

Mean result of 16 observations on the star Alpha Bootis, *h. m. s.*
 (Arcturus) West, (at 16*h.* 10*m.*)..... +0 59 30.53
 Mean result of 14 observations on the star Alpha LYRÆ,
 East, (at 15*h.* 36*m.*) as above.... +0 59 30.90
 CHRONOMETER ERROR.—Fast of Sidereal time, by a mean
 of these results (at 15*h.* 53*m.*) by East and West Stars.... +0 59 30.71
By Comparison.—Chronometer, No. 141, was slow of mean
 Solar time for this station (at 9*h.* 48*m.* Mean time)..... -0 4 58.33

II.—Chicago, June 28th, 1858.—Same Station:

NAMES OF STARS.	Observed true alti- tudes of Star af- fected by correc- tions for refrac- tion and errors of Sextant.			True Sidereal time of observation deduced.	Time of observa- tion noted by Si- dereal Chronom- eter, No. 2, 557.	Chronometer No. 2, 557, fast of Si- dereal time by each observation
	<i>h.</i>	<i>m.</i>	<i>s.</i>			
Alpha LYRÆ, (Vega) East	54	30	38.0	15 24 32.05	16 24 40	1 00 07.35
	54	58	16.0	15 27 03.75	16 27 12	1 00 08.25
	55	18	54.0	15 28 56.47	16 29 05.2	1 00 08.73
	56	02	15.1	15 32 53.05	16 33 01	1 00 07.95
	56	37	13.4	15 36 03.65	16 36 11.9	1 00 08.25
	56	58	04.0	15 37 57.16	16 38 05.5	1 00 08.34
	57	22	42.0	15 40 11.20	16 40 18.6	1 00 07.40
	58	09	15.6	15 44 24.29	16 44 32	1 00 07.71
	58	28	53.6	15 46 10.9	16 46 18.3	1 00 07.4
	59	16	24.5	15 49 08.58	16 50 36.4	1 00 07.82

Mean result of 10 observations on Alpha LYRÆ, E., (at 15*h.* 37*m.*) +1*h.* 0*m.*
 07.92*s.*

Alpha Bootis, (Arctu- rus) West	<i>h. m. s.</i>			<i>h. m. s.</i>		
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>h.</i>	<i>m.</i>	<i>s.</i>
	58	41	53.7	15 54 45.76	16 54 53	1 00 07.24
	58	30	06.4	15 56 04.32	16 56 11.5	1 00 07.18
	58	22	40.9	15 56 53.55	16 57 01	1 00 07.45
	57	58	25.4	15 59 33.25	16 59 40.3	1 00 07.05
	57	30	04.7	16 02 37.67	17 02 44.9	1 00 07.23
	57	15	34.3	16 04 11.20	17 04 18	1 00 06.80
	56	25	28.2	16 09 30.22	17 09 38	1 00 07.78
	55	51	12.3	16 13 05.14	17 13 12.7	1 00 07.53
	55	40	12.0	16 14 13.65	17 14 20.8	1 00 07.15
	55	19	31.5	16 16 21.69	17 16 29	1 00 07.31
	54	59	11.0	16 18 26.88	17 18 33.9	1 00 07.02
	54	28	35.5	16 21 33.81	17 21 40.5	1 00 06.69

Mean result of twelve observations on the Star Alpha Bootis, *h. m. s.*
 West, (at 16*h.* 08*m.*)..... +1 00 07.20
 Mean result of 10 observations on the Star Alpha LYRÆ,
 East, (at 15*h.* 37*m.*) as above +1 00 07.92

CHRONOMETER ERROR.—Fast of Sidereal time, by a mean of
 these results, from East and West Stars, (at 15*h.* 52*m.*).... +1 00 07.56
By Comparison.—Chronometer, No. 141, was slow of mean
 Solar time, for this Station, (at 9*h.* 25*m.* Mean time)..... -0 04 53.75