

Index Catalogue of Nebulæ found in the Years 1888 to 1894, with Notes and Corrections to the New General Catalogue. By J. L. E. DREYER, Ph.D.

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THE *New General Catalogue* contains the places and descriptions of all the nebulae known at the end of the year 1887. In the following catalogue I have put together all the new nebulae of which the places and descriptions have been published since then and up to the end of 1894. Most of these objects are very faint and minute, and doubtless represent but a very small part of the innumerable host of similar objects which are within the reach of our largest telescopes, while not a few of those found with moderate-sized instruments will probably turn out to be nothing but two or three very faint stars close together. But although the majority of these new nebulae cannot compare in interest with those catalogued in earlier years, it seems useful to have their places readily accessible in an index catalogue, though the number of observers to whom this will be of use will naturally be a comparatively limited one.

The catalogue is arranged exactly like the *New General Catalogue*, and requires but little explanation. The names of the observers will be found in the second column. A high number in brackets, *e.g.* (3259), denotes the number of the *Astronomische Nachrichten*, where the account of the finding of the object is recorded. The other references are as follow :

B. is BIGOURDAN'S second list, *Comptes Rendus*, March and April 1891. Numbers below 102 refer to his first list (*ibid.*, November and December 1887), a few objects from which are not in the *New General Catalogue*.

BURNHAM. See *Publications of the Lick Observatory*, vol. ii.

DENNING. *Monthly Notices*, vol. li. p. 96, and a privately communicated list, in which some of the positions in the printed list had been corrected.

ESPIN. See *Monthly Notices*, vol. liv. p. 327.

J. refers to M. JAVELLE'S two lists of 807 new nebulae found with the great equatorial of 30 inches aperture at the Nice Observatory (*Annales*, T. iv. and T. vi.). The positions are micrometrically determined.

KOBOLD. See *Astr. Nachr.*, No. 3184.

O. St. refers to the Publications of the Leander McCormick Observatory, Part 6 (southern Nebulae, micrometric observations).

PICKERING. See *Annals of Harvard College Observatory*, vol. xviii., where a list of objects discovered by photography is given.

Sf. refers to the list of objects found by Professor SAFFORD, and given in an appendix to the *New General Catalogue*. I have inserted them here (though found before 1888), as very few people ever think of referring to an appendix.

SPITALER. See *Astr. Nachr.*, Nos. 3167-68. The positions are micrometrically determined.

Sw. refers to Mr. LEWIS SWIFT'S four lists of nebulae found at the Warner Observatory, Rochester, N.Y.

VII. *Astr. Nachr.* 2859.

VIII. „ „ 2918.

IX. „ „ 3004.

X. „ „ 3094.

(X.) A few objects in *Monthly Notices*, vol. liii. p. 273.

The positions of these objects are generally reliable within one or two minutes of arc, but larger errors occur occasionally, and, as Mr. SWIFT rarely mentions whether he has seen other nebulae in the neighbourhood of the supposed new ones, it is generally very difficult to be certain that the latter are not identical with old ones. The absence of estimations of magnitudes and distances of the stars mentioned as being near the observed nebulae is also to be regretted.

THOME refers to some nebulae picked off the charts of the Cordoba Durchmusterung.

With regard to the descriptions of the objects it will be necessary for observers to bear in mind the aperture of the instrument with which each object has been found, as a comparison between the descriptions of the same nebula found by Mr. SWIFT with a 16-inch refractor, and by Dr. SPITALER with a 27-inch, or M. JAVELLE with a 30-inch, shows that the first-mentioned observer always describes it as much fainter than the others do, as is only natural.

Two clusters in MESSIER'S catalogue do not occur in the *New General Catalogue*, and may perhaps be mentioned here. They are (for 1860) :

M. 25	18 ^h	23 ^m	17 ^s	109°	2'·0	Cl of S st.
M. 48	8	6	54	91	32'·1	Cl of S st.

I have inserted in the catalogue a few very extensive and diffused nebulosities detected by means of photography by Mr. BARNARD and Professor MAX WOLF. The fifty-two regions found by WILLIAM HERSCHEL to be more or less "affected with nebulosity" ought to be re-examined by means of photography. Their places are given in the *Phil. Trans.* for 1811, p. 275, and in AUWERS' catalogue of W. HERSCHEL'S nebulae (*Königsberger Beobachtungen*, xxxiv. p. 199).

At the end of the catalogue I have given some notes and corrections to the *New General Catalogue*, relating chiefly to objects the places of which have been more accurately determined during recent years. Much valuable work has been done in this direction by Dr. SPITALER and Mr. BURNHAM, but there are still many doubtful cases to be examined by the possessors of large telescopes, and it is much to be hoped that some of these may turn their attention from the finding of new "eeF, eS" nebulae to the less showy but more useful work of verifying the many old nebulae which require re-observation.

Index Catalogue of Nebulae, 1888 to 1894.

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1	B. 103	h m s 0 1 15	^s +3'07	^o ['] 63 4	^{''} -20 1	D*, 13 & 13, one nebs
2	J. 1	0 3 52	3'06	103 36.2	20 1	F, S, bM
3	J. 2	0 4 56	3'07	91 12.1	20 1	F, vS, iF, r
4	Pechüle (3259)	0 6 15	3'08	73 20.6	20 0	vF, vS, R
5	J. 3	0 10 27	3'06	100 19.1	20 0	F, neb * 13m
6	J. 4	0 11 46	3'07	94 3.2	20 0	F, vS, R, m5M = * 14
7	J. 506	0 11 51	3'09	80 13.8	20 0	F, vS, R, * 12.5 elcse
8	Sf. 89 J. 5	0 11 54	3'07	93 59.9	20 0	vF, vS, irr E, lbM
9	J. 6	0 12 37	3'05	104 54.1	20 0	vF, pL, R
10	Sw. VII.	0 12 44	3'20	31 28	20 0	F * inv in eF, vL neb
11	Barnard	0 13 0 ±	3'19	34 11	20 0	vF, L, triple * on np corner
12	J. 7	0 13 6	3'07	93 26.2	20 0	pF, S, Ens
13	J. 507	0 13 8	3'08	83 4.9	20 0	vF, pL, Ens, dif
14	B. 104	0 15 22	3'09	80 18	20 0	Susp neb
15	J. 8	0 20 48	3'07	90 50.7	20 0	vF, vS, iF, sbM
16	J. 9	0 21 2	3'04	103 52.6	20 0	pB, R, bM
17	J. 10	0 21 18	3'07	88 7.8	20 0	pB, vS, R, stellar
18	J. 11	0 21 29	3'04	102 21.6	20 0	pF, S, iF, gbM
19	J. 12	0 21 33	3'04	102 24.9	20 0	R, S, stellar = 14m
20	J. 13	0 21 35	3'04	103 47.5	20 0	pB, R
21	J. 14	0 22 1	3'07	90 56.3	20 0	pB, vS, iF
22	J. 15	0 22 27	3'05	99 51.5	20 0	F, S, lbM, r
23	J. 16	0 23 47	3'04	103 30.4	19 9	pB, S, R, bM
24	B. 105	0 23 51	3'16	59 56	19 9	S, Cl, 30'-40', nebs?
25	J. 17	0 24 3	3'07	91 10.1	19 9	F, vS, irrR, vlbM, r
26	J. 18	0 24 41	3'03	104 6.8	19 9	F, S, R, gbM
27	J. 19	0 26 2	3'03	104 8.8	19 9	F, vS, lEpf, bM
28	J. 20	0 26 4	3'03	104 13.7	19 9	vF, dif, vlbM
29	J. 21	0 27 1	3'06	92 57.2	19 9	vF, S, R, lbM
30	J. 22	0 27 5	3'06	92 51.5	19 9	vF, S, R, lbM
31	J. 508	0 27 9	3'10	78 30.1	19 9	F, Epf, dif
32	J. 23	0 27 52	3'06	92 55.2	19 9	vF, vS, R, lbM
33	J. 24	0 27 56	3'06	92 54.8	19 9	vF, vS, R, lbM
34	Sf. 97, Sw. IX.	0 28 22	3'10	81 38.3	19 9	vF, pS, lE
35	J. 509	0 30 26	3'10	80 24.8	19 9	vF, S, dif, * 9.5 nf
36	J. 25	0 30 47	3'02	106 12.6	19 9	F, vS, R, dif
37	J. 26	0 31 32	3'02	106 8.1	19 8	eF, vS, R, dif
38	J. 27	0 31 37	3'02	106 11.8	19 8	F, S, R
39	J. 28	0 32 5	3'02	104 56.4	19 8	pB, pL, Ens, gbM
40	J. 510	0 32 12	+3'08	88 18.6	-19 8	F, S, R, gbMN = 13 5

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
41	J. 29	h m s 0 32 38	+ 3'02	104 56'6	- 19'8	vF, S, dif
42	J. 30	0 34 4	3'01	106 11'8	19'8	S, irr, v dif
43	B. 106	0 34 52	3'18	61 7	19'8	vF, S, mbM
44	Sw. X.	0 35 8	3'07	89 53'5	19'8	eF, S, R, bet 2 st
45	B. 107	0 35 12	3'18	61 6	19'8	Susp neb
46	J. 511	0 35 31	3'17	63 31'0	19'8	pB, S, R, bM
47	J. 31	0 35 53	3'02	104 30'8	19'8	eF, eS, R, stellar
48	Barnard (3097)	0 36 31	3'03	98 38'9	19'8	pF, S (? var brightness)
49	Sw. X.	0 36 43	3'08	88 54'6	19'8	eeF, pS, R, e diffic
50	J. 32	0 39 3	3'03	100 15'9	19'8	F, = neb * 13
51	J. 33	0 39 22	3'01	104 12'3	19'8	pB, S, bM, r
52	J. 34	0 41 9	3'09	86 40'8	19'7	vF, vS, R, gvlbM
53	Sw. X.	0 43 11	3'12	80 8'6	19'7	eeF, pS, R, others susp
54	Spitaler (2993)	0 43 38	3'06	93 3'3	19'7	Neb or S Cl, 2'. bM
55	J. 512	0 44 27	3'11	83 2'6	19'7	F, vS, dif, * 13 close
56	J. 35	0 44 29	3'01	103 36'1	19'7	vF, S, lbM
57	J. 513	0 47 31	3'13	78 55'4	19'6	F, vS, R, vlbM, F * close
58	J. 36	0 48 2	3'00	104 26'5	19'6	F, vS, R, r
59	{ M. Wolf (3214) } Barnard	0 49 0 ±	3'6	29 40	19'6	pF, eL! (nf γ Cassiop)
60	J. 37	0 49 5	3'00	104 7'7	19'6	F, v3, R, SN
61	J. 514	0 49 50	3'11	83 15'4	19'6	pF, vS, R, vlbM
62	J. 515	0 51 24	3'13	78 57'0	19'5	vF, pL, dif
63	{ Barnard } { M. Wolf (3214) }	0 51 50 ±	3'6	29 55	19'5	pF, eL! conn with np one
64	J. 516	0 51 51	3'22	63 42'2	19'5	F, S, R, gmbM
65	Sw. X.	0 52 53	3'41	43 4'2	19'5	eF, pL, mE, Bst f & s
66	B. 108	0 52 56	3'25	59 5'8	19'5	vF, vS, irr
67	B. 109	0 53 14	3'03	97 40	19'5	vF, suspected
68	B. 110	0 53 18	3'03	97 42	19'5	vF, suspected
69	Sf. 66	0 53 48	3'26	59 40'9	19'5	F, iF, lbM
70	J. 38	0 53 54	3'07	90 42'4	19'5	vF, vS, lbM
71	B. 111	0 54 14	3'03	97 32	19'5	vF, suspected
72	B. 112	0 54 28	3'03	97 31	19'5	Neb; * 7 sf 2'
73	J. 39	0 57 40	3'10	85 58'7	19'4	vF, pL, dif
74	J. 40	0 58 42	3'09	86 38'7	19'4	vF, S, stellar
75	J. 517	0 59 51	3'13	79 55'0	19'4	vF, vS, dif, vlbM
76	J. 518	1 1 6	3'04	95 18'3	19'3	F, vS, R, lbM
77	J. 41	1 1 48	2'97	106 10'2	19'3	vF, S, irr, bM
78	J. 42	1 1 52	2'97	106 35'4	19'3	F, S, lbM, r
79	J. 43	1 1 54	2'97	106 41'7	19'3	R, S, bM N = 14m
80	J. 44	1 1 56	+ 2'97	106 9'2	- 19'3	vF, S, R, gbM

No.	Observer.	R.A. 1860.	Dec. 1880.	N.P.D. 1860.	Dec. 1880.	Description.
81	Sw. VII.	h m s 1 2 3	^s + 3'06	92 26'1	-19'3	eF, S, 1E, * close nf
82	J. 45	1 2 11	2'97	106 44 7	19'3	F, S, gbM
83	J. 46	1 3 15	3'08	89 2'3	19'3	F, S, dif, lbM
84	J. 47	1 4 11	3'08	89 5'3	19'2	pB, S, iF, bM
85	B. 113	1 4 37	3'06	91 13	19'2	eF, close to * 8
86	J. 48	1 6 36	3'19	106 59'0	19'2	F, sbM
87	J. 519	1 7 4	3'07	89 58'3	19'2	F, pS, R, dif
88	J. 520	1 7 19	3'07	89 56'8	19'2	pF, S, R, vlbM
89	J. 49	1 8 48	3'10	86 27'0	19'1	F, S, iF, N = 13m; 462 f
90	O. St.	1 9 29	3'01	98 43'0	19'1	B, vS, sbMN
91	J. 521	1 11 28	3'09	88 11'1	19'1	F, S, r, N = 14m
92	B. 115	1 12 4	3'33	57 59	19'1	eeF [? different from h 98]
93	Sw. IX.	1 12 7	2'94	107 48'3	19'0	vF, pS, 1E, * 8 f 14°, 1' n
94	B. 116	1 12 17	3'33	58 2	19'0	Neb * 13
95	J. 50	1 12 22	2'97	103 18'5	19'0	F, vS, dif, vlbM
96	Sf. 69	1 12 34	3'31	61 4'0	19'0	pB, pS, vmbMN = 12'13m
97	B. 117	1 12 35	3'18	75 53	19'0	Stellar = 13'5m
98	J. 51	1 13 59	2'97	103 20'6	19'0	vF, vS, iF, bM
99	J. 52	1 15 32	2'97	103 41'1	19'0	vF, S, lbM
100	J. 522	1 15 49	3'03	95 22'5	18'9	F, vS, R, N = 12'5m
101	J. 523	1 16 47	3'14	80 47'6	18'9	vF, pL, E, dif
102	J. 524	1 17 4	3'14	80 50'2	18'9	eF, S, dif
103	J. 53	1 17 21	3'08	88 40'7	18'9	F, vS, R
104	B. 118	1 17 25	3'06	92 11	18'9	Stellar, 13m
105	J. 54	1 17 30	3'08	88 38'8	18'9	F, eS, R, lbM
106	B. 119	1 17 33	3'05	92 19	18'9	vF, S, dif, lbM
107	Sw. X.	1 17 38	3'19	75 51'2	18'9	vF, vS, R, * close p
108	J. 55	1 17 44	2'96	103 21'9	18'9	F, pL, Ens
109	J. 56	1 17 57	3'08	88 39'2	18'9	pB, vS, R
110	B. 120	1 18 3	3'36	57 14	18'9	vF
111	B. 121	1 18 5	3'36	57 15	18'9	* 13 with neb
112	J. 525	1 18 39	3'16	79 16'7	18'9	F, S, dif, Epf
113	Burnham	1 18 52	3'23	71 32'2	18'9	vF, 3' nf of * 5m
114	J. 526	1 19 1	3'14	80 48'6	18'9	eF, vS, R
115	Burnham	1 19 21	3'23	71 30'8	18'8	vF, * 6m 3 $\frac{1}{2}$ ' npp
116	J. 57	1 19 46	3'03	95 42'7	18'8	F, S, R, lbM
117	J. 58	1 20 14	3'05	92 35'5	18'8	pF, S, dif, III. 441 sf
118	J. 527	1 20 32	3'03	95 43'4	18'8	vF, vS, R, lbM
119	J. 59	1 20 47	3'05	92 46'1	18'8	F, Epf, dif, III. 442n
120	J. 60	1 21 5	3'05	92 38'5	18'8	F, S, dif
121	J. 528	1 21 8	3'09	88 11'6	18'8	F, S, R, gbM
122	J. 61	1 21 22	+ 2'94	105 33'8	-18'8	pB, S, bM

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
123	J. 529	^h 1 21 ^m 38 ^s	+ 3 09	88 15 7	- 18 8	F, S, R, sbM
124	J. 62	1 22 2	3 05	92 39 6	18 7	vF, vS, dif
125	J. 63	1 22 25	2 95	104 0 1	18 7	vF, vS, R, lbM
126	J. 64	1 22 41	3 05	92 42 5	18 7	eF, stellar, 577 f
127	J. 530	1 22 46	3 01	97 42 5	18 7	F, pS, dif, * 11 5 close
128	J. 65	1 24 30	2 96	103 20 9	18 7	F, R, S, N
129	J. 66	1 24 37	2 96	103 22 7	18 7	F, pL, R, dif
130	J. 67	1 24 38	2 93	106 18 8	18 7	vF, S, dif
131	B. 122	1 25 22	3 35	59 58	18 6	vF, close to * 13 5
132	B. 123	1 25 23	3 35	59 47	18 6	vF, D * (13, 13) close
133	B. 124	1 25 24	3 35	59 50	18 6	vF, S, vlb south, dif
134	B. 125	1 25 33	3 35	59 50	18 6	vF, susp, * 9 n 3'
135	B. 126	1 25 33	3 35	60 18	18 6	vF
136	B. 127	1 25 34	3 35	60 15	18 6	eF, diffie, * 10 np 3'
137	B. 128	1 25 44	3 35	60 13	18 6	vF, pL, dif
138	Sf. 95	1 25 46	3 06	91 23 9	18 6	No description
139	B. 129	1 25 50	3 35	60 15	18 6	vF, v dif, vlbM
140	B. 130	1 25 52	3 35	60 14	18 6	vF, dif
141	J. 68	1 26 0	2 94	105 32 1	18 6	pB, S, R, N 11 5 excentr
142	B. 131	1 26 7	3 36	59 58	18 6	vF, stellar, or * 13 inv
143	B. 132	1 26 18	3 36	59 57	18 6	vF, S, dif, * 13 f 0' 6
144	J. 69	1 30 49	2 94	104 1 8	18 4	eF, eS, stellar
145	J. 531	1 31 27	3 07	89 58 2	18 4	F, S, dif
146	J. 70	1 31 54	2 89	108 32 4	18 4	F, vS, R, lbM
147	J. 532	1 33 10	2 92	105 33 8	18 4	F, vS, R, vF * close
148	Sw. X.	1 34 54	3 20	77 3 6	18 3	eeF, pS, v diffie, II. 253 sf
149	J. 533	1 35 36	2 91	107 0 2	18 3	F, pS, Epf, lbM
150	J. 534	1 35 39	3 11	86 31 3	18 3	F, S, R, dif, * 10 5 near, h 148 f
151	Sw. X.	1 36 29	3 20	77 30 2	18 3	eF, pS, np of 2
152	Sw. X.	1 36 39	3 20	77 40 2	18 3	eF, S, R, vF * close, sf of 2
153	Sw. X.	1 37 9	3 19	78 4 6	18 2	eF, pS, R, sp of 2
154	J. 535	1 37 52	3 17	80 3 1	18 2	F, vS, lbM, * 11 5 sp
155	M. Wolf (3214)	1 38 0 ±	4 0	30 55 ±	18 2	vF, eL, dif
156	J. 536	1 38 4	3 17	80 9 0	18 2	pB, S, R, mbMN = * 12
157	Sw. X.	1 38 14	3 19	77 49 8	18 2	eeF, S, R, D * p, nf of 2
158	J. 537	1 38 54	3 00	97 38 6	18 2	vF, vS, R, mbM
159	J. 538	1 39 29	2 98	99 20 0	18 2	pB, S, R, mbM
160	J. 71	1 39 40	2 93	103 57 2	18 2	F, stellar, 13m
161	Sw. X.	1 41 20	3 17	80 20 3	18 1	eeF, vS, R
162	Sw. IX. & X.	1 41 27	3 17	80 10 4	18 1	eeF, S, 1E
163	Sf 72, Sw. IX.	1 41 42	3 28	69 59 0	18 1	F, pS, R, bM
164	Sw. IX.	1 42 19	+ 3 03	94 37 2	- 18 1	pF, S, R, bet 2st (? S Cl)

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
165	Sw. IX.	^h 1 42 ^m 19 ^s	+ 3'37	63° 4'2"	- 18'1"	eF, S, 1E, vF * close f
166	Denning	1 42 48	4'13	28 52	18'0"	S Cl, nebulous ?
167	B. 133	1 43 23	3'30	68 49	18 0	eF, * 10'5 n 4'
168	Burnham, J. 539	1 43 31	2'98	99 13 6	18'0"	vF, stellar, * 10 f 4' (707 f 1 ^m)
169	J. 72	1 43 47	2'93	103 22'4"	18'0"	F, S, Epf, bM, r
170	J. 510	1 45 1	2'98	99 13'3"	17'9"	F, vS, R, stellar
171	Sw. VIII.	1 47 10	3'50	55 23'7"	17'9"	pB, pS, cE, * nf
172	J. 541	1 47 43	3'07	89 52'7"	17'8"	pB, S, R, bM
173	J. 542	1 48 43	3'08	89 24'9"	17'8"	F, pS, R, lbM
174	J. 73	1 48 59	3'10	86 56'1"	17'8"	Neb * 13m
175	J. 543	1 49 5	3'08	89 22'2"	17'8"	vF, dif, diffic
176	J. 74	1 49 48	3'04	92 42'1"	17'8"	pB, S
177	J. 75	1 49 57	3'06	90 50'1"	17'8"	F, vS, R, dif
178	Sf. 67	1 50 40	3'53	54 4'4"	17'7"	pF, N = 13m
179	Sw. X	1 51 33	3'57	52 38'9"	17'7"	pB, S, 1E, * 9'5 nf
180	J. 544	1 52 13	3'34	67 4'7"	17'7"	vF, eS, R, stellar, sf 776
181	J. 545	1 52 15	3'34	67 1'4"	17'6"	eF, eS, stellar
182	J. 546	1 52 29	3'15	83 17'3"	17'6"	F, pL, biN
183	J. 547	1 52 33	3'00	96 1'7"	17'6"	F, vS, R, lbM
184	O. St.	1 52 53	2'99	97 31'3"	17'6"	eF, vS
185	J. 548	1 52 59	3'05	92 12'3"	17'6"	eF, vS, dif
186	J. 549	1 53 18	3'05	92 13'7"	17'6"	F, double, dist 15''
187	Sw. IX.	1 53 56	3'39	64 12'4"	17'6"	eeF, R
188	Sw. IX.	1 54 1	3'39	63 39'0"	17'6"	eeF, vS, R
189	J. 550	1 54 5	3'34	67 7'7"	17'6"	vF, vS, R, * 13'5 close
190	J. 551	1 54 19	3'35	67 7'9"	17'6"	F, vS, R, mbM
191	Sw. IX.	1 54 47	3'28	72 18'5"	17'5"	pB, pL, 1E [probably = h 188]
192	Spitaler (2993)	1 54 57	3'25	74 39'3"	17'5"	F, L, R, lbM
193	Sw. VII.	1 55 14	3'19	79 36'0"	17'5"	eF, pS, 1E, B * sf, F * f
194	J. 552	1 55 50	3'03	88 4'0"	17'5"	vF, vS, R, * 9'5 f 15°
195	Sw. IX.	1 56 8	3'24	75 58'5"	17'5"	eeF, S, R, F * s
196	Sw. IX.	1 56 23	3'24	75 57'1"	17'5"	pF, pS, R, 3st nr
197	J. 553	1 56 51	3'10	87 52'3"	17'5"	pB, S, E 225°, gbM
198	J. 554	1 58 38	3'17	81 21'6"	17'4"	pB, pS, R, bM
199	J. 555	1 58 54	3'17	81 25'6"	17'3"	F, S, R, bM
200	Sf. 71	1 59 18	3'47	59 29'9"	17'3"	pB, pL, R, bM
201	J. 556	1 59 50	3'17	81 33'8"	17'3"	vF, S, dif
202	J. 557	2 0 3	3'17	81 30'5"	17'3"	vF, vS, dif
203	J. 558	2 0 5	3'17	81 33'4"	17'3"	vF, vS, R, * 10 sf
204	Sf. 98	2 0 17	3'05	92 3'6"	17'3"	No description
205	J. 76	2 0 22	3'04	92 45'9"	17'3"	pB, vS, irr R
206	J. 77	2 0 34	+ 2'98	97 41'7"	- 17'3"	pF, S, irr R

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
207	J. 78	h m s 2 0 43	s +2.98	° ′ 97 39.0	— 17.3	pF, S, irr R
208	B. 134	2 1 8	3.14	84 18	17.3	vF, pL, dif
209	J. 79	2 2 0	2.98	97 43.6	17.2	pB, S, dif
210	Sf. 101	2 2 32	2.95	100 20.3	17.2	No description
211	J. 559	2 3 53	3.11	86 49.2	17.1	F, pS, R, bM, 851 sf
212	J. 560	2 5 57	3.27	74 3.8	17.0	F, vS, R, stellar
213	J. 561	2 6 24	3.27	74 12.4	17.0	F, S, gbM, * 13.5 close
214	J. 562	2 6 46	3.13	85 29.4	17.0	pB, S, gbM, r
215	J. 80	2 7 12	2.98	97 27.6	17.0	pB, E pf
216	J. 81	2 8 50	3.04	92 39.9	16.9	vF, eS, R, lbM
217	J. 563	2 9 24	2.91	102 34.9	16.9	F, pL, E ns
218	J. 564	2 9 56	3.08	89 22.0	16.9	vF, S, dif, * 13.5 close, 875 sf
219	J. 82, O. St.	2 11 41	3.97	97 33.4	16.8	pB, S, stellar
220	J. 83	2 12 26	2.90	103 25.8	16.7	vF, dif, vlbM
221	Spitaler 1	2 14 33	3.46	62 22.5	16.6	F, pL, R
222	J. 565	2 15 18	3.22	79 0.1	16.6	F, S, irr, N, excentr
223	B. 135, O. St.	2 15 34	2.78	111 23	16.6	vF, S, dif, vF stell N
224	J. 84	2 18 0	2.89	103 12.3	16.5	F, S, irr R, lbM
225	J. 566	2 19 15	3.08	89 27.8	16.4	F, S, R, vlbM, * 14 nf 2'
226	Spitaler 2	2 19 38	3.48	62 25.2	16.4	pF, S, R, bM, 2 F st n
227	Spitaler 3	2 19 56	3.48	62 27.2	16.4	F, p S, R, lbM
228	J. 85	2 20 1	2.86	105 8.4	16.4	vS, R, gbM
229	Thome	2 21 2	2.73	114 27.0	16.3	Neb, 10 mag
230	Burnham	2 22 1	2.92	101 27.9	16.3	eF, S, * 9.4 np 9'
231	J. 567	2 22 42	3.08	89 26.0	16.2	F, vS, R, Stellar
232	Sw. VII.	2 23 53	3.08	89 21.3	16.2	vF, S, R (? = J. 567)
233	J. 568	2 24 24	3.10	87 48.8	16.1	pF, S, R, lbM, vF * sr'
234	J. 86	2 24 26	3.06	90 45.6	16.1	F, S, dif, r
235	J. 569	2 25 1	3.36	69 58.6	16.1	F, S, dif
236	J. 87	2 25 44	3.06	90 45.0	16.1	F, S, dif, vlbM
237	J. 570	2 26 20	3.08	89 29.2	16.1	F, S, R, * 9.5 p
238	Sw. VII.	2 27 38	3.25	77 47.0	16.0	vF, vS, R, mbM
239	Roberts	2 27 48	3.72	51 37.9	15.9	vF spiral, F stellar N
240	B. 136	2 30 11	3.78	48 53	15.8	vF, pS
241	B. 137	2 30 41	3.10	88 17	15.8	vF, pS, R, stell N
242	J. 88	2 31 29	2.96	97 32.3	15.8	eF, eS, vF * close
243	J. 89	2 31 37	2.96	97 30.3	15.8	vF, vS, R, lbM
244	J. 571	2 32 8	3.10	87 53.8	15.7	vF, vS, dif
245	J. 90	2 32 15	2.85	104 54.4	15.7	pB, S, R, lbM
246	Sw. VII.	2 32 51	3.10	88 7.2	15.7	eeF, vF, R, 2 eF st nr
247	J. 91	2 33 23	2.89	102 19.8	15.7	pB, S, R
248	Burnham	2 33 37	+3.33	72 47.3	-15.7	vF

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
249	J. 92	h m s 2 34 6	s +2.96	° ' " 97 32.4	-15.6	pB, vS, R, dif, 1051 f
250	J. 93	2 34 12	2.86	103 55.1	15.6	vF, pS, iF
251	J. 94	2 34 36	2.84	105 33.6	15.6	F, S, lbM
252	J. 95	2 35 7	2.84	105 26.9	15.6	F, S, bM
253	J. 96	2 35 27	2.84	105 38.9	15.6	bB, iF, bM
254	J. 97	2 35 27	2.84	105 42.5	15.6	vF, eS, R, 1065 close
255	J. 572	2 39 15	3.32	74 19.5	15.4	vF, vS, R, * 12 f 5 ^a
256	Sw. VIII.	2 40 25	3.99	43 36.4	15.3	cF, lE, S, 1st of 3
257	Sw. VIII.	2 40 30	3.99	43 36.1	15.3	eF, pS, R, v diffie, 2nd of 3
258	Burnham	2 40 49	3.80	49 31.5	15.3	vF, vlbM, * 9.5 f 2'
259	Burnham	2 41 12	3.80	49 31.4	15.3	vF, double, dist 17"
260	Sw. VIII.	2 41 40	3.99	43 37.3	15.2	eeF, pS, 2 F st nr, 3rd of 3
261	J. 98	2 42 26	2.84	105 3.3	15.2	F, pL
262	Sw. VIII.	2 42 34	3.87	47 45.3	15.1	eeF, pS, R, bet 2st, v diffie
263	J. 99	2 43 25	3.06	90 42.0	15.1	vF, vS, R, N = 14m
264	J. 100	2 43 44	3.06	90 44.4	15.1	vF, eS, R, stellar
265	Sw. VIII.	2 45 46	3.85	48 54.8	15.0	eeF, eS, R
266	Sw. VIII.	2 45 59	3.86	48 18.8	15.0	eF, eS, R
267	B. 138, Sw. VII.	2 46 29	3.27	77 41.0	15.0	vF, pS, dif, II 254 np
268	J. 101	2 48 48	2.84	104 40.4	14.8	vF, vS, irr R, lbM
269	J. 102	2 48 49	2.84	104 38.1	14.8	eF, vS, dif
270	J. 103	2 49 7	2.84	104 46.4	14.8	pB, vS, R
271	J. 573	2 49 18	2.87	102 34.9	14.8	vF, S, R
272	J. 104	2 49 29	2.83	104 45.0	14.8	vF, S, iF
273	J. 574	2 49 55	3.11	87 46.5	14.8	F, pS, lE 235°, bM
274	Sw. VIII.	2 50 50	3.95	46 20.8	14.7	eeF, pS, R, v diffie
275	Sw. VIII.	2 51 40	3.95	46 12.8	14.6	eeF, pS, R, bet 2st
276	J. 575	2 52 8	2.80	106 16.2	14.6	pB, S, mbM
277	J. 576	2 52 35	3.11	87 47.4	14.6	pB, pS, R, N = 12.5
278	Burnham	2 52 39	3.77	52 47.6	14.5	vF, * 10 p 95", F * 12" sp
279	J. 577	2 53 24	3.33	74 20.3	14.5	vF, vS, R, dif
280	Sw. VIII.	2 54 11	3.91	48 11.9	14.4	eF, pS, R
281	Sw. VIII.	2 55 23	3.91	48 11.9	14.4	eeF, vS, * close n, II 607 nr
282	Sw. VIII.	2 56 3	3.90	48 41.7	14.4	eF, S, R, bet 2st nr
283	J. 105	2 56 42	3.06	90 45.7	14.3	pB, eS, R
284	Sw. VIII.	2 56 47	3.92	48 10.9	14.3	eeF, pL, lE, D * np, bet 2st
285	J. 578	2 57 25	2.87	102 34.3	14.3	F, vS, dif, II. 475 p
286	B. 139	2 57 53	2.96	97 2	14.3	vF
287	J. 579	2 58 17	2.86	102 37.6	14.2	F, vS, R, stellar
288	Sw. VIII.	2 58 17	3.92	48 10.7	14.2	vF, vS, R, 2st nf, ? S Cl
289	Sw. VIII.	2 59 7	4.77	29 12.9	14.2	pB, pL, R, bet 2vFst
290	Sw. VIII.	3 0 35	+3.88	49 33.3	-14.2	eeF, S, R

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
291	J. 106	h m s 3 0 46	+ 2'85	103° 8'1	--14'1	F, S, R, bM
292	Sw. VIII.	3 1 10	3'88	49 46'5	14'1	eF, pS, R, *s, bet 2st
293	Sw. VIII.	3 1 44	3'89	49 23'7	14'0	eF, S, R
294	Sw. VIII.	3 1 50	3'88	49 54'2	14'0	vF, pS, irr R
295	Sw. VIII.	3 1 55	3'88	49 55'2	14'0	eF, pS, R
296	Sw. VIII.	3 1 59	3'88	49 54'5	14'0	eF, pS, irrR, F D *p
297.	Sw. VIII.	3 4 2	3'93	48 25'5	13'9	eeF, pS, R, v diffie, F *sp
298	J. 580	3 4 5	3'09	89 12'4	13'9	F, pL, 2B points inv
299	J. 107	3 4 25	2'84	103 38'6	13'8	vF, vS, R, lbM
300	Sw. VIII.	3 4 52	3'94	48 4'9	13'8	eF, S, R, *9 sp, np of 2
301	Sw. VIII.	3 5 27	3'95	48 17'9	13'8	eF, pS, R, sf of 2
302	J. 581	3 5 30	3'14	85 49'4	13'8	pF, pS, R, vSN
303	J. 582	3 5 59	2'86	102 13'3	13'7	eF, eS, stellar
304	Burnham	3 6 6	3'82	52 38'6	13'7	vF, *76'' sf, np of 2
305	Burnham	3 6 8	3'82	52 39'9	13'7	vF, *49'' nf
306	J. 583	3 6 18	2'86	102 14'8	13'7	eF, S, R, diffie
307	J. 108	3 6 37	3'06	90 44'1	13'7	pB, vS, r
308	Sw. VIII.	3 6 48	3'92	49 20'6	13'7	eF, pS, iR, r?
309	Sw. VIII.	3 6 52	3'91	49 43'0	13'7	eeF, pS, R, bet 2st
310	Sw. VIII.	3 7 32	3'92	49 11'2	13'6	vF, pS, R, 1259 and 1260 near
311	Sw. VIII.	3 7 34	3'88	50 30'8	13'6	eF, pS, iR, bet 2st, vF * v. close f
312	Sw. VIII.	3 8 54	3'94	48 46'5	13'6	eeF, pS, R, nearly bet 2st
313	Sw. VIII.	3 11 42	3'93	48 36'8	13'5	eeF, vS, R, close D *nr s
314	B. 140	3 11 45	3'03	92 29	13'3	* 13 in vF, S neb
315	J. 584	3 11 50	3'13	86 29'4	13'3	vF, S, dif, vlbM
316	Sw. VIII.	3 12 9	3'95	48 34'6	13'3	eeF, pS, R
317	J. 109	3 12 18	2'84	103 15'5	13'3	vF, pL, R
318	J. 110	3 14 11	2'80	105 4'4	13'2	F, S, dif, lbM
319	B. 141	3 14 13	3'94	49 6	13'2	stellar, = 13m
320	Sw. VIII.	3 16 42	3'93	49 42'5	13'0	eF, pS, R, vF * close p
321	J. 111	3 17 58	2'79	105 29'0	13'0	pB, vS, R
322	J. 585	3 18 42	3'13	86 49'1	12'9	vF, pL, vlbM, diffie
323	Sw. VIII.	3 20 11	3'98	48 37'6	12'8	eF, pS, R, p of 2
324	B. 142	3 20 16	2'66	111 51	12'8	F, pS, dif, bM
325	J. 112	3 23 58	2'93	97 31'8	12'5	vF, S, R, vlbM
326	J. 113	3 24 5	2'79	104 54'6	12'5	vF, pL, E ns
327	J. 586	3 24 38	2'79	105 10'7	12'5	eF, vS, dif, v diffie
328	J. 114	3 24 40	2'79	105 7'3	12'5	vF, eS, R
329	J. 115	3 24 51	3'07	90 11'4	12'5	F, vS, R, lbM
330	J. 116	3 24 58	3'07	90 6'8	12'5	F, vS, R, lbM
331	J. 117	3 25 9	3'07	90 11'2	12'5	* 13 in neb
332	J. 587	3 25 26	+ 3'09	89 4'8	-12'4	F, vS, R, sbM

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
333	B. 143	h m s 3 27 6	s +2 97	° ′ 95 35	— ′ 12 3	eF * 8.8 nf 4'
334	Denning	3 27 31	7 41	13 48	12 2	pB, S, * 13 inv sf
335	Sw. VII.	3 29 35	2 33	124 55 0	12 2	pF, pS, eE pf
336	Barnard (3253)	3 30 ±	...	67	...	vF, eeL, v dif
337	Sw. IX.	3 30 12	2 94	97 11 2	12 1	eeF, pL, 3 st nr
338	J. 588	3 30 21	3 12	87 19 6	12 1	vF, S, dif, vF * close
339	O. St.	3 31 47	2 71	108 50 5	12 0	eF, eS, stell N
340	J. 118	3 32 56	2 82	103 34 4	12 0	F, pS, Epf, * 14 at end
341	Barnard (3253)	3 33 ±	...	68 30 ±	...	vF, eeL, v dif
342	Denning	3 33 20	5 71	22 21	11 8	pB, vS, * 12 close n
343	O. St.	3 33 48	2 71	108 53 9	11 9	eF, vS, 1E90°, dif
344	h. 305 = Sw. IX.	3 34 34	2 98	95 7 0	11 8	eeF, pL, R, II. 455 f
345	O. St.	3 34 50	2 70	108 46 0	11 8	eF, vS, iR, gbM
346	O. St.	3 35 6	2 70	108 49 4	11 8	vF, eS
347	Sw. IX.	3 35 36	2 98	94 45 9	11 7	eF, vS, R, stellar
348	Sf. 70	3 35 47	3 73	58 16 8	11 8	pB, vL, vgbM
349	Barnard (3018)	3 37 55	3 54	66 41	11 6	{ eF, vS, Pos. 165°, Dist. 36'' from Merope
350	J. 119	3 37 59	2 83	102 14 2	11 6	F, S, R, v dif
351	Barnard (3017)	3 38 33	3 83	55 22 6	11 5	O = * 10m, * 9m p 14', 2' s
352	J. 589	3 40 52	2 90	99 10 4	11 3	F, vS, R, bM
353	Barnard (3253)	3 45 ±	...	64 30 ±	...	vF, eeL, v dif
354	Barnard (3253)	3 45 ±	...	67 ±	...	vF, eeL, v dif
355	J. 590	3 45 39	3 46	70 24 8	...	vF, S, R, dif
356	{ Barnard (3097) Denning }	3 53 19	6 14	20 34 4	10 4	pF, pL, bM, * 8.5 4' n
357	Sf. 73	3 55 31	3 52	68 14 1	10 3	F, S, R, N = 13 5
358	J. 120	3 55 33	3 48	70 29 0	10 3	vS, dif, lbM
359	Sw. X.	4 4 51	3 68	62 39 8	9 6	eeF, pL, R
360	Barnard (3253)	4 6 ±	...	64 20	...	vF, eeL, v dif
361	Denning	4 7 24	4 96	32 3	9 3	F, L, ? neb Cl
362	J. 121	4 10 9	2 81	102 33 0	8 8	pB, vS, bM
363	Burnham (3048)	4 11 38	3 13	87 18	9 1	eF, * 9 nf 3'
364	J. 591	4 11 47	3 13	87 9 1	9 0	vF, vS, R, sbM
365	J. 592	4 11 55	3 13	86 59 4	9 0	pB, S, iF, sbM
366	Burnham (3048)	4 12 17	3 11	87 59 2	9 0	eF, 3' sf of 1550
367	[J. 122	4 14 16	2 75	105 7 3	8 9	pB, pL, dif
368	J. 123	4 16 11	2 79	102 56 8	8 7	eS, R, bM
369	J. 124	4 16 55	2 81	102 7 2	8 7	F, S, R, stellar
370	J. 593	4 17 20	2 87	99 43 6	8 6	eF, S, dif
371	B. 145	4 23 3	3 05	90 52	8 2	Stellar, eS, ? neb
372	J. 594	4 23 9	+ 2 96	95 19 1	— 8 1	F, vS, R, lbM

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1850.	Prec. 1880.	Description.
373	J. 595	h m s 4 23 48	+2 96	95 10 9	-8 1	F, vS, R, mbM
374	Spitaler 4	4 24 32	3 43	73 40 0	8 0	F, S, R, mbM
375	J. 125	4 24 34	2 78	103 16 7	8 0	vF, dif, lbM
376	J. 126	4 24 42	2 79	102 44 0	8 0	F, iF
377	J. 127	4 24 45	2 79	102 45 4	8 0	F, iF
378	J. 128	4 24 57	2 80	102 36 1	8 0	* strongly nebs
379	J. 596	4 25 3	2 91	97 32 5	8 0	vF, S, R, dif
380	J. 129	4 25 12	2 79	103 13 8	8 0	vF, bM
381	Denning	4 26 5	7 8	14 38 7	7 8	F, S, bM, * 12 np
382	J. 597	4 31 14	2 86	99 48 9	7 5	pB, pL, R, SN
383	J. 598	4 31 19	3 28	80 23 4	7 5	vF, S, dif, * 11 5 f
384	J. 599	4 32 32	2 89	98 7 0	7 4	F, eS, R, * 11 n
385	J. 600	4 32 44	2 91	97 22 3	7 4	vF, vS, R, dif
386	J. 601	4 33 18	2 86	99 44 0	7 3	vF, vS, vlbM
387	J. 602	4 31 57	2 91	97 21 5	7 2	eF, pL, v dif, diffie
388	J. 130	4 35 6	2 91	97 34 2	7 2	vF, v dif, S * inv
389	J. 131	4 35 12	2 91	97 34 7	7 2	F, S, R, stellar
390	J. 132 = 603	4 35 16	2 91	97 28 4	7 2	vF, vS, R
391	Denning	4 36 20	8 96	12 4	6 9	F, S, R
392	J. 604	4 39 5	3 14	86 44 8	6 9	pB, S, R, N = 12 5
393	J. 133	4 41 31	2 72	105 46 8	6 6	F, vS, iF, lbM
394	B. 146	4 42 2	2 93	96 32	6 6	vF, dif, ? vS Cl
395	Sw. IX.	4 42 13	3 07	90 0 0	6 6	eF, vS, R, F * close f
396	Denning	4 43 36	6 08	21 53 4	6 4	F, S, R, bMN, FD * sf
397	Spitaler 5	4 51 24	4 16	49 47 0	5 8	F, S
398	O. St.	4 51 27	2 89	98 0 ±	5 8	eF, pL, E 5°, dif
399	Spitaler 35	4 54 48	2 97	94 29 7	5 6	vF, vS, sf of 1741
400	O. St.	4 57 25	2 70	105 58 ±	5 4	eF, eS
401	J. 605	4 57 42	2 84	100 16 6	5 3	vF, vS, R, vSN
402	O. St.	4 59 35	2 86	99 19 6	5 2	eF, pL, iR, dif
403	Spitaler 6	5 5 33	4 15	50 11 6	4 6	eF, eS, R
404	J. 606	5 5 39	3 29	80 24 8	4 6	vF, vS, stellar, * 13 close
405	Schæberle, M. Wolf	5 7 4	3 95	55 50 7	4 5	* 6 7 with pB, vL neb
406	Spitaler 7	5 8 6	4 16	50 16 4	4 4	eF neb or eS neb Cl
407	J. 134	5 11 23	2 71	105 40 3	4 2	F, 1E ns
408	Sw. VIII.	5 12 10	2 46	115 14 5	4 1	vF, pS, E, * 8 5 south 5'
409	J. 607	5 12 13	3 15	86 49 9	4 1	pB, R, biN ?
410	M. Wolf (3130)	5 13 20	3 93	56 38	3 9	Dif, many st inv
411	Sw. VIII.	5 14 33	2 45	115 28 4	3 9	vF, pS, R, 2 others in field
412	Barnard, J. 608	5 14 36	3 15	86 39 3	3 9	vF, vS, stellar
413	Barnard, J. 609	5 14 39	3 15	86 39 5	3 9	eF, vS, stellar
414	Burnham	5 14 40	+3 14	86 49 6	-3 8	eF, * 9 sf 2'

ROYAL ASTRON. SOC.. VOL. LI,

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
415	J. 135	h m s 5 15 2	^s + 2'70	105° 41'0	—3'8	vF, vS, R, dif
416	J. 610	5 17 44	2'66	107 23 1	3 6	F, S, gbM
417	M. Wolf (3130)	5 18 50	3'97	55 40	3'5	vL, dif, * 6 inv
418	Pickering (3049)	5 20 59	2'78	102 48 7	3'3	○ = * 9'2 (gaseous sp)
419	M. Wolf (3130)	5 22 0	3'83	59 58	3'2	pB, L, mE
420	Pickering	5 25 20	2'97	94 36	2'9	vF, sfp * 9 (not verified)
421	Pickering	5 25 30	2'88	98 11	2'9	vF, L
422	J. 611	5 26 6	2'66	107 19 7	2'9	pB, vS, R, sbM
423	Pickering	5 26 15	3'06	90 43	2 8	vF, L oval ring
424	Pickering	5 26 30	3'05	90 25	2'8	vF, L, brightest f
425	M. Wolf (3130)	5 28	3'91	57 40	2'7	F, vvL
426	Pickering	5 29 40	3'07	90 20	2'6	vF, 5' diam
427	Pickering	5 29 45	2'92	96 45	2'6	} L, probably connected with Great Neb
428	Pickering	5 29 50	2 92	96 35	2'6	
429	J. 612	5 31 32	2 90	97 8'0	2'4	vF, vS, R [? inv in f one]
430	Pickering	5 31 45	2'90	97 10'0	2'4	Neb band 10' 1, np * 5m
431	Pickering	5 33 10	3'04	91 32	2'3	Neb * 8'6
432	Pickering	5 33 50	3'04	91 34	2'3	Neb, 1E, * 8'4 inv
433	J. 613	5 34 0	2'79	101 43 9	2'2	F, S, dif, gbM
434	Pickering	5 34 0	3'01	92 29	2 2	Neb, 60' 1, south from ζ Orionis
435	Pickering	5 35 55	3 02	92 23	2'0	Neb, * 8'5
436	Spitaler 8	5 44 1	4'14	51 24'5	1'3	eF
437	J. 614	5 45 9	2'77	102 36 3	1'2	vF, vS, R, dif
438	Sw. X.	5 46 41	2 64	107 54'3	1'1	eeF, pS, Ems, 2 st p
439	M. Wolf (3130)	5 47 30	3'90	58 0	1'1	eeL, eE 150° ±
440	Denning	5 54 15	10'72	9 55	0'2	vF, S
441	J. 615	5 56 14	2'77	102 30'1	—0'3	eF, vS, diffic, vF * cl. se
442	Denning	6 4 45	14'00	6 57'7	+ 0'8	F, S, R, mbM
443	{ M. Wolf (3130) Barnard }	6 8	3'62	67 30	0'9	F, narrow, curved
444	{ M. Wolf (3130) Barnard }	6 11 55	3'65	66 41	1'0	Neb, * 9'5 inv
445	Sw. VIII.	6 22 39	6'36	22 1'4	2'2	eF, S, R, B * sf
446	Barnard	6 23 14	3'32	79 27'4	2'1	Neb * 10m
447	Barnard	6 23 27	3'31	79 53	2 2	vF, eeL, dif
448	M. Wolf (3027)	6 25	3'24	82 30 ±	2'3	Neby, np * 5 mag
449	Sw. VIII.	6 29 24	7'02	18 31'1	2'8	pF, S, R, bM, bet 2 D st
450	Denning	6 35 4	7'82	15 31	3'3	vF, S
451	Denning	6 35 43	7'83	15 27	3'4	vF, S
452	B. 147	6 42 23	2'67	106 45	3 8	* 13'5 in S neb y
453	B. 148	6 42 54	2'67	106 53	3'8	* 13 in S neb, or 2 cr 3 st close
454	Sw. IX.	6 43 22	+ 3'37	76 55'0	+ 3'9	eeF, S, e d'fic

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
455	Denning	h m s 6 49 9	+20 ^s 57	° 4 12' 6"	+4' 9"	vF, eS, sf 2300
456	Sw. X.	6 54 50	2 32	119 58' 6"	4 8"	vF, pS, R, B st nf and np
457	Ld. R., Kobold	6 58 42	4' 63	39 38' 0"	5' 2"	eF, sp h 430
458	{ Ld. R., Sw. VIII., Kobold }	6 59 49	4' 63	39 39' 7"	5' 3"	F, bM
459	Ld. R., Kobold	6 59 51	4' 63	39 36' 2"	5 3	eF
460	Kobold	6 59 58	4 63	39 34' 7"	5 3	vF (not seen at Birr)
461	{ Ld. R., Sw. VIII., Kobold }	7 0 1	4' 63	39 41' 9"	5' 3"	vF, 3 F st f
462	Kobold	7 0 11	4 63	39 35' 8"	5 4	vF (not seen at Birr)
463	{ Ld. R., Sw. VIII., Kobold }	7 0 14	4' 63	39 39' 8"	5 4	eF
464	Ld. R., Kobold	7 0 19	4' 63	39 38' 5"	5' 4"	F
465	Ld. R., Kobold	7 0 47	4' 63	39 31' 7"	5 4	F
466	J. 616	7 1 42	2' 98	94 6 2"	5' 5"	* 11' 5 in vF neb
467	Denning	7 3 38	10' 44	9 49' 7"	5' 8"	vF, pS, ssf of 2336
468	B. 149	7 10 52	2' 78	102 55	6' 2"	vF neby, perhaps 2 or 3 st inv
469	Denning	7 12 56	19' 76	4 26' 7"	7' 1"	F, S, E, sf 2300
470	Sw. X.	7 13 18	4' 40	43 39' 8"	6' 4"	eF, eS, stellar
471	Sw. IX.	7 32 49	4' 53	39 59' 5"	8' 0"	eF, pS, R, up of 2
472	Sw. IX.	7 33 4	4' 52	40 2' 0"	8' 1"	eeF, pS, R, sf of 2
473	Spitaler 9	7 34 46	3' 28	80 25' 5"	8' 2"	Neb * 14, h 462 nf
474	J. 136	7 37 30	3' 69	63 11' 2"	8' 4"	pB, vS, dif
475	J. 137	7 38 19	3' 80	59 10' 2"	8' 4"	vF, vS, dif
476	J. 138	7 38 38	3' 70	62 42' 5"	8' 4"	vF, vS, lbM, diffie
477	J. 139	7 43 44	3' 60	66 9' 8"	8' 9"	F, pL, R, dif
478	J. 140	7 45 8	3' 68	63 9' 2"	9' 0"	vF, vS, dif
479	J. 141	7 45 47	3' 69	62 37' 0"	9' 1"	pF, vS, R
480	J. 142	7 46 46	3' 68	62 51' 5"	9' 1"	vF, pL, Ens, dif
481	J. 143	7 50 38	3' 61	65 27' 8"	9' 4"	vF, vS, dif
482	J. 144	7 51 20	3' 64	64 16' 7"	9' 4"	vF, S, dif, diffie
483	Spitaler 10	7 51 22	3' 65	63 42' 0"	9' 5"	F, S, bM, F * nf
484	J. 145, Spitaler 11	7 51 28	3' 67	62 57' 7"	9' 5"	F, vS, R, bM
485	J. 146, Spitaler 12a	7 51 47	3' 67	62 55' 8"	9' 5"	vF, vS, R, sbM
486	J. 147, Spitaler 12	7 51 48	3' 67	63 0' 8"	9' 5"	F, S, dif, gbM
487	Sw. VII	7 52 3	3' 66	90 17' 0"	9' 6"	eeF, vS, R
488	Spitaler 13	7 52 19	3' 65	63 42' 8"	9' 6"	vF, S, dif, * 13 sp
489	Spitaler 14	7 53 7	3' 65	63 34	9' 6"	vF, vS, sbM
490	J. 148	7 54 49	3' 65	63 48' 2"	9' 7"	eF, eS, S * f
491	J. 149	7 55 22	3' 66	63 5' 9"	9' 7"	vF, eS, R
492	{ J. 150, Barnard (3038), Spitaler 15 }	7 57 9	3' 65	63 26' 5"	9' 9"	pB, vgbM, Ens, * 13' 5 sf
493	J. 151	7 58 59	+3' 63	64 30' 3"	+10' 0"	pB, Ens

No.	Observer.	R.A. 1860.			N.P.D. 1860.	Prec. 1880.	Description.	
		h	m	s				
494	B. 150	7	59	7	+ 3°10	88 34'	+ 10°0	vF, pS, bM
495	J. 617	8	0	43	3°25	80 34.9	10 1	vF, vS, R, gv1bM
495	J. 152	8	1	16	3°64	63 42.9	10 2	pF, S, Epf, lbM
497	J. 153	8	1	41	3°62	64 41.5	10.2	F, S, R, lbM
498	Spitaler (2932)	8	2	6	3°18	84 18.7	10 3	F, pS, R
499	Denning	8	4	54	19°79	3 46.9	10 9	pF, S, mbM, *nf
500	J. 618	8	6	14	2°76	105 38.2	10.5	vF, dif, vF *att
501	J. 154	8	10	25	3°60	65 1.5	10 6	F, R, lbM
502	J. 619	8	14	29	3°25	80 48.2	11.1	F, vS, dif
503	Pechüle (2911)	8	14	51	3°14	86 18.7	11.2	vF, S, lE
504	Sw. VII.	8	15	10	3°16	85 18.1	11.2	vF, pS, R, 4 st f
505	Sw. VII.	8	15	50	3°16	85 10.9	11.2	eF, S, R, lbM
506	Sw. VII.	8	16	5	3°16	85 14.7	11.2	eeF, eS, R, v diffie
507	Sw. VIII.	8	18	28±	3°07	89 59.6	11.4	eeF, pS, v1E, bet 2 st
508	J. 155	8	20	1	3°59	64 25.3	11 6	F, L, R
509	J. 156	8	23	46	3°56	65 31.4	11.8	vF, pL, dif, lbM
510	J. 620	8	25	7	3°04	91 41.2	11.9	F, vS, R, dif
511	Sw. VIII.	8	25	22	6°78	16 10	12.1	vF, S, eE, 2 st sf
512	Denning	8	25	32	17°94	3 59.5	12 3	F, S, R, gbM
513	J. 157	8	26	26	2°85	101 52.9	12.1	F, S, dif, r
514	J. 621	8	28	19	3°04	91 34.5	12.2	vF, Ens
515	J. 622	8	28	25	3°04	91 25.5	12.2	vF, vS, dif, 2616 nf
516	J. 623	8	28	45	3°05	91 23.7	12.2	vF, vS, dif, 2616 p
517	J. 624	8	29	18	3°04	91 34.8	12.2	vF, S, iF
518	B. 151	8	29	51	3°09	88 50	12.2	vF ? vS Cl
519	J. 625	8	33	17	3°13	86 53.8	12.5	vF, vS, R, diffie, *14 close
520	Sw. VIII.	8	38	26	6°62	15 59.5	12.9	pB, pL, bM, *nr
521	J. 626	8	39	28	3°13	86 56.9	12.9	Neb *13m
522	Sw. IX.	8	43	47	4°65	32 18.4	13.2	pF, pS, R, bM (? 2 eF st inv)
523	J. 627	8	45	38	3°25	80 19.2	13.3	F, S, R, dif
524	J. 628	8	51	49	2°74	108 38.8	13.7	vF, vS, R, vF N ?
525	J. 629	8	54	16	3°05	91 18.1	13.9	F, S, lns
526	J. 630	8	55	4	3°26	78 36.4	14.0	F, S, R
527	Sw. IX.	9	0	56	3°80	51 49.6	14.3	eeF, pL, R, e diffie
528	J. 631	9	1	35	3°35	73 38.8	14.4	pB, vS, R, N = 13m
529	Denning	9	3	53	6°34	15 41	14.5	pF, pL, E
530	J. 158	9	7	39	3°27	77 33.0	14.8	pB, S, Epf
531	J. 632	9	10	40	3°08	89 40.0	14.9	F, vS, Epf, lbM
532	B. 152	9	12	29	2°82	106 10	15.0	pB, pL, Epf, bM
533	J. 633	9	13	21	3°02	93 24.1	15.1	eF, S, dif
534	J. 634	9	13	59	3°13	86 15.5	15.1	vF, S, dif
535	J. 635	9	15	8	+ 3°06	90 26.7	+ 15.2	F, vS, R

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Pre. 1880.	Description.
536	J. 159	h m s 9 16 35	+ 3'49	64 16'5	+ 15 2	F, S, R, lbM
537	J. 160	9 18 39	2 89	101 47 3	15 3	Neb * 14m
538	B. 154	9 19 18	3'45	66 23	15 4	* 13 in vF neb (? = h 599, whose a was uncertain)
539	J. 636	9 22 1	3 04	91 56 8	15 5	pB, S, R, gbM, r
540	J. 637	9 22 43	3'20	81 29 2	15 6	F, S, dif
541	Sw. IX.	9 23 29	3 02	93 38'2	15 6	eeF, pS, R, * 10 s
542	J. 161	9 24 23	2'89	102 34'2	15 7	F, vS, Epf, lbM
543	B. 155	9 24 29	2 86	104 10	15 7	vF, pL, E, dif
544	J. 162	9 27 52	3'46	64 29'2	15 8	vF, dif, diffie
545	J. 163	9 28 3	3 46	64 25'8	15 9	F, Epf, F * f
546	J. 164	9 28 12	2'84	105 46 0	15 9	F, vS, iF, h 3175 f
547	J. 165	9 29 21	2'90	101 49 0	15 9	pB, S, R, lbM
548	J. 638	9 30 50	3'22	79 55'4	16 0	F, vS, lbM, h 614 np
549	J. 639	9 33 24	3'14	85 22'8	16 2	vF, S, iF, lbM
550	J. 640	9 33 31	2'98	96 18'8	16 2	F, eS, stellar
551	J. 641	9 33 35	3'18	82 26 3	16 2	F, vS, R, N = 13'm
552	J. 166	9 33 44	3'23	78 43'1	16 2	F, vS, stell N = 14m
553	J. 642	9 33 46	3'00	94 48'1	16 2	vF, vS, R, dif
554	Sw. (X.)	9 34 13	3'25	76 55 9	16 2	eeF, eS, alm stell
555	J. 167	9 34 20	3 26	77 4'3	16 2	pB, vS, R, lbM
556	J. 168	9 36 9	3'24	78 17'9	16 3	F, vS, R, N = 14m
557	J. 169	9 36 30	3'23	78 22'3	16 3	F, vS, R, vlbM
558	Spitaler (2992)	9 35 47	3'53	59 54'1	16 3	F, R, lbM
559	J. 643	9 37 13	3'21	79 44'6	16 3	F, pS, R, dif
560	J. 644	9 38 42	3 07	89 38'7	16 4	F, S, dif, * 10 near
561	J. 645	9 38 43	3'12	86 12 6	16 4	pF, dif
562	J. 646	9 39 1	3'03	93 19 8	16 4	vF, pL, Ens, gbM
563	J. 647	9 39 4	3'12	86 18'6	16 4	pB, S, dif, gbM
564	J. 648	9 39 5	3'12	86 17 0	16 4	pB, pL, Epf
565	J. 649	9 40 10	3'30	73 30 0	16 5	F, S, dif
566	J. 650	9 42 47	3 08	89 35'2	16 6	vF, vS, R, lbM
567	B. 156	9 42 57	3'25	76 32	16 6	vF, suspected, 2' from III. 52
568	J. 651	9 43 30	3 29	73 37 0	16 7	F, pL, Epf, gbM
569	J. 170	9 43 58	3'22	78 25 0	16 7	vF, dif, vlbM
570	J. 652	9 44 13	3 29	73 35'4	16 7	pF, S, R, gbM
571	J. 653	9 44 53	3'29	73 34'2	16 7	pB, S, R, N = 12'5
572	J. 654	9 44 54	3'29	73 31 1	16 7	F, S, R, gbM
573	J. 171	9 46 45	2'92	101 49 6	16 8	eF, vS, R, vS * close
574	J. 655	9 47 28	2'99	96 17'8	16 8	pB, S, R, mbM, * 12s
575	J. 656	9 47 35	2'99	96 12 0	16 8	F, S, R, gbM
576	J. 172	9 47 36	+ 3'22	78 18'1	+ 16 8	vF, vS, R

No.	Observer.	R.A. 1850.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
577	J. 173	h m s 9 48 34	s +3 21	78° 50' 1	+16.9	F, vS, iF, F * n
578	J. 174	9 48 46	3.21	78 50.7	16.9	F, vS, R, lbM
579	Sw. VIII.	9 49 48	2.90	103 29.2	17.0	pF, pS, R
580	J. 175	9 50 28	3.21	78 53.7	17.0	pF, vS, iF
581	J. 657	9 50 34	3.28	73 23.0	17.0	pB, S, dif, N = 13 inv
582	J. 658	9 51 18	3.31	71 31.6	17.0	pB, S, iF, gbM
583	J. 659	9 51 23	3.31	71 31.3	17.0	F, vS, gbM
584	J. 176	9 51 37	3.21	78 58.0	17.0	eF, S, R, dif, II. 59 p
585	B. 157	9 52 11	3.24	76 19	17.1	* 13 in eF, S neb
586	J. 660	9 52 51	3.00	96 15.1	17.1	F, vS, mottled
587	J. 661	9 53 0	3.05	91 47.8	17.1	F, pL, R
588	J. 662	9 54 51	3.12	86 16.2	17.2	F, S, R, mottled
589	J. 663	9 57 23	3.01	95 0.3	17.3	vF, vS, biN?
590	J. 664	9 58 38	3.09	88 41.2	17.4	F, dif; neb D * ?
591	J. 177	9 59 58	3.23	77 2.9	17.4	pF, S, R
592	J. 665	10 0 54	3.05	91 49.8	17.5	F, S, R, dif
593	J. 666	10 1 13	3.05	91 51.4	17.5	F, S, R, gbM
594	J. 667	10 1 21	3.07	89 59.7	17.5	F, S, R, gbM, r
595	J. 178	10 2 10	3.21	78 18.6	17.5	F, vS, R, lbM
596	J. 668	10 3 6	3.19	79 16.3	17.5	F, S, dif
597	J. 669	10 3 13	3.00	96 12.6	17.5	F, vS, R
598	Sw. VIII.	10 4 34	3.69	46 4.2	17.6	vF, vS, R, bM, alm stell
599	J. 670	10 6 10	3.02	94 56.5	17.7	pF, S, vlbM
600	J. 671	10 10 6	3.04	92 48.0	17.9	F, pS, R, gbM
601	J. 672	10 10 55	3.15	82 15.9	17.9	vF, vS, dif, sbM
602	J. 673	10 10 59	3.15	82 14.9	17.9	pB, S, Ens
603	J. 674	10 12 22	3.02	94 57.5	17.9	F, vS, R, N = 13.5
604	Sw. IX.	10 14 32	3.99	32 16.0	18.0	eeF, vS, vmE(? seveF st in line)
605	J. 675	10 15 12	3.09	88 5.1	18.0	F, S, R, gbM
606	J. 676	10 16 8	3.20	78 20.3	18.0	vF, vS, R, dif
607	Sw. VIII.	10 16 38	3.25	72 31.1	18.0	eeF, pS, R, v diffic, * sp
608	J. 677	10 17 19	3.02	95 20.4	18.1	F, S, R
609	J. 678	10 18 28	3.06	91 30.4	18.1	F, pL, R
610	Sw. VIII.	10 18 36	3.29	69 3.6	18.1	eeF, pS, cE, e diffic
611	Sw. VIII.	10 18 46	3.29	69 2.6	18.1	eF, S, 1E
612	J. 679	10 19 40	3.19	78 14.3	18.2	F, vS, dif, vlbM
613	J. 680	10 19 43	3.19	78 17.0	18.2	F, vS, R
614	J. 681	10 19 46	3.05	92 45.1	18.2	vF, dif
615	J. 682	10 19 57	3.19	78 12.8	18.2	vF, S, R
616	J. 683	10 25 16	3.23	73 27.1	18.4	F, pS, R
617	J. 179	10 25 51	2.96	101 55.9	18.4	vF, vS, R, bM
618	J. 180	10 25 51	+2.96	102 0.6	+18.4	F, S, Epf, lbM

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1850.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
619	Sw. VIII.	h m s 10 26 4	s + 3'20	76 44'1	18'4	eeF, S, R, 3 Fstf
620	J. 181	10 26 8	3'19	77 24'8	18'4	vF, vS
621	J. 684	10 26 9	3'10	86 37'5	18'5	F, S, R
622	Sw. IX.	10 27 10	3'18	78 4'7	18'5	vF, pS, E, * 9s
623	J. 685	10 28 4	3'11	85 43'4	18'5	F, S, R
624	J. 686	10 29 14	3'00	97 37'0	18'5	F, vS, R
625	O. St.	10 29 50	2'85	113 11'8	18'6	eF, pL, E 110°, dif
626	J. 687	10 29 56	3'02	96 18'1	18'6	F, S, R, r
627	J. 688	10 30 13	3'05	92 38'3	18'6	F, S, r
628	J. 182	10 30 18	3'13	83 40'7	18'6	vF, vS, iF
629	B. 158	10 30 28	2'82	116 50	18'6	vF, vS st inv, Cl?
630	J. 689	10 31 32	3'02	96 26'8	18'7	F, eS, stellar, * 9'5 sp 1½'
631	J. 690	10 31 58	3'02	96 19'7	18'7	vF, vS, dif
632	J. 691	10 32 2	3'07	89 41'2	18'7	F, S, R, gbM
633	J. 692	10 32 14	3'07	89 39'8	18'7	vF, vS, R, SN
634	J. 693	10 33 37	3'13	83 16'7	18'7	vF, S, r
635	J. 694	10 34 17	3'21	73 38'2	18'7	F, S, R, gbM
636	J. 695	10 34 35	3'12	84 56'5	18'7	vF, vS, r
637	J. 696	10 34 52	3'21	73 54'7	18'7	F, vS, in line w 3 st
638	J. 697	10 36 18	3'22	73 22'8	18'8	F, vS, R
639	Sw. VII.	10 38 18	3'22	72 20'5	18'8	eF, S, mEns, * 10 nf 5'
640	B. 159	10 38 56	3'40	54 31	18'9	vF, pS, E, D?
641	B. 160	10 39 57	3'40	54 36	18'9	vF, pS, dif
642	Sw. VII.	10 40 28	3'22	71 4'5	18'9	vF, pS, lE, 2 st f
643	J. 183	10 42 6	3'17	77 3'4	18'9	pF, S, Ens, lbM
644	Sw. IX.	10 43 4	3'72	33 51'1	19'0	eeF, pS, lE, B * sf, sp of 2
645	J. 698	10 43 5	3'03	95 18'4	19'0	F, S, R
646	Sw. IX.	10 43 11	3'72	33 47'2	19'0	eeF, pS, R, nf of 2
647	J. 184	10 43 37	2'98	102 7'1	19'0	eF, vS, dif, III. 522 p
648	J. 185	10 43 38	3'18	76 57'9	19'0	eF, vS, vF * inv, diffie
649	J. 699	10 43 40	3'09	88 5'6	19'0	F, S, lbM, * 10 5 sp
650	J. 186	10 43 44	2'97	102 42'1	19'0	pF, vS, R
651	J. 700	10 43 59	3'06	91 24'5	19'0	pB, pS, gbM, r
652	J. 187	10 44 4	2'98	101 53'8	19'0	F, vS, R, lbM
653	J. 701	10 44 56	3'07	89 49'7	19'0	F, S, R, dif
654	J. 188	10 46 52	2'99	100 59'0	19'1	vF, S, diffie
655	J. 189	10 47 12	3'08	89 36'8	19'1	eF, iF
656	B. 161	10 47 40	3'21	71 39	19'1	vS, Cl, neb?
657	J. 702	10 50 47	3'04	94 9'4	19'2	F, pS, lEns
658	J. 703	10 50 57	3'14	80 58'9	19'2	F, vS, R, stellar
659	J. 704	10 50 59	3'03	95 30'8	19'2	F, S, R, lbM
660	J. 705	10 51 15	+ 3'09	87 51'1	+ 19'2	vF, S, r

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
661	J. 706	h m s 10 51 40	s + 3 09	87° 36' 1	+ 19 2	eF, vS, R, diffie
662	J. 707	10 52 9	3 09	87 39 2	19 2	vF, SN, diffie
663	Sw. X., J. 190	10 53 16	3 15	78 49 1	19 2	eF, vS, R, 2st s, 1st of 4
664	Sw. X., J. 191	10 53 26	3 15	78 42 2	19 2	eF, vS, R, lbM, 3492 f
665	J. 708	10 53 32	2 97	103 6 9	19 2	F, vS, R, bM
666	Sw. (X.), J. 192	10 53 54	3 15	78 46 4	19 3	eF, vS, iF, 4th of 4
667	J. 709	10 59 16	3 17	74 9 5	19 4	vF, vS, R, vlbM
668	J. 710	10 59 18	3 17	74 12 4	19 4	vF, vS, R, bM
669	J. 711	11 0 2	3 12	82 56 5	19 4	pB, vS, R, sbM
670	Spitaler 16	11 0 13	3 12	82 31 8	19 4	F, pS, R, bM
671	J. 712	11 0 18	3 08	88 28 3	19 4	vF, pS, R
672	J. 193	11 1 1	3 00	101 43 5	19 4	vF, vS
673	J. 194	11 2 17	3 08	89 19 2	19 4	vF, vS, Epf, r
674	Spitaler 35	11 3 12	3 38	45 37 0	19 5	pF, R, bM, D * sf
675	J. 713	11 3 29	3 10	85 33 8	19 5	pB, pL, Ens, biN ?
676	Sw. X.	11 5 26	3 13	80 10 5	19 5	vF, pS, lE, bet 2 dist st
677	J. 195	11 6 36	3 14	76 56 5	19 5	F, pL, gbM
678	J. 714	11 6 51	3 11	82 39 5	19 5	F, S, r, N = 13 5
679	J. 715	11 9 34	3 00	103 12 7	19 6	F, S, R, sbM
680	J. 716	11 10 41	3 07	91 10 9	19 6	F, S, R, gbM
681	J. 196	11 11 31	3 01	101 22 9	19 6	vF, S, iF, diffie
682	Sw. VIII.	11 13 50	3 17	69 0 9	19 7	eF, eS, R, vF * close np
683	B. 162	11 14 19	3 09	86 28	19 7	Neb object 13 5 mag
684	B. 163	11 14 22	3 09	86 24	19 7	F, S, * * sp 0' 5
685	Sw. VII.	11 14 40	3 16	71 25 7	19 7	eeF, pS, R, * nf
686	J. 717	11 15 51	3 10	83 35 2	19 7	eF, vS, R, v diffie
687	Sw. IX.	11 16 35	3 35	41 23 1	19 7	eF, eS, R, stell N, F * f
688	O. St.	11 16 36	3 03	99 1 6	19 7	eF, vS, R
689	O. St.	11 16 36	3 02	103 3 7	19 7	eF, vS, R, dif
690	J. 718	11 17 15	3 04	97 34 8	19 7	pB, S, R, N = 12 m
691	Sw. VII.	11 18 31	3 47	30 4 4	19 8	pF, pS, R, 2 st nr
692	Spitaler 37	11 18 38	3 11	79 16	19 8	F, vS, R, * 12 sf 2'
693	J. 719	11 19 41	3 06	94 13 9	19 8	F, pS, R, gbM, r
694	Ld. R. Sw. (X)	11 20 44	3 44	30 40	19 8	vS, forms D neb with I 247
695	J. 197	11 20 53	3 03	100 56 8	19 8	eF, S, v diffie
696	Spitaler 38	11 21 25	3 11	80 7 9	19 8	vF, pS, R, vlbM
697	J. 720	11 21 27	3 07	90 51 8	19 8	F, S, R, gbM
698	Spitaler 39	11 21 49	3 11	80 7 1	19 8	F, vS, R, bM
699	Spitaler 40	11 21 52	3 11	80 14 5	19 8	F, vS, lE, ns
700	J. 198	11 21 55	3 16	68 38 7	19 8	pS, R, lbM
701	Sw. VIII.	11 23 35	3 15	68 45 8	19 8	eF, vS, R, 2 pB st sf
702	J. 721	11 23 47	+ 3 06	94 9 3	+ 19 8	F, vS, R, N = 13 5

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Dec. 1880.	N.P.D. 1860.	Dec. 1880.	Description.
703	Sw. VIII.	h m s 11 24 44	+ 3'03	100° 49'5	+ 19'8	eeF, S, R, p of 2
704	Sw. VIII.	11 24 49	3'03	100 46'5	19'8	eF, vS (? close D), f of 2
705	Sw. IX.	11 25 16	3'31	38 58'6	19 8	eeF, vS, R
706	J. 199	11 26 9	3'03	102 34'3	19'8	eF, vS, lbM
707	Kobold (3241)	11 26 25	3'14	67 50'8	19'9	pF, pS, bM
708	Sw. IX.	11 26 26	3'29	40 9'0	19'9	eF, S, R, 1st of 4
709	Sw. IX.	11 26 41	3'29	40 9'5	19'9	eeF, S, R, 2nd of 4
710	J. 722	11 27 7	3'16	63 21'7	19'9	F, vS, R, lbM
711	Sw. IX.	11 27 16	3'29	40 15'5	19'9	eeF, pS, R, F * close sp
712	Sw. IX.	11 27 21	3'29	40 8 0	19'9	eF, S, R, pB * nf
713	B. 164	11 27 28	3'13	72 23	19'9	eF, susp, 3' nnf from * 6
714	O. St.	11 29 24	3'04	99 4'5	19'9	vF, pS, lE 170°, gbMN
715	J. 723	11 29 48	3'05	97 36'0	19'9	F, pS, R
716	J. 200	11 31 53	3'07	89 25'9	19'9	vF, S, lbM
717	O. St.	11 32 15	3'04	99 52 ±	19'9	eF, pS, Epf, dif
718	Spitaler 41	11 32 40	3'10	80 21'1	20'0	vF, S
719	Spitaler 42	11 33 5	3'10	80 12'7	20'0	F, pL, lE 45°, bM
720	Spitaler 43	11 35 10	3'10	80 27'0	20'0	F, S, R
721	J. 724	11 35 21	3'05	97 33'4	20'0	pF, pL, Epf
722	Spitaler 44	11 35 24	3'10	80 9'6	20'0	eF, vS, * 10 nf 2'
723	J. 725	11 35 50	3'05	97 32'9	20'0	pB, S, N = 12'5, r
724	Spitaler 45	11 36 14	3'10	80 11'2	20'0	F, lE 45°, S, bM
725	J. 726	11 36 20	3'07	90 53'6	20'0	F, vS, lE ns, * 11 n 1'
726	Spitaler 17	11 36 25	3'16	55 55'2	20'0	vF, pL, R
727	J. 201	11 37 15	3'10	78 26'3	20'0	vF, eS, R, 3839 p
728	J. 727	11 37 42	3'07	90 49'6	20'0	vF, S, R
729	Spitaler 18	11 37 59	3'16	55 54'5	20'0	F, pS, R
730	J. 728	11 38 24	3'08	85 59'5	20'0	F, vS, R, gbM, r
731	Sw. IX.	11 38 33	3'22	39 39'5	20'0	vF, vS, R
732	B. 165	11 38 44	3'12	68 47	20'0	vF, v dif
733	J. 729	11 38 51	3'06	97 22'9	20'0	F, vS, R, gbM, r
734	J. 730	11 38 55	3'06	97 29'8	20'0	F, S, dif
735	J. 202	11 40 59	3'09	79 0'6	20'0	eF, S, iF
736	J. 203	11 41 6	3'10	76 30'4	20'0	vF, eS, R
737	J. 204	11 41 14	3'10	76 29'8	20 0	vF, eS, R, N = 14
738	J. 731	11 41 45	3'07	93 54'0	20'0	F, S, R, N = 14 m
739	J. 732	11 43 7	3'11	65 23'9	20'0	vF, S, R, * 10'5 f
740	Sw. IX.	11 43 19	3'20	33 52'0	20'0	eeF, pL, iR, II. 787 s
741	J. 733	11 43 23	3'07	94 3'4	20'0	pB, S, R, sbMN = 12m
742	Sw. VIII.	11 43 42	3'11	68 25'1	20 0	eeF, pS, R, pB * sp
743	J. 205	11 46 16	3'06	102 28'8	20'0	F, S, dif
744	J. 734	11 46 51	+ 3'10	66 1'6	+ 20'0	eF, vS, v diffie

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
745	J. 206	h m s 11 46 59	^s + 3'07	89 5'5	+ 20'0	F, vS, stellar, N = 14
746	J. 735	11 48 22	3'10	63 19'9	20'0	F, pS, R
747	J. 736	11 49 55	3'06	97 31'0	20'0	F, vS, R, stellar
748	J. 737	11 50 15	3'08	81 45'6	20'0	F, vS, R, sbMN = 13
749	Spitaler 46	11 51 20	3'11	46 29'2	20'0	pB, L, R, lbM
750	Spitaler 47	11 51 38	3'11	46 29'8	20'0	pB, L, lE 35°, bM
751	Spitaler 48	11 51 39	3'11	46 39'0	20'0	pF, pL, lE 45°, mbM
752	Spitaler 49	11 52 2	3'11	46 39'2	20'1	vF, S, iR, * 13 nf 1 $\frac{1}{2}$ '
753	J. 738	11 52 3	3'07	89 44'8	20'1	pB, vS, R, vmbM, * 11 nf
754	J. 739	11 52 14	3'07	90 52'7	20'1	F, S, R, sbM
755	Sw. VIII.	11 53 58	3'08	75 5'7	20'1	eeF, S, E, bet 2 st
756	J. 740	11 55 47	3'07	84 21'9	20'1	vF, pL
757	B. 166	11 56 17	3'07	36 34	20'1	Susp., close to * 12
758	Sw. VII.	11 56 53	3'08	26 43'7	20'1	eeF, pS, R, bet 2 distant st
759	B. 167	11 58 0	3'07	68 58	20'1	pB, pL, Epf
760	O. St.	11 58 42	3'07	118 30'8	20'1	eF, vS, rr, bMN
761	J. 207	11 58 44	3'07	101 53'9	20'1	Neb * 14m
762	J. 741	12 1 4	3'06	63 28'2	20'1	pB, S, R, N = 12m
763	J. 742	12 1 8	3'06	63 25'0	20'1	F, vS, N = 13m
764	O. St.	12 3 1	3'09	118 57'6	20'1	eF, pL, Ens, lbN
765	B. 168	12 3 23	3'06	73 5	20'1	vF, susp 6' n of ll. 83
766	J. 208	12 3 41	3'08	101 53'0	20'1	pB, E ns, sbMN = 14m
767	J. 209	12 3 54	3'07	77 7'0	20'1	F, vS, stell, N = 14m
768	J. 210	12 4 38	3'06	77 4'6	20'1	vF, pS, R, gbM
769	J. 211, Spit. 19	12 5 24	3'06	77 6'0	20'1	vF, pS, vlbM
770	J. 743	12 5 52	3'07	93 46'7	20'1	vF, vS, R, * 13'5 n 1'
771	Spitaler (3167)	12 8 4	3'06	76 2	20'0	vF, S, R, * 3' south
772	B. 170	12 8 11	3'05	65 14	20'0	vF, vS, stell
773	J. 744	12 10 59	3'06	83 5'3	20'0	F, vS, dif, 2 vF st inv
774	J. 745	12 11 39	3'08	95 59'1	20'0	F, vS, R, gbM
775	B. 171	12 11 45	3'06	76 20	20'0	vF, S, stell N
776	J. 746	12 11 52	3'06	80 23'5	20'0	F, pL, R
777	Sf. 18	12 12 30	3'03	60 55'4	20'0	vF
778	Sw. VII.	12 12 32	2'94	33 13'3	20'0	eF, pS, R, bet 2 st
779	Sf. 19	12 12 46	3'03	59 20'1	20'0	F
780	J. 747	12 12 54	3'03	63 27'7	20'0	pB, S, R, N = 12'5 m
781	B. 172	12 12 56	3'05	74 15	20'0	vF, S, dif
782	J. 212	12 14 24	3'06	83 27'4	20'0	eF, S, R
783	Sw. VII.	12 14 34	3'04	73 29'5	20'0	eF, S, R
784	Sw. VIII.	12 15 23	3'08	93 47'1	20'0	vF, pL, mE, pB * s
785	J. 213	12 15 49	3'09	102 27'0	20'0	F, vS, R, stell
786	J. 214	12 15 58	+ 3'09	102 25'9	+ 20'0	vF, eS, R, stell

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
787	Sw. VII.	h m s 12 18 24	+ 3'04	73 6'0	+ 20'0	eF, pS, R, B * n, II. 88f
788	J. 748	12 19 2	3'04	73 1'6	20'0	pB, pL, R, II. 88 south
789	J. 749	12 19 14	3'06	81 45'0	20'0	F, vS, R, N = 14m, vF * close
790	B. 173	12 19 29	3'05	80 12	20'0	vF, vS, f h 1256
791	Sf. 26	12 19 59	3'02	66 35'5	20'0	BN = 12m
792	J. 750	12 20 5	3'03	72 53'7	20'0	F, S, gbM
793	Sw. VIII.	12 20 54	3'05	79 47'7	20'0	eF, S, mE, 3 others in field
794	J. 215	12 21 3	3'04	77 8'0	20'0	F, S, Epf, bM
795	J. 751	12 21 31	3'02	65 54'9	20'0	pB, S, stellar, 13m
796	J. 216	12 22 23	3'03	72 48'8	20'0	F, S, Ens, r
797	J. 217	12 24 49	3'03	74 5'9	19'9	F, S, R, gbM
798	J. 218	12 25 29	3'03	73 48'0	19'9	vF, eS, R
799	Sw. VIII.	12 26 42	3'09	96 35'4	19'9	eF, eS, R, ? eF * att p
800	J. 219	12 26 52	3'03	73 51'7	19'9	F, S, R, gbM
801	Sw. IX.	12 27 8	2'85	36 57'6	19'9	eeF, S, R, * close n
802	B. 174	12 30 28	2'38	14 56	19'9	vF, S, stellar
803	J. 220	12 32 35	3'02	72 39'2	19'8	eF, S, v diffie
804	Sw. VII.	12 33 57	3'09	94 15'7	19'8	vF, vS, R
805	Sw. VIII.	12 34 14	3'02	75 29'6	19'8	vF, pL, R, 2st n & nf
806	J. 221	12 34 50	3'13	106 35'0	19'8	eF, eS, R, * 12 close
807	J. 222	12 34 54	3'13	106 38'3	18'8	pF, vS, R, gbM
808	B. 175	12 34 58	3'00	69 17	19'8	S nebs Cl
809	Sw. VII.	12 35 2	3'03	77 29'4	19'8	eF, pS, R, M 59 s
810	Sw. VII.	12 35 4	3'02	76 38'1	19'8	eF, pS, mE
811	B. 176	12 37 31	3'11	99 26	19'8	Nebs * 13m, sf II. 558
812	J. 752	12 37 39	3'09	93 39'9	19'8	pB, S, R, N = 13m
813	Spitaler 20	12 38 17	2'97	66 11'9	19'8	F, pS, iR, bM
814	J. 753	12 38 19	3'10	97 19'7	19'8	pB, vS, R, r
815	J. 223	12 39 21	3'02	77 21'5	19'7	F, vS, * 14 inv
816	Sw. VII.	12 39 39	3'03	79 22'9	19'7	eeF, vS, R, D * nf, np of 2
817	Sw. VII.	12 39 54	3'03	79 22'4	19'7	eeF, vS, R, sf of 2
818	Spitaler 50	12 39 55	2'93	59 29'8	19'7	vS, R, bM, * 12 nf 2½'
819	Spitaler 51	12 40 21	2'93	58 30'0	19'7	} D neb, conn, vF, vS, sf one brighter
820	Spitaler 52	12 40 22	2'93	58 30'8	19'7	
821	Spitaler 53	12 40 37	2'93	59 26'8	19'7	R, pL, glbM, 2 st sssf
822	Spitaler 54	12 40 56	2'93	59 10	19'7	F, eS, bM
823	B. 177	12 40 58	2'94	62 2	19'7	Susp, 2's of II. 381
824	J. 754	12 42 29	3'09	93 48'6	19'7	pB, pL, Epf, biN
825	Sw. VII.	12 43 2	3'09	94 36'9	19'7	eeF, pS, R, nearly bet 2st
826	Spitaler 55	12 44 33	2'92	58 10'8	19'7	F, pS, R, gbM
827	J. 224	12 44 53	2'99	72 57'9	19'7	vF, S, Epf, dif
828	J. 755	12 45 0	+ 3'11	97 22'0	+ 19'7	F, vS, R, N = 13'5 m

No.	Obse. ver.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
829	B. 178	h m s 12 45 7	s + 3'14	104 46'	19'6	Neb * 13m
830	Sw. IX.	12 45 9	2'70	35 33'4	19'6	vF, vS, lE, stellar
831	Spitaler 56	12 45 52	2'93	62 46'5	19'6	F, S, R, bM
832	Sf. 22, Spitaler 57	12 47 10	2'93	62 49'5	19'6	F, S, R, bM, D * nf
833	Sw. VIII.	12 49 27	3'10	95 58'1	19'6	vF, S, R
834	Spitaler 58	12 49 28	2'93	62 54'5	19'6	pF, pS, sbM
835	Spitaler 59	12 50 3	2'92	62 46'5	19'6	F, S, R
836	Sw. VII.	12 50 21	2'46	25 37'4	19'6	eeF, vS, v diffie, bet 2st
837	Spitaler 60	12 50 42	2'92	62 45	19'5	F, S, R
838	Spitaler	12 51 28	2'92	62 51	19'5	vF, 1 1/2'nf 4849
839	B. 179	12 51 31	2'91	61 6	19'5	stellar, 13m
840	J. 756	12 51 41	3'01	78 36'5	19'5	F, S, R, lbM, r
841	H. C. Wilson	12 52 26 ±	2'94	67 24	19'5	vF (Astr & Astrophys, No. 103)
842	Sf. 2	12 53 54	2'89	60 12'0	19'5	pF
843	Sf. 3	12 54 54	2'89	60 12'7	19'5	F, bMN
844	O. St.	12 55 40	3'26	119 46'1	19'4	vF, vS, lbM
845	Sw. VIII.	12 58 20	2'99	77 8?	19'4	eeF, S, R, F * nr p
846	J. 225	12 58 33	2'92	66 9'2	19'4	vF, R, lbM, diffie
847	Sw. IX.	12 59 57	2'59	35 34'0	19'4	vF, S, R, bet 2st
848	J. 226	13 0 7	2'97	73 15'0	19'3	eF, vS, diffie
849	J. 757	13 0 27	3'07	90 10'6	19'3	F, pL, R, gbM
850	J. 758	13 0 39	3'07	90 6'3	19'3	vF, S, R
851	H. C. Wilson	13 1 46	2'93	68 12'1	19'3	vF (Astr & Astrophys, No. 103)
852	Sw. VII.	13 2 12	2'45	29 5'6	19'3	vF, pS, R, B * p
853	Sw. IX.	13 2 48	2'58	36 29'6	19'3	eeF, pS, R
854	J. 227	13 3 4	2'90	64 40'5	19'3	pF, vS, R, vlbM
855	J. 759	13 3 23	3'10	93 44'3	19'3	F, S, * 13'5 sp
856	J. 228	13 3 53	2'93	68 42'9	19'3	F, E, lbM
857	J. 229	13 6 58	2'95	72 10'7	19'2	pF, vS, R, gvlbM
858	J. 230	13 8 0	2'94	72 1'9	19'1	F, vS, R, stellar, N = 12m
859	J. 231	13 8 5	2'94	72 2'0	19'1	pF, R, N = 14m
860	J. 232	13 8 20	2'88	64 38'9	19'1	F, vS, R, N = 14m
861	Spitaler 21	13 8 37	2'80	54 55'8	19'1	F, vS, R, sbM
862	J. 233	13 9 26	2'92	69 12'6	19'1	pB, eS, R, N = 12m
863	J. 234	13 9 44	3'19	106 30'9	19'1	F, S, iF, biN
864	J. 235	13 10 20	2'91	68 34'2	19'1	vF, pS, R, bMSN
865	J. 760	13 10 20	3'11	95 5'3	19'1	F, vS, R, stellar
866	Sw. VIII., J. 236	13 10 28	2'91	68 34'4	19'1	vF, S, R, lbM
867	Sw. VIII., J. 237	13 10 31	2'91	68 37'3	19'1	vF, R, lbM
868	Sw. VIII., J. 238	13 10 39	2'91	68 39'0	19'1	vF, R, lbM
869	Sw. VIII., J. 239	13 10 42	2'91	68 34'9	19'1	vF, S, R, lbM
870	Sw. VIII., J. 240	13 10 43	+ 2'91	68 39'7	+ 19'1	vF, S, R, lbM

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
871	J. 761	h m s 13 10 55	^s + 3'03	84 51'8	+ 19'1	pB, pS, Epf, dif
872	Sw. X.	13 11 9	3'02	82 54'3	19'1	eeF, pS, R, lbM
873	J. 762	13 11 13	3'03	84 48'1	19'1	F, vS, R, bMN = 13'5m
874	O. St.	13 11 20	3'28	116 53'5	19'1	vF, S, R, dif
875	Sw. IX.	13 11 30	2'41	31 43'0	19'1	eF, vS, R, stellar
876	J. 763	13 11 32	3'03	84 46'9	19'1	F, pL, dif
877	Sw. X.	13 11 54	3'02	83 10'8	19'1	eeF, pS, pB * f 13°
878	Sw. X.	13 11 57	3'02	83 8'5	19'1	eeF, pL, v diffie
879	O. St.	13 11 59	3'28	116 41'5	19'0	eF, pL, iR, dif
880	Sw. X.	13 12 4	3'02	83 9'0	19'0	eeF, pS, Ens, pB * s, 5th of 5
881	J. 241	13 13 2	2'94	73 24'6	19'0	F, vS, R, stellar
882	J. 242	13 13 13	2'94	73 21'7	19'0	pF, vS, R, stellar
883	Spitaler 22	13 14 7	2'77	55 7'4	19'0	F, pS, iR, bM
884	Sw. VI.	13 15 31	3'16	101 59'7	18'9	vF, pS, R
885	Sw. VIII.	13 15 48	2'89	67 56'1	18'9	vF, pS, R
886	J. 764	13 16 42	3'10	93 39'6	18'9	vF, vS, bMN, v diffie
887	Sw. VI.	13 16 48	3'16	101 43'7	18'9	vF, vS, nearly bet 2st
888	Sw. VIII.	13 18 57	2'95	75 31'5	18'9	eeF, pS, R
889	J. 243	13 19 42	2'96	77 23'7	18'8	F, vS, R, N = 14m
890	J. 765	13 20 56	3'20	105 21'8	18'8	vF, sbM * 13'5, r
891	J. 766	13 22 52	3'06	88 59'1	18'7	F, S, R, N = 13m
892	J. 767	13 24 33	3'09	92 0'3	18'7	pB, iF, bM, r
893	J. 768	13 24 34	3'09	91 54'2	18'7	F, vS, dif
894	J. 244	13 25 17	2'92	72 13'4	18'7	pF, vS, R, lbM
895	Sw. VIII.	13 25 59	2'71	53 37'2	18'6	vF, pL, R, sbM, D ?
896	J. 245	13 27 8	3'02	84 25'5	18'6	vF, vS, dif, lbM
897	B. 180	13 27 12	2'90	71 35	18'6	vF, s of h 1634
898	J. 246	13 27 17	2'94	76 0'8	18'6	vF, vS, dif
899	J. 769	13 27 39	3'14	97 22'3	18'6	F, vS, R, sbM N
900	J. 247	13 27 45	2'98	79 56'5	18'6	F, S, R, gbM
901	J. 248	13 28 49	2'94	75 58'0	18'5	pF, eS, R
902	Sw. VII.	13 30 17	2'45	39 20'1	18'5	eeF, S, mE, v diffie
903	J. 770	13 31 17	3'07	89 30'7	18'5	pB, lEns, gbM N = 13m
904	J. 771	13 31 24	3'06	88 45'2	18'4	F, vS, dif
905	J. 249	13 33 26	2'83	66 8'6	18'4	F, vS, R, lbM, stellar
906	J. 250	13 33 34	2'83	65 56'9	18'4	eF, S, bM
907	Sw. VII.	13 33 53	2'40	38 34'1	18'4	eF, pS, R
908	J. 772	13 34 4	3'11	93 38'4	18'3	eF, pS, * 13'5 close
909	Sf. 28	13 34 13	2'82	64 47'1	18'3	No deser
910	J. 251	13 34 32	2'83	66 0'2	18'3	F, S, bM, r
911	J. 252	13 34 49	2'83	66 2'6	18'3	eF, eS, R, lbM
912	J. 253	13 34 53	+ 2'83	66 2'6	+ 18'3	eF, eS, R, lbM

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
913	J. 254	^h ^m ^s 13 34 54	^s + 2 83	[°] ['] ["] 66 7'2	+ 18'3	vF, vS, R, dif
914	J. 255	13 35 4	2'83	66 5'8	18'3	vF, vS, R, dif
915	J. 256	13 35 55	3'23	106 37'4	18'3	eF, vS, diffie
916	Sf. 27	13 36 0	2 82	64 49'0	18'3	N = 13m
917	Barnard (2998)	13 37 32	2 24	33 39'5	18'2	S
918	Barnard (2998)	13 37 35	2'24	33 42'0	18'2	vF, vS
919	Barnard (2998)	13 37 38	2'24	33 42'5	18'2	cB, R, bM
920	J. 773	13 37 57	3'19	101 52'2	18'2	F, vS, R, bM N, r
921	Barnard (2998)	13 37 58	2'24	33 37'6	18'2	vS, R, bM
922	Barnard (2998)	13 38 1	2'24	33 41'0	18'2	vS, R, bM
923	Barnard (2998)	13 38 5	2'24	33 40'5	18'2	vS
924	Burnham (2930)	13 38 9	3'19	101 45'1	18'2	F, S, dif, 86 Virg nf
925	Barnard (2998)	13 38 10	2 24	33 41'5	18'2	vS
926	Barnard (2998)	13 38 19	2'24	33 39'0	18'2	vS, R, bM
927	Burnham (2930)	13 38 24	3'19	101 45'7	18'2	F, S, dif, 86 Virg nf
928	Barnard (2998)	13 38 30	2'23	33 40'5	18'2	F, vS, R, gbM
929	Barnard (2998)	13 38 31	2'23	33 38'5	18'2	vS, R, bM
930	Barnard (2998)	13 38 35	2'23	33 37'0	18'2	F, vS, R, gbM
931	Barnard (2998)	13 38 37	2'23	33 40'5	18'2	F, vS, R, gbM
932	Barnard (2998)	13 38 37	2'23	33 39'5	18'2	vS, R
933	J. 257	13 38 41	2'82	66 3'6	18'2	vF, vS, R, N = 13m, stellar
934	Barnard (2998)	13 38 50	2'23	33 40'5	18'2	F, vS, R
935	Barnard (2998)	13 38 51	2'23	33 41'5	18'2	F, vS, R, gbM
936	Barnard (2998)	13 38 51	2'23	33 40'5	18'2	F, vS, R
937	Barnard (2998)	13 39 20	2'23	33 39'0	18'2	vS
938	Barnard (2998)	13 39 23	2'23	33 40'5	18'2	vS
939	J. 258	13 40 40	3'03	85 54'6	18'1	pB, vS, bM
940	J. 259	13 40 56	3'03	85 52'3	18'1	vF, vS, dif
941	J. 260	13 42 2	2'80	65 18'0	18'1	F, eS, gbM, r
942	Sw. VII.	13 42 40	2'17	32 40'8	18'0	eF, pS, R
943	J. 261	13 43 27	3'03	86 6'9	18'0	pF, iF, lbM, F * close
944	Sw. VII. and VIII.	13 44 42	2'92	75 12'2	18'0	vF, pS, mE, 3st f
945	Sw. VII.	13 45 2	1'18	17 14'9	18'0	eeF, S, R, 2st nf
946	Sw. VII. and VIII.	13 45 22	2'92	75 11'0	17'9	eF, vS, R, * close f
947	J. 774	13 45 29	3'06	88 28'9	17'9	pB, vS, R, sbMN = 12m
948	Sw. VII. and VIII.	13 45 37	2'92	75 11'5	17'9	eF, S, R
949	Sf. 14	13 45 38	2'82	66 46'0	17'9	pF
950	J. 262	13 45 39	2'91	74 48'0	17'9	F, eS, R, lbM
951	Sw. VII.	13 46 29	2'30	38 20'0	17'9	eeF, pS, R, 2st nr sp
952	J. 263	13 46 37	3'03	85 57'4	17'9	F, Epf, F * inv
953	O. St.	13 46 57	3'42	119 39'8	17'9	vF, eS, gbM
954	Sw. VII.	13 47 1	+ 1'24	18 7'4	+ 17'9	eeF, S, R, B * f

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
955	O. St.	h m s 13 47 43	s + 3'42	° ' " 119 34 4	" + 17 8	vF, vS, gbM
956	J. 264	13 48 2	2'83	68 35'8	17'8	eF, vS, * 14n
957	O. St.	13 48 7	3'42	119 33'0	17'8	vF, S, gbM
958	Sw. IX.	13 48 45	3'01	84 16'7	17'8	eeF, pS, iR
959	Sw. VIII.	13 49 17	2'92	75 47'9	17'8	eeF, S, R
960	J. 265	13 49 18	2'87	71 47'2	17'8	F, pL, lbM, dif
961	J. 266	13 49 21	2'76	63 27'8	17'8	vF, S, dif
962	Sw. VIII.	13 50 27	2'93	77 16'0	17'7	pF, vS, R, bM
963	J. 267	13 50 42	2'87	71 54'3	17'7	eF, vS, R
964	J. 268	13 51 0	2'87	71 48'0	17'7	eF, eS, R
965	J. 269	13 51 7	2'87	71 48'0	17'7	vF, vS, R, vSN
966	J. 775	13 51 12	3'01	83 55'2	17'7	F, S, R, gbM, r
967	J. 270	13 51 35	2'90	74 51'5	17'7	pF, vS, R, * 14 nr
968	B. 181	13 53 23	3'10	92 16	17'6	vF, vS, stellar
969	J. 776	13 54 30	3'11	93 30'2	17'6	vF, vS, R, N = 14m
970	J. 271	13 55 49	2'89	74 47'3	17'5	pB, vS, R
971	Sf. 105	13 56 23	3'18	99 27'7	17'5	No description
972	J. 272	13 56 46	3'26	106 33'0	17'5	F, vS, R, r
973	B. 182	13 59 10	3'13	94 49	17'4	Stellar, 13'5 m
974	B. 183	13 59 15	3'13	94 51	17'4	Neb object 1'8 sff of 5465
975	J. 273	14 0 26	2'88	73 58'8	17'3	vF, vS, R
976	Sw. VII.	14 1 28	3'08	90 28'5	17'3	eF, vS, R, eF * att s
977	J. 777	14 1 28	3'10	92 20'2	17'3	vF, S, dif
978	J. 778	14 1 44	3'10	92 18'4	17'3	vF, S, R, bMN
979	Sw. X.	14 2 34	2'88	74 29'5	17'2	eeF, pS, R, v diffic
980	J. 779	14 3 0	3'15	96 40'8	17'2	F, S, R, N = 13m, r
981	J. 780	14 3 11	3'11	93 30'6	17'2	F, S, gbM
982	J. 274	14 3 21	2'85	71 39'5	17'2	vS, R, N = 11m
983	J. 275	14 3 27	2'85	71 37'2	17'2	eS, R, N = 11m
984	J. 276	14 3 31	2'83	70 57'5	17'2	pB, S, gbM
985	O. St.	14 4 18	3'09	92 33'6	17'8	eF, eS
986	J. 781	14 4 19	3'05	88 0'5	17'1	F, S, N = 13'5, r
987	J. 277	14 4 56	2'82	70 9'2	17'1	eF, vS, stellar, v diffic
988	J. 278	14 7 28	3'02	86 9'8	17'0	F, vS, R
989	J. 279	14 7 48	3'02	86 12'5	17'0	F, vS, R, bM
990	B. 184	14 10 6	2'46	49 33	16'9	vF, S, dif
991	J. 280	14 10 14	3'24	103 13'3	16'9	F, S
992	J. 782	14 11 6	3'05	88 29'2	16'9	F, pS, R, * 10'5 nf
993	J. 281	14 11 20	2'92	78 4'9	16'8	vF, iF, diffic
994	J. 282	14 11 24	2'92	78 8'5	16'8	pB, vS, R
995	Sw. VII.	14 12 5	1'85	31 32'4	16'8	eeF, S, lE, v diffic
996	Sw. VII.	14 12 37	+ 1'85	31 42'4	+ 16'8	eeF, S, mE, v diffic

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
997	Sw. (X.)	h m s 14 12 38	+ 3'12	93 50'0	+ 16'7	pF, S, R, * n
998	Sw. (X.)	14 12 56	3'12	93 49'0	16'7	eeF, S, R, v diffie
999	J. 283	14 12 59	2'82	71 28'9	16'7	F, vS, R, N = 14m, stellar
1000	J. 284	14 13 7	2'82	71 30'1	16'7	F, vS, R, N = 14m, stellar
1001	J. 285	14 13 41	3'00	84 13'7	16'7	eF, S, dif
1002	J. 286	14 13 44	3'00	84 10'2	16'7	eF, vS, lbM
1003	J. 287	14 13 53	2'99	83 54'3	16'7	eF, vS, vS * att, diffie
1004	J. 288	14 14 16	2'83	71 42'1	16'7	pF, sbM
1005	Sw. VII.	14 16 30	0'75	17 45'6	16'6	F, S, R, bM
1006	Sf. 15	14 16 32	2'73	65 34'2	16'6	F
1007	J. 289	14 17 36	3'00	84 48'8	16'5	vF, vS, R, lbM, * 10'5 nr
1008	Sf. 5	14 18 52	2'65	61 1'8	16'5	pF
1009	J. 290	14 19 33	2'90	77 0'5	16'4	vF, S, dif
1010	J. 783	14 20 14	3'05	88 20'4	16'4	F, S, dif
1011	J. 784	14 20 58	3'05	88 21'7	16'3	F, vS, R, N = 14m
1012	Sf 8	14 21 10	2'60	58 23'4	16'3	No description
1013	J. 291	14 21 35	2'67	62 32'4	16'3	eF, vS
1014	Sf. 78	14 21 36	2'87	75 35'6	16'3	F, pL, R, vgbM
1015	J. 292	14 21 41	2'85	73 57'1	16'3	vF, iF
1016	Sw. X.	14 21 50	3'00	84 32'7	16'3	vF, vS, R, f h 1806
1017	J. 293	14 21 52	2'69	63 30'5	16'3	pF, vS, sbM, stellar
1018	J. 294	14 21 57	2'69	63 32'8	16'3	eF, eS, v diffie
1019	J. 295	14 21 59	2'69	63 25'8	16'3	F, vS, R, stellar, * 13 nr
1020	J. 296	14 22 35	2'68	63 21'3	16'2	F, stellar, vF * close
1021	J. 297	14 22 51	2'77	68 42'8	16'2	F, S, iR
1022	J. 298	14 23 0	3'01	85 34'9	16'2	vF, E ns
1023	Thome	14 23 55	3'63	125 10'6	16'2	Neb
1024	J. 299	14 24 26	3'02	86 21'9	16'2	pB, vS, E ns
1025	J. 300	14 24 33	2'97	82 17'7	16'2	eF, sbM
1026	Sf. 13	14 25 14	2'58	58 9'3	16'1	pB
1027	Sw. VII.	14 25 16	1'96	35 25'5	16'1	eeF, pS, R, another nr?
1028	Sw. VIII.	14 27 5	2'34	47 32'2	16'0	pB, S, R, F * close nf
1029	B. 185	14 27 37	2'09	39 28	16'0	vF, S, 1E, mbM
1030	Sf. 6	14 27 44	2'56	57 41'3	16'0	pF
1031	Sw. VII.	14 29 35	2'15	41 21'0	15'9	eeF, S, R
1032	Sw. VII.	14 29 40	2'15	41 25'7	15'9	eeF, S, R
1033	Sw. VII.	14 29 45	2'15	41 27'0	15'9	eeF, S, R
1034	J. 301	14 30 35	2'85	74 43'5	15'8	vF, lbM
1035	J. 302	14 31 20	2'93	80 3'3	15'8	pF, vS, R, S * nr
1036	J. 303	14 31 52	2'80	71 16'5	15'8	pF, S
1037	J. 304	14 31 55	2'30	71 12'1	15'7	F, vS, R, stellar
1038	J. 305	14 32 42	+ 2'89	77 28'1	+ 15'7	F, vS, stellar, * 10 f 8'

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1039	J. 306, Sw. (X.)	h m s 14 33 27	s +3'02	85° 59' 5	+15' 7	vF, vS, lbM
1040	J. 307	14 33 34	2'93	79 55' 5	15' 7	eF, vS
1041	J. 308	14 33 35	3'02	86 2' 9	15' 7	pB, vS, R, N = 12m
1042	J. 309, Sw. (X.)	14 33 36	3'01	85 57' 3	15' 7	(vF, vS, R, bM, close D with h 1862
1043	J. 310	14 33 41	3'01	86 3' 0	15' 7	vF, vS, R, bM
1044	J. 311	14 34 39	2'93	79 57' 5	15' 7	F, vS, R, gbM
1045	Sw. VIII.	14 35 26	2'31	46 39' 4	15' 6	eeF, pS, R, nearly bet 2 st
1046	Sw. VII.	14 35 53	0'82	20 22' 4	15' 5	eF, S, R, D * f
1047	J. 313	14 35 53	2'77	70 12' 7	15' 5	vF, S, v dif
1048	J. 312	14 36 0	2'99	84 30' 6	15' 5	pB, pL, E pf, r
1049	Sw. IX.	11 36 11	1'45	27 22' 1	15' 5	eeF, pS, R
1050	J. 314	14 37 37	2'79	71 22' 7	15' 4	vF, S, R, dif
1051	J. 315	14 37 43	2'77	70 22' 8	15' 4	F, vS, stellar
1052	J. 316	14 37 48	2'74	68 47' 5	15' 4	Neb * 12m
1053	J. 317	14 39 12	2'80	72 27' 3	15' 3	eF, vS, v dif, * 4 mp 28"
1054	J. 785	14 39 24	3'04	88 8' 6	15' 3	vF, vS, sbMN = 14m
1055	J. 318	14 39 47	3'27	103 7' 5	15' 3	F, pL, E ns
1056	Sw. VII.	14 41 3	2'01	39 0' 7	15' 2	eeF, L, R, 3 pB st sf
1057	Sw. VII.	14 41 20	2'01	39 2' 3	15' 2	eF, pS, R, bet 3 st
1058	J. 319	14 42 42	2'79	72 22' 8	15' 2	F, E ns, mbMN = 14m
1059	J. 786	14 43 31	3'08	90 17' 5	15' 1	F, S, lbM, r
1060	Sf. 106	14 44 26	3'17	96 39' 6	15' 0	No descr
1061	J. 320	14 44 47	2'77	70 39' 9	15' 0	eF, eS, diffie
1062	J. 321	14 44 50	2'77	70 44' 2	15' 0	pF, iF, diffie
1063	J. 322	14 45 12	2'99	84 44' 4	15' 0	pF, stellar
1064	J. 323	14 45 13	2'99	84 45' 6	15' 0	vF, vS, R, lbM
1065	Sw. VII.	14 46 1	1'97	26 9' 6	15' 0	vF, pS, R
1066	J. 324	14 46 1	3'01	86 8' 0	15' 0	F, vS, R
1067	J. 325	14 46 5	3'01	86 6' 0	15' 0	F, vS, R, lbM
1068	J. 326	14 46 30	3'01	86 21' 4	15' 0	F, pL, dif
1069	Sw. VII.	14 46 48	1'81	35 2' 8	15' 0	pF, vS, R, no st nr
1070	J. 327	14 46 53	3'01	85 56' 6	15' 0	vF, S, R, diffie
1071	Sw. X.	14 47 10	2'39	84 42' 6	15' 0	vF, S, R, bM
1072	J. 328	14 47 13	2'99	84 35' 0	15' 0	vF, vS, R, vlbM, 2nd of 3
1073	J. 329	14 47 15	2'99	84 37' 9	15' 0	vF, S, R, S * s, 3rd of 3
1074	Sw. VII.	14 47 27	1'94	38 9' 3	14' 9	eeF, S, R
1075	Sw. VIII.	14 48 22	2'77	71 18' 3	14' 8	eeF, pS, R, v diffie
1076	Sw. VIII., J. 330	14 48 32	2'77	71 23' 1	14' 8	eF, pS, R, bM, * sp
1077	O. St.	14 49 28	3'38	108 44	14' 8	vF, vS, R, gbMN
1078	J. 331	14 49 42	2'91	80 5' 2	14' 8	pF, vS, R, lbM
1079	J. 332	14 49 49	+2'91	80 4' 3	+14' 7	F, vS, R, gbM

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1080	J. 787	h m s 14 50 36	^s + 3'17	96 9'6	+ 14'7	vF, vS, R, lbM
1081	O. St.	14 50 59	3'38	108 44	14'7	eF, pL, E 175°
1082	J. 333	14 52 0	2'95	82 25'4	14'6	pF, S, R
1083	Sw. VII.	14 53 39	0'69	21 0'6	14'5	eeF, S, R
1084	O. St.	14 53 48	3'18	96 55'0	14'5	eF, S, R, dif
1085	J. 334	14 55 15	2'77	72 12'9	14'4	pB, vS, lE ns
1086	J. 335	14 56 58	2'77	72 21'7	14'3	F, iR, bMN
1087	J. 336	14 59 40	3'00	85 41'8	14'1	vF, vS
1088	J. 337	14 59 44	3'00	85 40'9	14'1	eeF, vS
1089	J. 338	15 0 32	2'94	82 21'4	14'1	eF, vS, R
1090	B. 186	15 0 38	2'18	46 47	14'1	eF, neb?
1091	B. 187	15 0 39	3'25	100 36	14'1	vF, S, dif
1092	J. 339	15 0 49	2'90	80 5 8	14'4	vF, vS, R
1093	J. 340	15 1 2	2'82	74 56'3	14'1	pB, vS, R, lbM
1094	J. 341	15 1 9	2'82	74 51'8	14'1	pB, vS, R, biN
1095	Sw. VIII.	15 1 55	2'83	75 27'0	14'0	eeF, S, lE
1096	J. 342	15 1 58	2'73	70 16'6	14'0	vF, S, dif
1097	J. 343	15 2 8	2'73	70 17'1	14'0	vF, vS, R, lbM
1098	B. 188	15 2 36	1'65	33 51	14'0	vF (? only a * 13m)
1099	Sw. IX.	15 3 22	1'60	32 58'2	13'9	eeF, pS, R, bet 2F st
1100	Sw. IX.	15 3 30	1'15	26 28'2	13'9	vF, pS, lE, bet 2 st
1101	Sw. IX.	15 4 1	2'97	83 42'2	13'8	No descr
1102	Sw. X.	15 4 10	2'99	85 12'0	13'8	eeF, vS, F * sf, v diffic
1103	J. 344	15 5 17	2'73	70 15'9	13'8	vF, S
1104	B. 190	15 5 29	3'15	94 33	13'8	vF
1105	Sw. X.	15 6 20	2'99	85 12'6	13'7	eeF, S, lE, F * np
1106	J. 345	15 6 58	2'98	84 45'8	13'7	vF, vS, R, gbM
1107	J. 346	15 7 11	2'98	84 45'6	13'7	F, vS, R, gbM
1108	Fleming (3269)	15 7 18	4'06	135 8	13'6	Stellar, gaseous spectrum
1109	Sw. X.	15 10 6	2'97	84 14'7	13'5	eeF, pS, R, * nf, v diffic
1110	Sw. VII.	15 10 12	0'65	22 6'6	13'5	eeF, S, mE
1111	Sw. VIII.	15 10 30	1'66	34 57'2	13'5	pB, S, R, 2 st nr
1112	Sw. IX.	15 10 52	2'94	82 15'3	13'4	eeF, pS, R
1113	J. 347	15 11 38	+ 2'84	76 58'9	13'4	eF, * 12 nr
1114	B. 191	15 13 13	- 0'88	14 2	13'4	vF, ? only a * 13
1115	Sw. VIII.	15 15 1	+ 3'14	93 57'4	13'2	eeF, S, R, pB * sf
1116	Sw. IX.	15 15 13	2'91	81 3'5	13'1	eeF, S, R
1117	J. 348	15 17 54	2'78	74 3'2	12'9	F, vS, R, lbM
1118	J. 349	15 18 24	2 82	76 3'4	12'9	pB, vS, R, S * nr
1119	J. 788	15 18 26	3'13	93 9'7	12'9	F, pS, R, * 11'5 nf
1120	J. 350	15 19 51	2'72	70 38'6	12'9	eF, eS, vF * att
1121	Sw. IX.	15 20 52	+ 2'94	82 41'6	+ 12'8	eeF, eS, stellar, vF * close p

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.			N.P.D. 1860.	Prec. 1880.	Description.	
		h	m	s				
1122	{ B. 192, Barnard } (3004)	15	22	36	+2°93	81 55'6"	+12°7	vF, pS, mbM, * 11 p 1'
1123	B. 193	15	24	3	2°09	46 38	12°6	vF, eS, stellar
1124	Sw. VIII.	15	24	27	2°61	65 52'1	12°5	eeF, vS, mE, 2 st n
1125	J. 789	15	25	50	3°09	91 8 6	12°4	F, pL, R, dif
1126	B. 194	15	28	4	2°97	84 32	12°3	* 13, nebulous?
1127	Sf. 7	15	29	50	2°60	65 3'2	12°1	pF
1128	Sw. VIII.	15	30	42	3°09	91 4'8	12°1	pF, pS, R
1129	Sw. VII.	15	31	5	0°35	21 16'5	12°1	vF, pS, iR, D * nf
1130	B. 195	15	31	20	2°73	72 18	12°0	vF (? another 2' sp), * 8'7 f
1131	J. 351	15	32	14	2°83	77 27'4	12°0	pF, vS, R, stellar, II. 76 np
1132	Sf. 9	15	33	42	2°66	68 52'9	11°9	No deser
1133	J. 352	15	34	43	2°76	73 58'4	11°8	pB, pL, iF
1134	J. 353	15	38	34	2°73	72 34'8	11°6	vF, vS, dif
1135	J. 354	15	39	12	2°71	71 52'1	11°5	vF, vS, R
1136	J. 790	15	40	18	3°09	91 7'2	11°4	F, eS, stellar
1137	Sw. IX.	15	42	8	2°90	80 59'0	11°3	vF, S, R, * 9 close np
1138	J. 355	15	42	23	+2°52	63 22'3	11°3	vF, S, iF, lbM, r
1139	Sw. VII.	15	42	43	-5°84	6 56'6	11°4	eeF, S, lE, v diffic
1140	B. 196	15	42	52	+2°68	70 30	11°2	vF (? S Cl), * 9'5 close
1141	Sw. VII.	15	43	3	2°82	77 10'3	11°2	vF, vS, R
1142	J. 356	15	43	8	+2°70	71 24'9	11°2	vF, dif
1143	Sw. VII.	15	43	56	-5°70	7 5'6	11°4	pF, vS, R, * nr
1144	Sw. IX.	15	46	43	+2°00	46 7'9	11°0	eeF, vS, R, * sf
1145	Sw. VII.	15	47	22	-0°48	17 6'9	11°0	eeF, pS, R, III. 313 nr
1146	Sw. VII.	15	48	9	+0°04	20 10'3	11°0	vF, pS, R, 2 st nr, sp of 2
1147	Sw. VII.	15	49	55	0°00	20 0'4	11°8	eeF, S, R, nf of 2
1148	Sf. 10	15	50	49	2°60	67 11'0	10°6	Neb *
1149	Sw. (X.)	15	51	25	2°82	77 30'9	10°6	eeF, pS, R, am 4st, v diffic
1150	J. 357	15	51	53	2°74	73 43'7	10°6	2 S st in F neby
1151	J. 358	15	52	12	2°71	72 8'7	10°5	vF, pL, dif
1152	Sw. VII.	15	52	21	1°79	41 30'2	10°5	vF, S, R, sp of 2
1153	Sw. VII.	15	52	36	+1°79	41 25'4	10°5	pF, pS, R, bM, * nf, nf of 2
1154	Sw. VII.	15	52	45	-0°16	19 13'1	10°5	vF, pS, R
1155	J. 359	15	54	12	+2°72	73 54'5	10°4	vF, S, diffic
1156	Sw. VII.	15	54	25	2°66	69 52'7	10°3	eeF, pS, lE, 2 st nr
1157	J. 360	15	54	31	2°75	74 4'9	10°3	vF, vS
1158	Sw. X.	15	54	34	3°03	87 53'5	10°3	eeF, pL, iR
1159	J. 361	15	54	36	2°75	74 11'5	10°3	vF, eS, R
1160	J. 362	15	54	39	2°75	74 7'1	10°3	vF, vS, R
1161	J. 363	15	54	52	2°74	73 57'1	10°3	F, vS, R, vSN
1162	J. 364	15	54	57	+2°70	71 55'2	+10°3	vF, vS, R, diffic (another susp)

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1163	J. 365	h m s 15 55 5	s +2.74	° ′ ″ 74 6 5	″ +10.3	F, R, vSN
1164	B. 197	15 55 34	-0.24	19 1	10.3	* 13 with neb ?
1165	J. 366	15 55 44	+2.74	73 54.2	10.2	vF, S, diffc
1166	J. 367	15 56 20	2.50	63 18.7	10.2	vF, vS, vF * nf
1167	J. 368	15 57 25	2.75	74 39.7	10.2	F, vS, R
1168	J. 369	15 57 28	2.75	74 42.3	10.2	pF, vS, iF, D?, 3 F st n
1169	Sw. VII. & VIII.	15 57 47	2.78	75 51.3	10.2	eF, vS, stellar
1170	J. 370	15 58 13	2.69	71 53.2	10.1	vF, vS, vSFN, 6041 f
1171	B. 198	15 58 33	2.69	71 39	10.1	Neb * ?
1172	B. 199	15 58 42	2.69	71 45	10.1	vF, S, stellar N
1173	J. 371	15 58 55	2.70	72 12.2	10.0	pF, S, iF, gbM, r
1174	Sf. 77	15 59 0	2.75	74 35.4	10.0	pF, S, bMN = 12m
1175	B. 200	15 59 1	2.69	71 29	10.0	Neb object, 6055 f 2'
1176	Sw. VII.	15 59 4	2.69	71 39.7	10.0	eeF, pS, iR, 2st nr s
1177	B. 201	15 59 5	2.68	71 18	10.0	vF, * 9.5 4' s
1178	Sw. VII.	15 59 7	2.70	72 1.2	10.0	eeF, pS, bet 2st
1179	Sw. VII.	15 59 7	2.69	71 52.0	10.0	eeF, pS, R [?=6054]
1180	B. 202	15 59 9	2.69	71 30	10.0	F * with neb ?, 6055 f
1181	Sw. VII.	15 59 16	2.70	72 1.7	10.0	eeF, S, R, '12th of 12'
1182	J. 372	15 59 19	2.69	71 48.8	10.0	vF, S, dif, lbM
1183	B. 203, J. 372 a	15 59 19	2.69	71 51	10.0	vF, vS, stellar * 11 sp 1'
1184	B. 204	15 59 25	2.69	71 49	10.0	* 13 with neb ?
1185	B. 205	15 59 26	2.69	71 54	10.0	* 13 with S neb
1186	J. 373	15 59 27	+2.70	72 15.8	10.0	F, S, dif
1187	B. 206	15 59 34	-0.27	19 3	10.0	* 13 with neb
1188	J. 374	15 59 50	+2.70	72 9.9	10.0	vF, S, dif
1189	Sw. VII.	15 59 55	2.68	71 25.7	10.0	eeF, pS, iR, bet 2 st
1190	Sw. VII.	16 0 5	2.68	71 22.3	10.0	eeF, S, R, 6061 nr
1191	Sw. VII.	16 0 7	2.68	71 20.7	10.0	eeF, S, lE
1192	J. 375	16 0 16	2.69	71 50.4	10.0	vF, S, iF, dif
1193	J. 376	16 0 16	2.69	71 53.1	10.0	F, S, r
1194	J. 377	16 0 21	2.69	71 50.1	9.9	eF, vS, dif
1195	J. 378	16 0 23	2.71	72 26.2	9.9	vF, S, dif
1196	Sw. VII.	16 1 19	2.85	78 51.0	9.8	eeF, nr p * of 3 in line
1197	Spitaler (2993)	16 1 31	2.91	82 4.2	9.8	L, mE, * att nf
1198	J. 379	16 2 2	2.81	77 16.9	9.8	F, vS, R, N = 13m
1199	Sw. IX.	16 3 54	+2.86	79 35.4	9.7	eeF, S, E, * 9.5 f 9'
1200	Sw. VII.	16 4 44	-0.15	19 57.0	9.7	pF, pS, lE, * 12 nr [?=B 207]
1201	Sw. VII.	16 5 59	-0.15	20 1.0	9.6	eeF, pS, iR, v diffc
1202	Sw. VII.	16 6 14	+2.86	79 46.1	9.5	eF, pS, R
1203	Thome	16 6 58	+3.55	111 59.1	9.4	No descr
1204	B. 207	16 7 34	-0.16	20 1	+9.5	vF, S, stell N, * 11 f 3'

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1205	Sw. VII.	h m s 16 7 40	^s +2.87	80 7 2	+9.3	F, S, 1E, * p
1206	Sw. VII., B. 208	16 8 36	2.83	78 20.8	9.3	eF, S, R
1207	Thome	16 10 41	3.74	119 17.9	9.1	No descr
1208	Burnham	16 10 43	2.18	53 7.3	9.1	vF, * 7m 105" n
1209	J. 380	16 12 17	2.73	74 5.9	9.0	pF, vS, R, bM, r
1210	Sw. IX.	16 12 40	0.75	27 6.5	9.0	vF, vS, 1E, r
1211	Sw. VIII.	16 13 26	1.46	36 38.7	8.9	pB, vS, R, bM
1212	Sw. IX.	16 14 13	0.56	25 25.7	8.9	eeF, pS, R, 3st n in line
1213	Sw. IX.	16 14 47	3.10	91 11.4	8.8	F, vS, R
1214	Sw. VII.	16 15 20	0.34	23 40.8	8.8	eF, S, R
1215	Sw. VII.	16 15 30	0.01	21 15.0	8.8	vF, S, R, 1st of 3
1216	Sw. VII.	16 15 55	+0.01	21 18.4	8.8	eeF, pS, R, 2nd of 3
1217	Sw. VII.	16 16 32	-0.23	19 59.0	8.7	eeF, S, R, v diffie
1218	Sw. VII.	16 16 40	0.00	21 26.7	8.7	vF, pS, 1E
1219	J. 381	16 18 17	+2.63	70 11.6	8.5	F, S, Epf, lbM
1220	Sw. X.	16 22 29	2.89	81 13.9	8.2	eeF, pS, E
1221	Sw. X.	16 30 38	1.76	43 17.9	7.6	eeF, pS, E, p of 2
1222	Sw. X.	16 30 57	1.77	43 28.9	7.6	eeF, pL, R, f of 2
1223	Sw. X.	16 31 36	1.62	40 26.9	7.5	eeF, pS, R, bet 2 dist F st
1224	J. 382	16 36 48	2.63	70 29.3	7.1	vF, vS, R, stellar
1225	Sw. IX.	16 37 0	0.00	22 5.3	7.1	eeF, vS, 2 or 3 F st inv, * p
1226	Sw. IX.	16 37 2	1.76	43 43.2	7.0	eF, S, R, forms arc with 4 st
1227	B. 210	16 37 45	0.99	31 7	7.0	vF, S, R, stellar N
1228	Sw. X.	16 41 30	0.27	24 9.2	6.7	vF, pS * n, 4 st in curve s
1229	Sw. X.	16 41 30	1.49	38 27.2	6.7	eeF, pS, v diffie, np of 2
1230	Sw. X.	16 41 48	1.49	38 31.2	6.7	eeF, S, R, v diffie, sf of 2
1231	Sw. IX.	16 44 40	0.99	31 18.8	6.4	eeF, L, R, pB * sp
1232	Sw. IX.	16 45 ±	1.75	43 40.2	6.3	eeF, S, iR, B * sf
1233	Sw. IX.	16 47 9	0.54	26 36.6	6.3	eF, vS, vE, bet 2 st [= 6247?]
1234	B. 211	16 50 17	1.10	32 5.2	6.0	vF, sev st in neb?
1235	B. 212	16 50 49	0.53	26 39	6.0	vF, dif, pS, * 8 nf 3'
1236	Sf. 44, Sw. X.	16 52 29	2.60	69 43.6	5.7	eF, pS, v1E, vF * close p
1237	Sw. IX.	16 53 23	1.22	34 43.8	5.7	eF, pL, 1E, * nr p
1238	m. 327	16 54 40	2.52	66 4.2	5.6	eF (not obs by St)
1239	B. 213	16 54 51	2.52	66 4.6	5.6	eF, eF stell N [6276?]
1240	B. 214	16 59 19	0.72	28 4.5	5.1	Susp neb, 3' nf * 8.7
1241	Sw. VII.	17 0 27	0.44	26 5.8	5.1	eF, pS, R
1242	J. 383	17 1 46	2.98	85 46.2	5.0	vS, R, v1bM
1243	Sw. IX.	17 4 0	2.82	79 1.9	4.8	pF, pS, mE, r
1244	Sw. VIII. & IX.	17 5 32	2.11	53 33.8	4.7	vF, pS, R, bet 2 st
1245	Sw. IX.	17 7 43	2.05	51 47.7	4.6	eF, S, R, bM, F * close s
1246	B. 215	17 8 13	+2.59	69 3.6	+4.4	Neb * 13? * 10 n 1'

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1850.	Prec. 1880.	Description.
1247	B. 216	h m s 17 8 31	^s + 3 36	102° 38'	" + 4'3	Stellar, * 9'8 sp 0'7
1248	Sw. VII.	17 9 26	0'81	29 57'5	4'4	eeF, pS, R, bet 2 st p & f
1249	Sw. IX.	17 9 56	2'13	54 17'8	4'3	eeF, pS, R, v diffic, 4 st s
1250	Sw. IX.	17 12 4	+ 1'02	32 25'2	4'1	pF, S, cE
1251	Sw. X.	17 12 49	- 1'09	17 25'0	4'1	eeF, pS, R, sp of 2, II. 767 nr
1252	B. 217	17 13 26	+ 1'02	32 28	4'0	vF, pS, * 12'5 v close
1253	Sf. 29	17 13 39	+ 2'67	71 11'4	3'9	F
1254	Sw. X.	17 14 21	- 1'09	17 24'5	4'0	eeF, pS, R, nf of 2, v diffic
1255	Sw. X.	17 16 37	+ 2'78	77 12'1	3'7	vF, pS, R, forms trap with 3 st
1256	J. 384	17 18 9	2'41	63 23'7	3'7	F, S, gbM
1257	Spitaler (2993)	17 19 36	3 23	96 58'2	3'4	F, pL, lbM
1258	Sw. VII.	17 25 3	0'91	31 23'3	3'0	pB, pS, R, 1st of 3
1259	Sw. VII.	17 25 13	0'91	31 20'8	3'0	pB, pS, R, 2nd of 3
1260	Sw. IX.	17 25 18	+ 0'91	31 24'2	3'0	eeF, S, R, 3rd of 3
1261	Sw. VIII.	17 25 25	- 0'85	18 36'0	3'0	eeF, pS, R
1262	Sw. IX.	17 28 51	+ 1'80	46 7'7	2'7	eF, pS, R, 1st of 3
1263	Sw. IX.	17 28 56	1'80	46 4'7	2'7	eF, pS, R, 2nd of 3
1264	Sw. IX.	17 29 6	1'80	45 15'2	2'7	eF, pS, R, 3rd of 3
1265	Sw. IX.	17 32 21	1'87	47 48'5	2'4	eeF, S, 1E
1266	Pickering (3227)	17 35 14	4'45	136 2	2'1	Stellar (gaseous spectrum)
1267	Sw. VII.	17 36 45	0'82	30 32'3	2'0	eeF, pS, R, v diffic
1268	Sw. VII.	17 44 12	2'66	72 44'9	1'3	eeF, pS, R, v diffic
1269	Sw. VII.	17 46 29	2'54	68 25'9	1'1	eeF, pL, R, 2 F st nr
1270	Sw. VII.	17 46 32	0'53	27 43'9	1'2	eeF, S, R, v diffic, 6488 f
1271	Sw. VIII.	17 56 55	3'68	114 27'2	+ 0'2	eeF, vL, B * inv
1272	B. 218	17 59 11	2'44	64 55	0'0	S Cl
1273	B. 219	17 59 20	2'44	64 53	0'0	vF, S Cl with neb? * 10 f 3'
1274	Barnard (3111)	18 1 0	3'66	113 45	- 0'2	3 st 8'5 to 9m in pL neb
1275	Barnard (3111)	18 1 25	3'67	113 51	0'2	2 st 8 & 8'5 in pL neb
1276	Sw. VIII.	18 3 33	3'24	97 15'4	0'4	eeF, vL, v diffic, D * close p
1277	B. 220	18 4 56	2'30	59 2	0'5	S Cl
1278	B. 221	18 5 11	2'27	58 53	0'6	vF, vS, sev st susp
1279	Sw. VII.	18 6 12	2'10	53 59'8	0'6	eeF, pS, R, v diffic
1280	B. 222	18 6 38	2'43	64 22	0'6	* 13, nebulous?
1281	Sw. VIII.	18 6 42	2'10	54 0'4	0'6	eeF, S, cE, sev st nr f [? = 1279]
1282	B. 223	18 8 6	2'56	68 56	0'8	vF, 2 or 3 st susp
1283	Barnard (3111)	18 8 59	3'55	109 47'0	0'8	* 9'3 nebulous
1284	Barnard (3101)	18 9 23	3'55	109 42'7	0'8	* 7'6 in neb, 15' diam
1285	B. 224	18 10 26	2'45	64 57	1'0	S Cl
1286	Sw. VII.	18 13 41	1'13	34 27'4	1'2	eF, pS, R, 2 st nr
1287	Barnard (3111)	18 23 40	3'33	100 53'2	2'1	* 5'5 in L, E neb
1288	Sw. VII.	18 24 41	+ 1'97	50 21'0	- 2'1	v F, S, 1E, 3 st nr

No.	Observer.	R.A. 1860.	Dec. 1880.	N.P.D. 1860.	Dec. 1880.	Description.
1289	Sw. VII.	h m s 18 25 16	+ 1° 96'	50° 6' 0"	- 2° 2'	eeF, pS, lE, 3 st nr
1290	Thome	18 29 55	3° 67'	114 13' 7"	2° 5'	No descr
1291	Sw. X.	18 30 3	1° 56'	40 47' 4"	2° 7'	eF, vS, R, F * close n
1292	Fleming (3269)	18 35 58	3° 77'	117 57	3° 1'	{ Stellar, gaseous spectrum, * 9' 6" sf
1293	Sw. VIII.	18 39 7	1° 10'	33 49' 4"	3° 4'	eeF, S, lE, * in centre, ?D
1294	Sw. VII.	18 45 16	1° 97'	49 54' 9"	4° 0'	eeF, S, iR, v diffie, F * close nf
1295	Sf. 82	18 47 1	3° 28'	98 58' 0"	4° 2'	pB, pL, gbM
1296	Barnard (3200)	18 48 7	2° 23'	57 6' 5"	4° 3'	eF, pS, iR, 4' npM 57
1297	Pickering (3227)	19 7 45	4° 14'	129 51	5° 9'	Stellar (gaseous spectrum)
1298	B. 225	19 11 16	3° 11'	91 52	6° 2'	vS Cl, 6778 p 3'
1299	Espin	19 16 33	2° 60'	69 31	6° 7'	S Cl of v F st
1300	Sw. X.	19 20 42	1° 44'	37 37' 5"	7° 0'	eF, vS, R
1301	Sw. IX.	19 22 56	1° 63'	40 59' 6"	7° 2'	eeF, vS, R, 3 st f
1302	Sf. 36	19 25 41	2° 18'	54 32' 2"	7° 4'	vF, undefined
1303	Sf. 37	19 26 16	2° 17'	54 26' 2"	7° 4'	vF, S, with S Cl
1304	Espin	19 30 46	2° 01'	49 16	7° 8'	F neby
1305	Espin	19 33 8	2° 63'	70 6	8° 0'	vF, * 9' 5" at sf end
1306	Espin	19 36 43	2° 14'	52 41	8° 3'	Neb group of F st
1307	Espin	19 37 5	2° 45'	62 50	8° 3'	F, vL, Ens, st inv
1308	O. St.	19 37 10	3° 40'	105 3' 3"	8° 3'	eF, eS, lE, gbM, 6822 p 12 ^s
1309	J. 385	19 55 1	3° 44'	107 37' 1"	9° 7'	F, vS, R, r
1310	Espin	20 4 43	2° 29'	55 27	10° 4'	F neb y
1311	Espin	20 6 0	2° 09'	49 14	10° 6'	eF, within circle of st
1312	B. 226	20 10 30	2° 72'	72 24	10° 9'	eF, pL, dif
1313	J. 386	20 10 45	3° 42'	107 22' 9"	10° 9'	F, vS, R, * 13 close
1314	Espin	20 11 42	2° 56'	65 15	11° 0'	F, pL, partly resolved
1315	B. 227	20 11 43	2° 41'	59 45	11° 0'	* 13 with eF neb ?
1316	B. 228	20 15 33	2° 95'	83 55	11° 3'	eF neb, suspected
1317	Spitaler 23	20 16 7	3° 07'	89 46' 8"	11° 3'	○ = * 12, diam 10"-15"
1318	Barnard	20 17 12	2° 15'	50 11' 4"	11° 4'	{ γ Cygni, surrounded by L patches of F neby
1319	J. 387	20 18 0	3° 45'	108 57' 5"	11° 4'	pF, vS, R, r
1320	J. 791	20 19 24	3° 04'	87 32' 8"	11° 5'	pF, S, R, gbM, r
1321	J. 388	20 20 10	3° 44'	108 44' 7"	11° 6'	F, S, iF, r
1322	J. 389	20 22 16	3° 37'	105 41' 3"	11° 7'	F, vS, R
1323	J. 390	20 22 37	3° 37'	105 38' 7"	11° 7'	vS neb *
1324	Sw. VII.	20 24 12	3° 25'	99 32' 4"	11° 9'	eeF, S, R, * 8m s
1325	Sw. VIII.	20 26 6	2° 89'	80 35' 8"	12° 0'	vF, S, sev F st inv, sp of 2
1326	Sw. VIII.	20 26 16	2° 89'	80 34' 9"	12° 0'	eeF, S, mE, pF * s, nf of 2
1327	Burnham	20 28 30	3° 08'	90 29' 0"	12° 2'	vF, * 8m 1' f
1328	J. 391	20 33 54	3° 45'	110 7' 8"	12° 6'	F, S, vF * close
1329	Sw. IX.	20 37 11	+ 2° 79'	74 54' 9"	- 12° 8'	eeF, pL, R, bet 4 st, v diffie

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1330	J. 392	h m s 20 38 29	s +3'34	° ' " 104 31'9	" -12'8	F, vS, dif
1331	J. 393	20 40 13	3'26	100 30'2	13'0	F, S, bM r
1332	J. 394	20 44 5	3'33	104 13'9	13'2	F, vS, R
1333	J. 395	20 44 25	3'37	106 46'1	13'3	vF, vS, sbM
1334	J. 396	20 44 26	3'37	106 48'1	13'3	F, S
1335	J. 397	20 45 15	3'37	106 51'2	13'4	F, S, stellar
1336	J. 398	20 47 10	3'40	108 34'1	13'5	vF, S, dif, F * f
1337	J. 399	20 49 3	3'37	107 6'7	13'6	F, vS, R, gbM
1338	J. 400	20 49 7	3'37	107 1'8	13'6	vF, vS, dif
1339	J. 401	20 50 1	3'40	108 28'9	13'6	F, S, gbM, r
1340	Sf. 51	20 50 25	2'49	59 28'4	13'6	Possibly conn with h 2093
1341	J. 402	20 52 32	3'32	104 31'6	13'7	F, vS, R, lbM
1342	J. 403	20 52 41	3'33	105 2'5	13'7	vF, vS, Epf, lbM
1343	J. 404	20 53 23	3'35	105 56'6	13'8	pB, vS, R, mbM
1344	J. 405	20 53 32	3'31	103 55'3	13'8	pB, pL, iF, sbM
1345	J. 406	20 53 40	3'31	103 56'4	13'8	vF, S, R, vlbM
1346	J. 407	20 53 58	3'32	104 24'6	13'9	pB, vS, R, gbM
1347	J. 408	20 54 1	3'31	103 51'5	13'9	pB, R
1348	J. 409	20 54 1	3'31	103 54'1	13'9	F, vS, R, bM
1349	J. 410	20 54 7	3'31	103 48'4	13'9	vF, vS, R, lbM
1350	J. 411	20 54 8	3'32	104 23'6	13'9	F, S, iF, lbM, r
1351	J. 412	20 54 9	3'31	103 44'6	13'9	F, vS, R, lbM
1352	J. 413	20 54 12	3'31	103 55'7	13'9	pB
1353	J. 414	20 54 13	3'31	103 49'2	13'9	vF, vS, R
1354	J. 415	20 54 14	3'32	104 18'2	13'9	F, vS, R, bM
1355	J. 416	20 54 15	3'31	103 43'0	13'9	F, vS, R, bM
1356	J. 417	20 55 4	3'35	106 21'3	14'0	F, R, sbM
1357	J. 418	20 58 20	3'26	101 16'5	14'1	vF, vS, iF, vlbM
1358	J. 419	20 58 41	3'36	106 45'9	14'2	vF, vS
1359	Sw. IX.	21 1 59	2'87	78 5'2	14'4	eeF, eS, stellar, eF * att
1360	J. 792	21 3 52	3'00	85 30'5	14'5	F, dif
1361	J. 793	21 4 31	3'00	85 31'6	14'5	vF, vS, dif
1362	Spitaler 24	21 4 47	3'04	88 14'5	14'5	vF, vS, R, * 14 nf
1363	Espin	21 5 39	2'11	43 43	14'6	F, * 9'4 at s end
1364	J. 420, Spitaler 25	21 6 20	3'03	87 48'6	14'6	pB, pS, R, sbM
1365	Spitaler 26, Sw. X.	21 6 51	3'04	88 1'0	14'7	eF, pS, R (Spit. another p?)
1366	Spitaler 27	21 7 2	3'04	88 48'0	14'7	F, S, iR, bet 2 st 11 & 13
1367	J. 421	21 7 7	3'03	87 34'9	14'7	vF, vS, R, F * nr
1368	Sw. X.	21 7 9	3'04	88 24'9	14'7	eeF, S, R, v diffie
1369	Pechüle (3259)	21 7 17	2'09	42 49	14'7	S neb Cl of st 13m
1370	J. 422	21 8 8	3'05	88 23'7	14'8	vF, 2 F st inv
1371	J. 423	21 12 54	+3'16	95 27'9	-15'0	F, S, dif, gbM, r

found in the Years 1888 to 1894.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1372	J. 424	h m s 21 12 54	^s + 3'17	96 12'0	-15'0	vF, vS, R, dif, * 14 sf
1373	Spitaler 28	21 13 29	3'06	89 30'0	15'1	F, vS, R, sbM, 2 others south
1374	J. 425	21 13 56	3'05	88 52'9	15'1	vF, vS, lbM
1375	J. 426	21 13 57	3'02	86 36'0	15'1	F, S, 2 F st inv
1376	Sf. 85	21 17 18	3'17	96 20'6	15'3	No descr
1377	J. 427	21 18 26	3'01	86 16'6	15'3	pB, S, R
1378	Espin	21 18 44	1'85	35 9	15'3	F, dif, F st inv
1379	J. 428	21 18 54	3'03	87 30'4	15'4	vF, bM, stellar
1380	J. 429	21 20 6	3'04	87 54'0	15'4	pB, S
1381	J. 430	21 20 21	3'10	91 47'7	15'5	F, vS, R, bM
1382	Sf. 55	21 20 24	2'79	71 57'1	15'5	pF, pS, iF
1383	J. 431	21 20 27	3'10	91 42'6	15'5	F, vS, R, stellar
1384	J. 432	21 20 37	3'10	91 57'5	15'5	vF, vS, R
1385	J. 433	21 21 39	3'10	91 40'7	15'5	pB, vS, R
1386	J. 434	21 21 41	3'41	111 48'0	15'5	F, bi N, or neb D *
1387	J. 435	21 22 18	3'10	91 56'5	15'6	pB, vS, iF
1388	Sw. X.	21 22 42	3'09	91 16'6	15'6	eF, vS, 2 st nf
1389	J. 436	21 24 19	3'36	108 38'2	15'7	F, vS, R, gbM
1390	J. 437	21 25 9	3'11	92 28'6	15'7	F, vS, R, bM
1391	J. 438	21 27 50	3'09	91 7'4	15'8	vF, S, dif
1392	Sf. 50	21 29 43	2'51	55 13'5	15'9	pB, vmbM *
1393	O. St.	21 32 16	3'41	113 2'7	16'1	eF, vS, R, dif
1394	Sw. VIII.	21 33 24	2'87	75 59'6	16'2	eF, S, R
1395	J. 439	21 34 37	3'02	86 31'7	16'2	vF, vS, iF, lbM
1396	Barnard	21 34 40	1'86	33 10	16'2	Neb part of M. Way
1397	J. 440	21 36 42	3'15	95 31'5	16'3	F, vS, stellar
1398	Spitaler 29	21 38 59	2'95	81 10'1	16'4	vF, vS, bM
1399	J. 441	21 39 8	3'02	86 14'6	16'4	vF, vS, stellar
1400	Espin	21 39 19	2'08	37 42	16'4	F, dif, partly resolved
1401	J. 442	21 39 50	3'06	88 56'8	16'5	pB, pS, r
1402	Espin	21 39 59	2'07	37 23	16'5	F, partly res, st 14m
1403	J. 443	21 43 12	3'12	93 22'0	16'6	eF, S, F * att, v diffic
1404	J. 444	21 43 29	3'20	99 55'4	16'7	F, vS, R, sbM * 13
1405	J. 445	21 43 43	3'05	88 37'6	16'7	pB, vS, R, bM
1406	J. 446	21 43 58	3'05	88 39'6	16'7	F, vS, R, stellar
1407	J. 447	21 45 18	3'04	87 14'4	16'7	F, S, r
1408	J. 448	21 45 34	3'26	104 0'2	16'7	F, vS, R, bM
1409	J. 449	21 45 56	3'18	98 9'3	16'7	eF, S, iF
1410	J. 450	21 48 46	3'12	93 33'2	16'9	pF, vSN
1411	J. 451	21 48 48	3'10	92 10'6	16'9	F, vS, R, vlbM
1412	J. 452	21 50 38	3'30	107 50'7	17'0	F, vS, ? D stell neb
1413	J. 453	21 51 11	+ 3'12	93 46'2	-17'0	F, S, stellar

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1414	Spitaler 30	h m s 21 51 22	s +2 97	82 16'	-17°0	vF, vS, R, 2 F st s
1415	B. 229	21 51 36	3 06	89 19	17°0	eF, *9.5 sf 8'
1416	B. 230	21 52 26	3 06	89 13	17°1	eF trace of neby
1417	J. 454	21 52 47	3 25	103 48.7	17°1	pB, pL, part more condensed
1418	J. 455	21 54 56	3 03	86 18.0	17°2	vF, S
1419	J. 456	21 55 31	3 20	100 35.5	17°2	eF, slbM
1420	Sw. IX.	21 55 35	2 84	70 55.4	17°2	eeF, pS, R, bet 2 F st
1421	J. 457	21 55 37	3 20	100 39.0	17°2	Neb * 14m
1422	J. 794	21 55 53	3 05	88 4.1	17°2	vF, eS, lbM, bet 2 st 13.5
1423	J. 458	21 56 10	3 03	86 22.6	17°2	F, vS, R, gvlbM
1424	B. 231	21 56 18	2 94	79 29	17°2	eF, vS, 1' f 7190
1425	J. 795	21 56 19	3 05	88 4.4	17°3	F, lE pf, r, D ?
1426	J. 459	21 56 26	3 20	100 35.1	17°3	F, S, iF, lbM
1427	Sf. 52	21 56 34	2 90	75 33.6	17°3	vF, vS
1428	J. 796	21 57 21	3 05	88 2.3	17°3	vF, S, R, * 14 nr
1429	B. 232	21 59 59	2 96	80 35	17°4	Neb susp close to * 11
1430	J. 460	22 0 58	3 24	104 15.3	17°4	F, S, vlbM, diffic
1431	J. 461	22 1 8	3 24	104 11.2	17°4	eF, v diffic, F * np
1432	J. 797	22 2 59	3 04	86 59.9	17°5	vF, vS, sbM * 14, * 13.5 nr
1433	J. 462	22 4 38	3 22	103 27.3	17°6	F, S, Epf, bM
1434	Espin	22 5 21	2 25	37 52	17°6	Fine Cl, 6 branches, st 12-15m
1435	J. 463	22 5 41	3 34	112 47.0	17°7	F, S
1436	J. 464	22 6 27	3 19	100 53.2	17°7	eF, vS, R, vSN
1437	J. 465	22 8 37	3 06	88 37.8	17°8	pB, vS, R, mbM
1438	J. 466	22 8 45	3 32	112 7.3	17°8	F, biN
1439	J. 467	22 8 56	3 32	112 10.9	17°8	vF, S, vlbM
1440	J. 468	22 8 58	3 26	106 42.5	17°8	F, S, stellar
1441	B. 233	22 9 10	2 61	53 24	17°8	eF, S, S stellar N
1442	Espin	22 11 11	2 26	36 39	17°9	Cl of neb stars
1443	J. 469	22 11 20	3 31	111 38.3	17°9	pB, S, iF, mbM,
1444	J. 470	22 15 21	3 03	85 33.9	18°0	F, S, iF, mbM, vF * close
1445	O. St.	22 17 56	3 25	107 57.5	18°1	pF, vS, gbMN
1446	J. 471	22 21 54	3 09	91 54.9	18°3	vF, stellar
1447	Sw. X.	22 22 56	3 13	95 51.6	18°3	eeF, pS, R, * 9.0 n 3'
1448	J. 472	22 27 6	3 20	103 39.3	18°5	vF, vS, diffic
1449	J. 473	22 27 46	3 16	99 29.9	18°5	F, S, iF, bM, r
1450	B. 234	22 31 34	2 73	56 11	18°6	vF, eS, stellar
1451	J. 474	22 38 45	3 16	101 6.3	18°8	vF, S, dif, vS, excent N
1452	B. 235	22 39 2	2 94	73 53	18°8	vF, vS, quite stellar
1453	J. 475	22 39 29	3 19	104 10.9	18°8	pB, pL, R
1454	Denning	22 41 13	0 57	10 18	18°9	vF, S, * 7 m 4' f
1455	Spitaler 31, Burnham	22 46 37	+3 07	89 22.2	-19°1	F, pS, R, 2 st 11 nr

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1456	J. 476	h m s 22 47 56	s +3'17	103° 28'1	-19'1	vF, vS
1457	B. 236	22 48 8	3'12	96 18	19'1	eF, * 10 sf 1'
1458	J. 477	22 49 24	3'13	98 7'4	19'1	vF, pL, dif
1459	Barnard	22 49 30	3'37	127 10'5	19'1	F, pS, com, N = 12m
1460	J. 478	22 49 55	3'04	86 4'2	19'2	pB, vS, mbM
1461	Sw. IX.	22 51 26	2'97	75 44'0	19'2	eeF, vS, R
1462	B. 237	22 51 34	3'02	82 21	19'2	vF, eS, ? only a *
1463	Engelhardt	22 52 0	3'15	101 17'0	19'2	Neb * 14m
1464	J. 479	22 55 55	3'13	99 44'7	19'3	F, r, D ?
1465	B. 238	22 55 59	2'96	74 10	19'3	vF, ? vS Cl
1466	J. 480	22 56 27	3'09	93 31'5	19'3	pB, vS, iF
1467	J. 481	22 57 37	3'10	93 58'9	19'4	F, S, biN
1468	J. 482	22 57 55	3'10	93 57'4	19'4	vF, vS, iF, sbM
1469	J. 483	22 59 6	3'16	104 17'4	19'4	F, S, R, F * f
1470	{ Spitaler 62, Barnard 3110 }	22 59 21	2'48	30 30'5	19'4	vF, vS, stellar N north edge
1471	J. 484	23 1 24	3'15	103 24'0	19'4	pB, S, R, bM
1472	Spitaler 32	23 2 10	2'97	73 31	19'4	F, vS, bM, 2 st f
1473	Sf. 58	23 4 26	2'90	61 8'0	19'5	F, pS, gbM
1474	Spitaler 33	23 5 45	3'05	84 57'3	19'5	F, R, pS, gbM
1475	Barnard	23 6 30	3'24	119 11	19'5	Neb *
1476	Sf. 59	23 8 28	2'90	60 13'1	19'6	S Cl ?
1477	J. 485	23 9 58	3'11	97 40'6	19'6	F, S, r
1478	B. 239	23 11 10	3'02	80 27	19'6	vF, S, dif
1479	J. 486	23 11 30	3'13	101 9'6	19'6	pF, S, R, stellar
1480	B. 240	23 11 56	3'02	79 26	19'6	vS Cl, nebs ?
1481	Spitaler 34	23 12 18	3'05	84 51'7	19'6	vF, vS, R
1482	J. 487	23 13 40	3'07	89 1'9	19'7	pB, vS, R
1483	J. 798	23 15 29	3'02	79 26'3	19'7	F, S, lbM
1484	J. 799	23 15 36	3'02	79 23'0	19'7	vF, vS
1485	J. 800	23 15 44	3'03	79 23'7	19'7	vF, vS, R, vSN
1486	B. 241	23 16 49	3'04	81 7	19'7	vF, S
1487	Sw. IX.	23 17 35	3'01	76 7'7	19'7	eeF, pS, iR, * 8 f, F * nf
1488	J. 801	23 17 49	3'01	75 26'6	19'7	eF, vS, Ens, v diffie, h 2237s
1489	J. 488	23 19 14	3'13	103 17'0	19'8	F, vS, R, * 9 south
1490	Sw. X.	23 21 50	3'09	94 54'2	19'8	eF, pS, R, vF * close n
1491	J. 489	23 22 5	3'14	107 5'1	19'8	F, S, R
1492	Sw. X.	23 23 23	3'09	93 48'4	19'8	eF, S, R, sp of 2
1493	J. 802	23 23 27	3'02	76 19'1	19'8	F, vS, sbM, another susp 7' p, 1' n
1494	J. 490	23 23 30	3'12	103 29'8	19'8	F, R, lbM
1495	J. 491	23 23 31	3'13	104 15'4	19'8	F, S, lbM
1496	Sw. X.	23 23 32	+3'09	93 42'9	-19'8	eeF, pS, R, nf of 2

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.
1497	B. 242	h m s 23 24 20	^s + 3 03	78 29'	- 19 8	eF, suspected
1498	Sw. X.	23 24 39	3 09	95 46 2	19 8	eeF, pS, R, * 9 5 p 36°, 3' s
1499	J. 492	23 24 41	3 12	104 12 9	19 8	pB, pL, iF
1500	J. 493	23 26 3	3 05	86 12 8	19 8	F, vS, Ens, lbM
1501	J. 494	23 27 29	3 08	93 55 7	19 9	vF, S, dif
1502	Sw. X.	23 30 32	2 45	15 7 2	19 9	vF, S, vF * close
1503	J. 495	23 31 18	3 06	85 58 1	19 9	F, S, R, gbM
1504	J. 496	23 34 10	3 06	86 43 6	19 9	F, pL, Epf, gbM
1505	Sw. X.	23 34 12	3 08	94 20 3	19 9	eeF, pS, R, 3 st f, diffie
1506	J. 497	23 37 39	3 06	86 1 8	20 0	vF, gbM
1507	J. 498	23 38 23	3 07	89 5 6	20 0	pB, iF, mbM
1508	J. 803	23 38 48	3 05	78 44 0	20 0	F, pL, E ns
1509	J. 499	23 40 2	3 10	106 5 3	20 0	F, S, E ns, gbM
1510	J. 500	23 43 22	3 07	88 42 0	20 0	F, S, R, biN
1511	B. 243	23 43 55	3 03	63 42	20 0	eF, susp close to * 12 5
1512	B. 244	23 43 56	3 03	63 44	20 0	* 13, nebulous?
1513	J. 804	23 46 20	3 09	79 27 9	20 0	F, vS, Epf, gbM
1514	Palisa (3235)	23 47 4	3 09	104 22	20 0	vF, S, excent N
1515	Sw. X.	23 48 51	3 07	91 46 0	20 0	eeF, pS, * 9 5 inv. bet 2 st
1516	Sw. X.	23 48 53	3 07	91 41 3	20 0	vF, pS, R, B * sf, nf of 2
1517	Sw. X.	23 49 6	3 07	91 5 2	20 0	eeF, vS, R, 3 st p
1518	J. 805	23 49 57	3 08	78 18 5	20 0	vF, vS, R
1519	J. 806	23 49 59	3 08	78 19 0	20 0	F, vS, lbM, stellar
1520	J. 501	23 50 43	3 09	104 49 1	20 0	vF, pL, R
1521	J. 502	23 51 51	3 08	97 55 7	20 0	vF, S, iF
1522	J. 503	23 51 53	3 07	89 4 3	20 0	F, S, Ens
1523	Burnham	23 51 57	3 07	83 54 6	20 0	vF, * 4m 3' f
1524	Sf. 87	23 52 20	3 08	94 56 0	20 0	No description
1525	Sw. IX.	23 52 54	3 04	43 54 2	20 0	eF, pS
1526	J. 807	23 54 24	3 08	79 25 9	20 0	F, S, bMSN
1527	J. 504	23 55 12	3 07	86 39 9	20 1	F, R, r, vF * sf
1528	Sf. 88	23 57 54	3 07	93 53 8	20 1	No description
1529	J. 505	23 58 2	+ 3 07	102 17 2	- 20 1	F, S, R, biN, r

Notes and Corrections to the New General Catalogue.

- N.G.C.
106 R.A. is $0^{\text{h}} 17^{\text{m}} 35^{\text{s}}$ (O. St.).
153 is identical with 151 (SPITALER, *A.N.* 3100).
239 R.A. is $0^{\text{h}} 38^{\text{m}} 40^{\text{s}}$ (O. St.).
607 This star is not nebulous, but has a $\star 14^{\text{m}}$ close south, looking at first sight like a nebulous appendage (SPITALER, compare *Lick Obs.* II. p. 169, and *Armagh Micr. Obs.* p. 546).
618 } h 136 and 141. Not observed by h in the same sweep as h 134-135. Should be struck out. Neither of
627 } them seen by BURNHAM.
737 Only a faint star (BURNHAM).
817 Seconds of R.A. should be 44 (BIGOURDAN).
846-47 are identical (SPITALER, *A.N.* 2992).
869 In last column insert †, and on p. 228, first two columns, for 521-212 read 512-207. The cluster h 212 was mapped by VOGEL (1878), PIHL (1891), and BALL and RAMBAUT (*Trans. R.I.A.* vol. xxx.).
874 No nebulosity seen by BURNHAM. For M. II. read Mu. II.
878 R.A. is $2^{\text{h}} 11^{\text{m}} 30^{\text{s}}$ F globular (BURNHAM).
905 An eF patch of nebulosity seen by BURNHAM in or near the place.
942 } $2^{\text{h}} 22^{\text{m}} 23^{\text{s}} 5$ $101^{\circ} 28' 1$ } D neb, F Nuclei (BURNHAM).
943 } $2^{\text{h}} 22^{\text{m}} 22^{\text{s}} 7$ $101^{\circ} 27' 6$ }
948 $2^{\text{h}} 21^{\text{m}} 47^{\text{s}}$ $101^{\circ} 10' 1$ (BURNHAM).
955 Variability extremely doubtful. Compare *Armagh Micr. Obs.* p. 546, and *Lick Obs.* II. p. 172.
988 No nebulosity seen by BURNHAM and BARNARD. STEPHAN'S position is wrong, being taken from BAILY'S Lalande, where the places of two stars ($\Delta\alpha = 18'$) are mixed up. I took the nf star, as I was not certain that it was not nebulous, while the sp one was certainly free from haze.
992 Seconds of R.A. should be 16^s (BIGOURDAN).
1059 Not found by BURNHAM, who has a vF neb 68^{s} p and 12^{s} s.
1098 $2^{\text{h}} 38^{\text{m}} 23^{\text{s}}$ $108^{\circ} 13' 7$ }
1099 $2^{\text{h}} 38^{\text{m}} 48^{\text{s}}$ $108^{\circ} 18' 1$ } (O. St.)
1100 $2^{\text{h}} 39^{\text{m}} 6^{\text{s}}$ $108^{\circ} 16' 9$ }
1174 Probably identical with h 281 = IV. 43 (SPITALER, *A.N.* 3030). The words "p B \star close f" were inserted in accordance with a correction made by Mr. SWIFT in a letter. This fourth list has "close p," which is correct.
1186 Suspected of variability by BIGOURDAN (*C.R.* 1891, No. 9). Drawing by SPITALER.
1391 $3^{\text{h}} 32^{\text{m}} 34^{\text{s}}$ $108^{\circ} 45' 0$ } (O. St.)
1394 $3^{\text{h}} 32^{\text{m}} 48^{\text{s}}$ $108^{\circ} 45' 0$ }
1397 is *not* = h 305, which latter was observed by SWIFT and BURNHAM in h's place ($3^{\text{h}} 34^{\text{m}} 34^{\text{s}}$, $95^{\circ} 7' 0$). Compare *Monthly Notices*, lii. p. 102.
1458 Not found by BURNHAM.
1499 is about half a degree in length. See a drawing by SCHEINER in *A.N.* 3157.
1554 HIND'S variable nebula, 2^{s} p and $40''$ south of the variable star T *Tauri*. BARNARD in 1890 found an e F neb in Pos. 185° , dist $\frac{3}{4}'$ from T, which agrees well with HIND'S and D'ARREST'S observations. BARNARD and BURNHAM also saw T *Tauri* within a very small condensed nebula (often seen by TEMPEL). BIGOURDAN'S No. 144 ($\star 13$ nebulous?) in $4^{\text{h}} 13^{\text{m}} 56^{\text{s}}$, $70^{\circ} 52'$, was apparently not seen at the Lick Observatory.
1640 R.A. $4^{\text{h}} 36^{\text{m}} 10^{\text{s}}$ } (O. St.)
1710 R.A. $4^{\text{h}} 50^{\text{m}} 56^{\text{s}}$ }
1725 Seconds of R.A. should be 46 (BURNHAM).
1728 R.A. is $4^{\text{h}} 52^{\text{m}} 51^{\text{s}}$ (BURNHAM).
1757 Not seen by SPITALER.
2237 } are parts of an eL nebulous ring surrounding the cluster h 392. See a sketch by BARNARD, *A.N.*
2238 } 2918.
2287 For M. 14 read M. 41.

- N.G.C.
 2330 } Not seen by KOBOLD (with the 18-inch refractor at Strassburg), who observed eleven nebulae about this
 2334 } place.
 2361 } This is probably = V. 21, for which H gave the R.A. $7^h 12^m 2^s$. D'ARREST's R.A. agrees with
 BIGOURDAN's.
- 2433 h's R.A. is correct (SPITALER).
 2452 Not planetary, but bi-nuclear (BURNHAM).
 2459 No nebulosity, only a couple of F stars seen by SPITALER.
 2543 R.A. is $8^h 3^m 46^s$ (SPITALER).
 2618 R.A. is $8^h 29^m 1^s$ (BIGOURDAN).
 2652 Not found by SPITALER.
 2846 BIGOURDAN's No. 153: $9^h 13^m 15^s$, $104^\circ 6'$, v F, stellar, is doubtless = 2846.
 2871 } Not seen by SPITALER; but he is wrong in assuming them = h 597 and 598. They are marked ϵ and γ in
 2875 } the Birr diagram.
 3234 is not = 3235; both seen by DENNING.
 3328 $10^h 32^m 19^s$, $80^\circ 3'4$, v S Cl, not nebulous (SPITALER).
 3331 R.A. $10^h 32^m 18^s$ } (O. St.).
 3335 R.A. $10^h 32^m 54^s$ }
 3531 to be struck out, is = 3526 (SPITALER).
 3666 Later observations at Armagh in 1889 and 1891 have not confirmed the suspected variability.
 3679 The position should be $11^h 19^m 2^s$, $94^\circ 48'8$, according to SPITALER, who found nothing in AUWERS' place,
 as well as in that given in the Catalogue.
- 3745 }
 3746 } The R.A.'s of these should be increased by $1^m 32^s$, and the N.P.D. diminished by $15'9$, as pointed out by
 3748 } KOBOLD in the *A.N.* 3241. In the Birr diagram the objects α and ι should be removed from the
 3750 } diagram (their places in the *N.G.C.* are correct). The error was caused by my assuming two stars
 3751 } described on different nights as "very red" and "reddish" to be identical, which they are not (see
 3753 } *A.N.* 3246).
 3754 }
- 3760 delenda. It is = 3301 with an error of 1^h in R.A. Nothing seen in D'ARREST's place at Birr Castle and
 Strassburg.
- 3813 Pos. of elongation 83° (Armagh). Also observed and drawn by SPITALER.
 3855 R.A. is $11^h 36^m 56^s$, while D'A.'s P.D. is correct (SPITALER).
 3856 $11^h 37^m 6^s$, $55^\circ 53'3$, v F, R, b M (SPITALER).
 3871 $11^h 38^m 52^s$, $56^\circ 8'0$ (SPITALER). In "Description" *delz* (?). To the note on p. 218 should be added
 that SPITALER has seen them all four. The Catalogue places of the three following ones are correct.
 3876 Seconds of R.A. should be 14^s (SPITALER).
 3930 The star is *Groombridge* 1830, the large P.M. of which is illustrated by the change of relative position of
 nebula and star.
 4013 Pos. of E 60° to 70° (Armagh, 1891). No change.
 4042 Not seen by SPITALER.
 4107 Dele o; the star is np (BURNHAM).
 4170 = BIGOURDAN 169, $12^h 5^m 11^s$, $60^\circ 1'$.
 4208 Not seen by SPITALER, to be struck out.
 4572 R.A. is $12^h 30^m 30^s$ (BIGOURDAN), which agrees better with H ($30^m 18^s$) than with h.
 4731 H in 1784 described it as "1b M," not "sb M," as in *G.C.* There has apparently not been any change;
 it is diffused, without condensation. The R.A. in *N.G.C.* (h) is correct (Armagh, 2 obs.).
 4849 $12^h 51^m 24^s$, $62^\circ 52'$ (SPITALER).
 5510 $14^h 5^m 55^s$ }
 5664 $14^h 27^m 5^s$ } (O. St.).
 5726 $14^h 35^m 7^s$ }
 5741 $14^h 38^m 17^s$ }
 5742 $14^h 38^m 2^s$ }
- 5824 is = h 1900 (BARNARD, *A.N.* 2995). It also occurs in the Cordoba D.M.

- N.G.C.
 5834 to be struck out, is = 5824.
 5856 No nebulosity seen by BIGOURDAN.
 5863 $15^{\text{h}} 2^{\text{m}} 53^{\text{s}}$, $107^{\circ} 58'$, BIGOURDAN.
 5872 Description is: v F, S, R, v mb M, * 13 nf $\frac{1}{2}$ (BIGOURDAN).
 5881 Not found by BIGOURDAN.
 5883 Description is: v F, p S, stellar N (BIGOURDAN).
 5884 No nebulosity; only two F stars seen by BIGOURDAN.
 5891 Place is $15^{\text{h}} 8^{\text{m}} 35^{\text{s}}$, $100^{\circ} 58'5$ (BIGOURDAN).
 5926 Not found by BIGOURDAN.
 5928 This is possibly *Messier* 102, found by MÉCHAIN: "Nébuleuse entre les étoiles α du *Bouvier* et ι du *Dragon*: elle est très faible; près d'elle est une étoile de la sixième grandeur." I assume that ι *Draconis* is an error for ι *Serpentis*.
 5941 } These are situated sp and nf, according to BIGOURDAN.
 5942 }
 6015 n'ARREST's description is correct (DENNING).
 6059 Seconds of R.A. should be 56^{s} (BIGOURDAN).
 6065 } Occur also in SWIFT's list IX., where the P.D.'s seem to have been interchanged, though the objects are
 6066 } still said to be sp, nf.
 6111 In SWIFT's list IX. the declination for 1890 is given as $63^{\circ} 32'6$. It was 62° in the MS. communication sent me in 1887.
 6194 BIGOURDAN 209 assumed identical with this, as the places and descriptions agree perfectly.
 6302 seems to be *Dunlop* No. 567.
 6393 SWIFT IX. 81 assumed identical with this.
 6557 N.P.D. is 166° , not 116° .
 6589 Place is $18^{\text{h}} 8^{\text{m}} 35^{\text{s}}$, $109^{\circ} 48'9$, and 6590 is = 6595 (BARNARD, *A.N.* 3101).
 6660 is = 6661 (PECHÛLE, *A.N.* 3259).
 6924 R.A. $20^{\text{h}} 24^{\text{m}} 57^{\text{s}}$ } (O. ST.).
 6936 R.A. $20^{\text{h}} 26^{\text{m}} 26^{\text{s}}$ }
 6951 is = 6952 (DENNING).
 7001 is pB, according to SPITALER.
 7030 Min. of R.A. is 3 (O. ST.).
 7045 is not a nebula, but only a couple of vF stars close together (SPITALER).
 7074 N.P.D. is $83^{\circ} 55'5$ (SPITALER).
 7100 Seconds of R.A. are 41^{s} , P.D. $81^{\circ} 45'2$ (SPITALER).
 7101 Not seen by SPITALER; evidently = 7100.
 7103 } R.A. $31^{\text{m}} 55^{\text{s}}$ and $32^{\text{m}} 6^{\text{s}}$ (O. ST.).
 7104 }
 7132 Seconds of R.A. should be 25^{s} (SPITALER).
 7157 Not found by SPITALER.
 7170 R.A. $21^{\text{h}} 55^{\text{m}} 7^{\text{s}}$ }
 7341 R.A. $22^{\text{h}} 31^{\text{m}} 27^{\text{s}}$ } (O. ST.).
 7359 R.A. $22^{\text{h}} 38^{\text{m}} 1^{\text{s}}$ }
 7403 Occurs only in one Harvard Zone (156). SPITALER and BURNHAM have not seen any nebulosity. The small nebula found by them 40^{s} f, $7'$ south can, of course, not have been the object observed in the zone.
 7447 to be struck out, as BURNHAM also could not find it. He only saw a F triple star a little np the place.
 7472 } to be struck out, both being = 7482 with errors of 2^{m} and 1^{m} in R.A. (BURNHAM).
 7477 }
 7793 Occurs in the Cordoba D.M., $23^{\text{h}} 50^{\text{m}} 38^{\text{s}}$, $123^{\circ} 22'3$.
 7804 to be struck out, only a F double star without nebulosity (BURNHAM).
 7821 R.A. $23^{\text{h}} 58^{\text{m}} 7^{\text{s}}$ (O. ST.).

Note to page 223, cluster VI. 8 (G.C. 3967).

I have examined the observation of this object in CAROLINE HERSCHEL's copy of the sweeps in the Society's library. VI. 8 was observed on April 25, 1784, on which night three sweeps (207-209) were observed, often interrupted by clouds (the date given in *P.T.* 1786 is therefore *not* wrong). It is the only object in sweep 209, and is thus described: "A very close compressed cluster of stars 8' or 9' in diam., extremely rich, of an i R figure, a little E. The stars are so small as hardly to be visible, and so accumulated in the middle as to look nebulous. MAYER's 577 Z f 1' 48" n 1° 26', R.A. 14^h 30' 5", P.D. 98° 15'," with this footnote: "The disagreement in the zeros of the two stars leaves it very doubtful if they are MAYER's 574 and 577." The observations of the two stars are given thus:

7.8 ^m MAYER's 574	$\begin{array}{r} Z\ 14^h\ 17'\ 52''\cdot 4 \\ \hline 10\ 36 \end{array}$	$\begin{array}{r} 99^\circ\ 5'\ 51'' \\ \hline 1\ 19 \end{array}$
	Cor + 17 16	Z 97 47
7 ^m MAYER's 577 Cat. of O st. No. 367	$\begin{array}{r} Z\ 14\ 28\ 16\cdot 9 \\ \hline 10\ 42 \end{array}$	$\begin{array}{r} 99\ 40\ 52 \\ \hline 1\ 45 \end{array}$
	Cor + 17 35	Z 97 56

The description of the object agrees with I 70=h 1813, but there must be some considerable error in the observation of position. The matter is in any case not of much importance, as so remarkable an object could not have been overlooked up to this, and it must therefore be identical with some known bright nebula.