HENRY DRAPER MEMORIAL.

Spectra to be Confirmed
in Catalogue of III Stars.
3.

Index.

over

Index.

over

Stars observed by Espin as III, Some of Them
See Astronomische Nachrichten, Vol. 137, No. 3286, p 375.

	Ident.	R.A. 1900 h. m.	Dec. 1900	Magn.
1	+58° 2701	0 1.6	+ 38 46	9.2
2	+39° 10	0 3.6	+ 40 10	8.5
3	+61° 8	0 4.3	+ 62 6	9.2
4	+62° 12	0 5.6	+ 62 51	8.6
5	+62° 20	0 7.1	+ 62 21	8.0
6	+36° 13	0 7.8	+ 36 51	7.9
7	+58° 19	0 10.2	+ 58 35	9.3
8	+37° 36	0 12.5	+ 38 6	9.0
9	+59° 33	0 14.6	+ 60 5	8.4
10	+59° 41	0 17.1	+ 60 3	9.1
11	+63° 40	0 19.6	+ 64 5	8.3
12	+60° 50	0 20.8	+ 61 0	8.8
13	+37° 68	0 21.9	+ 38 13	8.0
14	+59° 64	0 24.3	+ 59 57	9.4
15	+60° 63	0 25.4	+ 60 53	8.9
16	+59° 73	0 26.1	+ 59 42	9.0
17	+38 120	0 44.8	+ 38 19	8.7
18	+59° 131	0 45.5	+ 59 38	9.2
19	+60° 160	0 58.~~7~~ 6	+ 61 11	9.0
20	+62° 207	1 2.0	+ 63 4	9.3
21	+59° 224	1 10.9	+ 59 51	9.3
22	+44° 272	1 11.4	+ 45 4	8.7
23	+41° 311	1 29.3	+ 41 53	8.3
24	+36° 285	1 30.4	+ 37 6	8.0
25	+36° 326	1 45.1	+ 37 5	7.8
26	+36° 362	1 51.0	+ 36 36	8.5
27	+42° 452	2 2.8	+ 42 59	8.3

being probably II, Not entered in III Catalogue unless already in.

	Ident.	R. A. 1900 h. m.	Dec. 1900 ° ′	Magn.
28	+34° 391	2 6.9	+ 34 52	9.1
29	+41° 430	2 9.6	+ 41 59	8.0
30	+34° 402	2 10.1	+ 34 42	8.4
31	+41° 453	2 17.8	+ 41 39	6.9
32	+43° 504	2 23.4	+ 43 42	8.0
33	+53° 556	2 34.1	+ 53 29	9.0
34	+52° 624	2 39.3	+ 52 45	8.0
35	+63° 359	2 42.8	+ 63 14	8.3
36	+52° 639	2 45.5	+ 52 59	8.2
37	+52° 655	2 57.9	+ 52 14	7.9 √x
38	+49° 862	3 3.2	+ 49 18	9.1
39	+52° 665	3 4.8	+ 52 53	8.3
40	+48° 861	3 5.5	+ 48 42	9.3
41	+47° 784	3 6.9	+ 47 32	7.8
42	+50° 764	3 20.8	+ 50 36	8.1
43	+52° 703	3 28.9	+ 52 35	7.0
44	+48° 953	3 27.9	+ 48 48	8.4 √x
45	+46° 779	3 30.0	+ 46 53	8.6
46	+47° 924	3 53.4	+ 47 20	9.3
47	+52° 769	4 0.1	+ 52 57	9.1
48	+46° 853	4 5.3	+ 46 47	9.3
49	+47° 953	4 5.8	+ 47 39	8.7
50	+52° 843	4 25.5	+ 52 35	7.0 √x
51	+52° 853	4 28.0	+ 53 0	9.4
52	+38° 1045	5 3.2	+ 38 15	8.4
53	+53° 897	5 15.6	+ 53 15	9.0
54	+58° 1296	10 57.3	+ 57 58	8.6
55	+58° 1345	11 51.0	+ 58 44	8.3

x = already in III Catalogue.

	Ident.	R.A. 1900 h.	m.	Dec. 1900	′	Magn.
56	+54° 1492	12	4.0	+54°	15′	8.0
57	+51° 1754	12	22.1	+51	45	7.3
58	+49° 2143	12	24.3	+49	29	8.5
59	+52° 1637	12	30.2	+51	55	7.7
60	+59° 1461	12	39.2	+59	24	8.1
61	+57° 1398	12	49.6	+57	21	8.7
62	+57° 1426	13	9.9	+57	21	8.5
63	+57° 1432	13	12.1	+57	37	8.1
64	+58° 1437	13	13.6	+58	21	7.4
65	+51° 1830	13	15.6	+50	58	8.5
66	+52° 1698	13	18.9	+52	10	7.7
67	+61° 1359	13	26.3	+60	52	7.7
68	+48° 2140	13	35.0	+47	50	8.5
69	+49° 2256	13	54.9	+49	44	7.9
70	+49° 2259	13	55.6	+49	2	7.4
71	+49° 2269	14	2.5	+49	20	7.5 √x
72	+61° 1408	14	8.1	+60	52	8.0
73	+50° 2070	14	20.0	+49	51	7.3
74	+61° 1427	14	23.0	+61	13	8.2
75	+48° 2202	14	23.2	+48	28	8.0
76	+63° 1132	14	24.4	+62°	57	8.0
77	+39° 2773	14	25.7	+39	18	7.5 √x
78	+50° 2095	14	31.2	+49	49	5.7
79	+60° 1572	14	51.6	+59	55	7.4
80	+57° 1544	14	54.0	+57	27	8.8
81	+56° 1780	15	0.6	+56	26	6.8
82	+60° 1584	15	1.1	+60	26	6.5
83	+62° 1388	15	6.9	+62	8	8.6

	Ident.	R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.	
84	+42° 2577	15	10.5	+42	33	6.1	√X Entered also in III or II A.N. Vol. 140, No. 3352, p. 249
85	+48° 2277	15	13.4	+47	59	8.1	
86	+59° 1638	15	16.4	+58	52	6.8	
87	+58° 1563	15	16.5	+58	29	8.2	
88	+60° 1603	15	16.6	+59	53	8.1	√X
89	+63° 1194	15	21.3	+63	28	7.0	
90	+63° 1202	15	28.3	+63	2	8.9	
91	+66° 915	15	37.5	+66	6	6.8	
92	+56° 1833	15	46.9	+56	33	7.1	
93	+57° 1615	15	49.3	+57	27	7.3	√X
94	+41° 2643	15	50.0	+41	2	7.5	
95	+56° 1864	16	5.5	+56	31	8.5	
96	+53° 1848	16	6.8	+53	10	8.0	√X
97	+53° 1910	16	8.0	+53	18	7.5	
98	+59° 1716	16	17.2	+59	31	9.0	
99	+57° 1671	16	19.6	+57	7	7.5	√X
100	+60° 1673	16	20.8	+60	17	8.3	
101	+67° 942	16	28.1	+67	16	6.8	√X
102	+58° 1645	16	29.5	+58	3	8.1	
103	+58° 1669	16	43.9	+58	50	8.1	
104	+67° 968	16	45.1	+67	3	7.8	
105	+63° 1304	16	46.0	+63	33	7.7	
106	+53° 1910	16	57.8	+53	12	7.5	
107	+47° 2428	17	4.1	+47	48	7.6	
108	+58° 1698	17	5.6	+58	23	6.7	
109	+46° 2268	17	6.2	+46	54	8.0	
110	+54° 1869	17	10.9	+54	16	7.0	
111	+67° 997	17	15.3	+67	30	7.3	

	Ident.	R.A. 1900 h.	m.	Dec. 1900		Magn.
112	+39° 3104	17	16.4	+39	23	8.1
113	+62° 1539	17	18.0	+62	39	7.5
114	+61° 1652	17	18.1	+61	51	7.9
115	+43° 2724	17	20.4	+43	4	8.7
116	+50° 2413	17	26.6	+50	10	7.3 √ X
117	+51° 2219	17	26.7	+51	34	7.3
118	+57° 1771	17	28.1	+57	34	8.8
119	+63° 1360	17	29.6	+63	50	7.2
120	+60° 1761	17	30.3	+60	0	9.1
121	+59° 1832	17	38.1	+59	43	8.5
122	+44° 2757	17	40.1	+44	8	6.5
123	+48° 2576	17	46.3	+48	51	7.3
124	+56° 2024	17	47.9	+56	51	7.5
125	+49° 2716	17	56.4	+49	16	8.0
126	+47° 2573	17	58.6	+47	32	8.3
127	+15° 3354	18	0.8	+15	39	7.8
128	+49° 2729	18	3.6	+49	31	7.7
129	+48° 2639	18	3.9	+48	35	7.9
130	+40° 3295	18	4.9	+40	54	7.1
131	+44° 2846	18	9.5	+44	56	8.8
132	+15° 3408	18	10.4	+15	31	8.5
133	+39° 3385	18	16.6	+39	33	7.8
134	+13° 3617	18	17.3	+14	0	9.1
135	+43° 3005	18	29.8	+44	0	7.8
136	+47° 2651	18	31.2	+47	47	7.6
137	+43° 3025	18	33.5	+43	42	7.6
138	+13° 3702	18	34.6	+13	21	8.8
139	+49° 2847	18	40.2	+49	21	7.4

Ident.		R.A. 1900 h. m.	Dec. 1900	Magn.
140	+45° 2764	18 41.0	+45° 39′	7.7
141	+15° 3549	18 41.8	+15 48	9.3
142	+45° 2774	18 45.1	+45 37	8.1
143	+10° 3727	18 50.7	+10 36	8.8
144	+15° 3627	18 52.3	+15 38	9.0
145	+16° 3684	18 53.8	+16 55	9.2
146	+13° 3842	18 54.6	+13 46	9.4
147	+16° 3704	18 57.0	+16 16	8.8
148	+13° 3887	18 59.2	+13 32	8.7
149	+11° 3735	19 1.9	+11 24	9.2
150	+15° 3693	19 2.3	+15 48	8.3
151	+9° 4023	19 8.5	+9 45	9.5
152	+16° 3786	19 9.3	+16 38	9.5
153	+16° 3792	19 10.4	+16 14	8.3
154	+15° 3745	19 10.8	+15 45	9.2
155	+18° 4024	19 13.4	+18 40	7.7
156	+46° 2660	19 14.1	+46 14	8.1
157	+9° 4064	19 14.7	+9 57	8.9
158	+9° 4071	19 16.0	+9 6	9.0
159	+16° 3837	19 19.3	+16 16	9.3
160	+14° 3931	19 24.4	+15 2	8.1
161	+18° 4150	19 25.8	+18 29	8.2
162	+8° 4155	19 30.8	+9 0	8.6
163	+18° 4142	19 31.4	+18 21	7.9
164	+14° 3972	19 31.6	+14 50	8.9
165	+57° 2026	19 32.4	+57 50	9.0
165a	+46° 2738	19 33.0	+46 24	8.8
166	+16° 3924	19 33.6	+16 35	8.9

	Ident.	R.A. 1900	Dec. 1900	Magn.	
167	+27° 3448	19 33.7	+28 6	9.3	
168	+29° 3673	19 33.8	+29 10	8.5	
169	+10° 4077	19 47.6	+10 41	8.0	
170	+16° 4042	19 47.9	+16 23	7.8	
171	+15° 3985	19 50.6	+15 11	8.0	
172	+29° 3797	19 50.7	+29 25	9.2	
173	+57° 2085	19 51.2	+57 55	7.5	√x
174	+29° 3803	19 51.3	+29 51	9.2	
175	+28° 3529	19 51.4	+29 6	8.8	
176	+47° 2949	19 51.5	+47 40	8.0	√x
177	+17° 4158	19 52.4	+17 25	9.5	
178	+17° 4163	19 53.1	+17 21	9.2	
179	+30° 3824	19 53.2	+30 48	8.5	
180	+28° 3551	19 54.2	+28 48	8.7	
181	+17° 4185	19 55.6	+17 20	7.5	√x
182	+27° 3591	19 58.2	+27 21	8.7	
183	+28° 3602	19 59.6	+28 41	8.8	
184	+30° 3881	20 0.8	+30 13	8.0	
185	+14° 4171	20 1.2	+15 7	8.9	
186	+59° 2179	20 4.8	+59 11	8.7	
187	+14° 4213	20 6.7	+14 45	8.6	
188	+47° 3053	20 11.6	+47 25	8.0	
189	+15° 4124	20 13.4	+15 42	8.6	
190	+59° 2215	20 16.9	+59 10	8.9	√x
191	+17° 4297	20 16.7	+17 28	8.9	
192	+14° 4280	20 19.5	+14 49	9.2	
193	+15° 4152	20 20.0	+15 50	7.3	√x
194	+59° 2232	20 23.3	+60 9	8.6	

Ident.	R.A. 1900	Dec. 1900	Magn.
195 +62° 1826	20 30.3	+ 62° 10′	8.5
196 +14° 4360	20 32.0	+15 2	8.7 J X
197 +39° 4254	20 33.8	+39 27	8.3
198 +40° 4270	20 36.3	+40 13	9.4
199 +58° 2156	20 37.6	+58 31	8.4
200 +35° 4218	20 37.6	+35 33	7.5
201 +45° 3240	20 37.9	+45 15	9.4
202 +58° 2160	20 39.3	+58 51	8.5
203 +34° 4136	20 39.9	+35 3	8.3
204 +39° 4306	20 41.8	+39 23	9.1
205 +59° 2285	20 44.9	+59 44	7.9
206 +17° 4434	20 46.8	+17 50	8.7
207 +13° 4548	20 47.1	+13 32	7.3 J X
208 +33° 4087	20 51.3	+33 26	9.3
209 +17° 4470	20 52.7	+17 48	8.5
210 +39° 4379	20 53.6	+39 47	9.0
211 +40° 4376	20 55.3	+40 12	9.4
212 +62° 1892	21 3.9	+62 31	6.8
213 +39° 4445	21 4.3	+40 3	9.4
214 +39° 4528	21 17.1	+39 36	8.3
215 +17° 4568	21 17.6	+17 47	8.5
216 +60° 2225	21 17.8	+60 33	8.5 J X Also in list III!, A. N. M. 135, No. 8232, p. 273.
217 +48° 3364	21 19.2	+49 3	9.4
218 +33° 4276	21 25.4	+33 22	8.2
219 +33° 4296	21 29.1	+33 22	7.5
220 +17° 4607	21 30.5	+17 53	9.3 J X
221 +34° 4496	21 37.1	+34 59	8.5
222 +39° 4657	21 40.9	+39 35	9.1

Ident.			R.A. 1900 h.	m.	Dec. 1900		Magn.
223	+18°	4865	21	43.7	+18°	13′	9.1
224	+40°	4640	21	44.5	+40	19	9.1
225	+40°	4676	21	52.1	+40	40	9.0
226	+44°	4046	22	2.5	+44	55	8.5
227	+39°	4760	22	3.5	+39	38	8.5
228	+38°	4689	22	3.5	+38	50	8.0
229	+37°	4512	22	8.4	+37	33	9.0
229a	+55°	2702	22	9.0	+55	43	8.8
230	+44°	4087	22	13.3	+44	46	8.0
231	+39°	4797	22	13.8	+39	27	8.0
232	+39°	4814	22	17.5	+40	10	6.5
233	+37°	4554	22	18.7	+37	32	8.9
234	+44°	4116	22	19.1	+44	47	8.8
235	+38°	4754	22	19.6	+38	43	8.8 ✓x
236	+64°	1656	22	21.0	+64	41	8.5
237	+39°	4855	22	26.1	+39	16	8.8
238	+64°	1679	22	29.1	+64	47	7.9
239	+39°	4898	22	33.2	+39	38	8.8
240	+52°	3257	22	34.6	+52	21	8.1
241	+44°	4209	22	38.8	+45	1	8.3
242	+33°	4580	22	40.7	+33	48	8.1
243	+39°	4953	22	47.7	+39	44	8.0
244	+35°	4912	22	50.8	+35	37	8.0
245	+36°	4970	22	53.0	+36	51	7.5
246	+40°	4958	22	54.8	+40	21	8.3
247	+39°	4984	22	55.1	+39	17	8.6
248	+41°	4668	22	58.6	+41	41	8.7
249	+42°	4572	22	58.9	+43	11	8.3

Ident of Rad. Nr. AN. 3236, ☆ 1045, III !!

	Ident.	R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.	
250	+47° 4054	23	4.3	+48	10	7.5	
251	+53° 3130	23	14.4	+54	0	7.7	
252	+43° 4439	23	16.0	+44	2	7.9	
253	+54° 2970	23	20.8	+54	53	7.5	
254	+38° 5013	23	23.8	+39	8	8.3	
255	+37° 4852	23	24.8	+38	5	7.9	✓X
256	+53° 3180	23	27.1	+53	38	8.7	
257	+39° 5122	23	32.2	+39	29	9.1	
258	+62° 2269	23	35.4	+63	11	8.7	
259	+43° 4523	23	35.6	+43	31	9.1	
260	+38° 5049	23	35.8	+38	25	9.0	
261	+63° 2038	23	37.6	+63	58	6.0	✓X
262	+54° 3033	23	39.5	+54	39	6.8	
263	+40° 5138	23	39.6	+40	51	9.5	
264	+41° 4865	23	42.5	+41	27	9.5	
265	+41° 4869	23	43.6	+41	38	7.7	
266	+41° 4884	23	46.9	+42	0	9.3	
267	+53° 3242	23	47.1	+53	47	9.4	
268	+53° 3245	23	47.8	+53	40	8.6	
269	+44° 4520	23	49.9	+44	50	8.5	
270	+39° 5195	23	52.1	+39	33	9.2	
271	+62° 2343	23	54.6	+62	26	8.2	
272	+40° 5210	23	55.1	+40	46	9.2	
273	+43° 4607	23	57.0	+43	58	7.8	
274	+59° 2817	23	57.2	+59	58	9.5	Entered also in III or II, A.N. Vol. 135, No. 3232.

Stars observed by Espin as III! See Astron. Nach. Vol. 137

	Ident.	R.A. 1900	Dec. 1900	Magn.
21	+61° 1	h. m. 0 2.3	+ 61° 23′	8.8 ✓
22	+60° 26	0 13.0	+ 60 21	8.9 ✓
23	+54° 125	0 34.7	+ 55 12	9.0 ✓
24	+37° 199	0 58.5	+ 38 9	7.3 ✓ ×
25	+56° 264	1 18.1	+ 56 40	7.7 ✓
26	+61° 270	1 22.7	+ 61 14	9.3 ✓
27	+54° 315	1 27.1	+ 54 26	7.0 ✓
28	+57° 367	1 34.9	+ 57 17	9.4 ✓
29	+38° 326	1 36.3	+ 38 56	8.3 ✓
30	+47° 583	2 6.4	+ 48 6	7.6 ✓
31	+44° 456	2 11.8	+ 44 45	8.3 ✓ ×
32	+44° 560	2 35.3	+ 44 35	7.8 ✓
33	+42° 587	2 35.5	+ 42 35	7.8 ✓
34	+50° 809	3 37.4	+ 50 14	7.3 ✓
35	+53° 698	3 38.5	+ 53 36	8.0 ✓ ×
36	+47° 904	3 45.3	+ 47 49	8.9 ✓
37	+49° 1057	3 47.3	+ 49 27	8.1 ✓
38	+61° 707	4 15.3	+ 61 48	6.7 ✓
39	+49° 1206	4 27.3	+ 49 24	8.6 ✓
40	+61° 741	4 46.2	+ 61 54	8.5 ✓
41	+61° 759	4 59.6	+ 62 4	8.4 ✓
42	+40° 1343	5 29.2	+ 40 6	8.5 ✓
43	+58° 1422	13 6.0	+ 58 34	8.0 ✓
44	+50° 1992	13 13.3	+ 50 18	7.7 ✓
45	+56° 1747	14 29.5	+ 56 30	8.4 ✓
46	+50° 2098	14 33.0	+ 49 58	7.8 ✓
47	+42° 2566	15 4.0	+ 42 45	8.0 ✓
48	+58° 1552	15 5.7	+ 58 2	7.5 ✓

× = already entered in III Cat.

No. 3286, p. 375.

	Ident.	R. A. 1900	Dec. 1900	Magn.
29	+50° 2153	15h 8m.4	+50° 17′	7.4 ✓x
30	+60° 1599	15 14.5	+60 29	7.8 ✓
31	+48° 2286	15 18.6	+48 0	8.5 ✓
32	+56° 1798	15 19.5	+56 3	7.3 ✓
33	+48° 2314	15 35.5	+48 47	8.0 ✓
34	+65° 1069	15 38.6	+64 58	7.3 ✓
35	+57° 1608	15 44.4	+57 5	8.0 ✓
36	+59° 1707	16 11.9	+59 49	9.1 ✓
37	+47° 2359	16 33.3	+47 1	8.3 ✓
38	+61° 1604	16 36.9	+61 23	7.0 ✓
39	+67° 1004	17 19.5	+67 24	8.0 ✓
40	+47° 2522	17 39.0	+47 23	8.5 ✓
41	+49° 2702	17 49.3	+49 17	8.2 ✓
42	+39° 3252	17 49.8	+39 42	7.5 ✓
43	+45° 2618	17 51.6	+45 51	8.3 ✓
44	+43° 2860	17 56.2	+43 9	8.6 ✓
45	+52° 2122	17 57.8	+52 40	8.8 ✓
46	+63° 1396	17 58.5	+63 58	7.7 ✓
47	+15° 3363	18 2.8	+15 13	7.4 ✓x
48	+50° 2522	18 3.4	+50 21	8.3 ✓
49	+41° 2988	18 4.7	+41 42	7.0 ✓x
50	+45° 2662	18 6.1	+45 45	8.5 ✓
51	+47° 2596	18 8.9	+47 39	8.0 ✓
52	+13° 3579	18 11.6	+13 2	8.5 ✓
53	+48° 2668	18 13.8	+48 20	6.9 ✓
54	+43° 2970	18 21.0	+43 51	6.7 ✓
55	+51° 2394	18 28.3	+51 20	8.5 ✓
56	+15° 3511	18 30.0	+15 9	8.5 ✓

Ident.	R.A. 1900	Dec. 1900	Magn.	
57 + 10° 3596	18 33.2	+ 10 56	9.3 ✓	
58 + 9° 3866	18 42.1	+ 9 19	7.8 ✓ x	
59 + 43° 3072	18 43.4	+ 43 27	7.0 ✓ x	
60 + 30° 3344	18 51.0	+ 30 59	7.5 ✓	Entered also in III or II, A.N. Vol. 140, No. 3352, p 249
61 + 16° 3693	18 55.8	+ 16 52	8.6 ✓	
62 + 30° 3442	19 5.5	+ 30 24	7.0 ✓	
63 + 14° 3917	19 22.4	+ 14 54	9.0 ✓	
64 + 27° 3395	19 23.3	+ 27 49	8.8 ✓	
65 + 16° 3885	19 27.9	+ 16 46	9.2 ✓	
66 + 16° 3893	19 29.3	+ 16 39	8.9 ✓	
67 + 45° 2927	19 32.5	+ 45 13	8.3 ✓	
68 + 28° 3440	19 38.2	+ 28 32	9.1 ✓	
69 + 44° 3242	19 43.0	+ 44 48	9.2 ✓	
70 + 30° 3787	19 48.4	+ 30 40	8.4 ✓	
71 + 8° 4265	19 50.2	+ 9 4	8.5 ✓	
72 + 57° 2091	19 53.1	+ 57 40	8.5 ✓	
73 + 29° 3855	19 57.4	+ 29 45	8.5 ✓	
74 + 15° 4029	19 58.5	+ 15 11	8.5 ✓	
75 + 8° 4331	~~19 59.1~~ 20 1.3	+ 8 48	7.8 ✓	
76 + 14° 4179	20 2.6	+ 15 0	8.0 ✓	
77 + 28° 3626	20 3.1	+ 29 2	8.8 ✓	
78 + 8° 4349	20 4.1	+ 8 36	8.9 ✓	
79 + 29° 3909	20 4.4	+ 30 0	8.3 ✓	
80 + 8° 4369	20 6.5	+ 8 26	7.5 ✓ x	
81 + 8° 4376	20 8.3	+ 8 49	8.5 ✓ x	
82 + 10° 4259	20 16.8	+ 10 39	8.0 ✓	
83 + 11° 4289	20 26.0	+ 11 45	8.9 ✓	
84 + 14° 4377	20 34.6	+ 15 7	8.8 ✓	

	Ident.	R.A. h. 1900	m.	Dec. 1900		Magn.	
85	+ 34° 4118	20	37.3	+ 35	0	8.5	√
86	+ 36° 4194	20	37.8	+ 36	24	7.9	√
87	+ 15° 4232	20	38.0	+ 15	45	8.8	√
88	+ 14° 4405	20	39.0	+ 14	54	8.8	√
89	+ 39° 4457	21	5.6	+ 39	57	9.1	√
90	+ 59° 2337	21	9.5	+ 59	17	8.8	√
91	+ 17° 4535	21	11.3	+ 17	30	8.8	√
92	+ 33° 4210	21	11.5	+ 33	27	8.0	√
93	+ 63° 1740	21	27.~~7~~ 8	+ 63	51	8.4	√
94	+ 39° 4601	21	31.5	+ 39	45	8.8	√
95	+ 46° 3609	22	7.1	+ 47	3	9.1	√
96	+ 39° 4782	22	8.3	+ 40	4	8.6	√
97	+ 40° 4048	22	28.7	+ 40	50	7.5	√
98	+ 36° 4873	22	30.1	+ 36	35	7.9	√
99	+ 35° 4840	22	31.1	+ 35	51	8.3	√
100	+ 37° 4699	22	44.2	+ 38	0	8.0	√
101	+ 48° 3874	22	49.3	+ 48	14	8.7	√
102	+ 64° 1735	22	53.4	+ 64	45	9.2	√
103	+ 54° 2899	22	57.7	+ 54	22	8.8	√
104	+ 38° 4942	23	4.4	+ 39	9	9.0	√
105	+ 66° 1596	23	9.1	+ 66	33	8.0	√
106	+ 36° 5048	23	15.9	+ 36	57	8.5	√
107	+ 54° 3036	23	39.9	+ 54	50	8.2	√
108	+ 67° 1564	23	44.3	+ 68	6	8.4	√
109	+ 60° 2647	23	52.2	+ 60	28	6.8	√ X

Stars observed by Espin as III, or II. Not entered in See Astronomische Nachrichten, Vol 140, No. 3352, p. 249. (458 stars)

	Design.	R.A. h.	m.	Dec. °	′	Magn.	
1	+43° 4631	0	1.0	+43	30	7.4	
2	+67° 1599	0	1.1	+68	4	7.8	
3	+64° 3	0	3.9	+64	32	7.0	
4	+63° 5	0	4.9	+64	5	8.0	
5	+39° 26	0	7.4	+39	47	9.2	
6	+43° 54	0	14.8	+43	23	7.8	
7	+34° 42	0	17.1	+34	59	6.8	
8	+67° 30	0	17.2	+67	20	9.1	
9	+34° 51	0	20.1	+34	29	7.0	
10	+43° 80	0	20.7	+43	37	8.5	
11	+34° 54	0	21.4	+34	22	8.5	
12	+34° 74	0	27.1	+34	54	9.0	
13	+34° 81	0	31.0	+35	14	8.4	
14	+43° 113	0	31.3	+43	56	5.4	
15	+34° 85	0	31.8	+35	15	9.0	
16	+66° 43	0	31.9	+67	6	7.3	√x
17	+35° 109	0	33.3	+35	20	8.5	
18	+39° 154	0	35.3	+39	40	7.0	
19	+44° 146	0	36.0	+44	16	8.0	
20	+39° 174	0	40.4	+39	42	8.5	
21	+63° 114	0	50.0	+63	18	8.2	
22	+62° 180	0	54.3	+63	3	9.4	
23	+58 162	0	57.5	+58	23	6.5	
24	+34° 183	1	1.3	+34	38	7.6	
25	+34° 184	1	1.5	+35	15	9.3	
26	+39° 272	1	4.2	+39	56	8.4	
27	+62° 218	1	5.2	+62	49	8.5	
~~28~~							

III Catalogue unless already there.

	Ident.	R.A. 2.1900		Dec. 1900		Magn.
28	+43° 251	1	7.8 m	+43°	38′	7.8
29	+70° 90	1	9.1	+71	14	6.0
30	+44° 271	1	11.3	+44	23	6.4
31	+43° 260	1	11.7	+43	30	8.5
32	+43° 262	1	11.9	+44	5	6.9
33	+42° 274	1	12.4	+42	17	8.6
34	+44° 279	1	13.2	+45	10	7.5
35	+33° 205	1	13.9	+34	13	7.3
36	+34° 231	1	14.6	+34	36	7.8
37	+39° 328	1	20.0	+40	11	8.0
38	+58° 242	1	21.7	+58	55	9.5
39	+39° 334	1	22.0	+39	48	6.5
40	+33° 236	1	22.1	+34	6	8.2
41	+42° 308	1	22.5	+42	16	7.7
42	+44° 319	1	24.6	+44	25	8.0
43	+69° 105	1	27.3	+~~70~~ 69	23	9.0
44	+67° 138	1	27.3	+67	23	9.3
45	+62° 276	1	29.4	+62	53	9.0
46	+66° 139	1	30.5	+67	6	8.0
47	+64° 208	1	31.9	+65	1	8.9
48	+66° 149	1	34.9	+66	17	6.8
49	+60° 310	1	35.4	+60	55	9.4
50	+42° 354	1	36.3	+42	31	8.6
51	+66° 152	1	36.9	+67	4	8.1
52	+61° 316	1	~~36.9~~ 37.3	+61	21	7.5
53	+64° 228	1	37.2	+65	1	8.5
54	+62° 305	1	40.1	+63	9	8.0
55	+38° 342	1	40.1	+39	7	8.0
56	+63° 238	1	40.4	+63	22	6.1

	Ident		R.A. 1900	Dec. 1900	Magn.	
57	+44° 369	1	41.3	+44 15	9.0	
58	+58° 303	1	42.~~2~~0	+58 38	9.0	
59	+34° 317	1	44.6	+34 26	9.2	
60	+68° 134	1	45.6	+68 42	8.0	
61	+59° 352	1	47.9	+59 37	8.7	
62	+39° 431	1	48.6	+40 9	7.3	
63	+39° 434	1	48.9	+40 12	6.8	
64	+64° 269	1	50.2	+64 17	8.1	
65	+67° 173	1	50.4	+68 3	8.5	
66	+47° 536	1	52.4	+47 31	8.4	
67	+66° 176	1	52.5	+66 53	8.0	
68	+58° 345	1	53.0	+58 40	8.2	
69	+39° 448	1	53.6	+40 4	8.0	
70	+70° 155	1	54.3	+70 49	7.5	√X
71	+47° 544	1	54.9	+47 28	8.4	
72	+37° 455	1	55.0	+38 1~~2~~1	7.9	
73	+42° 430	1	56.2	+42 22	7.7	
74	+63° 277	1	56.5	+63 46	7.8	
75	+58° 363	1	57.8	+58 22	9.4	√X Entered also in III!, A.N. Vol. 135, No. 3232, p. 273
76	+62° 344	1	58.1	+62 28	8.0	
77	+58° 367	1	58.4	+58 31	9.5	
78	+62° 345	1	58.6	+62 42	8.3	
79	+47° 569	2	2.2	+47 40	9.0	
80	+36° 418	2	3.5	+36 26	8.7	
81	+62° 369	2	8.4	+62 46	7.0	√X
82	+64° 313	2	9.7	+64 48	7.0	
83	+59° 459	2	11.9	+59 17	9.4	
84	+67° 198	2	~~+8.9~~ 14.0	+67 33	9.2	

73

	Ident.	R.A. 1900		Decl. 1900		Magn.
		h.	m.	°	′	
85	+73° 129	2	14.0	+73°	39	8.8
86	+70° 171	2	14.9	+70	28	9.3
87	+63° 326	2	15.3	+63	23	8.5
88	+~~88°~~ 62° 386	2	16.5	+62	34	8.8
89	+62° 387	2	16.6	+63	6	7.4
90	+73° 136	2	17.2	+74	8	7.8
91	+63° 333	2	18.9	+63	34	8.8
92	+36° 482	2	19.7	+36	33	7.5
93	+40° 514	2	19.9	+40	26	8.2
94	+62° 399	2	20.2	+62	26	7.5
95	+70° 177	2	20.5	+70	14	8.5
96	+36° 490	2	20.7	+36	30	8.1
97	+47° 633	2	21.1	+47	43	8.3
98	+47° 640	2	23.8	+47	24	7.4
99	+70° 183	2	24.9	+70	52	6.5
100	+48° 695	2	26.4	+48	25	8.6
101	+47° 648	2	26.6	+47	18	8.2
102	+62° 426	2	28.7	+63	3	7.3
103	+62° 425	2	28.7	+62	41	7.5
104	+36° 519	2	29.4	+36	53	6.0
105	+65° 280	2	29.~~5~~ 4	+65	19	6.1 √X
106	+40° 552	2	29.6	+40	20	9.0
107	+38° 510	2	29.6	+39	6	8.0
108	+54° 584	2	29.9	+55	10	9.2
109	+36° 525	2	31.0	+37	10	8.8
110	+72° 142	2	31.4	+72	21	8.3
111	+34° 484	2	32.~~6~~ 7	+34	~~51~~ 46	8.8
112	+48° 735	2	35.3	+49	0	8.4

	Ident.	R. A. 1900 h.	m.	Dec. 1900	′	Magn. BD.
113	+ 40° 570	2	35.6	+ 40°	59′	7.2
114	+ 38° 542	2	35.7	+ 38	52	8.5
115	+ 61° 471	2	36.2	+ 61	21	8.7
116	+ 40° 573	2	~~33.2~~ 36.0	+ 40	~~38~~ 50	8.6
117	+ 40° 576	2	37.0	+ 40	41	8.5
118	+ 58° 515	2	38.9	+ 59	10	9.3
119	+ 48° 750	2	38.9	+ 48	32	8.5
120	+ 33° 503	2	39.7	+ 34	1	7.8
121	+ 33° 504	2	39.8	+ 33	50	9.0
122	+ 37° 634	2	41.2	+ 37	24	7.0
123	+ 39° 639	2	42.7	+ 40	6	9.1
124	+ 49° 782	2	43.0	+ 49	36	9.0
125	+ 34° 524	2	44.7	+ 34	59	7.0
126	+ 36° 582	2	45.9	+ 36	40	7.0
127	+ 47° 723	2	46.5	+ 48	9	6.7
128	+ 50° 654	2	47.4	+ 50	45	6.5
129	+ 62° 492	2	48.5	+ 62	12	7.0
130	+ 50° 661	2	48.5	+ 50	40	8.0
131	+ 38° 584	2	48.5	+ 39	1	8.3
132	+ 46° 656	2	48.8	+ 46	53	7.5
133	+ 35° 588	2	49.~~2~~ 3	+ 35	30	8.3
134	+ 58° 530	2	48.7	+ 58	28	9.0
135	+ 33° 542	2	49.7	+ 34	5	8.4
136	+ 62° 496	2	49.8	+ 62	53	7.5
137	+ 50° 665	2	49.8	+ 50	51	6.5
138	+ 40° 624	2	49.9	+ 41	3	8.6
139	+ 47° 743	2	50.0	+ 48	8	8.8
140	+ 50° 140	2	51.8	+ 50	56	9.2

		R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.
141	+40° 639	2	53.2	+40	38	6.5
142	+34° 550	2	52.9	+34	47	5.4
see p. 46, a star in 2h.						
143	+47° 754	2	55.2	+48	3	8.9
144	+64° 366	2	57.2	+64	45	7.4
145	+50° 692	2	57.4	+50	14	9.0
146	+40° 659	2	56.9	+41	10	7.6
147	+37° 702	2	59.6	+37	24	8.1
148	+77° 109	3	0.9	+77	49	7.0
149	+37° ~~149~~ 705	3	1.0	+37	26	8.0
150	+37° 707	3	1.6	+37	32	8.9
151	+40° 681	3	3.6	+40	25	8.9
152	+73° 172	3	4.4	+73	30	6.8
153	+51° 701	3	8.0	+51	16	9.3
154	+64° 380	3	8.5	+64	45	8.4
155	+70° 239	3	12.1	+70	45	7.9
156	+46° 733	3	13.3	+46	25	7.3
157	+45° 740	3	13.5	+45	31	7.4
158	+45° 741	3	13.6	+45	48	7.7
159	+60° 668	3	14.0	+61	6	8.5
160	+48° 904	3	16.8	+48	27	8.4
161	+62° 561	3	17.1	+62	35	8.3
162	+46° 742	3	17.8	+47	0	8.0
163	+39° 775	3	17.9	~~+40~~ +39	42	7.0
164	+49° 931	3	19.1	+49	~~18~~ 11	9.2
165	+39° 788	3	21.7	+39	38	8.6
166	+34° 646	3	20.4	+34	24	8.5
167	+33° 649	3	20.8	+34	4	7.0
168	+32° 626	3	19.4	+32	57	8.0

√ Entered also in III! A.N. Vol. 140, No. 3352, p. 249

	Ident.	R.A. 1900 h.	m.	Dec. 1900	°	′	Mag.
169	+46° 758	3	21.9	+47	2		8.5
170	+44° 732	3	25.5	+44	30		7.5
171	+46° 768	3	26.7	+46	30		9.3
172	+62° 582	3	27.4	+62	59		8.2 ✓X
173	+40° 784	3	27.4	+40	39		8.8
174	+44° 744	3	28.1	+45	7		8.1
175	+42° 789	3	29.1	+42	33		8.3
176	+33° 682	3	30.4	+34	1		7.0
177	+50° 804	3	~~35.9~~ 36.0	~~+50~~ 51	~~31~~ 2		~~9.0~~ 8.7
178	+33° 699	3	36.2	+33	14		7.8
179	+42° 810	3	36.8	+42	52		7.8
180	+48° 984	3	36.9	+48	13		6.5
181	+44° 181	3	37.2	+44	34		7.5
182	+37° 820	3	37.4	+38	4		7.5
183	+31° 644	3	39.2	+31	58		8.3
184	+65° 368	3	40.1	+65	35		9.2
185	+50° 828	3	41.2	+51	5		7.0
186	+49° 1028	3	41.2	+49	37		9.5
187	+60° 754	3	43.0	+61	4		8.4
188	+46° 808	3	43.8	+46	49		8.8
189	+33° 724	3	44.1	+33	45		7.0
190	+72° 196	3	44.5	+72	20		8.0
191	+69° 229	3	44.~~5~~ 3	+ ~~70~~ 69	55		8.0
192	+45° 828	3	44.6	+45	10		8.1
193	+73° 204	3	44.~~8~~ 9	+73	47		6.5
194	+34° 747	3	45.0	+34	18		7.8
195	+70° 267	3	45.6	+71	0		9.0
196	+36° 766	3	45.2	+36	35		8.8

see p. 50, his plates in 3 hrs

	Ident.	R.A. 1900 h. m.	Dec. 1900 ° ′	Magn.
197	+31° 662	3 46.3	+32 6	7.0
198	+36° ~~198~~ 770	3 46.8	+36 31	8.3
199	+72° 199	3 46.9	+72 26	7.0
200	+62° 625	3 47.7	+62 45	8.8
201	+39° 887	3 48.~~3~~ 2	+39 32	7.8
202	+46° 823	3 49.6	+46 9	9.4
203	+51° 817	3 51.3	+51 13	7.8
204	+36° 793	3 51.3	+36 20	7.5
205	+39° 902	3 52.8	+39 44	8.8
206	+30° 599	3 53.5	+31 4	8.6
207	+42° 865	3 55.1	+42 48	9.1
208	+35° 607	~~3~~ 2 55.~~1~~ 0	+35 4~~7~~ 5	7.0
209	+31° 700	3 59.2	+31 14	7.2
210	+44° 857	4 0.0	+44 23	9.2
211	+39° 933	4 1.6	+39 40	8.8
212	+39° 936	4 1.9	+39 27	8.0
213	+68° 310	4 2.~~9~~ 8	+68 16	6.5
214	+69° 243	4 4.~~1~~ 0	+~~70~~ 69 16	7.5
215	+40° 904	4 5.9	+40 24	8.0
216	+72° 217	4 7.1	+72 9	7.5
217	+50° 941	4 7.5	+50 26	7.4
218	+45° 899	4 9.0	+45 53	7.5
219	+64° 432	4 9.4	+65 0	8.5
220	+50° 963	4 9.7	+50 37	7.0
221	+46° 859	4 10.0	+46 27	7.9
222	+50° 971	4 1~~0~~ 1.7	+51 7	8.2
223	+64° 433	4 11.3	+64 54	~~6.0~~
224	+50° 976	4 13.4	+50 8	7.8

	Ident.	R.A. 1900 h m	Dec. 1900 ° ′	Magn.	
1	225 +49° 1162	4 13.5	+50 1	7.8	
1	226 +42° 939	4 13.5	+43 0	7.5	
1	227 +31° 757	4 13.~~8~~9	+31 44	6.3	
2	228 +49° 1165	4 14.3	+49 48	7.5	
2	229 +51° 917	4 16.0	+51 23	9.5	
2	230 +28° 652	4 17.6	+28 31	8.8	
2	231 +45° 930	4 18.0	+45 37	9.5	
2	232 +46° 882	4 18.7	+46 50	8.0	
2	233 +51° 924	4 19.3	+51 46	7.0	
2	234 +69° 258	4 19.4	+69 9	7.0	
2	235 +43° 991	4 24.0	+43 32	8.6	
2	236 +45° 947	4 25.1	+45 23	8.8	
2	237 +44° 973	4 25.9	+44 43	7.0	
2	238 +44° 982	4 27.1	+44 48	7.8	
2	239 +44° 991	4 28.5	+45 1	7.0	✓X
2	240 +42° 1003	4 28.9	+42 38	8.0	
2	241 +42° 1008	4 30.4	+42 49	7.9	
2	242 +42° 1015	4 31.4	+42 46	8.1	
2	243 +48° 1127	4 33.5	+48 9	9.4	
2	244 +50° 1039	4 35.6	+50 37	8.7	
2	245 +69° 272	4 36.5	+70 4	8.5	
2	246 +72° 238	4 38.3	+72 45	8.5	
2	247 +63° 534	4 36.8	+63 50	9.0	
2	248 +62° 704	4 39.3	+62 28	8.9	
2	249 +59° 831	4 39.8	+59 19	8.2	
2	250 +28° 692	4 40.3	+28 45	9.0	
2	251 +59° 832	4 41.0	+59 23	9.0	
2	252 +31° 816	4 42.8	+31 16	5.3	

~~Stars observed by Erkin as III I Sec. Ast. Nach. Vol.~~

Ident.	R.A. 1900 h. m.	Dec. 1900 ° ′	Magn.	
253	+50° 1070	4 42.9	+50 14	8.0 √X
254	+63° 544	4 43.3	+63 15	9.2
255	+31° 817	4 44.4	+31 23	7.8
256	+35° 754	~~4~~ 3 45.~~4~~ 0	+35 1~~4~~ 5	8.4
257	+35° 755	~~4~~ 3 45.~~4~~ 3	+35 2~~4~~ 5	8.7
258	+48° 1171	4 45.8	+48 26	9.4
258a	+70° 330	4 46.1	+70 30	8.6
259	+40° 1115	4 51.6	+40 45	9.2
260	+73° 264	4 51.8	+73 38	6.3
261	+45° 1017	4 53.3	+45 7	8.4
262	+41° 1033	4 54.4	+41 51	8.0
263	+58° 805	4 57.5	+58 53	6.5
264	+43° 1178	4 57.8	+43 10	9.3
265	+30° 772	4 57.9	+30 22	6.5
266	+30° 775	4 58.2	+30 14	8.5
267	+51° 1027	4 59.2	+51 34	8.5
268	+66° 377	5 1.1	+66 21	9.0
269	+56° 1007	5 1.8	+56 35	8.0
270	+29° 828	5 4.4	+29 41	9.2
271	+58° 821	5 4.6	+58 33	8.0
272	+29° 833	5 5.3	+29 48	6.5
273	+67° 376	5 6.1	+67 9	8.4
274	+47° 1117	5 7.7	+47 4	7.0
275	+61° 774	5 8.0	+61 8	8.8
276	+61° 776	5 9.2	+61 7	9.2
277	+48° 1245	5 9.9	+48 49	8.0
278	+45° 1081	5 10.1	+45 16	8.4
279	+48° 1248	5 10.9	+48 49	6.5
280	+46° 993	5 10.9	+46 56	8.0

~~140, No. 3352, p. 249. (Espin states that there are 132 stars in the list. Only 131 are given)~~

	Ident.	R.A. 1900		Dec. 1900		Magn.
		h.	m.	°	′	
281	+69° 316	5	12.6	+69°	49	8.0
282	+46° 999	5	14.4	+46	36	8.4
283	+46° 1007	5	15.7	+46	56	7.0
284	+46° 1008	5	15.9	+46	42	8.3
285	+28° 785	5	16.~~7~~ 6	+29	0	8.0
286	+46° 1010	5	16.8	+46	13	9.5
287	+29° 879	5	17.3	+29	29	9.2
288	+76° 197	5	17.4	+76	8	9.3
289	+31° 954	5	18.2	+31	8	6.6
290	+29° 888	5	19.1	+29	7	8.4
291	+48° 1274	5	20.4	+48	18	6.8
292	+48° 1273	5	20.4	+48	9	6.2
293	+30° 894	5	20.4	+30	23	8.5
294	+30° 905	5	21.7	+30	16	9.2
295	+61° 790	5	22.5	+61	32	9.0
296	+41° 1217	5	26.1	+41	34	8.5
297	+46° 1025	5	26.6	+46	7	8.7
298						
299	+70° 364	5	31.3	+70	26	8.7
300	+61° 807	5	31.6	+61	34	9.1
301	+41° 1238	5	31.6	+41	47	7.0
302	+28° 846	5	34.3	+28	56	7.5
303	+68° 410	5	41.2	+68	58	8.8
304	+30° 1012	5	41.3	+30	3	9.4
305	+30° 1021	5	42.8	+30	3	8.7
306	+69° 348	5	45.9	+69	10	8.5
307	+30° 1050	5	48.5	+30	19	8.9
308	+51° 1129	5	48.9	+51	32	8.5

Ident.		R.A. 1900 h. m.	Dec. 1900	Magn.	
309	+29° 1039	5 49.2	+29° 9'	7.5	
310	+30° 1063	5 50.6	+30 35	7.8	
311	+66° 420	5 52.0	+66 53	7.7	
312	+36° 1322	5 52.~~8~~ 9	+36 50	7.9	Entered also in Bürsch. as III!, A.N. Vol. 149, No. 3559, p 134.
313	+51° 1150	5 57.7	+51 53	8.5	
314	+76° 229	6 3.3	+76 12	9.5	
315	+41° 1386	6 4.8	+41 44	9.2	
316	+23° 1243	6 5.8	+23 14	7.3	
317	+69° 369	6 6.8	+69 12	8.8	
318	+51° 1166	6 6.8	+51 26	8.5	
318a	+52° 1049	6 8.1	+52 12	7.8	
319	+67° 425	6 13.1	+67 2	9.3	
320	+23° 1322	6 15.7	+23 49	7.7	
321	+51° 1185	6 16.5	+51 8	7.0	
322	+41° 1431	6 17.4	+41 52	8.5	
323	+41° 1434	6 17.8	+41 21	8.5	
324	+29° 1230	6 21.6	+29 21	9.3	
325	+68° 447	6 30.8	+68 44	8.0	
326	+41° 1482	6 31.9	+41 35	7.5	
327	+67° 452	6 39.5	+67 38	8.2	
328	+47° 1346	6 42.5	+47 8	8.0	✓ X
329	+68° 457	6 47.5	+68 29	8.2	
330	+70° 430	6 50.0	+70 57	6.0	
331	+69° 398	6 50.8	+69 47	6.8	
332	+30° 1441	7 5.0	+30 51	9.4	
333	+67° 488	7 18.5	+67 4	8.5	
334	+67° 493	7 23.0	+67 9	8.0	
335	+46° 1282	7 26.9	+46 23	7.3	
336	+68° 488	7 28.0	+68 41	8.7	

134 481.

	Ident.	R.A. h. 1900 m.	Dec. 1900 ° ′	Magn.	
337	+46° 1286	7 29.3	+ 46° 24	6.0	√X
338	+70° 471	7 32.6	+69 55	7.8	
339	+69° 436	7 32.8	+69 34	6.8	
340	+68° 517	7 54.3	+67 57	7.5	
341	+58° 1102	8 1.9	+58 34	6.2	
342	+59° 1154	8 8.~~8~~ 7	+59 30	7.3	
343	+57° 1143	8 21.1	+57 1	7.1	
344	+57° 1182	8 49.4	+57 16	6.7	
345	+57° 1211	9 8.5	+57 8	5.0	
346	+58° 1182	9 10.4	+57 54	7.1	
347	+58° 1183	9 10.5	+58 20	7.5	
348	+56° 1397	9 34.3	+56 19	6.5	
349	+66° 630	9 38.1	+66 5	7.2	
350	+67° 624	9 47.4	+67 46	9.0	
351	+62° 1093	9 50.8	+62 36	8.0	
352	+59° 1274	9 51.5	+59 26	7.1	
353	+57° 1240	9 52.~~6~~ 7	+56 56	7.5	
354	+57° 1242	9 ~~52.9~~ 53.X0	+57 1~~X~~ 8	5.0	√X
355	+63° 883	9 ~~57.7~~ 58.13	+63 33	8.1	
356	+64° 770	10 1.9	+64 26	6.8	
357	+57° 1278	10 31.0	+56 57	6.5	
358	+65° 791	10 31.4	+65 29	8.5	
359	+58° 1281	10 40.2	+57 53	6.3	√X
360	+64° 810	10 42.9	+64 19	7.0	
361	+57° 1294	10 45.0	+57 7	6.1	
362	+60° 1296	10 45.2	+59 51	5.8	
363	+59° 1345	10 56.3	+59 13	6.6	
364	+66° 705	11 5.4	+66 34	8.7	

Ident.		R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.
365	+62° 1172	11	13.1	+62	43	7.3
366	+55° 1485	11	41.0	+55	0	8.7
367	+50° 1871	11	47.~~X~~ 0	+50	30	7.2
368	+63° 986	11	51.5	+63	26	7.7
369	+63° 999	12	0.6	+63	30	6.0
370	+65° 874	12	7.1	+65	1	7.3
371	+61° 1319	12	44.1	+61	22	7.8
372	+60° 1425	12	48.9	+60	28	7.9
373	+68° 703	12	53.1	+67	47	6.5
374	+47° 2008	12	55.2	+46	59	8.5
375	+64° 946	13	18.0	+64	~~53~~ 29	7.5
376	+48° 2117	13	23.0	+48	30	8.3
377	+60° 1476	13	33.2	+60	12	8.2
378	+52° 1725	13	35.3	+52	18	6.8
379	+56° 1682	13	40.4	+56	8	8.0
380	+46° 1922	13	58.2	+46	15	6.0
381	+44° 2327	14	5.1	+44	13	8.1
382	+44° 2342	14	13.3	+44	1	8.0
383	+65° 982	14	10.3	+65	24	8.2
384	+28° 2318	14	19.6	+27	53	6.5 √X
385	+27° 2446	~~15~~ 14	~~0.5~~ 59.5	+27	28	7.2
386	+27° 2447	15	0.1	+27	20	4.7
387	+42° 2577	15	10.5	+42	33	6.1 √~~X~~ Entered also in III or II A.N. Vol. 137, No. 3286, p. 375
388	+27° 2474	15	13.2	+27	23	7.9
389	+46° 2052	15	14.8	+45	59	6.0
390	+43° 2512	15	33.1	+43	35	8.6
391	+46° 2106	15	43.7	+46	36	7.6
392	+46° 2110	15	44.5	+46	3	6.5

	Ident.	R.A. 1900 h.	m.	Dec. 1900		BD. Magn.
393	+46° 2124	15	50.0	+46	20	6.8
394	+43° 2542	15	51.3	+43	26	5.5 √X
395	+47° 2288	15	58.5	+47	25	7.0
396	+45° 2378	16	6.2	+44	58	8.3
397	+44° 2549	16	7.1	+44	4	7.0
398	+43° 2574	16	7.8	+43	18	7.7
399	+42° 2683	16	8.5	+42	39	6.3
400	+43° 2578	16	9.1	+43	14	8.6
400a	+47° 2333	16	18.1	+46	56	8.5
401	+48° 2406	16	26.2	+48	26	8.4
402	+42° 2730	16	34.~~5~~ 4	+42	35	8.2
403	+49° 2531	16	36.0	+49	8	5.0 √X
404	+53° 1879	16	36.7	+53	21	9.4
405	+43° 2642	16	42.0	+43	24	6.0
406	+39° 3038	16	42.2	+39	21	8.4
407	+43° 2648	16	44.6	+43	29	8.5
408	+43° 2654	16	46.6	+43	36	6.5
409	+40° 3074	16	52.0	+40	1	8.2
410	+42° 2774	16	54.7	+42	39	6.8
411	+35° 2904	16	58.0	+35	42	8.3
412	+43° 2686	17	1.0	+43	30	9.0
413	+49° 2599	17	8.2	+49	27	7.7
414	+43° 2715	17	15.4	+43	25	8.5
415	+44° 2695	17	17.5	+44	18	6.5
416	+44° 2696	17	17.8	+44	21	9.2
417	+37° 2883	17	21.~~5~~ 6	+37	5	9.0
418	+51° 2215	17	25.3	+51	3	9.5
419	+49° 2652	17	28.6	+49	49	8.8
420	+36° 3024	17	4.2	+36	28	9.0

Ident.	R.A. 1900 h. m.	Dec. 1900 ° ′	Magn.	
421 +31° 3196	18 7.2	+31 12	8.2	
422 +36° 3064	18 11.4	+36 21	8.1	
423 +32° 3119	18 20.9	+32 ~~3~~ 4 3	8.6	
424 +35° 3250	18 23.1	+35 39	8.0	
425 +31° 3272	18 24.0	+ ~~2~~ 3 1 8	7.7	✓x
426 +35° 3262	18 25.3	+35 44	8.0	
427 +32° 3156	18 31.5	+32 8	9.3	
428 +32° 3180	18 37.1	+33 1	9.3	
429 +31° 3347	18 40.0	+31 34	8.9	
430 +30° 3284	18 40.4	+30 55	8.8	
431 +30° 3295	18 42.8	+30 40	8.7	
432 +31° 3370	18 44.3	+31 18	9.3	
433 +35° 3364	18 45.2	+35 45	8.5	
434 +30° 3344	18 51.0	+30 59	7.5	✓x Entered also in III! A.N. Vol. 137, No. 3286, p. 375
435 +31° 3404	18 52.4	+31 35	8.6	
436 +31° 3453	19 1.1	+31 36	6.0	
437 +30° 3435	19 4.5	+30 42	9.1	
438 +32° 3406	19 18.9	+32 31	9.5	
439 +34° 4193	20 48.8	+34 32	8.6	
440 +32° 4043	21 0.6	+33 7	8.7	
441 +35° 4389	21 1.2	+35 11	8.9	
442 +37° 4300	21 20.9	+37 19	9.2	
443 +36° 4564	21 22.7	+37 5	7.5	
444 +36° 4580	21 24.9	+37 9	8.0	
445 +34° 4610	22 5.0	+34 37	7.5	
446 +65° 1833	22 52.4	+66 12	8.0	
447 +36° 4743	22 58.~~2~~ 0	+36 ~~32~~ 29	7.3	
448 +63° 1934	23 4.4	+63 34	9.2	

	Ident.	R.A. 1900		Dec. 1900		BD. Magn.
449	+62° 2179	23	5.4	+63	11	8.1
450	+64° 1810	23	22.8	+65	5	6.5
451	+63° 1998	23	23.0	+63	22	7.0
452	+63° 2011	23	28.0	+63	35	8.0
453	+64° 1838	23	36.6	+64	34	7.0
454	+65° 1969	23	51.4	+66	11	7.9
455	+66° 1670	23	55.8	+66	17	7.0
456	+64° 1894	23	59.7	+64	53	7.2
~~457~~	Error in numbering. 318 a + 400 a complete the 458 stars.					
~~458~~						

Stars observed by Espin as III! See Ast. Nach.

	Ident.	R.A. 1900 h.	m.	s.	Dec. 1900 °	′	Magn.	
1	+43° 44	0	12	5	+43	27	8.1	✓ x
2	+61° 43	0	15	3	+61	19	7.3	✓ x
3	+34° 98	0	35	6	+34	55	8.9	✓
4	+62° 147	0	41	8	+63	14	8.2	✓
5	+44° 169	0	43	0	+44	26	8.1	✓
6	+65° 116	0	53	4	+65	45	9.0	✓
7	+62° 198	1	0	4	+62	26	9.5	✓
8	+68° 75	1	2	9	+69	5	9.0	✓
9	+70° 89	1	8	~~5~~ 9	+71	2	8.0	✓
10	+63° 170	1	12	8	+64	12	9.0	✓
11	+58° 238	1	19	8	+5~~9~~ 8	25	9.3	✓
12	+34° 253	1	23	2	+34	24	8.7	✓
13	+34° 261	1	25	7	+34	14	9.2	✓
14	+44° 387	1	32	3	+45	9	8.7	✓
15	+66° 147	1	34	7	+66	55	9.1	✓
16	+39° 402	1	41	7	+39	38	9.3	✓
17	+66° 169	1	46	7	+67	3	9.2	✓
18	+62° 230	1	51	2	+63	9	8.8	✓
19	+46° 483	1	51	~~5~~ 6	+47	5	8.9	✓
20	+63° 266	1	52	6	+63	51	9.3	✓
21	+33° 351	1	57	6	+33	53	9.0	✓
22	+64° 300	2	2	5	+64	52	8.2	✓
23	+62° 359	2	3	6	+62	49	9.4	✓
24	+55° 575	2	12	6	+55	25	9.3	✓
25	+64° 326	2	18	1	+64	47	9.0	✓
26	+65° 267	2	24	2	+66	3	9.4	✓
27	+62° 420	2	27	7	+62	48	6.7	✓
28	+39° 565	2	27	7	+40	4	9.2	✓

x = already entered in III Catalogue.

Vol. 140, No. 3352, p. 249 (131 stars in the list. Experience gives no. as 132)

	Ident.	R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.	
29	+ 38° 513	2	30.2	+ 38	30	8.8 ✓	
30	+ 61° 463	2	34.6	+ 61	19	8.8 ✓	
31	+ 38° 539	2	35.4	+ 39	8	8.7 ✓	
32	+ 62° 450	2	36.1	+ 62	38	9.0 ✓	
33	+ 48° 826	2	54.2	+ 48	29	9.1 ✓	
34	+ 48° 836	2	56.5	+ 48	47	9.2 ✓	
35	+ 47° 767	2	59.4	+ 47	21	8.8 ✓	
36	+ 40° 671	3	1.3	+ 40	41	8.8 ✓	
37	+ 65° 323	3	1.5	+ 65	22	9.0 ✓ X	
38	+ 36° 638	3	2.4	+ 36	40	8.0 ✓	
39	+ 45° 733	3	10.2	+ 45	45	9.0 ✓	
40	+ 43° 688	3	14.2	+ 44	1	9.0 ✓	
41	+ 60° 668	3	14.~~X~~0	+ 61	6	8.5 ✓	Entered also in III or II, A.N. Vol. 140, No. 3352, p. 249
42	+ 60° 678	3	17.6	+ 61	6	8.4 ✓	
43	+ 44° 712	3	21.8	+ 44	18	8.9 ✓	
44	+ 73° 188	3	~~25.4~~ 24.8	+ 73	20	8.4 ✓	
45	+ 36° 712	3	25.4	+ 36	39	8.5 ✓ X	
46	+ 66° 273	3	25.6	+ 66	21	9.4 ✓	
47	+ 41° 724	3	31.7	+ 41	15	9.3 ✓	
48	+ 43° 785	3	33.5	+ 43	55	9.3 ✓	
49	+ 36° 739	3	36.8	+ 36	32	8.7 ✓	
50	+ 48° 987	3	38.0	+ 48	10	8.1 ✓	
51	+ 51° 772	3	38.4	+ 51	27	9.1 ✓	
52	+ 34° 728	3	40.4	+ 35	9	8.8 ✓	
53	+ 70° 261	3	41.3	+ 71	4	9.1 ✓	
54	+ 62° 618	3	44.9	+ 63	6	8.0 ✓ X	
55	+ 36° 775	3	48.1	+ 36	27	8.5 ✓	
56	+ 41° 796	3	56.1	+ 41	27	9.0 ✓ X	

249

	Ident.	R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.	
57	+66° 312	4	4.6	+66	17	8.7	✓
58	+70° 282	4	5.1	+70	50	8.4	✓
59	+72° 220	4	12.5	+72	50	7.9	✓
60	+61° 709	4	15.9	+61	8	9.2	✓
61	+50° 987	4	17.3	+50	37	8.8	✓
62	+28° 653	4	18.2	+28	48	8.0	✓
63	+64° 451	4	21.5	+64	14	9.1	✓
64	+42° 1006	4	29.9	+42	41	9.0	✓
65	+70° 310	4	30.1	+70	45	8.6	✓
66	+46° 901	4	34.~~5~~ 6	+46	46	9.3	✓
67	+70° 316	4	36.2	+71	3	9.1	✓
68	+46° 928	4	43.9	+46	28	9.0	✓X
69	+69° 294	4	54.4	+69	16	8.7	✓
70	+70° 339	4	57.4	+70	24	8.4	✓
71	+58° 819	5	3.8	+58	35	9.1	✓
72	+58° 820	5	3.8	+58	10	9.5	✓
73	+41° 1110	5	5.8	+41	33	8.8	✓
74	+41° 1114	5	6.3	+41	49	8.4	✓
75	+47° 1112	5	6.7	+47	6	8.9	✓
76	+48° 1241	5	7.6	+48	15	8.5	✓
77	+69° 315	5	12.1	+69	17	8.0	✓
78	+70° 353	5	17.7	+70	17	8.8	✓
79	+28° 791	5	17.9	+28	27	9.1	✓
80	+45° 1136	5	26.7	+45	19	8.9	✓
81	+69° 336	5	27.4	+69	21	9.0	✓
82	+29° 1022	5	45.9	+29	29	8.2	✓
83	+69° 355	5	48.6	+69	24	8.2	✓
84	+68° 418	5	51.7	+68	29	8.3	✓

	Ident.	R.A. 1900 h.	m.	Dec. 1900 °	′	Magn.	
85	+29° 1112	6	0.0	+29	31	6.0	✓X
86	+41° 1356	6	0.3	+41	12	8.5	✓
87	+23° 1212	6	2.2	+23	32	8.5	✓
88	+52° 1062	6	13.5	+52	34	8.4	✓
89	+29° 1274	6	28.4	+29	26	8.8	✓
90	+39° 1689	6	31.6	+39	12	8.0	✓
91	+48° 1438	6	40.4	+48	8	8.0	✓
92	+69° 400	6	51.9	+69	21	7.5	✓
93	+69° 404	6	58.7	+69	31	8.0	✓
94	+66° 487	7	2.7	+66	46	7.7	✓
95	+68° 510	7	46.0	+68	32	8.0	✓
96	+59° 1238	9	23.8	+59	11	6.8	✓
97	+57° 1222	9	27.~~6~~ 5	+57	1	8.8	✓
98	+57° 1230	9	~~38.0~~ 37.9	+57	9	9.4	✓
99	+60° 1245	10	7.5	+59	53	7.7	✓X
100	+64° 790	10	23.~~6~~ 9	+64	23	8.1	✓
101	+56° 1472	10	36.~~6~~ 7	+56	25	7.5	✓
102	+62° 1142	10	36.7	+62	44	7.3	✓
103	+63° 930	10	48.6	+63	29	8.2	✓
104	+66° 793	13	5.2	+66	6	7.8	✓X
105	+43° 2405	14	18.6	+43	39	8.1	✓X
106	+27° 2374	14	19.4	+27	44	8.0	✓X
107	+43° 2408	14	20.0	+43	9	7.8	✓
108	+46° 1999	14	50.3	+46	6	7.8	✓
109	+43° 2503	15	27.5	+43	13	7.3	✓
110	+51° 2182	17	7.9	+51	21	8.9	✓
111	+40° 3135	17	18.5	+40	10	8.5	✓
112	+51° 2261	17	46.7	+51	30	8.9	✓

	Ident.	R. A. h. 1900 m.		Dec. 1900 °	′	Magn.	
113	+31° 3203	18	8.8	+31	31	8.5	✓
114	+32° 3095	18	15.1	+33	1	7.7	✓X
115	+32° 3117	18	20.3	+32	49	9.1	✓
116	+30° 3294	18	42.8	+30	29	7.8	✓
117	+32° 3226	18	46.1	+32	52	9.0	✓
118	+31° 3399	18	51.7	+31	18	9.0	✓
119	+31° 3400	18	51.8	+31	4	9.0	✓
120	+32° 3937	20	42.9	+32	58	8.4	✓
121	+34° 4198	20	49.5	+34	22	8.7	✓
122	+32° 4089	20	59.9	+32	51	8.0	✓
123	+36° 4740	21	57.6	+36	27	8.3	✓X
124	+34° 4615	22	6.1	+34	46	9.5	✓
125	+63° 1948	23	8.0	+63	27	9.5	✓
126	+63° 1961	23	12.6	+63	56	9.5	✓
127	+63° 1985	23	19.5	+63	59	9.2	✓
128	+63° 2022	23	32.1	+63	59	8.0	✓
129	+63° 2033	23	35.9	+63	31	8.0	✓
130	+63° 2086	23	54.4	+64	5	8.0	✓
131	+65° 1993	23	58.7	+66	9	6.4	✓X

Vol. 145

Stars observed by Espin as III! See Ast. Nach. No. 3477, p 325.

	Ident.	R. A. 1900 h. m.	Dec. 1900 ° ′	Magn.	
1	+45° 291	1 5.4	+45 39	6.9	✓
2	+45° 521	1 56.8	+45 52	7.8	✓
3	+46° 512	1 59.9	+46 28	7.8	✓
4	+46° 538	2 7.8	+46 51	8.5	✓
5	+54° 771	4 20.0	+54 23	8.5	✓
6	+53° 817	4 41.5	+53 42	8.5	✓
7	+53° 962	5 47.5	+53 27	8.0	✓
8	+35° 1722	7 52.9	+34 58	7.0	✓
9	+36° 1765	8 7.2	+36 37	9.4	✓
10	+20° 2112	8 27.6	+20 43	9.1	✓ X
11	+37° 1982	9 19.3	+36 55	8.4	✓
12	+25° 2957	15 39.7	+25 17	8.0	✓
13	+37° 2883	17 21.6	+37 5	9.0	✓
14	+30° 2984	17 22.6	+30 52	8.2	✓
15	+68° 945	17 37.1	+68 34	7.7	✓
16	+72° 853	18 36.7	+72 27	8.3	✓
17	+70° 1036	18 54.2	+70 20	8.0	✓
18	+69° 1009	18 53.8	+69 42	8.5	✓
19	+51° 2512	19 5.5	+51 57	7.5	✓
20	+70° 1055	19 18.8	+70 44	8.0	✓
21	+72° 891	19 25.3	+72 24	8.0	✓ X
22	+52° 2437	19 25.8	+52 33	8.0	✓
23	+40° 3793	19 32.1	+40 28	8.0	✓
24	+58° 2059	20 6.4	+58 30	7.7	✓
25	+46° 2874	20 8.7	+46 18	8.9	✓
26	+38° 4166	20 33.3	+38 16	8.3	✓
27	+47° 3174	20 39.9	+47 27	9.0	✓
28	+56° 2525	21 0.4	+56 31	9.0	✓
29	+58° 2500	22 50.0	+58 22	8.0	✓

X = already entered in catalogue

25.

Finish discordant accs for
Ann. 145 & 140, No 3352
Have this Gill check from
p. 76 from the D.C.

Stars observed by Espin as III, or else II or II!. Ast. Nach. Vol. 145, No. 3477, p 325.

	Ident.	R. A. 1900 h. m.	Dec. 1900 ° ′	Magn.	
1	+45° 432	1 38.3	+45 39	6.8	
2	+45° 543	2 1.1	+45 26	8.3	
3	+45° 581	2 9.9	+45 26	9.1	
4	+46° 559	2 14.7	+46 13	9.1	
5	+45° 600	2 15.1	+45 58	7.8	
6	+45° 621	2 25.4	+45 44	8.4	
7	+67° 254	3 10.6	+67 57	8.9	
8	+54° 733	3 55.6	+54 27	8.7	
9	+48° 1056	4 4.8	+48 15	9.2	
10	+54° 757	4 9.9	+54 13	8.2	
11	+53° 766	4 18.1	+53 34	8.0	
12	+53° 842	4 54.8	+53 36	8.6	
13	+54° 896	5 21.3	+54 5	7.5	
14	+32° 1577	7 27.1	+32 51	8.0	
15	+32° 1584	7 28.6	+32 52	8.6	
16	+33° 1560	7 31.8	+33 24	7.0	
17	+35° 1669	7 35.0	+34 58	8.7	
18	+34° 1676	7 40.9	+34 24	8.3	
19	+33° 1623	7 51.6	+33 13	8.0	
20	+33° 1629	7 53.3	+32 58	8.4	
21	+36° 1726	7 53.4	+36 21	6.8	
22	+35° 1731	7 55.4	+35 41	6.5	
23	+35° 1741	7 57.4	+35 41	8.5	
24	+36° 1752	8 3.1	+36 0	7.2	
25	+35° 1808	8 14.8	+35 39	8.0	✓ x
26	+35° 1819	8 18.7	+35 22	6.0	
27	+28° 1599	8 19.0	+27 53	8.3	
28	+20° 2109	8 26.9	+20 47	5.6	
29					

	Ident.	R.A. 1900	Dec. 1900	Magn.	
		h. m.	° ′		
29	+19° 2119	8 47.7	+19 42	8.2	√ × also in C.M.V., No. 279, Tab. I.
30	+37° 1992	9 25.6	+36 52	6.8	
31	+37° 1997	9 27.1	+37 6	8.0	
32	+37° 2022	9 43.4	+37 14	6.3	√ ×
33	+25° 2916	15 23.3	+25 26	6.0	
34	+26° 2694	15 25.7	+25 51	7.3	
35	+23° 2918	16 13.6	+23 51	7.5	
36	+35° 2822	16 25.5	+35 50	8.2	
37	+72° 734	16 33.1	+72 49	6.3	
38	+35° 2847	16 35.7	+35 43	8.4	
39	+23° 3070	17 11.6	+23 52	7.0	
40	+33° 2871	17 15.1	+32 58	7.8	
41	+30° 2982	17 21.1	+30 50	8.5	
42	+24° 3197	17 26.6	+24 7	8.0	
43	+24° 3212	17 31.0	+24 25	7.3	
44	+68° 935	17 31.1	+68 50	7.5	
45	+72° 854	18 36.9	+72 18	8.3	
46	+72° 855	18 37.0	+72 11	7.0	
47	+72° 857	18 37.7	+72 18	6.5	
48	+61° 1768	18 40.6	+61 27	7.5	
49	+60° 1846	18 43.2	+60 15	8.3	
50	+38° 3324	18 47.7	+38 51	8.8	
51	+52° 2301	18 52.2	+52 33	7.6	
52	+73° 843	18 55.6	+73 58	7.8	
53	+28° 3160	18 58.3	+28 4	8.5	
54	+46° 2627	19 4.9	+46 52	8.2	
55	+52° 2350	19 6.1	+52 16	6.2	
56	+61° 1821	19 8.7	+61 46	7.5	

	Ident.	R.A. 1900 h. m.	Dec. 1900 ° ′	Magn.	
57	+52° 2376	19 12.3	+52 42	8.3	
58	+76° 724	19 17.8	+76 20	9.3	
59	+57° 1986	19 18.4	+57 27	6.0	
60	+57° 1993	19 19.6	+57 33	7.5	
61	+38° 3575	19 20.7	+39 1	7.6	
62	+60° 1959	19 28.1	+60 28	7.0	
63	+46° 2712	19 29.2	+47 3	8.8	
64	+70° 1073	19 31.8	+70 47	6.3	
65	+53° 2268	19 32.9	+53 12	9.3	
66	+48° 2918	19 33.8	+48 17	6.8	
67	+59° 2090	19 37.8	+59 7	7.9	
68	+38° 3725	19 39.7	+38 26	6.7	
69	+47° 2916	19 44.5	+47 41	5.8	✓X
70	+37° 3616	19 44.6	+37 29	7.5	
71	+48° 2955	19 45.3	+48 11	9.0	✓X
72	+38° 3772	19 45.9	+38 28	6.8	
73	+61° 1912	19 46.7	+61 10	7.4	
74	+38° 3780	19 47.0	+38 ~~28~~ 27	5.5	✓X Entered also in Astron. Soc. Notices, Vol. XXVI, p. 295.
75	+48° 2959	19 47.4	+48 10	7.8	
76	+38° 3798	19 49.3	+38 25	8.0	
77	+39° 3959	19 52.2	+39 55	6.8	
78	+60° 2045	19 53.1	+60 33	6.8	
79	+60° 2046	19 53.2	+60 21	6.6	
80	+58° 2013	19 54.1	+58 35	5.1	
81	+60° 2060	19 56.4	+60 34	7.1	✓X
82	+53° 2335	19 56.6	+53 18	8.7	
83	+61° 1970	20 ~~3.9~~ 4.0	+61 42	5.0	✓X
84	+52° 2629	20 4.7	+52 36	8.8	

	Ident.	R.A. 1900	Dec. 1900	Magn.	
85	+47° 3037	20 7.6	+47 56	6.4	
86	+60° 2099	20 11.6	+60 21	6.0	
87	+58° 2078	20 12.6	+58 38	7.0	√X
88	+44° 3506	20 30.4	+44 29	8.7	
89	+52° 2746	20 30.6	+52 27	7.5	
90	+52° 2750	20 31.2	+52 15	7.6	
91	+57° 2262	20 52.1	+57 17	7.3	
92	+56° 2547	21 11.7	+56 28	7.5	
93	+50° 3306	21 14.9	+50 52	9.1	
94	+58° 2249	21 16.5	+58 12	5.6	
95	+57° 2312	21 16.6	+57 53	6.8	
96	+68° 1244	21 41.1	+68 35	7.8	
97	+70° 1194	21 42.8	+70 31	8.8	
98	+60° 2300	21 46.4	+60 49	6.5	
99	+68° 1307	22 26.6	+68 55	7.5	
100	+67° 1442	22 26.8	+67 39	9.0	
101	+58° 2523	22 56.1	+58 31	8.3	
102	+56° 2927	22 57.3	+56 34	6.1	√X
103	+69° 1307	23 3.7	+70 9	7.6	
104	+56° 2957	23 5.7	+56 56	9.3	
105	+68° 1365	23 13.6	+69 6	7.8	
106	+56° 2985	23 15.3	+56 42	6.7	
107	+70° 1327	23 30.6	+71 5	6.0	
108	+56° 3085	23 42.2	+56 54	6.0	
109	+55° 3042	23 49.2	+55 26	8.5	
110	+54° 3081	23 53.7	+54 49	8.5	

Stars observed by Espin as III! See Astronom. Nach. Vol. 149, No. 3559, p. 134.

	Ident.		R.A. 1900		Dec. 1900		Magn.	
1	+24°	6	0h	4.9m	+24	39	8.0	✓
2	+28	17	0	7.2	+29	2	8.6	✓
3	+65°	25	0	9.6	+65	33	8.7	✓x
4	+32	157	0	48.0	+32	59	8.2	✓
5	+28	175	0	59.1	+29	12	8.5	✓
6	+32°	207	1	8.0	+32	58	8.3	✓
7	+31	298	1	37.7	+32	6	8.3	✓
8	+24	620	4	0.1	+24	28	9.0	✓
9	+37	914	4	16.2	+37	44	7.8	✓
10	+38	947	4	43.5	+38	34	9.2	✓
11	+51	1031	4	59.9	+51	59	8.8	✓
12	+37	1055	5	1.9	+37	29	8.6	✓
13	+21	949	5	~~44.0~~ 37.19	+2~~2~~ 1	~~55~~ 29	8.3 9	✓
14	+22	1052	5	44.0	+22	31	8.5	✓
15	+28	930	5	47.0	+28	15	8.2	✓
16	+36	1322	5	52.9	+36	50	7.9	✓
17	+22	1178	6	1.6	+22	87	8.8	✓
~~18~~	~~+33~~	~~2756~~						
~~19~~ 18	+58°	984	6	49.0	+58	26	9.0	✓
~~20~~ 19	+33	1453	6	54.5	+33	16	8.8	✓
20	+33	1468	6	59.5	+33	53	7.9	✓
~~21~~ 21	+36°	1696	7	45.6	+36	25	7.0	✓
~~28~~ 22	+33°	2756	16	34.9	+33	42	8.5	✓
~~24~~ 23	+28	3009	18	25.5	+29	0	8.8	✓
~~25~~ 24	+27	3099	18	41.1	+27	47	9.2	✓
~~26~~ 25	+27	3150	18	50.3	+27	47	6.2	✓
~~27~~ 26	+28	3317	19	20.0	+28	59	9.2	✓
~~28~~ 27	+25	4378	20	43.9	+26	2	8.0	✓x
~~29~~ 28	+23	4531	22	20.8	+23	49	9.1	✓

{Entered also in A. N. Vol. No. 140, No. 3352, p. 249
Also entered as III. or II.

134

1849

Ident.		R. A. 1900		Dec. 1900		Magn.	
~~38~~ 29	+27°4328	22h	24m.8	+27°	48'	9.0	✓
38 0	+23°4624	22	46.7	+23	27	8.5	✓
38 1	+29 4824	22	53.4	+29	49	8.6	✓
38 2	+28 4578	23	0.7	+28	29	7.5	✓
38 3	28° 4586 ~~+59 2762~~	23	22.6 ~~38.7~~	28 ~~+59~~	42 ~~24~~	~~8.6~~ 8.5	✓
38 4	+59° 2762	23	38.7	+59	24	8.6	✓
38 5	+28 4634	23	39.9	+29	1	8.6	✓
38 6	+22° 4902	23	41.4	+22	54	7.8	✓
37	+26 4694	23	44.3	+27	7	8.7	✓

Stars observed by Espin as III or II. See Astron. Nach. Vol. 149, No. 3559 p 134

	Ident.	R.A. 1900 h m		Dec. 1900 ° ′		Magn.
1	+23 4853	0	0.8	+24	0	6.3
2	+27 4674	0	0.9	+27	43	7.0
3	+28 4704	0	1.4	+28	29	7.5
4	+27 2	0	3.7	+28	14	8.1
5	+32 11	0	5.4	+32	35	7.3
6	+28 19	0	7.8	+28	51	8.7
7	+29 39	0	13.1	+29	49	8.0
8	+36 32	0	14.5	+36	24	7.3
9	+28 63	0	20.8	+28	23	7.9
10	+33 51	0	23.2	+33	15	7.0
11	+32 69	0	23.4	+33	5	7.5
12	+36 66	0	23.7	+36	21	6.3
12a	+29 92	0	25.5	+29	29	8.8
13	+32 85	0	27.1	+32	56	8.5
14	+32 90	0	27.9	+32	53	8.4
15	+33 76	0	30.5	+34	4	8.6
16	+36 88	0	30.6	+36	35	9.4
17	+38 88	0	35.1	+38	59	8.0
18	+38 112	0	41.8	+38	29	7.8
19	+34 123	0	44.6	+34	18	9.0
20	+36 145	0	47.4	+36	24	8.6 √x
21	+29 147	0	47.7	+29	48	7.5
22	+32 160	0	48.7	+32	21	7.3
23	+28 159	0	52.5	+28	59	8.3
24	+32 173	0	54.8	+32	17	7.9
25	+32 184	0	59.2	+32	40	7.7
26	+33 169	1	1.9	+33	28	8.2
27	+32 245	1	17.6	+32	46	7.7
28	+22 247	1	29.0	+22	54	8.5

34 Not entered in III Catalogue unless already there.

Ident.	R.A. 1900 h m	Dec. 1900 ° ′	Magn.	
29 +30° 245	1 29.8	+ 30° 16′	8.6	
30 +37 337	1 33.5	+ 38 3	8.4	√x
31 +32 299	1 36.7	+ 32 28	7.6	
32 +36 346	1 49.0	+ 36 37	6.4	
33 +32 360	1 53.2	+ 32 44	7.0	
34 +31 370	2 3.8	+ 31 52	7.7	
35 +33 436	2 22.2	+ 33 44	7.7	
36 +32 484	2 33.8	+ 32 23	7.1	
37 +32 507	2 43.0	+ 32 46	7.8	
38 +31 493	2 44.9	+ 31 57	8.0	
39 +32 550	2 57.1	+ 32 45	8.0	
40 +38 682	3 10.1	+ 38 15	7.8	
41 +31 597	3 19.3	+ 31 23	7.0	
42 +23 459	3 24.2	+ 23 51	8.0	
43 +38 800	3 38.1	+ 38 50	8.3	
44 +38 827	3 51.9	+ 38 33	6.5	
45 +37 877	4 0.8	+ 37 46	8.0	√x A.N. Vol. 140, No. 3352, p. 243, III.
46 +42 895	4 1.0	+ 42 48	8.8	√x A.N. Vol. 140, No. 3352, p. 243, III !!
47 +42 896	4 1.1	+ 42 56	6.7	
48 +36 837	4 3.9	+ 36 15	8.5	
49 +36 844	4 5.6	+ 36 33	8.2	
50 +39 952	4 6.2	+ 40 6	8.1	
51 +37 897	4 7.4	+ 37 43	6.0	
52 +40 912	4 8.~~2~~ 1	+ 40 1~~3~~ 4	4.8	
53 +37 899	4 8.3	+ 37 17	6.2	
54 +40 929	4 12.4	+ 40 46	8.0	
55 +38 873	4 13.0	+ 39 4	8.0	
56 +39 973	4 13.4	+ 39 36	7.8	

	Ident.	R.A. 1900 h m	Dec. 1900 ° ′	Magn.
57	+38° 876	4 14.2	+38° 20′	7.4
58	+40 987	4 26.4	+40 18	8.8
59	+37 941	4 28.7	+37 17	7.2
60	+39 1042	4 33.3	+39 36	7.0
61	+40 1045	4 39.8	+40 8	6.5
62	+37 969	4 43.2	+37 19	5.5
63	+52 893	4 46.5	+52 16	8.9
64	+52 897	4 47.3	+52 18	8.8
65	+54 844	4 52.6	+54 8	9.3
66	+37 1144	5 13.2	+37 18	8.4
67	+52 955	5 16.6	+52 12	7.8
68	+39 1288	5 17.2	+39 25	9.5
69	+43 1265	5 18.7	+43 9	8.3
70	+22 996	5 36.0	+22 37	6.8 √x
71	+35 1224	5 38.4	+35 5	8.4
72	+42 1391	5 39.3	+42 32	9.1
73	+28 929	5 46.9	+28 17	9.3
74	+39 1448	5 47.7	+39 8	8.5
75	+22 1096	5 48.8	+22 30	7.6 √x
76	+38 1341	5 51.6	+38 53	7.0
77	+42 1476	5 56.6	+42 21	9.2
78	+32 1287	6 18.7	+32 20	7.5
79	+32 1300	6 21.0	+32 38	6.5
80	+32 1306	6 22.5	+32 29	8.4
81	+32 1320	6 25.1	+32 14	6.8
82	+35 1436	6 26.0	+35 22	6.5
83	+35 1437	6 26.1	+35 8	6.8 √x
84	+42 1571	6 27.6	+42 34	9.3 √x

	Ident.		R. A. 1900		Dec. 1900		Magn.
6	85	+37° 1539	6h	28.4m	+37°	9′	7.2
5	86	+32 1378	6	36.2	+32	40	6.6
5	87	+42 1600	6	39.1	+42	22	7.0
6	88	+37 1592	6	43.0	+37	38	6.5
6	89	+32 1414	6	43.1	+32	43	5.8
6	90	+33 1424	6	46.4	+33	48	8.5
6	91	+35 1512	6	46.5	+35	27	9.1
6	92	+35 1534	6	53.4	+35	25	8.6
6	93	+34 1530	7	0.9	+34	9	6.0
6	94	+41 1595	7	1.0	+41	23	8.2
6	95	+34 1533	7	1.7	+33	58	6.6
6	96	+34 1536	7	2.3	+34	6	7.0
6	97	+44 1599	7	5.3	+44	11	7.8
7	98	+35 1578	7	7.5	+35	44	7.5
7	99	+42 1699	7	14.0	+42	50	6.5
7	100	+33 1519	7	17.4	+33	51	8.0
7	101	+33 1520	7	18.0	+33	14	8.5
7	102	+32 1550	7	20.5	+31	57	8.8
7	103	+32 1561	7	22.6	+32	12	8.0
7	104	+39 1958	7	25.2	+39	6	7.0
7	105	+37 1740	7	26.7	+37	25	6.5
7	106	+34 1648	7	32.3	+34	17	8.5
7	107	+37 1784	7	44.6	+37	21	6.8
8	108	+38 1986	8	54.2	+38	0	6.5
8	109	+39 2187	8	55.9	+39	3	7.5
8	110	+45 1742	9	31.3	+44	52	8.4
8	111	+44 1886	9	31.5	+44	39	8.5
8	112	+46 1566	9	51.7	+45	53	6.6

	Ident.	R.A. 1900	Dec. 1900	Magn.	
113	+46° 1580	9 58.6	+ 45 50	8.0	
114	+46 ~~1580~~ 2063	~~9 58.6~~ 10 4.9	~~+ 45 50~~ 1 10	~~8.0~~ 6.5	
115	+45 1879	10 53.3	+ 45 44	6.8	
116	+46 1680	10 54.5	+ 46 4	6.0	
117	+34 2800	16 26.8	+ 33 59	7.0	
118	+34 2816	16 32.7	+ 34 1	6.7	
119	+34 2961	17 21.1	+ 34 53	8.9	Entered also in class ob. as III!, A.N. Vol. 152, No. 3633, p 141.
120	+28 3125	18 52.7	+ 28 4	7.0	
121	+27 3183	18 54.2	+ 28 1	7.6	
122	+28 3320	19 20.7	+ 28 56	8.8	
123	+ 8 4250	19 48.2	+ 8 35	9.2	
124	+27 3666	20 11.7	+ 27 30	4.8	✓x
125	+25 4301	20 32.2	+ 26 3	8.8	
126	+26 3937	20 32.3	+ 26 15	8.1	
127	+25 4318	20 35.7	+ 25 59	8.8	
128	+25 4443	20 58.4	+ 26 6	7.1	✓x
129	+65 1562	21 11.8	+ 66 6	7.7	
130	+25 4500	21 12.4	+ 26 5	8.7	
131	+25 4513	21 16.2	+ 25 49	7.7	✓x
132	+25 4588	21 35.8	+ 25 40	9.0	
133	+25 4616	21 41.7	+ 25 27	8.0	✓x
134	+24 4502	21 51.0	+ 24 34	8.5	
135	+24 4506	21 52.4	+ 24 47	7.8	
136	+25 4671	22 0.7	+ 26 12	6.2	
137	+25 4676	22 2.4	+ 26 8	7.8	
138	+23 4470	22 3.7	+ 23 50	8.7	✓x
139	+24 4548	22 7.5	+ 24 28	6.5	
140	+23 4486	22 7.8	+ 23 16	7.5	

	Ident.	R.A. 1900	m	Dec. 1900	°	′	Magn.
141	+25 4691	22	8.6	+25	26		6.8
142	+28 4326	22	9.9	+28	42		8.9
143	+23 4497	22	11.4	+23	59		8.6
144	+26 4399	22	13.2	+26	26		7.0
145	+30 4711	22	22.5	+30	27		6.7
146	+31 4701	22	23.2	+31	20		6.2
147	+26 4437	22	23.5	+26	31		6.8
148	+24 4593	22	23.5	+24	23		7.5
149	+23 4547	22	23.7	+23	58		8.7
150	+26 4439	22	24.5	+26	16		5.7
151	+32 4437	22	25.0	+32	20		7.6
152	+23 4555	22	26.4	+23	28		7.5
153	+25 4768	22	29.9	+26	5		6.8
154	+29 4699	22	30.2	+29	27		6.8
155	+24 4617	22	30.9	+24	55		7.8
156	+27 4351	22	31.9	+27	16		7.5
157	+25 4779	22	33.0	+25	55		8.0
158	+29 4715	22	33.2	+29	24		7.4
159	+24 4637	22	36.6	+24	20		8.8
160	+32 4483	22	36.7	+32	16		8.0
161	+30 4771	22	36.9	+30	26		6.3
162	+32 4500	22	39.0	+32	19		7.5
163	+29 4753	22	40.9	+29	55		7.2
164	+23 4612	22	44.5	+23	22		7.7
165	+29 4783	22	46.6	+29	16		8.4
166	+23 4628	22	47.8	+23	37		8.5
167	+25 4848	22	52.2	+25	49		8.3
168	+23 4640	22	52.2	+24	9		8.0

	Ident.	R.A. 1900	Dec. 1900	Magn.
169	+23° 4641	22h 52.3	+24° 5′	9.0
170	+28 4493	22 52.8	+29 10	8.8
171	+24 4695	22 55.6	+24 18	9.2
172	+31 4836	22 59.2	+31 35	8.0
173	+26 4559	22 59.8	+27 7	8.6
174	+24 4716	23 2.2	+24 56	5.3
175	+29 4863	23 3.1	+29 54	7.3
176	+28 4535	23 4.7	+29 11	9.2
177	+28 4536	23 4.7	+29 8	7.0
178	+29 4877	23 6.4	+29 31	7.5
179	+28 4548	23 8.3	+28 54	6.5
180	+23 4701	23 8.9	+23 36	7.3
181	+23 4704	23 9.7	+23 34	6.5
182	+24 4738	23 10.7	+24 24	8.1
183	+29 4895	23 12.4	+29 20	7.7
184	+32 4622	23 13.9	+33 11	7.5
185	+29 4908	23 15.9	+29 52	6.1
186	+28 4589	23 23.3	+28 59	8.7
187	+23 4752	23 24.9	+24 13	7.4
188	+30 4977	23 28.7	+30 28	8.2
189	+23 4767	23 30.0	+23 53	6.5
190	+37 4867	23 30.7	+38 5	9.5
191	+23 4769	23 30.9	+24 1	6.7
192	+21 4958	23 31.5	+21 20	8.2
193	+21 4960	23 32.3	+21 42	7.3
194	+21 4961	23 32.4	+21 56	7.7
195	+28 4628	23 39.0	+28 45	8.5
196	+28 4630	23 39.5	+29 13	8.3

	Ident.	R.A. 1900		Dec. 1900		Magn.
197	+20° 5366	23	40.1	+20°	51	6.5
198	+27 4617	23	41.5	+28	9	7.1
199	+36 5117	23	41.7	+36	57	7.5
200	+30 5022	23	42.3	+30	55	8.5
201	+24 4834	23	42.5	+25	1	7.0
202	+27 4625	23	43.6	+27	49	7.5
203	+24 4841	23	44.2	+24	48	8.1
204	+30 5034	23	44.9	+30	47	9.0
205	+35 5118	23	46.2	+35	28	8.7
206	+20 5386	23	47.3	+21	~~6~~ 7	5.8 ✓ X
207	+34 5028	23	48.2	+34	29	7.5
208	+30 5044	23	48.9	+30	38	8.5
209	+24 4855	23	48.9	+24	52	9.0
210	+32 4735	23	50.3	+32	20	7.5
211	+21 4999	23	51.6	+22	5	6.0 ✓ X
212	+26 4721	23	54.2	+26	43	8.1
213	+30 5069	23	54.9	+30	59	8.4
214	+30 5071	23	55.4	+30	41	7.5
215	+23 4844	23	56.6	+23	42	6.6
216	+35 5156	23	56.7	+35	47	8.5

217 - No. 12 was repeated.

Stars observed by Espin as III! See Astron. Nach. Vol. 152, No. 3633, p. 141

	Ident.	R.A. 1900	Dec. 1900	Magn.
1	+22° 2841	15h 24m.4	+22° 47′	8.0 ✓
2	+29 2946	17 4.8	+29 40	8.8 ✓
3	+34 2961	17 21.1	+34 53	8.9 ✓* Entered also in Stars ob. as II or III, A.N. Vol. 149, No. 3559, p. 134.
4	+28° 2738	17 21.7	+28 28	8.2 ✓
5	+28 2822	17 41.8	+28 17	8.3 ✓
6	+22 4102	20 29.1	+22 30	8.6 ✓
7	+23 4406	21 45.1	+23 36	7.8 ✓
8	+34 4557	21 49.7	+34 45	8.2 ✓
9	+50 3523	21 57.3	+50 49	8.7 ✓
10	+46 3798	22 38.1	+46 45	8.8 ✓
11	+47 3187	23 45.2	+48 14	8.5 ✓

Stars observed by Espin as II or III. See Astron. Nach. Vol. 152, No. 3633, p. 141.

Ident.	R.A. 1900 h m	Dec. 1900 ° ′	Magn.
1 +30 31	0 11.9	+30 31	8.0
2 +30 59	0 21.9	+30 37	7.8
3 +55 245	1 1.6	+55 45	9.2
4 +30 172	1 3.3	+31 10	8.5
5 +29 183	1 3.9	+29 43	8.2
6 +29 184	1 4.0	+29 56	8.4
7 +30 182	1 5.7	+30 24	8.3
8 +56 221	1 6.8	+56 39	8.5
9 +24 2104	9 28.3	+23 53	6.5
10 +49 2052	11 20.8	+49 30	9.5
11 +51 1679	11 32.4	+51 1	6.0
12 +49 2079	11 39.2	+49 4	7.6 ✓ x
13 +48 1987	11 52.4	+48 20	8.1
14 +34 2436	13 33.5	+34 16	8.3
15 +20 2933	14 5.1	+20 12	[illegible]
16 +20 2945	14 9.3	+20 2	8.0
17 +25 2776	14 20.3	+25 4	9.1
18 +29 2565	14 35.8	+28 50	8.2
19 +20 3024	14 42.4	+20 13	7.5
20 +23 2736	14 43.6	+23 23	8.3
21 +23 2737	14 43.9	+22 50	7.7
22 +25 2839	14 44.9	+25 35	6.8
23 +24 2786	14 45.8	+24 20	5.8
24 +24 2790	14 48.0	+24 12	6.8
25 +23 2776	15 2.8	+23 18	7.3
26 +23 2775	15 2.8	+22 57	7.6
27 +29 2629	15 3.7	+28 53	7.3
28 +27 2538	15 43.1	+27 31	8.2

Not entered in III Catalogue unless already there.

Ident.			R. A. 1900 h m	Dec. 1900 ° ′	Magn.
29	+24	2954	15 55.8	+24 34	7.5
30	+34	2889	16 59.8	+34 31	7.0
31	+29	2933	17 0.8	+29 48	8.0
32	+34	2928	17 12.0	+34 49	7.0
33	+38	2924	17 18.8	+37 59	8.2
34	+34	2965	17 21.7	+34 16	8.4
35	+37	2885	17 22.1	+37 52	7.8
36	+37	2888	17 23.7	+37 10	9.0
37	+28	2787	17 32.2	+28 14	6.3
38	+35	3020	17 34.6	+35 2	7.7
39	+28	2803	17 37.7	+28 15	7.9
40	+35	3041	17 38.1	+35 24	7.8
41	+35	3042	17 38.2	+35 7	7.7
42	+35	3059	17 41.3	+35 16	7.0
43	+35	3098	17 50.0	+35 43	6.7
44	+33	2997	17 53.9	+33 50	7.8
45	+33	3006	17 56.9	+33 14	5.5
46	+33	3007	17 57.0	+33 19	9.0
47	+33	3009	17 57.9	+33 20	6.0
48	+35	3130	17 58.1	+35 24	8.5
49	+46	2778	19 42.9	+46 15	7.2
50	+37	3631	19 46.4	+37 13	8.8
51	+37	3658	19 49.4	+37 8	8.1
52	+27	3572	19 54.5	+27 14	8.5
53	+27	3574	19 55.1	+27 14	7.0
54	+36	3885	20 3.9	+37 2	9.0
55	+22	4025	20 16.5	+22 38	8.5
56	+22	4028	20 17.2	+22 32	7.2

Ident.		R.A. 1900		Dec. 1900		Magn.
57	+22 4034	20 h	17.9 m	+22°	40′	9.1
58	+22 4048	20	21.1	+22	43	9.0
59	+46 2969	20	30.0	+46	49	7.7
60	+36 4138	20	31.3	+37	8	9.2
61	+37 4000	20	33.6	+37	45	7.8
62	+37 4005	20	33.9	+37	34	7.7
63	+22 4188	20	42.8	+22	30	8.8
64	+22 4207	20	44.7	+22	46	9.1 ✓×
65	+45 3287	20	44.9	+45	37	9.4
66	+42 3872	20	45.3	+42	56	8.0
67	+42 3876	20	45.8	+42	16	8.6
68	+22 4223	20	47.4	+22	57	7.6
69	+45 3305	20	47.9	+45	53	9.1
70	+37 4079	20	48.1	+37	21	8.9
71	+49 3400	20	48.5	+49	19	8.4
72	+42 3893	20	49.2	+42	43	8.5
73	+41 3954	20	55.2	+41	59	9.2
74	+23 4233	21	0.8	+23	12	7.8 ✓×
~~75~~ see p. 116	~~+45 3992~~	~~22~~	~~1.3~~	~~+45~~	~~59~~	~~9.3~~
~~76~~ see p. 116	~~+45 3799~~	~~22~~	~~1.8~~	~~+45~~	~~48~~	~~8.6~~
~~77~~ see p. 116	~~+45 3801~~	~~22~~	~~2.0~~	~~+45~~	~~58~~	~~9.0~~
78	+37 4175	21	2.4	+37	56	9.0
79	+46 3180	21	2.6	+46	46	9.5
80	+23 4243	21	2.6	+23	11	8.3
81	+37 4179	21	3.0	+38	8	8.6
82	+22 4332	21	8.0	+22	46	8.8
83	+47 3327	21	8.2	+47	36	9.0
84	+37 4229	21	9.5	+37	59	7.8

	Ident.	R.A. 1900 h	m	Dec. 1900 °	′	Magn.	
85	+46° 3267	21	15.4	+46°	35′	8.3	
86	+46 3284	21	17.9	+46	36	8.0	
87	+23 4307	21	20.5	+23	59	8.8	√X
88	+23 4315	21	22.1	+23	52	8.5	
89	+34 4417	21	22.8	+34	22	8.8	
90	+23 4317	21	22.9	+23	54	8.5	
91	+46 3322	21	23.8	+46	23	8.3	
92	+46 3329	21	24.9	+46	40	8.0	
93	+46 3330	21	25.1	+46	41	8.7	
94	+46 3335	21	25.5	+46	50	8.7	
95	+23 4325	21	25.5	+23	12	4.5	√X
96	+50 3353	21	27.3	+50	26	9.0	
97	+46 3370	21	31.2	+46	32	9.2	
98	+50 3382	21	33.8	+50	37	7.1	
99	+53 2659	21	34.3	+53	36	6.5	
100	+48 3451	21	34.8	+48	16	7.6	√X
101	+35 4600	21	34.9	+35	35	8.2	
102	+50 3392	21	35.1	+50	40	8.5	
103	+44 3897	21	35.7	+44	16	9.1	
104	+22 4460	21	36.0	+22	44	8.2	
105	+22 4463	21	38.4	+22	51	7.2	
106	+22 4465	21	39.4	+22	22	6.5	
107	+29 4496	21	40.1	+29	51	8.2	√X
108	+42 4195	21	40.9	+42	59	8.5	
109	+22 4480	21	43.2	+23	9	9.2	
110	+35 4643	21	43.9	+36	6	6.7	
111	+37 4433	21	45.2	+37	54	8.1	
112	+34 4542	21	45.8	+34	20	7.7	

Ident.		R.A. 1900	Dec. 1900	Magn.	
113	+48° 3521	21 46.7	+48 51	8.1	
114	+42 4247	21 50.9	+42 52	8.3	
115	+42 4250	21 51.2	+42 42	7.5	
116	+44 3984	21 51.5	+44 20	9.0	
117	+53 2740	21 51.7	+53 42	8.0	√X
118	+47 3638	21 55.0	+47 19	9.0	
119	+23 4445	21 56.0	+23 26	9.5	
120	+48 3573	21 56.5	+48 34	7.8	
~~75~~	~~+45° 3792~~	22 1.3	+45 59	9.3	
121	+42 4304	22 4.0	+42 51	8.0	
122	+43 4144	22 6.0	+44 10	8.5	
123	+48 3633	22 7.1	+48 33	7.6	
124	+48 3643	22 9.0	+48 52	7.4	√x
125	+53 2817	22 9.6	+53 24	9.1	
126	+45 3883	22 15.3	+45 44	8.2	
127	+52 3179	22 15.4	+53 6	8.9	
128	+46 3661	22 15.7	+46 23	8.0	
129	+48 3689	22 16.6	+48 42	7.6	
130	+46 3671	22 17.4	+46 34	8.7	
131	+57 2515	22 18.8	+58 6	8.3	
132	+48 3727	22 22.2	+48 55	8.6	
133	+42 4441	22 29.3	+42 58	7.8	√x
134	+47 3841	22 29.4	+47 26	8.5	
135	+54 2828	22 35.0	+54 44	8.2	
136	+53 2953	22 36.9	+54 6	9.1	
137	+51 3444	22 36.9	+51 14	7.1	
138	+53 2957	22 37.3	+53 34	8.8	
139	+47 3991	22 53.3	+47 15	8.2	
140	+49 4078	23 11.8	+50 7	7.1	
~~76~~	+45 3799	22 1.8	+45 48	8.6	
~~77~~	+45 3801	22 2.0	+45 58	9.0	

Ident.	R.A. 1900	Dec. 1900	Magn.
141 +52° 3414	23 h 13.4 m	+52° 40′	9.0
142 +55 2990	23 32.4	+55 20	7.0
143 +55 3028	23 44.7	+56 6	8.8
144 +57 2815	23 45.0	+57 36	9.2

continued from Book 62a, p. 82.

Additional Red Stars in 0^h.

Ident.	R. A. 1900	Dec. 1900	Magn.	Plate Nos.	Class	Sp.	A.	Cl.
A.G.C. 32436	0^h 0.4^m	− 37° 52′	8	14696, 12332 a	Ma		..	..
C.DM. − 39° 16	0 3.6	− 39 48	9.4	14371, 12332 a, 20551	Md		..	..
AGC. 100	0 7.1	− 55 19	8	14382, 10351 a, 11768 a, 14414 a	Ma		..	..
" 174	0 11.5	− 44 20	8	14696, 14371 a, 23454 a, 23747 a	Ma		..	..
" 227	0 14.4	− 54 24	7.5	14382, 10351, 14414, 14881	Ma		..	..
" 280	0 17.4	− 24 50	8.5	14366, 10575 a, 14875 a, 23043 a	Ma		..	..
Computed 1900 Pos.	0 18.4	− 62 14	..	11532, 23788 a, 24066 a, 24115 a	Md		..	..
C.DM. − 25° 212	0 30.8	− 25 26	8.0	14366, 20456, 23746, 24335	Ma		..	..
AGC. 595	0 34.7	− 24 44	9	14366, 20456 a, 23746 a, 24335 a	~~Ma~~		..	..
+29° 77	0 22.8	+ 29 36	9.2	..	..		E.	III !!
+28° 98	0 31.4	+ 29 3	9.1	..	..		E	III !!!
+53° 121	0 36.4	+ 53 25	8.9	..	..		E	III !!
+33° 112	0 44.2	+ 34 8	9.5	..	..		E	III !!
+31° 144	0 51.5	+ 31 21	7.9	..	..		E.	III !!
+24° 6	0 4.9	+ 24 39	8.0	..	..		E.	III !
+28° 17	0 7.2	+ 29 2	8.6	..	..		E.	III !
+32° 157	0 48.0	+ 32 59	8.2	..	..		E.	III !
+28° 175	0 59.1	+ 29 12	8.5	..	..		E.	III !

See Bk. 3 p. 86

Plate 14371. Var. New. Hγ = 1.0, Hδ = 10.0

Continued from Book 2, p. 90.

Additional Red Stars in 5h.

Ident.	R.A. 1900	Dec. 1900	Magn.	Plate Nos.	Class Spectrum	A.	Cl.
+28° 859	5h 37.0m	+28° 13′	9.3	.. a 5542, a 5557, a 5571, a 5638 ..		E.	III !!
+22° 1057	5 44.7	+22 28	9.0	.. a 2317, a 19792, a 21976, a 26124 ..		E	III !!
+22° 947	5 28.7	+22 6	9.0	.. a 3257, a 19792, a 21976, a 26124 .		E.	B.
~~+37° 1055~~	~~5 1.9~~	~~+37 29~~	~~8.6~~	..	..	~~E.~~	~~III !~~
+21° 949	5 37.9	+21 55	8.9	See Bk 3, p. 86	..	E.	III !
+22° 1052	5 44.0	+22 31	8.5	..	..	E.	III !
+28° 930	5 47.0	+28 15	8.2	..	..	E.	III !
~~+36~~ 1322	5 52.9	+36 50	7.9	..	..	E.	III or II,
						E.	III !

Continued from Bk. 2, p. 202.

Additional Stars in 18h.

Ident.	R.A. 1900 h m	Dec. 1900 ° ′	Magn.		Plate Nos.	Class Sp.	A. Cl.	
+28°2927	18 3.8	+ 28 52	9.2		a a a a 1051 1905 1991 15829	..	E	III !!!
+35° 3165	6.0	+ 35 29	8.8	32161		Ma	..	..
+33° 3041	7.0	+ 33 45	9.2	32161		Ma	..	..
+31° 3203	8.8	+ 31 31	8.5	32161		Ma	E.	III !
+39° 3357	9.9	+ 39 27	8.5	32161		Ma	..	..

Chart plate 22893 + DM. Chart show this star to be slightly north instead of south of DM. +31°3205, 18h 7.3m +31° 31.'3. Error in DM. Cat.? Are not declinations transposed there?

continued from Bk. 2, p. 214

Additional Red Stars in 20h.

Ident.	R.A. 1900	Dec. 1900	Magn.	Plate Nos.	Class Sp. ~~Class Sp.~~	Cl.
+31° 4056	20h 18.7m	+31° 13′	7.0	a 1524 a 1992 a 19033 25476	E.	II
+48° 3107	20 19.8	+48 12	8.4	a 1303 a 1410 a 1434 a 4413	E.	III.!!
+31° 4101	20 24.9	+31 54	9.3	a 1231 a 4608 a 4653 a 19033	E.	III.!!
+46° 2970	20 30.1	+46 13	9.5	a 1303 a 1410 a 1434 a 4712	E.	III.!!
+31° 4152	20 32.7	+32 6	8.6	a 4608 a 4653 a 5287 a 13493	E.	III.!!*
..	20 32.7	+32 3	..	a 4608 a 4653 a 5287 a 13493	E.	—
+54° 2382	20 33.0	+54 14	9.0	a 4823 a 7378 a 4625	E.	III.!!
..	20 34.5	+42 19	..	a 193 a 1977 a 11803 a 13133	E.	III.!!
+45° 3262	20 42.3	+45 50	8.7	a 11484 a 11803 a 13096 a 13133	E.	III.!!
..	20 43.9	+44 42	..	a 11484 a 11803 a 13096 a 13133	E.	III.!!
+30° 4185	20 44.5	+30 25	7.5	a 4608 a 4653 a 5287 a 13493	E.	II
+30° 4191	20 45.5	+30 16	8.1	a 4608 a 4653 a 5287 a 13493	E.	II
+31° 4234	20 45.8	+31 58	9.4	a 4608 a 4653 a 5287 a 13493	E.	III.!!
+45° 3302	20 47.5	+45 52	9.4	a 11484 a 11803 a 13133 a 14839	E.	III.!!
..	20 50.2	+45 40	..	a 11484 a 11803 a 13133 a 14839	E.	III.!!
+32° 3988	20 51.2	+32 15	9.1	a 4608 a 4653 a 5287 a 13493	E.	III.!!
+32° 3989	20 51.3	+32 18	7.2	a 4608 a 4653 a 5287 a 13493	E.	II
+31° 4268	20 51.7	+31 43	7.6	a 4608 a 4653 a 5287 a 13493	E.	II?
+45° 3329	20 ~~51.9~~ 52.0	+45 36	9.2	1230 2397 11484 11803	E.*	III!!
+29° 4253	20 54.1	+30 6	6.7	a 4608 a 4653 a 5287 a 13493	E.	II
+49° 3424	20 54.6	+50 2	9.0	a 4625 a 7642 a 14839 a 23748	E.	III.!!
..	20 55.9	+43 34	..	a 1230 a 5342 a 11484 a 13133	E.	IV?
+42° 3935	20 56.4	+42 15	9.4	a 205 a 224 a 2397 a 11803	E.	III!!
+48° 3265	20 57.6	+49 8	8.4	a 4625 a 7642 14839 23748	E.	III.!!
+31° 4320	20 58.8	+31 57	7.2	a 4608 a 4653 a 5287 a 19034	E.	—
+37° 4158	20 59.2	+37 18	9.2	a 1829 a 2236 a 4569 a 13489	E.	III.!!
+49° 3442	20 59.1	+49 23	9.0	a 4955 a 13491 a 14839 a 23748	E.	III.!!

Br. III.!!

Br. III !!! "Suspected to be a variable star as it is not in the B.D."

Br. II!

Br. II

Br. III

* "Identification somewhat doubtful.

Br. III ?

Continued from Bk. 2, p. 208.

Additional Red Stars in 21h.

Ident.	R. A. 1900 h m	Dec. 1900 ° ′	Magn.	Plate Nos.	Class Sp.	A. Cl.
..	21 12.6	+ 53 54	..	.. 4903a, 4955a, 11795a, 13491a ..		E. IV?
..	21 14.7	+ 43 4	..	.. 5342a, 13508a, 15164a, 23968a ..		E. III!!!
+31° 4416	21 14.8	+ 31 46	7.3	.. 4608a, 4653a, 5287a, 19034a ..		E. —
+49° 3500	21 15.4	+ 49 18	9.4	.. 2215a, 2419a, 7487a, 25984a ..		E. IV?
+53° 2600	21 16.6	+ 53 54	9.2	.. 4903a, 4955a, 11795a, 13491a ..		E. III!!
+30° 4410	21 17.5	+ 30 22	8.4	.. 2232a, 2249a, 19034a ..		E. III?
+30° 4411	21 17.8	+ 30 30	9.2	.. 2232a, 2249a, 19034a ..		E. ?
+29° 4397	21 18.4	+ 29 53	6.5	.. 2232a, 2249a, 19034a ..		E. II
+23° 4298	21 19.0	+ 23 53	8.5	.. 1270a, 1316a, 2176a, 5301a ..		E. III!!!
+30° 4421	21 19.2	+ 30 41	7.8	.. 19034a ..		E. II
+29° 4419	21 24.1	+ 29 47	7.5	.. 2232a, 2249a, 19034a ..		E. II
..	21 26.4	+ 50 50	..	.. 4903a, 4955a, 11795a, 13491a ..		E. III!!
+48° 3403	21 27.8	+ 48 47	9.4	.. 2215a, 2419a, 7487a, 25984a		E. III!!
+29° 4440	21 28.2	+ 30 8	8.2	.. 19034a ..		E. II
+45° 3583	21 29.5	+ 46 2	9.5	.. 2215a, 2419a, 5114a, 25984a		E. III!!!
..	21 30.0	+ 43 43	..	.. 1825a, 2215a, 2419a, 5114a ..		E. III!!
+30° 4479	21 31.4	+ 30 33	8.0	.. 19034a ..		E. III?
+48° 3433	21 32.0	+ 48 57	9.0	.. 2215a, 2419a, 7487a, 25984a		E. III!!
+31° 4505	21 32.3	+ 32 0	7.7	.. 19034a ..		E. III?
+48° 3441	21 33.5	+ 48 13	9.3	.. 4903a, 7487a, 11795a, 25984a		E. III!!!
..	21 34.6	+ 53 47	..	.. 4885a, 4903a, 11795a, 13492a		E. III!!
+43° 4004	21 36.4	+ 43 29	9.0	.. 17188a, 17739a, 18382a, 18607a ..		E. III!!
+21° 4599	21 36.5	+ 21 46	7.5	.. ..		E. III!!
+29° 4481	21 36.6	+ 29 51	7.7	.. 19034a ..		E. —
+29° 4496	21 40.8	+ 29 51	8.2	.. ~~4903a, 7487a, 11795a, 13492a~~ ..		E. II or III / E. III
+49° 3616	21 42.4	+ 49 28	9.1	.. 4903a, 7487a, 11795a, 13492a ..		E. III!!
+23° 4391	21 42.6	+ 23 22	9.3	.. 27807a ..		E. III!!!
+46° 3433	21 42.8	+ 46 55	9.4	.. 2419a, 17739a, 18382a, 18607a ..		E. III!!

Continued in Book 4, p. 170

Br. 31, II.

Br. II.

Br. II.

Br. II.

Br. II!

Br. II.

Continued from Book 62, p. 210.

Additional Red Stars. 22h.

Ident.	R.A. 1900	Dec. 1900	Magn.	Plate Nos.	Class Sp.	A.	Cl.
+27°4389	22 38.2m	+ 27° 38′	8.6	..	..	E.	* III !!!
+28°4444	22 39.5	+ 29 5	8.6	..	..	E.	III !!
+25°4802	22 ~~40.0~~ 39.9	+ 26 10	8.7	.. 7620	..	E.	III !!!
+28°4446	22 41.0	+ 28 51	8.7	..	..	E.	* II ?
+29°4757	22 41.3	+ 30 4	9.0	..	..	E.	III !!
+29°4771	22 43.3	+ 30 6	8.5	..	..	E.	III !!
+26°4524	22 48.3	+ 26 28	7.7	.. 7620, a 23138 a	..	E.	III ?
+26°4528	22 49.0	+ 26 28	8.8	.. 7620, a 23138 a	..	E.	III !!
+23°4633	22 49.9	+ 23 52	7.5	.. 7620	..	E.	III !!
+29°4826	22 53.6	+ 29 40	8.8	.. a 23138	..	E.	III !!
+23°4656	22 55.5	+ 24 7	9.2	.. 7620, a 23138 a	..	E.	III !!
+28°4506	22 57.4	+ 28 52	8.2	.. a 23138	..	E.	* II
+23°4470	22 3.7	+ 23 50	8.7	.. a 27807	..	E. / E.	III a II / III !!
+57°2474	22 ~~6~~.2 7	+ ~~57 55~~ 58 0	9.1	.. 4505, a 4676, a 4687, a 13695 a ..		E.	III !!
+21°4724	22 12.6	+ 21 31	8.1	.. a 27807	..	E.	III !!
+47°3760	22 13.2	+ 47 25	9.0	.. a 2162, a 9926, a 11303, a 23299		E.	III !!
..	22 23.4	+ 46 40	..	.. a 2162, a 9926, a 11303, a 23299 ..		E.	III !!
+21°4820	22 39.7	+ 21 25	7.8	.. a 7620	..	E.	III !!

*Var.?

*III. Br. 10

*III. Br. 13

(continued from Bk. 62, p. 216

Additional Red Stars in 23h

Ident.	R.A. 1900	Dec. 1900	Magn.	Plate Nos.	Class Sp.	A.	Cl.
+58° 2548	23h 37.7m	+58° 20′	9.0	a 13843, a 14064, a 14261, a 14272		E.	III !!
+55° 2927	23 10.5	+55 23	9.4	a 13843, a 14064, a 14261, a 14272		E.	III !!
+50° 4001	23 12.8	+50 17	8.0	a 21192, a 23300, a 25940		E.	III !!
+55° 2939	23 15.0	+55 21	9.4	a 14825, a 13843, a 14064, a 14261		E.	III ! * var.?
+28° 4643	23 43.2	+28 17	8.8	a ~~2543~~, a ~~7711~~, a ~~16960~~, a ~~21217~~		E.	III !
+56° 3126	23 54.0	+56 ~~31~~ 25	9.1	a ~~2543~~, a 7711, a 16960, a 21217		E.	? *
+56° 3125	23 ~~54.1~~ 53.9	+56 ~~25~~ 18	9.5	a ~~2543~~, a 7711, a 16960, a 21217		E.	III !!

*There is either a mistake in the BD. No. or the star is variable.

*Comes IV ? .... suggests variation.