

Second Index Catalogue of Nebulæ and Clusters of Stars, containing objects found in the Years 1895 to 1907, with Notes and Corrections to the New General Catalogue and to the Index Catalogue for 1888–94. By J. L. E. DREYER, Ph.D.

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THE following catalogue is a continuation of the Index Catalogue of Nebulæ found in the years 1888 to 1894, published in Vol. LI. of the *Memoirs*.

Since 1895 about 1400 nebulæ have been detected with powerful telescopes and their places determined, nearly all by observers previously engaged in this work. But the majority of the objects in the present catalogue have been found by means of photography. Seven lists of nebulæ have been issued from the astrophysical department of the Heidelberg Observatory, containing in all about 2800 objects. Most of these have been found by Professor MAX WOLF on plates taken with the 16-inch Bruce refractor at Heidelberg, while one list (No. 2) was made by Dr. SCHWASSMANN from plates taken with a 6-inch lens. The third list* contains about 1500 points of condensation in the great cloud of nebulosity situated about the northern pole of the Milky Way, near R.A. $12^{\text{h}} 53^{\text{m}}$, N.P.D. $61^{\circ} 5$. These objects (of which 123 are identical with objects in the N.G.C. or the Index Catalogues) are arranged by Professor WOLF in separate zone-catalogues one degree of N.P.D. in breadth, from 59° to 64° , for the epoch 1875. As these zone-catalogues will be more convenient to the few photographic observers likely to study this small part of the heavens than a catalogue arranged in order of right ascension and extending from pole to pole could possibly be, these objects have not been included in the present reference catalogue. Besides, they ought more properly to be considered, not as separate nebulæ, but as the more conspicuous points of condensation or “knots” in one great mass of nebulosity similar to the nebula of Orion, the great “America-nebula” in Cygnus (N.G.C. 7000 = V. 37), and others.† Should continued examination of photographic plates prove the correctness of Professor KEELER’s estimate, according to

* *Publikationen des astrophysikalischen Observatoriums Königstuhl-Heidelberg*, Band I., Karlsruhe, 1902, pp. 125–176.

† For this reason I have not included any of the “knots” in the great nebula in Triangulum (Messier 33) which I measured on a plate taken by Dr. ISAAC ROBERTS, *Proc. R. Irish Acad.*, vol. xxv., sect. A., No. 2 (1904).

which there are at least about 120,000 nebulae in the whole sky,* the future great catalogue of nebulae will certainly have to be arranged in zones of one degree.

While the objects found and measured at Heidelberg are all in the northern hemisphere, Dr. DELISLE STEWART and Mr. R. H. FROST have measured a number of plates, chiefly of regions in the southern hemisphere, obtained with the 24-inch Bruce refractor at the Arequipa station of Harvard College Observatory, and containing about 1130 new nebulae.

The positions of all objects found on photographic plates are of course very reliable, and more than sufficient to identify the objects, but it is possible that in a few instances photographic defects have been mistaken for nebulae. All such objects seen on only one Harvard plate have been recorded as "susp," although in most cases they are believed to be genuine nebulae, and some marked thus were afterwards identified with known objects. In the Heidelberg lists such objects are marked with a ?. A region extending from about $12^{\text{h}}\ 2^{\text{m}}$ to $12^{\text{h}}\ 42^{\text{m}}$ and 80° to 75° is common to Dr. SCHWASSMANN's list and the Harvard list. In this region 45 new objects are given in the former which are not in the latter, while 208 objects in the latter do not occur in the former. Thirty-six objects seen as nebulae by Dr. SCHWASSMANN are distinctly stellar on the Harvard plates, being either faint double, or triple, or single stars which have been mistaken for nebulae. In six cases nothing was found in Dr. SCHWASSMANN's places, though there were faint stars near. Discrepancies like these are of course to be expected on account of the difference in size of the instruments used, and they are not greater than those with which telescopic observers are familiar, since extremely faint stars have occasionally been mistaken for nebulae, while very faint nebulae have been suspected in places where no nebulosity exists.

A very marked peculiarity of photographic records of nebulae is the general tendency of the observers to overestimate the brightness, even to the extent of two or three degrees of brightness. This fact must always be borne in mind by observers using even very powerful telescopes, but it did not seem feasible to allow for it in this catalogue, as the objects observed both visually and photographically are hardly yet numerous enough.

The descriptions are given with the usual abbreviations, to which only one has been added, viz. "spir" for spiral. Even among very faint nebulae photography has revealed many cases of spiral form. Of the very extensive and diffused nebulosities found by photography, I have only inserted a few fairly well-defined objects of limited size. An object like No. 27 of W. HERSCHEL's list of regions "affected with nebulosity," filling the whole constellation of Orion, could obviously not find a place here. About these regions see ROBERTS, *Astr. Nachr.*, No. 3836, and *Monthly Notices*,

* *Monthly Notices*, vol. lx. p. 128. After the completion of KEELER's work (not yet published) Professor PERRINE estimated the total number at 500,000; *Astrophys. Journal*, vol. xx. p. 356.

vol. lxii. p. 26; BARNARD, *Astrophys. Journal*, vol. xvii. p. 77; and M. WOLF, *Monthly Notices*, vol. lxiii. p. 303.

By special desire of the Council, the positions are given not only for 1860, the epoch of former catalogues, but also for 1900, the epoch of the photographic chart of the heavens.

In the column "Observer," a high number in brackets (*e.g.* 3520) denotes the number of the *Astronomische Nachrichten* where the object is recorded. The other references are:—

BAILEY, Catalogue of Bright Clusters and Nebulæ; *Ann. Harv. Coll. Obs.*, vol. lx. No. 8. Contains thirteen objects (clusters) not in the N.G.C., two of which (the Pleiades and the Hyades) I have not inserted.

BARNARD, *Monthly Notices*, vol. lv. p. 453; *Astr. Journal*, No. 422; *Astr. Nachr.*, Nos. 3301, 3315, 4112, 4136, 4239; *Astrophys. Journal*, vol. xiv. p. 157, vol. xxv. p. 224, p. 281. Also many MS. communications.

B. with a number refers to BIGOURDAN's third and fourth lists, *Comptes Rendus*, vol. cxxiii. p. 1243, vol. cxxiv. pp. 65 and 133 (Nos. 245 to 356), and vol. cxxxii. pp. 1094 and 1465, vol. cxxxiii. pp. 26 and 206 (Nos. 357 to 455). The fourth list includes a copious list of corrections to the places of objects in the N.G.C., most of which are given at the end of the present catalogue.

BURNHAM, *Publ. of the Yerkes Observatory*, vol. i. p. 296 (40-inch refractor).

D. S. See STEWART.

ESPIN, *Monthly Notices*, vol. lxvii. p. 360; *A.N.*, No. 3633.

FINLAY, *Monthly Notices*, vol. lviii. p. 329. Found with the 6-inch and 7-inch refractors of the Cape Observatory.

FLEMING, *Ann. Harv. Coll. Obs.*, vol. lx. p. 150 (planetary nebulae discovered by their spectra).

F = FROST, Nos. 786–1238, *Ann. Harv. Coll. Obs.*, vol. lx. pp. 179–192: nebulae found by photography, see above.

Ho. = HOWE, three lists of new nebulae found and micrometrically measured with the 20-inch refractor at Denver, Colorado,

- I. *Monthly Notices*, vol. lviii. p. 523.
- II. ,, ,, lx. ,, 129.
- III. ,, ,, lx. ,, 611.

At the end of list II. and also in vol. lviii. pp. 515–522 and vol. lxi. pp. 29–51 Professor Howe gives a great number of valuable notes on old nebulae, containing accurate positions of many of which only rough places had previously been given by their discoverers. These corrections are inserted in the Notes at the end of this catalogue.

INNES, *Monthly Notices*, vol. lviii. p. 329, vol. lix. p. 339, vol. lxii. p. 468. Found with the 7-inch refractor at the Cape Observatory.

J. with a number refers to M. JAVELLE's third list of micrometrically measured places of new nebulæ found with the 30-inch refractor of the Nice Observatory (*Annales*, T. xi.).

KEELER, *Monthly Notices*, vol. lix. p. 537. Seven small nebulæ found on photographs of M. 51 with the Crossley reflector.

KOBOLD, *Vierteljahrsschrift der Astr. Ges.*, xxxiii. p. 153. Nebulæ found with the 18-inch refractor at Strassburg.

LUNT, *Monthly Notices*, vol. lxii. p. 468. Found with the 18-inch refractor at the Cape Observatory.

PICKERING. A few objects mentioned in vol. xxvi. of the *Annals of H. C. Obs.*, p. 207 *sq.*

ROBERTS, *Monthly Notices*, vol. lxiii. p. 302, and *A.N.*, No. 3429. Found by photography.

Sn = SCHWASSMANN, *Publ. des astrophys. Observatoriums Königstuhl-Heidelberg*, vol. i. p. 89. Found and measured on a plate taken by Professor MAX WOLF with a 6-inch lens.

STEWART (D. S., Nos. 109-785). Found on Arequipa plates (see above). *Ann. Harv. Coll. Obs.*, vol. lx. pp. 156-172.

Sw. = SWIFT. This veteran observer continued for some years at Echo Mountain, Los Angeles, California, his search for new nebulæ. Eight separate lists were combined into one list (XI.) in *Astr. Nachr.*, No. 3517, which I have followed (a few discrepancies are noted in the column "Description"); list XII. in *Monthly Notices*, lix. p. 568. When any of these objects has been observed by some later observer, I have adopted the position given by him, as Mr. SWIFT's places are not as good as those formerly found by him with the same 16-inch refractor at Rochester, N.Y. Observers should remember that Mr. SWIFT used a very large field, so that some of his remarks about neighbouring stars may refer to stars a good way off.

W. = MAX WOLF (see above). His second list is referred to as Sn. The other references (to *Publ. des astroph. Obs.*) are

- I. vol. i. p. 12.
- IV. „ ii. „ 57.
- V. „ ii. „ 77.
- VI. „ ii. „ 89.
- VII. „ iii. „ 77.

I have to express my thanks to Professor BARNARD for many valuable communications, and to Professor E. C. PICKERING for the loan of a card catalogue of references to new nebulæ (exclusive of the Harvard and Heidelberg objects), which supplied a useful check on the completeness of my own notes.

Second Index Catalogue of Nebulae, 1895 to 1907.

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900	N.P.D. 1900.
1530	B. 357	h m s o o 6	+ s 3°07'	58° 10'	- 20°1	vF, S, iF, bM	m s 2 9	57° 57'
1531	Sw. XII.	o 2 8	3°06	123 3'3	20°1	vF, vS, R, D* n	4 10	122 49°9
1532	F. 786	o 2 53	3°02	155 8	20°1	2'l, mE, bM	4 54	154 55
1533	Sw. XII.	o 3 27	3°07	98 11'7	20°1	eeF, vS, R, v diff; * 7°5 n, * 9 s	5 30	97 58°3
1534	Barnard (4136)	o 6 26	3°12	42 37'8	20°0	pF, vS, diff, * 10 nr nf	8 31	42 24°5
1535	Barnard (4136)	o 6 38	3°12	42 37'4	20°0	vF, S, 48 nf 6'	8 43	42 24°1
1536	Barnard (4136)	o 6 59	3°12	42 39'5	20°0	F, S, R	9 4	42 26°2
1537	Sw. XI.	o 8 59	3°03	130 5'5	20°0	eeF, vL, vmE; 55 np	11 0	129 52°2
1538	B. 358	o 10 46	3°10	60 43	20°0	eF	12 50	60 30
1539	B. 359	o 11 8	3°10	60 41	20°0	eF, bet 2 st 13	13 12	60 28
1540	J. 808	o 12 34	3°10	67 3'8	20°0	F, S, iF	14 38	66 50°5
1541	J. 809	o 12 45	3°10	68 46'6	20°0	F, S, R, lbM, r	14 49	68 33°3
1542	J. 810	o 13 26	3°10	68 11'1	20°0	F, dif, gbM	15 30	67 57°8
1543	J. 811	o 13 40	3°11	68 54'5	20°0	F, S, R, gbMN	15 44	68 41°2
1544	J. 812	o 14 2	3°11	67 44'4	20°0	F, S, R, vlbM	16 6	67 31°1
1545	J. 813	o 14 5	3°11	68 47'6	20°0	F, vS, R, dif, vFN	16 9	68 34°3
1546	J. 814	o 14 14	3°11	68 16'3	20°0	vF, S, v diff	16 18	68 3°0
1547	B. 360	o 14 21	3°11	68 16	20°0	eF, pS, sbM *	16 25	68 3
1548	J. 815	o 14 39	3°11	68 46'2	20°0	F, vS, R, stell	16 43	68 32°9
1549	Sw. XI.	o 16 0	3°08	83 47'9	20°0	eF, D*f 46°	18 3	83 34°6
1550	J. 816	o 17 5	3°18	52 35'1	20°0	R, stell, vFN	19 12	52 21°8
1551	J. 817	o 20 21	3°09	81 54'2	20°0	F, vS, R, r	22 25	81 40°9
1552	J. 818	o 22 26	3°12	69 18'4	20°0	F, pL, dif	24 31	69 5°1
1553	D. S. 109	o 25 36	2°99	116 22	19°9	vF, vmE 10°	27 36	116 9
1554	D. S. 110	o 25 55	2°97	122 48	19°9	vF, vS, eE 170°, sbM	27 54	122 35
1555	Sw. XII.	o 27 41	2°97	120 46'2	19°9	eeF, S, R, 2 st p in line	29 40	120 32°9
1556	Sw. XI.	o 27 58	3°04	100 20'3	19°9	eeF, pS, R, v diff	30 0	100 7°0
1557	Ho. III.	o 28 26	3°05	93 39'0	19°9	eF, vS, 2 vF st close; nr 161	30 28	93 25°7
1558	D. S. 111	o 28 54	2°99	116 9	19°9	E 160°, * n, perhaps spir	30 54	115 56
1559	Ld. R., B. 245, J. 819	o 29 30	3°15	66 47'6	19°9	vF, o'5 ssf 169	31 36	66 34°3
1560	B. 361	o 30 28	3°08	88 6	19°9	eF, ?=164	32 31	87 53
1561	D. S. 112	o 31 31	2°98	115 6	19°9	E 105°, * n	33 30	114 53
1562	D. S. 113	o 31 37	2°98	115 2	19°9	S, R, psbM	33 36	114 49
1563	B. 362	o 31 55	3°04	99 46	19°8	eF, stellar, o'6 sf 191	33 57	99 33
1564	Ho. I.	o 31 56	3°09	84 48	19°8	eF	34 0	84 35
1565	J. 820	o 32 11	3°09	84 2'5	19°8	F, S, R, gbM	34 15	83 49°3
1566	J. 821	o 32 19	3°09	83 57'3	19°8	F, S, R, gbM, r	34 23	83 44°1
1567	Ho. I.	o 32 21	3°09	84 9	19°8	Neb *	34 25	83 56
1568	J. 822	o 32 43	3°09	83 55'2	19°8	F, S, R, gbM, r	34 47	83 42°0
1569	J. 823	o 33 15	3°09	84 3'0	19°8	vF, vS, R, gbM	35 19	83 49°8
1570	J. 824	o 33 20	3°09	84 0'9	19°8	vF, vS, R, vFN	35 24	83 47°7
1571	J. 825	o 33 28	3°07	91 6'4	19°8	F, pS, R, dif	35 31	90 53°2
1572	B. 363	o 33 55	3°13	74 30	19°8	eF, stell, III 200 nr	36 0	74 17
1573	D. S. 114	o 35 13	2°98	114 18	19°8	eF, eS, mE 60°	37 12	114 5
1574	D. S. 115	o 36 7	2°98	113 0	19°8	vF, vmE o°, gbM	38 6	112 47
1575	Sw. XI.	o 36 28	3°05	94 55'1	19°8	eF, S, R, * 10 s	38 30	94 41°9
1576	D. S. 116	o 37 20	+ 2°96	115 52	- 19°8	vF, vS, cE 135°, bet 2 st	39 18	115 39

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1577	Barnard	h m s o 37 31	s + 3°04'	98° 54'3	- 19''8	pB, S, R, gbM stell N	m s 39 33	98° 41'1
1578	D. S. 117	o 37 32	2°96	115 50	19°8	vF, vS, vnE	39 30	115 37
1579	D. S. 118	o 38 44	2°95	117 20	19°8	eF, eS, cE 15°, gbM	40 42	117 7
1580	B. 364	o 38 49	3°20	60 51	19°8	vF, v stell	40 57	60 38
1581	D. S. 119	o 39 14	2°96	116 40	19°8	eF, eS, E 45°, gbM	41 12	116 27
1582	D. S. 120	o 39 20	2°96	115 3	19°8	eF, eS, E 45°, sbM *	41 18	114 50
1583	J. 826	o 39 47	3°17	67 41'3	19°8	F, vS, R, stell N	41 54	67 28'1
1584	B. 365	o 39 48	3°19	62 57	19°8	eF, L, dif, r	41 56	62 44
1585	J. 827	o 39 51	3°17	67 42'5	19°7	F, vS, R, stell N	41 58	67 29'4
1586	J. 828	o 40 32	3°17	68 24'8	19°7	F, vS, R, gbM, r	42 39	68 11'7
1587	D. S. 121	o 41 50	2°96	114 19	19°7	eF, eS, alm R	43 48	114 6
1588	D. S. 122	o 44 8	2°96	114 19	19°7	vF, vS, cE 155°	46 6	114 6
1589	Sw. XI.	o 44 49	2°89	125 13'6	19°7	eF, eS, R, like D neb	46 45	125 0'5
1590	B. 366	o 44 57	3°46	34 10	19°7	Cl, vL, st sc; 281 f	47 15	33 57
1591	D. S. 123	o 45 14	2°96	113 26	19°6	vF, vS, cE 95°, bM	47 12	113 13
1592	Ho. I.	o 46 13	3°10	84 59'4	19°6	eF, S, bet * 12 and * 13	48 17	84 46'3
1593	B. 367	o 47 4	3°24	58 16	19°6	eF, semi-stellar	49 14	58 3
1594	D. S. 124	o 47 16	2°76	138 24	19°6	eF, eS, cE 130°, stell N	49 6	138 11
1595	D. S. 125	o 47 21	2°78	135 57	19°6	eF, S, mE 10°, stell N	49 12	135 44
1596	J. 829	o 47 17	3°18	69 14'7	19°6	F, S, Epf, gbM	49 24	69 1'6
1597	D. S. 126	o 47 27	2°62	148 52	19°6	eF, eS, cE 165°, cbM	49 12	148 39
1598	Ho. I.	o 47 28	3°10	84 59'2	19°6	Neb * 11; * 9 p 10s, 4'5 n	49 32	84 46'1
1599	D. S. 127	o 47 44	2°95	114 15	19°6	vF, vS, cE 100°	49 42	114 2
1600	D. S. 128	o 48 14	2°94	114 17	19°6	vF, vS, cE 95°	50 12	114 4
1601	D. S. 129	o 48 44	2°94	114 55	19°6	vF, vS, cE 105°	50 42	114 42
1602	Ho. II.	o 48 49	3°02	100 44'7	19°6	vF, S, nr 309	50 50	100 31'6
1603	D. S. 130	o 50 34	2°76	136 11	19°6	eF, eS, cE 115°, cbM	52 24	135 58
1604	Sw. XII.	o 51 1	2°98	107 ±	19°5	pF, vS, * 7'5 np, F * nr sp [? = 333]	53 0	107 ±
1605	D. S. 131	o 51 17	2°72	139 40	19°5	vF, eS, R	53 6	139 27
1606	Sw. XI.	o 51 22	3°01	102 56'2	19°5	eF, pS, nearly bet * 7 p and * 9 nf	53 22	102 43'2
1607	Ho. I., J. 830	o 51 38	3°07	90 10'2	19°5	vF, pS, R, lbM	53 41	89 57'2
1608	Sw. XI.	o 52 36	2°86	125 4'5	19°5	pB, pS, R; 2 st nf, 2 np	54 30	121 51'5
1609	Sw. XI.	o 53 8	2°80	131 6'9	19°5	vF, vS, R	55 0	130 53'9
1610	Sw. XI., Ho.	o 54 45	2°98	106 19'3	19°5	pF, pS, R, * 10 np	56 44	106 6'3
1611	D. S. 132	o 55 3	2°02	163 6	19°5	vF, bM	56 24	162 53
1612	D. S. 133	o 55 21	2°02	163 8	19°5	eF, vS	56 42	162 55
1613	Wolf	o 56 0	3°08	88 48	19°4	F, eeL	58 3	88 35
1614	J. 831	o 57 25	3°29	57 32'5	19°4	vF, S, E 120°, vlbM, * 15 nr	59 37	57 19'6
1615	D. S. 134	o 57 56	2°64	141 54	19°4	eF, S, cE 140°, cbM	59 42	141 41
1616	Sw. XII.	o 58 4	2°89	118 9'3	19°4	eF, pS, 3 st in line nr	o o	117 56'4
1617	D. S. 135	o 58 8	2°64	141 47	19°4	eF, S, cE 130°, cbM	59 54	141 34
1618	Kobold	o 58 13	3°28	58 19'1	19°4	vF, S	o 24	58 6'2
1619	J. 832	o 59 41	3°30	57 39'9	19°4	F, S, R, gbMFN, bet 2 st 13	1 53	57 27'0
1620	J. 833	o 59 51	3°16	76 47'6	19°4	F, pS, dif	1 57	76 34'7
1621	D. S. 136	1 o 6	2°69	137 28	19°4	eF, eS, mE o°, cbM	1 54	137 15
1622	Sw. XI.	1 o 39	2°96	108 15'4	19°3	vF, S, R, sp of 2	2 37	108 2'5
1623	Sw. XI.	1 o 47	2°96	108 13'4	19°3	B, cS, 1E, nf of 2	2 45	108 0'5
1624	D. S. 137	1 o 49	1'93	162 47	19°3	vF, S, R	2 6	162 34
1625	D. S. 138	1 1 25	2°68	137 40	19°3	eF, vS, R, susp	3 12	137 27
1626	D. S. 139	1 1 59	+ 1°82	164 3	- 19'3	vF, cS, R	3 12	163 50

found in the Years 1895 to 1907.

III

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1627	D. S. 140	h m s 1 2 1	s + 2'68	137° 1'	- 19'3	cF, S, eE 135°, vmbM	m s 3 48	13° 48'
1628	Sw. XII.	1 2 5	2'87	119 19'4	19'3	cB, pS, R, 3 st 8 nr	4 0	119 6'6
1629	J. 834	1 2 6	3'08	88 10'9	19'3	F, vS, R, stell	4 9	87 58'0
1630	D. S. 141	1 2 7	2'68	137 31	19'3	eF, eS, E 60°, susp	3 54	137 18
1631	D. S. 142	1 2 31	2'68	137 13	19'3	eF, S, R, susp.	4 18	137 0
1632	J. 835	1 3 16	3'19	73 4'2	19'3	vF, vS, dif, * 15 v close	5 24	72 51'3
1633	Sw. XI., D. S.	1 3 31	2'68	136 42'7	19'3	vF, S, R, vF * f	5 18	136 29'8
1634	J. 836	1 3 36	3'19	73 5'4	19'3	F, S, R, gbM, r	5 44	72 52'5
1635	J. 837	1 3 37	3'19	73 6'1	19'3	F, S, R, gbM, r	5 45	72 53'2
1636	J. 838	1 3 51	3'31	57 23'4	19'3	F, vS, gbMN	6 3	57 10'5
1637	D. S. 144	1 4 24	2'85	121 11	19'2	eF, S, R, susp	6 18	120 58
1638	J. 839	1 4 35	3'31	57 22'8	19'2	F, vS, R, gbMN, r	6 47	57 10'0
1639	J. 840	1 4 36	3'06	91 25'0	19'2	vS, R, stell	6 38	91 12'2
1640	J. 841	1 4 41	3'06	91 23'0	19'2	vS, R, bMN	6 43	91 10'2
1641	D. S. 143	1 4 56	1'89	162 31	19'2	eF, eS, R	6 12	162 18
1642	J. 842	1 4 57	3'18	74 59'2	19'2	F, S, R, lbMN	7 4	74 46'4
1643	J. 843	1 5 0	3'07	91 10'0	19'2	F, S, R, gbM	7 3	90 57'2
1644	Fleming 83	1 5 2	1'76	163 57	19'2	Planetary, stell	6 12	163 44
1645	J. 844	1 5 3	3'18	75 0'2	19'2	F, S, R, dif	7 10	74 47'4
1646	J. 845	1 5 20	3'18	75 2'8	19'2	vF, pS, dif	7 27	74 50'0
1647	J. 846	1 5 22	3'38	51 51'8	19'2	vF, S, R, diffic	7 37	51 39'0
1648	J. 847	1 5 55	3'31	57 31'5	19'2	F, vS, R, N, r	8 7	57 18'7
1649	D. S. 145	1 6 8	2'50	146 37	19'2	eF, eS, E 140°, cbM	7 48	146 24
1650	D. S. 146	1 6 16±	2'60	141 8	19'2	eF, S, mE 55°, cbM	8 0	140 55
1651	B. 368	1 6 17	3'08	88 39	19'2	* 13 with neb, chiefly nnf	8 20	88 26
1652	J. 848	1 7 10	3'31	58 48'1	19'2	F, S, Eus, * 12 v close	9 22	58 35'3
1653	J. 849	1 7 20	3'33	57 21'9	19'2	F, vS, R, gbMN, r	9 33	57 9'1
1654	J. 850	1 7 29	3'30	60 32'9	19'2	F, S, 1E, glbM, r	9 41	60 20'1
1655	D. S. 147	1 7 33	1'87	162 5	19'2	Cl, C, eF, vS	8 48	161 52
1656	Barnard	1 7 50	3'32	57 39'1	19'2	Neb, S * close sf, * 9 sf 3'	10 3	57 26'3
1657	Sw. XI.	1 7 53	2'81	123 24'4	19'2	eF, S, vm E	9 45	123 11'6
1658	J. 851	1 8 4	3'31	59 39'1	19'2	vF, pS, E, N, r	10 16	59 26'3
1659	J. 852	1 8 21	3'30	60 23'1	19'2	F, S, R, N, r	10 33	60 10'3
1660	D. S. 148	1 8 23	1'82	162 30	19'2	eF, vS, R, stell N or F * in M	9 36	162 17
1661	Barnard	1 8 25	3'32	57 39'4	19'2	eF, S, R	10 38	57 26'6
1662	D. S. 149	1 8 41	1'68	164 12	19'1	vF, eS, ? vS Cl	9 48	163 59
1663	Sw. XI.	1 9 31	2'83	121 24'1	19'1	eF, mE 350° [? PD 54'1]	11 24	121 11'4
1664	D. S. 150	1 9 49	1'93	160 33	19'1	2F st inv in eeF neb	11 6	160 20
1665	J. 853	1 9 54	3'35	56 2'3	19'1	F, vS, R, like 2 or 3 F st in neb	12 8	55 49'6
1666	J. 854	1 10 44	3'33	58 16'1	19'1	F, pS, dif, * 13 att	12 57	58 3'4
1667	Sw. XI.	1 10 47	2'94	107 51'0	19'1	eF, pS, R	12 45	107 38'3
1668	J. 855	1 11 3	3'33	57 33'5	19'1	eF, vS, R, vFN	13 16	57 20'8
1669	J. 856	1 12 16	3'34	57 32'7	19'0	vF, S, dif	14 29	57 20'0
1670	Sw. XI.	1 12 22	2'94	107 35'2	19'0	vF, pS, 1E, 2st nr nf	14 20	107 22'5
1671	Sw. XI.	1 12 42	2'94	107 50'1	19'0	eF, vS, R, * 7 nf 47'	14 40	107 37'4
1672	J. 857	1 12 52	3'31	61 2'4	19'0	pB, S, R, gbMN, r	15 4	60 49'7
1673	J. 858	1 12 59	3'34	57 42'8	19'0	F, R, stell N	15 13	54 30'1
1674	D. S. 151	1 13 6	2'54	141 23	19'0	eF, eS, bM, 2 spir wisps	14 48	141 10
1675	Kobold	1 13 8	3'35	56 29'2	19'0	F, S	15 22	56 16'5
1676	J. 859	1 13 13	+ 3'31	60 28'3	- 19'0	F, vS, stell N	15 25	60 15'6

No.	Observer.	R.A. 1860.	Prec. 1860.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1677	J. 860	h m s 1 13 16	+ 3°34'	57° 30'8	- 19"	F, pS, R, bMN	15 30	57° 18'1
1678	J. 861	1 13 46	3°11'	85° 10'9	19°0	F, vS, R, stell	15 50	84° 58'2
1679	J. 862	1 13 55	3°35'	57° 14'7	19°0	F, S, iF, vlbM, dif	16 9	57° 2'0
1680	J. 863	1 14 0	3°35'	57° 26'8	19°0	F, vS, bMN	16 14	57° 14'1
1681	J. 864	1 14 12	3°07'	90° 38'8	19°0	F, S, R, gbM, r	16 15	90° 26'1
1682	J. 865	1 14 22	3°35'	57° 30'7	19°0	F, vS, R, stell	16 36	57° 18'0
1683	J. 866	1 14 46	3°36'	56° 17'7	19°0	F, S, E ns, gbM, r	17 0	56° 5'0
1684	J. 867	1 15 3	3°35'	57° 20'7	19°0	F, S, R, dif	17 17	57° 8'0
1685	J. 868	1 15 15	3°35'	57° 32'2	19°0	F, S, R, vlbM, dif	17 29	57° 19'5
1686	J. 869	1 15 21	3°35'	57° 18'1	19°0	pB, pS, lE pf, gbMN	17 35	57° 5'4
1687	J. 870	1 15 30	3°35'	57° 27'3	19°0	F, vS, R, bMN	17 44	57° 14'6
1688	J. 871	1 15 35	3°35'	57° 40'1	19°0	F, vS, R, bMN	17 49	57° 27'4
1689	J. 872	1 15 55	3°35'	57° 41'8	18°9	F, vS, R, gbMN, * 14 close	18 9	57° 29'2
1690	J. 873	1 15 58	3°35'	57° 34'2	18°9	F, vS, R, stell	18 12	57° 21'6
1691	J. 874	1 16 35	3°35'	57° 21'4	18°9	pF, vS, R, dif	18 49	57° 8'8
1692	J. 875	1 16 49	3°36'	57° 31'0	18°9	F, vS, R, gbM, r	19 3	57° 18'4
1693	Ho. III.	1 16 55	3°05'	92° 23'2	18°9	eF, vS, possibly F *	18 57	92° 10'6
1694	B. 246	1 17 37	3°08'	89° 7	18°9	vF, S, mbM	19 40	88° 54
1695	Sw. XI.	1 17 39	3°14'	81° 59'7	18°9	eF, pS, R, * 10 att p	19 45	81° 47'1
1696	Ho. III.	1 17 44	3°05'	92° 20'9	18°9	eF, eS, 53° np	19 46	92° 8'3
1697	J. 876	1 17 53	3°07'	90° 17'3	18°9	F, vS, R, gbM	19 56	90° 4'7
1698	J. 877	1 17 57	3°19'	75° 53'3	18°9	pB, S, iF, bMN	20 5	75° 40'7
1699	J. 878	1 17 58	3°19'	75° 46'7	18°9	vF, vS, R, gbM	20 6	75° 34'1
1700	J. 879	1 18 0	3°19'	75° 51'6	18°9	pB, S, R, gbMN	20 8	75° 39'0
1701	J. 880	1 18 19	3°22'	72° 32'0	18°9	F, S, dif, N 13 mag	20 28	72° 19'4
1702	Sw. XI.	1 18 22	3°20'	74° 7'9	18°9	eeF, pS, lE, v diffic, bet 2 st ns	20 30	73° 55'3
1703	B. 369	1 19 18	3°05'	92° 23	18°8	eF, S, dif	21 20	92° 10
1704	J. 881	1 19 26	3°19'	76° 0'6	18°8	pB, pS, dif, iF, gvlbM	21 34	75° 48'1
1705	Ho. I.	1 19 39	3°04'	94° 13'8	18°8	Neb * 12, FD * nf z'	21 41	94° 1'3
1706	J. 882	1 19 48	3°19'	75° 58'0	18°8	F, S, dif, vlbM	21 56	75° 45'5
1707	B. 370	1 20 56	3°38'	57° 8	18°8	eF, dif, * 13°3 close	23 11	56° 55
1708	D. S. 152	1 21 0	1°66'	161° 55	18°8	vF, vS, R, * 9 sf 4'	22 6	161° 42
1709	Sw. XI.	1 21 46	2°72'	126° 29'5	18°8	eF, pS, R, v diffic	23 35	126° 17'0
1710	J. 883	1 23 10	3°26'	69° 17'1	18°7	F, pL, dif, * 13°5 att	25 20	69° 4'6
1711	J. 884	1 23 24	3°21'	73° 31'7	18°7	F, pL, E 260°, gbM	25 32	73° 19'2
1712	Barnard	1 24 20	3°01'	97° 35'4	18°7	No descr	26 20	97° 22'9
1713	B. 247	1 24 43	3°41'	55° 24	18°7	* 13, nebs ?	26 59	55° 12
1714	Sw. XII.	1 26 2	2°95'	104° 13'2	18°6	eeF, S, lE, v dif, * 8 n	28 0	104° 0'8
1715	J. 885	1 26 12	3°18'	78° 8'2	18°6	F, S, R, N, r	28 19	77° 55'8
1716	B. 371	1 26 33	2°96'	103° 2	18°6	eF, r, neb ?	28 31	102° 50
1717	D. S. 153	1 28 18	1°80'	158° 15	18°6	eF, eS, mE 25°, stell N	29 30	158° 3
1718	J. 886	1 30 28	3°41'	57° 22'1	18°5	F, vS, pR, * 13°5 att	32 44	57° 9'8
1719	Sw. XI.	1 31 22	2°71'	124° 42'0	18°4	vF, S, R, cF * nr nf	33 10	124° 29'7
1720	Sw. XI.	1 33 38	2°77'	119° 38'6	18°4	eF, eS, R, B * p	35 29	119° 26'3
1721	J. 887	1 34 3	3°15'	82° 10'9	18°4	pB, pS, Epf, gbM, r	36 9	81° 58'6
1722	D. S. 154	1 36 36	2°69'	124° 54	18°3	F, S, cE 45°	38 24	124° 42
1723	J. 888	1 36 51	3°15'	81° 54'4	18°2	F, pL, E 200°, glbM	38 57	81° 42'3
1724	D. S. 155	1 36 54	2°69'	124° 55	18°2	F, S, cE 175°	38 42	124° 43
1725	J. 889	1 37 29	3°29'	68° 54'9	18°2	F, S, pR, dif	39 41	68° 42'8
1726	J. 890	1 38 3	+ 3°11'	86° 5'1	- 18'2	F, vS, gbM, * 13°5 close	40 7	85° 53'0

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1727	Roberts	h m s I 39 39	s + 3°36'	63° 22'3	- 18''1	F, L, st inv, I 157 nf	m s 41 53	63° 10'2
1728	D. S. 156	I 41 25	2°68	124 18	18'1	F, S, E 160°, mbM	43 12	124 6
1729	Sw. XI., Ho.	I 41 28	2°77	117 35'4	18'1	pB, eS, alm stell, rr ?	43 19	117 23'3
1730	J. 891	I 42 12	3°30	68 43'2	18 1	F, S, R, gbM	44 24	68 31'1
1731	Roberts	I 42 19	3°36	63 29'7	18 1	F, E np sf, bM, prob spir	44 33	63 17'6
1732	B. 248	I 42 39	3°49	54 46	18'0	vF, pS, mbM, ? eF st inv	44 59	54 34
1733	J. 892	I 42 40	3°44	57 36'2	18'0	F, vS, pR, r	44 58	57 24'2
1734	Sw. XI., D. S.	I 42 45	2°69	123 27'3	18'0	vF, pS, lE 100°, bM	44 33	123 15'3
1735	J. 893	I 42 48	3°44	57 35'6	18'0	vF, vS, r	45 6	57 23'6
1736	J. 894	I 43 17	3°26	72 24'2	18'0	F, pS, E 210°, gblM	45 27	72 12'2
1737	B. 249	I 43 29	3°49	54 27	18'0	eF, 3 or 4 vF st in neb	45 49	54 15
1738	Sw. XI., Ho.	I 44 13	2°96	100 29'2	18'0	eF, vS, I 62 p	46 11	100 17'2
1739	D. S. 157	I 44 14	2°66	124 45	18'0	eF, cS, R, mbM	46 0	124 33
1740	Sw. XI.	I 44 56	2°72	120 38'3	18'0	pB, eS, like D *	46 45	120 26'3
1741	Ho. III.	I 45 12	2°89	107 28'8	17'9	eF, eS, ? = 690	47 8	107 16'9
1742	J. 895	I 45 28	3°32	67 58'5	17'9	F, S, lEPf, gblM	47 41	67 46'6
1743	B. 250	I 45 32	3°20	77 59	17'9	vF, pS, lbM, dif, ? = 716	47 40	77 47
1744	J. 896	I 45 58	3°28	70 50'4	17'9	F, S, R, gblM	48 9	70 38'5
1745	Ho. III.	I 46 15	2°89	107 21'6	17'9	eF, eS	48 11	107 9'7
1746	J. 897	I 47 7	3°12	85 53'1	17'9	F, S, pR, gbM	49 12	85 41'2
1747	Fleming 103	I 47 22	4°26	27 23	17'8	planetary, stell	50 12	27 11
1748	Palisa (3634)	I 48 32	3°26	73 2'8	17'8	vF	50 42	72 50'9
1749	J. 898	I 48 50	3°14	83 56'7	17'8	F, S, E ns, biN, r	50 56	83 44'8
1750	J. 899	I 49 2	3°11	86 36'5	17'8	vF, vS, pR, N	51 6	86 24'6
1751	Sw. XI., Ho.	I 49 3	3°13	85 3'6	17'8	pB, pS, R, * 9 np	51 8	84 51'7
1752	J. 900	I 49 19	3°40	62 3'9	17'8	F, vS, * 14'5 att	51 35	61 52'0
1753	J. 901	I 49 23	3°40	62 5'3	17'8	F, vS, dif, 14'5 close	51 39	61 53'4
1754	J. 902	I 49 34	3°11	86 39'6	17'8	F, S, gbM	51 38	86 27'7
1755	J. 903	I 49 37	3°23	76 9'0	17'8	F, S, dif	51 46	75 57'1
1756	Barnard	I 49 53	3°06	91 9'6	17'8	vF, E np sf, * 13 close sf	51 55	90 57'7
1757	Barnard	I 49 57	3°06	91 10'0	17'8	eF, vS, R	51 59	90 58'1
1758	Ho. III.	I 50 9	2°88	107 13'5	17'7	F, eS, sbM * 11	52 4	107 1'7
1759	Sw. XI.	I 51 18	2°65	123 43'3	17'7	pB, vS, R, bM, * 10 close sp	53 4	123 31'5
1760	Sw. XI.	I 51 18	2°67	122 41'5	17'7	eF, pS, R [? PD 123°]	53 5	122 29'7
1761	J. 904	I 51 41	3°07	90 5'8	17'7	vF, vS, R, gbMN	53 44	89 54'0
1762	Sw. XI., D. S.	I 51 49	2°65	123 57'5	17'7	eeF, pS, R, * 7 nf	53 35	123 45'7
1763	Sw. XII.	I 52 26	2°73	118 28'3	17'7	eeF, S, R, * 8 ssf	54 15	118 16'5
1764	J. 905	I 52 32	3°35	66 6'1	17'7	F, vS, R, lbM	54 46	65 54'3
1765	Barnard	I 52 32	3°46	58 50'2	17'7	S * att p	54 50	58 38'4
1766	Barnard	I 53 5	3°46	58 54'2	17'6	'No descr	55 23	58 42'4
1767	Sw. XI.	I 53 7	2°94	101 48'1	17'6	eF, pS, bet 2 st 10'5, 2 st n	55 5	101 36'4
1768	Sw. XI.	I 54 18	2°76	115 46'4	17'6	eeF, pS, R, 3 st 9 sf, v diffc	56 8	115 34'7
1769	D. S. 158	I 54 44	2°66	122 36	17'6	eF, eS, mE 80°	56 30	122 24
1770	J. 906	I 54 48	3°18	80 41'6	17'5	F, vS, R, stell	56 55	80 29'9
1771	J. 907	I 54 50	3°18	80 42'4	17'5	F, vS, R, stell	56 57	80 30'7
1772	Barnard	I 55 21	3°15	82 55'8	17'5	F, S, slbM, * 8'5 166''n	57 27	82 44'1
1773	B. 372	I 55 58	3°45	59 52	17'5	vF, vS, gbM, r	58 16	59 40
1774	J. 908	I 56 23	3°25	75 21'7	17'5	vF, dif	58 33	75 10'0
1775	J. 909	I 57 45	3°22	77 9'4	17'4	F, S, dif, * 13'5 nr	59 54	76 57'8
1776	J. 910	I 57 56	+ 3°13	84 33'3	- 17'4	F, pL, iR, dif	o 1	84 21'7

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900
1777	J. 911	h m s 1 58 34	s + 3°25'	75 ° 28' 0	- 17" 3	F, eS, R, stell	m s 0 44	75 ° 16' 5
1778	J. 912	1 58 53	3°17'	81 26' 9	- 17" 3	F, S, R, gbMN	1 0	81 15' 4
1779	J. 913	1 59 8	3°11'	86 58' 6	17" 3	F, S, R, * 14 nr	1 12	86 47' 1
1780	J. 914	1 59 17	3°24'	75 56' 5	17" 3	F, S, dif, sev st 9°10 nr	1 27	75 45' 0
1781	J. 915	1 59 47	3°06'	91 11' 9	17" 3	F, vS, R, N	1 49	91 0' 4
1782	Sw. XI.	2 1 5	2°74'	116 9' 0	17" 3	vF, D * in neb	2 55	115 57' 5
1783	Sw. XI., D. S.	2 3 55	2°61'	123 39' 4	17" 1	pF, vS, mE ns, F * p	5 39	123 28' 0
1784	J. 916	2 7 59	3°52'	58 1' 3	17" 0	F, L, Epf, gbM	10 20	57 50' 0
1785	J. 917	2 8 7	3°52'	58 0' 3	17" 0	F, S, R, stell	10 28	57 49' 0
1786	J. 918	2 8 44	3°13'	85 30' 2	16' 9	vF, vS, R, N	10 49	85 18' 9
1787	Sw. XI.	2 9 24	2°91'	102 36' 2	16' 9	eF, vmE, bet 2 st pf, * 8 nf	11 20	102 24' 9
1788	Sw. XI.	2 9 25	2°63'	121 50' 6	16' 9	pF, pS, R, 2 st nf	11 10	121 39' 3
1789	Barnard	2 9 59	3°52'	58 14' 8	16' 9	F, S, iF, ?	12 20	58 3' 5
1790	J. 919	2 10 5	3°23'	78 8' 6	16' 9	F, S, dif	12 14	77 57' 3
1791	J. 920	2 10 9	3°23'	78 10' 9	16' 9	S, R, like neb * 11	12 18	77 59' 6
1792	J. 921	2 10 43	3°56'	56 11' 3	16' 8	F, S, pR, gbM, r	13 5	56 0' 1
1793	J. 922	2 13 15	3°53'	58 6' 8	16' 7	F, S, E 200°, glbM	15 36	57 55' 7
1794	J. 923	2 13 49	3°27'	74 54' 2	16' 7	F, vS, dif, r	16 0	74 43' 1
1795	Barnard	2 16 20±	4°46'	28 34	16' 6	Patch of neby	19 18±	28 23
1796	D. S. 159	2 17 12	2°39'	132 1	16' 5	vF, vS, R	18 48	131 50
1797	J. 924	2 17 39	3°35'	70 13' 5	16' 5	F, vS, iF, dif	19 53	70 2' 5
1798	J. 925	2 18 40	3°25'	77 11' 3	16' 5	vF, vS, sbM * 15	20 50	77 0' 3
1799	B. 251	2 19 41	3°85'	44 40	16' 4	vF, S, lbM, * 13 p 0' 5	22 15	44 29
1800	B. 373	2 20 17	3°54'	59 13	16' 4	eF, S, ? eS Cl	22 39	59 2
1801	J. 926	2 20 24	3°34'	71 3' 3	16' 4	F, S, glbM, dif	22 38	70 52' 4
1802	Barnard	2 20 44	3°39'	67 30' 6	16' 3	* 11 np 1'	23 0	67 19' 7
1803	Barnard	2 21 21	3°39'	67 28' 6	16' 3	Stell N	23 37	67 17' 7
1804	Barnard	2 21 26	3°39'	67 28' 1	16' 3	No descr	23 42	67 17' 2
1805	Barnard	2 21 30	4°47'	29 9	16' 3	Cl, co, eL neby extends f	24 29	28 58
1806	J. 927	2 21 37	3°39'	67 40' 6	16' 3	F, vS, R, bMN	23 53	67 29' 7
1807	J. 928	2 22 33	3°39'	67 40' 2	16' 2	F, vS, R, lbM	24 49	67 29' 4
1808	J. 929	2 23 29	3°00'	94 50' 2	16' 2	F, vS, R, gbM, r	25 29	94 39' 4
1809	J. 930	2 23 43	3°40'	67 42' 7	16' 2	pB, pL, E 135°, gbM	25 59	67 31' 9
1810	D. S. 160	2 24 3	2°32'	133 43	16' 2	vF, R, stell N	25 36	133 32
1811	Sw. XI.	2 24 4	2°52'	124 52' 8	16' 2	eeF, S, R, 2 st p, up of 2 (sic)	25 45	124 42' 0
1812	D. S. 161	2 24 9	2°33'	133 27	16' 2	vF, bM	25 42	133 16
1813	Sw. XI.	2 24 19	2°52'	124 52' 5	16' 2	eF, eS, R, F * n, 2 st np, sf of 2 (sic)	26 0	124 41' 7
1814	Sw. XI.	2 24 35	2°49'	126 39' 6	16' 1	pB, pS, mE	20 15	126 28' 9
1815	J. 931	2 25 59	3°57'	58 11' 3	16' 1	F, S, R, gbMN	28 22	58 0' 6
1816	Sw. XI.	2 26 11	2°47'	127 22' 5	16' 1	vF, S, R, 2 st nr p	27 50	127 11' 7
1817	J. 932	2 26 18	3°22'	79 24' 7	16' 1	F, pL, Epf, dif	28 27	79 14' 0
1818	Ho. II.	2 27 20	2°91'	101 39' 4	16' 0	vF, eS, R, prob neb *	29 16	101 28' 7
1819	J. 933	2 28 24	3°12'	86 34' 4	16' 0	F, vS, R	30 29	86 23' 7
1820	J. 934	2 28 31	3°15'	84 34' 1	15' 9	F, vS, R, bMN	30 37	84 23' 5
1821	J. 935	2 28 47	3°26'	76 49' 1	15' 9	pF, S, gbM, dif	30 57	76 38' 5
1822	B. 252	2 28 49	2°94'	99 11	15' 9	* 13' 5 slightly nebs	30 47	99 0
1823	J. 936	2 30 15	3°57'	58 32' 8	15' 8	F, S, iF, dif	32 38	58 22' 3
1824	Barnard	2 30 30	4°56'	29 0	15' 8	Cl, st F, perh. F neby p extends to it	33 32	28 50
1825	J. 937	2 31 27	3°20'	81 30' 6	15' 8	F, S, R, gbMN	33 35	81 20' 1
1826	Sw. XI., D. S.	2 32 18	+ 2°63'	118 2' 9	- 15' 7	pB, cS, R, * 8 nr p	34 3	117 52' 4

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1827	J. 938	h m s 2 32 31	s + 3°09'	89° 2'7	- 15''7	F, S, fan-shape, * 13°5 close s	m s 34 35	88° 52'2
1828	J. 939	2 32 35	3 36	71 16'6	15'7	F, S, iF, gbMN	34 49	71 6'1
1829	J. 940	2 32 50	3'36	71 17'5	15'7	vF, vS, dif, r	35 4	71 7'0
1830	D. S. 162	2 32 57	2'63	118 3	15'7	vF, S, susp, eF * 1'5 sp	34 42	117 53
1831	Wolf (4082)	2 33 ...	4'70	27 ...	15'7	vF, eeL	36 ...	27 ...
1832	J. 941	2 34 3	3'35	71 34'7	15'6	F, iF or lEns, bMN	36 17	71 24'3
1833	Sw XI., Ho.	2 35 34	2'61	118 46'2	15'6	eeF, S, R, 3 D st nf	37 18	118 35'8
1834	J. 942	2 35 34	3'11	87 29'9	15'6	F, pS, pR, glbM	37 38	87 19'5
1835	J. 943	2 36 7	3'29	75 42'6	15'5	F, S, R, dif	38 19	75 32'3
1836	J. 944	2 36 9	3'11	87 28'8	15'5	F, S, R, vlbM	38 13	87 18'5
1837	J. 945	2 36 22	3'07	90 29'1	15'5	F, vS, R, gbM, r	38 25	90 18'8
1838	J. 946	2 36 51	3'36	71 9'1	15'5	F, vS, R, sbM * 14	39 5	70 58'8
1839	J. 947	2 37 0	3'29	75 20'2	15'5	vF, S, R, dif	39 12	75 9'9
1840	Ho. III.	2 37 5	2'83	106 18'0	15'5	vF, vS, mbM, 1081 nf	38 58	106 7'7
1841	J. 948	2 37 44	3'35	71 40'7	15'4	F, vS, R, gvlbM	39 58	71 30'4
1842	J. 949	2 37 50	3'24	79 8'0	15'4	F, vS, R, glbM	40 0	78 57'7
1843	J. 950	2 38 10	3'11	87 42'4	15'4	F, pL, Epf, dif	40 14	87 32'1
1844	J. 951	2 38 36	3'11	87 20'9	15'4	F, pS, Epf, dif	40 40	87 10'6
1845	Sw. XI.	2 38 51	2'61	118 32'9	15'4	eeF, S, R, D * np	40 35	118 22'6
1846	J. 952	2 40 6	3'27	77 21'1	15'3	F, S, glbM	42 17	77 10'9
1847	J. 953	2 40 9	3'29	76 4'8	15'3	F, S, iF, r	42 21	75 54'6
1848	Barnard	2 40 30	4'57	30 9	15'3	Cl, st F, extends 8m f, in F neby	43 33	29 59
1849	J. 954	2 40 41	3'21	81 13'5	15'3	F, vS, R, stell	42 49	81 3'3
1850	J. 955	2 41 2	3'27	77 20'7	15'2	F, S, dif	43 13	77 10'6
1851	Barnard	2 41 17	4'45	32 16'1	15'2	* 6'2, neb att sp, 5'l	44 15	32 6'0
1852	J. 956	2 41 21	3'27	77 22'9	15'2	F, pS, R, gbM	43 32	77 12'8
1853	Ho. III.	2 41 26	2'85	104 34'7	15'2	eF, vS, 1103 f 2s, 2'n	43 20	104 24'6
1854	J. 957	2 41 28	3'37	71 16'3	15'2	F, vS, R, bMN	43 43	71 6'2
1855	J. 958	2 41 37	3'27	77 13'2	15'2	F, pL, Dns, biN	43 52	77 3'1
1856	J. 959	2 41 42	3'05	91 19'5	15'2	F, S, E 200°, gbMN	43 44	91 9'4
1857	J. 960	2 41 57	3'29	75 57'7	15'2	F, S, R, glbM	44 9	75 47'6
1858	Sw. XI.	2 42 49	2'53	121 52'6	15'1	vF, pS, R, 1st of 3	44 30	121 42'5
1859	Sw. XI.	2 42 51	2'53	121 46'6	15'1	pF, pS, R, 2nd of 3	44 32	121 36'5
1860	Sw. XI.	2 43 23	2'53	121 46'6	15'1	pF, pS, 1E, 3rd of 3	45 4	121 36'5
1861	Barnard	2 45 8	3'48	65 5'8	15'0	F, pS, R, vgbM	47 27	64 55'8
1862	Sw. XI.	2 45 31	2'48	123 56'8	15'0	eeF, vS, 1E, v diffic, * 7 sf	47 10	123 46'8
1863	J. 961	2 47 22	3'20	81 48'4	14'9	F, vS, R, gbMN	49 30	81 38'5
1864	Sw. XI.	2 47 27	2'45	124 46'8	14'9	eF, S, R	49 5	124 36'9
1865	J. 962	2 47 51	3'20	81 45'7	14'8	F, vS, R, gbM, r	49 59	81 35'8
1866	Ho. III.	2 48 19	2'81	106 13'4	14'8	vF, eS, alm stell	50 11	106 3'5
1867	J. 963	2 48 21	3'20	81 14'5	14'8	F, S, pR, gbM	50 29	81 4'6
1868	J. 964	2 48 38	3'20	81 13'4	14'8	F, vS, R, stell	50 46	81 3'5
1869	J. 965	2 50 46	3'16	84 43'6	14'7	F, eS, like neb D *	52 52	84 33'8
1870	Barnard	2 50 48	3'03	92 53'6	14'7	vF, R, vgbM, v diffic	52 49	92 43'8
1871	Barnard	2 55 17	4'69	29 52'2	14'4	* 9'3 nebs, chiefly f	58 25	29 42'6
1872	Bidschof (3520)	2 55 23	3'92	47 44'4	14'3	Cl	58 0	47 34'9
1873	J. 966	2 56 18	3'22	81 1'7	14'3	F, S, E 200°	58 27	80 52'2
1874	J. 967	2 57 35	3'74	54 31'8	14'2	F, vS, vlbM, dif	0 5	54 22'3
1875	Sw. XI.	2 57 56	2'31	130 2'1	14'2	eF, pS, R, FD * sf in line	59 28	129 52'6
1876	Sw. XI.	2 58 37	+ 2'57	118 2'1	- 14'2	eeF, S, R, F * nr sf	0 20	117 52'6

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1877	D. S. 165	h m s 2 58 44	s + 1°91	14° 3'	- 14''2	eF, vS, E 170°, prob neb	m s 0 0	14° 54'
1878	D. S. 166	2 59 22	1°84	142 39	14°1	eeF, eS, cE 5°, prob neb	0 36	142 30
1879	D. S. 167	2 59 34	1°84	142 39	14°1	eeF, eS, mE 135°, stell N	0 48	142 30
1880	Ho. III.	2 59 42	2°90	100 16°3	14°1	eF, S, * 9 f 8s	1 38	100 6°9
1881	B. 253	3 0 20	3°82	51 52	14°1	vF, pS, v dif [? = 1213]	2 53	51 43
1882	J. 968	3 0 33	3°12	87 23°4	14°1	F, pL, E 210°	2 38	87 14°0
1883	Barnard	3 0 35	3°88	49 38°8	14°1	S, R, vgbM	3 10	49 29°4
1884	Barnard	3 0 36	3°88	49 33°8	14°1	S, E npsf, diffic, * 12 close f	3 11	49 24°4
1885	D. S. 168	3 0 58	2°44	123 23	14°1	vF, vS, mE 140°, gbM	2 36	123 14
1886	B. 254	3 1 3	2°99	94 56	14°1	vF, S, vmbM, * 13 s 1°2	3 3	94 47
1887	Barnard	3 1 4	3°88	49 46°8	14°1	* 12 close sf	3 39	49 37°4
1888	Barnard	3 1 51	3°88	49 24°3	14°1	vF, S	4 26	49 14°9
1889	Barnard	3 1 55	3°88	49 55°4	14°1	F, R, vgbM	4 30	49 46°0
1890	J. 969	3 2 3	3°40	71 20°4	14°0	pB, pL, iF, N, r	4 19	71 11°1
1891	J. 970	3 2 14	3°40	70 55°7	14°0	vF, S, bM, dif	4 30	70 46°4
1892	Ho. III.	3 2 15	2°66	113 35°6	14°0	vF, L, nr 1230	4 1	113 26°3
1893	J. 971	3 2 19	3°40	70 54°9	14°0	eF, vS, diffic	4 35	70 45°6
1894	J. 972	3 2 28	3°40	70 55°6	14°0	F, S, vlbM, dif	4 44	70 46°3
1895	Sw. XI.	3 3 24	2°61	115 51°8	13°9	eeF, pS, 2 st close p	5 8	115 42°5
1896	D. S. 169	3 3 58	1°71	144 46	13°9	eeF, eS, cE 10°, stell N	5 6	144 37
1897	Ho. III.	3 4 2	2°88	101 19°9	13°9	eF, vS, nr 1238	5 57	101 10°6
1898	D. S. 170	3 4 14	2°66	112 56	13°9	Neb line at 60°, susp	6 0	112 47
1899	Sw. XI.	3 5 46	2°60	115 51°2	13°8	eeF, S, R, 2 F st sp in line	7 30	115 42°0
1900	J. 973	3 7 1	3°80	53 22°2	13°7	F, S, pR, gbMN	9 33	53 13°1
1901	J. 974	3 7 9	3°80	53 24°7	13°7	F, vS, R, gbMN	9 41	53 15°6
1902	J. 975	3 7 18	3°80	53 20°8	13°6	F, vS, R, sbM * 14	9 50	53 11°7
1903	D. S. 171	3 8 46	1°86	141 7	13°6	2 F neb, E	10 0	140 58
1904	D. S. 172	3 9 9	2°48	121 13	13°6	eF, vS, mE 80°, stell N	10 48	121 4
1905	B. 374	3 9 34	3°93	49 9	13°5	Cl, S, vF, ? neb	12 11	49 0
1906	D. S. 173	3 10 31	2°38	124 53	13°4	vF, vS, vmE 60°, gbM	12 6	124 44
1907	B. 375	3 10 40	3°94	48 58	13°4	vF, S, vmbM	13 18	48 49
1908	D. S. 174	3 11 18	1°66	145 21	13°4	vF, vS, spir branch	12 24	145 12
1909	D. S. 175	3 11 42	2°40	124 12	13°4	vF, vS, c E 45°, stell N	13 18	124 3
1910	D. S. 176	3 11 43	2°67	111 57	13°4	2 eF, eS neb susp	13 30	121 48
1911	B. 258	3 11 58	3°76	55 13	13°3	Neb, not well seen	14 28	55 4
1912	D. S. 177	3 12 28	1°84	141 10	13°3	S, Ens	13 42	141 1
1913	D. S. 178	3 13 53	2°42	122 59	13°2	vF, vS, mE 155°, cbM	15 30	122 50
1914	D. S. 179	3 14 45	1°87	140 6	13°2	Spiral ?	16 0	139 57
1915	D. S. 180	3 15 29	1°83	141 12	13°1	Ens	16 42	141 3
1916	D. S. 181	3 15 56	1°89	139 33	13°1	F, S, R, 2 st sp	17 12	139 24
1917	D. S. 182	3 18 16	1°69	143 42	13°0	Ens	19 24	143 33
1918	J. 976	3 18 58	3°15	85 57°4	12°9	F, S, glbM, dif	21 4	85 48°8
1919	Sw. XI.	3 19 49	2°40	123 23°4	12°8	eF, pS, 1E, sev st n [? RA 9°]	21 25	123 14°9
1920	D. S. 183	3 20 16	1°70	143 13	12°8	Stellar	21 24	143 4
1921	D. S. 184	3 20 30	1°80	141 12	12°8	Stellar	21 42	141 3
1922	D. S. 185	3 20 30	1°80	141 14	12°8	Stellar	21 42	141 5
1923	D. S. 186	3 20 36	1°80	141 4	12°8	Stellar	21 48	140 55
1924	D. S. 187	3 20 56	1°74	142 11	12°8	E, stellar	22 6	142 3
1925	D. S. 188	3 21 8	1°76	141 45	12°8	Enp sf, stell	22 18	141 37
1926	D. S. 189	3 21 8	+ 1°74	142 11	- 12°8	E, stell	22 18	142 3

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1927	D. S. 190	h m s 3 21 8	+ s 1'74	° ' ' 142 13	- 12'8	vF	m s 22 18	142 ° ' 5
1928	D. S. 194	3 21 20	2'65	112 2	12'7	vF, vS, mE 20°, cbM	23 6	111 54
1929	D. S. 191	3 21 20	1'76	141 45	12'8	Enp sf	22 30	141 37
1930	J. 977	3 21 26	3'14	86 5'4	12'7	F, S, R, gbM, * 8 p 3°, s 1'6	23 32	85 56'9
1931	J. 978	3 21 43	3'09	88 44'3	12'7	vF, dif	23 47	88 35'8
1932	D. S. 192	3 21 44	1'75	141 49	12'7	Ens	22 54	141 41
1933	D. S. 193	3 21 46	1'69	143 16	12'7	1E sp nf	22 54	143 8
1934	Barnard	3 21 50	4'01	47 41'3	12'6	eF, pS, lbM, * 12 dist 34"	24 30	47 32'9
1935	D. S. 195	3 21 53	1'82	140 30	12'7	Stell, E, spir ?	23 6	140 22
1936	D. S. 196	3 22 20	1'75	141 48	12'7	Stell, E np sf	23 30	141 40
1937	D. S. 197	3 22 27	1'87	139 11	12'7	vF, vS, R, bM	23 42	139 3
1938	D. S. 198	3 23 18	1'66	143 30	12'6	Perhaps D *	24 24	143 22
1939	D. S. 199	3 23 38	1'76	141 33	12'6	Epf	24 48	141 25
1940	D. S. 200	3 23 40	1'71	142 37	12'6	bM	24 48	142 29
1941	D. S. 202	3 23 56	3'54	66 3	12'5	vF, S, vmE 0° (prob neb)	26 18	65 55
1942	D. S. 201	3 24 4	1'69	143 9	12'6	Stell, Ens	25 12	143 1
1943	Sw. XI.	3 24 58	2'05	134 35'3	12'5	pB, S, R	26 20	134 27'0
1944	D. S. 203	3 25 14	1'89	138 29	12'5	eF, eS, 1E 20°	26 30	138 21
1945	D. S. 204	3 25 23	1'68	143 7	12'5	Stell	26 30	142 59
1946	D. S. 205	3 25 29	1'68	143 6	12'5	Stell	26 36	142 58
1947	D. S. 206	3 26 25	1'78	140 48	12'4	Stell	27 36	140 40
1948	D. S. 207	3 26 27	1'88	138 27	12'4	eeF, S, R	27 42	138 19
1949	D. S. 208	3 26 33	1'88	138 28	12'4	cF, vS, spir, cbM	27 48	138 20
1950	D. S. 209	3 26 55	1'78	140 54	12'3	E np sf	28 6	140 46
1951	D. S. 210	3 27 12	1'64	143 37	12'3	E sp nf	28 18	143 29
1952	D. S. 212	3 27 22	2'60	114 11	12'3	eF, S, vmE 140°, * 1' sf	29 6	114 3
1953	D. S. 213	3 27 32	2'65	111 57	12'3	vF, cL, spir or annular	29 18	111 49
1954	Innes, D. S.	3 27 44	1'70	142 23	12'3	F, pL, R, spir	28 52	142 15
1955	D. S. 211	3 28 4	1'40	147 42	12'3	eF, vS, R	29 0	147 34
1956	J. 979	3 28 9	3'16	85 24'1	12'3	F, S, E 200°, 2 vF Nuclei	30 15	85 15'9
1957	D. S. 214	3 28 17	1'67	142 55	12'3	E sp nf	29 24	142 47
1958	D. S. 215	3 28 45	1'72	141 55	12'3	Stell	29 54	141 47
1959	D. S. 216	3 29 1	1'77	140 53	12'2	E np sf	30 12	140 45
1960	D. S. 217	3 29 16	1'40	147 40	12'2	eF, vS, R	30 12	147 32
1961	D. S. 218	3 29 17	1'83	139 25	12'2	eF, vS, cE 20°	30 30	139 17
1962	D. S. 221	3 29 26	2'65	111 46	12'2	eF, S, mE 175°, gbM	31 12	111 38
1963	Sw. XI.	3 29 27	2'33	124 55'0	12'2	pB, S, eE 90°	31 0	124 46'9
1964	D. S. 220	3 29 49	1'63	143 38	12'2	Epf	30 54	143 30
1965	D. S. 219	3 29 51	1'43	147 1	12'2	eF, vS, R, cbM	30 48	146 53
1966	D. S. 222	3 30 3	1'72	141 47	12'2	Stell	31 12	141 39
1967	J. 980	3 30 29	3'13	87 11'6	12'1	vF, S, R, * 13 nr	32 34	87 3'5
1968	D. S. 223	3 30 38	1'75	141 6	12'1	Stell	31 48	140 58
1969	D. S. 224	3 31 35	1'98	135 39	12'1	eF, vS, cE 50°, cbM	32 54	135 31
1970	Sw. XI., D. S.	3 31 45	2'03	134 25	12'1	eF, vS, eE 75°	33 6	134 17
1971	D. S. 225	3 32 6	1'65	143 6	12'0	Epf	33 12	142 58
1972	D. S. 226	3 32 29	1'68	142 26	12'0	E	33 36	142 18
1973	D. S. 227	3 32 29	1'68	142 27	12'0	E	33 36	142 19
1974	D. S. 228	3 32 30	1'79	140 2	12'0	E np sf	33 42	139 54
1975	Ho. III.	3 32 37	2'76	105 57 6	12 0	eF, vS, v diffic, nr 1405	34 27	105 49'6
1976	D. S. 229	3 32 45	+ 1'88	137 54	- 12'0	eF, eS, R	34 0	137 46

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
1977	J. 981	h m s 3 32 46	+ s 3'41	° 72 42'2	- 12''0	F, S, R, dif, * 13°5 nr	m s 35 2	72° 34'2
1978	D. S. 230	3 32 56	1'76	140 37	12'0	Ens	34 6	140 29
1979	D. S. 231	3 33 37	1'32	148 24	11'9	eeF, eS, vmE 20°	34 30	148 16
1980	D. S. 232	3 33 49	1'32	148 26	11'9	eF, cS, vmE 25°	34 42	148 18
1981	Sw. XI.	3 33 59	2'52	117 19'1	11'9	eF, eS, lE, * close nf	35 40	117 11'2
1982	D. S. 233	3 34 31	1'33	148 14	11'8	cF, eS, R	35 24	148 6
1983	Sw. XI.	3 35 1	2'61	113 3'5	11'8	vF, pS, R	36 45	112 55'6
1984	D. S. 234	3 35 26	1'89	137 32	11'8	eeF, eS, mE 150°	36 42	137 24
1985	Barnard	3 35 48	3'74	58 17'0	11'7	* 8 in F, eL neb	38 18	58 9'2
1986	D. S. 235	3 36 0	1'95	135 49	11'8	eF, eS, cE 135°	37 18	135 41
1987	D. S. 236	3 36 48	1'49	145 31	11'7	eF, vS, R	37 48	145 23
1988	Sw. XI.	3 37 44	2'15	130 20'0	11'6	eF, pL, R, 2 st nr f, 2 st up	39 10	130 12'3
1989	D. S. 237	3 37 58	1'71	141 25	11'6	stell	39 6	141 17
1990	Stratonoff (3366)	3 39 12	3'56	65 49	11'5	vL, mE pf, 15'1	41 34	65 41
1991	D. S. 238	3 40 47	1'67	141 59	11'4	stell, E sp nf	41 54	141 51
1992	D. S. 239	3 41 10	1'69	141 27	11'4	stell	42 18	141 19
1993	Sw. XI.	3 41 27	2'33	124 9'5	11'3	eF, L, cE, * 7'5 att, v diffic	43 0	124 2'0
1994	D. S. 242	3 41 54	1'66	142 6	11'3	Ens	43 0	141 58
1995	Barnard	3 41 54	3'59	64 50'7	11'3	* 6 in eF, eeL neb (M.N., lx. p. 260)	44 18	64 43'2
1996	D. S. 240	3 41 55	1'32	147 46	11'3	eeF, eS, eE 95°	42 48	147 38
1997	D. S. 241	3 42 0	1'19	149 34	11'3	eF, vS, R, cbM, stell N	42 48	149 26
1998	J. 982	3 44 17	3'09	89 13'3	11'1	F, S, R, bMN	46 21	89 5'9
1999	D. S. 243	3 44 31	1'33	147 23	11'1	eeF, vS, cE 140°	45 24	147 16
2000	D. S. 244	3 45 1	1'78	139 17	11'1	cB, L, eE 80°, vmbM	46 12	139 10
2001	D. S. 245	3 46 43	1'78	139 3	11'0	eF, vS, R, 3 st nr	47 54	138 56
2002	J. 983	3 46 49	3'28	79 42'1	11'0	F, Ens, dif, * 14 n	49 0	79 34'8
2003	Espin	3 47 26	3'82	56 32'3	10'9	pB, eS, lEns, * 13 n 4'', * 12 sp 18''	49 59	56 25'0
2004	D. S. 246	3 47 44	1'74	139 50	10'9	eF, S	48 54	139 43
2005	J. 984	3 48 31	3'91	53 36'3	10'8	F, vS, R, stell	51 7	53 29'1
2006	Sw. XI.	3 48 50	2'24	126 24'3	10'8	pB, S, R, * nr nf, D* sp	50 20	126 17'1
2007	Sw. XI.	3 49 2	2'46	118 33'5	10'8	eF, S, R, F * att nf	50 40	118 26'3
2008	Sw. XI.	3 49 23	2'46	118 37'6	10'8	eF, vS, eF * v close nf	51 1	118 30'4
2009	D. S. 249	3 49 26	1'76	139 24	10'8	eF, S	50 36	139 17
2010	D. S. 247	3 49 28	1'10	150 20	10'8	eF, S, E 70°	50 12	150 13
2011	D. S. 248	3 49 33	1'27	147 54	10'8	eeF, vS, R	50 24	147 47
2012	D. S. 250	3 50 0	1'19	149 3	10'7	eeF, eS, cE ns	50 48	148 56
2013	D. S. 251	3 50 24	2'71	107 31	10'7	cB, cL, mE 170°, cbM, susp	52 12	107 24
2014	D. S. 252	3 52 19	1'32	147 9	10'6	eeF, vS, R	53 12	147 2
2015	D. S. 253	3 53 6	2'09	130 51	10'5	eF, S, R, bM, susp	54 30	130 44
2016	Barnard	3 53 50	3'49	70 8'7	10'4	eF, vS, * 15 s 30''	56 10	70 1'8
2017	D. S. 254	3 54 4	1'11	149 48	10'4	eF, vS, R	54 48	149 41
2018	D. S. 255	3 54 16	1'55	143 11	10'4	eF, vS, R	55 18	143 4
2019	J. 985	3 54 32	3'18	84 46'3	10'4	F, S, R, stell, r	56 39	84 39'4
2020	D. S. 256	3 55 31	1'47	144 27	10'3	eF, vS, R	56 30	144 20
2021	D. S. 257	3 55 46	1'55	143 4	10'3	eF, vS, R	56 48	142 57
2022	D. S. 258	3 56 3	1'13	149 26	10'3	eeF, eS, mE 5°, cbM	56 48	149 19
2023	D. S. 259	3 56 4	1'55	143 5	10'3	eF, vS, R	57 6	142 58
2024	D. S. 260	3 56 36	1'51	143 46	10'2	eF, vS, cE 35°	57 36	143 39
2025	D. S. 261	3 56 47	1'52	143 28	10'2	eF, vS, cE 135°	57 48	143 21
2026	B. 376	3 57 18	+ 2'84	101 34	- 10'2	vF, vS, stell	59 12	101 27

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2027	J. 986	h m s 3 57 28	s + 3'94	° 53 14'	' 5 - 10'' 1	F, vS, R, vlbM	m o 6	53 ° 7'8
2028	D. S. 262	3 57 40	1'54	143 6	10'2	eF, vS, R	58 42	142 59
2029	D. S. 263	3 57 41	1'53	143 12	10'2	eF, vS, R	58 42	143 5
2030	D. S. 264	3 58 44	2'66	109 37	10'1	eF, vS, eE 135°, susp	o 30	109 30
2031	Barnard	3 59 ...	2'95	96 0±	10'0	eF, vS, dif, lbM, * 11 nf 3'	1 ...	95 53±
2032	D. S. 265	4 3 48	1'35	145 41	9'7	eF, vS, R	4 42	145 35
2033	D. S. 267	4 3 50	1'46	144 3	9'7	eF, vS, cE 130°	4 48	143 57
2034	D. S. 266	4 3 55	1'18	148 19	9'7	eeF, vS, cE 115°	4 42	148 13
2035	Innes	4 4 41	1'86	135 53	9'6	F, vS, R	5 55	135 47
2036	Sw. XI.	4 5 6	2'09	130 4'4	9'6	eeF, pS, R, v diffic, * 9 f	6 30	129 58'0
2037	D. S. 269	4 5 46	1'11	149 6	9'6	eF, vS, eE 90°, cbM	6 30	149 0
2038	D. S. 270	4 5 50	1'31	146 21	9'6	eF, vS, eE 145°	6 42	146 15
2039	D. S. 271	4 5 56	1'31	146 22	9'5	eF, vS, R	6 48	146 16
2040	Sw. XI.	4 6 58	2'31	122 56'1	9'4	vF, vS, R, rr?, 1531-32 s	8 30	122 49'8
2041	Sw. XI.	4 7 13	2'30	123 14'1	9'4	eF, vS, R, * 10 close s	8 45	123 7'8
2042	Innes	4 7 34	1'78	137 37'3	9'4	* 9 in neb r' diam	8 45	137 31'0
2043	D. S. 272	4 7 50	1'44	144 3	9'4	eF, vS, eE 5°, vmbM	8 48	143 57
2044	D. S. 273	4 7 58	1'39	144 53	9'4	eF, vS, R	8 54	144 47
2045	Ho. III.	4 8 5	2'79	103 31'7	9'3	eF, eS, alm stell, nr 1538	9 57	103 25'5
2046	D. S. 274	4 8 11	1'38	145 2	9'3	vF, vS, R	9 6	144 56
2047	Ho. III.	4 8 25	2'79	103 32'7	9'3	eF, eS, diffic, nr 1538	10 17	103 26'5
2048	Sw. XI.	4 9 0	2'29	123 28'6	9'3	eeF, eS, B * f, v diffic	10 32	123 22'4
2049	D. S. 275	4 9 28	1'11	148 54	9'3	eF, vS, R	10 12	148 48
2050	D. S. 276	4 10 32	+ 1'45	143 49	9'2	F, vS, cE 60°	11 30	143 43
2051	D. S. 268	4 10 41±	- 8'52	174 14±	9'4	! vF, vS, stell N, ellipt ring	5 0±	174 8±
2052	D. S. 278	4 11 46	+ 1'39	144 41	9'1	vF, vS, mE	12 42	144 35
2053	D. S. 279	4 11 54	+ 1'66	139 43	9'1	eF, S, cE 140°, susp	13 0	139 37
2054	D. S. 277	4 13 35	- 2'83	168 37	9'1	eeF, eS, vF * 1' nf, susp	11 42	168 31
2055	D. S. 280	4 13 53	+ 1'68	139 16	8'9	F, S, cE ns, susp	15 0	139 10
2056	Innes	4 14 8	0'95	150 33	8'9	F, pL, R, bM	14 46	150 27
2057	J. 987	4 14 34	3'15	86 16'5	8'9	pB, pS, R, gbM, r	16 40	86 10'6
2058	D. S. 281	4 14 51	1'27	146 16	8'9	cB, cL, eE 10°	15 42	146 10
2059	Sw. XI.	4 14 57	2'33	121 47'6	8'8	eeF, pL, R	16 30	121 41'7
2060	D. S. 282	4 14 59	1'22	146 57	8'8	F, S, bM	15 48	146 51
2061	D. S. 283	4 15 45	3'53	69 15	8'8	F, cS, R, susp	18 6	69 9
2062	B. 259	4 16 14	6'71	18 24	8'7	eF	20 42	18 18
2063	Ho. I.	4 16 18	2'73	105 59'6	8'7	eF, vS, nr 1561-65	18 7	105 53'8
2064	Ho.	4 17 5±	2'73	106 1	8'7	susp, nf 1565	18 54	105 55
2065	D. S. 284	4 18 40	1'26	146 16	8'5	vF, vS, vm E 45°, pmB M	19 30	146 10
2066	D. S. 285	4 20 24	1'34	145 4	8'4	eeF, vS, R	21 18	144 58
2067	Roberts	4 21 38	3'93	54 51'9	8'3	vF, R, * 15 inv n, * 17 close np	24 15	54 46'4
2068	Sw. XI.	4 21 45	1'96	132 28'8	8'3	eF, pL, R, h 2643 f	23 3	132 23'3
2069	D. S. 287	4 21 58	1'69	138 31	8'3	eeF, S, R, susp	23 6	138 26
2070	D. S. 286	4 22 16	1'10	148 16	8'2	vF, vS, cbM	23 0	148 11
2071	D. S. 288	4 22 51	1'43	143 27	8'2	eeF, vS, cE 80°	23 48	143 22
2072	D. S. 289	4 22 59	1'68	138 41	8'2	cF, S, R, susp	24 6	138 36
2073	D. S. 290	4 23 15	1'42	143 30	8'2	vF, vS, eE 60°, stell N	24 12	143 25
2074	B. 377	4 23 48	3'23	82 36	8'1	vF, S, st inv, ? S Cl	25 57	82 31
2075	B. 260	4 23 59	2'94	96 6	8'1	eF, pL, vlbM	25 57	96 1
2076	D. S. 291	4 24 10	+ 1'69	138 32	- 8'1	vF, vS, cE 130°, susp	25 18	138 27

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2077	J. 988	h m s 4 24 55	s + 3°08'	89° 44' 1	- 8'' 0	F, vS, gbMN	26 58	89° 38' 8
2078	B. 378	4 24 56	2°97	94 59	8°0	eF, pS	26 55	94 54
2079	D. S. 292	4 25 17	1°38	144 2	8°0	eF, vS, E 130°	26 12	143 57
2080	Ho. III.	4 25 27±	2°94	96 3 ±	8°0	eF, vS, 1594 p 90° ±, 3's	27 25±	95 58±
2081	D. S. 293	4 25 46	1°39	143 55	8°0	eF, vS, R, bet 2 F st	26 42	143 50
2082	D. S. 294	4 25 53	1°38	144 8	8°0	eF, S, R	26 48	144 3
2083	D. S. 295	4 27 29	1°37	144 16	7°9	eF, vS, R	28 24	144 11
2084	D. S. 297	4 28 11	1°67	138 35	7°8	F, S, R, susp	29 18	138 30
2085	D. S. 296	4 28 19	1°33	144 43	7°8	eF, vS, eE 110°	29 12	144 38
2086	D. S. 298	4 28 23	1°38	143 56	7°8	eeF, vS, R	29 18	143 51
2087	Barnard	4 31 27	3°67	64 33' 1	7°5	eeF, in hole of eL neby	33 54	64 28' 1
2088	Wolf (4082)	4 35 ...	+ 3°71	63 ...	7°2	eeL, 3° long	37 ...	63 ...
2089	D. S. 299	4 36 50	- 1°86	165 50	7°2	eeF, vS, R, F * 1' f, susp	35 36	165 54
2090	Sw. XI.	4 39 33	+ 2°22	124 15' 2	6°8	vF, pS, R, 3 st sp	41 2	124 10' 7
2091	Roberts	4 39 43	2°96	94 56' 4	6°8	F, stell N	41 41	94 51' 9
2092	Roberts	4 39 53	2°96	95 12' 7	6°8	S, spiral, stell N	41 51	95 8' 2
2093	B. 379	4 40 32	3°01	92 58	6°6	vF, stell	42 32	92 54
2094	Roberts	4 41 31	2°95	95 36' 6	6°7	Spiral, F stell N	43 29	94 32' 1
2095	Roberts	4 41 51	2°96	95 22' 9	6°6	F, S, E sp nf, spiral ?	43 49	95 18' 5
2096	Roberts	4 42 43	2°96	95 14' 1	6°6	S, E, spiral, stell N	44 41	95 9' 7
2097	Roberts	4 43 27	2°95	95 19' 9	6°5	F, E np sf, spiral, lbM	45 25	95 15' 6
2098	Roberts	4 43 50	2°95	95 40' 2	6°5	F, spiral, lbM	45 48	95 35' 9
2099	Roberts	4 43 55	2°96	95 8' 6	6°5	S, mbMN	45 53	95 4' 3
2100	B. 380, Roberts	4 44 20	2°96	95 4 3	6°4	vF, S, 1E, stell	46 18	95 0' 0
2101	Roberts	4 44 51	2°93	96 28' 2	6°4	F, E np sf, bM, prob spir	46 48	96 23' 9
2102	Roberts	4 44 58	+ 2°96	95 12' 7	6°4	vF, lbM, prob spir	46 56	95 8' 4
2103	D. S. 300	4 45 0	- 2°40	167 5	6°5	eF, vS, eE 80°, stell N	43 24	167 1
2104	Barnard	4 50 0	+ 2°71	106 1' 2	6°0	F, E, gbM	51 48	105 57' 2
2105	Fleming 84	4 50 6	- 0°31	159 25	6°1	Planetary, stellar	49 54	159 21
2106	Sw. XI.	4 50 25	+ 2°37	118 45' 5	5°9	eeF, pL, D * 24° f	52 0	118 41' 6
2107	B. 381	4 50 45	3°25	81 59	5°9	Cl, vF, vS, R	52 55	81 55
2108	B. 261	4 50 56	2°72	105 31	5°9	vF, pS, R, mbM, * 9°5 sf 1' 3	52 45	105 27
2109	B. 382	4 51 51	3°06	90 32	5°8	vF *, ? nebs	53 53	90 28
2110	B. 383	4 51 54	+ 3°06	90 32	5°8	vF *, ? nebs	53 56	90 28
2111	Fleming 85	4 52 50	- 0°35	159 37	5°8	Planetary, stellar	52 36	159 33
2112	J. 989	4 53 6	+ 3°17	85 48' 5	5°7	vF, pS, dif	55 13	85 44' 7
2113	Barnard	4 53 12	+ 2°70	106 2' 2	5°7	no deser	55 0	105 58' 4
2114	Fleming 86	4 55 19	- 0°33	159 25	5°6	Planetary, stellar	55 6	159 21
2115	Fleming 87	4 56 44	+ 0°11	156 36	5°5	Planetary, stellar	56 48	156 32
2116	Fleming 88	4 57 14	+ 0°11	156 37	5°4	Planetary, stellar	57 18	156 33
2117	Fleming 89	4 57 39	- 0°22	158 39	5°4	Planetary, stellar	57 30	158 35
2118	Wolf (M.N. lxv.)	5 0 ...	+ 2°90	97 25	5°1	F, eL, iF, III 500 inv s	2 ...	97 22
2119	Sw. XI., Ho.	5 0 48	2°59	100 32' 7	5°1	eeF, pS, v diffic, 2 st 12'5 nr	5 32	110 29' 3
2120	B. 262	5 9 36	4°09	51 58	4°3	eF	12 20	51 55
2121	Sw. XI., Ho.	5 14 1	2°46	115 12' 7	4°0	eeF, S, R, v diffic, * 7 p 14°, 3' 6 s	15 39	115 10' 0
2122	Sw. XI.	5 14 12	2°08	127 15' 6	3°9	pB, eS, R, 3 st nf	15 35	127 13' 0
2123	Barnard	5 14 33	3°15	86 38' 6	3°9	vS, R, mbM	16 39	86 36' 0
2124	Barnard	5 14 35	3°15	86 38' 7	3°9	vS, R, mbM	16 41	86 36' 1
2125	Sw. XI.	5 18 49	+ 2°40	117 6' 9	3°5	eeF, vS, R, v diffic	20 25	117 4' 6
2126	Fleming 90	5 22 20	- 0°20	158 5	- 3°3	Planetary, stellar	22 12	158 3

found in the Years 1895 to 1907.

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No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2127	Fleming 91	h m s 5 22 38	s - 0'20	158 6'	- 3'3	Planetary, stellar	m s 22 30	158 4
2128	Bailey	5 23 33	- 0'22	158 10	3'2	Cl, few st and neb (L Mag-Cloud)	23 24	158 8
2129	Sw. XI.	5 25 25	+ 2'51	113 10'2	2'9	eeF, pS, R, * 7 ssf	27 5	113 8'3
2130	Sw. XI.	5 25 50	2'50	113 16'6	2'9	eF, pL, R, * 7'5 nf	27 30	113 14'7
2131	Sw. XI.	5 26 4	2'66	107 19'6	2'9	pB, vS, R	27 50	107 17'7
2132	Ho.	5 26 4	2'74	104 1'8	2'9	vF, S	27 54	103 59'9
2133	B. 385	5 26 47	+ 6'58	20 42	2'7	vF, pL, * 13 sf 0'7	31 10	20 40
2134	D. S. 301	5 27 46	- 2'04	165 34	2'9	cF, vS	26 24	165 32
2135	Sw. XI.	5 27 56	+ 2'09	126 30'3	2'7	eeF, eS, eE, v diffic	29 20	126 28'5
2136	Sw. XI.	5 27 59	2'41	116 32'5	2'7	eF, pS, eE	29 35	116 30'7
2137	Sw. XI.	5 28 28	2'50	113 26'1	2'7	eF, vS, R, * 8F 10 ⁸ , III 240 nr	30 8	113 24'3
2138	B. 384, Sw. XI.	5 28 33	2'49	113 38	2'7	eF, S, 2 st inv 1/2' apart, * 7 p	30 13	113 36
2139	B. 263	5 29 6	+ 2'64	108 2	2'6	Cl, vvS (12''), looks nebs	30 52	108 0
2140	D. S. 302	5 37 58	- 2'06	165 27	2'0	eF, vS, ? eS Cl	36 36	165 26
2141	Innes	5 39 0	+ 1'42	141 6	1'8	F, vS, R, bM	39 57	141 5
2142	D. S. 303	5 40 34	- 3'24	168 5	1'6	eF, vS, 1E 25°, lbM	38 24	168 4
2143	Sw. XI., Ho.	5 40 45	+ 2'62	108 46'8	1'6	eF, pS, vmE 45°, 3 st sf	42 30	108 45'7
2144	Barnard	5 41 41	+ 3'66	66 10'5	1'6	pF, eS, * 12 nmp 2', * 12 s 1'	44 7	66 9'4
2145	Fleming 92	5 41 46	- 0'54	159 44	1'6	Planetary, stellar	41 24	159 43
2146	D. S. 304	5 42 2	- 1'84	164 51	1'6	Cl, vF, bet 2 st	40 48	164 50
2147	Sw. XI.	5 42 28	+ 2'29	120 32'9	1'5	eeF, pS, R, F * np	44 0	120 31'9
2148	D. S. 305	5 44 7	- 2'12	165 38	1'4	vF, vS, bM	42 42	165 37
2149	Fleming 105	5 45 56	+ 4'46	43 55	1'1	Planetary, stellar	48 54	43 54
2150	Sw. XI.	5 46 20	2'00	128 23'5	1'1	eeF, S, vmE, v diffic, 3 st s	47 40	128 22'8
2151	Ho. III.	5 46 26	2'64	107 49'2	1'1	eF, pS, nr I.C. 438	48 12	107 48'5
2152	Sw. XI., Ho.	5 52 3	2'50	113 11'9	0'7	pB, pS, R, sev B st f	53 43	113 11'4
2153	D. S. 306	5 55 3	2'17	123 55	0'4	eF, vS, susp	56 30	123 55
2154	Sw. XI., Ho.	5 55 19	2'49	113 40'8	0'4	pF, pS, R, * nf, 2 st np, prob. = II 264	56 59	113 40'5
2155	D. S. 307	5 55 45	2'17	124 1	0'3	eF, vS, R, susp	57 12	124 1
2156	Espin	5 56 14	3'67	65 51	0'2	Cl, ? nebs	58 41	65 51
2157	Espin	5 56 17	3'67	65 58	- 0'2	Cl, S	58 44	65 58
2158	Sw. XI., Ho.	5 59 48	2'36	117 50'8	+ 0'1	vF, pS, 1E, brush, * att nf	1 22	117 50'9
2159	B. 386	6 1 33	+ 3'57	69 34	0'2	vF, vL, dif	3 56	69 34
2160	D. S. 308	6 1 47	- 2'68	166 55	0'1	vF, vS, stell N	0 0	166 55
2161	D. S. 309	6 1 49	- 1'97	165 8	0'1	eF, vS, bM, susp	0 30	165 8
2162	Barnard	6 5 1	+ 3'51	71 59'7	0'5	vF, pL, R, * 10 inv p	7 21	72 0'0
2163	Ho. I.	6 10 32	+ 2'55	111 19'7	1'0	eF, pS, h 3032 p 7 ^s	12 14	111 20'4
2164	D. S. 310	6 11 28	- 2'04	165 19	0'9	eF, eeS, R, stell N	10 6	165 20
2165	Fleming 79	6 15 16	+ 2'76	102 55	1'5	Planetary, stellar	17 6	102 56
2166	Barnard	6 19 40	5'30	30 50	1'8	Neb; F * p 1', D * f 3'	23 12	30 51
2167	Barnard	6 23 32	3'32	79 27'9	2'2	* 9'5 in F, L neb	25 45	79 29'4
2168	B. 387	6 23 33	4'39	45 13	2'2	Cl, S, F neby	26 29	45 14
2169	Barnard	6 23 41	3'31	80 5'2	2'2	F, L, dif, sev st 9-10 inv	25 53	80 6'7
2170	B. 388	6 23 52	4'39	45 12	2'2	eF, S, r, * 13 spp 0'8	26 48	45 13
2171	Barnard	6 39 ...	2'66	107 32	3'5	F, 3 st 10 around	41 ...	107 34
2172	Barnard	6 39 37	3'11	88 31'7	3'5	Neb *	41 41	88 34'0
2173	B. 339	6 41 35	3'95	56 24	3'7	eF neb *, 2288 close, * 12 nnp 1'	44 13	56 26
2174	B. 264	6 50 20	8'10	14 27	4'7	eF, S, bM	55 44	14 30
2175	B. 265	6 50 21	4'00	54 32	4'5	eF, pL, r, nebs?	53 1	54 35
2176	J. 990	6 58 25	+ 3'90	57 19'6	+ 5'2	vF, vS, R, stell	1 1	57 23'1

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2177	Roberts (3509)	h m s 6 58 30	+ 2°82	100° 30'	+ 5°1	pB, eL, iR, v dif	m s 0 23	100° 33'
2178	J. 991	6 58 31	3°90	57 17°0	5°2	vF, vS, R, bMN	1 7	57 20°5
2179	B. 267	7 1 58	5°85	24 49	5°5	* 13 in vF, vS neb [? = III 746]	5 52	24 53
2180	J. 992	7 2 40	3°71	63 24°1	5°5	F, S, iF, dif	5 8	63 27°8
2181	J. 993	7 4 59	3°52	70 46°5	5°7	F, S, R, stell	7 20	70 50°3
2182	J. 994	7 5 59	3°52	70 49°3	5°8	vF, vS, dif, * 12 att	8 20	70 53°2
2183	D. S. 311	7 10 52	2°60	110 10	6°2	Wisp 2' ns, 3 st n, susp	11 36	110 14
2184	B. 390	7 14 10	7°00	17 46	6°6	vF, S, stell, r	18 50	17 50
2185	J. 995	7 14 14	3°89	57 14°4	6°5	F, S, R	16 50	57 18°7
2186	J. 996	7 14 24	3°58	68 12°7	6°5	F, S, R, gbM, r	16 47	68 17°0
2187	J. 997	7 14 24	3°58	68 15°7	6°5	F, S, R, dif, * 11°5 v nr	16 47	68 20°0
2188	J. 998	7 14 24	3°58	68 13°9	6°5	F, S, dif, FN	16 47	68 18°2
2189	Fleming 75	7 17 19	3°28	80 49	6°7	Planetary, stell	19 30	80 33
2190	J. 999	7 20 28	4°04	52 12°0	7°0	F, pS, dif	23 10	52 16°7
2191	J. 1000	7 21 48	3°64	65 23°3	7°1	F, vS, R, stell	24 14	65 28°0
2192	J. 1001	7 24 22	3°84	58 20°8	7°3	F, vS, R, * 14 nearly in cont	26 56	58 25°7
2193	Barnard	7 24 23	3°84	58 15°6	7°3	Close p * rom [? = J. 1001]	26 57	50 20°5
2194	Barnard, J. 1002	7 24 43	3°84	58 22°5	7°4	F, S, R, gbM, r	27 17	58 27°4
2195	D. S. 312	7 24 52	1°54	140 58	7°3	eB, S, R, bM, susp	25 54	141 3
2196	Barnard, J. 1003	7 25 13	3°84	58 18°1	7°4	F, S, pR, gbM, r, 3 st 2' p	27 47	58 23°0
2197	Barnard	7 25 27	3°84	58 19°5	7°4	vvF	28 1	58 24°4
2198	J. 1004	7 25 44	3°63	65 43°9	7°5	F, S, R, gbM, r	28 9	65 48°9
2199	Barnard	7 25 59	3°83	58 29°0	7°5	F, S	28 32	58 34°0
2200	D. S. 313	7 26 37	0°73	152 3	7°4	eF, eS, eE 65°, bet 2 st, susp	27 6	152 8
2201	J. 1006	7 27 13	3°89	56 34°5	7°5	F, vS, R, gbM, r	29 49	56 39°5
2202	D. S. 314	7 27 44	0°09	157 16	7°5	eF, eS, R	27 48	157 21
2203	J. 1007	7 31 23	3°91	55 29°0	7°9	F, S, R, gbM, r	33 59	55 34°3
2204	J. 1008	7 32 8	3°91	55 28°8	7°9	F, vS, R, eFN, r	34 44	55 34°1
2205	J. 1009	7 38 17	3°69	62 47°3	8°4	F, vS, neb D *	40 45	62 52°9
2206	Fleming 76	7 40 30	2°25	124 2	8°6	Planetary, stell, 9°5 mag	42 0	124 8
2207	J. 1010	7 40 47	3°89	55 41°4	8°6	vF, vS, dif, * 15 v nr	43 23	55 47°1
2208	J. 1011	7 43 50	3°71	62 8°5	8°9	F, S, R, dif	46 18	62 14°4
2209	B. 268	7 44 12	5°21	29 20	8°9	vF, S, lbM	47 40	29 26
2210	B. 391	7 45 34	4°91	32 57	9°0	eF, stell, * 13 np	48 50	33 3
2211	J. 1012	7 48 52	3°84	57 4°5	9°3	pB, S, R, FN, r	51 26	57 10°7
2212	J. 1013	7 50 4	3°84	57 1°1	9°4	F, pL, vlbM, dif	52 38	57 7°4
2213	J. 1014	7 50 30	3°70	62 10°5	9°4	F, S, R, lbMN	52 58	62 16°8
2214	J. 1015	7 50 55	3°86	56 20°2	9°4	pB, S, R, gbMN	53 29	56 26°5
2215	B. 392	7 51 8	3°63	64 43	9°4	Cl, vS, 30"	53 33	64 49
2216	B. 393	7 52 2	3°19	84 1	9°6	vF, eS, sbM	54 10	84 7
2217	J. 1016	7 52 13	3°69	62 8°0	9°6	F, pS, R, dif, r	54 41	62 14°4
2218	J. 1017	7 53 13	3°61	65 11°5	9°6	F, S, R, * 14 v nr	55 37	65 17°9
2219	J. 1018	7 54 1	3°69	62 10°6	9°6	F, pS, E 135°, gbM, r	56 29	62 17°0
2220	D. S. 315	7 54 15	1°13	148 45	9°6	!! L, E, spiral, * inv.	55 0	148 51
2221	J. 1019	7 55 53	3°98	52 9°4	9°8	vF, vS, R, diffic	58 32	52 15°9
2222	J. 1020	7 55 59	3°98	52 8°0	9°8	F, S, R dif, r	58 38	52 14°5
2223	J. 1021	7 56 31	3°98	52 8°5	9°9	F, S, R, dif	59 10	52 15°1
2224	J. 1022	7 56 35	3°98	52 8°6	9°9	vF, vS, R, vlbM, diffic	59 14	52 15°2
2225	J. 1023	7 57 18	3°92	53 39°8	9°9	F, pS, gbM, r	59 55	53 46°4
2226	Barnard	7 58 4	+ 3°34	77 3°3	+ 10°0	F, S	0 18	77 10°0

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2227	J. 1024	7 58 12	+ 3°92	53 34'4	+ 10''0	F, vS, gbMN, r, * 13°5 v nr	m 0 49	53 41'1
2228	B. 394	7 59 34	3°24	81 33	10'1	eF, S, r	1 44	81 40
2229	J. 1025	8 1 16	3°64	63 43'0	10'2	F, S, R, lbMN, r	3 42	63 49'8
2230	J. 1026	8 2 30	3°63	63 54'6	10'3	F, vS, dif	4 55	64 1°5
2231	Sw. XI., J. 1027	8 3 37	3°18	84 30'1	10'4	F, vS, R, dif, * 14 att	5 44	84 37'0
2232	J. 1028	8 3 49	3°92	53 19'7	10'4	F, pS, R, gbMN	6 26	53 26'6
2233	Roberts	8 4 4	4°25	43 50'0	10'5	pB, L, E np sf; IV. 55 np	6 54	43 57'0
2234	J. 1029	8 4 48	3°90	54 5'4	10'5	pF, vS, dif, vFN	7 24	54 12'4
2235	W. I. 1	8 5 13	3°59	65 30'3	10'5	pB, S, E 135°, dif	7 37	65 37'3
2236	W. I. 2	8 5 16	3°59	65 32'0	10'5	pB, E 0°, dif	7 40	65 39'0
2237	W. I. 3	8 5 44	3°60	64 54'1	10'5	vF, pS, p dif	8 8	65 1°1
2238	W. I. 4	8 5 45	3°61	64 55'2	10'5	pF, S, dif	8 9	65 2'2
2239	W. I. 5	8 5 46	3°58	65 42'9	10'5	pB, S, R, stell N	8 9	65 49'9
2240	W. I. 6	8 6 25	3°60	65 6'8	10'6	vF, S, E 155°, dif	8 49	65 13'9
2241	W. I. 7	8 6 47	3°59	65 26'9	10'6	pB, S, dif	9 11	65 34'0
2242	W. I. 8	8 6 50	3°59	65 26'7	10'6	pF, S, dif	9 14	65 33'8
2243	W. I. 9	8 6 58	3°58	65 36'9	10'6	F, S, dif, biN	9 21	65 44'0
2244	W. I. 10	8 7 0	3°60	65 2'0	10'6	vF, S, E 0°	9 24	65 9'1
2245	W. I. 11	8 7 6	3°60	65 2'5	10'6	vF, S, iF	9 30	65 9'6
2246	W. I. 12	8 7 41	3°58	65 43'6	10'7	pB, S, dif, bf	10 4	65 50'7
2247	W. I. 13	8 7 42	3°56	65 22'6	10'7	pF, E 135°, biN	10 4	65 29'7
2248	W. I. 14	8 7 47	3°56	66 26'5	10'7	pB, pL, E 90°, Nn	10 9	66 33'6
2249	W. I. 15	8 8 12	3°59	65 4'8	10'7	F, vS, iF, att * sp	10 36	65 11'9
2250	W. I. 16	8 8 13	3°57	65 56'7	10'7	F, S, dif	10 36	66 3'8
2251	W. I. 17	8 8 19	3°58	65 37'7	10'7	pF, pS, dif	10 42	65 44'8
2252	W. I. 18	8 8 19	3°60	64 52'8	10'7	pF, S, R	10 43	64 59'9
2253	J. 1030	8 8 22	3°53	68 8'4	10'7	F, vS, R, stell	10 43	68 15'5
2254	J. 1031	8 8 24	3°60	64 48'0	10'7	F, S, R, stell, * 13°5 v nr	10 48	64 55'1
2255	W. I. 19	8 8 24	3°57	66 7'2	10'7	vF, pL, N	10 47	66 14'3
2256	W. I. 20	8 8 34	3°59	65 23'7	10'8	B, pS, E 205°	10 58	65 30'9
2257	W. I. 21	8 8 51	3°57	65 55'4	10'8	F, S, lbM	11 14	66 2'6
2258	W. I. 22	8 8 57	3°56	65 59'7	10'8	pF, S, mE 0°, biN	11 19	66 6'9
2259	W. I. 23	8 8 59	3°57	66 0'5	10'8	vF, S, dif, diffic	11 22	66 7'7
2260	W. I. 24	8 9 5	3°60	64 53'9	10'8	pF, S, R, dif	11 29	65 1'1
2261	W. I. 25	8 9 15	3°57	66 3'4	10'8	vF, mE 45°, B * 1' f	11 38	66 10'6
2262	W. I. 26	8 9 20	3°45	71 7'0	10'8	pB, S, B * nf	11 38	71 14'2
2263	W. I. 27	8 9 22	3°57	65 59'5	10'8	vF, S, E 0°, vlbM	11 45	66 6'7
2264	W. I. 28	8 9 26	3°57	65 51'3	10'8	pB, S, stell N	11 49	65 58'5
2265	W. I. 29	8 9 29	3°59	65 22'6	10'8	pF, vS, R, dif	11 53	65 29'8
2266	W. I. 30	8 9 36	3°45	71 9'6	10'8	pB, vS, mE, B * att	11 54	71 16'8
2267	W. I. 32	8 9 39	3°60	64 50'0	10'8	pB, mE 135°	12 3	64 57'2
2268	W. I. 33, J. 1302	8 9 44	3°60	64 46'4	10'8	pF, S, R, glbM	12 8	64 53'6
2269	W. I. 34	8 9 52	3°56	66 30'3	10'8	pF, S, E 25°	12 14	66 37'5
2270	W. I. 35	8 9 56	3°47	70 28'4	10'8	pB, S, * v nr np	12 15	70 35'6
2271	W. I. 36	8 9 58	3°59	65 2'6	10'9	pB, S, bM	12 22	65 9'9
2272	W. I. 37	8 10 3	3°46	70 50'0	10'9	vF, vS, gbM, * att	12 21	70 57'3
2273	W. I. 38	8 10 10	3°45	71 10'0	10'9	pF, S, bM	12 28	71 17'3
2274	W. I. 39	8 10 11	3°46	70 54'2	10'9	pB neb *, 2 spir branches	12 29	71 1'5
2275	W. I. 40	8 10 11	3°45	71 9'4	10'9	pB, S, gbM	12 29	71 16'7
2276	W. I. 41	8 10 26	+ 3°45	71 5'4	+ 10'9	iF, conn with 44 and 46	12 44	71 12'7

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2277	W. I. 43	h m s 8 10 29	s + 3°46'	70° 55'0	+ 10°9	pF, vS, iF	m s 12 47	71° 2'3
2278	W. I. 44	8 10 31	3°45	71° 6'4	10°9	iF, conn with 41, 46	12 49	71 13'7
2279	W. I. 45	8 10 33	3°46	71° 0'0	10°9	F, S, dif	12 51	71 7'3
2280	W. I. 46	8 10 36	3°45	71° 7'0	10°9	pF, iF, conn with 41, 44	12 54	71 14'3
2281	W. I. 47	8 10 50	3°46	70° 39'5	10°9	* att 51°, spir br	13 8	70 46'8
2282	W. I. 48	8 10 53	3°60	64 46'5	10°9	pF, L, dif, * sf	13 17	64 53'8
2283	W. I. 50, J. 1033	8 10 53	3°60	64 47'0	10°9	pF, pS, R, * 9 f 4°6, 35'' s	13 17	64 54'3
2284	W. I. 49	8 10 56	3°46	70° 57'6	10°9	F, S, dif, stell N, * vnr sf	13 14	71 4'9
2285	W. I. 51	8 11 0	3°46	70° 39'2	10°9	pF, S, curved N, conn with 47	13 18	70 46'5
2286	W. I. 52	8 11 0	3°46	70° 36'7	10°9	pB, vS, E 50°	13 18	70 44'0
2287	W. I. 53	8 11 3	3°47	70° 10'0	10°9	vF, pS, lbM, dif	13 22	70 17'3
2288	W. I. 54	8 11 3	3°57	65 49'3	10°9	F, S, E 90°, bM, dif	13 26	65 56'6
2289	W. I. 55	8 11 5	3°45	71° 2'1	10°9	pF, S, iF	13 23	71 9'4
2290	W. I. 56	8 11 11	3°47	70° 15'1	10°9	pF, pS, dif, others nr	13 30	70 22'4
2291	W. I. 57	8 11 15	3°45	71° 3'5	10°9	vF, S, mE 125°, gbM	13 33	71 10'8
2292	W. I. 58	8 11 16	3°48	70° 0'1	10°9	pF, vS, E 135°, bM	13 35	70 7'4
2293	J. 1034	8 11 20	3°52	68 11'0	11°0	F, pS, dif	13 41	68 18'3
2294	W. I. 59	8 11 22	3°47	70° 34'8	11°0	pF, vS, iF	13 41	70 42'1
2295	W. I. 60	8 11 24	3°45	71° 9'1	11°0	F, vS, E 90°, vF stell N, B * sf	13 42	71 16'4
2296	W. I. 61	8 11 25	3°46	70° 40'0	11°0	pF, vS, iF, vlbM	13 43	70 47'3
2297	W. I. 62	8 12 3	3°45	71° 10'8	11°0	pB, S, others nr	14 21	71 18'1
2298	W. I. 63	8 12 5	3°45	71° 9'6	11°0	pF, S, iF, Ns, * close nf	14 23	71 16'9
2299	W. I. 64	8 12 6	3°45	70° 13'5	11°0	F, vm E 60°	14 24	70 20'8
2300	W. I. 65	8 12 10	3°45	71° 8'6	11°0	F, pS, iF, arms n and p	14 28	71 15'9
2301	W. I. 66	8 12 12	3°45	71° 7'7	11°0	vF, S, mE, exc N, * sf	14 30	71 15'0
2302	W. I. 67	8 12 12	3°47	70° 12'4	11°0	F, vS, R, vlbM	14 31	70 19'7
2303	W. I. 68	8 12 15	3°47	70° 8'7	11°0	F, vS, mE 0°	14 34	70 16'0
2304	W. I. 69	8 12 30	3°47	70° 7'3	11°0	B, vS, neb *	14 49	70 14'6
2305	W. I. 70	8 12 35	3°47	70° 6'5	11°0	vF, S, N	14 54	70 13'8
2306	W. I. 71	8 12 35	3°47	70° 27'1	11°0	F, vS, R, bM	14 54	70 34'4
2307	W. I. 72	8 12 39	3°47	70° 7'3	11°0	pB, pS, dif, E 0°	14 58	70 14'6
2308	W. I. 73	8 12 40	3°47	70° 11'9	11°0	pB, vS, iF, bM	14 59	70 19'2
2309	W. I. 74	8 12 41	3°47	71° 9'9	11°0	vF, pS, E 165	15 0	71 17'2
2310	W. I. 75	8 12 44	3°45	71° 5'9	11°0	pB, pS, mE 40°, curved, mbM	15 2	71 13'2
2311	Ho. I.	8 12 49	2 55	114 56'1	11°0	pB, vS, R, lbM, 6' n of III 288	14 31	115 3'4
2312	W. I. 76	8 12 51	3°45	71° 3'2	11°1	vF, S, E 45°, dif, vlbM	15 9	71 10'6
2313	W. I. 77	8 12 52	3°45	71° 2'8	11°1	vF, vS, vF stell N	15 10	71 10'2
2314	W. I. 78	8 13 0	3°46	70° 47'9	11°1	F, S, spir, vlbM	15 18	70 55'3
2315	W. I. 79	8 13 7	3°46	70° 38'7	11°1	F, vS, R, dif, N	15 25	70 46'1
2316	W. I. 80	8 13 10	3°48	69 48'1	11°1	pB, S, R, exc stell N	15 29	69 55'5
2317	W. I. 81	8 13 18	3°46	70° 43'0	11°1	F, vS, dif, v F stell N	15 36	70 50'4
2318	W. I. 83	8 13 30	3°45	70° 56'2	11°1	F, vS, N	15 48	71 3'6
2319	W. I. 84	8 13 31	3°45	71° 5'0	11°1	F, S, R	15 49	71 12'4
2320	W. I. 85	8 13 32	3°45	70° 53'4	11°1	F, vS, N	15 50	71 0'8
2321	W. I. 86	8 13 37	3°45	71° 5'4	11°1	pB, vS, R	15 55	71 12'8
2322	W. I. 87	8 13 37	3°45	71° 4'5	11°1	F, S, dif	15 55	71 11'9
2323	W. I. 88	8 13 38	3°45	70° 56'8	11°1	pF, S, R	15 56	71 4'2
2324	W. I. 89	8 13 54	3°47	70° 21'9	11°1	pF, S, mE 155°, sev N	16 13	70 29'3
2325	W. I. 90	8 14 5	3°46	70° 38'8	11°1	vF, pL, iF, F * att f	16 23	70 46'2
2326	W. I. 91	8 14 8	+ 3°46	70° 32'8	+ 11°1	vF, mE 90°, dif, sev N	16 26	70 40'2

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2327	J. 1035	h m s 8 14 9	+ 3°14'	86° 23'0	+ 11°1'	F, S, dif	m s 16 15	86° 30'4
2328	W. I. 92	8 14 12	3°46'	69 56'5	11°1'	pB, pS, mE 65°	16 30	70 3'9
2329	W. I. 93	8 14 16	3°46'	70 8'5	11°2'	pF, pS, mE 110°, stell N	16 34	70 16'0
2330	W. I. 94	8 14 20	3°46'	70 42'2	11°2'	B, vS, stell, 2 spir branches	16 38	70 49'7
2331	W. I. 95	8 14 30	3°48'	69 52'5	11°2'	vF, pL, R, dif	16 49	70 0'0
2332	W. I. 96	8 14 33	3°48'	69 38'0	11°2'	pB, vS, R, stell N, F * att s	16 52	69 45'5
2333	W. I. 97	8 14 57	3°44'	70 28'5	11°2'	F, S, R, N	17 15	70 36'0
2334	W. I. 98	8 14 57	3°45'	70 56'5	11°2'	pF, S, R	17 15	71 4'0
2335	W. I. 99	8 15 2	3°47'	70 8'7	11°2'	F, pS, vlbM, dif, bi N	17 21	70 16'2
2336	W. I. 100	8 15 17	3°45'	71 1'1	11°2'	vF, vS, R	17 35	71 8'6
2337	W. I. 101	8 15 18	3°45'	71 1'2	11°2'	F, vS, R	17 36	71 8'7
2338	J. 1036	8 15 21	3°52'	68 12'6	11°3'	F, vS, bMN	17 42	68 20'1
2339	J. 1037	8 15 23	3°52'	68 11'9	11°3'	F, S, R, bMN	17 44	68 19'4
2340	W. I. 102, J. 1038	8 15 25	3°45'	70 48'8	11°3'	pF, pS, dif, bMN	17 43	70 56'3
2341	J. 1039	8 15 30	3°52'	68 6'6	11°3'	F, S, R, bMN	17 51	68 14'1
2342	W. I. 103	8 15 30	3°45'	70 58'4	11°3'	pB, S, R, * 12 att 112°	17 48	71 5'9
2343	W. I. 104	8 15 51	3°46'	70 31'7	11°3'	F, pS, lbM, dif	18 9	70 39'2
2344	W. I. 105	8 15 53	3°45'	70 53'7	11°3'	pF, pS, R, lbM	18 11	71 1'2
2345	W. I. 106	8 16 2	3°48'	69 36'0	11°3'	F, S, E 90°, att B * sp	18 21	69 43'5
2346	W. I. 107	8 16 5	3°47'	69 50'7	11°3'	vF, S, R, bM, 2nd v nr sf	18 24	69 58'2
2347	W. I. 108	8 16 12	3°43'	70 46'7	11°3'	vF, S, iF, dif	18 29	70 54'2
2348	W. I. 109	8 16 12	3°49'	69 1'1	11°3'	F, pS, mE 45°, bM	18 32	69 8'6
2349	W. I. 110	8 16 13	3°46'	70 32'8	11°3'	pF, L, lbM, dif	18 31	70 40'3
2350	W. I. 111	8 16 23	3°47'	70 0'0	11°3'	vF, S, gbMN, B * s	18 42	70 7'5
2351	W. I. 112	8 16 28	3°45'	70 57'8	11°3'	pF, pS, iF, F stell N, 2581 f	18 46	71 5'3
2352	W. I. 114	8 16 35	3°47'	69 56'9	11°3'	F, S, lbM, S neb f	18 54	70 4'4
2353	W. I. 115	8 16 35	3°45'	70 53'7	11°3'	pB, S, R, spir br	18 53	71 1'2
2354	W. I. 116	8 16 38	3°45'	70 53'1	11°3'	vF, vS, dif, vFN	18 56	71 0'6
2355	W. I. 117	8 16 44	3°49'	69 5'2	11°3'	pB, S, R, stell N	19 4	69 12'7
2356	W. I. 118	8 16 56	3°47'	70 3'2	11°4'	F, vS, mE, lbM	19 15	70 10'8
2357	W. I. 119	8 16 59	3°47'	70 2'5	11°4'	pF, S, R, dif, stell N	19 18	70 10'1
2358	W. I. 120	8 17 0	3°47'	70 3'3	11°4'	F, S, E 135°, FN, vS neb f	19 19	70 10'9
2359	W. I. 121	8 17 4	3°49'	69 12'9	11°4'	F, vS, E 160°, stell N exec nf	19 24	69 20'5
2360	W. I. 122	8 17 10	3°47'	70 5'5	11°4'	F, S, dif, vFN exc	19 29	70 13'1
2361	J. 1040	8 17 13	3°47'	61 40'9	11°4'	F, pS, lEns, gbM, r	19 32	61 48'5
2362	W. I. 123	8 17 35	3°48'	69 36'4	11°4'	pF, pL, dif, bet 4 B st	19 54	69 44'0
2363	W. I. 124	8 17 41	3°45'	70 6'0	11°4'	pF, pL, dif	19 59	70 13'6
2364	W. I. 125	8 17 46	3°47'	69 47'3	11°4'	pF, S, R, bM	20 5	69 54'9
2365	J. 1041	8 17 47	3°66'	61 40'4	11°4'	pB, vS, R, stell	20 13	61 48'0
2366	J. 1042	8 17 47	3°66'	61 42'9	11°4'	pB, vS, R, bMN	20 13	61 50'5
2367	Barnard	8 17 48	2°71'	108 19'8	11°4'	pB, S	19 36	108 27'4
2368	W. I. 126	8 17 55	3°48'	69 39'7	11°4'	pF, vS, bMNE 170°	20 14	69 47'3
2369	W. I. 127	8 18 9	3°48'	69 18'9	11°4'	pB, S, R, stell N	20 28	69 26'5
2370	W. I. 128	8 18 18	3°47'	69 54'5	11°5'	pB, vS, iF, N	20 37	70 2'2
2371	W. I. 129	8 18 31	3°47'	69 44'8	11°5'	pB, S, IE 90°	20 50	69 52'5
2372	W. I. 130	8 18 35	3°48'	69 39'7	11°5'	F, S, IE 135°, B * sf	20 54	69 47'4
2373	W. I. 131	8 18 41	3°50'	69 10'8	11°5'	F, S, dif, exec N	21 1	69 18'5
2374	J. 1043	8 19 41	3°73'	59 6'1	11°6'	pF, S, R, dif, * 11°5 close	22 10	59 13'8
2375	Ho. I.	8 19 44	2°82'	102 50'8	11°5'	F, vS, E 90°, 1st of 3	21 37	102 58'5
2376	J. 1044	8 19 46	+ 3°73'	59 8'4	+ 11°6'	F, vS, R, * 14 close	22 15	59 16'1

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2377	Ho. I.	8 19 51	+ 2°82	102 51'0	+ 11"6	eF, vS, 2nd of 3	21 44	102 58'7
2378	J. 1045	8 19 51	3°73	59 6'9	11'6	F, S, R, glbM, r	22 20	59 14'6
2379	Ho. I.	8 19 52	2°82	102 50'2	11'6	vF, vS, 3rd of 3	21 45	102 57'9
2380	J. 1046	8 20 4	3°73	59 8'5	11'6	F, S, R, lbM, r	22 33	59 16'2
2381	W. I. 132	8 20 16	3°47	69 45'0	11'6	pF, S, R, bM, dif	22 35	69 52'7
2382	J. 1047	8 20 34	3°51	67 28'6	11'7	F, S, R, r, * 12'5 close	22 54	67 36'4
2383	J. 1048	8 21 2	3°73	58 50'1	11'7	F, vS, R, bMN	23 31	58 57'9
2384	J. 1049	8 25 38	3°76	57 5'8	12'0	F, S, R, stell	28 8	57 13'8
2385	J. 1050	8 26 3	3°90	52 15'7	12'1	F, S, R, dif, r	28 39	52 23'8
2386	B. 395	8 26 25	3°61	63 42	12'1	eF, L, e dif	28 49	63 50
2387	J. 1051	8 29 55	3°71	58 43'2	12'3	F, pS, Ens, gbM, r	32 23	58 51'4
2388	Barnard	8 31 54	3°46	69 51'9	12'4	eF, S, dif, ? FN; * 10 n 90"	34 12	70 0'2
2389	B. 269	8 32 33	6°70	15 58	12'5	vF, S, lbM	37 1	16 6
2390	Barnard	8 33 49	3°45	69 48'2	12'5	iF, gbM, * 10 sf 1½', * 12 nf 1'	36 7	69 56'5
2391	Bailey	8 36 21	1°72	142 26	12'7	Cl, co, incl. o Velorum 3'7 mag	37 30	142 34
2392	W. I. 133	8 36 33	3°42	71 12'3	12'7	pB, pS, E 180°, vlbM	38 50	71 20'8
2393	J. 1052	8 38 23	3°63	61 19'1	12'9	F, S, R, N, r	40 48	61 27'7
2394	J. 1053	8 38 39	3°63	61 15'2	12'9	F, S, R, gbM	41 4	61 23'8
2395	Bailey	8 38 42	1°95	137 40	12'9	Cl, co	40 0	137 49
2396	W. I. 134	8 38 45	3°40	71 50'6	12'9	vF, vS	41 1	71 59'2
2397	W. I. 135	8 38 46	3°41	71 49'9	12'9	F, vS, R	41 2	71 58'5
2398	W. I. 136	8 38 48	3°41	71 44'2	12'9	pB, S, R, bM	41 5	71 52'8
2399	W. I. 137	8 38 51	3°43	70 34'6	12'9	vF, pL, E 190°, bs	41 8	70 43'2
2400	J. 1054	8 38 58	3°89	51 25'0	12'9	F, S, stell	41 34	51 33'6
2401	J. 1055	8 39 10	3°88	51 45'1	12'9	F, S, R, N, r	41 45	51 53'7
2402	J. 1056	8 39 21	3°72	57 42'1	12'9	F, S, R, gbMN, r	41 50	57 5'7
2403	Ho. I.	8 39 38	2°80	104 50'8	12'9	vF, eS, lE	41 30	104 59'4
2404	J. 1057	8 39 40	3°66	59 59'4	13'0	F, S, R, sbMN	42 6	60 8'1
2405	J. 1058	8 39 43	3°86	52 15'9	13'0	F, S, R, gbM	42 17	52 24'6
2406	W. I. 138	8 40 9	3°40	71 47'1	13'0	B, pS, E 165°	42 25	71 55'8
2407	W. I. 139	8 40 14	3°40	71 52'6	13'0	pB, pS, mE 80°	42 30	72 1'3
2408	W. I. 140	8 40 21	3°43	70 27'0	13'0	pF, vS, R	42 38	70 35'7
2409	W. I. 141	8 40 27	3°42	71 9'4	13'0	pB, pL, bM, * 15 p	42 44	71 18'1
2410	W. I. 142	8 40 28	3°43	70 28'1	13'0	pB, S, E 90°, stell N	42 45	70 36'8
2411	W. I. 143	8 40 31	3°43	70 26'6	13'0	vF, S, E 235°	42 48	70 35'3
2412	W. I. 146	8 41 26	3°42	70 56'5	13'0	pB, S, R, N, * 14 np	43 43	71 5'2
2413	W. I. 147	8 41 34	3°42	70 44'5	13'1	pF, vS, FN	43 51	70 53'2
2414	W. I. 148	8 41 52	3°42	70 41'5	13'1	pF, vS, R, vlbM	44 9	70 50'2
2415	W. I. 150	8 42 4	3°42	70 49'9	13'1	F, vS, E 65°, FN	44 21	70 58'6
2416	W. I. 151	8 42 34	3°42	70 55'4	13'1	pB, S, R	44 51	71 4'1
2417	W. I. 152	8 43 11	3°42	70 51'3	13'2	B, S, R, stell N	45 28	71 0'1
2418	W. I. 153	8 43 29	3°43	71 32'0	13'2	vF, pL, R, 2nd v nr sf	45 46	71 40'8
2419	W. I. 154	8 44 13	3°43	71 22'6	13'2	F, pS, E 0°, dif	46 30	71 31'4
2420	J. 1059	8 44 14	3°13	86 22'9	13'2	F, S, gbMN	46 19	86 31'7
2421	J. 1060	8 45 43	3°72	56 47'2	13'3	vF, pS, dif, diffic	48 12	56 56'1
2422	J. 1061	8 46 23	3°45	69 15'0	13'4	pF, S, R, dif, * 14 close	48 41	69 23'9
2423	J. 1062	8 46 46	3°45	69 15'3	13'4	F, S, R, dif	49 4	69 24'2
2424	B. 271	8 47 45	3°90	50 5	13'5	vF, S, lbM [= 2704]	50 21	50 14
2425	B. 396	8 48 46	3°02	92 52	13'5	eF, neb?	50 47	93 1
2426	J. 1063	8 51 12	+ 3°13	86 33'3	+ 13'7	F, vS, R, stell	53 17	86 42'4

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2427	J. 1064	h m s 8 52 6	+ 3°84	5° 34'9	+ 13"8	F, vS, R, bM	m s 54 40	5° 44'1
2428	J. 1065	8 54 45	3°65	58 51'9	13'9	F, pS, Epf, glbM	57 11	59 1'2
2429	J. 1066	8 55 19	3°62	60 8'4	14'0	F, vS, R, bMN	57 44	60 17'7
2430	J. 1067	8 56 3	3°59	61 30'1	14'0	F, S, R, gbM, r	58 27	61 39'4
2431	J. 1068	8 56 50	3°33	74 50'8	14'0	F, S, R, N, r	59 3	75 0'1
2432	J. 1069	8 57 16	3°17	83 57'1	14'1	F, vS, R, dif	59 23	84 6'5
2433	J. 1070	8 57 25	3°48	66 50'3	14'1	F, lEp, dif	59 44	66 59'7
2434	J. 1071	8 58 26	3°80	52 12'7	14'1	F, pS, lbM, r	0 58	52 22'1
2435	J. 1072	8 58 33	3°55	63 9'9	14'2	F, S, R, gbM, r	0 55	63 19'4
2436	D. S. 316	8 58 58	2°75	108 37	14'2	eF, S, stell, susp	0 48	108 46
2437	Ho. I., D. S.	8 59 8	2°75	108 38'9	14'2	F, vS, R, 10's of 2754, 57, 58	0 58	108 48'4
2438	B. 272	8 59 28	6°34	16 0	14'3	Cl, 5 or 6 st 13 ... within 1'5	3 42	16 10
2439	J. 1073	9 0 6	3°69	56 49'5	14'3	F, S, dif, r	2 34	56 59'0
2440	B. 273	9 1 1	6°32	15 58	14'3	vF, stell (13m), neb ?	5 14	16 8
2441	J. 1074	9 1 56	3°47	66 34'4	14'4	F, S, R, glbM, D ?	4 15	66 44'0
2442	J. 1075	9 1 59	3°47	66 35'4	14'4	vF, vS, R, vlbM	4 18	66 45'0
2443	J. 1076	9 3 10	3°59	60 36'1	14'4	F, S, R, gbMN	5 34	60 45'7
2444	J. 1077	9 4 27	3°62	59 12'7	14'5	F, vS, R, stell	6 52	59 22'4
2445	J. 1078	9 4 43	3°65	57 37'2	14'5	F, S, R, dif, r	7 9	57 46'9
2446	J. 1079	9 5 10	3°59	60 28'4	14'5	F, S, E 130°, bMN, r	7 34	60 38'1
2447	J. 1080	9 5 11	3°59	60 41'1	14'5	F, S, R, gbMN	7 35	60 50'8
2448	Fleming 80	9 5 42	0°61	159 22	14'5	Planetary, stell	6 6	159 32
2449	J. 1081	9 6 51	3°61	59 25'6	14'7	vF, vS, lbM	9 15	59 35'4
2450	J. 1082	9 7 32	3°52	63 58'1	14'7	F, S, gbM, r	9 53	64 7'9
2451	J. 1083	9 7 43	3°48	65 54'7	14'7	F, S, R, gbMN	10 2	66 4'5
2452	J. 1084	9 7 53	3°48	65 56'1	14'7	F, S, R, gbMN	10 12	66 5'9
2453	J. 1085	9 7 57	3°43	68 29'9	14'7	F, S, R, gbM, r	10 14	68 39'7
2454	J. 1086	9 8 10	3°37	71 37'0	14'7	F, vS, gbMN	10 25	71 46'8
2455	J. 1087	9 8 53	3°41	69 18'1	14'8	F, R, gbMN, r	11 9	69 28'0
2456	J. 1088	9 8 54	3°71	54 38'0	14'8	F, S, dif, r	11 22	54 47'9
2457	J. 1089	9 9 7	3°41	69 19'4	14'8	F, S, R, dif	11 23	69 29'3
2458	B. 397	9 10 20	4°97	25 9	14'9	eF, S, dif, close to 2820	13 39	25 19
2459	J. 1090	9 10 30	3°71	54 32'1	14'9	eF, vS, diffic	12 58	54 42'0
2460	J. 1091	9 10 46	3°68	55 33'6	14'9	F, vS, Epf, stell N	13 13	55 43'5
2461	J. 1092	9 11 15	3°76	52 12'8	14'9	F, vS, vlbM	13 45	52 22'7
2462	J. 1093	9 14 55	3°45	66 43'3	15'1	vF, S, dif, r	17 13	66 53'4
2463	J. 1094	9 15 0	3°45	66 47'9	15'1	F, S, R, gbM, r	17 18	66 58'0
2464	J. 1095	9 15 22	3°45	66 47'2	15'2	pF, S, R, gbM, r	17 40	66 57'3
2465	J. 1096	9 15 28	3°48	64 57'6	15'2	F, S, dif	17 47	65 7'7
2466	J. 1097	9 15 41	3°48	64 53'2	15'2	vF, vS, dif, * 13'5 att	18 0	65 3'3
2467	J. 1098	9 16 6	3°77	51 4'0	15'2	F, vS, R, gbMN	18 37	51 14'1
2468	J. 1099	9 16 15	3°77	51 4'5	15'2	vS, R, sbM * 15	18 46	51 14'6
2469	Sw. XI.	9 16 29	2°53	121 52'8	15'2	pF, cS, mE, * 10 sp nr	18 10	122 2'9
2470	J. 1100	9 17 40	3°13	86 1'5	15'3	F, pS, iF, E 135°, r	19 45	86 11'7
2471	B. 398	9 18 16	2°97	96 13	15'3	vF, 2 or 3 st in neb [? = 2876]	20 15	96 23
2472	J. 1101	9 18 36	3°42	67 59'5	15'3	F, S, R, dif	20 53	68 9'7
2473	J. 1102	9 19 2	3°59	58 57'3	15'4	F, pS, R, glbM	21 26	59 7'6
2474	B. 275	9 19 11	3°45	66 22	15'4	* 13 in vS neb, I.C. 538 f	21 29	66 32
2475	J. 1103	9 19 33	3°57	59 36'3	15'4	F, vS, R, lbM	21 56	59 46'6
2476	J. 1104	9 19 33	+ 3°58	59 24'9	+ 15'4	F, S, R, bM	21 56	59 35'2

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2477	J. 1105	h m s 9 19 38	s + 3°57'	° ' 59 41'3	" + 15'4	F, S, gbM, r	m s 22 1	° ' 59 51'6
2478	J. 1106	9 19 41	3°58'	59 21'7	15'4	F, S, R, N	22 4	59 32'0
2479	J. 1107	9 19 44	3°58'	59 24'4	15'4	F, S, R, vlbM	22 7	59 34'7
2480	J. 1108	9 19 56	3°57'	59 41'3	15'4	F, vS, lEpf, gbM, r	22 19	59 51'6
2481	J. 1109	9 20 10	3°14'	85 26'8	15'4	F, S, E 150°, gbM, r	22 16	85 37'1
2482	Ho. II.	9 20 13	2°90'	101 30'2	15'4	F, vS, * 10 p 7°, o'8 n	22 9	101 40'5
2483	J. 1110	9 21 3	3°59'	58 24'1	15'5	F, S, R, lbm	23 27	58 34'4
2484	Sw. XI.	9 21 28	2°30'	132 14'2	15'5	pB, S, R, * 7 nf, D * p	23 0	132 24'5
2485	D. S. 317	9 21 36	2°39'	128 41'	15'5	eF, vS, R, st in neb, susp	23 12	128 51
2486	J. 1111	9 22 8	3°51'	62 44'8	15'6	vF, eS, dif	24 28	62 55'2
2487	J. 1112	9 22 15	3°39'	69 18'0	15'6	F, L, mE 160°	24 31	69 28'4
2488	Bailey	9 23 24	1°80'	146 22	15'6	Cl, eo	24 36	146 32
2489	Barnard	9 24 13	3°00'	95 16'2	15'7	pF, R	26 13	95 26'7
2490	J. 1113	9 24 46	3°56'	59 27'4	15'7	F, S, gbM	27 8	59 37'9
2491	J. 1114	9 26 45	3°65'	54 39'7	15'8	F, S, R, gbM, r	29 11	54 50'2
2492	D. S. 318	9 27 28	2°44'	127 17	15'8	eF, vS, R, B * 1' np, susp	29 6	127 28
2493	J. 1115	9 27 39	3°71'	51 59'8	15'8	F, vS, stell	30 7	52 10'3
2494	Sw. XI., Ho.	9 29 20	2°90'	101 48'8	15'9	pB, pL, R, 2 st nr f	31 16	101 59'4
2495	J. 1116	9 29 59	3°51'	61 18'2	16'0	F, eS, R, gbMN	32 19	61 28'9
2496	J. 1117	9 30 16	3°64'	54 40'6	16'0	F, vS, R, r	32 42	54 51'3
2497	J. 1118	9 32 37	3°64'	54 40'0	16'1	vF, vS, R, r	35 3	54 50'7
2498	J. 1119	9 33 12	3°50'	61 15'6	16'1	F, S, Ens, r, ? bi N	35 32	61 26'3
2499	J. 1120	9 33 17	3°50'	61 28'2	16'1	F, vS, dif, v diffic	35 37	61 38'9
2500	B. 399	9 33 49	3°66'	53 2	16'2	vF, pS, R, mbM	36 15	53 13
2501	Fleming 101	9 34 45	1°73'	149 27	16'2	Planetary, stell	35 54	149 38
2502	J. 1121	9 34 48	3°60'	56 13'4	16'2	F, S, R, gbM, diffic	37 12	56 24'2
2503	J. 1122	9 34 51	3°60'	56 10'5	16'2	vF, vS, dif, v diffic	37 15	56 21'3
2504	D. S. 319	9 36 5	1°07'	158 27	16'3	eF, vS, eE 170°, lbM, susp	36 48	158 38
2505	J. 1123	9 37 1	3°48'	62 5'7	16'3	F, S, R, vlbM	39 20	62 16'6
2506	J. 1124	9 37 7	3°48'	62 6'8	16'4	F, S, R, glbM, r	39 26	62 17'7
2507	Sw. XI., Ho., D. S.	9 38 30	2°61'	121 9'0	16'4	vF, S, R, * 12'5 nr nf, * 9 np	40 14	121 19'9
2508	J. 1125	9 38 46	3°59'	55 49'7	16'4	F, vS, R, dif, r	41 10	56 0'6
2509	B. 276	9 39 35	3°15'	83 38	16'5	eF, neb ?	41 41	83 49
2510	D. S. 320	9 41 40	2°60'	122 12	16'6	eF, vS, eE 140°, bM, susp	43 24	122 23
2511	Sw. XI., D. S.	9 43 16	2°60'	122 12'0	16'6	pB, pS, eE, * 7 np, np of 2	45 0	122 23'1
2512	Sw. XI.	9 43 21	2°60'	122 16'6	16'6	eeF, pS, mE, bet 2 st, sf of 2	45 5	122 27'7
2513	Sw. XI.	9 43 46	2°60'	122 16'7	16'6	eeF, eS, R, D * nr sf, sp of 2	45 30	122 27'8
2514	Sw. XI., D. S.	9 43 51	2°60'	122 14'0	16'6	eeF, eS, 3 F st nr f, nf of 2	45 35	122 25'1
2515	J. 1128	9 46 12	3°64'	51 55'0	16'8	F, eS, E ns, r, biN ?	48 38	52 6'2
2516	J. 1129	9 46 22	3°65'	51 40'3	16'8	F, S, R, gbM	48 48	51 51'5
2517	D. S. 321	9 46 40	2°60'	123 5	16'8	eeF, S, R, susp	48 24	123 16
2518	J. 1130	9 47 32	3°63'	52 10'8	16'8	F, S, R, lbM	49 57	52 22'0
2519	J. 1131	9 47 41	3°56'	55 17'6	16'8	F, vS, R, dif	50 3	55 28'8
2520	J. 1132	9 48 20	3°44'	62 5'1	16'9	F, vS, R, gbMN, r	50 38	62 16'4
2521	J. 1133	9 48 58	3°57'	55 21'2	16'9	F, S, dif	51 21	55 32'5
2522	D. S. 322	9 49 4	2°61'	122 29	16'9	vF, eL, R, * 8 n, susp	50 48	122 40
2523	D. S. 323	9 49 4	2°61'	122 34	16'9	vF, vS, eE 20°, susp	50 48	122 45
2524	J. 1134	9 49 16	3°56'	55 43'1	16'9	F, vS, R, stell	51 38	55 54'4
2525	J. 1135	9 50 0	3°62'	52 15'6	17'0	F, S, R, gbM	52 25	52 26'9
2526	Sw. XI., D. S.	9 50 47	+ 2°63'	121 36'7	+ 17'0	vF, S, R, * 7'5 nf	52 32	121 48'0

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2527	J. 1136	9 51 37	+ 3°64	51 9'7	+ 17"1	F, vS, R, N	54 3	51 21'1
2528	Sw. XI.	9 52 16	2°72	116 31'2	17'1	eeF, eS, R, v diffic, eF D* s	54 5	116 42'6
2529	Sw. XI.	9 52 58	2°79	112 10'5	17'1	eeF, eS, eF * att	54 50	112 21'9
2530	J. 1137	9 53 7	3°61	52 9'0	17'1	F, vS, stell	55 31	52 20'4
2531	Sw. XI.	9 53 37	2°69	118 59'1	17'1	eeF, pS, cE, 4 st n, nf, D * np	55 25	119 10'5
2532	D. S. 324	9 53 58	2°61	123 34	17'1	cB, S, stell N	55 42	123 45
2533	D. S. 325	9 54 20	2°66	120 35	17'1	cB, S, R	56 6	120 46
2534	D. S. 326	9 55 21	2°62	123 27	17'2	cB, S, R	57 6	123 38
2535	J. 1138	9 56 9	3°62	51 17'0	17'2	pB, pS, E 110°, gbm, r	58 34	51 28'5
2536	D. S. 327	9 57 21	2°62	123 16	17'3	F, S, E 50°, cbM	59 6	123 28
2537	Sw. XI.	9 57 36	2°73	116 53'3	17'3	eeF, L, cE	59 25	117 4'8
2538	D. S. 328	9 57 52	2°61	124 8	17'3	vF, vS, R, cbM	59 36	124 20
2539	D. S. 329	9 58 1	2°67	120 41	17'3	cF, vS, cE 30°, vmbM	59 48	120 53
2540	J. 1139	9 58 40	3°49	57 50'8	17'4	F, vS, R, gbmN	1 0	58 2'4
2541	D. S. 330	9 59 11	2°87	106 45	17'4	F, eE 5°, vmbM	1 6	106 57
2542	J. 1140	9 59 39	3°53	55 8'8	17'4	F, pS, glbM	2 0	55 20'4
2543	J. 1141	10 0 2	3°60	51 28'8	17'4	F, S, R, N, r	2 26	51 40'4
2544	J. 1142	10 0 19	3°52	55 58'1	17'4	F, S, dif	2 40	56 9'7
2545	D. S. 331	10 0 26	2°64	123 10	17'4	eF, eS, cE 25°, Δ 2 st	2 12	123 22
2546	D. S. 332	10 0 56	2°65	122 34	17'4	vF, vS, R, bet 2 st	2 42	122 46
2547	J. 1143	10 1 47	3°57	52 48'2	17'5	F, S, R, dif	4 10	52 59'9
2548	D. S. 333	10 1 51	2°62	124 33	17'5	eF, vS, R, bM, dif	3 36	124 45
2549	J. 1144	10 1 53	3°56	52 50'6	17'5	F, S, R, gvlbM	4 15	53 2'3
2550	J. 1145	10 2 29	3°43	61 22'0	17'5	F, cS, R, dif	4 46	61 33'7
2551	J. 1146	10 2 49	3°37	64 54'0	17'5	F, vS, R, stell	5 4	65 5'7
2552	D. S. 335	10 4 39	2°63	124 9	17'6	cB, S, R, bM	6 24	124 21
2553	Fleming 70	10 4 51	1°87	151 53	17'6	Planetary, stellar	6 6	152 5
2554	D. S. 334	10 5 8	1°61	156 20	17'6	cF, S, cE 10°, N, spir	6 12	156 32
2555	D. S. 336	10 5 24	2°69	120 57	17'6	eF, vS, eE 45°, cbM	7 12	121 9
2556	D. S. 337	10 6 26	2°64	124 2	17'7	eF, S, stell N	8 12	124 14
2557	J. 1147	10 7 46	3°57	51 12'3	17'7	vF, vS, R	10 9	51 24'1
2558	D. S. 338	10 8 32	2°66	123 38	17'8	cF, vS, cE 10°, cbM	10 18	123 50
2559	D. S. 339	10 8 38	2°66	123 22	17'8	eF, S, IE 10°, cbM	10 24	123 34
2560	Sw. XI., Ho., D. S.	10 10 4	2°67	122 50'9	17'8	eF, pS, am 4 st	11 51	123 2'8
2561	J. 1148	10 11 1	3°50	54 36'9	17'9	F, S, E 200°, gbm	13 21	54 48'8
2562	J. 1149	10 11 21	3°25	73 8'7	17'9	F, S, gbm, dif	13 41	73 20'6
2563	D. S. 340	10 12 36	2°70	121 54	17'9	eF, vS, eE 110°, eF * s	14 24	122 6
2564	J. 1150	10 13 15	3°52	52 50'8	18'0	F, S, R, gbm stell N	15 36	53 2'8
2565	J. 1151	10 13 24	3°39	61 22'1	18'0	F, vS, R, stell	15 40	61 34'1
2566	J. 1152	10 14 7	3°52	52 42'8	18'0	F, S, R, gbm, r	16 28	52 54'8
2567	J. 1153	10 14 11	3°35	64 38'9	18'0	F, vS, R, r	16 25	64 50'9
2568	J. 1154	10 14 18	3°52	52 39'4	18'0	F, S, R, N, r	16 39	52 51'4
2569	J. 1155	10 15 7	3°35	64 41'8	18'0	F, vS, R, stell	17 21	64 53'8
2570	D. S. 341	10 15 18	2°69	122 55	18'0	eF, eS, mE 150°, 3 st sf	17 6	123 7
2571	Sw. XI., Ho.	10 15 19	2°68	123 33'8	18'0	vF, cS, R, mbM, * 9 f 9s	17 6	123 45'8
2572	J. 1156	10 17 15	3°38	61 11'8	18'1	pF, S, iF	19 30	61 23'9
2573	D. S. 342	10 17 19	2°67	124 45	18'1	eF, vS, eE o°	19 6	124 57
2574	Coddington	10 18 7	4'55	20 49'9	18'2	vF, vL, iF	21 9	21 2'0
2575	D. S. 343	10 19 5	2°72	121 56	18'2	eF, vS, R	20 54	122 8
2576	D. S. 344	10 19 41	+ 2°72	122 12	+ 18'2	F, S, R	21 30	122 24

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2577	J. 1157	10 20 2	+ 3°44'	56° 30' 5	+ 18''2	F, cS, r, * 12 nr	22 20	56° 42' 6
2578	D. S. 345	10 21 6	2°71	123 10	18'3	eF, vS, eE 135°	22 54	123 22
2579	J. 1158	10 21 29	3°35	63 10'6	18'3	pB, pL, E 260°, bM [? 3251]	23 43	63 22'8
2580	D. S. 346	10 21 52	2°74	120 48	18'3	cB, S, bM	23 42	121 0
2581	Pickering	10 22 12	2°22	146 55'5	18'3	Cl, around * 5'4 mag	23 41	147 7'7
2582	D. S. 347	10 22 46	2°76	119 38	18'3	bM, indistinct (corner of plate)	24 36	119 50
2583	J. 1159	10 23 23	3°34	63 13'2	18'3	F, vS, R, stell	25 37	63 25'4
2584	D. S. 348	10 23 30	2°70	124 12	18'3	cB, bM	25 18	124 24
2585	D. S. 349	10 24 6	2°70	124 39	18'4	cB, bM	25 54	124 51
2586	Sw. XI.	10 24 12	2°78	118 0'2	18'4	pF, vS, R, 4 st nr sp	26 3	118 12'5
2587	D. S. 350	10 24 36	2°71	123 51	18'4	cB, bM	26 24	124 3
2588	Sw. XI.	10 25 19	2°77	119 40'3	18'4	eeF, pL, R, D * nr sf	27 10	119 52'6
2589	Sw. XI., Ho.	10 25 36	2°84	113 20'0	18'4	eeF, eS, v diff, * 13 sf, * 9 p'	27 30	113 32'3
2590	J. 1160	10 28 31	3°34	62 19'7	18'5	F, S, R, gbM, * 12 close	30 45	62 32'0
2591	J. 1161	10 28 39	3°44	54 13'5	18'5	F, cS, E 200°	30 57	54 25'8
2592	D. S. 351	10 28 58	2°59	132 59	18'5	F, pL, cE 15°, spir?	30 42	133 11
2593	Ho. II.	10 29 22	2°96	102 0'0	18'5	eF, cS, ? *	31 20	102 12'3
2594	Sw. XI., Ho.	10 29 25	2°85	113 35'9	18'6	eF, pS, R, bet 2 wide D st	31 19	113 48'3
2595	Sw. XI.	10 30 36	2°98	100 23'5	18'6	cB, eS, R, alm, stell	32 35	100 35'9
2596	F. 787	10 30 50	1°46	162 32	18'6	eF, pS, bM	31 48	162 44
2597	Sw. XI.	10 31 32	2°82	116 19'9	18'6	pB, pS, D * nr p	33 25	116 32'3
2598	J. 1162	10 31 58	3°33	62 32'4	18'6	F, S, R, N, r	34 11	62 44'8
2599	Pickering	10 32 2	2°28	147 53'5	18'6	* 8'5 in neb, 3324 f 6s, 6' s	33 33	148 5'9
2600	B. 400	10 36 8	4°58	16 57	18'8	eF, S, v dif	39 11	17 9
2601	B. 401	10 36 43	4°58	16 57	18'8	eF, pS, sev eF st inv	39 46	17 9
2602	Bailey	10 38 0	2°13	153 39	18'8	Cl, co, incl. θ Carinæ	39 24	153 52
2603	B. 279	10 40 35	3°37	56 20	18'9	vF, pL, biN or Dpf, bf	42 50	56 33
2604	J. 1163	10 41 34	3°36	56 28'8	18'9	F, cS, dif	43 48	56 41'4
2605	B. 402	10 42 1	3°36	56 18	18'9	eF, S, o'3 ssp I 116	44 15	56 31
2606	J. 1164	10 42 20	3°42	51 18'7	18'9	F, S, Ens, dif	44 37	51 31'3
2607	J. 1165	10 42 21	3°42	51 16'6	18'9	vF, vS, vlbM, diffic	44 38	51 29'2
2608	J. 1166	10 42 23	3°36	56 29'3	18'9	F, vS, R, * 14 att	44 37	56 41'9
2609	B. 403	10 43 17	2°98	101 22	19'0	vF, S, bM	45 16	101 35
2610	B. 280	10 44 21	3°36	56 11	19'0	vF, S, lbM, * 25'' p	46 35	56 24
2611	B. 404	10 45 18	3°15	79 8	19'0	eF	47 24	79 21
2612	J. 1168	10 45 46	3°35	56 29'0	19'1	F, S, R, dif	48 0	56 41'7
2613	J. 1169	10 46 29	3°35	56 17'1	19'1	B, pL, E 200°, gmbM dif N	48 43	56 29'8
2614	J. 1170	10 53 43	3°38	50 26'7	19'3	vF, vS, R	55 58	50 39'6
2615	J. 1171	10 54 13	3°37	51 18'6	19'3	F, vS, R, lbM	56 28	51 31'5
2616	J. 1172	10 54 16	3°38	50 27'9	19'3	F, S, R, gbM, r	56 31	50 40'8
2617	J. 1173	10 54 17	3°38	50 36'5	19'3	F, S, R, FN	56 32	50 49'4
2618	B. 281	10 54 22	3°27	61 29	19'3	vS neb ?	56 33	61 42
2619	J. 1174	10 54 27	3°37	51 17'3	19'3	F, vS, R stell	56 42	51 30'2
2620	J. 1175	10 54 32	3°37	50 46'2	19'3	F, S, R, N, r	56 47	50 59'1
2621	Fleming 106, Lunt	10 54 58	2°29	154 29'5	19'3	Planetary, stell, 10'5 mag	56 30	154 42'4
2622	Sw. XI.	10 56 31	2°97	105 28'8	19'3	eeF, eS, like D *	58 30	105 41'7
2623	Ho. III.	10 56 58	2°95	109 20'4	19'3	vF, vS	58 56	109 33'3
2624	Sw. XI.	11 0 22	2°96	108 48'2	19'4	cB, pS, R, n of 2	2 20	109 1'1
2625	Sw. XI.	11 0 27	2°96	108 48'9	19'4	eeF, vS, R, s of 2	2 25	109 1'8
2626	J. 1176	11 1 33	+ 3°25	62 20'4	+ 19'4	F, vS, dif, diffic	3 43	62 33'3

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2627	Sw. XI., Ho.	h m s II 3 3	s + 2°93	II 2 59°0	+ 19'5	eF, L, R, stell N	m s 5 0	II 3 12°0
2628	W. VII. 1	II 4 19	3°14	77 7°2	19'5	pF, pS, R, bM, spir	6 25	77 20°2
2629	W. VII. 2	II 5 18	3°14	77 8°1	19'5	F, S, R, bM	7 24	77 21°1
2630	W. VII. 4	II 5 24	3°14	76 55°1	19'5	F, vS, R, spir	7 30	77 8°1
2631	D. S. 352	II 5 29	1°82	165 51	19'5	* 9 in L neb	6 42	166 4
2632	W. VII. 5	II 5 47	3°14	77 33°9	19'5	F, S, R, bM	7 53	77 46°9
2633	W. VII. 6	II 5 51	3°14	77 38°2	19'5	F, cS, iF	7 57	77 51°2
2634	W. VII. 7	II 6 11	3°13	78 45°1	19'5	cB, cS, R, gbm	8 16	78 58°1
2635	W. VII. 8	II 6 11	3°14	77 46°4	19'5	F, S, stell N	8 17	77 59°4
2636	W. VII. 9	II 6 16	3°14	77 47°0	19'5	F, S, bM	8 22	78 0°0
2637	W. VII. 10	II 6 32	3°13	79 39°1	19'6	pB, cS, R, bM	8 37	79 52°2
2638	W. VII. 11	II 6 34	3°13	78 40°5	19'6	cB, pS, E 100°, bM	8 39	78 53°6
2639	W. VII. 13	II 6 38	3°13	79 35°5	19'6	F, S, R, bM, spir	8 43	79 48°6
2640	W. VII. 14	II 6 47	3°13	78 14°3	19'6	F, S, iF	8 52	78 27°4
2641	W. VII. 15	II 6 54	3°12	79 50°3	19'6	F, S, iF	8 59	80 3°4
2642	W. VII. 16	II 6 57	3°14	78 58°1	19'6	vF, vS, R, bM, spir	9 3	79 11°2
2643	W. VII. 17	II 7 10	3°13	79 6°5	19'6	cF, S, R, bM	9 15	79 19°6
2644	W. VII. 18	II 7 12	3°13	78 28°1	19'6	F, S, R	9 17	78 41°2
2645	W. VII. 19	II 7 12	3°14	77 21°0	19'6	pF, S, R, bM	9 18	77 34°1
2646	W. VII. 21	II 7 19	3°14	76 42°4	19'6	vF, vS, iF	9 25	76 55 5
2647	W. VII. 22	II 7 20	3°14	77 5°7	19'6	eF, pL, iF	9 26	77 18°8
2648	W. VII. 23	II 7 28	3°13	79 0°7	19'6	cF, cS, R, bM	9 33	79 13°8
2649	W. VII. 24	II 7 29	3°13	78 6°5	19'6	pB, S, R, bM, spir	9 34	78 19°6
2650	W. VII. 25	II 7 32	3°15	75 23°0	19'6	F, S, bM, iF	9 38	75 36°1
2651	W. VII. 26	II 7 33	3°14	76 59°7	19'6	F, S, R, bM	9 39	77 12°8
2652	W. VII. 27	II 7 33	3°14	76 47°4	19'6	vF, S, R, bM, spir	9 39	76 0°5
2653	W. VII. 28	II 7 36	3°13	78 41°3	19'6	vF, S, R	9 41	78 54°4
2654	W. VII. 29	II 7 44	3°14	76 44°0	19'6	vF, S, E 120°	9 50	76 57°1
2655	W. VII. 31	II 7 46	3°14	77 4°2	19'6	eF, S, iF	9 52	77 17°3
2656	W. VII. 32	II 7 47	3°14	76 51°4	19'6	vF, S, iF, E 120°	9 53	77 4°5
2657	W. VII. 33	II 7 49	3°15	75 32°6	19'6	F, pL, dif, bet 2 st	9 55	75 45°7
2658	W. VII. 34	II 7 50	3°14	76 14°4	19'6	vF, cS, R, bM	9 56	76 27°5
2659	W. VII. 35	II 8 9	3°14	76 20°9	19'6	F, vS, R, bM, spir	10 15	76 34°0
2660	W. VII. 36	II 8 9	3°14	76 48°0	19'6	vF, S	10 15	77 1°1
2661	W. VII. 37	II 8 10	3°15	75 37°6	19'6	F, pS, E 100°, bM	10 16	75 50°7
2662	W. VII. 38	II 8 11	3°14	76 28°0	19'6	F, vS, R, bM	10 17	76 41°1
2663	W. VII. 39	II 8 14	3°14	76 37°9	19'6	pB, vS, R, sbM *	10 20	76 51°0
2664	W. VII. 40	II 8 20	3°14	76 40°4	19'6	F, vS, E 80°, bM	10 26	76 53°5
2665	W. VII. 41	II 8 22	3°13	77 30°8	19'6	vF, pL, iF, N, 2 st 13 att	10 27	77 43°9
2666	W. VII. 42	II 8 24	3°15	75 27°3	19'6	cB, cS, E 20°, bM	10 30	75 40°4
2667	W. VII. 43	II 8 26	3°14	77 7°2	19'6	F, vS, R, bM, spir	10 32	77 20°3
2668	Ho. I.	II 8 32	3°00	103 24°4	19'6	eF, S	10 32	103 37°5
2669	W. VII. 44	II 8 34	3°14	75 48°4	19'6	F, S, E 50°, bM	10 40	76 1°5
2670	W. VII. 45	II 8 41	3°13	77 27°3	19'6	F, vS, R, bM, spir	10 46	77 40°4
2671	W. VII. 46	II 8 44	3°14	76 6°6	19'6	F, vS, R, bM	10 50	76 19°7
2672	W. VII. 47	II 8 47	3°13	79 4°7	19'6	F, vS, R, bM	10 52	79 17°8
2673	W. VII. 48	II 8 47	3°13	79 4°4	19'6	F, pL, iF, N, * 11 f 1'	10 52	79 17°5
2674	W. VII. 49	II 8 51	3°13	78 11°1	19'6	F, pS, R, bM, spir	10 56	78 24°2
2675	W. VII. 50	II 8 52	3°14	76 59°2	19'6	F, vS, R	10 58	77 12°3
2676	W. VII. 51	II 9 2	+ 3°12	79 24°7	+ 19'6	F, S, iF, * 11 sf 1'	II 7	79 37°8

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2677	W. VII. 52	h 9 2	s + 3°14'	77 1°3	+ 19°6	F, vS, R, bM, in L, E neby	11 8	77 14°4
2678	W. VII. 53	11 9 3	3°14	77 17°3	19°6	F, vS, E 110°, bM	11 9	77 30°4
2679	W. VII. 54	11 9 5	3°14	77 13°1	19°6	F, S, R, bM, spir, * 13 sp 20"	11 11	77 26°2
2680	W. VII. 55	11 9 9	3°12	79 25°7	19°6	cF, S, iF, N, * 11 np	11 14	79 38°8
2681	W. VII. 56	11 9 15	3°13	78 1°8	19°6	cB, vS	11 20	78 14°9
2682	W. VII. 57	11 9 20	3°12	79 49°5	19°6	pF, S, E, bM	11 25	80 2°6
2683	W. VII. 58	11 9 36	3°14	77 8°3	19°6	F, pL, iF, N	11 42	77 21°4
2684	W. VII. 59	11 9 42	3°14	76 8°0	19°6	F, pS, R, bM	11 48	76 21°1
2685	W. VII. 60	11 9 43	3°13	79 8°4	19°6	F, vS, R, sbM * 14	11 48	79 21°5
2686	W. VII. 61	11 9 44	3°14	76 17°0	19°6	F, S, iF, att * 14 sf	11 50	76 30°1
2687	W. VII. 62	11 9 55	3°13	79 4°6	19°6	vF, vS, R, bM, spir	12 0	79 17°7
2688	W. VII. 63	11 10 0	3°14	75 44°8	19°6	vF, S, E 30°, bM	12 5	75 57°9
2689	W. VII. 64	11 10 0	3°14	76 16°6	19°6	F, S, E 40°	12 6	76 29°7
2690	W. VII. 65	11 10 3	3°14	76 15°5	19°6	vF, S, iF, diffie	12 9	76 28°6
2691	W. VII. 66	11 10 7	3°13	77 12°3	19°6	F, vS, R, mbM	12 12	77 25°4
2692	W. VII. 67	11 10 16	3°13	78 28°0	19°6	F, vS	12 21	78 41°1
2693	W. VII. 68	11 10 18	3°14	75 41°2	19°6	vF, S, R, bM	12 23	75 54°3
2694	W. VII. 69	11 10 20	3°14	75 51°6	19°6	pB, S, E 90°, bM	12 26	76 4°7
2695	W. VII. 70	11 10 29	3°14	75 30°4	19°6	F, S, R, bM	12 35	75 43°5
2696	W. VII. 71	11 10 31	3°14	76 28°7	19°6	F, vS, R, bM	12 37	76 41°8
2697	W. VII. 73	11 10 32	3°14	75 50°1	19°6	F, S, iF, N, bet 2 st	12 38	76 3°2
2698	W. VII. 72	11 10 34	3°13	77 21°0	19°6	F, pS, iF, biN	12 39	77 34°1
2699	W. VII. 74	11 10 35	3°13	77 19°5	19°6	F, eS, R, bM	12 40	77 32°6
2700	W. VII. 75	11 10 36	3°13	77 10°8	19°6	vF, vS, iF, N	12 41	77 23°9
2701	W. VII. 76	11 10 40	3°13	78 6°9	19°6	F, vS, iF	12 45	78 20°0
2702	W. VII. 77	11 10 41	3°12	79 49°4	19°6	vF, S, E	12 46	80 2°5
2703	Kobold	11 10 43	3°16	71 35°1	19°6	vF, S	12 49	71 48°2
2704	W. VII. 78	11 10 46	3°14	76 46°9	19°6	F, S, E 70°, bM	12 52	77 0°0
2705	W. VII. 79	11 10 46	3°13	77 19°9	19°6	eF, eS, R, bM, diffie	12 51	77 33°0
2706	W. VII. 80	11 11 11	3°14	76 41°2	19°6	F, vS, E 60°, bM	13 17	76 54°3
2707	W. VII. 81	11 11 14	3°12	79 45°6	19°6	F, vS, R, bM, spir, * 13 sf	13 19	79 58°7
2708	W. VII. 82	11 11 16	3°14	76 31°5	19°6	pB, vS, R, bM	13 22	76 44°6
2709	W. VII. 83	11 11 22	3°14	76 40°3	19°6	eF, pL, iF, * 13 n	13 28	76 53°4
2710	W. VII. 84	11 11 26	3°14	75 40°0	19°6	B, vS, R, bM	13 32	75 53°1
2711	W. VII. 85	11 11 28	3°14	75 29°7	19°6	F, vS, R, bM	13 34	75 42°8
2712	W. VII. 86	11 11 37	3°12	79 36°3	19°6	F, vS, R, bM	13 42	79 49°4
2713	W. VII. 88	11 11 52	3°13	77 4°2	19°6	eF, vS, R, bM	13 57	77 17°3
2714	Bailey	11 11 54	2°56	151 57	19°6	Cl, pC	13 36	152 10
2715	W. VII. 89	11 11 56	3°13	77 17°0	19°7	vF, S, iF	14 1	77 30°1
2716	W. VII. 90	11 11 59	3°13	77 32°0	19°7	vF, S, iF	14 4	77 45°1
2717	W. VII. 91	11 12 1	3°13	77 11°1	19°7	vF, vS, R, bM, diffie	14 6	77 24°2
2718	W. VII. 92	11 12 3	3°13	77 12°6	19°7	F, vS, iF	14 8	77 25°7
2719	W. VII. 93	11 12 14	3°13	77 10°4	19°7	vF, S, iF, N	14 19	77 23°5
2720	W. VII. 94	11 12 18	3°13	77 9°4	19°7	eF, vS, R, bM	14 23	77 22°5
2721	W. VII. 95	11 12 25	3°13	77 5°4	19°7	eF, pS, dif	14 30	77 18°5
2722	W. VII. 96	11 12 25	3°13	75 16°0	19°7	F, S, iF	14 30	75 29°1
2723	W. VII. 97	11 12 31	3°13	77 12°0	19°7	F, vS, E 200°, diffie	14 36	77 25°1
2724	W. VII. 98	11 12 31	3°13	78 31°1	19°7	eF, vS, R, bM, * 13 p 20"	14 36	78 44°2
2725	W. VII. 99	11 12 39	3°14	75 48°4	19°7	vF, S, iF, diffie	14 45	76 1°5
2726	W. VII. 100	11 12 40	+ 3°14	75 49°1	+ 19°7	vF, vS, iF, diffie	14 46	76 2°2

No.	Observer.	R.A. 1880.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2727	W. VII. 101	h m s II 12 42	s + 3°13'	77 12'1	+ 19''7	F, vS, iF, N, diffic	m s 14 47	77 25'2
2728	W. VII. 102	II 12 47	3°14'	75 48'6	19'7	vF, S, iF, N, diffic	14 53	76 1'7
2729	W. VII. 103	II 12 48	3°14'	75 49'5	19'7	vF, S, iF, diffic	14 54	76 2'6
2730	W. VII. 104	II 12 50	3°13'	76 52'0	19'7	F, eS, E 90°, bM	14 55	77 5'1
2731	W. VII. 105	II 12 52	3°14'	75 40'4	19'7	F, S, R, bM, spir	14 58	75 53'5
2732	W. VII. 106	II 12 54	3°13'	76 49'8	19'7	vF, S, R, bM	14 59	77 2'9
2733	W. VII. 109	II 13 5	3°14'	75 21'9	19'7	vF, eS, iF, N, * 14 n	15 11	75 35'0
2734	W. VII. 110	II 13 6	3°13'	76 47'5	19'7	F, S, iF, N	15 11	77 0'6
2735	J. 1177	II 13 32	3°26'	54 54'1	19'7	pB, eS, Epf, N, r	15 42	55 7'2
2736	W. VII. 111	II 13 37	3°13'	76 49'5	19'7	vF, S, iF, N	15 42	77 2'6
2737	W. VII. 112	II 13 49	3°14'	74 56'4	19'7	F, eS, R, bM	15 55	75 9'5
2738	J. 1178	II 13 51	3°26'	54 53'4	19'7	F, S, R, gbMN	16 1	55 6'5
2739	W. VII. 113	II 13 55	3°13'	77 19'2	19'7	F, vS, annular?	16 0	77 32'3
2740	W. VII. 114	II 14 1	3°11'	80 28'8	19'7	vF, S, dif, diffic	16 5	80 41'9
2741	W. VII. 115	II 14 2	3°12'	80 4'9	19'7	vF, pS, iF, sev N	16 7	80 18'0
2742	W. VII. 116	II 14 2	3°12'	78 47'1	19'7	F, S, iF	16 7	79 0'2
2743	W. VII. 117	II 14 10	3°11'	80 32'4	19'7	F, vS, R, bM, spir	16 14	80 45'5
2744	J. 1179	II 14 11	3°25'	54 53'0	19'7	F, S, gbMN, r	16 21	55 6'1
2745	W. VII. 118	II 14 13	3°14'	75 48'4	19'7	pB, Sp, E 70°, bM, * 12 att sf	16 19	76 1'5
2746	W. VII. 119	II 14 19	3°13'	77 29'7	19'7	F, vS, R, bM	16 24	77 42'8
2747	W. VII. 120	II 14 25	3°11'	80 25'8	19'7	vF, vS, iF, 2 st 15 inv	16 29	80 38'9
2748	W. VII. 121	II 14 29	3°11'	80 25'6	19'7	F, vS, iF	16 33	80 38'7
2749	W. VII. 122	II 14 30	3°11'	80 39'6	19'7	F, S, dif (? D*)	16 34	80 52'7
2750	W. VII. 123	II 14 35	3°12'	79 34'5	19'7	vF, vS, iF	16 40	79 47'6
2751	J. 1180	II 14 36	3°25'	54 52'7	19'7	F, S, R, 2 st 15 inv	16 46	55 5'8
2752	W. VII. 124	II 14 43	3°14'	75 6'4	19'7	F, S, R, bM	16 49	75 19'5
2753	W. VII. 125	II 14 43	3°12'	79 21'2	19'7	eF, vS, R, bM	16 48	79 34'3
2754	W. VII. 126	II 14 43	3°14'	75 5'4	19'7	F, S, iF, N, diffic	16 49	75 18'5
2755	W. VII. 127	II 14 44	3°14'	75 26'4	19'7	F, vS, R, bM	16 50	75 39'5
2756	W. VII. 128	II 14 45	3°12'	79 16'2	19'7	vF, vS, E 120°, bM	16 51	79 29'3
2757	W. VII. 129	II 14 47	3°11'	80 50'3	19'7	F, S, iF, N	16 51	81 3'4
2758	W. VII. 130	II 14 48	3°11'	81 25'2	19'7	F, eS, R, bM, diffic	16 52	81 38'3
2759	B. 405	II 14 48	3°19'	64 55	19'7	eF, stell, * 13 npp z'5	16 56	65 8
2760	W. VII. 131	II 14 54	3°13'	76 34'0	19'7	vF, S, R, bM	16 59	76 47'1
2761	W. VII. 132	II 14 58	3°14'	75 3'3	19'7	F, S, R, bM, diffic	17 4	75 16'4
2762	W. VII. 133	II 15 0	3°13'	76 30'6	19'7	eF, pS, mE 150°, bM, * 12 p	17 5	76 43'7
2763	W. VII. 134	II 15 0	3°13'	76 10'1	19'7	eF, pS, E 95°, long N	17 5	76 23'2
2764	Sw. XI.	II 15 2	2°94'	118 14'4	19'7	pB, pS, R, * 10 nr nf, * 7 f	17 0	118 27'5
2765	W. VII. 135	II 15 4	3°14'	75 2'0	19'7	vF, vS, iF, N	17 10	75 15'1
2766	W. VII. 136	II 15 4	3°13'	76 19'8	19'7	vF, S, iF	17 9	76 32'9
2767	W. VII. 137	II 15 5	3°13'	76 9'3	19'7	vF, vS, iF	17 10	76 22'4
2768	W. VII. 138	II 15 6	3°13'	76 42'3	19'7	vF, vS, iF, N	17 11	76 55'4
2769	W. VII. 139	II 15 7	3°14'	75 2'3	19'7	F, eS, R, bM	17 13	75 15'4
2770	W. VII. 140	II 15 9	3°12'	80 0'6	19'7	F, S, iF	17 14	80 13'7
2771	W. VII. 141	II 15 10	3°13'	76 42'8	19'7	vF, vS, iF, N, diffic	17 15	76 55'9
2772	W. VII. 142	II 15 12	3°14'	75 38'0	19'7	vF, eS, iF, N	17 18	75 51'1
2773	W. VII. 143	II 15 18	3°14'	75 39'8	19'7	vF, S, viF, diffic	17 24	75 52'9
2774	W. VII. 144	II 15 19	3°13'	76 43'1	19'7	vF, vS, iF, N, diffic	17 24	76 56'2
2775	W. VII. 145	II 15 22	3°13'	76 43'3	19'7	vF, vS, iF, N, diffic	17 27	76 56'4
2776	W. VII. 146	II 15 22	+ 3°13'	75 53'6	+ 19'7	pF, pS, R, bM, spir	17 27	76 6'7

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2777	W. VII. 147	h m s II 15 23	s + 3°13'	° 12' 4	" 19' 7	pF, vS, R, bM	m s 17 28	° 25' 5
2778	W. VII. 148	II 15 24	3°13'	76 42' 5	19' 7	vF, vS, iF, N, diffic	17 29	76 55' 6
2779	W. VII. 149	II 15 27	3°13'	75 53' 1	19' 7	cF, eS, R	17 32	76 6' 2
2780	W. VII. 150	II 15 32	3°12'	79 5' 0	19' 7	F, vS, R, bM, * 15 n 15"	17 37	79 18' 1
2781	W. VII. 151	II 15 33	3°13'	76 53' 2	19' 7	F, vS, iF, fainter one 2' nf	17 38	77 6' 3
2782	W. VII. 152	II 15 37	3°13'	75 47' 5	19' 7	eF, es, R, bM	17 42	76 0' 6
2783	W. VII. 153	II 15 39	3°11'	80 20' 8	19' 7	F, vS, R, bM, spir	17 43	80 33' 9
2784	W. VII. 154	II 15 53	3°13'	76 6' 9	19' 7	pB, eS, R, bM, * 13 p 20"	17 58	76 20' 0
2785	W. VII. 155	II 15 57	3°13'	75 50' 5	19' 7	pF, S, R, bM	18 2	76 3' 6
2786	W. VII. 156	II 16 0	3°13'	75 50' 5	19' 7	cF, S, E 110°, bM	18 5	76 3' 6
2787	W. VII. 157	II 16 1	3°13'	75 36' 1	19' 7	cF, S, R, bM	18 6	75 49' 6
2788	W. VII. 158	II 16 9	3°13'	76 32' 0	19' 7	vF, S, R	18 14	76 45' 1
2789	W. VII. 159	II 16 14	3°14'	75 2' 6	19' 7	pB, S, R, bM	18 20	75 15' 7
2790	W. VII. 160	II 16 18	3°12'	79 40' 7	19' 7	vF, S, iF	18 23	79 53' 8
2791	W. VII. 161	II 16 20	3°13'	76 20' 2	19' 7	vF, vS, iF, diffic	18 25	76 33' 3
2792	W. VII. 162	II 16 25	3°12'	77 49' 6	19' 7	F, S, R	18 30	78 2' 7
2793	W. VII. 163	II 16 32	3°11'	79 47' 0	19' 7	vF, S, iF, diffic	18 36	80 0' 1
2794	W. VII. 164	II 16 46	3°13'	76 26' 3	19' 7	F, eS, R, bM	18 51	76 39' 4
2795	W. VII. 165	II 16 47	3°13'	77 5' 9	19' 7	F, vS, R	18 52	77 19' 0
2796	W. VII. 166	II 16 53	3°11'	79 53' 2	19' 7	vF, S, iF	18 57	80 6' 3
2797	W. VII. 167	II 17 4	3°12'	77 31' 5	19' 7	F, vS, R, bM	19 9	77 44' 6
2798	W. VII. 168	II 17 6	3°13'	76 48' 9	19' 7	vF, S, iF, N, diffic	19 11	77 2' 0
2799	W. VII. 169	II 17 9	3°13'	75 23' 0	19' 7	F, S, iF, N	19 14	75 36' 1
2800	W. VII. 171	II 17 10	3°13'	77 1' 5	19' 7	vF, S, R, bM	19 15	77 14' 6
2801	W. VII. 172	II 17 13	3°12'	79 2' 9	19' 7	F, S, R, bM, spir	19 18	79 16' 0
2802	W. VII. 173	II 17 13	3°13'	77 1' 4	19' 7	vF, vS, iF, N, v diffic	19 18	77 14' 5
2803	W. VII. 174	II 17 19	3°12'	79 22' 8	19' 7	F, vS, E 70°	19 24	79 35' 9
2804	W. VII. 175	II 17 38	3°13'	76 0' 5	19' 7	pB, es, E 10°, exc N	19 43	76 13' 6
2805	W. VII. 176	II 17 42	3°13'	75 13' 0	19' 7	vF, S, R, bM, diffic	19 47	75 26' 1
2806	W. VII. 177	II 18 0	3°11'	79 34' 6	19' 7	vF, S, iF, ? annular	20 4	79 47' 7
2807	W. VII. 178	II 18 0	3°12'	77 42' 2	19' 7	F, S, iF, * 14 att p	20 5	77 55' 3
2808	W. VII. 179	II 18 12	3°11'	80 5' 6	19' 7	vF, vS, R, bM, spir	20 16	80 18' 7
2809	W. VII. 180	II 18 23	3°11'	80 42' 2	19' 8	F, S, R, bM, ? spir	20 27	80 55' 4
2810	W. VII. 181	II 18 27	3°14'	74 33' 3	19' 8	pF, pS, R, bM, * 14 sf	20 33	74 46' 5
2811	W. VII. 182	II 18 30	3°11'	80 3' 7	19' 8	F, S, iF, * 14 f 30"	20 34	80 16' 9
2812	W. VII. 184	II 18 39	3°12'	77 42' 1	19' 8	F, S, E 10°	20 44	77 55' 3
2813	W. VII. 185	II 18 50	3°12'	77 58' 5	19' 8	F, vS, R, bM, spir	20 55	78 11' 7
2814	W. VII. 186	II 18 53	3°11'	79 34' 0	19' 8	pF, vS, R, bM, * 14 nf 30"	20 57	79 47' 2
2815	W. VII. 187	II 18 59	3°13'	76 25' 6	19' 8	F, es, R, bM	21 4	76 38' 8
2816	W. VII. 188	II 19 2	3°12'	78 35' 5	19' 8	cF, vS, R, bM, spir	21 7	78 48' 7
2817	W. VII. 189	II 19 4	3°11'	80 4' 8	19' 8	F, vS, iF, N	21 8	80 18' 0
2818	W. VII. 190	II 19 10	3°13'	76 18' 5	19' 8	F, vS, R, bM	21 15	76 31' 7
2819	W. VII. 191	II 19 10	3°13'	75 23' 0	19' 8	cF, S, E 60°, bM	21 15	75 36' 2
2820	W. VII. 192	II 19 11	3°12'	78 59' 5	19' 8	pF, vS, * 16 att n	21 16	79 12' 7
2821	W. VII. 193	II 19 17	3°13'	75 16' 0	19' 8	F, S	21 22	75 29' 2
2822	W. VII. 194	II 19 18	3°12'	77 47' 5	19' 8	F, pL, E 110°, bM, * 14 s	21 23	78 0' 7
2823	W. VII. 195	II 19 28	3°13'	76 22' 9	19' 8	pF, S, E 20°, bi N?	21 33	76 36' 1
2824	W. VII. 196	II 19 47	3°13'	75 8' 6	19' 8	pF, S, R, bM	21 52	75 21' 8
2825	W. VII. 197	II 19 48	3°11'	80 46' 6	19' 8	F, S, iF, N, * 15 att sf	21 52	80 59' 8
2826	W. VII. 198	II 19 49	+ 3°13'	75 59' 4	+ 19' 8	pF, es, N	21 54	76 12' 6

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2827	W. VII. 199	h m s 11 19 54	s + 3'12	° 42'8	+ 19"8	F, eS, * 14 sf	m 21 59	77 56'0
2828	W. VII. 200	11 19 57	3'11	80 29'8	19"8	pF, cS, E 65°, bM, 2 st p	22 1	80 43'0
2829	W. VII. 201	11 19 59	3'12	78 54'5	19"8	cF, vS, R, bM, spir, * 12 s	22 4	79 7'7
2830	W. VII. 202	11 20 7	3'10	81 24'8	19"8	F, S, R, bM	22 11	81 38'0
2831	W. VII. 203	11 20 8	3'11	80 15'1	19"8	F, vS, R	22 12	80 28'3
2832	W. VII. 204	11 20 8	3'13	75 14'4	19"8	pF, S, R, bM	22 13	75 27'6
2833	W. VII. 205	11 20 9	3'13	75 37'6	19"8	vF, S, iF, diffic, * 14 ? att np	22 14	75 50'8
2834	W. VII. 206	11 20 14	3'13	75 39'6	19"8	vF, S, iF, diffic, other neb att f	22 19	75 52'8
2835	W. VII. 207	11 20 15	3'12	77 5'1	19"8	cF, vS, R, bM, * 14 f	22 20	77 18'3
2836	W. VII. 208	11 20 22	3'11	80 8'7	19"8	F, vS, neb * 15 n 1'	22 26	80 21'9
2837	W. VII. 209	11 20 27	3'11	78 54'9	19"8	cF, vS, R, bM, spir	22 31	79 8'1
2838	W. VII. 210	11 20 28	3'13	75 13'0	19"8	F, S	22 33	75 26'2
2839	W. VII. 211	11 20 30	3'12	78 24'6	19"8	vF, S, iF	22 35	78 37'8
2840	W. VII. 212	11 20 30	3'13	75 48'3	19"8	vF, S, iF, N	22 35	76 1'5
2841	W. VII. 213	11 20 32	3'12	76 37'8	19"8	F, vS, R, bM, diffic	22 37	76 51'0
2842	W. VII. 214	11 20 33	3'11	79 34'6	19"8	vF, S, iF	22 37	79 47'8
2843	W. VII. 215	11 20 41	3'13	76 2'6	19"8	F, cS, R, bM, diffic, * 8'7 f 2'	22 46	76 15'8
2844	W. VII. 216	11 20 42	3'12	77 46'6	19"8	F, S, iF	22 47	77 59'8
2845	W. VII. 217	11 20 44	3'12	76 41'9	19"8	F, vS, iF, N	22 49	76 55'1
2846	W. VII. 218	11 20 44	3'12	78 4'2	19"8	pB, vS, R, bM, * 12 f	22 49	78 17'4
2847	W. VII. 219	11 20 46	3'13	75 18'0	19"8	vF, vS, iF, diffic	22 51	75 31'2
2848	W. VII. 220	11 20 56	3'12	76 11'9	19"8	vF, S, iF	23 1	76 25'1
2849	W. VII. 221	11 20 57	3'11	80 8'1	19"8	pF, vS, R, bM	23 1	80 21'3
2850	W. VII. 222	11 20 58	3'11	80 10'0	19"8	pB, S, E 120°, bM, * 13 sf	23 2	80 23'2
2851	W. VII. 223	11 20 59	3'12	77 50'1	19"8	F, S	23 4	78 3'3
2852	W. VII. 224	11 20 59	3'11	79 25'5	19"8	F, vS, R, bM, spir, ? neb *	23 3	79 38'7
2853	W. VII. 225	11 21 0	3'11	80 4'9	19"8	pB, pS, E 160°, bM	23 4	80 18'1
2854	W. VII. 226	11 21 5	3'11	80 15'6	19"8	F, vS, R, bM, spir	23 9	80 28'8
2855	W. VII. 228	11 21 10	3'11	79 32'5	19"8	F, vS, iF, N	23 14	79 45'7
2856	D. S. 353	11 21 17	3'02	102 7	19"8	vF, vS, cE 30°, cbM, susp	23 18	102 20
2857	W. VII. 229	11 21 17	3'11	80 7'6	19"8	F, pL, m E 160°, bM	23 21	80 20'8
2858	W. VII. 230	11 21 19	3'13	75 34'0	19"8	F, S, R, bM	23 24	75 47'2
2859	W. VII. 232	11 21 27	3'11	80 7'2	19"8	cF, vS, R, bM	23 31	80 20'4
2860	W. VII. 233	11 21 27	3'13	75 11'3	19"8	vF, S, iF, N	23 32	75 24'5
2861	J. 1181	11 21 27	3'19	50 23'1	19"8	F, S, R, dif	23 35	50 36'3
2862	W. VII. 234	11 21 29	3'11	79 6'1	19"8	F, S, iF	23 33	79 19'3
2863	W. VII. 235	11 21 39	3'11	80 8'1	19"8	pF, vS, E 110°, bM	23 43	80 21'3
2864	W. VII. 236	11 21 43	3'12	76 51'9	19"8	F, vS, iF	23 48	77 5'1
2865	W. VII. 237	11 21 45	3'11	80 6'6	19"8	vF, S, dif	23 49	80 19'8
2866	W. VII. 238	11 21 45	3'11	80 11'2	19"8	vF, vS, iF	23 49	80 24'4
2867	W. VII. 239	11 21 46	3'11	80 8'5	19"8	eF, S, iF, v diffic, * 14 np	23 50	80 21'7
2868	W. VII. 241	11 21 51	3'11	80 8'1	19"8	vF, S, iF, N	23 55	80 21'3
2869	W. VII. 243	11 21 54	3'11	80 12'7	19"8	vF, S, R, bM, spir	23 58	80 25'9
2870	W. VII. 244	11 21 56	3'12	77 21'8	19"8	F, pL, dif, diffic	24 1	77 35'0
2871	W. VII. 245	11 22 6	3'11	80 37'6	19"8	F, cS, E 85°	24 10	80 50'8
2872	F. 788	11 22 8	2'66	152 13	19"8	vL, m E, bM	23 54	152 26
2873	W. VII. 246	11 22 11	3'12	76 0'6	19"8	pF, cS, E 5°, bM	24 16	76 13'8
2874	W. VII. 247	11 22 12	3'11	78 35'9	19"8	F, pS, iF, ? Cl	24 16	78 49'1
2875	W. VII. 248	11 22 19	3'12	76 14'3	19"8	F, vS, R, bM, * 9 sp	24 24	76 27'5
2876	W. VII. 249	11 22 19	+ 3'11	80 12'6	+ 19"8	vF, S, dif	24 23	80 25'8

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2877	W. VII. 250	h m s II 22 21	+ 3°12'	76 22'5	+ 19"8	F, S, R, lbM	m s 24 26	76 35'7
2878	W. VII. 251	II 22 23	3°11'	79 15'6	19"8	pF, vS, iF, N	24 27	79 28'8
2879	W. VII. 252	II 22 30	3°11'	80 12'8	19"8	vF, S, diff	24 34	80 26'0
2880	W. VII. 253	II 22 37	3°12'	76 1'8	19"8	pF, vS, R, bM	24 42	76 15'0
2881	W. VII. 254	II 22 39	3°12'	76 43'1	19"8	F, vS	24 44	76 56'3
2882	W. VII. 256	II 22 53	3°12'	77 14'3	19"8	vF, S, R, bM, diffic	24 58	77 27'5
2883	W. VII. 257	II 23 1	3°11'	78 19'1	19"8	F, vS, R, bM	25 5	78 32'3
2884	D. S. 354	II 23 4	1°99'	168 58	19"8	eeF, eS, cE 145°, susp	24 24	169 11
2885	W. VII. 258	II 23 8	3°11'	79 27'3	19"8	F, vS, R, bM, spir	25 12	79 40'5
2886	W. VII. 259	II 23 9	3°12'	77 40'0	19"8	F, vS, R, bM, spir, * 12 sf	25 14	77 53'2
2887	W. VII. 260	II 23 15	3°11'	79 50'4	19"8	F, pS, E, curved, * 10 nf 1'	25 19	80 3'6
2888	W. VII. 261	II 23 21	3°11'	79 19'2	19"8	pF, vS, E 130°	25 25	79 32'4
2889	D. S. 355	II 23 29	3°03'	102 19	19"8	eF, vS, cE 165°, bM, susp	25 30	102 32
2890	W. VII. 262	II 23 30	3°12'	76 2'6	19"8	vF, S, iF, N	25 35	76 15'8
2891	W. VII. 263	II 23 31	3°12'	76 33'0	19"8	F, S, iF, N, diffic	25 36	76 46'2
2892	W. VII. 264	II 23 34	3°11'	78 38'4	19"8	F, vS, iF	25 38	78 51'6
2893	W. VII. 265	II 23 37	3°12'	75 50'1	19"8	F, vS, E 345°	25 42	76 3'3
2894	W. VII. 266	II 23 41	3°12'	75 59'6	19"8	vF, cS, R, bM	25 46	76 12'8
2895	W. VII. 267	II 23 42	3°11'	79 15'1	19"8	F, vS, R, bM	25 46	79 28'3
2896	W. VII. 268	II 23 58	3°12'	76 52'6	19"8	pB, vS, annular?	26 3	77 5'8
2897	W. VII. 269	II 24 4	3°12'	77 40'7	19"8	cF, vS, R, bM, * 14 p	26 9	77 53'9
2898	W. VII. 270	II 24 4	3°12'	75 53'5	19"8	vF, S, iF, * 14 nf	26 9	76 6'7
2899	W. VII. 271	II 24 5	3°11'	78 35'6	19"8	F, S, E 350°, ? st	26 9	78 48'8
2900	W. VII. 272	II 24 13	3°12'	76 3'5	19"8	vF, S, R, bM	26 18	76 16'7
2901	W. VII. 273	II 24 16	3°12'	76 31'7	19"8	F, S, iF, N	26 21	76 44'9
2902	W. VII. 274	II 24 16	3°12'	75 0'3	19"8	F, S, R, bM, diffic	26 21	75 13'5
2903	W. VII. 275	II 24 24	3°12'	76 35'2	19"8	F, vS, iF, N	26 29	76 48'4
2904	W. VII. 276	II 24 26	3°12'	76 2'5	19"8	FN in vF, dif neb	26 31	76 15'7
2905	W. VII. 277	II 24 32	3°11'	80 7'3	19"8	vF, S, R, bM, * 14 nf	26 36	80 20'5
2906	W. VII. 278	II 24 33	3°12'	76 5'6	19"8	F, vS, R, bM	26 38	76 18'8
2907	W. VII. 279	II 24 34	3°11'	79 19'7	19"8	vF, S, iF, N	26 38	79 32'9
2908	W. VII. 280	II 24 34	3°12'	76 17'3	19"8	vF, S, iF, * 13 sp	26 39	76 30'5
2909	W. VII. 281	II 24 35	3°11'	77 45'4	19"8	vF, S, R, vlbM	26 39	77 58'6
2910	B. 282	II 24 49	3°04'	98 58	19"8	vF, vS, sbM * 13	26 51	99 11
2911	W. VII. 282	II 24 49	3°12'	76 15'0	19"8	vF, cS, iF, other nf	26 54	76 28'2
2912	W. VII. 283	II 24 52	3°11'	77 31'1	19"8	F, S, R, bM, diffic	26 56	77 44'3
2913	Sw. XI.	II 24 52	2°96'	119 39'5	19"8	B, pS, R, sf 3717	26 50	119 52'7
2914	W. VII. 284	II 24 56	3°12'	75 44'0	19"8	F, S, R, bM	27 1	75 57'2
2915	W. VII. 285	II 24 59	3°12'	74 44'6	19"8	F, cS, R, bM	27 4	74 57'8
2916	W. VII. 286	II 25 1	3°11'	77 32'6	19"8	F, S, R, bM	27 5	77 45'8
2917	W. VII. 287	II 25 4	3°11'	78 16'8	19"8	vF, pS, iF	27 8	78 30'0
2918	W. VII. 288	II 25 10	3°12'	75 58'7	19"8	vF, S, E 100°, bM	27 15	76 11'9
2919	W. VII. 289	II 25 19	3°12'	75 2'3	19"8	pF, cS, R, bM	27 24	75 15'5
2920	W. VII. 290	II 25 33	3°12'	76 40'1	19"9	F, vS, iF, N	27 38	76 53'4
2921	W. VII. 291	II 25 34	3°11'	78 55'8	19"9	eF, S, R, bM, spir	27 38	79 9'1
2922	W. VII. 292	II 25 36	3°12'	76 18'2	19"9	pB, vS, R, bM	27 41	76 31'5
2923	W. VII. 293	II 25 38	3°12'	76 3'7	19"9	vF, cS, iF, N, diffic, * 10 sf	27 43	76 17'0
2924	W. VII. 294	II 25 38	3°10'	80 12'2	19"9	vF, S, iF, N, * 11 nf	27 42	80 25'5
2925	J. 1182	II 25 45	3°21'	54 57'2	19"9	F, S, R, gbM, biN	27 53	55 10'5
2926	W. VII. 295	II 25 48	+ 3°12'	76 47'4	+ 19"9	pF, vS, R, stell N, spir	27 53	77 0'7

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2927	W. VII. 296	h m s II 25 49	+ s 3°12	7° 8'4	+ 19''9	vF, vS, iF	m s 27 54	7° 21'7
2928	J. 1183	II 26 1	3°21	54 54°0	19'9	F, cS, R, gbMN	28 9	55 7'3
2929	W. VII. 297	II 26 16	3°11	77 5'2	19'9	F, pS, dif	28 20	77 18'5
2930	W. VII. 298	II 26 30	3°11	79 8'1	19'9	F, cS, E 60°, bM	28 34	79 21'4
2931	W. VII. 299	II 26 35	3°11	76 45'5	19'9	F, cS, N, ? neb * 15 np 20''	28 39	76 58'8
2932	W. VII. 300	II 26 39	3°11	78 40'9	19'9	pB, S, R, bM	28 43	78 54'2
2933	J. 1184	II 26 45	3°20	54 54'2	19'9	F, cS, Ens, gbMN	28 53	55 7'5
2934	W. VII. 302	II 27 4	3°12	75 54'2	19'9	F, S, iF, * 14 nf ½'	29 9	76 7'5
2935	W. VII. 303	II 27 34	3°11	78 58'6	19'9	cF, cS, E 130°, bM	29 38	79 11'9
2936	W. VII. 304	II 27 41	3°12	76 12'9	19'9	F, S, R, bM	29 46	76 26'2
2937	W. VII. 305	II 27 49	3°11	79 7'3	19'9	F, S, R, bM	29 53	79 20'6
2938	W. VII. 306	II 28 21	3°12	75 32'7	19'9	cF, pS	30 26	75 46'0
2939	W. VII. 307	II 28 23	3°11	78 31'7	19'9	cF, S, R, bM	30 27	78 45'0
2940	B. 283	II 28 40	3°14	67 27	19'9	eF, susp [not seen at Birr]	30 46	67 40
2941	W. VII. 308	II 28 56	3°10	79 10'2	19'9	F, pL, R, bM, spir	31 0	79 23'5
2942	W. VII. 309	II 28 57	3°11	77 24'4	19'9	cF, cS, R, bM	31 1	77 37'7
2943	Kobold	II 29 0	3°33	34 22'8	19'9	pF, S	31 13	34 36'1
2944	F. 789	II 29 20	2°74	152 14'7	19'9	* 3°4 in eL neb	31 10	152 28'0
2945	W. VII. 310	II 29 50	3°11	76 17'9	19'9	pF, pS	31 54	76 31'2
2946	J. 1185	II 30 7	3°19	56 58'4	19'9	F, S, R, gylbM	32 15	57 11'7
2947	J. 1186	II 30 8	3°18	57 51'8	19'9	F, cS, R, gbM, r	32 15	58 5'1
2948	F. 790	II 32 15	2°77	152 45	20'0	eeL	34 6	152 58
2949	Finlay	II 34 ...	2°92	135 42	20'0	No descr	36 ...	135 55
2950	J. 1187	II 34 14	3°19	51 13'8	20'0	F, cS, lEpf, gbM, r	36 22	51 27'1
2951	Bidschof (3520)	II 36 9	3°12	69 28'4	20'0	* 14 in neb	38 14	69 41'7
2952	J. 1188	II 36 57	3°16	55 53'5	20'0	pF, S, dif, vlbM	39 3	56 6'8
2953	J. 1189	II 37 5	3°16	55 53'4	20'0	F, cS, dif, vlbM	39 11	56 6'7
2954	J. 1190	II 37 46	3°14	62 26'4	20'0	F, S, R, gbM, stell	39 52	62 39'7
2955	B. 406	II 37 50	3°12	69 37	20'0	eF, close to III 385	39 55	69 50
2956	J. 1191	II 38 0	3°14	62 27'6	20'0	pF, cS, lbM	40 6	62 40'9
2957	J. 1192	II 38 18	3°15	55 55'4	20'0	F, S, R, * 14 nr f	40 24	56 8'7
2958	J. 1193	II 38 25	3°15	56 4'6	20'0	F, S, dif	40 31	56 17'9
2959	J. 1194	II 38 52	3°15	56 7'4	20'0	vF, S, R, r	40 58	56 20'7
2960	J. 1195	II 39 0	3°15	54 13'2	20'0	F, S, dif, vlbM	41 6	54 26'5
2961	J. 1196	II 40 31	3°14	57 53'1	20'0	F, S, R, lbM	42 37	58 6'4
2962	Sw. XI.	II 41 58	3°05	101 32'0	20'0	eF, cL, iR, 2 st n, f	44 0	101 45'3
2963	B. 284	II 42 15	3°07	94 20	20'0	v diffie, * 12 npp 20''	44 18	94 33
2964	B. 407	II 42 35	3°09	77 11	20'0	eeF, eF * 3°f, 3's	44 39	77 24
2965	Sw. XI.	II 43 23	3°04	108 48'7	20'0	B, S, vmE, ray	45 25	109 2'0
2966	F. 791	II 43 35	2°88	154 7	20'0	pL, bM	45 30	154 20
2967	J. 1197	II 43 39	3°12	58 22'3	20'0	pB, vS, stell N	45 44	58 35'6
2968	Kobold	II 45 16	3°10	68 35'4	20'0	eF, vS, 3937 f 12°	47 20	68 48'7
2969	Sw. XI.	II 45 20	3°07	92 56'9	20'0	eF, pS, R, B * f 55°, np of 2	47 23	93 10'2
2970	Sw. XI.	II 46 3	3°04	112 20'7	20'0	pB, S, R, II 623 f	48 5	112 34'0
2971	J. 1198	II 46 13	3°12	58 32'1	20'0	F, S, R, psbM	48 18	58 45'4
2972	Sw. XI.	II 46 30	3°07	93 11'9	20'0	vF, pS, R, 2 B st n, np, sf of 2	48 33	93 25'2
2973	J. 1199	II 46 35	3°12	55 51'3	20'0	F, cS, dif	48 40	56 4'6
2974	Sw. XI.	II 46 45	3°07	94 21'0	20'0	eeF, vS, lE	48 48	94 34'3
2975	Sw. XII.	II 47 ...	+ 3°07	95 ...	+ 20'0	{ eeF, vS, lE, 3 B st in line n, circle of st n	49 ...	95 ...

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
2976	Sw. XI.	h m s II 47 20	s + 3°07'	91° 56'7	+ 20''0	vF, vS, R, vF * nr nf	m s 49 23	92° 10'0
2977	Sw. XI., Ho.	II 48 10	3°02'	126 55.1	20'0	eF, vS, * 7 sp	50 11	127 8.4
2978	J. 1200	II 49 10	3°11'	57 11.2	20'0	vF, S, v dif	51 14	57 24.5
2979	J. 1201	II 49 40	3°11'	56 3.8	20'0	F, S, R, lbM, r	51 44	56 17.1
2980	D. S. 356	II 50 28	2°91'	162 55	20'0	eeF, eS, R, cbM	52 24	163 8
2981	J. 1202	II 50 36	3°11'	56 1.9	20'0	F, S, R, gvlbM	52 40	56 15.2
2982	B. 285	II 50 38	3°10'	61 24	20'0	vF, stell, * 10 nr	52 42	61 37
2983	B. 286	II 51 8	3°07'	91 18	20'0	eF	53 11	91 31
2984	J. 1203	II 51 55	3°10'	58 31.4	20'0	F, cS, R, vlbM	53 59	58 44.7
2985	J. 1204	II 52 0	3°10'	58 29.4	20'0	pF, S, dif	54 4	58 42.7
2986	J. 1205	II 52 37	3°09'	58 22.7	20'0	F, vS, R, N, r	54 41	58 36.0
2987	J. 1206	II 56 15	3°08'	50 25.4	20'1	F, S, N, dif	58 18	50 38.8
2988	B. 408	II 56 32	3°07'	85 49	20'1	eF, r, * II.5 sf 2'.7	58 35	86 2
2989	B. 287	II 57 25	3°07'	87 25	20'1	vF, S, bM or 2 or 3 eF st inv	59 28	87 38
2990	F. 792	II 57 27	3°07'	78 11	20'1	eF, R, poss planetary	59 30	78 24
2991	F. 793	II 57 57	3°07'	78 36	20'1	eF, S, E 10°, bet 4082 and 83	o o	78 49
2992	J. 1207	II 58 4	3°07'	58 52.7	20'1	F, S, R, gbMN, r	o 7	59 6.1
2993	J. 1208	II 58 4	3°07'	56 21.5	20'1	F, S, N, dif, r	o 7	56 34.9
2994	F. 794	II 58 21	3°07'	76 31	20'1	eF, R, bM	o 24	76 44
2995	Sw. XI., Ho., D. S.	II 58 27	3°07'	117 9.3	20'1	vF, L, cE 120°, * 8 f	o 30	117 22.7
2996	D. S. 357	II 58 33	3°07'	119 12	20'1	F, vS, E 20, * sp	o 36	119 25
2997	B. 288	II 58 36	3°07'	68 56	20'1	eF, * 12 sf 2' [? = 4090]	o 39	69 9
2998	B. 289	II 58 46	3°07'	68 28	20'1	vF, others near	o 49	68 41
2999	J. 1209	II 58 48	3°07'	57 52.8	20'1	vF, vS, N	o 51	58 6.2
3000	D. S. 358	II 58 57	3°07'	118 54	20'1	F, indistinct (? defect)	1 o	119 7
3001	J. 1210	II 59 8	3°07'	55 42.2	20'1	F, S, R, gbM	1 11	55 55.6
3002	J. 1211	II 59 55	3°07'	55 51.2	20'1	F, cS, R, gbM, r	1 58	56 4.6
3003	J. 1212	II 59 59	3°07'	56 22.1	20'1	F, S, dif, N, r	2 2	56 35.5
3004	F. 795	I2 0 3	3°07'	75 58	20'1	R, bM, magn. 15	2 6	76 11
3005	D. S. 359	I2 0 3	3°08'	119 15	20'1	F, S, eE 160°, stell N	2 6	119 28
3006	F. 796	I2 0 15	3°07'	76 14	20'1	R, bM, magn 15	2 18	76 27
3007	J. 1213	I2 0 21	3°07'	57 52.7	20'1	vF, vS, diffie	2 24	58 6.1
3008	F. 797	I2 0 45	3°07'	75 39	20'1	R, bM, magn 13.5	2 48	75 52
3009	Sn. 221	I2 0 51	3°07'	76 34.4	20'1	pB, cS	2 54	76 47.8
3010	Sw. XI., Ho.	I2 0 52	3°08'	119 34.0	20'1	eF, cS, R, 2 st 10 sf 8'	2 55	119 47.4
3011	Sn. 124	I2 1 0	3°07'	78 50.5	20'1	pF, pS, E 110°	3 3	79 3.9
3012	F. 798	I2 1 15	3°07'	78 3	20'1	R, planetary ?, magn 15	3 18	78 16
3013	F. 799	I2 1 15	3°07'	79 13	20'1	bM, magn 15	3 18	79 26
3014	J. 1214	I2 1 35	3°06'	50 24.3	20'1	pB, cS, R, gbM, r	3 37	50 37.7
3015	Sw. XI., Ho.	I2 1 48	3°08'	120 44.3	20'1	pB, mE 45°, * 10.5 sf 1'	3 51	120 57.7
3016	F. 800	I2 2 9	3°07'	77 48	20'1	S, R, bM	4 12	78 1
3017	F. 801	I2 2 15	3°07'	75 37	20'1	R, bM, dif, magn 14.5	4 18	75 50
3018	F. 802	I2 2 21	3°07'	75 9	20'1	R, lbM, magn 13.5	4 24	75 22
3019	F. 803	I2 2 21	3°07'	75 14	20'1	R, bM, dif, magn 14.5	4 24	75 27
3020	F. 804	I2 2 27	3°07'	75 0	20'1	R, bM, magn 14	4 30	75 13
3021	F. 805	I2 2 51	3°07'	76 11	20'1	R, bM, v dif, magn 14.5	4 54	76 24
3022	J. 1215	I2 2 56	3°05'	50 28.9	20'1	pB, pS, gbM	4 58	50 42.3
3023	F. 806	I2 2 57	3°07'	74 52	20'1	R, bM, dif, magn 15	5 0	75 5
3024	F. 807	I2 3 3	3°07'	76 55	20'1	R, bM, magn 13.5	5 6	77 8
3025	F. 808	I2 3 15	+ 3°07'	79 3	+ 20'1	S, E, bM	5 18	79 16

No.	Observer.	R.A. 1860.	Prec. 1880	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3026	D. S. 360	12 3 20	+ 3°09'	119° 9'	+ 20''1	vF, vS, mE 40°, bet 2 st	5 24	119° 22'
3027	F. 809	12 3 21	3°07'	75 2	20'1	bM, magn 14	5 24	75 15
3028	F. 810	12 3 21	3°07'	77 28	20'1	bM, magn 15	5 24	77 41
3029	F. 811	12 3 34	3°06'	75 54	20'1	E 35°, magn 13.5	5 36	76 7
3030	F. 812	12 3 58	3°06'	75 5	20'1	R, bM, magn 14	6 0	75 18
3031	F. 813	12 3 58	3°06'	75 55	20'1	vF, wisp at 35°	6 0	76 8
3032	F. 814	12 4 4	3°06'	74 57	20'1	R, bM, magn 13.5	6 6	75 10
3033	F. 815	12 4 4	3°06'	75 39	20'1	bM, wisps ns o'5, magn 13.5	6 6	75 52
3034	F. 816	12 4 46	3°06'	75 2	20'1	vF, E, bM	6 48	75 15
3035	Sn. 222	12 5 4	3°06'	75 58.4	20'0	F, cS	7 6	76 11.7
3036	F. 817	12 5 10	3°06'	76 45	20'0	vF, spir	7 12	76 58
3037	F. 818	12 5 16	3°06'	79 14	20'0	R, planetary ?, magn 16	7 18	79 27
3038	F. 819	12 5 22	3°06'	77 52	20'0	R, bM, planetary ?, magn 16	7 24	78 5
3039	F. 820	12 5 28	3°06'	76 55	20'0	S, R, bM	7 30	77 8
3040	F. 821	12 5 28	3°06'	78 9	20'0	R, planetary ?, magn 16	7 30	78 22
3041	F. 822	12 5 34	3°06'	76 29	20'0	S, E	7 36	76 42
3042	Sn. 151	12 5 37	3°07'	78 21.4	20'0	pF, cL	7 40	78 34.7
3043	F. 823	12 5 40	3°06'	79 13	20'0	cS, Ens, magn 15	7 42	79 26
3044	Sn. 273, F.	12 5 41	3°06'	75 14.7	20'0	F, stell	7 43	75 28.0
3045	Sn. 224	12 5 51	3°06'	76 26.5	20'0	pF, cS, Ns = 10.5 magn	7 53	76 39.8
3046	Sn. 225, F.	12 6 0	3°06'	76 18.1	20'0	vF, pS, spir	8 2	76 31.4
3047	F. 824	12 6 10	3°06'	76 15	20'0	R, bM, magn 14.5	8 12	76 28
3048	Sn. 226	12 6 14	3°06'	76 9.1	20'0	F, S, ? * 13	8 16	76 22.4
3049	F. 825	12 6 28	3°06'	74 45	20'0	R, planetary ?, magn 16	8 30	74 58
3050	Sn. 227	12 6 40	3°06'	75 47.7	20'0	pB, cL, gbM	8 42	76 1.0
3051	Sn. 228	12 6 46	3°06'	76 2.9	20'0	pB, pS	8 48	76 16.2
3052	F. 826	12 6 46	3°06'	76 33	20'0	R, planetary ?, magn 16.5	8 48	76 46
3053	F. 827	12 6 52	3°06'	75 1	20'0	R, bM, planetary ?, magn 16	8 54	75 14
3054	F. 828	12 7 10	3°06'	75 42	20'0	R, planetary ?, magn 16.5	9 12	75 55
3055	F. 829	12 7 16	3°06'	77 9	20'0	bM, magn 15	9 18	77 22
3056	F. 830	12 7 28	3°06'	75 26	20'0	pL, vm E 50°	9 30	75 39
3057	D. S. 361	12 7 43	3°12'	133 42	20'0	cF, S, R (? defect)	9 48	133 55
3058	F. 831	12 7 46	3°06'	75 9	20'0	R, planetary ?, magn 16	9 48	75 22
3059	F. 832	12 7 52	3°06'	75 47	20'0	vF, spir, doubtful	9 54	76 0
3060	Sn. 229	12 7 54	3°06'	76 40.5	20'0	vF, S, IE o°, ? * 14 m	9 56	76 53.8
3061	Sn. 274, F.	12 7 57	3°06'	75 11.5	20'0	F, pL, spir	9 59	75 24.8
3062	Sn. 275	12 7 58	3°06'	75 37.6	20'0	F, S	10 0	75 50.9
3063	F. 833	12 8 4	3°06'	77 13	20'0	bM, magn 14.5	10 6	77 26
3064	Sn. 230	12 8 9	3°06'	76 11.9	20'0	cF, cL, E 5°	10 11	76 25.2
3065	F. 834	12 8 10	3°06'	74 49	20'0	R, planetary ?, magn 14	10 12	75 2
3066	F. 835	12 8 10	3°06'	75 46	20'0	pL, E 16°, spir	10 12	75 59
3067	J. 1216	12 8 10	3°05'	65 17.3	20'0	vF, vS, stell	10 12	65 30.6
3068	F. 836	12 8 16	3°06'	77 43	20'0	bM, magn 16	10 18	77 56
3069	F. 837	12 8 16	3°06'	79 3	20'0	bM, magn 15.5	10 18	79 16
3070	Sn. 231	12 8 17	3°06'	76 10.9	20'0	vF, vS	10 19	76 24.2
3071	Sn. 126	12 8 23	3°06'	79 40.5	20'0	eF, eS	10 25	79 53.8
3072	Sn. 127	12 8 28	3°06'	79 39.9	20'0	eF, eS, ?	10 30	79 53.2
3073	F. 838	12 8 34	3°06'	75 37	20'0	bM, magn 16	10 36	75 50
3074	Sn. 152, F.	12 8 38	3°06'	78 31.3	20'0	cF, pL, E 170°	10 40	78 44.6
3075	J. 1217	12 8 49	+ 3°05'	65 38.0	+ 20'0	F, vS, R, stell	10 51	65 51.3

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880	Description.	R.A. 1900.	N.P.D. 1900.
3076	Sn. 77	h m s 12 8 56	s + 3°06	80° 8'6	+ 20°0	vF, vS	m s 10 58	80 21'9
3077	F. 839	12 8 58	3°06	74 49	20°0	bM, magn 15	11 0	75 2
3078	F. 840	12 8 58	3°06	76 34	20°0	bM, magn 14	11 0	76 47
3079	F. 841	12 8 58	3°06	77 41	20°0	bM, magn 14	11 0	77 54
3080	F. 842	12 9 4	3°06	75 4	20°0	bM, magn 14	11 6	75 17
3081	F. 843	12 9 4	3°06	76 33	20°0	bM, magn 15	11 6	76 46
3082	J. 1218	12 9 7	3°05	65 22'8	20°0	vF, vS, dif, * 5 n 6'	11 9	65 36'1
3083	F. 844	12 9 16	3°06	76 38	20°0	bM, magn 15	11 18	76 51
3084	J. 1219	12 9 18	3°04	65 18'3	20°0	F, vS, R, dif	11 20	65 31'6
3085	Sn. 128	12 9 18	3°06	79 45'1	20°0	eF, vS, = * 13	11 20	79 58'4
3086	Sn. 78	12 9 19	3°06	80 12'8	20°0	eF, vS	11 21	80 26'1
3087	Sn. 234	12 9 20	3°06	75 56'0	20°0	F, S, eE 30°, neb ?	11 22	76 9'3
3088	Sn. 129	12 9 21	3°06	79 45'6	20°0	vF, vS, = * 14	11 23	79 58'9
3089	J. 1220	12 9 24	3°04	65 23'6	20°0	vF, S, vlbM, dif	11 26	65 36'9
3090	Sn. 79	12 9 24	3°06	79 46'9	20°0	vF, vS	11 26	80 0'2
3091	F. 845	12 9 28	3°06	75 14	20°0	bM, magn 14	11 30	75 17
3092	F. 846	12 9 28	3°06	79 10	20°0	bM, magn 15'5	11 30	79 23
3093	F. 847	12 9 40	3°06	74 58	20°0	bM, magn 14	11 42	75 11
3094	Sn. 277, F.	12 9 49	3°06	75 35'7	20°0	F, S, bM	11 51	75 49'0
3095	W. IV. 1, J. 1221	12 9 50	3°04	65 15'8	20°0	pF, S, vEpF, bM, * 5 p 35°, 1' s	11 52	65 29'1
3096	F. 848	12 9 52	3°05	74 44	20°0	bM, magn 14'5	11 54	74 57
3097	Sn. 80, F.	12 9 53	3°06	79 48'9	20°0	vF, S, lbM	11 55	80 2'2
3098	Sn. 5	12 10 1	3°06	82 1'8	20°0	pF, pS, E 45°	12 3	82 15'1
3099	Sn. 235, F.	12 10 2	3°06	76 46'1	20°0	vF, pL, 1E 0°	12 4	76 59'4
3100	F. 849	12 10 4	3°06	76 58	20°0	bM, wisps 45° ?, magn 14'5	12 6	77 11
3101	F. 850	12 10 10	3°06	77 18	20°0	bM, magn 15	12 12	77 31
3102	Sn. 6	12 10 17	3°06	82 32'0	20°0	pF, pS, ? *	12 19	82 45'3
3103	Sn. 81	12 10 21	3°06	79 51'7	20°0	vF, vS, stell	12 23	80 5'0
3104	D. S. 362	12 10 25	3°42	168 56	20°0	eeF, cS, or v S Cl, * 12 sp 0'5	12 42	169 9
3105	Sn. 177, F.	12 10 27	3°06	76 49'9	20°0	vF, pS, E 40°	12 29	77 3'2
3106	Sn. 130	12 10 38	3°06	79 36'5	20°0	vF, vS, E 95°	12 40	79 49'8
3107	Sn. 153, F.	12 10 39	3°06	78 22'6	20°0	F, vS, 1E, mbM	12 41	78 35'9
3108	F. 851	12 10 40	3°06	75 52	20°0	R, bM, magn 14	12 42	76 5
3109	F. 852	12 10 40	3°06	76 5	20°0	bM, magn 14	12 42	76 18
3110	J. 1222	12 10 43	3°02	51 50'5	20°0	vF, S, dif	12 44	52 3'8
3111	Sn. 36	12 10 43	3°06	80 47'6	20°0	eF, S ?	12 45	81 0'9
3112	W. IV. 2	12 10 44	3°04	63 11'5	20°0	F, S, iF, N	12 46	63 24'8
3113	Sn. 7	12 10 49	3°06	82 2'1	20°0	cF, pL, E	12 51	82 15'4
3114	Sn. 82	12 10 49	3°06	80 5'3	20°0	cF, vS, stell	12 51	80 18'6
3115	Sn. 8	12 10 51	3°06	82 34'1	20°0	vF, pL, E	12 53	82 47'4
3116	W. IV. 3	12 10 53	3°04	64 8'7	20°0	vF, cS, R, bM	12 55	64 22'0
3117	Sn. 83	12 10 56	3°06	80 9'0	20°0	eF, S, E 30°	12 58	80 22'3
3118	Sn. 131, F.	12 11 3	3°06	79 43'3	20°0	vF, cS, 1E, dif	13 5	79 56'6
3119	W. IV. 4	12 11 4	3°04	64 32'1	20°0	pF, cS, R, bM	13 6	64 45'4
3120	F. 853	12 11 16	3°05	75 31	20°0	R, bM, magn 14'5	13 18	75 44
3121	F. 854	12 11 16	3°05	75 59	20°0	eF, 1E, magn 15	13 18	76 12
3122	W. IV. 5	12 11 17	3°04	64 0'3	20°0	pF, pL, E 150°, pLN	13 19	64 13'6
3123	Sn. 37	12 11 19	3°06	81 9'4	20°0	Neb, or *	13 21	81 22'7
3124	Sn. 132	12 11 20	3°06	79 38'1	20°0	cF, S, = * 13	13 22	79 51'4
3125	W. IV. 6	12 11 21	+ 3°04	64 51'4	+ 20°0	F, S, R, bM	13 23	65 4'7

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3126	F. 855	h m s 12 11 28	+ 3°05'	75° 25'	+ 20'0	R, bM, magn 15	m s 13 30	75° 38'
3127	F. 856	12 11 28	3°06'	77° 22'	20'0	R, bM, magn 16	13 30	77 35
3128	F. 857	12 11 34	3°05'	77° 30'	20'0	1E, D ?, magn 14.5	13 36	77 43
3129	Sn. 133	12 11 37	3°06'	79° 37.6	20'0	vF, eS, = * 14	13 39	79 50.9
3130	Sn. 38	12 11 41	3°06'	80° 59.5	20'0	eF, pS, m E 140°, ?	13 43	81 12.8
3131	Sn. 39	12 11 42	3°06'	81° 21.6	20'0	vF, S	13 44	81 34.9
3132	Sn. 40	12 11 43	3°06'	81° 21.6	20'0	vF, S, stell	13 45	81 34.9
3133	Sn. 41	12 11 47	3°06'	81° 34.8	20'0	eF, S, dif	13 49	81 48.1
3134	Sn. 84	12 11 48	3°06'	80° 15.7	20'0	vF, vS, E 0°	13 50	80 29.0
3135	W. IV. 7	12 11 49	3°03'	61° 43.7	20'0	vF, S, iF	13 50	61 57.0
3136	Sn. 2	12 11 49	3°06'	83° 2.1	20'0	F	13 51	83 15.4
3137	F. 858	12 11 52	3°05'	76° 46'	20'0	pL, E 45°	13 54	76 59
3138	F. 859	12 11 52	3°05'	76° 48'	20'0	R, bM, magn 15.5	13 54	77 1
3139	Sn. 85	12 11 53	3°06'	80° 5.6	20'0	eF, vS	13 55	80 18.9
3140	W. IV. 8	12 11 54	3°03'	62° 5.5	20'0	vF, pS, iF, dif	13 55	62 18.8
3141	W. IV. 9	12 11 54	3°04'	65° 2.1	20'0	F, S, R, bM	13 56	65 15.4
3142	F. 860	12 11 58	3°05'	75° 15'	20'0	R, bM, magn 14.5	14 0	75 28
3143	W. IV. 10	12 12 2	3°03'	61° 55.4	20'0	vF, S, R	14 3	62 8.7
3144	W. IV. 11	12 12 6	3°04'	63° 55.5	20'0	vF, S, R, bM	14 8	64 8.8
3145	W. IV. 12	12 12 7	3°04'	64° 55.7	20'0	F, S, R, bM	14 9	65 9.0
3146	W. IV. 13	12 12 9	3°04'	63° 30.5	20'0	eF, S, iF	14 10	63 43.8
3147	Sn. 178	12 12 11	3°05'	77° 12.3	20'0	vF, vS, stell	14 13	77 25.6
3148	Sn. 42	12 12 12	3°06'	81° 21.2	20'0	vF, S	14 14	81 34.5
3149	Sn. 179, F.	12 12 17	3°05'	76° 55.1	20'0	vF, vS	14 19	77 8.4
3150	Sn. 43	12 12 21	3°06'	81° 25.5	20'0	vF, S	14 23	81 38.8
3151	F. 861	12 12 22	3°05'	79° 49	20'0	R, bM, magn 13.5	14 24	80 2
3152	Sw. XI.	12 12 24	3°11'	115° 24.0	20'0	pB, S, R, 4st sf, * 8 np	14 28	115 37.3
3153	Kobold	12 12 28	3°06'	83° 49.5	20'0	vF, S, 4273 f	14 30	84 2.8
3154	W. IV. 15	12 12 30	3°04'	63° 38.2	20'0	F, S, R, bM	14 32	63 51.5
3155	B. 290	12 12 36	3°06'	83° 14	20'0	cF, S, sbM, ? vF st inv	14 38	83 27
3156	Sn. 86	12 12 36	3°06'	80° 4.4	20'0	vF, vS	14 38	80 17.7
3157	F. 862	12 12 40	3°05'	76° 49	20'0	R, bM, magn 14	14 42	77 2
3158	Sn. 87	12 12 41	3°06'	79° 55.8	20'0	eF, cS, ??	14 43	80 9.1
3159	F. 863	12 12 46	3°05'	77° 34	20'0	R, mbM, magn 15	14 48	77 47
3160	Sn. 88	12 12 52	3°06'	80° 7.3	20'0	eF, cS	14 54	80 20.6
3161	Sn. 89	12 12 53	3°06'	80° 13.5	20'0	eF, vS, ? *, conn w f one	14 55	80 26.8
3162	Sn. 90	12 12 55	3°06'	80° 13.5	20'0	eF, vS, ? *, conn w p one	14 57	80 26.8
3163	Sn. 90 *	12 12 55	3°06'	79° 58.0	20'0	Neb or * ?	14 57	80 11.3
3164	W. IV. 18	12 13 1	3°03'	64° 16.0	20'0	eF, S, iF, ? D *	15 2	64 29.3
3165	W. IV. 19	12 13 2	3°03'	61° 14.8	20'0	F, cS, iF, lbM	15 3	61 28.1
3166	Sw. XII.	12 13 8	2°92'	28° 31.7	20'0	eeF, S, p of 2	15 5	28 45.0
3167	Sn. 134, F.	12 13 11	3°06'	79° 40.6	20'0	vF, vS, 1E 65°, bM	15 13	79 53.9
3168	W. IV. 21	12 13 16	3°03'	61° 18.1	20'0	F, cS, E 45°, bM	15 17	61 31.4
3169	W. IV. 22	12 13 18	3°03'	62° 37.5	20'0	vF, vS, R, bM	15 19	62 50.8
3170	Sn. 91, F.	12 13 19	3°06'	79° 48.0	20'0	F, S, R, bM	15 21	80 1.3
3171	W. IV. 23	12 13 21	3°03'	63° 39.7	20'0	pB, S, R, bM	15 22	63 53.0
3172	W. IV. 24	12 13 22	3°03'	61° 24.2	20'0	vF, S, iF	15 23	61 37.5
3173	F. 364	12 13 22	3°05'	77° 54	20'0	R, bM, magn 13	15 24	78 7
3174	Sn. 135, F.	12 13 22	3°06'	78° 58.8	20'0	eF, vS, * 13 att sp	15 24	79 12.1
3175	F. 865	12 13 22	+ 3°06'	79° 23	+ 20'0	R, bM, magn 13	15 24	79 36

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
		h m s	s				m s	
3176	W. IV. 25	12 13 27	+ 3°03'	63° 42'5	+ 20''0	vF, vS, R, bM	15 28	63° 55'8
3177	F. 866	12 13 28	3°05'	75° 6	20°0	L, vm E 45°, 2'5 1	15 30	75 19
3178	W. IV. 26	12 13 32	3°03'	63° 3'1	20°0	F, vS, iF, N	15 33	63 16'4
3179	W. IV. 27	12 13 35	3°03'	63° 3'4	20°0	F, vS, iF, N	15 36	63 16'7
3180	Sw. XII.	12 13 38	2°92'	28° 31'7	20°0	vF, pL, R, * 7°5 s, f of 2	15 35	28 45°0
3181	W. IV. 28	12 13 40	3°03'	59° 52'6	20°0	pF, pL, lE 150°	15 41	60 5'9
3182	Sn. 237	12 13 41	3°05'	76° 29'7	20°0	vF, S, bi N	15 43	76 43°0
3183	Sn. 9	12 13 41	3°06'	82° 32'1	20°0	vF, cS, st ?	15 43	82 45'4
3184	W. IV. 29	12 13 44	3°03'	64° 18'5	20°0	pF, cS, E 40°, bM	15 45	64 31'8
3185	W. IV. 30	12 13 49	3°03'	63° 47'6	20°0	F, vS, R, bM	15 50	64 0'9
3186	W. IV. 31	12 13 52	3°03'	64° 33'3	20°0	pB, S, R, bM	15 53	64 46'6
3187	F. 867	12 13 52	3°05'	78° 4	20°0	vl E, bM, magn 14'5	15 54	78 17
3188	F. 868	12 13 52	3°05'	78° 13	20°0	R, bM, magn 13'5	15 54	78 26
3189	W. IV. 32	12 13 53	3°03'	63° 47'8	20°0	F, vS, R, bM	15 54	64 1'1
3190	Sn. 136	12 13 55	3°06'	79° 39'2	20°0	eF, eS	15 57	79 52'5
3191	Sn. 45	12 13 57	3°06'	81° 31'1	20°0	vF, vS, R	15 59	81 44'4
3192	F. 869	12 13 58	3°05'	77° 29	20°0	lbM, planetary ?, magn 15	16 0	77 42
3193	W. IV. 33	12 13 59	3°03'	61° 19'4	20°0	F, S, iF, ? D *	16 0	61 32'7
3194	W. IV. 34	12 14 6	3°03'	64° 5'4	20°0	F, vS, R, bM	16 7	64 18'7
3195	W. IV. 36	12 14 15	3°03'	63° 24'9	20°0	vF, S, iF	16 16	63 38'2
3196	F. 870	12 14 22	3°05'	77° 29	20°0	bM, magn 14	16 24	77 42
3197	W. IV. 37	12 14 23	3°03'	63° 46'8	20°0	F, vS, R, bM	16 24	64 0'1
3198	W. IV. 38	12 14 28	3°03'	62° 51'4	20°0	eF, S, iF	16 29	63 4'7
3199	F. 871	12 14 34	3°05'	78° 38	20°0	R, bM, magn 14	16 36	78 51
3200	W. IV. 39	12 14 35	3°03'	62° 27'7	20°0	vF, S, iF, N	16 36	62 41'0
3201	W. IV. 40	12 14 38	3°03'	63° 29'9	20°0	vF, S, R, bM	16 39	63 43'2
3202	W. IV. 41	12 14 42	3°03'	62° 10'0	20°0	eF, S, iF	16 43	62 23'3
3203	W. IV. 42	12 14 43	3°03'	63° 20'3	20°0	pF, S, E 150°	16 44	63 33'6
3204	W. IV. 43	12 14 47	3°03'	64° 58'5	20°0	F, S, E	16 48	65 11'8
3205	W. IV. 44	12 14 48	3°03'	62° 52'9	20°0	cF, S, iF, N	16 49	63 6'2
3206	W. IV. 45	12 14 48	3°03'	62° 51'7	20°0	cF, S, iF, N	16 49	63 5'0
3207	W. IV. 46	12 14 49	3°03'	64° 52'0	20°0	F, S, E 100°	16 50	65 5'3
3208	F. 872	12 14 52	3°05'	77° 16	20°0	F, pL, vm E 70°	16 54	77 29
3209	F. 873	12 14 58	3°05'	77° 29	20°0	pL, E 140°, sbM *, spir	17 0	77 42
3210	W. IV. 47	12 15 0	3°02'	60° 47'5	20°0	F, S, R, bM, spir	17 1	61 0'8
3211	Sn 93	12 15 0	3°06'	80° 14'0	20°0	eF, S	17 2	80 27'3
3212	W. IV. 48	12 15 2	3°02'	61° 2'2	20°0	F, S, R, glbM	17 3	61 15'5
3213	W. IV. 49	12 15 5	3°03'	65° 21'9	20°0	pF, S, R, bM, * 12 att np	17 6	65 35'2
3214	W. IV. 50	12 15 7	3°02'	61° 59'2	20°0	vF, vS, R, bM	17 8	62 12'5
3215	W. IV. 51	12 15 8	3°03'	63° 10'2	20°0	vF, pS, E 95°, bM	17 9	63 23'5
3216	W. IV. 52	12 15 9	3°03'	63° 56'2	20°0	F, vS, R, bM	17 10	64 9'5
3217	W. IV. 53	12 15 11	3°03'	62° 50'2	20°0	cF, S, R, bM, spir	17 12	63 3'5
3218	Sn 12	12 15 12	3°06'	82° 17'5	20°0	vF, pL, biN ?	17 14	82 30'8
3219	W. IV. 54	12 15 13	3°03'	63° 16'2	20°0	eF, vS, R, bM, spir	17 14	63 29'5
3220	F. 874	12 15 16	3°05'	78° 38	20°0	R, bM, magn 15'5	17 18	78 51
3221	W. IV. 55	12 15 17	3°03'	63° 56'4	20°0	eF, S, iF, v diff	17 18	64 9'7
3222	W. IV. 56	12 15 17	3°02'	60° 23'5	20°0	F, eS, dif	17 18	60 36'8
3223	Sn 137	12 15 23	3°06'	79° 44'2	20°0	vF, pS, am 3 vF st	17 25	79 57'5
3224	F. 875	12 15 28	3°05'	77° 4	20°0	R, bM, magn 14'5	17 30	77 17
3225	Sn 13	12 15 30	+ 3°06'	82° 32'8	+ 20°0	F, S, ? st	17 32	82 46'1

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3226	W. IV. 58	h m s 12 15 33	s + 3°03	63 ° 9'4	+ 20°0	vF, vS, bM *, spir	m s 17 34	63 ° 22'7
3227	W. IV. 59	12 15 33	3°03	65 8'3	20°0	F, S, iF	17 34	65 21'6
3228	W. IV. 60	12 15 36	3°03	64 53'6	20°0	F, vS, E 150°, bM	17 37	65 6'9
3229	Sn 14	12 15 36	3°06	82 32'7	20°0	eF, cS, dif, ?	17 38	82 46'0
3230	W. IV. 61	12 15 38	3°02	61 28'7	20°0	F, vS, iF	17 39	61 42'0
3231	W. IV. 62	12 15 41	3°03	64 24'2	20°0	pF, S, iF, bM	17 42	64 37'5
3232	W. IV. 63	12 15 45	3°03	64 47'8	20°0	F, eS, neb *	17 46	65 1'1
3233	F. 876	12 15 46	3°05	76 39	20°0	R, bM, magn 15	17 48	76 52
3234	W. IV. 64	12 15 51	3°02	61 6'7	20°0	F, S, R, bM	17 52	61 20'0
3235	F. 877	12 15 52	3°05	75 41	20°0	IE, bM, magn 15	17 54	75 54
3236	F. 878	12 15 52	3°05	79 8	20°0	R, bM, magn 14	17 54	79 21
3237	W. IV. 65	12 15 57	3°02	60 43'8	20°0	F, cS, iF, eFN, att * 14 sp	17 58	60 57'1
3238	F. 879	12 16 4	3°04	74 47	20°0	R, bM, magn 14	18 6	75 0
3239	F. 880	12 16 4	3°05	77 31	20°0	E, lbM, magn 15	18 6	77 44
3240	F. 881	12 16 4	3°05	78 53	20°0	R, bM, magn 15	18 6	79 6
3241	W. IV. 66	12 16 7	3°02	62 19'1	20°0	F, vS, R, bM	18 8	62 32'4
3242	W. IV. 67	12 16 8	3°02	62 58'4	20°0	vF, S, iF	18 9	63 11'7
3243	W. IV. 68	12 16 10	3°02	61 27'4	20°0	F, S, iF, dif	18 11	61 40'7
3244	F. 882	12 16 10	3°04	74 51	20°0	R, bM, magn 14	18 12	75 4
3245	F. 883	12 16 10	3°05	80 6	20°0	vF, pL, bM, ? defect	18 12	80 19
3246	Sn. 240	12 16 11	3°05	76 10'3	20°0	eF, pL, vinE 145°, ?	18 13	76 23'6
3247	W. IV. 69	12 16 13	3°02	60 19'8	20°0	pF, pS, E 170°, bM	18 14	60 33'1
3248	W. IV. 70	12 16 14	3°02	63 40'3	20°0	eeF, S, R, bM } chain of	18 15	63 53'6
3249	W. IV. 71	12 16 16	3°02	63 46'6	20°0	eeF, S, iF } about 18	18 17	63 59'9
3250	W. IV. 72	12 16 16	3°02	63 35'7	20°0	eeF, S, R, bM } neb	18 17	63 49'0
3251	W. IV. 73	12 16 17	3°02	63 34'2	20°0	eeF, S, R, bM } s to n	18 18	63 47'5
3252	W. IV. 74	12 16 24	3°02	60 36'3	20°0	F, S, iF, ? Cl	18 25	60 49'6
3253	D. S. 363	12 16 24	3°14	123 51	20°0	eF, vL, mE 20°, lbM	18 30	124 4
3254	F. 884	12 16 28	3°04	69 46	20°0	B, S, R, planetary	18 30	69 59
3255	F. 885	12 16 28	3°05	79 35	20°0	R, bM, magn 13	18 30	79 48
3256	B. 291	12 16 28	3°06	82 9	20°0	* 12 in S neb [= III 95 or 96]	18 30	82 22
3257	B. 292	12 16 32	3°06	81 57	20°0	eF	18 34	82 10
3258	Sn. 241, F.	12 16 38	3°05	76 45'9	20°0	cF, cS, R, exc N s	18 40	76 59'2
3259	B. 293, Sn. 16	12 16 40	3°06	82 2'1	20°0	F, cS, R, bM	18 42	82 15'4
3260	B. 294, Sn. 17	12 16 45	3°06	82 7'0	20°0	F, cS, R, bM	18 47	82 20'3
3261	F. 886	12 16 46	3°05	77 45	20°0	pS, F * M, spir, doubtful	18 48	77 58
3262	W. IV. 75	12 16 47	3°02	61 49'9	20°0	F, S, iF, Cl ?	18 48	62 3'2
3263	W. IV. 76	12 16 49	3°02	61 1'4	20°0	pF, S, R, bM, spir, 2nd sp att	18 50	61 14'7
3264	W. IV. 77	12 16 50	3°02	63 39'9	20°0	vF, S, R, bM	18 51	63 53'2
3265	Sn. 48	12 16 51	3°06	81 25'2	20°0	pF, S, N, ? *	18 53	81 38'5
3266	Sn. 49	12 16 52	3°06	81 26'3	20°0	eF, S, biN, ? st	18 54	81 39'6
3267	B. 295, Sn. 18	12 16 58	3°06	82 10'9	20°0	pF, cS, R	19 0	82 24'2
3268	Sn. 19	12 16 59	3°06	82 37'1	20°0	pB, ? *	19 1	82 50'4
3269	W. IV. 78	12 17 3	3°02	61 47'6	20°0	eF, S, iF	19 4	62 0'9
3270	W. IV. 79	12 17 5	3°02	61 38'7	20°0	vF, vS, iF	19 6	61 52'0
3271	Sn. 50	12 17 6	3°06	81 16'2	20°0	eF, pS, dif, ? ?	19 8	81 29'5
3272	W. IV. 80	12 17 7	3°03	65 55'9	20°0	vF, S, iF, * 13 att n	19 8	66 9'2
3273	Sn. 95	12 17 8	3°05	80 41'1	20°0	cF, pL, E 48°, * 10'5 inv	19 10	80 54'4
3274	Sn. 96	12 17 8	3°05	79 57'4	20°0	eF, vS, ?	19 10	80 10'7
3275	F. 887	12 17 10	+ 3°05	78 48	+ 20°0	R, bM, magn 14'5	19 12	79 1

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3276	W. IV. 81	h m s 12 17 12	s + 3°02	63 ° 24' 3	+ 20" 0	vF, vS, R, bM	m s 19 13	63 ° 37' 6
3277	W. IV. 82	12 17 14	3°02	63 39' 6	20' 0	eF, cS, dif	19 15	63 52' 9
3278	W. IV. 83	12 17 14	3°02	61 48' 0	20' 0	vF, S, iF, N	19 15	62 1' 3
3279	Sn. 242	12 17 18	3°05	76 22' 3	20' 0	pF, S, ? 2 st	19 20	76 35' 6
3280	F. 888	12 17 19	3°05	76 0' 2	20' 0	S, R, bM, magn 15.5	19 21	76 13' 5
3281	Sn. 51	12 17 20	3°06	81 24' 1	20' 0	pB, pS, N, stell	19 22	81 37' 4
3282	W. IV. 84	12 17 26	3°02	63 33' 2	20' 0	eF, vS, R, bM	19 27	63 46' 5
3283	W. IV. 85	12 17 27	3°02	62 0' 7	20' 0	vF, S, R, bM, spir	19 28	62 14' 0
3284	F. 889	12 17 28	3°05	78 24' 2	20' 0	vS, R, bM, magn 14	19 30	78 37' 5
3285	W. IV. 86	12 17 32	3°02	64 21' 8	20' 0	vF, vS, R, bM, in dif neb E 25°	19 33	64 35' 1
3286	W. IV. 87	12 17 32	3°02	65 28' 4	20' 0	S, pR	19 33	65 41' 7
3287	W. IV. 88	12 17 35	3°02	64 37' 8	20' 0	eF, cS, iF, in dif neby	19 36	64 51' 1
3288	W. IV. 89	12 17 37	3°02	64 16' 5	20' 0	vF, vS, R, bM	19 38	64 29' 8
3289	Sw. XI., Ho.	12 17 39	3°13	115 15' 3	20' 0	eF, vS, R, v diffic, * 7 nf, * 8 np	19 44	115 28' 6
3290	Sw. XI., Ho.	12 17 45	3°16	128 59' 9	20' 0	pF, vS, R, * att, 4373 f	19 51	129 13' 2
3291	F. 892	12 17 46	3°05	77 13	20' 0	R, bM, magn 14	19 48	77 26
3292	F. 890	12 17 47	3°03	71 1	20' 0	F, vS, R, bM	19 48	71 14
3293	F. 891	12 17 47	3°03	71 47	20' 0	F, eS, R, planetary	19 48	72 0
3294	W. IV. 90	12 17 48	3°02	63 37' 5	20' 0	eF, cS, dif	19 49	63 50' 8
3295	W. IV. 91	12 17 48	3°01	60 31' 0	20' 0	cF, S, R, bM	19 49	60 44' 3
3296	W. IV. 92	12 17 56	3°02	64 50' 4	20' 0	cF, neb * 13, * 13 sp	19 57	65 3' 7
3297	W. IV. 93	12 17 57	3°02	62 27' 3	20' 0	vF, pL, R, bM, spir	19 58	62 40' 6
3298	F. 893	12 17 58	3°04	72 11	20' 0	S, E 150°, bM	20 0	72 24
3299	W. IV. 95	12 18 3	3°01	61 50' 9	20' 0	vF, vS, R, bM, spir	20 3	62 4' 2
3300	W. IV. 96	12 18 3	3°02	63 15' 9	20' 0	pF, pS, E 80°, bM	20 4	63 29' 2
3301	F. 894	12 18 4	3°04	75 4	20' 0	vF, vS, R	20 6	75 17
3302	W. IV. 97	12 18 9	3°02	63 20' 7	20' 0	eF, vS, iF	20 10	63 34' 0
3303	Sn. 244, F.	12 18 9	3°05	76 30' 7	20' 0	vF, vS	20 11	76 44' 0
3304	W. IV. 98	12 18 10	3°02	63 48' 0	20' 0	eF, S, R	20 11	64 1' 3
3305	F. 895	12 18 10	3°05	77 23' 2	20' 0	vlE, bM, magn 15	20 12	77 36' 5
3306	W. IV. 99	12 18 12	3°01	61 49' 3	20' 0	vF, vS, iF, N	20 12	62 2' 6
3307	F. 896	12 18 16	3°04	75 4	20' 0	R, bM, magn 15	20 18	75 17
3308	W. IV. 100	12 18 17	3°02	62 30' 5	20' 0	F, eS, E 70°, bM	20 18	62 43' 8
3309	W. IV. 101	12 18 20	3°01	60 50' 6	20' 0	F, pS, R, bM, spir	20 20	61 3' 9
3310	B. 297	12 18 25	3°04	73 33	20' 0	vF, S, dif, sbM	20 27	73 46
3311	Sn. 185, F.	12 18 27	3°05	76 57' 9	20' 0	vF, cS, mE 135°	20 29	77 11' 2
3312	W. IV. 102	12 18 28	3°02	65 38' 5	20' 0	eF, S, R, bM, v diffic	20 29	65 51' 8
3313	F. 897	12 18 28	3°04	73 23	20' 0	F, vS, R, planetary, B 297 ssp	20 30	73 36
3314	W. IV. 103	12 18 29	3°02	65 38' 0	20' 0	vF, S, R, bM	20 30	65 51' 3
3315	F. 898	12 18 34	3°05	76 55	20' 0	E, bM, magn 15	20 36	77 8
3316	W. IV. 104	12 18 35	3°02	63 3' 7	20' 0	eF, vS, bM, ? neb	20 36	63 17' 0
3317	W. IV. 105	12 18 37	3°02	63 52' 9	20' 0	eF, S, E	20 38	64 6' 2
3318	Sn. 139	12 18 43	3°05	79 27' 6	20' 0	pB, S, = * 10.5	20 45	79 40' 9
3319	Sn. 140	12 18 44	3°05	78 50' 0	20' 0	pF, pS	20 46	79 3' 3
3320	Sn. 155	12 18 44	3°05	78 46' 0	20' 0	pF, pS, iF, FN	20 46	78 59' 3
3321	W. IV. 106	12 18 45	3°02	63 8' 5	20' 0	vF, vS, R, ? D *	20 46	63 21' 8
3322	Sn. 52	12 18 46	3°06	81 40' 0	20' 0	cF, pS, m E 130°	20 48	81 53' 3
3323	W. IV. 107	12 18 48	3°01	61 40' 9	20' 0	cF, vS, R, bM, neb * att	20 48	61 54' 2
3324	W. IV. 108	12 18 49	3°01	62 29' 1	20' 0	cF, vS, R, bM, spir	20 49	62 42' 4
3325	W. IV. 109	12 18 49	+ 3°02	65 19' 7	+ 20' 0	F, S	20 50	65 33' 0

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3326	W. IV. 110	h m s 12 18 51	s + 3°02	65° 27' 4	+ 20" 0	F, S, iF	m s 20 52	65° 40' 7
3327	F. 899	12 18 52	3°04	74 20	20" 0	bM, magn 15	20 54	74 33
3328	Sn. 141, F.	12 18 52	3°05	79 10' 2	20" 0	vF, vS, bM	20 54	79 23' 5
3329	W. IV. 112	12 18 56	3°01	61 39' 7	20" 0	vF, S, iF, att 4393	20 56	61 53' 0
3330	J. 1223	12 18 58	3°00	58 22' 5	20" 0	F, cS, Epf, gbM	20 58	58 35' 8
3331	Sn. 186, F.	12 19 0	3°05	77 24' 7	20" 0	eF, cS, E 78°, bM	21 2	77 38' 0
3332	W. IV. 113	12 19 4	3°02	63 56' 7	20" 0	vF, vS, iF, N	21 5	64 10' 0
3333	Sn. 248	12 19 4	3°04	76 5' 4	20" 0	vF, vS, ? * 14	21 6	76 18' 7
3334	W. IV. 114	12 19 10	3°01	60 45' 7	20" 0	vF, pS, R, bM	21 10	60 59' 0
3335	W. IV. 116	12 19 19	3°01	63 5' 7	20" 0	eF, vS, R, bM, ? neb	21 19	63 19' 0
3336	W. IV. 117	12 19 20	3°01	62 23' 1	20" 0	pB, vS, R, bM	21 20	62 36' 4
3337	W. IV. 118	12 19 20	3°02	63 54' 7	20" 0	eF, vS, R, bM, spir	21 21	64 8' 0
3338	W. IV. 119	12 19 21	3°02	63 20' 2	20" 0	F, vS, R, bM, spir	21 22	63 33' 5
3339	Sn. 99	12 19 22	3°05	80 21' 2	20" 0	* 11 with neb nf	21 24	80 34' 5
3340	F. 900	12 19 23	3°03	72 22	20" 0	vS, E 200°	21 24	72 35
3341	W. IV. 120	12 19 24	3°01	61 28' 6	20" 0	vF, cS, dif	21 24	61 41' 9
3342	W. IV. 121	12 19 27	3°01	62 5' 1	20" 0	vF, vS, R, spir, sbM *	21 27	62 18' 4
3343	Sn. 100	12 19 28	3°05	80 20' 9	20" 0	eF, vS, ??	21 30	80 34' 2
3344	F. 901	12 19 31	3°04	75 39' 2	20" 0	R, bM, magn 14' 5	21 33	75 52' 5
3345	W. IV. 122	12 19 31	3°02	64 51' 3	20" 0	eF, S, iF	21 32	65 4' 6
3346	F. 902	12 19 34	3°05	77 52	20" 0	eS, R, bM, magn 15' 5	21 36	78 5
3347	F. 903	12 19 34	3°05	78 20	20" 0	R, bM, magn 15	21 36	78 33
3348	W. IV. 123	12 19 37	3°02	63 36' 0	20" 0	eF, vS, iF	21 38	63 49' 3
3349	F. 904	12 19 40	3°04	76 47	20" 0	vS, R, lbM, magn 15	21 42	77 0
3350	Sn. 102	12 19 40	3°05	79 46' 8	20" 0	* 10' 5 with neb sp	21 42	80 0' 1
3351	W. IV. 124	12 19 41	3°02	61 37' 1	20" 0	eF, S, iF	21 42	61 50' 4
3352	Sn. 103	12 19 41	3°05	80 28' 0	20" 0	F, pS, E	21 43	80 41' 3
3353	W. IV. 125	12 19 42	3°02	61 18' 7	20" 0	eF, S, iF	21 43	61 32' 0
3354	Sn. 187	12 19 46	3°04	77 7' 7	20" 0	eF, S, ?	21 48	77 21' 0
3355	Sn. 251, F.	12 19 46	3°04	76 2' 9	20" 0	eF, pS, E 168°	21 48	76 16' 2
3356	F. 905	12 19 46	3°05	77 41	20" 0	R, bM, magn 16	21 48	77 54
3357	F. 906	12 19 46	3°05	79 28	20" 0	R, bM, magn 15	21 48	79 41
3358	Sn. 188, F.	12 19 48	3°05	77 33' 7	20" 0	vF, S	21 50	77 47' 0
3359	W. IV. 126	12 19 50	3°02	65 43' 6	20" 0	F, S, iF, N, * 14 np	21 51	65 56' 9
3360	W. IV. 127	12 19 50	3°01	63 10' 6	20" 0	eF, vS, iF	21 50	63 23' 9
3361	F. 907	12 19 52	3°05	78 35	20" 0	R, bM, magn 15' 5	21 54	78 48
3362	W. IV. 128	12 19 54	3°01	62 32' 0	20" 0	F, vS, bM, spir	21 54	62 45' 3
3363	F. 908	12 19 58	3°04	76 41	20" 0	E, bM, magn 15	22 0	76 54
3364	W. IV. 130	12 20 4	3°01	63 39' 7	20" 0	vF, vS, R, bM	22 4	63 53' 0
3365	F. 909	12 20 4	3°04	73 19	20" 0	pL, vmE 240°	22 6	73 32
3366	Sn. 105	12 20 9	3°05	79 48' 7	20" 0	vF, vS	22 11	80 2' 0
3367	W. IV. 131	12 20 10	3°01	62 16' 0	20" 0	F, vS, R, att 2nd np	22 10	62 29' 3
3368	F. 910	12 20 11	3°03	72 48	20" 0	vS, vlE, planetary	22 12	73 1
3369	F. 911	12 20 11	3°03	73 11	20" 0	vF, bM, magn 14	22 12	73 24
3370	Sw. XI., Ho.	12 20 12	3°17	128 33' 7	20" 0	pB, pL, R, * 8' 5 p 4'	22 19	128 47' 0
3371	F. 912	12 20 16	3°05	78 22' 2	20" 0	F, pL, vmE 225°	22 18	78 35' 5
3372	W. IV. 132	12 20 24	3°01	63 56' 3	20" 0	vF, vS, bM, spir	22 24	64 9' 6
3373	W. IV. 133	12 20 27	3°01	63 46' 3	20" 0	F, cS, iF	22 27	63 59' 6
3374	F. 913	12 20 28	3°05	79 15	20" 0	R, bM, magn 15' 5	22 30	79 28
3375	W. IV. 134	12 20 41	+ 3°01	61 51' 5	+ 20" 0	F, vS, R, att * 14 sp	22 41	62 4' 8

No.	Observer.	R.A. 1860.	Prec. 1880	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3376	W. IV. 135	h m s 12 20 51	s + 3°01	62° 13'8	+ 20''0	pB, S, R, bM	m s 22 51	62° 27'1
3377	W. IV. 136	12 20 51	3 01	64 17'0	20'0	pF, vS, R, bM	22 51	64 30'3
3378	F. 914	12 21 5	3°03	71 55	20'0	z neb, 1' apart, magn 15.5	23 6	72 8
3379								
3380	W. IV. 137	12 21 6	3°01	62 33'1	20'0	F, vS, bM, spir	23 6	62 46'4
3381	Sn. 192, F.	12 21 9	3°04	77 26'2	20'0	eF, vS, stell	23 11	77 39'5
3382	F. 915	12 21 10	3°4	75 40	20'0	F, pS, mE 15°	23 12	75 53
3383	F. 916	12 21 10	3°05	78 57	20'0	R, bM, magn 15	23 12	79 10
3384	W. IV. 138	12 21 12	3°01	64 8'1	20'0	eF, Sv, iF	23 12	64 21'4
3385	W. IV. 139	12 21 14	3°01	63 47'6	20'0	eF, pS, R, bM, dif	23 14	64 0'9
3386	F. 917	12 21 16	3°04	76 2	20'0	vF, cS, E 90°	23 18	76 15
3387	W. IV. 141	12 21 20	3°00	61 13'7	20'0	vF, S, viF	23 20	61 27'0
3388	F. 918	12 21 22	3°04	76 25	20'0	vS, R, lbM, magn 15	23 24	76 38
3389	W. IV. 142	12 21 25	3°00	61 22'8	20'0	vF, S, iF	23 25	61 36'1
3390	W. IV. 143	12 21 28	3°01	64 24'9	20'0	vF, vS, R, bM	23 28	64 38'2
3391	F. 919	12 21 29	3°03	70 49	20'0	cS, vLE, sbMF *, ? spir	23 30	71 2
3392	F. 920	12 21 34	3°04	74 13'7	20'0	B, L, mE 225°, mbM	23 36	74 27'0
3393	F. 921	12 21 40	3°04	76 19	20'0	S, E 125°, bM, magn 14	23 42	76 32
3394	W. IV. 144	12 21 42	3°01	62 25'6	20'0	F, S, bM, spir	23 42	62 38'9
3395	W. IV. 146	12 21 44	3°01	64 11'4	20'0	vF, vS, R, bM	23 44	64 24'7
3396	W. IV. 147	12 21 44	3°01	64 10'6	20'0	vF, vS, R, bM, others n	23 44	64 23'9
3397	W. IV. 148	12 21 46	3°01	63 29'6	20'0	F, S, v iF	23 46	63 42'9
3398	Sn. 279	12 21 54	3°04	75 39'6	20'0	cF, vS	23 56	75 52'9
3399	W. IV. 149	12 21 56	3°01	63 31'7	20'0	vF, vS, R, bM	23 56	63 45'0
3400	Sn. 108	12 21 56	3°05	79 49'1	20'0	cB, cS, = * 10	23 58	80 2'4
3401	W. IV. 150	12 21 59	3°00	62 45'9	19'9	vF, vS, R	23 59	62 59'2
3402	W. IV. 151	12 22 1	3°00	60 21'5	19'9	vF, cL, E 10°, * np, conn ?	24 1	60 34'8
3403	W. IV. 152	12 22 1	3°01	64 35'6	19'9	cF, S, pR, bM	24 1	64 48'9
3404	Sn. 22	12 22 3	3°05	82 4'3	19'9	cB, cS, R, mbM	24 5	82 17'6
3405	J. 1224	12 22 4	2'97	51 29'7	19'9	F, S, R, vlbM	24 3	51 43'0
3406	W. IV. 153	12 22 4	3°00	61 35'0	19'9	cF, S, bM, spir	24 4	61 48'3
3407	W. IV. 154	12 22 5	3°00	61 26'8	19'9	cF, cS, E 15°, bM, ? spir	24 5	61 40'1
3408	Sn. 194	12 22 10	3°04	77 21'0	19'9	B, stell, ? * 9'5	24 12	77 34'3
3409	F. 923	12 22 10	3°04	74 26	19'9	bM, magn 15	24 12	74 39
3410	F. 922	12 22 11	3°03	70 14	19'9	bM, magn 15.5	24 12	70 27
3411	W. IV. 155	12 22 12	3°01	64 38'5	19'9	eF, S, iF, neby sf	24 12	64 51'8
3412	Sn. 144, F.	12 22 16	3°05	79 14'4	19'9	eF, cS	24 18	79 27'7
3413	Sn. 157, F.	12 22 16	3°05	77 47'5	19'9	vF, vS, R, bM	24 18	78 0'8
3414	Sn. 23	12 22 21	3°05	82 27'3	19'9	cF, cS, mbM	24 23	82 40'6
3415	W. IV. 156	12 22 23	3°00	62 27'5	19'9	F, vS, bM, spir, ? neb *	24 23	62 40'8
3416	F. 924	12 22 28	3°05	78 27	19'9	S, mE 250°	24 30	78 40
3417	Sn. 60	12 22 32	3°05	81 21'8	19'9	eF, vS, ? *	24 34	81 35'1
3418	F. 926	12 22 34	3°04	77 50	19'9	vF, wisp	24 36	78 3
3419	F. 925	12 22 35	3°03	74 12	19'9	vF, R, magn 16	24 36	74 25
3420	Sn. 257	12 22 38	3°04	75 46'9	19'9	vF, S, R, ? ?	24 40	76 0'2
3421	W. IV. 157	12 22 39	3°00	62 59'7	19'9	Cl, F, cS, R, bM	24 39	63 13'0
3422	F. 927	12 22 40	3°04	74 32	19'9	bM, magn 15	24 42	74 45
3423	Sn. 282	12 22 42	3°04	75 34'0	19'9	vF, vS	24 44	75 47'3
3424	W. IV. 158	12 22 44	3°01	64 49'1	19'9	eF, pS, iF	24 44	65 2'4
3425	F. 928	12 22 52	+ 3°05	78 37	+ 19'9	bM, magn 14	24 54	78 50

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3426	Sn. 284	12 22 57	+ 3°04	75 37'4	+ 19"9	vF, vS	24 59	75 50'7
3427	Sn. 158, F.	12 23 5	3°04	78 26'8	19'9	F, vS, exc Nf	25 7	78 40'1
3428	W. IV. 160	12 23 7	3°01	65 33'1	19'9	F, S, R, bM	25 7	65 46'4
3429	W. IV. 161	12 23 7	3°01	65 40'9	19'9	vF, S, iF, N	25 7	65 54'2
3430	Sn. 110	12 23 11	3°05	80 8'4	19'9	eF, cS, dif	25 13	80 21'7
3431	F. 930	12 23 16	3°04	77 38	19'9	vS, R	25 18	77 51
3432	F. 929	12 23 17	3°03	75 5	19'9	B, S, R	25 18	75 18
3433	F. 931	12 23 23	3°02	71 56	19'9	bM, magn 14'5	25 24	72 9
3434	F. 932	12 23 29	3°02	70 26	19'9	bM, magn 15	25 30	70 39
3435	F. 933	12 23 29	3°03	74 6	19'9	S, mE 135°, sbM	35 30	74 19
3436	F. 934	12 23 35	3°02	69 34	19'9	bM, magn 14	25 36	69 47
3437	F. 935	12 23 40	3°04	77 54	19'9	bM, magn 15	25 42	78 7
3438	Sn. 65	12 23 53	3°05	81 8'8	19'9	cF, S, FN	25 55	81 22'1
3439	W. IV. 162	12 24 0	3°00	63 39'9	19'9	vF, cS, iF, sev N	26 0	63 53'2
3440	Sn. 198, F.	12 24 0	3°04	77 12'0	19'9	eF, pS, 1E 30°	26 2	77 25'3
3441	W. IV. 163	12 24 7	2°99	60 22'3	19'9	F, S, bM, spir	26 7	60 35'6
3442	F. 936	12 24 11	3°03	75 7	19'9	F, vS, R, lbM	26 12	75 20
3443	F. 937	12 24 11	3°03	76 54	19'9	bM, magn 15'5	26 12	77 7
3444	W. IV. 164	12 24 16	2°99	61 40'7	19'9	vF, vS, bM, spir	26 16	61 54'0
3445	F. 938	12 24 16	3°04	76 30	19'9	F, eS, R	26 18	76 43
3446	F. 939	12 24 16	3°04	77 45	19'9	bM, magn 14	26 18	77 58
3447	F. 940	12 24 16	3°04	78 33	19'9	F, eS, R	26 18	78 46
3448	F. 941	12 24 23	3°02	72 2	19'9	vF, vLE	26 24	72 15
3449	W. IV. 165	12 24 24	3°00	63 18'8	19'9	eF, vS, bM, spir	26 24	63 32'1
3450	W. IV. 167	12 24 26	3°00	62 25'1	19'9	vF, vS, spir, ?(I, 83 sp)	26 26	62 38'4
3451	W. IV. 168	12 24 27	2°99	60 22'2	19'9	F, S, bM, spir	26 26	60 35'5
3452	Sn. 199	12 24 27	3°04	77 36'1	19'9	pF, pS, E 100°	26 29	77 49'4
3453	F. 942	12 24 29	3°03	74 22	19'9	F, S, E 160°, lbM	26 30	74 35
3454	W. IV. 169	12 24 31	2°99	61 43'8	19'9	F, S, iF, dif, att * 11 n	26 31	61 57'1
3455	W. IV. 170	12 24 45	3°00	63 26'5	19'9	eF, S, iF	26 45	63 39'8
3456	W. IV. 171	12 24 46	2°99	60 52'1	19'9	vF, pS, iF	26 46	61 5'4
3457	F. 943	12 24 46	3°04	76 35	19'9	S, R, lbM	26 48	76 48
3458	W. IV. 172	12 24 47	2°99	61 4'8	19'9	F, S, bM, spir	26 47	61 18'1
3459	Sn. 200, F.	12 24 51	3°04	77 3'1	19'9	vF, pS, dif	26 53	77 16'4
3460	W. IV. 173	12 24 52	2°99	61 50'3	19'9	F, S, iF	26 52	62 3'6
3461	Sn. 201, F.	12 24 57	3°04	77 20'1	19'9	vF, vS	26 59	77 33'4
3462	F. 944	12 24 59	3°03	73 56	19'9	vF, eS, R	27 0	74 9
3463	Sn. 202	12 25 0	3°04	76 54'3	19'9	vF, cS, E 40°	27 2	77 7'6
3464	W. IV. 174	12 25 2	3°00	63 13'3	19'9	eF, vS, bM, spir	27 2	63 26'6
3465	F. 945	12 25 4	3°04	77 10	19'9	bM, magn 16	27 6	77 23
3466	F. 946	12 25 4	3°04	77 26	19'9	bM, magn 15	27 6	77 39
3467	F. 947	12 25 10	3°04	77 27	19'9	eS, vm E 255°, sbM *	27 12	77 40
3468	F. 948	12 25 10	3°04	78 59	19'9	bM, magn 13'5	27 12	79 12
3469	W. IV. 175	12 25 12	3°00	63 25'4	19'9	eF, S, E 50°	27 12	63 38'7
3470	F. 950	12 25 16	3°04	77 58	19'9	bM, magn 13'5	27 18	78 11
3471	F. 949	12 25 17	3°03	73 12	19'9	F, vS, R	27 18	73 25
3472	W. IV. 176	12 25 20	3°00	64 29'9	19'9	eF, S, iF	27 20	64 43'2
3473	F. 951	12 25 23	3°02	71 0	19'9	S, R, lbM	27 24	71 13
3474	Roberts	12 25 28	3°06	86 34'4	19'9	pF, E sp nf, dif, * 17 np, B * sf	27 30	86 47'7
3475	F. 952	12 25 35	+ 3°03	76 28	+ 19'9	vF, pS, R, dif	27 36	76 41

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3476	Sn. 288, F.	12 25 38	+ 3°03	75 ° 10' 7	+ 19' 9	pF, pL, bM	27 39	75 24° 0
3477	W. IV. 177	12 25 40	3°00	63 11' 1	19' 9	vF, vS, bM, spir	27 40	63 24' 4
3478	Sn. 289, F.	12 25 40	3°03	75 1' 9	19' 9	vF, vS, bM	27 41	75 15' 2
3479	W. IV. 178	12 25 42	3°00	63 49' 3	19' 9	vF, vS, iF	27 42	64 2' 6
3480	W. IV. 179	12 25 44	2°99	62 23' 9	19' 9	vF, S, E 90°, bM	27 44	62 37' 2
3481	F. 953	12 25 46	3°04	77 50	19' 9	bM, magn 13	27 48	78 3
3482	W. IV. 180	12 26 4	2°99	61 23' 7	19' 9	vF, S, bM, spir	28 4	61 37° 0
3483	F. 955	12 26 4	3°04	77 53	19' 9	bM, magn 14	28 6	78 6
3484	F. 954	12 26 5	3°02	71 50	19' 9	S, R, bM	28 6	72 3
3485	Sn. 112	12 26 5	3°04	80 0' 5	19' 9	eF, S; ?	28 7	80 13' 8
3486	Roberts, F.	12 26 7	3°03	76 22' 0	19' 9	F, S, R, dif	28 8	76 35' 3
3487	Sn. 113	12 26 7	3°04	79 49' 8	19' 9	vF, vS	28 9	80 3' 1
3488	W. IV. 181	12 26 10	2°99	62 52' 6	19' 9	F, S, R, bM	28 10	63 5' 9
3489	F. 956	12 26 10	3°04	76 59	19' 9	bM, magn 13	28 12	77 12
3490	F. 957	12 26 10	3°04	78 18	19' 9	vF, S, vM E 240°	28 12	78 31
3491	W. IV. 182	12 26 11	2°99	62 8' 0	19' 9	F, S, iF	28 11	62 21' 3
3492	Roberts	12 26 13	3°03	76 22' 3	19' 9	sbM, prob spiral	28 14	76 35' 6
3493	Sn. 114	12 26 15	3°04	79 50' 2	19' 9	eF, vS	28 17	80 3' 5
3494	W. IV. 183	12 26 17	2°99	61 38' 6	19' 9	vF, vS, neb *, * 15 np	28 17	61 51' 9
3495	W. IV. 184	12 26 19	2°99	62 25' 2	19' 9	vF, cS, iF, diffic	28 19	62 38' 5
3496	W. IV. 185	12 26 21	2°99	62 28' 0	19' 9	vF, cS, iF, * 15 inv, s	28 21	62 41' 3
3497	W. IV. 186	12 26 30	2°99	63 44' 3	19' 9	vF, vS, R, bM	28 30	63 57' 6
3498	W. IV. 187	12 26 31	2°99	62 29' 4	19' 9	vF, S, iF	28 31	62 42' 7
3499	F. 959	12 26 40	3°04	78 14	19' 9	cS, E (wisps) 130°, bM	28 42	78 27
3500	F. 958	12 26 41	3°03	75 17	19' 9	S, E 90°, sbM *	28 42	75 30
3501	Roberts, F.	12 26 44	3°03	75 54' 0	19' 9	F, S, R, bMN	28 45	76 7' 3
3502	W. IV. 188	12 26 45	2°99	62 36' 9	19' 9	eF, S, iF	28 45	62 50' 2
3503	J. 1225	12 26 57	2°94	51 26' 9	19' 9	eF, vS, bMN	28 55	51 40' 2
3504	Sn. 24	12 27 1	3°05	82 20' 5	19' 9	eF, vS, nr * 10	29 3	82 33' 8
3505	F. 960	12 27 5	3°02	73 16	19' 9	F, S, E	29 6	73 29
3506	F. 961	12 27 5	3°03	76 30	19' 9	vF, R	29 6	76 43
3507	W. IV. 189	12 27 6	2°99	63 51' 9	19' 9	vF, vS, iF	29 6	64 5' 2
3508	W. IV. 190	12 27 10	2°99	62 33' 4	19' 9	cF, S, bM, spir	29 10	62 46' 7
3509	F. 962	12 27 10	3°04	77 11	19' 9	bM, magn 14	29 12	77 24
3510	F. 963	12 27 10	3°04	78 9	19' 9	eF, bM, magn 15, * 10 nf	29 12	78 22
3511	W. IV. 191	12 27 13	2°99	61 52' 7	19' 9	vF, S, iF, N	29 13	62 6' 0
3512	W. IV. 192	12 27 13	2°99	61 51' 9	19' 9	vF, S, iF, N	29 13	62 5' 2
3513	W. IV. 193	12 27 15	2°99	61 53' 9	19' 9	vF, S, iF, N	29 15	62 7' 2
3514	W. IV. 194	12 27 19	2°99	62 31' 7	19' 9	vF, vS, bM, spir	29 19	62 45' 0
3515	W. IV. 195	12 27 19	2°99	61 21' 9	19' 9	F, S, iF	29 19	61 35' 2
3516	W. IV. 196	12 27 20	2°99	61 46' 6	19' 9	vF, S, iF, N	29 20	61 59' 9
3517	Sn. 117	12 27 25	3°04	80 4' 4	19' 9	eF, pS, mE 28°; ?	29 27	80 17' 7
3518	F. 966	12 27 28	3°04	79 37	19' 9	cS, mE 210°, bM	29 30	79 50
3519	F. 964	12 27 29	3°02	73 39	19' 9	vF, vS, R	29 30	73 52
3520	F. 965	12 27 29	3°03	75 44	19' 9	vF, R	29 30	75 57
3521	Sn. 26	12 27 32	3°05	82 4' 1	19' 9	pF, cS, E 45°, bM	29 34	82 17' 4
3522	F. 967	12 27 35	3°03	74 2	19' 9	vF, S, mE 90°	29 36	74 15
3523	F. 968	12 27 35	3°03	75 13	19' 9	vF, R	29 36	75 26
3524	Sn. 290	12 27 39	3°03	74 59' 9	19' 9	cF, S, ? * 12' 5	29 40	75 13' 2
3525	F. 969	12 27 40	+ 3°04	79 4	+ 19' 9	vF, R	29 42	79 17

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3526	W. IV. 197	h m s 12 27 43	s + 2'99	63° 32'6	+ 19''9	F, vS, R, bM	m s 29 43	63° 45'9
3527	W. IV. 198	12 27 45	2'99	63 4'2	19'9	F, vS, R, bM *	29 45	63 17'5
3528	F. 970	12 27 47	3'02	73 41	19'9	bM, magn 14	29 48	73 54
3529	W. IV. 199	12 27 52	2'99	63 31'7	19'9	F, vS, R, bM	29 52	63 45'0
3530	F. 971	12 27 53	3'02	71 26	19'9	F, vS, R	29 54	71 39
3531	W. IV. 200	12 28 0	2'99	62 36'1	19'9	vF, vS, bM, spir	30 0	62 49'4
3532	W. IV. 201	12 28 0	2'99	63 20'8	19'9	vF, vS, bM, spir	30 0	63 34'1
3533	W. IV. 202	12 28 3	2'99	63 26'9	19'9	pF, vS, R, bM	30 3	63 40'2
3534	F. 972	12 28 11	3'02	74 14	19'9	vF, cS, R	30 12	74 27
3535	W. IV. 203	12 28 13	2'99	63 29'8	19'9	F, vS, R, bM	30 13	63 43'1
3536	W. IV. 204	12 28 15	2'99	62 41'7	19'9	vF, S, iF	30 15	62 55'0
3537	Sn. 69	12 28 16	3'05	81 34'5	19'9	vF, S, ?	30 18	81 47'8
3538	W. IV. 205	12 28 18	2'99	62 59'5	19'9	eF, S, iF	30 18	63 12'8
3539	W. IV. 206	12 28 21	3'00	65 14'7	19'9	eF, S, R, bM, * 13 sp	30 21	65 28'0
3540	Roberts, F.	12 28 22	3'03	76 28'5	19'9	vS, R, sev. condens	30 23	76 41'8
3541	W. IV. 207	12 28 24	3'00	65 15'2	19'9	eF, S, R, * 14 np	30 24	65 28'5
3542	F. 973	12 28 41	3'03	77 34	19'9	bM, magn 14'5	30 42	77 47
3543	W. IV. 209	12 28 44	2'99	62 56'4	19'9	vF, S, LE 150°	30 44	63 9'7
3544	Sn. 291	12 28 44	3'03	74 55'7	19'9	cF, vS, ? * 12'5	30 45	75 9'0
3545	W. IV. 211	12 28 44	2'99	62 42'3	19'9	pB, S, R, bM	30 44	62 55'6
3546	W. IV. 212	12 28 45	2'99	63 0'3	19'9	F, S, LE 150°	30 45	63 13'6
3547	W. IV. 214	12 28 52	2'98	62 53'9	19'9	vF, vS, iF	30 51	63 7'2
3548	F. 974	12 28 52	3'04	78 17	19'9	vF, eS, R	30 54	78 30
3549	W. IV. 216	12 28 54	2'98	62 49'9	19'9	vF, vS, bM, spir	30 53	63 3'2
3550	W. IV. 218	12 28 56	2'98	61 17'7	19'9	Nuclei	30 55	61 31'0
3551	W. IV. 219	12 28 58	2'98	61 15'8	19'9	inv. in	30 57	61 29'1
3552	W. IV. 220	12 28 58	2'98	61 13'9	19'9	I, 92	30 57	61 27'2
3553	W. IV. 221	12 28 59	2'98	63 2'0	19'9	vF, vS, R, bM	30 58	63 15'3
3554	W. IV. 222	12 29 0	2'98	61 18'0	19'9	N inv. in I 92 (2s ² , 1'8 s)	30 59	61 31'3
3555	W. IV. 223	12 29 1	2'98	61 14'2	19'9	N inv. in I 92 (1s.5p, 2'0 n)	31 0	61 27'5
3556	W. IV. 225	12 29 2	2'98	62 15'7	19'9	F, S, R, bM	31 1	62 29'0
3557	F. 975	12 29 5	3'02	72 37	19'9	bM, magn 15'5	31 6	72 50
3558	F. 976	12 29 5	3'03	77 23	19'9	D; F, R, dist 12'' n & s	31 6	77 36
3559	W. IV. 226	12 29 7	2'98	62 14'4	19'9	vF, vS, R, bM	31 6	62 27'7
3560	W. IV. 227	12 29 8	2'98	62 9'0	19'9	vF, vS, R, bM	31 7	62 22'3
3561	W. IV. 228	12 29 8	2'98	62 19'7	19'9	cF, vS, R, bM *	31 7	62 33'0
3562	F. 977	12 29 10	3'04	79 19	19'9	E 220°	31 12	79 32
3563	W. IV. 229	12 29 13	2'98	61 18'1	19'9	Nuclei inv.	31 12	61 31'4
3564	W. IV. 230	12 29 14	2'98	61 18'1	19'9	in I, 92	31 13	61 31'4
3565	W. IV. 231	12 29 16	2'98	62 28'4	19'9	vF, S, E 148°, ? st	31 15	62 41'7
3566	F. 980	12 29 16	3'04	78 4	19'9	Com, R with tail 1' at 110°	31 18	78 17
3567	F. 979	12 29 17	3'03	75 38	19'9	F, vS, R, bM	31 18	75 51
3568	Aitken (3667)	12 29 18	1'62	6 39'9	19'9	Planetary or neb * 9'5; * 13 p 15''	30 23	6 52'2
3569	F. 978	12 29 18	3'01	69 56	19'9	cS, spir, 2 br, F * M, F * inv	31 18	70 9
3570	W. IV. 233	12 29 20	2'99	65 9'0	19'9	eF, S, iF, * 13 np	31 20	65 22'3
3571	W. IV. 234	12 29 23	2'99	63 8'6	19'9	eF, S, iF, others nr	31 23	63 21'9
3572	Sn. 205	12 29 23	3'03	77 36'6	19'9	eF, vS, ??	31 24	77 49'9
3573	F. 981	12 29 23	3'03	77 29	19'9	F, vS, R	31 24	77 42
3574	Sn. 206	12 29 24	3'03	76 49'5	19'9	vF, vS, ? * 14	31 25	77 2'8
3575	F. 982	12 29 29	+ 3'03	75 29	+ 19'9	vF, vS, R	31 30	75 42

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3576	Sn. 27	h m s 12 29 31	+ 3°05'	82° 36' 4	+ 19° 9	F, pS, dif	m s 31 33	82° 49' 7
3577	Sn. 207	12 29 32	3°03'	77 19' 9	19' 9	vF, pS, dif, * 13 inv nf	31 33	77 33' 2
3578	F. 984	12 29 34	3°04'	78 8	19' 9	S, E 125°	31 36	78 21
3579	W. IV. 236	12 29 36	2 99	63 7' 5	19' 9	eF, S, iF, others nr	31 36	63 20' 8
3580	F. 983	12 29 36	3°01'	70 57	19' 9	F, vS, R	31 36	71 10
3581	W. IV. 237	12 29 40	2°99'	64 48' 0	19' 9	pB, S, E 50°, bM	31 40	65 1' 3
3582	W. IV. 238	12 29 40	2°99'	62 59' 6	19' 9	F, vS, com, bM, others nr	31 40	63 12' 9
3583	Roberts, F.	12 29 40	3°03'	75 58' 5	19' 9	vmE, * 13 att sf, 2 st 12 nr	31 41	76 11' 8
3584	Sn. 208	12 29 41	3°03'	76 59' 8	19' 9	vF, vS, ? * 14	31 42	77 13' 1
3585	W. IV. 239	12 29 44	2°98'	62 24' 0	19' 9	cF, S, neb *	31 43	62 37' 3
3586	Sn. 263, F.	12 29 51	3°03'	76 42' 6	19' 9	vF, cS, dif	31 52	76 55' 9
3587	W. IV. 240	12 29 53	2°98'	61 40' 8	19' 9	vF, S, LE 120°, * 15 nf	31 52	61 54' 1
3588	Sn. 293	12 29 53	3°03'	75 0' 6	19' 9	eF, pL, lbM	31 54	75 13' 9
3589	Sn. 29	12 29 54	3°05'	82 17' 5	19' 9	vF, S, R, stell	31 56	82 30' 8
3590	W. IV. 241	12 29 55	2°98'	61 56' 9	19' 9	vF, S, viF	31 54	62 10' 2
3591	Sn. 30	12 29 56	3°05'	82 18' 2	19' 9	F, pS, nr * 14	31 58	82 31' 5
3592	W. IV. 242	12 29 58	2°98'	61 22' 0	19' 9	pF, S, LE 140°	31 57	61 35' 3
3593	W. IV. 243	12 29 58	2°98'	61 28' 8	19' 9	pF, S, iF, N	31 57	61 42' 1
3594	W. IV. 244	12 30 0	2°98'	63 6' 9	19' 9	eF, vS, iF	31 59	63 20' 2
3595	W. IV. 245	12 30 8	2°99'	65 26' 4	19' 9	eF, S, iF	32 8	65 39' 7
3596	W. IV. 246	12 30 23	2°98'	62 42' 5	19' 9	vF, S, iF, nr D *	32 22	62 55' 8
3597	W. IV. 247	12 30 26	2°99'	65 21' 9	19' 9	eF, S, R	32 26	65 35' 2
3598	Roberts, W. IV. 248	12 30 26	2°97'	61 1' 2	19' 9	pF, vS, sbM *, * 15 nf 100"	32 25	61 14' 5
3599	W. IV. 249	12 30 45	2°98'	62 31' 3	19' 9	eF, S, R, bM	32 44	62 44' 6
3600	W. IV. 250	12 30 46	2°98'	62 6' 0	19' 9	F, vS, neb *	32 45	62 19' 3
3601	F. 985	12 30 47	3°02'	74 2	19' 9	bM, magn 15	32 48	74 15
3602	F. 986	12 31 4	3°04'	79 9	19' 9	F, eS, R, lbM	33 6	79 22
3603	F. 987	12 31 11	3°02'	73 42	19' 9	eF, bM, magn 15	33 12	73 55
3604	F. 989	12 31 17	3°03'	77 31	19' 9	F, vS, R, lbM	33 18	77 44
3605	F. 988	12 31 18	3°01'	69 43	19' 9	vF, vS, R	33 18	69 56
3606	F. 990	12 31 23	3°03'	76 38	19' 9	F, viE	33 24	76 51
3607	F. 991	12 31 28	3°04'	78 52	19' 9	F, eS, R	33 30	79 5
3608	F. 993	12 31 34	3°04'	78 46	19' 9	vS, R, wisps pf, 1' each	33 36	78 59
3609	F. 992	12 31 35	3°02'	74 53	19' 9	B, vS, R, ? planetary	33 36	75 6
3610	W. IV. 252	12 31 52	2°98'	62 21' 4	19' 9	eF, S, viF	33 51	62 34' 7
3611	Sn. 265, F.	12 32 1	3°02'	75 52' 1	19' 8	pF, cS, E 130°	34 2	76 5' 3
3612	F. 995	12 32 5	3°02'	74 31	19' 8	B, vS, R, ? planetary	34 6	74 44
3613	F. 996	12 32 5	3°02'	75 30	19' 8	F, eS, R, lbM	34 6	75 43
3614	W. IV. 253	12 32 6	2°98'	62 55' 7	19' 8	eF, pS, gbM, spir	34 5	63 8' 9
3615	F. 994	12 32 6	3°01'	71 3	19' 8	S, E 185°, bM	34 6	71 16
3616	F. 997	12 32 11	3°02'	74 30	19' 8	bM, magu 14	34 12	74 43
3617	Sn. 70	12 32 19	3°04'	81 15' 8	19' 8	vF, S	34 21	81 29' 0
3618	W. IV. 254	12 32 22	2°97'	62 33' 1	19' 8	F, vS, R, bM	34 21	62 46' 3
3619	W. IV. 255	12 32 22	2°98'	65 5' 4	19' 8	vF, cS, E 160°, bM	34 21	65 18' 6
3620	Roberts, W. IV. 256	12 32 23	2°97'	61 19' 2	19' 8	F, S, iF, bM, sev neb st nr	34 22	61 32' 4
3621	F. 998	12 32 29	3°02'	73 45	19' 8	bM, magn 14	34 30	73 58
3622	F. 999	12 32 29	3°02'	73 49	19' 8	vF, S, R	34 30	74 2
3623	W. IV. 257	12 32 33	2°97'	62 7' 6	19' 8	cF, S, R, bM	34 32	62 20' 8
3624	F. 1000	12 32 35	3°03'	77 15	19' 8	F, S, E 180°	34 36	77 28
3625	F. 1001	12 32 35	+ 3°03'	78 16	+ 19' 8	vF, R	34 36	78 29

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3626	W. IV. 258	h m s 12 32 36	+ s 2°98	63 33°1	+ 19°8	vF, S, bM, spir	m s 34 35	63 46°3
3627	W. IV. 259	12 32 37	2°97	61 44°0	19°8	F, S, iF, N	34 36	61 57°2
3628	W. IV. 260	12 32 44	2°97	62 59°3	19°8	eF, S, R	34 43	63 12°5
3629	F. 1002	12 32 47	3°02	75 43	19°8	S, mE 245°, lbM	34 48	75 56
3630	W. IV. 261	12 32 51	2°98	63 47°9	19°8	vF, vS, 1E, ? D *	34 50	64 1°1
3631	F. 1003	12 32 53	3°02	76 16	19°8	bM, magn 13	34 54	76 29
3632	W. IV. 262	12 33 5	2°97	62 32°8	19°8	eF, cS, iF	35 4	62 46°0
3633	F. 1005	12 33 10	3°04	79 21	19°8	vS, planetary, lbM	35 12	79 34
3634	F. 1006	12 33 10	3°04	79 24	19°8	vF, R, dif	35 12	79 37
3635	F. 1004	12 33 11	3°02	76 22	19°8	F, vS, R, bM	35 12	76 35
3636	W. VI. 1	12 33 17	2°99	67 9°4	19°8	eF, vS, E 0°, bM	35 17	67 22°6
3637	F. 1007	12 33 17	3°02	74 32	19°8	vF, vS, R, dif	35 18	74 45
3638	F. 1008	12 33 17	3°03	78 44	19°8	B, S, R, lbM	35 18	78 57
3639	Sw. XI., Ho.	12 33 21	3°22	125 59°2	19°8	pF, pS, * 12°5 ssp	35 30	126 12°4
3640	} W. IV. 263	12 33 30	2°97	62 42°3	19°8	F, S, bM, spir; vF, R neb 30° np	35 29	62 55°5
3641		12 33 31	2°97	62 30°0	19°8	vF, cS, iF, dif	35 30	62 43°2
3642	W. IV. 264	12 33 31	2°97	62 30°0	19°8	vF, vS, iF, dif	35 42	77 3
3643	F. 1009	12 33 41	3°03	76 50	19°8	F, vI E	35 41	62 56°6
3644	W. IV. 265	12 33 42	2°97	62 43°4	19°8	vF, S, iF	35 42	62 54°6
3645	W. IV. 266	12 33 43	2°97	62 41°4	19°8	F, vS, R, bM	35 43	62 55°5
3646	W. IV. 267	12 33 44	2°97	62 42°3	19°8	F, S, E 65°, bM	35 48	78 59
3647	F. 1010	12 33 47	3°03	78 46	19°8	F, cS, mE 135°	35 51	76 27°9
3648	Sn. 266	12 33 50	3°02	76 14°7	19°8	eF, S ; ? ?	35 51	68 20°7
3649	W. VI. 2	12 33 51	2°99	68 7°5	19°8	F, vS, iF, N	35 52	62 58°6
3650	W. IV. 268	12 33 53	2°97	62 45°4	19°8	eF, vS, bM, spir	35 57	62 43°4
3651	W. IV. 269	12 33 58	2°97	62 30°2	19°8	pF, cS, R, spir	36 0	78 17
3652	F. 1011	12 33 59	3°03	78 4	19°8	S, R, mbM	36 12	78 4
3653	F. 1012	12 34 11	3°03	77 51	19°8	bM, magn 13	36 14	66 51°7
3654	W. VI. 3	12 34 15	2°98	66 38°5	19°8	F, S, iF, N	36 16	68 47°1
3655	W. VI. 4	12 34 16	2°99	68 33°9	19°8	vF, vS, iF, * 16 inv, other neb ur	36 16	66 51°4
3656	W. VI. 5	12 34 17	2°98	66 38°2	19°8	F, S, iF, N	36 20	67 46°5
3657	W. VI. 6	12 34 21	2°98	67 33°3	19°8	vF, vS, N ; ? neb *	36 24	74 45°5
3658	F. 1013	12 34 23	3°02	74 32°3	19°8	F, S, E 240°	36 30	66 31°2
3659	W. VI. 7	12 34 31	2°98	66 18°0	19°8	cF, S, E 50°	36 39	68 21°5
3660	W. VI. 8	12 34 39	2°99	68 8°3	19°8	F, vS, iF, N	36 40	66 57°4
3661	W. VI. 9	12 34 39	2°98	66 44°2	19°8	cF, S, iF, N	36 42	77 13
3662	W. VI. 10, J. 1226	12 34 41	2°98	65 48°2	19°8	F, S, R, bM, spir	36 43	69 30°5
3663	F. 1014	12 34 41	3°02	77 0	19°8	F, S, R, dif	36 48	77 58
3664	W. V. 11	12 34 43	2°99	69 17°3	19°8	vF, vS, iF, N	36 50	81 36°4
3665	F. 1015	12 34 47	3°03	77 45	19°8	F, S, R, dif	36 54	48 18°1
3666	Sn. 72	12 34 48	3°04	81 23°2	19°8	eF, vS, ?	36 55	48 19°5
3667	W. V. 1	12 34 50	2°89	48 4°9	19°8	cB, pL, E 55°, bM	36 56	68 18°8
3668	W. V. 2	12 34 50	2°89	48 6°3	19°8	pF, pS, iF, N	36 57	66 56°5
3669	W. V. 3	12 34 53	2°89	48 5°6	19°8	F, pS, iF, N	36 58	65 56°4
3670	F. 1016	12 34 53	3°02	77 29	19°8	vS, R, bM	36 59	77 42
3671	W. VI. 12, J. 1227	12 34 56	2°98	65 43°3	19°8	cF, cS, 1E 230°, bM	37 6	77 41°9
3672	Sn. 213, F	12 35 5	3°03	77 28°7	19°8	vF, vS, R, stell ; I. C. 809 n	37 6	68 18°8
3673	W. VI. 13	12 35 7	2°98	68 5°6	19°8	F, vS, iF, N	37 7	66 56°4
3674	W. VI. 14	12 35 8	2°98	66 43°2	19°8	pF, S, exc N, * 11 sp	37 6	48 10°6
3675	W. V. 4	12 35 10	+ 2°89	47 57°4	+ 19°8	pB, pL, iF, N		

No.	Observer.	R.A. 1860.	Prec. 1880.	N.P.D. 1860.	Prec. 1880.	Description.	R.A. 1900.	N.P.D. 1900.
3676	Sn. 294	h m s 12 35 10	s + 3°02'	° 40'4	+ 19"8	vF, vS; ? * 13	m s 37 11	75 53'6
3677	W. VI. 16	12 35 14	2°99	63 20'8	19'8	F, vS, iF, N	37 14	68 34°0
3678	W. VI. 17	12 35 14	2°99	68 21'1	19'8	vF, vS, iF, N	37 14	68 34'3
3679	W. VI. 18	12 35 15	2°98	66 24'9	19'8	F, S, iF, N	37 14	66 38'1
3680	W. V. 5	12 35 16	2°90	50 7'7	19'8	F, S, iF, N	37 12	50 20'9
3681	W. V. 6	12 35 17	2°90	50 8'9	19'8	cF, vS, E 135°, bM, * 13 sp	37 13	50 22'1
3682	W. VI. 19	12 35 22	2°99	68 22'0	19'8	F, vS, iF, N	37 22	68 35'2
3683	W. VI. 20	12 35 23	2°99	68 21'6	19'8	F, vS, iF, N	37 23	68 34'8
3684	F. 1017	12 35 23	3°03	77 31	19'8	vF, vS, R	37 24	77 44
3685	Sn. 32	12 35 26	3°04	82 21'7	19'8	vF, pL	37 28	82 34'9
3686	F. 1018	12 35 29	3°03	78 41	19'8	F, S, R	37 30	78 54
3687	W. V. 7	12 35 31	2°90	50 43'8	19'8	vF, cL, dif, sev N	37 27	50 57'0
3688	Sn. 295	12 35 35	3°02	74 52'3	19'8	cF, pS	37 36	75 5'5
3689	W. VI. 21	12 35 39	2°98	68 22'9	19'8	F, vS, iF, N	37 38	68 36'1
3690	F. 1019	12 35 47	3°03	78 54	19'8	B, vS, R	37 48	79 7
3691	W. VI. 23	12 35 53	2°97	66 26'6	19'8	F, S, iF, N	37 52	66 39'8
3692	W. VI. 24	12 35 56	2°98	68 14'5	19'8	pF, S, bM, spir	37 55	68 27'7
3693	F. 1020	12 35 59	3°03	78 34	19'8	F, vS, R, lbM	38 0	78 47
3694	F. 1021	12 36 5	3°02	78 2	19'8	bM, magn 13°5	38 6	78 15
3695	W. VI. 25	12 36 11	2°97	66 29'4	19'8	vF, vS, iF, N	38 10	66 42'6
3696	W. VI. 26	12 36 12	2°99	69 18'3	19'8	vF, vS, iF, N	38 12	69 31'5
3697	W. V. 8	12 36 15	2°89	49 23'1	19'8	vF, S, N, ? neb *	38 11	49 36'3
3698	F. 1022	12 36 17	3°02	78 2	19'8	S, R, mbM	38 18	78 15
3699	W. VI. 27	12 36 19	2°99	70 13'8	19'8	F, S, iF, N, 3 st n, np	38 19	70 27'0
3700	W. VI. 28	12 36 21	2°99	69 58'0	19'8	F, S, dif	38 21	70 11'2
3701	F. 1023	12 36 29	3°03	78 12	19'8	F, vS, R, dif	38 30	78 25
3702	F. 1024	12 36 29	3°03	78 23	19'8	B, vS, R	38 30	78 36
3703	W. V. 9	12 36 37	2°90	51 15'4	19'8	F, vS, iF, N, 2 st II sf	38 33	51 28'6
3704	Sn. 164, F.	12 36 42	3°03	78 27'6	19'8	F, pL, m E 225°	38 43	78 40'8
3705	W. VI. 29	12 36 43	2°99	69 54'4	19'8	eF, S, iF	38 43	70 7'6
3706	Sn. 118	12 36 43	3°03	80 0'4	19'8	vF, cS, dif	38 44	80 13'6
3707	W. V. 10	12 36 44	2°90	51 15'0	19'8	pF, vS, bM *	38 40	51 28'2
3708	Sn. 270	12 36 50	3°02	76 5'7	19'8	pB, cL, E	38 51	76 18'9
3709	Sn. 119	12 36 59	3°03	80 10'2	19'8	vF, cS, dif	39 0	80 23'4
3710	F. 1025	12 37 11	3°02	77 8	19'8	vF, cS, R, dif	39 12	77 21
3711	F. 1026	12 37 11	3°03	78 4	19'8	vF, vS, R, dif	39 12	78 17
3712	Sn. 148	12 37 13	3°03	78 51'5	19'8	vF, pS, E 42°; ?	39 14	79 4'7
3713	W. V. 11	12 37 23	2°87	48 3'9	19'8	F, pS, dif, * 13 sf 1'	39 18	48 17'1
3714	F. 1027	12 37 23	3°03	79 4	19'8	S, R	39 24	79 17
3715	W. VI. 30	12 37 24	2°98	69 22'5	19'8	vF, vS, iF, N	39 23	69 35'7
3716	Sn. 74	12 37 40	3°04	81 7'9	19'8	vF, vS, sp of 2	39 42	81 21'1
3717	W. V. 12	12 37 41	2°88	49 42'4	19'8	F, cS, E 150°, bM, * 15 up	39 36	49 55'6
3718	Sn. 217, F.	12 37 43	3°02	76 52'9	19'8	F, pS, E 90°	39 44	77 6'1
3719	Sn. 75	12 37 43	3°04	81 7'5	19'8	eF, vS, ? !, nf of 2	39 45	81 20'7
3720	Sn. 218, F.	12 37 45	3°02	77 10'5	19'8	eF, S, dif	39 46	77 23'7
3721	F. 1028	12 37 48	3°00	70 29	19'8	bM, magn 13°5	39 48	70 42
3722	Sn. 219	12 37 48	3°02	77 27'3	19'8	vF, vS, = * 13	39 49	77 40'5
3723	W. V. 14	12 37 50	2°87	48 29'6	19'8	pF, vS, R, bM	39 45	48 42'8
3724	F. 1029	12 37 53	3°03	78 58	19'8	S, R	39 54	79 11
3725	W. VI. 31	12 37 54	+ 2°99	70 28'7	+ 19'8	pF, cS, E, bM	39 54	70 41'9

