
MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1868

REDUCED TO JANUARY 1, OF THAT YEAR.

Mean Positions of Stars for 1868 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>)...	2.0	...	0	1	34.06	61	38	20.1	4	0.83
2	... ..	9.0	1	0	2	4.72	127	28	41.1	1	0.86
3	Lacaille 9757	7.0	1	0	4	37.48	181	6	27.8	1	0.76
4	Lacaille 3	6.9	1	0	6	18.72	148	35	57.8	1	0.74
5	88 Pegasi γ (<i>Algenib</i>) ...	3.0	...	0	6	26.86	75	33	2.6	6	0.84
6	... ..	7.5	1	0	12	53.98	150	25	17.2	1	0.88
7	Taylor 64	7.1	1	0	14	12.84	129	58	18.4	1	0.76
8	Lalande 421	7.5	...	0	15	59.73	51	58	41.5	1	0.78
9	... ..	8.5	1	0	16	59.36	26	25	54.8	1	0.86
10	... ..	8.8	2	0	18	34.00	26	52	41.1	2	0.80
11	44 Piscium	5.8	...	0	18	38.24	83	47	30.4	2	0.75
12	... ..	9.0	1	0	19	11.99	26	35	19.7	1	0.89
13	Lacaille 88	7.8	2	0	19	42.86	180	22	43.8	2	0.84
14	... ..	9.0	3	0	22	54.07	94	44	40.1	3	0.84
15	12 Ceti	6.2	...	0	23	13.17	94	41	15.0	7	0.83
16	... ..	8.3	...	0	26	55.90	144	53	5.0	1	0.86
17	Taylor 148	6.0	1	0	28	10.49	143	6	10.6	1	0.78
18	13 Ceti	5.3	...	0	28	27.18	94	19	11.8	2	0.82
19	... ..	8.4	2	0	32	3.19	128	43	33.0	2	0.78
20	18 Cassiopeæ α Var. 2 ...	2.2	...	0	33	1.85	34	11	15.5	1	0.88
21	... ..	9.2	2	0	35	11.03	83	27	34.3	2	0.88
22	16 Ceti β	2.1	...	0	36	57.70	108	42	42.9	7	0.84
23	W. B. E. O. 628... ..	8.9	1	0	37	6.18	93	48	10.3	1	0.89
24	... ..	9.2	1	0	40	4.73	150	43	36.1	1	0.90
25	... ..	9.1	1	0	43	7.14	89	3	1.0	1	0.88
26	Lacaille 234	7.2	1	0	45	5.86	129	14	43.1	1	0.88
27	... ..	9.3	2	0	45	20.86	129	12	34.8	2	0.87
28	... ..	9.1	1	0	47	46.01	153	38	59.9	1	0.89
29	R. P. L. 10	6.6	...	0	48	4.22	1	41	9.1	1	0.76
30	... ..	9.8	1	0	49	5.83	153	48	31.2	1	0.87
31	... ..	9.1	1	0	49	6.18	133	45	55.3	1	0.88
32	... ..	9.1	1	0	51	14.99	130	39	39.3	1	0.87
33	... ..	8.5	2	0	52	2.03	130	40	44.6	2	0.89
34	W. B. E. O. 897... ..	9.0	1	0	52	24.55	92	48	37.6	1	0.88
35	71 Piscium ϵ	4.5	...	0	56	5.62	82	49	16.5	8	0.86

8.—Observed for map of R. Andromedæ Var 1.

20.— α Cassiopeæ Var. 2 (*Shediv*) changes irregularly between 2.2 and 2.8 magnitude.

23.—Comparison star for Europa in 1861.

25.—Comparison star for Mars in 1862.

29.—Groombridge 144.

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.	
1	21 Andromedæ α ...	+ 3·0770	+ 0·0182	+ 0·009	- 20·055	+ 0·013	+ 0·15	4
2	... ..	+ 3·0628	- 0·0207	...	- 20·054	+ 0·013	...	...
3	Lacaille 9757 ...	+ 3·0486	- 0·0236	...	- 20·050	+ 0·018	...	22
4	Lacaille 3 ...	+ 3·0118	- 0·0449	...	- 20·047	+ 0·021	...	...
5	88 Pegasi γ (<i>Algenib</i>)	+ 3·0817	+ 0·0100	0·000	- 20·047	+ 0·022	+ 0·02	26
6	... ..	+ 2·9388	- 0·0458	...	- 20·022	+ 0·033	...	...
7	Taylor 64 ...	+ 3·0021	- 0·0211	...	- 20·016	+ 0·037	...	69
8	Lalande 421 ...	+ 3·1449	+ 0·0271	...	- 20·006	+ 0·041	...	...
9	... ..	+ 3·2713	+ 0·0704	...	- 20·000	+ 0·044	...	...
10	... ..	+ 3·2856	+ 0·0697	...	- 19·989	+ 0·048	...	...
11	44 Piscium ...	+ 3·0744	+ 0·0035	- 0·002	- 19·989	+ 0·045	+ 0·02	87
12	... ..	+ 3·2956	+ 0·0710	...	- 19·984	+ 0·049	...	...
13	Lacaille 88 ...	+ 2·9745	- 0·0207	...	- 19·981	+ 0·046	...	...
14	... ..	+ 3·0611	+ 0·0007	...	- 19·955	+ 0·054	...	...
15	12 Ceti ...	+ 3·0809	+ 0·0008	- 0·002	- 19·952	+ 0·055	+ 0·01	112
16	... ..	+ 2·8493	- 0·0325	...	- 19·916	+ 0·058	...	...
17	Taylor 148 ...	+ 2·8537	- 0·0303	...	- 19·903	+ 0·060	...	143
18	13 Ceti ...	+ 3·0596	+ 0·0014	+ 0·017	- 19·900	+ 0·064	+ 0·04	145
19	... ..	+ 2·9223	- 0·0176	...	- 19·858	+ 0·069	...	...
20	18 Cassiopeæ α Var. 2	+ 3·3547	+ 0·0553	+ 0·006	- 19·847	+ 0·080	+ 0·04	169
21	... ..	+ 3·0956	+ 0·0073	...	- 19·819	+ 0·078	...	...
22	16 Ceti β ...	+ 2·9994	- 0·0055	+ 0·013	- 19·795	+ 0·080	- 0·02	196
23	W. B. E. O. 628 ...	+ 3·0579	+ 0·0020	...	- 19·793	+ 0·080	...	...
24	... ..	+ 2·6572	- 0·0340	...	- 19·749	+ 0·075	...	...
25	... ..	+ 3·0763	+ 0·0048	...	- 19·700	+ 0·092	...	...
26	Lacaille 234 ...	+ 2·8585	- 0·0161	...	- 19·667	+ 0·090	...	...
27	... ..	+ 2·8576	- 0·0160	...	- 19·663	+ 0·090	...	...
28	... ..	+ 2·5136	- 0·0328	...	- 19·620	+ 0·084	...	...
29	R. P. L. 10 ...	+ 12·5367	+ 7·1088	+ 0·061	- 19·615	+ 0·389	+ 0·03	240
30	... ..	+ 2·4944	- 0·0323	...	- 19·597	+ 0·085	...	...
31	... ..	+ 2·7999	- 0·0183	...	- 19·596	+ 0·095	...	...
32	... ..	+ 2·8074	- 0·0160	...	- 19·555	+ 0·099	...	...
33	... ..	+ 2·8136	- 0·0160	...	- 19·541	+ 0·100	...	...
34	W. B. E. O. 897 ...	+ 3·0573	+ 0·0034	...	- 19·533	+ 0·109	...	...
35	71 Piscium ϵ ...	+ 3·1129	+ 0·0087	- 0·002	- 19·547	+ 0·119	0·00	288

15.—18.—Proper motions from "Greenwich Catalogue 1872."

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				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
36	8.2	1	1	3	18.27	150	15	0.8	1	0.79
37	8.9	2	1	4	6.11	18	33	35.4	2	0.87
38	9.1	1	1	4	57.63	127	20	28.4	1	0.88
39	86 Piscium ζ ... 1st...	5.4	...	1	6	50.19	83	7	25.0	4	0.83
40	O. A. N. 1363	7.0	1	1	9	0.64	18	17	42.9	1	0.80
41	1 Urs. Min. α (<i>Polaris</i>) ...	2.2	...	1	10	36.32	1	23	40.2	10	0.64
42	Brightone 263	8.0	1	1	15	9.38	150	46	2.3	1	0.87
43	45 Ceti θ^1	3.8	...	1	17	25.51	98	51	56.3	10	0.88
44	98 Piscium μ	5.2	...	1	23	16.11	84	32	15.5	1	0.75
45	99 Piscium η	4.5	...	1	24	25.36	75	20	9.5	10	0.88
46	Taylor 496	8.0	1	1	25	51.12	140	34	56.8	1	0.88
47	Taylor 514... ..	6.2	1	1	28	46.45	73	14	37.3	1	0.89
48	... ..	8.4	2	1	31	0.37	130	40	21.8	2	0.93
49	... ..	8.5	2	1	31	33.45	130	51	3.8	2	0.83
50	Taylor 539	5.9	1	1	31	54.34	148	56	42.3	1	0.88
51	106 Piscium ν	4.7	...	1	34	33.77	85	10	54.0	10	0.89
52	... ..	9.3	1	1	40	33.08	128	35	52.0	1	0.93
53	111 Piscium ξ	4.7	...	1	46	43.52	87	27	54.0	3	0.78
54	Lacaille 550	8.1	2	1	46	45.90	129	23	55.9	2	0.85
55	6 Arietis β	2.8	...	1	47	21.08	69	50	20.7	10	0.88
56	... ..	9.3	2	1	49	25.21	126	6	22.2	2	0.90
57	... ..	9.8	2	1	49	36.74	86	45	8.2	2	0.95
58	W. B. E. 1. 892.	9.3	2	1	51	9.10	86	58	29.2	2	0.95
59	... ..	9.0	1	1	52	26.62	145	33	16.5	1	0.93
60	... ..	9.7	1	1	53	5.73	151	21	44.4	1	0.87
61	W. B. E. 1. 940	7.6	2	1	53	30.07	86	15	8.3	2	0.97
62	... ..	9.6	1	1	56	17.16	129	26	7.8	1	0.87
63	... ..	9.5	3	1	56	17.60	87	28	22.2	3	0.95
64	... ..	9.4	2	1	57	40.55	87	34	24.8	2	0.94
65	13 Arietis α	2.0	1	1	59	44.17	67	9	48.7	2	0.85
66	... ..	9.7	2	2	1	3.88	87	17	23.4	2	0.92
67	... ..	9.2	1	2	1	10.33	148	46	29.3	1	0.80
68	Taylor 697	7.0	1	2	1	54.27	145	42	48.3	1	0.80
69	Lalande 4053	7.3	2	2	4	52.40	87	10	14.5	3	0.92
70	... ..	9.7	1	2	6	13.16	151	22	58.3	1	0.87

37.—40.—Stars for map of S Cassiopea Var. 4.

57.—58.—61.—Comparison stars for Sylvia in 1868.

63.—64.—66.—69.—Comparison stars for Camilla in 1868.