MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1872

REDUCED TO JANUARY 1 OF THAT YEAR

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
1	Lalande 47303	6·5	5	0	1	14·35	113	13	13·6	5	0·86
2	21 Androm. α (*Alpheratz*)...	2·1	...	0	1	46·44	61	36	59·9	5	0·83
3	... ...	9·2	1	0	6	35·71	131	5	38·7	1	0·90
4	88 Pegasi γ (*Algenib*) ...	3·0	...	0	6	38·71	75	31	42·4	9	0·84
5	... ...	9·0	2	0	17	12·29	26	24	36·4	2	0·84
6	R Andromedæ, Var. 1 ...	7·5	2	0	17	16·36	52	7	53·6	2	0·79
7	O. A. N. 317	8·7	3	0	18	2·93	26	4	14·6	3	0·85
8	... ...	9·0	1	0	18	47·28	26	51	23·6	1	0·83
9	45 Piscium	6·0	2	0	19	6·01	83	1	0·5	2	0·86
10	12 Ceti	6·2	...	0	23	30·42	94	39	54·2	5	0·84
11	... ...	8·3	...	0	27	7·33	144	51	42·0	1	0·76
12	13 Ceti	5·9	1	0	28	39·69	94	17	53·4	1	0·86
13	Taylor 184	6·0	2	0	34	11·25	95	3	17·2	2	0·85
14	W. B. E. 0·585	8·9	4	0	34	59·15	94	56	8·7	4	0·86
15	16 Ceti β	2·1	...	0	37	9·78	108	41	23·6	10	0·84
16	58 Piscium	5·7	...	0	40	20·93	78	43	29·5	1	0·77
17	... ...	9·7	1	0	49	15·22	153	47	12·1	1	0·92
18	2 Ursæ Minoris	4·5	...	0	51	39·34	4	25	54·4	1	0·20
19	70 Piscium	6·2	4	0	55	27·56	82	45	0·4	4	0·86
20	71 Piscium ε	4·5	...	0	56	18·05	82	47	58·2	6	0·86
21	... ...	8·0	1	1	3	28·09	150	13	43·4	1	0·90
22	... ...	8·9	1	1	4	22·76	18	32	17·2	1	0·86
23	... ...	8·2	2	1	7	44·60	152	57	31·9	2	0·89
24	... ...	7·3	1	1	9	23·45	18	16	25·7	1	0·92
25	... ...	9·3	1	1	10	33·46	81	47	13·0	1	0·89
26	1 Urs. Min. α (*Polaris*) ...	2·2	...	1	11	57·19	1	22	23·9	14	0·53
27	44 Ceti	8·0	1	1	17	36·24	98	40	26·3	1	0·81
28	45 Ceti θ^1	3·8	...	1	17	37·60	98	50	41·0	4	0·90
29	99 Piscium η	3·7	...	1	24	38·09	75	18	54·3	5	0·88
30	Taylor 496	8·4	2	1	26	1·29	140	33	40·7	2	0·83
31	... ...	8·4	1	1	26	2·54	150	19	11·9	1	0·89
32	102 Piscium π	6·0	2	1	30	18·83	78	30	49·6	2	0·87
33	α Eridani (*Achernar*) ...	1·0	...	1	32	56·95	147	53	16·8	2	0·88
34	106 Piscium ν	4·7	...	1	34	46·31	85	9	39·6	6	0·74
35	... ...	8·7	1	1	38	49·97	152	0	28·0	1	0·91

1.—Comparison star for Egiria in 1862.
5—7—8.—Observed for map of Gemma's Nova of 1572.
22—24.—Observed for map of S Cassiopeæ, Var. 2.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
1	Lalande 47303 ...	+ 3·0690	− 0·0108	...	− 20·054	+ 0·012	...	...
2	21 Andromedæ α ...	+ 3·0778	+ 0·0182	+ 0·010	− 20·054	+ 0·013	+ 0·16	3215
3	... ...	+ 3·0387	− 0·0233	...	− 20·047	+ 0·021	...	...
4	88 Pegasi γ (*Algenib*)	+ 3·0821	+ 0·0100	− 0·001	− 20·045	+ 0·022	+ 0·01	1
5	... ...	+ 3·2741	+ 0·0704	...	− 19·998	+ 0·044	...	...
6	R Androm., Var. 1 ...	+ 3·1505	+ 0·0271	...	− 19·997	+ 0·043	...	...
7	O. A. N. 317 ...	+ 3·2871	+ 0·0723	...	− 19·992	+ 0·047	...	...
8	... ...	+ 3·2884	+ 0·0697	...	− 19·987	+ 0·048	...	...
9	45 Piscium	+ 3·0859	+ 0·0066	+ 0·000	− 19·985	+ 0·046	+ 0·05	26
10	12 Ceti	+ 3·0610	+ 0·0008	− 0·000	− 19·950	+ 0·055	+ 0·01	38
11	... ...	+ 2·8480	− 0·0325	...	− 19·914	+ 0·058	...	...
12	13 Ceti	+ 3·0597	+ 0·0014	+ 0·027	− 19·897	+ 0·064	+ 0·02	50
13	Taylor 184	+ 3·0546	+ 0·0012	...	− 19·832	+ 0·075	...	...
14	W. B. E. 0·585 ...	+ 3·0546	+ 0·0013	...	− 19·821	+ 0·078	...	...
15	16 Ceti β	+ 2·9991	− 0·0055	+ 0·015	− 19·791	+ 0·080	− 0·03	70
16	58 Piscium	+ 3·1189	+ 0·0101	+ 0·002	− 19·745	+ 0·087	+ 0·01	76
17	... ...	+ 2·4931	− 0·0323	...	− 19·593	+ 0·085	...	...
18	2 Ursæ Minoris ...	+ 6·9272	+ 1·3216	...	− 19·547	+ 0·234	...	...
19	70 Piscium	+ 3·1130	+ 0·0086	− 0·002	− 19·470	+ 0·116	− 0·07	110
20	71 Piscium ε	+ 3·1132	+ 0·0087	− 0·007	− 19·453	+ 0·119	− 0·04	113
21	... ...	+ 2·4333	− 0·0237	...	− 19·291	+ 0·105	...	...
22	... ...	+ 4·1774	+ 0·1517	...	− 19·268	+ 0·177	...	...
23	... ...	+ 2·3092	− 0·0225	...	− 19·185	+ 0·106	...	...
24	... ...	+ 4·2793	+ 0·1510	...	− 19·142	+ 0·194	...	...
25	... ...	+ 3·1307	+ 0·0099	...	− 19·111	+ 0·146	...	...
26	1 Urs. Min. α (*Polaris*)	+ 20·2026	+ 14·4666	+ 0·109	− 19·074	+ 0·922	+ 0·00	102
27	44 Ceti	+ 3·0043	+ 0·0019	+ 0·008	− 18·916	+ 0·154	+ 0·06	183
28	45 Ceti θ^1	+ 3·0030	+ 0·0018	− 0·007	− 18·916	+ 0·154	+ 0·20	184
29	99 Piscium η... . .	+ 3·1986	+ 0·0141	− 0·000	− 18·702	+ 0·177	+ 0·00	203
30	Taylor 496	+ 2·4768	− 0·0141	...	− 18·662	+ 0·140	...	...
31	... ...	+ 2·2121	− 0·0148	...	− 18·657	+ 0·126	...	...
32	102 Piscium π ...	+ 3·1766	+ 0·0125	− 0·006	− 18·517	+ 0·185	− 0·05	214
33	α Eridani (*Achernar*)..	+ 2·2317	− 0·0128	+ 0·008	− 18·428	+ 0·137	+ 0·07	Stone
34	106 Piscium ν ...	+ 3·1176	+ 0·0091	− 0·003	− 18·365	+ 0·191	− 0·01	228
35	... ...	+ 2·0209	− 0·0089	...	− 18·219	+ 0·131	...	...

33.—Proper motions from "*Stone's Cape Catalogue.*"

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
36	... ...	9·3	1	1	40	10·69	149	24	56·1	1	0·92
37	... ...	...	...	1	40	43·47	128	34	35·2	1	0·81
38	... ...	9·7	...	1	46	26·57	148	55	34·2	1	0·90
39	6 Arietis β	2·8	...	1	47	34·30	69	49	8·2	9	0·70
40	V Piscium, Var. 5 ...	8·0	2	1	47	36·90	81	51	0·1	3	0·93
41	Bonn +3°.266	10·0	1	1	49	49·35	86	43	56·6	1	0·94
42	8 Arietis ϵ	6·0	2	1	50	21·54	72	48	31·3	3	0·87
43	W. B. E. I. 892	8·9	1	1	51	21·40	86	57	18·5	1	0·83
44	... ...	9·1	2	1	52	35·08	145	46	2·8	2	0·98
45	... ...	9·6	2	1	53	13·50	151	20	32·5	2	0·94
46	... ...	8·5	1	1	56	27·16	129	56	11·6	1	0·92
47	... ...	9·3	1	1	56	27·44	129	24	54·5	1	0·83
48	... ...	9·0	2	1	57	52·86	87	33	14·1	2	0·88
49	13 Arietis α	2·0	...	1	59	57·57	67	8	38·9	5	0·71
50	... ...	9·6	2	2	1	18·51	148	45	20·8	2	0·94
51	17 Arietis η	5·8	3	2	5	38·16	69	23	30·2	3	0·88
52	... ...	10·3	2	2	7	0·33	87	10	17·9	2	0·83
53	R Arietis, Var. 1	9·0	2	2	8	50·38	65	32	24·7	2	0·85
54	67 Ceti	5·5	...	2	10	35·98	97	0	47·8	6	0·62
55	22 Arietis θ	5·6	...	2	11	0·47	70	41	33·4	1	0·82
56	73 Ceti ξ^2	4·4	...	2	21	21·28	82	6	53·6	6	0·61
57	... ...	9·7	1	2	29	25·48	147	35	22·0	1	0·83
58	... ...	10·2	1	2	29	36·98	84	58	30·0	1	0·83
59	32 Arietis ν	6·0	2	2	31	33·06	68	35	33·5	2	0·86
60	86 Ceti γ	3·6	...	2	36	40·09	87	18	17·9	7	0·77
61	42 Arietis π	5·9	1	2	42	9·00	73	4	11·2	1	0·86
62	Lalande 5483	8·4	3	2	51	29·77	80	18	36·4	3	0·97
63	48 Arietis ϵ	5·8	1	2	51	53·63	69	10	24·6	1	0·87
64	Lalande 5558	8·4	2	2	53	54·68	80	15	55·9	2	0·95
65	92 Ceti α (*Menkar*) ...	2·7	...	2	55	35·36	86	24	50·3	6	0·76
66	25 Persei ρ, Var. 2 ...	Var.	...	2	56	58·75	51	39	27·7	1	0·86
67	26 Persei β, Var. 1 (*Algol*)	Var.	...	2	59	50·81	49	32	22·5	1	0·98
68	R. P. L. 33	5·9	...	3	2	24·70	5	33	0·1	1	0·43
69	57 Arietis δ	4·5	...	3	4	18·73	70	45	34·1	7	0·82
70	Taylor 1081	7·8	1	3	5	23·20	151	38	25·6	1	0·87

41—43.—Comparison stars for Sylvia in 1868.
48—52.—Comparison stars for Camilla in 1868.
61.—Comparison star for Mars in 1879.
62—64.—Comparison stars for Isis in 1872.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
36	... ...	+ 2·1146	− 0·0100	...	− 18·169	+ 0·138	...	...
37	... ...	+ 2·6184	− 0·0081	...	− 18·148	+ 0·171	...	...
38	... ...	+ 2·0785	− 0·0082	...	− 17·931	+ 0·144	...	...
39	6 Arietis β	+ 3·2945	+ 0·0183	+ 0·005	− 17·886	+ 0·226	+ 0·10	252
40	V Piscium, Var. 5 ...	+ 3·1588	+ 0·0111	...	− 17·884	+ 0·216	...	...
41	Bonn +3°.266 ...	+ 3·1073	+ 0·0087	...	− 17·798	+ 0·217	...	...
42	8 Arietis ι	+ 3·2637	+ 0·0163	+ 0·001	− 17·774	+ 0·228	+ 0·02	262
43	W. B. E. I. 892 ...	+ 3·1053	+ 0·0087	...	− 17·733	+ 0·219	...	...
44	... ...	+ 2·1452	− 0·0077	...	− 17·683	+ 0·156	...	...
45	... ...	+ 1·9122	− 0·0040	...	− 17·657	+ 0·140	...	...
46	... ...	+ 2·5276	− 0·0065	...	− 17·521	+ 0·187	...	...
47	... ...	+ 2·5376	− 0·0064	...	− 17·521	+ 0·188	...	...
48	... ...	+ 3·1003	+ 0·0086	...	− 17·459	+ 0·230	...	...
49	13 Arietis α	+ 3·3539	+ 0·0203	+ 0·013	− 17·370	+ 0·252	+ 0·13	287
50	... ...	+ 1·9593	− 0·0036	...	− 17·311	+ 0·151	...	...
51	17 Arietis η	+ 3·3342	+ 0·0188	+ 0·009	− 17·116	+ 0·260	− 0·02	303
52	... ...	+ 3·1069	+ 0·0090	...	− 17·053	+ 0·246	...	...
53	R Arietis, Var. 1 ...	+ 3·3962	+ 0·0216	...	− 16·969	+ 0·270	...	...
54	67 Ceti	+ 2·9834	+ 0·0049	+ 0·004	− 16·885	+ 0·242	+ 0·11	321
55	22 Arietis θ	+ 3·3256	+ 0·0179	− 0·002	− 16·867	+ 0·269	− 0·01	320
56	73 Ceti ξ^2	+ 3·1793	+ 0·0117	+ 0·001	− 16·360	+ 0·276	+ 0·00	347
57	... ...	+ 1·7945	+ 0·0024	...	− 15·941	+ 0·166	...	...
58	... ...	+ 3·1436	+ 0·0103	...	− 15·930	+ 0·285	...	...
59	32 Arietis ν	+ 3·3941	+ 0·0193	− 0·002	− 15·827	+ 0·310	+ 0·01	367
60	86 Ceti γ	+ 3·1119	+ 0·0094	− 0·011	− 15·549	+ 0·294	+ 0·16	383
61	42 Arietis π	+ 3·3368	+ 0·0163	− 0·001	− 15·240	+ 0·322	− 0·00	397
62	Lalande 5483 ...	+ 3·2274	+ 0·0124	...	− 14·697	+ 0·327	...	...
63	48 Arietis ε	+ 3·4189	+ 0·0185	− 0·003	− 14·673	+ 0·345	+ 0·01	415
64	Lalande 5558... ...	+ 3·2299	+ 0·0124	...	− 14·553	+ 0·330	...	...
65	92 Ceti α (*Menkar*) ...	+ 3·1302	+ 0·0098	− 0·003	− 14·451	+ 0·323	+ 0·07	428
66	25 Persei ρ, Var. 2 ...	+ 3·8100	+ 0·0332	+ 0·010	− 14·367	+ 0·393	+ 0·09	429
67	26 Persei β, Var. 1 ...	+ 3·8780	+ 0·0356	− 0·002	− 14·190	+ 0·405	− 0·01	436
68	R. P. L. 33	+ 12·9030	+ 1·5959	...	− 14·031	+ 1·351	+ 0·12	Gr.
69	57 Arietis δ	+ 3·4083	+ 0·0171	+ 0·010	− 13·911	+ 0·364	− 0·01	446
70	Taylor 1081	+ 1·2801	+ 0·0156	...	− 13·844	+ 0·141	...	...

68—70.—Proper motions from "*Greenwich Catalogue* 1872."

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
71	58 Arietis ζ	4·9	...	3	7	32·82	69	25	56·0	1	0·99
72	... ...	9·2	1	3	12	40·98	130	8	45·7	1	0·01
73	... ...	8·7	1	3	12	52·08	129	25	57·5	1	0·94
74	... ...	8·0	1	3	13	38·94	125	38	5·9	1	0·98
75	61 Arietis τ^1	5·5	1	3	13	50·18	69	18	58·5	1	0·90
76	... ...	9·5	1	3	15	15·63	151	30	29·7	1	0·95
77	2 Tauri ξ	3·8	...	3	20	14·05	80	42	55·5	1	0·99
78	... ...	9·6	1	3	21	9·66	54	46	5·5	1	0·95
79	... ...	8·9	2	3	22	24·79	88	10	44·1	2	0·94
80	... ...	9·6	2	3	23	32·73	130	8	35·6	2	0·48
81	... ...	9·0	1	3	23	57·59	126	20	55·8	1	0·02
82	... ...	8·1	1	3	25	7·48	129	0	2·6	1	0·99
83	... ...	9·3	2	3	32	2·77	129	48	26·6	2	0·02
84	... ...	8·1	1	3	32	30·75	131	19	7·1	1	0·04
85	Lacaille 1166	9·0	1	3	33	19·50	129	11	37·6	2	0·94
86	... ...	8·8	2	3	33	36·87	127	41	34·3	2	0·93
87	Lacaille 1192	7·9	2	3	35	9·71	147	42	13·5	2	0·51
88	... ...	8·6	1	3	35	29·56	150	11	41·1	1	0·98
89	... ...	9·9	1	3	36	4·53	129	8	58·4	1	0·95
90	... ...	8·0	1	3	37	9·29	148	25	56·4	1	0·05
91	17 Tauri (*Electra*) ...	3·8	...	3	37	16·64	66	17	29·4	2	0·96
92	... ...	7·9	1	3	39	48·15	66	29	2·6	1	0·05
93	25 Tauri η (*Alcyone*) ...	3·0	...	3	39	52·67	66	17	34·8	5	0·76
94	... ...	8·0	1	3	41	6·21	147	1	36·9	1	0·02
95	Lacaille 1242	8·7	2	3	41	56·15	147	3	44·5	2	0·02
96	33 Tauri	...	...	3	49	28·51	67	11	55·4	4	0·70
97	... ...	9·7	1	3	49	55·58	129	13	16·5	1	0·01
98	... ...	8·8	1	3	50	6·17	129	10	45·9	1	0·05
99	34 Eridani γ^1	3·0	...	3	52	3·48	103	52	28·2	6	0·35
100	... ...	10·0	1	3	53	22·57	128	23	58·0	1	0·02
101	... ...	9·0	1	3	53	52·89	143	7	0·9	1	0·03
102	... ...	9·2	1	3	54	58·82	129	9	28·0	1	0·94
103	... ...	9·0	1	3	55	50·83	129	18	15·5	1	0·94
104	Taylor 1392	6·9	1	3	55	58·28	147	28	0·5	1	0·05
105	R. P. L. 35	6·7	...	3	57	8·73	4	47	11·2	2	0·98

78.—Observed for map of R Persei, Var. 3.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
71	58 Arietis ζ	+ 3·4384	+ 0·0176	− 0·003	− 13·706	+ 0·373	+ 0·07	451
72	... ...	+ 2·2318	+ 0·0012	...	− 13·374	+ 0·249	...	...
73	... ...	+ 2·2523	+ 0·0011	...	− 13·363	+ 0·251	...	...
74	... ...	+ 2·3553	+ 0·0011	...	− 13·312	+ 0·263	...	...
75	61 Arietis τ^1... ...	+ 3·4501	+ 0·0175	+ 0·001	− 13·299	+ 0·382	+ 0·03	465
76	... ...	+ 1·2183	+ 0·0166	...	− 13·205	+ 0·140	...	...
77	2 Tauri ξ	+ 3·2397	+ 0·0117	+ 0·003	− 12·876	+ 0·368	+ 0·05	481
78	... ...	+ 3·7987	+ 0·0279	...	− 12·813	+ 0·431	...	...
79	... ...	+ 3·1050	+ 0·0089	...	− 12·729	+ 0·355	...	...
80	... ...	+ 2·1973	+ 0·0018	...	− 12·652	+ 0·254	...	...
81	... ...	+ 2·3076	+ 0·0016	...	− 12·624	+ 0·266	...	...
82	... ...	+ 2·2273	+ 0·0018	...	− 12·544	+ 0·258	...	...
83	... ...	+ 2·1821	+ 0·0023	...	− 12·066	+ 0·259	...	...
84	... ...	+ 2·1320	+ 0·0025	...	− 12·034	+ 0·250	...	...
85	Lacaille 1166 ...	+ 2·1977	+ 0·0023	...	− 11·976	+ 0·262	...	...
86	... ...	+ 2·2427	+ 0·0021	...	− 11·957	+ 0·268	...	...
87	Lacaille 1192 ...	+ 1·3656	+ 0·0120	...	− 11·848	+ 0·165	...	...
88	... ...	+ 1·1870	+ 0·0159	...	− 11·824	+ 0·145	...	...
89	... ...	+ 2·1913	+ 0·0024	...	− 11·783	+ 0·264	...	...
90	... ...	+ 1·3055	+ 0·0131	...	− 11·706	+ 0·160	...	...
91	17 Tauri (*Electra*) ...	+ 3·5491	+ 0·0178	− 0·000	− 11·697	+ 0·426	+ 0·04	509
92	... ...	+ 3·5485	+ 0·0176	...	− 11·516	+ 0·428	...	...
93	25 Tauri η (*Alcyone*)..	+ 3·5529	+ 0·0177	− 0·000	− 11·512	+ 0·430	+ 0·04	521
94	... ...	+ 1·3783	+ 0·0114	...	− 11·424	+ 0·170	...	...
95	Lacaille 1242 ...	+ 1·3717	+ 0·0114	...	− 11·364	+ 0·170	...	...
96	33 Tauri	+ 3·5455	+ 0·0164	+ 0·005	− 10·814	+ 0·441	+ 0·02	541
97	... ...	+ 2·1521	+ 0·0029	...	− 10·781	+ 0·270	...	...
98	... ...	+ 2·1530	+ 0·0029	...	− 10·768	+ 0·270	...	...
99	34 Eridani γ^1 ...	+ 2·7921	+ 0·0047	+ 0·003	− 10·624	+ 0·351	+ 0·11	546
100	... ...	+ 2·1702	+ 0·0030	...	− 10·525	+ 0·274	...	...
101	... ...	+ 1·5535	+ 0·0082	...	− 10·487	+ 0·198	...	...
102	... ...	+ 2·1415	+ 0·0031	...	− 10·406	+ 0·271	...	...
103	... ...	+ 2·1344	+ 0·0031	...	− 10·340	+ 0·271	...	...
104	Taylor 1392	+ 1·2757	+ 0·0126	...	− 10·332	+ 0·164	...	...
105	R. P. L. 35	+ 16·7991	+ 1·8121	+ 0·057	− 10·243	+ 2·111	− 0·05	Gr.

795.—Proper motions from "*Greenwich Catalogue* 1872."

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
106	... ...	9·0	1	4	5	8·60	150	4	18·2	1	0·02
107	38 Eridani o^1	4·1	...	4	5	37·07	97	10	24·3	11	0·53
108	Lacaille 1418	8·3	1	4	12	39·34	143	38	30·7	1	0·03
109	... ...	9·2	1	4	12	45·70	129	9	36·4	1	0·01
110	Lacaille 1425	5·8	2	4	13	7·36	152	30	52·6	2	0·03
111	... ...	9·9	1	4	15	31·41	129	6 5	41·0	1	0·06
112	... ...	9·0	1	4	15	56·95	128	38	39·6	1	0·02
113	62 Tauri	6·5	1	4	16	16·45	65	59	59·4	1	0·08
114	74 Tauri ϵ...	3·7	...	4	21	8·63	71	6	21·8	10	0·22
115	R Tauri, Var. 2	8·0	2	4	21	16·92	80	7	30·9	2	0·99
116	... ...	9·8	1	4	27	20·58	150	32	56·3	1	0·02
117	87 Tauri α (*Aldebaran*) ...	1·0	...	4	28	34·64	73	45	3·0	9	0·04
118	... ...	9·0	1	4	31	54·18	142	58	35·5	1	0·08
119	Lacaille 1551—2nd ...	10·0	1	4	32	18·80	153	5	22·4	1	0·94
120	... ...	8·8	2	4	33	42·94	144	52	51·6	2	0·97
121	... ...	8·7	2	4	34	3·26	67	31	6·5	2	0·49
122	Lacaille 1566	7·0	1	4	35	54·02	148	27	28·8	1	0·06
123	... ...	10·0	1	4	36	49·19	64	18	14·1	1	0·02
124	... ...	10·2	1	4	39	18·49	153	15	1·5	1	0·93
125	3 Aurigæ ι	2·7	...	4	48	39·58	57	2	21·8	15	0·16
126	R Orionis, Var. 3... ...	9·6	2	4	52	4·11	82	4	1·9	3	0·95
127	... ...	8·7	1	4	52	35·13	129	39	4·7	1	0·04
128	7 Aurigæ ϵ, Var. 1 ...	Var.	...	4	52	47·01	46	22	8·2	1	0·93
129	... ...	9·1	2	4	52	47·28	150	37	8·3	2	0·07
130	2 Leporis ϵ	3·3	...	5	0	2·51	112	32	42·1	9	0·14
131	Taylor 1852	6·0	1	5	2	19·77	144	34	53·5	1	0·04
132	15 Orionis...	6·4	1	5	2	22·45	74	34	7·8	2	0·09
133	... ...	8·7	2	5	6	17·47	131	45	6·6	2	0·06
134	13 Aurigæ α (*Capella*) ...	0·2	...	5	7	14·21	44	8	7·7	1	0·09
135	19 Orionis β (*Rigel*) ...	0·3	...	5	8	23·22	98	21	6·4	6	0·35
136	... ...	9·0	1	5	8	35·38	150	35	46·3	1	0·05
137	109 Tauri ν	6·2	2	5	11	35·31	68	2	19·1	2	0·06
138	... ...	9·1	3	5	13	17·44	75	4	25·6	3	0·10
139	... ...	9·5	3	5	14	51·45	75	5	56·6	3	0·10
140	112 Tauri β	1·9	...	5	18	12·12	61	30	12·6	8	0·15

[6]

119—124.—Observed for map of R Reticuli, Var. 1.
138.—Comparison star for Asia in 1866.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
106	... ...	+ 1·0356	+ 0·0165	...	− 9·630	+ 0·136	...	...
107	38 Eridani o^1 ...	+ 2·9244	+ 0·0058	− 0·001	− 9·598	+ 0·379	− 0·09	568
108	Lacaille 1418 ...	+ 1·4517	+ 0·0088	...	− 9·055	+ 0·193	...	...
109	... ...	+ 2·1004	+ 0·0035	...	− 9·046	+ 0·277	...	...
110	Lacaille 1425 ...	+ 0·7769	+ 0·0210	...	− 9·017	+ 0·105	...	...
111	... ...	+ 2·0962	+ 0·0035	...	− 8·829	+ 0·279	...	...
112	... ...	+ 2·1114	+ 0·0035	...	− 8·795	+ 0·281	...	...
113	62 Tauri	+ 3·6076	+ 0·0146	− 0·000	− 8·769	+ 5·477	+ 0·02	595
114	74 Tauri ϵ	+ 3·4878	+ 0·0120	+ 0·007	− 8·385	+ 0·466	+ 0·03	609
115	R Tauri, Var. 2 ...	+ 3·2837	+ 0·0092	...	− 8·374	+ 0·439	...	...
116	... ...	+ 0·8953	+ 0·0162	...	− 7·889	+ 0·123	...	...
117	87 Tauri α (*Aldebaran*)	+ 3·4312	+ 0·0105	+ 0·004	− 7·790	+ 0·464	+ 0·18	630
118	... ...	+ 1·4290	+ 0·0082	...	− 7·521	+ 0·196	...	...
119	Lacaille 1551—2nd...	+ 0·6284	+ 0·0205	...	− 7·487	+ 0·088	...	...
120	... ...	+ 1·3045	+ 0·0096	...	− 7·373	+ 0·180	...	...
121	... ...	+ 3·5870	+ 0·0122	...	− 7·346	+ 0·489	...	...
122	Lacaille 1566... ...	+ 1·0391	+ 0·0128	...	− 7·195	+ 0·144	...	...
123	... ...	+ 3·6736	+ 0·0130	...	− 7·121	+ 0·503	...	...
124	... ...	+ 0·5825	+ 0·0199	...	− 6·916	+ 0·083	...	...
125	3 Aurigæ ι	+ 3·8974	+ 0·0144	+ 0·001	− 6·142	+ 0·544	+ 0·00	677
126	R Orionis, Var. 3 ...	+ 3·2503	+ 0·0068	...	− 5·858	+ 0·456	...	...
127	... ...	+ 2·0118	+ 0·0038	...	− 5·815	+ 0·284	...	...
128	7 Aurigæ ϵ, Var. 1 ...	+ 4·2924	+ 0·0199	− 0·002	− 5·798	+ 0·602	+ 0·01	690
129	... ...	+ 0·7991	+ 0·0139	...	− 5·798	+ 0·113	...	...
130	2 Leporis ϵ	+ 2·5360	+ 0·0033	+ 0·000	− 5·187	+ 0·359	+ 0·07	713
131	Taylor 1852	+ 1·2514	+ 0·0077	...	− 4·993	+ 0·179	...	...
132	15 Orionis	+ 3·4297	+ 0·0074	− 0·001	− 4·989	+ 0·486	− 0·01	714
133	... ...	+ 1·9115	+ 0·0038	...	− 4·657	+ 0·273	...	...
134	13 Aurigæ α (*Capella*)	+ 4·4137	+ 0·0173	+ 0·008	− 4·577	+ 0·629	+ 0·42	722
135	19 Orionis β (*Rigel*)...	+ 2·8808	+ 0·0040	− 0·001	− 4·478	+ 0·412	− 0·01	736
136	... ...	+ 0·7593	+ 0·0117	...	− 4·461	+ 0·110	...	...
137	109 Tauri n	+ 3·5994	+ 0·0078	+ 0·001	− 4·205	+ 0·515	+ 0·08	741
138	... ...	+ 3·4211	+ 0·0063	...	− 4·059	+ 0·491	...	...
139	... ...	+ 3·4210	+ 0·0062	...	− 3·925	+ 0·491	...	...
140	112 Tauri β	+ 3·7860	+ 0·0082	+ 0·001	− 3·637	+ 0·545	+ 0·18	756

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
141	Taylor 1984	7·7	1	5	18	56·95	150	54	22·7	1	0·08
142	... ...	8·6	1	5	18	58·68	129	57	35·8	1	0·05
143	Taylor 1973	6·2	1	5	19	10·50	129	47	56·9	1	0·04
144	115 Tauri	6·0	3	5	19	42·18	72	9	2·0	3	0·39
145	R. P. L. 40	6·4	...	5	21	13·93	4	52	34·3	1	0·95
146	Lacaille 1854	7·8	1	5	21	51·84	137	12	28·3	1	0·05
147	λ Doradûs	6·5	1	5	24	27·21	149	1	19·4	1	0·09
148	... ...	9·0	1	5	25	26·92	130	35	0·1	1	0·10
149	34 Orionis δ, Var. 1 ...	Var.	...	5	25	28·03	90	23	46·3	4	0·03
150	... ...	9·2	...	5	25	36·10·37	155	50	55·4	1	0·12
151	11 Leporis α	2·7	...	5	27	5·07	107	54	57·2	4	0·53
152	Taylor 2057	7·3	1	5	28	5·93	151	55	18·1	1	0·04
153	46 Orionis ε	1·8	...	5	29	43·10	91	17	10·8	4	0·29
154	... ...	9·4	1	5	29	59·29	135	21	44·1	1	0·11
155	123 Tauri ζ	3·0	...	5	29	59·68	68	56	17·6	2	0·02
156	... ...	7·3	1	5	31	5·37	150	12	44·5	1	0·05
157	... ...	8·3	2	5	32	16·03	123	55	5·0	2	0·05
158	Lacaille 1916	7·9	2	5	32	40·74	121	8	21·9	2	0·09
159	126 Tauri	5·9	2	5	33	53·93	73	32	7·6	3	0·09
160	α Columbæ	2·7	...	5	35	0·90	124	8	38·3	3	0·35
161	... ...	8·7	1	5	36	51·17	135	48	24·7	1	0·10
162	... ...	9·0	1	5	36	59·31	129	57	37·0	1	0·11
163	... ...	8·5	1	5	39	37·42	79	0	1·1	1	0·10
164	Taylor 2145	6·3	2	5	40	3·39	135	53	35·8	2	0·06
165	Lacaille 1984	7·0	1	5	40	57·37·51	130	15	8·3	1	0·12
166	Lacaille 2010	9·0	1	5	42	9·06·16	146	58	9·8	1	0·11
167	... ...	7·6	2	5	42	20·05	137	3	21·9	2	0·08
168	... ...	9·5	1	5	44	57·03·18	137	10	8·3	1	0·12
169	54 Orionis χ^1	4·6	...	5	46	48·10	69	45	1·0	1	0·06
170	... ...	8·8	1	5	47	15·02	135	46	45·2	1	0·08
171	58 Orionis α, Var. 1 ...	Var.	...	5	48	14·48	82	37	8·6	6	0·21
172	... ...	8·9	2	5	49	33·70	121	9	44·8	2	0·09
173	... ...	9·3	2	5	49	52·34·48	130	1	13·6	2	0·12
174	... ...	9·5	1	5	49	58·28	63	50	5·0	1	0·11
175	Lacaille 2073	7·5	2	5	50	43·74	137	12	34·3	2	0·08

163.—Comparison star for Sappho in 1866.
174.—Comparison star for Urania in 1862.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
141	Taylor 1984	+ 0·7080	+ 0·0104	...	− 3·573	+ 0·103	...	...
142	... ...	+ 1·9699	+ 0·0034	...	− 3·570	+ 0·285	...	...
143	Taylor 1973	+ 1·9759	+ 0·0034	...	− 3·554	+ 0·286	...	...
144	115 Tauri	+ 3·4961	+ 0·0061	− 0·001	− 3·508	+ 0·504	+ 0·00	767
145	R. P. L. 40	+ 18·5197	+ 0·6492	...	− 3·376	+ 2·664	...	...
146	Lacaille 1854 ...	+ 1·6480	+ 0·0042	...	− 3·322	+ 0·238	...	...
147	λ Doradûs	+ 0·8720	+ 0·0081	...	− 3·098	+ 0·127	...	...
148	... ...	+ 1·9400	+ 0·0034	...	− 3·011	+ 0·281	...	...
149	34 Orionis δ, Var. 1...	+ 3·0630	+ 0·0038	− 0·001	− 3·010	+ 0·443	+ 0·01	787
150	... ...	+ 0·1241	+ 0·0143	...	− 2·998	+ 0·019	...	...
151	11 Leporis α	+ 2·6443	+ 0·0029	− 0·001	− 2·870	+ 0·383	− 0·01	796
152	Taylor 2057	+ 0·5903	+ 0·0096	...	− 2·786	+ 0·086	...	...
153	46 Orionis ε	+ 3·0424	+ 0·0035	− 0·002	− 2·642	+ 0·441	− 0·01	809
154	... ...	+ 1·7299	+ 0·0037	...	− 2·618	+ 0·251	...	...
155	123 Tauri ζ	+ 3·5827	+ 0·0055	− 0·001	− 2·618	+ 0·519	+ 0·02	800
156	... ...	+ 0·7553	+ 0·0079	...	− 2·523	+ 0·110	...	...
157	... ...	+ 2·1798	+ 0·0029	...	− 2·421	+ 0·317	...	...
158	Lacaille 1916 ...	+ 2·2701	+ 0·0027	...	− 2·385	+ 0·330	...	...
159	126 Tauri	+ 3·4649	+ 0·0045	+ 0·000	− 2·280	+ 0·503	+ 0·01	817
160	α Columbæ	+ 2·1708	+ 0·0027	+ 0·005	− 2·182	+ 0·316	+ 0·03	Stone
161	... ...	+ 1·7040	+ 0·0035	...	− 2·022	+ 0·248	...	...
162	... ...	+ 1·9576	+ 0·0030	...	− 2·010	+ 0·285	...	...
163	... ...	+ 3·3311	+ 0·0036	...	− 1·781	+ 0·485	...	...
164	Taylor 2145	+ 1·6082	+ 0·0033	...	− 1·743	+ 0·248	...	...
165	Lacaille 1984... ...	+ 1·9443	+ 0·0030	...	− 1·664	+ 0·284	...	...
166	Lacaille 2010 ...	+ 1·0222	+ 0·0050	...	− 1·559	+ 0·150	...	...
167	... ...	+ 1·6400	+ 0·0034	...	− 1·547	+ 0·230	...	...
168	... ...	+ 1·6331	+ 0·0033	...	− 1·316	+ 0·239	...	...
169	54 Orionis χ¹ ...	+ 3·5647	+ 0·0034	− 0·015	− 1·154	+ 0·520	+ 0·10	856
170	... ...	+ 1·7005	+ 0·0030	...	− 1·115	+ 0·248	...	...
171	58 Orionis α	+ 3·2451	+ 0·0027	+ 0·001	− 1·028	+ 0·473	− 0·02	860
172	... .	+ 2·2644	+ 0·0024	...	− 0·913	+ 0·330	...	...
173	... ...	+ 1·9507	+ 0·0027	...	− 0·886	+ 0·284	...	...
174	... ...	+ 3·7284	+ 0·0031	...	− 0·876	+ 0·543	...	...
175	Lacaille 2073 ...	+ 1·6292	+ 0·0030	...	− 0·812	+ 0·237	...	...

160.—Proper motions from "*Stone's Cape Catalogue.*"

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
176	... ...	9·5	1	5	52	1·76	140	36	33·8	1	0·14
177	... ...	9·8	2	5	52	26·61	141	46	1·9	2	0·13
178	... ...	9·2	1	5	52	56·76	129	32	28·1	1	0·12
179	... ...	7·9	1	5	53	38·07	141	40	5·3	1	0·05
180	R. P. L. 43	6·6	...	5	55	34·74	3	14	17·4	2	0·30
181	... ...	9·2	2	5	57	12·84	136	1	0·6	2	0·07
182	67 Orionis ν	4·4	...	6	0	15·88	75	13	6·4	4	0·11
183	... ...	8·8	2	6	2	23·99	153	44	42·8	2	0·10
184	... ...	9·6	2	6	4	6·65	150	5	30·3	2	0·12
185	... ...	7·7	1	6	4	38·25	128	2	40·0	1	0·09
186	... ...	8·6	2	6	4	46·99	136	49	44·5	2	0·12
187	... ...	9·2	1	6	6	4·44	77	51	33·2	1	0·10
188	... ...	9·2	2	6	6	44·49	121	29	29·1	2	0·13
189	7 Geminorum η	3·5	...	6	7	9·03	67	27	31·6	3	0·14
190	... ...	9·2	1	6	7	32·96	151	18	31·9	1	0·14
191	... ...	...	...	6	7	53·74	137	6	32·3	1	0·15
192	... ...	9·3	1	6	9	42·06	131	50	58·8	1	0·08
193	... ...	7·0	1	6	11	8·63	149	53	59·2	1	0·04
194	... ...	9·0	1	6	11	47·33	152	1	59·3	1	0·14
195	Lalande 12053	8·0	1	6	12	52·81	68	51	26·2	1	0·13
196	Lalande 12075	8·0	2	6	13	42·62	68	44	44·9	2	0·09
197	Lalande 12094	8·7	4	6	14	3·76	68	42	10·1	4	0·12
198	13 Geminorum μ	3·2	...	6	15	12·98	67	25	25·2	2	0·53
199	Taylor 2474	6·2	1	6	18	26·95	121	43	33·0	1	0·03
200	... ...	9·0	2	6	18	37·81	151	28	40·6	2	0·08
201	Taylor 2485	8·5	1	6	18	38·25	151	16	21·3	1	0·11
202	... ...	9·5	1	6	20	9·48	65	40	9·0	1	0·12
203	α Argûs (*Canopus*) ...	0·4	...	6	21	0·68	142	37	36·8	3	0·14
204	... ...	7·8	1	6	21	34·21	128	51	46·1	1	0·12
205	... ...	9·5	1	6	22	12·46	129	36	44·2	1	0·12
206	Lacaille 2321	7·6	1	6	23	32·87	153	20	57·9	1	0·10
207	Taylor 2524	8·0	2	6	23	42·77	131	3	20·9	2	0·09
208	... ...	9·2	1	6	27	34·93	152	28	11·3	1	0·11
209	... ...	9·2	1	6	27	44·50	128	46	18·6	1	0·12
210	... ...	9·5	1	6	28	0·04	131	5	38·1	1	0·12

187.—Comparison star for Sappho in 1865.
195—196—197.—Comparison stars for Ariadne in 1866.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Procession.	Secular Variation.	Proper Motion.	
176	... ...	+ 1·4449	+ 0·0031	...	− 0·697	+ 0·211	...	...
177	... ...	+ 1·3760	+ 0·0031	...	− 0·661	+ 0·201	...	...
178	... ...	+ 1·9690	+ 0·0026	...	− 0·617	+ 0·287	...	...
179	... ...	+ 1·3819	+ 0·0031	...	− 0·557	+ 0·201	...	...
180	R. P. L. 43	+ 26·6994	+ 0·1588	...	− 0·387	+ 3·892	...	...
181	... ...	+ 1·6871	+ 0·0027	...	− 0·244	+ 0·246	...	...
182	67 Orionis ν	+ 3·4249	+ 0·0017	− 0·000	+ 0·023	+ 0·500	+ 0·01	887
183	... ...	+ 0·3616	+ 0·0025	...	+ 0·209	+ 0·053	...	...
184	... ...	+ 0·7484	+ 0·0022	...	+ 0·359	+ 0·109	...	...
185	... ...	+ 2·0263	+ 0·0023	...	+ 0·406	+ 0·295	...	...
186	... ...	+ 1·6472	+ 0·0004	...	+ 0·418	+ 0·240	...	...
187	... ...	+ 3·3598	+ 0·0013	...	+ 0·530	+ 0·490	...	...
188	... ...	+ 2·2534	+ 0·0022	...	+ 0·590	+ 0·329	...	...
189	7 Geminorum η ...	+ 3·6268	+ 0·0007	− 0·005	+ 0·626	+ 0·529	+ 0·00	909
190	... ...	+ 0·6306	+ 0·0016	...	+ 0·660	+ 0·092	...	...
191	... ...	+ 1·6340	+ 0·0022	...	+ 0·690	+ 0·238	...	...
192	... ...	+ 1·8758	+ 0·0021	...	+ 0·849	+ 0·273	...	...
193	... ...	+ 0·7687	+ 0·0010	...	+ 0·975	+ 0·112	...	...
194	... ...	+ 0·5576	+ 0·0005	...	+ 1·032	+ 0·081	...	...
195	Lalande 12053 ...	+ 3·5884	+ 0·0002	...	+ 1·125	+ 0·523	...	...
196	Lalande 12075 ...	+ 3·5912	0·0000	...	+ 1·199	+ 0·522	...	...
197	Lalande 12094 ...	+ 3·5924	0·0000	...	+ 1·223	+ 0·522	...	...
198	13 Geminorum μ ...	+ 3·6268	− 0·0003	+ 0·004	+ 1·330	+ 0·527	+ 0·10	929
199	Taylor 2474	+ 2·2482	+ 0·0020	...	+ 1·613	+ 0·326	...	...
200	... ...	+ 0·6146	− 0·0007	...	+ 1·628	+ 0·089	...	...
201	Taylor 2485	+ 0·6411	− 0·0007	...	+ 1·629	+ 0·092	...	...
202	... ...	+ 3·6744	− 0·0011	...	+ 1·761	+ 0·533	...	...
203	α Argûs (*Canopus*) ...	+ 1·3293	+ 0·0010	0·000	+ 1·845	+ 0·192	0·00	Stone
204	... ...	+ 1·9996	+ 0·0019	...	+ 1·884	+ 0·289	...	...
205	... ...	+ 1·9709	+ 0·0018	...	+ 1·940	+ 0·285	...	...
206	Lacaille 2321 ...	+ 0·4221	− 0·0028	...	+ 2·057	+ 0·060	...	...
207	Taylor 2524	+ 1·9140	+ 0·0018	...	+ 2·072	+ 0·277	...	...
208	... ...	+ 0·5257	− 0·0030	...	+ 2·407	+ 0·075	...	...
209	... ...	+ 2·0062	+ 0·0018	...	+ 2·421	+ 0·290	...	...
210	... ...	+ 1·9149	+ 0·0016	...	+ 2·446	+ 0·276	...	...

203.—Proper motions from "*Stone's Cape Catalogue.*"

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.	Mean Polar Distance.	Observations.	Fraction of Year.
				h. m. s.	° ′ ″		
211	... ...	9·2	2	6 28 39·66·72	130 56 8·7	2	0·07
212	... ...	6·6	1	6 28 40·56	122 7 50·5	1	0·05
213	24 Geminorum γ	2·0	...	6 30 19·09	73 29 39·5	5	0·10
214	... ...	8·0	2	6 30 57·53	130 55 34·1	2	0·03
215	... ...	9·4	2	6 31 19·02 18·96	122 7 6·6	2	0·12
216	... ...	9·0	1	6 31 37·83	140 0 35·1	1	0·13
217	... ...	8·1	2	6 31 42·28	130 57 6·6	2	0·14
218	... ...	9·4	2	6 33 37·64·76	152 27 28·7	2	0·13
219	... ...	8·8	2	6 34 9·33	130 54 42·9	2	0·09
220	Lacaille 2406	7·5	2	6 34 18·55	147 25 55·5	2	0·12
221	27 Geminorum ε	3·2	...	6 36 3·36	64 44 43·4	3	0·12
222	... ...	10·2	2	6 36 26·87·3	62 6 16·3	2	0·12
223	Taylor 2652	6·9	1	6 36 38·12	151 25 16·4	1	0·05
224	... ...	9·6	2	6 37 41·77·89	153 25 58·9	2	0·14
225	... ...	10·0	1	6 37 56·74 7·01	153 21 4·3	1	0·17
226	Lacaille 2451	8·7	1	6 38 12·05	155 58 9·5	1	0·11
227	51 Cephei (*Hev.*)	5·3	...	6 39 44·54	2 45 44·7	4	0·04
228	... ...	9·3	1	6 40 32·24	154 14 0·2	1	0·13
229	... ...	9·4	2	6 40 37·10	151 59 20·1	2	0·15
230	W. B. N. VI. 1272 ...	9·0	1	6 42 37·44	70 39 46·1	1	0·10
231	... ...	10·2	2	6 43 21·49·55	130 38 43·4	2	0·13
232	... ...	9·8	1	6 45 19·08	106 33 16·1	1	0·10
233	... ...	10·5	2	6 50 52·84·90	75 18 2·6	2	0·11
234	... ...	9·5	1	6 52 51·86	152 54 58·5	1	0·14
235	21 Canis Majoris ε ...	1·5	...	6 53 35·71·3	118 47 58·3	6	0·09
236	ζ[3] Geminorum, Var. 1 ...	Var.	...	6 56 30·81	69 14 41·4	1	0·14
237	... ...	9·3	1	6 56 37·30	129 18 0·6	1	0·16
238	Taylor 2825	8·9	2	6 56 58·12	150 55 18·7	2	0·15
239	... ...	9·0	2	6 57 32·32	69 5 32·3	2	0·15
240	23 Canis Majoris γ ...	4·1	...	6 57 57·93	105 26 46·0	2	0·08
241	Lalande 13707	8·4	2	6 58 35·18	67 7 20·6	2	0·07
242	... ...	9·4	2	6 58 52·29	66 56 45·4	2	0·14
243	W. B. N. VI. 1762 ...	9·2	1	6 58 54·11·07	70 55 31·3	1	0·17
244	R Geminorum, Var. 2 ...	8·1	2	6 59 38·85	67 6 5·8	2	0·13
245	... ...	8·0	1	7 0 4·82 5·03	129 43 46·2	1	0·17

230—243.—Comparison stars for Hestia in 1870.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
211	... ...	+ 1·9217	+ 0·0016	...	+ 2·501	+ 0·277	...	...
212	... ...	+ 2·2390	+ 0·0018	...	+ 2·502	+ 0·323	...	...
213	24 Geminorum γ ...	+ 3·4648	− 0·0015	+ 0·002	+ 2·645	+ 0·500	+ 0·04	969
214	... ...	+ 1·9236	+ 0·0016	...	+ 2·701	+ 0·277	...	...
215	... ...	+ 2·2407	+ 0·0018	...	+ 2·731	+ 0·323	...	...
216	... ...	+ 1·4936	+ 0·0007	...	+ 2·759	+ 0·215	...	...
217	... ...	+ 1·9231	+ 0·0015	...	+ 2·765	+ 0·277	...	...
218	... ...	+ 0·5361	− 0·0043	...	+ 2·931	+ 0·076	...	...
219	... ...	+ 1·9265	+ 0·0015	...	+ 2·977	+ 0·277	...	...
220	Lacaille 2406 ...	+ 1·0024	− 0·0015	...	+ 2·991	+ 0·144	...	...
221	27 Geminorum ε ...	+ 3·6950	− 0·0035	− 0·002	+ 3·143	+ 0·531	+ 0·01	983
222	... ...	+ 3·7711	− 0·0040	...	+ 3·176	+ 0·542	...	...
223	Taylor 2652	+ 0·6492	− 0·0042	...	+ 3·192	+ 0·092	...	...
224	... ...	+ 0·4346	− 0·0061	...	+ 3·284	+ 0·061	...	...
225	... ...	+ 0·4446	− 0·0061	...	+ 3·305	+ 0·063	...	...
226	Lacaille 2451 ...	+ 0·1153	− 0·0092	...	+ 3·327	+ 0·016	...	...
227	51 Cephei (*Her.*) ...	+ 30·3833	− 1·0936	...	+ 3·417	+ 4·365	...	...
228	... ...	+ 0·3458	− 0·0076	...	+ 3·528	+ 0·048	...	...
229	... ...	+ 0·5083	− 0·0053	...	+ 3·534	+ 0·084	...	...
230	W. B. N. VI. 1272 ...	+ 3·5332	− 0·0031	...	+ 3·708	+ 0·504	...	...
231	... ...	+ 1·0448	+ 0·0012	...	+ 3·772	+ 0·277	...	...
232	... ...	+ 2·6826	+ 0·0009	...	+ 3·940	+ 0·382	...	...
233	... ...	+ 3·4145	− 0·0031	...	+ 4·417	+ 0·484	...	...
234	... ...	+ 0·5271	− 0·0086	...	+ 4·585	+ 0·073	...	...
235	21 Can. Maj. ε ...	+ 2·3572	+ 0·0013	− 0·001	+ 4·647	+ 0·332	− 0·02	1023
236	ζ^2 Geminorum, Var. 1	+ 3·5636	− 0·0050	− 0·001	+ 4·895	+ 0·503	− 0·00	1024
237	... ...	+ 2·0112	+ 0·0012	...	+ 4·905	+ 0·282	...	...
238	Taylor 2825	+ 0·7420	− 0·0070	...	+ 4·933	+ 0·103	...	...
239	... ...	+ 3·5669	− 0·0052	...	+ 4·982	+ 0·502	...	...
240	23 Can. Maj. γ ...	+ 2·7145	+ 0·0005	− 0·002	+ 5·019	+ 0·381	+ 0·00	1028
241	Lalande 13707 ...	+ 3·6181	− 0·0057	...	+ 5·070	+ 0·509	...	...
242	... ...	+ 3·6225	− 0·0058	...	+ 5·094	+ 0·509	...	...
243	W. B. N. VI. 1762 ...	+ 3·5194	− 0·0049	...	+ 5·098	+ 0·495	...	...
244	R Geminorum, Var. 2	+ 3·6179	− 0·0059	...	+ 5·160	+ 0·508	...	...
245	... ...	+ 1·9991	+ 0·0011	...	+ 5·198	+ 0·280	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
246	... ...	9·3	1	7	1	2·30	60	50	48·8	1	0·14
247	... ...	7·5	1	7	1	11·81	140	10	47·9	1	0·22
248	... ...	9·3	1	7	1	41·44	61	4	51·6	1	0·15
249	... ...	9·0	1	7	1	45·66·80	129	39	58·2	1	0·12
250	... ...	9·0	1	7	3	6·13	141	24	47·6	1	0·16
251	... ...	9·4	2	7	5	6·326	153	52	54·0	2	0·17
252	Taylor 2923	8·5	1	7	7	22·90	150	22	4·6	1	0·03
253	Lalande 14177	7·0	2	7	11	44·698	67	44	39·5	2	0·13
254	55 Geminorum δ	3·7	...	7	12	28·682	67	47	4·3	14	0·12
255	... ...	9·0	1	7	14	43·83	138	50	27·8	1	0·14
256	Taylor 3005	8·2	1	7	15	36·65	149	1	48·6	1	0·15
257	Lalande 14397	7·7	3	7	19	13·36	41	49	17·2	3	0·09
258	... ...	10·3	1	7	19	14·98·87	69	16	25·4	1	0·17
259	6 Canis Minoris	5·0	...	7	22	40·32	77	43	52·0	1	0·22
260	Bonn +48°. 1546... ...	10·0	2	7	24	8·742	42	1	45·7	2	0·16
261	... ...	9·8	1	7	25	0·1637	130	10	30·3	1	0·17
262	... ...	8·8	3	7	25	16·484	123	9	18·4	3	0·16
263	R. P. L. 45	7·1	...	7	25	18·67	0	59	58·2	1	0·68
264	... ...	8·3	1	7	25	43·17	129	19	4·3	1	0·09
265	... ...	7·7	1	7	26	16·91	142	6	54·2	1	0·15
266	66 Geminorum a^2 (*Castor*)	2·8	...	7	26	25·864	57	50	1·2	9	0·11
267	69 Geminorum υ	4·2	...	7	28	2·00	62	49	22·0	2	0·06
268	... ...	10·4	2	7	30	41·83	158	43	19·4	2	0·16
269	... ...	8·0	1	7	30	53·13	121	55	28·4	1	0·20
270	Taylor 3133	6·4	2	7	31	27·74	65	29	24·0	2	0·14
271	74 Geminorum *f*	5·2	...	7	32	5·04	72	2	11·3	2	0·17
272	... ...	9·0	1	7	32	10·63	129	44	58·1	1	0·09
273	10 Canis Minoris (*Procyon*)	0·5	...	7	32	36·04	84	26	57·1	6	0·10
274	... ...	7·6	2	7	32	36·68·20	129	54	19·9	2	0·13
275	Lacaille 2893	7·7	1	7	33	1·78·93	121	50	30·8	1	0·18
276	... ...	8·4	2	7	35	39·89·97	144	20	47·3	2	0·14
277	Taylor 3195	8·7	1	7	36	40·14	150	20	11·2	1	0·16
278	77 Geminorum κ	3·6	...	7	36	43·15	65	17	51·0	1	0·06
279	... ...	7·8	1	7	37	3·47	130	52	2·3	1	0·09
280	78 Gemin. β (*Pollux*) ...	1·1	...	7	37	28·83	61	40	2·2	7	0·13

246—248.—Comparison stars for Isis in 1866.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
246	... ...	+ 3·7917	− 0·0081	...	+ 5·278	+ 0·532	...	...
247	... ...	+ 1·5256	− 0·0007	...	+ 5·292	+ 0·213	...	...
248	... ...	+ 3·7842	− 0·0081	...	+ 5·334	+ 0·531	...	...
249	... ...	+ 2·0037	+ 0·0011	...	+ 5·340	+ 0·280	...	...
250	... ...	+ 1·4597	− 0·0013	...	+ 5·452	+ 0·203	...	...
251	... ...	+ 0·4546	− 0·0125	...	+ 5·620	+ 0·062	...	...
252	Taylor 2923	+ 0·8227	− 0·0077	...	+ 5·812	+ 0·113	...	...
253	Lalande 14177 ...	+ 3·5927	− 0·0071	...	+ 6·176	+ 0·496	...	...
254	55 Geminorum δ ...	+ 3·5911	− 0·0072	− 0·003	+ 6·237	+ 0·495	− 0·00	1062
255	... ...	+ 1·6234	− 0·0008	...	+ 6·423	+ 0·221	...	...
256	Taylor 3005	+ 0·9647	− 0·0071	...	+ 6·497	+ 0·130	...	...
257	Lalande 14397 ...	+ 4·4779	− 0·0245	...	+ 6·795	+ 0·611	...	...
258	... ...	+ 3·5482	− 0·0074	...	+ 6·797	+ 0·484	...	..
259	6 Canis Minoris ...	+ 3·3442	− 0·0052	− 0·001	+ 7·078	+ 0·453	+ 0·00	1085
260	Bonn +48°. 1546 ...	+ 4·4567	− 0·0256	...	+ 7·198	+ 0·605	...	...
261	... ...	+ 2·0202	+ 0·0009	...	+ 7·269	+ 0·272	...	...
262	... ...	+ 2·2586	+ 0·0011	...	+ 7·291	+ 0·304	...	...
263	R. P. L. 45	+ 74·4612	− 29·8625	− 0·323	+ 7·294	+ 10·070	− 0·01	Gr.
264	... ...	+ 2·0530	+ 0·0009	...	+ 7·327	+ 0·276	...	...
265	... ...	+ 1·4742	− 0·0024	...	+ 7·373	+ 0·197	...	...
266	66 Geminorum a^2 ...	+ 3·8539	− 0·0133	− 0·015	+ 7·386	+ 0·519	+ 0·08	1087
267	69 Geminorum ν ...	+ 3·7086	− 0·0110	− 0·002	+ 7·515	+ 0·499	+ 0·10	1094
268	... ...	− 0·0955	− 0·0309	...	+ 7·731	− 0·016	...	...
269	... ...	+ 2·3039	+ 0·0012	...	+ 7·746	+ 0·307	...	...
270	Taylor 3133	+ 3·6339	− 0·0102	...	+ 7·792	+ 0·487	...	...
271	74 Geminorum ƒ ...	+ 3·4711	− 0·0078	− 0·002	+ 7·843	+ 0·463	− 0·02	1103
272	... ...	+ 2·0491	+ 0·0009	...	+ 7·850	+ 0·272	...	...
273	10 Can. Min. α ...	+ 3·1916	− 0·0041	− 0·047	+ 7·884	+ 0·425	+ 1·03	1106
274	... ...	+ 2·0441	+ 0·0008	...	+ 7·884	+ 0·271	...	...
275	Lacaille 2893 ...	+ 2·3094	+ 0·0012	...	+ 7·918	+ 0·307	...	...
276	... ...	+ 1·3644	− 0·0041	...	+ 8·130	+ 0·179	...	...
277	Taylor 3195	+ 0·9306	− 0·0105	...	+ 8·210	+ 0·120	...	...
278	77 Geminorum κ ...	+ 3·6333	− 0·0109	− 0·003	+ 8·215	+ 0·480	+ 0·06	1111
279	... ...	+ 2·0176	+ 0·0009	...	+ 8·241	+ 0·264	...	...
280	78 Geminorum β ...	+ 3·7288	− 0·0128	− 0·048	+ 8·275	+ 0·491	+ 0·05	1112

163.—Proper motions from "*Greenwich Catalogue* 1872."

Mean Positions of Stars for 1872, *January* 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.	Mean Polar Distance.	Observations.	Fraction of Year.
				h. m. s.	° ′ ″		
281	... ...	8·0	1	7 38 3·31	128 53 59·2	1	0·19
282	... ...	8·6	2	7 41 24·03	151 35 39·6	2	0·20
283	... ...	8·6	2	7 41 43·40	144 19 49·8	2	0·19
284	... ...	9·0	1	7 42 9·46	153 5 30·4	1	0·17
285	Lacaille 3013	7·6	2	7 43 41·29	142 1 54·5	2	0·14
286	Lacaille 3034	8·0	1	7 44 9·45	153 52 49·7	1	0·22
287	... ...	...	...	7 45 23·61	129 26 5·5	1	0·16
288	... ...	8·8	2	7 45 37·21	129 28 5·3	2	0·16
289	... ...	7·7	2	7 46 19·47	132 31 16·9	2	0·12
290	... ...	8·7	1	7 46 40·93	144 23 40·1	1	0·08
291	... ...	9·6	2	7 48 57·14	67 47 22·0	2	0·18
292	... ...	9·0	1	7 48 59·33	129 56 4·2	1	0·17
293	... ...	7·2	1	7 49 35·63	152 36 9·4	1	0·10
294	... ...	8·7	1	7 49 58·62	130 31 23·6	1	0·19
295	Taylor 3339	7·9	2	7 52 1·65	144 18 11·8	2	0·19
296	... ...	8·3	1	7 52 9·85	148 23 39·8	1	0·09
297	... ...	8·4	1	7 52 34·90	151 31 57·5	1	0·21
298	6 Cancri	5·0	...	7 55 39·21	61 50 57·8	13	0·14
299	Taylor 3380	8·0	3	7 55 59·63	144 11 53·8	3	0·18
300	... ...	9·4	1	7 56 48·32	129 22 37·5	1	0·21
301	12 Cancri	5·1	...	8 1 33·10	75 59 19·9	3	0·17
302	W. B. N. VII. 1684 ...	9·0	2	8 1 51·96	69 30 36·1	2	0·19
303	15 Argûs	2·9	...	8 2 5·54	113 56 13·4	12	0·15
304	14 Cancri ψ^2	5·8	...	8 2 44·15	64 6 24·6	1	0·22
305	... ...	8·3	1	8 5 35·88	130 46 46·4	1	0·09
306	... ...	9·8	1	8 5 46·79	77 38 57·1	1	0·16
307	... ...	9·1	1	8 5 53·02	77 26 22·0	1	0·09
308	... ...	9·3	1	8 5 54·40	128 40 11·4	1	0·16
309	... ...	9·4	1	8 9 34·21	77 28 55·5	1	0·19
310	... ...	9·8	1	8 10 14·34	150 48 9·1	1	0·22
311	W. B. N. VIII. 178 ...	9·4	1	8 10 22·70	74 17 39·8	1	0·21
312	... ...	9·0	1	8 11 29·91	152 5 58·0	1	0·10
313	Bonn +28°.1585—2nd ...	9·5	2	8 12 13·46	61 7 52·1	2	0·18
314	19 Cancri λ	5·7	...	8 12 55·23	65 34 35·9	1	0·22
315	... ...	8·9	3	8 12 58·99	130 29 49·2	3	0·21

310.—Comparison star for Ariadne in 1863.
313.—Comparison star for Isis in 1870.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
281	... ...	+ 2·0907	+ 0·0010	...	+ 8·321	+ 0·274	...	...
282	... ...	+ 0·8383	− 0·0128	...	+ 8·587	+ 0·107	...	...
283	... ...	+ 1·3900	− 0·0041	...	+ 8·612	+ 0·179	...	...
284	... ...	+ 0·6953	− 0·0161	...	+ 8·646	+ 0·088	...	...
285	Lacaille 3013 ...	+ 1·5315	− 0·0026	...	+ 8·767	+ 0·197	...	...
286	Lacaille 3034 ...	+ 0·6222	− 0·0180	...	+ 8·803	+ 0·078	...	...
287	... ...	+ 2·0869	+ 0·0010	...	+ 8·900	+ 0·269	...	...
288	... ...	+ 2·0861	+ 0·0010	...	+ 8·918	+ 0·269	...	...
289	... ...	+ 1·9757	+ 0·0007	...	+ 8·974	+ 0·254	...	...
290	... ...	+ 1·4038	− 0·0042	...	+ 9·001	+ 0·179	...	...
291	... ...	+ 3·5576	− 0·0109	...	+ 9·178	+ 0·458	...	...
292	... ...	+ 2·0772	+ 0·0010	...	+ 9·182	+ 0·266	...	...
293	... ...	+ 0·7819	− 0·0153	...	+ 9·229	+ 0·098	...	...
294	... ...	+ 2·0584	+ 0·0010	...	+ 9·258	+ 0·262	...	...
295	Taylor 3339	+ 1·4294	− 0·0041	...	+ 9·417	+ 0·180	...	...
296	... ...	+ 1·1548	− 0·0083	...	+ 9·429	+ 0·145	...	...
297	... ...	+ 0·8078	− 0·0134	...	+ 9·460	+ 0·112	...	...
298	6 Cancri	+ 3·6983	− 0·0148	− 0·003	+ 9·696	+ 0·468	+ 0·04	1149
299	Taylor 3380	+ 1·4510	− 0·0040	...	+ 9·719	+ 0·181	...	...
300	... ...	+ 2·1144	+ 0·0013	...	+ 9·785	+ 0·265	...	...
301	12 Cancri	+ 3·3601	− 0·0083	− 0·001	+ 10·144	+ 0·419	+ 0·02	1165
302	W. B. N. VII. 1684...	+ 3·5028	− 0·0113	...	+ 10·169	+ 0·437	...	...
303	15 Argûs	+ 2·5609	+ 0·0009	− 0·008	+ 10·184	+ 0·318	− 0·06	1170
304	14 Cancri ψ^2... ...	+ 3·6304	− 0·0140	− 0·007	+ 10·235	+ 0·452	+ 0·35	1167
305	... ...	+ 2·0879	+ 0·0013	...	+ 10·448	+ 0·256	...	...
306	... ...	+ 3·3191	− 0·0080	...	+ 10·462	+ 0·410	...	...
307	... ...	+ 3·3263	− 0·0081	...	+ 10·470	+ 0·410	...	...
308	... ...	+ 2·1597	+ 0·0016	...	+ 10·471	+ 0·265	...	...
309	... ...	+ 3·3229	− 0·0082	...	+ 10·743	+ 0·405	...	...
310	... ...	+ 1·0558	− 0·0120	...	+ 10·793	+ 0·125	...	...
311	W. B. N. VIII. 78 ...	+ 3·3889	− 0·0096	...	+ 10·803	+ 0·412	...	...
312	... ...	+ 0·9516	− 0·0147	...	+ 10·886	+ 0·112	...	...
313	Bonn+28°. 1585—2nd	+ 3·6892	− 0·0169	...	+ 10·938	+ 0·446	...	...
314	19 Cancri λ	+ 3·5800	− 0·0142	− 0·002	+ 10·990	+ 0·431	+ 0·03	1182
315	... ...	+ 2·1173	+ 0·0016	...	+ 10·995	+ 0·253	...	...

Mean Positions of Stars for 1872, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
316	... ...	8·9	2	8	12	59·06	130	36	43·8	2	0·20
317	... ...	9·7	1	8	18	55·29	151	2	14·5	1	0·22
318	Taylor 3599	7·0	1	8	20	28·91	144	54	18·5	1	0·09
319	... ...	8·4	3	8	21	11·40	153	19	40·5	3	0·17
320	Taylor 3607	6·0	1	8	21	27·39	144	56	57·1	1	0·09
321	... ...	8·2	1	8	21	47·15	131	43	8·7	1	0·10
322	Taylor 3620	7·8	1	8	23	27·87	130	49	18·8	1	0·10
323	... ...	7·8	1	8	23	32·29	144	56	29·9	1	0·14
324	31 Cancri θ	5·8	...	8	24	17·62	71	28	30·2	3	0·20
325	33 Cancri η	5·5	...	8	25	18·24	69	7	33·9	14	0·14
326	Taylor 3652	8·0	1	8	26	1·13	130	4	14·5	1	0·19
327	Lacaille 3393	7·9	1	8	26	6·79	149	41	45·4	1	0·19
328	... ...	8·0	1	8	26	18·89	144	59	22·4	1	0·22
329	... ...	9·1	1	8	26	42·68	130	32	4·9	1	0·20
330	W. B. N. VIII. 699 ...	8·0	1	8	29	58·57	70	41	16·7	1	0·16
331	... ...	9·3	1	8	31	30·03	129	47	5·1	1	0·10
332	43 Cancri γ	4·8	...	8	35	52·51	68	4	23·6	1	0·06
333	45 Cancri A^1	5·6	...	8	36	8·95	76	51	43·4	2	0·20
334	S Cancri, Var. 2	8·0	2	8	36	37·36	70	30	26·8	2	0·21
335	... ...	9·0	1	8	37	32·24	136	10	13·7	1	0·18
336	... ...	7·8	1	8	38	6·55	136	7	16·3	1	0·18
337	W. B. E. VIII. 991 ...	9·3	1	8	39	17·18	81	43	55·1	1	0·19
338	50 Cancri A^2	6·0	...	8	39	55·00	77	25	19·4	3	0·20
339	11 Hydræ ϵ	3·6	...	8	39	59·74	83	6	48·6	13	0·15
340	... ...	7·9	1	8	41	13·45	147	18	27·6	1	0·22
341	Lacaille 3534	7·9	2	8	42	35·18	129	19	51·3	2	0·22
342	f Velorum	7·0	2	8	46	13·07	136	3	7·0	2	0·09
343	... ...	8·5	2	8	47	12·24	136	7	50·5	2	0·19
344	... ...	9·3	2	8	47	49·96	69	38	58·7	2	0·20
345	R. P. L. 60	6·5	...	8	48	13·3	5	18	40·8	5	0·19
346	... ...	9·6	1	8	48	25·61	133	26	59·4	1	0·25
347	Taylor 3886	7·9	1	8	48	30·14	136	54	41·8	1	0·10
348	... ...	8·5	1	8	49	1·92	133	2	56·4	1	0·16
349	... ...	9·0	2	8	49	25·70	133	29	17·1	2	0·19
350	W. B. E. VIII. 1302 ...	9·3	1	8	51	12·60	98	55	37·0	1	0·18

337.—Comparison star for Meleta in 1868.
350.—Observed for map of T Hydræ, Var. 4.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
316	... ...	+ 2·1133	+ 0·0016	...	+ 10·994	+ 0·253	...	...
317	... ...	+ 1·0870	− 0·0122	...	+ 11·426	+ 0·126	...	...
318	Taylor 3599	+ 1·5159	− 0·0039	...	+ 11·537	+ 0·176	...	...
319	... ...	+ 0·9000	− 0·0175	...	+ 11·588	+ 0·102	...	...
320	Taylor 3607	+ 1·5180	− 0·0038	...	+ 11·607	+ 0·176	...	...
321	... ...	+ 2·1011	+ 0·0018	...	+ 11·629	+ 0·245	...	...
322	Taylor 3620	+ 2·1362	+ 0·0020	...	+ 11·750	+ 0·248	...	...
323	... ...	+ 1·5285	− 0·0037	...	+ 11·755	+ 0·176	...	...
324	31 Cancri θ	+ 3·4343	− 0·0118	− 0·005	+ 11·809	+ 0·401	+ 0·05	1208
325	33 Cancri η	+ 3·4829	− 0·0129	− 0·004	+ 11·880	+ 0·404	+ 0·05	1207
326	Taylor 3652	+ 2·1683	+ 0·0022	...	+ 11·929	+ 0·249	...	...
327	Lacaille 3393 ...	+ 1·2340	− 0·0095	...	+ 11·938	+ 0·140	...	...
328	... ...	+ 1·5394	− 0·0036	...	+ 11·952	+ 0·175	...	...
329	... ...	+ 2·1553	+ 0·0022	...	+ 11·979	+ 0·247	...	...
330	W. B. N. VIII. 699 ...	+ 3·3440	− 0·0124	...	+ 12·207	+ 0·394	...	...
331	... ...	+ 2·1934	+ 0·0014	...	+ 12·311	+ 0·222	...	...
332	43 Cancri γ	+ 3·4906	− 0·0143	− 0·009	+ 12·613	+ 0·391	+ 0·03	1230
333	45 Cancri A^1 ...	+ 3·3146	− 0·0096	− 0·001	+ 12·631	+ 0·371	− 0·01	1232
334	S Cancri, Var. 2 ...	+ 3·4392	− 0·0130	...	+ 12·663	+ 0·385	...	...
335	... ...	+ 1·9962	+ 0·0019	...	+ 12·724	+ 0·220	...	...
336	... ...	+ 1·9998	+ 0·0019	...	+ 12·763	+ 0·220	...	...
337	W. B. E. VIII. 991 ...	+ 3·2213	− 0·0076	...	+ 12·843	+ 0·355	...	...
338	50 Cancri A^2	+ 3·3008	− 0·0095	− 0·006	+ 12·885	+ 0·364	+ 0·03	1242
339	11 Hydræ ϵ	+ 3·1958	− 0·0071	− 0·014	+ 12·890	+ 0·351	+ 0·02	1243
340	... ...	+ 1·4837	− 0·0049	...	+ 12·973	+ 0·159	...	...
341	Lacaille 3534 ...	+ 2·2410	+ 0·0032	...	+ 13·063	+ 0·242	...	...
342	*f* Velorum	+ 2·0343	+ 0·0025	...	+ 13·302	+ 0·216	...	...
343	... ...	+ 2·0355	+ 0·0026	...	+ 13·367	+ 0·216	...	...
344	... ...	+ 3·4410	− 0·0140	...	+ 13·407	+ 0·368	...	...
345	R. P. L. 60	+ 13·7512	− 1·7198	...	+ 13·434	+ 0·481	...	...
346	... ...	+ 2·1326	+ 0·0033	...	+ 13·447	+ 0·225	...	...
347	Taylor 3886	+ 2·0122	+ 0·0025	...	+ 13·451	+ 0·212	...	...
348	... ...	+ 2·1479	+ 0·0033	...	+ 13·486	+ 0·226	...	...
349	... ...	+ 2·1350	+ 0·0033	...	+ 13·511	+ 0·224	...	...
350	W. B. E. VIII. 1302...	+ 2·9181	− 0·0016	...	+ 13·626	+ 0·307	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
351	... ...	9·7	1	8	51	22·12	98	36	57·6	1	0·18
352	65 Cancri α	4·3	...	8	51	29·03	77	38	55·0	3	0·10
353	... ...	9·5	1	8	51	34·11	147	16	26·0	1	0·22
354	... ...	9·5	1	8	54	24·38	142	43	0·2	1	0·22
355	69 Cancri ν	5·6	...	8	55	15·24	65	2	42·6	2	0·18
356	... ...	8·8	1	8	57	7·46	146	36	28·5	1	0·22
357	77 Cancri ξ	5·2	...	9	1	59·71	67	26	18·9	1	0·07
358	... ...	9·0	1	9	6	47·07	138	43	27·4	1	0·18
359	... ...	10·1	2	9	7	52·26	124	49	8·1	2	0·17
360	82 Cancri π ²	5·6	...	9	8	9·73	74	31	46·7	4	0·13
361	Lalande 18251	8·0	1	9	8	48·82	74	27	36·6	1	0·21
362	... ...	9·0	2	9	9	29·81	150	33	45·3	2	0·20
363	Lacaille 3761	7·0	1	9	9	41·97	150	23	24·3	1	0·21
364	83 Cancri	6·6	...	9	11	50·10	71	45	13·2	9	0·17
365	... ...	10·4	1	9	13	22·97	70	34	11·7	1	0·13
366	ι Argûs	2·5	...	9	13	39·82	148	44	22·4	1	0·11
367	... ...	8·0	1	9	15	30·35	143	50	43·2	1	0·20
368	... ...	8·9	1	9	15	55·58	124	48	52·8	1	0·26
369	... ...	9·4	2	9	16	51·28	124	49	34·8	2	0·24
370	... ...	7·8	2	9	19	23·16	70	23	20·0	2	0·18
371	... ...	9·5	1	9	19	33·23	150	32	39·9	1	0·15
372	... ...	7·3	1	9	19	55·56	75	8	32·9	1	0·22
373	... ...	8·8	1	9	20	3·59	125	23	13·7	1	0·17
374	... ...	7·8	1	9	20	47·14	125	25	0·6	1	0·17
375	30 Hydræ α, Var. 2 ...	Var.	...	9	21	17·83	98	6	19·0	10	0·14
376	Lalande 18636	8·7	1	9	22	8·43	68	31	42·4	1	0·20
377	Lalande 18659	8·2	1	9	23	4·79	67	51	31·9	1	0·25
378	... ...	7·2	1	9	23	7·57	67	37	35·5	1	0·26
379	Lalande 18683	9·3	1	9	23	44·84	68	8	53·7	1	0·27
380	... ...	9·5	1	9	24	27·76	158	42	50·9	1	0·27
381	... ...	9·0	1	9	24	51·59	130	28	14·1	1	0·23
382	Lacaille 3887	7·9	1	9	25	11·78	140	2	37·2	1	0·20
383	... ...	9·0	1	9	28	31·17	146	34	4·6	1	0·20
384	... ...	9·1	2	9	28	43·21	144	1	48·4	2	0·10
385	... ...	9·3	1	9	29	47·10	146	35	41·9	1	0·22

376—377—379.—Comparison stars for Metis in 1861.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
351	... ...	+ 2·9237	− 0·0017	...	+ 13·636	+ 0·307	...	...
352	65 Cancri *α* ...	+ 3·2868	− 0·0098	+ 0·001	+ 13·644	+ 0·346	+ 0·02	1269
353	... ...	+ 1·5482	− 0·0037	...	+ 13·649	+ 0·159	...	...
354	... ...	+ 1·8005	+ 0·0005	...	+ 13·830	+ 0·184	...	...
355	69 Cancri *ν*	+ 3·5211	− 0·0172	...	+ 13·884	+ 0·364	...	...
356	... ...	+ 1·6202	− 0·0023	...	+ 14·001	+ 0·163	...	...
357	77 Cancri *ξ*	+ 3·4615	− 0·0159	− 0·001	+ 14·304	+ 0·348	− 0·03	1289
358	... ...	+ 2·0275	+ 0·0037	...	+ 14·593	+ 0·197	...	...
359	... ...	+ 2·4376	+ 0·0046	...	+ 14·659	+ 0·237	...	...
360	82 Cancri π^3... ...	+ 3·3244	− 0·0117	− 0·003	+ 14·677	+ 0·325	− 0·02	1304
361	Lalande 18251 ...	+ 3·3247	− 0·0118	...	+ 14·715	+ 0·323	...	...
362	... ...	+ 1·4678	− 0·0057	...	+ 14·756	+ 0·138	...	...
363	Lacaille 3761... ...	+ 1·4805	− 0·0052	...	+ 14·768	+ 0·140	...	...
364	83 Cancri	+ 3·3673	− 0·0134	− 0·009	+ 14·893	+ 0·323	+ 0·14	1309
365	... ...	+ 3·3856	− 0·0142	...	+ 14·984	+ 0·322	...	...
366	*ι* Argûs	+ 1·6105	− 0·0022	...	+ 15·000	+ 0·150	...	...
367	... ...	+ 1·8688	+ 0·0026	...	+ 15·107	+ 0·174	...	...
368	... ...	+ 2·4620	+ 0·0053	...	+ 15·130	+ 0·229	...	...
369	... ...	+ 2·4646	+ 0·0053	...	+ 15·184	+ 0·228	...	...
370	... ...	+ 3·3794	− 0·0144	...	+ 15·328	+ 0·311	...	...
371	... ...	+ 1·5467	− 0·0035	...	+ 15·337	+ 0·138	...	...
372	... ...	+ 3·3003	− 0·0116	...	+ 15·358	+ 0·303	...	...
373	... ...	+ 2·4619	+ 0·0056	...	+ 15·366	+ 0·224	...	...
374	... ...	+ 2·4636	+ 0·0057	...	+ 15·407	+ 0·223	...	...
375	30 Hydræ *α*, Var. 2 ...	+ 2·0505	− 0·0013	− 0·002	+ 15·436	+ 0·268	− 0·05	1330
376	Lalande 18636 ...	+ 3·4064	− 0·0158	...	+ 15·483	+ 0·310	...	...
377	Lalande 18659 ...	+ 3·4162	− 0·0161	...	+ 15·534	+ 0·309	...	...
378	... ...	+ 3·4202	− 0·0162	...	+ 15·536	+ 0·309	...	...
379	Lalande 18683 ...	+ 3·4101	− 0·0159	...	+ 15·571	+ 0·308	...	...
380	... ...	+ 0·9181	− 0·0275	...	+ 15·610	+ 0·077	...	...
381	... ...	+ 2·3577	+ 0·0064	...	+ 15·632	+ 0·209	...	...
382	Lacaille 3887 ...	+ 2·0744	+ 0·0057	...	+ 15·651	+ 0·182	...	...
383	... ...	+ 1·8289	+ 0·0029	...	+ 15·831	+ 0·157	...	...
384	... ...	+ 1·9426	+ 0·0047	...	+ 15·842	+ 0·167	...	...
385	... ...	+ 1·8366	+ 0·0031	...	+ 15·899	+ 0·156	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
386	10 Leonis	4·7	...	9	30	26·90	82	35	30·6	1	0·22
387	R. P. L. 69	7·9	...	9	35	26·62	2	48	56·6	2	0·15
388	... ...	8·0	1	9	35	46·69	151	58	30·3	1	0·22
389	16 Leonis ψ	5·7	...	9	36	45·56	75	23	38·8	2	0·24
390	... ...	9·8	2	9	37	2·27	151	56	0·4	3	0·18
391	... ...	7·3	2	9	37	9·33	148	27	34·4	2	0·18
392	... ...	8·0	2	9	37	19·42	148	33	27·5	2	0·20
393	17 Leonis ϵ	3·1	...	9	38	34·87	65	38	14·8	6	0·20
394	Bonn $+7°.2181$	6·1	2	9	39	24·65	82	42	7·8	2	0·14
395	18 Leonis	6·1	...	9	39	29·44	77	36	5·2	3	0·28
396	... ...	8·0	2	9	39	53·78	148	35	54·2	2	0·16
397	l Carinæ, Var. 1	Var.	...	9	41	43·86	151	55	7·8	2	0·19
398	Taylor 4337	7·0	1	9	42	6·16	148	27	29·8	1	0·22
399	... ...	8·0	1	9	42	9·27	130	51	33·4	1	0·30
400	... ...	8·5	1	9	43	1·57	130	50	3·6	1	0·28
401	Lalande 19286	8·7	2	9	43	39·65	89	18	1·6	2	0·20
402	... ...	8·2	1	9	43	50·63	143	48	7·9	1	0·26
403	... ...	9·0	1	9	46	15·89	129	5	7·8	1	0·17
404	... ...	10·1	2	9	47	32·64	75	35	43·7	2	0·27
405	... ...	9·8	2	9	48	47·52	152	9	55·4	2	0·23
406	... ...	9·8	1	9	52	42·36	72	3	56·5	1	0·27
407	... ...	9·0	1	9	53	2·37	129	42	57·1	1	0·16
408	29 Leonis π	5·0	...	9	53	26·92	81	20	34·7	15	0·20
409	... ...	10·2	1	9	55	34·12	72	20	17·0	1	0·27
410	Taylor 4444	6·5	...	9	55	40·56	67	26	6·2	2	0·14
411	... ...	10·3	1	9	56	18·80	129	59	42·9	1	0·27
412	... ...	8·0	1	9	56	43·15	144	6	9·8	1	0·25
413	W. B. N. IX. 1189 ...	9·7	1	9	56	53·66	73	9	58·9	1	0·28
414	... ...	9·0	2	9	58	4·60	145	35	21·0	2	0·18
415	Taylor 4476	7·8	1	9	58	8·12	145	38	22·1	1	0·18
416	W. B. N. IX. 1230 ...	9·0	...	9	58	18·87	72	54	49·7	1	0·29
417	... ...	9·0	1	9	58	26·35	143	56	28·6	1	0·26
418	... ...	8·8	1	9	58	41·19	150	41	18·6	1	0·20
419	... ...	9·3	2	9	59	47·74	86	32	39·5	2	0·28
420	... ...	10·0	1	10	0	19·41	86	24	36·0	1	0·28

407—409—413—416.—Comparison stars for Mars in 1869.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
386	10 Leonis	+ 3·1778	− 0·0077	+ 0·001	+ 15·933	+ 0·276	+ 0·01	1340
387	R. P. L. 69	+ 19·1029	− 5·6206	...	+ 16·195	+ 1·637	...	...
388	... ...	+ 1·5938	− 0·0020	...	+ 16·213	+ 0·130	...	...
389	16 Leonis ψ	+ 3·2760	− 0·0115	− 0·001	+ 16·263	+ 0·273	+ 0·00	1366
390	... ...	+ 1·6075	− 0·0016	...	+ 16·278	+ 0·130	...	...
391	... ...	+ 1·8008	+ 0·0031	...	+ 16·283	+ 0·146	...	...
392	... ...	+ 1·7972	+ 0·0030	...	+ 16·293	+ 0·146	...	...
393	17 Leonis ε	+ 3·4224	− 0·0180	− 0·004	+ 16·357	+ 0·282	+ 0·01	1368
394	Bonn +7°. 2181 ...	+ 3·1708	− 0·0075	...	+ 16·398	+ 0·260	...	...
395	18 Leonis	+ 3·2413	− 0·0103	− 0·002	+ 16·402	+ 0·266	− 0·03	1370
396	... ...	+ 1·8152	+ 0·0036	...	+ 16·422	+ 0·145	...	...
397	l Carinæ, Var. 1 ...	+ 1·6504	− 0·0001	− 0·003	+ 16·514	+ 0·130	− 0·02	Stone
398	Taylor 4337	+ 1·8392	+ 0·0042	...	+ 16·532	+ 0·145	...	...
399	... ...	+ 2·4179	+ 0·0083	...	+ 16·536	+ 0·193	...	...
400	... ...	+ 2·4221	+ 0·0084	...	+ 16·578	+ 0·192	...	...
401	Lalande 19286 ...	+ 3·0813	− 0·0044	...	+ 16·610	+ 0·247	...	...
402	... ...	+ 2·0496	+ 0·0075	...	+ 16·618	+ 0·160	...	...
403	... ...	+ 2·4740	+ 0·0086	...	+ 16·735	+ 0·192	...	...
404	... ...	+ 3·2597	− 0·0113	...	+ 16·798	+ 0·253	...	...
405	... ...	+ 1·7005	+ 0·0017	...	+ 16·857	+ 0·128	...	...
406	... ...	+ 3·3003	− 0·0134	...	+ 17·040	+ 0·247	...	...
407	... ...	+ 2·4880	+ 0·0095	...	+ 17·055	+ 0·184	...	...
408	29 Leonis π	+ 3·1789	− 0·0080	− 0·004	+ 17·074	+ 0·236	+ 0·01	1398
409	... ...	+ 3·2920	− 0·0132	...	+ 17·171	+ 0·241	...	...
410	Taylor 4444	+ 3·3589	− 0·0165	...	+ 17·176	+ 0·245	...	...
411	... .	+ 2·4958	+ 0·0097	...	+ 17·204	+ 0·180	...	...
412	... ...	+ 2·1259	+ 0·0102	...	+ 17·223	+ 0·152	...	...
413	W. B. N. IX. 1189 ...	+ 3·2791	− 0·0127	...	+ 17·230	+ 0·238	...	...
414	... ...	+ 2·0822	+ 0·0099	...	+ 17·282	+ 0·147	...	...
415	Taylor 4476	+ 2·0807	+ 0·0100	...	+ 17·286	+ 0·147	...	...
416	W. B. N. IX. 1230 ...	+ 3·2802	− 0·0129	...	+ 17·294	+ 0·235	...	...
417	... ...	+ 2·1433	+ 0·0105	...	+ 17·299	+ 0·151	...	...
418	... ...	+ 1·8698	+ 0·0067	...	+ 17·310	+ 0·131	...	...
419	... ...	+ 3·1126	− 0·0054	...	+ 17·359	+ 0·221	...	...
420	... ...	+ 3·1140	− 0·0055	...	+ 17·382	+ 0·220	...	...

396.—Proper motions from "*Stone's Cape Catalogue.*"

Mean Positions of Stars for 1872, *January* 1*st.*

	Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
	421	30 Leonis η	3·6	...	10	0	21·11	72	36	52·2	2	0·07
	422	32 Leonis α (*Regulus*) ...	1·4	...	10	1	33·19	77	24	29·0	11	0·22
21·70	423	... ...	8·9	2	10	2	21·64	129	58	45·7	2	0·22
	424	... ...	9·4	1	10	2	40·63	123	29	43·8	1	0·23
6·70	425	... ...	9·4	2	10	3	6·79	129	59	56·7	2	0·22
	426	33 Leonis	8·0	1	10	3	47·33	73	39	55·6	1	0·27
46·91	427	... ...	9·2	2	10	4	46·88	122	56	21·8	2	0·23
	428	... ...	9·4	1	10	4	54·55	123	31	12·8	1	0·25
19·18	429	Taylor 4552	7·2	1	10	7	19·04	147	25	46·4	1	0·19
18·51	430	... ...	8·1	2	10	8	18·31	139	58	39·4	2	0·17
	431	... ...	9·0	1	10	10	8·90	145	36	45·6	1	0·20
	432	R. P. L. 72	5·6	...	10	10	39·28	5	6	2·6	2	0·68
	433	41 Leonis γ^1	2·2	...	10	12	54·71	69	30	44·2	17	0·23
12·10	434	... ...	9·2	...	10	13	11·90 (12·10)	128	39	19·3	1	0·17
	435	44 Leonis	6·2	...	10	18	30·39	80	33	56·8	2	0·15
3·45	436	... ...	9·8	1	10	19	3·37	146	10	54·0	1	0·17
	437	... ...	9·7	2	10	19	41·53	146	11	9·5	2	0·27
	438	... ...	9·5	5	10	20	30·47	146	14	13·8	5	0·25
	439	Taylor 4682	7·0	1	10	21	58·13	75	0	13·4	1	0·16
43·82	440	... ...	9·3	1	10	24	43·49	147	1	21·8	1	0·18
6·84	441	... ...	8·0	1	10	25	0·69	125	36	20·8	1	0·18
24·04	442	Lalande 20402	8·0	1	10	25	24·03	79	55	13·0	1	0·18
	443	... ...	8·0	4	10	25	37·80	146	53	9·4	4	0·23
	444	... ...	8·0	1	10	25	58·11	146	56	35·6	1	0·20
	445	47 Leonis ρ	4·0	...	10	26	4·23	80	2	8·8	10	0·23
28·73	446	p Carinæ	3·6	...	10	27	28·66	151	1	37·6	1	0·19
	447	... ...	10·0	1	10	28	20·17	131	44	3·4	1	0·30
	448	... ...	9·4	2	10	28	22·28	150	52	24·5	2	0·29
	449	... ...	9·7	2	10	29	30·85	147	57	5·3	2	0·27
	450	50 Leonis	6·5	...	10	32	2·55	73	12	27·7	3	0·19
42·84	451	... ...	9·2	1	10	35	42·72	137	22	2·9	1	0·18
	452	... ...	9·3	2	10	36	49·68	150	49	43·4	2	0·20
	453	... ...	8·9	1	10	37	47·56	151	31	50·5	1	0·22
	454	36 Sextantis	6·0	...	10	38	33·71	86	50	23·9	2	0·25
0·68	455	Taylor 4850—2nd ...	7·9	3	10	39	0·69	148	52	37·7	3	0·22

421.—Comparison star for Mars in 1869.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
421	30 Leonis η	+ 3·2809	− 0·0131	+ 0·001	+ 17·384	+ 0·232	− 0·00	1403
422	32 Leonis α	+ 3·2197	− 0·0102	− 0·018	+ 17·435	+ 0·225	− 0·02	1406
423	... ...	+ 2·5217	+ 0·0105	...	+ 17·470	+ 0·173	...	...
424	... ...	+ 2·6387	+ 0·0084	...	+ 17·484	+ 0·182	...	...
425	... ...	+ 2·5246	+ 0·0106	...	+ 17·502	+ 0·172	...	...
426	33 Leonis	+ 3·2625	− 0·0123	+ 0·005	+ 17·531	+ 0·223	+ 0·01	Gr.
427	... ...	+ 2·6548	+ 0·0089	...	+ 17·573	+ 0·179	...	...
428	... ...	+ 2·6460	+ 0·0091	...	+ 17·579	+ 0·178	...	...
429	Taylor 4552	+ 2·0842	+ 0·0116	...	+ 17·679	+ 0·136	...	...
430	... ...	+ 2·3267	+ 0·0130	...	+ 17·720	+ 0·151	...	...
431	... ...	+ 2·1713	+ 0·0129	...	+ 17·795	+ 0·138	...	...
432	R. P. L. 72	+ 9·9490	− 1·6342	− 0·096	+ 17·815	+ 0·658	− 0·04	1399
433	41 Leonis γ^1	+ 3·2971	− 0·0148	+ 0·021	+ 17·905	+ 0·208	+ 0·14	1432
434	... ...	+ 2·5918	+ 0·0115	...	+ 17·915	+ 0·162	...	...
435	44 Leonis	+ 3·1675	− 0·0079	− 0·007	+ 18·120	+ 0·191	+ 0·12	Gr.
436	... ...	+ 2·2215	+ 0·0152	...	+ 18·140	+ 0·131	...	...
437	... ...	+ 2·2262	+ 0·0155	...	+ 18·164	+ 0·130	...	...
438	... ...	+ 2·2309	+ 0·0156	...	+ 18·202	+ 0·129	...	...
439	Taylor 4682	+ 3·2207	− 0·0111	...	+ 18·248	+ 0·187	...	...
440	... ...	+ 2·2401	+ 0·0168	...	+ 18·346	+ 0·124	...	...
441	... ...	+ 2·6871	+ 0·0120	...	+ 18·361	+ 0·150	...	...
442	Lalande 20402 ...	+ 3·1675	− 0·0084	...	+ 18·370	+ 0·178	...	...
443	... ...	+ 2·2517	+ 0·0170	...	+ 18·378	+ 0·124	...	...
444	... ...	+ 2·2528	+ 0·0171	...	+ 18·390	+ 0·123	...	...
445	47 Leonis ρ	+ 3·1657	− 0·0080	− 0·001	+ 18·394	+ 0·176	− 0·01	1467
446	p Carinæ	+ 2·1235	+ 0·0165	...	+ 18·442	+ 0·114	...	...
447	... ...	+ 2·6077	+ 0·0145	...	+ 18·472	+ 0·140	...	...
448	... ...	+ 2·1382	+ 0·0169	...	+ 18·473	+ 0·114	...	...
449	... ...	+ 2·2508	+ 0·0181	...	+ 18·511	+ 0·119	...	...
450	50 Leonis	+ 3·2232	− 0·0119	...	+ 18·600	+ 0·168	...	...
451	... ...	+ 2·5500	+ 0·0177	...	+ 18·713	+ 0·126	...	...
452	... ...	+ 2·2220	+ 0·0202	...	+ 18·748	+ 0·107	...	...
453	... ...	+ 2·2067	+ 0·0205	...	+ 18·778	+ 0·105	...	...
454	36 Sextantis	+ 3·0979	− 0·0040	− 0·005	+ 18·802	+ 0·150	− 0·01	1491
455	Taylor 4850—2nd ...	+ 2·3059	+ 0·0211	...	+ 18·815	+ 0·109	...	...

426.—Proper motions from "*Greenwich Catalogue for* 1872."
435.—Proper motions from "*Greenwich Catalogue for* 1864."

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
456	... ...	9·0	1	10	39	6·44	144	52	51·6	1	0·27
457	Taylor 4852—1st... ...	8·8	3	10	39	10·37	148	54	16·4	3	0·28
458	Taylor 4852—2nd ...	9·0	3	10	39	12·14	148	54	20·7	3	0·28
459	... ...	8·8	1	10	39	21·54	148	36	43·6	1	0·28
460	Brisbane 3194—2nd ...	8·5	1	10	39	37·27	149	3	58·8	1	0·20
461	... ...	9·5	1	10	39	44·78	139	4	41·6	1	0·31
462	... ...	8·0	3	10	39	47·37	148	53	37·1	3	0·20
463	η Argûs, Var. 1	6·9	2	10	40	5·938	149	0	44·7	4	0·19
464	Taylor 4872	8·0	1	10	41	23·07	151	16	7·5	1	0·30
465	53 Leonis *l*	5·3	...	10	42	31·65	78	46	42·0	11	0·22
466	Lacaille 4502	7·9	1	10	46	50·60	141	7	18·1	1	0·19
467	... ...	9·2	1	10	47	18·28	141	47	22·6	1	0·22
468	... ...	8·0	1	10	48	11·92	150	8	4·4	1	0·27
469	... ...	9·7	1	10	48	15·74	147	44	37·1	1	0·29
470	... ...	9·2	1	10	48	20·70	129	31	45·9	1	0·27
471	... ...	9·3	2	10	48	45·98	148	54	8·2	2	0·26
472	55 Leonis	6·0	...	10	49	7·38	88	34	52·2	2	0·30
473	... ...	9·0	2	10	50	36·44	144	33	4·7	2	0·19
474	... ...	9·2	1	10	52	16·03	143	48	4·1	1	0·22
475	... ...	8·5	2	10	52	39·48	143	38	51·1	2	0·25
476	... ...	8·9	2	10	53	13·79	139	35	21·2	2	0·18
477	58 Leonis *d*	5·0	...	10	53	57·14	85	41	45·0	1	0·21
478	61 Leonis p^3	5·0	...	10	55	17·91	91	47	46·1	1	0·20
479	50 Ursæ Majoris α ...	2·0	...	10	55	48·46	27	33	30·3	1	0·29
480	... ...	8·5	2	10	55	57·54	149	19	21·4	2	0·24
481	... ...	9·2	1	10	57	22·39	145	38	16·7	1	0·30
482	63 Leonis χ	4·7	...	10	58	24·74	81	58	20·5	9	0·27
483	65 Leonis p^4	5·7	...	11	0	22·34	87	21	4·6	1	0·20
484	Lacaille 4612	9·3	2	11	1	13·867	154	49	9·3	2	0·18
485	... ...	8·0	1	11	1	22·96	135	36	12·1	1	0·31
486	... ...	8·2	1	11	2	9·24	149	16	19·9	1	0·28
487	... ...	7·8	1	11	2	18·07	148	58	46·7	1	0·21
488	Lalande 21367	8·0	1	11	3	43·978	78	8	22·5	1	0·19
489	Lalande 21371	7·9	2	11	3	55·68	78	0	16·0	2	0·19
490	Taylor 5088	7·7	1	11	5	15·56	149	41	25·8	1	0·21

460—471.—Observed for map of η Argûs, Var. 1.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	*″*	*″*	*″*	
456	... ...	+ 2·4150	+ 0·0207	...	+ 18·818	+ 0·114	...	...
457	Taylor 4852—1st ...	+ 2·3066	+ 0·0213	...	+ 18·820	+ 0·108	...	...
458	Taylor 4852—2nd ...	+ 2·3067	+ 0·0212	...	+ 18·822	+ 0·108	...	...
459	... ...	+ 2·3170	+ 0·0213	...	+ 18·826	+ 0·109	...	...
460	Brisbane 3194—2nd...	+ 2·3056	+ 0·0214	...	+ 18·834	+ 0·108	...	...
461	... ...	+ 2·5431	+ 0·0191	...	+ 18·837	+ 0·119	...	...
462	... ...	+ 2·3126	+ 0·0214	...	+ 18·838	+ 0·108	...	...
463	η Argûs, Var. 1 ...	+ 2·3116	+ 0·0217	...	+ 18·848	+ 0·107	...	...
464	Taylor 4872	+ 2·2519	+ 0·0220	...	+ 18·886	+ 0·102	...	...
465	53 Leonis *l*	+ 3·1601	− 0·0080	− 0·002	+ 18·920	+ 0·145	+ 0·02	1500
466	Lacaille 4502 ...	+ 2·5519	+ 0·0215	...	+ 19·041	+ 0·109	...	...
467	... ...	+ 2·5424	+ 0·0218	...	+ 19·054	+ 0·108	...	...
468	... ...	+ 2·3546	+ 0·0246	...	+ 19·079	+ 0·098	...	...
469	... ...	+ 2·4199	+ 0·0242	...	+ 19·080	+ 0·101	...	...
470	... ...	+ 2·7329	+ 0·0164	...	+ 19·082	+ 0·115	...	...
471	... ...	+ 2·3943	+ 0·0247	...	+ 19·093	+ 0·099	...	...
472	55 Leonis	+ 3·0823	− 0·0026	+ 0·006	+ 19·103	+ 0·130	− 0·01	1517
473	... ...	+ 2·5122	+ 0·0238	...	+ 19·142	+ 0·102	...	...
474	... ...	+ 2·5401	+ 0·0239	...	+ 19·185	+ 0·100	...	...
475	... ...	+ 2·5461	+ 0·0239	...	+ 19·195	+ 0·100	...	...
476	... ...	+ 2·6211	+ 0·0222	...	+ 19·209	+ 0·102	...	...
477	58 Leonis *d*	+ 3·1007	− 0·0039	− 0·002	+ 19·227	+ 0·120	+ 0·01	1526
478	61 Leonis p^3... ...	+ 3·0605	− 0·0007	+ 0·000	+ 19·261	+ 0·117	+ 0·01	1530
479	50 Urs. Maj. α ...	+ 3·7804	− 0·0821	− 0·018	+ 19·273	+ 0·144	+ 0·07	1528
480	... ...	+ 2·4506	+ 0·0274	...	+ 19·276	+ 0·091	...	...
481	... ...	+ 2·5445	+ 0·0263	...	+ 19·311	+ 0·092	...	...
482	63 Leonis χ	+ 3·1222	− 0·0056	− 0·026	+ 19·335	+ 0·113	+ 0·02	1535
483	65 Leonis p^4... ..	+ 3·0881	− 0·0028	− 0·029	+ 19·380	+ 0·109	+ 0·06	1539
484	Lacaille 4612 ...	+ 2·3510	+ 0·0315	...	+ 19·399	+ 0·079	...	...
485	... ...	+ 2·7268	+ 0·0216	...	+ 19·401	+ 0·093	...	...
486	... ...	+ 2·5105	+ 0·0297	...	+ 19·419	+ 0·084	...	...
487	... ...	+ 2·5185	+ 0·0296	...	+ 19·422	+ 0·084	...	...
488	Lalande 21367 ...	+ 3·1404	− 0·0076	...	+ 19·454	+ 0·105	...	...
489	Lalande 21371 ...	+ 3·1411	− 0·0076	...	+ 19·457	+ 0·105	...	...
490	Taylor 5088	+ 2·5311	+ 0·0312	...	+ 19·485	+ 0·080	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
491	... ...	8·0	2	11	6	9·47	149	1	21·0	2	0·22
492	Taylor 5108	5·6	...	11	7	6·98	149	37	20·9	1	0·29
493	69 Leonis p^5	5·5	...	11	7	12·25	89	22	25·3	1	0·24
494	68 Leonis δ	2·8	...	11	7	17·90	68	46	32·0	9	0·28
495	Taylor 5107	6·1	2	11	7	22·80	81	14	21·6	2	0·22
496	... ...	8·0	1	11	7	28·22	145	42	52·0	1	0·31
497	73 Leonis n	5·5	...	11	9	9·45	75	59	40·8	1	0·07
498	12 Crateris δ	3·9	...	11	12	56·55	104	5	11·1	10	0·27
499	78 Leonis ι	4·0	...	11	17	15·04	78	45	59·5	2	0·18
500	79 Leonis...	5·5	...	11	17	28·06	87	53	24·0	2	0·22
501	... ...	8·9	3	11	21	14·48	145	54	24·6	3	0·28
502	84 Leonis τ	5·1	...	11	21	21·25	86	26	21·4	1	0·29
503	Lalande 21819	8·0	3	11	21	22·21	86	27	53·1	3	0·21
504	Lalande 21833	7·8	3	11	21	51·44	86	30	36·4	3	0·23
505	... ...	10·0	1	11	22	43·04	91	58	48·3	1	0·29
506	... ...	9·1	1	11	23	10·23	145	56	23·4	1	0·24
507	... ...	9·0	1	11	25	30·13	151	34	8·9	1	0·28
508	... ...	9·5	1	11	27	13·69	151	33	38·1	1	0·28
509	91 Leonis ν	4·5	...	11	30	23·73	90	7	2·3	16	0·28
510	W. B. E. XI. 573... ...	8·0	7	11	33	54·22	84	9	2·9	7	0·37
511	W. B. E. XI. 582... ...	8·2	1	11	34	22·50	84	20	17·6	1	0·31
512	2 Virginis ξ	5·0	...	11	38	41·17	81	1	50·7	2	0·25
513	3 Virginis ν	4·2	...	11	39	16·78	82	45	13·1	1	0·22
514	3 Virginis A^1	5·2	...	11	41	20·33	81	2	35·8	2	0·30
515	94 Leonis β (*Deneb*) ...	2·2	...	11	42	31·75	74	42	44·8	15	0·29
516	B. A. C. 3996	6·1	3	11	42	33·54	84	5	59·1	3	0·23
517	W. B. E. XI. 805... ...	8·0	2	11	47	55·19	85	15	3·4	2	0·22
518	Bonn +4°.2543	9·1	7	11	48	8·09	85	30	44·5	7	0·35
519	Bonn +4°.2550	10·2	2	11	50	57·49	85	21	58·1	2	0·37
520	Taylor 6389	7·4	1	11	51	40·35	85	48	18·3	1	0·25
521	... ...	9·0	1	11	52	44·70	154	35	12·7	1	0·27
522	7 Virginis b	5·2	...	11	53	23·51	85	37	54·5	1	0·25
523	8 Virginis π	4·4	...	11	54	18·86	82	40	18·8	3	0·27
524	Taylor 6440	8·0	1	11	58	9·87	85	42	48·7	1	0·32
525	R. P. L. 89	6·3	...	11	58	16·60	3	42	12·9	2	0·51

495—497—512—514.—Comparison stars for the moon.
505.—Comparison star for Asia in 1868.
510—511—517—518—519—524.—Comparison stars for Mars in 1871.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
491	... ...	+ 2·5539	+ 0·0311	...	+ 19·504	+ 0·079	...	...
492	Taylor 5108	+ 2·5506	+ 0·0319	...	+ 19·522	+ 0·077	...	...
493	69 Leonis p^5... ...	+ 3·0756	− 0·0013	− 0·003	+ 19·525	+ 0·095	− 0·01	1547
494	68 Leonis δ	+ 3·1905	− 0·0132	+ 0·010	+ 19·527	+ 0·098	+ 0·12	1546
495	Taylor 5107	+ 3·1191	− 0·0055	...	+ 19·528	+ 0·095	...	...
496	... ...	+ 2·6267	+ 0·0294	...	+ 19·530	+ 0·079	...	...
497	73 Leonis n	+ 3·1451	− 0·0049	− 0·002	+ 19·565	+ 0·043	+ 0·02	1550
498	12 Crateris δ... ...	+ 3·0037	+ 0·0064	− 0·011	+ 19·634	+ 0·081	− 0·21	1557
499	78 Leonis ι	+ 3·1214	− 0·0064	+ 0·009	+ 19·707	+ 0·076	+ 0·06	1560
500	79 Leonis	+ 3·0813	− 0·0016	− 0·003	+ 19·710	+ 0·076	− 0·01	1562
501	... ...	+ 2·7397	+ 0·0339	...	+ 19·768	+ 0·059	...	...
502	84 Leonis τ	+ 3·0862	− 0·0020	− 0·001	+ 19·770	+ 0·072	+ 0·01	1570
503	Lalande 21819 ...	+ 3·0860	− 0·0021	...	+ 19·770	+ 0·068	...	...
504	Lalande 21833 ...	+ 3·0859	− 0·0020	...	+ 19·778	+ 0·067	...	...
505	... ...	+ 3·0646	+ 0·0008	...	+ 19·789	+ 0·064	...	...
506	... ...	+ 2·7557	+ 0·0344	...	+ 19·795	+ 0·056	...	...
507	... ...	+ 2·7019	+ 0·0415	...	+ 19·828	+ 0·050	...	...
508	... ...	+ 2·7203	+ 0·0423	...	+ 19·849	+ 0·048	...	...
509	91 Leonis υ	+ 3·0718	+ 0·0003	− 0·002	+ 19·888	+ 0·049	− 0·05	1586
510	W. B. E. XI. 573 ...	+ 3·0877	− 0·0026	...	+ 19·925	+ 0·042	...	...
511	W. B. E. XI. 582 ...	+ 3·0870	− 0·0024	...	+ 19·930	+ 0·041	...	...
512	2 Virginis ξ	+ 3·0917	− 0·0040	+ 0·004	+ 19·968	+ 0·033	+ 0·01	1599
513	3 Virginis ν	+ 3·0877	− 0·0031	− 0·003	+ 19·973	+ 0·032	+ 0·17	1601
514	4 Virginis A^1 ...	+ 3·0893	− 0·0039	− 0·005	+ 19·989	+ 0·027	− 0·02	1602
515	94 Leonis β (*Deneb*)..	+ 3·1000	− 0·0074	− 0·036	+ 19·996	+ 0·025	+ 0·10	1605
516	B. A. C. 3996 ...	+ 3·0827	− 0·0022	...	+ 19·997	+ 0·025	...	...
517	W. B. E. XI. 805 ...	+ 3·0780	− 0·0013	...	+ 20·027	+ 0·014	...	...
518	Bonn +4°.2543 ...	+ 3·0775	− 0·0011	...	+ 20·028	+ 0·014	...	...
519	Bonn +4°.2550 ...	+ 3·0764	− 0·0010	...	+ 20·039	+ 0·008	...	...
520	Taylor 6389	+ 3·0757	− 0·0008	...	+ 20·042	+ 0·007	...	...
521	... ...	+ 2·9831	+ 0·0604	...	+ 20·044	+ 0·005	...	...
522	7 Virginis b	+ 3·0751	− 0·0008	− 0·002	+ 20·047	+ 0·005	− 0·02	1617
523	8 Virginis π	+ 3·0764	− 0·0022	− 0·003	+ 20·048	+ 0·002	+ 0·02	1618
524	Taylor 6440	+ 3·0729	− 0·0004	...	+ 20·054	− 0·006	...	...
525	R. P. L. 89	+ 3·2275	− 0·5065	...	+ 20·054	− 0·005	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
526	... ...	8·8	1	12	1	32·22	150	24	8·8	1	0·24
527	W. B. E. XII. 9	9·0	5	12	2	52·52	86	50	50·9	5	0·37
528	Lacaille 5041	7·8	1	12	2	57·52	141	25	53·6	1	0·24
529	10 Virginis	6·1	...	12	3	7·65	87	22	59·5	1	0·15
530	2 Corvi ϵ	3·1	...	12	3	32·65	111	54	28·5	11	0·29
531	... ...	9·0	2	12	4	14·95	145	58	59·8	2	0·35
532	Lalande 22869	9·6	2	12	4	59·85	86	40	46·3	2	0·39
533	... ...	8·3	...	12	6	12·96	134	10	51·6	1	0·28
534	... ...	8·7	1	12	6	21·21	150	21	46·5	1	0·39
535	W. B. E. XII. 87	7·5	1	12	7	23·49	87	1	38·5	1	0·25
536	69 Ursæ Majoris δ ...	3·4	...	12	8	4·88	32	15	20·7	1	0·32
537	W. B. E. XII. 174 ...	8·0	5	12	12	28·03	88	7	24·0	5	0·36
538	R. P. L. 92	6·7	...	12	13	7·37	2	51	7·9	1	0·39
539	... ...	8·5	1	12	13	18·54	108	33	47·2	1	0·34
540	15 Virginis η	4·0	...	12	13	21·48	89	57	19·1	6	0·29
541	16 Virginis c	5·2	...	12	13	50·89	85	58	28·2	1	0·15
542	R. P. L. 93	6·3	...	12	14	20·37	1	35	28·0	1	0·83
543	Lacaille 5119	8·8	1	12	15	47·17	138	36	57·4	1	0·24
544	W. B. E. XII. 269 ...	8·0	5	12	18	8·01	87	54	26·3	5	0·37
545	... ...	8·0	1	12	19	29·07	147	24	0·2	1	0·38
546	α Crucis	1·5	...	12	19	29·53	152	23	25·3	2	0·29
547	Taylor 5710	7·0	1	12	20	27·33	147	36	31·1	1	0·40
548	... ...	9·0	2	12	21	36·56	147	28	32·4	2	0·35
549	... ...	9·5	1	12	23	38·50	87	3	39·9	1	0·28
550	... ...	9·0	1	12	25	5·27	151	1	16·7	1	0·30
551	... ...	8·3	2	12	27	27·32	38	3	6·4	2	0·25
552	9 Corvi β	2·8	...	12	27	39·95	112	41	19·4	4	0·23
553	Taylor 5785	7·9	1	12	28	13·38	151	2	6·2	1	0·36
554	... ...	8·5	1	12	28	15·39	141	42	34·8	1	0·38
555	Lalande 23532	8·3	5	12	28	53·18	92	50	26·8	5	0·34
556	... ...	9·0	1	12	33	1·65	100	7	21·9	1	0·39
557	... ...	7·5	2	12	33	13·48	28	16	2·2	2	0·37
558	29 Virginis γ^1 (*North*) ...	2·8	...	12	35	10·33	90	44	47·9	1	0·30
559	28 Virginis	6·5	1	12	35	20·68	96	47	46·3	2	0·34
560	S Ursæ Majoris, Var. 2 ...	10·0	1	12	38	20·06	28	12	18·4	1	0·34

527—532—535—537—544.—Comparison stars for moon.
538.—Groombridge 1871.
542.—Groombridge 1884.
555.—Comparison star for Hestia in 1872 and Polyhymnia in 1867.
556.—Comparison star for Sappho in 1867.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
526	... ...	+ 3·0880	+ 0·0549	...	+ 20·053	− 0·011	...	...
527	W. B. E. XII. 9 ...	+ 3·0712	+ 0·0005	...	+ 20·053	− 0·015	...	...
528	Lacaille 5041 ...	+ 3·0939	+ 0·0400	...	+ 20·053	− 0·014	...	...
529	10 Virginis	+ 3·0714	+ 0·0007	+ 0·001	+ 20·053	− 0·013	+ 0·19	1625
530	2 Corvi ε	+ 3·0805	+ 0·0142	− 0·006	+ 20·052	− 0·016	− 0·02	1626
531	... ...	+ 3·1089	+ 0·0474	...	+ 20·051	− 0·017	...	...
532	Lalande 22869 ...	+ 3·0705	+ 0·0005	...	+ 20·050	− 0·019	...	...
533	... ...	+ 3·1074	+ 0·0318	...	+ 20·047	− 0·021	...	...
534	... ...	+ 3·1374	+ 0·0568	...	+ 20·047	− 0·021	...	...
535	W. B. E. XII. 87 ...	+ 3·0699	+ 0·0008	...	+ 20·045	− 0·024	...	...
536	69 Urs. Maj. δ ...	+ 2·9884	− 0·0425	+ 0·013	+ 20·038	− 0·026	− 0·00	1637
537	W. B. E. XII. 174 ...	+ 3·0698	+ 0·0016	...	+ 20·025	− 0·034	...	...
538	R. P. L. 92	+ 1·5363	+ 0·0033	+ 0·285	+ 20·022	− 0·022	+ 0·02	1656
539	... ...	+ 3·0982	+ 0·0128	...	+ 20·021	− 0·035	...	...
540	15 Virginis η... ...	+ 3·0721	+ 0·0027	− 0·006	+ 20·020	− 0·035	+ 0·02	1647
541	16 Virginis c... ...	+ 3·0665	+ 0·0006	− 0·021	+ 20·017	− 0·036	+ 0·06	1652
542	R. P. L. 93	+ 0·0632	+ 1·0321	− 0·152	+ 20·015	− 0·010	− 0·07	Main
543	Lacaille 5119 ...	+ 3·1766	+ 0·0388	...	+ 20·007	− 0·040	...	...
544	W. B. E. XII. 269 ...	+ 3·0682	+ 0·0018	...	+ 19·992	− 0·045	...	...
545	... ...	+ 3·2498	+ 0·0546	...	+ 19·982	− 0·040	...	...
546	α Crucis	+ 3·2892	+ 0·0680	− 0·006	+ 19·983	− 0·050	+ 0·04	Stone
547	Taylor 5710	+ 3·2600	+ 0·0555	...	+ 19·975	− 0·051	...	...
548	... ...	+ 3·2696	+ 0·0556	...	+ 19·965	− 0·053	...	...
549	... ...	+ 3·0650	+ 0·0017	...	+ 19·948	− 0·055	...	...
550	... ...	+ 3·3360	+ 0·0658	...	+ 19·935	− 0·061	...	...
551	... ...	+ 2·8681	− 0·0294	...	+ 19·911	− 0·058	...	...
552	9 Corvi β	+ 3·1394	+ 0·0164	− 0·003	+ 19·909	− 0·064	+ 0·05	1685
553	Taylor 5785	+ 3·3690	+ 0·0670	...	+ 19·902	− 0·068	...	...
554	... ...	+ 3·2805	+ 0·0459	...	+ 19·902	− 0·067	...	...
555	Lalande 28532 ...	+ 3·0806	+ 0·0050	...	+ 19·896	− 0·065	...	...
556	... ...	+ 3·1065	+ 0·0091	...	+ 19·846	− 0·074	...	...
557	... ...	+ 2·7130	− 0·0384	...	+ 19·844	− 0·066	...	...
558	29 Virginis γ^1 ...	+ 3·0748	+ 0·0043	− 0·039	+ 19·820	− 0·078	− 0·02	1698-9
559	28 Virginis	+ 3·0967	+ 0·0074	− 0·001	+ 19·817	− 0·078	+ 0·03	1700
560	S Urs. Maj., Var. 2...	+ 2·6573	− 0·0360	...	+ 19·775	− 0·073	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
561	... ...	9·2	5	12	38	31·70	96	15	13·8	5	0·34
562	35 Virginis	6·0	...	12	41	20·42	85	43	40·6	1	0·30
563	... ...	8·9	1	12	42	52·07	147	21	23·4	1	0·37
564	... ...	9·0	1	12	43	14·48	142	54	34·4	1	0·35
565	... ...	9·1	1	12	43	18·22	139	27	56·5	1	0·38
566	U Virginis, Var. 3 ...	8·0	1	12	44	36·21	83	44	58·6	1	0·25
567	37 Virginis	6·0	...	12	45	5·92	86	14	49·7	1	0·39
568	... ...	9·5	1	12	45	34·66	83	21	44·9	1	0·28
569	R. P. L. 99	5·5	...	12	48	12·69	5	53	28·4	8	0·48
570	... ...	9·5	1	12	48	54·87	125	27	56·2	1	0·35
571	43 Virginis δ	3·7	...	12	49	9·42	85	54	23·8	1	0·38
572	... ...	8·0	1	12	49	51·50	145	36	49·2	1	0·30
573	12 Canum Venaticorum α.	3·0	...	12	50	2·20	50	59	24·2	2	0·25
574	O. A. S. 12539	6·9	4	12	50	25·68	118	10	28·7	4	0·35
575	... ...	9·0	1	12	51	36·51	127	7	43·1	1	0·29
576	44 Virginis κ	5·9	...	12	53	3·98	93	7	17·0	1	0·15
577	... ...	7·8	1	12	53	35·60	142	26	40·7	1	0·35
578	... ...	9·3	1	12	55	5·69	139	20	59·1	1	0·37
579	... ...	8·8	1	12	56	15·20	149	30	6·2	1	0·30
580	48 Virginis	6·6	...	12	57	18·78	92	58	26·8	1	0·15
581	... ...	10·0	...	12	59	36·85	113	15	9·5	1	0·35
582	50 Virginis	6·7	1	13	3	3·37	99	38	45·0	2	0·31
583	51 Virginis θ	4·4	...	13	3	19·42	94	51	18·5	16	0·36
584	... ...	9·2	2	13	5	4·29	143	14	55·9	2	0·36
585	... ...	9·0	1	13	6	3·79	124	19	3·6	1	0·31
586	O. A. N. 13563	8·3	2	13	15	42·45	27	55	45·7	2	0·32
587	... ...	8·9	1	13	16	17·64	145	15	23·5	1	0·38
588	65 Virginis	6·1	...	13	16	40·96	94	15	16·7	3	0·34
589	... ...	9·6	1	13	17	34·37	128	11	58·4	1	0·28
590	66 Virginis	5·8	...	13	17	53·45	94	29	39·3	1	0·31
591	67 Virginis α (*Spica*) ...	1·2	...	13	18	27·12	100	29	33·2	8	0·38
592	79 Urs. Maj. ζ (*Mizar*)—1st	2·6	...	13	18	46·17	34	24	20·5	2	0·41
593	79 Urs. Maj. ζ (*Mizar*)—2nd	4·2	...	13	18	47·04	34	24	33·0	1	0·48
594	... ...	9·5	1	13	22	15·83	112	30	27·8	1	0·29
595	R Hydræ, Var. 1	8·1	3	13	22	43·25	112	37	8·1	3	0·35

561.—Comparison star for Asia in 1872.
568.—Observed for map of U Virginis, Var. 3.
574.—Comparison star for Danaë in 1869.
586.—Comparison star for Comet 2, 1861.
594.—Observed for map of R Hydræ, Var. 1.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
561	... ...	+ 3·0967	+ 0·0074	...	+ 19·773	− 0·084	...	...
562	35 Virginis... ...	+ 3·0642	+ 0·0020	− 0·003	+ 19·729	− 0·089	+ 0·01	1708
563	... ...	+ 3·4602	+ 0·0613	...	+ 19·705	− 0·101	...	...
564	... ...	+ 3·4038	+ 0·0512	...	+ 19·698	− 0·100	...	...
565	... ...	+ 3·3658	+ 0·0449	...	+ 19·697	− 0·099	...	...
566	U Virginis, Var. 3 ...	+ 3·0439	+ 0·0012	...	+ 19·675	− 0·093	...	...
567	37 Virginis	+ 3·0550	+ 0·0025	− 0·004	+ 19·667	− 0·095	− 0·03	1714
568	... ...	+ 3·0415	+ 0·0010	...	+ 19·659	− 0·095	...	...
569	R. P. L. 99	+ 0·3609	+ 0·2212	− 0·017	+ 19·612	− 0·019	− 0·02	1730
570	... ...	+ 3·2739	+ 0·0279	...	+ 19·599	− 0·108	...	...
571	43 Virginis δ... ...	+ 3·0518	+ 0·0025	− 0·034	+ 19·595	− 0·103	+ 0·05	1723
572	... ...	+ 3·4939	+ 0·0586	...	+ 19·582	− 0·117	...	...
573	12 Can. Ven. α ...	+ 2·8376	− 0·0152	− 0·022	+ 19·579	− 0·098	− 0·07	1725
574	O. A. S. 12539 ...	+ 3·2284	+ 0·0217	...	+ 19·572	− 0·110	...	...
575	... ...	+ 3·2982	+ 0·0208	...	+ 19·548	− 0·115	...	...
576	44 Virginis κ... ...	+ 3·0888	+ 0·0064	− 0·004	+ 19·520	− 0·111	− 0·01	1729
577	... ...	+ 3·4751	+ 0·0522	...	+ 19·509	− 0·125	...	...
578	... ...	+ 3·4429	+ 0·0465	...	+ 19·477	− 0·127	...	...
579	... ...	+ 3·6238	+ 0·0716	...	+ 19·454	− 0·136	...	...
580	48 Virginis	+ 3·0894	+ 0·0065	− 0·006	+ 19·431	− 0·119	+ 0·02	1738
581	... ...	+ 3·2127	+ 0·0184	...	+ 19·446	− 0·122	...	...
582	50 Virginis	+ 3·1339	+ 0·0104	− 0·001	+ 19·300	− 0·131	+ 0·02	1746
583	51 Virginis θ... ...	+ 3·1031	+ 0·0078	− 0·004	+ 19·294	− 0·132	+ 0·04	1747
584	... ...	+ 3·5738	+ 0·0560	...	+ 19·252	− 0·153	...	...
585	... ...	+ 3·3317	+ 0·0282	...	+ 19·227	− 0·145	...	...
586	O. A. N. 13563 ...	+ 2·2542	− 0·0189	...	+ 18·971	− 0·114	...	...
587	... ...	+ 3·7021	+ 0·0629	...	+ 18·953	− 0·183	...	...
588	65 Virginis	+ 3·1048	+ 0·0080	− 0·004	+ 18·943	− 0·157	+ 0·01	1772
589	... ...	+ 3·4216	+ 0·0331	...	+ 18·917	− 0·173	...	...
590	66 Virginis	+ 3·1072	+ 0·0082	+ 0·009	+ 18·892	− 0·159	+ 0·02	1773
591	67 Virginis α... ...	+ 3·1553	+ 0·0116	− 0·004	+ 18·891	− 0·163	+ 0·02	1774
592	79 Urs. Maj. ζ—1st...	+ 2·4144	− 0·0172	+ 0·013	+ 18·882	− 0·127	+ 0·02	1776
593	79 Urs. Maj. ζ—2nd..	+ 2·4143	− 0·0172	+ 0·015	+ 18·881	− 0·127	+ 0·03	1777
594	... ...	+ 3·2668	+ 0·0191	...	+ 18·776	− 0·175	...	...
595	R Hydræ, Var. 1 ...	+ 3·2689	+ 0·0192	+ 0·002	+ 18·766	− 0·176	− 0·01	Gr.

595.—Proper motions from "*Greenwich Catalogue* 1872."

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
596	... ...	9·0	1	13	25	15·28	128	11	11·6	1	0·29
597	... ...	9·0	2	13	25	16·91	124	11	37·5	2	0·42
598	74 Virginis l^2	4·9	...	13	25	18·72	95	35	39·5	2	0·40
599	... ...	8·6	1	13	25	59·05	128	12	50·3	1	0·24
600	Taylor 6257	8·3	2	13	26	6·88	148	50	53·7	2	0·38
601	... ...	8·0	1	13	27	6·08	131	37	40·7	1	0·44
602	79 Virginis ζ	3·5	...	13	28	10·33	89	56	26·7	5	0·39
603	80 Virginis	5·8	...	13	28	51·88	94	44	36·8	2	0·23
604	... ...	8·0	1	13	30	1·47	151	5	14·5	2	0·33
605	Lacaille 5614	8·0	1	13	30	24·68	128	14	35·4	1	0·35
606	... ...	10·2	1	13	34	31·09	129	12	26·9	1	0·44
607	82 Virginis m	5·3	...	13	34	53·73	98	3	22·4	1	0·38
608	Bonn +0°.3090	9·3	1	13	35	24·02	89	27	57·7	1	0·40
609	... ...	9·2	1	13	36	42·85	128	7	48·3	1	0·44
610	Taylor 6366	7·0	1	13	37	25·54	151	48	30·6	1	0·34
611	Lacaille 5659	8·0	1	13	37	41·25	152	15	59·0	1	0·29
612	... ...	8·2	2	13	37	59·46	128	42	42·9	2	0·42
613	Taylor 6374	7·2	2	13	38	16·88	151	56	52·9	2	0·36
614	... ...	9·5	1	13	39	7·07	152	48	30·1	1	0·35
615	85 Ursæ Majoris η ...	2·0	...	13	42	29·55	40	2	55·4	1	0·28
616	89 Virginis	5·2	...	13	42	55·17	107	29	43·7	2	0·33
617	... —2nd... ...	10·0	1	13	45	59·55	128	25	35·0	1	0·42
618	X Virginis, Var. 5 ...	8·9	1	13	47	38·66	78	18	15·5	1	0·34
619	Taylor 6473	6·5	1	13	48	15·33	97	25	39·8	1	0·38
620	8 Bŏotis η...	2·9	...	13	48	35·37	70	57	35·2	12	0·37
621	... ...	8·2	1	13	50	32·70	149	56	32·3	1	0·36
622	... ...	8·4	1	13	50	39·48	123	46	7·4	1	0·42
623	... ...	8·3	2	13	51	8·48	123	46	18·2	2	0·40
624	... ...	8·8	2	13	53	37·67	135	43	13·3	2	0·36
625	93 Virginis τ	4·4	...	13	55	8·01	87	50	6·3	10	0·40
626	Lacaille 5794	6·3	1	13	57	39·70	152	49	56·5	1	0·35
627	... ...	8·6	1	13	58	43·50	129	22	24·0	1	0·36
628	95 Virginis	5·7	...	13	59	56·76	98	42	5·8	2	0·31
629	... ...	9·8	1	14	0	55·63	150	53	23·9	1	0·44
630	... ...	9·5	1	14	2	30·55	124	18	29·0	2	0·31

608.—Comparison star for Isis in 1871.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual. Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
596	... ...	+ 3·4544	+ 0·0334	...	+ 18·683	− 0·190	...	...
597	... ...	+ 3·4025	+ 0·0291	...	+ 18·682	− 0·188	...	...
598	74 Virginis l^2 ...	+ 3·1197	+ 0·0091	− 0·008	+ 18·682	− 0·174	+ 0·03	1784
599	... ...	+ 3·4579	+ 0·0334	...	+ 18·660	− 0·192	...	...
600	Taylor 6257	+ 3·8839	+ 0·0761	...	+ 18·655	− 0·215	...	...
601	... ...	+ 3·5129	+ 0·0379	...	+ 18·623	− 0·197	...	...
602	79 Virginis ζ ...	+ 3·0716	+ 0·0064	− 0·021	+ 18·589	− 0·176	− 0·06	1789
603	80 Virginis	+ 3·1141	+ 0·0088	− 0·001	+ 18·566	− 0·180	− 0·10	1790
604	... ...	+ 3·9985	+ 0·0861	...	+ 18·527	− 0·231	...	...
605	Lacaille 5614 ...	+ 3·4772	+ 0·0337	...	+ 18·514	− 0·202	...	...
606	... ...	+ 3·5094	+ 0·0351	...	+ 18·373	− 0·212	...	...
607	82 Virginis m ...	+ 3·1483	+ 0·0108	− 0·009	+ 18·359	− 0·192	− 0·05	1796
608	Bonn +0°.3090 ...	+ 3·0671	+ 0·0065	...	+ 18·342	− 0·189	...	...
609	... ...	+ 3·5021	+ 0·0339	...	+ 18·295	− 0·216	...	...
610	Taylor 6366	+ 4·1009	+ 0·0909	...	+ 18·269	− 0·253	...	...
611	Lacaille 5659 ...	+ 4·1234	+ 0·0933	...	+ 18·260	− 0·255	...	...
612	... ...	+ 3·5166	+ 0·0346	...	+ 18·250	− 0·220	...	...
613	Taylor 6374	+ 4·1154	+ 0·0920	...	+ 18·239	− 0·257	...	...
614	... ...	+ 4·1629	+ 0·0964	...	+ 18·208	− 0·261	...	...
615	85 Urs. Maj. η ...	+ 2·3842	− 0·0103	− 0·012	+ 18·083	− 0·159	+ 0·01	1815
616	89 Virginis	+ 3·2552	+ 0·0164	− 0·009	+ 18·066	− 0·213	+ 0·03	1811
617	... —2nd ...	+ 3·5454	+ 0·0346	...	+ 17·948	− 0·238	...	...
618	X Virginis, Var. 5 ...	+ 2·9469	+ 0·0022	...	+ 17·883	− 0·202	...	...
619	Taylor 6473	+ 3·1526	+ 0·0109	...	+ 17·858	− 0·217	...	...
620	8 Böotis η	+ 2·8616	− 0·0006	− 0·005	+ 17·845	− 0·199	+ 0·34	1821
621	... ...	+ 4·1438	+ 0·0844	...	+ 17·767	− 0·289	...	...
622	... ...	+ 3·4873	+ 0·0295	...	+ 17·762	− 0·243	...	...
623	... ...	+ 3·4890	+ 0·0295	...	+ 17·742	− 0·244	...	...
624	... ...	+ 3·7245	+ 0·0453	...	+ 17·639	− 0·265	...	...
625	93 Virginis τ... ...	+ 3·0480	+ 0·0064	− 0·001	+ 17·576	− 0·221	+ 0·03	1829
626	Lacaille 5794 ...	+ 4·3517	+ 0·0996	...	+ 17·469	− 0·318	...	...
627	... ...	+ 3·6155	+ 0·0361	...	+ 17·424	− 0·268	...	...
628	95 Virginis	+ 3·1745	+ 0·0118	− 0·012	+ 17·370	− 0·238	− 0·02	1834
629	... ...	+ 4·2812	+ 0·0897	...	+ 17·327	− 0·320	...	...
630	... ...	+ 3·5370	+ 0·0302	...	+ 17·257	− 0·269	...	...

Mean Positions of Stars for 1872, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
631	R. P. L. 108	...	...	14	2	53·20	3	37	45·4	1	0·42
632	... ...	8·9	2	14	2	55·07	129	6	34·7	2	0·39
633	Böotis, Var. 4	9·7	2	14	4	45·15	79	34	49·7	2	0·44
634	98 Virginis κ	4·3	...	14	6	4·15	99	40	36·4	2	0·31
635	99 Virginis ι	4·2	...	14	9	18·13	95	23	18·1	1	0·35
636	16 Böotis α (*Arcturus*) ...	0·0	...	14	9	49·45	70	9	1·1	11	0·38
637	... ...	10·0	1	14	11	54·43	124	18	44·4	1	0·43
638	... ...	9·6	1	14	11	58·02	124	29	49·0	1	0·36
639	100 Virginis λ	4·6	...	14	12	11·17	102	46	50·2	1	0·24
640	W. B. E. XIV. 192 ...	7·7	1	14	12	17·56	103	48	55·7	1	0·35
641	... ...	8·6	1	14	15	2·87	122	37	59·9	1	0·36
642	Taylor 6709	7·0	1	14	16	26·53	119	5	34·0	2	0·35
643	S Böotis, Var. 2	8·6	3	14	18	35·72	35	36	24·6	3	0·32
644	... ...	9·2	2	14	20	2·47	124	40	34·1	2	0·42
645	... ...	8·8	1	14	22	26·17	122	36	9·3	1	0·35
646	Lacaille 5962	7·9	1	14	23	11·85	129	48	56·4	1	0·35
647	... ...	9·0	2	14	23	25·71	129	48	9·7	2	0·37
648	... ...	8·0	2	14	24	13·96	136	56	34·5	2	0·37
649	... ...	9·0	1	14	24	41·69	123	50	46·8	1	0·44
650	O. A. N. 14634	8·9	1	14	25	59·00	20	10	32·8	1	0·45
651	25 Böotis ρ	3·6	...	14	26	18·77	59	3	56·6	6	0·36
652	O. A. N. 14652	7·8	1	14	27	8·39	20	9	6·1	1	0·42
653	R Böotis, Var. 1	8·7	1	14	31	32·89	62	42	26·5	1	0·44
654	Lacaille 6027	7·9	1	14	31	33·08	122	49	24·0	1	0·36
655	... ...	7·8	2	14	33	10·88	121	46	24·6	2	0·36
656	Taylor 6848	7·6	1	14	33	20·03	136	43	26·0	1	0·36
657	... ...	9·0	1	14	33	25·14	126	19	54·0	1	0·43
658	α Lupi	2·6	...	14	33	25·79	136	50	13·1	2	0·40
659	5 Libræ	6·6	...	14	38	54·39	104	55	6·0	1	0·38
660	36 Böotis ε (*Mirac*) ...	2·6	...	14	39	23·79	62	23	5·4	4	0·39
661	Brisbane 5069	8·7	1	14	41	54·73	131	18	46·0	1	0·43
662	8 Libræ α^1	3·0	...	14	43	36·67	105	27	49·8	2	0·44
663	9 Libræ α^2	6·0	...	14	43	47·99	105	30	30·5	8	0·37
664	... ...	8·2	1	14	45	55·35	101	51	24·7	1	0·45
665	... ...	9·0	1	14	50	54·07	130	34	11·2	1	0·44

650—652.—Comparison stars for Comet 2, 1862.
664.—Supposed variable by Prof. Schumacher, in "Astronomisches Nachrichten No. 641"

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
631	R. P. L. 108	− 7·6958	+ 2·4452	...	+ 17·240	+ 0·567	...	...
632	... ...	+ 3·6277	+ 0·0357	...	+ 17·238	− 0·276	...	...
633	Böotis, Var. 4 ...	+ 2·9449	+ 0·0035	...	+ 17·156	− 0·229	...	...
634	98 Virginis κ... ...	+ 3·1915	+ 0·0122	− 0·000	+ 17·096	− 0·250	− 0·14	1842
635	99 Virginis ι... ...	+ 3·1396	+ 0·0102	− 0·003	+ 16·946	− 0·252	+ 0·42	1846
636	16 Böotis α	+ 2·8131	+ 0·0004	− 0·080	+ 16·922	− 0·227	+ 1·98	1847
637	... ...	+ 3·5688	+ 0·0303	...	+ 16·823	− 0·290	...	...
638	... ...	+ 3·5725	+ 0·0304	...	+ 16·840	− 0·290	...	...
639	100 Virginis λ ...	+ 3·2376	+ 0·0140	− 0·003	+ 16·811	− 0·264	− 0·03	1850
640	W. B. E. XIV. 192 ...	+ 3·2516	+ 0·0146	...	+ 16·805	− 0·266	...	...
641	... ...	+ 3·5480	+ 0·0284	...	+ 16·673	− 0·293	...	...
642	Taylor 6709	+ 3·4895	+ 0·0252	...	+ 16·604	− 0·292	...	...
643	S Böotis, Var. 2 ...	+ 2·0107	− 0·0022	...	+ 16·498	− 0·174	...	...
644	... ...	+ 3·6025	+ 0·0306	...	+ 16·426	− 0·308	...	...
645	... ...	+ 3·5701	+ 0·0285	...	+ 16·304	− 0·309	...	...
646	Lacaille 5962 ...	+ 3·7242	+ 0·0365	...	+ 16·266	− 0·324	...	...
647	... ...	+ 3·7248	+ 0·0364	...	+ 16·253	− 0·324	...	...
648	... ...	+ 3·9145	+ 0·0476	...	+ 16·212	− 0·342	...	...
649	... ...	+ 3·6014	+ 0·0297	...	+ 16·189	− 0·316	...	...
650	O. A. N. 14634 ...	+ 0·9082	+ 0·0359	...	+ 16·122	− 0·085	...	...
651	25 Böotis ρ	+ 2·5946	− 0·0015	− 0·009	+ 16·105	− 0·233	− 0·13	1869
652	O. A. N. 14652 ...	+ 0·8906	+ 0·0366	...	+ 16·062	− 0·084	...	...
653	R Böotis, Var. 1 ...	+ 2·6486	− 0·0004	...	+ 15·827	− 0·244	...	...
654	Lacaille 6027... ...	+ 3·6018	+ 0·0284	...	+ 15·827	− 0·329	...	...
655	... ...	+ 3·5854	+ 0·0274	...	+ 15·739	− 0·330	...	...
656	Taylor 6848	+ 3·9529	+ 0·0469	...	+ 15·731	− 0·364	...	...
657	... ...	+ 3·6823	+ 0·0319	...	+ 15·726	− 0·339	...	...
658	α Lupi	+ 3·9569	+ 0·0472	...	+ 15·726	− 0·364	...	...
659	5 Libræ	+ 3·3000	+ 0·0152	− 0·003	+ 15·424	− 0·314	− 0·01	1882
660	36 Böotis ε (*Mirac*) ...	+ 2·6240	− 0·0001	− 0·004	+ 15·397	− 0·252	− 0·00	1890
661	Brisbane 5069 ...	+ 3·8351	+ 0·0379	...	+ 15·254	− 0·369	...	...
662	8 Libræ α^1	+ 3·3143	+ 0·0154	− 0·010	+ 15·158	− 0·323	+ 0·09	1893
663	9 Libræ α^2	+ 3·3152	+ 0·0154	− 0·009	+ 15·147	− 0·324	+ 0·07	1894
664	... ...	− 3·2581	+ 0·0135	...	+ 15·025	− 0·321	...	...
665	... ...	+ 3·8489	+ 0·0363	...	+ 14·732	− 0·386	...	...

16·820

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
666	Taylor 6991	6·4	...	14	52	8·29	39	50	52·0	1	0·44
667	19 Libræ δ, Var. 4 ...	5·3	2	14	54	8·08	98	0	34·4	2	0·37
668	O. A. N. 15023	7·1	1	14	55	50·41	27	49	23·7	1	0·40
669	... ...	8·2	1	14	58	13·67	131	32	36·4	1	0·39
670	Taylor 7036	6·7	3	14	58	18·75	62	25	1·6	3	0·37
671	43 Böotis ψ	4·5	...	14	58	57·63	62	33	7·2	5	0·42
672	21 Libræ ν^1	5·4	...	14	59	29·33	105	45	31·9	2	0·31
673	... ...	8·2	1	15	1	23·94	97	24	14·6	1	0·51
674	W. B. E. XV. 32	8·6	1	15	3	52·43	97	3	27·0	1	0·37
675	O. A. N. 15138	9·0	1	15	4	23·74	43	1	57·4	1	0·45
676	R. P. L. 111	6·9	...	15	4	49·20	5	33	15·1	1	0·24
677	27 Libræ β	2·7	...	15	10	7·26	98	54	32·6	6	0·41
678	Taylor 8048	6·1	2	15	12	40·23	68	57	29·1	3	0·43
679	Redhill 2293	8·0	...	15	13	44·13	4	23	3·0	1	0·86
680	Lalande 28028	7·6	3	15	15	38·88	58	3	44·8	3	0·36
681	S. Cor. Bor., Var. 2 ...	8·9	2	15	16	11·03	58	10	17·0	2	0·48
682	31 Libræ ε	5·2	...	15	17	15·76	99	51	37·5	1	0·42
683	Lacaille 6377	8·0	2	15	19	25·35	130	12	37·7	2	0·45
684	Taylor 7220	8·0	1	15	22	36·66	123	8	16·8	1	0·42
685	... ...	9·0	1	15	23	7·60	151	38	44·2	1	0·51
686	38 Libræ γ	4·0	...	15	28	21·99	104	21	39·5	3	0·34
687	5 Cor. Bor. α (*Alpheta.*) ...	2·4	...	15	29	16·09	62	51	11·8	7	0·41
688	... ...	9·2	1	15	30	41·49	129	35	5·6	1	0·51
689	W. B. E. XV. 587 ...	8·0	1	15	32	19·67	103	29	11·8	1	0·35
690	Taylor 7300	7·8	1	15	32	41·62	103	38	10·6	1	0·42
691	43 Libræ κ	5·0	...	15	34	34·57	109	15	43·1	1	0·50
692	W. B. E. XV. 704 ...	9·2	1	15	37	40·53	92	36	23·7	1	0·50
693	24 Serpentis a	2·7	...	15	37	57·83	83	10	12·0	3	0·44
694	... ...	9·5	1	15	41	46·66	62	4	40·9	1	0·44
695	R. Cor. Bor., Var. 1 ...	9·0	1	15	43	17·86	61	26	58·1	1	0·31
696	W. B. E. XV. 838 ...	8·1	2	15	44	26·75	104	28	29·0	2	0·39
697	36 Serpentis b	5·2	...	15	44	35·73	92	42	5·6	1	0·41
698	R. Serpentis, Var. 2 ...	Var.	...	15	44	47·76	74	28	35·0	1	0·44
699	46 Libræ θ	4·3	...	15	46	32·40	106	21	5·9	1	0·39
700	R. P. L. 115	6·9	...	15	47	16·22	5	45	24·1	2	0·96

666.—Comparison star for Comet 1, 1861.
668.—Comparison star for Comet 2, 1862.
673—674—686.—Comparison stars for Comet 2, 1867.
675.—Comparison star for Comet 2, 1861.
676.—Groombridge 2213.
680.—Observed for map of S. Cor. Bor., Var. 2.
689—690—696.—Comparison stars for Asia in 1861.
697.—Comparison star for Donati's Comet of 1858.
700.—Carrington 2380.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
666	Taylor 6991	+ 1·9790	+ 0·0013	...	+ 14·659	− 0·203	...	...
667	19 Libræ δ, Var. 4 ...	+ 3·2017	+ 0·0116	− 0·006	+ 14·539	− 0·328	+ 0·01	1911
668	O. A. N. 15023 ...	+ 1·3138	+ 0·0151	...	+ 14·436	− 0·139	...	...
669	... ...	+ 3·9033	+ 0·0371	...	+ 14·290	− 0·405	...	...
670	Taylor 7036	+ 2·5820	+ 0·0011	...	+ 14·284	− 0·270	...	...
671	43 Böotis ψ	+ 2·5834	+ 0·0010	− 0·015	+ 14·245	− 0·271	+ 0·01	1922
672	21 Libræ ν^1	+ 3·3384	+ 0·0153	− 0·005	+ 14·212	− 0·349	+ 0·03	1919
673	... ...	+ 3·1957	+ 0·0112	...	+ 14·095	− 0·337	...	...
674	W. B. E. XV. 32 ...	+ 3·1911	+ 0·0112	...	+ 13·939	− 0·340	...	...
675	O. A. N. 15138 ...	+ 2·0404	+ 0·0015	...	+ 13·906	− 0·220	...	...
676	R. P. L. 111	− 6·8516	+ 1·1737	...	+ 13·879	+ 0·715	...	...
677	27 Libræ β	+ 3·2267	+ 0·0117	− 0·008	+ 13·541	− 0·353	+ 0·02	1934
678	Taylor 8048	+ 2·6889	+ 0·0028	...	+ 13·376	− 0·298	...	...
679	Redhill 2293... ...	− 9·9748	+ 1·9511	...	+ 13·305	+ 1·082	...	...
680	Lalande 28028 ...	+ 2·4441	+ 0·0014	...	+ 13·180	− 0·274	...	...
681	S. Cor. Bor., Var. 2...	+ 2·4455	+ 0·0014	...	+ 13·145	− 0·275	...	...
682	31 Libræ ε	+ 3·2490	+ 0·0120	− 0·008	+ 13·008	− 0·367	+ 0·15	1944
683	Lacaille 6377 ...	+ 3·9362	+ 0·0334	...	+ 12·929	− 0·444	...	...
684	Taylor 7220	+ 3·7471	+ 0·0258	...	+ 12·715	− 0·427	...	...
685	... ...	+ 4·9915	+ 0·0862	...	+ 12·680	− 0·567	...	...
686	38 Libræ γ	+ 3·3423	+ 0·0136	+ 0·004	+ 12·321	− 0·389	− 0·02	1964
687	5 Coronæ Bor. α ...	+ 2·5296	+ 0·0023	+ 0·009	+ 12·259	− 0·297	+ 0·09	1973
688	... ...	+ 3·9512	+ 0·0314	...	+ 12·160	− 0·463	...	...
689	W. B. E. XV. 587 ...	+ 3·3287	+ 0·0131	...	+ 12·046	− 0·393	...	...
690	Taylor 7300	+ 3·3319	+ 0·0131	...	+ 12·020	− 0·393	...	...
691	43 Libræ κ	+ 3·4485	+ 0·0157	− 0·005	+ 11·888	− 0·409	+ 0·10	1981
692	W. B. E. XV. 704 ...	+ 3·1229	+ 0·0089	...	+ 11·668	− 0·375	...	...
693	24 Serpentis α ...	+ 2·9418	+ 0·0062	+ 0·008	+ 11·649	− 0·354	− 0·06	1990
694	... ...	+ 2·4888	+ 0·0027	...	+ 11·375	− 0·304	...	...
695	R. Cor. Bor., Var. 1...	+ 2·4704	+ 0·0026	...	+ 11·265	− 0·303	...	...
696	W. B. E. XV. 838 ...	+ 3·3586	+ 0·0129	...	+ 11·182	− 0·408	...	...
697	36 Serpentis b ...	+ 3·1246	+ 0·0087	− 0·008	+ 11·170	− 0·395	+ 0·02	2004
698	R. Serpentis, Var. 2...	+ 2·7637	+ 0·0043	...	+ 11·156	− 0·340	...	...
699	46 Libræ θ	+ 3·3999	+ 0·0136	+ 0·007	+ 11·080	− 0·418	− 0·13	2011
700	R. P. L. 115	− 10·3747	+ 1·5368	...	+ 10·976	+ 1·262	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
701	1 Herculis χ	4·5	...	15	48	15·04	47	11	19·7	1	0·50
702	Lalande 28970	8·0	1	15	48	19·37	70	50	32·2	1	0·38
703	16 Ursæ Minoris ζ ...	4·5	...	15	48	41·07	11	48	45·0	1	0·44
704	Lalande 29054	8·7	1	15	50	57·61	104	5	2·6	1	0·42
705	Lalande 29193	7·0	1	15	56	9·67	86	58	59·7	1	0·41
706	W. B. E. XV. 1047 ...	8·3	1	15	56	21·20	91	17	31·7	1	0·42
707	8 Scorpii β^1	3·0	...	15	57	59·81	109	27	10·9	4	0·40
708	9 Scorpii ω^1	4·1	...	15	59	19·27	110	19	1·6	2	0·31
709	O. A. S. 15281	9·0	1	16	1	25·91	105	45	4·7	1	0·43
710	Lalande 29414	8·0	1	16	2	45·91	102	32	48·5	1	0·50
711	O. A. S. 15342	9·0	1	16	3	53·85	107	46	48·9	1	0·44
712	14 Scorpii ν	4·2	...	16	4	33·50	109	7	32·7	2	0·31
713	1 Ophiuchi δ	2·8	...	16	7	38·32	93	21	47·4	6	0·48
714	O. A. S. 15504	9·8	1	16	11	49·02	106	42	40·8	1	0·44
715	O. A. S. 15613	7·5	1	16	17	43·89	113	9	45·4	1	0·41
716	7 Ophiuchi χ	5·0	...	16	19	36·31	108	9	49·7	1	0·53
717	21 Scorpii α (*Antares*) ...	1·1	...	16	21	33·72	116	8	43·7	4	0·46
718	Lalande 30042	9·0	1	16	23	0·21	48	27	55·4	1	0·50
719	9 Ophiuchi ω	4·7	...	16	24	33·08	111	11	25·3	2	0·39
720	... ...	9·0	2	16	26	57·30	130	55	55·9	2	0·57
721	23 Scorpii τ	2·9	...	16	27	55·10	117	56	53·4	1	0·50
722	... ...	8·9	1	16	29	5·99	152	17	47·3	1	0·44
723	... ...	10·0	1	16	29	42·27	130	52	22·6	1	0·51
724	Taylor 7723	5·9	1	16	34	10·38	107	29	29·2	1	0·58
725	Taylor 7724	6·4	2	16	34	22·40	109	40	37·2	2	0·39
726	40 Herculis ζ	3·1	...	16	36	27·71	58	9	50·7	7	0·48
727	... ...	8·9	2	16	37	17·16	130	58	54·8	2	0·57
728	O. A. S. 15952	5·5	...	16	39	50·85	111	56	28·2	1	0·58
729	... ...	9·0	1	16	44	57·93	131	2	22·8	1	0·44
730	... ...	...	...	16	45	8·15	130	19	1·5	1	0·50
731	S Herculis, Var. 3 ...	8·5	1	16	46	4·28	74	50	29·5	1	0·51
732	... ...	...	...	16	49	25·49	125	32	6·4	1	0·58
733	27 Ophiuchi κ	3·4	...	16	51	36·58	80	25	26·4	4	0·51
734	... ...	8·4	2	16	52	36·43	122	49	38·0	2	0·57
735	O. A. S. 16233	8·0	1	16	54	27·05	110	24	20·2	1	0·57

[22·8]

702—705—706—718.—Comparison stars for Comet 2, 1862.
704—709—714.—Comparison stars for Sappho in 1864.
710.—Comparison star for Sappho in 1871.
711.—Comparison star for Sylvia in 1866.
715.—Comparison star for Angelina in 1866.
735.—Observed for map of T Serpentis, Var. 4.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
701	1 Herculis χ	+ 2·0327	+ 0·0034	+ 0·037	+ 10·904	− 0·254	− 0·60	2021
702	Lalande 28970 ...	+ 2·6824	+ 0·0039	...	+ 10·899	− 0·333	...	...
703	16 Urs. Min. ζ ...	− 2·2992	+ 0·2031	+ 0·003	+ 10·873	+ 0·276	+ 0·00	2041
704	Lalande 29054 ...	+ 3·3559	+ 0·0125	...	+ 10·705	− 0·418	...	...
705	Lalande 29193 ...	+ 3·0118	+ 0·0069	...	+ 10·317	− 0·380	...	...
706	W. B. E. XV. 1047 ...	+ 3·0982	+ 0·0079	...	+ 10·303	− 0·392	...	...
707	8 Scorpii β^1	+ 3·4790	+ 0·0142	− 0·003	+ 10·178	− 0·441	+ 0·03	2034
708	9 Scorpii ω^1	+ 3·5006	+ 0·0106	− 0·003	+ 10·065	− 0·446	+ 0·02	2039
709	O. A. S. 15281 ...	+ 3·4000	+ 0·0124	...	+ 9·919	− 0·435	...	...
710	Lalande 29414 ...	+ 3·3316	+ 0·0111	...	+ 9·817	− 0·428	...	...
711	O. A. S. 15342 ...	+ 3·4471	+ 0·0130	...	+ 9·731	− 0·443	...	...
712	14 Scorpii ν	+ 3·4783	+ 0·0136	− 0·003	+ 9·680	− 0·448	+ 0·01	2055
713	1 Ophiuchi δ... ...	+ 3·1414	+ 0·0081	− 0·005	+ 9·443	− 0·408	+ 0·14	2065
714	O. A. S. 15504 ...	+ 3·4297	+ 0·0121	...	+ 9·119	− 0·449	...	...
715	O. A. S. 15613 ...	+ 3·5882	+ 0·0141	...	+ 8·655	− 0·476	...	...
716	7 Ophiuchi χ ...	+ 3·4694	+ 0·0119	− 0·004	+ 8·506	− 0·462	+ 0·02	2088
717	21 Scorpii α	+ 3·6688	+ 0·0150	− 0·002	+ 8·352	− 0·491	+ 0·03	2091
718	Lalande 30042 ...	+ 1·9924	+ 0·0040	...	+ 8·236	− 0·260	...	...
719	9 Ophiuchi ω ...	+ 3·5463	+ 0·0126	+ 0·000	+ 8·112	− 0·476	− 0·05	2095
720	... ...	+ 4·1374	+ 0·0235	...	+ 7·920	− 0·557	...	...
721	23 Scorpii τ	+ 3·7251	+ 0·0152	− 0·002	+ 7·843	− 0·502	+ 0·02	2103
722	... ...	+ 5·4207	+ 0·0614	...	+ 7·748	− 0·731	...	...
723	... ...	+ 4·1407	+ 0·0228	...	+ 7·698	− 0·561	...	...
724	Taylor 7723	+ 3·4643	+ 0·0105	...	+ 7·337	− 0·473	...	...
725	Taylor 7724	+ 3·5173	+ 0·0112	...	+ 7·319	− 0·481	...	...
726	40 Herculis ζ ...	+ 2·2966	+ 0·0033	− 0·036	+ 7·149	− 0·316	− 0·41	2127
727	... ...	+ 4·1589	+ 0·0215	...	+ 7·081	− 0·570	...	...
728	O. A. S. 15952 ...	+ 3·5782	+ 0·0114	...	+ 6·872	− 0·493	...	...
729	... ...	+ 4·1742	+ 0·0198	...	+ 6·449	− 0·579	...	...
730	... ...	+ 4·1467	+ 0·0192	...	+ 6·435	− 0·575	...	...
731	S. Herculis, Var. 3 ...	+ 2·7827	+ 0·0039	...	+ 6·357	− 0·380	...	...
732	... ...	+ 3·9822	+ 0·0156	...	+ 6·079	− 0·556	...	...
733	27 Ophiuchi κ ...	+ 2·8566	+ 0·0044	− 0·021	+ 5·896	− 0·402	− 0·02	2156
734	... ...	+ 3·8977	+ 0·0137	...	+ 5·813	− 0·547	...	...
735	O. A. S. 16233 ...	+ 3·5494	+ 0·0093	...	+ 5·658	− 0·498	...	...

2-7287

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
736	... ...	8·7	2	16	56	22·91	130	55	25·3	2	0·58
737	22 Ursæ Minoris, ϵ ...	4·5	...	16	59	10·23	7	45	25·5	8	0·34
738	... ...	8·5	1	17	4	38·85	59	7	52·3	1	0·58
739	O. A. S. 16432	7·7	2	17	6	17·21	105	24	17·9	2	0·56
740	... ...	8·3	3	17	7	41·17	130	43	7·8	3	0·57
741	64 Herculis α^1, Var. 1 ...	Var.	...	17	8	48·61	75	27	42·7	4	0·56
742	... ...	9·0	1	17	9	33·15	124	4	51·8	1	0·45
743	... ...	9·5	1	17	12	32·05	130	28	13·2	1	0·59
744	42 Ophiuchi θ	3·4	...	17	14	9·00	114	52	9·2	2	0·45
745	44 Ophiuchi b	4·5	...	17	18	33·36	114	3	17·6	2	0·56
746	45 Ophiuchi d	4·4	...	17	19	10·94	119	44	54·9	1	0·53
747	... ...	8·4	1	17	21	37·75	130	44	1·1	1	0·57
748	... ...	8·9	1	17	21	46·84	130	46	6·0	1	0·58
749	... ...	8·1	1	17	21	56·17	130	33	23·6	1	0·58
750	Brisbane 6091	8·2	1	17	22	1·60	148	27	30·1	1	0·59
751	55 Ophiuchi α	2·2	...	17	28	59·56	77	20	41·7	6	0·58
752	Taylor 8141	6·4	2	17	31	3·46	111	50	4·2	3	0·54
753	56 Serpentis o	4·4	...	17	34	13·30	102	48	17·3	1	0·59
754	... ...	9·0	1	17	34	45·82	128	57	47·0	1	0·58
755	... ...	8·6	2	17	40	16·65	127	14	50·3	2	0·56
756	86 Herculis μ	3·5	...	17	41	26·92	62	12	10·7	5	0·59
757	... ...	8·0	2	17	43	53·92	128	36	24·1	2	0·58
758	... ...	8·2	1	17	45	34·61	128	35	30·5	1	0·59
759	... ...	9·2	1	17	48	45·68	152	8	40·8	1	0·62
760	Taylor 8288	7·0	1	17	48	57·31	105	47	17·1	1	0·61
761	4 Sagittarii b	4·6	...	17	51	58·77	113	48	5·9	1	0·39
762	... ...	9·0	1	17	52	33·01	130	49	34·7	1	0·58
763	9 Sagittarii	5·7	...	17	56	1·52	114	21	38·7	3	0·52
764	10 Sagittarii γ^1, Var. 6 ...	3·0	...	17	56	50·68	119	34	59·8	2	0·55
765	Bonn +30°.3133... ...	8·0	1	18	3	21·73	59	1	9·5	1	0·56
766	T Herculis, Var. 4 ...	9·7	2	18	4	15·42	95	0	0·1	2	0·62
767	13 Sagittarii μ	4·1	...	18	6	6·52	111	5	24·0	7	0·57
768	... ...	7·9	1	18	7	15·47	122	22	39·1	1	0·58
769	23 Ursæ Minoris δ ...	4·3	...	18	13	38·10	3	23	36·1	3	0·35
770	21 Sagittarii	4·9	...	18	17	43·63	110	36	29·7	1	0·59

755—757—758.—Comparison stars for Donati's Comet of 1858.
765.—Observed for map of T Herculis, Var. 4.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Anwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
736	... ...	+ 4·1871	+ 0·0171	...	+ 5·496	− 0·589	...	...
737	22 Urs. Min. *e* ...	− 6·3984	+ 0·3063	+ 0·009	+ 5·261	+ 0·898	+ 0·00	2201
738	... ...	+ 2·2962	+ 0·0031	...	+ 4·797	− 0·327	...	...
739	O. A. S. 16432 ...	+ 3·4304	+ 0·0070	...	+ 4·658	− 0·489	...	...
740	... ...	+ 4·1931	+ 0·0144	...	+ 4·538	− 0·597	...	...
741	64 Herculis α^1, Var. 1.	+ 2·7341	+ 0·0035	− 0·002	+ 4·442	− 0·391	− 0·03	2183
742	... ...	+ 3·9549	+ 0·0113	...	+ 4·379	− 0·565	...	...
743	... ...	+ 4·1885	+ 0·0132	...	+ 4·124	− 0·590	...	...
744	42 Ophiuchi θ ...	+ 3·6795	+ 0·0080	− 0·002	+ 3·986	− 0·528	+ 0·04	2189
745	44 Ophiuchi *b* ...	+ 3·6593	+ 0·0073	− 0·003	+ 3·607	− 0·527	− 0·01	2198
746	45 Ophiuchi *d* ...	+ 3·8242	+ 0·0084	− 0·003	+ 3·552	− 0·551	+ 0·15	2200
747	... ...	+ 4·2075	+ 0·0111	...	+ 3·342	− 0·605	...	...
748	... ...	+ 4·2090	+ 0·0111	...	+ 3·329	− 0·606	...	...
749	... ...	+ 4·2006	+ 0·0109	..	+ 3·316	− 0·605	...	...
750	Brisbane 6091 ...	+ 5·2205	+ 0·0227	...	+ 3·307	− 0·753	...	...
751	55 Ophiuchi α ...	+ 2·7747	+ 0·0030	+ 0·007	+ 2·705	− 0·402	− 0·22	2218
752	Taylor 8141	+ 3·6035	+ 0·0054	...	+ 2·526	− 0·522	...	...
753	56 Serpentis *o* ...	+ 3·3742	+ 0·0041	− 0·006	+ 2·251	− 0·490	+ 0·04	2225
754	... ...	+ 4·1469	+ 0·0075	...	+ 2·203	− 0·612	...	...
755	... ...	+ 4·0851	+ 0·0060	...	+ 1·723	− 0·594	...	...
756	86 Herculis μ ...	+ 2·3696	+ 0·0025	− 0·024	+ 1·621	− 0·346	+ 0·75	2237
757	... ...	+ 4·1372	+ 0·0052	...	+ 1·408	− 0·603	...	...
758	... ...	+ 4·1370	+ 0·0049	...	+ 1·262	− 0·603	...	...
759	... ...	+ 5·5991	+ 0·0090	...	+ 0·983	− 0·815	...	...
760	Taylor 8288	+ 3·4497	+ 0·0029	...	+ 0·966	− 0·503	...	...
761	4 Sagittarii *b* ...	+ 3·6617	+ 0·0028	− 0·001	+ 0·702	− 0·534	+ 0·05	2246
762	... ...	+ 4·2267	+ 0·0037	...	+ 0·651	− 0·614	...	...
763	9 Sagittarii	+ 3·6774	+ 0·0022	− 0·003	+ 0·348	− 0·536	+ 0·01	2260
764	10 Sagittarii γ^1, Var. 6.	+ 3·8310	+ 0·0021	− 0·005	+ 0·276	− 0·559	+ 0·21	2266
765	Bonn + 30°. 3133 ...	+ 2·2696	+ 0·0022	...	− 0·293	− 0·331	...	...
766	T. Herculis, Var. 4 ...	+ 2·2690	+ 0·0021	...	− 0·372	− 0·331	...	...
767	13 Sagittarii μ ...	+ 3·5876	+ 0·0009	− 0·001	− 0·534	− 0·523	− 0·00	2284
768	... ...	+ 3·9194	+ 0·0001	...	− 0·636	− 0·571	...	...
769	23 Urs. Min. δ ...	− 19·4343	− 0·3982	+ 0·026	− 1·192	+ 2·831	− 0·04	2395
770	21 Sagittarii... ...	+ 3·5735	− 0·0004	− 0·002	− 1·549	− 0·519	+ 0·00	2303

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
771	22 Sagittarii λ	3·1	...	18	20	4·37	115	29	22·0	2	0·59
772	Taylor 8516—2nd ...	6·0	1	18	22	28·78	104	39	50·1	1	0·53
773	... ...	9·0	2	18	23	26·90	135	15	31·7	2	0·67
774	O. A. S. 18326	8·7	1	18	23	51·81	109	14	40·9	1	0·62
775	U Sagittarii, Var. 4 ...	7·2	1	18	24	20·94	109	12	43·2	1	0·63
776	... ...	9·9	1	18	29	58·23	135	12	7·6	1	0·67
777	3 Lyræ α *(Vega)*	0·2	...	18	32	36·21	51	20	3·7	9	0·59
778	... ...	8·5	1	18	35	14·64	118	34	15·0	1	0·39
779	... ...	9·7	1	18	35	35·67	137	15	53·5	1	0·62
780	Lacaille 7832	7·9	3	18	38	18·04	149	5	3·7	3	0·67
781	10 Lyræ β, Var. 1 ...	Var.	...	18	45	21·22	56	47	4·2	8	0·59
782	32 Sagittarii γ^1	5·0	...	18	46	26·74	112	53	59·4	1	0·68
783	Lacaille 7919	8·0	1	18	48	16·10	129	4	35·0	1	0·66
784	13 Lyræ, Var. 2	Var.	...	18	51	26·30	46	13	15·6	1	0·67
785	R. P. L. 131	6·6	...	18	56	24·99	3	27	21·7	1	0·10
786	O. A. S. 19032	9·2	2	18	57	34·33	111	16	16·8	2	0·68
787	17 Aquilæ ζ	3·1	...	18	59	31·57	76	19	30·9	8	0·62
788	Bonn +7°. 3971	9·4	2	19	1	15·27	82	0	49·0	2	0·66
789	41 Sagittarii π	3·1	...	19	2	9·16	111	13	28·0	1	0·39
790	... ...	8·0	1	19	3	42·99	139	22	0·3	1	0·68
791	42 Sagittarii ψ	5·2	...	19	7	41·44	115	28	30·0	2	0·62
792	R. Sagittarii, Var. 1 ...	9·2	1	19	9	11·21	109	31	49·4	1	0·62
793	25 Aquilæ ω	5·1	...	19	11	48·46	78	37	59·6	4	0·62
794	Lacaille 8074	6·7	3	19	13	10·96	132	15	8·3	3	0·68
795	45 Sagittarii ρ^2	6·1	...	19	14	22·84	108	32	36·4	2	0·68
796	30 Aquilæ δ	3·5	...	19	19	2·59	87	8	18·2	4	0·64
797	... ...	9·5	2	19	19	42·28	128	37	32·0	2	0·65
798	Taylor 8950	6·0	...	19	22	46·31	143	27	8·7	1	0·61
799	... ...	8·9	2	19	25	28·95	129	54	57·8	2	0·68
800	... ...	9·0	1	19	25	42·43	127	48	21·4	1	0·68
801	... ...	7·6	1	19	26	10·04	131	23	49·5	1	0·56
802	51 Sagittarii h^1	5·8	...	19	28	15·29	114	59	49·7	3	0·68
803	52 Sagittarii h^2	4·6	...	19	28	54·91	115	9	48·4	3	0·64
804	R. Cygni, Var. 3	9·9	2	19	33	25·33	40	3	44·7	2	0·64
805	... ...	8·0	1	19	34	22·44	127	44	11·9	1	0·67

774.—Observed for map of U Sagittarii, Var. 5.
776.—Comparison star for Donati's Comet of 1858.
778.—Comparison star for Amphitrite in 1863.
785.—Carrington 2882.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
771	22 Sagittarii λ ...	+ 3·7071	− 0·0013	− 0·005	− 1·754	− 0·537	+ 0·20	2310
772	Taylor 8516—2nd ...	+ 3·4203	− 0·0005	...	− 1·964	− 0·495	...	...
773	... ...	+ 4·4142	− 0·0059	...	− 2·048	− 0·640	...	...
774	O. A. S. 18326 ...	+ 3·5364	− 0·0010	...	− 2·084	− 0·512	...	...
775	U Sagittarii, Var. 5...	+ 3·5354	− 0·0011	...	− 2·126	− 0·512	...	...
776	... ...	+ 4·4071	− 0·0078	...	− 2·615	− 0·636	...	...
777	3 Lyræ α (*Vega*) ...	+ 2·0132	+ 0·0016	+ 0·017	− 2·844	− 0·290	− 0·30	2341
778	... ...	+ 3·7916	− 0·0040	...	− 3·072	− 0·546	...	...
779	... ...	+ 4·5019	− 0·0103	...	− 3·101	− 0·648	...	...
780	Lacaille 7832 ...	+ 5·2737	− 0·0210	...	− 3·336	− 0·758	...	...
781	10 Lyræ β, Var. 1 ...	+ 2·2139	+ 0·0015	− 0·001	− 3·943	− 0·315	− 0·02	2369
782	32 Sagittarii γ^1 ...	+ 3·6254	− 0·0043	− 0·003	− 4·036	− 0·516	+ 0·02	2364
783	Lacaille 7919 ...	+ 4·1338	− 0·0098	...	− 4·192	− 0·588	...	...
784	13 Lyræ, Var. 2 ...	+ 1·8233	+ 0·0008	+ 0·001	− 4·463	− 0·257	− 0·07	2389
785	R. P. L. 131	− 18·4008	− 1·5569	...	− 4·888	+ 2·603	...	...
786	O. A. S. 19032 ...	+ 3·5763	− 0·0053	...	− 4·985	− 0·503	...	...
787	17 Aquilæ ζ	+ 2·7578	+ 0·0003	− 0·003	− 5·151	− 0·387	+ 0·09	2405
788	Bonn +7°.3971 ...	+ 2·8914	− 0·0004	...	− 5·295	− 0·405	...	...
789	41 Sagittarii π ...	+ 3·5725	− 0·0057	− 0·002	− 5·372	− 0·500	+ 0·03	2406
790	... ...	+ 4·5704	− 0·0208	...	− 5·504	− 0·640	...	...
791	42 Sagittarii ψ ...	+ 3·6815	− 0·0075	+ 0·000	− 5·838	− 0·510	+ 0·03	2418
792	R Sagittarii, Var. 1...	+ 3·5251	− 0·0060	...	− 5·962	− 0·488	...	...
793	25 Aquilæ ω	+ 2·8165	− 0·0003	− 0·001	− 6·181	− 0·388	− 0·03	2432
794	Lacaille 8074 ...	+ 4·2253	− 0·0174	...	− 6·295	− 0·582	...	...
795	45 Sagittarii ρ^2 ...	+ 3·4984	+ 0·0062	+ 0·006	− 6·394	− 0·481	+ 0·07	2436
796	30 Aquilæ δ	+ 3·0093	− 0·0018	+ 0·015	− 6·781	− 0·410	− 0·09	2451
797	... ...	+ 4·0765	− 0·0161	...	− 6·834	− 0·556	...	...
798	Taylor 8950	+ 4·7596	− 0·0327	...	− 7·087	− 0·647	...	...
799	... ...	+ 4·1138	− 0·0181	...	− 7·308	− 0·557	...	...
800	... ...	+ 4·0378	− 0·0167	...	− 7·326	− 0·545	...	...
801	... ...	+ 4·1676	− 0·0196	...	− 7·404	− 0·562	...	...
802	51 Sagittarii h^1 ...	+ 3·6498	− 0·0100	− 0·001	− 7·533	− 0·491	+ 0·02	2475
803	52 Sagittarii h^2 ...	+ 3·6535	− 0·0102	+ 0·002	− 7·587	− 0·490	+ 0·01	2478
804	R Cygni, Var. 3 ...	+ 1·6128	− 0·0015	...	− 7·950	− 0·213	...	...
805	... ...	+ 4·0204	− 0·0182	...	− 8·027	− 0·535	...	...

Mean Positions of Stars for 1872, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
806	... ...	8·7	1	19	34	55·54	127	15	57·9	1	0·68
807	50 Aquilæ γ	2·8	...	19	40	10·43	79	41	48·5	7	0·68
808	S Vulpeculæ, Var. 2 ...	9·5	1	19	43	8·93	63	1	50·3	1	0·67
809	53 Aquilæ α (*Altair*) ...	1·0	...	19	44	32·25	81	28	3·8	4	0·59
810	57 Sagittarii	6·2	...	19	44	45·67	109	22	5·2	1	0·56
811	χ Cygni, Var. 2	5·4	2	19	45	38·62	57	24	30·7	2	0·67
812	O. A. S. 20055	8·8	1	19	46	46·94	107	44	35·6	1	0·68
813	60 Aquilæ β	4·0	...	19	49	1·52	83	54	40·6	6	0·69
814	... ...	8·3	2	19	50	12·58	145	55	36·1	2	0·68
815	λ Ursæ Minoris	6·5	...	19	52	19·15	1	4	35·1	2	0·02
816	... ...	9·5	1	19	54	16·57	107	11	1·6	1	0·69
817	... ...	9·0	2	19	59	48·18	129	10	4·3	2	0·68
818	... ...	8·0	1	20	4	50·88	147	13	12·1	1	0·68
819	Lacaille 8370	7·0	1	20	7	40·18	152	17	49·6	1	0·67
820	R Sagittarii, Var. 1 ...	9·3	1	20	8	13·75 ?	73	39	36·0	1	0·59
821	O. A. S. 20356	8·0	1	20	8	49·44	110	24	41·3	1	0·69
822	5 Capricorni α^1	4·5	...	20	10	33·17	102	54	5·2	1	0·69
823	6 Capricorni α^2	3·8	...	20	10	57·02	102	56	23·4	5	0·70
824	9 Capricorni β	3·4	...	20	13	48·97	105	11	1·0	1	0·68
825	Lalande 39125	8·6	1	20	15	58·58	106	11	51·7	1	0·67
826	... ...	9·2	1	20	16	10·95	106	16	9·1	1	0·68
827	11 Capricorni ρ	5·0	...	20	21	33·47	108	14	5·6	5	0·69
828	24 Cephei	8·7	1	20	22	2·49	1	15	32·5	2	0·15
829	... ...	8·7	1	20	23	29·53	125	56	54·3	1	0·70
830	... ...	8·0	2	20	26	49·66	150	16	43·2	2	0·68
831	... ...	8·2	1	20	26	51·03	121	11	5·9	2	0·64
832	R. P. L. 143	6·7	...	20	28	34·11	5	16	50·6	1	0·70
833	15 Capricorni υ	5·3	...	20	32	45·75	108	35	14·9	2	0·68
834	50 Cygni α (*Deneb*) ...	1·5	...	20	37	4·09	45	10	34·1	2	0·69
835	W. B. E. XX. 935 ...	8·9	2	20	37	9·92	73	21	22·0	2	0·68
836	... ...	9·1	1	20	38	44·41	143	1	35·1	1	0·74
837	O. A. S. 20841	8·0	2	20	39	41·64	116	52	54·7	2	0·70
838	32 Vulpeculæ	5·1	...	20	49	6·29	62	25	40·9	6	0·68
839	... ...	9·6	2	20	59	12·92	148	50	44·3	2	0·71
840	... ...	8·8	2	21	1	2·26	120	2	52·4	2	0·70

812—817.—Comparison stars for Hestia in 1869.
821.—Comparison star for Parthenope in 1862.
825—826.—Comparison stars for Hestia in 1865.
832.—Carrington 3128.
837.—Comparison star for Undine in 1867.
840.—Comparison star for Sylvia in 1867.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
806	... ...	+ 4·0034	− 0·0179	...	− 8·071	− 0·533	...	...
807	50 Aquilæ γ	+ 2·8519	− 0·0011	− 0·001	− 8·489	− 0·373	− 0·01	2511
808	S Vulpeculæ, Var. 2..	+ 2·4597	+ 0·0011	...	− 8·722	− 0·319	...	...
809	53 Aquilæ α	+ 2·8920	− 0·0014	+ 0·035	− 8·834	− 0·374	− 0·38	2524
810	57 Sagittarii	+ 3·4939	− 0·0094	− 0·001	− 8·851	− 0·454	+ 0·05	2522
811	χ Cygni, Var. 2 ...	+ 2·3068	+ 0·0013	...	− 8·920	− 0·297	...	...
812	O. A. S. 20055 ...	+ 3·4543	− 0·0088	...	− 9·009	− 0·446	...	...
813	60 Aquilæ β	+ 2·9454	− 0·0020	+ 0·001	− 9·185	− 0·378	+ 0·47	2538
814	... ...	+ 4·8246	− 0·0479	...	− 9·276	− 0·621	...	...
815	λ Ursæ Minoris ...	− 59·7092	− 29·8137	− 0·050	− 9·440	+ 7·686	+ 0·00	2795
816	... ...	+ 3·4354	− 0·0092	...	− 9·590	− 0·437	...	...
817	... ...	+ 4·0159	− 0·0238	...	− 10·012	− 0·504	...	...
818	... ...	+ 4·8480	− 0·0563	...	− 10·392	− 0·602	...	...
819	Lacaille 8370 ...	+ 5·2334	− 0·0772	...	− 10·603	− 0·643	...	...
820	R Sagittarii, Var. 1 ..	+ 2·7399	− 0·0020	...	− 10·634	− 0·186	...	...
821	O. A. S. 20356 ...	+ 3·4931	− 0·0115	...	− 10·689	− 0·427	...	...
822	5 Capricorni α^1 ...	+ 3·3301	− 0·0084	− 0·001	− 10·816	− 0·406	− 0·03	2593
823	6 Capricorni α^2 ...	+ 3·3306	− 0·0084	+ 0·002	− 10·846	− 0·403	− 0·02	2595
824	9 Capricorni β ...	+ 3·3749	− 0·0095	+ 0·001	− 11·055	− 0·406	− 0·02	2609
825	Lalande 39125 ...	+ 3·3942	− 0·0101	...	− 11·212	− 0·406	...	...
826	... ...	+ 3·3955	− 0·0101	...	− 11·227	− 0·406	...	...
827	11 Capricorni ρ ...	+ 3·4312	− 0·0115	− 0·003	− 11·614	− 0·403	+ 0·01	2626
828	24 Cephei	− 46·4200	− 24·6138	...	− 11·647	+ 5·517	...	...
829	... ...	+ 3·8578	− 0·0237	...	− 11·752	− 0·451	...	...
830	... ...	+ 4·9498	− 0·0747	...	− 11·987	− 0·575	...	...
831	... ...	+ 3·7209	− 0·0200	...	− 11·988	− 0·431	...	...
832	R. P. L. 143	− 8·4581	− 1·2692	...	− 12·109	+ 0·988	...	...
833	15 Capricorni υ ...	+ 3·4256	− 0·0122	− 0·003	− 12·399	− 0·388	− 0·01	2657
834	50 Cygni α (*Deneb*) ...	+ 2·0434	+ 0·0021	− 0·000	− 12·693	− 0·226	− 0·00	2679
835	W. B. E. XX. 935 ...	+ 2·7629	+ 0·0002	...	− 12·699	− 0·307	...	...
836	... ...	+ 4·4389	− 0·0530	...	− 12·806	− 0·495	...	...
837	O. A. S. 20841 ...	+ 3·5919	− 0·0177	...	− 12·871	− 0·397	...	...
838	32 Vulpeculæ ...	+ 2·5556	+ 0·0026	− 0·002	− 13·491	− 0·270	+ 0·00	2709
839	... ...	+ 4·6415	− 0·0757	...	− 14·131	− 0·476	...	...
840	... ...	+ 3·6166	− 0·0215	...	− 14·245	− 0·366	...	...

Mean Positions of Stars for 1872, *January* 1*st.*

	Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
	841	61 Cygni—2nd	6·3	...	21	1	11·18	51	52	51·3	1	0·77
	842	... ...	9·0	1	21	1	40·52	119	58	30·4	1	0·70
37·23	843	13 Aquarii ν	4·6	...	21	2	37·24	101	53	18·1	1	0·69
31·84	844	... ...	9·4	1	21	11	31·86	129	29	56·2	1	0·69
	845	... ...	9·5	2	21	14	18·30	128	58	21·5	2	0·72
7·01	846	32 Capricorni ι	4·4	...	21	15	7·02	107	22	41·1	1	0·69
	847	22 Aquarii β	3·1	...	21	24	49·13	96	7	58·7	5	0·71
	848	... ...	9·5	1	21	27	35·15	132	36	13·7	1	0·66
	849	... ...	8·5	1	21	30	0·33	134	0	22·6	1	0·67
	850	... ...	8·7	1	21	30	19·27	98	23	17·3	1	0·71
	851	8 Pegasi ε	2·4	...	21	37	53·94	80	42	38·8	7	0·74
14·04	852	51 Capricorni μ	5·2	...	21	46	19·06	104	9	10·2	1	0·69
	853	16 Pegasi	5·0	...	21	47	14·28	64	40	35·8	10	0·71
17·59	854	... ...	9·5	1	21	53	17·56	136	35	56·6	1	0·68
	855	ε Indi	6·0	1	21	53	33·43	147	18	39·6	2	0·76
41·53	856	31 Aquarii ο	4·7	...	21	56	41·52	92	46	21·3	3	0·68
12·50	857	32 Aquarii...	5·2	...	21	58	12·48	91	31	27·8	2	0·68
	858	34 Aquarii α	3·2	...	21	59	12·58	90	56	27·6	4	0·71
	859	... ...	8·0	1	22	0	26·14	115	0	56·0	1	0·74
	860	... ...	10·0	1	22	2	27·31	114	57	30·8	1	0·77
	861	... ...	10·0	1	22	2	28·28	114	52	27·0	1	0·76
	862	O. A. S. 22014	7·4	...	22	7	37·52	114	38	18·8	1	0·77
4·64	863	43 Aquarii θ	4·3	...	22	10	4·67	98	25	10·0	5	0·70
	864	O. A. S. 22070	8·6	2	22	12	20·35	114	26	36·3	2	0·76
	865	... ...	9·9	2	22	19	32·63	88	40	24·3	2	0·78
	866	... ...	9·1	2	22	19	53·35	88	40	52·0	3	0·77
	867	55 Aquarii ζ	3·8	...	22	22	14·31	90	40	27·3	3	0·67
14·32	868	R. P. L. 150	5·4	...	22	23	8·94	4	32	18·1	2	0·23
	869	O. A. S. 22193	7·3	2	22	23	46·70	116	43	36·8	2	0·80
16·68	870	... ...	8·0	1	22	24	10·65	130	38	2·9	1	0·69
	871	62 Aquarii η	4·2	...	22	28	46·61	90	46	36·4	6	0·80
	872	T Aquarii, Var. 3... ...	10·4	1	22	29	10·64	98	15	58·8	1	0·83
	873	63 Aquarii κ	5·5	...	22	30	7·56	94	53	14·7	1	0·67
	874	42 Pegasi ζ	3·6	...	22	35	4·69	79	50	10·4	6	0·76
	875	67 Aquarii...	6·2	...	22	36	33·27	97	37	56·4	3	0·72

842.—Comparison star for Sylvia in 1867.
857.—Comparison star for Encke's Comet in 1862.
859—860—861—862—864.—Comparison stars for D'Arrest's Comet in 1870.
866.—Comparison star for Sappho in 1868.
868.—Groombridge 3820.
869—Comparison star for Isis in 1864.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
841	61 Cygni—2nd ...	+ 2·3343	+ 0·0044	+ 0·350	− 14·256	− 0·238	− 3·03	2745
842	... ...	+ 3·6134	− 0·0214	...	− 14·284	− 0·365	...	...
843	13 Aquarii ν... ...	+ 3·2690	− 0·0098	+ 0·004	− 14·341	− 0·328	+ 0·01	2747
844	... .	+ 3·8113	− 0·0320	...	− 14·876	− 0·368	...	...
845	... ...	+ 3·7878	− 0·0315	...	− 15·038	− 0·360	...	...
846	32 Capricorni ι ...	+ 3·3479	− 0·0130	− 0·000	− 15·085	− 0·316	− 0·01	2772
847	22 Aquarii β... ...	+ 3·1621	− 0·0071	− 0·001	− 15·631	− 0·282	+ 0·00	2797
848	... ...	+ 3·8310	− 0·0371	...	− 15·781	− 0·339	...	...
849	... ...	+ 3·8583	− 0·0394	...	− 15·911	− 0·337	..	...
850	... ...	+ 3·1920	− 0·0082	...	− 15·928	− 0·276	...	...
851	8 Pegasi ϵ	+ 2·9451	− 0·0005	+ 0·001	− 16·322	− 0·242	− 0·01	2835
852	51 Capricorni μ ...	+ 3·2579	− 0·0113	+ 0·018	− 16·739	− 0·255	− 0·01	2860
853	16 Pegasi	+ 2·7258	+ 0·0052	− 0·001	− 16·783	− 0·210	+ 0·00	2864
854	... ...	+ 3·8146	− 0·0441	...	− 17·066	− 0·286	...	...
855	ϵ Indi...	+ 4·1645	− 0·0724	+ 0·480	− 17·077	− 0·313	+ 2·45	Stone
856	31 Aquarii o... ...	+ 3·1054	− 0·0051	− 0·001	− 17·221	− 0·226	+ 0·00	2883
857	32 Aquarii	+ 3·0902	− 0·0045	− 0·002	− 17·288	− 0·222	+ 0·03	2887
858	34 Aquarii α... ...	+ 3·0832	− 0·0041	− 0·001	− 17·333	− 0·219	− 0·00	2890
859	... ...	+ 3·3830	− 0·0183	...	− 17·387	− 0·289	...	...
860	... ...	+ 3·3774	− 0·0155	...	− 17·475	− 0·233	...	...
861	... ...	+ 3·3763	− 0·0182	...	− 17·475	− 0·233	...	...
862	O. A. S. 22014 ...	+ 3·3608	− 0·0179	...	− 17·692	− 0·222	...	...
863	43 Aquarii θ... ...	+ 3·1635	− 0·0075	+ 0·006	− 17·792	− 0·205	+ 0·02	2929
864	O. A. S. 22070 ...	+ 3·3472	− 0·0177	...	− 17·883	− 0·212	...	...
865	... ...	+ 3·0590	− 0·0025	...	− 18·159	− 0·181	...	...
866	... ...	+ 3·0591	− 0·0025	...	− 18·172	− 0·180	...	...
867	55 Aquarii ζ... ...	+ 3·0787	− 0·0033	+ 0·011	− 18·257	− 0·178	− 0·04	2960
868	R. P. L. 150	− 3·8373	− 1·2007	+ 0·052	− 18·290	+ 0·238	− 0·04	2993
869	O. A. S. 22193 ...	+ 3·3466	− 0·0193	...	− 18·313	− 0·191	...	...
870	... ...	+ 3·5380	− 0·0337	...	− 18·327	− 0·202	...	...
871	62 Aquarii η ...	+ 3·0792	− 0·0031	+ 0·004	− 18·487	− 0·166	+ 0·05	2979
872	T Aquarii, Var. 3 ...	+ 3·1472	− 0·0072	...	− 18·500	− 0·170	...	...
873	63 Aquarii κ... ...	+ 3·1154	− 0·0051	− 0·006	− 18·565	− 0·164	+ 0·11	2988
874	42 Pegasi ζ	+ 2·9853	+ 0·0023	+ 0·004	− 18·694	− 0·149	+ 0·02	2992
875	67 Aquarii	+ 3·1360	− 0·0063	− 0·003	− 18·740	− 0·155	− 0·02	3001

855.—Proper motions from "*Stone's Cape Catalogue.*"

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
876	71 Aquarii τ^2	4·1	...	22	42	48·74	104	16	3·4	2	0·79
877	... ...	10·0	1	22	44	35·08	135	34	41·5	1	0·83
878	73 Aquarii λ	3·8	...	22	45	56·13	98	15	37·2	2	0·81
879	74 Aquarii	5·8	...	22	46	44·28	102	17	49·2	2	0·83
880	O. A. S. 22487	9·0	1	22	48	14·40	114	39	0·1	1	0·77
881	O. A. S. 22497	8·8	2	22	49	18·72	114	49	58·6	2	0·83
882	24 Pis. Aus. α (*Fomalhaut*)	1·3	...	22	50	34·38	120	18	1·0	3	0·75
883	... ...	10·5	2	22	55	5·83	101	40	31·2	2	0·82
884	53 Pegasi β, Var. 1 ...	Var.	...	22	57	34·23	62	36	40·5	4	0·83
885	... ...	10·0	1	22	57	34·82	57	9	29·9	1	0·83
886	54 Pegasi α (*Markab*) ...	2·6	...	22	58	23·10	75	28	59·1	5	0·79
887	91 Aquarii ψ^1	4·5	...	23	9	11·07	99	47	6·2	3	0·81
888	6 Piscium γ	3·8	...	23	10	31·75	87	25	0·5	3	0·83
889	... ...	8·1	3	23	11	3·46	150	41	58·2	3	0·80
890	93 Aquarii ψ^2	4·5	...	23	11	15·08	99	52	51·7	2	0·86
891	... ...	9·2	1	23	11	34·25	151	13	6·9	1	0·83
892	... ...	9·1	1	23	12	4·16	129	55	17·8	1	0·85
893	96 Aquarii	5·7	...	23	12	45·69	95	49	24·2	1	0·74
894	O. A. S. 22814	6·2	4	23	17	22·98	109	23	33·2	5	0·83
895	... ...	10·1	1	23	18	41·07	131	5	52·3	1	0·83
896	... ...	10·2	3	23	20	8·57	109	16	42·6	3	0·82
897	8 Piscium κ	5·0	...	23	20	22·25	89	26	41·7	2	0·85
898	10 Piscium θ	4·4	...	23	21	28·54	84	19	25·3	2	0·82
899	... ...	8·6	4	23	26	2·42	108	31	5·7	5	0·81
900	... ...	9·0	1	23	26	10·78	108	45	29·1	1	0·77
901	R. P. L. 158	5·6	...	23	27	48·87	3	23	55·4	1	0·22
902	... ...	9·0	1	23	30	6·33	130	4	26·8	1	0·85
903	17 Piscium ι	4·3	...	23	33	21·98	85	4	2·0	8	0·82
904	... ...	10·3	1	23	35	28·32	107	46	33·2	1	0·83
905	18 Piscium λ	4·7	...	23	35	30·93	88	55	27·6	1	0·87
906	... ...	10·0	1	23	35	37·23	107	46	47·7	1	0·79
907	... ...	10·0	1	23	35	52·83	107	51	48·1	1	0·83
908	R. Aquarii, Var. 1 ...	9·8	1	23	37	11·68	105	59	39·9	1	0·83
909	δ Sculptoris	4·6	...	23	42	15·41	118	50	18·3	2	0·79
910	21 Piscium	6·1	...	23	42	54·26	89	38	5·2	4	0·85

879.—Comparison star for Mars in 1877.
880—881.—Comparison stars for Isis in 1864.
894—896—900—904—906—907.—Comparison stars for D'Arrest's in 1870.
901.—Groombridge 4101.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
876	71 Aquarii τ^2 ...	+ 3·1848	− 0·0098	− 0·003	− 18·928	− 0·146	+ 0·04	3013
877	... ...	+ 3·5130	− 0·0394	...	− 18·978	− 0·158	....	...
878	73 Aquarii λ... ...	+ 3·1338	− 0·0063	− 0·002	− 19·016	− 0·137	− 0·04	3019
879	74 Aquarii	+ 3·1637	− 0·0085	+ 0·000	− 19·039	− 0·137	+ 0·01	3021
880	O. A. S. 22487 ...	+ 3·2611	− 0·0166	...	− 19·079	− 0·138	...	...
881	O. A. S. 22497 ...	+ 3·2600	− 0·0168	...	− 19·109	− 0·136	...	...
882	24 Piscis Australis α..	+ 3·3052	− 0·0210	+ 0·023	− 19·142	− 0·135	+ 0·16	3032
883	... ...	+ 3·1494	− 0·0078	...	− 19·256	− 0·121	...	...
884	53 Pegasi β, Var. 1 ...	+ 2·8859	+ 0·0117	+ 0·013	− 19·315	− 0·106	− 0·13	3047
885	... ...	+ 2·8400	+ 0·0144	...	− 19·315	− 0·104	...	...
886	54 Pegasi α	+ 2·9802	+ 0·0056	+ 0·003	− 19·334	− 0·107	+ 0·03	3050
887	91 Aquarii ψ^1 ...	+ 3·1229	− 0·0061	+ 0·024	− 19·564	− 0·093	+ 0·01	3078
888	6 Piscium γ	+ 3·0592	+ 0·0005	+ 0·049	− 19·590	− 0·087	− 0·02	3082
889	... ...	+ 3·5771	− 0·0704	...	− 19·599	− 0·104	...	...
890	93 Aquarii ψ^2 ...	+ 3·1214	− 0·0061	+ 0·000	− 19·602	− 0·088	+ 0·02	3083
891	... ...	+ 3·5827	− 0·0721	...	− 19·608	− 0·103	...	...
892	... ...	+ 3·3044	− 0·0290	...	− 19·618	− 0·093	...	...
893	96 Aquarii	+ 3·1001	− 0·0038	+ 0·011	− 19·630	− 0·085	− 0·00	3090
894	O. A. S. 22814 ...	+ 3·1585	− 0·0113	...	− 19·713	− 0·077	...	...
895	... ...	+ 3·2813	− 0·0304	...	− 19·730	− 0·078	...	...
896	... ...	+ 3·1530	− 0·0111	...	− 19·752	− 0·071	...	...
897	8 Piscium κ	+ 3·0699	0·0000	+ 0·004	− 19·756	− 0·069	+ 0·10	3116
898	10 Piscium θ... ...	+ 3·0499	+ 0·0026	− 0·010	− 19·772	− 0·067	+ 0·05	3120
899	... ...	+ 3·1382	− 0·0103	...	− 19·835	− 0·058	...	...
900	... ...	+ 3·1389	− 0·0104	...	− 19·836	− 0·058	...	...
901	R. P. L. 158	− 0·0786	− 0·5210	+ 0·084	− 19·857	+ 0·011	− 0·01	Main
902	... ...	+ 3·2184	− 0·0272	...	− 19·885	− 0·052	...	...
903	17 Piscium ι ...	+ 3·0587	+ 0·0030	+ 0·023	− 19·920	− 0·042	+ 0·44	3148
904	... ...	+ 3·1179	− 0·0092	...	− 19·940	− 0·039	...	...
905	18 Piscium λ... ...	+ 3·0696	+ 0·0011	− 0·011	− 19·940	− 0·039	+ 0·14	3158
906	... ...	+ 3·1176	− 0·0092	...	− 19·941	− 0·039	...	...
907	... ...	+ 3·1174	− 0·0093	...	− 19·944	− 0·038	...	...
908	R Aquarii, Var. 1 ...	+ 3·1093	− 0·0081	...	− 19·954	− 0·036	...	...
909	δ Sculptoris	+ 3·1291	− 0·0161	+ 0·009	− 19·994	− 0·026	+ 0·10	Stone
910	21 Piscium	+ 3·0715	+ 0·0011	− 0·002	− 19·999	− 0·025	+ 0·03	3167

909.—Proper motions from "*Stone's Cape Catalogue.*"

Mean Positions of Stars for 1872, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.	Mean Polar Distance.	Observations.	Fraction of Year.
				h. *m.* *s.*	° ′ ″		
911	... ...	9·0	1	23 43 12·29	129 41 12·1	1	0·83
912	22 Piscium	5·9	...	23 45 24·67	87 46 52·1	4	0·85
913	... ...	9·5	2	23 47 56·64	150 43 14·5	2	0·83
914	... ...	8·3	1	23 50 22·87	148 50 45·0	1	0·84
915	28 Piscium ω	4·2	...	23 52 44·34	83 50 43·6	6	0·84
916	29 Piscium	5·1	...	23 55 15·81	93 44 25·7	3	0·85
917	33 Piscium	4·6	...	23 58 47·02	96 25 25·4	2	0·83
918	... ...	9·5	1	23 58 59·96	125 50 35·9	1	0·77

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Auwers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
911	... ...	+ 3·1534	− 0·0251	...	− 20·000	− 0·025	...	...
912	22 Piscium	+ 3·0689	+ 0·0022	0·000	− 20·014	− 0·020	+ 0·01	3174
913	... ...	+ 3·1976	− 0·0566	...	− 20·026	− 0·016	...	...
914	... ...	+ 3·1651	− 0·0512	...	− 20·037	− 0·011	...	...
915	28 Piscium ω... ...	+ 3·0676	+ 0·0047	+ 0·009	− 20·045	− 0·005	+ 0·11	3191
916	29 Piscium	+ 3·0738	− 0·0004	− 0·000	− 20·051	0·000	+ 0·00	3196
917	33 Piscium	+ 3·0729	− 0·0016	− 0·002	− 20·054	+ 0·006	− 0·10	3208
918	... ...	+ 3·0764	− 0·0198	...	− 20·054	+ 0·007	...	...