
MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1863

REDUCED TO JANUARY 1 OF THAT YEAR

Mean Positions of Stars for 1863 January 1st,

Number	Star	Magnitude	Estimations	Mean Right Ascension			Mean Polar Distance			Observations	Fraction of Year
				h	m	s					
1	21 Androm α (<i>Alpherat</i>)	20		0	1	18 65	61	39	59 5	4	0 84
2		63	2	0	6	3 64	148	40	36 5	2	0 82
3	88 Pegasi γ (<i>Algemb</i>)	27		0	6	10 97	75	84	43 5	6	0 81
4		89	2	0	9	19 89	149	32	11 4	2	0 82
5		94	1	0	12	44 45	150	26	58 0	1	0 84
6	41 Piscum δ	60		0	13	32 96	82	84	16 0	1	0 73
7	R Andromedæ Var 1	84	5	0	16	48 16	52	10	55 4	5	0 76
8		97	4	0	17	34 73	149	85	29 5	4	0 83
9	45 Piscum	68		0	18	33 19	83	3	59 8	3	0 84
10	12 Ceti	65		0	23	2 81	94	42	54 2	6	0 86
11		105	1	0	25	13 92	76	9	33 2	1	0 80
12		96	6	0	23	50 66	89	7	55 6	7	0 83
13		96	9	0	30	44 81	89	7	54 3	10	0 80
14	18 Cassiopeæ α Var 1	30		0	32	45 02 ¹⁰	34	12	54 1	2	0 93
15	1097 Lalande	81	6	0	34	32 75	89	0	17 3	6	0 86
16	1123 Lalande	90	8	0	35	33 90	89	3	21 7	8	0 87
17	16 Ceti β	20		0	36	42 69	108	44	20 9	2	0 04
18	1198 Lalande	88	8	0	38	3 50	88	56	37 0	9	0 90
19	0 653 W B E	95	8	0	38	34 94	89	2	32 4	9	0 89
20	63 Piscum δ	49		0	41	34 55	83	9	41 0	2	0 77
21		93	5	0	41	37 03	89	6	56 0	6	0 91
22		99	9	0	42	5 98	88	49	43 6	10	0 86
23	0 806 W B E	97	7	0	46	36 84	88	50	6 3	7	0 85
24		91		0	47	52 11	133	47	34 4	1	0 75
25	1638 Lalande	78	6	0	50	37 46	88	57	25 0	7	0 87
26	1639 Lalande	89	5	0	50	39 34	88	38	54 9	7	0 89
27	271 Lacaille	78	1	0	52	39 79	151	26	17 1	1	0 77
28	1734 Lalande	81	7	0	54	55 91	88	12	43 3	7	0 86
29	71 Piscum ϵ	46		0	55	50 07	82	50	54 5	11	0 97
30	1879 Lalande	79	6	0	57	40 32	88	25	15 6	7	0 86
31	0 1031 W B E	90	7	0	59	4 86	88	6	8 9	7	0 89
32		98	10	1	2	3 88	87	57	27 7	10	0 83
33	1 15 W B E	94	9	1	2	57 03	87	39	1 8	9	0 93
34	2089 Lalande	87	5	1	3	24 39	88	10	34 0	7	0 93
35	33 Ceti	63		1	3	30 63	88	17	5 7	4	0 99

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[48]

7—R Andromedæ Var 1.—Period, 405 days—Range 6th to 13th magnitude
 12 13 15 16 18 19 21 22 23 25 26 28 30 31 32 33 34 35 Comparison stars used with Mars in
 opposition in 1862 for investigation of the constant of Solar Parallax
 14— α Cassiopeæ Var 1—Irregular Range 22 to 28 magnitude

Observed with the Madras Meridian Circle in that Year

Number	Star	In Right Ascension			In Polar Distance			Number in B A C
		Annual Precession	Secular Variation	Proper Motion	Annual Precession	Secular Variation	Proper Motion	
		<i>s</i>	<i>s</i>	<i>s</i>				
1	21 Andromedæ α	+ 3 0761	+ 0 0182	+ 0 009	- 20 056	+ 0 013	+ 0 15	4
2		+ 3 0140	- 0 0449		- 20 048	+ 0 021		
3	88 Pegasæ γ	+ 3 0812	+ 0 0100	0 000	- 20 049	+ 0 022	+ 0 02	26
4		+ 2 9795	- 0 0452		- 20 039	+ 0 027		
5		+ 2 9411	- 0 0453		- 20 024	+ 0 033		
6	41 Piscum δ	+ 3 0824	+ 0 0066	- 0 002	- 20 020	+ 0 036	- 0 01	66
7	E Andromedæ ν 1	+ 3 1481	+ 0 0271		- 20 001	+ 0 043		
8		+ 2 8975	- 0 0419		- 19 996	+ 0 034		
9	45 Piscum	+ 3 0853	+ 0 0066		- 19 989	+ 0 046		89
10	12 Ceti	+ 3 0609	+ 0 0008	- 0 002	- 19 955	+ 0 055	+ 0 01	112
11		+ 3 1084	+ 0 0108		- 19 933	+ 0 059		
12		+ 3 0746	+ 0 0089		- 19 896	+ 0 065		
18		+ 3 0748	+ 0 0040		- 19 875	+ 0 069		
14	18 Cassiopæ α Var 1	+ 3 3519	+ 0 0553	+ 0 006	- 19 851	+ 0 080	+ 0 04	169
15	1097 Lalande	+ 3 0755	+ 0 0043		- 19 828	+ 0 076		
16	1123 Lalande	+ 3 0755	+ 0 0044		- 19 814	+ 0 079		
17	16 Ceti β	+ 2 9997	- 0 0055	+ 0 013	- 19 799	+ 0 080	- 0 02	196
18	1198 Lalande	+ 3 0761	+ 0 0045		- 19 779	+ 0 083		
19	0 658 W B E	+ 3 0758	+ 0 0046		- 19 772	+ 0 084		
20	63 Piscum δ	+ 3 1009	+ 0 0079	+ 0 008	- 19 727	+ 0 090	+ 0 05	222
21		+ 3 0758	+ 0 0047		- 19 726	+ 0 089		
22		+ 3 0770	+ 0 0048		- 19 718	+ 0 090		
23	0 806 W B E	+ 3 0776	+ 0 0051		- 19 642	+ 0 099		
24		+ 2 8063	- 0 0185		- 19 619	+ 0 093		
25	1688 Lalande	+ 3 0774	+ 0 0052		- 19 567	+ 0 107		
26	1630 Lalande	+ 3 0790	+ 0 0054		- 19 567	+ 0 107		
27	271 Lacaille	+ 2 5126	- 0 0289		- 19 529	+ 0 092		276
28	1784 Lalande	+ 3 0820	+ 0 0058		- 19 481	+ 0 115		
29	71 Piscum ϵ	+ 3 1125	+ 0 0087	- 0 002	- 19 463	+ 0 119	0 00	288
30	1879 Lalande	+ 3 0813	+ 0 0058		- 19 423	+ 0 120		
31	0 1081 W B E	+ 3 0834	+ 0 0061		- 19 392	+ 0 123		
32		+ 3 0849	+ 0 0063		- 19 323	+ 0 129		
33	1 15 W B E	+ 3 0870	+ 0 0065		- 19 304	+ 0 130		
34	2089 Lalande	+ 3 0837	+ 0 0062		- 19 293	+ 0 131		
35	33 Ceti	+ 3 0830	+ 0 0062	- 0 003	- 19 290	+ 0 131	+ 0 02	344

Mean Positions of Stars for 1863 January 1st,

Number	Star	Magnitude	Estimations	Mean Right Ascension			Mean Polar Distance			Observations	Fraction of Year
				h	m	s	'	"	"		
(1st) 36	86 Piscum 3 Δ	60		1	6	34.48	88	9	07	3	0.79
37	1101 W B E	89	6	1	7	42.74	87	54	18.0	7	0.90
38	1 Urs Min α (<i>Polaris</i>)	20		1	8	59.64	1	25	15.5	9	0.46
39		98	8	1	9	13.01	87	42	24.5	8	0.85
40	45 Ceti θ	30		1	17	10.52	98	53	29.5	12	0.98
41		81	2	1	23	24.95	87	44	17.2	2	0.92
42	R Piscum Var 1	10.2	1	1	23	34.40	87	49	48.4	1	0.98
43	99 Piscum η	40		1	24	9.83	75	21	48.4	10	0.90
44	102 Piscum π	60		1	29	50.24	78	33	39.1	1	0.82
45	525 Taylor	59	2	1	30	6.98	148	50	28.7	2	0.84
46	539 Taylor	56	2	1	31	43.67	148	58	16.6	2	0.84
47	α Eridani (<i>Achernar</i>)	10		1	32	36.71	147	56	2.7	2	0.93
48	106 Piscum ν	47		1	34	18.28	85	12	25.4	5	0.89
49	508 Lacaille	79	2	1	35	40.96	151	41	36.8	2	0.88
50	507 Lacaille	62	2	1	37	6.50	151	28	50.8	2	0.88
51	110 Piscum \circ	45		1	38	9.67	81	31	59.8	1	0.89
52		93	2	1	39	51.51	149	27	40.1	2	0.83
53		97	2	1	46	7.56	148	58	15.1	2	0.90
54	6 Arctus β	27		1	47	4.60	69	51	48.8	13	0.92
55		94	2	1	48	31.09	150	5	31.0	2	0.87
56	582 Lacaille	86	2	1	50	52.76	145	44	39.6	2	0.84
57		96	2	1	59	21.58	150	2	49.9	2	0.87
58	13 Arctus α	20		1	59	27.31	67	11	15.8	10	0.84
59	680 Lacaille	60	2	1	59	46.48	145	32	17.9	2	0.86
60		96	2	2	1	1.59	149	49	21.9	2	0.83
61	697 Taylor	74	2	2	1	48.98	145	44	15.9	2	0.90
62	17 Arctus η	60		2	5	8.15	69	26	5.5	1	0.96
63	677 Lacaille	80	1	2	6	54.10	149	47	52.8	1	0.85
64		98	1	2	6	56.71	148	39	46.7	1	0.86
65	67 Ceti	60		2	10	9.05	97	3	20.0	6	0.95
66	68 Ceti \circ Var 1	78	1	2	12	25.64	98	36	8.6	1	0.96
67		97	2	2	18	56.34	148	27	13.9	2	0.88
68		81	2	2	15	37.88	152	34	27.9	2	0.91
69	818 Taylor	83	2	2	19	6.29	147	26	14.9	2	0.82
70	73 Ceti ζ^2	45		2	20	52.64	82	9	21.2	8	0.92

37-39—Comparison stars used with Mars in opposition in 1862 for investigation of the constant of Solar Parallax

42—R Piscum Var 1—Period, 345 days Range 7.5 to 12th magnitude

66—Mira Ceti Var 1—Period 331 days Range 2nd to 10th magnitude