
MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1886

REDUCED TO JANUARY 1 OF THAT YEAR

Mean Positions of Stars for 1886, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
1	48 Andromedæ β ...	2.2	...	1	3	20.99	54	59	3.7	1	0.94
2	1 Ursæ Minoris α , (<i>Polaris</i>)	2.2	...	1	16	57.86	1	17	57.9	3	0.79
3	110 Piscium σ ...	4.4	...	1	39	22.42	81	24	58.2	4	0.78
4	43 Arietis σ ...	5.5	...	2	45	11.98	75	23	16.4	4	0.74
5	1 Tauri σ , Var. 5	Var.	...	3	18	40.78	81	22	23.1	6	0.85
6	18 Eridani ϵ ...	3.7	...	3	27	33.54	99	50	40.7	5	0.04
7	37 Tauri A ¹ ...	4.4	...	3	57	57.32	68	13	51.3	3	0.05
8	54 Tauri γ ...	3.9	...	4	13	18.33	74	38	55.9	4	0.07
9	57 Eridani μ ...	4.3	...	4	39	48.15	93	27	52.5	6	0.09
10	R. P. L. 37 ...	6.8	...	4	51	23.53	4	11	31.9	5	0.25
11	19 Orionis β (<i>Rigel</i>) ...	0.3	...	5	9	3.53	98	20	3.0	3	0.08
12	R. P. L. 40 ...	6.2	...	5	25	32.46	4	51	50.6	3	0.08
13	34 Orionis δ , Var. 1 ...	Var.	...	5	26	10.98	90	23	1.7	8	0.12
14	46 Orionis ϵ ...	1.8	...	5	30	25.69	91	16	32.4	9	0.12
15	53 Orionis κ ...	2.2	...	5	42	20.92	99	42	39.0	7	0.12
16	7 Geminorum η ...	3.5	...	6	7	59.66	67	27	38.3	1	0.09
17	51 Cephei (<i>Hev.</i>) ...	5.3	...	6	46	46.24	2	46	37.8	14	0.21
18	3 Canis Minoris β ...	3.1	...	7	20	58.06	81	28	55.5	1	0.08
19	17 Cancri β ...	3.8	...	8	10	19.94	80	27	47.1	3	0.26
20	43 Cancri γ ...	4.8	...	8	36	41.24	68	7	20.2	5	0.26
21	65 Cancri α ...	4.3	...	8	52	15.07	77	42	4.5	4	0.26
22	76 Cancri κ ...	5.0	...	9	1	34.32	78	52	24.2	5	0.27
23	Lalande 18162 ...	8.5	5	9	6	46.26	78	51	47.5	5	0.27
24	14 Leonis σ ...	3.8	...	9	35	3.93	79	35	20.9	5	0.30
25	24 Leonis μ ...	4.1	...	9	46	16.67	63	27	22.8	5	0.30
26	R. P. L. 72 ...	5.9	...	10	12	55.01	5	10	9.3	2	0.26
27	42 Hydræ μ ...	4.1	...	10	20	34.58	106	15	16.2	9	0.33
28	58 Leonis δ ...	5.0	...	10	54	40.38	85	46	13.3	8	0.33
29	84 Leonis τ ...	5.1	...	11	22	4.43	86	30	56.6	2	0.32
30	... ..	9.5	5	11	38	38.67	80	56	10.4	5	0.29
31	... ..	9.3	5	11	41	17.42	81	21	9.2	5	0.30
32	... ..	9.0	5	11	41	42.69	81	0	51.1	5	0.32
33	8 Virginis π ...	4.4	...	11	55	1.89	82	44	59.6	5	0.34
34	Lalande 22762 ...	8.7	5	12	2	12.94	83	19	43.9	5	0.27
35	R. P. L. 92 ...	6.7	...	12	13	29.64	2	55	50.4	4	0.35

12.—Groombridge 944.

23.—Comparison star for Ariadne in 1886.

26.—Groombridge 1620.

30—31—32—34.—Comparison stars for Vera in 1886.

35.—Groombridge 1871.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
1	43 Andromedæ β ...	+ 3.3280	+ 0.0286	+ 0.014	"	"	"	140
2	1 Ursæ Minoris α ...	+ 22.4929	+ 16.9580	+ 0.108	- 18.933	+ 1.089	+ 0.00	102
3	110 Piscium σ ...	+ 3.1572	+ 0.0111	+ 0.003	- 18.198	+ 0.200	- 0.06	232
4	43 Arietis σ ...	+ 3.3025	+ 0.0150	- 0.000	- 15.066	+ 0.323	+ 0.04	400
5	1 Tauri σ ...	+ 3.2270	+ 0.0115	- 0.005	- 12.978	+ 0.384	+ 0.07	477
6	18 Eridani ϵ ...	+ 2.8899	+ 0.0055	- 0.068	- 12.376	+ 0.336	- 0.01	493
7	37 Tauri A ¹ ...	+ 3.5324	+ 0.0153	+ 0.005	- 10.182	+ 0.447	+ 0.06	554
8	54 Tauri γ ...	+ 3.4003	+ 0.0115	+ 0.007	- 9.002	+ 0.446	+ 0.03	583
9	57 Eridani μ ...	+ 2.9964	+ 0.0055	- 0.000	- 6.875	+ 0.413	+ 0.00	657
10	R. P. L. 37 ...	+ 20.5020	+ 1.4802	...	- 5.907	+ 2.861	...	...
11	19 Orionis β ...	+ 2.8813	+ 0.0040	- 0.001	- 4.421	+ 0.412	- 0.01	736
12	R. P. L. 40 ...	+ 18.6040	+ 0.5814	...	- 3.004	+ 2.684	...	...
13	34 Orionis δ ...	+ 3.0635	+ 0.0038	- 0.001	- 2.948	+ 0.443	+ 0.01	787
14	46 Orionis ϵ ...	+ 3.0420	+ 0.0035	- 0.002	- 2.580	+ 0.441	- 0.01	809
15	53 Orionis κ ...	+ 2.8442	+ 0.0027	- 0.002	- 1.543	+ 0.414	- 0.00	844
16	7 Geminorum η ...	+ 3.6269	+ 0.0007	- 0.005	+ 0.700	+ 0.529	+ 0.00	909
17	51 Cephei (Hev.) ...	+ 30.0605	- 2.3200	- 0.040	+ 4.064	+ 4.291	+ 0.05	1880
18	3 Canis Minoris β ...	+ 3.2604	- 0.0041	- 0.004	+ 6.938	+ 0.444	+ 0.03	1079
19	17 Cancri β ...	+ 3.2616	- 0.0072	- 0.004	+ 10.799	+ 0.307	+ 0.04	1180
20	43 Cancri γ ...	+ 3.4885	- 0.0143	- 0.009	+ 12.667	+ 0.300	+ 0.03	1230
21	65 Cancri α ...	+ 3.2854	- 0.0098	+ 0.001	+ 13.692	+ 0.345	+ 0.02	1269
22	76 Cancri κ ...	+ 3.2571	- 0.0093	- 0.003	+ 14.277	+ 0.329	- 0.01	1287
23	Lalande 18162 ...	+ 3.2529	- 0.0094	...	+ 14.593	+ 0.320	...	...
24	14 Leonis σ ...	+ 3.2176	- 0.0093	- 0.010	+ 16.176	+ 0.272	+ 0.02	1360
25	24 Leonis μ ...	+ 3.4104	- 0.0198	- 0.019	+ 16.736	+ 0.271	+ 0.05	1384
26	R. P. L. 72 ...	+ 9.7288	- 1.5787	- 0.096	+ 17.904	+ 0.631	- 0.04	1399
27	42 Hydræ μ ...	+ 2.9085	+ 0.0040	- 0.010	+ 18.197	+ 0.171	+ 0.06	1451
28	58 Leonis δ ...	+ 3.1002	- 0.0039	- 0.002	+ 19.244	+ 0.120	+ 0.01	1526
29	84 Leonis τ ...	+ 3.0859	- 0.0020	- 0.001	+ 19.779	+ 0.066	+ 0.01	1570
30	... ..	+ 3.0923	- 0.0042	...	+ 19.966	+ 0.033	...	...
31	... ..	+ 3.0890	- 0.0038	...	+ 19.987	+ 0.028	...	...
32	... ..	+ 3.0893	- 0.0039	...	+ 19.990	+ 0.027	...	...
33	8 Virginis π ...	+ 3.0761	- 0.0022	- 0.003	+ 20.048	+ 0.002	+ 0.02	1618
34	Lalande 22762 ..	+ 3.0709	- 0.0015	...	+ 20.053	- 0.013
35	R. P. L. 92 ...	+ 1.5357	+ 0.0036	+ 0.285	+ 20.019	- 0.022	+ 0.02	1656

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				h.	m.	s.	°	'	"		
36	7 Corvi δ^a	3.1	...	12	23	57.98	105	52	49.6	2	0.44
37	29 Virginis γ^1	3.5	...	12	35	53.03	90	49	23.6	2	0.44
38	43 Virginis δ	3.7	...	12	40	51.65	85	58	57.7	3	0.44
39	47 Virginis ϵ	3.0	...	12	56	30.17	78	25	40.5	1	0.46
40	4 Bootis τ	4.5	...	13	41	50.80	71	58	29.5	3	0.47
41	93 Virginis τ	4.3	...	13	55	50.69	87	54	10.7	1	0.48
42	22 Bootis f	5.4	...	14	21	9.22	70	15	38.3	2	0.47
43	25 Bootis ρ	3.6	...	14	26	54.88	59	7	40.0	1	0.47
44	R. P. L. 110	7.1	...	14	52	17.76	3	34	46.7	4	0.73
45	72 Ophiuchi	3.8	...	18	1	56.68	80	27	7.4	1	0.59
46	23 Ursæ Minoris δ	4.3	...	18	9	5.05	3	23	21.6	7	0.14
47	58 Serpentis η	3.4	...	18	15	24.68	92	55	39.3	1	0.67
48	22 Sagittarii λ	3.1	...	18	20	56.07	115	28	58.9	2	0.63
49	13 Aquilæ ϵ	4.1	...	18	54	26.88	75	5	11.7	2	0.66
50	52 Sagittarii h^a	4.6	...	19	29	46.18	105	8	2.1	2	0.68
51	λ Ursæ Minoris	6.5	...	19	37	50.94	1	2	31.0	8	0.26
52	53 Aquilæ α (<i>Altair</i>)	1.0	..	19	45	13.21	81	25	54.5	5	0.70
53	65 Aquilæ θ	3.4	...	20	5	25.37	91	9	31.4	7	0.70
54	2 Delphini ϵ	4.1	...	20	27	45.91	79	5	0.4	4	0.72
55	R. P. L. 155	7.0	...	23	24	18.93	4	12	38.4	5	0.30

Observed with the Madras Meridian Circle in that Year.

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		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
36	7 Corvi δ^2 ...	+ 3.1120	+ 0.0118	- 0.014	+ 19.944	- 0.055	+ 0.15	1675
37	29 Virginis γ^1 ...	+ 3.0754	+ 0.0043	- 0.039	+ 19.808	- 0.078	- 0.02	1698
38	43 Virginis δ ...	+ 3.0522	+ 0.0025	- 0.034	+ 19.582	- 0.103	+ 0.05	1723
39	47 Virginis ϵ ...	+ 3.0056	- 0.0007	- 0.019	+ 19.448	- 0.114	- 0.03	1735
40	4 Bootis τ ...	+ 2.8854	- 0.0007	- 0.035	+ 18.16	- 0.188	- 0.04	1810
41	93 Virgins τ ...	+ 3.0437	+ 0.0064	- 0.001	+ 17.546	- 0.222	+ 0.03	1829
42	22 Bootis f ...	+ 2.7953	+ 0.0009	- 0.006	+ 16.369	- 0.242	- 0.03	1864
43	25 Bootis ρ ...	+ 2.5944	- 0.0015	- 0.009	+ 16.072	- 0.233	- 0.13	1866
44	R. P. L. 110 ...	- 11.5221	+ 2.9796	...	+ 14.649	+ 1.142	...	...
45	72 Ophiuchi ...	+ 2.8475	+ 0.0019	- 0.006	- 0.169	- 0.415	- 0.09	2275
46	23 Ursae Minoris δ ...	- 19.4823	- 0.2624	+ 0.026	- 0.795	+ 2.839	- 0.04	2395
47	58 Serpentes η ...	+ 3.1405	+ 0.0010	- 0.040	- 1.348	- 0.456	+ 0.68	2298
48	22 Sagittarii λ ...	+ 3.7070	- 0.0013	- 0.005	- 1.829	- 0.537	+ 0.20	2310
49	13 Aquilae ϵ ...	+ 2.7263	+ 0.0004	- 0.005	- 4.719	- 0.385	+ 0.08	2390
50	52 Sagittarii h^2 ...	+ 3.6521	- 0.0102	+ 0.002	- 7.656	- 0.490	+ 0.01	2478
51	λ Ursae Minoris ...	- 63.8390	- 28.9195	- 0.050	- 8.304	+ 8.478	+ 0.01	2795
52	53 Aquilae α ...	+ 2.8919	- 0.0014	+ 0.035	- 8.886	- 0.374	- 0.38	2524
53	65 Aquilae θ ...	+ 3.0955	- 0.0042	- 0.000	- 10.434	- 0.382	- 0.01	2576
54	2 Delphini ϵ ...	+ 2.8664	- 0.0013	- 0.001	- 12.052	- 0.330	+ 0.02	2642
55	R. P. L. 155 ...	+ 0.2564	- 0.3328	...	- 19.810	+ 0.003	...	...