

RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL

OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

1850.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1850.)

APPENDIX.

ROYAL OBSERVATORY, GREENWICH.

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ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1850.

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 1850, Telescope-Observations of the Magnetometers have usually been made four times every day (except Sundays); 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 reading of the Horizontal Circle of the Theodolite, by which the DECLINATION MAGNET is observed, corresponding to the Astronomical Meridian, on January 21, February 12, May 3, 18, June 8, 15, July 4, 5, 8, 11, 15, September 4, 6, 17, October 7, November 4, 6, 29, and December 20.

Observations of the angle of torsion of the HORIZONTAL FORCE MAGNETOMETER were made on 1849, December 31, and 1850, January 1. The angle determined was $43^{\circ}.3'$. Observations were made for the times of vibration and readings of the scale for different readings of the torsion-circle on 1849, December 31, and 1850, January 1; and the general conclusion was, that the scale-readings were nearly identical and had nearly the usual value when the reading of the torsion-circle was $144^{\circ}.30'$ (marked end West); and $230^{\circ}.0'$ (marked end East). The reading adopted for the adjustment of the torsion-circle throughout the year (marked end West) is $144^{\circ}.30'$.

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 0.0020559 .

The correction for temperature is $0.0000809(t-32) + 0.00000762(t-32)^2$, where t is the temperature in degrees of Fahrenheit's scale. This is not applied to any of the results of observation.

Observations of the times of vibration of the VERTICAL FORCE MAGNETOMETER in a vertical plane have usually been made three times a week. The adopted time of vibration till September 30 was $23^s.05$, and from October 1 was $22^s.01$.

Observations for the time of vibration in a horizontal plane were made in 1848, July, and the time was found to be $24^s.0164$ from 7000 vibrations. The values of the disturbing force, in terms of the whole vertical force, for one division of the scale, are inferred to be 0.000667 till September, and 0.000732 from October till the end of the year; and these numbers are used in their respective periods.

The correction for temperature is $0.00013845 \times (t-32) + 0.000004054 \times (t-32)^2$. This is not applied to any of the results of observation.

The methods adopted in the use of the Photographic Apparatus, in the determinations 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.

It is proper, however, to mention that, in measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in the two preceding volumes has still occasionally been felt. Occasionally, without any apparent 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, but, at times, by a considerable quantity. In all cases this displacement is accompanied with vibration, the original position being at the extremity of the vibration, and the new position being at the centre of the arc: showing that there has been no want of delicacy of the movement, and that the change has been

precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet. To combine these dislocated parts, a small machine has been prepared, by means of which a piece of tracing-paper can be slid, parallel to itself, in the direction of the ordinates; and the various portions of the curve are traced on this paper in such a manner that their ends are properly joined. This traced curve is then used for the measure of the ordinates. I conceive that these measures, for a single sheet, are perfectly and accurately comparable: although it is evident that the results on one sheet cannot always be compared with those on another.

In general the ordinates of the photographic curves have been measured only at the times of the successive maxima and minima values; but, on days in which the unsteadiness of the magnets was strongly marked, the ordinates have been measured at well-marked bends of the curve: so 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, and connecting these points by straight lines, will very nearly reproduce the original curves.

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.																																				
							H. F.	V. F.								H. F.	V. F.																																			
Jan. 29 8. 0 8. 30 9. 19 14. 0 23. 53	22. 28. 20 18. 10 25. 30 28. 0 30. 55	Jan. 29 5. 15: 8. 20 8. 37 9. 25 17. 42 23. 58	*1015 *1027 *1042 *1024 *1045 *1027	Jan. 29 5. 15: 17. 10 23. 55	*00895 *01540 *01534	3 9 21	55.0 53.0 48.5	57.0 57.5 52.0	Feb. 2 0. 20 1. 56 4. 30 4. 45 5. 8 5. 25 5. 38: 6. 12: 6. 33 7. 0 7. 10 7. 28 8. 0 8. 20 8. 40 8. 52 9. 8 9. 14 9. 30 10. 18 11. 20 11. 36 13. 0 13. 40: 14. 10 14. 54: 15. 20: 15. 40: 23. 50	22. 35. 0 42. 10 37. 30 40. 10 35. 40 37. 0 27. 10 28. 15 23. 25 30. 20 25. 55 28. 58 26. 15 23. 55 17. 55 27. 10 24. 0 25. 30 6. 55 26. 55 25. 35 22. 48 29. 0 26. 0 27. 30 26. 0 27. 40 25. 30 16. 0	Feb. 2 0. 18 6. 10 6. 42 7. 42 8. 40 8. 50 9. 20 10. 38 12. 33 13. 32 17. 0 19. 35 23. 0	*0987 *1003 *1039 *0987 *1001 *1031 *0980 *1016 *1003 *1020 *1008 *1023 *1006	Feb. 2 0. 30 6. 22 7. 10 8. 20: 9. 14 23. 30	*01210 *00096 *00982 *01020 *00995 *01510	1 3 9 9 22	58.0 60.0 56.0 53.0	60.0 62.0 59.0 57.0	Jan. 30 1. 25 4. 40 8. 0 9. 28 10. 52 11. 5 11. 48 12. 10 23. 55	22. 34. 5 26. 45 30. 0 24. 58 27. 0 18. 20 29. 50 26. 0 30. 50	Jan. 30 1. 0 3. 20 9. 10 10. 55 11. 30 12. 0 23. 30	*1029 *1040 *1024 *1031 *1053 *1035 *1034	Jan. 30 1. 0 8. 0: 14. 35 23. 30:	*01463 *00892 *01442 *01350	1 3 9 21	50.0 55.0 50.0 43.0	53.0 57.0 53.0 48.0	Feb. 3 0. 0 1. 10 1. 18 1. 34: 1. 50 2. 40 9. 40 10. 0 10. 42 11. 22: 11. 40 12. 0 12. 30 13. 50 14. 10 14. 40 16. 0 23. 45	22. 33. 30 36. 45 44. 40 43. 0 46. 20 35. 0 26. 40 23. 5 27. 20 25. 45 26. 40 31. 58 24. 50 27. 45 25. 0 29. 0 23. 50 32. 58	Feb. 3 0. 0 2. 0 2. 48 4. 45 5. 30 13. 42 14. 36 16. 2 21. 0 23. 5	*1019 *1000 *1029 *1032 *1023 *1026 *1043 *1021 *1035 *1012	Feb. 3 0. 0 2. 50 8. 0: 9. 45 22. 57	*01555 *01593 *01330 *01442 *01230	9 21	55.0 45.0	58.5 48.0	Feb. 1 0. 35 2. 50 3. 3 3. 8 3. 26 7. 5: 8. 7 8. 38 10. 12 10. 31 12. 20 17. 18 18. 0 18. 30 19. 10: 20. 58 21. 27 21. 40 23. 55	22. 30. 45 37. 30 35. 0 38. 45 34. 0 30. 0 26. 0 28. 0 25. 0 28. 5 28. 58 26. 25 37. 35 29. 45 26. 10 28. 0 33. 10 30. 20 24. 35	Feb. 1 0. 42 5. 30 7. 30 8. 43 10. 20 11. 30 16. 50 17. 43 18. 33 19. 58 21. 37 23. 45	*1018 *1009 *1019 *1014 *1034 *1024 *1042 *0996 *1040 *1038 *1006 *1002	Feb. 1 1. 0 6. 30: 18. 15: 23. 40:	*00840 *01042 *00922 *01220	1 3 9 21	55.0 56.0 57.5 55.5	57.0 58.0 61.0 59.0	(+)							
Jan. 30 1. 25 4. 40 8. 0 9. 28 10. 52 11. 5 11. 48 12. 10 23. 55	22. 34. 5 26. 45 30. 0 24. 58 27. 0 18. 20 29. 50 26. 0 30. 50	Jan. 30 1. 0 3. 20 9. 10 10. 55 11. 30 12. 0 23. 30	*1029 *1040 *1024 *1031 *1053 *1035 *1034	Jan. 30 1. 0 8. 0: 14. 35 23. 30:	*01463 *00892 *01442 *01350	1 3 9 21	50.0 55.0 50.0 43.0	53.0 57.0 53.0 48.0	Feb. 3 0. 0 1. 10 1. 18 1. 34: 1. 50 2. 40 9. 40 10. 0 10. 42 11. 22: 11. 40 12. 0 12. 30 13. 50 14. 10 14. 40 16. 0 23. 45	22. 33. 30 36. 45 44. 40 43. 0 46. 20 35. 0 26. 40 23. 5 27. 20 25. 45 26. 40 31. 58 24. 50 27. 45 25. 0 29. 0 23. 50 32. 58	Feb. 3 0. 0 2. 0 2. 48 4. 45 5. 30 13. 42 14. 36 16. 2 21. 0 23. 5	*1019 *1000 *1029 *1032 *1023 *1026 *1043 *1021 *1035 *1012	Feb. 3 0. 0 2. 50 8. 0: 9. 45 22. 57	*01555 *01593 *01330 *01442 *01230	9 21	55.0 45.0	58.5 48.0	Feb. 1 0. 35 2. 50 3. 3 3. 8 3. 26 7. 5: 8. 7 8. 38 10. 12 10. 31 12. 20 17. 18 18. 0 18. 30 19. 10: 20. 58 21. 27 21. 40 23. 55	22. 30. 45 37. 30 35. 0 38. 45 34. 0 30. 0 26. 0 28. 0 25. 0 28. 5 28. 58 26. 25 37. 35 29. 45 26. 10 28. 0 33. 10 30. 20 24. 35	Feb. 1 0. 42 5. 30 7. 30 8. 43 10. 20 11. 30 16. 50 17. 43 18. 33 19. 58 21. 37 23. 45	*1018 *1009 *1019 *1014 *1034 *1024 *1042 *0996 *1040 *1038 *1006 *1002	Feb. 1 1. 0 6. 30: 18. 15: 23. 40:	*00840 *01042 *00922 *01220	1 3 9 21	55.0 56.0 57.5 55.5	57.0 58.0 61.0 59.0	(+)																									
Feb. 1 0. 35 2. 50 3. 3 3. 8 3. 26 7. 5: 8. 7 8. 38 10. 12 10. 31 12. 20 17. 18 18. 0 18. 30 19. 10: 20. 58 21. 27 21. 40 23. 55	22. 30. 45 37. 30 35. 0 38. 45 34. 0 30. 0 26. 0 28. 0 25. 0 28. 5 28. 58 26. 25 37. 35 29. 45 26. 10 28. 0 33. 10 30. 20 24. 35	Feb. 1 0. 42 5. 30 7. 30 8. 43 10. 20 11. 30 16. 50 17. 43 18. 33 19. 58 21. 37 23. 45	*1018 *1009 *1019 *1014 *1034 *1024 *1042 *0996 *1040 *1038 *1006 *1002	Feb. 1 1. 0 6. 30: 18. 15: 23. 40:	*00840 *01042 *00922 *01220	1 3 9 21	55.0 56.0 57.5 55.5	57.0 58.0 61.0 59.0	(+)																																											

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 to several times near that which is recorded. The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.																																					
							H. F.	V. F.								H. F.	V. F.																																				
Feb. 4 1.40 3.40 9.40 19.00 23.42	22.33.44 (+) 31.33 (+) 27.45 26.55 33.40	Feb. 4 1.40 3.40 10.00 18.40 23.40	*1022* (+) *1028* (+) *1028 *1038 *1011	Feb. 4 1.00 9.45 21.20 23.55	*01430 *00800 *01113 *01085	1 3 9 21	49.00 53.00 50.00 48.50	52.00 55.00 53.00	Feb. 8 14.50 15.10 21.00 23.55	22.31.00 29.00 23.55 31.00	Feb. 8 10.00 10.55 18.40 23.10	*1056 *1032 *1042 *1017																																									
Feb. 5 0.00 7.55 8.25 8.34 9.45 19.10 21.40	22.33.20 27.00 14.00 14.00 27.50 25.00 (+) 27.52* (+)	Feb. 5 0.00 7.50 8.10 8.40 16.00 23.20	*1006 *1036 *1018 *1050 *1041 *1025	Feb. 5 0.00 5.20 23.00	*01085 *00855 *01402	1 3 9 21	50.00 54.00 50.00 48.00	53.00 56.00 55.00 52.00	Feb. 9 0.30 4.15 5.80 9.30 10.28 10.48 14.00 23.40	22.32.55 26.45 29.10 23.30 25.00 21.20 27.55 26.40	Feb. 9 0.30 6.55 13.20 23.10	*1017 *1025 (+) *1034 *1048 *1038 *1048 *1034	Feb. 9 0.30 6.55 13.20 23.10	*01090 *00938 *01384 *01250	1 3 9 22	56.00 56.00 50.00 45.00	58.00 59.00 53.00 48.00	Feb. 10 9.10 11.40 21.10 23.55	(+) 22.25.38* (+) 25.30 24.25 30.50	Feb. 10 12.00 19.30 23.30	(+) *1040 *1049 *1021	Feb. 10 0.00 10.30 21.40 23.22	*01150 *00680 *01140 *01108	9 21	49.00 46.50	52.00 48.00	Feb. 11 1.00 13.10 13.32 15.35 23.50	22.31.25 25.15 29.00 23.30 30.00	Feb. 11 1.00 9.45 22.30	*1028 *1046 *1032	Feb. 11 1.00 6.37 8.15 23.20	*00920 *00741 *00618 *01180	1 3 9 21	48.00 50.00 48.00	52.00 53.00 50.00 48.00	Feb. 12 0.00 2.30 6.45 7.15 8.50 9.15 9.45 14.00 15.50 16.20 23.45	22.30.00 33.50 30.00 32.15 26.00 26.45 18.50 25.30 19.00 21.20 30.00	Feb. 12 0.00 2.37 7.40 8.35 9.45 10.50 13.42 14.18	*1032 *1046 *1031 *1042 *1018 *1032 *1038 *1054 *1034 *1049 *1030	Feb. 12 0.00 7.30 18.53 23.12	*01022 *00668 *01198 *01154	1 3 9 21	46.00 49.50 48.00 40.00	48.00 50.50 50.00 43.00	Feb. 13 1.20 13.30 23.50	22.31.30 20.00 31.00	Feb. 13 1.30 4.08 10.30 18.30 23.00	*1029 *1049 *1032 *1050 *1019	Feb. 13 1.50 5.40 6.40 9.00 17.00 21.20 23.50	*01146 *00747 *00774 *00692 *01230 *01245 *01198	1 3 9 21	48.00 50.00 47.00 41.00	50.00 52.00 51.00 45.50

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The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time.

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

February 4, till 10^h, the time-piece of the Declination and Horizontal Force Photographic Cylinder was away for repair.

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.																																					
							H. F.	V. F.								H. F.	V. F.																																				
Feb. 14 0. 0 2. 0 7. 0 14. 50 20. 35 23. 55	22. 31. 5 34. 50 25. 25 28. 0 23. 30 30. 0	Feb. 14 0. 0 11. 30 23. 20	'1021 '1034 '1007	Feb. 14 0. 30 5. 36 6. 50 11. 0 23. 30	'01173 '00763 '00833 '00810 '00835	1 3 9 21	46. 0 48. 0 51. 0 53. 5	48. 8 52. 0 55. 0 57. 0	Feb. 20 0. 0 1. 15 1. 40 1. 50 2. 23 12. 58 21. 5 22. 30	22. 30. 0 32. 30 31. 20 34. 40 32. 0 25. 10 23. 50 25. 45	Feb. 20 0. 0 5. 38 6. 14 7. 25 8. 30 9. 3 12. 32 14. 51 20. 30 22. 50	'1027 '1035 '1026 '1034 '1022 '1033 '1041 '1031 '1043 '1026	Feb. 20 0. 0 7. 0 11. 30 15. 10 23. 5	'01235 '00955 '00900 '01143 '00985	1 3 9 21	57. 0 57. 0 58. 0 48. 0	59. 0 59. 5 61. 0 52. 0	Feb. 15 0. 0 1. 48 14. 25 23. 40	22. 30. 40 34. 35 23. 50 30. 30	Feb. 15 0. 0 10. 43 20. 8 23. 0	'1006 '1029 '1036 '1016	Feb. 15 0. 0 6. 30 8. 45 20. 30 22. 30 23. 45	'00848 '00981 '00933 '01400 '01408 '01385	1 3 9 21	56. 0 58. 0 57. 0 53. 0	59. 0 60. 0 59. 0 55. 0	Feb. 21 0. 0 1. 11 1. 37 2. 48 3. 49 12. 30 13. 15 15. 40 21. 0 23. 55	22. 30. 10 33. 0 32. 20 34. 5 30. 40 27. 0 23. 5 27. 10 28. 0 31. 40	Feb. 21 0. 0 2. 50 9. 38 14. 0 18. 37 23. 30	'1024 '1044 '1037 '1030 '1040 '1016	Feb. 21 0. 0 6. 26 10. 30 20. 38 23. 30	'01340 '00863 '00826 '00958 '00937	1 3 9 21	50. 0 55. 0 53. 0 52. 0	55. 0 58. 0 55. 0 56. 0	Feb. 16 0. 0 2. 30 13. 5 14. 8 14. 45 18. 50 23. 20	22. 32. 0 34. 10 23. 40 27. 0 24. 20 28. 0 29. 0	Feb. 16 0. 0 13. 40 14. 25 15. 8 20. 30 22. 30	'1015 '1035 '1045 '1034 '1049 '1032	Feb. 16 0. 0 4. 30 10. 10 23. 20	'01375 '01070 '01550 '01318	1 3 9 22	55. 0 57. 0 55. 0 45. 0	59. 0 59. 0 59. 0 49. 0	Feb. 22 0. 0 3. 13 3. 25 4. 5 4. 58 5. 25 5. 58 6. 10 8. 30 8. 38 9. 10 9. 53 10. 13 10. 16 10. 33 11. 0 11. 11 11. 21 11. 42 12. 55	22. 32. 5 30. 10 31. 30 27. 40 31. 0 26. 0 29. 10 22. 40 20. 0 34. 30 22. 0 26. 0 20. 0 22. 20 10. 33 11. 0 20. 40 19. 30 23. 0 18. 50	Feb. 22 0. 0 3. 10 3. 40 4. 42 5. 40 6. 18 6. 32 7. 30 8. 42 9. 15 9. 42 10. 10 10. 50 11. 5 11. 30 11. 45 12. 10 13. 25 14. 32 15. 10 16. 20 16. 40	'1023 '1020 '1062 '1021 '1068 '1009 '1029 '1012 '1046 '1016 '1032 '1008 '1042 '1028 '1036 '1006 '1027 '0997 '1030 '0996 '1025 '0992	Feb. 22 0. 10 1. 22 10. 0 10. 32 11. 0 12. 28 15. 11 19. 35 23. 30	'00914 '00840 *** '01440 *** '01515 *** '01481 *** '01562 *** '01395 *** '01462 *** '01420	1 3 9 21	55. 0 58. 0 58. 0 50. 0	58. 0 60. 0 62. 0 54. 5
Feb. 15 0. 0 1. 48 14. 25 23. 40	22. 30. 40 34. 35 23. 50 30. 30	Feb. 15 0. 0 10. 43 20. 8 23. 0	'1006 '1029 '1036 '1016	Feb. 15 0. 0 6. 30 8. 45 20. 30 22. 30 23. 45	'00848 '00981 '00933 '01400 '01408 '01385	1 3 9 21	56. 0 58. 0 57. 0 53. 0	59. 0 60. 0 59. 0 55. 0	Feb. 21 0. 0 1. 11 1. 37 2. 48 3. 49 12. 30 13. 15 15. 40 21. 0 23. 55	22. 30. 10 33. 0 32. 20 34. 5 30. 40 27. 0 23. 5 27. 10 28. 0 31. 40	Feb. 21 0. 0 2. 50 9. 38 14. 0 18. 37 23. 30	'1024 '1044 '1037 '1030 '1040 '1016	Feb. 21 0. 0 6. 26 10. 30 20. 38 23. 30	'01340 '00863 '00826 '00958 '00937	1 3 9 21	50. 0 55. 0 53. 0 52. 0	55. 0 58. 0 55. 0 56. 0	Feb. 16 0. 0 2. 30 13. 5 14. 8 14. 45 18. 50 23. 20	22. 32. 0 34. 10 23. 40 27. 0 24. 20 28. 0 29. 0	Feb. 16 0. 0 13. 40 14. 25 15. 8 20. 30 22. 30	'1015 '1035 '1045 '1034 '1049 '1032	Feb. 16 0. 0 4. 30 10. 10 23. 20	'01375 '01070 '01550 '01318	1 3 9 22	55. 0 57. 0 55. 0 45. 0	59. 0 59. 0 59. 0 49. 0	Feb. 22 0. 0 3. 13 3. 25 4. 5 4. 58 5. 25 5. 58 6. 10 8. 30 8. 38 9. 10 9. 53 10. 13 10. 16 10. 33 11. 0 11. 11 11. 21 11. 42 12. 55	22. 32. 5 30. 10 31. 30 27. 40 31. 0 26. 0 29. 10 22. 40 20. 0 34. 30 22. 0 26. 0 20. 0 22. 20 10. 33 11. 0 20. 40 19. 30 23. 0 18. 50	Feb. 22 0. 0 3. 10 3. 40 4. 42 5. 40 6. 18 6. 32 7. 30 8. 42 9. 15 9. 42 10. 10 10. 50 11. 5 11. 30 11. 45 12. 10 13. 25 14. 32 15. 10 16. 20 16. 40	'1023 '1020 '1062 '1021 '1068 '1009 '1029 '1012 '1046 '1016 '1032 '1008 '1042 '1028 '1036 '1006 '1027 '0997 '1030 '0996 '1025 '0992	Feb. 22 0. 10 1. 22 10. 0 10. 32 11. 0 12. 28 15. 11 19. 35 23. 30	'00914 '00840 *** '01440 *** '01515 *** '01481 *** '01562 *** '01395 *** '01462 *** '01420	1 3 9 21	55. 0 58. 0 58. 0 50. 0	58. 0 60. 0 62. 0 54. 5																		
Feb. 16 0. 0 2. 30 13. 5 14. 8 14. 45 18. 50 23. 20	22. 32. 0 34. 10 23. 40 27. 0 24. 20 28. 0 29. 0	Feb. 16 0. 0 13. 40 14. 25 15. 8 20. 30 22. 30	'1015 '1035 '1045 '1034 '1049 '1032	Feb. 16 0. 0 4. 30 10. 10 23. 20	'01375 '01070 '01550 '01318	1 3 9 22	55. 0 57. 0 55. 0 45. 0	59. 0 59. 0 59. 0 49. 0	Feb. 22 0. 0 3. 13 3. 25 4. 5 4. 58 5. 25 5. 58 6. 10 8. 30 8. 38 9. 10 9. 53 10. 13 10. 16 10. 33 11. 0 11. 11 11. 21 11. 42 12. 55	22. 32. 5 30. 10 31. 30 27. 40 31. 0 26. 0 29. 10 22. 40 20. 0 34. 30 22. 0 26. 0 20. 0 22. 20 10. 33 11. 0 20. 40 19. 30 23. 0 18. 50	Feb. 22 0. 0 3. 10 3. 40 4. 42 5. 40 6. 18 6. 32 7. 30 8. 42 9. 15 9. 42 10. 10 10. 50 11. 5 11. 30 11. 45 12. 10 13. 25 14. 32 15. 10 16. 20 16. 40	'1023 '1020 '1062 '1021 '1068 '1009 '1029 '1012 '1046 '1016 '1032 '1008 '1042 '1028 '1036 '1006 '1027 '0997 '1030 '0996 '1025 '0992	Feb. 22 0. 10 1. 22 10. 0 10. 32 11. 0 12. 28 15. 11 19. 35 23. 30	'00914 '00840 *** '01440 *** '01515 *** '01481 *** '01562 *** '01395 *** '01462 *** '01420	1 3 9 21	55. 0 58. 0 58. 0 50. 0	58. 0 60. 0 62. 0 54. 5																																				

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Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.										
							H. F.	V. F.								H. F.	V. F.									
Feb. 26 6. 5 7. 53 9. 55 23. 58	22. 23. 0 26. 10 22. 30 31. 0	Feb. 26 7. 50 8. 50 12. 33 19. 10 23. 15	.1039 .1023 .1032 .1036 .1015	Feb. 26 23. 55	.01335	21	48. 0	52. 5	Mar. 3 0. 20 12. 50 13. 0 13. 30 14. 40 15. 42 23. 58	22. 33. 25 25. 15 28. 0 23. 10 30. 20 23. 50 31. 10	Mar. 3 0. 0 10. 30 22. 30	.1006 .1035 .1019 .1032 .1025 .1042 .1032 .1003 .1019 .1014	Mar. 3 0. 15 10. 30 22. 30	.01260 .00865 .01320	12 21	52. 0 48. 0	55. 0 52. 0									
Feb. 27 0. 0 1. 46 6. 55 8. 45 11. 0 13. 45 14. 20 15. 25 23. 50	22. 31. 55 36. 10 24. 5 26. 0 18. 30 23. 0 20. 40 25. 20 29. 30	Feb. 27 0. 0 2. 32 11. 20 18. 30 23. 30	.1022 .1044 .1016 .1029 .1010	Feb. 27 0. 5 4. 48 7. 0 9. 28 16. 38 23. 45	.01338 .00905 .00922 .00858 .01446 .01362	1 3 9 21	48. 0 57. 0 57. 0 47. 0	50. 0 59. 0 59. 5 49. 0	Mar. 4 0. 55 5. 0 6. 5 6. 45 7. 25 8. 5 10. 55 11. 28 11. 45 12. 28 13. 33 15. 20 16. 8 16. 40 18. 0 19. 30 21. 0 23. 55	22. 34. 30 31. 30 24. 55 28. 30 16. 50 27. 10 22. 0 26. 50 13. 55 21. 10 17. 10 28. 50 22. 0 27. 0 22. 0 26. 0 23. 58 30. 50	Mar. 4 1. 10 9. 26 16. 20 21. 30 23. 55	.1029 .1020 .0996 .1013 .1015 .0988 .1015 .1003 .1030 .1008 .1030 .1004 .1005 .1030 .1012 .1033 .1014 .1027	Mar. 4 1. 10 9. 26 16. 20 21. 30 23. 55	.01080 .00748 .01195 .01213 .01162	1 3 9 21	50. 0 52. 5 55. 0 43. 0	53. 0 54. 0 56. 0 44. 0									
Feb. 28 0. 0 1. 30 12. 5 13. 55 21. 25 23. 50	22. 29. 25 32. 5 23. 0 26. 10 23. 0 31. 30	Feb. 28 0. 0 7. 45 11. 36 17. 10 23. 15	.1015 .1039 .1023 .1032 .1000	Feb. 28 0. 0 10. 0 21. 28 23. 23	.01372 .00930 .01385 .01352	1 3 9 21	49. 0 53. 0 53. 0 49. 0	51. 0 55. 0 57. 0 53. 0	Mar. 1 0. 0 1. 57 7. 0 7. 42 8. 12 8. 47 9. 36 11. 25 12. 12 14. 7 14. 45 15. 35 16. 25 16. 50 17. 35 19. 40 23. 50	22. 33. 0 36. 30 28. 40 15. 30 30. 0 20. 30 20. 30 24. 0 17. 50 23. 30 15. 0 22. 10 18. 20 22. 0 15. 0 23. 5	Mar. 1 0. 0 2. 20 7. 30 7. 55 8. 32 11. 20 11. 40 12. 10 13. 55 14. 25 15. 20 17. 25 22. 50	.1010 .1034 .1007 .1047 .0987 .1006 .1028 .1012 .1000 .1012 .1002 .1026 .0990	Mar. 1 0. 0 4. 5 6. 55 8. 20 23. 30	.01288 .00880 .01012 .00920 .01432	1 3 9 21	53. 0 60. 0 57. 0 55. 0	55. 0 62. 0 59. 0 58. 0	Mar. 5 0. 5 1. 40 16. 12 23. 45	22. 30. 40 34. 10 23. 30 30. 30	Mar. 5 0. 10 2. 27 12. 0 13. 15 14. 30 19. 0 23. 12	.1026 .1036 .1023 .1031 .1020 .1028 .1001	Mar. 5 0. 10 4. 30 19. 30 23. 0	.01045 .00687 .01288 .01222	1 3 9 21	47. 0 53. 0 52. 0 45. 5	47. 0 55. 0 54. 0 48. 0
Mar. 2 0. 0 1. 30 12. 0 15. 30 21. 0 23. 55	22. 28. 30 31. 55 24. 0 26. 25 24. 0 31. 0	Mar. 2 0. 0 9. 3 18. 55 23. 15	.0988 .1022 .1030 .1013	Mar. 2 0. 0 6. 20 11. 25 23. 30	.01442 .01300 .01478 .01298	1 3 9 22	55. 0 58. 0 57. 0 50. 0	58. 0 60. 0 59. 0 53. 0	Mar. 6 0. 12 6. 5 11. 10 12. 5 13. 0 23. 55	22. 34. 58 22. 55 25. 20 19. 0 23. 0 30. 0	Mar. 6 0. 30 3. 50 6. 10 11. 10 12. 12 12. 38 19. 0 23. 13	.1013 .1022 .1005 .1014 .1019 .1008 .1028 .1002	Mar. 6 0. 0 3. 30 15. 25 23. 30	.01225 .00845 .01438 .01326	1 3 9 21	50. 0 58. 0 59. 0 49. 5	53. 0 60. 0 61. 0 52. 5	Mar. 7 1. 40	22. 33. 44* (†)	Mar. 7 1. 40	.1003* (†)	Mar. 7 0. 30	.01310	1	50. 0	55. 0

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The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time.

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

On March 7 the time-piece of the Declination and Horizontal Force Cylinder was away for repair.

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Mar. 14 19. 12 21. 10 23. 8	22. 24. 55 22. 0 26. 0						o	o	Mar. 19 23. 55	22. 30. 0	Mar. 19 8. 45 19. 0 23. 30	.1037 .1033 .1005	Mar. 19 23. 30	.01250		o	o
Mar. 15 0. 0 1. 56: 12. 55 13. 2 14. 0 16. 57 19. 0 23. 35	22. 29. 0 34. 0 23. 0 24. 0 19. 25 22. 0 21. 0 30. 0	Mar. 15 0. 10 12. 30 13. 15 14. 30 19. 30 22. 15 23. 30	.1009 .1028 .1035 .1027 .1046 .1018 .1021	Mar. 15 0. 0 9. 0: 14. 55 18. 20 23. 0	.01228 .00832 .01260 .01282 .01178	1 50.0 3 55.0 9 50.0 21 40.0	55.0 58.0 54.0 45.0		Mar. 20 0. 0 2. 11 21. 0 23. 55	22. 29. 45 32. 50 22. 0 31. 25	Mar. 20 0. 45 12. 5 19. 15 23. 58	.1014 .1027 .1028 .1007	Mar. 20 0. 0 9. 10 21. 0: 23. 45:	.01320 .00766 .01290 .01285	1 50.0 3 55.0 9 55.0 21 48.5	53.0 58.0 57.0 52.5	
Mar. 16 0. 0 2. 25 10. 20 10. 50 11. 42 13. 0 13. 50 14. 30 23. 20	22. 30. 20 36. 10 *** 21. 50 *** 20. 0 *** 21. 20 *** 15. 10 *** 19. 10 *** 16. 0 27. 15	Mar. 16 0. 30 9. 18 10. 38 11. 55 13. 0 19. 5 23. 15	.1025 .1012 .1019 .1022 .1007 .1045 .1020	Mar. 16 0. 0 4. 20 16. 32 23. 25	.01045 .00642 .01225 .01100	1 44.0 3 50.0 9 52.2 22 40.0	48.0 53.0 55.5 44.0		Mar. 21 0. 0 1. 20 5. 20 6. 55 9. 42 12. 3 12. 20 13. 57 20. 50 23. 48	22. 32. 20 35. 22 24. 20 27. 5 20. 40 23. 25 28. 25 23. 40 22. 30 30. 40	Mar. 21 0. 0 8. 0 12. 5 12. 18 13. 30 20. 25 23. 30	.1009 .1027 .1021 .1038 .1024 .1046 .1020	Mar. 21 0. 30 8. 45: 15. 3 23. 50	.01342 .00990 .01335 .01170	1 52.0 3 54.0 9 53.0 21 44.0	55.0 58.0 57.0 47.0	
Mar. 17 0. 0 2. 0 12. 20: 18. 25 23. 30	22. 28. 50 34. 0 23. 25 26. 50 30. 30	Mar. 17 0. 0 5. 20 7. 45 18. 0 23. 25	.1019 .1041 .1027 .1048 .1019	Mar. 17 0. 0 10. 0: 17. 17 20. 0 23. 10	.01092 .00588 .01100 .01125 .01075	9 44.0 21 38.0	47.5 42.0		Mar. 22 0. 0 2. 0 21. 20 23. 55	22. 30. 10 36. 5 21. 5 28. 50	Mar. 22 0. 0 16. 5 19. 15 22. 0	.1032 .1015 .1027 .1007	Mar. 22 0. 0 5. 36 23. 30	.01168 .00714 .01102	1 46.0 3 53.0 9 55.0 21 49.0	50.0 58.0 60.0 54.0	
Mar. 18 0. 10 1. 0 11. 50: 18. 25 21. 0 23. 58	22. 32. 20 33. 35 24. 0 25. 10 23. 0 30. 40	Mar. 18 0. 10 2. 12 17. 50: 22. 45 23. 40	.1022 .1036 .1030 .1009 .1013	Mar. 18 0. 0 3. 20 16. 14 22. 50	.00993 .00610 .01316 .01248	1 43.0 3 52.0 9 53.5 21 43.0	45.0 55.0 55.0 47.0		Mar. 23 0. 0 2. 23 6. 50 7. 18 7. 40 8. 12 8. 30 9. 29 11. 30 12. 0 13. 50 15. 40 16. 20 23. 46	22. 29. 20 34. 50 27. 30 27. 10 25. 30 26. 55 25. 25 27. 0 25. 25 27. 0 21. 40 24. 50 20. 35 29. 10	Mar. 23 0. 0 4. 20 6. 12 11. 53 13. 0 18. 48 19. 55 23. 11	.1008 .1029 .1019 .1027 .1043 .1025 .1038 .1015	Mar. 23 0. 30 8. 28 14. 30 23. 55	.01102 .01030 .01375 .01235	1 51.0 3 54.0 9 50.0 22 40.5	55.0 59.0 55.0 46.0	
Mar. 19 0. 0 2. 43 15. 30: 18. 25 21. 5	22. 31. 30 33. 30 25. 0 25. 50 22. 20	Mar. 19 0. 30 4. 30 5. 12 5. 42 6. 0	.1017 .1037 .1021 .1035 .1028	Mar. 19 0. 30 5. 12 7. 7 9. 10: 21. 25	.01239 .00710 .00775 .00722 .01268	1 50.0 3 54.0 9 53.0 21 48.0	53.0 57.0 55.0 52.0		Mar. 24 0. 0 5. 0 6. 35 8. 15 14. 58 15. 0 15. 30	22. 30. 10 32. 5 24. 12 27. 5 26. 20 29. 55 24. 10	Mar. 24 0. 0 2. 34 3. 8 4. 55 6. 55 14. 58 15. 0	.1018 .1017 .1032 .1021 .1045 .1038 .1057	Mar. 24 0. 0 7. 0 21. 57: 23. 30	.01136 .01202 .01093 .01128	9 42.5 21 37.0	45.0 41.0	

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INDICATIONS OF THE MAGNETOMETERS

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							H. F.	V. F.								H. F.	V. F.
Mar. 24 16. 10 16. 52 18. 40 19. 40 20. 25 21. 56 22. 0 23. 55	22. 25. 0 16. 20 23. 58 27. 10 24. 0 37. 40 35. 0 37. 10	Mar. 24 17. 35 18. 33 20. 22 21. 12 21. 45 23. 30	*1033 *1057 *1039 *0992 *1016 *1004	Mar. 24 17. 35 18. 33 20. 22 21. 12 21. 45 23. 30	*1033 *1057 *1039 *0992 *1016 *1004		o	o	Mar. 27 18. 10 20. 25 23. 55	22. 22. 40 18. 40 31. 35	Mar. 27 18. 10 20. 25 23. 55					o	o
Mar. 25 0. 15 6. 0 7. 25 7. 55 8. 40 9. 45 10. 28 11. 0 15. 5 15. 20 15. 33 20. 30 23. 42	22. 40. 45 26. 50 26. 5 24. 0 26. 30 20. 50 15. 50 24. 50 24. 0 21. 55 24. 45 23. 10 32. 50	Mar. 25 0. 30 1. 30 3. 0 5. 3 7. 2 7. 55 8. 30 9. 33 9. 55 10. 27 10. 40 11. 15 13. 0 13. 30 14. 49 19. 3 23. 15	*1005 *0999 *1022 *1009 *1024 *1006 *1019 *1004 *1034 *1005 *1017 *1006 *1012 *1028 *1014 *1036 *1007	Mar. 25 0. 0 4. 58 16. 52 23. 25	*01105 *00585 *01182 *01075	1 43.0 3 50.0 9 48.0 21 38.5	46.0 55.0 53.0 42.0	Mar. 29 0. 0 1. 15 6. 30 12. 40 19. 15 20. 40 23. 20	22. 29. 55 35. 0 24. 50 24. 10 23. 40 19. 55 26. 15	Mar. 29 0. 0 18. 0 23. 7	*1003 *1036 *1006	Mar. 29 0. 30 6. 55 8. 0 10. 30 23. 0	*01110 *00580 *00627 *00552 *01200	9 21	49.0 41.0	52.5 45.0	
Mar. 26 0. 0 1. 8 9. 12 9. 47 11. 30 11. 45 14. 11 14. 54 15. 58 17. 25 19. 40 23. 42	22. 32. 25 36. 00 22. 30 25. 50 24. 55 22. 10 24. 0 26. 30 21. 10 24. 5 21. 0 33. 40	Mar. 26 1. 0 1. 37 2. 11 9. 3 11. 30 11. 58 13. 0 16. 0 19. 18 22. 6 23. 55	*1016 *1002 *1027 *1015 *1023 *1042 *1018 *1010 *1033 *1008 *1012	Mar. 26 1. 0 5. 30 7. 40 9. 50 21. 8 23. 30	*01080 *00563 *00602 *00562 *01153 *01142	1 40.0 3 50.0 9 49.0 21 40.0	45.0 55.0 51.0 45.0	Mar. 30 0. 0 1. 50 5. 40 12. 0 17. 10 18. 0 21. 10 23. 30	22. 30. 20 33. 25 26. 15 25. 25 25. 30 25. 10 16. 30 34. 55	Mar. 30 0. 0 4. 10 23. 30	*1012 *1024 *1037 *0969 *0976	Mar. 30 0. 0 4. 10 23. 30	*01135 *00690 *01270	1 3 9 22	49.0 55.0 54.5 47.0	53.0 58.0 58.0 50.0	
Mar. 27 0. 15 1. 47 4. 30 4. 55 8. 20 9. 8 11. 10 13. 52 16. 0	22. 33. 30 36. 0 22. 30 24. 48 23. 0 21. 0 21. 0 23. 5 20. 5	Mar. 27 0. 0 4. 5 5. 0 10. 2 19. 0 23. 35	*1010 *1004 *1025 *1001 *1026 *0995	Mar. 27 0. 0 3. 45 15. 45 23. 30	*01112 *00747 *01275 *01134	1 45.0 3 54.0 9 54.5 21 40.0	50.0 59.0 56.5 45.0	Mar. 31 0. 5 1. 45 2. 53 3. 10 3. 34 3. 58 4. 30 5. 0 5. 55 6. 25 7. 5 7. 55 8. 14 8. 42 8. 54 9. 6 9. 28 10. 50 11. 17 11. 50	22. 35. 30 33. 0 34. 30 37. 30 33. 45 37. 0 31. 45 34. 30 29. 0 25. 0 27. 25 25. 0 16. 55 21. 25 15. 30 22. 20 3. 0 21. 55 18. 5 21. 35	Mar. 31 0. 3 0. 42 3. 5 3. 30 3. 54 4. 30 5. 20 7. 14 8. 35 9. 18 9. 33 10. 0 10. 38 11. 37 12. 7 13. 32 16. 33 17. 5 17. 18 18. 2	*0980 *0976 *1015 *1002 *1022 *1000 *1024 *0992 *1028 *0974 *1004 *0990 *1003 *0994 *1069 *0992 *1005 *1026 *1017 *1034	Mar. 31 0. 0 6. 3 12. 45 21. 51 23. 15	*01300 *01388 *00843 *01230 *01175	8 21	51.0 50.0	55.0 55.0	

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							H. F.	V. F.								H. F.	V. F.
Mar. 31 12. 10 12. 25 12. 32 13. 2 13. 43 14. 25 15. 0 16. 22 16. 42 17. 40 18. 25 21. 25 23. 58	22. 5. 55 19. 0 17. 5 23. 55 16. 5 20. 20 18. 50 22. 50 30. 40 24. 30 24. 50 16. 40 28. 0	Mar. 31 23. 30	*0982						Apr. 3 2. 0 8. 0 12. 30 14. 0 21. 10 23. 55	22. 33. 50 23. 20 *** 19. 42 25. 50 25. 40 21. 15 29. 55	Apr. 3 5. 35 7. 25 19. 42 23. 50	*1017 *1007 *1017 *0997	Apr. 3 7. 10 19. 0 23. 30	*00965 *01186 *01040	3 9 21	60.0 58.0 55.0	0 64.0 60.0 58.0
Apr. 1 0. 30 1. 50 3. 52 4. 15 5. 20 6. 55 7. 15 7. 47 8. 48 9. 10 9. 21 9. 48 12. 12 14. 20 15. 0 15. 25 16. 12 17. 25 21. 5 23. 47	22. 31. 0 37. 0 35. 0 26. 50 31. 35 26. 40 18. 40 24. 55 23. 30 14. 30 21. 0 24. 5 22. 25 30. 10 27. 0 31. 50 26. 45 31. 30 23. 55 31. 40	Apr. 1 0. 15 0. 40 2. 2 3. 20 3. 55 4. 20 6. 15 8. 12 8. 57 9. 15 10. 48 15. 39 20. 5 23. 42	*0982 *0989 *0978 *1013 *1003 *1032 *0995 *1022 *0999 *1028 *1005 *0998 *1013 *1015	Apr. 1 0. 30 9. 52 23. 30	*01048 *00792 *01343	1 3 9 21	55.0 58.0 59.0 55.5	59.0 60.0 63.0 59.0	Apr. 5 0. 0 1. 47 13. 40 21. 0 23. 48	22. 30. 50 31. 55 22. 45 20. 0 29. 0	Apr. 5 0. 30 6. 36 7. 30 13. 0 17. 40 19. 25 22. 50 23. 52	*1003 *1021 *1015 *1021 *1016 *1025 *1004 *1008	Apr. 5 0. 0 3. 20 16. 30 22. 15 23. 30	*01310 *00790 *01405 *01270 *01320	1 3 9 21	57.0 60.0 62.0 53.0	60.0 63.0 66.0 57.0
Apr. 2 0. 0 2. 0 6. 40 7. 32 9. 15 9. 33 10. 0 10. 25 10. 55 13. 25 19. 55 23. 55	22. 31. 45 36. 5 24. 48 17. 15 23. 45 22. 5 30. 0 21. 0 19. 0 25. 0 21. 45 31. 0	Apr. 2 0. 43 4. 30 6. 43 7. 12 8. 35 9. 47 10. 15 10. 32 11. 50 18. 32 23. 40	*0983 *1020 *1017 *1006 *1018 *1004 *1020 *1010 *1025 *1007 *1018 *0991	Apr. 2 0. 0 10. 40 19. 45 23. 0	*01330 *00726 *01430 *01385	1 3 9 21	58.0 60.0 62.0 55.0	62.0 65.0 66.0 59.0	Apr. 6 0. 0 1. 57 8. 5 8. 30 10. 0 10. 38 11. 25 11. 40 12. 30 13. 12 13. 38 14. 10 14. 21 14. 33 14. 40 15. 28 16. 16 17. 5 23. 55	22. 29. 20 33. 0 26. 0 27. 45 21. 25 24. 5 18. 55 23. 45 9. 45 19. 55 8. 25 26. 50 19. 55 21. 0 18. 5 18. 15 23. 50 18. 12 *** 34. 10	Apr. 6 0. 30 6. 25 7. 57 9. 40 11. 23 12. 0 13. 12 14. 23 23. 30	*1009 *1017 *1043 *1002 *1083 *0963 *1009 *0963 *1005 *0986 *1015 *0977 *0985 *0968 *0990	Apr. 6 0. 30 6. 25 7. 57 9. 40 11. 23 12. 0 13. 12 14. 23 23. 30	*01330 *00785 *00835 *00735 *00772 *00650 *00813 *00748 *01355	1 3 9 22	55.0 60.0 60.5 55.0	59.0 63.0 64.5 58.0
Apr. 3 0. 30	22. 31. 40	Apr. 3 0. 2	*0994	Apr. 3 0. 30	*01208	1	60.0	64.0	Apr. 7 0. 0	22. 35. 0	Apr. 7 0. 10	*0979	Apr. 7 1. 0	*01402	10	60.0	65.0

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							H. F.	V. F.								H. F.	V. F.
Apr. 7 0.30 0.47 7.30 7.55 8.40 9.50 10.5 10.32 11.14 11.55 13.0 13.50 14.32 15.24 16.28 17.40 20.30 23.55	22.33.40 36.30 25.0 23.0 25.50 23.0 20.50 27.0 19.55 23.15 20.0 23.58 17.45 25.55 21.0 24.50 19.15 30.0	Apr. 7 0.43 1.7 1.15 1.35 1.58 2.30 2.58 6.18 9.58 10.18 10.35 10.55 12.12 14.15 15.0 17.52 20.30 21.48 23.30	*0996 *0979 *0991 *0978 *0992 *0980 *1000 *1004 *0996 *1010 *1024 *1013 *0991 *1014 *0987 *1004 *0996 *0966 *0988	Apr. 7 6.50 7.53 12.0 22.52	*00905 *00966 *00790 *01352	21	57.0 61.0		Apr. 10 13.30 21.20 22.2	22.24.20 21.5 (+)	Apr. 10 5.15 5.56 6.10 6.30 7.5 18.30 22.3	*1016 *1014 *1004 *1015 *1018 *1015 *0987	Apr. 10 10.0 18.20 21.43	*00722 *01350 *01288	21	53.0 58.0	
Apr. 8 0.30 1.5 4.8 5.30 8.45 12.40 13.0 15.50 16.50 21.5 23.58	22.30.25 34.50 30.0 17.20 27.25 25.55 30.25 21.20 28.55 22.0 29.5	Apr. 8 0.30 1.2 1.45 3.30 4.40 5.12 5.18 5.50 6.50 12.0 12.52 13.40 14.37 16.42 17.50 21.30 23.55	*0982 *0989 *0977 *1010 *0997 *1027 *1015 *1037 *0999 *1009 *1029 *1010 *1020 *0996 *1015 *0982 *0987	Apr. 8 0.30 9.36 15.8 17.38 23.30	*01415 *01100 *01375 *01290 *01288	1 3 9 21	60.0 62.0 62.0 54.5 65.0 66.0 67.0 58.0		Apr. 12 0.5 1.45 9.50 14.10 21.0 23.54	22.28.30 35.0 21.55 27.20 20.35 29.20	Apr. 12 0.15 5.0 7.0 9.23 10.40 19.0 23.30	*0971 *1017 *1004 *1015 *1004 *1016 *1020	Apr. 12 0.30 10.5 19.10 21.30 23.0	*01099 *00748 *01370 *01318 *01360	1 3 9 21	58.0 58.0 58.0 55.0 61.0 61.0 61.0 59.0	
Apr. 9 0.15 2.50 11.2 12.5 20.0 23.45	22.30.5 34.15 25.0 26.35 22.0 31.55	Apr. 9 0.30 3.25 4.20 10.0 10.34 17.45 23.45	*0984 *1008 *0996 *1020 *1009 *1018 *0970	Apr. 9 0.30 10.10 19.30 22.20	*01289 *00870 *01334 *01275	1 3 9 21	55.0 57.0 58.0 51.0 60.0 61.0 63.0 53.0		Apr. 13 0.0 1.50 13.0 20.55 23.28	22.30.0 36.45 26.55 19.20 28.20	Apr. 13 0.30 18.30 23.2	*0983 *1020 *0984	Apr. 13 0.0 9.51 18.50 23.10	*01190 *00852 *01290 *01200	1 3 9 22	55.0 59.0 58.0 52.0 60.0 62.0 63.0 57.0	
Apr. 10 0.0 1.25 7.0	22.33.0 35.0 18.50	Apr. 10 0.50 1.45 2.8	*0979 *0988 *0980	Apr. 10 0.30 5.40 8.5	*01202 *00693 *00820	1 3 9	55.0 60.0 60.0 59.0 63.0 64.0		Apr. 14 0.0 2.12 8.58 13.58 14.55 21.25 23.5	22.31.40 38.55 25.0 29.55 25.20 22.10 27.0	Apr. 14 0.10 1.30 13.20 14.25 16.0 20.10 23.30	*0991 *0981 *1013 *1025 *1013 *1015 *0978	Apr. 14 0.0 10.30 19.40 23.0	*01190 *00808 *01270 *01160	10 21	55.0 50.0 60.0 55.0	
Apr. 15 0.0 2.0 8.12 8.45 9.30 11.0 12.8	22.31.40 38.30 27.20 23.10 28.0 20.20 25.0	Apr. 15 0.0 10.15 19.34 23.30	*01112 *00635 *01308 *01115	Apr. 15 0.0 3.42 4.0 7.30 9.10 9.34 9.48	*0978 *1014 *1029 *1028 *1013 *1029 *1014	1 3 9 21	55.0 58.0 60.0 53.5 60.0 63.0 58.0										

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The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time.

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

April 10 and 11. During parts of these days workmen were employed in laying down gas pipes for the Astronomical Observatory.

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.																						
							H. F.	V. F.								H. F.	V. F.																					
Apr. 15 15.30 20.20 23.35	22.27.0 22.10 30.0	Apr. 15 10.0 10.22 15.26 23.15	.1025 .1011 .1028 .0983						Apr. 20 3.0 6.20 8.35 9.25 9.45 10.15 10.45 11.20 11.45 12.30 13.30 14.23 16.30 19.9 19.45 20.45 21.8 23.45	22.36.55 25.10 25.0 18.0 19.55 18.15 23.50 21.30 22.40 15.25 32.25 15.50 23.55 22.40 19.5 23.0 20.5 32.30	Apr. 20 5.0 5.40 7.10 8.0 8.28 8.57 9.35 10.40 12.2 13.12 13.45 15.12 17.40 22.12 23.3	.1012 .1027 .1030 .1019 .1030 .1023 .1039 .1022 .1032 .1002 .1039 .1021 .1033 .1003 .1015 .1005	Apr. 20 16.18 23.45	.01272 .01148	9 22	57.0 53.5	61.0 57.0																					
Apr. 16 0.0 2.0 11.42 20.30 23.45	22.32.0 37.55 25.20 20.45 28.0	Apr. 16 0.30 11.53 18.0 23.44	.0983 .1031 .1030 .1085	Apr. 16 0.0 9.43 19.25 23.30	.01098 .00895 .01120 .00988	1 3 9 21	55.0 55.0 54.0 53.0	59.0 60.0 58.0 57.0																														
Apr. 17 0.0 1.43 6.0 15.6 21.0 23.45	22.29.10 34.10 25.55 27.40 21.30 30.50	Apr. 17 0.30 18.37 18.43 22.55 23.45	.0984 .1016 .1028 .0982 .0983	Apr. 17 0.0 2.12 6.35 8.5 9.45 17.12 23.30	.00926 .00640 .00698 .00765 .00723 .01328 .01260	1 3 9 21	57.0 60.0 60.0 52.0	61.0 64.0 65.0 55.0																														
Apr. 18 0.0 2.0 6.0 12.20 14.30 16.30 16.40 17.5 20.0 20.10 20.20 23.55	22.31.58 33.35 24.55 25.10 23.0 23.40 22.0 25.0 20.40 22.30 18.50 30.0	Apr. 18 0.30 12.50 15.52 18.35 23.28	.0982 .1025 .1017 .1029 .0988	Apr. 18 0.0 3.30 15.48 23.40	.01238 .00736 .01350 .01245	1 3 9 21	58.0 60.0 60.0 60.0	61.0 65.0 65.0 64.0																														
Apr. 19 0.0 1.45 6.20 10.40 11.35 12.15 12.45 13.58 17.28 19.58 23.55	22.31.10 35.40 29.0 26.0 29.50 25.30 27.0 23.0 27.40 20.55 34.30	Apr. 19 0.45 11.10 12.25 13.22 15.0 19.38 22.45 23.58	.0991 .1033 .1013 .1029 .1019 .1028 .0988 .0996	Apr. 19 0.0 9.44 21.50 23.40	.01240 .00970 .01218 .01149	1 3 9 21	55.0 60.0 58.0 54.0	59.0 63.0 62.5 59.0																														
Apr. 20 0.5 0.55	22.35.20 37.55	Apr. 20 0.10 3.54	.0996 .1022	Apr. 20 0.10 10.0	.01124 .00750	1 3	60.0 60.0	65.0 65.0																														
									Apr. 21 0.0 0.35 6.23 6.55 7.5 8.40 15.0 19.40 23.58	22.33.30 36.5 27.0 15.40 15.10 22.0 27.20 21.30 30.30	Apr. 21 0.23 3.0 3.40 4.20 4.48 6.0 6.40 7.18 8.8 8.48 10.0 16.37 19.14 22.8 23.48	.0993 .1014 .1008 .1034 .1014 .1032 .1026 .1023 .1014 .1005 .1024 .1009 .1003 .1004	Apr. 21 0.0 6.0 8.20 10.31 21.30 23.30	.01130 .00648 .00753 .00670 .01280 .01248	10 21	59.0 52.0	64.0 58.5																					
									Apr. 22 0.30 7.30 10.5 11.45 15.30 20.10 23.40	22.31.15 24.0 27.20 23.30 25.20 21.5 30.0	Apr. 22 0.5 1.33 2.35 6.12 9.47 19.5 22.35 23.40	.1003 .1011 .0994 .1010 .1002 .1019 .0990 .0995	Apr. 22 0.30 10.0 16.45 23.40	.01163 .00690 .01295 .01202	1 3 9 21	58.0 59.0 57.0 52.0	63.0 63.0 60.0 56.0																					
									Apr. 23 0.0 1.57 6.0 13.30 21.0	22.31.50 35.25 24.10 26.0 20.55	Apr. 23 0.0 1.10 5.20 8.55 18.15	.0995 .0989 .1008 .0996 .1015	Apr. 23 0.0 4.40 8.0 10.20 17.50	.01182 .00612 .00700 .00632 .01280	1 3 9 21	53.0 58.0 59.0 50.0	58.0 61.0 61.0 53.0																					

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INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Apr. 23 23.55	22. 28. 30	Apr. 23 18.33 23.30	.1026 .0988	Apr. 23 23.40	.01190		°	°	Apr. 28 15.27 16.0 16.30 18.18 20.15 23.58	22. 18. 0 17. 0 21.40 24.20 21.10 31.25	Apr. 28 4.0 4.32 5.58 6.25 7.8 9.54 10.8 11.18 14.17 15.7 17.0 22.37 23.30	.1022 .1036 .1027 .1043 .1022 .1026 .1042 .1017 .1014 .1049 .1013 .1003 .1013	Apr. 28 23.25	.01156		°	°
Apr. 24 0.0 1.40 6.25 11.0 11.45 12.28 12.40 13.0 14.20 15.30 16.35 19.42 23.55	22. 28. 55 32. 0 24. 0 24.20 18.55 21.30 28. 0 22.30 14.25 21.40 23. 0 20. 0 27. 0	Apr. 24 0.30 10.2 10.38 11.10 12.35 13.26 14.18 18.50 23.45	.0990 .1016 .1011 .1027 .1004 .1039 .1004 .1026 .0996	Apr. 24 0.0 3.48 6.52 8.10 9.50 16.20 23.40	.01168 .00665 .00655 .00720 .00665 .01280 .01190	1 3 9 21	57.0 60.0 60.0 51.0	60.0 63.0 63.0 53.0	Apr. 29 0.30 9.21 12.25 12.45 14.30 20.0 23.50	22. 32. 45 21.50 24.40 27.50 25.20 20.50 30.30	Apr. 29 0.30 3.30 8.0 9.20 19.2 22.18	.1014 .1002 .1015 .1000 .1014 .0993	Apr. 29 0.30 3.30 8.0 10.10 18.12 23.55	.01015 .00597 .00690 .00610 .01290 .01215	1 3 9 21	55.0 60.0 58.0 50.0	59.0 63.0 61.0 55.0
Apr. 25 0.0 1.40 6.0 10.55 11.28 12.0 15.0 21.0 23.55	22. 27. 12 32. 0 23.30 23.0 26.0 24.10 25.5 20.45 27.58	Apr. 25 0.0 5.35 6.10 10.30 19.0 23.4	.0996 .1007 .1019 .1008 .1015 .0994 .1001 .0998	Apr. 25 0.0 6.28 8.25 10.30 19.20 23.40	.01178 .00596 .00700 .00600 .01295 .01222	1 3 9 21	56.0 59.0 59.0 51.0	59.0 62.0 63.0 56.0	Apr. 30 0.0 1.50 8.0 10.45 12.12 14.30 20.40 23.58	22. 30. 20 33.0 21.0 23.55 22.10 23.50 18.20 26.25	Apr. 30 0.0 6.18 8.0 12.38 19.0 23.20	.0989 .1007 .0995 .0990 .1008 .0982	Apr. 30 0.30 4.16 7.22 10.10 18.7 22.30	.01187 .00640 .00742 .00628 .00295 .01190	1 3 9 21	55.0 60.0 62.0 51.0	59.0 64.0 67.0 54.0
Apr. 26 0.30 1.50 8.40 20.25 23.30	22. 29. 40 32. 0 21.55 19.55 28.25	Apr. 26 0.10 10.37 19.0 23.10 23.47	.0996 .1017 .1019 .1002 .1009	Apr. 26 0.30 3.48 9.27 16.6 23.55	.01202 .00705 .00632 .01270 .01135	1 3 9 21	56.0 55.0 57.0 51.0	60.0 61.0 60.0 56.5	May 1 0.10 2.30 20.10 23.58	22. 27. 20 30.0 20.30 29.40	May 1 0.45 6.58 7.57 8.48 18.38 23.35	.0983 .1020 .1001 .1014 .1029 .0997	May 1 0.30 10.15 15.5 17.32 18.10 23.20	.01268 .00848 .01236 .01210 .01265 .01185	1 3 9 21	55.0 57.0 58.0 50.0	59.0 61.0 63.0 55.0
Apr. 27 0.30 1.40 6.30 13.50 14.39 18.30 19.12 23.25	22. 28. 30 30.30 24.0 21.50 23.50 22.0 19.25 30.0	Apr. 27 0.30 3.57 4.30 6.0 9.23 12.45 17.30 18.42 20.45 23.25	.1006 .1025 .1010 .1026 .1018 .1032 .1017 .1029 .1021 .1004	Apr. 27 0.30 5.18 8.15 10.0 15.52 23.30	.01170 .00647 .00710 .00640 .01282 .01165	1 3 9 22	55.0 60.0 60.0 50.0	59.0 64.0 66.5 55.0	May 2 0.0 1.50 17.25 18.15 20.0 20.58 23.58	22. 30. 5 32.25 22.45 21.0 23.0 21.0 28.50	May 2 0.0 18.57 22.20 23.35 23.58	.1000 .1032 .1027 .1002 .1007	May 2 0.30 4.12 8.15 10.25 16.5 23.12	.01072 .00584 .00710 .00620 .01244 .01110	1 3 9 21	54.0 58.5 62.0 49.0	58.0 62.0 66.5 53.0
Apr. 28 10.30 13.3 14.10	(†) 22. 18. 0 20. 0 30.20	Apr. 28 0.10 2.7 3.33	.0996 .1016 .1029	Apr. 28 0.0 10.40 17.40	.01155 .00542 .01214	10 21	55.0 48.0	59.0 52.0	May 3 0.30	22. 30. 55	May 3 0.30	.1011	May 3 0.30	.00960	1	55.0	59.0

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Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.		Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.	
							H. F.	V. F.								H. F.	V. F.
May 3 1. 50 7. 40 7. 57 9. 0 9. 55 10. 5 10. 24 10. 33 10. 56 11. 15 11. 48 13. 30 19. 0 23. 58	22. 34. 15 24. 45 16. 45 22. 30 17. 50 7. 55 10. 55 3. 40 13. 0 22. 0 15. 25 22. 50 17. 55 34. 5	May 3 2. 34 3. 12 3. 42 4. 35 5. 58 7. 3 7. 55 8. 20 8. 55 9. 51 10. 14 10. 32 10. 45 10. 58 11. 8 11. 28 13. 30 17. 53 18. 18 20. 12 21. 50 23. 50	*0994 *1020 *1003 *1028 *1002 *1022 *0995 *1023 *1023 *0991 *1028 *0988 *1010 *0997 *1008 *1078 *1000 *0985 *0997 *1079 *0985 *0963	May 3 3. 12 8. 8 10. 25 19. 42 23. 55	*00545 *00746 *00548 *01248 *01237	3 9 21	60° 63° 61° 64° 55° 59°		May 7 0. 0 2. 18 11. 45 12. 15 12. 50 13. 3 13. 15 14. 25 14. 58 15. 37 15. 58 18. 58 19. 15 23. 55	22. 30. 0 35. 45 25. 15 12. 20 16. 5 12. 55 16. 5 16. 30 18. 10 26. 45 16. 25 20. 30 13. 25 33. 30	May 7 0. 0 2. 45 5. 35 6. 30 7. 20 8. 30 11. 5 11. 35 12. 20 12. 58 13. 37 14. 48 16. 20 20. 2 21. 59 23. 0 23. 55	*1009 *1006 *1031 *1020 *1030 *1021 *1034 *1024 *1079 *1021 *1031 *1007 *1030 *0978 *1005 *0953 *0983	May 7 0. 0 12. 57 23. 30	*01130. *00650 *01012	1 3 9 21	53° 57° 57° 61° 54° 58°	
May 4 0. 10 7. 30 8. 6 8. 20 13. 10 20. 0 23. 29	22. 32. 58 22. 25 12. 25 19. 15 26. 5 20. 50 30. 0	May 4 0. 15 2. 38 2. 58 6. 57 8. 2 8. 18 9. 25 13. 20 15. 15 20. 30 23. 0	*0962 *0995 *0984 *1013 *1000 *1040 *1000 *1014 *1000 *1007 *0993	May 4 0. 20 5. 30 8. 12 10. 0 16. 37 21. 35 23. 30	*01210 *00728 *00821 *00766 *01370 *01255 *01290	1 3 9 22	58° 60° 60° 65° 62° 66° 55° 57°		May 8 0. 0 3. 30 5. 12 6. 25 6. 58 10. 42 11. 30 12. 40 14. 20 15. 32 20. 40 23. 30	22. 34. 0 34. 0 28. 30 28. 0 19. 45 25. 10 22. 25 30. 40 21. 50 23. 0 20. 0 31. 55	May 8 0. 0 2. 3 3. 30 3. 58 5. 0 6. 30 7. 0 7. 30 7. 45 9. 41 14. 0 21. 57 23. 30	*0993 *1016 *1001 *1016 *1004 *1023 *1037 *1021 *1029 *1006 *1024 *0990 *1004	May 8 0. 0 9. 51 20. 0 23. 40	*01012 *00984 *01182 *01046	1 3 9 21	56° 59° 57° 60° 56° 60° 52° 56°	
May 5 0. 0 2. 15 4. 30 7. 30 13. 0 20. 0 23. 58	22. 29. 20 28. 40 24. 0 23. 10 24. 20 19. 25 29. 40	May 5 0. 30 13. 32 20. 5 22. 25	*1000 *1020 *1012 *0995	May 5 0. 0 10. 10 19. 45 22. 40 23. 55	*01208 *00580 *01262 *01170 *01180	9 21	59° 64° 53° 57°		May 9 0. 0 2. 55 9. 40 13. 48 14. 0 15. 45 17. 0 20. 28 23. 42	22. 32. 40 32. 0 23. 30 24. 20 27. 0 20. 50 24. 50 21. 0 31. 0	May 9 0. 0 3. 0 3. 50 7. 15 10. 18 14. 30 16. 25 19. 2 23. 25	*0998 *1012 *0998 *1012 *1002 *1013 *1004 *1026 *1000	May 9 0. 0 4. 0 8. 30 10. 30 17. 27 23. 40	*01022 *00600 *09750 *00660 *01288 *01204	1 3 9 21	57° 61° 58° 63° 63° 67° 52° 55°	
May 6 1. 15 3. 30 5. 15 12. 30 20. 35 23. 50	22. 29. 30 27. 0 23. 30 26. 0 20. 55 29. 5	May 6 1. 18 11. 15 14. 38 23. 25	*1015 *1028 *1027 *1003	May 6 1. 20 6. 38 11. 25 23. 45	*01196 *01168 *01234 *01138	1 3 9 21	54° 58° 55° 58° 52° 59° 50° 56°		May 10 0. 0 1. 15 6. 5 12. 3 19. 25 23. 58	22. 32. 0 33. 0 20. 50 24. 0 17. 30 29. 0	May 10 1. 0 1. 54 4. 30 5. 18 6. 0 19. 48 22. 22	*1013 *1000 *1020 *1013 *1021 *1000 *0982	May 10 0. 0 5. 0 6. 45 8. 18 10. 27 20. 40 23. 40	*01180 *00643 *00652 *00732 *00650 *01332 *01285	1 3 9 21	56° 59° 60° 65° 60° 65° 57° 60°	

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Göttingen Mean Solar Time. h m	Western Declination. ° / "	Göttingen Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature. °	Göttingen Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature. °	Hour.	Thermometers.		Göttingen Mean Solar Time. h m	Western Declination. ° / "	Göttingen Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature. °	Göttingen Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature. °	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
		May 10 23. 58	*0994				°	°	May 13 19. 30	22. 11. 40	May 13 8. 25	*0991				°	°
May 11 0. 0 1. 51 13. 0 13. 28 14. 10 20. 5 23. 20	22. 29. 50 32. 15 23. 0 26. 0 22. 45 18. 15 27. 20	May 11 0. 10 15. 37 19. 55 23. 20	*0990 *1023 *1015 *0989	May 11 0. 0 5. 50 6. 40 8. 20 10. 0 19. 33 23. 25	*01268 *00700 *00695 *00780 *00648 *01328 *01250	1 3 9 22	60° 0 62° 0 64° 6 55° 0	65° 0 66° 0 68° 0 59° 0	19. 50 19. 56 20. 20 23. 58	22. 11. 40 15. 10 22. 15 13. 10 30. 50	May 13 8. 45 10. 57 11. 2 11. 23 11. 33 12. 2 12. 28 12. 48 14. 18 15. 3 18. 18 22. 50 23. 40	*1009 *0996 *1024 *0987 *0994 *0968 *0994 *0984 *1012 *1006 *1012 *0987 *0997					
May 12 0. 0 2. 35 3. 55 4. 27 6. 0 10. 0 10. 30 10. 57 11. 13 13. 8 13. 45 21. 40 23. 50	22. 31. 50 36. 30 36. 0 27. 15 32. 35 24. 30 11. 25 26. 40 21. 10 21. 20 26. 0 23. 15 33. 0	May 12 1. 0 2. 0 2. 45 3. 28 3. 50 3. 59 4. 48 4. 55 6. 48 7. 35 7. 50 8. 5 8. 30 8. 40 10. 10 10. 30 11. 0 12. 35 14. 50 16. 0 17. 5 17. 8 17. 20 19. 0 22. 30 23. 38	*0997 *1008 *1055 *1034 *1065 *1040 *1056 *1087 *1002 *1019 *0985 *1023 *1008 *1021 *1004 *1028 *1006 *1020 *1016 *1016 *1026 *1012 *1026 *1022 *0982 *1006	May 12 0. 0 4. 58 11. 10 17. 55 23. 0	*01256 *** *01310 *** *00610 *01310 *01206	11 21	60° 0 54° 0	64° 0 58° 0	May 14 0. 10 4. 52 5. 8 13. 30 19. 55 23. 56	22. 31. 40 29. 0 22. 20 24. 20 17. 0 30. 15	May 14 1. 10 4. 50 5. 0 5. 30 5. 52 8. 35 17. 30 22. 18 23. 55	*0992 *1022 *1003 *1049 *1031 *1018 *1016 *0992 *0994	May 14 0. 10 10. 35 20. 37 23. 40	*01050 *00405 *01150 *01060	1 3 9 21	57° 0 60° 0 60° 0 54° 0	60° 0 64° 0 64° 0 58° 0
May 13 0. 50 7. 30 8. 28 10. 10 10. 40 11. 0 11. 28 11. 45 12. 15 12. 36 13. 10 15. 32	22. 33. 35 21. 30 13. 0 22. 10 19. 0 24. 50 19. 20 22. 20 15. 0 16. 5 11. 0 27. 0	May 13 0. 50 1. 52 2. 15 2. 40 3. 50 4. 18 4. 32 5. 5 6. 10 6. 40 7. 7 7. 30	*1005 *1018 *1012 *1036 *0982 *1018 *1000 *1027 *1004 *1026 *1008 *1029	May 13 1. 0 10. 0 10. 56 11. 10 16. 2 23. 55	*01125 *00580 *00635 *00554 *01202 *01055	1 3 9 21	58° 0 60° 0 63° 5 52° 0	61° 0 64° 0 66° 0 56° 0	May 16 0. 10 2. 1 9. 16 11. 32 12. 3 13. 34 14. 30 20. 25 23. 52	22. 31. 0 32. 35 21. 0 25. 0 22. 20 27. 30 23. 35 20. 0 26. 20	May 16 0. 10 2. 0 3. 15 4. 25 5. 5 5. 25 5. 40 6. 7 7. 15 9. 10 17. 35 19. 10 21. 8 23. 10	*1004 *1019 *0996 *1008 *0998 *1011 *1004 *1020 *1026 *0987 *1033 *1018 *0987 *1006	May 16 0. 30 4. 30 8. 12 10. 50 20. 0 23. 50	*00918 *00470 *00574 *00482 *01150 *01106	1 3 9 21	55° 0 60° 0 60° 0 54° 0	59° 0 64° 0 63° 0 59° 0
May 17 0. 0	22. 27. 0	May 17 0. 20	*1015	May 17 0. 0	*01098	1	58° 0	61° 0	May 17 0. 0	22. 27. 0	May 17 0. 20	*1015	May 17 0. 0	*01098	1	58° 0	61° 0

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The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time.

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

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
May 17 1. 56 7. 40 10. 15 10. 55 11. 25 20. 3 23. 58	22. 30. 10 21. 30 24. 30 18. 45 24. 35 19. 0 28. 15	May 17 3. 30 6. 0 6. 40 7. 50 8. 37 9. 50 11. 20 11. 42 13. 40 17. 38 23. 45	·1015 ·1042 ·1027 ·1032 ·1020 ·1032 ·1023 ·1033 ·1013 ·1028 ·0996	May 17 5. 40 8. 0 10. 30 20. 20 23. 45	·00528 ·00593 ·00520 ·01205 ·01180	3 9 21	60.0 64.0 58.0	65.0 67.0 61.0	May 22 0. 10 1. 40 11. 30 13. 0 14. 15 19. 25 23. 58	22. 27. 55 32. 20 *** 23. 0 *** 20. 15 *** 23. 0 *** 15. 10 *** 31. 30	May 22 0. 0 7. 10 17. 10 22. 50 23. 42	·0998 ·1021 ·1017 ·0990 ·0996	May 22 0. 0 11. 0 19. 2 23. 45	·01280 ·00714 ·01302 ·01192	1 3 9 21	60.0 61.0 65.0 58.0	65.0 66.0 69.0 62.0
May 18 0. 30 1. 55 12. 10 14. 25 15. 3 15. 33 19. 18 23. 58	22. 30. 0 32. 0 22. 0 24. 0 22. 0 26. 15 18. 10 30. 0	May 18 0. 20 5. 0 6. 20 11. 0 12. 42 15. 45 17. 40 23. 55	·0999 ·1030 ·1018 ·1039 ·1019 ·1021 ·1036 ·0977	May 18 0. 30 10. 0 17. 10 23. 50	·01148 ·00522 ·01200 ·01045	1 3 9 22	60.0 62.0 64.5 59.5	64.0 66.0 67.5 61.0	May 23 0. 45 7. 0 8. 45 15. 15 19. 10 23. 55	22. 33. 40 23. 20 *** 19. 55 *** 22. 0 *** 18. 20 31. 0	May 23 0. 30 4. 27 5. 13 6. 0 6. 40 7. 25 8. 10 11. 46 12. 18 14. 20 18. 35 19. 13 22. 0 23. 55	·0997 ·1019 ·1010 ·1018 ·1010 ·1017 ·1008 ·1017 ·1029 ·1008 ·1022 ·1036 ·1017 ·1031	May 23 0. 30 5. 28 8. 20 10. 18 17. 2 23. 55	·01160 ·00588 ·00640 ·00589 ·01330 ·01012	1 3 9 21	60.0 65.0 69.0 58.0	65.0 69.0 70.0 62.0
May 19 0. 0 16. 30 22. 45	22. 30. 0 16. 25 22. 50	May 19 0. 0 7. 30 9. 0 12. 0 14. 10 16. 0 16. 30 17. 25 22. 30	·0977 ·1009 ·0994 ·1013 ·0994 ·1008 ·0998 ·1009 ·0981	May 19 0. 0 4. 27 8. 12 10. 30 17. 45 22. 40	·01038 ·00495 ·00602 ·00550 ·01203 ·01168	9 21	65.5 56.0	67.0 60.0	May 24 0. 30 5. 30 19. 30 23. 58	22. 31. 0 25. 30 *** 20. 0 28. 10	May 24 0. 48 1. 5 1. 30 1. 50 2. 57 3. 22 4. 20 5. 5 5. 27 6. 10 6. 50 7. 25 8. 0 9. 10 16. 10 22. 3 23. 58	·1024 ·1017 ·1032 ·1022 ·1030 ·1017 ·1026 ·1022 ·1032 ·1026 ·1039 ·1025 ·1030 ·1022 ·1030 ·1012 ·1014	May 24 0. 30 4. 10 8. 40 10. 10 18. 50 23. 55	·00925 ·00497 ·00578 ·00542 ·01306 ·01182	1 3 9 21	63.0 63.0 64.0 60.0	66.0 68.0 67.0 63.0
May 20 0. 0 1. 15 8. 45 14. 58 18. 58 23. 55	22. 26. 50 32. 35 20. 0 27. 45 19. 20 31. 5	May 20 0. 0 5. 40 6. 28 11. 20 14. 45 15. 7 19. 15 20. 0 23. 58	·0980 ·1018 ·1003 ·0990 ·1004 ·1017 ·0988 ·1020 ·0987	May 20 0. 0 5. 25 8. 55 10. 30 21. 10 22. 30	·01117 ·00520 ·00641 ·00576 ·01300 ·01230	1 3 9 21	60.0 63.0 64.0 58.0	64.0 66.0 68.0 64.0	May 25 0. 30 6. 15 9. 46	22. 28. 50 21. 30 24. 0 ***	May 25 0. 52 1. 28 11. 20	·1019 ·1012 ·1025	May 25 0. 30 10. 25 19. 30	·01160 ·00515 ·01234	1 3 9	60.0 63.5 65.0	64.0 65.5 67.0
May 21 0. 45 12. 30 20. 15 23. 58	22. 32. 45 21. 10 15. 50 28. 0	May 21 0. 37 1. 50 3. 32 7. 58 18. 8 21. 30 23. 58	·0993 ·0991 ·1000 ·0965 ·1013 ·0995 ·0999	May 21 1. 0 1. 45 8. 40 14. 12 23. 55	·00780 ·00630 ·00543 ·01175 ·01075	1 3 9 21	67.0 70.0 70.0 60.0	69.0 74.0 74.0 64.0	May 25 0. 30 6. 15 9. 46	22. 28. 50 21. 30 24. 0 ***	May 25 0. 52 1. 28 11. 20	·1019 ·1012 ·1025	May 25 0. 30 10. 25 19. 30	·01160 ·00515 ·01234	1 3 9	60.0 63.5 65.0	64.0 65.5 67.0

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INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		
							H. F.	V. F.								H. F.	V. F.	
May 25 19. 45 23. 45	22. 19. 30 29. 15	May 25 18. 28 18. 50 21. 27 23. 45	.1018 .1028 .1002 .1004	May 25 23. 45	.01055	22	61.0	62.0	May 29 23. 45	22. 30. 20	May 29 6. 32 11. 0 13. 10 15. 30 16. 30 18. 30 21. 47 23. 52	.1024 .1004 .1017 .1015 .1006 .1016 .1002 .1008						
May 26 0. 0 5. 0 9. 39 11. 15 11. 50 12. 32 14. 30 14. 55 19. 40 23. 55	22. 30. 20 23. 10 24. 30 24. 50 27. 20 24. 10 23. 25 25. 50 17. 50 30. 0	May 26 0. 0 6. 55 7. 30 9. 0 11. 40 15. 33 16. 5 23. 36	.1007 .1029 .1042 .1032 .1045 .1031 .1043 .1013	May 26 0. 15 11. 15: 23. 30:	.01034 .00470 .01075	9 21	64.5 59.0	66.5 63.0	May 30 0. 0 1. 30 15. 0: 18. 30 23. 45	22. 31. 0 32. 20 22. 15 *** 19. 55 30. 55	May 30 0. 40 7. 40 18. 30: 18. 58 23. 10	.1005 .1023 .1022 .1033 .1000	May 30 0. 0 5. 3 8. 30: 10. 38: 16. 38 23. 30	.01230 .00613 .00728 .00662 .01368 .01172	1 3 9 21	65.0 67.0 68.0 63.0	67.0 69.0 73.0 63.5	
May 27 1. 0 9. 15 13. 0 18. 30 23. 58	22. 34. 0 22. 10 21. 50 21. 30 32. 30	May 27 1. 0 4. 10 4. 37 5. 30 7. 30 8. 35 9. 7 13. 33 20. 30 23. 30	.1018 .1039 .1029 .1040 .1031 .1045 .1029 .1033 .1019 .1012	May 27 0. 10 10. 40: 19. 35 23. 58	.01078 .00515 .01230 .01037	1 3 9 21	61.0 64.0 64.0 62.0	64.0 65.5 67.5 64.0	May 31 0. 0 5. 30 18. 50 23. 45	22. 31. 10 22. 0 17. 55 31. 0	May 31 0. 5 9. 20 18. 25 19. 0 23. 30	.1010 .0988 .1002 .1020 .0996	May 31 0. 0 1. 59 14. 40 23. 40	.01096 .00650 .01364 .01168	1 3 9 21	68.5 71.5 73.0 65.5	68.5 73.0 76.0 63.5	
May 28 0. 30 9. 30 16. 0 23. 30	22. 35. 0 24. 25 *** 26. 15 28. 30	May 28 0. 30 1. 52 2. 30 2. 58 4. 0 4. 50 6. 0 8. 12 8. 55 9. 54 10. 28 12. 36 13. 45 14. 5 16. 40 23. 40	.1018 .1008 .1023 .1018 .1026 .1020 .1032 .1021 .1029 .1022 .1032 .1021 .1030 .1023 .1036 .1008	May 28 0. 32 4. 28 8. 10: 10. 40 17. 3 23. 28	.00979 .00532 .00615 .00570 .01296 .01078	1 3 9 21	63.0 65.0 67.0 61.0	66.0 67.0 69.5 62.0	June 1 6. 20 9. 40 10. 20 10. 42 11. 33 12. 5: 15. 0 18. 32 23. 20	22. 24. 0 *** 23. 0 19. 30 28. 0 17. 40 *** 17. 0 *** 21. 50 *** 16. 0 33. 5	June 1 (†) 6. 16 7. 40 8. 20 10. 0 10. 30 11. 4 12. 38 14. 35 17. 40 19. 15 23. 20	.1000 .0996 .1004 .0996 .1017 .0982 .1001 .0983 .0994 .1042 .1011	June 1 6. 20 13. 8 23. 20	.00624 .01330 .01080	1 3 9 22	65.0 70.0 65.0	70.0 75.0 70.0 65.0	
May 28 0. 30 9. 30 16. 0 23. 30	22. 35. 0 24. 25 *** 26. 15 28. 30	May 28 0. 30 1. 52 2. 30 2. 58 4. 0 4. 50 6. 0 8. 12 8. 55 9. 54 10. 28 12. 36 13. 45 14. 5 16. 40 23. 40	.1018 .1008 .1023 .1018 .1026 .1020 .1032 .1021 .1029 .1022 .1032 .1021 .1030 .1023 .1036 .1008	May 28 0. 32 4. 28 8. 10: 10. 40 17. 3 23. 28	.00979 .00532 .00615 .00570 .01296 .01078	1 3 9 21	63.0 65.0 67.0 61.0	66.0 67.0 69.5 62.0	June 2 0. 30 0. 57 1. 28 1. 46 3. 36 7. 47 12. 5 12. 54 15. 10 16. 40 19. 40 23. 30	22. 35. 50 36. 0 31. 55 33. 20 25. 55 16. 30 20. 0 24. 0 15. 45 19. 50 18. 5 29. 30	June 2 0. 0 0. 15 0. 55 1. 23 1. 50 2. 35 3. 20 3. 58 5. 0 5. 58 6. 20 6. 36	.1018 .1009 .1015 .0992 .1010 .1005 .0988 .1006 .0991 .1009 .1002 .1008	June 2 0. 0 2. 12 15. 30 23. 0	.00988 .00532 .01298 .01220	11 21	67.0 60.0	70.0 65.0	
May 29 0. 0 1. 30 6. 30 19. 25	22. 29. 30 32. 25 22. 0 18. 55	May 29 0. 0 3. 25 5. 3 5. 35	.1006 .1004 .1018 .1010	May 29 0. 30: 10. 30: 15. 30 23. 30	.00758 .00715 .01370 .01282	1 3 9 21	64.0 68.0 71.0 63.0	66.0 68.0 72.5 64.0										

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							H. F.	V. F.								H. F.	V. F.
		June 2 8.37 12.50 13.32 14.48 15.30 18.30 19.0 19.28 20.8 21.53 23.20	*0986 *0999 *0986 *0999 *0991 *1003 *1023 *1009 *1016 *1002 *1000														
		June 3 0.40 12.0 13.0 15.10 19.30 23.58	22.29.50 21.0 16.5 19.40 14.35 31.40	June 3 0.25 1.38 2.52 3.26 4.30 5.13 6.0 6.25 7.25 12.6 13.30 18.15 18.58 21.5 22.55 23.58	*0994 *1005 *0975 *0983 *0968 *0977 *0971 *0984 *0974 *0984 *0973 *0997 *1030 *0995 *1022 *1014	June 3 0.30 3.0 15.3 23.45	*01068 *00592 *01325 *01126	1 65.0 3 70.0 9 71.0 21 60.0	69.0 76.0 76.0 66.0								
		June 4 0.30 1.10 8.15 8.30 10.25 12.0 13.5 14.10 16.0 23.55	22.31.0 33.10 20.0 21.50 13.20 18.0 9.55 21.30 10.50 32.0	June 4 0.30 2.55 7.56 10.0 20.55 23.55	*1007 *1000 *1019 *0992 *1045 *1028	June 4 0.0 2.50 14.40 23.50	*01103 *00590 *01270 *01136	1 65.0 3 70.0 9 70.0 21 63.0	69.0 77.0 72.0 65.0								
		June 5 0.0 9.33 10.10 14.15 18.40 19.25 19.43 23.55	22.32.15 *** 20.0 13.0 22.40 12.30 20.10 16.30 31.30	June 5 0.32 1.20 4.22 8.35 9.40 10.5 10.45 16.30 18.42	*1016 *1024 *1006 *1036 *1025 *1039 *1013 *1038 *1028	June 5 0.30 3.43 17.40 23.30	*01074 *00600 *01355 *01290	1 66.0 3 72.5 9 70.0 21 63.0	70.0 73.0 75.0 66.0								
		June 6 1.5 6.10 7.10 8.20 9.5 9.25 10.8 11.58 12.58 15.8 20.15 23.58	22.34.5 30.30 26.30 21.0 25.30 22.10 25.50 25.25 18.30 27.55 21.0 33.0	June 6 0.37 2.22 3.30 5.44 9.12 9.35 10.20 12.30 13.48 15.35 23.30	*0966 *0980 *0971 *1006 *0978 *0991 *0973 *1001 *0977 *0986 *0960	June 6 0.30 7.35 23.55	*01285 *01440 *01102	1 65.0 3 65.0 9 60.0 21 60.5	69.0 69.0 64.0 62.0								
		June 7 0.35 2.0 11.30 12.58 13.55 14.5 14.45 18.32 23.58	22.34.15 37.0 27.0 18.50 23.55 20.10 24.15 17.55 32.0	June 7 0.20 6.20 7.32 7.56 9.50 11.50 12.32 13.15 15.20 23.45	*0961 *0997 *0990 *0999 *0987 *0982 *0988 *0967 *0996 *0955	June 7 0.30 4.12 4.52 10.23 16.30 23.55	*01070 *00620 *00702 *00614 *01155 *01032	1 61.0 3 65.0 9 66.0 21 62.0	63.0 68.0 67.5 62.0								
		June 8 0.15 2.0 8.55 9.15 10.30 15.0 16.3 18.28 18.54 19.30 23.42	22.32.35 37.10 24.10 16.30 25.45 24.20 33.20 18.45 25.40 19.10 33.25	June 8 1.0 4.32 6.40 7.40 8.20 8.56 9.12 9.30 11.0 12.10 16.15 17.0 18.48 19.30 23.28	*0949 *0990 *0973 *0980 *0974 *0980 *0976 *0995 *0973 *0986 *0972 *0987 *0987 *0970 *0966	June 8 0.30 11.0 16.40 23.40	*01005 *00632 *01098 *01080	1 60.0 3 61.0 9 64.0 22 63.5	65.0 66.0 68.0 63.5								
		June 9 0.0 0.30	22.34.0 35.0	June 9 0.18 3.10	*0970 *0975	June 9 0.0 2.38	*01060 *00645	9 71.0 21 60.0	72.0 65.0								

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							H. F.	V. F.								H. F.	V. F.
June 9 6. 15 12. 30 13. 20 14. 8 19. 20 23. 58	22. 25. 0 *** 25. 5 28. 0 24. 25 20. 0 33. 0	June 9 3. 38 4. 15 5. 18 6. 15 7. 2 7. 25 12. 30 13. 5 14. 30 19. 10 23. 30	*0967 *0982 *0958 *0975 *0966 *0977 *0964 *0976 *0964 *0980 *0956	June 9 15. 40 23. 15	*01250 *01158		o	o	June 13 10. 15 10. 38 11. 10 11. 30 11. 58 12. 25 13. 30 14. 17 15. 53 16. 30 17. 20 23. 58	21. 55. 0 22. 2. 20 19. 10 9. 50 13. 0 26. 50 15. 35 21. 55 17. 45 22. 0 16. 25 30. 5	June 13 7. 28 9. 40 10. 2 10. 20 11. 15 11. 30 12. 8 12. 45 13. 8 15. 0 16. 0 19. 5 23. 23	*1055 *0982 *0954 *1007 *0955 *0963 *0953 *0979 *0959 *0984 *0973 *0994 *0975	June 13 12. 25 16. 18 23. 40	*00290 *01062 *00990		o	o
June 10 1. 0 7. 30 8. 0 8. 40 9. 12 13. 5 13. 30 14. 12 16. 30 19. 0 23. 58	22. 33. 10 19. 30 16. 0 21. 10 19. 20 21. 30 24. 30 21. 0 25. 5 18. 40 33. 0	June 10 3. 5 6. 55 7. 48 8. 8 10. 17 12. 33 12. 42 13. 8 14. 2 14. 48 17. 30 19. 40 20. 35 23. 0 23. 50	*0965 *0990 *0980 *0994 *0971 *0973 *0986 *0978 *0990 *0975 *0992 *0977 *0988 *0960 *0971	June 10 1. 0 2. 45 8. 0 11. 0 15. 48 23. 58	*01023 *00725 *00834 *00730 *01272 *01152		1 65.0 3 69.5 9 73.0 21 62.0	69.0 72.5 74.5 64.0	June 14 0. 15 2. 35 6. 30 10. 25 10. 58 11. 10 11. 35 11. 57 15. 30 16. 10 17. 20 17. 47 19. 45 23. 58	22. 31. 30 35. 20 27. 0 26. 0 29. 15 22. 50 27. 30 22. 50 25. 0 29. 0 24. 55 27. 10 22. 40 32. 0	June 14 0. 45 2. 40 3. 28 4. 0 8. 10 9. 30 10. 53 11. 12 11. 45 12. 9 16. 40 21. 15 23. 55	*0991 *1008 *0991 *1017 *1024 *1003 *1006 *1024 *0996 *1008 *1014 *0984 *0992	June 14 0. 8 11. 15 19. 30 23. 50	*00968 *00518 *00882 *00830	1 58.0 3 60.0 9 63.0 21 55.0	61.0 63.0 64.5 58.0	
June 11 0. 0 6. 30 14. 30 21. 0 23. 58	22. 32. 55 20. 0 25. 50 18. 20 28. 15	June 11 1. 0 4. 30 6. 50 9. 34 18. 30 19. 12 23. 15	*0967 *0962 *0981 *0972 *0993 *1013 *0983	June 11 0. 30 2. 18 5. 8 10. 0 15. 23 23. 30	*01100 *00742 *00880 *00720 *01240 *01160		1 68.0 3 75.0 9 75.0 21 66.5	72.0 79.0 79.0 67.5	June 15 0. 30 6. 0 8. 50 20. 15 23. 55	22. 33. 40 27. 50 24. 50 19. 0 31. 50	June 15 0. 30 7. 30 18. 50 23. 40	*0994 *1017 *1010 *0984	June 15 0. 30 10. 30 16. 40 23. 55	*00812 *00435 *00972 *00744	1 55.0 3 58.0 10 61.0 23 56.0	58.0 60.0 63.0 57.0	
June 12 0. 0 2. 5 8. 30 14. 30 20. 30 23. 55	22. 28. 55 33. 35 23. 0 24. 30 19. 10 29. 0	June 12 0. 0 7. 0 11. 30 18. 30 23. 45	*0992 *1024 *1014 *1025 *1004	June 12 0. 0 8. 0 14. 45 23. 30	*01150 *00815 *01154 *01038		1 68.5 3 68.0 9 68.0 21 60.0	68.0 71.0 68.5 65.0	June 16 1. 0 4. 30 8. 40 20. 25 23. 58	22. 33. 0 27. 40 23. 30 18. 30 30. 0	June 16 0. 0 1. 30 6. 5 12. 20 18. 48 23. 45	*0987 *0979 *1000 *0993 *1004 *0985	June 16 0. 5 2. 20 17. 15 23. 55	*00723 *00420 *01144 *01018	9 68.0 21 62.0	69.0 62.0	
June 13 0. 0 2. 27 8. 45 9. 28 10. 0	22. 27. 10 32. 30 20. 30 13. 10 22. 5	June 13 0. 0 4. 55 5. 0 5. 30 7. 0	*0981 *0998 *1037 *1017 *1032	June 13 0. 0 8. 45 9. 57 10. 10 11. 5	*01030 *00595 *00312 *00460 *00379		1 61.0 3 64.0 9 66.0 21 59.5	66.0 69.0 68.0 62.0	June 17 1. 0 6. 0 20. 0 23. 45	22. 31. 15 23. 30 20. 40 32. 55	June 17 1. 0 3. 12 5. 28 8. 38 10. 48 19. 15	*0986 *1000 *0986 *1003 *0993 *1004	June 17 2. 0 2. 54 8. 40 15. 37 23. 55	*00792 *00528 *00525 *01095 *00918	1 64.0 3 68.0 9 66.0 21 62.0	64.0 68.0 68.5 62.0	

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Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
		June 17 23. 0	*0973						June 22 1. 0 5. 25	22. 32. 25 22. 30 ***	June 22 1. 3 2. 40 6. 15	*0984 *0991 *0977 *0985	June 22 1. 15 3. 18 7. 35: 10. 30: 15. 53 23. 40	*00895 *00558 *00634 *00578 *01220 *01067	1 3 9 22	76° 0 74° 0 77° 0 70° 5	76° 0 76° 0 79° 0 71° 0
June 18 0. 10 6. 0 10. 50 11. 58 12. 30 14. 20 20. 15 23. 50	22. 33. 0 21. 30 22. 45 30. 55 18. 5 21. 0 16. 30 27. 50	June 18 0. 28 1. 25 2. 23 3. 8 3. 40 4. 5 4. 28 6. 0 11. 35 12. 20 18. 33 23. 55	*0997 *0976 *0995 *0961 *0970 *0963 *0976 *0965 *0992 *0954 *0994 *0970	June 18 1. 0 2. 20 15. 38 23. 55	*00845 *00570 *01162 *01062	1 3 9 21	67° 0 69° 0 70° 0 63° 0	67° 5 69° 5 72° 5 63° 0	June 23 0. 0 5. 30 7. 30 13. 0 16. 0 16. 30 23. 58	22. 30. 0 22. 30 17. 50 20. 30 18. 50 20. 50 29. 10	June 23 0. 9 2. 40 3. 50 6. 0 8. 30 16. 45 20. 0 22. 32 23. 55	*0962 *0975 *0964 *0972 *0961 *0958 *0966 *0951 *0961	June 23 0. 15 3. 18 6. 50: 11. 0: 17. 45 23. 15	*01030 *00538 *00660 *00492 *01105 *01078	9 21	81° 0 74° 0	82° 0 74° 0
June 19 0. 0 1. 59 7. 0 7. 30 8. 10 14. 15 19. 30: 23. 55	22. 28. 0 30. 55 23. 10 13. 0 21. 50 21. 0 20. 0 31. 40	June 19 1. 0 2. 25 2. 50 3. 12 4. 28 5. 30 6. 32 7. 5 7. 36 8. 28 16. 30 23. 58	*0975 *0982 *0972 *0983 *0966 *0973 *1000 *0989 *1009 *0970 *0993 *0959	June 19 0. 0 3. 30 15. 15 23. 40	*01052 *00563 *01170 *01018	1 3 9 21	68° 0 70° 0 70° 0 63° 0	68° 0 70° 0 72° 5 63° 0	June 24 0. 15 6. 0 9. 30 15. 0 18. 50 23. 58	22. 29. 0 23. 30 20. 0 21. 10 19. 10 31. 55	June 24 0. 20 6. 30 7. 0 7. 45 10. 0 11. 0 14. 12 18. 45 19. 15 23. 45	*0957 *0976 *0968 *0976 *0970 *0981 *0966 *0973 *1001 *0962	June 24 0. 10 4. 25 13. 15 23. 45	*01014 *00430 *01080 *00825	1 3 9 21	78° 0 79° 5 77° 0 70° 5	78° 0 80° 0 77° 0 71° 5
June 20 0. 30 4. 10 6. 30 8. 30 13. 30 23. 48	22. 32. 55 26. 40 22. 30 17. 10 *** 22. 0 30. 5	June 20 0. 30 7. 30 14. 15 18. 58 19. 28 23. 42	*0961 *0972 *0969 *0984 *0998 *0975	June 20 0. 30 1. 48 10. 0: 15. 14 23. 56	*00885 *00640 *00665 *01248 *01115	1 3 9 21	70° 0 74° 0 74° 0 65° 5	72° 0 73° 5 76° 0 67° 0	June 25 0. 20 9. 26 18. 30 23. 55	22. 32. 0 *** 19. 0 *** 21. 0 *** 30. 0	June 25 0. 30 9. 37 18. 0 19. 0 20. 15 23. 30	*0964 *0976 *0994 *1001 *1024 *1003	June 25 0. 30 2. 12 6. 38: 12. 45 23. 55	*00730 *00368 *00375 *01075 *00760	1 3 9 21	76° 0 78° 5 74° 0 65° 5	77° 0 81° 0 78° 0 67° 5
June 21 0. 0 6. 0 10. 50 11. 5 11. 35 13. 30 15. 0 15. 55 17. 20 19. 10 23. 58	22. 30. 20 *** 20. 5 22. 30 20. 0 24. 30 16. 55 23. 0 12. 0 16. 55 15. 30 30. 50	June 21 0. 30 5. 0 11. 30 13. 30 15. 35 16. 0 18. 50 19. 13 23. 0	*0973 *0952 *0971 *0953 *0977 *0972 *0982 *1005 *0982	June 21 0. 0 2. 24 9. 25: 13. 58 23. 30	*01195 *00698 *00616 *01160 *01022	1 3 9 21	73° 0 75° 0 77° 0 67° 5	73° 5 78° 0 78° 0 67° 0	June 26 0. 0 7. 30 11. 35 20. 45 23. 40	22. 30. 0 21. 30 19. 20 18. 0 29. 0	June 26 0. 0 7. 20 17. 20 22. 50 23. 20	*0998 *0973 *1006 *0982 *0984	June 26 0. 0 2. 35 5. 55 8. 25: 15. 15 23. 30	*00742 *00300 *00410 *00335 *01078 *00888	1 3 9 21	72° 0 75° 0 75° 5 64° 0	73° 5 76° 0 78° 0 67° 0
									June 27 0. 0 2. 2 5. 30	22. 30. 0 33. 20 31. 0	June 27 0. 0 1. 0 1. 42	*0976 *0996 *0975	June 27 0. 0 8. 0: 13. 5	*00885 *00594 *00890	1 3 9	65° 0 68° 5 67° 0	68° 5 69° 0 69° 0

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INDICATIONS OF THE MAGNETOMETERS

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							H. F.	V. F.								H. F.	V. F.
June 27 6. 28 7. 30 11. 10 11. 55 12. 40 13. 50 14. 40 15. 35 19. 30 23. 50	22. 21. 5 24. 25 21. 55 25. 30 22. 30 27. 10 18. 55 25. 0 22. 0 31. 0	June 27 4. 20 5. 45 6. 2 6. 10 6. 28 6. 58 12. 0 13. 20 17. 10 18. 48 23. 50	*1005 *0981 *1000 *0987 *1004 *0989 *1000 *0989 *0994 *1024 *1005	June 27 23. 12	*00548	21	60.0	63.5	June 30 15. 0 20. 30 23. 40	22. 24. 0 *** 20. 55 *** 26. 10	b	b	b	b		o	o
June 28 0. 0 2. 14 6. 50 7. 12 7. 45 10. 30 14. 14 18. 0 23. 50	22. 30. 0 36. 5 27. 15 23. 25 26. 0 21. 30 *** 24. 50 21. 20 30. 0	June 28 0. 0 4. 3 7. 0 9. 5 9. 53 10. 10 22. 45 23. 55	*1004 *1021 *1006 *1002 *1001 *1014 *0986 *0990	June 28 0. 0 3. 48 9. 30 10. 57 20. 55 21. 53	*00400 *00092 *00272 *00204 *00978 *00948	1 3 9 21	64.0 66.0 68.0 64.0	66.5 67.0 72.0 66.0	8. 30 14. 45 18. 30 20. 15 21. 15 23. 33	25. 30 *** 20. 30 16. 25 22. 10 20. 0 36. 0	7. 28 12. 35 13. 45 18. 34 23. 22	*0990 *** *1004 *** *0996 *** *1012 *** *0940					
June 29 0. 10 2. 0 6. 30 10. 10 14. 20 21. 40 23. 40	22. 31. 25 *** 35. 40 *** 22. 30 *** 20. 20 *** 24. 20 *** 21. 55 *** 26. 30	June 29 0. 30 2. 58 5. 15 9. 20 9. 50 11. 45 19. 30 23. 58	*0991 *** *0997 *** *0967 *** *0976 *** *0987 *** *0971 *** *1014 *** *0974	June 29 0. 0 8. 0 14. 5 23. 40	*00918 *00632 *00943 *00682	1 3 9 22	64.0 65.0 64.0 60.0	66.5 67.0 68.0 62.0	0. 20 1. 30 5. 30 12. 0 13. 20 19. 50 23. 45	22. 32. 45 34. 50 *** 23. 50 *** 24. 20 *** 28. 50 *** 19. 30 *** 29. 10	1. 0 1. 37 1. 58 3. 12 13. 50 14. 10 16. 10 20. 30 22. 50	*0981 *** *0957 *** *0968 *** *0940 *** *0979 *** *0994 *** *0988 *** *1012 *** *9988	0. 20 1. 45 14. 50 23. 52	*01020 *00772 *01360 *01244	1 3 9 21	65.0 68.0 68.0 62.0	68.0 71.0 69.0 63.0
June 30 0. 0 2. 45 7. 30 11. 30 12. 10	22. 27. 0 *** 32. 0 *** 23. 30 *** 25. 0 *** 22. 50 ***	June 30 0. 0 3. 52 5. 16 6. 32 23. 50	*0978 *** *0997 *** *0990 *** *0997 *** *0974	June 30 0. 2 3. 8 23. 50	*00568 *00140 *00842	9 21	69.0 66.0	70.0 67.5	July 3 0. 12 7. 35 20. 15 23. 55	22. 30. 0 31. 55 24. 10 20. 0 32. 5	0. 58 3. 22 8. 35 17. 37 21. 52 23. 58	*1006 *0975 *0994 *0994 *0970 *0986	July 3 0. 0 4. 30 17. 12 23. 50	*01240 *00835 *01452 *01343	1 3 9 21	63.0 65.0 68.0 60.0	66.0 69.0 72.0 64.0
July 4 0. 15	22. 33. 0	July 4 0. 30	*0985	July 4 1. 0	*01298	1	62.0	66.0									

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							H. F.	V. F.								H. F.	V. F.	
July 4 7.15 10.50 20.15 23.58	22. 25. 50 24. 0 21. 0 33. 20	July 4 3.38 4.28 5.30 6.25 7.50 8. 8 18. 0 23.12	.0996 .1016 .0983 .0997 .0991 .0973 .0977 .0955	July 4 9.52: 14.54 23.55	.00894 .01382 .01100		3 63.0 9 65.5 21 61.0	66.0 68.0 62.5	July 6 21. 0 23. 28	22. 20. 10 25. 10								
July 5 0.30 6.30 13. 0 20.15 20.45 23.58	22. 33. 30 24. 0 23. 30 18. 0 22. 0 28. 30	July 5 0.30 19. 5 23.36	.0957 .0977 .0960	July 5 0.30 2.40 17. 8 23.40	.01022 .00718 .01448 .01332		1 62.0 3 67.5 9 68.0 21 58.0	64.0 68.0 70.0 62.0	July 7 0. 0 2. 0 5.10 5.30 8.30 19.40 23.55	22. 26. 50 *** 32.45 27.30 30. 0 24.30 19.10 30. 0	July 7 0. 0 3. 0 3.28 3.35 3.42 3.58 4. 6 4. 9 4.30 4.55 5.20 5.52 6.10 6.25 7.10 7.35 12.10 12.18 12.30 12.50 13. 8 14.12 14.18 14.32 21.23 23.40	.0963 .0983 .0963 .0981 .0967 .0982 .0970 .0984 .0969 .0973 .1007 .0961 .0974 .0961 .0979 .0960 .0968 .0977 .0965 .0996 .0967 .0975 .0989 .0972 *** .0954 *** .0964	0. 0 7.33 14.58 23.10	.01430 .01000 .01432 .01325	11 21	63.5 57.0	65.0 60.0	
July 6 0.30 2.32 5. 5 6.12 8. 0 9.58 10.30 11.32 12. 2 12.30 13.32 14. 0 14.18 14.42 15. 0 18.15 19.30	22. 30. 0 *** 36.50 *** 31.50 *** 22. 0 *** 23.50 *** 16.30 *** 20.20 *** 17. 0 *** 18.30 *** 15. 0 *** 20.10 *** 15.20 *** 33.25 *** 19.45 *** 21.50 *** 14.20 *** 16. 0 ***	July 6 0.30 1. 2 1.35 2.25 2.35 2.53 3. 0 3.22 3.37 4.28 4.50 5. 0 5.12 5.28 6.32 7.18 8.20 9.23 10. 5 11.35 12.55 13.28 13.48 14.10 14.22 14.32 18.30 22.52	.0977 .0955 .0986 .0942 .0957 .0938 .0954 .0940 .0975 .0957 .0978 .0961 .0977 .0963 .0954 .0977 .0953 .0967 .0957 .0979 .0958 .0970 .0955 .0974 .0940 .0958 .0939 .0958 .0945	July 6 0.30 3.15 5.33 11.30: 14.20 14.30 23.30	.01249 .00776 .00840 .00660 .00691 .00612 .01345		1 67.0 3 68.0 9 68.0 22 60.0	67.0 68.0 70.0 65.0	July 8 1.10 5. 0 11.26 13. 0 13.30 14.12 15.12 15.55 20. 5 23.45	22. 33. 50 26. 0 21. 0 26. 0 23.30 26.15 20.50 25.10 17.55 28. 0	July 8 1. 5 2.56 11.40 12.10 15.30 18.20 22. 0 23.50	.0968 .0981 .0969 .0978 .0964 .0970 .0957 .0965	July 8 1.30 11. 0 17. 5 23.55:	.01314 .00560 .01240 .01122	1 3 9 21	60.0 64.0 65.5 59.5	64.0 67.0 68.0 62.0	
July 9 0. 0 2. 0 8.45	22. 29. 0 *** 34.40 22. 0 ***	July 9 0.20 2. 0 3.10 3.32 4.40	.0963 .0997 .0978 .0998 .0976	July 9 0. 0 2. 0 3.10 3.32 4.40	.01264 .00750 .00725 .01330 .01249		1 3 9 21	61.0 65.0 65.5 57.7	63.0 66.0 68.0 60.0									

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							H. F.	V. F.								H. F.	V. F.		
July 9 13. 2 13. 36 14. 30 16. 0 16. 45 18. 30 21. 30 23. 55	⁰ _{22.} ¹⁵ ₄₅ ***	July 9 ^h _{5.} ^m ₂₈ ^h _{7.} ^m ₅₀ ^h _{12.} ^m ₅₀ ^h _{15.} ^m ₁₈ ^h _{17.} ^m ₀ ^h _{17.} ^m ₂₅ ^h _{21.} ^m ₃₀ ^h _{23.} ^m ₅₈	*0998 *0972 *0957 *0980 *0958 *0972 *0947 *0960	^h _{0.} ^m ₃₀ ^h _{4.} ^m ₀ ^h _{19.} ^m ₃₀ ^h _{22.} ^m ₄₅ ^h _{23.} ^m ₅₈	*01202 4. 0 *00685 *01376 *01420 *01322	1 3 9 21	60.0 63.0 65.0 64.0	64.0 67.0 69.0 64.0	July 11 16. 48 17. 30 18. 43 19. 30 19. 50 23. 45	⁰ _{22.} ¹³ ₀ ⁰ _{16.} ⁵⁰ ⁰ _{14.} ⁴⁰ ⁰ _{22.} ²⁵ ⁰ _{19.} ⁰ ⁰ _{30.} ⁵⁵	July 11 ^h _{16.} ^m ₄₈ ^h _{17.} ^m ₃₀ ^h _{18.} ^m ₄₃ ^h _{19.} ^m ₃₀ ^h _{19.} ^m ₅₀ ^h _{23.} ^m ₄₅	*0928 *0917 *0977 *** *0968 *0984 *0970 *0992 *** *0968 *** *0996 *0970 *1004 *0988 *0990 *0969 *** *0986 *** *0968 *** *0950 *** *0956 *0937 *0962 *** *0935 *** *0940 *0972 *** *0968 *0936 *0954 *0936 *** *0946 *** *0975 *0948 *** *0934	July 12 0. 0 1. 0 5. 10 5. 28 5. 32 5. 35 6. 12 8. 10 8. 38 9. 20 9. 28 9. 58 11. 20 11. 35 13. 30 14. 35 15. 20 15. 45 16. 33 17. 8 17. 42 19. 55 23. 55	⁰ _{22.} ³² ₂₀ ⁰ _{35.} ⁰ _{31.} ⁰ _{25.} ⁰ _{31.} ⁰ _{24.} ⁰ _{33.} ⁰ _{23.} ⁰ _{11.} ⁰ _{25.} ⁰ _{18.} ⁰ _{23.} ⁰ _{15.} ⁰ _{19.} ⁰ _{14.} ⁰ _{8.} ⁰ _{14.} ⁰ _{14.} ⁰ _{7.} ⁰ _{22.} ⁰ _{17.} ⁰ _{22.} ⁰ _{18.} ⁰ _{30.}	July 12 ^h _{0.} ^m ₁₅ ^h _{1.} ^m ₅ ^h _{2.} ^m ₃₅ ^h _{3.} ^m ₃₀ ^h _{3.} ^m ₅₅ ^h _{4.} ^m ₁₅ ^h _{4.} ^m ₃₂ ^h _{4.} ^m ₅₀ ^h _{4.} ^m ₅₅ ^h _{5.} ^m ₀ ^h _{5.} ^m ₂₈ ^h _{5.} ^m ₃₂ ^h _{5.} ^m ₄₀ ^h _{5.} ^m ₅₈ ^h _{6.} ^m ₃ ^h _{6.} ^m ₁₅ ^h _{6.} ^m ₄₀ ^h _{6.} ^m ₅₅ ^h _{7.} ^m ₅ ^h _{7.} ^m ₃₀ ^h _{8.} ^m ₄ ^h _{8.} ^m ₃₀ ^h _{8.} ^m ₅₀ ^h _{9.} ^m ₁₅ ^h _{9.} ^m ₂₈ ^h _{9.} ^m ₃₈ ^h _{10.} ^m ₀ ^h _{10.} ^m ₆ ^h _{11.} ^m ₀ ^h _{11.} ^m ₂₈ ^h _{12.} ^m ₀	*01385 *00965 *01092 *00824 *00438 *01485 *01388	1 3 9 21	65.0 70.0 73.0 61.0	68.0 74.0 74.0 64.0
July 10 0. 30 2. 42 9. 56 14. 20 15. 25 17. 50 18. 50 23. 55	⁰ _{22.} ³⁰ ₄₀ ⁰ _{32.} ⁰ _{21.} ⁰ _{21.} ⁰ _{25.} ⁰ _{16.} ⁰ _{22.} ⁰ _{29.}	July 10 ^h _{0.} ^m ₃₀ ^h _{2.} ^m ₄₅ ^h _{3.} ^m ₅₅ ^h _{9.} ^m ₀ ^h _{15.} ^m ₃₂ ^h _{23.} ^m ₃₀	*0957 *0974 *0958 *0959 *0973 *0935	July 10 ^h _{0.} ^m ₃₀ ^h _{4.} ^m ₀ ^h _{19.} ^m ₃₀ ^h _{22.} ^m ₄₅ ^h _{23.} ^m ₅₈	*01202 4. 0 *00685 *01376 *01420 *01322	1 3 9 21	60.0 63.0 65.0 64.0	64.0 67.0 69.0 64.0	July 11 0. 0 1. 45 4. 30 9. 20 10. 10 10. 25 10. 53 11. 8 11. 28 11. 40 11. 55 12. 5 12. 36 12. 58 13. 18 13. 30 13. 43 14. 8 15. 0 16. 8	⁰ _{22.} ³⁰ ₀ *** ⁰ _{28.} *** ⁰ _{32.} ⁰ _{23.} *** ⁰ _{21.} *** ⁰ _{24.} *** ⁰ _{3.} ⁰ _{10.} *** ⁰ _{10.} *** ⁰ _{6.} ⁰ _{13.} *** ⁰ _{9.} *** ⁰ _{23.} ⁰ _{17.} ⁰ _{20.} ⁰ _{15.} ⁰ _{17.} ⁰ _{15.} ⁰ _{21.} ⁰ _{10.} ⁰ _{21.} ⁰ _{10.} ⁰ _{21.}	July 11 ^h _{0.} ^m ₀ ^h _{5.} ^m ₁₅ ^h _{5.} ^m ₄₀ ^h _{6.} ^m ₁₂ ^h _{7.} ^m ₀ ^h _{7.} ^m ₅₀ ^h _{9.} ^m ₄₀ ^h _{10.} ^m ₁₀ ^h _{10.} ^m ₂₀ ^h _{10.} ^m ₃₇ ^h _{10.} ^m ₅₅ ^h _{11.} ^m ₅₀ ^h _{12.} ^m ₀ ^h _{12.} ^m ₁₅ ^h _{12.} ^m ₄₂ ^h _{14.} ^m ₄₀ ^h _{15.} ^m ₄₂ ^h _{17.} ^m ₂ ^h _{22.} ^m ₃ ^h _{23.} ^m ₅₀	*0931 *0992 *0978 *0994 *0972 *0969 *0960 *0965 *0997 *0942 *0958 *0925 *0931 *0910 *0968 *0984 *0952 *0974 *0918 *0941	July 11 ^h _{0.} ^m ₀ ^h _{3.} ^m ₁₅ ^h _{8.} ^m ₁₅ ^h _{12.} ^m ₁₅ ^h _{22.} ^m ₄₅ ^h _{23.} ^m ₄₀	*01292 *00790 *00875 *00598 *01490 *01445	1 3 9 21	65.0 68.0 66.0 63.0	69.0 70.0 69.0 64.0		

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 to several times near that which is recorded. The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
		July 12 12.30 12.52 13.28 13.58 14.25 16.28 16.33 18.2 18.20 23.40	.0943 .0937 .0947 .0931 .0950 *** .0952 .0962 .0942 .0956 .0932														
		July 13 0.0 4.30 9.0 13.10 14.0 16.42 17.35 20.3 23.30	22.31.0 23.15 18.40 20.30 25.0 18.55 22.15 16.5 21.45	July 13 1.0 1.18 1.29 1.31 1.55 6.2 23.30	.0957 .0938 .0957 .0948 .0958 *** .0927 *** .0926												
		July 14 0.0 2.8 6.30 21.28 23.58	22.23.10 28.40 22.0 20.0 26.45	July 14 1.0 18.0 22.55 23.42	.0936 .0954 .0941 .0922												
		July 15 1.0 6.10 6.42 11.15 12.0 12.20 13.0 13.33 14.8 14.54 15.55 19.10 20.50 23.55	22.27.20 *** 22.35 *** 17.45 *** 19.55 *** 15.5 18.0 12.0 15.50 14.5 30.10 15.10 19.30 23.30 30.25	July 15 1.0 2.18 10.20 22.20 23.58	.0936 .0935 .0926 .0938 *** .0970 *** .0915 *** .0935 *** .0944 *** .0976 *** .0954 *** .0975 *** .0946												
		July 16 0.30 3.10 4.12 7.15 17.30 23.15	22.30.40 30.0 21.55 17.0 16.35 24.30	July 16 0.30 2.9 2.48 3.12 4.0 4.28 5.0 6.0 7.2 8.0 10.33 23.10	.0942 .0952 .0935 .0943 .0937 .0946 .0936 .0958 .0946 .0958 .0950 .0933												
		July 17 1.0 6.30 17.15 20.50 23.58	22.31.0 23.30 20.0 16.30 25.50	July 17 1.3 3.33 19.30 23.0	.0934 .0932 .0953 .0930												
		July 18 0.35 2.46 5.45 8.50 9.5 12.50 17.35 23.58	22.27.10 31.0 26.0 24.45 20.0 25.10 17.50 29.20	July 18 0.35 5.52 5.58 *** 7.0 8.20 9.0 11.2 15.25 15.33 20.30 23.58	.0939 .0966 .0993 *** .0973 .1007 .0976 .0968 .0975 .0987 *** .0964 .0973												
		July 19 0.15 6.30 12.0 18.0 20.43 23.58	22.30.20 21.10 22.20 18.30 16.0 25.50	July 19 0.40 13.26 22.58	.0972 .0982 .0971												
		July 20 0.30 6.0 9.10 11.57 12.30 13.40 18.0 23.55	22.25.10 22.30 16.0 18.45 10.48 16.25 15.0 29.25	July 20 0.30 2.50 5.42 7.28 10.36 11.15 19.33 21.0	.0970 .0989 .0981 .1001 .0966 .0976 .0962 .0965												

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The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
h m	o ' "	July 20 h m 23. 30	.0948	h m			o	o	July 25 h m 9. 45	22. 19. 20	July 25 h m 9. 27	.1003	July 25 h m 17. 30	.01552	9	66.0	69.0
July 21 0. 15 2. 28 6. 30 8. 0 13. 0 20. 30 23. 58	22. 29. 0 31. 0 22. 0 17. 0 20. 30 15. 25 27. 5	July 21 h m 0. 30 1. 42 2. 28 3. 0 4. 50 5. 15 7. 28 11. 3 14. 38 23. 58	.0956 .0946 .0957 .0941 .0964 .0957 .0977 .0952 .0968 .0938	July 21 h m 0. 30 1. 0 11. 15 17. 10 23. 58	.00720 .00655 .00800 .01360 .01245	10 21	73.0 65.0	75.0 68.0	July 25 h m 10. 20 15. 30 23. 58	23. 0 18. 10 27. 0	July 25 h m 23. 50	.0969	July 25 h m 23. 55	.01392	21	58.0 61.0	61.0
July 22 1. 15 6. 0 14. 0 15. 25 16. 10 16. 55 19. 45 23. 58	22. 28. 35 21. 10 18. 55 22. 0 17. 0 18. 20 14. 0 25. 10	July 22 h m 0. 40 6. 40 11. 10 15. 50 18. 45 19. 10 23. 20	.0940 .0955 .0941 .0957 .0956 .0971 .0949	July 22 h m 1. 30 2. 22 7. 55 10. 30 14. 45 22. 29 23. 55	.01052 .00840 .00985 .00904 .01465 .00442 .01278	2 3 9 21	73.0 76.0 78.0 68.0	76.0 79.0 82.0 71.0	July 26 h m 0. 30 6. 30 8. 45 18. 10 23. 58	22. 28. 0 23. 0 20. 0 17. 0 25. 50	July 26 h m 0. 45 1. 58 2. 35 3. 15 5. 30 6. 30 7. 58 10. 5 16. 30 22. 0 22. 50	.0973 .0979 .0973 .0982 .0975 .0984 .0976 .0984 .0980 .0971 .0975	July 26 h m 1. 0 2. 40 11. 30 18. 15 23. 55	.00990 .00730 .00781 .01382 .01240	1 3 9 21	61.0 65.0 67.0 58.0	64.0 68.0 69.0 60.0
July 23 0. 30 6. 20 7. 30 9. 30 9. 50 10. 30 11. 15 14. 55 19. 30 23. 58	22. 26. 0 20. 0 16. 0 20. 50 17. 30 20. 0 17. 0 21. 0 16. 0 26. 50	July 23 h m 1. 2 10. 55 18. 18 23. 35	.0937 .0978 .0982 .0942	July 23 h m 0. 45 1. 30 13. 40 23. 55	.01088 .00860 .01528 .01378	1 3 9 21	76.0 79.0 73.0 64.0	78.0 81.0 77.0 67.0	July 27 h m 1. 0 6. 0 11. 58 12. 10 13. 3 13. 56 15. 0 16. 32 17. 28 19. 15 22. 30	22. 28. 0 24. 0 21. 58 25. 30 18. 50 26. 20 19. 0 18. 20 25. 20 15. 10 19. 0	July 27 h m 1. 50 6. 25 8. 20 9. 12 12. 10 22. 28	.0972 .0988 .0990 .0975 .0984 .0958	July 27 h m 1. 15 12. 30 22. 30	.01200 .00742 .01282	1 3 9 22	58.0 63.0 65.0 60.0	60.0 65.0 68.0 63.0
July 24 0. 30 5. 50 6. 35 6. 58 7. 25 10. 32 12. 10 12. 52 14. 10 20. 0 23. 55	22. 27. 15 26. 35 12. 5 17. 35 13. 20 19. 20 11. 5 28. 10 16. 0 13. 55 25. 0	July 24 h m 0. 25 6. 0 15. 22 23. 55	.01384 .00760 .01422 .01345	July 24 h m 0. 25 6. 0 15. 22 23. 55	.01384 .00760 .01422 .01345	1 3 9 21	65.0 70.0 67.0 60.0	68.0 74.0 70.0 64.0	July 28 h m 0. 0 6. 45 20. 50 23. 42	22. 28. 0 22. 30 16. 50 29. 0	July 28 h m 0. 0 0. 35 1. 0 1. 15 1. 55 3. 6 3. 42 4. 20 5. 5 5. 53 6. 42 16. 36 22. 50 23. 57	.0964 .0971 .0960 .0967 .0957 .0988 .0972 .0997 .0982 .1003 .0977 .0983 .0938 .0951	July 28 h m 0. 0 5. 24 12. 0 23. 12	.01248 .00812 .00778 .01245	10 21	67.0 61.0	69.0 64.0
July 25 2. 15 6. 0	22. 28. 45 24. 10	July 25 h m 2. 5 4. 38	.0996 .1005	July 25 h m 2. 30 10. 30	.01346 .01188	1 3	65.0 64.0	66.0 67.0	July 29 h m 1. 10 7. 30 8. 45 9. 10	22. 31. 30 21. 50 15. 0 22. 0	July 29 h m 1. 15 3. 30 5. 5 5. 35	.0968 .0977 .0964 .0991	July 29 h m 1. 30 3. 40 10. 40 15. 5	.01145 .00875 .00866 .01400	1 3 9 21	64.0 68.0 70.0 64.0	67.0 70.0 74.0 67.5

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 July 24. The suspension skein of the Horizontal Force Magnet broke, and a new one was put up.

Göttingen Mean Solar Time. h m	Western Declina- tion.	Göttingen Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.		Göttingen Mean Solar Time. h m	Western Declina- tion.	Göttingen Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.		
							H. F.	V. F.								H. F.	V. F.	
July 29 10. 12 12. 40 14. 30 17. 30 19. 30 23. 58	22. 15. 10 22. 55 16. 50 21. 50 15. 10 24. 0	July 29 7. 0 7. 25 8. 0 9. 5 10. 0 10. 17 10. 40 11. 7 12. 18 13. 55 15. 40 17. 20 17. 50 19. 25 23. 30	0974 0985 0973 0990 0966 0983 0971 0984 0970 0989 0977 0994 0981 0991 0972	July 29 23. 55	01368		o	o	Aug. 1 13. 50 14. 28 15. 38 20. 52 23. 55	o / //	Aug. 1 13. 50 14. 28 15. 38 20. 52 23. 55	1000 0991 1005 0969 0996	h m				o	o
July 30 0. 15 6. 35 15. 30 23. 55	22. 24. 0 20. 30 17. 30 27. 40	July 30 0. 25 1. 35 2. 0 3. 15 4. 30 5. 0 5. 57 7. 55 8. 5 8. 52 9. 54 17. 12 23. 32	0967 0979 0970 0986 0976 1011 0984 0994 1009 0984 0981 1002 0969	July 30 0. 30 6. 45 10. 55 17. 8 23. 58	01360 00845 00826 01428 01340		1 62.0 3 65.0 9 69.0 21 64.0	64.0 68.0 72.5 67.0	Aug. 2 0. 0 1. 33 6. 0 6. 30 11. 45 15. 25 16. 40 18. 43 20. 30 22. 30 23. 58	22. 25. 50 29. 45 23. 40 19. 0 22. 50 18. 15 29. 0 18. 10 27. 50 19. 45 22. 50	Aug. 2 0. 0 2. 29 3. 22 3. 50 5. 55 6. 18 6. 35 16. 35 17. 5 19. 7 20. 38 23. 12	0994 0981 1001 0985 1017 1006 1018 0996 1004 1004 0968 0984	Aug. 2 0. 0 7. 23 12. 15 23. 30	01372 00840 00790 01195		1 62.0 3 66.0 9 68.0 21 64.0	66.0 68.0 71.0 66.0	
July 31 0. 45 6. 30 8. 15 18. 30 20. 5 23. 40	22. 30. 0 23. 0 21. 0 17. 0 14. 0 22. 55	July 31 0. 30 1. 0 6. 20 8. 42 20. 20 23. 30	0978 0976 0989 0978 0996 0977	July 31 0. 25 3. 32 13. 0 21. 28 23. 40	01282 00815 00864 01485 01445		1 66.0 3 68.0 9 69.0 21 64.0	69.0 71.0 72.0 67.0	Aug. 3 1. 0 2. 15 7. 10 9. 57 10. 28 11. 15 14. 20 20. 0 23. 21	22. 25. 30 29. 50 17. 0 19. 50 25. 0 17. 20 21. 40 14. 5 23. 10	Aug. 3 0. 43 5. 0 6. 18 6. 52 7. 12 10. 2 17. 18 23. 32	0979 0988 0990 0968 0990 1001 0994 0946	Aug. 3 1. 0 5. 0 8. 8 11. 0 17. 50 23. 40	01145 00852 01018 00860 01553 01485		1 65.0 3 69.0 9 72.0 23 66.0	68.0 77.0 77.0 69.0	
Aug. 1 0. 0 2. 28 10. 56 13. 30 15. 45 19. 42 23. 55	22. 23. 0 30. 10 18. 30 25. 10 16. 30 12. 45 25. 25	Aug. 1 0. 0 2. 30 2. 55 6. 10 6. 40 7. 42 8. 10 9. 42 10. 7 10. 28 12. 10 12. 48	0978 0998 0978 1020 1010 1010 1025 0995 1007 0992 0997 0977	Aug. 1 1. 0 10. 24 18. 15 23. 30	01444 01158 01472 01378		1 65.0 3 66.0 9 68.0 21 63.5	68.0 68.0 72.5 67.0	Aug. 4 0. 30 1. 30 6. 30 11. 10 15. 18 19. 40 23. 58	22. 30. 0 32. 0 19. 0 14. 55 18. 10 14. 10 28. 30	Aug. 4 1. 0 18. 7 23. 45	0939 0988 0954	Aug. 4 0. 0 4. 0 8. 10 12. 15 15. 35 23. 30	01468 00915 01050 00948 01558 01458		11 74.0 21 66.0	77.0 71.0	
Aug. 5 1. 30 5. 30 12. 0 13. 0 14. 15	22. 32. 55 22. 0 19. 0 23. 0 17. 0	Aug. 5 1. 30 2. 10 9. 35 13. 37 23. 58	0967 0944 0973 0987 0958	Aug. 5 1. 45 3. 50 12. 10 13. 20 23. 35			1 70.0 3 76.0 9 74.0 21 64.0	75.0 78.0 75.0 68.0	Aug. 5 1. 30 2. 10 9. 35 13. 37 23. 58	22. 32. 55 22. 0 19. 0 23. 0 17. 0	Aug. 5 1. 45 3. 50 12. 10 13. 20 23. 35	0967 0944 0973 0987 0958	Aug. 5 1. 30 2. 10 9. 35 13. 37 23. 58	01075 00910 00993 01600 01484		1 70.0 3 76.0 9 74.0 21 64.0	75.0 78.0 75.0 68.0	

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INDICATIONS OF THE MAGNETOMETERS

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							H. F.	V. F.								H. F.	V. F.
Aug. 5 16. 20 18. 45: 23. 50	22. 20. 20 *** 16. 20 30. 0						o	o	Aug. 9 18. 12 20. 30 22. 0 22. 14 23. 15 23. 55			.0988 .0955 .0950 .0967 .0927 .0943			o	o	
Aug. 6 0. 0 1. 30 5. 30 12. 10: 23. 58	22. 30. 20 34. 0 22. 50 *** 20. 50 31. 45	Aug. 6 1. 5 6. 6 15. 32: 23. 0	.0961 .0956 .0985 .0958	Aug. 6 0. 15 4. 35 9. 55: 14. 8 23. 58	.01466 .00822 .00848 .01532 .01382	1 3 9 21	66.0 70.0 68.0 59.5	69.0 74.0 74.0 64.5	Aug. 10 0. 40 1. 45 6. 15 9. 55 19. 54 20. 17 23. 28	22. 30. 0 33. 20 20. 50 18. 0 15. 0 20. 0 28. 0	Aug. 10 0. 35 1. 0 1. 32 4. 32 5. 15 5. 38 7. 25	.0953 .0966 .0941 .0947 .0968 .0944 .0964	Aug. 10 0. 30 4. 15 7. 30: 11. 30: 23. 25	.01358 .00808 .00924 .00828 .01272	1 3 9 23	65.0 68.0 70.0 68.0	68.0 70.0 74.0 71.0
Aug. 7 0. 10 4. 30 12. 15: 20. 0 23. 58	22. 32. 20 24. 0 *** 21. 40 17. 5 30. 10	Aug. 7 0. 5 6. 0 10. 25 21. 40	.0963 .0960 .0977 (+) .0960* (+)	Aug. 7 0. 30 3. 15 9. 45: 14. 48 23. 58	.01342 .00780 .00810 .01548 .01385	1 3 9 21	65.0 69.0 68.0 65.0	67.5 71.5 72.0 68.0	Aug. 11 0. 0 5. 0 7. 30 9. 52 11. 30 15. 2 19. 10 20. 50 23. 55	22. 28. 45 23. 10 19. 0 22. 10 20. 0 18. 0 26. 0 17. 30 27. 30	Aug. 11 0. 20 1. 18 2. 0 3. 42 5. 28 16. 30 23. 38	.0924 .0942 .0931 .0957 .0944 .0968 .0931	Aug. 11 0. 0 3. 23 10. 15: 15. 55 23. 25	.01248 .00898 .00930 .00622 .01540	11 21	72.0 63.0	75.0 66.0
Aug. 8 1. 2 5. 30 11. 40 12. 36 13. 35 22. 55 23. 58	22. 33. 25 24. 0 20. 15 *** 23. 0 *** 19. 0 (+) 25. 15 28. 0	Aug. 8 0. 20 0. 46 3. 22 7. 55 10. 30 12. 15 12. 58 23. 0	.0992 *** .0987 *** .1007 *** .0997 *** .1004 *** .0996 *** .1003 *** .0973	Aug. 8 0. 15 6. 55: 16. 55 23. 55	.01334 .00802 .00554 .01434	1 3 9 21	68.0 70.0 70.0 73.0 68.5 64.0	70.0 73.0 73.0 64.0	Aug. 12 0. 0 1. 30 8. 24 9. 5 10. 34 11. 32 12. 10 13. 15 14. 5 17. 50 23. 55	22. 27. 30 31. 5 20. 45 9. 0 17. 30 14. 15 20. 50 15. 10 23. 0 16. 20 28. 50	Aug. 12 0. 0 8. 20 8. 45 9. 15 10. 46 12. 28 12. 48 18. 17 19. 0 21. 35 22. 30 23. 35	.0928 .0955 .0940 .0954 .0926 .0940 .0933 .0957 .0936 .0922 .0929 .0921	Aug. 12 0. 45 14. 30: 18. 15 23. 55	.01582 .01465 .01512 .01410	1 3 9 21	65.0 65.0 65.0 59.0	69.0 70.0 68.0 62.0
Aug. 9 0. 30 1. 20 6. 0 8. 15 13. 0 13. 40 14. 20 15. 27 16. 58 18. 28 19. 30 20. 0 23. 25	22. 30. 10 33. 50 22. 40 19. 0 22. 0 15. 30 18. 40 10. 50 19. 20 16. 0 21. 0 15. 0 32. 10	Aug. 9 0. 20 1. 13 1. 50 2. 28 3. 0 4. 0 4. 30 6. 35 9. 22 13. 50 15. 0 16. 50 17. 50	.0975 .0987 .0977 .0986 .0977 .0983 .0972 .0985 .0972 .0998 .0973 .0996 .0980	Aug. 9 0. 30 5. 5 8. 5: 10. 50: 22. 30: 23. 58	.01390 .00730 .00835 .00758 .01482 .01410	1 3 9 21	64.0 68.0 67.0 60.0	67.0 70.0 72.0 64.0	Aug. 13 0. 40 6. 0 20. 0 23. 58	22. 31. 10 19. 50 17. 0 27. 20	Aug. 13 1. 10 3. 40 4. 0 5. 30	.1004 *** .0991 *** .0998 *** .0978 ***	Aug. 13 0. 30 3. 48 10. 30: 18. 15: 23. 58	.01350 .00770 .00825 .01622 .01560	1 3 9 21	60.0 68.0 67.0 60.0	63.0 71.0 70.0 63.0

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Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Thermometers.			Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Thermometers.																						
						Hour.	H. F.	V. F.							Hour.	H. F.	V. F.																				
																		h	m	s																	
		Aug. 13 10. 55 17. 0 23. 58	*0990 *** *1004 *** *0988																																		
Aug. 14 0. 10 6. 0 14. 0 19. 10 23. 15	22. 27. 30 21. 30 19. 50 18. 0 27. 10	Aug. 14 0. 32 18. 10 23. 12	*0983 *** *1004 *** *0987	Aug. 14 0. 15 7. 18 10. 25 19. 58 23. 15	*01560 *00840 *00815 *01598 *01560	1 3 9 21	64.0 67.0 69.0 62.0	68.0 70.0 72.0 65.0																													
Aug. 15 0. 0 1. 30 6. 0 11. 3 12. 15 13. 15 14. 10 15. 20 23. 55	22. 28. 40 32. 0 23. 0 15. 20 19. 25 17. 20 20. 10 17. 0 26. 30	Aug. 15 0. 30 4. 20 16. 32 19. 20 23. 55	*0988 *0983 *1002 *1002 *0963	Aug. 15 0. 0 10. 10 18. 20 20. 52 22. 28	*01562 *00798 *01560 *01512 *01548	1 3 9 21	65.0 68.0 67.5 62.0	68.0 70.0 72.5 66.0																													
Aug. 16 0. 5 8. 0 9. 37 15. 0 15. 30 16. 3 19. 30 23. 50	22. 26. 40 20. 0 10. 50 18. 20 25. 50 16. 10 17. 5 26. 55	Aug. 16 0. 0 3. 50 6. 45 7. 20 9. 55 16. 51 17. 35 18. 35 21. 40 23. 30	*0963 *0944 *0969 *0959 *0946 *0977 *0959 *0980 *0956 *0971	Aug. 16 0. 0 2. 45 8. 10 10. 45 18. 32 23. 58	*01262 *00828 *00965 *00882 *01626 *01602	1 3 9 21	65.0 73.0 72.0 65.0	68.0 75.0 76.0 68.0																													
Aug. 17 0. 0 7. 40 8. 28 9. 32 12. 15 12. 30 13. 10 14. 2 15. 10 16. 30 18. 58 23. 20	22. 27. 15 22. 0 14. 0 22. 20 19. 0 22. 10 11. 0 17. 55 12. 30 23. 55 12. 50 25. 0	Aug. 17 0. 0 1. 32 2. 20 3. 9 3. 50 6. 34 6. 50 7. 58 8. 41 12. 12 12. 32 13. 30 14. 0 15. 48 17. 26	*0970 *0961 *0972 *0954 *0971 *0971 *0985 *0967 *0977 *0970 *0987 *0954 *0970 *0954 *0974	Aug. 17 0. 0 6. 10 8. 30 11. 0 18. 58 23. 30	*01604 *00865 *00972 *00878 *01630 *01605	1 3 9 22	68.0 70.0 70.0 68.0	71.0 74.0 74.0 72.0																													
		Aug. 18 0. 0 2. 45 7. 12 13. 30 14. 45 23. 58		Aug. 18 0. 0 7. 18 10. 25 19. 58 23. 15					22. 27. 0 30. 5 13. 30 22. 55 10. 10 24. 55															Aug. 17 23. 20	Aug. 18 0. 0 3. 30 3. 55 4. 50 7. 20 8. 35 13. 15 14. 12 14. 50 18. 15 19. 20 23. 50	Aug. 18 0. 0 5. 24 10. 30 18. 8 23. 30	*0955 *0954 *0938 *0958 *0941 *0967 *0957 *0963 *0938 *0976 *0942 *0975 *0946	Aug. 18 0. 0 5. 24 10. 30 18. 8 23. 30	*01608 *00932 *00885 *01626 *01594	9 21	72.0 62.0	76.5 66.0					
Aug. 19 1. 40 3. 40 7. 20 9. 30 9. 52 13. 50 20. 48 23. 58	(+) 22. 29. 28* (+) 27. 50* 17. 50 18. 20 8. 0 22. 0 12. 58 24. 5	Aug. 19 0. 40 1. 12 1. 55 2. 30 3. 5 7. 45 8. 24 9. 5 10. 37 12. 15 15. 0 17. 7 21. 0 23. 55	*0952 *0928 *0956 *0948 *0960 *0965 *0949 *0978 *0951 *0981 *0958 *0975 *0949 *0956	Aug. 19 0. 0 1. 12 20. 52 22. 28	*01552 *00959 *00875 *01430 *01340	1 3 9 21	65.0 68.0 67.0 58.0	68.0 70.0 72.0 61.0																													
Aug. 20 1. 15 5. 0 13. 5 16. 50 19. 58 23. 58	22. 30. 10 23. 0 17. 45 21. 20 17. 0 26. 30	Aug. 20 0. 30 6. 42 9. 45 18. 55 23. 40	*0956 *0971 *0953 *0964 *0946	Aug. 20 0. 0 2. 45 8. 10 10. 45 18. 32 23. 58																																	
Aug. 21 0. 10 8. 30 13. 40 14. 5 19. 0 23. 50	22. 26. 55 17. 25 19. 25 22. 55 16. 30 30. 30	Aug. 21 0. 30 6. 30 11. 50 23. 45	*0957 *0974 *0962 *0962	Aug. 21 0. 0 6. 10 8. 30 11. 0 18. 58 23. 30																																	
Aug. 22 0. 0 5. 0 11. 20	22. 30. 10 22. 0 18. 30	Aug. 22 0. 0 2. 45 10. 0	*0963 *** *0978	Aug. 22 0. 0 6. 10 8. 30 11. 0 18. 58 23. 30																																	

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INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.		Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.	
							H. F.	V. F.								H. F.	V. F.
Aug. 22 22. 22 23. 55	22. 22. 30 29. 10	Aug. 22 4. 10 11. 0 12. 20 22. 57	.0964 .0959 .0968 (†) .0964	Aug. 22 12. 20 22. 25 23. 30	.00776 (†) .01232 .01282	21	55.0	58.0	Aug. 26 22. 50		Aug. 26 22. 50	.0939					
Aug. 23 0. 5 2. 28 6. 50 8. 6 10. 24 11. 20 13. 0 14. 40 15. 42 17. 10 23. 55	22. 30. 0 33. 40 17. 30 12. 30 22. 0 14. 30 22. 25 17. 20 22. 0 15. 0 29. 0	Aug. 23 1. 35 2. 0 2. 30 2. 48 5. 4 5. 32 6. 0 8. 0 9. 34 10. 50 11. 35 16. 5 18. 20 18. 52 19. 10 22. 7 23. 55	.0970 .0952 .0985 .0957 .0983 *** .0965 *** .0977 *** .0957 .0968 .0955 .0965 .0971 .0953 .0963 .0952 .0950 .0965	Aug. 23 0. 15 2. 17 8. 13 10. 35 15. 55 22. 40	.01216 .00728 .00960 .00805 .01550 .01564	1 3 9 21	63.0 65.0 65.5 59.0	66.0 68.0 73.0 66.0	Aug. 27 0. 30 7. 10 7. 50 15. 0 20. 30 23. 55	22. 32. 35 21. 55 16. 55 21. 0 14. 10 27. 0	Aug. 27 0. 30 4. 0 7. 50 15. 4 20. 30 23. 55	.0953 *** .0964 *** .0951 .0957 .0952 .0962 .0946	Aug. 27 0. 30 4. 0 23. 0 23. 58	.01252 .00610 .01504 .01512	1 3 9 21	60.0 65.0 67.5 60.0	64.0 68.0 70.5 63.0
Aug. 24 0. 0 4. 30 7. 57 22. 58	22. 29. 10 22. 0 16. 30 24. 50	Aug. 24 0. 30 1. 54 3. 0 6. 53 7. 25 22. 58	.0964 .0953 .0970 .0957 .0965 .0947	Aug. 24 1. 10 5. 2 8. 0 10. 10 13. 58 23. 50	.01478 .00800 .00942 .00830 .01508 .01445	1 3 9 22	60.0 65.0 65.0 60.0	63.0 68.0 69.0 62.5	Aug. 28 0. 30 2. 20 7. 0 15. 0 16. 50 20. 35 23. 58	22. 28. 55 30. 15 22. 30 18. 55 21. 5 14. 50 25. 20	Aug. 28 0. 30 9. 30 15. 48 23. 58	.0949 .0967 .0955 .0964 .0960 .0972 .0958 .0943	Aug. 28 0. 30 9. 30 15. 48 23. 58	.01508 .00926 .01500 .01392	1 3 9 21	63.0 65.0 65.0 59.5	65.0 68.0 68.0 61.0
Aug. 25 0. 5 5. 0 9. 0 20. 0 23. 58	22. 30. 0 23. 0 20. 10 17. 0 30. 0	Aug. 25 0. 0 11. 53 21. 45 23. 45	.0952 .0957 .0932 .0942	Aug. 25 0. 0 6. 55 22. 30	.01415 .00606 .00662	8 21	65.0 65.0	68.0 67.5	Aug. 29 0. 15 10. 0 10. 45 12. 28 13. 48 14. 40 20. 30 23. 55	22. 26. 25 21. 0 14. 50 20. 10 16. 45 23. 25 14. 20 28. 5	Aug. 29 0. 30 10. 18 18. 20 23. 58	.0945 .0969 .0962 .0973 .0966 .0976 .0965 .0978 .0961 .0976 .0964 .0975 .0992 .0956 .0957	Aug. 29 0. 40 10. 18 18. 20 23. 58	.01374 .00602 .01372 .01306	1 3 9 21	58.0 63.0 63.0 54.0	60.0 66.0 64.5 58.0
Aug. 26 0. 15 6. 0 20. 20 23. 58	22. 31. 30 22. 0 16. 30 31. 15	Aug. 26 0. 20 0. 58 1. 32 3. 32 12. 35 18. 30 18. 57 19. 20	.0947 .0941 .0954 .0944 .0957 .0956 .0968 .0952	Aug. 26 1. 0 14. 38 23. 58	.00585 .01508 .01318	1 3 9 21	66.0 68.0 65.0 57.5	68.0 70.0 68.0 61.0	Aug. 30 0. 0 5. 0 13. 0 13. 12 14. 5 15. 58 20. 10 23. 50	22. 28. 50 24. 50 20. 45 26. 0 20. 50 24. 0 14. 55 25. 30	Aug. 30 0. 0 3. 43 17. 32 23. 30	.0957 .0969 .0965 .0977 .0962 .0954	Aug. 30 0. 0 3. 43 17. 32 23. 30	.01300 .00550 .01405 .01368	1 3 9 21	58.0 65.0 64.0 53.0	60.0 68.0 66.5 56.0
Aug. 26 0. 15 6. 0 20. 20 23. 58	22. 31. 30 22. 0 16. 30 31. 15	Aug. 26 0. 20 0. 58 1. 32 3. 32 12. 35 18. 30 18. 57 19. 20	.0947 .0941 .0954 .0944 .0957 .0956 .0968 .0952	Aug. 26 1. 0 14. 38 23. 58	.00585 .01508 .01318	1 3 9 21	66.0 68.0 65.0 57.5	68.0 70.0 68.0 61.0	Aug. 31 0. 2	22. 26. 0	Aug. 31 0. 30	.0955	Aug. 31 0. 30	.01288	1	60.0	63.0

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							H. F.	V. F.								H. F.	V. F.
Aug. 31 6. 0 13. 30 20. 0 23. 20	22. 20. 30 19. 0 14. 55 24. 50	Aug. 31 9. 20 23. 15	*0976 *0937	Aug. 31 4. 45 11. 25 23. 20	*00518 *00525 *01148	3 9 22	60.0 63.0 58.5	64.0 66.0 62.0	Sep. 4 7. 35 9. 0 11. 58 12. 20 12. 45 13. 5 15. 58 16. 55 18. 57 19. 55 20. 27 23. 58	22. 26. 55 22. 20 28. 0 32. 30 29. 10 33. 0 24. 0 29. 55 21. 50 26. 0 22. 50 37. 30	Sep. 4 1. 48 2. 59 4. 23 6. 28 7. 0 8. 0 8. 50 9. 33 16. 32 16. 52 17. 45 19. 5 22. 43	*0950 *0967 *0935 *0957 *0945 *0960 *0945 *0968 *0972 *0982 *0970 *0985 *0936	Sep. 4 14. 40 22. 30 23. 40	*01410 *01313 *01360	21	55.0 59.0	
Sep. 1 0. 0 1. 0 10. 0 16. 0 19. 45 23. 15	22. 26. 10 29. 0 19. 30 16. 0 12. 35 25. 50	Sep. 1 0. 15 3. 10 8. 50 15. 45 21. 0 22. 30 23. 15	*0943 *0975 *0976 *0980 *0942 *0957 *0950	Sep. 1 0. 0 8. 30 11. 30 22. 30 23. 25	*01166 *00622 *00570 *01103 *01080	9 21	63.5 62.0	66.5 64.5	Sep. 5 0. 28 0. 58 1. 28 1. 58 2. 43 4. 25 5. 10 6. 3 7. 32 9. 58 10. 32 20. 22 23. 42	22. 40. 5 38. 20 41. 10 37. 50 40. 35 33. 0 37. 10 24. 30 30. 0 17. 50 29. 0 19. 10 33. 30	Sep. 5 2. 0 4. 9 5. 10 6. 5 6. 20 7. 5 9. 47 10. 0 10. 42 22. 35	*0957 *0946 *0972 *0943 *0984 *0958 *0967 *0988 *0965 *0956	Sep. 5 1. 58 5. 15 10. 38 20. 33 23. 30	*01205 *00675 *00550 *01415 *01405	1 3 9 21	50.9 60.5 63.0 58.0	
Sep. 2 0. 28 1. 2 2. 27 6. 40 7. 20 7. 55 8. 55 11. 30 16. 0 18. 35 23. 58	22. 31. 0 28. 10 30. 55 20. 50 16. 25 18. 50 16. 0 20. 30 15. 30 13. 55 27. 0	Sep. 2 1. 5 2. 12 3. 2 4. 0 4. 55 7. 32 18. 55 23. 35	*0945 *0969 *0951 *0958 *0940 *0965 *0967 *0944	Sep. 2 0. 0 3. 2 18. 50 23. 10	*01050 *00670 *01528 *01076	1 3 9 21	65.0 67.0 69.5 54.0	68.0 69.0 72.5 60.0	Sep. 6 0. 30 2. 22 2. 42 3. 25 4. 28 5. 38 6. 48 6. 56 7. 3 7. 32 8. 5 8. 29 8. 38 9. 12 13. 0 20. 5 23. 58	22. 32. 50 36. 55 33. 50 34. 20 32. 0 27. 0 26. 15 19. 0 26. 35 12. 20 28. 20 22. 55 28. 50 17. 0 27. 30 28. 20 39. 0	Sep. 6 0. 0 1. 50 2. 39 3. 0 3. 36 4. 4 4. 18 4. 35 5. 15 5. 30 6. 32 6. 55 7. 20 7. 35 7. 50 8. 17 8. 29 8. 55 9. 45 10. 15 17. 15 23. 30	*0965 *0979 *0960 *0973 *0952 *0983 *0960 *0978 *0962 *0972 *0963 *1006 *0944 *0980 *0955 *0960 *1005 *0949 *0973 *0958 *0983 *0940	Sep. 6 0. 0 8. 43 15. 58 21. 54 23. 20	*01392 *00570 *01402 *01300 *01338	1 3 9 21	58.0 63.0 62.5 53.0	
Sep. 3 0. 30 2. 25 2. 45 5. 10 5. 20 9. 20 10. 30 11. 0 11. 15 12. 10 12. 30 12. 55 14. 20 14. 48 16. 8 17. 40 20. 0 23. 58	22. 28. 0 35. 40 30. 0 22. 30 25. 10 20. 0 15. 0 18. 20 16. 0 20. 0 18. 35 27. 0 20. 45 25. 30 19. 10 32. 0 17. 50 39. 50	Sep. 3 0. 30 2. 0 2. 28 2. 50 4. 8 4. 52 5. 23 6. 7 7. 40 9. 20 16. 7 17. 30 18. 15 23. 30	*0957 *0960 *0986 *0946 *0946 *1002 *0977 *0990 *0980 *0991 *0962 *0987 *0950	Sep. 3 1. 0 13. 30 23. 48	*01494 *00990 *01470	1 3 9 21	62.0 64.0 64.0 61.0	65.0 66.0 68.0 65.0	Sep. 4 0. 12 1. 54 2. 59	22. 41. 25 35. 40 38. 0	Sep. 4 0. 20 0. 38 1. 7	*0960 *0947 *0958	Sep. 4 0. 15 4. 50 8. 40	*01454 *00700 *00666	1 3 9	64.0 66.0 65.0	66.0 69.0 67.0

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Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.																																																									
							H. F.	V. F.								H. F.	V. F.																																																								
Sep. 7 0. 2 6. 10 7. 28 7. 35 8. 42 10. 5 11. 50 12. 5 14. 0 14. 58 15. 56 18. 30 18. 45 19. 48 23. 4	22. 41. 10 28. 30 24. 30 27. 50 23. 20 27. 0 25. 0 30. 25 17. 55 28. 0 27. 0 24. 0 18. 0 27. 10 33. 0	Sep. 7 0. 20 0. 55 1. 58 3. 32 4. 20 6. 55 8. 10 12. 5 12. 45 13. 30 14. 30 15. 55 20. 0 20. 30 23. 12	.0928 .0956 .0944 .0958 .0942 .0971 .0956 .0987 .0970 .0980 .0961 .0994 .0970 .0976 .0942	Sep. 7 0. 30 3. 10 6. 50 10. 25 16. 42 23. 10	.01190 .00624 .00742 .00640 .01362 .01360	1 3 9 22	57.0 65.0 65.0 55.0	60.0 68.0 68.0 58.0	Sep. 11 0. 30 6. 0 14. 0 20. 12 23. 30	22. 32. 15 25. 30 20. 30 23. 5 33. 35	Sep. 11 0. 40 5. 30 18. 55 23. 35	.0959 .0967 .0988 .0947	Sep. 11 0. 50 6. 20 10. 10 18. 33 23. 55	.01376 .00600 .00570 .01448 .01230	1 3 9 21	57.0 60.0 62.0 55.0	60.0 64.0 64.0 58.0	Sep. 8 0. 0 1. 3 4. 20 5. 15 7. 22 9. 29 10. 10 20. 28 23. 2	22. 35. 0 38. 50 30. 25 24. 0 27. 0 20. 50 26. 5 24. 50 32. 0	Sep. 8 0. 0 3. 30 4. 58 6. 10 7. 0 13. 25 22. 50	.0952 .0990 .0966 .0983 .0972 .0983 .0956	Sep. 8 0. 0 10. 30 23. 8	.01398 .00567 .01382	11 21	58.0 56.0	60.0 58.0	Sep. 11 0. 30 6. 0 14. 0 20. 12 23. 30	22. 33. 10 36. 0 28. 0 26. 0 23. 5 24. 55 27. 50 23. 50 28. 25 20. 40 33. 20	Sep. 12 1. 0 2. 0 5. 0 9. 24 10. 2 12. 5 12. 28 14. 55 15. 48 20. 25 23. 58	Sep. 12 1. 0 2. 40 10. 5 15. 38 23. 42	.0957 *** .0970 *** .0962 *** .0987 .0977 .0997 .0966	Sep. 12 0. 0 2. 40 10. 5 15. 38 23. 42	.01200 .00640 .00672 .01477 .01380	1 3 9 21	60.0 65.0 66.0 50.0	64.0 68.0 67.0 53.0	Sep. 8 0. 0 1. 3 4. 20 5. 15 7. 22 9. 29 10. 10 20. 28 23. 2	22. 35. 0 38. 50 30. 25 24. 0 27. 0 20. 50 26. 5 24. 50 32. 0	Sep. 8 0. 0 3. 30 4. 58 6. 10 7. 0 13. 25 22. 50	.0952 .0990 .0966 .0983 .0972 .0983 .0956	Sep. 8 0. 0 10. 30 23. 8	.01398 .00567 .01382	11 21	58.0 56.0	60.0 58.0	Sep. 13 0. 30 9. 0 12. 23 13. 56 14. 55 20. 28 23. 18	22. 34. 35 28. 30 20. 35 23. 40 19. 30 19. 45 30. 0	Sep. 13 0. 45 6. 2 6. 10 6. 28 7. 18 7. 22 7. 28 7. 47 11. 37 12. 0 16. 0 22. 0 22. 32 23. 18	Sep. 13 0. 30 3. 42 10. 15 18. 14 23. 30	.0972 .0991 .0982 .0993 .0982 .1004 .0981 .0997 .0973 .0981 .0990 .0980 .0961 .0976	Sep. 13 0. 30 3. 42 10. 15 18. 14 23. 30	.01310 .00638 .00630 .01468 .01383	1 3 9 21	58.0 65.0 63.0 55.0	61.0 68.0 66.0 58.0	Sep. 9 0. 0 5. 0 9. 40 21. 0 23. 58	22. 34. 45 27. 20 23. 30 20. 0 35. 0	Sep. 9 0. 0 7. 52 17. 45 23. 10	.0948 .0982 .0984 .0948	Sep. 9 0. 0 9. 45 19. 55 22. 30	.01377 .00842 .01440 .01410	1 3 9 21	59.0 60.0 61.0 56.0	60.0 63.0 63.5 58.0	Sep. 14 0. 30 6. 35 7. 38 8. 16 8. 55 9. 10 11. 25 14. 32 16. 35 23. 22	22. 36. 55 29. 0 23. 50 15. 0 19. 20 16. 40 27. 5 20. 50 25. 10 31. 40	Sep. 14 0. 50 5. 30 10. 30 18. 33 23. 20	.0949 *** .0973 *** .0964 *** .0981 *** .0967 *** .0987 *** .0971 .0993 .0967 .0984	Sep. 14 1. 0 5. 30 10. 30 18. 33 23. 20	.01396 .00640 .00600 .01445 .01382	1 3 9 22	56.0 63.0 64.0 55.0	59.0 66.0 66.0 58.0
Sep. 8 0. 0 1. 3 4. 20 5. 15 7. 22 9. 29 10. 10 20. 28 23. 2	22. 35. 0 38. 50 30. 25 24. 0 27. 0 20. 50 26. 5 24. 50 32. 0	Sep. 8 0. 0 3. 30 4. 58 6. 10 7. 0 13. 25 22. 50	.0952 .0990 .0966 .0983 .0972 .0983 .0956	Sep. 8 0. 0 10. 30 23. 8	.01398 .00567 .01382	11 21	58.0 56.0	60.0 58.0	Sep. 11 0. 30 6. 0 14. 0 20. 12 23. 30	22. 33. 10 36. 0 28. 0 26. 0 23. 5 24. 55 27. 50 23. 50 28. 25 20. 40 33. 20	Sep. 12 1. 0 2. 0 5. 0 9. 24 10. 2 12. 5 12. 28 14. 55 15. 48 20. 25 23. 58	Sep. 12 1. 0 2. 40 10. 5 15. 38 23. 42	.0957 *** .0970 *** .0962 *** .0987 .0977 .0997 .0966	Sep. 12 0. 0 2. 40 10. 5 15. 38 23. 42	.01200 .00640 .00672 .01477 .01380	1 3 9 21	60.0 65.0 66.0 50.0	64.0 68.0 67.0 53.0	Sep. 8 0. 0 1. 3 4. 20 5. 15 7. 22 9. 29 10. 10 20. 28 23. 2	22. 35. 0 38. 50 30. 25 24. 0 27. 0 20. 50 26. 5 24. 50 32. 0	Sep. 8 0. 0 3. 30 4. 58 6. 10 7. 0 13. 25 22. 50	.0952 .0990 .0966 .0983 .0972 .0983 .0956	Sep. 8 0. 0 10. 30 23. 8	.01398 .00567 .01382	11 21	58.0 56.0	60.0 58.0	Sep. 13 0. 30 9. 0 12. 23 13. 56 14. 55 20. 28 23. 18	22. 34. 35 28. 30 20. 35 23. 40 19. 30 19. 45 30. 0	Sep. 13 0. 45 6. 2 6. 10 6. 28 7. 18 7. 22 7. 28 7. 47 11. 37 12. 0 16. 0 22. 0 22. 32 23. 18	Sep. 13 0. 30 3. 42 10. 15 18. 14 23. 30	.0972 .0991 .0982 .0993 .0982 .1004 .0981 .0997 .0973 .0981 .0990 .0980 .0961 .0976	Sep. 13 0. 30 3. 42 10. 15 18. 14 23. 30	.01310 .00638 .00630 .01468 .01383	1 3 9 21	58.0 65.0 63.0 55.0	61.0 68.0 66.0 58.0	Sep. 9 0. 0 5. 0 9. 40 21. 0 23. 58	22. 34. 45 27. 20 23. 30 20. 0 35. 0	Sep. 9 0. 0 7. 52 17. 45 23. 10	.0948 .0982 .0984 .0948	Sep. 9 0. 0 9. 45 19. 55 22. 30	.01377 .00842 .01440 .01410	1 3 9 21	59.0 60.0 61.0 56.0	60.0 63.0 63.5 58.0	Sep. 14 0. 30 6. 35 7. 38 8. 16 8. 55 9. 10 11. 25 14. 32 16. 35 23. 22	22. 36. 55 29. 0 23. 50 15. 0 19. 20 16. 40 27. 5 20. 50 25. 10 31. 40	Sep. 14 0. 50 5. 30 10. 30 18. 33 23. 20	.0949 *** .0973 *** .0964 *** .0981 *** .0967 *** .0987 *** .0971 .0993 .0967 .0984	Sep. 14 1. 0 5. 30 10. 30 18. 33 23. 20	.01396 .00640 .00600 .01445 .01382	1 3 9 22	56.0 63.0 64.0 55.0	59.0 66.0 66.0 58.0																		
Sep. 8 0. 0 1. 3 4. 20 5. 15 7. 22 9. 29 10. 10 20. 28 23. 2	22. 35. 0 38. 50 30. 25 24. 0 27. 0 20. 50 26. 5 24. 50 32. 0	Sep. 8 0. 0 3. 30 4. 58 6. 10 7. 0 13. 25 22. 50	.0952 .0990 .0966 .0983 .0972 .0983 .0956	Sep. 8 0. 0 10. 30 23. 8	.01398 .00567 .01382	11 21	58.0 56.0	60.0 58.0	Sep. 13 0. 30 9. 0 12. 23 13. 56 14. 55 20. 28 23. 18	22. 34. 35 28. 30 20. 35 23. 40 19. 30 19. 45 30. 0	Sep. 13 0. 45 6. 2 6. 10 6. 28 7. 18 7. 22 7. 28 7. 47 11. 37 12. 0 16. 0 22. 0 22. 32 23. 18	Sep. 13 0. 30 3. 42 10. 15 18. 14 23. 30	.0972 .0991 .0982 .0993 .0982 .1004 .0981 .0997 .0973 .0981 .0990 .0980 .0961 .0976	Sep. 13 0. 30 3. 42 10. 15 18. 14 23. 30	.01310 .00638 .00630 .01468 .01383	1 3 9 21	58.0 65.0 63.0 55.0	61.0 68.0 66.0 58.0	Sep. 9 0. 0 5. 0 9. 40 21. 0 23. 58	22. 34. 45 27. 20 23. 30 20. 0 35. 0	Sep. 9 0. 0 7. 52 17. 45 23. 10	.0948 .0982 .0984 .0948	Sep. 9 0. 0 9. 45 19. 55 22. 30	.01377 .00842 .01440 .01410	1 3 9 21	59.0 60.0 61.0 56.0	60.0 63.0 63.5 58.0	Sep. 14 0. 30 6. 35 7. 38 8. 16 8. 55 9. 10 11. 25 14. 32 16. 35 23. 22	22. 36. 55 29. 0 23. 50 15. 0 19. 20 16. 40 27. 5 20. 50 25. 10 31. 40	Sep. 14 0. 50 5. 30 10. 30 18. 33 23. 20	.0949 *** .0973 *** .0964 *** .0981 *** .0967 *** .0987 *** .0971 .0993 .0967 .0984	Sep. 14 1. 0 5. 30 10. 30 18. 33 23. 20	.01396 .00640 .00600 .01445 .01382	1 3 9 22	56.0 63.0 64.0 55.0	59.0 66.0 66.0 58.0																																					
Sep. 9 0. 0 5. 0 9. 40 21. 0 23. 58	22. 34. 45 27. 20 23. 30 20. 0 35. 0	Sep. 9 0. 0 7. 52 17. 45 23. 10	.0948 .0982 .0984 .0948	Sep. 9 0. 0 9. 45 19. 55 22. 30	.01377 .00842 .01440 .01410	1 3 9 21	59.0 60.0 61.0 56.0	60.0 63.0 63.5 58.0	Sep. 14 0. 30 6. 35 7. 38 8. 16 8. 55 9. 10 11. 25 14. 32 16. 35 23. 22	22. 36. 55 29. 0 23. 50 15. 0 19. 20 16. 40 27. 5 20. 50 25. 10 31. 40	Sep. 14 0. 50 5. 30 10. 30 18. 33 23. 20	.0949 *** .0973 *** .0964 *** .0981 *** .0967 *** .0987 *** .0971 .0993 .0967 .0984	Sep. 14 1. 0 5. 30 10. 30 18. 33 23. 20	.01396 .00640 .00600 .01445 .01382	1 3 9 22	56.0 63.0 64.0 55.0	59.0 66.0 66.0 58.0																																																								

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 to several times near that which is recorded. The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Göttingen Mean Solar Time. h m	Western Declination. ° ' "	Göttingen Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time. h m	Western Declination. ° ' "	Göttingen Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		
							H. F.	V. F.								H. F.	V. F.	
		Sep. 14 12. 22 13. 30 14. 45 15. 20 18. 30 23. 17	.0965 .0990 .0974 .0981 *** .0981 *** .0962				o	o			Sep. 18 12. 30 15. 10 22. 10 23. 55	.1011 .0981 *** .0966 *** .0970					o	o
Sep. 15 0. 8 3. 48 4. 40 6. 10 8. 0 8. 35 9. 30 10. 38 11. 0 11. 50 14. 30 15. 15 16. 30 17. 32 19. 42 23. 55	22. 33. 5 30. 30 25. 35 27. 25 23. 0 9. 58 21. 0 25. 0 19. 20 30. 20 16. 50 24. 0 21. 45 24. 55 21. 40 30. 45	Sep. 15 0. 35 1. 4 3. 30 7. 20 7. 50 8. 5 8. 28 8. 55 9. 35 9. 55 10. 12 11. 50 12. 40 13. 35 14. 52 21. 51 23. 30	.0956 *** .0969 *** .0974 .0984 .0973 .0980 .0966 .0994 .0965 .0972 .0963 .0988 .0970 .0984 .0961 .0958 .0954	Sep. 15 0. 55 7. 15 12. 25 23. 10	.01415 .00598 .00540 .01070	11 21	63.0 58.0	66.0 60.0	Sep. 19 0. 25 11. 5 12. 30 13. 45 17. 33 18. 45 21. 2 23. 57	22. 35. 25 26. 30 23. 25 26. 50 22. 30 24. 50 20. 30 31. 0	Sep. 19 1. 5 5. 45 15. 35 22. 50 23. 58	.0976 *** .0968 *** .0988 *** .0965 *** .0976	Sep. 19 0. 30 4. 45 10. 0 23. 58	.01246 .00675 .00642 .01192	1 3 9 21	60.0 65.0 63.0 60.0	62.0 67.0 65.0 62.0	
Sep. 16 0. 40 1. 35 6. 35 10. 10 13. 24 20. 8 23. 58	22. 31. 20 34. 35 24. 0 21. 0 26. 55 19. 20 31. 40	Sep. 16 0. 0 3. 20 10. 10 21. 50	.0965 *** .0957 .0990 .0964	Sep. 16 1. 0 6. 40 10. 15 23. 0 23. 58	.01052 .00580 .00568 .01298 .01280	1 3 9 21	60.0 65.0 63.0 58.0 61.0	63.0 68.0 65.5 61.0	Sep. 20 1. 0 6. 0 20. 30 23. 58	22. 30. 25 24. 0 19. 0 29. 0	Sep. 20 0. 30 7. 27 10. 40 23. 0	.0973 *** .0990 *** .0961	Sep. 20 0. 30 7. 27 10. 40 23. 0	.01192 .00718 .00670 .01472	1 3 9 21	60.0 63.0 65.0 60.0	63.0 65.0 67.0 64.0	
Sep. 17 1. 0 6. 0 20. 5 23. 58	22. 33. 10 25. 0 19. 58 32. 20	Sep. 17 1. 0 11. 55 23. 30	.0965 .0983 .0965	Sep. 17 1. 0 6. 40 18. 58 23. 58	.01227 .00595 .01450 .01395	1 3 9 21	60.0 63.0 63.0 55.0	63.0 66.0 66.0 58.0	Sep. 21 1. 0 6. 30 11. 32 12. 45 14. 40 20. 52 23. 25	22. 30. 25 26. 0 22. 55 19. 20 23. 0 18. 20 27. 10	Sep. 21 1. 0 9. 35 20. 12 23. 25	.0965 .0984 .0966	Sep. 21 0. 50 9. 35 20. 12 23. 25	.01444 .00690 .00515 .01460	1 3 22	63.0 65.0 63.0 59.0	66.0 68.0 66.0 62.0	
Sep. 18 1. 0 7. 20 11. 45 15. 2 20. 15 23. 58	22. 34. 45 28. 30 21. 45 17. 0 21. 0 34. 5	Sep. 18 1. 0 5. 10 9. 57 11. 8	.0979 *** .0970 *** .0988 .0977	Sep. 18 0. 30 5. 12 17. 35 22. 30	.01368 .00610 .01445 .01406	1 3 9 21	60.0 62.0 64.0 55.0	63.0 64.0 67.0 58.0	Sep. 22 0. 0 1. 10 9. 0 9. 40 14. 30 18. 57 23. 58	22. 29. 45 32. 35 23. 55 18. 45 24. 0 17. 45 27. 0	Sep. 22 1. 0 7. 20 9. 18 16. 40 23. 0	.0970 .0970 .0974 .0992 .0964	Sep. 22 0. 0 8. 10 10. 30 23. 30	.01448 .00695 .00662 .01466	11 21	61.0 59.0	64.0 60.0	
Sep. 18 1. 0 7. 20 11. 45 15. 2 20. 15 23. 58	22. 34. 45 28. 30 21. 45 17. 0 21. 0 34. 5	Sep. 18 1. 0 5. 10 9. 57 11. 8	.0979 *** .0970 *** .0988 .0977	Sep. 18 0. 30 5. 12 17. 35 22. 30	.01368 .00610 .01445 .01406	1 3 9 21	60.0 62.0 64.0 55.0	63.0 64.0 67.0 58.0	Sep. 23 1. 0 5. 0 11. 0 13. 45 16. 57 19. 40 23. 58	22. 30. 0 26. 0 23. 25 15. 45 20. 30 16. 30 35. 0	Sep. 23 1. 0 10. 43 11. 6 15. 15 23. 40	.0970 .0983 .0994 .0978 .0954	Sep. 23 1. 0 9. 20 20. 30 23. 58	.01440 .00770 .01425 .01360	1 3 9 21	60.0 65.0 63.0 58.0	60.0 68.0 65.0 60.0	

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 to several times near that which is recorded. The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 4^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.																		
							H. F.	V. F.								H. F.	V. F.																	
Sep. 24 0. 10 1. 30 4. 42 5. 28 6. 10 7. 20 8. 28 9. 38 14. 0 16. 8 18. 0 21. 0 23. 58	22. 36. 0 39. 30 30. 0 20. 35 25. 20 18. 45 23. 0 14. 20 23. 0 21. 0 24. 55 17. 35 30. 0	Sep. 24 1. 0 5. 22 7. 5 8. 45 9. 20 9. 50 10. 8 17. 40 18. 45 23. 50	*0958 *0988 *0965 *0985 *0976 *1003 *0987 *0977 *0988 *0950	Sep. 24 0. 30 7. 0 10. 0 20. 20 23. 58	*01348 *00740 *00685 *01475 *01342	1 3 9 21	60.0 63.0 60.0 60.0		Sep. 29 11. 0 15. 50 16. 20 17. 35 18. 12 21. 3 23. 58	22. 22. 10 23. 50 22. 5 23. 5 25. 35 18. 25 32. 55	Sep. 29 11. 30 16. 12 17. 50 18. 40 23. 42	*0987 *0998 *0991 *1001 *0961	Sep. 29 23. 20	*01386																				
Sep. 25 0. 6 1. 38 6. 30 7. 45 21. 0 23. 58	22. 31. 30 34. 50 25. 0 22. 30 18. 10 24. 50	Sep. 25 1. 30 18. 30 23. 30	*0958 *0990 *0954	Sep. 25 0. 5 3. 20 7. 20 9. 40 17. 45 23. 54	*01312 *00744 *00815 *00745 *00515 *01476	1 3 9 21	60.0 62.0 67.0 68.5 61.0		Sep. 30 1. 12 6. 0 10. 25 11. 0 12. 15 13. 0 13. 28 15. 10 15. 30 16. 42 17. 45 18. 12 18. 35 19. 45 20. 5 21. 20 23. 15 23. 55	22. 35. 0 29. 0 25. 5 19. 0 25. 0 22. 0 24. 5 21. 50 20. 0 16. 20 24. 30 23. 55 31. 50 17. 30 24. 55 21. 0 42. 25 36. 50	Sep. 30 1. 20 9. 2 10. 35 15. 0 15. 25 16. 8 16. 25 18. 15 19. 12 21. 32 23. 30 23. 38 23. 55	*0965 *0996 *0983 *0990 *1029 *1009 *1016 *0982 *1013 *0948 *0942 *0966 *0950	Sep. 30 1. 30 4. 33 7. 10 8. 50 16. 37 22. 55 23. 58	*01206 *00700 *00730 *00688 *01280 *01342 *01285	1 3 9 21	60.0 62.0 63.0 63.0 57.0																		
Sep. 26 0. 45 2. 50 6. 0 20. 40 23. 58	22. 27. 0 29. 45 24. 20 18. 10 28. 35	Sep. 26 0. 30 18. 0 23. 50	*0961 *0991 *0957	Sep. 26 0. 40 9. 10 17. 25 23. 58	*01445 *00978 *01468 *01384	1 3 9 21	61.0 62.0 66.0 61.0		Oct. 1 0. 43 1. 10 1. 30 1. 42 2. 12 3. 20 3. 52 6. 6 6. 28 6. 45 7. 32 8. 0 8. 28 9. 32 10. 20 10. 33 10. 45 10. 55 11. 12 11. 28 11. 40 12. 8 12. 20	22. 38. 10 35. 45 42. 45 38. 15 42. 30 32. 50 40. 0 22. 50 24. 10 18. 0 22. 0 19. 50 24. 50 3. 55 24. 50 16. 10 19. 55 15. 30 21. 0 19. 50 27. 0 19. 45 22. 55	Oct. 1 1. 0 1. 34 1. 52 2. 20 2. 52 3. 20 3. 30 3. 42 4. 2 5. 10 5. 34 6. 18 6. 35 8. 5 9. 6 9. 52 10. 30 10. 42 10. 55 11. 4 11. 23 12. 15 12. 40	*0936 *0978 *0942 *0960 *0933 *0967 *0951 *0969 *0945 *0968 *0944 *0962 *0948 *0975 *0956 *1018 *0953 *0968 *0955 *0971 *0949 *0989 *0952	Oct. 1 1. 0 3. 42 6. 44 10. 30 12. 0 12. 30 13. 0 13. 20 15. 12 17. 10 23. 0	*01200 *** *00802 *** *00878 *** *00620 *** *00690 *** *00658 *** *00716 *** *00672 *00972 *00960 *01222 *01345	1 3 9 21	58.0 61.0 61.0 53.0																		
Sep. 27 0. 30 3. 3 6. 30 14. 40 18. 50 21. 40	22. 29. 30 31. 45 26. 30 20. 20 20. 55 22. 12* (†)	Sep. 27 1. 0 13. 45 23. 20	*0961 *1001 *0945	Sep. 27 1. 0 3. 8 9. 31 23. 58	*01284 *00952 *00990 *01470	1 3 9 21	60.0 63.0 68.0 64.0 60.0		Sep. 28 0. 50 3. 3 9. 35 12. 25 14. 15 21. 0 23. 45	22. 33. 10 34. 0 24. 10 22. 5 26. 55 17. 50 27. 50	Sep. 28 2. 35 17. 45 23. 35	*0952 *0988 *0966	Sep. 28 1. 0 3. 55 9. 35 18. 3 23. 50	*01418 *00764 *00770 *01450 *01410	1 3 9 22	60.0 62.0 67.0 67.0 61.0		Sep. 29 0. 15 2. 40 6. 0	22. 30. 0 34. 0 27. 0	Sep. 29 0. 4 10. 18 10. 35	*0969 *0991 *1000	Sep. 29 0. 10 10. 40 20. 45	*01410 *00695 *01396	9 21	60.0 58.0		Oct. 1 0. 43 1. 10 1. 30 1. 42 2. 12 3. 20 3. 52 6. 6 6. 28 6. 45 7. 32 8. 0 8. 28 9. 32 10. 20 10. 33 10. 45 10. 55 11. 12 11. 28 11. 40 12. 8 12. 20	22. 38. 10 35. 45 42. 45 38. 15 42. 30 32. 50 40. 0 22. 50 24. 10 18. 0 22. 0 19. 50 24. 50 3. 55 24. 50 16. 10 19. 55 15. 30 21. 0 19. 50 27. 0 19. 45 22. 55	Oct. 1 1. 0 1. 34 1. 52 2. 20 2. 52 3. 20 3. 30 3. 42 4. 2 5. 10 5. 34 6. 18 6. 35 8. 5 9. 6 9. 52 10. 30 10. 42 10. 55 11. 4 11. 23 12. 15 12. 40	*0936 *0978 *0942 *0960 *0933 *0967 *0951 *0969 *0945 *0968 *0944 *0962 *0948 *0975 *0956 *1018 *0953 *0968 *0955 *0971 *0949 *0989 *0952	Oct. 1 1. 0 3. 42 6. 44 10. 30 12. 0 12. 30 13. 0 13. 20 15. 12 17. 10 23. 0	*01200 *** *00802 *** *00878 *** *00620 *** *00690 *** *00658 *** *00716 *** *00672 *00972 *00960 *01222 *01345	1 3 9 21	58.0 61.0 61.0 53.0

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 to several times near that which is recorded. The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Oct. 1 12. 40 13. 12 13. 38 14. 30 15. 0 15. 30 15. 50 16. 45 17. 32 18. 43 19. 55 20. 5 20. 40 22. 50 23. 57	22. 13. 20 30. 30 14. 30 21. 0 19. 25 34. 0 18. 58 25. 50 22. 0 34. 0 29. 0 25. 10 29. 0 27. 0 30. 0	Oct. 1 13. 12 14. 8 15. 13 15. 28 16. 19 17. 30 18. 5 20. 8 22. 50 22. 58 23. 40	*0994 *0970 *0988 *0962 *1010 *0979 *0992 *0944 *0952 *0963 *0947	h m			o	o	Oct. 3 8. 35 9. 52 10. 25 11. 3 11. 32 21. 0 23. 58	22. 23. 50 12. 20 25. 55 19. 50 28. 10 19. 20 27. 45	Oct. 3 4. 0 7. 22 8. 36 10. 20 11. 28 12. 0 16. 45 22. 40	*0975 *0970 *0998 *0964 *1000 *0978 *0988 *0955	Oct. 3 20. 12 23. 55	*01590 *01520		o	o
Oct. 2 0. 30 3. 6 3. 42 4. 40 5. 22 5. 40 5. 56 6. 12 6. 20 6. 25 7. 27 8. 35 10. 10 10. 25 10. 28 10. 42 10. 55 11. 2 11. 15 11. 42 12. 26 13. 28 14. 2 14. 42 15. 12 16. 5 16. 28 20. 3 23. 58	22. 29. 20 31. 0 16. 40 25. 0 16. 55 21. 30 14. 55 22. 30 11. 10 19. 35 5. 20 25. 40 20. 0 24. 55 23. 0 33. 0 27. 56 35. 10 19. 12 31. 55 13. 5 29. 5 14. 20 26. 5 17. 0 33. 50 20. 30 29. 30 28. 30	Oct. 2 0. 20 2. 6 3. 30 4. 0 4. 40 4. 42 4. 54 5. 2 5. 34 6. 18 6. 34 8. 18 10. 0 10. 30 10. 50 10. 58 11. 5 11. 22 11. 58 12. 32 12. 53 14. 38 16. 0 16. 45 18. 24 19. 2 20. 35 22. 35 23. 55	*0953 *0971 *0944 *0986 *0958 *0989 *0966 *0984 *0965 *0980 *0958 *0949 *0954 *1014 *0968 *0985 *0952 *1000 *0938 *0962 *0938 *0991 *0970 *1020 *0958 *0956 *0979 *0947 *0967	Oct. 2 0. 30 3. 55 5. 8 6. 20 7. 10 7. 18 7. 25 7. 50 10. 10 10. 48 23. 5	*01500 *** *01120 *** *00918 *** *01110 *** *01000 *** *01065 *** *00935 *** *00878 *00825 *00642 *01520	1 3 9 21	55. 0 58. 0 58. 0 54. 0	57. 0 58. 0 60. 0 55. 0	Oct. 5 0. 30 2. 32 4. 0 9. 28 10. 32 15. 30 16. 55 19. 0 19. 45 23. 20	22. 35. 35 36. 5 30. 0 24. 10 15. 50 26. 35 21. 20 30. 0 23. 5 32. 20	Oct. 5 0. 30 2. 34 4. 0 10. 0 10. 40 11. 12 12. 30 16. 38 18. 34 19. 30 22. 53	*0964 *0982 *0964 *0982 *1016 *0995 *0984 *1008 *0972 *0996 *0967	Oct. 5 0. 30 3. 35 9. 17 15. 18 23. 25	*01514 *00942 *00910 *01596 *01484	1 3 9 22	60. 0 65. 0 62. 0 52. 0	61. 7 67. 0 66. 5 56. 0
Oct. 3 0. 50 3. 50 6. 30 7. 52	22. 31. 30 23. 5 23. 0 19. 20	Oct. 3 0. 20 1. 58 2. 50 3. 32	*0964 *0955 *0978 *0956	Oct. 3 0. 30 5. 28 6. 40 9. 40	*01430 *00880 *00905 *00815	1 3 8 21	58. 0 60. 0 60. 0 55. 0	59. 0 62. 0 62. 0 58. 0	Oct. 7 1. 0 3. 0 3. 12 3. 30 3. 53	22. 35. 50 35. 0 35. 30 33. 40 33. 30	Oct. 7 1. 10 6. 12 8. 52 9. 50 12. 38	*0961 *0945 *0971 *0957 *0989	Oct. 7 0. 50 9. 35 15. 28 21. 51 23. 30	*00867 *01008 *01383 *01520 *01555	1 3 9 21	61. 0 62. 5 60. 0 53. 0	64. 0 64. 5 63. 5 58. 0

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Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Oct. 16 14. 40 20. 32 23. 55	22. 16. 0 13. 25 24. 50	Oct. 16 14. 30 17. 58 23. 0	.0976 .0993 .0975	h m			o	o	Oct. 21 12. 45 20. 35 23. 58	22. 15. 45 12. 30 22. 0	Oct. 21 23. 15	.0982	Oct. 21 8. 30 15. 30 23. 55	.00836 .01562 .01470	9 21	55.0 46.0	57.0 47.0
Oct. 17 0. 30 8. 0 8. 32 9. 12 10. 40 20. 30 21. 28 23. 58	22. 24. 0 18. 0 14. 15 17. 50 13. 35 15. 25 12. 5 21. 0	Oct. 17 0. 50 5. 42 7. 45 8. 25 9. 0 10. 0 19. 5 23. 15 23. 58	.0981 .0970 .0980 .0972 .0992 .0972 .0993 .0966 .0973	Oct. 17 0. 50 3. 12 6. 25 9. 34 19. 12 23. 58	.01475 .00978 .01070 .00978 .01675 .01640	1 3 9 21	58.0 60.0 60.0 54.0	60.0 60.0 63.5 56.0	Oct. 22 0. 30 4. 55 20. 40 23. 55	22. 23. 0 16. 0 12. 0 19. 15	Oct. 22 0. 20 19. 30 23. 14	.0986 .0974 *** .0998	Oct. 22 1. 0 6. 50 14. 45 20. 45 23. 58	.01440 .00780 .01448 .01501 .01250	1 3 9 22	50.0 53.0 48.0 45.0	52.0 54.0 52.0 47.0
Oct. 18 0. 30 1. 25 5. 0 5. 40 7. 0 17. 35 21. 33 23. 58	22. 22. 10 23. 40 17. 10 10. 30 15. 10 15. 0 11. 0 19. 45	Oct. 18 0. 30 4. 37 5. 37 6. 20 19. 0 23. 30	.0970 .0979 .0962 .0980 .0987 .0969	Oct. 18 0. 30 4. 25 6. 10 10. 30 20. 45 23. 58	.01610 .01068 .01130 .01025 .01745 .01680	1 3 9 21	55.0 60.0 63.0 58.0	58.0 63.0 65.0 58.0	Oct. 23 0. 5 11. 15 13. 10 16. 5 21. 10 23. 55	22. 20. 0 15. 30 11. 45 15. 58 12. 15 21. 0	Oct. 23 0. 30 12. 57 19. 0 23. 48	.1006 .1022 .1020 .0987	Oct. 23 0. 15 2. 52 6. 10 9. 27 23. 0	.01220 .00774 .00850 .00800 .01358	1 3 9 21	50.0 53.0 52.0 48.0	52.0 54.0 56.0 50.0
Oct. 19 0. 20 6. 45 7. 10 9. 2 21. 10 23. 15	22. 20. 50 16. 30 1. 50 15. 50 12. 5 18. 0	Oct. 19 0. 10 6. 45 6. 58 7. 25 8. 38 18. 0 23. 12	.0972 .0984 .0973 .1002 .0971 .0992 .0974	Oct. 19 0. 30 10. 0 19. 48 23. 16	.01672 .01003 .01125 .01672	1 3 9 22	60.0 60.0 61.0 55.0	62.0 62.0 64.5 58.0	Oct. 24 1. 0 1. 32 5. 0 12. 10 20. 40 23. 58	22. 23. 0 24. 5 18. 50 16. 35 13. 20 22. 0	Oct. 24 1. 0 4. 58 11. 45 18. 0 23. 30	.0998 .1009 .1019 .1022 .0986	Oct. 24 0. 30 9. 14 20. 55 23. 55	.01300 .00865 .01525 .01500	1 3 9 21	50.0 52.0 50.0 47.0	52.0 53.0 51.0 51.0
Oct. 20 0. 0 7. 30 8. 0 8. 32 9. 58 9. 32 10. 0 12. 35 12. 50 13. 10 17. 30 21. 2 23. 57	22. 20. 45 15. 50 11. 0 13. 20 8. 50 12. 50 11. 10 14. 50 17. 30 13. 45 15. 20 11. 55 22. 0	Oct. 20 0. 30 8. 6 9. 2 11. 15 19. 0 20. 5 21. 40	.0972 .0991 .1005 .0991 .1004 .0997 (+) .0981* (+)	Oct. 20 0. 0 3. 30 21. 51 23. 10	.01680 .01722 .01540 .01580	11 21	55.0 50.0	56.0 51.0	Oct. 25 0. 32 3. 55 5. 45 6. 0 6. 28 6. 40 7. 0 10. 0 13. 2 13. 30 14. 0 17. 32 21. 0 23. 58	22. 28. 0 27. 0 19. 0 12. 50 19. 0 14. 50 20. 30 7. 45 16. 5 7. 55 7. 45 18. 30 14. 10 21. 0	Oct. 25 0. 30 2. 0 2. 36 4. 20 5. 10 5. 32 6. 12 7. 10 8. 17 8. 30 8. 45 9. 47 13. 0 13. 45 14. 32 17. 2 18. 40 23. 50	.0990 .0988 .0997 .0990 .1000 .0987 .1006 .0979 .0990 .0974 .0988 .0981 .1000 .1015 .1001 .0996 .1014 .0980	Oct. 25 0. 30 5. 16 5. 40 11. 5 21. 2 23. 30	.01460 .00902 .00952 .00872 .01540 .01540	1 3 9 21	50.0 55.0 53.0 48.5	53.0 57.0 56.0 51.5
Oct. 21 1. 10 4. 0	22. 22. 20 18. 0	Oct. 21 1. 15 19. 0	.0978 .1011	Oct. 21 1. 30 3. 56	.01360 .00890	1 3	55.0 58.0	57.0 59.0	Oct. 26 0. 15 3. 0 5. 10 7. 27	22. 23. 10 28. 5 19. 25 16. 50	Oct. 26 0. 30 3. 28 6. 0 7. 36	.0989 .0982 .0998 .0987	Oct. 26 0. 30 4. 40 10. 0 17. 18	.01506 .00930 .00870 .01550	1 3 9 22	52.0 55.0 54.0 45.0	53.0 57.0 55.0 48.0

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INDICATIONS OF THE MAGNETOMETERS

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Oct. 26 7.55 9.41 21.40 23.7	22. 5.50 16.30 14.10 19.15	Oct. 26 8.12 8.55 19.0 23.5	*1004 *0996 *1023 *0991	Oct. 26 23.10	*01475		o	o	Oct. 30 4.30 4.45 5.10 8.50 9.40 10.6 10.30 12.0 14.0 14.30 16.0 23.58	22. 20. 0 15.10 17.0 15.20 9.58 12.10 3.30 15.0 16.10 23.30 14.55 33.0	Oct. 30 4.20 4.42 8.20 10.12 10.36 11.28 14.20 15.25 17.30 19.50 23.35	*1003 *0989 *1012 *1004 *1030 *1003 *0997 *1022 *1005 *1014 *0978	Oct. 30 15.18 22.42	*00825 *01068	9 21	54.0 53.0	56.0 55.0
Oct. 27 0.0 2.28 8.30 8.56 9.52 10.30 13.15 14.12 14.58 22.0 23.58	22. 23. 0 27.5 16.0 12.30 17.0 11.30 15.0 10.15 16.0 12.55 19.20	Oct. 27 0.0 4.7 4.40 6.35 8.0 8.48 9.30 10.18 10.15 13.50 14.38 19.25 23.58	*0993 *0992 *1004 *0993 *1006 *0999 *1018 *1005 *1019 *1003 *1012 *0980	Oct. 27 1.0 9.49 19.3 23.58	*01510 *00893 *00766 *00835	9 21	49.0 50.5	52.0 54.0	Oct. 31 0.30 5.43 6.32 7.40 8.30 9.15 9.36 13.55 14.20 21.15 23.58	22. 32. 40 16.0 11.50 16.0 8.0 13.30 10.50 15.45 18.58 13.25 21.45	Oct. 31 1.0 1.55 4.45 8.37 10.40 14.35 16.0 18.11 23.42	*0976 *0988 *0984 *1014 *1003 *1009 *1001 *1011 *0973	Oct. 31 1.15 5.30 8.25 19.30 23.58	*00902 *01032 *00924 *01292 *01056	1 3 9 21	56.0 58.0 56.0 55.0	58.0 60.0 59.0 57.0
Oct. 28 1.10 5.0 14.28 14.45 15.27 17.10 21.15 23.58	22. 23. 0 17.0 12.30 15.5 11.50 22.5 15.5 21.35	Oct. 28 1.5 13.18 14.25 15.25 17.0 18.8 23.5	*0985 *1021 *1006 *1027 *1015 *1038 *0983	Oct. 28 1.30 8.0 18.5 22.5 23.58	*00890 *00898 *01550 *01500 *01550	1 3 9 21	55.0 56.0 54.0 45.0	57.0 58.0 56.0 47.0	Nov. 1 0.10 3.12 3.25 4.50 6.0 7.30 18.0 21.15 23.55	22. 25. 0 21.40 18.40 16.30 18.30 17.20 16.50 13.40 21.50	Nov. 1 0.30 4.0 4.55 18.30 23.0	*0977 *0991 *0976 *1007 *0972	Nov. 1 0.30 5.55 8.30 20.0 23.55	*01047 *01130 *01052 *01407 *01308	1 3 9 21	60.0 60.5 60.0 60.0	62.0 63.5 63.0 62.0
Oct. 29 0.30 1.30 6.10 7.35 8.0 9.26 10.5 10.28 10.40 12.37 13.30 14.0 15.25 16.20 17.28 19.50 20.40 23.58	22. 23. 0 28.30 17.0 9.5 12.0 7.55 15.30 13.0 15.0 7.20 15.0 12.45 16.58 22.50 15.5 21.20 15.0 21.0	Oct. 29 0.35 1.35 2.37 6.10 7.30 7.30 9.0 10.23 14.47 16.30 17.15 18.40 23.8	*0992 *1003 *0980 *1007 *** *0982 *** *0983 *1012 *1004 *1027 *1012 *1025 *0989	Oct. 29 1.0 4.40 10.30 17.18 23.55	*01475 *00910 *00882 *01484 *01470	1 3 9 21	50.0 55.0 53.0 45.0	52.0 57.0 56.0 47.0	Nov. 2 0.15 6.12 6.40 7.10 8.0 8.28 14.50 15.30 16.0 16.50 18.40 20.15 21.15 23.10	22. 22. 50 17.40 17.30 11.30 12.40 10.30 20.0 18.40 23.30 17.0 17.30 22.20 17.30 21.50	Nov. 2 0.20 7.20 9.25 13.45 15.50 18.10 19.2 23.20	*0979 *0996 *0983 *1004 *0998 *1009 *1001 *0981	Nov. 2 0.30 2.0 10.5 18.57 23.12	*01245 *01088 *01105 *01790 *01732	1 3 9 21	62.0 64.0 63.0 54.0	64.0 66.0 67.0 56.0
Oct. 30 0.28 0.36	22. 25. 0 22.0	Oct. 30 0.26 2.25	*0998 *0980	Oct. 30 0.30 4.30	*01450 *00882	1 3	49.0 55.0	50.0 56.0									

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							H. F.	V. F.								H. F.	V. F.
Nov. 3 0. 0 1. 0 5. 5 7. 0 11. 20. 12. 0 19. 0 21. 45 23. 55	22. 23. 20 24. 30 16. 10 15. 30 17. 40 15. 0 15. 30 15. 10 21. 0	Nov. 3 0. 0 3. 45 16. 0. 23. 30	.0984 .0985 .1009 .0985	Nov. 3 1. 10. 8. 25. 17. 0. 23. 55	.01778 .01178 .01485 .01300	11 21	56.0 57.0	58.0 59.0	Nov. 7 11. 30. 12. 20 14. 0 15. 0. 16. 30 21. 0 23. 55	22. 12. 30 15. 0 13. 50 10. 0 14. 40 17. 0 19. 0	Nov. 7 23. 40	.0984	Nov. 7 23. 55	.01270			
Nov. 4 0. 30 5. 35 6. 30 19. 20 21. 30 23. 55	22. 22. 30 17. 30 17. 0 16. 20 14. 40 21. 10	Nov. 4 0. 40 1. 35 3. 10 18. 30 23. 2	.0986 .0993 .0987 .1020 .0990	Nov. 4 0. 30 4. 38 5. 45. 7. 30. 14. 0 23. 55	.01230 .01046 .01070 .01035 .01715 .01580	1 3 9 21	59.0 60.0 58.0 56.0	60.0 62.0 61.0 56.0	Nov. 8 0. 30 5. 20 11. 8 17. 0 21. 30 23. 55	22. 21. 15 18. 20 16. 0 20. 30 16. 40 21. 50	Nov. 8 1. 2 18. 0. 23. 50	.0980 .1023 .0996	Nov. 8 0. 50 3. 23 14. 23 21. 58 23. 30	.01210 .01008 .01518 .01400 .01440	1 3 9 21	58.0 60.0 57.0 59.0 48.5	60.0 62.0 59.0 52.0
Nov. 5 0. 30 4. 45 19. 50 21. 30 22. 20 23. 55	22. 22. 30 17. 50 16. 50 15. 0 15. 30 22. 0	Nov. 5 0. 30 17. 0 23. 30	.0996 .1014 .0982	Nov. 5 1. 0 4. 30 5. 50. 9. 35. 23. 0	.01498 .00992 .01040 .00970 .01370	1 3 9 21	55.0 56.0 58.0 54.0	57.0 58.5 61.5 57.5	Nov. 9 0. 15 1. 3 1. 45 9. 30 10. 0 23. 20	22. 22. 40 25. 0 22. 50 16. 50 14. 30 18. 20	Nov. 9 0. 8 3. 13 7. 30 13. 0 23. 12	.1000 .0994 .1006 .1011 .0997	Nov. 9 0. 15 4. 28 8. 30. 19. 0. 23. 14	.01560 .00962 .00935 .00935 .00988	1 3 9 22	54.0 58.0 58.0 55.0	56.0 59.0 59.0 57.0
Nov. 6 0. 35 6. 0 7. 0 8. 55 9. 12 9. 55 10. 12 10. 35 10. 50 11. 15 11. 40. 12. 5 12. 38 13. 12 14. 0 18. 30 21. 40 23. 25	22. 22. 30 17. 0 20. 30 16. 30 18. 30 13. 20 14. 40 12. 20 13. 30 8. 20 12. 30 11. 0 13. 20 13. 0 16. 50 20. 0 15. 0 21. 30	Nov. 6 0. 42 4. 55 9. 30 10. 32 10. 58 11. 28 11. 55 19. 30 23. 12	.0989 .1004 .0992 .1003 .0986 .0998 .0994 .1018 .0995	Nov. 6 1. 0 2. 20 4. 10. 8. 0 16. 56 22. 0 23. 30	.01222 .01050 .01120 .01052 .01600 .01540 .01558	1 3 9 21	59.0 60.0 59.0 53.5	60.0 62.0 60.0 56.5	Nov. 10 0. 0 1. 30 6. 55 7. 25 8. 0 9. 10 9. 55 10. 45 11. 0 15. 20 15. 40 22. 45 23. 55	22. 20. 30 22. 50 21. 10 12. 10 20. 15 17. 0 2. 0 8. 0 8. 30 18. 40 14. 30 20. 30 24. 10	Nov. 10 0. 0 3. 35 4. 25 6. 26 7. 15 8. 0 8. 14 9. 15 10. 57 16. 20 23. 8	.0997 .1008 .1008 .1010 .0979 .0994 .0987 .0998 .0979 .1008 .0983	Nov. 10 0. 0 2. 55 7. 40 15. 40 23. 55	.00982 .00942 .01055 .00994 .01254	10 21	59.0 55.0	60.0 57.0
Nov. 7 1. 0 7. 30 7. 50 8. 20 11. 15	22. 24. 10 15. 0 13. 20 16. 0 14. 0	Nov. 7 1. 28 6. 30 7. 33 8. 5 16. 45	.0989 .0998 .0989 .0998 .1011	Nov. 7 1. 0 2. 8 7. 20. 10. 40. 20. 30.	.01672 .01688 .01025 .00990 .01345	1 3 9 21	55.0 59.0 59.0 56.0	57.0 60.0 61.0 58.0	Nov. 11 0. 35 1. 20 2. 10 7. 20 14. 30 15. 30. 20. 40 23. 55	22. 24. 30 22. 30 24. 30 16. 40 19. 20 16. 0 15. 40 23. 0	Nov. 11 1. 20 3. 25 5. 45 19. 42 23. 55	.0977 .0987 .0979 .1009 .0989	Nov. 11 0. 40 3. 6 9. 26 21. 52 23. 58	.01268 .01058 .01232 .01725 .01705	1 3 9 21	59.0 60.0 60.0 55.0	61.0 62.0 62.0 58.0
Nov. 7 1. 0 7. 30 7. 50 8. 20 11. 15	22. 24. 10 15. 0 13. 20 16. 0 14. 0	Nov. 7 1. 28 6. 30 7. 33 8. 5 16. 45	.0989 .0998 .0989 .0998 .1011	Nov. 7 1. 0 2. 8 7. 20. 10. 40. 20. 30.	.01672 .01688 .01025 .00990 .01345	1 3 9 21	55.0 59.0 59.0 56.0	57.0 60.0 61.0 58.0	Nov. 12 0. 30 1. 20	22. 24. 40 22. 30	Nov. 12 0. 35 4. 0	.0991 .0983	Nov. 12 0. 35 7. 45.	.01660 .01110	1 3	58.0 60.0	60.0 61.0

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							H. F.	V. F.								H. F.	V. F.
Nov. 19 23. 55	22. 23. 20						o	o	Nov. 24 21. 50 22. 45 23. 20 23. 40	22. 19. 20 22. 30 21. 40 23. 0	Nov. 24 21. 35 22. 30 23. 32	*1000 *0983 *1002				o	o
Nov. 20 0. 30 5. 25 6. 40 8. 5 9. 38 10. 25 13. 30 22. 0 23. 55	22. 23. 20 22. 0 24. 30 19. 20 18. 40 13. 20 21. 30 20. 30 25. 0	Nov. 20 1. 0 4. 22 4. 37 5. 6 6. 52 9. 0 9. 50 10. 22 11. 30 19. 50 22. 42 23. 15 23. 58	*1020 *1011 *1018 *1009 *1020 *1014 *1021 *1011 *1024 *1009 *0998 *1004	Nov. 20 0. 30 9. 40 23. 40	*01620 *01065 *01058	1 3 9 21	53. 0 54. 0 54. 0 51. 0	54. 0 56. 0 56. 0 53. 0	Nov. 25 0. 20 1. 20 1. 50 3. 0 4. 25 11. 25 20. 0 20. 50 21. 45 22. 30 23. 30 23. 55	22. 23. 10 22. 0 22. 30 22. 0 21. 30 15. 10 23. 40 20. 45 23. 30 20. 50 22. 30 22. 30	Nov. 25 0. 45 1. 22 1. 50 5. 0 6. 57 10. 30 11. 40 14. 0 17. 0 18. 50 21. 4 23. 42	*1004 *0983 *0983 *0994 *0981 *1005 *1018 *1004 *1013 *1006 *1014 *0983	Nov. 25 0. 25 4. 28 5. 30 8. 30 17. 55 23. 55	*01555 *01020 *01042 *01005 *01628 *01575	1 3 9 21	54. 0 56. 0 54. 0 49. 0	56. 0 56. 2 55. 0 49. 0
Nov. 21 0. 40 1. 5 2. 10 5. 20 9. 0 9. 26 9. 50 10. 5 12. 10 22. 35 23. 35	22. 25. 0 26. 30 23. 15 20. 45 20. 40 13. 0 16. 20 14. 20 21. 30 19. 45 24. 0	Nov. 21 0. 50 6. 20 9. 15 9. 30 9. 57 19. 30 23. 35	*0997 *1003 *1004 *1022 *1007 *1024 *1003	Nov. 21 1. 0 3. 45 7. 12 17. 48 22. 48	*01218 *01013 *00982 *01660 *01645	1 3 9 21	54. 0 55. 0 54. 0 49. 0	56. 0 57. 0 56. 0 52. 0	Nov. 26 0. 38 1. 45 2. 20 3. 0 3. 15 3. 30 4. 12 7. 15 7. 40 9. 35 11. 30	22. 28. 0 22. 30 26. 40 20. 0 22. 0 18. 50 24. 0 15. 40 20. 30 12. 40 13. 30 16. 10 15. 0 21. 15 17. 45 21. 30	Nov. 26 1. 0 2. 28 3. 25 3. 48 4. 28 5. 40 8. 5 9. 45 15. 30 18. 10 22. 28 23. 30	*0986 *0997 *0955 *0996 *0988 *1000 *0978 *0984 *1000 *1013 *0988 *0990	Nov. 26 0. 45 11. 26 23. 0 23. 58	*01565 *00935 *01290 *01273	1 3 9 21	50. 0 52. 0 50. 0 46. 0	53. 0 53. 0 53. 0 48. 0
Nov. 22 0. 0 0. 30 3. 40 11. 35 22. 6 23. 55	22. 22. 50 23. 50 21. 30 18. 40 21. 30 23. 20	Nov. 22 0. 15 3. 20 10. 25 16. 0 23. 30	*1008 *1002 *1012 *1008 *0976	Nov. 22 0. 30 3. 52 5. 23 12. 0 16. 10 20. 55 23. 3 23. 58	*01468 *01052 *01090 *01025 *01040 *01072 *01050 *01075	1 3 9 21	54. 0 58. 0 57. 0 58. 0 59. 0	56. 0 58. 0 58. 5 59. 0	Nov. 27 0. 30 6. 0 9. 25 9. 32 10. 15 10. 30 11. 30 11. 40 12. 5 12. 52 13. 5 13. 30 21. 12 23. 55	22. 22. 0 18. 40 19. 0 14. 30 19. 30 15. 45 18. 0 21. 15 18. 0 19. 30 21. 45 20. 0 18. 0 22. 30	Nov. 27 0. 30 3. 0 9. 32 12. 40 13. 5 20. 0 23. 42	*0990 *0982 *1005 *1005 *1017 *1009 *1021 *0985	Nov. 27 1. 0 3. 55 7. 10 16. 15 23. 58	*01222 *00935 *00905 *01552 *01500	1 3 9 21	50. 0 53. 0 50. 0 42. 0	52. 0 54. 0 53. 0 43. 0
Nov. 23 0. 30 5. 30 12. 20 21. 30 23. 30	22. 23. 40 21. 30 19. 30 20. 30 25. 20	Nov. 23 1. 0 17. 30 23. 30	*0985 *1012 *1000	Nov. 23 0. 30 6. 40 13. 55 23. 35	*01115 *01100 *01752 *01665	1 3 9 22	60. 0 60. 0 55. 0 51. 0	62. 0 62. 0 57. 0 54. 0	Nov. 24 0. 30 6. 0 10. 10 23. 20	22. 25. 50 22. 30 20. 0 21. 0	Nov. 24 0. 30 3. 20 5. 12 17. 0	*1002 *1009 *1000 *1008					

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Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Thermo- meters.		Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Thermo- meters.			
						Hour.	H. F.							V. F.	Hour.	H. F.	V. F.
Nov. 28 h m 0.55 22. 22. 40 6. 5 19. 30 9. 50 19. 30 10. 15 16. 40 10. 50 19. 30 22. 0 19. 30 23. 55 22. 30		Nov. 28 h m 1. 0 3. 50 10. 20 10. 55 20. 35 23. 40	•1000 •0997 •1016 •1009 •1025 •0991	Nov. 28 h m 1. 15 3. 40 4. 25 8. 0 16. 10 23. 58	•01365 •00920 •00942 •00866 •01512 •01470	1 48° 49° 3 54° 54° 9 48° 52° 21 40° 42°		Dec. 1 h m 23. 0 23. 30		Dec. 1 h m 1. 30 3. 0 7. 25 8. 48 9. 10 9. 45 20. 40 23. 30	•0994 •1001 •1000 •0983 •1001 •0999 •1010 •1001 •1016 •0990	Dec. 2 h m 1. 27 3. 0 8. 40 9. 6 10. 27 23. 30	22. 24. 30 20. 0 18. 30 11. 15 17. 30 20. 15	•0994 •1001 •0983 •1001 •0999 •1010 •1001 •1016 •0990	Dec. 2 h m 1. 15 5. 10 9. 5 23. 55	•09910 •01029 •00953 •01438	1 50° 50° 3 53° 54° 9 50° 50° 21 46° 49°
Nov. 29 h m 0. 36 22. 20. 50 1. 20 23. 50 6. 10 18. 30 10. 20 20. 0 10. 40 17. 0 14. 45 21. 0 17. 20 16. 0 19. 30 20. 50 21. 25 18. 20 23. 55 24. 0		Nov. 29 h m 0. 30 8. 50 9. 35 14. 58 17. 48 23. 28	•0995 •1010 •1005 •1014 •1031 •0990	Nov. 29 h m 0. 30 3. 18 5. 0 7. 55 15. 20 21. 0 23. 57	•01428 •00931 •00930 •00848 •01498 •01440 •01487	1 48° 50° 3 53° 55° 9 48° 49° 21 40° 42°		Dec. 3 h m 0. 30 8. 30 9. 22 10. 3 13. 35 13. 57 14. 26 16. 4 23. 45		Dec. 3 h m 0. 30 1. 25 2. 18 2. 48 3. 30 9. 12 9. 35 10. 40 13. 32 13. 58 14. 25 19. 15 22. 40	•0999 •1005 •0988 •0996 •0988 •1004 •1014 •1004 •1011 •1039 •1013 •1028 •1004	Dec. 3 h m 0. 30 9. 48 16. 35 23. 0 23. 55	•01428 •01002 •01295 •01281 •01250	1 48° 50° 3 48° 51° 9 49° 51° 21 43° 48°			
Nov. 30 h m 0. 30 22. 26. 20 3. 55 22. 30 4. 55 23. 0 6. 8 10. 30 7. 0 18. 40 7. 40 17. 50 8. 20 13. 40 10. 40 18. 0 14. 10 20. 0 14. 35 18. 40 16. 0 25. 0 16. 50 19. 0 18. 50 19. 10 20. 20 25. 0 20. 50 19. 30 21. 35 20. 0 22. 10 22. 40 22. 25 21. 0 23. 30 21. 30		Nov. 30 h m 0. 10 0. 45 1. 55 3. 25 6. 20 8. 30 15. 45 18. 45 22. 45 23. 32	•0993 •0974 •0997 •0974 •0994 •0987 •1008 •1021 •1001 •1005	Nov. 30 h m 0. 15 4. 38 5. 14 10. 40 23. 35	•01462 •00942 •00960 •00845 •01305	1 44° 45° 3 49° 49° 9 47° 50° 22 43° 46°		Dec. 4 h m 0. 30 10. 20 23. 50		Dec. 4 h m 0. 37 8. 0 8. 50 23. 24	•1004 •1012 •0993	Dec. 4 h m 0. 33 4. 32 8. 50 23. 24	•01469 •01014 •01010 •01030	1 47° 50° 3 49° 52° 9 53° 55° 21 51° 55°			
Dec. 1 h m 0. 0 0. 50 6. 50 7. 10 8. 15 23. 0 23. 45	22. 21. 15 24. 30 18. 0 10. 30 16. 30 20. 0 24. 0	Dec. 1 h m 0. 0 2. 10 3. 20 4. 55 6. 0 7. 6 7. 45 8. 30 9. 50 21. 30	•1007 •0998 •1011 •1008 •1015 •1008 •1021 •1010 •1018 •1017	Dec. 1 h m 0. 0 4. 30 11. 0 23. 55	•01315 •01400 •01213 •01040	8 43° 47° 21 44° 46°		Dec. 6 h m 0. 0 8. 58 9. 18 10. 25 11. 38 11. 58 22. 53 23. 45		Dec. 6 h m 0. 5 9. 44 18. 30 23. 30	•0997 •0994 •1014 •0996	Dec. 6 h m 0. 0 2. 5 10. 30 23. 55	•01690 •01700 •01126 •01303	1 50° 52° 3 51° 53° 9 53° 54° 21 49° 52°			

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The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time.

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

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Dec. 7 0.30 9.38 21.30 23.25	22. 22. 20 18. 30 20. 30 24. 0	Dec. 7 0.45 3.15 22. 5 23.46	*1007 *0996 *1031 *1010	Dec. 7 0.15 7.30 15.10 23.45	*01300 *01011 *01616 *01563	1 50.0 3 51.0 9 51.5 22 44.5	53.5 54.5 53.0 48.0		Dec. 13 10. 8 23.30	22. 18. 0 21. 50	Dec. 13 3.10 10. 0 21.40 23.55	*0998 *1005 *1017 *0996	Dec. 13 9. 0 23.55	*01048 *01370	3 54.0 9 52.0 21 50.0	54.0 56.0 53.0	
Dec. 8 0. 0 1.25 9.15 10.37 13.30 21.56 23.30	22. 22. 30 24. 30 19. 0 13.45 21. 0 20.10 22.15	Dec. 8 0. 0 19.30 23.30	*1010 *1030 *1010	Dec. 8 0. 0 5. 0 8. 0 21.56 23.55	*01570 *01595 *01545 *01512 *01533	21 43.0 44.0			Dec. 14 0.45 7. 8 15.45 23.30	22. 22. 10 15. 30 18.10 21. 0	Dec. 14 1.10 2.10 10.30 23.10	*1005 *0996 *1011 *1016	Dec. 14 1. 0 5.40 10.30 19.32 23.30	*01358 *01050 *01020 *01637 *01640	1 51.0 3 55.0 9 54.0 22 47.0	52.0 56.0 56.5 49.5	
Dec. 9 1. 0 11.15 23.30	22. 21. 15 16. 30 20.15	Dec. 9 0.30 3.30 21.30 23.40	*1016 *0994 *1026 *0992	Dec. 9 1.15 5.30 11. 0 23. 0	*01465 *00935 *00858 *01101	1 45.0 3 50.0 9 47.0 21 45.0	46.0 50.0 47.5 47.0		Dec. 15 0. 0 6.50 7.33 7.50 8.38 11.48 12. 2 12.33 13. 0 13.25 22. 0 23.45	22. 21. 50 19.45 16.10 19. 0 16.10 17.15 12. 0 13.30 20.15 15.45 19. 0 22.30	Dec. 15 0. 0 4. 0 8.55 10.28 12.30 17.15 13. 0 14.50 18.18 23.53	*1015 *1029 *1007 *1023 *1006 *1018 *1009 *1019 *0993	Dec. 15 0. 0 13.40 18.15 23.30	*01645 *01034 *01025 *01362	8 48.5 21 49.5	52.5 52.5	
Dec. 10 0.30 11. 0 23.40	22. 20. 50 17. 20 21.15	Dec. 10 0.30 6.50 7.26 12. 0 19. 0 23.58	*0994 *1007 *0996 *1020 *1030 *0996	Dec. 10 0.15 1.30 7.15 20.10 23. 0	*01035 *00915 *00911 *01540 *01538	1 49.0 3 49.0 9 47.5 21 42.0	50.0 53.5 50.0 43.0		Dec. 16 1.15 3. 7 14.38 15.22 16.30 16.58 17.48 18. 5 18.28 19.52 21.23 22.48 23.14 23.40	22. 20. 30 18.40 18.45 22.10 17.55 5. 0 18.45 22.10.30 21.58.30 22. 4.30 2.50 29.10 17. 0 29.20 23. 0	Dec. 16 1. 0 14.40 15.55 17.12 17.20 17.55 18.40 19.18 21.35 22.13 22.37 23.20 23.40	*1002 *1022 *1047 *1016 *1039 *1004 *1019 *1006 *1044 *0983 *0995 *0967 *0980 *0972 *0985	Dec. 16 1. 0 7.20 17.10 17.30 18. 4 18.38 23.55	*01426 *01050 *01508 *01488 *01542 *01518 *01602	1 52.0 3 54.0 9 51.0 21 45.0	52.0 55.0 52.5 47.5	
Dec. 11 0.30 1.35 3.25 3.45 4.43 9.28 11.50 21.30 23.45	22. 22. 10 20.15 24.30 19.30 23. 0 18. 0 14.30 18.30 21.15	Dec. 11 0.30 1.30 1.48 2.38 3.36 4. 6 7. 0 18.40 23.30	*1011 *1023 *1003 *1014 *0990 *1007 *1019 *1020 *1000	Dec. 11 0.15 4.28 18.22 23.55	*01464 *00982 *00908 *01023	1 47.0 3 51.0 9 49.0 21 49.0	47.0 52.0 49.0 52.0		Dec. 12 0.40 7.32 7.55 9.31 11.28 11.45 12.10 12.30 23.50	22. 21. 45 17.10 10.30 17.50 17.15 14. 0 17.10 15. 0 20.15	Dec. 12 0.30 2.24 5.20 7. 0 11.30 12. 3 12.30 19.15 23.10	*1000 *0986 *1005 *0995 *1008 *1017 *1005 *1018 *0997	Dec. 12 0.35 2.32 4.24 4.45 6.40 15. 5 23.30	*01050 *01150 *00992 *01026 *01010 *01550 *01545	1 54.0 3 59.0 9 55.0 21 48.5	55.0 60.0 56.0 52.5	
Dec. 13 0.30	22. 20. 15	Dec. 13 1. 0	*1007	Dec. 13 0.20	*01673	1 54.0	52.0		23.40	27.30							

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Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.		Göttingen Mean Solar Time.	Western Declina- tion.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermo- meters.																																																										
							H. F.	V. F.								H. F.	V. F.																																																									
Dec. 17 h m s 0.30 22.25.30 1.38 22.30 2.0 25.30 3.40 23.30 4.18 37.30 5.28 23.0 5.52 19.0 6.45 24.30 6.55 13.30 7.42 23.30 8.27 3.0 8.41 22.19.0 8.52 21.58.0 9.8 22.14.0 9.18 11.45 9.33 19.30 9.48 13.30 12.20 19.10 14.47 15.30 23.45 22.0	Dec. 17 h m s 0.30 22.25.30 4.28 22.30 6.0 25.30 6.40 23.30 7.2 37.30 7.22 23.0 7.36 19.0 7.48 24.30 8.18 13.30 8.36 23.30 8.44 3.0 8.57 22.19.0 9.42 21.58.0 11.0 22.14.0 20.42 11.45 22.25 19.30 23.45 13.30	*1000 *0983 *0996 *0985 *1008 *0999 *1007 *0987 *0984 *1044 *0986 *1038 *0983 *1009 *1020 *0988 *1013	Dec. 17 h m s 0.40 0.1595 7.40 0.1155 8.32 0.1190 9.19 0.1123 17.3 0.1553 23.55 0.1518	Dec. 17 h m s 0.40 0.1595 7.40 0.1155 8.32 0.1190 9.19 0.1123 17.3 0.1553 23.55 0.1518	Hour. 1 48.0 3 50.0 9 47.0 21 42.0	49.0 50.0 47.0 44.5		Dec. 22 h m s 0.0 22.21.0 7.45 14.30 8.38 15.10 8.48 10.40 9.8 16.50 9.20 14.10 10.26 19.50 11.25 10.15 11.58 17.10 13.55 15.0 16.30 18.45 23.45 24.0	Dec. 22 h m s 0.0 22.21.0 14.30 7.38 15.10 8.20 10.40 9.12 16.50 10.42 14.10 19.5 19.50 23.35 10.15 17.10 15.0 18.45 24.0	Dec. 22 h m s 0.0 0.0 7.38 *1029 8.20 *1040 9.12 *1010 10.42 *1026 19.5 *1042 23.35 *1012	Dec. 22 h m s 0.0 0.0 3.15 *1040 7.10 *1118 23.55 *0945 *1508	Hour. 11 21	43.0 38.0	44.5 40.0	Dec. 18 0.30 22.21.30 6.30 20.50 6.55 10.40 7.30 21.0 15.10 16.20 23.30 20.50	Dec. 18 0.20 22.21.30 2.6 20.50 5.0 10.40 6.15 21.0 6.50 16.20 7.20 20.50 7.40 19.15 22.10 23.30	*1010 *0997 *1000 *1017 *1003 *1019 *1010 *1023 *1002 *1012	Dec. 18 0.30 0.1518 6.52 0.0882 9.45 0.0870 23.55 0.1290	Dec. 18 0.30 0.1518 6.52 0.0882 9.45 0.0870 23.55 0.1290	Hour. 1 3 9 21	43.0 49.0 47.0 43.0	43.0 49.0 48.5 44.0	Dec. 24 0.30 22.19.0 9.38 12.30 16.0 15.30 23.0 20.0	Dec. 24 0.30 22.19.0 12.30 1.30 15.30 9.25 20.0 20.10 23.22 23.22	*1019 *1007 *1018 *1031 *1015	Dec. 24 2.37 *10222 4.15 *1015 8.48 *0982 18.35 *1168 23.25 *1008	Hour. 1 3 9 22	44.0 48.0 45.0 43.0	45.0 50.0 47.0 45.0	Dec. 19 0.30 22.21.15 15.20 17.45 23.55 22.50	Dec. 19 0.30 22.21.15 3.45 17.45 18.15 22.50 23.15 23.15	*1010 *1009 *1031 *1007	Dec. 19 1.0 0.1312 10.0 0.0895 20.20 0.1475 23.37 0.1492	Dec. 19 1.0 0.1312 10.0 0.0895 20.20 0.1475 23.37 0.1492	Hour. 1 3 9 21	45.0 45.0 53.0 49.0	45.0 45.0 53.0 50.0	Dec. 25 1.0 22.23.10 9.0 15.45 23.55 21.15	Dec. 25 0.0 22.23.10 18.0 15.45 22.10 21.15	*1014 *1035 *1021	Dec. 25 0.0 0.0 2.25 *0992 8.45 *1018 23.15 *1292	Hour. 11 21	44.0 42.0	46.8 45.5	Dec. 20 0.30 22.21.40 9.27 15.20 20.52 20.20 23.30 20.40	Dec. 20 1.0 22.21.40 2.30 15.20 20.0 20.20 22.30 20.40 23.30 22.30	*1022 *1004 *1041 *1022 *1027	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Hour. 1 3 9 21	44.0 49.0 44.0 37.2	45.0 49.0 48.0 38.0	Dec. 26 1.15 22.24.45 1.58 28.0 2.10 23.0 2.30 32.15 3.12 21.20 12.45 15.0 22.55 17.20	Dec. 26 3.50 22.24.45 9.33 28.0 23.0 23.0 32.15 21.20 15.0 17.20	*0994 *1007 *0987	Dec. 26 (+) 1.30 *0994 3.30 *10290 7.30 *10233 16.30 *10255 23.0 *10412	Hour. 1 3 9 21	47.5 50.0 48.5 48.0	47.5 51.0 51.5 52.0	Dec. 21 0.20 22.21.40 9.50 15.20 23.15 21.0	Dec. 21 0.30 22.21.40 9.30 15.20 23.20 21.0	*1029 *1026 *1022	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Hour. 1 3 9 22	37.0 41.0 43.0 43.0	38.0 42.0 44.0 41.0	Dec. 27 3.40 22.23.9* 5.0 16.0 5.20 22.50 9.35 22.16.10 10.6 21.53.30 11.13 22.19.0 12.8 15.30	Dec. 27 0.0 22.23.9* 1.18 16.0 2.50 22.50 5.50 22.16.10 7.50 21.53.30 8.35 22.19.0 9.5 15.30 9.45 9.45	*0976 *0964 *0978 *0956 *0988 *0967 *0975 *0944	Dec. 27 0.30 0.1550 2.48 *10500 3.55 *10400 4.48 *10592 5.45 *10545 9.45 *10676 10.12 *10725 12.5 *10667	Hour. 1 3 9 21	53.0 55.0 53.5 47.0	54.0 57.0 54.5 51.0
Dec. 18 0.30 22.21.30 6.30 20.50 6.55 10.40 7.30 21.0 15.10 16.20 23.30 20.50	Dec. 18 0.20 22.21.30 2.6 20.50 5.0 10.40 6.15 21.0 6.50 16.20 7.20 20.50 7.40 19.15 22.10 23.30	*1010 *0997 *1000 *1017 *1003 *1019 *1010 *1023 *1002 *1012	Dec. 18 0.30 0.1518 6.52 0.0882 9.45 0.0870 23.55 0.1290	Dec. 18 0.30 0.1518 6.52 0.0882 9.45 0.0870 23.55 0.1290	Hour. 1 3 9 21	43.0 49.0 47.0 43.0	43.0 49.0 48.5 44.0	Dec. 24 0.30 22.19.0 9.38 12.30 16.0 15.30 23.0 20.0	Dec. 24 0.30 22.19.0 12.30 1.30 15.30 9.25 20.0 20.10 23.22 23.22	*1019 *1007 *1018 *1031 *1015	Dec. 24 2.37 *10222 4.15 *1015 8.48 *0982 18.35 *1168 23.25 *1008	Hour. 1 3 9 22	44.0 48.0 45.0 43.0	45.0 50.0 47.0 45.0	Dec. 19 0.30 22.21.15 15.20 17.45 23.55 22.50	Dec. 19 0.30 22.21.15 3.45 17.45 18.15 22.50 23.15 23.15	*1010 *1009 *1031 *1007	Dec. 19 1.0 0.1312 10.0 0.0895 20.20 0.1475 23.37 0.1492	Dec. 19 1.0 0.1312 10.0 0.0895 20.20 0.1475 23.37 0.1492	Hour. 1 3 9 21	45.0 45.0 53.0 49.0	45.0 45.0 53.0 50.0	Dec. 25 1.0 22.23.10 9.0 15.45 23.55 21.15	Dec. 25 0.0 22.23.10 18.0 15.45 22.10 21.15	*1014 *1035 *1021	Dec. 25 0.0 0.0 2.25 *0992 8.45 *1018 23.15 *1292	Hour. 11 21	44.0 42.0	46.8 45.5	Dec. 20 0.30 22.21.40 9.27 15.20 20.52 20.20 23.30 20.40	Dec. 20 1.0 22.21.40 2.30 15.20 20.0 20.20 22.30 20.40 23.30 22.30	*1022 *1004 *1041 *1022 *1027	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Hour. 1 3 9 21	44.0 49.0 44.0 37.2	45.0 49.0 48.0 38.0	Dec. 26 1.15 22.24.45 1.58 28.0 2.10 23.0 2.30 32.15 3.12 21.20 12.45 15.0 22.55 17.20	Dec. 26 3.50 22.24.45 9.33 28.0 23.0 23.0 32.15 21.20 15.0 17.20	*0994 *1007 *0987	Dec. 26 (+) 1.30 *0994 3.30 *10290 7.30 *10233 16.30 *10255 23.0 *10412	Hour. 1 3 9 21	47.5 50.0 48.5 48.0	47.5 51.0 51.5 52.0	Dec. 21 0.20 22.21.40 9.50 15.20 23.15 21.0	Dec. 21 0.30 22.21.40 9.30 15.20 23.20 21.0	*1029 *1026 *1022	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Hour. 1 3 9 22	37.0 41.0 43.0 43.0	38.0 42.0 44.0 41.0	Dec. 27 3.40 22.23.9* 5.0 16.0 5.20 22.50 9.35 22.16.10 10.6 21.53.30 11.13 22.19.0 12.8 15.30	Dec. 27 0.0 22.23.9* 1.18 16.0 2.50 22.50 5.50 22.16.10 7.50 21.53.30 8.35 22.19.0 9.5 15.30 9.45 9.45	*0976 *0964 *0978 *0956 *0988 *0967 *0975 *0944	Dec. 27 0.30 0.1550 2.48 *10500 3.55 *10400 4.48 *10592 5.45 *10545 9.45 *10676 10.12 *10725 12.5 *10667	Hour. 1 3 9 21	53.0 55.0 53.5 47.0	54.0 57.0 54.5 51.0															
Dec. 19 0.30 22.21.15 15.20 17.45 23.55 22.50	Dec. 19 0.30 22.21.15 3.45 17.45 18.15 22.50 23.15 23.15	*1010 *1009 *1031 *1007	Dec. 19 1.0 0.1312 10.0 0.0895 20.20 0.1475 23.37 0.1492	Dec. 19 1.0 0.1312 10.0 0.0895 20.20 0.1475 23.37 0.1492	Hour. 1 3 9 21	45.0 45.0 53.0 49.0	45.0 45.0 53.0 50.0	Dec. 25 1.0 22.23.10 9.0 15.45 23.55 21.15	Dec. 25 0.0 22.23.10 18.0 15.45 22.10 21.15	*1014 *1035 *1021	Dec. 25 0.0 0.0 2.25 *0992 8.45 *1018 23.15 *1292	Hour. 11 21	44.0 42.0	46.8 45.5	Dec. 20 0.30 22.21.40 9.27 15.20 20.52 20.20 23.30 20.40	Dec. 20 1.0 22.21.40 2.30 15.20 20.0 20.20 22.30 20.40 23.30 22.30	*1022 *1004 *1041 *1022 *1027	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Hour. 1 3 9 21	44.0 49.0 44.0 37.2	45.0 49.0 48.0 38.0	Dec. 26 1.15 22.24.45 1.58 28.0 2.10 23.0 2.30 32.15 3.12 21.20 12.45 15.0 22.55 17.20	Dec. 26 3.50 22.24.45 9.33 28.0 23.0 23.0 32.15 21.20 15.0 17.20	*0994 *1007 *0987	Dec. 26 (+) 1.30 *0994 3.30 *10290 7.30 *10233 16.30 *10255 23.0 *10412	Hour. 1 3 9 21	47.5 50.0 48.5 48.0	47.5 51.0 51.5 52.0	Dec. 21 0.20 22.21.40 9.50 15.20 23.15 21.0	Dec. 21 0.30 22.21.40 9.30 15.20 23.20 21.0	*1029 *1026 *1022	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Hour. 1 3 9 22	37.0 41.0 43.0 43.0	38.0 42.0 44.0 41.0	Dec. 27 3.40 22.23.9* 5.0 16.0 5.20 22.50 9.35 22.16.10 10.6 21.53.30 11.13 22.19.0 12.8 15.30	Dec. 27 0.0 22.23.9* 1.18 16.0 2.50 22.50 5.50 22.16.10 7.50 21.53.30 8.35 22.19.0 9.5 15.30 9.45 9.45	*0976 *0964 *0978 *0956 *0988 *0967 *0975 *0944	Dec. 27 0.30 0.1550 2.48 *10500 3.55 *10400 4.48 *10592 5.45 *10545 9.45 *10676 10.12 *10725 12.5 *10667	Hour. 1 3 9 21	53.0 55.0 53.5 47.0	54.0 57.0 54.5 51.0																														
Dec. 20 0.30 22.21.40 9.27 15.20 20.52 20.20 23.30 20.40	Dec. 20 1.0 22.21.40 2.30 15.20 20.0 20.20 22.30 20.40 23.30 22.30	*1022 *1004 *1041 *1022 *1027	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Dec. 20 0.15 0.1468 4.30 0.0950 8.30 0.0865 16.38 0.1478 23.45 0.1503	Hour. 1 3 9 21	44.0 49.0 44.0 37.2	45.0 49.0 48.0 38.0	Dec. 26 1.15 22.24.45 1.58 28.0 2.10 23.0 2.30 32.15 3.12 21.20 12.45 15.0 22.55 17.20	Dec. 26 3.50 22.24.45 9.33 28.0 23.0 23.0 32.15 21.20 15.0 17.20	*0994 *1007 *0987	Dec. 26 (+) 1.30 *0994 3.30 *10290 7.30 *10233 16.30 *10255 23.0 *10412	Hour. 1 3 9 21	47.5 50.0 48.5 48.0	47.5 51.0 51.5 52.0	Dec. 21 0.20 22.21.40 9.50 15.20 23.15 21.0	Dec. 21 0.30 22.21.40 9.30 15.20 23.20 21.0	*1029 *1026 *1022	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Hour. 1 3 9 22	37.0 41.0 43.0 43.0	38.0 42.0 44.0 41.0	Dec. 27 3.40 22.23.9* 5.0 16.0 5.20 22.50 9.35 22.16.10 10.6 21.53.30 11.13 22.19.0 12.8 15.30	Dec. 27 0.0 22.23.9* 1.18 16.0 2.50 22.50 5.50 22.16.10 7.50 21.53.30 8.35 22.19.0 9.5 15.30 9.45 9.45	*0976 *0964 *0978 *0956 *0988 *0967 *0975 *0944	Dec. 27 0.30 0.1550 2.48 *10500 3.55 *10400 4.48 *10592 5.45 *10545 9.45 *10676 10.12 *10725 12.5 *10667	Hour. 1 3 9 21	53.0 55.0 53.5 47.0	54.0 57.0 54.5 51.0																																													
Dec. 21 0.20 22.21.40 9.50 15.20 23.15 21.0	Dec. 21 0.30 22.21.40 9.30 15.20 23.20 21.0	*1029 *1026 *1022	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Dec. 21 0.0 0.1508 2.50 0.1513 9.38 0.0896 23.15 0.1010	Hour. 1 3 9 22	37.0 41.0 43.0 43.0	38.0 42.0 44.0 41.0	Dec. 27 3.40 22.23.9* 5.0 16.0 5.20 22.50 9.35 22.16.10 10.6 21.53.30 11.13 22.19.0 12.8 15.30	Dec. 27 0.0 22.23.9* 1.18 16.0 2.50 22.50 5.50 22.16.10 7.50 21.53.30 8.35 22.19.0 9.5 15.30 9.45 9.45	*0976 *0964 *0978 *0956 *0988 *0967 *0975 *0944	Dec. 27 0.30 0.1550 2.48 *10500 3.55 *10400 4.48 *10592 5.45 *10545 9.45 *10676 10.12 *10725 12.5 *10667	Hour. 1 3 9 21	53.0 55.0 53.5 47.0	54.0 57.0 54.5 51.0																																																												

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.

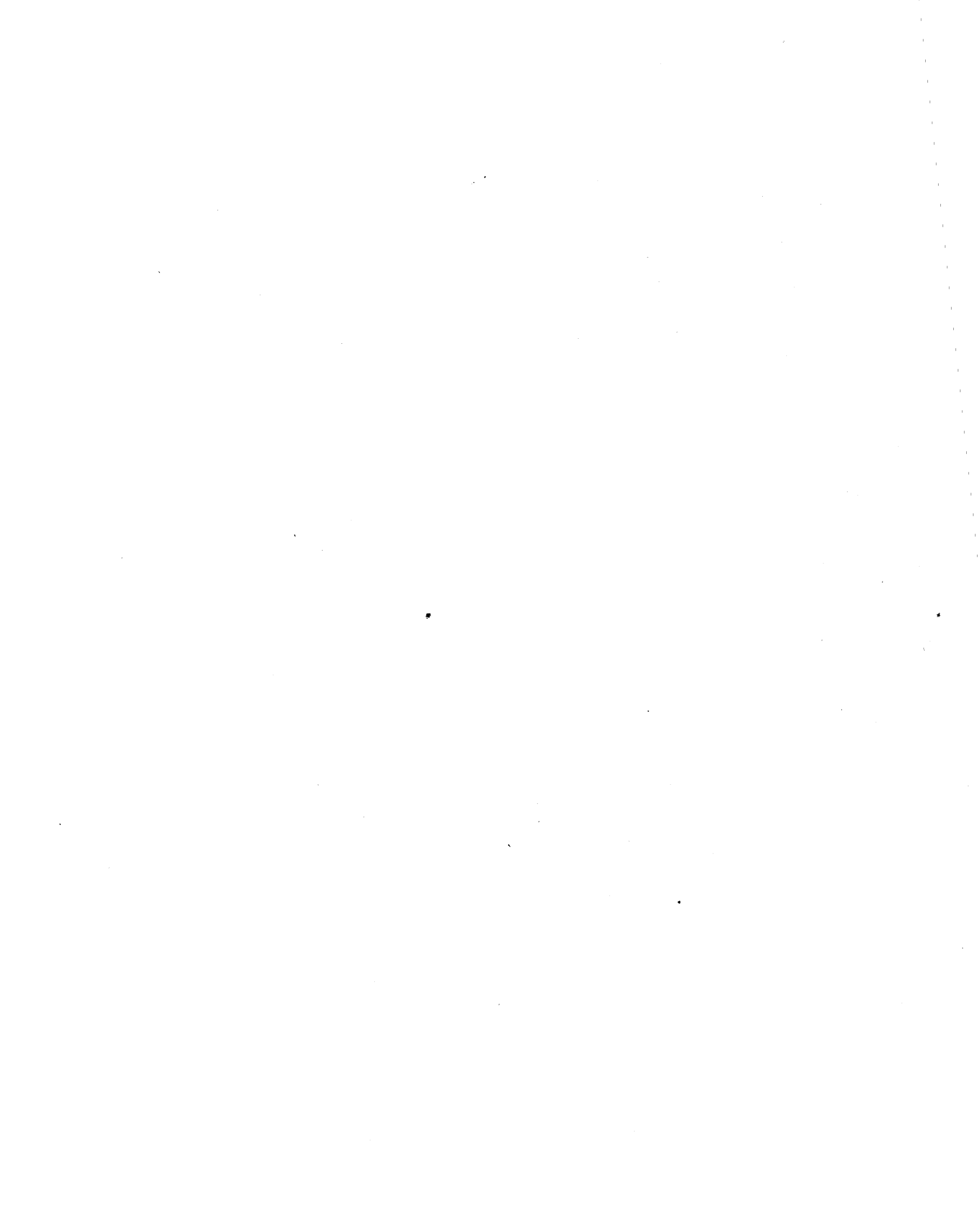
The Symbol : attached to a time denotes that the reading will apply equally to several times near that which is recorded.

The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time.

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

Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.		Göttingen Mean Solar Time.	Western Declination.	Göttingen Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Göttingen Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Hour.	Thermometers.	
							H. F.	V. F.								H. F.	V. F.
Dec. 27 14. 28 16. 20 17. 54 20. 54 22. 20	22. 23. 40 21. 15 27. 20 19. 45 22. 0	Dec. 27 10. 20 10. 42 11. 50 12. 15 13. 12 18. 18 20. 30 21. 42 23. 37	.0980 .0967 .0980 .1003 .0970 .1002 .0982 .0998 .0977	Dec. 27 17. 5 23. 0	.01752 .01676		0	0	Dec. 29 8. 23 9. 0 13. 7 13. 30 14. 0 15. 20 15. 40 16. 40 23. 55	22. 17. 40 20. 40 21. 30 24. 30 21. 30 22. 0 25. 0 21. 0 23. 0	Dec. 29 13. 30 23. 30	.0996 .0983	Dec. 29 11. 26 23. 55	.01144 .01178		0	0
Dec. 28 3. 30 9. 0 9. 50 10. 12 10. 48 12. 8 23. 15	† 22. 22. 50 22. 10 9. 0 18. 10 10. 10 21. 0 23. 0	Dec. 28 0. 0 9. 0 9. 28 10. 42 19. 50 23. 20	.0976 .0977 .0989 .0965 .0995 .0988	Dec. 28 1. 30 9. 15 18. 8 23. 15	.01705 .01273 .01640 .01600	1 3 9 22	48.5 50.0 49.0 44.0	50.0 52.0 52.5 46.0	Dec. 30 1. 0 11. 42 23. 55	22. 24. 0 20. 0 23. 30	Dec. 30 1. 0 4. 45 18. 25 23. 30	.0983 .0979 .0996 .0976	Dec. 30 1. 0 10. 0 18. 30 23. 30	.01206 .01492 .01358 .01362	1 3 9 21	48.5 51.0 53.0 52.5	53.0 53.5 55.0 55.5
Dec. 29 0. 30 7. 45	22. 23. 30 21. 30	Dec. 29 0. 0 4. 35	.0988 .0982	Dec. 29 0. 0 3. 5	.01604 .01622	10 21	49.0 48.0	50.0 52.0	Dec. 31 0. 30 10. 25 22. 40	22. 23. 45 19. 0 21. 0	Dec. 31 0. 30 4. 25 18. 20 23. 55	.0983 .0972 .0990 .0976	Dec. 31 0. 30 4. 30 7. 15 23. 0	.01313 .01400 .01518 .01738	1 3 9 21	54.0 55.5 56.0 53.0	56.5 57.0 58.0 54.0

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 to several times near that which is recorded. The time of reading the thermometers is the hour specified in Greenwich time, or the hour increased by 40^m in Göttingen time. For the Horizontal and Vertical Forces, increasing readings denote increasing forces.



ROYAL OBSERVATORY, GREENWICH.

R E S U L T S

OF

O B S E R V A T I O N S

OF THE

M A G N E T I C D I P.

1850.

The Dipping Needle is described, and the mode of using it is explained, in the *Magnetical and Meteorological Observations*, 1847, Introduction, page xliii, and in the corresponding parts of several preceding Volumes.

The needle A 2 was used till October 27, and again after November 10; and the Needle A 1 was used on October 28 and November 4.

Magnetic Dip, observed at the Royal Observatory, Greenwich, in the Year 1850.

Day and Approximate Hour, 1850.	Magnetic Dip.	Day and Approximate Hour, 1850.	Magnetic Dip.	Day and Approximate Hour, 1850.	Magnetic Dip.
d h	o ' "	d h	o ' "	d h	o ' "
January 3. 3	68.45.25	May 9. 3	68.53.50	September 19. 3	68.39.75
6. 21	68.48.75	12. 21	68.52.00	29. 21	68.50.50
10. 3	68.46.00	16. 3	68.55.00	October 6. 21	68.50.00
13. 21	68.48.00	20. 21	68.55.50	7. 3	68.30.50
16. 3	68.48.25	23. 3	68.56.75	7. 9	68.40.50
20. 21	68.47.00	26. 21	68.55.00	13. 21	68.27.75
24. 3	68.47.50	30. 3	68.56.25	14. 3	68.36.50
27. 21	68.53.00	June 2. 21	68.56.50	14. 9	68.40.50
31. 3	68.49.75	6. 3	68.56.75	19. 21	68.49.25
February 3. 21	68.53.50	9. 21	68.53.00	21. 3	68.47.50
7. 3	68.51.50	13. 3	68.52.00	21. 9	68.49.00
10. 21	68.54.75	16. 21	68.51.75	27. 21	68. (4.25)
14. 3	68.50.75	20. 3	68.46.00	28. 3	68.41.75
17. 21	68.54.75	23. 21	68.43.00	28. 9	68.46.75
21. 3	68.53.75	27. 3	68.43.00	November 4. 3	68.27.50
24. 21	68.56.50	30. 21	68.47.50	4. 9	68.28.00
28. 3	68.55.00	July 7. 21	68.47.00	10. 21	68.40.00
March 3. 21	68.48.50	11. 3	68.52.50	11. 3	68.37.50
7. 3	68.55.50	14. 21	68.49.25	11. 9	68.40.00
10. 21	68.53.00	21. 21	68.51.50	24. 21	68.36.50
17. 21	68.47.00	28. 21	68.52.00	25. 3	68.40.50
21. 3	68.54.00	August 4. 21	68.52.00	25. 9	68.40.50
24. 21	68.52.50	8. 3	68.49.00	December 1. 21	68.41.25
28. 3	68.53.25	11. 21	68.51.00	2. 3	68.32.00
31. 21	68.42.00	15. 3	68.49.00	2. 9	68.37.50
April 4. 3	68.54.75	18. 21	68.51.50	15. 21	68.30.50
7. 21	68.55.50	22. 3	68.51.25	16. 3	68.42.00
11. 3	68.49.00	25. 21	68.33.75	16. 9	68.33.75
14. 21	68.50.50	29. 3	68.38.75	22. 21	68.44.00
18. 3	68.52.75	September 1. 21	68.36.50	23. 3	68.42.50
21. 21	68.52.25	5. 3	68.28.00	23. 9	68.37.75
25. 3	68.51.00	8. 21	68.34.50	29. 21	68.38.75
28. 21	68.50.00	12. 3	68.35.50	30. 3	68.27.50
May 2. 3	68.55.50	15. 21	68.33.25	30. 9	68.34.25

October 27^d. 21^h. The needle A 2 moved very sluggishly, and no further use has been made of the observations.

October 28^d. The needle A 2 was sent to Mr. Barrow for repair; and needle A 1, which had had a new axle, was used on October 28 and November 4.

November 4^d. 9^h. The axle of needle A 1 was accidentally broken; it was sent to Mr. Barrow for repair.

November 10^d. 21^h. Needle A 2 was used, a new axle having been applied to it.

Mean Monthly Magnetic Dip, at the Royal Observatory, Greenwich, in the Year 1850.

1850, Month.	Mean Monthly Dip at 21 ^h .	Number of Observations.	Mean Monthly Dip at 3 ^h .	Number of Observations.	Mean Monthly Dip at 9 ^h .	Number of Observations.
January	68. 49 .25	4	68. 47 .25	5		
February	68. 54 .75	4	68. 52 .75	4		
March	68. 48 .50	5	68. 54 .25	3		
April	68. 52 .00	4	68. 51 .75	4		
May	68. 54 .25	3	68. 55 .50	5		
June	68. 50 .25	5	68. 49 .50	4		
July	68. 50 .00	4	68. 52 .50	1		
August	68. 47 .00	4	68. 47 .00	4		
September	68. 38 .75	4	68. 34 .25	3		
October	68. 42 .25	3	68. 38 .75	4	68. 44 .25	4
November	68. 38 .25	2	68. 35 .00	3	68. 36 .00	3
December	68. 38 .50	4	68. 36 .00	4	68. 35 .75	4
Mean	68. 47 .4	46	68. 46 .4	44		

Mean = 68° 46.9 (omitting 9 obs^{ns}.)

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

DEFLEXION OF A MAGNET

FOR

ABSOLUTE MEASURE

OF

HORIZONTAL FORCE.

1850.

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 preceding Volumes. The magnet, marked $\frac{D}{XX}$ (the same which was used in preceding years), 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 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: the unit of length being the English foot, and the unit of weight being the English grain.

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

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

we have for the formula of computation

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

$$m X = \frac{\pi^2 K}{T^2}$$

from which m and X are found.

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

$$\frac{a_1}{(\text{distance})^3} + \frac{b_1}{(\text{distance})^3}$$

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 $m X$ 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, 1850.	Position of Deflecting Magnet with regard to Suspended Magnet.	Distance of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibrations of Deflecting Magnet.	Number of Vibrations.	Temperature.
March 5	Lateral.....	ft. in.	44.9	0 1 "	5.088	100	42.5
	Axial.....	1. 0		12. 10. 30.05			
	Lateral.....	1. 6		6. 32. 59.26	5.067	102	46.5
	Axial.....			3. 35. 53.37			
			1. 49. 32.93				
June 4	Lateral.....	1. 0	76.6	12. 5. 10.61	5.102	100	72.0
	Axial.....	1. 6		6. 30. 29.57			
	Lateral.....				3. 33. 28.43	5.105	100	77.5
	Axial.....			1. 48. 12.06			
October 1	Lateral.....	1. 0	57.0	12. 6. 23.78	5.120	100	59.6
	Axial.....	1. 6		6. 32. 21.20			
	Lateral.....				3. 32. 30.58	5.116	100	57.6
	Axial.....			1. 47. 59.91			
November 28	Lateral.....	1. 0	40.0	11. 52. 5.75	5.099	100	38.5
	Axial.....	1. 6		6. 27. 1.84			
	Lateral.....				3. 31. 52.46	5.115	100	45.3
	Axial.....			1. 48. 28.02			
December 15	Lateral.....	1. 0	46.0	11. 55. 47.58	5.115	100	45.3
	Axial.....	1. 6		6. 24. 52.39			
	Lateral.....				3. 29. 47.15	5.120	100	46.2
	Axial.....			1. 47. 54.15			

Nov. 28. The suspension-skein broke before a second set of vibrations could be taken, and the adopted time of vibration in the calculation of the Absolute Measure of Horizontal Force is that found before the deflexions were taken.

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COMPUTATION OF THE VALUES OF ABSOLUTE MEASURE OF HORIZONTAL FORCE.

Computation of the Values of Absolute Measure of Horizontal Force.

Month and Day, 1850.	Apparent Value of <i>a</i> .	Apparent Value of <i>b</i> .	Mean Value of <i>b</i> .	Apparent Value of <i>a</i> ₁ .	Apparent Value of <i>b</i> ₁ .	Adopted Value of <i>a</i> , assuming the Mean Value of <i>b</i> as applicable to all.	Log. $\frac{1}{2} a$ = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log. <i>m X</i> .	Value of <i>X</i> .	Value of <i>m</i> .
March 5	+0.2125	-0.0016	-0.0006	+0.1023	+0.0118	+0.2116	9.02448	5.078	0.17716	3.7700	0.3989
June 4	+0.2095	-0.0001		+0.1005	+0.0129	+0.2099	9.02095	5.104	0.17280	3.7664	0.3953
October 1	+0.2075	+0.0022		+0.0997	+0.0142	+0.2099	9.02107	5.118	0.17034	3.7553	0.3942
November 28	+0.2096	-0.0040		+0.1018	+0.0106	+0.2066	9.01421	5.099	0.17356	3.7991	0.3926
December 15	+0.2055	+0.0007		+0.1013	+0.0105	+0.2066	9.01418	5.118	0.17034	3.7852	0.3911

Values of Absolute Measure of Horizontal Force, from Observations of Vibration of the Deflecting Magnet $\frac{D}{XX}$, unaccompanied by Deflexions.

Month and Day, 1850.	Adopted time of Vibration.	Temperature.	Log. <i>m X</i> .	Value of <i>m</i> interpolated from the Deflexion Observations.	Inferred Value of <i>X</i> .
March 12	5.098	50.0	0.17374	0.3986	3.7428
April 8	5.105	58.2	0.17254	0.3976	3.7419
April 29	5.094	53.0	0.17442	0.3967	3.7667
May 29	5.099	66.0	0.17356	0.3955	3.7706
September 2	5.112	70.5	0.17136	0.3945	3.7611
October 21	5.120	54.2	0.17000	0.3936	3.7579
November 6	5.116	58.2	0.17068	0.3932	3.7677
December 13	5.119	48.8	0.17016	0.3913	3.7814
December 30	5.089	49.0	0.17528	0.3896	3.8429

The number of observed vibrations employed in each determination was 100.

ROYAL OBSERVATORY, GREENWICH.

R E S U L T S

OF

METEOROLOGICAL OBSERVATIONS.

1850.

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 xlvi, 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 a smaller number of observations has 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 and lowest readings of the dry thermometers" are self-registering thermometers, as described in the Introduction, 1847, page lxvii; and their index-errors have been found weekly, in the manner there explained. The readings given in these tables are corrected for the 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.

The mean daily reading of the dry thermometer is inferred from observations taken at the same hours as the observations of the barometer; the mean of these is corrected by a quantity given in the *Phil. Trans.*, 1848, part I.

The dew-point has been exclusively inferred 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 comparison of all the simultaneous readings of the dry-bulb, wet-bulb, and dew-point thermometers, to the end of the year 1844).

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	8.5	32	3.1	44	2.3	56	1.9	68	1.6	80	1.5
21	8.5	33	2.8	45	2.3	57	1.9	69	1.5	81	1.5
22	8.5	34	2.6	46	2.3	58	1.9	70	1.5	82	1.5
23	8.5	35	2.6	47	2.2	59	1.8	71	1.5	83	1.5
24	7.3	36	2.6	48	2.2	60	1.8	72	1.5	84	1.5
25	6.4	37	2.5	49	2.2	61	1.8	73	1.5	85	1.5
26	6.1	38	2.5	50	2.1	62	1.7	74	1.5	86	1.5
27	6.1	39	2.5	51	2.1	63	1.7	75	1.5	87	1.5
28	5.7	40	2.4	52	2.0	64	1.7	76	1.5	88	1.5
29	5.0	41	2.4	53	2.0	65	1.6	77	1.5	89	1.5
30	4.6	42	2.4	54	2.0	66	1.6	78	1.5	90	1.5
31	3.7	43	2.4	55	2.0	67	1.6	79	1.5		

Tables nearly equivalent to this have been used in the reduction of the observations with the wet-bulb thermometer in the years following 1844.

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 highest temperature in the sunshine, the lowest temperature on the grass, and the highest and lowest temperatures of the water of the Thames, are described in the Introduction, 1847, pages lxix and lxxi. They are occasionally verified. That for the highest temperature in the sunshine was out of order from January 6 to May 4; May 26, 27, and 28; June 2, 9, 12, and 28; August 4, 8, 9, 10, 11, and 20; September 1; September 8 to October 20; November 3, 5, 8, 9, 23 to 30; December 8, 13 to 21; and those for the temperature of the Thames water from May 1 to May 7.

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, and they probably differ little from the absolute maxima and minima.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of seven years, is found by comparison with a table of results deduced by Mr. Glaisher from seven years' observations, made in the Magnetic and Meteorological Department of the Royal Observatory in nearly the same locality as that in which the present observations are made, which are printed in the *Greenwich Magnetical and Meteorological Observations*. For all ordinary week days, the mean adopted in these results was the mean of the twelve readings made at equidistant intervals of two hours. For Sundays and exceptional days the maximum and minimum readings were taken, and their mean was corrected for a difference exhibited in the Introductions to the various volumes of the *Magnetical and Meteorological Observations*.

Osler's Anemometer is described in the Introduction, 1847, page lxxi. Little explanation of the results deduced from it appears to be necessary. In the columns of direction, the letter C is occasionally used for Calm. 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. This instrument was away for repair from March 30 to April 7.

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 <i>galvanic currents</i>	N denotes <i>negative</i>	s denotes <i>strong</i>	v denotes <i>variable</i>
m .. <i>moderate</i>	P .. <i>positive</i>	sp .. <i>sparks</i>	w .. <i>weak</i>

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 <i>aurora borealis</i>	hl denotes <i>hail</i>	h-r denotes <i>heavy rain</i>	h-sqs denotes <i>heavy squalls</i>
ci .. <i>cirrus</i>	so-ha .. <i>solar halo</i>	c-h-r .. <i>continued heavy rain</i>	fr-h-sqs .. <i>frequent heavy squalls</i>
ci-cu .. <i>cirro-cumulus</i>	l .. <i>lightning</i>	m-r .. <i>misty rain</i>	sc .. <i>scud</i>
ci-s .. <i>cirro-stratus</i>	li-cl .. <i>light clouds</i>	fr-m-r .. <i>frequent misty rain</i>	li-sc .. <i>light scud</i>
cu .. <i>cumulus</i>	lu-co .. <i>lunar corona</i>	sl-r .. <i>slight rain</i>	sl .. <i>sleet</i>
cu-s .. <i>cumulo-stratus</i>	lu-ha .. <i>lunar halo</i>	h-sh .. <i>heavy showers</i>	sn .. <i>snow</i>
d .. <i>dew</i>	m .. <i>meteor</i>	fr-shs .. <i>frequent showers</i>	sl-sn .. <i>slight snow</i>
h-d .. <i>heavy dew</i>	ms .. <i>meteors</i>	fr-h-shs .. <i>frequent heavy showers</i>	s .. <i>stratus</i>
f .. <i>fog</i>	n .. <i>nimbus</i>	li-shs .. <i>light showers</i>	t .. <i>thunder</i>
th-f .. <i>thick fog</i>	r .. <i>rain</i>	oc-shs .. <i>occasional showers</i>	t-s .. <i>thunder storm</i>
fr .. <i>frost</i>	th-r .. <i>thin rain</i>	sq .. <i>squall</i>	w .. <i>wind</i>
h-fr .. <i>hoar frost</i>	oc-r .. <i>occasional rain</i>	sqs .. <i>squalls</i>	st-w .. <i>strong wind</i>
h .. <i>haze</i>	fr-r .. <i>frozen rain</i>	fr-sqs .. <i>frequent squalls</i>	

Observations of special character are reserved for the pages following the tabular arrangement.

RESULTS OF METEOROLOGICAL OBSERVATIONS

Table with columns for MONTH and DAY (1850), Phases of the Moon, READINGS OF THERMOMETERS (Dry, Dew Point, Air Temperature), Difference between Dew Point and Air Temperature, WIND AS DEDUCED FROM ANEMOMETERS (OSLER'S, General Direction, Pressure), and Rain in Inches read at 9 P. M.

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Jan. 1	o	o : w	10, ci.-s, sc, h	10, ci.-s, sc, h : o
2	v	v	10, ci.-s, sc	10, ci.-s, sc
3	o : m	o	10, ci.-s, sc	10, ci.-s, sc, th.-r : 10, ci.-s, sc, th.-r
4	o	o	10, ci.-s, sc	10, ci.-s, sc, th.-r : o
5	o	o	o	o
6	o	o	o	o
7	o : s	o : s	o : o : 10	5 : o
8	o	o	o, th.-f	10, ci.-s, sc
9	o	s : o : o	10, ci.-s, sc	10, ci.-s, sc : fr-r
10	s	s	10, ci.-s, sc, fr-r	10, ci.-s, sc, fr-r
11	v	v	10, ci.-s, sc	10, ci.-s, sc
12	o	o	10, ci.-s, sn	10, ci.-s
13	o	o	10, ci.-s, sc	10, ci.-s, sc : o : 10, ci.-s, sc
14	o	o	10, ci.-s, sc	10, ci.-s, sc
15	o	o	10, ci.-s, sc	10, ci.-s, sc, sn : 10, ci.-s, sc
16	o	o	10, ci.-s, sc, sn	10, ci.-s, sc
17	o	o	10, ci.-s, sc	10, ci.-s, sc
18	o : o : s	s : o : o	10, ci.-s, sc, f	10, ci.-s, sc, sn
19	o	o	10, ci.-s, sc, m.-r	10, ci.-s, sc, m.-r
20	o	o	10	10
21	o	o	10	10
22	o	o	10	10 : 10, th.-r
23	o	o	10	10 : o
24	o	o	10, th.-f	10
25	o	o	10, sc	3, sc : 10, sc, th.-r
26	o	o	10, h.-r : 2	10, sh.-r : 10 : 10, sh.-r
27	o	w : o	o	o : o : 10
28	o	o	10, fr.-m.-r	10, fr.-m.-r
29	o	m	10	10 : 10, r
30	v	v	10 : 3, so.-ha	3 : 3 : 3, d
31	m	o	10	10 : 10, r
Feb. 1	o	o	10, fr.-m.-r	10, fr.-m.-r : 10, h.-r : 10
2	o	o	10, fr.-m.-r	10, fr.-m.-r : 10, h.-w
3	o	o	10	o
4	o	o	o	7
5	o	o	10, s.-w	10, s.-w
6	o	o	7, s.-w : 7, s.-w : 10, s.-w	10, s.-w : o, s.-w
7	o	o	3	7 : 3
8	o	o	10, r	10 : 8, r
9	o	o	7 : 10	10, h.-r : o
10	o	o	o	o
11	o	o	10, fr.-h.-shs	10, fr.-h.-shs
12	o	o	10, r	7, r : o
13	o	o	o	o
14	o	o	10, r	10
15	o	o	10	10, m.-r
16	o	o	o : o : 8	o
17	o	o	5	10
18	o	o	10	o : 10
19	o	o	10	10
20	o	o	10, h.-r	10 : o, lu.-ha
21	o	o	10	10 : 10, lu.-ha : 8
22	o	o	10	10 : o
23	o	m : o : o	10	10 : 10, lu.-ha
24	o	o	10	10
25	o	m : o : o	10	10
26	o	s : o : o	10	10 : 10 : o
27	v	v	th.-f : th.-f : 10	5
28	o	s	th.-f : th.-f : 10	10

RESULTS OF METEOROLOGICAL OBSERVATIONS

Table with columns: MONTH and DAY, 1850.; Phases of the Moon.; READINGS OF THERMOMETERS. (Dry, Dew Point); Difference between the Dew Point Temperature and Air Temperature.; WIND AS DEDUCED FROM ANEMOMETERS. (General Direction, Osler's, Pressure); Rain in Inches read at 9th P. M.

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A. M.	P. M.	A. M.	P. M.
Mar. 1	v	o	7	7 : 10
2	o	o	9	5 : 10 : 10
3	o	o	10	
4	o	o	10, sl.-shs, r	10 : o
5	o	o	10	10
6	o	o	10	o
7	o	o	10, th.-f	10
8	v	v	10	10
9	s	s	10	o : 10
10	o	o	o	o
11	o	o	o	3 : o
12	s	s	o	o
13	o	s : o : o	o	o
14	o	o	10	10
15	o	o	10	10 : o
16	o	o	10	10 : 5
17	o : s	o : w	10	o
18	s	s	7	7 : 10
19	o	o	10, sl.-r	10, sl.-r
20	o	o	10	10
21	o	o	10	10 : o
22	o	o	10	10 : 10, r
23	o : w	w : o	10, r, sn	10
24	o	o	10, sn, sl	10, sn, sl
25	o	o	o	7 : o, f
26	o	o	o	10
27	o	s	o	o : 7, sn : 5
28	o	v	10, sn : o	7 : o
29	v	v	o	o, so.-ha : o, lu.-ha
30	w	w	10, cls, so.-ha	10, cls : 10, li.-r
31	o : w	o	10, r	v, r
Apr. 1	o	o	10	10
2	o	o	10, r	v
3	o	o	10	10 : 10, sqs, w, r
4	o	o	10, r, st.-w	10, r
5	o	o	8	5 : o
6	o	o	10	10, r
7	o	o	10	v
8	o	o : w	9	9, r
9	o	o	10, r	10
10	o	s : s	8	5 : o
11	o	o : s	10	v, r
12	m : m	ss, P, N, v, sp, g. cur : o	9	9, l.-t, r : 9
13	o	o : ss, N	10	10 : 10, r
14	o	o	10	10
15	o	o	10, r	10 : 8
16	o	o	10, sqs, w, r,	10, sqs, w, r
17	o	o	8	8, r : 5
18	o	s : o	10	5 : 2
19	o	s, N, P, v : o	10	10, r : 10
20	o	s, N, P, v, sp, g. cur : o	v, sqs, w, r	v, sqs, r, h, w
21	o	o	v	v, r : v
22	o	o	10	10 : o
23	o	w : w	10	10
24	s : s	s : s	8	8
25	o	o	10	10 : o
26	o	o	v	v
27	o	o	v	v : o
28	o	o	5	o

RESULTS OF METEOROLOGICAL OBSERVATIONS

Table with columns: MONTH and DAY, 1850.; Phases of the Moon.; READINGS OF THERMOMETERS. (Dry, Dew Point, Water of the Thames); Difference between the Dew Point Temperature and Air Temperature.; WIND AS DEDUCED FROM ANEMOMETERS. (OSLER'S, General Direction, Pressure, Rain); and other meteorological data.

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A. M.	P. M.	A. M.	P. M.
April 29	o	w : o	8	10
30	o	m : o	8	10
May 1	o	o	10, r	10 : v
2	o	o	v	v : o
3	v	v	3	10
4	o : s, N, sp, g. cur	s, N, sp, g. cur : o	10	10, r, sqs, w, r
5	o	o : w	7, r	7, r
6	o	o	10, r	10, r
7	o	o	10, r	10, r : 10, f
8	o	o	10, r	10, r
9	o	o	5	5
10	o	o	8	9
11	o	w : o	8, r	6 : 8, r
12	o	o	10	o
13	o : w	o	8	v : v, r
14	o	o	10	10 : 10, r
15	o	s : o	9	9
16	s	s	8	8 : 10
17	s : s	s : m, N	10	10 : 10, r
18	v : s	v : v	10	v
19	o	s, N : o	v	v, r
20	v	v	10	o
21	o	o	o	o : v
22	o	o	10, r	10 : o
23	s	s	10	10 : o
24	m : m	o	10	10
25	o	o	v, ci.-s, cu, sc	v, ci.-s, cu, sc : v, ci.-s, cu, sc, r
26	o	o	10, r	v : o
27	o	o	8	8, r
28	o	s, N : o	10, r	v, r
29	o	o	5	2 : o
30	o	o	8	1
31	o	w : o	o	o
June 1	s : s	s : s	o	o
2	s	s	o	o
3	s	s	o	o
4	s : s	s : o	o	o
5	o : m	o	2, cu, ci.-s, sc	5, cu, ci.-s, sc : 10, cu, ci.-s, sc
6	o	o	10, ci.-s, r	10, ci.-s, r : o
7	o	o	10, cu.-s, ci.-s, sc	10, cu.-s, ci.-s, sc, r : 10, cu.-s, ci.-s, sc
8	o : m, P, N, v	o	10, cu, cu.-s, sc, r	10, cu, cu.-s, sc : o
9	o	o : m	5, cu, ci.-s, li.-cls	o : 5, cu, ci.-s, li.-cls
10	o	v : o	7, cu, ci.-s, li.-cls	7, cu, ci.-s, li.-cls : 10, cu, ci.-s, li.-cls
11	o	s : o	10, cu, cu.-s	5, cu, cu.-s : o
12	o	o	10, ci.-s, sc	10, ci.-s, sc
13	P, N, sps, g. cur	o	10, cu, cu.-s, sc, sqs, w, r	5, cu, cu.-s, sc, sqs : w, r
14	o	o	10, ci.-s, sc, r	10, ci.-s, sc, r
15	o	N, m : o : o	10	10, r : o
16	m	m	3, li.-cls	3, h
17	o	o	7, ci.-s, sc, cu	7, ci.-s, sc, cu, sh.-r
18	s	s	3, ci.-s, ci, sc, cu	3, ci.-s, ci, sc, cu
19	o	o	o	3, ci.-s, h : o
20	o	m	o	3, h : o
21	w	w	3, cu, li.-cls	3, cu, li.-cls
22	w	w	o	5, ci, ci.-cu, h : o
23	s	o : o : s	o	o
24	o	o : o : s	o	o
25	o	o	o	o
26	o	o	o	o : 3 : 10, r, t

RESULTS OF METEOROLOGICAL OBSERVATIONS

Table with columns: MONTH and DAY, 1850.; Phases of the Moon.; READINGS OF THERMOMETERS. (Dry, Dew Point, Water of the Thames); Difference between the Dew Point and Air Temperature.; WIND AS DEDUCED FROM ANEMOMETERS. (OSLER'S, General Direction, Pressure in lbs.); WHEELWELL'S; Rain in Inches read at 9h P. M.

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
	June 27	o	o	10, ci.-s, cu, sc	3, h.-r, t, l, ci.-s, cu, sc : 10, r, ci.-s, cu, sc
28	o	o : o : N, s	10, ci.-s, cu, sc	10, ci.-s, cu, sc : 10, ci.-s, cu, sc : 3, l, t, r, ci.-s, cu, sc
29	o	o : o : w	10, r, ci.-s, cu, sc	10, ci.-s, cu, sc : o
30	o	o	7, ci.-s, sc, li.-cls, sl.-shs, r	7, ci.-s, sc, li.-cls, sl.-shs
July 1	o	o	10, cu, cu.-s, sc	5, cu, cu.-s, sc
2	o	o	10, cu.-s, ci.-s, sc	10, cu.-s, ci.-s, sc, sl.-sh : 10, cu.-s ci.-s, sc
3	o	o	10, cu, ci.-s, sc : 10, cu, cu.-s, sc, sh.-r	10, cu, ci.-s, sc
4	o	o	10, h.-r	10 : o
5	o	o	8, cu, cu.-s, sc	8, cu, cu.-s, sc : o
6	o	o	10, cu.-s, ci.-s, sc, li.-cls	10, cu.-s, ci.-s, sc, li.-cls
7	o	o	10, ci.-s, sc, fr.-shs, r	10, ci.-s, sc, fr.-shs.-r
8	o	o	10, cu.-s, ci.-s	10, cu.-s, ci.-s : o, l
9	o	o	10, cu, ci.-s, li.-cls, sc : 7, cu, ci.-s, li.-cls	7, cu, ci.-s, li.-cls, sc, h.-r : 7, cu, ci.-s, li.-cls, sc
10	o	s	10, cu.-s, ci.-s, sc	10, cu.-s, ci.-s, sc
11	o	s	10, s, li.-cls, sc	10, s, li.-cls, sc : 10, s, li.-cls, sc : o
12	s	s	10, ci.-s, li.-cls, sc	10, ci.-s, li.-cls, sc
13	v	v	o	10, cu, ci.-s, sc
14	m	m	10, ci.-s, sc	5, ci.-s, sc
15	o	o	5, cu, cu.-s, li.-cls	5, cu, cu.-s, li.-cls : o
16	o	s	5, r, cu, cu.-s : 5, cu, cu.-s	5, cu, cu.-s : 10, s
17	s	s	5, cu, cu.-s, ci.-s	10, cu, cu.-s ci.-s, t
18	o	w : o	10, ci.-s	10, ci.-s, t, r : 10, ci.-s
19	o	o	10, ci.-s, fr.-r	10, ci.-s, fr.-r
20	o	m : o	10, ci.-s, fr.-r	10, ci.-s, fr.-r
21	w	o	10, cu, cu.-s, ci.-s	10, cu, cu.-s, ci.-s, sl.-sh
22	w	w	o	5, cu, cu.-s, ci.-s : 10, cu, cu.-s, ci.-s
23	o	o : w	3, ci.-s, li.-cls	10, ci.-s, li.-cls, r : 10, ci.-s, li.-cls
24	o	o : s	10, cu, cu.-s, ci.-s	5, cu, cu.-s, ci.-s
25	o	N, s : o : o	10, ci.-s, r	10, ci.-s, r
26	o	o	10, ci.-s, sc	10, ci.-s, sc
27	o	o	10, ci.-s, r	10, ci.-s, r : o
28	o	o	10, ci.-s, r	10, ci.-s, r
29	o	o	10, cu, cu.-s, ci.-s	5, cu, cu.-s, ci.-s : o
30	o	o	10, ci.-s, li.-cls, sc	10, ci.-s, li.-cls, sc : o
31	o	o	10, ci.-s	10, ci.-s
Aug. 1	o	o	10, ci.-s, r	10, ci.-s
2	o	o	10, ci.-s	10, ci.-s
3	o	o	10, cu, cu.-s, ci.-s, sh.-r	5, cu, cu.-s, ci.-s : o
4	o	o	10, cu, cu.-s, ci.-s	o
5	o	o	5, ci.-cu, ci.-s	o : 5, ci.-cu, ci.-s
6	o	s : o	10, ci.-s	10, ci.-s : 10, ci.-s, r : 10, ci.-s
7	o	o	3, cu, cu.-s, li.-cls	3, cu, cu.-s, li.-cls : 10, cu, cu.-s, li.-cls
8	o	o	10, ci.-s, sc	10, ci.-s, sc, h.-r : 10, ci.-s, sc, sl.-r
9	o	o	10, cu, cu.-s, sc	10, cu, cu.-s, sc
10	o	o	10, ci.-cu, ci.-s	5, ci.-cu, ci.-s : 10, sl.-r, ci.-cu, ci.-s
11	o	o	10, ci.-s, li.-cls, sc	10, ci.-s, li.-cls, sc, sl.-shs : o
12	o	s, sps, g. cur	10, cu, cu.-s, ci.-s	10, cu, cu.-s, ci.-s, t, l, h.-r : o
13	o	o : w	10, cu, cu.-s, ci.-s	5, cu, cu.-s, ci.-s : o
14	o	o : s	10, cu, cu.-s, ci.-s, sc	10, cu, cu.-s, ci.-s, sc : 5, cu, cu.-s, ci.-s, sc
15	v	o	10	10 : o : 10, s
16	o	o	o	5, cls, cu, ci.-cu, ci.-s : 10, cu, ci.-cu, ci.-s
17	o	o	10, ci.-s	10, ci.-s
18	o	o	10, ci.-s	10, ci.-s : 10, ci.-s, sl.-r : 10, ci.-s
19	o	o	10, cu, ci.-cu, ci.-s	10, cu, ci.-cu, ci.-s : o
20	o	o	5, ci.-cu, ci, sc	5, ci.-cu, ci, sc
21	P, N, s, sps, g. cur	P, N, s, sps, g. cur	10, ci.-s, r	10, ci.-s, r : 10, ci.-s
22	o	o	o	8, cu, ci.-s, sc : o
23	o	o	o	7, sl.-sh : o
24	P, N, s, sps, g. cur	s	10, cu, ci.-s, sc, t.-s, h.-sh	7, cu, ci.-s, sc : o

RESULTS OF METEOROLOGICAL OBSERVATIONS

Table with columns: MONTH and DAY, 1850.; Phases of the Moon.; Mean Daily Reading of the Barometer; READINGS OF THERMOMETERS (Dry, Dew Point, Air Temperature); Difference between the Dew Point Temperature and Air Temperature; WIND AS DEDUCED FROM ANEMOMETERS (OSLER'S, General Direction, Pressure); Rain in Inches read at 9h P. M.

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Aug. 25	o	o	10, ci-s, li.-cls	10, ci-s, li.-cls, r
26	o	o	10, cu, cu.-s, ci, shs	7, cu, cu.-s, ci : o
27	o	o	7, ci-s, li.-cls, sc	7, ci-s, li.-cls, sc
28	o	o	5, ci.-cu, ci.-s, h.-r	7, ci.-cu, ci.-s, h : 10, ci.-cu, ci.-s, h
29	o	m : o : o	10, cu, ci.-cu, ci.-s, h	10, cu, ci.-cu, ci.-s, h : 10, cu, ci.-cu, ci.-s, h : o
30	o	s	10, ci.-cu, ci.-s, h	10, ci.-cu, ci.-s, h : o
31	o	v	10, ci-s, h	10, ci-s, h
Sep. 1	o	o	10, ci-s, sc, sh	10, ci-s : 5, ci-s : 5, ci-s
2	o	o	10, ci-s	10, ci-s : o
3	o	o	7, ci-s, sc, sh	10, ci-s, sc
4	o	s	5, cu, cu.-s, ci	5, cu, cu.-s, ci : o
5	o	m	o	o : 5, ci-s, li.-cls
6	o	s	o	7, cu, cu.-s, li.-cls : o
7	o	m	o	5, cu, ci.-cu, ci, sc : o
8	w	w	10, ci-s, sc	10, ci-s, sc
9	o	o	10, ci-s	10, ci-s
10	o	o	10, ci-s, li.-cls	7, ci-s, li.-cls : o
11	o	o	10, ci-s, sc, f	o
12	o	w : o : o	o	3, cu, li.-cls : o
13	o	o	3, cu, cu.-s, ci.-s	5, cu, cu.-s, ci.-s
14	o	m	7, cu, ci.-cu, ci.-s	o : 5, cu, ci.-cu, ci.-s
15	o	o	10, ci-s, sc, sl.-sh	10, ci-s, sc
16	o	o	10, ci-s, sc	10, ci-s, sc
17	o	o	10, ci-s, sc	10, ci-s, sc
18	o	o	7	o : 5
19	o	m : o : o	10, ci-s	10, ci-s : 10, ci-s, r
20	o	o	10, ci-s, sc	10, ci-s, sc : 10, ci-s, sc, h.-r
21	o	o	10, h.-sh, cu.-s, ci.-s, li.-cls	o : 5, cu.-s, ci.-s, li.-cls
22	o : N, s, sps	o : s	10, cu, ci.-cu, ci.-s	10, cu, ci.-cu, ci.-s
23	N, s	o	10, ci-s	10, ci-s
24	o	m : o : o	10, ci-s	10, ci-s, h.-sh : 10, ci-s
25	o	s : o : o	10, th.-f, cu, ci.-s, h	7, cu, ci.-s, h : 5, cu, ci.-s, h
26	o	o	10, ci-s	10, ci-s, r : o : 10, ci-s
27	o	N, s, sps : o	7, fr.-shs	5, fr.-shs : 10, fr.-shs
28	o	o	5	5 : 10 : o
29	o	o	10, ci-s	10, ci-s, h.-sh : 10, ci-s, sl.-r
30	o	o	10, cu, cu.-s, ci.-s, sc, r	10, cu, cu.-s, ci.-s, sc : 5, l, cu, cu.-s, ci.-s, sc
Oct. 1	o	N, s : m	5, cu, ci.-s, sc	7, cu, ci.-s, sc, sl.-shs : o, a
2	s	s	10, cu, ci.-cu, ci.-s, h	7, cu, ci.-cu, ci.-s, h : o
3	o	s	10, ci-s	10, ci-s
4	o	s	10, ci.-cu, ci.-s	10, ci.-cu, ci.-s : 10, sl.-r, ci.-cu, ci.-s
5	m	m	8	8 : 5, l : o
6	o	o	5, cu, ci.-s, li.-cls, sc	5, cu, ci.-s, li.-cls, sc : 10, cu, ci.-s, li.-cls, sc, sl.-r
7	o	o	o	o : o
8	o	o	5, cu, ci.-cu, ci.-s	7, cu, ci.-cu, ci.-s
9	o	o	10, ci.-cu, s, h	10, ci.-cu, s, h, f
10	o	s	o	5, cu, ci.-s : 10, sh, cu, ci.-s
11	o	N, s, g. cur : o	5, cu, ci.-cu, ci.-s, sc, h.-r	5, sq.-w.-r, cu, ci.-cu, ci.-s, sc, sl.-shs
12	o	o	o	7, cu, ci.-cu, ci, h : o
13	o	o	10, ci-s, f	10, ci-s
14	o	o	10, ci-s	10, ci-s
15	s : o	o	10, ci.-cu, ci, h	7, ci.-cu, ci, h : 5
16	o	o	o	o
17	o	o	10	10 : o
18	o	o	10, th.-f	o : 5, ci.-cu, ci, li.-cls : 5, ci.-cu, ci, li.-cls
19	o	o	10, ci-s	10, ci-s
20	o	o	10, ci-s, sl.-r	10, ci-s : 10, ci-s, lu.-ha
21	o	o	o	7, cu, ci, sc : o
22	o	o	o	10, ci.-cu, ci, li.-cls, sc

RESULTS OF METEOROLOGICAL OBSERVATIONS

Table with columns: MONTH and DAY, 1850.; Phases of the Moon.; READINGS OF THERMOMETERS. (Dry, Dew Point, Water of the Thames); Difference between the Dew Point Temperature and Air Temperature.; WIND AS DEDUCED FROM ANEMOMETERS. (OSLER'S, General Direction, Pressure, Rain); and Whp-will's. Rows include dates from Oct. 23 to Dec. 20, 1850.

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A. M.	P. M.	A. M.	P. M.
Oct. 23	o	o	10, ci.-s	10, ci.-s, h.-r : 10, ci.-s
24	o : N w : o	o	10, ci.-s, r	10, ci.-s, r
25	o	o : w : o	10, ci.-s, sc	10, ci.-s, sc : 10, r, ci.-s, sc
26	o	o : o : m	10, ci.-s, sc	10, ci.-s, sc : o
27	o	o	o	o : 10, ci.-s, sl.-r
28	o	o	10, cu, ci, h : 10, cu, ci, h, sl.-r	7 : o
29	o	o : o : m	10, h, ci.-cu, ci, h	5, ci.-cu, ci, h : o
30	o	o	10, ci.-s, sc, sl.-r	10, ci.-s, sc, sl.-r
31	o	m : o : o	10, ci.-cu, ci.-s, h	10, ci.-cu, ci.-s, h
Nov. 1	o	o	10, ci.-s, sc, sl.-r	10, ci.-s, sc : 10, ci.-s, sc : o
2	o	o	10	10 : o
3	o	o	o	3, ci.-s : 10, ci.-s, sc
4	o	o	10, cu, ci, ci.-s, sc, fr.-sqs	5, cu, ci, ci.-s, sc : o
5	o	o	10, ci.-s, sc	10, ci.-s, sc : o
6	o	o	o	7, ci.-cu, ci, li.-cl : o
7	o	o	10, ci.-s, li.-cls, sc	10, ci.-s, li.-cl, sc
8	o	o	7, ci.-cu, ci, sc	o
9	o	o	o : 10, ci.-s : 10, ci.-s	10, ci.-s
10	o	o	10, ci.-s, sc	10, ci.-s, sc
11	o	o	7, ci.-cu, ci.-s	3, ci.-cu, ci.-s
12	o	o	10, ci.-cu, ci, sc	7, ci.-cu, ci, sc
13	o	o	10, ci.-cu, ci.-s, sc, th.-f	10, ci.-cu, ci.-s, sc
14	o	o	o, f	o, f
15	o	o	10, ci.-cu, ci.-s, sc, h	10, ci.-cu, ci.-s, sc, h
16	o	o	10, r	10, r : 10, r : o
17	o	o	10, ci.-s, li.-cls, sc	10, ci.-s, li.-cls, sc
18	o	o	10, ci.-s, sc, r	10, ci.-s, sc, r
19	o	o	3, ci.-s, sc	7, ci.-s, sc : 10, ci.-s, sc, r
20	o	o	5, ci.-s, sc	10, ci.-s, sc, r : 10, ci.-s, sc
21	o	o	10, ci.-s, sc	10, ci.-s, sc
22	o	o	10, ci.-s, sc, r	10, ci.-s, sc, r
23	o	o	10, ci.-s, sc, r	10, ci.-s, sc : 5, ci.-s, sc : o
24	o	o	10, fr.-h.-sqs	10, fr.-h.-sqs, g : 10, fr.-h.-sqs : o
25	o	o	o	10, cu, ci.-cu, ci.-s : 10, cu, ci.-cu, ci.-s, r : o
26	o	o	10, ci.-s	10, ci.-s
27	o	o	10, ci.-s-shs	10 : 5 : o
28	o	o	o	o
29	o	o	o	o
30	m	m	10, ci.-s	10, ci.-s
Dec. 1	o	o	10	10 : 10, oc.-
2	o	o	10, ci.-s	10, ci.-s
3	o	o	10, ci.-s	10, ci.-s
4	o	o	10, ci.-s	10, ci.-s, m.-r
5	o	o	8, ci.-s, f	o, f
6	m : o	o	o, f	o, f : 10, f
7	m : o	o	10	10 : o, f
8	s	o	10, f	10, f
9	o	o	10, ci.-s, f	10, ci.-s, f
10	o	s	10, ci.-s, th.-f	10, ci.-s, th.-f
11	o	s	10, ci.-s	10, ci.-s
12	o	o : o : m	10, ci.-s, oc.-r	10, ci.-s : o
13	s	s	10, ci.-s, ci, li.-sc	7, ci.-s, ci, li.-sc : 4, ci.-s, ci, li.-sc
14	o	o	7, ci.-s, sc	10, ci.-s, sc : 10, ci.-s, sc, h.-r
15	o	o	10, ci.-s, sc, fr.-r	10, ci.-s, sc, fr.-r
16	o	o	o	9, ci.-s, oc.-r
17	o	o	10, ci.-s, sc	7, ci.-s, sc, oc.-r
18	o	o	o	3, ci.-s, h : 10, ci.-s, h, h.-r
19	s	Ns, sp	10, ci.-s	10, ci.-s, h, an, h.-r : o
20	s	o	o	o

RESULTS OF METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1850.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.				Difference between the Mean Temperature of the Day and the Mean Temperature of the same day on an Average of 7 Years.	WIND AS DEDUCED FROM ANEMOMETERS.							
			Dry.				Dew Point.		Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.	Highest.	Lowest.		Mean Daily Value.	OSLER'S.		Pressure in lbs. on the square foot.			WHEELER'S Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9 ^h P. M.
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.	From 4 Diff.										General Direction.	Greatest.	Least.	Mean of 24 Obs.			
			In the Sun, as shown by a Self-Registering Thermometer read at 9 ^h A. M. next morning.		In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9 ^h A. M. next morning.		In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9 ^h A. M. next morning.		In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9 ^h A. M. next morning.		A. M.	P. M.	lbs.	lbs.		lbs.					miles.	in.	
Dec. 21	Perigee	30.120	39.5	24.2	33.0	28.8	..	21.0	39.6	36.5	4.2	7.0	0.0	- 6.0	Calm	S	0.0	0.0	0.0	45	0.00		
22	..	30.398	40.5	31.9	34.5	34.2	43.0	27.0	38.6	35.5	0.3	1.7	0.0	- 4.0	N	N; W	0.0	0.0	0.0	30	0.00		
23	..	30.464	38.9	29.9	33.7	32.7	42.0	25.0	38.1	34.7	1.0	3.8	0.0	- 4.7	SW	W	0.0	0.0	0.0	75	0.00		
24	..	30.246	35.5	29.7	33.7	31.9	38.0	28.0	37.1	34.5	1.8	3.0	1.3	- 4.6	SW	SW	3.0	0.0	0.2	125	0.06		
25	Last Qr.	29.946	42.7	36.7	39.6	34.3	45.0	29.3	36.6	34.3	5.3	6.7	0.0	+ 1.6	SW	SW	3.3	0.0	0.3	100	0.00		
26	In Equator	30.066	49.0	35.7	41.7	40.0	53.0	29.0	36.1	33.5	1.7	5.1	1.2	+ 3.8	SW	SW; N	0.0	0.0	0.0	30	0.00		
27	..	30.078	47.3	41.9	44.1	40.4	51.0	27.0	36.6	34.3	3.7	6.4	1.8	+ 6.2	W	WSW	0.0	0.0	0.0	70	0.00		
28	..	30.147	48.5	40.9	44.0	35.9	52.0	29.5	37.1	34.7	5.0	6.5	2.6	+ 2.7	W; NW	W	1.5	0.0	0.1	115	0.00		
29	..	30.019	47.3	36.3	44.0	38.5	51.0	37.0	38.4	35.3	5.5	7.2	4.0	+ 5.6	WSW	WSW	2.4	0.0	0.1	175	0.00		
30	..	29.838	50.8	42.4	47.1	44.7	51.5	39.0	40.1	36.5	2.4	4.4	1.2	+ 8.9	WSW	SW	3.6	0.0	1.5	195	0.00		
31	..	29.666	54.1	43.2	49.6	48.5	55.0	43.5	41.8	38.0	1.1	4.0	0.2	+ 11.6	SW	SW	5.0	0.0	2.5	260	0.03		

29.914 33.21

35.21

MONTH and DAY, 1850.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A. M.	P. M.	A. M.	P. M.
Dec. 21	o	o	10, h	10, th.-r
22	o	o	10, ci.-s	10, ci.-s, th.-f
23	o	o	7, ci.-s, li.-sc, h	10, ci.-s, li.-sc, h : 7, ci.-s, li.-sc, h
24	o	o	10, ci.-s, fr.-m.-r.	10, ci.-s, fr.-m.-r
25	o	o	5, ci.-s, h	o
26	o	o	10, ci.-s	10, ci.-s
27	o	o	10, ci.-s, h	o : 10, ci.-s, h
28	o	o	5, ci.-s, sc : 10, ci.-s, sc	10, ci.-s, sc : o
29	o	o	10, ci.-s	10, ci.-s, r
30	o	o	10, ci.-s	10, ci.-s
31	o	o	10, ci.-s, fr.-m.-r	10, ci.-s, fr.-m.-r

7

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 observations taken by the eye. There is good reason to believe that these readings do not differ much from the true maxima and minima, although the times may sometimes be sensibly erroneous.

MAXIMA.				MINIMA.				MAXIMA.				MINIMA.										
Approximate Mean Solar Time, 1850.			Reading.	Approximate Mean Solar Time, 1850.			Reading.	Approximate Mean Solar Time, 1850.			Reading.	Approximate Mean Solar Time, 1850.			Reading.							
d	h	m	in.	d	h	m	in.	d	h	m	in.	d	h	m	in.							
January	8.	0.	0	30	223	January	5.	0.	0	29	322	June	18.	21.	0	30	253					
	17.	21.	0	29	863		15.	3.	0	29	272		29.	21.	0	29	846					
	22.	0.	0	30	401		18.	21.	0	29	336		July	5.	9.	0	30	031				
30.	9.	0	30	218	26.	3.	0	29	283	11.	21.	0		29	981							
February	8.	9.	0	29	602	February	5.	21.	0	28	803	30.		0.	0	30	083					
	10.	8.	30	29	980		9.	3.	0	29	306	August	13.	21.	0	29	879					
	13.	9.	0	30	113		12.	0.	0	29	125	September	7.	22.	20	30	302					
March	25.	0.	0	30	282	15.	21.	0	29	796	21.	22.	20	29	777	September	20.	9.	0	29	379	
	1.	9.	0	30	237	28.	3.	0	30	042	October	3.	9.	0	29		774					
	5.	21.	0	30	474	March	3.	11.	30	29	542	12.	9.	0	30		247	October	6.	21.	0	29	274
11.	21.	0	30	452	9.		3.	0	30	062	17.	21.	0	30	025	14.	9.		0	29	815	
17.	9.	0	30	222	16.		3.	0	30	058	21.	21.	0	30	002	20.	11.		0	29	767	
April	21.	9.	0	30	118	19.	3.	0	29	987	26.	22.	0	29	767	23.	3.	0	29	040		
	28.	22.	20	30	031	23.	3.	0	29	394	November	2.	22.	30	30	056	28.	3.	0	29	184	
	5.	9.	0	29	757	April	4.	0.	0	28	890	6.	9.	0	30	016	November	3.	21.	0	29	650
13.	22.	20	29	762	8.		9.	0	29	253	8.	21.	0	30	222	7.	21.	0	29	832		
18.	21.	0	29	960	16.		3.	0	28	982	14.	9.	0	30	191	13.	3.	0	29	875		
May	23.	21.	0	30	049	20.	9.	0	29	371	21.	9.	0	29	574	20.	0.	0	28	592		
	28.	21.	0	30	208	25.	3.	0	29	836	28.	9.	0	30	221	24.	4.	31	28	902		
	2.	21.	0	30	244	May	1.	3.	0	29	923	December	5.	21.	0	30	307	December	3.	21.	0	29	958
13.	9.	0	30	023	7.		21.	0	29	244	15.	21.	0	29	178	15.	8.	0	28	841		
June	1.	22.	20	30	252		24.	0.	0	29	288	23.	0.	0	30	482	16.	9.	0	28	899	
	8.	22.	30	30	081	June	6.	9.	0	29	444	27.	21.	0	30	166	24.	22.	30	29	929	

READINGS OF THE THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day, except Sundays.

Day of the Month, 1850.	January. <i>R. 51</i>	February. <i>R. 50</i>	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
a	o	o	o	o	o	o	o	o	o	o	o	o
1	51·84	51·25	50·40	49·59	49·00	48·78	48·85	49·44	S	51·03	51·55	S
2	51·82	51·24	50·37	49·58	49·04	S	48·87	49·45	50·29	51·04	51·57	51·64
3	51·83	S	S	49·55	48·98	48·76	48·87	49·47	50·30	51·06	S	51·64
4	51·83	51·15	50·33	49·54	48·98	48·76	48·88	S	50·34	51·09	51·58	51·67
5	51·77	51·12	50·26	49·52	S	48·75	48·90	49·55	50·40	51·12	51·63	51·68
6	S	51·09	50·25	49·48	48·93	48·74	48·93	49·56	50·38	S	51·61	51·63
7	51·74	51·05	50·20	S	48·95	48·74	S	49·64	50·42	51·17	51·60	51·64
8	51·72	51·06	50·17	49·45	48·94	48·74	48·94	49·63	S	51·16	51·62	S
9	51·75	51·03	50·15	49·43	48·94	S	48·98	49·64	50·46	51·18	51·61	51·57
10	51·69	S	S	49·40	48·90	48·75	48·97	49·72	50·50	51·20	S	51·56
11	51·65	50·95	50·09	49·43	48·89	48·76	48·97	S	50·52	51·20	51·65	51·57
12	51·64	50·94	50·07	49·37	S	48·78	49·02	49·71	50·58	51·24	51·65	51·59
13	S	50·87	50·06	49·35	48·87	48·74	49·04	49·73	50·58	S	51·61	51·58
14	51·60	50·85	50·04	S	48·85	48·73	S	49·75	50·62	51·30	51·62	51·57
15	51·56	50·85	49·98	49·30	48·83	48·72	49·08	49·80	S	51·27	51·63	S
16	51·55	50·80	49·95	49·28	48·83	S	49·12	49·83	50·66	51·32	51·62	51·55
17	51·55	S	S	49·78	48·83	48·80	49·12	49·87	50·70	51·34	S	51·53
18	51·53	50·74	49·90	49·26	48·82	48·82	49·12	S	50·73	51·35	51·65	51·51
19	51·54	50·70	49·89	49·24	S	48·82	49·14	49·90	50·75	51·37	51·66	51·50
20	S	50·68	49·85	49·23	48·77	48·83	49·15	49·87	50·75	S	51·65	51·50
21	51·45	50·64	49·83	S	48·81	48·83	S	49·90	50·80	51·38	51·65	51·48
22	51·44	50·62	49·80	49·19	48·78	48·82	49·23	49·77	S	51·40	51·66	S
23	51·44	50·57	49·75	49·15	48·78	S	49·24	50·00	50·85	51·40	51·67	51·46
24	51·40	S	S	49·15	48·77	48·87	49·25	50·03	50·87	51·40	S	51·40
25	51·42	50·51	49·71	49·15	48·78	48·85	49·25	S	50·90	51·42	51·66	Christ. Day.
26	51·40	50·47	49·68	49·11	S	48·47?	49·28	50·08	50·92	51·34	51·64	51·44
27	S	50·45	49·67	49·09	48·82	48·85	49·29	50·12	50·94	S	51·64	51·45
28	51·30	50·40	49·65	S	48·82	48·86	S	50·14	50·96	51·48	51·64	51·43
29	51·31		Good Friday	49·05	48·82	48·87	49·37	50·15	S	51·47	51·64	S
30	51·26		49·63	49·04	48·82	S	49·38	50·20	51·00	51·49	51·62	51·44
31	51·23		S		48·82	S	49·42	50·23		51·52		51·46
	<i>15·16</i>	<i>20·03</i>	<i>24·67</i>									

The letter S denotes that the day was Sunday.

April 17. The reading is evidently 0°·5 too high.

June 26. The reading is evidently erroneous; it probably should be 48°·87.

From 1846, April, to 1847, December, this thermometer was read every two hours, night and day (excepting Sundays, and a few other days). During that interval of time, the monthly mean of the readings at noon was found in twelve instances to be greater by 0°·01 than the monthly mean of all the observations; in one instance the excess was 0°·02, and in another it amounted to 0°·03. In all the remaining cases the means of the noon observations agreed precisely with the means of all the observations.

(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 Noon on every Day, except Sundays.

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	o	o	o	o	o	o	o	o	o	o	o	o
1	50·17	47·33	46·38	46·20	46·58	47·96	50·66	53·19	S	54·80	53·64	S
2	50·09	47·24	46·42	46·17	46·74	S	50·80	53·25	54·84	54·75	53·58	51·77
3	50·04	S	S	46·15	46·68	48·08	50·80	53·32	54·84	54·77	S	51·77
4	49·96	47·05	46·46	46·11	46·75	48·16	50·95	S	54·88	54·77	53·40	51·75
5	49·84	46·97	46·35	46·08	S	48·21	51·08	53·52	54·93	54·79	53·38	51·72
6	S	46·90	46·37	46·04	46·91	48·28	51·21	53·52	54·88	S	53·27	51·60
7	49·64	46·86	46·36	S	46·96	48·38	S	53·64	54·91	54·78	53·58	51·56
8	49·54	46·85	46·46	46·00	46·97	48·45	51·37	53·65	S	54·74	53·10	S

READINGS OF THERMOMETERS SUNK IN THE GROUND

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

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	o	o	o	o	o	o	o	o	o	o	o	o
9	49.53	46.78	46.37	45.97	47.03	S	51.54	53.67	54.88	54.69	53.00	51.28
10	49.37	S	S	45.97	47.04	48.69	51.56	53.78	54.93	54.68	S	51.24
11	49.26	46.73	46.40	46.04	47.06	48.78	51.64	S	54.90	54.60	52.93	51.19
12	49.16	46.77	46.36	45.96	S	48.94	51.76	53.84	55.00	54.61	52.87	51.20
13	S	46.63	46.48	46.10	47.12	48.95	51.85	53.90	54.94	S	52.74	51.10
14	48.96	46.66	46.50	S	47.13	49.04	S	53.95	54.94	54.54	52.68	51.03
15	48.86	46.63	46.40	46.04	47.15	49.12	52.03	54.00	S	54.50	52.62	S
16	48.77	46.57	46.40	46.04	47.18	S	52.13	54.10	54.91	54.53	52.63	50.85
17	48.67	S	S	46.09	47.22	49.46	52.15	54.19	54.93	54.50	S	50.76
18	48.57	46.54	46.42	46.12	47.27	49.57	52.14	S	54.93	54.44	52.50	50.64
19	48.54	46.53	46.40	46.15	S	49.67	52.22	54.24	54.90	54.40	52.58	50.60
20	S	46.53	46.40	46.17	47.29	49.78	52.25	54.28	54.87	S	52.42	50.53
21	48.29	46.48	46.40	S	47.37	49.88	S	54.30	54.88	54.25	52.35	50.44
22	48.22	46.44	46.37	46.25	47.47	49.45	52.46	54.35	S	54.18	52.33	S
23	48.14	46.38	46.30	46.27	47.46	S	52.58	54.44	54.84	54.10	52.27	50.32
24	48.04	S	S	46.30	47.47	50.17	52.58	54.47	54.84	54.05	S	50.28
25	47.95	46.37	46.29	46.38	47.54	50.25	52.62	S	54.85	53.97	52.16	Christ. Day.
26	47.85	46.43	46.24	46.40	S	50.32	52.74	54.60	54.84	53.97	52.06	50.14
27	S	46.36	46.26	46.06	47.72	50.35	52.75	54.66	54.84	S	52.04	50.11
28	47.64	46.36	46.25	S	47.78	50.44	S	54.65	54.82	53.84	51.94	50.03
29	47.56		Good Friday.	46.49	47.86	50.52	52.97	54.69	S	53.75	51.90	S
30	47.46		46.20	46.56	Aut	S	53.04	54.74	54.80	53.70	51.33	49.97
31	47.37		S		Aut		53.15	54.75		53.65		49.88

The letter S denotes that the day was Sunday.

April 27. The reading is evidently erroneous; probably it should be 46° 46.

June 22. The reading seems to be too low by 0° 5; probably it should be 49° 95.

November 7. The reading seems to be somewhat too high.

November 30. The reading is evidently erroneous; probably it should be 51° 83.

From 1846, April, to 1847, December, this thermometer was read at every two hours, night and day (excepting Sundays and a few other days). During that interval of time, the monthly mean reading at noon was found to be of the same value in three cases as the monthly mean of all the readings; in five cases it was in excess by 0° 01; in seven cases the excess amounted to 0° 02; in four cases to 0° 03; and in one case to 0° 04.

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6 1/2 feet (6 French feet) below the surface of the soil, at Noon on every Day, except Sundays.

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	o	o	o	o	o	o	o	o	o	o	o	o
1	46.20	43.10	44.78	44.00	47.40	50.82	56.30	58.15	S	56.79	52.10	S
2	46.00	43.12	44.80	43.98	47.72	S	56.41	58.20	58.60	56.68	51.97	49.79
3	45.87	S	S	44.00	47.77	51.24	56.42	58.25	58.50	56.60	S	49.62
4	45.69	43.15	44.99	44.10	47.80	51.50	56.48	S	58.50	56.49	51.71	49.45
5	45.49	43.40	44.78	44.28	S	51.79	56.58	58.40	58.50	56.38	51.78	49.30
6	S	43.64	44.97	44.48	47.99	51.98	56.67	58.44	58.45	S	51.70	49.08
7	45.21	43.68	45.00	S	47.97	52.30	S	59.00	58.40	56.18	51.69	49.02
8	45.17	43.79	44.97	44.84	48.02	52.58	56.58	58.70	S	56.00	51.67	S
9	45.12	43.85	44.98	45.00	48.06	S	56.62	58.75	57.80	55.87	51.60	48.78
10	44.88	S	S	45.20	47.98	53.08	56.58	58.75	57.90	55.72	S	48.70
11	44.77	43.88	45.00	45.48	48.00	53.25	56.58	S	57.70	55.50	51.60	48.60
12	44.60	43.98	45.05	45.59	S	53.38	56.58	58.83	57.80	55.40	51.57	48.68
13	S	43.95	45.08	45.77	48.08	53.47	56.58	58.90	57.60	S	51.44	48.40
14	44.33	43.97	45.13	S	48.10	53.58	S	58.97	57.48	55.07	51.47	48.38
15	44.20	43.98	45.00	46.00	48.20	53.75	56.68	59.05	S	54.83	51.44	S
16	44.08	43.90	44.97	46.17	48.34	S	56.81	59.12	57.28	54.71	51.44	48.20
17	43.95	S	S	46.29	48.44	54.12	56.90	59.26	57.25	54.55	S	48.10
18	43.80	43.97	44.90	46.40	48.54	54.16	56.98	S	57.10	54.30	51.10	48.05

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

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
19	43·71	44·00	44·88	46·50	S	54·16	57·21	59·30	57·79	54·17	51·00	47·97
20	S	43·95	44·78	46·62	48·70	54·24	57·38	59·36	57·10	S	50·88	47·88
21	43·30	44·20	44·70	S	48·88	54·33	S	59·39	57·10	53·84	50·74	47·70
22	43·19	44·33	44·62	46·83	48·97	54·40	57·60	59·40	S	53·78	50·70	S
23	43·21	44·42	44·58	46·97	49·13	S	57·70	59·40	57·08	53·60	50·65	47·28
24	43·10	S	S	47·08	49·38	54·79	57·70	59·30	57·08	53·49	S	47·10
25	43·08	44·60	44·50	47·19	49·57	55·03	57·70	S	57·08	53·30	50·47	Christ. Day.
26	43·00	44·70	44·49	47·23	S	55·22	57·80	59·40	57·00	53·19	50·40	46·65
27	S	44·70	44·40	47·27	50·04	55·50	57·80	59·15	57·00	S	50·40	46·48
28	42·93	44·70	44·34	S	50·12	55·67	S	59·00	56·98	52·90	50·38	46·30
29	42·98		Good Friday.	47·40	50·41	55·93	57·80	59·00	S	52·58	50·28	S
30	43·00		44·12	47·49	<i>Not</i>	S	58·00	58·90	56·85	52·40	50·10	46·25
31	43·00		S		<i>Not</i>		58·10	58·80		52·22		46·22

The letter S denotes that the day was Sunday.

September 19. The reading is evidently too high; probably it should be 57°·09.

From 1846, April, to 1847, December, this thermometer was read at every two hours, night and day (excepting on Sundays and a few other days). During that interval of time, the monthly mean reading at noon was found to be higher than the monthly mean reading, as found from all the observations, by 0°·03.

(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 Noon on every Day, except Sundays.

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	40·57	39·63	42·97	41·10	47·90	54·10	60·60	60·92	S	56·64	48·58	S
2	40·80	40·12	43·03	41·80	48·12	S	60·50	61·08	58·88	56·29	48·90	45·48
3	40·98	S	S	<i>Not</i>	47·98	55·30	60·30	61·08	58·80	56·98	S	45·43
4	40·17	41·54	43·72	43·30	47·80	55·90	60·20	S	58·90	55·70	49·67	45·48
5	40·43	41·57	43·60	43·95	S	56·40	60·08	61·50	58·92	55·61	50·02	45·52
6	S	41·60	44·28	44·38	48·09	56·78	59·78	61·70	58·67	S	49·88	45·78
7	40·20	41·57	43·07	S	48·02	57·10	S	62·10	58·58	55·11	49·84	45·92
8	39·95	41·30	43·10	45·35	47·78	56·88	59·36	62·19	S	54·90	49·80	S
9	39·73	41·29	43·20	45·60	47·72	S	59·15	62·20	58·10	54·60	49·80	45·60
10	39·40	S	S	45·90	47·67	56·80	58·90	62·20	57·98	54·30	S	45·30
11	39·27	41·67	43·38	46·12	47·81	57·19	58·80	S	57·80	53·90	49·80	45·08
12	39·12	41·65	43·30	46·19	S	57·72	58·88	62·12	58·00	53·53	50·00	44·88
13	S	41·40	43·10	46·29	48·60	57·90	59·19	61·98	57·87	S	50·04	44·90
14	38·78	41·08	43·02	S	48·89	57·80	S	61·77	57·79	52·49	49·72	45·10
15	38·60	40·88	42·89	46·48	49·00	57·40	60·29	61·80	S	52·19	49·10	S
16	38·40	41·40	42·80	46·60	49·05	S	60·87	61·88	57·59	52·08	48·52	45·40
17	38·20	S	S	46·70	48·97	56·70	60·52	61·89	57·20	51·78	S	45·30
18	38·10	42·10	42·00	46·85	49·20	56·73	62·00	S	57·78	51·62	48·19	44·90
19	38·07	42·40	41·70	47·00	S	56·92	62·30	62·21	57·79	51·74	48·10	44·30
20	S	42·00	41·79	47·20	49·80	57·38	62·08	62·11	57·80	S	48·28	43·80
21	38·05	43·10	41·90	S	50·38	57·82	S	61·77	57·95	51·97	48·40	43·25
22	37·98	43·19	42·08	47·50	50·90	58·40	61·81	61·20	S	51·69	48·38	S
23	37·97	43·29	41·97	47·60	51·64	S	62·08	60·67	57·80	51·00	48·30	42·19
24	37·90	S	S	47·50	52·00	59·68	62·20	60·27	57·75	50·60	S	41·88
25	38·08	43·10	41·70	47·39	52·18	60·42	62·30	S	57·75	50·24	48·60	Christ. Day.
26	38·42	43·07	41·30	47·35	S	60·88	62·19	60·05	57·69	49·90	48·58	41·30
27	S	43·03	40·90	47·50	52·56	61·19	61·60	60·10	57·61	S	48·19	41·67
28	39·19	42·92	40·70	S	52·68	61·42	S	59·98	57·38	49·28	47·80	41·88
29	39·08		Good Friday.	47·78	52·87	61·19	61·90	59·97	S	49·10	47·19	S
30	39·35		40·49	47·85	<i>Not</i>	S	60·78	59·80	56·98	48·85	46·40	42·32
31	39·67		S		<i>Not</i>		60·95	59·39		48·50		42·70

The letter S denotes that the day was Sunday.

March 4 and 5. Both these readings seem to be too high.

July 18, 19, and 20. The readings on these days seem to be too high. *Probably 17° should be increased by 1°.*

From 1846, April, to 1847, December, this thermometer was read at every two hours, night and day (excepting on Sundays and a few other days). During that interval of time, the monthly mean reading at noon, in the months from April to September, was found to be $0^{\circ} \cdot 08$ higher than the mean of the same months from all the observations, and in the remaining months the excess was $0^{\circ} \cdot 03$.

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of one inch below the surface of the soil, within the box which covers the tops of the deep-sunk Thermometers, at Noon on every Day, except Sundays.

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	o	o	o	o	o	o	o	o	o	o	o	o
1	33·0	47·0	44·8	47·8	48·0	63·6	63·0	64·8	S	54·5	53·0	S
2	38·0	49·6	48·0	51·0	48·5	S	63·7	63·0	61·0	53·0	54·0	43·7
3	38·0	S	S	51·0	50·0	63·0	63·5	65·0	60·0	54·0	S	43·0
4	43·0	43·0	42·0	52·0	52·8	64·8	61·8	S	60·5	54·0	55·0	43·5
5	38·0	43·0	40·0	51·0	S	64·8	61·0	68·0	58·0	54·7	50·5	49·0
6	S	43·0	43·0	49·0	47·0	63·0	63·0	67·0	58·0	S	51·0	43·0
7	34·0	41·3	44·0	S	48·0	61·0	S	65·0	58·5	54·5	50·0	46·0
8	33·0	43·0	44·5	53·0	48·0	60·7	58·8	68·0	S	53·0	51·0	S
9	35·0	48·0	45·0	49·8	48·0	S	60·5	64·7	57·0	52·0	47·0	39·0
10	35·5	S	S	50·0	49·8	63·0	59·0	64·5	59·0	50·7	S	40·0
11	32·0	43·0	43·0	49·5	53·0	68·0	63·0	S	58·0	48·3	53·0	42·0
12	33·0	42·0	42·0	50·8	S	65·2	65·0	63·0	60·0	48·0	53·0	47·0
13	S	39·0	43·0	49·0	53·0	62·0	64·7	63·0	58·0	S	45·0	45·0
14	33·0	40·0	44·0	S	50·7	59·0	S	64·0	58·0	48·0	44·0	47·0
15	31·0	48·0	43·0	49·0	50·0	55·0	71·0	64·8	S	48·0	43·0	S
16	32·0	47·0	39·0	49·8	49·0	S	72·0	65·5	60·0	48·0	48·0	45·0
17	35·0	S	S	51·0	53·0	60·0	72·0	67·0	60·0	52·0	S	43·0
18	34·8	45·8	39·0	51·0	55·0	61·5	66·4	S	59·0	52·0	47·8	38·0
19	41·0	47·0	43·0	51·0	S	64·0	65·7	63·0	60·0	54·5	50·7	39·0
20	S	46·0	43·0	52·0	54·8	66·0	63·0	61·0	59·0	S	48·5	38·0
21	31·8	45·7	43·0	S	60·0	63·0	S	60·0	60·0	48·0	48·0	38·0
22	34·0	48·0	40·0	59·0	56·6	69·1	68·0	58·0	S	47·0	48·0	S
23	35·0	44·8	40·0	48·0	58·5	S	72·0	60·7	58·0	46·0	52·0	38·0
24	37·0	S	S	48·0	59·0	71·0	86·3	60·0	59·0	45·0	S	38·0
25	49·0	43·0	38·0	49·8	58·0	74·5	63·0	S	58·5	44·0	50·0	Christ. Day.
26	45·8	43·0	38·0	49·0	S	70·0	63·0	63·0	58·0	45·0	55·0	40·0
27	S	43·0	38·0	49·8	57·5	66·2	60·0	61·0	58·0	S	45·0	43·0
28	38·0	42·0	38·0	S	58·0	64·0	S	61·0	58·0	48·0	43·0	42·0
29	43·0		Good Friday	50·0	59·5	63·5	63·0	59·0	S	45·0	40·0	S
30	40·0		43·0	50·0	<i>Not</i>	S	63·3	58·0	54·7	43·0	40·0	45·0
31	38·0		S		<i>Not</i>		65·5	58·0		47·0		49·5

The letter S denotes that the day was Sunday.

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at Noon on every Day, except Sundays.

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	o	o	o	o	o	o	o	o	o	o	o	o
1	31·7	51·7	50·0	52·8	47·5	73·0	67·8	65·7	S	58·0	56·0	S
2	34·7	54·4	51·0	56·8	52·5	S	68·0	65·8	66·0	54·0	58·0	45·0
3	39·0	S	S	56·5	55·7	71·7	63·0	67·8	63·0	55·7	S	42·0
4	45·7	46·7	41·0	55·8	55·8	75·0	61·0	S	66·0	57·5	57·8	49·5
5	37·7	44·5	43·8	55·5	S	73·0	65·7	77·0	64·0	61·0	50·3	53·0
6	S	44·8	50·0	52·8	45·5	60·0	68·5	72·7	63·0	S	56·0	40·5
7	32·0	44·8	46·7	S	46·5	63·8	S	72·0	67·0	58·5	54·0	45·0
8	31·7	50·0	45·0	59·0	47·5	63·0	62·4	71·4	S	58·0	53·0	S
9	33·5	50·8	45·7	52·5	51·0	S	64·0	66·0	60·0	54·8	51·0	34·0
10	32·4	S	S	54·8	53·0	73·8	63·0	67·0	64·0	55·0	S	36·5

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

Day of the Month, 1850.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	o	o	o	o	o	o	o	o	o	o	o	o
11	30.0	43.0	46.7	52.5	55.4	77.5	71.5	S	62.7	48.0	57.0	41.0
12	31.4	42.5	46.7	53.8	S	68.5	72.0	67.0	71.0	52.0	56.0	49.0
13	S	38.8	49.0	51.7	58.8	62.5	72.0	66.7	66.0	S	43.8	46.8
14	28.8	41.0	47.0	S	52.0	56.7	S	68.0	66.7	48.5	45.0	49.0
15	27.0	57.6	44.0	50.0	51.4	51.7	80.0	67.0	S	48.0	44.5	S
16	31.0	47.8	41.7	50.0	53.8	S	83.0	73.0	63.0	57.5	52.0	46.0
17	33.7	S	S	55.8	55.8	67.0	79.0	74.0	65.8	59.0	S	42.0
18	32.0	49.0	43.0	55.8	58.8	69.5	65.0	S	66.0	57.8	48.0	37.0
19	44.5	50.7	48.0	54.8	S	70.5	68.0	65.8	65.0	56.0	53.0	36.0
20	S	50.0	44.0	55.8	60.0	76.0	65.0	64.4	63.0	S	48.0	37.0
21	30.0	48.0	42.8	S	70.8	77.0	S	61.0	64.8	51.5	46.5	32.4
22	33.8	51.0	43.7	53.6	58.0	78.0	76.6	63.0	S	49.8	51.0	S
23	36.5	48.0	48.8	51.4	63.0	S	84.8	67.0	59.7	48.0	52.5	38.8
24	35.7	S	S	51.7	66.0	80.0	69.0	65.8	61.0	43.0	S	36.0
25	47.5	45.7	39.0	54.0	60.0	81.0	59.0	S	64.0	43.0	51.7	Christ. Day.
26	47.0	48.0	36.6	54.0	S	76.5	65.8	67.8	57.5	46.2	43.5	41.5
27	S	45.5	40.8	53.0	61.0	69.0	57.7	66.5	61.0	S	42.0	44.0
28	39.0	41.0	41.7	S	61.0	66.0	S	63.7	59.2	47.5	41.0	41.0
29	46.4		Good Friday.	55.6	66.0	62.0	67.5	59.0	S	46.0	41.0	S
30	39.0		48.0	54.8	<i>Not</i>	S	66.0	63.0	56.0	45.0	37.5	48.0
31	36.7		S		<i>Not</i>		71.7	61.7		49.5		51.5

103.8
17.3
67.

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.

- 1849. Dec. 31. 12. The direction of the wind was W.
- 1850. Jan. 31. 12. ,, ,, S.S.W., which implies a direct motion of $292\frac{1}{2}^\circ$.
- Jan. 5. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
- Jan. 22. 3. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- Jan. 28. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .

Therefore the whole excess of direct motion in the month of January was $652\frac{1}{2}^\circ$.

- 1850. Jan. 31. 12. The direction of the wind was S.S.W.
- Feb. 28. 12. ,, ,, N., which implies a retrograde motion of $202\frac{1}{2}^\circ$.
- Jan. 31. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- Feb. 24. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
- Feb. 25. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .

Therefore the whole excess of direct motion in the month of February was $157\frac{1}{2}^\circ$.

- 1850. Feb. 28. 12. The direction of the wind was N.
- March 31. 12. ,, ,, S.S.E., which implies a retrograde motion of $202\frac{1}{2}^\circ$.
- March 9. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- March 12. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- March 15. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- March 17. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- March 18. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- March 27. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .

Therefore the whole excess of direct motion in the month of March was $1957\frac{1}{2}^\circ$.

- 1850. March 31. 12. The direction of the wind was S.S.E.
- April 30. 12. ,, ,, N., which implies a direct motion of $202\frac{1}{2}^\circ$.
- April 12. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- April 21. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
- April 24. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .

CHANGES IN THE DIRECTION OF THE WIND—*continued.*

1850. April ^{d h} 25. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° . Therefore the whole excess of direct motion in the month of April was $922\frac{1}{2}^\circ$.

1850. April ^{d h} 30. 12. The direction of the wind was N.
 May 31. 12. ,, ,, E.N.E., which implies a direct motion of $67\frac{1}{2}^\circ$.
 May 2. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 May 9. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 May 19. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 May 21. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 May 22. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 May 23. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 May 24. 3. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 May 29. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 Therefore the whole excess of direct motion in the month of May was $67\frac{1}{2}^\circ$.

1850. May ^{d h} 31. 12. The direction of the wind was E.N.E.
 June 30. 12. ,, ,, S.W., which implies a retrograde motion of $202\frac{1}{2}^\circ$.
 June 5. 3. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 June 17. 3. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 June 20. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 June 28. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 Therefore the whole excess of direct motion in the month of June was $1237\frac{1}{2}^\circ$.

1850. June ^{d h} 30. 12. The direction of the wind was S.W.
 July 31. 12. ,, ,, N., which implies a direct motion of 135° .
 July 6. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 July 20. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 Therefore the whole excess of direct motion in the month of July was 135° .

1850. July ^{d h} 31. 12. The direction of the wind was N.
 August 31. 12. ,, ,, N.W., which implies a retrograde motion of 45° .
 August 1. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 Therefore the whole excess of direct motion in the month of August was 315° .

1850. August ^{d h} 31. 12. The direction of the wind was N.W.
 Sep. 30. 12. ,, ,, S.W., which implies a retrograde motion of 90° .
 Sep. 20. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 Sep. 25. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 Therefore the whole excess of retrograde motion in the month of September was 90° .

1850. Sep. ^{d h} 30. 12. The direction of the wind was S.W.
 Oct. 31. 12. ,, ,, S.S.W., which implies a retrograde motion of $22\frac{1}{2}^\circ$.
 Oct. 22. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 Oct. 24. 22. The trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360° .
 Therefore the whole excess of retrograde motion in the month of October was $22\frac{1}{2}^\circ$.

1850. Oct. ^{d h} 31. 12. The direction of the wind was S.S.W.
 Nov. 30. 12. ,, ,, N., which implies a direct motion of $157\frac{1}{2}^\circ$.
 Therefore the whole excess of direct motion in the month of November was $157\frac{1}{2}^\circ$.

1850. Nov. ^{d h} 30. 12. The direction of the wind was N.
 Dec. 31. 12. ,, ,, S.W., which implies a retrograde motion of 135° .
 Dec. 1. 22. The trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360° .
 Therefore the whole excess of direct motion in the month of December was 225° .

The whole excess of direct motion during the year was 5715° .

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1850.

1850, Month.	Monthly Amount of Rain collected in the Gauge.			
	On the Roof of the Library.	Crosley's.	Cylinder partly sunk in the Ground.	Cylinder partly sunk in the Ground at the Royal Naval Schools.
	in.	in.	in.	in.
January	0·8	1·0	1·2	1·1
February	1·3	1·1	1·4	1·4
March	0·3	0·3	0·4	0·2
April	1·8	2·1	2·3	2·1
May	2·3	2·2	2·3	2·2
June	0·9	0·9	1·0	0·8
July	2·7	2·6	2·8	2·8
August	1·5	1·6	1·7	1·4
September	1·7	1·5	1·4	1·6
October	1·4	1·2	1·6	1·5
November	1·7	1·9	2·2	1·9
December	1·1	1·3	1·4	1·5
Sums	17·5	17·7	19·7	18·5

The gauges at the Royal Observatory were read at 9^h P. M., and the monthly records for the Royal Observatory terminate at 9^h P. M., on the last day of every month. The gauge at the Royal Naval Schools was read at noon on the last day of every month, except in two instances, to be spoken of presently; the results, are not strictly comparable in those instances in which rain has fallen after noon on the last day of the month.

At the Royal Naval Schools the reading was not taken for December 1849; but, at the end of January 1850, the amount accumulated in the two months was found to be 3ⁱⁿ·3. In like manner, the reading was not taken at the end of April, and the amount collected at the end of May was found to be 4ⁱⁿ·3 for April and May. These numbers, when divided in proportion to the monthly falls at the Royal Observatory, give the separate numbers inserted in the table above.

EXTRAORDINARY ELECTROMETER OBSERVATIONS

Greenwich Mean Solar Time, or Limits of Time, 1850.	Sign of Electricity, as shewn by Dry Pile Apparatus.	READINGS OF ELECTROMETERS.					Time of Recovery after Discharge.	RONALDS' SPARK-MEASURER.		GALVANOMETER.	
		Single Gold Leaf of Dry Pile Appa- ratus.	Double Gold Leaf.	Volta (1).	Volta (2).	Henley.		Opening of Spark- measurer, or Length of Spark.	Corresponding Frequency.	The Head of the Needle towards A.	The Head of the Needle towards B.
April 20. 0.47. 0 to 20. 0.49. 0 0.51. 0 to 0.53. 30 0.55. 0 0.59. 0	Neg. Pos. Neg. Neg.	B. R. B. R. B. R. B. R.	B. R. B. R. B. R. B. R.	B. R. B. R. B. R. B. R.	B. R. B. R. B. R. B. R.	6	Instantly Instantly Instantly Instantly	0.15 0.20 .. 0.10	3 in 1 2 in 1 .. 3 in 2	.. .. 5 15	.. 15
May 3. 22. 55. 0 to 3. 22. 59. 0 4. 1. 0. 0 to 4. 1. 5. 0	Neg. Neg.	B. R. B. R.	B. R. B. R.	B. R. B. R.	B. R. 200	15 2 to 9	Instantly Instantly	0.25 0.35	3 in 2 1 in 1	2 5	....
June 12. 23. 45. 0 23. 45. 13 23. 48. 0 13. 2. 0. 0 to 13. 2. 10. 0 13. 2. 11. 0	Neg. Neg. Pos. Neg. Pos.	B. R. B. R. B. R. B. R. B. R.	B. R. B. R. B. R. B. R. B. R.	B. R. B. R. B. R. B. R. B. R.	200 80 40 B. R. B. R.	2 40 10 to 12	Instantly Instantly Instantly Instantly Instantly	.. .. .. 0.28 ..	.. .. .. 3 in 1 ..	.. .. .. 5 to 30..	..........
Aug. 12. 0.42. 0 0.48. 0	Pos. Neg.	B. R. B. R.	B. R. B. R.	B. R. B. R.	B. R. B. R.	10 10	Instantly Instantly	0.03 0.08	.. 3 in 2	.. 2	....
Aug. 23. 22. 37. 0 22. 38. 0 to 23. 22. 44. 0 22. 45. 0 22. 48. 0 22. 52. 30 22. 55. 0 22. 58. 0 22. 59. 0 22. 0. 0 to 23. 23. 2. 0 23. 3. 0 23. 4. 0 to 23. 23. 7. 0 23. 10. 0 23. 11. 0	Neg. Neg. Neg. Neg. Neg. Neg. Neg. Neg. Neg. Pos. Pos. o	B. R. B. R. B. R. .. B. R. B. R. o B. R. B. R. B. R. B. R. o B. R. B. R. o B. R. B. R. o B. R. B. R. o	B. R. B. R. B. R. .. B. R. B. R. o B. R. B. R. B. R. B. R. o B. R. B. R. o B. R. B. R. o B. R. B. R. o	B. R. B. R. B. R. .. B. R. B. R. o B. R. B. R. B. R. B. R. o B. R. B. R. o B. R. B. R. o B. R. B. R. o	B. R. B. R. B. R. .. B. R. B. R. o B. R. B. R. B. R. B. R. o B. R. B. R. o B. R. B. R. o B. R. B. R. o	40 47 28 o 43 30 o 32 20 to 32 .. 12 40 to 50 30 10 to 20 8	Instantly Instantly Instantly .. Instantly Instantly .. Instantly Instantly .. Instantly Instantly Instantly .. Instantly Instantly .. Instantly Instantly	0.02 0.03 0.02 .. 0.02 0.02 .. 0.02 0.01 .. 0.01 0.04 0.02 0.14 0.07	.. 2 in 3 Volley .. Volley Volley Volley	5 11 3 .. 20 8 .. 22 10 .. 6 36 .. .. ..	.. .. .. .. .. .. .. .. .. .. 6
Dec. 19. 1. 30. 0 to 19. 1. 45. 0 2. 11. 0	Neg. Neg.	B. R. B. R.	B. R. B. R.	B. R. B. R.	B. R. B. R.	6 10	Instantly Instantly	0.30 0.07	3 in 1 1 in 1	....	....

The letters B. R. denote that the gold leaf or straws have been deflected from the vertical *beyond the range* to which confidence can be placed in their indications. The greatest inclination considered trustworthy, for all the electrometers except Henley's, is about 20° from the vertical.

WIND.		REMARKS.
From Osler's Anemometer.		
Direction.	Pressure in lbs. per square foot.	
SW	from lbs. to lbs. 0 to 2	Rain falling.
SW	0 to 2	Hail and rain falling.
SW	0 to 4	The rain and hail ceased falling.
SW	0 to 2½	Rain again falling: the difference of temperature before and after the squall was 12°.
WSW	..	Rain falling: the rain ceased about 23 ^h .
NNW	0 to 3½	
SW	0 to 1	
SW	0 to 1	
SW	0 to 1	
WSW	0 to 6½	Squall of wind and rain.
WSW		
S	..	At 12 ^d . 0 ^h . 42 ^m and 0 ^h . 44 ^m distant thunder heard in the N.
S	..	
SW	..	At 23 ^d . 22 ^h . 35 ^m rain commenced falling. Frequent claps of distant thunder in the E.
SW	..	
SW	..	At 23 ^d . 22 ^h . 46 ^m . 45 ^s and 22 ^h . 49 ^m . 0 ^s thunder heard in the distance from S. S. W. to S. S. E.: no lightning seen. At 22 ^h . 53 ^m . 15 ^s there was a volley of sparks, followed immediately by thunder in E.: no lightning observed.
SW	..	
SW	..	At 23 ^d . 22 ^h . 57 ^m . 10 ^s thunder in the E.: no lightning seen.
SW	..	Heavy rain, accompanied by thunder.
SW	..	Heavy rain continues.
SW	..	
SW	..	The rain still continues heavy.
SW	..	
SW	..	The rain has ceased. No lightning observed throughout these observations.
SW	..	
SW	..	The rain lighter.
SW	..	Rain still continues. Thunder in the E.: no lightning observed.
SW	..	The rain has nearly ceased.
NNE	..	Rain falling, accompanied with sleet and large flakes of snow.
NE	..	At 2 ^h . 35 ^m the rain ceased.