 | 50·58 | 51·19 | 51·36 | 51·09 |
| 25 | 51·80 | 50·78 | *S* | 49·00 | 48·52 | 48·56 | 49·06 | 49·86 | 50·57 | 51·22 | *S* | ChristmasDay. |
| 26 | 51·75 | *S* | 49·80 | 48·84 | 48·53 | 48·57 | 49·10 | *S* | 50·62 | 51·22 | 51·35 | 51·07 |
| 27 | 51·72 | 50·72 | 49·76 | 48·90 | *S* | 48·57 | 49·07 | 49·92 | 50·65 | 51·22 | 51·36 | 51·07 |
| 28 | 51·64 | 50·72 | 49·75 | 48·95 | 48·47 | 48·58 | 49·13 | 49·95 | 50·68 | *S* | 51·36 | 51·05 |
| 29 | *S* | 50·67 | 49·72 | *S* | 48·52 | 48·60 | *S* | 49·98 | 50·70 | 51·23 | 51·34 | 51·00 |
| 30 | 51·64 | | 49·68 | 48·93 | 48·52 | 48·62 | 49·18 | 50·02 | *S* | 51·28 | 51·35 | *S* |
| 31 | 51·60 | | 49·65 | | 48·50 | | 49·21 | 50·05 | | 51·26 | | 51·02 |
| Means | 52·07 | 51·11 | 50·12 | 49·21 | 48·67 | 48·51 | 48·90 | 49·63 | 50·40 | 51·02 | 51·31 | 51·21 |

January 13. The reading is evidently erroneous; it has not been used in deducing the mean.

(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.

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | *S* | 47·93 | 46·30 | *S* | 45·95 | 47·92 | *S* | 52·40 | 53·62 | 54·00 | 52·97 | 51·17 |
| 2 | 49·57 | 47·90 | 46·22 | 45·33 | 45·96 | 47·90 | 50·21 | 52·45 | *S* | 54·03 | 52·90 | *S* |
| 3 | 49·52 | 47·82 | 46·18 | 45·33 | 45·97 | *S* | 50·32 | 52·50 | 53·70 | 54·05 | 52·83 | 50·97 |
| 4 | 49·36 | 47·83 | *S* | 45·38 | 45·96 | 48·23 | 50·40 | 52·56 | 53·72 | 54·00 | *S* | 50·91 |
| 5 | 49·32 | *S* | 46·07 | 45·38 | 45·98 | 48·30 | 50·44 | *S* | 53·82 | 53·98 | 52·78 | 50·82 |
| 6 | 49·23 | 47·65 | 45·98 | GoodFriday. | *S* | 48·38 | 50·51 | 52·61 | 53·72 | 53·98 | 52·76 | 50·79 |
| 7 | 49·18 | 47·63 | 45·93 | 45·40 | 46·05 | 48·50 | 50·61 | 52·67 | 53·78 | *S* | 52·72 | 50·72 |
| 8 | *S* | 47·60 | 45·90 | *S* | 46·10 | 48·59 | *S* | 52·69 | 53·78 | 53·88 | 52·70 | 50·62 |
| 9 | 49·10 | 47·53 | 45·82 | 45·55 | 46·13 | 48·64 | 50·72 | 52·72 | *S* | 53·76 | 52·70 | *S* |
| 10 | 49·03 | 47·43 | 45·80 | 45·50 | 46·18 | *S* | 50·79 | 52·77 | 53·85 | 53·74 | 52·62 | 50·46 |
| 11 | 49·01 | 47·40 | *S* | 45·50 | 46·23 | 48·82 | 50·86 | 52·82 | 53·88 | 53·74 | *S* | 50·40 |
| 12 | 49·00 | *S* | 45·78 | 45·50 | 46·30 | 48·83 | 50·95 | *S* | 53·85 | 53·66 | 52·54 | 50·29 |

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12 French feet—*concluded.*

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 13 | 48·90 | 47·26 | 45·70 | 45·53 | *S* | 48·92 | 51·00 | 52·92 | 53·95 | 53·70 | 52·52 | 50·30 |
| 14 | 48·92 | 47·25 | 45·70 | 45·55 | 46·41 | 49·05 | 51·10 | 52·97 | 53·96 | *S* | 52·48 | 50·20 |
| 15 | *S* | 47·20 | 45·60 | *S* | 46·49 | 49·08 | *S* | 52·97 | 53·96 | 53·65 | 52·47 | 50·15 |
| 16 | 48·82 | 47·15 | 45·60 | 45·63 | 46·44 | 49·18 | 51·25 | 53·06 | *S* | 53·60 | 52·37 | *S* |
| 17 | 48·77 | 47·10 | 45·58 | 45·68 | 46·50 | *S* | 51·35 | 53·06 | 54·00 | 53·60 | 52·26 | 50·00 |
| 18 | 48·60 | 47·04 | *S* | 45·70 | 46·61 | 49·30 | 51·39 | 53·67 | 53·95 | 53·55 | *S* | 49·90 |
| 19 | 48·66 | *S* | 45·50 | 45·66 | 46·70 | 49·38 | 51·42 | *S* | 54·00 | 53·50 | 52·10 | 49·86 |
| 20 | 48·62 | 46·90 | 45·50 | 45·70 | *S* | 49·48 | 51·53 | 53·19 | 54·03 | 53·48 | 52·08 | 49·82 |
| 21 | 48·55 | 46·86 | 45·45 | 45·72 | 46·83 | 49·54 | 51·58 | 53·22 | 54·03 | *S* | 52·01 | 49·76 |
| 22 | *S* | 46·77 | 45·42 | *S* | 47·00 | 49·58 | *S* | 53·22 | 54·03 | 53·42 | 51·93 | 49·72 |
| 23 | 48·45 | 46·73 | 45·40 | 45·78 | 47·03 | 49·68 | 51·72 | 53·28 | *S* | 53·37 | 51·86 | *S* |
| 24 | 48·40 | 46·65 | 45·40 | 45·74 | 47·07 | *S* | 51·77 | 53·29 | 54·00 | 53·30 | 51·82 | 49·68 |
| 25 | 48·30 | 46·60 | *S* | 45·82 | 47·13 | 49·77 | 51·90 | 53·37 | 53·95 | 53·30 | *S* | Christmas Day. |
| 26 | 48·27 | *S* | 45·35 | 45·67 | 47·24 | 49·82 | 52·02 | *S* | 53·98 | 53·27 | 51·60 | 49·52 |
| 27 | 48·18 | 46·48 | 45·32 | 45·72 | *S* | 49·86 | 52·02 | 53·38 | 54·03 | 53·21 | 51·50 | 49·50 |
| 28 | 48·15 | 46·45 | 45·38 | 45·87 | 47·37 | 49·92 | 52·19 | 53·50 | 54·02 | *S* | 51·42 | 49·38 |
| 29 | *S* | 46·32 | 45·38 | *S* | 47·60 | 50·00 | *S* | 53·52 | 54·02 | 53·07 | 51·33 | 49·22 |
| 30 | 48·17 | | 45·35 | 45·92 | 47·73 | 50·08 | 52·26 | 53·57 | *S* | 53·07 | 51·25 | *S* |
| 31 | 48·00 | | 45·38 | | 47·82 | | 52·32 | 53·61 | | 52·98 | | 49·10 |
| Means. | 48·77 | 47·18 | 45·67 | 45·60 | 46·62 | 49·11 | 51·26 | 53·01 | 53·91 | 53·59 | 52·25 | 50·13 |

(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.

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | *S* | 44·92 | | *S* | 46·08 | 52·03 | *S* | 56·76 | 57·39 | 55·78 | 53·48 | 48·64 |
| 2 | 45·36 | 44·70 | | 44·45 | 46·17 | 51·94 | 54·87 | 56·72 | *S* | 55·72 | 53·48 | *S* |
| 3 | 45·60 | 44·75 | | 44·60 | 46·40 | *S* | 54·88. | 56·78 | 57·43 | 55·60 | 53·48 | 48·52 |
| 4 | 45·80 | 44·75 | | 44·70 | 46·63 | 52·20 | 54·90 | 56·83 | 57·41 | 55·49 | *S* | 48·53 |
| 5 | 46·12 | *S* | | 44·80 | 46·89 | 52·22 | 55·00 | *S* | 57·40 | 55·46 | 53·23 | 48·60 |
| 6 | 46·30 | 44·50 | | Good Friday. | *S* | 52·27 | 55·10 | 56·85 | 57·38 | 55·40 | 53·05 | 48·55 |
| 7 | 46·45 | 44·50 | | 45·00 | 47·50 | 52·53 | 55·22 | 56·92 | 57·22 | *S* | 52·88 | 48·56 |
| 8 | *S* | 44·38 | | *S* | 47·72 | 52·60 | *S* | 56·91 | 57·33 | 55·12 | 52·45 | 48·57 |
| 9 | 46·50 | 44·20 | | 45·18 | 47·95 | 52·49 | 55·38 | 56·98 | *S* | 54·98 | 52·25 | *S* |
| 10 | 46·30 | 44·20 | | 45·30 | 48·17 | *S* | 55·50 | 57·03 | 57·12 | 55·00 | 52·07 | 48·53 |
| 11 | 46·27 | 44·20 | | 45·40 | 48·38 | 52·79 | 55·67 | 57·03 | 57·27 | 54·90 | *S* | 48·53 |
| 12 | 46·12 | *S* | | 45·53 | 48·57 | 52·74 | 55·77 | *S* | 57·20 | 54·77 | 51·60 | 48·50 |
| 13 | 46·03 | 44·20 | | 45·60 | *S* | 52·86 | 55·83 | 57·01 | 57·20 | 54·67 | 51·39 | 48·53 |
| 14 | 45·93 | 44·10 | | 45·60 | 48·93 | 52·83 | 55·96 | 57·03 | 57·12 | *S* | 51·29 | 48·48 |
| 15 | *S* | 43·95 | | *S* | 49·15 | 52·90 | *S* | 57·00 | 56·98 | 54·30 | 51·11 | 48·28 |
| 16 | 45·78 | 43·90 | | 45·58 | 49·20 | 52·95 | 56·18 | 57·07 | *S* | 54·05 | 50·96 | *S* |
| 17 | 45·78 | 43·70 | | 45·57 | 49·38 | *S* | 56·38 | 57·07 | 56·80 | 53·88 | 50·80 | 48·08 |
| 18 | 45·60 | | | 45·60 | 49·60 | 53·37 | 56·50 | 57·10 | 56·72 | 53·70 | *S* | 47·93 |
| 19 | 45·75 | | | 45·65 | 49·74 | 53·39 | 56·60 | *S* | 56·65 | 53·58 | 50·53 | 47·82 |
| 20 | 45·70 | | | 45·73 | *S* | 53·45 | 56·70 | 57·18 | 56·60 | 53·51 | 50·43 | 47·66 |
| 21 | 45·68 | | | 45·80 | 50·00 | 53·60 | 56·75 | 57·20 | 56·59 | *S* | 50·18 | 47·42 |
| 22 | *S* | | | *S* | 50·20 | 53·70 | *S* | 57·16 | 56·52 | 53·49 | 50·00 | 47·28 |
| 23 | 45·40 | | | 45·90 | 50·38 | 53·72 | 56·83 | 57·26 | *S* | 53·33 | 49·82 | *S* |
| 24 | 45·39 | | | 45·90 | 50·53 | *S* | 56·86 | 57·18 | 56·45 | 53·32 | 49·54 | 46·81 |
| 25 | 45·35 | | *S* | 45·93 | 50·80 | 53·98 | 56·88 | 57·22 | 56·40 | 53·28 | *S* | Christmas Day. |
| 26 | 45·30 | | 44·00 | 45·78 | 51·06 | 54·13 | 56·93 | *S* | 56·42 | 53·21 | 49·32 | 46·40 |

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6 French feet—*concluded.*

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 27 | 45·08 | | 44·03 | 45·75 | *S* | 54·31 | 56·83 | 57·20 | 56·39 | 53·22 | 49·23 | 46·18 |
| 28 | 45·04 | | 44·03 | 45·90 | 51·50 | 54·46 | 56·68 | 57·22 | 56·23 | *S* | 49·13 | 45·93 |
| 29 | *S* | | 44·01 | *S* | 51·83 | 54·53 | *S* | 57·28 | 56·05 | 53·28 | 48·90 | 45·52 |
| 30 | 45·10 | | 44·03 | 46·00 | 51·97 | 54·69 | 56·77 | 57·26 | *S* | 53·47 | 48·80 | *S* |
| 31 | 45·00 | | 44·18 | | 52·01 | | 56·63 | 57·68 | | 53·34 | | 44·83 |
| Means. | 45·72 | .. | .. | 45·47 | 49·14 | 53·18 | 56·06 | 57·07 | 56·89 | 54·29 | 51·13 | 47·71 |

At temperatures below 43°·50 the fluid of this thermometer descends below the scale; the readings from February 18 to March 24 were all less than 43°·50.

(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.

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | *S* | 41·15 | 39·70 | *S* | 46·05 | 53·90 | *S* | 58·62 | 59·03 | 54·62 | 52·90 | 45·11 |
| 2 | 43·63 | 40·75 | 39·60 | 43·90 | 46·90 | 53·85 | 57·12 | 58·70 | *S* | 54·60 | 52·43 | *S* |
| 3 | 44·06 | 40·50 | 39·70 | 44·00 | 47·61 | *S* | 57·39 | 58·79 | 58·77 | 54·59 | 51·77 | 45·50 |
| 4 | 44·27 | 40·20 | *S* | 43·80 | 48·24 | 54·03 | 57·76 | 58·90 | 58·69 | 54·57 | *S* | 45·68 |
| 5 | 44·40 | *S* | 40·08 | 43·80 | 48·86 | 53·91 | 58·02 | *S* | 58·60 | 54·49 | 50·22 | 45·77 |
| 6 | 44·04 | 40·40 | 40·20 | Good Friday. | *S* | 54·00 | 58·20 | 59·04 | 58·39 | 54·19 | 49·58 | 45·88 |
| 7 | 43·77 | 40·65 | 40·15 | 44·30 | 49·33 | 54·10 | 58·50 | 59·10 | 58·47 | *S* | 49·20 | 46·07 |
| 8 | *S* | 40·30 | 39·95 | *S* | 49·51 | 54·09 | *S* | 58·80 | 58·45 | 54·40 | 48·82 | 46·32 |
| 9 | 42·80 | 40·70 | 39·88 | 44·94 | 49·88 | 54·10 | 58·60 | 58·70 | *S* | 54·30 | 48·50 | *S* |
| 10 | 42·37 | 40·73 | 39·70 | 45·03 | 50·20 | *S* | 58·80 | 58·60 | 58·55 | 53·77 | 48·12 | 46·22 |
| 11 | 42·05 | 40·30 | *S* | 44·70 | 50·37 | 54·27 | 58·90 | 58·52 | 58·12 | 53·11 | *S* | 46·02 |
| 12 | 41·90 | *S* | 39·67 | 44·40 | 50·66 | 54·32 | 58·98 | *S* | 57·60 | 52·74 | 47·34 | 45·60 |
| 13 | 41·95 | 39·50 | 39·70 | 44·15 | *S* | 54·53 | 59·10 | 58·75 | 57·23 | 52·04 | 47·20 | 45·44 |
| 14 | 41·85 | 39·00 | 39·80 | 44·10 | 51·38 | 54·60 | 59·50 | 58·80 | 57·00 | *S* | 47·11 | 45·21 |
| 15 | *S* | 38·90 | 40·05 | *S* | 51·62 | 54·55 | *S* | 58·80 | 56·99 | 51·43 | 47·23 | 45·00 |
| 16 | 42·40 | | 40·10 | 44·05 | 51·80 | 54·79 | 60·03 | 59·03 | *S* | 51·32 | 47·48 | *S* |
| 17 | 42·53 | | 40·23 | 44·50 | 52·00 | *S* | 60·23 | 59·12 | 57·10 | 51·60 | 47·23 | 44·30 |
| 18 | 42·12 | | *S* | 44·77 | 51·96 | 55·36 | 60·13 | 58·92 | 57·13 | 51·53 | *S* | 43·90 |
| 19 | 41·80 | | 41·57 | 44·80 | 51·90 | 55·35 | 60·02 | *S* | 57·20 | 51·40 | 46·32 | 43·38 |
| 20 | 41·70 | | 41·95 | 44·90 | *S* | 55·77 | 60·02 | 58·53 | 56·83 | 51·64 | 45·88 | 42·68 |
| 21 | 41·85 | | 42·10 | 44·70 | 52·55 | 56·07 | 59·82 | 58·79 | 56·60 | *S* | 45·53 | 42·03 |
| 22 | *S* | | 42·40 | *S* | 53·10 | 56·29 | *S* | 58·90 | 56·85 | 51·58 | 45·32 | 41·55 |
| 23 | 41·70 | | 42·20 | 44·47 | 53·70 | 56·47 | 59·40 | 58·90 | *S* | 51·30 | 45·54 | *S* |
| 24 | 41·53 | | 42·20 | 44·30 | 54·20 | *S* | 59·12 | 58·62 | 56·77 | 51·55 | 45·47 | 40·95 |
| 25 | 41·70 | | *S* | 44·25 | 54·75 | 57·22 | 58·82 | 58·56 | 56·32 | 52·09 | *S* | Christmas Day |
| 26 | 41·60 | | 41·87 | 44·11 | 54·95 | 57·55 | 58·50 | *S* | 55·70 | 52·44 | 45·20 | 40·12 |
| 27 | 41·10 | | 41·88 | 44·30 | *S* | 57·52 | 58·12 | 58·73 | 55·22 | 52·70 | 45·00 | 39·83 |
| 28 | 41·23 | | 41·80 | 44·60 | 54·68 | 57·52 | 58·27 | 58·90 | 55·10 | *S* | 44·90 | 39·72 |
| 29 | *S* | 39·60 | 42·24 | *S* | 54·54 | 57·38 | *S* | 58·92 | 55·18 | 52·93 | 44·90 | 39·00 |
| 30 | 41·12 | | 42·96 | 45·20 | 54·09 | 57·30 | 58·43 | 59·03 | *S* | 53·09 | 45·00 | *S* |
| 31 | 41·10 | | 43·38 | | 53·92 | | 58·50 | 59·05 | | 52·93 | | |
| Means. | 42·33 | .. | 40·93 | 44·42 | 51·44 | 55·34 | 58·86 | 58·82 | 57·28 | 52·85 | 47·47 | 43·80 |

At temperatures below 39°·70 the fluid of this thermometer descends below the scale; the readings on those days, which are slightly below this value, are estimated readings only, and therefore liable to some uncertainty. From February 16 to February 28 and on December 31 the readings were all below 39°·70, and mostly less than 39°.

(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.

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | *S* | 35·3 | 39·3 | *S* | 54·3 | 57·7 | *S* | 60·9 | 59·6 | 53·1 | 51·0 | 46·6 |
| 2 | 46·3 | 36·0 | 40·8 | 44·2 | 55·2 | 56·6 | 63·0 | 61·0 | *S* | 55·0 | 47·0 | *S* |
| 3 | 46·8 | 37·2 | 41·0 | 45·0 | 55·2 | *S* | 62·6 | 62·3 | 59·6 | 56·5 | 43·9 | 45·2 |
| 4 | 46·2 | 37·7 | *S* | 45·0 | 54·3 | 57·2 | 63·2 | 63·0 | 59·0 | 51·9 | *S* | 45·0 |
| 5 | 43·0 | *S* | 40·7 | 47·0 | 53·0 | 55·2 | 60·6 | *S* | 58·5 | 53·0 | 44·0 | 46·0 |
| 6 | 41·5 | 39·7 | 38·0 | Good Friday. | *S* | 53·7 | 63·0 | 61·2 | 59·8 | 55·0 | 45·0 | 47·1 |
| 7 | 38·0 | 37·7 | 39·7 | 49·0 | 54·0 | 55·0 | 60·2 | 59·8 | 58·6 | *S* | 45·3 | 48·3 |
| 8 | *S* | 43·0 | 38·3 | *S* | 55·2 | 57·2 | *S* | 57·9 | 60·7 | 53·6 | 43·5 | 48·0 |
| 9 | 38·0 | 40·0 | 36·8 | 46·0 | 57·0 | 56·1 | 61·2 | 58·9 | *S* | 46·0 | 43·0 | *S* |
| 10 | 37·9 | 35·0 | 35·0 | 43·0 | 55·3 | *S* | 59·7 | 60·2 | 56·0 | 47·2 | 43·0 | 44·0 |
| 11 | 39·0 | 36·0 | *S* | 42·3 | 57·2 | 57·3 | 61·7 | 60·1 | 56·0 | 50·7 | *S* | 42·9 |
| 12 | 41·7 | *S* | 39·7 | 44·6 | 59·0 | 58·0 | 63·0 | *S* | 54·6 | 44·1 | 42·0 | 42·9 |
| 13 | 39·0 | 34·6 | 40·0 | 44·0 | *S* | 57·2 | 62·0 | 60·9 | 56·2 | 49·0 | 45·0 | 42·3 |
| 14 | 42·7 | 34·0 | 41·0 | 43·0 | 57·6 | 57·3 | 63·7 | 62·0 | 58·8 | *S* | 46·0 | 42·9 |
| 15 | *S* | 35·0 | 39·0 | *S* | 58·0 | 57·0 | *S* | 61·4 | 58·0 | 49·7 | 46·0 | 39·7 |
| 16 | 42·0 | 37·0 | 42·0 | 48·0 | 56·0 | 60·2 | 64·0 | 63·9 | *S* | 53·8 | 44·6 | *S* |
| 17 | 39·3 | 37·0 | 46·0 | 47·0 | 56·2 | *S* | 65·0 | 59·0 | 60·0 | 51·0 | 44·7 | 39·5 |
| 18 | 36·6 | 39·5 | *S* | 47·0 | 56·0 | 57·0 | 63·4 | 57·3 | 57·0 | 51·8 | *S* | 36·7 |
| 19 | 41·3 | *S* | 45·0 | 43·0 | 55·5 | 57·7 | 61·3 | *S* | 56·0 | 53·0 | 40·6 | 35·0 |
| 20 | 43·0 | 36·0 | 46·0 | 44·0 | *S* | 61·0 | 62·8 | 61·7 | 57·3 | 52·0 | 41·8 | 34·5 |
| 21 | 41·0 | 38·0 | 46·0 | 43·0 | 60·5 | 61·2 | 59·8 | 60·0 | 57·8 | *S* | 41·8 | 35·0 |
| 22 | *S* | 38·0 | 42·4 | *S* | 61·7 | 61·3 | *S* | 59·2 | 59·3 | 50·6 | 45·7 | 34·9 |
| 23 | 39·0 | 35·5 | 43·0 | 43·8 | 61·0 | 61·8 | 59·0 | 58·1 | *S* | 54·0 | 41·9 | *S* |
| 24 | 41·5 | 35·0 | 41·7 | 40·8 | 61·2 | *S* | 58·5 | 58·0 | 54·2 | 55·3 | 42·3 | 31·2 |
| 25 | 40·0 | 35·0 | *S* | 45·0 | 60·8 | 60·8 | 57·7 | 60·3 | 51·4 | 56·1 | *S* | Christmas Day |
| 26 | 37·0 | *S* | 42·8 | 45·0 | 59·2 | 60·5 | 58·2 | *S* | 53·0 | 56·8 | 40·8 | 33·0 |
| 27 | 43·2 | 41·0 | 42·0 | 46·0 | *S* | 59·3 | 60·0 | 60·2 | 54·8 | 55·0 | 43·7 | 34·8 |
| 28 | 36·0 | 44·0 | 47·0 | 46·0 | 54·0 | 60·3 | 59·8 | 60·3 | 55·0 | *S* | 42·8 | 34·1 |
| 29 | *S* | 39·0 | 49·3 | *S* | 53·9 | 58·8 | *S* | 62·3 | 53·7 | 54·0 | 43·5 | 31·0 |
| 30 | 42·5 | | 47·0 | 52·0 | 55·0 | 57·5 | 59·5 | 62·2 | *S* | 54·8 | 45·0 | *S* |
| 31 | 40·3 | | 47·5 | | 55·0 | | 60·7 | 60·0 | | 52·1 | | 36·2 |
| Means. | 40·9 | 37·4 | 42·1 | 45·2 | 56·7 | 58·2 | 61·3 | 60·4 | 57·0 | 52·4 | 44·0 | 39·9 |

(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.

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | *S* | 33·0 | 46·0 | *S* | 65·0 | 63·0 | *S* | 66·3 | 67·2 | 54·2 | 57·2 | 48·5 |
| 2 | 49·0 | 35·0 | 42·2 | 40·3 | 65·8 | 55·5 | 72·0 | 63·2 | *S* | 60·0 | 51·9 | *S* |
| 3 | 53·3 | 39·0 | 48·0 | 50·0 | 64·8 | *S* | 67·2 | 66·0 | 66·8 | 63·0 | 48·7 | 44·5 |
| 4 | 46·2 | 39·5 | *S* | 53·7 | 62·7 | 62·9 | 70·1 | 67·2 | 65·5 | 56·3 | *S* | 45·4 |
| 5 | 42·0 | *S* | 44·0 | 53·9 | 52·4 | 59·3 | 67·2 | *S* | 67·0 | 58·6 | 43·7 | 46·8 |
| 6 | 40·3 | 39·0 | 41·3 | Good Friday. | *S* | 53·1 | 65·0 | 61·5 | 61·4 | 59·8 | 45·5 | 50·8 |
| 7 | 38·0 | 38·5 | 35·5 | 57·3 | 63·3 | 56·2 | 65·3 | 63·2 | 64·7 | *S* | 48·2 | 50·9 |
| 8 | *S* | 47·5 | 39·8 | *S* | 61·3 | 62·3 | *S* | 56·5 | 67·2 | 55·5 | 44·8 | 47·3 |
| 9 | 38·0 | 38·5 | 38·7 | 47·3 | 60·6 | 57·7 | 63·7 | 60·7 | *S* | 51·5 | 42·5 | *S* |
| 10 | 37·5 | 33·0 | 36·0 | 47·0 | 60·2 | *S* | 59·8 | 68·0 | 62·0 | 45·0 | 40·8 | 44·3 |
| 11 | 41·0 | 36·5 | *S* | 44·0 | 61·4 | 63·5 | 66·9 | 64·0 | 61·5 | 48·0 | *S* | 41·8 |
| 12 | 44·0 | *S* | 42·0 | 47·0 | 65·0 | 59·1 | 68·5 | *S* | 61·3 | 44·5 | 45·1 | 42·5 |
| 13 | 38·0 | 35·0 | 43·8 | 47·0 | *S* | 60·4 | 67·5 | 65·0 | 66·0 | 52·0 | 47·2 | 41·9 |
| 14 | 45·0 | 34·0 | 45·2 | 45·0 | 63·8 | 60·2 | 67·2 | 67·3 | 65·5 | *S* | 45·2 | 40·3 |
| 15 | *S* | 36·5 | 43·0 | *S* | 63·0 | 60·0 | *S* | 65·3 | 62·0 | 53·0 | 47·2 | 35·3 |

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

| Day of the Month, 1860. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 16 | 40·0 | 40·0 | 47·7 | 51·0 | 59·0 | 67·1 | 64·4 | 68·2 | *S* | 53·0 | 46·7 | *S* |
| 17 | 37·5 | 40·2 | 54·0 | 55·0 | 57·5 | *S* | 71·2 | 61·0 | 64·3 | 55·0 | 42·3 | 36·5 |
| 18 | 36·7 | 43·8 | *S* | 55·0 | 61·0 | 63·3 | 67·0 | 55·4 | 53·9 | 54·9 | *S* | 33·0 |
| 19 | 42·8 | *S* | 51·0 | 42·7 | 63·4 | 61·3 | 61·5 | *S* | 59·2 | 58·0 | 40·5 | 34·7 |
| 20 | 45·0 | 36·0 | 50·0 | 47·0 | *S* | 66·0 | 65·7 | 63·8 | 63·8 | 55·0 | 45·0 | 31·6 |
| 21 | 42·0 | 39·0 | 39·0 | 47·0 | 73·0 | 65·7 | 58·0 | 64·9 | 60·0 | *S* | 42·9 | 32·9 |
| 22 | *S* | 39·0 | 44·8 | *S* | 73·2 | 67·2 | *S* | 60·7 | 62·2 | 59·2 | 49·0 | 32·0 |
| 23 | 43·7 | 37·5 | 45·0 | 47·3 | 71·0 | 67·9 | 57·7 | 63·9 | *S* | 56·0 | 42·7 | *S* |
| 24 | 44·3 | 38·0 | 42·0 | 37·7 | 68·0 | *S* | 59·0 | 59·1 | 58·8 | 59·8 | 42·6 | 28·3 |
| 25 | 39·3 | 37·3 | *S* | 50·2 | 64·1 | 61·3 | 59·5 | 61·9 | 49·0 | 61·5 | *S* | Christmas Day. |
| 26 | 36·0 | *S* | 47·0 | 48·5 | 62·9 | 66·0 | 64·7 | *S* | 57·9 | 59·3 | 38·3 | 34·0 |
| 27 | 45·4 | 42·0 | 44·3 | 49·7 | *S* | 60·0 | 66·4 | 63·6 | 59·0 | 56·9 | 46·3 | 33·2 |
| 28 | 31·7 | 50·0 | 55·0 | 51·4 | 54·7 | 66·7 | 61·7 | 63·9 | 55·8 | *S* | 43·3 | 33·2 |
| 29 | *S* | 42·6 | 52·8 | *S* | 56·0 | 61·7 | *S* | 66·8 | 54·0 | 57·2 | 43·2 | 29·4 |
| 30 | 43·0 | | 48·8 | 63·7 | 59·7 | 58·2 | 63·8 | 66·9 | *S* | 63·2 | 48·0 | *S* |
| 31 | 39·5 | | 50·2 | | 55·0 | | 63·9 | 66·0 | | 51·3 | | 36·1 |
| Means. | 41·5 | 38·8 | 45·0 | 49·1 | 62·5 | 61·8 | 64·8 | 63·6 | 61·4 | 55·6 | 45·3 | 39·0 |

## WEEKLY MEANS of READINGS of THERMOMETERS.

| 1860. 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 | 7 | 52·08 | 49·36 | 45·94 | 44·03 | 43·6 | 44·8 |
| | 8 | to | 14 | 52·15 | 48·99 | 46·19 | 42·15 | 39·7 | 40·6 |
| | 15 | to | 21 | 51·83 | 48·67 | 45·72 | 42·07 | 40·5 | 40·7 |
| | 22 | to | 28 | 51·77 | 48·28 | 45·26 | 41·48 | 39·5 | 40·1 |
| | 29 | to February | 4 | 51·54 | 47·94 | 44·87 | 40·80 | 38·2 | 38·2 |
| February | 5 | to | 11 | 51·31 | 47·54 | 44·33 | 40·51 | 38·6 | 38·8 |
| | 12 | to | 18 | 51·09 | 47·17 | 43·97 | ... | 36·2 | 38·3 |
| | 19 | to | 25 | 50·86 | 46·75 | ... | ... | 36·3 | 37·8 |
| | 26 | to March | 3 | 50·66 | 46·33 | ... | ... | 40·9 | 45·1 |
| March | 4 | to | 10 | 50·39 | 45·88 | ... | 39·99 | 38·1 | 39·2 |
| | 11 | to | 17 | 50·19 | 45·66 | ... | 39·93 | 41·3 | 46·0 |
| | 18 | to | 24 | 49·95 | 45·36 | ... | 42·07 | 44·0 | 45·3 |
| | 25 | to | 31 | 49·73 | 45·36 | 44·05 | 42·36 | 45·9 | 49·7 |
| April | 1 | to | 7 | 49·49 | 45·36 | 44·71 | 43·96 | 46·0 | 51·0 |
| | 8 | to | 14 | 49·32 | 45·49 | 45·44 | 44·55 | 43·8 | 46·2 |
| | 15 | to | 21 | 49·13 | 45·68 | 45·66 | 44·62 | 45·3 | 49·6 |
| | 22 | to | 28 | 48·95 | 45·77 | 45·86 | 44·34 | 44·4 | 47·5 |
| | 29 | to May | 5 | 48·88 | 45·96 | 46·36 | 47·14 | 54·0 | 62·4 |
| May | 6 | to | 12 | 48·77 | 46·18 | 48·05 | 49·99 | 56·3 | 62·0 |
| | 13 | to | 19 | 48·64 | 46·53 | 49·33 | 51·78 | 56·6 | 61·3 |
| | 20 | to | 26 | 48·55 | 47·05 | 50·50 | 53·88 | 60·7 | 68·7 |
| | 27 | to June | 2 | 48·49 | 47·72 | 51·88 | 54·16 | 55·4 | 57·3 |
| June | 3 | to | 9 | 48·48 | 48·44 | 52·38 | 54·04 | 55·7 | 58·6 |
| | 10 | to | 16 | 48·47 | 48·98 | 52·85 | 54·51 | 57·8 | 61·7 |
| | 17 | to | 23 | 48·51 | 49·49 | 53·54 | 55·89 | 60·0 | 65·2 |
| | 24 | to | 30 | 48·58 | 49·91 | 54·35 | 57·42 | 59·5 | 62·3 |
| July | 1 | to | 7 | 48·69 | 50·42 | 55·00 | 57·83 | 62·1 | 67·8 |
| | 8 | to | 14 | 48·80 | 50·90 | 55·69 | 58·98 | 61·9 | 65·6 |
| | 15 | to | 21 | 48·94 | 51·42 | 56·52 | 60·04 | 62·7 | 64·6 |
| | 22 | to | 28 | 49·07 | 51·94 | 56·84 | 58·71 | 58·9 | 61·5 |
| | 29 | to August | 4 | 49·25 | 52·42 | 56·75 | 58·66 | 61·2 | 65·1 |
| August | 5 | to | 11 | 49·43 | 52·71 | 56·98 | 58·79 | 59·7 | 62·3 |
| | 12 | to | 18 | 49·61 | 53·01 | 57·05 | 58·90 | 60·7 | 63·7 |
| | 19 | to | 25 | 49·79 | 53·26 | 57·20 | 58·72 | 59·6 | 62·4 |
| | 26 | to September | 1 | 50·00 | 53·53 | 57·34 | 58·94 | 60·8 | 65·7 |
| September | 2 | to | 8 | 50·19 | 53·75 | 57·36 | 58·56 | 59·4 | 65·4 |
| | 9 | to | 15 | 50·35 | 53·91 | 57·15 | 57·58 | 56·6 | 63·1 |
| | 16 | to | 22 | 50·49 | 54·01 | 56·65 | 56·95 | 57·9 | 60·6 |
| | 23 | to | 29 | 50·63 | 54·00 | 56·32 | 55·72 | 53·7 | 55·8 |
| | 30 | to October | 6 | 50·83 | 54·01 | 55·58 | 54·51 | 54·1 | 58·7 |
| October | 7 | to | 13 | 50·91 | 53·75 | 54·91 | 53·39 | 48·4 | 49·4 |
| | 14 | to | 20 | 51·05 | 53·56 | 53·84 | 51·49 | 51·9 | 54·8 |
| | 21 | to | 27 | 51·18 | 53·31 | 53·31 | 51·94 | 54·6 | 58·8 |
| | 28 | to November | 3 | 51·27 | 52·97 | 53·42 | 52·68 | 50·5 | 54·9 |
| November | 4 | to | 10 | 51·29 | 52·71 | 52·66 | 49·07 | 44·0 | 44·3 |
| | 11 | to | 17 | 51·31 | 52·44 | 51·19 | 47·26 | 44·7 | 45·6 |
| | 18 | to | 24 | 51·33 | 51·97 | 50·08 | 45·68 | 42·4 | 43·8 |
| | 25 | to December | 1 | 51·35 | 51·38 | 49·00 | 45·02 | 43·7 | 44·6 |
| December | 2 | to | 8 | 51·35 | 50·81 | 48·56 | 45·87 | 46·6 | 47·6 |
| | 9 | to | 15 | 51·28 | 50·30 | 48·48 | 45·58 | 42·5 | 41·0 |
| | 16 | to | 22 | 51·15 | 49·84 | 47·70 | 42·97 | 35·9 | 33·5 |
| | 23 | to | 31 | 51·05 | 49·40 | 45·94 | 39·92 | 33·4 | 32·4 |

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.

1859. Dec. 31. 12. The direction of the wind was S.W.
1860. Jan. 31. 12. ,, ,, N.N.W., which implies a direct motion of 112½°.
On Jan. 18. 3, the trace was shifted to the next set of lines upwards; on Jan. 18d. 22h, 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 direct motion in the month of January was 112½°.

1860. Jan. 31. 12. The direction of the wind was N.N.W.
Feb. 29. 12. ,, ,, S.W., which implies a retrograde motion of 112½°.
On Feb. 11. 22, the trace was shifted to the next set of lines upwards; on Feb. 22d. 22h, 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 February was 112½°.

1860. Feb. 29. 12. The direction of the wind was S.W.
March 31. 12. ,, ,, W.S.W., which implies a direct motion of 22½°.
On March 11. 0¾, 26d. 22h, 29d. 22h, the trace was shifted to the next set of lines downwards; on March 14d. 22h, 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 March was 742½°.

1860. March 31. 12. The direction of the wind was W.S.W.
April 30. 12. ,, ,, E.N.E., which implies a retrograde motion of 180°.
On April 5. 22, 13d. 22h, 21d. 22h, 25d. 22h, the trace was shifted to the next set of lines upwards; on April 6d. 1½h, 14d. 22h, 28d. 22h, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1440°, and direct motion of 1080°.
Therefore the whole excess of retrograde motion in the month of April was 540°.

1860. April 30. 12. The direction of the wind was E.N.E.
May 31. 12. ,, ,, W.S.W., which implies a direct motion of 180°.
On May 4. 22, 20d. 22h, the trace was shifted to the next set of lines downwards, implying direct motion of 720°.
Therefore the whole excess of direct motion in the month of May was 900°.

1860. May 31. 12. The direction of the wind was W.S.W.
June 30. 12. ,, ,, N.N.E., which implies a direct motion of 135°.
On June 9. 22, 16d. 2¾h, the trace was shifted to the next set of lines upwards, implying retrograde motion of 720°.
Therefore the whole excess of retrograde motion in the month of June was 585°.

1860. June 30. 12. The direction of the wind was N.N.E.
July 31. 12. ,, ,, W., which implies a retrograde motion of 112½°.
On July 17. 22, 21d. 22h, the trace was shifted to the next set of lines upwards, implying retrograde motion of 720°.
Therefore the whole excess of retrograde motion in the month of July was 832½°.

1860. July 31. 12. The direction of the wind was W.
Aug. 31. 12. ,, ,, S.W., which implies a retrograde motion of 45°.
Therefore the whole excess of retrograde motion in the month of August was 45°.

1860. Aug. 31. 12. The direction of the wind was S.W.
Sept. 30. 12. ,, ,, N.W., which implies a direct motion of 90°.
On Sept. 12. 22, the trace was shifted to the next set of lines downwards; on Sept. 24d. 22h, 27d. 22h, 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 September was 270°.

1860. Sept. 30. 12. The direction of the wind was N.W.
Oct. 31. 12. ,, ,, E.N.E., which implies a retrograde motion of 247½°.
Therefore the whole excess of retrograde motion in the month of October was 247½°.

1860. Oct. 31. 12. The direction of the wind was E.N.E.
Nov. 30. 12. ,, ,, S.W., which implies a direct motion of 517½°.
On Nov. 7. 22, 13d. 22h, 23d. 22h, the trace was shifted to the next set of lines upwards; on Nov. 12d. 22h, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1080°, and direct motion of 360°.
Therefore the whole excess of retrograde motion in the month of November was 202½°.

1860. Nov. 30. 12. The direction of the wind was S.W.
Dec. 31. 12. ,, ,, S., which implies a retrograde motion of 45°.
On Dec. 0. 22, 29d. 22h, the trace was shifted to the next set of lines downwards; on Dec. 20d. 22h, the trace was shifted to the next set of lines upwards, implying direct motion of 720°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of December was 315°.

The whole excess of retrograde motion to the end of the year was 765°

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 1860, January 1 .. .. .. .. .. .. .. .. .. .. | 42·0 |
| December 31 .. .. .. .. .. .. .. .. .. .. | 39·9 |

Implying an excess of retrograde motion, during the year, of 2·1 revolutions, or 756°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1860.

| 1860, MONTH. | Monthly Amount of Rain collected in each Gauge. | | | |
|---|---|---|---|---|
| | Osler's Anemometer Gauge. | On the Roof of the Library. | Crosley's. | Cylinder partly sunk in the Ground. |
| | in. | in. | in. | in. |
| January - - | 1·0 | 1·1 | 1·6 | 1·8 |
| February - - | 0·5 | 0·7 | 1·0 | 1·1 |
| March - - | 0·8 | 1·1 | 1·7 | 1·9 |
| April - - | 0·5 | 0·8 | 1·0 | 1·0 |
| May - - - | 2·1 | 3·4 | 3·6 | 3·9 |
| June - - - | 3·0 | 5·2 | 5·3 | 5·8 |
| July - - - | 2·3 | 2·6 | 2·6 | 2·8 |
| August - - | 1·9 | 2·7 | 3·5 | 3·7 |
| September - - | 1·9 | 2·8 | 2·2 | 3·1 |
| October - - | 0·8 | 1·0 | 1·0 | 1·6 |
| November - - | 1·6 | 2·2 | 1·8 | 2·5 |
| December - - | 1·5 | 1·9 | 2·1 | 2·8 |
| Sums - - | 17·9 | 25·5 | 27·4 | 32·0 |

The heights of the receiving surfaces are as follows:

| | Above the Mean Level of the Sea. | | | Above the Ground. | |
|---|---|---|---|---|---|
| | Ft. | In. | | Ft. | In. |
| Osler's Anemometer Gauge ..... | 205 | 6 | ..... | 50 | 8 |
| Gauge on the Roof of the Library..... | 177 | 2 | ..... | 22 | 4 |
| Crosley's Gauge ..... | 156 | 6 | ..... | 1 | 8 |
| Cylinder Gauge ..... | 155 | 3 | ..... | 0 | 5 |

During the last four months of the year, Crosley's Gauge evidently did not register correctly; the amounts are probably in error by about $0^{in}.3$.

ROYAL OBSERVATORY, GREENWICH.

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# SUPPLEMENTARY APPENDIX

TO

# RESULTS

OF

# METEOROLOGICAL OBSERVATIONS, 1860;

CONTAINING

I.—Monthly Means of Results for Atmospheric Pressure, Temperature, Moisture, and Rain, from 1848 to 1853.

II.—Monthly Statement of the Number of Days of Wind referred to Eight Points of the Azimuthal Circle, and of the Number of Calm Days, from 1841 to 1860.

III.—Monthly Statement of the Mean Daily Horizontal Movement of the Air in Miles, as found by converting the observed Indications of Whewell's Anemometer into corresponding Indications of Robinson's Anemometer, from 1843 to 1859.

IV.—Weekly and Monthly Means of the Readings of the Deep-sunk Thermometers, from 1848 to 1855.

## I.—MONTHLY MEANS OF RESULTS FOR ATMOSPHERIC PRESSURE, TEMPERATURE, MOISTURE, AND RAIN, FROM 1848 TO 1853.

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In the printed *Meteorological Observations* from their commencement in 1840 to 1847, the Monthly and Yearly Means of the principal Meteorological Results were published; and again in the printed *Results of Meteorological Observations* from 1854 to the present year, the same Means were published. The publication was omitted in the years 1848 to 1853.

The following Tables contain the Means of the principal Meteorological Results from 1848 to 1853.

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## MONTHLY MEANS of RESULTS, in the YEAR 1848.

| 1848. MONTH. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. | | | | | | | Mean Temperature of Dew Point. | HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition. | | | | | RAIN. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean Daily Range. | Mean Temperature. | | 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. | Mean Degree of Humidity. (Sat. = 100) | Mean Weight of a Cubic Foot of Air. | Number of Rainy Days. | Amount collected on the Ground. |
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | in. | grs. | grs. | | grs. | | in. |
| January..... | 29·816 | 50·4 | 15·8 | 34·6 | 38·1 | 29·8 | 8·3 | 34·6 | 29·3 | 0·162 | 1·9 | 0·4 | 80 | 559 | 8 | 1·2 |
| February..... | 29·517 | 55·0 | 29·2 | 25·8 | 48·7 | 38·0 | 10·7 | 43·4 | 39·4 | 0·241 | 2·8 | 0·5 | 85 | 544 | 19 | 2·6 |
| March ..... | 29·505 | 71·5 | 27·3 | 44·2 | 50·7 | 36·4 | 14·3 | 43·8 | 39·0 | 0·238 | 2·7 | 0·5 | 82 | 543 | 22 | 3·1 |
| April..... | 29·589 | 75·0 | 29·7 | 45·3 | 56·2 | 39·5 | 16·7 | 47·6 | 41·1 | 0·258 | 3·0 | 0·7 | 79 | 540 | 23 | 3·4 |
| May..... | 29·926 | 83·0 | 33·5 | 49·5 | 74·4 | 43·9 | 30·5 | 59·7 | 47·1 | 0·324 | 3·6 | 2·1 | 63 | 533 | 5 | 0·4 |
| June ..... | 29·642 | 78·4 | 38·7 | 39·7 | 68·0 | 50·5 | 17·5 | 58·5 | 50·7 | 0·370 | 4·2 | 1·3 | 76 | 529 | 22 | 3·5 |
| July..... | 29·836 | 85·3 | 42·2 | 43·1 | 73·7 | 51·2 | 22·5 | 62·3 | 53·6 | 0·412 | 4·6 | 1·7 | 74 | 528 | 18 | 2·0 |
| August ..... | 29·723 | 75·5 | 42·5 | 33·0 | 68·9 | 50·4 | 18·5 | 58·9 | 51·9 | 0·386 | 4·3 | 1·3 | 78 | 530 | 29 | 4·3 |
| September..... | 29·832 | 78·8 | 32·8 | 46·0 | 66·8 | 45·9 | 20·9 | 56·7 | 50·0 | 0·361 | 4·0 | 1·1 | 78 | 534 | 14 | 2·4 |
| October..... | 29·646 | 74·0 | 32·4 | 41·6 | 59·6 | 43·1 | 16·5 | 51·6 | 47·0 | 0·323 | 3·6 | 0·7 | 84 | 537 | 26 | 3·5 |
| November..... | 29·785 | 57·8 | 25·2 | 32·6 | 51·1 | 35·4 | 15·7 | 43·8 | 39·2 | 0·239 | 2·8 | 0·5 | 84 | 548 | 19 | 1·2 |
| December ..... | 29·807 | 62·8 | 21·8 | 41·0 | 48·9 | 36·2 | 12·7 | 44·0 | 40·2 | 0·249 | 2·8 | 0·4 | 86 | 548 | 18 | 2·6 |
| Means ..... | 29·719 | 70·6 | 30·9 | 39·7 | 58·8 | 41·7 | 17·1 | 50·4 | 44·0 | 0·297 | 3·4 | 0·9 | 79 | 539 | Sum. 223 | Sum. 30·2 |

## MONTHLY MEANS of RESULTS, in the YEAR 1849.

| 1849. MONTH. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. | | | | | | | Mean Temperature of Dew Point. | HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition. | | | | | RAIN. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean Daily Range. | Mean Temperature. | | 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. | Mean Degree of Humidity. (Sat. = 100) | Mean Weight of a Cubic Foot of Air. | Number of Rainy Days. | Amount collected on the Ground. |
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | in. | grs. | grs. | | grs. | | in. |
| January..... | 29·771 | 56·4 | 19·9 | 36·5 | 45·4 | 34·7 | 10·7 | 40·1 | 36·7 | 0·218 | 2·5 | 0·4 | 88 | 552 | 17 | 1·6 |
| February..... | 30·106 | 58·0 | 26·8 | 31·2 | 49·4 | 36·5 | 12·9 | 43·2 | 39·3 | 0·240 | 2·8 | 0·5 | 85 | 555 | 19 | 2·2 |
| March ..... | 29·915 | 60·7 | 27·7 | 33·0 | 50·1 | 36·3 | 13·8 | 42·5 | 36·5 | 0·216 | 2·5 | 0·6 | 80 | 552 | 11 | 0·5 |
| April..... | 29·517 | 64·3 | 28·6 | 35·7 | 52·5 | 36·5 | 16·0 | 43·3 | 39·4 | 0·241 | 2·8 | 0·4 | 86 | 544 | 20 | 2·2 |
| May..... | 29·766 | 75·0 | 36·8 | 38·2 | 63·8 | 46·7 | 17·1 | 54·2 | 43·9 | 0·287 | 3·3 | 1·4 | 68 | 536 | 15 | 3·9 |
| June ..... | 29·868 | 80·7 | 38·6 | 42·1 | 69·1 | 48·5 | 20·6 | 58·4 | 49·5 | 0·355 | 3·9 | 1·5 | 73 | 534 | 7 | 0·2 |
| July..... | 29·789 | 84·1 | 39·5 | 44·6 | 74·2 | 51·6 | 22·6 | 62·1 | 51·1 | 0·375 | 4·1 | 2·1 | 67 | 528 | 12 | 2·9 |
| August ..... | 29·841 | 82·5 | 42·4 | 40·1 | 74·2 | 54·0 | 20·2 | 62·9 | 52·6 | 0·397 | 4·4 | 2·0 | 69 | 528 | 8 | 0·5 |
| September..... | 29·767 | 79·0 | 42·7 | 36·3 | 68·7 | 51·2 | 17·5 | 58·8 | 50·8 | 0·371 | 4·2 | 1·3 | 75 | 531 | 15 | 3·3 |
| October..... | 29·744 | 69·7 | 31·5 | 38·2 | 59·2 | 44·1 | 15·1 | 51·1 | 45·2 | 0·302 | 3·4 | 0·8 | 81 | 539 | 21 | 2·7 |
| November..... | 29·743 | 61·7 | 23·5 | 38·2 | 49·8 | 38·1 | 11·7 | 44·1 | 39·9 | 0·246 | 2·8 | 0·5 | 85 | 547 | 11 | 1·5 |
| December ..... | 29·795 | 56·3 | 18·8 | 35·9 | 43·2 | 34·1 | 9·1 | 39·1 | 36·4 | 0·215 | 2·5 | 0·3 | 90 | 554 | 18 | 2·4 |
| Means ..... | 29·802 | 69·0 | 31·4 | 37·5 | 58·3 | 42·7 | 15·6 | 50·0 | 43·4 | 0·289 | 3·3 | 1·0 | 79 | 542 | Sum. 174 | Sum. 23·9 |

## MONTHLY MEANS of RESULTS, in the YEAR 1850.

| 1850. MONTH. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. | | | | | | | Mean Temperature of Dew Point. | HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition. | | | | | RAIN. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean Daily Range. | Mean Temperature. | | 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. | Mean Degree of Humidity. (Sat. = 100) | Mean Weight of a Cubic Foot of Air. | Number of Rainy Days. | Amount collected on the Ground. |
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | in. | grs. | grs. | | grs. | | in. |
| January ..... | 29·854 | 53·1 | 22·0 | 31·1 | 38·0 | 29·5 | 8·5 | 33·7 | 30·4 | 0·170 | 2·0 | 0·3 | 87 | 561 | 10 | 1·2 |
| February..... | 29·828 | 58·2 | 30·0 | 28·2 | 50·7 | 39·1 | 11·6 | 44·7 | 39·5 | 0·242 | 2·8 | 0·6 | 82 | 548 | 13 | 1·3 |
| March ..... | 30·039 | 58·0 | 20·0 | 38·0 | 48·6 | 32·1 | 16·5 | 39·9 | 33·2 | 0·189 | 2·2 | 0·7 | 77 | 557 | 5 | 0·3 |
| April ..... | 29·594 | 66·9 | 34·0 | 32·9 | 58·5 | 42·5 | 16·0 | 48·5 | 42·0 | 0·267 | 3·0 | 0·8 | 79 | 540 | 18 | 2·3 |
| May ..... | 29·714 | 76·5 | 31·7 | 44·8 | 62·1 | 43·2 | 18·9 | 51·3 | 43·5 | 0·283 | 3·2 | 1·0 | 76 | 539 | 21 | 2·4 |
| June ..... | 29·886 | 85·1 | 36·2 | 48·9 | 74·1 | 48·1 | 26·0 | 60·8 | 49·6 | 0·356 | 3·9 | 2·0 | 66 | 531 | 8 | 0·9 |
| July ..... | 29·789 | 87·0 | 43·5 | 43·5 | 72·9 | 52·9 | 20·0 | 62·2 | 55·1 | 0·434 | 4·8 | 1·4 | 78 | 528 | 15 | 2·9 |
| August ..... | 29·787 | 81·0 | 40·0 | 41·0 | 70·6 | 52·0 | 18·6 | 60·2 | 53·5 | 0·410 | 4·6 | 1·2 | 78 | 530 | 14 | 1·9 |
| September..... | 29·930 | 70·5 | 39·0 | 31·5 | 65·3 | 48·2 | 17·1 | 56·4 | 49·7 | 0·357 | 4·0 | 1·0 | 78 | 537 | 13 | 1·3 |
| October ..... | 29·681 | 64·5 | 31·5 | 33·0 | 54·8 | 40·6 | 14·2 | 47·0 | 41·4 | 0·261 | 3·0 | 0·7 | 81 | 543 | 8 | 1·4 |
| November..... | 29·728 | 61·3 | 27·9 | 33·4 | 52·4 | 41·0 | 11·4 | 46·5 | 42·2 | 0·269 | 3·1 | 0·5 | 86 | 544 | 14 | 2·5 |
| December ..... | 29·914 | 56·5 | 24·2 | 32·3 | 44·8 | 36·1 | 8·7 | 40·6 | 38·4 | 0·232 | 2·7 | 0·2 | 92 | 554 | 16 | 1·3 |
| Means ..... | 29·812 | 68·2 | 31·7 | 36·5 | 57·7 | 42·1 | 15·6 | 49·3 | 43·2 | 0·289 | 3·3 | 0·9 | 80 | 543 | Sum. 155 | Sum. 19·7 |

## MONTHLY MEANS of RESULTS, in the YEAR 1851.

| 1851. MONTH. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. | | | | | | | Mean Temperature of Dew Point. | HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition. | | | | | RAIN. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean Daily Range. | Mean Temperature. | | 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. | Mean Degree of Humidity. (Sat. = 100) | Mean Weight of a Cubic Foot of Air. | Number of Rainy Days. | Amount collected on the Ground. |
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | in. | grs. | grs. | | grs. | | in. |
| January ..... | 29·649 | 56·5 | 26·6 | 29·9 | 48·1 | 38·1 | 10·0 | 42·9 | 38·5 | 0·233 | 2·7 | 0·5 | 85 | 546 | 15 | 2·7 |
| February..... | 29·891 | 57·1 | 23·7 | 33·4 | 47·4 | 34·2 | 13·2 | 40·1 | 36·0 | 0·212 | 2·4 | 0·5 | 86 | 554 | 14 | 1·2 |
| March ..... | 29·600 | 58·4 | 29·8 | 28·6 | 49·5 | 37·4 | 12·1 | 42·6 | 37·5 | 0·225 | 2·6 | 0·6 | 83 | 546 | 21 | 4·1 |
| April ..... | 29·726 | 64·1 | 28·6 | 35·5 | 54·1 | 38·0 | 16·1 | 44·7 | 39·3 | 0·240 | 2·8 | 0·6 | 81 | 546 | 11 | 2·3 |
| May ..... | 29·891 | 74·2 | 33·5 | 40·7 | 61·4 | 41·8 | 19·6 | 50·9 | 43·1 | 0·278 | 3·2 | 1·0 | 75 | 542 | 12 | 0·8 |
| June ..... | 29·895 | 87·0 | 38·5 | 48·5 | 70·8 | 48·7 | 22·1 | 58·9 | 49·6 | 0·356 | 4·0 | 1·6 | 71 | 533 | 12 | 1·3 |
| July ..... | 29·708 | 84·4 | 38·9 | 45·5 | 71·1 | 51·0 | 20·1 | 60·1 | 51·8 | 0·385 | 4·3 | 1·5 | 74 | 529 | 17 | 4·3 |
| August ..... | 29·890 | 82·0 | 42·2 | 39·8 | 73·4 | 53·4 | 20·0 | 62·3 | 53·2 | 0·406 | 4·5 | 1·8 | 73 | 529 | 9 | 1·5 |
| September..... | 30·025 | 76·6 | 37·6 | 39·0 | 67·9 | 47·3 | 20·6 | 56·9 | 48·1 | 0·336 | 3·8 | 1·4 | 72 | 538 | 14 | 0·4 |
| October ..... | 29·726 | 70·1 | 34·7 | 35·4 | 59·7 | 46·7 | 13·0 | 52·6 | 46·4 | 0·316 | 3·5 | 0·9 | 80 | 537 | 14 | 1·8 |
| November..... | 29·781 | 53·4 | 24·3 | 29·1 | 44·3 | 32·4 | 11·9 | 37·9 | 32·5 | 0·184 | 2·1 | 0·6 | 81 | 555 | 10 | 0·6 |
| December ..... | 30·135 | 54·8 | 24·9 | 29·9 | 44·4 | 36·4 | 8·0 | 40·4 | 36·1 | 0·213 | 2·5 | 0·5 | 85 | 558 | 6 | 0·6 |
| Means ..... | 29·826 | 68·2 | 31·9 | 36·3 | 57·7 | 42·1 | 15·6 | 49·2 | 42·7 | 0·282 | 3·2 | 1·0 | 79 | 543 | Sum. 155 | Sum. 21·6 |

## MONTHLY MEANS of RESULTS, in the YEAR 1852.

| 1852. MONTH. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. | | | | | | | Mean Temperature of Dew Point. | HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition. | | | | | RAIN. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean Daily Range. | Mean Temperature. | | 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. | Mean Degree of Humidity. (Sat. = 100) | Mean Weight of a Cubic Foot of Air. | Number of Rainy Days. | Amount collected on the Ground. |
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | in. | grs. | grs. | | grs. | | in. |
| January | 29·589 | 55·5 | 28·1 | 27·4 | 47·9 | 36·5 | 11·4 | 42·0 | 35·7 | 0·209 | 2·4 | 0·7 | 79 | 546 | 19 | 3·6 |
| February | 29·857 | 57·4 | 24·9 | 32·5 | 47·5 | 35·3 | 12·2 | 40·8 | 35·1 | 0·204 | 2·4 | 0·6 | 81 | 553 | 12 | 0·9 |
| March | 30·007 | 68·4 | 21·3 | 47·1 | 50·7 | 32·1 | 18·6 | 41·3 | 34·3 | 0·198 | 2·3 | 0·7 | 77 | 555 | 5 | 0·2 |
| April | 29·945 | 74·7 | 26·7 | 48·0 | 58·2 | 34·2 | 24·0 | 45·9 | 38·2 | 0·231 | 2·7 | 0·9 | 74 | 549 | 6 | 0·5 |
| May | 29·786 | 73·4 | 29·3 | 44·1 | 61·8 | 43·2 | 18·6 | 51·5 | 44·0 | 0·288 | 3·2 | 1·1 | 76 | 540 | 14 | 1·9 |
| June | 29·560 | 72·7 | 41·0 | 31·7 | 66·5 | 49·4 | 17·1 | 56·1 | 48·1 | 0·336 | 3·8 | 1·2 | 75 | 530 | 23 | 4·6 |
| July | 29·857 | 90·3 | 49·2 | 41·1 | 80·6 | 55·7 | 24·9 | 66·6 | 55·9 | 0·447 | 5·0 | 2·2 | 68 | 524 | 4 | 2·3 |
| August | 29·649 | 81·5 | 49·9 | 31·6 | 72·6 | 54·7 | 17·9 | 62·1 | 51·8 | 0·385 | 4·3 | 2·0 | 70 | 526 | 16 | 4·4 |
| September | 29·739 | 77·5 | 37·9 | 39·6 | 66·6 | 49·2 | 17·4 | 56·8 | 48·9 | 0·346 | 3·9 | 1·2 | 75 | 533 | 13 | 3·8 |
| October | 29·687 | 64·0 | 31·0 | 33·0 | 55·7 | 41·1 | 14·6 | 47·9 | 41·8 | 0·265 | 3·0 | 0·8 | 81 | 542 | 17 | 3·8 |
| November | 29·465 | 63·8 | 32·6 | 31·2 | 54·5 | 44·1 | 10·4 | 48·9 | 43·5 | 0·283 | 3·2 | 0·7 | 82 | 536 | 23 | 6·0 |
| December | 29·581 | 57·1 | 31·7 | 25·4 | 52·1 | 42·4 | 9·7 | 47·6 | 41·1 | 0·258 | 2·9 | 0·8 | 78 | 540 | 19 | 2·2 |
| Means | 29·727 | 69·7 | 33·6 | 36·1 | 59·6 | 43·2 | 16·4 | 50·6 | 43·2 | 0·287 | 3·3 | 1·1 | 76 | 540 | Sum. 171 | Sum. 34·2 |

## MONTHLY MEANS of RESULTS, in the YEAR 1853.

| 1853. MONTH. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. | | | | | | | Mean Temperature of Dew Point. | HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition. | | | | | RAIN. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean Daily Range. | Mean Temperature. | | 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. | Mean Degree of Humidity. (Sat. = 100) | Mean Weight of a Cubic Foot of Air | Number of Rainy Days. | Amount collected on the Ground. |
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | in. | grs. | grs. | | grs. | | in. |
| January | 29·570 | 55·5 | 30·8 | 24·7 | 47·6 | 37·5 | 10·1 | 42·4 | 36·6 | 0·217 | 2·5 | 0·6 | 80 | 546 | 20 | 2·0 |
| February | 29·525 | 45·0 | 20·5 | 24·5 | 39·1 | 29·0 | 10·1 | 33·3 | 26·6 | 0·145 | 1·7 | 0·6 | 76 | 556 | 13 | 0·9 |
| March | 29·780 | 60·5 | 20·8 | 39·7 | 47·0 | 31·2 | 15·8 | 38·5 | 32·1 | 0·182 | 2·1 | 0·6 | 78 | 554 | 13 | 1·5 |
| April | 29·710 | 62·0 | 32·3 | 29·7 | 54·0 | 39·8 | 14·2 | 45·2 | 38·3 | 0·231 | 2·7 | 0·7 | 77 | 545 | 14 | 3·1 |
| May | 29·754 | 78·8 | 32·6 | 46·2 | 63·1 | 42·6 | 20·5 | 52·0 | 43·5 | 0·283 | 3·2 | 1·2 | 73 | 539 | 11 | 1·6 |
| June | 29·729 | 81·0 | 39·9 | 41·1 | 68·9 | 50·2 | 18·7 | 58·2 | 47·6 | 0·330 | 3·8 | 1·7 | 68 | 531 | 13 | 2·8 |
| July | 29·728 | 81·7 | 48·3 | 33·4 | 70·5 | 53·4 | 17·1 | 60·3 | 51·9 | 0·386 | 4·3 | 1·6 | 74 | 529 | 16 | 6·0 |
| August | 29·793 | 77·5 | 45·8 | 31·7 | 70·9 | 51·8 | 19·1 | 60·0 | 52·1 | 0·389 | 4·3 | 1·5 | 75 | 530 | 7 | 2·2 |
| September | 29·833 | 73·0 | 37·5 | 35·5 | 65·2 | 47·2 | 18·0 | 55·3 | 50·1 | 0·364 | 4·0 | 0·9 | 84 | 536 | 12 | 2·4 |
| October | 29·558 | 67·0 | 31·7 | 35·3 | 59·1 | 43·9 | 15·2 | 50·9 | 47·8 | 0·333 | 3·7 | 0·4 | 89 | 536 | 24 | 4·3 |
| November | 29·941 | 60·8 | 25·8 | 35·0 | 47·8 | 36·3 | 11·5 | 42·1 | 40·3 | 0·250 | 2·9 | 0·3 | 93 | 553 | 11 | 1·5 |
| December | 29·804 | 50·8 | 18·0 | 32·8 | 38·8 | 29·5 | 9·3 | 34·0 | 31·2 | 0·175 | 2·1 | 0·2 | 89 | 559 | 8 | 0·7 |
| Means | 29·727 | 66·1 | 32·0 | 34·1 | 56·0 | 41·0 | 15·0 | 47·7 | 41·5 | 0·274 | 3·1 | 0·9 | 80 | 543 | Sum. 162 | Sum. 29·0 |

## II.—MONTHLY STATEMENT OF THE NUMBER OF DAYS OF WIND REFERRED TO EIGHT POINTS OF THE AZIMUTHAL CIRCLE, AND OF THE NUMBER OF CALM DAYS, FROM 1841 TO 1860.

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The frequent references, which have been made to the difference in the proportion of Winds in different directions at different Seasons of the Year, have suggested the exhibition of this Table for past years. It is proposed to continue it in future years.

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer.

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less than $\frac{1}{4}$ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1841. | | | | | | | | | |
| January | 5 | 3 | 2 | 1 | 5 | 5 | 7 | 2 | 1 |
| February | 1 | 6 | 7 | 1 | 6 | 2 | 1 | 2 | 2 |
| March | 0 | 0 | 1 | 1 | 7 | 12 | 7 | 2 | 1 |
| April | 7 | 4 | 2 | 2 | 1 | 6 | 7 | 1 | 0 |
| May | 2 | 4 | 4 | 1 | 6 | 12 | 1 | 1 | 0 |
| June | 6 | 0 | 0 | 0 | 4 | 9 | 9 | 2 | 0 |
| July | 5 | 0 | 0 | 0 | 4 | 15 | 3 | 2 | 2 |
| August | 1 | 0 | 0 | 0 | 3 | 15 | 6 | 1 | 5 |
| September | 0 | 1 | 3 | 2 | 3 | 7 | 4 | 0 | 10 |
| October | 7 | 1 | 0 | 1 | 3 | 9 | 5 | 1 | 4 |
| November | 5 | 0 | 3 | 0 | 4 | 11 | 2 | 1 | 4 |
| December | 1 | 0 | 0 | 0 | 3 | 9 | 8 | 2 | 8 |
| Sums | 40 | 19 | 22 | 9 | 49 | 112 | 60 | 17 | 37 |
| 1842. | | | | | | | | | |
| January | 6 | 2 | 0 | 3 | 2 | 11 | 1 | 3 | 3 |
| February | 1 | 0 | 3 | 1 | 4 | 14 | 1 | 1 | 3 |
| March | 4 | 0 | 0 | 1 | 3 | 14 | 6 | 3 | 0 |
| April | 1 | 17 | 10 | 0 | 0 | 1 | 0 | 1 | 0 |
| May | 3 | 5 | 0 | 2 | 5 | 11 | 2 | 2 | 1 |
| June | 2 | 6 | 4 | 1 | 2 | 9 | 3 | 2 | 1 |
| July | 6 | 2 | 2 | 0 | 5 | 9 | 4 | 3 | 0 |
| August | 2 | 5 | 6 | 3 | 3 | 6 | 4 | 2 | 0 |
| September | 5 | 2 | 3 | 1 | 2 | 6 | 6 | 3 | 2 |
| October | 10 | 0 | 0 | 0 | 1 | 5 | 5 | 3 | 7 |
| November | 5 | 1 | 3 | 2 | 1 | 9 | 2 | 2 | 5 |
| December | 1 | 0 | 0 | 1 | 3 | 17 | 4 | 0 | 5 |
| Sums | 46 | 40 | 31 | 15 | 31 | 112 | 38 | 25 | 27 |
| 1843. | | | | | | | | | |
| January | 2 | 1 | 0 | 0 | 1 | 10 | 9 | 1 | 7 |
| February | 6 | 8 | 6 | 1 | 0 | 2 | 1 | 3 | 1 |
| March | 6 | 6 | 2 | 2 | 3 | 4 | 3 | 1 | 4 |
| April | 2 | 4 | 3 | 0 | 0 | 12 | 2 | 3 | 4 |
| May | 3 | 6 | 4 | 1 | 0 | 10 | 2 | 0 | 5 |
| June | 8 | 4 | 4 | 0 | 2 | 6 | 2 | 3 | 1 |
| July | 5 | 3 | 0 | 0 | 2 | 12 | 5 | 2 | 2 |
| August | 3 | 6 | 1 | 1 | 4 | 10 | 3 | 1 | 2 |
| September | 4 | 6 | 2 | 2 | 1 | 4 | 0 | 4 | 7 |
| October | 3 | 0 | 0 | 1 | 2 | 10 | 6 | 4 | 5 |
| November | 0 | 0 | 0 | 0 | 2 | 12 | 1 | 4 | 11 |
| December | 0 | 0 | 0 | 0 | 1 | 10 | 3 | 3 | 14 |
| Sums | 42 | 44 | 22 | 8 | 18 | 102 | 37 | 29 | 63 |

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less that $\frac{1}{4}$ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1844. | | | | | | | | | |
| January | 2 | 2 | 0 | 1 | 3 | 8 | 6 | 5 | 4 |
| February | 4 | 0 | 1 | 0 | 3 | 10 | 3 | 3 | 5 |
| March | 6 | 3 | 2 | 0 | 1 | 10 | 4 | 3 | 2 |
| April | 4 | 4 | 2 | 2 | 2 | 12 | 2 | 1 | 1 |
| May | 10 | 14 | 3 | 2 | 0 | 1 | 0 | 1 | 0 |
| June | 3 | 3 | 1 | 1 | 0 | 7 | 3 | 5 | 7 |
| July | 3 | 5 | 0 | 0 | 2 | 7 | 4 | 4 | 6 |
| August | 1 | 0 | 0 | 1 | 1 | 11 | 6 | 2 | 9 |
| September | 6 | 8 | 0 | 0 | 0 | 2 | 1 | 0 | 13 |
| October | 3 | 2 | 2 | 1 | 5 | 11 | 4 | 0 | 3 |
| November | 3 | 5 | 1 | 2 | 4 | 10 | 2 | 2 | 1 |
| December | 3 | 11 | 6 | 4 | 1 | 0 | 0 | 0 | 6 |
| Sums | 48 | 57 | 18 | 14 | 22 | 89 | 35 | 26 | 57 |
| 1845. | | | | | | | | | |
| January | 2 | 2 | 0 | 3 | 8 | 10 | 0 | 4 | 2 |
| February | 4 | 3 | 1 | 0 | 5 | 3 | 2 | 5 | 5 |
| March | 5 | 10 | 1 | 3 | 1 | 5 | 2 | 4 | 0 |
| April | 4 | 7 | 1 | 1 | 4 | 7 | 0 | 3 | 3 |
| May | 8 | 6 | 1 | 0 | 2 | 3 | 4 | 3 | 4 |
| June | 1 | 6 | 1 | 2 | 1 | 11 | 3 | 2 | 3 |
| July | 2 | 4 | 2 | 0 | 3 | 14 | 3 | 2 | 1 |
| August | 2 | 2 | 1 | 0 | 3 | 12 | 7 | 4 | 0 |
| September | 2 | 7 | 2 | 1 | 1 | 10 | 3 | 1 | 3 |
| October | 0 | 1 | 0 | 0 | 5 | 9 | 6 | 5 | 5 |
| November | 0 | 1 | 1 | 3 | 7 | 7 | 5 | 0 | 6 |
| December | 0 | 0 | 0 | 0 | 3 | 13 | 8 | 5 | 2 |
| Sums | 30 | 49 | 11 | 13 | 43 | 104 | 43 | 38 | 34 |
| 1846. | | | | | | | | | |
| January | 0 | 0 | 1 | 0 | 3 | 11 | 5 | 1 | 10 |
| February | 0 | 0 | 0 | 1 | 3 | 8 | 4 | 4 | 8 |
| March | 0 | 0 | 1 | 2 | 2 | 12 | 2 | 3 | 9 |
| April | 5 | 4 | 4 | 2 | 3 | 7 | 3 | 2 | 0 |
| May | 2 | 4 | 2 | 3 | 3 | 7 | 5 | 1 | 4 |
| June | 1 | 4 | 4 | 5 | 1 | 9 | 1 | 1 | 4 |
| July | 1 | 1 | 0 | 1 | 1 | 12 | 6 | 1 | 8 |
| August | 6 | 5 | 0 | 1 | 4 | 6 | 0 | 2 | 7 |
| September | 4 | 3 | 4 | 1 | 4 | 3 | 1 | 1 | 9 |
| October | 2 | 0 | 0 | 2 | 4 | 7 | 3 | 1 | 12 |
| November | 1 | 3 | 5 | 0 | 7 | 6 | 0 | 2 | 6 |
| December | 5 | 1 | 0 | 0 | 4 | 6 | 2 | 4 | 9 |
| Sums | 27 | 25 | 21 | 18 | 39 | 94 | 32 | 23 | 86 |

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less than $\frac{1}{4}$ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1847. | | | | | | | | | |
| January | 2 | 2 | 3 | 1 | 2 | 3 | 1 | 0 | 17 |
| February | 2 | 4 | 3 | 0 | 3 | 8 | 4 | 0 | 4 |
| March | 4 | 5 | 2 | 0 | 6 | 6 | 2 | 2 | 4 |
| April | 4 | 1 | 0 | 1 | 6 | 10 | 2 | 5 | 1 |
| May | 1 | 0 | 2 | 1 | 12 | 10 | 1 | 0 | 4 |
| June | 7 | 2 | 1 | 0 | 3 | 9 | 4 | 2 | 2 |
| July | 7 | 2 | 1 | 0 | 2 | 8 | 4 | 0 | 7 |
| August | 5 | 1 | 2 | 0 | 2 | 11 | 3 | 0 | 7 |
| September | 2 | 3 | 0 | 0 | 0 | 16 | 6 | 0 | 3 |
| October | 4 | 1 | 2 | 0 | 6 | 10 | 3 | 0 | 5 |
| November | 1 | 0 | 0 | 0 | 5 | 11 | 5 | 1 | 7 |
| December | 2 | 2 | 0 | 1 | 8 | 9 | 1 | 0 | 8 |
| Sums | 41 | 23 | 16 | 4 | 55 | 111 | 36 | 10 | 69 |
| 1848. | | | | | | | | | |
| January | 7 | 6 | 2 | 5 | 5 | 3 | 2 | 1 | 0 |
| February | 2 | 0 | 0 | 0 | 3 | 17 | 6 | 0 | 1 |
| March | 5 | 0 | 2 | 6 | 4 | 8 | 2 | 3 | 1 |
| April | 8 | 6 | 1 | 3 | 4 | 3 | 2 | 3 | 0 |
| May | 3 | 5 | 8 | 4 | 1 | 4 | 1 | 0 | 5 |
| June | 3 | 4 | 1 | 1 | 4 | 10 | 4 | 2 | 1 |
| July | 3 | 4 | 1 | 0 | 10 | 6 | 5 | 1 | 1 |
| August | 1 | 2 | 0 | 2 | 6 | 10 | 3 | 0 | 7 |
| September | 6 | 6 | 0 | 2 | 4 | 5 | 0 | 2 | 5 |
| October | 6 | 2 | 0 | 5 | 10 | 5 | 0 | 3 | 0 |
| November | 7 | 0 | 0 | 4 | 1 | 12 | 3 | 3 | 0 |
| December | 2 | 3 | 4 | 4 | 6 | 7 | 1 | 2 | 2 |
| Sums | 53 | 38 | 19 | 36 | 58 | 90 | 29 | 20 | 23 |
| 1849. | | | | | | | | | |
| January | 3 | 5 | 0 | 1 | 5 | 14 | 1 | 2 | 0 |
| February | 2 | 0 | 1 | 1 | 4 | 14 | 4 | 0 | 2 |
| March | 7 | 1 | 4 | 2 | 1 | 4 | 4 | 4 | 4 |
| April | 6 | 4 | 1 | 2 | 4 | 6 | 5 | 2 | 0 |
| May | 8 | 5 | 0 | 2 | 5 | 6 | 1 | 2 | 2 |
| June | 6 | 5 | 5 | 1 | 1 | 6 | 4 | 1 | 1 |
| July | 2 | 7 | 0 | 0 | 3 | 13 | 3 | 3 | 0 |
| August | 5 | 3 | 0 | 3 | 3 | 9 | 5 | 3 | 0 |
| September | 5 | 9 | 3 | 1 | 4 | 7 | 0 | 0 | 1 |
| October | 4 | 7 | 0 | 3 | 3 | 10 | 3 | 0 | 1 |
| November | 3 | 6 | 2 | 4 | 4 | 7 | 2 | 2 | 0 |
| December | 8 | 2 | 4 | 3 | 2 | 6 | 3 | 3 | 0 |
| Sums | 59 | 54 | 20 | 23 | 39 | 102 | 35 | 22 | 11 |

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less than ¼ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1850. | | | | | | | | | |
| January | 7 | 6 | 3 | 2 | 4 | 6 | 3 | 0 | 0 |
| February | 0 | 0 | 1 | 1 | 3 | 14 | 7 | 0 | 2 |
| March | 9 | 4 | 2 | 3 | 1 | 5 | 1 | 1 | 5 |
| April | 5 | 5 | 1 | 3 | 4 | 8 | 1 | 0 | 3 |
| May | 5 | 8 | 2 | 2 | 1 | 7 | 2 | 1 | 3 |
| June | 1 | 4 | 7 | 1 | 2 | 9 | 5 | 1 | 0 |
| July | 5 | 4 | 1 | 1 | 2 | 6 | 2 | 3 | 7 |
| August | 3 | 2 | 1 | 0 | 2 | 12 | 1 | 2 | 8 |
| September | 5 | 10 | 3 | 2 | 2 | 4 | 1 | 2 | 1 |
| October | 5 | 2 | 0 | 0 | 1 | 15 | 2 | 5 | 1 |
| November | 2 | 3 | 0 | 2 | 2 | 17 | 1 | 3 | 0 |
| December | 2 | 0 | 3 | 4 | 6 | 13 | 1 | 1 | 1 |
| Sums | 49 | 48 | 24 | 21 | 30 | 116 | 27 | 19 | 31 |
| 1851. | | | | | | | | | |
| January | 0 | 0 | 1 | 6 | 5 | 17 | 0 | 0 | 2 |
| February | 5 | 3 | 2 | 1 | 3 | 7 | 1 | 0 | 6 |
| March | 5 | 2 | 0 | 3 | 2 | 13 | 2 | 3 | 1 |
| April | 6 | 5 | 4 | 3 | 2 | 8 | 2 | 0 | 0 |
| May | 7 | 3 | 1 | 2 | 3 | 4 | 1 | 5 | 5 |
| June | 2 | 2 | 4 | 0 | 2 | 10 | 5 | 4 | 1 |
| July | 5 | 3 | 2 | 0 | 2 | 7 | 5 | 2 | 5 |
| August | 3 | 7 | 1 | 0 | 2 | 9 | 5 | 2 | 2 |
| September | 5 | 9 | 4 | 2 | 1 | 2 | 1 | 1 | 5 |
| October | 1 | 1 | 1 | 1 | 4 | 13 | 6 | 2 | 2 |
| November | 10 | 2 | 0 | 0 | 1 | 3 | 5 | 5 | 4 |
| December | 3 | 2 | 1 | 2 | 1 | 7 | 4 | 1 | 10 |
| Sums | 52 | 39 | 21 | 20 | 28 | 100 | 37 | 25 | 43 |
| 1852. | | | | | | | | | |
| January | 0 | 1 | 0 | 0 | 9 | 14 | 7 | 0 | 0 |
| February | 7 | 5 | 1 | 2 | 0 | 5 | 6 | 2 | 1 |
| March | 4 | 9 | 9 | 3 | 2 | 1 | 2 | 0 | 1 |
| April | 1 | 10 | 12 | 1 | 1 | 4 | 0 | 0 | 1 |
| May | 7 | 9 | 1 | 0 | 3 | 9 | 2 | 0 | 0 |
| June | 2 | 0 | 1 | 5 | 8 | 13 | 1 | 0 | 0 |
| July | 5 | 8 | 5 | 2 | 3 | 8 | 0 | 0 | 0 |
| August | 6 | 1 | 0 | 2 | 8 | 12 | 0 | 2 | 0 |
| September | 6 | 4 | 4 | 1 | 1 | 5 | 4 | 1 | 4 |
| October | 4 | 5 | 0 | 2 | 4 | 10 | 3 | 3 | 0 |
| November | 2 | 6 | 2 | 1 | 9 | 8 | 1 | 0 | 1 |
| December | 1 | 0 | 1 | 2 | 4 | 19 | 1 | 0 | 3 |
| Sums | 45 | 58 | 36 | 21 | 52 | 108 | 27 | 8 | 11 |

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less than ¼ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1853. | | | | | | | | | |
| January | 3 | 4 | 0 | 0 | 7 | 12 | 2 | 1 | 2 |
| February | 8 | 6 | 1 | 3 | 1 | 2 | 1 | 1 | 5 |
| March | 1 | 10 | 2 | 2 | 1 | 6 | 2 | 2 | 5 |
| April | 3 | 4 | 2 | 1 | 1 | 4 | 6 | 6 | 3 |
| May | 1 | 13 | 4 | 4 | 0 | 2 | 2 | 2 | 3 |
| June | 7 | 2 | 0 | 2 | 1 | 13 | 1 | 1 | 3 |
| July | 0 | 2 | 1 | 1 | 2 | 18 | 4 | 3 | 0 |
| August | 5 | 5 | 3 | 1 | 3 | 9 | 2 | 0 | 3 |
| September | 4 | 5 | 0 | 4 | 2 | 8 | 3 | 2 | 2 |
| October | 1 | 4 | 1 | 2 | 6 | 8 | 3 | 0 | 6 |
| November | 4 | 2 | 1 | 4 | 4 | 4 | 3 | 3 | 5 |
| December | 6 | 8 | 1 | 3 | 0 | 0 | 3 | 6 | 4 |
| Sums | 43 | 65 | 16 | 27 | 28 | 86 | 32 | 27 | 41 |
| 1854. | | | | | | | | | |
| January | 2 | 3 | 1 | 9 | 5 | 8 | 1 | 2 | 0 |
| February | 2 | 2 | 1 | 0 | 3 | 11 | 1 | 7 | 1 |
| March | 3 | 4 | 0 | 1 | 4 | 11 | 2 | 3 | 3 |
| April | 4 | 7 | 8 | 1 | 0 | 3 | 4 | 3 | 0 |
| May | 2 | 5 | 0 | 0 | 4 | 17 | 1 | 0 | 2 |
| June | 3 | 5 | 1 | 2 | 3 | 10 | 5 | 1 | 0 |
| July | 2 | 5 | 2 | 1 | 3 | 8 | 4 | 0 | 6 |
| August | 3 | 2 | 0 | 1 | 0 | 14 | 2 | 3 | 6 |
| September | 1 | 5 | 1 | 0 | 2 | 6 | 4 | 2 | 9 |
| October | 1 | 4 | 3 | 2 | 2 | 5 | 5 | 3 | 6 |
| November | 7 | 3 | 0 | 3 | 3 | 11 | 1 | 2 | 0 |
| December | 1 | 0 | 0 | 0 | 1 | 13 | 12 | 4 | 0 |
| Sums | 31 | 45 | 17 | 20 | 30 | 117 | 42 | 30 | 33 |
| 1855. | | | | | | | | | |
| January | 5 | 10 | 1 | 0 | 0 | 7 | 2 | 2 | 4 |
| February | 5 | 12 | 3 | 1 | 1 | 3 | 0 | 0 | 3 |
| March | 5 | 6 | 5 | 3 | 6 | 3 | 2 | 0 | 1 |
| April | 7 | 9 | 2 | 2 | 1 | 2 | 5 | 1 | 1 |
| May | 8 | 7 | 2 | 3 | 1 | 6 | 0 | 3 | 1 |
| June | 4 | 4 | 1 | 1 | 2 | 12 | 0 | 2 | 4 |
| July | 3 | 3 | 3 | 0 | 2 | 12 | 3 | 1 | 4 |
| August | 2 | 0 | 0 | 2 | 2 | 10 | 5 | 4 | 6 |
| September | 3 | 11 | 1 | 3 | 2 | 5 | 2 | 1 | 2 |
| October | 4 | 2 | 1 | 0 | 2 | 9 | 5 | 7 | 1 |
| November | 7 | 8 | 0 | 2 | 4 | 3 | 2 | 2 | 2 |
| December | 3 | 2 | 4 | 0 | 2 | 12 | 4 | 3 | 1 |
| Sums | 56 | 74 | 23 | 17 | 25 | 84 | 30 | 26 | 30 |

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less than ¼ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1856. | | | | | | | | | |
| January | 0 | 7 | 1 | 4 | 6 | 7 | 4 | 0 | 2 |
| February | 2 | 5 | 2 | 2 | 6 | 7 | 4 | 1 | 0 |
| March | 4 | 12 | 10 | 3 | 0 | 0 | 0 | 1 | 1 |
| April | 1 | 6 | 2 | 6 | 6 | 6 | 0 | 2 | 1 |
| May | 10 | 3 | 0 | 2 | 4 | 9 | 1 | 2 | 0 |
| June | 2 | 3 | 0 | 0 | 0 | 11 | 9 | 4 | 1 |
| July | 1 | 2 | 1 | 2 | 1 | 8 | 11 | 4 | 1 |
| August | 3 | 3 | 3 | 4 | 3 | 8 | 5 | 0 | 2 |
| September | 4 | 2 | 3 | 3 | 1 | 7 | 4 | 2 | 4 |
| October | 2 | 6 | 4 | 4 | 1 | 4 | 3 | 0 | 7 |
| November | 9 | 2 | 1 | 0 | 1 | 2 | 3 | 9 | 3 |
| December | 6 | 3 | 0 | 0 | 2 | 11 | 6 | 1 | 2 |
| Sums | 44 | 54 | 27 | 30 | 31 | 80 | 50 | 26 | 24 |
| 1857. | | | | | | | | | |
| January | 7 | 6 | 0 | 0 | 3 | 8 | 6 | 1 | 0 |
| February | 0 | 4 | 0 | 2 | 4 | 12 | 1 | 2 | 3 |
| March | 1 | 2 | 4 | 6 | 3 | 7 | 2 | 4 | 2 |
| April | 1 | 5 | 2 | 3 | 4 | 8 | 2 | 4 | 1 |
| May | 1 | 13 | 5 | 1 | 1 | 8 | 2 | 0 | 0 |
| June | 0 | 4 | 7 | 2 | 3 | 8 | 2 | 2 | 2 |
| July | 0 | 4 | 0 | 0 | 1 | 16 | 5 | 5 | 0 |
| August | 2 | 7 | 2 | 2 | 1 | 10 | 3 | 1 | 3 |
| September | 1 | 4 | 0 | 2 | 5 | 12 | 2 | 1 | 3 |
| October | 3 | 1 | 2 | 5 | 3 | 9 | 4 | 0 | 4 |
| November | 5 | 8 | 6 | 3 | 2 | 2 | 0 | 0 | 4 |
| December | 0 | 0 | 0 | 1 | 3 | 19 | 5 | 1 | 2 |
| Sums | 21 | 58 | 28 | 27 | 33 | 119 | 34 | 21 | 24 |
| 1858. | | | | | | | | | |
| January | 3 | 2 | 1 | 2 | 4 | 11 | 6 | 1 | 1 |
| February | 1 | 7 | 8 | 7 | 1 | 3 | 0 | 1 | 0 |
| March | 1 | 4 | 3 | 1 | 1 | 6 | 6 | 5 | 4 |
| April | 4 | 7 | 7 | 3 | 1 | 4 | 3 | 1 | 0 |
| May | 4 | 5 | 1 | 0 | 1 | 14 | 5 | 1 | 0 |
| June | 1 | 5 | 1 | 1 | 3 | 13 | 3 | 3 | 0 |
| July | 4 | 2 | 0 | 2 | 3 | 9 | 4 | 7 | 0 |
| August | 3 | 6 | 3 | 2 | 3 | 7 | 3 | 4 | 0 |
| September | 1 | 5 | 2 | 3 | 2 | 13 | 1 | 2 | 1 |
| October | 1 | 7 | 4 | 1 | 1 | 10 | 5 | 2 | 0 |
| November | 2 | 10 | 6 | 2 | 1 | 5 | 0 | 0 | 4 |
| December | 1 | 1 | 2 | 3 | 5 | 11 | 4 | 2 | 2 |
| Sums | 26 | 61 | 38 | 27 | 26 | 106 | 40 | 29 | 12 |

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*concluded.*

| MONTH. | Number of Days for different Mean Directions of the Wind. | | | | | | | | Number of Calm Days and Days on which the Pressure of the Wind was less than ¼ lb. per Square Foot. |
|---|---|---|---|---|---|---|---|---|---|
| | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | |
| 1859. | | | | | | | | | |
| January | 2 | 3 | 0 | 0 | 0 | 18 | 5 | 2 | 1 |
| February | 1 | 0 | 0 | 1 | 3 | 14 | 5 | 4 | 0 |
| March | 2 | 0 | 0 | 0 | 2 | 15 | 6 | 6 | 0 |
| April | 4 | 2 | 2 | 3 | 3 | 11 | 1 | 4 | 0 |
| May | 1 | 23 | 4 | 2 | 1 | 0 | 0 | 0 | 0 |
| June | 4 | 7 | 0 | 6 | 0 | 4 | 4 | 4 | 1 |
| July | 3 | 6 | 1 | 1 | 2 | 13 | 3 | 1 | 1 |
| August | 2 | 3 | 0 | 1 | 4 | 11 | 5 | 4 | 1 |
| September | 4 | 1 | 1 | 1 | 2 | 13 | 3 | 4 | 1 |
| October | 1 | 2 | 3 | 4 | 3 | 9 | 4 | 1 | 4 |
| November | 3 | 3 | 2 | 6 | 4 | 9 | 2 | 0 | 1 |
| December | 4 | 4 | 3 | 4 | 1 | 11 | 2 | 1 | 1 |
| Sums | 31 | 54 | 16 | 29 | 25 | 128 | 40 | 31 | 11 |
| 1860. | | | | | | | | | |
| January | 2 | 0 | 1 | 4 | 5 | 12 | 4 | 3 | 0 |
| February | 6 | 7 | 1 | 0 | 3 | 4 | 5 | 3 | 0 |
| March | 2 | 3 | 0 | 0 | 1 | 11 | 8 | 6 | 0 |
| April | 3 | 10 | 3 | 2 | 1 | 3 | 4 | 4 | 0 |
| May | 0 | 2 | 5 | 2 | 1 | 11 | 7 | 2 | 1 |
| June | 2 | 1 | 0 | 2 | 1 | 19 | 5 | 0 | 0 |
| July | 6 | 7 | 1 | 0 | 0 | 10 | 1 | 5 | 1 |
| August | 1 | 0 | 0 | 0 | 2 | 17 | 9 | 2 | 0 |
| September | 4 | 4 | 1 | 2 | 1 | 10 | 5 | 1 | 2 |
| October | 0 | 2 | 0 | 2 | 2 | 14 | 10 | 1 | 0 |
| November | 0 | 8 | 8 | 2 | 2 | 5 | 1 | 2 | 2 |
| December | 4 | 3 | 6 | 3 | 3 | 4 | 5 | 2 | 1 |
| Sums | 30 | 47 | 26 | 19 | 22 | 120 | 64 | 31 | 7 |

## III.—MONTHLY STATEMENT OF THE MEAN DAILY HORIZONTAL MOVEMENT OF THE AIR IN MILES, AS FOUND BY CONVERTING THE OBSERVED INDICATIONS OF WHEWELL'S ANEMOMETER INTO CORRESPONDING INDICATIONS OF ROBINSON'S ANEMOMETER, FROM 1843 TO 1859.

During the years 1843 to 1859 Whewell's anemometer was in use, and during the Years 1860 and 1861 both Whewell's and Robinson's were in operation. The daily comparison of their results in the two last years showed clearly, that in strong winds the horizontal movement of the air, as shown by Whewell's anemometer, was less than one-half of that shown by Robinson's anemometer, and in light winds the difference between the two was very much greater.

From experiments made in the year 1861, the scale of velocity as indicated by Robinson's was found to be correct, and in accordance with the theory of the inventor.

The ratio of the scale of velocity as shown by Whewell's anemometer to that of Robinson's anemometer, was found to be so systematic, that every result given by the former would be readily convertible into that which would have been given by the latter, when the two instruments had been in simultaneous operation a sufficient length of time to determine satisfactorily the ratio existing between them for different velocities of the wind. For obtaining this ratio all the simultaneous results have been classified, and their discussion has led to the formation of the following Table of Factors.

TABLE OF FACTORS to be multiplied into the READINGS of WHEWELL'S ANEMOMETER expressed in MILES at different VELOCITIES of the WIND, in order to determine the HORIZONTAL MOVEMENT of the AIR in MILES, as it would have been shown by the USE of ROBINSON'S ANEMOMETER.

| Daily Horizontal Movement in Miles, as shown by Whewell's Anemometer. | Factors to be multiplied into Results by Whewell's Anemometer, to convert them into Results by Robinson's Anemometer. |
|---|---|
| Less than 10 | 9·95 |
| From 10 to 20 | 7·62 |
| 20 to 30 | 5·38 |
| 30 to 40 | 4·10 |
| 40 to 50 | 3·40 |
| 50 to 60 | 3·00 |
| 60 to 70 | 2·75 |
| 70 to 80 | 2·56 |
| 80 to 90 | 2·44 |
| 90 to 100 | 2·36 |
| 100 to 110 | 2·30 |
| 110 to 120 | 2·25 |
| 120 to 130 | 2·21 |
| 130 to 140 | 2·17 |
| 140 to 150 | 2·14 |
| 150 to 160 | 2·12 |
| 160 to 170 | 2·10 |
| Above 170 | 2·09 |

These factors have been used in deducing the values given in the following Tables, under the heading of Robinson's Anemometer, from the observed results of Whewell's Anemometer.

MONTHLY STATEMENT of the MEAN DAILY HORIZONTAL MOVEMENT of the AIR, in MILES, as found by converting the OBSERVED INDICATIONS of WHEWELL'S ANEMOMETER into corresponding INDICATIONS of ROBINSON'S ANEMOMETER, from 1843, September, to 1859, October; with the INDICATIONS of ROBINSON'S ANEMOMETER, as observed in November and December.

| Month. | 1843. | 1844. | 1845. | 1846. | 1847. | 1848. | 1849. | 1850. | 1851. | 1852. | 1853. | 1854. | 1855. | 1856. | 1857. | 1858. | 1859. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. |
| January.... | .. | 322 | 339 | .. | 242 | 266 | 435 | 237 | 278 | 340 | 259 | 250 | 160 | 229 | 239 | 267 | 242 |
| February... | .. | 362 | 267 | 251 | 312 | 514 | 286 | 366 | 212 | 329 | 200 | 291 | 176 | 284 | 174 | 203 | 320 |
| March ..... | .. | 520 | 349 | 319 | 252 | 310 | .. | 197 | 261 | 229 | 174 | 205 | 176 | 234 | 215 | 212 | 318 |
| April..... | .. | .. | 338 | 250 | 261 | 284 | 171 | 251 | 200 | 222 | 263 | 200 | 227 | 288 | 215 | 187 | 291 |
| May ..... | .. | 338 | 289 | 219 | .. | 227 | 216 | 234 | 195 | 217 | 229 | 233 | 266 | 317 | 176 | 227 | 195 |
| June..... | .. | 340 | 249 | 212 | 317 | 370 | 182 | 215 | 291 | 235 | 232 | 235 | 212 | 197 | 267 | 139 | 168 |
| July..... | .. | .. | 235 | 302 | 224 | 304 | 261 | 210 | 248 | 165 | 261 | 202 | 184 | 215 | 235 | 197 | 171 |
| August .... | .. | 195 | 286 | 219 | 246 | 304 | 202 | 268 | 242 | 219 | 174 | 202 | 246 | 190 | 150 | .. | 210 |
| September.. | 250 | 217 | 285 | 197 | 312 | 229 | 176 | 200 | 187 | 168 | 217 | 203 | 192 | 222 | 168 | 232 | 229 |
| October.... | 329 | 340 | 286 | 337 | 261 | 310 | 229 | 267 | 242 | 217 | 187 | 212 | 244 | 167 | 200 | 244 | 165 |
| November.. | 349 | 284 | 339 | 302 | 286 | 359 | 219 | 335 | 182 | 344 | 168 | 233 | 173 | 222 | 153 | 184 | 209 |
| December .. | 281 | 200 | 424 | 285 | 362 | 347 | 261 | 244 | 181 | 368 | 156 | 389 | 257 | 302 | 250 | 217 | 152 |
| Means .... | .. | 312 | 307 | 263 | 280 | 319 | 240 | 252 | 227 | 254 | 210 | 238 | 209 | 239 | 204 | 210 | 223 |

The following TABLE shows the NUMBER of DAYS from which each MEAN is derived, in those MONTHS in which the ANEMOMETER was not in use every DAY.

| | | |
|---|---|---|
| 1843 September..... 15 | 1846 February..... 18 | 1850 March ..... 29 |
| October ..... 25 | 1847 June ..... 15 | April ..... 23 |
| 1844 March ..... 12 | December ..... 22 | 1852 February..... 22 |
| May ..... 27 | 1848 January ..... 24 | September..... 26 |
| June ..... 17 | April ..... 28 | October..... 24 |
| August ..... 10 | August ..... 21 | 1853 April ..... 22 |
| October..... 25 | September..... 23 | December ..... 27 |
| 1845 August ..... 9 | 1849 April ..... 9 | 1854 May..... 24 |
| December ..... 27 | July..... 23 | July..... 28 |
| | October..... 28 | September..... 16 |

| |
|---|
| 1855 January ..... 14 |
| February..... 21 |
| 1859 January ..... 21 |
| February ..... 20 |
| March..... 23 |
| October..... 23 |
| December ..... 22 |

## IV.—WEEKLY AND MONTHLY MEANS OF THE READINGS OF THE DEEP-SUNK THERMOMETERS, FROM 1848 TO 1855.

In the printed volumes of Meteorological Observations from the year 1848 to 1855 inclusive, the Daily Readings of Thermometers sunk in the ground are given; since that time the Weekly and Monthly Means have been published as well as the Daily Observations.

The whole of the Weekly and Monthly Temperatures of all the Deep-sunk Thermometers for the years 1848 to 1855 are given in the Tables here subjoined.

## WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS.

| 1848. Period. | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|
| | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | ° | ° | ° | ° | ° | ° |
| January 1 to January 7 | 51·65 | 50·62 | 47·17 | 43·27 | 41·8 | 42·1 |
| 8 to 14 | 51·55 | 50·02 | 46·38 | 41·93 | 38·6 | 37·4 |
| 15 to 21 | 51·45 | 49·45 | 45·56 | 41·19 | 37·0 | 35·5 |
| 22 to 28 | 51·32 | 48·87 | 44·67 | 39·58 | 31·8 | 29·3 |
| 29 to February 4 | 51·21 | 48·30 | 43·79 | 38·98 | 38·8 | 40·3 |
| February 5 to 11 | 51·09 | 47·67 | 43·73 | 41·73 | 46·4 | 48·0 |
| 12 to 18 | 50·91 | 47·17 | 44·51 | 43·02 | 43·1 | 44·1 |
| 19 to 25 | 50·74 | 47·05 | 44·72 | 42·22 | 44·8 | 47·1 |
| 26 to March 3 | 50·51 | 46·75 | 44·82 | 43·50 | 44·8 | 45·3 |
| March 4 to 10 | 50·31 | 46·69 | 44·90 | 42·68 | 42·4 | 44·4 |
| 11 to 17 | 50·14 | 46·66 | 44·88 | 42·78 | 42·5 | 42·7 |
| 18 to 24 | 49·92 | 46·47 | 44·75 | 42·92 | 45·0 | 47·1 |
| 25 to 31 | 49·79 | 46·46 | 45·20 | 44·78 | 49·4 | 52·9 |
| April 1 to April 7 | 49·66 | 46·53 | 46·46 | 48·06 | 53·8 | 59·4 |
| 8 to 14 | 49·51 | 46·79 | 47·49 | 47·21 | 47·0 | 49·3 |
| 15 to 21 | 49·30 | 47·05 | 47·62 | 47·65 | 50·4 | 53·0 |
| 22 to 26 | 49·13 | 47·27 | 48·10 | 48·05 | 47·6 | 47·0 |
| 29 to May 5 | 49·11 | 47·54 | 48·13 | 48·00 | 53·2 | 59·3 |
| May 6 to 12 | 49·10 | 47·77 | 49·32 | 52·45 | 62·6 | 71·8 |
| 13 to 19 | 49·05 | 48·11 | 51·45 | 56·26 | 64·0 | 68·6 |
| 20 to 28 | 49·04 | 48·79 | 53·07 | 56·92 | 62·8 | 69·0 |
| 27 to June 2 | 49·03 | 49·52 | 54·11 | 58·19 | 61·7 | 65·3 |
| June 3 to 9 | 49·05 | 50·20 | 54·67 | 57·34 | 60·5 | 62·8 |
| 10 to 16 | 49·11 | 50·80 | 54·96 | 57·57 | 62·1 | 65·4 |
| 17 to 23 | 49·20 | 51·29 | 55·55 | 58·95 | 63·9 | 66·3 |
| 24 to 30 | 49·30 | 51·73 | 56·25 | 59·61 | 61·7 | 62·9 |
| July 1 to July 7 | 49·44 | 52·26 | 56·61 | 59·34 | 64·5 | 68·6 |
| 8 to 14 | 49·58 | 52·71 | 57·28 | 60·88 | 65·8 | 71·7 |
| 15 to 21 | 49·73 | 53·14 | 58·52 | 62·72 | 66·3 | 69·0 |
| 22 to 28 | 49·87 | 53·62 | 59·13 | 61·76 | 63·3 | 65·3 |
| 29 to August 4 | 50·04 | 54·11 | 59·28 | 61·57 | 62·8 | 65·4 |
| August 5 to 11 | 50·21 | 54·46 | 59·25 | 60·45 | 60·5 | 63·3 |
| 12 to 18 | 50·38 | 54·75 | 58·83 | 59·93 | 60·9 | 63·2 |
| 19 to 25 | 50·57 | 54·94 | 58·70 | 59·54 | 59·2 | 61·1 |
| 26 to September 1 | 50·77 | 55·09 | 58·38 | 59·69 | 61·6 | 64·1 |
| September 2 to 8 | 50·97 | 55·23 | 58·33 | 59·89 | 62·5 | 67·1 |
| 9 to 15 | 51·10 | 55·25 | 58·21 | 59·05 | 56·2 | 60·2 |
| 16 to 22 | 51·28 | 55·37 | 57·58 | 57·21 | 57·6 | 66·1 |
| 23 to 29 | 51·42 | 55·31 | 57·00 | 57·58 | 59·5 | 61·1 |
| 30 to October 6 | 51·62 | 55·31 | 56·99 | 57·45 | 59·9 | 63·7 |
| October 7 to 13 | 51·72 | 55·19 | 56·86 | 57·29 | 55·5 | 58·3 |
| 14 to 20 | 51·80 | 55·08 | 56·03 | 54·26 | 50·2 | 48·5 |
| 21 to 27 | 51·95 | 54·96 | 54·55 | 52·12 | 51·4 | 53·7 |
| 28 to November 3 | 52·08 | 54·56 | 53·44 | 51·10 | 48·5 | 50·1 |
| November 4 to 10 | 52·13 | 54·11 | 52·51 | 48·83 | 42·9 | 43·5 |
| 11 to 17 | 52·16 | 53·58 | 51·01 | 46·52 | 42·8 | 44·5 |
| 18 to 24 | 52·18 | 52·97 | 49·88 | 46·22 | 47·4 | 49·5 |
| 25 to December 1 | 52·17 | 52·32 | 49·48 | 46·92 | 47·5 | 47·4 |
| December 2 to 8 | 52·16 | 51·80 | 49·24 | 46·33 | 47·3 | 49·9 |
| 9 to 15 | 52·11 | 51·34 | 49·01 | 47·29 | 50·1 | 52·4 |
| 16 to 22 | 52·02 | 50·94 | 48·90 | 46·58 | 43·3 | 42·9 |
| 23 to 31 | 51·90 | 50·65 | 47·83 | 43·49 | 42·0 | 42·2 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

| 1849. Period. | | | | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | d | | d | ° | ° | ° | ° | ° | ° |
| January | 1 | to January | 7 | 51·84 | 50·11 | 46·78 | 42·06 | 34·4 | 32·0 |
| | 8 | to | 14 | 51·64 | 49·60 | 45·49 | 40·70 | 41·0 | 41·6 |
| | 15 | to | 21 | 51·54 | 49·02 | 45·28 | 42·71 | 45·7 | 47·8 |
| | 22 | to | 28 | 51·40 | 48·55 | 45·87 | 44·32 | 45·9 | 47·8 |
| | 29 | to February | 4 | 51·21 | 48·26 | 45·96 | 43·05 | 41·7 | 42·3 |
| February | 5 | to | 11 | 51·06 | 48·11 | 45·79 | 43·89 | 45·2 | 47·0 |
| | 12 | to | 18 | 50·86 | 47·88 | 45·77 | 42·91 | 40·6 | 42·9 |
| | 19 | to | 25 | 50·71 | 47·70 | 45·43 | 43·25 | 45·6 | 48·4 |
| | 26 | to March | 4 | 50·51 | 47·38 | 45·31 | 42·97 | 43·2 | 46·2 |
| March | 5 | to | 11 | 50·33 | 47·21 | 45·34 | 43·74 | 43·7 | 46·5 |
| | 12 | to | 18 | 50·19 | 47·13 | 45·39 | 43·38 | 46·9 | 50·4 |
| | 19 | to | 25 | 50·03 | 47·05 | 45·71 | 44·36 | 43·5 | 43·5 |
| | 26 | to April | 1 | 49·89 | 46·99 | 45·67 | 43·30 | 43·7 | 46·2 |
| April | 2 | to | 8 | 49·77 | 46·91 | 45·67 | 44·59 | 47·8 | 51·3 |
| | 9 | to | 15 | 49·66 | 46·94 | 46·35 | 45·70 | 45·5 | 46·8 |
| | 16 | to | 22 | 49·50 | 46·91 | 46·33 | 44·42 | 42·2 | 43·4 |
| | 23 | to | 29 | 49·39 | 46·94 | 45·97 | 44·47 | 48·3 | 52·2 |
| | 30 | to May | 6 | 49·32 | 46·89 | 46·75 | 47·83 | 56·8 | 64·6 |
| May | 7 | to | 13 | 49·20 | 47·03 | 48·34 | 50·07 | 50·9 | 50·5 |
| | 14 | to | 20 | 49·13 | 47·42 | 49·09 | 50·68 | 56·2 | 59·8 |
| | 21 | to | 27 | 49·07 | 47·85 | 50·14 | 52·52 | 58·7 | 64·0 |
| | 28 | to June | 3 | 48·98 | 48·39 | 51·99 | 55·56 | 62·0 | 67·7 |
| June | 4 | to | 10 | 48·96 | 48·99 | 53·40 | 57·93 | 64·4 | 70·2 |
| | 11 | to | 17 | 48·97 | 49·68 | 54·49 | 57·59 | 59·5 | 64·3 |
| | 18 | to | 24 | 49·04 | 50·42 | 55·00 | 58·22 | 63·5 | 69·3 |
| | 25 | to July | 1 | 49·08 | 51·01 | 55·89 | 60·39 | 65·7 | 69·5 |
| July | 2 | to | 8 | 49·20 | 51·62 | 56·85 | 60·77 | 65·7 | 69·7 |
| | 9 | to | 15 | 49·34 | 52·26 | 57·69 | 62·73 | 69·5 | 76·4 |
| | 16 | to | 22 | 49·45 | 52·83 | 58·05 | 62·87 | 64·5 | 66·5 |
| | 23 | to | 29 | 49·59 | 53·41 | 58·00 | 60·70 | 61·0 | 63·4 |
| | 30 | to August | 5 | 49·79 | 53·87 | 57·88 | 60·64 | 62·7 | 67·9 |
| August | 6 | to | 12 | 50·01 | 54·22 | 58·33 | 61·21 | 68·9 | 74·2 |
| | 13 | to | 19 | 50·18 | 54·43 | 58·25 | 62·05 | 63·3 | 65·9 |
| | 20 | to | 26 | 50·37 | 54·75 | 58·22 | 61·07 | 64·7 | 68·8 |
| | 27 | to September | 2 | 50·58 | 55·05 | 58·68 | 60·33 | 65·5 | 69·0 |
| September | 3 | to | 9 | 50·75 | 55·28 | 58·21 | 62·16 | 64·8 | 70·7 |
| | 10 | to | 16 | 50·90 | 55·47 | 58·05 | 60·58 | 61·0 | 62·2 |
| | 17 | to | 23 | 51·09 | 55·64 | 57·99 | 58·79 | 59·8 | 61·9 |
| | 24 | to | 30 | 51·27 | 55·69 | 57·92 | 58·26 | 60·7 | 65·6 |
| October | 1 | to October | 7 | 51·41 | 55·55 | 57·61 | 57·52 | 53·3 | 53·6 |
| | 8 | to | 14 | 51·57 | 55·47 | 56·51 | 54·42 | 49·1 | 50·2 |
| | 15 | to | 21 | 51·74 | 55·29 | 55·05 | 52·31 | 54·1 | 59·9 |
| | 22 | to | 28 | 51·86 | 54·84 | 54·48 | 53·71 | 55·8 | 59·4 |
| | 29 | to November | 4 | 51·91 | 54·46 | 54·43 | 53·31 | 51·5 | 55·0 |
| November | 5 | to | 11 | 52·01 | 54·17 | 53·67 | 51·43 | 50·3 | 52·4 |
| | 12 | to | 18 | 52·06 | 53·86 | 52·99 | 50·81 | 47·8 | 50·3 |
| | 19 | to | 25 | 52·07 | 53·47 | 51·93 | 48·64 | 46·1 | 45·6 |
| | 26 | to December | 2 | 52·07 | 53·00 | 50·74 | 45·95 | 39·1 | 38·0 |
| December | 3 | to | 9 | 52·11 | 52·47 | 49·04 | 44·82 | 42·8 | 42·5 |
| | 10 | to | 16 | 52·09 | 51·78 | 48·31 | 44·07 | 42·3 | 41·4 |
| | 17 | to | 23 | 52·02 | 51·10 | 47·84 | 45·25 | 43·6 | 43·2 |
| | 24 | to | 31 | 51·90 | 50·49 | 47·08 | 44·08 | 35·7 | 34·9 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

| 1850. Period. | | | | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | d | | d | ° | ° | ° | ° | ° | ° |
| January | 1 | to January | 7 | 51·80 | 49·96 | 45·74 | 40·52 | 37·3 | 36·7 |
| | 8 | to | 14 | 51·68 | 49·30 | 44·81 | 39·38 | 33·6 | 31·3 |
| | 15 | to | 21 | 51·53 | 48·62 | 44·51 | 38·24 | 34·3 | 33·0 |
| | 22 | to | 28 | 51·40 | 47·97 | 43·09 | 38·26 | 39·8 | 39·9 |
| | 29 | to February | 4 | 51·24 | 47·34 | 43·06 | 39·90 | 43·4 | 45·8 |
| February | 5 | to | 11 | 51·05 | 46·85 | 43·71 | 41·50 | 43·6 | 46·3 |
| | 12 | to | 18 | 50·84 | 46·63 | 43·96 | 41·42 | 43·6 | 46·1 |
| | 19 | to | 25 | 50·62 | 46·46 | 44·25 | 42·85 | 45·8 | 48·9 |
| | 26 | to March | 4 | 50·40 | 46·40 | 44·76 | 43·12 | 43·8 | 46·1 |
| March | 5 | to | 11 | 50·19 | 46·38 | 44·95 | 43·27 | 43·3 | 46·3 |
| | 12 | to | 18 | 50·00 | 46·43 | 45·02 | 42·85 | 41·7 | 45·2 |
| | 19 | to | 25 | 49·81 | 46·36 | 44·68 | 41·86 | 41·2 | 44·4 |
| | 26 | to April | 1 | 49·64 | 46·23 | 44·27 | 40·90 | 40·4 | 44·0 |
| April | 2 | to | 8 | 49·52 | 46·09 | 44·28 | 43·71 | 51·2 | 56·1 |
| | 9 | to | 15 | 49·38 | 46·01 | 45·51 | 46·10 | 49·7 | 52·5 |
| | 16 | to | 22 | 49·33 | 46·14 | 46·47 | 46·98 | 52·3 | 54·3 |
| | 23 | to | 29 | 49·12 | 46·33 | 47·19 | 47·52 | 49·1 | 53·3 |
| | 30 | to May | 6 | 49·00 | 46·70 | 47·68 | 47·96 | 49·4 | 52·0 |
| May | 7 | to | 13 | 48·92 | 47·03 | 48·02 | 47·93 | 49·9 | 52·0 |
| | 14 | to | 20 | 48·82 | 47·21 | 48·39 | 49·15 | 52·1 | 55·3 |
| | 21 | to | 27 | 48·79 | 47·50 | 49·33 | 51·61 | 58·3 | 63·1 |
| | 28 | to June | 3 | 48·80 | 47·92 | 50·65 | 53·74 | 59·0 | 67·9 |
| June | 4 | to | 10 | 48·75 | 48·36 | 52·20 | 56·64 | 62·9 | 68·1 |
| | 11 | to | 17 | 48·75 | 49·05 | 53·60 | 57·45 | 61·5 | 64·0 |
| | 18 | to | 24 | 48·83 | 49·75 | 54·52 | 57·82 | 65·7 | 75·2 |
| | 25 | to July | 1 | 48·79 | 50·42 | 55·61 | 60·95 | 66·4 | 72·0 |
| July | 2 | to | 8 | 48·90 | 51·04 | 56·52 | 60·04 | 61·9 | 64·8 |
| | 9 | to | 15 | 49·01 | 51·73 | 56·60 | 59·20 | 63·9 | 71·7 |
| | 16 | to | 22 | 49·15 | 52·22 | 57·15 | 61·60 | 67·8 | 72·8 |
| | 23 | to | 29 | 49·28 | 52·71 | 57·75 | 62·04 | 67·9 | 67·3 |
| | 30 | to August | 5 | 49·45 | 53·24 | 58·18 | 61·05 | 64·9 | 69·0 |
| August | 6 | to | 12 | 49·65 | 53·69 | 58·74 | 62·09 | 65·4 | 69·4 |
| | 13 | to | 19 | 49·81 | 54·06 | 59·10 | 61·92 | 64·5 | 69·1 |
| | 20 | to | 26 | 49·98 | 54·41 | 59·34 | 61·01 | 60·4 | 64·8 |
| | 27 | to September | 2 | 50·19 | 54·72 | 58·91 | 59·69 | 59·6 | 63·3 |
| September | 3 | to | 9 | 50·38 | 54·89 | 58·36 | 58·66 | 58·7 | 63·8 |
| | 10 | to | 16 | 50·58 | 54·94 | 57·62 | 57·84 | 58·8 | 65·6 |
| | 17 | to | 23 | 50·76 | 54·89 | 57·24 | 57·72 | 59·3 | 64·0 |
| | 24 | to | 30 | 50·93 | 54·83 | 57·00 | 57·53 | 57·7 | 59·8 |
| October | 1 | to October | 7 | 51·08 | 54·78 | 56·52 | 56·06 | 54·1 | 57·4 |
| | 8 | to | 14 | 51·21 | 54·64 | 55·59 | 53·95 | 50·0 | 52·7 |
| | 15 | to | 21 | 51·34 | 54·44 | 54·40 | 51·90 | 50·4 | 55·0 |
| | 22 | to | 28 | 51·41 | 54·02 | 53·38 | 50·45 | 45·8 | 46·2 |
| | 29 | to November | 4 | 51·53 | 53·62 | 52·16 | 48·93 | 49·5 | 51·7 |
| November | 5 | to | 11 | 51·62 | 53·21 | 51·67 | 49·86 | 50·4 | 53·6 |
| | 12 | to | 18 | 51·63 | 52·67 | 51·41 | 49·26 | 46·8 | 48·2 |
| | 19 | to | 25 | 51·66 | 52·35 | 50·74 | 48·34 | 49·5 | 50·5 |
| | 26 | to December | 2 | 51·64 | 51·84 | 50·22 | 47·27 | 44·4 | 41·7 |
| December | 3 | to | 9 | 51·64 | 51·61 | 49·21 | 45·62 | 44·2 | 44·0 |
| | 10 | to | 16 | 51·57 | 51·10 | 48·49 | 45·11 | 44·4 | 44·7 |
| | 17 | to | 23 | 51·50 | 50·55 | 47·83 | 43·96 | 39·0 | 37·2 |
| | 24 | to | 31 | 51·44 | 50·07 | 46·50 | 41·96 | 42·9 | 43·6 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

| 1851. Period. | | | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|---|---|
| | | | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | d | d | ° | ° | ° | ° | ° | ° |
| January | 1 to January | 7 | 51·46 | 49·51 | 46·32 | 44·07 | 46·0 | 47·3 |
| | 8 to | 14 | 51·25 | 49·02 | 46·52 | 43·96 | 44·8 | 46·6 |
| | 15 to | 21 | 51·12 | 48·67 | 46·48 | 44·27 | 45·1 | 46·0 |
| | 22 to | 28 | 50·97 | 48·41 | 46·11 | 42·85 | 41·0 | 42·3 |
| | 29 to February | 4 | 50·83 | 48·17 | 45·37 | 42·10 | 42·5 | 42·8 |
| February | 5 to | 11 | 50·70 | 47·77 | 44·89 | 41·76 | 42·8 | 45·1 |
| | 12 to | 18 | 50·58 | 47·48 | 44·73 | 41·51 | 41·8 | 43·7 |
| | 19 to | 25 | 50·41 | 47·23 | 44·58 | 41·86 | 45·2 | 48·4 |
| | 26 to March | 4 | 50·24 | 46·91 | 44·64 | 41·73 | 40·8 | 41·1 |
| March | 5 to | 11 | 50·09 | 46·69 | 44·30 | 41·32 | 41·7 | 44·0 |
| | 12 to | 18 | 49·90 | 46·42 | 44·06 | 41·38 | 42·7 | 45·1 |
| | 19 to | 25 | 49·70 | 46·04 | 44·06 | 41·86 | 46·7 | 50·3 |
| | 26 to April | 1 | 49·53 | 45·94 | 44·93 | 44·34 | 47·1 | 50·8 |
| April | 2 to | 8 | 49·39 | 46·12 | 45·56 | 44·68 | 46·3 | 49·0 |
| | 9 to | 15 | 49·23 | 46·27 | 45·71 | 44·29 | 45·5 | 47·2 |
| | 16 to | 22 | 49·14 | 46·33 | 46·06 | 46·10 | 52·4 | 54·1 |
| | 23 to | 29 | 48·97 | 46·43 | 47·27 | 48·22 | 50·8 | 54·0 |
| | 30 to May | 6 | 48·85 | 46·73 | 47·80 | 47·26 | 48·1 | 51·6 |
| May | 7 to | 13 | 48·79 | 47·02 | 47·90 | 48·09 | 54·3 | 57·4 |
| | 14 to | 20 | 48·73 | 47·25 | 48·80 | 50·21 | 54·8 | 58·5 |
| | 21 to | 27 | 48·71 | 47·60 | 49·66 | 51·58 | 57·3 | 61·6 |
| | 28 to June | 3 | 48·72 | 48·06 | 50·84 | 54·08 | 61·1 | 68·8 |
| June | 4 to | 10 | 48·68 | 48·47 | 52·22 | 55·56 | 59·0 | 59·2 |
| | 11 to | 17 | 48·69 | 49·10 | 53·01 | 55·65 | 58·8 | 63·3 |
| | 18 to | 24 | 48·73 | 49·66 | 53·69 | 57·04 | 63·1 | 71·6 |
| | 25 to July | 1 | 48·82 | 50·26 | 54·95 | 59·52 | 68·4 | 78·6 |
| July | 2 to | 8 | 48·90 | 50·87 | 56·52 | 61·62 | 65·2 | 70·1 |
| | 9 to | 15 | 48·97 | 51·56 | 57·21 | 60·74 | 62·9 | 66·9 |
| | 16 to | 22 | 49·11 | 52·25 | 57·40 | 60·26 | 62·9 | 67·5 |
| | 23 to | 29 | 49·25 | 52·70 | 57·45 | 60·22 | 63·2 | 65·5 |
| | 30 to August | 5 | 49·42 | 53·16 | 57·94 | 61·45 | 66·0 | 71·7 |
| August | 6 to | 12 | 49·59 | 53·54 | 58·46 | 63·12 | 67·5 | 72·9 |
| | 13 to | 19 | 49·78 | 54·02 | 59·05 | 63·52 | 67·2 | 72·0 |
| | 20 to | 26 | 49·97 | 54·42 | 59·51 | 63·12 | 64·7 | 71·9 |
| | 27 to September | 2 | 50·14 | 54·90 | 59·02 | 60·02 | 61·3 | 64·0 |
| September | 3 to | 9 | 50·34 | 55·18 | 58·80 | 60·84 | 63·2 | 65·2 |
| | 10 to | 16 | 50·54 | 55·32 | 58·67 | 59·79 | 59·3 | 66·7 |
| | 17 to | 23 | 50·73 | 55·49 | 58·36 | 59·09 | 60·0 | 65·2 |
| | 24 to | 30 | 50·92 | 55·36 | 57·96 | 58·14 | 56·0 | 59·7 |
| October | 1 to October | 7 | 51·10 | 55·31 | 57·12 | 56·24 | 55·0 | 58·9 |
| | 8 to | 14 | 51·24 | 55·20 | 56·29 | 55·56 | 57·1 | 61·7 |
| | 15 to | 21 | 51·50 | 54·90 | 55·88 | 55·17 | 54·4 | 57·1 |
| | 22 to | 28 | 51·52 | 54·69 | 55·35 | 54·81 | 54·7 | 55·2 |
| | 29 to November | 4 | 51·59 | 54·38 | 54·68 | 52·33 | 45·6 | 43·6 |
| November | 5 to | 11 | 51·67 | 54·12 | 53·07 | 48·66 | 44·0 | 45·8 |
| | 12 to | 18 | 51·72 | 53·59 | 51·50 | 47·22 | 41·1 | 40·2 |
| | 19 to | 25 | 51·76 | 52·96 | 49·83 | 44·01 | 39·4 | 41·0 |
| | 26 to December | 2 | 51·81 | 52·23 | 48·30 | 42·77 | 37·5 | 36·4 |
| December | 3 to | 9 | 51·84 | 51·47 | 47·23 | 42·56 | 43·8 | 44·0 |
| | 10 to | 16 | 51·76 | 50·61 | 47·07 | 44·16 | 43·1 | 42·2 |
| | 17 to | 23 | 51·68 | 50·07 | 47·02 | 44·02 | 44·6 | 45·0 |
| | 24 to | 31 | 51·54 | 49·58 | 46·83 | 43·22 | 39·0 | 37·3 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

| 1852. Period. | | | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|---|---|
| | | | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | d | d | ° | ° | ° | ° | ° | ° |
| January | 1 to January | 7 | 51·41 | 49·21 | 45·96 | 41·53 | 40·2 | 41·2 |
| | 8 to | 14 | 51·28 | 48·76 | 45·27 | 41·59 | 43·2 | 44·2 |
| | 15 to | 21 | 51·13 | 48·22 | 45·23 | 42·99 | 45·6 | 47·6 |
| | 22 to | 28 | 50·98 | 47·90 | 45·38 | 42·64 | 42·8 | 43·6 |
| | 29 to February | 4 | 50·81 | 47·66 | 45·10 | 42·45 | 44·0 | 46·2 |
| February | 5 to | 11 | 50·62 | 47·37 | 45·29 | 43·64 | 43·9 | 44·8 |
| | 12 to | 18 | 50·46 | 47·20 | 45·19 | 42·07 | 41·7 | 45·1 |
| | 19 to | 25 | 50·28 | 47·03 | 44·74 | 41·39 | 38·5 | 40·2 |
| | 26 to March | 3 | 50·12 | 46·78 | 44·18 | 40·63 | 40·6 | 43·6 |
| March | 4 to | 10 | 49·98 | 46·50 | 43·77 | 40·06 | 40·0 | 44·8 |
| | 11 to | 17 | 49·80 | 46·25 | 43·65 | 40·98 | 42·2 | 44·2 |
| | 18 to | 24 | 49·71 | 46·00 | 43·96 | 42·05 | 45·3 | 53·5 |
| | 25 to | 31 | 49·54 | 45·94 | 44·48 | 43·31 | 46·1 | 49·1 |
| April | 1 to April | 7 | 49·40 | 45·92 | 45·00 | 44·22 | 46·5 | 51·7 |
| | 8 to | 14 | 49·25 | 46·00 | 45·71 | 45·61 | 50·0 | 57·9 |
| | 15 to | 21 | 49·10 | 46·14 | 46·60 | 47·09 | 49·1 | 53·3 |
| | 22 to | 28 | 48·98 | 46·41 | 47·33 | 47·67 | 52·9 | 59·0 |
| | 29 to May | 5 | 48·83 | 46·60 | 47·93 | 48·49 | 51·8 | 55·9 |
| May | 6 to | 12 | 48·75 | 46·93 | 48·50 | 49·51 | 54·9 | 60·4 |
| | 13 to | 19 | 48·68 | 47·28 | 49·38 | 51·36 | 57·5 | 61·5 |
| | 20 to | 26 | 48·66 | 47·73 | 50·56 | 53·22 | 57·1 | 60·3 |
| | 27 to June | 2 | 48·64 | 48·25 | 51·34 | 53·12 | 54·2 | 57·9 |
| June | 3 to | 9 | 48·64 | 48·74 | 51·74 | 53·87 | 59·2 | 62·8 |
| | 10 to | 16 | 48·65 | 49·16 | 52·59 | 54·59 | 56·2 | 58·8 |
| | 17 to | 23 | 48·70 | 49·62 | 53·06 | 55·45 | 60·2 | 63·5 |
| | 24 to | 30 | 48·77 | 50·06 | 53·96 | 57·15 | 62·6 | 64·7 |
| July | 1 to July | 7 | 48·85 | 50·57 | 55·10 | 59·38 | 70·2 | 77·5 |
| | 8 to | 14 | 48·93 | 51·14 | 57·04 | 63·62 | 72·5 | 80·0 |
| | 15 to | 21 | 49·05 | 51·96 | 58·73 | 65·28 | 71·5 | 77·4 |
| | 22 to | 28 | 49·20 | 52·91 | 59·23 | 65·52 | 70·2 | 75·8 |
| | 29 to August | 4 | 49·35 | 53·68 | 59·45 | 65·76 | 68·9 | 72·2 |
| August | 5 to | 11 | 49·51 | 54·36 | 59·42 | 63·91 | 64·2 | 66·5 |
| | 12 to | 18 | 49·72 | 54·94 | 59·17 | 62·20 | 63·8 | 68·3 |
| | 19 to | 25 | 49·94 | 55·36 | 59·00 | 62·88 | 65·1 | 68·0 |
| | 26 to September | 1 | 50·20 | 55·58 | 59·46 | 63·46 | 66·0 | 70·8 |
| September | 2 to | 8 | 50·45 | 55·83 | 59·43 | 63·19 | 68·2 | 69·4 |
| | 9 to | 15 | 50·66 | 56·05 | 59·41 | 61·98 | 61·4 | 63·9 |
| | 16 to | 22 | 50·87 | 56·20 | 58·20 | 59·40 | 57·4 | 58·7 |
| | 23 to | 29 | 51·11 | 56·24 | 58·76 | 57·89 | 57·8 | 61·5 |
| | 30 to October | 6 | 51·34 | 56·07 | 57·58 | 56·22 | 52·8 | 54·4 |
| October | 7 to | 13 | 51·56 | 55·83 | 56·10 | 53·29 | 49·1 | 51·7 |
| | 14 to | 20 | 51·73 | 55·39 | 54·81 | 52·29 | 50·6 | 54·6 |
| | 21 to | 27 | 51·84 | 54·85 | 53·94 | 51·68 | 50·5 | 51·6 |
| | 28 to November | 3 | 52·04 | 54·36 | 52·94 | 50·59 | 51·6 | 54·1 |
| November | 4 to | 10 | 52·14 | 53·88 | 52·80 | 51·95 | 54·2 | 56·3 |
| | 11 to | 17 | 52·21 | 53·51 | 52·64 | 51·61 | 51·4 | 51·8 |
| | 18 to | 24 | 52·25 | 53·16 | 52·02 | 49·80 | 46·5 | 46·1 |
| | 25 to December | 1 | 52·25 | 52·80 | 51·06 | 48·01 | 44·6 | 46·2 |
| December | 2 to | 8 | 52·21 | 52·50 | 50·27 | 47·17 | 47·7 | 48·4 |
| | 9 to | 15 | 52·14 | 52·05 | 50·07 | 48·20 | 50·8 | 52·4 |
| | 16 to | 22 | 52·01 | 51·71 | 50·05 | 47·91 | 47·3 | 48·2 |
| | 23 to | 31 | 51·95 | 51·33 | 49·52 | 47·12 | 47·3 | 48·3 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

| 1853. Period. | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|
| | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| d d | ° | ° | ° | ° | ° | ° |
| January 1 to January 7 | 51·85 | 51·00 | 49·16 | 46·86 | 47·5 | 48·8 |
| 8 to 14 | 51·74 | 50·67 | 48·63 | 45·81 | 45·8 | 46·9 |
| 15 to 21 | 51·65 | 50·32 | 48·04 | 44·85 | 44·4 | 45·5 |
| 22 to 28 | 51·48 | 49·90 | 47·42 | 43·86 | 40·6 | 39·5 |
| 29 to February 4 | 51·34 | 49·48 | 46·64 | 42·55 | 39·3 | 38·6 |
| February 5 to 11 | 51·23 | 49·09 | 45·91 | 41·78 | 39·0 | 38·2 |
| 12 to 18 | 51·06 | 48·61 | 45·20 | 40·42 | 35·3 | 35·6 |
| 19 to 25 | 50·97 | 48·17 | 44·22 | 38·75 | 35·5 | 36·4 |
| 26 to March 4 | 50·79 | 47·51 | 43·26 | 38·31 | 37·3 | 38·8 |
| March 5 to 11 | 50·68 | 46·97 | 43·09 | 40·35 | 44·6 | 49·0 |
| 12 to 18 | 50·47 | 46·51 | 43·99 | 42·14 | 43·8 | 42·1 |
| 19 to 25 | 50·28 | 46·32 | 44·01 | 40·37 | 37·2 | 38·3 |
| 26 to April 1 | 50·09 | 46·18 | 43·43 | 39·99 | 44·7 | 49·5 |
| April 2 to 8 | 49·90 | 45·89 | 43·91 | 43·42 | 49·5 | 53·3 |
| 9 to 15 | 49·71 | 45·85 | 45·17 | 44·73 | 46·3 | 48·7 |
| 16 to 22 | 49·54 | 45·99 | 45·65 | 45·26 | 47·2 | 51·3 |
| 23 to 29 | 49·33 | 46·15 | 46·22 | 45·60 | 44·2 | 46·4 |
| 30 to May 6 | 49·15 | 46·32 | 46·59 | 47·06 | 52·5 | 56·8 |
| May 7 to 13 | 48·99 | 46·55 | 47·55 | 47·52 | 48·3 | 49·9 |
| 14 to 20 | 48·92 | 46·90 | 48·11 | 49·65 | 58·3 | 66·1 |
| 21 to 27 | 48·83 | 47·15 | 49·82 | 53·21 | 61·0 | 72·3 |
| 28 to June 3 | 48·77 | 47·74 | 51·52 | 54·66 | 58·3 | 60·2 |
| June 4 to 10 | 48·75 | 48·47 | 52·27 | 54·94 | 63·6 | 69·5 |
| 11 to 17 | 48·76 | 49·12 | 53·41 | 57·06 | 63·6 | 69·1 |
| 18 to 24 | 48·77 | 49·71 | 54·38 | 57·46 | 61·6 | 66·0 |
| 25 to July 1 | 48·86 | 50·39 | 54·80 | 58·27 | 63·4 | 66·5 |
| July 2 to 8 | 48·93 | 50·94 | 55·62 | 59·02 | 62·5 | 71·1 |
| 9 to 15 | 49·03 | 51·65 | 56·86 | 60·97 | 63·6 | 65·5 |
| 16 to 22 | 49·18 | 52·50 | 57·93 | 59·84 | 62·9 | 65·6 |
| 23 to 29 | 49·34 | 52·85 | 57·90 | 60·46 | 64·1 | 68·4 |
| 30 to August 5 | 49·52 | 53·26 | 58·14 | 61·24 | 66·3 | 70·9 |
| August 6 to 12 | 49·72 | 53·63 | 58·71 | 62·04 | 65·5 | 71·6 |
| 13 to 19 | 49·88 | 53·99 | 59·15 | 61·84 | 63·9 | 67·0 |
| 20 to 26 | 50·07 | 54·39 | 59·18 | 61·64 | 64·0 | 67·0 |
| 27 to September 2 | 50·28 | 54·71 | 58·93 | 60·08 | 60·1 | 63·7 |
| September 3 to 9 | 50·48 | 54·94 | 58·45 | 59·05 | 59·6 | 63·0 |
| 10 to 16 | 50·70 | 55·04 | 57·97 | 58·62 | 60·3 | 63·0 |
| 17 to 23 | 50·90 | 55·05 | 57·76 | 58·39 | 59·9 | 63·4 |
| 24 to 30 | 51·08 | 55·04 | 57·30 | 56·98 | 61·6 | 58·3 |
| October 1 to October 7 | 51·21 | 54·94 | 56·33 | 54·86 | 58·5 | 52·9 |
| 8 to 14 | 51·38 | 54·78 | 55·31 | 54·13 | 54·6 | 56·8 |
| 15 to 21 | 51·54 | 54·50 | 54·85 | 53·46 | 51·4 | 53·8 |
| 22 to 28 | 51·69 | 54·25 | 54·23 | 53·38 | 57·1 | 60·8 |
| 29 to November 4 | 51·81 | 53·95 | 54·08 | 62·82 | 52·0 | 54·6 |
| November 5 to 11 | 51·83 | 53·68 | 53·42 | 51·59 | 49·7 | 50·4 |
| 12 to 18 | 51·83 | 53·33 | 52·22 | 48·49 | 42·7 | 41·9 |
| 19 to 25 | 51·83 | 52·88 | 50·50 | 45·11 | 39·3 | 40·1 |
| 26 to December 2 | 51·85 | 52·23 | 48·56 | 43·92 | 43·6 | 43·8 |
| December 3 to 9 | 51·82 | 51·51 | 48·04 | 44·13 | 42·2 | 41·5 |
| 10 to 16 | 51·76 | 50·78 | 47·46 | 42·96 | 38·8 | 37·2 |
| 17 to 23 | 51·67 | 50·19 | 46·34 | 40·82 | 36·0 | 33·6 |
| 24 to 31 | 51·52 | 49·48 | 45·11 | 39·35 | 33·8 | 31·7 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

| 1854. Period. | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|
| | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | ° | ° | ° | ° | ° | ° |
| January 1 to January 7 | 51·38 | 48·61 | 43·88 | 37·65 | 34·2 | 32·7 |
| 8 to 14 | 51·23 | 47·97 | 42·69 | 37·70 | 38·1 | 38·6 |
| 15 to 21 | 51·06 | 47·22 | 42·84 | 39·58 | 43·5 | 45·5 |
| 22 to 28 | 50·84 | 46·72 | 43·49 | 40·90 | 43·4 | 46·0 |
| 29 to February 4 | 50·65 | 46·49 | 43·97 | 42·46 | 44·2 | 45·2 |
| February 5 to 11 | 50·37 | 46·34 | 44·39 | 42·25 | 43·7 | 46·3 |
| 12 to 18 | 50·16 | 46·26 | 44·12 | 40·38 | 38·8 | 39·9 |
| 19 to 25 | 49·96 | 46·11 | 43·46 | 39·93 | 41·6 | 46·7 |
| 26 to March 4 | 49·77 | 45·80 | 43·42 | 40·64 | 41·6 | 49·5 |
| March 5 to 11 | 49·54 | 45·62 | 43·44 | 41·28 | 46·0 | 50·0 |
| 12 to 18 | 49·40 | 45·48 | 44·35 | 44·09 | 48·4 | 53·7 |
| 19 to 25 | 49·20 | 45·51 | 44·90 | 43·24 | 43·2 | 44·2 |
| 26 to April 1 | 49·04 | 45·62 | 44·87 | 43·46 | 47·6 | 54·9 |
| April 2 to 8 | 48·89 | 45·68 | 45·59 | 46·00 | 51·4 | 60·5 |
| 9 to 15 | 48·77 | 45·83 | 46·69 | 47·99 | 54·3 | 59·8 |
| 16 to 22 | 48·67 | 46·23 | 47·96 | 49·84 | 56·6 | 64·2 |
| 23 to 29 | 48·46 | 46·65 | 48·84 | 49·33 | 48·6 | 51·1 |
| 30 to May 6 | 48·46 | 47·07 | 48.66 | 48·67 | 52·2 | 56·6 |
| May 7 to 13 | 48·43 | 47·33 | 49·02 | 49·62 | 51·8 | 57·1 |
| 14 to 20 | 48·40 | 47·59 | 49·76 | 51·84 | 55·8 | 63·0 |
| 21 to 27 | 48·40 | 47·92 | 50·90 | 53·20 | 56·2 | 58·4 |
| 28 to June 3 | 48·40 | 48·38 | 51·55 | 53·23 | 56·2 | 60·5 |
| June 4 to 10 | 48·41 | 48·81 | 51·90 | 53·82 | 55·9 | 59·5 |
| 11 to 17 | 48·45 | 49·22 | 52·60 | 54·86 | 59·3 | 63·7 |
| 18 to 24 | 48·54 | 49·68 | 53·43 | 56·27 | 62·6 | 67·5 |
| 25 to July 1 | 48·61 | 50·09 | 54·54 | 58·67 | 62·2 | 63·8 |
| July 2 to 8 | 48·63 | 50·68 | 55·36 | 58·43 | 61·8 | 64·2 |
| 9 to 15 | 48·81 | 51·24 | 55·75 | 58·24 | 60·4 | 62·9 |
| 16 to 22 | 48·94 | 51·73 | 56·09 | 59·50 | 66·0 | 73·3 |
| 23 to 29 | 49·09 | 52·18 | 57·49 | 63·10 | 70·1 | 76·3 |
| 30 to August 5 | 49·21 | 52·70 | 58·93 | 62·85 | 61·3 | 63·6 |
| August 6 to 12 | 49·40 | 53·40 | 58·88 | 60·66 | 63·9 | 68·5 |
| 13 to 19 | 49·59 | 53·86 | 58·86 | 61·40 | 64·7 | 68·1 |
| 20 to 26 | 49·78 | 54·17 | 58·82 | 61·32 | 63·8 | 69·8 |
| 27 to September 2 | 49·97 | 54·50 | 59·10 | 62·70 | 70·0 | 77·1 |
| September 3 to 9 | 50·15 | 54·76 | 59·11 | 62·59 | 64·5 | 72·7 |
| 10 to 16 | 50·35 | 55·09 | 58·08 | 61·51 | 63·8 | 70·3 |
| 17 to 23 | 50·52 | 56·31 | 58·44 | 61·18 | 60·4 | 63·4 |
| 24 to 30 | 50·71 | 55·46 | 58·76 | 58·74 | 56·8 | 64·2 |
| October 1 to October 7 | 50·81 | 55·42 | 57·75 | 57·06 | 57·2 | 61·7 |
| 8 to 14 | 51·06 | 55·31 | 56·97 | 56·51 | 54·7 | 58·6 |
| 15 to 21 | 51·31 | 55·06 | 55·98 | 53·90 | 50·0 | 51·7 |
| 22 to 28 | 51·37 | 54·76 | 54·69 | 51·47 | 48·6 | 52·0 |
| 29 to November 4 | 51·48 | 54·34 | 53·41 | 50·87 | 51·8 | 55·7 |
| November 5 to 11 | 51·61 | 53·83 | 52·71 | 49·66 | 45·6 | 46·2 |
| 12 to 18 | 51·64 | 53·28 | 51·36 | 47·40 | 44·6 | 44·3 |
| 19 to 25 | 51·63 | 52·67 | 50·28 | 45·76 | 40·4 | 39·2 |
| 26 to December 2 | 51·66 | 52·09 | 48·82 | 43·88 | 41·1 | 41·1 |
| December 3 to 9 | 51·65 | 51·39 | 47·96 | 43·94 | 44·3 | 45·0 |
| 10 to 16 | 51·63 | 50·76 | 47·31 | 43·09 | 44·7 | 45·3 |
| 17 to 23 | 51·55 | 50·14 | 46·97 | 43·32 | 41·8 | 41·4 |
| 24 to 31 | 51·39 | 49·52 | 46·49 | 42·94 | 40·8 | 40·3 |

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*concluded.*

| 1855. Period. | | | | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| | d | | d | ° | ° | ° | ° | ° | ° |
| January | 1 | to January | 7 | 51·32 | 49·18 | 46·00 | 42·86 | 46·4 | 48·1 |
| | 8 | to | 14 | 51·15 | 48·71 | 46·23 | 43·84 | 42·5 | 41·8 |
| | 15 | to | 21 | 50·98 | 48·49 | 45·82 | 41·43 | 33·9 | 32·5 |
| | 22 | to | 28 | 50·80 | 48·16 | 44·62 | 39·29 | 33·5 | 34·4 |
| | 29 | to February | 4 | 50·66 | 47·59 | 43·60 | 38·30 | 33·6 | 32·0 |
| February | 5 | to | 11 | 50·49 | 47·00 | 42·77 | 37·76 | 34·6 | 33·1 |
| | 12 | to | 18 | 50·32 | 46·39 | 42·17 | 37·07 | 31·9 | 31·8 |
| | 19 | to | 25 | 50·16 | 45·90 | 41·52 | 36·04 | 31·1 | 34·6 |
| | 26 | to March | 4 | 49·96 | 45·35 | 40·88 | 36·39 | 40·4 | 44·2 |
| March | 5 | to | 11 | 49·74 | 44·79 | 41·39 | 38·77 | 38·8 | 41·7 |
| | 12 | to | 18 | 49·54 | 44·60 | 41·71 | 38·60 | 42·2 | 45·1 |
| | 19 | to | 25 | 49·23 | 44·39 | 42·17 | 40·48 | 41·2 | 43·2 |
| | 26 | to April | 1 | 49·11 | 44·34 | 42·45 | 39·60 | 41·0 | 42·7 |
| April | 2 | to | 8 | 48·85 | 44·39 | 42·56 | 40·53 | 44·2 | 49·1 |
| | 9 | to | 15 | 48·66 | 44·32 | 43·39 | 43·29 | 49·0 | 53·0 |
| | 16 | to | 22 | 48·44 | 44·42 | 44·87 | 46·43 | 52·1 | 60·5 |
| | 23 | to | 29 | 48·28 | 44·76 | 46·34 | 47·13 | 49·5 | 55·5 |
| | 30 | to May | 6 | 48·16 | 45·31 | 47·10 | 47·78 | 49·3 | 52·9 |
| May | 7 | to | 13 | 47·99 | 45·70 | 47·57 | 48·46 | 51·4 | 55·8 |
| | 14 | to | 20 | 47·91 | 46·12 | 47·99 | 48·02 | 50·7 | 54·7 |
| | 21 | to | 27 | 47·87 | 46·50 | 48·84 | 50·14 | 58·1 | 63·7 |
| | 28 | to June | 3 | 47·80 | 46·76 | 49·71 | 52·41 | 53·8 | 52·6 |
| June | 4 | to | 10 | 47·82 | 47·28 | 50·44 | 53·02 | 60·8 | 66·6 |
| | 11 | to | 17 | 47·83 | 47·79 | 51·87 | 55·90 | 60·2 | 62·7 |
| | 18 | to | 24 | 47·84 | 48·36 | 52·72 | 55·04 | 58·8 | 64·6 |
| | 25 | to July | 1 | 47·94 | 49·11 | 53·51 | 57·67 | 68·1 | 75·7 |
| July | 2 | to | 8 | 48·03 | 49·63 | 55·12 | 60·85 | 67·4 | 72·7 |
| | 9 | to | 15 | 48·12 | 50·38 | 56·72 | 61·96 | 66·8 | 70·9 |
| | 16 | to | 22 | 48·22 | 51·24 | 57·40 | 61·84 | 63·1 | 64·8 |
| | 23 | to | 29 | 48·39 | 51·90 | 57·81 | 61·15 | 64·6 | 68·0 |
| | 30 | to August | 5 | 48·55 | 52·49 | 58·10 | 61·55 | 66·2 | 70·1 |
| August | 6 | to | 12 | 48·73 | 52·93 | 58·92 | 62·02 | 65·2 | 68·0 |
| | 13 | to | 19 | 49·04 | 53·42 | 59·00 | 61·49 | 65·6 | 71·5 |
| | 20 | to | 26 | 49·22 | 53·78 | 58·93 | 62·42 | 66·5 | 70·6 |
| | 27 | to September | 2 | 49·42 | 54·09 | 58·93 | 62·46 | 66·4 | 71·9 |
| September | 3 | to | 9 | 49·61 | 54·50 | 59·00 | 61·22 | 61·0 | 64·4 |
| | 10 | to | 16 | 49·83 | 54·79 | 58·00 | 59·78 | 59·7 | 63·8 |
| | 17 | to | 23 | 50·06 | 54·91 | 57·80 | 59·53 | 62·2 | 67·7 |
| | 24 | to | 30 | 50·28 | 54·95 | 58·36 | 59·28 | 60·1 | 64·4 |
| October | 1 | to October | 7 | 50·45 | 54·96 | 57·86 | 58·35 | 58·6 | 62·0 |
| | 8 | to | 14 | 50·65 | 54·91 | 57·18 | 56·70 | 55·5 | 58·6 |
| | 15 | to | 21 | 50·80 | 54·82 | 56·24 | 54·75 | 53·2 | 57·2 |
| | 22 | to | 28 | 50·98 | 54·66 | 55·34 | 54·44 | 53·1 | 53·9 |
| | 29 | to November | 4 | 51·15 | 54·27 | 54·02 | 51·37 | 47·2 | 45·9 |
| November | 5 | to | 11 | 51·34 | 53·93 | 52·62 | 48·99 | 48·2 | 50·9 |
| | 12 | to | 18 | 51·42 | 53·36 | 51·84 | 48·97 | 44·4 | 43·8 |
| | 19 | to | 25 | 51·46 | 52·82 | 50·80 | 46·80 | 42·6 | 40·8 |
| | 26 | to December | 2 | 51·49 | 52·26 | 49·61 | 45·33 | 41·9 | 42·3 |
| December | 3 | to | 9 | 51·48 | 51·63 | 48·60 | 43·98 | 39·5 | 39·0 |
| | 10 | to | 16 | 51·42 | 50·98 | 47·26 | 41·38 | 36·2 | 35·2 |
| | 17 | to | 23 | 51·33 | 50·21 | 46·00 | 40·63 | 33·3 | 30·3 |
| | 24 | to | 31 | 51·25 | 49·23 | 44·75 | 39·07 | 44·8 | 48·4 |

## MONTHLY MEANS of READINGS of DEEP-SUNK THERMOMETERS.

| MONTH. | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|
| | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| 1848. | ° | ° | ° | ° | ° | ° |
| January | 51·47 | 49·64 | 45·80 | 41·28 | 37·4 | 36·3 |
| February | 50·92 | 47·39 | 44·26 | 42·00 | 44·1 | 45·8 |
| March | 50·08 | 46·57 | 44·93 | 43·30 | 44·6 | 46·2 |
| April | 49·39 | 46·93 | 47·45 | 47·72 | 49·5 | 52·1 |
| May | 49·07 | 48·28 | 51·09 | 54·34 | 61·6 | 68·0 |
| June | 49·15 | 50·90 | 55·28 | 58·36 | 61·7 | 63·9 |
| July | 49·68 | 53·01 | 57·99 | 61·21 | 65·0 | 68·7 |
| August | 50·41 | 54·70 | 58·87 | 60·15 | 60·8 | 63·0 |
| September | 51·19 | 55·28 | 57·78 | 58·45 | 58·8 | 63·3 |
| October | 51·81 | 55·07 | 55·78 | 54·75 | 53·5 | 55·3 |
| November | 52·15 | 53·44 | 51·07 | 47·53 | 45·5 | 46·7 |
| December | 52·04 | 51·19 | 48·73 | 45·88 | 45·5 | 46·6 |
| 1849. | ° | ° | ° | ° | ° | ° |
| January | 52·54 | 49·21 | 45·88 | 42·55 | 41·6 | 41·9 |
| February | 50·97 | 47·89 | 45·67 | 43·28 | 43·6 | 45·8 |
| March | 50·15 | 47·11 | 45·31 | 43·59 | 44·3 | 46·8 |
| April | 49·57 | 46·92 | 46·09 | 44·86 | 46·3 | 49·1 |
| May | 49·15 | 47·46 | 49·14 | 51·15 | 56·5 | 60·6 |
| June | 49·01 | 49·91 | 54·51 | 58·36 | 60·3 | 68·5 |
| July | 49·42 | 52·63 | 57·67 | 61·69 | 65·0 | 68·8 |
| August | 50·22 | 54·51 | 58·31 | 61·44 | 65·2 | 69·4 |
| September | 50·97 | 55·49 | 58·06 | 60·11 | 60·9 | 65·3 |
| October | 51·67 | 55·21 | 55·75 | 54·42 | 50·0 | 55·8 |
| November | 52·04 | 53·73 | 52·64 | 49·75 | 46·5 | 47·5 |
| December | 52·03 | 51·51 | 48·15 | 44·08 | 41·1 | 40·6 |
| 1850. | ° | ° | ° | ° | ° | ° |
| January | 51·46 | 48·80 | 44·22 | 39·13 | 36·7 | 35·9 |
| February | 50·83 | 46·68 | 43·96 | 41·87 | 44·4 | 47·3 |
| March | 49·99 | 46·37 | 44·79 | 42·44 | 41·9 | 45·0 |
| April | 49·34 | 46·16 | 45·85 | 46·04 | 50·4 | 54·0 |
| May | 48·87 | 47·19 | 48·54 | 49·50 | 53·0 | 56·2 |
| June | 48·78 | 49·24 | 53·61 | 57·84 | 64·1 | 69·7 |
| July | 49·10 | 51·96 | 58·06 | 60·73 | 65·2 | 69·0 |
| August | 49·81 | 54·06 | 58·92 | 61·26 | 63·0 | 67·0 |
| September | 50·65 | 54·88 | 57·60 | 57·97 | 58·7 | 63·4 |
| October | 51·29 | 54·38 | 54·69 | 52·61 | 49·5 | 52·2 |
| November | 51·63 | 52·67 | 51·16 | 48·85 | 48·7 | 49·5 |
| December | 51·54 | 50·87 | 48·08 | 44·21 | 42·7 | 42·5 |
| 1851. | ° | ° | ° | ° | ° | ° |
| January | 51·16 | 48·84 | 46·27 | 43·62 | 44·2 | 45·5 |
| February | 50·30 | 47·50 | 44·70 | 41·80 | 42·7 | 44·3 |
| March | 49·86 | 46·35 | 44·33 | 42·26 | 44·0 | 46·8 |
| April | 49·18 | 46·29 | 46·19 | 45·84 | 48·5 | 51·5 |
| May | 48·76 | 47·29 | 48·86 | 49·96 | 54·8 | 59·1 |
| June | 48·73 | 49·24 | 53·22 | 56·63 | 62·2 | 69·2 |
| July | 49·67 | 51·88 | 57·14 | 60·73 | 63·8 | 67·8 |
| August | 49·78 | 54·02 | 58·87 | 62·76 | 65·5 | 70·6 |
| September | 50·60 | 55·32 | 58·48 | 59·52 | 60·0 | 64·7 |
| October | 51·36 | 54·98 | 56·08 | 55·32 | 54·7 | 57·3 |
| November | 51·72 | 53·41 | 51·35 | 46·63 | 41·2 | 41·6 |
| December | 51·72 | 50·55 | 47·10 | 43·38 | 42·2 | 41·8 |

MONTHLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*concluded.*

| MONTH. | Thermometers sunk in the ground. | | | | | Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales. |
|---|---|---|---|---|---|---|
| | Bulb 24 French Feet deep. | Bulb 12 French Feet deep. | Bulb 6 French Feet deep. | Bulb 3 French Feet deep. | Bulb 1 Inch deep. | |
| 1852. | ° | ° | ° | ° | ° | ° |
| January | 51·16 | 48·43 | 45·43 | 42·17 | 43·1 | 44·1 |
| February | 50·46 | 47·21 | 44·97 | 42·21 | 42·0 | 44·1 |
| March | 49·79 | 46·23 | 43·98 | 41·50 | 43·0 | 47·3 |
| April | 49·16 | 46·15 | 46·30 | 46·33 | 49·9 | 55·5 |
| May | 48·71 | 47·34 | 49·53 | 51·24 | 55·1 | 59·1 |
| June | 48·69 | 49·32 | 52·73 | 55·07 | 59·4 | 62·4 |
| July | 49·04 | 51·85 | 56·72 | 63·70 | 71·0 | 77·4 |
| August | 49·77 | 54·90 | 59·29 | 63·41 | 65·2 | 68·5 |
| September | 50·77 | 56·07 | 59·16 | 60·60 | 61·1 | 63·3 |
| October | 51·68 | 55·39 | 55·24 | 52·84 | 50·2 | 52·5 |
| November | 52·20 | 53·48 | 52·26 | 50·59 | 50·4 | 51·6 |
| December | 52·09 | 51·90 | 49·98 | 47·55 | 48·0 | 49·0 |
| 1853. | ° | ° | ° | ° | ° | ° |
| January | 51·66 | 50·40 | 48·21 | 45·16 | 44·3 | 44·8 |
| February | 51·11 | 48·68 | 48·21 | 40·50 | 37·0 | 37·1 |
| March | 50·46 | 46·65 | 43·53 | 40·35 | 41·8 | 43·7 |
| April | 49·41 | 45·99 | 45·18 | 44·59 | 47·4 | 50·3 |
| May | 48·94 | 46·84 | 48·45 | 50·16 | 55·8 | 61·4 |
| June | 48·78 | 49·20 | 53·46 | 56·20 | 62·3 | 66·9 |
| July | 49·12 | 51·97 | 57·11 | 60·10 | 63·2 | 67·5 |
| August | 49·88 | 53·97 | 58·86 | 61·52 | 64·2 | 68·7 |
| September | 50·73 | 55·00 | 58·00 | 58·49 | 60·3 | 62·2 |
| October | 51·48 | 54·57 | 55·11 | 53·94 | 55·1 | 55·9 |
| November | 51·83 | 53·23 | 51·78 | 48·14 | 44·9 | 45·6 |
| December | 51·70 | 50·56 | 46·79 | 41·92 | 38·0 | 36·4 |
| 1854. | ° | ° | ° | ° | ° | ° |
| January | 51·09 | 47·53 | 43·30 | 39·25 | 40·6 | 41·7 |
| February | 50·21 | 46·24 | 43·95 | 41·15 | 41·6 | 44·4 |
| March | 49·37 | 45·59 | 44·22 | 42·64 | 45·3 | 50·1 |
| April | 48·74 | 46·07 | 47·13 | 48·09 | 52·7 | 59·4 |
| May | 48·42 | 47·56 | 49·79 | 51·08 | 54·1 | 58·9 |
| June | 48·48 | 49·31 | 52·87 | 55·52 | 59·8 | 63·5 |
| July | 48·88 | 51·45 | 56·22 | 59·90 | 64·4 | 68·8 |
| August | 49·57 | 53·71 | 58·91 | 61·63 | 64·6 | 69·1 |
| September | 50·17 | 55·11 | 58·65 | 61·17 | 61·6 | 68·0 |
| October | 51·17 | 55·08 | 56·12 | 54·31 | 52·8 | 56·7 |
| November | 51·61 | 53·22 | 51·29 | 47·48 | 44·1 | 43·9 |
| December | 51·57 | 50·61 | 47·31 | 43·38 | 42·9 | 43·1 |
| 1855. | ° | ° | ° | ° | ° | ° |
| January | 51·02 | 48·53 | 45·46 | 41·48 | 38·4 | 38·4 |
| February | 50·32 | 46·44 | 42·17 | 36·94 | 33·4 | 34·0 |
| March | 49·48 | 44·61 | 41·79 | 39·05 | 41·0 | 43·7 |
| April | 48·53 | 44·50 | 44·47 | 44·64 | 48·9 | 54·6 |
| May | 47·95 | 46·06 | 48·07 | 49·25 | 52·8 | 57·4 |
| June | 49·85 | 48·04 | 51·98 | 55·12 | 61·2 | 66·3 |
| July | 48·21 | 50·91 | 56·86 | 61·43 | 65·6 | 69·1 |
| August | 49·01 | 53·40 | 58·83 | 62·03 | 66·0 | 70·6 |
| September | 49·93 | 54·75 | 58·31 | 60·06 | 60·9 | 65·2 |
| October | 50·77 | 54·78 | 56·42 | 55·66 | 55·8 | 57·1 |
| November | 51·40 | 53·26 | 51·57 | 47·97 | 44·3 | 44·3 |
| December | 51·38 | 50·52 | 46·72 | 41·52 | 38·3 | 37·8 |

ROYAL OBSERVATORY, GREENWICH.

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# REDUCTION

OF

# THE OBSERVATIONS

OF THE

# DEEP-SUNK THERMOMETERS

AT THE

## ROYAL OBSERVATORY, GREENWICH,

FROM 1846 TO 1859.

BY

PROFESSOR J. D. EVERETT,

OF KING'S COLLEGE, WINDSOR, NOVA SCOTIA.

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# OBSERVATIONS OF THE DEEP-SUNK THERMOMETERS,

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My first operation was to take the means of the readings of each thermometer for each Calendar Month, year by year. For 1846, 7, and for 1856, 7, 8, the means were already given in the *Greenwich Observations*, and in these instances I have simply copied them, not considering it necessary to revise the calculation. The only exceptions to this statement are the means for the 6 ft. and 3 ft. thermometers for March 1858, in which month a number of observations are wanting (the fluid having sunk below the scale); and as the means printed in the *Observations*, being derived only from the recorded readings, were of necessity too high, I adopted in their stead lower values obtained by a rough estimation. I should also state that wherever erroneous readings were pointed out in the *Observations*, I adopted the corrections there suggested; but these corrections were, in all cases, too insignificant to have any appreciable influence on my ultimate results.

The monthly means are given on pages (cci) and (ccii) of the subjoined tabular statement of results; those values which, from the fluid having risen above or fallen below the scale, are doubtful, being enclosed in brackets. These doubtful cases are almost confined to the 6 ft. thermometer. The mean values for the entire year, given in the last column of each page, are simply the arithmetical means of the 12 monthly values; no allowance being made for the unequal lengths of the months.

The observations extend over 13 years and 9 months, commencing with April 1846 and coming down to the end of December 1859. My second operation was to find the mean monthly values for the 13 years which are entire; viz., 1847–1859. They are given on page (cciii), and were derived from the values for each year in the usual manner.

The next operation was to find the co-efficients of the terms in harmonic expressions which should represent the temperature of each thermometer, in terms of the time of year. For an explanation of the process by which they are obtained, I may refer to my Paper in the *Transactions of the Royal Society of Edinburgh*, Vol. xxii, Part II. The process is identical with that described by Sir John Herschel, art. Meteorology, *Enclyclopædia Britannica*, pp. 664, 665. I adopt the notation employed in my own Paper, except that I write,

$$t \text{ instead of } 2\pi\frac{t}{T}$$

that is to say, I adopt the convention that time shall be represented by degrees at the rate of 360° to the year. I should also state that the two forms

$$\sqrt{\frac{\pi c}{Tk}} \text{ and } \sqrt{\frac{\pi c}{k}}$$

the former of which is used in my paper above referred to, and the latter in Professor Thomson's, which immediately precedes it in the *Transactions*, stand for one and the same function; the latter form (which will be here used) implying the convention that a year is the unit of time. For a full discussion of the units employed, see Professor Thomson's Paper, pp. 424–427.

The values of the coefficients $A_1$, $B_1$, $A_2$, $B_2$, were found by the process exhibited on p. 433 of my Paper in the *Transactions;* but in the present instance the work was carried to one and sometimes two more places of decimals. The values of $E_1$ and $P_1$ were calculated by the formulæ

$$\log \tan E_1 = \log A_1 - \log B_1 + 10$$
$$\log P_1 = \log B_1 + \log \sec E_1 - 10$$

the value of $E_1$ being taken to the nearest 10 seconds. The tabular logarithm of $P_1$ being thus found, the Napierian logarithm was derived from it by a Table. The value of $E_1$ in circular measure was obtained by a Table of "Lengths of Circular Arcs to Radius Unity." The logarithms were carried to 5 places of decimals; but the correctness of the 5th decimal place in the values of $\log_e P_1$ and $E_1$ is not to be depended on.

The next operation was to find the differences in the values of $\log_e P_1$, obtained by comparing the thermometers two and two. The number of thermometers being 4, the number of comparisons is of course 6. The differences in the corresponding values of $E_1$ (in circular measure) were also found. These latter differences ought to be equal to the former, each to each, if the conditions which theory supposes were exactly fulfilled; and any one of them divided by the corresponding difference of depth should give the value of the thermal coefficient $\sqrt{\frac{\pi c}{k}}$ for the stratum of soil intervening betweeen the two thermometers compared, $k$ being the conductivity, $c$ the capacity for heat (or specific heat), both referred to the unit of volume, and $\pi$ the ratio of circumference of circle to diameter. If the surface of the soil is uneven, or if buildings or other objects in the immediate neighbourhood prevent uniformity in the distribution of the surface-temperature, the values of the thermal coefficients derived from $P_1$ cannot be expected to agree exactly with those derived from $E_1$. On the other hand, differences in the thermal qualities of the strata of soil intervening between the bulbs of the thermometers would have no tendency to produce discrepancy between the results from $P_1$ and those from $E_1$, provided that each stratum is uniform horizontally; but would merely bring out differences between results for different depths.

In the present instance, the values of $\sqrt{\frac{\pi c}{k}}$ derived from $E_1$ agree remarkably well among themselves, but differ considerably from the values derived from $P_1$, which latter differ also among themselves. On taking the means of the 6 determinations furnished by each element, it appears, however, that the discrepancies nearly counterbalance each other; the mean value of $\sqrt{\frac{\pi c}{k}}$ derived from $P_1$ (amplitude) being ·09158, and that derived from $E_1$ (epoch) being ·09192. The mean of these two numbers is ·09175.

The values of the same function found for the three stations at Edinburgh were—

| | |
|---|---|
| Calton Hill, Trap Rock ..... | ·1156 |
| Experimental Garden, Sand ..... | ·1098 |
| Craigleith Quarry, Sandstone ..... | ·06744 |

The less the value of this function is, the more sensible will the changes of temperature be at any given depth, and the more rapidly will they be felt.

The values of the half-yearly coefficients $P_2$ and $E_2$ were derived from those of $A_2$ and $B_2$ by a process similar to that already described for $P_1$ and $E_1$, and the differences of $\log_e P_2$ and also of $E_2$, in circular measure, were divided by the corresponding differences of depth. The quotients thus obtained are determinations of the value of $\sqrt{\frac{2\pi c}{k}}$, and have accordingly been divided by $\sqrt{2}$, in order to obtain values of $\sqrt{\frac{\pi c}{k}}$. These latter ought, if the conditions supposed by theory were fulfilled, to agree with those previously obtained from the annual term; and the 6 values derived from $P_2$ ought to be equal respectively to the corresponding values derived from $E_2$. The agreement is much closer in the present instance than in the case of the thermometers at Calton Hill.

Thus far, only the means of the actual readings have been employed; but in order to ascertain the exact temperatures of the bulbs of the thermometers, it is necessary to apply small corrections for temperature of stem. In applying these corrections, I have adopted the method described by Professor (now Principal) Forbes, *Transactions R. S. E.*, Vol. xvi, Part II., except that, instead of correcting each individual reading, I have corrected the monthly means. In correcting for the temperature of that portion of the stem which is exposed to the air, I made use of the Table on page 203 of Professor Forbes' Paper. The mode of obtaining this correction is sufficiently obvious, bearing in mind that alcohol expands, at ordinary temperatures, by ·000555 of its volume for each degree Fahrenheit. The correction for the temperature of the underground portion of the stem is based upon an approximate formula for the mean temperature of the stem, which, though not pretending to great accuracy, is sufficient for the purpose required. In order to apply this

correction, it is of course necessary to know the ratio of the quantity of fluid in the underground portion of the stem to the quantity in the bulb; or, what amounts to the same thing, the number of degrees of the scale that are equivalent to the quantity of fluid in the underground portion of the stem. Respecting this datum I have not been able to obtain direct information; and the analogy of the Edinburgh thermometers does not afford very definite grounds for estimation; for by the Table, p. 198, of Professor Forbes' Paper, it appears that the thermometers at three stations, "Observatory," "Experimental Garden," and "Craigleith," differ considerably, as regards the element in question. I have assumed that the values of "Observatory" are applicable to the Greenwich thermometers; that is to say, that the quantities of fluid in the underground portions of the stems are equivalent respectively to,

$13^\circ{\cdot}7$ for the 24 ft. thermometer.
$4^\circ{\cdot}5$ ,, 12 ,,
$4^\circ{\cdot}8$ ,, 6 ,,

I have also applied corrections for the inequality of the Calendar Months. It would scarcely be practicable to do this completely, and I have therefore contented myself with making January, February, and March, of equal length, each containing 30 days, except in leap year, when I give February 31 days. The mode of effecting this correction was, to find, from the *Observations*, the mean temperature of January 31st, also of March 1st, and hence to calculate what the mean temperature would have been for each of the three months, if these two days had been reckoned as belonging to February.

The results obtained by applying the sum of the three several corrections just described, are given in p. (ccv), under the designation of "Corrected Means for the Period 1847–59." Making these corrected means the basis of calculation, I have repeated the operations already described for finding the value of $\sqrt{\frac{\pi c}{k}}$. The results from the half-yearly term are improved by the application of the corrections; but in the case of the annual term (which is far more important) the discrepancies are increased.

I may remark that I have tried the effect of omitting the second of the above-mentioned corrections and applying the other two; also the effect of applying the first only, and the first two only. These experiments were confined to the annual term, and the results were in each case more discrepant than those obtained from the uncorrected temperatures. I have therefore thought it unnecessary to give them.

With the view of ascertaining whether the values of the coefficients have continued uniform throughout the whole period of observation, I have divided it into three shorter periods; the first containing 4 years and 9 months, the second 5 years, and the third 4 years. The monthly means for each of these periods (uncorrected) are given on p. (ccvi), together with the values of $A_0$, $P_1$, $\log_e P_1$ and $E_1$, derived from them, and on p. (ccvii), the resulting values of $\sqrt{\frac{\pi c}{k}}$ are shown. On inspecting these last results, it will be observed that the values diminish from each period to the next; and also that the agreement between results from amplitude and those from epoch improves. Both these facts are very singular; and I can offer no satisfactory explanation of them. The *primâ facie* inference is, that some change has taken place in the soil, probably as regards moisture. Drainage, building, planting, or clearing may be suggested as possible causes. The diminution of $\sqrt{\frac{\pi c}{k}}$ indicates either a decrease in capacity for heat, or an increase in conductivity.

Another singular fact appears on inspecting the values of $A_0$ (mean temperature of the year) given on p. (ccvi), viz., that the mean temperature at 6 ft. has, in each of the three periods, been greater than at any other depth. I do not think this circumstance can be due to errors in the estimated readings of the 6 ft. thermometer. On the contrary, these readings appear to have been rather under-estimated; for it will be observed, that in deriving values of $\sqrt{\frac{\pi c}{k}}$ from comparison of the values of the $\log_e P_1$ for every pair of thermometers, the least values have been obtained from comparison of those at 12 ft. and 6 ft., and the greatest from those at 6 ft. and 3 ft.; whereas no such difference is observable in the values derived from $E_1$. Hence it appears that the value which we have given to $P_1$ for the 6 ft. thermometer is too small; and therefore the range (which is approximately double of $P_1$) is too small; and since the estimated readings have been taken at the time of maximum temperature, the inference is that they also are too small.

As matter of curiosity rather than use, I have given, on p. (ccvii) the values of the coefficients, and the resulting values of $\sqrt{\frac{\pi c}{k}}$, for the terms whose periods are respectively one-third and one-fourth of a year. These terms are of the form

$$P_3 . \sin(3t + E_3) + P_4 . \sin(4t + E_4)$$

and are to be appended to the annual and half-yearly terms whose coefficients have already been found. The values for these two additional terms have been derived from the "Corrected Means," by a process analogous to that which was used for the two preceding terms.

On p. (ccviii) are given the "Corrections necessary to reduce Calculated to Actual Temperatures;" that is to say, the differences between the observed monthly temperatures and the values of $v$ furnished by each of the expressions

$$v = A_0 + P_1 . \sin (t + E_1)$$
$$v = A_0 + P_1 . \sin (t + E_1) + P_2 . \sin (2t + E_2)$$

the sign + being used to denote excess of observed above calculated temperature. In the construction of this Table the "Corrected Means" and "Corrected Values of Coefficients," p. (ccv), have been employed. In the first set of corrections the occurrence of double maxima and minima in the year is very marked. The corrections here given in no way affect the accuracy of the results previously deduced, since each term in the series for $v$ is independent of the rest.

The relation between results derived (as ours have been) from monthly means, and those which would be furnished by daily means, is as follows:—

Let the monthly mean temperature be represented by the expression—

$$A_0 + P_1 . \sin (t + E_1) + P_2 . \sin (2t + E_2)$$

($t$ being the time for the centre of the month),

then the daily, or more strictly, the instantaneous temperature will be

$$A_0 + P_1 \frac{\text{arc } 15^\circ}{\sin 15^\circ} \sin (t + E_1) + P_2 \frac{\text{arc } 30^\circ}{\sin 30^\circ} \sin (2t + E_2).$$

Hence the only alteration necessary for rendering our results applicable to daily mean temperatures, is to multiply the values found for $P_1$ and $P_2$ by the under-mentioned factors:—

$P_1$ must be multiplied by $\frac{\text{arc } 15^\circ}{\sin 15^\circ}$ that is by 1·0115

$P_2$ ,, ,, $\frac{\text{arc } 30^\circ}{\sin 30^\circ}$ ,, 1·0472

Similarly—

$P_3$ ,, ,, $\frac{\text{arc } 45^\circ}{\sin 45^\circ}$ ,, 1·1107

$P_4$ ,, ,, $\frac{\text{arc } 60^\circ}{\sin 60^\circ}$ ,, 1·2092

Since these factors are the same for all the thermometers, the difference of $\log_e P_1$, obtained by comparing any two thermometers, will remain unchanged. Hence the mode, in which we have derived $\sqrt{\frac{\pi c}{k}}$ from the values of $\log_e P_1$, requires no correction; and the same remark applies to $\log_e P_2$, $\log_e P_3$, $\log_e P_4$. It is evident that the values of $E_1$, $E_2$, $E_3$, $E_4$ require no correction.

It appears from the foregoing investigation, that the value of $\sqrt{\frac{\pi c}{k}}$ for the soil in which the Greenwich thermometers are sunk is about ·092.

If it be required to find approximately the effect, at any given depth, of the daily range of temperature at the surface, we may proceed as follows:—Assume the daily variation at the surface to follow a simple harmonic law, which is the same for every day in the year: employing the same units as we have hitherto used, the term expressing daily variation will be of the form

$$P . \sin (365t + E)$$

and the diminution of $\log_e P$ for each foot of depth will be,

$$\sqrt{\frac{365\pi c}{k}} = \sqrt{365} \times \cdot 092 = 1 \cdot 758,$$

which is the Napierian logarithm of 5·80. Hence the amplitude $P$ diminishes in the ratio of 1 : 5·8 for each foot of depth; and the daily range at the depth of 3 feet will be only $\left(\frac{1}{5 \cdot 8}\right)^3$, or about $\frac{1}{195}$th of that at the surface.

The corresponding retardation of phase for each foot of descent will be 1·758 in circular measure, which is equivalent to about 102 days; and the retardation for three feet will be 306 days.

It is quite obvious then that the daily range at the surface is altogether inappreciable at 3 feet, and *à fortiori* at greater depths. Hence the daily variation in the readings of the deep-sunk thermometers, as recorded in the *Observations* for 1846–7, must be owing to changes of temperature in their stems. As an approximate verification of this assertion, we will take two instances from the *Observations* for 1847 ; and to obviate the necessity of applying the correction mentioned in *Introduction to Greenwich Meteorological Observations*, page lxxi, we shall, in each instance, select the month in which the maximum occurs.

In September of that year the highest and lowest mean readings at even hours of Göttingen time, were—

For Thermometer in Air (Table xxxii),

| | | |
|---|---|---|
| Highest..... | 62·3 | at $4^h$ |
| Lowest ..... | 48·8 | ,, $18^h$ |
| Showing a difference of..... | 13·5 | |

For 12 ft. Thermometer (Table xxiv),

| | | |
|---|---|---|
| Highest..... | 55·16 | at $2^h$ |
| Lowest ..... | 55·06 | ,, $16^h$ and $18^h$ |
| Showing a difference of ..... | ·10 | |

The mean reading of the 12 ft. thermometer for the month was 55·11 ; and as the lowest degree on its scale is 42·0, the mean length of the column exposed to air was 13·11. Since the expansion of alcohol for 1° Fahrenheit is ·000555, we have

$$13{\cdot}11 \times 13{\cdot}5 \times {\cdot}000555 = {\cdot}098$$

for the daily range due to the temperature of the portion of stem exposed to air; which agrees with the difference ·10, shown by the observations.

Again, in August of the same year, we have—

For Thermometer in Air,

| | | |
|---|---|---|
| Highest..... | 72·6 | at $4^h$ |
| Lowest ..... | 56·2 | ,, $18^h$ |
| Difference..... | 16·4 | |

For 3 ft. Thermometer,

| | | |
|---|---|---|
| Highest..... | 62·50 | at $4^h$ |
| Lowest ..... | 62·22 | ,, 18 |
| Difference..... | ·28 | |

Length of column exposed to air $62{\cdot}34 - 34{\cdot}2 = 28{\cdot}14$, and $28{\cdot}14 \times 16{\cdot}4 \times {\cdot}000555 = {\cdot}26$, which nearly agrees with the difference ·28 found above.

The values of $P_1$, $P_2$, $E_1$, $E_2$, for any depth other than 3, 6, 12, or 24 feet, may be found by taking the values of these coefficients for the nearest of the 4 thermometers, and using the equations

$$\text{Difference of } \log_e P_1 = \text{difference of } E_1 = {\cdot}092 \times \text{difference of depth.}$$
$$\text{Difference of } \log_e P_2 = \text{difference of } E_2 = {\cdot}092 \times \sqrt{2} \times \text{difference of depth.}$$

The mean temperature of a horizontal stratum of given thickness may be derived from the expression for the temperature of its centre, by the following rule. Let the product of ·092 or $\sqrt{\frac{\pi c}{k}}$ by half the thickness of the stratum be denoted by $z$, and let the values of $P_1$, $P_2$, $E_1$, $E_2$, for the centre of the stratum be given ; then

$P_1$ must be multiplied by $1 + \frac{1}{45} z^4 - \frac{1}{5670} z^8$ nearly.

$P_2$ ,, ,, $1 + \frac{4}{45} z^4 - \frac{16}{5670} z^8$ ,,

$E_1$ must be increased by $\tan^{-1}\left(\frac{1}{3} z + \frac{1}{105} z^6\right)$ ,,

$E_2$ ,, ,, $\tan^{-1}\left(\frac{2}{3} z^2 + \frac{8}{105} z^6\right)$ ,,

When the stratum is 1 French foot in thickness, it will be found that the multiplier for $P_1$ is 1·0000001, and the correction for $E_1$ is 2′. 25″. Hence we may form some idea of the corrections due to the lengths of the bulbs (10 or 12 inches). It is obvious that these corrections will be very small; and they will be the same for all the thermometers, except in so far as the bulbs differ in length.

The Tables on the latter half of p. (ccviii) have been derived from graphical projection in the following manner:— The monthly means of each thermometer p. (cciii) were made the ordinates of a curve at 12 equidistant points in the line of abscissæ, the curve itself being carefully drawn by hand through the 12 points thus determined. The two points at which the curve intersected the line of mean annual temperature were marked, and are entered in the first Table under the names (derived from an obvious analogy) of vernal and autumnal means. The days midway between these were taken as the centres of warm and cold halves of the year; this part of the calculation being checked by comparison with the values of $E_1$ (p. (cciii)), which in no case differed by more than a day from the values found graphically. The "highest" and "lowest" temperatures, in the last Table on the same page, were determined graphically, and the numbers in the remaining columns (except "Mean of Year") were derived from them. It will be observed that in every instance the temperature rises higher above the mean than it falls below; but the number of days below the mean is greater than the number above.

I have inadvertently omitted above to call attention to the decrease of temperature, with increase of depth, which the thermometers exhibit. This is especially evident from the values of $A_0$, p. (ccvi), which show that in each of the periods the temperature has been higher at 3 than at 12 feet, and higher at 12 than at 24 feet. As, however, the mean temperature of Greenwich (49°·27, I believe,) is less than the lowest of these, it may be that the years which our observations cover have been exceptionally warm.

J. D. EVERETT.

## NOTE BY THE ASTRONOMER ROYAL.

From the establishment of the thermometers to the middle of the year 1857, the excess of fluid in the 6-feet and 3-feet thermometers was such that, when the temperature shown by the 6-feet thermometer rose above 57°·5, or that of the 3-feet thermometer rose above 64°·5, a portion of the fluid passed into the upper bulb.

On 1857, June 22, Mr. Negretti removed from each of these thermometers a quantity of fluid, corresponding to the extent of 5° on its scale; and the scales of the two thermometers were lowered by that quantity, making the readings the same as before.

It appears now that the amount of fluid removed was a little too great. When the temperature of the 6-feet thermometer falls below 43°·5, or that of the 3-feet thermometer below 39°·7, the fluid sinks into the capillary tube.

It appears probable that the observations of the thermometers in their present state will ultimately give material assistance for the completion of the defective higher readings in their former state, and that the readings of the thermometers in their former state enable us to supply the lower readings which are wanting in their present state.

I am unable to suggest any conjectural explanation of the change of mean annual temperature and of law of annual temperature pointed out in page (cxcvii), line 31.

G. B. AIRY.

## TABULAR STATEMENT OF RESULTS.

### MEAN READINGS of THERMOMETER 24 French feet deep.

| Year. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1846 | .. | .. | .. | 48·95 | 48·78 | 48·86 | 49·39 | 50·30 | 51·24 | 52·19 | 52·60 | 52·53 | .. |
| 1847 | 52·05 | 51·18 | 50·19 | 49·34 | 48·83 | 48·69 | 49·09 | 49·81 | 50·64 | 51·34 | 51·72 | 51·79 | 50·39 |
| 1848 | 51·47 | 50·92 | 50·08 | 49·39 | 49·07 | 49·15 | 49·68 | 50·41 | 51·19 | 51·81 | 52·16 | 52·04 | 50·61 |
| 1849 | 51·54 | 50·89 | 50·15 | 49·57 | 49·14 | 49·01 | 49·42 | 50·22 | 50·97 | 51·67 | 52·04 | 52·03 | 50·55 |
| 1850 | 51·57 | 50·83 | 49·99 | 49·32 | 48·87 | 48·79 | 49·10 | 49·81 | 50·65 | 51·29 | 51·63 | 51·54 | 50·28 |
| 1851 | 51·16 | 50·55 | 49·86 | 49·18 | 48·76 | 48·74 | 49·07 | 49·78 | 50·60 | 51·34 | 51·72 | 51·71 | 50·21 |
| 1852 | 51·16 | 50·46 | 49·79 | 49·15 | 48·71 | 48·69 | 49·04 | 49·77 | 50·77 | 51·68 | 52·20 | 52·09 | 50·29 |
| 1853 | 51·66 | 51·11 | 50·46 | 49·62 | 48·94 | 48·78 | 49·12 | 49·88 | 50·73 | 51·48 | 51·83 | 51·70 | 50·44 |
| 1854 | 51·09 | 50·22 | 49·38 | 48·74 | 48·42 | 48·49 | 48·88 | 49·57 | 50·40 | 51·16 | 51·61 | 51·57 | 49·96 |
| 1855 | 51·02 | 50·32 | 49·48 | 48·53 | 47·95 | 47·85 | 48·21 | 49·01 | 49·93 | 50·77 | 51·40 | 51·38 | 49·65 |
| 1856 | 50·75 | 49·93 | 49·13 | 48·53 | 48·10 | 48·08 | 48·53 | 49·32 | 50·32 | 51·15 | 51·58 | 51·60 | 49·75 |
| 1857 | 51·05 | 50·26 | 49·37 | 48·65 | 48·24 | 48·23 | 48·72 | 49·64 | 50·68 | 51·69 | 52·29 | 52·34 | 50·10 |
| 1858 | 51·97 | 51·36 | 50·50 | 49·54 | 48·92 | 48·85 | 49·30 | 50·22 | 51·12 | 51·91 | 52·27 | 52·23 | 50·68 |
| 1859 | 51·71 | 51·02 | 50·29 | 49·71 | 49·43 | 49·41 | 49·82 | 50·71 | 51·70 | 52·51 | (52·94) | 52·76 | 51·00 |

### MEAN READINGS of THERMOMETER 12 French feet deep.

| Year. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1846 | .. | .. | .. | 47·17 | 48·06 | 50·49 | 53·68 | 55·55 | 56·57 | 56·55 | 54·71 | 52·21 | .. |
| 1847 | 48·98 | 46·73 | 45·78 | 45·81 | 46·81 | 49·50 | 51·92 | 54·22 | 55·11 | 54·58 | 53·61 | 51·82 | 50·41 |
| 1848 | 49·64 | 47·39 | 46·57 | 46·92 | 48·28 | 50·90 | 53·01 | 54·70 | 55·28 | 55·07 | 53·43 | 51·19 | 51·03 |
| 1849 | 49·20 | 47·89 | 47·11 | 46·92 | 47·46 | 49·92 | 52·63 | 54·51 | 55·50 | 55·20 | 53·73 | 51·52 | 50·97 |
| 1850 | 48·80 | 46·68 | 46·37 | 46·17 | 47·19 | 49·26 | 51·96 | 54·06 | 54·88 | 54·38 | 52·67 | 50·87 | 50·27 |
| 1851 | 48·84 | 47·50 | 46·35 | 46·29 | 47·29 | 49·24 | 51·88 | 54·02 | 55·30 | 54·98 | 53·46 | 50·55 | 50·47 |
| 1852 | 48·43 | 47·21 | 46·23 | 46·15 | 47·34 | 49·32 | 51·85 | 54·90 | 56·07 | 55·39 | 53·48 | 51·90 | 50·69 |
| 1853 | 50·40 | 48·68 | 46·65 | 45·99 | 46·85 | 49·20 | 51·97 | 53·97 | 55·00 | 54·57 | 53·23 | 50·56 | 50·59 |
| 1854 | 47·56 | 46·22 | 45·59 | 46·07 | 47·56 | 49·31 | 51·45 | 53·71 | 55·11 | 55·08 | 53·22 | 50·61 | 50·12 |
| 1855 | 48·53 | 46·44 | 44·61 | 44·50 | 46·06 | 48·04 | 50·91 | 53·40 | 54·75 | 54·78 | 53·26 | 50·63 | 49·66 |
| 1856 | 47·69 | 46·39 | 45·87 | 45·76 | 46·89 | 48·87 | 51·64 | 54·12 | 55·33 | 54·89 | 53·49 | 50·87 | 50·15 |
| 1857 | 48·50 | 46·49 | 45·62 | 45·82 | 46·84 | 49·46 | 52·58 | 55·08 | 56·44 | 56·26 | 54·88 | 52·80 | 50·90 |
| 1858 | 50·62 | 48·22 | 46·16 | 46·00 | 47·41 | 49·91 | 53·29 | 55·22 | 56·21 | 56·03 | 54·24 | 51·35 | 51·22 |
| 1859 | 49·27 | 47·87 | 47·43 | 47·67 | 48·43 | 50·67 | 53·69 | 56·35 | (57·07) | 56·51 | 54·66 | 51·48 | 51·76 |

### MEAN READINGS of THERMOMETER 6 French feet deep.

| Year. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1846 | .. | .. | .. | 47·46 | 49·94 | (55·87) | (58·25) | (58·99) | (59·23) | (56·99) | 52·79 | 47·97 | .. |
| 1847 | 43·98 | 42·85 | 43·27 | 45·12 | 48·64 | 53·94 | (57·08) | (58·91) | (57·83) | 55·36 | 52·76 | 49·48 | 50·77 |
| 1848 | 45·80 | 44·26 | 44·93 | 47·45 | 51·09 | 55·28 | (57·99) | (58·87) | (57·78) | 55·78 | 51·07 | 48·73 | 51·59 |
| 1849 | 45·99 | 45·67 | 45·56 | 46·09 | 49·14 | 54·50 | (57·67) | (58·31) | (58·06) | 55·75 | 52·64 | 48·15 | 51·46 |
| 1850 | 44·22 | 43·96 | 44·79 | 45·85 | 48·54 | 53·61 | (57·06) | (58·92) | (57·59) | 54·69 | 51·16 | 48·08 | 50·71 |
| 1851 | 46·27 | 44·79 | 44·33 | 46·19 | 48·86 | 53·22 | 57·14 | (58·87) | (58·48) | 56·08 | 51·35 | 47·10 | 51·06 |
| 1852 | 45·43 | 44·97 | 43·98 | 46·30 | 49·53 | 52·73 | (57·72) | (59·29) | (59·17) | 55·24 | 52·26 | 49·98 | 51·38 |
| 1853 | 48·21 | 45·21 | 43·53 | 45·18 | 48·45 | 53·46 | (57·11) | (58·86) | (58·00) | 55·11 | 51·78 | 46·79 | 50·97 |
| 1854 | 43·30 | 43·95 | 44·22 | 47·13 | 49·80 | 52·91 | 56·22 | (58·91) | (58·59) | 56·12 | 51·29 | 47·31 | 50·81 |
| 1855 | 45·46 | 42·17 | 41·79 | 44·47 | 48·07 | 51·98 | 56·86 | (58·83) | (58·31) | 56·42 | 51·57 | 46·84 | 50·23 |
| 1856 | 44·38 | 44·22 | 44·42 | 46·12 | 48·60 | 53·29 | 57·05 | (58·84) | (58·61) | 56·09 | 51·88 | 47·79 | 50·94 |
| 1857 | 45·08 | 43·15 | 44·14 | 46·14 | 49·00 | 54·82 | 58·95 | 61·27 | 60·94 | 57·86 | 54·42 | 50·76 | 52·21 |
| 1858 | 47·47 | 44·46 | (43·00) | 46·22 | 49·76 | 55·88 | 59·32 | 60·69 | 60·03 | 57·65 | 52·24 | 48·38 | 52·09 |
| 1859 | 46·39 | 45·91 | 46·86 | 48·06 | 50·42 | 55·82 | 60·43 | (62·38) | 60·25 | 58·04 | 52·17 | 47·49 | 52·85 |

MEAN READINGS of THERMOMETER 3 French feet deep.

| Year. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1846 | .. | .. | .. | 47·66 | 52·15 | 61·72 | 62·95 | 63·61 | 62·45 | 55·44 | 50·22 | 42·71 | .. |
| 1847 | 39·35 | 39·65 | 41·17 | 44·46 | 51·17 | 57·24 | 61·56 | 62·34 | 57·82 | 54·73 | 50·63 | 46·46 | 50·55 |
| 1848 | 41·28 | 42·00 | 43·30 | 47·72 | 54·34 | 58·36 | 61·21 | 60·15 | 58·45 | 54·75 | 47·53 | 45·88 | 51·25 |
| 1849 | 42·55 | 43·28 | 43·56 | 44·86 | 51·15 | 58·36 | 61·69 | 61·44 | 60·11 | 54·42 | 49·75 | 44·08 | 51·27 |
| 1850 | 39·13 | 41·87 | 42·36 | 46·04 | 49·50 | 57·84 | 60·65 | 61·26 | 57·97 | 52·98 | 48·85 | 44·21 | 50·22 |
| 1851 | 43·62 | 41·80 | 42·26 | 45·84 | 49·97 | 56·63 | 60·73 | 62·76 | 59·52 | 55·32 | 46·63 | 43·39 | 50·71 |
| 1852 | 42·17 | 42·21 | 41·49 | 46·33 | 51·24 | 55·07 | (63·70) | (63·41) | 60·60 | 52·84 | 50·59 | 47·55 | 51·43 |
| 1853 | 45·16 | 40·50 | 40·35 | 44·57 | 50·16 | 56·59 | 60·10 | 61·51 | 58·49 | 53·94 | 48·14 | 41·92 | 50·12 |
| 1854 | 39·25 | 41·15 | 42·61 | 48·09 | 51·08 | 55·52 | 59·90 | 61·63 | 61·17 | 54·51 | 47·48 | 43·38 | 50·48 |
| 1855 | 41·48 | 36·94 | 39·05 | 44·64 | 49·25 | 55·12 | 61·43 | 62·03 | 60·05 | 55·66 | 47·97 | 41·52 | 49·60 |
| 1856 | 41·39 | 41·66 | 42·22 | 46·26 | 49·57 | 56·85 | 61·01 | (63·90) | 59·32 | 55·37 | 48·24 | 44·13 | 50·83 |
| 1857 | 41·33 | 40·22 | 42·67 | 46·23 | 51·19 | 59·16 | 62·82 | 64·76 | 61·76 | 56·45 | 51·46 | 47·21 | 52·11 |
| 1858 | 42·23 | 39·84 | (40·00) | 46·29 | 51·03 | 61·65 | 62·73 | 63·82 | 61·28 | 56·52 | 47·37 | 44·57 | 51·46 |
| 1859 | 42·76 | 43·53 | 45·69 | 47·22 | 51·89 | 60·07 | 65·72 | 65·32 | 60·28 | 56·80 | 47·74 | 42·24 | 52·44 |

MEAN READINGS of THERMOMETER 1 inch deep.

| Year. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1846 | .. | .. | .. | .. | .. | 64·2 | 64·8 | 64·7 | 62·2 | 52·2 | 47·7 | 36·2 | .. |
| 1847 | 37·9 | 38·0 | 42·3 | 46·4 | 56·7 | 59·8 | 66·8 | 63·9 | 56·0 | 53·7 | 48·4 | 44·0 | 51·16 |
| 1848 | 37·4 | 44·1 | 44·6 | 49·5 | 61·6 | 61·7 | 65·0 | 60·8 | 58·8 | 53·5 | 45·5 | 45·5 | 52·33 |
| 1849 | 41·5 | 43·6 | 44·3 | 46·3 | 56·5 | 63·3 | 65·0 | 65·2 | 61·8 | 53·0 | 46·5 | 41·1 | 52·34 |
| 1850 | 36·7 | 44·4 | 41·9 | 50·4 | 53·0 | 64·1 | 65·2 | 63·0 | 58·7 | 49·5 | 48·7 | 42·7 | 51·52 |
| 1851 | 44·2 | 42·7 | 44·0 | 48·5 | 54·8 | 62·2 | 63·8 | 65·5 | 60·0 | 54·7 | 41·2 | 42·2 | 51·98 |
| 1852 | 42·8 | 42·0 | 43·0 | 49·9 | 55·1 | 59·4 | 71·0 | 65·2 | 61·1 | 50·2 | 50·4 | 48·0 | 53·18 |
| 1853 | 44·3 | 37·0 | 41·8 | 47·4 | 55·7 | 62·3 | 63·2 | 64·1 | 60·3 | 55·1 | 44·9 | 38·0 | 51·18 |
| 1854 | 40·6 | 41·6 | 45·3 | 52·7 | 54·2 | 59·8 | 64·4 | 64·6 | 61·6 | 52·9 | 44·1 | 42·9 | 52·06 |
| 1855 | 38·4 | 33·4 | 41·0 | 48·9 | 52·9 | 61·3 | 65·6 | 66·0 | 60·9 | 54·7 | 44·3 | 38·3 | 50·48 |
| 1856 | 41·5 | 43·3 | 41·7 | 50·4 | 52·6 | 63·0 | 64·8 | 66·7 | 59·0 | 54·5 | 43·9 | 41·9 | 51·94 |
| 1857 | 38·9 | 40·7 | 43·7 | 48·3 | 57·6 | 65·6 | 67·0 | 67·9 | 62·5 | 55·2 | 48·8 | 46·6 | 53·57 |
| 1858 | 39·6 | 37·8 | 42·2 | 49·6 | 54·3 | 68·6 | 64·5 | 66·0 | 62·7 | 54·2 | 42·2 | 42·4 | 52·01 |
| 1859 | 42·4 | 43·5 | 47·3 | 49·3 | 55·8 | 64·4 | 70·7 | 66·7 | 59·7 | 54·4 | 44·3 | 39·3 | 53·15 |

MEAN READINGS of THERMOMETER in Air.

| Year. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1846 | .. | .. | .. | .. | .. | .. | 65·4 | 64·4 | 61·4 | 50·9 | 46·5 | 33·4 | .. |
| 1847 | 36·4 | 36·4 | 42·0 | 46·0 | 57·4 | 59·2 | 66·9 | 63·4 | 55·0 | 53·2 | 47·3 | 42·9 | 50·51 |
| 1848 | 36·3 | 45·8 | 46·2 | 52·1 | 68·0 | 63·9 | 68·7 | 63·0 | 63·3 | 55·3 | 46·7 | 46·5 | 54·65 |
| 1849 | 41·9 | 45·8 | 46·8 | 49·1 | 60·6 | 68·5 | 68·8 | 69·4 | 65·3 | 55·8 | 47·5 | 40·6 | 55·01 |
| 1850 | 35·9 | 47·3 | 45·0 | 54·0 | 56·3 | 69·7 | 68·7 | 67·0 | 63·4 | 52·2 | 49·5 | 42·5 | 54·29 |
| 1851 | 45·5 | 44·3 | 46·8 | 51·5 | 59·1 | 68·2 | 67·8 | 70·6 | 64·7 | 57·3 | 41·6 | 41·7 | 54·92 |
| 1852 | 44·1 | 44·2 | 47·3 | 55·5 | 59·1 | 62·4 | 77·4 | 68·5 | 63·3 | 52·5 | 51·6 | 49·0 | 56·24 |
| 1853 | 44·8 | 37·2 | 43·7 | 50·3 | 61·4 | 66·9 | 67·5 | 68·7 | 62·2 | 55·9 | 45·6 | 36·4 | 53·38 |
| 1854 | 41·7 | 44·4 | 50·1 | 59·4 | 58·9 | 63·5 | 68·8 | 69·1 | 68·0 | 56·7 | 43·9 | 43·1 | 55·63 |
| 1855 | 38·4 | 34·0 | 43·7 | 54·6 | 56·3 | 66·3 | 69·1 | 70·6 | 65·2 | 57·1 | 44·3 | 37·8 | 53·12 |
| 1856 | 41·8 | 45·1 | 43·1 | 55·3 | 55·5 | 68·3 | 69·0 | 71·4 | 63·3 | 57·2 | 43·7 | 42·3 | 54·67 |
| 1857 | 38·6 | 44·6 | 47·3 | 51·3 | 63·7 | 72·6 | 73·3 | 73·5 | 66·7 | 58·4 | 49·1 | 48·0 | 57·26 |
| 1858 | 41·0 | 39·4 | 46·6 | 55·6 | 60·0 | 76·4 | 68·3 | 73·5 | 67·6 | 56·9 | 43·0 | 42·7 | 55·92 |
| 1859 | 43·9 | 47·2 | 51·0 | 53·9 | 62·4 | 70·3 | 77·6 | 74·2 | 63·9 | 56·5 | 46·5 | 39·8 | 57·27 |

MEAN READINGS for the PERIOD 1847–1859 (13 Years).

| Thermometer. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 24 ft. | 51·40 | 50·70 | 49·90 | 49·17 | 48·72 | 48·67 | 49·08 | 49·86 | 50·75 | 51·52 | 51·95 | 51·91 | 50·30 |
| 12 ft. | 48·96 | 47·21 | 46·18 | 46·16 | 47·26 | 49·51 | 52·21 | 54·48 | 55·54 | 55·21 | 53·64 | 51·24 | 50·63 |
| 6 ft. | 45·54 | 44·27 | 44·22 | 46·18 | 49·22 | 53·96 | 57·74 | 59·46 | 58·74 | 56·17 | 52·05 | 48·22 | 51·31 |
| 3 ft. | 41·67 | 41·13 | 42·06 | 46·04 | 50·89 | 57·57 | 61·79 | 62·64 | 59·76 | 54·95 | 48·64 | 44·35 | 50·96 |
| Inch.. | 40·48 | 40·93 | 43·32 | 49·05 | 55·45 | 62·73 | 65·92 | 65·05 | 60·24 | 53·51 | 45·63 | 42·53 | 52·07 |
| Air .. | 40·78 | 42·75 | 46·12 | 52·97 | 59·90 | 67·40 | 70·15 | 69·45 | 63·99 | 55·77 | 46·18 | 42·56 | 54·84 |

VALUES of the COEFFICIENTS in the EXPRESSIONS—

$$v = A_0 + A_1 \cdot \cos t + B_1 \cdot \sin t + A_2 \cdot \cos 2t + B_2 \cdot \cos 2t. \quad (1)$$

$$v = A_0 + P_1 \cdot \sin (t + E_1) + P_2 \cdot \sin (2t + E_2). \quad (2)$$

| Thermometer. | $A_0$ | $A_1$ | $B_1$ | $A_2$ | $B_2$ | $P_1$ | $E_1$ | $P_2$ | $E_2$ |
|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° ′ | ° | ° ′ |
| 24 ft..... | 50·30 | + 1·1738 | − 1·1805 | − 0·05 | − 0·0058 | 1·6647 | 135. 10 | 0·0503 | 263. 25 |
| 12 ft..... | 50·63 | − 1·5897 | − 4·5302 | − 0·0483 | + 0·254 | 4·8010 | 199. 20 | 0·259 | 349. 14 |
| 6 ft..... | 51·31 | − 6·0285 | − 4·9568 | + 0·295 | + 0·468 | 7·8047 | 230. 34 | 0·553 | 392. 15 |
| 3 ft..... | 50·96 | − 10·029 | − 4·4058 | + 0·773 | + 0·598 | 10·954 | 246. 17 | 0·977 | 412. 18 |
| Inch..... | 52·07 | − 12·865 | − 2·095 | | | 13·033 | 260. 45 | | |
| Air..... | 54·84 | − 14·966 | − 1·221 | | | 15·013 | 265. 20 | | |

NAPIERIAN LOGARITHMS of $P_1$ and $P_2$, and VALUES of $E_1$ and $E_2$ in circular measure $\left(\frac{\text{arc}}{\text{radius}}\right)$.

| Thermometer. | $\log_e P_1$ | $E_1$ | $\log_e P_2$ | $E_2$ |
|---|---|---|---|---|
| 24 ft..... | 0·50966 | 2·35905 | − 2·989 | 4·597 |
| 12 ft..... | 1·56883 | 3·47907 | − 1·353 | 6·095 |
| 6 ft..... | 2·05473 | 4·02424 | − 0·593 | 6·846 |
| 3 ft..... | 2·39369 | 4·29846 | − 0·023 | 7·196 |
| Inch..... | 2·56750 | 4·55094 | | |
| Air ..... | 2·70890 | 4·63099 | | |

Taking the differences of the values of $\log_e P_1$ for each pair of thermometers, also the differences of the values of $E_1$, and dividing in each case by the difference of depth, we obtain the following quotients, which are determinations of the value of $\sqrt{\frac{\pi c}{k}}$, $c$ being the capacity for heat, and $k$ the conductivity.

| Thermometers compared. | Difference of $\log_e P_1$ divided by Difference of depth. | Difference of $E_1$ divided by Difference of depth. |
|---|---|---|
| 24 ft. and 12 ft. | ·0883 | ·0933 |
| 24 ,, 6 ,, | ·0858 | ·0925 |
| 24 ,, 3 ,, | ·0897 | ·0924 |
| 12 ,, 6 ,, | ·0810 | ·0909 |
| 12 ,, 3 ,, | ·0917 | ·0910 |
| 6 ,, 3 ,, | ·1130 | ·0914 |
| Means ..... | ·09158 | ·09192 |

To obtain determinations of the value of $\sqrt{\frac{\pi c}{k}}$ from the values of $\log_e A_2$ and $E_2$, we must first proceed as above, and divide the results by $\sqrt{2}$, as shown below :—

| Thermometers compared. | Diff. of $\log_e P_2$ divided by Diff. of depth. | Quotients by $\sqrt{2}$. | Diff. of $E_2$ divided by Diff. of depth. | Quotients by $\sqrt{2}$. |
|---|---|---|---|---|
| 24 ft. and 12 ft. | ·1364 | ·0964 | ·1248 | ·0882 |
| 24 ,, 6 ,, | ·1331 | ·0941 | ·1249 | ·0883 |
| 24 ,, 3 ,, | ·1412 | ·0998 | ·1237 | ·0875 |
| 12 ,, 6 ,, | ·1267 | ·0896 | ·1251 | ·0885 |
| 12 ,, 3 ,, | ·1477 | ·1044 | ·1223 | ·0865 |
| 6 ,, 3 ,, | ·1899 | ·1343 | ·1166 | ·0824 |
| Means ..... | .... | ·1031 | .... | ·0869 |

The mean of ·09158 and ·09192 is ·09175,
The mean of ·1031 and ·0869 is ·0950,
and the former of these means is entitled to much more weight than the latter, the coefficients of the half-yearly term being too small, and too variable from year to year, to furnish accurate determinations.

CORRECTIONS for TEMPERATURE of that portion of STEM which is above the bottom of the scale, or above the capillary tube.

Argument, $(v - V) \times (v - v') \times ·000555$; $v$ being the temperature of bulb, or the actual reading ; V the temperature of air ; and $v'$ the degree of the bottom of the scale. The values of $v'$ are—

For the 24 ft. thermometer, 43°
,, 12 ,, 42°
For the 6 ft. thermometer, 39°
,, 3 ,, 34°

| Thermometers. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 ft. ..... | + °·05 | + °·03 | + °·01 | − °·01 | − °·04 | − °·06 | − °·07 | − °·07 | − °·06 | − °·02 | + °·03 | + °·05 |
| 12 ,, ..... | + ·03 | + ·01 | ·00 | − ·02 | − ·04 | − ·08 | − ·11 | − ·10 | − ·06 | ·00 | + ·05 | + ·05 |
| 6 ,, ..... | + ·02 | ·00 | − ·01 | − ·03 | − ·06 | − ·11 | − ·13 | − ·11 | − ·06 | ·00 | + ·04 | + ·03 |
| 3 ,, ..... | ·00 | ·00 | − ·02 | − ·04 | − ·09 | − ·12 | − ·13 | − ·10 | − ·06 | − ·01 | + ·02 | + ·01 |

The sign + denotes that the correction is to be added to the observed reading.
[In strictness, these numbers do not apply after 1857, June.—G. B. A.]

ASSUMED CORRECTIONS for TEMPERATURE of that portion of STEM (capillary tube) which is below ground.

| Thermometers. | January. | February. | March. | April. | May | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 ft. ..... | + °·03 | + °·04 | + °·03 | + °·02 | °·00 | − °·02 | − °·04 | − °·05 | − °·04 | − °·02 | °·00 | − °·02 |
| 12 ,, ..... | + ·02 | + ·02 | + ·01 | ·00 | − ·01 | − ·03 | − ·04 | − ·03 | − ·02 | ·00 | + ·01 | + ·02 |
| 6 ,, ..... | + ·01 | + ·01 | + ·01 | ·00 | − ·01 | − ·01 | − ·01 | − ·01 | ·00 | ·00 | + ·01 | + ·01 |
| 3 ,, ..... | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 | ·00 |

CORRECTIONS for INEQUALITY of CALENDAR MONTHS, obtained by reckoning the 31st of January and the 1st of March as part of February.

| Thermometers. | January. | February. | March. |
|---|---|---|---|
| 24 ft. ..... | + °·01 | °·00 | + °·01 |
| 12 ,, ..... | + ·04 | ·00 | − ·02 |
| 6 ,, ..... | + ·03 | ·00 | + ·01 |
| 3 ,, ..... | + ·02 | ·00 | + ·04 |

## CORRECTED MEANS for the PERIOD 1847–1859.

| Thermometers. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 24 ft. | 51·49 | 50·77 | 49·95 | 49·18 | 48·68 | 48·59 | 48·97 | 49·74 | 50·65 | 51·48 | 51·98 | 51·94 | 50·28 |
| 12 ,, | 49·05 | 47·24 | 46·17 | 46·14 | 47·21 | 49·40 | 52·06 | 54·35 | 55·46 | 55·21 | 53·70 | 51·31 | 50·61 |
| 6 ,, | 45·60 | 44·28 | 44·23 | 46·15 | 49·15 | 53·84 | 57·60 | 59·34 | 58·68 | 56·17 | 52·10 | 48·26 | 51·28 |
| 3 ,, | 41·69 | 41·13 | 42·08 | 46·00 | 50·80 | 57·45 | 61·66 | 62·54 | 59·70 | 54·94 | 48·66 | 44·36 | 50·92 |

## CORRECTED VALUES of COEFFICIENTS.

| Thermometers. | $A_0$. | $A_1$. | $B_1$. | $A_2$. | $B_2$. | $P_1$. | $E_1$. | $P_2$. | $E_2$. |
|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° ′ | ° | ° ′ |
| 24 feet... | 50·28 | +1·2688 | −1·1540 | −0·0517 | −0·01154 | 1·7151 | 132. 17 | 0·0530 | 257. 25 |
| 12 ,, . | 50·61 | −1·4856 | −4·5410 | −0·060 | +0·231 | 4·7778 | 198. 7 | 0·239 | 345. 26 |
| 6 ,, . | 51·28 | −5·9375 | −4·9715 | +0·277 | +0·459 | 7·7443 | 230. 4 | 0·536 | 391. 7 |
| 3 ,, . | 50·92 | −9·9547 | −4·4176 | +0·755 | +0·603 | 10·891 | 246. 4 | 0·966 | 411. 23 |

## CORRECTED VALUES of $\log_e P_1$, $\log_e P_2$, and of $E_1$ and $E_2$, in CIRCULAR MEASURE.

| Thermometers. | $\text{Log}_e P_1$. | $E_1$. | $\text{Log}_e P_2$. | $E_2$. |
|---|---|---|---|---|
| 24 feet..... | ·53947 | 2·30885 | — 2·9381 | 4·4928 |
| 12 ,, ..... | 1·56398 | 3·45779 | — 1·4327 | 6·0289 |
| 6 ,, ..... | 2·04694 | 4·01531 | — ·6235 | 6·8263 |
| 3 ,, ..... | 2·38794 | 4·29472 | — ·0343 | 7·1800 |

| Thermometers compared. | Diff. of $\log_e P_1$ divided by Diff. of Depth. | Diff. of $E_1$ divided by Diff. of Depth. | |
|---|---|---|---|
| 24 feet and 12 feet ..... | ·0854 | ·0957 | The mean of ·09048 and ·09402 is ·09225. |
| 24 ,, 6 ,, ..... | ·0838 | ·0948 | |
| 24 ,, 3 ,, ..... | ·0880 | ·0946 | |
| 12 ,, 6 ,, ..... | ·0805 | ·0929 | |
| 12 ,, 3 ,, ..... | ·0915 | ·0930 | |
| 6 ,, 3 ,, ..... | ·1137 | ·0931 | |
| Means ..... | ·09048 | ·09402 | |

| Thermometers compared. | Diff. of $\log_e P_2$ divided by Diff. of Depth. | Quotients by $\sqrt{2}$. | Diff. of $E_2$ divided by Diff. of Depth. | Quotients by $\sqrt{2}$. | |
|---|---|---|---|---|---|
| 24 feet and 12 feet ..... | ·1254 | ·0887 | ·1280 | ·0905 | The mean of ·1036 and ·0901 is ·09685. |
| 24 ,, 6 ,, ..... | ·1286 | ·0909 | ·1297 | ·0917 | |
| 24 ,, 3 ,, ..... | ·1383 | ·0978 | ·1280 | ·0905 | |
| 12 ,, 6 ,, ..... | ·1349 | ·0954 | ·1329 | ·0940 | |
| 12 ,, 3 ,, ..... | ·1554 | ·1099 | ·1279 | ·0904 | |
| 6 ,, 3 ,, ..... | ·1964 | ·1389 | ·1179 | ·0834 | |
| Means ..... | .... | ·1036 | .... | ·0901 | |

MEANS of UNCORRECTED READINGS for the THREE PERIODS—(1) April 1846–December 1850; (2) January 1851–December 1855; (3) January 1856–December 1859.

| Periods. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **24-feet Thermometer.** | | | | | | | | | | | | |
| 1st period ..... | 51°·66 | 50°·96 | 50°·10 | 49°·31 | 48°·94 | 48°·90 | 49°·34 | 50°·11 | 50°·94 | 51°·66 | 52°·03 | 51°·99 |
| 2nd ,, ..... | 51·22 | 50·53 | 49·79 | 49·04 | 48·56 | 48·51 | 48·86 | 49·60 | 50·49 | 51·29 | 51·75 | 51·69 |
| 3rd ,, ..... | 51·37 | 50·64 | 49·82 | 49·11 | 48·67 | 48·64 | 49·09 | 49·97 | 50·96 | 51·82 | 52·27 | 52·23 |
| **12-feet Thermometer.** | | | | | | | | | | | | |
| 1st period ..... | 49°·16 | 47°·17 | 46°·46 | 46°·60 | 47°·56 | 50°·01 | 52°·64 | 54°·61 | 55°·47 | 55°·16 | 53°·63 | 51°·52 |
| 2nd ,, ..... | 48·75 | 47·21 | 45·89 | 45·80 | 47·02 | 49·02 | 51·61 | 54·00 | 55·25 | 54·96 | 53·33 | 50·85 |
| 3rd ,, ..... | 49·02 | 47·24 | 46·27 | 46·31 | 47·39 | 49·73 | 52·80 | 55·19 | 56·26 | 55·92 | 54·32 | 51·62 |
| **6-feet Thermometer.** | | | | | | | | | | | | |
| 1st period ..... | 45°·00 | 44°·18 | 44°·64 | 46°·39 | 49°·47 | 54°·64 | 57°·61 | 58°·80 | 58°·10 | 55°·71 | 52°·08 | 48°·48 |
| 2nd ,, ..... | 45·73 | 44·22 | 43·57 | 45·85 | 48·94 | 52·86 | 57·01 | 58·95 | 58·51 | 55·79 | 51·65 | 47·60 |
| 3rd ,, ..... | 45·83 | 44·44 | 44·92 | 46·64 | 49·44 | 54·95 | 58·94 | 60·80 | 59·96 | 57·41 | 52·68 | 48·60 |
| **3-feet Thermometer.** | | | | | | | | | | | | |
| 1st period ..... | 40°·58 | 41°·70 | 42°·60 | 46°·15 | 51°·66 | 58°·70 | 61°·61 | 61°·76 | 59°·36 | 54°·46 | 49°·40 | 44°·67 |
| 2nd ,, ..... | 42·34 | 40·52 | 41·15 | 45·89 | 50·34 | 55·79 | 61·17 | 62·27 | 59·97 | 54·45 | 48·16 | 43·55 |
| 3rd ,, ..... | 41·93 | 41·31 | 42·64 | 46·50 | 50·92 | 59·43 | 63·07 | 64·45 | 60·66 | 56·28 | 48·70 | 44·54 |

VALUES of COEFFICIENTS derived from the above.

| Thermometers and Periods. | $A_0$. | $P_1$. | $\text{Log}_e P_1$. | $E_1$ in degrees. | $E_1$ in Circular Measure. |
|---|---|---|---|---|---|
| | ° | ° | ° | ° ′ | |
| 24 feet, 1st period ..... | 50·50 | 1·6186 | 0·48154 | 135. 4 | 2·35750 |
| 24 feet, 2nd ,, ..... | 50·11 | 1·6399 | 0·49461 | 133. 16 | 2·32599 |
| 24 feet, 3rd ,, ..... | 50·38 | 1·8280 | 0·60322 | 138. 58 | 2·42547 |
| 12 feet, 1st period ..... | 50·83 | 4·6626 | 1·53958 | 201. 8 | 3·51044 |
| 12 feet, 2nd ,, ..... | 50·31 | 5·7336 | 1·55468 | 197. 48 | 3·45226 |
| 12 feet, 3rd ,, ..... | 51·01 | 5·1726 | 1·64338 | 199. 54 | 3·48877 |
| 6 feet, 1st period ..... | 51·26 | 7·5509 | 2·02167 | 232. 41 | 4·06099 |
| 6 feet, 2nd ,, ..... | 50·89 | 7·6413 | 2·03357 | 229. 12 | 4·00029 |
| 6 feet, 3rd ,, ..... | 52·05 | 8·3247 | 2·11923 | 230. 45 | 4·02720 |
| 3 feet, 1st period ..... | 51·05 | 10·773 | 2·37701 | 248. 19 | 4·33394 |
| 3 feet, 2nd ,, ..... | 50·47 | 10·830 | 2·38231 | 244. 45 | 4·27155 |
| 3 feet, 3rd ,, ..... | 51·70 | 11·646 | 2·45493 | 246. 45 | 4·30650 |

| Thermometers compared. | Difference of log $P_1$ divided by Difference of Depth. | | | Difference of $E_1$ divided by Difference of Depth. | | |
|---|---|---|---|---|---|---|
| | 1st Period. | 2nd Period. | 3rd Period. | 1st Period. | 2nd Period. | 3rd Period. |
| 24 feet and 12 feet ..... | ·08817 | ·08834 | ·08668 | ·09608 | ·09386 | ·08861 |
| 24 ,, 6 ,, ..... | ·08556 | ·08550 | ·08422 | ·09464 | ·09302 | ·08898 |
| 24 ,, 3 ,, ..... | ·09026 | ·08989 | ·08818 | ·09412 | ·09265 | ·08957 |
| 12 ,, 6 ,, ..... | ·08035 | ·07982 | ·07931 | ·09176 | ·09134 | ·08974 |
| 12 ,, 3 ,, ..... | ·09305 | ·09196 | ·09017 | ·09150 | ·09103 | ·09086 |
| 6 ,, 3 ,, ..... | ·11845 | ·11625 | ·11190 | ·09098 | ·09042 | ·09310 |
| Means..... | ·09264 | ·09196 | ·09008 | ·09318 | ·09205 | ·09014 |

The Mean of ·09264 and ·09318 is ·09291.
,, ·09196 ,, ·09205 ,, ·09200.
,, ·09008 ,, ·09014 ,, ·09011.

COEFFICIENTS of the TERM whose PERIOD is ONE-THIRD of a YEAR.

| Thermometers. | $A_3$. | $B_3$. | $P_3$. | $\text{Log}_e P_3$. | $E_3$ in Degrees. | $E_3$ in Circular Measure. |
|---|---|---|---|---|---|---|
| | ° | ° | ° | | ° ′ | |
| 24 feet..... | − 0·0133 | − 0·0333 | 0·0359 | − 3·3281 | 201. 47 | 3·5218 |
| 12 ,, ..... | − 0·035 | + 0·00833 | 0·0360 | − 3·3247 | 283. 23 | 4·9460 |
| 6 ,, ..... | − 0·0833 | + 0·09 | 0·1226 | − 2·0988 | 317. 13 | 5·5365 |
| 3 ,, ..... | − 0·035 | + 0·1033 | 0·1091 | − 2·2158 | 341. 17 | 5·9565 |

| Thermometers compared. | Diff. of $\log_e P_3$ divided by Diff. of Depth. | Quotients by $\sqrt{3}$ or Values of $\sqrt{\frac{\pi c}{k}}$. | Diff. of $E_3$ divided by Diff. of Depth. | Quotients by $\sqrt{3}$ or Values of $\sqrt{\frac{\pi c}{k}}$. |
|---|---|---|---|---|
| 24 feet and 12 feet ..... | ·0003 | ·0002 | ·1187 | ·0685 |
| 24 ,, 6 ,, ..... | ·0683 | ·0394 | ·1119 | ·0646 |
| 24 ,, 3 ,, ..... | ·0530 | ·0306 | ·1159 | ·0669 |
| 12 ,, 6 ,, ..... | ·2043 | ·1180 | ·0984 | ·0568 |
| 12 ,, 3 ,, ..... | ·1232 | ·0711 | ·1123 | ·0648 |
| 6 ,, 3 ,, ..... | − ·0390 | − ·0225 | ·1400 | ·0808 |
| Means..... | .... | ·0395 | .... | ·0671 |

The Mean of ·0395 and ·0671 is ·0533.

COEFFICIENTS of the TERM whose PERIOD is ONE-FOURTH of a YEAR.

| Thermometers. | $A_4$. | $B_4$. | $P_4$. | $\text{Log}_e P_4$. | $E_4$ in Degrees. | $E_4$ in Circular Measure. |
|---|---|---|---|---|---|---|
| | ° | ° | ° | | ° ′ | |
| 24 feet..... | − 0·005 | + 0·00577 | 0·00764 | − 4·8747 | − 40. 55 | − 0·7141 |
| 12 ,, ..... | + 0·0667 | + 0·0231 | 0·0706 | − 2·6507 | + 70. 54 | + 1·2374 |
| 6 ,, ..... | + 0·0967 | − 0·0202 | 0·0988 | − 2·3148 | 101. 48 | 1·7764 |
| 3 ,, ..... | + 0·155 | − 0·0663 | 0·1685 | − 1·7806 | 173. 10 | 3·0223 |

| Thermometers compared. | Diff. of $\log_e P_4$ divided by Diff. of Depth. | Quotients by 2 or Values of $\sqrt{\frac{\pi c}{k}}$. | Diff. of $E_4$ divided by Diff. of Depth. | Quotients by 2 or values of $\sqrt{\frac{\pi c}{k}}$. |
|---|---|---|---|---|
| 24 feet and 12 feet ..... | ·1853 | ·0926 | ·1626 | ·0813 |
| 24 ,, 6 ,, ..... | ·1422 | ·0711 | ·1384 | ·0692 |
| 24 ,, 3 ,, ..... | ·1473 | ·0737 | ·1779 | ·0890 |
| 12 ,, 6 ,, ..... | ·0560 | ·0280 | ·0898 | ·0449 |
| 12 ,, 3 ,, ..... | ·0967 | ·0484 | ·1983 | ·0992 |
| 6 ,, 3 ,, ..... | ·1781 | ·0890 | ·4153 | ·2076 |
| Means..... | .... | ·0671 | .... | ·0985 |

The Mean of ·0671 and ·0985 is ·0828.

CORRECTIONS necessary to reduce CALCULATED to ACTUAL TEMPERATURES (corrected).

I. When only the Annual Term is employed.

| Thermometers. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 feet..... | − °·06 | + °·03 | + °·03 | + °·05 | + °·03 | − °·01 | − °·04 | − °·02 | + °·01 | + °·05 | + °·07 | − °·02 |
| 12 ,, ..... | − ·07 | + ·19 | + ·24 | + ·07 | − ·21 | − ·23 | − ·04 | + ·18 | + ·17 | + ·06 | − ·10 | − ·28 |
| 6 ,, ..... | + ·26 | + ·62 | + ·22 | − ·16 | − ·79 | − ·09 | + ·38 | + ·44 | + ·13 | − ·08 | − ·52 | − ·37 |
| 3 ,, ..... | + ·72 | +1·04 | − ·03 | − ·50 | −1·27 | + ·12 | + ·79 | + ·79 | − ·03 | − ·40 | −1·11 | − ·15 |

II. When the Annual and Half-yearly Terms are employed.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 feet..... | − °·01 | + °·01 | + °·01 | °·00 | − °·01 | + °·01 | + °·01 | + °·02 | − °·01 | °·00 | + °·03 | °·00 |
| 12 ,, ..... | − ·01 | + ·02 | + ·01 | + ·01 | − ·04 | ·00 | + ·02 | + ·01 | − ·06 | ·00 | + ·07 | − ·05 |
| 6 ,, ..... | − ·02 | + ·08 | − ·04 | + ·12 | − ·25 | + ·17 | + ·10 | − ·10 | − ·13 | + ·20 | + ·02 | − ·11 |
| 3 ,, ..... | − ·03 | + ·44 | − ·16 | + ·25 | − ·67 | + ·25 | + ·04 | + ·19 | − ·16 | + ·35 | − ·51 | − ·02 |

DATES of the CENTRES of the WARM and COLD HALVES of the YEAR, for each THERMOMETER, and DAYS whose TEMPERATURE is equal to the MEAN of the YEAR (for uncorrected readings).

| Thermometers. | Centre of Warm. | Centre of Cold. | Vernal Mean. | Autumnal Mean. | Days from Vernal to Autumnal. | Days from Autumnal to Vernal. |
|---|---|---|---|---|---|---|
| Air..... | July 21 | January 20 | April 24 | October 18 | 177 | 188 |
| Inch..... | ,, 26 | ,, 24 | ,, 30 | ,, 21 | 174 | 191 |
| 3 feet..... | August 9 | February 8 | May 15 | November 3 | 172 | 193 |
| 6 ,, ..... | ,, 25 | ,, 24 | ,, 30 | ,, 21 | 175 | 190 |
| 12 ,, ..... | September 25 | March 27 | June 28 | December 23 | 178 | 187 |
| 24 ,, ..... | November 30 | June 1 | September 1 | February 28 | 180 | 185 |

The application of the corrections (p. (cciv)) will produce a retardation of 3 days for the 24-feet Thermometer, and of 1 day for the 12-feet Thermometer.

TABLE showing the RANGE of the ANNUAL CURVE of TEMPERATURE for each THERMOMETER (uncorrected).

| Thermometers. | Highest. | Lowest. | Mean of Year. | Highest above Mean. | Lowest below Mean. | Range. |
|---|---|---|---|---|---|---|
| Air..... | °70·2 | °40·4 | °54·8 | °15·4 | °14·4 | °29·8 |
| Inch..... | 66·2 | 40·8 | 52·1 | 14·1 | 11·3 | 25·4 |
| 3 feet..... | 62·8 | 41·1 | 51·0 | 11·7 | 9·9 | 21·7 |
| 6 ,, ..... | 59·5 | 44·1 | 51·3 | 8·2 | 7·2 | 15·4 |
| 12 ,, ..... | 55·5 | 46·0 | 50·6 | 4·9 | 4·6 | 9·5 |
| 24 ,, ..... | 52·0 | 48·6 | 50·3 | 1·7 | 1·7 | 3·4 |

The numbers in this Table are for monthly means, understanding by a month any period of 30 or 31 days. The ranges, and departures, above and below mean of year, will be greater for daily means, by about 1 per cent.

The effect of the corrections (p. (cciv)) will be to increase the range by a tenth of a degree for the 24-feet Thermometer, and diminish it by the same amount for the 3-feet, 6-feet, and 12-feet Thermometers.