ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

NORTH POLAR DISTANCE OF CUSPS

MADE WITH

THE NORTH EQUATOREAL

DURING

THE SOLAR ECLIPSE OF 1858, MARCH 14-15.

OBSERVATIONS of NORTH POLAR DISTANCE of CUSPS, made with the NORTH EQUATOREAL

Number of Series.	Object observed.	Time by Clock Arnold 1.	Sidereal Time.	Mean Solar Time.	Pointer Reading.	Readings of Microscope-Micrometers. A B.
		h m s	h m s	h m s	o ′	′ ″
1	North Cusp	0. 35. 10·5	0. 35. 33·87	1. 4. 11·88	88. 0	0. 44·7 2. 5·2
2	South Cusp.....	0. 37. 0·0	0. 37. 23·37	1. 6. 1·08	87. 45	0. 31·0 2. 1·5
3	North Cusp	0. 38. 3·5	0. 38. 26·88	1. 7. 4·40	88. 0	2. 52·0 4. 23·4
4	South Cusp.....	0. 38. 28·0	0. 38. 51·38	1. 7. 28·84	87. 40	4. 37·2 6. 4·5
5	North Cusp	0. 39. 54·5	0. 40. 17·88	1. 8. 55·11	88. 0	4. 3·6 5. 23·4
6	South Cusp.....	0. 40. 35·2	0. 40. 58·58	1. 9. 35·70	87. 40	4. 11·8 5. 36·1
7	North Cusp	0. 41. 16·0	0. 41. 39·38	1. 10. 16·38	88. 0	4. 30·2 5. 50·5
8	South Cusp.....	0. 42. 17·5	0. 42. 40·88	1. 11. 17·72	87. 45	0. 42·4 2. 8·7
9	North Cusp	0. 42. 44·0	0. 43. 7·38	1. 11. 44·15	88. 5	1. 25·6 2. 54·4
10	South Cusp.....	0. 43. 12·0	0. 43. 35·38	1. 12. 12·07	87. 45	0. 30·8 1. 54·4
11	North Cusp	0. 43. 34·0	0. 43. 57·38	1. 12. 34·01	88. 5	1. 33·2 3. 0·2
12	South Cusp.....	0. 43. 54·0	0. 44. 17·38	1. 12. 53·95	87. 45	0. 40·8 2. 9·8
13	North Cusp	0. 44. 9·5	0. 44. 32·88	1. 13. 9·41	88. 5	1. 51·0 3. 17·9
14	South Cusp.....	0. 44. 33·0	0. 44. 56·38	1. 13. 32·85	87. 40	4. 57·2 6. 27·7
15	North Cusp	0. 44. 52·0	0. 45. 15·38	1. 13. 51·80	88. 5	1. 19·7 2. 47·4
16	South Cusp.....	0. 45. 14·7	0. 45. 38·08	1. 14. 14·44	87. 40	5. 9·8 6. 35·0
17	North Cusp	0. 45. 55·0	0. 46. 18·38	1. 14. 54·62	88. 5	1. 35·8 3. 3·5

Series 8. The reading of the telescope-micrometer has been increased three revolutions.
Series 16. The clock-time by Arnold has been decreased thirty seconds.

during the SOLAR ECLIPSE of 1858, March 14–15.

Correction for Runs of A B.	Corrected Microscope-Micrometer Readings A B.	Concluded Circle Reading.	Reading of Telescope-Micrometer (a).	Correction for Micrometer (a) in Arc.	Concluded Instrumental S.P.D.	Concluded Instrumental N.P.D.
″	′ ″	° ′ ″	r	′ ″	° ′ ″	° ′ ″
− 0·37 − 0·25	0. 44·33 2. 4·97	88. 1. 24·65	2·278	− 1. 11·23	88. 0. 13·22	91. 59. 46·78
− 0·25 − 0·24	0. 30·75 2. 1·26	87. 46. 16·00	1·738	− 0. 54·35	87. 45. 21·65	92. 14. 38·35
− 1·42 − 0·53	2. 50·58 4. 22·87	88. 3. 36·73	1·738	− 0. 54·35	88. 2. 42·38	91. 57. 17·62
− 2·28 − 0·73	4. 34·92 6. 3·77	87. 45. 19·35	0·738	− 0. 23·08	87. 44. 56·27	92. 15. 3·73
− 2·01 − 0·65	4. 1·59 5. 22·75	88. 4. 42·17	0·686	− 0. 21·45	88. 4. 20·72	91. 55. 39·28
− 2·07 − 0·67	4. 9·73 5. 35·43	87. 44. 52·58	0·611	− 0. 19·11	87. 44. 33·47	92. 15. 26·53
− 2·22 − 0·70	4. 27·98 5. 49·80	88. 5. 8·89	0·611	− 0. 19·11	88. 4. 49·78	91. 55. 10·22
− 0·34 − 0·26	0. 42·06 2. 8·44	87. 46. 25·25	3·573	− 1. 51·79	87. 44. 33·46	92. 15. 26·54
− 0·70 − 0·35	1. 24·90 2. 54·05	88. 7. 9·48	3·271	− 1. 42·28	88. 5. 27·20	91. 54. 33·80
− 0·25 − 0·23	0. 30·55 1. 54·17	87. 46. 12·36	3·010	− 1. 34·12	87. 44. 38·24	92. 15. 21·76
− 0·76 − 0·36	1. 32·44 2. 59·84	88. 7. 16·14	3·024	− 1. 34·56	88. 5. 41·58	91. 54. 18·42
− 0·33 − 0·26	0. 40·47 2. 9·54	87. 46. 25·00	3·176	− 1. 39·31	87. 44. 45·69	92. 15. 14·31
− 0·91 − 0·39	1. 50·09 3. 17·51	88. 7. 33·80	3·176	− 1. 39·31	88. 5. 54·49	91. 54. 5·51
− 2·45 − 0·77	4. 54·75 6. 26·93	87. 45. 40·84	2·020	− 1. 3·17	87. 44. 37·67	92. 15. 22·33
− 0·66 − 0·33	1. 19·04 2. 47·07	88. 7. 3·06	2·027	− 1. 3·38	88. 5. 59·68	91. 54. 0·32
− 2·54 − 0·79	5. 7·26 6. 34·21	87. 45. 50·74	2·143	− 1. 7·01	87. 44. 43·73	92. 15. 16·27
− 0·78 − 0·37	1. 35·02 3. 3·13	88. 7. 19·08	2·243	− 1. 10·14	88. 6. 8·94	91. 53. 51·06