No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4905	3360	3451	...	...	12 53 51	+3·26	120 10·0	+19·5	vF, vS, R, slbM, f of 2	
4906	5702	...	...	d'A	12 53 53	2·90	61 19·5	19·5	vF, vS, * 15 p	
4907	5703	...	...	d'A	12 54 2	2·90	61 5·3	19·5	eF, vS, * 13 att	
4908	5704	...	...	d'A	12 54 5	2·90	61 13·1	19·5	vF, vS	
4909	3362	3452	...	...	12 54 9	3·36	132 0·9	19·5	eF, 3 or 4 st 11, 12, f	
4910	3363	...	V 3	...	12 54 10	3·06	87 35·5	19·5	eF, vL, rr	*
4911	3364	...	II 392	d'A	12 54 10	2·90	61 27·3	19·5	1st of 4, F, pL, * 11 2′ np	
4912	5705	...	...	Ld R*	12 54 12	2·82	51 52 ±	19·5	Two neb, n of and in line with h 1514 (?)	
4913	5706	...	...	Ld R*	12 54 12	2·82	51 54 ±	19·5		
4914	3365	1514	II 645	...	12 54 12	2·82	51 55·8	19·5	pB, cS, R, smbM, * 17 np	
4915	3366	1513	IV 47	...	12 54 15	3·09	93 46·8	19·5	pB, S, R, bM	
4916	5707	...	...	Ld R*	12 54 20	2·82	51 53 ±	19·5	Neb, nf h 1514 (?)	
4917	3367	1515	...	...	12 54 27	2·72	42 1·9	19·5	eF, S, E, bM	
4918	...	...	...	L II	12 54 33	3·09	93 45·3	19·5	eF, eS, R, bMN, h 1513 sp 4′	
4919	5708	...	...	d'A	12 54 35	2·90	61 26·0	19·5	vF, vS, 2nd of 4	
4920	...	...	...	T V	12 54 35	3·14	100 44	19·5	vF	
4921	3368	1516	II 393	...	12 54 39	2·90	61 21·8	19·5	F, pL, 3rd of 4	
4922	5709	...	...	d'A	12 54 42	2·89	59 56·0	19·5	pB, S, R, lbM, * 11·12 f	
4923	3369	1518	II 394	...	12 54 45	2·90	61 23·8	19·5	vF, 4th of 4	
4924	3370	1517	...	...	12 54 51	3·15	104 13·2	19·5	cF, L, vlE 45° ±	
4925	3371	1519	II 779	...	12 54 51	3·11	96 57·7	19·5	cF, S	
4926	5710	...	...	d'A	12 55 7	2·90	61 37·3	19·5	pB, S, R, glbM	
4927	3372	...	III 364	d'A	12 55 13	2·90	61 14·8	19·5	vF	
4928	3373 = 3374	3453	II 190 = III 760	...	12 55 43	3·12	97 19·5	19·4	F, pS, vlE, glbM	*
4929	5711	...	...	d'A	12 55 59	2·89	61 12·3	19·4	F, S, * 16 close p	
4930	3375	3454	...	...	12 56 15	3·36	130 39·8	19·4	vF, R, Δ 2 st 8, 9, f	
4931	5712	...	...	d'A	12 56 17	2·89	61 13·3	19·4	F, S	
4932	3376	...	III 818	...	12 56 20	2·66	38 47·5	19·4	cF, S, R, vglbM	
4933	3377	...	II 191	...	12 56 28	3·14	100 45·0	19·4	pB, pL, iR	
4934	5713	...	...	d'A	12 56 28	2·89	61 12·9	19·4	F, S, lE	
4935	...	...	...	Sw VI	12 56 36	2·98	74 51·7	19·4	vF, vS, R, 3 st f	
4936	3378	3456	...	...	12 56 39	3·26	119 46·4	19·4	pB, S, R, bM, * f 6′	
4937	3379	3455	...	...	12 56 43	3·43	136 28·0	19·4	eeF, S, R, p of 2	
4938	3380	1521	...	...	12 56 48	2·65	37 55·3	19·4	eF, R, psbM	
4939	3381	3458	II 561	...	12 56 57	3·13	99 35·7	19·4	pB, L, R, gmbM	
4940	3382	3457	...	...	12 56 58	3·43	136 29·4	19·4	F, S, R, f of 2	
4941	3383	1520	I 40	...	12 56 59	3·10	94 48·4	19·4	pF, L, E, gbMBN, r	
4942	3384	...	III 761	...	12 57 0	3·11	96 55·5	19·4	vF, S	
4943	5714	...	...	d'A	12 57 2	2·89	61 9·7	19·4	vF, vS	
4944	3385	1522	II 395	...	12 57 5	+2·89	61 3·6	+19·4	F, S, R, bM, * 9 nf 1′	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4945	3386	3459	...	Δ 411	12 57 14	+3·46	138 32·1	+19·4	B, vL, vmE 38°·7	
4946	3387	3460	...	...	12 57 32	3·39	132 50·9	19·4	B, pS, R, gpmbM, p of 2	
4947	3388	3461	...	...	12 57 34	3·31	124 35·1	19·4	F, pL, R, vglbM	
4948	...	...	...	Sw VI	12 57 36	3·12	97 11·6	19·4	eeF, pS, lE, I 130 f	
4949	5715	...	...	d'A	12 57 37	2·88	60 12·9	19·4	eF, S	
4950	3389	3462	...	...	12 57 40	3·39	132 45·8	19·4	eF, S, R, pslbM, f of 2	
4951	3390	1523	II 188	d'A	12 57 55	3·11	95 44·8	19·4	F, pL, lE, r	
4952	3391	1524	II 396	...	12 58 15	2·88	60 7·5	19·4	F, S, R, psbM * 11	
4953	3392	3463	...	...	12 58 18	3·33	126 48·5	19·4	vF, pS, am 3 S st	
4954	3393	1527	...	...	12 58 24	1·66	13 50·6	19·4	vF, S, R, vgbM	*
4955	3394	3464	...	...	12 58 26	3·26	119 0·2	19·4	F, cS, R, gbM	
4956	3395	1525	II 413	...	12 58 27	2·83	54 4·3	19·4	pB, eS, R, smbM	
4957	3396	1526	II 397	...	12 58 27	2·89	61 40·8	19·4	F, S, R	
4958	3397	3465	I 130	...	12 58 32	3·12	97 16·2	19·4	vB, pS, E, bMBN	
4959	3399	1528	...	...	12 59 2	2·84	56 4·1	19·4	eF, S, R	
4960	5716	...	...	d'A	12 59 3	2·89	61 45·8	19·4	F, S, R, N = * 16	
4961	3400	1529	II 398	...	12 59 5	2·89	61 31·0	19·4	F, S, iF	
4962	3401	...	III 303	...	12 59 10	2·87	60 10·4	19·4	eF, vS	
4963	3402	1530	II 663	...	12 59 27	2·75	47 31·2	19·4	F, vS, R, stellar, vS * s	
4964	3403	1532	III 779	...	12 59 28	2 54	32 56·0	19·4	eF, S, lE	
4965	3404	3466	...	...	12 59 34	3·26	117 28·6	19·4	vF, vL, cE, vgbM	
4966	3405	1531	III 304	...	12 59 35	2·87	60 12·2	19·4	vF, vS, vlE, vglbM, * sp *	
4967	3406	1533	III 783	...	12 59 35	2·59	35 40·7	19·4	vF, S, E, * att	
4968	3407	3467	...	...	12 59 37	3·22	112 55·8	19·4	F, pL, R, glbM	
4969	...	...	...	Sw VI	12 59 41	2·98	75 36·6	19·4	eeF, S, R, v diffic	
4970	3408	...	III 765	...	12 59 58	3·22	113 15·4	19·4	vF, pL, iF	
4971	5717	...	...	d'A	13 0 7	2·87	60 42·4	19·4	F, vS, lE, * nr n *	
4972	3409	...	III 937	...	13 0 17	1·67	13 57·4	19·4	vF, S, iR, bM	*
4973	3410	...	III 781	...	13 0 18	2·58	35 38·7	19·3	vF, S	
4974	3411	...	III 782	...	13 0 32	2·58	35 36·7	19·3	vF, S	
4975	3412	1534	...	...	13 0 37	3·10	94 17·0	19·3	vF, vS, R, psbM	
4976	3413	3468	...	...	13 0 40	3·48	138 45·4	19·3	B, pL, R, gmbM	
4977	3414	...	III 780	...	13 0 42	2·54	33 34·4	19·3	cF, S	
4978	3415	1535	...	...	13 0 58	2·95	70 50·1	19·3	F, vS, R, sb M, stellar	
4979	3416	...	III 346	...	13 1 8	2·90	64 29·4	19·3	eF, pL, lE	
4980	3417	3469	...	...	13 1 30	3·26	117 54·0	19·3	eF, cS, R	
4981	3418	1537	II 189	...	13 1 32	3·11	96 2·0	19·3	B, pL, R, * 10 1′ sf	
4982	...	...	...	T V	13 1 32	3·14	99 50	19·3	vF, S	
4983	3419	...	III 365	...	13 1 33	2·87	60 56·4	19·3	vF	
4984	3420	1536	II 301	...	13 1 33	3·17	104 45·7	19·3	B, pL, R, psmbM	*
4985	3422	1539	III 654	...	13 1 50	+2·74	47 35·0	+19·3	vF, vS, R, lbM	

MEMOIRS

OF THE

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A New General Catalogue of Nebulæ and Clusters of Stars, being the Catalogue of the late Sir John F. W. Herschel, Bart., revised, corrected, and enlarged.

By J. L. E. Dreyer, Ph.D.

The General Catalogue of Nebulæ which the late Sir John Herschel published in the *Philosophical Transactions* for 1864 was almost entirely founded on his father's and his own observations. Out of 5,079 objects which it contained only about 450 positions were due to other observers, while the places of the remainder were deduced from all the observations of Sir William and Sir John Herschel, those of the former having been reduced independently by Caroline Herschel and by Auwers. But already, before the appearance of this valuable work, several astronomers had commenced determining accurate positions of nebulæ. In 1853 Laugier made the beginning by publishing the places of fifty-three bright nebulæ determined at the Paris Observatory, and in 1856 appeared d'Arrest's first series of micrometric observations of nebulæ made at the Leipzig Observatory. These observations having shown how many objects were within the reach of comparatively small instruments, Schönfeld and Schultz devoted themselves for a number of years to the determination of positions of nebulæ, each observing about 500 objects. Less extensive series of observations have been made by Auwers, G. Rümker, Vogel, J. Schmidt, and B. von Engelhardt. None of these results were, however, available when Herschel's General Catalogue was compiled (except d'Arrest's first series), and what is more to be regretted, the great work of d'Arrest's, *Siderum Nebulosorum Observationes Havnienses*, founded on zone observations made with the 11-inch Refractor at Copenhagen, was not completed until three years after Herschel's

work had appeared. Although the probable errors of d'Arrest's results are not much smaller than those of Sir John Herschel's positions, the former are entirely free from the large accidental errors occasionally met with in the observations of the two Herschels, and which naturally arose from the construction of their instruments and the haste with which the observations often necessarily were made. There are, therefore, many cases where the General Catalogue, although evincing the most scrupulous care both in observing and reducing, is not in accordance with the heavens. And it is not only through d'Arrest's observations that such discrepancies have been revealed, the other works on nebulæ which have appeared since 1864 have brought others to light, while a considerable number of new nebulæ were also found in the course of years, so that Herschel's excellent work soon appeared to want a supplement.

For these reasons I found it, in 1876, desirable to compile for use in Lord Rosse's observatory a complete list of corrections to the General Catalogue, as well as a catalogue of the new nebulæ discovered by d'Arrest, Marth, Stephan, Tempel, and others. This Supplement was published in 1878 in the *Transactions of the Royal Irish Academy*, vol. xxvi., and has, I believe, been found useful. Since then no extensive work on nebulæ has appeared, with the exception of the detailed account of the observations made from 1848 to 1878 with Lord Rosse's 6-foot telescope. But still a good deal of work has been done on nebulæ, though the results have been published in a less systematic manner. A number of short notes from the pen of M. Tempel give a considerable amount of valuable information (particularly of many of Sir William Herschel's nebulæ which have not been observed by others), and contain places of many new objects. M. Stephan has also continued his valuable micrometric observations of new nebulæ, while during the last few years Mr. Lewis Swift and Professor Ormond Stone have placed on record about a thousand new nebulæ, most of which, however, are of the last degree of faintness and minuteness, and possessing but little interest.

In December 1886 I submitted to the Council of the Royal Astronomical Society a second supplementary catalogue arranged exactly like the first one. But considering the circumstance that Herschel's work is practically out of print, and that the simultaneous use of three catalogues and two copious lists of corrections would be very inconvenient, the Council proposed to me to

amalgamate the three catalogues into a new General Catalogue. I agreed to do so, and have adopted the following plan in compiling the present work.

There did not seem to be any reason for changing the epoch from 1860 to a year nearer to the present time, as 1860 has the advantage of being close to the epochs of ARGELANDER'S, SCHÖNFELD'S, and CHACORNAC'S maps, and coincides with that of PETERS' maps, while D'ARREST'S final positions of nebulæ are referred to 1860, and nearly all the modern micrometric observations on nebulæ to an epoch only five years later. But the positions given in the General Catalogue required a thorough revision. They were first corrected by being compared with all modern published micrometric and meridian observations of nebulæ, after which all the positions not thus corrected but occurring in D'ARREST'S great work were improved by means of the latter, either by simply adopting D'ARREST'S places whenever they were based on three or more good observations, or, whenever D'ARREST had only one or two observations, by taking the mean of these and HERSCHEL'S positions. Constant reference was also made to the original papers in the *Philosophical Transactions* for 1786, 1789, 1802, 1833, to the Cape Observations, and to AUWERS' invaluable reduction of W. HERSCHEL'S observations, in order, if possible, to find the causes of discordant results and other difficulties. It was not possible to indicate the source of each position in the catalogue, nor was it necessary, as a catalogue of this kind can only be a work of reference or an index, but not a systematic catalogue of final positions representing the observations of this or that astronomer. But whenever considerable alterations, amounting to several minutes of arc, were made in one or both coordinates, the authority (or the principal one if there were several) has always been quoted in the column "Other Observers." Of course very many positions had to be left unaltered, chiefly those of objects situated in the southern hemisphere which is still waiting for its D'ARREST. But, though every endeavour was thus made to make the catalogue as accurate as possible, it appeared proper only to give the Right Ascensions to whole seconds of time and the Polar Distances to the tenth part of a minute; not only on account of the character of the work as one of reference only, but also because it would be useless to attempt greater accuracy in the case of clusters or of nebulæ not micrometrically observed, while it would even be premature to attempt a final catalogue of the objects observed with

the Micrometer, owing to the yet but imperfectly studied systematic errors in observations of nebulæ.* But within the said limits I trust that no opportunity has been lost of making the places as accurate as possible, and it is hardly necessary to point out that this will be found a special advantage wherever a number of objects occur close together.

The Precessions have been given for 1880 as already done by Sir John Herschel; the descriptions have also been revised, though not in the same systematic manner as the positions had been, and whenever any error of importance was detected it was corrected, chiefly by means of d'Arrest's and Lord Rosse's observations. Special care was taken to give the places and descriptions of the new nebulæ found at Birr Castle correctly, but here I had little to do except to copy the notes, which I inserted in the Birr Castle Observations when I had the pleasure of preparing them for publication in 1877–79. With regard to the very numerous new nebulæ recorded of late years, it was frequently a matter of some difficulty to decide about the identity of objects announced independently by several observers, and differing little as regards place, but often much as to description. The plan always adopted by M. Tempel of stating precisely how many objects, new or old, he has seen about the place under observation is very strongly to be recommended, especially when announcing new nebulæ which have not been micrometrically observed. In case anyone should feel doubts about an assumed identity he can easily decide for himself by referring to the authorities quoted in the fifth column.

Arrangement of the Catalogue.

This is in general the same as that adopted by Sir John Herschel, except that for obvious reasons the three columns have been omitted which showed the number of results in R.A. and N.P.D. made use of, and the "total number of times observed by *h* and *H*."

The *first column* contains the current numbers of the present catalogue. It was with much regret that I found it necessary to introduce new numbers, and it is greatly to be hoped that these will be *quoted* as little as possible,

* In making use of these I did not lose sight of the systematic differences, which appear to depend to a great extent on the degree of condensation and brightness of the objects, as first pointed out by J. Schmidt, and afterwards shown in more detail in my reviews of Schultz's and Schönfeld's observations in the *Vierteljahrsschrift d. a. G.*, vols. x. and xi.

but that old nebulæ, as hitherto, will be chiefly mentioned by their *h* number, or failing such by their *H* class and number.

The *second column* gives the number of Sir JOHN HERSCHEL'S General Catalogue (1–5079), or my Supplement (5080–6251).

The *third column* gives the numbers of Sir JOHN HERSCHEL'S Slough Observations in the *Phil. Trans.* 1833 (1–2306) and his Cape Observations (2308–4021). Numbers in round and square brackets refer to the special lists of objects in the two nubeculæ in the Cape Observations, pp. 151–164. A few objects (*h* 4016–4021) accidentally omitted from the regular catalogue of observations, but given among errata in the Cape Observations, are designated *h. o. n.* in the fifth column. A synoptic table of the dates of the observations is given in the Cape Observations, pp. 129–131.

The *fourth column* contains the classes and numbers of Sir WILLIAM HERSCHEL, by which the objects are designated in his unreduced observations in the *Phil. Trans.* for 1786, 1789, 1802. Eight nebulæ found in September 1802 (*H. O. N.* in the fifth column) are published in the Cape Observations, p. 128. A most important list of errata in the three catalogues is given in the *Phil. Trans.*, 1864, pp. 44, 45. The only published reduced catalogue of Sir W. HERSCHEL'S nebulæ and clusters is that of AUWERS, printed in vol. xxxiv. of the Königsberg Observations (in the present work simply quoted as "AUWERS"), where a chronological table of the sweeps, an index of the classes and numbers with their approximate R.A., and a list of fifty-two very widely diffused nebulosities will also be found.

The *fifth column* contains references to other observers. For the sake of the historical interest attached to early observations of nebulæ and clusters, I have here inserted the names of observers before MESSIER (HIPPARCHUS, SÛFI, CYSAT, FLAMSTEED, MÉCHAIN, &c.). Whenever the name of an observer later than the two HERSCHELS is given at an object observed by *h* or *H*, it means that the place given in the General Catalogue was considerably in error, and has been corrected by means of the observations of the astronomer mentioned in this column. Objects not observed by *H* or *h* have been discovered by the observer whose name is given here. References to the list of new nebulæ found before 1862, given by AUWERS in his above-mentioned work (*Auw.* with a number), will be found in the

column *Description*, but the name of their discoverer has been given in the fifth column. Only names which occur very frequently have been abbreviated, and in the following manner :—

d'A.	d'Arrest.
Auw.	Auwers.
C. H.	Caroline Herschel.
Δ	Dunlop.
H.	Sir William Herschel.
h	Sir John Herschel.
G. C.	General Catalogue of 1864.
L.	Leavenworth.
Lac.	Lacaille.
M.	Messier.
Mu.	Muller.
m	Marth.
Ld. R.	The late Lord Rosse (and his assistants).
Ld. R.*	The present Lord Rosse.
(R)	Found with Lord Rosse's telescope.
St.	Stephan.
O. St.	Ormond Stone.
Sw.	Swift.
T.	Tempel.

I now proceed to indicate the sources where the observations referred to in this column will be found.

d'Arrest. A few references (chiefly in the notes at the end of the catalogue) are to d'Arrest's *Erste Reihe* (Leipzig, 1856), but nearly all are to his work *Siderum Nebulosorum Observationes Havnienses* (Copenhagen, 1867), and it is to that thesaurus, more than to the exertions of any other observer, that the credit should be given for whatever superiority as to accuracy the present work may possess in comparison with Herschel's.

Austin. *See* Harvard College.

Auwers. *Königsberger Beobachtungen*, Band xxxiv.; positions of forty nebulæ in the *Astr. Nachr.*, vol. lviii., No. 1392, from observations made with the Königsberg Heliometer.

Ball. *See* Lord Rosse.

Barnard. Nebulæ found with a 6-inch Refractor at Nashville, Tennessee. The *Sidereal Messenger*, vols. i.–iii., and private communications.

BIGOURDAN. About 100 nebulæ found with the west Equatorial of the Paris Observatory (of 310 mm. aperture), and kindly communicated in May 1887.

BOND. *List of New Nebulæ and Star-Clusters found at Harvard College Observatory.* Cambridge, 1863, 8vo. This contains objects found by G. P. BOND, S. COOLIDGE, and J. H. SAFFORD, nearly all occurring in the Harvard Equatorial Zones.

BORELLY. *Astr. Nachr.*, vol. lxxix., No. 1885, and *Monthly Notices*, xxxii. p. 248. Six nebulæ found at the Marseilles Observatory, and micrometrically observed.

BURNHAM. *Memoirs R.A.S.*, vol. xliv. pp. 169 and 216; *Astr. Nachr.*, vol. cvi., No. 2524.

COMMON. List of about 32 new nebulæ found with a 3-foot Reflector, in *Copernicus*, vol. i. p. 50.

COOLIDGE. *See* BOND.

COPELAND. Wherever (R) is added, the object in question was found with Lord ROSSE's 6-foot telescope. Other nebulæ were discovered by means of the spectroscope, partly in Peru (*Copernicus* iii. p. 206), partly at Dun Echt (*Monthly Notices*, xlv. p. 91).

DREYER. *See* Lord ROSSE.

DUNLOP. Catalogue of 629 southern nebulæ in the *Phil. Trans.* for 1828. As Sir JOHN HERSCHEL failed to find about two-thirds of these objects, he came to the conclusion "that a want of sufficient light or defining power in the instrument used by Mr. DUNLOP has been the cause of his setting down objects as nebulæ where none really exist." For this reason none of the objects were inserted in the General Catalogue unless confirmed at the Cape, and I have, of course, followed HERSCHEL implicitly in this particular.

ENGELHARDT. *Observations Astronomiques faites par B. d'Engelhardt dans son Observatoire à Dresde*, vol. i., Dresden, 1886, contains micrometric observations of 100 nebulæ. I am further indebted to M. D'ENGELHARDT for 90 positions of nebulæ recently observed by him.

ENGELMANN. Meridian observations of nebulæ made at the Leipzig Observatory, *Astr. Nachr.* vol. civ., No. 2485.

HARTWIG. A few nebulæ found with the 18-inch Refractor at Strasburg, *Astr. Nachr.*, vol. cv., No. 2507; vol. cvi., No. 2544; and vol. cxii., No. 2688.

Harvard College. Vol. xiii., Part I. of the *Observations*, contains a series of observations of nebulæ, among which are some new ones found by Austin, Langley, Peirce, Searle, Wendell, and Winlock.

Holden. New nebulæ found with the 15½-inch Refractor at Madison, *Publications of the Washburn Observatory*, vol. i. p. 73, and vol. ii. p. 101.

Lacaille. Catalogue of 42 southern nebulæ reduced by Auwers (*l.c.* p. 223). The Roman numerals indicate his three classes: I. Nebulæ without stars; II. Clusters; III. Stars with nebulosity.

Langley. *See* Harvard.

Leavenworth. *See* Ormond Stone.

Lohse, J. G. List of about 20 new nebulæ found with the 15½-inch Refractor at Mr. Wigglesworth's Observatory, Scarborough. Kindly communicated by letters.

Marth's Catalogue of 600 new nebulæ, found at Malta with Mr. Lassell's 4-foot Reflector, is published in the *Mem. R.A.S.*, vol. xxxvi. A good many of them were found independently by d'Arrest and Stephan, whereby the accuracy of Mr. Marth's positions has been proved to be very satisfactory.

Melbourne. In the first part of the Melbourne observations of southern nebulæ there are a few *novæ*.

Messier's Catalogue as reduced by Auwers (*l.c.* p. 218).

Muller. *See* Ormond Stone.

Palisa. Nebulæ discovered or observed with the 27 and 12-inch Refractors of the Vienna Observatory, *Wiener Beobachtungen*, vierte Folge, vols. ii. iii. iv., and *Astr. Nachr.*, Nos. 2520, 2544, 2732, and 2782.

Peirce. *See* Harvard.

Peters, C. H. F. Positions of nebulæ (including a few *novæ*) read off from his maps or micrometrically observed. *Copernicus*, vol. i. p. 51, and vol. ii. p. 54.

Pickering's star-like planetary nebulæ, detected by means of spectroscopic sweeps, *The Observatory*, vol. v. p. 294, and private letter of July 1885.

Lord Rosse. For detailed information about the nebulæ found at Birr Castle (nearly all in the neighbourhood of brighter nebulæ), see "Observations of Nebulæ and Clusters of Stars made with the 6-foot and 3-foot

Reflectors at Birr Castle from 1848 to 1878," Dublin 1880 (from the *Scient. Trans. R. Dubl. Soc.*, vol. ii.). This publication embodies *all* observations of nebulæ of any value made at Birr Castle (except of the *Orion* nebula), and quite supersedes the abstracts given in the *Phil. Trans.* for 1850 and 1861, except that the engravings have not been republished. The new nebulæ found before 1861 (chiefly by G. J. Stoney, B. Stoney, and R. J. Mitchell) have been marked Ld. R.; many of them were re-observed and measured in 1874–78 by the present Earl of Rosse and myself. Those found by the present Earl have been marked Ld. R *, and those found by Ball, Copeland, and Dreyer are indicated by the name of the observer with an (R) added.

G. Rümker's Ring-Micrometer observations of 135 nebulæ are published in the *Astr. Nachr.*, vols. lxiii.–lxviii., Nos. 1508, 1531, 1566, 1599, and 1631. Several of the objects have not been observed by anybody else after Sir W. Herschel. In many cases the comparison stars have not been observed on the Meridian.

Safford. *See* Bond.

Schmidt, J. Ring-Micrometer observations, *Astr. Nachr.*, Nos. 1678 and 2097.

Schönfeld. The very valuable Ring-Micrometer observations of 489 nebulæ are published in the *Astr. Beobachtungen auf der Grossherzoglichen Sternwarte zu Mannheim*, vols. i., ii., 1862–75.

Schultz's equally important *Micrometrical Observations of* 500 *Nebulæ* were published at Upsala in 1874. A "Preliminary Catalogue" of the resulting positions was given in the *Monthly Notices*, vol. xxxv. p. 135. Next to d'Arrest's work this publication and those of Schönfeld have furnished most corrections to the General Catalogue.

Searle. *See* Harvard.

Secchi. Fourteen new nebulæ, *Astr. Nachr.*, vol. lxvi., No. 1571.

Stephan. The new nebulæ found with the $0^m{\cdot}8$ silvered glass Reflector at Marseilles have *all* been micrometrically observed, and the positions are therefore extremely reliable. All the lists published in two places have been compared *inter se* to guard against misprints, and the eight first lists were, besides, compared with a MS. copy which M. Stephan kindly sent me in 1877. The various lists are referred to by Roman numerals in the following manner :—

St. I.	*Astr. Nachr.* vol. lxxvi. No. 1810	}	*Monthly Notices*, xxxii. p. 23.			
II.	„ „ lxxviii. „ 1867					
III.	„ „ lxxix. „ 1876		„	„	p. 231.	
IV.	„ „ lxxxi. „ 1939		„	xxxiii.	p. 433.	
V.	„ „ lxxxiii. „ 1972		„	xxxiv.	p. 75.	
VI.	„ „ lxxxiii. „ 1977.					
VII.	*Comptes Rendus*, vol. lxxxiii. p. 328.					
VIII.	*Monthly Notices*, xxxvii. pp. 334–39.					
IX.	*Comptes Rendus*, vol. lxxxvii. p. 869.					
X.	„ „ xc. p. 837.					
XI.	„ „ xcii. pp. 1128, 1183, 1260; *Astr. Nachr.* vol. c. No. 2390.					
XII.	„ „ xcvi. pp. 546, 609		„	„	cv. „	2502.
XIII.	„ „ c. pp. 1043, 1107		„	„	cxi. „	2661.

Stone, Ormond. A remarkable contrast to M. Stephan's results is offered by the extremely rough places of 476 new southern nebulæ, found by Messrs. Ormond Stone, Leavenworth, and Muller, with the 26-inch Refractor at the L. M'Cormick Observatory at Charlottesville, Virginia, and published in two lists in the *Astronomical Journal*, vol. vii., Nos. 146 and 152 (designated by the numbers i. and ii.). In the first list the Right Ascensions are given to whole minutes of time only, in the second one mostly to the tenth part of a minute. If one may judge from the descriptions, many of the objects are not unlikely to turn out to be nothing but very small stars, and it is much to be hoped that the observers in future will verify the objects before proceeding to publication, and aim at greater accuracy in the positions. Wherever a bright star is stated to be near one of these objects, I have tried to identify the star in the *Durchmusterung*, but rarely with success, so that either the positions or the magnitudes (most probably the former) must be greatly in error.

Struve, O. *Observations de quelques Nébuleuses; Entdeckung einiger schwacher Nebelflecken; Wiedererscheinen des Winnecke'schen Cometen und Entdeckung einiger neuer Nebelflecken; Mélanges Math. et Astron.* t. iii. p. 569; *ibid.* p. 689, and t. iv. p. 395.

Swift. Since 1883 Mr. Lewis Swift has searched most assiduously for nebulæ with the 16-inch Refractor at the Warner Observatory, and has in four years found about 600, mostly extremely faint objects. The positions are very good. I am under great obligations to Mr. Swift for his kindness in copying for me in advance several of his published lists, and supplying me

with the places of all objects found by him up to June 1887. The rapid discovery of so many faint nebulæ in a few years by one observer furnishes a confirmation of the opinion expressed by D'ARREST : "nebulas esse numero omnino infinitas." The following is a list of the references to the six catalogues:—

Sw. I. *Astr. Nachr.* vol. cxii. No. 2683.
II. „ „ cxiii. „ 2707.
III. „ „ cxv. „ 2746.
IV. „ „ cxv. „ 2752.
V. „ „ cxvi. „ 2763.
VI. communicated by degrees in MS.

TEMPEL. The observations of nebulæ made at Arcetri with an 11-inch Refractor since 1875 are unfortunately only partly published in a number of scattered articles in the *Astr. Nachr.* Of particular value for the present work have been a great many observations of, and notes on, nebulæ, observed by nobody after W. HERSCHEL, except by M. TEMPEL. Many new nebulæ have also been found at Arcetri. I have to express my best thanks for the kindness with which M. TEMPEL has answered my inquiries about many objects, old and new, by which I have been enabled to give the accurate positions of many *novæ* merely alluded to in the published notes. The Roman numerals indicate the sources of the results as follow:—

T. I. *Astr. Nachr.* No. 2212.
II. „ „ 2253.
III. „ „ 2284.
IV. „ „ 2347.
V. „ „ 2439.

T. VI. *Astr. Nachr.* No. 2511.
VII. „ „ 2522.
VIII. „ „ 2527.
IX. „ „ 2660.
X. „ „ 2691.

TODD. A number of nebulous-looking objects were found by Professor D. P. TODD during his search for an ultra-Neptunian planet (*Astr. Nachr.*, No. 2698), but I have only inserted eight of them. Of the rest, some were near the places of nebulæ already catalogued, while the nebular character of others seemed very doubtful.

VOGEL. *Beobachtungen von Nebelflecken und Sternhaufen:* Leipzig, 1867, 8vo ; and *Positionsbestimmungen von Nebelflecken und Sternhaufen zwischen* + 9° 30′ *und* + 15° 30′ *Declination:* Leipzig, 1876, 4to (*Leipziger Beobachtungen*, Bd. i.). All filar Micrometer observations.

Wendell. *See* Harvard.

Winlock. *See* Harvard.

Winnecke. Places of a few new nebulæ communicated by letter in 1876.

The sixth and following columns require no explanation. In the last column will be found references to the notes at the end of the catalogue (*), and to the list of figured nebulæ (†). The "Summary Description" of objects not occurring in the General Catalogue represents the observer's own words as nearly as possible, except that I have always changed M. Stephan's *eeF* into *eF*, and his *eF* into *vF*, as such of his *novæ* which have been found independently by other observers have always by these been described as somewhat brighter than by M. Stephan. The system of abbreviated description used in the observations of the two Herschels has been in use so long that it is unnecessary to enter into a lengthy explanation of it, except to call attention to the progressive scale of brightness, size, and form adopted by Sir John Herschel.

1. excessively faint	excessively small, 3″ to 4″ diam.	
2. very faint	very small, 10″ to 12″ diam.	
3. faint	small	20″ to 30″ diam.
4. considerably faint	considerably small	
5. pretty faint	pretty small	50″ to 60″ diam.
6. pretty bright	pretty large	
7. considerably bright	considerably large	3′ to 4′ diam.
8. bright	large	
9. very bright	very large, 8′ to 10′ diam.	
10. excessively bright	excessively large, 20′ and upwards.*	

In the case of form, the scale was supposed arranged in the order: round, very little extended, elliptic or oval, considerably extended, pretty much extended, much extended, very much extended, extremely extended.

The following is a complete list of the abbreviations :—

ab	about	app	appended
alm	almost	att	attached
am	among	b	brighter

* In estimating clusters of well-separated and scattered stars a wider acceptation must be understood, so that, e.g., a cluster of 1′ in extent would be very small, and one of 15′ or 20′ large.

bet	between
biN	binuclear
bn	brightest towards the north side
bs	brightest towards the south side
bp	brightest towards the preceding side
bf	brightest towards the following side
B	bright
c	considerably
ch	chevelure
co	coarse, coarsely
com	cometic
cont	in contact
C	compressed
C.G.H.	Results of observations, &c., at the Cape of Good Hope
Cl	cluster
d	diameter
def	defined
dif	diffused
diffic	difficult
dist	distance, or distant
D	double
e	extremely, excessively
ee	most extremely
er	easily resolvable
exc	excentric
E	extended
f	following
F	faint
g	gradually
gr	group
i	irregular
inv	involved, involving
iF	irregular figure
]	little (adv.), long (adj.)
L	large
m	much
mm	mixed magnitudes
mn	milky nebulosity
M	middle, or in the middle
n	north
neb	nebula
nf	north following
np	north preceding
nr	near
N	Nucleus, or to a Nucleus
p	preceding
p	pretty (before F, B, L, S)
pg	pretty gradually
pm	pretty much
ps	pretty suddenly
P	poor
quad	quadrilateral
quar	quartile
r	resolvable (mottled, *not* resolved)
rr	partially resolved, some stars seen
rrr	well resolved, clearly consisting of stars
R	round
RR	exactly round
Ri	rich
s	suddenly
s	south
sp	south preceding
sf	south following
sc	scattered
st	stars
sev	several
susp	suspected
sh	shaped
stell	stellar
S	small
sm	smaller
triN	trinuclear
trap	trapezium
v	very
vv	an intensive of v
var	variable

∗ a star; ∗10, a star of 10th magnitude

⁂ double star; ∴ triple star

! remarkable, !! very much so, !!! a magnificent or otherwise interesting object

Δ triangle, forms a triangle with

⊕ globular cluster of stars

○ planetary nebula

◎ annular nebula

st 9 ... stars from the 9th mag. downwards

st 9 ... 13 stars from the 9th to 13th mag.

Catalogue.

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1	1	...	...	d'A	0 0 4	+3·07	63 4·3	−20·1	F, S, R, bet * 11 and * 14	
2	6246	...	...	Ld R*	0 0 6	3·07	63 6·0	20·1	vF, S, s of G.C. 1	
3	5080	...	...	m 1	0 0 6	3·07	82 28	20·1	F, vS, R, alm stell	
4	5081	...	...	m 2	0 0 16	3·07	82 23	20·1	eF	
5	...	...	...	St XII	0 0 37	3·08	55 25·0	20·1	vF, vS, N = * 13, 14	
6	...	...	...	Sw II	0 1 5	3·08	58 15·6	20·1	eF, vS, cE	
7	2	4014	...	...	0 1 14	3·07	120 41·2	20·1	eF, cL, mE, vgvlbM	
8	5082	...	...	O Struve	0 1 17	3·08	66 59	20·1	vF, N in n end	
9	5083	...	...	O Struve	0 1 27	3·08	67 0	20·1	F, R, *9, 10 sf	
10	3	4015	...	...	0 1 28	3·06	124 38·9	20·1	F, cL, vlE, glbM	
11	...	...	...	St XII	0 1 29	3·08	53 19·9	20·1	vF, vS, vlE, 2 vF st inv	
12	4	1	III 868	...	0 1 34	3·07	86 10·2	20·1	eF, pL, vglbM	
13	5	2	III 866	...	0 1 35	3·08	57 20·8	20·1	vF, vS, S st + neb	
14	7	3	II 591	...	0 1 37	3·08	74 57·9	20·1	vF, pS, R, glbM	
15	5084	...	...	m 3	0 1 50	3·08	69 10	20·1	vF, vS, R, bM	
16	8 = 12	4 = 5	IV 15	...	0 1 52	3·08	63 3·0	20·1	pB, S, R, bM	*
17	...	...	...	Mu II	0 1 58	3·07	102 54·0	20·1	vF, eS, iR, D * 2′p	
18	5085	...	...	Schultz	0 2 11	3·08	63 2·8	20·1	F, vS, iR, mbM, h4 p19′	*
19	...	...	...	Sw II	0 2 13	3·08	57 55·6	20·1	ceF, lE, 3 vF st around	
20	6 = 5086	...	...	Ld R, Schultz	0 2 21	3·09	57 28·2	20·1	F, * 10 at	
21	...	...	...	Sw II	0 2 25	3·08	57 34·1	20·1	eF, S, lE	
22	...	...	...	St XIII	0 2 36	3·08	62 56·9	20·1	vF, pS, R, lbM, r	
23	9	...	III 147	...	0 2 41	3·08	64 51·0	20·1	3 S st + neb	
24	10	2308	III 461	...	0 2 47	3·06	115 45·0	20·1	vF, cL, mE, gbM	
25	11	2309	...	...	0 2 57	3·05	147 48·2	20·1	vF, S, R	
26	5087	...	...	d'A	0 3 14	3·08	64 56 2	20·1	vF, pL, R, 2 F st n	
27	...	...	...	Sw I	0 3 15	3·09	61 47·3	20·1	eF, vS, E, B * nr	
28	13	2310	...	...	0 3 25	3·03	147 46·4	20·1	eF, p of 2	
29	14	6	II 853	...	0 3 32	3·09	57 25·6	20·1	pB, pL, E 0°	
30	5088	...	...	m 4	0 3 38	3·08	68 49	20·1	Neb * 13	
31	15	2311	...	...	0 3 39	3·02	147 46·4	20·1	eeF, S, R, f of 2	
32	16	...	...	J Schmidt	0 3 42	3·08	71 59·0	20·1	F (Anw. 1)	
33	5089	...	...	m 5	0 3 45	+3·07	87 6	−20·1	eF, vS, or neb st	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
34	...	...	...	Sw VI	0 3 53	+3·07	102 53·2	−20·1	pF, S, R, 2 st nr	
35	...	...	...	Sw VI, Mu II	0 4 3	3·07	102 47·2	20·1	eeF, pS, R	
36	19	...	III 456	d'A	0 4 11	3·08	84 24·2	20·1	vF, pS, iF	
37	17	2312	...	...	0 4 22	3·02	147 43·8	20·1	eF, S, R	
38	...	...	...	St XII	0 4 38	3·07	96 22·0	20·1	F, S, R, mbM	
39	18	7	III 861	...	0 5 4	3·09	59 41·4	20·1	vF, pS, R	
40	20	8	IV 58	...	0 5 27	3·19	18 15·4	20·1	F, vS, R, vsmbM, * 12 sp	
41	5090	...	...	m 6	0 5 33	3·09	68 46	20·1	pF, S, lE, gbM	
42	5091	...	...	m 7	0 5 42	3·09	68 41	20·1	F, vS, stell	
43	21	9	...	...	0 5 46	3·10	59 49·8	20·1	eF, * 12 np 45″	*
44	22	10	...	...	0 5 59	3·10	59 29·3	20·1	eF, vS	
45	23	2313	...	...	0 6 48	3·05	113 57·2	20·0	eF, L, vgvlbM, L * cont f	
46	24	...	...	Markree Cat.	0 6 59	3·07	84 47·5	20·0	Nebula (Auw. 2)	
47	...	...	...	Tempel	0 7 22	3·06	97 56 6	20 0	vF, vS	
48	...	...	...	Sw II	0 7 27	3·12	42 31·8	20·0	eeF, pL, R, v diffic	
49	...	...	...	Sw II	0 7 37	3·13	42 31·3	20·0	eeF, S, R, 2nd of 3	
50	5092	...	...	Secchi	0 7 39	3·06	98 8·8	20·0	vF	
51	...	...	...	Sw II	0 7 47	3·13	42 31·6	20·0	pF, pS, R, bM	
52	25	11	III 183	...	0 7 48	3·09	72 14·3	20·0	vF, S, E	
53	26	2314	...	...	0 7 53	2·98	151 6·2	20 0	eF, S, R, bM	
54	...	...	...	Tempel, Sw V	0 7 58	3·06	97 54·3	20 0	vF, pS, R, 5092 sp	
55	27	2315	...	Δ 507	0 8 0	3·03	129 59·6	20·0	vB, vL, vmE, triN	†
56	28	12	...	...	0 8 9	3·08	78 20·0	20·0	eF, eL, diff	
57	29	13	II 241 = II 243	...	0 8 18	3·09	73 26·9	20·0	F, S, R, sbM	*
58	...	...	...	Sw V	0 8 28	3·06	97 56·8	20·0	vF, pS, R	
59	...	...	...	O St I	0 8 30	3·05	112 13	20·0	vF, pS, iR, gbM	
60	...	...	...	St XII	0 8 48	3·07	91 4·9	20·0	eF, vS, R, lbM	
61	30	14	III 428	...	0 9 15	3·07	97 5·8	20·0	vF, S, iR, psvlbM	
62	...	...	...	St XIII, O St I	0 9 57	3·05	104 15·9	20·0	F, vS, R, glbM	
63	5093	...	...	d'A	0 10 33	3·09	79 19·7	20 0	pF, S, R, sbM	
64	...	...	...	Sw V	0 10 38	3·06	97 34·6	20·0	eeF, vS, R, v diffic	
65	...	...	...	Mu II	0 10 53	3·04	113 40·0	20·0	eF, vS, R, gbM, p of 2	
66	...	...	...	Mu II	0 10 59	3·04	113 44·0	20·0	eF, pS, E, 225°, * 9n1′, f. of 2	
67	32	...	...	Ld R	0 10 59	3·11	60 43·0	20·0	eF, vS, R	
68	31	15	V 16	...	0 11 5	3·11	60 42·2	20·0	eF, L, 3 or 4 st + neb	†
69	33	...	...	Ld R	0 11 7	3·11	60 44·1	20·0	eF, vS, R	
70	34	...	...	Ld R	0 11 10	3·11	60 41·8	20·0	eF, vS, R, bet 2 F st	
71	35	...	...	Ld R, d'A	0 11 11	3·11	60 42·7	20·0	eF, vS, R	
72	36	...	...	Ld R	0 11 16	3·11	60 44·1	20·0	eF, vS, R	
73	...	...	...	Sw V	0 11 36	+3·05	106 5·5	−20·0	vF, S, R, eF D * close f	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
74	37	...	...	Ld R	0 11 42	+3·11	60 43·7	−20·0	eF, S, E, last of 6	
75	...	...	...	Sw V	0 12 8	3·08	84 18·9	20·0	vF, vS, R	
76	...	...	...	Bigourdan	0 12 27	3·11	60 51	20·0	vF, S, bM	
77	...	...	...	Mu II	0 12 30	3·04	113 18·0	20·0	eF, vS, iF (?*), *9 p 3′	
78	5094	...	...	Pechüle	0 13 17	3·07	89 55·3	20·0	vF, S, R	
79	...	...	...	Bigourdan	0 13 45	3·11	68 12·5	20·0	vF, S, vlbM	
80	38	16	...	...	0 13 55	3·11	68 25·2	20·0	F, S, R, psbM	
81	...	...	...	Copeland (R)	0 13 57	3·11	68 23·7	20·0	eeF, sp h 17	
82	...	...	...	Bigourdan	0 14 2	3·11	68 18·9	20·0	eF, stellar	
83	39	17	...	...	0 14 5	3·11	68 20·6	20·0	E, biN, 3 B st nr	
84	...	...	...	Bigourdan	0 14 5	3·11	68 9·7	20·0	eF, st & neb	
85	5095	...	...	Copeland (R)	0 14 8	3·11	68 15·8	20·0	eeF, eL, R	
86	...	...	...	Bigourdan	0 14 11	3·11	68 13·1	20·0	eF, vS, lbM	
87	43	2316	...	...	0 14 19	2·97	139 24·7	20·0	eF, S, R, gbM, 1st of 4	
88	44	2317	...	...	0 14 28	2·97	139 25·2	20·0	eF, vS, R, 2nd of 4	
89	45	2318	...	...	0 14 30	2·97	139 26·6	20·0	vF, S, R, gbM, 3rd of 4	
90	40 = 5096	...	...	Ld R, Schultz	0 14 35	3·11	68 21·2	20·0	vF, lE	
91	41 = 5097	...	...	Ld R, d'A	0 14 36	3·11	68 22·9	20·0	vF, vS, *13 sp	
92	46	2319	...	...	0 14 37	2·97	139 24·4	20·0	F, S, R, gbM, 4th of 4	
93	42 = 5098	...	...	Ld R, d'A	0 14 47	3·11	68 22·1	20·0	vF, vS	
94	...	...	...	Bigourdan	0 14 58	3·11	68 16·9	20·0	eF, vS	
95	47	19	II 257	...	0 15 1	3·09	80 17·8	20·0	F, pL, R, gbM	
96	...	...	...	Bigourdan	0 15 2	3·11	68 13·0	20·0	vF, S, vlbM	
97	48	18	...	...	0 15 11	3·12	61 1·5	20·0	F, vS, R, gbM	
98	49	2320	...	...	0 15 56	2·97	136 3·2	20·0	vF, pS, R, bM, r	
99	...	...	...	St XIII	0 16 45	3·10	75 0·4	20·0	vF, pL, R, gbM	
100	...	...	...	Sw III	0 16 48	3·10	74 17·7	20·0	vF, pS, mE	
101	50	2321	...	...	0 16 56	3·00	123 19·4	20·0	pB, pL, lE, *14f	
102	...	...	...	L I	0 17 30	3·04	104 45	20·0	eF, vS, R	
103	51	20	...	...	0 17 38	3·27	29 26·7	20·0	Cl, pS, pC, st 11...18	
104	52	2322	...	Lac I, 1, Δ 18	0 17 47	2·72	162 51·6	20·0	⊕!! vB, vL, vmCM	†
105	...	...	...	St XIII, Sw V	0 18 3	3·10	77 53·4	20·0	vF, S, R, vlbM	
106	...	...	...	L I	0 18 30	3·06	95 56	20·0	pF, vS, R, lbM	
107	5099	...	...	O Struve	0 18 40	3·05	99 3	20·0	F, pL, *7 sf 5′	
108	53	21	III 148	...	0 18 40	3·13	61 33·8	20·0	pF, pL, R, pslbM	
109	54	...	...	d'A	0 18 51	3·12	68 58·3	20·0	vF, S, 3 st nr	
110	55	22	...	...	0 19 19	3·41	19 23·0	20·0	Cl, pR, lC, st 9...12	
111	...	...	...	L II	0 19 30±	+3·07	93 24·0	−20·0	vF, S, R, lbM, * 8,5 p 36′, n2′ (? = 5100)	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
112	...	...	...	Sw II	0 19 32	+3·14	59 4·1	−20·0	eF, vS, R	
113	5100	...	...	T I	0 19 46	3·07	93 16·6	20·0	vF, S, sbM	
114	...	...	...	T IV	0 19 49	3·07	92 33·8	20·0	vF, S ✶ in centre, p of 2	
115	56	2323	...	...	0 19 51	2·99	124 27·4	20·0	vF, pL, lE, D ✶ 2′np	
116	5101	...	...	Secchi	0 19 59	3·05	98 43·2	20·0	vF	
117	5102	...	...	m 8	0 20 0	3·07	89 27	20·0	F, vS	
118	...	...	...	T IV	0 20 7	3·07	92 33·3	20·0	vF, S ✶ in centre, f of 2	
119	57	2324	...	...	0 20 17	2·88	147 45·4	20·0	pB, S, R, mbM	
120	...	...	...	T IV	0 20 20	3·07	92 12	20·0	Nebulous ✶	
121	58	2325	...	...	0 20 25	2·69	162 18·4	20·0	pB, pS, lE, vgbM	
122	...	...	...	T IV	0 20 33	3·07	92 24	20·0	2vF neb 4′–5′ np	
123	...	...	...	T IV	0 20 36	3·07	92 22	20·0	of ✶ 8·5 m	
124	...	...	...	T IV	0 20 43	3·07	92 35·7	20·0	vF, L, dif, 2 F st np	
125	59	23	III 869	...	0 21 41	3·08	87 56·1	20·0	vF, S, bM, D ✶ sp	
126	60	...	...	Ld R, d'A	0 21 54	3·08	87 58·1	20·0	vF, S, lE	
127	61	...	...	Ld R	0 22 1	3·08	87 54·1	20·0	vF, vS, R, p h 25	
128	62	25	II 854	...	0 22 5	3·08	87 54·6	20·0	pB, pS, lE 2°, bM	
129	63	24	VIII 79	...	0 22 6	3·30	30 33·1	20·0	Cl, vL, pR, lC, st 9...13	
130	64	...	...	Ld R	0 22 9	3·08	87 54·1	20·0	vF, vS, R, f h 25	
131	65	2326	...	...	0 22 43	2·98	124 2·0	20·0	F, pL, pmE, vgbM, p of 2	
132	66	26	II 855	...	0 23 0	3·08	88 40·9	20·0	pF, cL, R, vglbM, r	
133	5103	...	...	d'A	0 23 21	3·35	27 25·7	20·0	Cl, pL, st 10..., D ✶ inv	
134	67	2327	...	...	0 23 28	2·98	124 1·8	19·9	vB, L, vmE 47°, psbM, f of 2 ✶ 10 np 45″	†
135	...	...	...	L I	0 23 30	3·04	104 8·0	19·9	vF, vS, R	
136	68	...	VI 35	...	0 23 41	3·32	29 15·8	19·9	⊕, vF, S, eC	
137	69	...	II 471	d'A	0 23 43	3·10	80 34·0	19·9	F, iF, lbM	
138	5104	...	...	m 9	0 23 47	3·08	85 37	19·9	F, eS, sbM	
139	5105	...	...	m 10	0 23 54	3·08	85 39	19·9	eF, S	
140	...	...	...	St XII	0 23 57	3·16	59 58·9	19·9	vF, S, R, gbM	
141	5106	...	...	m 11	0 24 6	3·08	85 35	19·9	vF, vS, iR	
142	...	...	...	Mu II	0 24 30	3·01	113 24·0	19·9	eF, S, lE, 1st of 3	
143	...	...	...	Mu II	0 24 30	3·01	113 21·0	19·9	eF, S, mE, 2nd of 3	
144	...	...	...	Mu II	0 24 30	3·01	113 26·0	19·9	eF, vS, R, 3rd of 3	
145	70	27=2328	...	...	0 24 38	3·06	95 55·6	19·9	F, pL, vlE, vgbM, ✶8 9 f 5′	
146	71	28	...	...	0 25 13	3·37	27 29·3	19·9	Cl, pL, lC, st 11–12, D ✶	
147	72	29	...	...	0 25 32	3·24	42 16·5	19·9	vF, vL, iR, gsmbM ✶ 11	*
148	73	2329	...	...	0 26 22	2·97	122 34·0	19·9	vB, S, lE 90°, smbM ✶ 11	
149	...	...	...	St XIII	0 26 26	3·17	60 2·9	19·9	vF, vS, R, gbM ✶ 14, ✶ 12 sp	
150	...	...	...	Sw VI	0 26 50	+2·98	118 35·1	−19·9	pF, pS, R	

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					h m s	s	° ′	″		
151	74	30 = 2330	II 478	...	0 26 57	+3·04	100 28·5	−19·9	pF, pL, lE 90°, vglbM	
152	75	2331	...	...	0 27 4	2·51	163 53·2	19·9	vF, L, R, vglbM	
153	...	...	...	Sw IV	0 27 14	3·04	100 28·4	19·9	pF, pS, R, *nr nf	
154	76	31	III 467	...	0 27 14	3·03	103 26·0	19·9	eF, vS, R	
155	...	...	...	Sw IV, O St I	0 27 24	3·04	101 31·7	19·9	pF, S, R	
156	...	...	...	T V	0 27 28	3·04	99 7	19·9	vS, np II 3	
157	78	...	II 3	d'A, St IX	0 27 40	3·04	99 10·2	19·9	pB, L, E, bet 2 cB st	
158	...	...	...	T V	0 27 51	3·04	99 5	19·9	vS, nf II 3	
159	77	2332	...	...	0 28 3	2·82	146 33·4	19·9	vF, pS, R, glbM, 3 st f	
160	79	32	III 476	...	0 28 42	3·15	66 48·8	19·9	vF, vS, stell, *8, 17°, 4′	*
161	...	...	...	Sw VI	0 28 44	3·06	93 36·2	19·9	eF, eS, R, nearly bet 2 st	
162	5107	...	...	Schultz	0 28 48	3·15	66 48·4	19·9	eF, stellar, h 39 sp	
163	81	...	III 954	d'A, Sw IV	0 28 55	3·04	100 53·5	19·9	vF, vS	
164	5108	...	...	m 12	0 29 23	3·08	88 2	19·9	eF	
165	...	...	...	T V	0 29 24	3·04	100 53·5	19·9	F, L, st in centre, f of 2	
166	...	...	...	L II	0 29 30	3·03	104 23·0	19·9	eF, S, lE, *11 np	
167	...	...	...	Mu II	0 29 30	2·99	114 9·0	19·9	vF, pS, iR	
168	...	...	...	Mu II	0 29 30	2·99	113 23·0	19·9	eF, S, E 30°, *10 nf 3′	
169	82	...	...	d'A, Ld R	0 29 30	3·15	66 47·1	19·9	F, pL, D or biN, *6 nf 4′	
170	5109	...	...	m 13	0 29 35	3·08	88 52	19·9	F, S, R	
171	83	...	III 223??	...	0 29 41	3·01	109 44·1	19·9	vF, pL, lE, 2 pB st sf	
172	...	...	...	Mu II	0 30 0	3·00	113 23·0	19·9	eF, S, E	
173	84	33	III 871	...	0 30 2	3·08	88 49·8	19·9	vF, S, R, vgbM, *11 sp 80″	
174	85	2333	...	...	0 30 2	2·97	120 14·5	19·9	eF, S, vlE, am B st	
175	86	2334	III 223?	...	0 30 21	3·00	110 42·2	19·9	pB, pL, E, gbM, r	
176	87	2335	...	...	0 30 22	2·45	163 56·5	19·9	eF, S, vlE, r, *8 nr	
177	...	...	...	Mu II	0 30 30	2·99	113 21·0	19·9	eF, S, E 175° (?*)	
178	...	...	...	O St I	0 30 30	3·02	104 57·0	19·9	F, S, mE 0°, bM	
179	...	...	...	L II	0 30 36	3·01	108 37·0	19·9	eF, eS, R, B*np	
180	88	...	III 876	...	0 30 47	3·10	82 6·1	19·9	vF, pL, iR, *np inv	*
181	...	...	...	St XIII	0 30 57	3·17	61 17·9	19·9	eF, eS, irr, vF*att	
182	89	...	III 870	...	0 31 1	3·08	88 2·0	19·9	vF, S, iR, vgbM	
183	...	...	...	St XIII	0 31 3	3·17	61 15·6	19·9	pF, vS, R, gbM	
184	...	...	...	St XIII	0 31 9	3·17	61 19·4	19·9	eF, eS	
185	90	35	II 707	...	0 31 14	3·27	42 26·0	19·9	pB, vL, iR, vgmbM, r	†
186	91 + 99	...	...	d'A	0 31 15	3·08	87 36·1	19·9	F, S, R, lbM	
187	...	...	...	O St I	0 31 30	3·02	105 25·9	19·8	F, S, mE 150°, bM	
188	92	34	...	...	0 31 40	5·15	5 26·5	19·8	Cl, vL, R, 150–200 st 10...18	
189	93	36	...	...	0 31 40	3·41	29 42·5	19·8	Cl, pL, R, st 11...15	
190	...	...	...	Sw V	0 31 48	+3·09	83 42·6	−19·8	vF, S, lE, sev st nr sp	

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					h m s	s	° ′	″		
191	95	38	II 479	...	0 31 53	+3·04	99 46·4	−19·8	pB, pL, iE 0°	
192	96	39	III 872	...	0 32 3	3·07	89 54·6	19·8	F, pS, pmE, bM	
193	94	37	III 595	d'A, Schultz	0 32 7	3·08	87 26·4	19·8	F, L, p of 2, * 15 close sp	*
194	98	40	II 856	...	0 32 7	3·08	87 43·9	19·8	pB, S, R, vgbM	
195	5110	...	...	T I	0 32 8	3·04	99 53 3	19·8	F	
196	100	41	II 860	...	0 32 8	3·07	89 51·4	19·8	F, pS, R, psmbM	*
197	5111	...	...	m 14	0 32 9	3·07	89 53	19·8	eF, s of h 41	
198	97	...	II 857	d'A, Schultz	0 32 12	3·08	87 58·2	19·8	F, S, vgbM	
199	103	...	...	d'A	0 32 21	3·08	87 37·9	19·8	F, vS, * 8 p 27', 45″ s	
200	104	...	II 858	...	0 32 23	3·08	87 53·0	19·8	pB, S, vgbM	
201	102	43	III 873	...	0 32 26	3·07	89 55·1	19·8	vF, cL, E, vglbM	
202	5112	...	...	St VIII	0 32 28	3·08	87 14·0	19·8	eF, vS, ibM	
203	5113	...	...	Copeland (R)	0 32 29	3·08	87 19·7	19·8	F, R, * 9 sp 8'	
204	101	42	...	d'A	0 32 33	3·08	87 28·1	19·8	F, pS, R, vgbM, f of 2	
205	105	44	V 18	C H	0 32 46	3·24	49 5·0	19·8	vB, vL, mE 165°, vgvmbM	†
206	106	45	V 36	...	0 32 57	3·24	50 2·2	19·8	vF, vL, mE 0°	†
207	108	...	...	Ld R	0 32 57	3·02	105 4·0	19·8	vF, S, lE, stellar	
208	5114	...	...	m 15	0 33 8	3·08	88 1	19·8	pF	
209	...	...	...	L I	0 33 30	3·00	109 23·9	19·8	vF, vS, R, bM	
210	107	46	II 452	...	0 33 32	3·02	104 38·6	19·8	B, pS, R, psbM, r, * 11 p 2'	
211	5115	...	...	St VIII	0 33 47	3·08	87 19·7	19·8	eF, S, mbMN	
212	110	2236	...	...	0 33 50	2·76	146 56·2	19·8	vF, S, R, p of 2	
213	109	...	III 200	...	0 33 55	3·13	74 18·3	19·8	F, S, bet 2 S st	
214	111	47	II 209	...	0 34 3	3·17	65 16·1	19·8	pF, pS, gvlbM, r	
215	112	2337	...	...	0 34 26	2·76	146 58·5	19·8	F, S, R, am st, f of 2	
216	113	49	III 244	...	0 34 29	2·99	111 49·0	19·8	eF, vS, lE	
217	114	48	II 480	...	0 34 30	3·03	100 47·0	19·8	F, S, lE 90°, glbM	
218	5116	...	...	St VIII	0 34 57	3·22	54 26·4	19·8	eF, vS, R, gbM	
219	5058	...	...	G. P. Bond	0 35 1	3·07	89 51·8	19·8	F, S, R, * 11 sp 1'	
220	115	2338	...	...	0 35 2	2·34	164 9·9	19·8	F, iR, vgbM, 1st of several	
221	117	51	...	Legentil, M 32	0 35 5	3·25	49 54·2	19·8	! vvB, L, R, psmbMN	†
222	118	2339	...	...	0 35 5	2·34	164 14·0	19·8	vF, R, 2nd of several	
223	119	...	...	Bond, d'A	0 35 6	3·07	89 55·7	19·8	vF, pS, R	
224	116	50	...	Sûfi, M 31	0 35 7	3·25	49 29·8	19·8	!!! ceB, eL, vm E (Andromeda)	†
225	120	52	VIII 78	C II	0 35 19	3·46	28 58 7	19·8	Cl, L, lC, st 9...10	
226	121	53	...	...	0 35 24	3·20	58 10·9	19·8	eF, S, R, * 13 s 20″	
227	122	...	II 444	Engelhardt	0 35 28	3·06	92 17·7	19·8	F, pL, lbM	
228	...	...	...	St X	0 35 32	3·16	67 15·8	19·8	eF, S, R, fainter of 2	
229	...	...	...	St X	0 35 42	3·16	67 15·5	19·8	vF, S, R, smaller of 2	
230	...	...	...	L II	0 35 43	2·98	114 22·9	19·8	eF, eS, R, bMN	
231	123	2340	...	Δ 2? ?	0 35 51	+2·33	164 7·3	−19·8	i train of st and neb	

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					h m s	s	° ′	″		
232	...	...	...	L II	0 36 1	+ 2·98	114 19·9	− 19·8	eF, S, R, bMN	
233	124	54	III 149	...	0 36 5	3·20	60 11·0	19·8	F, vS, R, lbM	
234	125	...	II 245	...	0 36 11	3·12	76 27·9	19·8	F, pS, i lE, bM	
235	...	...	...	L II	0 36 13	2·98	114 17·9	19·8	eF, S, R, bMN	
236	5117	...	...	m 16	0 36 14	3·08	87 47	19·8	vF, pL	
237	...	...	...	Sw VI	0 36 33	3·07	90 53·6	19·8	vF, pS, lE, lbM	
238	126	2341	...	...	0 36 53	2·80	140 56·7	19·8	eF, pL, R, gvlbM	
239	...	...	...	L I	0 37 30	3·06	94 32·9	19·8	pF, pS, E 20°, bMN, * S f 20'	
240	...	...	...	Sw V	0 37 58	3·09	84 39·3	19·8	vF, S, R, * nr s	
241	127	2342	...	...	0 38 13	2·28	164 11·7	19·8	vF, R	
242	128	2343	...	...	0 38 19	2·28	164 12·3	19·8	vF, S, bi-N	
243	...	...	...	St XII	0 38 32	3·20	60 48·5	19 8	F, vS, R, gbM, * 10 p	
244	129	55	III 485	...	0 38 45	3·01	106 21·0	19·8	vF, S, iR, r, * 10 s 5'	
245	130	...	II 445	...	0 39 4	3·06	92 29·2	19·8	F, pS, iF, er	
246	131	56	V 25	...	0 40 1	3·02	102 38·4	19·7	vF, L, 4 st in dif neb	
247	132	57	V 20	...	0 40 4	2·98	111 31·0	19·7	F, eL, vm E 172°	*
248	133	2344	...	...	0 40 13	2·24	164 8·6	19·7	F, S, E or biN, vglbM	
249	134	2346	...	Δ 19? 21?	0 40 18	2·26	163 51·0	19·7	F, pL, vlE, r	
250	...	...	...	Sw III	0 40 18	3·10	82 52·0	19·7	eF, vS, R, am 3 st	
251	135	58	III 204	...	0 40 32	3·15	71 9·5	19·7	vF, S, R, lbM, * inv, 2 vS st f	
252	{136 = 139}	59 = 60	II 609	...	0 40 33	3·20	63 8 6	19·7	pB, S, R, pmbM, r, * * p	
253	138	{61 = 2345}	V 1	C H	0 40 38	2·95	116 3·7	19·7	!! vvB, vvL, vmE 54°, gbM	*†
254	140	2347	...	...	0 40 41	2·92	122 11·5	19·7	vB, pS, lE, smbM, * 8 nf 5'	
255	141	62	II 472	...	0 40 44	3·02	102 14·7	19·7	F, pS, R, gbM	
256	142	2348	...	...	0 40 44	2·22	164 16 7	19·7	F, S, R, gbM, * 9 nf 40″	
257	143	...	II 863	...	0 40 47	3·11	82 27·2	19·7	pL, lE, gbM, r	
258	137	...	...	Ld R	0 40 50	3·20	63 7	19·7	eF, S, vF st close	
259	{144 = 145}	{63 = 64}	{II 703 = II 621}	...	0 40 54	3·06	93 32·7	19·7	F, S, E 135°, lbM	*
260	5118	...	...	d'A	0 41 8	3·20	63 4·8	19·7	eF, pS, lE	
261	146	2349	...	Δ 3, 4, 21?	0 41 24	2 23	163 52·1	19·7	F, pL, R, gbM * 13	
262	...	...	...	Sw II	0 41 29	3·23	58 48·4	19·7	eF, vS, R, v diffic	
263	...	...	...	L I	0 41 30	3·01	103 53·9	19·7	eF, vS, lE 30°	
264	147	2350	...	...	0 41 42	2·87	129 0·3	19·7	F, S, R, vsvm bM * 13	
265	148	2351	...	...	0 42 4	2·20	164 15·1	19·7	F, pS, R	
266	149	65	III 153	...	0 42 14	3·23	58 29·2	19 7	pB, pS, lE, psbM, r, * S sf 4'	
267	150	2352	...	...	0 42 50	2·20	164 2·6	19·7	Cl, F, pL, st vS	
268	151	66	III 463	...	0 43 1	3·05	95 58·0	19·7	vF, pS, ilE, r	
269	152	2353	...	...	0 43 21	2·17	164 18·0	19·7	vF, S, R	
270	153		III 955	...	0 43 29	+ 3·03	99 25·7	− 19 7	pF, vS, iR, pglbM	

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					h m s	s	° ′	″		
271	154	67	II 446	...	0 43 34	+3·06	92 40·4	−19·7	pF, S, lE, psbM, * 8 f 5 5	
272	5119	...	...	d'A	0 43 41	3·26	54 55·3	19·7	Cl, L, lC	
273	155	...	III 430	Tempel	0 43 47	3·04	97 39·3	19·7	vF, vS	†
274	156	69	III 429	...	0 43 57	3·04	97 49·7	19·7	pB, pS, smbM, np of 2	†
275	157	70	...	...	0 44 0	3·04	97 50·2	19·7	vF, S, R, sf of 2	†
276	...	...	...	Mu II	0 44 1	2·96	113 27·9	19·7	eF, pS, E 265°, * 11 n 3′	
277	5120	...	...	d'A	0 44 12	3·03	99 21·2	19 7	F, pS, * 11 np	
278	158	71	I 159	...	0 44 12	3·35	43 12·3	19·7	cB, pL, R, 2 st 10 nr	
279	159	73	III 439	...	0 45 0	3·06	92 59·2	19·7	vF, S, iR, bM, stellar	
280	160	72	III 477	...	0 45 0	3·19	66 25·4	19·7	eF, S, R, 15 f 30″	
281	...	...	...	Barnard	0 45 7	3·47	34 10	19 6	F, vL, dif, S triple * on np edge	
282	...	...	...	St X	0 45 11	3·23	60 7·4	19·6	F, S, R, lbM	
283	...	...	...	L I	0 45 30	3·01	103 55·8	19·6	eF, S, R, 1st of 4	
284	...	...	...	L I	0 45 30	3·01	103 55·8	19·6	eF, S, R, 2nd of 4	
285	...	...	...	L I	0 45 30	3·01	103 55·8	19·6	eF, S, R, 3rd of 4	
286	...	...	...	L I	0 45 30	3·01	103 53 8	19·6	eF, S, R, 4th of 4	
287	161	75	...	...	0 45 52	3·24	58 17·0	19·6	eF, S, R (? RA 46^m 52^s)	*
288	162	74 = 2354	VI 20	...	0 45 52	2·93	117 20·7	19·6	⊕, B, L, lE, st 12...16	
289	163	2355	...	...	0 45 58	2·90	121 57·9	19·6	vB, L, pmE, gbM, * 11 np	
290	164	2357	...	...	0 46 17	2·14	163 54·8	19·6	eF	
291	5121	...	...	m 17	0 46 27	3·03	99 32	19·6	vF, vS, lE, alm stellar	
292	165	2356	...	...	0 46 34	2·12	164 6·6	19·6	Cl, F, eeL, R, st 12...18	*
293	5122	...	...	m 18	0 47 11	3·03	98 0	19·6	vF, S	
294	166	2358	...	Δ 5, 6?	0 47 15	2·10	164 8·5	19·6	vF, pL, R, vglbM, r	
295	5123	...	...	Copeland (R)	0 47 30	3·24	59 13·8	19·6	F, S, R, * 10″ n, II 214 nf	
296	167	...	II 214	...	0 47 52	3·24	59 11·3	19·6	F, lF, * 10 nf 2′	*
297	5124	...	...	m 19	0 47 56	3 03	98 7	19·6	eF	
298	5125	...	...	m 20	0 47 58	3 03	98 6	19·6	pF	
299	168	2360	...	...	0 48 23	2·15	162 57·4	19·6	pB, vS, R, gvlbR, r	
300	169	2359	...	...	0 48 25	2·84	128 27·1	19·6	pB, vL, vmiE, vgpmbM	*†
301	...	...	...	Mu I	0 48 30	3·01	101 25·8	19·6	eF, S, iR, gbM, * 8 p 30°	
302	...	...	...	Mu I	0 48 30	3·01	101 24·8	19·6	eF, vS	
303	...	...	...	L I	0 48 30	2·98	107 25 8	19·6	eF, vS	
304	...	...	...	St IX	0 48 39	3·20	66 37·8	19·6	pF, S, R, svlbM	
305	170	76	...	...	0 49 0	3·13	78 40·9	19·6	Cl, S, sc st	
306	171	2361	...	...	0 49 16	2·13	163 0 0	19·6	F, vS	
307	172	77	...	...	0 49 25	3·06	92 31·5	19·6	pF, S, E	
308	5126	...	...	Ball (R)	0 49 27	3·06	92 32·2	19·6	vF, e^q, 1′ sf h 77	
309	5127	...	...	T I	0 49 30	3·02	100 42·5	19·6	pB, pL, * 12·13 n	
310	5128	...	...	Ball (R)	0 49 41	+3·06	92 31·1	−19·6	Stellar	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
311	173	78	...	...	0 49 58	+3·24	60 28·6	−19·6	pF, vS, R, gbM	
312	174	2363	...	...	0 50 4	2·68	143 32·1	19·6	F, S, R, ∗ 12 f	
313	5059	...	...	Ld R	0 50 9	3·24	60 23·5	19·6	vF, eS, 1′ np II 210	
314	175	2362	...	...	0 50 11	2·88	122 43·2	19·6	eF, vS, R, pB ∗ f 2′	
315	176	79	II 210	...	0 50 13	3·24	60 24·4	19·6	pB, pL, R, gbM, ∗ 9 nf 3′	
316	5129	...	...	Ld R	0 50 16	3·24	60 24·3	19·6	vF, eS, stellar, 1′f II 210	
317	...	...	...	Sw II	0 50 16	3·35	46 56·7	19·6	eeF, pS, lE, D ∗ close f	
318	177	...	...	Ld R, St XII	0 50 28	3·24	60 19·8	19·6	vF, vS, R, bM	
319	178	4007	...	...	0 50 29	2·78	134 35·9	19·6	eF, vS, R, lbM	*
320	...	...	...	L II	0 50 30	2·96	111 35·8	19·6	vF, pS, E 160°, ∗ 10 n	
321	5130	...	...	m 21	0 50 34	3·04	95 51	19·5	eF, vS	
322	179	4008	...	...	0 50 36	2·78	134 30·0	19·5	vF, vS, R, lbM, 3 st p	*
323	180	2365	...	...	0 50 37	2·67	143 44·0	19·5	pF, S, R, bM, p of 2	
324	181	2364	...	...	0 50 40	2·81	131 12·6	19·5	(?), F, S, stellar	
325	5131	...	...	m 22	0 50 41	3·04	95 53	19·5	vF, vS	
326	5132	...	...	d′A	0 50 49	3·22	63 53·1	19·5	F, lE, ∗ 9·10 sf	
327	5133	...	...	m 23	0 50 50	3·04	95 54	19·5	F, S, E	
328	182	2366	...	...	0 50 52	2·67	143 40·0	19·5	vF, lE, vgbM, f of 2	
329	5134	...	...	m 24	0 50 56	3·04	95 50	19·5	F, E	
330	183	2367	...	Δ 23	0 51 27	2·08	163 13·6	19·5	⊕, vB, S, lE, st 13...15	
331	...	...	...	L II	0 51 30±	3·05	93 28·8	19·5	eF, vS, R, lbM, ∗ 12 nf 3′	
332	...	...	...	Sw V	0 51 32	3·11	83 38·5	19·5	vF, S, R, sev st nr s	
333	...	...	...	T I	0 51 54	2·98	107 18	19·5	No description	
334	184	2368	...	...	0 52 11	2·85	125 53·4	19·5	vF, S, R, glbM, 2 st 11 s	
335	...	...	...	L I	0 52 30	2·97	109 1·8	19·5	vF, pS, E, bM	
336	...	...	...	L I	0 52 30	2·96	109 10·8	19·5	vF, vS, R, sbM	
337	185	80	II 433	...	0 52 46	3·03	98 19·9	19·5	pF, L, E, glbM, ∗ 10 f 21ˢ	
338	...	...	...	T I, St XII	0 53 0	3·25	60 5·2	19·5	vF, vS, iF, bM	
339	186	2369	...	...	0 53 13	1·90	165 12·5	19·5	F, L, R, vgbM	
340	5135	...	...	m 25	0 53 30	3·03	97 37	19·5	vF, S, E	
341	...	...	...	St XII	0 53 44	3·02	99 56·6	19·5	F, pL, R, lbM, r	
342	5136	...	...	m 26	0 53 46	3·03	97 32	19·5	vF, vS	
343	...	...	...	Mu II	0 54 2	2·93	113 58·8	19·5	eF, vS, iR, sbMN (? ∗)	
344	...	...	...	Mu II	0 54 2	2·93	113 59·8	19·5	eF, vS, iR, sbMN (? ∗)	
345	5137	...	...	m 27	0 54 17	3·03	97 38	19·5	vF, vS, gbM	
346	187	2370	...	Δ 25	0 54 20	2·04	162 56·1	19·5	B, L, viF, mbMD ∗, r	†
347	5138	...	...	m 28	0 54 31	3·03	97 30	19·5	vF, vS	
348	188	2371	...	...	0 54 45	2·63	143 59·8	19·5	eF, S, R	
349	5139	...	...	m 29	0 54 47	3·03	97 34	19·5	vF, vS	
350	5140	...	...	m 30	0 54 54	3·03	97 34	19·5	eF	
351	...	...	...	Sw III	0 55 2	+3·06	92 41·9	−19·5	eF, pS, np of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
352	189	81	III 191	...	0 55 5	+3·04	94 59·8	−19·5	pF, S, iE, ✶8 f 97°	
353	...	...	...	Sw III	0 55 24	3·06	92 43·4	19·4	eF, pS, R, sf of 2	
354	...	...	...	St XII	0 55 47	3·20	68 24·5	19·4	vF, vS, R, vS ✶ inv, ✶ 14 close p	
355	5141	...	...	m 31	0 56 1	3·03	97 5	19·4	eF, vS	
356	5142	...	...	m 32	0 56 5	3 03	97 44	19·4	vF, S, iR	
357	190	82	II 434	...	0 56 16	3·03	97 5·8	19·4	F, S, iR, sbM, ✶ 14 nf 20″	
358	5143	...	...	d'A	0 56 28	3·68	28 42·7	19·4	Cl, vl Ri	
359	5144	...	...	m 33	0 57 8	3·07	91 31	19·4	eF, vS	
360	191	2372	...	...	0 57 27	2·31	156 21·5	19·4	eF, vm E 145°, vlbM	
361	192	2374	...	Δ 55??	0 57 29	2·02	162 22·6	19·4	vvF, pL, vlE, vgbM	
362	193	2375	...	Δ 62	0 57 29	2·07	161 36·0	19·4	⊕, vB, vL, vC, vmbM, st 13–14	
363	...	...	...	L I	0 57 30	2 97	107 18·7	19·4	eF, eS, R	
364	5145	...	...	m 34	0 57 31	3·07	91 33	19·4	vF, vS	
365	194	2373	...	...	0 57 44	2·83	125 53·8	19·4	F, S, R, glbM	
366	195	83	...	...	0 57 46	3·70	28 34·1	19·4	Cl, S	
367	...	...	...	Mu II	0 57 54	2·99	102 53·7	19·4	eF, pS, E 175°, bn, 3 st 12 np	
368	196	4012	...	...	0 57 58	2·75	134 1·8	19·4	eF, vS, ✶7·8 sp 3′	*
369	...	...	...	L I	0 58 30	2·96	108 33·7	19·4	vF, vS, R, gbM	
370	197	...	...	d'A	0 58 53	3·28	58 20·3	19·4	vF, ✶13 s 15″, dif	
371	198	2376	...	Δ 31??	0 58 56	1·97	162 48·5	19·4	Cl, F, L, R, pC, st 14...16	
372	5146	...	...	Dreyer (R)	0 59 2	3·28	58 19·4	19·4	Stellar, mbM, r	
373	5147	...	...	Dreyer (R)	0 59 14	3·29	58 26·6	19·4	vF, vS	
374	199	...	...	d'A	0 59 21	3·29	57 57·3	19·4	F, S, bet 2 st 15	
375	5148	...	...	Ld R*	0 59 23	3·29	58 24·2	19·4	vF, vS	
376	200	2378	...	Δ 36??	0 59 27	1·90	163 34·4	19·4	⊕, B, S, R	
377	...	...	...	L I	0 59 30	2·94	110 47·7	19·4	vF, vS, mE, sbMN	
378	201	2377	...	...	0 59 32	2·86	120 55·9	19·4	vF, S, R, gbM	
379	202	84	II 215	...	0 59 34	3·29	58 13·8	19·4	pF, S, R, bM	
380	203	85	II 216	...	0 59 36	3·29	58 16·0	19·4	pF, S, R, sbM	
381	204	...	VIII 64	C H	0 59 40	3·70	29 10·0	19·4	Cl, pC	
382	205	...	...	Ld R, d'A	0 59 42	3·29	58 20·7	19·4	vF, S, R, sp of D neb	
383	206	86	II 217	...	0 59 43	3·29	58 20·2	19·4	pF, pL, R, gbM, nf of D neb	
384	207	...	...	Ld R, d'A	0 59 43	3·29	58 27·3	19·4	pF, pS, sp of 2	
385	208	...	...	Ld R, d'A	0 59 45	3·29	58 25·7	19·4	pF, pS, R, nf of 2	
386	209	...	...	Ld R	0 59 48	3·29	58 23·3	19·4	eF, S, R	
387	5149	...	...	Ld R*	0 59 50	3·29	58 21·6	19·4	vF, S, R	
388	210	...	...	Ld R	1 0 4	3·29	58 27·3	19·3	vF, S, R	
389	...	...	...	Sw II	1 0 6	3·36	51 1·5	19·3	eF, eS, R, ✶nr	
390	...	...	..	Bigourdan	1 0 13	3·29	58 18·5	19·3	vF, vS, stellar	
391	211	...	...	Bond, 1853	1 0 14	+3·07	89 48·9	−19·3	F, S, r (Auw. 9)	

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					h m s	s	° ′	″		
392	212	87	II 218	...	1 0 40	+3·30	57 36·9	−19·3	F, vS, R, mbM, bet 2 st	
393	214	88	I 54	...	1 0 44	3·36	51 6·2	19·3	F, vS, vlE, gbM, 4 S st nr	*
394	{215= 213}	...	...	d'A, Ld R	1 0 44	3·30	57 36·2	19·3	F, S, 50″ nf II 218	
395	216	2379	...	...	1 0 46	1·94	162 44·6	19·3	vF, pL, R, glbM	
396	5150	...	...	m 35	1 0 49	3·10	86 13	19·3	eF, S, lE	
397	5151	...	...	Ball (R)	1 0 52	3·30	57 38·2	19·3	eF, S, R, vF *p	
398	...	...	...	Bigourdan	1 1 12	3·30	58 14	19·3	vF, vS, stellar	
399	5152	...	...	Ld. R*	1 1 14	3·30	58 6·9	19·3	vF, S, R	
400	5153	...	...	Ball (R)	1 1 19	3·30	58 0·9	19·3	eF, vS, GC 217 f	
401	5154	...	...	Ball (R)	1 1 22	3·30	57 59·1	19·3	eF, stellar, 217 f	
402	5155	...	...	Ld. R*	1 1 27	3·30	57 56·5	19·3	eF, vS, R, 217 s 3′	
403	217	...	...	d'A	1 1 30	3·30	57 59·8	19·3	vF, pS, cE, *11 s 85″	
404	218	89	II 221	...	1 1 39	3·33	55 1·9	19·3	pB, cL, R, gbM, β Andr. sf	
405	219	2380	...	...	1 2 6	2·68	137 25·6	19·3	eS, stellar, = *7m	
406	220	2381	...	...	1 2 40	2·04	160 37·5	19·3	F, vL, R, vglbM	
407	221	...	II 219	d'A, Schultz	1 2 52	3·31	57 37 0	19·3	vF, vS, sp of 2	
408	5156	...	...	Schultz	1 3 6	3·31	57 35·6	19·3	vF, vS, II 220 f 8′	
409	223	2382	...	...	1 3 9	2·80	126 31·4	19·3	eF, S, R, vS *nr	
410	222	...	II 220	d'A, Schultz	1 3 14	3·31	57 35·7	19·3	pB, pL, nf of 2	
411	224	2384	...	...	1 3 28	1·91	162 30·7	19·3	eF, pL, R, gvlbM	
412	...	...	...	L I	1 3 30	2·93	110 45·7	19·3	vF, eS, R, sbMN (Neb?)	
413	...	...	...	L II	1 3 30 ±	3·05	93 33·7	19·3	eF, pS, vlE	
414	5157	...	...	Schultz	1 3 32	3·31	57 37·9	19·3	vF, S, iR, mbM, II 220 np	
415	225	2383	...	...	1 3 37	2·80	126 14·6	19·3	vF, S, R, glbM	
416	226	2386	...	...	1 3 39	1·86	163 6·4	19·3	F, pS, R, gbM	
417	...	...	...	L II	1 3 50	2·95	108 54·7	19·3	eF, eS, R	
418	227	2385	...	...	1 3 58	2·85	120 57·8	19·3	F, pL, R, vglbM, p of 2	
419	228	2387	...	Δ 36?	1 4 4	1·81	163 38·0	19·3	pB, pL, R, gbM	
420	229	90	III 154	...	1 4 25	3·30	58 37·4	19·2	F, pS, R, bM	
421	230	...	III 155	...	1 4 25 ±	3·30	58 36 ±	19·2	eF, vS (only seen by II)	
422	231	[162]	...	...	1 4 28	1·89	162 30·9	19·2	vF (in Nubec. minor)	
423	232	2388	...	...	1 4 42	2·86	119 58·7	19·2	eF, S, E, glbM, f of 2	
424	233	2389	...	...	1 4 58	2·77	128 49·7	19·2	vF, S, R, glbM	
425	...	...	...	St X	1 5 9	3·37	51 58·6	19·2	vF, vS, R, lbM, *11 att	
426	234	91	III 592	...	1 5 40	3·07	91 2·7	19·2	vF, vS, R	
427	236	2390	...	...	1 5 44	2·83	122 49·7	19·2	3 v S st with neby (?)	
428	238	...	II 622	...	1 5 46	3·07	89 45·7	19·2	F, L, R, bM, er	
429	237	92	III 593	...	1 5 48	3·07	91 5·6	19·2	vF, vS	
430	239	93	II 447	...	1 5 52	3·07	90 59·8	19·2	F, vS, R, vsbM *	
431	240	95	...	...	1 6 16	+3·32	57 1·8	−19·2	F, S, vsbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880	North Polar Distance, 1860·0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
432	241	2391	...	...	1 6 16	+2·34	152 20·7	−19·2	F, S, R, gbM, ∗ 12 f	
433	242	94	...	...	1 6 28	3·73	30 36·9	19·2	Cl, S, lC	
434	243	2392	...	...	1 6 37	2·43	148 59·9	19·2	B, S, R, psbM	
435	5158	...	...	m 36	1 6 48	3·08	88 38	19·2	eF, S, E	
436	244	...	VII 45	...	1 6 53	3·70	31 56·1	19·2	Cl, S, iF, pC	
437	...	...	...	Sw V	1 6 58	3·11	84 48 8	19·2	pF, vS, R, F ∗ np	
438	245	2393	...	...	1 7 7	2·76	128 39·0	19·2	pF, S, R, glbM	
439	246	2394	...	...	1 7 12	2·82	122 29·4	19·2	pB, S, R, gbM	
440	247	2396	...	...	1 7 13	2·42	149 1·7	19·2	F, vS, R	
441	248	2395	...	...	1 7 17	2·82	122 32·9	19·2	pF, S, R, gbM	
442	...	...	...	Sw V	1 7 19	3·06	91 46·0	19·2	vF, S, R, B ∗ sf	
443	249	...	...	d'A	1 7 21	3·32	57 30·8	19·2	F, S, R, ∗ 15 p 8ᵐ on par.	
444	251	...	...	Ld R	1 7 37	3·31	59 40	19·2	vF, mE 135°, lbM	
445	5159	...	...	m 37	1 7 41	3·08	88 49	19·2	vF, vS	
446	5160	...	...	m 38	1 7 48	3·10	86 26	19·2	F, vS, stellar	
447	250	...	...	d'A	1 7 50	3·32	57 40·5	19·2	F, pL, bM, ∗ 11 nf	
448	...	...	...	Sw IV	1 8 14	3·06	92 21·5	19·1	pB, vS, lE	
449	...	...	...	St XII	1 8 19	3·33	57 39·0	19·1	vF, vS, R, vlbM, vF st inv	
450	254	...	III 440	d'A	1 8 24	3·06	91 36·0	19·1	vF, L	
451	...	...	...	St XII	1 8 25	3·33	57 40·5	19·1	vF, vS, R, vlbM	
452	252	96	...	...	1 8 29	3·31	59 42·7	19·1	vF, E, ∗ 9 np, S ∗ nf, vnr	
453	...	...	...	St XII	1 8 29	3·33	57 42·4	19·1	vF, vS, R, vF st inv	
454	253	2397	...	...	1 8 35	2·48	146 8·6	19·1	vF, S, R, bM	
455	5161	...	...	m 39	1 8 45	3·10	85 33	19·1	F, vS, alm stell	
456	255	2399	...	Δ 7, 10?	1 9 51	1·67	164 2·2	19·1	pF, pL, iR, r, 1st of sev	
457	256	97	VII 42	...	1 10 20	3·72	32 25·0	19·1	Cl, B, L, pRi, st 7, 8, 10	
458	257	2401	...	Δ 60?	1 10 41	1·80	162 17·2	19·1	pF, L, R, vgbM	
459	258	...	III 205	...	1 10 41	3·20	73 4·9	19·1	eF	
460	259	2402	...	Δ 8, 10?	1 10 49	1·65	164 2·7	19·1	F, pL, iR, gbM, r, 2nd of sev	
461	260	2400	...	...	1 10 54	2·79	124 6·2	19·1	pB, R, glbM (? 1° wrong)	
462	5162	...	...	m 40	1 10 55	3·10	86 30	19·1	eF, vS, stellar	
463	5163	...	...	St III	1 11 31	3·19	74 24·6	19·1	eF, vS, R, lbM	
464	...	...	...	T V	1 11 41	3·35	55 46·5	19·1	S	
465	261	2404	...	Δ 9?	1 11 42	1·63	164 4·6	19·1	pB, pL, iF, 3rd of sev	
466	262	2403	...	...	1 11 43	2·37	149 38·8	19·1	vF, pS, R, gbM	
467	263	99	I 108	...	1 11 57	3·09	87 26·2	19·1	pB, pL, R, gbM	*
468	265	98	...	...	1 12 3	3·34	58 1·9	19·1	vF, eS, stellar	
469	5164	...	...	m 41	1 12 9	3·18	75 52	19·0	eF, S, R	
470	264	...	III 250	d'A, Schultz	1 12 31	3·09	87 19·6	19·0	pB, L, iR	
471	5165	...	...	m 42	1 12 34	3·18	75 57·0	19·0	Neb ∗ 12 m	
472	266	...	...	d'A	1 12 41	+3·33	58 2 0	−19·0	eF, vS, ∗ 9,10 p 14ˢ, v diff	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860 0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
473	267	...	...	III 206	1 12 41	+3·19	74 14·9	−19·0	eF, S	
474	269	...	III 251	d'A, Schultz	1 12 53	3·09	87 19·3	19·0	pB, S, smbM, f of 2	
475	5166	...	...	m 43, Peters	1 12 54	3·18	75 52·0	19 0	eF, S	
476	5167	...	...	m 44	1 12 54	3·19	74 42	19·0	eF, vS, stellar	
477	268	100	III 577	...	1 13 20	3·43	50 14·3	19·0	vF, pS, vlE, vglbM	
478	...	...	...	L II	1 13 39	2·89	113 6 5	19·0	eF, eS, R, sbMN	
479	5168	...	...	m 45	1 13 59	3·10	86 52	19·0	eF, S, R	
480	...	...	...	L II	1 14 0	2·99	100 36·5	19·0	eF, vS, R, (neb ?)	
481	...	...	...	Sw VI, L II	1 14 0	3·00	99 56·7	19·0	vF, vS, R, F * np	
482	271	2405	...	...	1 14 4	2·69	131 42·9	19·0	eF, lE	
483	272	102	...	d'A, Schultz	1 14 5	3·35	57 12·8	19·0	vF, vS	
484	273	2406	...	...	1 14 7	2·35	149 15·6	19·0	vB, S, lE, psmbM	
485	270	101	...	d'A, Schultz	1 14 11	3·12	83 43·2	19·0	cF, pL, R, *8 sp $3\frac{1}{2}'$	
486	275	...	...	Ld R	1 14 29	3·11	85 24·0	19·0	eF, eS, stell, 5′ n of h 103	
487	...	...	...	L I	1 14 30	2·94	107 6·5	19·0	oF, vS, R	
488	276	103	III 252	...	1 14 31	3·11	85 28·7	19 0	pB, L, R, svmbM, * 8 f 10′	
489	274	...	...	d'A	1 14 33	3·14	81 31·6	19·0	pB, S, E	
490	277	...	...	Ld R	1 14 48	3·11	85 21·8	19·0	vF, vS, R, 8′ nf h 103	
491	279	2407	...	...	1 14 54	2·77	124 48·3	19·0	B, S, vlE, bM, vS * nr	
492	280	...	...	Ld R	1 14 57	3·11	85 18·6	19·0	eF, vS, R	
493	281	105	III 594	...	1 14 58	3·08	89 46·5	19·0	vF, L, mE 60°, lbM	
494	282	104	...	...	1 15 4	3·35	57 33·6	19·0	vF, pL, E, 3 F st s	
495	278	...	III 156	d'A, Schultz	1 15 5	3·35	57 15·7	19·0	vF, S, 1st of 3	*
496	288	...	III 157	Ld R	1 15 13	3·35	57 13·0	19·0	vF, vS (C in Birr diagr.), 2nd of 3	*
497	...	...	...	St XII	1 15 14	3·06	91 36·3	19·0	eF, pS, R, vlbM, r	
498	283	...	...	Ld R	1 15 16	3·35	57 15·0	19·0	eeF, np h 106 (D in Birr diagr.)	*
499	289	106	III 158	...	1 15 20	3·35	57 16·4	19 0	pB, pL, R, 3rd of 3	*
500	290	...	...	Ld R	1 15 23	3·11	85 20·3	19 0	vF, vS, mbM, * 11 nf 1′	
501	284	...	...	Ld R	1 15 33	3·35	57 17 7	19·0	vF, S (E in Birr diagr.)	
502	293	...	...	d'A	1 15 36	3·13	81 41·0	18·9	eB, S, R, bMN	
503	5169	...	...	d'A	1 15 37	3·35	57 24 2	18 9	eF, eS, D * 4′ sp	
504	291 = 292	107	...	d'A	1 15 37	3·35	57 31·7	18·9	vF, S	*
505	5170	...	...	m 46	1 15 37	3·14	81 16	18·9	vF, vS, stellar	
506	5171	...	...	Ld R*	1 15 47	3·35	57 29·8	18·9	vF, vS, sp h 108	
507	294	108	III 159	...	1 15 49	3·35	57 28 6	18·9	vF, pL, R, bM, s of 2	
508	295	109	III 160	...	1 15 49	3·35	57 27·0	18·9	vF, S, n of 2	
509	5172	...	...	m 47	1 16 3	3·14	81 18	18·9	vF, S, E	
510	5173	...	...	Schultz	1 16 4	3·36	57 14 1	18·9	vF, vS, lE	
511	5174	...	...	St VIII	1 16 8	+3·15	79 26·5	−18·9	eF, vS, S * inv, S * att.	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
512	296	110	...	...	1 16 8	+3·36	56 49·9	−18·9	vF, vS	
513	297	111	III 169	...	1 16 34	3·36	56 56·5	18·9	F, S, stellar	*
514	298	112	II 252	...	1 16 36	3·17	77 49·2	18·9	F, L, lE, vglbM, ✶ f ✶	†
515	299	113	III 167	...	1 16 46	3·36	57 15·5	18·9	pF, vS, R, np of 2	
516	300	...	...	d'A	1 16 48	3·14	81 10·1	18·9	eF, S, v diffic, I 151 f 41′	
517	301	114	III 168	...	1 16 52	3·36	57 18·1	18·9	pF, R, stellar, sf of 2	
518	5175	...	...	m 48	1 16 57	3·14	81 25	18·9	F, vS, R	
519	...	...	...	Sw VI	1 17 14	3·05	92 23·7	18·9	eeF, vS, R, v diffic	
520	303	116	III 253	...	1 17 19	3·10	86 56·1	18·9	F, cL, E 137°	†
521	304	115	II 461	...	1 17 21	3·08	89 0·0	18·9	F, pL, R, gbM	
522	305	...	...	d'A	1 17 23	3·14	80 44·4	18·9	eF, pL, iF, ? Cl + neb	
523	306	...	III 170?	d'A	1 17 25	3 37	56 42·4	18·9	D neb, vF, vS, pos 90°, dist 30″	*
524	307	117	I 151	...	1 17 27	3 14	81 11·6	18·9	vB, pL, mbM, 4 S st nr	
525	308	...	...	d'A	1 17 32	3·14	81 1·7	18·9	vF, vS, ✶ 11·12 p 5′	
526	309	2408	...	...	1 17 35	2·75	125 48·1	18·9	F, S, lE, p of 2	
527	310	2409	...	...	1 17 38	2·75	125 51·0	18·9	F, S, lE, bM, f of 2	
528	5176	...	. .	d'A	1 17 41	3·36	57 3·7	18·9	F, pL, R, lbM	
529	311	118	...	...	1 17 46	3·38	56 1·0	18·9	pB, vS, sbM, p of 2	
530	...	...	...	Sw VI	1 17 49	3·05	92 19·4	18·9	eF, S, mE, F ✶ sf	
531	312	...	...	Ld R	1 17 55	3·38	55 58·4	18·9	F, S, R	
532	313 = 314	119	III 556	...	1 17 59	3·14	81 28·0	18·9	vF, pL, E 30°, bM	*
533	315	121	II 462	...	1 18 19	3·08	88 58·2	18·9	pB, pL, R, gbM	
534	316	2410	...	...	1 18 23	2·71	128 52·2	18·9	eeF, S, R, vgbM, 1st of 4	
535	5177	...	...	d'A	1 18 23	3·06	92 7 8	18·9	vF, vS, 1st of 3	
536	317 = 325	120	III 171	...	1 18 27	3·38	56 1·4	18·9	pB, pL, gbM, f of 2	*
537	319	...	III 170	...	1 18 27	3·37	56 39·1	18·9	Stellar (? = G C 306)	
538	...	...	...	Sw VI	1 18 29	3·06	92 16·4	18·9	eF, S, mE, F ✶ n	
539	...	...	...	L I	1 18 30	2·92	108 55·4	18·9	vF, vS, R	
540	...	...	...	L I	1 18 30	2·90	110 41·4	18·9	vF, vS, R, sbMN	
541	5178	...	...	d'A	1 18 36	3·06	92 6 1	18·9	F, S, R, bM	
542	318	...	...	Ld R	1 18 38	3·38	56 3·3	18·9	eF, diffic	
543	5179	...	...	D'A	1 18 42	3·06	92 1·8	18·9	eF, eS	
544	320	2411	...	...	1 18 51	2·71	128 49·0	18·9	eeF, S, R, vgbM, 2nd of 4	
545	322	...	II 448	...	1 18 51	3·06	92 4·0	18·9	Stellar, p of D neb	
546	321	2412	...	...	1 18 52	2·71	128 47·3	18·9	eeF, S, R, vgbM, 3rd of 4	
547	323	...	II 449	...	1 18 53	3·06	92 4·3	18·9	Stellar, f of D neb	
548	...	...	...	Searle	1 18 53	3·06	91 57·3	18·9	eF, eS	
549	324	2413	...	...	1 19 7	2 71	128 44·7	18·8	eeF, S, R, vgbM, 4th of 4	
550	326	122	II 463	...	1 19 31	+3·08	88 42·5	−18 8	F, S, E 90°, bM, r	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
551	327	123	III 560	...	1 19 43	+3·42	53 32·5	−18·8	vF, S, E, vglbM, ∗13 nr	
552	328	...	III 172	...	1 19 56	3·37	57 16·1	18·8	vS, stellar, p of 2 } ? R A	
553	329	...	III 173	...	1 19 56	3·37	57 16·1	18·8	vS, stellar, f of 2 }	
554	...	...	...	Mu II	1 20 4	2·87	113 27·4	18·8	eF, vS, E, 1st of 3, ∗11 f	
555	...	...	...	Mu II	1 20 4	2·87	113 29·4	18·8	eF, S, iR, 2nd of 3	
556	...	...	...	Mu II	1 20 4	2·87	113 25·4	18·8	eF, vS, R, 3rd of 3	
557	...	...	...	Sw VI	1 20 4	3·05	92 21·9	18·8	eF, S, R, ∗10 nf	
558	5180	...	...	d'A	1 20 7	3·05	92 41·9	18·8	eF, S, E, ∗10 p	
559	330	124	VII 48	...	1 20 10	3·97	27 25·9	18·8	Cl, B, pL, pRi	*
560	332	...	III 441	d'A, St VIII	1 20 19	3·05	92 38·8	18·8	vF, vS, iE, p of 2	
561	331	...	...	d'A	1 20 21	3·38	56 25·3	18·8	eF, pL, R	
562	...	...	...	Sw III	1 20 21	3·59	42 20·3	18·8	eF, pS, R, D ∗nr s	
563	...	...	...	L I	1 20 30	2·91	108 55·4	18·8	vF, pS, lE, bMN, sev F st nr	
564	333	...	III 442	d'A, St VIII	1 20 40	3·05	92 36·9	18·8	vF, vS, iF, f of 2	
565	...	...	...	Searle	1 21 1	3·06	92 2·0	18·8	S, E (? bi N)	
566	334	125	...	...	1 21 11	3·36	58 23·8	18·8	vF, S, R	
567	...	...	...	L I	1 21	2·98	101 0·4	18·8	eF, vS, R	
568	335	2414	...	...	1 21 37	2·73	126 27·0	18·8	vF, S, R	
569	5181	...	...	m 49	1 21 44	3·16	79 35	18·8	eF, vS, R	
570	...	...	...	Searle	1 21 50	3·06	91 40·5	18·8	vF, pL, R, mbMN	
571	5182	...	...	d'A	1 22 2	3·36	58 13·5	18·8	vF, pS, ∗13·14 sp	
572	336	2415	...	...	1 22 21	2·68	130 2·4	18·7	eF, S, att to S ∗, B ∗nr	
573	...	...	...	St XII	1 22 40	3·48	49 28·0	18·7	vF, vS, R, gbM	
574	337	2416	...	...	1 22 44	2·72	126 19·5	18·7	vS, D ∗pos 225° inv	
575	5183	...	...	St VIII	1 23 10	3·25	67 17·0	18·7	eF, pL, iR	
576	338	2417	...	...	1 23 15	2·45	142 18·9	18·7	F, S, R, bM, am st 11	
577	...	...	...	T I, II	1 23 34	3·05	92 43·1	18·7	F	
578	339	2418	...	...	1 23 44	2·86	113 23·7	18·7	B, L, pm E, gpmbM	
579	340	127	...	...	1 23 51	3·39	57 6·2	18·7	vF, pL, gbM	
580	...	...	...	T I, Sw VI	1 23 59	3·05	92 43·5	18·7	pF, pS, R	
581	341	126	...	M 103, Σ 131	1 24 0	3·92	30 1·5	18·7	Cl, pL, B, R, Ri, st 10...11	
582	5184	...	...	d'A	1 24 4	3·39	57 14·4	18·7	vF, pL, pmE, ∗12 p	
583	...	...	...	L II	1 24 9	2·91	109 4·4	18·7	eF, S, R	
584	342	128	I 100	...	1 24 20	3·01	97 35·4	18·7	vB, pL, R, mbM, p of 2	
585	345	129	...	...	1 24 27	3·06	91 38·5	18·7	vF, S, R, bM	
586	343 = 344 = 346	130	III 431	...	1 24 36	3·01	97 37·0	18·7	vF, vS, R	*
587	347	...	...	d'A	1 24 41	3·41	55 26·3	18·7	vvF, S, ? S Cl	
588	348	...	...	d'A	1 24 54	3·35	60 4·4	18·7	F, p of 2	
589	...	...	...	Mu II	1 24 55	+2·96	102 45·4	−18·7	vF, S, R, gbMN, ∗10 sp 2′	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
590	5185	...	...	d'A	1 25 17	+3·55	45 47·4	−18·6	F, vS, rr?	
591	...	...	...	Sw III	1 25 18	3·42	55 3·7	18·6	eF, pS, R, lbM, B ✱ sf	
592	349	...	...	d'A	1 25 21	3·35	60 4·6	18·6	F, pL, f of 2	
593	...	...	...	St XII	1 25 27	2·96	103 4·7	18·6	vS Cl, lE, nebulous	
594	...	...	...	L I	1 25 30	2·92	107 16·3	18·6	F, pS, E, glbM	
595	5186	...	...	d'A	1 25 42	3·36	60 1·7	18·6	vF, S, R, inv in M 33	
596	351	132	II 4	...	1 25 51	3·00	97 45·1	18·6	pB, R, bM, r, ✱6 f 12′	
597	350	2419	...	...	1 25 53	2·74	124 13·5	18·6	F, S, R, bM	
598	352	131	V 17	M 33	1 25 58	3·36	60 3·8	18·6	l eB, eL, R, vgbMN	†
599	353	...	II 473	Mu II	1 26 1	2·96	102 53·3	18·6	F, S, iF, er	
600	354	...	III 432	...	1 26 15	3·00	98 2·6	18 6	eeF	
601	...	...	...	Mu II	1 26 25	2·96	102 56 3	18 6	vF, vS, R, 4′ sf II 473	
602	356	2421	...	Δ 17?	1 26 25	1·33	164 16·6	18·6	B, S, R, psbM ✱, r	
603	357	...	...	Ld R	1 26 30	3·36	60 32	18·6	S neb or Cl with 3 st inv	
604	355	133	III 150	d'A, Schultz	1 26 40	3·36	59 56·2	18·6	B, vS, R, vvlbM	
605	...	...	...	St XII	1 26 50	3·50	49 28·3	18·6	vF, vS, R, bM	
606	...	...	...	St XII	1 27 12	3·26	69 18·0	18·6	eF, pS, R, vlbM, r?	
607	358	...	...	d'A	1 27 16	3·00	98 7·8	18·6	✱ 11, nebulous? (Auw 15)	✱
608	359	134	...	...	1 27 30	3·40	57 3·5	18 6	vF, psbM, stellar	
609	5187	...	...	d'A	1 27 34	4·09	26 10·1	18·6	Cl, S, pRi, st 14...	
610	...	...	...	Mu II	1 27 35	2·88	110 52·3	18·6	eF, vS, R, vgbM, ✱ 10 p 2′	
611	...	...	...	Mu II	1 27 35	2·88	110 51·3	18·6	eF, vS (? F ✱), 30″ nf last	
612	360	2423	...	...	1 27 45	2·69	127 13·5	18·6	F, vS, R, ✱ 12 p	
613	361	{139= 2422}	I 281	...	1 27 47	2·78	120 7·6	18·6	vB, vL, vmE 118°, sbM, ✱ 10 nf	
614	362	135	III 174	...	1 27 53	3·40	57 2·3	18·6	pF, psbM, stellar	
615	363	137	II 282	d'A	1 28 6	3·00	98 3·4	18·6	pB, pL, ilE, gbM, r, ✱ 8 np 10′	
616	5188	...	...	d'A	1 28 7	3·40	56 57·2	18·6	Neb D ✱, ✱ 8 np	
617	...	...	...	L II	1 28 13	2·98	100 30·3	18·6	eF, S, lE	
618	364	136	...	...	1 28 20	3·40	57 19·4	18·6	pB, pL, bM (? Place)	✱
619	365	2424	...	...	1 28 38	2·69	127 12·3	18·5	eeF, vS, R, p of 2	
620	5189	...	...	St III	1 28 43	3·53	48 23·6	18·5	eF, vS, R, lbM	
621	...	...	...	St XIII	1 28 46	3·43	55 12·1	18·5	vF, eS, R, bMN	
622	366	138	III 454	...	1 28 49	3·07	90 3·0	18·5	eF, pL, dif	
623	367	2425	...	...	1 28 50	2·69	127 12·7	18·5	F, S, R, f of 2	
624	368	140	III 471	...	1 28 55	2·98	100 43·6	18·5	eF, S, am vS st	
625	369	2426	...	Δ 479	1 28 57	2·61	132 9·4	18 5	B, L, mE, gpmbM	
626	370	2427	...	...	1 29 3	2·65	129 51·8	18·5	pF, S, R, bM	
627	371	141	...	...	1 29 9	3·41	57 7·7	18·5	vF, R; place doubtful	✱
628	372	142	...	Méchain, M 74	1 29 11	3·21	74 56·0	18·5	⊕, F, vL, R, vg, psmbM, rr	†
629	373	...	...	Σ 2	1 29 14	+4·68	17 49·8	−18·5	iF, 3st + neb (Auw 15)	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
630	374	2428	...	...	1 29 28	+2·64	130 3·7	−18·5	pF, S, R, bM	
631	5190	...	...	m 50	1 29 29	3·12	84 53	18·5	vF, S, gbM	
632	375	143	...	...	1 30 0	3·12	84 50·2	18·5	pB, S, R, psbM	
633	376	2429	...	...	1 30 10	2·67	128 2·2	18·5	pB, S, R, gbM, ⁂ np	
634	5191	...	...	St VIII	1 30 15	3·43	55 20·9	18·5	eF, eS, sev F st inv	
635	...	...	...	L I	1 31 35	2·88	110 39·2	18·4	eF, vS, R	
636	377	144	II 283	...	1 32 7	3·00	98 13·4	18·4	pB, vS, R, mbM, r	
637	378	...	VII 49	...	1 32 8	4·13	26 40·5	18·4	Cl, pS, B & vF st	
638	...	...	...	Sw V	1 32 22	3·13	83 28·2	18·4	vF, pS, R	
639	379	2430	...	...	1 32 32	2·76	120 38·2	18·4	vF, vS, p of 2	
640	...	...	...	L II	1 32 37	2·98	100 6·2	18·4	eF, S, lE 170°, lbMN, ∗ 10s 4′	
641	380	2432	...	...	1 32 39	2·58	133 14·4	18·4	F, S, R, gpmbM, p of 2	
642	381	2431	...	...	1 32 39	2·76	120 37·3	18·4	vF, pS, R, gbM, ∗f, nr, f of 2	
643	382	2435	...	...	1 32 41	0·93	166 16·1	18·4	vF, pS, R, vglbM	
644	383	2433	...	...	1 32 51	2·57	133 18·4	18·4	F, S, vlE, glbM, f of 2	
645	5192	...	...	m 51	1 32 51	3·12	84 59	18·4	F, pL, mE	
646	384	2434	...	...	1 32 55	1·91	155 36·6	18·4	vF, iR, vglbM	
647	...	...	...	L II	1 33 20	2·98	99 58·2	18·4	eF, pS, lE 160°, bMN, ∗ 8 f 16′	
648	...	...	...	L I	1 33 30	2·89	108 34·2	18·4	vF, vS, vlE, sbMN	
649	...	...	...	L II	1 33 30	2·98	99 59·2	18·4	eF, S, E 0°, bMD ∗?	
650	385	...	...	Méchain, M 76	1 33 31	3·73	39 8·3	18·4	vB, p of D neb	
651	386	...	I 193	...	1 33 34	3·73	39 7·7	18·4	vB, f of D neb	
652	...	...	...	Sw V	1 33 37	3·14	82 43·8	18·4	eeF, pS, R, v diffic	
653	...	...	...	St XIII	1 34 21	3·45	55 4·2	18·4	vF, pL, mE, lbM, sev F st inv	
654	387	145	VII 46	...	1 34 28	4·06	28 49·3	18·3	Cl, iF, Ri, one ∗ 6·7, st 11...14	
655	...	...	...	O St I	1 34 30	2·94	103 45·2	18·3	eF, eS, gbMN	
656	5193	...	...	d'A	1 34 39	3·33	64 33·9	18·3	F, vS, R, r?	
657	388	146	...	...	1 34 42	3·86	34 49·9	18·3	Cl, pRi, st 12	
658	...	...	...	St XI, Sw II	1 34 42	3·19	78 6·4	18·3	pF, pS, mE, mbM	
659	389	...	VIII 65	C II	1 34 45	4·02	30 0·6	18·3	Cl, lRi, st B	
660	390	...	II 253	...	1 35 34	3·20	77 3·8	18·3	pB, pL, E, bM, r	
661	391	147	II 610	...	1 36 21	3·37	62 1·4	18·3	F, S, R, bM, r	
662	...	...	...	St XIII	1 36 24	3·49	53 0·6	18·3	F, S, R, mbM	
663	392	...	VI 31	...	1 36 29	4·06	29 27·7	18·3	Cl, B, L, eRi, st pL	
664	393	148	...	...	1 36 30	3·11	86 28·6	18·3	vF, S, R	
665	394	...	II 588	d'A	1 37 31	3·17	80 17·2	18·2	F, S, lE, bM, r	
666	...	...	...	St XIII	1 38 2	3·45	56 19·7	18·2	vF ∗ in eF, eS neby	
667	...	...	...	Mu II	1 38 5	2·83	113 39·1	18·2	eF, S, R, ∗ 10 np 100″	
668	...	...	...	St XI	1 38 13	3·48	54 14·5	18·2	pF, pS, R, gbM	
669	...	...	...	St XIII	1 39 9	3·47	55 8·4	18·2	pF, pL, mE, gbM	
670	395	149	II 611	...	1 39 32	+3·37	62 49·0	−18·2	F S, lE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
671	...	...	...	Sw II	1 39 50	+3·20	77 35·0	−18·2	eF, pS, R, bet D ✱ and ✱	
672	396	150	I 157	...	1 40 0	3·36	63 16·1	18·1	F, pL, mE 80°	
673	397	...	II 589	d'A	1 40 58	3·18	79 10·4	18·1	pF, pL, E, lbM, ✱ 11 nf 3′	
674	398	...	...	d'A	1 41 29	3·30	68 21·3	18·1	pB, vmE, ✱ 14 f 8′	
675	...	...	...	Sw V	1 41 35	3·20	77 38·6	18·1	vF, S, R, lbM, sp of 2	
676	400	151	IV 42	...	1 41 38	3·13	84 47·2	18·1	vF, E 161°, sbM ✱ 9	†
677	...	...	...	Sw V	1 41 40	3·20	77 38·4	18·1	eeF, S, R, nf of 2	
678	399	...	II 228	...	1 41 42	3·30	68 42·0	18·1	pB, S, iR, mbM, p of 2	
679	401	...	III 175	...	1 41 51	3·48	54 53·9	18·1	F, stellar	*
680	402	...	II 229	...	1 42 4	3·30	68 43·5	18·1	pB, S, iR, mbM, f of 2	
681	404	2436	II 481	...	1 42 15	2·96	101 7·3	18·1	pF, cL, R, glbM, S ✱ p 90″	
682	406	154	II 501	...	1 42 18	2·91	105 39·9	18·1	cF, S, R, gvlbM	
683	405	153	...	...	1 42 20	3·19	79 0·6	18·1	eF, 2 st 14 p 90″	
684	403	152	II 612	d'A, Schultz	1 42 21	3·37	63 3·1	18·1	F, vlE, ✱ 13 f 100″	
685	407	2438	...	...	1 42 21	2·29	143 29·1	18·1	F, vL, R, vgvlbM	
686	408	155 = 2437	III 459	...	1 42 21	2·81	114 29·5	18·1	vF, vS, R gbM, or, 2 st nr	
687	409	...	III 561	...	1 42 26	3·49	54 21·9	18·0	vF, stellar	
688	5194	...	...	d'A	1 42 35	3·47	55 24·4	18·0	vF, vS, r?	
689	...	...	...	O St I	1 42 35	2·76	118 7·0	18·0	vF, pL, R, gbM	
690	...	...	...	L I	1 42 35	2·89	107 26·0	18·0	vF, vS, R, lbM	
691	410	...	II 617	...	1 42 56	3·30	68 56·9	18·0	F, cL, vglbM	
692	411	2439	...	...	1 43 2	2·39	139 20·0	18·0	B, S, R, gbM	
693	412	156	II 859	...	1 43 13	3·13	84 33·1	18·0	pF, S, E 90°, vglbM, ✱ 10 nf	†
694	413	...	...	d'A	1 43 13	3·30	68 42·3	18·0	F, S, R, bet 2 st 15	
695	414	...	II 618	...	1 43 29	3·31	68 7·9	18·0	v S, stellar	
696	415	2440	...	...	1 43 33	2·65	125 38·9	18·0	F, S, R	
697	416	...	III 179	...	1 43 36	3·31	68 20·2	18·0	F, cL, E, mbM	
698	417	2441	...	...	1 43 42	2·65	125 34·1	18·0	eF, S	
699	...	...	...	Mu II	1 43 56	2·94	102 44·0	18·0	eF, pS, E 105°, bnp, curved	
700	423	...	...	Ld R	1 44 8	3·50	54 35	18·0	eF, vS, R, sp h 157	
701	418	160 = 2442	I 62	...	1 44 8	2·96	100 23·8	18·0	F, pL, E, vgvlbM, r	*
702	419	158	III 192	...	1 44 17	3·02	94 45·0	18·0	eF, vlE 0°, ✱ 13 s 90″	
703	422	157	III 562	...	1 44 25	3·50	54 31·4	18·0	vF, vS, R, 1st of 4	
704	420	...	III 563	...	1 44 26	3·50	54 33·7	18·0	vF, vS, R, 2nd of 4	
705	421	...	III 564	...	1 44 29	3·50	54 33·4	18·0	vF, vS, R, 3rd of 4	
706	426	161	II 596	...	1 44 31	3·13	84 23·8	18·0	F, S, bM, ✱ 13 n 1′	
707	...	...	...	T IV	1 44 31	2·98	99 12·0	18·0	vF, F ✱ in centre	
708	427	159	III 565	...	1 44 34	3·50	54 32·3	18·0	F, pL, bM, 4th of 4	
709	5195	...	...	Dreyer (R)	1 44 35	+3·50	54 28·6	−18·0	vF, pS, bet 2 st, group sp	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
710	5196	...	...	Ld R, d'A	1 44 45	+3·50	54 38·2	−18·0	vF, pS, 2 st s	
711	...	...	...	St XII	1 44 52	3·25	73 10·8	18·0	vF ∗ in vF, vS neby	
712	429	163	...	...	1 44 54	3·51	53 52·5	18·0	vF, R, am pB st	
713	...	...	...	L II	1 45 7	2·97	99 47·0	17·9	eF, pS, E 90°, glbMN, ∗ 14 np	
714	5197	...	...	Ld R, d'A	1 45 18	3·50	54 28·1	17·9	F, vS, R, 2 st 13 p and np	
715	...	...	...	O. St I	1 45 30	2·93	103 31·0	17·9	eF, S, gbMN	
716	...	...	...	Sw IV	1 45 30	3·19	78 38·6	17·9	eF, S, R, B ∗ f	
717	5198	...	...	Ld R, d'A	1 45 41	3·50	54 28·0	17·9	vF, pS, ∗ 15 sf 1′	
718	430	164	II 270	...	1 45 57	3·11	86 29 8	17·9	pB, S, iR, psmbM	
719	432	...	...	d'A	1 46 11	3·28	70 50 3	17·9	eF, R, vF ∗ f	
720	431	{165 = 2443}	I 105	...	1 46 12	2·92	104 25·8	17·9	cB, pL, lE, psmbM	
721	433	...	...	d'A	1 46 32	3 56	51 18·3	17·9	eF, pL	
722	434	...	...	d'A	1 47 4	3·29	69 59·6	17·9	vF, vS, R, β Arietis n	
723	435	{166 = 2444}	III 460	...	1 47 14	2·80	114 26·8	17·9	pF, vS, R, vgbM	
724	436	167	...	...	1 47 15	2 80	114 33·4	17·9	{vF, pL, R, gbM, S ∗ ssp [? = h 166]}	
725	...	...	...	L I	1 47 30	2·89	107 13·9	17·8	vF, vS, R	
726	...	...	...	Mu I	1 47 30	2·95	101 29·9	17·8	vF, pL, iR, ∗ 9 3′ f	
727	437	2445	...	...	1 47 43	2·62	126 34·4	17·8	F, S, R, bM	
728	438	168	...	...	1 47 48	3·11	86 29·2	17·8	Suspected neb (d'A, not found)	
729	439	2446	...	...	1 47 50	2·62	126 32·0	17·8	eeF, S, R	
730	...	...	...	Bigourdan	1 48 0	3·13	85 4·0	17·8	vF, very stellar	
731	440	...	III 266	Peters	1 48 1	2·97	99 42·0	17·8	eF, stellar	*
732	...	...	...	St XIII	1 48 13	3·52	53 53·2	17·8	vF ∗ in vF, vS, R neby	
733	442	...	...	Ld R	1 48 26	3 46	57 38·3	17·8	vF, 2′p h 169	*
734	...	...	...	L I	1 48 30	2·88	107 42·9	17·8	vF, vS, R, bMN, ∗ 11 p 11ˢ	
735	443	...	III 176	...	1 48 33	3·48	56 23·1	17·8	ceF, stellar	
736	444	169	II 221 ?	...	1 48 35	3·46	57 38 9	17·8	pB, R, bM	
737	445	...	...	Ld R	1 48 36	3·46	57 38·4	17·8	{Stellar neb (? F ∗), 27″ n of h 169}	
738	446	...	...	Ld R	1 48 38	3·46	57 38·0	17 8	Neb, 75″ nf h 169	
739	5199	...	...	Copeland (R)	1 48 47	3·46	57 32 0	17·8	cF, vS, R, in Δ of st	
740	447	...	II 221 ?	Ld R	1 48 48	3·46	57 40·3	17·8	F, L, cE	*
741	448	172	II 271	...	1 49 4	3·13	85 3·5	17·8	pF, S, R, p of 2, pos 102°	
742	449	173	II 272	...	1 49 8	3·13	85 3·7	17·8	vF, vS, R, sbM, f of 2	
743	450	170	...	...	1 49 8	4·13	30 30 8	17·8	Cl, not Ri, D ∗ (h 1098)	
744	451	171	...	...	1 49 8	3·95	35 13·2	17·8	Cl, pL, pRi, iF, st 11...13	
745	452	2449	...	...	1 49 12	2·11	147 22·7	17·8	pB, S, R, gbM	
746	...	...	...	Sw II	1 49 18	3·68	45 45·9	17·8	vF, pS, lE, sev st nr	
747	...	...	...	L II	1 49 19	+2·96	100 8·9	−17·8	eF, pS, lE 180°	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
748	453	176	III 193	...	1 49 20	+3·02	95 9·2	−17·8	pF, ∗9 np	*
749	454	2448	...	...	1 49 22	2·71	120 36·4	17 8	pB, S, E, bM	
750	455	175	II 222	...	1 49 25	3·47	57 28·7	17·8	cB, pL, R } D neb	
751	5200	...	...	Ld R	1 49 25	3·47	57 29·1	17·8	pF, eS, R, bM } 173° 25″	
752	457	174	VII 32	...	1 49 26	3·54	53 1·2	17·8	Cl, vvL, Ri, st L & sc	
753	5201	...	...	d'A	1 49 27	3·51	54 46·1	17·8	pB, pL, R, gmbM	
754	458	2450	...	...	1 49 28	2·11	147 26·8	17 8	vF, S, R, bM	
755	441	{177 = 2447}	III 265	Peters	1 49 28	2·97	99 45 0	17·8	vF, pS, vlE	
756	...	...	...	L I	1 49 30	2·88	107 24 9	17·8	F, vS, R, bMN	
757	...	...	...	O St I	1 49 30	2·97	99 35·9	17·8	F, S, gbMN, (? = h 177)	
758	...	...	...	L II	1 49 30±	3 03	93 44·9	17·8	vF, vS	
759	5202	...	...	d'A	1 49 34	3·52	54 20·6	17·8	Cl, vS, R	
760	5203	...	...	Copeland (R)	1 49 38	3·47	57 19·9	17·8	vF, R, 456 nf	
761	456	...	...	L I R	1 49 41	3·47	57 18·7	17·8	pF, cL, 4 F st nr	
762	459	{178 = 2451}	III 464	...	1 49 57	3·01	96 5·3	17 8	vF, S, lE, vglbM	
763	...	...	...	O St I	1 50 30	2·97	99 39·9	17·7	vF, pL, E 65°, gbMN	
764	...	...	...	O St I	1 50 30	2·89	106 42·9	17 7	eF, vS, iR, gbM	
765	5204	...	...	m 52	1 50 57	3·35	65 47·0	17·7	vF, vS	
766	460	180	...	...	1 51 19	3·16	82 20 2	17·7	vF, S, R, ∗11, 2′, 75°	*
767	...	...	...	L II	1 51 20	2·96	100 14·9	17·7	eF, pS, E 160°	
768	...	...	...	Sw III	1 51 29	3·07	90 8·9	17·7	eF, pS, R, ∗8 f 30′	
769	...	...	...	St XII	1 51 32	3·44	59 46·4	17·7	vF, vS, iR, bM, F ∗att	
770	{461 = 464}	...	...	Ld R, d'A	1 51 33	3·28	71 43·7	17·7	vF, S, R, sp I 112	
771	462	179	...	...	1 51 36	5 01	18 15·6	17·7	Suspected neb ∗ (50 Cassiop.)	*
772	463	181	I 112	...	1 51 39	3·28	71 40·6	17·7	B, cL, R, gbM, r	
773	465	2452	III 468	...	1 52 1	2 94	102 10·8	17·7	eF, pL, E 0°, glbM	
774	466	...	III 214	...	1 52 2	3·22	76 41·3	17·7	vF, stellar	
775	467	2453	...	...	1 52 4	2·75	116 58·5	17 7	pF, S, R, glbM	
776	468	...	...	d'A	1 52 5	3·34	67 2·3	17·7	F, pL	
777	469	182	II 223	...	1 52 10	3·45	59 15·0	17·7	pB, pL, R, glbM	
778	5205	...	...	St VIII	1 52 15	3·45	59 22·1	17 6	eF, vS, R, lbM	
779	470	183	I 101	...	1 52 42	3 00	96 38·7	17·6	cB, L, mE 162°, mbM	
780	472	184	III 583	d'A	1 52 38	3·41	62 27·7	17·6	vF, vS, E, 3 st p	
781	471	...	III 215	...	1 52 43	3·21	78 0·0	17·6	eF, stellar	
782	473	2454	...	...	1 52 57	2·04	148 28·1	17·6	pB, pL, lE, ∗12 att	
783	5206	...	...	St VIII	1 53 0	3·46	58 47·8	17·6	eF, S, iR, vF st att	
784	5207	...	...	d'A	1 53 19	3 41	61 50·0	17·6	vF, L, E (? double)	
785	5208	...	...	St VIII	1 53 34	3·46	58 51·1	17·6	eF, eS, vF ∗att	
786	5209	...	...	d'A	1 53 47	+3·24	75 2·8	−17·6	eF, vS	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	a	° ′	″		
787	...	...	...	Peters, T IV	1 53 54	+2·96	99 41·0	−17·6	vF, S	
788	474	185	II 435	...	1 54 8	2·99	97 29·6	17·6	pF, pS, R, bM	
789	5210	...	...	d'A, St III	1 54 19	3·47	58 36·4	17·6	vF, S, lE	
790	475	186	III 433	...	1 54 21	3·01	96 3·2	17·6	cF, cS, R, bM	
791	476	...	...	d'A	1 54 23	3·16	82 10·7	17·6	vF, S, * 14 f 3′	
792	477	187	...	...	1 54 39	3·25	74 58·2	17·6	eF, S, R, * 11 75°	
793	...	...	...	J. G. Lohse	1 54 40±	3·47	58 40±	17·6	vvF, bet 2 st, sf 5210	
794	478	188	III 207	...	1 54 55	3·28	72 18·1	17 5	vF, cS, stellar	
795	479	2455	...	...	1 54 55	2·10	146 30·4	17·5	pF, S, R, 2 st 11 nr	
796	480	2456	...	...	1 55 1	0 70	164 54·3	17·5	eF, vS, R, * np 25″	
797	481	189	III 566	...	1 55 9	3 57	52 33·9	17·5	vF, S, iR, sbM, * nr	
798	5211	...	...	St III	1 55 12	3·47	58 36 0	17·5	eF, vS	
799	...	...	...	Sw II	1 55 33	3·07	90 46·0	17·5	ceF, pS, R, n of 2	
800	...	...	...	Sw II	1 55 33	3·08	90 48·3	17·5	ceF, S, R, s of 2	
801	...	...	...	Sw II	1 55 40	3·58	52 24·1	17·5	cF, pS, iR, D * close f	
802	482	2457	...	...	1 55 46	1·43	158 32·7	17·5	ceF, vS, R, * 13 p 100″	
803	483	190	III 208	...	1 56 8	3·25	74 39·0	17·5	vF, S, iR, glbM, * 10 p 3″·5	
804	...	...	...	Sw II	1 56 19	3·45	59 51·0	17·5	ceF, vS, R, lbM	
805	5212	...	...	d'A	1 56 29	3·42	61 52·2	17·5	eF, cS, R, 2 st 14 p	
806	...	...	...	Sw V	1 56 51	2·95	100 36·1	17·5	ceF, S, R, v diffic, pB * n	
807	484	191	III 151	...	1 56 54	3·43	61 41·0	17·5	vF, vS, iR, bet 2st n and sp	
808	485	{192 = 2458}	...	...	1 57 29	2·78	113 58·3	17·4	vF, pS, vlE	†
809	...	...	...	Sw V	1 57 46	2·96	99 24·0	17·4	vF, S, R	
810	5213	...	...	St III	1 57 47	3·21	77 25·2	17·4	vF, vS, R, bM	
811	...	...	...	L II	1 57 55	2 96	99 46·7	17·4	eF, eS, R (?neb), * 10 s 1′	
812	5214	...	...	St VIII	1 58 9	3 72	46 5·8	17·4	eF, pL, E 45°, bM	
813	486	2459	...	...	1 58 26	1·34	159 7·3	17·4	pF, S, R, gbM	
814	...	...	...	O St I	1 59 35	2·88	106 25·7	17·3	eF, S, R, gbM	
815	...	...	...	O St I	1 59 35	2·87	106 29·7	17·3	eF, vS, R, gbM	
816	5215	...	...	St VI	2 0 5	3·46	61 25·7	17·3	vF, vS, iF	
817	...	...	...	Sw IV	2 0 18	3·27	73 27·7	17·3	eF, vS, R, 2 st nr	
818	488	194	II 604	...	2 0 19	3·60	51 54·4	17·3	pB, cL, lE, mbM	
819	5216	...	...	d'A, St VI	2 0 31	3·46	61 27·1	17·3	pF, vS, R, * 13 n	
820	489	195	...	...	2 0 50	3·24	76 19·1	17·3	F, vS, R, bM	
821	487	193	I 152	d'A	2 0 53	3·20	79 40·4	17·3	pB, vS, vlE, svmbM, * 10 np 1′	*
822	490	2461	...	...	2 0 55	2·47	131 49·2	17·3	eF, vS, R, sbM, r	
823	491	{196 = 2460}	...	...	2 0 57	2·74	116 7·3	17·3	vF, vF D * inv	†
824	492	2462	...	...	2 0 58	2·56	127 9·2	17·3	F, S, R, vsvmbM * 13	
825	5217	...	...	m 53	2 1 11	+3·14	84 22	−17·3	F, S, mE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
826	5218	...	...	St VI	2 1 18	+3·46	59 55·5	−17·3	cF, S, R, lbM	
827	493	198	III 227	...	2 1 34	3·16	82 41·7	17·3	vF, S, E, bM, am st	*
828	494	197	II 605	...	2 1 40	3·62	51 28·4	17·3	pB, S, iR, D * f 15′	
829	5219	...	...	d'A	2 1 45	2·97	98 25·8	17·3	F, S, * 11 s, 1st of 3	
830	5220	...	...	d'A	2 2 2	2·97	98 25·5	17·2	pF, vS, R, 2nd of 3	
831	5221	...	...	m 54	2 2 16	3·14	84 34	17·2	vF, pS	
832	5222	...	...	d'A	2 2 17	3 54	55 7·6	17·2	F, vS, *9·10 sp	
833	495	199 = 2463	II 482	...	2 2 30	2·94	100 47·6	17·2	F, S, R, 1st of 4	†
834	496	...	III 567	...	2 2 32	3·59	53 0·7	17·2	vF, S, lE	
835	497	200 = 2464	II 483	...	2 2 33	2·94	100 47·8	17·2	F, S, R, 2nd of 4	†
836	...	...	...	Mu II	2 2 36	2·79	112 43·6	17·2	eF, S, R, gbMN	
837	...	...	...	L II	2 2 40	2·78	113 6 6	17·2	eF, pS, mE o°, * 10 n 1′	
838	498	201 = 2465	II 484	...	2 2 47	2·94	100 48·5	17·2	vF, vS, R, 3rd of 4	†
839	499	202 = 2466	II 485	...	2 2 52	2·94	100 51·2	17·2	vF, pS, R, 4th of 4	†
840	5223	...	...	m 55	2 2 52	3·16	82 49	17·2	eF, vS	
841	...	...	...	St XIII	2 2 52	3·59	53 10·0	17·2	pB, vS, mbMN = *13·14	
842	500	203	...	...	2 2 55	2·97	98 25·1	17 2	vF, vS, R, psbM, 3rd of 3	
843	5224	...	...	d'A	2 2 56	3·49	58 34·0	17·2	⊕, F, S, R	
844	5225	...	...	m 56	2 2 56	3·14	84 37	17·2	F, S	
845	501	204	III 604	d'A	2 3 5	3·59	53 10·5	17·2	vF, iF, stellar	*
846	5226	...	...	St VIII	2 3 26	3·74	46 5·6	17·2	eF, vS, R, gbM	
847	...	...	...	Sw III	2 3 33	3·74	46 4·9	17·1	vF, pL, R	
848	...	...	...	Sw V, O St I	2 3 41	2·94	100 59·0	17·1	eeF, pL, v diffic, *nf	
849	...	...	...	L II	2 3 43	2·78	113 0·6	17·1	eF, vS, R (? neb)	
850	503	...	III 259	d'A	2 4 7	3·05	92 8·6	17·1	eF, eS, iF	
851	...	...	...	Sw III	2 4 7	3·11	86 53·2	17·1	eF, pS, R, v diffic	
852	502	2467	...	...	2 4 16	1·99	147 23·6	17·1	pF, pS, R, glbM, r	
853	504	...	II 486	...	2 4 46	2·95	99 58·1	17·1	F, S, E	
854	505	2468	...	...	2 5 37	2·56	126 30·6	17·1	cF, pS, lE o°, gbM	
855	506	...	II 613	...	2 5 52	3·44	62 46·9	17·1	F, S, lE 90°, bM	
856	...	...	...	Sw V	2 6 24	3·06	91 21·6	17·0	eF, S, lE, F * close f	
857	507	2469	...	...	2 6 31	2·62	122 36·2	17·0	cB, S, E, psmbM	
858	...	...	...	L II	2 6 43	2·77	113 9·5	17·0	eF, pL, R	
859	...	...	...	Sw V	2 6 44	3·05	91 22·9	17·0	pF, pS, R, lbM	
860	5227	...	...	St VI	2 6 51	3·48	59 52·6	17·0	*13 in F neb	
861	5228	...	...	d'A	2 7 23	3·57	54 44·9	17·0	vF, S, D * att sp	
862	508	2470	...	...	2 7 24	2·42	132 41·2	17·0	F, vS, svmbM	
863	509	205	III 260	...	2 7 25	+3·06	91 25·0	−17·0	vF, R, bM, stellar	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
864	510	206	III 457	...	2 8 6	+3·14	84 39·5	−17·0	eF, cL, R, gbM, * 12 sf att	
865	5229	...	...	St V	2 8 10	3·45	62 3·1	17·0	eF, eS, iR	
866	...	...	...	Sw V	2 8 34	3·05	91 25·1	16·9	pF, pS, R, lbM	
867	511	...	III 2	...	2 8 41	3·08	89 36·0	16·9	eF, vS, R, bM	
868	...	...	...	Sw V	2 8 54	3·06	91 21·9	16·9	eF, pS, R	
869	512	207	VI 33	Hipparchus	2 9 15	4·17	33 29·9	16·9	! Cl, vvL, vRi, st 7...14	
870	514	...	...	Ld R	2 9 33	3·25	76 8	16·9	eF, stellar, 2v F st close sp, s of h 208	
871	513	208	III 201	...	2 9 34	3·25	76 6·4	16·9	vF, vS, E, * 10 sf 5′	
872	...	...	...	L I	2 9 35	2·83	108 27·5	16·9	vF, pS, m E 0°, gvlbM, sev F st inv	
873	515	209=2471	II 474	...	2 9 43	2·92	102 0·0	16·9	F, pL, R, vglbM	
874	...	...	...	M II	2 9 43	2·76	113 50·5	16·9	eF, pS, E 170° (? D *), * 10 np	
875	5230	...	...	d'A	2 9 54	3·08	89 24·1	16·9	vF, vS (?? = III 2)	
876	517	...	...	Ld R	2 10 18	3·25	76 7·6	16·9	eF, S, R, 107″ sp h 210	
877	516	210	II 246	...	2 10 23	3·25	76 6·3	16·9	pF, pL, lE, pgbM, * 12 sf 1′, * 9 166°, 285″	*
878	...	...	...	L II	2 10 50	2·75	114 2·4	16·8	eF, vS, R	
879	...	...	...	L II	2 10 56	2·95	99 37·4	16·8	eF, pS, iR, bM	
880	...	...	...	L II	2 11 18	3·01	94 52·4	16·8	eF, vS, R, sbMN	
881	518	211	II 436	...	2 11 47	2·98	97 17·0	16·8	F, pS, E, bM, 2 or 3 st nr	*
882	519	213	...	...	2 11 59	3·27	74 49·0	16·8	eF, R, gbM, * 16 nr	
883	520	215	II 437	...	2 12 8	2·98	97 25·9	16·8	pF, pS, vlE, bM, D * nr	
884	521	212	VI 34	Hipparchus	2 12 35	4·19	33 32·0	16·7	! Cl, vL, vRi, ruby * M	†
885	...	...	...	Sw V	2 12 39	3·06	91 25·0	16·7	vF, pS, R, lbM	
886	522	214	...	...	2 12 47	4·54	26 52·3	16·7	Cl, L, lC, sc, st 9...13	
887	523	216	III 486	...	2 12 54	2·85	106 42·1	16·7	F, S, iR, pgbM	
888	524	2473	...	...	2 13 20	1·77	150 30·1	16·7	eF, S, R, 2 or 3 vF st nr	
889	525	2472	...	...	2 13 31	2·40	132 23·0	16·7	vF, vS, R, bM, * 7 sf	
890	526	217	II 225	...	2 13 43	3·55	57 22·6	16·7	B, S, R, bM, 3 F st sp	
891	527	218	V 19	...	2 13 45	3·74	48 17·5	16·7	! B, vL, vmE 22°	†
892	...	...	...	L II	2 14 2	2·75	113 46·3	16·7	eF, eS, E?, neb?	
893	528	2474	...	...	2 14 21	2·40	132 3·0	16·7	pF, pS, R, lbM, * 8 f 4′	
894	530	...	...	Ld R	2 14 35	2·99	96 9	16·6	vF, E, bM	D neb, connected
895	529	219	II 438	...	2 14 38	2·99	96 10·1	16·6	F, vL, iR, gbM	D neb, connected
896	531	...	III 695	...	2 15 1	4·45	28 40·8	16·6	eF, pL, iF	
897	532	2475	...	...	2 15 9	2·56	124 21·5	16·6	pB, S, R, psbM, * 10 f 35″	
898	533	...	III 570	...	2 15 14	3·73	48 42·3	16·6	eF, vS, lE	
899	534	2476	...	...	2 15 26	2·78	111 27·2	16·6	pB, S, gbM, r, D * p	
900	5231	...	...	m 57	2 15 30	3·44	64 8	16·6	vF, vS, stellar	
901	5232	...	...	m 58	2 15 33	+3·44	64 5	−16·6	eF, vS	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
902	...	...	...	L I	2 15 35	+2·84	107 20·3	−16·6	eF, vS, R	
903	...	...	...	St XIII	2 15 57	3·45	63 16·9	16·6	eF, eS, R	
904	...	...	...	St XIII	2 16 1	3·45	63 17·7	16·6	vF, vS, R, lbM	
905	...	...	...	L II	2 16 26	2·95	99 22·2	16·6	eF, eS, R, ? *	
906	...	...	...	St X	2 16 30	3·74	48 33·8	16·6	eF, iE	
907	535	2477	III 224	...	2 16 34	2·78	111 20 6	16·5	F, S, E 90°, gbM	
908	536	...	I 153	...	2 16 37	2·77	111 52·3	16·5	cB, vL, E	*
909	...	...	...	St X	2 16 37	3·74	48 37·1	16·5	vF, vS, vS * inv	
910	537	...	III 571	d'A	2 16 46	3·74	48 49·5	16·5	vF, pS, stellar	
911	...	...	...	St X	2 16 56	3·74	48 41·8	16·5	eF, vS, R, bM	
912	...	...	...	St X	2 16 57	3·74	48 52·5	16·5	F, vS, R, bM	
913	...	...	...	St X	2 16 59	3·74	48 51·2	16·5	eF, vS, lbM	
914	...	...	...	St X	2 17 19	3·75	48 30·5	16·5	eF, pL, dif	
915	5233	...	...	m 59	2 17 41	3 45	63 26	16·5	eF, vS, stellar	
916	5234	...	...	m 60	2 17 43	3·45	63 25	16·5	eF	
917	539	220	...	...	2 17 51	3·54	58 23·6	16·5	vF, S, R, 4 st nr (? vS Cl)	*
918	538	221	...	...	2 18 7	3·32	72 8·1	16·5	pF, L, R, * 10 sf 3′	
919	5235	...	...	m 61	2 18 11	3·45	63 26	16·5	eF	
920	...	...	...	Sw II	2 18 34	3·85	44 39·7	16 5	eF, eS, R, 1 or 2 eF st nr	
921	...	...	...	O St I	2 18 35	2·85	106 28·2	16·5	eF, S, R, gbM	
922	540	2478	III 239	...	2 18 45	2·71	115 26·2	16·5	cF, pL, R, gpmbM	
923	...	...	...	St X	2 18 48	3·75	48 40·3	16·4	vF, S, R, gsbM	
924	541	...	III 474	...	2 18 56	3 35	70 7 7	16·4	eF, vS, iR	
925	542	222	III 177	...	2 18 56	3·57	57 3·4	16·4	cF, cL, E, vgbM, 2 st 13 np	
926	5236	...	...	T I	2 18 58	3·06	91 0·7	16·4	vF, pS	
927	...	...	...	Palisa, Sw III	2 19 5	3 23	78 28·1	16·4	F, S, bM	
928	5237	...	...	m 62	2 19 36	3·46	63 25	16·4	eF, vS, stellar	
929	...	...	...	Mu II	2 19 45	2·90	102 43·2	16·4	eF, S, E 170°, * 8·5 n 4′	
930	5238	...	...	Copeland (R)	2 20 3	3·35	70 16·5	16 4	eF, S, iR, vgbM, II 489 sf 1′	
931	5239	...	...	d'A	2 20 3	3·53	59 19·2	16·4	F, pL, iR	
932	543	...	II 489	...	2 20 6	3·35	70 17·2	16·4	F, S, lE, 3 st inv	
933	...	...	...	Sw II	2 20 14	3·85	44 42·8	16·4	eF, eS, R, B * nf	
934	5240	...	...	T I	2 20 26	3·06	90 52·7	16·4	vF, eS, ? O	
935	...	...	...	Sw II	2 20 27	3·34	71 2·3	16·3	pB, pS, R, * f 6ᵐ	
936	544	223	IV 23	...	2 20 30	3·05	91 47·2	16·3	vB, vL, R, mbMN, p of 2	†
937	...	...	...	St XIII	2 20 39	3·76	48 22·7	16·3	vF * slightly nebulous	
938	5241	...	...	d'A	2 20 43	3·35	70 20·6	16·3	pB, S, R, lbM, * 11 sf	
939	545	2479	...	...	2 21 0	2·30	135 4·3	16·3	vvF, S, R, gvlbM	
940	5242	...	...	d'A	2 21 7	3·54	58 59·0	16·3	F, S, R, bM	
941	546	224	III 261	...	2 21 22	+3·05	91 47·0	−16·3	vF, cL, R, f of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
942	...	...	...	Mu I	2 21 30	+ 2·92	101 27·2	− 16·3	vF, R } neb D ✱ ?	
943	...	...	...	Mu I	2 21 30	2·92	101 26·2	16·3	vF, R }	
944	...	...	...	L I	2 21 30	2·86	105 9·2	16·3	eF, S, mE 0°, sbM	
945	547	{ 225 = 2480 }	II 487	...	2 21 48	2·92	101 10·2	16·3	vF, L, iR, glbM	
946	...	...	...	St XIII	2 21 49	3·77	48 23·6	16·3	F, S, R, glbM	
947	548	2481	...	...	2 22 2	2·80	109 40·1	16·3	pB, E, gbM	
948	...	...	...	Sw V, O St I	2 22 12	2·92	101 8·6	16·3	vF, S, R	
949	549	226	I 154	...	2 22 15	3·65	53 29·4	16·3	cB, L, E, vgbM	*
950	...	...	...	O St I	2 22 30	2·91	101 39·1	16·2	eF, S, gbM	
951	...	...	...	L II	2 22 32	2·73	113 0·1	16·2	eF, S, E 0°, ? D ✱	
952	5243	...	...	St III	2 22 52	3·61	55 52·6	16·2	vF, vS, R, bM	
953	5244	...	...	d'A, St III	2 22 56	3·51	61 2·1	16·2	pF, S, R, mbM	
954	550	2482	...	...	2 23 20	2·37	132 1·5	16·2	vF, pL, lE, gbM, ✱ 8 sf 3′	
955	551	229	II 278	...	2 23 26	3·05	91 44·0	16·2	pB, S, E, psbM	*
956	552	228	...	...	2 23 28	3·84	45 59·6	16·2	Cl, pRi, st 9...15	
957	553	227	...	...	2 23 29	4·29	33 5·8	16·2	Cl, pL, pRi, st 13...15	
958	554	230	II 237	...	2 23 39	3·02	93 33·8	16·2	pF, ilE, bM	
959	5245	...	...	St VIII	2 23 54	3·62	55 7·7	16·2	eF, pL, lE, lbM	
960	...	...	...	L II	2 24 20	2·93	99 55·1	16·2	eF, vS, R, ? nob, ✱ 9 sp	
961	...	...	...	O St II	2 24 20	2·97	97 32·1	16·2	eF, pS, E 230°, ✱ 10 att	
962	5246	...	...	St III	2 24 29	3·49	62 33·1	16·1	eF, S, gbMN	
963	...	...	...	L II	2 24 48	3·00	94 51·0	16·1	eF, S, R, gbM, r	
964	555	2483	...	...	2 25 22	2·48	126 39·0	16·1	pB, pS, mE 215°	
965	...	...	...	O St I	2 25 35	2·80	109 16·1	16·1	vF, S, gbM	
966	...	...	...	L II	2 25 37	2·77	110 30·0	16·1	eF, R, ✱ 9 sp 2′	
967	556	2484	...	...	2 25 38	2·82	107 49·6	16·1	F, S, iR, gbM	
968	...	...	...	St X	2 25 39	3·61	56 8·3	16·1	pF, pS, R, bM	
969	557	231	...	...	2 25 44	3·58	57 40·2	16·1	S, R, psbM, 1st of 5	*
970	558	...	...	Ld R	2 25 48	3·58	57 39·0	16·1	vF, vS, R, 2nd of 5	*
971	559	...	...	Ld R	2 25 52	3 58	57 38·8	16·1	vF, vS, R, 3rd of 5	*
972	560	232	II 211	...	2 26 0	3·51	61 18·4	16·1	pB, eL, lE, gmbM, 3 st s	†
973	...	...	...	Sw IV	2 26 1	3·57	58 7·4	16·1	eeF, S, mE, pB ✱ nr sp	
974	561	233	...	...	2 26 2	3·58	57 39·8	16·1	vF, R, bM, 4th of 5	*
975	...	...	...	Sw I	2 26 2	3·20	80 53·0	16·1	vF, cE	
976	5248	...	...	T I	2 26 7	3·37	69 39·7	16·1	vF, vS, 4 F st nr	
977	562	2485	III 472	...	2 26 17	2·91	101 22·6	16·1	eF, pS, R, vlbM, am sc st	
978	563	234	...	...	2 26 24	3·58	57 46·2	16·1	pB, R, 5th of 5	*
979	564	2486	...	...	2 26 27	2·27	135 8·4	16·1	F, S, R, bet 2 st in par	
980	565	235	III 572	...	2 26 33	3·75	49 47·4	16·0	vF, pS, sp of 2	*
981	...	...	...	O St I	2 26 35	+2·91	101 35·0	−16·0	eF, S, gbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
982	566	236	III 573	...	2 26 37	+3·75	49 44·5	−16·0	F, S, nf of 2	
983	5249	...	...	St III	2 26 44	3·55	59 5·8	16·0	eF, vS, R, bM	
984	5250	...	...	St III	2 26 44	3·41	67 12 2	16·0	vF, eS, R, bM	
985	...	...	...	L II	2 27 50	2·94	99 25·0	16·0	vF, vS, R, bMN	
986	567	2487	...	Δ 519??	2 28 0	2·40	129 39·3	16·0	pB, L, pmE, sbM, bi-N	†
987	568	237	III 161	...	2 28 24	3·60	57 17·0	16·0	F, S, vlE, bM, r, 2 st 14 np	
988	...	...	...	St X	2 28 34	2·93	99 57·9	15·9	Neb ∗ 7·5 m	
989	...	...	...	L I	2 28 35	2·82	107 8·0	15·9	F, vS, R, bMN	
990	569	238	III 557	...	2 28 45	3·23	78 58·2	15·9	F, S, R, psbM	
991	570	239	III 434	...	2 28 46	2·96	97 46·5	15·9	vF, eL, iF, vlbM	
992	...	...	...	Sw IV	2 29 23	3·38	69 30·7	15 9	pF, pS, mE, ∗ s	
993	5251	...	...	m 63	2 29 32	3·09	88 34	15·9	eF, vS	
994	...	...	...	Sw III	2 29 33	3·09	88 33·1	15·9	eeF, pS, R, vF ∗ close, nr 5251	
995	5252	...	...	St III	2 29 40	3·78	49 4·9	15·9	vF, vS	
996	5253	...	...	St III	2 29 47	3·79	48 57·8	15·9	vF, vS	
997	5254	...	...	m 64	2 29 50	3·17	83 18	15·9	F, S	
998	5255	...	...	m 65	2 29 52	3·17	83 17	15·9	vF	
999	5256	...	...	St III	2 29 54	3·79	48 56·4	15·9	eF	
1000	5257	...	...	St III	2 29 58	3·78	49 9·0	15·9	vvF, p S, dif	
1001	5258	...	...	St III	2 30 19	3·79	48 56·2	15·8	vF, vS	
1002	...	...	...	St XII	2 30 25	3·63	55 59·2	15·8	vF, vS, iR, bMN	
1003	571	240	II 238 = III 198	...	2 30 25	3·76	49 44·2	15·8	pF, L, E 90° ±, mbM, r	*
1004	...	...	...	St IX, Sw III	2 30 29	3·09	88 38·0	15·8	pF, vS, R, vmbM, ∗ 11 p 2'	
1005	5259	...	...	St III	2 30 35	3·79	49 6·9	15·8	vF, vS	
1006	...	...	...	Sw V	2 30 38	2·90	101 38·4	15·8	eeF, pS, R, lbM	
1007	5260	...	...	m 66	2 30 38	3·10	88 29	15·8	eF, stellar	
1008	5261	...	...	m 67	2 30 41	3·10	88 32	15·8	vF, eS, stellar	
1009	...	...	...	Sw III	2 30 49	3·10	88 18·1	15 8	eeF, pS, R, ∗ 9 sf	
1010	5262	...	...	St VIII, Sw V	2 30 49	2·91	101 38·1	15 8	eF, S, R	
1011	5263	...	...	St VIII, Sw V	2 30 52	2·91	101 36·9	15·8	eF, S, R, lbM	
1012	572	241	III 152	...	2 30 57	3·54	60 27·5	15·8	F, pS, iR, bM, st inv	†
1013	...	...	...	Sw V	2 30 58	2·90	102 7·4	15·8	eeF, vS, R, bet 2 dist Dst	
1014	...	...	...	Mu II	2 31 2	2·93	100 7·9	15·8	eF, eS, iR, p of 2	
1015	5265	...	...	T I	2 31 4	3·05	91 55·7	15·8	vF, S	
1016	5264	...	...	m 68, T I	2 31 5	3·10	88 30	15 8	F, S, R, psbM	
1017	...	...	...	Sw V, O St I	2 31 6	2·90	101 35·9	15·8	eeF, vS, R, v diffic	
1018	...	...	...	Mu II	2 31 14	2·93	100 6·9	15·8	eF, vS, E 180°, f of 2	
1019	...	...	...	St IX	2 31 14	3·09	88 42·0	15·8	vF, S, lE	
1020	5266	...	...	m 69	2 31 30	3·10	88 23	15·8	eF, vS	
1021	5267	...	...	m 70	2 31 34	+3·10	88 24	−15·8	eF, S	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1022	574	244	I 102	...	2 31 37	+2·97	97 17·1	−15·8	cB, pL, R, mbM, ✶ 11 nf 2′	
1023	575	242	I 156	...	2 31 39	3·73	51 32·5	15·8	vB, vL, vmE, vvmbM	†
1024	576	243	II 592	...	2 31 41	3·22	79 45·6	15·8	pF, S, lE, bM, ✶ 11 nf 1′	
1025	577	2488	...	...	2 31 43	1·88	145 28·8	15·8	eF, S, R, p of 2	
1026	5268	...	...	m 71	2 31 57	3·16	84 3	15·8	pF, S, R, psbM	
1027	578	...	VIII 66	...	2 32 0	4·57	29 3·4	15·8	Cl, L, sc st, one 10 m	
1028	5269	...	...	m 72	2 32 0	3·22	79 46	15·8	eF	
1029	5270	...	...	m 73	2 32 2	3·22	79 49	15·8	F, S, mE	
1030	579	245	III 581	...	2 32 2	3·33	72 34·6	15·8	vF, iE	
1031	580	2490	...	...	2 32 8	1·87	145 28·3	15·7	F, S, R, gbM, ✶ 11 s 2′	
1032	581	246	II 5	...	2 32 11	3·08	89 30·8	15·7	pB, S, vlE, bM, 3st trap	
1033	...	...	...	L II	2 32 14	2·93	99 23·9	15·7	eF, pL, iE 190°, sbMN	
1034	...	...	...	L I	2 32 35	2·83	106 24·9	15·7	vF, vS, lE, lbM, 2 B st p 20′	
1035	582	249 = 2489	II 284	...	2 32 35	2·95	98 44·5	15·7	pF, L, mE, r, ✶ 17 att sf	
1036	583	247	III 475	...	2 32 40	3·35	71 19·3	15·7	F, S, R, lbM	
1037	...	...	...	Sw V	2 32 52	3·04	92 20·3	15·7	eeF, vS, mE, v diffic	
1038	...	...	...	Sw III, V	2 32 55	3·09	89 5·5	15·7	eF, pS, R, lbM	
1039	584	248	...	M 34	2 33 2	3·83	47 49·4	15·7	Cl, B, vL, lC, sc st 9	†
1040	5271	...	...	St III	2 33 18	3·80	49 6 0	15·7	F, S, bM	
1041	...	...	...	St XII	2 33 27	2·98	96 2·5	15·7	pF, pS, iR, bM	
1042	...	...	...	Sw III	2 33 35	2·94	99 3·0	15·7	eeF, L, R, np of 2	
1043	...	...	...	Sw V	2 33 38	3·08	89 16·2	15·7	eeF, S, R, v diffic	
1044	585	251	III 228	...	2 33 38	3·19	81 52·1	15·7	vF, vS, p of 2, ✶ 10 p	
1045	586	253 = 2491	II 488	...	2 33 43	2·90	101 53·5	15·7	F, S, R, bM	
1046	587	252	III 229	...	2 33 46	3·19	81 53·4	15·7	eF, vS, f of 2	
1047	...	...	...	Sw III	2 33 47	2·94	98 46·0	15·6	eeF, pS, R, v diffic	
1048	...	...	...	Sw III	2 33 47	2·94	99 8·9	15·6	eeF, pS, R, sf of 2	
1049	588	2492	...	...	2 33 58	2·49	124 52·3	15·6	pB, S, R, stellar	
1050	5272	...	...	d'A, St III	2 34 3	3·64	55 50·3	15·6	F, S, ✶ 18 inv n	
1051	...	...	...	St IX	2 34 8	2·96	97 32·2	15·6	eF, lE npsf, ✶ att np	
1052	589	254 = 2493	I 63	...	2 34 12	2·94	98 51·5	15·6	B, pL, R, mbM ✶ 12	
1053	...	...	...	Sw V	2 34 15	3·80	49 5·9	15·6	vF, vS, lE, 3 or 4 st in line nr	
1054	5273	...	...	d'A	2 34 25	3·34	72 23·2	15·6	vF, vS, lE	
1055	591	258	I 1 = II 6	...	2 34 33	3·07	90 9·5	15·6	pF, cL, iE 80°, bM, ✶ 11 n 1′	*
1056	590	256	III 584	...	2 34 34	3·52	62 1·5	15·6	F, S, R, psbM	
1057	595-6	...	...	Ld R	2 34 36	3·60	58 6·4	15·6	vF, double	
1058	592	255	II 633	...	2 34 40	3·70	53 16·4	15·6	pF, cL, R, glbM	
1059	593	259	...	...	2 34 45	3·34	72 35·5	15 6	eF, hardly sure (d'A not found)	*
1060	594	257	III 162	...	2 34 49	+3·60	58 10·4	−15·6	F, pL, R, lbM, ✶ 7·5 f 46′, 3′s	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1061	597	...	...	Ld R	2 34 49	+3·60	58 7·9	−15·6	vF, S, R, bM	
1062	...	...	...	Copeland (R)	2 34 58	3·60	58 8·1	15·6	eeF	
1063	...	...	...	St XII	2 35 13	2·98	96 10·0	15·6	vF, pS, iR, r?	
1064	...	...	...	L II	2 35 20	2·92	99 57·8	15·6	eF, S, R	
1065	...	...	...	Sw V	2 35 24	2·84	105 41·5	15·6	eeF, pS, * nr s, * 7·5 p	
1066	598	260	III 163	...	2 35 24	3·60	58 7·2	15·6	vF, pL, R, lbM, s of 2	
1067	599	261	...	...	2 35 24	3·60	58 5·2	15·6	eF, S, n of 2	
1068	600	262	...	Méchain, M 77	2 35 31	3·07	90 36·7	15·6	vB, pL, iR, sbMrrN	†
1069	...	...	...	Sw V	2 36 2	2·94	98 53·1	15·5	eeF, pS, R, * 8·5 nr f	
1070	601	263	II 273	...	2 36 2	3·14	85 37·7	15·5	pF, S, iR, gbM	
1071	...	...	...	L II	2 36 14	2·93	99 22·7	15·5	eF, vS, E 0°, bet 2 st	
1072	...	...	...	St XII	2 36 21	3·07	90 17·5	15·5	eF, vS, R, sev v F st inv	
1073	602	...	III 455	...	2 36 33	3·09	89 13·4	15·5	vF, L, lbM, er	
1074	...	...	...	L I	2 36 35	2·82	106 53·8	15·5	eF, vS, R	
1075	...	...	...	L I	2 36 35	2·82	106 48·8	15·5	vF, vS, bMN	
1076	...	...	...	Sw III	2 36 59	2·84	105 21·3	15·5	vF, pS, R, B * f 22"	
1077	...	...	...	Sw II	2 37 16	3·78	50 29·8	15·4	vF, pL, E	
1078	...	...	...	Mu II	2 37 38	2·92	100 1·7	15·4	eF, eS, R (? = 1064)	
1079	603	2494	...	...	2 37 44	2·59	119 35·8	15·4	B, pL, pmE, sbM	
1080	...	...	...	Sw V	2 38 15	2·99	95 18·0	15·4	vF, pS, iR	
1081	...	...	...	Sw V	2 38 24	2·83	106 10·5	15·4	eF, pS, R	
1082	...	...	...	Sw V	2 38 47	2·94	98 46·6	15·4	eeF, pS, lE	
1083	...	...	...	Sw V	2 38 59	2·83	105 57·2	15·4	eeF, pS, mE, np of 2	
1084	604	264	I 64	...	2 39 7	2·95	98 10·2	15·4	vB, pL, E, gpmbM	†
1085	5274	...	...	d'A	2 39 9	3·12	86 58·7	15·4	F, S, R, lbM, bet 2 st	
1086	...	...	...	Sw II	2 39 13	3·82	49 20·4	15·4	vF, pS, D * nr	
1087	605	265	II 466	...	2 39 17	3·06	91 5·3	15·3	pB, cL, lE, mbM	
1088	607	...	III 582	...	2 39 23	3·31	74 25·5	15·3	vF, S, iF	
1089	...	...	...	Sw V	2 39 24	2·83	105 39·4	15·3	eeF, S, R, sf of 2	
1090	606	266	II 465	...	2 39 26	3·06	90 50·0	15·3	vF, pL, iR, bM	
1091	...	...	...	L I	2 39 35±	2·79	108 8·7	15·3	vF, vS, R, sbMN	
1092	...	...	...	L I	2 39 35±	2·79	108 8·7	15·3	vF, vS, R, sbMN	
1093	...	...	...	St IX	2 39 43	3·65	56 10·1	15·3	eF, vS	
1094	608	267	III 462	...	2 40 18	3·06	90 51·0	15·3	vF, S, R, 2 S st p	
1095	5275	...	...	St VIII	2 40 18	3·16	85 56·9	15·3	eF, pS, R	
1096	609	2496	...	...	2 40 21	1·55	150 30·2	15·3	F, pS, R, glbM	
1097	610	2495	V 48	...	2 40 22	2·56	120 51·5	15·3	vB, L, vmE 151°, vbMN	
1098	...	...	...	L I	2 40 35	2·79	108 16·7	15·3	F, vS, R, bMN, 1st of 3	
1099	...	...	...	L I	2 40 35	2·79	108 18·7	15·3	F, pS, lE, bMN, 2nd of 3	
1100	...	...	...	L I	2 40 35	2·79	108 17·7	15·3	F, vS, lE, bMN, 3rd of 3	
1101	5276	...	...	St VIII	2 40 55	+3·16	86 0·5	−15·3	vF, eS, R, bM, * 13 p	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1102	...	...	...	L II	2 41 9	+2·71	112 48·6	−15·2	eF, vS, R	
1103	...	...	...	Sw III	2 41 19	2·85	104 33·1	15·2	eeF, S, E, ✱15 inv, ✱11 f	
1104	5277	...	...	d'A	2 41 29	3·06	90 51·7	15·2	vF, vS, r, ✱14 s	
1105	...	...	...	L I	2 41 35	2·82	106 17·6	15·2	vF, vS, R	
1106	612	268	...	d'A	2 41 39	3·84	48 55·1	15·2	vF, vS, vF ✱att s	
1107	5278	...	...	m 74	2 41 49	3·19	82 29	15·2	F, vS, R	
1108	...	...	...	Sw V	2 41 53	2·94	98 31·7	15·2	eF, pS, R	
1109	5279	...	...	m 75	2 42 0	3 27	77 20	15·2	vF	
1110	...	...	...	L II	2 42 2	2·94	98 24·6	15·2	eF, pL, E 348°	
1111	5280	...	...	m 76	2 42 4	3·27	77 21	15·2	F, vS, stellar	
1112	5281	...	...	m 77	2 42 21	3·27	77 22	15·2	F, pS	
1113	5282	...	...	m 78	2 42 29	3·27	77 17	15·2	vF	
1114	611	{269=2497}	III 449	...	2 42 35	2 80	107 34.4	15·2	pF, pL, pmE, glbM	
1115	5283	...	...	m 79	2 42 46	3·27	77 20	15·1	vF	
1116	5284	...	...	m 80	2 42 56	3·27	77 15	15·1	vF	
1117	5285	...	...	m 81	2 43 4	3·27	77 25	15·1	Close to a S✱	
1118	...	...	...	Sw V	2 43 18	2·88	102 44·7	15·1	eF, vS, Epf	
1119	...	...	...	L I	2 43 35	2·78	108 36·6	15·1	F, cS, R (? F ✱)	
1120	...	...	...	L I	2 43 35	2 84	105 2·6	15·1	vF, S, R, bM	
1121	...	...	...	Sw I	2 43 46	3·04	92 19·4	15·1	F, m E	
1122	...	...	...	Sw II	2 43 47	3·86	48 22·3	15·1	vF, pS, R, ✱nr n	
1123	613	270	II 601	...	2 43 48	3·86	48 22·4	15·1	cF, S, iR, vgbM, r	
1124	...	...	...	O St I	2 44 40	2·64	116 17 5	15·0	eF, eS, iR, gbM, ✱9 nf 1′	
1125	615	272	III 450	...	2 45 9	2·80	107 12 8	15·0	vF, S, lE, gbM	
1126	...	...	...	Sw V	2 45 9	3·04	91 51·7	15·0	eeF, S, R, h 273 f	
1127	5286	...	...	m 82	2 45 12	3·27	77 20	15·0	vF	
1128	...	...	...	Sw V	2 45 13	3·16	84 32·0	15·0	eF, S, lE, 2 F st close p	
1129	616	271	II 602	...	2 45 22	3 85	49 0·0	15 0	cF, pS, iR, vglbM, D or F ✱ sp	
1130	617	...	...	Ld R	2 45 22	3·85	48 58	15·0	cF, eS	
1131	618	...	...	Ld R	2 45 34	3·85	49 1	15·0	cF, cS	
1132	619	273	...	...	2 45 44	3·04	91 51·0	15·0	eF, pL, gbM, ✱8 f	
1133	...	...	...	L II	2 45 56	2·92	99 23·5	15·0	vF, vS, lE 45°, 2 st np, nf	
1134	620	...	II 254	...	2 46 1	3·27	77 34·9	15·0	F, S, iR, r	
1135	621	2498	...	...	2 46 36	1·78	145 32·5	14·9	F, R, gbM	
1136	622	2499	...	...	2 46 45	1·77	145 38·5	14·9	F, R, gbM	
1137	...	...	...	Sw III	2 46 57	3·11	87 37·7	14·9	vF, pS, R, lbM	
1138	623	274	III 580	...	2 47 30	3·90	47 31·4	14·9	vF, vS, R, gbM, 2 S st △	
1139	...	...	...	L I	2 47 35	2·83	105 5·5	14·9	vF, S, R, gbMN	
1140	624	{275=2500}	II 470	...	2 47 46	+2·91	100 36·2	−14·9	pB, S, R, stellar	✱

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1141	5287	...	...	m 83	2 47 59	+3·07	90 6	−14·8	vF, S, p of D neb	
1142	5289	...	...	m 84	2 48 1	3·07	90 6	14·8	pF, S, R, f of D neb	
1143	5288	...	...	St VIII	2 48 1	3·06	90 45·0	14·8	eF, S, R, p of 2	
1144	5290	...	...	St VIII	2 48 5	3·06	90 45·3	14·8	eF, S, R, f of 2	
1145	625	2501	...	...	2 48 8	2·76	109 13·1	14·8	F, pL, pmE, 2 S st f	
1146	5291	...	...	d'A	2 48 9	4·00	44 7·3	14·8	Cl, vS, vF + neb	
1147	...	...	...	Mu II	2 48 30	2·92	99 41·4	14 8	eF, vS, E 0°, * 9·5 f 6′	
1148	...	...	...	Sw III, L II	2 50 10	2·94	98 15·8	14 7	eF, pS, R, v diffic, np of 2	
1149	...	...	...	St IX	2 50 15	3·06	90 52 6	14·7	vF, vS, R, bM, S * p 30″	
1150	...	...	...	L I	2 50 35	2·82	105 36·4	14·7	vF, S, R, sbMN	
1151	...	...	...	L I	2 50 35	2·82	105·36·4	14·7	eF, S, R (neb ?), nr last	
1152	...	...	...	Sw III	2 50 42	2·94	98 19·8	14·7	eeF, S, R, v diffic, sf of 2, * s	
1153	626	276	II 274	...	2 50 53	3·12	87 11·1	14·7	F, vS, ilE, sbM, er	
1154	5292	...	...	St VIII	2 51 22	2·90	100 57·6	14·6	eF, S, lbM, sp of 2	
1155	5293	...	...	St VIII	2 51 28	2·90	100 56·8	14 6	eF, S, lbM, nf of 2	
1156	627	...	II 619	...	2 51 31	3·49	65 19·4	14·6	pB, eL, pm E 0°, bet 2 st	
1157	...	...	...	L I	2 51 35	2·82	105 41·3	14·6	eF, pS, E 0°, sbMN	
1158	...	...	...	L I	2 51 35	2·83	104 56·3	14·6	eF, S, R, sbMN	
1159	...	...	...	St XIII	2 51 35	3 92	47 23·9	14·6	vF, S, R, vlbM	
1160	629	...	III 199	Ld R	2 51 55	3·96	45 36·4	14·6	F, E	*
1161	628 = 634	277	II 239	...	2 51 56	3·96	45 39·7	14·6	F, pS, lE, sbM	*
1162	630	2502	III 469	...	2 52 17	2·86	102 57·6	14·6	F, R, glbM, stellar	
1163	...	...	...	L I	2 52 35	2·78	107 44·3	14·6	vF, pS, mE 75°	
1164	632	278	...	...	2 52 51	3·91	47 58·7	14·6	eF, vS	
1165	633	2503	...	...	2 52 57	2·48	122 39·4	14·6	vF, pL, E, vlbM	
1166	5294	...	...	m 85	2 52 57	3·26	78 43	14·6	eF, S	
1167	631	...	III 178	...	2 53 4	3·71	55 19·5	14·5	vF, pL, R, spmbM	
1168	5295	...	...	m 86	2 53 9	3·26	78 47	14·5	eF	
1169	635	279	II 620	...	2 54 5	4·03	44 10·3	14·5	pF, pS, iF, sbM	
1170	...	...	...	C S Pierce	2 54 10	3·53	63 29	14·5	eL, dif	
1171	...	...	...	St X, Sw II	2 54 46	3 93	47 9·2	14·4	vF, pL, iF	
1172	636	280	II 502	...	2 55 0	2·82	105 23·1	14·4	pF, pL, R, psbM	*
1173	...	...	...	Bigourdan	2 55 6	3·87	49 11·3	14·4	eF, vS, stellar Nucl	
1174	...	...	...	Sw IV	2 55 17	3·92	47 43·1	14·4	pF, pS, lE, pB * close f	
1175	637	...	II 607	...	2 55 21	3·91	48 13·4	14·4	F, cL, E	
1176	...	...	...	Bigourdan	2 55 25	3·87	49 9·7	14·4	* 13 in vF neb	
1177	5296	...	...	Ld R*	2 55 27	3·91	48 12·0	14·4	vF, S, R, nf II 607	
1178	...	...	...	Bigourdan	2 55 29	3·87	49 14·6	14·4	* 13 in vF neb (?)	
1179	...	...	...	O St I	2 55 35	2·75	109 27·2	14·4	eF, pS, gbM, * 12 f 1′	
1180	...	...	...	L I	2 55 35	+2·81	105 34·2	−14·4	eF, vS, R, bMN	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1181	...	...	...	L I	2 55 35	+2·81	105 36·2	−14·4	eF, vS, R, bMN	
1182	...	...	...	O St I	2 55 35	2 91	100 13·2	14·4	eF, pS, E 120°, ∗ 10 sp 2½′	
1183	...	...	...	Bigourdan	2 55 37	3·87	49 11·1	14·4	∗ 13 inv in neb	
1184	638	...	II 704	...	2 55 45	8·61	9 44·5	14·4	F, pL, mE	
1185	...	...	...	L II	2 56 3	2·91	99 41·2	14·4	cF, pS, E 15°	
1186	639	281	IV 43	...	2 56 20	3·93	47 43·5	14·4	F ∗ with neb appendages	*
1187	640	2504	III 245	...	2 56 25	2·67	113 25·1	14·3	pF, cL, pmE, gbM ∗ 16, r	
1188	...	...	...	L I	2 56 35	2 80	106 3·1	14·3	eF, vS, R	
1189	...	...	...	L I	2 56 35	2·80	106 9·1	14·3	eF, vS, R	
1190	...	...	...	L I	2 56 35	2·80	106 12·1	14·3	eF, vS, R	p h286
1191	...	...	...	L I	2 56 35	2 80	106 14·1	14·3	eF, vS, R	
1192	...	...	...	L I	2 56 35	2·80	106 13 1	14·3	eF, vS, R	
1193	641	...	II 608	...	2 56 35	3·98	46 10·5	14·3	F, cL, er	
1194	...	...	...	St XIII	2 56 43	3·04	91 39 3	14·3	F, S, R, glbM	
1195	5297	...	...	Dreyer (R)	2 56 52	2 86	102 36 0	14·3	eF, eS, ∗ 12 sf, h 2505 sf	
1196	642	2505	...	...	2 56 55	2·86	102 38·3	14·3	vF, sp of 2	
1197	...	...	...	Sw II	2 56 56	3·96	46 29·2	14·3	pF, pS, cE, sev vF st nr	
1198	...	...	...	St IX	2 57 5	3·89	48 41·9	14·3	Neb ∗ 11	
1199	643	282	II 503	...	2 57 6	2·80	106 9·0	14·3	cB, pS, iR, smbM	
1200	644	2506	II 475	...	2 57 15	2·87	102 32·5	14·3	pF, cL, iR, bM, nf of 2	
1201	645	283	I 109	...	2 58 4	2·60	116 35·8	14·2	cB, pS, vlE, r, S ∗ nr	
1202	...	...	...	O St II	2 58 32	2·95	97 2·1	14·2	eF, S, 2 st 4′ nf	
1203	...	...	...	L I	2 58 35	2·82	104 55·1	14·2	vF, S, R, bMN (neb?)	
1204	...	...	...	L I	2 58 35	2·86	102 53·1	14·2	eF, E 45°, r, sev st inv	
1205	...	...	...	O St I	2 58 35	2·90	100 14·1	14·2	eF, pS, E 25°, ∗ 9·5 3′ sp	
1206	...	...	...	L II	2 59 14	2·92	99 23·1	14·2	eF, vS, vlE 0°	
1207	646	284	III 578	...	2 59 20	3·81	52 9·4	14·2	cF, vS, R, psb in npp end	
1208	647	285 = 2507	II 285	...	2 59 25	2·91	100 5·1	14·2	pB, S, lE 80° ±, lbM	
1209	648	286	II 504	...	2 59 30	2·80	106 8·7	14·2	B, S, cE, psbM	
1210	...	...	...	O St I	2 59 40	2·61	116 17·1	14·1	eF, vS, iR, gbMN	
1211	...	...	...	St IX	2 59 45	3·05	91 20·3	14·1	pB, vS, R, mbMN = ∗ 9·10	
1212	...	...	...	Sw I	2 59 54	3·88	49 38·9	14·1	eF, S, R, Algol nr	
1213	...	...	...	Sw I	2 59 57	3 81	51 54·5	14·1	eF, lE, ∗ close n, diffic	
1214	...	...	...	Sw V, O St I	3 0 8	2·90	100 5·1	14·1	F, pS, iR, h 285 p	
1215	...	...	...	Sw V, O St I	3 0 18	2·90	100 7·8	14·1	eF, vS, R	
1216	...	...	...	O St I	3 0 30	2·90	100 9	14·1	eF, S, stellar, 3rd of 3	
1217	649	2508	...	...	3 0 48	2·29	129 34·4	14·1	pF, S, R, psbM	
1218	...	...	...	Sw IV	3 1 2	3·13	86 26·1	14·1	pF, pS, R	
1219	5298	...	...	m 87	3 1 12	3·10	88 26	14·1	F, pL, R	
1220	650	287	...	...	3 1 29	+4·34	37 11·9	−14·0	Cl, vS, st vF	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1221	...	...	...	L II	3 1 36	+2·99	94 48·0	−14·0	eF, vS, E 170°, *s	
1222	...	...	...	St XIII	3 1 55	3·01	93 29·6	14·0	vF * in pF, S, R neb	
1223	...	...	...	L II	3 2 6	3·00	94 41·0	14·0	eF, S, R, gbMN, p of 2	
1224	...	...	...	Sw II	3 2 6	3·90	49 9·8	14·0	eF, vS, R	
1225	...	...	...	L II	3 2 18	3·00	94 38·0	14·0	eF, vS, R, f of 2	
1226	...	...	...	St X	3 2 19	3·74	55 9·0	14·0	F, vS, R, bM	
1227	...	...	...	St X	3 2 22	3·74	55 13·3	14·0	vF, vS	
1228	...	...	...	L II	3 2 58	2·66	113 28·0	13·9	eF, eS, R, gbM, p of 2	
1229	...	...	...	L II	3 2 58	2·66	113 31·0	13·9	eF, eS, R, gbM, f of 2	
1230	...	...	...	L II	3 3 10	2·66	113 33·0	13·9	? F *	
1231	...	...	...	L I	3 3	2·80	106 7·0	13·9	eF, pL, E (? neb)	
1232	651	2509	II 258	...	3 3 27	2·70	111 7·0	13·9	pB, cL, R, gbM, r	
1233	5299	...	...	St III	3 3 31	3·85	51 12·7	13·9	F, vS, R, diff	
1234	...	...	...	L II	3 3 32	2·93	98 23·0	13·9	eF, S, iR, * or st inv	
1235	...	...	...	Sw V	3 3 49	3·84	51 36·2	13·9	vF, S, lE	
1236	5300	...	...	m 88	3 3 52	3·25	79 44	13·9	eF, vS, R	
1237	...	...	...	Mu II	3 3 56	2·92	99 12·0	13·9	vF, S, E 170°, ? D *	
1238	...	...	...	Sw V	3 4 18	2·88	101 16·5	13·9	vF, pS, R, II 900 nf	
1239	652	288	III 262	...	3 4 20	3·02	93 5·0	13·9	eF, stellar (? RA + 30ˢ)	*
1240	653	...	III 164	...	3 4 23	3·63	59 57·7	13·9	eF, vS, ? vS st	
1241	654	289 = 2510	II 286	...	3 4 27	2·91	99 27·5	13·8	F, pL, R, vglbM, * 9 n	*
1242	655	...	III 591	Ld R	3 4 31	2·91	99 26·4	13·8	vF, S	*
1243	656	291 = 2511	...	...	3 4 36	2·91	99 29·2	13·8	F, vS, R	*
1244	657	2512	...	Δ 205 ? ?	3 4 42	0·77	157 18·8	13·8	F, S, pmE, gbM	
1245	658	290	VI 25	...	3 5 6	4·11	43 17·4	13·8	Cl, pL, Ri, C, iR, st 12...15	
1246	659	2513	...	...	3 5 18	0·75	157 29·2	13·8	pF, S, R, glbM	
1247	660	...	II 900	...	3 5 39	2·88	101 0·1	13·8	F, pL, E 80°	
1248	661	292	III 443	...	3 5 50	2·98	95 45·1	13·8	cF, S, lE, bM, * 9 n 5′	
1249	662	2514	...	...	3 5 58	1·78	143 52·3	13 7	B, L, vmE 80°, vgbM	
1250	...	...	...	Sw V	3 6 12	3·92	49 10·6	13·7	vF, vS, R	
1251	5060	...	...	S Coolidge	3 6 55	3·09	89 4·5	13·7	F	
1252	663	2515	...	...	3 7 7	1·47	148 40·3	13·7	Cl of 18 or 20 st	
1253	664	...	IV 17	d'A	3 7 7	3·02	93 20·3	13·7	* 12 with neb f, 90″ l	
1254	5301	...	...	m 89	3 7 7	3·11	87 51	13·7	F, vS, stellar	
1255	...	...	...	Barnard, O St I	3 7 31	2·59	116 17·6	13·6	F, pL, F * close p	
1256	665	2516	...	...	3 7 47	2·67	112 30·8	13·6	F, S, E, alm stell, * 8 np	
1257	...	...	...	Bigourdan	3 7 51	3·92	48 59·4	13 6	Stellar neb	
1258	...	...	...	L II	3 8 4	2·67	112 18·8	13·6	eF, pS, vlE, 12′ n of h 2516	
1259	...	...	...	Bigourdan	3 8 5	+3·92	49 7·8	−13·6	vF, S, R, vlbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1260	...	...	...	Bigourdan	3 8 16	+3·92	49 6·7	−13·6	vF, S, R	
1261	666	2517	...	Δ 337	3 8 26	1·64	145 44·8	13·6	⊕, B, L, R, rr	
1262	...	...	...	L I	3 8 35	2·78	106 24·8	13·6	eF, pS, iR, sbMN	
1263	...	...	...	L I	3 8 35	2·80	105 37·8	13·6	vF, S, lE, sbM	
1264	...	...	...	Bigourdan	3 8 47	3·92	48 59·5	13·6	vF, S, vlbM	
1265	...	...	...	Bigourdan	3 8 56	3·94	48 37·9	13·6	vF, vS, mbM	
1266	667	...	III 194	d'A	3 8 57	3·02	92 56·5	13·6	vF, pS, * 13 sp 2′	*
1267	668	...	...	d'A	3 9 31	3·93	49 2·5	13·5	F, vS, R, stell	
1268	669	...	...	d'A	3 9 31	3·93	49 1·7	13·5	eF, S, lE, com	
1269	670	2518	...	...	3 9 42	2·20	131 36·4	13·5	vB, R, gmbM	
1270	671	...	...	d'A	3 9 46	3·93	49 1·9	13·5	vF, S, R	
1271	...	...	...	Bigourdan	3 9 59	3·92	49 9·9	13·5	vF, vS	
1272	672	...	...	d'A	3 10 9	3·93	49 1 6	13·5	F, S, R	
1273	673	...	...	d'A	3 10 11	3·94	48 58·5	13·5	vF, vS	
1274	5302	...	...	Ld R*	3 10 28	3·94	48 58·0	13·4	vF, vS	
1275	675	...	...	d'A	3 10 35	3·94	49 0·3	13·4	F, S	
1276	5303	...	...	Dreyer (R)	3 10 37	3·94	48 52·5	13·4	vF, vS	
1277	{5304 = 5305}	...	...	Ld R*	3 10 38	3·94	48 56·5	13·4	vF, vS, np II 603	
1278	674	293	II 603	...	3 10 40	3·94	48 57·4	13·4	pB, pS, R, bM	*
1279	5306	...	...	Dreyer (R)	3 10 47	3·94	49 2·3	13·4	vF, vS	
1280	...	...	...	St XII	3 10 48	3·06	90 41·2	13·4	vF, vS, R, gbM, r	
1281	5307	...	...	Dreyer (R)	3 10 51	3·94	48 53·3	13·4	vF, S, * 11 p 1′	
1282	...	...	...	Bigourdan	3 11 0	3·93	49 9·2	13·4	vF, S, lbMN	
1283	...	...	...	Bigourdan	3 11 2	3·93	49 7·3	13·4	vF, S, vlbM	
1284	676	2519	III 956	...	3 11 2	2·88	100 48·7	13·4	eF, vS, 2 st s	
1285	5308	...	...	d'A	3 11 5	2·94	97 48·6	13·4	pF, S	
1286	...	...	...	Sw III	3 11 5	2·93	98 8·8	13·4	eF, eS, R, 4 B st s	
1287	684	...	III 195	d'A	3 11 32	3·02	93 14·9	13·4	vF, vS, iR	
1288	683	2520	...	...	3 11 34	2·42	123 5·7	13·4	vF, L, R, vglbM	
1289	...	...	...	Sw IV	3 11 34	3·03	92 29·0	13·4	vF, S, R, 4 st f	
1290	...	...	...	O St I	3 11 35	2·82	104 29·7	13·4	eF, eS	
1291	685	2521	...	Δ 487	3 12 15	2·19	131 36·8	13·3	⊕, vB, pL, R, mbM, er	
1292	...	...	...	Barnard	3 12 15	2·54	118 8·0	13·3	F, pS, lE, vgbM, S D * nr	
1293	686	294	III 574	...	3 12 25	3·94	49 7·1	13·3	vF, R, bM, np of 2	*
1294	687	295	III 575	...	3 12 30	3·94	49 8·9	13·3	vF, R, bM, sf of 2	*
1295	...	...	...	O St I	3 12 35	2·82	104 30·7	13·3	eF, vS, gbMN, * 10 f 3′	
1296	...	...	...	L II	3 12 47	2·83	103 34·7	13·3	eF, vS, R	
1297	...	...	...	Barnard	3 12 52	2·72	109 36·3	13·3	F, pS	
1298	5309	...	...	d'A	3 13 10	3·03	92 37·2	13·3	F, pS, R, * 13 sp	
1299	688	296	II 287	...	3 13 15	+2·95	96 46 0	−13·3	vF, S, vlE, gbM, er	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1300	689	2522	...	...	3 13 23	+2·71	109 55·1	−13·3	cB, vL, vmE, psvmbM	
1301	...	...	...	O St I	3 13 40	2·73	109 3·6	13·3	vF, mE 135°	
1302	...	...	...	Barnard	3 13 50	2·57	116 34·3	13·2	S, R, psvmbM, *9 np 1′	
1303	5310	...	...	d'A	3 13 51	2·93	97 54·0	13·2	vF, sev st inv	
1304	690	...	III 444	...	3 14 8	2·98	95 8·2	13·2	eF, vS	
1305	5311	...	...	d'A	3 14 20	3·02	92 48·3	13·2	pB, pS, R, *16 att	
1306	...	...	...	O St I	3 14 45	2·58	116 2·6	13·2	vF, vS, gbM, *10·5 f 4′	
1307	...	...	...	L II	3 15 19	2·98	95 3·5	13·1	eF, vS, R, *9·5 nf	
1308	691	...	III 568	...	3 15 26	3·02	93 15·7	13·1	eF, S. iF, am 3 or 4 st	
1309	692	2523	I 106	...	3 15 36	2·79	105 54·2	13·1	cB, cL, iR, gbM, *8 sp 4′	
1310	693	2524	...	...	3 15 42	2·30	127 38·6	13·1	⊕, vF, pL, R, vgvlbM	
1311	694	2525	...	...	3 16 0	1·75	142 41·0	13·1	F, pL, mE-37°, gbM	
1312	5061	...	...	S Coolidge	3 16 29	3·09	89 19·1	13·1	F	
1313	695	2528	...	Δ 206	3 16 34	0·70	156 59·6	13·1	pB, L, E, vgbM, r	
1314	. .	...	...	L II	3 16 48	2·99	94 40·5	13·0	*10 with eF, cL, E neb s	
1315	696	2526	...	...	3 16 55	2·67	111 52·3	13·0	pB, S, R, gbM	
1316	697	2527	...	Δ 548	3 17 20	2·29	127 43·7	13·0	vB, cL, vlE, vsvmbMN	
1317	698	2529	...	Δ 547	3 17 23	2·29	127 36·4	13·0	pB, pS, psbM	
1318	5312	...	...	J Schmidt	3 17 23	2·29	127 37·1	13·0	F	
1319	699	2533	...	...	3 17 46	2·66	112 1·0	13·0	F, S, R, bM, p of 2	
1320	700	298 = 2530	III 197	...	3 17 49	3·01	93 32·1	13·0	F, S, R, bM	
1321	701	297 = 2531	III 196	...	3 17 49	3·01	93 30·5	13·0	F, S, Epf, D or biN	
1322	702	2532	...	...	3 17 53	3·01	93 25·1	13·0	vF, vS, R, bM	
1323	703	...	...	Ld R	3 17 53	3·01	93 19·2	13·0	eF, eS, *13 sp 25″ ±	
1324	704	299	III 445	...	3 18 5	2·96	96 14·2	13·0	vF, pS, pmE	
1325	705	2534	IV 77	...	3 18 18	2·66	112 1·8	12·9	F, mE 239°, com, *9·5 att	†
1326	706	2535	...	...	3 18 38	2·31	126 58·2	12·9	○? pS, vsvmbMN	
1327	...	...	...	O St I	3 18 45	2·57	116 10·5	12·9	eF, vS, neb?	
1328	...	...	...	L II	3 19 6	2·99	94 37·5	12·9	vF, eS, R, bMN	
1329	707	2536	...	...	3 19 40	2·74	108 5·0	12·9	F, pS, R, glbM	
1330	...	...	...	St XII	3 19 45	3·97	48 48·7	12·8	vF st in vF, S neb	
1331	708	...	III 959	...	3 19 54	2·66	111 51·0	12·8	vF, vS	
1332	709	...	I 60	...	3 20 5	2·66	111 49·7	12·8	vB, S, E 114°, smbMN	
1333	710	...	...	Schönfeld	3 20 41	3·69	59 6·5	12·8	F, L, * 10 nf (Auw No 17)	*
1334	711	...	...	d'A	3 20 47	3·98	48 39·1	12·7	eF, pL, lbM	
1335	...	...	...	St XII	3 21 1	3·98	48 54·7	12·7	vF * in vF, eS neb	
1336	712	2537	...	...	3 21 10	2·32	126 12·6	12·7	vF, S, vlE, gbM	
1337	...	...	...	Sw III	3 21 17	2·91	98 53·2	12·7	eF, vL, mEns	
1338	...	...	...	St XIII	3 22 16	+2·84	102 38·2	−12·7	vF, S, iR, lbM, r	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1339	713	2538	...	...	3 22 30	+2·41	122 46·3	−12·7	cB, pS, R, psbM, D ✶ p	
1340	715	2539	...	...	3 22 39	2·44	121 23·2	12·6	vB, pS, lE, psbM (? I 257)	✻
1341	716	2540	...	...	3 22 40	2·28	127 38·2	12·6	F, S, R, ✶ 12 sf	
1342	717	301	VIII 88	...	3 22 41	3·85	53 9·6	12·6	Cl, vL, ab 60 st	
1343	718	300	III 694	...	3 22 54	6·31	17 54·3	12·6	F, vS, iR, gbM, D ✶ v nr	
1344	714	2542	I 257	...	3 23 0	2·44	121 32·7 ±	12·6	cB, pL, iR, vgbM	
1345	719	2541	...	...	3 23 10	2·73	108 16·2	12·6	vF, S, R, pslbM	
1346	5313	...	...	St VIII	3 23 18	2·96	96 1·4	12·6	eF, eS, R, bM, ✶ 13 p	
1347	...	...	...	L II	3 23 41	2·64	112 45·3	12·6	eF, pS, E 130°, sbMN	
1348	720	...	VIII 84	...	3 23 42	4·36	39 3·3	12·6	Cl, lRi, st L	
1349	...	...	...	Sw VI	3 23 58	3·14	86 6·9	12·5	eeF, S, R, bet 2 st	
1350	721	2545	...	Δ 591	3 24	2 36	124 12	12·5	B, L, mE, vmbMRN	
1351	722	2544	...	...	3 25 8	2·33	125 20·2	12·5	pB, pS, R, psbM	
1352	723	2543	...	...	3 25 17	2·70	109 45·6	12·5	eF, pslbM, diff, ✶ 8 sf	
1353	724	2546	III 246	...	3 25 49	2 67	111 17·8	12·4	pB, cL, iE, mbM	
1354	725	2547	III 487	...	3 26 2	2·78	105 41·5	12·4	vF, S, lE, glbM	
1355	5314	...	...	d'A	3 26 27	2·99	95 28·6	12·4	pF, S	
1356	728	2549	...	...	3 26 31	1·79	140 45·9	12·4	vF, pL, iR, gbM, ✶ nr	
1357	726	2548	II 290	...	3 26 44	2·81	104 8·4	12·4	pF, pL, R, lbM, ✶ 9 nf	
1358	727	302	III 446	...	3 26 44	2·97	95 33·5	12·4	vF, S, bet 2 st	
1359	729	2550	...	...	3 27 29	2·69	109 58·6	12·3	F, L, R, vglbM	
1360	5315	...	...	{Swift 1857 / Winnecke}	3 27 36	2·55	116 18·5	12·3	✶ 8 in B, L neb, Ens	
1361	...	...	...	O St II	3 27 38	2·95	96 43·1	12·3	eF, eS, gbMN	
1362	730	2551	III 960	...	3 27 39	2 67	110 46·1	12·3	vF, S, R	
1363	...	...	...	Burnham	3 28 6	2·88	100 18·8	12·3	vF, S, R, ✶ 7 sp 3′·5, sp of 2	
1364	...	...	...	Mu II	3 28 16	2·88	100 18 1	12·3	vF, S, vlE, nf of 2	
1365	731	2552	...	...	3 28 18	2·29	126 36·5	12·3	!! vB, vL, mE, rN	†
1366	732	2553	III 857	...	3 28 18	2·42	121 40·6	12·3	vF, S, iF, lbM	
1367	...	...	...	O St I	3 28 40	2·57	115 24·1	12·2	vF	
1368	...	...	...	L I	3 28 40	2·77	106 10·1	12·2	vF, vS, R, lbM	
1369	5316	...	...	J Schmidt	3 28 41	2·29	126 44·6	12·2	F	
1370	733	2554	III 559	...	3 29 1	2·67	110 50 8	12·2	vF, S, R, bet 2 st 14	
1371	734	2555	II 262	...	3 29 2	2·57	115 24·4	12·2	pB, pL, vlE, psbM	
1372	...	...	...	L I	3 29 40	2·76	106 22·1	12·2	vF, vS, R, glbM	
1373	735	2556	...	...	3 29 51	2·31	125 42·4	12·2	eF, vS, p of 3	
1374	736	2557	...	J Schmidt	3 29 54	2·31	125 41·9	12·2	vB, pL, lE, gmbM, 2nd of 3	✻
1375	737	2558	...	J Schmidt	3 29 54	2·31	125 44·4	12·2	B, S, lE, pmbM, 3rd of 3	
1376	738	303	II 288	...	3 30 9	2·97	95 30·0	12·1	eF, pL, iR, bM, r	
1377	740	2560	III 961	...	3 30 29	2 66	111 21·7	12·1	F, S, R, gbM	
1378	5317	...	...	J Schmidt	3 30 31	+2·31	125 40·5	−12·1	F	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1379	741	2561	...	...	3 30 43	+2·31	125 54·8	−12·1	⊕, B, pL, R, gpmbM	
1380	739	2559	...	Δ 574, Schmidt	3 31 4	2·32	125 26·8	12·1	vB, L, R, psbM	
1381	5318	...	...	J Schmidt	3 31 9	2·30	125 46·0	12·1	F	
1382	5319	...	...	J Schmidt	3 31 9	2·30	125 37·8	12·1	F	
1383	742	2562	...	...	3 31 20	2·71	108 48·3	12·1	pF, S, R, psmbM	
1384	5320	...	...	m 90	3 31 20	3·37	74 37	12·0	Neb ∗ 13	
1385	743	2563	II 263	...	3 31 27	2·58	114 58·1	12·0	pB, pS, R, gpmbM	
1386	5321	...	...	J Schmidt	3 31 29	2·29	126 28·2	12·0	F	
1387	744	2564	...	...	3 31 35	2·30	125 58·6	12·0	⊕, vB, pL, R, gmbM	
1388	...	...	...	L I	3 31 40	2·76	106 23·0	12·0	vF, vS, R, lbM	
1389	5322	...	...	J Schmidt	3 31 50	2·29	126 12 9	12·0	F	
1390	...	...	...	Mu II	3 31 50	2 69	109 30·0	12·0	vF, pS, E 260°	
1391	...	...	...	L II	3 32 10±	2·71	108 48·0	12·0	eF, S, R, gbMN	∗
1392	...	...	...	Sw VI	3 32 17	2·25	127 35·6	12·0	vF, pS, R	
1393	745	2565	III 451	...	3 32 19	2·71	108 53·6	12 0	F, S, R, glbM	
1394	...	...	...	L II	3 32 20±	2·71	108 44·0	12·0	vF, vS, E 170°, sbMN	∗
1395	746	2566	I 58	...	3 32 25	2·61	113 29·3	12·0	B, pS, E, psmbM	
1396	5323	...	...	J Schmidt	3 32 40	2·29	126 7·9	12·0	F	
1397	756	305	III 569	d'A	3 32 49	2·98	95 7·3	12·0	vF, vS, lE	
1398	...	...	...	Winnecke, Block	3 32 58	2·53	116 47·7	12·0	cB, cL, R, vmbM	
1399	748	2569	...	...	3 33 7	2·30	125 54·9	11·9	⊕, vB, pL, psbM, rr	∗
1400	747	2567	II 593	...	3 33 13	2·70	109 8·7	11·9	cB, pS, R, psmbM	
1401	749	2568	III 247	...	3 33 14	2·61	113 10·8	11·9	vF, vS, R	
1402	...	...	...	L II	3 33 15	2·70	108 59·0	11·9	eF, vS, R	
1403	...	...	...	L II	3 33 17	2 62	112 51·0	11·9	vF, eS, neb ∗	
1404	750	2571	...	...	3 33 30	2·29	126 3·2	11·9	vB, pL, R, psmbM	∗
1405	...	...	...	L I	3 33 40	2·77	105 59·0	11·9	eF, pL, mE 150°, glbM, F st inv	
1406	751	2572	...	...	3 33 50	2·41	121 46·4	11·9	F, cL, vmE, vglbM, ∗ 7 np	
1407	752	2570	I 107	...	3 33 54	2·70	109 2·1	11·9	vB, L, R, svmbMN	
1408	5324	...	...	J Schmidt	3 34 0	2·29	125 58·9	11·9	F	
1409	753	304	III 263	...	3 34 4	3·04	91 45·6	11·9	eF, stellar or lE	
1410	754	...	...	Ld R	3 34 4	3·04	91 45	11·9	Makes D neb with h 304 Pos 0°	
1411	755	2573	...	...	3 34 5	2·01	134 33·3	11·9	B, pS, R, smbM	
1412	757	2574	...	...	3 34 37	2 53	116 40·1	11·8	F, S, E, gbM, ∗ sf 2	
1413	...	...	...	L I	3 34 40	2·76	106 2·9	11·8	eF, vS, R, lbM	
1414	...	...	...	L II	3 34 47	2·63	112 10·9	11·8	eF, pS, mE 0°, bMN	
1415	759	2575	II 267	...	3 34 51	2 62	113 0·7	11 8	pB, S, lE, pglbM, ∗ sf ′	
1416	...	...	...	Mu II	3 34 54	2·61	113 13·9	11·8	eF, S, R, ∗ 8·6 n 2′	
1417	758	306	II 455	d'A	3 35 1	2·98	95 9·3	11·8	pF, pL, lE, lbM, ∗ sf	
1418	760	307	II 456	d'A	3 35 19	2·98	95 11·2	11·8	vF, S, E, ∗ 11 sf 1′	
1419	761	2576	...	...	3 35 30	+2·23	127 58·6	−11·8	pF, pS, R, psbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1420	5325	...	...	d'A	3 35 46	+2·95	96 18·4	−11·7	F, vS, ✱ 13 p	
1421	762	2577	II 291	...	3 35 57	2·80	103 56·9	11·7	F, cL, mE 0°, r	
1422	...	...	...	L II	3 36 17	2·63	112 8·9	11·7	eF, pS, E 80°	
1423	...	...	...	Sw V	3 36 18	2·94	96 49·4	11·7	eeF, S, R, v diffic	
1424	763	...	...	Ld R	3 36 19	2·98	95 11	11·7	vF, ✱ 10·11 np	
1425	764	...	II 852	...	3 36 30	2·44	120 21·2	11·7	F, pL, iR, gbM	
1426	765	2578	III 248	...	3 36 42	2·62	112 33·4	11·7	pF, S, lE, bM	
1427	766	2579	...	...	3 36 58	2·29	125 51·0	11·7	pF, S, R, psmbM	
1428	5326	...	...	J Schmidt	3 37 0	2·29	125 36·4	11·7	F	
1429	...	...	...	L II	3 37 5	2·98	95 10	11·6	eF, vS, E 0°, gbMN, f of 2	
1430	...	...	...	L II	3 37 9	2·71	108 40·8	11·6	eF, S, E 20°, sbMN	
1431	5327	...	...	m 91	3 37 23	3·12	87 37	11·6	eF, pL, iR	
1432	...	...	...	Henry	3 37 30	3·55	66 5	11·6	eF, vL, dif (Maja Plejadum)	†
1433	767	2580	...	Δ 426	3 37 38	1·88	137 40·6	11·6	vB, L, pmE, vsvmbM ✱ 10	
1434	...	...	...	Mu II	3 37 40	2·88	100 7·8	11·6	eF, S, R, ✱ 8·5 f 25ˢ, n 3′	
1435	768	...	...	Tempel	3 37 52	3·54	66 40	11 6	vF, vL, dif (Merope)	†
1436	769	2581	...	Δ 562	3 38 8	2·26	126 34·2	11·6	⊕, vB, pmE, pgbM	
1437	770	2582	...	...	3 38 20	2·27	126 18·0	11·6	F, vL, R, glbM	
1438	...	...	...	O St I	3 38 40	2·60	113 26·8	11·5	eF, mE, N, ✱ 10 f 1′	
1439	771	2584	III 249	...	3 38 43	2 62	112 21 7	11·5	F, pS, gpmbM	
1440	773	2583	II 458	...	3 38 44	2·70	108 43·5	11·5	pB, pS, R, smbM ✱ 13	
1441	772	...	II 597	...	3 38 45	2 99	94 31·9	11·5	vF, S, iE, ✱ 12 f	
1442	774	...	II 594	...	3 38 46	2·68	109 41·9	11·5	pB, vS, bM (? = II 458)	*
1443	...	...	...	T V	3 38 50	2·99	94 28	11·5	vF, nf II 597	
1444	775	308	VIII 80	...	3 38 52	4·49	37 46·3	11·5	Cl of ab 30 st 12...14	
1445	...	...	...	Mu II	3 38 58	2·87	100 17·8	11·5	vF, S, R, ✱ 9 np 2′	
1446	...	...	...	Dreyer (R), T V	3 39 0	2·99	94 30·5	11·5	eF, f II 597	
1447	...	...	...	L II	3 39 3	2·89	99 28 8	11·5	vF, S, R, neb ? ✱ 7·8 f 3′	
1448	776	2585	...	...	3 39 5	1·98	135 5·3	11·5	pB, L, vmE 222°	
1449	5328	...	...	d'A	3 39 5	2·99	94 34·7	11·5	vF, vS, vlE	
1450	...	...	...	Sw V, O St I	3 39 8	2·89	99 40·4	11·5	eF, pS, R (? D, dist 0′·4)	
1451	5329	...	...	d'A	3 39 10	2 99	94 30·6	11·5	vF, vS, lE	
1452	777	...	II 459	...	3 39 12	2·70	109 0·4	11·5	F, R, lbM	
1453	778	309	I 155	...	3 39 29	2·99	94 24·6	11·5	pB, S, R, ✱ 17 M.	*
1454	...	...	...	Mu II	3 39 40	2·65	111 7·8	11·5	vF, eS, R, (? ✱), ✱ 9·5 sp 3′	
1455	...	...	...	L II	3 39 47	2·69	109 4·8	11·5	vF, S, lE 30°, sbMN	
1456	...	...	...	J. G. Lohse	3 39 54	3·52	67 52·5	11·5	D ✱ 10–12, comp. nebulous (130°, 9″)	
1457	779	2586	...	...	3 39 57	1·97	135 5·4	11·5	pF, pL, eE 42°, vgpmbM	
1458	...	...	...	L II	3 40 40	2·70	108 40·7	11·4	vF, vS, R, ○ ? neb ?	
1459	...	...	...	O St I	3 40 45	+2·54	115 57 7	−11·4	eF, pS, glbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1460	780	2587	...	...	3 41 0	+2·24	127 7·9	−11·4	F, S, R, ✶att	
1461	781	2588	II 460	Schönfeld	3 42 3	2·74	106 49·4	11·3	pB, S, lE, mbMN	
1462	5330	...	...	m 92	3 42 54	3·20	83 28	11·2	vF, S, vlE	
1463	782	2589	...	...	3 43 33	1·14	150 14·5	11·2	eF, S, R, glbM, am 7 B st	
1464	...	...	...	Sw V	3 44 51	2·76	105 48·6	11·2	pF, S, R, 2 st nr	
1465	...	...	...	Sw V	3 44 51	+3·77	57 55·0	11·1	pF, pS, R, pB ✶ nr p	
1466	783	2590	...	...	3 45 15	−0·36	162 6·6	11·1	pF, pS, iR, glbM, ✶7 f	
1467	...	...	...	Mu II	3 45 15	+2·89	99 16·5	11·0	eF, vS, R, ✶9 s 4′	
1468	...	...	...	St XII	3 45 20	2·94	96 46·2	11·1	vF, vS, R, bM	
1469	...	...	...	Sw III	3 45 33	5·88	21 47·5	11·0	vF, vS, R, B ✶ nr	
1470	...	...	...	Mu II	3 46 27	2·89	99 25·5	11 0	eF, S, E 0°	
1471	...	...	...	L I	3 46 35	2·76	105 49·5	11·0	vF, vS, E 45°	
1472	...	...	...	O St I	3 46 35	2·90	98 59·5	11·0	vF, eS, stell N, 1st of 3	
1473	784	2592	...	...	3 46 49	0·22	158 38·4	11·0	eF, pL, R, gvlbM	
1474	5331	...	...	m 93	3 46 58	3·27	79 51	11·0	vF, S, R	
1475	...	...	...	L II	3 47 21	2·90	98 32·5	10·9	eF, eS, R, ✶14 np 4′	
1476	785	2591	...	...	3 47 35	1·96	134 56·8	10·9	eF, S, E 90°, gbM	
1477	...	...	...	O St I	3 47 35	2·90	98 59·5	10·9	eF, vS, 2nd of 3	
1478	...	...	...	O St I	3 47 35	2·90	98 57·5	10·9	eF, vS, 3rd of 3	
1479	...	...	...	Mu II	3 47 40	2·86	100 37·5	10·9	eF, S, E, p of 2	
1480	...	...	...	Mu II	3 47 52	2·86	100 40·5	10·9	eF, S, iR, f of 2, ✶10 f 30″	
1481	786	2593	...	...	3 48 19	2·64	110 52·5	10·8	eF, S, R, 2 B st f, p of 2	
1482	787	2594	III 962	...	3 48 28	2·64	110 55·0	10·8	F, S, vlE, 2 st 10 nr, f of 2	
1483	788	2595	...	Δ 427? Δ 428?	3 48 31	1·83	137 53·9	10·8	eF, pL, R, vglbM	
1484	789	2596	...	...	3 49 9	2·21	127 24·3	10·8	vF, L, E, vgvlbM	
1485	...	...	...	Sw III	3 49 58	6·31	19 21·5	10·6	eF, pS, R	
1486	...	...	...	L II	3 50 48	2·61	112 13·3	10·6	eF, vS, R	
1487	790	2597	...	Δ 480	3 51 4	2·03	132 46·7	10·6	pB, pL, R, gbM, 2 st Δ	
1488	791	...	...	Markree Cat.	3 52 1	3·44	71 50·1	10·5	✶12 inv in Neb (Auw 19)	
1489	...	...	...	Mu II	3 52 4	2·67	109 37·3	10·5	eF, pS, E 190°	
1490	792	2599	...	...	3 52 23	0·48	156 25·7	10·6	pB, S, vlE, pmbM	
1491	793	...	I 258	Engelhardt	3 52 51	4·48	39 4·9	10·5	vB, S, iF, bM, r, ✶inv	
1492	794	2598	...	...	3 53 0	2·25	125 51·8	10·5	vF, vS, R	
1493	795	2600	...	Δ 438	3 53 6	1·87	136 36·9	10·5	F, eL, R, vglbM	
1494	796	2601	...	...	3 53 36	1·75	139 18·7	10·5	F, L, R, vgvlbM, 3 st n	
1495	797	2602	...	...	3 53 47	1·72	134 53·0	10·5	eF, S, lE 90°, vgvlbM	
1496	798	310	...	...	3 53 47	4·55	37 45·8	10·4	Cl, segment of a ring	
1497	5332	...	...	St VIII	3 53 49	3·55	67 15·8	10·4	eF, vS, iR, mbM	
1498	799	...	VII 3	...	3 53 52	2·82	102 25·5	10·4	Cl, S, C	
1499	...	...	...	Barnard	3 54 19	3·91	53 58·5	10·4	vF, vL, Ens, dif	
1500	800	2603	...	Δ 369?	3 54 34	+1·57	142 43·6	−10·4	F, vS, R, pmbM, ✶8 np	

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					h m s	s	° ′	″		
1501	801	...	IV 53	...	3 54 59	+5·11	29 27·9	−10·3	○, pB, pS, vlE, 1′ diam	
1502	802	...	VII 47	...	3 55 10	5·23	28 3·9	10·3	Cl, pRi, cC, iF	
1503	803	2604	...	...	3 55 25	0·46	156 25·7	10·4	eF, pS, R, ∗ 10 np	
1504	...	...	...	O St I	3 55 35	2·88	99 43·2	10·3	eF, S, R, gbM	
1505	...	...	...	O St I	3 55 35	2·88	99 42·2	10·3	eF, S, R, gbM	
1506	804	2605	...	...	3 56 45	1·55	142 58·1	10·2	eeeF, S, R, bet 2 st 12 and 13	
1507	805	...	II 279	...	3 57 20	3·02	92 35·0	10·2	vF, pL, mE, vlbM, er	
1508	5333	...	...	St VIII	3 57 21	3·61	64 58·6	10·1	vF, vS, R, bM, r	
1509	...	...	...	Sw V, O St I	3 57 29	2·84	101 33·8	10·2	vF, vS, lE, F∗nr p	
1510	806	2606	...	...	3 59 0	1·97	133 47·6	10·1	F, pL, R, vgmbM	
1511	807	2608	...	...	3 59 3	0·22	158 1·4	10·1	pB, pS, mE 121°·5, gbM	
1512	808	2607	...	Δ 466	3 59 20	1·97	133 44·4	10·0	⊕, B, eL, R, bM, rr	
1513	809	...	VII 60	...	3 59 36	4·42	40 51·8	10·0	Cl, L, vRi, pC, st vL	†
1514	810	311	IV 69	...	4 0 30	3·76	59 35·9	10·0	∗ 9m in neb 3′ diam	†
1515	811	2609	...	Δ 348	4 0 39	1·45	144 29·4	9·9	B, L, vmE 10°, bM	
1516	812	2610	III 499	...	4 1 24	2·88	99 12·4	9·9	eeF, S, E, psmbM, er	
1517	...	...	...	St XIII	4 1 37	3·24	81 43·6	9·8	vF, vS, R, r, ∗ 9,10 sf	
1518	813	2611	...	...	4 1 44	2·61	111 33·0	9·8	B, L, pmE, gbM, ∗ 8 sp	
1519	...	...	...	T I and V	4 1 50	+2·70	107 34·1	9·8	vF, S, lE, vS∗inv	
1520	814	2615	...	...	4 2 8	−2·03	167 13·0	9·9	Cl, pL, lRi, st 9–10	
1521	815	2612	...	...	4 2 10	+2·62	111 25·6	9·8	pB, R, bM	
1522	816	2613	...	...	4 2 35	1·53	143 2·7	9·8	eF, vS, R, vlbM	
1523	817	2614	...	...	4 2 48	1·44	144 28·6	9·8	vF, R	
1524	...	...	...	O St I	4 3 35	2·89	99 9·9	9·7	eF, pS, R, gbM } D neb	
1525	...	...	...	O St I	4 3 35	2·89	99 9·9	9·7	eF, pS, R, gbM } 340°, 0′·5	
1526	818	2617	...	...	4 4 9	0·43	156 12·6	9·7	eF, vS, R, glbM	
1527	819	2616	...	...	4 4 18	1·76	138 15 9	9·7	pB, pS, E 77°, vsmbMRN	
1528	820	...	VII 61	...	4 4 37	4·52	39 7·2	9 6	Cl, B, vRi, cC	
1529	821	2619	...	...	4 5 33	0·75	153 16·1	9·6	vF, S, R, gbM	
1530	5334	...	...	T I	4 5 42	7·47	15 3·2	9·4	pB, L	
1531	822	2620	...	...	4 6 35	2·30	123 12·6	9·5	pB, pL, R, bM, np of 2	†
1532	823	2621	...	Δ 600	4 6 40	2·30	123 14·1	9·5	B, vL, vmE 32°, psmbM	†
1533	824	2622	...	...	4 6 51	1·30	146 29·3	9·5	vB, vL, R, smbM, 2st 10 nf	
1534	825	2623	...	...	4 7 0	0·75	153 9·4	9·5	F, S, R, vS∗¾d sf	
1535	826	2618	IV 26	...	4 7 44	2·79	103 5·8	9·4	○, vB, S, R, ps, vsbM, r	†
1536	827	2625	...	...	4 8 4	1·27	146 50·4	9·4	vF, R, pL, vlbM	
1537	828	2624	...	...	4 8 18	2·34	121 54·7	9·3	vB, pS, lE, psvmbM	
1538	...	...	...	O St I	4 8 35	2·79	103 35·6	9·3	eF, vS, R, gbM	
1539	5335	...	...	m 94	4 9 25	3·66	63 35	9·2	vF, vS, gbM	
1540	829	2626	...	...	4 9 33	2·42	118 50·3	9·2	vF, vS, E, gvlbM, r	
1541	5336	...	...	m 95	4 9 48	+3·08	89 32	−9·2	vF, S	

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					h m s	s	° ′	″		
1542	5337	...	...	m 96	4 9 51	+3·17	85 34	−9·2	vF, S, E	
1543	830	2627	...	...	4 9 59	1·17	148 5·6	9·2	B, pL, E, smbMN = * 11	
1544	5338	...	...	T I	4 10 10	20·13	4 3·3	8·8	vF, vS	
1545	831	...	VIII 85	...	4 10 25	4·49	40 5·7	9·1	Cl, pRi, lC, stL	
1546	832	2628	...	...	4 11 38	1·28	146 25·0	9·1	pB, lE, gbMEN, * p	
1547	...	...	...	L I	4 11 40	2·68	108 13·6	9·1	pF, pS, iR (?Cl or neb w st inv)	
1548	833	312	...	...	4 11 46	3·96	53 25·8	9·0	Cl, vL, lRi, lC, st 10...12	
1549	834	2629	...	...	4 12 9	1·31	145 55·8	9·1	B, pS, R	
1550	835	...	...	d'A	4 12 21	3·11	87 56·2	9·0	vF, S, R, * 13 nr	
1551	836	...	II 464	...	4 12 23	3·10	88 55·6	9·0	F, vS, R, probably = 835	*
1552	837	313	III 490	...	4 13 10	3·05	91 2·3	8·9	cF, pS, lE, vgbM, * 11 sp	
1553	838	2630	...	...	4 13 11	1·29	146 7·8	9·0	vB, pS, R, gmbM, am 3 st	
1554	5339	...	...	O Struve, d'A	4 13 33	3·49	70 49·0	8·9	!!! var, S, R, Nn = * 13	*
1555	839	...	...	Hind	4 13 48	3·49	70 48·8	8·9	!!! vF, S, variable (Auw 20)	*
1556	840	2631	...	...	4 13 57	+1·62	140 30·2	8·9	cF, S, R, vglbM	
1557	841	2633	...	...	4 14 1	−0 35	160 46·4	9·0	Cl, vlC, ab 20 sc st	
1558	842	2632	...	...	4 14 56	+1·86	135 22·0	8·8	pF, S, E, gbM	
1559	843	2634	...	...	4 15 56	0·70	153 7·8	8·8	vB, vL, mE, vgpmbM, * 14 attn	
1560	...	...	...	T IX	4 16 3	6·71	18 25·0	8·7	vF, L, E, * 9·3 sp	
1561	...	...	...	L I	4 16 38	2·72	106 11·3	8·7	vF, vS, lE 170°, glbM, * 8 p 6ˢ	
1562	...	...	...	L I	4 16 40±	2·73	106 6·3	8·7	vF, eS, R, glbM	
1563	...	...	...	L I	4 16 40±	2·73	106 4·3	8·7	eF, vS, R, lbM } D	
1564	...	...	...	L I	4 16 40±	2·73	106 4·3	8·7	eF, vS, R, lbM } D	
1565	...	...	...	L I	4 16 40±	2·73	106 6·3	8·7	eF, pS, lE	
1566	844	2635	...	Δ 338??	4 16 52	1·34	145 16·6	8·7	B, vL, vg, svmbM, 15ˢ d in RA	
1567	845	2636	...	...	4 17 9	1·71	138 35·4	8·7	F, S, R, bM	
1568	...	...	...	Sw V	4 17 14	3·05	91 4·8	8·6	eF, vS, R, nearly bet 2 st	
1569	847	...	II 768	...	4 17 36	5·62	25 28·1	8·5	pB, S, lE, bNM, * 9·5 n 1′	
1570	846	2637	...	...	4 17 42	1·92	133 47·5	8·6	F, S, R, gbM	
1571	848	2638	...	...	4 17 46	1·91	133 57·0	8·6	vF, S, R, gbM, * nf	
1572	849	2639	...	...	4 17 59	2·03	130 55·1	8·6	pF, S, R, * 13 nf 1′	
1573	...	...	...	T IX	4 18 16	7·03	17 4·0	8·4	vF, S, * 9·5 f	
1574	850	2640	...	...	4 19 13	1·19	147 17·9	8·5	pB, S, R, pgbM, 2S st sf	
1575	...	...	...	Mu II	4 19 17	2·85	100 25·2	8·5	vF, pS, R, * 9·5 s 2′	
1576	851	314	III 587	...	4 19 24	2·99	93 57·0	8·5	eF, bM, bet 2 st	
1577	...	...	...	Sw III	4 19 39	2·85	100 26·0	8·5	vF, pL, R, lbM, * nr s	
1578	852	2641	...	...	4 20 12	1·53	141 55·2	8·4	pF, S, R, bM	
1579	853	315	I 217	...	4 21 3	3·92	55 1·9	8·3	pB, vL, iR, mbM, * 8 350°, 2′	†
1580	5340	...	...	St VIII	4 21 25	2·96	95 29·6	8·3	vF, vS, R, r	
1581	854	2642	...	...	4 21 37	1·32	145 15·8	8·3	F, S, E, glbM	
1582	855	...	VIII 70	...	4 22 9	+4·23	46 27·6	−8·2	Cl, vL, pRi, lC, stL	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1583	...	...	...	L I	4 22 40	+2·68	107 56·1	−8·2	F, vS, R, sbMN	
1584	...	...	...	L I	4 22 40	2·68	107 51·1	8·2	F, eS, R, sbMN	
1585	856	2643	...	...	4 22 58	1·96	132 27·7	8·2	pF, S, R, gbM, ∗ 12, 287°·8	
1586	857	...	...	d'A	4 23 5	3·05	90 50·1	8·2	vF, iF, vlbM, bet ∗∗ & ∗ 14	
1587	858	316	II 8	...	4 23 28	3·08	89 38·8	8·1	F, pS, R, r, p of D neb	
1588	859	317	II 9	...	4 23 32	3·08	89 38·6	8·1	F, vS, R, r, f of D neb	
1589	860	318	II 7	...	4 23 33	3·09	89 26·6	8·1	F, pL, lE 132°, ∗ 42°, 80″	
1590	5341	...	...	d'A	4 23 38	3·23	82 40 0	8·1	F, S, ∗ 12 nf	
1591	861	2644	...	...	4 23 49	2·45	117 0·8	8·1	pF, pS, R, gbM	
1592	862	2645	...	...	4 23 53	2·44	117 16·0	8·1	vF, vS	
1593	5342	...	...	m 97	4 23 56	3·08	89 44	8·1	vF	
1594	...	...	...	Sw V	4 24 17	2·94	96 6·5	8·1	vF, pS	
1595	863	2646	...	...	4 24 25	1·71	138 7·1	8·1	vF, S, R, bM	
1596	864	2648	...	...	4 24 35	1·31	145 20·3	8·1	B, pL, mE 15°, smbM, p of 2	
1597	...	...	...	O St I	4 24 35	2·82	101 35·0	8·0	eF, vS, R, gbM	
1598	865	2647	...	...	4 24 36	1·71	138 5·4	8·1	F, S, R, bM	
1599	...	...	...	St XII	4 24 43	2·97	94 53·5	8·0	vF, vS, R, vlbM	
1600	866	319	I 158	...	4 24 45	2·96	95 23·4	8·0	pB, pL, R, gmbM	
1601	867 = 5343	...	...	Ld R, d'A	4 24 46	2·96	95 21·9	8·0	vF, vS	
1602	870	2649	...	...	4 24 48	1·30	145 22·0	8·1	eF, pL, lE, f of 2	
1603	868	...	...	Ld R	4 24 55	2·96	95 24·0	8·0	vF, vS	
1604	...	...	...	Sw VI	4 24 56	2·95	95 39·9	8·0	eF, S, R, bet ∗ and D ∗	
1605	871	...	VI 26	...	4 24 59	4·30	45 3·8	8·0	Cl, vF, pS, C, st eS	
1606	869	...	...	Ld R	4 25 5	2·96	95 21·0	8·0	eF	
1607	...	...	...	St XII	4 25 7	2·97	94 45·8	8·0	F, S, R, lbM	
1608	5344	...	...	Ld R*	4 25 15	3·08	89 35·5	8·0	pF, cS, ∗ 12 m 2′ n	
1609	872	...	III 585	d'A	4 25 47	2·97	94 39·6	7·9	vF, eS, ∗ 17 45″ n	
1610	...	...	...	L II	4 25 49	2·97	94 53·0	7·9	eF, vS, R, bMN	
1611	873	...	III 586	...	4 26 10	2·98	94 35·8	7·9	eF, S, E 90° ±	
1612	...	...	...	St XII	4 26 16	2·98	94 28·3	7·9	vF, vS, R, gmbM	
1613	...	...	...	St XII	4 26 29	2·98	94 33·8	7·9	F, vS, R, mbM	
1614	...	...	...	Sw III	4 27 38	2·88	98 53·2	7·8	pF, S, R, lbM	
1615	...	...	...	St IX	4 27 49	3·51	70 20·5	7·7	vF, vS, R, lbM, vS ∗ inv	
1616	874	2650	...	...	4 28 20	1·88	134 0·5	7·8	F, S, E, vglbM	
1617	875	2651	...	Δ 339??	4 28 34	1·32	144 54·2	7·8	B, L, mE 106°, vg, vsmbMN 5″	
1618	876	320	II 524	...	4 29 7	3·00	93 26·6	7·7	F, S, iF, lbM, 2 st sf	
1619	...	...	...	Sw VI	4 29 16	2·96	95 7·3	7·7	eeF, S, R	
1620	877	321	II 514	...	4 29 28	3·06	90 25·8	7·6	vF, pL, mE 140°, B ∗∗ nf	
1621	...	...	...	Sw VI	4 29 31	2·96	95 16·0	7·6	eF, S, R, lbM	
1622	878 = 881	...	...	Ld R, d'A	4 29 35	+3·00	93 28·6	−7·6	vF, S, ∗ 20 p 5′, II 524 p	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1623	...	...	...	O St I	4 29 40	+2·77	103 49·8	−7·6	eF, vS, R, gbMN	
1624	879	...	V 49	...	4 29 48	4·56	39 50·2	7·6	F, cL, iF, 6 or 7 st+neb	
1625	880	322	...	...	4 30 7	3·00	93 35·8	7·6	vF, E 141°, sbM, F * att np, * 6 p 48°	
1626	...	...	...	L II	4 30 19	2·96	95 16·8	7·6	eF, vS, R, * 8 np	
1627	...	...	...	Sw VI	4 30 38	2·96	95 9·5	7·5	eF, pL, R, 2 st sf, s of 2	
1628	...	...	...	Sw VI	4 30 41	+2·96	94 59·5	7·5	vF, pS, mEns, n of 2	
1629	882	2653	...	...	4 31 14	−0·76	162 8·1	7·6	vF, pL, R, glbM	
1630	...	...	...	L II	4 31 47	+2·64	109 11·8	7·5	eF, eS, R	
1631	883	2652	...	...	4 32 20	2·60	110 55·6	7·4	Neb. No description	
1632	...	...	...	Mu II	4 32 28	2·86	99 43·7	7·4	eF, vS, R	
1633	884	323	III 952	...	4 32 36	3·23	82 56·3	7·4	eF, S, R, * 8 sp, p of D neb	
1634	885	324	III 953	...	4 32 37	3·23	82 57·0	7·4	eF, vS, f of D neb	
1635	886	325	II 515	...	4 33 1	3·06	90 49·6	7·4	F, S, R, bM, * 11 nf 12ˢ·5	
1636	887	326 = 2654	II 522	...	4 33 57	2·88	98 52·8	7·3	vF, pS, R, vgbM, r, * nf 1′	
1637	888	327	I 122	...	4 34 26	3·01	93 7·8	7·2	cB, L, R, vglbM	†
1638	890	...	II 525	d'A	4 34 33	3·03	92 4·7	7·2	F, pL, lE	
1639	889	2655	...	...	4 34 37	2·69	107 16·1	7·2	eF, vS, R, bet 2 st	
1640	...	...	...	O St I	4 34 40	2·60	110 41·6	7·2	vF, pS, E 40°, gbM	
1641	891	2656	...	...	4 35 30	0·27	156 4·8	7·2	Cl, pL, pRi, pmC, st 11...16	
1642	892	...	...	d'A	4 35 45	3·08	89 39·7	7·1	F, R, Cometary, Δwith 2 st 18, f	
1643	893	328	III 588	...	4 36 51	2·95	95 35·0	7·0	eF, vS, iR, bM	
1644	894	2657	...	...	4 37 7	0·21	156 27·9	7·1	F, S, R, gbM	
1645	5345	...	...	d'A	4 37 10	2·95	95 43·7	7·0	vF, pS, R (h 328 np)	
1646	895	329	II 523	...	4 37 41	2·88	98 47·2	7·0	F, vS, iR, bM, * 7 np	
1647	896	...	VIII 8	...	4 37 55	3·50	71 11·4	6·9	Cl, vL, stL, sc	
1648	...	...	...	Sw III	4 38 10	+2·88	98 44·3	6·9	eeF, pS, v diffic, II 523 sp	
1649	897	2660	...	...	4 38 37	−0·20	159 5·1	7·0	F, pS, R, gbM	
1650	...	...	...	L I	4 38 40	+2·71	106 9·5	6·9	vF, pS, E 0°, bMN	
1651	898	2662	...	...	4 38 42	−0·53	160 51·5	7·0	pF, L, vlE, vglbM	
1652	899	2661	...	...	4 38 44	−0·18	158 56·4	7·0	vF, S, R, glbM	
1653	900	...	II 526	...	4 38 45	+3·02	92 39·1	6·9	F, eS, R, lbM	
1654	...	...	...	St XII	4 38 45	3·02	92 20·5	6·9	F, S, R, lbM, r? p of 2	
1655	...	...	...	J G Lohse	4 38 55	3·55	69 20·0	6·9	pB, R, gbM, * 10 s	
1656	901	330	...	...	4 39 1	2·95	95 23·4	6·9	eF, iF?	
1657	...	...	...	St XII	4 39 4	3·02	92 20·0	6·9	Fainter but larger than p one	
1658	902	2658	...	...	4 39 29	1·95	131 45·1	6·9	F, pS, pmE, glbM	
1659	903	331	III 589	...	4 39 35	2·96	95 2·6	6·8	pF, pS, iE 90° ±, bM	
1660	904	2659	...	...	4 39 38	1·95	131 46·9	6·8	vF, S, lE, glbM	
1661	...	...	...	St XII	4 40 5	+3·02	92 18·5	−6·8	vF, vS, bM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1662	905	332	VII 1	...	4 40 45	+3·31	79 19·3	−6·7	Cl of L & S sc st	†
1663	906	...	VIII 7	...	4 40 45	3·36	77 6·1	6·7	Cl, lRi, st L & S	
1664	907	...	VIII 59	...	4 41 2	4·27	46 33·3	6·7	Cl, lRi, lC, pL	
1665	908	333	II 457	...	4 41 24	2·95	95 41·2	6·7	eF, pL, R, lbM	
1666	...	...	...	Sw V	4 41 39	2·92	96 49·1	6·6	vF, pS, R	
1667	...	...	...	St XIII	4 41 47	2·93	96 34·2	6·6	pF, pS, R, r?	
1668	909	2663	...	...	4 42 0	1·81	135 2·1	6·6	eF, R, att to ✶ 14	
1669	910	2664	...	...	4 42 20	0·24	156 4·1	6·7	eF, S, R	
1670	911	...	III 501	...	4 42 40	3·01	93 0·3	6·5	vF, vS	
1671	...	...	...	Sw V	4 43 9	3·05	91 0·9	6·5	pF, pS, R	
1672	912	2665	...	Δ 296??	4 43 32	+0·93	149 30·1	6·5	B, L, smbMN	
1673	913	2667	...	...	4 43 35	−0 40	160 4 0	6 6	vF, S, att to ✶ 10	
1674	...	...	...	J G Lohse	4 43 56	+3·63	66 20·0	6·4	Two F neb in same field	
1675										
1676	914	2669	...	...	4 44 19	−0·23	159 4·5	6·5	vF, pL, iR, r	
1677	...	...	...	Sw V	4 44 26	+2·96	95 2·4	6·4	pF, pL, lE	
1678	915	...	III 502	...	4 44 32	3·01	92 52 0	6·4	vF, S	
1679	916	2666	...	...	4 44 39	2·28	122 12·8	6·4	vB, L, iR, 4 st inv	
1680	917	2668	...	...	4 44 42	1·67	138 3·5	6·4	vF, S, R, r or st inv	
1681	...	..	...	St IX	4 44 58	2·94	96 2·6	6·4	vF, S, R, vlbM	
1682	919	...	II 527	d'A	4 45 20	3·00	93 20·7	6·3	vF, vS, II 528 f 12^s ±, ✶ 9s 4′·5	
1683	918	...	...	Ld R	4 45 24	3·00	93 15·8	6·3	vF, R	
1684	920 = 921 = 924	334	II 528	...	4 45 32	3·00	93 20·7	6·3	pF, pS, R, bM, ✶ 9, 225° ±	
1685	922	...	...	Ld R	4 45 38	3·00	93 8·7	6·3	F	
1686	...	...	...	L I	4 45 40	2·72	105 35·2	6·3	eF, vS, mE 30°	
1687	923	2670	...	...	4 46 9	2·21	124 10·4	6·3	vF, S, R, vglbM	
1688	925	2671	...	...	4 46 19	0·88	150 2·1	6·3	pB, pL, iR, pgmbM	
1689	...	...	...	Sw V	4 46 47	2·93	96 33·9	6·2	pB, pS, lE	
1690	926	335	...	...	4 47 6	3·10	88 35·8	6·2	vF, vS, am vS st, L ✶ sp	
1691	5346	...	...	St VIII	4 47 19	3·14	86 57·8	6·2	F, S, ✶ 11 inv	
1692	...	...	...	O St I	4 47 40	+2·59	110 47·1	6·2	eF, vS, R	
1693	927	2672	...	...	4 48 23	−0·34	159 35·2	6·2	F, S, R	
1694	...	...	...	St X	4 48 23	+2·96	94 52·8	6 0	vF, vS, R, sbM	
1695	928	2673	...	...	4 48 30	−0·35	159 37·1	6·2	F, S, R	
1696	929	2674	...	...	4 48 47	−0·15	158 27·4	6·1	vF, E, vlbM	
1697	930	2675	...	...	4 49 2	−0·20	158 47·5	6·1	⊕, pB, L, R, rr	
1698	931	2677	...	...	4 49 42	−0·30	159 20·7	6 1	pB, pS, R, glbM	
1699	...	...	...	Ld R, Sw VI	4 50 1	+2·96	94 58·8	6·0	eeF, pS, R, bet 2 st, n of 932	
1700	932	336	IV 32	...	4 50 2	+2·96	95 5·3	−6·0	cB, S, mbM ✶	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1701	933	2676	...	...	4 50 25	+2·33	120 6·2	−5·9	F, S, vlE, glbM, ✶ 10, 75″ sf	
1702	934	2680	...	Δ 73?	4 50 27	−0·44	160 5·5	6·0	Cl, vF, S	
1703	935	2678	...	...	4 50 49	+0·87	149 58·0	5·9	F, L, R, vglbM, ✶✶ att	
1704	936	2683	...	...	4 50 54	−0·43	159 59·2	6·0	F, pS, lE, r	
1705	937	2679	...	...	4 51 9	+1·34	143 35·2	5·9	pF, S, R, pmbM	
1706	938	2682	...	...	4 51 15	0·54	153 13·5	5·9	F, pS, R, vglbM	
1707	939	338	...	...	4 51 16	3·25	81 58·7	5·8	S, R, rrr	
1708	940	337	...	...	4 51 32	4 75	37 19·9	5·8	Cl, vL, pRi, lC, stL and S	
1709	944	...	...	Ld R	4 51 36	3 06	90 41·1	5·8	vF, vS, np II 516	
1710	...	...	...	L I	4 51 40	+2·72	105 30·9	5·8	vF, vS, R, bMN, ✶ 13 inv	
1711	941	2684	...	Δ 76?	4 51 45	−0·47	160 13·0	5·9	⊕, B, S, iR, rrr, st 14	
1712	942	2685	...	...	4 51 46	−0·37	159 39 8	5·9	Cl, pB, S	
1713	943	339	II 516	...	4 51 47	+3·06	90 41·7	5·8	F, S, R, bM	
1714	945	2686	...	...	4 52 0	0·04	157 8·9	5·9	vB, S, E or bi-N, bM, sp of 2	
1715	946	2687	...	...	4 52 3	0 05	157 7·8	5·9	vF, S, R, sbM, 2 st nr, nf of 2	
1716	947	2681	...	...	4 52 16	2·59	110 34·7	5·8	pF, pL, R, glbM	
1717	949	...	...	Ld R	4 52±	3·06	90 28	5·8	np h 340 (? F ✶)	
1718	950	2688	...	...	4 52 20	0·02	157 16·7	5·8	F, pS, R, vglbM	
1719	948	340	...	d'A	4 52 26	3·06	90 27·9	5 8	pF, S, iR, pslbM	
1720	951	...	...	d'A	4 52 37	2·89	98 4·0	5·7	pF, pL, lbM, h 341 nr	
1721	...	...	...	Barnard, Sw III	4 52 40	+2·82	101 20·6	5·7	vF, vS, R	
1722	952	2689	...	...	4 52 42	−0·37	159 37·2	5·8	Cl, pF, S, R, 2nd of 3	
1723	...	...	...	T V, Barnard	4 52 50	+2 82	101 11·5	5·7	F, bet 2 st 9, 10 n & s, 3rd ✶ f	
1724	5347	...	...	G Rümker	4 52 53	4·56	40 42·4	5·7	Cl, vS, st + neb?	
1725	...	...	...	Barnard, Sw III	4 52 55	2·82	101 20 9	5·7	eF, vS, R	
1726	953	341	...	...	4 52 59	+2·89	97 58 0	5·7	F, R, ✶ 13, s	
1727	954	2690	...	...	4 53 1	−0·36	159 34·1	5·8	Cl, pB, pS, pmE, st 12	
1728	...	...	...	Barnard, Sw III	4 53 5	+2·82	101 20·6	5·7	vF, vS, R	
1729	955	...	III 503	d'A	4 53 13	2·99	93 35·1	5·7	vF, pL, 2B st v nr	
1730	...	...	...	Sw V, O St I	4 53 13	2·70	106 2·1	5·7	F, pS, lE, bet 2 F st (O St D, Δ 10″)	
1731	956	2691	...	...	4 53 23	+0·04	157 8·6	5·8	Cl, pL, lRi, lC, st 10...15	
1732	957	2694	...	...	4 53 43	−0·24	158 52·4	5·7	S, R, close ✶✶ in M	
1733	958	2693	...	...	4 53 49	+0·07	156 53·7	5·7	eF, pS, R, glbM	
1734	959	2695	...	...	4 54 8	−0·26	158 59·3	5·7	pB, L, R, gmbM	
1735	960	2696	...	...	4 54 19	+0 01	157 18·9	5·7	pF, pS, R, 2 st att	†
1736	961	2697	...	...	4 54 19	−0·14	158 17·3	5 7	B, R, r	†
1737	962	2698	...	...	4 54 32	−0·34	159 24·2	5·7	vF, S, 1st of 4	†
1738	...	...	...	O St I	4 54 40	+2 65	108 21·8	5·6	vF, S, E 45°	
1739	...	...	...	O St I	4 54 40	2·65	108 21·8	5·6	eF, vS, lE, in field with last	
1740	965	342	...	d'A	4 54 41	+2·99	93 30·8	−5·5	eF, vS, ✶ 12 sp	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1741	...	...	...	St IX	4 54 43	+2·97	94 27·9	−5·6	vF, vS, vS excent pt inv	
1742	5348	...	...	Ball (R)	4 54 45	+2·99	93 30·4	5·6	vF, vS, 3·6 f h 342	
1743	963	2699	...	Δ 114	4 54 49	−0·34	159 25·3	5·6	B, pL, R, gbM, r, 2nd of 4	†
1744	964	2692	...	...	4 54 51	+2·44	116 14·6	5·6	F, vL, vmE, vgvlbM	†
1745	966	2702	...	...	4 55 8	−0·34	159 23·2	5·6	F, S, 3rd of 4	†
1746	5349	...	...	d'A	4 55 9	+3·63	66 24·2	5·5	Cl, P	
1747	967	2701	...	...	4 55 13	−0·01	157 23·5	5·6	Cl, pS, lRi, st vS	
1748	968	2704	...	...	4 55 14	−0·34	159 25·1	5·6	pB, vS, R, 4th of 4	†
1749	969	2703	...	...	4 55 17	−0·17	158 24·4	5·6	vF, R, p of 2	
1750	970	...	VIII 43	...	4 55 19	+3·63	66 33·3	5·5	Cl, stL, vesc	*
1751	971	2705	...	...	4 55 19	−0·46	160 2·0	5·6	eF, pL, iR	
1752	972	...	...	d'A	4 55 26	+2·88	98 26·8	5·5	F, pL, pmE, 2 or 3 st 11 nf	
1753	...	...	...	Sw V	4 55 30	+2·99	93 33·2	5·5	eeF, pS, R, sf h 342	
1754	973	2708	...	...	4 55 37	−0·58	160 39 8	5·6	F, S, R, * 13 att, 135°	
1755	976	2706	...	Δ 167	4 55 37	−0·17	158 25·7	5·6	vB, pL, R, gbM, f of 2	
1756	974	2707	...	...	4 55 38	−0·35	159 27·4	5 6	vF, S, R	
1757	975	343	...	...	4 55 45	+2·96	94 55·6	5·5	vL dif neb in zigzags ??	*
1758	977	...	VII 21	...	4 55 56	3·63	66 25·4	5·4	Cl, pC, st L and S	
1759	978	2700	...	...	4 56 6	2·04	128 55·0	5·5	vF, pL, vglbM	
1760	979	2709	...	...	4 56 16	0·09	156 43·9	5·5	vF, S, 3 vS st inv	*†
1761	980	2710	...	...	4 56 19	0·09	156 41·1	5·5	Cl, L, mC, ** 9 m	†
1762	981	...	III 453	...	4 56 25	3·10	88 34·5	5·4	vF, vS	*
1763	982	2711	...	...	4 56 32	+0·10	156 37 2	5·5	vB, vL, vimE	†
1764	983	2713	...	...	4 56 42	−0·09	157 54·6	5·5	vF, S, R	
1765	984	2712	...	...	4 56 52	+0·63	152 14·2	5·4	eF, S, R, glbM	
1766	985	2717	...	...	4 57 15	−0·54	160 26·3	5·4	eF, S, gbM	
1767	5062	(123)	...	...	4 57 18	−0 39	159 36·5	5·4	No descr (in Nubec major)	
1768	986	2718	...	...	4 57 22	−0·18	158 28·1	5·4	F, S, R, gbM	
1769	987	2716	...	...	4 57 30	+0·09	156 39·9	5·4	B, L, iR, vsmb M ** 10	†
1770	988	2715	...	Δ 169	4 57 40	−0 21	158 37·7	5·4	Cl + neb, pL, pRi, st 11...18	
1771	989	2720	...	...	4 57 48	+0·51	153 20·7	5·4	vF, mE, glbM, *7·8 np	
1772	990	2722	...	...	4 57 49	−0·42	159 46 0	5·4	pB, pS, iR, rr	
1773	991	2721	...	...	4 57 50	+0·11	156 34·0	5·4	pF, pL, iR, 2 or 3 B st nr	
1774	992	2723	...	...	4 58 11	−0·03	157 27·1	5·4	B, S, R, smbM, ** + neb	
1775	993	2725	...	...	4 58 19	−0·59	160 38·4	5·4	eF, pL, iR	
1776	994	2724	...	...	4 58 23	+0·09	156 38·0	5·3	vF, S, R, gbM	
1777	995	2728	...	...	4 58 28	−1·56	164 29·7	5·4	eF, E, ** 9 att, f	
1778	996	344	VIII 61	...	4 58 36	+4·04	53 8·3	5·2	Cl, pC, lRi, iF, st L	
1779	997	345 = 2714	III 500	...	4 58 38	2·86	99 20·5	5·2	pB, S, R, gpmbM	†
1780	...	...	...	O St I	4 58 40	+2·61	109 38·6	−5·2	eF, eS, gbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1781	998	...	III 268	...	4 58 43	+2·64	108 22·9	−5·3	eF, vS, stellar	*
1782	999	2727	...	...	4 58 44	−0·39	159 36 3	5·3	⊕, pB, S, R, pmbM, rr	
1783	1000	2726	..	...	4 58 44	+0·15	156 11·6	5·3	cB, L, R, vgpmbM, r	
1784	1001	2719	...	...	4 58 57	+2·80	102 4·1	5·2	pB, pL, vlE, vglbM, am st	
1785	1002	(147)	...	...	4 59 12	−0·29	159 3 6	5·3	No description, in Nubec major	
1786	1003	2729	...	...	4 59 21	−0·11	157 57·0	5·3	vB, pS, lE, vsvmbM * 9	
1787	1004	2731	...	...	4 59 52	+0·17	156 2·7	5·2	Cl, vL, pRi	
1788	1005	347	V 32	...	4 59 57	+2·99	93 32·7	5·1	B, cL, R, bM * * * * 15, * 10, 1½′ 318°, inv in the nebv	
1789	1006	2733	...	...	4 59 58	−0·93	162 5·6	5·2	vF, pS, R, vglbM	
1790	1007	346	...	...	5 0 13	+4 72	38 7·1	5·0	Cl, group of 8 or 9 st 10	
1791	1008	2734	...	...	5 0 20	−0·54	160 21·8	5·2	eF, S, R	
1792	1009	2730	...	Δ 531 ?	5 0 24	+2·06	128 11·6	5·1	vB, vL, mE 314°, glbM, rr	
1793	1010	2736	...	...	5 0 36	−0·43	159 45·4	5·2	F, S, R, glbM	
1794	...	...	...	O St I	5 0 40	+2·64	108 21·6	5·1	vF, eS, gbM (? = III 268)	
1795	1011	2738	...	Δ 81	5 0 59	−0·47	159 59·6	5·1	F, pL, lE	
1796	1012	2735	...	...	5 1 1	+0·71	151 19·5	5·1	pF, pS, pmE, vglbM	
1797	...	...	...	Sw VI	5 1 3	2·89	98 12·5	5·0	eeF, S, R, vF * np	
1798	...	...	...	Barnard	5 1 7	4·49	42 31·2	5·0	S, Cl or Cl + neb	
1799	...	...	...	Sw VI	5 1 8	2·89	98 9·5	5·0	vF, vS, vlE	
1800	1013	2732	...	...	5 1 11	+2·26	122 8·7	5·0	pB, pmE, gpmbM, * 13 f	
1801	1014	2739	...	...	5 1 34	−0·44	159 48·5	5·1	F, pL, R, vglbM, p of 2	
1802	1015	...	VIII 41	...	5 1 44	+3·65	66 4·8	4·9	Cl, st c sc	
1803	1016	2737	...	...	5 1 52	+1·54	139 45·8	5·0	F, S, R, vglbM, * 11 sf, ? neb	
1804	1017	2742	...	...	5 1 52	−0·34	159 16·9	5·0	F, S, R, bM	
1805	1018	2741	...	Δ 233 ?	5 2 2	+0·13	156 18·1	5·0	B, vS, vsmbM, st + neb	
1806	1019	2745	...	...	5 2 32	−0·16	158 11·3	5·0	pB, L, gbM	
1807	1020	348	...	...	5 2 38	+3·45	73 39·6	4·9	Cl, pRi, st L & S	
1808	1021	2740	...	Δ 549	5 2 50	+2·07	127 41·8	4·9	B, L, E, psbM	†
1809	1022	2747	...	...	5 3 5	−0·45	159 49·2	4·9	pF, S, R, gbM, 2nd of 2	
1810	1023	2746	...	Δ 235	5 3 9	+0·09	156 34·3	4·9	cF, S, R, lbM, ⊕ f	
1811	1024	2743	...	...	5 3 17	2·34	119 27·9	4·9	cF, S, lE, p of 2	
1812	1025	2744	...	...	5 3 27	+2·34	119 26·1	4·8	F, S, R, glbM, f of 2	
1813	1026	2752	...	...	5 3 55	−0 59	160 30·7	4·9	vF, S, R, r	
1814	1027	2748	...	...	5 3 55	−0·05	157 29·7	4·9	vF, R, s of 2 in Cl	
1815	1028	2753	...	...	5 3 56	−0·65	160 48·6	4·9	F, vS, R, vlbM, am st	
1816	1029	2750	...	...	5 3 59	−0·05	157 27·0	4·9	vF, R, 2nd neb in Cl	
1817	1030	349	VII 4	...	5 3 59	+3·46	73 28·7	4·8	Cl, L, Ri, lC, st 11...14	
1818	1031	2749	...	Δ 236	5 4 2	+0·08	156 37·1	4·9	⊕, vB, pL, R, vmC, rr	
1819	...	...	...	Sw III	5 4 10	+3·19	84 58·2	4·7	vF, S, R	
1820	1032	2754	...	...	5 4 22	−0·05	157 26·8	−4·8	Cl, pL, Ri, C, iF	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1821	...	...	...	L I	5 4 40	+2·72	105 17·4	−4·7	vF, vS, lE	
1822	1033	2756	...	...	5 4 48	+0·10	156 23·8	4·8	vF, S, p of 2	
1823	1034	2758	...	...	5 4 52	−0·59	160 31·9	4·8	Cl, pF, L, iF, st 12...15	
1824	1035	2755	...	...	5 4 53	+0·83	149 54·2	4·8	vF, pL, vmE 162°	
1825	1036	(199)	...	...	5 5 2	−0·33	159 7·9	4·8	No description, in Nubec major	
1826	1037	2757	...	...	5 5 11	+0·10	156 25·0	4·8	vF, S, f of 2	
1827	1038	2751	...	...	5 5 13	+2·09	127 9·3	4·7	vF, vmE, long ray, * 11 inv	
1828	1039	2761	...	...	5 5 17	−0·41	159 34·6	4·8	F, S, R, 1st of 3	
1829	1040	2760	...	...	5 5 23	−0·18	158 14·2	4·7	F, pL, R, r	
1830	1041	2762	...	...	5 5 34	−0·40	159 31·8	4·7	F, pS, R, 2nd of 3	
1831	1042	2759	...	Δ 246	5 5 36	+0·28	155 6·7	4·7	B, L, R, glbM, r	
1832	1043	...	II 292	...	5 5 53	+2·70	105 53·2	4·6	pB, iR, mbM, c * nf 1′	
1833	1044	2765	...	...	5 5 56	−0·68	160 55·1	4·7	vF, pL, 1st of sev	
1834	1045	2764	...	...	5 6 3	−0·38	159 23·9	4·7	○ ? B, eS, lE	
1835	1046	2763	...	...	5 6 4	−0·42	159 35·2	4·7	cB, S, R, gmbM, 3rd of 3	
1836	1047	2766	...	...	5 6 13	−0·28	158 48·7	4·7	st + neb, 1st of sev	
1837	1048	2769	...	...	5 6 28	−0·68	160 53·9	4 7	Cl, L, Ri, st sc	
1838	1049	2767	...	Br 895	5 6 33	−0·25	158 37·5	4·6	Cl, L, vlC	
1839	1050	2768	...	Δ 170?	5 6 38	−0·28	158 48·6	4·7	st + neb, pB, iF, 2nd of sev	
1840	1051	2771	...	...	5 6 46	−0·91	161 56·1	4·6	F, R, bM, r (? min of R A)	
1841	1052	2788	...	...	5 7 2	−9·68	174 12·6	4·9	pF, L, iR, vsbM, r	
1842	1053	2772	...	...	5 7 21	−0·06	157 27·3	4·6	vvF, R, p of 2	
1843	5350	...	...	St VIII	5 7 30	+2·82	100 47·5	4·5	F, S, R, lbM	
1844	1054	2773	...	...	5 7 37	−0·07	157 29·9	4·5	pF, pL, R, gbM, f of 2	
1845	1055	2770	...	...	5 7 38	−0·65	160 44·7	4·6	Cl, vlCM, st 9, 11...16	
1846	1056	2774	...	...	5 7 45	−0·09	157 38·0	4·5	pB, cL, R, vglbM, r	
1847	1057	2775	...	...	5 7 56	−0·34	159 8·9	4·5	B, S, lE, ** in M	†
1848	1058	2776	...	...	5 8 6	−0·79	161 21·9	4·5	Cl, vlC, st 9...	
1849	1059	2778	...	...	5 9 21	+0·08	156 28·7	4·4	vF, S, lE, glbM	
1850	1060	2780	...	Δ 170?	5 9 25	−0·31	158 55·8	4·4	⊕! vB, L, lE, vmCM, rr	
1851	1061	2777	...	Δ 508	5 9 30	+1·97	130 12·3	4·3	⊕! vB, vL, R, vsvvbM, rrr	
1852	1062	2781	...	...	5 9 42	−0·15	157 57·0	4·4	F, pL, R, vglbM	
1853	1063	2779	...	...	5 9 52	+1·02	147 33·7	4·3	F, S, mE 45°, vgvlbM, * 11nf	
1854	1064	2782	...	...	5 10 2	−0·33	159 1·2	4·4	⊕, cB, S, R, gbM, 2nd of 3	
1855	1065	2783	...	...	5 10 8	−0·33	159 0·6	4·3	Cl, vB, L, R, st 12	
1856	1066	2784	...	...	5 10 20	−0·38	159 18·0	4·3	B, pL, R, gbM, 12′ diam R A	
1857	1067	350	VII 33	...	5 10 26	+4·14	50 48·5	4·2	Cl, pRi, pC, st 7...	
1858	1068	2785	...	...	5 10 37	−0·34	159 3·7	4·3	B, L, iE, biN, Cl + neb	
1859	1069	2786	...	...	5 10 59	+0·22	155 24·8	4·3	F, S, R, vgbM, * 7 nf 6′	
1860	1070	2787	...	Δ 172?	5 11 22	−0·32	158 55·6	4·2	F, pL, R, vgbM	
1861	1071	2790	...	...	5 12 2	−0·71	160 56·9	−4·2	eF, pL, R, gvlbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1862	1072	2789	...	...	5 12 6	+0·09	156 18·8	−4·2	pF, L, iR, vgbM, r	
1863	1073	2791	...	Δ 173?	5 12 19	−0·31	158 53·4	4·2	vB, vS, R, r or stellar	
1864	1074	2792	...	...	5 12 56	−0·13	157 47·3	4·1	F, pS, iR, bM, r or stellar	
1865	1075	2794	...	Δ 173??	5 13 6	−0·32	158 55·6	4·1	vF, pL, R, vglbM	
1866	1076	2793	...	Δ 247? 248?	5 13 11	+0·18	155 37·6	4·1	vB, L, R, vgmbM, r	
1867	1077	2795	...	...	5 13 27	0·07	156 27·1	4·0	eF, pL, R	
1868	1078	2796	...	...	5 13 42	+0·38	154 6·6	4·0	pB, pL, R, vglbM	
1869	1079	2798	...	Δ 210	5 13 58	−0·09	157 32·1	4·0	Cl, L, pRi, st sc	
1870	1080	2799	...	...	5 13 59	−0·39	159 16·5	4·0	B, S, R, glbM	
1871	1081	2800	...	...	5 14 6	−0·11	157 36·8	4·0	Cl, lRi, 2nd of sev	
1872	1082	2802	...	...	5 14 8	−0·42	159 28·2	4·0	pB, R, glbM, 1st of group	†
1873	1083	2801	...	...	5 14 9	−0·09	157 29·4	4·0	Cl, 3rd of sev	
1874	1084	2803	...	...	5 14 10	−0·43	159 31·9	4·0	neb and Cl, biN	†
1875	5351	...	...	m 98	5 14 13	+3·22	83 28	3·9	eF, S, R	
1876	1085	2804	...	...	5 14 16	−0·43	159 31·0	4·0	pB, iR, biN, 2nd in group	†
1877	1086	2805	...	...	5 14 19	−0·43	159 31·8	4·0	vF, 3rd of group in Cl	†
1878	1087	2807	...	...	5 14 26	−0·65	160 37·9	4·0	vF, lE, gvlbM, r	
1879	1088	2797	...	...	5 14 37	+2·24	122 17·8	3·9	vF, L, R, vgvlbM, ✶12 p	
1880	1089	2808	...	...	5 14 38	−0·44	159 31·8	4·0	4th of group in Cl	†
1881	1090	2810	...	...	5 15 3	−0·42	159 27·0	3·9	vF, ✶ ✶ p	†
1882	1091	2809	...	...	5 15 16	+0·09	156 16·6	3·9	pF, R, vgvlbM, r	
1883	1092	...	VII 34	...	5 15 29	4·45	43 35·9	3·7	Cl, vF, pRi, pC, iF	
1884	1093	2812	...	...	5 15 45	+0·08	156 18·8	3·8	eF, pL	
1885	1094	2814	...	...	5 15 47	−0·36	159 7·4	3·9	pB, vS, R, bM	
1886	...	...	...	Mu II	5 15 51	+2·49	113 57·9	3·8	vF, pL, E 240°, ✶8 sp 40″	
1887	1095	2813	...	...	5 15 54	0·06	156 28·3	3·8	vF, vS, R, ✶p 25″	
1888	1096	352= 2806	II 289	...	5 16 3	2·80	101 37·7	3·7	pB, pL, R, r	†
1889	1097	...	...	Ld R	5 16	+2·80	101 38	3·7	Makes a close D neb with h 352	†
1890	1098	2816	...	...	5 16 6	−1·02	162 13·9	3·9	vF, S, R, glbM	
1891	1099	2811	...	...	5 16 21	+2·12	125 51·6	3·7	Cl, L, sc, ✶ ✶ taken	
1892	1100	2815	...	...	5 16 32	0·25	155 6·7	3·8	cF, pL, E 90° ±, vglbM	
1893	1101	351	...	...	5 16 32	+3·94	56 44·6	3·7	Cl, L, Ri, lC	
1894	1102	2818	...	...	5 16 57	−0·46	159 36·7	3·8	F, pL, R, sbM, r, st inv	
1895	1103	2817	...	...	5 17 3	−0·09	157 28·6	3·7	pF, pL, R, gvlbM	
1896	1104	353	VIII 4	...	5 17 8	+3·80	69 58·2	3·6	Cl, vL, Ri, vlC, st 9...12	
1897	1105	2820	...	...	5 17 44	−0·11	157 35·3	3·7	eF, S, R	
1898	1106	2822	...	...	5 17 51	−0·50	159 47·7	3·7	F, pS, R	
1899	1107	2821	...	...	5 17 58	−0·18	158 1·1	3·7	F, pS, R, vglbM, 3 st 10 p	
1900	1108	2819	...	...	5 18 1	+0·48	153 10·2	3·6	F, pL, lE, vgvlbM, ✶7 np	
1901	1109	2824	...	...	5 18 8	−0·30	158 44·1	−3·7	Cl, BM, lRi, st 7...	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
1902	1110	2823	...	...	5 18 14	+0·01	156 46·0	−3·6	⊕, pB, pL, R, pmbM, rr	
1903	1111	2825	...	...	5 18 22	−0·44	159 28·7	3·6	vB, S, R, gmbM	
1904	1112	...	...	Méchain, M 79	5 18 25	+2·47	114 39·3	3·6	⊕, pL, eRi, eC, rrr	
1905	1113	4016	...	(h o n)	5 18 36	−0·09	157 25·4	3·6	F, S, R, r	
1906	...	...	...	L I	5 18 40	+2·69	106 5·8	3·5	eF, pS, E o°, glbM	
1907	1114	354	VII 39	Legentil	5 18 43	4·00	54 48·5	3·5	Cl, pRi, pC, R, st 9...12	
1908	1115	...	V 33	...	5 18 52	3·01	92 39·4	3·3	v diffused neb susp	
1909	1116	...	V 38	...	5 19 10	+2·88	98 15·3	3·5	eL, strongly susp (2° in P D)	
1910	1117	2827	...	Δ 129	5 19 10	−0·42	159 21·5	3·6	Cl, L, pRi, iR, st 11...16	
1911	1118	2826	...	...	5 19 13	−0·01	156 54·1	3·6	F, R, gbM, am st	
1912	1119	...	...	M 38	5 19 17	+4·02	54 17·6	3·4	Cl, B, vL, vRi, iF, st L & S	
1913	1120	(356)	...	...	5 19 34	−0·48	159 41·5	3·5	No description, in Nubec major	
1914	1121	2830	...	...	5 19 36	−0·83	161 23·7	3·5	F, L, iE	
1915	1122	2828	...	...	5 19 37	−0·02	156 56·4	3·5	eF, pL	
1916	1123	2829	...	...	5 19 39	−0·45	159 32·8	3·5	B, S, R, vgvmbM, r	
1917	1124	2831	...	...	5 19 53	−0·38	159 8·3	3·5	vF, L, R, vglbM	
1918	1125	(369)	...	...	5 20 10	−0·50	159 46·6	3·5	No description, in Nubec major	
1919	1126	2832	...	...	5 20 15	−0·03	157 1·0	3·5	Cl, eF, L, iR, mC, rr	
1920	1127	2833	...	...	5 20 33	−0·01	156 54·7	3·4	pB, pL, R, vgbM	
1921	1128	2834	...	...	5 20 34	−0·53	159 55·1	3·5	vF, pS, lE, r	
1922	5063	(374)	...	...	5 20 53	−0·47	159 36·6	3·4	No description, in Nubec major	
1923	1129	2835	...	...	5 21 7	+0·17	155 37·0	3·4	vF, pS, R	
1924	1130	...	III 447	...	5 21 7	2·95	95 26·7	3·3	vF, pL, iR, st nr	
1925	1131	2837	...	...	5 21 22	+0·11	156 0·3	3·4	Cl, vlRi, lC, st 10	
1926	1132	2838	...	...	5 21 41	−0·48	159 39·9	3·4	pB, pL, iR, r, in dif n	
1927	1133	356	...	...	5 22 1	+2·88	98 29·7	3·2	Diffused nebulosity	*
1928	1134	2839	...	Δ 131	5 22 2	−0·47	159 36·9	3·3	pF, pL, R, gbM	
1929	1135	2840	...	...	5 22 2	−0·20	158 3·6	3·3	F, p of group	†
1930	1136	2836	...	...	5 22 3	+1·67	136 51·1	3·3	pF, S, R, bM, 4 B st p	
1931	1137	355	I 261	...	5 22 9	3·97	55 52·0	3·2	vB, L, R, B $\overset{*}{**}$ in M	†
1932	1138	2841	...	...	5 22 15	+0·07	156 16·5	3·3	pB, S, R, smbM	D neb 26°, 80″	*
1933	1139								eF, R, stellar		
1934	1140	2842	...	...	5 22 21	−0·20	158 2·9	3·3	2nd neb of group	†
1935	1141	2843	...	...	5 22 25	−0·20	158 5·3	3·3	pF, S, R, 3rd of group	†
1936	1142	2844	...	Δ 175	5 22 42	−0·21	158 6·4	3·3	!, pB, S, R, 4th of group	†
1937	1143	2845	...	...	5 22 44	−0·20	158 1·8	3·3	vF, pL, follows a group	†
1938	1144	2848	...	Δ 89?	5 22 46	−0·56	160 4·7	3·3	pB, pS, R, glbM	D neb 339°, 50″	
1939	1145								F, S, R, glbM		
1940	1146	2847	...	...	5 22 55	−0·08	157 18·8	3·2	pB, vS, R, bM, 2 st 9 & 10 f	
1941	1147	2846	...	...	5 22 55	+0·04	156 30·6	3·2	vS, neb + st	
1942	1148	2849	...	...	5 23 51	+0·36	154 4·4	−3·1	eF, stell, * 14 + neb	

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					h m s	s	° ′	″		
1943	1149	2850	...	Δ 90	5 23 53	−0·61	160 16·8	−3·2	{pF, pS, iR, vglbM, * 15, 190°·6, 60″	
1944	1150	2852	...	...	5 24 27	−1·14	162 36·3	3·1	pB, pL, R, bM	
1945	1151	2851	...	...	5 24 48	+0·03	156 34·7	3·1	eeeF, vvL, irr dif	
1946	1152	2854	...	Δ 237?	5 25 9	0·03	156 30·5	3·0	pF, R, gbM, r	
1947	1153	2855	...	...	5 25 38	0·26	154 52·7	3·0	pB, L, R, glbM, * 9 np	
1948	1154	2856	...	...	5 25 40	+0·05	156 23·1	3·0	Cl, cL, Ri, st 13	
1949	1155	2857	...	...	5 25 47	−0·30	158 35·5	3·0	pB, S, R, psbM	
1950	1156	2859	...	...	5 25 51	−0·56	160 1·4	3·0	The 1st of a group of 7!	*†
1951	1158	2858	...	...	5 26 4	0·00	156 42·5	3·0	B, lE, sbM ** 10 & 11	
1952	1157	357	...	Bevis 1731, M 1	5 26 6	+3·60	68 5·0	2·9	vB, vL, E 135° ±, vglbM, r	†
1953	1159	2862	...	...	5 26 17	−0·36	158 57·0	3·0	pB, S, R, glbM	
1954	1160	2853	III 590	...	5 26 25	+2·74	104 10·0	2·9	vF, S, R, smbM	
1955	1161	2863	...	Δ 211	5 26 31	−0·14	157 37·4	2·9	Cl, Ri, 2nd of sev	
1956	1162	2874	...	...	5 26 40	−3·09	167 51·6	3·0	eF, S, gbM	
1957	...	...	...	L 1	5 26 40	+2·74	104 13·4	2·8	eF, pS, R, bMN, * 15 inv	
1958	1163	2864	...	...	5 26 47	−0·55	159 57·4	2·9	F, pL, iR, vgbM, 2nd of group!	†
1959	1164	2865	...	...	5 26 50	−0·57	160 2·9	2·9	F, vL, vgbM, 3rd of group!	†
1960	1166	358	...	Legentil, M 36	5 27 3	+3·97	55 57·5	2·8	Cl, B, vL, vRi, lC, st 9...11 sc	
1961	1167	...	III 747	...	5 27 11	+6·69	20 36·0	2·7	{cF, pL, iF, mbM, er, * inv (? P D)	*
1962	1165	2866	...	Δ 136?	5 27 15	−0·36	158 57·1	2·9	vF, pL, R, 1st of 4!	*†
1963	1169	2861	...	...	5 27 17	+2·09	126 28·8	2·8	Cl, st 8...11	
1964	1170	2860	IV 21	..	5 27 26	+2·54	112 2·7	2·8	{F, vS, R, vsvmbM * 12, 3 st inv	
1965	1168	2867	...	Δ 136?	5 27 33	−0·36	158 55·4	2·9	F, S, 2nd of 4!	*†
1966	1171	2868	...	Δ 136	5 27 38	−0·36	158 56·0	2·8	{pB, R, pslbM, 3rd of 4, in pL, irr Cl	*†
1967	1172	(456)	...	...	5 27 43	−0·41	159 12·6	2·8	No description, in Nubec major	
1968	1173	2870	...	...	5 27 44	−0·13	157 34·2	2·8	Cl, Ri, 3rd of sev	
1969	1174	2872	...	...	5 27 47	−0·55	159 57·6	2·8	F, S, 4th of gr of 7	*†
1970	1175	2869	...	...	5 27 50	−0 36	158 56·6	2·8	4th of 4	†
1971	1176	2875	...	...	5 28 1	−0·56	159 58·4	2·8	5th of gr of 7	†
1972	1177	2876	...	...	5 28 2	−0·56	159 57·6	2·8	6th of gr of 7! D, a vS neb np	†
1973	5352	...	...	d'A	5 28 10	+2·96	94 49·6	2·7	* 8·9 inv in Neb (V 30)	
1974	1178	2877	...	Δ 213	5 28 16	−0·13	157 32·6	2·8	Cl, L, irr	
1975	5353	...	...	d'A	5 28 19	+2·96	94 46·4	2·7	B ** inv in neb (V 30)	
1976	1179	360	...	Cysat, M 42	5 28 24	2·95	95 29·2	2·7	!!! θ'Orionis and the great neb	†
1977	1180	...	V 30	...	5 28 29	+2·96	94 56·0	2·7	!!, c¹ 42 Orionis and neb	†
1978	1181	2878	...	Δ 238??	5 28 32	−0·02	156 20·3	2·7	vB, vL, lE, vgpmbM	
1979	1182	...	III 240	...	5 28 33	+2·50	113 26·2	2·7	vF, vS, stellar	
1980	1183	361	V 31	...	5 28 35	+2·93	96 0·4	−2 7	vF, vvL, ι 44 Orionis inv	†

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					h m s	s	° ′	″		
1981	1184	362	...	...	5 28 37	+2·97	94 26·8	−2·7	Cl, vB, lRi, st L, sc	
1982	1185	...	III 1??	Mairan, M 43	5 28 38	+2·95	95 21·8	2·7	! vB,vL,R with tail,mbM ∗ 8·9	∗†
1983	1186	2881	...	...	5 28 40	−0·39	159 5·8	2·8	Cl, vL, pRi, iF	
1984	1187	2882	...	...	5 28 40	−0·42	159 14·2	2·8	Cl, place of ∗ ∗	
1985	1188	359	III 865	...	5 28 41	+3·90	58 6·1	2·6	cF, S, R, psbM	
1986	1189	2883	...	...	5 28 58	−0·58	160 5·0	2·7	B, pL, R, gbM	
1987	1190	2885	...	...	5 28 59	−0·74	160 50 9	2·7	F, L, iR, 3 st p	
1988	1191	...	...	Chacornac	5 29 4	+3·58	68 52·3	2·7	!!!, variable (?)	∗
1989	1192	2871	...	...	5 29 6	2·28	120 54·0	2·6	vF, S, R, lbM, st nr	
1990	1193	363	V 34	...	5 29 7	+3·04	91 17·7	2·6	!!!, eL, E, ε Orionis inv p	∗
1991	1194	2884	...	...	5 29 13	−0·13	157 32·4	2·7	Cl, 4th of sev	
1992	1195	2873	...	...	5 29 14	+2·28	120 59·5	2·6	eeF, vS	
1993	1196	...	III 269	...	5 29 20	+2·64	107 55·3	2·6	eF, vS, stellar	∗
1994	1197	2887	...	...	5 29 21	−0·42	159 15·0	2·7	Cl, eS, st 11...16	
1995	1198	2879	...	...	5 29 24	+1·56	138 46·9	2·6	eeF, R, bM, diffic, p of 2	
1996	1199	...	VIII 42	...	5 29 33	3·71	64 15·8	2·6	Cl, L, lC, lRi	
1997	1200	2886	...	...	5 29 35	0·44	153 18·7	2·7	eF, cS, R	
1998	1201	2880	...	...	5 29 37	1·56	138 47·5	2·6	vF, R, gbM, st s, f of 2	
1999	1202	...	IV 33	...	5 29 38	+2·91	96 48·5	2·6	∗ 10, 11 inv in Neb	†
2000	1203	2889	...	...	5 29 45	−1·00	161 58·6	2·7	F, pL, R, vlbM	
2001	1204	2888	...	Δ 178??	5 29 51	−0 35	158 50·9	2·7	Cl, st 13m	
2002	1205	2890	...	Δ 214?	5 30 25	−0·05	156 59·2	2·6	vB, S, R, ∗ ∗ +neb in vLCl	
2003	1206	2981	...	...	5 30 50	+0·01	156 34·1	2·6	B, S, stellar, r	
2004	1207	2893	...	Δ 215	5 30 55	−0·11	157 23·3	2·6	⊕, B, pL, pRi, C, st 12	
2005	1208	(509)	...	...	5 31 23	−0·54	159 51·3	2·5	No description,in Nubecmajor	
2006	1209	2895	...	...	5 31 27	−0·06	157 4·1	2·5	Cl, eL, vRi, vBvSNM	
2007	1210	2892	...	...	5 31 37	+1·43	141 1·2	2·4	eF, pL, R	
2008	1211	2894	...	...	5 31 45	+1·43	141 2·9	2·4	eF, pL, R, vlbM	
2009	1212	2897	...	...	5 31 59	−0·43	159 16·9	2·5	pF, pS, R, glbM, in Cl	
2010	1213	2898	...	...	5 32 16	−0·76	160 56·0	2·4	F, cL, R, vglbM	
2011	1214	2899	...	...	5 32 41	−0·15	157 37·0	2·4	vB, S, R, psmbM	
2012	1215	2907	...	...	5 32 42	−4·41	169 57·4	2·5	vF, S, lE, bM, 2 st 9 nf	
2013	1216	364	...	...	5 32 43	+6·02	34 16·8	2·2	Cl, vlRi, st 11	
2014	1217	2900	...	...	5 32 48	−0·18	157 47·4	2·4	Cl, pL, pC, iF, st 9...15	
2015	1218	2901	...	...	5 32 52	−0·45	159 21·3	2·4	Cl, vL, Ri, vlC	
2016	1219	2902	...	...	5 32 58	−0·58	160 3·1	2·4	F, vL, iR, gbM	
2017	1220	2896	...	...	5 33 8	+2·64	107 55·8	2·3	Cl of L st	
2018	1221	2904	...	...	5 33 17	−0·82	161 10·3	2·4	pB, pL, R, pglbM, ∗ 10 p inv	
2019	1222	2905	...	Δ 98	5 33 29	0·62	160 15·1	2·3	B, pL, gbM	
2020	1223	2903	...	Δ 218	5 33 31	−0·18	157 48·3	2·3	F, vL, vlE, vglbM	
2021	1224	2906	...	...	5 33 47	−0·14	157 33·0	−2·3	vF, S, R, in pLCl	

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					h m s	s	° ′	″		
2022	1225	365	IV 34	...	5 34 26	+3·28	80 59·3	−2·1	○, pB, vS, vlE	†
2023	1226	...	IV 24	...	5 34 36	3·02	92 18·7	2·1	B ✶ in M of L, l E neb	†
2024	1227	...	V 28	...	5 34 47	+3·03	91 55·7	2·1	! irr, B, vvL, black sp incl	†
2025	1228	2909	...	...	5 34 48	−0·96	161 47·4	2·2	vB, vS, lE, gmbM, r	
2026	1229	...	VIII 28	...	5 34 49	+3·56	69 57·7	2·1	Cl, lRi, lC, st pL	
2027	1230	2908	...	Δ 241	5 35 4	−0·06	157 0·5	2·2	Cl, vL, Ri, st 9...11	
2028	1231	2912	...	Δ 100?	5 35 11	−0·59	160 2·4	2·2	vF	
2029	1232	2911	...	Δ 240	5 35 20	−0·16	157 38·7	2·2	pB, pL, R, gbM, in eLCl	
2030	1233	2910	...	...	5 35 27	+0·07	156 6·8	2·1	pB, L, iR, gbM, 1st of 3	†
2031	1234	2915	...	...	5 35 34	−0·80	161 5·4	2·2	⊕, B, pL, R, gbM, rr	
2032	1235	2913	...	Δ 219?	5 35 40	−0·16	157 39·8	2·1	B, L, E, 2nd of 3	†
2033	1236	(579)	...	...	5 35 45	−0·55	159 52·5	2·1	Cl, in Nubec major	
2034	1237	2914	...	...	5 35 52	−0·06	156 58·7	2·1	Cl, vL, Ri	
2035	1238	2916	...	Δ 220	5 35 53	−0 16	157 40·3	2·1	B, L, R, bM, 3rd of 3	†
2036	1239	2917	...	...	5 35 58	−0·42	159 8·6	2·1	vF, pL, R, gbM	
2037	1240	(593)	...	...	5 36 18	−0 55	159 51·5	2 1	Cl, in Nubec major	
2038	1241	2920	...	...	5 36 24	−0·71	160 38·4	2·1	pB, S, R, gbM, ✶9, np 5′	
2039	1242	366	...	...	5 36 26	+3·27	81 25·6	2·0	Cl, vL, lRi, lC	
2040	1243	2918	...	...	5 36 28	−0·16	157 39 1	2·1	F, L, iR, glbM, r	†
2041	1244	2919	...	...	5 36 36	−0·07	157 4·4	2·0	B, S, R, vglbM	
2042	1245	2922	...	...	5 37 2	−0·39	159 0·3	2·0	Cl, vL, Ri, st 12...15	
2043	...	...	...	Melbourne Obs	5 37 5	−0·62	160 10·1	2·0	S,E group of F st inv in F neby	
2044	1246	(608)	...	...	5 37 8	−0·44	159 17·5	2 0	Cl, in Nubec major	
2045	1247	367	...	Lal 10842	5 37 9	+3·38	77 10·5	1·9	✶8·9 with F neb	
2046	1248	2923	...	...	5 37 11	−0 64	160 19·0	2·0	vF, R, gbM, 1st of 7	†
2047	1249	2925	...	...	5 37 27	−0·64	160 16·3	2·0	F, S, lE, 2nd of 7	†
2048	1250	2926	...	...	5 37 36	−0·52	159 41·7	2·0	vF, L, pmE	
2049	1251	2921	...	...	5 37 53	+2·30	120 8·7	1·9	vF, S, R, bM	
2050	1252	2928	...	...	5 37 55	−0·48	159 28·2	1·9	Cl + neb, mC, iF, st vS	
2051	1253	2930	...	...	5 38 3	−0·81	161 5·4	1·9	pB, S, R, gbM	
2052	1254	2929	...	...	5 38 3	−0·56	159 52·2	1·9	eF, vvS, vglbM	
2053	1255	2927	...	...	5 38 4	−0·14	157 30·1	1·9	F, pL, lE, gbM	
2054	5354	...	...	G P Bond	5 38 11	+2·84	100 8·3	1·8	vF, pS, iR, r? ✶9 10 7′ n	
2055	1256	2931	...	...	5 38 15	−0·49	159 30·0	1·9	Cl, vL, Ri, st 10...15	
2056	1257	2932	...	...	5 38 18	−0·75	160 45·3	1·9	pB, R, bM, p of 2, ✶9 bet	
2057	1258	2935	...	...	5 38 24	−0·65	160 20·7	1·9	pF, S, R, gbM, 3rd of 7	†
2058	1259	2933	...	Δ 102	5 38 25	−0·63	160 14·6	1 9	vB, pL, R, gbM, 4th of 7	†
2059	1260	2936	...	...	5 38 27	−0·62	160 12·4	1·9	vF, 5th of 7	†
2060	1261	(642)	...	...	5 38 43	−0·44	159 14·6	1·9	neb, no descrip, in Nub maj	
2061	1262	2924	...	...	5 38 49	+2·17	124 1·1	1·8	Cl, L, lC, st 13	
2062	1263	2937	...	...	5 38 57	−0·05	156 56·8	−1·8	vF, pS, E, glbM, 2 st 10 s	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2063	1264	...	VIII 2	...	5 39 7	+3·28	81 16·6	−1·7	Cl, poor, S sc st	
2064	5355	...	...	d'A	5 39 10	+3·07	90 3·8	1·7	eF, vS, ∗ 9·10 np 4′	
2065	1265	2938	...	Δ 103?	5 39 11	−0·65	160 18·4	1·8	B, R, 6th of 7	†
2066	1266	2939	...	...	5 39 21	−0·63	160 15·1	1·8	vF, vS, E, 7th of 7	†
2067	5356	...	...	T 1	5 39 22	+3·07	89 57	1·7	F, pL, M 78 s	
2068	1267	368	...	Méchain, M 78	5 39 34	+3·07	90 0·3	1·6	B, L, wisp, gmbN, 3 st inv, r	†
2069	1268	2940	...	Δ 143	5 39 38	−0·41	159 4·7	1·8	F, L, E	
2070	1269	2941	...	Lac I 2, Δ 142	5 39 41	−0·42	159 10·3	1·8	!!! vB, vL, looped	†
2071	1270	...	IV 36	...	5 39 57	+3·08	89 45·4	1·7	D ∗ (10 & 14 m) with vF L chev	
2072	...	...	...	Melbourne Obs	5 39 58	−0·64	160 17·8	1·8	vF, S	
2073	1271	2934	III 241	...	5 40 0	+2·53	112 4·0	1·7	eF, vS, R, gbM	
2074	1272	2942	...	...	5 40 1	−0·50	159 33·6	1·8	pB, pL, mE, 5 st inv	
2075	1273	2943	...	...	5 40 9	−0·74	160 45·3	1·8	B, R, bM, rr, f of 2	
2076	1274	...	III 267	...	5 40 35	+2·67	106 48·2	1·6	vF, pS, iE, bM	
2077	1275	2947	...	...	5 40 50	−0·53	159 43·8	1·7	F, R, p of D neb	
2078	1276	2948	...	...	5 40 53	−0·55	159 48·9	1·7	neb, up of gr of 7	†
2079	1277	2949	...	Δ 152??	5 40 54	−0·56	159 50·7	1·7	neb, sp of gr of 7	†
2080	1278	2950	...	...	5 40 57	−0·53	159 43·4	1·7	B, R, f of D neb	†
2081	1279	2951	...	...	5 41 11	−0·48	159 28·3	1·7	Cl, vF, mC, st + neb	†
2082	1280	2945	...	...	5 41 11	+0·30	154 21·6	1·6	pF, L, R, glbM	
2083	1281	2952	...	...	5 41 12	−0·55	159 48·4	1·7	neb, nf of gr of 7	†
2084	1282	2953	...	...	5 41 16	−0·55	159 49·9	1·7	neb, sf of gr of 7	†
2085	1283	2954	...	...	5 41 19	−0·54	159 45·0	1·7	vF, R, ∗ 10 vnr	†
2086	1284	2956	...	...	5 41 34	−0·54	159 44·5	1·6	B, pS, R, lbM, ∗ 10p	
2087	1285	2946	...	...	5 41 39	+1·13	145 35·5	1·6	eF, pS, R, vlbM	
2088	1286	2955	...	...	5 41 40	−0·31	158 31·7	1·6	vF, S, R	
2089	1287	...	III 270	...	5 41 44	+2·65	107 39·3	1·5	vF, eS, stellar	*
2090	1288	2944	...	Δ 594	5 41 57	+2·16	124 18·4	1·5	⊕, B, pL, iR, gbM	
2091	1289	2957	...	...	5 42 5	−0·50	159 31·1	1·6	vF, S, mE, glbM, ? D	
2092	1290	2962	...	...	5 42 39	−0·45	159 16·6	1·5	vF, pL, R, rr	
2093	1291	2963	...	Δ 184??	5 42 43	−0·40	158 59·3	1·5	vF, S, R	
2094	1292	2959	...	...	5 42 46	−0·30	158 25·7	1·5	vF, S, R	
2095	1293	2961	...	...	5 42 48	−0·13	157 23·4	1·5	Cl, F, eS, irr	
2096	1294	(725)	...	...	5 43 2	−0·32	158 32·7	1·5	neb, no descrip, in Nub major	
2097	1296	2960	...	...	5 43 6	+0·47	152 50·6	1·5	vF, pS, iR, pslbM ∗ 16	
2098	1297	2965	...	Δ 185??	5 43 7	−0·28	158 20·2	1·5	⊕, B, S, rr	
2099	1295	369	...	M 37	5 43 8	+3·92	57 29·6	1·5	Cl, Ri, pCM, st L & S	†
2100	1298	2966	...	Δ 147? 151? 154?	5 43 10	−0·45	159 16·4	1·5	⊕, B, pL, irlR, rr	
2101	1299	2958	...	...	5 43 10	+1·36	142 8·3	1·4	eF, pS, R, 3 st 10 sf	
2102	1300	(730)	...	...	5 43 25	−0·50	159 33·5	1·5	neb, no descrip, in Nub maj	
2103	1301	2968	...	...	5 43 45	−0·89	161 23·8	−1·4	pB, L, pmE, gbM ∗ 13	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2104	1302	2964	...	...	5 43 50	+1·39	141 36·3	−1·4	pB, pS, R, glbM	
2105	1303	2969	...	...	5 44 24	−0·06	156 58·0	1·4	F, pS, R, gbM	
2106	1304	2967	...	...	5 44 49	+2·54	111 36 3	1·3	vF, S, vlE, gbM	
2107	1305	2971	...	...	5 44 55	−0 74	160 42·2	1·3	pB, pS, R, gbM	
2108	1306	2970	...	Δ 153?	5 44 58	−0·44	159 14·0	1·3	eF, pL, lE	
2109	1307	2972	...	...	5 45 7	−0 33	158 35·9	1·3	F, pS, R, vglbM	
2110	1308	370	III 448 = III 510	...	5 45 26	+2·90	97 30·1	1·2	eF, cS, lE, pslbM, er	
2111	1309	2973	...	...	5 46 28	−0·82	161 2·8	1·2	vF, S, R, gbM	
2112	1310	371	VII 24	...	5 46 37	+3 08	89·38·9	1·1	Cl, pL, lRi, pC, st S	
2113	1311	2975	...	...	5 46 40	−0·56	159 49·7	1·2	Cl, F, S, iF, vlC, rr	
2114	1312	2974	...	...	5 46 45	−0·25	158 5·6	1·2	eF, pL, iR	
2115	1313	2976	...	...	5 47 57	+1·45	140 37 1	1·0	eeF, vS, 3 st 10 sp	
2116	1314	2977	...	...	5 47 57	−0·33	158 33·2	1·1	F, S, R, ∗11 p	
2117	1315	2978	...	...	5 48 7	−0·15	157 29·6	1·0	F, pL, iR, vlbM, rrr	
2118	1316	2979	...	...	5 48 39	−0·44	159 10·4	1·0	⊕, vB, vS, vsmbM, rr	
2119	...	...	...	St X	5 49 38	+3·35	78 4·3	0·8	F, vS, R, bM	
2120	1317	2980	...	...	5 49 41	+0·37	153 42·7	0 9	eF, pL, R, vglbM	
2121	1318	2982	...	...	5 50 16	−0·92	161 30·7	0·9	vF, eL, vgbM	
2122	1319	2981	...	Δ 106	5 50 17	−0 62	160 6·3	0·9	Cl, pB, iF, gvmCM, st 15	
2123	1320	2983	...	...	5 51 18	+0·16	155 20 8	0·8	pB, vS, R, gbM	
2124	1321	...	III 225	...	5 51 47	+2·58	110 3·2	0·6	eeF, pS, E, r	
2125	1322	2985	...	...	5 52 0	−0·51	159 31·3	0·7	vF, pS, R, gbM	
2126	1323	...	VIII 68	...	5 52 7	+4·66	40 6·2	0·6	Cl, not Ri, ∗7 m north	
2127	1324	2986	...	...	5 52 29	−0·48	159 23·6	0 7	pB, vS, R, gmbM	
2128	...	...	...	Sw VI	5 52 30	+5·22	31 52·7	0·5	vF, vS, vlE	
2129	1325	372	VIII 26	...	5 52 35	+3·65	66 42·4	0·5	Cl, pL, 40 or 50 st 8...15	
2130	1326	2987	...	...	5 52 41	−0·13	157 21·6	0 6	F, pS, R, glbM	
2131	1327	2984	...	...	5 53 12	+2·40	116 39·9	0 5	vF, pS, R, gbM	
2132	1328	2988	...	...	5 53 22	+0·77	149 55·9	0·6	Cl, vlC, st L & S	
2133	1329	2989	...	...	5 53 26	−0·85	161 12·3	0 6	F, pL, R, gpmbM	
2134	1330	2991	...	...	5 53 54	−0·84	161 7·9	0·6	⊕, B, pL, R, gmbM, r	
2135	1331	2990	...	...	5 53 54	−0·15	157 27·0	0·5	F, pS, R, r, am st	
2136	1332	2992	...	Δ 160	5 54 7	−0·50	159 30 9	0·5	⊕, pB, R, gmbM, rr, st 14...16	
2137	1333	2994	...	...	5 54 23	−0·50	159 30·4	0·5	vF, S, R, f of 2	
2138	1334	2993	...	...	5 54 35	+0·09	155 51·5	0·5	eF, S, R	
2139	1335	...	II 264	...	5 54 56	+2·48	113 49·5	0·4	F, S	
2140	1336	2995	...	...	5 55 1	−0·34	158 37·0	0·4	pF, pS, iR, bM	
2141	...	...	...	Barnard	5 55 14	+3·32	79 33·9	0·3	F, pS, dif (Sw not found)	
2142	1337	373	...	...	5 55 16	2 82	100 36·2	0·3	∗(3 Monoc) inv in pL, F, neb	
2143	1338	374	...	...	5 55 39	+3·21	84 16·7	−0·3	Cl, L, pRi, vlC, st 10	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2144	1339	3009	...	...	5 56 0	−6·64	172 9·5	−0·5	F, pS, iR, bM	
2145	1340	2998	...	...	5 56 13	−0·80	160 56·6	0·4	F, lE, r	
2146	5357	...	...	Winnecke, T 1	5 56 18	+9·58	11 37	0 0	pB, 2′1, lE	
2147	1341	2997	...	...	5 56 23	−0·27	158 13·2	0·3	eF, S, R, bM	
2148	1342	2996	...	...	5 56 51	+0·84	149 7·6	0·3	eF, S, R, ∗ 12 vnr	
2149	5358	...	...	St VIII	5 56 53	+2·84	99 43·8	0·2	F, ∗ 12 inv	
2150	1343	3000	...	...	5 57 1	−0·52	159 34·9	0 3	F, vS, R, vsmbM, stellar	
2151	1344	3001	...	...	5 57 14	−0·42	159 2 0	0·2	F, pS, R, bM	
2152	1345	2999	...	...	5 57 34	+1·44	140 44·1	0 2	eeF, R, ∗ 15 att	
2153	1346	3002	...	...	5 57 46	+0·01	156 24·9	0·2	eeF, lE, ∗ 16 att	
2154	1347	3003	...	...	5 57 53	−0·12	157 16·0	0·2	F, pL, R, vglbM	
2155	1348	3004	...	...	5 58 10	+0·14	155 28·7	0·2	F, pL, R, vglbM	
2156	1349	3005	...	Δ 196	5 58 32	−0·32	158 28·1	0·1	pB, S, R, gbM, 1st of 3	
2157	1350	3006	...	Δ 161 ?	5 58 36	−0·45	159 12·0	0·1	⊕, vB, S, R, vgvmbM, rr	
2158	1351	375	VI 17	...	5 58 49	+3·67	65 53·8	0·0	Cl, pS, mC, vRi, irr Δ, st eS	
2159	1352	3007	...	Δ 193	5 58 50	−0·35	158 38·1	0·1	pF, S, R, gbM, ∗ 15 att nf	
2160	1353	3008	...	...	5 58 51	−0·29	158 17·8	0·1	pF, pS, R, gbM	
2161	1354	3013	...	...	5 59 34	−1·70	164 21·4	0·1	F, pL, R, gpmbM	
2162	1355	3010	...	...	5 59 36	+0·37	153 43·3	−0·0	F, pL, R, vglbM	
2163	...	...	...	St IX	5 59 37	+3·52	94 26·2	+0·1	eF, E, dif, ∗ 11 att s	
2164	1356	3011	...	Δ 194	5 59 39	−0·33	158 31·0	0·0	⊕, vB, R, mCM, rr	
2165	1357	376	...	...	6 0 0	+4·77	38 17·9	0·1	Cl, pL, poor, st 11	
2166	1358	3012	...	Δ 223?	6 0 5	−0·23	157 56·9	0·0	F, S, R, gbM	
2167	1359	378	IV 44	...	6 0 9	+2·93	96 11·8	0·1	Nebulous ∗ 7, am 3 st	
2168	1360	377	...	M 35	6 0 13	3·68	65 39·3	0·1	Cl, vL, cRi, pC, st 9...16	
2169	1361	379	VIII 24	...	6 0 33	3·41	76 1·6	0·2	Cl, S, lRi, pmC, ∗∗ 2 S48	†
2170	1362	...	IV 19	...	6 0 43	+2·92	96 23·1	0·2	∗9 in vF, pL neb, E 170°	†
2171	1363	3016	...	...	6 0 45	−0·75	160 43·2	0·0	eF, L, R, glbM	
2172	1364	3015	...	...	6 0 52	−0·35	158 38·8	0·1	F, eL, R, lbM	
2173	1365	3018	...	...	6 0 56	−1·29	162 58·7	0·0	pF, pL, R, gmbM	
2174	...	...	...	St IX	6 1 3	+3·58	69 19·0	0·2	eF, bet 3 vF st	
2175	1366	...	...	Bruhns	6 1 19	+3·57	69 29·7	0·0	∗ 8m in neb (Auw No 21)	
2176	1367	3017	...	...	6 1 27	−0·06	156 51·3	0·1	eeF, pL, R, gbM	
2177	1368	3020	...	...	6 1 42	−0·19	157 43·7	0·2	F, vS, iR, lbM, r	
2178	1369	3019	...	...	6 1 56	+0·36	153 45·9	0·2	eF, vS, R	
2179	1370	3014	...	...	6 2 6	2·54	111 43·9	0·3	F, pS, vmE, glbM	
2180	1371	380	VIII 6	...	6 2 12	3·18	85 15·9	0·3	Cl, pRi, lC, st L and S	
2181	1372	3021	...	...	6 2 29	0·17	155 15·2	0·2	vF, S, R	
2182	1373	381	IV 38	...	6 2 42	2·92	96 19·0	0·3	pB ∗∗, L ∗ neb, E 90° ±	
2183	5359	...	...	d'A	6 3 58	2·93	96 11·5	0 4	eF, S, lE, ∗ 11·12 sp	
2184	1374	382	...	...	6 4 0	+2·99	93 30·1	+0·4	Cl, L, vlC	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2185	1375	383	IV 20	...	6 4 17	+2·93	96 11·0	+0·5	✶ 11 and 4 S st in vF, L neb	†
2186	1376	384	VII 25	...	6 4 40	+3·20	84 31·9	0·5	Cl, pL, pRi, pC, st L and S	
2187	1377	3025	...	...	6 5 4	−0·52	159 33·8	0·4	pB, pS, R, gbM, vF, R, glbM, D neb 12°·5	
2188	1378	3022	...	...	6 5 6	+2·17	124 4·5	0·5	pF, pL, vmE, gvlbM	
2189	5064	...	...	J H Safford	6 5 7	+3·09	88 50·7	0·5	2 clusters nr 2 st 9·10 & 10·11	
2190	1379	3027	...	...	6 5 7	−1·82	164 42·4	0·4	vF, pL, R, glbM	
2191	1380	3023	...	...	6 5 17	+1·33	142 29·3	0·5	pB, vS, E, vsbM, ✶9 p 5′	
2192	1381	...	VII 57	...	6 5 25	4·19	50 6·4	0·6	Cl, cL, C, iF, st vS	
2193	1382	3026	...	...	6 5 48	0·20	155 4·2	0·5	F, iF, glbM, 2 or 3 st inv	
2194	1383 = 5360	...	VI 5	d'A, DM 1066	6 5 55	3 38	77 9·5	0·6	Cl, L, Ri, gvmCM	
2195	...	...	...	J G Lohse	6 6 12	3·50	72 19·0	0·7	F, S, 2 S st inv, ✶10 n 31″	
2196	1384	3021	II 265	...	6 6 14	+2·54	111 46·4	0·6	pF, pS, vlE, pmbM, st nr	
2197	1385	3028	...	...	6 6 21	−0·09	157 4·4	0·5	vF, pS, R, glbM	
2198	5065	...	...	J H Safford	6 6 41	+3·09	88 58·2	0·7	Cl, bet 2 st 9·10 and 10·11	
2199	1386	3031	...	...	6 7 58	−1·40	163 22·2	0·7	F, vS, R, bM	
2200	1387	3029	...	...	6 9 5	+1·80	133 37·4	0·9	eF, pS, R, vlbM, ? 134° P D	
2201	1388	3030	...	...	6 9 19	1·80	133 39·5	0·9	eF, S, R, pslbM, ? 134° P D	
2202	1389	385	...	Σ 885	6 9 23	+3 21	83 58·2	0·9	✶ ✶ Chief of Cl	
2203	1390	3035	...	...	6 9 27	−2·06	165 24·4	0·8	pB, pL, iR, vgpmbM, r	
2204	1391	...	VII 13	...	6 9 33	+2·62	108 36 8	0·9	Cl, L, pRi, lC	
2205	1392	3034	...	...	6 10 13	0·51	152 29·8	0·9	pF, S, R, bM	
2206	1394	3033	...	...	6 10 24	2·40	116 43·6	1·0	F, pS, vlE, pslbM	
2207	1393	3032	...	...	6 10 25	2·55	111 19·8	1·0	pB, pL, mE 87°, pslbMRN	
2208	...	...	...	Sw VI	6 11 20	+4·78	38 0·4	1·1	pF, pS, lE	
2209	1395	3037	...	...	6 12 5	−1·53	163 47·9	1·0	vF, cL, R, gvlbM	
2210	1396	3036	...	...	6 12 33	−0·42	159 5·0	1·1	vB, pL, R, mbM, r	
2211	...	...	...	L 1	6 12 40±	+2·63	108 28·4	1·2	vF, pS, E 45°, bMN	
2212	...	...	...	L 1	6 12 40±	+2 63	108 28·4	1·2	eF, vS, R, in field with last	
2213	1397	3038	...	...	6 12 45	−0·92	161 29·5	1·1	vF, S, R, glbM, ✶ ✶ ✶ p	
2214	1398	3039	...	Δ 201	6 13 34	−0·27	158 13·2	1·2	B, pS, lE, gbM, rrr	
2215	1399	386	VII 20	...	6 14 5	+2·90	97 14·4	1·3	Cl, cL, pRi, pC, st 11...15	
2216	1400	3040	...	...	6 15 37	2·53	112 1·0	1·4	vF, pL, R, vglbM	
2217	1401	3041	...	...	6 16 5	2·39	117 10·6	1·5	vB, S, R, psmbM, r	
2218	1402	...	...	Markree Cat.	6 16 25	3·54	70 35·5	1·5	F Cl (Auwers No 22)	
2219	1403	387	...	..	6 16 29	2·96	94 37·3	1·5	Cl, P, vlC, st 6, 11...12	
2220	1404	3042	...	...	6 17 5	1·75	134 41·9	1·6	Cl, B, P, st 8...	
2221	1405	3044	...	...	6 18 1	0·98	147 29·6	1·6	vF, lE, vgbM, p of 2	
2222	1406	3045	...	...	6 18 2	0·98	147 27·5	1·6	vF, lE, vgvlbM, f of 2	
2223	1407	3043	...	...	6 18 44	+2·51	112 46·1	+1·7	F, pL, R, vglbM, 2 st inv	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2224	1408	...	VII 35	...	6 19 45	+3·37	77 16·8	+1·8	Cl, pC, with neb?	
2225	1409	388	VII 26	...	6 19 58	2·85	99 34·5	1·8	Cl, P, lCM, st 12...15	
2226	...	...	...	Barnard	6 20	2·85	99 34 ±	1·8	S, v diffic, *10 close s	
2227	1410	3046	...	...	6 20 1	2·54	111 55·4	1·8	eF, R, *p 270°, 90″	
2228	1411	3047	...	...	6 20 33	0·29	154 23·4	1·8	F, S, R, glbM	
2229	1412	3048	...	...	6 20 49	0·23	154 52·8	1·8	eF, vS, R, 1st of 3	
2230	1413	3049	...	...	6 20 55	+0·23	154 55·4	1·8	eF, S, lE, 2nd of 3	
2231	1414	3050	...	...	6 21 1	−0·14	157 27·1	1·8	F, pL, R, gvlbM, *f	
2232	1415	...	VIII 25	...	6 21 2	+2·96	94 40·7	1·9	B*(10 Monoc)+Cl	
2233	1416	3051	...	...	6 21 11	0·22	154 58·2	1·9	eF, S, 3rd of 3	
2234	1417	389	VIII 9	...	6 21 14	3·47	73 13·6	2·0	Cl, cL, pRi, lC, st L & S	
2235	1418	3052	...	...	6 21 50	0·24	154 51·8	1·9	vF, S, R, *12 nr	
2236	1419	390	VII 5	...	6 22 11	3·23	83 4·4	2·0	Cl, pRi, pC, st 10, 12...15	†
2237	...	...	...	Sw II	6 22 51	3·19	84 51·5	2·2	pB, vvL, dif (?=5361)	
2238	5361	...	...	m 99	6 23 11	3·19	84 54	2·1	S*in nebulosity	
2239	1420	392	...	...	6 23 29	3·19	84 57·5	2·1	*8 in L, P, BCl	
2240	1421	391	VIII 49	...	6 23 32	+4·01	54 42·3	2·2	Cl, pL, P, vlC, st 7, 10...15	
2241	1422	3054	...	...	6 23 42	−0·37	158 50·6	2·0	vF, pL, R, glbM	
2242	...	...	...	Sw VI	6 23 55	+4·39	45 6·5	2·2	eeF, vS, R, F*nf	
2243	1423	3053	...	Δ 616?	6 24 14	2·27	121 11·5	2·2	pB, eL, R, vglbM, 4′	
2244	1424	...	VII 2	...	6 24 53	3·19	85 2·2	2·3	Cl, beautiful, st sc (12 Monoc)	
2245	1425	393	IV 3	...	6 24 58	3·31	79 44·5	2·3	pL, com, mbN sf alm *, *7·8 nf	†
2246	...	...	...	Sw III	6 25 0	3·19	84 47·2	2·3	eeF, L, irrR, e diffic	
2247	...	...	...	Ld R, Sw I	6 25 26	3·31	79 34	2·3	Neb*in eF, eL neby, nf IV 3	
2248	1426	...	...	Markree Cat.	6 25 52	+3·73	63 35·3	2·4	Small cluster (Auw 23)	
2249	1427	3055	...	...	6 26 38	−0·36	158 50·0	2·3	pB, pL, R, vgbM, *p	
2250	1428	394	...	...	6 27 5	+2·96	94 57·9	2·4	Cl, pRi, lC, iF, st 8, 12...14	
2251	1429	395	VIII 3	...	6 27 8	3·27	81 32·3	2·5	Cl, vL, E, Ri, lC	
2252	1430	396	VIII 50	...	6 27 24	3·20	84 32·2	2·5	Cl, vL, pRi, lC, st S	
2253	1431		VII 54	...	6 27 56	6·04	24 2·3	2·6	vF, st eS	
2254	1432	397	VII 22	...	6 28 25	3·25	82 13·7	2·6	Cl, S, pC, iF, st 11...13	
2255	1433	3056	...	...	6 28 59	2·15	124 42·9	2·6	eF, S, lE, vlbM	
2256	...	...	...	T IX	6 29 9	7·79	15 39·0	2·8	F, R, *9·5 3′ sf	
2257	1434	3057	...	...	6 29 26	0·33	154 13·4	2·6	F, eL, R, vglbM, r, 17″·0 d	
2258	...	...	...	T IX	6 30 40	7·84	15 29·0	2·8	F, 2 st 10·11 f	
2259	1435	...	VI 28	...	6 30 48	3·33	79 0·6	2·8	Cl, cRi, eC, iF, st eS	
2260	1436	398	VIII 48	...	6 31 2	3·04	91 20·7	2·8	Cl, vL, P, vlC, st L & S	
2261	1437	399	IV 2	...	6 31 31	3·28	81 8·7	2·9	B, vmE 330°, N com = *11	†
2262	1438	400	VII 37	...	6 32 24	3·10	88 43·8	2·9	Cl, vC, iR, bM, st eS	
2263	1439	3058	...	...	6 32 42	2·46	114 43·9	2·9	pF, lE, bet 2 vS st, pslbM	
2264	1440	401	V 27 = VIII 5	...	6 33 16	+3·31	79 58·7	+3·0	15 Monoc, Cl, *, ? neb	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2265	1441	402	...	...	6 33 41	+3·35	77 57·1	+3·0	Cl, P, 30 or 40 st 12...13	
2266	1442	403	VI 21	...	6 34 33	3·75	62 53·6	3·1	Cl, pS, eC, Ri, st 11...15	
2267	1443	3059	...	...	6 35 32	2·24	122 20·8	3·2	pB, S, R, 2 or 3 st v nr	
2268	5362	...	...	Borelly	6 36 0	16·86	5 25·3	3·6	pF, pL, lE	
2269	1444	404	VI 3	...	6 36 27	3·18	85 17·7	3·3	Cl, vmC, not Ri, st vS	
2270	1445	405	VII 36	...	6 36 36	3·15	86 24·9	3·3	Cl, lC, not Ri	
2271	1446	3060	...	...	6 37 3	2·50	113 20·3	3·3	pF, S, R, gbM, am st	
2272	1447	3061	...	...	6 37 7	2·39	117 19·6	3·3	pF, pS, vlE, bM, r	
2273	5363	...	...	Dunér	6 37 29	5·45	29 0·3	3·4	F, S, iR, r?	
2274	1448	406	II 615	...	6 38 5	3·95	56 17 6	3·4	F, S, bM	
2275	1449	407	II 614	...	6 38 6	3·95	56 15·6	3·4	eF, vS	
2276	5364	...	...	T I, Winnecke	6 38 31	21·67	4 2	3·9	F, 60″, lbM	
2277	5365	...	...	d'A	6 38 36	3·95	56 24·5	3·5	Cl, vS, lRi	
2278	5366	...	...	d'A	6 39 3	3·95	56 26·8	3·5	vF, vS	
2279	...	...	...	Bigourdan	6 39 13	3 95	56 27·1	3·5	vF, vS, stellar Nucl	
2280	1450	3062	...	...	6 39 17	2·39	117 30·1	3·5	pF, pL, lE, gbM	
2281	1451	...	VIII 71	...	6 39 31	4·22	48 47·3	3·6	Cl, pRi, vlC, st pL	
2282	...	...	...	Barnard	6 39 37	3 11	88 32·0	3·5	* 10 in F, R neby	
2283	1452	...	III 271	...	6 39 46	2·64	108 3·4	3·6	3 or 4 S st + neb	*
2284	5367	...	...	d'A	6 40 2	3·94	56 38·6	3·6	F, r	
2285	5368	...	...	d'A	6 40 20	3·94	56 29·9	3·6	eF, eS, r?	
2286	1453	408	VIII 31	...	6 40 39	3·00	93 1·4	3·6	Cl, L, C, ab 100 st 9...15	
2287	1454	411	...	Flamsteed, Legentil, M 14	6 41 0	2·58	110 36·0	3·6	Cl, vL, B, lC, st 8...	
2288	1455	...	...	Ld R M41	6 41 32	3·94	56 27·2	3·7	eF, S, R (β of Lord R's diag)	*
2289	1457 = 1456	410	III 898	...	6 41 33	3 94	56 25·4	3·7	eF, vS, (= γ)	*
2290	5369	...	III 897?	Ld R, d'A	6 41 37	3·94	56 28·6	3·7	F, S, gbM (= α)	
2291	1458	409	III 897?	...	6 41 38	3·95	56 23·3	3·7	eF, vS, (= δ)	*
2292 2293	1459	3063	...	...	6 41 44	2·41	116 35·8	3·7	eF, R, gbM / pB, R, gbM	D neb, am st
2294	1460	...	...	Ld R	6 41 50	3·94	56 23·1	3·7	eeF, (ε of Lord R's diag)	*
2295	1461	3064	...	...	6 42 3	2·41	116 34·3	3·7	eF, S, R, bet st, D neb p	
2296	...	...	...	Sw VI	6 43 3	2·68	106 46·0	3 8	vF, vS, R	
2297	1462	3066	...	...	6 43 24	0·43	153 34·3	3·8	vF, S, R, vglbM	
2298	1463	3065	...	Δ 578	6 44 2	2·12	125 50·9	3·9	⊕, B, pL, iR, gbM, rr	
2299	1464	412	...	...	6 44 17	2·92	96 49·6	3·9	Cl of 30 or 40 st	
2300	5370	...	...	Winnecke, Borelly	6 44 29	21·33	4 3·3	4·5	pB, pL, lE, bM	
2301	1465	413	VI 27	...	6 44 35	3 09	89 22·7	4·0	Cl, Ri, L, iF, st L & S	
2302	1466	414	VIII 39	...	6 45 3	2·91	96 55·2	4·0	Cl, L, P, lC	
2303	...	...	...	Sw VI	6 45 50	+4·41	44 18·7	+4·1	eF, vS, R, sev st nr	

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					h m s	s	° ′	″		
2304	1467	415	VI 2	...	6 46 55	+3·50	71 49·2	+4·1	Cl, pL, Ri, mC, st vS	†
2305	1468	3067	...	...	6 47 46	0·38	154 6·7	4·2	vF, vS, R, 2 st Δ	
2306	1469	416	VIII 51	...	6 47 47	2·91	97 1·4	4·2	Cl, P, vlC	
2307	1470	3068	...	...	6 47 58	0·37	154 9·9	4·2	vF, pS, vlE 90°	
2308	5371	...	...	St VI	6 48 23	4 39	44 36·5	4·3	eF, vS, vF * inv	
2309	1471	417	VI 18	...	6 49 15	2·91	97 1·4	4·4	Cl, pL, pRi, mC, st 13	
2310	1472	3069	...	...	6 49 23	1·95	130 41·5	4·3	pB, pL, vmE 45°, pslbM	
2311	1473	418	VIII 60	...	6 50 52	2·97	94 24·3	4·5	Cl, lC, not Ri	
2312	1474	419	...	...	6 51 6	3·31	79 33·4	4·5	Cl, P	
2313	1475	...	...	d'A	6 51 18	2·89	97 45·6	4·5	F, vS, R	
2314	...	...	...	T IX	6 51 40	8·07	14 34·0	4·7	vF, S, R	
2315	1476	420	...	...	6 51 50	4·67	39 12 9	4·6	eF	
2316	1477	421	II 304	...	6 52 55	2·90	97 35·0	4 7	pF, S, R, r, S st inv	†
2317	1478	...	...	Ld R	6 52	2·90	97 35	4·7	Makes a close D neb with h 421	†
2318	1479	422 = 3070	VII 14	...	6 53 4	2·76	103 30·7	4·7	Cl, L, sc, st 8...9	
2319	1480	423	VIII 1 B	...	6 53 48	3·15	86 44·9	4·8	Cl of v sc st, st 8, 9...	*
2320	1482	424	II 861	...	6 54 51	4·66	39 13·2	4·8	pB, S, iR, gbM, *8, 120°	
2321	...	...	...	Ld R	6 54 57	4·66	39 1	4·8	vF, 12′ n of h 424	
2322	1481	...	III 874	Ld R	6 55 23	4·66	39 17·2	4·9	vF, vS, lE	
2323	1483	425	...	M 50	6 56 13	2 89	98 8·8	5·0	! Cl, vL, Ri, pC, E, st 12...16	
2324	1484	427	VII 38	...	6 56 57	3·10	88 44·5	5·0	Cl, L, Ri, cC, st 12...16	
2325	1485	3071	...	...	6 57 7	2·37	118 30·2	5·0	pB, pL, lE, gbM	
2326	1486	426	II 734	...	6 57 29	4·66	39 5·8	5·0	vF, pL, iR, psmbM, st p	
2327	1487	428	IV 25	...	6 57 33	2·82	101 6·5	5·1	pB ** inv in S, vF, neb	
2328	1488	3072	...	...	6 58 7	1·91	131 51·9	5·1	vF, S, vlE, bM, am st	
2329	1489	429	II 735 = III 875	...	6 58 34	4·55	41 10·7	5·2	vF, vS, stellar	
2330	1492?	...	...	Ld R?, Bigourdan	6 58 46	4·63	39 33·6	5·2	vF, vS, v stellar	
2331	1490	432	VIII 40	Flamsteed	6 58 48	3·74	62 35·7	5·2	Cl, L, vlC, S Cl inv	
2332	1491	430	II 862	...	6 58 49	4·63	39 36·0	5·2	F, S, R, psbM	
2333	1493	431	III 899	...	6 58 54	3·99	54 39·6	5·2	vF, S, R, bM	
2334	1492?	...	...	Ld R?, Bigourdan	6 59 7	4·63	39 34·6	5·2	vF, bet 2 st 12	
2335	1494	...	VIII 32	...	6 59 55	2·85	99 52·1	5·3	Cl, L, lC	
2336	5372	...	...	T I	7 0 ±	10·80	9 32	5·2	pB, pL, R, 2 st 11 nr	
2337	5373	...	...	St VIII	7 0 6	4·34	45 19·4	5·3	eF, S, E	
2338	1495	435	...	...	7 0 7	2·95	95 24·6	5·3	Cl, vlC	
2339	1496	434	II 769	...	7 0 8	3·51	71 0·5	5·3	pB, pL, R, glbM	
2340	1497	433	II 736	...	7 0 28	4 63	39 36·4	5·4	pF, S, R, glbM, r	
2341	5374	...	...	m 100	7 0 54	3·56	69 11	5·4	vF, vS	
2342	5375	...	...	m 101	7 1 1	+3·56	69 10	+5·4	pF, S, lE, vlbM	

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					h m s	s	° ′	″		
2343	1498	...	VIII 33	...	7 1 36	+2·83	100 26·2	+5·4	Cl, cL, P, lC	
2344	...	...	...	Sw VI	7 1 48	4·47	42 35·1	5·5	pB, pS, R, lbM	
2345	1499	3073	...	...	7 1 52	2·78	102 57·1	5·4	Cl, pL, pRi, gbM, st 10...14	
2346	1500	...	IV 65	...	7 2 15	3 06	90 35·1	5·5	* 10 aff with S, vF, neb	
2347	1501	...	III 746	...	7 2 48	5·83	24 57·8	5·6	vF, S, R, lbM	
2348	1502	3074	...	...	7 3 7	0·01	157 11·1	5·5	Cl, P, lC, 30 st ±	
2349	1503	436	VII 27	C II	7 3 16	2·88	98 24·0	5·6	Cl, cL, P, eC	
2350	5376	...	...	St VI	7 5 24	3·36	77 30·1	5·7	eF, eS, iR	
2351	1504	437	...	...	7 6 56	2·82	101 15·2	5·9	Cl, lC, ** taken	
2352	1505	...	VII 15	...	7 7 48	2·51	113 51·2	5·9	Cl, pRi, pC	
2353	1506	...	VIII 34	...	7 7 51	2·85	100 3·7	5·9	Cl, L, lC, one vB *	
2354	1507	438	VII 16	...	7 8 28	2·46	115 29·5	6·0	Cl, cRi, lC	
2355	1508	439	VI 6	...	7 9 4	3·39	75 58·9	6 1	Cl, pS, pRi, mC, st 15...16	*
2356	1509	...	VII 6	...	7 9 12	3·39	75 46·9	6·1	Cl, lC	
2357	...	...	...	St XIII	7 9 14	3·63	66 23·9	6·0	eF, L, mE, bM, F st inv	
2358	1510	...	VIII 45	...	7 10 32	2·69	106 48·0	6·2	Cl, P, lC	
2359	1511	3075	V 21	...	7 11 3	2·78	102 57·9	6·2	!!, vF, vvL, viF	†
2360	1512	440 = 3076	VII 12	C II	7 11 23	2·72	105 23·3	6·2	Cl, vL, Ri, pC, st 9...12	
2361	...	...	...	Bigourdan	7 11 56	2·78	102 58·0	6·2	vvF, vS	
2362	1513	441 = 3077	VII 17	...	7 12 55	2·49	114 42·2	6·3	Cl, pL, Ri (30 Can maj)	
2363	5377	...	...	Copeland (R)	7 13 53	6·41	20 41·3	6·5	Neb * or vFvS, III, 748 sf	
2364	1514	442	...	...	7 14 0	2·91	97 18 2	6·4	Cl, pC, st pL, bifid	
2365	5378	...	...	m 102, St VI	7 14 1	3·59	67 39·4	6·5	vF, pS, R, psbM	
2366	1515	...	III 748	...	7 14 2	6·41	20 42·3	6·5	vF, pL, mbM, vS * inv, curved tails	†
2367	1516	...	VIII 27	...	7 14 9	2·57	111 40·3	6 5	Cl, S, P, lC	
2368	1517	443	...	...	7 14 21	2 85	100 7·6	6·5	Cl, S, pRi, st 15	
2369	1518	3078	...	...	7 15 1	0·68	152 5·8	6·5	pB, pL, iE, glbM	
2370	5379	...	...	m 103	7 16 33	3·63	65 56	6·7	eF, vS, E	
2371	1519	444	II 316	...	7 16 44	3·79	60 14·5	6·7	B, S, R, bMN, p of Dneb	*†
2372	1520	445	II 317	...	7 16 45	3·79	60 14·2	6·7	pB, S, R, bMN, f of Dneb	*†
2373	5380	...	...	Ld R, St IX	7 17 29	3·92	55 54·2	6·8	eF, vS (ζ in Ld R's diag)	
2374	1521	3080	VIII 35	...	7 17 32	2·78	102 59·6	6·7	Cl, vL, pRi, lC, st L	
2375	5383	...	...	Ld R, St IX	7 18 1	3·92	55 53·7	6·9	eF, vS, h 446 f 17', 1's (ε)	
2376	5381	...	...	m 104	7 18 10	3·61	66 39	6·8	eF, vS	
2377	5382	...	...	St VI	7 18 16	2·86	99 23·2	6·8	eF, vS * inv, * 11 s	
2378	...	...	...	St IX	7 18 16	3·92	55 53·6	6·8	2vF close st in eF neb, h 446 f 2', 1's	
2379	1527	446	...	Ld R, St IX	7 18 18	3·92	55 54·8	6·9	vF, vS (δ)	*
2380	1522	3079	...	...	7 18 19	+2·42	117 15·9	+6·8	pF, pS, R, vsmbM, sm st	

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					h m s	s	° ′	″		
2381	1523	3084	...	...	7 18 27	+0·62	152 48·8	+6·8	vF, vS, R, am st	
2382	1524	3082	...	...	7 18 33	2·43	117 6·4	6·8	pF, S, R, bM	
2383	1525	3081	...	...	7 18 40	2·60	110 40·0	6·8	Cl, pS, pmC, st 12	
2384	1526	3083	...	...	7 19 0	2·60	110 45·0	6·9	Cl, lC, bifid, * *	
2385	1528	447	III 703	...	7 19 24	3·92	55 53·1	6·9	vF, vS, R, bM	*
2386	5384	...	...	Ld R*	7 19 29	3·92	55 57·0	6·9	Stellar	
2387	1529	...	II 820	...	7 19 45	4·02	52 58·7	7·0	pB, S, stellar	
2388	1530	448	III 900	...	7 19 46	3·92	55 54·1	7·0	vF, S, R, bM	*
2389	1531	449	III 901	...	7 19 57	3·92	55 51·6	7·0	vF, S, R, psbM	*
2390	5385	...	...	Ball (R)	7 19 58	3·92	55 53·2	7·0	vF	
2391	5386	...	...	Ball (R)	7 20 3	3·92	55 54 0	7·0	eF	
2392	1532	450	IV 45	Greenw IX yr C	7 20 53	3·56	68 48·3	7 0	B, S, R, *9 M, *8 nf 100″	†
2393	...	...	...	St XIII	7 20 56	3·92	55 41·3	7·0	eF, pS, lE, dif, r?	
2394	1533	...	VIII 44	...	7 21 3	3·23	82 41·0	7·0	Cl, L, P, vlC, stL	*
2395	1534	...	VIII 11	...	7 21 12	3·38	75 56 9	7·1	Cl, pRi, C	
2396	1535	451	VIII 36	...	7 21 39	+2·82	101 27·5	7·1	Cl, vL, vlC	
2397	1536	3085	...	...	7 21 42	−0·15	158 43·9	7 0	pB, cL, cE 117°, lbM	
2398	...	...	...	St XIII	7 21 46	+3·65	65 13·7	7·1	vF, eS, bM, r?	
2399	1537	...	...	Bond	7 22 41	3·07	89 55·6	7·2	Two F neb (Auw 24 & 25)	*
2400	1538	...	...	Bond	7 22 46	3·07	89 55·7	7·2	? vS clusters	*
2401	1539	454	VII 65	...	7 22 57	2 77	103 41·4	7·2	Cl, S, eRi, eC, st vS	
2402	1540	453	III 19	...	7 23 6	3·29	80 3·4	7·2	eF, S, R, lbM, *inv	
2403	1541	...	V 44	...	7 23 15	5·86	24, 6·2	7·3	!! cB, eL, vmE, vgmbMN	
2404	...	...	...	Bigourdan	7 23 28	5·86	24 0·0	7·3	vF, vS	
2405	5387	...	...	m 105	7 23 38	3 69	63 49	7·3	vF, S, iR	
2406	...	...	...	St XIII	7 23 40	3·49	71 25·3	7·3	eF, eS, vSN?	
2407	...	...	...	St XIII	7 23 49	3·49	71 22·5	7·3	eF, eS, vSN?	
2408	1542	452	...	...	7 24 36	6 90	18 1·6	7·4	Cl, vlC	
2409	1543	3086	...	...	7 25 22	2·69	106 54·3	7·4	Cl, S but B, st 8...10	
2410	5388	...	...	St VIII	7 26 0	3 88	56 52·6	7·5	eF, vS, scv vF st inv	
2411	...	...	...	St XIII	7 26 29	3·49	71 25·1	7·5	*14m slightly nebs	
2412	...	...	...	J G Lohse	7 26 45	3·26	81 9·4	7·5	vF, *8f 59s, 1′·5s, *13 s, 10″	
2413	1544	...	VIII 52	...	7 26 50	2 79	102 47·8	7·5	Cl, vL, P, vlC	
2414	1545	455	VIII 37	...	7 26 50	2·74	105 8·8	7·5	Cl, P, lC, st 9, &c	
2415	1546	456	II 821	...	7 27 43	3·95	54 28·4	7·6	pB, eS, R, vgvlbM, r, almʘ	
2416	5389	...	...	m 106	7 28 5	3·33	78 6	7·6	eF, S	
2417	1547	3087	...	...	7 28 25	0·74	151 57 8	7·6	vF, L, R, gbM, r	
2418	5390	...	...	St VIII	7 28 31	3·48	71 48·6	7·6	vF, eS, bM	
2419	1548	457	I 218	...	7 28 39	4·08	50 48 6	7·7	pB, pL, lE 90°, vgbM, *7·8 267°, 4′ dist	
2420	1549	458	VI 1	...	7 30 6	+3·57	68 7·2	+7 8	Cl, eL, Ri, C, st 11...18	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2421	1550	3089	VII 67	...	7 30 10	+2·62	110 18·0	+7·8	Cl, L, cRi, st 11...13	
2422	1551	459=3088	VIII 38	...	7 30 11	2·76	104 10·5	7·8	Cl, B, vL, pRi, st L and S	
2423	1552	3090	VII 28	...	7 30 38	2·77	103 32·9	7·8	Cl, vL, Ri, pC, st vS	
2424	...	...	...	St XIII	7 31 9	4·09	50 27·0	7·9	vF, pS, mE, lbM, r?	
2425	1553	...	VIII 87	...	7 31 52	2·75	104 35·2	7·9	Cl, P, S, st vS	
2426	1554	460	II 822	...	7 32 27	4·68	37 20·8	8·0	cF, R, vgbM, r, *8 p	
2427	1555	3091	...	...	7 32 32	1·74	137 18·5	7·9	eF, L, pmE, gmbM, 2 st inv	
2428	1556	...	VIII 47	...	7 32 56	2·71	106 11·8	8·0	Cl, vL, vlC	
2429	5391	...	...	Copeland (R)	7 32 56	4·68	37 18·6	8·0	pF, pS, vmE, *12 att	
2430	1557	...	VIII 46	...	7 33 5	2·72	106 1·8	8·0	Cl, vL, vlC	
2431	1558	...	III 829	...	7 34 27	4·71	36 35·0	8·2	eF, vS, R, bM	
2432	1559	3092	VI 36	...	7 34 42	2·66	108 45·6	8·1	Cl, pL, pC, Eo°, st L and S	
2433	1560	462	...	...	7 35 5	+3·28	80 24·8	8·2	eF, *15, 90″ sp	*
2434	1561	3096	...	...	7 35 10	−0·12	158 58·1	8·1	pB, S, R, pmbM, 3 st 11 n	
2435	1562	...	II 616	...	7 35 18	+3·83	58 1·2	8·2	F, S, lbM	
2436	1563	461	...	...	7 35 19	4·65	37 35·9	8·2	vF, vS, R, bM	
2437	1564	463	...	M 46	7 35 24	2·76	104 29·8	8·2	!, Cl, vB, vRi, vL, inv ○	
2438	1565	464=3093	IV 39	...	7 35 26	2·76	104 25·0	8·2	○, pB, pS, vlE, r, 3″·75 d	†
2439	1566	3094	...	...	7 35 26	2·33	121 19·8	8·2	Cl, B, pRi, pL, lC, st 9, 12...14	
2440	1567	3095	IV 64	...	7 35 40	2·68	107 53·0	8·2	○, cB, not v well def	†
2441	...	...	...	T VI	7 36 26	+7·12	16 40·7	8·4	vF, pS	
2442	1568	3097	...	...	7 36 44	−0·15	159 12·8	8·2	cL, vF, R } D neb, 40°,	
2443	1569								pL, vF, R } D * inv M	
2444	5392	...	...	St VIII	7 37 26	+4·07	50 37·9	8·4	vF, mbM	
2445	5393	...	...	St VIII	7 37 28	4·07	50 38·9	8·4	vF, mbM, S * att s	
2446	1570	465	...	...	7 37 36	4·80	35 3·2	8·4	F, am 4 st	
2447	1571	3098	...	M 93	7 38 39	2·54	113 32·7	8·4	Cl, L, pRi, lC, st 8...13	
2448	1572	466	...	Lal 15134	7 38 41	2·52	114 21·2	8·4	Cl of 18 or 20 st 11...13	
2449	5394	...	..	St VI	7 38 45	3·70	62 43·8	8·5	eF, cS, R, bM, r	
2450	...	...	...	St IX	7 38 55	3·70	62 38·3	8·5	eF, vS, S * inv	
2451	1573	3099	...	...	7 40 19	2·14	127 38·3	8·6	Cl, vvL, vlC, 1 *4·5 m	
2452	1574	3100	...	...	7 41 47	2·46	117 0·1	8·7	○, F, S, lE, am 60 st	
2453	1575	3101	...	...	7 41 57	2·46	116 54·4	8·7	Cl, S, pRi, pC	
2454	5395	...	...	St VI	7 42 35	3·43	73 16·9	8·8	vF, eS, R, bM	
2455	1576	3102	...	...	7 42 52	2·61	110 57·1	8·8	Cl, cL, pRi, lC, st 12	
2456	1577	467	...	...	7 42 57	4·83	34 9·4	8·8	vF, R, vgbM	
2457	5396	...	...	Copeland (R)	7 43 37	4·84	34 6·2	8·9	F, pL, R, h 467 sp	
2458	1581	...	...	Ld R, Bigourdan	7 44 4	4·91	32 56·0	8·9	vF, *12 close	
2459	1578	468	III 479	...	7 44 24	+3·28	80 5·5	+8·9	vF, S, rr group + neb	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2460	...	...	...	T VI	7 44 56	+5·19	29 15·7	+9·0	F, S, R, S ✶ in centre	
2461	1582	...	...	Ld R, Bigourdan	7 45 23	4·91	32 58·2	9·0	✶ 13 slightly nebulous	
2462	1583	...	...	Ld R, Bigourdan	7 45 29	4·91	32 58·0	9·0	vF, vS, vlbM	
2463	1579	469	...	...	7 45 48	4·91	32 57·7	9·1	eF, R	
2464	1584	...	...	Ld R, Bigourdan	7 45 58	4·91	32 58·0	9·1	pS Cl, st eF, nebulous	
2465	1585	...	...	Ld R, Bigourdan	7 46 19	+4·91	32 52 7	9·1	✶, nebulous ?	
2466	1580	3104	...	...	7 46 21	−0·42	161 3 6	9·0	vF, S, R, lbM	
2467	1589	472	IV 22	...	7 46 40	+2·49	116 2·0	9·1	pB, vL, R, er, ✶ 8M	
2468	5397	...	...	d'A	7 46 41	4·87	33 16·5	9·1	F, R, bM	
2469	1590	470	III 836	...	7 46 42	4·91	32 57·1	9·1	F, vS, R, ✶ 9 sf	
2470	...	...	...	Sw V	7 46 51	3·17	85 10·9	9·1	eF, S, lE, bet 2 st	
2471	1586	...	...	Ld R, Bigourdan	7 46 52	4·91	32 52·5	9·1	✶ 13, slightly nebulous	
2472	1587	...	...	Ld R	7 47	4·91	32 57 ±	9·1	2 of 10 neb, in line with h 469, 470	
2473	1588									
2474	1591	471	III 830	...	7 47 11	4·66	36 46·2	9·2	F, pS, E? bMvS ✶? L ✶ nf	
2475	1592	...	...	Ld R	7 47 12	4·66	36 46·0	9·2	Makes D neb with h 471	
2476	...	...	...	St IX	7 47 16	4·08	49 42·4	9·1	vS ✶ in eF, S neb	
2477	1593	3103	...	Lae I_2, Δ 535	7 47 19	2·13	128 11·1	9·1	!, Cl, B, Ri, L, lC, st 12	
2478	1594	...	...	M 47	7 48 20	2·75	105 3·3	9·2	Cluster	*
2479	1595	...	VII 58	...	7 48 40	2·70	107 21·1	9·2	Cl, pL, pRi, pC, st S	
2480	1597	...	...	Ld R	7 48	3·60	65 51 ±	9·3	vF, Enpsf, close np h 473	
2481	1596	473	II 302	...	7 48 48	3·60	65 52·1	9·3	F, S, lE, bM, er	
2482	1598	474 = 3106	VII 10	...	7 49 1	2·54	113 56·2	9·3	Cl, L, eRi, vlC	
2483	1599	3105	...	...	7 49 2	2·45	117 30·0	9·3	Cl, L, lC	
2484	...	...	...	St XIII	7 49 10	4·00	51 50·5	9·3	vF, vS, R, bM, r ?	
2485	5398	...	...	m 107	7 49 17	3·24	82 9	9·3	Neb ✶ 12 m	
2486	5399	...	...	m 108	7 49 25	3·64	64 26	9·3	vF, S, psbM	
2487	5400	...	...	m 109	7 49 49	3·64	64 27	9·3	vF, S, gbM	
2488	1600	475	III 837	...	7 50 26	4·88	33 3·9	9·4	vF, vS, R, glbM	
2489	1601	479 = 3107	VII 23	Δ 626	7 50 37	2·40	119 42·0	9·4	Cl, pL, cRi, pC, st 11...13	
2490	1603	...	...	Ld R	7 50 42	3·68	62 35·8	9·4	vF, S, R, ✶ 13 1′ f, p of 2	
2491	...	...	...	Sw III	7 50 49	3·24	81 37 6	9·4	eeF, pS, irrR, v diffie, B ✶ p	
2492	1602	477	...	...	7 50 54	3·68	62 36·0	9·4	vF, S, R, bM, f of 2	
2493	1604	476	III 750	...	7 50 55	4·07	49 47·8	9·4	eB, S, R, sbM	
2494	5401	...	...	m 110	7 50 58	3·07	90 15	9·4	F, S, lE	
2495	1605	...	...	Ld R	7 51 +	3·07	49 47 ±	9·4	Follows III 750 2′ or 3′, eF, vS	
2496	...	...	...	Sw III	7 51 4	3·24	81 36·3	9·4	vF, pS, R, lbM, ✶ close f	
2497	1606	...	III 838	...	7 51 11	4·90	32 42·3	9·5	eF, vS	
2498	...	...	...	St XIII	7 51 12	+3·63	64 38·5	+9·4	vF, vS, R, bMN	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2499	5402	...	...	m III	7 51 23	+3·23	82 8	+9·4	eF, pS, iR	
2500	1607	478	III 709	...	7 51 25	4·53	38 52·1	9·5	F, L, R, vgbM, r, am st	
2501	1608	3108	...	...	7 52 3	2·78	103 59·0	9·5	cF, S, vlE 90°, glbM, am st	
2502	1609	3109	...	...	7 52 12	1·57	141 55·2	9·5	pF, S, R, vgpmbM	
2503	5403	...	...	m 112	7 52 20	3·56	67 14	9·5	eF, S, glbM	
2504	5404	...	...	m 113	7 52 27	3·19	84 1	9·5	vF, S, R	
2505	1610	...	III 839	...	7 53 15	4·67	36 10·5	9·6	eF, vS	
2506	1611	480	VI 37	...	7 53 16	2·86	100 14·4	9·6	Cl, pL, vRi, C, st 11...20	*
2507	1612	481	II 554	...	7 53 40	3·41	73 54·6	9·6	pB, pL, iR, vgbM, er, * 232°, 80″	
2508	1618	484	III 7	d'A	7 54 19	3·26	81 3·8	9·7	F, vS, vlE, 2 st p	
2509	1613	...	VIII 1	...	7 54 32	2·67	108 41·2	9·7	Cl, B, pRi, lC, st S	
2510	1615	...	...	Ld R	7 54 33	3 27	80 7·7	9·7	γ in Lord Rosse's diagram	
2511	1616	...	...	Ld R, d'A	7 54 41	3·27	80 12·7	9·7	eF, III 512 nf, ($=\beta$)	
2512	1614	482	III 605	...	7 54 47	3·59	66 13·5	9·7	vF, S, iR	
2513	1617	483	III 512	...	7 54 47	3·27	80 12·2	9 7	F, S, R, psmbM, r	
2514	...	...	...	St XIII	7 54 53	3·41	73 48·3	9·7	eF, pS, irr R, dif	
2515	5066	...	...	G P Bond	7 55 13	3·51	69 25·3	9·7	vF, cometic	
2516	1619	3111	...	Lac II 3	7 56 1	1·00	150 29 2	9·8	Cl, vB, vL, pRi, st 7...13	
2517	1620	3110	...	...	7 56 17	2·83	101 54·8	9·8	F, vS, R, bet 3 st 13·14	
2518 2519	...	...	...	J G Lohse	7 56 45 ±	4·54	38 29	9·9	Two neb, F, L, R, gbM, $\Delta\alpha=42$·	
2520	1621	3112	...	...	7 56 49	2·46	117 47·7	9·9	Cl, B, pRi, pC	
2521	1622	485	...	...	7 57 26	4·94	31 49·8	10·0	pF, pL, R, psbM, *9, np 3′	
2522	5405	...	...	m 114	7 58 11	3·45	71 54	10·0	vF, vS, E, psbM	
2523	...	...	...	Sw II	7 58 38	7·09	15 59·6	10·1	pB, pL, lE, lbM, * nr	
2524	5406	...	...	St VIII	7 58 48	4·02	50 26·5	10·0	vF, S	
2525	1623	486	III 877	...	7 59 1	2·85	101 2 1	10·0	cF, pL, R, vgvlbM, am st	
2526	5407	...	...	m 115	7 59 26	3·24	81 36	10·1	vF, S, mE	
2527	1624	488	VIII 30	...	7 59 28	2·46	117 46·4	10·0	Cl, vL, pRi, lC, st 10...15	
2528	5408	...	...	St VIII	7 59 44	4·02	50 28·4	10·1	F, S, R, bM	
2529	...	...	...	Bigourdan	7 59 51	3·45	71 47	10·1	eF (suspected)	
2530	1625	487	III 752	...	7 59 54	3·45	71 46·5	10·1	eF, lE, vS * n	
2531	...	...	...	Bigourdan	7 59 57	3·45	71 47	10·1	vF	
2532	1626	489	II 726	...	8 1 16	3·86	55 38·2	10·2	pB, pL, R, vglbM, r, 2 st nf	
2533	1627	3113	...	...	8 1 22	2·42	119 29·9	10·2	Cl, pL, Ri, C, st 9, 13...14	
2534	1628	490	III 840	...	8 1 49	4·78	33 54·8	10·3	pF, pL, R, psbM, *8, 164°	
2535	5409	...	...	St VIII	8 2 48	3·62	64 23·0	10·3	eF, vS, R	
2536	5410	...	...	St VIII	8 2 51	3·62	64 24·6	10·3	vF, vS, R	
2537	1629	491	IV 55	...	8 3 19	4·27	43 35·6	10·4	⊕, pB, pL, R, rrr, st 20	
2538	5411	...	...	St VIII	8 4 3	+3·15	85 57·2	+10·4	vF, vS, R, mbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2539	1630	3114	VII 11	...	8 4 8	+2·82	102 25·0	+10·4	Cl, vL, Ri, IC, st 11...13	
2540	...	...	...	St XIII	8 4 18	3·64	63 13·3	10·5	vF, pL, iR, bM, r	
2541	1631	492	III 710	...	8 4 26	4·40	40 30·3	10·5	F, L, E, vgbM	
2542	1632	3115	...	...	8 4 42	2·82	102 30·9	10·5	Nebulous ✶ 5th mag	
2543	1633	493	II 719	...	8 4 51	3·92	53 19·4	10·5	F, pL, iR, vgbM, D ✶ nr	*
2544	...	...	...	Sw II	8 5 3	7·12	15 36·4	10·6	ceF, pS, R, sev B st around	
2545	1634	494	II 627	...	8 6 3	3·52	68 13·5	10·6	F, S, lE 45°, ✶8 np 4′	
2546	1635	3116	...	Lac II 4, Δ 563	8 6 26	2 22	126 58·4	10·6	Cl, B, L, lC, iE, st 9...12	
2547	1636	3117	...	Lac III 2, Δ 411	8 6 32	1·77	138 51·0	10·6	Cl, B, L, lC, st 7...16	
2548	1637	496	VI 22	C H	8 6 50	2·96	95 22·5	10·6	Cl, vL, pRi, pmC, st 9...13	
2549	1638	495	...	...	8 7 38	4 89	31 46·1	10·7	pB, S, mE 0°, psmbM	
2550	...	...	...	Sw II	8 8 3	7·12	15 33·3	10·8	ceF, pS, cE	
2551	...	...	...	T VI, Sw II	8 8 25	6·94	16 8·9	10·8	vF, S, F ✶ in centre	
2552	1639	...	III 711	...	8 8 46	4·44	39 32·6	10·8	eF, cL, lE 45°	
2553	5412	...	...	m 116	8 9 22	3·51	68 38	10 8	vF, S, glbM	
2554	1640	497	II 303	...	8 10 36	3·57	66 5·9	10·9	F, S, R, mbM, r	
2555	1641	498	III 256	...	8 10 44	3·09	88 48 8	10 9	vF, cS, iF, 3 S st inv ?	
2556	5413	....	...	m 117	8 10 49	3·51	68 36	10·9	vF, vS	
2557	5414	...	...	St VIII	8 10 59	3·52	68 6·9	10·9	eF, eS, R, lbM	
2558	1642	499	III 606	...	8 11 7	3·50	69 3·2	11·0	vF, S, R, sbM, stellar	
2559	1643	3118	...	...	8 11 21	2·50	117 2·2	10·9	F, pL, gmbM, am 60 st	
2560	1644	...	...	d'A	8 11 42	3·51	68 34·8	11·0	F, pL	
2561	...	...	...	Sw VI	8 12 6	3·17	84 54·4	11·0	vF, S, R, 2 st Δ	
2562	1645	500	III 607	...	8 12 13	3·51	68 25·9	11·0	vF, cS, R	
2563	1646	501	II 634	...	8 12 25	3·51	68 29·7	11·0	eF, S, R, bM	
2564	1647	3119	...	...	8 12 28	2·63	111 22·6	11·0	vF, S, R, gbM, am many st	
2565	...	...	...	J G Lohse	8 12 30	3·53	67 30·5	11·1	F, biN	
2566	1648	...	III 288	...	8 12 49	2·55	115 1·9	11·0	vF, cL, er	
2567	1649	{503=3120}	VII 64	...	8 12 58	2·42	120 12·3	11·1	Cl, pL, pRi, lC, iR, st 11...14	
2568	...	...	...	Barnard	8 13 3	2·24	126 41·4	11·1	vF, pL, F ✶ inv	
2569	1650	...	...	d'A	8 13 11	3·50	68 41·8	11·1	vF, cE, 3 vS st f	
2570	5415	...	...	Copeland (R)	8 13 11	3·50	68 38·9	11·1	ceF, L, R, n of 2	
2571	1651	502	VI 39	...	8 13 15	2·44	119 18·6	11·1	Cl, vL, cRi, lC, st 9...	
2572	5416	...	...	St VIII	8 13 20	+3·47	70 24·7	11·1	eF, vS, iF, ✶ 13 att	
2573	1652	3176	...	...	8 13 ±	−141	179 41·1	7·7	F, S, R, glbM, Polariss Austr	
2574	...	...	...	O St II	8 14 9	+2·90	98 31·5	11·1	eF, pS, rr, ✶7·5 nf 5′	
2575	...	...	...	St IX	8 14 25	3·58	65 15·6	11·2	eF, pL, iR, sev F st inv	
2576	5417	...	...	m 118	8 14 32	3·61	63 50	11·2	cF, cS, stellar	
2577	1653	...	II 259	Schultz	8 14 39	3·54	67 0·2	11·2	F, S, iF, r	
2578	1654	3121	III 902	...	8 14 49	+2·82	102 52 6	+11·2	F, vlE, gbM, r, am 50 st	

No.	G.C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
2579	1655	3122	...	...	8 15 35	+2·27	125 46·6	+11·2	D ✱ (h 4083) in pS neb, am 70 st	
2580	1656	3123	...	...	8 15 44	2·44	119 52·1	11·2	Cl, eL, pRi, pC, R, st 12	
2581	...	...	...	St XIII	8 16 29	3·45	70 57·1	11·4	vF, vS, R, vF ✱ inv, F ✱ att	
2582	1657	504	III 753	...	8 17 3	3·49	69 13·4	11·4	vF, pS, R, glbM, ✱ p 75″	
2583	...	...	...	Mu II	8 17 7	2·98	94 31·3	11·4	vF, S, R, sbMN, 1st of 4	
2584	...	...	...	Mu II	8 17 19	2·98	94 30·3	11·4	vF, S, R, 2nd of 4	
2585	...	...	...	Mu II	8 17 25	2·98	94 27·3	11·4	vF, S, R, 3rd of 4	
2586	...	...	...	Mu II	8 17 31	2·98	94 29·3	11·4	eF, pS, R, 4th of 4 (? neb)	
2587	1658	3124	...	...	8 17 39	2·46	119 2·5	11·5	Cl, pmCM, iF, st 9...13	
2588	1659	3125	...	...	8 17 39	2·37	122 31·2	11·5	Cl, F, S, R, gbM, st 15	
2589	...	...	...	Sw VI	8 17 42	2·91	98 19·0	11·4	pF, pS, lE	
2590	...	...	...	St IX	8 17 53	3·07	90 8·4	11·4	F ✱ inv in vF. vS, lE neb	
2591	5418	...	...	d'A	8 18 16	8·41	11 30·3	11·6	F, S, E, lbM	
2592	1660	505	II 315	...	8 18 43	3·62	63 34·5	11·5	pF, S, R, vsbM ✱	
2593	5419	...	...	m 119	8 18 49	3·41	72 10	11·5	eF, vS	
2594	5420	...	...	m 120	8 18 52	3·61	63 40	11·5	eF	
2595	1661	506	III 599	...	8 19 34	3·51	68 3·8	11·6	vF, pL, iF, r, D ✱ sp 2′	
2596	5421	...	...	m 121	8 19 37	3·42	72 15	11·6	vF, S, lE	
2597	5422	...	...	m 122	8 21 49	3·51	68 2	11·7	eF, vS	
2598	5423	...	...	m 123	8 21 54	3·51	68 2	11·7	F, S	
2599	1662	507	III 234	...	8 23 58	3·53	66 58·2	11·9	vF, S, stellar	
2600	...	...	...	Bigourdan	8 24 12	4·51	36 48·7	11·8	No description	
2601	1663	3126	...	...	8 24 28	0·44	157 39·4	11·8	F, pS, R, gbM	
2602	1664	508	...	...	8 24 33	4·51	36 41·5	11·9	eF, S, R, ✱ 95°	
2603	1667	...	...	Ld R	8 24 48	4·50	36 44	11·9	eF, vS	*
2604	1665	509	III 292	...	8 24 49	3·69	59 59·2	11·9	vF, pL, R, lbM, r, D ✱ nr	
2605	1668	...	...	Ld R	8 24 52	4·50	36 41	12·0	F, S, lbM	*
2606	1666	510	...	...	8 25 8	4·50	36 44·9	12·1	eF, S, R, ✱ 310°	
2607	1669	511	...	...	8 25 27	3·63	62 32·9	12 0	eF	
2608	1670	512	II 318	...	8 26 44	3·66	61 3·6	12·1	F, vlE, mbM, r	
2609	1671	3130	...	...	8 26 49	1·17	150 38·5	12·0	Cl, pS, lRi, lC	
2610	1672	513 = 3127	IV 35	...	8 26 57	2·77	105 40·1	12·1	F, S, att to ✱ 13, ✱ 7 nf	
2611	5424	...	...	m 124	8 27 9	3·58	64 30	12·1	vF, S, pmE, gbM	
2612	1673	3128	...	...	8 27 15	2·83	102 41·9	12·1	B, S, E, psbM, bet 2 st	
2613	1674	3129	II 266	...	8 27 15	2·63	112 29·8	12·1	eB, L, vmE 110°	
2614	5425	...	...	d'A	8 27 28	6·64	16 32·2	12·2	eF, pS, R	
2615	...	...	...	St XIII	8 27 30	3·03	92 4·2	12·1	F, pS, lE, lbM, F ✱ inv r	
2616	...	...	...	Sw III	8 28 34	3·04	91 22·5	12·2	vF, S, R, ✱ nr nf	
2617	...	...	...	St XIII	8 28 39	3·00	93 36·6	12·2	eF, vS, 2 vF st inv	
2618	1675	515	III 257	...	8 28 49	+3·09	88 48·8	+12·2	eF, pL, iF	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2619	1676	514	II 319	...	8 29 1	+3·66	60 49·3	+12·2	F, pS, R, bM, r	
2620	5426	...	...	m 125, Lassell	8 29 9	3·60	64 35	12·2	F, S, E	
2621	5427	...	...	m 126	8 29 18	3·60	64 32	12·2	vF, S, R	
2622	5428	...	...	m 127	8 29 52	3·58	64 37	12·3	F, S, R	
2623	...	...	...	St XIII	8 30 3	3·59	63 45·6	12·3	vF, vS, R, bM, r	
2624	5429	...	...	m 128	8 30 6	3·46	69 48	12·3	eF	
2625	5430	...	...	m 129	8 30 19	3·46	69 48	12·3	eF, vS	
2626	1677	3131	...	...	8 30 28	2·18	130 11·1	12·3	∗9 inv in pB, pL, R neb	†
2627	1678	516 = 3132	VII 63	...	8 31 28	2·48	119 28·0	12·4	Cl, cL, pRi, pC, st 11...13	
2628	1680	...	III 235	...	8 31 51	3·54	65 57·3	12·4	eF, S	
2629	1679	...	III 982	H O N, d'A	8 32 0	6·58	16 31·5	12·5	vF, S, stellar	*
2630	...	...	...	T IX	8 32	6·58	16 30 ±	12·5	2 vF, vS, v nr III 982	
2631	...	...	...	T IX	8 32	6·58	16 30 ±	12·5		
2632	1681	517	...	Hipparchus, M44	8 32	3·46	69 32	12·4	Præsepe Cancri	
2633	...	...	...	T VI, IX	8 32 22	6 86	15 23·2	12·5	F, S, lE	
2634	...	...	...	T VI, IX	8 32 34	6·83	15 31·2	12·5	F, S, lE	
2635	1683	3133	...	...	8 32 58	2·36	124 16·2	12·5	Cl, pmC, irr Δ, st 13...	
2636	...	...	...	T IX	8 33 0	6·72	15 51	12·5	vF, S, 2 st 11·12 f	*
2637	5431	...	...	m 130	8 33 17	3·45	69 57	12·5	eeF, vS	
2638	...	...	...	St XIII	8 33 25	3·88	52 17·0	12·5	vF, vS, iF	
2639	1684	518	I 204	...	8 33 33	4·35	39 17·8	12 6	cB, S, E 130°, psmbM	
2640	1685	3134	...	...	8 33 42	1·60	144 37·8	12·5	pB, S, R, 3 or 4 vS st p nr	
2641	1682	...	III 983	H O N, d'A	8 33 46	6·54	16 35·4	12·6	vF, S, stellar	*
2642	1686	519	...	d'A	8 33 49	3·01	93 38 8	12·5	vF, pL, gbM, 2 B st s, one f	*
2643	5432	...	...	m 131	8 34 8	3·45	69 59	12·6	eF neb ∗	
2644	...	...	...	St IX	8 34 9	3·17	84 31·4	12·6	vF, pL, irr oval, sev S points	
2645	1687	3136	...	...	8 34 21	2·00	135 43·9	12·6	Cl, S, st L and S	
2646	...	...	...	T IX	8 34 35	6·66	16 1	12·7	vF, S, 2F st 2′·5 sf	*
2647	5433	...	...	m 132	8 34 42	3·45	69 52	12·6	Neb ∗	
2648	1688	521 = 3135	III 49	...	8 34 51	3·35	75 13·0	12·6	F, S, vlE 135°, psbM	
2649	1689	522	II 727	...	8 35 18	3·80	54 47·3	12·7	F, L, R, r	
2650	1690	...	II 908	...	8 36 10	6·02	19 11·4	12·8	pB, pL, iF, er	
2651	5434	...	...	m 133	8 36 11	3·29	77 45	12·7	eF, S, E	
2652	...	...	...	O St II	8 36 12	3·01	93 6·7	12·7	F, pS, E 50°, gbM stell N, ∗9 sp 50″	
2653	...	...	...	T VI	8 36 41	8·29	11 4	12·9	vF, vS, F ∗ close n, I 288 s	
2654	...	...	...	T VI	8 36 55	4 91	29 13	12·8	pF, S, F ∗ in M, F ∗ close sp	
2655	1691	520	I 288	. .	8 37 2	8·24	11 15·6	12·9	vB, cL, lE 90°, gsvmbM	
2656	1692	523	...	...	8 37 28	4·50	35 36·8	12·8	eF, psbM	
2657	...	...	...	St XIII	8 37 41	+3·25	79 51·1	+12·8	vF, vS, iR, F ∗ att f	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2658	1693	4017	...	h o n, Δ 609	8 37 46	+2·42	122 9·1	+12·8	Cl, pS, lRi, lC, iF, st 12·13	
2659	1694	3137	...	...	8 37 50	2·06	134 27·3	12·8	Cl, L, Ri, pmE, st 11...14	
2660	1695	3138	...	...	8 38 1	1·98	136 42·3	12·8	Cl, pS, mC, iR, gbM, st 13...15	
2661	1696	...	III 50	Bigourdan	8 38 16	3·31	76 52·7	12·9	eF, cL, R, lbM	*
2662	1697	3139	...	...	8 39 0	2·80	104 47·3	12·9	vF, vS, R, bM, * 15 nr	
2663	...	...	...	Sw III	8 39 30	2·40	123 19·8	12·9	pF, pS, lE	
2664	1698	524	...	...	8 39 30	3·31	76 53·2	12·9	Cl, st 9...10	
2665	...	...	...	Mu II	8 39 38	2·72	108 48·6	12·9	F, S, R, gbMN	
2666	1700	525	...	...	8 40 20	4·18	42 25·7	13·0	Cl, lC	
2667	1699	...	...	d'A	8 40 21	3·43	70 27·8	13·0	eF	
2668	...	...	...	St IX	8 40 24	3·84	52 46·0	13·0	vF, vS, R, r	
2669	1701	3140	...	Sûfi	8 40 51	1·69	143 27·5	13·0	Cl, L, P, lC, st 10 ..13	
2670	1702	3142	...	...	8 41 3	1·93	138 16·5	13·0	Cl, pL, P, lC, st 13...	
2671	1703	3141	...	Δ 489? 490?	8 41 7	2·17	131 22·5	13·0	Cl, pRi, lCM, st 12...13	
2672	1704	526	II 80 = II 48	...	8 41 23	3·43	70 24·8	13·1	pB, pL, iR, mbM	*
2673	1705	...	...	Ld R	8 41 25	3·43	70 24·9	13·1	vF, vS, close f h 526	
2674	...	...	...	O St I	8 41 35	2·82	103 46·4	13·1	eF, S, neb?	
2675	1706	...	...	d'A	8 41 52	4·46	35 58·8	13·1	vF, R, * 15 p 12'	
2676	...	...	...	Sw VI	8 41 58	4·20	41 54·5	13·1	eeF, pS, R, 4 pB st nf	
2677	1707	527	II 48?	...	8 42 1	3·43	70 28·3	13·1	eF, vS, rr (vS Cl)	*
2678	1708	528	VIII 10	...	8 42 33	3·28	78 8·8	13·1	Cl, vlC, P	
2679	1709	529	III 294	...	8 42 59	3·69	58 36·6	13·2	pF, pS, R, bM } D neb	
2680	1710	..	...	Ld R	8 43 0	3·69	58 36·6	13·2	vF, vS, R, bM } D neb	
2681	1711	530	I 242	...	8 43 28	4·35	38 9·8	13·2	vB, vL, vg, vsmbM * 10	
2682	1712	531	...	M 67 Oriani	8 43 34	3·29	77 40·6	13·2	! Cl, vB, vL, eRi, lC, st 10...15	
2683	1713	532	I 200	...	8 43 59	3·75	56 3·4	13·2	vB, vL, vmE 39°, gmbM	
2684	1714	533	III 712	...	8 45 2	4·25	40 18·6	13·3	F, pL, R, gbM, 4 S st nr	
2685	...	...	...	T VI	8 45 4	4·75	30 41	13·3	pF, R, F * in centre	
2686	1715	...	...	Ld R	8 45	4·25	40 20 ±	13·3	vF, vS, D or * close f	
2687	1716	...	...	Ld R	8 45	4·25	40 19 ±	13·3	vS	
2688	1717	...	...	Ld R	8 45	4·25	40 21 ±	13·3	vvF, S	
2689	...	...	...	Ld R	8 45	4·25	40 22 ±	13·3	vvF, S	
2690	..	...	...	Sw III	8 45 14	3·03	92 5·8	13·3	pF, S, E	
2691	1718	...	II 658	...	8 45 43	3·91	49 55·2	13·4	pF, vS, mbM	
2692	1719	534	III 831	...	8 46 50	4·37	37 24·1	13·4	vF, S. R, psbM	
2693	1720	535	II 823	...	8 46 58	4·33	38 7·1	13·4	pB, lE, psmbM	*
2694	5435	...	...	Ld R	8 46 58	4·33	38 8	13·4	vF, vS, 1's of h 535	
2695	1721	536	II 280	...	8 47 23	3·03	92 32·1	13·4	pF, eS, R	†
2696	...	...	...	O St I	8 47 30	+2·99	94 27·2	+13·5	eF, vS, stellar	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2697	1725	...	...	Ld R	8 47 58	+3·03	92 27·2	+13·5	vF, vS, R	
2698	1726	538	...	...	8 48 32	3·03	92 38·6	13·5	vF, pS, R, *9 np 4′	
2699	1727	...	...	d'A	8 48 44	3·03	92 35·0	13·5	vF, S, R, *15 np	
2700	5437	...	...	Tempel	8 48 45	3·03	94 34	13·5	eF, vS, 1′ n of 1727	
2701	1728	537	IV 66	...	8 48 46	4·44	35 41·4	13·6	pB, fan-shaped, *11 att	†
2702	5436	...	...	Tempel	8 48 49	3·03	92 31·2	13·6	vF, vS, 4′ nf 1727	
2703	5438	...	...	Tempel	8 48 50	3·02	92 45	13·6	eF, lE, doubtful	
2704	1729	...	III 625	...	8 48 54	3·89	50 7·4	13·6	vF, vS	
2705	5439	...	...	Tempel	8 48 55	3·03	92 28·2	13·6	vF, vS, 3 st 14 f, nf	
2706	...	...	...	Sw III	8 49 4	3·03	92 2·5	13·6	vF, pS, mE, *nr f	
2707	5440	...	...	Tempel	8 49 5	3·03	92 32	13·6	eF, S	
2708	1730	...	II 281	d'A	8 49 6	3·02	92 49·1	13·6	pF, pS, E, 2 st nr	
2709	1722	...	...	Ld R	8 49 11	3·02	92 42·0	13·6	vF, pS, lE, nnf II 281	*
2710	1731	...	III 841	...	8 49 15	4·54	33 46·9	13·6	vF, S	
2711	5441	...	...	m 134	8 49 31	3·39	72 11	13·6	vF, S, R	
2712	1732	540	...	...	8 50 4	4·07	44 33·4	13·7	pB, L, E, vgbM *18	
2713	5442	...	...	m 135, d'A	8 50 5	3·13	86 32·4	13·7	pB, iR, mbM	
2714	1733	3143	...	...	8 50 6	1·45	148 41·4	13·6	eF, S, R, pslbM	
2715	5443	...	...	Borelly	8 50 9	7·88	11 22·6	13·7	pB, L, E	
2716	5444	...	...	m 136, d'A	8 50 19	3·13	86 22·9	13·6	F, S, R, mbM	
2717	1734	3144	...	...	8 50 52	2·63	114 8·0	13·7	pF, S, R, vgpmbM	
2718	{1735 = 1736}	542	II 557	...	8 51 20	3·19	83 8·5	13·7	F, pL, E, am 3 st	*
2719	1737	541	III 540	...	8 51 26	3·79	53 44·1	13·7	vF, S, E 110°, 2 vF st inv	
2720	5445	...	...	m 137, T I	8 51 30	3·27	78 18	13·7	F, S, R, bM	
2721	1739	543	II 529	...	8 51 59	3·00	94 21·5	13·7	cF, pL, R, vgbM	
2722	1740	...	III 264	...	8 52 29	3·02	93 11·1	13·8	vF, vS, stellar	
2723	5446	...	...	m 138	8 53 2	3·13	86 16	13·8	F, S, R	
2724	1741	544	...	...	8 53 7	3·78	53 42·7	13·8	eF, S, stellar	
2725	5447	...	...	m 139	8 53 26	3·27	78 22	13·8	F, pL, p of 2	
2726	1742	545	II 834	...	8 53 53	4·77	29 29·8	13·9	cF, pS, iR, er	*
2727	1743	546	...	...	8 54 2	3·02	92 50·3	13·9	vF, L, R, bM	
2728	5448	...	...	m 140	8 54 3	3·27	78 22	13·9	vF, pL, lE, f of 2	
2729	5449	...	...	m 141	8 54 3	3·14	85 44	13·9	vF, vS, R	
2730	5450	...	...	m 142	8 54 26	3·37	72 35	13·9	vF, L, R	
2731	5451	...	...	m 143	8 54 35	3·22	81 8	13·9	F, vS, R	
2732	1738	539	...	d'A	8 54 42	8·39	10 15·0	13·9	pB, S, E 45°, *13 nf	
2733	1744	547	...	...	8 55 1	3·02	93 10·9	13·9	eF, R	
2734	5452	...	...	m 144	8 55 11	3·37	72 33	13·9	eF, vS, R	
2735	...	...	...	St IX	8 55 23	3·55	63 31·0	13·9	S *inv in vF, vS neb, E pf	
2736	1745	3145	...	...	8 55 31	+2·10	135 20·9	+13·9	! eeF, vL, vvmE 19°	†

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2737	1747	...	...	d'A	8 55 56	+3·47	67 32·5	+14·0	vF, vS } D neb	
2738	1746	...	...	d'A	8 55 57	3·47	67 28·8	14·0	pB, S, iF } D neb	
2739	1749	...	...	Ld R	8 56 4	4·31	37 40	14·0	vF, S, R, np h 549	
2740	1748	549	...	...	8 56 6	4·31	37 41·4	14·0	vF, pS, R	
2741	5453	...	...	m 145	8 56 23	3·40	71 11	14·0	vF, p of 2	
2742	1750	550	I 249	...	8 56 28	4·79	28 57·9	14·1	cB, cL, E 90°, er	
2743	1751	...	III 608	...	8 56 34	3·53	64 26·9	14·1	eF, S, R, vlbM	
2744	1752	551	III 60	...	8 56 43	3·40	70 59·2	14·1	vF, S, R, r, D ∗ nr	
2745	5454	...	...	m 146	8 56 45	3·40	71 12	14·1	eF, vS, stell, f of 2	
2746	1754	552	III 825	...	8 57 15	3·76	54 3·9	14·1	eF, S, R, vglbM, ∗ 12 nnp 50″	
2747	5455	...	...	m 147	8 57 23	3·40	71 0	14·1	vF, vS, stellar	
2748	1753	548	...	...	8 57 27	7·17	12 57·6	14·2	pB, pL, E, vglbM	
2749	1755	..	...	d'A	8 57 27	3·40	71 7·9	14·1	pF, S, R, bMN = ∗ 15	
2750	1756	...	III 291	d'A	8 57 35	3·53	64 0·5	14·1	vF, cL, R, bMN, 2 c st p	*
2751	5456	...	...	m 148	8 57 40	3·39	71 11	14·1	eF, eS, stellar	
2752	5457	...	...	m 149	8 57 48	3·39	71 7	14·1	pF, pL, vmE, gbM	
2753	1757	...	...	d'A	8 57 55	3·53	64 6·2	14·1	vF, vS, ∗ 14 np 40″	*
2754	...	...	...	Mu II	8 58 44	2·75	108 31·9	14·2	eF, S, R, 1st of 3	
2755	1758	...	III 626	...	8 58 52	3·93	47 44·5	14·2	vF, S, iF, lbM, r	
2756	1759	553	II 828	...	8 58 52	4·39	35 35·4	14·2	pB, pS, E, vgbM	
2757	...	...	...	Mu II	8 59 8	2·75	108 28·9	14·2	eF, 2nd of 3, ? ∗	
2758	...	...	...	Mu II	8 59 14	2·75	108 28·9	14·2	eF, S, E 0°, 3rd of 3	
2759	1760	554	III 647	...	8 59 33	3·81	51 48·7	14·2	vF, cS, R	
2760	...	...	...	Sw VI	8 59 33	7·09	13 3·0	14·3	vF, S, R, nearly bet ∗ 8 & ∗ 9	
2761	5458	...	...	m 150	8 59 37	3·40	71 1	14·2	vF, S	
2762	1767	...	...	Ld R	9 0 12	4·22	39 1·4	14·3	vvF, S, R, 1st of 4	
2763	1761	560	III 275	...	9 0 14	2·82	104 56·4	14·3	vF, pS, bM, S ∗ 30″ n	
2764	1762	557	III 236	...	9 0 15	3·45	67 59·8	14·3	cF, vS, R, er, bet 2 pB st	
2765	1763	558	II 520	...	9 0 17	3·14	86 2·6	14·3	vF, pL, E, gbM, er	
2766	...	...	...	St XIII	9 0 23	3·62	59 34·5	14·3	vF, vS, iF, bM	
2767	1764	556	...	...	9 0 29	4·22	39 2·1	14·3	vF, sbM ∗ 15, 2nd of 4	
2768	1765	555	I 250	...	9 0 42	4·73	29 23·4	14·3	cB, cL, lE, psbMLBN	
2769	1766	559	...	...	9 0 48	4·22	39 0·4	14·3	pF, S, E. pslbM, 3rd of 4	
2770	1768	562	II 490	...	9 0 57	3·69	56 18·4	14·3	F, L, mE 150°, r, 2 st n	
2771	1769	561	...	...	9 1 0	4·23	39 4·4	14·3	vF, S, lE, 4th of 4	
2772	1770	3146	...	...	9 1 28	2·67	113 5·3	14·3	eF, lE, lbM	
2773	5459	...	...	m 151	9 2 18	3·20	82 15	14·4	vF, S, lE	
2774	1773	565	III 61	d'A, St IX	9 2 46	3·38	70 44·2	14·4	vF, S, R, am 5 S st	*
2775	1771	564	I 2	...	9 2 53	3·20	82 23·6	14·4	cB, cL, R, vgvsmbM, r	
2776	1772	563	...	...	9 2 56	4·01	44 28·3	14·5	pB, L, R, vgbM, r	
2777	5460	...	...	m 152	9 3 16	+3·20	82 13	+14·4	F, S	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2778	1774	566	II 564	...	9 3 44	+3·73	54 24·2	+14·5	pB, S, R, psmbM	
2779	1775	...	...	Ld R	9 3 48	3·73	54 22·7	14·5	eF, vS, 92″ nf h 566	
2780	1776	567	III 826	...	9 4 4	3·73	54 30·4	14·5	vF, S, R, S D ∗ p	
2781	1777	569 = 3147	I 66	...	9 4 50	2·84	104 14·7	14·5	B, S, vlE, psmbM	
2782	1778	568	I 167	...	9 5 11	3·86	49 18·8	14·6	cB, R, mbMBN	
2783	1779	...	III 295	...	9 5 21	3·61	59 23·4	14·6	vF, vS, R, 2 pB st sp	
2784	1780	571 = 3148	I 59	...	9 6 5	2·67	113 35·9	14·6	B, L, mE 64°, gmbM	
2785	...	...	...	St XIII	9 6 15	3·88	48 30·4	14·6	eF, pS, iE, sev eF st inv	
2786	5461	...	...	m 153	9 6 17	3·28	77 17	14·6	vF, vS, mbM	
2787	1781	570	I 216	...	9 6 33	5·54	20 13·0	14·7	B, pL, lE 90°, mbM, r, vS ∗ sf inv	
2788	1782	3150	...	...	9 6 36	0·87	157 21·8	14·6	vF, vS, mE 105°	
2789	...	...	...	St XIII	9 6 37	3·61	59 41·6	14·6	pF, S, R, gbM	
2790	5462	...	...	m 154	9 7 5	3·41	69 44	14·7	vF, S, R, lbM	
2791	5463	...	...	m 155	9 7 8	3·37	71 50	14·7	F, R	
2792	1783	3149	...	...	9 7 11	2·25	131 51·6	14·7	! ○, pB = ∗ 9, vS, R, am st	
2793	1784	572	...	...	9 8 11	3·71	54 59·1	14·8	vF, S, R, D ∗ p 5ˢ, n 5′	
2794	5464	...	...	d'A	9 8 12	3·37	71 49·2	14·7	eF, vS, sp of 2	
2795	5465	...	...	m 156, d'A	9 8 14	3·37	71 47·0	14·7	eF, vS, nf of 2	
2796	1785	573	III 296	...	9 8 17	3·62	58 31·8	14·8	eF, S, R, lbM	
2797	5466	...	...	d'A	9 8 26	3·37	71 41·6	14·8	eF, sev st nr	
2798	1788	...	II 708	...	9 8 32	3·90	47 27·6	14·8	pB, S, stellar	
2799	5467	...	...	Copeland (R)	9 8 40	3·90	47 28·0	14·8	F, eL, vmE, f II 708	
2800	1789	574	III 832	...	9 8 40	4·27	36 54·2	14·8	vF, S, lE, ∗ att, ∗ inv	
2801	5468	...	...	m 157	9 8 46	3·41	69 30	14·8	eF, pL	
2802	1786	575	III 62	d'A	9 8 47	3·39	70 27·1	14·8	vF, S, R, r, np of 2	
2803	1787	575	III 63	d'A	9 8 51	3·39	70 27·6	14·8	vF, S, R, r, sf of 2	
2804	1791	577	...	...	9 8 54	3·41	69 13·2	14·8	vF, S, R	*
2805	1790	...	III 878	...	9 8 55	4·97	25 18·6	14·8	vF, L, R, mbM	
2806	5469	...	...	Dreyer (R)	9 9 1	3·41	69 20·9	14·8	vF, stellar, p h 578	
2807	1792	...	...	d'A	9 9 4	3·41	69 22·8	14·8	vF, vS, h 578 f 7ˢ, n 2′	*
2808	1793	3152	...	Δ 265	9 9 10	1·19	154 17·3	14·8	! ⊕, vL, eRi, vgeCM, 45ˢ d, st 13...15	
2809	1794	578	...	...	9 9 11	3·41	69 20·9	14·8	vF, S, R	*
2810	1795	...	III 749	...	9 9 35	5·95	17 34·7	14·9	F, cS, bM	
2811	1796	580 = 3151	II 505	...	9 9 37	2·82	105 43·9	14·8	pB, pS, E, psmbM	
2812	5470	...	...	m 158	9 9 46	3·41	69 29	14·8	eF	
2813	5471	...	...	m 159	9 9 50	3·41	69 29	14·8	F	
2814	1797	...	II 868	...	9 9 53	+4·98	25 9·7	+14·9	F, S, iF, 1st of 2 (d'A, not found)	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2815	1799	3153	III 242	...	9 10 4	+2·69	113 2·3	+14·9	F, S, lE, gbM	
2816	1800	579	...	...	9 10 17	4·68	28 58·0	14·9	F, pmE	
2817	...	...	...	Sw VI	9 10 20	3·01	94 9·0	14·9	vF, pS, R	
2818	1801	3154	...	Δ 564	9 10 22	2·42	126 1·9	14·9	! ◯, pB, pL, R, vglbM, in L Cl	†
2819	5472	...	...	m 160, Palisa	9 10 22	3·34	73 13·1	14·9	pB, vS, R	
2820	1798	576	II 869	d'A	9 10 25	4·97	25 10·2	14·9	F, S, E, 2nd of 2	
2821	1802	3155	...	...	9 10 40	2·63	116 14·8	14·9	eF, ✶ 11 att	
2822	1803	3156	...	...	9 10 41	0·71	159 3·7	14·9	pF, vS, R, glbM	
2823	1805	...	...	Ld R	9 10 44	3·68	55 19·6	14·9	vF, S, R	
2824	5473	...	...	d'A	9 10 51	3·54	63 8·3	14·9	Cl, S, st F, vC	
2825	1806	581	...	...	9 10 51	3·68	55 40·7	14·9	F, pS, lE, bM	✶
2826	1807 = 1809	...	...	Ld R, d'A	9 10 52	3·68	55 47·8	14·9	vF, vS, R, h 581 n 7′	
2827	1808	...	...	Ld R	9 10 53	3·68	55 29·1	14·9	vF, vS, R, 1st of 3	
2828	1810	...	...	Ld R	9 11 3	3·68	55 28·6	14·9	vF, vS, R, 2nd of 3	
2829	1804	...	...	Ld R	9 11 9	3·68	55 45	14·9	eF, vS, R, nf 1807	
2830	1811	582	I 113	...	9 11 14	3·68	55 39·8	14·9	cB, cL, E, 1st of 3	✶
2831	1812	...	...	Ld R	9 11 15	3·68	55 39·2	14·9	F, S, lE, bM. 2nd of 3	
2832	1813	...	...	Ld R	9 11 16	3·68	55 38·9	14·9	F, vS, R, 3rd of 3	
2833	1814	...	...	Ld R	9 11 18	3·68	55 27·6	14·9	F, pS, R, 3rd of 3 in line	
2834	1815	...	...	Ld R	9 11 33	3·68	55 42·5	14·9	vF, S, R, bM	
2835	...	...	...	Barnard	9 11 34	2·71	111 46·0	14·9	F, ✶ 10 inv f, bet 2 st 9	
2836	1816	3157	...	...	9 11 42	0·76	158 45·8	14·9	F, pS, R, glbM	
2837	1819	585	...	...	9 11 45	2·82	105 53·2	14·9	eF, R, bM, ✶ f 8″·5	
2838	1820	583	III 627	...	9 11 50	3·81	50 7·3	15·0	vF, vS, R	
2839	1821	...	...	Ld R	9 12 6	3·68	55 46·6	15·0	vF, S, R	
2840	1822	586	III 827	...	9 12 14	3·71	54 2·4	15·0	cF, S, R, ✶ 10 np 2′	
2841	1823	584	I 205	...	9 12 19	4·19	38 26·0	15·0	vB, L, vmE 151°, vsmbM = ✶ 10	
2842	1824	3158	...	...	9 12 30	1·36	152 28·9	15·0	F, vS, bet 2 st	
2843	1825	...	III 64	...	9 12 41	3·39	70 28·9	15·0	S ✶ and neb	
2844	1826	...	III 628	...	9 12 53	3·83	49 15·9	15·0	cF, cS	
2845	1827	3159	...	...	9 13 3	2·39	127 25·6	15·0	vF, S, R, ✶ 12 att sf	
2846	...	...	...	Ld R*	9 13	2·85	104 15	15·0	vS Cl (neb ?), ✶ 10 sf 4′	
2847	1828	...	...	Ld R	9 13 30	2·82	105 55·0	15·1	vF, S, inv in h 587, np	✶†
2848	1829	587	III 488	...	9 13 32	2·82	105 55·6	15·1	vF, cL, E 45°, glbM, ✶ 11 nf 3′	†
2849	1830	3160	...	...	9 13 53	2·33	129 57·4	15·1	eF, cL, R, vglbM, rr	
2850	...	...	...	St XII	9 13 57	3·00	94 21·0	15·1	vF, vS, R, mbM	
2851	...	...	...	Sw III	9 14 0	2·82	105 55·3	15·1	eF, pS, mE, f III 488	
2852	1831	588	III 629	...	9 14 21	3·83	49 16·5	15·1	vF, cS, R, ✶ 10 p 2′, 1st of 2	
2853	1832	590	III 630	...	9 14 24	3·83	49 14·7	15·1	vF, S, vgbM, 2nd of 2	✶
2854	1833	589	III 714	...	9 14 30	+4·11	40 11·7	+15·1	cF, cS, vlE, pglbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
2855	1835	592	I 132	...	9 14 42	+2·90	101 19·0	+15·1	pB, pL, R, gmbMN	
2856	1836	591	III 713	...	9 14 44	4·11	40 9·3	15·1	cF, cS, lE, bM	
2857	1834	...	...	Ld R	9 15 20	4·11	40 4·4	15·2	vF, pL, 4 st p	
2858	5474	...	...	m 161	9 15 39	3·13	86 15	15·2	vF, S, mbM	
2859	1837	593	I 137	...	9 15 45	3·68	54 53·4	15·2	vB, pL, R, smbM	
2860	...	...	...	St XIII	9 15 58	3·84	48 20·4	15·2	vF, vS, R, gbM	
2861	5475	...	...	m 162, d'A	9 16 20	3·11	87 18·8	15·2	pF, S, iR, ✶ 14 f	
2862	5476	...	...	d'A	9 16 46	3·52	62 37·8	15·2	F, S, E, bM	
2863	1838	594	III 520	...	9 16 48	2·92	99 50·1	15·2	cF, S, E, bet 2 st 12, 16	
2864	5477	..	...	m 163	9 16 49	3·17	83 28	15·2	vF, pL, lE	
2865	1841	3161	...	...	9 17 11	2·71	112 34·6	15·3	B, S, R, gbM	
2866	1842	3162	...	...	9 17 22	2·02	140 30·4	15·3	Cl, lC	
2867	1843	3163	...	...	9 17 28	1·69	147 43·0	15·3	!! ○ = ✶ 8, vS, R, ✶ 15, 59°.13″	
2868	...	...	...	Mu II	9 17 30±	2·92	99 49·4	15·3	eF, S, R, 10ˢ p next (?RA 9ʰ 22ᵐ)	
2869	...	...	...	Mu II	9 17 30±	2·92	99 49·4	15·3	eF, pS, E 170°, gbM, bet 2F st	
2870	1844	595	III 846	...	9 17 38	4·45	32 1·7	15·3	cF, S, E, vglbM	
2871	5478	...	...	Ld R*	9 18 5	3·26	77 57·1	15·3	eF, h 597 sf 1′	
2872	{1839 = 1845}	597	{II 57 = II 546}	...	9 18 8	3·26	77 58·0	15·3	pF, pS, R, bM	*
2873	1846	...	...	Ld R	9 18 13	3·26	77 56·5	15·3	vF, vS, R, n of E neb	
2874	{1840 = 1847}	598	{II 58 = II 547}	...	9 18 13	3·26	77 58·5	15·3	vF, pL, mE	*
2875	5479	...	...	Ld R*	9 18 15	3·26	77 58·1	15·3	eF, nf h 598	
2876	...	...	...	St IX	9 18 17	2·98	96 7·0	15·3	F, S, sev vF st inv	
2877	5480	...	...	m 164	9 18 31	3·11	87 10	15·3	vF, S, vlE	
2878	5481	...	...	m 165	9 18 33	3·11	87 18	15·3	vF, S, vlE	
2879	5482	...	...	d'A	9 18 34	2·90	101 2·9	15·3	vF, vS, R, lbM	
2880	1848	596	I 260	...	9 18 35	4·76	26 54·3	14·4	B, cS, R, mbM, am st	
2881	...	...	...	Sw III	9 19 4	2·90	101 24·2	15·4	eF, pS, 2 st 4′ f	
2882	5483	...	...	m 166	9 19 8	3·20	81 26	15·4	F, pL, E	
2883	1849	3164	...	...	9 19 30	2·50	123 29·6	15·4	vF, S, vglbM, rrr, st 15	
2884	5484	...	...	d'A	9 19 37	2·90	100 57·0	15·4	F, S, r?	
2885	1850	599	...	...	9 19 42	3·45	66 23·0	15·4	eF, vS, E 90°	
2886	1851	3165	...	...	9 20 8	2·74	111 8·6	15·4	eeF, pL	
2887	1852	3168	...	...	9 20 11	1·37	153 12·5	15·4	F, S, R, pmbM, B ✶ nr	
2888	1853	3166	...	...	9 20 13	2·63	117 25·4	15·4	cF, S, R, gmbM	
2889	1854	600	II 555	...	9 20 25	2·90	101 2·3	15·4	pF, pS, vlE, vglbM, r	
2890	...	...	...	L I	9 20 35	2·86	103 55·3	15·4	eF, S, R, bMN	
2891	1855	3167	...	...	9 20 41	2·69	114 11·7	15·5	F, S, R, bM	
2892	...	...	...	Sw I	9 21 11	5·17	21 45·8	15·5	pF, pS, R, lbM	
2893	1856	602	III 297	...	9 22 0	+3·56	59 50·0	+15·5	vF, S, R, vsbM ✶ 12	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2894	1857	603	III 8	...	9 22 2	+3·20	81 39·7	+15·5	vF, E, er, 2 or 3 st inv	
2895	1858	601	...	...	9 22 12	4·42	31 54·4	15·6	vF, vS, R, vgbM, D ✱ 7′ s	
2896	5485	...	...	d'A	9 22 14	3·45	65 43·6	15·6	F, vS, R, ✱ 17 att	
2897	5486	...	...	m 167	9 22 29	3·11	87 12	15·6	eF, S	
2898	5487	...	...	m 168	9 22 37	3·11	87 20	15·6	vF, vS, lE	
2899	1859	3169	...	...	9 22 42	1·84	145 30·3	15·6	F, pL, R, gmbM, am 80 st	
2900	...	...	...	Sw III	9 23 5	3·00	85 15·5	15·6	eeF, pL, R	
2901	...	...	...	O St I	9 24	3·58	58 16 ±	15·6	No description	
2902	1860	...	III 276	...	9 24 12	2·86	104 7·3	15·6	vF, vS, stellar	
2903	1861	604·1	I 56	...	9 24 14	3·41	67 53·1	15·7	cB, vL, E, gmbM, r, sp of 2	†
2904	1862	3170	...	...	9 24 15	2·59	119 46·8	15·7	F, S, lE, psbM	
2905	1863	604·2	I 57	...	9 24 16	3·41	67 52·0	15·7	vF, cL, R, psbM, r, nf of 2	†
2906	1864	606	II 495	...	9 24 38	3·20	80 57·2	15·7	F, pS, lE, gbM	
2907	1865	607	II 506	...	9 25 3	2·83	106 7·5	15·7	pF, S, lE, mbsf	
2908	1866	...	III 977	...	9 25 16	7·88	9 37·5	15·8	eF, vS	
2909	1867	605	...	...	9 25 27	4·97	23 26·3	15·8	eF, S, psbM	
2910	1868	3171	...	...	9 25 37	1·99	142 17·4	15·7	Cl, cL, pRi, pC, st 10...14	*
2911	1869	608	II 40	...	9 26 15	3·23	79 13·8	15·8	F, pL, R, gbM, p of 2	
2912	5488	...	...	Schultz	9 26 18	3·23	79 12	15·8	eF, h 608 sp	
2913	5489	...	...	m 169	9 26 29	3·22	79 54	15·8	vF, pL, iR	
2914	1870	609	III 513	...	9 26 32	+3·23	79 16·4	15·8	vF, S, R, bMN, f of 2	
2915	1871	3174	...	...	9 26 54	−0·28	166 0·8	15·7	pF, pL, R, gbM	
2916	1872	610	II 260	...	9 26 59	+3·41	67 40·5	15·8	F, S, vlE	
2917	5491	...	...	m 170	9 27 21	3·04	91 53	15·8	pF, S, mbM	
2918	1873	611	III 298	...	9 27 24	3·59	57 41·0	15·8	vF, cS, R, sbMN	
2919	5490	...	...	T I	9 27 38	3·23	79 5·9	15·8	F, pS	
2920	1874	3172	...	...	9 27 49	2·77	110 13·9	15·8	eF, S, R, p of 2	
2921	1875	3173	III 597	..	9 28 2	2·77	110 18·0	15·9	vF, pS, lE, vglbM, f of 2	
2922	...	...	...	St XIII	9 28 15	3·71	51 40 8	15·9	vF, S, iR, lbM, r	
2923	5492	...	...	m 171	9 28 17	3·32	72 35	15·9	vF	
2924	1876	3175	...	...	9 28 32	2·84	105 46·7	15·9	pB, S, R	
2925	1877	3177	...	...	9 28 57	1·99	142 49·4	15·9	Cl, pRi, pC, D ✱ taken	
2926	...	...	...	Palisa	9 29 8	3·66	56 32·0	15·9	vF	
2927	5493	...	...	d'A	9 29 18	3·44	65 47·1	15·9	F, pL, R, lbM	
2928	5494	...	...	m 172	9 29 22	3·33	72 23	15·9	vF, S, R, bM	
2929	1878	...	...	d'A	9 29 32	3·43	66 12·5	15·9	eF, vS, lE, vlbM, 1st of 3	
2930	1879	...	...	d'A	9 29 33	3·43	66 10·2	15·9	eF, S, 2nd of 3	
2931	1880	...	...	d'A	9 29 41	3·43	66 7·8	15·9	eF, vS, 3rd of 3	
2932	1881	3179	...	...	9 30 7	2·22	136 19·0	16·0	Cl, eL, vRi, st L and S	
2933	5495	...	...	m 173	9 30 10	3·33	72 20	16·0	F, vS, lE, sp of 2	
2934	5496	...	...	m 174	9 30 13	+3·33	72 18	+16·0	eF, nf of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2935	1882	3178	II 556	...	9 30 17	+2·77	110 30·1	+16·0	pB, pS, vlE, gmbM	
2936	5497	...	...	m 175	9 30 26	3·11	86 38	16·0	vF, iR	
2937	5498	...	...	m 176	9 30 27	3·11	86 38	16·0	F, S, like a neb *	
2938	1883	612	III 963?	...	9 30 28	6·57	12 47·8	16·1	eF, S, iF, D * f 3′	
2939	1884	614	III 4	...	9 30 39	3·22	79 51·5	16·0	vF, S, vlE, bM, Δst nf	
2940	...	...	...	T I	9 30 39	3·22	79 46·5	16·0	vF, S, 5′ n of h 614	
2941	5499	...	...	m 177	9 30 39	3·33	72 19	16·0	eF, vS, lE, p of 2	
2942	1885	613	...	...	9 30 43	3·63	55 21·9	16·0	F, pL, vlE o°, vglbM	
2943	5500	...	...	m 178	9 30 47	3·33	72 20	16·0	F, S, iR, bM, f of 2	
2944	...	...	...	Palisa	9 30 57	3·59	57 3·7	16·0	F, vS, lbM	
2945	1886	3180	...	...	9 31 16	2·76	111 24·9	16·0	F, S, R, glbM, 2 or 3 S st nr	
2946	5501	...	...	m 179	9 31 16	3·32	72 20	16·0	vF, S, E	
2947	...	...	...	L I	9 31 35	2·90	101 48·0	16·0	eF, pL, iR, gbM	
2948	1887	615	III 519	...	9 31 35	3·18	82 24·0	16·1	vF, pL, vgbM	
2949	5502	...	...	m 180	9 32 9	3 32	72 35	16·1	vF, double?	
2950	1888	616	IV 68	...	9 32 22	4·41	30 31·3	16·1	B, pS, R, vgvmbMN	
2951	5503	...	...	m 181	9 32 29	3·08	89 37	16·1	pF, S, E	
2952	...	...	...	Mu II	9 32 30	2·94	99 31·0	16·1	eF, pS, iR, sbM, *9·5 f 30°	
2953	1889	3182	...	...	9 32 39	3·29	74 32·1	16·1	eeF, suspected	
2954	1890	3181	...	...	9 32 41	3·29	74 26·1	16·1	vF, S, R, n of 2	
2955	1891	620	III 541	...	9 32 46	3·66	53 29·0	16·1	cF, pS, iR, glbM, r	
2956	...	...	...	Mu II	9 32 48	2·80	108 32·0	16·1	vF, vS, R, *9·5 sf 4′	
2957	1892	617	...	...	9 33 8	5·75	16 22·2	16·2	eF, *13 nr	
2958	...	...	...	St IX	9 33 9	3·25	77 28·6	16·1	vF, pS, R, vlbM	
2959	1893	618	...	...	9 33 18	5·15	20 46·0	16·2	F, pL, R, vglbM, st n	
2960	1894	621	...	...	9 33 25	3·13	85 46·0	16·2	vF, R, gbM	
2961	...	...	...	Ld R*	9 33 33	5·15	20 45·1	16·2	cF, S, lE, nf h 618	
2962	5504	...	...	m 182	9 33 33	3·15	84 12	16·2	F, vS, vlE, psbM	
2963	1895	619	III 315	...	9 33 39	5·73	16 23·7	16·2	vF, vS, R, bM	
2964	1896	622	I 114	...	9 34 36	3·57	57 31·0	16·2	B, vL, lE, vgbM, sp of 3	
2965	1897	623	III 751	...	9 34 47	3·66	53 6·6	16·2	eF, vS, R, bM, r	
2966	...	...	...	St XIII	9 34 51	3·14	84 41·3	16·2	vF * in vF, lE neb, F * p 30″	
2967	1898	626	II 275	...	9 34 52	3·08	89 1·7	16·2	pF, pL, R, vglbM	
2968	1899	624	II 491	...	9 34 53	3·57	57 26·1	16·2	pB, pL, lE, vglbM, 2nd of 3	
2969	1900	628	III 527	...	9 34 59	2·96	97 57·4	16·2	vF, pS, iR, vglbM	
2970	1901	627	...	...	9 35 13	3·57	57 23·1	16·2	F, nf of 3	*
2971	...	...	...	St XIII	9 35 16	3·66	53 11·1	16·3	eF, pS iR, vlbM	
2972	1902	3183	...	Δ 397	9 35 17	2·14	139 41·5	16·2	Cl, S, lRi, pC, st 13	
2973	1903	4018	...	h o n	9 35 23	2·63	119 24·7	16·2	eF, pS, *8 f	
2974	1904	630	I 61	...	9 35 29	3·03	93 3·7	16·3	B. eS, iR, bM, *9 sp 43″	
2975	...	...	...	O St I	9 35 35	+2·84	106 0·8	+16·3	eeF, S, R, gbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
2976	1905	625	I 285	...	9 35 36	+5·05	21 26·6	+16·3	B, vL, mE 152°, st inv	
2977	1906	...	I 282	...	9 35 48	6·11	14 15·1	16·3	cB, pL, iF (place doubtful)	*
2978	...	...	...	Sw III	9 36 9	2·94	99 7·7	16·3	eF, S, R, III 528 n 10′	
2979	1907	631	III 521	...	9 36 17	2·94	99 44·7	16·3	pF, pS, vlE, psbM	
2980	1908	632	III 528	...	9 36 18	2·95	98 58·0	16·3	vF, pS, lE 0°, vglbM	
2981	...	...	...	Palisa	9 36 40	3·55	58 14·3	16·3	vF	
2982	1910	3184	...	...	9 36 52	2·33	133 33·7	16·3	Cl, P, E, st 10...11	
2983	1911	3185	III 289	...	9 37 8	2·79	109 49·9	16·3	F, pS, R, bM, r, stellar	*
2984	1912	633	III 34	...	9 37 23	3·23	78 20·2	16·4	eF, vS, R, bM (? PD 15′)	
2985	1909	629	I 78	...	9 37 38	5·58	17 4·5	16·4	vB, cL, R, psmbM, *inv f	
2986	1913	...	II 311	Engelhardt	9 37 47	2·78	110 38·3	16·4	pB, pS, iR, mbM	
2987	...	...	...	St XIII	9 38 22	3·14	84 25·0	16·4	eF, S, iF, sev vF st inv	
2988	1916	...	...	Ld R	9 38 50	3·39	67 21	✓16·4	eF, p h 634	
2989	1915	3186	...	...	9 38 52	2·83	107 44·4	16·4	F, R, gbM, D*f	
2990	1914	...	II 624	d'A	9 38 56	3·16	83 38·3	16·4	F, pS, lE 90°	
2991	1917	634	...	...	9 38 57	3·39	67 20·5	✓16·4	F, vS, bM, sp of 2	
2992	1918	635	III 277	...	9 38 58	2·88	103 41·1	16·4	cF, S, R, bM, stellar, p of 2	
2993	1919	637	III 278	...	9 39 5	2·88	103 43·4	16·4	cF, S, R. bM, stellar, f of 2	
2994	1920	636	...	...	9 39 22	3·39	67 15·9	✓16·5	F, S, R, bM, nf of 2	
2995	1921	3189	...	...	9 39 22	2·01	144 8·0	16·4	Cl, P, lC	
2996	1922	3187	...	...	9 39 28	2·78	110 56·8	16·5	vF, S, *20 f 1′	
2997	1923	3188	V 50	...	9 39 33	2·62	120 32·8	16·5	! vF, vL, vgvsbMN 4″, 19″·5 d	
2998	1924	638	II 717	...	9 40 2	3·82	45 15·5	16·5	pF, pL, E 51°, bMN, r	*
2999	1927	3191	...	Δ 397	9 40 5	2·17	139 47·2	16·5	Cl, S, lRi, iF, st 12...15	
3000	1928	...	...	Ld R	9 40 10	3·82	45 12·4	16·5	vF, S, iR, r	
3001	1929	3190	...	...	9 40 10	2·63	119 48·0	16·5	F, S, R, *12 att 320°	
3002	1925	...	...	Ld R	9 40 12	3·82	45 16·5	16·5	eeF, vS	
3003	1931	639	V 26	...	9 40 15	3·58	55 56·2	16·5	! cB, L, vmE 90°	
3004	1926	...	...	Ld R	9 40 20	3·82	45 14·0	16·5	eF, suspected	
3005	1932	...	...	Ld R	9 40 33	3·82	45 12·5	16·5	vF, pS, E nnpssf	
3006	1930	...	...	Ld R	9 40 37	3·82	45 18·7	16·5	vF, S, stellar	
3007	...	...	...	St XIII, L I	9 40 47	2·99	95 47·4	16·5	eF, S, iR, lbM, r	
3008	1934	...	...	Ld R	9 40 54	3·82	45 15·4	16·6	pF, S, E, *13·14 p 1′	
3009	1933	640	...	...	9 41 1	3·82	45 1·8	16·6	pF, R, bM, r, p of 2	
3010	1935	641	...	...	9 41 7	3·82	45 0·3	16·6	F, psbM, rr, f of 2	
3011	...	...	...	Sw III	9 41 16	3·56	57 9·2	16·5	eeF, eS, stellar	
3012	1938	...	...	d'A	9 41 32	3·49	54 38·7	16·6	vF, pL, R, com	
3013	5505	...	...	Ld R*	9 41 50	3·58	55 6·9	16·6	pF, pS, R, bM, h 645 f	
3014	1941	644	...	...	9 42 3	3·01	94 3·6	16·6	eF, pL, p of 2	
3015	5506	...	...	m 183	9 42 11	3·10	88 11	16·6	F, vS, alm stellar	
3016	5507	...	...	d'A, Ld R	9 42 15	+3·25	76 39·4	+16·6	vF, S, R, p of 2	

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					h m s	s	° ′	″		
3017	...	...	...	O St II	9 42 17	+3·04	92 12 7	+16·6	eF, vS, ✶ 11 np 3′	
3018	...	...	...	St X, Sw III	9 42 29	3·09	88 43 6	16·6	vF, vS, bM	
3019	1940	...	...	Ld R	9 42 30	3·25	76 39	16·6	eF, f of 2	
3020	1942 = 1939	646 = 642	III 51	...	9 42 31	3·25	76 32·0	16·6	eF, pS, lE o°, r	*
3021	1944	645	I 115	...	9 42 38	3·58	55 47·7	16·6	pB, pS, vlE, mbM, ✶ 10, 140°	
3022	1943	647	...	...	9 42 39	3·01	94 31·2	16·6	F, R, vglbM, f of 2	
3023	...	...	...	St X, Sw III	9 42 41	3·09	88 43·7	16·6	pF, pL, iR, lbM, dif	
3024	1945	648	III 52	...	9 42 54	3·25	76 36·3	16·6	eF, pL, E, r	
3025	1946	3192	...	...	9 42 58	2·78	111 5·3	16·6	eF, vS, R, ✶ 9 s	
3026	...	...	...	Sw III	9 42 58	3·49	60 49·1	16·6	eeF, pS, lE, v diffic	
3027	1947	643	V 23	...	9 43 10	5·47	17 8·4	16·7	vF, vL, lE, r	
3028	1948	3193	...	...	9 43 18	2·82	108 31·6	16·6	F, S, R, lbM	
3029	...	...	...	Sw III	9 43 26	2·97	97 17·4	16·6	pF, pS, R	
3030	...	...	...	L II	9 43 32	2·92	101 35·7	16·6	eF, vS, R, bM	
3031	1949 = 1953	649	...	Bode, M 81	9 43 56	5·07	20 16·7	16·7	! eB, eL, E 156°, gsvmbMBN	
3032	1951	650	...	...	9 44 0	3·50	60 6·6	16·7	F, S, sbM ✶ 12, bet 2 B st	
3033	1952	3194	...	...	9 44 2	1·98	145 45·7	16 7	Cl, pL, pRi, iF, st 11...12	
3034	1950	...	IV 79 = 4 H O N	Bode, M 82	9 44 10	5·14	19 38·7	16·7	vB, vL, vmE(ray)	
3035	...	...	...	St X	9 44 56	2·99	96 10·2	16·7	pF, pL, R, sev v F st inv	
3036	1954	3197	...	...	9 45 6	1·67	152 2·2	16·7	Cl, cL, lC	
3037	1955	3195	...	...	9 45 6	2·71	116 22·1	16·7	F, pS, R, lbM	
3038	...	...	...	Sw III	9 45 10	2·61	122 6·6	16·7	pB, pS, R	
3039	5508	...	...	m 184	9 45 12	3 11	87 12	16·7	vF, S, iR	
3040	...	...	...	St XIII	9 45 18	3·34	69 54·7	16·8	vF, vS, bM, r	
3041	1956	3196	II 98	...	9 45 25	3 30	72 40·1	16·8	⊕, F, L, R, vglbM, rr, 2 B st sp	
3042	5509	...	...	m 185	9 46 7	3·09	88 39	16·8	pB, S, vlE, gbM	
3043	1957	651	II 835	...	9 46 19	4·33	30 2·7	16·8	cF, pS, lE, vgbM, ✶ 10 n 7′	
3044	1958	652	III 254	...	9 46 27	3·10	87 46·0	16·8	vF, vL, vm E 122°	
3045	1959	3198	...	...	9 46 39	2·83	107 59·1	16·8	vF, pS, R, lbM. sp of 2	
3046	1960	3199	...	...	9 47 2	2·70	116 40·4	16·8	pF, R, sp of 2	
3047	...	...	...	Burnham and Hough	9 47 15	3·06	90 37·7	16·8	vF, S, R	
3048	5510	...	...	m 186	9 47 17	3·29	72 53	16·8	eF	
3049	...	...	...	St XII	9 47 23	3·20	80 4·1	16·8	vF, vS, F ✶ v nr	
3050	...	...	...	Mu II	9 47 32	2·95	99 43·6	16·8	vF, pS, vlE, gbMN	
3051	1961	3201	...	...	9 47 41	2·71	116 37·9	16·9	pF, S, R, gbM, nf of 2	
3052	1962	3202	III 272	...	9 47 51	2·84	107 58·7	16·9	F, pL, R, glbM, nf of 2	
3053	1963	3200	III 600	...	9 47 54	3·29	72 54·1	16·9	vF, S, vlE, gbM	
3054	...	...	...	Peters, O St I	9 48 0	+2·73	115 3	+16·9	pB, L, irr oblong	

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					h m s	s	° ′	″		
3055	1964	656	VI 4	...	9 48 0	+3·13	85 4·2	+16·9	F, pL, vlE, vgbM, rr, ✶7 f 92°	†
3056	1965	3203	...	...	9 48 16	2·69	117 38·6	16·9	pB, S, R, vgmbM, ✶11 att 204°	
3057	1966	...	III 978	...	9 48 24	7·50	9 3·7	17·0	eF, pL, vlbM, 2 S st s	
3058	...	...	...	L I	9 48 30	2·92	101 48·5	16·9	eF, pL, D or biN	
3059	1967	3205	...	...	9 48 31	0·65	163 16·3	16·9	F, L, iR, glbM, S ✶ inv	
3060	1968	3204	III 601	...	9 48 40	3·30	72 30·1	16·9	vF, cS, vlE, er	
3061	1970	653	II 903?	...	9 48 44	6·10	13 10·2	17·0	vF, pL, r	
3062	5511	...	...	m 187	9 49 22	3·10	87 54	16·9	vF, vS, alm stellar	
3063	1972	...	II 909?	H O N 5, d'A	9 49 27	5·36	17 12·4	17·0	F, pS, R	✳
3064	...	...	...	L I	9 49 30	3·00	95 42·5	16·9	eF, vS, E 45°	
3065	1969	654	II 333	d'A	9 49 40	5·36	17 9·4	17·0	pF, vS, R, bM, ✶11 nr	
3066	1971	655	II 334 = II 909?	d'A	9 49 45	5·35	17 12·3	17·0	vF, vS, vglbM	
3067	1973	657	II 492	...	9 50 8	3·53	56 57·9	17·0	pB, pL, E 106°, gbM, ✶9, 74°, 4′	
3068	1974	...	III 293	...	9 50 33	3·47	60 21·9	17·0	eeF, eS, stellar (?)	✳
3069	5513	...	...	Dreyer (R)	9 50 33	3·21	78 55	17·0	vF, vS	
3070	1975	659	II 59	...	9 50 39	3·21	78 58·5	17·0	pB, pS, R, gmbMN, am 3 st	
3071	...	...	...	Palisa	9 50 43	3·52	57 42·7	17·0	Neb ✶13 m	
3072	1976	3206	III 273	...	9 50 47	2·83	108 40·8	17·0	vF, pS, lE, glbM	
3073	1977	...	III 853	...	9 51 11	4·13	33 42·4	17·0	vF, S, vglbM	
3074	1978	660	III 542	...	9 51 19	3·59	53 55·8	17·0	vF, pL, iR, vgvlbM	
3075	1979	3207	...	...	9 51 20	3·26	74 53·9	17·0	vvF, ✶14 att, ✶11 f	
3076	1980	3208	...	...	9 51 32	2·85	107 30·4	17·0	eF, S, R	
3077	1982	658	I 286	...	9 51 59	4·95	20 35·7	17·1	cB, cL, mbM, R with ray	
3078	1981	3209	II 268	...	9 52 4	2·73	116 15·6	17·1	pB, S, R, mbM	
3079	1983	...	V 47	...	9 52 24	4·12	33 38·5	17·1	vB, L, mE 135°	
3080	1984	...	III 934	...	9 52 35	3·24	76 20·0	17·1	vF	
3081	1985	...	III 596	...	9 52 37	2·79	112 8·0	17·1	vF, cS, lbM, Δ S st np	
3082	1986	3210	...	...	9 52 41	2·67	119 41·8	17·1	vF, S, R, D ✶att	
3083	5514	...	...	m 188	9 52 42	3·04	92 13	17·1	eF, S, E	
3084	1987	3211	...	...	9 52 45	2·72	116 28·1	17·1	vF, S, R, ✶13 att sf	
3085	1988	3212	...	...	9 52 51	2·83	108 50·9	17·1	vF, S, R	
3086	5515	...	...	m 189	9 53 4	3·04	92 19	17·1	eF, S, iR	
3087	1989	3213	...	...	9 53 5	2·61	123 33·8	17·1	pB, S, R, pmbM, bet 2st	
3088	1990	661	III 24	...	9 53 18	3·37	66 55·9	17·1	vF, S	
3089	1991	3214	...	...	9 53 20	2·71	117 38·8	17·1	pF, pS, R, vS st inv	
3090	5516	...	...	m 190	9 53 23	3·04	92 18	17·1	vF, vS	
3091	1992	3215	II 293	...	9 53 39	2·83	108 57·9	17·1	pB, pS, iR, bM, p of 2	
3092	5517	...	...	m 191	9 53 41	3·04	92 23	17·1	eF, S	
3093	5518	...	...	m 192	9 53 47	3·04	92 18	17·1	eF, vS	
3094	...	...	...	Palisa	9 53 48	+3·27	73 33·6	+17·1	F, bM, ✶9 ½′ sf	

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					h m s	s	° ′	″		
3095	1993	3216	...	...	9 53 53	+2·66	120 52·9	+17·1	F, L, E, vgvlbM	
3096	1994	3217	...	...	9 54 3	2·83	108 58·0	17·2	eF, R, lbM, f of 2	
3097	...	...	...	Austin	9 54 20	4·30	29 12	17·2	Neb ✶? 2′ np h 662	
3098	1995	663	...	...	9 54 22	3·40	64 36·9	17·2	pB, S, E 85°, psbMN	
3099	1996	664	III 478	...	9 54 25	3·53	56 37·2	17·2	eF, S	
3100	1997	3218	...	...	9 54 28	2·66	120 59·6	17·2	pB, pS, R, gpmbM	
3101	5519	...	...	m 193	9 54 29	3·04	92 20	17·2	eF	
3102	1998	662	III 916	...	9 54 37	4·30	29 13·4	17·2	vF, vS, R, bM, ✶11, 142°	
3103	...	...	...	Sw III	9 55 19	2·66	121 0·7	17·2	eF, pL, R	
3104	1999	665	IV 48	...	9 55 19	3·68	48 35·5	17·2	eF, pL, E, vF ✶ inv	
3105	2000	3219	...	...	9 55 46	2·12	144 6·3	17·2	Cl, C, lE, st 13...16	
3106	2001	666	II 320	...	9 55 58	3·50	58 8·3	17·2	F, S, R, sbM	
3107	2004	...	II 898	...	9 56 0	3·24	75 49·8	17·2	pF, pL, iR, ✶8 148°, 112″	
3108	2002	3220	...	...	9 56 18	2·66	121 0·6	17·2	F, S, R, glbM	
3109	2003	3221	...	...	9 56 40	2·75	115 29·4	17·3	cF, vL, vmE 82°, lbM	†
3110	...	...	...	St XIII	9 57 3	3·00	95 47·0	17·3	F, vS, iR, r	
3111	2005	667	...	...	9 57 15	3·82	42 3·5	17·3	pB, S, R, smbM ✶12	
3112	...	...	...	O St I	9 57 35	2·82	110 6·3	17·3	eF, eS, R, ? neb	
3113	2006	3222	...	...	9 58 3	2·72	117 46·2	17·3	eF, L, Δ 2 st 8 m	
3114	2007	3224	...	Δ 297	9 58 11	1·93	149 26·8	17·3	Cl, eL, lC, B, st 9...14	
3115	2008	668 = 3223	I 163	...	9 58 16	2·99	97 2·5	17·3	vB, L, vmE 46°, vgsmbMEN	
3116	...	...	...	Palisa	9 58 39	3·49	58 12·7	17·4	Neb ✶13 m	
3117	...	...	...	St IX	9 58 55	3·11	86 24·4	17·4	vF, vS, R, S ✶ inv	
3118	...	...	...	St XIII	9 59 2	3·51	56 17·5	17·4	S group of vF st in vF neb	
3119	5520	..	...	m 194	9 59 14	3·25	74 58	17·4	vF	
3120	2009	3225	...	...	9 59 15	2·63	123 32·6	17·4	F, pS, R, gbM	
3121	2010	...	...	Lassell, 1848	9 59 20	3·25	74 56·5	17·4	pF, pL, glbM, ✶9·5 np (Anw 26)	
3122	2011	...	II 305	...	9 59 26	3·00	95 51·3	17·4	F, S, lE, er	
3123	5067	...	...	S. Coolidge	9 59 51	3·08	89 15·1	17·4	Neb, no description	
3124	2012	3226	...	...	10 0 2	2·85	108 33·6	17·4	F, pL, R, lbM, D ✶ s	
3125	2013	3227	...	...	10 0 15	2·70	119 15·2	17·4	cF, S, R, vgbM	
3126	5521	...	...	d'A, Struve	10 0 17	3·49	57 27·5	17·4	F, S, lE, N = ✶15	
3127	...	...	...	L I	10 0 35	2·89	105 27·3	17·4	eF, pL, mE 45°	
3128	...	...	...	L I	10 0 35	2·89	105 27·3	17·4	eF, pL, mE 170°, lbM	
3129	2014	669	III 65	...	10 0 40	3·30	70 53·7	17·5	eF, cS, vlE, r	*
3130	2015	670	...	...	10 0 45	3·20	79 20·7	17·5	eF, S, psbM, ✶5 sf	
3131	2016	671	...	...	10 0 57	3·30	71 5·2	17·5	pB, pS, pmE, gbM	
3132	2017	3228	...	...	10 1 8	2·52	129 45·1	17·5	!! ○, vB, vL, lE ✶9 M, 4′d	†
3133	...	...	...	L II	10 1 38	+2·94	101 18·3	+17·5	eF, vS, R	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3134	...	...	...	Todd	10 2	+3·22	76 59	+17·5	vF, disc	
3135	2019	672	...	...	10 2 10	3·76	43 21·2	17·5	F, S, R, gbM	*
3136	2018 = 2020	3229 = 3231	...	...	10 2 10	1·55	156 41·5	17·5	pB, pS, R, gbM, *13 n	*
3137	2021	3230	...	...	10 2 30	2·72	118 22·4	17·5	vF, S, lE	
3138	...	...	...	L II	10 2 30	2·94	101 15·3	17·5	eF, vS, R, 1st of 2	
3139	...	...	...	L II	10 2 30	2·94	101 7·3	17·5	eF, vS, R, 2nd of 2	
3140	...	...	...	L I	10 2 35	2·88	105 57·2	17·5	eF, pS, R, sbMN, 1st of 2	
3141	...	...	...	L I	10 2 35	2·88	105 57·2	17·5	eF, S, R, 2nd of 2	
3142	2022	3232	...	...	10 3 10	2·98	97 47·9	17·6	F, R (d'A, P D 43′·3, 1 obs)	
3143	...	...	...	Common	10 3 12	2·93	101 58	17·6	F, S	
3144	5522	...	...	d'A	10 3 17	5·44	15 4·5	17·6	vF, S, R, *13 att f	
3145	2023	673	III 518	...	10 3 18	2·94	101 44·3	17·6	F, pL, R, vgslbM	
3146	...	...	...	O St I	10 4 35	2·84	110 11·2	17·6	eF, S, R, gbM	
3147	2024	674	I 79	...	10 4 48	5·31	15 54·4	17·7	vB, L, R, vgvsvmbM !	
3148	2025	675	...	...	10 4 48	+3·86	38 49·4	17·6	*7 in photosphere 2′ or 3′ d	
3149	2027	3234	...	...	10 5 11	−0·51	169 43·9	17·6	F, S, lE, vlbM, *15 inv	
3150	...	...	...	Bigourdan	10 5 11	+3·59	50 39·5	17·6	vF, S	
3151	...	...	...	Bigourdan	10 5 12	3·59	50 41·2	17·6	vF, vS	
3152	2031	...	...	Ld R	10 5 16	3·59	50 27·5	17·6	eF, vS, iR, eF * close sp	
3153	2026	677	III 53	Peters	10 5 22	3·22	76 38·8	17·6	eF, pL, vlE, r, st inv	
3154	...	...	...	St X	10 5 24	3·27	72 16·5	17·6	F, S, R, lbM	
3155	2033	676	...	d'A	10 5 24	5·42	14 58·1	17·7	vF, S, R	
3156	2028	680	III 255	...	10 5 26	3·11	86 10·6	17·6	F, cS, R, psbM, *9·10 sf 2′	
3157	2029	3233	...	...	10 5 28	2·70	120 16·1	17·6	vF, pS, E, *8·9 sp	
3158	2030	678	II 639	...	10 5 30	3·59	50 32·6	17·7	cB, cS, R, psbM, r	
3159	...	...	...	Bigourdan	10 5 35	3·59	50 38·9	17·7	vF, vS, stellar	
3160	2032	...	...	Ld R	10 5 35	3·59	50 27·8	17·7	vF, vS, lE	
3161	...	...	...	Bigourdan	10 5 38	3·59	50 38·9	17·7	vF, vS	
3162	2034	682	II 43	...	10 5 44	3·35	66 34·3	17·7	pF, cL, R, vglbM, r, S * inv	
3163	2035	681	II 640	...	10 5 48	3·59	50 40·2	17·7	F, S, R, gbM	
3164	2036	679	...	...	10 5 49	4·05	32 38·8	17·7	eF, S, R, vglbM	
3165	2037	...	...	Ld R, St XIII	10 6 0	3·12	85 55·5	17·7	vF, mE 0°, 1st of 3	†
3166	2038	684	I 3	...	10 6 30	3·12	85 53 0	17·7	B, pS, R, psmbM, 2nd of 3	†
3167	2039	..	...	d'A	10 6 37	3·34	59 42·7	17·7	F, S, ? vS Cl of vF st	
3168	2040	683	...	...	10 6 45	4·19	29 4·6	17·7	F, psbM, stellar, *7·8 np 5′	
3169	2041	685	I 4	...	10 6 59	3·12	85 50 5	17·7	B, pL, vlE, pgmbM, *11,78°, 80″, 3rd of 3	†
3170	2042	686	...	...	10 7 32	3·75	42 42·7	17·7	F, S, R	
3171	...	...	...	O St I	10 7 35	2·84	109 56·1	17·7	eF, S, R, gbM	
3172	2043	250	...	...	10 8±	+87·5	0 6·8	+19·5	vF, R, gbM, *11 s 2′, Polarissima Borealis	*

No.	G. C.	J. H.	W. H.	Other Observers.	Rigbt Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3173	2044	3235	...	...	10 8 9	+2·75	116 59·7	+17·8	eF, S, R, 2 B st f	
3174	2045	...	III 964	...	10 8 16	5·42	14 38·6	17·8	cF, S, stellar, S ∗ f nr [Place??]	
3175	2046	3236	...	...	10 8 19	2·74	118 11·1	17·8	cB, L, mE 51°, vglbM	
3176	...	...	...	O St I	10 8 35	2·86	108 20·1	17·8	eF, pS, iR, ? neb	
3177	2047	687	III 25	...	10 8 52	3·32	68 10·7	17·8	cF, S, R, psbM	
3178	2048	3237	...	...	10 9 24	2·91	105 5·9	17·8	pB, pL, gpmbM	
3179	...	...	...	Ld R	10 9 30	3·62	48 15	17·8	S, R, bMN, in line with 2 st	
3180	2049	...	...	Ld R	10 9 45	3·62	47 53·2	17·8	vF, E } connected with h 688	
3181	2050	...	...	Ld R	10 9 47	3·62	47 54·2	17·8	vF, E }	
3182	2051	...	I 265	...	10 9 48	4·08	31 5·7	17·8	cB, cL, iR, vgbM	
3183	5523	...	...	d'A	10 9 48	5·32	15 7·1	17·9	F, pL, E, lbM	
3184	2052 = 2053	688 = 689	I 168	...	10 9 50	3·62	47 53·0	17·8	pB, vL, R, vgbM	*†
3185	2054	...	...	Ld R, d'A	10 9 55	3·32	67 36·8	17·8	pF, pL, gmbM	
3186	5524	...	...	m 195	10 9 57	3·15	82 15	17·8	pF, vS, gbM, sev F st nr	
3187	2055	...	...	Ld R	10 10 5	3·32	67 25·1	17·9	vF, E	
3188	2056	690	III 910	...	10 10 17	4·05	31 53·1	17·9	vF, pL, r	
3189	2057	...	...	Ld R, d'A	10 10 18	3·32	67 28	17·9	vvF, mE, parallel to h 692	†
3190	2058	692	II 44	...	10 10 22	3·32	67 28·2	17·9	B, pS, E, psbMN	†
3191	2059	691	...	...	10 10 26	3·73	42 51·8	17·9	F, S, R, bM	
3192	2060	...	III 704	...	10 10 28	3·73	42 43·7	17·9	eF, vS (? = h 691)	
3193	2061	693	II 45	...	10 10 41	3·32	67 24·4	17·9	B, S, vlE, pslbM, ∗ 9·5 354°, 80″	
3194	2062	...	III 965	...	10 10 47	+5·39	14 29·7	17·9	vF, vS [Place??]	
3195	2063	3241	...	...	10 10 52	−0·51	170 10·2	17·8	!○, pB, S, lE, 13ᵐd, 3 S st nr	†
3196	2064	694	III 348	...	10 10 54	+3·40	61 38·5	17·9	eeF, pS, lE	
3197	2065	...	III 966	...	10 10 58	6·11	11 4·9	17·9	vF, vS [Place??]	
3198	2066	695	I 199	...	10 11 14	3·70	43 44·3	17·9	pB, vL, mE 45°, vgbM	
3199	2067	3239	...	...	10 11 46	2·13	147 15·7	17·9	! vB, vL, falcate, D ∗ inv	†
3200	...	...	...	Holden	10 11 51	2·88	107 17	17·8	pB, E 160°, bMN	
3201	2068	3238	...	Δ 445	10 11 53	2·45	135 42·1	17·9	⊕, vL, iR, lCM, st 13...16	
3202	2069	696	II 720	...	10 12 5	3·64	46 18·7	17·9	cF, S, R, vgbM, 1st of 3	
3203	2070	3240	...	...	10 12 6	2·78	116 0·3	17·9	pB, S, cE, gbM	
3204	2071	698	...	...	10 12 13	3·40	61 28·9	17·9	eF, pL, gbM	
3205	2072	699	II 721	...	10 12 22	3·64	46 20·8	17·9	cF, S, R, vgbM, 2nd of 3	
3206	2073	697	I 266	...	10 12 31	4·01	32 22·1	17·9	pB, cL, E, vglbM	
3207	2074	700	II 722	...	10 12 33	3·64	46 18·8	17·9	cF, S, R, stellar, 3rd of 3	
3208	...	...	...	O St I	10 12 35	2·79	115 7·0	17·9	eF, pL, iR, gbM	
3209	2075	701	...	...	10 12 47	3·36	63 47·8	18·0	F, S, R, has a ∗	
3210	2077	...	III 979	H O N	10 12 10±	6·56	9 27	18·0	Stellar, 1st of 3 in line, 1′ apart	
3211	2076	3242	...	...	10 13 18	1·95	151 58·6	18·0	○ = ∗ 10, R, am 150 st	
3212	2078	...	III 980	H O N, d'A	10 13 30	+6·56	9 27·7	+18·0	vF, S, 2nd of 3	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3213	...	...	...	St XIII	10 13 38	+3·29	69 38·4	+18·0	vF, vS, R, r	
3214	5525	...	...	Copeland (R)	10 13 49	4·00	32 15·4	18·0	cB, vS, R, sbM, 5′ p III 911	
3215	2079	...	III 981	H O N, d'A	10 13 51	6·56	9 28·1	18·0	vF, S, 3rd of 3	
3216	2080	702	III 330	...	10 13 55	3·34	65 21·9	18·0	vF, pS, R, bM	
3217	...	...	...	Todd	10 14	3·19	78 24	18·0	vF disc	
3218	2081	...	I 283	...	10 14 23	5·30	14 37·9	18·0	cB, cL, er [Place??]	*
3219	...	...	...	St XII	10 14 23	3·55	50 43·0	18·0	eF, S, R, lbM	
3220	2082	...	III 911	...	10 14 26	4·00	32 15·9	18·0	pF, cL, E 92°, *9 f 9′·5	
3221	2083	...	...	d'A	10 14 39	3·31	67 42·2	18·0	eF, mE, ray	
3222	2084	...	...	Winnecke 1855	10 14 55	3·29	69 24·7	18·0	F, lbM, rr (Schultz, bi N); Auw 27	
3223	2085	3243	...	...	10 15 21	2·68	123 33·0	18·0	pB, vL, vlE, pslbMN	
3224	2086	3244	...	...	10 15 28	2·68	123 59·5	18·0	vF, pS, R, vgmbM	
3225	2087	703	II 882	...	10 15 43	4·03	31 9·3	18·1	cF, pL, lE, vgbM	
3226	2088	...	II 28	d'A, Schultz	10 15 47	3·29	69 23·8	18·1	pB, cL, R	
3227	2089	...	II 29	d'A, Schultz	10 15 51	3·29	69 25·8	18·1	pB, cL, R } D neb, 159°, 138″	
3228	2090	3245	...	Lac II 7, Δ 386	10 16 11	2·35	141 1·0	18·1	Cl, 9 L and a few S st	
3229	5068	...	...	S Coolidge	20 16 14	3·08	89 13·8	18·1	F	
3230	2091	705	...	...	10 16 16	3·21	76 44·4	18·1	pF, pS, sbM *14, *9·10s 19″	
3231	2092	704	...	...	10 16 26	4·46	22 29·1	18·1	Cl, cL, P, lC, st 10...12	
3232	2093	...	...	d'A	10 16 33	3·39	61 16·7	18·1	eF, *11 p 150″, ls, p of 2	
3233	...	...	...	O St I	10 16 35	2·84	111 32·9	18·1	eF, pL, iF, stell N	
3234	2094	706	...	...	10 17 5	3·37	62 16·1	18·1	pB, pS, R, psbM (?=2095)	*
3235	2095	...	...	d'A	10 17 5	3·38	61 16·6	18·1	F, S, f of 2	
3236	2096	707	...	...	10 17 17	4·14	28 1·3	18·1	eF, vS, psbM, 2 st 11·12 f	
3237	2097	709	III 631	...	10 17 28	3·56	49 39·8	18·1	vF, vS, R, pgbM	
3238	2098	708	II 883	...	10 17 29	3·98	32 4·4	18·1	F, S, R, pslbM	
3239	2099	710=3246	IV 10	...	10 17 31	3·26	72 8·3	18·1	vF, *9 inv nr M	†
3240	2100	3247	...	...	10 17 53	2·85	111 4·9	18·1	eF, S, R, * nr	
3241	2101	3249	...	...	10 17 57	2·72	121 45·5	18·1	F, pmE, glbM, *11 np	
3242	2102	3248	IV 27	LL 20204	10 18 2	2·89	107 56·1	18·1	! ○, vB, lE 147°, 45″d, *blue*	†
3243	...	...	...	Sw III	10 19 4	3·05	91 55·9	18·2	vF, S, lE, bet 2 st	
3244	2103	4019	...	h o n	10 19 21	2·61	129 6·4	18·2	vF, *11 n 90″	
3245	2104	711	I 86	...	10 19 26	3·39	60 46·9	18·2	vB, pL, E 0°, smbMEN	
3246	2105	712	...	...	10 19 26	3·12	85 26·4	18·2	eF, S, R, 2 st Δ, *6, 300°, 8′	
3247	2106	3250	...	...	10 19 38	2·20	147 10·6	18·2	st inv in neb	
3248	2107	713	II 347	...	10 20 3	3·31	66 26·5	18·2	pB, S, R, psbM	
3249	2108	3251	...	...	10 20 7	2·69	124 14·6	18·2	eF, pL, R, vgvlbM	
3250	2109	3252	...	...	10 20 26	2·63	129 13·8	18·2	pB, pL, R, vgpsbM, *13, 45°	
3251	2110	...	...	d'A	10 20 29	+3·35	63 11·7	+18·2	vF, pL, 3 B st sp	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
3252	2111	...	III 316	...	10 20 51	+5·05	15 27·2	+18·3	eF, pS, mE, r	
3253	...	...	...	Sw III	10 20 55	3·20	76 36·1	18·3	vF, pS, R	
3254	2112	714	I 72	...	10 21 27	3·39	59 47·7	18·3	cB, L, mE 45°, psmbMN	
3255	2113	3253	...	...	10 21 32	2·11	149 57·8	18·3	Cl, pS, vC, st 15	
3256	2114	3254	...	...	10 21 53	2·55	133 11·1	18·3	cB, S, R, gmbM	
3257	2115	3255	...	...	10 22 30	2·69	124 56·8	18·3	vF, vS, R, psbM, 1st of 4	
3258	2116	3256	...	...	10 22 37	2·69	124 53·1	18·3	cF, S, R, pslbM, 2nd of 4	
3259	2117	715	II 870	...	10 22 50	4·27	24 14·0	18·3	F, S, R, gbM	
3260	2118	3257	...	...	10 22 53	2·69	124 52·6	18·3	vvF, vS, R, pslbM, 3rd of 4	
3261	2119	3258	...	...	10 23 3	2·55	133 56·2	18·3	F, S, R, am st	
3262	2120	3260	...	...	10 23 8	2·55	133 29·1	18·3	eF, S, R	
3263	2122	3261	...	...	10 23 14	2·56	133 24·5	18·3	F, S, mE 280°, psbM	
3264	2124	716	...	...	10 23 18	3·90	33 11·6	18·4	eF, bet 2 S st	
3265	2123	718	III 349	...	10 23 20	3·38	60 29·6	18·3	pF, S, R, psbM, *sf	
3266	2125	717	II 871	...	10 23 34	4·25	24 31·9	18·4	cF, vS, R, psmbM*	
3267	2126	3262	...	...	10 23 34 ±	2·70	124 38·2 ±	18·3	eF, vS, R, 1st of 4	
3268	2127	3263	...	...	10 23 38 ±	2·70	124 39·2 ±	18·3	F, S, R, 2nd of 4	
3269	2128	3264	...	...	10 23 41	2·70	124 30·2	18·4	F, S, R, bM, 3rd of 4	
3270	2129	719	III 331	...	10 23 44	3·33	64 24·5	18·4	cF, vS, E, glbM	
3271	2130	3265	...	...	10 23 46	2·70	124 39·1	18·4	pF, S, E, pmbM, 4th of 4	
3272	5526	...	...	Schultz	10 23 58	3·37	60 48·8	18·4	F, vS, iR, b 721 nf	
3273	2121	3259	...	...	10 24 11	2·69	124 53 8	18·4	vF, vS, R, pslbM, 4th of 4	*
3274	2131	720	II 358	...	10 24 28	3·36	61 37·0	18·4	F, pL, R, glbM, D*f	
3275	2132	3266	...	...	10 24 34	2·68	126 1·4	18·4	F, L, vlE, pslbM	
3276	2133	3267	...	...	10 24 58	2·64	129 13·9	18·4	F, S, *8 p	
3277	2134	721	II 359	...	10 25 5	3·37	60 46·2	18·4	cB, cS, R, pgmbM	
3278	2135	3268	...	...	10 25 26	2·64	129 13·9	18·4	F, S, R, D*nf	
3279	...	...	...	Todd	10 25 30 ±	3 18	78 4	18·4	F, m E	
3280	...	...	...	Common	10 25 31	2·96	101 47	18·4	F, biN	
3281	2136	3269	...	...	10 25 34	2·71	124 8·1	18·4	eF, pL, E, glbM	
3282	...	...	...	Sw III	10 25 34	2·86	111 35·1	18·4	eF*in eF, vS neb, bet 2 st	
3283	2137	3271	...	...	10 26 51	2·54	135 22·1	18·5	pF, S, R, gbM	
3284	2138	...	III 912	...	10 26 59	3·94	30 44·4	18·5	eF, vS	
3285	2139	3270	...	...	10 27 1	2·81	116 44·2	18·5	pB, S, lE, gbM, 1st of 9	
3286	2140	722	III 917	...	10 27 9	3·95	30 40·2	18·5	vF, pS, R, pslbM	
3287	2141	...	...	d'A	10 27 10	3·28	67 37·3	18·5	F, pL, D*p 24^s, s 4′	
3288	2142	723	III 918	...	10 27 13	3·94	30 43·5	18·5	eF, cS, R, vglbM	
3289	2143	3272	...	...	10 27 47	2·71	124 34·5	18·5	eF, vS, R	
3290	...	...	...	L II	10 27 56	2·92	106 32·8	18·5	eF, S, lE 0°, gbM, B*n 6′	
3291	...	...	...	Bigourdan	10 28 1	3·48	52 0·8	18·5	*13 inv in vF neb	
3292	...	...	...	Sw VI	10 28 3	+3·02	95 26·7	+18·5	vF, vS, lE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3293	2144	3276	...	...	10 28 8	+2·26	147 28·2	+18·5	Cl, B, Ri, pL	*
3294	2145	724	I 164	...	10 28 10	3·47	51 57·1	18·5	cB, L, m E 135°, glbM	
3295	...	...	...	L I	10 28 30	2·96	101 55·7	18·5	eF, pL, bM, D or st inv	
3296	...	...	...	L I	10 28 30	2·96	101 59·7	18·5	eF, pS, R, bM	
3297	...	...	...	L I	10 28 30	2·96	101 57·7	18·5	eF, S, iR	
3298	2146	725	III 767	...	10 28 45	3·70	39 9·9	18·5	vF, pS, iE	
3299	2147	726	III 54	...	10 28 58	3·19	76 34·6	18·5	eF, cL, R, vgbM, r	
3300	2148	727 = 3273	III 55	...	10 29 11	3·21	75 6·5	18·5	cF, cS, R, pmbM, r, am *B* st	
3301	2150 = 2149	728	II 46	d'A	10 29 18	3·28	67 23·6	18·5	cB, S, lE 53°, psbM, r	*
3302	2151 = 2152	3274 = 3275	...	...	10 29 21	2·76	121 37·9	18·5	eF, S, R	*
3303	2153	730	III 66	...	10 29 27	3·25	71 8·8	18·5	vF, vS, vlE, glbM, r	
3304	2154	729	III 615	...	10 29 34	3·47	51 49·4	18·6	vF, cS, psbM, er	
3305	2155	3277	...	...	10 29 39	2·82	116 26·3	18·6	vF, S, R, 2nd of 9	
3306	...	...	...	Sw III	10 29 40	3·19	76 39·0	18·6	F, S, R	
3307	2156	3278	...	...	10 29 41	2·81	116 52·6	18·6	eeF, 3rd of 9	
3308	2157	3279	...	...	10 29 48	2·82	116 42·8	18·6	F, S, R, 4th of 9	
3309	2159	3280	...	...	10 30 1	2·82	116 48·1	18·6	B, L, R, p of D neb, 5th of 9	
3310	2158	731	IV 60	...	10 30 2	3·77	35 46·3	18·6	cB, pL, R, vg, vsmbMN 15″	†
3311	2160	3281	...	...	10 30 10	2·82	116 49·3	18·6	B, L, R, f of D neb, 6th of 9	
3312	2161	3282	...	...	10 30 29	2·82	116 51·7	18·6	cF, E, gbM, 7th of 9	
3313	...	...	...	O St I	10 30 35	2·84	114 35·7	18·6	eF, pS, iR, gbMN, * 15 n 3″	
3314	2162	3283	...	...	10 30 40	2·82	116 56·8	18·6	8th of 9 neb	
3315	...	...	...	Austin	10 30 41	2·82	117 2	18·6	vF, pL, iR, gvlbM, * 1′ np	
3316	2163	3284	...	...	10 31 0	2·82	116 52·8	18·6	F, S, R, bM, 9th of 9	
3317	...	...	...	Austin	10 31 0	2·82	116 48	18·6	Neb *, 5′ n of h 3284	
3318	2164	3285	...	...	10 31 6	2·64	130 54·4	18·6	cF, pL, pmE, lbM	
3319	2165	...	III 700	...	10 31 7	3·53	47 36·5	18·6	cF, L, iE, mb, s of M	
3320	2166	732	II 745	...	10 31 13	3·63	41 51·5	18·6	F, pS, mE, * 10 nf	
3321	...	...	...	L II	10 31 19	2·97	100 55·7	18·6	eF, pS, mE 160°, * np end	
3322	...	...	...	Common	10 31 47	2·98	100 39	18·6	F, iF, * p	
3323	...	...	...	St IX	10 31 57	3·31	63 56·9	18·6	vF, vS, R, lbM	
3324	2167	3286	...	Δ 322?	10 32 3	2·28	147 53·8	18·6	pB, vvL, iF, D * inv	
3325	...	...	...	St X	10 32 10	3·08	89 28·4	18·6	F, vS, vS * inv	
3326	5527	...	...	m 196	10 32 12	3·12	84 10	18·6	vF, eS, stellar	
3327	2168	734	II 348	...	10 32 18	3·30	65 11·0	18·6	vF, S, R, gbM, vS * att	
3328	...	...	...	T V, Peters	10 32 35	3·16	79 58	18·7	vF, F st inv	
3329	2169	733	...	...	10 32 40	5·26	12 26·6	18·7	pB, S, lE, psmbM	
3330	2171	3287	...	Δ 355	10 33 2	2·41	143 24·1	18·7	Cl, P, st 9...	
3331	...	...	...	Mu II	10 33 4	+2·86	113 5·7	+18·7	vF, S, vlE 0°	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3332	2170	...	I 272?	Schönfeld, Vogel	10 33 7	+3·16	80 5·4	+18·7	vF, S, lE 130?	*
3333	2172	3288	...	...	10 33 26	2·73	125 19·3	18·7	eF, vS, mE, * 15 att	
3334	2173	735	II 641	...	10 33 28	3·45	51 58 3	18·7	cF, vS, R, bM	
3335	...	...	...	Mu II	10 33 34	2·86	113 10·7	18·7	vF, S, iR, gbM	
3336	2174	3289	...	...	10 33 44	2·82	117 1·7	18·7	vF, pL, lE, glbM	
3337	5528	...	...	m 197	10 34 30	3·12	84 17	18·7	eF, vS, alm stellar	
3338	2175	737	II 77	...	10 34 42	3·20	75 31·5	18·7	F, cL, E, vgbM, * 7 p 10°	
3339	5529	...	...	m 198	10 35 1	3·08	89 38	18·7	eF, stellar	
3340	5530	...	...	m 199	10 35 8	3·08	89 39	18·7	F, S, R	
3341	5531	...	...	m 200	10 35 15	3·12	84 14	18·7	vF, vS	
3342	2177	...	III 5	...	10 35 26	3·16	79 49·7	18·7	eF, eS	
3343	2176	736	III 317	...	10 35 30	4·72	15 54·8	18·7	pF, S, R, gbM	
3344	2178	739	I 81	...	10 35 50	3·30	64 20 7	18·8	cB, L, gbM, * inv, 2 st f	
3345	2179	740	I 26??	...	10 36 9	3·18	77 16·7	18·8	eeF (if anything)	*
3346	2180	3290	V 7	...	10 36 11	3·20	74 23·2	18·8	cF, vL, R, vgvlbM, er	
3347	2181	3291	...	...	10 36 24	2·73	125 37·8	18·8	pF, S, mE 0°±, vsvmbM, 1st of 3	
3348	2182	738	I 80	...	10 36 29	4·65	16 25·4	18·8	B, S, ilE, psbM, * 11 282°, 21'	
3349	5532	...	...	m 201	10 36 31	3·13	82 30	18·8	eF, vS	
3350	2183	742	...	...	10 36 34	3·36	58 32·4	18·8	eF, vS, 2 st 9·10 s	
3351	2184	743	...	M 95	10 36 34	3·18	77 33·8	18·8	B, L, R, pgmbMN	
3352	...	...	...	St X	10 36 39	3·27	66 53·6	18·8	pB, S, R, bMN	
3353	2185	741	III 842	...	10 36 39	3·78	33 18·5	18·8	F, cS, R, pgbM, * s 90″	
3354	2186	3292	...	...	10 36 41	2·73	125 38·9	18·8	F, S, vlE, psbM, 2nd of 3	
3355	...	...	...	Langley	10 36 50	2·87	112 28	18·8	Neb, no description	
3356	2187	744	III 107	...	10 36 53	3·13	82 30·8	18·8	vF, pS, R, bM, *9 s 150″±	
3357	5533	...	...	m 202, d'A	10 36 55	3·19	75 10·9	18·8	F, S, mbM	
3358	2188	3293	...	...	10 37 12	2·74	125 39·0	18·8	cF, vS, vlE, vS * att, 3rd of 3	
3359	2189	745	V 52	...	10 37 21	4·02	26 2·4	18·8	pB, L, E 0°, glbM	
3360	...	...	...	Common	10 37 32±	2·98	100 42	18·8	F pair of neb,	
3361	...	...	...	Common	10 37 32±	2·98	100 42	18·8	f one the brighter	
3362	5534	...	...	m 203, St XII	10 37 33	3·13	82 40·0	18·8	vF, pS, R, lbM, r	
3363	...	...	...	St XII	10 37 33	3·27	67 11·1	18·8	F, pS, iR, lbM, r	
3364	2190	746	III 318	...	10 38 2	4·58	16 50·1	18·8	vF, L, R, vgbM, r, D * sf	
3365	2191	747	...	...	19 39 0	3·09	87 28·5	18·9	eF, L, cE 159°, vgvlbM	
3366	2192	3294	...	...	10 39 4±	2·64	132 58·7	18·9	F, E, gbM, * 6·7 vnr	*
3367	2193	748	II 78	...	10 39 10	3·19	75 30·9	18·9	pB, cL, iR, vglbM, r, 1st of 3	
3368	2194	749	...	Méchain, M 96	10 39 22	3·17	77 26·7	18·9	vB, vL, lE, vsvmbM, r	
3369	...	...	...	O St I	10 39 35	2·86	114 30·5	18·9	cF, vS, R	
3370	2195	750	II 81	...	10 39 35	3·22	71 59·7	18·9	cB, pL, vlE, gbM, r	
3371	2196	751	...	Peters	10 39 37	+3·19	75 28·4	+18·9	eF, R, 2nd of 3	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3372	2197	3295	...	Lac III 6, Δ 309	10 39 37	+2·31	148 56·7	+18·9	! Great neb, η Argûs	†
3373	2198	753	...	...	10 39 49	3·19	75 35 3	18·9	F, R, 3rd of 3	
3374	2199	752	III 701	...	10 39 49	3·51	46 4·3	18·9	vF, cS, iR	
3375	...	...	...	T V, St XI	10 40 1	3·00	99 12·2	18·9	F, S, R, gmbM	
3376	2200	...	...	d'A	10 40 10	3·12	83 12·6	18·9	vF, S	
3377	2201	754	II 99	...	10 40 17	3·19	75 16·7	18·9	vB, cL, lE, svmbMBN	
3378	2202	3296	...	...	10 40 22	2·70	129 17·0	18·9	cF, S, R, glbM	
3379	2203	757	I 17	Méchain	10 40 26	3·18	76 40·9	18·9	vB, cL, R, psbM, r	
3380	2204	755	II 360	...	10 40 28	3·32	60 39·7	18·9	pB, pS, R, sbM	
3381	2205	756	II 565	...	10 40 33	3·39	54 33·3	18·9	pF, cL, iR, vglbM, 1st of 3	
3382	...	...	...	Ld R*	10 40 35	3·42	52 32	18·9	F, S, iR, ? S Cl	
3383	2206	3297	...	...	10 40 40	2·87	113 41·6	18·9	F, pL, iR, glbM	
3384	2207	758	I 18	...	10 40 53	3·18	76 38·0	18·9	vB, L, R, psmbM, 2nd of 3	
3385	2209	760	...	...	10 40 53	3·12	84 20·2	18·9	vF, S, R, s of 2	
3386	2208	759	...	...	10 40 54	3·12	84 15·4	18·9	vF, S, lE, bM, n of 2	
3387	2210	762	...	d'A	10 40 57	3·12	84 15·9	18·9	eF, eS	
3388	...	...	...	Common	10 41	3·14	80 40	18·9	F, R	
3389	2211	761	II 41	...	10 41 3	3·18	76 44·1	18·9	F, L, Epf, vglbM, 3rd of 3	
3390	2212	3298	...	...	10 41 33	2 81	120 48·7	18·9	F, S, pmE 0°	
3391	5535	...	...	m 204, d'A	10 41 34	3·19	75 2·5	18·9	F, S, R, bet 2 st, nr	
3392	2213	763	III 881	...	10 41 36	4·08	23 28·7	18·9	vF, S, psbM, st nr	
3393	2214	3299	...	...	10 41 42	2·87	114 25·6	18·9	F, S, R, psbM, 2 st 10 f	
3394	2215	764	II 872	...	10 42 0	4·08	23 30·9	18·9	cF, S, lE, vgbM	
3395	2216	765	I 116	...	10 42 1	3·36	56 16·7	18 9	cB, pS, ilE, 1st of 2	†
3396	2217	766	I 117	...	10 42 6	3·36	56 16·2	18·9	pB, pS, ilE, 2nd of 2	†
3397	2218	...	I 284	...	10 42 35	5·10	11 57·8	19·0	cB, vS, iF [Place ? ?]	*
3398	2219	...	III 792	...	10 42 57	3·72	33 49·9	19·0	vF, S, E, er	
3399	5536	...	...	m 205	10 43 2	3·20	73 2	19·0	F, vS	
3400	2220	768	II 361	...	10 43 3	3·31	60 47·4	19·0	pF, S, R, bM	
3401	...	...	III 88	...	10 43 4±	3·12	83 28	19·0	eF (not verified)	
3402	...	...	...	Common	10 43 11	2·98	101 56	19·0	F, R	
3403	2221	767	II 335	...	10 43 15	4·61	15 34·6	19·0	pF, L, iE, vgbM	
3404	...	...	...	Common	10 43 17	2·99	101 8	19 0	pB, vL, Epf	
3405	5537	...	...	m 206	10 43 18	3·20	73 1	19·0	F, eS, alm stell, close to S *	
3406	2222	771	...	...	10 43 18	3 62	38 13 9	19·0	pB, R, pgbM	
3407	2223	769	III 919	...	10 43 20	3·88	27 53·1	19·0	vF, vS, R, vS * nr	
3408	2224	770	III 913	...	10 43 21	3·79	30 49·8	19·0	vF, eS, R, 2 pB st s	
3409	...	...	...	L II	10 43 26	2·94	106 17·5	19·0	eF, S, E 200°, 2 vF st inv	
3410	...	...	...	Ld R*	10 43 28	3 62	38 15	19·0	F, pS, dif, 2' sf h 771	
3411	2228	776	III 522	...	10 43 29	2·98	102 6·5	19·0	F, S, R lbM	
3412	2229	774	I 27	...	10 43 29	+3·18	75 50·9	+19·0	B, S, lE 135° ±, smbMN	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3413	2232	...	II 493	d'A	10 43 33	+3·36	56 29·5	+ 19·0	F, S	
3414	2227	773	II 362	...	10 43 35	3·31	61 17·1	19·0	B, pL, R, mbM	
3415	2225	772	II 718	...	10 43 36	3·50	45 32·8	19·0	pB, S, vlE, stellar, 3 S st nr	
3416	2226	...	...	Ld R	10 43 37	3·50	45 29	19·0	eF (? F ∗), n of h 772	
3417	5538	...	...	m 207	10 43 41	3·14	80 48	19·0	eF, vS, alm stell	
3418	2230	775	II 363	...	10 43 42	3·31	61 8·8	19·0	cF, S, R, bM	
3419	5539	...	...	m 208, T I	10 43 54	3·18	75 18·7	19·0	F, vS, R, alm stell, S ∗ v nr	
3420	...	...	...	L II	10 43 56	2·94	106 28·5	19·0	eF, vS, R, pgbMN, ∗8·5 s 6′	
3421	...	...	...	Common	10 43 57	2·99	101 29	19·0	2 neb, F, R	
3422	...	...	...	Common	10 43 57	2·99	101 29	19 0		
3423	2234	777	IV 6 = II 131	...	10 43 58	3·12	83 25·0	19·0	F, vL, R, vgbM, rr	*†
3424	2235	778	II 494	...	10 44 0	3·36	56 21·6	19.0	pF, pL, lE, sp of 3	
3425	2237	...	III 108	T I & V	10 44 0	3·14	80 43·0	19·0	eF, eS, R	*
3426	...	...	...	Sw VI	10 44 5	3·22	70 46·4	19·0	pF, S, R, D ∗ n	
3427	...	...	...	T I & V	10 44 10	3·14	81 0·0	19·0	Neb, no descr.	
3428	5540	...	...	m 209	10 44 10	3·15	79 59	19·0	vF, S, lE, glbM	
3429	...	...	...	Common	10 44 12	3·15	80 0·0	19·0	pF, R	
3430	2236 = 2239	779 = 782	I 118	...	10 44 23	3·36	56 18·5	19·0	pB, L, iE, gbM, 2nd of 3	*
3431	...	...	...	L II	10 44 26	2·94	106 16·5	19·0	eF, S, E 130°, gbM	
3432	2238	780	I 172	...	10 44 36	3·40	52 38·5	19·0	pB, pL, vmE 40°, ∗ ∗ close sp	*
3433	2240	783	III 20	...	10 44 43	3·16	79 6·0	19·0	vF, vL, R, vgbM	
3434	2241	784	III 497	...	10 44 44	3·11	85 28·0	19·0	F, pS, R, vglbM	
3435	2242	781	II 887	...	10 44 55	3·87	27 58·4	19·0	cF, pS, lE, vgbM	
3436	...	...	...	Todd	10 44	3·14	81 18	19·0	eS	
3437	2243	786	II 47	...	10 45 1	3·26	66 19·6	19·0	pB, pL, lE 120°, gbM	
3438	5541	...	...	m 210	10 45 6	3·16	78 43	19·0	vF, eS, alm stell	
3439	5542	...	...	m 211	10 45 6	3·14	80 43	19 0	eeF, vS, alm stell	
3440	2244	785	III 914	...	10 45 11	3·74	32 8·5	19·0	vF, S, lE	†
3441	...	...	...	Holden	10 45 13	3·12	82 3	19·0	pB	
3442	...	...	...	St XIII	10 45 20	3·36	55 20·8	19·0	F, vS, R, mbM, r?	
3443	...	...	...	Sw VI	10 45 24	3·21	71 49.3	19·0	eeF, vS, R	
3444	5543	...	...	m 212	10 45 39	3·15	79 4	19·0	eF, vS, pmE	
3445	2245	787	I 267	...	10 45 58	3·73	32 16·3	19·1	cB, pL, iR, vglbM, ∗ 10 nf 2′	†
3446	2246	3301	...	...	10 45 59	2·66	134 24·4	19·0	Cl, pL, P, lC, iF, st 9...13	
3447	2247	3300	...	...	10 46 0	3·20	72 29·5	19·1	eF, vL, vgvlbM, B ∗ ∗ sp	
3448	2248	788	I 233	...	10 46 10	3·67	34 57·1	19·1	B, pL, mE 67°·0, gbM	
3449	2249	3302	...	...	10 46 20	2·81	122 11·0	19·1	F, S, R, ∗6·7 sf	
3450	2250	3303	...	...	10 46 26	2·92	110 6·2	19·1	vF, L, R, vglbM, r	
3451	2251	789	II 364	...	10 46 40	+3·29	62 1·1	+19·1	F, pL, vlE, vlbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3452	...	...	...	Common	10 46 45	+2·99	100 37	+19·0	eF, R, n of S∗	
3453	2252	3304	...	...	10 46 52	2·91	111 2·2	19·1	F, S, R, bM	
3454	2253	790	...	...	10 47 1	3·21	71 55·1	19·1	pF, lE, np of 2	
3455	2254	791	II 82	...	10 47 3	3·21	71 58·1	19·1	pF, S, E, gbM, r, sf of 2	
3456	2255	792	IV 29	...	10 47 12	2·96	105 17·0	19·1	eF, att to ∗ 12 f	
3457	2256	793	...	...	10 47 22	3·21	71 38·9	19·1	2 or 3 S st and neb	*
3458	2257	...	I 268	...	10 47 25	3·72	32 8·7	19·1	vB, vS, R, stellar	
3459	...	...	...	L II	10 47 32	2·95	106 16·5	19·1	vF, S, E, gbM	
3460	...	...	...	L l R, Sw I	10 47 45	3·20	71 38·5	19·1	pB, R, no ∗ nr (?? = h 793)	
3461	...	...	...	Ld R	10 47 57	3·20	71 36·0	19·1	F neb 5′ nf last	
3462	2258	794	II 16	...	10 48 2	3·13	81 33·7	19·1	vF, vS, vlE, psbM	
3463	2259	3305	...	...	10 48 30	2·88	115 24·0	19·1	F, S, R, glbM	
3464	...	...	...	O St I	10 48 30	2·92	110 20·4	19·1	eF, pL, E 125°	
3465	2260	795	...	...	10 48 55	4·65	14 3·8	19·1	eF, pL, R, vglbM, ∗ nf ∗	
3466	2261	796	...	...	10 48 55	3·15	79 30·0	19·1	vF, ∗ 9, 90°, p of 2	
3467	2262	798	...	...	10 49 24	3·14	79 29·8	19·1	vF, R, vsmbM ∗ 12, f of 2	
3468	2263	797	III 632	...	10 49 34	3·43	48 18·1	19·1	F, eS, R, bM	
3469	2264	3306	...	...	10 49 59	2·98	103 33·4	19·2	eeF, S	
3470	2265	799	II 888	...	10 50 6	3·76	29 44·8	19·2	vF, S, R, vgbM	
3471	2266	...	III 972	...	10 50 15	3·82	27 39·1	19·2	vF, S, R, bM	
3472	...	...	...	O St I	10 50 30	2·94	108 53·4	19·2	eF, S, R, gbM	
3473	2267	...	III 67	...	10 50 37	3·20	72 9·1	19·2	vF, E, bet 2 st	
3474	...	...	...	Sw VI	10 50 49	3·20	72 9·3	19·2	vF, pS, R, s of III 67	
3475	2268	800	III 332	...	10 50 50	3·25	65 1·3	19·2	vF, R, gbM, ∗ 13 H 1′ n, h 2′ s	
3476	5544	...	...	m 213	10 50 52	3·14	79 55	19·2	eF, vS, alm stell	
3477	5545	...	...	m 214	10 50 57	3·14	79 58	19·2	eeF, eS, stell	
3478	2269	801	III 705	...	10 51 19	3·49	43 8·3	19·2	eF, S, R	
3479	...	...	...	O St I	10 51 30	2·97	104 12·4	19·2	eF, pS, E 90°, gbMN	
3480	...	...	...	Common	10 51 34	3·14	79 54	19·2	S, stellar	
3481	...	...	...	O St II	10 52 11	3·02	96 48·4	19·2	eF, vS, rr, prob vF Cl, ∗ 9 5′ sf	
3482	2270	3308	...	...	10 52 16	2·68	135 49·4	19·2	eF, S, R, gbM	
3483	2271	3307	...	...	10 52 18	2·87	117 43·8	19·2	pF, S, R, bM, am st	
3484	2272	802	...	...	10 52 29	4·67	13 25·8	19·2	Very doubtful object	
3485	2273	804 = 3309	II 100	...	10 52 39	3·18	74 25·0	19·2	F, L, R, glbM, r	
3486	2274	805	I 87	...	10 52 45	3·29	60 16·5	19·2	cB, cL, R, gmbM	
3487	...	...	...	Sw III	10 52 45	3·20	71 40·4	19·2	eeF, pS, R, v diffic	
3488	2275	803	I 269	...	10 52 50	3·69	31 34·9	19·2	h, eF H, cB vlE, pS, ∗ 13 s att	
3489	2276	806	II 101	...	10 52 56	3·17	75 21·0	19·2	vB, pL, lE 80° ±, smbMN	
3490	...	...	...	Common	10 53	+3·14	79 55	+19·2	vF, S	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3491	2277	807	III 21	...	10 53 15	+3·16	77 5·3	+19·2	eF, cS, R, bMN	
3492	...	...	...	Peters	10 53 36	3·15	78 44·3	19·2	pF, S, *9·5 p 20', 1' s	
3493	2278	808	...	...	10 53 49	3·27	61 32·2	19·3	vF, R, bM, *sp	
3494	...	...	...	T V	10 54 0	3·10	85 31·5	19·2	vS, h 809 6's	
3495	2279	809	III 498	...	10 54 1	3·10	85 37 5	19·3	vF, pL, mE	
3496	2280	3310	...	...	10 54 12	2·43	149 34·8	19·3	Cl, pL, pRi, lC, st 13	
3497	2281	...	III 824	...	10 54 29	2·95	108 43·2	19·3	vF, vS, iR, glbM	
3498	2282	...	III 75	...	10 54 30	3·17	74 52·2	19·3	eF, pL (d'A not found)	
3499	2283	...	III 793	...	10 54 46	3·64	33 2·2	19·3	vF, vS, stellar	
3500	{2284 2285}	...	III {967 968}	...	10 55 10	4·58	13 27·2	19·3	{vF eF} D neb, v near (?? Place)	
3501	...	...	...	St XI	10 55 22	3·20	71 15·3	19·3	vF, mE ns, gbM, 3' long	
3502	...	...	...	L I	10 55 30	2·98	104 12 3	19·3	eF, pL, iR, glbM	
3503	2286	3311	...	...	10 55 33	2·46	149 5·8	19·3	3 S st 10 m in vF neb	
3504	2287	810	I 88	...	10 55 35	3·27	61 16·5	19·3	B, L, E, mbMN, rr, p of 2	
3505	2288	3312	...	...	10 55 50	2 98	104 44·4	19·3	pF, S, R, glbM, *14 nr	
3506	2289	811	III 22	...	10 55 54	3·15	78 10·4	19·3	vF, cS, R, vgvlbM	
3507	2290	812	IV 7	...	10 55 58	3·19	71 6·7	19·3	cF, pL, R, sbMS *, *9 att 25°	
3508	2291	814	II 507	...	10 56 4	2·97	105 32·1	19·3	F {H, S h, vL}, bM, *nf inv	
3509	2292	...	III 598	...	10 56 5	3·11	84 28·3	19·3	eF, S, lE?	
3510	2293	813	II 365	...	10 56 6	3·28	60 21·7	19·3	F, L, cE, *7, 310° 8'	
3511	2294	...	V 39	...	10 56 27	2·92	112 21·3	19·3	vF, vL, mE	
3512	2295	815	II 366	...	10 56 27	3·27	61 12·7	19 3	F, pS, R, pgbM, f of 2	
3513	2296	...	V 40	...	10 56 44	2·92	112 29·3	19·3	vF, vL, mE	
3514	2297	3313	...	...	10 56 50	2·96	108 1·7	19·3	vF, pL, R, vgvlbM	
3515	...	...	...	St XII	10 57 1	3·29	61 1·2	19·3	vF, S, R, sev eF st inv	
3516	2298	816	II 336	...	10 57 2	4·25	16 41·4	19·3	pB, vS, iR, psmbM *	
3517	2299	817	II 884	...	10 57 13	3·62	32 43·5	19·3	eF, S, R, vgbM	
3518	...	...	...	L I	10 57 30	3·03	95 48·3	19·3	eF, eS, lE	
3519	2300	3314	...	...	10 58 19	2·45	150 36·6	19·4	Cl, pRi, pC	
3520	...	...	...	L II	10 58 37	2·96	107 11·4	19·3	eF, vS, iR, gbM, sev vF st inv	
3521	2301	818	I 13	...	10 58 38	3·08	89 16·9	19·4	cB, cL, mE 140° ±, vsmbMN	†
3522	...	...	...	Sw III	10 58 55	3·20	69 9·7	19·4	pF, vS, lE	
3523	2302	...	II 904	...	10 59 5	4·48	13 33·3	19·4	F, pL, lbM (place doubtful)	*
3524	2303	819	III 23	...	10 59 14	3·15	77 51·4	19·4	F, S, lE, psbM, 2 st np in line	
3525	...	...	...	O St I	10 59 30	2·95	108 42·3	19·4	F, pS, gbMN	
3526	5546	...	...	m 215	10 59 40	3·12	82 5	19·4	eF, vmE, pos 50° ±	
3527	2304	820	III 350	...	10 59 41	3·26	60 43·6	19·4	eF, S, *10 p 60″	
3528	2305	3316	...	...	11 0 17	2·96	108 43·1	19·4	F, S, R, pslbM, p of 2	
3529	2306	3317	...	...	11 0 20	+2·96	108 47·3	+19·4	eF, S, R, vlbM, f of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3530	2307	821	III 915	...	11 0 21	+3·61	32 1·5	+19·4	vF, S, R, pgbM	
3531	...	...	...	Holden	11 0 22	3·12	82 32·5	19·4	E 50°, * 11 at sp end (? = 5546)	
3532	2308	3315	...	Lac II 10, Δ 323	11 0 34	2·53	147 55·0	19·4	!!, Cl, eL, R, lC, st 8...12	
3533	2309	3318	...	...	11 0 45	2·82	126 25·0	19·4	eeF, vS * att	
3534	5547	...	...	O Struve	11 1 8	3·24	62 37	19·4	vF, * 9 np 3′	
3535	2310	823	III 111	...	11 1 17	3·10	84 24·8	19·4	cF, vS, R, bM, r	
3536	2311	822	...	...	11 1 19	3·26	60 47·2	19·4	F, S, R, bM	
3537	...	...	...	T I & V, Common	11 1 25	3·02	99 30·1	19·4	vF, S, vF st inv	
3538	5548	...	...	d'A	11 1 28	4·42	13 40·6	19·4	vF, pL, * 17 nr	
3539	2312	825	...	...	11 1 31	3·26	60 34·5	19·4	eF	
3540	2313	824	...	...	11 1 32	3·32	53 12·7	19·4	vF, R, psbM, * 7 p 7′	
3541	...	...	...	Common	11 1 41	3·01	100 0	19·4	Nebulous *	
3542	...	...	...	St XIII	11 2 13	3·32	52 17·7	19·4	vF, S, irr R, lbM, r	
3543	2314	826	III 920	...	11 2 29	3·68	27 54·0	19·5	eF, vS, E 0° ±, r	
3544	...	...	...	O St I	11 2 30	2·97	107 31·3	19·4	vF, L, mE 95°, bM, ? = II 819	
3545	...	...	...	St XIII	11 2 30	3·32	52 16·1	19·4	vF, vS, irr R, lbM, r	
3546	...	...	...	Mu II	11 2 30	3·00	102 38·3	19·4	Neb * 12, * 12 2′nf	
3547	2315	828	II 42	...	11 2 39	3·14	78 31·0	9·5	F, S, lE, vlbM	
3548	2316	827	...	...	11 2 41	3·31	53 12·6	19·5	eF, S, * 8, p	
3549	2317	...	I 220	...	11 2 45	3·52	35 51·8	19·5	cB, cL, cE 160°	
3550	2319	829	III 351	...	11 3 4	3·25	60 28·8	19·5	F (? var), S, R, bM, * 9 f 1′, 1st of 4	*
3551	...	...	...	Sw I	11 3 5	3·20	67 30·4	19·5	eeF, vS, R, sp of 2	
3552	2320	832	III 352	...	11 3 10	3·25	60 33·1	19·5	eF, vS, 2nd of 4	
3553	...	...	...	Bigourdan	11 3 10	3·25	60 32·3	19·5	eF, vS, forms D neb with III 352	
3554	2321	833	...	...	11 3 12	3·25	60 36·4	19·5	vF, pS, R, bM, 3rd of 4	
3555	...	...	...	Sw I	11 3 15	3·20	67 29·9	19·5	vF, R, nf of 2	
3556	2318	831	V 46	G. Rümker	11 3 18	3·55	33 34·0	19·5	cB, vL, vmE 79°, pbM, r	
3557	2322	3319	...	...	11 3 20	2·83	126 46·8	19·5	B, S, R, pgmbM, 1st of 3	
3558	5549	...	...	d'A	11 3 22	3·25	60 40·5	19·5	pF, S	
3559	2323	...	III 79	d'A	11 3 26	3·14	77 13·3	19·5	eF, pS, lE, r	
3560	2324	834	...	...	11 3 26	3·14	78 3·6	19·5	F, S, R, gbM	
3561	2326	835	...	...	11 3 36	3·25	60 32·8	19·5	vF, pL, 4th of 4	
3562	2325	830	II 337	...	11 3 38	4·17	16 21·5	19·5	pF, pS, lE, gbM, * 15, 22°, 70″	
3563	5550	...	...	O Struve	11 3 49	3·24	62 16	19·5	pF, pL, * 8 m 2′ n	
3564	2327	3320	...	...	11 3 57	2·83	126 46·7	19·5	pF, S, R, bM, 2nd of 3	
3565	...	...	...	O St I	11 3	2·96	109 17·2	19·5	vF, vS, R, gbMN, 1st of 2	
3566	...	...	...	O St I	11 3	2·96	109 17·2	19·5	eeF, eS, R, gbM, 2nd of 2	
3567	2328	836	III 89	...	11 4 2	3·11	83 25·1	19·5	eF, R, sbM, r	
3568	2329	3321	...	...	11 4 10	+2·84	126 42·2	+19·5	vF, pL, R, * inv, 3 B st nr, 3rd of 3	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3569	5551	...	...	d'A	11 4 24	+3·30	53 47·6	+19·5	F, vS, stell	
3570	....	...	...	St IX	11 4 31	3·25	61 39·0	19·5	vF, vS, R, bM	
3571	2330	...	II 819	...	11 4 32	2·97	107 31·5	19·5	pF, pL, iF, bM	
3572	2331	3323	...	...	11 4 33	2·53	149 28·9	19·5	Cl, pRi, 1C	
3573	2332	3322	...	...	11 4 40	2·84	126 5·5	19·5	eF, S, R, glbM, 3 st 11 f	
3574	...	...	...	St IX	11 4 40	3·25	61 36·9	19·5	eF	
3575	5552	...	...	d'A	11 5 44	3·20	66 35·2	19·5	pB, pL, R, *11 p	
3576	2333	3324	...	...	11 5 53	2·52	150 37·0	19·5	F, lE, 1st of 6	†
3577	2334	...	III 723	...	11 5 53	3·42	40 53·5	19·5	eF, vS, p of 2	
3578	2335	837	...	...	11 5 54	2·99	105 11·8	19·5	Doubtful object, probably a neb	
3579	2336	3325	...	...	11 5 56	2·53	150 28·1	19·5	F, lE, sbM, 2nd of 6	†
3580	5553	...	...	T I	11 6 0	3·10	85 35·7	19·5	vF, *14 f	
3581	2337	3326	...	...	11 6 3	2·53	150 33·0	19·5	*12 with fan-shaped neb att, 3rd of 6	†
3582	2338	3327	...	...	11 6 14	2·53	150 30·6	19·5	B, bM*, 4th of 6	†
3583	2339	...	II 728	...	11 6 18	3·42	40 51·5	19·5	pB, pL, R, vgmbM	
3584	2340	3329	...	...	11 6 21	2·54	150 26·7	19·5	F, L, E 0°, bM, 5th of 6	†
3585	2341	3328	II 269	...	11 6 28	2·92	115 59·9	19·5	B, pL, E, vsmbMN, 2 B st Δ	
3586	2342	3330	...	...	11 6 31	2·54	150 35·5	19·5	eF, S, E 160°±, 6th of 6	†
3587	2343	838	...	Méchain, M 97	11 6 40	3·51	34 13·3	19·5	!!, ○, vB, vL, R, vvg, vsbM, 150″ d	†
3588	...	...	...	Sw I	11 6 45	3·20	68 50·9	19·5	vF, cS, 4ª f δ Leonis [& 8's]	
3589	2344	839	III 921	...	11 6 52	3·62	28 32·5	19·5	vF, L, E, vgbM, in Δ of L st	
3590	2345	3332	...	...	11 6 59	2·55	150 2·3	19·5	Cl, pRi, C, E	
3591	2346	3331	III 529	...	11 7 5	3·00	103 19·8	19·5	vF, S, iR, lbM	
3592	5554	...	...	m 216	11 7 7	3·17	71 58	19·5	eF, S, pmE, pos 60°	
3593	2347	840	I 29	...	11 7 18	3·14	76 25·4	19·6	B, cL, E 90±, psmbM	†
3594	2348	...	III 770	...	11 7 26	3·52	33 29·5	19·6	vF, vS, stellar	
3595	2349	...	III 706	...	11 7 30	3·40	41 45·5	19·6	vF, vS, vlE, stellar, cB*n	
3596	2350	841	II 102	...	11 7 44	3·15	74 26·9	19·6	pF, L, R, glbM	
3597	2351	3333	...	...	11 7 49	2·95	112 57·7	19·6	vF, pS, R, bM	
3598	5555	...	...	m 217, T I	11 7 50	3·17	71 58	19·6	F, vS, stell, *n	
3599	2352	843	II 49	...	11 8 4	3·17	71 7·7	19·6	B, pS, R, pgmbM	
3600	2353	842	II 709	...	11 8 7	3·34	47 38·5	19·6	pF, S, lE 0°±, vgbM	
3601	5556	...	...	m 218	11 8 19	3·10	84 8	19·6	vF, pS, alm stell	
3602	5557	...	...	m 219	11 8 27	3·17	71 49	19·6	eeF, vS, alm stell	
3603	2354	3334	...	...	11 9 7	2·56	150 29·7	19·6	⊕ and neb, st 15...18	
3604	2355	...	II 626	...	11 9 8	3·10	84 42·6	19·6	pB, S, lE, mbM	
3605	2356	844	III 27	...	11 9 24	3·17	71 13·2	19·6	F, S, R, sp of 3	
3606	2357	3335	...	...	11 9 30	2·89	123 3·9	19·6	eF, S, R, gbM	
3607	2358	845	II 50	...	11 9 32	+3·17	71 11·2	+19·6	vB, L, R, vmbM, 2nd of 3	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3608	2359	846	II 51	...	11 9 36	+3·17	71 5·3	+19·6	B, pL, R, psbM, 3rd of 3	
3609	5558	...	...	O Struve	11 10 7	3·22	62 36	19·6	pF, S, bM	
3610	2360	847	I 270	...	11 10 13	3·55	30 27·0	19·6	vB, pS, lE 90° ±, vsvmbMSN	
3611	2361	849	II 521	...	11 10 17	3·10	84 40·9	19·6	pF, cS, iR, psmbM, * 10 np 3′	
3612	5559	...	...	O Struve	11 10 18	3·22	62 37	19·6	pL, dif, * 10·11 nf 2′	
3613	2362	848	I 271	...	11 10 26	3·53	31 14·0	19·6	vB, cL, mE 305°, smbMN	
3614	2363	850	II 729	...	11 10 30	3·37	43 29·1	19·6	F, pL, lE 90° ±, glbM, r	
3615	2364	851	III 333	...	11 10 40	3·20	65 49·8	19·6	cF, vS, smbM, stellar, p of 2	
3616	2366	...	III 76	...	11 10 53	3·15	74 29·6	19·6	eF, pL	
3617	2367	3336	...	...	11 11 0	2·94	115 21·9	19·6	F, S, R, gbM	
3618	2368 = 2365	...	III 334	Ld R, d'A	11 11 7	3·20	65 46·5	19·6	vF, S, f of 2	
3619	2369	852	I 244	...	11 11 13	3·52	31 28·8	19·6	cB, cL, R, vgmbM	
3620	2370	3338	...	...	11 11 21	1·99	165 27·3	19·6	F, pS, pmE, gbM	
3621	2371	3337	I 241	Δ 617	11 11 30	2·90	122 2·8	19·6	cB, vL, E 160°, am 4 st	
3622	2372	853	II 879	...	11 11 35	3·75	21 59·5	19·6	pB, S, R, gbM	
3623	2373	854	...	M 65	11 11 37	3·14	76 8·5	✓ 19·6	B, vL, mE 165° ±, gbMBN	†
3624	2374	855	...	...	11 11 41	3·11	81 42·9	19 6	eF	
3625	2375	...	II 885	d'A	11 12 24	3·51	31 27·1	19·6	F, S, lE 135° ±	
3626	2376	856	II 52	...	11 12 42	3·16	70 52·7	19·7	B, S, vlE, sbM	
3627	2377	857 = 875	...	M 66	11 12 56	3·14	76 14·5	✓ 19·7	B, vL, mE 150°, mbM, 2 st np	†
3628	2378	859	V 8	...	11 12 57	3·14	75 38·5	19·7	pB, vL, vmE 102°	†
3629	2380	860	II 338	...	11 13 3	3·21	62 16·2	19·7	cF, L, R, vgvlbM	
3630	2381	861	...	...	11 13 5	3·09	86 16·2	19·7	pB, S, R, smbMN	
3631	2379	858	I 226	...	11 13 6	3·44	36 3·1	19·7	pB, L, R, svmbMrN	†
3632	2382	...	II 30	...	11 13 6	3·16	71 4·6	19·7	pB, * inv	*
3633	...	...	...	Sw VI	11 13 13	3·09	85 39·0	19·7	vF, S, R, 2 st nr	
3634	...	...	...	L II	11 13 17	3·03	98 14·2	19·6	eF, eS, R, bMN } 85° dist 0′·4	
3635	...	...	...	L II	11 13 17	3·03	98 14·2	19·6	eF, eS, R, bMN }	
3636	2383	862	II 550	...	11 13 22	3·03	99 30·7	19·7	F, vS, R, lbM, * 7 f, p of 2	
3637	2384	863	II 551	...	11 13 36	3·03	99 28·9	19·7	F, vS, R, psbM, * 7 p, f of 2	
3638	...	...	...	O St II	11 13 41	3·04	97 20·2	19·7	eF, vS, 2 st 10 f	
3639	2385	...	...	Ld R	11 13 46	3·16	70 52·9	19·7	pF, S, R, vlbM, 15′ f h 856	
3640	2386	864	II 33	...	11 13 55	3·09	85 59·9	19·7	B, pL, R, psbM	
3641	5560	...	...	m 220, TI	11 13 56	3·09	86 2	19·7	F, vS, alm stell, II 33 2′ n	
3642	2387	865	I 245	...	11 14 11	3·52	30 9·5	19·7	pB, pL, R, vgbM	
3643	5561	. .	...	m 221	11 14 11	3·09	86 13	19·7	eF, vS	
3644	5562	...	...	m 222	11 14 21	3·09	86 25	19·7	vF, vS	
3645	2388	867	II 32	T I	11 14 21	3·09	86 16·8	19·7	pB, S, E, bM	*
3646	2389	866	III 15	...	11 14 21	+3·17	69 4·3	+19·7	cF, cL, lE, gbM, sp of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3647	5563	...	...	m 223	11 14 26	+3·09	86 20	+19·7	eF neb ✶	
3648	2390	868	...	...	11 14 52	3·29	49 22·6	19·7	pB, S, pmE, bMN = close ✶ ✶ ?	
3649	2391	869	III 16	...	11 14 53	3·17	69 1·7	19·7	vF, pS, R, gbM, nf of 2	
3650	...	...	...	Sw III	11 14 56	3·19	68 31·9	19·7	eF, S, R, bet 2 st	
3651	2392	870	III 335	...	11 15 1	3·19	64 56·1	19·7	cF, vS, R, bM, np of 2	
3652	2394	871	II 775	...	11 15 3	3·27	51 28·2	19·7	pF, cL, lE, vgbM	
3653	2393	872	III 336	...	11 15 6	3·19	64 57·8	19·7	vF, vS, sf of 2	
3654	2395	...	II 880	...	11 15 30	3·77	19 48·5	19·7	F, S, lE 15° ±	
3655	2396	873	I 5	...	11 15 35	3·15	72 38·6	19·7	pB, pS, iR, bM, r	
3656	2397	874	II 782	...	11 15 41	3·42	35 23·4	19·7	pB, S, R, vgbM, ✶12 p	
3657	2398	876	III 768	...	11 15 59	3·41	36 18·7	19·7	cF, vS, R, stellar	
3658	2400	877	IV 59	...	11 16 22	3·27	50 41·3	19·7	F, S, R, svmbMN = ✶14 mag	
3659	2399	878	II 53	...	11 16 24	3·15	71 25·0	19·7	cF, S, lE, r	
3660	2401	...	II 635	...	11 16 27	3·04	97 52·7	19·7	F, pL, iR, vgbM	
3661	2402	3339	III 530	...	11 16 37	3·01	103 3·5	19·7	F, S, R, stellar, p of 2	
3662	2403	879	IV 4	...	11 16 40	3·07	90 19·9	19·7	vF, S, att to ✶13 m	
3663	...	...	...	Common	11 16 49	3·02	101 17	19·7	eF, fan sbaped, ✶close	
3664	...	...	...	T II	11 17 6	3·09	85 55·2	19·7	pF, biN	
3665	2404	881	I 219	...	11 17 9	3·27	50 28·1	19·7	cB, cL, iR, pgmbM	
3666	2405	882	I 20	...	11 17 10	3·12	77 53·4	19·7	F, E 90° ±, 6 mag ✶ f 34″, 5′ n	*
3667	2406	3340	III 531	...	11 17 12	3·02	103 4·5	19·7	pF, pL, iR, vlbM	
3668	2407	880	II 845	...	11 17 14	3·57	25 47·0	19·7	F, pS, iR, gbM, ✶9 np	
3669	2408	883	II 829	...	11 17 24	3·46	31 30·9	19·7	vF, pL, pmE 135° ±, er	
3670	2409	884	III 337	...	11 17 25	3·18	65 16·6	19·7	vF, vS, R	
3671	2410	885	III 922	...	11 17 54	3·50	28 45·2	19·7	vF, vS, 2 vS st inv	
3672	2411	886	I 131	...	11 17 58	3·03	99 1·5	19·7	pB, L, E 0° ±, gbM	
3673	2412	3341	...	...	11 18 20	2·96	115 58·5	19·7	F, vL, gvlbM, ✶7 s 6′	
3674	2415	...	II 886	d'A	11 18 26	3·44	32 11·3	19·8	pF, iF	
3675	2413	887	I 194	...	11 18 28	3·30	45 38·5	19·7	vB, cL, vmE 0° ±, vsmbMN, many st p	
3676	...	...	...	Mu II	11 18 30	3·03	99 51·2	19·7	eF, vS, R, 2 st 10 nf, sf	
3677	2414	888	...	...	11 18 35	3·33	42 14·5	19·7	eF, S, R, vsbM ✶, 2 st 11 nf	
3678	2416	889	...	...	11 18 48	3·20	61 21·7	19·8	vF, S, R, psbM, ✶12 nf	
3679	2417	...	III 112	...	11 18 52 ±	3·05	95 5 ±	19·8	eF, cL, R, r (v near vB ✶)	*
3680	2418	3342	...	Δ 481	11 18 57	2·86	132 27·8	19·8	Cl, cL, pRi, lC, st 10...14	
3681	2419	891 = 3343	II 159	...	11 19 11	3·15	72 21·1	19·8	B, pS, R, bM	
3682	2420	890	I 262	...	11 19 20	3·62	22 38·6	19·8	cB, S, iR, spmbMN	
3683	2421	892	I 246	...	11 19 36	3·43	32 21·2	19·8	cB, pL, E	
3684	2422	893	...	...	11 19 51	3·14	72 12·1	19·8	pB, pL, E, vgbM	
3685	...	...	...	Todd	11 19	+3·09	85 6	+19·7	eF, vS	

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					h m s	s	° ′	″		
3686	2423	894	II 160 = III 28	...	11 20 24	+3·14	72 0·5	+19·8	pB, L, vlE, vgbM, r	
3687	2424	895	II 770	...	11 20 32	3·20	59 42·9	19·8	pB, pS, R, lbM, r	
3688	...	...	...	L II	11 20 41	3·04	98 23·1	19·8	eF, eS, lE 0°, gbM	
3689	2426	897	II 339	...	11 20 44	3·18	63 34·2	19·8	pB, pL, lE, bM	
3690	2425	896	I 247	...	11 20 45	3·44	30 40·8	19·8	pB, pS, vlE 80° ±, pgbM, S st sf nr	
3691	2427	898	II 54	...	11 20 50	3·14	72 18·6	19·8	F, pS, lE, r	
3692	2428	...	II 152	Tempel	11 21 0	3·11	79 51·7	19·8	F, mE, r	
3693	2429	3334	III 532	...	11 21 9	3·02	102 24·9	19·8	cF, S, E, gbM	
3694	2430	899	...	...	11 21 23	3·23	53 48·7	19·8	cF, S, R, mbM	
3695	5564	...	...	Ball (R)	11 21 23	3·23	53 44·4	19·8	eF, pS, h 899 4′ s	
3696	...	...	...	L II	11 21 29	3·03	100 41·1	19·8	eF, eS, R, bMN	
3697	2431	900	...	...	11 21 30	3·16	68 25·9	19·8	eF, vS, E 90°	
3698	5565	...	...	Dreyer (R)	11 21 33	3·23	53 33·5	19·8	eF, vS	
3699	2432	3345	...	...	11 21 34	2·71	149 11·1	19·8	B, pL, iR, pgpmbM	
3700	5566	...	...	Ball (R)	11 21 48	3·23	53 48·7	19·8	eF, h 899 p	
3701	2433	901	II 349	...	11 22 5	3·17	65 7·9	19·8	pF, pL, lE	
3702	...	...	...	L II	11 22 5	3·04	98 13·1	19·8	eF, eS, R, glbM	
3703	...	...	...	O St I	11 22 30	3·04	97 51·1	19·8	eF, vS, gbMN	
3704	...	...	...	T V, Common	11 22 44	3·03	100 44·4	19·8	vF, pS, *9·10 2′ ssf	
3705	2434 = 2436	902 = 903	II 13	...	11 22 53	3·11	79 57·1	19·8	pF, pL, R, vsmbM, r	*
3706	2435	3346	...	...	11 22 54	2·92	125 37·6	19·8	pB, cS, R, psmbM	
3707	...	...	...	T V, Common	11 23 0	3·03	100 46·4	19·8	vF, S, *15 (neb?) 2′ f	
3708	...	...	...	O St I	11 23 30	3·06	92 27·1	19·8	vF, S, R, gbM	
3709	...	...	...	O St I	11 23 30	3·06	92 29·1	19·8	cF, eS	
3710	2437	904	II 350	...	11 23 44	3·16	66 27 7	19·8	F, S, *7·8 nf 5′	
3711	...	...	...	L II	11 23 53	3·03	100 18·1	19·8	eF, vS, *9 s 4′	
3712	2438	905	...	...	11 24 15	3·19	60 44·1	19·8	F, vS, R, smbM	
3713	2439	906	II 367	...	11 24 17	3·18	61 4·4	19·8	F, cS, R, sbMN	
3714	2440	907	III 353	...	11 24 29	3·18	60 52·0	19·8	F, S, R, psbM	*
3715	2441	3347	II 562	...	11 24 29	3·02	103 27·6	19·8	pF, S, R, vgvlbM	
3716	5567	...	...	d'A	11 24 33	3·09	85 44·7	19·8	vF, vS	
3717	2442	3348	...	...	11 24 37	2·96	119 29·1	19·8	pB, S, mE, *13 att	
3718	2443	908	I 221	...	11 24 46	3·34	36 9·4	19·8	pB, vL, R, vglbM	
3719	5568	...	...	d'A	11 25 5	3·08	88 24·3	19·8	vF, np of 2	
3720	5569	...	...	d'A	11 25 14	3·08	88 25·3	19·8	vF, sf of 2	
3721	...	...	...	L II	11 25 29	3·04	98 41·1	19·8	eF, eS, R, gbM	
3722	...	...	...	L II	11 25 29	3·04	98 54·1	19·8	eF, vS, R, sbMN, 1st of 2	
3723	...	...	...	Common	11 25 32	3·04	99 10	19·8	F, S, R	
3724	...	...	...	L II	11 25 41	+3·04	98 56·1	+19·8	eF, vS, R, sbMN, 2nd of 2	

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					h m s	s	° ′	″		
3725	2444	909	II 836	...	11 25 43	+3·44	27 21·5	+19·8	cF, S, R, gvlbM, r	
3726	2445	910	II 730	...	11 25 45	3·28	42 11·0	19·8	pB, vL, lE 0°, vsmbM * 15, * 11 n	†
3727	...	...	...	L II	11 25 47	3·02	103 6·1	19·8	eF, eS, R, gbMN, * 11 sf 1′	
3728	2446	912	II 351	...	11 26 2	3·16	64 47·0	19·9	F, S, R, bM	
3729	2447	911	I 222	...	11 26 2	3·33	36 5·8	19·9	pB, pL, lE 0° ±, gbM, * 12 nr	
3730	...	...	...	Common, L II	11 26 17	3·04	98 50·1	19·8	eF, S, lE 140°, glbnM	*
3731	2448	...	III 80	...	11 27 6	3·12	76 43·8	19·9	vF, vS, R	
3732	2449	913	II 552	...	11 27 8	3·04	99 3·8	19·9	F, S, R, psbM, * 14 sp 225°	
3733	2450	...	III 771	...	11 27 16	3·34	34 23·1	19·9	eF, S, iR, * 6 m sf	
3734	2451	3349	III 935	...	11 27 37	3·04	103 19·1	19·9	eF, S, R, gbM	
3735	2452	914	I 287	...	11 27 40	3·60	18 41·6	19·9	pB, L, mE 130°, mbM	
3736	...	...	...	Copeland	11 27 44	3·71	15 45·5	19·9	vF, vS, R	
3737	2453	...	III 772	...	11 27 51	3·34	34 16·5	19·9	vF, stellar	
3738	2454	...	II 783	...	11 28 6	3·33	34 41·9	19·9	pB, pL, bM	
3739	5570	...	...	O Struve	11 28 8	3·16	64 7	19·9	vF, bet 2 st 12 m	
3740	2455	915	III 847	...	11 28 24	3·39	29 15·2	19·9	vF, vS, R, vgbM	
3741	2456	916	...	...	11 28 34	3·26	43 56·4	19·9	vF, S, R, vgbM	
3742	2457	3350	...	...	11 28 37	2·94	127 10·6	19·9	pF, pL, vlE, glbM	
3743	...	...	...	Copeland (R)	11 28 38	3·14	67 30·0	19·9	F, S, R, * 9 1′ sf	
3744	...	...	...	St XII	11 28 39	3·15	66 13·0	19·9	eF, S, R, lbM	
3745	...	...	...	Copeland (R)	11 28 54	3·14	67 28·4	19·9	pB, pS, R	
3746	...	...	...	Copeland (R)	11 28 54	3·14	67 29·1	19·9	pB, pS, R	
3747	2458	...	III 969	...	11 28 57	3·75	14 14·8	19·9	eF, S, place doubtful	
3748	...	...	...	Copeland (R)	11 28 58	3·14	67 28·1	19·9	pB, pS, R	
3749	2459	3351	...	...	11 28 59	2·94	127 12·8	19·9	F, cS, lE, gvlbM	
3750	...	...	...	Copeland (R)	11 29 1	3·14	67 31·2	19·9	pB, R, cbM, 1st of 3 in line	
3751	...	...	...	Copeland (R)	11 29 3	3·14	67 33·4	19·9	F, L, E 45°	
3752	2460	917	II 905	...	11 29 3	3·78	13 57·0	19·9	pB, pL	
3753	...	...	...	Copeland (R)	11 29 4	3·14	67 30·7	19·9	pB, pL, 2nd of 3 in line	
3754	...	...	...	Copeland (R)	11 29 4	3·14	67 30·5	19·9	vF, R, 3rd of 3 in line	
3755	2462	920	...	...	11 29 5	3·20	52 49·1	19·9	eF, pL, pmE, gbM	
3756	2461	918	II 784	...	11 29 7	3·32	34 55·7	19·9	pF, L, lE	
3757	2463	919	III 843	...	11 29 9	3·36	30 49·3	19·9	vF, R, stellar, vS * 1 d sf	
3758	...	...	...	Copeland (R) St XIII	11 29 10	3·14	67 37·8	19·9	pB, S, R, bM, * 8·5 3′ f	
3759	5571	...	...	d'A	11 29 15	3·32	34 24·3	19·9	F, S, iR, * 11 nr	
3760	2464	...	...	d'A	11 29 16	3·14	67 24·2	19·9	B, pS, mbMN = * 13, * 11 p 4″, s 175″	*
3761	...	...	...	St XII	11 29 25	3·15	66 14·0	19·9	vF, S, R, bM	
3762	2465	921	II 837	...	11 29 30	3·40	27 29·0	19·9	F, vlE, gbM	
3763	...	...	...	Common	11 29 36	+3·04	99 5·0	+19·9	F, dif, sp 7 st	

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					h m s	s	° ′	″		
3764	2466	...	...	d'A	11 29 39	+3·13	71 20·7	+19·9	F, S, R	
3765	2467	922	...	...	11 29 42	3·15	65 7·4	19·9	vF, S, R	
3766	2468	3352	...	Lac III 7, Δ 289	11 29 42	2·76	150 49·5	19·9	Cl, pL, pRi, pC, st 8...13	
3767	2470	924	...	...	11 29 56	3·13	72 20·6	19·9	vF, S, bM	
3768	2469	923	III 29	...	11 29 58	3·13	71 23·1	19·9	vF, eS, stellar	
3769	2471	925	II 731	...	11 30 10	3·26	41 19·1	19·9	pB, S, pmE	
3770	2472	926	II 838	...	11 30 13	3·36	29 36·6	19·9	pF, S, R, gbM, r	
3771	...	...	...	L II	11 30 17	3·05	98 34·1	19·9	vF, eS, R, * 10 p 15'	
3772	2473	927	II 352	...	11 30 28	3·14	66 32·6	19·9	vF, S, E, r	
3773	2474	928	III 81	...	11 30 58	3·11	77 6·6	19·9	cF, cS, R, psbM	
3774	...	...	...	L II	11 31 17	3·05	98 11·1	19·9	eF, vS, E 75°, *9 np 3′	
3775	...	...	...	Common	11 31 24	3·04	99 53	19·9	pB, bMN	
3776	...	...	...	O St I	11 31 30	3·06	92 38·0	19·9	eF, vS	
3777	...	...	...	L I	11 31 30	3·04	101 47·0	19·9	eF, pS, iR, gbM, S * or neb f	
3778	2475	3353	...	...	11 31 34	2·88	139 55·9	19·9	eF, S, R, am 50 S st	
3779	...	...	...	Common	11 31 38	3·04	99 50	19·9	eeF	
3780	2476	929	I 227	...	11 31 41	3·32	32 57·3	19·9	pF, L, vlE, vgbM, r	
3781	...	...	...	St XI	11 31 44	3·15	62 51·8	19·9	vF, vS, R, bM	
3782	2477	930	II 732	...	11 32 2	3·24	42 45·6	19·9	F, S, att to * 15, another * inv	
3783	2478	3354	...	...	11 32 7	2·95	126 57·8	19·9	cB, R, sbMN *, *9 sf	
3784	...	...	...	St XI	11 32 10	3·15	62 55·0	19·9	vF, vS, R, gmbM	
3785	...	...	...	St XI	11 32 13	3·15	62 55·4	19·9	vF, eS, R, bM	
3786	2479	931	...	...	11 32 19	3·17	57 18·8	19·9	pB, pL, E 57°, gbM, p of 2	
3787	5572	...	...	d'A	11 32 19	3·13	68 46·1	19·9	vF, vS, R, *15 p	
3788	2480	932	...	...	11 32 22	3·17	57 17·3	19·9	cB, pL, pmE 177°, pgbM	*
3789	...	...	...	L II	11 32 30	3·05	98 49·1	19·9	eF, vS, E 0°, gbM	
3790	2481	933	III 109	...	11 32 31	3·12	71 30·2	19·9	cF, vS, pmE, sbM, 2 S st f, 1st of 3	
3791	2482	935	III 609	...	11 32 35	3·05	98 35·2	19·9	vF, vS, R, gbM, *8 s 6′	
3792	...	...	...	Holden	11 32 36	3·09	84 13·5	19·9	vF, dif	
3793	...	...	...	T V	11 32 37	3·17	57 19	19·9	vS, f h 932	
3794	2483	...	III 773	...	11 32 45	3·30	32 59·9	19·9	cF, pS, vS * v nr	*
3795	2484	...	III 844	...	11 32 47	3·33	30 36·4	19·9	vF, S, mE	
3796	2485	937	II 839	...	11 32 48	3·35	28 56·0	19·9	F, cS, R, mbM	
3797	...	...	...	T V	11 32 49	3·17	57 19	19·9	vS, f h 932	
3798	2487	938	II 340	...	11 32 55	3·14	64 31·7	19·9	F, cS, lE, stellar, r	
3799	2486	934 = 3355	...	...	11 32 56	3·12	73 54·1	19·9	cF, R, p of 2	†
3800	2488	936 = 3356	II 103	...	11 32 58	3·12	73 53·5	19·9	F, pS, E, pglbM, r, f of 2	†
3801	2490	939	II 161	...	11 33 1	3·12	71 30·0	19·9	pF, pL, R, bM, r, 2nd of 3	
3802	2493	940	III 30	...	11 33 2	+3·12	71 27·6	+19·9	vF, pS, r, 2 vB st p, 3rd of 3	

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					h m s	s	° ′	″		
3803	2491	...	...	Ld R	11 33 5	+3·12	71 25	+19·9	vF, S, R	
3804	2494	...	II 830	d'A	11 33 15	3·30	33 0·9	19·9	pB, E	
3805	2495	941	III 375	...	11 33 25	3·13	68 52·8	19·9	cB, cS, R, bM, r	
3806	2496	...	...	d'A	11 33 29	3·12	71 25·7	19·9	F, pL, *9·10 s 5′	
3807	2492	...	...	Ld R	11 33 33	3·12	71 25	19·9	vF, S, R (? vF *)	
3808	2497	...	III 338	...	11 33 35	3·14	66 46·7	19·9	vF, vS	
3809	5573	...	...	d'A	11 33 40	3·33	29 20·3	19·9	pB, S, R, glbM	
3810	2499	943	I 21	...	11 33 45	3·10	77 45·2	19·9	B, L, vlE	
3811	2498	942	II 737	...	11 33 46	3·24	41 30·8	19·9	F, S, vlE, glbM	
3812	2500	944	III 320	...	11 33 49	3·14	64 24·2	19·9	cF, vS, R, 1st of 3, *6 sf 3′	
3813	2501	945	I 94	...	11 33 54	3·18	52 40·7	19·9	cB, pL, pmE 90° ±, bM	*
3814	...	...	...	St XI	11 34 9	3·14	64 25·2	19·9	vS, nebs *, p III 339	
3815	2502	946	III 339	...	11 34 21	3·14	64 25·5	19·9	cF, S, 3rd of 3	
3816	5574	...	...	d'A	11 34 31	3·13	69 7·2	19·9	F, S, bM	
3817	2503	947	...	...	11 34 40	3·10	78 55·0	19·9	F, 1st of 4	
3818	2504	948	III 284	...	11 34 48	3·06	95 23·2	19·9	F, pS, R, psbM	
3819	2505	950	...	...	11 34 52	3·10	78 53·7	19·9	vF, 2nd of 4	
3820	5575	...	...	d'A	11 34 52	3·10	78 50·5	19·9	eF, vS, h 950 s	
3821	2506	949	III 376	...	11 34 53	3·13	68 54·4	20·0	vF, cS, R, bM, bet 2 st	
3822	2507	951	II 153	...	11 34 58	3·10	78 57·2	20·0	pF, pS, 3rd of 4	
3823	2508	3357	...	...	11 35 9	3·04	103 4·6	20·0	F, cS, lE, pslbM	
3824	2509	952	III 774	...	11 35 10	3·26	36 26·9	20·0	vF, cS, pmE	
3825	2510	953	II 154	...	11 35 11	3·10	78 58·1	20·0	pF, pS, 4th of 4	
3826	2511	954	II 341	...	11 35 14	3·14	62 44·0	20·0	pF, S, R, psbM, stellar	
3827	2512	...	...	d'A	11 35 21	3·12	70 22·7	20·0	F, S, lbM	
3828	...	...	...	Bigourdan	11 35 43	3·12	72 44·9	20·0	vF, S, dif	
3829	2513	955	III 775	...	11 35 51	3·25	36 29·9	20·0	vF, vS	
3830	2514	956	...	...	11 35 57	3·14	62 43·5	20·0	eF	
3831	2515	957	...	...	11 36 12	3·04	102 5·4	20·0	F, vS, R, bM	
3832	2516	...	III 340	...	11 36 15	3·13	66 24·9	20·0	vF, pL, 2 suspected neb nr	
3833	2517	...	III 102	...	11 36 16	3·10	79 6·9	20·0	eF, pS	
3834	2518	...	..	d'A	11 36 21	3·12	70 7·7	20·0	vF, vS, slbMN *13	
3835	2519	958	...	...	11 36 24	3·31	29 6·8	20·0	pB, E, gbM, ** 8 sf 5′	
3836	...	...	...	T I & V	11 36 26	3·03	106 0·8	20·0	F, S, F * close n	
3837	2526	961	...	...	11 36 39	3·12	69 20·2	20·0	cF, S, R, 1st of 5	
3838	2520	959	II 831	...	11 36 40	3·29	31 16·4	20·0	pB, cS, E, psbM *12	
3839	...	...	...	St XII	11 36 41	3·10	78 26·4	20·0	vF, S, R, lbM	
3840	5576	...	...	d'A	11 36 41	3·12	69 9·2	20·0	F, S, lE	
3841	2521	960	...	...	11 36 43	3·12	69 15·9	20·0	cF, S, R, 2nd of 5	*
3842	2527	962	III 377	...	11 36 44	3·12	69 17·2	20·0	F, S, R, vglbM, 3rd of 5	
3843	...	...	...	Holden	11 36 44	+3·09	81 17·0	+20·0	F, E sp nf, *11 p	

No.	G.C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3844	5577	...	...	d'A	11 36 45	+3·12	69 11·5	+20·0	vF, pS, lE	
3845	2528	963	...	...	11 36 47	3·12	69 14·2	20·0	vF, pS, 4th of 5	
3846	2529	964	...	...	11 36 53	3·26	33 34·7	20·0	F, pL, R, vgbM	
3847	2530	965	...	...	11 36 54	3·16	55 42·3	20·0	F, S, R, psbM	
3848	2531	...	III 35	...	11 36 58	3·10	78 56·0	20·0	eF, vS	
3849	...	...	...	Todd	11 37	3·08	86 4	20·0	F, S, F * 2′ s sp	
3850	2532	...	III 776	...	11 37 2	3·27	33 19·9	20·0	eF, pL, lE	
3851	2533	966	III 378	...	11 37 6	3·12	69 15·6	20·0	eF, vS, R, 5th of 5	
3852	2534	...	III 36	...	11 37 12	3·10	78 56·0	20·0	eF, vS	
3853	5578	...	...	Borelly	11 37 13	3·11	72 39·5	20·0	S, R, bM	
3854	...	...	...	L II	11 37 17	3·05	98 36·1	20·0	eF, vS, lE 70°, bMN	
3855	5579	...	...	d'A	11 37 23	3·16	55 53 ±	20·0	eF, vS, P D doubtful	
3856	5580	...	...	d'A	11 37 23	3·16	55 52 ±	20·0	North of the last one, others near	
3857	...	...	...	St XIII, Sw I	11 37 34	3·12	69 41·5	20·0	vF, vS, mbM	
3858	...	...	...	L II	11 37 35	3·05	98 31·1	20·0	eF, eS, R, gbM, * 9·5 p 3′	
3859	...	...	...	St XIII, Sw I	11 37 36	3·12	69 46·2	20·0	eF, vS, R, lbM, r?	
3860	2535	...	III 386	...	11 37 37	3·12	69 28·0	20·0	vF, vS, r	
3861	2536	970	...	...	11 37 48	3·12	69 15·0	20·0	F, S, R, bM	
3862	2537	...	III 385	...	11 37 52	3·12	69 36·5	20·0	vF, vS, R, * 17 n	*
3863	5581	...	...	m 224	11 37 53	3·09	80 46	20·0	vF, 2′l, m E 70°, glbM	
3864	...	...	...	St XIII, Sw I	11 38 0	3·12	69 49·9	20·0	eF, vS, R	
3865	...	...	...	Common	11 38 4	3·05	98 26	20·0	F, pL, dif	
3866	...	...	...	Common	11 38	3·05	98 30 ±	20·0	sf last one, not so L	
3867	...	...	...	St XIII	11 38 14	3·12	69 49·4	20·0	F, S, irr R, mbM, s of 2	
3868	...	...	...	St XIII	11 38 15	3·12	69 46·7	20·0	vF, vS, R, mbM, n of 2	
3869	2538	971	...	...	11 38 30	3·10	78 23·9	20·0	F, S, iR, psbM	*
3870	2539	972	III 833	...	11 38 34	3·22	39 1·3	20·0	cF, cS, R, psbM	
3871	2540	967	...	...	11 38 35 ±	3·15	56 7·0 ±	20·0	eF, R, gbM, 1st of 4 (?)	*
3872	2541	973	II 104	...	11 38 35	3·10	75 27·4	20·0	B, S, R, smbM *	
3873	5582	...	...	d'A	11 38 35	3·12	69 27·3	20·0	vF, pS, lE, III 387 sf	
3874	2542	...	III 104	...	11 38 36	3·09	80 40·5	20·0	vF, vS, suspected	
3875	2543	...	III 387	...	11 38 37	3·12	69 28·0	20·0	vF, vS, r	
3876	2544	...	III 103	...	11 38 38	3·09	80 2·0	20·0	vF, r	
3877	2545	...	I 201	G. Rümker	11 38 42	3·20	41 44·0	20·0	B, L, mE 37°	
3878	2546	974	...	...	11 38 56	3·15	56 1·3	20·0	vF, R, 2nd of 4	
3879	2547	...	II 881	...	11 39 1	3·39	19 50·0	20·0	F, pL, mE 105° ± (d'A not found)	*
3880	2548	968 = 975	...	...	11 39 1	3·15	56 3·3	20·0	vF, R, gbM, 3rd of 4	*
3881	2549	969 = 976	...	...	11 39 15	+3·15	56 7·1	+20·0	vF, R, gbM, 4th of 4	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3882	2550	3358	...	...	11 39 17	+2·90	145 36·3	+20·0	vF, lE, 2 st inv	
3883	2551	...	III 372	...	11 39 22	3·11	68 36·0	20·0	vF, cL	
3884	2552	977	III 388	...	11 39 31	3·12	68 49·7	20·0	cF, S, iR, gbM, r, *7 sp 6′	
3885	2553	3359	III 828	...	11 39 45	3·01	117 8·6	20·0	cF, vS, vlE, bM, vF * sf	
3886	5583	...	...	d'A	11 39 49	3·11	69 23·4	20·0	F	
3887	2554	979=3360	I 120	...	11 39 57	3·04	106 4·9	20·0	pB, L, iR, vgpmbM	
3888	2555	978	II 785	...	11 40 6	3·24	33 15·4	20·0	pB, S, lE, pgbM	
3889	...	...	...	Ld R*	11 40 8	3·24	33 21	20·0	vF, vS, 5′ s of II 785	
3890	2558	...	III 940	d'A	11 40 25	3·46	14 54·9	20·0	vF, S, R, bM	
3891	2556	980	II 723	...	11 40 46	3·14	58 51·7	20·0	pB, S, bM	
3892	2557	981=3361	II 553	...	11 40 54	3·05	100 11·0	20·0	pB, pL, R, gbM, r	
3893	2559	982	II 738	...	11 41 16	3·19	40 30·4	20·0	B, pL, R, mbM	†
3894	2560	983	I 248	...	11 41 20	3·25	29 48·5	20·0	B, pL, iR, pgmbM, p of 2	
3895	2561	984	II 832	...	11 41 32	3·25	29 47·6	20·0	pF, pL, vlE, gbM, f of 2	
3896	2562	...	II 739	...	11 41 33	3·19	40 32·0	20·0	F, vS	
3897	2563	986	II 408	...	11 41 42	3·14	54 11·6	20·0	F, S, R, bM	
3898	2564	985	I 228	...	11 41 46	3·22	33 8·4	20·0	B, pL, lE, svmbM	
3899	2565	987	...	...	11 41 52	3·12	62 46·5	20·0	pB, R, smbM	
3900	2566	988	I 82	...	11 41 53	3·12	62 13·0	20·0	B, pL, vlE 0° ±, bMN	
3901	2567	...	III 970	...	11 41 59	3·56	11 8·0	20·0	pF, pL, r. Place doubtful	
3902	2568	989	III 321	...	11 42 1	3·12	63 5·8	20·0	F, pS, lE, vglbM	
3903	2569	3362	...	...	11 42 1	3·00	126 44·4	20·0	pB, eS, vlE, lbM	
3904	2570	3363	II 864	...	11 42 9	3·02	118 32·5	20·0	pB, S, R, mbM	
3905	...	...	...	Common, O St I	11 42 14	3·05	98 59·0	20·0	vF, L, dif	
3906	2571	...	III 715	...	11 42 15	3·19	40 48·0	20·0	eF, pL	
3907	2572	990	...	...	11 42 20	3·07	90 19·1	20·0	eF, S, psbM	
3908	...	...	...	Sw I	11 42 28	3·09	77 9·0	20·0	F, vS, R, mbM	
3909	2573	3364	...	...	11 42 34	2·97	137 29·4	20·0	Cl, vL, lC, st 9...14	
3910	5584	...	...	O Struve	11 42 43	3·11	67 53	20·0	S, R, mbM, * 10·11 n 50″	
3911	2574	991	III 341	...	11 42 48	3·12	64 18·0	20·0	vF, S, p of 2	
3912	2575	992	II 342	...	11 42 49	3·12	62 44·0	20·0	F, pL, R, pgbM	
3913	2576	...	II 786	...	11 43 1	3·21	33 53·0	20·0	F, E	
3914	2580	995	III 90	...	11 43 21	3·08	82 38·9	20·0	F, vS, R, lbM, * 13 up 80″	
3915	2577	...	III 113	Peters	11 43 23	3·07	94 22·2	20·0	eF, eS, bet 2 st	*
3916	2578	993	II 787	...	11 43 24	3·21	34 4·5	20·0	eF, R, gbM	
3917	2579=2583	994	II 824	...	11 43 24	3·19	37 23·7	20·0	F, L, vmE, vgbM	*
3918	2581	3365	...	...	11 43 24	2·93	146 24·1	20·0	O, !, S, R, blue, = *7m, d = 1″·5	
3919	5585	...	...	d'A	11 43 28	3·11	69 12·1	20·0	F, S, R	
3920	2582	996	....	...	11 43 34 ±	+3·12	64 17·8	+20·0	Neb, f of 2	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3921	2584	997	II 788	...	11 43 39	+3·20	34 8·5	+20·0	pF, S, R, pspmbM	
3922	2585	...	III 716	...	11 43 48	3·18	39 1·0	20·0	vF, vS	*
3923	2586	3366	I 259	...	11 43 58	3·03	118 3·1	20·0	B, pL, lE, gmbM, r, vS *sp inv	
3924	2587	...	II 825	...	11 43 59	3·19	39 8·0	20·0	pB, S, iF, bM	*
3925	2588	...	...	d'A	11 44 5	3·11	67 20·1	20·0	vF, vS	
3926	2589	998	III 379	...	11 44 11	3·11	67 12·3	20·0	eF, eS, vlE, er, st nr	
3927	5586	...	...	d'A	11 44 17	3·12	61 4·9	20·0	pF, pS	
3928	2590	999	II 740	...	11 44 25	3·17	40 31·9	20·0	pF, S, R, pspmbM	
3929	5587	...	...	d'A	11 44 28	3·11	68 13·3	20·0	Cl, S, st F, vC	
3930	2591	1000	III 616	...	11 44 30	3·14	51 13·3	20·0	eF, cL, iF, glbM, *7 f	*
3931	2592	...	III 769	...	11 44 40	3·18	37 16·0	20·0	eF, S	
3932	2593	...	...	d'A	11 44 49	3·17	40 35·7	20·0	vF, v diffic, II 740 np	
3933	5588	...	...	Borelly	11 44 49	3·10	72 24·3	20·0	pF, lE	
3934	5589	...	...	Borelly	11 44 58	3·10	72 21·8	20·0	eF, R	
3935	2594	1001	...	...	11 45 9	3·12	56 48·8	20·0	pF, S, lE, psbM	
3936	2595	3367	...	...	11 45 20	3·03	116 7·4	20·0	vF, cL, vmE 59°	
3937	2596	1003	III 389	...	11 45 29	3·10	68 35·1	20·0	vF, cS, R	
3938	2597	1002	I 203	...	11 45 31	3·15	45 5·6	20·0	B, vL, R, bMpBN, er	
3939	2598	...	III 971	...	11 45 31	3·38	14 7·0	20·0	eF, vS, R (Place doubtful)	
3940	2599	1004	III 380	...	11 45 34	3·10	68 14·0	20·0	vF, eS, R	
3941	2600	1005	I 173	...	11 45 38	3·13	52 14·4	20·0	vB, pL, R, smbM *9	
3942	...	...	...	L II	11 45 40	3·06	100 39·0	20·0	eF, pS, E 160°, gvlbM	
3943	5590	...	...	d'A	11 45 43	3·10	68 44·4	20·0	pF, pS, E, *8 p 24^s	
3944	2601	1007	III 322	...	11 45 50	3·11	63 0·7	20·0	pF, pS, R, psbM	
3945	2602	1006	I 251	...	11 45 51	3 21	28 32·9	20·0	B, pL, R, gmbM, r, *12 sp	
3946	...	...	...	Bigourdan	11 46 7	3·10	68 12	20·0	vF, vlbM, dif	
3947	2603	1008	II 403	...	11 46 8	3·10	68 28·0	20·0	F, pS, iE, lbM, ** p	
3948	...	...	...	Bigourdan	11 46 21	3·10	68 16	20·0	vF, stellar	
3949	2604	1009	I 202	...	11 46 22	3·16	41 22·0	20·0	cB, pL, pmE, vgbM	*
3950	5591	...	...	Ld R*	11 46 22	3·16	41 19·4	20·0	eF, 2′·6 n of h 1009	
3951	2605	1010	III 342	...	11 46 22	3·11	65 49·5	20·0	vF, cS, vlE	
3952	2607	1012	III 612	...	11 46 28	3·07	93 13·4	20·0	cF, cS, lE 90° ±, bM, r	
3953	2606	1011	V 45	...	11 46 29	3·17	36 53·1	20·0	cB, L, E 0° ±, vsbMLrN	†
3954	2608	1013	III 381	...	11 46 30	3·10	68 20·7	20·0	eF, R	*
3955	2609	...	II 623	...	11 46 54	3·04	112 24·0	20·0	cF, S, E 170° ±, lbs	
3956	2610	3368	III 290	...	11 46 57	3·05	109 47·5	20·0	cF, pL, pmE 57°	
3957	2611	...	II 294	...	11 46 58	3·05	108 47·0	20·0	F, S, E, r	
3958	2612	1014	II 833	...	11 47 10	3·19	30 51·7	20·0	pF, pS, pmE, vgbM	
3959	...	...	...	T V	11 47 27	3·06	96 58·6	20·0	vF, S, bet 2 vF st	
3960	2614	3369	...	Δ 349	11 47 29	+2·98	144 56·4	+20·0	Cl, pL, pRi, gpmbM, st 13	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
3961	2615	...	III 905	...	11 47 31	+3·25	19 54·0	+20·0	eF, vS	
3962	2616	3370	I 67	...	11 47 33	3·06	103 11·8	20·0	cB, pL, iR, gmbM, Δ 2 st	
3963	2613	1015	IV 67	...	11 47 37	3·18	30 43·9	20·0	pF, cL, R, vg, sbM	
3964	2617	1016	...	...	11 47 39	3·11	60 57·1	20·0	vF, S, E, * 10 nf att	
3965	...	...	...	L II	11 47 58	3·06	100 6·0	20·0	eF, eS, R, bMN, * 9·5 np 4′	
3966	5592	...	...	d'A	11 47 59	3·11	57 1·5	20·0	F, pL, lE, bM, * 12 p	
3967	...	...	...	T V	11 48 1	3·06	97 3·9	20·0	vF, S, F * close p	
3968	2621	1018	II 162	...	11 48 15	3·09	77 15·1	20·0	pB, L, iR, bM, * 10, 65°, 3′	
3969	...	...	...	O St II	11 48 17	3·05	107 58·0	20·0	eF, vS, gbMN, * 10 np 4′	
3970	2623	1020	...	...	11 48 19	3·06	101 15·9	20·0	F, S, R, psbM, p of 2	
3971	2624	1019	II 724	...	11 48 20	3·11	59 13·7	20·0	pF, vS, R, bM	
3972	2618	...	II 789	d'A	11 48 24	3·17	33 54·7	20·0	pB, E	*
3973	2622	...	...	Ld R	11 48 24	3·09	77 13	20·0	eF, eS, * 10 1′ sf (requires verification)	
3974	2625	1021	...	...	11 48 32	3·06	101 12·7	20·0	vF, S, R, bM, f of 2	
3975	5593	...	...	Ld R*	11 48 33	3·18	28 41·5	20·0	vF, vS, II 840 f 17′	
3976	2626	1022	II 132	...	11 48 47	3·08	82 28·3	20·0	B, pL, cE 30°, vsmbMN	
3977	2619	...	II 790	Dreyer	11 48 48	3·17	33 50·4	20·0	F, S	*
3978	2627	1023	II 840	...	11 48 50	3·18	28 42·0	20·0	cF, S, lE, bM, * 8, 90°, 6′	
3979	...	...	...	Holden, Sw III	11 48 55	3·07	91 55·0	20·0	pF, * 11·12 nf	
3980	...	...	...	Sw I	11 48 56	3·16	33 50·0	20·0	eF, pL, E, D * nr	
3981	2628	...	III 274	...	11 49 4	3·05	109 7·0	20·0	vF, pL, iF	
3982	2620	1017	IV 62	d'A, Schultz	11 49 9	3·17	34 5·8	20·0	B, pL, R, g, sbM disc	
3983	2629	1024	III 343	...	11 49 10	3·10	65 20·9	20·0	cF, cS, R, psbM	
3984	2630	1026	...	...	11 49 23	3·10	60 13·4	20·0	eF, S, R, bM	
3985	2631	1025	III 707	...	11 49 24	3·14	40 53·0	20·0	vF, cS, another suspected	
3986	2632	1027	...	...	11 49 30	3·11	57 12·0	20·0	pF, S, pmE 90° ±, * 11 nr	
3987	2638	...	...	Ld R	11 50 7	3·10	64 1·5	20·0	F, mE	
3988	2633	1028	...	...	11 50 10	3·10	61 20·7	20·0	vF, S, R, bM *, p of 2	
3989	2639	...	...	Ld R	11 50 12	3·10	63 58 ±	20·0	cF, vS, R	
3990	2634	1029	II 791	...	11 50 17	3·15	33 45·7	20·0	pF, S, lE, pslbM	
3991	5594	...	...	d'A	11 50 18	3·11	56 52·4	20·0	F, S, lE, 1st of 3	
3992	2635	1030	IV 61	...	11 50 19	3·14	35 51·3	20·0	cB, vL, pmE, sbMBrN	
3993	2640	...	...	Ld R	11 50 25	3·10	63 58·8	20·0	vF, pS, E, 3 st nr	
3994	5595	...	...	d'A	11 50 25	3·11	56 56·1	20·0	pB, vS, 2nd of 3	
3995	5596	...	...	d'A	11 50 32	3·11	56 55·0	20·0	F, pL, iR, bM, 3rd of 3	
3996	2636	1032	...	...	11 50 34	3·09	74 55·5	20·0	vF, pL, R, 2 st f	
3997	2641	1033	...	...	11 50 36	3·10	63 57·0	20·0	pF, vS, E 25° bet 2 st	
3998	2637	1031	I 229	...	11 50 38	3·15	33 46·0	20·0	cB, pS, R, vg, smbM	
3999	...	...	...	Ld R*	11 50 44	3·09	64 9·4	20·0	vF, S	
4000	...	...	...	Ld R*	11 50 44	+3·09	64 4·7	+20·0	vF, vS, lE, * 8 m 2′ f, 5597 is sf	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4001	2642	...	...	Ld R	11 50 45	+3·12	41 54·2	+20·0	S, R, 7′ np h 1040	
4002	2643	1034	III 344	...	11 50 46	3·09	66 0·7	20·0	vF, vS, R, n of 2	
4003	2644	1035	III 345	...	11 50 46	3·09	66 5·0	20·0	vF, vS, R, s of 2	
4004	2645	1036	III 354	...	11 50 53	3·10	61 20·4	20·0	F, vS, R, * 12 near	
4005	5597	...	...	O Struve	11 50 56	3·09	64 6·0	20·0	pF, vS, mbM, * 7 np 2′	
4006	2647	1037	...	...	11 50 56	3·07	91 21·1	20·0	F, S, R, bM, * 11 nf	
4007	2648	...	III 325	...	11 50 58	3·09	66 6·0	20·0	eF, vS	
4008	2649	1038	II 368	...	11 51 3	3·10	61 1·6	20·0	pB, pS, E, psbM, * inv n	
4009	...	...	...	Dreyer (R)	11 51 3	3·09	64 2·1	20·0	vF, eS	
4010	2651	1040	...	...	11 51 14	3·12	41 59·2	20·0	F, pL, mE, vglbM	
4011	...	...	...	Dreyer (R)	11 51 14	3·09	64 7·5	20·0	vF, vS, * 12 np	
4012	5598	...	...	m 225	11 51 17	3·08	79 12	20·0	vF, S, lE	
4013	2652	1041	II 733	...	11 51 19	3·12	45 17·2	20·0	B, cL, mE 62°, vsvmbM * 10	*
4014	2653	1042	...	...	11 51 25	3·09	73 2·5	20·0	pB, pS, R, psbM	*
4015	...	...	III 323?	Dreyer (R)	11 51 31	3·09	64 11·1	20·0	F, vS, E, mbM	
4016	2654	...	...	Ld R	11 51 33	3·10	61 39·8	20·0	vF	
4017	2655	1043	II 369	...	11 51 33	3·10	61 44·8	20·0	F, L, E, gbfM	
4018	...	...	...	Dreyer (R)	11 51 35	3·09	63 52·5	20·0	mE np sf, 2 st s	
4019	2656	1044	...	...	11 51 43	3·08	75 0·8	20·0	eF, * 9 sf 5′	
4020	2657	1045	II 725	...	11 51 44	3·10	58 48·0	20·0	pB, pL, E 19°·5, biN	
4021	...	...	III 324?	Dreyer (R)	11 51 50	3·09	64 8·4	20·0	F, S, vlE	*
4022	...	...	...	Dreyer (R)	11 51 51	3·09	63 57·4	20·0	pF, vS, stellar	
4023	...	...	...	Dreyer (R)	11 51 54	3·09	64 13·9	20·0	pF, pL, dif	
4024	2658	...	II 295	...	11 51 56	3·06	107 35·0	20·1	F, vS, iF, bM	
4025	2659	1046	III 617	...	11 51 58	3·10	51 24·7	20·1	eF, pL, R	
4026	2660	1047	I 223	...	11 52 11	3·12	38 15·5	20·1	vB, cL, mE 176°, vsvmbMBN	
4027	2661	3371	II 296	...	11 52 23	3·06	108 29·4	20·1	⊕, pF, pL, R, rr, st 16	
4028	2662	...	III 3	...	11 52 45	3·08	73 0·0	20·1	vF, vS, vlE, r	
4029	5599	...	...	m 226	11 52 50	3·08	81 2	20·1	vF, vS, lE, stellar N	
4030	2663	1048	I 121	...	11 53 14	3·07	90 19·3	20·1	eB, L, vlE, psmbM, B st nr	
4031	5600	...	...	d'A	11 53 20	3·09	57 16·5	20·1	eF, vS, * 17 v nr south	
4032	2664	1049	II 404	...	11 53 22	3·08	69 8·8	20·1	pF, pL, R, gbM, * 12 nf	
4033	2665	...	II 508	Engelhardt	11 53 26	3·06	107 3·8	20·1	pB, S, lE, bM	
4034	2666	...	III 903	...	11 53 45	3·16	19 52·0	20·1	eF, S, iF, gvlbM	
4035	2667	3372	III 279	...	11 53 51	3·06	105 10·2	20·1	eF, pL, * 9m 45° ±	
4036	2668	1050	I 253	...	11 54 13	3·13	27 19·5	20·1	vB, vL, E	*
4037	2669	1051	III 77	...	11 54 13	3·08	75 49·2	20·1	eF, pL, R, r	
4038	2670	1052	IV 28·1	...	11 54 44	3·06	108 5·3	20·1	pB, cL, R, vgbM	†
4039	2671	1053	IV 28·2	...	11 54 44	3·06	108 6·5	20·1	pF, pL	†
4040	...	...	...	Sw VI	11 54 48	3·08	71 23·9	20·1	eF, pS, R, 3 st nr	
4041	2672	1054	I 252	...	11 55 0	+3·12	27 5·0	+20·1	B, cL, R, g, psvmbMrN	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4042	5601	...	...	m 227	11 55 10	+3·08	69 5	+20·1	vF, vS	
4043	2673	1055	...	...	11 55 11	3·07	84 52·6	20·1	pF, S, R, psbM, ⁂ f 30′	
4044	2674	1056	III 491	...	11 55 19	3·07	89 25·9	20·1	eF, eS, R, bM	
4045	2675	1057	II 276	...	11 55 33	3·07	87 14·8	20·1	pF, L, R, sbM, ∗ sf	
4046	5602	...	...	d'A	11 55 34	3·07	87 29·2	20·1	F, pS, Δ 2F st (Qy = h 1057)	*
4047	2676	1058	II 741	...	11 55 37	3·10	40 35·1	20·1	pB, pS, R	
4048	2677	1059	...	...	11 55 39	3·08	71 12·2	20·1	vF, vS, R, psbM	
4049	2678	1060	III 390	...	11 55 42	3·08	70 28·4	20·1	eF, pS, R, glbM	
4050	2679	...	II 509	...	11 55 48	3·07	105 36·0	20·1	F, cL, iR, lbM	
4051	2680	1061	IV 56	...	11 55 59	3·09	44 41·7	20·1	B, vL, E, vgvsmbM ∗ 11	†
4052	2681	3373	...	...	11 56 0	3·04	152 24·2	20·1	Cl, pRi, 1C	
4053	5603	...	...	m 228, d'A	11 56 1	3·08	69 30·0	20·1	F, vS, vlE, alm stell	
4054	2682	...	III 794	...	11 56 9	3·10	31 18·0	20·1	eF, S	
4055	2683	1062	...	...	11 56 32	3·08	68 10 ±	20·1	pB (PD very doubtful)	*
4056	5604	...	...	m 229	11 56 36	3·08	68 57	20·1	eF, vS	
4057	2684	1063	...	...	11 56 37	3·08	68 8 ±	20·1	pB (PD very doubtful)	*
4058	...	...	...	G M Searle	11 56 39	3·07	85 40·5	20·1	vF, pS, R, bM	
4059	2685	1064	...	...	11 56 41	3·08	67 55 ±	20·1	pB (PD very doubtful)	*
4060	5605	...	...	m 230	11 56 48	3·08	68 55	20·1	eF	
4061	2686	1065	III 394	...	11 56 52	3·08	68 59·9	20·1	vF, S, R, p of D neb, Pos 80°	*
4062	2687	1066	I 174	...	11 56 53	3·08	57 19·5	20·1	pB, vL, mE 97°, vgbM	
4063	...	...	...	St XI	11 56 56	3·07	87 22·5	20·1	eF, vS, B pts inv	
4064	2688	...	...′	d'A	11 56 57	3·07	70 46·7	20·1	B, E, gbM	
4065	{2689 = 2701}	1067	III 395	...	11 56 57	3·08	68 59·8	20·1	pF, R, f of D ncb	*
4066	2690	1068	...	...	11 57 0	3·08	68 51·9	20·1	pB	*
4067	2691	1069	III 37	...	11 57 1	3·07	78 21·9	20·1	F, pS, R, gbM	
4068	2692	...	II 781	...	11 57 2	3·09	36 40·0	20·1	pF, S, stellar	
4069	2693	1070	III 392	...	11 57 2	3·08	68 53·6	20·1	vF, vS	*
4070	2694	1071	III 391	...	11 57 2	3·08	68 49·2	20·1	F, vS	*
4071	2695	3374	...	...	11 57 5	3·05	156 31·5	20·1	vF, vS, R, bM ∗, am st	
4072	5606	...	...	Copeland (R)	11 57 6	3·08	69 1·5	20·1	eF, sf h 1065-67	
4073	2696	1072	II 277	...	11 57 17	3·07	87 19·4	20·1	F, pS, R, pgbM, np of 2	
4074	2697	1073	III 393	...	11 57 21	3·08	68 54·0	20·1	eF, vS	*
4075	2698	1074	...	...	11 57 21	3·07	87 9·1	20·1	F, S, R	
4076	{2699 = 2702}	1075	III 396	...	11 57 24	3·08	69 1·1	20·1	vF, vS	*
4077	2700	1076	III 258	...	11 57 30	3·07	87 26·1	20·1	cF, cS, vlE, bM, sf of 2	
4078	5607	...	...	m 231, d'A	11 57 37	3·07	78 37·0	20·1	F, vS, R, glbM	
4079	2703	1077	...	...	11 57 38	3·07	91 36·1	20·1	F, L, R, ∗ 10 n 1′	
4080	2704	1078	III 355	...	11 57 42	+3·08	62 13·5	+20·1	eF, pS, E, gbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4081	...	...	...	Sw I	11 57 44	+3·08	24 46·0	+20·1	F, S, mE, D ∗ nr	
4082	5608	...	...	m 232	11 57 59	3·07	78 34	20·1	vF, vS, lE, lbM	
4083	5609	...	...	m 233	11 58 1	3·07	78 37	20·1	eF, vS	
4084	5610	...	...	d'A	11 58 6	3·07	68 0·2	20·1	F, S	
4085	{2707 = 2705}	...	I 224	d'A, Schultz	11 58 15	3·07	38 52·2	20·1	B, pL, pmE 78°, vsbM	
4086	5611	...	...	d'A	11 58 22	3·07	68 59·5	20·1	F, pS, R	
4087	2706	3375	III 754	...	11 58 24	3·07	115 44·7	20·1	pB, S, R, bM	
4088	2708	...	I 206	d'A, Schultz	11 58 25	3·07	38 40·8	20·1	B, cL, E 55°, lbM	
4089	5612	...	...	d'A	11 58 27	3·07	68 40·1	20·1	vF, S, R, p of 2	
4090	5613	...	...	d'A	11 58 29	3·07	68 56·0	20·1	vF, vS, ∗15 f 1′	
4091	5614	...	...	d'A	11 58 31	3·07	68 40·3	20·1	vF, S, R, f of 2	
4092	5615	...	...	d'A	11 58 40	3·07	68 44·7	20·1	F, pS, R, ∗11 np	
4093	5616	...	...	d'A	11 58 43	3·07	68 42·1	20·1	eF, vS	
4094	2709	3376	...	...	11 58 44	3·07	103 45·5	20·1	eF, L, pmE, vgbM, 2 st 11 nr	
4095	2710	1079	III 382	...	11 58 45	3·07	68 39·0	20·1	vF, vS	
4096	2711	1081	I 207	...	11 58 52	3·07	41 44·6	20·1	pB, vL, m E 32°	
4097	2712	1080	III 400	...	11 58 53	3·07	52 21·1	20·1	eF, vS, R, stellar, ∗10 sp 2′	
4098	2713	1082	III 383	...	11 58 55	3·07	68 36·8	20·1	eF, eS, R, bM	
4099	2714	...	III 384	...	11 58 57	3·07	68 35·0	20·1	eF, eS	
4100	2715	1084	III 717	...	11 59 0	3·07	39 38·8	20·1	pB, vL, vmE 161°, vgvlbM	
4101	2716	1083	III 326	...	11 59 0	3·07	63 39·7	20·1	eF, vS, R, vgbM	
4102	2717	1085	I 225	...	11 59 15	3·07	36 30·6	20·1	B, pS, R, bMBN, ∗12 sp, vnr	
4103	2718	3377	...	Δ 291	11 59 28	3·08	150 27·9	20·1	Cl, pL, pC, iR, st 10...14	
4104	2719	1086	II 370	...	11 59 29	3·07	61 2·6	20·1	pB, pS, lE, bM	
4105	2720	3378	II 865	...	11 59 29	3·07	119 0·4	20·1	pF, pS, R, psbM, r, p of 2	
4106	2721	3379	II 866	...	11 59 34	3·07	119 0·7	20·1	pF, pS, R, pgbM, f of 2	
4107	5617	...	...	d'A	11 59 35	3·07	78 37·4	20·1	○, pB, S, lE, ∗10·11 sf	
4108	2722	1087	...	...	11 59 41	3·06	22 3·5	20·1	B, S, R, gbM	
4109	5618	...	...	Ld R	11 59 49	3·07	46 14·5	20·1	vF, I 195 nnf 6′	
4110	2751	...	...	Ld R	11 59 52	3·07	70 40·9	20·1	F, S	
4111	2723	1088	I 195	...	11 59 56	3·07	46 9·3	20·1	vB, pS, mE 151°	
4112	2724	3380	...	...	11 59 56	3·08	129 25·3	20·1	F, S, vlE, glbM, 3 B st nr	
4113	2725	1089	...	...	12 0 1	3·07	55 13·8	20·1	eF	
4114	2726	3381	III 533	...	12 0 1	3·07	103 24·4	20·1	eF, S, iR, gbM	
4115	2727	1090	...	...	12 0 2	3·07	74 49·2	20·1	eF, suspected	
4116	2728	...	...	Ld R, Peters	12 0 28	3·07	86 32·2	20·1	vF, E (hook shape), sp of 2	
4117	2729	1091	III 708	d'A	12 0 40	3·06	46 5·7	20·1	vF, vS	
4118	5619	...	...	Ld R*	12 0 41	3·06	46 6·8	20·1	eF, vS, 1′ s of III 708	
4119	2730	...	II 14	...	12 0 42	3·07	79 41·0	20·1	lE	*
4120	2731	...	III 904	...	12 0 56	+3·04	19 38·0	+20·1	eF, vS, E	

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					h m s	s	° ′	″		
4121	5620	...	...	d'A	12 0 56	+3·05	24 6·4	+20·1	F, vS, lE, r	
4122	2732	1093	...	...	12 0 59	3·06	56 13·1	20·1	cF, vS, R, mbM	
4123	2733	1092	V 4	...	12 0 59	3·07	86 20·7	20·1	cF, vL, E 90° ±, bMN	†
4124	2734	1094	I 33 = II 60	...	12 1 1	3·07	78 50·5	20·1	pB, pL, mE 118°, bM, r	
4125	2735	...	...	Hind	12 1 4	3·05	24 2·7	20·1	pB, pL, cE, mbM (Anw 28)	
4126	2736	1095	III 68	...	12 1 28	3·07	73 5·2	20·1	vF, S, R, pslbM, bet 2 vS st	
4127	2737	1096	I 279	...	12 1 35	3·01	12 25·0	20·1	F, pL, vlE, glbM	
4128	2738	...	I 263	...	12 1 36	3·03	20 27·0	20·1	cB, lE, bM	
4129	2739	1097 = 3382	II 548	...	12 1 42	3·07	98 15·3	20·1	F, pL, pmE 95° ±, vglbM	
4130	5621	...	...	d'A	12 1 45	3·07	93 14·6	20·1	pE, lbM, * 13 p 5′	
4131	2740	1098	III 356	...	12 1 47	3·06	59 55·5	20·1	cF, S, R, 1st of 3	
4132	2741	1099	III 357	...	12 1 53	3·06	59 59·0	20·1	cF, S, iR, 2nd of 3	
4133	2742	1100	I 278	...	12 1 59	3·00	14 19·3	20·1	pB, cL, R, gmbM	
4134	2743	1101	II 371	...	12 2 1	3·06	60 3·1	20·1	pF, pL, lE, 3rd of 3	
4135	...	...	...	St XI	12 2 4	3·05	45 13·0	20·1	vF, pS, R, 2 F st inv	
4136	2744	1108	II 321	...	12 2 7	3·06	59 18·1	20·1	F, vL, vgmbM	
4137	...	...	...	St XI	12 2 13	3·05	45 7 8	20·1	vF, pS, R, I fainter than sp one	
4138	2745	...	I 196	...	12 2 23	3·05	45 32·5	20·1	B, pL, lE, vgbM, * np	
4139	5622	...	...	d'A	12 2 24	3·07	87 25·5	20·1	F, S, diffic, p of D neb	
4140	5623	...	...	d'A	12 2 29	3·07	87 25·9	20·1	F, S, diffic, f of D neb	
4141	2746	1102	III 795	...	12 2 30	3·04	30 22·0	20·1	vF, pS, lE, gbM, r	
4142	2747	1103	III 814	...	12 2 31	3·04	36 6·1	20·1	vF, S, iF, vglbM, er	*
4143	2748	1104	IV 54	d'A	12 2 32	3·05	46 41·2	20·1	cB, R, vg, vsbMN	
4144	2749	1107	II 747	...	12 2 54	3·05	42 46·3	20·1	pF, cL, vmE 109°, vgbM	
4145	2750	1105	I 169	...	12 2 54	3·05	49 20·0	20 1	B, vL, vglbM	
4146	2753	...	III 327	...	12 2 57	3·06	62 48·0	20·1	vF, pS	
4147	2752	1106	I 19	...	12 2 58	3·06	70 40·7	20·1	⊕, vB, pL, R, gbM, rrr	
4148	5624	...	...	d'A	12 3 1	3·06	53 20·9	20·1	F, S, * 12 sf	
4149	2754	1109	II 802	...	12 3 23	3·03	30 56·2	20·1	F, S, E	
4150	2755	1110	I 73	...	12 3 27	3·06	58 49·1	20·1	B, S, R, pgmbM	
4151	2756	1111	I 165	...	12 3 27	3·05	49 49·0	20·1	vB, S, R, vsmbMBN, p of 2	†
4152	2757	1112	II 83	...	12 3 29	3·06	73 11·3	20·1	pB, pL, R, pgmbM, r	
4153	2758	...	I 11	...	12 3 37	3·06	70 52·0	20·1	B, pL, E, bM	
4154	2759	...	III 845	...	12 3 43	3·03	30 53·0	20·1	vF, S, E 90° ±	
4155	...	...	...	Sw I	12 3 44	3·05	70 12·1	20·1	eF, vS	
4156	2760	1113	II 642	...	12 3 47	3·05	49 45·0	20·1	pF, S, E, vgbM, f of 2	†
4157	2761	1114	I 208	...	12 4 1	3·04	38 43·9	20·1	pF, cL, vmE 60° ± (double ?)	*
4158	2762	1115	II 405	...	12 4 2	3·06	69 2·7	20·1	F, pS, lE, bM, pB * sf	
4159	2763	1116	III 941	...	12 4 5	+2·95	13 5·8	+20·1	eF, pS, R, Δ 2 st	

	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m		° ′	″		
4160	...	...	...	Bigourdan	12 4 31	+3·05	45 29·0	+20·1	Neb ✱ 13 m	
4161	2764	...	II 803	...	12 4 39	3·02	31 27·0	20·1	F, S, R	
4162	2765	1117	II 353	...	12 4 47	3·06	65 5·8	20·1	B, L, iE, bM	
4163	2766	...	III 399	...	12 4 56	3·05	53 2·0	20·1	vF, pL, vlE, r	
4164	...	...	...	T I and V	12 4 59	3·06	76 2	20·1	vF, 2′-3′ s of 5625	
4165	5625	...	...	d'A	12 4 59	3·06	75 59·2	20·1	eF, ✱ 10 np, h 1119 f	
4166	...	...	...	T IX	12 5 0	3·06	71 29	20·0	vF, S	
4167	2767	1118	...	...	12 5 5	3·05	52 43·1	20·1	F, pL, R, vgbM, ✱ s ✱	
4168	2768	1119	II 105	...	12 5 9	3·06	76 0·9	20·1	pB, pL, iF, psbM, r, ✱ inv	
4169	2769	1120	III 358	...	12 5 15	3·05	60 3·3	20·1	F, S, 1st of 4	
4170	5626	...	...	d'A	12 5 16±	3·05	60 2±	20·1	eF } very near h 1120, 21, 22,	
4171	5627	...	...	d'A	12 5 16±	3·05	60 2±	20·1	eF } 24	
4172	2770	1123	II 792	...	12 5 17	3·02	33 3·0	20·1	F, S, lE, gbM	
4173	2771	1121	II 372	...	12 5 17	3·05	60 2·5	20·1	F, S, 2nd of 4	*
4174	2772	1122	III 359	...	12 5 19	3·05	60 5·5	20·1	F, S, 3rd of 4	
4175	2773	1124	III 360	...	12 5 27	3·05	60 3·5	20·1	F, eS, 4th of 4	*
4176	...	...	...	L II	12 5 30±	3·08	98 22·0	20·1	eF, vS, R, slbM, ✱ 10	
4177	2774	3383	III 534	...	12 5 31	3·08	103 14·6	20·1	vF, pL, R, vgbM	
4178	2775	1125	...	...	12 5 36	3·06	78 20·6	20·1	vF, vL, E 45°±, ✱ 7 f	
4179	2776	1126	I 9	...	12 5 42	3·07	87 55·3	20·1	pB, pS, pmE 135°±, bMN	
4180	2777	1127	II 133	...	12 5 54	3·07	82 10·9	20·1	pF, S, lE 0°±, r	
4181	2778	...	III 777	...	12 6 5	3·02	36 20·0	20·1	eF, S, stellar	
4182	...	...	...	Peters	12 6 11	3·07	85 11·0	20·0	vS (? vS Cl)	
4183	2779	1128	III 697	...	12 6 13	3·03	45 32·6	20·1	vF, cL, mE 170°±	
4184	2780	3384	...	...	12 6 14	3·15	151 56·2	20·0	Cl, mC, st eS	
4185	2781	1129	II 373	...	12 6 15	3·05	60 43·0	20·0	cF, L, R, gbM	
4186	...	...	...	T I and V	12 6 20	3·06	74 28·5	20·0	pF, S, R, sp M 98	
4187	2782	...	II 813	...	12 6 29	3·02	38 30·0	20·0	pB, S, lE	
4188	...	...	...	O St I	12 6 30	3·08	101 48·0	20·0	eF, pS	
4189	2783	1131	II 106	...	12 6 39	3·06	75 47·7	20·0	F, L, lE, vglbM, r	
4190	2784	1133	II 409	...	12 6 39	3·04	52 35·5	20·0	cF, pS, R, vglbM, r	
4191	2785	1130	...	...	12 6 40	3·07	82 1·1	20·0	cF, R, bM, near S ✱	
4192	2786	1132	...	Méchain, M 98	12 6 40	3·06	74 19·3	20·0	B, vL, vmE 152°, vsvmbM	†
4193	2787	1134	II 163	...	12 6 45	3·06	76 3·0	20·0	vF, pL, E, vgbM	
4194	2788	1135	II 867	...	12 7 7	3·00	34 40·8	20·0	pB, vS, vsbM ✱ 12	
4195	2789	...	III 796	...	12 7 9	2·99	29 34·0	20·0	eF	
4196	2790	1136	II 374	...	12 7 26	3·05	60 48·3	20·0	pB, S, R, vsmbM ✱	
4197	2791	1137	II 134	...	12 7 29	3·07	83 24·7	20·0	pF, pmE, vgbM	
4198	2792	1139	II 793	...	12 7 30	3·00	33 12·3	20·0	pF, pS, lE, gbM	
4199	2793	...	III 797	...	12 7 32	2·98	29 16·0	20·0	vF, S	
4200	2794	1138	II 164	...	12 7 33	+3·06	77 3·2	+20·0	cF, lE, lbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annnal Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4201	...	...	...	L II	12 7 58	+3·08	100 48·0	+20·0	eF, eS, R, bMN	
4202	...	...	...	Tod	12 8	3 07	90 24	20·0	F, irr, cometary, F ✶ 1′ nf	
4203	2796	1140	I 175	...	12 8 1	3·04	56 1·4	20·0	vB, S, R, psmbM	
4204	2797	1141	III 397	...	12 8 8	3·05	68 33·6	20·0	vF, cL, iR, vgbM	
4205	2798	...	...	d'A	12 8 8	2·96	25 26·0	20·0	pB, pS, R, ✶ 12 f, ln	
4206	2795	...	II 165	T V	12 8 12	3·06	76 10·5	20·0	F, vmE	
4207	5628	...	...	d'A	12 8 18	3·06	79 38·1	20·0	pF, pS, lE, ✶ 14 np	
4208	2799	1142	II 107	...	12 8 19	3·06	75 19·4	20·0	vF, pL, R, gbM (?=h 1144)	*
4209	2800	...	II 375	...	12 8 22	3·04	60 43·4	20·0	F, pS	
4210	2801	1143	III 850	...	12 8 23	2·95	23 14·5	20·0	pF, pS, R, vgbM	
4211	...	...	...	St XI	12 8 32	3·04	61 2·6	20·0	vF, eS, mbM	
4212	2802	1144	II 108	...	12 8 32	3·06	75 19·2	20·0	B, L, E 107°, g, sbM, r	
4213	2803	1145	II 354	...	12 8 32	3·05	65 14·0	20·0	cF, vS, R	
4214	2804	1146	I 95	...	12 8 36	3·03	52 54·1	20·0	cB, cL, iE, biN	✢
4215	2805	1147	II 135	...	12 8 45	3·07	82 49·4	20·0	B, pS, E, sbM ✶ 11	
4216	2806	1148	I 35	...	12 8 46	3·06	76 4·6	20·0	vB, vL, vmE 17°, sbMN	✢
4217	2807	1149	II 748	...	12 8 50	3·01	42 8·4	20·0	pF, L, mE 45°, ✶ n, p of 2 ✶	✢
4218	2808	...	III 718	...	12 8 55	3·01	41 5·0	20·0	vF, vS	
4219	2809	3385	...	...	12 9 7	3·13	132 32·7	20·0	pF, pL, pmE, vglbM	
4220	2811	1151	I 209	...	12 9 13	3·01	41 20·3	20·0	cB, pL, pmE 134°, psbM	
4221	2810	1150	...	...	12 9 14	2·93	22 59·4	20·0	pB, S, R, psbM	
4222	2814	...	II 109	T V	12 9 16	3·06	75 53·0	20·0	vF, pS, R	
4223	2812	1152	II 137	...	12 9 18±	3·07	82 31·5	20·0	pF, pL, R, r (? R A 10ᵐ)	*
4224	2813	1153	II 136	...	12 9 25	3·06	81 45·6	20·0	pB, pS, lE, gbM, r	
4225	2815	1154	...	...	12 9 25	3·08	101 31·8	20·0	F, eS, R, ✶ 170°, 60″	
4226	2816	1155	...	...	12 9 29	3·01	42 12·5	20·0	F, S, lE, f of 2	
4227	2817	1156	II 518	...	12 9 31	3·03	55 42·1	20·0	F, vS, vlE, psbM, sp of 2	
4228	2818	1157	...	...	12 9 32	3·03	52 53·7	20·0	vF, L, R, gbM [?=h 1146]	*
4229	2819	1158	II 519	...	12 9 37	3·03	55 39·6	20·0	cF, vS, lE, psbM, nf of 2	
4230	2820	3386	...	...	12 9 41	3·16	144 31·3	20·0	Cl, F, pL, iF, st 13...15	
4231	2827	...	III 719	d'A	12 9 58	3·00	41 44·5	20·0	vF, vS, n of D neb	
4232	2828	...	III 720	d'A	12 9 58	3·00	41 45·5	20·0	vF, vS, s of D neb	
4233	2823	1161	II 496	...	12 9 59	3·06	81 35·9	20·0	pF, R, vsbMSN	
4234	2822	1160	...	...	12 10 0	3·07	85 32·5	20·0	pB, L, R, gbM	
4235	2821	1159	II 17	...	12 10 1	3·06	82 1·9	20·0	pB, pL, pmE, bM, p of 2	
4236	2825	1163	V 51	...	12 10 3	2·89	19 45·0	20·0	vF, eL, mE 160° ±, vgbM	
4237	2824	1162	II 11	...	12 10 5	3·05	73 53·9	20·0	pB, pL, lE, vgbM, r	
4238	2826	1164	III 851	...	12 10 9	2·94	25 48·5	20·0	vF, pS, iR, vglbM	
4239	...	...	...	Pechüle	12 10 9	3·05	72 43	20·0	F, pL, R	
4240	...	...	...	TI&V, Common	12 10 12	3·08	99 10·4	20·0	pB, S, ✶ 12 sp ½′	
4241	2829	1165	III 480	...	12 10 18	+3·06	82 32·8	+20·0	vF, L, vgbM, ✶ 7 s	

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					h m s	s	° ′	″		
4242	2830	1166	III 725	...	12 10 21	+3·00	43 35·8	+20·0	vF, cL, iR, vgbM, r	
4243	...	...	...	Sw III	12 10 23	3·08	100 32·6	20·0	pB, eS, pB ✶ close p	
4244	2831	1167	V 41	...	12 10 28	3·02	51 24·7	20·0	pB, vL, eE 43°, vgbM	
4245	2832	1168	I 74	...	12 10 33	3·03	59 36·9	20·0	cB, pL, vlE, smbM, r	
4246	2833	...	III 91	...	12 10 44	3·06	82 2·0	20·0	eF	*
4247	...	...	...	G M Searle	12 10 44	3·06	81 56	20·0	F, S, R, bM, 6′ n of III 91	
4248	2834	1169	II 742	...	12 10 49	3·00	41 48·0	20·0	vF, S, pmE, psbM	
4249	5629	...	...	m 234	12 10 50	3·06	83 38	20·0	F	
4250	2835	1170	I 264	...	12 10 53	2·86	18 25·3	20·0	pB, S, R, pgbM	
4251	2836	1171	I 89	...	12 11 5	3·03	61 2·8	20·0	vB, S, E, vsvmbMN, ✶ 6·7 f 90°	
4252	5630	...	...	m 235	12 11 19	3·06	83 39	20·0	F, E	
4253	2837	1172	III 702	...	12 11 31	3·03	59 23·0	20·0	vF, vS, R	
4254	2838	1173	...	Méchain, M 99	12 11 43	3·05	74 48·2	20·0	!! (H, h,) B, L, R, gbM, r (R & L) 3-branched spiral	†
4255	...	...	...	Peters	12 11 46	3·07	84 26·5	20·0	S, pmbM	
4256	2839	1174	II 846	...	12 12 1	2·90	23 19·4	20·0	pB, L, eE 38°, bMBN	
4257	2840	...	...	d'A	12 12 1	3·06	83 29·4	20·0	vF, pS, R, ✶ 18 s 2′	
4258	2841	1175	V 43	...	12 12 2	2·99	41 55·1	20·0	vB, vL, vmE 0°, sbMBN	†
4259	2844	1178	...	...	12 12 13	3·06	83 50·8	20·0	F, pS, R	*
4260	2843	1177	II 138	...	12 12 14	3·06	83 7·4	20·0	pB, E, psbM	
4261	2842	1176	II 139	Schönfeld	12 12 15	3·06	83 23·9	20·0	pB, pS, R, gbM	
4262	2845	1179	II 110	...	12 12 24	3·05	74 20·6	20·0	B, S, R, r	
4263	2846	...	III 535	...	12 12 26	3·09	101 28·5	20·0	vF, pL, iF	*
4264	2847	1180	II 140	...	12 12 27	3·06	83 22·6	20·0	F, pS, R, gbM	
4265	...	...	...	Sw III	12 12 28	3·09	101 28·8	20·0	vF, pS, R	
4266	5631	...	...	m 236	12 12 34	3·06	83 40	20·0	pF	
4267	2848	1181	II 166	...	12 12 37	3·05	76 27·0	20·0	pB, vS, R, vsmbM	
4268	5632	...	...	Schönfeld, d'A	12 12 38	3·06	83 56·3	20·0	pF, S, 2nd of 6 neb	*
4269	2849	...	...	d'A	12 12 41	3·06	83 12·5	20·0	pF, S, R, ✶ 9 f 1″·7, n 85″	
4270	5070	...	II 568?	Schönfeld, d'A	12 12 41	3·06	83 45·6	20·0	pB, S, R	*
4271	2853	...	II 804	...	12 12 44	2·95	32 29·1	20·0	pB, pL, iF	
4272	2850	1182	III 299	...	12 12 45	3·02	58 52·8	20·0	eF, S, iR, gmbM	
4273	2852 = 2862	1183 = 1189	II 569?	...	12 12 47	3·06	83 52·8	20·0	pB, L, E, gbM	*
4274	2851	1185	I 75	...	12 12 48	3·03	59 36·5	20·0	vB, vL, E 90°, mbMN	
4275	2854	1184	II 376	...	12 12 49	3·03	61 36·0	20·0	F, S, vlE, gbM, ✶ 15 nr	
4276	...	...	...	Peters	12 12 59	3·06	81 32·6	20·0	pF, pL	
4277	2865	1190	II 571	Schultz	12 13 0	3·06	83 52·6	20·0	vF, eS	*
4278	2855	1186	I 90 = II 322	...	12 13 4	3·03	59 56·5	20·0	vB, pL, R, mbM, r, 1st of 3	
4279	...	...	...	Sw III	12 13 8	3·09	100 55·7	20·0	eeF, vS, R	
4280	...	...	...	Sw III	12 13 13	+3·09	100 55·2	+20·0	eeF, vS, R	

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					h m s	s	° ′	″		
4281	2857 = 2869	1187 = 1194	II 573 II 570?	...	12 13 13	+3·06	83 50·2	+20·0	B, vL, R, pgbM	*
4282	5633	...	...	m 237	12 13 16	3·06	83 37	20 0	pF	
4283	2858 = 2859	1188	II 323 = II 377	...	12 13 18	3·02	59 54 7	20·0	B, S, R, bM, 2nd of 3	
4284	2860	...	III 798	...	12 13 26	2·93	31 6·0	20·0	cF, lE, p of 2	
4285	...	...	...	Sw III	12 13 28	3·09	100 52·2	20·0	eF, pS, R	
4286	2861 = 2863	...	III 300	d'A	12 13 37	3·02	59 52·0	20·0	vF, 3rd of 3	
4287	5634	...	...	m 238	12 13 40	3·06	83 36	20 0	pF	
4288	2864	1191	III 726	...	12 13 44	2·98	42 56·4	20·0	vF, pS, R, vgbM, r	
4289	...	...	...	T I	12 13 53	3·07	85 29·7	20·0	vF, S, *8·5 12" f	
4290	2866	1193	II 805	...	12 13 58	2·93	31 7·8	20·0	pB, L, R, gmbM	
4291	2868	1192	I 275	...	12 14 2	2·72	13 50·4	20·0	pB, vS, R, lbM, 3 st f	†
4292	2870	1196	...	...	12 14 7	3·06	84 37·7	20·0	F, S, R, vglbM, *9 np 72"	
4293	2867	1195	V 5	...	12 14 8	3·04	70 50·5	20·0	F, vL, E, lbM, r	
4294	2871	1197	II 61	...	12 14 8	3·05	77 42·9	20·0	F, L, mE 135° ±, biN, p of 2	
4295	5635	...	...	d'A	12 14 10	3·02	61 3·4	20·0	vF, S	
4296	2872	...	III 92	...	12 14 23	3·06	82 34·0	20·0	vF, vS	
4297	2873	...	III 93	...	12 14 24	3·06	82 34·0	20·0	eF, eS, (d'A not found)	
4298	2874	1198	II 111	...	12 14 25	3·05	74 36·9	20·0	F, L, E, vgbM, p of 2	
4299	2875	1200	II 62	...	12 14 33	3·05	77 43·0	20·0	F, L, lE, vgbM, f of 2	
4300	2876	1201	II 572	...	12 14 33	3·06	83 50·4	20·0	F, lE, vgbM	
4301	2884	...	...	Ld R	12 14 34	3·06	84 31	20·0	F, E, 10′ nf h 1196	*
4302	2877	1199	II 112	...	12 14 35	3·05	74 37·2	20·0	L, vmE 177°, f of 2	
4303	2878	1202	I 139	Oriani, M 61	12 14 46	3·06	84 45·0	20·0	vB, vL, vsbM *, biN	†
4304	2879	3387	...	...	12 14 52	3·13	122 41·9	20·0	vF, vL, R, vgvlbM, r	
4305	2880	1203	...	...	12 14 53	3·05	76 29·0	20·0	vF, R	
4306	5636	...	...	d'A	12 14 54	3·05	76 26·4	20·0	vF, pL, R, h 1203 sp	
4307	...	...	...	Peters, T VII	12 14 56	3·05	80 10·5	20·0	pF, L, mE, 3 knots	
4308	...	...	...	T V	12 14 56	3·02	59 8·9	20·0	vF, S, vF st inv, np I 76	
4309	...	...	...	Peters	12 15 6	3·06	82 5·4	20·0	F, S, *11 f 12s	
4310	2882	1205	II 378	...	12 15 25	3·02	60 0·6	20·0	F, cL, lE, n of 2	
4311	2883	1206	...	...	12 15 25	3·02	60 1·1	20·0	F, s of 2	
4312	2886	1209	II 628	...	12 15 26	3·04	73 41·1	20·0	pB, cL, E, gbM	
4313	2885	1207	II 63	...	12 15 30	3·05	77 26·4	20·0	vF, L, E 135° ±, r	
4314	2881	1204	I 76	...	12 15 31	3·02	59 19·6	20·0	cB, L, E 150° ±, sbM, *np	
4315	...	...	...	T V	12 15 32	3·05	79 55·0	20·0	vF, vS	
4316	...	...	...	T V, St XIII	12 15 34	3·05	79 53·4	20·0	vF, S, mE, 2 knots	
4317	2887	...	II 324	...	12 15 35	3·01	58 11·0	20·0	F, S	
4318	2889	1208	...	...	12 15 37	3·06	81 1·3	20·0	cF, *8 n 5′	
4319	2888	1210	I 276	...	12 15 38	+2·69	13 54·0	+20·0	pB, pS, vlE, sbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4320	5637	...	...	d'A	12 15 48	+3·05	78 40·5	+20·0	F, vS, sp of 2	
4321	2890	1211	...	Méchain, M100	12 15 50	3·04	73 24·0	20·0	!! {pF, vL, R, vg, psbMrN / (L) 2-branched spiral}	†
4322 / 4323	...	...	...	T V	12 15 50±	3·04	73 20±	20·0	2, vF, n of M 100	
4324	2892	...	...	d'A	12 15 58	3·06	83 58·7	20·0	pB, R or lE, bM	
4325	5638	...	...	d'A	12 15 58	3·05	78 36·3	20·0	vF, vS, iR, nf of 2	
4326	2893	1213	II 141	...	12 16 3	3·06	83 9·0	20·0	vF, S, R, bM, 1st of 3	*
4327	...	...	...	T V	12 16 5±	3·04	73 27±	20·0	vF, s of II 84	
4328	2894	...	II 84	...	12 16 5	3·04	73 25·0	20·0	F, S, R, r	
4329	2896	1214	...	...	12 16 9	3·09	101 45·5	20·0	vF, vS, R, bMN	
4330	2909 = 5639	...	...	Ld R, d'A	12 16 9	3·05	77 51·5	20·0	vF, L, mE	
4331	2898	1220	III 942	...	12 16 11	2·64	13 3·1	20·0	eF, E 0° ±	
4332	2895	1216	II 847	...	12 16 14	2·84	23 22·5	20·0	pF, S, vlE, vgbM	
4333	2899	1215	II 142	...	12 16 14	3·06	83 11·0	20·0	F, pS, R, bM, 2nd of 3	*
4334	2900	1218	...	...	12 16 16	3·06	81 45·1	20·0	pF, S, R, * v nr	
4335	2897	1217	II 806	...	12 16 20	2·91	30 47·0	20·0	pB, S, E, gbM	
4336	2901	1219	II 406	...	12 16 21	3·04	69 48·2	20·0	vF, pL, iR, biN ?	
4337	2902	3388	...	...	12 16 23	3·23	147 20·5	20·0	Cl, pRi, lC, st 12...14	
4338	5640	...	...	d'A	12 16 25	3·02	60 0·1	20·0	vF, lE, com	
4339	2904	1222	II 143	...	12 16 27	3·06	83 8·5	20·0	B, pL, R, bM, 3rd of 3	
4340	2891	1212	II 85	d'A	12 16 30	3·04	72 30·1	20·0	pB, S, R, psbM	
4341	2905	...	III 95	...	12 16 30	3·06	82 14·5	20·0	eF, vS, R	*
4342	2906	...	III 96	...	12 16 30	3·06	82 14·5	20·0	eF, vS, R	*
4343	2907	1223	III 94	...	12 16 31	3·06	82 16·2	20·0	pF, S, E, ? D	*
4344	2908	1224	III 31	...	12 16 33	3·04	71 41·0	20·0	vF, pS, R, vglbM, Δ 2 st	
4345	...	...	...	J G Lohse	12 16 33	2·66	13 54·0	20·0	F, pL, gbM	
4346	2910	1225	I 210	...	12 16 35	2·96	42 13·8	20·0	vF, S, mE 100° ±, vsmbMBN	†
4347	...	...	...	Peters	12 16 42	3·08	92 27·7	20·0	No description	
4348	2911	1226	II 625	...	12 16 43	3·08	92 40·3	20·0	F, pL, E 70° ±, vlbM	
4349	2912	3389	...	Δ 292	12 16 49	3·26	151 7·2	20·0	Cl, vB, vL, lC, st 12...14	
4350	2903	1221	II 86	d'A	12 16 53	3·04	72 31·8	20·0	cB, vS, mE, vsbM	
4351	5641	...	...	d'A	12 16 54	3·05	77 1·1	20·0	F, pL, iR, bM	
4352	2929 = 5642	1227	II 64	d'A	12 16 55	3·05	78 0·6	20·0	cF, cS, lE	*
4353	...	...	...	Peters	12 16 58	3·06	81 24·8	20·0	No description	
4354	...	...	...	Sw VI	12 16 59	3·05	77 1·5	20·0	eeF, pL, v diffic	
4355	...	...	...	Todd	12 17	3·07	90 14	20·0	eF, S, R	
4356	2913	...	III 481	...	12 17 3	3·06	80 42·0	20·0	vF	
4357	...	...	...	Bigourdan	12 17 7	+2·95	40 26·4	+20·0	F, pS, gbM (? = II 743)	

No.	G.C.	J.H.	W.H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4358	2914	1230	III 799	...	12 17 9	+2 90	30 50·5	+20·0	cF, cS, lE	
4359	2916	1229	III 648	...	12 17 10	3·01	57 42·6	20·0	cF, pmE 90°, vlbM	
4360	...	...	...	T V, St XIII	12 17 15	3·05	79 55·8	20·0	F, F st inv, *9·5 np	
4361	2917	1231	I 65	...	12 17 17	3·11	10S 0·1	20·0	vB, L, R, vsmbMN, r	
4362	2918	1233	III 800	...	12 17 17	2·90	30 51·5	20·0	vF, cS, R, r	
4363	2919	...	III 938	...	12 17 18	2 66	14 17·0	20·0	cF, pL, iF	
4364	2920	...	III 801	...	12 17 19	2·89	30 49·0	20·0	cF, cS, R	
4365	2921	1232	I 30	...	12 17 21	3·06	81 54 3	20·0	cB, pL, vlE, gl, smbM	
4366	2922	...	III 97	...	12 17 23	3·06	81 50·0	20·0	cF	*
4367	5643	...	...	d'A	12 17 32	3·05	77 2·7	20·0	vF, S, R	
4368	2923	...	III 38	...	12 17 35	3·05	78 38·0	20·0	vF, vS	
4369	2924	1234	I 166	...	12 17 38	2·98	49 50·7	20·0	cB, S, R, mbMN, r	
4370	2926	1236	II 144	...	12 17 48	3·06	81 46·7	20·0	pF, pS, lE, bM	
4371	2925	1235	I 22	...	12 17 49	3·05	77 31·2	20·0	B, pS, R, gbM	
4372	2927	3390	...	Δ 67??	12 17 50	3·41	161 53·3	20·0	⊕, pF, L, R, st 12...16	
4373	2928	3391	...	...	12 17 56	3·16	128 58·2	20·0	pB, S, R, pgvmbM	
4374	2930	1237	...	M 84	12 17 58	3·05	76 20·2	20·0	vB, pL, R, psbM, r	*
4375	2931	1238	II 379	...	12 17 59	2·99	60 40·1	20·0	F, S, R, bM, *nf 90″	
4376	2941	...	II 530	...	12 18 3	3·06	83 30·0	20·0	F, S	
4377	2942	1239	I 12	...	12 18 7	3·04	74 27·7	20·0	B, S, R, smbM	
4378	2915	1228	I 123	d'A	12 18 9	3·06	84 18·0	20·0	B, S, *8·9 sf 3′	
4379	2943	1240	II 87	...	12 18 10	3·04	73 37·0	20 0	pS, R, psbMN	*
4380	2944	1241	...	...	12 18 17	3 05	79 13·0	20·0	vF, pL, R, lbM	
4381	2945	...	II 743	...	12 18 19	2·94	40 24·0	20·0	F, S	
4382	2946	1242	...	Méchain, M 85	12 18 20	3·03	71 2·0	20·0	vB, pL, R, bM, *np	
4383	5644	...	...	Schönfeld	12 18 21	3·04	72 45·3	20·0	cS, stellar or neb *11·12	
4384	2947	1243	III 879	...	12 18 22	2·91	34 43·0	20·0	cF, S, iR	
4385	5645	...	...	m 239	12 18 32	3·07	88 40	20·0	vF, vS, alm stell	
4386	2948	1247	I 277	...	12 18 32	2·61	13 41·9	20·0	pB, cL, lE, psmbM	
4387	2955	1250	II 167	d'A	12 18 36	3·04	76 25·0	20·0	pF, vS, R, *13 90″ np, np of 2	
4388	2949 = 2956	1244	II 168	...	12 18 41	3·05	76 33·8	20 0	vF, E, sf of 2	
4389	2950	1245	II 749	...	12 18 44	2·95	43 32·4	20·0	pB, pL, iE, vglbM	†
4390	2967	...	III 39	d'A	12 18 45	3·05	78 46·1	20 0	vF, pL, R	
4391	2952	1248	III 852	...	12 18 46	2 82	24 17·2	20·0	cF, S, R, sbM, * * * sp	
4392	2953	1249	III 729	...	12 18 48	2·95	43 25·3	20·0	cF, S, R, vgbM	
4393	2954	1246	III 361	...	12 18 49	3·01	61 39·8	20·0	vF, vL, iF, B*p	
4394	2957	1251	II 55	...	12 18 52	3·03	71 0·7	20·0	pB, lE, bM	
4395	2958	1252	V 29·1	...	12 18 52	2 99	55 40·6	20·0	eF, vL, np of D neb	†
4396	...	...	...	d'A	12 18 53	3·04	73 33·4	20·0	vF, pL, mE	
4397	...	...	...	T I	12 18 57	+3·03	70 54·7	+20·0	vF, S, II 55 sp	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4398	5646	...	...	d'A	12 18 59	+3·05	78 32·4	+20·0	F, pS, III 39 p 14', 14' s	
4399	2959	...	...	Ld R	12 19 ±	2·99	55 40 ±	20·0	vF, form trapezium with 2958 and 62	
4400	2960									
4401	2962	1252	V 29·2	...	12 19 1	2·99	55 42·5	20·0	vF, vL, pslbM, sf of D neb	†
4402	2965	...	...	Auwers	12 19 2	3·04	76 6·2	20·0	F, L, mE 90° (Auw 30)	
4403	2963	...	III 755	...	12 19 3	3·09	96 54·5	20·0	vF, vS, E	
4404	2964	...	III 756	...	12 19 3	3·09	96 54·5	20·0	vF, vS, E	
4405	2966	1254	II 88	...	12 19 3	3·04	73 3·2	20·0	pF, S, R, vsbM, r	
4406	2961	1253	...	M 86	12 19 6	3·04	76 16·7	20·0	vB, L, R, gbMN, r	
4407	2968	1255	...	...	12 19 11	3·04	76 35	20·0	f of 2 neb	
4408	5647	...	...	d'A	12 19 16	3·01	61 21·6	20·0	F, S, r	
4409	2970	...	III 17	...	12 19 17	3·07	86 44·0	20·0	vF, pS, r	
4410	2969	1256	...	...	12 19 21	3·05	80 12·2	20·0	pF, vL, R, gbM	
4411	...	...	...	Peters	12 19 23	3·03	80 21·4	20·0	F, pL	
4412	2971	1257	II 34	...	12 19 26	3·06	85 15·9	20·0	F, pL, R, gbM, r	
4413	2974	1259	II 169	...	12 19 26	3·04	76 37·0	20·0	cF, S, gbM, 2 st n, np	
4414	2972	1258	I 77	...	12 19 28	3·00	58 0·3	20·0	vB, L, E, g, vsmbM *	†
4415	2973	...	III 482	...	12 19 35	3·05	80 47·3	20·0	eF, pS	
4416	2975	1260	...	...	12 19 41	3·05	81 18·0	20·0	vF, L, R, * 7 sp 5'	
4417	2979	...	II 155	Vogel	12 19 44	3·05	79 38·4	20·0	F, pL, E, lbp	
4418	2976	1261	III 492	...	12 19 45	3·07	90 6·7	20·0	H, vF, cL, mE h, F, S, R, * nr	*
4419	2977	1262	II 113	...	12 19 49	3·04	74 10·9	20·0	B, pmE 135° ±, sbM	
4420	2978	1263	II 23	...	12 19 51	3·07	86 43·7	20·0	F, pL, lE, r (? = III 17)	
4421	2981	1264	II 89	...	12 19 58	3·04	73 46·1	20·0	pB, pL, pgbM, B * up	
4422	2980	1265	III 114	...	12 20 0	3·08	95 3·2	20·0	F, vS, R, psbM, 2 S st nr	
4423	2982	1266	II 145	...	12 20 2	3·06	83 20·7	20·0	vF, vS, E	
4424	5648	...	...	d'A	12 20 3	3·05	79 48·4	20·0	F, pL, iR, bM	
4425	2983	1267	II 170	...	12 20 8	3·04	76 29·3	20·0	pF, S, R, bM	
4426	5649	...	...	d'A	12 20 10	3·01	61 23·3	20·0	Cl, F, S	*
4427	...	...	...	Bigourdan	12 20 10	3·01	61 23	20·0	vF, ? 2 or 3 F st in neb	*
4428	2985	1269	...	...	12 20 16	3·09	97 24·2	20·0	vF, pL	
4429	2987	1271	II 65	...	12 20 20	3·05	78 7·0	20·0	B, L, cE, psbM, * 10 nf	
4430	2986	1270	II 146	...	12 20 21	3·06	82 57·9	20·0	cF, L, R, gbM	
4431	2984	1268	II 171	d'A	12 20 22	3·04	76 56·2	20·0	vF, vS, cE, gbM	
4432	5650	...	...	m 240	12 20 24	3·06	83 0	20·0	2 st in eF neb	
4433	2990	1273	...	...	12 20 26	3·09	97 30·8	20·0	pF, pL, lE	
4434	2989	...	II 497	d'A	12 20 30	3·05	81 4·3	20·0	pF, vS	
4435	2991	1274	I 28, 1	...	12 20 35	3·04	76 8·8	20·0	vB, cL, R, np of 2	
4436	2988	1272	II 172	d'A	12 20 36	3·04	76 54·5	20·0	cF, S, gbM	
4437	2996	1277	...	...	12 20 39	+3·07	89 5·7	+20·0	F, eE 75°, * 10 nf, place that of *	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4438	2994	1275	I 28, 2	...	12 20 40	+3·04	76 13·0	+20·0	B, cL, vlE, r, sf of 2	
4439	2997	3392	...	Δ 300?	12 20 45	3·29	149 19·1	20·0	Cl, S, st 11...12	
4440	2993	1276	II 173	d'A	12 20 48	3·04	76 55·9	20·0	B, pS, R, bM, r	
4441	2998 = 3016	1278 = 1291	II 848	...	12 20 53	2·80	24 25·4	20·0	pB, S, iR, bM	*
4442	2999	1279	II 156	...	12 20 57	3·05	79 25·2	20·0	vB, pL, R, smbM	
4443	2995	...	...	Ld R	12 21 0	3·04	76 6±	20·0	F, S, κ in Ld R's diagram	
4444	3000	3393	...	...	12 21 8	3·19	132 29·1	20·0	eF, L, R, vgbM	
4445	5651	...	...	d'A	12 21 10	3·05	79 47·6	20·0	vF, pL, mE	
4446	...	...	...	Sw VI	12 21 12	3·04	75 18·9	20·0	eeF, pS, R	
4447	...	...	...	Sw VI	12 21 14	3·04	75 18·9	20·0	eeF, pS, R	
4448	3001	1280	I 91	...	12 21 17	3·00	60 36·5	20·0	B, L, E 90°, sbM	
4449	3002	1281	I 213	...	12 21 23	2·94	45 8·0	20·0	vB, cL, mE, D or bifid, rrr, *9 f 5′	
4450	3003	1282	II 56 = II 90	...	12 21 25	3·03	72 8·6	20·0	B, L, R, gvmbM*, r, B * sp	*
4451	5652	...	...	d'A	12 21 32	3·05	79 57·8	20·0	pB, pS, R, bM, * 13 s	
4452	3008	...	I 23	Schönfeld	12 21 38	3·04	77 28·2	20·0	pB, S, vmE	
4453	3004	1283	II 26	...	12 21 39	3·06	82 42·8	20·0	F, pS, bM, r	*
4454	3005	1284	II 180	...	12 21 40	3·08	91 10·2	20·0	F, L, R, gbM, er	
4455	3006	1285	II 355	...	12 21 42	3·01	66 24·4	20·0	F, L, E, gbM, 2 B st nf	
4456	3007	3394	...	...	12 21 43	3·15	119 19·7	20·0	eeF, vS, * 13 att	
4457	3009	1286	II 35	...	12 21 50	3·06	85 39·2	20·0	cB, pS, R, smbMN	
4458	3010	1287	II 121	...	12 21 52	3·04	75 59·0	20·0	pB, S, R, bM, p of 2	
4459	3012	1288	I 161	...	12 21 55	3·04	75 14·8	20·0	pB, pL, iR, bM, r, * 8 sf 2′	
4460	3011	1289	I 212 = II 750	...	12 21 57	2·94	44 21·5	20·0	B, pL, E 123°, psbM	
4461	3013	1290	II 122 = II 174	...	12 21 58	3·04	76 2·5	20·0	pF, S, R, bM, f of 2	
4462	3014	3396	III 764	...	12 22 2	3·13	112 23·5	20·0	pB, pS, E 130°, sbM	
4463	3015	3395	...	...	12 22 3	3·35	154 1·0	20·0	Cl, P, vlC	
4464	3018	1292	III 483	...	12 22 14	3·05	81 4·1	20·0	F, vS, R, pgbM	
4465	...	...	...	Bigourdan	12 22 19	3·05	81 12	20·0	vF, v dif	
4466	5653 = 3022	...	...	d'A	12 22 23	3·05	81 31·9	20·0	vF, pS, iR	
4467	5654	...	...	O Struve, d'A	12 22 24	3·05	81 13·6	20·0	vF, vS, lE	
4468	3017	...	II 630	d'A	12 22 26	3·04	75 10·6	20·0	F, cL	
4469	3019	...	II 157	d'A, St XIII	12 22 26	3·05	80 28·0	20·0	pF, pL, mE, bM, r	
4470	3020	1293	II 18 = II 498	...	12 22 31	3·05	81 24·1	20·0	F, pL, iR, bM	
4471	5655	...	...	J Schmidt	12 22 34	3·05	81 19·4	20·0	vF, vS (not found by d'A)	
4472	3021	1294	...	Oriani, M 49	12 22 40	3·05	81 13·5	20·0	vB, L, R, mbM, r	*
4473	3030	...	II 114	d'A	12 22 44	+3·04	75 47·8	+20·0	pB	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4474	3026	1295	II 117 = II 629	...	12 22 49	+3·04	75 9·4	+20·0	pF, R, r	
4475	3027	1297	III 362	...	12 22 49	3·00	61 58·5	20·0	eF, pL, R	
4476	3028	1296	II 123	...	12 22 54	3·04	76 52·7	20·0	F, S, R, bM, 1st of 3	†
4477	3025	...	II 115	d'A, Schultz	12 22 57	3·02	75 35·4	20·0	pB, cL	†
4478	3031	1298	II 124	...	12 23 12	3·04	76 53·8	19·9	pB, S, R, psbM, 2nd of 3	
4479	3029	...	II 116	d'A	12 23 14	3·04	75 39·0	19·9	pB, pL	
4480	3032 = 3060	1299	II 531	...	12 23 18	3·06	84 58·7	19·9	pF, pS, E, bs	
4481	5656	...	...	d'A	12 23 24	2·77	25 11·5	19·9	pF, vS, R, ∗13 att	
4482	3033	...	III 40	...	12 23 33	3·04	78 29·0	19·9	eF, pL	
4483	5657	...	...	d'A	12 23 36	3·05	80 12·6	19·9	pB, pS, R, bM	
4484	3034	1300	...	...	12 23 37	3·10	100 51·9	19·9	pF, S, R, gbM	
4485	3041	1306	I 197	d'A, Rümker	12 23 42	2·94	47 31·5	19·9	B, pS, iR, np of 2	†
4486	3035	1301	...	M 87	12 23 44	3·04	76 50·1	19·9	vB, vL, R, mbM, 3rd of 3	
4487	3036	...	II 776	...	12 23 44	3·09	97 18·5	19·9	F, vL, er	
4488	3037	1302	III 484	...	12 23 45	3·05	80 51·6	19·9	vF, vS, lE	
4489	3038	1303	II 91	...	12 23 48	3·03	72 27·9	19·9	pF, cS, R, gbM	
4490	3042	1308	I 198	d'A, Rümker	12 23 49	2·94	47 34·8	19·9	vB, vL, mE 130°, r, sf of 2	†
4491	3039	1304	III 41	...	12 23 52	3·04	77 44·8	19·9	F, L, R	
4492	3040	1305	II 499	...	12 23 53	3·05	81 8·9	19·9	pF, pL, vglbM, 2 st nr	
4493	5658	...	...	m 241	12 23 57	3·07	88 37	19·9	vF, vS, iR	
4494	3043	1307	I 83	...	12 24 25	3·00	63 27·1	19·9	vB, pL, R, vsmbMN	
4495	3044	1310	III 301	...	12 24 26	2·99	60 5·1	19·9	pF, cS, R, pslbM	
4496	3045	1309	II 36	...	12 24 30	3·06	85 17·8	19·9	F, cL, biN or D neb	
4497	3046	...	III 42	...	12 24 31	3·04	77 37·0	19·9	vF (d'A pF)	
4498	3051	...	III 69	d'A	12 24 36	3·02	72 22·3	19·9	vF, pL, E, ? biN	
4499	3047	3397	...	...	12 24 40	3·20	129 12·3	19·9	vF, L, R, vglbM	
4500	3048	1311	I 234	...	12 24 53	2·83	31 15·7	19·9	B, cS, E, pgbM, ∗9 f 50″	
4501	3049	1312	...	M 88	12 24 55	3·03	74 48·2	19·9	B, vL, vmE	*†
4502	3053	1314	II 92	...	12 24 59	3·03	72 32·4	19·9	vF, S	
4503	3052	1313	II 66	...	12 25 1	3·04	78 3·0	19·9	pB, S, R, gbM	
4504	3054	1398	II 771	...	12 25 4	3·09	96 46·7	19·9	pB, cL, iE, gvlbM, er	
4505	3055	1315	III 18	...	12 25 7	3·06	85 14·9	19·9	vF, cL, r, f of 2	
4506	3056	1316	II 631	...	12 25 7	3·03	75 48·4	19·9	cF, pmE 90° ± , gbM, ∗9 p 8′	
4507	3057	3399	...	...	12 25 10	3·20	129 8·1	19·9	pB, S, R, psmbM ∗16	
4508	3058	1317	...	...	12 25 10	3·06	83 24·0	19·9	vS, R, sbM ∗13	
4509	3059	1318	...	...	12 25 15	2·97	57 8·0	19·9	vF, S, R, lbM	
4510	5659	...	...	d'A	12 25 26	2·75	24 59·8	19·9	Cl, vS, st F, mC	
4511	3061	1319	III 834	...	12 25 33	2·83	32 45·9	19·9	pF, vS, iR, vgbM	
4512	3062	1321	...	...	12 25 45	+2·75	25 29·8	+19·9	pB, S, R, psbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4513	5660	...	...	d'A	12 25 46	+2·71	22 53·5	+19·9	F, R (? vS Cl)	
4514	3063	1320	III 302	...	12 25 48	2·98	59 30·9	19·9	eF, vS, R, bM	
4515	3067	1324	II 93	...	12 26 0	3·02	72 57·2	19·9	F, vS, bM *	
4516	3065	1323	III 78	...	12 26 3	3·03	74 38·7	19·9	F, pS, R, r	
4517	3066	...	IV 5	...	12 26 3	3·07	89 8·9	19·9	cB, vL, vmE 89°, pB * in cont	
4518	3064	1322	...	...	12 26 5	3·05	81 22·5	19·9	F, S, R, bM	
4519	3068	...	II 158	...	12 26 22	3·05	80 34·0	19·9	F, pL, R, bM, r	
4520	3070	...	II 757	...	12 26 24	3·09	96 37·0	19·9	vF, S, 2 vS st inv	
4521	3071 = 3069	1326	II 849	d'A	12 26 30	2·74	25 17·0	19 9	pB, S, pmE, pgbM, * 10 p 12'	*
4522	3072	1325	...	...	12 26 33	3·04	80 2·8	19·9	eF, pL, lE, vlbM	
4523	5661	...	...	d'A	12 26 35	3·03	74 3 8	19·9	Cl + neb, close to a * *	
4524	3073	1327	...	...	12 26 38	3·10	101 14·4	19·9	vF, iF, bM	
4525	3074	1328	II 325	...	12 26 53	2·98	58 58·0	19·9	F, pL, iR, bM	
4526	3075	1329	I 31 = I 38	...	12 26 57	3·05	81 31·6	19·9	vB, vL, mE 120° ±, psmbM, bet 2 st 7 m	
4527	3076	1330	II 37	...	12 27 0	3·06	86 34·4	19·9	pB, L, pmE 69°, mbM	
4528	3077	1331	II 67	...	12 27 1	3·04	77 54·5	19·9	pF, cS, R, bM, * 9 f 30'	
4529	3078	...	III 26	...	12 27 2	3 01	68 41·9	19·9	eF, L	*
4530	3079	1332	...	...	12 27 3	2·93	47 52·8	19·9	Nebulous * 4 mag??? (8Canum)	*
4531	3081	1333	II 175	...	12 27 11	3·03	76 9·3	19·9	F, pL, R, vgbM	
4532	3082	1334	II 147	...	12 27 12	3 05	82 46·2	19·9	pB, pL, pmE, vgbM, r	
4533	...	...	...	T I	12 27 12	3·06	86 53·8	19·9	F, V 2 sf	
4534	3083	1336	II 410	...	12 27 13	2·95	53 42·2	19·9	cF, L, lE, vglbM, r	
4535	3080	...	II 500	...	12 27 15	3·05	81 1·7	19·9	pF, vL, r	
4536	3085	1337	V 2	...	12 27 18	3·06	87 2·5	19·9	B, vL, mE 110°, sbM, er	†
4537	...	...	...	Sw I	12 27 21	2·86	38 24·8	19·9	eeF, S, R, nearly bet 2 st	
4538	5662	...	...	m 242	12 27 31	3·06	85 55	19·9	eF, vS, nearly R	
4539	3086	1338	...	...	12 27 36	3·02	71 0·8	19·9	pB, pmE	
4540	3084	1335	II 94 = II 119	d'A	12 27 47	3·02	73 40·0	19·9	F, pS, bM, r	
4541	3090	1342	III 493	Holden	12 28 0	3·07	89 28·1	19·9	F, S, R, gbM	
4542	3087	1341	...	...	12 28 7	2·86	38 25·3	19·9	eF, pL, R	
4543	3088	1340	...	...	12 28 12	3·05	83 6·6	19 9	pF, cS, R, bM	
4544	...	...	...	Sw VI	12 28 13	3·06	86 11·2	19·9	vF, S, R, bet 2 st	
4545	3089	1346	II 850	...	12 28 17	2·72	25 42·6	19 9	F, L, iR, vgbM, S * nf	
4546	3092	1339	I 160	...	12 28 18	3·08	93 1·2	19·9	vB, cL, pmE 78°, vsmbMN	
4547	3091	1344	III 802	...	12 28 20	2·78	30 19·0	19·9	vF, pS, E, vgbM, * 9 f 2', p of 2	
4548	3093	1345	II 120	...	12 28 23	3·03	74 43·8	19·9	B, L, lE, lbM	
4549	3094	1347	III 807	...	12 28 24	2·78	30 17·7	19·9	eF, pS, E, f of 2	
4550	3095	1343	I 36	...	12 28 26	3·03	77 0·5	19 9	pB, S, vlE, sp of 2	
4551	3096	1349	I 37	...	12 28 34	+3·03	76 57·8	+19·9	pB, S, R, bM, nf of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4552	3097	1348	...	M 89	12 28 36	+3·03	76 40·3	+19·9	pB, pS, R, gmbM	
4553	3098	3400	...	...	12 28 37	3·21	128 39·8	19·9	F, vlE, glbM	
4554	...	...	...	T V	12 28 37	3·03	78 2·5	19·9	vF	
4555	3099	1350	II 343	...	12 28 43	2·98	62 42·3	19·9	B, pS, iR, vsmbM ✱ 12	
4556	3100	1351	II 380	...	12 28 46	2·98	62 18·8	19·9	F, pL	
4557	...	...	...	Bigourdan	12 28 53	2·98	62 11·5	19·9	Nebulous ✱	
4558	3102	1354	...	...	12 28 57	2·98	62 15·0	19·9	vF, nf of 2 or ? 3	
4559	3101	1352	I 92	...	12 29 0	2·98	61 16·1	19·9	vB, vL, mE 150°, gbM, 3 st f	†
4560	3103	1353	I 119	...	12 29 0	3·05	81 33·4	19·9	eB, pL, R, gbM	✱
4561	3104	1355	II 407	...	12 29 6	3·01	69 54·3	19·9	pB, pL, vlE, lbM, r	
4562	...	...	...	T V	12 29	2·99	63 16±	19·9	S, sp V 24	
4563	5663	...	...	d'A	12 29 17	2·98	62 17·2	19·9	F, vS, R, mbM	
4564	3105	1356	II 68	...	12 29 22	3·03	77 47·4	19·9	pB, S, lE, psbM	
4565	3106	1357	V 24	...	12 29 24	2·99	63 14·5	19·9	B, eL, eE 135°, vsbMN = ✱ 10·11	†
4566	3107	1360	III 880	...	12 29 26	2·82	35 0·0	19·9	pF, S, iR, gbM	
4567	3108	1358 = 1363	IV 8	...	12 29 27	3·04	77 58·2	19·9	vF, L, np of D neb	pos 160° ± †
4568	3109	1359 = 1363	IV 9	...	12 29 29	3·04	77 59·4	19·9	vF, L, sf of D neb	
4569	3111	...	...	M 90	12 29 46	3·03	76 3·9	19·9	pL, bMN	
4570	3110	1361	I 32	...	12 29 47	3·05	81 59·1	19·9	eB, pS, mE 0° ±, sbMrN	
4571	3113	1362	III 602	M 91 ??, d'A	12 29 50	3·02	75 1·7	19·9	vF, L, E, vgbM, ✱ 9 nf nr	✱†
4572	3112	1364	III 939	...	12 29 56	2·39	14 59·9	19·9	eF, S	
4573	3114	3401	...	...	12 30 7	3·24	132 51·2	19·9	vF, S, ✱ 10 u 30″	
4574	3115	3402	...	...	12 30 18	3·20	124 44·1	19·9	vF, L, lE, vglbM	
4575	3116	3403	...	...	12 30 19	3·22	129 46·0	19·9	F, S, pmE, 2 st p	
4576	...	...	...	Holden	12 30 23	3·06	84 51·5	19·9	F, ✱ 7 sf	
4577	3117	...	III 13	...	12 30 24	3·05	83 9·9	19·9	vF, vS	
4578	3118 = 3119	1365 = 1366	II 15	...	12 30 26	3·04	79 40·4	19·9	pF, pS, R, sbMN, ✱ np	✱
4579	3121	1368	...	M 58	12 30 39	3·03	77 24·7	19·9	B, L, iR, vmbM, r	
4580	3122	1369	I 124	...	12 30 41	3·05	83 51·9	19·9	pB, L, vgbM	
4581	...	...	...	Holden	12 30 56	3·06	87 44	19·9	F, S, bM stell N	
4582	5071	...	...	S Coolidge	12 31 1	3·07	89 2·8	19·9	✱ 12 in F ncb	
4583	3123	1370	III 495	...	12 31 14	2·95	55 46·3	19·9	eF, S, lE, bM	
4584	3124	...	...	d'A	12 31 17	3·02	76 7·2	19·9	vF, S, R	
4585	5664	...	...	d'A	12 31 19	2·97	60 17·4	19·9	vF, eS	
4586	3125	1371	I 125	...	12 31 20	3·06	84 54·7	19·9	pB, L, E, psbM	
4587	...	...	...	Palisa	12 31 28	3·06	86 34·4	19·8	F, pS, mbM	
4588	3126	...	III 98	...	12 31 46	3·05	82 25·9	19·9	vF, eS	
4589	3127	1374	I 273	...	12 31 59	+2·37	15 2·4	+19·9	eB, L, lE, pgmbM	✱

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					h m s	s	° ′	″		
4590	3128	3404	...	M 68	12 32 5	+3·17	115 58·8	+19·8	⊕, L, eRi, vC, iR, rrr, st 12	
4591	3129	1372	III 504	...	12 32 7	3·05	83 12·5	19·8	vF, cS	
4592	3130	1373	II 31	...	12 32 8	3·07	89 46·3	19·8	F, L, E 90° ±, vgbM	
4593	3131	1375	II 183	...	12 32 27	3·09	94 34·4	19·8	pB, cL, E, sbMN = ✶	
4594	3132	1376	I 43	...	12 32 43	3·11	100 51·2	19·8	!, vB, vL, eE 92°, vsmbMN	†
4595	3133	1377	II 632	...	12 32 50	3·02	73 56·1	19·8	pF, pL, R, gbM	
4596	3134	1378	I 24	...	12 32 51	3·03	79 3·2	19·8	B, pS, R, gmbM, r, 3 st f	
4597	3135	...	II 636	...	12 32 54	3·09	95 2·4	19·8	F, vL, bM	
4598	3136	...	III 105	...	12 33 12	3·04	80 51·4	19·8	eF, L, R, vlbM	
4599	3137	...	III 509	...	12 33 14	3·07	88 0·9	19·8	vF, vS	
4600	3138	1379	II 577	...	12 33 14	3·06	86 6·6	19·8	F, S, R, 2 st 8 f	
4601	3139	3405	...	...	12 33 24	3·24	130 9·0	19·8	eF, L, R, pslbM, p of 2	
4602	3140	1380	II 184	...	12 33 27	3·09	94 21·8	19·8	F, L, E, vglbM	
4603	3141	3406	...	...	12 33 31	3·24	130 12·0	19·8	F, L, R, vgbM, r	
4604	...	...	...	Peters	12 33 32	3·09	94 22·6	19·8	No description	
4605	3142	1381	I 254	...	12 33 45	2·69	27 37·2	19·8	B, L, vmE 118°·6, glbM	
4606	3143	1382	III 43	...	12 33 53	3·03	77 20·2	19·8	vF, pS, E, 2 or 3 vS st inv	
4607	...	...	...	Ld R	12 34 7	3·03	77 20	19·8	F, mE, 3′ or 4′ f III 43	
4608	3144	1383	II 69	...	12 34 8	3·03	79 4·5	19·8	pB, pL, R, psbM, r, ✶ 12 np 1′	
4609	3145	3407	...	Δ 272	12 34 13	3·46	152 12·1	19·8	Cl, pL, pC, cE, st 10	
4610	3147	...	II 19	...	12 34 20	3·04	81 30·9	19·8	F, vL (Place uncertain)	*
4611	...	...	...	St XII	12 34 23	3·02	75 30·1	19·8	eF, S, lE, bet 2 v F st	
4612	3148 = 3174	1384	II 148 = II 20	...	12 34 27	3·04	81 54·9	19·8	pB, S, R, psmbM	*
4613	5665	...	...	d'A	12 34 34	2·97	63 9·1	19·8	vF, S, lE, 1st of 3	
4614	5666	...	...	d'A	12 34 38	2·97	63 11·4	19·8	F, S, R, ✶ 12 np, 2nd of 3	
4615	5667	...	...	d'A	12 34 44	2·97	63 9·8	19·8	F, pL, E, 3rd of 3	
4616	3149	3408	...	...	12 34 45	3·25	129 54·2	19·8	eF, vS, R, ✶ att nf, p of 2	
4617	3150	...	II 744	...	12 34 46	2·82	38 48·8	19·8	pF, S, iR, er	
4618	3151 3152	1385	I 178 I 179	...	12 34 50	2·89	48 4·8	19·8	B, L, E, mbM, curved branch n	†
4619	3154	1388	II 411	...	12 34 57	2·92	54 9·9	19·8	F, pS, R, lbM, ✶ 8·9 f	
4620	3153	1387	...	...	12 34 58	3·02	76 17·5	19·8	vF, S, R, vgbM	
4621	3155	1386	...	M 59	12 34 58	3·03	77 35·1	19·8	B, pL, lE, vsvmbM, 2 st p	†
4622	3156	3409	...	...	12 35 4	3·25	129 58·5	19·8	pF, S, R, pslbM, f of 2	
4623	3157	1389	II 149	...	12 35 4	3·04	81 33·9	19·8	cF, pL, E, pslbM, r	
4624	3158	1390	...	...	12 35 7	3·06	86 10·3	19·8	B, E	
4625	3160	1392	II 660	...	12 35 10	2·88	47 57·0	19·8	pF, S, R	
4626	3161	1393 = 3410	II 772	...	12 35 10	3·10	96 16·2	19·8	vF, cS, lE, glbM	
4627	3159	1391	II 659	...	12 35 11	2·94	56 39·1	19·8	F, S, R, np of 2	
4628	3162	1394 = 3411	II 773	...	12 35 11	+3·10	96 11·4	+19·8	cF, S, E, gbM	

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					h m s	s	° ′	″		
4629	3163	...	...	d'A	12 35 21	+3·07	91 2·2	+19·8	pB, pL, E, lbM, ? biN	
4630	3164	1395	II 532	...	12 35 22	3·06	85 16·4	19·8	cF, S, R, lbM	
4631	3165	1397	V 42	...	12 35 22	2·93	56 40·9	19·8	!, vB, vL, eE 70° ±, bMN, ✶12 att n	†
4632	3166	1396	I 14	...	12 35 24	3·07	89 18·9	19·8	pB, L, E 45° ±	
4633	...	...	...	Sw VI	12 35 24	3·02	74 51·5	19·8	eeF, pS, F ✶ close p, III 603 s	
4634	3167	1398	III 603	...	12 35 39	3·02	74 56·0	19·8	vF, L, mE 135° ±, vgbM	
4635	3168	1400	...	...	12 35 40	2·99	69 17·5	19·8	vF, L, vglbM	
4636	3169= 3170	1399= 1401	II 38	...	12 35 41	3·06	86 32·7	19·8	B, L, iR, vgvmbM, r	✶
4637	3172	...	...	Ld R	12 35 43 ±	3·03	77 47 ±	19·8	Makes a D neb with h 1402 (?)	✶
4638	3171	1402	II 70= II 176	...	12 35 44	3·03	77 47·4	19·8	F, R, gbM	
4639	3173	1403	II 125	...	12 35 49	3·02	75 58·7	19·8	pB, S, E, r, ✶12 sf 1′	
4640	...	...	...	Sw VI	12 35 54	3·02	76 58·1	19·8	eF, pL, lE, ✶nr p	
4641	...	...	...	Sw VI	12 35 58	3·02	77 11·1	19·8	eF, pL, R, F ✶nr f	
4642	3175	...	III 494	...	12 36 7	3·07	89 53·5	19·8	vF, cS, E	
4643	3176	1404	I 10	...	12 36 11	3·06	87 15·3	19·8	cB, pS, lE, mbM	
4644	3177	1406	II 794, 1	...	12 36 18	2·75	34 4·4	19·8	vF, S, R, gbM	✶
4645	3178	3412	...	...	12 36 22	3·26	130 58·8	19·8	pB, S, psbM	
4646	3179	1407	II 794, 2	...	12 36 26	2·76	34 22·4	19·8	F, S, 4 vS st sp	✶
4647	3180	1405	III 44	...	12 36 29	3·03	77 39·0	19·8	pF, pL, lE 115° ±, np of D neb	†
4648	3181	1410	I 274	...	12 36 33	2·26	14 48·6	19·8	pB, cS, R, gbM, ✶ ✶ p	
4649	3182	1408	...	M 60	12 36 37	3·03	77 40·8	19·8	vB, pL, R, f of D neb	†
4650	3183	3413	...	...	12 36 41	3·26	129 57·6	19·8	vF, R, bM, r	
4651	3184	1409	II 12	...	12 36 42	3·01	72 50·5	19·8	cB, L, E 90°, gbM, r	
4652	3185	1413	...	...	12 36 49	2·70	30 16·3	19·8	pF, pL, gbM, 2 B st 6′ np	
4653	3186	...	III 662	...	12 36 50	3·07	89 47·8	19·8	vF, pL	
4654	3187	1411	II 126	...	12 36 54	3·02	76 7·1	19·8	F, vL, pmE, ? D, 3 st nr	
4655	3188	1412	II 661	...	12 36 55	2·88	48 12·4	19·8	vF, vS, stellar, ✶15 f	
4656	3189	1414	I 176	...	12 37 9	2·93	57 4·0	19·8	!, pB, L, vmE 34°, sp of 2	✶†
4657	3190	1415	I 177	...	12 37 18	2·93	57 0·8	19·8	!, pF, L, E 90° ±, nf of 2	✶†
4658	3191	3414	II 558	...	12 37 23	3·11	99 18·9	19·8	vF, L, E, ✶16 att, ✶9 p	
4659	3192	1416	II 127	...	12 37 28	3·02	75 44·4	19·8	F, cS, R, bM, r	
4660	3193	1417	II 71	...	12 37 29	3·03	78 4·1	19·8	vB, S, vsvmbMN	
4661	3194	3415	...	...	12 37 38	3·26	130 19·9	19·8	F, pL, R, gbM	
4662	3195	1418	II 643	...	12 37 43	2·90	52 6·0	19·8	pF, pL, R, gbM, r	
4663	...	...	...	T V	12 37 43	3·11	99 24	19·8	vF, S, ✶13·14 f	
4664	3196	...	II 39	...	12 37 46	3·06	86 0·8	19·8	pB, 2 S st in M, S ✶p (?= h 1419)	✶
4665	3197	1419	I 142	...	12 37 58	3·06	86 10·7	19·8	B, pL, iR, mbM, ✶10 sp	
4666	3198	1420	I 15	...	12 37 58	+3·07	89 41·7	+19·8	B, vL, mE 45° ±, psbM	

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					h m s	s	° ′	″		
4667	3199	1421	...	...	12 38 12	+3·02	77 47·5	+19·8	B, S, R, psbM (?)	*
4668	3200	...	III 663	...	12 38 23	3·07	89 47·0	19·8	vF, S, iF	
4669	5668	...	...	d'A	12 38 23	2·74	34 21·9	19·8	F, E (? r)	
4670	3201	1422	III 328	...	12 38 24	2·95	62 6·6	19·8	pF, cS, R, bM, r, p of 2	
4671	3202	1423	II 774	...	12 38 32	3·10	96 18·1	19·8	pF, S, R, psmbM	
4672	3203	3416	...	...	12 38 36	3·27	130 56·9	19·8	eF, S, R, vgbM	
4673	3204	1424	III 329	...	12 38 44	2·95	62 10·4	19·8	F, vS, R, sbM * 10, f of 2	
4674	3205	3417	...	...	12 38 47	3·10	97 52·7	19·8	vF, cS, R, glbM	
4675	3206	...	III 778	...	12 39 11	2·73	34 28·7	19·8	cF, S, lE	*
4676	3207	1425	II 326	...	12 39 18	2·93	58 30·1	19·7	vF, pmE, ? biN	
4677	3208	3418	...	...	12 39 18	3·27	130 49·9	19·7	eF, lE, vgbM	
4678	...	...	...	L II	12 39 27	3·09	93 49·2	19·7	eF, eS, R (neb ?), * 2' f	
4679	3209	3419	...	...	12 39 36	3·26	128 48·1	19·7	eeF, pL, R	
4680	3210	3420	...	...	12 39 36	3·12	100 52·6	19·7	eF, S, 1 or 2 st inv	
4681	3211	3421	...	...	12 39 46	3·29	132 34·8	19·7	pF, S, R, gbM	
4682	3212	3423	III 523	...	12 39 58	3·11	99 17·5	19·7	cF, L, E 45° ±, gvlbM	
4683	3213	3422	...	...	12 40 3	3·28	130 47·4	19·7	eF, pS, R, vgbM, S * sp	
4684	3214	1426	II 181	...	12 40 6	3·08	91 57·8	19·7	B, pL, pmE 25°	*
4685	3215	1427	III 398	...	12 40 13	2·98	69 46·9	19·7	F, S, R, sbM *, rr	
4686	3216	1428	II 795	...	12 40 19	2·73	34 42·0	19·7	pF, vS, vmE, vsmbM	*
4687	3217	1430	...	...	12 40 39	2·90	53 52·9	19·7	vF, vS, R, psbM	
4688	3218	1429	III 543	...	12 40 43	3·05	84 54·0	19·7	eF, pL, *9·10 p 10'	
4689	3219	1431	II 128	...	12 40 44	3·01	75 28·6	19·7	pB, vL, E, vglbM, r	
4690	3220	...	III 664	...	12 40 47	3·08	90 54·5	19·7	vF, S	
4691	3221	1432	II 182	...	12 41 0	3·08	92 33·5	19·7	pB, pL, E 90° ±, mbM	
4692	3222	1433	II 381	...	12 41 3	2·94	62 0·7	19·7	F, cS, R, bM	
4693	3223	...	III 906	...	12 41 6	2·33	18 3·7	19·7	vF, plE	
4694	3225	1434	II 72	...	12 41 11	3·02	78 14·8	19·7	pF, S, vlE	
4695	3224	1435	II 796	...	12 41 12	2·73	34 51·4	19·7	eF, pS, vlE, mbMN	*
4696	3226	3424	...	Δ 510?	12 41 12	3·28	130 32·5	19·7	pB, L, R, gbM, r	
4697	3227	1436	I 39	...	12 41 22	3·09	95 2·2	19·7	vB, L, lE 45° ±, smbMN	
4698	3228	...	{I 8 = III 6}	...	12 41 28	3·03	80 44·9	19·7	cB, pL, iR, bM, r	*
4699	3229	{1437 = 3425}	I 129	...	12 41 47	3·11	97 54·1	19·7	vB, R, vmbMrN, r	
4700	3230	{1438 = 3426}	III 524	...	12 41 50	3·12	100 38·3	19·7	F, L, mE 40°, vlbM, B * p	
4701	3231	...	II 578	...	12 42 2	3·05	85 50·7	19·7	F, S	
4702	5669	...	...	d'A	12 42 3	2·94	62 0·7	19·7	Cl, F, S, vmC	
4703	3232	...	III 514	...	12 42 6	3·11	98 21·7	19·7	eF, cS, pmE	
4704	3233	1439	II 662	...	12 42 9	2·84	47 18·7	19·7	cF, S, R, gbM	
4705	3238	1440	III 610	d'A	12 42 12	+3·09	94 26·1	+19·7	cF, pL, lE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	
					h m s	s	° ′	″		
4706	3234	3427	...	...	12 42 16	+3·29	130 31·8	+19·7	vF, vS, R, psbM	
4707	3235	...	III 815	...	12 42 20	2·75	38 2·7	19·7	S, stellar	
4708	3236	...	III 722	...	12 42 23	3·12	100 20·7	19·7	eF, S	
4709	3237	3428	...	Δ 511	12 42 27	3·29	130 36·2	19·7	pB, cS, R, gbM	
4710	3240	1441	II 95	...	12 42 39	3·00	74 4·3	19·7	cB, pL, vmE 28°·5, sbMN	†
4711	3242	1443	II 412	...	12 42 40	2·89	53 54·3	19·7	F, S, E, glbM, er	
4712	3241 = 3239	1442	...	...	12 42 41	2·95	63 45·7	19·7	vF, pL	
4713	3243	1444	I 140	...	12 42 52	3·05	83 55·4	19·7	pB, L, vlE, glbM	
4714	3244	1445	III 536	...	12 43 2	3·13	102 33·9	19·7	F, pS, R, gbM	
4715	5670	...	...	d'A	12 43 8	2·94	61 25·0	19·7	F, S, R	
4716	...	...	...	T V	12 43 17	3·11	98 41·3	19·7	Double neb, np brighter & smbM, sf one fainter	
4717	...	...	...	T V	12 43 18	3·11	98 42·0	19·7		
4718	3245	1446	...	T V	12 43 20	3·09	94 30·9	19·7	eF, vS, bet 2 st	
4719	3246	1448	III 424	...	12 43 23	2·90	56 4·6	19·7	vF, stellar	
4720	3248	1447	III 611	...	12 43 26	3·09	93 23·2	19·7	eF, S, bM	
4721	5671	...	...	d'A	12 43 29	2·94	61 55·3	19·7	vF, vS, ? r	
4722 4723	...	...	...	T V	12 43 30±	3·13	102 34	19·7	2 vF, vS, f III 356	
4724	3250	1449	III 280	...	12 43 34	3·14	103 34·5	19·7	F, vS, R, stellar, np of 2	
4725	3249	1451	I 84	...	12 43 35	2·95	63 44·2	19·7	vB, vL, E, vg, vsvmbMeBN	†
4726	...	...	...	T V	12 43 36	3·14	103 30	19·7	vF, 4′ n of D neb	
4727	3251	1450	II 298	...	12 43 38	3·14	103 35·0	19·7	F, pL, R, lbM, sf of 2	
4728	5672	...	...	d'A	12 43 38	2·94	61 48·1	19·7	eF, eS	
4729	3252	3430	...	...	12 43	3·29	130 20±	19·7	neb, 1st of 3 p, a little s of h 3433	
4730	3253	3431	...	...	12 43	3·29	130 20±	19·7	2nd of 3	
4731	3254	1452	I 41	...	12 43 45	3·10	95 37·8	19·7	vF, pL, E	*
4732	3255	...	II 814	...	12 43 54	2·72	36 20·7	19·7	F, S, vsmbM	
4733	3256	1453	II 73	...	12 44 3	3·02	78 19·8	19·7	cF, pL, lE, r, * 12 p	*
4734	3257	1454	...	...	12 44 5	3·05	84 23·3	19·7	vF, vS, R	
4735	...	...	...	Bigourdan	12 44 12	2·93	60 18·6	19·7	vF, vlbM	
4736	3258	1456	...	Méchain, M 94	12 44 17	2·84	48 7·0	19·7	vB, L, iR, vsvmbMBN, r	†
4737	3259	1457	III 496	...	12 44 19	2·89	55 5·2	19·7	eF, vS, pmE	
4738	3247	...	...	Ld R, Bigourdan	12 44 19	2·92	60 27·5	19·7	vF, E 30°, vlbM	*
4739	3260	1455	III 515	...	12 44 21	3·11	97 39·2	19·7	F, pL, lE, pglbM	
4740	...	...	...	Sw VI	12 44 26	3·14	103 33·5	19·7	pF, pS, R, mbM	
4741	3261	1458	III 721	...	12 44 30	2·78	41 33·9	19·7	vF, S, R, psbM	
4742	3262	3432	I 133	...	12 44 31	3·12	99 41·6	19·7	pB, vS, vbMN = * 11, * 10 sf	
4743	3263	3429	...	...	12 44 31	3·30	130 37·9	19·7	F, R, gbM	
4744	3264	3433	...	...	12 44 37	3·30	130 18·7	19·7	F, L, E, gbM, 3rd of 3	
4745	5673	...	...	d'A	12 44 38	+2·93	61 48·6	+19·7	eF, * 6 n	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4746	3265	1460	...	...	12 44 55	+3·01	77 9·6	+19·7	pB, mE, r	
4747	3266=3269	...	II 344	...	12 44 55	2·94	63 28·7	19·7	F, pL, lE	
4748	3267	1459	III 537	...	12 44 55	3·13	102 38·8	19·7	F, vS, iR, gbM	
4749	3268	...	III 907	...	12 44 56	2·24	17 36·7	19·7	vF, cL, E 135° ±	
4750	3270	1463	IV 78	...	12 45 7	2·18	16 21·6	19·7	pB, L, R, vg, vsbM	
4751	3271	3434	...	...	12 45 7	3·31	131 54·5	19·7	B, pS, R, vg, vsmbM	
4752	3272	...	III 82	...	12 45 10	3·01	75 44·7	19·7	vF, S, E, r	
4753	3273	1461	I 16	...	12 45 12	3·08	90 26·2	19·7	cB, L, vlE, vglbM	
4754	3274	1462	I 25=II 74	...	12 45 15	3·02	77 55·5	19·7	B, pL, R, psbM, p of 2	
4755	3275	3435	...	Lac II 12, Δ 301	12 45 22	3·53	149 35·3	19·6	Cl, vL, st vB (κ Crucis)	†
4756	3276	1464	III 281	...	12 45 35	3·14	104 38·8	19·6	vF, pS, r	
4757	...	...	...	T V	12 45 35	3·12	99 34·5	19·6	vF	
4758	3277	1465	III 70	...	12 45 46	2·99	73 23·3	19·6	vF, pL, E?	
4759	...	...	II 559	d'A, T V	12 45 49	3·11	98 26·5	19·6	pL, double, ∗ 10 2′ sp	
4760	5674	...	...	Winnecke	12 45 50	3·12	99 44·0	19·6	pB, R	
4761	...	...	...	T V	12 45 52	3·11	98 26·5	19·6	eF, eS, 1′ f D neb II 559	
4762	3278	1466	II 75	...	12 45 54	3·02	78 0·5	19·6	pB, vmE 31°, 3 B st s, f of 2	†
4763	3279	...	III 489	...	12 45 56	3·15	106 13·7	19·6	vF, S, lbM	
4764	...	...	...	T V	12 46 0	3·11	98 28·5	19·6	eF, eS, sf D neb II 559	
4765	3280	1467	III 544	...	12 46 8	3·05	84 46·5	19·6	F, cS, R, gbM	
4766	...	...	...	T V	12 46 10	3·12	99 36·0	19·6	vF	
4767	3281	3436	...	...	12 46 11	3·30	128 58·1	19·6	B, pS, lE, mbM	
4768	...	...	...	T V	12 46	3·12	98 46	19·6	vF, vS, p III 525 on parallel	
4769	...	...	...	T V	12 46	3·12	98 46	19·6		
4770	3282	...	III 525	...	12 46 13	3·12	98 45·7	19·6	vF, vS	
4771	3283	1468	II 535	...	12 46 13	3·06	87 58·4	19·6	F, pL, mE, ∗9 p 90°	
4772	3285	1469	II 24	...	12 46 21	3·06	87 4·3	19·6	pF, pS, R, mbM	
4773	3284	...	III 516	...	12 46 22	3·11	97 54·6	19·6	vF, S	
4774	3286	1471	III 618	...	12 46 27	2·86	52 25·1	19·6	eF, cS, R, bM	
4775	3287	1470	II 186	...	12 46 30	3·10	95 51·6	19·6	F, cL, R, vglbM, r	
4776	3288	3437	...	...	12 46 47	3·11	98 26·6	19·6	F, S, R, vlbM, p of D neb	
4777	3289	...	III 517	...	12 46 48	3·11	98 1·6	19·6	vF, S	
4778	3290	3438	...	...	12 46 48	3·11	98 26·3	19·6	vF, S, R, vlbM, f of D neb	
4779	3291	1472	III 106	...	12 46 48	3·02	79 31·6	19·6	vF, pL, R, r	
4780	...	...	...	T V	12 46 50	3·11	97 53·5	19·6	vF, f III 516 and 517	
4781	3292	...	I 134	...	12 47 5	3·12	99 46·6	19·6	cB, vL, mE	
4782	3293	...	I 135	...	12 47 15	3·13	101 49·1	19·6	pF, pS, R, mbM, p of D neb	
4783	3294	...	I 136	...	12 47 16	3·13	101 50·1	19·6	pF, pS, R, mbM, f of D neb	
4784	3295	...	III 526	...	12 47 17	+3·12	99 51·6	+19·6	eF, cS	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4785	3296	3439	...	...	12 47 17	+3·38	137 58·9	+19·6	vF, S, R, glbM	
4786	3297	...	II 187	...	12 47 21	3·10	96 6·1	19·6	pB, pS, mbM, r	
4787	5675	...	...	d'A	12 47 22	2·93	62 10·5	19·6	vF, vS, II 345 f	
4788	5676	...	...	d'A	12 47 23	2·92	61 56·2	19 6	vF, S	
4789	3298	1473	II 345	...	12 47 30	2·93	62 10·0	19·6	F, R, *9 att 1′ n	
4790	3299	...	II 560	...	12 47 32	3·12	99 28·6	19·6	pF, pS, iR	
4791	5677	...	...	m 243	12 47 40	3·03	81 11	19·6	eF, vS, lE, vlbM	
4792	...	...	...	T V	12 47 43	3·13	101 46·5	19·6	vS, R, 7′ n np of II 538	
4793	3300	1475	I 93	...	12 47 54	2·91	60 18·1	19·6	pB, pS, lE, *8 nf 1′	
4794	3301	...	II 538	...	12 47 55	3·13	101 52·1	19·6	vF, S, 2 or 3 st near	
4795	3302	1474	II 21	...	12 47 59	3·03	81 10·9	19·6	pF, pL, R, bM, r	
4796	5678	...	...	m 244	12 48 1	3·03	81 11	19·6	eF, eS, alm stell, close f h 1474	
4797	5679	...	...	d'A	12 48 7	2·92	61 54·4	19·6	F, S, R, lbM	
4798	3303	1477	II 382	...	12 48 7	2·92	61 49·3	19·6	pF, pS, gbM	
4799	3304	1476	III 548	...	12 48 8	3·05	86 20·3	19·6	eF, S, vS * att	
4800	3305	1478	I 211	...	12 48 11	2·77	42 42·7	19·6	pB, eS, R, psbM, * 14 p	
4801	3306	1479	III 816	...	12 48 27	2·68	36 8·5	19·6	eF, S, lE	
4802	...	...	...	T V	12 48 29	3·13	101 17·7	19·6	vF, S, * 10 att	
4803	5680	...	...	m 245	12 48 31	3·03	81 0	19·6	eF, eS, R, lbM	
4804	3307	...	IV 40	...	12 48 34	3·14	102 17·6	19·6	S, att to pB *	
4805	...	...	...	Bigourdan	12 48 38	2·90	61 15	19·6	vF	
4806	3308	3440	...	...	12 48 39	3·23	118 45·0	19·6	F, eS, R, gvlbM	
4807	5681	...	...	d'A	12 48 40	2·91	61 43·2	19·6	F, pS, R, bM	
4808	3311	1480	I 141	...	12 48 43	3·05	84 56·0	19·6	pB, cL, E 135° ±	
4809 / 4810	3309 / 3310		...	...	Ld R*	12 48 45	3·05	86 42 ±	19·6	F, D neb, E at right angles to each other
4811	3312	3441	...	...	12 49 6	3·33	131 2·3	19·6	eF, eS, R, gbM, p of 2	
4812	3313	3442	...	...	12 49 6	3·33	131 3·8	19·6	eF, S, R, gbM, f of 2	
4813	3316	1482	II 777	...	12 49 20	3·10	96 3·5	19·6	F, S, R, bM	
4814	3315	1483	I 243	...	12 49 22	2·59	30 53·7	19 6	B, pS, vlE, vgbM	
4815	3317	3443	...	...	12 49 24	3·68	154 11·8	19·6	Cl, pL, pRi, iF, st 10...18	
4816	3314	1481	II 383	...	12 49 25	2·92	61 29·8	19·6	vF, pL	
4817	...	...	...	Bigourdan	12 49 26	2·92	61 15	19·6	vF, no N	
4818	3318	1484= 3445	II 549	...	12 49 33	3·11	97 46·1	19·6	pB, L, pmE 0°, gbM	
4819	3324	1487	II 346	d'A	12 49 40	2·92	62 15·2	19·6	vF, pL, iF	
4820	...	...	...	T V	12 49 41	3·14	102 58	19·6	vS, sp of II 563	
4821	5682	...	...	d'A	12 49 42	2·92	62 16·6	19·6	vF, vS, II 346 np	
4822	...	...	...	T V	12 49 46	3·12	100 0·0	19·6	F, st inv	
4823	...	...	...	T V	12 49 47	3·14	102 55	19·6	vS, sp of II 563	
4824	...	...	...	Bigourdan	12 49 48	+2·92	61 48·0	+19·6	vF, vS	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4825	3320	...	II 563	...	12 49 51	+3·14	102 54·6	+19·6	pB, iF, bM	
4826	3321	1486	...	M 64	12 49 51	2·95	67 33·5	19·6	! vB, vL, vmE 120° ± , bMSBN	†
4827	3319	1485	II 384	...	12 49 53	2·92	62 3·8	19·6	F, eL	
4828	5683	...	...	d'A	12 49 53	2·91	61 13·3	19·6	F, S, R	
4829	...	...	...	T V	12 50 3	3·14	102 59	19·6	vS, sf II 563	
4830	...	...	...	T IV and V	12 50 3	3·17	108 56 0	19·6	F, L, st inv, *8 m 5′ sf	
4831	3322	3447	...	...	12 50 6	3·22	116 32·2	19·6	F, S, R, gbM	
4832	3323	3446	...	...	12 50 6	3·32	129 59·6	19·6	pF, vS, R, sbM *17, *10, 70°·3	
4833	3325	3444	...	Lac I 4, Δ 164	12 50 8	3·90	160 6·9	19·6	⊕, B, L, R, g, vsbM, st 12	
4834	3326	1488	III 817	...	12 50 11	2·68	36 56·7	19·6	vF, S, iR, bM	
4835	3327	3448	...	...	12 50 15	3·38	135 30·0	19·6	F, pL, mE, vgbM	
4836	...	...	...	T V	12 50 15	3·14	101 59·2	19·6	vF, L, dif	
4837	3328	1489	...	...	12 50 23	2·73	40 26·2	19·6	Neb?	
4838	3329	1490	...	T V	12 50 36	3 14	102 18·0	19·5	vF, pS, R, 3 S st sp	
4839	3333	1494	II 386	d'A	12 50 36	2 91	61 44·9	19·5	F, pL, R	
4840	5684	...	II 385	d'A	12 50 45	2·91	61 38·6	19·5	vF, vS	
4841	3331	1493	II 387	...	12 50 46	2·91	60 46·0	19·5	pF, pL, R, vS *att	
4842	5685	...	...	d'A	12 50 46	2·91	61 44·2	19·5	vF, vS, h 1494 sp	
4843	3332	1492	III 613	...	12 50 48	3·09	92 51·4	19·5	eF, E, er, *sf 30″	
4844	...	...	...	T V	12 50 51	3·14	102 18·6	19·5	F, S	
4845	3330	1491	II 536	...	12 50 52	3·06	87 40·4	19·5	pF, pL, pmE, vgbM, *nf 30°	
4846	3334	1495	...	...	12 51 9	2·84	51 52·1	19·5	eF	
4847	...	...	...	T V	12 51 10	3·14	102 22·6	19·5	F, S neb *, *9 p 40ˢ on parallel	
4848	5686	...	...	d'A	12 51 17	2 91	61 0·0	19·5	pF, S, lE	
4849	5687	...	...	d'A	12 51 28	2·92	62 56·1	19·5	pB, R, bM	
4850	5688	...	...	d'A	12 51 29	2·91	61 16·3	19·5	F, S, R	
4851	5689	...	...	d'A	12 51 33	2·91	61 5·3	19·5	F, vS, r	
4852	3335	3449	...	Δ 311	12 51 45	3·57	148 50·6	19·5	Cl, L, pRi, iR, st 10	
4853	3336	1496	...	...	12 51 49	2·91	61 38·4	19·5	F, S, R, pslbM	
4854	5690	...	...	d'A	12 51 55	2·91	61 34·0	19·5	vF, pL, com	
4855	...	...	...	T V	12 51 58	3·14	102 28·4	19·5	F, S, st inv	
4856	3337	1497	I 68	...	12 52 0	3·15	104 17·0	19·5	B, R, psmbM, *13 np	*
4857	3339	...	III 908	...	12 52 2	2·17	19 1·5	19·5	eF, vS, iR, vlbM	
4858	5691	...	...	d'A	12 52 14	2·90	61 7·2	19·5	F, vS, p of D neb	
4859	5692	...	...	d'A	12 52 15	2·91	62 25·7	19·5	F, vS, R	
4860	5693	...	...	d'A	12 52 17	2·80	61 6·8	19·5	pF, S, R, f of D neb	
4861	3340	1499	IV 30	...	12 52 23	2·85	54 23·0	19·5	vF, pL, vmE 30° ± , bet 2 st	†
4862	...	...	...	L I	12 52 25	3·15	103 22·2	19·5	eF, S, R	
4863	...	...	...	L I	12 52 25	+3·15	103 17·2	+19·5	eF, S, mE 45°, sbMN	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4864	3343	1500	...	d'A	12 52 27	+2·90	61 16·0	+19·5	F, S, p of 2	
4865	5694	...	...	d'A	12 52 29	2·90	61 9·5	19·5	vF, vS, *7·8 f 13'	
4866	3342	1498	I 162	...	12 52 29	2·99	75 4·4	19·5	B, pL, mE 90°, sbMN, S * inv	†
4867	...	...	...	d'A, Bigourdan	12 52 32	2·90	61 15	19·5	vF, vS, stellar, f h 1500	
4868	3341	...	II 644	...	12 52 36	2·83	51 56·5	19·5	pB, S, R, mbM	
4869	3344	1501	II 388	d'A	12 52 37	2·90	61 19·8	19·5	cF, S, R, *7 n	
4870	...	...	...	Ld R*	12 52 40	2·83	52 15	19·5	pF, lE, bet 2 st	
4871	...	...	...	d'A, Bigourdan	12 52 45	2·90	61 17·0	19·5	vF, vS, stell N	
4872	3347	1502	II 389	d'A	12 52 49	2·90	61 17·0	19·5	pF, pS, R	
4873	...	...	...	d'A, Bigourdan	12 52 49	2·90	61 15·5	19·5	vF, vS	
4874	5695	...	...	d'A	12 52 53	2·90	61 17·1	19·5	F, h 1501 and 1502 p	
4875	...	...	...	Bigourdan	12 52 53	2·90	61 19	19·5	vF, vS, stellar	
4876	...	...	...	Bigourdan	12 53 2	2·90	61 19	19·5	vF, vS, no Nucl	
4877	3338	...	II 299	T V	12 53 3	3·15	104 31·7	19·5	pB, pL, mbM	*
4878	3345	...	III 758	...	12 53 6	3·10	95 21·0	19·5	vF, vS, p of 2	
4879	3346	...	III 759	...	12 53 8	3·10	95 20 ±	19·5	vF, vS, f of 2	
4880	3348	1503	III 83	...	12 53 9	3·00	76 46·3	19·5	cF, pL, R, vglbM, r	
4881	5696	...	...	d'A	12 53 11	2·90	60 59·9	19·5	F, S, lE, *9 sp	
4882	5697	...	...	d'A	12 53 12	2·90	61 16·0	19·5	vF, S, others near	
4883	...	...	...	d'A, Bigourdan	12 53 13	2·90	61 12	19·5	vF, S, stellar	
4884	5698	...	...	d'A	12 53 15	2·90	61 16·3	19·5	Chief one of Multiple Neb	
4885	3349	1504	...	...	12 53 17	3·11	96 5·8	19·5	vF, S, E	
4886	5699	...	...	d'A	12 53 18	2·90	61 15·9	19·5	F, S, R, II 391 f 4'	
4887	...	...	...	T V	12 53 18	3·15	103 54·7	19·5	vF, I 69 nf	
4888	3350	1505	II 778	...	12 53 21	3·10	95 19·0	19·5	pF, cS, E, psbM, * np *	
4889	3351	1507	II 391	...	12 53 22	2·90	61 16·0	19·5	pB, pmE, bM, *7 n	
4890	3352	1506	III 614	...	12 53 24	3·09	93 50·1	19·5	cF, S, iR, bM	
4891	...	...	...	T V	12 53 24	3·14	102 40·0	19·5	F neb *	
4892	3353	1508	II 390	...	12 53 28	2·91	62 21·1	19·5	vF	
4893	5700	...	...	d'A, Ld R*	12 53 29	2·83	52 3·5	19·5	vF, *20 sp, *17 nf	
4894	3354	1510	III 363?	...	12 53 30	2·90	61 17·2	19·5	pF, S, R	*
4895	5701	...	...	d'A	12 53 30	2·90	61 2·5	19·5	vF, S, R	
4896	...	...	...	Bigourdan	12 53 31	2·90	60 56	19·5	vF, vS, R, mbM	
4897	...	...	...	T V	12 53 31	3·14	102 41·9	19·5	F	
4898	...	...	...	d'A, Bigourdan	12 53 32	2·90	61 18	19·5	vF, S, close to h 1510	
4899	3355	...	II 300	...	12 53 34	3·15	103 11·5	19·5	pF, eL	
4900	3356	1509	I 143	...	12 53 34	3·06	86 45·0	19·5	cB, cE, *10 att 135° ±	*†
4901	3357	1512	...	...	12 53 35	2·72	42 1·8	19·5	pF, S, R, gbM	
4902	3358	1511	I 69	...	12 53 38	3·15	103 45·9	19·5	pB, pL, iR, st nr	*
4903	3359	3450	...	...	12 53 44	3·26	120 12·0	19·5	vF, cS, R, *att, p of 2	
4904	3361	...	II 517	...	12 53 48	+3·07	89 16·0	+19·5	pB, pS, R, bM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4905	3360	3451	...	...	12 53 51	+3·26	120 10·0	+19·5	vF, vS, R, slbM, f of 2	
4906	5702	...	...	d'A	12 53 53	2·90	61 19·5	19·5	vF, vS, * 15 p	
4907	5703	...	...	d'A	12 54 2	2·90	61 5·3	19·5	eF, vS, * 13 att	
4908	5704	...	...	d'A	12 54 5	2·90	61 13·1	19·5	vF, vS	
4909	3362	3452	...	...	12 54 9	3·36	132 0·9	19·5	eF, 3 or 4 st 11, 12, f	
4910	3363	...	V 3	...	12 54 10	3·06	87 35·5	19·5	eF, vL, rr	*
4911	3364	...	II 392	d'A	12 54 10	2·90	61 27·3	19·5	1st of 4, F, pL, * 11 2′ np	
4912	5705	...	...	Ld R*	12 54 12	2·82	51 52 ±	19·5	Two neb, n of and in line with h 1514 (?)	
4913	5706	...	...	Ld R*	12 54 12	2·82	51 54 ±	19·5		
4914	3365	1514	II 645	...	12 54 12	2·82	51 55·8	19·5	pB, eS, R, smbM, * 17 np	
4915	3366	1513	IV 47	...	12 54 15	3·09	93 46·8	19·5	pB, S, R, bM	
4916	5707	...	...	Ld R*	12 54 20	2·82	51 53 ±	19·5	Neb, nf h 1514 (?)	
4917	3367	1515	...	...	12 54 27	2·72	42 1·9	19·5	eF, S, E, bM	
4918	...	...	...	L II	12 54 33	3·09	93 45·3	19·5	eF, eS, R, bMN, h 1513 sp 4′	
4919	5708	...	...	d'A	12 54 35	2·90	61 26·0	19·5	vF, vS, 2nd of 4	
4920	...	...	...	T V	12 54 35	3·14	100 44	19·5	vF	
4921	3368	1516	II 393	...	12 54 39	2·90	61 21·8	19·5	F, pL, 3rd of 4	
4922	5709	...	...	d'A	12 54 42	2·89	59 56·0	19·5	pB, S, R, lbM, * 11·12 f	
4923	3369	1518	II 394	...	12 54 45	2·90	61 23·8	19·5	vF, 4th of 4	
4924	3370	1517	...	...	12 54 51	3·15	104 13·2	19·5	cF, L, vlE 45° ±	
4925	3371	1519	II 779	...	12 54 51	3·11	96 57·7	19·5	cF, S	
4926	5710	...	...	d'A	12 55 7	2·90	61 37·3	19·5	pB, S, R, glbM	
4927	3372	...	III 364	d'A	12 55 13	2·90	61 14·8	19·5	vF	
4928	3373 = 3374	3453	II 190 = III 760	...	12 55 43	3·12	97 19·5	19·4	F, pS, vlE, glbM	*
4929	5711	...	...	d'A	12 55 59	2·89	61 12·3	19·4	F, S, * 16 close p	
4930	3375	3454	...	...	12 56 15	3·36	130 39·8	19·4	vF, R, Δ 2 st 8, 9, f	
4931	5712	...	...	d'A	12 56 17	2·89	61 13·3	19·4	F, S	
4932	3376	...	III 818	...	12 56 20	2·66	38 47·5	19·4	cF, S, R, vglbM	
4933	3377	...	II 191	...	12 56 28	3·14	100 45·0	19·4	pB, pL, iR	
4934	5713	...	...	d'A	12 56 28	2·89	61 12·9	19·4	F, S, lE	
4935	...	...	...	Sw VI	12 56 36	2·98	74 51·7	19·4	vF, vS, R, 3 st f	
4936	3378	3456	...	...	12 56 39	3·26	119 46·4	19·4	pB, S, R, bM, * f 6′	
4937	3379	3455	...	...	12 56 43	3·43	136 28·0	19·4	ceF, S, R, p of 2	
4938	3380	1521	...	...	12 56 48	2·65	37 55·3	19·4	cF, R, psbM	
4939	3381	3458	II 561	...	12 56 57	3·13	99 35·7	19·4	pB, L, R, gmbM	
4940	3382	3457	...	...	12 56 58	3·43	136 29·4	19·4	F, S, R, f of 2	
4941	3383	1520	I 40	...	12 56 59	3·10	94 48·4	19·4	pF, L, E, gbMBN, r	
4942	3384	...	III 761	...	12 57 0	3·11	96 55·5	19·4	vF, S	
4943	5714	...	...	d'A	12 57 2	2·89	61 9·7	19·4	vF, vS	
4944	3385	1522	II 395	...	12 57 5	+2·89	61 3·6	+19·4	F, S, R, bM, * 9 nf 1′	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4945	3386	3459	...	Δ 411	12 57 14	+3·46	138 32·1	+19·4	B, vL, vmE 38°·7	
4946	3387	3460	...	...	12 57 32	3·39	132 50·9	19·4	B, pS, R, gpmbM, p of 2	
4947	3388	3461	...	...	12 57 34	3·31	124 35·1	19·4	F, pL, R, vglbM	
4948	...	...	...	Sw VI	12 57 36	3·12	97 11·6	19·4	eeF, pS, lE, I 130 f	
4949	5715	...	...	d'A	12 57 37	2·88	60 12·9	19·4	eF, S	
4950	3389	3462	...	...	12 57 40	3·39	132 45·8	19·4	eF, S, R, pslbM, f of 2	
4951	3390	1523	II 188	d'A	12 57 55	3·11	95 44·8	19·4	F, pL, lE, r	
4952	3391	1524	II 396	...	12 58 15	2·88	60 7·5	19·4	F, S, R, psbM * 11	
4953	3392	3463	...	...	12 58 18	3·33	126 48·5	19·4	vF, pS, am 3 S st	
4954	3393	1527	...	...	12 58 24	1·66	13 50·6	19·4	vF, S, R, vgbM	*
4955	3394	3464	...	...	12 58 26	3·26	119 0·2	19·4	F, cS, R, gbM	
4956	3395	1525	II 413	...	12 58 27	2·83	54 4·3	19·4	pB, cS, R, smbM	
4957	3396	1526	II 397	...	12 58 27	2·89	61 40·8	19·4	F, S, R	
4958	3397	3465	I 130	...	12 58 32	3·12	97 16·2	19·4	vB, pS, E, bMBN	
4959	3399	1528	...	...	12 59 2	2·84	56 4·1	19·4	eF, S, R	
4960	5716	...	...	d'A	12 59 3	2·89	61 45·8	19·4	F, S, R, N = * 16	
4961	3400	1529	II 398	...	12 59 5	2·89	61 31·0	19·4	F, S, iF	
4962	3401	...	III 303	...	12 59 10	2·87	60 10·4	19·4	eF, vS	
4963	3402	1530	II 663	...	12 59 27	2·75	47 31·2	19·4	F, vS, R, stellar, vS * s	
4964	3403	1532	III 779	...	12 59 28	2 54	32 56·0	19·4	eF, S, lE	
4965	3404	3466	...	...	12 59 34	3·26	117 28·6	19·4	vF, vL, cE, vgbM	
4966	3405	1531	III 304	...	12 59 35	2·87	60 12·2	19·4	vF, vS, vlE, vglbM, * sp	
4967	3406	1533	III 783	...	12 59 35	2·59	35 40·7	19·4	vF, S, E, * att	
4968	3407	3467	...	...	12 59 37	3·22	112 55·8	19·4	F, pL, R, glbM	
4969	...	...	...	Sw VI	12 59 41	2·98	75 36·6	19·4	eeF, S, R, v diffic	
4970	3408	...	III 765	...	12 59 58	3·22	113 15·4	19·4	vF, pL, iF	
4971	5717	...	...	d'A	13 0 7	2·87	60 42·4	19·4	F, vS, lE, * nr n	
4972	3409	...	III 937	...	13 0 17	1·67	13 57·4	19·4	vF, S, iR, bM	*
4973	3410	...	III 781	...	13 0 18	2·58	35 38·7	19·3	vF, S	
4974	3411	...	III 782	...	13 0 32	2·58	35 36·7	19·3	vF, S	
4975	3412	1534	...	...	13 0 37	3·10	94 17·0	19·3	vF, vS, R, psbM	
4976	3413	3468	...	...	13 0 40	3·48	138 45·4	19·3	B, pL, R, gmbM	
4977	3414	...	III 780	...	13 0 42	2·54	33 34·4	19·3	cF, S	
4978	3415	1535	...	...	13 0 58	2·95	70 50·1	19·3	F, vS, R, sb M, stellar	
4979	3416	...	III 346	...	13 1 8	2·90	64 29·4	19·3	eF, pL, lE	
4980	3417	3469	...	...	13 1 30	3·26	117 54·0	19·3	eF, cS, R	
4981	3418	1537	II 189	...	13 1 32	3·11	96 2·0	19·3	B, pL, R, * 10 1′ sf	
4982	...	...	...	T V	13 1 32	3·14	99 50	19·3	vF, S	
4983	3419	...	III 365	...	13 1 33	2·87	60 56·4	19·3	vF	
4984	3420	1536	II 301	...	13 1 33	3·17	104 45·7	19·3	B, pL, R, psmbM	*
4985	3422	1539	III 654	...	13 1 50	+2·74	47 35·0	+19·3	vF, vS, R, lbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
4986	3423	1538	III 401	...	13 1 51	+2·81	54 3·1	+19·3	vF, S, R, stellar	
4987	3424	1542	II 815	...	13 1 55	2·60	37 18·9	19·3	vF, vS, stellar	
4988	3425	3470	...	...	13 1 55	3·40	132 21·3	19·3	vF, S, E, r	
4989	3421 = 3426	...	II 185	Markree Cat	13 2 1	3·10	94 38·9	19·3	pB, S, R, * 4 mg sf (Auw 31)	*
4990	5718	...	...	d'A	13 2 4	3·10	94 31·4	19·3	vF, vS	
4991	5719	...	...	m 246	13 2 5	3·05	86 55	19·3	vF, vS	
4992	3427	1541	...	...	13 2 6	2·99	77 37·0	19·3	vF, S, lE, 2 S st s	
4993	3428	...	III 766	...	13 2 12	3·23	112 38·4	19·3	vF, vS	
4994	3429	3471	...	...	13 2 16	3·22	111 48·1	19·3	pF, cS, R, slbM, am st	
4995	3430	1540 = 3472	I 42	...	13 2 24	3·12	97 5·1	19·3	pB, pL, R, vgpmbM, * 8 np	
4996	5720	...	...	m 247	13 2 24	3·06	88 23	19·3	pB, S, R, bM	
4997	...	...	...	Burnham	13 2 26	3·17	105 46·1	19·3	No description, * 6·5 2′ p	
4998	3431	...	III 819	...	13 2 29	2·62	38 34·3	19·3	vF	
4999	3432	1543	II 537	...	13 2 33	3·06	87 35·6	19·3	cF, pL, R, lbM, er	
5000	3433	1544	III 366	...	13 3 6	2·86	60 20·7	19·3	cF, pS, lE	
5001	3434	1545	...	...	13 3 38	2·56	35 44·5	19·3	pF, S, iR, gbM	
5002	5721	...	...	d'A	13 4 8	2·79	52 36·4	19·3	vF, pL, E, * 13 att, n	
5003	3435	...	III 655	...	13 4 15	2·70	47 27·3	19·3	vF, pS, lbM, Minute of RA?	
5004	3436	1546	III 305	...	13 4 21	2·85	59 36·7	19·3	vF, vS, vlE	
5005	3437	1547	I 96	...	13 4 25	2·78	52 11·6	19·2	vB, vL, vmE 66°, vsbMN	
5006	...	...	...	T V	13 4 30	3·20	108 30	19·2	F * close p	
5007	3438	...	III 848	...	13 4 35	2·34	27 7·3	19·3	vF, vS	
5008	3439	...	...	d'A	13 4 37	3·05	63 51·7	19·2	pF, pL, R	
5009	3440	1550	III 820	...	13 4 46	2·61	39 9·9	19·2	vF, R, bet 2 vS, st	
5010	3442	1548	...	...	13 4 51	3·18	105 3·2	19·2	vF, R, bM, * 10 np 5′	
5011	3443	3473	...	...	13 4 52	3·42	132 21·1	19·2	pB, cS, R, am 4 st	
5012	3441	1549	I 85	...	13 4 53	2·91	66 20·4	19·2	pF, cL, E 17°, biN, * 9 f	
5013	5722	...	....	m 248	13 5 0	3·05	86 4	19·2	vF, vS	
5014	3444	1551	II 414	...	13 5 2	2·79	52 58·7	19·2	pF, S, E, psbM	
5015	3445	1552	II 637	...	13 5 8	3·10	93 36·0	19·2	F, cL, iR, lbM	
5016	3446	...	II 356	d'A	13 5 23	2·90	65 9·8	19·2	pB, S	
5017	3447	1553	III 669	...	13 5 28	3·18	106 0·9	19·2	vF, R, bM	
5018	3448	1554	II 746	...	13 5 31	3·20	108 46·1	19·2	cB, S, R, mbMpBN	
5019	3449	1555	III 545	...	13 5 37	3·04	84 31·1	19·2	eF, vS, R, er	
5020	3450	1556	II 129	...	13 5 43	2·98	76 39·5	19·2	cF, cL, vlE, lbM	
5021	3451	1557	...	...	13 5 46	2·66	43 4·0	19·2	pF, cS, R, * 12 nf 90″	
5022	...	...	...	T V, O St I	13 5 55	3·20	108 46	19·2	vF, pL, E 30°, gbM, f II 746, F * close p	
5023	3452	1559	II 664	...	13 5 56	2·69	45 12·8	19·2	pF, L, mE 20°, vlbM	
5024	3453	1558	...	M 53	13 6 4	+2·94	71 5·3	+19·2	!, ⊕, B, vC, iR, vvmbM, st 12	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5025	3454	1560	III 649	...	13 6 10	+2·83	57 26·7	+19·2	vF, S, lE, *13 n	
5026	3455	3474	...	...	13 6 14	3·43	132 13·0	19·2	pB, pL, R, gbM, *7 nf	
5027	3456	1561	...	...	13 6 17	3·03	83 11·6	19·2	vF, S, R, pgbM	
5028	...	...	...	T V	13 6 22	3·15	102 17·9	19·2	vF, S, *11·12 p	
5029	3457	1562	...	...	13 6 27	2·65	42 10·7	19·2	F, vS, R, gbM	
5030	...	...	...	Holden	13 6 28	3·18	105 45·0	19·1	vF, S	
5031	...	...	...	Holden	13 6 37	3·17	105 23	19·1	vF, stellar	
5032	3458	1563	III 367	...	13 6 46	2·86	61 27·5	19·2	vF, pL, iR	
5033	3459	1564	I 97	...	13 7 0	2·78	52 39·7	19·2	vB, pL, E 167°, smbMvBN, *np	†
5034	3460	...	III 909	...	13 7 19	1·92	18 36·2	19·2	vF, vS, R	
5035	...	...	...	Holden	13 7 22	3·17	105 46	19·1	F, S, R, bMN	
5036	...	...	...	L II	13 7 27	3·09	93 26·4	19·2	eF, vS, R, gbM, 1st of 2	
5037	3461	1565	II 510	...	13 7 33	3·19	105 51·0	19·2	cF, pS, vlE, bM	
5038	...	...	...	Holden	13 7 36	3·17	105 12	19·1	pB, E 90°, stellar	
5039	...	...	...	L II	13 7 39	3·09	93 25·4	19·2	eF, eS, E 45°, 2nd of 2	
5040	3462	...	II 816	...	13 7 50	2·57	37 58 2	19·2	F, S, iR, vgmbM	
5041	5723	...	...	d'A	13 7 55	2·83	58 23·1	19·2	F, S, R	
5042	3463	3477	...	...	13 7 56	3·24	113 14·5	19·2	F, L, R, vgvlbM, *9 p	
5043	3464	3476	...	...	13 7 56	3·74	149 19·2	19·2	Cl, P, E, sc st 11	
5044	3465	1566	II 511	...	13 7 57	3·18	105 38·8	19·2	pB, pL, R, bM	
5045	3466	3475	...	...	13 7 59	3·85	152 40·4	19·1	Cl, vL, vRi, st 11	
5046	...	...	...	Holden	13 8 17	3·17	105 35	19·1	F, vS, R, stellar Nucl	
5047	3468	...	III 670	...	13 8 21	3·19	105 44·5	19·1	vF	
5048	3467	3478	...	...	13 8 26	3·28	117 40·9	19·1	pF, R, sp of 2	
5049	3469	...	II 512	...	13 8 32	3·19	105 39·0	19·1	cF, S	
5050	5724	...	...	m 249	13 8 32	3·05	86 24	19·1	F, vS, stell	
5051	3470	3479	...	...	13 8 47	3·28	117 35·6	19·1	Neb, nf of 2	
5052	3471	1567	...	...	13 9 0	2·84	59 34·7	19·1	vF	
5053	3472	1569	VI 7	...	13 9 31	2·94	71 35·2	19·1	Cl, vF, pL, iR, vgbM, st 15	
5054	3473	1568	II 513	...	13 9 31	3·19	105 53·8	19·1	F, pS, iR	
5055	3474	1570	...	Méchain, M 63	13 9 32	2·70	47 13·7	19·1	vB, L, pmE120° ±, vsmbMBN	
5056	3475	1571	III 306	...	13 9 38	2·82	58 18 2	19·1	cF, cS, R, sp of 2	
5057	3476	1572	III 307	...	13 9 52	2·82	58 13·3	19·1	cF, cS, R, nf of 2	
5058	...	...	...	T V	13 9 55	2·98	76 43	19·1	vvF	
5059	5725	...	...	m 250	13 9 57	3·01	81 25	19·1	eF, S, lE	
5060	5726	...	...	d'A	13 10 13	3·02	83 12·9	19·1	F, S, lE	
5061	3477	3480	I 138	...	13 10 27	3·27	116 6·8	19·1	vB, S, R, vsmbM *10 f	
5062	3478	3482	...	...	13 10 34	3·36	124 41·5	19·1	eF, vS, E, r	
5063	3479	3481	...	...	13 10 34	3·36	124 35·3	19·1	eF, vS, R, *nr	
5064	3480	3483	...	...	13 10 46	+3·52	137 10·4	+19·1	B, S, R, pslbM	

	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5065	3481	1573	III 308	...	13 10 57	+2·82	58 10·0	+19·1	vF, cS	
5066	5727	...	...	m 251	13 11 7	3·14	99 30	19·1	vF, vS	
5067	5728	...	...	m 252	13 11 7	3·14	99 24	19·1	vF, vS	
5068	3482	...	II 312	Palisa	13 11 21	3·23	110 17·9	19·1	F, L, iR, bM	*
5069	...	...	...	O St I	13 11 25	3·14	99 28·4	19·1	eF, vS (?=m 251)	
5070	...	...	...	Sw III	13 11 31	3·16	101 50·2	19·1	ceF, eS, vF * close, 5730 near	
5071	5729	...	...	m 253	13 11 36	3·01	81 19	19·1	eF, eS, stell	
5072	5730	...	...	d'A	13 11 50	3·16	101 48·1	19·1	F, S, *14 nf	
5073	3483	1574	III 282	...	13 11 55	3·18	104 6·9	19·1	vF, pL, pmE 135° ±	*
5074	3484	1575	III 309	...	13 11 56	2·81	57 47·3	19·1	eF, vS	
5075	5731	...	...	m 254	13 12 6	3·01	81 25	19·0	vF, eS, stell	
5076	3485	1576=3489	III 117	...	13 12 8	3·16	102 0·1	19·0	vF, cS, R, 1st of 3	
5077	3486	1577=3490	II 193	...	13 12 9	3·16	101 55·2	19·0	pB, S, vlE, sbM, 2nd of 3	
5078	3487	3484	II 566	...	13 12 10	3·29	116 40·1	19·0	pB, pS, cE, psbM, *7·8 f	
5079	3488	1578=3491	III 118	...	13 12 15	3·16	101 57·8	19·0	cF, pS, vlE, 3rd of 3	
5080	...	...	...	Holden	13 12 17	3·00	80 50·5	19·0	F, S, *7 nf	
5081	5732	...	...	d'A	13 12 31	2·84	60 45·4	19·0	pF, S, iR, *7·8 np	
5082	3490	3485	...	...	13 12 33	3·47	132 58·1	19·0	vF, S, R, 1st of 4	*
5083	...	...	...	Sw I	13 12 37	2·71	49 39·7	19·0	pF, pL, R	
5084	3491	1579	II 313	...	13 12 42	3·24	111 4·6	19·0	cB, cS, vlE 90 ±, bf	
5085	3492	...	II 780	...	13 12 44	3·26	113 40·1	19·0	F, L, R, vglbM	
5086	3493	3486	...	...	13 12 55	3·47	132 59·4	19·0	eF, vS, R, 2nd of 4	
5087	3494	...	III 724	...	13 12 56	3·23	109 52·1	19·0	cF, vS, iF	
5088	3489	...	...	Ld R, d'A	13 12 58	3·16	101 50·1	19·0	pB, pS, R, bM	
5089	3495	1580	II 327	...	13 13 3	2·82	59 1·6	19·0	pF, pL, gbM	
5090	3496	3487	...	...	13 13 4	3·47	132 58·7	19·0	pB, pL, R, 3rd of 4	
5091	3497	3488	...	...	13 13 9	3·47	132 59·9	19·0	eF, S, vlE, 4th of 4	
5092	5733	...	...	d'A	13 13 10	2·89	66 16·1	19·0	pB, pL, iR, *17 s	
5093	3498	1583	III 633	...	13 13 20	2·70	48 51·4	19·0	vF, S, R, lbM	
5094	3499	1581	III 539	...	13 13 22	3·17	103 20·9	19·0	cF, vS, R, gbM	
5095	3500	1582	...	...	13 13 25	3·09	91 34·1	19·0	vF, iR, *11 sp	
5096	3501	1584	III 650	...	13 13 39	2·79	56 11·0	19·0	vF, cS, R, bM, sp of 2	
5097	...	...	...	Sw III	13 13 40	3·16	101 46·8	19·0	eF, eS, R, stell, nearly bet 2 st	
5098	3502	1585	...	...	13 13 47	2·79	56 7·3	19·0	vF, S, bet 2 st, nf of 2	
5099	...	...	...	Sw III	13 13 56	3·17	102 21·0	19·0	eF, eS, R	
5100	5734	...	...	m 255	13 13 59	3·00	80 17	19·0	vF, vS, lbM	
5101	3503	3493	II 567	...	13 14 4	3·29	116 41·6	19·0	cB, pS, lE, psbM *	
5102	3504	3492	...	...	13 14 5	3·39	125 54·2	19·0	vB, pS, R, svmbM	
5103	3505	...	II 665	...	13 14 10	+2·66	46 10·0	+19·0	pB, cS, E	

No.	G.C.	J.H.	W.H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5104	5735	...	...	m 256	13 14 12	+3·06	88 56	+19·0	F, S, lE	
5105	...	...	...	Sw III	13 14 24	3·17	102 29·2	19·0	eF, pS, lE·	
5106	3506	...	II 22	...	13 14 34	3·00	80 46·5	19·0	vF, vS, PD very doubtful	*
5107	3507	1586	III 619	...	13 15 6	2·72	50 42·4	19·0	vF, S, cE 0° ±	
5108	3508	3494	...	...	13 15 12	3·34	121 36·6	19·0	eeF, p of 2	
5109	3509	1588	II 826	...	13 15 14	2·37	31 37·0	19·0	cF, S, cE	*
5110	...	...	...	Sw III	13 15 28	3·17	102 16·3	19·0	eF, pS, R, in line with 2 pB st	
5111	3510	1587	III 119	...	13 15 33	3·17	102 14·1	18·9	cF, cS, iR, glbM	
5112	3511	1589	II 646	...	13 15 38	2·71	50 31·5	19·0	F, L, iR, vglbM	†
5113	3512	...	III 808	...	13 15 54	2·36	31 39·5	19·0	cF, S, E (perhaps = h 1388)	*
5114	3513	3495	...	...	13 16 13	3·35	121 36·6	18·9	F, lE, psbM, f of 2	
5115	...	...	...	Sw VI	13 16 16	2·96	75 18·7	18·9	eeF, S, R, *nf, D*f 24s	
5116	3514	1590	III 368	...	13 16 19	2·84	62 17·5	18·9	pF, pS, pmE, glbM, r	
5117	3515	1592	...	...	13 16 19	2·83	60 56·6	18·9	vF, L, Δ 2 st 11 np	
5118	3516	1591	III 925	...	13 16 25	3·02	82 52 6	18·9	vF, S, R, gbM	
5119	3517	3497	...	...	13 16 36	3·16	101 33·5	18·9	pB, S, lE	
5120	3518	3496	...	...	13 16 38	3·94	152 40·8	18·9	Cl, eRi, mC, st 12...16	
5121	3519	3498	...	...	13 16 46	3·41	126 57·3	18·9	cB, S, R, psmbM, r	
5122	...	...	...	Sw VI	13 16 56	3·15	99 54·7	18·9	vF, S, R	
5123	3520	1594	II 666	...	13 17 0	2·65	46 10·7	18·9	pF, S, R, gmbM	
5124	3521	3499	...	...	13 17 2	3·33	119 34·9	18·9	vF, S, vlE	
5125	3522	1593	...	...	13 17 3	2·99	79 33·1	18·9	pF, S, R, gbM	
5126	3523	3500	...	...	13 17 5	3·33	119 37·0	18·9	vF, vS	
5127	3524	1596	II 328	...	13 17 15	2·79	57 42·3	18·9	pB, pL, R, gmbM, ** p	
5128	3525	3501	...	Δ 482	13 17 15	3·48	132 17·2	18·9	!!, vB, vL, vmE 122°·5, bifid	†
5129	3526	1595	II 653	...	13 17 16	2·96	75 17·3	18·9	pB, vS, R, gmbM, ** f	
5130	...	...	...	O St I	13 17 25	3·15	99 27·5	18·9	vF, vS, gbM	
5131	5736	...	...	d'A	13 17 26	2·81	58 16·8	18·9	F, pS, lE, N = *15	
5132	5737	...	...	d'A	13 17 36	2·95	75 9·8	18·9	vF, r	
5133	...	...	...	St XI	13 17 39	3·10	93 21·0	18·9	vF, vS, irrR, bM	
5134	3527	1597	II 314	...	13 17 44	3·24	110 23·4	18·9	F, pS, lE, vgbM	*
5135	3528	3502	...	...	13 17 56	3·33	119 6·2	18·9	pB, S, E	
5136	3529	1598	III 84	...	13 18 0	2·95	75 31·3	18·9	eF, vS, R, psbM	
5137	...	...	...	Sw VI	13 18 17	2·95	75 11·8	18·9	eeF, pL, v diffic	
5138	3530	3503	...	Δ 312?	13 18 20	3·81	148 16·7	18·9	Cl, Ri, lC, st 11	
5139	3531	3504	...	Halley, Lac I 5, Δ 440	13 18 24	3·55	136 34·8	18·9	!!!, ⊕, ω Centauri	†
5140	3532	3505	...	...	13 18 27	3·37	123 9·0	18·9	vF, S, R, glbM	
5141	3533	1599	III 402	...	13 18 30	2·73	52 53·1	18·9	cF, cS, R, vsmbM *, *12 sp, sp of 2	
5142	3534	1600	III 403	...	13 18 40	+2·73	52 51·0	+18·9	F, cS, R, vsmbM *, nf of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5143	3535	...	...	Ld R	13 18 40	+2·73	52 49 ±	+18·9	vF	
5144	3536	...	IV 70	...	13 18 52	1·74	18 45·4	18·9	○ ?, cB, S, R, g, slbM	†
5145	3537	1602	II 667	...	13 19 5	2·63	46 0·6	18·9	pB, vS, vlE, glbM	
5146	3538	...	III 115	...	13 19 10	3·17	101 35·4	18·8	vF, vS, stellar	
5147	3539	1601	II 25	...	13 19 12	3·05	87 10·2	18·8	pB, pL, vlE, vsmbM ✱ 12	
5148	5738	...	...	m 257	13 19 30	3·05	86 58	18·8	eF, S	
5149	3540	1604	III 404	...	13 19 48	2·73	53 19·8	18·8	cF, pS, E, bM, sp of 2	
5150	3542	3507	...	...	13 19 52	3·33	118 50·5	18·8	cF, S, R, pslbM, ✱ f 2′	
5151	3541	1603	...	...	13 19 53	2·93	72 23·9	18·8	vF, S, R, ✱ 8 nf 4′	
5152	3543	3508	...	...	13 20 3	3·33	118 54·4	18·8	vF, S, R, p of D neb	
5153	3544	3509	...	...	13 20 4	3·33	118 53·9	18·8	pF, S, f of D neb	
5154	3545	1605	III 405	...	13 20 7	2·73	53 16·7	18·8	vF, pL, R, nf of 2	
5155	3546	3506	...	...	13 20 9	3·98	152 41·5	18·8	Cl, vRi	
5156	3547	3510	...	...	13 20 18	3·59	138 10·8	18·8	pB, cS, iE, glbM, r	
5157	3548	1606	III 651	...	13 20 49	2·77	57 15·5	18·8	F, pS, vlE, bM, p of 2	
5158	3549	1607	...	...	13 21 0	2·92	71 29·5	18·8	vF, R	
5159	5739	...	...	m 258	13 21 9	3·04	86 18	18·8	eF, S, lE	
5160	3550	...	...	d'A	13 21 13	3·02	83 16·7	18·8	pF (? vF D ✱ with F ✱ close)	*
5161	3551	3511	...	...	13 21 19	3·37	122 26·4	18·8	pF, L, vmE, pgbM, rr	
5162	...	...	...	Sw VI	13 21 21	2·98	78 15·0	18·8	vF, pL, lE, F ✱ nr nf	
5163	3552	...	III 821	...	13 21 35	2·44	36 28 8	18·8	cF, stellar	
5164	3553	1609	III 784	...	13 21 38	2·37	33 47·1	18·8	cF, S, iR	
5165	...	...	...	T VIII, Burnham	13 21 41	2·97	77 53	18 8	F, vS, R, ✱ 13 sf	
5166	3554	1608	...	...	13 21 47	2·77	57 14·6	18·8	pF, pL, lE, lbM, f of 2	
5167	...	...	...	T VII	13 21 47	2·96	76 34	18·8	vF, sev vF st close	
5168	3555	3512	...	...	13 22 3	3·90	150 12·1	18·8	Cl, vF, S, vRi, st 15	
5169	3556	1611	...	...	13 22 9	2·56	42 38·4	18·8	vF, pS, R	
5170	3557	1610	V 22	...	13 22 18	3·22	107 14·5	18·7	cF, L, mE 129°, pgbM	
5171	...	...	...	T VIII, Hough	13 22 26	2·97	77 32·4	18·7	pB, L	
5172	3558	1613	...	...	13 22 29	2·92	72 13·3	18·7	F, pL, R, gbM	
5173	3559	1614	III 672	...	13 22 29	2·56	42 41·4	18·7	F, vS, R, stellar	
5174	3560	1612	III 45	...	13 22 29	2·97	78 16·1	18·7	vF, pL	D neb, close
5175	3561		III 46						vF, pL	
5176	...	...	...	Hartwig	13 22 30	2·97	77 29·6	18·7	No description, not seen by T	
5177	...	...	...	Hartwig	13 22 30	2·97	77 28·7	18·7		
5178	...	...	...	T VIII	13 22 32	2·97	77 38	18·7	vF	
5179	...	...	...	T VIII, Burnham	13 22 35	2·97	77 31·7	18·7	vF, ✱ in centre	
5180	3562	1615	III 71	...	13 22 37	2·92	72 27·0	18·7	vF, S, R, am 3 st, ✱ 7 nf	
5181	3563	1616	...	...	13 22 49	2·95	75 58·3	18·7	vF, S, R	
5182	3564	3513	...	...	13 22 52	3·32	117 25·4	18·7	vF, pL, vlE, ✱ 7 nf 10′	
5183	3565	1617	II 679	...	13 22 55	+3·08	91 0·0	+18·7	F, cS, lE, gbM, p of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5184	3566	1618	II 680	...	13 23 0	+3·08	90 56 1	+18·7	pF, pL, iR, bM, f of 2	
5185	3567	1619	III 642	...	13 23 9	2·95	75 53·5	18·7	vF, S, iR	
5186	...	...	...	Hartwig	13 23 10	2·96	77 6·0	18·7	No description	
5187	3568	1620	III 652	...	13 23 18	2·77	58 8·6	18·7	vF, vS, R, glbM	
5188	3569	3515	...	...	13 23 31	3·40	124 3·8	18·7	F, pL, vlE, vglbM	
5189	3570	3514	...	Δ 252?	13 23 41	4·13	155 15·2	18·7	!, B, pL, cE, bM curved axis, 4 st inv	†
5190	3571	1621	...	...	13 23 50	2·91	71 8·3	18·7	cF, S, R, bM, * * * f	
5191	...	...	...	Hough, T VIII	13 23 50	2·98	78 4·1	18 7	eF, * 9 f 57°	
5192	5740	...	...	m 259	13 23 56	3·08	91 1	18·7	vF	
5193	3573	3516	...	...	13 23 57	3·38	122 30·5	18·7	pB, S, R, g, psbM	
5194	3572	1622	...	M 51	13 23 58	2·54	42 4·9	18·7	!!!, Great Spiral neb	†
5195	3574	1623	I 186	...	13 24 5	2·54	42 0·6	18·7	B, pS, lE, vgbM, inv in M 51	†
5196	5741	...	...	m 260	13 24 5	3·08	90 54	18·7	vF	
5197	5742	...	...	m 261	13 24 9	3·08	90 59	18·7	vF	
5198	3576	...	II 689	...	13 24 16	2·55	42 36·3	18·7	pF, pS, R, mbM	
5199	3577	1624	III 406	...	13 24 22	2·73	54 26·5	18·7	vF, vS, lE	
5200	5072	...	...	S Coolidge	13 24 32	3·07	89 18·5	18·7	*12 in F neb	
5201	3578	...	II 797	...	13 24 40	2·41	36 12·2	18·7	pF, cS, R, vglbM	
5202	5743	...	...	m 262	13 24 45	3·08	90 59	18·7	vF	
5203	3579	3517	III 507	...	13 24 52	3·14	98 3·3	18·7	vF, cS, R, gbM, r	
5204	3575	1625	IV 63	d'A	13 24 53	2·26	30 51·5	18·7	pB, cL, iR, gmbM, r	
5205	...	...	...	Sw VI	13 25 2	2·11	26 46·4	18·7	vF, pS, R, bet 2 vF st	
5206	3580	3518	...	...	13 25 19	3·61	137 24·7	18 6	F, pL, R, vgbM	
5207	3581	1626	III 643	...	13 25 22	2·95	75 22·9	18·7	F, S, cE, *11 att np	
5208	3582	1627	III 9	...	13 25 27	3·00	81 57·7	18·6	F, vS, R, psbM, p of 2	
5209	3583	1628	III 10	...	13 25 43	3·00	81 57·4	18·6	F, vS, R, stellar, f of 2	
5210	3584	1629	III 99	...	13 25 50	3·00	82 6·7	18·6	F, S, R, psbMN	
5211	3585	1630	...	...	13 25 54	3·08	90 18·9	18·6	pB, S, R, psmbM	
5212	3586	1631	...	...	13 26 22	3·00	81 59·1	18·6	eF	
5213	5744	...	...	m 263	13 26 35	3 03	85 10	18 6	vF, S, lE	
5214	3587	1632	III 656	...	13 26 45	2·62	47 24·6	18·6	vF, S, R, lbM	
5215	3589	3519	...	...	13 27 10	3·40	122 45·7	18·6	eF, eS, *s and *p	
5216	3590	1635	II 841	...	13 27 15	2·08	26 33·9	18·6	pB, S, vlE	
5217	3591	1634	...	...	13 27 18	2·90	71 25·4	18·6	vF, S, R, bM	
5218	3592	1636	II 842	...	13 27 21	2·07	26 30·7	18·6	pB, pL, R, gbM	
5219	3593	3520	...	...	13 27 48	3·58	135 11·3	18·6	vF, S, R, *n, nr	
5220	3594	3521	...	...	13 28 0	3·40	122 44·2	18 6	vF, S, R, *10 f	
5221	3595	1637	III 86	...	13 28 4	2·94	75 27·8	18·6	vF, S, vlE, 1st of 3	
5222	3596	1638	III 85	...	13 28 4	2·94	75 32·3	18·6	cF, S, R, bM, 2nd of 3	
5223	3598	1640	III 407	...	13 28 6	+2·71	54 34·8	+18·6	F, cS, R, *10 p, p of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5224	3588	1633	III 926	...	13 28 7	+ 3·01	82 47·8	+ 18·6	vF, S, *9 nf inv?	*
5225	3599	...	III 822	...	13 28 10	2·42	37 46·6	18·6	cF, pS, iR, lbM	
5226	...	...	...	Dreyer (R)	13 28 13	2·94	75 22·5	18·6	eF, pS, h 1637 sp	
5227	3600	1641	III 928	...	13 28 15	3·05	87 53·3	18·6	vF, S, R	
5228	3601	1642	III 408	...	13 28 17	2·71	54 29·4	18·6	vF, vS, R, f of 2	
5229	...	...	...	Sw III	13 28 23	2 50	41 22·2	18·6	eF, L, mE, v diffic	
5230	3597=3602	1639=1643	III 87	...	13 28 38	2·94	75 36·2	18·5	F, L, E, vgbM, 3rd of 3	*
5231	5745	...	...	m 264	13 28 42	3·04	86 18	18·5	F, S, bM	
5232	5746	...	...	m 265	13 28 49	3·14	97 46	18·5	F, vS	
5233	3603	1645	III 425	...	13 28 52	2·71	54 36·8	18·5	F, S, R, vS *nr	
5234	3604	3522	...	...	13 28 52	3·67	139 7·0	18·5	eeF, S, lE	
5235	3605	1644	III 100	...	13 28 58	3·01	82 41·5	18·5	vF, pS, vlE, *9 sp	
5236	3606	3523	...	M 83, Lac 16, Δ 628	13 29 9	3·36	119 9·0	18·5	!! (H,h)vB,vL,E55°,esbMN (L) 3 branched spiral	†
5237	3607	3524	...	...	13 29 21	3·54	132 8·0	18·5	F, pL, cE, vglbM	
5238	3609	...	III 823	...	13 29 27	2·41	37 39·6	18·5	cF, pL, R, vlbM	
5239	3608	1646	III 101	...	13 29 28	3·00	81 54·7	18·5	vF, pL, R, er	
5240	3610	...	III 409	...	13 29 30	2·70	53 43·1	18·5	vF, pL, R, lbM	
5241	...	...	...	Sw III	13 29 57	3·14	97 47·3	18·5	pF, eS, vF * close	
5242	3611	1647	...	...	13 30 1	3·04	86 30·8	18·5	eF, eL	
5243	3612	1648	III 620	...	13 30 5	2·65	50 55·7	18·5	cF, pL, E 65°, biN?	
5244	3613	3525	...	...	13 30 17	3·59	135 9·0	18·5	vF, S, R, vglbM, *13 att	
5245	5747	...	...	m 266	13 30 22	3·03	85 26	18·5	vF, vS	
5246	5748	...	...	m 267	13 30 26	3·03	85 11	18·5	vF, vS	
5247	3614	1649	II 297	...	13 30 30	3·23	107 10·1	18·5	!! (H,h)cF,vL,vg,psmbMLN (L) 2 branched spiral	†
5248	3615	1650	I 34	...	13 30 34	2·99	80 24·0	18·5	B, L, E 150°, psbMrN	†
5249	3616	1651	III 72	...	13 30 49	2·92	73 18·5	18·5	vF, S, R, bM	
5250	3617	...	II 817	...	13 30 50	2·41	38 1·5	18·5	pB, S, R, vgbM	
5251	3618	1652	III 369	...	13 30 53	2·80	61 51·8	18·5	vF, S, vlE	
5252	3619	1653	III 505	...	13 31 12	3·03	84 46·2	18·5	vF, S, R, bM	
5253	3620	3526	II 638	Δ 623	13 32 0	3·39	120 55·6	18·4	B, pL, E 45° ±, psmbM	
5254	3621	3527	...	...	13 32 14	3·17	100 47·0	18·4	pB, L, pmE, glbM	
5255	3622	...	III 803	...	13 32 22	2·24	32 10·9	18·4	vF, vS	
5256	3623	1656	III 673	...	13 32 33	2·47	40 59·6	18·4	eF, vS, R, gbM	
5257	3624	1654	II 895	...	13 32 45	3·06	88 26·9	18·4	vF, S, R, bM, p of D neb	
5258	3625	1655	II 896	...	13 32 49	3·06	88 27·3	18·4	F, S, iR, f of D neb	
5259	5749	...	...	d'A	13 33 0	2·75	58 18·1	18·4	vF, S, iR	
5260	...	...	...	Sw I	13 33 8	3·30	113 10·5	18·4	eF, pL, 3 st f in a line	
5261	3626	1657	...	...	13 33 14	3·02	84 13·1	18·4	vF, R, am pB st	
5262	3627	1660	...	...	13 33 14	+ 1·00	14 14·2	+ 18·4	eF, S	

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					h m s	s	° ′	″		
5263	3628	1658	III 370	...	13 33 25	+2·78	60 53·5	+18·4	cF, S, mE 0° ±, *9 sp	
5264	3629	3528	...	...	13 33 44	3·37	119 12·5	18·4	vF, pL, R, vlbM	
5265	3630	1659	III 410	...	13 33 59	2·66	52 25·5	18·4	F, cS, vlE, er	
5266	3631	3529	...	...	13 34 28	3·67	137 27·7	18·3	B, pL, vlE, vglbM, 3 st nr	
5267	3632	1661	...	...	13 34 33	2·63	50 30·0	18·3	F, S, R, gbM, S *np	
5268	3633	...	...	Markree Cat	13 34 44	3·20	103 9·1	18·3	A nebula (Auw 32)	
5269	3634	3530	...	...	13 35 4	4·11	152 11·8	18·3	Cl, P, L, iF, st 12	
5270	3635	1662	...	...	13 35 6	3·03	85 1·7	18·3	eF, S, bet 2 st	
5271	...	...	...	St XII	13 35 18	2·75	59 10·0	18·3	vF, vS, R, gvlbM	
5272	3636	1663	...	M 3	13 35 44	2·77	60 54·9	18·3	!!, ⊕, eB, vL, vsmbM, st11...	
5273	3637	1664	I 98	...	13 35 54	2·67	53 38·3	18·3	cB, pL, R, g, psmbM	
5274	...	...	...	St XII	13 35 59	2·75	59 26·7	18·3	vF, vS, R, bM	
5275	...	...	...	St XII	13 35 59	2·75	59 28·1	18·3	F, S, R, gmbM	
5276	3638	...	...	Ld R	13 36 9	2·67	53 37·8	18·3	F, S	
5277	...	...	...	St XII	13 36 14	2·75	59 20·4	18·3	eF, S, R, bM	
5278	3639	1665	II 798	...	13 36 25	2·25	33 37·4	18·3	pF, R, vS neb 40″ f, *n	
5279	...	1665a	...	Ld R	13 36 30	2·25	33 37·2	18·3	F, vS, f of 2	
5280	...	...	...	St XII	13 36 32	2·75	59 25·5	18·3	F, vS, R, bM	
5281	3640	3531	...	Lac I 7, Δ 273	13 36 55	4·13	152 11·8	18·2	Cl, B, S, pC, iR, st 10...12	
5282	...	...	...	St XII	13 37 1	2·75	59 13·5	18·2	F, S, R gbM *14	
5283	5750	...	...	d'A	13 37 9	1·68	21 37·3	18·2	F, S, stell	
5284	3641	3532	...	...	13 37 15	3·98	148 29·4	18·2	Cl, L, vRi, st 7...16	
5285	...	...	...	St XI	13 37 19	3·05	87 11·1	18·2	eF, vS, R, gvlbM	
5286	3642	3533	...	Δ 388	13 37 38	3·76	140 40·1	18·2	⊕, vB, pL, R, rrr, st 15	
5287	...	...	...	St XII	13 38 30	2·74	59 31·4	18·2	F, S, irr, r?	
5288	3643	3534	...	...	13 38 48	4·24	153 59·3	18·2	Cl, S, C, iR, st 14	
5289	3644	1666	II 668	...	13 39 10	2·56	47 47·6	18·2	vF, vS, lE 90° ±, sbM	
5290	3645	...	I 170	...	13 39 20	2·56	47 34·5	18·2	cB, pL, E 90° ±, bMN	
5291	3646	3535	...	...	13 39 26	3·40	119 41·2	18·2	vF, R, vlbM, * * p	
5292	3647	3536	...	...	13 39 41	3·41	120 13·2	18·1	pF, S, R, 2 st nr	
5293	3648	...	V 6	...	13 39 56	2·90	72 59·2	18·1	eF, vL, r	*
5294	3649	1667	III 785	...	13 39 57	+2·23	34 0·4	18·1	cF, 2 st att or inv	
5295	3650	...	III 946	...	13 40 21	−0·15	9 52·1	18·1	vF, vS, R	*
5296	3651	...	...	Ld R	13 40	+2·51	45 28 ±	18·1	R, bM, is sp h 1668	
5297	3652	1668	I 180	...	13 40 32	2·51	45 27·5	18·1	cB, L, pmE 142°, gbM	
5298	3653	3538	...	...	13 40 40	3·40	119 44·4	18·1	F, S, R, gbM	
5299	3654	3537	...	...	13 40 52	4·06	149 14·7	18·1	Cl, vL, vRi	
5300	3655	1669	II 533	...	13 41 10	3·03	85 21·6	18·1	vF, vL, lE, vgbM	
5301	3656	1670	II 688	...	13 41 14	2·46	43 9·4	18·1	cF, L, vmE	
5302	3657	3539	...	...	13 41 23	3·41	119 47·3	18·1	F, S, R, gbM	
5303	3658	1672	III 681	...	13 41 40	+2·61	51 0·3	+18·1	pF, cS, lE, F * * inv	

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					h m s	s	° ′	″		
5304	...	...	...	Sw I	13 41 45	+3·40	119 51·6	+18·1	eF, pS, lE, vF ∗ f	
5305	3659	1673	III 621	...	13 41 51	2·61	51 28·2	18·1	eF, S, R	
5306	3660	1671 = 3540	II 306	...	13 41 52	3·14	96 31·8	18·1	vF, vS, R, r	
5307	3661	3541	...	...	13 42 12	3·78	140 30·6	18·0	○, or vF, eS, D neb	†
5308	3662	1674	I 255	...	13 42 21	2·00	28 19·3	18·1	B, pL, mE 57°, psbMBEN	
5309	...	...	...	Sw VI	13 42 23	3·23	105 4·4	18·1	vF, pS, R, bet ∗ and D ∗	
5310	5073	...	...	S Coolidge	13 42 38	3·07	89 14·0	18·0	∗ 12 in F neb	
5311	3663	1675	II 710	...	13 42 58	2·57	49 19·1	18·0	cF, cS, R, sbM, p of 2	
5312	3664	1676	III 422	...	13 43 38	2·67	55 41·2	18·0	vF, R, stellar, 1st of 4	*
5313	3665	1677	II 711	...	13 43 45	2·57	49 19·6	18·0	pB, pS, vlE, glbM, f of 2	
5314	...	...	...	Sw III	13 43 52	1·38	18 58·2	18·0	vF, eS, stellar, eF ∗ v close	
5315	...	...	...	Copeland	13 44 2	4·40	155 50	18·0	○, stellar = 10·5 mag	
5316	3666	3542	...	Δ 282	13 44 7	4·16	151 9·7	18·0	Cl, pL, pC, st 11	
5317	3667	1678	...	...	13 44 8	3·01	84 18·5	18·0	vF, vL, R, vgbM	
5318	3668	1679	III 423	...	13 44 24	2·67	55 36·1	18·0	F, S, R, psbM, 2nd of 4	*
5319	...	...	...	Ld R	13 44 25	2·67	55 30	18·0	vF, R, n of III 423, 3rd of 4	
5320	3669	1682	II 669	...	13 44 27	2·54	47 56·2	18·0	cF, pL, R, gbM	
5321	3670	1680	...	...	13 44 29	2·67	55 39·6	18·0	eF, pL, R, svmbM ∗, 4th of 4	
5322	3671	1684	I 256	...	13 44 34	2·01	29 6·8	18·0	vB, pL, iR, psmbM	
5323	3672	1689	II 899	...	13 44 39	0·43	12 28·4	18·0	vF, pS, lE 0° ±	
5324	3673	1681	II 307	...	13 44 44	3·13	95 21·2	18·0	cF, L, iR, bM	
5325	...	...	...	Sw II	13 44 45	2·60	51 1·2	18·0	ccF, pS, R, v diffic, 2 B st nr	
5326	3674	1685	II 712	...	13 44 51	2·57	49 44·1	18·0	cF, S, vlE, sbM	
5327	3675	1683	II 685	...	13 44 52	3·09	91 30·5	18·0	F, pS, R, 2 st p	
5328	3676	3543	III 923	...	13 44 56	3·39	117 46·9	18·0	pB, S, R, slbM	
5329	3677	1686	III 549	...	13 45 5	3·04	86 58·4	17·9	F, vS, R, psbM	
5330	...	...	...	Sw VI	13 45 5	3·39	117 46·9	17·9	ccF, S, R, v diffic, nf 3676	
5331	3678	1687	III 929	...	13 45 8	3·04	87 12·3	17·9	vF, S, E 0°, rr	
5332	...	...	...	Sw VI	13 45 28	2·89	72 19·9	17·9	vF, S, R	
5333	3679	3544	...	...	13 45 40	3·74	137 48·6	17·9	vF, vS, R, ∗ 8 f	
5334	3680	...	III 665	...	13 45 45	3·08	90 25·5	17·9	cF, vL, R, lbM, r	
5335	3681	1688	...	...	13 45 50	3·04	86 29·0	17·9	F, iR	
5336	3682	1690	II 670	...	13 46 20	2·49	46 3·9	17·9	cF, pL, R, psbM	
5337	3683	1691	III 698	...	13 46 26	2·56	49 37·6	17·9	vF, S, iR, ∗ 7 p	
5338	...	...	...	Ld R*	13 46 36	3·01	84 4	17·9	vF, Epf, 4′ fD ∗	
5339	...	...	...	Bigourdan	13 46 38	3·15	97 14	17·9	vF, pS, R	
5340	...	...	...	Sw III	13 46 38	1·08	16 40·0	17·9	eF, S, R	
5341	3690	...	...	Ld R	13 46 40	2·59	51 33	17·9	lE, bM, sp h 1697	
5342	3684	1694	III 849	...	13 46 44	2·01	29 25·9	17·9	eF, vS	
5343	3685	1692	II 308	...	13 46 51	+3·15	96 54·2	+17·9	vF, S, R, lbM	

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					h m s	s	° ′	″		
5344	...	...	...	Sw III	13 46 58	+0·88	15 23·0	+17·0	vF, S, R	
5345	3686	1693	II 686	...	13 47 2	3·08	90 44·6	17·9	F, S, R, bM	
5346	...	...	...	St XII	13 47 4	2·56	49 43·7	17 9	cF, pL, irrR, glbM, r?	
5347	3687	1695	II 424	...	13 47 7	2·66	55 49·5	17·9	pF, cL, R, lbM	
5348	...	...	...	Ld R*	13 47 16	3·01	84 3	17·9	vF, mE ns	
5349	3691	...	...	Ld R	13 47 16	2·59	51 26	17·9	bM, sp 1697	
5350	3688	1696	II 713	...	13 47 26	2·54	48 56·3	17·9	cF, pL, bM, *7 p, 1st of 4	
5351	3689	1697	II 697	...	13 47 26	2·59	51 23·7	17·9	cF, L, lE 90°, vgbM	
5352	3692	1700	II 415	...	13 47 32	2·62	53 10·1	17·9	cF, S, R, lbM, *nf 90″	
5353	3693	1698	II 714	...	13 47 32	2·55	49 1 6	17·9	pB, S, R, 2nd of 4	
5354	3694	1699	II 715	...	13 47 32	2·55	49 0·4	17·9	pF, S, R, 3rd of 4	
5355	3695	1702	III 699	...	13 47 45	2·54	48 57·6	17·8	vF, pS, 4th of 4	
5356	3696 = 3698	1701	III 506	...	13 47 56	3·01	83 58·7	17·8	F, pL, vmE 17°, r	
5357	3697	3546	...	...	13 47 58	3·42	119 38·9	17·8	pF, S, R, glbM, bet 2 st 10	
5358	...	...	...	St XI, Vogel	13 48 5	2·54	49 1·9	17 8	vF, vS, R, 2 vF st inv	
5359	3699	3545	...	...	13 48 31	4·75	159 43·3	17·8	Cl, vL, lRi, lC, st 11	
5360	5751	...	...	m 268	13 48 34	3·01	84 18	17·8	vF, vS, lE	
5361	3700	...	III 682	...	13 48 39	2·57	50 52·9	17·8	eF, cS, E	
5362	3701	...	II 671	...	13 48 59	2·52	48 3·4	17·8	pB, pL, E	
5363	3702	1703	I 6	...	13 49 5	3·01	84 3·5	17·8	B, pL, R, psbM, *8 nf	
5364	3704 = 3703	1705	II 534	...	13 49 10	3·01	84 17·8	17·8	cF, L, R, gbM	
5365	3705	3547	...	...	13 49 16	3·66	133 14·7	17·8	pB, cS, R, pgbM, am st	
5366	5074	...	...	G P Bond	13 49 19	3·07	89 31 2	17·8	S, R, *9 dist 2′	
5367	3706	3548	...	...	13 49 21	3·58	129 17·7	17·8	!, vB, vL, vl, vsmbM **	†
5368	3707	1706	III 786	...	13 49 24	2·19	34 58·6	17·8	F, cS, R, stellar, *16 nf	
5369	3708	1704	III 285	...	13 49 33	3·13	94 48·5	17·8	vF, vS, R	
5370	3709	1708	II 843	...	13 49 39	1·94	28 37·5	17·8	F, S	
5371	3710	1707	II 716	...	13 49 47	2·53	48 49·7	17·8	pB, L, R, bMFN	
5372	3711	1709	III 809	...	13 49 49	2·03	30 39·6	17·8	cF, S, E, ?* inv	
5373	5752	...	...	m 269	13 50 5	3·01	84 3	17·7	vF, vS, stell	
5374	3712	1710	II 889	...	13 50 29	3·00	83 12 9	17·7	cF, pL, R, vgbM, *11 np	
5375	3713	1711	...	...	13 50 37	2·72	60 9·0	17·7	pB, pL, R, lbM	
5376	3714 = 3715	...	II 844 = I 238	...	13 50 37	1·99	29 48·4	17·7	cB, pL, vlE, vgmbM	
5377	3716	1712	I 187	...	13 50 44	2·38	42 5·5	17·7	B, L, mE 42°, smbMN	
5378	3717	1713	...	...	13 50 47	2·58	51 31·6	17·7	pB, lE, vglbM	
5379	3720	...	I 239	...	13 50 56	1·97	29 34·5	17 7	pB, pS, E, mbM	
5380	3718	1714	II 698	...	13 50 57	2·58	51 42·3	17·7	F, cS, R, smbM	
5381	3719	3549	...	...	13 50 58	4·12	148 54·5	17·7	Cl, Ri, vC, pL, st 11...12	
5382	3721	1715	III 546	...	13 51 16	+3·00	83 3·7	+17·7	vF, vS, r, stellar	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5383	3723	1717	I 181	...	13 51 18	+2·50	47 28·3	+17·7	cB, cL, R, gbM	
5384	5753	...	...	m 270	13 51 18	3·00	82 49	17·7	F, vS, stell	
5385	3724	1721	...	...	13 51 19	0·41	13 8·0	17·7	Cl, P, S	
5386	3725	1716	III 547	...	13 51 23	3·00	82 58·6	17·7	vF, vS, biN, r, stellar	
5387	5754	...	...	m 271	13 51 24	3·00	83 15	17·7	vF ray, 2′·1	
5388	...	...	...	Mu I	13 51 25	3·22	103 28·1	17·7	F, S, R, vgbM	
5389	3726	1719	I 240	...	13 51 30	1·97	29 34·3	17·7	pB, pL, E, mbMN	
5390	3727	1718	...	...	13 51 31	2·52	48 52·6	17·7	F, L, vgbM, *9 nf	
5391	...	...	...	Sw I	13 52 3	2·40	42 59·5	17·7	F, vS, * close	
5392	3728	1720	III 666	...	13 52 11	3·10	92 31·4	17·7	vF, cS, R, gbM	*
5393	3729	3550	...	...	13 52 33	3·41	118 11·3	17·6	vF, S, R, glbM	
5394	3730	1722	I 191	...	13 52 35	2·58	51 52·1	17·7	cF, S, np of 2	†
5395	3731	1723	I 190	...	13 52 38	2·58	51 53·9	17·7	cF, cL, E 15°, lbM, sf of 2	†
5396	3732	...	III 125	...	13 52 39	2·71	60 11·5	17·7	vF, S, iR, sbM *	
5397	3733	3551	...	...	13 52 56	3·49	123 16·4	17·6	vF, S, R, gbM	
5398	3734	3552	...	...	13 53 11	3·48	122 23·3	17·6	pB, pL, R, vgbM	
5399	3735	1724	III 411	...	13 53 25	2·62	54 32·6	17·6	eF, vS, pmE 90°	
5400	3736	...	III 667	...	13 53 32	3·10	92 10·7	17·6	vF, cS	
5401	3737	1725	III 412	...	13 53 40	2·59	53 4·1	17·6	cF, cS, E	
5402	3738	1727	III 810	...	13 53 42	1·94	29 28·6	17·6	vF, vS, R	
5403	3739	1726	III 683	...	13 53 52	2·56	51 8·0	17·6	vF, pL, iF	
5404	5075	...	...	S Coolidge	13 53 58	3·07	89 13·9	17·6	*12 in neb	
5405	...	...	...	Hartwig	13 54 11	2·98	81 37·4	17·6	vF, iF, bM	
5406	3740	1728	II 699	...	13 54 24	2·54	50 24·0	17·6	F, pS, R, lbM	
5407	3741	1732	III 684	...	13 54 50	2·54	50 9·3	17·6	vF, vS, R, bM, in Cl	
5408	3742	3553	...	...	13 54 51	3·63	130 44·1	17·5	eF, E bet 2 vS st	
5409	...	...	...	T VI	13 54 52	2·96	79 52	17·6	eF, R, III 56 f 26s	
5410	3743	1729	II 672	...	13 55 0	2·50	48 19·6	17·6	pF, pS, bM	
5411	...	...	...	T VI & VIII	13 55 5	2·96	80 23	17·5	vvF	
5412	...	...	...	Sw III	13 55 10	0·80	15 43·8	17·5	pF, S, R, D * p	
5413	3745	1733	...	...	13 55 11	1·65	24 24·5	17·6	pF, pS, R, pslbM, *7 p 37s	*
5414	...	...	...	T VI	13 55 15	2·96	79 31	17·5	S, F * in centre, * 10·11 nf	
5415	...	...	...	Sw III	13 55 16	1·16	18 34·9	17·5	eF, vS, R, 2 F st nr	
5416	3744	...	III 56	T VIII	13 55 17	2·96	79 52·7	17·5	eF, vS, E, r	
5417	3746	1730	III 11	...	13 55 17	2·97	81 17·2	17·5	cF, S, R, psbM, * p	
5418	3747	1731	...	...	13 55 20	2·98	81 38·4	17·5	vF, R, bM	
5419	3748	3554	...	...	13 55 24	3·50	123 17·7	17·5	pB, pL, R, gpmbM	
5420	...	...	...	L I	13 55 25	3·24	103 55·2	17·5	F, pS, mE, com	
5421	...	...	...	St XI	13 55 34	2·63	55 29·8	17·5	F, irrR, 2 vF st inv	
5422	3749	1736	I 230	...	13 55 45	2·12	34 9·5	17·5	pB, S, pmE 45° ±, vsvmbMN	
5423	...	...	...	T VI & VIII	13 55 54	+2·96	79 58·7	+17·5	vF, R, * in centre	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5424	...	...	...	T VI & VIII	13 56 2	+2·96	79 54·7	+17·5	vF, R, * in centre	
5425	...	...	...	Sw I	13 56 2	2·32	40 52·3	17·5	eF, S, lE, B * 4′ n	
5426	3750	1734	II 309	...	13 56 4	3·13	95 23·1	17·5	pF, cL, R, gmbM, sp of 2	
5427	3751	1735	II 310	...	13 56 6	3·13	95 20·9	17·5	pF, cL, R, nf of 2	†
5428 5429	...	...	...	T V	13 56 8 ±	3·13	95 22 ±	17·5	2 near II 310, one in line with II 309 and II 310	
5430	3752	1738	II 827	...	13 56 13	1·95	29 59·5	17·5	pB, S, iE, mbM	
5431	...	...	...	T VIII	13 56 16	2·96	79 54	17·5	vF	
5432	...	...	...	T V	13 56 20	3·13	95 17	17·5	vF	
5433	3753	1737	III 653	...	13 56 27	2·65	56 49·1	17·5	vF, eS, lE 0°, bM	
5434	...	...	...	T VI & VIII	13 56 30	2·96	79 53	17·5	vF, L	
5435	...	...	...	T V	13 56 32	3·13	95 14	17·5	vF, * 10·11 close f	
5436 5437 5438	...	...	...	T VII	13 56 35 ±	2·96	79 43 ±	17·5	3 vF in a line, 2′–3′ dist, n one brightest, nf * 8·6	
5439	...	...	...	Sw I	13 56 39	2·37	43 0·3	17·5	vF, pL, eE, bet 2 st	
5440	3754	1739	II 416	...	13 56 58	2·61	54 33·5	17·5	pF, eS, lE, bM, * 11 sp	
5441	3755	1740	...	...	13 57 18	2·61	54 40·7	17·5	vF, S	
5442	5755	...	...	m 272	13 57 18	3·18	99 2	17·5	vF, vS, iR	
5443	3758	1743A	II 799	h o n	13 57 19	2·08	33 30·6	17·5	pF, L, E	
5444	3756	1741	II 417	...	13 57 20	2·60	54 11·5	17·5	pB, pL, ivlE, vsmbM	
5445	3757	1742	III 413	...	13 57 26	2·60	54 18·6	17·4	F, * 13 p	
5446	3759	...	III 57	...	13 57 30	2·95	79 42·5	17·4	eF, eS	
5447	3760= 3766	...	III 787	Ld R	13 57 30	2·14	35 3·1	17·4	pB, S, R, gmbM, conn with M 101	†
5448	3761	1743	II 691	...	13 57 31	2·29	40 9·3	17·4	pB, cL, vmE 90° ±, smbMN	
5449	3762	...	...	Ld R	13 57 33	2·13	35 0·5	17·4	vF, pL, gvlbM	†
5450	3763	...	...	Ld R	13 57 33	2·14	35 5·9	17·4	F, pS, iR, glbM	†
5451	3764	...	...	Ld R	13 57 42	+2·13	34 57·7	17·4	vF, pL, iR, vlbM	†
5452	3765	1747	III 947	...	13 57 44	−0·25	11 5·9	17·5	vF, pL, iR, vgvlbM	
5453	3767	...	...	Ld R	13 58 0	+2·13	35 2·1	17·4	F, pL, lE, vlbM, conn w M 101	†
5454	5756	...	...	d'A	13 58 0	2·90	74 56·8	17·4	pF, S	
5455	3768	...	..	Ld R	13 58 3	2·13	35 8·3	17·4	pB, pS, R, psbM, conn w M 101	†
5456	3769	...	...	d'A	13 58 8	2·92	77 27·4	17·4	F, pS	
5457	3770	1744	...	M 101	13 58 14	2·13	34 58·6	17·4	pB, vL, iR, g, vsmbMBSN	†
5458	3771	...	...	Ld R	13 58 15	2·13	35 4·0	17·4	vF, pL, R, vlbM, conn w M 101	†
5459	...	...	...	Sw VI	13 58 17	2·91	76 11·6	17·4	F, S, lE, pB * sp	
5460	3772	3555	...	Δ 431	13 58 40	3·81	137 38·9	17·4	Cl, vL, vlC, st 8...	
5461	3773= 3778	...	III 788	Ld R, d'A	13 58 44	2 13	35 0·5	17·4	B, pS, R, psbM	†
5462	3774= 3779	...	III 789	Ld R, d'A	13 58 58	+2·12	34 57·7	+17·4	pB, pL, iR, gbM	†

all conn with M 101

conn with M 101

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5463	3780	...	III 58	T VIII	13 59 0	+2·96	79 55·5	+17·4	eF, S, lE	
5464	3775	3556	...	...	13 59 1	3·45	119 20·5	17·4	pF, S, R, pslbM	
5465	...	...	...	T V	13 59 8	3 13	94 50·7	17·4	eF, vS, sp III 286	
5466	3776	1746	VI 9	...	13 59 9	2·70	60 48·2	17·4	Cl, L, vRi, vmC, st 11...	
5467	...	...	...	T V	13 59 13	3·13	94 49·2	17·4	eF, vS, sp III 286	
5468	3777	1745	III 286	...	13 59 18	3·13	94 47·5	17·4	F, L, R, vgbM, *9 sf 4′	
5469	...	...	...	T VIII	13 59 24	2·95	79 53	17·4	vF, pS, R	
5470	3785	1749	...	d'A	13 59 33	2·99	83 17·4	17·3	F, mE, vglbM	
5471	5757	...	...	d'A	13 59 34	2·12	34 56·1	17·4	F, S, R, *12·13 p	
5472	3781	...	...	Ld R, T V	13 59 40	3·13	94 47·5	17·4	pF, vS, bet 2 vF st	
5473	3782	1748	I 231	...	13 59 50	2·10	34 25 8	17·4	pB, S, R, gbM	
5474	3783	...	I 214	...	13 59 59	2·14	35 40·3	17·4	pB, L, bM	
5475	3784	1750	II 800	...	14 0 22	2 06	33 35·2	17·3	pB, S, pmE, bM	
5476	3786	1751	III 287	...	14 0 49	3 14	95 25·6	17·3	F, pS, iR	
5477	3787	...	III 790	...	14 0 54	2 10	34 52·3	17·3	vF, pL	
5478	3788	...	III 762	...	14 0 56	3·09	91 1·4	17·3	vF, vS	
5479	...	...	...	Sw IV	14 1 24	1·53	23 37·8	17 3	eF, vS, R, nearly bet 2 st	
5480	3789	...	II 692	...	14 1 25	2·23	38 37·3	17 3	F, pS, vgbM, np of 2	
5481	3790	...	II 693	...	14 1 43	2 22	38 37·8	17·3	F, vS, smbM, stellar, sf of 2	
5482	3791	...	III 59	...	14 1 43	2·96	80 24·3	17·3	eF, S	
5483	3792	3557	...	...	14 1 46	3·70	132 39 3	17 2	pF, vL, R, vgbM	
5484	3793	...	III 791	...	14 2 0±	2·08	34 20±	17·2	vF, S, R, 4′ from I 232 (d'A not found)	
5485	3794	...	I 232	...	14 2 20	2·08	34 19·9	17·2	cB, R, vgbM, f of 2	
5486	3795	...	II 801	...	14 2 34	2 07	34 14·0	17·2	F, pL	
5487	...	...	...	G M Searle	14 2 43±	2·97	81 17±	17·2	eF (Place uncertain)	
5488	3796	3558	...	...	14 2 46	3·52	122 58·6	17 2	F, R, *8 s nr	
5489	3797	3559	...	...	14 3 10	3·78	135 25·6	17 2	vF, S, R, bM	
5490	3798	1752	III 32	...	14 3 17	2·85	71 47·3	17·2	cF, cS, R, sbMF * *	
5491	3799	1753	II 890	...	14 4 0	2·99	82 58·2	17·2	pB, pS, R, gbM, r	
5492	3800	1754	II 876	...	14 4 1	2·82	69 43·8	17·2	pB, vS, E	
5493	3801	1755	IV 46	...	14 4 11	3·13	94 22·7	17·1	pB, vS, R, psmbM *, *18 inv	
5494	3802	3560	...	...	14 4 16	3·48	119 59·8	17·1	pB, L, R, gbM, rr	
5495	3803	3561	...	...	14 4 24	3·42	116 26·9	17·1	vF, S, R, bM, *sf	
5496	...	...	...	Holden	14 4 24	3·08	90 29·5	17·1	pB, vL, Ens	
5497	...	...	...	St XII	14 4 43	2·50	50 26·6	17·1	cF, S, R, lbM	
5498	...	...	...	St XII	14 4 43	2·73	63 38 5	17·1	F, S, R, lbM, r?	
5499	...	...	...	St XII	14 4 51	2·56	53 25·4	17·1	F, S, R, gbM, r?	
5500	3804	...	III 674	...	14 5 6	2·27	40 46·2	17·1	cF, cS, iR	
5501	3805	1756	...	...	14 5 13	3·05	88 5·1	17·1	vF, S, rr	
5502	...	...	...	Sw I	14 5 20	+1·81	28 53·6	+17·1	ceF, pS, R, v diffic, bet 2 st	

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					h m s	s	° ′	″		
5503	...	...	...	Sw I	14 5 27	+1·82	28 56·1	+17·1	eeF, vS, R, v diffic, 2 st nr	
5504	...	...	...	St XI	14 5 34	2·86	73 29·9	17·1	vF, vlE, vlbM	
5505	...	...	...	Sw III	14 5 43	2·90	76 3·5	17·1	vF, pS, bet ✱ and D ✱	
5506	3806	1757	II 687	...	14 5 59	3·11	92 32·7	17·1	pB, L, E 20° ±, lbM	
5507	{3808 = 3807}	1758	IV 49	...	14 6 6	3·10	92 29·5	17·1	cF, S, R, stellar	
5508	...	...	...	St XII	14 6 6	2·74	64 42·4	17·0	eF, eS, R, lbM	
5509	...	...	...	Bigourdan	14 6 9	2·80	68 41	17·0	vF, S, R, stellar Nucl	
5510	...	...	...	O St I	14 6 20	3·29	107 18·5	17·0	vF, S, R, gbM	
5511	...	...	...	Hough	14 6 22	2·96	80 43·5	17·0	vF, S, ✱ 10 p	
5512	...	...	...	St XIII	14 6 32	2·64	58 29·1	17·0	vF, vS, R, sbMN, r?	
5513	3809	1759	II 877	...	14 6 36	2·80	68 55·1	17·0	pB, pL, iR	
5514	5758	...	...	d'A	14 6 45	2·97	81 40·7	17·0	F, pS, R, lbM, ✱ 16 nf	
5515	3810	1760	III 685	...	14 6 51	2·48	50 1·9	17·0	vF, S, vlE	
5516	3811	3562	...	...	14 6 55	3·85	137 27·5	17·0	pF, S, R, psbM, S ✱ ✱ nf	
5517	...	...	...	St XII	14 6 55	2·55	53 37·7	17·0	F, eS, R, bMN	
5518	...	...	...	St XII	14 7 17	2·80	68 29·7	17·0	F, vS, R, gbM	
5519	5759	...	...	d'A	14 7 25	2·97	81 49·3	17·0	vF, pL, ✱ 10 p	
5520	3812	...	III 676	...	14 7 50	2·20	38 59·5	17·0	F, S, lE, stellar	
5521	3813	1761	...	...	14 8 21	3·01	84 56·1	17·0	F, S, R, bM	
5522	3814	...	III 644	...	14 8 24	2·87	74 14·0	17·0	vF, vS, E	*
5523	3818	1762	III 134	...	14 8 31	2·73	64 0·9	16·9	F, pL, pmE 90°, ✱ 10 np	
5524	3819	...	...	Ld R	14 8 47 ±	2·53	52 57 ±	16·9	vF	
5525	...	...	...	St XIII	14 8 56	2·88	75 3·9	16·9	pF, pS, iR, bM	
5526	3820	1763	{III 804 = III 835}	...	14 9 18	1·90	31 34·4	16·9	vF, S, E, r	*
5527	3821	...	...	Ld R	14 9 19 ±	2·53	53 6 ±	16·9	eeF	
5528	...	...	...	Sw VI	14 9 31	2·96	81 3·1	16·9	eeF, pS, R, 2 vF st nr	
5529	3822	1764	III 414	...	14 9 40	2 53	53 7·6	16·9	cF, pL, vmE 110°, vgvmbM	
5530	3823	3563	...	...	14 9 42	3·74	132 43·5	16·9	!, vF, pmE, esvmbM ✱ 12	
5531	3824	...	...	d'A	14 9 53	2·92	78 28·0	16·9	F, S, R, III 47 f 10'	
5532	3825	1765	III 47	...	14 10 3	2·93	78 32·2	16·9	vF, vS, R, gbM, r	
5533	3826	1766	II 418	...	14 10 10	2·55	53 59·9	16·9	pB, R, vsmbM, 2 or 3 st inv	
5534	...	...	...	St XII, T V	14 10 17	3·16	96 46·0	16·9	pF, st inv, ✱ 12 np	
5535	5760	...	...	m 273	14 10 38	2·96	81 9	16·8	eF, S, iR	
5536	3827	1768	III 731	...	14 10 40	2·46	49 51·6	16·8	cF, vS, R, sp of 2	
5537	5761	...	...	m 274	14 10 40	2·97	82 18	16·8	eeF, S, lE	
5538	{3830 = 5762}	...	...	Ld R, m 275	14 10 41	2·97	81 53	16·8	eF, S, E	
5539	3828	1767	...	...	14 10 44	2·96	81 10·2	16 8	F, pL, iF, gbM	
5540	3829	...	III 805	...	14 10 45	1·79	29 20·1	16·9	eF, vS, R, stellar	
5541	3831	1769	III 732	...	14 10 48	+2·46	49 45·7	+16·8	cF, S, R, gbM, nf of 2	

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					h m s	s	° ′	″		
5542	3832	...	...	Ld R, d'A	14 10 57	+2·97	81 47·1	+16·8	vF, vS	
5543	5763	...	...	d'A	14 11 9	+2·97	81 41·1	16·8	eF, vS	
5544	3833	1771	II 419	...	14 11 9	2·52	52 46·7	16·8	F, pS, E 80° } D neb or biN	†
5545	3834	...	...	Ld R	14 11 10	2·52	52 47	16·8	E, lbM } D neb or biN	†
5546	3835 = 3836	1770	III 551	...	14 11 14	+2·97	81 46·9	16·8	pB, cS, gbM	*
5547	3837	...	III 948	...	14 11 36	−0·75	10 44·8	16·8	eF, vS, E 0° ±	
5548	3838	1773	II 194	...	14 11 38	+2·72	64 12·7	16·8	eF, pS, R, vsvmbM *	
5549	3839	1772	III 552	...	14 11 43	2·97	81 58·7	16·8	vF, vS, R	
5550	3840	1774	...	...	14 11 44	2·90	76 27·9	16·8	vF, cS, pmE	
5551	5764	...	...	m 276	14 11 53	2·99	83 55	16·8	3 st in neby	
5552	5765	...	...	m 277	14 12 12	2·97	82 19	16·8	vF, S	
5553	3841	1775	...	...	14 12 13	2·70	63 4·8	16·8	vF, S, lE	
5554	5766	...	...	m 278	14 12 19	2·97	82 19	16·8	eF, S	
5555	...	...	...	O St I	14 12 20	3·32	108 28·6	16·8	vF, S, iR, gbMN	
5556	3842	3564	...	...	14 12 25	3·48	118 36·2	16·8	eF, L, S * inv	
5557	3843	1776	I 99	...	14 12 34	2·52	52 51·6	16·8	cB, S, R, vsbM *	
5558	...	...	...	Sw I	14 12 46	2·98	82 19·0	16·7	eF, S, lE, np of 2	
5559	3844	1777	III 347	...	14 12 51	2·72	64 32·7	16·7	vF, S, vlE, bM	*
5560	3845	1778	II 579	...	14 13 2	3·01	85 21·8	16·7	pF, eL, E, gbM	
5561	...	...	...	Sw I	14 13 4	1·84	30 36·2	16·7	eF, pS, R, F * close p	
5562	...	...	...	T VIII	14 13 15	2·93	79 22	16·7	vF, S, vF * 3ª f	
5563	5767	...	...	m 279	14 13 16	2·97	82 17	16·7	eF, S, lE	
5564	...	...	...	Sw I	14 13 17	2·98	82 20·0	16·7	eF, S } probably = m279	
5565	...	...	...	Sw I	14 13 17	2·98	82 20·5	16·7	eF, S, v diffic } probably = m279	
5566	3846	1779	I 144	...	14 13 18	3·01	85 24·3	16·7	B, pL, R, psbM, r, * 12 f 1′·5	*
5567	3847	1780	...	...	14 13 21	2·54	54 13·9	16·7	pF, R	
5568	...	...	...	Bigourdan	14 13 22	2·54	54 16	16·7	vF, S, v dif	
5569	3848	...	...	Ld R	14 13 30	3·01	85 24	16·7	eF, pL, R	
5570	3849	1781	III 12	...	14 13 32	2·97	81 50·4	16·7	F, S, iR	
5571	...	...	...	Bigourdan	14 13 37	2·54	54 12	16·7	S Cl of F st in neb	
5572	...	...	...	St XIII	14 13 44	2·52	53 12·8	16·7	eF, vS, bM	
5573	5768	...	...	m 280	14 13 46	2·97	82 27	16·7	vF, S, lE	
5574	3850	1782	I 145	...	14 13 53	3·02	86 7·2	16·7	pF, pS, lE, p of 2	
5575	5769	...	...	m 281	14 14 0	2·98	83 8	16·7	F, vS, or neb *	
5576	3851	1783	I 146	...	14 14 1	3·02	86 5·1	16·7	B, S, R, vsmbM, f of 2	
5577	3855	...	...	Ld R, d'A	14 14 9	3·02	85 54·9	16·7	pF, pL, vmE 53°	
5578	...	...	...	Sw I	14 14 16	2·98	83 9·0	16·7	vF, vS, lE, mbMN	
5579	3852	1784	III 415	...	14 14 32	2·54	54 9·8	16·7	vF, eL, p of 2	
5580	3853	1785	...	...	14 14 45	2·54	54 8·9	16·6	pB, S, f of 2	
5581	...	...	...	St XIII	14 14 54	+2·74	65 52·2	+16·6	vF * in vF, vS, R neby	

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					h m s	s	° ′	″		
5582	3854	1786	II 754	...	14 15 2	+2·44	49 39·8	+16·6	pB, pS, R, bMFN, ∗ sp	
5583	...	...	...	Sw III	14 15 3	2·89	76 8·7	16 6	vF, pS, R, pB ∗ nr	
5584	...	...	...	Barnard	14 15 12	3·07	89 44·7	16·6	F, L, mE, dif, glbM	
5585	3856	1790	I 235	...	14 15 18	1·91	32 38·1	16·6	pF, L, iR, vgmbM, r	
5586	...	...	...	Sw III	14 15 23	2·89	76 10·5	16·6	eF, vS, R	
5587	3857	1787	III 110	...	14 15 30	2·88	75 26·6	16·6	F, cS, vlE, ∗ 8 sf	
5588	3858	1789	...	...	14 15 31	2·53	54 14·0	16·6	vF, R, gbM	*
5589	3859	1788	III 416	...	14 15 31	2·53	54 5·2	16·6	vF, S, R, np of 2	
5590	3860	1791	III 417	...	14 15 43	2·53	54 9·3	16·6	cF, S, R, bM ∗, sf of 2	
5591	...	...	...	Sw III	14 15 43	2·88	75 40·7	16·6	eF, S, R, pB ∗ nr sf	
5592	3861	3565	III 924	...	14 15 48	3·47	118 1·9	16·6	F, S, E, gvlbM, r	
5593	3862	3566	...	Δ 357	14 16 13	4·12	144 9·9	16·6	Cl, vlRi, vlC, st 10	
5594	3863	...	III 135	...	14 16 25	2·69	62 58·6	16·6	eF, vS, stellar	*
5595	3864	1792	III 121	...	14 16 33	3·29	106 5·1	16 6	F, pL, R, vgbM, p of 2	
5596	3865	1795	III 418	...	14 16 41	2·49	52 14·4	16·6	eF, S, R, stellar	
5597	3866	1793	III 122	...	14 16 47	3·29	106 7·6	16·5	vF, L, vlE, vglbM, f of 2	
5598	3867	1796	III 733	...	14 16 50	2·42	49 2·5	16·6	F, vS, R, bM	
5599	3868	1794	III 927	...	14 16 54	2·98	82 46·8	16·5	F, S, lE	
5600	3869	1797	II 177	...	14 17 8	2·87	74 43·2	16·5	pB, pS, gbM	
5601	5770	...	...	Ball (R)	14 17 8	2·42	49 3	16·5	vF, bet III 733 and 734	
5602	3870	...	II 694	...	14 17 17	2·13	38 49·5	16·5	pF, pS, lE, mbM	
5603	3871	1800	III 734	...	14 17 24	2·41	48 58·7	16·5	cF, pS, R, gbM	
5604	3872	1799	III 668	...	14 17 28	3·11	92 34·2	16·5	F, pS, R, vgbM ∗, r	
5605	3873	1798 = 3569	III 120	...	14 17 32	3·24	102 32·5	16·5	vF, pL, R, vgbM	
5606	3874	3568	...	Δ 313	14 17 37	4·35	149 0·0	16·5	Cl, S, pC, stL & S	
5607	3875	...	II 331	...	14 17 44	0·73	17 47·5	16·5	pF, cS, iR, bM, er	
5608	3876	1801	II 673	...	14 17 48	2·38	47 35·2	16·5	F, pL, lE, vglbM	
5609	3881	...	...	Ld R	14 17 53	2·53	54 31	16·5	eeF	
5610	3877	1802	III 136	...	14 18 4	2·71	64 45 6	16·5	vF, S, pmE 0° ±, ∗ 9 f	
5611	3878	1803	...	...	14 18 6	2·57	56 19·0	16·5	F, S, R, bM	
5612	3879	3567	...	...	14 18 10	6·64	167 46 0	16·4	vF, E, gbM, r	
5613	3882	...	...	Ld R	14 18 11	2·53	54 28·0	16·5	eF, pS, dif, 2′ n of h 1804	
5614	3880	1804	II 420	...	14 18 12	2 53	54 29·9	16·5	pB, S, R, smbM	
5615	3883	...	...	Ld R	14 18 12	2·53	54 29·5	16·5	close n of h 1804 (? vF ∗)	
5616	3884	1805	III 419	...	14 18 31	2·50	52 54·1	16·5	vF, S, cE, vgbM, er	
5617	3885	3570	...	Δ 302	14 19 23	4·42	150 5·3	16·4	Cl, L, pRi, pCM, st 8...	
5618	3886	...	III 763	...	14 20 1	3·10	91 37·5	16·4	eF, S	
5619	3887	1806	...	...	14 20 16	3·00	84 33·9	16·4	vF, S, R, vgbM	
5620	3888	...	III 319	...	14 20 18	0·68	17 44·4	16·4	oF, vS	*
5621	3889	1807	III 14	...	14 20 55	+2·95	81 7·4	+16·3	eeF, L, r	

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					h m s	s	° ′	″		
5622	3890	1809	III 677	...	14 21 4	+2·18	40 48·8	+16·3	vF, pS, vlE, vglbM	
5623	3891	1808	II 329	...	14 21 13	2·55	56 7·2	16·3	eF, S, R, vsmbM, r	
5624	...	...	...	Sw VI	14 21 23	2·08	37 45·4	16·3	eF, S, lE	
5625	3892	1810	...	...	14 21 26	2·41	49 25·0	16·3	vF, S, R, gbM	
5626	3893	3571	...	...	14 21 35	3·51	119 7·5	16·3	eF, S, R	
5627	3894	1811	...	...	14 21 48	2·91	77 59·2	16·3	vF, vS, R, *9 sp	
5628	...	...	...	St XIII	14 21 53	2·81	71 26·7	16·3	pF, S, R, gbMN = 14 m	
5629	3895	1812	...	...	14 22 0	2·69	63 31·5	16·3	pF, S, R, gbM	
5630	3896	1814	II 674	...	14 22 4	2 37	48 6·8	16·3	F, S, E 90° ±, gbM	
5631	3897	1820	I 236	...	14 22 12	1·87	32 47·2	16 3	B, S, R, psbMN	
5632	3898	...	...	G P Bond	14 22 12	3·07	89 49·1	16·3	Neb, *11 f 150' (Auw 33)	
5633	3899	1818	I 185	...	14 22 14	2·24	43 13·4	16·3	cB, pS, R, pglbM	
5634	3900	1813	I 70	...	14 22 16	3·15	95 21·0	16·3	⊕, vB, cL, R, gbM, rrr, st 19, *8 sf	
5635	3901	1815	III 132	...	14 22 21	2·66	61 58·0	16·3	F, S, E, sbM	
5636	3902 = 3905	1816	II 580	...	14 22 35	3·02	86 6·0	16·2	eF, cL, R, np of 2	
5637	3903	1819	II 357	...	14 22 36	2·73	66 11·1	16·3	vF, S, R, vgbM	
5638	3904	1817	II 581	...	14 22 37	3·02	86 8·4	16·2	cB, pL, R, sf of 2	
5639	3906	1821	...	...	14 22 41	+2·60	58 58·3	16·3	vF, R, *7p, *11s	
5640	3907	...	III 949	...	14 23 3	−1·63	9 18·2	16·3	eF, S, lE	
5641	...	...	...	St XI	14 23 9	+2·63	60 33·0	16·2	pB, pS, lE, mbM, r?	
5642	3908	1822	III 126	...	14 23 11	2·61	59 21·6	16·2	cF, S, *inv, *12 nf	
5643	3909	3572	...	Δ 469	14 23 40	3·83	133 34·5	16·2	pB, L, R, vglbM, st inv	
5644	...	...	...	St XI	14 23 40	2·90	77 27·0	16·2	pB, pS, R, gmbM	
5645	3910	1823	II 150	...	14 23 44	2·96	82 5·9	16·2	cF, pL, iR, gbM	
5646	...	...	...	St XI	14 23 44	2 50	53 54·8	16·2	eF, E sp nf, 45"1	
5647	...	...	...	St XI	14 23 50	2·90	77 30·0	16·2	F, S, R, vlbM	
5648	...	...	...	Bigourdan	14 23 50	2 87	75 21	16·2	vF, S, no Nucl, h 1824 nr	
5649	3911	1824	III 645	...	14 23 54	2·87	75 22·3	16·2	eF, vS, np of 2	
5650	...	...	...	Sw VI	14 23 56	2·98	83 23·3	16·2	vF, pS, R	
5651	3912	...	...	G P Bond	14 24 3	3·07	89 42·1	16·2	Neb, R (Auw 34)	
5652	3913	1825	II 891	...	14 24 4	2·98	83 23 8	16·2	pB, pL, vlE, bM	
5653	3914	1826	II 330	...	14 24 8	2·58	58 9·7	16·2	pF, pS, R, bM	
5654	3915	1828	III 420	...	14 24 15	2 48	53 0·8	16·2	F, S, E ?, * * inv?	
5655	3916	1827	...	...	14 24 18	2·87	75 27·9	16·2	eeF, sf of 2	
5656	3917	1829	II 421	...	14 24 35	2·50	54 3·0	16·2	pF, pL, R, mbM, r	
5657	...	...	...	St XI	14 24 37	2 62	60 11·7	16·2	F, S, irr, sev vF st inv, r?	
5658	3918	...	...	G P Bond	14 24 48	3·07	89 45·1	16·2	Neb, F, E (Auw 35)	
5659	3919	1831	...	...	14 24 53	2·69	63 59·1	16·1	eF	
5660	3920	1832	II 695	...	14 24 54	+2·12	39 45·3	+16·1	pB, L, iR, vgbM	

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					h m s	s	° ′	″		
5661	3921	1830	II 892	...	14 25 0	+2·98	83 7·6	+16·1	vF, pS, iE	
5662	3922	3573	...	Lac III 8, Δ342	14 25 8	4·26	145 56·5	16·1	Cl, L, pRi, lC, st 9...	*
5663	...	...	...	L I	14 25 20	3·30	105 57·9	16·1	eF, vS, R, glbM	
5664	...	...	...	L I	14 25 20	3·27	103 57·9	16·1	pF, S, E, gbM	
5665	3923	1833	II 27	...	14 25 32	2·95	81 18·3	16·1	pB, pL, R, gbM, r	
5666	3924	1834	...	...	14 26 20	2·92	78 51·6	16·1	vF, vS, R, stellar	
5667	3925	...	II 807	...	14 26 23	1·69	29 54·1	16·1	pB, pS, E 0°	
5668	3926	1835	II 574	...	14 26 23	3·00	84 55·9	16·1	F, pS, vlE, *14 inv	
5669	3927	...	II 79	...	14 26 28	2·92	79 28·2	16·0	F, L, R, lbM, r	
5670	3928	3574	...	...	14 26 28	3·89	135 20·5	16·0	vF, S, cE, bet 2 st	
5671	3929	...	III 882	...	14 26 35	0·86	19 44·1	16·1	vF, pL, R, bM	
5672	3930	1836	III 310	...	14 26 40	2·56	57 43·4	16·0	vF, vL, iR, lbM, ** p	
5673	3931	1838	II 696	...	14 26 42	2·10	39 26·2	16·1	F, S, cE, *15 np	
5674	3932	1837	II 893	...	14 26 54	2·99	83 55·0	16·0	cF, pS, R, gbM	
5675	3933	1839	II 422	...	14 26 54	2·47	53 4·6	16·0	F, pS, E, bM	
5676	3935	1842	I 189	...	14 27 52	2·11	39 55·3	16·0	B, L, E 45°±, pgbM, r	
5677	3936	1840	III 283	...	14 27 55	2·68	63 54·9	16·0	vF, vS, R, r, 3 st 9, 10 np	
5678	3934	1843	I 237	...	14 27 59	1·76	31 27·6	16·0	B, L, lE 0°, vgmbM	
5679	3937	1841	II 894	...	14 28 9	2·99	84 1·1	16·0	vF, S, R, * 12 att	
5680	5771	...	...	m 282	14 28 34	3·06	89 23	15·9	vF, vS	
5681	5772	...	...	d'A	14 28 47	2·95	81 5·0	15·9	F, S	
5682	3943	...	...	Ld R	14 29 40	2·12	40 43	15·9	F, pS, E	
5683	3944	...	...	Ld R	14 29 50	2·12	40 43	15·9	F, vS, lE	
5684	3938	1844	III 421	...	14 30 7	2·45	52 51·0	15·9	F, cS, R, bM, p of 2	
5685	...	...	...	St XIII	14 30 13	2·59	59 28·8	15·9	vF, vS, R, gbMN = 15 m	
5686	3939	1845	...	...	14 30 19	2·45	52 53·0	15·9	vF, S, R, f of 2	
5687	3940	1849	II 808	...	14 30 27	1·90	34 53·9	15·9	pF, S, iF, r, * 10 f	
5688	3941	3575	...	...	14 30 28	3·88	134 25·8	15·8	F, S, vgbM, am st	
5689	3942	1848	I 188	...	14 30 33	2·12	40 38·7	15·8	cB, pL, E 87°, psmbM	
5690	3946	1846	II 582	...	14 30 40	3·03	87 6·1	15 8	vF, mE 138°, F * att sf, *7 p 4′	
5691	3947	1847	II 681	...	14 30 43	3·07	89 46·8	15 8	pB, pS, lE, gbM	
5692	...	...	...	St XIII	14 31 16	3·02	85 58 8	15·8	pB, vS, R, gbM	
5693	3945	...	...	Ld R	14 31 20	2·12	40 51	15·8	F, pL, *13 att s	
5694	3954	3576	II 196	d'A, Engelhardt	14 31 28	3·47	115 55·8	15·8	cB, cS, R, psbM, r, *9·5 sp	
5695	3948	1851	II 423	...	14 31 38	2·45	52 49·6	15·8	pB, cS, R, bM, r	
5696	3951	1850	II 648	...	14 31 38±	2·32	47 36·0	15·8	cF, cS, R, lbM, r	*
5697	3952	1853	II 675	...	14 31 39±	2·32	47 46±	15·8	F, vS, R, bM, 4 B st p	*
5698	3953	1852	II 700	...	14 31 39	2·40	50 56·0	15·8	cF, cS, lE, in Δ of st	
5699	3955	...	III 127	...	14 32 13	2·59	59 53·8	15·7	eF, vS	
5700	...	...	...	Ld R*	14 32 13	+2·12	40 53	+15·7	eF, S, r, * 11 sp 4′	

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					h m s	s	° ′	″		
5701	3956	1854	II 575	...	14 32 13	+2·99	84 1·8	+15·7	cB, pS, R, mbM, ∗ 11 p 15′	
5702	3957	...	III 894	...	14 32 21	2·75	68 53·3	15·7	vF, vS	
5703	3958	...	III 128	...	14 32 27	2·59	59 53·8	15.7	vF, vS, iR	
5704	3959	1855	II 649	...	14 32 27	2·35	48 52·6	15·7	F, eS, lE 0° ±	
5705	...	...	...	St XIII	14 32 39	3·07	90 7·0	15·7	eF, L, lE, eF dif neby around	
5706	...	...	...	St XIII	14 32 42	2·57	58 55 6	15·7	vF, vS, R, vlbM	
5707	...	...	...	Sw I	14 32 45	2 01	37 49·6	15·7	B, pS, R	
5708	3960	1859	...	...	14 32 46	2·35	48 56 8	15·7	F, pL, Eo° ±, gbM	
5709	...	...	...	St XIII	14 32 49	2·57	58 57·0	15 7	vF, S, iF, Epf	
5710	3961	1856	III 895	...	14 32 50	2·76	69 21·0	15·7	vF, S, vgbM, ⁎ ⁎ f, p of 2	
5711	3962	1858	...	...	14 32 56	+2·76	69 24·9	15·7	eE, vS, ⁎ ⁎ att, f of 2	
5712	3963	...	III 950	...	14 32 58	−1·32	10 33·7	15·8	vF, S, R, S Cl p	
5713	3964	1857	I 182	...	14 33 1	+3·07	89 41·1	15·7	cB, pL, R, psmbM, r	
5714	3965	1861	III 675	...	14 33 3	2·18	42 44·5	15·7	vF, pS, Epf, D ∗ n, 1st of 6	
5715	3966	3577	...	Δ 333	14 33 15	4·35	146 56·8	15·7	Cl, L, p Ri, CM, st 11...13	
5716	3968	1860	III 671	...	14 33 19	3·33	106 52·0	15 7	vF, pL, R	
5717	3969	1864	...	...	14 33 29	2·17	42 42·5	15·7	vF, S, R, D ∗ nr, 2nd of 6	
5718	3970	1862	III 550	...	14 33 40	3·01	85 56·0	15·7	vF, S, R, vglbM, ∗ 8·9 nf	
5719	3971	1863	II 682	...	14 33 46	3·07	89 41·0	15·7	pF, S, lE, bM	
5720	...	...	...	Sw VI	14 33 48	2·03	38 34·1	15·7	eeF, pS, R, bet 2 st	
5721	3972	...	...	Ld R	14 33 48	2·17	42 41	15·7	vF, S, R	
5722	3975	1865	...	...	14 33 50	2·17	42 41	15·7	vF, S, R, psbM	Form trapezium
5723	3973	...	...	Ld R	14 33 50	2·17	42 40	15·7	vF, S, R	F neb connecting?
5724	3974	...	...	Ld R	14 33 52	2·17	42 40	15·7	vF, S, R	
5725	3976	...	...	d'A	14 33 53	3·03	87 12·7	15·6	vF, S, dise, ∗ 15 s 95″	
5726	...	...	...	O St I	14 34 20	3·34	107 50·2	15·6	F, S, R, gbM, ∗ 10·5 np 3′	
5727	...	...	...	St XII	14 34 37	2·50	55 24·1	15·6	eF, pL, R, dif	
5728	3977	1866	I 184	...	14 34 38	3·33	106 38·6	15·6	pF, pL, pmE 45° ±, mbM, ∗ 10 s	*
5729	3978	3578	III 508	...	14 34 40	3·20	98 24·1	15·6	F, pL, E, r	
5730	3979	1867	III 657	...	14 34 42	2 28	46 36·2	15 6	vF, eS, E 90° ±	
5731	3980	1868	III 658	...	14 34 52	2·28	46 37 7	15·6	vF, eS, lE	
5732	3981	1869	III 686	...	14 35 3	2·39	50 45·2	15·6	vF, S, R, lbM	
5733	5773	...	...	m 283	14 35 35	3·07	89 45	15·6	vF, S, mE	
5734	...	...	...	L I	14 36 20	3·39	110 17·2	15·5	vF, S, lE, glbM	
5735	3982	1870	III 133	...	14 36 29	2 60	60 40·8	15·5	vF, L, iR, lbM	
5736	...	...	...	Sw VI	14 36 43	2·90	78 12·1	15·5	eeF, S, lE, v diffic	
5737	3983	1871	III 896	...	14 36 43	2·77	70 31·1	15·5	vF, eS, R, vglbM	
5738	5774	...	...	m 284	14 36 49	3·04	87 48	15·5	F, S, bM	
5739	3984	1873	I 171	...	14 37 13	2·30	47 34·4	15·5	pB, S, R, smbM, r, ∗ nr	
5740	3985	1872	II 538	...	14 37 18	+3 04	87 43·3	+15·5	pB, L, iR, gbM, r	†

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5741	...	...	...	L I	14 37 20	+3·25	101 20·3	+15·4	vF, vS, R, sbMN	
5742	...	...	...	L I	14 37 20	3·24	101 14·3	15·4	F, pS, pmE, gbMN	
5743	...	...	...	L I	14 37 20	3 39	110 17·3	15·4	F, S, mE, smbMN	
5744	...	...	...	O St I	14 37 20	3·35	107 53·3	15·4	eF, vS, neb ?	
5745	3986	3579	...	...	14 37 23	3·28	103 20·8	15·4	vF, S, E, pslbM	
5746	3987	1874	I 126	...	14 37 50	3·04	87 27·1	15·4	B, L, vmE 170°, bmBN	
5747	3988	...	III 48	...	14 38 26	2·88	77 18·5	15·4	eF, S	
5748	...	...	...	St XII	14 38 44	2·72	67 29·5	15·4	eF, vS	
5749	3989	3580	...	Δ 356	14 38 57	4·26	143 56·2	15·3	Cl, pL, pRi, lC, st 10...11	
5750	3990	1875	I 183	...	14 39 1	3·07	89 37·9	15·3	pF, pS, vlE, r	
5751	3991	1877	II 809	...	14 39 24	1·89	35 59·1	15·4	F, S, vlE, Δ 2 st 10·11	
5752	...	...	...	Ld R*	14 39 41	2·37	50 40·5	15·3	F, 1′ p h 1878	
5753	...	...	...	Ld R*	14 39 45	2 37	50 36·7	15·3	F, bM, np h 1878	
5754	3992	1878	III 687	...	14 39 48	2·37	50 40·3	15·3	eF, eS, R, bM	
5755	...	...	...	Ld R*	14 39 51	2·37	50 38·3	15·3	F, 2′nf h 1878	
5756	3993	3581	...	...	14 39 54	3·29	104 15·9	15·3	pB, pL, pmE, gpmbM	
5757	3994	1876	III 690	...	14 39 54	3·36	108 29·8	15·3	vF, S, iR, lbM	
5758	...	...	...	Sw III	14 40 20	2·86	75 46·3	15·3	eF, pS, R, *9 f 22′	
5759	...	...	...	St XI	14 40 36	2·86	75 57·3	15·3	eF, S, R	
5760	3995	1879	III 885	...	14 41 13	2·77	70 54·6	15·2	vF, vS, cE 90°, vglbM	
5761	...	...	...	L I	14 41 20	3·39	109 41·4	15·2	vF, S, R, glbMN	
5762	...	...	...	Sw III	14 42 13	2·87	76 58 3	15·2	vF, S, R, p of 2	
5763	...	...	...	Sw III	14 42 38	2·87	76 56·3	15·2	eeF, pS, v diffic, f of 2	
5764	3996	3582	...	...	14 43 45	4·21	142 5·4	15·1	Cl, vF, vS, vC	
5765	3997	1880	...	...	14 43 52	2·99	84 18·0	15·1	D neb, both eF	
5766	...	...	...	O St I	14 44 20	3·41	110 47·5	15·0	eF, pS, R, gbM	
5767	...	...	...	Sw I	14 44 58	2·08	42 2·1	15·0	eF, pS, R, *nr	
5768	3998	...	III 373	...	14 44 59	3·10	91 57·2	15·0	F, R, bMFN, S*s	*
5769	...	...	...	Holden	14 45 47	2·94	81 27	15·0	vF	
5770	3999	1881	II 576	...	14 46 13	3·00	85 27·6	15·0	eF, S, vlE, bM, biN	
5771	4000	1882	III 129	...	14 46 17	2·55	59 35·1	15·0	vF, S, R, pgbM	
5772	4001	1883	...	...	14 46 18	2·30	48 49·4	15·0	pB, pL, lE, pslbM, *8 np	
5773	4002	1884	III 130	...	14 46 34	2·55	59 37·9	14·9	vF, S, R, pgbM	
5774	4003	...	...	Ld R	14 46 43	3·01	85 50·4	14·9	pF, pL, R, np of 2	
5775	4004	1885	III 554	...	14 46 58	3·01	85 52·8	14·9	F, pS, vmE 148°, gvlbM	
5776	4005	...	...	d'A	14 47 32	3·02	86 27 7	14·9	vF, pL, vlbM, *8·9 sp	
5777	4006	...	III 806	...	14 47 33	1·56	30 26·9	14·9	vF, vS, lE	
5778	...	...	...	Sw IV	14 47 56	2·76	70 46·7	14·9	eeF, pS, R, pB*close f, diffic	
5779	...	...	...	Sw I	14 48 17	1·72	33 30·5	14·8	vF, pS, lE, lbM	
5780	...	...	...	Sw VI	14 48 26	2·56	60 28·5	14·8	vF, S, R, *nr sp	
5781	4007	1886	...	...	14 48 52	+3·34	106 40·1	+14·8	F, S, R, bM, *16 sp	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
5782	...	...	...	Sw VI	14 48 54	+ 2·88	77 43·4	+ 14·8	eF, vS, E, ✱ nr sf	
5783	...	...	...	Sw VI	14 48 58	1·89	37 19·4	14 8	pB, pS, iR, F ✱ inv	
5784	4008	1887	II 676	...	14 49 5	2·23	46 52·3	14·8	pB, S, R, smbM, stellar	
5785	...	...	...	Sw VI	14 49 33	1·89	37 17·3	14 8	vF, pS, F ✱ close f, np of 2	
5786	4009	3583	...	...	14 49 58	3·88	131 27·4	14·7	F, mE, B ✱ sf	
5787	4010	1888	II 677	...	14 50 2	2·23	46 56·1	14·7	F, cS, R, pslbM	
5788	...	...	...	Sw VI	14 50 3	1·89	37 19·3	14·7	eeF, S, R, v diffic, sf of 2	
5789	4011	1890	III 976	...	14 50 41	2·53	59 12·9	14·7	eF, pS, iF	
5790	...	...	...	St XIII	14 50 46	2·93	81 8·9	14·7	eF, vS, iF, lbM	
5791	4012	1889	III 691	...	14 50 52	3·38	108 42·5	14·7	pF, S, R, stellar	
5792	4013	...	II 683	...	14 51 12	3·08	90 31·5	14·7	pB, pL, R, mbM, ✱ 8·9 np 1′	
5793	...	...	...	L I	14 51 20 ±	3·34	106 6·7	14·6	eF, pS, E, bMN	
5794	4014	1891	...	...	14 51 22	1·98	39 44·7	14·7	pF, S, vsbM ✱ 13, 1st of 4	
5795	...	...	...	Sw VI	14 51 29	2·02	40 50·9	14·7	vF, pS, lE, pB ✱ close to p end	
5796	...	...	...	T X, O St I	14 51 36	3·34	106 3·7	14·7	F, pS ✱ in centre	
5797	4015	1893	III 678	...	14 51 46	1·98	39 44·9	14·6	F, S, vsbM ✱ 13, 2nd of 4	
5798	4016	1892	III 131	...	14 51 48	2·53	59 28·3	14·6	F, S, R, vgbM, ✱ nf	*
5799	4017	3584	...	...	14 51 49	5·89	161 52·5	14·6	eF, S, R, bM	
5800	4018	3585	...	...	14 52 6	4·22	141 21·5	14·6	Cl, pL, pRi, lC	
5801	...	...	...	L I	14 52 20	3·29	103 17·7	14·6	vF, vS, sbM, 1st of 3	
5802	...	...	...	L I	14 52 20	3·29	103 18·7	14·6	vF, vS, sbM, 2nd and brightest	
5803	...	...	...	L I	14 52 20	3·29	103 16·7	14·6	vF, vS, sbM, 3rd of 3	
5804	4019	1895	III 679	...	14 52 31	1·97	39 45·3	14·6	vF, vS, vsmbM, ✱ 6 nr	
5805	4020	...	...	Ld R	14 52 31	1·97	39 47·5	14·6	S	
5806	4021	1894	II 539	...	14 52 55	3·03	87 33·0	14·6	cB, cL, E 165° ±, sbMN	
5807	5775	...	...	d'A	14 53 0	+ 1·05	25 31·8	14·6	vF, vS, r	
5808	4022	...	III 311	...	14 53 1	− 0·02	16 24·6	14·6	vF, S, iR, bet 2 st	
5809	4023	3586	...	...	14 53 11	+ 3·30	103 36 8	14·5	vF, S, E, glbM	
5810	...	...	...	O St I	14 53 20	3·36	107 17·7	14·5	eF, vS, lE 230°, bet 2 vF st	
5811	5776	...	...	m 285	14 53 22	3·04	87 48	14·5	vF, S, iR	
5812	4024	3587	I 71	...	14 53 29	3·19	96 54·0	14·5	cB, S, R, svmbM	
5813	4026	1896	I 127	...	14 54 6	3·04	87 44·5	14·5	B, pS, R, psmbM	
5814	4027	1897	...	...	14 54 15	3·04	87 48·7	14·5	vF, vS, R	
5815	...	...	...	L I	14 54 20	3·34	106 15·7	14·5	eF, pS, E 10°, D ✱ inv	
5816	...	...	...	O St I	14 54 20	3·33	105 34·7	14·5	F, pS, gbMN, stellar	
5817	...	...	...	O St I	14 54 20	3·33	105 38·7	14·5	vF, pS	
5818	...	...	...	Sw VI	14 54 21	+ 1·96	39 35·5	14·5	vF, pS, R, eF ✱ inv, bet 2 st	
5819	...	...	III 311 ?	d'A	14 54 28	− 0·02	16 18·8	14·5	F, pL, Δ 2 st	
5820	{4029 = 4025}	1898	II 756	...	14 54 31	+ 1·78	35 33·3	14·5	B, E 90° ±, sbM, B D ✱ f 8′	*
5821	{4030 = 4028}	...	III 811	Ld R	14 54 51	+ 1·78	35 30	+ 14·5	vF, S	*

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5822	4031	3588	...	...	14 55 2	+4·35	143 47·4	+14·4	Cl, vL, Ri, lC, st 9...12	
5823	4032	3589	...	...	14 55 20	4·41	145 2·3	14·4	Cl, cL, Ri, lCM, st 13...14	
5824	...	...	...	Barnard	14 55 23	3·67	122 30·9	14·4	pB, S, stell, N	
5825	...	...	...	Sw IV	14 55 36	2·75	70 45·2	14·4	eeF, pS, lE, pB * close f	
5826	...	...	...	Sw I	14 55 48	1·70	33 56·7	14·4	vF, pL, E	
5827	...	...	...	St XI	14 55 49	2·61	63 28·9	14·4	pB, pL, R, bM	
5828	...	...	...	Sw VI	14 56 12	1·94	39 26·2	14·4	eF, pS, R, bet 2 dist st	
5829	...	...	...	St XII	14 56 31	2·66	66 6·8	14·4	vF, vL, irrR, bM	
5830	...	...	...	Sw VI	14 57 0	2·02	41 32·0	14·3	vF, S, R, B * nr f	
5831	4033	1899	II 540	...	14 57 2	3·05	88 14·7	14·3	pB, S, mbM	
5832	4034	...	II 332	...	14 57 32	0·17	17 45·3	14·3	pB, cL, iR, bp, r	
5833	4035	3590	...	...	14 57 33	6·05	162 19·1	14·2	F, cS, lE, glbM, am st	
5834	4036	1900	...	...	14 57 47	3·68	122 34·6	14·2	eeF? (Marth : B, stellar)	
5835	...	...	...	Sw VI	14 57 50	+1·98	40 32·4	14·2	vF, pS, R	
5836	4037	...	III 312	...	14 57 55	−0·26	15 36·3	14·3	eF, vS, lE, 2 st inv	
5837	...	...	...	Sw VI	14 57 55	+2·85	76 49·1	14·2	vF, S, R, D * np	
5838	4038	...	II 542	...	14 58 22	3·03	87 21·2	14·2	pB, pS	
5839	4039	...	II 541	...	14 58 22	3·04	87 49·2	14·2	pF, pS	
5840	...	...	...	Sw IV	14 58 27	2·53	59 56·7	14·2	eeF, pS, lE, v diffic	
5841	5777	...	...	m 286	14 58 31	3·03	87 28	14·2	F, S, E	
5842	...	...	...	St XII	14 58 34	2·70	68 22·9	14·2	eF, vS, R, lbM	
5843	4040	3592	...	...	14 58 42	3·76	125 47·1	14·2	vF, S, lE, vlbM, r	
5844	4041	3591	...	...	14 58 51	5·03	154 8·2	14·2	pB, pL, R, vgvlbM	
5845	4042	...	III 511	...	14 58 55	3·04	87 49·3	14·2	vF, R	
5846	4045	1901	I 128	...	14 59 24	3·04	87 51·1	14·2	vB, pL, R, psbMN, F * invs, rr	*
5847	5778	...	...	m 287	14 59 28	2·96	83 5	14·2	eF, S, iR	
5848	4046	...	...	d'A	14 59 29	3·03	87 26·7	14·2	eF, S, close D * sf 7′	
5849	...	...	...	L I	14 59 30	3·31	103 53·1	14·1	{ * 13 in vF neb, 3 st p 1′, * 8 f 10′, 15′ s	
5850	4047	1902	II 543	...	15 0 2	3·04	87 54·9	14·1	cF, S, lE, psbM	
5851	4048	...	III 886	...	15 0 17	2·85	76 36·1	14·1	eF, vS, np of 2	*
5852	4049	...	III 887	...	15 0 17	2·85	76 36·1	14·1	cF, vS, sf of 2	*
5853	...	...	...	St XII	15 0 35	2·28	49 56·1	14·1	pF, pS, R, mbM, r?	
5854	4050	1903	II 544	...	15 0 45	3·02	86 53·5	14·1	pB, S, vlE, lbM, am st	
5855	...	...	...	Sw VI	15 0 45	3·00	85 28·4	14·1	eF, S, R, 2 st nf	
5856	4053	1904	IV 71	d'A I	15 0 55	2·75	71 0·9	14·1	Neb * 6 m (??)	
5857	4051	1905	II 751	...	15 1 6	2·73	69 51·7	14·1	cF, cS, E, p of D neb	*†
5858	...	...	...	Holden	15 1 12	3·25	100 40·0	14·1	F, S, stell N, II 192 sf	
5859	4052	1905	II 752	...	15 1 13	2·73	69 52·7	14·1	pF, pS, E, f of D neb	†
5860	4054	1906	...	...	15 1 29	2·18	46 49·8	14·1	F, S, R, psbM	
5861	4055	...	II 192	...	15 1 37	+3·26	100 46·8	+14·0	F, L, E, r	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5862	...	...	...	Sw I	15 2 19	+1·65	33 51·8	+14·0	eF, pS, R, v diffic	
5863	...	...	...	O St I	15 2 20	3·38	107 53·0	14·0	✶12 in eF neb, S ,R	
5864	4056	1907	II 585	...	15 2 31	3·01	86 24·7	14·0	pF, cS, ilE, gbM, ✶14 f	
5865	4057	...	II 684	...	15 2 39	3·06	88 58·0	14·0	pB, S, iE	*
5866	4058	1909	I 215	...	15 2 39	1·64	33 41·7	14·0	vB, eL, pmE 146°, gbM	†
5867	4059	...	...	Ld R	15 2 40	1·64	33 43	14·0	eF, vS, stellar	
5868	4060	...	...	d'A	15 2 41	3·05	88 55·8	14·0	eF, II 545 s 3′	
5869	4061	1908	II 545	...	15 2 41	3·06	88 59·4	14·0	pF, S, E, psbM	
5870	...	...	...	Sw I	15 2 49	1·65	33 58·8	14·0	eF, pS, lE, v diffic, ✶f	
5871	...	...	...	T V	15 2 53	3·06	88 57	13·9	eF, forms trapezium with 3 neb p	
5872	...	...	...	Winlock	15 3 19	3·26	100 56·2	13·9	No description	
5873	...	...	...	Copeland	15 3 46	3·81	127 34	13·9	○, stellar = 9·5 mag	
5874	...	...	...	Sw I	15 3 53	1·69	34 42·5	13·9	vF, pL, R, in △ of 3 B st	
5875	4062	...	II 755	Engelhardt	15 5 2	1·79	36 56·2	13·8	pB, pL, lE	
5876	...	...	...	Sw I	15 5 28	1·69	34 57·3	13·8	F, S, R, mbM	
5877	5779	...	...	J Schmidt	15 5 31	3·15	94 23·7	13·8	vF, S, ✶12 att n	
5878	4063	3593	III 736	...	15 6 2	3·31	103 44·6	13·7	pB, pL, pmE 0°, psmbM, ✶inv	
5879	4064	1910	II 757	...	15 6 9	1·55	32 28·0	13·8	eB, S, E, mbMRN, r	
5880	...	...	...	L I	15 6 20	3·32	104 1·1	13·7	eF, vS, R, bM, in field with 5883	
5881	4065	...	II 818	...	15 6 27	1·13	26 30·8	13·8	pF, eS, R, vgbM	*
5882	4066	3594	...	...	15 7 19	4·06	135 7·5	13·6	○, vS, R, quite sharp	†
5883	...	...	...	Winlock	15 7 24	3·32	104 5·2	13·7	No description	
5884	...	...	...	J G Lohse	15 7 26	2·45	57 36·9	13·6	F, biN, Pos 170°, Dist 7″ ±	
5885	4067	3595	III 116	...	15 7 30	3·24	99 33·1	13·6	F, cL, R, vgbM	
5886	4068	1911	...	...	15 7 38	2·20	48 15·0	13·6	F, vS, R, bM	
5887	...	...	...	St XI	15 7 38	3·04	88 19·3	13·7	pF, pS, gbM	
5888	4069	1912	III 659	...	15 7 59	2·20	48 13·0	13·6	cF, vS, R, bM, r	
5889	4070	...	...	Ld R	15 8 20±	2·20	48 8·5	13·6	eeF, glbM	
5890	...	...	...	O St I	15 8 20	3·38	107 2·2	13·6	vF, vS, E 235°	
5891	...	...	...	L I	15 8 20	3·27	101 0·2	13·6	vF, pS, lE, gbM, ✶11 f	
5892	...	...	...	O St I	15 8 20	3·33	104 28·2	13·6	eF, L, gbM	
5893	4071	1913	II 678	...	15 8 30	2·18	47 31·3	13·6	F, S, R, r, 3 st nr	
5894	4074	∴	II 763	...	15 8 38	1·35	29 40·2	13·6	pF, pS, E 0° ±	
5895	4072	...	...	Ld R	15 8 40	2·18	47 29	13·6	vF, S, E ns	apparently connected
5896	4073	...	...	Ld R	15 8 41	2·18	47 28	13·6	vF, vS, R	apparently connected
5897	4075	3596	VI 19 = VI 8?	...	15 9 22	3·44	110 29·7	13·5	⊕, pF, L, viR, vgbM, rrr	*
5898	4076	3597	III 138	...	15 9 53	3·50	113 31·7	13·5	F, S, R, gbM	
5899	4077	1914	II 650	...	15 10 1	+2·17	47 25·7	+13·5	cB, pL, pmE, smbMN	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5900	4078	1915	III 660	...	15 10 3	+2·16	47 16·8	+13·5	vF, S, vlE, gbM	
5901	4079	...	...	Ld R	15 10 3	2·16	47 16 ±	13·5	Close n of h 1915, eF, S	
5902	4080	...	III 737	...	15 10 15	1·86	39 12·1	13·5	vF, vS, stellar	
5903	4081	3598	III 139	...	15 10 24	3·51	113 31·1	13·5	cF, S, R, gpmbM	
5904	4083	1916	...	G Kirch, M 5	15 11 28	3·03	87 24·3	13·4	!!, ⊕, vB, L, eCM, st 11...15	*†
5905	{4082 = 4084}	...	II 758	d'A	15 11 40	1·61	33 57·9	13·5	pF, pS, iR	
5906	4086	...	...	Ld R	15 12 15	1·55	33 10 ±	13·4	{A ray, vmE, par to h 1917 and close p it}	†
5907	4087	1917	II 759	...	15 12 16	1·55	33 9·3	13·4	cB, vL, vmE 155°, vg, psbMN	†
5908	{4085 = 4088}	...	II 760	d'A	15 13 0	+1·61	34 4·1	13·4	pF, pS, R	
5909	4089	...	III 943	...	15 13 11	−0·87	14 7·1	13·4	vF, vS	
5910	4090	...	II 400	...	15 13 16	+2·68	68 36·9	13·3	vF, S, er	
5911	...	...	...	St XI	15 13 18	+3·00	85 58·3	13·3	vF, vS, 2 S st inv	
5912	4091	...	III 944	...	15 13 36	−0·88	14 7·1	13·3	vF, vS	
5913	4092 {1918 = 3599}		III 374	...	15 13 39	+3·11	92 4·0	13·3	vF, pL, vlE, r	
5914	...	...	...	St XII	15 13 41	2·16	47 37·4	13·3	F, vS, R, F st inv	
5915	4093	3600	...	...	15 13 51	3·30	102 35·1	13·2	B, S, R, glbM, p of 2	
5916	4094	3601	...	...	15 13 56	3·30	102 39·2	13·2	F, S, lE, glbM, f of 2	
5917	4095	3602	...	...	15 14 3	3·19	96 51·1	13·2	eF, vS, psbM	
5918	4096	1920	...	...	15 14 37	2·02	43 36·7	13·2	cF, L, pmE, glbM, ✱ s ✱	
5919	...	...	...	Sw VI	15 14 37	2·93	81 46·8	13·2	eeF, pS, lE, np of 2	
5920	...	...	...	Sw VI	15 14 59	2·93	81 47·3	13·2	eeF, pS, lE, sf of 2	
5921	4097	1919	I 148	...	15 15 0	2·98	84 25·6	13·2	cB, cL, iR, vsbM ✱ 12, am st	
5922	4098	1922	III 661	...	15 16 12	2·16	47 50·5	13·1	eF, S	
5923	4099	1921	...	...	15 16 13	2·16	47 46·5	13·1	vF, pL, vlE, vgbM	
5924	...	...	...	St XII	15 16 20	2·45	58 15·7	13·1	Neb ✱, vF, S, F ✱ close s	
5925	4100	3603	...	Δ 357	15 17 15	4·48	144 1·7	13·0	Cl, vL, vRi, lC, st 11...14	
5926	...	...	...	Sw I	15 17 19	2·84	76 46·3	13·0	F, vS, 2 st nr	
5927	4101	3604	...	Δ 389	15 17 56	4·30	140 10·8	12·9	⊕, cB, L, R, vgbM, rrr, st 15	
5928	4102	1923	II 874	...	15 19 41	2·73	71 25·5	12·9	pB, cS, R, psbM, ✱ 7 n	
5929	4103	1924	...	...	15 21 6	2·14	47 50·5	12·8	vF, vS, sp of D neb	
5930	4104	1925	II 651	...	15 21 9	2·14	47 50·3	12·8	pF, pS, R, nf of D neb	
5931	...	...	...	Sw VI	15 22 32	2·93	81 57·0	12·6	eF, pL, R	
5932	...	...	...	Sw VI	15 22 34	1·88	40 50·0	12·6	vF, pS, R, np of 2	
5933	...	...	...	Sw VI	15 22 44	1·88	40 51·0	12·6	eeF, vS, R, sf of 2	
5934	...	...	...	St XI	15 23 20	2·09	46 35·0	12·6	F, S, irr, lEns, 2 S st inv	
5935	...	...	...	St XI	15 23 24	2·09	46 34·1	12·6	✱ 13·14 seems slightly nebs	
5936	4105	...	II 130	d'A	15 23 25	2·83	76 31·6	12·6	F, pL, iR, vgbM, r	
5937	4106 {1926 = 3606}		II 401	...	15 23 29	+3·12	92 20·8	+12·6	pB, pS, R, vgbM, 3 st f	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
5938	4107	3605	...	...	15 23 30	+5·47	156 22·6	+12·5	F, S, am st	
5939	...	...	...	Sw I	15 23 51	0·34	20 46·5	12·6	pB, pS, lE	
5940	...	...	...	Sw VI	15 24 27	2·93	82 3·0	12·5	eF, pS, R, F * p, 1st of 4	
5941	...	...	...	Sw VI	15 24 37	2·93	82 10·0	12·5	eeF, S, R, 2nd of 4	
5942	...	...	...	Sw VI	15 24 42	2·93	82 13·0	12·5	eeF, S, R, 3rd of 4	
5943	...	...	...	St XIII	15 24 51	2·09	46 44·5	12·5	vF, pS, dif	
5944	...	...	...	Sw VI	15 24 52	2·93	82 12·2	12·5	eeF, S, R, 4th of 4	
5945	...	...	...	St XI	15 24 53	2·09	46 35·7	12·5	pF, pL, gmbM, S * att np	
5946	4108	3607	...	...	15 25 20	4·33	140 11·2	12·4	⊕, cB, pL, R, vglbM, rrr, st16	
5947	...	...	...	St XIII	15 25 44	2·09	46 48·3	12·4	vF, S, dif	
5948	...	...	...	St XII	15 25 59	2·99	85 32·4	12·4	F * in vF neby, vF * close	
5949	4109	...	II 906	...	15 26 3	0·81	24 45·5	12·5	F, S, lE 45° ±, vglbM	
5950	...	...	...	St XII	15 26 28	2·17	49 5·7	12·3	vF, S, R, S * np	
5951	4110	...	II 654	...	15 27 14	2·78	74 32·0	12·3	F, pS, E 150° ±	
5952	5780	...	...	m 288	15 27 59	2·97	84 33	12·3	eF, vS, alm stell	
5953	4111	1927	II 178	...	15 28 4	2·78	74 20·2	12·3	pB, cS, p of D neb	
5954	4112	1927	II 179	...	15 28 7	2·78	74 19·7	12·3	pB, cS, f of D neb	
5955	5781	...	...	m 289	15 28 15	2·97	84 27	12·3	eF, vS, stellar	
5956	5782	...	...	d'A	15 28 23	2·84	77 47·0	12·3	F, S, R, * 16 close f	
5957	5783	...	...	d'A	15 28 46	2·84	77 29·2	12·2	pB, pL, com, lbM	
5958	4113	...	II 399	...	15 28 58	2·48	60 51·4	12·2	pF, pL, iR, bM, r	
5959	...	...	...	O St I	15 29 20	3·38	106 6·9	12·2	vF, pS, vlE, bMN	
5960	5784	...	...	m 290	15 29 23	2·96	83 52	12·2	vF, S, neb *	
5961	...	...	...	St XI	15 29 36	2·43	58 40·0	12·2	pF, S, Epf	
5962	4116	1928	II 96	...	15 30 7	2·75	72 55·6	12·1	pF, pL, ilE, gbM	
5963	4114	...	II 761	d'A	15 30 10	1·45	32 57·8	12·2	pF, pS, iF	
5964	4118	1929	...	d'A	15 30 40	2·95	83 33·7	12·1	eF, vL, R, vgbM, r	†
5965	4115	1931	II 762	d'A	15 30 42	1·43	32 50·7	12·2	cF, cL, lE	
5966	4119	1930	III 634	...	15 30 48	2·17	49 46·2	12·1	vF, S, R, gbM, 2 st 8 f	
5967	4120	3608	...	...	15 31 13	7·16	165 13·2	12·0	F, pL, R, vgbM	
5968	4121	3609	...	...	15 31 20	3·69	120 5·8	12·0	vF, L, R, gbM, r	
5969	...	...	...	Sw II	15 31 29	1·44	33 4·8	12·1	eS, R, stellar	
5970	4122	...	II 76	d'A	15 31 53	2·83	77 21·5	12·0	pF, pL, R, rr	
5971	...	...	...	Sw II	15 32 9	1·44	33 4·8	12·0	eeF, vS, R, lbM	
5972	...	...	...	St XI	15 32 31	2·74	72 30·9	12·0	F, pS, irrR	
5973	5785	...	...	m 291	15 32 44	3·23	98 9	11·9	F, S, iR	
5974	4123	1932	...	...	15 33 26	2·40	57 46·7	11·9	vF, vS, R, bM	
5975	...	...	...	St XII	15 33 48	2·64	68 4·4	11·9	vF, vS, irrR, sev vF st inv	
5976	4124	...	...	Ld R	15 34 0	1·21	30 6·4	11·8	eeF, S, R	
5977	...	...	...	St XI	15 34 11	2·73	72 25·1	11·8	eF, S, R, lbM	
5978	...	...	...	L I.	15 34 20	+3·32	102 46·1	+11·8	eF, vS, sbMN, am st	

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					h m s	s	° ′	″		
5979	4125	3610	...	...	15 34 54	+5·01	150 46·4	+11·8	!, ○, pF, vS, R, r? am 150 st	†
5980	4126	1933	II 655	...	15 35 0	2·76	73 45·6	11·8	F, pS, E 0°	
5981	4127	...	...	Ld R	15 35 3	1·21	30 9·0	11·8	F, mE	
5982	4128	1934	II 764	d'A, Rümker	15 35 49	1·21	30 11·4	11·7	cB, S, R, psbM, r	
5983	5786	...	...	m 292	15 35 59	2·91	81 18·0	11·7	eF, eS, R, vlbM	
5984	4129	...	II 656	...	15 36 21	2·79	75 20·8	11·7	pB, S, E 135° ±, bM	
5985	{4131 = 4133}	...	II 766	Sch II, Rümker	15 36 46	1·22	30 13·0	11·7	pB, cL, iE, r	
5986	4132	3611	...	Δ 552	15 36 53	3·90	127 19·4	11·6	!, ⊕, vB, L, R, vgbM, st 13...15	
5987	4130	...	II 765	d'A	15 36 56	1·31	31 27·5	11·7	pF, cS	
5988	...	...	...	Sw VI	15 37 39	2·86	79 15·4	11·6	eeF, pS, R, F ∗ nr n	
5989	4134	...	III 738	...	15 38 47	1·17	29 47·6	11·6	vF, vS	
5990	4135	1935	II 425	...	15 39 16	3·02	87 8·9	11·5	vF, vS, R, gbM	
5991	...	...	...	St X	15 39 19	2·56	64 55·7	11·5	pF, S, R, mbM	
5992	4136	1936	III 635	...	15 39 30	2·10	48 26·7	11·5	vF, vS, R, bM, sp of 2	
5993	4137	1937	III 636	...	15 39 33	2·10	48 26·1	11·5	cF, vS, R, bM, nf of 2	
5994	...	...	...	Ld R	15 40	2·71	71 41	11·4	S, sp II 97	
5995	4138	3613	...	...	15 40 39	3·33	103 19·2	11·4	eF, S, R, vS ∗ p	
5996	4139	1938	II 97	...	15 40 40	2·71	71 40·4	11·4	pF, cS, R, r, bet 2 D st	
5997	5787	...	...	m 293	15 40 41	2·90	81 15	11·4	eF, eeS, stell	
5998	4140	...	VII 29	...	15 40 56	3·66	118 10·5	11·4	Cl, pL, pRi, st vS	
5999	4141	3612	...	Δ 343	15 41 7	4·72	146 2·7	11·3	Cl, L, pRi, st 12...14	
6000	4142	3614	...	...	15 41 11	3·68	118 57·3	11·3	vF, S, R, sbM	
6001	4143	...	III 371	...	15 42 4	2·46	60 54·9	11·3	vF, S, R	
6002	5788	...	...	Ld R*	15 42 4	2·46	60 56·6	11·3	Neb 100″ s of III 371	
6003	...	...	...	St X	15 43 10	2·69	70 32·2	11·2	F, vS, S ∗ inv	
6004	...	...	...	St X	15 44 7	2·69	70 38 1	11·1	vF, pL, lE, lbM	
6005	4144	3615	...	Δ 334	15 44 35	4·80	147 1·0	11·1	Cl, pS, pRi, mC, st 16	
6006	5789	...	...	m 294	15 46 27	2·83	77 35	11·0	vF, S	
6007	5790	...	...	m 295	15 46 46	2·83	77 38	11·0	F, pL	
6008	...	...	...	St XI	15 46 48	2·63	68 28·8	10·9	vF, R, pL, bM	
6009	5791	...	...	m 296	15 46 48	2·83	77 31	11·0	F, vS, stell	
6010	4145	1939	II 583	...	15 47 10	+3·05	89 2·3	10·9	pF, S, E 90° ±, gbM, r	
6011	4146	...	III 313	...	15 47 36	−0·48	17 24·9	11·0	vF, S, E 90° ±, vS ∗ f	
6012	4147	...	II 657	...	15 47 49	+2·77	75 0·0	10·9	F, bet 2 B st	
6013	5792	...	...	St VII	15 47 59	2·10	48 56·3	10·9	eF, vS, iR, lbM	
6014	4148	1940	...	...	15 49 4	2 95	83 39·5	10·8	pB, pL, E	
6015	4149	...	III 739	...	15 49 23	0·89	27 16·0	10·8	vF, pL, R, vgbM (d'A : B, mE)	
6016	5793	...	...	m 297	15 50 4	2·49	62 38	10·7	vF, S, E	
6017	4150	1941	...	...	15 50 22	2·95	83 35·7	10·7	!, vF, vS, R, disc g, smbM	
6018	4151	1942	III 646	...	15 51 5	+2·74	73 42·7	+10·6	vF, S, lE, p of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6100	...	...	...	Sw IV	16 9 36	+3·05	88 46·8	+9·2	eeF, vS, eeF * close p	
6101	4175	3623	...	Δ 68	16 9 54	6·72	161 51·9	9·1	⊕, pF, L, iR, vgbM, rr, st 14	
6102	5813	...	...	m 308	16 9 57	2·43	61 29	9·2	vF, S, R	
6103	4176	1950	III 888	...	16 10 18	2·32	57 41·1	9·2	vF, S, R, vglbM	
6104	4177	1951	III 688	...	16 11 22	2·21	53 56·3	9·1	vF, S, iR	
6105	...	...	...	St XI	16 11 57	2·23	54 46·4	9·0	F, S, R, gvlbM	
6106	4178	1952	II 151	...	16 11 59	2·91	82 15·1	9·0	F, pL, lE, vgbM, r	
6107	...	...	...	St XI	16 12 8	2·23	54 45·1	9·0	F, vS	
6108	...	...	...	St XI	16 12 14	2·23	54 31·1	9·0	eF, vS, R, lbM	
6109	...	...	...	St XI	16 12 29	2·23	54 39·0	9·0	F, S, R, gbM	
6110	...	...	...	St XI	16 12 32	2·23	54 34·0	9·0	eF, vS, R, gbM	
6111	...	...	...	Sw VI	16 12 37	0·77	27 17·7	9·0	vF, pS, lE, D * nr s	
6112	...	...	...	St XI	16 12 49	2·23	54 32·7	9·0	vF, vS, R, bM	
6113	...	...	...	Sw VI	16 12 52	2·77	75 30·6	9·0	vF, S, R	
6114	...	...	...	St XI	16 13 14	2·22	54 28·9	8 9	eF, S, R, glbM	
6115	4179	3625	...	...	16 13 43	4·59	141 36·8	8·9	Cl, eL, eRi	
6116	...	...	...	St XI	16 13 44	2·22	54 30·3	8·9	vF, vS, R, gbM	
6117	5814	...	...	m 309	16 14 15	2·16	52 35	8·9	vF, S, R	
6118	4180	1953	II 402	...	16 14 33	3·11	91 56·8	8·8	vF, cL, cE 45° ±, r	
6119	4181	1954	...	...	16 14 44	2·13	51 53·0	8·8	vF, eS, R	
6120	4182	1955	III 623	...	16 14 51	2·13	51 54·1	8 8	vF, vS, R, D * nf	
6121	4183	...	...	Lac I 9, M 4	16 15 4	3·67	116 11·2	8·8	Cl, 8 or 10 B st in line, with 5 st, rrr	
6122	...	...	...	Bigourdan	16 15 10	2 13	51 59	8·8	vF, R, no N	
6123	...	...	...	Sw II	16 15 13	0·79	27 43·6	8·8	pF, vS, E, * nr	
6124	4184	3626	...	Lac I 8, Δ 514	16 16 1	4·10	130 20·1	8·7	Cl, B, L, pRi, lCM, st 9...11	
6125	4185	...	II 810	...	16 16 4	1·15	32 2·8	8·7	pF, pS, lE	
6126	...	...	...	St XII	16 16 23	2·18	53 17·4	8·7	F, vS, R, bMSN	
6127	...	...	...	Sw IV	16 16 32	1·13	31 40·6	8·7	pF, vS, R	
6128	...	...	...	Sw IV	16 16 38	1·13	31 40·0	8·7	pF, pS, R, bM	
6129	4186	...	III 891	...	16 16 46	2·12	51 40·8	8 7	eF, vS, R, lbM	
6130	...	...	...	Sw IV	16 16 55	1·15	32 2·3	8·7	pF, pL, R, B * nr p	
6131	...	...	...	St XII	16 17 0	2·09	50 44·1	8·7	vF, pL, iR, dif	
6132	5815	...	...	St VII	16 17 6	2·81	77 53·1	8·6	eF, vS, vlbM	
6133	...	...	...	Sw V	16 17 20	1·22	32 59·5	8·6	eeF, S, cE, v diffic	
6134	4187	3627	...	Δ 412	16 17 21	4·46	138 49·5	8·6	Cl, cL, pRi, lCM, st 13...15	
6135	...	...	...	Sw IV	16 17 54	0·46	24 45·6	8·6	vF, vS, mE, 2 st nr	
6136	...	...	...	Sw IV	16 18 0	1·29	33 41·4	8·6	eeF, S, R, v diffic	
6137	4188	1956	III 624	...	16 18 4	2·12	51 44·8	8·6	F, S, iR, bM	
6138	5816	...	...	St II	16 18 9	2·01	48 44·3	8·6	vF, vS, R, bM	
6139	4189	3628	...	Δ 536	16 18 15	+4·04	128 31·0	+8·5	B, pL, R, psbM, rr	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6140	4190	...	III 740	...	16 18 23	+0·40	24 17·6	+8·6	cF, pL, iR	*
6141	...	...	...	Bigourdan	16 18 24	2·02	48 52	8·5	vF, pS, no Nucl	
6142	4191	...	III 892	...	16 18 24	2·14	52 26·8	8·5	eF, S, bM	
6143	4192	...	II 811	...	16 18 37	1·32	34 35·1	8·5	pB, iR, vgvlbM	
6144	4193	3629	VI 10	...	16 18 43	3·66	115 43·1	8·5	Cl, cL, mC, gbM, rrr	
6145	4194	1957	...	...	16 20 21	2·01	48 44·7	8·4	F, R, bM	
6146	4195	1958	III 638	...	16 20 27	2 01	48 46·9	8·4	cF, vS, R, bM	
6147	4196	...	...	Ld R	16 20	2·01	48 47 ±	8·4	eF, one of 3	
6148	5817	...	...	m 310	16 20 38	2·52	65 31	8·4	vF, S, with st	
6149	...	...	...	Sw VI	16 21 9	2·63	70 5·9	8·3	vF, pS, R, pB ∗ nr s	
6150	4198	1959	III 639	...	16 21 10	2 03	49 13·0	8·3	vF, vS, R	
6151	4199	3630	...	...	16 21 41	7·07	162 57·0	8·2	vF, vS ∗ 9 nr	
6152	4200	3631	...	...	16 21 50	4·65	142 19·0	8·2	Cl, L, lC, st L	
6153	...	...	...	Copeland	16 21 54	4·09	129 56	8·2	○, stellar	
6154	4201	...	III 680	...	16 22 7	1·62	39 48·8	8·3	vF, S, R, lbM, er	
6155	4202	...	II 690	...	16 22 35	1·69	41 17·8	8·2	F, pS, iF, gbM	
6156	4203	3632	...	...	16 22 36	5·22	150 18·0	8·1	pF, pL, vlE, gbM	
6157	...	...	...	Sw IV	16 22 44	1·29	34 19·3	8·2	eeF, pS, R, v diffic	
6158	4205	...	II 647	Schultz	16 22 52	2·06	50 18·2	8·2	F, S, iF	
6159	...	...	...	St X	16 22 54	1·94	47 0·4	8·2	vF, S, iR, lbM	
6160	4204	1960	II 652	...	16 23 1	2·00	48 45·3	8·2	cF, pL, R, gbM, r	
6161	5818	...	...	St I	16 23 2	2·28	56 52·7	8·2	vF, S, lbM	
6162	5819	...	...	St I	16 23 3	2·28	56 50·3	8·2	F, S, lbM	
6163	5820	...	...	St I	16 23 10	2·28	56 50·5	8·2	vF, S, lbM	
6164	4206	3633	...	...	16 23 23	4·42	137 48·0	8·1	eF (strongly susp), D ∗ f nr	
6165	4207	3634	...	...	16 23 40	4·43	137 51·3	8·1	F, eS, lE, vglbM, D ∗ p	
6166	4208	1961	II 875	...	16 23 51	2·05	50 8·3	8·1	pF, S, vlE, vgmbM	
6167	4209	3635	...	Δ 400	16 23 51	4·51	139 27·8	8·1	Cl, L, lC, iF	
6168	...	...	...	Sw I	16 23 55	2·62	69 31·2	8·1	eeF, mE, F ∗ at p end, v diffic	
6169	4210	3636	...	...	16 24 7	4·25	133 44·3	8·0	Cl, μ Normæ inv	
6170	...	...	...	Sw IV	16 24 41	0·97	30 7·4	8·1	eeF, vS, R, v diffic	
6171	4211	3637	VI 40	Méchain	16 24 42	3·35	102 44·8	8·0	⊕, L, vRi, vmC, R, rrr	
6172	...	...	...	St XIII	16 24 57	3·10	91 11·3	8·0	vF, eS, R, bM	
6173	4212	1962	III 640	...	16 25 5	2·00	48 52·6	8·0	cF, vS, R, bM	
6174	4213	...	...	Ld R	16 25 19	2·00	48 53	8·0	vF	*
6175	4214	1963	III 641	...	16 25 19	2·01	49 3·9	8·0	vF, vS, R	
6176	...	...	...	Sw V	16 25 28	0·97	30 7·2	8·0	eF, eS, v diffic	
6177	4215	1964	III 890	...	16 25 34	2·20	54 38·0	8·0	vF, pL, iE, rr, ∗ nr	
6178	4216	3638	...	...	16 25 36	4·32	135 19·3	7·9	Cl, B, S, st pL	
6179	4217	...	...	Ld R	16 25 48	2·20	54 35·2	7·9	vF, S, bMN, 4′ nf h 1964	
6180	5821	...	...	St VII	16 25 52	+2·01	49 9·4	+7·9	eF, vS, R, mbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′ ″	″		
6100	...	...	...	Sw IV	16 9 36	+3·05	88 46·8	+9·2	ceF, vS, eeF ✱ close p	
6101	4175	3623	...	Δ 68	16 9 54	6·72	161 51·9	9·1	⊕, pF, L, iR, vgbM, rr, st 14	
6102	5813	...	...	m 308	16 9 57	2·43	61 29	9·2	vF, S, R	
6103	4176	1950	III 888	...	16 10 18	2·32	57 41·1	9·2	vF, S, R, vglbM	
6104	4177	1951	III 688	...	16 11 22	2·21	53 56·3	9·1	vF, S, iR	
6105	...	...	...	St XI	16 11 57	2·23	54 46·4	9·0	F, S, R, gvlbM	
6106	4178	1952	II 151	...	16 11 59	2·91	82 15·1	9·0	F, pL, lE, vgbM, r	
6107	...	...	...	St XI	16 12 8	2·23	54 45·1	9·0	F, vS	
6108	...	...	...	St XI	16 12 14	2·23	54 31·1	9·0	eF, vS, R, lbM	
6109	...	...	...	St XI	16 12 29	2·23	54 39·0	9·0	F, S, R, gbM	
6110	...	...	...	St XI	16 12 32	2·23	54 34·0	9·0	eF, vS, R, gbM	
6111	...	...	...	Sw VI	16 12 37	0·77	27 17·7	9·0	vF, pS, lE, D ✱ nr s	
6112	...	...	...	St XI	16 12 49	2·23	54 32·7	9·0	vF, vS, R, bM	
6113	...	...	...	Sw VI	16 12 52	2·77	75 30·6	9·0	vF, S, R	
6114	...	...	...	St XI	16 13 14	2·22	54 28·9	8·9	eF, S, R, glbM	
6115	4179	3625	...	...	16 13 43	4·59	141 36·8	8·9	Cl, eL, eRi	
6116	...	...	...	St XI	16 13 44	2·22	54 30·3	8·9	vF, vS, R, gbM	
6117	5814	...	...	m 309	16 14 15	2·16	52 35	8·9	vF, S, R	
6118	4180	1953	II 402	...	16 14 33	3·11	91 56·8	8·8	vF, cL, cE 45° ±, r	
6119	4181	1954	...	...	16 14 44	2·13	51 53·0	8·8	vF, eS, R	
6120	4182	1955	III 623	....	16 14 51	2·13	51 54·1	8·8	vF, vS, R, D ✱ nf	
6121	4183	...	...	Lac I 9, M 4	16 15 4	3·67	116 11·2	8·8	Cl, 8 or 10 B st in line, with 5 st, rrr	
6122	...	...	...	Bigourdan	16 15 10	2 13	51 59	8·8	vF, R, no N	
6123	...	...	...	Sw II	16 15 13	0·79	27 43·6	8·8	pF, vS, E, ✱ nr	
6124	4184	3626	...	Lac I 8, Δ 514	16 16 1	4·10	130 20·1	8·7	Cl, B, L, pRi, lCM, st 9...11	
6125	4185	...	II 810	...	16 16 4	1·15	32 2·8	8·7	pF, pS, lE	
6126	...	...	...	St XII	16 16 23	2·18	53 17·4	8·7	F, vS, R, bMSN	
6127	...	...	...	Sw IV	16 16 32	1·13	31 40·6	8·7	pF, vS, R	
6128	...	...	...	Sw IV	16 16 38	1·13	31 40·0	8·7	pF, pS, R, bM	
6129	4186	...	III 891	...	16 16 46	2·12	51 40·8	8·7	eF, vS, R, lbM	
6130	...	...	...	Sw IV	16 16 55	1·15	32 2·3	8·7	pF, pL, R, B ✱ nr p	
6131	...	...	...	St XII	16 17 0	2·09	50 44·1	8·7	vF, pL, iR, dif	
6132	5815	...	...	St VII	16 17 6	2·81	77 53·1	8·6	eF, vS, vlbM	
6133	...	...	...	Sw V	16 17 20	1·22	32 59·5	8·6	eeF, S, cE, v diffic	
6134	4187	3627	...	Δ 412	16 17 21	4·46	138 49·5	8·6	Cl, cL, pRi, lCM, st 13...15	
6135	...	...	...	Sw IV	16 17 54	0·46	24 45·6	8·6	vF, vS, mE, 2 st nr	
6136	...	...	...	Sw IV	16 18 0	1·29	33 41·4	8·6	eeF, S, R, v diffic	
6137	4188	1956	III 624	...	16 18 4	2·12	51 44·8	8·6	F, S, iR, bM	
6138	5816	...	...	St II	16 18 9	2·01	48 44·3	8·6	vF, vS, R, bM	
6139	4189	3628	...	Δ 536	16 18 15	+4·04	128 31·0	+8·5	B, pL, R, psbM, rr	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6140	4190	...	III 740	...	16 18 23	+0·40	24 17·6	+8·6	cF, pL, iR	*
6141	...	...	...	Bigourdan	16 18 24	2·02	48 52	8·5	vF, pS, no Nucl	
6142	4191	...	III 892	...	16 18 24	2·14	52 26·8	8·5	eF, S, bM	
6143	4192	...	II 811	...	16 18 37	1·32	34 35·1	8·5	pB, iR, vgvlbM	
6144	4193	3629	VI 10	...	16 18 43	3·66	115 43·1	8·5	Cl, cL, mC, gbM, rrr	
6145	4194	1957	...	...	16 20 21	2·01	48 44·7	8·4	F, R, bM	
6146	4195	1958	III 638	...	16 20 27	2 01	48 46·9	8·4	cF, vS, R, bM	
6147	4196	...	...	Ld R	16 20	2·01	48 47 ±	8·4	eF, one of 3	
6148	5817	...	...	m 310	16 20 38	2·52	65 31	8·4	vF, S, with st	
6149	...	...	...	Sw VI	16 21 9	2·63	70 5·9	8·3	vF, pS, R, pB * nr s	
6150	4198	1959	III 639	...	16 21 10	2 03	49 13·0	8·3	vF, vS, R	
6151	4199	3630	...	...	16 21 41	7·07	162 57·0	8·2	vF, vS * 9 nr	
6152	4200	3631	...	...	16 21 50	4·65	142 19·0	8·2	Cl, L, lC, st L	
6153	...	...	...	Copeland	16 21 54	4·09	129 56	8·2	○, stellar	
6154	4201	...	III 680	...	16 22 7	1·62	39 48·8	8·3	vF, S, R, lbM, er	
6155	4202	...	II 690	...	16 22 35	1·69	41 17·8	8·2	F, pS, iF, gbM	
6156	4203	3632	...	...	16 22 36	5·22	150 18·0	8·1	pF, pL, vlE, gbM	
6157	...	...	...	Sw IV	16 22 44	1·29	34 19·3	8·2	eeF, pS, R, v diffic	
6158	4205	...	II 647	Schultz	16 22 52	2·06	50 18·2	8·2	F, S, iF	
6159	...	...	...	St X	16 22 54	1·94	47 0·4	8·2	vF, S, iR, lbM	
6160	4204	1960	II 652	...	16 23 1	2·00	48 45·3	8·2	eF, pL, R, gbM, r	
6161	5818	...	...	St I	16 23 2	2·28	56 52·7	8·2	vF, S, lbM	
6162	5819	...	...	St I	16 23 3	2·28	56 50·3	8·2	F, S, lbM	
6163	5820	...	...	St I	16 23 10	2·28	56 50·5	8·2	vF, S, lbM	
6164	4206	3633	...	...	16 23 23	4·42	137 48·0	8·1	cF (strongly susp), D * f nr	
6165	4207	3634	...	...	16 23 40	4·43	137 51·3	8·1	F, cS, lE, vglbM, D * p	
6166	4208	1961	II 875	...	16 23 51	2·05	50 8·3	8·1	pF, S, vlE, vgmbM	
6167	4209	3635	...	Δ 400	16 23 51	4·51	139 27·8	8·1	Cl, L, lC, iF	
6168	...	...	...	Sw I	16 23 55	2·62	69 31·2	8·1	eeF, mE, F * at p end, v diffic	
6169	4210	3636	...	...	16 24 7	4·25	133 44·3	8·0	Cl, μ Normæ inv	
6170	...	...	...	Sw IV	16 24 41	0·97	30 7·4	8·1	eeF, vS, R, v diffic	
6171	4211	3637	VI 40	Méchain	16 24 42	3·35	102 44·8	8·0	⊕, L, vRi, vmC, R, rrr	
6172	...	...	...	St XIII	16 24 57	3·10	91 11·3	8·0	vF, cS, R, bM	
6173	4212	1962	III 640	...	16 25 5	2·00	48 52·6	8·0	cF, vS, R, bM	
6174	4213	...	...	Ld R	16 25 19	2·00	48 53	8·0	vF	*
6175	4214	1963	III 641	...	16 25 19	2·01	49 3·9	8·0	vF, vS, R	
6176	...	...	...	Sw V	16 25 28	0·97	30 7·2	8·0	cF, eS, v diffic	
6177	4215	1964	III 890	...	16 25 34	2·20	54 38·0	8·0	vF, pL, iE, rr, * nr	
6178	4216	3638	...	...	16 25 36	4·32	135 19·3	7·9	Cl, B, S, st pL	
6179	4217	...	...	Ld R	16 25 48	2·20	54 35·2	7·9	vF, S, bMN, 4′ nf h 1964	
6180	5821	...	...	St VII	16 25 52	+2·01	49 9·4	+7·9	eF, vS, R, mbM	

No.	G.C.	J.H.	W.H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6181	4218	...	II 753	Schultz	16 26 14	+2·62	69 52·4	+7·9	pB, pL, vlE, pgmbM	
6182	4219	...	III 813	...	16 26 50	1·26	34 9·9	7·9	vF, vS, iR	
6183	4220	3639	...	...	16 26 50	6·31	159 4·9	7·8	vF, eS, R, gbM	
6184	5822	...	...	St VII	16 26 53	2·01	49 8·0	7·9	eF, vS, R, vlbM	
6185	4221	1965	...	...	16 28 15	2·19	54 21·7	7·8	F, S, R, gbM, * 11 np	
6186	4222	...	...	III 730	16 28 19	2·58	68 9·9	7·7	eF, vS, E	
6187	...	...	...	Young	16 28 58	1·10	31 59·3	7·7	vF, vS, lbM	
6188	4223	3640	...	...	16 29 15	4·48	138 44	7·6	!F, vL, viE, B * inv	
6189	...	...	...	Sw II	16 29 21	0·95	30 5·3	7·7	vF, pS, lE	
6190	...	...	...	Sw II	16 29 34	1·04	31 15·9	7·7	vF, pS, R, F * nr	
6191	...	...	...	Sw IV	16 29 35	1·02	30 54·3	7·7	pF, pL, E, 2 st p	
6192	4224	3641	...	Δ 483	16 30 29	4·23	133 5·3	7·5	Cl, pL, pRi, iR, st 11...14	†
6193	4225	3642	...	Δ 413	16 30 52	4·47	138 29·1	7·5	Cl, vL, lRi, lC, rrr, F neb inv	
6194	4227	1967	...	Schultz	16 31 35	2·16	53 30·9	7·5	vF, vS, sbM * 12	
6195	4226	1966	III 893	...	16 31 44	2·06	50 41·5	7·5	vF, S, R, gbM, bet 2 st	
6196	5823	...	...	m 311	16 32 13	2·16	53 37	7·4	vF, vS, stellar	
6197	5824	...	...	m 312	16 32 18	2·16	53 42	7·4	eF, E, stellar	
6198	...	...	...	Sw IV	16 33 8	1·10	32 12·8	7·4	vF, vS, R, 2 st f	
6199	5825	...	...	m 313	16 33 50	2·16	53 38	7·3	eF	
6200	4228	3643	...	...	16 33 50	4·42	137 11·8	7·2	Cl (in Milky Way)	
6201	5826	...	...	m 314	16 34 22	2·52	65 58	7·2	eF, vS	
6202	...	...	...	Sw IV	16 34 32	0·71	27 45·5	7·3	eeF, pS, * f	
6203	5827	...	...	m 315	16 34 34	2·52	65 57	7·2	eF, vS	
6204	4229	3644	...	Δ 442	16 36 7	4·40	136 45·6	7·1	Cl, pRi, eiCM, st 11...12	†
6205	4230	1968	...	{Halley 1714, M 13}	16 36 40	2·14	53 16·3	7·1	!!⊕, eB, vRi, vgeCM, st 11...	†
6206	...	...	...	Sw V	16 37 25	1·00	31 7·1	7·0	pF, eS, R, stell, 3 vF st nr	
6207	4231	1969	II 701	...	16 38 6	2·13	52 54·1	7·0	pB, pL, E 45° ±, vgmbM	
6208	4232	3646	...	Δ 364	16 38 18	4·78	143 33·5	6·9	Cl, L, Ri, lCM, st 9...12	
6209	4233	3645	...	...	16 38 24	7·03	162 20·5	6·8	vF, pL, vgvlbM	
6210	4234	1970	...	Σ 5, LL 30510	16 38 38	2·51	65 56·2	6·9	○, vB, vS, R, disc & border	†
6211	...	...	...	Sw VI	16 38 38	1·06	31 55·5	6·9	vF, pS, R, sp of 2	
6212	5828	...	...	St II	16 38 41	2·02	49 55·8	6·9	eF	
6213	...	...	...	Sw VI	16 38 53	1·06	31 54·3	6·9	eF, vS, R, nf of 2	
6214	...	...	...	Sw I & IV	16 38 54	0·22	23 41·5	6·9	eF, vS, R	
6215	4235	3647	...	...	16 39 4	5·15	148 44·8	6·8	pF, R, vglbM, *4 p 79°	
6216	4237	3648	...	Δ 454	16 39 20	+4·31	134 28·3	6·8	Cl, pS, pRi, pC, st 12...15	
6217	4236	...	I 280	G Rümker	16 39 25	−3·04	11 31·3	7·0	B, eL, lE, slbM	
6218	4238	1971	...	M 12	16 39 58	+3·11	91 41·7	6·8	{!!⊕, vB, vL, iR, gmbM, rrr, st 10...	
6219	5829	...	...	m 316	16 40 8	+2·89	80 41	+6·?	F, S	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880	Summary Description.	Notes.
					h m s	s	° ′	″		
6220	...	...	...	Sw VI	16 40 8	+3·07	90 0·2	+6·8	eeF, pS, iR, 3 F st s	
6221	4239	3649	...	...	16 40 40	5·17	148 58·0	6·7	⊕, pB, cL, R, glbM, rr	
6222	4240	3650	...	Δ 456?	16 40 41	4·31	134 28·6	6·7	Cl, vL, vRi, lbM, st 12...13	
6223	4241	...	...	d'A	16 41 24	0·72	28 9·3	6·7	F, S, R, mbM	
6224	...	...	...	Sw VI	16 41 37	2·93	83 25·7	6·6	eeF, vS, lE, pB ✱ nr n, n of 2	
6225	...	...	...	Sw VI	16 41 39	2·93	83 31·2	6·6	eF, vS, lE, F st inv, s of 2	
6226	4242	...	...	d'A	16 41 47	0·68	27 46·0	6·7	F, S, Δ with 2 st 12 & 14	
6227	4243	3651	...	...	16 41 52	4·17	130 58·7	6·6	Cl, eL, cRi (Milky Way)	
6228	5830	...	...	m 317	16 42 18	2·44	63 33	6·6	vF, S	
6229	4244	...	IV 50	Schultz	16 43 3	1·68	42 13·3	6·6	⊕vB, L, R, disc & F border, r	
6230	...	...	...	Sw IV	16 43 47	2·96	85 7·8	6·5	eeF, pS, R, v diffic	
6231	4245	3652	...	Halley, Lac II 13, Δ499	16 44 15	+4·20	131 33·6	6·4	Cl, B, cL, pRi, st 10...13	
6232	...	...	...	Sw I	16 44 22	−0·57	19 6·8	6·5	pF, pL, lE	
6233	...	...	...	St XI	16 44 24	+2·51	66 10·6	6·4	pF, S, R, gbM	
6234	5831	...	...	m 318	16 45 1	2·97	85 24	6·4	F, S, R	
6235	4246	3653	II 584	...	16 45 3	+3·58	111 56·3	6·4	pB, cL, iR, rrr, st 14...16	
6236	...	...	...	Sw I	16 45 24	−0·60	18 58·4	6·4	F, pL	
6237	...	...	...	Sw I	16 45 24	−0·57	19 6·9	6·4	eF, S, E	
6238	...	...	...	Sw IV	16 45 38	+0·65	27 36·2	6·4	eeF, eS, eF ✱ close, v diffic	
6239	4247 = 5832	...	III 727	St VII	16 45 39	1·89	47 0 8	6·3	vF, E, biN np sf	*
6240	5833	...	...	St II, Bigourdan	16 45 55	3·02	87 22·0	6 3	vF, pL, lE, dif	*
6241	4248	...	III 735	...	16 46 0	1·78	44 20·4	6·3	eF, pS	
6242	4249	3654	...	Lac I 10, Δ 520	16 46 4	4·11	129 16·2	6·2	Cl, B, L, Ri, st 8...11	
6243	...	...	...	St XI	16 46 34	2·52	66 26·0	6·2	vF, vS, iF, dif	
6244	...	...	...	Sw IV	16 46 38	+0·65	27 32 7	6·3	vF, vS, R, bet 2 st, nf of 2	
6245	...	...	...	Sw I	16 46 45	−0·61	18 56·9	6·3	vF, pL, R	
6246	...	...	...	Sw IV	16 46 55	+1·21	34 12·8	6·3	eF, S, R	
6247	4250	...	...	d'A	16 47 0	+0·56	26 47·5	6·3	F, pS, iF	
6248	...	...	...	Sw II	16 47 13	−0·52	19 24·4	6·3	eeF, pL, R, v diffic	
6249	4251	3655	...	...	16 47 34	+4·33	134 33·3	6·1	Cl, pRi, vlC, iF, st L & S	
6250	4252	3656	...	...	16 47 41	+4·38	135 42·4	6·1	Cl, L, lRi, lC, st 8...12	
6251	4253	...	III 974	...	16 47 55	−6·99	7 9·0	6·4	cF, S, bM, p of 2	
6252	4254	...	III 975	...	16 47 58	−7 06	7 6·0	6·4	vF, vS, f of 2	
6253	4255	3657	...	Δ 374?	16 48 3	+4·73	142 28·9	6·1	Cl, S, triangular, st 13	
6254	4256	1972 = 3659	...	M 10	16 49 47	3·16	93 52·7	6·0	! ⊕, B, vL, R, gvmbM, rrr, st 10...15	
6255	4257	1973	III 689	...	16 49 48	2·12	53 16·8	6·0	eF, cL, E 90°	
6256	4258	3658	...	...	16 50 9	4·03	126 53·5	5·9	⊕, vF, vL, iR, vgbM, rrr	
6257	4259	1974	...	...	16 50 12	2·01	50 9·6	6·0	vF (? vSD ✱), FD ✱ nf	
6258	...	...	...	Sw IV	16 50 31	+0·76	29 14·4	+6·0	eF, vS, R, B ✱ and D ✱ p	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	′		
6259	4260	3660	...	Δ 456	16 50 37	+4·33	134 26·9	+5·9	! Cl, B, vL, vRi, st 11...	
6260	...	...	...	Sw IV	16 50 43	0·47	26 3·0	5·9	eF, pS, R, sev st nr sf	
6261	...	...	...	St XI	16 50 56	2·39	61 48·0	5·9	eF, eS, iF	
6262	...	...	...	Sw V	16 51 3	1·10	32 51·0	5·9	eeF, pS, R, v diffic	
6263	5834	...	...	m 319, St II	16 51 11	2·07	61 57·0	5·9	vF, vS, R	
6264	5835	...	...	m 320, St II	16 51 44	2·07	61 55·4	5·8	eF, vS	
6265	5836	...	...	m 321, St II	16 51 57	2·07	61 55·9	5·8	eF, vS	
6266	4261	3661	...	M 62, Δ 627	16 52 19	3·81	119 53·8	5·7	! ⊕, vB, L, gmbM, rrr, st 14...16	†
6267	4262	...	III 123	...	16 52 22	2·52	66 46·9	5·8	vF, pL, R, lbM	*
6268	4263	3662	...	Δ 521	16 52 26	4·13	129 30·8	5·7	Cl, B, pL, eRi, st 10...	
6269	5837	...	...	m 322, St II	16 52 26	2·07	61 55·3	5·8	F, S, R	
6270	5838	...	...	m 323, St II	16 53 12	2·07	61 55·2	5·7	eF, S, R	
6271	5839	...	...	m 324	16 53 18	2·07	61 49	5·7	vF, R	
6272	5840	...	...	m 325	16 53 26	2·07	61 52	5·7	vF	
6273	4264	1975 = 3663	...	M 19	16 53 59	3·70	116 3·2	5·6	⊕, vB, L, R, vCM, rrr, st 16	
6274	5841	...	...	m 326	16 54 8	2·33	60 2	5·6	eF, vS	
6275	...	...	...	Sw IV	16 54 12	0·51	26 32·4	5·7	eeF, S, lE, v diffic	
6276	5842	...	...	m 327, St II	16 54 52	2·52	66 44·9	5·6	eF	*
6277	5843	...	...	m 328, St II	16 54 56	2·52	66 45·2	5·6	eF	*
6278	4266	...	III 124	St II	16 54 58	2·52	66 46·8	5·6	vF, stellar	
6279	...	...	...	Sw V	16 55 3	1·68	42 32·7	5·5	vF, pS, lE, coarse D * np	
6280	5844	...	...	m 329	16 55 10	2·92	83 7	5·5	pB, S, lE	
6281	4265	3664	...	Δ 556	16 55 16	4·07	127 40 9	5·5	Cl, L, pRi, lC, st 9...11	
6282	5845	...	...	m 330	16 55 21	2·33	59 58	5·5	vF, S, R	
6283	4267	...	III 728	...	16 55 53	1·53	39 51·6	5·5	vF, eS, iR	
6284	4268	1976 = 3665	VI 11	...	16 55 56	3·66	114 33·8	5·4	⊕, B, L, R, CM, rrr, st 16...	
6285	...	...	...	Sw VI	16 56 7	0·92	30 48·8	5·5	eeF, S, R, v diffic, np of 2	
6286	...	...	...	Sw II	16 56 17	0·93	30 51·0	5·5	eF, pS, R	
6287	4269	3666	II 195	...	16 56 44	+3·61	112 30·6	5·4	⊕, cB, L, R, gpmCM, rrr, st 16	
6288	...	...	...	Sw I	16 58 5	−0·22	21 19·8	5·4	eF, vS, R, sp of 2	
6289	...	...	...	Sw I	16 58 36	−0·23	21 17·8	5·3	eF, pL, mE, nf of 2	
6290	...	...	...	Sw II	16 58 37	+0·92	30 49·6	5·3	eF, pS, R, * close f	
6291	...	...	...	Sw II	16 58 37	0·92	30 51·6	5·3	eeF, eS, R	
6292	...	...	...	Sw II	17 0 52	0·72	28 45 8	5·1	eF, E, v diffic, F st nr	
6293	4270	1977 = 3667	VI 12	...	17 1 28	3·72	116 23·2	5·0	⊕, vB, L, R, psbM, rrr, st 16	
6294	4271	1978	...	...	17 1 34	3·72	116 22·6	5·0	F, S, vgbM, ⊕ p	
6295	...	...	...	Sw IV	17 1 36	0·78	29 25·6	5·0	eF, S, mE, F * nr	
6296	5846	...	...	m 331	17 1 46	2·98	85 53	5·0	pB	
6297	...	...	...	Sw II	17 1 50	+0·62	27 46·8	+5·0	pB, pS, R, bet 2 st, p of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6298	...	...	...	Sw II	17 1 55	+0·62	27 46·8	+5·0	vF, eS, R, bet 2 st, f of 2	
6299	4272	...	...	d'A	17 3 39	0·57	27 21·9	4·9	vF, vS, R	
6300	4273	3668	...	...	17 3 52	5·59	152 39·1	4·7	F, vL, vlE, am st, 2 st inv	
6301	4274	...	IV 57	...	17 4 10	1·88	47 29·3	4·8	F, stellar	
6302	...	...	..	Barnard	17 4 17	+4·05	126 56·1	4·7	pB, E pf (Swift : triple)	
6303	...	...	...	Sw I	17 5 6	−0·23	21 27·6	4·8	eF, pL, mE, nearly bet 2 st	
6304	4275	3670	I 147	...	17 5 40	+3 80	119 17·3	4·6	⊕, B, cL, R, lbM, rrr, st 16	
6305	4276	3669	...	...	17 5 46	5·24	149 0·4	4·6	vF, vS, R, glbM	
6306	...	...	...	Sw II	17 5 53	0·74	29 6·0	4·7	vF, vS, lE	
6307	4277	...	...	d'A, Sw II	17 5 59	0·73	29 4·0	4·7	vF, vS, lE, * 13 nr n	
6308	5847	...	...	m 332	17 6 8	2·51	66 27	4·6	vF, S, R, sbM	
6309	5851	...	...	T I	17 6 12	3·36	102 44·5	4·6	B, S, bet 2 st v nr	
6310	4278	...	...	d'A	17 6 15	0·71	28 50·0	4·6	F, pL, lE	
6311	5848	...	...	St VII	17 6 16	1·91	48 10·5	4·6	pB, vS, R	
6312	...	...	...	St X	17 6 24	1·88	47 32·3	4·6	eF, irr R, dif, vS * inv	
6313	...	...	...	Sw VI	17 6 42	1·61	41 27·4	4·6	eeF, vS, lE, bet 2 F st	
6314	5849	...	...	m 333	17 6 48	2·51	66 33	4·5	F, vS, R, bM	
6315	5850	...	...	m 334	17 6 53	2·51	66 36	4·5	eF, S	
6316	4279	3671	I 45	...	17 7 49	3·77	117 58·5	4 4	⊕, cB, pS, R, gvmbM, rrr, st16	
6317	...	...	...	Sw I	17 8 1	0·51	26 55·6	4·5	eeF, S, R, F * nr, sp of 2	
6318	4280	3672	...	Δ 522	17 8 4±	4·14	129 17·2	4·4	Cl, pL, Ri, R, gbM, st 12...14	
6319	...	...	...	Sw I	17 8 7	0·51	26 51·4	4·5	vF, vS, R, lbM, nf of 2	
6320	5852	...	...	St IV	17 8 20	1·96	49 34·3	4·4	eF, * 13 p 0ᵐ·5	
6321	5853	...	...	St II	17 8 23	2·58	69 31·3	4·4	eF, iR, pS, vlbM	
6322	4281	3673	...	...	17 8 45	4·28	132 43·5	4·3	Cl, vL, pRi, lC (place of * nf)	
6323	5854	...	...	St VII	17 9 4	+1·82	46 3·4	4·4	eF, vS, diffic	
6324	4282	...	III 945	...	17 9 15	−2·00	14 23·4	4·5	vF, S, E, S * s	
6325	4283	3676	...	...	17 9 31	+3·64	113 35·9	4·3	pF, L, R, rr	
6326	4284	3675	...	...	17 9 41	4·72	141 35·5	4·2	!!! ○, pB, vS, R	†
6327	5855	...	...	St VII	17 9 49	1·82	46 11·3	4·3	eF, vS, diffic	
6328	4285	3674	...	...	17 9 58	5·86	154 51·4	4·2	vF, vS, vlE, glbM	
6329	5856	...	...	St VII	17 10 0	1·82	46 9·4	4·3	vF, vS, R, bM	
6330	...	...	...	St XI	17 10 19	+2·33	60 26·3	4 2	eF, S, R	
6331	4286	...	III 951	...	17 10 45	−3·50	11 12·7	4·4	eF, S	
6332	5857	...	...	St VII	17 10 48	+1·82	46 11·8	4·2	vF, oval, ibM	
6333	4287	1979=3677	...	M 9	17 11 0	3·51	108 21·9	4·2	⊕, B, L, R, eCM, rrr, st 14	
6334	4288	3678	...	...	17 11 3	4·02	125 54·9	4·1	eF, vL, icE, vglbf, * 8 inv	
6335	4289	3679	...	...	17 11 36±	3·83	120 0±	4·1	Dif neb in patches	
6336	5858	...	...	St VII	17 12 3	1·81	46 1·7	4·1	vF, vS, R, bM	
6337	4290	3680	...	...	17 12 40	+4·11	128 20·0	+4 0	!!!⊙, eF, S, am st	†

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6338	4291	...	II 812	...	17 12 41	+1·01	32 24·1	+4·1	F, S, R, vglbM	
6339	...	...	...	Sw VI	17 12 42	+1·93	48 58·2	4·0	vF, L, iR, sp of 2	
6340	4292	1980	II 767	...	17 12 44	−1·06	17 32·1	4·1	cF, pL, R, vgmbM	
6341	4294	...	...	M 92, LL 31544	17 12 51	+1·84	46 42·6	4 0	⊕, vB, vL, eCM, rrr, st S	†
6342	4293	...	I 149	...	17 12 55	3·54	109 26·5	4 0	cB, pS, lE, cr	
6343	...	...	...	Sw VI	17 12 57	1·93	48 46·2	4·0	vF, S, lE, nf of 2	
6344	...	..	...	J G Lohse	17 12 57	1·87	47 25·0	4·0	F, S, R, * 12 nf, nr	
6345	...	...	...	Sw VI	17 12 59	1·02	32 27·3	4·0	eeF, vS, R, 2nd of 3	
6346	...	...	...	Sw VI	17 13 2	1·02	32 29·0	4·0	eeF, S, R, 3rd of 3	
6347	...	...	...	St XI	17 13 40	2·68	73 11·6	3·9	eF, iR, dif	
6348	...	...	...	St XI	17 13 55	1·90	48 12·3	3·9	eF, vS, iR, lbM	
6349	...	...	...	St X	17 14 11	2·11	53 47·7	3·9	vF, eS, R, lbM, p of 2	
6350	...	...	...	St XI	17 14 16	1·90	48 9·6	3·9	pF, pS, gbM	
6351	...	...	...	St X	17 14 16	2·11	53 47·8	3·9	vF, vS, fainter than p one	
6352	...	...	...	Δ 417, Barnard	17 14 50	4·54	138 20	3·7	pF, L	
6353	...	...	...	J G Lohse	17 14 53	2·70	74 10 2	3·9	pB, pS, 3 S st inv, * 10 nf 1′	
6354	...	...	...	Barnard	17 15 2	4·11	128 24	3·9	eF, S	
6355	4295	3681	I 46	...	17 15 16	3·72	116 12·7	3 8	cF, L, R, gbM, rrr	
6356	4296	3683	I 48	...	17 15 26	3·49	107 40·5	3·8	⊕, vB, cL, vgvmbM, rrr, st 20	
6357	4297	3682	...	...	17 15 28	3·96	124 3·1	3·8	F, L, E, vglbM, D * inv	
6358	...	...	...	Sw VI	17 15 41	1·35	37 13·1	3·8	cF, S, R, D * nr np	
6359	4298	...	...	d'A	17 16 27	0·61	28 4·5	3·8	pB, S, R, bMN = * 12	
6360	4299	3685	...	...	17 16 28	3·83	119 51·6	3·7	Neb in patches (Milky Way)	
6361	...	...	...	Sw IV	17 16 52	0·73	29 14·4	3 7	vF, pS, mE, nearly bet 2 st	
6362	4300	3684	...	Δ 225	17 17 23	6·17	156 55 8	3·5	⊕, cB, L, vgmbM, rrr, st 14...17	
6363	...	...	...	St X	17 18 10	1·92	48 45·9	3·6	vF, S, R, gbM	
6364	...	...	...	St X	17 19 1	2·33	60 28·7	3·5	pF, vS, R, bM * 13	
6365	...	...	...	Sw IV	17 20 16	0·57	27 42·3	3·5	eeF, pL, iR, eF st inv, * sf	
6366	4301	...	...	Winnecke	17 20 19	3·18	94 57·0	3·4	F, L, vlbM (Auw 36)	
6367	...	...	...	St XI	17 20 22	2·05	52 7·0	3·4	vF * in vF, vS, R neb	
6368	5860	...	...	m 335	17 20 39	2 80	78 20	3·4	F, S, E	
6369	4302	1981 = 3686	IV 11	...	17 20 49	3·65	113 38·5	3·2	!! ⊙, pB, S, R	†
6370	...	...	...	Sw I	17 20 54	1·04	32 53 7	3·5	vF, vS, R, B * nr n	
6371	5861	...	...	m 336	17 21 43	2·41	63 22	3·3	vF, S, R, np of 2	
6372	4303	...	III 137	m	17 21 55	2·41	63 24·8	3·2	vF, pS, iF, sf of 2	
6373	...	...	...	Sw I	17 22 8	0 88	30 52·5	3·3	eeF, pL, v diffic	
6374	4304	3687	...	...	17 22 58	3 91	122 28·8	3·1	Cl, S, P, B * inv	
6375	5862	...	...	m 337	17 23 6	2·69	73 40	3·1	F, vS, R	
6376	...	...	...	Sw IV	17 23 18	+0·88	31 3·4	+3·2	eeF, eS, R, v diffic	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6377	...	...	...	Sw IV	17 23 23	+0·88	31 3·1	+3·2	eF, cS, R, lbM	
6378	5863	...	...	St VII	17 23 53	2 93	83 36·4	3·1	v difficult	
6379	5864	...	...	m 338	17 24 20	2·69	73 35	3·0	vF, pL	
6380	4305	3688	...	...	17 24 47	4 14	128 58·0	3 0	eF, pS, lE, ∗ 9 att	†
6381	...	...	...	Sw I	17 25 25	0·79	29 52·7	3·0	vF, pL, E	
6382	...	...	...	Sw I	17 25 33	1·04	33 1·3	3·0	pF, pS, R	
6383	4306	3689	...	...	17 25 34	3·92	122 28 6	2·9	Cl, st 13, ∗ 6·7 in M	
6384	5865	...	...	d'A, m 339, St II	17 25 38	2·90	82 50·0	2 9	pB, S, vlE	
6385	...	...	...	Sw IV	17 25 39	1·02	32 21·6	3·0	eF, S, R, B ∗ s	
6386	...	...	...	Sw I	17 25 56	1·33	37 10·4	2·9	vF, pS, R, bet 2 st	
6387	...	...	...	Sw IV	17 25 59	1·01	32 20·6	2·9	eF, S, R	
6388	4307	3690	...	Δ 457	17 26 3	4·38	134 38·5	2·8	⊕, vB, L, R, pg, psvmbM, rrr, st 17...	
6389	4308	...	II 901	Peters	17 26 24	2·68	73 30·5	2·9	F, S, iF, er	
6390	...	...	...	Sw I	17 26 31	0·76	29 41·7	2·9	eeF, mE, v diffic	
6391	...	...	...	Sw IV	17 26 33	0·87	31 2·2	2·9	eF, vS, R, nearly bet 2 st	
6392	4309	3691	...	...	17 27 58	6·66	159 41·3	2·6	eF, S, R, glbM, ∗ 13 sp	
6393	...	...	...	Sw I	17 28 25	0·80	30 15·4	2·7	eF, pS, R, s of 2	
6394	...	...	...	Sw I	17 28 25	+0·80	30 11·8	2·7	eF, pS, R, n of 2	
6395	...	...	...	Sw I	17 28 50	−0 81	18 48·2	2·7	vF, pL, lE, D ∗ n	
6396	4310	3693	...	...	17 28 51	+4·00	124 54·8	2·6	Cl, pL, lRi, lC	
6397	4311	3692	...	Lac III 11, Δ 366	17 29 17	4·87	143 35·1	2·5	⊕, B, vL, Ri, st 13	
6398	4312	3694	...	...	17 29 49	5·53	151 36·1	2·5	eF, S, R, p of 2	
6399	...	...	...	Sw I	17 29 50	0·80	30 17·8	2·6	eF, vS, R	
6400	4313	3696	...	Δ 568	17 30 2	4·07	126 51·1	2·5	Cl, pL, pRi, iR, st 9...10	
6401	4314	1982 = 3697	I 44	...	17 30 6	3 66	113 49·6	2·5	pB, pL, R, ∗ 12 f inv	
6402	4315	1983 = 3698	...	M 14	17 30 15	3·15	93 9·5	2·5	⊕, B, vL, R, eRi, vgmbM, rrr, st 15	
6403	4316	3695	...	...	17 30 19	5·53	151 36·1	2·4	eeF, f of 2	
6404	4317	4020	...	h o n	17 30 26	3·94	123 9·3	2·5	Cl, F, L, pRi, lC, st 13...15	
6405	4318	3699	...	Lac III 12, M 6	17 30 56	3 91	122 7·1	2·4	Cl, L, iR, lC, st 7, 10...	
6406	...	...	...	Bigourdan	17 32 14	2·62	71 5	2·4	vF, eS, stellar	
6407	4319	3700	...	...	17 32 15	5·44	150 39·7	2·3	eF, S, R, 3 st nr	
6408	5866	...	...	m 340, St II	17 32 41	2·62	71 2·4	2·3	F, S, iR, gbM	
6409	...	...	...	Sw I	17 32 46	1·44	39 8·9	2·4	vF, S, R	
6410	...	...	...	Sw VI	17 33 33	0·69	29 5·6	2·3	eeF, S, R, nearly bet 2 st, sp of 2	
6411	4320	...	...	d'A	17 33 56	+0·69	29 6 7	2·3	vS, gbM	
6412	4321	...	VI 41	...	17 34 ·8	−2·18	14 11·2	2·3	⊕, eL, R, vgbM, rr	
6413	5867	...	...	St II	17 34 13	+2·77	77 18·0	2·2	vF, vS, smbM	
6414	...	...	...	Sw III	17 34 27	−1·70	15 33·0	2·3	eeF, pS, R, v diffic, bet 2 st	
6415	4322	3701′	...	...	17 35	+4·00	124 56·5	+2·1	Nebs portion of Milky Way	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6416	4323	3702	...	Δ 612	17 35 9	+3·91	122 17·0	+2·1	Cl, vL, Ri, 1C	
6417	5868	...	...	m 341	17 36 0	2·45	66 15	2·0	pF, S, vlbM	
6418	...	...	...	Sw I	17 36 16	+0·88	31 11·4	2·1	eF, pS, R	
6419	...	...	...	Sw II	17 36 26	−0·26	21 45·6	2·1	eeF, eS, R, v diffic	
6420	...	...	...	Sw II	17 36 26	−0·24	21 52·3	2·1	eeF, eS, R, v diffic	
6421	4324	3702′	...	...	17 36 30	+3·96	123 37·6	1·9	Cl, vL, pRi, st 8...12	†
6422	...	...	...	Sw II	17 36 46	−0·24	21 51·8	2·0	eF, pS, R, nearly bet 2 st	
6423	...	...	...	Sw II	17 37 16	−0·26	21 45·8	2·0	eeF, vS, R, * close f	
6424	...	...	...	Sw II	17 37 25	−0·59	19 56·2	2·0	vF, pS, R	
6425	4326	3703	...	...	17 37 56	+3·89	121 28·0	1·8	Cl, pS, lRi, 1C, st 10...12	
6426	{4325 = 5870}	...	II 587	St VII	17 37 56	3·00	86 45·9	1·8	vF, cL, E, vlbM	
6427	5869	...	...	m 342	17 37 57	2·44	64 25	1·8	vF, vS, stellar	
6428	...	...	...	Bigourdan	17 38 13	2·44	64 24	1·8	vF, S, stellar	
6429	5871	...	...	m 343	17 38 22	2·44	64 34	1·8	F, S, stellar	
6430	5872	...	...	m 344	17 38 27	2·63	71 47	1·8	vF, S, mE	
6431	5873	...	...	St I	17 38 35	2·43	64 25·5	1·8	vF, vS, R	
6432	4327	1984	...	...	17 38 46	3·69	114 49·9	1·8	Cl, st vS	
6433	5874	...	...	m 345	17 39 8	+2·07	53 9	1·7	vF, S, pmE, bM	
6434	4328	1987	III 741	...	17 39 12	−1·07	17 49·4	1·7	vF, vS, R, stellar, * 8 s	
6435	...	...	...	Sw VI	17 39 15	+0·49	27 16·3	1·8	eeF, vS, R, vF D * nr f	
6436	...	...	...	Sw V	17 39 34	0·72	29 28·2	1·8	eeF, pS, lE, * * * nr	
6437	4329	3704	...	...	17 39 40	4·02	125 22·8	1·7	Cl, F, eL, vS st + neb	
6438	4330	3701	...	...	17 39 43	19·74	175 24·4	1·2	pB, R, vgbM	
6439	...	...	...	Pickering	17 40 13	3·47	106 26	1·6	○, stellar = 13 m	
6440	4331	1985	I 150	...	17 40 34	3·57	110 18·5	1·6	pB, pL, R, bM	
6441	4332	3705	...	Δ 557	17 40 42	4·08	127 0·1	1·6	⊕, vB, pL, R, vgmbM, rrr, st 18	
6442	5875	...	...	m 346	17 40 50	2·57	69 10	1·6	pF, S, iR, gbM	
6443	...	...	...	Sw V	17 40 55	1·58	41 48·8	1·6	eF, pS, lE	
6444	4334	3706	...	Δ 597?	17 40 55	4·00	124 48·8	1·6	Cl, vL, vRi, st 12...13	
6445	4333	1986	II 586	...	17 40 57	3·56	109 57·5	1·6	pB, pS, R, gbM, r, * 15 np	
6446	5876	...	...	m 347	17 41 10	2·12	54 22	1·6	eF, vS, iR	
6447	5877	...	...	m 348	17 41 20	2·12	54 22	1·6	vF, S, R	
6448	...	...	...	Sw II	17 41 23	1·26	36 24·1	1·6	vF, pS, R, lbM	
6449	...	...	...	Sw I	17 41 24	1·03	33 8·0	1·6	vF, pS, R	
6450	...	...	...	Sw II	17 41 25	2·62	71 22·3	1·6	vF, vS, B * f 2′	
6451	4335	3707	VI 13	...	17 41 41	3·85	120 10·2	1·5	Cl, pL, pRi, bifid, st 12...	†
6452	5878	...	...	m 349	17 41 57	2·56	69 5	1·5	eeF, S	
6453	4336	3708	...	...	17 42 0	3·99	124 34·7	1·5	cL, iR, pmbM, r	
6454	...	...	...	Sw I	17 42 2	1·11	34 14·1	1·5	vF, pS, R, lbM	
6455	4337	3709	...	...	17 42 38	+4·02	125 20·7	+1·4	Cl, rr, st eS + neb	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6456	...	...	...	Sw V	17 42 44	−0·17	22 20·0	+1·5	eeF, eS, R, v diffic, bet 2 st	
6457	...	...	...	Sw I	17 42 45	0·00	23 27·9	1·5	F, vS. R, bM	
6458	5879	...	...	m 350	17 43 10	+2·56	69 8	1·4	eF, vS, stellar	
6459	...	...	...	Sw I	17 43 12	1·11	34 10·0	1·4	eF, eS, R, r	
6460	5880	...	...	m 351	17 43 30	+2·57	69 11	1·4	vF, pL, iR	
6461	...	...	...	Sw V	17 43 35	−1·42	16 32·3	1·5	eF, pS, R, 5 st nr	
6462	...	...	...	Sw I	17 43 44	+0·57	28 1·4	1·4	F, eS, R, ◯ ?	
6463	...	...	...	Sw IV	17 43 59	−0·17	22 21·3	1·4	eeF, S, R, v diffic, 2nd of 6	
6464	...	...	...	Sw I	17 44 13	+0·67	29 1·9	1·4	eeF, pS, R, s of 4 st	
6465	4338	1988	...	...	17 44 17	3·71	115 21·5	1·3	eF, S (suspected)	
6466	...	...	...	Sw I	17 44 25	1·40	38 33·9	1·3	eF, vS, R, bet 2 st	
6467	5881	...	...	m 352	17 44 27	2·65	72 25	1·3	vF, vS, lE	
6468	5882	...	...	m 353	17 44 28	2·65	72 25	1·3	vF, S, R	
6469	4339	3711	...	...	17 44 30	+3·62	112 18·4	1·3	Cl, pRi (in M Way)	
6470	...	...	...	Sw IV	17 44 34	−0·17	22 20·2	1·3	eeF, vS, R, v diffic, 3rd of 6	
6471	...	...	...	Sw V	17 44 34	−0·17	22 21·5	1·3	eeF, eS, R, * nr, 4th of 6	
6472	...	...	...	Sw V	17 44 34	−0·17	22 18·0	1·3	eeF, eS, R, v diffic, 5th of 6	
6473	...	...	...	Sw IV	17 44 35	+0·99	32 38·5	1·3	eeF, S, R, s of 2	
6474	...	...	...	Sw IV	17 44 35	0·99	32 38·3	1·3	eF, pS, R, n of 3, 3 st nr	
6475	4340	3710	...	{Halley, Lac II 14, M 7}	17 44 40	4·00	124 46·6	1·2	Cl, vB, pRi, lC, st 7...12	†
6476	4341	3712	...	...	17 44 55	+3·82	119 5·6	1·2	Neb or nebs part of M Way	
6477	...	...	...	Sw V	17 45 9	−0·17	22 18·8	1·3	eeF, eS, R, v diffic, * nr,	
6478	...	...	...	Sw III	17 45 21	+1·41	38 47·2	1·3	pB, S, vmE, spindle	
6479	...	...	...	Sw I	17 45 34	1·23	35 47·8	1·2	eF, pS, R, 3 st n	
6480	4342	3713	...	...	17 45 37	3·85	120 23·9	1·2	Neb or nebs part of M Way	†
6481	...	...	...	Peters	17 45 55	2·97	85 47·9	1·1	vS, bM	
6482	4343	1989	...	...	17 45 58	2·50	66 53·5	1·1	! vF, S, R, vsvmbMvSRN	†
6483	4344	3713	...	...	17 46 1	5·77	153 38 0	1·1	F, S, E, bM, bet 2 st 10	
6484	5883	...	...	St VII	17 46 3	2·46	65 28·7	1·1	eF, vS, R, mbM	
6485	5884	...	...	m 354, St II	17 46 38	2·25	58 30·1	1·1	vF, vS, R	
6486	...	...	...	St XI	17 47 13	2·31	60 8·8	1·1	vS * slightly nebs	
6487	...	...	...	St XI	17 47 19	2·31	60 7·6	1·0	F, S, R, gbM	
6488	...	...	...	Sw IV	17 47 45	0·53	27 43·8	1·0	pF, pS, E	
6489	...	...	...	Sw I	17 47 46	0·75	29 53·4	1·0	eeF, pL, lE, bet 2 st	
6490	5885	...	...	m 355, St II	17 48 22	2·63	71 35·8	1·0	vF, vS, stellar	
6491	...	...	...	Sw I	17 48 25	0·61	28 25·9	1·0	pF, eS, vF * att, np of 2	
6492	4345	3714	...	...	17 48 31	6·13	156 24·7	0·8	pF, S, pmE 90°, * 12 att f	
6493	...	...	...	Sw I	17 48 40	0·61	28 27·3	0·9	F, eS, R, ◯ ?, F * v nr, sf of 2	
6494	4346	1990	...	M 23	17 48 41	3·53	108 59·7	0·9	Cl, B, vL, pRi, lC, st 10...	
6495	5886	...	...	m 356, St II	17 48 42	+2·63	71 38·7	+0·9	F, S, R	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6496	4347	3715	...	Δ 460?	17 48 51	+ 4·37	134 13·9	+0·8	Neb + Cl, pL, mE, gvlbM	
6497	...	...	...	Sw I	17 49 10	0·81	30 28·4	0·9	eF, pS, lE, ✶ close n, np of 2	
6498	...	...	...	Sw I	17 49 11	0·81	30 28·9	0·9	pF, pS, R, F ✶ v nr, sf of 2	
6499	5887	...	...	m 357	17 49 14	2·63	71 36	0·9	S D ✶ in neb	
6500	4348	...	III 957	St XII	17 49 52	2 63	71 38·3	0·8	vF, vS, sp of 2	
6501	4349	...	III 958	St XII	17 49 56	2·63	71 36·2	0·8	vF, vS, nf of 2	
6502	4350	3716	...	...	17 50 20	+5·99	155 24·0	0·7	vF, vS, f ✶ of D ✶ inv	
6503	4351	...	...	Auwers	17 50 51	−0 64	19 49·2	0·8	pF, L, mE, ✶ 9 f 4′ (Auw 37)	
6504	5888	...	...	m 358	17 50 55	+2·20	56 46	0·7	F, vmE, sbM	
6505	...	...	...	Sw IV	17 51 2	0·13	24 25·5	0·8	ecF, vS, R	
6506	4352	3717	...	...	17 51 11	3·69	114 38·4	0·7	Cl, Ri, eL, vlC	
6507	4353	...	VIII 53	...	17 51 30	+3·49	107 23·3	0·6	Cl, pS, lRi, lC	
6508	...	...	...	Sw I, Hartwig	17 52 12	−1·05	17 56·9	0·7	vF, S, 3 st nr	
6509	...	...	...	St X	17 52 37	+2·92	83 42·0	0·7	vF, pL, irrR, lbM	
6510	...	...	...	Sw IV	17 52 43	0·68	29 10·2	0·6	eeF, pS, lE, v diffic	
6511	...	...	...	Sw I	17 53 23	0·68	29 10·3	0·5	F, pL, bM (? = last one)	
6512	4354	...	...	d'A, Sw III	17 53 43	0·49	27 20·5	0·5	vF, R, 1st of 3	
6513	5889	...	...	m 359, St I	17 53 51	2·45	65 6·1	0·5	vF, vS, stellar	
6514	4355	1991 = 3718	IV 41, V 10, 11, 12	M 20	17 53 54	3·64	113 1·5	0·4	!!! vB, vL, trifid, D ✶ inv	†
6515	...	...	...	Sw III	17 54 8	1·44	39 14·6	0·4	vF, vS, R, 2 B st nr	
6516	4356	...	...	d'A, Sw III	17 54 9	0·48	27 18·5	0·5	vF, vS, 2nd of 3	
6517	4357	3719	II 199	...	17 54 11	3·28	98 57·2	0·4	pB, pL, R, rr	
6518	...	...	...	St XIII	17 54 17	2·33	61 7·5	0·4	2 vF, close st in vF, vS neb	
6519	5890	...	...	J Schmidt	17 54 23	3·84	119 48·1	0·4	vF, np I 49	
6520	4358	3721	VII 7	...	17 54 36	3·78	117 53·5	0·4	Cl, pS, Ri, lC, st 9...13	
6521	4360	...	...	d'A, Sw III	17 54 38	0·49	27 22·0	0·5	F, pL, 3rd of 3	
6522	4359	3720	I 49	...	17 54 40	3·85	120 2·0	0·4	⊕, B, pL, R, gvmbM, rrr, st 16	
6523	4361	3722	...	Lac III 13, M 8	17 55 6	3·68	114 22·8	0·3	!!! vB, eL, eiF, with L Cl	†
6524	...	...	...	Sw V	17 55 12	1·69	44 4·8	0·4	pF, pS, lE	
6525	4362	1992	...	...	17 55 28	2·81	78 57·1	0·3	Cl, P, st L	
6526	4363	...	V 9	...	17 55 40	3·65	113 27·5	0·3	F, L, eE	
6527	...	...	...	Sw IV	17 55 40	2·59	70 17·6	0·3	eeF, vS, R	
6528	4364	3723	II 200	...	17 55 51	3·85	120 3·5	0·3	⊕, pF, cS, R, gbM, rrr, st 16	
6529	4365	3724	...	Δ 569	17 56 2	4·05	126 18·1	0·2	Cl in Milky Way	
6530	4366	3725	...	...	17 56 6	3·68	114 20·0	0·2	Cl, B, L, pRi, f M 8	
6531	4367	1993	...	M 21	17 56 14	3·63	112 30·1	0·2	Cl, pRi, lC, st 9...12	
6532	...	...	...	Sw V	17 56 23	1·07	33 45·2	0·3	eeF, pS, R	
6533	4368	...	...	V 13	17 56 32	3·69	114 53·4	0·2	eL, eiF, st f	*
6534	...	...	...	Sw IV	17 56 38	0·29	25 41·2	0·3	eeF, pS, R	
6535	4369	...	...	Hind	17 56 40	+3·08	90 17·7	+0·2	pF, vS, vS neb ✶ p (Auw 38)	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6536	...	...	...	Sw I	17 56 55	+0·22	25 4·0	+0·3	vF, pL, R	
6537	...	...	...	Pickering	17 56 55	+3·55	109 51	0·2	○, B, S, stellar	
6538	...	...	...	Sw IV	17 57 10	−1·42	16 34·4	0·3	eF, vS, lE, bet 2 eF st	
6539	4370	...	...	Brorsen	17 57 15	+3·25	97 35·0	0·2	No descript (Auw 39)	
6540	4371	...	II 198	...	17 57 27	3·78	117 49·3	0·1	pF, S, iE, er or Cl	
6541	4372	3726	...	{Cacciatore Δ 473}	17 57 51	4·35	133 43·4	0·1	⊕, B, R, eC, gbM, rrr, st 15...16	*
6542	...	...	...	Sw IV	17 58 10	+0·62	28 37·9	0·1	eF, S, mE, 2 st sp	
6543	4373	...	IV 37	d'A	17 58 36	−0·02	23 21·7	+0·1	○, vB, pS, sbMvSN	
6544	4374	1994	II 197	...	17 58 42	+3·70	115 0·9	0·0	cF, pL, iR, r	
6545	4375	3727	...	...	17 58 46	5·79	153 47·5	−0·1	eeF, eeS, R	†
6546	4376	3729	...	...	17 58 48	3·65	113 14·0	0·0	Cl, vL, vRi	
6547	5891	...	...	m 360	17 59 26	2·44	64 46·0	0·0	F, vS, E, mbM	
6548	4377	...	III 555	...	17 59 39	2·62	71 27·1	0·0	cF, S, lE, r	
6549	5892	...	...	m 361	17 59 40	2·62	71 28	0·0	vF, pL, iR, near III 555	
6550	...	...	...	St XII	17 59 42	2·62	71 28·4	0·0	{vF, pS, R, sev F st inv, near m 361}	
6551	...	...	...	L I	18 0 5	+3·83	119 34·1	−0·1	vF, vS, R, rr	
6552	5893	...	...	d'A	18 0 14	−0·02	23 23·7	0·0	F, pS, iR	
6553	4378	3730	IV 12	...	18 0 44	+3·72	115 56·3	−0·2	⊕, F, L, lE, vglbM, rr, st 20	
6554	4379	1995	...	...	18 0 51	3·52	108 26·8	0·2	Cl, pRi, vlC, st L & S	
6555	4383	...	II 902	Schultz	18 0 57	2·65	72 24·9	0·2	F, L, R, vglbM	
6556	4380	3732	...	...	18 1 10	3·77	117 32·5	0·2	F, vL, cE, lbM, rr	
6557	4381	3728	...	...	18 1 11	8·69	116 36·7	0·4	vF, vS, R, glbM	
6558	4382	3731	...	...	18 1 12	3·90	121 46·8	0·2	⊕, pB, pL, R, glbM, rrr, st 16	
6559	4384	{1996 = 3733}	...	...	18 1 24	3·67	114 7·5	0·2	vF, vL, lE, ** inv	
6560	...	...	...	Sw V	18 1 28	1·64	43 7·1	0.2	eeF, pS, iR	
6561	4385	1997	VIII 54	...	18 2 25	3·48	106 49·0	0·3	Cl, L, lC, st cL	
6562	...	...	...	Sw I	18 2 42	1·07	33 45·2	0·3	F, pS, R, bM, bet 2 st	
6563	4386	3734	...	...	18 2 48	3·97	123 53·5	0·4	○, F, L, cE, hazy border	
6564	5894	...	...	m 362	18 2 52	2·66	72 37	0·3	eF, vS	
6565	...	...	...	Pickering	18 3 3	3·79	118 12	0·4	○, stellar	
6566	4387	...	...	d'A	18 3 51	1·34	37 44·0	0·4	eF, vS, R, * 16 nr	
6567	...	...	...	Pickering	18 4 2	3·53	109 7	0·5	○, stell, 11 mag, in a Cl	
6568	4388	{1998 = 3735}	VII 30	...	18 4 21	3·60	111 37·6	0·5	Cl, vL, lC	
6569	4389	3736	II 201	Δ 619	18 4 33	3·90	121 51·0	0·5	⊕, cB, L, R, rrr, st 15...	
6570	5895	...	...	m 363, d'A	18 4 46	2·74	75 56·4	0·5	pF, pL, R	
6571	5896	...	...	m 364	18 4 51	2·55	68 48	0·5	eF, vS, stell	
6572	4390	2000	...	≍ 6	18 5 18	2·91	83 10·5	0·6	○, vB, vS, R, l hazy	†
6573	4391	1999	...	...	18 5 24	+3·62	112 10·8	−0·6	Cl, st vS	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6574	5897	...	...	m 365	18 5 30	+2·72	75 3	−0·6	pB, S, R	
6575	...	...	...	St XII	18 5 40	2·27	58 54·7	0·6	pB, S, R	
6576	5898	...	...	m 366	18 5 51	2·55	68 35	0·6	eF, vS	
6577	5899	...	...	m 367	18 6 4	2·55	68 34	0·6	vF, S	
6578	...	...	...	Pickering	18 6 33	3·57	110 19	0·7	○, stellar = 13 mag	
6579	5900	...	...	m 368	18 6 35	2·55	68 36	0·6	F, p of D neb	
6580	5901	...	...	m 369	18 6 37	2·55	68 36	0·6	F, f of D neb	
6581	5902	...	...	St I	18 6 51	2·43	64 22·8	0·7	eF, dif, bet 2 F st	
6582	...	...	...	Sw IV	18 7 23	1·49	40 6·8	0·7	eeF, pS, R	
6583	4392	2001 = 3739	VII 31	...	18 7 24	3·62	112 10·4	0·8	Cl, pRi, pC, cE, st 13...	
6584	4393	3737	...	Δ 376	18 7 25	4·80	142 15·2	0·8	⊕, eB, eL, R, gmbM, rrr, st 15	
6585	...	...	...	Sw VI	18 7 34	1·97	50 21·2	0·8	eeF, S, eE, bet sev B st	
6586	5903	...	...	m 370	18 7 38	2·56	68 57	0·7	eF, S, R	
6587	5904	...	...	m 371	18 7 43	2·62	71 13	0·7	F, vS, R, stell	
6588	4394	3738	...	...	18 7 57	5·79	153 51·3	0·9	eF, S, ∗ 6 sp	
6589	...	...	...	Sw II	18 7 59	3·55	109 50·3	0·8	D ∗ in centre of eF, pL neby	
6590	...	...	...	Sw II	18 8 1	3·55	109 55·3	0·8	D ∗ in centre of pF, pL, R neby	
6591	5905	...	...	m 372	18 8 2	2·56	68 59	0·8	eeF, vS, stell	
6592	...	...	...	Sw I	18 8 10	0·62	28 36·3	0·7	vF, vS, R	
6593	5906	...	...	m 373, St VII	18 8 10	2·53	67 45·2	0·8	vF, vS, R, lbM	
6594	...	...	...	Sw I	18 8 34	0·65	28 53·6	0·8	vF, vS, R	
6595	4395	2002	...	...	18 8 47	3·53	109 55·1	0·9	F, pL, cE, ∗∗ inv	†
6596	4396	2003	VIII 55	...	18 9 28	3·47	106 41·4	0·9	Cl, lC	
6597	...	...	...	Sw I	18 9 34	+0·65	28 51·1	0·9	vF, vS, R, B ∗ nr	
6598	...	...	...	Sw I	18 9 50	−0·41	20 58·6	0·9	eF, pS, R	
6599	...	...	...	St XII	18 9 59	+2·45	65 7·8	0·9	pF, vS, R, gbM, S ∗ att f	
6600	5907	...	...	m 374	18 9 59	2·45	65 1	0·9	F, vS, stell	
6601	...	...	...	Sw I	18 10 5	0·62	28 35·1	0·9	eF, pS, R	
6602	...	...	...	Bigourdan	18 10 10	2·45	65 0	1·0	Cl, vS, st F, 30″, nebulous?	
6603	4397	2004	...	M 24	18 10 14	3·52	108 28·1	1·0	!, Cl, vRi, vmC, R, st 15 (M Way)	*
6604	4398	3740	VIII 15	...	18 10 14	3·36	102 17·2	1·0	Cl, lRi, lC	
6605	4399	2005	...	...	18 10 21	3·43	104 59 6	1·0	Cl, lRi, lC, st 10...12	
6606	...	...	...	St XIII	18 10 27	1·82	46 46·7	1·0	vF, S, R, gbM, vF ∗ inv	
6607	...	...	...	Sw I	18 10 29	0·63	28 42·3	1·0	eF, pS, R, v diffic	
6608	...	...	...	Sw I	18 10 44	0·63	28 42·1	1·0	vF, eS, R, vF ∗ nr	
6609	...	..	...	Sw I	18 10 49	0·63	28 42·1	1·0	vF, pS, lE, F ∗ nr	
6610	5908	...	...	St VII	18 10 56	2·71	75 2·9	1·0	F, S, E, mbM, r	
6611	4400	2006	...	M 16	18 10 57	3·40	103 50 0	1·1	Cl, at least 100 st L & S	
6612	...	...	...	Sw VI	18 11 5	2·10	53 55·0	1·0	eeF, eS, R, v diffic	
6613	4401	2007	...	M 18	18 11 45	+3·49	107 11·1	−1·1	Cl, P, vlC	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6614	4402	3741	...	...	18 11 45	+5·72	153 17·8	−1·2	vF, S, R, gvlbM, *9 p	
6615	5909	...	...	m 375	18 12 7	2·76	76 49	1·1	vF, vS	
6616	...	...	...	Sw II	18 12 12	2·53	67 49·1	1·1	vF, eS, mE, 2 F st nr	
6617	...	...	...	Sw I	18 12 24	0·63	28 43·7	1·1	eeF, pL, R, v diffic	
6618	4403	2008	...	M 17	18 12 42	3·46	106 13·9	1·2	!!!, B, eL, eiF, 2 hooked	†
6619	5910	...	...	m 376	18 13 7	2·49	66 25	1·2	F, S, E	
6620	...	...	...	Pickering	18 13 8	+3·75	116 54	1·2	○, stellar	
6621	...	...	...	Sw I & II	18 13 53	−0·28	21 43·9	1·2	pF, pS, R, lbM, s of 2	
6622	...	...	...	Sw I & II	18 13 53	−0·28	21 43·7	1·2	pF, pS, R, lbM, n of 2	
6623	5911	...	...	m 377	18 14 1	+2·49	66 22	1·3	pF, S, R, bM	
6624	4404	3742	I 50	...	18 14 42	3·86	120 25·4	1·4	⊕, vB, pL, R, rrr, st 16	
6625	4405	2009	...	...	18 15 21	3·36	102 6·0	1·4	Cl, lC, lRi, st 11...12	
6626	4406	2010=3743	...	M 28	18 15 56	3·69	114 56·1	1·5	!, ⊕, vB, L, R, geCM, rrr, st 14...16	
6627	5912	...	...	m 378	18 16 22	2·70	74 23	1·5	vF, pL	
6628	5913	...	...	m 379	18 16 34	2·49	66 35	1·5	vF, S, lE, bM	
6629	4407	3744	II 204	...	18 17 13	3·65	113 16·5	1·6	○ or ⊕, pB, eeS, R	
6630	4408	3745	...	...	18 19 12	5·73	153 22·4	1·9	pF, S, R, gbM	
6631	4409	3746	...	...	18 19 23	3·36	102 6·7	1·8	Cl, pL, pRi, st 12...15	
6632	5914	...	...	m 380	18 19 31	2·38	62 32	1·8	F, S, R, gbM	
6633	4410	...	VIII 72	C H	18 20 43	2·92	83 31·3	1·9	Cl, lC, st L	†
6634	5076	...	...	Lac I, 11	18 20 45	3·95	123 30·5	1·9	Neb, without stars	
6635	5915	...	...	m 381	18 21 15	2·72	75 18	1·9	vF, S, R	
6636	...	...	...	Sw IV	18 22 0	0·00	23 27·4	1·9	eeF, pS, R, 3 st nr	
6637	4411	...	...	M 69, Δ 613	18 22 13	3·92	122 26·6	2·1	⊕, B, L, R, rrr, st 14...16	*
6638	4412	3748	I 51	...	18 22 17	3·71	115 35·2	2·1	⊕, B, S, R, rr	
6639	4413	2011	...	...	18 23 5	3·39	103 15·2	2·1	Cl (in M Way)	
6640	...	...	...	St XIII	18 23 5	2·17	55 47·2	2·1	vF, S, R, vlbM	
6641	5916	...	...	St V	18 23 6	2·51	67 10 8	2·1	vF, vS, R, bM	
6642	4414	2012=5749	II 205	...	18 23 23	+3·65	113 34·0	2·2	⊕, pB, pL, iR, gpmbM, rrr, st 16	
6643	4415	...	...	Tuttle	18 23 47	−1·72	15 30·3	2·0	pB, pL, E 50°, 2 st p (Auw 40)	*
6644	...	...	...	Pickering	18 23 56	+3·70	115 14	2·2	○, stellar	
6645	4416	2013	VI 23	...	18 24 32	3·48	106 59·1	2·2	Cl, pL, vRi, pC, st 11...15	
6646	4417	...	II 907	...	18 25 3	1·97	50 13·7	2·2	F, S, iF	
6647	4418	2014	VIII 14	...	18 25 5	3·49	107 26·0	2·3	Cl, L, Ri, lC, st vS	
6648	4419	...	...	Σ 7	18 25 5	0·23	25 5·7	2·2	S, pmE, * * inv (Auw 41)	†
6649	4420	3751	...	...	18 25 44	+3·32	100 29·5	2·3	Cl, P, lC, pS, st 9·10, 12...13	
6650	...	...	...	Sw II	18 25 48	−0·13	22 4·3	2·2	vF, vS, R	
6651	...	...	...	Sw IV	18 26 2	−0·90	18 29·5	2·2	eeF, pS, lE, v diffic	
6652	4421	3752	...	Δ 607	18 26 35	+3·94	123 5·7	−2·4	B, S, lE, rrr, st 15	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6653	4422	3750	...	...	18 27 8	+7·51	163 22·8	−2·6	vF, S, lE, glbM	
6654	...	...	...	Sw I, Palisa	18 27 12	−1·30	16 54·3	2·3	✶ 12·13 in pB, pL neby	
6655	4423	...	...	Winnecke	18 27 19	+3·21	96 4·8	2·5	pF, vS, E (Auw 42)	
6656	4424	2015 = 3753	...	J A Ihle, 1665 M22, Lac I 12	18 27 51	3·66	114 1·0	2·5	!!, ⊕, vB, vL, R, vRi, vmC, st 11...15	
6657	5917	...	...	St VII	18 27 56	2·18	56 2·5	2·4	vF, vS, sbM	
6658	5918	...	...	m 382	18 28 5	2·52	67 14	2·4	F, vS, lE	
6659	4425	2016	...	...	18 28 6	2·50	66 32·4	2·5	Cl, P, lC	
6660	...	...	...	Sw II	18 28 42	2·52	67 21·5	2·6	pB, pS, R, mbM, bet 2 st	
6661	5919	...	...	m 383, St II	18 28 45	2·52	67 11·8	2·6	F, vS, R, gbM	
6662	...	...	...	St XIII	18 28 57	2·24	58 2·6	2·6	F ✶ in vF, vS, lE neby	
6663	...	...	...	Sw VI	18 29 1	1·96	50 0·0	2·6	eeF, pS, R, v diffic	
6664	4426	3754	VIII 12	...	18 29 5	3·27	98 20·0	2·6	Cl, L, pRi, vlC	
6665	5920	...	...	St II	18 29 10	2·29	59 23·2	2·6	vF, vS	
6666	...	...	...	Sw VI	18 29 37	+2·20	56 31·3	2·6	eF, S, R, v diffic	
6667	...	...	...	Sw II	18 30 55	−0·19	22 6·8	2·7	vF, pL, lE, vF D ✶ nr	
6668	...	...	...	Sw IV	18 30 57	−0·07	22 57·2	2·7	pB, pS, mE	
6669	5921	...	...	m 384	18 31 19	+2·53	67 56	2·7	eF, pL	
6670	...	...	...	Sw IV	18 31 45	0·80	30 12·9	2·8	eeF, S, mE, v diffic	
6671	5922	...	...	m 385, St II	18 31 48	2·42	63 42·0	2·9	vF, vS, R, mbM	
6672	...	...	...	St X	18 31 56	1·84	47 10·1	2·8	2 close st, n one nebs	
6673	4427	3755	...	...	18 32 2	5·60	152 25·6	3·0	pF, S, R, psbM, r	
6674	5923	...	...	m 386, St II	18 32 51	2·45	64 44·7	2·9	F, pS, iR, bM	
6675	5924	...	...	St VII	18 32 52	+1·96	50 3·6	2·9	vF, E, 45″	
6676	...	...	...	Sw IV	18 33 1	−0·02	23 10·0	2·9	eeF, pS, lE, lbM, v diffic	
6677	...	...	...	Sw I & III	18 33 23	0·05	22 59·1	2·9	vF, vS, bet ✶ v close & vFD ✶	
6678	...	...	...	Sw I	18 33 34	0·16	22 15·7	2·9	pF, pS, R	
6679	...	...	...	Sw VI	18 33 42	−0·07	22 50·1	2·9	eF, close double	
6680	5925	...	...	m 387	18 33 50	+2·53	67 48	2·9	eF, S, close to a S ✶	
6681	4428	3756	...	M 70, Δ 614	18 34 5	3·91	122 25·2	3·1	⊕, B, pL, R, gbM, st 14...17	*
6682	4429	2017	...	...	18 34 10	3·19	94 53·5	3·1	Cl, L, Ri, st 10...18	
6683	4430	2018	...	...	18 34 41	3·22	96 21·2	3·1	Cl, vRi, vlC (in M. Way)	
6684	4431	3757	...	...	18 35 10	5·94	155 19·3	3·2	vB, pL, R, vg, psvmbM, ✶ 7 p	
6685	...	...	...	Sw VI	18 35 17	1·96	50 5·1	3·1	eeF, vS, R, v diffic, sp of 2	
6686	...	...	...	Sw VI	18 35 21	1·96	49 56·1	3·1	eeF, eS, R, v diffic, nf of 2	
6687	...	...	...	Sw I	18 35 39	0·83	30 28·0	3·1	eF, pL, R, bet 2 st	
6688	5926	...	...	m 388, St II	18 35 45	+2·10	53 45·7	3·2	F, pS, R, bM	
6689	5927	...	...	d'A	18 36 19	−0·64	19 35·6	3·2	vF, pS, ✶ 8 f, 7′ dist	
6690	...	...	...	Sw V	18 36 24	−0·64	19 35·4	3·2	pF, L, R, bet 2 st	
6691	...	...	...	Sw IV	18 36 26	+1·15	34 31·1	3·2	vF, pL, R, pB ✶ S nr	
6692	...	...	...	St XIII	18 36 39	+2·16	55 17·3	−3·3	vF, vS, irr E, scv vF st inv	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s		° ′	″		
6693	5928	...	...	m 389	18 36 40	+2·08	53 13	−3·3	vF	
6694	4432	3758	...	M 26	18 37 33	3·29	99 32·0	3·4	Cl, cL, pRi, pC, st 12...15	
6695	...	...	...	St XIII	18 38 9	1·96	49 46·3	3·4	vF, S, irrE ns, vlbM	
6696	...	...	...	Sw II	18 39 9	0·86	30 46·0	3·4	eeF, pL, v diffic	
6697	5929	...	...	m 390	18 39 33	2·45	64 38	3·5	F, vS, stell	
6678	4433	...	VI 15	...	18 39 38	3·72	116 3·7	3·6	Suspected Cl, cL, st vF	
6699	4434	3759	...	...	18 40 7	5·13	147 27·8	3·6	pF, pS, lE 90°, pslbM	
6700	5930	...	...	St V	18 40 50	2·24	57 52·0	3·6	eF, lE, dif, iR	
6701	...	...	...	Sw II	18 41 27	0·74	29 29·3	3·6	pB, pS, mE, F * close f	
6702	5931	...	...	d'A	18 42 54	1·73	44 26·9	3·8	pF, S, lE	
6703	5932	...	...	d'A	18 43 16	1·74	44 36·1	3·8	B, S, R, mbM	
6704	4435	...	...	Winnecke	18 43 20	3·19	95 21·3	3·9	Cl, B, 60 st 13 (Auw 43)	
6705	4437	2019	...	Kirch 1681, M11	18 43 33	3·22	96 25·9	3·9	!, Cl, vB, L, iR, Ri, *9, st 11...	†
6706	4436	3760	...	...	18 43 37	5·68	153 19·7	4·0	Neb. No description	
6707	4438	3761	...	...	18 44 2	4·87	143 58·8	4·0	F, S, vlE, gbM	
6708	4439	4021	h o n.	...	18 44 18	4·87	143 53·3	4·0	pF, S, R, gpmbM, last of gr	
6709	4440	2020	...	...	18 44 53	2·84	79 49·0	4·0	Cl, pRi, lC, iF	†
6710	5933	...	...	m 391, St I	18 44 56	2·42	63 19·5	4·0	vF, S, R, bM	
6711	...	...	...	Sw II	18 45 4	1·64	42 30·6	4·0	vF, pS, R, lbM	
6712	4441	3762	I 47	...	18 45 26	3·28	98 52·4	4·1	⊕, pB, vL, irr, vglbM, rrr	
6713	5934	...	...	m 392	18 45 39	+2·19	56 12	4·0	vF, S, R, bM	
6714	...	...	...	Sw IV	18 45 46	−0·05	23 25·8	4·0	eeF, pS, v diffic, sev B st n	
6715	4442	3763	...	M 54, Δ 624	18 46 6	+3·85	120 38 5	4·1	⊕, vB, L, R, g, smbM, rrr, st15	
6716	4443	2021	...	...	18 46 17	3·55	110 4·1	4·1	Cl, pRi, st 9...13	
6717	4444	{2022= 3766}	III 143	...	18 46 40	3·62	112 52·3	4·2	F, S, rr, Cl + neb	
6718	4445	3764	...	...	18 47 26	6·04	156 17·2	4·3	vF, S, R, glbM, *9 sp	
6719	4446	3765	...	...	18 48 3	6·43	158 47·0	4·4	vF, pL, R, vgvlbM	
6720	4447	2023	...	M 57, Darquier	18 48 23	2·23	57 8·6	4·3	! ! !, ⊙, B, pL, cE (in Lyra)	†
6721	4448	3767	...	...	18 48 51	5·15	147 56·8	4·4	pF, cS, R, vmbM	
6722	4449	3768	...	...	18 49 59	5·87	155 5·4	4·5	pF, S, E, glbM, 2 st 8 p	
6723	4450	3770	...	Δ 573	18 50 8	4·05	126 48·8	4·5	⊕, vL, vlE, vgbM, rrr, st14...16	
6724	4451	2024	...	...	18 50 25	2·84	79 49·3	4·5	Cl	
6725	4452	3769	...	...	18 50 26	4·87	144 7·5	4·5	eF, pL, R	
6726	5935	...	...	m 393, Schmidt	18 52 13	4·05	127 4·6	4·6	*6·7 in F, pL, neb	
6727	5936	...	...	m 394, Schmidt	18 52 15	4·05	127 3·8	4·6	*8 in F, pL neb	
6728	4453	...	VIII 13	...	18 52 21	3·28	99 7·6	4·6	Cl, vL, P	
6729	5937	...	...	m 395, Schmidt	18 52 28	4·05	127 8·5	4·6	Var *(11...) with neb ! !	
6730	4454	3771	...	...	18 52 32	6·47	159 6·8	4·7	vF, S, R, pmbM, *7·8 nf	
6731	...	...	...	J G Lohse	18 52 34	1·85	47 7·1	4·6	vF	
6732	...	...	...	Sw V	18 52 50	+1·39	37 48·0	−4·6	pB, vS, R, F *n	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Descripti n.	Notes.
					h m s	s	° ′	″		
6733	4455	3772	...	...	18 53 15	+5·55	152 23·6	−4·8	eeF, vglbM, v difficult	
6734	4456	3773	...	...	18 53 29	5·94	155 39·7	4·8	vF, S, R, glbM, p of 2	
6735	4457	2025	...	...	18 53 33	3·09	90 39·1	4·7	Cl. vL, P, st 12...	
6736	4458	3774	...	...	18 53 45	5·93	155 38 2	4·8	eF, S, R, glbM, f of 2	
6737	4459	2026	...	...	18 53 59	3·51	108 44·1	4·8	Cl, pL, pRi, R, st 12...15	
6738	4460	2027	...	...	18 54 50	2·81	78 35·3	4·8	Cl, P, lC	
6739	4461	3775	...	...	18 55 7	5·46	151 34·4	4·9	cF, vS, cE, psbM, 3 st p	
6740	5938	...	...	m 396	18 55 20	2·37	61 25	4·9	eeF, S	
6741	...	...	...	Pickering	18 55 25	3·11	90 38	4·9	○, stellar	
6742	4462	...	III 742	d'A	18 55 32	1 62	41 45·2	4·9	vF, stellar	
6743	4463	2028	...	...	18 55 58	2·35	60 55·6	4·9	Cl, pL, P, st 11...12	
6744	4464	3776	...	Δ 262	18 56 27	5·73	154 4·0	5·1	cB, cL, R, vg, svmbM, r	
6745	...	...	...	St X	18 57 7	1·96	49 27·3	5·0	vF, lEns	
6746	4465	3777	...	...	18 57 32	+5·52	152 10·6	5·1	eF, cS, R, glbM	
6747	...	...	...	Sw V	18 57 42	−1·07	17 23·5	5·0	eeF, v diffic, pB st sf	
6748	5939	...	...	St II	18 57 51	+2·56	68 35·8	5·1	pB, vS, bM	
6749	4466	2029	...	...	18 57 57	3·04	88 25·2	5·1	Cl, L, lC, st L & S	
6750	...	...	...	Sw II	18 58 27	0·92	31 1·9	5·1	vF, vS, R	
6751	5940	...	...	m 397, St XII	18 58 27	3·21	96 12·1	5·1	pB, S	
6752	4467	3778	...	Δ 295	18 58 28	5·32	150 11·8	5·2	⊕, B, vL, iR, rrr, st 11...16	
6753	4468	3779	...	...	18 59 38	5·09	147 15·5	5·3	pB, pL, R, gbM	
6754	4469	3780	...	...	19 0 34	4·65	140 51·5	5·4	pF, pL, mE 63°, vglbM	
6755	4470	2030	VII 19	...	19 0 51	2·98	85 59·3	5·4	Cl, vL, vRi, pC, st 12...14	
6756	4471	2031	VII 62	...	19 1 47	2·97	85 32·7	5·4	Cl, S, Ri, lC, st 11...12	
6757	...	...	...	Sw II	19 1 55	1·20	34 30·0	5·4	pF, mE, 3 F st inv	
6758	4472	3781	...	...	19 2 16	5·01	146 32·4	5·5	pB, S, R	
6759	...	...	...	Sw V	19 3 20	1·53	39 51·9	5·5	vF, S, R, vF D ∗ close sp	
6760	4473	...	...	Hind	19 4 5	3·05	89 11·7	5·6	pB, pL, vglbM (Auw. 44)	*,†
6761	4474	3782	...	...	19 4 14	4·65	140 53·2	5·7	vF, pS, iR	
6762	...	...	...	Sw II	19 4 18	0·47	26 17·5	5·6	eF, mE	
6763	...	...	...	Sw II	19 4 18	0·47	26 17·0	5·6	eF, vS, cE, F ∗ nr	
6764	...	...	...	Sw II	19 4 43	1·50	39 17·5	5·6	pF, pL, mE, sev vF st inv	
6765	5941	...	...	{m 398, St (II & MS)}	19 5 42	2·32	59 40·9	5·7	F, S, E	
6766	...	...	...	Pickering	19 5 57	1·75	43 57·7	5·7	○, stellar	
6767	...	...	...	J G Lohse	19 6 40	2·08	52 30·8	5·8	vF, S, R, stellar, S ∗ nr n	
6768	4475	3786	...	...	19 6 50	4·16	130 25·7	5·9	vF, S, R, pslbM	
6769	4476	3783	...	...	19 6 54	5·35	150 44·3	5·9	vF, S, R, lbM, 1st of 3	
6770	4477	3784	...	...	19 7 6	5·35	150 44·8	5·9	cF, vS, 2nd of 3	
6771	4478	3785	...	...	19 7 7	5·35	150 46·4	5·9	eF, S, 3rd of 3	
6772	4479	2032	IV 14	...	19 7 15	+3·14	92 57·1	−5·9	vF, L, R, vvlbM, r	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6773	4480	2033	...	...	19 8 4	+2·97	85 22·2	−6·0	Cl, P, lC	
6774	4481	2034	...	...	19 8 39	3·45	106 30·6	6·0	Cl, vL, lC	
6775	4482	2035	...	...	19 9 38	3·10	91 9·8	6·1	Cl, P, lC, st 10...11	
6776	4483	3787	...	...	19 10 23	5·69	154 8·4	6·2	pB, S, R, pgbM	
6777	4484	...	...	Lac I 13	19 10 46	6·92	161 45·6	6·2	Neb without st	
6778	5942	...	...	m 399	19 11 4	3·11	91 52	6·2	S, E, ill-defined disc	
6779	4485	2036	...	M 56	19 11 8	2·34	60 3·7	6·2	⊕, B, L, iR, gvmCM, rrr, st 11...14	
6780	4486	3788	...	...	19 11 18	4·95	146 1·8	6·3	vF, L, R, vglbM	
6781	4487	2037	III 743	...	19 11 38	2·93	83 42·9	6·3	O, F, L, R, vsbM disc, S ∗ nf	†
6782	4488	3789	...	...	19 11 39	5·28	150 10·7	6·3	cF, cS, R, lbM, ∗ 9 s	
6783	5943	...	...	St IV	19 12 40	1·77	44 14·8	6·3	eF, diffic	
6784	4489	3790	...	...	19 12 48	5·90	155 53·0	6·4	eeeF, pS, am S st	
6785	4490	2038	...	...	19 13 23	+3·10	91 21·4	6·4	eS, stellar	
6786	...	...	...	Sw V	19 13 38	−1·14	16 49·4	6·3	eeF, S, R, 2 st nf	
6787	...	...	...	Sw II	19 13 59	+0·86	29 49·7	6·4	eeF, pS, 4 st sf, e diffic	
6788	4491	3791	...	...	19 14 31	4·89	145 13·6	6·5	pB, S, mE, pslbM	
6789	...	...	...	Sw IV	19 15 28	0·51	26 18·1	6·5	eeF, pL, R, v diffic	
6790	...	...	...	Pickering	19 15 50	3·04	88 45·0	6·6	O, B, eS, stell = 9·5 mag	
6791	4492	...	...	Winnecke	19 15 56	2·10	52 28·5	6·5	vF (Auw 45)	
6792	...	...	...	J G Lohse	19 16 24	1·90	47 9·5	6·7	F, E 26°, glbM, ∗ 9·5 sf	
6793	4493	2039	VIII 81	...	19 17 14	2·57	68 6·1	6·7	Cl, P, lC	
6794	4494	3792	...	...	19 18 24	4·09	129 9·7	6·8	eF, pS, R, vgvlbM	
6795	4495	2040	...	...	19 19 7	3·00	86 44·8	6·9	Cl, Ri, bet 2 st 9	
6796	...	...	...	Sw II	19 19 25	0·81	29 7·5	6·8	vF, pS, mE ns	
6797	...	...	...	Peters	19 20 25	3·68	115 56·6	6·9	Neb with ∗ 9 m att f	
6798	...	...	...	Sw II	19 20 41	1·37	36 39·4	6·9	F, vS, R, ∗ v nr	
6799	4496	3793	...	...	19 20 47	4·94	146 11·7	7·1	eF, vS, R, lbM, 3 vS st nr	
6800	4497	2041	VIII 21	...	19 21 23	2·49	65 8·4	7·0	Cl, vL, pRi, vlC, st 10...	
6801	...	...	...	Sw IV	19 24 26	1·35	35 54·5	7·2	eF, pS, R, F ∗ s nr	
6802	4498	2042	VI 14	...	19 24 30	2·63	70 1·1	7·3	Cl, L, vC, E 0°, st 14...18	
6803	...	...	...	Pickering	19 24 39	2·86	80 13	7·3	O, stellar	
6804	4499	2043	VI 38	...	19 24 53	2·88	81 4·0	7·3	cB, S, iR, rrr	
6805	4500	3796	...	...	19 27 18	4·07	128 51·5	7·6	eF, R, vgbM	
6806	4501	3795	...	...	19 27 19	4·21	132 36·3	7·6	eF, vS, ∗ 14 att	
6807	...	...	...	Pickering	19 27 41	2·95	84 36	7·5	O, stellar	
6808	4502	3794	...	...	19 28 30	6·64	160 57·5	7·7	pB, E, biN, ∗ 8 f	
6809	4503	3798	...	Lac I 14, M 55, Δ 620	19 31 8	3·82	121 15·7	7·9	⊕, pB, L, R, vRi, vgbM, st 12...15	
6810	4504	3797	...	...	19 31 43	5·11	148 58·7	8·0	pS, R, vgbM	
6811	4505	2044	...	...	19 33 59	+1·79	43 44·8	−8·0	Cl, L, pRi, lC, st 11...14	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6812	4506	3799	...	...	19 34 7	+4·86	145 40·3	−8·1	pB, pS, pmE, glbM	
6813	5944	...	...	m 400	19 34 41	2.45	63 1	8·1	✱ in vF, S neb	
6814	4507	2045	III 744	...	19 35 0	3·30	100 38·5	8·2	pF, pL, R, bM, r	
6815	4508	2046	...	...	19 35 7	2·46	63 30·9	8·2	Cl, vL, pRi, lC, st 10...15	
6816	4509	3800	...	...	19 35 16	3·74	118 52·7	8·2	eF, pS, R, vlbM, ✱np	
6817	...	...	...	Sw II	19 35 26	0·76	27 55·6	8·0	eeF, pS, lE	
6818	4510	2047	IV 51	...	19 36 4	3·39	104 29·0	8·3	○, B, vS, R	†
6819	4511	2048	...	Harding 1827	19 36 30	2·05	50 8·5	8·3	Cl, vL, vRi, st 11...15	†
6820	5945	...	...	m 401	19 36 32	2·51	67 15	8·3	F, S, R, bM	
6821	5946	...	...	m 402	19 36 54	3·23	97 9	8·3	F, pL, R	
6822	...	...	...	Barnard	19 37 3	3·40	105 6	8·3	vF, L, E, dif	
6823	4512	2049	VII 18	...	19 37 14	2·56	67 1·8	8·3	Cl, cRi, E, st 11...12	
6824	4513	...	II 878	d'A	19 40 39	1·30	34 13·6	8·6	pB, iF, bM	
6825	...	...	...	Sw II	19 40 45	0·62	26 16·0	8·5	eF, vS, v diffic, F✱nr	
6826	4514	2050	IV 73	...	19 41 2	1·62	39 48·8	8·6	○, B, pL, R, ✱11 M	†
6827	...	...	...	St IX	19 42 47	2·61	69 8·0	8·8	vF, E, dif, sev st inv	
6828	4515	2051	VIII 73	...	19 43 30	2·91	82 26·4	8·8	Cl, P, lC	
6829	...	...	...	Sw IV	19 44 59	1·03	30 26·7	8·9	eF, pS, R, pB✱close s, p of 2	
6830	4516	2052	VII 9	...	19 45 4	2·57	67 15·8	9·0	Cl, L, pRi, pC, st 11...12	
6831	...	...	...	Sw IV	19 45 44	1·03	30 26·7	9·0	eF, S, R, f of 2	
6832	4517	2053	...	...	19 45 44	1·07	30 55·9	9·0	Cl, vL, lC, st 7...	
6833	...	...	...	Pickering	19 45 47	1·71	41 23·5	9·0	○, stellar	
6834	4518	2054	VIII 16	...	19 46 34	2·41	60 57·1	9·1	Cl, P, lC, st 11...12	
6835	...	...	...	St XII	19 46 45	3·34	102 55·8	9·1	F, pL, mE	
6836	...	...	...	St XII	19 46 53	3·35	103 2·9	9·1	vF, pL, R, dif	
6837	4519	2055	VIII 18	...	19 46 53	2·83	78 40·5	9.1	Cl, S, P	
6838	4520	2056	...	Mécbain, M 71	19 47 30	2·67	71 35·1	9·1	Cl, vL, vRi, pmC, st 11...16	
6839	4521	2057	VI 16?	...	19 48 14	2·70	72 28·4	9·2	Cl, vS, vC.	
6840	4522	2058	VIII 19	...	19 48 42	2·82	78 15·6	9·2	Cl, P, lC	
6841	4523	3802	...	...	19 48 58	3·82	122 11·5	9·3	vF, S, R, psbM	
6842	5947	...	...	m 403, d'A	19 49 19	2·42	61 5·4	9·3	F, pL, vlE	
6843	4524	2059	...	...	19 49 32	2·82	78 12·6	9·3	Cl, S, P	
6844	4525	3801	...	...	19 49 43	5·67	155 36·8	9·4	eF, vS, R, psbM, ✱11 np	
6845	4526	3803	...	...	19 50 50	4·36	137 27·5	9·4	vF, S, vlE, glbM	
6846	5948	...	...	St V	19 51 2	2·33	58 1·0	9·4	eF, vS, 3 st inv	
6847	4527	...	II 202	...	19 51 23	2·42	61 1·7	9·4	Neb, r	*
6848	4528	3804	...	...	19 51 33	4·85	146 28·3	9·5	eF, eL, R, vglbM, 2 st f	
6849	4529	3805	...	...	19 51 48	4·08	130 35·4	9·5	pB, S, R, vS✱np	
6850	4530	3806	...	...	19 52 28	4·76	145 13·8	9·6	vF, S, R, bM	
6851	4531	3807	...	...	19 53 19	4·40	138 39·2	9·6	pF, S, vlE, psbM	
6852	5949	...	...	m 404	19 53 28	+3·04	88 39	−9·6	F neb, am st	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6853	4532	2060	...	M 27	19 53 33	+2·59	67 39·6	−9·6	!!!, vB, vL, biN, iE (Dumbbell)	†
6854	4533	3808	...	...	19 54 41	4·72	144 45·7	9·8	F, S, vlE, glbM	
6855	4534	3809	...	...	19 55 32	4·85	146 47·0	9·8	pF, S, R	
6856	4535	2063	...	...	19 56 9	1·35	34 15·2	9·8	Cl, pS, pmC, iR, st 12...16	
6857	4536	2062	III 144	...	19 56 24	2·31	56 51·6	9·8	F, am Milky Way st	
6858	4537	2061	...	...	19 56 24	2·85	79 7·4	9·8	Cl, cL, E, pRi, st 13...	
6859	4538	...	...	G P Bond	19 56 40	3·07	89 56·7	9·9	vSCl, * 10 p1s, s1′29″(Auw 46)	
6860	4539	3810	...	...	19 56 41	5·21	151 29·5	9·9	F, pS, gbM	
6861	4540	3811	...	Δ 425	19 57 5	4·40	138 46·1	9·9	B, S, cE, gpmbM	
6862	4541	3812	...	...	19 57 40	4·85	146 47·3	10·0	F, S, lE, glbM	
6863	4542	2065	...	...	19 57 47	3·15	93 57·0	9·9	Cl, S, vmC, st 19	
6864	4543	2064	...	Méchain, M 75	19 57 49	3·55	112 19·0	10·0	⊕, B, pL, R, vmbMBN, rr	
6865	5950	...	...	m 405	19 58 20	3·27	99 26	10·0	F, S, E	
6866	4544	2066	VII 59	...	19 59 11	1·97	46 23·8	10·0	Cl, L, vRi, cC	
6867	4545	3813	...	...	19 59 32	4·73	145 11·1	10·1	eeF, L, pmE	
6868	4546	3814	...	...	19 59 41	4·39	138 46·4	10·1	vB, S, R, pgvmbM	
6869	...	...	...	Sw II and IV	19 59 48	0·48	24 9·1	10·0	pB, pS, R	
6870	4547	3815	...	...	19 59 58	4·38	138 41·3	10·1	cF, cS, E 90°, gbM	
6871	4548	2067	...	Σ 2630	20 0 38	2·26	54 37·2	10·1	Cl, st L and S, ⁂ inv	
6872	4549	3816	...	...	20 2 3	6·43	161 11·9	10·3	{ F, pS, lE, glbM, * 9 p 10″·5, 1st of 4	
6873	4550	2068	...	Σ 2631	20 2 5	2·64	69 17·9	10·3	Cl, lC, st 10...13, ⁂ inv	
6874	4551	2069	VIII 86	...	20 2 44	2·18	52 9·6	10·3	Cl, P, lC	
6875	4552	3819	...	...	20 3 15	4·28	136 34·4	10·4	F, vS, R, vgmbM, * 7 nf	
6876	4553	3817	...	...	20 3 28	6·43	161 17·1	10·5	pB, S, R, eS * sf, 2nd of 4	
6877	4554	3818	...	...	20 3 45	6·43	161 17·2	10·5	vF, vS, R, 3rd of 4	
6878	4555	3821	...	...	20 4 3	4·21	134 56·5	10·4	vF, pL, R, glbM	
6879	...	...	...	{ Pickering, Copeland }	20 4 4	2·73	73 29·3	10·4	○, stellar = 10 m	
6880	4556	3820	...	...	20 4 41	6·42	161 17·1	10·5	F, S, R, r, vS * att, 4th of 4	
6881	...	...	...	Pickering	20 5 43	2·21	53 0	10·5	○, stellar	
6882	4557	...	VIII 22	...	20 5 58	2·51	63 42·6	10·5	Cl, P, lC	
6883	4558	2070	...	...	20 5 59	2·26	54 34·3	10·5	Cl, pRi, ⁂ inv	
6884	...	...	...	Copeland	20 5 59	1·89	43 57·2	10 5	○, stellar	
6885	4559	2071	VIII 20	...	20 6 7	2·51	63 55·7	10·6	Cl, vB, vL, Ri, lC, st 6...11	†
6886	...	...	...	Copeland	20 6 29	2·67	70 25·7	10·6	○, stellar = 10 m	
6887	4560	3822	...	...	20 6 38	4·58	143 12·5	10·6	pF, cL, pmE, glbM	
6888	4561	...	IV 72	...	20 7 22	2·19	52 1·5	10·6	F, vL, vmE, ⁂ att	†
6889	4562	3823	...	...	20 8 6	4·64	144 23·0	10·8	vF, L, lE	
6890	4563	3824	...	...	20 8 30	4·21	135 13·9	10·8	pF, S, R, vglbM	
6891	...	...	...	Copeland	20 8 32	+2·83	77 41·2	−10 7	○, stellar = 9·5 m	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6892	5951	...	...	d'A	20 10 33	+2·71	72 23·9	−10·9	eF neb ✱ (? eS Cl)	
6893	4564	3825	...	...	20 10 43	4·34	138 40·9	10·9	pF, S, R, svbM ✱ 12	
6894	4565	2072	IV 13	...	20 10 45	2·42	59 51·8	10·9	! !, ⊙, F, S, vvlE	†
6895	4566	...	VIII 83	...	20 12 24	1·75	40 12·1	11·0	Cl, pRi, lC	
6896	4567	...	...	d'A	20 12 26	2·42	59 47·4	11·0	Cl (+ neb ?), S, st vS	
6897	5952	...	...	m 406	20 13 18	3·33	102 42	11·1	vF, S	
6898	5953	...	...	m 407	20 13 24	3·33	102 48	11·1	F, S, iR	
6899	4568	3826	...	...	20 14 4	4·43	140 52·0	11·2	F, S, R, glbM, am st	
6900	5954	...	...	m 408	20 14 18	3·13	92 59	11·2	vF, S, R	
6901	5955	...	...	m 409	20 14 22	2·95	83 59	11·2	eF	
6902	4569	3827	...	...	20 14 53	4·14	134 5·9	11·2	F, cS, R, bM	
6903	4570	2073	...	...	20 15 40	3·47	109 45·2	11·3	cL, E, bM ✱ 17, ✱ 10 att n	
6904	4571	2074	...	...	20 15 46	2·55	64 41·5	11·3	Cl, S, vlC, st 10...11	
6905	4572	2075	IV 16	...	20 16 9	2·68	70 20·4	11·3	! !, ○, B, pS, R, 4 S st nr	†
6906	5956	...	...	m 410	20 16 39	2·95	83 59	11·3	pF, pL, R	
6907	4573	2076	III 141	...	20 16 44	3·59	115 14·9	11·4	cF, cL, vlE, vglbM, r, 3 st p	
6908	5957	...	...	m 411	20 16 46	3·59	115 15	11·4	eF, vS, lE, h 2076 p	
6909	4574	3828	...	...	20 17 44	4·27	137 29·0	11·4	pB, pL, gbM, 2 st 10 nr	
6910	4575	2077	VIII 56	...	20 18 6	2·14	49 40·2	11·4	Cl, pB, pS, P, pC, st 10...12	
6911	...	...	...	Sw II	20 18 16	0·56	23 42·6	11·4	eF, L, lbM, pB ✱ nr	
6912	...	...	...	Holden	20 18 50	3·45	109 4	11·5	vF, 2 st 14·15 np, ✱ 8 f	
6913	4576	2078	...	M 29	20 18 52	2·21	51 56·1	11·5	Cl, P, lC, st L and S	
6914	...	...	...	St XII	20 19 52	2·08	47 58·2	11·5	vF, vL, iR, dif, 2 st att p	
6915	5958	...	...	m 412	20 20 27	3·14	93 30·2	11·6	pB, S, R	
6916	...	...	...	Sw VI	20 20 35	1·32	32 4·0	11·6	eeF, pS, F ✱ close p, v diffic	
6917	5959	...	...	m 413	20 20 38	2·92	82 22	11·6	vF, S, att to a S ✱	
6918	4577	3830	...	...	20 20 50	4·27	137 56·5	11·7	vF, ✱ 12 att sp	
6919	4578	3831	...	...	20 22 0	4·14	134 40·9	11·7	eF, pS, R, vgvlbM	
6920	4579	3829	...	...	20 22 36	9·44	170 28·8	11·9	pB, cS, R, psmbM	
6921	5960	...	...	m 414	20 22 36	2·56	64 45	11·8	F, S, E	
6922	5961	...	...	m 415	20 22 36	3·12	92 39	11·8	vF, pL, R	
6923	4580	3832	...	...	20 23 2	3·73	121 17·6	11·8	pF, cS, R, gbM, bet 2 st	
6924	...	...	...	L I	20 24 10	3·59	115 57·0	11·9	vF, pS, R, sbMN	
6925	4581	3834	...	...	20 25 36	3·75	122 26·9	12·0	cB, L, mE 6°, pslbM	
6926	4582	2079	III 142	...	20 25 52	3·12	92 29·7	12·0	vF, pL, E 176°, p of 2	
6927	5962	...	...	m 416	20 25 52	2·89	80 35	12·0	eF, lE	
6928	5963	...	...	m 417	20 26 6	2·89	80 32·8	12·0	pB, pL, mE	
6929	4583	2080	...	...	20 26 8	3·12	92 30·5	12·0	vF, vS, sf of 2	
6930	5964	...	...	m 418	20 26 13	2·89	80 37	12·0	F, mE	
6931	...	...	...	L I	20 26 20	3·29	101 52·0	12·0	eF, pS, E 120°, gbM	
6932	4584	3833	...	...	20 26 29	+6·80	164 6·8	−12·1	F, S, R, gbM, 5 st p	

No.	G.C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6933	5965	...	...	Schultz	20 26 47	+2·94	83 5·3	−12·1	pB, vS, h 2081 f	*
6934	{4585 = 4586}	2081	I 103	...	20 27 20	2·94	83 4·2	12·1	⊖, B, L, R, rrr, st 16..., *9 p	
6935	4587	3835	...	...	20 27 59	4·46	142 35·2	12·2	pB, cL, R, glbM, r, p of 2	
6936	...	...	...	L I	20 28 10	3·58	115 46·1	12·2	vF, vS, R, slbM	
6937	4588	3836	...	...	20 28 25	4·46	142 38·2	12 2	vF, cS, R, slbM, f of 2	
6938	4589	2082	VIII 17	...	20 28 35	2·65	68 13·9	12·2	Cl, vL, P, vlC	
6939	4590	2083	VI 42	...	20 28 36	1·21	29 49·9	12·1	Cl, pL, eRi, pCM, st 11...16	
6940	4591	...	VII 8	...	20 28 43	2·51	62 9 9	12·2	Cl, vB, vL, vRi, cC, st pL	
6941	5966	...	...	St IV	20 29 1	3·17	95 6·2	12·2	eF, lE, lbM	
6942	4592	3837	...	...	20 30 4	4·56	144 47·7	12·3	pB, pL, R, pslbM	
6943	4593	3838	...	...	20 31 4	5·83	159 14·3	12·4	pF, L, mE, vglbM vS *	
6944	5967	...	...	m 419	20 31 30	2·95	83 30	12·4	pF, S, R	
6945	5968	...	...	{m 420 St I}	20 31 37	3·17	95 27·6	12·4	pF, vS, R, mbM	
6946	4594	2084	IV 76	...	20 31 57	1·27	30 20·3	12·4	vF, vL, vg, vsbM, rr	†
6947	4595	3839	...	...	20 32 31	3·75	122 58·9	12·5	vF, L, R, gbM	
6948	4596	3840	...	...	20 33 5	4·50	143 51·4	12·5	vF, pS, cE, lbM	
6949	...	...	...	Sw V	20 33 8	0·88	25 40·3	12·4	eF, pS, iR	
6950	4597	2085	VIII 23	...	20 34 41	2·77	73 50·6	12·6	Cl, P, vlC	
6951	...	...	...	Sw II	20 35 16	0·77	24 23·0	12·6	pB, pL, lE	
6952	...	...	...	Coggia	20 35 53	0·74	24 3·1	12·6	pB, oval, dif, * 15 close f	
6953	...	...	...	Sw II	20 36 8	0·81	24 43·5	12·6	eeF, pL, R, v diffic	
6954	5969	...	...	m 421	20 37 1	3·02	87 18	12·8	F, S, vlE	
6955	5970	...	...	m 422	20 37 12	3·03	87 55	12·8	eF, pL, R	
6956	4598	2086	III 219	...	20 37 17	2·85	77 59·4	12·8	vF, S, stellar, * * att	
6957	5971	...	...	m 423	20 37 41	3·03	87 55	12·8	vF, S, R	
6958	4599	3841	...	...	20 39 39	3·88	128 30·4	13·0	B, cS, R, pgmbM, 4 st p	
6959	...	...	...	Bigourdan	20 39 47	3·07	90 4·4	13·0	vF	
6960	4600	2088	V 15	...	20 39 53	2·48	59 47·2	12·9	!! pB, cL, eiF, κ Cygni inv	†
6961	4602	...	...	Ld R	20 40 0	3·07	90 8·6	13·0	eF, vS	
6962	4601	2087	II 426	...	20 40 8	3·07	90 11·0	13·0	cF, S, R, bM	
6963	4...	...	...	Bigourdan	20 40 9	3·07	89 59·0	13·0	neb * 13 m	
6964	4605	2089	II 427	...	20 40 14	3·07	90 12·6	13·0	F, vS, R, bM, * 14 sf ½′	
6965	4603	...	...	Ld R	20 40 15	3·07	90 5·0	13·0	vF, vS	
6966	...	...	...	d'A, Bigourdan	20 40 15	3·07	90 8·7	13·0	cF, vS	
6967	4604	...	...	Ld R	20 40 23	3·07	90 5·8	13·0	eF, vS, *10 50″ f	
6968	...	...	...	St XIII	20 41 1	3·23	98 52·5	13·0	F, S, R, gbM, F * inv	
6969	5972	...	...	m 424	20 41 36	2·94	82 47	13·1	F, pL, E	
6970	4606	3842	...	...	20 42 15	4·24	139 17·7	13·1	pB, S, lE, gbM	
6971	5973	...	...	m 425	20 42 28	+2·97	84 32	−13·1	vF, S, R	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
6972	5974	...	...	m 426	20 43 14	+2·90	80 36	−13·2	F, S, R	
6973	...	...	...	Bigourdan	20 44 42	3·18	96 25	13·2	vF, S, r	
6974	5975	...	...	Ld R*	20 44 54	2·49	59 53 ±	13·2	Neb ✶, neby cE pf	
6975	...	...	...	Bigourdan	20 44 57	3·18	96 23	13·2	vF, S, ? = m 427	
6976	5976	...	...	m 427	20 45 1	3·18	96 17	13 2	eF, iR	
6977	5977	...	...	m 428	20 45 5	3·18	96 16	13·2	vF, S, iR	
6978	5978	...	...	m 429	20 45 11	3·18	96 14	13·2	vF	
6979	4607	...	II 206	...	20 45 16	2·45	58 23·8	13·3	vF, S, iE, scv F st f nr	
6980	...	...	...	Bigourdan	20 45 26	3·18	96 21	13·3	vF, S, r	
6981	4608	2090	...	Méchain, M 72	20 45 46	3·30	103 3·8	13·3	⊕, pB, pL, R, gmCM, rrr	
6982	4609	3843	...	...	20 47 8	4·36	142 24·4	13·5	vF, S, E, p of 2	
6983	4610	3844	...	...	20 47 19	4·04	134 30·5	13 5	eF, eS, R	
6984	4611	3845	...	...	20 47 48	4·35	142 24·2	13·5	F, pL, vlE, vgbM, f of 2	
6985	...	...	...	L I	20 48 20	3·27	101 36·8	13·5	eF, vS, iR	
6986	...	...	...	L I	20 48 20	3·41	109 6·8	13 5	vF, vS, R, glbMN	
6987	4612	3846	...	...	20 48 21	4·21	139 10·2	13·5	pF, S, vlE, gpmbM, B ✶ pr′	
6988	5979	...	...	m 430	20 49 7	2·90	80 3	13·5	eF, pL, R	
6989	4613	...	VIII 82	...	20 49 13	2·09	45 15·5	13·6	Cl, cL, st pS	
6990	4614	3847	...	...	20 49 27	4·53	146 6·4	13·6	eeF, vS, vmE o°, ✶ 13 att, n	
6991	4615	2091	VIII 76	...	20 49 52	2·92	43 15·4	13·6	Cl, L, P, vlC	
6992	4616	2092	V 14	...	20 50 35	2·48	58 50·2	13·6	!!, eF, eL, eE, eiF, bifurcated	†
6993	...	...	...	L I	20 51 10	3·55	116 13·9	13·7	vF, vS, R, sbMN	
6994	4617	...	...	M 73	20 51 16	3·30	103 10·5	13·7	Cl, eP, vlC, no neb	
6995	4618	2093	...	...	20 51 20	2·49	59 19·3	13·7	F, eL, neb & st in groups	*†
6996	4619	2094	...	...	20 51 31	2·10	45 4	13·7	Cl, P, lC	
6997	4620	...	VIII 58	...	20 51 34	2·12	45 53·4	13·7	Cl, P, lC, st L	
6998	5980	...	...	m 431	20 53 16	3·60	118 34	13·8	eeF, vS	
6999	5981	...	...	m 432	20 53 38	3·60	118 36	13·8	eeF, vS	
7000	4621	2096	V 37?	...	20 53 48	2·14	46 13·1	13·8	F, eeL, dif nebulosity	
7001	4622	2095	...	...	20 53 55	3·08	90 44·6	13·9	eF, S, E o°	
7002	4623	3848	...	...	20 53 57	4·20	139 35·0	13·9	eF, eS, R, bM	
7003	5982	...	...	d'A	20 54 9	2·77	72 44·5	13·9	vF, vS, lE, ✶ 15 close f	
7004	4624	3849	...	...	30 54 14	4·20	139 40·5	13·9	eF, R, lbM, ✶ 11 f	
7005	5983	...	...	d'A	20 54 16	3·30	103 25·8	13·9	Cl, S, P (? neb)	
7006	4625	2097	I 52	...	20 54 58	2·80	74 21·5	13·9	B, pL, R, gbM	
7007	4626	3850	...	...	20 55 23	4·35	143 6·1	14·0	pB, S, R, psbM, am st	
7008	4627	2099	I 192	...	20 55 28	1·75	35 59 8	14·0	cB, L, E 45° ±, r, ✶✶ att	†
7009	4628	2098	IV 1	LL 40765	20 56 33	3·27	101 54·9	14·0	!!!, ○, vB, S, elliptic	†
7010	4629	2100	...	...	20 57 6	3·29	103 3·1	14·1	eF, pL, R, r	
7011	4630	2101	...	...	20 57 8	2·05	43 13·8	14·1	Cl, no description	
7012	4631	3851	...	...	20 57 21	+4·03	135 22 2	−14·1	F, pL, E, vgvlbM, ✶ p	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7013	4632	2102	II 203	...	20 57 38	+2·54	60 39·3	−14·1	pB, cS, R, psbM, pB ∗ np	
7014	4633	3852	...	...	20 58 18	4·11	137 44·7	14·2	pF, S, R, bM, 2 st 12 n	
7015	...	...	...	St IX, Sw II	20 58 53	2·90	79 8·6	14·2	vF, pS, glbM	
7016	...	...	...	L I	20 59 15	3·53	116 3·1	14·2	vF, eS, R, bMN, 1st of 3	
7017	...	...	...	L I	20 59 15	3·53	116 3·1	14·2	eF, vS, R, bMN, 2nd of 3	
7018	...	...	...	L I	20 59 15	3·53	116 1·1	14·2	vF, vS, vlE, glbM, 3rd of 3	
7019	...	...	...	L I	20 59 ±	3·51	114 58·1	14·2	vF, vS, R, sbMN	
7020	4635	3853	...	...	20 59 39	5·14	154 35·8	14·3	pB, cS, lE, pgbM	
7021	4636	3854	...	...	20 59 39	5·00	154 5·6	14·3	pF, cS, R, psbM, ∗ 7·8 p	
7022	4637	3855	...	...	20 59 45	4·19	139 52·2	14·3	eeF, S, R, B $\overset{*}{*}$ ∗ sf	
7023	4634	...	IV 74	...	20 59 51	0·77	22 23·3	14·3	∗ 7 in eF, eL neby	*
7024	4638	2103	VIII 57	...	21 0 46	2·26	49 4·0	14·3	Cl, P, lC, st 10...	
7025	5984	...	...	m 433	21 1 14	2·80	74 13	14·3	vF, vS, R, stell	
7026	...	...	...	Burnham	21 1 33	2·06	42 42·8	14·3	pB, biN, ⊙	
7027	...	...	...	St IX, Webb	21 1 48	2·24	48 19·6	14·3	○, stellar = 8·5 m	
7028	5985	...	...	m 434	21 1 48	2·77	72 5	14·3	vF, S, vlE	
7029	4639	3856	...	...	21 2 7	4·17	139 51·4	14·4	B, cS, R, pgmbM	
7030	...	...	...	L I	21 2 15	3·43	111 4·2	14·4	vF, vS, iR, bMN	
7031	4640	2105	VIII 74	...	21 2 46	1·95	39 43·2	14·4	Cl of triple st, lC	
7032	4641	3857	...	...	21 2 47	5·46	158 52·0	14·5	vF, cS, R, glbM	
7033	5986	...	...	m 435	21 3 2	2·83	75 27	14·4	vF, S, R	
7034	5987	...	...	m 436	21 3 4	2·83	75 25	14·4	vF, vS, R	
7035	...	...	...	Mu II	21 3 15	3·48	113 39·2	14·4	eF, S, iR	
7036	4642	2104	...	...	21 3 37	2·83	75 7·1	14·5	Cl, lC	
7037	4643	2106	...	...	21 5 3	2·47	56 50·8	14·6	Cl, pRi, iF, st 11...15	
7038	4644	3858	...	...	21 5 39	4·08	137 47·8	14·6	pB, pL, lE, gbM	
7039	4645	2107	...	...	21 6 14	2·15	44 53·5	14·6	Cl, vL, pRi, E, st 10...	
7040	...	...	...	Harrington	21 6 21	2·94	81 43	14·7	eF, vL, mE ns (A. N. 2479)	
7041	4647	3859	...	...	21 6 56	4·11	138 56·7	14·7	B, cS, cE, psmbM, ∗ 10 f	
7042	4646	...	III 209	d'A, Schultz	21 7 5	2·86	77 0·0	14·7	vF, S, R	
7043	5988	...	...	m 437	21 7 23	2·86	76 57	14·7	vF, S, R	
7044	4648	2110	VI 24	...	21 7 45	2·25	48 4·7	14·7	Cl, vF, pL, vRi, vC, st 15...18	
7045	4649	2108	...	...	21 7 49	3·01	86 3·6	14·7	eF	*
7046	4650	2109	III 858	...	21 7 53	3·04	87 44·3	14·7	eF, pL, R, lbM	
7047	5989	...	...	St V	21 9 14	3·09	91 24·4	14·8	eF, vS, biN pf	
7048	...	...	...	St IX	21 9 15	2·14	44 17·4	14·8	pF, pL, dif, iR, vlbM	
7049	4651	3860	...	Δ 406	21 9 27	4·11	139 8·9	14·8	vB, pS, E, mbM	
7050	4652	2111	...	...	21 9 33	2·42	54 23·3	14·8	Cl, no description	
7051	4654	2113	...	d'A	21 12 20	3·22	99 22·5	15·0	vF, R, gbM, $\overset{*}{*}$ nr	
7052	4653	2112	III 145	...	21 12 23	2·64	64 8·5	15·0	F, S, vlE, r	†
7053	5990	...	...	m 438, d'A	21 14 48	+2·71	67 30·5	−15·1	pB, S, vlE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7054	5991	...	...	St IV	21 15 11	+2·37	51 25·2	−15·1	vF, vS, R, F ∗ inv	
7055	4655	2114	...	...	21 15 26	1·72	32 59 8	15·1	Cl, F, pS, P	
7056	5992	...	...	m 439	21 15 37	2·78	71 56	15·2	pF, S, R	
7057	4656	3861	...	...	21 15 58	3·88	133 3 7	15·2	eF, vS, R, p of 2	
7058	4657	2115	...	...	21 16 17	2·02	39 47·1	15·2	Cl, P, lC	
7059	4658	3862	...	...	21 16 42	4·61	150 37·3	15·3	B, pL, lC, gpmbM	
7060	4659	3863	...	...	21 16 54	3·88	133 0·4	15·3	vF, pS, R, f of 2	
7061	4660	3864	...	...	21 17 59	4·09	139 40·2	15·3	eeF, vS, R	
7062	4661	2116	VII 51	...	21 18 12	2·18	44 13·1	15·3	Cl, pS, pRi, pC, st 13...	
7063	4662	2117	...	...	21 18 45	2·45	54 5·7	15·3	Cl, P, st 10...	
7064	4663	3865	...	...	21 19 9	4·22	143 23·3	15·4	eF, pL, vmE 91°, ∗ s	
7065	5993	...	...	m 440, d'A	21 19 20	3·18	97 36·3	15·4	vF, sbM (m has 19^m 33ˢ)	
7066	...	...	...	Sw IV	21 19 29	2·86	76 25·2	15·4	eeF, close sf of M of 3 F st	
7067	4664	2118	VII 50	...	21 19 37	2·14	42 34·8	15·4	Cl, P, ? neb	
7068	5994	...	...	m 441	21 19 47	2·89	78 26	15·4	vF, close to a S ∗	
7069	5995	...	...	m 442	21 20 52	3·10	92 15	15·5	vF, S, R, stell	
7070	4665	3866	...	...	21 21 27	3·88	133 41·8	15·5	F, cL, lE, gvlbM, p of 2	
7071	4666	2119	...	...	21 21 31	2·15	42 40·4	15·5	Cl, S, C, cE	
7072	4667	3867	...	...	21 21 38	3·88	133 46·0	15·5	F, S, R, vglbM, f of 2	
7073	5996	...	...	m 443	21 21 52	3·25	102 6	15·5	vF, vS, iR	
7074	5997	...	...	m 444	21 22 41	2·98	83 49	15·6	vF, S, E	
7075	4668	3868	...	...	21 22 49	3·76	129 14·0	15·6	cF, cS, R, pgbM	
7076	4669	...	III 936	...	21 22 52	1·46	27 43·5	15·6	vF, er	
7077	5998	...	...	m 445	21 22 55	3·05	88 12	15·6	F	
7078	4670	2120	...	{Maraldi, M 15 = LL 40815}	21 23 13	2 90	78 26·7	15·6	{!, ⊕, vB, vL, iR, vsmbM, rrr, st vS}	
7079	4671	3869	...	...	21 23 32	3·90	134 40·9	15·6	B, R, cS, psbM	
7080	5999	...	...	m 446	21 23 48	2·66	63 54	15·6	vF, S, vlE	
7081	4672	2121	III 859	...	21 24 18	3·04	88 7·4	15·7	F, S, R, mbM, ∗ 14 s	
7082	4673	2122	VII 52	...	21 24 23	2·19	43 31·1	15·7	Cl, L, cRi, lC, st 10...13	
7083	4674	3870	...	Δ 263?	21 24 39	4·81	154 31·2	15·7	pF, cL, vlE, vgpmbM, r	
7084	4675	2123	...	...	21 25 11	2·82	73 11·5	15·7	Cl, lC	
7085	6001	...	...	m 447	21 25 28	2·98	84 2	15·7	eF, S, E	
7086	4676	2124	VI 32	...	21 25 43	2·04	39 1·9	15·7	Cl, cL, vRi, pC, st 11...16	
7087	4677	3871	...	...	21 25 44	3·80	131 26·5	15·8	cF, S, R, gbM	
7088	...	...	...	Baxendell	21 26 10 ±	3·09	91 0 ±	15·8	eF, eL, dif, Epf, n of M 2	*
7089	4678	2125	...	{Maraldi, M 2 = LL 41928}	21 26 15	3·09	91 26·5	15·8	{!!, ⊕, B, vL, gpmbM, rrr, st eS}	†
7090	4679	3872	...	...	21 26 36	4·25	145 10·8	15·8	pB, pL, vmE 127°, g, pslbM	
7091	4680	3873	...	...	21 26 51	3·70	127 24·1	15·8	eF, pL, vgbM, ∗ 6 f 40ˢ	
7092	4681	2126	...	M 39	21 27 13	+2·16	42 11·0	−15·8	Cl, vL, vP, vlC, st 7...10	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7093	4682	2127	...	...	21 29 5	+2·24	44 37·1	−15·9	Cl, P, lC	
7094	...	...	...	Sw II	21 29 33	2·90	77 50·7	15·9	∗ in eeF neby, v diffic	
7095	4683	3875	...	...	21 30 4	3·83	133 10·4	16·0	F, pL, R, vglbM, ∗ 13 inv	
7096	4684	3874	...	...	21 30 20	4·76	154 32·0	16·0	vF, S, R, vS ∗∗ nf	
7097	4685	3877	...	...	21 31 24	3·82	133 10·3	16·1	B, S, vlE, mbM	
7098	4686	3876	...	...	21 32 0	6·18	165 44·4	16·1	pF, R, g, psmbM, am st	
7099	4687	2128 = 3878	...	M 30	21 32 25	3·42	113 48·7	16·1	!, ⊕, B, L, lE, gpmbM, st 12...16	†
7100	...	...	...	Bigourdan	21 32 27	2·95	81 44	16·1	vF, r	
7101	6002	...	...	m 448	21 32 41	2·95	81 39	16·1	F, vS, R, stell	
7102	6003	...	...	m 449	21 32 43	2·99	84 20	16·1	F, pL, R	
7103	...	...	...	Mu II	21 32 48	3·41	113 6·0	16·1	vF, vS, R, gbM, 1st of 2	
7104	...	...	...	Mu II	21 32 48	3·41	113 4·0	16·1	vF, vS, iR, gbMN, 2nd of 2	
7105	...	...	...	L I	21 33 ±	3·22	100 58·1	16·1	F, vS, E 130°, smbMN, ∗ np	
7106	4688	3879	...	...	21 33 0	4·13	143 20·5	16·1	eF, cS, lE, vglbM	
7107	4689	3880	...	...	21 33 22	3·87	135 25·6	16·2	vF, cL, R, vglbM	
7108	6004	...	...	m 450	21 33 31	3·17	97 24	16·1	vF, S, R, stell	
7109	4690	3881	...	...	21 33 32	3·63	125 4·9	16·2	eF, vS, am st	
7110	4691	3882	...	...	21 33 48	3 62	124 48·2	16·2	F, S, R, bM	
7111	6005	...	...	St IV	21 34 30	3·17	97 20·7	16·2	eF, eS, R, bM	
7112	...	...	...	Sw IV	21 35 34	2·90	78 3·3	16·3	eeF, S, R, pB ∗ close p	
7113	6006	...	...	m 451	21 35 40	2·90	78 1	16·3	vF, S, stell	
7114	...	...	...	...	21 36 13	2·35	47 47·7	16·3	Nebulous var ∗, ? ○	*
7115	...	...	...	L I	21 36 15	3·45	116 0·2	16·3	vF, pS, mE 90°, com, 2 st inv	
7116	6007	...	...	m 452	21 36 29	2·65	61 41	16·3	vF, pL, mE	
7117	4692	3883	...	...	21 36 33	3·97	139 4·0	16·3	F, S, R, glbM, p of 2	
7118	4693	3884	...	...	21 36 57	3·96	138 59·8	16·3	F, S, R, glbM, f of 2	
7119	4694	3885	...	...	21 37 11	3·90	137 9·6	16·4	F, S, R, gbM	
7120	6008	...	...	m 453	21 37 12	3·17	97 10	16·3	vF, S, vlE	
7121	6009	...	...	St IV	21 37 36	3·13	94 14·7	16·4	vF, vS, R, vlbM	
7122	4695	...	...	Markree	21 38 21	3·20	99 28·5	16·4	Nebulous ∗ 10·11 or vS Cl (Auwers 47)	
7123	4696	3886	...	...	21 38 40	5·28	160 58·7	16·5	pB, S, R, vgbM, ∗ 9 f	
7124	4697	3888	...	...	21 38 45	4·02	141 12·8	16·4	pB, L, pmE, vgbM	
7125	4698	3887	...	...	21 38 56	4·47	151 21·3	16·5	eF, pL, R, sp of 2	
7126	4699	3889	...	...	21 38 59	4·46	151 15·2	16·5	pB, pS, lE, gbM, nf of 2	
7127	4700	2129	...	...	21 39 9	2·01	36 1·4	16·4	Cl, S, P, lC	
7128	4701	2130	VII 40	...	21 39 17	2·05	36 56·3	16·4	Cl, S, pRi, has a ruby ∗ 9·5	
7129	4702	2131	IV 75	...	21 39 45	1·39	24 32·3	16·4	!, cF, pL, gbM ∗ ∗	
7130	4703	3890	...	...	21 39 52	3·61	125 5·7	16·5	pB, S, R, glbM	
7131	6010	...	...	m 454	21 40 1	+3·26	103 53	−16·5	vF, S, vlE, vgbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7132	...	...	...	Sw II	21 40 47	+2·94	80 24·5	−16·5	vF, pL, lE, bet 2 st	
7133	...	...	...	Bigourdan	21 41 10	1·40	24 28·5	16·5	vF, pL	
7134	...	...	...	Peters	21 41 20	3·25	103 37 7	16·5	pF, vS, ∗ 11 n	
7135	4704	3891	...	...	21 41 22	3·61	125 31·7	16·6	pB, pL, R, vgbM, ∗ 14 att p	
7136	...	...	...	Mu II	21 41 25	3·24	102 26·2	16·5	eF, vS, R (neb?), ∗ 9·5 f 2′	
7137	4705	2132	II 261	...	21 41 44	2·77	68 29·3	16·6	F, pS, R, vglbM, r	
7138	6011	...	...	m 455	21 42 14	2·91	78 9	16·6	vF, vS, stell	
7139	4706	...	III 696	...	21 42 15	1·58	26 49·5	16·6	vF, cS, R, r	
7140	4707	3892	...	...	21 42 29	4·23	147 12·1	16·6	pF, cS, R, bM	
7141	4708	3893	...	...	21 42 30	4·19	146 13·6	16 6	F, L, R, gpsmbM (? = h 3892)	
7142	4709	2134	VII 66	...	21 42 34	1·44	24 50·7	16·6	Cl, cL, cRi, pC, st 11...14	
7143	4710	2133	...	...	21 42 41	2·65	60 41·5	16·6	vF, ? D ∗ (inv in neb?)	*
7144	4711	3894	...	...	21 43 34	3·92	138 54·5	16·7	vB, pS, R, mbMN	
7145	4712	3895	...	...	21 44 13	3·91	138 32·4	16·7	B, S, R, in Δ of st 13	
7146	6012	...	...	m 456	21 44 42	3·04	87 37	16·7	F, R	
7147	6013	...	...	m 457, d'A	21 44 52	3·04	87 34·9	16·7	F, S, lE	
7148	6014	...	...	d'A	21 45 2	3·04	87 18·9	16·7	vF, vS, R	
7149	6015	...	...	d'A	21 45 7	3·04	87 21·4	16·7	vF, vS, R	
7150	5077	...	...	G P Bond	21 45 13	2·22	40 53·8	16·7	Neb, no description	
7151	4713	3896	...	...	21 45 46	3·98	141 19·2	16·8	vF, pL, lE, vgbM, r	
7152	4714	3897	...	...	21 45 50	3·49	119 56·6	16 8	eeF, vS (Lassell not found)	
7153	4715	3898	...	...	21 46 30	3·49	119 41·5	16·8	eF, S, E or has eF ∗ nr	
7154	4716	3900	...	...	21 46 59	3·59	125 28·4	16·8	B, pL, iR, glbM, r	
7155	4717	3899	...	...	21 46 59	3·94	140 10·8	16·8	pB, S, lE, mbM	
7156	4718	2135	III 452	...	21 47 28	3·04	87 43·0	16·8	F, pL, R, bM, r	
7157	...	...	...	L I	21 48 15	3·42	116 2·5	16·9	vF, vS, R, sbMN, B D ∗ p 8ᵐ	
7158	...	...	...	Mu II	21 49 25	3·23	102 15·4	16·9	vF neb ∗, ∗ 9·5 nf 3′	
7159	...	...	...	Sw VI	21 49 47	2·91	77 6·0	16·9	eeF, eS, R, vF ∗ sf	
7160	4719	2136	VIII 67	...	21 49 48	1·72	28 3·0	16·9	Cl, P, vlC	
7161	4720	...	...	d'A	21 49 53	3·04	87 42·7	17·0	Cl, vS, st 19, bet 2 st 16	
7162	4721	3901	...	...	21 50 58	3·75	133 58·5	17·0	eF, cL, cE, glbM	
7163	4722	3902	...	...	21 51 11	3·52	122 33·1	17·0	F, pL, vlE, vglbM	
7164	...	...	...	L II	21 51 28	3·07	89 14·5	17·0	eF, R, 4 vF st n	
7165	4723	2137	III 930	...	21 51 49	3·29	107 10·7	17·1	eF	*
7166	4724	3903	...	...	21 51 54	3·75	134 3·5	17·1	cB, S, vlE, smbMN	
7167	4725	3905	...	...	21 52 37	3·40	115 18·3	17·1	F, pS, R, vglbM, ∗ 10 f	
7168	4726	3904	...	...	21 52 54	3·98	142 25·1	17·1	pB, S, R, psbM	
7169	4727	3906	...	...	21 53 7	3·85	138 21·8	17·1	eF, S, R, ∗ S np	
7170	...	...	...	L I	21 53 26	3·14	96 7·6	17·1	vF, pS, iR, bMN, D ∗ p 36ᵐ	
7171	4728	2138	III 692	...	21 53 27	3·24	103 56·5	17·1	vF, cL, E 124°, vgbM	
7172	4729	3908	...	...	21 53 52	+3·51	122 32·6	−17·2	pB, pL, lE, gbM, 1st of 4	†

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7173	4730	3909	...	...	21 53 53	+3·51	122 38·1	−17·2	cB, cS, R, sbM ∗, 2nd of 4	†
7174	4731	3910	...	...	21 53 55	3·52	122 40·0	17·2	cF, S, R, p of D neb, 3rd of 4	†
7175	4732	2141	...	...	21 53 56	2·11	35 50·8	17·1	Cl, vL, pRi, 1C	
7176	4733	3911	...	...	21 53 59	3·51	122 39·5	17·2	B, pL, R, f of D neb, 4th of 4	†
7177	4734	2139	II 247	...	21 54 1	2·86	72 55·9	17·2	pB, pS, R, bMN, r, ∗ sp	†
7178	4735	3912	...	...	21 54 6	3·58	126 28·8	17·2	eF, S, R, ∗ 8 s 2′	
7179	4736	3907	...	...	21 54 21	4·53	154 43·2	17·2	cF, pS, vgbM	
7180	4737	2140	III 693	...	21 54 27	3·34	111 13·4	17·2	vF, S, R, lbM, p of 2	
7181	6016	...	...	m 458	21 54 32	3·10	92 38	17 2	eF, vS, stellar	
7182	6017	...	...	m 459	21 54 37	3·11	92 52	17·2	eF, vS, stellar	
7183	4738	2142	II 595	...	21 54 38	3·32	109 34·2	17·2	vF, pL, E 90°, lbM	
7184	4739	2143	II 1	...	21 54 53	3·34	111 29·0	17·2	pB, pL, mE 64°, bet 3 st, er	
7185	4740	2144	...	...	21 55 11	3·34	111 8·6	17 2	vF, pL, iR, vglbM, f of 2	
7186	4741	...	III 165	...	21 55 14	2·60	55 33 9	17·2	vF, am 5 or 6 st	
7187	...	...	...	L I	21 55 15	3·52	123 27·6	17·2	pF, pS, R, lbM	
7188	...	...	...	L I	21 55 20	3·33	111 0·6	17·2	eF, pS, E, lbM	
7189	6018	...	...	m 460	21 56 7	3·07	90 6	17·2	F, S, 1E	
7190	6019 = 6020	...	...	St II & IV	21 56 15	2 94	79 28·6	17·2	eF, vS, iR, lbM	∗
7191	4742	3913	...	...	21 56 20	4·54	155 19·1	17·3	vF, S, 1E, vgbM	
7192	4743	3914	...	...	21 56 25	4·52	154 59·4	17·3	pB, S, R, pmbM	
7193	4744	2145	...	...	21 56 43	2·95	79 51·4	17·3	Cl, lRi, 1C, st 9...10	
7194	...	...	...	Sw II	21 56 49	2·93	78 0·5	17·3	vF, vS, R, lbM	
7195	...	...	...	Sw II	21 56 49	2·93	77 59·5	17·3	eeF, R, v diffic	
7196	4745	3915	...	...	21 56 51	3·90	140 48·0	17·3	cB, S, R, am st	
7197	4746	2146	II 599	...	21 57 9	2·49	49 37·2	17·3	F, cS, cE, vglbM, er	
7198	6021	...	...	m 461	21 58 3	3·09	91 20	17·3	eF, vS, stellar	
7199	4747	3916	...	...	21 58 4	4·53	155 23·0	17·4	vF, S, R, pslbM, ∗ 11 p 3′	
7200	4748	3917	...	...	21 58 8	3·89	140 40·8	17·4	pF, S, R, smbM	
7201	4749	3918	...	...	21 58 27	3·49	121 55·5	17·4	F, R, gbM, 1st of 4	
7202	4750	3920	...	...	21 58 39	3·49	121 51·8	17·4	eF, S, stellar, 2nd of 4	
7203	4751	3921	...	...	21 58 40	3·49	121 49·7	17·4	cF, R, stellar, 3rd of 4	
7204	4752	3922	...	...	21 58 48	3 48	121 43·5	17·4	pB, L, 1E, gbM, 4th of 4	
7205	4753	3919	...	...	21 58 54	4·14	148 6·5	17·4	pB, L, cE, gpslbM	
7206	6022	...	...	m 462	21 58 56	2·88	73 54	17·4	F, S, 1E, bM	
7207	6023	...	...	m 463	21 59 0	2·88	73 55	17·4	vF, S	
7208	4754	3923	...	...	21 59 25	3·45	119 44·0	17·4	vF, vS, R, almost ○	
7209	4755	2147	VII 53	...	21 59 42	2·38	44 11·6	17·4	Cl, L, cRi, pC, st 9...12	
7210	4756	2148	...	...	21 59 58	2·74	63 34·3	17·4	cF, R, bM, vF D ∗ np	∗
7211	6024	...	...	m 464	21 59 58	3·17	98 47	17·4	eF, S, stellar	
7212	...	...	...	Sw V	22 0 6	+2·96	80 26·6	−17·4	eF, vS, 1E	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7213	4757	3924	...	...	22 0 29	+3·80	137 50·6	−17·5	vB, pS, R, gbM	
7214	4758	3926	...	...	22 1 8	3·43	118 29·7	17·5	⊕, pL, iR, rr	
7215	6025	...	...	m 465	22 1 23	3·07	90 11	17·5	vF, S, E	
7216	4759	3925	...	...	22 1 31	4·79	159 20·8	17·5	pF, S, R, gbM	
7217	4760	2149	II 207	...	22 1 37	2·68	59 19·4	17·5	B, pL, gbM, er	
7218	4761	2150	II 897	...	22 2 35	3·27	107 20·2	17·5	pB, lE, r	
7219	4762	3927	...	...	22 2 47	4·49	155 32·1	17·6	pB, S, R, 2 st nr	
7220	...	...	...	Mu II	22 2 50	3·35	113 40·7	17·5	eF, vS, vlE, gbM, * 10 n 3′	
7221	4763	3928	...	...	22 3 14	3·46	121 14·4	17·6	F, S, R, gbM, r, 2 vS st nr	
7222	6026	...	...	m 466	22 3 45	3·09	88 35	17·6	vF, S	
7223	4764	2151	III 862	...	22 4 16	2·52	49 40·8	17·6	eF, pS, lE, r, am 3 st	
7224	6027	...	...	m 467, St II	22 5 7	2·77	64 49·5	17·6	F, S, R	
7225	4765	3929	...	...	22 5 15	3·39	116 50·6	17·6	pF, S, lE, bM	
7226	...	...	...	Holden	22 5 28	2·17	35 17	17·6	pB, L, in cluster	
7227	6028	...	...	St IV	22 5 31	2·57	51 58·1	17·6	vF, vS, R, lbM, np of 2	
7228	6029	...	...	St IV	22 5 48	2·57	51 59·5	17·7	F, vS, R, lbM, sf of 2	
7229	4766	3930	...	...	22 6 5	3·44	120 4·1	17·7	F, pL, R, vglbM	
7230	4767	2152	III 931	...	22 6 37	3·27	107 45·7	17·7	vF, S, R, bM	
7231	4768	2153	II 606	...	22 6 43	2·45	45 20·9	17·7	eF, S, er	
7232	4769	3931	...	...	22 6 57	3·73	136 32·5	17·7	pB, S, pmE, psbM, p of 2	
7233	4770	3932	...	...	22 7 8	3·73	136 32·3	17·7	F, vS, R, * 8 f, f of 2	
7234	4771	...	VIII 63	...	22 7 8	2·13	33 42·9	17·7	Cl, S, P, lC	
7235	4772	2154	...	...	22 7 35	2·12	33 25·2	17·7	Cl, pC, has a ruby * 10	
7236	6030	...	...	m 468	22 7 56	2·92	76 52	17·7	vF, S, stellar	
7237	6031	...	...	m 469	22 7 58	2·92	76 52	17·7	vF, S, stellar	
7238	...	...	...	Sw IV	22 8 45	2·82	68 10 5	17·8	pF, S, R, mbM, 4 st p	
7239	6032	...	...	m 470	22 8 46	3·13	95 44	17·8	eF, vS	
7240	6033	...	...	St V	22 9 16	2·62	53 25·1	17·8	eF, eS, * att n, p of 2	
7241	6034	...	...	St IV	22 9 24	2·86	71 27·9	17·8	pF, lE, * 10 att s	
7242	6035	...	...	St V	22 9 33	2·62	53 24·1	17·8	vF, S, lbM, f of 2	
7243	4773	2155	VIII 75	...	22 9 41	2·36	40 48 9	17·8	Cl, L, P, lC, st vL	
7244	6036	...	...	St IV	22 9 41	2·90	74 13·5	17 8	eF, eS, R, bM	
7245	4774	2157	VI 29	...	22 10 2	2·24	36 22·0	17·8	Cl, C, st eS	
7246	4775	2156	III 932	...	22 10 9	3·25	106 15·7	17·8	vF, S, vlE, vgbM, * 13 n	
7247	...	...	...	L I	22 10 20	3·35	114 25·9	17·8	pF, vS, R, lbM, B D * p 13′	
7248	4776	...	III 863	...	22 11 0	2·56	50 10·2	17·9	vF, vS, mbM	
7249	4777	3933	...	...	22 11 26	3·96	145 48·9	17·9	eeF, R, doubtful object	
7250	4778	...	III 864	...	22 12 29	2·57	50 8·2	17·9	vF, S, mE 165° ±	
7251	4779	2158	III 933	...	22 12 53	3·25	106 27·8	18·0	F, pS, R, gpmbM	
7252	4780	3934	III 458	...	22 12 58	3·35	115 22·7	18·0	F, S, R, er	
7253	6037	...	...	m 471	22 13 1	+2·75	61 19	−17·9	vF, pE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.
					h m s	s	° ′	″	
7254	...	...	...	Mu II	22 14 20	+3·32	112 26·0	−18·0	vF, vS, R, ✱ 11 p 4′·5
7255	...	...	...	L I	22 14 25	3·24	106 16·0	18·0	eF, L, mE 30°, sbMN
7256	6038	...	...	m 472	22 14 55	3·31	112 36	18·0	3 F st in F neb
7257	6039	...	...	m 473	22 14 56	3·12	94 44	18·0	F, vS, lE
7258	4781	3935	...	...	22 15 7	3·40	119 3·4	18·0	vF, S, E, glbM, ? biN
7259	4782	3936	...	...	22 15 10	3·40	119 39·3	18·0	eF, pL, R, vlbM
7260	6040	...	...	St VIII	22 15 21	3·12	94 49·5	18·0	eF, pS, iR
7261	4783	2159	...	...	22 15 24	2·15	32 36·9	18·0	Cl, L, pRi, lC
7262	4784	3937	...	...	22 15 26	3·45	123 3·5	18·0	eF, S, R, lbM
7263	6041	...	...	m 474	22 15 33	2·65	54 21	18·0	F, S, R
7264	6042	...	...	m 475	22 16 2	2·65	54 19	18·1	vF, pS, mE
7265	6043	...	...	St VIII	22 16 15	2·66	54 29·5	18·1	F, vS, R, mbM
7266	6044	...	...	m 476	22 16 18	3·12	94 41	18·1	F, vS, R, alm stellar
7267	4785	3938	...	...	22 16 21	3·47	124 24·0	18·1	cB, pS, vlE, glbM, B ✱ ✱ sp
7268	4786	3939	...	...	22 16 44	3·43	121 53·8	18·1	F, cS, vlE, p of 2
7269	...	...	...	L I	22 17 25	3·21	103 55·1	18·1	eF, pS, R, glbM
7270	6045	...	...	m 477	22 17 28	2·72	58 16	18·1	vF, S, E
7271	6046	...	...	m 478	22 17 38	2·72	58 19	18·1	vF, S, vlE
7272	6047	...	...	m 479	22 17 43	2·91	74 7	18·1	vF, S, iR
7273	6048	...	...	St VIII	22 17 56	2·66	54 30·4	18·1	F, vS, R, mbM
7274	6049	...	...	St VIII	22 17 57	2·66	54 34·9	18·1	pF, vS, mbM
7275	6050	...	...	m 480	22 17 58	2·72	58 14	18·1	eF, S, mE
7276	6051	...	...	St VIII	22 18 1	2·66	54 37·2	18·1	vF, vS, mbM
7277	4787	3940	...	...	22 18 16	3·42	121 51·4	18·2	F, cS, vlE, f of 2
7278	4788	3941	...	...	22 18 57	4·08	150 52·9	18·2	eeF, lE, vgvlbM, 3 st sf
7279	4789	3942	...	...	22 19 7	3·48	125 51·3	18·2	vF, pS, R, vgvlbM
7280	4790	2160	II 248	...	22 19 39	2·92	74 33·8	18·2	F, cS, R, gbMS ✱, 3 st n, nf
7281	4791	2161	...	...	22 19 39	2·20	32 52·4	18·2	Cl, L, pRi, lC, st 10...16
7282	...	...	...	St IX	22 19 49	2·61	50 23·7	18·2	eF, pL, dif, bet 3 st
7283	6052	...	...	m 481	22 20 51	2·90	73 17	18·2	vF, vS, R
7284	4792	3943	II 469	...	22 20 51	3·34	115 34·3	18·3	cF, cS, lE, r, D ✱ inv
7285	5078	...	...	Lassell	22 20 51 ±	3·34	115 34 ±	18·3	Neb* ✱ 1′ dist from h 3943
7286	4793	2162	...	...	22 20 52	2·77	61 36·8	18·2	vF, S, R, am st
7287	...	...	...	Mu II	22 20 54	3·21	112 51·1	18·3	eF, slightly nebs D ✱
7288	6053	...	...	m 482	22 21 0	3·11	93 36	18·3	vF, eS, stellar
7289	4794	3944	...	...	22 21 12	3·47	126 10·4	18·3	vF, S, R, gbM
7290	6054	...	...	m 483	22 21 40	2·91	73 34	18·3	pB, S, pmE
7291	6055	...	...	St VIII	22 21 42	2·91	73 55·9	18·3	eF, eS, R, smbM
7292	6056	...	...	St IV	22 21 59	2·76	60 25·4	18·3	eF, S, oval, F ✱ inv
7293	4795	...	...	Harding	22 22 6	3·29	111 33·0	18·3	! pF, vL, E or biN (Auw 48)
7294	...	...	...	L I	22 22 20	+3·34	116 8·2	−18·3	vF, vS, R

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7295	4796	2163	...	...	22 22 21	+2·36	37 53·4	−18·3	Cl, P, lC, st 12...13	
7296	4797	...	VII 41	...	22 22 37	2·38	38 24·8	18·3	Cl, iR, lC, st vS	
7297	4798	3945	...	...	22 22 59	3·50	128 33·0	18·3	eF, S, R, p of 2	
7298	6057	...	...	m 484	22 23 18	3·22	104 54	18·3	vF, pL, iR	
7299	4800	3946	...	...	22 23 24	3·50	128 32·2	18 3	eF, S, R, f of 2	
7300	{4801 = 4799}	2164	...	...	22 23 28	3·21	104 43·5	18·3	vF, cS, E, vglbM	
7301	...	...	...	L I	22 24 20	3·25	108 18·2	18·4	vF, pS, lE, lbM	
7302	4802	2165	IV 31	...	22 24 54	3·21	104 50 4	18·4	F, pS, R, vsbMSN	
7303	4804	2166	...	...	22 25 0	2·76	59 46·4	18·4	vF, S, R, gvlbM	
7304	4803	...	...	d'A	22 25 2	2·76	59 45·3	18·4	vF, pS, vlbM, nf h 2166 (?)	*
7305	...	...	...	Sw IV	22 25 16	2·97	79 0·3	18·4	eF, S, R, 4 F st around	
7306	4805	3948	...	...	22 25 28	3·35	117 58·1	18·4	vF, S, lE, *11 p	
7307	4806	3947	...	...	22 25 33	3·54	131 39·9	18·4	F, pL, pmE	
7308	...	...	...	L I	22 26 25	3·20	103 42·2	18·4	pB, vS, R	
7309	4807	2167	II 476	...	22 26 56	3·17	101 4·9	18·5	vF, pL, R, glbM, r	
7310	...	...	...	L I	22 27	3·29	113 14·3	18 5	vF, pS, R, bMN	
7311	4808	2168	II 428	...	22 27 3	3·03	85 9·0	18·5	pF, S, R, psbM, r	
7312	6058	...	...	m 485	22 27 32	3·02	84 54	18·5	F, S	
7313	6059	...	...	m 486	22 27 46	3·33	116 50	18·5	eF, E	
7314	4810	3949	...	...	22 28 2	3·33	116 45·9	18·5	eF, L, mE 0°, vlbM	
7315	6060	...	...	St IV	22 29 8	2·73	55 55·0	18·5	vF, eS, R, bM	
7316	4809	2169	III 180	d'A	22 29 11	2·89	70 24·1	18·5	F, S, R, *8 sp	
7317	6061	...	...	St VIII	22 29 30	2·74	56 46·7	18·5	vF, vS	
7318	6062	...	...	St VIII	22 29 35	2·74	56 45·5	18·5	eF, eS	
7319	6063	...	...	St VIII	22 29 40	2·74	56 44·8	18·5	eF, eS	
7320	6064	...	...	St VIII	22 29 41	2·74	56 46·5	18·5	F, vS	
7321	4811	2170	III 237	...	22 29 45	2·88	69 6·1	18·6	F, S, iR, vgvlbM	
7322	4812	3950	...	...	22 29 46	3·47	127 57 2	18·6	vF, S, vlE, gbM	
7323	6065	...	...	m 487	22 30 6	2·90	71 35	18·6	pF, pL, iR	
7324	6066	...	...	m 488	22 30 14	2 90	71 34	18·6	vF, vS, neb *	
7325	6067	...	...	Schultz	22 30 25	2·74	56 21·4	18·6	F, vS, h 2172 f	
7326	6068	...	...	Ld R*	22 30 27	2·74	56 18·2	18·6	eF, eS, h 2172 f	
7327	...	...	...	T V	22 30 30	2·74	56 15	18 6	eF, eS, np h 2172	
7328	4813	2171	...	...	22 30 31	2·98	80 11·7	18·6	eF, pS, lE 90°, vglbM	
7329	4814	3951	...	...	22 30 37	4·26	157 12·3	18·6	pB, pS, mE 90°	
7330	6069	...	...	St II	22 30 40	2·68	52 10·6	18·6	pB, S, lE, bM	
7331	4815	2172	I 53	...	22 30 40	2·74	56 18·5	18·6	B, pL, pmE 163°, smbM	†
7332	4821	2173	II 233	...	22 30 44	2·86	66 55·6	18·6	cB, S, mE 156°, smbMN, p of 2	
7333	6070	...	...	Schultz	22 30 48	2·74	56 17·3	18·6	vF, vS, p h 2174	*
7334	4822	3950?	...	...	22 30 50	+3·47	127 55·8	−18·6	eeF (? = G.C. 4812)	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7335	4823	2174	III 166	...	22 30 56	+2·74	56 16·7	−18·6	vF, vS (*B* of Ld R)	
7336	4816	...	...	Ld R	22 30 59	2·74	56 14·8	18·6	eF, vS (*C*)	
7337	4817	...	...	Ld R	22 31 3	2·74	56 21·2	18·6	eF, S, stellar (*E*)	
7338	...	...	...	T V	22 31 3	2·74	56 18	18·6	eF, eS, sf h 2174	
7339	4824	2175	II 234	...	22 31 6	2·86	66 56·4	18·6	F, pS, mE 89°, vglbM, f of 2	
7340	4818	...	...	Ld R	22 31 20	2·74	56 19·0	18·6	vF, vS (*D* of Ld R)	
7341	...	...	...	L I	22 31	3·29	113 25·3	18·6	pF, pS, E, lbM	
7342	6071	...	...	St IV	22 31 51	2·74	55 13·7	18·6	eF, vS	
7343	6072	...	...	St VIII	22 32 13	2·75	56 39·4	18·6	eF, vS, R, lbM, S ∗ inv	
7344	6073	...	...	m 489	22 32 21	3·11	94 53	18·6	pF, vS, R	
7345	6074	...	...	St IV	22 32 22	2·74	55 11·2	18·6	eF, vS	
7346	6075	...	...	m 490	22 32 39	2·98	79 39	18·6	eF, vS, stellar	
7347	4825	2176	...	...	22 32 58	2·98	79 42·7	18·6	eF, pL, E	
7348	6076	...	...	m 491	22 33 39	2·97	78 50	18·6	vF, pL, iR	
7349	...	...	...	Mu II	22 33 52	3·28	113 37·3	18·7	eF, vS, E 175°, biN, bn	
7350	6077	...	...	m 492	22 34 7	2·97	78 46	18·7	vF	
7351	...	...	...	St IX, Sw II	22 34 12	3·11	95 10·5	18·7	pF, pS, R, bM, r	
7352	4826	2177·	...	...	22 34 15	2·33	33 20·0	18·7	Cl, vL, pRi, vlC	
7353	6078	...	...	m 493	22 34 27	2·97	78 48	18·7	eF	
7354	4827	2178	II 705	...	22 35 8	2·22	29 26·7	18·7	○, B, S, R, pgvlbM	
7355	4828	3952	...	...	22 35 26	3·45	128 36·5	18·7	ceF, S, R, D ∗ f 40'	
7356	...	...	...	St XIII	22 35 30	2·80	60 1·4	18·7	eF, pS, R, glbM, ∗ att	
7357	...	...	...	St XIII	22 35 51	2·80	60 33·6	18·7	vF, vS, vF ∗ inv	
7358	4829	3953	...	Δ 255?	22 36 10	4·12	155 51·3	18·8	F, S, R, bM	
7359	...	...	...	L I	22 36 20	3·28	114 26·4	18·8	pF, vS, pmE, bMN	
7360	6079	...	...	m 494	22 36 26	3·04	86 34	18·8	eF, vS	
7361	4830	3954	...	...	22 36 31	3·35	120 47·1	18·8	F, pL, vmE 0°, vgvlbM	
7362	...	...	...	Sw IV	22 36 45	3·00	82 1·8	18·8	vF, S, R, lbM	
7363	6080	...	...	d'A	22 36 50	2·76	56 43·7	18·8	pF, pL, E, D ∗ f	
7364	4831	2179	II 442	...	22 37 14	3·08	90 53·7	18·8	F, S, R, psbM	
7365	...	...	...	L I	22 37 20	3·25	110 41·4	18·8	vF, eS, R, gbMN, ∗ 11 nf 4'	
7366	6081	...	...	m 495	22 37 26	2·98	79 56	18·8	eF, S, stellar	
7367	6082	...	...	d'A, m 496	22 37 29	3·05	87 4·7	18·8	vF, pS, lE	
7368	4832	3955	...	...	22 37 31	3·48	130 4·6	18·8	F, eS, lE, glbM	
7369	6083	...	...	d'A	22 37 43	2·77	56 23·2	18·8	pF, bet 2 F st	
7370	6084	...	...	m 497	22 38 36	2·99	79 41	18·8	eF, vS	
7371	4833	2180	II 477	...	22 38 40	3·17	101 44·5	18·8	vF, pL, R, lbM	
7372	6085	...	...	m 498	22 38 46	2·99	79 37	18·8	F, S, iR	
7373	6086	...	...	m 499	22 39 0	3·05	87 31	18·8	F, vS, bM, stellar	
7374	6087	...	...	m 500	22 39 2	2·99	79 52	18·8	vF, pL, R	
7375	...	...	...	Sw IV	22 39 33	+2·90	69 38·8	−18·8	eF, vS, R	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7376	6088	...	...	m 501	22 40 11	+3·05	87 7′	−18·9	eF, vS, R	
7377	4834	2181	II 598	...	22 40 12	3·26	113 2·9	18·9	pB, S, vlE, vgmbM, * 12 p	*
7378	...	...	...	T III	22 40 25	3·17	102 33·0	18·9	vF, pL	
7379	6089	...	...	St VIII	22 41 13	2·70	50 30·0	18·9	eF, S, R, lbM	
7380	4842	2182	VIII 77	C H	22 41 23	2·37	32 39·1	18·9	Cl, pL, pRi, lC, st 9...13	
7381	...	...	...	L I	22 41 25	3·24	110 29·5	18·9	eF, vS, R, gbM	
7382	4843	3956	...	...	22 42 23	3·41	127 34·9	18·9	eF, vS, R, * 12 att np	
7383	4844	...	...	Ld R, d'A	22 42 38	2·99	79 11·1	18·9	vF, vS, R, III 216 nf	
7384	...	...	...	Ld R	22 42 46	2·99	79 15	18·9	eF, 5′nf G.C. 4844	
7385	4845	2183	III 216	...	22 42 55	2·99	79 7·9	19·0	eF, S, R, glbM * 11 np	
7386	4846	2184	III 217	...	22 43 4	2·99	79 2·5	19·0	eF, S, R, pgbM, f of 2	
7387	4847	...	...	Ld R, d'A	22 43 19	2·99	79 5·9	19·0	eF, vS, R, 2 st 11 s	
7388	6090	...	...	Ld R*	22 43 21	2·99	79 1·3	19·0	vF, * 11 f 2′·5	
7389	4848	...	...	Ld R	22 43 24	2·99	79 7·8	19·0	vF, R	
7390	...	...	...	Ld R	22 43 24	2·99	79 9·5	19·0	eF, s of G.C. 4848	
7391	4849	2185	II 443	...	22 43 24	3·09	92 17·1	19·0	eF, eS, R, sbM * 13, * np	
7392	4850	2186	II 702	...	22 44 16	3·24	111 21·0	19·0	pB, pS, lE 120°, mbM	
7393	4851	2187	II 453	...	22 44 22	3·12	96 18·0	19·0	vF, pL, lE, vgbM, r	
7394	4852	2188	...	...	22 44 36	2·53	38 33·9	19·0	Cl, vP	
7395	6091	...	...	St V	22 44 36	2·76	53 39·3	19·0	eF, vS, R, bM	
7396	4853	2189	...	...	22 45 14	3·07	89 39·0	19·0	pF, pS, R, gbM	
7397	4854	...	...	Ld R	22 45 36	3·07	89 36·7	19·0	eF, vS	
7398	4855	...	...	Ld R	22 45 38	3·07	89 32·5	19·0	vF, pL	
7399	...	...	...	Sw II	22 45 42	3·14	99 59·4	19·0	eF, pL	
7400	4857	3957	...	...	22 45 42	3·51	136 5·6	19·0	pF, lE, glbM, vS * inv	
7401	4856	...	...	Ld R	22 45 45	3·07	89 36·7	19·0	eF, vS	
7402	...	...	...	Ld R	22 45 50	3·07	89 36·7	19·0	eF, vS	
7403	6092	...	...	S Coolidge	22 45 57	3·07	89 15·7	19·0	* slightly nebulous	
7404	4858	3958	...	...	22 46 24	3·42	130 3·5	19·1	vF, S, R	
7405	6093	...	...	m 502	22 46 38	2·98	78 16	19·1	eF, S, R	
7406	6094	...	...	m 503	22 46 40	3·12	97 18	19·1	F, S, lE	
7407	6095	...	...	St V	22 46 46	2·82	58 36·8	19·1	eF, vS	
7408	4859	3959	...	...	22 46 50	3·93	154 26·5	19·1	pB, pS, R, vglbM	
7409	6096	...	...	m 504	22 46 58	2·93	70 32	19·1	eF	
7410	4860	3960	...	Δ 518	22 47 3	3·42	130 24·6	19·1	cB, L, vmE 43°, mbM	
7411	6097	...	...	m 505	22 47 42	2·93	70 30	19·1	vF, vS	
7412	4861	3961	...	...	22 47 46	3·46	133 23·8	19·1	eF, vL, * 7 nf	
7413	...	...	...	Sw IV	22 47 51	2·98	77 31·6	19·1	eeF, pS, R, v diffic, s of 2	
7414	...	...	...	Sw IV	22 47 51	2·98	77 29·1	19·1	eeF, S, R, v diffic, n of 2	
7415	6098	...	...	m 506	22 47 59	2·93	70 28	19·1	eF	
7416	6099	...	...	m 507	22 48 27	+3·12	96 15	−19·1	F, pL, pmE, vgbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7417	4862	3962	...	...	22 48 42	+3·94	155 46·4	−19·1	pB, cS, R, gpmbM	
7418	4863	3963	...	...	22 48 42	3·38	127 46·4	19·1	cB, vL, vlE, vglbM	
7419	4864	2190	VII 43	...	22 48 47	2·36	29 55·1	19·1	Cl, pRi, cC	
7420	6100	...	...	m 508	22 48 54	2·85	60 56	19·1	vF, S	
7421	4865	3964	...	...	22 49 2	3·39	128 5·5	19·1	cB, L, vlE, gpmbM, rr	
7422	6101	...	...	m 509, Struve, d'A	22 49 4	3·05	86 49·2	19·1	vF, pS, vlE	
7423	4866	2191	III 745	...	22 49 19	2·47	33 38·2	19·2	vF, pL, iF, er	
7424	4867	3965	...	...	22 49 21	3·43	131 49·1	19·1	F, cL, vlE, vgmbM	
7425	...	...	...	Mu I	22 49 25	3·15	101 41·6	19·1	eF, vlE, *10 p 4′	
7426	4868	2192	III 576	...	22 49 29	2·78	54 22·6	19·1	vF, cS, R, stellar, D*p	
7427	6102	...	...	O Struve	22 50 5	3·02	82 17	19·2	F, S, *9 sf 4′	
7428	6103	...	...	m 510	22 50 7	3·08	91 47	19·2	F, vS, R, bM	
7429	4869	2193	...	...	22 50 18	2·40	30 45·4	19·2	Cl, P, pC, st 9...11	
7430	6104	...	...	d'A	22 50 26	3·02	81 57·2	19·2	eF, vS	
7431	...	...	...	Bigourdan	22 50 54	2·89	64 35·0	19·2	eF, vS	
7432	4870	2194	III 465	...	22 51 2	2·99	77 37·0	19·2	eF, S, R	
7433	4872	...	...	Ld R, d'A	22 51 9	2·89	64 36·0	19·2	eF, vS, p h 2195	
7434	6105	...	...	m 511	22 51 10	3·09	91 55	19·2	vF, vS, R, stellar	
7435	4873	...	...	Ld R	22 51 13	2·89	64 37	19·2	eF, s of h 2195	
7436	4871	2195	III 243	...	22 51 13	2·89	64 35·9	19·2	F, pS, F*att p, gbM	†
7437	...	...	...	Sw II	22 51 23	2·98	76 26·6	19·2	eeF, L, R, F*nr nf, v diffic	
7438	4874	2196	...	...	22 51 36	2·54	36 23·9	19·2	Cl, vL, E	
7439	6106	...	...	m 512	22 51 58	2·86	61 30	19·2	Long patch of F neby	
7440	6107	...	...	St VIII	22 52 0	2·80	54 56·8	19·2	eF, S, iR	
7441	...	...	...	O St I	22 52 25	3·12	97 48	19·2	vF, pS, iR, *10 p (? PD)	
7442	4875	...	...	d'A	22 52 31	2·97	75 12·6	19·2	pF, R, bet 2 st 16, *13 nf	
7443	4876	2197	II 450	...	22 52 46	3·16	103 33·2	19·2	F, vS, vlE, smbM, er, n of 2	†
7444	4877	2198	II 451	...	22 52 46	3·16	103 34·3	19·2	F, vS, vlE, smbM, er, s of 2	†
7445	...	...	...	St IX	22 52 54	2·77	51 38·8	19·2	eF, vS	
7446	...	...	...	St IX	22 53 0	2·77	51 40·1	19·2	eF, vS, R, r	
7447	4878	...	...	Markree Cat	22 53 6	3·14	101 16·7	19·2	*11·12 in neb (Auw 49)	*
7448	4879	2199	II 251	...	22 53 8	2·97	74 46·2	19·2	pB, L, E173°, vgbM, *11f2′·5	
7449	...	...	...	St IX	22 53 9	2·77	51 36·2	19·2	vF, S, R, vS*in centre	
7450	6108	...	...	T IV	22 53 31	3·16	103 39·7	19·2	vF, S	
7451	6109	...	...	O Struve	22 53 33	3·02	82 20	19·2	pF, pL, *10·11 sp 2′	
7452	...	...	...	Sw II	22 54 4	3·03	84 0·3	19·2	eeF, pL, R, v diffic	
7453	...	...	...	Peters	22 54 9	3·12	97 6·4	19·3	B, vS, *11 close np	
7454	4880	...	II 249	...	22 54 11	2·97	74 21·7	19·3	F, cS, lE, lbM, *11 p 1′	
7455	...	...	..	Sw II	22 54 14	+3·03	83 27·3	−19·3	eF, pS, cE, F*close p	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7456	4881 = 4882	3966 = 3967	...	...	22 54 15	+3·39	130 19·8	−19·3	vF, L, mE 34°, vglbM	
7457	4883	2201	II 212	...	22 54 18	2·86	60 36·4	19·3	cB, cL, lE, gmbM, r, 2 S st n	†
7458	4884	2200	II 590	...	22 54 20	3·07	88 59·9	19·3	cF, cS, psbM	
7459	...	...	...	Sw II	22 54 24	3·03	84 0·4	19·3	eeF, pL, R, * nr	
7460	6110	...	...	St VIII	22 54 35	3·06	88 29·4	19·3	eF, pL, R	
7461	6111	...	...	m 513	22 54 52	2·97	75 11	19·3	vF, vS, alm stellar	
7462	4885	3968	...	...	22 54 56	3·40	131 35·0	19·3	cF, pS, vmE 5° ±, * 11 np	
7463	4886	2202	III 210	...	22 54 56	2·97	74 46·1	19·3	vF, S, lE, p of 2	†
7464	6112	...	...	m 514, d'A	22 54 58	2·97	74 46·3	19·3	vF, vS, E, sf h 2202	†
7465	4887	2203	III 211	...	22 55 5	2·97	74 47·2	19·3	vF, vS, f of 2	†
7466	6113	...	...	St V	22 55 18	2·89	63 42·1	19·3	eF, eS, bM	
7467	6114	...	...	m 515	22 55 30	2·97	75 12	19·3	eF, vS	
7468	4890	...	III 202	d'A	22 56 1	2·97	74 8·5	19·3	eF, vS	
7469	4888	2204	III 230	...	22 56 13	3·02	81 52·7	19·3	vF, vS, vsmbM * 12	
7470	4889	3969	...	...	22 56 13	3·51	140 52·2	19·3	eF, pL, R, glbM, * 11 np	
7471	...	...	...	Mu II	22 56 23	3·23	113 39·6	19·3	eF, vS, lE8 5°, sbM, 3 st 10 p 20°	
7472	6115	...	...	O Struve	22 56 34	3·06	87 42	19·3	F neb * (? = 7477)	
7473	6116	...	...	m 516	22 57 8	2·87	60 36	19·3	vF, S, R	
7474	6117	...	...	m 517	22 57 11	2·95	70 41	19·3	eF, vS	
7475	6118	...	...	m 518	22 57 17	2·95	70 40	19·3	vF, S	
7476	4891	3970	...	...	22 57 20	3·41	133 51·7	19·3	F, S, R, △ with 2 st 7	
7477	6119	...	...	d'A	22 57 34	3·06	87 38·1	19·3	F, S, bM * 15, * 17 att n	
7478	6120	...	...	m 519	22 57 44	3·06	88 10	19·3	eF, E	
7479	4892	2205	I 55	...	22 57 56	3·00	78 25·9	19·4	pB, cL, mE 12°, bet 2 st	†
7480	6121	...	...	m 520	22 58 2	3·06	88 12	19·4	vF, vS, vlE, vgbM	
7481	...	...	...	O St I	22 58 25	3·20	110 41·7	19·4	vF, vS, R, gbM	
7482	6122	...	...	m 521	22 58 33	3·06	87 41	19·4	F, vS, stellar	
7483	4893	2206	...	...	22 58 40	3·06	87 12·7	19·4	vF, S, E, psbM	
7484	4894	3971 = 3972	...	...	22 59 21	3·33	127 1·6	19·4	pB, S, R, lbM, * 8·9 att s	*
7485	4895	2207	...	...	22 59 24	2·85	56 39·1	19·4	vF, S, R, bM, * 10 p	
7486	...	...	...	Copeland (R)	22 59 31	2·85	56 39·3	19·4	vF, vS, 2′ f h 2207	
7487	...	...	...	Sw IV	23 0 13	2·89	62 34·1	19·4	vF, S, R	
7488	6123	...	...	m 522	23 0 38	3·07	89 49	19·4	vF, vS, stellar	
7489	6124	...	...	Lassell, m 523	23 0 40	2·93	67 47	19·4	F, S, R	
7490	...	...	...	St X, Holden	23 0 44	2·86	58 22·9	19·4	vF, vS, iR, lbM	
7491	...	...	...	St XII	23 0 51	3·11	96 43·3	19·4	vF, S, R, vlbM	
7492	4896	2208	III 558	...	23 1 2	3·17	106 22·6	19·4	eF, L, bet 2 D st	
7493	...	...	...	Bigourdan	23 1 23	3·07	89 51	19·4	vF, stellar	
7494	6125	...	...	m 524	23 1 27	+3·23	115 7	−19·4	eF, vS, stellar	

No.	G. C.	.H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7495	...	...	...	Sw II	23 1 50	+3·00	78 42·3	−19·4	eF, S, lE, *9 nf nr	
7496	4897	3973	...	...	23 1 56	3·38	134 10·6	19·4	pB, eL, lE, vgbM *13	
7497	4898	2209	III 203	...	23 2 6	2·97	72 35·1	19·4	vF, L, pmE 45°, lbM	
7498	6126	...	...	m 525	23 2 25	3·22	115 10	19·4	vF, S, iR	
7499	6127	...	...	m 526	23 3 17	3·03	83 10	19·5	vF, vS, stellar	
7500	...	...	...	Sw IV	23 3 20	3·01	79 43·7	19·5	eF, vS, R	
7501	6128	...	...	m 527	23 3 25	3·03	83 9	19·5	eF	
7502	...	...	...	Mu II	23 3 25	3·20	112 30·7	19·5	eF, vS, E 290°, (? F D *)	
7503	6129	...	...	m 528	23 3 36	3·03	83 11	19·5	vF, S, stellar	
7504	6130	...	...	m 529	23 3 37	2·99	76 21	19·5	vF, S, stellar	
7505	...	...	...	Sw V	23 3 55	3·00	77 7·6	19·5	eeF, eS, lE, bet a B & 2 F st	
7506	4899	2210	III 184	...	23 4 29	3·09	92 55·0	19·5	eF, vS, R, sbM *15	
7507	4900	2211 = 3974	II 2	...	23 4 34	3·25	119 17·9	19·5	pB, cS, R, psvmbM, *10 np	
7508	4901	2212	...	...	23 4 45	3·00	77 49·6	19·5	eF, bM *, *11 np 2′	
7509	...	...	...	Sw IV	23 5 15	2·99	76 7·6	19·5	vF, S, R, bet 2 st	
7510	4902	2213	VII 44	...	23 5 27	2·54	30 11·4	19·5	Cl, pRi, pC, fan-sh, st p B	
7511	...	...	...	Sw IV	23 5 35	3·00	77 1·7	19·5	eeF, S, R, v diffic, sev st nf	
7512	...	...	...	St IX	23 5 36	2·89	59 38·1	19·5	F, S, R, vS *in centre	
7513	6131	...	...	m 530	23 5 39	3·24	119 7	19·5	vF, pL, E, gbM	
7514	6132	...	...	St VIII	23 5 47	2·86	55 52·3	19·5	eF, pL, iR	
7515	4903	2214	III 220	...	23 5 47	3·01	78 4·9	19·5	F, cS, R, vglbM, r	*
7516	6133	...	...	m 531	23 5 53	2·96	70 30	19·5	F, vS, stellar	
7517	6134	...	...	m 532	23 6 2	3·09	92 51	19·5	vF, vS, stellar	
7518	6135	...	...	m 533	23 6 5	3·04	84 26	19·5	vF, S, R	
7519	6136	...	...	m 534	23 6 9	3·02	79 59	19·5	vF, pL	
7520	6137	...	...	T I	23 6 16	3·21	114 33·3	19·5	F, pS, bet 2 st	
7521	6138	...	...	m 535	23 6 23	3·09	92 30	19·5	vF, pS, psbM	
7522	...	...	...	Mu II	23 6 25	3·20	113 38·7	19·5	eF, vS, iR, *10 nff 3′	
7523	6139	...	...	m 536	23 6 30	3·00	76 47	19·5	eeF, E	
7524	6140	...	...	m 537	23 6 35	3·09	92 30	19·5	eF, vS	
7525	6141	...	...	m 538	23 6 36	3·00	76 45	19·5	eF, vS, vlE, gbM	
7526	4904	...	III 470	...	23 6 37	3·13	99 57·5	19·5	eF, vS	
7527	6142	...	...	m 539	23 6 49	2·94	65 51	19·5	vF, vS, stellar	
7528	...	...	...	Common	23 6 52	3·02	80 32	19·5	F, S	
7529	...	...	...	T IV	23 6 57	3·03	81 46·1	19·5	vF	
7530	6143	...	...	m 540	23 7 0	3·09	93 32	19·5	eF, vS, alm stellar	
7531	4905	3975	...	...	23 7 1	3·36	134 21·8	19·5	pB, S, lE, pgbM	
7532	6144	...	...	m 541	23 7 10	3·09	93 29	19·5	vF, vS, lE	
7533	6145	...	...	m 542	23 7 10	3·09	92 48	19·5	F, S, R	
7534	6146	...	...	m 543	23 7 14	+3·09	93 27	−19·5	eF, vS, lE	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7535	...	...	...	Sw V	23 7 15	+3·00	77 10·3	−19·5	eeF, pS, R, v diffic, n of 2	
7536	...	...	...	Sw V	23 7 15	3·00	77 19·3	19·5	eeF, pS, R, am 6 st, s of 2	
7537	4906	2215	II 429	...	23 7 27	3·05	86 15·7	19·5	vF, eS, R, bM, sp of 2	
7538	4907	...	II 706	...	23 7 34	2·54	29 15·0	19·6	vF, L, 2 p B st inv	
7539	4908	2217	...	...	23 7 36	2·95	67 4·7	19·6	F, S, R, psbM	
7540	6147	...	...	m 544	23 7 36	2·99	74 49	19·6	F, vS, stellar	
7541	4909	2216	II 430	...	23 7 36	3·05	86 13·7	19·6	B, L, mE 97°, mbM, nf of 2	
7542	6148	...	...	m 545	23 7 39	3·02	80 7	19·6	eF, eS, stellar	
7543	...	...	...	St IX	23 7 44	2·92	62 26·1	19·6	vF, S, R, lbM	
7544	6149	...	...	m 546	23 7 46	3·09	92 57	19·6	eF, vS	
7545	4910	3976	...	...	23 7 49	3·31	129 17·9	19·6	F, S, vlE, vgvlbM, * 10 att	
7546	6159	...	...	m 547	23 7 54	3·09	93 6	19·6	eF, S, lE	
7547	4911	2218	...	...	23 8 6	2·98	71 47·4	19·6	vF, S, iR	
7548	4914	...	...	d'A	23 8 17	2·94	65 29·3	19·6	vF, vS, * 16 p 11'	
7549	{4912 = 6151}	...	...	Ld R, d'A	23 8 18	2·98	71 43·2	19 6	pF, pS, R, * 10 11 p	
7550	4915	2219	III 181	...	23 8 19	2 98	71 48·1	19·6	eF, S, R	
7551	6152	...	...	m 548	23 8 22	2·99	74 50	19·6	Neb * 13 m	
7552	4916	3977	...	Δ 475?	23 8 25	3·35	133 21·5	19·6	B, S, mE 90° ±, vsbM * 13	
7553	{4913 = 6153}	...	...	Ld R, Schultz	23 8 26	2·98	71 46·8	19·6	vF, vS, R	
7554	6154	...	...	m 549	23 8 29	3·09	93 9	19·6	eF, eS, alm stell, h 2220 f	
7555	4918	2221	...	...	23 8 30 ±	3·01	78 11 ±	19·6	F, R, bM, place very rough	*
7556	4919	2220	II 235	...	23 8 32	3 09	93 9·1	19·6	cF, pL, R, B ** f	
7557	4917	...	...	Ld R	23 8 33	3 04	84 3·3	19·6	vF, vS, p of 2	
7558	6155	...	...	m 550	23 8 41	2·98	71 51	19·6	eeF, neb * 13 m	
7559	4920	2222	III 221	...	23 8 46	3·01	77 28·4	19·6	F, cS, R, bM * 16, np of 2	
7560	6156	...	...	Schultz	23 8 47	3·05	86 16·0	19·6	F, vS, iR, sp of 2	
7561	6157	...	...	Schultz	23 8 51	3·05	86 14·5	19·6	F, vS, iR, nf of 2	
7562	4921	2224	II 467	...	23 8 51	3 04	84 4·5	19 6	cB, pS, iR, psbM	
7563	49·2	2223	III 222	...	23 8 55	3·01	77 34·0	19·6	pF, eS, R, sbM * 16, sf of 2	*
7564	...	...	...	Bigourdan	23 8 56	3·04	83 25	19·6	vF, eS, stellar N	
7565	6158	...	...	Secchi	23 9 9	3·08	90 49·2	19·6	vF	
7566	4923	...	III 185	...	23 9 9	3·09	93 6·9	19·6	vF, pS, E, er, 3 F st inv	
7567	6159	...	...	m 551	23 9 10	2·99	74 56	19·6	eeF, vS, E	
7568	6160	...	...	St VIII	23 9 32	2·95	66 16·0	19·6	eF, pL, iR, sev st inv	
7569	...	...	...	Sw IV	23 9 40	3·02	79 51·4	19·6	vF, S, R, 3 F st sf	
7570	4924	...	III 238	...	23 9 43	3·01	77 16·9	19·6	cF, eS	
7571	6161	...	...	Schultz	23 9 50	2·98	71 47	19·6	vF, cE, sev knots or gr of neb	
7572	6162	...	...	m 552	23 9 52	2·98	72 18	19·6	eeF, alm stellar	
7573	...	...	...	Mu II	23 9 54	3·19	112 55·8	19·6	eF, S, iR, b np, * 10 p 4'	
7574	6163	...	...	d'A	23 9 59	+2·95	66 46·2	−19·6	pF, S, E, rr	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7575	6164	...	...	m 553	23 10 10	+3·04	84 7	−19·6	F, S, vlE	
7576	4925	...	II 454	...	23 10 11	3·10	95 29·8	19·6	F, S, smbM	
7577	...	...	...	Bigourdan	23 10 13	3·04	83 23	19·6	*13·5 in vF neb	
7578	4926	2225	III 182	...	23 10 14	2·98	72 4·3	19·6	vF, am vS st	
7579	6165	...	...	m 554	23 10 34	3·03	81 20	19·6	eF, vS, stellar	
7580	...	...	...	Sw V	23 10 35	3·00	76 45·7	19·6	vF, pS, R, F*sp	
7581	6166	...	...	Holden	23 10 38	3·05	86 5·8	19·6	vF, mE, *12·13 close f	
7582	4927	3978	...	Δ 476?	23 10 40	3·33	132 53·0	19·6	pB, L, pmE, gbM	
7583	6167	...	...	m 555	23 10 46	3·04	83 21	19·6	vF, vS	
7584	6168	...	...	m 556	23 10 48	3·03	81 20	19·6	eF, vS, stellar	
7585	4928	2226 = 3979	II 236	...	23 10 48	3·10	95 24·8	19·6	pB, pS, iR, gbM	
7586	6169	...	...	m 557	23 10 49	3·03	82 10	19·6	eF, vS, alm stellar	
7587	6170	...	...	m 558	23 10 53	3·03	81 5	19·6	vF, vS, lE, gbM	
7588	6171	...	...	m 559	23 10 59	2·98	72 1	19·6	eF, eS	
7589	6172	...	...	m 560	23 11 4	3·07	90 30	19·6	eF, vS	
7590	4929	3980	...	Δ 477, 1	23 11 9	3·33	132 59 9	19·6	pB, pL, pmE, gbM, p of 2	
7591	6173	...	...	m 561	23 11 10	3·04	84 11	19·6	pF, S, R, vgbM	
7592	4930	...	III 186	d'A	23 11 11	3·10	95 10·8	19·6	eF, vS	
7593	6174	...	...	m 562	23 11 17	3·02	79 25	19·6	F, S, R	
7594	...	...	...	Common	23 11 24	3·02	80 34	19·6	pF, R, 3 st p	
7595	...	...	...	Common	23 11 28	3·02	80 51	19·6	F, stellar	
7596	...	...	...	L I	23 11	3·11	97 40·8	19·6	vF, pS, lE 0°, lbMN	
7597	6175	...	...	m 563	23 11 33	2·98	72 6	19·6	eF, vS, gbM	
7598	6176	...	...	m 564	23 11 35	2·98	72 1	19·6	eF, eS, stellar	
7599	4931	3981	...	Δ 477, 2	23 11 37	3·33	133 1·1	19·6	F, pL, pmE, gbM, f of 2	
7600	4932	2227	II 431	...	23 11 39	3·11	98 20·7	19·6	cF, S, R, psmbM	
7601	...	...	...	Common	23 11 42	3·03	81 30	19·6	pB, dif	
7602	6177	...	...	m 565	23 11 47	2·98	72 4	19·6	eF, eS, stellar	
7603	6178	...	...	m 566	23 11 47	3·07	90 31	19·6	F, vS, stellar	
7604	6179	...	...	m 567	23 11 47	3·04	83 19	19·6	eF, vS, bM	
7605	6180	...	...	m 568	23 11 48	3·04	83 21	19·6	vF, S, R, glbM	
7606	4933	2228 = 3982	I 104	...	23 11 49	3·12	99 15·0	19·6	pF, cL, pmE 0° ±	
7607	...	...	...	T IV	23 11 56	3·02	79 25·4	19·6	vF, S, R, *16 nf ½′ (nebs?)	
7608	6181	...	...	m 569, d'A	23 12 8	3·03	82 24·8	19·6	vF, pS, lE, lbM	
7609	6182	...	...	m 570	23 12 25	3·03	81 16	19·6	vF, vS, gbM	
7610	...	...	...	Common	23 12 27	3·03	80 37	19·6	F, S, dif	
7611	4934	...	...	d'A	23 12 31	3·04	82 42·1	19·6	F, S, R, Δ with 2 st 19, n	
7612	6183	...	...	m 571, d'A	23 12 38	3·03	82 11·1	19·6	pB, vS, R, bM	
7613	6184	...	...	Secchi	23 12 42	+3·07	90 34·0	−19·6	vF	

No.	G.C.	J.H.	W.H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7614	6185	...	...	Secchi	23 12 50 ±	+3·07	90 33	−19·6	vF, nf of 2	
7615	4935	2229	...	...	23 12 51	3·04	82 21·3	19·6	eF, eS	*
7616	...	...	...	Common	23 12 55	3·03	80 38	19·6	pF, dif	
7617	6186	...	...	d'A, m 572	23 13 0	3·04	82 36	19·7	eF, vS	
7618	...	...	...	St X	23 13 9	2·83	47 54·8	19·7	F, S, R, gbM	
7619	4936	2230	II 439	...	23 13 10	3·04	82 33·7	19·7	eB, pS, R, psbM	
7620	6187	...	...	m 573, T I	23 13 12	2·95	66 32·5	19·7	F, S, vlE	
7621	6188	...	...	m 574	23 13 18	3·04	82 24	19·7	eF, vS, stellar	
7622	4937	3983	...	...	23 13 21	3·58	152 53·5	19·7	eF, eS, am 5 st (doubtful)	
7623	4938	2231	III 435	...	23 13 25	3·04	82 22·2	19·7	F, vS, R, psbM	
7624	...	...	...	St IX, Sw IV	23 13 30	2·94	63 27·0	19·7	vF, lE or iR, dif, vlbM	
7625	4939	2232	II 250	...	23 13 31	2·99	73 32·4	19·7	pB, eS, R, smbM	
7626	4940	2233	II 440	...	23 13 37	3·04	82 33·0	19·7	eB, pS, R, psbM	
7627	...	...	...	Sw VI	23 13 50	3·02	78 42·8	19·7	vF, S, mE, 2 st n	
7628	...	...	...	St IX, Sw IV	23 14 2	2·95	64 52·0	19·7	vF, S, R, bM	
7629	6189	...	...	m 575	23 14 9	3·07	89 22	19·7	vF, vS, stellar	
7630	...	...	...	Common	23 14	3·02	79 20	19·7	F, S	
7631	{ 4942 = 4943 }	...	...	Ld R, d'A	23 14 22	3·04	82 33·0	19·7	vF, vS	
7632	4944	3985	...	...	23 14 22	3·31	133 14·9	19·7	F, S, R, lbM	
7633	4945	3986	...	...	23 14 31	3·72	158 25·8	19·7	F, vS, E 90°, psbM	
7634	4946	2234	II 441	...	23 14 36	3·04	81 53·0	19·7	F, S, F * * att	
7635	4947	2235	IV 52	...	23 14 36	2·62	29 34·3	19·7	vF, *8 inv l excentric	
7636	4948	3987	...	...	23 15 4	3·22	120 2·7	19·7	eF, S, R, sbM	
7637	4949	3984	...	...	23 15 6	4·99	172 40·3	19·7	vF, pL, R, vlbM, *nr	
7638 7639	} ...	...	...	Common	23 15 20 ±	3·02	79 40 ±	19·7	2 neb, F, S	
7640	4950	2236	II 600	...	23 15 24	2·86	49 54·8	19·7	eF, L, mE 164°, vlbM, r	†
7641	6190	...	...	St V	23 15 27	3·02	78 52·4	19·7	vF, S, iR, dif, lbM	
7642	6191	...	...	m 576	23 15 43	3·07	89 20	19·7	vF, vS, bM	
7643	6192	...	...	St V	23 15 47	3·02	78 47·0	19·7	F, pS, iR, dif, lbM	
7644	...	...	...	Sw V	23 16 10	3·01	76 47·3	19·7	vF, pS, lE	
7645	4951	3988	...	...	23 16 18	3·22	120 8·9	19·7	vF, S, R, glbM	
7646	...	...	...	Mu II	23 16 25	3·13	102 45·8	19·7	vF, vS, E 260° (neb?), *9n 3′·6	
7647	4952	...	III 473	...	23 16 48	3·00	74 0·3	19·7	eF, cL (?), p a row of st	
7648	4953	...	III 218	d'A, St IX	23 16 48	3·03	81 5·9	19·7	vF, pS, lE, bM	
7649	...	...	...	Sw VI	23 17 15	3·01	76 7·2	19·7	vF, pL, R	
7650	4954	3989	...	...	23 17 18	3·46	148 33·8	19·7	pF, pS, R, glbM, np of 2	
7651	...	...	...	Sw IV	23 17 25	3·01	76 47·6	19·7	eF, S, R	
7652	4955	3990	...	...	23 17 38	3·46	148 40·0	19·7	eF, S, R, sf of 2	
7653	4956	2237	...	...	23 17 48	+3·01	75 29·6	−19·7	vF, pS, R, gbM	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7654	4957	2238	...	M 52	23 18 3	+2·64	29 10·3	−19·7	Cl, L, Ri, mCM, R, st 9...13	
7655	4958	3991	...	...	23 18 15	3·67	158 47·7	19·7	eF, vS, R, pslbM, * 10 p 22'	
7656	...	...	...	L I	23 18 25	3·16	109 50·9	19·7	vF, vS, R, bMN	
7657	4959	3992	...	...	23 18 41	3·45	148 35·0	19·8	eF, R	
7658	4960	3994	...	...	23 18 48	3·27	129 59·9	19·8	D, both eF, S, R, 4 st p	
7659	4961	2239	III 212	...	23 18 53	3·02	76 33·6	19·8	vF, vS, R, psbM	
7660	4962	2240	...	...	23 18 53	2·96	63 44·1	19·8	F, vS, psmbM, * 10 p	
7661	4963	3993	...	...	23 18 56	3·59	156 2·8	19·8	eF, eL, R, vgvlbM	
7662	4964	2241	IV 18	...	23 19 11	2·86	48 14·0	19·8	!!! ○ or ⊙, vB, pS, R, blue	†
7663	6193	...	...	Secchi	23 19 27	3·09	95 31·3	19·8	vF	
7664	6194	...	...	St VIII, T I	23 19 43	2·97	65 41·3	19·8	vF, *s, 2 st 11·12 p	
7665	4965	...	III 438	...	23 20 1	3·11	100 11·3	19·8	eF, S, stellar	
7666	6196	...	...	Secchi	23 20 12	3·09	94 57·3	19·8	vF	
7667	6197	...	...	Secchi	23 20 12	3·07	90 57·3	19·8	vF	
7668	6198									
7669	6199	...	...	Secchi	23 20	3·07	90 57 ±	19·8	vF, surround G.C. 6197	
7670	6200									
7671	4966	2242	III 226	...	23 20 16	3·03	78 18·1	19·8	pB, S, R, vsmbM, *9 p	*
7672	4967	...	...	Ld R	23 20 28	3·03	78 23·2	19·8	vF, S, 5' s of h 2242	
7673	6201	...	...	m 577, d'A	23 20 43	2·98	67 10·9	19·8	F, S, R	
7674	4968	2243	...	...	23 20 50	3·04	81 59·5	19·8	F, cS, gbM, p of 2	
7675	4969	2244	...	...	23 21 0	3·04	82 0·1	19·8	vF, S, R, gbM, f of 2	
7676	4970	3995	...	...	23 21 3	3·46	150 29·0	19·8	B, S, lE, vsvmbM * 11	
7677	6202	...	...	m 578	23 21 9	2·98	67 14	19·8	eF, vS, stell	
7678	4971	2245	II 226	...	23 21 34	2·99	68 21·0	19·8	vF, pL, vlE, lbM, am 4 st	†
7679	6203	...	...	m 579, d'A	23 21 38	3·06	87 15·4	19·8	pB, S, R, mbMN, stell	
7680	4972	2246	III 860	d'A, St IX	23 21 41	2·94	58 21·2	19·8	vF, S, R, lbM, r	
7681	4973	2247	II 242	...	23 21 52	3·01	73 28·1	19·8	vF, S, iR, r, *f	
7682	4974	...	...	d'A	23 21 55	3·06	87 14·4	19·8	eF, * 14 p 13″·7, ln	
7683	6204	...	...	Secchi, T I	23 22 0	3·03	79 20·0	19·8	F, * 13 n	
7684	6205	...	...	m 580	23 23 20	3·07	90 41	19·8	F, vS, stell	
7685	4975	2248	III 426	...	23 23 22	3·06	86 52·1	19·8	eF, cL, R, gbM, *nr	
7686	4976	2249	VIII 69	...	23 23 29	2·84	41 38·8	19·8	Cl, P, lC, st 7...11	†
7687	4977	...	...	d'A	23 23 47	3·06	87 13·2	19·8	vF, vS, * 11 f 1', n 85″	
7688	6206	...	...	Struve, Peters	23 24 6	3·00	69 21·7	19·8	F, vS, dif, * 11 201°, 80″	
7689	4978	3996	...	Δ 347?	23 24 48	3·35	144 52·4	19·8	pF, L, R, vgbM	
7690	4979	3997	...	...	23 25 20	3·33	142 28·2	19·8	eB, S, lE, psbM, *8 f	
7691	4980	2250	III 213	...	23 25 25	3·02	74 55·2	19·8	eF, pL, Δ with 2 st 10	
7692	5079	...	...	G P Bond	23 25 33	3·09	96 22·2	19·8	Neb, *9 f 18', 73″ s	
7693	...	...	...	Hall	23 25 59	+3·08	92 3·9	−19·8	S neb or neb * 14 (A N 2394	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	o ′	″		
7694	{4981 = 4982}	...	III 187	d'A	23 26 6	+3·08	93 28·5	−19·9	eF, pL, stellar	
7695	6207	...	...	m 581	23 26 7	3·09	93 29	19·8	cF, stell (nr III 187)	
7696	6208	...	...	m 582	23 26 41	3·06	85 55	19·9	F, S, lE	
7697	4983	3998	...	...	23 29 49	3·49	156 19·6	19·9	eeF, pL (certain)	
7698	...	...	...	St XIII	23 27 2	2·99	65 49·6	19·8	vF, eS, R, bMSN	
7699	6209	...	...	m 583	23 27 14	3·09	93 41	19·9	eF, vS	
7700	6210	...	...	m 584	23 27 18	3·09	93 44	19·9	vF, eS, stellar	
7701	4984	...	III 188	d'A	23 27 20	3·08	93 37·5	19·9	vF, S, R, mbM, * 11 sp	
7702	4985	3999	...	...	23 27 44	3·35	146 47·0	19·9	B, cS, E, g, sbM, * 8·9 p	
7703	4986	2251	...	...	23 27 44	3·02	74 42·0	19·9	vF, vS, gbM, * 14 nf 1′	
7704	4987	2252	...	...	23 27 51	3·06	85 52·2	19·9	eF, * 12 p, sp of 2	
7705	6211	...	...	m 585	23 27 54	3·06	85 58	19·9	eF	
7706	4988	2253	...	...	23 28 2	3·06	85 48·9	19·9	vF, pS, * 18 close s, nf of 2	
7707	4989	2254	III 579	...	23 28 3	2·90	46 27·7	19·9	eF, S, R, * 9·10 p v nr	
7708	4990	2255	VIII 62	...	23 28 16	2·51	17 51·4	19·9	Cl, L, P, lC, st 8, 10...15	
7709	...	...	...	Sw VI	23 28 22	3·13	107 28·8	19·9	pF, S, R, lbM	
7710	6212	...	...	d'A, m 586	23 28 32	3·09	93 39·0	19·9	pF, vS, stellar	
7711	4991	2256	II 244	...	23 28 35	3·03	75 28·2	19·9	F, S, R, psbM, stellar	
7712	6213	...	...	T I	23 28 45	3·00	67 8·3	19·9	vF	
7713	4992	4000	...	...	23 28 57	3·21	128 13·0	19·9	pB, L, E, vgbM	
7714	4993	2257	...	...	23 29 5	3·07	88 37·2	19·9	pB, S, R, psbM, * 12 sp, * 6 sf	
7715	4994	...	...	Ld R	23 29 12	3·07	88 37·1	19·9	eF, pL, R	
7716	4995	2258	...	...	23 29 20	3·07	90 28·7	19·9	F, pL, lE, gbM, * 10 s	
7717	6214	...	...	T I	23 30 35	3·12	105 53·3	19·9	vF, S	
7718	6215	...	...	m 587	23 31 4	3·00	65 5	19·9	vF, S, R	
7719	...	...	...	L I	23 31 25	3·14	113 46·0	19·9	eF, vS, R	
7720	4996	2259	III 146	...	23 31 28	2·99	63 45·2	19·9	F, S, lE, bM, am st	
7721	4997	2260	II 432	...	23 31 36	3·09	97 17·6	19·9	pF, cL, E 12° ±, vgbM	
7722	6216	...	...	d'A	23 31 39	3·03	74 48·9	19·9	pB, pL, R, mbM	
7723	4998	2261	I 110	...	23 31 42	3·11	103 44·2	19·9	cB, cL, E, gmbM, r	*
7724	6217	...	...	St V	23 31 52	3·11	102 59·9	19·9	eF, pL, iR	
7725	4999	...	III 189	...	23 32 21	3·09	95 24·1	19·9	eeF	
7726	...	...	...	Sw IV	23 32 30	2·99	63 47·3	19·9	eeF, pS, R, v diffic	
7727	5000	2262	I 111	...	23 32 39	3·11	103 4·1	19·9	pB, pL, iR, mbM	
7728	6218	...	...	d'A	23 33 0	2·99	63 39·0	19·9	vF, vS, lE, * 10 sp	
7729	...	...	...	St XIII	23 33 33	2·99	61 35·2	19·9	vF, S, iE, F * inv s	
7730	6219	...	...	T I	23 34 5	3·13	111 0·3	19·9	pB, pL, E	
7731	6220	...	...	m 588	23 34 17	3·06	87 3	19·9	F, S	
7732	6221	...	...	m 589	23 34 22	3·06	87 3	19·9	vF, pL	
7733	5001	4001	...	...	23 34 41	+3·40	156 45·0	−19·9	eF, S, R, p of 2	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7734	5002	4002	...	...	23 34 49	+3·40	156 44·4	−19·9	eF, cS, R, f of 2	
7735	5003	2263	...	...	23 35 15	3 01	64 33·2	20·0	vF, S, vlE, * 13 nf, v nr	
7736	...	...	...	O St I	23 35 25	3·12	110 14·0	20·0	eF, cS, gbM, bet 2 st 12	
7737	...	...	...	Bigourdan	23 35 45	3·00	63 43	20·0	vF, S, mbMN	
7738	6222	...	...	Secchi	23 36 22	3·07	90 17·3	20·0	vF, n of 2	
7739	6223	...	...	Secchi	23 36 22	3·07	90 18	20·0	s of 2, v nr	
7740	...	...	...	Bigourdan	23 36 28	3·00	63 28	20·0	vF, S, lbM, stellar	
7741	5004	...	II 208	d'A, St XII	23 36 52	3·01	64 42·2	20·0	cF, cL, iR, D * 10,12 np2′	
7742	5005	2264	II 255	...	23 37 9	3·05	80 0·7	20·0	cB, cS, gmbM, * 12 f 72″	
7743	5006	2265	II 256	...	23 37 14	3 05	80 50·6	20·0	pF, S, R, * 14 sf	
7744	5007	4003	...	...	23 37 36	3·19	133 41·5	20·0	cB, S, vlE, svmbM * 14	
7745	6224	...	...	m 590	23 37 41	3 01	64 52	20·0	eF	
7746	...	...	...	Sw IV	23 38 3	3·08	92 27·4	20·0	eF, pS, R, * nr s	
7747	6225	...	...	St V	23 38 20	2·99	63 27·5	20·0	vF, vS, iR	
7748	5008	2266	...	...	23 38 27	2·76	21 1·3	20·0	vL neby, surrounds * 7	
7749	5009	4004	...	...	23 38 30	3 14	120 17·1	20·0	vF, S, R, gmbM, * 12 f	
7750	5010	2267	III 427	...	23 39 28	3·07	86 58·7	20·0	cF, pL, vlE 0°, lbM, * 11 sf	
7751	5013	2269	III 437	d'A	23 39 49	3·06	83 54·3	20·0	F, S, R, gbM, er	
7752	6226	...	...	Ld R, d'A	23 39 59	3·01	61 16·5	20·0	F, S, lE, p h 2268	
7753	5011	2268	II 213	...	23 40 5	3·01	61 17·9	20·0	cF, cL, vlE, vglbM, r	
7754	...	...	...	L I	23 40 25	3·11	107 24·0	20·0	eF, vS	
7755	5012	4005	...	...	23 40 36	3·14	121 17·8	20·0	B, cL, R, psmbM	
7756	...	...	...	Ld R*	23 41 22	3·07	86 40	20·0	Neb, 5′ sp h 2270	
7757	5014	2270	...	...	23 41 37	3·07	86 36·1	20·0	vF, cL, vlE, vglbM, 2 st 13 n	
7758	...	...	...	Mu II	23 41 39	3 11	112 49·0	20·0	eF, vS, iR, sbM, D * 10 nf 50″	
7759	...	...	...	Sw VI, L I	23 41 54	3·11	107 19·1	20·0	vF, S, R, lbM, B * n	
7760	5015	2271	III 854	...	23 42 8	3·02	59 47·8	20·0	cB, vS, R, psbM, * 12 att	
7761	...	...	...	O St I	23 42 25	3·10	104 10·0	20·0	F, vS, R, gbM, * 10 p 8′	
7762	5016	2272	VII 55	...	23 43 5	2·85	22 45·8	20·0	Cl, pRi, pC, st 11...15	
7763	...	...	...	L I	23 43 25	3·10	107 23·0	20·0	eF, vS, R, F * f	
7764	5017	4006	...	...	23 43 34	3·15	131 31·0	20·0	B, pL, R, gbM	
7765	5018	...	...	Ld R	23 43 47	3·03	63 36·5	20·0	vvF, 100″ np h 2273	
7766	6227	...	...	Copeland (R)	23 43 52	3·03	63 39·0	20 0	vF, S, 85″ s of h 2273	
7767	6228	...	...	Copeland (R)	23 43 53	3·03	63 41·3	20·0	vF, S, lE, * p 19″	
7768	5019	2273	...	...	23 43 53	3·03	63 37·6	20·0	vF, S, E, * inv, * p vnr	
7769	5020	2274	II 230	...	23 43 58	3·04	70 37·7	20·0	pF, pS, R, mbM	†
7770	5021	...	...	Ld R	23 44 17	3·04	70 40·9	20·0	vF, vS, iR, s of 2	†
7771	5022	2275	II 231	...	23 44 19	3·04	70 40·0	20·0	pB, pL, E 84°, bM, n of 2	†
7772	5023	2276	...	...	23 44 38	3 05	74 31·4	20·0	Cl of sc st 10 m	
7773	5024	2277	II 851	...	23 45 5	3 02	59 30·5	20·0	pF, cS, R, * 13 nf nr	
7774	...	...	...	Sw IV	23 45 12	+3·06	79 18·2	−20·0	eF, S, R, in centre of 3 st	

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7775	...	...	...	St XIII	23 45 19	+3·03	62 0·3	−20·0	vF, pS, lE, glbM	
7776	...	...	...	O St I	23 45 30	3·09	104 10±	20 0	eF, vS, lE, gbM	
7777	6229	...	...	St VIII	23 46 7	3·03	62 29·7	20·0	vF, vS, R, bM	
7778	5025	2278	III 231	...	23 46 11	3·06	82 54·3	20·0	cF, S, R, psbM, stellar, 1st of 4	
7779	5026	2279	III 232	...	23 46 19	3·06	82 54·0	20·0	pF, S, R, psbM, stellar, 2nd of 4	
7780	...	...	...	St XII, Sw IV	23 46 23	3·06	82 39·6	20·0	vF, vS, R, lbM, F * inv	
7781	5027	2280	...	...	23 46 39	3·06	82 55·0	20·0	F, S, R, 3rd of 4	
7782	5028	2281	III 233	...	23 46 45	3·06	82 48·5	20·0	pF, pL, lE, glbM, 4th of 4	
7783	6230	...	...	m 591	23 46 59	3·07	90 24	20·0	F, S, lE	
7784	...	...	...	St XIII	23 48 6	3·05	69 1·1	20·0	vF, eS, lbM, r?, p of 2	
7785	5029	2282	II 468	...	23 48 10	3·07	84 51·8	20·0	pB, pS, iR, psbM, r, *8 p 4′·5	
7786	...	...	...	St XIII	23 48 14	3·05	69 11·4	20·0	pF, pS, lE, vF st inv, f of 2	
7787	6231	...	...	m 592	23 48 41	3·07	90 13	20·0	vF, S, R	
7788	5030	2283	...	...	23 49 43	2·98	29 23·3	20·0	Cl, S, pRi, vC, st 10, 13...	
7789	5031	2284	VI 30	C H	23 49 59	2·99	34 3·8	20·0	Cl, vL, vRi, vmC, st 11...18	
7790	5032	2285	VII 56	...	23 50 1	2·98	29 33·8	20·0	Cl, pRi, pC	
7791	5033	2286	...	...	23 50 47	3·06	80 0·3	20·0	vF, vS, ? F * (d'A not found)	
7792	6232	...	...	St V	23 50 55	3·06	74 17·0	20·0	eF, eS, bM	
7793	6233	...	...	G P Bond	23 51 17	3·10	123 20·7	20·0	Like a comet (1850)	
7794	5036	2288	III 466	d'A	23 51 23	3·07	80 3·2	20·0	vF, pS, iR	
7795	5034	2287	...	...	23 51 34	3·00	30 45·7	20·0	Cl, vL, P, lC, st 7, 10...	
7796	5035	4009	...	...	23 51 45	3·14	146 14·3	20·0	pB, eS, R, gmbM	
7797	5037	2289	III 867	...	23 51 50	3·07	87 8·4	20 0	eF, pS, iR, lbM	
7798	5038	2290	II 232	...	23 52 16	3·06	70 1·7	20 0	pF, S, R, sbM, * 10 sp	
7799	6234	...	...	d'A	23 52 21	3·05	59 29·1	20·0	vF, vS, * 16 close p	
7800	5039	2291	II 10	...	23 52 26	3·06	75 58·4	20·0	F, pS, E 39°	
7801	5040	2292	...	...	23 53 18	3·03	40 3·6	20·0	Cl, pRi, pC, st 9...	
7802	5041	2293	...	...	23 53 50	3·07	84 32·1	20·0	vF, S, R, psbM	
7803	...	...	...	Sw VI	23 53 58	3·07	77 39·3	20·1	pF, pS, R, F * np v nr	
7804	6235	...	...	Schweizer	23 54 9	3·07	83 1·9	20·1	vF, D *, nebulous?	*
7805	5042	2294	III 855	...	23 54 18	3·06	59 20·5	20·1	eF, S, R, sbM, stellar, sp of 2	
7806	5043	2295	III 856	...	23 54 20	3·06	59 19·9	20·1	eF, S, R, stellar, nf of 2	
7807	...	...	...	O St I	23 54 30	3·08	109 33·0	20·1	eF, pS, iF	
7808	...	...	...	Mu I	23 54 30	3·08	101 31·0	20·1	eF, vS, R, stell N, *8·5 sp 3′	
7809	6236	...	...	m 593	23 54 56	3·07	87 51	20·1	eF, vS	
7810	5044	2296	(III 984)	H. MS	23 55 9	3·07	77 48·3	20·1	pF, stellar, 2 st np in line	
7811	6237	...	...	m 594	23 55 15	3·07	87 26	20·1	vF, S, R, stellar	
7812	5045	4010	...	...	23 55 43	3·09	125 1·6	20·1	vF, S, R, am st	
7813	...	...	...	Mu II	23 56 4	3·08	102 46·0	20·1	eF, vS, E 80°, * 8·5 f 38″, *9 np 40″	
7814	5046	2297	II 240	...	23 56 5	+3·07	74 38·9	−20·1	eB, eL, E, vgbM	†

No.	G. C.	J. H.	W. H.	Other Observers.	Right Ascension, 1860·0.	Annual Precession, 1880.	North Polar Distance, 1860·0.	Annual Precession, 1880.	Summary Description.	Notes.
					h m s	s	° ′	″		
7815	6238	...	...	Schultz	23 56 15	+3·07	70 4·5	−20·1	F, S, lE, h 2300 nf	
7816	5047 = 5048	2298 = 2299	III 436	...	23 56 39	3·07	83 18·1	20·1	vF, pL, R, gbM	
7817	5049	2300	II 227	...	23 56 49	3·07	70 1·8	20·1	pF, eL, mE 45° ± , lbM	
7818	...	...	...	Sw VI	23 56 59	3·07	83 22·8	20·1	eeF, pS, v diffic, sf h 2298	
7819	6239	...	...	Copeland (R)	23 57 11	3·07	59 18·3	20·1	eF, L	
7820	5050	2301	...	...	23 57 20	3·07	85 34·8	20·1	pF, vS, vsmbM, * 14 sp	
7821	...	...	...	O St I	23 57 30	3·07	107 16·0	20·1	vF, pS, iF, glbM	
7822	5051	2302	...	...	23 57 33	3·05	22 6·3	20·1	! eeF, eeL	*
7823	5052	4011	...	...	23 57 35	3·09	152 50·7	20·1	F, S, R, gbM	
7824	5053	2303	...	...	23 57 54	3·07	83 51·5	20·1	pF, S, R, * 10 np	
7825	5054	2304	...	...	23 57 58	3·07	85 33·9	20·1	vF, S, gbM	
7826	5055	2305	VIII 29	...	23 58 2	3·07	111 29·6	20·1	Cl, vP, vlC	
7827	5056	2306	...	...	23 58 18	3·07	85 33·5	20·1	vF, S, R, * 12·13 nf	
7828	...	...	...	L II	23 58 46	3·07	104 11·0	20·1	eF, S, E 130°, sbMN, * 15 sf	100° 20″
7829	...	...	...	L II	23 58 46	3·07	104 11·0	20·1	eF, eS, R (neb?), f of 2	100° 20″
7830	6240	...	...	m 595	23 59 1	3·07	82 24	20·1	eF, neb * 13 m	
7831	...	...	...	Sw II	23 59 6	3·07	58 18·3	20·1	eF, vS, mE, vF * v nr	
7832	5057	4013	III 190	...	23 59 17	3·07	94 29·8	20·1	vF, vS, R, vgpsmbM, 2 st 9 sf	
7833	...	...	...	Bigourdan	23 59 21	3·07	63 8	20·1	Cl, vS, vF, 2′·5, nebs?	
7834	6241	...	...	m 596	23 59 26	3·07	82 24	20·1	eeF, vS	
7835	6242	...	...	m 597	23 59 35	3·07	82 21	20·1	eF, S, R	
7836	...	...	...	Sw II	23 59 35	3·07	57 50·7	20·1	eF, vS, R, bet 2 st	
7837	6243	...	...	m 598	23 59 41	3·07	82 25	20·1	eF, p of D neb	
7838	6244	...	...	m 599	23 59 43	3·07	82 25	20·1	eF, f of D neb	
7839	...	...	...	Bigourdan	23 59 50	3·07	63 8·9	20·1	vF, pS, dif, r	
7840	6245	...	...	m 600	23 59 56	+3·07	82 21	−20·1	eF, S	

Notes.

Some of the following Notes are taken from Sir J. Herschel's General Catalogue (sometimes abridged), and are distinguished by the initials *J. H.* Most of the Notes in the "Supplement" have been omitted, as the corrections to Herschel's places indicated by them have already been made in the present Catalogue and the authorities given in the fifth column. The notes are referred to in the last column of the Catalogue by the sign *, except those on the numbers 428, 614, 3146, 3967, 4941 of the G. C., which objects have been omitted in the present Catalogue.

N. G. C.

16 h 5 was not seen by d'A and St (XIII); it is = h 4 as they were observed in different sweeps.

18 G. C. 5085, nova Schultz. Not seen by St (XIII); does not occur in d'A's nor in Ld R's observations.

43 h 9. Schultz says: "An eF neb suspected np between * DM 30°, 20 and a F * north."

57 h 13 = II 241 = II 243. In P. T. the determining star is omitted, and in the statement of the places of these nebulæ there is much confusion (see list of errata, P.T. 1864, p. 44). Auwers has threaded the intricacies of this maze with singular felicity, but has been misled in the case of II 243 into assigning to it a totally erroneous place.—*J. H.*

147 h 29. d'A has N.P.D. 42° 26′ (one obs.), but Bigourdan has 42° 15′·9, agreeing with h.

160 h 32. This is not a double nebula as stated in the G. C. (No. 79, 80), as the observer at Birr Castle mistook G. C. 82 for h 32. There is, however, a vF neb. in Pos. 78°, Dist. 72″, first seen by Schultz (No. 162 in this Cat.).

180 III 876. The P.D. of Auwers (81° 16′) is 1° wrong. The place given in P. T. is 1° 43′ *n* of 51 *Piscium*, so also in register.—*J. H.*

193, 196 h 37–41. d'A has observed all the nebulæ in P.D. 87° and 89°, and his identification agrees with that of Auwers. The R.A.'s of h 37 and 42 were made out by h on the assumption that the *latter* was = III 595; h found $\Delta\alpha = 25^{s}\cdot5$, which is correct.

247 h 57 = V 20. According to Tempel this nebula is 30′ long.

253 h 61 = h 2345. In h's sweep 733 the position reading is set down as 324°·5. This is in contradiction with a diagram made at the time and is an obvious mistake for 234°·5 which agrees with the diagram and with two obs. of H, in both of which it is described as "*nf* to *sp*." There is also an erratum in C. G. H. Cat., *for* 143°·8 *read* 144°·5, since 324°·5 − 180° = 144°·5.—*J. H.*

259 h 64 = II 621 = II 703. Auwers remarks that A *Ceti*, the determining star of H, does not exist, but C. H. has perceived this, and by using 13 *Ceti* (H, sweep 756) has fixed the place of II 703 for 1800 at $0^{h}\ 37^{m}\ 47^{s}$, 93° 53′, thereby identifying it with II 621.—*J. H.*

287 h 75. d'A's R.A. is 1^{m} greater (one obs., h also only one).

292 h 2356. This is the main body of the nubecula minor.

296 II 214. Not found by d'A (only once looked for). Seen by Schönfeld (II Abtheilung), who says that H's R.A. is too great (how much?). Observed once at Birr Castle.

300 h 2359. A complex object with several nuclei. Erratum in the R.A. set down in C. G. H. as resulting from sw 488; *for* 46^{m} *read* 47^{m}.—*J. H.*

319, 322, 368 h 4007, 4008, 4012. In the C. G. H. Cat. these nebulæ are placed erroneously in 23^{h} of R.A. owing to a mistake in reducing.—*J. H.*

393 h 88 = I 54. This is *not* the I 54 of the P. T. which proved to be one of Messier's nebulæ, but another subsequently inserted by H so as not to break the order of the numbers.—*J. H.*

N. G. C.

467 h 99 is = I 108 (not III 250) as already suggested by Marth (*A. N.* 995 and 1665).

495, 496, 498, 499 III 156, 157, 158. Ld R's A, B, C are certainly H's group III 156, 157, 158, "three forming a rectangular triangle, in the legs eF, vS, at the rectangle vF, pL." Nothing was ever seen at Birr Castle in the place assigned by Schultz to III 157, sp h 106, while two were seen np h 106, viz. C and D, or III 157 and G. C. 283 (if Schultz's object were 84″ *north* of h 106 it would agree with C).

504 h 107, whose P.D. was only roughly observed, is beyond a doubt = G. C. 291, nova d'A.

523 G. C. 306 (d'A). Is it = III 170? See Auwers' note to III 171. All the R.A.'s observed on Sept. 13, 1784, are wrong (III 167–173), only II 224 is right owing to its proximity to *β Andromedæ*.

532 h 119 = III 556. h took 119 for III 556, but no R.A. was obtained, that set down being the R.A. brought up from C II. Only one seen in Birr, and by d'A. It is certainly curious that it was once described at Birr as R and twice as mE 30°, but the * 281″ nf proves the E neb to be the same as observed by d'A, so I have assumed the identity to be established.

536 h 120. I agree with Auwers in making III 171 = h 120; the Δα is exactly 60ˢ.

559 h 124 = VII 48. Auwers remarks that h 124 is not nova but = VII 48; this is correct, an error of 1° having been committed in reducing the P.D. of sw 216.—*J. H.*

586 h 130. I assume Swift's III 6 ($1^h\ 24^m\ 55^s$, 97° 36′·6 vF, pL, R, bM) to be h 130, which he does not mention.

607 G. C. 358. No nebulosity seen by Schönfeld, but Auwers saw it (*Kön. Beob.* p. 226).

618 h 136. Never found at Birr, nor by d'A. Schönfeld (II) has two obs., vF, eS = * 13. place agreeing with h. Query: only a F *. h has "* f $2^m\ 51^s$," in which place, however, there is no D. M. star.

627 h 141. Not found by d'A. h has but one obs., and adds, "The R.A. conjectural and P.D. liable to some error."

679 III 175. d'A's R.A. is $1^h\ 41^m\ 35^s{\cdot}5$, one observation.

701 h 160 = h 2442 = I 62. This nebula, though set down by H as of the first class, could not be seen by d'A with the 4½-inch Refractor at Leipzig. It is marked in this Catalogue by a mean of four obs. only as *F.—J. H.* Not observed at Copenhagen, nor apparently elsewhere of late years.

... G. G. 428 = 55 *Andromedæ*. Omitted in this Catalogue, as the star is undoubtedly not nebulous and was not seen so by Piazzi (whom h quotes). See Schjellerup's note, *Astr. Nachr.* No. 1613.

731, 755 III 266 and 265. See Peters' observations, *A. N.* 2365, which agree well with H (Auwers).

733, 740 G. C. 442 and 447. The former is ε of Ld R, the latter is δ. II 221 *may* be = h 169, though H's "F, pL, mE" agrees better with the description of δ. But, on the other hand, H gives identically the same description of II 221 and II 222 (1784 Sept. 12), so perhaps it only belongs to II 222.

748 h 176 = III 193. Seen as pB by d'A.

766 h 180. The words in P. T. 1833, "* 10m, 15° np, 2′ dist.," should evidently be "* 15° nf," or in Pos. 75°, i.e. f 8^s, 31″n. d'A has not seen any star p, but one 11″·12 f $9^s{\cdot}0$ and 52″ n, which agrees sufficiently well with h's estimated pos. and dist.

771 h 179. Retained in the Cat. for future occasional observation. Nothing can be more difficult than to verify or disprove the nebulosity of a considerable star under ordinary atmospheric circumstances.—*J. H.*

821 h 193 = I 152. Though H has placed it in the first class, all other observers appear to agree in calling it only pB.

827 h 198 = III 227. H: "2 or 3 st with neb"; h: "vF, R, bM, 20″"; d'A: "Non perfecte rotunda"; Swift (I No. 2): mE. No other neb near except G. C. 5223.

845 h 204 = III 604. d'A's R.A. adopted, H (Auwers) gives $2^h\ 2^m\ 48^s$, while that of h is 5^s too great.

877 h 210 = II 246. II and h are at issue about the adjacent stars, but h is confirmed by d'A and Ld R. The * in Pos. 166° is B.W. 2^h, 143.

881 h 211 = II 436. R.A. of G. C. is 33^s too small (H and d'A).

908 I 153. The place given by Auwers is wrong owing to a misprint in P. T., the nebula follows (not precedes) the determining star.—*J. H.*

917 h 220. No neb, only a vS, Cl with 4 st nr np (2 Birr obs. 1874–76, not found by d'A).

949 h 226 = I 154. The place of Auwers is wrong owing to a misprint in P. T.—*J. H.*

955 h 229 = II 278. In the *Month. Not.* xxxviii. p. 104, Winnecke drew attention to the remarkable circumstance that this nebula was invisible to Schönfeld in Dec. 1861 and to Vogel in Nov. 1865, while it was easily seen by d'A, Schönfeld, and Winnecke in 1856, 1863, 1864, 1868 and 1877. Possibly the brightness of this object is variable. In Nov. 1887 it was fully of the second class.

N. G. C.

959, 970, 971, 974, 978 h 231, 233, 234, &c. The identification in G. C., p. 17, is slightly wrong. $\Delta\alpha$ of h 231 and 233 is = 17ˢ·4, ΔPD = 30″, while Ld R's observation gives β f α 17ˢ·4, 29″ n, so that β = h 233, and the neb 12′ sf is h 234. d'A's identification is wrong.

980, 982 h 235–236 = III 572–573. h has under h 235: "Pos. from the next one = 337°·0." Is the p one perhaps the most northern one? H says nothing about their relative position; not observed by d'A.

1003 h 240 = II 238 = III 198. C. H. has overlooked or omitted an obs. by H of III 198 in sw 574 which, referred to, confirms Mr. Marth's surmise that the nebulæ are identical.—*J. H.*

1055 II 6 is on p. 17 of G. C. supposed to have been a comet, but further on (p. 45) it is stated ("from MS. notes") that it is = I 1. The place of II 6 was very rough.

1059 h 259. Not found by d'A on a very clear night.

... G. C. 614 (Bessel) is the star B. W. (2) 1063, but no nebulosity was seen by d'A, nor by Auwers. 9·3 mag. in the D. M.

1140 h 275 = h 2500 = II 470. H, h (at Slough), and d'A agree in calling it pB, only C. G. H. has F (but not vF, as in G. C.).

1161 h 277 = II 239. No neb seen by d'A, nor at Birr, in the place assigned to II 239 in G. C.; II 239 and III 199 were the only nebulæ observed on Oct. 7, 1784, and were referred to 30 *Persei* (see errata in P. T.). This would give for 1860:

	h m s	° ′	
III 199	2 53 39	45 34·5	vF, iF
II 239	2 53 42	45 38·5	pB, pS.

Assuming an error of -2^m, this would agree fairly well with h 277 and Ld R's nova np it.

1172 h 280 = II 502. H describes II 502 as eS, F, stellar. Either then the identity is doubtful or some change must be suspected. The place, however, agrees well.—*J. H.*

1186 h 281 = IV 43. Twice looked for by Ld R, but not found; often searched for in vain by d'A. H. calls it "a pB ✱ with 2 F branches;" h has "a ✱ 14 m with some kind of nebulous appendage."

1239 h 288 = III 262. d'A's R.A. is 30ˢ greater (one obs.); h has no R.A.

1241, 1242, 1243 h 289, III 591 and h 291. H makes III 591 to be the nf of 2, therefore it was the first and second one he saw. It is very curious that nobody had ever seen more than two of these three at the same time, until I observed them all three at Birr Castle on Nov. 6, 1877.

1266 III 194. The only nebula found by d'A near H's place is that given in the Catalogue (4 obs.), differing 13ˢ and 12′ from H's single observation.

1278 h 293 = II 603. It is difficult to see which nebula of this group is = h 293. I have adopted the one observed by d'A 4ˢ·5 f, 2′·9 n of his nova G. C. 675. This implies a correction of $-2'$ to the P.D. of h, which agrees with the correction required by h 294 and h 295.

1293, 1294 h 294-295 = III 574–575. About this pair see *Month. Not.* xlvii. p. 415.

1333 G. C. 710. The brightness has been suspected to vary (*A. N.* 1379 and 1391), but it is probably a case like the Merope nebula.

1340 h 2539. It *may* be identical with I 257 (h 2542), for h has only one observation of each (in different sweeps) and gives but a rough place for h 2542.

1374 h 2557. For J. Schmidt's obs. of this group see *Astr. Nachr.* 2097.

1391, 1394 Nos. 373–74 of Prof. O. Stone's list *Astr. Journal*, No. 152, with these notes added: "1st of 3, one of which is G. C. 742," and "3rd of 3."

1399, 1404 h 2569-71. The R.A.'s of h are respectively 4ˢ and 13ˢ too great (J. Schmidt, *Astr. Nachr.* 2097).

1442 II 594. Not found by Schönfeld (II Abth.). Probably = II 458 with an error of 1° in P.D.

1453 h 309 = I 155. Auwers' place of I 155 is deduced from an erroneous entry in P. T. (see errata, P. T. 1864, p. 44). C. H. has used two observations in sweeps 608 and 638, agreeing to 3ˢ in R.A. and 2′ in P.D.—*J. H.*

1551 II 464. Not found at Copenhagen, nor at Birr Castle. G. C. 835 (nova d'A) is exactly 1° north; they are probably identical.

1554, 1555 G. C. 5339 and 839. The latter is the well-known nebula found by Hind, Oct. 11, 1852 (*Astr. Nachr.* 839), observed by d'A at Leipzig four times in 1855–56 as a pB or pF neb, about a minute in diameter, and found missing by d'A in Oct. 1861. G. C. 5339 is a neb, S, with an eccentric nucleus = ✱ 14 mag., which was found early in 1868 by O. Struve, and was also observed by d'A (*Astr. Nachr.* 1689), who was sure that no nebulosity had formerly existed in that place (4′ p Hind's nebula). This object must also have

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disappeared since, as I was unable to perceive any nebulosity near the place with Lord Rosse's 6-foot Reflector in 1877. The place has also been examined of late years by Tempel (*A. N.* 2212) with a similar result. The place for G. C. 839 in the Catalogue is that resulting from d'A's four obs. at Leipzig.

1740 h 342. P. T. 1833 has "∗ 12 nf," G. C. has "∗ 12 sf," while d'A places the star on the sp margin, agreeing with a Birr diagram.

1750 VIII 43. Misprint of 10′ in Auwers' P.D.

1757 h 343. Looked for six times at Birr Castle and twice by Tempel (*A. N.* 2439) and not seen. Its existence is therefore very doubtful, as h has only one obs.

1760 h 2709. Place graphically determined by measurement of a diagram, as compared with h 2710.—*J. H.*

1762 III 453. Erroneously identified with h 335 in P. T. 1833. By an unlucky coincidence, its place per working list, roughly brought up from C. H. agreed so well with h 335 that it was assumed to be the same. There is, however, an error of 10^m in R.A. in C. H.'s reduction, the star of comparison being 10 *Orionis* and the nebula *following* the star by $5^m\ 7^s$ (as ascertained by reference both to the register sheet and the original sweep). Auwers, misled by the erroneous identification, has assumed that the nebula must have preceded the star, which would (nearly) account for the difference, and in consequence his R.A. is 10^m too small. C. H.'s error probably arose from misapplying in like manner the sign of $\Delta\alpha$.—*J. H.*

1781 III 268. Auwers' R.A. ($4^h\ 57^m\ 23^s$, 1830) is adopted in preference to $5^h\ 0^m\ 28^s$, that brought up from C. H. to the same epoch. In the sweep 367 (H) there are three stars of comparison given: 58 *Eridani*, α *Leporis*, and 19 *Leporis*. The $\Delta\alpha$ of α and 19 comes out correct, but that of 58 from each is wrong by $3^m\ 5^s$, so that the star must have been mistaken. C. H. has used 58 and α, and has rightly brought out the place of the neb by the wrong star and wrongly by the right one; and by an odd coincidence the two results agree well, though both wrong.—*J. H.*

1927 h 356. Looked for three times at Birr Castle; twice the sky was fancied to have a milky appearance.

1932, 1933 h 2841. Double nebula. In the Cape Cat., sweep 538, *for* "first" and "second" read "larger" and "smaller." The smaller is sp, the position 260° is right. It is very remarkable that in sweeps 508, 522, 658, and 761 the smaller of the two was not noticed. Is it variable?—*J. H.*

1950 h 2859. According to Melbourne Obs., Part I., p. 20, the R.A. of this object is about 50^s too small. I have, however, followed h, who has two obs. agreeing well.

1961 III 747. Auwers makes the P.D. 8″·3 *less*, assuming the determining star to be B.A.C. 1985 = P. 337.

1962, 1965, 1966, 1970 h 2866, 2867, 2868, 2869. 16″·2 added to all the R.A.'s of these nebulæ in the Cape Cat. to compensate an error detected in sw. 538. The correction is deduced from a comparison of the diagram fig. 20, Pl. vi., C. G. H. with the place of 2868.—*J. H.*

1982 III 1? There are two observations by H of III 1, but they differ enormously. One agrees with M. 43. The place of M. 43 is corrected [by −6″·3 in P.D.] to agree with its place in the cat. of stars, &c., in the great neb, in *Orion*, C. G. H. p. 28.—*J. H.* Messier calls it a S ∗ surrounded by neb, 7′·5 n of great neb; it is the so-called Mairan's neb, h's μ, Bond 734.

1988 G. C. 1191. First seen by Chacornac in October 1855 at a star of the 11 mag., at which he had not noticed any nebulosity the year before when mapping this region. The nebula was again observed as a very conspicuous object in January 1856, but was on November 20, 1862, found to have disappeared. The nebula does not seem to have been seen by anyone except Chacornac. M. Tempel informs me that he heard of the alleged discovery early in 1861 at Marseilles through M. Valz, that he looked at the star with his 4-inch Steinheil Refractor, and showed M. Valz that the nebula was only a false image of the star.

1990 V 34 = ϵ *Orionis*. A nebula of the *Merope* class; the star is in the np end of the much elongated nebulosity of which the nf border seems sharper than the sp one (Armagh, 1886).

1993 III 269. Auwers' R.A. is 1^h too great. The P. T. says that it precedes 19 *Leporis* by $32^m\ 23^s$, and that this is no misprint appears from C. H.'s reduction.—*J. H.*

2089 III 270. Auwers also places this neb. an hour too late. Its place is very distinctly settled by α *Leporis* and 19 *Leporis*, following the former $15^m\ 4^s$, and preceding the latter $20^m\ 0^s$.—*J. H.*

2283 III 271. Auwers' place is altogether wrong; he used 8 *Canes* instead of 8 *Canis* owing to an error in Pfaff's translation. See *Vierteljahrsschrift*, I. p. 182.

2288, 2289, 2291, 2294 In Ld R's diagram α = G. C. 5369, β = G. C. 1455, γ = h 410, δ = h 409; α and γ may be III 897–98, as H. says these are np and sf; they are also the brightest.

2319 h 423. Entered by C. H. as VIII 1 B, with a remark "not in print."—*J. H.* It must be a vP Cl; at any rate, Auwers could not find anything like a cluster in this place.

2355 h 439 = VI 6. H's R.A. is nearly 2^m less, but h is confirmed by observations by Harding and Auwers, while nothing was seen in H's place.—Auwers, p. 203.

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2371, 2372 h 444–45 = II 316–17. About this pair see *Month. Not.* xlvii. p. 416.

2379, 2385, 2388, 2389 h 446, 447, 448, 449, &c. Stephan (IX) has here four nebulæ —

	h m s	° ′
No. 8	7 17 29	55 54·2 = ξ of Ld R
9	18 1	53·7 = ϵ
10	18 16	53·6 nova
11	18 18	54·8 = δ = h 446.

The rough place put down for h 446 in P.T. 1833 (in which place nothing has been seen in Birr nor by d'A) is therefore 60ˢ too great. The vF, oblong neb seen at Birr on Jan. 29, 1856, is St XIII, $7^h\ 20^m\ 56^s$, 55° 41′ 3. Ld R's diagram was badly reproduced in P. T. 1861, and h in G. C. has supposed it to be two separate diagrams of the same three nebulæ instead of its being one diagram of six nebulæ. ξ = G. C. 5380, ϵ = G. C. 5383.

2394 VIII 44. Auwers' P.D. is 84° instead of 82°, owing to an erratum in P. T.—*J. H.*

2399, 2400 G.C. 1537–38. d'A makes the R.A. 1^m greater (1 obs), but Schultz agrees with Bond.

2433 h 462. h has R.A. $7^h\ 35^m\ 5^s$ (one obs), d'A $7^h\ 34^m\ 46^s$ (one obs). Which is right?

2459 h 468 = III 479. No nebulosity seen at Birr Castle in 6 obs, though the stars are twice called hazy. In H's single obs the neb is "suspected," and in those of h it is not positively ascertained. The object seems, therefore, to be merely a S Cl of vF st.—*J. H.*

2478 M 47. Auwers assigns a R.A. greater by 4^m (clerical error, see V.J.S., Vol. I. p. 183).

2506 h 480 = VI 37. h's P.D. corrected by − 10′ to make it agree with that found by Hardino (1827) and H.—*J.H.*

2543 h 493 = II 719. h's R.A. in P. T. 1833 diminished by 1^m for an error of 1^m detected in the reduction. This brings it nearer to Auwers.—*J. H.*

2603, 2605 G. C. 1667–68. Of the four nebulæ in the Birr diagram of 1858 α and δ are evidently h 508 and 510, as these two are in Pos. 122°, Dist. 6′·5 by h's positions.

2629, 2641 III 982–983. The places of these nebulæ as given in the G. C. differ a good deal from those in the Cape Obs. (error of reduction of 10′ in P.D.). d'A's places (which I adopt) agree much better with Auwers in P.D.

2642 h 519. I adopt d'A's R.A. (30ˢ less than h's) though only founded on one obs., as the "2 B st s and one f" would then be S.D. − 3°, 2434, 2435, 2436 (8·5, 9·8, and 8·9 mag.).

2636, 2646 In the *Astr. Nachr.* 2660 the declinations of these two are misprinted, *for* 75° *read* 74°.

2661 III 50. I find a memorandum to the effect that this neb is lost and was probably a comet, but I cannot recover my authority for the statement. *J.H.*—In the present Catalogue the place of a neb found by Bigourdan 28ˢ p and 2′ n of H's place has been assumed to be III 50. B. describes it: "grandeur 13·4, 35″ de diam., très diffuse."

2672, 2677 It appears likely that II 80 = II 48 (or at least that the descriptions belong to one neb), as it would be strange if II on two nights should only have seen one of two pB nebulæ so near one another. h 527 "the faintest object imaginable" is doubtless a vS Cl, seen by d'A, Schultz, and myself in h's place.

2693 h 535 = II 823. H describes it as round, h as much extended, evidently seeing indistinctly the faint appendage north observed at Birr Castle.

2709 G. C. 1722. This is the only nova seen at Birr Castle before 1877, G. C. 1723–24 therefore struck out. Of Tempel's novæ I saw in 1877 two, G. C. 5436 and 5439, while I looked in vain for 5438.

2718 h 542 = II 557. Though h calls it R and H mE, there is only one nebula about this place, and Auwers' assumption as to the identity is confirmed by a Birr Castle obs. of 1876.

2726 h 545 = II 834. Auwers has II 844 instead of II 834 (misprint).

2750 III 291. Auwers's Decl. + 27° 7′ should be 26° 7′ (misprint).

2753 G. C. 1757. Found by d'A Feb. 21, 1863, but looked for in vain on two nights in 1864 and 1865.

2774 h 565 = III 61. Degree of P.D. is 70° (h, d'A, Ld R) and not 71, as H makes it.

2804, 2807, 2809 h 577, G. C. 1792 (d'A) and h 578. G. C. 1792 must surely be variable, as it is inconceivable that it should not have been seen by h, when h 578, to which it is almost close, was observed and its place taken [in one obs.] Neither of the three were seen by Ld R. *J. H.*—They were all three observed by myself in 1876.

2814 II 868. Not seen by h and d'A. Δα of this and II 869 is 30ˢ according to Auwers; G. C. has only 2ˢ. Auwers and d'A agree as to the place of II 869.

2825, 2830 h 581, h 582 = I 113. In Ld R's diagram of 12 nebulæ δ is undoubtedly = h 581, but α (and not γ) may be = h 582, but this would only affect the places of α, β, γ (which are in a line sp nf), but it would not materially alter the places of the outlying members of the group.

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2847 G. C. 1828 is close np and involved in h 587. d'A mentions it as following h 587 4ˢ a little north, but nothing nebulous was seen there at Birr Castle (I saw a * 11·12 3′ nf in March 1878).

2853 h 590. Not found by Ld R in one obs., supposed to be of h 588, but probably III 628 was observed by mistake for h 588. Not looked for by d'A.

2872 } H gives the following places for II 57 and II 58:—
2874 }

$9^h\ 17^m\ 8^s$	77° 46′·0	} 2, dist 1′ np sf,
9 17 11	77 46·3	} p one pS, f one pL.

They were searched for in vain by Schultz and are not mentioned by d'A, who observed h 597–598. They are doubtless identical with the latter, as H's description and relative position agrees with those of h 597–98.

2910 h 3171. In the omitted observations on the last page of C. G. H. obs. *for* h 3170 *read* 3171.—*J. H.*

2970 h 627. Not seen by d'A, but often observed at Birr Castle.

2977 I 282. Not found by d'A. The places of all the nebulæ observed on April 2, 1801 (I 282–84, II 903–5, III 963–71) are affected by some large error. They were all compared with one star only, which was assumed to be "208 (N) *Camelop.* of Bode's Cat." This is D.M. 78°, 412 = A. Oe 12459, of the 5th mag.

2983 h 3185 = III 289. P.D. of Auwers 5′ too small, owing to a misprint in P. T.—*J. H.*

2998 h 638 and group. The places are founded on my obs. of 1878, Apr. 1. G. C. 1936–37, Ld R. novæ near h 641 have been omitted, as the obs. of 1854, Mar. 1, was no doubt of h 638 and group, and not of h 640–41.

3020 h 642 is = h 646 with an error of 1^m in R.A., as h only observed the former in one sweep, in which h 646 and 648 do not occur, and nothing was seen in Birr nor by d'A in the place assigned to h 642.

3063 Probably II 909 is = II 334, which is pL according to d'A; but H must have seen all three nebulæ, as he says that II 909 is the last of three.

3068 III 293. Auwers' place is wrong, owing to an erratum in P. T., where the determining star is set down as 23 *Leonis* instead of 23 *Leonis minoris*.—*J. H.*

3129 h 669 = III 65. Not found by Ld R three times, not looked for by d'A. It was found by h in its place per working list, so that H's place was correct (h took only the place roughly).

3135 h 672. Not seen by Ld R in one obs. Examined the sweep and reductions, and found all correct.—*J. H.* —Not looked for by d'A.

3136 h 3229 is = h 3231. The place of the former is only "a very rude approximation." See errata in C. G. H. obs.

3172 h 250. This neb is so near the Pole that its R.A. is necessarily a very rude approximation. d'A found $9^h\ 39^m$.

3184 h 689 was looked for in vain by Winnecke in 1876. It is marked as uncertain in both co-ordinates, and is therefore = h 688. Only one was seen at Birr, although in P. T. 1861 the descriptions are erroneously given as belonging to two different objects.

3218 I 283. Not found by d'A. See note to 2977.

3234 h 706. Not seen by Ld R in 6 observations. Re-examined the record of the original obs. and the reductions, found all correct except an error of −26ˢ·6 in the reduction of R.A. This, however, could not have caused its non-observation by Ld R. This then was a comet or is a lost nebula. *J. H.*—See, however, Lord Rosse's remarks about the objects not found at Birr Castle before the instrument was furnished with hour-angle graduation (*Obs. of Nebulæ*, 1848–78, p. 178). h 706 was not looked for by d'A. Probably it is = G. C. 2095 with an error of 1° in P.D., as h had only one obs.

3273 h 3259. Minute of R.A. is 24 (not 23, as in G. C.). See errata in Cape Obs.

3293 h 3276. Place approximate, by review with Equatoreal Refractor at C. G. H.—*J. H.*

3301 II 46 is quite certainly = h 728; there is only one nebula here and h and d'A agree.

3302 h 3275 is = h 3274. See errata in Cape Obs.

3332 The nebula observed by Schönfeld and Vogel differs a good deal as to place from I 272, while the vF neb seen by Tempel and C. H. F. Peters (3328) is nearly in H's place.

3345 I 26 is described as cB, pL, E, mbM; h 740 was "barely visible"; d'A and I have seen nothing. H − h = −54′, −4′. Doubtless the place of H is wrong; perhaps he observed M 95 or M 96.

3366 h 3294. Minute of R.A. is stated to be very doubtful (one obs.) There is no star of the 6th or 7th mag. near the place in the *Argentine Gen. Cat.*, nor in *Stone's Cat.*

3397 I 284. Not found by d'A. See note to 2977.

3423 h 777. H's observations of this group are given in detail by d'A, p. 145. As IV 6 and II 131 (different sweeps; G. C. also makes them out to be identical) are both pB, they must be = h 777, for which d'A finds

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the same place as h. III 88 being observed in the same sweep as IV 6 (1^m 27^s p, same P.D.), "elF, no time to verify," must be different.

3425 III 108. Not found by Tempel in the place of H (10^h 44^m 34^s, 80° 45′), but he saw two np and sp the place. I have assumed that the np one is = III 108.

3430 I 118 (G. C. 2233) is beyond a doubt = h 779, as partly suspected by h.

3432 h 780 = I 172. h in P.T. 1833 suggests that this nebula may have moved. There is, however, no ground for this supposition, as its place agrees quite remarkably with that brought up from C. H. But query if the double star have not moved, since one of the obs. places it "in the middle" and a subsequent one makes the south extremity of the neb touch the large star of the double star. *J. H.*—The latter obs. agrees with d'A and Ld R, so that it is scarcely possible that the D ✱ can have moved. This is a case analogous to that of h 705; see *Month. Not.* xlvii. p. 417.

3457 h 793. h and d'A call this a S neb Cl. One Birr obs. of 1878 calls it an eSCl, while two others of 1854 and 1878 record a pB neb with a vF dif neb 5′ nnf. The pB neb was seen by Swift (*A. N.* 2683); surely it must be different from h 793?

3523 II 904. Not found by d'A. See 2977.

3550 h 829 = III 351. The obs. of this nebula, which are numerous, disagree so very remarkably in the particular of brightness, that a considerable suspicion of variability exists.—*J. H.*

3632 II 30. Auwers' R.A. is wrong (error of reduction).

3645 h 867 and h 861 are *not* the same (as suspected in G. C.); h 867 was seen by Tempel (*A. N.* 2212).

3666 h 882 = I 20. This neb would seem to have decreased in brightness. *J. H.*—According to Winnecke it was again fully of the second class in 1878–79 (*A. N.* 2293). On May 24, 1887, I could only see it with the greatest difficulty, guided by the ✱6 mag. nf.

3679 III 112. Auwers has reduced this nebula by the star given in P. T., ϕ 74 *Leonis*. But I find a MS. note that this star was not dependable, and that Mayer's No. 510 is the proper determining star. The neb was subsequently looked for and found, not in the place given by ϕ, but 8′ from the P.D. concluded from Mayer 510. A mean of these two determinations is therefore used. *J. H.*—Auwers' place is 11^h 19^m 38^s, 94° 45′, near which place there is no S.D. star. H says it is "v nr a vB ✱." The only star above 9·5 mag. near the place given in the Catalogue is S.D. −5°, 3281, for 1860: 11^h 18^m 24^s, 95° 14′·2, 8·9 mag.; but 3284 is nearer, 11^h 18^m 48^s, 95° 9′·4, 9·7 mag.

3705 h 903 is = h 902; only one nebula seen by H, h, d'A, Vogel, Tempel, and Ld R.

3714 h 907 = III 353. Auwers doubts the identity, but it is in consequence of a misprint in P. T., 53^m for 43^m.—*J. H.*

3730 Common has "3, F, R, 15′ n of h 913."

3760 G. C. 2764, nova d'A. Not noticed in Birr, where a large group of novæ preceding it was found.

3788 h 932. Double or with a "knot" in the north end (Ld R, Tempel, *A. N.* 2439).

3794 III 773. Is it = II 830? d'A found only the latter, and they were observed in different sweeps.

3813 h 945 = I 94. H makes this by one obs. Ens, by another E nf sp, while h has two obs. agreeing in making it extended in the parallel. Surely it does not rotate?—*J. H.*—d'A calls it "longiuscula," but says nothing about the direction; Schultz agrees perfectly with h (E nearly in par.). No change.

3841 h 960. Eight nebulæ were seen in Birr somewhere about this neighbourhood, but h and H had already catalogued nine objects; there was no necessity for introducing four "R novæ," G. C. 2522–25, and they have been struck out.

3862 III 385. Assumed = Swift I No. 16, which would only be 2′·5 south of H's place.

3869 h 971. A nebulous star, according to Tempel.

3871 h 967. 1^m added to the R.A.; it is evidently the first of the group of 4.—*J. H.* Why should there be *four* neb? Both in sweep 337 (h 968-69-70) and in sweep 74 (h 974-75-76) h only saw 3 neb, and the former sweep seems to agree with the Birr diagram, the places being for 1860:

	h	m	°	′
h 967	11	37·7 ±	56	7 ±
968		37·7 ±	56	4 ±
969		37·7 ±	56	7 ±

It seems, therefore, to be somewhat doubtful whether h 968 and h 969 are really = 975 and 976. It is the places of the two latter which are given in the Catalogue as G. C. 2548–49.

3879 II 881. Not found by d'A.

3915 III 113. C. H. F. Peters' place (*Copernicus*, i. p. 53) agrees well with that of C. H. in P.D., while it is about midway between C. H. and Auwers in R.A. Peters calls it vL, H has eS.

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3917 II 824 was not found by d'A. It is doubtless = h 994 with an error of 1° in P.D.

3920 h 996. Not found by d'A, nor by myself. The R.A. is, however, doubtful. h has no description; in the place given I could only see a faint star.

3922, 3924 III 716 and II 825. Both seen by TEMPEL. d'A saw only the p one.

3930 h 1000 = III 616. H says "5′s ✱6m," h has ✱7 f in parallel. There is only one star, D.M. +38°, 2285, f 20ˢ, 2″·5 south.

3938 h 1002 = I 203. AUWERS' R.A. is 7ᵐ too small, owing to an erratum in P. T.—*J. H.*

3949 h 1009 = I 202. The same misprint has also vitiated AUWERS' R.A. of this nebula.—*J. H.*

3954 h 1013 = III 381. MARTH's identification adopted. The place of III 381 in the catalogue of C. H., from which h's working lists were made out, is vitiated by some great mistake. The P.D. is supposed to be derived from 1 *Comæ*, the neb being 1° 12′ south of the star. This, however, would give 68° 9′·5 for 1830 instead of 65° 45′·0, that brought up from C. H.—*J. H.*

3972, 3977 II 789–790. d'A saw the only p one, but I saw both in 1878. The place of II 790 in the Catalogue was found by combining d'A's place for II 789 with my measure of Pos. and Dist. between them.

4013 h 1041 = II 733. According to H the position of extension is "near the meridian." h has a measure 62°·3 and an estimation 65° in another obs.—*J. H.*

4014 h 1042. This cannot be III 3, as C. H. has reduced two obs. of this latter well agreeing, and giving a R.A. 2ᵐ exceeding that of h 1042, which also rests on two obs. by h.—*J. H.*

4021 G. C. 2646 and 2650. No nebulæ noticed at Birr Castle in the places given in G. C. for III 323–24. H's description, "Two, sp vF, lE, nf eF, 5′ or 6′ dist.," seems to agree with β and δ of the Birr diagram, and in the Cat. these have been assumed to be III 323–24.

4036 h 1050 = I 253. d'A and SCHULTZ agree with H as to description. No doubt about the identity; places agree.

4046 G. C. 5602. Nova d'A, one obs. Perhaps = h 1057 = II 276 with an error of 15′ in P.D. h and H agree.

4055, 4057, 4059, 4061, 4065, 4066, 4069, 4070, 4074, 4076 d'A has observed h 1065, 1067, 1070, 1071, 1073, 1075, and his places agree with those of the G. C. H has also only 6 nebulæ, their places being, according to AUWERS:

	h	m	s	°	′	
III 391–96	11	57	7	68	54	"The places belong to the three first, which are vF, vS. The other three are 10′ or 12′ more south, but there was not time to take their place. More suspected."
			9		50	
			9		56	
	...			...		
	...			...		
	...			...		

The identification in G. C. of the first four with h 1070, 1071, 1073, 1075 seems correct, but it is not easy to see the source of the places of G. C. 2701–2702 = III 395–396 (11ʰ 57ᵐ 32ˢ, 69° 7′). h 1065, 1067, 1075 fulfil sufficiently the condition of being about 10′ south of the other 3, and I have therefore followed d'A's identification and left out G. C. 2701–2.

4066 h 1068 (4 obs.) was not noticed by d'A. In P. T. 1833 there is no N.P.D. for h 1062-63-64 except 68° ±; these were observed in sweep 423, only h 1068 being observed in the same sweep.

4119 II 14. Owing to an erratum in P. T., AUWERS gives quite an erroneous place for this nebula.—*J. H.*

4142 h 1103 = III 814. AUWERS' N.P.D. is 1° too great, owing to an erratum in PFAFF's translation of H's paper; 0° 32′ north of 5 *Canum* should be 1° 32′. P. T. has the correct figure.

4157 h 1114 = I 208. d'A says, "Quandoquidem videbar mihi videre duas in unum confluentes nebulas." As suggested by SCHÖNFELD, the disagreement between his measures (ii. p. 90) may arise from this cause.

4173, 4175 H says the most northerly of the pair II 372, III 360 is the largest; h "by diagram" makes the following nebula, III 360, the larger of the two.—*J. H.*

4208 h 1142 = II 107. It is remarkable that neither d'A nor the observers at Birr have seen this neb when observing h 1144 = II 108. h 1142 was only seen in sweep 243, while h 1144 was observed in sweeps 419 and 338. Perhaps h simply made an error of 10ˢ in sw. 243, and h 1142 = h 1144. H's place of II 107 agrees with that of h and d'A for h 1144, and II 108 is by him placed 18ˢ f and 2′ n.

4223 h 1152 = II 137. Never seen by d'A.

4228 h 1157. Not found by d'A, once looked for.

4246 III 91. H gives P.D. 82° 6′, but according to *Annals of Harvard College Observatory*, vol. xiii., it is on the parallel of h 1159.

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4259
4268
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4273
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4281 h's observati ns have been very fully discussed by d'A, Schultz, and Schönfeld, who agree perfectly as to the present state of the group. There is no doubt that Schönfeld's ingenious suggestion is right, according to which 48ˢ are to be subtracted from the R.A.s of h 1189, 1190, 1194 and the descriptions of the two first to be interchanged. The following nebulæ form this group :—

	h	m	s	°	′	
h 1178	12	12	13	83	50·8	
...	12	12	38	83	56·3	seen by h ("3 more seen"), first determined by Schönfeld and d'A.
II 568?	12	12	41	83	45·6	
h 1183=89	12	12	47	83	52·8	
h 1190	12	13	0	83	52·6	seen by Schultz on 3 nights.
h 1187=94	12	13	13	83	50·2	

With regard to II 568, 569, 570, 571 there can likewise be no doubt that they are 34′ *north* (instead of south) of 11 *Virginis*, and that they are identical with 4 of the above group. No traces of nebulosity have been seen in 82° 50′. G. C. 2856, 2862, 2869 have accordingly been struck out. It is rather puzzling that h 1194 alone of the whole group was also observed in sweep 251, and that the RA (but not the description) agrees within a fraction with that of sw. 117 (the place being for 1860 $12^h\ 14^m\ 6^s$, 83° 50′·0). h must have made the same error of reduction in both sweeps.

4263 III 535. In a sweep two years subsequent to the obs. of this neb by H it was looked for again but not found. ? if a comet.—*J. H.*

4301. The place of 2884 is wrong in G. C., as the nova is 10′ nf of h 1196 and not of h 1202. It was therefore not found by d'A and Schultz.

4326
4333 h 1213 and 1215. There is some discordance between Schönfeld, Schultz, and d'A as to which of these is the faintest. Schönfeld says h 1215 is, while Schultz agrees with h in making 1213 the faintest. d'A says, in a note to h 1215, that it appears from his observations that 1215, in 1862, was the faintest. I cannot, however, reconcile this remark to the fact of d'A's only having one obs. of h. 1213 (3 of 1215), adding to it : "Duarum precedens ac debilior." It does not seem likely that any change has taken place here.

4341
4342
4343 III 94, 95, 96. H says, "All eF, vS, R; in the second obs. two of them were overlooked." h and d'A have only one.

4352 h 1227 = II 64. h has R.A. $12^h\ 16^m\ 55^s$; II is 1^m wrong. Bigourdan searched in vain in $12^h\ 17^m\ 55^s$.

4366 III 97. Not seen by h, d'A, nor at Birr Castle. P. T. 1786 gives but the one place for this and II 144, but G. C. quotes *two* observations.

4374 G. C. 2932–40. Ld R novæ. "12 knots examined." h and H have more than 12 nebulæ between $12^h\ 18^m - 21^m$ and 76° to 77°, so there does not appear to have been sufficient reason for introducing these nine "novæ" in the G. C.

4379 II 87 is = h 1240. The difference of 30ˢ in R.A. does not signify, as H observed it in March 1784, when his R.A.s, according to his own statement, may be from $\frac{1}{2}^m$ to 1^m wrong. II could not have overlooked h 1240 if it had been a separate nebula.

4418 h 1261 = III 492. III 492 was looked for April 11, 1787, by H in the place assigned to it, but was not seen. Auwers, however, makes it identical with h 1261 [the places agree]. Yet the descriptions are radically different, and after all there *may* be another nebula, the real III 492, in the neighbourhood.—*J. H.*

4426
4427 These are evidently identical (note added in press).

4441 h 1291 is beyond a doubt = h 1278. According to d'A there is no neb in the place assigned to h 1291.

4450 In G. C., p. 29, it is stated that II 56 and II 90 were seen in one sweep, Mar. 1, 1784, at 1^m interval of time, by the same star 25 *Comæ*, II 56 being 1′ more north, and II 90 3′ more south than the star. There must be some mistake, for according to P.T. 1786, there were no obaervations made on that date, while II 56 was observed on the 14th and II 90 on the 21st March, the star and other data being as stated above. As h and d'A could not find II 90, it is doubtless = II 56 with an error of 1^m, and there is no "case of positive disappearance."

4453 Not found by Bigourdan. The original obs. were :—

II 26	12^h	20^m	55^s	82° 40′	pB, cL, b tow. f side.
h 1283		21	39	42·9	eF (one obs.)

This is also one of H's earliest and therefore least accurate observations.

4472 G. C. 3023, 3024 (Ld R) have been struck out, as only h 1293, 1294, 1305, and G. C. 5653 (d'A) were seen at Birr.

4501 II 118, "just following M 88," has been left out, as nobody after H has seen any neb f M 88.

N. G. C.

4521 h 1326 is = II 849, but h's P.D. is wrong; d'A's adopted. h says: "A ✶9 m near" (d'A: ✶10 p 10″); G. C. has erroneously " ✶9 inv."

4529 III 26. Place as per C. H. $12^h\ 25^m\ 32^s$, 68° 32′ for 1830, as per Auwers $12^h\ 25^m\ 40^s$, 68° 47′ (see list of errata, G. C. p. 44). The correction of the place in P. T. is not, properly speaking, an erratum, but the substitution of a good obs. for a bad one. In the obs. sw. 177 (H), where 20 *Comæ* was used as the determining star, the place is given only by description. In a sweep long subsequent (sw. 944) it was compared with 26 *Comæ* in the regular form of observation, and this of course is to be preferred. Auwers' place is deduced from the earlier and that of C. H. from the later obs. only.—*J. H.*

4530 h 1332 = 8 *Canum*. h has 4 obs. of the nebulosity, but d'A, Ld R, Lassell, and myself have seen none. I have, however, retained it in the Cat., as Tempel was uncertain whether the star was not after all slightly nebulous.

4560 h 1353 = I 119. Barely perceptible to d'A with the 4½-in. Leipzig Refractor. Not found by Bigourdan. Not observed elsewhere.

4571 M 91 ($12^h\ 30^m\ 30^s$, 75° 30′, 1781, Mar. 18, neb without stars) must have been a comet. h found np the place a F neb (which he calls h 1367), the place of which he did not determine. It was doubtless III 602 = h 1362, which he had not seen in the same sweep.

4578 h 1366 must be an erroneous obs. of h 1365, of which it should only be 5′ south. Schönfeld (2. Abth.) has observed h 1365 and says nothing about h 1366; h observed them in different sweeps.

4589 h 1374 = I 273. h expresses some doubt as to the identity, as the descriptions differ, but d'A saw only one neb.

... G. C. 3146 = I 7, $12^h\ 34^m\ 16^s$, 81° 19′ (40′ s of 49 *Leonis*) was a comet, seen by H on Jan. 23, 1784, and taken for one of Messier's nebulæ. On looking for it a month later the place was found empty. It can neither have been comet 1783 nor 1784 I.

4610 II 19 should be 12′ south of the above-mentioned I 7, the place of which was "inaccurate."

4612 h 1384 = II 148. In P. T. 1833 this is identified with II 20, and G. C. quotes a MS. memorandum to the effect that II 148 is probably = II 20. Yet the latter was entered separately as G. C. 3174, but as this was not found by d'A the identity seems certain.

4636 h 1401 is = II 38 with an error of 1° in P.D.

4637 It is very possible that the Birr observer miatook M 60 and III 44 for h 1402 and a nova. Schultz says that h 1402 is "conspicuously bi-N," but why was this neither noticed by h, nor by d'A, nor by Vogel?

4644, 4646, 4675, 4686, 4695 h 1406, 1407 = II 794 (1 & 2), III 778, h 1428, 1435 = II 795, 796. h states that the places of these as given by H in P. T. all rest on comparisons with ε *Ursæ* in sweeps 921 and 1001 (H), and the obs. of that star is erroneous in sweep 921 by about 11′ in P.D., and that two distinct nebulæ were observed and confounded together as one number, II 794. d'A's positions of all 5 nebulæ agree well with those of G. C.

4656, 4657 I 176–177. According to Ld R these are connected by faint nebulosity.

4664 II 39. Is it = I 142 (h 1419) with an error of 10′ in P.D.? The descriptions seem to agree, and Schultz says that h 1419 is undoubtedly resolvable. Neither Schultz nor d'A mention II 39.

4667 h 1421. Not found by d'A and Vogel.

4675 See note to 4644.

4684 h 1426 = II 181. Auwers' place is wrong, owing to a misprint in P. T.—*J. H.*

4686, 4695 See note to 4644.

4698 III 6 is expressly stated in the register to be of the first class, although set down (it does not appear why) in the third.—*J. H.*

4731 h 1452 = I 41. The case of this nebula is a very odd one. On Apr. 5, 1784, H describes it as a "L, B, r neb, sbM, iR fig, Class I.," and on Mar. 3, 1789, "pB, cL, i Fig, er, many of the stars visible." Here seems evidence of change. *J. H.*—h describes it as "vF, pL, E, third class, sky perfectly clear and fine," (one obs.); d'A has one obs., vF, L, iF. It is also strange how badly the R.A.'s agree.

H	12^h	44^m 10ˢ
h		43 45
d'A		43 29

4733 h 1453 = II 73. Contradictory descriptions, and possibly two nebulæ differing 1^m in R.A.—*J. H.*—There is only one according to d'A; he once calls it R, another time oval.

4738 G.C. 3247. Birr Castle, 1851, Mar. 1, " At $12^h\ 43^m$ and 60° 20′ nova, Nucl, E." Pos. of E by diagram = 45° ±. Assumed to be the same as that found by Bigourdan in the place given in Cat., and which is E 30°.

N. G. C.

4856, 4877, 4902, 4984, 5073 — h 1497 = I 68, II 299, h 1511 = I 69, h 1536 = II 301, h 1574 = III 282. Auwers finds 5′ ΔP.D. between I 68 and h 1497. His place is from P. T., 53 *Virginis* n 1° 4′, whereas C. H. in her reductions uses n 1° 11′, and h's observations of this and the other nebulæ in this list justify the departure.—*J. H.* d'A has only observed h 1536 and agrees with h. Tempel (*A. N.* 2439) has observed h 1497 (place agreeing with that of h) and II 299. He found the R.A. of the latter to be 1ᵐ too small, while his P.D. agrees with C. H.'s result, so that her correction also in this case was justified.

4894 h 1510 agrees with d'A, but III 363 should be in 12ʰ 54ᵐ 13ˢ, 61° 15′. This region is so very crowded that it is not easy to identify a vF neb.

4900 h 1509 = I 143. Auwers places this neb 1° 13′ too much to the south in consequence of an erratum in P. T.—*J. H.*

4902 See note on 4856.

4910 V 3. Auwers' R.A. is 10ᵐ too great by an error of reduction.

4928 III 760 is = II 190, as already suspected by Marth and Auwers. No neb seen by d'A in the place where G. C. 3374 (III 760) should be.

4954, 4972 — h 1527 and III 937. These are not impossibly one nebula, but, as both R.A.s and P.D.s differ very much, they *may* be different and are therefore separately stated.—*J. H.*

4984 See note on 4856.

4989 Auwers, misled by an error in P. T., makes the R.A. of II 185 too small by 10ᵐ.—*J. H.*—It is identical with the neb occurring in the Markree Catalogue and also observed by d'A.

5068 Observed by J. Schmidt Jan. 1, 1865, and taken for Bruhns' Comet (1864 V).

5073 See note on 4856.

5082 h 3485. The P.D. in G. C. is many degrees wrong, having been by mistake taken from h 3484.

5106 II 22. Not found by Tempel (*A. N.* 2522); at least there was no 2nd-class neb near the place.

5109, 5113 — h 1588 = II 826 and III 808. I agree with Auwers in putting h 1588 = II 826. The original observations are:—

II 826	13ʰ 15ᵐ 32ˢ	31° 34′·5	}	different sweeps.
III 808	15 54	39·5		
h 1588	15 14	37·0		one obs.

Very likely they are all three identical.

5134 Auwers' place of II 314 is erroneous, owing to an erratum in P. T. The agreement with h is satisfactory.—*J. H.*

5160 G. C. 3550. Nova d'A, but not found again Feb. 19, 1863; sky perfectly clear. Tempel found a vF double star with a vF star close np, but on two occasions it looked like an eF neb.

5224 h 1633 = III 926. H says it is sp a considerable star. h has "a *9 m with a very dilute nebulous atmosphere." Has the star or the nebula moved?—*J. H.*—H has 28ᵐ; h has 27ᵐ, "possibly 28ᵐ." The star D.M. + 7°, 2667 (8·8 mag.), is in 13ʰ 28ᵐ 13ˢ, 82° 47′. I have therefore assumed that H is right, as there is no D.M. star near h's place, and Schultz looked once in vain for it in 13ʰ 27ᵐ.

5230 According to the well-agreeing obsˢ. by H, d'A, and Ld R, there are here only 3 nebulæ, h 1637 = III 86, h 1638 = III 85, h 1643 = III 87, and h 1639 is = h 1643 with an error of 30ˢ in R.A. (different sweeps).

5293 V 6. Tempel (*A. N.* 2522) found only a F, vS neb here.

5295 III 946. Auwers' decl. misprinted 89° for 80°.

5312, 5318 — h 1676, 1679 = III 422, 423. Auwers finds the P.D. 12′ too great by reason of an erratum in P. T.

5382 There is no "R. nova" near, only h 1710, h 1715, h 1716 seen at Birr. G. C. 3722 struck out.

5392 h 1720 = III 666. Auwers, finding II − h = + 52ˢ in R.A., supposes a mistake of 1ᵐ. Examined sweep 146 (h) and found all clearly written and correctly reduced.—*J. H.*

5413 h 1733. Swift (VI) has a neb 1ᵐ 10ˢ p, same P.D., vF, pS, iR, B * sp. I assume it = h 1733, as the latter has a * 7·2 37ˢ p, and Swift does not mention h 1733.

5522 III 644. G. C. adds "a D neb," but there is nothing in P.T. 1789 about its being double.

5526 h 1763 = III 804 = III 835. The identity of these nebulæ rests on a memorandum in MS. in my copy of P. T., supported by the reductions of all the obs. by C. H. in 3 sweeps, each with 2 determining stars. Auwers makes them differ by 14′ in P.D.—*J. H.*

5546 According to H, III 551 should be 3′ or 4′ p III 552, but nothing was seen in that place by h and d'A. h 1770 could not have escaped H, I therefore assume III 551 = h 1770.

5559 h 1777 = III 347. Auwers makes ΔP.D. = − 59′, but observes that there must be some misprint. I find that 1° has been mistaken (see errata, G. C. p. 45) and the identity is therefore proved.—*J. H.*

N. G. C.

5566 h 1779 = I 144. Auwers makes II − h = 1° 14′ in P.D. The cause of the discordance is a misprint in P. T.—*J. H.*

5588 h 1789 eF (one obs.) Not seen in two Birr obs. (in 1855) of h 1783 and h 1791. The group has not been observed elsewhere after 1833.

5594 III 135. Auwers' P.D. for 1830 is 63° 0′; C. H. gives 62° 50′ 20″. Auwers has used (P. T.) 1° 5′ n of d 12 *Bootis*, C. H. 1° 16′ n of the same star. C. H. is to be preferred on every account to P.T. Her N.P.D.s are grounded on a most complete and searching re-examination and recomputation (according to the then existing star catalogues) of all the data (in the earlier sweeps most obscure—"foliis Sibyllinis obscuriora") for determining the degrees and minutes of P.D. from the index numbers. In almost every case I find her corrections (or rather interpretations) to be justified, and I have no doubt that in this particular instance such will prove to be the case, though *here* I confess myself, after consulting the original sweep, unable to perceive the reason for the deviation.—*J. H.*

5620 III 319. Auwers, following P.T., which places the neb 2° 26′ north of β *Ursæ min.*, makes P.D. 1830 = 12° 46′. But it should be 2° 26′ *south*. So C. H. has used it, and so it proves to be on reference to the original sweep.—*J. H.*

5662 h 3573 = Lac. III 8. Misprint of 10′ in Auwers' cat. of Lacaille's nebulæ; identity therefore certain.

5696, 5697 The results of H (Auwers) and h are:

II 675	14ʰ	30ᵐ	55ˢ	47°	47′	h 1850	14ʰ	31ᵐ	9ˢ ± 47° 36′·0
II 648		31	28	47	31	1853	14	31	39 ± 47 46 ±

h has one obs. of each (different sweeps), but II seems to have observed II 648 twice, as G. C. quotes 3 obs. by H and h. Could there only be one neb? I have followed the G. C.

... G. C. 3967, VI 8. G. C. gives for this cluster the place 14ʰ 33ᵐ 16ˢ, 98° 30′·8. The determining star in P. T. is χ *Virginis*, but this is declared by a MS. note (quoted in C. G. H. p. 109) to be a mistake for Mayer 577 (*B. A. C.* 4837). Auwers, using the latter star (*not* using χ *Virginis*, as stated in G. C. p. 35), finds for 1830 14ʰ 53ᵐ 37ˢ, 99° 55′. How the place given in G.C. was found is a mystery; h states that on consulting the original sweep he could find no star whose identity could be satisfactorily ascertained. Neither the Berlin maps nor the S. D. show any compressed cluster near Auwers' or h's places, and at the Cape h looked in vain for it near h 3578. Accordiog to P. T. 1786, VI 8 was observed on April 25, 1784, on which night eight other nebulæ were observed. Perhaps the date is wrong, as h says in G. C. that no other neb was observed in the sweep in question. Marth remarked (*A. N.* 995) that comparison star and Δα and Δδ are exactly the same for II 190, so that H, in writing the paper for the Royal Society, probably by mistake copied them from II 190.* But if we assume the star to have been No. 577 of Mayer's Catalogue *as given in "Vince's Astronomy,"* vol. ii. for 1790 (or A. Oe. 13930), this would give 15ʰ 3ᵐ, 110° 44′, which is not *very* far from VI 19, with which the description agrees. As the printed Δα and Δδ are notoriously wrong and 6th-class clusters are not numerous, I have assumed the identity.

5728 h 1866 = I 184. Some suspicion of variability, inasmuch as one description calls it R, another E, and another mE, besides other indications in respect of brightness.—*J. H.*

5768 III 373. Auwers gives P.D. 91° 17′ (1830), a misprint for 91° 47′.

5798 h 1892 = III 131. Query if not variable in brightness. II in two obs. calls it F and cB. h in two others, vF and eF.—*J. H.*

5820 II 756 must be = h 1898. G. C. 4025 not seen by h nor at Birr Castle.

5821 III 811 (G. C. 4028) is = G. C. 4030, R. nova, as the relative positions of II 756 and III 911 agree with those of h 1898 and Lord Rosse's nova.

5846 G. C. 4043–44 not seen by d'A and Schultz, nor do the later Birr obs. mention them. "6 nebulæ found," but II 542, II 541, III 511, I 128, G. C. 4046, and II 543 make six nebulæ. G. C. 4043–44 therefore struck out.

5851, 5852 III 886–887. Error of reduction of 12′ in Auwers' P.D.

5856 h 1904 = IV 71. No nebulosity seen by d'A at Leipzig.

5857 h 1905 = II 751. Auwers' Decl. +20° 44′ is a misprint for 20° 14′.—*J. H.*

5865 II 684. Not observed by d'A, who only saw II 545 and G. C. 4060. But Temple has seen them all three.

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* I have been indebted to Lord Crawford for the loan of a copy of H's three catalogues in P. T. In these the errata first published in 1864 have been corrected, evidently many years ago; perhaps by C. H.? It is significant that in this case the name of the star and Δα and Δδ have been struck out, but nothing has been substituted for them, as done in all other cases of errata.

N. G. C.

5881 II 818. Owing to an erratum in P. T. Auwers has found a wrong place.—*J. H.*

5897 About VI 8 see note above after 5696–97.

5904 h 1916 = M 5. According to Maria Margaretba Kirch's diary (now belonging to Lord Crawford) this was discovered by her husband, Gotfried Kirch, on May 5, 1702.

6039 Swift (*A. N.* 2752) says of this: "ap of 3 in line, the other 2 being 2 of Stephan's, 3rd of 10," and adds in a note: "3 of the 10 or more nebulæ in this interesting group are M. Stephan's, presumably G. C. 5799, and certainly 5800 and 5801; 2 or 3 more suspected. They are all very difficult objects to see and to measure, atmospheric conditions seldom allowing them to be seen except Stephan's last 2, which are quite interesting objects, but those he describes as F and S and vS I call pL." I have given Swift's novæ exactly as published in *A. N.* 2752, although No. 6039 in the Cat. appears as the *first* of 10 instead of the 3rd. It should be remembered that M. Stephan's positions are very accurate, while Mr. Swift's may be out a minute of arc or more in each co-ordinate.

6093 M. 80. In this well-resolved globular cluster Auwers saw a *new star* of the 7th mag. on May 21, 1860 (*A. N.* 1267 and 2715), which was also found by Pogson on the 28th, and remained visible until about June 10. This phenomenon bears a close resemblance to the "new star" in the *Andromeda* nebula in 1885.

6140 III 740. d'A has one obs. of this, but in $16^h\ 19^m\ 59^s$. He seems, however, to doubt the accuracy of the obs.

6174 Second of 3, forming a rectangular Δ, the 2 others being assumed to be h 1962 and h 1963, but the identity of the group is doubtful.

6239 III 727. There is a note on this neb in the G. C., imputing three errors to Auwers' name and place of this object. One is, however, given in the list of misprints, another is only a broken type (a 4 like a 1), and as to the third (46° 59′ P.D.) Auwers is right, while h is 1° wrong, as the neb is 0° 14′ (*not* 0′ 14″) north of *σ Herculis*. Stephan's P.D. agrees within 1′ with H's, while his R.A. is 16^s smaller than H's.

6240 Stephan's comparison star must have been LL 30519. Adopting this star his obs. agrees well with Bigourdan's.

6267 III 123. Observed by Marth in RA $16^h52^m15^s$.

6276 } Stephan's positions adopted in Catalogue. Mr. Marth's places are
6277 }

m 327	$16^h54^m40^s$	66°42′	1 obs.
328	54 48	66 44	2 obs.

Having consulted Mr. Marth, he kindly sent me his original observations, from which it is evident, that he did *not* see No. 6277, while 6276 is = m 328 and m 327 is a different object. m 327 should therefore have been inserted in the Cat. after 6275. (Note added in press.)

6533 V 13. P.D. by Auwers erroneous, owing to an error in P. T.—*J. H.*

6541 h 3726. The statement by Cacciatore (*Astr. Nachr.* No. 113), that Lacaille and Piazzi had only seen a star in the place since occupied by this cluster, is erroneous, as the place of Piazzi's star (XVII 341) differs by no less than 18′ in P.D.—*J. H.*

6603 h 2004 = M 24. h's two observations hardly consist with this description, and their deviation of nearly $+3^m$ from Messier's place makes it very doubtful whether he really saw this object.—*J. H.*

6637 M 69. Piazzi, in a note on XVIII 122 of his Catalogue, says that both M 69 and M 70 are 1° more to the south. But he is wrong.—*J. H.*

6643 Discovered by Tuttle on Sept. 1, 1859, and it would appear to be variable, for M. d'Arrest says (in a letter of May 8, 1863), "La nébuleuse de M. Tuttle était, le 24 sept. 1862, si brillante et si remarquable dans le chercheur, que je suis persuadé qu'elle n'a pas été telle du temps de Messier et de votre père, et de vos propres observations."—*J. H.*—This is by no means the only conspicuous nebula which escaped Messier and the two Herschels, particularly near the pole.

6681 M 70. See note on 6637.

6760 Discovered by Hind on March 30, 1845. Suspected of variability in the G. C., because it was re-found by d'A in May 1852 (*A. N.* 809) and called a first-class nebula, and subsequently "pF and diluted," while Auwers found it once pB, another time of the 2nd class at most. There is, however, no reason for thinking it variable. It has little or no condensation, which probably makes its appearance more depending on the state of the atmosphere than would otherwise be the case.

6847 II 202. Not noticed by d'A, who has 2 obs. of G. C. 5947 = m 403.

6995 h 2093. In conformity with Mr. Mason's remarks on my obs. of this neb and with his elaborate and excellent monograph of which it forms a part, I have diminished the P.D. of Cat. of 1833 by 1°. It is evident that the index reading must have been mistaken, 1° for 0°. Sweep 8 examined; the writing is clear and the reduction correct, but the conclusion from Mr. Mason's obs. is irresistible.—*J. H.*

7023 IV 74. The * is Fedorenko 3684. I have seen the nebulosity; it was particularly distinct north and south of the star.

N. G. C.

7045 h 2108. Not found by d'A (twice) while h 2109 was visible. h has only one obs. (in faint moonlight).

7088 Found by Baxendell (*Month. Not.* xli. p. 48). A very large and very diffused nebulosity north of the cluster M 2. I have seen it without difficulty in the Armagh 10-inch Refractor. It seems to extend about 35′ northwards from the parallel of the * 10′ nf M 2, and to be about 45′ or more in length (Mr. B gives 52′ by 75′).

7114 *Nova Cygni* 1876. See *Copernicus*, ii. pp. 106–113, and *Month. Not.* xlvii. p. 495. The star should be watched with powerful spectroscopes. Mr. Lohse asserts that it is surrounded by nebulosity.

7143 h 2133. No nebulosity seen at Birr Castle in 6 obs. Probably only a vF D *.

7165 h 2137 = III 930. Not seen by Ld R (1 obs.) Not looked for by d'A.

7190 Occurs both in Stephan's 2nd and 4th list. In the latter the place of the comparison star is only taken from the D.M., but it is = *Lam.* 2895, which gives a place for the neb agreeing perfectly with that of the 2nd list.

7210 h 2148. Not seen by Ld R (three obs.), not looked for by d'A.

7304 G. C. 4803, d'A; not seen a second time, not found by me.

7333 G. C. 6070, Schultz. Not noticed at Birr nor by Tempel, nor does it occur in an Armagh obs. of 1886.

7377 G. C. 4835-41 do not exist. The words "7 knots found" in P. T., 1861, p. 735, refer to the nebulæ h 2183–84, and not to h 2181.

7447 G. C. 4878 not found by Tempel on several occasions (*A. N.* 2284).

7484 h 3971 = h 3972. These are assuredly identical, but the minute of R.A. being doubtful, that of h 3971 is preferred.—*J. H.*

7515 h 2214 = III 220. Swift (V) has a pB, pS, R neb with a D * pointing to it, the place being 10′ n of that of h 2214. It is doubtless identical with the latter, which has a D * 7′ south, nearly "pointing to it."

7555 h 2221. Not seen by d'A, Vogel, and Schultz. At Birr it was once not found, another time recorded as R,pL, psbMBN, but this may have been an obs. of some other neb not far from the place, such as h 2214.

7563 h 2223 = III 222. Three times called by h pB, and three times by h and H eF, vF, eF. Is this a case of variability?—*J. H.*—d'A, Schultz, and Schönfeld have pF.

7615 h 2229. Not seen by d'A, Schultz, and Tempel; h has one obs.

... G. C. 4941 (d'A, *Resultate*) is not a nebula, only 3 stars close together.

7671 h 2242 = III 226. Called pB by h in 4 obs., and in two by H eF and vF.—*J. H.* d'A and Ld R have pB.

7723 h 2261 = I 110. H calls it eB in 2 obs.; h has one obs. where it is called eF, adding "sky quite clear."—*J. H.*—d'A places it among the brighter neb of the 2nd class. Schönfeld has "F, diffused," Ld R pB.

7804 G. C. 6235. Found by Schweizer (*Observations de Moscou*, vol. ii. livr. 2, pp. 115 and 119), and observed by Bredichin in 1875. Described as F, E, a little brighter sp. v. Engelhardt in 4 obs. could only see a D * without nebulosity.

7822 h 2302. Not seen at Birr Castle in two obs. It is, however, far north of the Zenith, and the speculum may have tilted.

Index to Published Figures of Nebulæ and Clusters.

The following list of figures of Nebulæ and Clusters in various works (to which references are given in the last column of the Catalogue by the sign †) is an extension of the similar lists (revised) in Herschel's General Catalogue and in Holden's "Index Catalogue of Books and Memoirs relating to Nebulæ and Clusters of Stars" (*Smithsonian Misc. Coll.* vol. xiv. 1878). Dunlop's figures are not included, as they, according to Sir John Herschel, offer no resemblance to the objects (when identifiable), and Sir William Herschel's figures in *Phil. Trans.*, 1811, are also omitted, as they do not profess to be resemblances, and were given merely as types of different classes of objects. The list only contains references to *published* figures, and of the nebula in *Orion* it only gives figures made during the present century. For references to a number of unpublished drawings by different observers see Holden's above-mentioned Index Catalogue, while an account of the older drawings of the *Orion* nebula (several of which possess great interest) will be found in the same author's "Monograph of the Central Parts of the Nebula of *Orion*" (Washington Observations, 1878, App. I.) For lists of Tempel's as yet unpublished drawings see *Astr. Nachr.*, No. 2439, and his memoir "Ueber Nebelflecken" (*Abh. d. K. Böhm. Gesell.*, 1885).

As the objects in the different works here referred to are sometimes designated by their *G. C.* number, sometimes by their *h* number, both these systems of numbering have been employed here, while it appeared unnecessary to give the current numbers of the present Catalogue. The third column contains the name of the work quoted, but in the case of short papers in journals or observatory publications the author's name is given instead, while a further reference will be found in a footnote. The abbreviations used in the latter will be easily understood (*Proc. R.S.* for *Proceedings of the*

Royal Society, *M.N.* for *Monthly Notices*, *A.N.* for *Astronomische Nachrichten*, &c.) ; the abbreviations in the third column are :

P. T. 33	Sir J. Herschel in *Philosophical Transactions* for 1833.*
P. T. 44	Lord Rosse in *Philosophical Transactions* for 1844.
P. T. 50	Lord Rosse in *Philosophical Transactions* for 1850.
P. T. 61	Lord Rosse in *Philosophical Transactions* for 1861.
C. G. H.	Sir J. Herschel, Results of Astronomical Observations made at the Cape of Good Hope.
Ld R	Observations of Nebulæ and Clusters at Birr Castle, 1848–78 (*Transactions Royal Dublin Society*, vol. ii. 1880).
R. di	Diagrams in Lord Rosse's papers of 1861 and 1880.†
d'A	d'Arrest, *Instrumentum magnum æquatoreum*, Havniæ, 1861.
$d'A_2$	d'Arrest, *Siderum Nebulosorum Observationes Havnienses*, 1867.
$d'A_3$	d'Arrest, *Undersögelser over de nebulose Stjerner*, Copenhagen, 1872.
Bond	W. C. and G. P. Bond, *Transactions of American Academy of Arts and Sciences*, N.S. vol. iii.
H. C.	Winlock and Trouvelot, *Annals of Harvard College Observatory*, vol. viii.
Lam.	Lamont, *Ueber die Nebelflecken*, Munich, 1837.
$Lam._2$	Lamont, *Annalen der K. Sternwarte bei München*, vol. xvii.
Lass.	Lassell, *Memoirs R.A.S.* vol. xxiii.
$Lass._2$	Lassell, *Memoirs R.A.S.* vol. xxxvi.
Mason	Mason and Smith, *Transactions of American Philosophical Society*, vol. vii.
Melb.	*Melbourne Observations of Southern Nebulæ*, Part I. 1886.
Schultz	Schultz, *Mikrom. Bestimmung einiger teleskopischen Sternhaufen* (Bihang til K. Svenska Vetensk. Akad. Handl. xii. 1886).
Secchi	Secchi, *Memorie dell' Osserv. del Collegio Romano*, 1852–55.
Tempel	Ueber Nebelflecken (*Abh. d. K. Böhm. Gesell. d. Wiss.* 1885).
Valentiner	*Beobachtungen auf der Sternwarte zu Mannheim*, III Abtheilung.
Vogel	"Positionsbestimmungen von Nebelflecken und Sternhaufen zw. +9° 30′ und +15° 30′ Decl." (*Leipziger Beob.* Band I).
$Vogel_2$	*Publicationen des astrophys. Observatoriums zu Potsdam*, vol. iv. Part I. (Observations with the 27-inch Vienna Refractor.)
Wash.	Holden and Trouvelot, *Washington Observations*, 1874, App. I.

* The references are to the plates as numbered in the volume of *Philosophical Transactions*. The numbers should be diminished by eight if it be required to know the numbers of plates in the reprints of Herschel's paper.

† Only those are referred to which show some distinct peculiarity of shape and appearance not figured elsewhere by the same observers. In the "Observations, 1848–78" there are a great number of diagrams showing the relative positions of neighbouring nebulæ; these have not been referred to.

G. C.	h or H	Work cited.	No. of Plate.	No. of Fig.	G. C.	h or H	Work cited.	No. of Plate.	No. of Fig.
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67	2327	C. G. H.	VI	19			P. T. 61	XXV	5
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117	51				705	2534	C. G. H.	VI	7
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156	69	Ld R	I				Spitaler¶	p. 209	
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		Melb.	I	4			M. Hall‖‖	p. 169	
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544	223	d'A	II	7	963	2699			
560	232	P. T. 61	XXV	3	964	2692	Melb.	III	23

* *Mem. d. Oss. Col. Rom.* 1840–41.
§ *Rapp. d. l'Obs. de Paris*, 1884.
** *Journ. Liv. A. S.* v.
§§ *Ann. d. l'Obs. de Paris*, xiv.
† *Act. Soc. Fenn.* viii.
‖ *A. N.* cxiv.
†† *Publ. d. R. Oss. di Milano*, No. 5.
‖‖ *M. N.* xl.
‡ *M. N.* xxviii.
¶ *A. N.* cxiv.
‡‡ *M. N.* xl.
¶¶ *Ibid.*
*** *Journ. Liv. A. S.* v.

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* *Mem. R.A.S.* ii.
§ *A. N.* lviii.
** *Mem. Soc. Ital.* 3rd Ser. I.
† *Mem. Oss. d. Coll. Rom.* 1839.
‖ *Ann. Harv. Coll. Obs.* v.
†† *Wash. Obs.* 1878, App. I.
‡ *A. N.* xlv.
¶ P. T. 68.
‡‡ P. T. 68.

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1375	383	Ld R	I	
1419	390	R. di		
1425	393	P. T. 61	XXVII	11
		Vogel	I	1
1437	399	P. T. 33	XIV	64
		P. T. 50	XXXVII	10
		Lass	II	8
		Secchi	IV	6
		$d'A_2$	p. 86	
1467	415	P. T. 33	XVI	91
1477	421	P. T. 61	XXVII	12
1477	421	Le Sueur†	p. 19	
1511	3075	C. G. H.	IV	4
		$Lass_2$	II	9
1515	III 748	Ld R	I	
1519	444	P. T. 33	XV	72
1520	445	P. T. 50	XXXVII	6
		Lass	II	9
		$Lass_2$	I	10
		Secchi	IV	15
		Ld R	II	
1532	450	P. T. 50	XXXVIII	15
		Lass	II	6
		Secchi	IV	13
		$Lass_2$	I	11
		$d'A_2$	p. 92	
		H. C. Key‡	p. 155	
1565	464	P. T. 50	XXXVIII	12
		Lass	II	5
		Secchi	IV	11
1567	3095	Lass	II	7
		Secchi	IV	14
1677	3131	C. G. H.	VI	12
1721	536	P. T. 33	XIV	61
		Lam	I	8
1728	537	P. T. 33	XIV	65
1745	3145	C. G. H.	V	12
		Melb.	IV	34
1801	3154	C. G. H.	V	8
1829	587	Ld R	III	
1861	604	P. T. 33	XV	70
1863				
		P. T. 50	XXXVI	3
		$Lass_2$	II	12
		Ld R	III	
1964	656	Ld R	III	
2003	3221	C. G. H.	V	9
2017	3228	C. G. H.	VI	9
		Lass	II	10
		Secchi	IV	16
		$Lass_2$	III	13

* *A. N.* cxv. † *Proc. R. S.* xix. ‡ *M. N.* xxviii.

G. C.	h or H	Work cited.	No. of Plate.	No. of Fig.
2037	3228			
2038	684	Ld R	III	
2041	685			
2052	688	P. T. 61	XXVII	13
2055	...			
2057	...	P. T. 61	XXVII	14
2058	692			
2061	693			
2063	3241	C. G. H.	VI	2
2067	3239	C. G. H.	IV	3
2099	710	$d'A_2$	p. 133	
2102	3248	C. G. H.	VI	5
		Lass	II	11
		Secchi	IV	5
		$Lass_2$	III	14
		Ld R	III	
2158	731	P. T. 33	XIII	40
2197	3295	C. G. H.	IX	1
		Abbott*	p. 2	
		Abbott†	p. 200	
		Col. Herschel‡	p. 82	
		Abbott§	p. 234	
		McGeorge‖	p. 110	
		Russell¶		
		C. E. Peck**		
2216	765	P. T. 61	XXVII	15
2217	766			
2234	777	Ld R	III	
2244	785	Ld R	III	
2245	787			
2301	818	Ld R	III	
2333	3324			
2336	3325			
2337	3326	C. G. H.	IV	10
2338	3327	Melb.	IV	35
2340	3329			
2342	3330			
2343	838	P. T. 33	X	32
		P. T. 50	XXXVII	11

G. C.	h or H	Work cited.	No. of Plate.	No. of Fig.
2347	840	Vogel	I	2
2373	854	P. T. 33	XIV	53
		P. T. 50	XXXVII	7
		Lam	I	6
		$Lass_2$	III	15
		Vogel	I	4
2377	857	P. T. 33	XIV	54
		P. T. 61	XXVI	16
		Vogel	I	5
2378	859	P. T. 33	XIV	51
		Vogel	I	3
		Ld R	III	
2379	858	R. di		
2445	910	R. di		
2486	934	P. T. 33	XV	79
2488	936			
2559	982	R. di		
2597	1002	R. di		
2606	1011	P. T. 61	XXVII	17
2670	1052	P. T. 61	XXVII	18
2671	1053			
2680	1061	P. T. 61	XXVII	19
2733	1092	R. di		
2756	1111	P. T. 61	XXVII	20
2760	1113			
2786	1132	Vogel	I	6
2804	1146	P. T. 33	XV	71
		Ld R	III	
2806	1148	P. T. 33	XIV	59
		Vogel	I	7
2807	1149	P. T. 50	XXXVII	8
2838	1173	P. T. 50	XXXV	2
		$Lass_2$	IV	16
		Vogel	I	8
2841	1175	P. T. 33	XIV	55
2868	1192	$d'A_2$	p. 207	
2878	1202	P. T. 33	XV	69
		P. T. 61	XXVII	21
2890	1211	$Lass_2$	III	17

* *M. N.* xxiv. † *Ibid.* xxviii. ‡ *Ibid.* xxix. § *Ibid.* xxxi. ‖ *Tr. R. S. Vict.* x.
¶ *Pr. R. S. New S. Wales*, 1871. ** *Rousdon Obs.* 1886.

G. C.	h or H.	Work cited.	No. of Plate.	No. of Fig.
2910	1225	P. T. 33	XIV	57
2950	1245	P. T. 61	XXVII	22
2958	1252	P. T. 33	XV	68
2962				
2972	1258	R. di.		
3025	II 115	$Lass_2$	IV	19
3028	1296	$Lass_2$	IV	18
3041	1306	P. T. 61	XXVII	23
3042	1308			
3049	1312	$Lass_2$	IV	20
		Vogel	I	9
		Ld R	III	
3085	1337	P. T. 61	XXVIII	24
3101	1352	P. T. 33	XVI	83
3106	1357	P. T. 33	XII	37
		$Lass_2$	V	21
3108	1358	P. T. 33	X V	78
3109	1359			
3113	1362	P. T. 33	XIV	66
3132	1376	P. T. 33	XIV	50
		$Lass_2$	V	22
3151	1385	P. T. 61	XXVIII	25
3152				
3155	1386	$Lass_2$	V	23
3165	1397	P. T. 33	XV	76
		P. T. 50	XXXVII	9
		$Lass_2$	V	24
3180	1405	P. T. 33	XV	74
3182	1408			
3189	1414	P. T. 33	XV	75
3190	1415	P. T. 61	XXVIII	26
3240	1441	P. T. 61	XXVIII	27
3249	1451	R. di		
3258	1456	P. T. 33	XIII	41
		$Lass_2$	V	25
3275	3435	C. G. H.	I	2
3278	1466	P. T. 33	XVI	84
3321	1486	P. T. 33	X	27
		$Lass_2$	VI	26
3340	1499	P. T. 33	XIV	62

G. C.	h or H.	Work cited.	No. of Plate.	No. of Fig.
3342	1498	Vogel	I	10
3356	1509	P. T. 33	XIV	67
3459	1564	Ld R	III	
3511	1589	P. T. 61	XXVIII	28
3525	3501	C. G. H.	I V	2
3531	3504	C. G. H.	V	7
3536	IV 70	$d'A_2$	p. 290	
3570	3514	C. G. H.	VI	1
		Le Sueur *	I	
3572	1622	P. T. 33	X	25
3574	1623	P. T. 50	XXXV	1
		$Lass_2$	VI	27
		Ld R †	IV	
		$Vogel_2$	III	
3606	3523	C. G. H.	IV	5
		$Lass_2$	VII	28
3614	1649	P. T. 33	XIII	39
		$Lass_2$	VII	29
3615	1650	P. T. 61	XXVIII	29
		Vogel	I	11
3661	3541	C. G. H.	VI	15
3706	3548	C. G. H.	VI	10
3730	1722	P. T. 61	XXVIII	30
3731	1723			
3751	1735	R. di		
3760	III 787	P. T. 61	XXIX	35
3762	Ld R			
3763	Ld R			
3764	Ld R			
3767	Ld R			
3768	Ld R			
3770	1744			
3771	Ld R			
3773	III 788			
3774	III 789			
3833	1771	Ld R	V	
3985	1872	Ld R	V	
4051	1905	P. T. 33	XV	77
4052		P. T. 61	XXVIII	31
4058	1909	P. T. 50	XXXVII	8

* *Proc. R. S.* xviii.

† Also diagram.

G. C.	h or H.	Work cited.	No. of Plate.	No. of Fig.
4066	3594	C. G. H.	VI	8
4083	1916	P. T. 33	XVI	87
4087	1917	$d'A_2$	p. 319	
		Ld R	VI	
4118	1929	P. T. 33	XVI	89
4125	3610	C. G. H.	VI	7
4160	1946	P. T. 61	XXVIII	32
4224	3641	C. G. H.	V	4
4229	3644	C. G. H.	V	6
4230	1968	P. T. 33	XVI	86
		P. T. 61	XXVIII	33
		H. C.	25	
4234	1970	Lam	I	1
		$Vogel_2$	p. 34	6
4261	3661	C. G. H.	VI	13
4284	3675	C. G. H.	VI	6
4290	3680	C. G. H.	VI	3
		$Lass_2$	VII	30
4294	M 92	H. C.	25	
		Schultz	II	
4302	3686	C. G. H.	VI	4
4305	3688	C. G. H.	VI	18
4324	3702′	C. G. H.	V	1
4335	3707	C. G. H.	V	5
4340	3710	Blanchini *	p. 231	
4342	3713′	C. G. H.	V	2
4343	1989	P. T. 33	XIII	42
		$Lass_2$	VII	31
4355	1991 / 3718	P. T. 33	XVI	80
		C. G. H.	II	2
		Mason	IV	1
		$Lass_2$	VIII	32
		Lassell †	I	
		H. C.	32	
4361	3722	C. G. H.	I	1
4375	3727	C. G. H.	VI	16
4390	2000	Secchi	IV	3
		$Vogel_2$ ‡	IV	
4395	2002	P. T. 33	X	30
4403	2008	P. T. 33	XII	35
		C. G. H.	II	1
		Lam	I	10
		Mason	VI	1
		$Lass_2$	VII	33
		Wash	VI	3
		Holden, Trouvelot §	p. 348	
		Le Sueur ‖	I	
		Ld R	VI	
4410	VIII 72	Valentiner	I	
4419	Σ 7	W. Struve ¶	I	2332
4437	2019	Lam	I	9
		Helmert **	I, II	
4440	2020	Vogel	II	1
4447	2023	P. T. 33	X	29
		P. T. 44	XIX	29
		d'A	II	5
		$d'A_2$	p. 334	
		Wash.	VI	2
		H. C.	34	
4473	...	Ld R	V	
4487	2037	Lam	I	7
		$Lass_2$	IX	34
4510	2047	P. T. 33	XIII	46
		d'A	II	3
		Lam	I	2
		Secchi	IV	1
		$d'A_2$	p. 336	
4511	2048	Ld R	V	
4514	2050	P. T. 33	XIII	43
		Secchi	IV	
4532	2060	P. T. 33	X	26
		P. T. 44	XIX	26
		P. T. 50	XXXVIII	17
		P. T. 61	XXXI	43
		d'A	II	8
		$Lass_2$	IX	35

* *Observationes Selectæ, Veronæ*, 1737. † *Mem. R. A. S.* xxxiii. ‡ Also p. 34.
§ *Amer. Journ.* 1876. ‖ *Proc. R. S.* xviii. ¶ *Cat. nov. Stell. Dupl.*
** *Publ. d. Hamburg. Sternw.* i.

G. C.	h or H.	Work cited.	No. of Plate.	No. of Fig.	G. C.	h or H.	Work cited.	No. of Plate.	No. of Fig.
4532	2060	Secchi	IV	10	4687	2128	P. T. 33	XVI	90
		d'A_2	p. 338				Secchi	IV	9
		Smyth *	p. 290		4729	3908	C. G. H.	IV	11
		H. C.	35		4730	3909			
		$Vogel_2$	III		4731	3910			
4559	2071	Schultz †			4733	3911			
4561	IV 72	Ld R	V		4734	2139	P. T. 61	XXX	38
4565	2072	P. T. 33	XIII	48	4815	2172	P. T. 61	XXX	39
		Ld R	V		4871	2195	Ld R	V	
4572	2075	P. T. 33	XIII	47	4876	2197	P. T. 33	XV	73
		P. T. 44	XIX	47	4877	2198			
		P. T. 61	XXVIII	34	4883	2201	Ld R	V	
		Lam	I	5	4886	2202	d'A	p. 360	
		$Lass_2$	IX	36	4887	2203	Vogel	I	12
		$Vogel_2$	IV		4892	2205	P. T. 33	XIV	63
4594	2084	P. T. 61	XXX	36			P. T. 50	XXXVI	4
4600	2088	P. T. 33	XI	33			d'A	II	6
4616	2092	P. T. 33	XI	34			d'A_2	p. 362	
		Mason	VII	1	4950	2236	P. T. 33	XIV	60
4618	2093	P. T. 33	XVI	82	4964	2241	P. T. 33	XIII	45
		Mason	VII	1			P. T. 50	XXXVIII	13
4627	2099	P. T. 61	XXX	37			P. T. 61	XXX	40
4628	2098	P. T. 33	XIII	44			Lam	I	3
		P. T. 50	XXXVIII	14			Secchi	IV	4
		d'A	II	1			$Lass_2$	X	38
		Lam	I	4			$Vogel_2$	IV	
		Secchi	IV	2	4971	2245	P. T. 33	XVI	85
		$Lass_2$	X	37			P. T. 61	XXX	41
		Lassell ‡	p. 269		4976	2249	Schultz	III	
		$Vogel_2$	IV		5020	2274	Ld R	V	
4653	2112	Ld R	V		5022	2275			
4678	2125	P. T. 33	XVI	88	5046	2297	P. T. 61	XXX	42
		P. T. 44	XVIII	88			Ld R	V	

* *Spec. Hartw.* † *K. Sv. Vetensk. Ak. Handl.* xi. ‡ *Proc. R. S.* xii.

Appendix.

While the present Catalogue was in the press, Mr. SWIFT published in the *Astronomische Nachrichten*, No. 2798, his sixth list of new nebulæ, containing most of the objects here marked Sw VI. The positions of some of the objects in the hours 12 to 17 differ very slightly from those communicated to me, and made use of in the foregoing pages. Mr. SWIFT's No. 5 is =223, No. 22 is assumed=1729, No. 63 is assumed=*h* 1733 (as already remarked in the Notes above, D* in the *Astr. Nachr.* is a misprint for B*), while No. 99 is undoubtedly=*h* 2296. The minute of R.A. of No. 92 should be 16, and not 14. The list contains two objects, Nos. 53 and 55, which accidentally had not been communicated to me, and are therefore not included in the present Catalogue. Their places are for 1860 :

h m s		° ′	″	
13 15 31	+3·16	101 59·7	+18·9	vF, pS, R
13 16 48	3·16	101 43·7	18·9	vF, vS, nearly bet 2 st, h 3497 np

In the autumn of 1887 was published the "Annual Report of the Board of Directors of the Chicago Astronomical Society, together with the Report of the Director of the Dearborn Observatory for 1885 and 1886." In an appendix is given a list of 106 nebulæ found at the Dearborn Observatory in 1866–68 by Professor T. H. SAFFORD, and supposed to be new. Fifty-nine of these were found to occur in the present Catalogue, having been recorded independently by other observers. As Professor SAFFORD's list (which is for the epoch 1870) is not arranged according to R.A., and is, besides, published in a place where many observers might overlook it, I give below the places of the 47 new objects for 1860, in order that this volume may contain a record (I hope a complete one) of all nebulæ of which the places have been published up to December 1887.

Safford's No.	R.A. 1860.	Ann. Prec. 1880.	N.P.D. 1860.	Ann. Prec. 1880.	Description.
	h m s	s	° ′	″	
89	0 11 50	+3·07	94 3·9	−20·0	No descr
97	0 28 27	3·10	81 38·6	19·9	No descr
66	0 53 48	3·26	59 40·9	19·5	F, iF, lbM
69	1 12 34	3·31	61 4·0	19·0	pB, pS, vmbMN = 12·13m
95	1 25 46	3·06	91 23·9	18·6	No descr
72	1 41 37	3·28	69 58·6	18·1	pB, pS, bMN = 13m
67	1 50 40	3·53	54 4·4	17·7	pF, N = 13m
71	1 59 18	3·47	59 29·9	17·3	pB, pL, R, bM
98	2 0 17	3·05	92 3·6	17·3	No descr
101	2 2 32	2·95	100 20·3	17·2	No descr
70	3 35 47	3·73	58 16·8	11·8	pB, vL, vgbM
73	3 55 31	3·52	68 14·1	−10·3	F, S, R, N = 13·5m
18	12 12 30	3·03	60 55·4	+20·0	vF
19	12 12 46	3·03	59 20·1	20·0	F
26	12 19 59	3·02	66 35·5	20·0	bN = 12m
22	12 47 19	2·93	62 47·7	19·6	neb * 12
2	12 53 54	2·89	60 12·0	19·5	pF
3	12 54 54	2·89	60 12·7	19·5	F, bMN
28	13 34 13	2·82	64 47·1	18·3	No descr
27	13 36 0	2·82	64 49 0	18·3	N = 13m
14	13 45 38	2·82	66 46·0	17·9	pF
105	13 56 23	3·18	99 27·7	17·5	No descr
15	14 16 32	2·73	65 34·2	16·6	F
5	14 18 52	2·65	61 1·8	16·5	pF
8	14 21 10	2·60	58 23·4	16·3	No descr
78	14 21 36	2·87	75 35·6	16·3	F, pL, R, vgbM
13	14 25 14	2·58	58 9·3	16·1	pB
6	14 27 44	2·56	57 41·3	16·0	pF
106	14 44 26	3·17	96 39·6	15·0	No descr
7	15 29 50	2·60	66 3·2	12·1	pF
9	15 33 42	2·66	68 52·9	11·9	No descr
10	15 50 49	2·60	67 11·0	10·6	Neb *
77	15 59 0	2·75	74 35·4	10·0	pF, S, bMN = 12·5m
44	16 52 26	2·60	69 43·0	5·8	vF, nearly R, pS, lbM
29	17 13 39	2·67	71 11·4	+ 3·9	F
82	18 47 1	3·28	98 58·0	− 4·2	pB, pL, gbM
36	19 25 41	2·18	54 32·2	7·4	vF, undefined
37	19 26 16	2·17	54 26·2	7·4	vF, diam 30″, with S Cl
51	20 50 25	2·49	59 28·4	13·6	possibly connected with h 2093
85	21 17 18	3·17	96 20·6	15·3	No descr
55	21 20 24	+2·79	71 57·1	−15·5	pF, pS, iF

Safford's No.	R.A. 1860.	Ann. Prec. 1880.	N.P.D. 1860.	Ann. Prec. 1880.	Description.
	h m s	s	° ′	″	
50	21 29 43	+2·51	55 13·5	−15·9	pB, vmbM ✶
52	21 56 34	2·90	75 33·6	17·3	vF, vS
58	23 4 26	2·90	61 8·0	19·5	F, pS, gbM
59	23 8 28	2·90	60 13·1	19·6	S Cl?
87	23 52 20	3·08	94 56·0	20·0	No descr
88	23 57 54	+3·07	97 53·8	−20·0	No descr

Errata.

No. 1083, *for* np of 2 *read* sp of 2.
No. 1089, *for* sf of 2 *read* nf of 2.
No. 1932–33, in description, *for* 26° *read* 260°.
No. 1960, last column, *add* ✢.
No. 1969, last column, the ✶ belongs to No. 1970.
No. 6933, last column, dele ✶.