

XI.—Chicago, September 5th, 1858.—At Observing Station, No. 3, in Latitude $41^{\circ} 53' 46.3''$ N.; Longitude $5h. 50m. 31.2s.$ W.

NAMES OF STARS.	Observed true altitudes of Star affected by corrections for refraction and errors of Sextant.	True Sidereal time of observation deduced.	Time of observation noted by Sidereal Chronometer, No. 2,557.	Chronometer No. 2,557, fast of Sidereal time by each observation
Alpha CORONÆ BOREALIS, West	45 57 06.4	18 54 04.65	20 00 58.7	1 06 54.05
	45 34 35.9	18 56 05.68	20 02 59	1 06 53.32
	45 11 30.2	18 58 09.86	20 05 04	1 06 54.14
	44 49 16.9	19 00 09.33	20 07 03.7	1 06 54.37
	44 28 43.7	19 01 59.81	20 08 54.5	1 06 54.69
	43 51 02.4	19 05 22.37	20 12 16	1 06 53.63
	43 31 36.7	19 07 06.77	20 14 00	1 06 53.23
	43 07 19.4	19 09 17.29	20 16 10.7	1 06 53.41
	42 46 25.2	19 11 09.63	20 18 03.3	1 06 53.67
	42 06 21.3	19 14 44.94	20 21 38.7	1 06 53.76

Mean result of 10 observations on Alpha CORONÆ BOREALIS, West, (at 19*h.* 4*m.*)..... *h. m. s.* +1 06 53.83

Alpha ANDROMEDÆ, East	° ' "	<i>h. m. s.</i>	<i>h. m. s.</i>	<i>h. m. s.</i>
	42 13 41.5	20 12 28.37	21 19 23	1 06 54.63
	42 55 52.8	20 16 15.27	21 23 10	1 06 54.73
	43 20 11.2	20 18 25.96	21 25 20	1 06 54.04
	43 41 41.9	20 20 21.60	21 27 16	1 06 54.40
	44 04 35.1	20 22 24.61	21 29 19.7	1 06 55.09
	44 24 43.5	20 24 12.85	21 31 07.7	1 06 54.85
	44 36 06.4	20 25 14.02	21 32 08.7	1 06 54.68
	45 01 44.7	20 27 31.80	21 34 26.6	1 06 54.80
	45 17 17.8	20 28 55.37	21 35 50	1 06 54.63
	46 14 59.3	20 34 05.41	21 41 00	1 06 54.59
	46 32 50.2	20 35 41.41	21 42 36.5	1 06 55.09
	46 53 00.7	20 37 29.78	21 44 24.6	1 06 54.82

Mean result of 12 observations on the Star Alpha ANDROMEDÆ, East, (at 20*h.* 25*m.*)..... *h. m. s.* +1 06 54.69

Mean result of 10 observations on the Star Alpha CORONÆ BOREALIS, West, (at 19*h.* 01*m.*) as above..... *h. m. s.* +1 06 53.83

CHRONOMETER ERROR.—Fast of Sidereal time, by a mean of these results, from East and West Stars (at 19*h.* 45*m.*)... *h. m. s.* +1 06 54.25
By Comparison:—Chronometer, No. 141, slow of mean Solar time for this Station. (at 8*h.* 45*m.* Mean time) *h. m. s.* -0 04 28.5