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MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1875

REDUCED TO JANUARY 1 OF THAT YEAR

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Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension,			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
	1 21 Andromedæ <i>(Alpherat)</i>	2.1	...	0	1	55.91	61	36	0.2	1	0.89
	2 W. B. E. 0.28 ... ..	7.9	5	0	3	39.24	99	40	12.6	5	0.72
561	3 W. B. E. 0.41 ... ..	9.2	5	0	4	56.31	99	59	9.7	5	0.76
	4 W. B. E. 0.76 ... ..	9.1	5	0	5	58.63	99	24	18.8	5	0.79
	5 88 Pegasi $\gamma$ <i>(Algenib)</i> ... ..	3.0	...	0	6	47.99	75	30	42.6	2	0.91
28.50	6 T Cassiopeiæ, Var. 5 ... ..	8.4	10	0	16	28.48 <sup>50</sup>	34	54	2.7	10	0.86
41.94	7 S Ceti, Var. 3. ... ..	9.4	10	0	17	41.94 <sup>54</sup>	100	1	15.8	10	0.73
	8 12 Ceti ... ..	6.2	...	0	23	39.48	94	38	53.5	1	0.87
31.82	9 T Piscium, Var. 3 ... ..	10.5	6	0	25	31.81 <sup>2</sup>	76	5	23.2	6	0.87
56.65	10 ... ..	10.5	2	0	25	56.64 <sup>5</sup>	76	5	35.2	2	0.79
18.86	11 16 Ceti $\beta$ ... ..	2.1	...	0	37	18.86 <sup>6</sup>	108	40	22.8	3	0.90
34.16	12 R. P. L. 10 ... ..	6.6	...	0	49	36.80 <sup>16</sup>	1	38	52.4	1	0.84
	13 2 Ursæ Minoris ... ..	4.5	...	0	52	0.69	4	24	52.7	8	0.84
30.97	14 R. P. L. 14 ... ..	6.2	...	0	55	27.56	3	31	15.6	5	0.62
	15 71 Piscium $\epsilon$ ... ..	4.5	...	0	56	27.42	82	46	59.7	3	0.90
40.13	16 R. P. L. 18 ... ..	7.9	...	1	11	40.13 <sup>3</sup> 30.45	2	5	22.2	8	0.74
	17 1 Ursæ Minoris $\alpha$ <i>(Polaris)</i> .	2.2	...	1	13	0.00	1	21	29.9	2	0.27
	18 45 Ceti $\theta^1$ ... ..	3.8	...	1	17	46.51	98	49	44.1	6	0.92
	19 99 Piscium $\eta$ ... ..	3.7	..	1	24	47.74	75	17	58.3	6	0.93
	20 106 Piscium $\nu$ ... ..	4.7	...	1	34	55.55	85	8	43.4	4	0.93
44.18	21 6 Arietis $\beta$ ... ..	2.8	...	1	47	44.17 <sup>8</sup>	69	48	13.6	6	0.95
	22 13 Arietis $\alpha$ ... ..	2.0	...	2	0	7.70	67	7	46.8	5	0.94
	23 67 Ceti ... ..	5.5	...	2	10	44.90	96	59	56.6	5	0.76
	24 73 Ceti $\xi^2$ ... ..	4.4	...	2	21	30.84 <sup>8</sup>	82	6	3.6	5	0.56
21.85	25 R. P. L. 26 ... ..	8.0	...	2	25	21.66 <sup>8</sup>	3	30	0.1	14	0.43
	26 Lacaille 849—1st... ..	8.1	2	2	36	18.11	150	6	18.3	2	0.81
	27 86 Ceti $\gamma^2$ ... ..	3.6	...	2	36	49.47	87	17	29.8	6	0.33
21.50	28 T Arietis, Var. 3... ..	8.2	10	2	41	21.49 <sup>50</sup>	73	0	49.5	10	0.83
	29 ... ..	10.0	5	2	46	10.63	150	9	36.5	5	0.04
	30 92 Ceti $\alpha$ <i>(Menkar)</i> ... ..	2.7	...	2	55	44.73	86	24	5.1	8	0.26
4.49	31 R. P. L. 33 ... ..	5.8	...	3	3	4.49 <sup>9</sup> 3.85	5	32	18.0	8	0.33
	32 57 Arietis $\delta$ ... ..	4.5	...	3	4	29.03	70	44	51.8	5	0.03
	33 ... ..	10.3	2	3	13	13.64	131	44	20.7	2	0.01
44.94	34 R. P. L. 34 ... ..	5.9	...	3	25	44.88 <sup>94</sup>	3	45	8.1	13	0.28
	35 25 Tauri $\eta$ <i>(Aleyone)</i> ... ..	3.0	...	3	40	3.85	66	16	59.5	12	0.12

2—3—4.—Comparison stars for Sylvia in 1875.  
 10.—Observed for map T Piscium, Var. 3.  
 12.—Groombridge 144.  
 14.—Groombridge 195.

16.—Carrington 183.  
 25.—Groombridge 352.  
 31.—Groombridge 595.  
 34.—Groombridge 642.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Ayers- Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
1	21 Andromedæ $\alpha$ ...	+ 3.0783	+ 0.0182	+ 0.010	- 20.054	+ 0.013	+ 0.16	3215
2	W. B. E. 0.28 ...	+ 3.0685	- 0.0030	...	- 20.051	+ 0.016	...	...
3	W. B. E. 0.41 ...	+ 3.0680	- 0.0032	...	- 20.051	+ 0.016	...	...
4	W. B. E. 0.76 ...	+ 3.0665	- 0.0028	...	- 20.048	+ 0.020	...	...
5	88 Pogasi $\gamma$ ( <i>Algenib</i> )	+ 3.0824	+ 0.0100	- 0.001	- 20.046	+ 0.022	+ 0.01	1
6	T Cassiopeiæ, Var. 5.	+ 3.2098	+ 0.0491	...	- 20.003	+ 0.042	...	...
7	S Ceti, Var. 3 ...	+ 3.0539	- 0.0023	...	- 19.995	+ 0.043	...	...
8	12 Ceti ...	+ 3.0610	+ 0.0008	- 0.000	- 19.948	+ 0.055	+ 0.01	38
9	T Piscium, Var. 3 ...	+ 3.1091	+ 0.0108	...	- 19.930	+ 0.058	...	...
10	... ..	+ 3.1097	+ 0.0108	...	- 19.926	+ 0.060	...	...
11	16 Ceti $\beta$ ...	+ 2.9990	- 0.0055	+ 0.015	- 19.789	+ 0.080	- 0.03	70
12	R. P. L. 10 ...	+ 13.0564	+ 7.6087	+ 0.116	- 19.586	+ 0.418	+ 0.02	Main
13	2 Ursæ Minoris ...	+ 6.9688	+ 1.3334	+ 0.068	- 19.540	+ 0.238	+ 0.01	92
14	R. P. L. 14 ...	+ 8.2789	+ 2.0702	+ 0.054	- 19.469	+ 0.297	+ 0.02	95
15	71 Piscium $\epsilon$ ...	+ 3.1135	+ 0.0087	- 0.007	- 19.449	+ 0.119	- 0.04	113
16	R. P. L. 18 ...	+ 14.3417	+ 6.4938	...	- 19.082	+ 0.651	...	...
17	1 Ursæ Minoris $\alpha$ ...	+ 20.7403	+ 14.9675	+ 0.108	- 19.046	+ 0.955	+ 0.00	102
18	45 Ceti $\theta^1$ ...	+ 3.0031	+ 0.0018	- 0.007	- 18.911	+ 0.154	+ 0.20	184
19	99 Piscium $\eta$ ...	+ 3.1990	+ 0.0141	- 0.000	- 18.697	+ 0.177	+ 0.00	203
20	106 Piscium $\nu$ ...	+ 3.1179	+ 0.0091	- 0.003	- 18.359	+ 0.191	- 0.01	228
21	6 Arietis $\beta$ ...	+ 3.2950	+ 0.0183	+ 0.005	- 17.879	+ 0.226	+ 0.10	252
22	13 Arietis $\alpha$ ...	+ 3.3545	+ 0.0203	+ 0.013	- 17.362	+ 0.252	+ 0.13	287
23	67 Ceti ...	+ 2.9836	+ 0.0049	+ 0.004	- 16.878	+ 0.242	+ 0.11	321
24	73 Ceti $\xi^2$ ...	+ 3.1796	+ 0.0117	+ 0.001	- 16.352	+ 0.276	+ 0.00	347
25	R. P. L. 26 ...	+ 16.0251	+ 3.7143	...	- 16.154	+ 1.393	...	...
26	lucanillo 849—1st ...	+ 1.6064	+ 0.0071	...	- 15.568	+ 0.154	...	...
27	86 Ceti $\gamma^2$ ...	+ 3.1122	+ 0.0094	- 0.011	- 15.540	+ 0.294	+ 0.16	383
28	T Arietis, Var. 3 ...	+ 3.3366	+ 0.0164	...	- 15.286	+ 0.322	...	...
29	... ..	+ 1.5265	+ 0.0093	...	- 15.010	+ 0.154	...	...
30	92 Ceti $\alpha$ ( <i>Menkar</i> )...	+ 3.1305	+ 0.0098	- 0.003	- 14.441	+ 0.323	+ 0.07	428
31	R. P. L. 33 ...	+ 12.9490	+ 1.6017	+ 0.045	- 13.990	+ 1.357	+ 0.12	402
32	57 Arietis $\delta$ ...	+ 3.4088	+ 0.0171	+ 0.010	- 13.900	+ 0.364	- 0.01	446
33	... ..	+ 2.1815	+ 0.0013	...	- 13.336	+ 0.243	...	...
34	R. P. L. 34 ...	+ 19.0118	+ 3.2330	+ 0.136	- 12.501	+ 2.173	+ 0.06	Gr.
35	25 Tauri $\eta$ ( <i>Alcyone</i> )	+ 3.5534	+ 0.0177	- 0.000	- 11.499	+ 0.430	+ 0.04	521

12.—Proper motions from Main's list.

34.—Proper motions from *Greenwich Catalogue 1872*.

Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
	36 34 Eridani $\gamma^1$ ... ..	3.0	...	3	52	11.88	108	51	55.5	9	0.15
	37 R. P. L. 35 ... ..	6.7	...	3	57	58.08	4	46	40.7	6	0.23
	38 Lalande 7655 ... ..	8.0	3	4	1	4.57	70	35	53.3	3	0.97
6.24	39 ... ..	10.0	4	4	3	6.30.24	67	14	27.2	4	0.08
2.61	40 ... ..	10.0	2	4	4	2.56.61	68	23	28.1	2	0.88
	41 T Tauri, Var. 4 ... ..	10.9	3	4	4	27.62	60	30	55.2	3	0.02
12.77	42 ... ..	10.0	5	4	5	12.75.7	67	14	46.6	5	0.73
	43 ... ..	9.9	5	4	5	38.84	67	13	57.9	5	0.09
	44 38 Eridani $\sigma^1$ ... ..	4.1	...	4	5	45.81	97	9	52.5	2	0.05
	45 U Tauri, Var. 7 ... ..	9.7	1	4	14	32.09	70	29	0.0	1	0.09
	46 74 Tauri $\epsilon$ ... ..	3.7	...	4	21	19.09	71	5	55.2	7	0.07
19.37	47 ... ..	9.6	5	4	22	19.36.7	70	38	8.8	5	0.92
	48 ... ..	10.1	2	4	22	38.44	80	26	33.3	2	0.01
	49 87 Tauri $\alpha$ (Aldebaran) ... ..	1.0	...	4	28	44.97	73	44	38.5	4	0.07
	50 V Tauri, Var. 8 ... ..	9.9	10	4	44	48.49	72	40	35.1	10	0.04
	51 3 Aurigæ $\epsilon$ ... ..	2.7	...	4	48	51.35	57	2	2.7	8	0.08
	52 2 Leporis $\epsilon$ ... ..	3.3	...	5	0	10.12	112	32	25.6	7	0.08
	53 112 Tauri $\beta$ ... ..	1.9	...	5	18	23.44	61	30	2.2	7	0.09
	54 R. P. L. 40 ... ..	6.0	...	5	22	8.52	4	52	27.5	4	0.38
	55 34 Orionis $\delta$ , Var. 1 ... ..	Var.	...	5	25	37.20	90	23	36.5	3	0.10
52.17	56 46 Orionis $\epsilon$ ... ..	1.8	...	5	29	52.15.7	91	17	1.0	1	0.09
27.11	57 R. P. L. 42 ... ..	7.9	...	5	32	27.26.11	2	41	12.0	5	0.44
24.30	58 58 Orionis $\alpha$ , Var. 2 ... ..	0.9	...	5	48	24.44.30	82	37	5.4	2	0.09
	59 ... ..	9.1	4	5	51	26.96	141	51	52.4	4	0.06
	60 R. P. L. 43 ... ..	6.6	...	5	56	53.96	3	14	18.4	3	0.40
	61 67 Orionis $\nu$ ... ..	4.4	...	6	0	26.17	75	13	5.5	1	0.11
	62 Lalande 12072 ... ..	7.5	2	6	13	46.23	68	48	53.0	2	0.04
	63 13 Geminorum $\mu$ ... ..	3.2	...	6	15	23.88	67	25	28.3	2	0.14
	64 24 Geminorum $\gamma$ ... ..	2.0	...	6	30	29.46	73	29	46.2	8	0.12
20.26	65 R. Monocerotis, Var. 1 ... ..	...	...	6	32	20.26.6	81	9	12.9	4	0.17
	66 15 Monocerotis, Var. 2 ... ..	5.0	10	6	34	5.77	79	59	24.3	10	0.19
15.99	67 51 Cephei (Hev.) ... ..	...	...	6	41	15.77.99	2	45	58.3	16	0.47
5.84	68 W. B. N VI. 1361 ... ..	9.0	5	6	46	5.84.4	70	35	0.5	5	0.13
	69 21 Canis Majoris $\epsilon$ ... ..	1.5	...	6	53	42.78	118	48	11.3	15	0.14
	70 23 Canis Majoris $\gamma$ ... ..	4.1	...	6	58	6.18	105	27	0.2	14	0.15

37.—Groombridge 750.  
 38—47.—Comparison stars for Sylvia in 1875.  
 48.—Observed for map of R Tauri, Var. 2.  
 54.—Groombridge 944.

60.—Groombridge 1004.  
 62.—Observed for map of R Reticuli, Var. 1.  
 68.—Comparison star for Hestia in 1875.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Answers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
36	34 Eridani $\gamma^1$ ...	+ 2.7922	+ 0.0047	+ 0.003	- 10.613	+ 0.351	+ 0.11	546
37	R. P. L. 35 ...	+ 16.8528	+ 1.8103	+ 0.057	- 10.181	+ 2.121	- 0.05	Gr.
38	Lalande 7655 ...	+ 3.4811	+ 0.0139	...	- 9.946	+ 0.445	...	...
39	... ..	+ 3.5617	+ 0.0153	...	- 9.792	+ 0.457	...	...
40	... ..	+ 3.5335	+ 0.0147	...	- 9.719	+ 0.454	...	...
41	T Tauri, Var. 4 ...	+ 3.5332	+ 0.0146	...	- 9.687	+ 0.455	...	...
42	... ..	+ 3.5641	+ 0.0151	...	- 9.629	+ 0.460	...	...
43	... ..	+ 3.5649	+ 0.0151	...	- 9.597	+ 0.460	...	...
44	38 Eridani $\sigma^1$ ...	+ 2.9246	+ 0.0058	- 0.001	- 9.587	+ 0.379	- 0.09	568
45	U Tauri, Var. 7 ...	+ 3.4969	+ 0.0129	...	- 8.906	+ 0.460	...	...
46	74 Tauri, $\epsilon$ ...	+ 3.4882	+ 0.0120	+ 0.007	- 8.371	+ 0.466	+ 0.47	609
47	... ..	+ 3.5000	+ 0.0122	...	- 8.291	+ 0.469	...	...
48	... ..	+ 3.2773	+ 0.0090	...	- 8.266	+ 0.439	...	...
49	87 Tauri $\alpha$ (Aldebaran) ...	+ 3.4315	+ 0.0105	+ 0.004	- 7.776	+ 0.464	+ 0.18	630
50	V Tauri, Var. 8 ...	+ 3.4670	+ 0.0095	...	- 6.462	+ 0.482	...	...
51	3 Aurigæ $\iota$ ...	+ 3.8978	+ 0.0144	+ 0.001	- 6.126	+ 0.544	+ 0.00	677
52	2 Leporis $\epsilon$ ...	+ 2.5361	+ 0.0033	+ 0.000	- 5.176	+ 0.359	+ 0.07	713
53	112 Tauri $\beta$ ...	+ 3.7802	+ 0.0082	+ 0.001	- 3.621	+ 0.545	+ 0.18	766
54	R. P. L. 40 ...	+ 18.5393	+ 0.6340	...	- 3.297	+ 2.669	...	...
55	34 Orionis $\delta$ , Var. 1 ...	+ 3.0631	+ 0.0038	- 0.001	- 2.997	+ 0.443	+ 0.01	787
56	46 Orionis $\epsilon$ ...	+ 3.0425	+ 0.0035	- 0.002	- 2.629	+ 0.441	- 0.01	809
57	R. P. L. 42 ...	+ 31.3575	+ 1.4732	...	- 2.405	+ 4.543	...	...
58	58 Orionis $\alpha$ , Var. 2 ...	+ 3.2452	+ 0.0027	+ 0.001	- 1.014	+ 0.473	- 0.02	860
59	... ..	+ 1.3704	+ 0.0033	...	- 0.749	+ 0.200	...	...
60	R. P. L. 43 ...	+ 26.7096	+ 0.1087	...	- 0.271	+ 3.895	...	...
61	67 Orionis $\nu$ ...	+ 3.4250	+ 0.0017	- 0.000	+ 0.038	+ 0.500	+ 0.01	887
62	Lalande 12072 ...	+ 3.5895	0.0000	...	+ 1.204	+ 0.522	...	...
63	13 Geminorum $\mu$ ...	+ 3.6268	- 0.0003	+ 0.004	+ 1.346	+ 0.527	+ 0.10	929
64	24 Geminorum $\gamma$ ...	+ 3.4648	- 0.0015	+ 0.002	+ 2.660	+ 0.500	+ 0.04	969
65	R. Monocerotis, Var. 1 ...	+ 3.2782	- 0.0007	...	+ 2.821	+ 0.473	...	...
66	15 Monocerotis, Var. 2 ...	+ 3.3056	- 0.0010	...	+ 2.973	+ 0.476	...	...
67	51 Cephei (Hev.) ...	+ 30.3010	- 2.0844	- 0.040	+ 3.592	+ 4.347	+ 0.05	Gr.
68	W. B. N. VI. 1361 ...	+ 3.5340	- 0.0036	...	+ 4.007	+ 0.503	...	...
69	21 Canis Majoris $\epsilon$ ...	+ 2.3572	+ 0.0013	- 1.001	+ 4.657	+ 0.332	- 0.02	1023
70	23 Canis Majoris $\gamma$ ...	+ 2.7145	+ 0.0005	- 0.002	+ 5.080	+ 0.381	+ 0.00	1028

37—68.—Proper motions from *Greenwich Catalogue 1872*.67.—Proper motions from *Greenwich Catalogue 1880*.

Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				h.	m.	s.	°	'	"			
3.53	71	66 Geminorum $\alpha^2$ ( <i>Castor</i> ).	2.0	...	7	26	37.38	57	50	22.3	13	0.15
	72	R. P. L. 45 ... ..	7.2	...	7	29	<del>1.48</del> <sup>1.53</sup>	1	0	24.2	5	0.58
	73	10 Can. Min. $\alpha$ ( <i>Procyon</i> )..	0.5	...	7	32	45.42	84	27	22.3	9	0.16
	74	78 Geminorum $\beta$ ( <i>Pollux</i> ).	1.1	...	7	37	39.96	61	40	25.8	5	0.16
	75	Taylor 3290 ... ..	7.7	4	7	46	33.50	144	29	33.0	4	0.11
46.24	76	R. P. L. 49 ... ..	6.7	...	7	46	43.91	5	35	17.5	2	0.18
	77	... ..	11.5	2	7	47	48.32 <sup>4</sup>	67	44	26.4	2	0.17
	78	W. B. E. VII. 1477. ...	8.8	5	7	51	8.61	77	38	10.8	5	0.15
	79	... ..	9.6	1	7	52	19.19	151	42	13.6	1	0.09
	80	... ..	9.3	5	7	53	44.87	77	48	53.1	5	0.12
50.26	81	... ..	9.4	5	7	53	51.99	149	55	27.9	5	0.14
	82	... ..	9.2	2	7	53	55.44	149	54	32.2	2	0.11
	83	6 Cancri ... ..	5.0	...	7	55	50.23 <sup>6</sup>	61	51	25.2	5	0.18
	84	15 Argus $\iota$ ... ..	2.9	...	8	2	13.28	113	56	42.8	7	0.18
	85	Lalande 16007 ... ..	8.0	5	8	4	52.41	73	26	48.3	5	0.12
18.24	86	... ..	9.6	5	8	12	10.81	131	52	34.2	5	0.11
	87	... ..	9.5	4	8	12	18.23 <sup>4</sup>	131	44	50.9	4	0.13
	88	V Cancri, Var. 5 ... ..	8.9	10	8	14	35.66	72	19	11.9	10	0.18
	89	20 Cancri $d^1$ ... ..	5.9	...	8	16	12.27 <sup>4</sup>	71	16	5.9	1	0.14
	90	33 Cancri $\eta$ ... ..	5.5	...	8	25	28.70	69	8	6.8	5	0.19
55.13	91	U Cancri, Var. 4 ... ..	10.4	6	8	28	37.33	70	40	29.2	6	0.15
	92	11 Hydre $\epsilon$ ... ..	3.6	...	8	40	9.33	83	7	25.3	6	0.18
	93	R. P. L. 60 ... ..	7.0	...	8	48	<del>58.13</del> <sup>54.52</sup>	5	19	20.7	3	0.35
	94	33 Cancri ... ..	6.6	...	9	12	0.13	71	45	57.2	1	0.19
	95	R. P. L. 69 ... ..	7.9	1	9	36	23.55	2	40	43.1	1	0.21
16.53	96	17 Leonis $\epsilon$ ... ..	3.1	...	9	38	45.18	65	39	3.6	3	0.20
	97	R. P. L. 70 ... ..	5.0	...	9	48	16.36 <sup>53</sup>	5	28	53.6	3	0.35
	98	29 Leonis $\pi$ ... ..	5.0	...	9	53	36.45	81	21	23.8	1	0.20
	99	Taylor 4503 ... ..	8.0	5	10	1	33.30	77	23	35.3	5	0.11
	100	32 Leonis $\alpha$ ( <i>Regulus</i> ) ...	1.4	...	10	1	42.84	77	25	21.3	3	0.22
8.67	101	R. P. L. 72 ... ..	6.0	...	10	11	<del>8.00</del> <sup>8.67</sup>	5	6	54.9	2	0.41
4.12	102	41 Leonis $\gamma^1$ ... ..	2.5	...	10	13	4.71 <sup>2</sup>	69	31	38.3	4	0.23
13.64	103	30 Sextantis ... ..	4.9	...	10	23	54.05	89	59	46.4	2	0.14
	104	... ..	10.5	1	10	23	57.46	76	8	38.1	1	0.15
	105	47 Leonis $\rho$ ... ..	4.0	...	10	26	13.67 <sup>9</sup>	80	3	1.6	6	0.23

72.—Groombridge 1119. 95.—Carrington 1418.  
 76.—Groombridge 1359. 97.—Carrington 1451.  
 78—80—85.—Comparison stars for Asia in 1875. 101.—Groombridge 1620.  
 98.—Carrington 1286.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Answers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
71	66 Geminorum $\alpha^2$ ...	+ 3·8535	- 0·0133	- 0·015	+ 7·401	+ 0·519	+ 0·08	1087
72	R. P. L. 45 ...	+ 73·4879	- 30·2397	- 0·323	+ 7·595	+ 0·990	- 0·01	Main
73	10 Canis Minoris $\alpha$ ...	+ 3·1915	- 0·0041	- 0·047	+ 7·897	+ 0·425	+ 1·03	1106
74	78 Geminorum $\beta$ ...	+ 3·7284	- 0·0128	- 0·048	+ 8·290	+ 0·491	+ 0·05	1112
75	Taylor 3290 ...	+ 1·3975	- 0·0043	...	+ 8·992	+ 0·178	...	...
76	R. P. L. 49 ...	+ 15·2730	+ 1·2348	...	+ 9·005	+ 1·986	...	...
77	... ..	+ 3·5599	- 0·0108	...	+ 9·090	+ 0·459	...	...
78	W. B. E. VII. 1477 ...	+ 3·3315	- 0·0071	...	+ 9·349	+ 0·426	...	...
79	... ..	+ 0·8811	- 0·0137	...	+ 9·439	+ 0·109	...	...
80	... ..	+ 3·3260	- 0·0072	...	+ 9·550	+ 0·423	...	...
81	... ..	+ 1·0427	- 0·0106	...	+ 9·559	+ 0·130	...	...
82	... ..	+ 1·0443	- 0·0104	...	+ 9·563	+ 0·130	...	...
83	6 Cancri ...	+ 3·6979	- 0·0148	- 0·003	+ 9·710	+ 0·468	+ 0·04	1149
84	15 Argus $\epsilon$ ...	+ 2·5609	+ 0·0009	- 0·008	+ 10·195	+ 0·318	- 0·06	1170
85	Lalande 16007 ...	+ 3·3059	- 0·0076	...	+ 10·394	+ 0·407	...	...
86	... ..	+ 2·0676	+ 0·0014	...	+ 10·936	+ 0·248	...	...
87	... ..	+ 2·0724	+ 0·0014	...	+ 10·945	+ 0·248	...	...
88	V Cancri, Var 5 ...	+ 3·4270	- 0·0108	...	+ 11·112	+ 0·411	...	...
89	20 Cancri $\delta^1$ ...	+ 3·4479	- 0·0114	- 0·005	+ 11·228	+ 0·413	+ 0·02	1185
90	33 Cancri $\eta$ ...	+ 3·4825	- 0·0129	- 0·004	+ 11·892	+ 0·404	+ 0·05	1207
91	U Cancri, Var 4 ...	+ 3·4460	- 0·0124	...	+ 12·112	+ 0·397	...	...
92	11 Hydræ $\epsilon$ ...	+ 3·1956	- 0·0071	- 0·014	+ 12·901	+ 0·351	+ 0·02	1243
93	R. P. L. 60 ...	+ 13·6983	- 1·7150	...	+ 13·479	+ 1·485	...	...
94	83 Cancri ...	+ 3·3669	- 0·0134	- 0·009	+ 14·903	+ 0·323	+ 0·14	1300
95	R. P. L. 69 ...	+ 18·9411	- 5·5585	...	+ 16·244	+ 1·612	...	...
96	17 Leonis $\epsilon$ ...	+ 3·4219	- 0·0180	- 0·004	+ 16·365	+ 0·282	+ 0·01	1368
97	R. P. L. 70 ...	+ 10·6457	- 1·5567	...	+ 16·832	+ 0·837	...	...
98	29 Leonis $\pi$ ...	+ 3·1787	- 0·0080	- 0·004	+ 17·081	+ 0·236	+ 0·01	1398
99	Taylor 4503 ...	+ 3·2199	- 0·0102	...	+ 17·435	+ 0·224	...	...
100	32 Leonis $\alpha$ ( <i>Regulus</i> )	+ 3·2194	- 0·0102	- 0·018	+ 17·442	+ 0·225	- 0·02	1406
101	R. P. L. 72 ...	+ 9·9019	- 1·6221	- 0·096	+ 17·835	+ 0·652	- 0·04	1399
102	41 Leonis $\gamma^1$ ...	+ 3·2967	- 0·0148	+ 0·021	+ 17·911	+ 0·208	+ 0·14	1432
103	30 Sextantis ...	+ 3·0723	- 0·0030	- 0·003	+ 18·317	+ 0·175	+ 0·01	1459
104	... ..	+ 3·2065	- 0·0102	...	+ 18·318	+ 0·183	...	...
105	47 Leonis $\rho$ ...	+ 3·1655	- 0·0080	- 0·001	+ 18·399	+ 0·176	- 0·01	1467

72.—Proper motions from Main's list.

Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				h.	m.	s.	°	'	"			
106	Taylor 4850—1st.	9.4	3	10	39	4.50	148	53	44.2	3	0.20	
107	Taylor 4852—2nd	9.2	1	10	39	19.01	148	55	19.0	1	0.21	
108	53 Leonis <i>l</i>	5.3	...	10	42	41.13	78	47	36.2	10	0.24	
109	68 Leonis $\chi$	4.7	...	10	58	34.08	81	59	17.9	11	0.25	
27.47	110	68 Leonis $\delta$	2.8	...	11	7	27.497	68	47	29.4	14	0.25
	111	12 Crateris $\delta$	3.9	...	11	13	5.54	104	6	7.3	7	0.25
	112	...	10.5	2	11	27	0.60	151	41	27.9	2	0.15
	113	91 Leonis <i>v</i>	4.5	...	11	30	32.88	90	8	0.1	10	0.26
	114	94 Leonis $\beta$ ( <i>Deneb</i> ).	2.2	...	11	42	40.99	74	43	45.4	8	0.26
0.13	115	R. P. L. 87	8.0	...	11	53	0.9713	2	18	34.8	7	0.75
	116	R. P. L. 89	6.3	...	11	58	27.52	3	43	13.7	1	0.81
4.45	117	2 Corvi $\epsilon$	3.1	...	12	3	41.965	111	55	27.7	2	0.31
	118	R. P. L. 90	7.7	...	12	7	20.66	2	22	20.4	7	0.34
11.45	119	T Virginis, Var. 4	9.8	9	12	8	11.935	95	20	27.4	10	0.23
	120	...	8.7	5	12	8	37.68	138	27	16.4	5	0.29
31.43	121	...	9.6	4	12	10	31.8643	138	29	43.9	4	0.32
25.55	122	...	9.0	2	12	11	25.4955	138	25	36.7	3	0.23
11.50 12.14	123	R. P. L. 92	6.7	...	12	13	13.90	2	52	10.3	6	0.56
20.30	124	R. P. L. 93	6.7	...	12	14	20.6630	1	36	25.1	12	0.46
	125	...	9.0	2	12	17	55.33	24	46	44.3	2	0.21
40.31	126	$\alpha$ Crucis—2nd	...	...	12	19	40.1931	152	24	26.1	5	0.20
	127	...	9.5	2	12	25	11.65	151	48	34.4	2	0.36
49.35	128	9 Corvi $\beta$	2.8	...	12	27	49.335	112	42	19.4	4	0.31
6.36	129	R. P. L. 98	6.6	...	12	48	7.36	5	54	8.1	3	0.80
14.24	130	R. P. L. 99	5.6	...	12	48	14.24	5	54	26.4	2	0.52
10.68	131	12 Canum Venaticorum $\alpha$	3.1	...	12	50	10.68	51	0	22.2	13	0.31
	132	51 Virginis $\theta$	4.4	...	13	3	28.71	94	52	15.5	16	0.33
27.78	133	R. P. L. 101	7.5	...	13	8	27.78	1	40	50.1	3	0.46
36.50	134	67 Virginis $\alpha$ ( <i>Spica</i> )	1.2	...	13	18	36.4950	100	30	28.6	10	0.32
35.26	135	W Virginis, Var. 9	9.6	9	13	19	35.236	92	43	40.1	10	0.23
43.47 44.26	136	R. P. L. 103	7.0	...	13	19	43.47	4	35	32.8	4	0.83
21.07	137	V Virginis Var. 7	10.1	7	13	21	21.087	92	31	27.8	7	0.34
	138	...	10.9	2	13	23	51.94	88	41	39.4	2	0.36
	139	79 Virginis $\zeta$	3.5	...	13	28	19.48	89	57	21.5	8	0.34
11.91	140	...	9.3	5	13	36	11.9491	187	1	43.4	5	0.22

28.1

116.—Groombridge 1850.  
 118.—Carrington 1816.  
 123.—Groombridge 1871.  
 124.—Groombridge 1884.  
 129.—Groombridge 1937.

130.—Groombridge 1940.  
 133.—Groombridge 2006.  
 136.—Groombridge 2007.  
 140.—Comparison star for comet in 1873.



## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Answers. Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	"	"	"	
106	Taylor 4850—1st ...	+ 2.3060	+ 0.0212	...	+ 18.817	+ 0.109	...	...
107	Taylor 4852—2nd ...	+ 2.3073	+ 0.0212	...	+ 18.825	+ 0.108	...	...
108	53 Leonis <i>l</i> ...	+ 3.1599	- 0.0080	- 0.002	+ 18.924	+ 0.145	+ 0.02	1500
109	63 Leonis <i>χ</i> ...	+ 3.1220	- 0.0056	- 0.026	+ 19.338	+ 0.113	+ 0.02	1535
110	68 Leonis <i>δ</i> ...	+ 3.1901	- 0.0132	+ 0.010	+ 19.530	+ 0.098	+ 0.12	1546
111	12 Crateris <i>δ</i> ...	+ 3.0039	+ 0.0064	- 0.011	+ 19.636	+ 0.081	- 0.21	1557
112	... ..	+ 2.7161	+ 0.0424	...	+ 19.847	+ 0.048	...	...
113	91 Leonis <i>v</i> ...	+ 3.0718	+ 0.0003	- 0.002	+ 19.889	+ 0.049	- 0.05	1586
114	94 Leonis <i>β</i> ( <i>Deneb</i> )	+ 3.0998	- 0.0074	- 0.036	+ 19.997	+ 0.025	+ 0.10	1605
115	R. P. L. 87 ...	+ 4.0812	- 1.2257	...	+ 20.045	+ 0.009	...	...
116	R. P. L. 89 ...	+ 3.2107	- 0.4990	...	+ 20.050	- 0.006	...	...
117	2 Corvi <i>ε</i> ...	+ 3.0809	+ 0.0142	- 0.006	+ 20.052	- 0.016	- 0.02	1626
118	R. P. L. 90 ...	+ 2.0385	- 0.2328	...	+ 20.045	- 0.019	...	...
119	T Virginis, Var. 4 ...	+ 3.0767	+ 0.0052	...	+ 20.041	- 0.025	...	...
120	... ..	+ 3.1290	+ 0.0373	...	+ 20.040	- 0.026	...	...
121	... ..	+ 3.1416	+ 0.0378	...	+ 20.033	- 0.030	...	...
122	... ..	+ 3.1473	+ 0.0379	...	+ 20.030	- 0.032	...	...
123	R. P. L. 92 ...	+ 1.5346	+ 0.0049	+ 0.285	+ 20.021	- 0.022	+ 0.02	1656
124	R. P. L. 93 ...	+ 0.0934	+ 1.0162	- 0.152	+ 20.015	- 0.010	- 0.07	Main
125	... ..	+ 2.8460	- 0.0523	...	+ 19.993	- 0.041	...	...
126	<i>α</i> Crucis—2nd ...	+ 3.2914	+ 0.0680	- 0.006	+ 19.980	- 0.050	+ 0.04	Stone
127	... ..	+ 3.3459	+ 0.0685	...	+ 19.933	- 0.063	...	...
128	9 Corvi <i>β</i> ...	+ 3.1399	+ 0.0164	- 0.003	+ 19.907	- 0.064	+ 0.05	1685
129	R. P. L. 98 ...	+ 0.3764	+ 0.2187	- 0.017	+ 19.614	- 0.019	- 0.02	1730
130	R. P. L. 99 ...	+ 0.3716	+ 0.2195	- 0.020	+ 19.611	- 0.019	- 0.02	1731
131	12 Canum Venat. <i>α</i> ...	+ 2.8371	- 0.0152	- 0.022	+ 19.576	- 0.098	- 0.07	1725
132	51 Virginis <i>θ</i> ...	+ 3.1034	+ 0.0078	- 0.004	+ 19.290	- 0.132	+ 0.04	1747
133	R. P. L. 101 ...	- 10.3459	+ 7.5327	...	+ 19.167	+ 0.436	...	...
134	67 Virginis <i>α</i> ( <i>Spica</i> )	+ 3.1556	+ 0.0116	- 0.004	+ 18.886	- 0.163	+ 0.02	1774
135	W Virginis, Var. 9 ...	+ 3.0939	+ 0.0074	...	+ 18.863	- 0.162	...	...
136	R. P. L. 103 ...	+ 2.6031	+ 0.9508	...	+ 18.853	+ 0.122	...	...
137	V Virginis, Var. 7 ...	+ 3.0927	+ 0.0073	...	+ 18.804	- 0.164	...	...
138	... ..	+ 3.0614	+ 0.0055	...	+ 18.726	- 0.167	...	...
139	79 Virginis <i>ζ</i> ...	+ 3.0718	+ 0.0064	- 0.021	+ 18.584	- 0.176	- 0.06	1789
140	... ..	+ 3.6570	+ 0.0468	...	+ 18.313	- 0.225	...	...

124.—Proper motions from Main's list.

126.—Proper motions from Stone's Cape Catalogue.

## Mean Positions of Stars for 1874, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
	141 Bonn + O <sup>o</sup> . 3091... ..	10.4	1	13	36	30.77	89	38	19.1	1	0.27
43.93	142 Lacaille 5661 ... ..	7.9	3	13	37	43.74.93	138	9	49.7	3	0.24
48.66	143 ... ..	8.5	4	13	39	48.52.66	138	53	29.8	4	0.26
4.25	144 ... ..	8.3	2	13	40	4.81.5	138	32	18.6	2	0.27
	145 8 Bootis $\eta$ ... ..	2.9	...	13	48	43.99	70	58	28.5	13	0.36
	146 $\beta$ Centauri ... ..	1.2	...	13	55	1.25 0.98	149	46	5.7	3	0.25
1.25	147 93 Virginis $\tau$ ... ..	4.4	...	13	55	17.15	87	50	57.9	11	0.37
	148 ... ..	9.7	1	14	1	8.83	150	54	17.9	1	0.29
	149 R. P. L. 108 ... ..	7.8	...	14	2	30.04	3	38	39.9	2	0.61
7.36	150 ... ..	9.4	6	14	3	7.316	101	48	34.8	6	0.23
	151 ... ..	10.4	9	14	5	23.29	102	9	57.3	9	0.30
	152 ... ..	9.0	2	14	6	48.88	102	21	16.1	2	0.24
	153 16 Bootis $\alpha$ ( <i>Arcturus</i> )....	0.0	...	14	9	57.62	70	9	57.2	10	0.37
	154 ... ..	10.2	1	14	18	3.51	123	16	27.5	1	0.27
41.61	155 8 Bootis Var. 2 ... ..	8.0	1	14	18	41.78.61	35	37	10.9	2	0.23
[5.75]	156 ... ..	10.3	3	14	20	5.75 6.11	124	31	48.2	3	0.27
	157 25 Bootis $\rho$ ... ..	3.6	...	14	26	26.56 18.53	59	4	44.2	11	0.41
1.25	158 O. A. N. 14652 ... ..	9.0	1	14	27	14.28	20	9	52.0	1	0.23
7.57	159 $\alpha^1$ Centauri ... ..	1.0	...	14	31	7.52.7	150	19	9.5	3	0.30
7.79	160 $\alpha^2$ Centauri ... ..	4.0	...	14	31	7.57.79	150	19	4.4	4	0.26
	161 36 Bootis $\epsilon$ ( <i>Mirac</i> ) ... ..	2.6	...	14	30	31.70	62	23	51.5	13	0.41
	162 9 Libræ $\alpha^3$ ... ..	3.0	...	14	43	57.90	105	31	16.0	12	0.41
	163 ... ..	9.9	1	14	48	21.40	150	43	44.0	1	0.26
	164 43 Bootis $\psi$ ... ..	4.5	...	14	50	5.38	62	33	49.8	8	0.41
	165 ... ..	9.0	5	15	0	57.29	123	28	3.0	5	0.28
11.15	166 ... ..	9.6	4	15	1	11.10.5	150	59	5.1	3	0.31
59.71	167 ... ..	8.9	5	15	1	59.67.1	123	20	4.3	5	0.27
	168 R. P. L. 111 ... ..	7.0	...	15	4	28.05	5	33	59.9	4	0.72
	169 ... ..	8.7	1	15	7	26.15	130	28	59.4	1	0.27
	170 27 Libræ $\beta$ ... ..	2.7	...	15	10	16.92	98	55	12.1	9	0.41
13.67	171 Redhill 2293 ... ..	...	...	15	13	13.67 14.44	4	23	38.1	9	0.33
	172 R. P. L. 114 ... ..	6.9	...	15	18	18.05	2	17	24.4	12	0.34
28.42	173 31 Libræ $\epsilon$ ... ..	5.2	...	15	18	28.42 25.90.42	99	52	16.5	2	0.25
47.55	174 W. B. E. XV. 319 ... ..	9.1	3	15	18	47.52.5	102	25	39.7	3	0.27
	175 5 Cor. Bor. $\alpha$ ( <i>Alpheta</i> ) ...	2.4	...	15	29	23.76	62	51	47.8	6	0.41

141.—Comparison star for Isis in 1871.

142—143—144.—Comparison stars for comet in 1873.

149.—Groombridge 2099.

150—151—152.—Comparison stars for Mars in 1873.

158.—Comparison star for comet 2, 1862.

167.—Comparison star for Euphrosyne in 1874.

168.—Groombridge 2213.

172.—Groombridge 2283.

174.—Comparison star for comet in 1867.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Ayers- Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
141	Bonn + 0°. 3091 ...	+ 3.0688	+ 0.0065	...	+ 18.302	- 0.191	...	...
142	Lacaille 5661 ...	+ 3.6899	+ 0.0491	...	+ 18.258	- 0.231	...	...
143	... ..	+ 3.7185	+ 0.0507	...	+ 18.183	- 0.237	...	...
144	... ..	+ 3.7121	+ 0.0500	...	+ 18.173	- 0.237	...	...
145	S Bootis $\eta$ ...	+ 2.8616	- 0.0006	- 0.005	+ 17.839	- 0.199	+ 0.34	1821
146	$\beta$ Centauri ...	+ 4.1759	+ 0.0841	- 0.010	+ 17.581	- 0.301	+ 0.05	Stone
147	$\eta$ Virginis $\tau$ ...	+ 3.0480	+ 0.0064	- 0.001	+ 17.570	- 0.221	+ 0.03	1829
148	... ..	+ 4.2839	+ 0.0897	...	+ 17.317	- 0.320	...	...
149	R. P. L. 108 ...	- 7.6206	+ 2.4175	...	+ 17.257	+ 0.559	...	...
150	... ..	+ 3.2153	+ 0.0134	...	+ 17.230	- 0.247	...	...
151	... ..	+ 3.2221	+ 0.0136	...	+ 17.127	- 0.251	...	...
152	... ..	+ 3.2260	+ 0.0137	...	+ 17.062	- 0.254	...	...
153	16 Bootis $\alpha$ ...	+ 2.8132	+ 0.0004	- 0.080	+ 16.916	- 0.227	+ 1.98	1847
154	... ..	+ 3.5694	+ 0.0292	...	+ 16.524	- 0.301	...	...
155	S. Bootis, Var 2 ...	+ 2.0106	- 0.0022	...	+ 16.492	- 0.174	...	...
156	... ..	+ 3.6002	+ 0.0304	...	+ 16.423	- 0.308	...	...
157	25 Bootis $\rho$ ...	+ 2.5946	- 0.0015	- 0.009	+ 16.098	- 0.233	- 0.13	1869
158	O. A. N. 14652 ...	+ 0.8916	+ 0.0366	...	+ 16.060	- 0.084	...	...
159	$\alpha^1$ Centauri ...	+ 4.5092	+ 0.0878	- 0.476	+ 15.850	- 0.410	- 0.81	Stone
160	$\alpha^2$ Centauri ...	+ 4.5092	+ 0.0878	- 0.476	+ 15.850	- 0.410	- 0.81	Stone
161	36 Bootis $\epsilon$ ...	+ 2.6240	- 0.0001	- 0.004	+ 15.389	- 0.252	- 0.00	1890
162	9 Libræ $\alpha^2$ ...	+ 3.3157	+ 0.0154	- 0.009	+ 15.137	- 0.324	+ 0.07	1894
163	... ..	+ 4.6709	+ 0.0883	...	+ 14.883	- 0.460	...	...
164	43 Bootis $\psi$ ...	+ 2.5834	+ 0.0010	- 0.015	+ 14.237	- 0.271	+ 0.01	1922
165	... ..	+ 3.6997	+ 0.0276	...	+ 14.122	- 0.389	...	...
166	... ..	+ 4.7854	+ 0.0878	...	+ 14.107	- 0.502	...	...
167	... ..	+ 3.6994	+ 0.0275	...	+ 14.057	- 0.391	...	...
168	R. P. L. 111 ...	- 6.8150	+ 1.1676	...	+ 13.901	+ 0.710	...	...
169	... ..	+ 3.9050	+ 0.0349	...	+ 13.713	- 0.420	...	...
170	27 Libræ $\beta$ ...	+ 3.2271	+ 0.0117	- 0.008	+ 13.530	- 0.353	+ 0.02	1934
171	Redhill 2293 ...	- 9.9211	+ 1.9443	...	+ 13.338	+ 1.075	...	...
172	R. P. L. 114 ...	- 22.3778	+ 7.5556	...	+ 13.003	+ 2.478	...	...
173	31 Libræ $\epsilon$ ...	+ 3.2494	+ 0.0120	- 0.008	+ 12.997	- 0.367	+ 0.15	1944
174	W. B. E. XV. 319 ...	+ 3.2969	+ 0.0131	...	+ 12.972	- 0.373	...	...
175	5 Coronæ Borealis $\alpha$ ...	+ 2.5297	+ 0.0023	+ 0.009	+ 12.250	- 0.297	+ 0.09	1973

Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				h.	m.	s.	°	'	"			
34.53	176	...	9.3	3	15	29	39.3 <sup>3</sup>	119	39	59.6	3	0.35
	177	Lalande 28530	9.0	2	15	32	13.48	47	27	28.5	2	0.27
0.52	178	...	9.7	4	15	33	0.5 <sup>2</sup>	116	38	40.6	4	0.35
18.42	179	...	9.4	3	15	34	18.3 <sup>4</sup>	126	37	23.0	3	0.33
	180	24 Serpentis $\alpha$	2.7	...	15	38	6.70	83	10	45.8	6	0.42
27.22	181	O. A. S. 14841	9.0	2	15	38	27.85 <sup>4</sup>	114	9	53.1	2	0.34
24.75	182	Lacaille 6524	6.0	4	15	41	24.7 <sup>5</sup>	144	40	17.5	4	0.28
	183	...	10.2	3	15	42	59.30	61	48	47.9	3	0.35
	184	O. A. S. 14934	9.6	2	15	43	27.10	107	54	28.5	2	0.29
34.77	185	...	9.2	3	15	44	34.7 <sup>7</sup>	104	23	35.2	3	0.31
9.31	186	W. B. E. XV. 861	9.5	3	15	46	8.29 <sup>31</sup>	101	27	30.8	3	0.34
	187	Radcliffe 3462	8.0	2	15	46	42.92	47	3	35.4	2	0.32
	188	R. P. L. 115	7.0	...	15	46	45.09	4	45	56.0	14	0.26
	189	...	9.1	5	15	47	1.88	147	12	42.9	5	0.36
	190	16 Ursæ Minoris $\zeta$	4.5	...	15	48	34.52	11	40	18.3	1	0.30
18.17	191	4 Herculis	5.7	...	15	51	18.93 <sup>17</sup>	47	4	8.9	1	0.30
54.68	192	...	7.2	1	15	51	54.4 <sup>8</sup>	143	47	12.7	1	0.34
16.40	193	O. A. S. 15089	9.0	4	15	52	8.10	105	51	44.6	4	0.34
	194	T Coronæ, Var. 3	9.6	8	15	54	16.4 <sup>10</sup>	63	43	32.6	10	0.42
	195	O. A. S. 15146	8.8	1	15	55	24.84	107	30	41.4	1	0.27
27.43	196	O. A. S. 15148	9.0	3	15	55	27.4 <sup>3</sup>	107	40	14.4	3	0.36
	197	...	8.9	5	15	55	59.43	126	57	33.3	5	0.45
	198	8 Scorpii $\beta^1$	3.0	...	15	58	10.29	109	27	40.3	5	0.50
	199	...	8.1	1	16	0	35.60	105	18	9.6	1	0.27
	200	R. P. L. 116	7.0	...	16	2	26.53	4	20	31.5	2	0.29
	201	1 Ophiuchi $\delta$	2.8	...	16	7	47.73	93	22	15.0	7	0.51
22.61	202	...	9.2	1	16	10	22.6 <sup>1</sup>	112	35	18.1	1	0.33
	203	...	9.3	2	16	16	42.32	152	18	40.4	2	0.31
	204	21 Scorpii $\alpha$ ( <i>Antares</i> )	1.1	...	16	21	44.68	116	9	8.2	5	0.47
16.49	205	14 Draconis $\eta$	2.8	...	16	22	18.50 <sup>49</sup>	28	12	7.1	7	0.29
	206	30 Herculis $\gamma$ , Var. 5	Var.	...	16	24	32.12	47	50	31.5	4	0.32
42.82	207	...	9.2	3	16	24	42.75 <sup>82</sup>	152	16	30.5	4	0.37
	208	O. A. S. 15722	9.9	3	16	26	8.92	111	5	14.2	5	0.52
	209	...	8.2	5	16	27	4.40	132	57	1.8	5	0.36
	210	...	9.0	2	16	29	21.95	152	18	8.8	3	0.39

[53.1]

181.—Comparison star for Iphigenia in 1873.  
 182—189.—Comparison stars for Niobe in 1874.  
 184—195—196.—Comparison stars for Sylvia in 1866.  
 185—198.—Comparison stars for Asia in 1861.  
 186.—Comparison star for Sappho in 1871.  
 188.—Carrington 2380.  
 197.—Comparison star for Thyra in 1874.  
 199.—Comparison star for Sappho in 1864.  
 200.—Carrington 2423.  
 202.—Observed for map of R. S. T. Scorpii, Vars.  
 208.—Comparison star for Donati's comet in 1858.  
 209.—Comparison star for Comet 2, 1862.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Aurwers- Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
176	... ..	+ 3.6758	+ 0.0224	...	+ 12.232	- 0.429	...	...
177	Lalande 28530	+ 2.0918	+ 0.0025	...	+ 12.053	- 0.249	...	...
178	... ..	+ 3.6098	+ 0.0201	...	+ 11.999	- 0.426	...	...
179	... ..	+ 3.8719	+ 0.0278	...	+ 11.907	- 0.458	...	...
180	24 Serpentis $\alpha$	+ 2.9420	+ 0.0062	+ 0.003	+ 11.638	- 0.354	- 0.06	1990
181	O. A. S. 14841	+ 3.5613	+ 0.0181	...	+ 11.613	- 0.428	...	...
182	Lacaille 6524	+ 4.6239	+ 0.0555	...	+ 11.402	- 0.560	...	...
183	... ..	+ 2.4798	+ 0.0027	...	+ 11.287	- 0.304	...	...
184	O. A. S. 14934	+ 3.4299	+ 0.0145	...	+ 11.253	- 0.418	...	...
185	... ..	+ 3.3572	+ 0.0129	...	+ 11.172	- 0.411	...	...
186	W. B. E. XV. 861	+ 3.2983	+ 0.0116	...	+ 11.059	- 0.406	...	...
187	Radeliffé 3492	+ 2.0327	+ 0.0033	...	+ 11.017	- 0.252	...	...
188	R. P. L. 115	- 10.3281	+ 1.5336	...	+ 11.014	+ 1.254	...	...
189	... ..	+ 4.8080	+ 0.0613	...	+ 10.993	- 0.591	...	...
190	16 Ursæ Minoris $\zeta$	- 2.2931	+ 0.2031	+ 0.003	+ 10.881	+ 0.276	+ 0.00	2041
191	4 Herculis	+ 2.0195	+ 0.0035	- 0.001	+ 10.679	- 0.254	+ 0.01	2028
192	... ..	+ 4.6204	+ 0.0506	...	+ 10.633	- 0.575	...	...
193	O. A. S. 15089	+ 3.3945	+ 0.0131	...	+ 10.617	- 0.424	...	...
194	T Corona, Var. 3	+ 2.5090	+ 0.0030	...	+ 10.458	- 0.316	...	...
195	O. A. S. 15146	+ 3.4333	+ 0.0135	...	+ 10.372	- 0.432	...	...
196	O. A. S. 15148	+ 3.4401	+ 0.0137	...	+ 10.369	- 0.433	...	...
197	... ..	+ 3.9345	+ 0.0253	...	+ 10.329	- 0.495	...	...
198	8 Scorpii $\beta^1$	+ 3.4794	+ 0.0142	- 0.003	+ 10.165	- 0.441	+ 0.03	2034
199	... ..	+ 3.3896	+ 0.0123	...	+ 9.982	- 0.432	...	...
200	R. P. L. 116	- 12.2678	+ 1.7486	...	+ 9.840	+ 1.555	...	...
201	1 Ophiuchi $\delta$	+ 3.1417	+ 0.0081	- 0.005	+ 9.431	- 0.498	+ 0.14	2035
202	... ..	+ 3.5660	+ 0.0147	...	+ 9.230	- 0.465	...	...
203	... ..	+ 5.3656	+ 0.0682	...	+ 8.736	- 0.706	...	...
204	21 Scorpii $\alpha$ ( <i>Antares</i> )	+ 3.6693	+ 0.0150	- 0.002	+ 8.337	- 0.491	+ 0.03	2091
205	14 Draconis $\eta$	+ 0.8022	+ 0.0188	+ 0.006	+ 8.292	- 0.111	- 0.05	2104
206	30 Herculis $\gamma$ , Var. 5	+ 1.9653	+ 0.0042	0.000	+ 8.114	- 0.265	+ 0.04	2102
207	... ..	+ 5.3994	+ 0.0638	...	+ 8.100	- 0.722	...	...
208	O. A. S. 15722	+ 3.5451	+ 0.0125	...	+ 7.985	- 0.477	...	...
209	... ..	+ 4.2159	+ 0.0253	...	+ 7.910	- 0.568	...	...
210	... ..	+ 5.4225	+ 0.0614	...	+ 7.726	- 0.731	...	...

## Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				h.	m.	s.	°	'	"			
35.94	211	...	7.2	4	16	29	35.934	133	8	34.2	5	0.64
	212	...	9.6	2	16	29	54.82	130	32	45.5	2	0.40
	213	...	9.2	5	16	31	28.82	121	28	25.3	5	0.49
26.86	214	Brisbane 5784	9.2	2	16	31	52.96	150	40	48.3	2	0.32
	215	$\alpha$ Trianguli Australis	...	...	16	35	26.98 <sup>86</sup>	158	47	40.9	4	0.32
	216	40 Herculis $\zeta$	3.1	...	16	36	34.44	58	10	10.3	7	0.49
25.44	217	...	9.0	5	16	41	2.48	139	5	3.6	5	0.35
	218	...	9.0	5	16	41	19.94	138	59	18.3	5	0.37
	219	...	7.3	2	16	42	25.424	138	53	48.1	2	0.64
	220	...	7.0	4	16	45	0.13	139	30	0.0	5	0.39
	221	S Herculis, Var. 3	8.7	5	16	46	12.50	74	50	47.3	5	0.31
	222	49 Herculis	6.4	...	16	46	23.19	74	48	53.9	2	0.31
49.10	223	...	8.5	3	16	47	36.80	130	17	34.5	3	0.36
	224	...	9.5	3	16	47	48.98 <sup>10</sup>	131	0	47.0	3	0.34
	225	Taylor 7832	8.7	1	16	48	14.26	130	18	38.7	1	0.32
36.46	226	...	8.0	1	16	48	16.14	121	6	13.2	1	0.32
	227	27 Ophiuchi $\kappa$	3.4	...	16	51	45.00	80	25	43.7	17	0.52
	228	O. A. S. 16232	10.0	1	16	54	36.486	110	15	48.1	1	0.33
50.43	229	22 Ursæ Minoris $\epsilon$	4.5	...	16	58	48.65 <sup>83</sup>	7	45	38.0	1	0.08
22.97	230	G. Z. C. XVII. 421	9.5	2	17	6	22.997	130	54	33.9	2	0.33
59.92	231	G. Z. C. XVII. 442	9.3	1	17	6	52.92	130	54	52.7	1	0.32
	232	...	8.9	2	17	6	59.89 <sup>92</sup>	137	25	52.6	2	0.65
	233	64 Herculis $\alpha$ , Var. 1	Var.	...	17	8	56.86	75	27	54.5	15	0.52
	234	42 Ophiuchi $\theta$	3.4	...	17	14	20.07	114	52	21.6	5	0.55
	235	...	9.0	4	17	22	36.44	131	54	38.2	4	0.40
56.23	236	23 Draconis $\beta$	3.0	...	17	27	36.60	37	36	16.7	3	0.36
	237	G. Z. C. XVII. 1907	9.2	1	17	27	58.24 <sup>23</sup>	150	36	7.6	1	0.33
	238	55 Ophiuchi $\alpha$	2.2	...	17	29	7.94	77	20	49.4	4	0.54
	239	...	9.0	6	17	30	19.50	117	58	5.4	10	0.55
	240	...	9.5	1	17	35	18.88	126	15	26.5	1	0.38
	241	...	9.8	1	17	35	19.39	128	35	48.4	1	0.37
	242	O. A. S. 17105	8.6	6	17	35	25.50	117	49	16.6	10	0.55
	243	...	9.2	1	17	37	2.37	150	36	25.9	1	0.38
	244	...	9.5	3	17	37	22.59	150	37	28.6	3	0.38
	245	...	10.0	2	17	40	1.78	127	17	46.9	2	0.38

213.—Comparison star for Amphitrite in 1875.

217—218—219—220.—Comparison stars for comet in 1862.

226.—Comparison star for Alexandra in 1871.

228.—Observed for map of Serpentis, Var. 4.

239—242.—Comparison stars for Mars in 1875.

240.—Comparison star for Donati's comet in 1858.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Answers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
211	...	+ 0.6262	+ 0.0249	...	+ 7.707	- 0.572	...	...
212	...	+ 4.1411	+ 0.0228	...	+ 7.681	- 0.561	...	...
213	...	+ 3.8303	+ 0.0164	...	+ 7.555	- 0.521	...	...
214	Brisbane 5784	+ 5.2791	+ 0.0545	...	+ 7.522	- 0.715	...	...
215	$\alpha$ Trianguli Australis.	+ 6.2862	+ 0.0907	0.000	+ 7.232	- 0.858	+ 0.06	Stone
216	40 Herculis $\zeta$	+ 2.2967	+ 0.0033	- 0.036	+ 7.140	- 0.316	- 0.41	2127
217	...	+ 4.5241	+ 0.0281	...	+ 6.773	- 0.624	...	...
218	...	+ 4.5200	+ 0.0279	...	+ 6.749	- 0.624	...	...
219	...	+ 4.5176	+ 0.0275	...	+ 6.659	- 0.624	...	...
220	...	+ 4.5545	+ 0.0271	...	+ 6.446	- 0.623	...	...
221	S Herculis, Var. 3	+ 2.7288	+ 0.0039	...	+ 6.346	- 0.380	...	...
222	40 Herculis	+ 2.7279	+ 0.0040	+ 0.000	+ 6.331	- 0.381	+ 0.00	2144
223	...	+ 4.1497	+ 0.0186	...	+ 6.229	- 0.578	...	...
224	...	+ 4.1778	+ 0.0192	...	+ 6.212	- 0.581	...	...
225	Taylor 7832	+ 4.1514	+ 0.0186	...	+ 6.177	- 0.578	...	...
226	...	+ 3.8396	+ 0.0137	...	+ 6.174	- 0.536	...	...
227	27 Ophiuchi $\kappa$	+ 2.8567	+ 0.0044	- 0.021	+ 5.884	- 0.402	- 0.02	2156
228	O. A. S. 16232	+ 3.5458	+ 0.0093	...	+ 5.645	- 0.498	...	...
229	22 Ursæ Minoris $\epsilon$	- 6.3902	+ 0.3075	+ 0.009	+ 5.290	+ 0.897	+ 0.00	2201
230	G. Z. C. XVII. 421	+ 4.1092	+ 0.0149	...	+ 4.649	- 0.597	...	...
231	G. Z. C. XVII. 442	+ 4.1999	+ 0.0146	...	+ 4.607	- 0.598	...	...
232	...	+ 4.4891	+ 0.0187	...	+ 4.596	- 0.638	...	...
233	64 Herculis $\alpha$ , Var. I.	+ 2.7342	+ 0.0035	- 0.002	+ 4.430	- 0.391	- 0.03	2133
234	42 Ophiuchi $\theta$	+ 3.6797	+ 0.0080	- 0.002	+ 3.970	- 0.528	+ 0.04	2189
235	...	+ 4.2563	+ 0.0112	...	+ 3.258	- 0.614	...	...
236	23 Draconis $\beta$	+ 1.3538	+ 0.0052	- 0.002	+ 2.825	- 0.197	- 0.00	2221
237	G. Z. C. XVII. 1907	+ 5.4221	+ 0.0219	...	+ 2.793	- 0.783	...	...
238	55 Ophiuchi $\alpha$	+ 2.7748	+ 0.0030	+ 0.007	+ 2.693	- 0.402	+ 0.22	2218
239	...	+ 3.7762	+ 0.0061	...	+ 2.589	- 0.547	...	...
240	...	+ 4.0472	+ 0.0069	...	+ 2.156	- 0.587	...	...
241	...	+ 4.1332	+ 0.0072	...	+ 2.155	- 0.600	...	...
242	O. A. S. 17105	+ 3.7737	+ 0.0055	...	+ 2.146	- 0.548	...	...
243	...	+ 5.4338	+ 0.0162	...	+ 2.004	- 0.797	...	...
244	...	+ 5.4358	+ 0.0155	...	+ 1.976	- 0.799	...	...
245	...	+ 4.0867	+ 0.0061	...	+ 1.746	- 0.594	...	...

## Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
246	86 Herculis $\mu$ ...	3.5	...	17	41	33.95	62	12	17.2	9	0.57
247	31 Draconis $\psi^1$ —2nd ...	6.0	...	17	44	11.57	17	46	52.8	1	0.38
46.87	248 ... ..	9.0	2	17	45	48.56 <sup>7</sup>	128	47	53.6	2	0.64
249	... ..	10.0	2	18	4	22.47	59	9	47.0	2	0.38
31.18	250 ... ..	10.4	3	18	5	31.17 <sup>6</sup>	120	43	30.4	3	0.43
251	18 Sagittarii $\mu$ ...	4.1	...	18	6	17.25	111	5	21.7	9	0.59
252	... ..	8.0	2	18	7	26.88	122	22	36.9	2	0.39
253	... ..	9.5	1	18	8	48.80	122	24	31.6	1	0.68
3.34	254 24 Ursæ Minoris ...	5.9	...	18	17	3.77 <sup>14</sup>	3	0	47.9	10	0.53
255	... ..	10.5	1	18	30	6.53 <sup>5</sup>	136	54	58.4	2	0.53
42.33	256 3 Lyræ $\alpha$ ( <i>Vega</i> ) ...	0.2	...	18	32	42.33 <sup>3</sup>	51	19	52.8	2	0.66
27.90	257 10 Lyræ $\beta^1$ , Var. 1 ...	Var.	...	18	45	27.88 <sup>90</sup>	56	46	51.1	3	0.59
10.12	258 R. P. L. 131 ...	6.5	...	18	55	30.38 <sup>22</sup>	3	27	5.1	5	0.30
259	17 Aquilæ $\zeta$ ...	3.1	...	18	59	39.82	76	19	14.5	12	0.63
260	R Sagittarii, Var. 1 ...	8.0	4	19	9	21.56	109	31	31.2	4	0.48
261	O. A. S. 19353 ...	7.7	2	19	11	0.30	116	17	49.9	2	0.43
19.10	262 O. A. S. 19366 ...	8.3	2	19	11	19.66 <sup>10</sup>	116	15	57.3	2	0.50
263	25 Aquilæ $\omega$ ...	5.1	...	19	11	56.86	78	37	42.3	6	0.65
264	S Sagittarii, Var. 2 ...	10.8	2	19	12	6.87	109	14	56.8	3	0.56
265	30 Aquilæ $\delta$ ...	3.5	...	19	19	11.73	87	7	56.9	4	0.66
266	52 Sagittarii $h^2$ ...	4.6	...	19	29	5.88	115	9	26.9	1	0.68
267	50 Aquilæ $\gamma$ ...	2.8	...	19	40	18.97	79	41	23.4	10	0.65
41.05	268 53 Aquilæ $\alpha$ ( <i>Altair</i> ) ...	1.0	...	19	44	41.05 <sup>5</sup>	81	27	36.2	5	0.67
269	60 Aquilæ $\beta$ ...	4.0	...	19	49	10.38	83	54	12.9	4	0.68
270	R Sagittæ, Var. 1 ...	9.1	1	20	8	22.18	73	39	3.7	1	0.49
271	R Delphini, Var. 2 ...	9.5	8	20	8	52.93	81	17	19.6	9	0.72
272	6 Capricorni $\alpha^2$ ...	3.8	...	20	11	7.06	102	55	52.5	1	0.60
273	... ..	10.5	1	20	16	37.84	106	30	35.7	2	0.55
48.65	274 24 Cephei ( <i>Hes.</i> ) ...	Var.	...	20	19	48.65 <sup>48-65</sup>	1	14	56.4	2	0.73
275	11 Capricorni $\rho$ ...	5.0	...	20	21	43.64	108	13	29.4	5	0.72
44.03	276 Cordoba XX. 865 ...	8.6	4	20	26	14.03 <sup>3</sup>	150	24	22.7	4	0.58
7.94	277 R. P. L. 143 ...	6.7	...	20	28	7.94 <sup>7-94</sup>	5	16	16.5	1	0.17
278	50 Cygni $\alpha$ ( <i>Deneb</i> ) ...	1.5	...	20	37	10.25	45	9	56.1	3	0.67
279	T Delphini, Var. 3 ...	9.0	7	20	39	33.71	74	3	14.4	7	0.38
280	... ..	10.5	4	20	39	45.16	74	3	11.6	4	0.71

258.—Carrington 2882.

261—262.—Comparison stars for D'Arrest's comet in 1870.

273.—Comparison star for Hestia in 1865.

274.—Ursæ Minoris, Var. 2.

277.—Carrington 3128.

280.—Observed for map of T Delphini, Var. 3.



## Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in Answers-Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
246	86 Herculis $\mu$ ...	+ 2.3697	+ 0.0025	- 0.024	+ 1.611	- 0.346	+ 0.75	2237
247	31 Draconis $\psi^1$ -2nd... ... ..	- 1.0864	+ 0.0156	- 0.001	+ 1.382	+ 0.157	+ 0.28	2252
248	... ..	+ 4.1450	+ 0.0049	...	+ 1.241	- 0.604	...	...
249	... ..	+ 2.2743	+ 0.0021	...	- 0.382	- 0.332	...	...
250	... ..	+ 3.8667	+ 0.0007	...	- 0.483	- 0.564	...	...
251	13 Sagittarii $\mu$ ...	+ 3.5876	+ 0.0009	- 0.001	- 0.550	- 0.523	- 0.00	2284
252	... ..	+ 3.0194	+ 0.0001	...	- 0.652	- 0.571	...	...
253	... ..	+ 3.9203	- 0.0001	...	- 0.771	- 0.571	...	...
254	24 Ursæ Minoris ...	- 22.2522	- 0.6281	+ 0.085	- 1.402	+ 3.238	- 0.01	Gr.
255	... ..	+ 4.4894	- 0.0084	...	- 2.627	- 0.648	...	...
256	3 Lyræ $\alpha$ ( <i>Vega</i> ) ...	+ 2.0132	+ 0.0016	+ 0.017	- 2.852	- 0.290	- 0.30	2341
257	10 Lyræ $\beta^1$ , Var. 1....	+ 2.2139	+ 0.0015	- 0.001	- 3.952	- 0.315	- 0.02	2369
258	R. P. L. 131 ...	- 18.4472	- 1.5374	...	- 4.809	+ 2.614	...	...
259	17 Aquilæ $\zeta$ ...	+ 2.7578	+ 0.0003	- 0.003	- 5.162	- 0.387	+ 0.09	2405
260	R Sagittarii, Var. 1....	+ 3.5249	- 0.0060	...	- 5.977	- 0.488	...	...
261	O. A. S. 19353 ...	+ 3.7014	- 0.0086	...	- 6.114	- 0.511	...	...
262	O. A. S. 19366 ...	+ 3.7003	- 0.0085	...	- 6.140	- 0.511	...	...
263	25 Aquilæ $\omega$ ...	+ 2.8165	- 0.0003	- 0.001	- 6.193	- 0.388	- 0.03	2432
264	8 Sagittarii, Var. 2. ...	+ 3.5161	- 0.0064	...	- 6.207	- 0.485	...	...
265	30 Aquilæ $\delta$ ...	+ 3.0092	- 0.0018	+ 0.015	- 6.793	- 0.410	- 0.09	2451
266	52 Sagittarii $h^2$ ...	+ 3.6532	- 0.0102	+ 0.002	- 7.602	- 0.400	+ 0.01	2478
267	50 Aquilæ $\gamma$ ...	+ 2.8519	- 0.0011	- 0.001	- 8.500	- 0.373	- 0.01	2511
268	53 Aquilæ $\alpha$ ( <i>Altair</i> )...	+ 2.8920	- 0.0014	+ 0.035	- 8.845	- 0.374	- 0.38	2524
269	60 Aquilæ $\beta$ ...	+ 2.9453	- 0.0020	+ 0.001	- 9.196	- 0.378	+ 0.47	2538
270	R Sagittæ, Var. 1. ...	+ 2.7398	- 0.0020	...	- 10.640	- 0.186	...	...
271	R Delphini, Var. 2. ...	+ 2.8990	- 0.0017	...	- 10.692	- 0.353	...	...
272	6 Capricorni $\alpha^2$ ...	+ 3.3303	- 0.0084	+ 0.002	- 10.853	- 0.403	- 0.02	2595
273	... ..	+ 3.4001	- 0.0103	...	- 11.260	- 0.405	...	...
274	24 Cephei ( <i>Hev.</i> ) ...	- 47.1941	- 24.8275	...	- 11.483	+ 5.645	...	...
275	11 Capricorni $\rho$ ...	+ 3.4309	- 0.0115	- 0.003	- 11.626	- 0.403	+ 0.01	2626
276	Cordoba XX. 865 ...	+ 4.0631	- 0.0750	...	- 11.945	- 0.575	...	...
277	R. P. L. 143 ...	- 8.4952	- 1.2729	...	- 12.079	+ 0.994	...	...
278	50 Cygni $\alpha$ ( <i>Deneb</i> ) ...	+ 2.0435	+ 0.0021	- 0.000	- 12.700	- 0.226	- 0.00	2679
279	T Delphini, Var. 3 ...	+ 2.7791	0.0000	...	- 12.862	- 0.305	...	...
280	... ..	+ 2.7793	0.0000	...	- 12.874	- 0.305	...	...

254.—Proper motions from *Greenwich Catalogue 1872*.

## Mean Positions of Stars for 1875, January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
281	... ..	10.5	1	20	41	45.52	105	15	58.7	2	0.55
282	32 Vulpeculæ ... ..	5.1	...	20	49	13.98	62	25	0.8	6	0.73
283	64 Cygni ζ ... ..	3.4	...	21	7	36.95	60	17	6.1	14	0.72
284	22 Aquarii β ... ..	3.1	...	21	24	58.61	96	7	11.8	16	0.74
285	8 Pegasi ε... ..	2.4	...	21	38	2.75	80	41	49.7	9	0.76
286	... ..	10.0	1	21	41	24.31	102	29	23.6	1	0.72
287	16 Pegasi ... ..	5.0	...	21	47	22.50	64	39	44.2	8	0.76
288	34 Aquarii α ... ..	3.2	...	21	59	21.70	90	55	34.8	6	0.80
289	T Pegasi, Var. 4. ... ..	10.5	5	22	2	47.53	78	4	15.5	5	0.84
290	... ..	9.5	1	22	3	54.96	101	5	38.5	1	0.68
291	43 Aquarii θ ... ..	4.3	...	22	10	14.15	98	24	16.2	11	0.79
56.67 25.64	292 R. P. L. 150 ... ..	5.5	...	22	22	56.55.67	4	31	21.2	6	0.43
293	R. P. L. 151 ... ..	6.9	...	22	23	23.85.64	4	24	27.8	3	0.51
294	R. P. L. 153 ... ..	7.6	...	22	28	2.55	2	33	16.1	3	0.15
295	62 Aquarii η ... ..	4.2	...	22	28	55.93	90	45	38.8	6	0.82
296	T Aquarii, Var. 3. ... ..	10.5	4	22	29	19.69	98	15	5.9	4	0.85
297	42 Pegasi ζ ... ..	3.6	...	22	35	13.58	79	49	13.2	11	0.83
298	... ..	7.1	3	22	46	24.26.1	130	5	2.7	3	0.89
299	24 Pis. Aus. α (Fomalhaut) ... ..	1.3	...	22	50	44.34.5	120	17	3.7	5	0.83
300	54 Pegasi α (Markab) ... ..	2.6	...	22	58	32.05	75	28	0.2	5	0.83
301	6 Piscium γ ... ..	3.8	...	23	10	41.05	87	23	59.3	8	0.85
302	W. B. E. XXIII. 190 ... ..	9.1	5	23	11	10.86	82	28	9.7	5	0.79
303	Lalande 45607 ... ..	8.0	4	23	11	40.80	81	10	41.0	5	0.73
304	8 Piscium κ ... ..	5.0	...	23	20	31.44	89	25	42.1	8	0.86
305	W. B. E. XXIII. 424 ... ..	9.5	5	23	22	21.44	78	44	32.7	5	0.72
49.72	306 R. P. L. 158 ... ..	5.7	...	23	27	49.34.72	3	22	56.1	6	0.58
307	17 Piscium ι ... ..	4.3	...	23	33	31.22	85	3	3.1	9	0.86
24.62	308 δ Sculptoris ... ..	4.6	...	23	42	24.62.2	118	49	17.0	5	0.88
309	G. C. Z. XXIII. 1321 ... ..	9.3	1	23	48	31.74	150	39	57.5	1	0.69
310	28 Piscium ω ... ..	4.2	...	23	52	53.54	83	49	41.5	3	0.88

292.—Groombridge 3820.  
293.—Groombridge 3824.  
294.—Carrington 3466.

302—303—305.—Comparison stars for Sappho  
in 1875.  
306.—Groombridge 4101.

## Observed with the Madras Meridian Circle in that Year.

Number.	Star	In Right Ascension.			In Polar Distance.			Number in Awers- Bradley.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
281	... ..	+ 3.3500	- 0.0109	...	- 13.008	- 0.367	...	...
282	32 Vulpeculæ ...	+ 2.5557	+ 0.0026	- 0.002	- 13.499	- 0.270	+ 0.00	2709
283	64 Cygni ζ ...	+ 2.5509	+ 0.0038	- 0.002	- 14.644	- 0.248	+ 0.07	2760
284	22 Aquarii β ...	+ 3.1619	- 0.0071	- 0.001	- 15.639	- 0.282	+ 0.00	2797
285	8 Pegasi ε ...	+ 2.9451	- 0.0005	+ 0.001	- 16.329	- 0.242	- 0.01	2835
286	... ..	+ 3.2407	- 0.0104	...	- 16.497	- 0.263	...	...
287	16 Pegasi ...	+ 2.7260	+ 0.0052	- 0.001	- 16.789	- 0.210	+ 0.00	2864
288	34 Aquarii α ...	+ 3.0831	- 0.0041	- 0.001	- 17.340	- 0.219	- 0.00	2890
289	T Pegasi, Var. 4 ...	+ 2.9340	+ 0.0015	...	- 17.488	- 0.203	...	...
290	... ..	+ 3.1993	- 0.0092	...	- 17.536	- 0.219	...	...
291	43 Aquarii θ ...	+ 3.1632	- 0.0075	+ 0.006	- 17.798	- 0.205	+ 0.02	2929
292	R. P. L. 150 ...	- 3.8738	- 1.2128	+ 0.053	- 18.282	+ 0.242	- 0.04	2993
293	R. P. L. 151 ...	- 4.0246	- 1.2796	+ 0.025	- 18.300	+ 0.248	- 0.01	2997
294	R. P. L. 153 ...	- 8.6321	- 4.0821	...	- 18.462	+ 0.500	...	...
295	62 Aquarii η ...	+ 3.0791	- 0.0031	+ 0.006	- 18.492	- 0.166	+ 0.11	2970
296	T Aquarii, Var. 3 ...	+ 3.1470	- 0.0072	...	- 18.505	- 0.170	...	...
297	42 Pegasi ζ ...	+ 2.9854	+ 0.0023	+ 0.004	- 18.698	- 0.149	+ 0.02	2992
298	... ..	+ 3.4271	- 0.0317	...	- 19.029	- 0.150	...	...
299	24 Piscis Aust. α ...	+ 3.3046	- 0.0210	+ 0.023	- 19.146	- 0.135	+ 0.16	3032
300	54 Pegasi α (Markab).	+ 2.9804	+ 0.0056	+ 0.003	- 19.337	- 0.107	+ 0.03	3050
301	6 Piscium γ ...	+ 3.0592	+ 0.0005	+ 0.049	- 19.592	- 0.087	- 0.02	3082
302	W. B. E. XXIII. 190.	+ 3.0348	+ 0.0029	...	- 19.601	- 0.086	...	...
303	Lalande 45607 ...	+ 3.0288	+ 0.0036	...	- 19.600	- 0.085	...	...
304	8 Piscium κ ...	+ 3.0699	0.0000	+ 0.004	- 19.758	- 0.069	+ 0.10	3116
305	W. B. E. XXIII. 424.	+ 3.0287	+ 0.0055	...	- 19.784	- 0.065	...	...
306	R. P. L. 158 ...	- 0.0934	- 0.5293	+ 0.084	- 19.857	+ 0.011	- 0.00	3147
307	17 Piscium ι ...	+ 3.0588	+ 0.0030	+ 0.023	- 19.921	- 0.042	+ 0.44	3148
308	δ Sculptoris ...	+ 3.1286	- 0.0161	+ 0.009	- 19.995	- 0.026	+ 0.10	Stone
309	G. C. Z. XXIII. 1321.	+ 3.1912	- 0.0561	...	- 20.030	- 0.015	...	...
310	28 Piscium ω ...	+ 3.0677	+ 0.0047	+ 0.009	- 20.045	- 0.005	+ 0.11	3191

308.—Proper motions from Stone's Cape Catalogue.