AnHar..14

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VOL. XIV.—PART I.

OBSERVATIONS

WITH

THE MERIDIAN PHOTOMETER

DURING THE YEARS 1879–82.

BY

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AIDED BY

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WHO DIED IN APRIL, 1775, LEAVING A NAME INSEPARABLY CONNECTED WITH THE HISTORY OF THE AMERICAN REVOLUTION.

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CHAPTER V.

GENERAL CATALOGUE.

THE work undertaken with the meridian photometer has already been stated, at the beginning of Chapter I., to be the observation of the stars not fainter than the sixth magnitude, between the north pole and thirty degrees south declination. The catalogue which appears in the present chapter was drawn up in general accordance with the plan just described. Its extent, however, is more definitely indicated by the following account of its formation.

The list of stars to be observed with the photometer was originally compiled upon the same sheets of paper which were to be used in recording the observations, as above stated (p. 6). A provisional list was formed of the stars contained in the Durchmusterung, which are there described as not fainter than the magnitude 6.0. These were taken from the catalogue at page 138 of the United States Coast Survey Report for 1873. This was supplemented, for stars beyond the southern limit of the Durchmusterung, by the Catalogue of the British Association, from which all stars there appearing to be not fainter than the sixth magnitude, and within the required limits of declination, were extracted. Their places were carried forward to 1880, the epoch of the Coast Survey List just mentioned, and that which had been selected for the proposed photometric catalogue.

The separate sheets forming this provisional list could now be arranged in the order of right ascension, or by constellations, and thus conveniently compared with any catalogue which was to be used as an authority for stellar magnitude. New stars could be inserted, and rejections from the list could be made, whenever a change of either kind was indicated by the authorities consulted. Much care was taken to secure a correct result, and to avoid the repetition of errors, many of which were found in the catalogues employed.

The Catalogue, in its final form, was designed to contain the following classes of stars: —

1. All stars in Argelander's Uranometria Nova.

2. All stars in the catalogue accompanying the Atlas Cœlestis Novus of Heis, except such as were there described as fainter than the magnitude 6.

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3. All stars of the Durchmusterung not there described as fainter than the magnitude 6.0.

4. All stars in the catalogue accompanying Behrmann's Atlas des südlichen gestirnten Himmels, and not more than 30° south of the equator.

5. All stars in the Uranometria Argentina not there described as fainter than the magnitude 6.0, and not more than 30° south of the equator.

6. All stars in Houzeau's Uranométrie Générale (Annales de l'Observatoire Royal de Bruxelles, Nouvelle Série, Astronomie, Tome I.) not there described as of the magnitude 6 or fainter, and not more than 30° south of the equator.

7. All components of double stars estimated by Struve to be of the magnitude 6.0 or brighter. The "Summary" of Struve's observations contained in Vol. I. of the Dun Echt Observatory Publications was employed in the formation of this part of the required list.

8. All variable stars in Schönfeld's Catalogue (Zweiter Catalog von veränderlichen Sternen, Mannheim, 1875) there described as not fainter at their maxima than the magnitude 6.5.

9. All stars ephemerides of which are given in the volumes for 1880 of the American Ephemeris, the Nautical Almanac, or the Connaissance des Temps.

10. All stars contained in the lists published by the Astronomische Gesellschaft in order to provide fundamental stars for zone observations. These lists appear in the Vierteljahrsschrift der Astronomischen Gesellschaft, IV. 324–349, and XV. 273–287, and contain respectively 539, 303, and 83 stars.

Besides the stars belonging to the classes just enumerated, a few others were added to the list for special reasons, which will generally be obvious from the remarks following the catalogue. For example, several stars which had been used for comparison with variable stars were included in the list. When an object was described by the Uranometria Nova or by Heis as consisting of two stars, the combination of which is as bright as the sixth magnitude, both stars were inserted.

The number of sources thus employed makes it likely that very few stars have been omitted from the catalogue which are actually so bright that they should have been included in it according to the general principles in accordance with which it was compiled. The care taken to make the compilation complete may be shown by a few instances, without the description of all the details of the work. In general, each catalogue was compared with the provisional list of stars, and, moreover, the stars already contained in the list which might be expected to occur in the catalogue were looked for there, so that no data which could be obtained for them should be omitted.

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In the case of the Durchmusterung, the catalogue of that work was examined for all stars not fainter than the magnitude 6.5. This examination furnished the DM. numbers and magnitudes for the greater part of the stars in the provisional list, and not more than 2° south of the equator. It also insured the completeness of the list for stars not fainter than the magnitude 6.0 according to the Durchmusterung. All stars remaining in the provisional list, within the limits of the Durchmusterung, but not yet provided with DM. numbers and magnitudes, were separately identified. In all cases in which the DM. magnitude exceeded 6.2, the position for 1880 derived from the Durchmusterung was compared with that previously computed from the catalogue of Heis. This work was facilitated by the use of tables and curves showing the limits within which particular values of precession were applicable. The identification of stars which were carried to a different degree of declination, by the effect of precession, between 1855 and 1880, was similarly checked. When errors in computation or in identification were discovered, the corrected result was checked by another computer.

A large part of the stars having the magnitudes 6.1 or 6.2 in the Durchmusterung occur in the present catalogue, having been introduced from other sources. Those not contained in the catalogue are given below in Table XXIII., for the convenience of any one who may wish to extend the catalogue to stars slightly fainter than those of the sixth magnitude.

TABLE XXIII.

DM. STARS NOT IN CATALOGUE, OF THE MAGNITUDES 6.1 AND 6.2.

Magnitude 6.1.		Magnitude 6.2.			
+ 2° 1315	+43° 4378	−1° 377	+ 7° 36	+15° 3095	+23° 3975
+11° 4368	+45° 237	−0° 63	+ 8° 3367	+16° 2705	+25° 1496
+13° 3593	+46° 2551	593	3741	+17° 3241	2733
+18° 2906	+52° 1205	632	+ 9° 4735	+19° 3218	3972
4930	+54° 1510	1299	+10° 4902	4017	5068
+20° 4602	2544	2195	+11° 261	5058	+26° 2250
+24° 2779	+56° 1058	2796	3802	5147	+27° 3150
+30° 418	+57° 1456	4585	+12° 25	+20 85	+29° 947
+35° 1334	+60° 2026	+0° 2782	+13° 2901	4629	3706
+36° 1883	+62° 1669	3337	4360	+21° 2755	+31° 1139
+38° 3758	+63° 238	3816	4861	+22° 2764	+33° 140
+40° 1665	+65° 280	+1° 347	+14° 3279	+23° 558	+34° 3410
4885	+70° 102	+2° 118	+15° 926	3733	4500
+42° 2577	+74° 229	2217	2690	4305	+35° 8

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MAGNITUDE 6.2.

+35° 4357	+40° 3446	+46° 563	+50° 2705	+57° 2057	+72° 805
+37° 899	+41° 2170	+47° 2158	3232	+59° 541	+73° 108
954	3668	2937	+51° 1605	1446	+75° 59
2551	3805	1592	1632	2060	247
4271	+42° 1935	+48° 320	+52° 92	+60° 1813	+77° 519
4866	+43° 2068	899	2350	+61° 178	+78° 392
+38° 515	4375	1015	2799	+62° 2171	+81° 349
+39° 2357	+44° 3133	1273	3114	+69° 1263	389
+40° 1032	+45° 2684	3249	+53° 2397	+70° 24	+83° 356
2948	3637	+49° 2604	+57° 651	+72° 409	588
3228	3813	3448			

In the Uranometria Argentina, the list of standard stars at page 20 of that work, as well as the principal catalogue beginning at page 131, was compared with the list drawn up for photometric observation. The designations of the stars according to Bayer, Flamsteed, and the Durchmusterung were checked, as were also their magnitudes according to the Uranometria Nova, Heis, and the Durchmusterung. The magnitudes given in the list of standard stars were compared with those assigned to the same stars in the principal catalogue of the Uranometria Argentina. Some differences of one tenth of a magnitude were noted. In such cases the magnitude taken from the list of standard stars is adopted in the present work, and the second value which occurs in the Uranometria Argentina is mentioned in the remarks forming part of this chapter.

Soon after the compilation of the catalogue upon the separate sheets had been begun, a continuous copy of the list was drawn up, nearly in the form exhibited by the left hand pages of the printed catalogue. This continuous list was used in the comparisons made with the various authorities from which the magnitudes and the places of the stars were derived. It also afforded a security against omissions resulting from the accidental loss of any of the separate sheets. The list was numbered provisionally, and all subsequent insertions were effected by adding letters to the numbers designating adjacent stars. The provisional designations were retained throughout the observations, and until the left-hand pages of the catalogue could be printed, after which the consecutive printed numbers were brought into use.

The positions of the stars for 1880 were obtained directly from ephemerides for that year, when this was practicable. In all other cases, they were obtained and checked by methods designed to exclude any serious errors; but minute accuracy

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in this respect did not appear important. Errors of $0^m.1$ in right ascension or of 1′ in declination are presumably rather frequent, and errors of twice that amount will sometimes occur.

In the arrangement of the stars, the order of right ascension is usually followed. An occasional exception is allowed for the purpose of placing upon successive lines two or more adjacent stars which appeared to have been observed as a single object. In this case the mean of the separate right ascensions determines the place of the group in the catalogue. When two or more stars have the same right ascension according to the catalogue, the order of declination is followed, proceeding southwards. Hence, the following star of a close pair, if north of its companion, may be made to precede it in the list. Figures referring to a combination of separately mentioned stars are placed between the lines which those stars occupy.

The last four columns of the left-hand pages of the catalogue show the mean results obtained with the photometer and by direct estimate, and the probable errors of these results, which are added to show the accordance of the observations. The number of estimates was almost always three, as is explained in the previous chapter, and it therefore seemed needless to insert it; but it may be found from the right-hand pages of the catalogue, combined with Table XXIX., page 282. But the number of observations with the photometer varied more frequently, and has accordingly been given. It is often larger than the number of observations from which the mean result, in the next column, was derived, because it includes observations in which no numerical result was obtained; such, for example, as those in which the place was presumably well identified, but the star was invisible in the photometer, or too faint for observation. But when an obvious reason for its faintness, such as the neighborhood of the Moon, could be found in the record, the observation is altogether omitted. The number of observations of each standard star is that of the observations at upper culmination. The observations made at lower culmination are given in Table XXVIII., page 274.

The computation of the probable errors was abridged by the use of Table XXIV., which is here given, as it may be of service in other work of a similar nature. It is calculated from the formula of Peters, according to which the probable error of any one of n observations may be expressed by $\frac{.845}{\sqrt{n\,(n-1)}}\Sigma r$, where Σr denotes the arithmetical sum of the residuals. The probable error of the mean is then expressed by $\frac{.845}{n\sqrt{n-1}}\Sigma r$. The first five columns of Table XXIV. contain the number of observations as the argument, and the corresponding

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coefficients by which the average deviation and the arithmetical sum of the residuals must be respectively multiplied in order to obtain the probable errors of a single observation or of the mean. The remaining columns enable the computer to obtain the probable error of the mean by inspection, when the number of observations is three, four, five, six, or seven. The first of these columns contains successive values of the probable error from .00 to .20 inclusive. The next column contains the corresponding values of the arithmetical sum of the two largest differences in the case of three observations. The probable error for this number of observations was computed by a special method, which was found to have some advantages in regard to exactness and economy of time. Let the results of the three observations, in the order of their magnitude, be denoted by A, B, and C. If B differs less from A than from C, the mean result, $\frac{1}{3}(A+B+C)$, will be less than A or B, but greater than C. The three residuals, all taken with the positive sign, will be $\frac{1}{3}(2A-B-C)$, $\frac{1}{3}(2B-A-C)$, and $\frac{1}{3}(A+B-2C)$. Their sum is $\frac{1}{3}(2A+2B-4C)$, which may be expressed as $\frac{2}{3}[(A-C)+(B-C)]$. Similarly, if B differs less from C than from A, the sum of the residuals will be $\frac{2}{3}[(A-B)+(A-C)]$. In either case, the arithmetical sum of the three residuals is two thirds of the sum of the two largest differences between the observed quantities. The coefficient by which this last sum is to be multiplied in order to obtain the probable error of the mean is therefore $\frac{2}{3}\cdot\frac{.845}{3\sqrt{2}}$, the approximate value of which is $\frac{2}{15}$. The column of Table XXIV. headed "Sum Diff." has been computed according to this formula. The last four columns give the corresponding values of the arithmetical sum of all the residuals when the number of observations is four, five, six, or seven. Two successive values often occur in the same column, corresponding to a single value of the probable error. A dash in any of these columns denotes that the value of the probable error standing upon the same line will not be indicated by the given number of observations. Thus, according to the rule adopted, when there are three observations, the probable errors .01 and .02 will not occur; when there are four observations, the probable error will never be .03. The case of two observations is rare, and is provided for sufficiently by the first line of the first part of Table XXIV.

No probable error is given for the result of the estimates, in the last column of the left-hand page of the catalogue, when one of three observations was rejected; but when the star was recorded on one occasion as too faint for estimation, the probable error of the mean of the other two observations is inserted.

The "photometric magnitude" of each star, given on the right-hand page of the catalogue, is usually derived from the result of observation given on the

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TABLE XXIV.

PROBABLE ERROR.

No. of Obs.	Av. Dev.		Sum Resid.		P. E. Mean.	Sum Diff.	Sum of Residuals.			
	1 Obs.	Mean.	1 Obs.	Mean.			4	5	6	7
2	1.196	.845	.598	.422	.00	0	0	0	0	0,1
3	1.036	.598	.345	.199	.01	—	1	1	1,2	2,3
4	.976	.488	.244	.122	.02	—	2	2	3	4,5
5	.945	.422	.189	.084	.03	2	—	3,4	4,5	6,7
6	.926	.378	.154	.063	.04	3	3	5	6,7	8,9
7	.913	.345	.130	.049	.05	4	4	6	8	10,11
8	.903	.319	.113	.040	.06	—	5	7	9,10	12,13
9	.896	.299	.099	.033	.07	5	6	8	11	14,15
10	.891	.282	.089	.028	.08	6	—	9,10	12,13	16,17
11	.886	.267	.081	.024	.09	7	7	11	14,15	18,19
12	.883	.255	.074	.021	.10	—	8	12	16	20,21
13	.880	.244	.068	.019	.11	8	9	13	17,18	22,23
14	.877	.234	.063	.017	.12	9	10	14	19,20	24,25
15	.875	.226	.058	.015	.13	10	11	15,16	21	26,27
20	.867	.194	.043	.0097	.14	—	—	17	22,23	28,29
30	.860	.157	.029	.0052	.15	11	12	18	24	30,31
40	.856	.135	.021	.0034	.16	12	13	19	25,26	32,33
50	.854	.121	.017	.0024	.17	13	14	20	27	34,35
100	.849	.085	.008	.00085	.18	—	15	21,22	28,29	36,37
1000	.845	.027	.001	.00003	.19	14	—	23	30	38,39
∞	.845	.000	.000	.00000	.20	15	16	24	31,32	40,41

opposite page, by expressing it in tenths, instead of in hundredths, of a magnitude. It often happened, however, that when a close pair of stars occurred in the list, it could only be observed as a single object. In other cases one component only was observed, since it appeared impracticable, or at least inexpedient, to observe the other, owing to the disturbing effect of the companion. The "photometric magnitude" of the separate components, if both were measured as a single object, or of one of them, if only the other was observed, is printed in Italics, and was obtained from the combination of the measure actually made with the difference in magnitude of the two stars. This difference was variously determined in different cases, as will be shown below. The computation, supposing the difference in magnitude to be known, was as follows: let M denote the remainder obtained by subtracting from the magnitude of the brighter star that of a star having the brightness of the two components combined; and let m denote the difference in magnitude of the two components. If l denotes the ratio of light between the components, so that the combination of l stars, each equal to the fainter com-

$b_a \cdot a$ } M
$b_1 \cdot 1$ } m
$b_2 \cdot 2$ }

$l = \frac{b_1}{b_2} = 10^{-0.4m}$ ✓

$b_2 l = b_1$

$\frac{b_1 + b_2}{b_1} = \frac{b_a}{b_1}$

$\frac{b_2 l + b_2}{b_2 l} = \frac{1+l}{l}$ ✓

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ponent, would be equal to the brighter, the corresponding ratio between the combination of both components and the brighter of the two will be $\frac{l+1}{l}$. Hence $M = 2.5 \log \frac{l+1}{l}$, while $m = 2.5 \log l$. From these equations, we find that for all values of m from ∞ to 3.4 inclusive, $M = 0.0$, if the results are carried only to tenths of a magnitude. Similarly, for values of m from 3.3 to 2.1 inclusive, $M = 0.1$; for values of m from 2.0 to 1.5 inclusive, $M = 0.2$; for values of m from 1.4 to 1.1 inclusive, $M = 0.3$; when the value of m is 1.0, 0.9, or 0.8, $M = 0.4$; when the value of m is 0.7, 0.6, or 0.5, $M = 0.5$; when the value of m is 0.4 or 0.3, $M = 0.6$; and for smaller values of m, $M = 0.7$. Accordingly, if two stars have the magnitudes 4.3 and 6.0, their combined light should be equal to that of a star having the magnitude 4.1. If the magnitude of a double star is 5.2, and the magnitudes of its components differ by 0.6, these magnitudes should be 5.7 and 6.3. This subject has been discussed in the Proceedings of the American Academy of Arts and Sciences, XVI. 10.

The differences in magnitude of the components of many bright double stars belonging to the present catalogue were observed here in the years 1877–1879. The results appear in Vol. XI. of these Annals, and have been employed in the present work in all cases to which they were applicable, except for the star *θ Serpentis*, which is specially mentioned in the remarks on No. 3215 of the catalogue. To provide additional material, many pairs of stars not previously observed were measured with the same apparatus in the years 1881 and 1883. As the components of these pairs were generally too widely separated to allow them to be observed with the photometer attached, as usual, to the large telescope, it was adapted to the finder, which has an aperture of about 10 cm. and a focal length of 150 cm. Nos. 717–8, 2755–6, 2067–8, and 3049–50, however, were measured with the principal telescope. When the components are much less than 3″ apart, they cannot be compared with this photometer, and when very nearly equal in brightness a sufficiently correct result may be obtained by a direct estimate. In these cases, the difference in magnitude is commonly taken from the estimates of Struve. The authority in each case is given in the remarks following the catalogue.

The double stars compared photometrically in 1881 and 1883 are given in Table XXV. The successive columns give the number assigned in the catalogue to the first star of each pair, the approximate right ascension and declination of the mean of the two components, and the result for their combined magnitude. The next columns give the approximate position angles and distances for 1880. The position angle indicates the direction of the fainter star. The year and dates

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of observation are given in the next columns. The last observation of No. 410 was made on December 8, and the last two observations of No. 2234 on May 18. The last columns give the mean difference in magnitude of the components, the residuals of the separate measures from the mean, in the form already employed in Table II. and later, and the initials of the observers. Commas in the last column serve to indicate the number of measures made on each night. The observations were taken at such times in the evening that no serious error will result from the assumption that those of each date were made six tenths of a day after the corresponding mean noon of Greenwich.

TABLE XXV.

ADJACENT STARS.

No. in Catal.	R. A.	Dec.	Comb. Magn.	Pos. Angle.	Dist.	Year.	Dates.	Magn.	Resid.	Obs.
	h m	° ′		°	″					
410	2 30.0	+24 8	6.1	273	39	1881	Oct. 7, Nov. 6	.70	0011	P,PS,W
674	3 58.2	−20 29	5.8	104	174	1881	Nov. 30, Dec. 5	1.00	1210	WS,WP
717	4 9.0	+ 5 53	6.0	305	73	1883	Nov. 12, Nov. 14	.48	1110	S,SWW
2039	11 49.0	+47 8	5.8	114	63	1883	May 17, May 18	.35	0101	SW,WP
2182	12 46.3	+17 45	5.5	49	195	1883	May 16, May 17	.32	0032	PW,PS
2234	13 7.0	+19 22	6.1	283	558	1883	May 16, May 17	.17	111111	S,PWW,WP
2251	13 12.9	+ 4 20	5.8	61	257	1883	May 17, May 18	.50	1340	PS,SW
2273	13 23.2	+65 20	6.0	159	122	1881	Oct. 6, Nov. 28	.35	1001	PS,PS
2405	14 12.2	+57 15	5.9	143	6	1881	Oct. 6, Nov. 28	.32	2010	SP,PS
2755	16 18.4	−23 10	4.8	3	4	1883	May 18, May 25	.70	1102	PW,WS
2967	17 38.6	+ 2 38	5.8	94	21	1883	May 17, May 18	.40	0000	SW,SP
3049	18 3.0	+26 5	5.2	183	14	1883	May 17, May 18	.15	0222	SP,WS
3071	18 9.0	+79 58	5.2	236	21	1881	Oct. 6, Nov. 4	.38	2001	SP,WS
3280	19 6.8	+26 4	6.7	317	147	1881	Oct. 6, Oct. 19	.12	0201	PS,WP
3357	19 23.8	+24 28	4.4	28	396	1883	May 17, May 18	1.10	1221	WS,WP
3410	19 38.7	+50 14	5.5	136	37	1881	Nov. 4, Nov. 28	.10	1010	SW,SP
3493	19 59.3	+70 2	6.1	55	137	1881	Nov. 4, Nov. 28	1.48	1321	WP,PW
3588	20 26.3	+ 1 46	6.2	352	315	1881	Oct. 5, Nov. 6	.77	002121	SPPS,SP
3768	21 17.4	+60 13	6.2	16	299	1883	May 17, May 18	.28	1132	PS,SW
3774	21 18.7	+36 52	5.8	302	365	1883	May 18, May 25	.22	2122	PS,SW
3882	21 54.2	+65 34	5.6	117	91	1881	Nov. 28, Nov. 30	.28	3111	PW,SW

The observations agree closely together, the average value of the residuals, expressed in magnitudes, being .10. In one case only, that of No. 2251–2, does the residual exceed 0.3, and here there is no evidence of real variability in the stars.

To compare the stellar magnitudes given in other catalogues with those result-

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ing from the measures contained in the present volume, they must first be reduced to the same scale. This has been done, in general, by selecting from each catalogue all the stars to which any given magnitude is assigned, finding the corresponding photometric magnitude, and taking the mean of the results. The details of this work will be given in Part II. The first portion of Table XXVI. relates to those catalogues in which three subdivisions of each magnitude are employed. The first column gives the successive designations of magnitude employed in the Uranometria Nova. The next five columns give the photometric magnitudes corresponding to these symbols in the catalogues of Ptolemy, Sûfi, the Uranometria Nova, Heis, and Behrmann. The notation of the first column is here employed to indicate the letters employed by Ptolemy and the descriptions of Sûfi, as will be explained in Part II. The next two columns give the magnitudes of Houzeau, and their corresponding photometric magnitudes. In the other catalogues here noticed, the magnitudes are given in tenths. The third part of Table XXVI. there-

TABLE XXVI.

COMPARISON OF VARIOUS CATALOGUES.

Est. Mag.	P	S	U	*H*	B	Est. Mag.	*h*	Est. Mag.	Σ	D	G	F	Est. Mag.	Σ	D	G	F	Est. Mag.	Σ	D	G	F
1	0.5	0.6	0.3	0.3	.	1	0.5	1.0	0.6	0.3	0.7	0.2	3.1	3.5	3.3	3.2	3.2	5.2	5.4	5.2	4.9	5.0
1·2	1.2	1.1	1.2	1.2	.	1·2	1.4	1.1	.	1.0	0.8	.	3.2	3.6	3.4	3.3	3.3	5.3	5.4	5.2	5.0	5.0
2·1	1.2	1.3	1.5	1.5	.	2	2.0	1.2	.	1.1	0.9	.	3.3	3.7	3.5	3.4	3.4	5.4	5.5	5.3	5.1	5.1
2	2.1	2.0	2.2	2.2	1.8	2·3	2.5	1.3	.	1.3	.	0.8	3.4	3.8	3.6	3.5	3.5	5.5	5.6	5.4	5.2	5.2
2·3	2.6	2.5	2.5	2.5	2.2	3	3.0	1.4	.	.	1.2	0.9	3.5	3.9	3.7	3.6	3.6	5.6	5.7	5.5	5.3	5.3
3·2	2.7	2.6	2.7	2.8	2.6	3·4	3.5	1.5	1.4	1.5	1.3	1.0	3.6	4.0	3.8	3.7	3.7	5.7	5.8	5.6	5.4	5.4
3	3.3	3.2	3.2	3.2	3.0	4	4.0	1.6	1.5	.	.	.	3.7	4.1	3.9	3.8	3.8	5.8	5.8	5.6	5.6	5.4
3·4	3.8	3.6	3.4	3.5	3.2	4·5	4.4	1.7	.	1.7	1.6	1.2	3.8	4.2	3.9	3.9	3.8	5.9	5.9	5.7	5.7	5.5
4·3	3.8	3.8	3.7	3.7	3.6	5	4.9	1.8	.	.	1.7	.	3.9	4.3	4.0	4.0	3.9	6.0	6.0	5.8	5.8	5.6
4	4.4	4.2	4.1	4.1	3.9	5·6	5.3	1.9	.	.	.	1.8	4.0	4.4	4.1	4.1	4.0	6.1	6.1	5.9	5.9	5.7
4·5	4.6	4.5	4.4	4.4	4.1	6	5.7	2.0	2.1	2.1	2.0	1.9	4.1	4.5	4.2	4.2	4.1	6.2	6.2	6.0	6.0	5.8
5·4	4.7	4.6	4.6	4.6	4.4	6·7	6.1	2.1	2.2	2.2	2.1	2.0	4.2	4.6	4.3	4.2	4.2	6.3	6.3	6.1	6.1	5.8
5	5.0	4.9	5.0	5.0	4.7	7	6.4	2.2	2.4	2.3	2.2	2.1	4.3	4.6	4.3	4.3	4.2	6.4	6.4	6.2	6.2	5.9
5·6	.	5.0	5.2	5.2	5.0			2.3	2.5	2.5	2.3	2.3	4.4	4.7	4.4	4.4	4.3	6.5	6.5	6.3	6.3	6.0
6·5	.	5.1	5.4	5.6	5.5			2.4	2.7	2.6	2.5	2.4	4.5	4.8	4.5	4.4	4.4	6.6	6.6	6.4	6.4	6.1
6	5.4	5.3	5.8	5.8	6.0			2.5	2.8	2.7	2.6	2.5	4.6	4.9	4.6	4.5	4.5	6.7	6.7	6.5	6.5	6.2
6·7	.	5.6	.	6.1	.			2.6	2.9	2.8	2.7	2.6	4.7	5.0	4.7	4.6	4.6	6.8	6.8	6.6	6.6	6.3
								2.7	3.0	2.9	2.8	2.7	4.8	5.0	4.8	4.7	4.6	6.9	6.9	6.7	6.7	.
								2.8	3.2	3.0	2.9	2.9	4.9	5.1	4.9	4.7	4.7	7.0	7.0	6.8	6.8	6.4
								2.9	3.3	3.1	3.0	3.0	5.0	5.2	5.0	4.8	4.8	7.1	7.1	6.9	6.9	.
								3.0	3.4	3.2	3.1	3.1	5.1	5.3	5.1	4.9	4.9	7.2	7.2	7.0		.

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fore begins with a column containing the successive tenths of a magnitude from 1.0 to 7.2 inclusive, which is followed by the adopted photometric magnitudes answering to the respective results of Struve, the Durchmusterung, the Uranometria Argentina, and Flammarion.

The principal use of this table is to indicate the relation of the scales adopted by the various observers. It also shows how the residuals contained in the right-hand pages of the catalogue were obtained. It may be used for the inverse problem of determining the original magnitude from the residual, by adding the latter to the photometric magnitude and finding from the table the catalogue magnitude corresponding to it. This will be best shown by the examples on page 324. It will be seen, however, that the same photometric magnitude sometimes corresponds to two successive values of the argument. The original magnitudes for four of the principal catalogues are given on the left-hand pages of the photometric catalogue.

For a few magnitudes not contained in the above table the following magnitudes have been adopted. In Sûfi, for 3·4 – 4·3, 3.7; for 4·5 – 5·4, 4.6; for 5·6 – 6·5, 5.1. In the Durchmusterung, for 7.3, 7.1; for 7.4, 7.2; for 7.5, 7.3; for 7.7, 7.5; and for 7.8, 7.6. In the Uranometria Argentina, for 7.4, 7.2. In Flammarion, for 7.5, 6.8.

By the courtesy of the Royal Astronomical Society a manuscript catalogue of stars was sent to Cambridge for use in the preparation of this work. This catalogue was prepared by Mr. W. S. Franks, of Leicester, England, and contains 3890 stars taken from the Catalogue of the British Association. The observations were made with a "Wray" refractor of 13 cm. aperture and 200 cm. focus. The definition and color correction were very satisfactory. Under favorable conditions γ^2 *Andromedæ* is deeply notched. The eyepiece used was an aplanatic by Horne and Thornthwaite, giving a power of 105 diameters, and a field of about 33′. For close double stars higher powers were occasionally used. In observing, one hour in right ascension was taken as the limit of the sweeps, and, beginning with 25° south, zones of 5° in declination were taken at a time, gradually working up to the pole. The natural grouping of the stars was followed, rather than a strict adherence to their order in right ascension. The observations began in July, 1877, with Hour XVIII., and ended in May, 1878.

The principal object of this work was the estimation of the color of the stars. The brightness was also estimated, but only to half-magnitudes. A valuable contribution to our knowledge of stellar magnitudes could have been made had the estimates been in tenths of a magnitude, as they would have served to show the

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effect of an increase in the size of the telescope on the comparative brightness of the stars.

The colors given in this catalogue are indicated in the last column but one of the right-hand page of the catalogue. It is not thought necessary to maintain all the original distinctions of color given by Mr. Franks. The following abbreviations are accordingly used: — b = blue, g = green, l = lilac, o = orange, p = purple, r = red, w = white, y = yellow. The termination *ish* is designated by placing the letter in Italics. Modifying adjectives, as "faint," "dull," or "pale," denoting a diminution in the color, are similarly indicated. In like manner, "very full," "bright," "lucid," "splendid," "intense," and other terms indicating an increased color sensation, are denoted by capitals. Among other abbreviations are the following: — topaz yellow = Y; flushed white = *r*; silvery white = w; fine pale yellow = *y*. "Bright," when used as a secondary qualification, seems to denote intensity rather than color, and is therefore omitted; as, bright pale yellow = *y*; bright flushed white = *r*; orange red and orange yellow are denoted by *o*.

The explanation of the successive columns of the catalogue is given below. The heading of each column is here prefixed to the account of it, for convenience of reference.

No. — The first column contains the numbers used in designating the stars. Each component of a pair or group of stars is separately numbered, if bright enough to be included in the list. In all the subsequent columns, data understood to relate to the combination of two or more stars are placed between the lines occupied by the first and last numbers designating the pair or group. It is recommended that references to this catalogue should be made by means of the numbers in the first column, preceded by the letters H. P. (Harvard Photometry).

Constellation. — The Atlas of Heis is regarded as the authority for the name of the constellation given in this column. When the star itself does not occur in that work, it is assigned to the constellation in which it appears to lie by the boundaries drawn on the maps.

B. Fl. — The stars are here designated by the letters of Bayer and the numbers of Flamsteed. In applying the letters, the identifications adopted by Heis (with a few corrections by Schönfeld) are accepted. Besides Bayer's letters, the customary designations R, S, etc., for variable stars occur in this column, and the designation λ is retained for the star commonly called λ *Ursæ Minoris*, No. 3426 of the catalogue. For a list of stars designated by letters, see page 315. For the numbers of Flamsteed, Baily's authority is followed. The number is printed in Italics, when the

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constellation in which Flamsteed placed the star is not the same as that in which it is here placed. In such cases, Flamsteed's constellation is mentioned in the remarks following the catalogue.

B. A. C. — The numbers designating the stars in the Catalogue of the British Association.

DM. — The zones and numbers by which the stars are designated in the Durchmusterung.

R. A. — The right ascensions of the stars for 1880.0 expressed in minutes and tenths. The hour is given in heavy faced type at the top of the left-hand page, towards the right.

Dec. — The declinations of the stars for 1880.0, in degrees and minutes of arc.

U. N. — The magnitudes according to Argelander's Uranometria Nova. The inverted period is used in this column to denote that the magnitudes are not given in tenths, but that the figures separated by the point express two adjacent magnitudes, between which the star is placed, but nearer to the magnitude denoted by the first figure than to the other. The letter F signifies that the corresponding star does not occur in the Uranometria Nova, being presumably too faint to be seen. "Nebula," "cumulus," and "variable," are expressed by the usual abbreviations, "neb.," "cum.," and "var."

H. — The magnitudes according to the Atlas Cœlestis Novus of Heis. The inversion of the period has the same significance here as in the previous column, and the abbreviations employed are likewise the same.

DM. — The magnitudes according to the Durchmusterung. These are expressed in tenths. The abbreviations are the same as those in the previous columns, except that "cum." is inserted to mark the occurrence of several neighboring stars in the Durchmusterung, not that of a single object so designated in that catalogue.

U. A. — The magnitudes, likewise carried to tenths, according to the Uranometria Argentina. The abbreviations are the same as those under the heading U. N. and H.

Measures. — The results of the photometric measures are here given under the subordinate headings "No. Obs.," signifying the number of observations, "Magn.," signifying the mean result for magnitude, and "P. E.," signifying the probable error. For additional explanations, see page 87. The abbreviations have nearly the same meaning as in the previous columns; thus F signifies that no star bright enough for measurement was found in the place examined. The letter R has been used in this column to call attention to a special case, explained in the remarks following the catalogue.

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Estimates. — The two columns under this general heading give the mean magnitude, and its probable error resulting from the direct estimates described in Chapter IV. The abbreviation F here denotes that in all, or all but one, of the original observations, the star was either invisible, or, if seen, was fainter than λ *Ursæ Minoris*, No. 3426 of the catalogue. The omission of the number of observations, and the computation of the probable errors, are explained on page 87.

On the right-hand page, the order of the columns is as follows: —

No. — This is the same as the first column of the left-hand page.

Numbers of Series. — The two columns under this heading contain the numbers of the series of photometric measures and of direct estimates corresponding to the separate observations, the residuals of which are given in the fifth and sixth columns of the same page. For the dates of these series, and for other information respecting them, Tables II. and XVIII. should be consulted. The series number of an estimate made with the opera glass is printed in Italics.

Ph. Mag. — This is the mean result of the photometric measures already given on the left-hand page, but expressed in tenths, instead of in hundredths, of a magnitude. The rule adopted, when the figure 5 stood in the place of hundredths, was to employ the nearest even tenth of a magnitude in the abridged result. Thus 5.95 and 6.05 were both expressed by 6.0. The use of Italics in this column denotes a computed value, instead of one directly observed. The method of computation is explained on page 89. Additional information with regard to its employment is given in the remarks following the catalogue. The abbreviations "neb.," "cum.," and "var." are used as on the left-hand page; F and R also have the same meaning as in the corresponding column on that page.

Meas. — This column contains residuals expressed in tenths of a magnitude, and obtained by subtracting from the results of the separate photometric observations the photometric magnitude given in the previous column. The form in which the residuals are given is the same as that used in Table II. (see page 11). That is, the positive residuals are expressed by Roman figures; if such a residual exceeds +9, the last figure only is given, and is printed in heavy type; thus **0** signifies +10, and **9**, +19. If the residual exceeds +19, it is replaced by the letter **f**, and its value will be found on page 311, at the end of the remarks. Negative residuals are expressed by Italic figures; if numerically greater than 9, they are replaced by the letter **b**, and their values will be found in the remarks. The letters F and R, in small capitals, have the meaning previously explained; F signifying that no star bright enough for measurement with the photometer was found in the region examined; and R, that some circumstance attending the observation is to be

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explained in a remark following the catalogue. When more than seven observations were made, a hyphen follows the seven residuals for which there is space in this column, and the remaining observations, with their series numbers, will be found in Table XXVIII., page 274. The abbreviations for "nebula," "cumulus," and "variable," are reduced in this column, and in those which follow, to N, C, and V. The order of the residuals is the same as that of the series numbers in the second column of the page.

Est. — This column contains the residuals of the observations taken by direct estimate, in the same order as that of the corresponding series numbers in the third column of the page. These residuals are taken from the photometric magnitude, not from the mean of the estimates themselves. The form in which they are expressed, and most of the abbreviations employed, are the same as in the previous column. The hyphen is employed to indicate the existence of additional observations, except when the star is one of the hundred circumpolar stars used in determining the amount of atmospheric absorption. These stars have the letter s placed opposite to them in the last column of the catalogue, and were all observed more than three times by the method of estimation. The additional observations will be found in Table XXIX., page 282. The letter F here denotes that the star was invisible, or, if seen, was fainter than λ *Ursæ Minoris*, No. 3426 of the catalogue.

Estimates of Magnitude. — Under this heading the results obtained for the magnitude of stars by fourteen different series of observations are compared with the corresponding photometric magnitudes, as given in the fourth column of the same page. The authorities employed, and the comparative results of their observations, will be further considered in Part II. of this volume. The results are here reduced to a uniform scale of magnitude; the mode of obtaining this scale will be shown in Part II., but the adopted system of reduction is given above, page 92. These residuals are expressed in the same form as that already described under the heading "Meas.," and the abbreviations employed are substantially the same as in that column. Dots are used to indicate the absence of any observation of a given star; but if, in any series of observations here considered, the star would presumably have been observed if it had been readily visible, the dot is replaced by the letter F. The subordinate headings, and their meanings, are as follows: P signifies Ptolemy; S, Sûfi; H, William Herschel; h, J. F. W. Herschel; Σ, Struve; U, the Uranometria Nova of Argelander; *H*, the Atlas Cœlestis Novus of Heis; D, the Durchmusterung; B, the Atlas des südlichen gestirnten Himmels of Behrmann; G, the Uranometria Argentina of Gould; *h*, the Uranométrie

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Générale of Houzeau; R, a series of observations with the meridian circle of this Observatory, made in 1878 by Prof. W. A. Rogers, which will be further described in Part II. of this volume; F, the work of Flammarion entitled "Les Étoiles"; and E, the mean result of the direct estimates made at this Observatory. Of these authorities, the Uranometria Nova, the Atlas of Heis, and the Uranométrie of Houzeau severally include the entire region comprised in the present catalogue, so that, under the three headings U, *H*, and *h*, the letter F is always used instead of a dot when a star is wanting.

Phot. — The three series of photometric observations by Seidel, Resultate photometrischer Messungen, etc., München, 1862, Wolff, Photometrische Beobachtungen an Fixsternen, Leipzig, 1877, and Peirce, Vol. IX. of these Annals, are here compared with the photometric magnitudes in the fourth column. The form in which the residuals are given is the same as that of the previous columns, and the adopted system of reduction will be explained in Part II.

Col. Fr. — In this column are given the abbreviations already explained, page 93, by which the observations of Mr. Franks on the color of the stars are represented.

Remarks. — The remarks following the catalogue are arranged in the order of the stars, and often relate to a variety of subjects. As the reader may desire to refer only to such notes as are connected with some special topic, the letters in the final column of the catalogue are employed to indicate the nature of the corresponding notes, as explained below. Some classes of remarks are separated from the rest, and will appear in Part II. of this work, as described in the following paragraphs.

The letter n refers to a remark upon nomenclature, including constellation, letter, number, or identification. Discrepancies in the places of the same star in different catalogues may be considered under this head, but, in general, the letter c will then be used, as explained below.

The letter d calls attention to the fact that a star is double, or that an adjoining star is sufficiently near and bright to affect observations made with the naked eye. When both stars are given in the catalogue, on successive lines, a verbal remark may not always be required.

The letter v relates to variability, known or suspected. The remarks following the catalogue contain some data concerning the known variable stars. But the greater part of the notes upon the subject of variability will be found in a special discussion to appear in Part II. of this work.

The letter t refers to a note on some peculiarity of color or spectrum.

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The letter s denotes that the corresponding star is one of the hundred circumpolars used in determining the amount of atmospheric absorption, and forming the larger part of the list of standard stars employed in the direct estimates. It has already been stated that more than three estimates were made of each of these stars, and that the results of the additional estimates are to be found in Table XXIX., page 282.

The letter p refers to a note upon some circumstance attending the photometric observations.

The letter e refers to a note upon some circumstance attending the direct estimates described in Chapter IV.

The letter a relates to the ancient observations, by Ptolemy, Sûfi, and Ulugh Beg, a discussion of which will be found in Part II. Chapter VII.

The letter h refers to a note upon the observations of either of the Herschels, an account of which will be found in Part II. Chapter VIII.

The letter g relates to the Uranometria Argentina of Gould. The corresponding note, in this case also, will generally appear in Part II., when it relates to a suspicion that the star is variable. Remarks taken from the Uranometria Argentina, which consist merely of an indication that the star is double or colored, are given in the remarks following the catalogue, but reference to them is made by the appropriate letter d or t, as already explained.

The letter c refers to some remark relating to a catalogue or series of observations distinct from those designated by a, h, or g.

The letter m indicates some remark not readily classified under any of the headings already named; as, for example, an explanation of the insertion of a star not apparently belonging to the catalogue according to the general rule with regard to its construction.

A single remark often has a bearing upon more than one of the subjects above mentioned. In that case, reference is made to it by more than one letter.

The abridgments explained above are illustrated by the examples on page 324.

Additional remarks, and the corrections of any important errors which may be detected in the work, will be placed at the end of Part II.

Table XXVII., the form of which has just been described, is immediately followed by Tables XXVIII. and XXIX., containing the additional observations mentioned in the preceding pages. When more than seven photometric observations of any star were made, the residuals obtained from the eighth and subsequent observations appear in Table XXVIII., the successive columns of which give the number of the star in Table XXVII., the numbers of the series, including the additional

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observations, the photometric magnitude, and the residuals. These columns therefore contain data corresponding to those of the first, second, fourth, and fifth columns of the right-hand pages of the catalogue. The additional observations of a single star occasionally fill more than one line in Table XXVIII. When any of the observations of a star were made at its lower culmination, they are separated from the others, and are indicated by the use of Italic figures in the first column for the number of the star. The photometric magnitude, also printed in Italics, may be derived from the observations at lower culmination by applying to them the same process of reduction employed in reducing the observations made at upper culmination. It is still more readily obtained by adding to the photometric magnitude, taken from the left-hand page of the catalogue, the correction in the last column of Table VII., page 47, and reducing the result from hundredths to tenths of a magnitude.

Table XXIX. gives, in a similar form, the series numbers and residuals corresponding to all additional estimates after the three for which there is space in the catalogue. The four columns accordingly correspond to the first, third, fourth, and sixth columns of the right-hand pages of Table XXVII.

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TABLE XXVII.

GENERAL CATALOGUE

OF THE MAGNITUDES OF 4260 STARS, WITH THEIR APPROXIMATE PLACES FOR 1880.

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0^h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1	Cassiopeia .	10	8373	+63° 2107	0.2	+63 31	6	6·5	5.4	—	3	5.52	.05	5.6	.05
2	Cetus . .	—	—	—	1.6	−23 11	F	F	—	5.9	7	7.29	.05	—	—
3	Cetus . .	4	1	—	1.6	− 3 13	6	6	—	6.5	6	6.36	.03	—	—
4	Cetus . .	5	3	—	2.0	− 3 7			—	6.4	6	6.31	.07	—	—
5	Andromeda	α 21	4	+28° 4	2.2	+28 26	2	2	2.0	—	16	2.08	.04	2.2	.06
6	Cetus . .	—	—	—	2.4	−18 15	F	6	—	6.2	3	6.38	.19	—	—
7	Cetus . .	—	5	—	2.5	− 2 53	6	6·5	—	F	8	7.42	.09	—	—
8	Pegasus .	—	—	+24° 3	2.7	+24 47	6	6	6.3	—	3	6.23	.03	6.0	.19
9	Cassiopeia .	β 11	7	+58° 3	2.8	+58 29	2·3	2	2.2	—	17	2.42	.03	2.4	.04
10	Pegasus .	87	8	+17° 7	2.9	+17 34	6	6·5	5.7	5.8	3	5.71	.03	5.8	.11
11	Piscis austr.	—	10	—	3.2	−28 39	F	F	—	5.5	3	5.25	.08	—	—
12	Pisces . .	34	14	+10° 8	3.9	+10 29	6	6	5.8	5.5	4	5.43	.04	5.4	.09
13	Andromeda	22	16	+45° 17	4.1	+45 24	5·6	5·6	5.2	—	6	4.92	.06	5.2	.11
14	Cassiopeia .	—	—	+56° 11	4.2	+56 29	6	6·7	6.7	—	3	6.69	.11	6.4	.08
15	Cetus . .	—	17	—	4.2	− 5 55	6	6·5	—	6.1	7	5.92	.07	—	—
16	Cetus . .	—	—	—	4.5	−13 15	6	6	—	5.9	3	5.88	.12	—	—
17	Cetus . .	6	21	—	5.2	−16 8	5·4	5·4	—	5.1	3	4.94	.16	—	—
18	Piscis austr.	—	23	—	5.5	−28 28	5	5	—	5.4	6	5.53	.04	—	—
19	Andromeda	—	—	+47° 21	5.7	+47 29	F	6	5.5	—	3	6.30	.09	5.8	.08
20	Pegasus .	—	—	+22° 14	5.8	+22 49	F	F	6.0	—	3	6.65	.08	—	—
21	Cetus . .	—	—	—	6.1	−18 37	6	6	—	5.4	3	5.23	.07	—	—
22	Andromeda	—	—	+36° 12	6.6	+37 2	F	6	6.8	—	3	6.64	.05	6.3	.08
23	Pegasus .	γ 88	26	+14° 14	7.1	+14 31	3·2	3·2	2.5	—	13	3.04	.03	3.0	.11
24	Andromeda	—	—	+26° 13	7.2	+26 18	6	6·7	6.5	—	3	6.29	.09	5.9	.19
25	Andromeda	23	28	+40° 29	7.3	+40 22	6	6	5.7	—	3	5.84	.07	5.8	.13
26	Cetus . .	—	—	—	7.6	−26 41	F	F	—	6.0	3	6.02	.12	—	—
27	Andromeda	—	—	+32° 21	7.8	+32 32	6	6	6.5	—	3	6.04	.11	5.8	.11
28	Pegasus .	χ 89	32	+19° 27	8.4	+19 33	5	5	5.0	5.2	3	4.92	.05	4.9	.08
29	Cetus . .	—	—	—	8.5	− 8 27	6	6	—	5.4	3	5.45	.03	—	—
30	Cetus . .	7	33	—	8.5	−19 36	5·4	5·4	—	4.3	6	4.62	.05	—	—
31	Pegasus .	—	—	+21° 13	8.7	+21 37	F	6·7	6.0	—	3	6.02	.11	6.1	.16
32	Pisces . .	35	36	+ 8° 19	8.8	+ 8 9	6	6	6.0	5.8	3	6.09	.11	5.9	.12
33	Cetus . .	—	35	—	8.8	−10 14	F	6	—	5.9	3	5.44	.13	—	—
34	Andromeda	—	—	+26° 23	9.0	+26 36	6	6·7	6.5	—	3	5.89	.05	5.9	.20
35	Cepheus .	—	39	+76° 5	9.4	+76 17	F	6·7	6.5	—	6	6.19	.04	—	—
36	Andromeda	—	—	+42° 41	10.1	+42 56	F	6	6.0	—	3	5.97	.04	6.0	.19
37	Pisces . .	36	44	+ 7° 27	10.4	+ 7 34	6	6	6.2	6.3	3	6.09	.03	6.0	.15
38	Cassiopeia .	—	46	+60° 21	10.5	+60 52	F	6	6.0	—	3	5.79	.15	5.8	.04
39	Andromeda	—	51	+47° 50	10.8	+47 16	F	F	6.0	—	3	5.77	.04	—	—
40	Andromeda	θ 24	52	+37° 34	10.8	+38 1	5·4	5·6	4.5	—	3	4.30	.17	4.7	.03
41	Cetus . .	—	—	—	11.8	−14 8	6	6	—	6.7	3	6.60	.07	—	—
42	Andromeda	σ 25	58	+35° 44	12.0	+36 7	4·5	4·5	4.5	—	6	4.65	.03	4.7	.08
43	Andromeda	26	60	+42° 48	12.4	+43 8	F	6·7	5.9	—	3	5.90	.05	6.1	.15
44	Andromeda	—	—	+30° 35	12.5	+30 52	6	6	6.0	—	7	5.76	.08	5.6	.04
45	Cetus . .	ι 8	62	—	13.3	− 9 29	3·4	3·4	—	3.5	6	3.62	.04	—	—
46	Andromeda	—	—	+30° 42	14.2	+30 16	6	6	6.4	—	3	5.63	.05	5.4	.03
47	Pisces . .	d 41	66	+ 7° 36	14.4	+ 7 32	6·5	6	6.2	5.3	7	5.64	.07	5.7	.15
48	Andromeda	—	—	+32° 45	14.5	+32 15	6	6	6.0	—	3	6.00	.05	5.6	.04
49	Andromeda	ρ 27	67	+37° 45	14.9	+37 18	6	6·5	5.7	—	3	5.27	.08	5.0	.08
50	Piscis austr.	—	72	—	15.5	−29 39	F	F	—	5.3	4	5.48	.17	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* K F E	s w p		
1	10,289,310	*122,427,631*	5.5	*111*	202	. . 7 . . 3 1 2 . . 2 . . 1	. . .	w	
2	15,321,327,333,571,573,574		7.3	b033002	—	. . . . . F F . bbb . . .	. . .	.	v
3	281,321,327,567,569,571		6.4	*110*200	—	. . 2 . . 22 . . 1 1 . . .	. . .	.	dv
4	281,321,327,595,597,598		6.3	221222	—	. . 2 . . . . 1 . . .	. . .	.	dv
5	10, 13, 15, 17, 20,278,281	112,113,118	2.1	2026211-	128-	5 4 1 2 0 1 1 0 . . 1 . 2 1	2 1 .	W	ndea
6	289,298,317		6.4	252	—	. . . . . F 6 . . 4 F . . .	. . .	.	t
7	281,302,317,333,335,350,569		7.4	1b25317-	—	. . . . . bb . . F F . . .	. . .	.	v
8	285,295,321	113,*416,627*	6.2	001	272	. . . . . 4 4 1 . . 1 . . 2	. . .	.	
9	13, 15, 17,278,283,290,295	112,112,113	2.4	3420212-	120	9 8 0 0 . 1 2 1 . . 6 . 3 0	0 1 .	y	s
10	285,289,321	*118*,411,627	5.7	001	222	. . 0 . . 1 1 1 . 1 0 . . 1	. . .	y	
11	285,298,317		5.2	022	—	. . . . . F F . 5 0 5 . 0 .	. . .	.	
12	15,289,317,327	118,411,626	5.4	F110	212	. . 2 . 6 4 4 2 . 2 5 . . 0	. . .	w	d
13	17,298,317,563,569,571	122,427,631	4.9	302013	305	. . 3 . . 3 3 3 . . 8 . . 3	. . 3	y	
14	290,317,327	*122,427,631*	6.7	302	24F	. . . . . 9 6 2 . . F . . 3	. . .	.	e
15	289,308,321,327,569,571,573		5.9	0b32330	—	. . . . . 1 3 . . 0 2 . . .	. . .	y	
16	15,308,321		5.9	132	—	. . . . . 1 1 . . 2 2 . . .	. . .	.	
17	13,295,321		4.9	242	—	bb1 . . 3 3 . . 0 0 . 0 .	. . .	o	
18	285,290,298,595,597,598		5.5	210201	—	. . . . . 5 5 . b4 6 . 5 .	. . .	.	nvtg
19	20,285,327	*122,427,631*	6.3	212	663	. . . . . F 5 9 . . 6 . . 5	. . .	.	
20	17,298,327		6.6	121	—	. . . . . F F 8 . . F 5 . .	. . .	.	
21	10,287,298		5.2	021	—	. . . . . 6 6 . . 1 5 . 1 .	. . .	.	t
22	285,290,321	*116,416*,626	6.6	111	2F4	. . . . . F 8 0 . . F . . 3	. . .	.	e
23	20,287,289,298,300,305,308	118,411,627	3.0	2203020-	311	4 5 1 1 . 3 2 3 . . 5 . 5 0	2 2 .	W	vg
24	285,290,321	113,*416,627*	6.3	212	571	. . . . . 5 2 0 . . 6 . . 4	. . .	.	
25	17,298,311	*114*,428,*626*	5.8	210	331	. . 2 . . 0 0 2 . . 1 . . 0	. . 2	y	
26	285,295,321		6.0	330	—	. . . . . F F . F 2 1 . . .	. . .	.	dc
27	10,308,321	116,416,*627*	6.0	302	250	. . . . . 2 2 3 . . 3 . . 2	. . .	.	
28	13,308,321	118,417,626	4.9	111	032	. . 0 . . 1 1 1 . 0 4 . 4 0	. . .	Y	
29	285,295,321		5.4	010	—	. . . . . 4 4 . . 3 3 . 3 .	. . .	.	t
30	20,287,321,569,571,573		4.6	130202	—	8 8 0 . . 0 0 . . 3 3 . 4 .	. . .	y	t
31	285,308,321	*118,416,627*	6.0	131	432	. . . . . F 1 2 . . F 7 . 1	. . .	.	
32	13,295,310	*118*,411,*626*	6.1	113	143	. . 4 . 1 3 3 3 . 5 0 . 5 2	. . .	y	d
33	17,300,327		5.4	331	—	. . . . . F 4 . . 3 3 . . .	. . .	w	
34	10,285,321	*113,416,627*	5.9	111	145	. . . . . 1 2 4 . . 2 . . 0	. . .	.	
35	569,571,573,574,576,577		6.2	212010	—	. . . . . F 1 1 . . F . . .	. . .	.	
36	20,300,324	*114,428*,626	6.0	110	153	. . . . . F 2 2 . . 3 . . 0	. . .	.	
37	10,295,310	*118*,411,*626*	6.1	100	341	. . 2 . . 3 3 1 . 0 0 . . 1	. . .	Y	
38	17,308,327	*122,427*,631	5.8	340	011	. . . . . F 0 0 . . F . . 0	. . .	y	
39	287,308,327		5.8	011	—	. . . . . F F 0 . . F . . .	. . 2	y	
40	13,302,311	114,428,626	4.3	342	454	1 2 5 . . 3 9 2 . . 0 . 8 4	. . .	y	
41	20,308,321		6.6	021	—	. . . . . 8 8 . . 1 5 . . .	. . .	.	
42	278,308,310,569,571,573	114,417,626	4.6	210110	131	2 1 5 . . 2 2 1 . . 3 . 0 1	. . .	W	
43	13,300,324	*114,428,626*	5.9	111	225	. . 1 . . F 2 2 . . 2 . . 2	. . .	.	
44	17,300,311,317,569,571,573	116,*416*,627	5.8	7211203	231	. . . . . 0 0 0 . . 3 . . 2	. . .	.	
45	10,302,311,569,571,573		3.6	023001	—	2 0 1 . . 2 1 . . 0 1 . 0 .	. . .	y	t
46	13,300,311	116,*416*,627	5.6	111	212	. . . . . 2 2 6 . . 5 . . 2	. . .	.	p
47	17,295,310,311,555,571,573	*118*,411,*626*	5.6	8411104	431	2 3 3 . . 2 2 4 . 6 3 . 6 1	. . .	Y	
48	20,295,310	116,416,627	6.0	111	453	. . . . . 2 2 2 . . 3 1 . 4	. . .	.	
49	278,295,310	114,428,626	5.3	211	441	3 3 6 . . 5 3 3 . . 0 . 3 3	. . .	y	
50	10, 21,300,311		5.5	F423	—	. . . . . F F . 5 5 2 . . .	. . .	.	n

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
51	Cassiopeia .	T	—	+54° 48	16.7	+55 8	F	F	8.5	—	11	var.	—	—	—
52	Cetus . .	9	75	—	16.7	−12 53	6	6	—	6.4	6	6.55	.06	—	—
53	Andromeda	—	78	+43° 72	17.7	+43 36	F	6·7	6.5	—	4	6.64	.03	6.4	.03
54	Andromeda	R	—	+37° 58	17.7	+37 55	F	var.	var.	—	9	var.	—	6.5	.00
55	Cassiopeia .	—	79	+51° 62	17.8	+51 21	F	6	6.0	—	3	5.40	.09	5.5	.09
56	Cassiopeia .	12	80	+61° 69	18.2	+61 10	6	6·5	6.1	—	3	5.39	.03	5.5	.13
57	Cassiopeia .	—	83	+52° 61	18.6	+52 23	F	6	6.0	—	3	5.80	.05	5.7	.07
58	Pisces . .	44	87	+ 1° 57	19.2	+ 1 17	F	6	6.2	5.9	6	5.84	.04	5.8	.08
59	Andromeda	—	100	+43° 92	21.8	+43 44	6	6·5	5.5	—	3	5.24	.03	5.0	.07
60	Pisces . .	47	101	+17° 55	21.8	+17 13	6·5	6·5	5.4	5.4	3	5.37	.09	5.5	.13
61	Pisces . .	48	102	+15° 63	22.0	+15 46	6	6	6.0	—	3	6.67	.17	6.1	.17
62	Piscis austr.	—	103	—	22.0	−33 40	5	5	—	5.2	7	4.78	.11	—	—
63	Cetus . .	—	—	—	22.4	−21 0	F	F	—	6.4	6	6.36	.03	—	—
64	Cassiopeia .	—	—	+59° 68	23.7	+59 18	F	6	6.0	—	3	5.96	.08	5.8	.03
65	Andromeda	28	109	+28° 75	23.8	+29 5	6·5	6·5	5.9	—	3	5.33	.09	5.2	.05
66	Cetus . .	—	111	—	23.8	−15 32	F	6	—	6.2	3	6.08	.05	—	—
67	Cetus . .	12	112	—	23.9	− 4 37	F	6	—	6.0	6	6.17	.07	—	—
68	Cetus . .	—	115	—	24.4	−24 27	5·6	5·6	—	5.2	6	5.23	.03	—	—
69	Cassiopeia .	λ 14	121	+53° 82	25.1	+53 50	5	5	5.2	—	3	4.83	.09	5.1	.07
70	Andromeda	—	120	+32° 80	25.1	+32 56	F	6	6.0	—	3	6.20	.11	5.7	.19
71	Cassiopeia .	κ 15	126	+62° 102	26.2	+62 16	4·5	4·5	4.5	—	19	4.18	.03	4.4	.07
72	Pisces . .	51	129	+ 6° 64	26.2	+ 6 18	6	6	6.2	5.8	3	5.68	.09	5.5	.00
73	Pisces . .	52	130	+19° 79	26.3	+19 38	6	6·5	5.5	—	3	5.52	.03	5.5	.08
74	Pisces . .	—	142	+12° 57	28.7	+12 43	F	F	6.0	—	3	6.40	.03	—	—
75	Cetus . .	13	145	—	29.1	− 4 15	6·5	6	—	5.7	6	5.28	.08	—	—
76	Cetus . .	14	147	− 1° 68	29.4	− 1 10	F	6·7	5.8	6.0	3	5.97	.04	—	—
77	Cassiopeia .	—	146	+53° 102	29.5	+53 30	6	6	5.8	—	3	5.00	.05	5.5	.11
78	Cassiopeia .	—	148	+59° 84	29.7	+59 39	6	6	6.0	—	3	5.59	.07	5.8	.03
79	Andromeda	—	—	+26° 91	30.0	+26 35	6	6·7	6.5	—	3	6.13	.15	6.4	.04
80	Cetus . .	—	—	—	30.1	−23 30	F	F	—	6.1	3	6.08	.11	—	—
81	Andromeda	—	152	+43° 113	30.2	+43 50	6	6	5.4	—	3	5.40	.03	5.1	.03
82	Cassiopeia .	ζ 17	153	+53° 105	30.3	+53 14	4	4	4.1	—	6	3.74	.05	4.2	.08
83	Andromeda	π 29	155	+32° 101	30.5	+33 4	4	4	4.1	—	6	4.39	.04	4.6	.16
84	Pisces . .	53	156	+14° 76	30.6	+14 34	6	6	6.1	5.8	3	5.77	.07	5.6	.08
85	Cepheus .	—	154	+81° 13	30.8	+81 50	6	6·7	6.5	—	3	6.33	.15	6.3	.03
86	Andromeda	—	—	+23° 84	30.8	+23 21	F	6·7	6.0	—	7	6.47	.08	6.2	.21
87	Andromeda	—	158	+34° 86	31.0	+34 44	6	6	5.8	—	3	5.64	.09	5.4	.12
88	Cetus . .	—	160	—	31.2	−25 26	6	6	—	5.8	7	5.62	.08	—	—
89	Cetus . .	15	163	− 1° 75	31.9	− 1 10	F	F	6.8	6.8	7	6.87	.08	—	—
90	Andromeda	ε 30	164	+28° 103	32.2	+28 40	4	4·5	4.5	—	6	4.58	.06	4.6	.16
91	Cassiopeia .	—	165	+48° 192	32.5	+48 42	F	6	6.0	—	7	5.62	.07	5.6	.23
92	Andromeda	δ 31	166	+30° 91	32.9	+30 12	3·4	3·4	3.3	—	6	3.41	.04	3.4	.12
93	Pisces . .	55	170	+20° 87	33.6	+20 48	6·5	6·5	5.5	—	3	5.52	.03	5.2	.03
94	Cassiopeia .	α 18	169	+55° 139	33.7	+55 53	var.	var.	var.	—	10	2.25	.03	2.3	.09
95	Cetus . .	—	—	—	34.5	−24 27	F	F	—	6.3	3	6.15	.07	—	—
96	Andromeda	32	173	+38° 90	34.6	+38 48	5	5·6	5.5	—	3	5.57	.12	5.2	.11
97	Cetus . .	—	174	—	34.6	− 5 1	6	6	—	6.0	3	6.32	.19	—	—
98	Cassiopeia .	—	175	+65° 83	34.9	+65 28	F	6·7	6.0	—	3	5.88	.07	6.0	.11
99	Andromeda	—	178	+23° 94	35.3	+23 59	F	6·7	6.0	—	3	5.96	.08	6.0	.15
100	Cassiopeia .	ξ 19	180	+49° 164	35.5	+49 51	6	5·4	5.1	—	3	4.80	.15	4.8	.03

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
51	13, 21,278,283,289,295,300		var.	FFFRFRR-	—	. . . . . FFR. . F. . .	. . .	.	vtpm
52	278,300,317,555,565,567		6.6	0*11*304	—	. . R . . *88*. . *49*. . .	. . .	*y*	h
53	278,594,595,597	*114,438,626*	6.6	b11*1*	*122*	. . . . . F*53*. . F. . *2*	. . .	*y*	
54	17,285,289,295,300,302,308	*114*,428,631	var.	RRFRFFR-	RFR	. . . . . FVV. . F. . R	. . .	.	vtpe
55	10,287,317	*122,427*,631	5.4	122	3*12*	. . . . . F44. . 3. . 1	. . .	W	
56	13,308,318	*122*,427,631	5.4	010	323	. . *1* . . 425. . 3. . 1	. . .	w	
57	287,317,318	*122,427*,631	5.8	*1*11	0*31*	. . . . . F00. . 3. . *1*	. . .	*y*	
58	287,300,311,555,563,565	*118*,416,626	5.8	*102*112	121	. . R . . F02. *11*. . 0	. . .	*y*	h
59	10,317,327	114,428,628	5.2	0*10*	0*32*	. . . . . 642. . 1. . *2*	. . 3	O	
60	13,300,324	119,411,627	5.4	2*21*	422	. . 4. . 02*1*. *31*. . 1	. . .	*o*	t
61	21,300,324	*119*,411,627	6.7	4*41*	4b*3*	. . *9*. . *999*. . *6*. . *6*	. . .	*o*	
62	278,327,335,343,563,569,571		4.8	632*0423*	—	. . . . . 22. 215. 2.	. . .	.	n
63	571,573,574,576,577,578		6.4	000*22*0	—	. . . . . FF. F27. . .	. . .	.	
64	10,278,310	*122,427*,631	6.0	1*21*	*232*	. . . . . F*22*. . 1*2*. *2*	. . .	.	
65	21,300,311	119,418,627	5.3	*221*	0*22*	. . 0. . 134. . 4. . *1*	. . .	*y*	
66	13,317,327		6.1	11*1*	—	. . . . . F*3*. . *14*. . .	. . .	w	
67	287,317.324,555,567,571		6.2	*213221*	—	. . *3*. . F*4*. . *45*. *6*.	. . .	Y	
68	287,317,327,555,571,573		5.2	*103*001	—	. . . . . 00. *233*. *2*.	. . .	*y*	
69	287,310,327	122,427,631	4.8	*122*	431	. . 1. . 224. . 9. 13	.2.	*r*	
70	287,289,324	*119,418*,627	6.2	30*2*	0*86*	. . . . . F*44* . F. . *5*	. . .	Y	
71	10, 13, 18, 21,287,289,300	112,113,120	4.2	0301*11*-	453	430. . 223. . 2. 22	.1.	W	se
72	287,300,324	*118*,411,626	5.7	*122*	*222*	*346*. *5*113. *10*. *12*	. . .	W	d
73	21,300,311	119,411,627	5.5	00*1*	202	. . 0. . 31*1*. . 2. . 0	. . .	Y	
74	10,300,324		6.4	00*1*	—	. . . . . FF6. . 7. . .	. . .	*y*	
75	13,300,324,555,563,567		5.3	322*132*	—	. . 5. . 15. . 10. 3.	. . .	*y*	
76	10,300,324		6.0	*1*01	—	. . . . . F1*4*. *23*. . .	. . .	*y*	
77	278,302,311	*122*,427,631	5.0	11*1*	752	. . . . . 886. . R. . 5	. . .	*y*	dc
78	287,305,324	*122*,427,631	5.6	*1*20	212	. . . . . 222. . 1. . 2	. . .	*r*	
79	18,300,324	*119,418,627*	6.1	*4*12	432	. . . . . *3*02. . 0. . 3	. . .	.	
80	289,302,335		6.1	*3*11	—	. . . . . FF. *124*. . .	. . .	.	
81	21,311,337	114,428,628	5.4	010	*233*	. . . . . 44*1*. . *1*. . *3*	. . *2*	*y*	t
82	18,278,321,563,565,568	127,424,631	3.7	03*1112*	537	112. . 445. . 7. 35	111	W	dc
83	278,300,310,555,563,565	119,417,627	4.4	*202*102	35*2*	022. . *332*. . *4*. *22*	.1.	w	
84	13,310,340	119,411,627	5.8	*1*20	0*42*	. . R . . 001. *21*. . *2*	. . .	w	h
85	289,318,340	*117,427,631*	6.3	*412*	*1*00	. . . . . *52*0. . *6*. . 0	. . .	*y*	
86	21,330,340,345,555,563,567	119,*418,627*	6.5	7*230*302	0F*5*	. . . . . F*47*. . *46*. *3*	. . .	.	
87	10,300,324	119,418,627	5.6	*122*	1*43*	. . . . . 220. . *3*. . *2*	. . .	*y*	
88	18,302,337,343,565,569,571		5.6	*3522122*	—	. . . . . 22. *107*. . .	. . .	.	
89	555,565,568,569,571,573,574		6.9	*3172130*	—	. . *6*. . FF*3*. *3*F. . .	. . .	.	
90	278,318,337,569,571,573	119,417,627	4.6	11*1033*	134	*243*. . *521*. . *6*. *40*	.*2*.	*y*	
91	10,302,318,324,569,573,574	*114*,428,628	5.6	*1*b03*511*	6*32*	. . . . . F22. . F. . 0	. . 0	O	
92	18,291,318,569,571,573	119,417,627	3.4	20*2102*	2*31*	*121*. . 011. . *4*. 00	3*1*.	Y	t
93	278,300,327	119,411,627	5.5	*1*00	*233*-	. . . . *4111*. . 2. *13*	. . .	*o*	de
94	13,291,295,300,302,317,340	122,427,631	2.2	0100*132*-	3*12*	**1002**. VVV. . 8. 31	32.	Y	dvte
95	10,317,337		6.2	01*2*	—	. . . . . FF. *211*. . .	. . .	.	
96	18,295,321	114,428,628	5.6	*132*	*461*	. . *4*. . *642*. . 1. . *4*	. . .	Y	
97	278,302,340		6.3	40*5*	—	. . . . . *55*. . *5*F. . .	. . .	y	
98	291,300,337	*126,424,631*	5.9	20*1*	321	. . . . . F2*1*. . 2. . 1	. . .	Y	
99	13,295,318	119,*418*,627	6.0	02*2*	4*12*-	. . . . . F1*2*. . 1. . 0	. . .	*y*	
100	10,318,324	*114*,428,628	4.8	*241*	100	. . *2*. . **0**23. . 5. 50	. . 2	*y*	

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No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
101	Andromeda	33	—	+40° 148	36.2	+40 37	neb.	neb.	neb.	—	4	neb.	—	5.3	.32
102	Cassiopeia .	π 20	189	+46° 146	36.8	+46 22	6	5	4.5	—	3	4.97	.04	4.9	.03
103	Cetus . .	β 16	196	—	37.6	−18 39	2	2	—	2.3	21	2.13	.04	2.4	.08
104	Cassiopeia .	21	194	+74° 27	37.7	+74 20	6	6	5.5	—	18	5.60	.03	5.4	.05
105	Cassiopeia .	—	197	+47° 181	37.8	+47 12	6	6	5.8	—	3	5.50	.03	5.4	.07
106	Cetus . .	—	—	—	37.8	−12 40	6	6	—	6.2	3	6.45	.09	—	—
107	Cassiopeia .	o 22	198	+47° 183	38.0	+47 38	5	5	4.8	—	6	4.64	.05	4.7	.08
108	Andromeda	—	—	+39° 167	38.0	+40 1	F	F	7.1	—	7	7.37	.03	—	—
109	Cetus . .	φ¹ 17	200	—	38.1	−11 16	6·5	6·5	—	5.1	3	4.93	.15	—	—
110	Cassiopeia .	—	201	+54° 143	38.4	+54 34	6	6	5.8	—	3	5.36	.12	5.7	.04
111	Cetus . .	—	203	—	38.8	−22 40	6·5	6·5	—	5.3	3	5.23	.00	—	—
112	Cetus . .	18	208	—	39.4	−13 32	6	6	—	6.6	3	6.20	.11	—	—
113	Andromeda	—	—	+44° 160	39.6	+44 11	6	6·7	6.3	—	3	5.87	.12	5.8	.23
114	Cassiopeia .	23	206	+74° 29	39.8	+74 12	6	6·5	5.8	—	3	5.30	.09	5.4	.09
115	Cetus . .	—	—	—	40.2	−23 11	6	6	—	5.8	3	5.55	.11	—	—
116	Pisces . .	57	211	+14° 111	40.3	+14 49	6·5	6·5	5.0	—	3	5.71	.03	5.5	.08
117	Pisces . .	58	213	+11° 96	40.7	+11 20	5	5	5.2	—	3	5.70	.13	5.5	.07
118	Pisces . .	59	214	+18° 101	40.9	+18 55	6	6	6.3	—	3	6.05	.08	5.9	.13
119	Andromeda	ζ 34	215	+23° 106	41.0	+23 37	4	4·5	3.9	—	6	4.38	.04	4.6	.04
120	Cassiopeia .	η 24	218	+57° 150	41.8	+57 11	4·3	4	3.8	—	7	3.64	.02	3.8	.11
121	Cassiopeia .	ν 25	219	+50° 147	42.0	+50 19	5	5	5.2	—	3	5.00	.05	4.7	.07
122	Pisces . .	62	220	+ 6° 105	42.1	+ 6 39	F	F	7.0	6.0	3	6.01	.04	—	—
123	Pisces . .	—	221	+ 4° 123	42.1	+ 4 40	6	6	6.0	5.9	6	5.68	.04	5.6	.07
124	Cetus . .	—	—	—	42.1	−22 23	6·5	6·5	—	5.8	3	5.50	.03	—	—
125	Pisces . .	δ 63	222	+ 6° 107	42.5	+ 6 56	4·5	4·5	4.5	4.4	6	4.58	.06	4.7	.09
126	Pisces . .	64	223	+16° 76	42.7	+16 18	6·5	6·5	5.7	—	3	5.34	.16	5.1	.04
127	Andromeda	ν 35	227	+40° 171	43.2	+40 26	4·5	4·5	4.7	—	6	4.42	.06	4.5	.08
128	Cetus . .	—	—	—	43.3	−24 47	F	F	—	6.1	3	6.11	.07	—	—
129	Cetus . .	—	230	—	43.4	−14 13	6	6	—	5.9	4	5.80	.05	—	—
130	Cassiopeia .	—	228	+63° 99	43.5	+63 36	6	6	5.8	—	6	5.40	.06	5.3	.11
131	Pisces . .	i 65	229	+26° 131	43.5	+27 4	6	6·5	5.3	—	3	5.63	.05	5.4	.05
132	Pisces . .				43.5	+27 4									
133	Andromeda	—	—	+44° 176	43.6	+44 20	6	6·7	6.8	—	3	5.87	.12	5.9	.20
134	Cepheus .	—	225	+82° 20	43.7	+83 3	6	6	6.5	—	8	5.47	.04	5.4	.08
135	Cetus . .	φ² 19	233	—	44.1	−11 17	6·5	5·6	—	5.5	6	5.27	.01	—	—
136	Cassiopeia .	—	239	+60° 124	45.9	+60 27	6	5·6	5.0	—	7	4.89	.04	5.1	.13
137	Cetus . .	—	—	—	46.8	−24 40	F	F	—	5.7	3	5.65	.07	—	—
138	Cetus . .	20	242	− 1° 114	46.9	− 1 48	5·6	5	5.2	5.2	3	5.04	.15	—	—
139	Cassiopeia .	ν¹ 26	244	+58° 134	47.9	+58 19	6·5	6·5	5.0	—	3	5.06	.00	5.1	.07
140	Pisces . .	66	247	+18° 122	48.2	+18 32	6	6	6.0	—	3	5.82	.05	5.7	.13
141	Andromeda	36	—	+22° 146	48.5	+22 59	F	F	6.0	—	6	5.43	.07	—	—
142	Cassiopeia .	γ 27	253	+59° 144	49.5	+60 4	2	2	2.3	—	20	2.30	.03	2.2	.03
143	Cassiopeia .	ν² 28	254	+58° 138	49.5	+58 31	6·5	6·5	5.0	—	3	4.89	.05	5.1	.07
144	Pisces . .	k 67	256	+26° 151	49.5	+26 33	6	6	6.0	—	3	5.99	.09	5.5	.05
145	Cassiopeia .	—	255	+59° 146	49.6	+59 43	F	F	6.3	—	7	5.50	.08	—	—
146	Cetus . .	—	257	—	49.6	− 8 0	F	6	—	6.0	3	6.00	.11	—	—
147	Cetus . .	φ³ 22	260	—	50.0	−11 55	6	6·5	—	5.7	6	5.62	.05	—	—
148	Andromeda	μ 37	259	+37° 175	50.1	+37 51	4	4	4.2	—	6	3.92	.06	4.2	.09
149	Cetus . .	—	—	—	50.1	−28 26	F	F	—	6.3	3	6.03	.07	—	—
150	Andromeda	η 38	264	+22° 153	50.8	+22 47	5	4·5	4.5	—	3	4.65	.04	4.6	.09

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S Hh Σ U *H* D B G *h* R F E	s w p		
101	289,302,317,318	114,438,628	neb.	NNNN	RRR	. . N. . NNN. . F. . R	. . .	.	e
102	10,300,327	114,429,628	5.0	*101*	*101*	. . *2*. . 80*5*. . 3. 0*1*	. . 2	*y*	
103	10, 13, 18, 21, 23,278,289	118,125,126	2.1	*2311213-*	*128-*	6572. 11. . *21*. 03	2 . .	Y	te
104	10, 13, 23,278,291,302,310	112,113,115	5.6	*0320240-*	*431*	. . *4*. . 222. . R. . *2*	. . .	w	dsc
105	291,300,327	*114,429*,628	5.5	100	*301*	. . . . . 331. . F. . *1*	. . 5	*w*	
106	278,317,337		6.4	*122*	—	b. . . . *66*. . *4* F. . .	. . .	*y*	a
107	291,300,327,571,573,574	114,428,628	4.6	*101321*	*131*	. . 2. . 442. . 3. 41	. . 3	*y*	
108	291,318,340,568,569,571,573		7.4	b*110020*	—	. . . . . FF*5*. . b. . .	. . .	.	dpc
109	289,295,321		4.9	*241*	—	*2*21. . 57. . 04. 0.	. . .	*y*	ag
110	10,302,327	*122,427,628*	5.4	*330*	432	. . . . . 442. . 3. . 3	. . .	*w*	e
111	289,313,318		5.2	000	—	. . . . . 24. *223*. . .	. . .	*y*	
112	13,317,337		6.2	*032*	—	. b*2*. . *44*. . *21*. . .	. . .	*y*	a
113	10,316,318	*114,428*,628	5.9	*033*	*345*	. . . . . *122*. . *2*. . *1*	. . 5	.	
114	18, 23,337	*122,427*,631	5.3	*212*	*130*	. . 4. . 533. . 4. . 1	. . .	w	dc
115	289,313,318		5.6	*230*	—	. . . . . 22. 40 F. . .	. . .	.	t
116	21,311,327	119,411,627	5.7	*010*	*024*	. . *1*. . *317*. . 0. . *2*	. . .	Y	t
117	13,321,340	119,*418*,629	5.7	*313*	*124*	. . 0. . *775*. . 0. *62*	. . .	*y*	
118	23,311,340	119,411,*627*	6.0	*202*	*242*	. . *1*. . *221*. . 1. . *1*	. . .	*y*	
119	10,295,321,571,573,574	119,418,627	4.4	*220102*	321	011. . *304*. . *4*. *22*	. . .	Y	
120	18,291,321,327,569,573,574	122,424,631	3.6	1101001	*412*	86*1*. 8153. . 4. 52	00.	*y*	d
121	21,311,330	114,428,628	5.0	*111*	*314*	. . 2. . 002. . 3. 3*3*	. . .	*y*	
122	289,306,318		6.0	*011*	—	. . *8*. . FF8. *23*. . .	. . .	Y	
123	13,306,321,569,573,574	124,411,626	5.7	*110131*	*211*	. . . . . 111. 0 F. . *1*	. . .	*y*	t
124	10,313,318		5.5	*100*	—	. . . . . *11*. 01*2*. . .	. . .	.	
125	23,306,318,569,573,574	124,418,627	4.6	*220222*	*231*	*248*. . *221*. *23*. *21*	. . .	*o*	t
126	26,311,340	119,411,627	5.3	*422*	*213*	. . 0. . 133. . 4. . *2*	. . .	*y*	
127	13,310,337,569,573,574	114,429,628	4.4	*221022*	*311*	012. . 003. . 0. 01	.25	*y*	
128	10,295,321		6.1	*120*	—	. . . . . FF. *128*. . .	. . .	.	dc
129	18,278,317,343		5.8	F11*1*	—	*4*. . . . 00. . *11*. . .	. . .	Y	pa
130	291,310,327,569,571,573	122,*424,631*	5.4	*123102*	*222*	. . . . . 442. . 34. *1*	. . .	*y*	
131	278,310,340	124,420,627	*6.4*	*111*	*313*	*201*. $^{4}_{3}$204. . 1. 0*2*	. . .	*y*	d
132			*6.3*				. . .	*y*	d
133	21,316,318	*114,428*,628	5.9	*330*	*325*	. . . . . *127*. . *2*. . 0	. . 6	.	
134	13,295,318,333,343,571,573	117,*427*,631,	5.5	*4223111-*	*311*	. . . . . 338. . F. . *1*	. . .	.	
135	10, 23,306,571,573.574		5.3	*001010*	—	101. . *11*. . *14*. *1*.	. . .	*y*	a
136	10, 23,289,317,563,565,568	122,*427*,631	4.9	**63***11010*	*511*	. . . . . 931. . 8. . 2	.1.	Y	
137	13,306,321		5.6	*012*	—	. . . . . FF. *423*. . .	. . .	.	d
138	21,303,327		5.0	*142*	—	. . 4. . 202. *11*. 0.	. . .	Y	t
139	23,313,327	122,*424*,631	5.1	000	*120*	. . *1*. . 351. . 6. . 0	.*1*.	*o*	e
140	21,311,330	119,420,627	5.8	*111*	*144-*	. . 0. . 000. . *1*. . 0	. . .	w	
141	278,303,317,595,597,598		5.4	*151211*	—	. . *2*. . FF4. . 3. . .	. . .	.	dv
142	13, 18, 21, 23, 26,289,291	111,113,121	2.3	*11*21500-	*121*	4300. *112*. . 2. *41*	*31*.	W	ts
143	291,313,327	122,*424*,631	4.9	*111*	302	. . 1. . 571. . 4. 22	.1.	Y	te
144	289,291,327	124,420,627	6.0	*122*	*644*	*642*. . *222*. . 1. *45*	. . .	w	
145	289,303,318,327,563,565,568		5.5	0732302	—	. . . . . FF6. . F. . .	.2.	*w*	
146	291,316,327		6.0	*230*	—	. . . . . F2. . *23*. . .	. . .	Y	
147	289,306,327,565,571,573		5.6	*131111*	—	. . 1. . 20. . *23*. *2*.	. . .	*y*	t
148	291,317,333,563,565,568	114,429,628	3.9	021*312*	145	531. . 224. . *4*. 33	.1.	*y*	
149	289,316,330		6.0	*021*	—	. . . . . FF. 01*3*. . .	. . .	.	
150	278,317,333	124,420,627	4.6	*101*	*221*	*201*. . *421*. . *6*. *30*	. . .	Y	t

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
151	Cassiopeia .	—	261	+65° 115	51.0	+65 41	6	6	6.0	—	3	6.02	.09	5.5	.13
152	Pisces . .	h 68	267	+28° 157	51.3	+28 21	6	6	6.0	—	3	5.56	.08	5.4	.04
153	Pisces . .	—	269	+12° 119	51.6	+13 4	6	6	6.0	6.4	3	6.43	.04	6.0	.11
154	Andromeda	—	—	+33° 140	51.7	+33 19	6	6	6.2	—	3	6.40	.07	5.7	.07
155	Cepheus .	2	262	+85° 19	52.6	+85 37	4·5	4·5	5.0	—	6	4.46	.03	4.5	.13
156	Cetus . .	φ^4 23	271	—	52.7	−12 2	6	6	—	5.9	3	5.79	.04	—	—
157	Cetus . .	—	—	—	52.8	−20 17	F	F	—	F	6	7.23	.06	—	—
158	Cetus . .	—	272	—	52.8	−30 0	5·4	5·4	—	4.2	3	4.06	.13	—	—
159	Andromeda	—	—	+43° 193	53.4	+44 3	6	6·7	6.2	—	4	5.67	.05	5.5	.17
160	Andromeda	39	283	+40° 209	56.2	+40 41	6	6·7	6.0	—	3	5.90	.05	5.6	.05
161	Pisces . .	σ 69	285	+31° 168	56.2	+31 10	5	5·6	5.5	—	3	5.60	.07	5.1	.08
162	Pisces . .	ε 71	288	+ 7° 153	56.7	+ 7 15	4	4	4.2	4.2	6	4.46	.03	4.6	.13
163	Cassiopeia .	—	—	+60° 158	57.0	+60 57	F	6·7	6.0	—	3	5.89	.13	6.0	.09
164	Cassiopeia .	—	—	+51° 220	57.0	+51 51	F	F	6.0	—	3	6.40	.05	—	—
165	Cetus . .	25	291	—	57.0	− 5 29	6	6·5	—	5.8	3	5.85	.12	—	—
166	Cetus . .	26	295	+ 0° 174	57.7	+ 0 43	F	6·7	6.0	5.9	6	6.04	.03	5.7	.04
167	Pisces . .	73	303	+ 4° 172	58.7	+ 5 0	F	6·7	6.0	5.9	3	6.38	.05	6.0	.07
168	Pisces . .	72	305	+14° 163	58.8	+14 18	6	6	5.5	—	3	5.67	.07	5.9	.13
169	Pisces . .		307	+20° 156	59.3	+20 50			5.0	—					
170	Pisces . .	ψ^1 74	308	+20° 157	59.3	+20 49	5·4	5·4	6.0	—	4	5.03	.09	4.8	.03
171	Pisces . .	77	311	+ 4° 175	59.6	+ 4 16	6	6	6.7	5.9	7	6.13	.10	5.6	.03
172	Cetus . .	28	315	—	0.1	−10 29	6	6	—	5.7	3	5.38	.09	—	—
173	Pisces . .	78	321	+31° 185	0.3	+31 23	F	6	6.9	—	3	6.24	.09	6.1	.17
174	Pisces . .	75	316	+12° 135	0.3	+12 19	6	6	6.2	—	3	6.13	.12	5.7	.03
175	Cassiopeia .	μ 30	314	+54° 223	0.4	+54 20	6	5·6	5.7	—	6	5.21	.03	5.1	.04
176	Andromeda	41	318	+43° 234	1.1	+43 18	5	5	5.2	—	3	5.34	.03	5.0	.04
177	Cassiopeia .	—	—	+57° 200	1.2	+57 37	F	6	6.5	—	3	5.66	.08	5.8	.07
178	Pisces . .	ψ^2 79	322	+19° 185	1.5	+20 6	6·5	6·5	5.7	—	3	5.72	.15	5.6	.04
179	Cetus . .	30	323	—	1.7	−10 26	F	6	—	5.8	3	5.91	.04	—	—
180	Cepheus .	—	320	+78° 34	2.0	+79 2	6·5	6·5	5.6	—	6	5.63	.07	5.4	.05
181	Pisces . .	e 80	328	+ 4° 190	2.2	+ 5 1	6·5	6·5	6.0	5.5	3	5.68	.09	5.6	.04
182	Andromeda	φ 42	330	+46° 275	2.5	+46 36	4·5	4·5	4.4	—	3	4.30	.09	4.5	.12
183	Cetus . .	η 31	332	—	2.6	−10 49	3	3·4	—	3.5	6	3.57	.08	—	—
184	Cassiopeia .	31	327	+68° 77	2.7	+68 8	6	6	6.0	—	15	5.29	.05	5.2	.07
185	Andromeda	β 43	334	+34° 198	3.0	+34 59	2·3	2·3	2.2	—	18	2.21	.04	2.3	.05
186	Pisces . .	ψ^3 81	336	+18° 153	3.4	+19 1	6	6·5	5.8	—	3	5.58	.07	5.4	.12
187	Andromeda	44	337	+41° 219	3.5	+41 27	6	6	6.2	—	3	5.67	.04	5.6	.00
188	Cassiopeia .	—	335	+63° 149	3.6	+63 33	6·5	6	6.0	—	3	5.35	.08	5.3	.15
189	Cassiopeia .	θ 33	339	+54° 236	3.8	+54 31	4·5	4·5	4.8	—	3	4.43	.07	4.6	.15
190	Pisces . .	—	—	+24° 186	3.8	+24 50	F	6	6.0	—	3	6.09	.07	6.0	.21
191	Cassiopeia .	32	338	+64° 127	4.0	+64 21	6	6	5.9	—	7	5.53	.03	5.3	.12
192	Cetus . .	32	342	—	4.2	− 9 33	F	6	—	6.5	7	6.51	.11	—	—
193	Andromeda	45	343	+36° 201	4.4	+37 5	6	6	6.0	—	3	5.84	.11	5.8	.16
194	Cetus . .	33	344	+ 1° 221	4.5	+ 1 47	F	6·7	6.0	6.1	4	6.26	.07	6.1	.09
195	Pisces . .	g 82	345	+30° 181	4.7	+30 47	5	5·6	5.5	—	3	5.06	.08	5.0	.12
196	Pisces . .	χ 84	348	+20° 172	5.0	+20 24	5·4	5·4	4.7	—	3	4.92	.11	4.6	.12
197	Pisces . .	τ 83	349	+29° 190	5.1	+29 27	4	4	4.2	—	6	4.73	.03	4.7	.03
198	Pisces . .	φ 85	365	+23° 158	7.3	+23 56	5	5·4	4.6	—	3	4.59	.07	4.9	.07
199	Pisces . .		368	+ 6° 174	7.5	+ 6 57			5.2						
200	Pisces . .	ζ 86	369	+ 6° 175	7.5	+ 6 57	5·4	5·4	7.7	4.8	3	5.01	.08	4.9	.05

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
151	23,311,330	*122,424,631*	6.0	*221*	*383*	. . . . . *222*. . F 3 . *5*	. . .	w	
152	278,322,340	124,420,627	5.6	*211*	*312*	*2* 0 2 . . 2 2 2 . . 1 . 0 *2*	. . .	*y*	
153	278,322,337	*124,420*,629	6.4	*110*	*416*	. . . . . *666*. *23*. . *4*	. . .	*y*	
154	278,317,333	*124,420,627*	6.4	*102*	*875*	. . . . . *664*. . F . . *7*	. . .	*y*	
155	21,311,333,563,565,568	117,424,631	4.5	001*3*01	*232*	. . . . . *115*. . *1*. 3 0	.0.	*o*	ntc
156	23,289,306		5.8	*111*	—	. *5* 0 . . 0 0 . . *11*. *3*.	. . .	Y	a
157	565,571,574,576,577,578		7.2	13*1*11*2*	—	. . . . . FF. FFF. . .	. . .	.	
158	18,316,337		4.1	*133*	—	. . . . . 5 5 . 0 1 3 . 1 .	. . .	.	n
159	21,291,343,345	114,*429*,628	5.7	11*11*	*601*	. . . . *1* 1 4 3 . . F . . *2*	. . 3	.	
160	21,306,337	*114,429*,628	5.9	11*1*	*242*	. . 1 . . *12*1 . . F . . *3*	. . 4	*y*	
161	23,311,333	124,420,627	5.6	0*12*	*474*	. *73*. . *642*. . 12*45*	. . .	*y*	n
162	278,322,330,563,565,568	124,418,629	4.5	0*13*100	*332*	*131*. . *442*. *31*. *31*	. . .	Y	
163	291,313,330	122,*427,631*	5.9	31*3*	*132*	. . . . . F2*1*. . F 3 . 1	. . .	.	
164	291,330,335		6.4	1*11*	—	. . . . . FF*6*. . F*4*. .	. . .	.	
165	291,306,330		5.8	30*3*	—	. . *9*. . 0 2 . . *21*. . .	. . .	*y*	
166	23,311,333,563,565,568	*124,418,629*	6.0	301*1*00	*432*	. . *2*. . F 1 2 . *33*. . *3*	. . .	*y*	
167	291,317,333	*124,418*,629	6.4	*111*	*542*	. . *3*. . F *36*. *77*. . *4*	. . .	O	
168	278,322,330	*124*,420,629	5.7	0*12*	35*1*	. . 0 . . 11*3*. . *4*. . 2	. . .	*y*	
169	21, 23,306,313	124,420,627	*5.7*	03*22*	*223*	*683*. *6* *7*. .	. . .	*y*	ndp
170			*5.9*			. *7*44 1 . . *6*. *32*	. . .	*w*	ndp
171	18,317,333,335,563,565,568	*124,418*,629	6.1	6132*11*	*545*	. . 0 . *633*4 . *44*. *55*	. . .	*y*	d
172	295,303,340		5.4	2*12*	—	. . *2*. . 44 . . 0 *1*. . .	. . .	*y*	
173	313,322,337	*124,421,627*	6.2	2*12*	*352*	. . *7*. . F *45*. . F . . *1*	. . .	*y*	
174	301,311,337	*124*,420,629	6.1	*321*	*544*	. . 0 . . *331*. . *4*. . *4*	. . .	*y*	
175	301,313,340,570,572,574	114,*429*,628	5.2	012*101*	*210*	. *71*. . 604 . . 1 . 4*1*	.10	*y*	ta
176	23,311,335	114,429,628	5.3	0*10*	*342*	. . 0 . . *331*. . *4*. *23*	. . *1*	*y*	
177	301,313,340	*114,429*,628	5.7	11*2*	*112*	. . . . . F 16 . . 0 . . 1	. . .	.	
178	21,303,306	*124*,420,629	5.7	3*40*	*120*	b b *2*. . *311*. . 0 . *31*	. . .	W	
179	295,303,340		5.9	1*10*	—	. *64*. . F *1*. . *3* F . . .	. . .	*w*	a
180	313,335,343,572,574,576	*122,428*,631	5.6	144*110*	*313*	. . . . . *201*. . 1 . . *2*	. . .	w	n
181	291,317,347	*124,418*,629	5.7	*122*	*201*	*340*. . *311*. *54*. *41*	. . .	*y*	
182	303,335,343	114,425,628	4.3	*221*	*134*	7 6 2 . . 111 . . 6 . 12	.11	*y*	d
183	295,303,340,572,574,576		3.6	222*114*	—	*3*012 . *41*. . 06 . 0 .	. . .	Y	vt
184	21, 28,301,306,312,316,322	112,112,*115*	5.3	555*1312*-	032	. . 0 . . 555 . . 4 . . *1*	. . .	W	s
185	21, 23,291,295,301,303,306	112,120,121	2.2	323*1221*-	203-	1 3 2 0 . 3 3 1 . . 3 . *11*	2 0 .	Y	te
186	303,313,340	*124*,420,629	5.6	*120*	*150*	b . 0 . . 2 0 0 . . 1 . 0 *2*	. . .	*y*	
187	301,313,343	*114*,429,628	5.7	*101*	*111*	. . 2 . . 113 . . 4 . . *1*	. . 1	*y*	
188	303,316,340	122,424,*631*	5.4	0*22*	*233*	. . . . . 044 . . 3 . . *1*	. . .	*y*	
189	301,313,340	114,429,628	4.4	0*21*	*243*	0 . 1 . . 004 . . 5 . *12*	.2.	*y*	a
190	312,343,347	*124*,420,*627*	6.1	0*12*	*444*	. . . . . F *33*. . 0 *3*. *1*	. . .	.	
191	23,303,316,340,572,576,577	122,424,*631*	5.5	20b*2001*	*341*	. . R . . 3 3 2 . . 2 . . *2*	. . .	w	h
192	295,303,340,343,572,576,577		6.5	49*81011*	—	. . *4*. . F *7*. . *24*. . .	. . .	*y*	
193	21,335,347	*124*,421,627	5.8	02*3*	*313*	. . *3*. . 0 0 0 . . *1* . . 0	. . .	w	
194	28,295,337,347	*124,418,629*	6.3	F*2*10	*430*	. . *1*. . F *25*. *42*. . *2*	. . .	*o*	
195	28,343,345	124,420,627	5.1	*211*	*232*	*126*. . *113*. . 6 . 1*1*	. . .	*y*	
196	23,303,345	124,420,627	4.9	1*31*	*162*	*574*. . *332*. . *5*. *33*	. . .	Y	
197	27,306,347,572,576,577	124,420,627	4.7	*300*010	100	3 . 3 . . *664*. . 2 . *30*	. . .	Y	
198	21,312,340	124,420,627	4.6	*210*	431	*242*. 4400 . . 3 . 03	. . .	*y*	d
199	23,347,351	124,418,629	*5.4*	*211*	002	*680*. *8* *2*.	. . .		d
200			*6.4*			. b 44 1 . . *31*. *31*	. . .	W	d

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No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
201	Cassiopeia .	—	363	+70° 90	7.6	+71 7	F	6·7	6.0	—	3	6.40	.13	—	—
202	Pisces . .	87	370	+15° 177	7.8	+15 30	6	6	6.5	—	3	5.91	.09	5.7	.04
203	Cetus . .	37	372	—	8.4	− 8 34	6	5·6	—	5.3	6	5.02	.01	—	—
204	Pisces . .	88	373	+ 6° 181	8.5	+ 6 22	6	6	6.2	6.2	3	6.11	.16	5.9	.13
205	Cetus . .	38	374	− 1° 162	8.7	− 1 37	6	6	5.8	5.8	3	5.80	.11	—	—
206	Cetus . .	39	384	—	10.5	− 3 8	6	6	—	5.5	6	5.64	.07	—	—
207	Pisces . .	f 89	388	+ 2° 185	11.6	+ 2 59	5·6	5	5.5	5.2	6	5.13	.04	4.8	.09
208	Cassiopeia .	φ 34	391	+57° 260	12.6	+57 36	5	5·6	6.1	—	3	5.23	.05	4.9	.03
209	Pisces . .	v 90	395	+26° 220	12.9	+26 38	4	4·5	4.7	—	6	4.71	.03	4.6	.08
210	Cepheus .	—	393	+77° 49	13.4	+78 5	6	6	6.0	—	3	5.88	.19	5.7	.04
211	Cetus . .	42	400	− 1° 171	13.7	− 1 8	6	6	5.8	6.1	3	6.25	.19	—	—
212	Pisces . .	l 91	401	+27° 215	14.5	+28 6	5	5	5.0	—	3	5.79	.09	5.2	.08
213	Ursa Minor	α 1	360	+88° 8	14.8	+88 40	2	2	2.0	—	—	2.15	—	2.2	.04
214	Andromeda	ξ 46	404	+44° 287	15.3	+44 54	5	5	5.2	—	3	4.94	.07	5.1	.07
215	Pisces . .	—	410	+ 6° 211	16.7	+ 6 46	F	6	7.7	F	3	7.38	.19	F	—
216	Andromeda	47	409	+36° 237	16.8	+37 6	6	6	6.0	—	4	5.50	.09	5.5	.15
217	Pisces . .	—	—	+19° 226	16.9	+19 51	6	6	6.2	—	3	6.28	.17	6.2	.11
218	Cassiopeia .	ψ 36	412	+67° 123	17.5	+67 30	5	5	5.2	—	6	4.84	.04	5.1	.25
219	Cassiopeia .	δ 37	416	+59° 248	18.0	+59 37	3	3·2	3.0	—	15	2.84	.03	3.0	.06
220	Cetus . .	θ 45	420	—	18.0	− 8 48	3	3	—	3.2	12	3.77	.05	—	—
221	Cetus . .	—	—	—	18.4	− 7 32	6	6	—	5.9	3	5.96	.05	—	—
222	Cetus . .	—	—	—	18.7	−16 17	F	6	—	6.4	3	6.47	.19	—	—
223	Andromeda	—	425	+42° 302	19.3	+42 50	6	6	6.0	—	7	6.08	.08	5.9	.09
224	Andromeda	—	—	+33° 228	19.3	+33 58	6	6·7	6.5	—	3	6.30	.07	6.2	.20
225	Cetus . .	46	429	—	19.7	−15 13	5·6	5·6	—	5.1	3	5.28	.17	—	—
226	Pisces . .	ϱ 93	427	+18° 187	19.8	+18 33	5	5	5.3	—	3	5.22	.05	4.9	.04
227	Pisces . .	94	431	+18° 189	20.2	+18 37	F	6·7	5.5	—	3	5.55	.00		
228	Andromeda	ω 48	432	+44° 317	20.5	+44 47	5	5	5.0	—	3	4.80	.11	5.0	.07
229	Andromeda	—	—	+40° 289	20.5	+40 29	F	F	6.0	—	3	6.37	.08	—	—
230	Cetus . .	47	435	—	20.9	−13 41	6	6·5	—	5.5	4	5.84	.09	—	—
231	Pisces . .	—	440	+ 7° 213	22.1	+ 7 21	F	6·7	7.0	5.9	3	6.44	.19	6.3	.05
232	Cassiopeia .	38	438	+69° 102	22.3	+69 38	6	6·7	6.1	—	7	5.89	.08	5.7	.03
233	Cassiopeia .	—	—	+65° 175	22.5	+65 29	6	6·7	6.0	—	3	5.88	.07	6.2	.11
234	Andromeda	A 49	441	+46° 370	22.9	+46 23	6	6	5.8	—	3	5.24	.15	5.4	.00
235	Pisces . .	97	446	+17° 210	23.4	+17 44	F	6	6.3	—	3	5.97	.05	5.9	.13
236	Cetus . .	48	449	—	23.8	−22 15	5·6	5·6	—	5.3	6	5.09	.03	—	—
237	Pisces . .	μ 98	448	+ 5° 194	23.9	+ 5 31	5	5	5.0	5.0	3	5.24	.03	4.9	.11
238	Cetus . .	—	452	—	24.7	−26 50	F	F	—	6.2	3	6.12	.04	—	—
239	Pisces . .	η 99	453	+14° 231	25.1	+14 44	4·3	4·3	4.0	—	6	3.66	.07	3 9	.19
240	Andromeda	—	—	+35° 292	25.9	+35 14	6	6·7	6.5	—	4	6.67	.07	6.4	.08
241	Cassiopeia .	χ 39	456	+58° 260	26.1	+58 37	6·5	5·6	6.0	—	3	4.93	.03	4.9	.03
242	Triangulum	—	—	+29° 261	27.1	+30 2	F	neb.	neb.	—	3	F	—	F	—
243	Andromeda	—	465	+36° 277	27.3	+36 37	6	6	6.2	—	3	5.87	.04	5.4	.08
244	Cetus . .	—	—	—	27.7	− 7 38	6	6·5	—	5.9	3	5.96	.11	—	—
245	Cetus . .	49	475	—	28.8	−16 18	6	6·5	—	5.6	3	5.54	.04	—	—
246	Cassiopeia .	40	468	+72° 86	29.0	+72 26	6	5·6	5.2	—	6	5.46	.06	5.4	.04
247	Pisces . .	—	477	+16° 176	29.4	+16 49	6	6	6.5	—	3	5.91	.11	5.8	.13
248	Andromeda	v 50	480	+40° 332	29.7	+40 48	4·5	4	4.0	—	6	4.24	.08	4.5	.09
249	Cetus . .	50	485	—	30.1	−16 1	6	6·5	—	5.5	6	5.47	.05	—	—
250	Cassiopeia .	—	482	+57° 349	30.3	+57 22	6	6	6.0	—	3	5.79	.03	5.7	.12

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
201	295,337,345		6.4	322	—	. . . . . F 3 6 . . F . . .	. . .	.	
202	27,312,347	124,420,629	5.9	212	321	. . 0 . . 114 . . 2 . . 2	. . .	y	
203	28,347,351,395,397,398		5.0	01000*1*	—	. . 6 . 182 . . 01 . 0 .	. . .	W	dv
204	20,347,351	124,418,629	6.1	314	513	. . 5 . . 331 . 14 . . 2	. . .	y	
205	21,347,351		5.8	320	—	. . 3 . . 002 . 2 F . . .	. . .	y	
206	21,312,347,566,568,570		5.6	401231	—	. . 3 . . 22 . . 41 . . .	. . .	y	
207	23,308,347,566,568,574	124,418,629	5.1	122100	125	321 . . 113 . 22 . 13	. . .	W	
208	28,306,335	114,429,628	5.2	111	323	237 . . 207 . . 3 . 03	. . .	y	a
209	28,312,334,566,568,574	124,420,627	4.7	201101	113	352 . . 630 . . 2 . 41	. . .	y	
210	301,316,337	122,428,631	5.9	153	231	. . . . . 111 . . 2 . . 2	. . .	y	n
211	301,334,335		6.2	135	—	. . R . 444 6 . 35 . 6 .	. . .	W	dh
212	23,306,335	124,421,627	5.8	122	558	. 97 . . 888 . . 1 . 66	. . .	o	
213	All	128,145,146	2.2		332-	10111001 . . 3 . 30	11 .	y	dem
214	28,312,347	114,429,628	4.9	021	032	. . 1 . . 113 . . 4 . 12	. 41	Y	
215	21,308,335	124,421,630	7.4	504	FFF-	. . . . . F b 1 . F F . . F	. . .	.	
216	23,301,312,337	114,429,628	5.5	F212	241	. . 4 . . 333 . . 2 . . 0	. . .	y	
217	27,306,347	124,420,629	6.3	432	231	. . . . . 553 . . F . . 1	. . .	.	
218	301,308,340,566,568,570	122,424,631	4.8	112110	901	. . 1 . 1224 . . 1 . 43	. . .	Y	d
219	21, 22,295,303,308,314,319	112,113,120	2.8	2224221-	222	5480 . 404 . . 7 . 12	02 .	W	s
220	301,314,334,343,566,568,570		3.8	2170131-	—	5221 . 66 . . 53 . 5 .	. . .	Y	
221	301,314,337		6.0	111	—	. . . . . 22 . . 3 F . . .	. . .	.	
222	28,308,334		6.5	405	—	. . . . . F 7 . . 34 . . .	. . .	.	
223	23,306,343,347,566,568,574	114,429,628	6.1	8124101	043	. . . . . 333 . . 0 . . 2	. . 0	y	dc
224	303,330,347	124,421,627	6.3	201	261	. . . . . 520 . . F . . 1	. . .	.	
225	22,308,334		5.3	414	—	. . 1 . . 11 . . 44 . 4 .	. . .	y	t
226	27,312,319	124,420,630	5.2	111	432	833 . . 220 . . 1 . 2 3	. . .	y	dea
227	27,312,319		5.6	000		. . 2 . . F 52 . . . 6	. . .	o	dea
228	28,306,337	114,429,628	4.8	302	142	. . 0 . . 222 . . 5 . 22	. 32	y	
229	306,316,334		6.4	121	—	. . . . . F F 6 . . F 1 . .	. . .	.	
230	23,303,314,334		5.8	F122	—	. . 5 . . 02 . . 65 . . .	. . .	w	
231	314,330,335	124,418,630	6.4	225	200	. . . . . F 34 . 7 F . . 1	. . .	.	
232	22,303,308,337,566,568,574	122,424,631	5.9	3113161	221	. . 3 . . 120 . . 2 . . 2	. . .	y	n
233	27,316,343	122,428,631	5.9	201	631	. . . . . 121 . . F 3 . 3	. . .	.	
234	28,306,319	114,429,628	5.2	034	222	211 . . 664 . . 5 . 42	. . 2	y	
235	312,315,340	124,420,630	6.0	111	233	. . 0 . . F 21 . . 1 . . 1	. . .	w	
236	301,314,337,566,572,574		5.1	001112	—	. . 1 . . 11 . 112 . 1 .	. . .	W	
237	301,308,337	124,418,630	5.2	010	226	872 . . 222 . 41 . 43	. . .	y	
238	314,330,345		6.1	110	—	. . . . . F F . 110 . . .	. . .	.	n
239	27,306,319,566,568,574	124,420,630	3.7	005321	711	404 . . 004 . . 3 . 02	. 0 .	Y	v
240	28,315,347,566	124,421,631	6.7	1302	F24	. . . . . 964 . . F . . 3	. . .	.	
241	30,315,345	114,429,628	4.9	010	001	. . 4 . . 539 . . 8 . 50	. . .	y	
242	322,337,340	124,421,631	F	FFF	FRF	. . . . . F N N . . F . . F	. . .	.	e
243	27,308,345	114,429,628	5.9	110	474	. . . . . 111 . . 2 . . 5	. . .	w	
244	22,330,345		6.0	320	—	. . . . . 24 . . 33 . . .	. . .	.	
245	28,308,319		5.5	011	—	. . 2 . . 31 . . 22 . . .	. . .	w	
246	23,312,343,566,568,574	122,424,631	5.5	124111	120	. . 0 . . 333 . . 6 . . 1	. . .	y	v
247	30,308,347	125,421,630	5.9	320	233	. . . . . 114 . . 2 . . 1	. . .	w	
248	30,316,335,566,568,574	114,423,628	4.2	151131	512	242 . . 211 . . 7 . 03	. 01	y	n
249	28,303,319,566,570,572		5.5	102212	—	. . 1 . . 31 . . 32 . . .	. . .	y	
250	27,312,328	114,429,628	5.8	100	232	. . . . . 000 1	. . .	Y	de

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1h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
251	Perseus . .	*v 51*	487	+47° 467	30.6	+48 1	4·3	4·3	3.6	—	6	3.69	.06	3.8	.16
252	Pisces . .	π102	488	+11° 205	30.7	+11 32	6	6·5	6.0	5.5	6	5.60	.05	5.4	.04
253	Cetus . .	—	491	—	31.6	−10 1	F	6	—	6.2	3	6.18	.03	—	—
254	Andromeda	χ 52	492	+43° 343	32.2	+43 46	5·6	6·5	5.0	—	4	5.14	.07	5.0	.07
255	Cetus . .	—	—	—	33.1	−21 53	6	6	—	5.7	3	5.71	.07	—	—
256	Pisces . .	105	500	+15° 245	33.2	+15 48	6	6·7	6.5	—	3	6.11	.09	5.8	.12
257	Cassiopeia .	43	498	+67° 149	33.5	+67 26	6	6	6.1	—	7	5.51	.03	5.6	.05
258	Andromeda	—	501	+42° 345	33.5	+42 41	6	6	6.0	—	3	5.60	.07	5.3	.11
259	Andromeda	τ 53	502	+39° 378	33.6	+39 58	5	5·6	5.4	—	3	4.94	.15	4.8	.07
260	Cassiopeia .	42	499	+69° 114	33.8	+70 0	6	6·7	5.2	—	7	5.07	.06	5.2	.11
261	Andromeda	—	510	+41° 328	34.5	+42 1	6	6·5	5.3	—	3	5.24	.09	5.0	.04
262	Pisces . .	—	—	+25° 276	34.6	+25 8	F	F	6.0	—	3	6.13	.07	—	—
263	Triangulum	—	514	+29° 286	34.8	+29 27	6	6	6.0	—	3	6.13	.09	6.0	.19
264	Triangulum	—	516	+34° 297	35.1	+34 38	6	6	6.0	—	3	5.37	.04	5.8	.16
265	Pisces . .	ν106	518	+ 4° 293	35.2	+ 4 53	5·4	5·4	5.0	4.5	6	4.67	.03	4.7	.15
266	Cassiopeia .	44	515	+59° 307	35.3	+59 57	6	6	6.0	—	3	5.53	.07	5.6	.03
267	Cetus . .	—	—	—	35.9	−11 54	6	6	—	5.8	3	5.89	.08	—	—
268	Pisces . .	107	523	+19° 279	36.0	+19 42	5·6	5·6	5.3	—	3	5.35	.04	5.4	.23
269	Perseus . .	φ *54*	522	+49° 444	36.1	+50 5	4	4	4.1	—	6	4.24	.03	4.4	.16
270	Cetus . .	—	—	—	36.7	− 4 17	5·6	5·6	—	5.2	4	5.43	.11	—	—
271	Cetus . .	τ 52	536	—	38.5	−16 34	3·4	3·4	—	3.4	7	3.56	.06	—	—
272	Pisces . .	ο110	537	+ 8° 273	39.1	+ 8 33	4	4·5	4.5	4.3	6	4.42	.05	4.6	.16
273	Cetus . .	—	539	—	40.0	− 6 20	6	6	—	5.5	6	5.67	.06	—	—
274	Cetus . .	—	541	—	40.0	−25 39	5	5	—	5.4	6	5.25	.06	—	—
275	Aries . .	3	538	+16° 196	40.1	+16 49	F	6	6.5	—	3	6.47	.19	6.3	.05
276	Andromeda	—	544	+37° 372	41.6	+37 21	F	F	6.0	—	3	6.10	.03	—	—
277	Aries . .	4	546	+16° 203	41.7	+16 22	6	6·5	6.0	—	5	5.60	.08	5.3	.27
278	Triangulum	—	—	+31° 316	41.8	+32 5	6	6	6.2	—	3	5.97	.08	5.8	.16
279	Perseus . .	—	547	+47° 508	42.0	+47 18	6	6	6.2	—	3	6.00	.07	5.8	.13
280	Pisces . .	—	551	+ 2° 270	42.3	+ 3 5	F	6·7	6.5	5.9	3	5.90	.04	6.1	.17
281	Aries . .	1	556	+21° 243	43.5	+21 40	6	6	6.0	—	3	5.98	.07	5.5	—
282	Cetus . .	χ 53	559	—	43.7	−11 17	5·4	5·4	—	4.8	4	4.77	.13	—	—
283	Perseus . .	1	558	+54° 396	44.1	+54 33	6	6	5.7	—	3	5.46	.00	5.3	.11
284	Perseus . .	2	560	+50° 379	44.5	+50 12	6	6	6.1	—	3	5.44	.07	5.6	.09
285	Aries . .	*54*	561	+10° 252	44.5	+10 28	6	6	5.5	—	3	5.83	.08	5.6	.03
286	Cetus . .	ζ 55	565	—	45.5	−10 56	3	3	—	3.5	6	3.85	.04	—	—
287	Cassiopeia .	ε 45	564	+62° 320	45.8	+63 5	3.4	3·4	3.3	—	15	3.55	.03	3.5	.03
288	Andromeda	55	566	+40° 394	46.1	+40 9	6	6	6.0	—	3	5.60	.09	5.7	.23
289	Triangulum	α 2	569	+28° 312	46.2	+29 0	4·3	4·3	3.9	—	15	3.58	.04	3.6	.04
290	Cassiopeia .	ω 46	568	+67° 169	46.8	+68 5	5	5	5.2	—	7	5.08	.06	5.0	.08
291	Aries . .		572		46.9	+18 42									
292	Aries . .	γ 5	573	+18° 243	46.9	+18 42	4·3	4·3	3.5	3.8	6	4.27	.04	4.3	.19
293	Cetus . .	—	—	—	47.1	−17 32	6	6	—	5.8	3	5.72	.08	—	—
294	Pisces . .	ξ111	574	+ 2° 290	47.3	+ 2 36	4	4	4.5	4.7	6	4.74	.06	4.6	.13
295	Aries . .	β 6	577	+20° 306	48.0	+20 13	3·2	3	2.5	2.7	15	2.79	.04	2.9	.13
296	Andromeda	—	579	+36° 354	48.8	+36 41			5.8	—	3	5.77	.08		
297	Andromeda	56	580	+36° 355	49.0	+36 40	5	5·6	5.8	—	3	5.74	.11	5.1	.12
298	Aries . .	7	581	+22° 284	49.2	+22 59	F	6	6.5	—	7	5.90	.06	6.1	.17
299	Aries . .	ι 8	592	+17° 289	50.8	+17 14	6	6·5	5.5	—	3	5.24	.12	5.2	.12
300	Cassiopeia .	—	588	+63° 265	50.9	+64 2	6	6·7	5.5	—	3	5.22	.07	5.4	.05

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
251	23,312,330,568,572,574	114,425,628	3.7	0*32*103	*333*	1 1 *3*. . 0 0 1 . . 3 . 2 1	5 1 *1*	Y	n
252	30,303,322,568,572,574	124,421,630	5.6	*123*101	*201*	*6 6* 1 . . 2 0 2 . *4 7* . *2 2*	. *1*.	w	de
253	28,314,322		6.2	*1*00	—	. . . . . F *4* . . *2 5* . . .	. . .	*y*	
254	22, 23, 30,335	114,429,628	5.1	F0*21*	*121*	*1* 0 2 . . 1 5 *1* . . 6 . 2 *1*	. 1 0	*y*	
255	28,308,322		5.7	*2*01	—	. . . . . 1 1 . *2 3 4* . .	. . .	.	
256	30,308,340	*125*,421,630	6.1	*221*	0*63*	. . R . . *3* 0 2 . . *4* . . *3*	. . .	*y*	h
257	23, 27,340,345,568,572,574	*122,428,631*	5.5	*2*1000*12*	220	. . 0 . . 3 3 4 . . 2 . . 1	. . .	w	n
258	27,303,340	114,*429*,628	5.6	0*21*	*622*	. . . . . 2 2 2 . . F . . *3*	. 1 2	w	
259	291,319,334	114,429,628	4.9	30*4*	*112*	*5* 7 0 . . 1 3 4 . . 8 . *2 1*	. 3 .	w	c
260	22,328,334,337,568,572,574	*122*,424,*631*	5.1	f*321*121	1*23*	. . 2 . . 7 0 1 . . 2 . . 1	. . .	w	
261	27,309,345	114,429,628	5.2	*221*	*312*	. . . . . 6 4 0 . . 5 . . *2*	. 0 *1*	*y*	
262	28,303,322		6.1	10*2*	—	. . . . *1* F F *3* . . 0 *1* . .	. . .	.	d
263	314,337,347	*124,421,631*	6.1	*221*	*424*	. . . . . *3 3 3* . . 0 . . *1*	. . .	y	
264	292,309,319	*124*,421,*631*	5.4	1*1*0	813	. . . . . 4 4 4 . . 3 . . 4	. . .	w	n
265	23,296,330,566,568,570	124,418,630	4.7	00*1111*	12*4*	*3 5* 2 . . *1 1* 3 . *3 3* . *2* 0	. . .	Y	nt
266	292,306,322	*114,429*,628	5.5	1*2*0	101	. . *5* . . 3 3 3 . . 2 . . 1	. . .	w	
267	292,314,343		5.9	*121*	—	. . . . *7 1 1* . . *3 2* . . .	. . .	.	d
268	28,296,330	125,421,630	5.4	0*11*	6*14*	. . 2 . . *2 2 2* . . 3 . . 0	. . .	*y*	n
269	30,301,322,566,570,572,	114,425,628	4.2	*12*0001	3*25*	4 0 0 . . *1 1* 0 . . 2 . *2 2*	. 1 2	W	n
270	22, 23,296,334		5.4	F1*31*	—	. . . . . *2 2* . . *5 1* . *4* .	. . .	.	
271	22, 28,322,347,566,570,575		3.6	f*22*0131	—	*3* 0 2 3 . *2 1* . . *1 6* . *1* .	. . .	*y*	
272	24, 30,334,566,570,575	124,418,630	4.4	*22*0211	44*2*	0 *2* 1 . . *3* 0 1 . *1 3* . *1* 2	. . .	*y*	
273	24,296,325,566,570,575		5.7	*1*1203*3*	—	. . . . . 1 1 . . *5* 0 . . .	. . .	Y	
274	28,301,322,566,570,575		5.2	124*11*	—	. . . . . *2 2* . *5 1 8* . 2 .	. . .	.	n
275	306,325,341	*125,421,630*	6.5	*225*	*331*	. . *7* . . F *7 2* . . F . . *2*	. . .	.	v
276	22,296,325		6.1	001	—	. . . . . F F *3* . . 0 . . .	. . .	*y*	
277	24, 30,306,325,566	125,421,630	5.6	*21*421	4*75*	. . 4 . . 2 0 2 . . 1 . . *3*	. . .	w	
278	28,309,319	*124*,421,*631*	6.0	*211*	*262*	. . . . . *2 2* 0 . . F . . *2*	. . .	*y*	
279	30,322,331	*114,429*,628	6.0	0*12*	14*4*	. . . . . *2 2* 0 . . 1 . . *2*	. . 3	*y*	n
280	292,306,328	*124*,421,*630*	5.9	0*11*	61*2*	. . . . . F 2 4 . *2 2* . . 2	. . .	.	
281	22,296,325	*124*,421,*631*	6.0	0*21*	5*55*	. . R . *1 2 2 2* . . *3* . *4 2*	. . .	Y	dh
282	24, 28,301,325		4.8	F*313*	—	. 1 0 . . *2 2* . . *1 8* . *2* .	. . .	*y*	
283	30,315,328	120,429,628	5.5	000	*241*	. . *3* . . 3 3 1 . . 2 . . *2*	. . .	w	
284	292,309,338	*114,429*,628	5.4	01*2*	401	. . 5 . . 4 4 5 . . 3 . . 2	. . 5	w	n
285	292,322,338	*124*,421,630	5.8	*220*	*212*	. . 1 . . 0 0 4 . . *1* . . *2*	. . .	*y*	n
286	30,301,325,566,570,575		3.8	*2022*10	—	*5 2* 0 6 . *6 6* . . *2 8* . *2* .	. . .	Y	
287	22, 24, 28, 30,301,306,314	112,120,121	3.6	F0*11*400-	223	8 6 0 *3* . *2 1 1* . . 4 . 0 *1*	*2 1* .	W	s
288	292,309,331	*120*,429,628	5.6	*212*	1*56*	. . *4* . . 2 2 2 . . 1 . 0 1	. . *1*	y	
289	30,296,301,306,309,314,319	124,421,631	3.6	*2223105*-	01*1*	*3 4* 0 . . 1 1 4 . . *1* . 4 0	0 0 .	Y	
290	292,319,341,347,566,572,575	122,424,631	5.1	*23*50003	*221*	. *2 1* . . *1 1* 1 . . 2 . 3 *1*	. . .	W	n
291	292,301,341,570,575,578	124,415,630	*5.0*	*1*1210*2*	40*5*	5 7 9 . $^{4}_{4}$ 6 6 6 . 4 1 . 4 0	4 4 .	W	t
292			*5.1*					*b*	t
293	292,309,338		5.7	02*2*	—	. . . . . 1 1 . . *1* 0 . . .	. . .	.	
294	292,328,341,576,578,579	124,421,630	4.7	012*33*	11*4*	*3 5* 2 . . *6 6* 2 . *1 3* . *1 1*	. . .	*y*	g
295	28,296,301,304,306,309,314	153,415,630	2.8	24*34*101-	42*2*	5 4 1 1 . *1 4 1* . 0 2 . 3 1	*1* 0 .	W	c
296	292,319,334	120,423,628	5.8	02*2*	4*10*	. . 4 . $^{2}_{3}$ 0 2 . $^{2}_{1}$ . . $^{3}_{.}$ 2 1	. . .	*y*	d
297	292,319,338		5.7	20*3*			. . .	o	d
298	24,309,328,347,575,576,578	*124,421,631*	5.9	*b*14011*2*	60*1*	. . *4* . . F *1 4* . . 2 . 1 2	. . .	Y	
299	22,301,334	124,421,630	5.2	30*3*	3*12*	*2 3* 2 . . 6 4 2 . . 5 . 2 0	. *1*.	*y*	a
300	24,319,334	*120,429*,628	5.2	0*21*	131	. . . . . 6 9 2 . . F . . 2	. . .	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
301	Perseus . .	3	590	+48° 576	51.0	+48 37	6	6	6.2	—	3	5.70	.11	5.6	.08
302	Cetus . .	56	594	—	51.0	−23 7	6·5	6·5	—	5.0	3	5.15	.17	—	—
303	Aries . .	λ 9	593	+22° 288	51.3	+23 1	5	5	5.0	—	3	4.89	.09	4.9	.16
304	Cassiopeia .	A 48	595	+70° 153	52.1	+70 19	5·4	5·4	4.6	—	15	4.60	.05	4.6	.05
305	Aries . .	—	609	+11° 261	53.0	+11 43	6	6	6.2	—	3	6.23	.08	5.7	.08
306	Cassiopeia .	50	600	+71° 117	53.2	+71 50	4	4	4.0	—	6	4.06	.05	4.0	.11
307	Cetus . .	—	—	—	53.5	−26 53	F	F	—	6.6	3	6.78	.03	—	—
308	Cassiopeia .	47	597	+76° 63	53.8	+76 42	5·6	5·6	5.3	—	7	5.40	.02	5.2	.11
309	Pisces . .	112	615	+ 2° 311	53.9	+ 2 31	F	6·7	6.5	6.0	6	5.84	.04	6.0	.16
310	Cassiopeia .	49	608	+75° 86	54.1	+75 32	6·5	6·5	5.0	—	7	5.29	.04	5.2	.12
311	Cassiopeia .	52	610	+64° 282	54.1	+64 19	6	6	6.0	—	7	5.74	.06	5.5	.15
312	Cassiopeia .	53	611	+63° 274	54.1	+63 49	6	6·7	6.0	—	3	5.52	.05	5.5	.04
313	Cetus . .	57	617	—	54.1	−21 24	F	F	—	5.7	3	5.75	.04	—	—
314	Perseus . .	g 4	614	+53° 439	54.4	+53 55	5·6	5	5.0	—	3	4.93	.15	5.1	.07
315	Cetus . .	ν 59	618	—	54.4	−21 40	4	4	—	3.9	6	3.83	.09	—	—
316	Cetus . .	—	—	—	54.5	− 9 7	6	6	—	5.7	3	5.79	.05	—	—
317	Cetus . .	—	—	—	54.8	− 9 3			—	7.4	3	7.22	.08	—	—
318	Cepheus .	—	605	+80° 64	54.7	+80 43	6	6	6.1	—	3	5.97	.07	5.7	.16
319	Cetus . .	—	—	—	55.2	−25 0	F	F	—	7.0	6	6.94	.14	—	—
320	Pisces . .				55.9	+ 2 11									
321	Pisces . .	α 113	625	+ 2° 317	55.9	+ 2 11	3·4	3·4	3.5	3.8	12	3.99	.03	4.0	.16
322	Cetus . .	—	627	—	55.9	−30 35	5·6	5·6	—	5.5	3	5.24	.07	—	—
323	Triangulum	ε 3	624	+32° 369	56.1	+32 43	5·6	6·5	5.5	—	3	5.40	.11	5.7	.13
324	Andromeda				56.5	+41 45									
325	Andromeda	γ 57	628	+41° 395	56.5	+41 45	2·3	2·3	2.0	—	14	2.14	.04	2.3	.05
326	Aries . .	10	630	+25° 341	56.8	+25 21	6	6	6.0	—	3	5.79	.11	5.9	.25
327	Cetus . .	60	633	− 0° 307	57.0	− 0 27	6	6	6.0	5.4	3	5.41	.09	—	—
328	Cetus . .	—	636	—	57.2	−15 53	6	6	—	5.9	7	5.73	.11	—	—
329	Cetus . .	61	639	− 1° 285	57.7	− 0 55	F	6·7	7.3	5.9	7	6.02	.09	—	—
330	Cetus . .	—	—	—	57.7	− 4 40	F	F	—	5.8	3	5.88	.09	—	—
331	Cetus . .	—	643	—	59.1	−29 52	5	5	—	4.9	6	4.63	.04	—	—
332	Aries . .	$\varkappa$ 12	644	+21° 279	59.8	+22 05	6·5	6·5	6.0	—	3	5.15	.08	5.3	.08
333	Aries . .	α 13	648	+22° 306	0.4	+22 54	2	2	2.0	—	19	2.04	.03	2.3	.04
334	Andromeda	58	649	+37° 486	1.3	+37 18	5	5·6	5.0	—	3	4.77	.04	4.8	.15
335	Perseus . .	—	653	+53° 460	2.1	+53 17	F	6	6.0	—	4	6.44	.03	6.3	.09
336	Triangulum	β 4	656	+34° 381	2.4	+34 25	3	3	3.0	—	17	3.12	.04	3.2	.09
337	Aries . .	14	657	+25° 355	2.6	+25 23	5	5	5.0	—	3	5.06	.04	5.0	.20
338	Cetus . .	62	660	—	3.1	− 2 54	F	F	—	F	7	7.05	.04	—	—
339	Cetus . .	—	—	—	3.1	−18 21	F	6·7	—	6.5	6	6.19	.06	—	—
340	Andromeda	59	661	+38° 425	3.6	+38 29	6	6	6.1	—	3	5.60	.03	5.5	.03
341	Aries . .	15	665	+18° 277	4.0	+18 56	6	6·5	6.0	—	7	5.88	.09	5.6	.16
342	Cetus . .	—	—	—	4.1	−24 55	F	F	—	6.4	3	6.64	.09	—	—
343	Cetus . .	64	672	+ 7° 347	5.0	+ 8 1	6	6	6.3	5.7	3	5.72	.08	5.8	.16
344	Cassiopeia .	55	668	+65° 239	5.1	+65 58	6	6·7	6.0	—	6	6.08	.06	5.8	.15
345	Triangulum	6	675	+29° 371	5.4	+29 45	6·5	5·6	5.0	—	3	5.29	.07	5.1	.07
346	Cetus . .	—	—	—	5.4	−10 37	F	6·7	—	5.9	3	6.00	.08	—	—
347	Cetus . .	63	677	—	5.5	− 2 23	6	6	—	6.0	8	6.08	.03	—	—
348	Perseus . .	6	673	+50° 481	5.6	+50 30	6	6	6.1	—	7	5.38	.08	5.3	.08
349	Andromeda	b 60	676	+43° 447	5.8	+43 40	5·6	5·6	5.2	—	3	5.10	.09	5.0	.13
350	Aries . .	η 17	682	+20° 348	6.1	+20 39	5·6	5·6	5.5	—	3	5.42	.07	5.1	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
301	292,328,343	*114,429*,628	5.7	*131*	*122*	. . *1* . . 1 1 3 . . 0 . . *1*	. . 2	*y*	
302	292,328,338		5.2	*423*	—	. . *3* . . 2 4 . 3 *4 8* . *4* .	. . .	y	t
303	292,309,328	124,421,630	4.9	*221*	*413*	. 1 0 . 1 1 1 1 . . 0 . 1 0	. . .	*y*	d
304	30,292,304,309,319,328,336	112,118,118	4.6	160*1312*-	*200*	. *4* 0 . . 0 0 0 . . *2* . 0 0	. . .	*y*	ns
305	30,334,345	*124,421*,630	6.2	*220*	*636*	. . . . . *4 4 2* . . *5* . . *5*	. . .	.	
306	301,328,347,566,570,572	122,424,631	4.1	*213*101	*312*	. 1 1 . . 0 0 0 . . 3 . 1 *1*	. . .	W	
307	296,338,347		6.8	0*10*	—	. . . . . F F . *8 4 7* . . .	. . .	.	nc
308	22,328,347,349,566,570,572	122,*424,631*	5.4	f000*111*	*250*	. . *3* . . *2 2 2* . . 7 . . *2*	. . .	.	
309	301,347,349,595,597,598	*124,421,630*	5.8	32*1*100	44*2*	. . *5* . . F 3 5 . 0 F . . 2	. . .	*w*	v
310	24,328,347,349,566,570,576	122,*424*,638	5.3	*7201012*	041	. . 3 . . 1 *3 3* . . 8 . . *1*	. . .	*y*	
311	28,319,345,349,566,570,576	*120,429*,628	5.7	16*20121*	*423*	. . 0 . . 1 1 1 . . 0 . . *2*	. . .	w	
312	28,319,345	*120,429*,628	5.5	1*11*	01*1*	. . *1* . . 3 6 3 . . 2 . . 0	. . .	*y*	
313	296,328,347		5.8	10*1*	—	. . *4* . . F F . 2 *4 5* . . .	. . .	o	t
314	30,331,338	120,429,628	4.9	12*4*	203	. . 2 . . 3 1 1 . . 4 . 4 2	. . .	*y*	n
315	296,328,347,570,576,577		3.8	600*117*	—	6 4 **0** . . 3 3 . 1 2 2 . 2 .	. . .	*o*	t
316	296,331,347		5.8	1*11*	—	. . . . . 3 3 . . *4* . . .	. . .	.	dt
317	296,331,347		7.2	20*2*	—	. . . . 0 . . .	. . .	.	d
318	301,347,349	*122,424*,638	6.0	01*2*	*171*	. . . . . *2 2 1* . . F . . *3*	. . .	w	n
319	22,359,584,586,588,590		6.9	417*426*	—	. . . . . F F . *9 1* F . . .	. . .	.	np
320	24,345,347,355,357,359,364	124,421,630	*5.3*	0120*131*-	*143*	7 3 1 1 **b** *6 5 3* . 1 0 . . 0	*3 1* .	*r*	d
321			*4.4*			**b** . .		*g*	d
322	301,347,352		5.2	0*21*	—	. . . . . 0 0 . 3 0 5 . 0 .	. . .	.	n
323	30,334,338	125,421,*631*	5.4	*231*	611	. . 2 . 0 *2* 2 0 . . *5* . 0 3	. . .	w	d
324	22, 28, 30,301,304,306,307	118,118,120	*2.2*	40*12501*-	201-	**2** **1** 3 2 **2** 4 4 0 . . 9 . *1 2*	2 2 *2*	Y	dte
325			*5.0*			**2** . .		*g*	dte
326	301,352,355	*124*,421,*631*	5.8	3*11*	7*32*	. *8 6* . 3 0 0 0 . . *1* . . 1	. . .	*y*	d
327	30,301,347		5.4	*212*	—	. . 2 . . 4 4 4 . *3 3* . . .	. . .	W	
328	24, 30,338,347,570,576,577		5.7	*8*061044	—	. . . . . 1 1 . . 0 F . . .	. . .	.	
329	301,347,352,576,577,578,579		6.0	1210*852*	—	. . *2* . . F 1 1 . *3* F . 0 .	. . .	.	vg
330	301,347,352		5.9	21*2*	—	. . . . . F F . . *3* F . . .	. . .	.	g
331	22, 28,347,595,597,598		4.6	210*021*	—	. . . . . 4 4 . 1 1 *2* . 0 .	. . .	.	nv
332	28, 30,331	124,*421*,631	5.2	*121*	*221*	. 1 *1* . . 2 4 6 . . 5 . 2 1	. . .	w	
333	22, 24,292,296,301,304,306	118,118,121	2.0	0000*260*-	322-	7 6 1 2 . 2 2 1 . . 5 . 1 3	3 1 .	Y	te
334	22, 30,336	120,423,628	4.8	10*1*	40*3*	. . *1* . . 2 4 2 . . 9 . . 0	. . .	W	
335	24,292,314,345	*120,429*,628	6.4	F*100*	03*1*	. . . . . F *6 6* . . F . . *1*	. . .	*y*	
336	30,296,301,304,307,309,312	125,421,631	3.1	1*127224*-	*312*	2 1 1 1 . 1 1 1 . . *1* . 2 1	0 0 .	*y*	
337	307,331,347	124,421,631	5.1	1*10*	26*1*	. . 3 . . *1 1 1* . . 2 . 0 *1*	. . .	*y*	dc
338	575,576,579,580,584,586,590		7.0	021*1131*	—	. . *5* . . F F . . F F . . .	. . .	.	
339	576,579,580,584,586,588		6.2	11*1240*	—	. . . . . F *1* . . 1 *1* . . .	. . .	.	
340	292,314,357	*120*,423,628	5.6	010	*121*	. . 2 . . 2 2 3 . . 5 . . *1*	. . .	*w*	
341	24,309,336,345,576,579,584	*124*,421,*631*	5.9	*6233202*	*371*	. . *2* . . *1 3 1* . . 2 . . *3*	. . .	O	t
342	309,319,341		6.6	*212*	—	. . . . . F F . *6 4 5* . . .	. . .	.	
343	22,314,352	*125,421,631*	5.7	*220*	50*2*	. . *3* . . 1 1 4 . *3* 0 . . 1	. . .	*y*	
344	292,345,357,576,579,584	*125,428,638*	6.1	*330121*	1*45*	. . 0 . . *3* 0 *3* . . *4* . . *3*	. . .	*y*	v
345	24,309,341	125,421,632	5.3	20*1*	02*3*	. . *3* . *3 1 1 3* . . *4* . 1 *2*	. . .	Y	d
346	309,319,357		6.0	22*0*	—	. . . . . F 1 . . *3 1* . . .	. . .	.	
347	292,312,323,338,345,359,364		6.1	0211*120*-	—	. . 1 . . *3 3* . . *3 4* . . .	. . .	*y*	
348	307,319,352,357,579,584,586	120,*429*,628	5.4	*4624010*	*131*	. . *2* . . 4 4 5 . . 3 . . *1*	. . 0	*y*	
349	307,334,344	120,423,628	5.1	21*2*	*233*	. . 0 . . 1 1 1 . . 2 . 1 *1*	. . *3*	Y	t
350	307,334,357	124,415,*632*	5.4	1*20*	*153*	*4 4* 0 . . *2 2* 0 . . *1* . *2 3*	. . .	*y*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
351	Aries . .	19	683	+14° 357	6.5	+14 42	6	6·5	6.0	—	3	6.17	.11	5.8	.16
352	Cetus . .	ξ^1 65	684	+ 8° 345	6.6	+ 8 17	4·5	4·5	4.6	4.3	9	4.45	.04	4.7	.05
353	Cetus . .	66	685	—	6.7	− 2 57	F	6·7	—	5.8	6	5.64	.04	—	—
354	Cetus . .	—	—	—	7.5	−21 34	6	6	—	5.8	3	5.92	.07	—	—
355	Cetus . .	—	688	—	7.6	−31 17	5	5	—	5.4	7	5.18	.08	—	—
356	Triangulum	7	691	+32° 409	8.8	+32 49	5	6·5	5.2	—	3	5.20	.13	5.3	.08
357	Aries . .	20	692	+25° 373	8.9	+25 14	6	6	6.1	—	3	5.79	.07	5.8	.09
358	Aries . .	21	693	+24° 329	8.9	+24 30	6	6·5	6.0	—	3	5.59	.03	5.7	.12
359	Perseus . .	8	695	+57° 535	9.5	+57 21	F	6	6.2	—	3	5.96	.08	5.9	.17
360	Triangulum	δ 8	697	+33° 395	9.9	+33 42	6·5	5·6	5.0	—	3	5.04	.13	5.1	.08
361	Triangulum	γ 9	698	+33° 397	10.2	+33 17	4·5	4·5	4.1	—	13	4.15	.04	4.6	.11
362	Perseus . .	h	700	+56° 522	10.7	+56 35	cum.	cum.	6.8	—	7	6.66	.14	5.0	.12
363	Cetus . .	67	704	—	11.0	− 6 59	6	6	—	5.7	7	5.54	.05	—	—
364	Andromeda	c 62	706	+46° 552	11.5	+46 49	5·6	5·6	5.2	—	3	5.24	.19	5.0	.13
365	Aries . .	θ 22	707	+19° 340	11.5	+19 21	6·5	6·5	6.0	—	6	5.55	.03	5.2	.12
366	Cetus . .	—	708	+ 1° 410	11.8	+ 1 11	6	6	5.8	6.1	3	5.89	.16	5.3	.07
367	Triangulum	10	710	+27° 360	12.0	+28 5	6	5·6	5.8	—	3	5.29	.03	5.0	.11
368	Aries . .	—	—	+22° 329	12.2	+22 37	F	6·7	6.0	—	3	6.55	.08	6.1	.09
369	Andromeda	63	715	+49° 640	13.1	+49 36	6	6	6.2	—	3	5.60	.03	5.5	.07
370	Cetus . .	o 68	720	—	13.3	− 3 31	var.	var.	—	var.	2	var.	—	—	—
371	Cetus . .	—	723	—	13.6	−26 31	F	F	—	6.5	3	6.20	.08	—	—
372	Perseus . .	χ	719	—	13.7	+56 34	cum.	cum.	cum.	—	2	cum.	—	5.3	.21
373	Perseus . .	i 9	721	+55° 598	14.0	+55 18	6·5	5·6	5.7	—	7	5.23	.04	5.2	.03
374	Andromeda	—	727	+40° 500	15.4	+40 51	6	6	6.3	—	3	5.97	.08	5.5	.07
375	Cetus . .	69	729	− 0° 355	15.8	− 0 9	6	6	5.5	5.8	5	5.78	.07	—	—
376	Cetus . .	70	732	− 1° 322	16.1	− 1 26	6	6·5	5.8	5.9	6	5.62	.03	—	—
377	Cetus . .	—	—	—	16.1	−11 19	6	6	—	5.4	3	5.47	.03	—	—
378	Andromeda	64	731	+49° 649	16.5	+49 27	6	6	5.8	—	3	5.54	.09	5.4	.11
379	Perseus . .	10	733	+55° 612	16.8	+56 4	F	6	6.3	—	3	6.23	.13	6.1	.15
380	Cetus . .	—	737	—	17.1	−24 22	5	5	—	5.4	6	5.36	.06	—	—
381	Andromeda	65	735	+49° 656	17.7	+49 44	5	6·5	4.9	—	5	4.87	.07	5.0	.07
382	Aries . .	ξ 24	745	+ 9° 316	18.4	+10 5	5·6	5·6	5.7	5.6	3	5.42	.08	5.4	.25
383	Cetus . .	—	—	—	18.8	−26 24	F	F	—	6.6	4	6.63	.08	—	—
384	Cassiopeia .	ι	744	+66° 213	19.2	+66 52	4	4	4.7	—	16	4.61	.04	4.4	.04
385	Cetus . .	ϱ 72	754	—	20.2	−12 50	5	5	—	4.6	6	4.88	.03	—	—
386	Cetus . .	—	—	—	20.3	−15 53	F	6	—	5.7	7	5.48	.09	—	—
387	Triangulum	11	752	+31° 427	20.4	+31 15	6	6·5	5.7	—	3	5.67	.00	5.7	.12
388	Triangulum	12	757	+29° 417	21.2	+29 8	6·5	5·6	5.5	—	3	5.46	.04	5.0	.13
389	Cetus . .	ξ^2 73	760	+ 7° 388	21.8	+ 7 55	4	4	4.5	4.4	9	4.41	.04	4.6	.00
390	Aries . .	—	—	+22° 354	22.4	+22 56	6	6	6.0	—	3	6.12	.03	5.7	.03
391	Aries . .	—	766	+24° 358	23.6	+24 42	6	6	6.2	—	7	5.84	.08	5.6	.08
392	Aries . .	26	769	+19° 365	23.9	+19 19	6	6	6.4	—	3	6.08	.07	5.6	.08
393	Eridanus .	—	773	—	24.4	−23 13	F	F	—	6.7	2	6.31	.08	—	—
394	Triangulum	14	772	+35° 497	24.8	+35 38	6	6·5	5.6	—	3	5.27	.08	5.5	.07
395	Cetus . .	—	774	—	24.8	−25 43	F	F	—	6.5	3	6.48	.07	—	—
396	Eridanus .	—	775	—	25.1	−23 5	F	6·7	—	6.3	3	6.45	.05	—	—
397	Cetus . .	—	776	+ 1° 438	25.3	+ 1 45	6	6	5.5	5.7	4	5.52	.09	5.5	.19
398	Triangulum	—	—	+33° 454	25.6	+34 1	F	6	6.4	—	3	5.90	.11	5.7	.07
399	Cetus . .	75	778	− 1° 353	26.0	− 1 34	6·5	6·5	5.6	5.9	10	5.55	.04	—	—
400	Cetus . .	σ 76	781	—	26.4	−15 46	5	5	—	4.8	6	4.70	.06	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
351	22,334,341	*125,422,632*	6.2	*131*	057	. . *2* . . *464* . . *1* . . *4*	. . .	.	
352	292,314,338,345,364,371,579	125,421,632	4.4	*1123201-*	422	014 . . 002 . *10* . *23*	. . .	Y	
353	292,312,338,364,575,595		5.6	*101311*	—	. . 3 . 2F5 . . 01 . 0 .	. . .	.	dv
354	24,336,349		5.9	10*2*	—	. . . . . *11* . 1*32* . .	. . .	.	
355	22,309,345,357,579,584,586		5.2	F1*22422*	—	. . . . . *22* . *211* . *1* .	. . .	.	n
356	22,309,338	125,*421*,632	5.2	31*3*	131	. 11 . . *240* . . 5 . 41	. 3 .	w	
357	292,312,344	125,422,*632*	5.8	0*12*	2*12*	. . 0 . . 001 . . 3 . . 0	. . .	*y*	t
358	292,312,345	125,422,*632*	5.6	100	4*10*	. . 4 . . 202 . . 1 . . 1	. . .	*y*	
359	314,336,349	*120,429,628*	6.0	11*2*	*253*	. . *2* . . F*20* . . F . . *1*	. . .	Y	
360	292,309,359	125,421,632	5.0	*232*	3*11*	*602* . . 420 . . 3 . 21	. 1 .	Y	
361	292,301,304,307,312,314,349	125,421,632	4.2	0*461103-*	515	*961* . . 220 . . *7* . 04	. 0 .	*y*	
362	304,317,312,336,579,580,581	*120*,438,628	6.7	b*236515*	bbb	. . . . . cc*1* . . F . cb	. . .	.	npe
363	304,338,349,359,579,584,586		5.5	317*1*120	—	. . 5 . . 33 . . *12* . . .	. . .	*y*	
364	304,314,352	120,429,628	5.2	*522*	1*15*	. . *1* . . 000 . . 1 . 4*2*	. . 3	*y*	
365	307,341,352,579,584,586	124,415,*632*	5.6	011*101*	*165*	*660* . . *202* . . 1 . *24*	. . .	w	
366	307,314,352	124,422,*632*	5.9	31*4*	*647*	. . . . . *113* . 0*2* . . *6*	. . .	Y	
367	307,338,352	125,421,632	5.3	100	0*35*	. . 1 . . 5*13* . . *4* . . *3*	. . .	w	
368	24,309,355	*125,422,632*	6.6	2*20*	*473*	. . . . . F*58* . . F*4* . *5*	. . .	.	
369	36,314,341	120,*429*,628	5.6	100	*310*	. . 0 . . 224 . . 1 . . *1*	. . 1	w	
370	341,566		var.	RR	—	. . R . . VV . . VV . . .	. . .	Y	vthg
371	352,355,357		6.2	*100*	—	. . . . . FF . *211* . . .	. . .	.	
372	292,307	120,438,628	cum	CC	RRR	. . . . . CCC . . F . CC	. . .	.	ntpe
373	24,319,359,371,579,584,586	120,*429*,628	5.2	f011*202*	100	. . 2 . . 204 . . 1320	. . .	*y*	
374	22, 36,341	*120,429,628*	6.0	*121*	*574*	. . . . . *221* . . *3* . . *5*	. . 0	*y*	
375	28,325,359,376,379		5.8	*112*04	—	. . *3* . . 00*4* . *25* . . .	. . .	*o*	t
376	33,325,331,344,359,376		5.6	1011*1*	—	. . 0 . . 200 . 1*3* . . .	. . .	*y*	
377	309,355,359		5.5	*100*	—	. . . . . 33 . . *42* . . .	. . .	.	
378	307,314,371	120,*429*,628	5.5	*212*	*222*	. . *1* . . 331 . . *2* . . *1*	. . *3*	*y*	
379	319,336,371	*120,429,628*	6.2	*331*	*413*	. . . . . F*41* . . F . . *1*	. . .	*w*	
380	22,312,357,579,580,584		5.4	40*1032*	—	. . . . . *44* . 1*31* . *1* .	. . .	*y*	n
381	24,309,341,357,580	120,*429*,628	4.9	*12221*	301	. . 2 . . 170 . . 4 . . 1	. . *2*	*o*	t
382	28,314,344	*125*,422,*632*	5.4	0*22*	6*25*	. . *1* . . *222* . *13* . *20*	. . .	*y*	ne
383	33, 36,338,352		6.6	F11*2*	—	. . . . . FF . *62*F . . .	. . .	.	n
384	22, 24, 36, 39,301,314,325	112,113,118	4.6	2300101-	*642*	*21* . . *1551* . . 3 . *22*	. . .	*y*	ndsea
385	28, 36,336,579,580,581		4.9	101*020*	—	*5725* . 11 . . *44* . *4* .	. . .	w	
386	30,312,341,365,580,581,582		5.5	24*62221*	—	. . . . . F3 . . *12* . . .	. . .	.	d
387	33,314,349	125,422,632	5.7	000	30*3*	. . 2 . . 1*11* . . *4* . . 0	. . .	O	nc
388	28, 39,331	125,421,632	5.5	101	*268*	. . *1* . . *131* . . 2 . . *5*	. . .	*y*	
389	24, 33,325,331,365,376,581	125,421,632	4.4	1113*211-*	222	0*2*03 . *33*1 . 0*9* . *22*	. . .	W	a
390	30, 36,331	*125*,422,*632*	6.1	*100*	*344*	. . . . . *333* . . 0*1* . *4*	. . .	.	dc
391	24, 30, 39,336,581,582,584	*125*,422,*632*	5.8	f233*131*	0*33*	. . . . . 002 . . *1* . . *2*	. . .	*y*	
392	28, 33,344	*125*,422,*632*	6.1	02*1*	*357*	. . R . . *331* . . F . . *5*	. . .	*y*	h
393	312,344		6.3	*11*	—	. . . . . FF . *326* . . .	. . .	*w*	npg
394	24, 36,352	123,*438*,628	5.3	*121*	142	. . 1 . . 532 . . 4 . . 2	. . .	*o*	
395	36,312,346		6.5	0*12*	—	. . . . . FF . *52*F . . .	. . .	.	n
396	33, 39,312		6.4	1*11*	—	. . . . . F*3* . *433* . . .	. . .	o	ng
397	24, 28,312,346	125,422,*632*	5.5	F2*21*	50*4*	. . . . . 33*1* . *1*F . . 0	. . .	y	
398	42,331,621	*123,438*,628	5.9	*131*	*421*	. . . . . F*13* . . F . . *2*	. . .	.	
399	30, 39,325,331,336,344,359		5.6	*2143220-*	—	. . 1 . . *201* . 11 . . .	. . .	*y*	
400	30, 39,344,575,580,582		4.7	040*131*	—	*351* . . 33 . . 02 . *1* .	. . .	*y*	a

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No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
401	Cassiopeia .	—	777	+72° 140	26.7	+72 18	6·5	6·5	5.0	—	18	5.33	.02	5.3	.04
402	Perseus . .	—	—	+36° 519	28.2	+36 48	F	6	6.0	—	3	5.97	.12	5.6	.04
403	Triangulum	15	786	+34° 469	28.6	+34 10	6·5	6·5	5.6	—	6	5.60	.06	5.5	.09
404	Cetus . .	—	790	—	28.6	−28 46	5·4	5·4	—	4.9	7	4.78	.08	—	—
405	Cetus . .	—	789	+ 6° 392	28.7	+ 6 57	F	F	7.0	5.9	3	6.24	.03	—	—
406	Cetus . .	77	791	—	28.8	− 8 23	F	6	—	5.5	3	5.65	.07	—	—
407	Eridanus .	—	—	—	29.1	−22 27	F	F	—	7.0	3	7.13	.08	—	—
408	Cetus . .	—	793	+ 6° 398	29.5	+ 6 18	6	6	6.5	6.0	6	5.89	.08	5.9	.12
409	Cetus . .	ν 78	794	+ 4° 418	29.6	+ 5 5	5	5·4	5.3	5.1	9	4.90	.07	5.1	.09
410	Aries . .	30	796	+24° 375	30.0	+24 8	6	6	7.5	—	3	6.06	.08	5.6	.12
411	Aries . .	—	797	+24° 376	30.1	+24 8			7.0	—					
412	Aries . .	31	798	+11° 360	30.1	+11 57	6	6·5	5.1	5.9	4	5.56	.03	5.9	.13
413	Cetus . .	80	799	—	30.1	− 8 21	6	6	—	5.4	3	5.76	.05	—	—
414	Cetus . .	—	800	+ 7° 402	30.2	+ 7 12	6	6	6.5	5.6	3	6.08	.11	5.9	.12
415	Cepheus .	—	784	+80° 86	30.5	+80 56	6	6	5.9	—	3	5.87	.09	5.9	.12
416	Cetus . .	81	807	—	31.7	− 3 55	6	6	—	6.0	7	5.74	.07	—	—
417	Aries . .	ν 32	808	+21° 362	32.0	+21 26	6·5	6·5	5.8	—	7	5.38	.04	5.4	.24
418	Cetus . .	δ 82	811	− 0° 406	33.3	− 0 11	4	4	3.7	4.0	13	4.13	.06	—	—
419	Aries . .	33	813	+26° 443	33.7	+26 33	6·5	6·5	5.5	—	3	5.39	.11	5.4	.19
420	Cetus . .	ε 83	815	—	33.8	−12 23	5·4	5·4	—	4.6	3	4.96	.12	—	—
421	Cetus . .	—	817	+ 5° 374	34.0	+ 5 36	6	6	7.0	6.4	3	6.31	.08	5.8	.15
422	Cetus . .	—	—	—	34.3	− 9 57	6	6	—	5.7	3	5.88	.03	—	—
423	Cassiopeia .	—	814	+67° 224	34.5	+67 19	F	6·7	6.6	—	6	5.86	.06	—	—
424	Perseus . .	11	816	+54° 598	34.5	+54 36	F	6	6.0	—	3	5.56	.04	5.6	.03
425	Perseus . .	—	819	+52° 616	34.5	+53 1	F	6·7	6.0	—	3	6.10	.07	6.0	.21
426	Perseus . .	—	822	—	34.8	+42 11	cum.	cum.	cum.	—	3	cum.	—	cum.	—
427	Perseus . .	12	821	+39° 610	34.8	+39 41	5	5·6	4.9	—	3	4.90	.05	5.0	.03
428	Aries . .	μ 34	825	+19° 403	35.6	+19 29	6·5	6·5	5.8	—	3	5.78	.11	5.4	.23
429	Perseus . .	θ 13	827	+48° 746	36.0	+48 43	4	4	4.2	—	6	4.24	.05	4.6	.09
430	Cetus . .	85	830	+10° 360	36.0	+10 14	6	6	7.0	6.5	6	6.26	.05	6.1	.17
431	Perseus . .	14	829	+43° 566	36.4	+43 47	6	6	5.6	—	3	5.60	.09	5.5	.05
432	Aries . .	35	831	+27° 424	36.4	+27 12	5	5	5.0	—	6	4.68	.06	4.7	.09
433	Cetus . .	γ 86	837	+ 2° 422	37.1	+ 2 44	3·4	3·4	3.5	3.2	14	3.59	.03	3.8	.09
434	Aries . .	o 37	842	+14° 457	37.9	+14 49	6	6	6.0	6.0	3	5.81	.17	5.7	.13
435	Aries . .	38	844	+11° 377	38.4	+11 57	5	5	5.2	5.4	3	5.20	.07	5.0	.13
436	Cetus . .	π 89	847	—	38.4	−14 22	4	4	—	4.1	6	4.28	.03	—	—
437	Cetus . .	μ 87	845	+ 9° 359	38.5	+ 9 36	4	4	4.0	4.3	14	4.38	.04	4.7	.07
438	Eridanus .	τ^1 1	856	—	39.5	−19 5	4·5	4·5	—	4.5	4	4.67	.09	—	—
439	Aries . .	39	861	+28° 462	40.8	+28 45	5	5	5.2	—	8	4.64	.04	4.7	.08
440	Aries . .	*16*	866	+24° 396	41.8	+24 42	6·5	6	6.0	—	3	5.96	.12	5.4	.17
441	Aries . .	40	867	+17° 442	41.8	+17 48	F	6·7	6.0	—	3	6.08	.11	5.9	.04
442	Eridanus .	—	—	—	41.8	−22 59	F	F	—	6.5	3	7.05	.07	—	—
443	Perseus . .	η 15	863	+55° 714	42.0	+55 24	4·3	4	3.5	—	6	3.93	.03	4.2	.21
444	Aries . .	π 42	870	+16° 355	42.6	+16 58	6·5	6·5	5.7	5.5	3	5.57	.15	5.4	.24
445	Aries . .	41	872	+26° 471	42.9	+26 46	4	4·3	3.7	—	6	3.78	.09	4.1	.05
446	Perseus . .	16	871	+37° 646	43.0	+37 49	5·4	5·4	4.8	—	3	4.44	.13	4.6	.07
447	Perseus . .	—	—	+46° 648	43.7	+46 21	F	6·7	6.0	—	3	5.84	.11	6.2	.08
448	Eridanus .	—	879	—	44.1	−32 55	5·4	5·4	—	4.5	3	4.71	.09	—	—
449	Perseus . .	17	877	+34° 527	44.2	+34 34	5	5	4.2	—	3	4.80	.07	4.9	.04
450	Eridanus .	—	880	—	44.5	−25 3	F	F	—	6.4	3	6.27	.04	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
401	24, 28, 30, 36,292,312,336	112,113,121	5.3	0*13*1*1*12-	*131*	. . . . . 1 3 *3* . . 8 . . 0	. . .	*y*	s
402	28, 42,346	*123*,*438*,628	6.0	*132*	*534*	. . . . 0 F *2 2* . . 1 . . *4*	. . .	.	d
403	30,331,355,595,597,598	123,*438*,628	5.6	0*15112*	*213*	. . *2* . . *2* 0 *1* . . 1 . . *1*	. . .	o	vt
404	24, 33, 39,344,575,579,580		4.8	f221*412*	—	. . . . . *22* . *111* . *2* .	. . .	.	ndp
405	338,349,355		6.2	100	—	. . . . . F F 6 . *51* . . .	. . .	Y	
406	621,623,625		5.6	02*1*	—	. . 1 . . F 2 . . *4* 8 . . .	. . .	Y	dpc
407	42,338,352		7.1	11*2*	—	. . . . . F F . b *3* F . . .	. . .	.	n
408	33,338,349,588,590,592	*125*,422,*632*	5.9	25*1*212	3*21*	. . . . . *114* . *12* . . 0	. . .	*o*	
409	36,325,331,341,349,357,361	125,422,632	4.9	41*45*232-	401	*5* 0 5 . 3 1 *3* 3 . 0 0 . *12*	. . .	*y*	dpa
410			*7.3*						
411	28,292,344	*125*,422,*632*	*6.6*	*112*	*348*	. . *7* . *2* 0 . . 4 . *55* . . *5* *33* 2 . .	. . .	l	ndphc
412	24, 26,312,338	125,422,*632*	5.6	F010	010	. . *2* . . 2 0 *5* . 1 1 . . 3	. . .	*y*	ndphc
413	30,349,355		5.8	*111*	—	. . 3 . . 0 0 . . 7 R . . .	. . .	Y	e
414	33, 39,312	*125*,*422*,*632*	6.1	11*3*	1*43*	. . . . . *33* 2 . *80* . . *2*	. . .	*o*	dc
415	30, 42,349	*125*,*428*,638	5.9	*221*	3*12*	. . . . . *112* . . 2 . . 0	. . .	*y*	n
416	26, 36,331,575,581,582,588		5.7	221b*213*	—	. . R . . 1 1 . . 1 0 . . .	. . .	*y*	h
417	28, 33, 39,575,581,582,584	125,422,632	5.4	012b021	6*33*	0 *11* . . 0 2 2 . . 3 . 2 0	. . .	w	
418	24, 30, 42,325,336,341,359		4.1	*25*2434*1*-	—	*8512* . 00*2* . 0*6* . *1* .	0 0 .	W	
419	26, 39,346	125,422,632	5.4	03*2*	31*5*	*442* . 3020 . . 3 . 00	. . .	*y*	d
420	28, 36,331		5.0	*331*	—	*6826* . *44* . . *53* . *6* .	. . .	*y*	
421	34,292,344	*125*,422,*632*	6.3	0*22*	*176*	. . . . . *555* . *12* . . *5*	. . .	.	
422	33,336,357		5.9	00*1*	—	. . . . . *11* . . *52* . *5* .	. . .	.	a
423	575,580,581,582,584,586		5.9	3*22110*	—	. . . . . F 2 5 . . 2 . . .	. . .	.	
424	36,355,621	*127*,439,628	5.6	*212*	0*10*	. . b . . F 2 2 . . 1 . . 0	. . .	w	
425	30,341,355	*127*,439,*628*	6.1	*120*	163	. . . . . F 0 *3* . . F . . *1*	. . .	*y*	
426	292,336,338	*123*,438,628	cum	CCC	RRR	. . . . . C C C . . F . . C	. . .	.	pe
427	26,292,346	123,438,628	4.9	1*11*	121	. . 3 . . 1 3 0 . . 0 . 3 1	. . 1	*y*	
428	28, 39,344	125,422,632	5.8	023	*258*	. . *1* . . *422* . . *1* . *44*	. . .	w	
429	33, 36,357,581,584,586	123,425,628	4.2	120*311*	623	2 3 5 . 4 *111* . . *2* . 1 4	. . *1*	*y*	d
430	24, 26, 34,325,378,575	*125*,*422*,*632*	6.3	F00321	2*36*	. . *7* . . *555* . 0 *2* . . *2*	. . .	*y*	n
431	30,312,357	*123*,438,628	5.6	*212*	*200*	. . *5* . . 2 2 *1* . . 1 . . *1*	. . 0	*y*	
432	39,341,348,580,581,584	125,421,632	4.7	2*13201*	12*2*	3 2 4 . . 3 3 3 . . 2 . 1 0	. 2 .	*y*	
433	28,292,325,331,338,346,348	125,422,632	3.6	*100302*4-	014	*34* 1 3 *32* 1 1 . *36* . *32*	*10* .	*y*	dg
434	25, 30, 39	125,422,*632*	5.8	4*23*	2*33*	. . *2* . . 0 0 0 . 0 3 . *21*	. . .	*y*	
435	26, 39,346	125,422,*632*	5.2	01*2*	1*35*	. . 0 . . *220* . *11* . *42*	. . .	*y*	n
436	28, 34,344,581,584,586		4.3	*120011*	—	. . 1 *1* . *22* . . *11* . *3* .	. . .	W	v
437	33, 36,325,331,336,341,359	125,421,632	4.4	*2111042*-	431	. *222* . *333* . *14* . *23*	. . .	*y*	na
438	25, 26, 33, 36		4.7	F*212*	—	*3524* . *33* . . *32* . *3* .	. . .	*y*	nt
439	25, 36,336,348,352,581,584	125,421,632	4.6	90f1*122*-	22*1*	4 3 *1* . . 4 4 6 . . 3 . 1 1	. 0 .	*o*	
440	26, 39,348	125,422,632	6.0	21*3*	25b	. . 0 . . *622* . . *3* . . *6*	. . .	w	n
441	34,341,357	125,*422*,*632*	6.1	*230*	*123*	. . *5* . . F 0 *3* . . 0 . . *2*	. . .	O	
442	34,338,357		7.0	*120*	—	. . . . . F F . b 7 F . . .	. . .	.	n
443	33, 36,357,581,584,586	127,425,628	3.9	C01*111*	428	5 3 R . 5 *222* . . 1 . 3 3	6 1 .	Y	dth
444	25,341,357	125,422,632	5.6	40*3*	4*55*	. . *4* . *6200* . *43* . *32*	. .	*y*	d
445	33, 36,359,581,584,586	125,421,632	3.8	*135*105	422	6 4 2 . . 4 *11* . . 6 . 0 3	. 0 .	W	dc
446	26,307,338	123,439,628	4.4	*223*	320	. 5 2 . . 2 2 4 . . 0 . 0 2	. . .	*y*	
447	33,348,352	*123*,439,*629*	5.8	13*1*	426	. . . . . F 3 0 . . *10* . 4	. . .	.	
448	338,348,352		4.7	*221*	—	. . . . . *11* . *333* . *3* .	. . .	.	n
449	26, 39,346	123,439,629	4.8	02*1*	201	. . 3 . . 2 2 *5* . . 1 . 0 1	. . .	O	
450	36,338,357		6.3	10*1*	—	. . . . . F F . *312* . . .	. . .	.	n

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$2^h - 3^h$

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
451	Eridanus .	—	883	—	44.7	−28 26	5	5	—	5.6	3	5.26	.04	—	—
452	Aries . .	σ 43	881	+14° 480	44.9	+14 34	6	6·5	6.0	5.7	7	5.47	.06	5.5	.21
453	Eridanus .	τ^2 2	887	—	45.6	−21 30	5·4	5·4	—	4.9	6	4.83	.07	—	—
454	Perseus . .	τ 18	885	+52° 641	45.8	+52 16	4	4	4.2	—	6	3.97	.03	4.4	.20
455	Perseus . .	20	888	+37° 655	46.2	+37 52	6	6·5	6.0	—	3	5.37	.08	5.8	.15
456	Cassiopeia .	—	—	+60° 591	46.4	+61 2	F	F	5.9	—	17	5.57	.03	5.9	.05
457	Perseus . .	—	—	+46° 658	48.5	+46 40	F	F	6.0	—	3	5.80	.17	—	—
458	Aries . .	45	901	+17° 457	49.1	+17 51	F	6	6.0	—	3	5.78	.03	5.8	.16
459	Aries . .	ϱ 46	903	+17° 458	49.7	+17 32	6	6	6.5	—	3	5.54	.08	5.6	.17
460	Cetus . .	—	905	+ 7° 450	49.8	+ 7 54	F	6	6.8	6.3	3	6.02	.00	5.8	.24
461	Perseus . .	21	904	+31° 509	50.0	+31 26	5	5	4.8	—	3	5.20	.07	4.9	.04
462	Cepheus .	—	896	+78° 103	50.2	+78 57	6	6	5.6	—	6	5.64	.08	5.8	.16
463	Eridanus .	—	—	—	50.6	− 4 12	6·5	6·5	—	5.1	6	5.21	.04	—	—
464	Eridanus .	η 3	910	—	50.6	− 9 23	3	3	—	3.7	6	3.95	.05	—	—
465	Perseus . .	π 22	912	+39° 681	51.1	+39 11	5	5	5.1	—	3	4.74	.05	4.6	.25
466	Aries . .	47	913	+20° 480	51.2	+20 10	F	6	6.0	—	3	5.88	.03	5.6	.17
467	Perseus . .	—	914	+46° 669	51.7	+46 44	F	6	5.8	—	7	5.57	.04	5.8	.17
468	Perseus . .	24	915	+34° 550	51.7	+34 42	5·6	5·6	5.4	—	3	5.04	.03	4.9	.05
469	Eridanus .	4	922	—	52.1	−24 21	5	5	—	5.7	3	5.42	.05	—	—
470	Perseus . .	—	918	+51° 665	52.4	+51 54	5	6·5	5.7	—	3	5.10	.03	5.3	.13
471	Perseus . .	—	—	+37° 675	52.4	+37 40	F	6·7	7.0	—	3	5.90	.09	5.7	.04
472	Aries . .	ε 48	921	+20° 484	52.4	+20 52	4·5	4·5	4.2	5.0	6	4.58	.06	4.7	.05
473	Aries . .				52.4	+20 52									
474	Eridanus .	—	—	—	52.7	− 3 16	6	6	—	5.2	3	5.03	.11	—	—
475	Eridanus .	6	926	—	52.8	−24 5	F	F	—	6.2	3	6.09	.08	—	—
476	Cepheus .	—	908	+80° 97	53.2	+81 0	6	6	5.5	—	3	5.97	.03	5.9	.04
477	Cetus . .	λ 91	929	+ 8° 455	53.3	+ 8 26	5·4	5·4	4.8	4.8	9	4.60	.07	4.7	.09
478	Eridanus .	5	934	—	53.6	− 2 57	5·6	5·6	—	5.4	6	5.38	.01	—	—
479	Eridanus .	—	939	—	54.0	−29 23	F	F	—	6.3	3	6.15	.11	—	—
480	Eridanus .	—	940	—	54.3	−25 45	F	6·7	—	5.9	3	5.45	.08	—	—
481	Aries . .	49	941	+26° 477	54.8	+26 0	6	6·5	5.8	—	3	5.89	.11	5.8	.13
482	Cetus . .	α 92	949	+ 3° 419	56.0	+ 3 37	2·3	2·3	2.5	2.4	11	2.68	.04	2.9	.12
483	Perseus . .	γ 23	947	+52° 654	56.1	+53 2	3	3	3.2	—	13	3.11	.03	3.6	.09
484	Perseus . .	k	948	+56° 767	56.5	+56 14	5	5	5.0	—	3	5.03	.09	5.1	.04
485	Eridanus .	—	951	—	56.5	−28 33	F	F	—	6.0	3	5.95	.04	—	—
486	Eridanus .	ϱ 9	952	—	56.8	− 8 9	6	5·6	—	5.6	6	5.45	.04	—	—
487	Eridanus .	τ^3 11	954	—	57.1	−24 6	4·3	4·3	—	4.1	6	4.10	.06	—	—
488	Cassiopeia .	—	—	+63° 390	57.3	+63 36	F	6·7	6.0	—	20	5.75	.02	6.0	.04
489	Perseus . .	ϱ 25	953	+38° 630	57.5	+38 22	4	var.	var.	—	13	3.68	.06	4.1	.23
490	Aries . .	52	957	+24° 431	58.4	+24 47	6	6·5	6.0	—	3	5.29	.05	5.4	.12
491	Aries . .				58.4	+24 47									
492	Eridanus .	10	959	—	58.4	− 8 4	6	6	—	5.3	3	5.43	.12	—	—
493	Cassiopeia .	—	955	+73° 168	58.9	+73 56	5·4	5·4	5.2	—	3	4.73	.08	4.9	.17
494	Aries . .	—	—	+12° 436	59.8	+12 44	F	6	5.2	6.0	3	5.90	.03	5.6	.11
495	Perseus . .	ι	962	+49° 857	0.4	+49 9	4	4	4.3	—	6	4.14	.01	4.6	.09
496	Perseus . .	β 26	963	+40° 673	0.4	+40 30	var.	var.	var.	—	17	2.31	.03	2.4	.05
497	Eridanus .	—	—	—	0.6	− 6 33	6	6	—	5.8	3	5.61	.15	—	—
498	Perseus . .	κ 27	967	+44° 631	1.4	+44 24	4·5	4·5	4.5	—	13	3.95	.04	4.4	.21
499	Cepheus .	—	—	+78° 109	1.5	+78 25	F	6	7.0	—	7	6.59	.04	6.3	.12
500	Aries . .	55	974	+28° 499	2.4	+28 37	6	6	6.0	—	3	5.46	.08	5.5	.11

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
451	36,341,349		5.3	011	—	. . . . . *33*. 204. 0.	. . .	.	n
452	39,323,341,588,592,594,595	125,422,632	5.5	2310**3**01	515	*563*. . 313. *12*. *10*	. . .	w	
453	25, 33,352,584,586,588		4.8	11*1233*	—	*434*. . *22*. *115*. *1*.	. . .	Y	
454	31, 39, 45,580,581,582	127,425,629	4.0	*2*01001	617	492. . 113. . 0. 24	.10	Y	
455	31, 36,355	123,439,*629*	5.4	*220*	814	. . *1*. 2424. . 3. . 4	. . .	*r*	d
456	26, 31,33,34,312,331,338	*118*,121,*121*	5.6	12*13*112-	614	. . . . . FF 1. . 50. 3	. . .	.	s
457	25, 31,349		5.8	*423*	—	. . . . . FF 0. . F. . .	. . .	.	
458	26, 33, 36	*125*,*422*,632	5.8	100	*413*	. . 5. . F 00. . 3. . 0	. . .	o	nt
459	26, 33, 36	125,*422*,632	5.5	022	503	*565*. . 338. . 2. 11	. . .	*y*	n
460	34,323,357	*125*,*422*,632	6.0	000	*428*	. . . . . F *26*. 11. . *2*	. . .	*y*	
461	39, 45,341	123,439,629	5.2	*112*	*234*	. . *4*. . *224*. . 1. *23*	. . .	w	
462	45,323,344,580,581,582	*125*,*428*,638	5.6	132*41*1	611	. . . . 622*1*. . 5. . 2	. . .	O	nd
463	34,344,359,595,597,598		5.2	311*011*	—	. . . . . 24. . *35*. . .	. . .	.	v
464	39, 48,359,580,581,584		4.0	112*121*	—	*722*1. *88*. . *24*. *2*.	. . .	Y	
465	323,341,357	123,423,629	4.7	1*11*	372	*351*. . 334. . 2. *21*	.0.	w	
466	45,323,359	129,*430*,*633*	5.9	010	*127*	. . *5*. . F *11*. . *2*. . *3*	. . .	*y*	e
467	48,349,361,364,580,581,584	*123*,439,*629*	5.6	**6**220*0*11	610	. . . . . F 20. . 1. . 2	. . .	*y*	
468	45,355,359	123,439,629	5.0	*100*	002	. . 1. . 223. . F. *21*	. . .	*o*	
469	39,355,359		5.4	1*11*	—	. . 0. . *44*. *4*03. 0.	. . .	*y*	
470	45,348,361	127,439,629	5.1	100	51*1*	. . . . 0*15*5. . 2. 32	.11	W	d
471	323,348,369	*127*,*439*,*629*	5.9	21*2*	*321*	. . . . . F 29. . *6*. . *2*	. . .	.	
472			*5.2*				. . .		de
473	26,323,359,580,581,584	129,430,633	*5.5*	410*4*01	020	432. $^{6}_{5}$ *223*. *22*. 01	. . .	*y*	de
474	33,346,357		5.0	20*3*	—	. . . . . 88. . *13*. . .	. . .	.	
475	39,355,361		6.1	*202*	—	. . *5*. . F F. *618*. . .	. . .	*o*	
476	36,361,364	125,*428*,638	6.0	0*10*	*021*	. . . . . *226*. . F. . *1*	. . .	.	n
477	39,323,341,346,359,364,365	125,422,632	4.6	124*2*031-	231	*242*. . 002. 1*2*. 01	. . .	w	
478	34, 48,346,595,597,598		5.4	100000	—	. . R. . *22*. . *33*. *3*.	. . .	W	vh
479	26, 39,346		6.2	3*11*	—	. . . . . FF. *21* F. . .	. . .	.	n
480	31, 45,359		5.4	*202*	—	. . . . . F 7. 633. . .	. . .	.	n
481	33, 36, 48	129,*419*,*633*	5.9	*230*	*323*	. . *3*. . *133*. . *2*. . *1*	. . .	*y*	dec
482	34,323,359,364,365,371,373	125,422,632	2.7	0101113-	105	654**1**2. *220*. *22*. *32*	*12*.	O	th
483	26,312,323,359,364,365,371	127,425,629	3.1	2*2*2011*2*-	367	7 5*1* 0. 113. . *1*. 05	11*2*	*y*	
484	45,323,361	127,439,629	5.0	*221*	021	. . . . . 000. . 3. 01	. . .	*y*	n
485	36,346,361		6.0	1*10*	—	. . . . . FF. 0*23*. . .	. . .	.	n
486	355,361,595,598,600,621		5.4	*111022*	—	. *51*. . *42*. . *13*. *4*.	. . .	*y*	nvt
487	48,355,357,580,581,584		4.1	5*10112*	—	3 *3* 11. *44*. *2*13. 0.	. . .	*y*	
488	26, 33, 39,323,336,346,352	118,121,125	5.8	0002211-	412	. . . . . F 30. . 30. 2	. . .	.	s
489	26,312,323,359,364,365,371	123,423,629	3.7	*23*43331-	*726*	7 1*6*. . 4 v v. . 7. 14	.*1*.	*o*	vth
490			*6.0*			. . $^{0}_{1}$. $^{0}_{1}$ 535. . 0. . 1	. . .		de
491	36,355,359	129,419,633	*6.1*	11*1*	*322*	. . . . .	. . .	W	de
492	34,355,359		5.4	*330*	—	b *5*1. . 44. . *43*. . .	. . .	w	na
493	33,355,357	125,424,638	4.7	*121*	061	. . . . . *115*. . 68. 2	. . .	*y*	
494	26, 36,355	129.*430*,634	5.9	00*1*	*305*	. . . . . F *17*. *1* F 2. *3*	. . .	.	e
495	45, 77,332,582,585,588	127,425,629	4.1	0*10001*	347	31. . . 002. . 3. 15	.22	*y*	
496	26, 29, 31, 33, 34, 36, 45	118,121,125,	2.3	1*2*00200-	*121*-	*2*251. v v v. . 7. . 1	*221*	W	vte
497	39, 48,364		5.6	2*41*	—	. . . . . 22. . 01. . .	. . .	.	
498	26, 33, 77,326,332,364,371	123,425,629	4.0	05*12*210-	717	425. . 445. . 4. 34	. . *2*	Y	
499	31, 48,366,371,582,586,588	*125*,*428*,638	6.6	b102*2*02	*162*	. . . . . F *82*. . F. . *3*	. . .	.	
500	29, 45,339	129,*419*,*633*	5.5	*211*	302	. . 1. . 333. . F. . 0	. . .	w	e

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
501	Eridanus .	—	978	—	2.7	−28 18	F	F	—	6.2	3	6.03	.03	—	—
502	Aries . .	—	980	+26° 516	3.3	+26 26	F	6·7	6.0	—	3	5.76	.08	6.1	.25
503	Perseus . .	ω 28	981	+39° 724	3.6	+39 9	5	5	5.2	—	3	4.74	.11	5.0	.12
504	Cepheus .	—	960	+84° 59	4.0	+84 29	6	6	6.0	—	3	5.91	.13	5.8	.15
505	Aries . .	δ 57	986	+19° 477	4.8	+19 16	4·5	4	4.2	—	6	4.48	.06	4.6	.07
506	Cepheus .	—	979	+77° 115	5.1	+77 17	6	6·7	6.2	—	6	5.47	.04	5.6	.16
507	Aries . .	56	989	+26° 523	5.1	+26 48	6	6	6.2	—	3	5.49	.07	5.6	.08
508	Eridanus .	—	—	—	5.4	− 4 15	F	6	—	6.7	7	6.28	.04	—	—
509	Taurus . .	g	991	+ 6° 496	6.1	+ 6 13	6	6	6.4	6.1	3	5.88	.07	5.8	.19
510	Cetus . .	94	994	− 1° 457	6.6	− 1 39	5·6	5·6	5.3	5.3	8	5.02	.07	—	—
511	Perseus . .	—	—	+56° 798	6.7	+56 41	6	6	6.0	—	3	5.86	.12	5.8	.23
512	Eridanus .	12	997	—	7.0	−29 28	3·4	3·4	—	3.6	7	3.77	.03	—	—
513	Perseus . .	—	995	+50° 729	7.6	+50 29	5	5	6.0	—	7	5.24	.09	5.2	.17
514	Perseus . .	—	—	+30° 512	8.0	+30 7	6	6	5.8	—	3	5.53	.07	5.6	.08
515	Aries . .	ζ 58	999	+20° 527	8.0	+20 36	4·5	5·4	4.5	5.2	6	4.93	.04	4.9	.07
516	Camelopard.	—	1001	+65° 340	9.5	+65 13	5	5	4.5	—	19	4.78	.02	4.8	.03
517	Perseus . .	30	1006	+43° 674	9.7	+43 35	6	6	6.0	—	3	5.37	.08	5.4	.07
518	Eridanus .	—	1012	—	9.8	−26 33	F	F	—	6.3	3	5.95	.05	—	—
519	Eridanus .	ζ 13	1013	—	10.0	− 9 16	4·5	4·5	—	4.9	6	4.80	.08	—	—
520	Eridanus .	—	—	—	10.1	− 6 21	6	6	—	6.6	6	6.02	.06	—	—
521	Perseus . .	29	1007	+49° 899	10.1	+49 47	5	5	5.7	—	3	5.30	.07	5.3	.13
522	Perseus . .	31	1011	+49° 902	10.7	+49 40			5.7	—	5	4.99	.04	5.2	.17
523	Eridanus .	14	1016	—	10.8	− 9 36	6	6	—	6.5	3	6.08	.11	—	—
524	Perseus . .	—	1017	+33° 619	11.3	+33 46	5	5	5.0	—	3	4.80	.17	5.2	.07
525	Cetus . .	95	1022	− 1° 469	12.2	− 1 22	6	6·5	6.2	5.7	3	5.74	.09	—	—
526	Aries . .	59	1023	+26° 540	12.7	+26 38	6	6	6.0	—	3	5.89	.03	5.8	.15
527	Eridanus .	—	—	—	13.0	−29 14	F	F	—	5.9	3	5.76	.11	—	—
528	Aries . .	—	1025	+28° 516	13.1	+28 37	5	5	5.2	—	3	4.73	.15	5.0	.11
529	Cetus . .	κ 96	1028	+ 2° 518	13.1	+ 2 56	5	5	5.3	5.1	3	4.97	.07	4.9	.11
530	Eridanus .	15	1031	—	13.1	−22 57	5·6	5·6	—	5.3	3	5.02	.12	—	—
531	Eridanus .	—	—	—	13.2	−18 59	6	6	—	5.8	3	5.73	.15	—	—
532	Perseus . .	1 32	1026	+42° 750	13.5	+42 54	5	5·6	5.4	—	3	4.84	.09	5.1	.09
533	Eridanus .	τ^4 16	1037	—	14.2	−22 12	4·3	4·3	—	3.4	6	3.79	.11	—	—
534	Camelopard.	—	1030	+64° 391	14.3	+64 9	F	6	6.0	—	3	5.65	.16	5.6	.08
535	Aries . .	τ 61	1034	+20° 543	14.3	+20 43	5	5	5.0	—	3	5.18	.09	5.0	.11
536	Eridanus .	—	1039	—	14.3	−24 33	F	6·7	—	5.9	5	5.94	.07	—	—
537	Perseus . .	—	1035	+48° 899	14.7	+48 47	F	6·7	6.2	—	3	5.20	.05	5.4	—
538	Cetus . .	97	1041	+ 3° 461	14.9	+ 3 15	6	6	6.3	6.2	3	5.50	.16	5.8	.15
539	Aries . .	62	1040	+27° 500	15.0	+27 11	6	6	5.7	—	7	5.59	.08	5.6	.15
540	Eridanus .	—	1047	—	15.6	−27 2	6	6	—	6.5	4	6.28	.07	—	—
541	Perseus . .	α 33	1043	+49° 917	15.8	+49 26	2	2	2.0	—	19	1.94	.03	2.1	.05
542	Aries . .	63	1045	+20° 551	15.8	+20 19	5·6	5·6	5.0	—	7	5.15	.06	4.8	.11
543	Eridanus .	—	1049	—	16.2	−24 4	F	6·7	—	5.7	3	5.76	.07	—	—
544	Perseus . .	—	—	+33° 636	17.0	+33 6	F	6	5.5	—	5	5.65	.06	5.6	.04
545	Eridanus .	—	1054	—	17.1	−26 1	F	F	—	6.5	3	6.31	.09	—	—
546	Aries . .	64	1052	+24° 481	17.2	+24 19	6	6·5	5.8	—	3	5.56	.16	5.8	.15
547	Aries . .	65	1053	+20° 556	17.5	+20 23	6	6	5.8	—	3	5.55	.16	5.5	.20
548	Taurus . .	—	—	+12° 473	17.6	+12 12	F	6·7	6.0	—	3	6.16	.09	6.0	.17
549	Perseus . .	—	—	+48° 913	17.8	+48 42	F	F	6.5	—	3	5.87	.08	—	—
550	Taurus . .	o 1	1057	+ 8° 511	18.4	+ 8 36	4·3	4·3	3.8	3.4	13	3.77	.03	3.8	.09

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
501	33, 48,366		6.0	00*1*	—	. . . . . FF. 00*3*. . .	. . .	.	n
502	31,348,621	129,*419*,*633*	5.8	*1*02	6F0	. . . . . F30. . 3. . 3	. . .	*y*	e
503	29, 34, 48	123,423,629	4.7	*3*02	612	*323*. . 335. . 2. 13	.*11*	Y	t
504	26, 33, 48	*125*,*424*,638	5.9	22*3*	3*41*	. . . . . *111*. . *2*. . *1*	. . .	Y	n
505	31, 39, 77,585,588,590	129,430,633	4.5	*2*22022	130	*133*. . *142*. . 4. *41*	. . .	Y	e
506	29, 36,326,585,588,590	125,*428*,638	5.5	11*1*12*1*	50*2*	. . . . . 365. . 2. . 1	. . .	*y*	nv
507	33, 39,348	129,*419*,*633*	5.5	02*1*	31*1*	. . *1*. . 335. . 2. . 1	. . .	w	e
508	25, 45,332,350,586,588,590		6.3	b02*1*1*21*	—	. . . . . F*5*. . 2*2*. . .	. . .	.	
509	26, 45,348	130,*430*,634	5.9	*2*10	11*6*	. . . . . *113*. 0*2*. *11*	. . .	*y*	n
510	31, 42,350,353,366,586,588		5.0	*2222*143-	—	. . 2. . 222. 0*1*. 0.	. . .	*y*	
511	29, 34,348	*127*,439,*629*	5.9	*3*12	*345*	. . . . . *111*. . 2*1*. *1*	. . .	.	
512	25, 39,332,350,586,588,590		3.8	0120*1*21	—	. *2*64. *43*. F*13*. *1*.	. . .	.	n
513	31, 39,320,339,585,588,590	127,*431*,629	5.2	02*43122*	4*32*	. . . . . *22*6. . 1. . 0	. . *1*	*y*	
514	29, 34, 48	*127*,419,*630*	5.5	01*2*	300	. . . . . 331. . F. . 1	. . .	w	
515	26, 33, 36,586,588,590	129,430,633	4.9	*112*201	20*1*	*572*. . *534*. 0*5*. *2*0	. . .	W	e
516	25, 26, 29, 33, 34, 36,320	118,121,123	4.8	021*2*221-	1*21*	. . . . . 223. . 5. 00	. . .	W	ns
517	42,320,342	123,*431*,*629*	5.4	02*2*	2*10*	. . 1. . 444. . *1*. . 0	. . 2	*y*	
518	39, 48,326		6.0	11*1*	—	. . . . . FF. 01F. . .	. . .	.	
519	26, 34,350,590,592,594		4.8	21*3*142	—	b*62*. . *44*. . *14*. *1*.	. . .	*y*	
520	36,326,350,595,598,600		6.0	4*11021*	—	. . . . . *22*. . 4*3*. . .	. . .	.	v
521	320,332,336	127,431,647	5.3	*1*02	3*22*	. . *1*. . 3. . 4. . 0	. . 0	*y*	de
522	33, 39, 42,320,588	127,431,647	5.0	1*1*012	6*10*	. . 1. . 66 6. . 7. . 2	. . 3	*r*	de
523	26, 34,350		6.1	2*30*	—	. . *3*. . *33*. . 20. . .	. . .	*r*	
524	29, 36, 68	127,431,631	4.8	41*4*	542	. . . . . 222. . 5. 34	. . .	*y*	
525	31, 39,332		5.7	*122*	—	. . *3*. . 113. *34*. . .	. . .	*y*	
526	29, 33, 42	129,*419*,*633*	5.9	001	*134*	. . 1. . *111*. . 2. . *1*	. . .	*y*	e
527	26, 39,342		5.8	3*11*	—	. . . . . FF. 2*11*. . .	. . .	.	
528	45,320,346	127,419,630	4.7	03*4*	440	. . . . . 335. . 2. 33	. . .	Y	
529	42,326,366	130,430,633	5.0	10*2*	*411*	. . *2*. . 002. *11*. *11*	. . .	*y*	n
530	45, 68,326		5.0	12*3*	—	. . 0. . 22. 001. 0.	. . .	*o*	
531	31, 45,332		5.7	*214*	—	. . . . . 11. . *10*. . .	. . .	.	
532	34, 48,348	123,431,629	4.8	*221*	521	. . 2. . 245. . 1. 43	. . 3	*g*	
533	39, 53,326,582,590,592		3.8	504*03*5	—	6412. *11*. 1*32*. *3*.	. . .	O	v
534	25, 45,348	*127*,*431*,631	5.6	4*22*	2*11*	. . . . . F22. . 5. . 0	. . .	O	
535	26, 48,353	129,*430*,633	5.2	21*2*	*115*	*8*b*2*. . *222*. . 5. *42*	. . .	W	ne
536	29, 42,346,366,582		5.9	*122*12	—	. . . . . F2. 1*2*F. . .	. . .	Y	t
537	326,329,366	*127*,*155*,*632*	5.2	*1*11	0*62*	. . . . . F98. . 9. . 2	.32	*y*	e
538	33,350,353	130,*430*,634	5.5	4*31*	54*1*	. . *4*. . 336. 52. 33	. . .	Y	n
539	34,320,332,339,582,591,592	129,*419*,633	5.6	454*1*011	21*4*	. . *1*. . 220. . 1. . 0	. . .	*y*	e
540	31, 34,326,350		6.3	F01*2*	—	. . . . . *55*. *3*0F. . .	. . .	.	g
541	25, 26, 29, 31, 33, 34, 37	121,125,127	1.9	3*111*104-	3*12*-	2110. 332. . 1. 22	*111*	W	e
542	42, 45, 68,369,582,590,592	129,*430*,633	5.2	155*0*100	*146*	. . 1. . 002. . 5. 04	. . .	*y*	ne
543	42, 53,346		5.8	10*2*	—	. . . . . F3. 24*1*. . .	. . .	*y*	
544	29, 48,332,371,582	127,*431*,*630*	5.6	*2*1112	10*1*	. . . . . F*22*. . 13. 0	. . .	.	
545	34, 48, 68		6.3	22*1*	—	. . . . . FF. *30*F. . .	. . .	.	
546	25, 37,366	129,*419*,*633*	5.6	34*1*	43*2*	. . 1. . 200. . *3*. . 2	. . .	*y*	e
547	31, 42,369	129,*430*,*633*	5.6	14*3*	4*16*	. . 2. . 220. . 5. . *1*	. . .	w	e
548	26, 68,329	*130*,*430*,*634*	6.2	12*2*	2*16*	. . . . . F*14*. . *11*. *2*	. . .	.	
549	320,326,366		5.9	22*0*	—	. . . . . FF4. . F. . .	.*4*.	.	
550	29, 34, 53,320,332,342,364	130,430,633	3.8	1221*0*10-	*212*	6063. *111*. *32*. *30*	.*1*.	*y*	vte

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
551	Camelopard.	—	1058	+59° 660	19.4	+59 31	5·4	5·4	4.5	—	7	4.16	.04	4.5	.07
552	Perseus . .	—	1059	+48° 920	19.6	+48 39	6	6	6.0	—	8	4.95	.04	5.2	.20
553	Camelopard.	—	1062	+58° 607	20.3	+58 28	5	5	5.0	—	3	4.79	.05	4.7	.07
554	Taurus . .	ξ 2	1068	+ 9° 439	20.7	+ 9 19	4·3	4·3	4.0	3.5	13	3.77	.04	3.8	.08
555	Perseus . .	34	1066	+49° 945	20.8	+49 7	5	5·6	5.3	—	3	4.77	.04	5.1	.21
556	Perseus . .	—	—	+33° 656	20.8	+33 23	F	6	6.0	—	5	5.49	.08	5.5	.13
557	Camelopard.	—	1065	+54° 684	20.9	+55 2	5	5	4.8	—	3	4.96	.04	5.1	.21
558	Eridanus .	—	1073	—	21.3	−27 44	F	F	—	6.1	3	6.11	.17	—	—
559	Aries . .	66	1069	+22° 495	21.4	+22 25	F	6	6.0	—	3	6.08	.11	6.2	.08
560	Perseus . .	σ 35	1071	+47° 843	22.1	+47 35	5	5·4	4.8	—	6	4.39	.07	4.6	.00
561	Eridanus .	—	—	—	22.3	−11 42	6	6	—	5.9	3	5.82	.13	—	—
562	Eridanus .	—	—	—	23.7	− 7 13	6	6	—	6.1	3	6.20	.11	—	—
563	Taurus . .	s 4	1084	+10° 452	23.8	+10 56	5	5	5.3	5.6	3	5.10	.07	5.0	.23
564	Eridanus .	—	—	—	23.9	−13 6	6	6	—	5.8	8	5.67	.07	—	—
565	Taurus . .	—	—	+27° 515	24.1	+27 9	6	6	5.7	—	4	5.76	.00	5.8	.23
566	Perseus . .	36	1083	+45° 778	24.2	+45 39	6	6	6.0	—	3	5.40	.09	5.4	.17
567	Taurus . .	f 5	1087	+12° 486	24.2	+12 31	4	4	4.0	4.3	6	4.26	.03	4.5	.08
568	Perseus . .	—	—	+44° 734	24.4	+44 26	6	6	6.5	—	3	6.04	.03	5.6	.03
569	Camelopard.	—	—	+54° 693	24.5	+54 33	F	6·7	6.0	—	3	5.69	.11	5.8	.17
570	Eridanus .	—	—	—	24.5	−12 3	F	F	—	6.8	3	6.89	.16	—	—
571	Eridanus .	17	1090	—	24.7	− 5 29	5	5·4	—	4.7	7	4.75	.07	—	—
572	Perseus . .	—	—	+34° 674	25.0	+35 3	6	6	6.0	—	3	5.70	.05	5.5	.16
573	Perseus . .	—	—	+39° 811	25.7	+39 30	F	6	6.0	—	3	5.77	.04	5.9	.05
574	Taurus . .	t 6	1092	+ 8° 528	26.1	+ 8 58	6	6	6.2	6.0	5	5.48	.12	5.4	.23
575	Cepheus .	—	1061	+86° 51	27.3	+86 16	6	6·5	6.0	—	3	5.77	.08	5.9	.11
576	Eridanus .	ε 18	1100	—	27.3	− 9 52	3	3	—	3.6	7	3.66	.04	—	—
577	Taurus . .	7	1095	+23° 473	27.4	+24 3	6	6	6.2	—	3	5.89	.11	5.8	.07
578	Perseus . .	ψ 37	1099	+47° 857	28.0	+47 48	5	5	5.3	—	8	4.24	.04	4.5	.03
579	Eridanus .	τ^5 19	1104	—	28.5	−22 2	4	4	—	4.5	3	4.21	.09	—	—
580	Eridanus .	—	—	—	30.3	−11 36	6	6	—	5.8	3	5.79	.12	—	—
581	Taurus . .	10	1112	− 0° 572	30.8	+ 0 2	4·5	4·5	4.2	4.5	3	4.35	.15	4.6	.08
582	Eridanus .	20	1115	—	30.8	−17 52	5	5	—	5.3	6	5.30	.07	—	—
583	Camelopard.	—	1111	+62° 597	31.8	+62 50	6	6	5.0	—	15	5.25	.02	5.3	.08
584	Taurus . .	—	—	+20° 602	32.0	+20 31	F	6·7	6.0	—	3	6.15	.08	6.6	.04
585	Eridanus .	—	—	—	32.6	− 7 47	6	6	—	6.1	3	5.93	.00	—	—
586	Taurus . .	—	1119	+16° 484	32.7	+16 9	6	6	6.0	—	3	6.41	.13	6.1	.13
587	Camelopard.	—	1117	+59° 699	32.8	+59 35	F	6·7	6.0	—	3	5.93	.09	5.9	.15
588	Perseus . .	—	1123	+37° 811	33.4	+37 12	6	6	5.7	—	7	5.91	.10	5.6	.04
589	Taurus . .	12	1128	+ 2° 581	33.6	+ 2 41	6	6	5.8	6.1	3	5.90	.00	5.8	.11
590	Eridanus .	—	—	—	33.6	− 3 47	6	6	—	6.6	4	6.54	.06	—	—
591	Perseus . .	δ 39	1129	+47° 876	34.4	+47 24	3	3·4	3.5	—	14	3.18	.04	3.3	.11
592	Camelopard.	—	1127	+66° 284	34.7	+66 50	6	6	6.2	—	3	5.82	.03	5.5	.12
593	Eridanus .	22	1134	—	34.7	− 5 36	6	6	—	5.8	3	5.45	.08	—	—
594	Perseus . .	o 40	1132	+33° 698	34.8	+33 34	5	5	4.8	—	7	5.01	.05	5.1	.19
595	Taurus . .	13	1135	+19° 578	35.4	+19 19	6·5	6·5	5.5	—	3	5.35	.08	5.4	.09
596	Camelopard.	—	1133	+62° 604	35.6	+62 58	6·5	6·5	5.3	—	13	4.98	.03	4.9	.11
597	Perseus . .	—	—	+45° 804	36.2	+45 44	6	6·7	6.5	—	3	6.14	.05	5.8	.07
598	Camelopard.	—	—	+70° 257	36.7	+70 30	5	5	5.7	—	3	5.31	.11	5.4	.11
599	Perseus . .	—	—	+36° 742	36.8	+36 5	6	6	5.5	—	7	5.63	.07	5.6	.05
600	Perseus . .	o 38	1138	+31° 642	36.8	+31 54	4	4	3.8	—	13	4.01	.02	4.1	.08

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
551	25, 34, 53, 68,585,590,592	127,425,631	4.2	1F03120	314	. . . . 8 4 4 3 . . 2 . 4 3	. . .	Y	d
552	37, 42,320,339,366,585,590	*127,431*,630	5.0	4203011-	732	. . . . . 8 8 8 . . 7 . . 2	.12	w	
553	48,369,371	127,425,631	4.8	111	031	. . . . . 2 2 2 . . 1 . 0 1	. . .	y	
554	42,320,332,339,346,364,371	130,430,633	3.8	0136202-	202	6 0 1 2 . 113 . 22 . 20	.0.	g	e
555	45, 53,320	127,425,630	4.8	101	800	. . 0 . . 2 4 4 . . 9 . . 3	.52	y	
556	68,329,342,369,585	127,*431,630*	5.5	42003	223	. . . . . F 3 3 . . 2 4 . 0	. . .	.	
557	45,342,366	127,425,631	5.0	110	640	. . . . 0 0 0 2 . . 3 . 0 1	. . .	W	d
558	48,339,369		6.1	414	—	. . . . . F F . 124 . . .	. . .	.	dc
559	48, 68,369	129,*419,636*	6.1	311	131	. . 1 . . F 33 . . 0 . . 1	. . .	y	e
560	37,366,585,588,594,602	127,425,630	4.4	213113	222	0 2 0 . . 6 2 4 . . 5 . 2 2	. . 0	O	t
561	34, 42,329		5.8	322	—	. . . . . 0 0 . . 13 . . .	. . .	.	t
562	26, 48,350		6.2	113	—	. . . . . 44 . . 31 . . .	. . .	.	
563	29, 42, 50	130,630,633	5.1	120	552	7 9 1 . . 111 . 22 . 11	. . .	w	e
564	34,329,350,369,371,585,588		5.7	9632121-	—	. . . . . 11 . . 10 . . .	. . .	.	
565	45, 48,342,369	127,419,*630*	5.8	F000	641	. . . . 2 0 0 2 . . 5 . . 0	. . .	.	d
566	53,346,621	127,431,630	5.4	001	423	. . 3 . . 4 4 4 . . 3 . . 0	. . 1	y	
567	42, 50,346,590,592,594	130,630,633	4.3	111001	114	1 1 2 . . 222 . 01 . 32	. . .	y	e
568	37,342,369	127,*431,630*	6.0	010	454	. . . . . 223 . . F . . 4	. . 5	.	
569	31,339,366	127,*431*,631	5.7	113	523	. . . . . F 4 1 . . 42 . 1	. . .	.	
570	329,350,369		6.9	413	—	. . . . . F F . . 3 F . . .	. . .	.	
571	29, 48,346,360,590,592,594		4.8	2401421	—	. . 2 . . 22 . . 21 . 2 .	. . .	w	
572	25, 50,346	127,*431,630*	5.7	111	006	. . . . . 111 . . 43 . 2	. . .	.	
573	26, 33, 53	127,*431,630*	5.8	101	020	. . . . . F 0 0 . . 1 . . 1	. . .	.	
574	25, 48,339,360,590	130,*431*,636	5.5	26213	552	. . 1 . . 3 3 5 . 36 . 11	. . .	w	
575	29, 37, 53	125,*424*,638	5.8	121	411	. . . . . 0 2 0 . . 3 . . 1	. . .	y	n
576	26, 33, 68,369,588,592,594		3.7	02b2300	—	4123 . 55 . . 02 . 0 .	. . .	y	
577	31, 42, 50	129,*419,636*	5.9	230	121	. . 1 . . 111 . . 2 . . 1	. . .	w	e
578	25, 48, 77,369,588,592,594	127,425,630	4.2	22301f1-	433	2 0 0 . . 8 8 0 . . 7 . 4 3	.32	y	
579	26, 33, 45		4.2	221	—	2 0 2 0 . 11 . 122 . 2 .	. . .	w	
580	31, 40, 50		5.8	330	—	. . . . . 0 0 . . 23 . . .	. . .	.	v
581	33, 50, 68	130,431,634	4.4	403	033	0 2 2 4 . 0 0 1 . 0 0 . 0 2	. . .	y	
582	45, 53, 77,592,594,603		5.3	112331	—	. . 1 . . 33 . . 30 . 3 .	. . .	w	
583	29,350,395,397,399,400,401	*118,121,123*	5.2	1002003-	410	. . . . . 6 6 2 . . 5 . . 1	. . .	o	ts
584	40,339,360	129,*419,636*	6.2	112	3F4	. . . . . F 14 . . F 1 . 4	. . .	.	e
585	342,362,371		5.9	000	—	. . . . . 11 . . 0 2 . . .	. . .	.	
586	45,342,350	129,*431,636*	6.4	322	046	. . . . . 666 . . 3 . . 3	. . .	.	e
587	26, 77,339	*127,439,631*	5.9	212	403	. . . . . F 2 1 . . F 3 . 0	. . .	O	
588	25, 53,346,366,591,592,594	127,*431*,630	5.9	8232402	243	. . . . . 113 . . 6 . . 3	. . .	w	
589	29, 68,360	130,431,634	5.9	000	213	. . 2 . . 113 . 02 . . 1	. . .	y	
590	48, 50,621,623		6.5	1211	—	. . . . . 77 . . 1 F . . .	. . .	.	
591	26, 42, 77,329,346,362,364	127,431,630	3.2	221212-2-	131	1 0 4 0 . 0 3 5 . . 3 . 4 1	2 0 0	W	v
592	40, 53,350	127,*431*,631	5.8	001	126	. . . . . 0 0 2 . . 1 . . 3	. . .	w	
593	50,342,350		5.4	121	—	. . 2 . . 44 . . 23 . . .	. . .	w	v
594	31, 56,339,366,583,592,594	127,439,630	5.0	1701101	611	. . 1 . 4 0 0 2 . . 3 . 4 1	.8.	y	dc
595	43, 50,353	129,*419*,636	5.4	220	212	. . 7 . . 0 2 0 . . 3 . . 0	. . .	w	e
596	26, 29, 31, 40, 42, 48, 50	*127,431*,631	5.0	1012212-	400	. . . . . 4 6 2 . . 3 . . 1	. . .	y	
597	26, 37,353	*127,439*,630	6.1	111	523	. . . . . 3 0 2 . . F . . 3	. . 1	.	
598	40, 65,320	*125,424*,638	5.3	302	004	. . . . . 3 3 3 . . 4 3 3 1	. . .	.	
599	25, 50,346,366,585,592,594	127,*431*,630	5.6	5241111	111	. . . . . 222 . . 1 . . 0	. . .	.	
600	26,329,346,362,376,379,385	127,439,630	4.0	0111011-	121	2 4 4 . . 111 . . 4 . 21	.0.	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
601	Taurus . .	14	1140	+19° 582	36.8	+19 17	F	6·7	6.0	—	3	6.42	.05	5.9	.09
602	Perseus . .	ν 41	1139	+42° 815	37.0	+42 12	4	4	4.1	—	13	4.00	.05	4.1	.07
603	Taurus . .	—	1143	+20° 621	37.4	+20 33	6	6	6.2	—	3	5.85	.08	5.6	.15
604	Eridanus .	δ 23	1148	—	37.5	−10 10	3	3	—	3.3	7	3.68	.07	—	—
605	Eridanus .	—	1150	—	37.5	−32 19	5	5	—	4.9	3	4.77	.08	—	—
606	Perseus . .	—	1142	+45° 811	37.6	+45 18	6	6	6.2	—	3	5.64	.09	5.6	.15
607	Camelopard.	—	1137	+70° 259	37.7	+70 58	4·5	4·5	4.3	—	17	4.65	.03	4.7	.05
608	Taurus . .	17	1147	+23° 507	37.8	+23 44	4	4·5	4.7	—	10	3.82	.06	4.6	.13
609	Eridanus .	—	1152	—	37.8	−10 52	6	6	—	5.9	3	5.57	.11	—	—
610	Taurus . .	q 19	1151	+24° 547	38.1	+24 5	5	5	5.0	—	9	4.44	.06	5.1	.19
611	Eridanus .	24	1153	− 1° 526	38.4	− 1 33	6	6·5	5.8	5.4	6	5.09	.06	—	—
612	Camelopard.	—	1144	+65° 369	38.5	+65 9	5	5	4.5	—	18	4.61	.03	4.7	.08
613	Taurus . .	20	1154	+23° 516	38.7	+24 0	5	5	4.8	—	9	3.98	.03	4.8	.17
614	Eridanus .	25	1158	− 0° 593	38.8	− 0 40	F	6·7	6.2	5.9	5	5.70	.06	—	—
615	Taurus . .	23	1161	+23° 522	39.2	+23 34	5	5·4	4.5	—	9	4.22	.05	5.0	.16
616	Taurus . .	u 29	1162	+ 5° 539	39.3	+ 5 40	6·5	6·5	5.7	5.7	3	5.68	.19	5.5	.20
617	Perseus . .	—	—	+50° 825	39.5	+50 21	F	6·7	6.0	—	4	5.72	.15	5.9	.24
618	Taurus . .	η 25	1166	+23° 541	40.4	+23 44	3	3	3.2	—	8	3.00	.04	3.7	.13
619	Eridanus .	π 26	1168	—	40.5	−12 29	5·4	5·4	—	4.7	3	4.39	.00	—	—
620	Perseus . .	—	—	+43° 818	40.8	+43 35	6	6	6.2	—	3	5.97	.04	5.5	.09
621	Eridanus .	—	1179	—	41.6	−29 43	F	F	—	5.7	7	5.82	.06	—	—
622	Taurus . .	e 30	1174	+10° 486	41.7	+10 46	5	5	5.2	5.3	3	5.13	.08	5.3	—
623	Eridanus .	τ^6 27	1181	—	41.7	−23 36	4	4	—	3.9	7	4.30	.09	—	—
624	Perseus . .	—	1172	+44° 801	41.8	+44 35	6	6	5.8	—	3	5.87	.08	5.5	.17
625	Taurus . .	27	1176	+23° 557	42.0	+23 41	4	4	4.0	—	8	3.77	.04	4.5	.13
626	Perseus . .	n 42	1175	+32° 667	42.1	+32 43	6·5	6·5	5.8	—	3	5.20	.11	5.2	.15
627	Eridanus .	τ^7 28	1191	—	42.5	−24 15	5	5	—	5.5	3	4.82	.11	—	—
628	Taurus . .	—	1189	+21° 535	42.9	+21 53	F	6	6.5	—	3	5.98	.03	5.8	.09
629	Taurus . .	—	1192	+25° 624	43.1	+25 14	6	6	6.0	—	7	5.49	.06	5.6	—
630	Eridanus .	—	1194	—	43.1	−30 32	5	5	—	5.6	6	5.70	.10	—	—
631	Camelopard.	—	—	+57° 752	44.0	+57 36	F	6·7	6.0	—	3	5.79	.13	5.9	.24
632	Perseus . .	—	—	+33° 728	44.3	+34 0	6	6·7	6.5	—	3	5.70	.13	5.8	.15
633	Taurus . .	—	—	+21° 539	44.5	+21 41	6	F	7.2	—	3	5.68	.11	—	—
634	Taurus . .	—	—	+12° 516	44.6	+12 41	6	6	7.0	6.4	3	6.03	.16	6.1	—
635	Taurus . .	31	1202	+ 6° 594	45.6	+ 6 11	6	6	6.1	5.9	3	5.68	.11	5.7	.19
636	Taurus . .	—	1206	+16° 523	46.3	+16 59	6	6	6.1	—	3	6.04	.08	5.8	.08
637	Perseus . .	—	—	+51° 803	46.6	+51 52	F	F	6.5	—	3	6.60	.07	—	—
638	Perseus . .	ζ 44	1207	+31° 666	46.6	+31 32	3	3	3.0	—	13	3.10	.05	3.5	.13
639	Camelopard.	—	1203	+62° 628	46.8	+62 43	6·5	6	5.2	—	3	4.75	.08	4.8	.07
640	Eridanus .	30	1212	—	46.8	− 5 43	6·5	6·5	—	5.7	6	5.43	.02	—	—
641	Camelopard.	—	1204	+60° 768	46.9	+60 45	6	6	5.8	—	6	5.09	.08	5.4	.15
642	Perseus . .	—	1210	+47° 912	47.3	+47 32	6·5	6·5	6.0	—	3	5.40	.11	5.5	.17
643	Perseus . .	A 43	1214	+50° 860	47.7	+50 21	5·6	5·6	5.7	—	7	5.46	.08	5.3	.24
644	Eridanus .				48.3	− 3 19									
645	Eridanus .	32	1216	—	48.3	− 3 19	5	5	—	4.7	3	4.79	.13	—	—
646	Eridanus .	τ^8 33	1217	—	48.6	−24 58	4	4·5	—	4.4	3	4.70	.09	—	—
647	Perseus . .	—	—	+34° 768	48.7	+34 44	6	6	6.2	—	7	5.47	.03	5.5	.20
648	Taurus . .	32	1221	+22° 605	49.7	+22 08	6	6	6.0	—	6	5.72	.05	5.5	.19
649	Perseus . .	ε 45	1219	+39° 895	49.8	+39 40	3·4	3·4	3.2	—	14	3.04	.05	3.3	.16
650	Cepheus .	—	1211	+80° 125	50.0	+80 22	5·6	5·6	4.9	—	3	5.23	.15	5.1	.07

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S Hh Σ U *H* D B G *h* R F E	s w p		
601	42, 77,360	129,*419,636*	6.4	111	*437*	. . 7 . . F *3 6* . . F . . *5*	. . .	.	e
602	26, 40,350,371,376,379,385	127,425,630	4.0	1432111-	211	*2 2 1* . . 1 1 2 . . 4 . 1 1	*. 1 2*	*y*	
603	29, 68,362	129,*419*,636	5.8	220	234	. . . . . 0 0 2 . . 3 . . *2*	. . .	.	e
604	50,339,353,366,585,587,594		3.7	*3611012*	—	*4* 0 0 2 . *5 5* . . *3 2* . *3* .	. . .	*y*	t
605	342,350,362		4.8	022	—	. . . . . 2 2 . *7 1* 1 . *1* .	. . .	.	
606	53,353,623	*127*,439,630	5.6	112	014	. . . . . 2 2 4 . . 5 . . 0	. . 2	w	
607	31, 37, 43, 68,320,326,342	*118,121,127*	4.6	1331041-	201	. . . . . *2 2 3* . . 3 . 4 1	. . .	W	ns
608	27, 65, 72,356,373,379,382	130,419,636	3.8	b112341-	951	. . 1 . . 3 6 9 . . 2 . 6 8	. . .	W	m
609	50, 77,339		5.6	032	—	. . . . . 2 2 . . 1 F . . .	. . .	*r*	
610	27, 72,356,373,379,382,589	130,419,636	4.4	131313*0*-	929	6 5 *2* . . 6 6 6 . . 0 . . 7	. . .	*y*	nam
611	42,371,376,592,594,603		5.1	*31*1211	—	. . 2 . . 7 5 5 . 0 *2* . . .	. . .	w	v
612	26, 29, 37, 40, 56, 59, 77	118,121,153	4.6	*115151*2-	122	. . . . . 4 4 *1* . . 7 . **0** 1	. . .	*o*	ts
613	27, 72,356,373,379,382,589	130,419,636	4.0	*1102012*-	**0**41	. . 0 . . **0 0** 8 . . 0 . 8 8	. . .	*y*	m
614	68,326,353,371,587		5.7	12121	—	. . *3* . . F 4 3 . 0 0 . . .	. . .	.	
615	27, 72,356,373,379,382,589	130,419,636	4.2	*122314*1-	149	8 7 3 . . 8 4 3 . . 2 . . 8	. . .	*y*	am
616	37, 56,360	130,431,634	5.7	045	*363*	. . *6* . . *3 1 1* . *3 4* . *3 2*	. . .	w	n
617	29, 42,342,371	*127*,439,*630*	5.7	4233	*811*	. . . . . F 4 1 . . 4 . . 2	. . .	.	
618	27, 72,373,379,382,583,591	130,419,636	3.0	1223000-	64**0**	. . 2 0 1 2 2 4 . . 5 . 1 7	*1* . .	*g*	dhm
619	37, 53,353		4.4	000	—	0 *2* 0 . . 2 2 . . 2 0 . 2 .	. . .	*o*	t
620	31, 40,362	*127*,439,630	6.0	*1*01	*437*	. . . . . *2 2* 0 . . 1 . . *5*	. . 1	.	
621	29, 65,346,366,583,585,594		5.8	70*21201*	—	. . . . . F F . *8 4 5* . . .	. . .	.	
622	40, 59, 77	130,432,634	5.1	*2*11	911	*1 2 1* . *3 1 1* 1 . *1 2* . *3 2*	. . .	*g*	d
623	32, 37, 56,371,583,585,594		4.3	*327213*1	—	1 *1 1* 0 . *2 2* . *4 3* 1 . *4* .	. . .	*y*	
624	68,353,362	*127*,439,630	5.9	112	*128*	. . . . . *1 1 3* . . 2 . . *4*	. . 1	*y*	
625	27, 72,373,379,382,583,591	130,419,436	3.8	011*2*102-	949	**2 1** *2* . **3** 3 3 3 . . 2 . 7 7	. . .	*y*	dam
626	43, 59, 65	127,439,630	5.2	*2*30	41*2*	. . 0 . . 2 4 4 . . 1 . 9 0	. . .	w	
627	37,326,360		4.8	*2*03	—	2 2 0 . . 2 2 . *4* 4 1 . 4 .	. . .	*w*	
628	29, 40, 65	129,*419*,636	6.0	001	014	. . . . . F *2* 3 . . F . . *2*	. . .	.	ne
629	32, 77,353,366,587,593,595	*127*,439,630	5.5	70*21011*	**0**21	**b b** . . . 3 3 3 . . 2 . . 1	. . .	W	ea
630	68,346,362,595,598,600		5.7	5*24320*	—	. . . . . *7 7* . b *4 4* . *4* .	. . .	.	vtg
631	37, 53, 68	*127*,439,631	5.8	*223*	7*22*	. . . . . F 3 0 . . 3 . . 1	. . .	.	
632	29, 43, 65	*127*,439,*630*	5.7	2*32*	5*10*	. . . . . 1 4 6 . . 4 . . 1	. . .	.	
633	339,350,362		5.7	*2*03	—	. . . . . 1 F **3** . . F . . .	. . .	.	n
634	32, 40, 59	*130,432*,634	6.0	22*4*	42**b**	. . . . . *2 2* 8 . 2 F . . 1	. . .	.	e
635	37, 53, 65	*130*,431,634	5.7	*3*11	5*22*	. *4 2* . . 1 1 2 . 0 0 . . 0	. . .	*y*	n
636	32, 43, 56	*130*,432,*636*	6.0	*2*20	0*24*	. . . . . *2 2 1* . . 1 . . *2*	. . .	.	
637	29, 50, 77		6.6	02*1*	—	. . . . . F F *3* . . F . . .	. . .	.	c
638	50, 68, 77,320,326,339,342	127,439,630	3.1	01325*21*-	517	7 5 *1* 0 *1* 1 1 1 . . 9 . 0 4	*1 1* .	*y*	d
639	50,342,350	127,*431*,638	4.8	112	*2*10	. . . . . 6 **0** 4 . . 5 . . 0	. . .	*y*	
640	53, 68,339,587,594,595		5.4	0*1*10*1*0	—	. . *2* . . 0 2 . . 0 *1* . . .	. . .	w	d
641	37, 56, 65,585,587,594	*127,431*,638	5.1	*232212*	5*14*	. . . . . 7 7 5 . . 6 . 3 3	. . .	Y	t
642	32, 50, 77	127,439,630	5.4	*113*	5*21*	. . . . . 0 2 4 . . 3 . . 1	. . 2	w	
643	40, 56,346,360,585,587,594	127,425,630	5.5	80*21222*	47*3*	. . *3* . . *3 3* 1 . . 2 . 2 *2*	. . *1*	w	
644	29, 43, 53		*6.5*	133	—	. . *1* . *5* 22 . . *21* . *2* .	. . .	*y*	d
645			*5.1*		—	. . . *7*	. . .	.	d
646	37, 59, 65		4.7	122	—	*3513* . *63* . *833* . *4* .	. . .	*y*	
647	32, 40, 59,366,585,594,595	*127*,439,630	5.5	0010102	325	. . . . . 3 3 5 . . 6 . . 0	. . .	w	
648	37, 56,342,346,360,585	130,*419*,636	5.7	11*131*1	3*35*	. . 0 . . 1 1 1 . . 4 . . *2*	. . .	*y*	
649	29, 40, 56,65,320,326,339	127,425,630	3.0	042005**b**-	43*2*	3 2 *4* 1 5 4 5 4 . . 5 . 4 3	*1* 0 0	W	dv
650	35, 50, 59	125,424,638	5.2	*214*	*130*	. . . . *2* 0 0 *3* . . 5 . . *1*	. . .	*y*	nd

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3h—4h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
651	Taurus . .	—	1226	+ 5° 564	50.7	+ 5 41	6	6	7.0	6.4	3	5.88	.19	5.9	.19
652	Perseus . .	ξ 46	1228	+35° 775	51.2	+35 27	4	4	4.2	—	7	4.06	.05	4.3	.04
653	Eridanus .	γ 34	1234	—	52.4	−13 51	3	3	—	2.8	10	3.05	.07	—	—
654	Eridanus .	—	—	—	52.9	− 5 49	6	6	—	6.2	3	5.81	.07	—	—
655	Taurus . .	—	1240	+17° 666	53.9	+17 52	6	6	6.0	—	3	5.68	.11	5.8	.08
656	Camelopard.	—	—	+68° 303	54.0	+68 20	F	6	6.0	—	7	6.14	.04	6.0	.24
657	Taurus . .	λ 35	1241	+12° 539	54.0	+12 9	3·4	var.	var.	—	12	3.59	.04	3.9	.11
658	Taurus . .	—	1242	+19° 643	54.1	+19 51	6	6·7	7.0	—	3	6.55	.12	F	—
659	Camelopard.	—	1237	+58° 690	54.6	+58 49	6·5	6·5	5.0	—	4	4.94	.06	5.2	.11
660	Eridanus .	τ^9 36	1243	—	54.8	−24 21	4	4	—	4.4	3	4.62	.07	—	—
661	Taurus . .	—	1244	+ 9° 528	55.2	+ 9 39	6	6	5.8	5.9	3	5.89	.13	6.0	.21
662	Eridanus .	35	1245	− 1° 572	55.5	− 1 53	5·6	5·6	5.5	5.3	5	5.21	.07	—	—
663	Eridanus .	—	1250	—	55.9	−30 50	F	F	—	5.9	3	5.82	.07	—	—
664	Eridanus .	—	—	− 0° 632	56.5	− 0 36	6	6	6.2	5.6	5	5.50	.09	—	—
665	Taurus . .	ν 38	1251	+ 5° 581	56.8	+ 5 39	4	4	4.0	3.9	13	3.99	.03	4.4	.00
666	Taurus . .	36	1253	+23° 609	57.2	+23 47	6	6	6.0	—	7	5.65	.08	5.7	.19
667	Camelopard.	—	—	+53° 732	57.3	+53 41	F	F	6.0	—	3	6.54	.09	—	—
668	Taurus . .	40	1256	+ 5° 584	57.4	+ 5 6	6	6	6.2	5.4	7	5.31	.04	5.6	.23
669	Taurus . .	—	—	+ 7° 592	57.5	+ 7 52	6	6	5.9	5.9	3	5.55	.03	5.8	.17
670	Taurus . .	A 37	1257	+21° 585	57.6	+21 45	5·4	5·4	5.0	—	6	4.45	.04	4.7	.13
671	Perseus . .	λ 47	1254	+49° 1101	57.7	+50 1	4·5	4·5	4.2	—	3	4.54	.09	4.6	.05
672	Taurus . .	—	—	+ 2° 645	57.9	+ 2 30	6	6	5.8	5.9	3	5.49	.08	5.7	.21
673	Camelopard.	—	—	—	58.0	+62 0	cum.	cum.	cum.	—	3	6.15	.04	5.5	.12
674	Eridanus .	—	—	—	58.1	−20 29	6	6	—	6.0	6	6.25	.04	—	—
675	Eridanus .	—	—	—	58.3	−20 29			—	6.9	—	—	—	—	—
676	Eridanus .	—	—	—	58.5	−13 8	F	6	—	6.0	5	5.60	.06	—	—
677	Taurus . .	41	1262	+27° 633	59.2	+27 18	6·5	5·6	5.1	—	3	5.43	.11	5.1	.19
678	Cepheus .	—	1235	+85° 63	59.4	+85 14	F	6·7	6.5	—	6	6.68	.09	—	—
679	Perseus . .	—	—	+52° 771	59.4	+53 2	F	F	7.1	—	5	6.54	.05	—	—
680	Taurus . .	ψ 42	1265	+28° 619	59.6	+28 41	6	6·5	5.4	—	7	5.17	.08	5.2	.15
681	Camelopard.	—	—	+54° 740	59.9	+54 30	F	F	6.0	—	3	6.49	.19	—	—
682	Perseus . .	c 48	1266	+47° 939	0.0	+47 23	4	4	4.5	—	6	4.32	.09	4.6	.11
683	Perseus . .	49	1268	+37° 881	0.3	+37 25	F	F	6.0	—	3	6.24	.03	—	—
684	Cepheus .	—	1247	+83° 113	0.4	+83 31	6	6·5	5.0	—	3	5.36	.03	5.7	.11
685	Camelopard.	—	—	+71° 239	0.4	+71 48	6	6	6.3	—	3	6.16	.03	6.1	.12
686	Perseus . .	50	1269	+37° 882	0.6	+37 44	6	6	5.5	—	8	5.66	.10	5.7	.07
687	Eridanus .	—	1273	—	0.7	−27 59	5	5·6	—	5.8	7	5.46	.03	—	—
688	Camelopard.	—	—	+68° 310	0.9	+68 12	F	6	6.5	—	7	6.38	.07	6.1	.20
689	Taurus . .	—	1272	+16° 560	1.1	+17 1	F	6	5.6	—	3	6.31	.05	5.8	.07
690	Eridanus .	—	—	—	1.2	−18 23	F	F	—	7.0	6	6.74	.03	—	—
691	Taurus . .	43	1274	+19° 672	2.1	+19 17	6	6	6.2	—	3	5.82	.11	5.8	.08
692	Perseus . .	—	—	+33° 807	3.3	+33 16	6	6	6.2	—	3	5.97	.08	6.0	.09
693	Taurus . .	p 44	1279	+26° 686	3.5	+26 9	6	6	5.8	—	4	5.63	.11	5.4	.11
694	Cepheus .	—	1263	+82° 113	3.8	+83 3	6	6·5	5.0	—	3	5.76	.05	5.8	.11
695	Eridanus .	—	—	—	3.8	−16 42	6	6	—	5.5	7	5.38	.02	—	—
696	Eridanus .	37	1284	—	4.5	− 7 13	F	6	—	5.9	7	5.76	.08	—	—
697	Taurus . .	45	1285	+ 5° 601	4.9	+ 5 13	6	6	6.0	6.2	3	5.68	.05	5.9	.12
698	Eridanus .	—	—	—	5.0	− 9 8	F	6·7	—	6.0	3	5.85	.03	—	—
699	Taurus . .	—	—	+16° 569	5.6	+16 59	F	6·7	6.0	—	3	6.44	.04	6.2	.17
700	Taurus . .	—	1289	+22° 649	5.7	+22 7	F	F	6.0	—	3	6.22	.07	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
651	35, 43, 53,	*130*,431,634	5.9	252	522	. 6 . . . 119 . 32 . . 0	. . .	.	
652	29, 37, 50, 59,591,593,595	127,439,630	4.1	4104110	321	310 . . 002 . . 3 . 12	. 1 .	*y*	
653	32, 40, 56,587,593,594,595		3.0	0138220-	—	3616 . 22 . . 15 . 1 .	. . .	Y	t
654	29, 43, 53		5.8	120	—	. . . . . 00 . . 23 . . .	. . .	.	
655	32, 46, 59	*130*,432,*636*	5.7	023	311	. . . . . 111 . . 0 . . 1	. . .	w	
656	35, 50, 56,366,593,594,598	*127,431,638*	6.1	2121101	371	. . . . . F 33 . . F 2 . 1	. . .	.	
657	37, 53, 77,320,326,339,350	130,432,634	3.6	0101361-	613	341 . . 2 v v . . 4 . . 3	22 .	W	v
658	50, 77,339	*130,432,636*	6.6	123	F1F	. . . . . 852 . . F . . F	. . .	.	
659	29, 46,342,631	*127,431*,638	4.9	2111	305	. . . . . 571 . . 4 . . 3	. . .	*y*	
660	43, 56, 65		4.6	120	—	2412 . 55 . 722 . 3 .	. . .	w	
661	37, 50, 59	*130*,432,634	5.9	331	613	. . . . . 113 . 220 . 1	. . .	.	t
662	32, 40, 53,631,632		5.2	32300	—	. . 2 . . 002 . 21 . 2 .	. . .	w	v
663	350,353,360		5.8	210	—	. . . . . FF . 219 . . .	. . .	.	
664	29, 37, 53,631,632		5.5	13232	—	. . . . . 335 . 22 . . .	. . .	*y*	v
665	35, 43, 56, 65,320,326,350	130,432,634	4.0	9021020-	444	4210 . 111 . 04 . 14	. . .	*y*	
666	32, 46, 77,366,585,593,595	130,432,636	5.6	3561011	424	. . 3 . . 222 . . 1 . . 1	. . .	Y	
667	77,362,621		6.5	414	—	. . . . . FF 7 . . F . . .	. . .	.	
668	35, 56, 65,326,585,593,595	*130,432*,636	5.3	f121011	921	. 03 . . 557 . 24 . 23	. . .	w	
669	43, 50,353	*130*,432,634	5.6	100	632	. . . . . 221 . 11 . . 2	. . .	*r*	
670	43, 59,353,585,595,598	130,432,636	4.4	033000	026	655 . . 226 . . 5 . 33	. . .	Y	na
671	37, 62, 68	127,155,638	4.5	212	020	130 . . 112 . . 6 . 01	. 10	w	
672	29, 46,360	*130*,432,634	5.5	121	702	. . . . . 331 . 221 . 2	. . .	w	
673	326,350,366	*127*,431,638	6.2	011	5b6	. . . . . CCC . . F . . 7	. . .	.	
674	37, 53,342,350,360,585		6.2	011410	—	. . . . . 00 . 2 4 . . .	. . .	.	dp
675			7.2		—	. . . . . 5 F . . .	. . .	.	dp
676	46, 65,353,631,632		5.6	12121	—	. . . . . F 2 . . 21 . . .	. . .	.	v
677	40, 62, 77	127,439,630	5.4	032	255	. 40 . . 023 . . 5 . 33	. . .	w	
678	405,416,419,591,595,598		6.7	223133	—	. . . . . F 64 . . F . . .	. . .	.	n
679	35, 59, 62, 68,371		6.5	1FF11	—	. . . . . FF 4 . . F . . .	. . .	.	c
680	46, 56,360,366,591,595,598	127,439,630	5.2	8141021	421	230 . . 641 . . 3 . 10	. . .	*y*	
681	35, 50,353		6.5	504	—	. . . . . FF 7 . . F 5 . .	. . .	.	
682	49,342,376,583,589,600	127,425,638	4.3	710241	163	113 . . 222 . . 6 . 03	. 20	W	
683	43, 56, 65		6.2	001	—	. . 3 . . FF 4 . . 5 . . .	. . .	*y*	
684	49,350,376	*125,424*,638	5.4	100	613	. . . . . 424 . . 36 . 3	. . .	w	n
685	46,353,379	*125,424*,638	6.2	010	214	. . . . . 441 . . F . . 1	. . .	.	
686	43, 56,388,394,395,583,589	*127*,440,638	5.7	8524221-	102	. . 1 . . 113 . . F . . 0	. . .	*y*	p
687	40, 62,358,360,583,591,603		5.5	5012020	—	. . . . . 53 . 012 . 1 .	. . .	.	
688	43, 53,368,391,583,596,600	*127,431,638*	6.4	6340002	081	. . . . . F 61 . . F . . 3	. . .	.	
689	32, 40, 59	*130*,432,*636*	6.3	111	356	. . . . . F 58 . . 2 . . 5	. . .	*y*	
690	591,593,596,599,602,603		6.7	000031	—	. . . . . FF . . 1 F . . .	. . .	.	
691	37, 50,368	*130*,432,*636*	5.8	032	202	. . 4 . . 002 . . 1 . 40	. . .	*y*	n
692	32, 59,358	*127*,440,*638*	6.0	121	212	. . . . . 220 . . 1 . . 0	. . .	.	
693	40, 43,350,388	130,432,639	5.6	F203	025	672 . . 220 . . 3 . 22	. . .	*y*	
694	37, 59,376	*125,424*,638	5.8	111	230	. . . . . 028 . . 32 . 0	. . .	*y*	n
695	46, 65,360,368,589,591,603		5.4	4001110	—	. . . . . 44 . . 21 . . .	. . .	.	
696	40, 49,350,379,587,589,600		5.8	8041021	—	. . b . . F 0 . . 15 . . .	. . .	*y*	t
697	32,350,385	*130*,433,639	5.7	111	510	. . 2 . . 111 . 34 . . 2	. . .	*y*	
698	342,353,376		5.8	001	—	. . . . . F 3 . . 03 . . .	. . .	.	t
699	37, 65,385	*130*,432,639	6.4	101	160	. . . . . F 36 . . F 4 . 2	. . .	.	
700	43, 62,385		6.2	120	—	. . . . . FF 4 . . F . . .	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
701	Eridanus .	o^1 38	1290	—	6.0	− 7 9	4·5	4·5	—	4.0	6	4.10	.05	—	—
702	Perseus . .	μ 51	1287	+48° 1063	6.1	+48 6	4·5	4·3	4.2	—	7	4.23	.09	4.5	.04
703	Perseus . .	—	—	+37° 897	6.1	+37 39	F	6·7	6.0	—	7	6.37	.11	6.3	.07
704	Cepheus .	—	1276	+80° 133	6.2	+80 32	6	6	5.7	—	3	5.67	.09	5.7	.12
705	Camelopard.	—	1286	+61° 687	6.4	+61 33	6	6·5	5.5	—	20	5.62	.02	5.5	.08
706	Eridanus .	—	—	—	6.4	−20 40	6	6	—	5.6	7	5.57	.03	—	—
707	Perseus . .	f 52	1291	+40° 912	6.7	+40 11	5	5	4.8	—	3	4.94	.03	4.8	.07
708	Taurus . .	46	1296	+ 7° 617	7.1	+ 7 25	6	6·5	5.5	5.9	7	5.28	.03	5.8	.08
709	Camelopard.	—	1292	+57° 787	7.2	+57 33	F	6·7	6.0	—	3	5.86	.04	—	—
710	Taurus . .	—	—	+12° 564	7.2	+12 28	F	F	6.0	6.6	3	6.60	.07	—	—
711	Camelopard.	—	1293	+53° 750	7.4	+53 18	5	5	5.0	—	7	5.20	.01	5.2	.04
712	Taurus . .	47	1298	+ 8° 652	7.4	+ 8 58	5	5	4.7	5.2	7	4.97	.03	4.6	—
713	Taurus . .	—	—	+ 9° 550	8.1	+ 9 42	6·5	6·5	5.7	5.6	7	5.05	.03	5.6	.15
714	Eridanus .	A 39	1303	—	8.7	−10 33	5	5	—	5.2	6	4.93	.06	—	—
715	Taurus . .	48	1302	+15° 603	9.0	+15 6	6	6	6.3	—	6	6.39	.08	6.4	.04
716	Taurus . .	μ 49	1304	+ 8° 657	9.0	+ 8 36	4·5	4·5	4.5	4.4	5	4.28	.05	4.6	.07
717	Taurus . .	—	—	+ 5° 613	9.0	+ 5 54			8.5	7.2					
718	Taurus . .	—	—	+ 5° 614	9.1	+ 5 52	6	6	7.5	6.5	10	6.05	.05	5.9	.12
719	Perseus . .	b	1301	+49° 1150	9.2	+50 0	5	5	4.8	—	7	4.57	.09	4.9	.21
720	Camelopard.	—	1300	+64° 433	9.4	+64 51	6	6	6.0	—	7	5.48	.09	5.3	.11
721	Eridanus .	o^2 40	1309	—	9.7	− 7 50	5·4	5·4	—	4.4	6	4.51	.06	—	—
722	Taurus . .	ω 50	1311	+20° 724	10.2	+20 17	6·5	6·5	5.7	—	3	4.65	.03	5.3	.12
723	Perseus . .	—	—	+49° 1155	10.3	+49 45	F	F	6.0	—	3	5.60	.07	—	—
724	Perseus . .	—	1314	+50° 973	11.1	+50 38	6	6·7	6.1	—	3	5.40	.03	5.5	.13
725	Taurus . .	51	1316	+21° 618	11.3	+21 17	F	F	6.0	—	8	5.43	.09	—	—
726	Eridanus .	—	—	—	11.4	− 6 46	6	6	—	6.3	3	6.11	.13	—	—
727	Camelopard.	—	1313	+60° 800	11.5	+60 28	6·5	6·5	5.7	—	7	5.70	.07	5.7	.03
728	Perseus . .	—	—	+50° 976	11.9	+50 5	F	6	7.8	—	3	7.54	.05	5.3	.13
729	Perseus . .	—	—	+49° 1162	12.0	+49 58			7.8	—	4	7.19	.09		
730	Camelopard.	—	1318	+56° 905	12.1	+56 13	6	6	6.3	—	3	5.93	.07	5.7	.04
731	Taurus . .	53	1321	+20° 733	12.4	+20 52	6	6	6.2	—	3	5.52	.15	5.7	.11
732	Taurus . .	56	1324	+21° 623	12.5	+21 31	6	6	5.8	—	7	5.41	.04	5.8	.08
733	Perseus . .	54	1322	+34° 860	12.6	+34 17	6	6·5	5.0	—	6	5.10	.04	5.3	.13
734	Camelopard.	—	—	+59° 793	12.8	+59 20	6	6	6.5	—	3	5.99	.07	5.7	.03
735	Perseus . .	d 53	1323	+46° 872	13.0	+46 13	5	5	5.1	—	6	4.92	.04	4.8	.11
736	Taurus . .	φ 52	1326	+27° 655	13.0	+27 4	5·6	5·6	5.5	—	3	5.09	.03	5.1	.28
737	Taurus . .	γ 54	1328	+25° 612	13.0	+15 20	4	4	3.8	—	13	3.86	.03	4.2	—
738	Taurus . .	h 57	1330	+13° 663	13.2	+13 44	6	6	5.7	—	3	5.67	.07	5.9	.11
739	Taurus . .	—	—	+18° 624	13.4	+18 26	F	6·7	6.0	—	3	5.88	.07	6.4	.03
740	Eridanus .	v^4 41	1333	—	13.4	−34 5	4·3	4·3	—	3.3	3	3.32	.03	—	—
741	Eridanus .	—	—	—	13.5	−23 15	F	F	—	6.2	3	6.14	.05	—	—
742	Taurus . .	58	1332	+14° 682	13.8	+14 48	F	6·7	5.9	—	8	5.12	.07	5.9	.07
743	Taurus . .	—	—	+ 5° 631	14.2	+ 5 51	6	6	6.5	6.2	4	5.98	.07	5.9	.12
744	Eridanus .	—	—	—	14.7	− 6 32	6	6	—	6.7	7	6.26	.06	—	—
745	Eridanus .	—	1340	—	14.7	−25 19	F	F	—	—	6	6.91	.04	—	—
746	Eridanus .	d	—	—	14.9	− 7 52	6	6	—	6.0	3	5.63	.03	—	—
747	Taurus . .	χ 59	1341	+25° 707	15.3	+25 20	6·5	6·5	5.7	—	3	5.46	.04	5.6	—
748	Taurus . .	60	1343	+13° 668	15.3	+13 47	6	6	5.7	—	3	5.77	.05	5.8	.12
749	Eridanus .	—	—	—	15.4	−20 55	6·5	6·5	—	5.4	6	5.28	.08	—	—
750	Taurus . .	δ 61	1346	+17° 712	16.0	+17 16	4	4	3.7	—	7	3.98	.02	4.2	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
701	46,350,379,587,589,600		4.1	*2*11*12*1	—	312..33..03.*1*.	...	W	v
702	49,339,391,395,583,587,600	127,425,638	4.2	*28*21*1*23	243	202..2*5*1..7.23	.01	Y	
703	339,353,391,394,587,589,600	*127,440,638*	6.4	*8*145*1*30	1*21*	.....F*36*..F*5*.*1*	...	.	
704	353,385,621	*125,424*,638	5.7	*2*21	3*3*0	.....11*1*..40.0	...	*o*	n
705	382,388,391,395,589,593,602	121,*127*,127	5.6	*1*231*2*10-	*321*	.....20*2*..1..*1*	...	w	s
706	49, 49,358,360,379,388,391		5.6	RR*1*10*1*1	—	.....22.*13*1...	...	.	p
707	37,368,379	127,440,638	4.9	00*1*	*301*	111..11*1*..4.*11*	..*2*	Y	
708	358,379,394,395,593,596,602	130,433,639	5.3	00**6**0*3*1	753	..*1*..531.44..5	...	*y*	
709	46,360,385		5.9	10*1*	—	.....F2*1*..2...	...	.	
710	65,372,395		6.6	10*2*	—	.....FF*8*.*2*F...	...	.	
711	40, 65,391,394,591,596,600	127,440,638	5.2	**4**011000	1*1*0	*22*...*222*..5.00	...	w	
712	43,379,388,395,591,596,600	130,433,639	5.0	7010*301*	**0**44	..2..00*3*.*17*.0*4*	...	*y*	te
713	32, 53,388,395,591,596,600	130,433,639	5.0	**3**200*1*01	**0**36	.....466.3F..6	...	w	t
714	37,342,388,593,596,599		4.9	011*21*4	—	..*1*.111..04.1.	...	Y	d
715	40,329,379,605,607,613	*130,420*,639	6.4	5*20*5*1*0	0F*1*	..**b**..*663*..F.00	...	*y*	v
716	49, 62,379,388,591	130,*433*,634	4.3	2*0022*	314	1*1*3..112.11.03	...	W	
717	43, 50, 53, 79,339,368,388	*130*,433,639	*7.0*	0F11*56*1-	*223*	.....*22* **3**.0..	...	.	p
718			*6.5*			.....8.*2*F..*1*	...	.	p
719	46, 56,358,379,391,398,402	127,*440*,638	4.6	*722*2113	080	*24*...442..7.33	..2	W	n
720	32, 56,391,394,591,602,603	*127,440,638*	5.5	*4*710*1*32	1*42*	.*2*...333..*2*..*2*	...	*y*	a
721	350,379,593,599,602,621		4.5	120*41**1*	—	*1*.3*3*111..*15*.*2*.	...	Y	da
722	37, 50,388	130,433,639	4.6	*1*00	**0**65	8.5..8**00**..3.**2**7	...	W	na
723	56,596,603		5.6	20*1*	—	.....FF2..F...	...	.	vp
724	43, 62,379	*127*,439,638	5.4	100	*2*33	.....475..7..1	..2	.	n
725	49,395,398,402,589,591,600		5.4	*8*100*44*-	—	..3..FF4..7...	...	.	p
726	379,621,623		6.1	*331*	—	.**b**...*33*..0F...	...	.	a
727	40,379,385,388,589,602,603	*127*,440,*638*	5.7	81*11112*	0*1*0	.....*311*..0..0	...	*o*	
728	593,602,603	*127*,425,638	7.5	*111*	**bbb**	.....F*8* **1**..	..	.	dvpe
729	395,593,602,603		7.2	*3*121		.....**4**..F..**b**	.. **b**	.	dvpe
730	50,358,385	*127*,440,*638*	5.9	0*21*	*123*	.....*112*..F..*2*	...	*y*	
731	43,368,388	*130*,433,639	5.5	21*4*	520	..*1*..335..6..2	...	w	
732	43, 56, 79,368,388,394,587	*130*,432,639	5.4	12*10212*	633	..*2*..442..7..4	...	w	
733	59,372,391,583,589,593	127,440,638	5.1	121*2*00	500	..0..75*1*..2..2	...	*y*	
734	46, 79,379	*127*,440,*638*	6.0	2*1*0	*233*	.....*223*..F..*3*	...	.	
735	37,368,391,631,632,633	127,440,638	4.9	212*10**1*	*312*	10*1*..112..4.1*1*	..2	W	v
736	49,391,395	130,432,639	5.1	100	257	*120*..113..2.10	...	O	d
737	40,329,379,342,376,385,388	130,420,639	3.9	700001*1*-	**b**17	*131*..220..1.23	.*2*.	Y	
738	329,360,394	*130,420*,639	5.7	*1*02	42*1*	..*2*..11*1*..F.*1*2	...	*y*	
739	339,360,394	*130,433*,639	5.9	*1*20	655	.....F2*1*..F1.5	...	.	
740	358,370,391		3.3	00*1*	—	**1**55..44.*11*2.1.	...	.	n
741	46,370,391		6.1	11*1*	—	.....FF.*110*...	...	.	
742	37,329,391,395,583,591,600	*130,433*,639	5.1	**2**430**2**51-	**0**87	..3..F**0**6..F..8	...	w	
743	32, 43, 50,398	*130*,433,639	6.0	F021	*223*	.....*223*.0F..*1*	...	Y	
744	40, 66, 79,379,583,603,605		6.3	**b**320*211*	—	.....*55*..*22*...	...	.	t
745	398,593,603,605,621,624		6.9	021*02*2	—	.....FF.**b**.F...	...	.	
746	350,379,621		5.6	01*1*	—	.....22..2F...	...	.	
747	37, 71,385	130,432,639	5.5	10*1*	12**b**	*56*3.2*1*11..2.11	...	w	de
748	50, 62,329	*130*,420,639	5.8	*1*11	3*12*	..*4*..00*2*..F..0	...	.	
749	350,391,398,587,593,599		5.3	*143*221	—	.....13.2*2*0...	...	.	
750	46, 59, 62,385,587,589,600	130,420,639	4.0	1102001	**b**27	*24*1..11*1*..0.02	.*3*.	Y	nem

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					m.	° ′									
751	Taurus . .	—	—	+20° 751	16.5	+20 42	6	6	6.2	—	3	5.88	.09	5.8	.07
752	Taurus . .	63	1350	+16° 586	16.5	+16 31	F	F	6.0	—	3	5.61	.05	—	—
753	Perseus . .	55	1349	+33° 853	16.7	+33 51	6	6	6.0	—	3	5.60	.11	5.3	.12
754	Taurus . .	62	1353	+23° 684	16.8	+24 1	6	6	6.5	—	7	6.18	.02	5.9	.04
755	Perseus . .	56	1352	+33° 854	16.9	+33 42	F	F	6.0	—	3	5.74	.03	—	—
756	Taurus . .	64	1356	+17° 714	17.2	+17 10	6	6·5	4.8	—	3	4.74	.12	5.2	—
757	Taurus . .	r 66	1357	+ 9° 570	17.3	+ 9 11	5·6	5·6	5.2	5.4	3	5.12	.16	5.2	.31
758	Eridanus .	ξ 42	1360	—	17.7	− 4 1	5·6	5·6	—	5.6	6	5.28	.08	—	—
759	Eridanus .	—	—	—	18.1	−25 10	F	F	—	6.1	3	6.10	.07	—	—
760	Taurus . .	κ 65	1362	+21° 642	18.2	+22 2	5·4	5·4	4.3	—	3	4.58	.19	4.4	.03
761	Taurus . .	67	1363	+21° 643	18.3	+21 55	F	6·7	6.0	—	3	5.48	.07	6.3	.16
762	Perseus . .	—	1364	+31° 776	18.5	+31 10	6	6·5	6.0	—	3	5.40	.09	5.5	.07
763	Taurus . .	68	1365	+17° 719	18.6	+17 39	5	5	4.7	—	3	4.24	.08	4.8	—
764	Taurus . .	υ 69	1367	+22° 696	19.1	+22 32	5·4	5·4	4.5	—	3	4.55	.08	4.3	.16
765	Taurus . .	71	1369	+15° 625	19.5	+15 20	6	6	5.0	—	3	4.61	.09	5.5	.19
766	Eridanus .	v^3 43	1372	—	19.5	−34 18	4	4	—	4.0	3	4.03	.08	—	—
767	Camelopard.	—	—	+72° 227	19.7	+72 16	6	6	6.0	—	20	6.00	.03	5.7	.02
768	Taurus . .	π 73	1370	+14° 697	19.8	+14 28	5	5	5.0	—	3	4.91	.03	5.2	.16
769	Taurus . .	72	1371	+22° 699	20.1	+22 43	6	6	6.2	—	3	5.45	.08	5.9	.11
770	Taurus . .	—	1373	+21° 647	20.9	+21 21	6	6	6.5	—	3	5.68	.07	5.8	.12
771	Taurus . .	—	—	+10° 577	20.9	+10 57	6	6	6.4	6.3	3	5.83	.04	5.8	.16
772	Taurus . .	—	—	+30° 665	21.3	+30 7	F	6·7	6.0	—	3	6.23	.09	6.4	.05
773	Taurus . .	ε 74	1376	+18° 640	21.6	+18 55	4·3	4·3	3.7	—	13	3.67	.03	3.6	.31
774	Taurus . .	75	1377	+16° 605	21.6	+16 6	F	6·7	5.0	—	3	5.34	.12	5.6	.25
775	Taurus . .	θ^1 77	1380	+15° 631	21.7	+15 42	4·5	4	4.0	—	6	3.92	.04	4.1	.25
776	Taurus . .	θ^2 78	1381	+15° 632	21.8	+15 36	4·5	4	4.0	—	6	3.62	.06	3.6	—
777	Taurus . .	b 79	1384	+12° 598	22.1	+12 47	6·5	6·5	5.0	5.5	3	5.16	.05	5.5	.21
778	Eridanus .	44	1386	+ 1° 757	22.3	+ 1 7	6	6	5.7	5.8	3	5.56	.03	5.9	.08
779	Camelopard.	1	1382	+53° 779	22.5	+53 39	6	6	6.0	—	6	5.49	.09	5.5	.17
780	Taurus . .	80	1390	+15° 636	23.3	+15 22	F	6·7	6.0	—	9	5.55	.04	6.1	.03
781	Taurus . .	81	1392	+15° 637	23.8	+15 26			5.5	—	7	5.49	.03		
782	Eridanus .	—	—	—	23.6	−13 19	6	6	—	5.7	3	5.31	.09	—	—
783	Taurus . .	—	1391	+15° 637	23.7	+15 56	5	5	5.0	—	7	4.94	.05	5.1	—
784	Taurus . .	83	1393	+13° 690	23.9	+13 29	6	6	5.7	—	3	5.43	.08	5.7	.12
785	Perseus . .	m 57	1398	+42° 990	25.0	+42 48	6	6	6.5	—	7	5.99	.03	5.6	.11
786	Camelopard.	—	—	+63° 515	25.2	+64 0	6	6·7	6.3	—	3	5.95	.04	5.6	.12
787	Eridanus .	45	1403	− 0° 713	25.7	− 0 18	5·6	5·6	5.0	5.4	6	4.93	.07	—	—
788	Eridanus .	—	—	—	26.5	− 3 28	F	6	—	6.0	4	6.09	.15	—	—
789	Taurus . .	ϱ 86	1409	+14° 720	27.0	+14 35	5	5·6	5.4	5.1	7	4.85	.07	5.1	.20
790	Taurus . .	—	1408	+28° 666	27.1	+28 43	6	6	5.7	—	3	5.59	.09	5.9	.11
791	Taurus . .	—	—	+ 5° 679	27.8	+ 5 19	6	6	6.0	6.0	3	5.84	.05	5.7	.13
792	Eridanus .	46	1416	—	28.1	− 7 0	6·5	6·5	—	5.7	7	5.62	.06	—	—
793	Perseus . .	e 58	1414	+40° 1000	28.4	+41 1	5	5	5.0	—	3	4.44	.09	4.7	.16
794	Eridanus .	47	1419	—	28.4	− 8 29	6·5	6·5	—	5.4	7	5.58	.07	—	—
795	Eridanus .	—	—	—	28.5	− 9 13	6	6	—	5.5	3	5.79	.17	—	—
796	Eridanus .	v^1 50	1422	—	28.8	−30 0	4	4	—	4.7	8	4.43	.08	—	—
797	Taurus . .	α 87	1420	+16° 629	29.0	+16 16	1	1	1.1	—	16	1.00	.03	1.2	.07
798	Taurus . .	d 88	1421	+ 9° 607	29.1	+ 9 55	5·4	5·4	4.3	4.6	3	4.55	.09	4.6	.03
799	Eridanus .	ν 48	1429	—	30.3	− 3 36	3·4	3·4	—	3.8	6	4.11	.07	—	—
800	Camelopard.	2	1424	+53° 794	30.5	+53 14	6	6	5.4	—	3	5.47	.04	5.5	.15

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
751	66, 78,372	*130*,433,639	5.9	221	112	. . . . . *111* . . 2 . . *1*	. . .	.	
752	62,360,370		5.6	111	—	. . *3* . . FF 2 . . 5 . . .	. . .	*y*	
753	66, 71,388	127,440,638	5.6	*131*	054	. . 0 . . 222 . . 6 . . *3*	. . .	*y*	dc
754	40, 50,388,398,587,589,600	130,432,639	6.2	b001101	*243*	. . b . *244* 1 . . *1* . . *3*	. . .	.	d
755	37, 66, 71		5.7	*100*	—	. . 0 . . FF 1 . . R . .	. . .	*y*	dec
756	358,388,394	130,420,639	4.7	*132*	329	. . 1 . . 191 . . 6 . 85	. . .	*g*	ne
757	46, 79,368	130,433,639	5.1	422	905	. 22 . . 111 . 02 . 01	. . .	*y*	
758	32,342,391,587,603,605		5.3	*106321*	—	*332* . . *11* . . 04 . 0 .	. . .	w	
759	50,358,398		6.1	*102*	—	. . . . . FF . *62* F . . .	. . .	.	t
760	40, 69, 71	130,433,639	4.6	522	*221*	441 . 6003 . . 3 . 02	. . .	*y*	nd
761	391,398,402	*130,433*,639	5.5	210	040	. . *4* . 5F63 . . 2 . 58	. . .	*r*	nd
762	66, 74, 79	127,440,638	5.4	221	211	. . . . . 424 . . 7 . . 1	. . .	Y	n
763	66, 78,394	130,420,639	4.2	112	476	. 90 . . 885 . . 7 . 66	. . .	W	ne
764	56, 62, 69	130,433,639	4.6	220	*117*	443 . . 001 . . *2* . 03	. . .	*y*	n
765	71, 74,356	130,420,639	4.6	*212*	459	. . 6 . . 224 . . 3 . . 9	. . .	w	
766	351,356,391		4.0	*211*	—	4253 . 11 . *114* . 0 .	. . .	.	nt
767	32, 40, 46, 59, 69, 71, 79	121,125,129	6.0	*3203201-*	*422*	. . . . . *222* . . F . . *3*	. . .	.	dsc
768	62, 78,356	130,420,639	4.9	010	713	. . *1* . . 111 . . 0 . 53	. . .	*y*	
769	342,358,391	*130,433*,639	5.4	*112*	662	. . 3 . . 446 . . F . 25	. . .	*g*	n
770	56, 78,362	*130,433*,639	5.7	201	322	. . . . . 116 . . F . . 1	. . .	.	
771	40,358,391	*130,420*,639	5.8	*101*	*431*	. . . . . 004 . 3 F . . 0	. . .	.	
772	43,354,391	*130,433*,639	6.2	*122*	313	. . . . *4* F *14* . . F 0 . 2	. . .	*y*	d
773	35,351,370,374,376,385,388	130,420,639	3.7	*3100121-*	905	111 . . 002 . . 7 . 11	*82*.	*y*	
774	49,354,374	130,420,639	5.3	303	835	. . *3* . . F 8 *3* . . *4* . . 3	. . .	*y*	
775	49,374,385,583,587,600	130,420,639	3.9	*112021*	*308*	*133* . 3522 . . 5 . 02	. . .	Y	d
776	49,356,374,583,587,600	130,420,639	3.6	013320	*827*	. . *1* . 4855 . . 4 . 60	. *2*.	W	dv
777	43, 66,391	130,420,639	5.2	111	824	. . 0 . . 242 . 05 . 23	. . .	*y*	
778	54,342,391	130,*433*,639	5.6	010	441	. . *1* . . 220 . 01 . . 3	. . .	*w*	
779	56, 78,368,583,589,603	*155*,440,638	5.5	*234132*	342	. . 0 . *5* 333 . . 2 . . 0	. . .	*y*	d
780	40, 62,342,351,583,587,600	130,*433*,639	5.6	f311103-	332	. . 1 . 8 F 3 2 . . F . . 3	. . .	*y*	d
781	82,385,391,394,583,587,600		5.5	b130010		. . *1* . . *1* . .	. . .	*y*	d
782	54, 79,367		5.3	212	—	. . . . . 55 . . 18 . . .	. . .	.	
783	40, 82,356,372,583,587,600	*130*,420,639	4.9	f104201	122	. . . . . 111 . . 0 . *22*	. . .	W	e
784	32, 54, 79	130,*420*,639	5.4	*220*	612	. . 0 . . 442 . . *1* . . 3	. . .	*y*	
785	54, 78,368,372,583,587,603	*155*,440,638	6.0	F020210	*274*	. . *6* . . *223* . . *3* . 04	. . 3	*w*	v
786	38, 56, 79	*127,440,638*	6.0	110	*273*	. . . . . *211* . . *3* . . *4*	. . .	.	
787	32, 43,370,583,599,603		4.9	*212024*	—	. . 4 . . 331 . 28 . 2 .	. . .	*o*	t
788	35, 38, 54, 78		6.1	F124	—	. . . . . F *3* . . *34* . . .	. . .	.	
789	32, 40,356,391,583,593,599	130,420,639	4.8	*2710203*	810	. . 1 . . 245 . 15 . 53	. . .	*y*	
790	43, 69,367	*130,433*,639	5.6	*212*	622	. . . . . 220 . . 5 . . 3	. . .	.	
791	38, 74,368	130,433,639	5.8	*111*	*242*	. . . . . 000 . 010 . *1*	. . .	.	
792	49, 78,354,391,583,593,599		5.6	*2312013*	—	. . *1* . . *20* . . *23* . . .	. . .	*b*	
793	69,342,367	*155*,440,638	4.4	*212*	117	. . 1 . . 666 . . 5 . 13	. . *2*	*o*	t
794	71,358,372,391,583,587,603		5.6	*1550301*	—	. . 0 . . *20* . . *51* . . .	. . .	*o*	t
795	71,358,372		5.8	*441*	—	. . . . . 00 . . *6* F . . .	. . .	.	t
796	62,360,362,370,605,607,613		4.4	*3422162-*	—	016 . . *33* . *520* . 2 .	. . .	.	nvg
797	32, 35, 38, 40, 79,351,358	127,133,133	1.0	*0122104-*	055-	*5404477* 0 . . *5* . *12*	*22*.	Y	dvt
798	43,362,368	130,433,639	4.6	221	*001*	*243* . . 003 . *13* . *10*	. . .	*y*	
799	35,360,372,596,599,613		4.1	*322220*	—	312 . *76* . . *28* . *3* .	. . .	W	
800	66, 79,367	*155*,440,638	5.5	*101*	241	. . *4* . *3332* . . 2 . . 0	. . .	*y*	d

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
801	Camelopard.	3	1425	+52° 865	30.5	+52 50	6	6	5.4	—	3	5.37	.04	5.5	.19
802	Eridanus .	ν^2 52	1433	—	30.9	−30 48	4·3	4·3	—	3.7	5	3.80	.08	—	—
803	Eridanus .	49	1431	+ 0° 798	31.0	+ 0 46	6·5	6·5	5.7	5.6	3	5.36	.13	5.7	.23
804	Taurus . .	—	—	+20° 785	31.2	+20 27	6	6	6.0	—	3	5.78	.03	6.0	.09
805	Taurus . .	c 90	1434	+12° 618	31.5	+12 16	5·4	4·5	4.0	4.5	7	4.34	.07	4.5	.04
806	Eridanus .	c 51	1435	—	31.6	− 2 43	5·6	5·6	—	5.8	6	5.27	.03	—	—
807	Taurus . .	σ^1 91	1436	+15° 665	32.3	+15 33	5	5	5.3	—	3	5.11	.05	5.5	.08
808	Taurus . .	σ^2 92	1437	+15° 666	32.4	+15 42			5.3	—	3	4.84	.08	5.2	.19
809	Perseus . .	—	—	+48° 1128	32.5	+48 4	6	6	6.0	—	3	5.74	.03	5.5	.13
810	Taurus . .	—	—	+ 7° 681	32.6	+ 7 38	6	6	5.8	5.8	3	5.49	.11	5.6	.15
811	Camelopard.	—	1428	+75° 189	32.7	+75 43	6	6·7	6.0	—	6	5.95	.04	5.8	.15
812	Eridanus .	53	1441	—	32.7	−14 32	4	4	—	4.1	6	3.89	.05	—	—
813	Eridanus .	—	1443	—	33.3	−12 21	5·6	5·6	—	5.2	3	4.92	.09	—	—
814	Taurus . .	93	1442	+11° 639	33.4	+11 58	6·5	6·5	6.0	—	3	5.26	.07	5.7	.17
815	Taurus . .	—	1444	+28° 680	33.8	+28 24	6	6·5	5.0	—	3	5.86	.08	5.9	.12
816	Eridanus .	—	1446	—	33.8	−14 36	F	6	—	5.6	3	5.53	.03	—	—
817	Perseus . .	—	—	+49° 1230	34.3	+49 45	6	6	5.5	—	7	5.72	.03	5.5	.21
818	Perseus . .	59	1445	+43° 1043	34.3	+43 8	6	6	5.7	—	3	5.27	.08	5.4	.12
819	Taurus . .	τ 94	1449	+22° 739	35.0	+22 44	4·5	4·5	4.7	—	7	4.40	.03	4.4	.03
820	Eridanus .	—	1450	—	35.1	−24 43	F	6	—	6.0	3	5.75	.05	—	—
821	Eridanus .	54	1451	—	35.2	−19 54	5	5	—	4.6	6	4.48	.09	—	—
822	Orion . .	—	1460	+10° 621	37.8	+10 56	6	6	5.6	5.9	3	5.33	.08	5.6	.17
823	Eridanus .	55	1461	—	37.8	− 9 1	6	6	—	6.4	4	5.99	.15	—	—
824	Cepheus .	—	1448	+80° 155	38.0	+80 59	5	5	5.5	—	3	5.30	.12	5.2	.05
825	Camelopard.	4	1456	+56° 973	38.0	+56 32	6	6·5	5.8	—	6	5.38	.04	5.3	.15
826	Camelopard.	—	1459	+55° 928	38.2	+55 24	6	6	6.5	—	4	6.23	.09	6.1	.17
827	Eridanus .	56	1465	—	38.3	− 8 44	6	6	—	5.8	6	5.74	.04	—	—
828	Eridanus .	—	—	—	38.8	−18 53	6	6	—	5.7	3	5.57	.11	—	—
829	Orion . .	—	—	+11° 646	39.4	+11 29	6	6	5.7	—	4	5.65	.09	5.5	.20
830	Eridanus .	μ 57	1469	—	39.5	− 3 29	4·3	4·3	—	4.0	6	4.31	.06	—	—
831	Camelopard.	—	1470	+63° 543	40.9	+63 18	6	6	5.8	—	3	5.88	.07	5.5	.12
832	Auriga . .	—	1475	+32° 840	41.5	+32 24	6	6	6.0	—	3	6.00	.03	5.9	.11
833	Auriga . .	—	—	+31° 816	41.5	+31 13	6	6	5.6	—	3	5.67	.08	5.9	.11
834	Eridanus .	—	1482	—	41.6	−28 18	F	F	—	6.4	3	5.86	.12	—	—
835	Auriga . .	1	1476	+37° 969	41.8	+37 17	6	6·5	5.5	—	3	5.17	.00	5.4	.17
836	Camelopard.	9	1474	+66° 358	42.1	+66 8	4	5·4	5.0	—	21	4.41	.03	4.4	.05
837	Auriga . .	—	1477	+48° 1162	42.2	+48 32	6	6	5.8	—	3	5.84	.09	5.7	.13
838	Eridanus .	58	1484	—	42.2	−17 9	6	6	—	5.7	3	5.83	.04	—	—
839	Orion . .	—	—	+ 3° 681	42.4	+ 3 23	6	6	7.0	6.1	4	6.30	.07	5.8	.15
840	Orion . .	π^3 1	1486	+ 6° 762	43.3	+ 6 45	4	4·3	3.3	3.2	7	3.33	.02	3.6	.09
841	Orion . .	π^2 2	1491	+ 8° 777	44.1	+ 8 42	5·4	5·4	5.0	4.7	3	4.42	.04	4.4	.11
842	Taurus . .	i 97	1493	+18° 743	44.3	+18 39	5·6	5·6	4.5	5.6	7	5.07	.07	5.0	.17
843	Auriga . .	—	—	+42° 1081	44.4	+42 23	6	6	6.2	—	3	5.54	.03	5.7	.11
844	Auriga . .	2	1492	+36° 952	44.6	+36 31	5	5	5.0	—	3	5.04	.05	4.9	.08
845	Orion . .	π^4 3	1495	+ 5° 745	44.8	+ 5 24	4·5	4·5	4.0	3.7	8	3.98	.08	4.2	.07
846	Eridanus .	60	1498	—	44.8	−16 26	6	6	—	5.0	6	5.19	.03	—	—
847	Orion . .	—	—	+ 9° 668	45.1	+ 9 47	6	6	6.2	6.3	3	5.99	.11	6.1	.12
848	Camelopard.	5	1494	+55° 941	45.3	+55 4	6	6	5.8	—	3	5.76	.12	5.5	.11
849	Taurus . .	—	—	+27° 701	45.3	+27 42	F	F	6.0	—	3	5.89	.03	—	—
850	Orion . .	o^1 4	1500	+14° 777	45.8	+14 3	5·6	6	5.0	—	3	5.44	.12	4.9	.07

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	Measures.	Estimates.				P S H h ⧖ U *H* D B G *h* R F E	s w p		
801	43, 78,368	*155*,440,638	5.4	10*1*	3*43*	. . 1 . . 44*1* . . 3 . . 1	. . .	*y*	
802	360,362,370,632,633		3.8	14*22*1	—	646 . . *11* . *2*02 . 0 .	. . .	.	n
803	69,354,372	130,*433*,639	5.4	*31*3	65*3*	. . *2* . . 022 . *11* . . 3	. . .	w	
804	69,362,368	*130*,433,639	5.8	010	410	. . . . . 000 . . 34 . 2	. . .	.	
805	51,360,370,599,601,603,605	130,433,639	4.3	*352*1211	132	1*1*1 . . 31*2* . 16 . 02	. . .	W	n
806	35,360,372,605,607,613		5.3	010*2*01	—	. . *5* . . *11* . . 34 . 1 .	. . .	*y*	vg
807	62,356,367	*130*,162	5.1	1*11*	53	. *1* . 3 1 . . . 04	. . .	w	da
808	62,356,367	*130*,162,639	4.8	0*22*	8*14*	. 8 1 . 0 88 4 . . 7 . 34	. . .	*y*	da
809	38, 66, 78	*155*,440,638	5.7	0*10*	0*50*	. . . . . 111 . . *2* . . *2*	. . 0	.	
810	49,360,372	130,433,639	5.5	20*3*	5*21*	. . . . . 331 . 12 . . 1	. . .	*y*	
811	51, 79,372,599,601,613	*125*,*424*,*638*	6.0	0*22*011	2*34*	. . . . . *212* . . *3* . . *2*	. . .	*y*	
812	46, 74,362,599,602,613		3.9	20*111*3	—	. . *43* . 22 . . 35 . 2 .	. . .	*y*	
813	35, 71,370		4.9	*2*21	—	. . . . . 33 . . 04 . 1 .	. . .	w	
814	74,360,370	*130*,*433*,639	5.3	02*1*	760	. . 0 . . 135 . . 4 . *14*	. . .	*w*	n
815	38, 78,368	*130*,433,639	5.9	1*2*1	3*12*	. . . . . *139* . . *6* . . 0	. . .	*y*	
816	49,362,370		5.5	00*1*	—	. . . . . F 3 . . *2* F . .	. . .	*r*	
817	51, 69, 79,354,599,601,603	*155*,440,638	5.7	13*1*1011	171	. . . . . 11*3* . . 0 . . *2*	. . 2	.	
818	46, 62, 78	*155*,440,638	5.3	*2*02	0*14*	. . *3* . . 553 . . 4 . . 1	. . 1	W	
819	35, 49, 74,599,602,603,613	130,433,639	4.4	*211*0061	00*1*	021 . . 003 . . 5 . 00	. . .	w	
820	38, 60, 79		5.8	*111*	—	. . . . . F 0 . *3*01 . . .	. . .	*y*	
821	51, 60, 82,599,602,613		4.5	3*14*330	—	. . 3*1* . 55 . 001 . 0 .	. . .	*o*	tg
822	35, 46, 74	130,433,639	5.3	2*2*0	72*1*	. . . . . 552 . 44 . . 3	. . .	w	n
823	38, 49, 78, 79		6.0	21F4	—	. . *1* . *3* 22 . . 2F . 0 .	. . .	*y*	d
824	41, 51,376	125,424,638	5.3	*132*	*220*	. . . . . *33*1 . . 4 . . *1*	. . .	Y	n
825	46, 82,367,599,602,613	*155*,440,638	5.4	0*13*021	3*23*	. . 0 . . 422 . . *1* . . *1*	. . .	*y*	
826	51, 60,354,374	*155*,440,*653*	6.2	F*212*	05*3*	. . . . . *44*1 . . *1* . . *1*	. . .	*y*	
827	49,351,356,362,368,374		5.7	*2*011*11*	—	. . 2 . . 11 . . *1*0 . . .	. . .	W	t
828	41, 62, 82		5.6	11*3*	—	. . . . . 22 . . *2*1 . . .	. . .	.	
829	35, 78,367,379	130,433,639	5.6	*24*01	4*25*	. . . . . 220 . . 10 . *1*	. . .	.	
830	38, 54, 79,599,602,613		4.3	*132*201	—	1*1*1*3* . *66* . . *26* . *3* .	. . .	W	
831	51, 62,362	*127*,*440*,*638*	5.9	0*12*	*273*	. . . . . *113* . . 2 . . *4*	. . .	O	t
832	41, 57,376	*130*,*433*,639	6.0	010	*222*	. . . . . *222* . . 1 . . *1*	. . .	.	
833	46,351,374	*130*,*433*,639	5.7	*2*11	511	. . . . . 11*2* . . 40 . 2	. . .	.	
834	69,354,379		5.9	2*3*1	—	. . . . . FF . 13*2* . . .	. . .	.	
835	60,354,376	161,440,670	5.2	000	6*21*	. . 0 . . 642 . . 1 . . 2	. . .	*o*	
836	38, 41, 66, 71, 79,351,354	124,127,161	4.4	10*31*1*14*-	*412*	. . 0 . . *3*26 . . *4* . 10	. . .	W	ns
837	51,354,374	*133*,440,*652*	5.8	*221*	240	. . . . . 002 . . *1* . . *1*	. . *1*	w	
838	54,362,368		5.8	1*10*	—	. . 4 . . 0.0 . . *41* . . .	. . .	*y*	
839	51,351,367,376	*166*,434,*641*	6.3	*21*30	*394*	. . . . . *555* . *46* . . *5*	. . .	.	dte
840	35, 79,362,368,601,602,613	166,435,640	3.3	f010071	125	031*1* . 842 . 07 . *13*	. *1* .	*y*	nvhg
841	41, 57, 82	166,435,640	4.4	10*1*	*203*	022 . . 226 . 25 . 20	. . .	w	n
842	46, 60, 74,376,603,605,607	166,434,641	5.1	*261*0021	350	*725* . . 116 . *22* . 3*1*	. . .	*y*	
843	51, 62, 69	*133*,440,652	5.5	00*1*	511	. . . . . 335 . . F . . 2	. . 3	.	
844	38, 71,368	161,440,670	5.0	1*11*	*221*	. . 1 . . 000 . . 3 . 1*1*	. . .	*o*	
845	54, 79,367,370,602,603,605	166,435,640	4.0	5201*626*-	230	*7414* . 441 . *24* . *22*	. *2* .	W	nv
846	354,374,376,603,605,607		5.2	*111*101	—	. . 0 . . 66 . . *45* . *4* .	. . .	Y	vtg
847	51, 82,368	166,*434*,*641*	6.0	*3*11	0*14*	. . . . . *220* . 1 F . . 1	. . .	.	de
848	41, 57, 66	*155*,440,638	5.8	21*3*	*163*	. . *2* . . 002 . . *1* . . *3*	. . .	*y*	
849	46, 62,367		5.9	100	—	. . . . . FF *1* . . 2 . . .	. . .	.	
850	35, 60, 82	*137*,434,641	5.4	30*3*	*574*	. . *6* . . *244* . . *5* . 0*5*	. . .	O	t

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
851	Eridanus .	—	—	—	46.2	−25 31	F	F	—	6.9	3	6.66	.12	—	—
852	Auriga . .	—	—	+43° 1116	46.3	+43 52	6	6	6.3	—	7	6.06	.07	6.0	.08
853	Camelopard.	—	—	+52° 898	46.7	+52 40	F	6	6.5	—	3	5.87	.08	5.7	.07
854	Eridanus .	ω 61	1507	—	47.0	− 5 39	4·5	4·5	—	4.7	3	4.25	.12	—	—
855	Orion . .	5	1508	+ 2° 800	47.1	+ 2 19	F	6	5.0	6.0	6	5.74	.06	5.9	.08
856	Camelopard.	7	1504	+53° 829	47.7	+53 34	5	5	5.0	—	7	4.50	.04	4.7	.11
857	Orion . .	π^5 8	1514	+ 2° 810	48.0	+ 2 15	4	4	3.5	3.7	6	3.86	.05	4.0	.08
858	Orion . .	g 6	1515	+11° 675	48.2	+11 14	6	6	6.3	—	7	5.18	.03	5.4	.12
859	Orion . .	π^1 7	1516	+ 9° 683	48.3	+ 9 59	5	5	5.3	5.0	3	4.82	.12	4.6	.16
860	Orion . .	—	—	+ 7° 755	48.3	+ 7 35	6	6	5.7	6.0	6	5.57	.06	5.2	.03
861	Orion . .	—	1519	+ 0° 893	48.6	+ 0 16	6	6	6.2	6.3	3	5.75	.07	5.9	.07
862	Auriga . .	ι 3	1520	+32° 855	49.2	+32 58	3	3	3.0	—	6	2.72	.07	3.1	.25
863	Cepheus .	—	—	+85° 74	49.5	+85 48	F	6·7	6.0	—	3	6.45	.05	6.4	.03
864	Camelopard.	—	1510	+73° 265	49.5	+73 53	6	6·7	6.3	—	5	6.03	.08	6.0	.09
865	Orion . .	o^2 9	1525	+13° 740	49.6	+13 19	5	5	5.0	—	3	4.33	.04	4.5	.09
866	Eridanus .	—	—	—	49.7	−16 57	F	F	—	5.7	4	5.71	.01	—	—
867	Eridanus .	—	—	—	49.9	−16 36	6	6	—	5.4	7	5.68	.03	—	—
868	Taurus . .	—	1526	+16° 672	50.4	+16 58	6	5·6	5.6	—	3	5.81	.13	5.7	.13
869	Taurus . .	99	1527	+23° 777	50.5	+23 46	6	6	6.2	—	8	5.98	.02	5.9	.05
870	Eridanus .	b 62	1529	—	50.5	− 5 22	6	6	—	5.9	3	5.35	.12	—	—
871	Eridanus .	—	—	—	50.6	−25 55	F	F	—	6.7	3	6.44	.04	—	—
872	Taurus . .	k 98	1528	+24° 717	50.8	+24 52	6·5	6	6.0	—	3	5.73	.11	5.8	.03
873	Auriga . .	4	1530	+37° 1005	51.1	+37 42	6	6·5	5.7	—	3	5.07	.16	5.2	.08
874	Eridanus .	—	—	—	51.7	−14 25	6	6	—	6.3	3	5.63	.11	—	—
875	Orion . .	π^6 10	1538	+ 1° 872	52.3	+ 1 33	5·4	5·4	5.0	4.7	3	4.72	.11	4.7	.12
876	Camelopard.	10	1536	+60° 856	52.7	+60 16	4	4	5.0	—	21	4.21	.03	4.5	.09
877	Auriga . .	ε 7	1540	+43° 1166	53.4	+43 39	3·4	var.	var.	—	7	3.18	.07	3.4	—
878	Eridanus .	—	—	—	53.6	−16 34	6	6	—	6.0	3	5.37	.07	—	—
879	Auriga . .	ζ 8	1541	+40° 1142	54.1	+40 54	4	4	3.6	—	13	3.96	.05	4.0	.23
880	Lepus . .	R	—	—	54.1	−14 59	F	var.	—	var.	5	var.	—	—	—
881	Orion . .	—	—	+ 3° 736	54.2	+ 3 26	6	6·7	7.8	6.2	6	5.95	.03	6.0	.12
882	Eridanus .	63	1544	—	54.2	−10 26	6	6	—	6.0	4	5.71	.08	—	—
883	Eridanus .	64	1545	—	54.4	−12 43	6	6	—	var.	6	4.90	.03	—	—
884	Eridanus .	ψ 65	1552	—	55.6	− 7 21	5·4	5·4	—	5.3	3	4.66	.13	—	—
885	Camelopard.	11	1546	+58° 804	55.7	+58 48	5	5·6	6.0	—	3	5.13	.07	4.7	.12
886	Camelopard.	12	1547	+58° 805	55.7	+58 51			6.0	—	—	—	—		
887	Orion . .	—	—	+ 0° 923	55.7	+ 0 34	6	6	6.2	6.6	7	6.10	.06	6.0	.00
888	Taurus . .	ι 102	1551	+21° 751	55.9	+21 25	5	5	4.8	—	6	4.73	.03	4.7	.13
889	Lepus . .	—	1553	—	56.2	−20 14	5·6	5·6	—	5.5	3	5.05	.05	—	—
890	Camelopard.	—	1549	+73° 274	57.3	+73 47	5·6	6·5	5.5	—	3	5.46	.03	5.6	.17
891	Auriga . .	9	1554	+51° 1024	57.3	+51 26	5	5·6	5.2	—	7	4.89	.06	4.8	.03
892	Lepus . .	—	1559	—	57.3	−26 27	5	5	—	5.4	4	5.05	.04	—	—
893	Taurus . .	—	—	+27° 725	57.7	+27 46	F	F	5.9	—	3	6.33	.11	—	—
894	Orion . .	11	1557	+15° 732	57.7	+15 14	5	5	5.3	—	6	4.71	.03	4.6	.09
895	Lepus . .	1	1560	—	57.7	−22 58	F	F	—	6.1	6	5.97	.04	—	—
896	Auriga . .	η 10	1558	+41° 1058	58.1	+41 4	4·3	4·3	3.4	—	13	3.33	.04	3.7	.10
897	Lepus . .	—	—	—	58.9	−24 33	F	6	—	5.9	3	5.48	.16	—	—
898	Orion . .	—	—	—	59.0	− 3 12	6	6	—	6.5	3	5.99	.07	—	—
899	Orion . .	—	—	+ 0° 939	59.2	+ 1 1	F	F	6.0	6.6	7	6.49	.14	—	—
900	Taurus . .	m 104	1568	+18° 779	0.3	+18 30	5·6	5·6	5.2	—	3	5.08	.05	4.8	.11

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
851	38,351,374		6.7	*132*	—	. . . . . FF. 70F. . .	. . .	.	
852	49, 57, 74,376,603,607,608	*133,440*,652	6.1	7*10322*0	1*13*	. . . . . *33*0. . F. . *1*	. . 1	.	
853	49, 54,374	*161,440*,652	5.9	2*11*	*124*	. . . . . F*1*4. . F. . *2*	. . .	.	
854	46, 62,358		4.2	*3*30	—	234. . 22. . 47. 4.	. . .	*y*	
855	38, 60, 69,605,607,613	*166,435*,641	5.7	*231111*	303	. . *4*. . F17. 1F. . 2	. . .	o	vtg
856	41, 54, 79,374,603,605,607	161,425,652	4.5	1**6**10121	*133*	. . 3. 1555. . 4. 32	. . .	w	dv
857	51, 57, 74,602,603,605	166,435,640	3.9	*3*11012	030	*63*02. 222. *1*5. *11*	.*4*.	*g*	n
858	49, 60,374,376,603,605,607	166,434,641	5.2	f*100121*	105	. . 0. . 669. . 5. 42	. . .	W	
859	44, 62,368	166,435,640	4.8	0*33*	*442*	*46*0. . 224. 01. 0*2*	. . .	*y*	n
860	41, 54,379,605,607,613	166,434,641	5.6	111*402*	*344*	. . . . . 220. 2F. 4*4*	. . .	*y*	vtg
861	35, 66,374	*166,434*,641	5.8	1*20*	21*1*	. . . . . 002. 3F. . 1	. . .	.	
862	49, 79,368,602,603,607	135,435,641	2.7	*330311*	629	**1**954. 555. . 8. 94	52.	Y	
863	74,623,624	*125,428*,638	6.4	*015*	010	. . . . . F*36*. . F. . 0	. . .	.	n
864	38, 54, 60,367,376	*125,424,638*	6.0	*40*132	*221*	. . . . . *2*11. . F. . 0	. . .	w	
865	38, 57,374	137,434,641	4.3	10*1*	403	1*1*4. . 777. . 1. 52	. . .	Y	a
866	351,354,374,621		5.7	000*1*	—	. . . . . FF. . *3*. . .	. . .	.	dt
867	35,354,374,376,603,605,607		5.7	**4**110102	—	. . . . . 11. . *6*^{7}. *6*.	. . .	.	dvtpg
868	57, 71,367	166,*434*,641	5.8	*223*	411	. . . . . 0*63*. . F. *81*	. . .	Y	n
869	44, 66, 79,374,596,603,608	*166,434*,641	6.0	**b***100103*-	*202*	. . 1. . *22*0. . F. . *1*	. . .	*o*	
870	51, 71,358		5.4	12*3*	—	. . *1*. . 44. . 37. 1.	. . .	w	c
871	46,358,376		6.4	01*1*	—	. . . . . FF. *41*F. . .	. . .	.	
872	41, 60,374	*166,434*,641	5.7	02*3*	121	. . 0. . *3*11. . 4. *11*	. . .	w	
873	38, 54, 74	161,440,670	5.1	*341*	300	3. *1.8* 755. . 2. 31	. . .	W	da
874	35, 51,374		5.6	*311*	—	. . . . . 22. . 5F. . .	. . .	.	c
875	41, 60, 79	166,434,640	4.7	023	*303*	**b***51*. . *113*. *12*. *10*.	. . .	O	nt
876	38, 41, 69, 71, 74,356,367	124,127,161	4.2	101*422*-	*404*	. . *2*. . *118*. . 2. 03	. . .	Y	ns
877	35, 44, 49, 54,354,368,370	161,425,652	3.2	5*241*021	501	6**0***4*0. *2*vv. . **2**. 62	1*1*5	*y*	v
878	38, 62, 69		5.4	2*10*	—	. . . . . 44. . 47. . .	. . .	.	
879	41, 71,351,370,383,385,391	161,425,652	4.0	*8103*124-	263	*221*. . 11*2*. . 0. 00	.*24*	O	ta
880	54, 57,351,374,376		var.	FRRFR	—	. . . . . FV. . VF. . .	. . .	.	vtpg
881	51, 69,367,608,609,613	*166*,641	6.0	*101021*	12	. . . . *2216*. 0F. *2*0	. . .	*w*	dvg
882	46, 51, 79,368		5.7	F121	—	. . *4*. . 11. . 1*8*. . .	. . .	*y*	
883	44, 66, 74,609,613,617		4.9	001211	—	. . 4. . 99. . V4. *3*.	. . .	w	vg
884	41, 66,379		4.7	*322*	—	*3112*. *11*. . 36. 3.	. . .	W	t
885	35, 46, 74		5.1	1*20*		. . *4*. 1 $^{3}_{11}$ . . $^{.}_{2}$. 10	. . .	*y*	d
886		161,440,652	*5.9*		*312*	. . *4*. 1 $^{3}_{11}$ . . $^{.}_{5}$. $^{.}_{2}$ 10	. . .	*r*	d
887	38, 60,374,379,608,609,613	*166,434*,641	6.1	**0***212112*	*111*	. . . . . *331*. 3F. . *1*	. . .	.	vtg
888	44, 62, 69,596,602,613	166,434,641	4.7	000*221*	2*32*	321. . 331. . 2. 10	. . .	w	
889	54, 71,368		5.0	1*11*	—	. . . . . 22. *323*. 2.	. . .	w	
890	383,385,391	*125*,424,638	5.5	010	5*32*	. . . . . *311*. . 6. . 1	. . .	W	
891	41, 66, 79,395,596,603,607	161,425,*652*	4.9	*20*21220	*101*	. . 2. . 133. . 4. 3*1*	. . .	w	
892	44,354,383,398		5.0	*1*002	—	. . . . . 00. *311*. 1.	. . .	.	t
893	51, 69,367		6.3	11*3*	—	. . . . . FF*6*. . F. . .	. . .	.	
894	47,354,383,596,599,613	166,434,641	4.7	1*20001*	031	*355*. . 335. . **0**. 1*1*	. . .	W	
895	54,358,383,608,609,613		6.0	401*200*	—	. . *4*. . FF. *51*F. . .	. . .	Y	v
896	41, 71,351,370,379,383,385	161,425,652	3.3	*1011312*-	606-	1930. 443. . 7. 74	. . *1*	W	a
897	35, 79,358		5.5	22*4*	—	. . . . . F3. 022. . .	. . .	.	c
898	47. 60,391		6.0	*120*	—	. . . . . *22*. . 3F. . .	. . .	.	
899	41, 69,368,370,608,609,613		6.5	*6751*504	—	. . . . . FF*7*. *1*F*73*.	. . .	.	tc
900	35, 79,395	166,434,641	5.1	11*1*	*262*	*123*. . 111. . 2. 1*3*	. . .	*y*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
901	Lepus . .	ε 2	1575	—	0.4	−22 32	4·3	4·3	—	3.1	6	3.26	.06	—	—
902	Lepus . .	—	1578	—	0.4	−26 19	F	6	—	6.1	3	6.13	.08	—	—
903	Taurus . .	l 106	1570	+20° 885	0.7	+20 15	6·5	6·5	5.3	—	3	5.45	.04	5.1	.12
904	Taurus . .	103	1572	+24° 755	0.8	+24 7	6	6	5.8	—	3	5.46	.04	5.7	.07
905	Taurus . .	105	1571	+21° 766	0.8	+21 33	6	6	6.3	—	3	5.82	.03	5.8	.03
906	Eridanus .	66	1579	—	0.8	− 4 49	F	6	—	5.6	3	5.18	.15	—	—
907	Orion . .	i 14	1584	+ 8° 866	1.3	+ 8 21	6	6	5.8	5.9	3	5.42	.04	5.5	.09
908	Auriga . .	—	1582	+46° 970	1.8	+46 49	F	6	6.0	—	3	5.60	.05	6.1	.11
909	Lepus . .	—	—	—	1.9	−12 39	6	6	—	6.3	3	6.25	.19	—	—
910	Eridanus .	β 67	1588	—	2.0	− 5 15	3	3	—	2.8	6	2.87	.07	—	—
911	Taurus . .	—	—	+27° 732	2.2	+27 53	F	6	5.5	—	3	5.96	.04	5.8	.03
912	Orion . .	h 16	1590	+ 9° 743	2.7	+ 9 40	6	6	6.0	5.9	3	5.32	.00	5.5	.08
913	Camelopard.	—	1565	+79° 169	2.8	+79 5	5	5	5.2	—	6	5.13	.02	5.0	.03
914	Orion . .	15	1591	+15° 752	2.8	+15 27	5·6	5·6	5.0	—	3	4.81	.11	4.7	.07
915	Eridanus .	68	1593	—	2.8	− 4 37	6	6	—	5.6	4	5.37	.11	—	—
916	Cepheus .	—	—	+85° 78	3.3	+85 34	6	F	7.0	—	3	6.25	.03	—	—
917	Eridanus .	λ 69	1597	—	3.4	− 8 55	4	4	—	4.6	7	4.39	.08	—	—
918	Camelopard.	—	1585	+73° 280	3.6	+73 8	6	6	5.8	—	18	5.73	.03	5.7	.05
919	Orion . .	—	—	− 0° 867	4.0	− 0 44	6	6·7	6.7	6.5	3	6.38	.12	—	—
920	Orion . .	—	1601	+15° 759	4.8	+15 54	6	6	5.7	—	3	5.34	.16	5.4	.19
921	Auriga . .	—	—	+53° 872	5.1	+53 4	F	6	6.5	—	3	6.20	.11	5.9	.11
922	Auriga . .	μ 11	1602	+38° 1063	5.2	+38 20	6·5	6·5	5.2	—	6	4.92	.06	5.1	.07
923	Orion . .	—	—	—	5.3	− 2 38	6	6	—	6.3	3	6.00	.05	—	—
924	Orion . .	—	—	+ 0° 975	5.6	+ 0 53	6	6·7	6.5	6.3	3	5.92	.09	5.7	.20
925	Lepus . .	—	1604	—	5.8	−12 0	F	F	—	6.0	3	5.86	.11	—	—
926	Lepus . .	—	—	—	5.9	−26 4	F	F	—	6.6	3	6.47	.07	—	—
927	Lepus . .	ι 3	1608	—	6.7	−12 1	5	5	—	4.4	3	4.66	.15	—	—
928	Orion . .	ϱ 17	1611	+ 2° 888	7.0	+ 2 43	5	5	4.8	5.1	3	4.47	.11	4.8	.08
929	Lepus . .	μ 5	1616	—	7.5	−16 21	3.4	4	—	3.4	6	3.29	.04	—	—
930	Auriga . .	14	1614	+32° 922	7.6	+32 33	5·6	5·6	5.5	—	3	5.20	.11	4.8	.03
931	Lepus . .	κ 4	1617	—	7.7	−13 5	4·5	5	—	4.2	7	4.55	.07	—	—
932	Auriga . .	α 13	1613	+45° 1077	7.8	+45 52	1	1	1.0	—	16	0.18	.02	0.3	.05
933	Lepus . .	—	—	—	8.1	−27 19	F	F	—	6.7	5	6.73	.07	—	—
934	Auriga . .	—	—	+34° 980	8.3	+34 11	6	6	6.7	—	3	5.94	.13	5.7	.20
935	Orion . .	—	—	+ 4° 877	8.4	+ 5 1	6	6	6.0	6.1	3	5.91	.04	5.9	.07
936	Orion . .	β 19	1623	—	8.8	− 8 20	1	1	—	1.0	15	0.32	.04	0.3	.06
937	Camelopard.	15	1622	+57° 874	9.1	+57 59	6	6	6.5	—	3	6.29	.15	5.6	.07
938	Camelopard.	—	—	+62° 742	9.2	+62 31	F	6	6.0	—	15	5.84	.03	5.8	.07
939	Orion . .	—	—	− 1° 837	9.3	− 1 33	6	6·7	6.5	6.5	3	6.00	.09	—	—
940	Orion . .	18	1624	+11° 756	9.4	+11 12	6	6	6.0	5.9	3	5.56	.03	5.5	.15
941	Auriga . .	—	—	+42° 1239	9.7	+42 40	F	6·7	6.0	—	3	6.04	.09	6.3	.08
942	Auriga . .	16	1627	+33° 1000	10.3	+33 15	5	5	5.1	—	3	4.97	.08	4.8	.03
943	Lepus . .	—	1634	—	10.6	−27 5	5	5·6	—	5.4	5	4.71	.05	—	—
944	Auriga . .	λ 15	1631	+39° 1248	10.7	+40 0	5	5	4.9	—	6	4.95	.07	5.0	.05
945	Camelopard.	—	1619	+77° 195	10.9	+77 52	6	6·7	7.0	—	3	6.34	.03	6.4	.07
946	Auriga . .	—	1632	+33° 1008	11.1	+33 37	6	6	6.2	—	7	5.34	.08	5.2	—
947	Auriga . .	—	—	+40° 1253	11.8	+40 58	6	6	5.8	—	3	5.34	.03	5.8	.03
948	Orion . .	τ 20	1638	—	11.8	− 6 59	4	4	—	3.9	7	3.65	.06	—	—
949	Auriga . .	19	1636	+33° 1013	12.1	+33 50	5·6	6·5	5.9	—	3	5.10	.09	5.4	.11
950	Taurus . .	n 109	1637	+21° 816	12.1	+21 59	6	6·5	5.5	—	3	5.15	.04	5.3	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks
	Measures.	Estimates.				P S Hh Σ U *H* D B G *h* R F E	s w p		
901	51, 57, 84,606,613,615		3.3	410*113*	—	5532. 44. *117*. *1*.	...	*y*	vtg
902	69,398,629		6.1	20*2*	—	..... F *3*. *624*. . .	...	.	
903	38, 54,401	166,434,641	5.4	011	063	*450*. . 022. . 3. 0*3*	...	W	
904	41,71,405	166,*434*,641	5.5	10*1*	032	. . 1. . 331. . 2. . 2	...	*y*	
905	60,383,395	*166*,435,641	5.8	00*1*	010	. . *2*. . 003. . 3. *20*	...	*y*	
906	351,398,402		5.2	*421*	—	. . 3. . F6. . 19. . .	...	w	v
907	71, 74,395	166,435,641	5.4	011	*103*	. . *1*. . 442. 3*1*. 11	...	w	
908	51, 66, 79	*133,440,652*	5.6	111	662	..... F22. . 5. . 5	. . 0	*y*	
909	60,385,401		6.2	13*5*	—	..... *44*. . *1* F. . .	...	.	v
910	38, 84,398,609,613,615		2.9	223*211*	—	**53**82. 33. . 06. 0.	.*3*.	*y*	vg
911	57,383,405	*166*,435,*642*	6.0	10*1*	*212*	. . . . 0 F *26*. . F2. *2*	...	.	d
912	41,367,401	166,435,641	5.3	000	024	. . 2. . 555. 44. 22	...	*y*	
913	47, 71,402,609,613,615	125,424,638	5.1	000*111*	*110*	. . . . *3111*. . *2*. *31*	...	*y*	d
914	54,370,401	166,424,641	4.8	11*3*	*130*	*466*. . 442. . 5. 2*1*	...	*y*	
915	38, 66, 84,401		5.4	5*121*	—	. . **b**. . 44. . *17*. . .	...	*y*	v
916	54, 84,395		6.2	0*10*	—	..... *4* F6. . F. . .	...	.	n
917	51, 74,385,609,613,631,633		4.4	*5231212*	—	*624*1. *33*. . 10. 1.	.*5*.	*g*	v
918	38, 44, 57, 74, 79, 84,363	*124*,127,*128*	5.7	305*1231*-	*111*	..... 11*1*. . 03. 0	...	w	s
919	47, 71,405		6.4	30*3*	—	..... *631*. *1* F. *2*.	...	.	t
920	47, 60, 87	166,*435*,641	5.3	*143*	136	..... 553. . 8. . 1	...	O	
921	41, 57, 82	*161,162,652*	6.2	*131*	*404*	..... F *41*. . F. . *3*	...	.	
922	54, 84,395,601,615,617	135,435,642	4.9	*102*132	203	. . 1. . 573. . 4. 72	...	*y*	
923	71,363,395		6.0	111	—	..... *22*. . 11. . .	...	.	
924	54,351,401	*166*,435,641	5.9	21*2*	170	..... *124*. 22. . *2*	...	.	
925	354,363,401		5.9	0*32*	—	..... FF. . *1* F. . .	...	.	vt
926	44, 79,383		6.5	*120*	—	..... FF. *51* F. . .	...	.	
927	38, 57, 87		4.7	034	—	32*53*133. . *32*. *4*.	...	*y*	dt
928	44, 79,405	166,435,640	4.5	*311*	225	. . 4. 5553. 48. 43	...	o	dvtg
929	51, 69,405,606,615,617		3.3	*111112*	—	5503. 18. . 27. 2.	. .	W	vt
930	54,363,401	135,435,642	5.2	32*0*	*434*	. . *1*. *1*002. . 1. *24*	...	*y*	d
931	54,367,401,402,606,615,617		4.6	6*131021*	—	432*2*52*4*. . *43*. *4*.	...	w	d
932	38, 41, 66, 94,354,367,370	174,198,204	0.2	1002*111*-	*232*-	34*8*3. 111. . 3. 61	*112*	*w*	ve
933	374,395,401,402,405		6.7	F0*1*F2	—	..... FF. *72* F. . .	...	.	nd
934	47, 54, 84	*135,435*,642	5.9	*133*	*127*	..... *116*. . F. . *2*	...	.	
935	69,368,398	*166*,435,641	5.9	*110*	10*2*	..... *111*. 0*23*. 0	...	.	t
936	38, 41, 71, 74, 79,368,370	166,174,176	0.3	*221*1100-	112-	232*0*300. . 42. *50*	*42*.	*b*	dve
937	51,367,401	*161*,440,*652*	6.3	4*21*	*587*	. . **b**. . *550*. . *6*. . *7*	...	*y*	
938	69, 71, 79,351,368,374,396	124,*161,162*	5.8	0*111523*-	*222*	..... F00. . F *1*. 0	...	.	sp
939	363,402,408		6.0	*221*	—	..... *213*. 3 F. . .	...	.	
940	79,383,398	166,435,641	5.6	100	*323*	. . *2*. . 222. 11. . *1*	...	*y*	
941	66,368,401	161,*440,653*	6.0	*221*	225	..... F *12*. . F. . 3	...	.	t
942	47, 47,401	*135*,435,642	5.0	*220*	*221*	. . 0. . 001. . *1*. 4*2*	...	O	
943	44, 87,367,374,395		4.7	*10*230	—	..... 35. *3*42. 4.	...	.	n
944	38, 84,405,609,613,631	135,435,642	5.0	4*31111*	111	. . *3*. 400*1*. . 7. 20	. . *3*	*y*	d
945	41,398,402	*125*,162,670	6.3	010	*211*	..... *525*. . *2*. . 1	...	*y*	dc
946	363,383,398,401,604,609,617	*135,435*,642	5.3	**0***230313*	**10***3*	..... 557. . *4*. . *1*	...	.	ec
947	47, 82,405	*161,440*,653	5.3	0*10*	556	..... 553. . F9. 5	. . 3	.	t
948	54,370,402,609,613,619,621		3.6	4200*520*	—	2233. 55. . 4**3**. 7.	.*1*.	*g*	p
949	60, 84,383	*135,435*,642	5.1	1*22*	361	. . 2. . 156. . 6. . 3	...	*y*	
950	47,79,405	166,436,641	5.2	0*11*	*221*	*232*. . 642. . 1. 31	...	*y*	a

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
951	Lepus . .	—	1643	—	12.2	−13 39	F	6·7	—	6.0	3	5.70	.11	—	—
952	Orion . .	21	1646	+ 2° 916	13.0	+ 2 28	6·5	6	6.1	5.9	6	5.37	.04	5.6	.16
953	Camelopard.	16	1642	+57° 879	13.2	+57 26	6·5	6·5	5.3	—	3	5.33	.09	5.0	.08
954	Auriga . .	ϱ 20	1645	+41° 1162	13.4	+41 41	6·5	6	6.0	—	3	5.14	.07	5.8	.09
955	Lepus . .	—	—	—	13.4	−18 15	F	6	—	6.4	3	5.91	.08	—	—
956	Auriga . .	—	1649	+29° 869	13.6	+29 27	F	F	6.0	—	3	5.63	.09	—	—
957	Orion . .	—	—	− 1° 859	13.6	− 1 32	6	6	6.5	6.7	3	6.40	.19	—	—
958	Auriga . .	—	—	+40° 1268	14.0	+40 54	6	6	6.0	—	3	5.54	.03	5.8	.07
959	Lepus . .	λ 6	1653	—	14.0	−13 18	4·5	5·4	—	4.1	3	4.28	.08	—	—
960	Lepus . .	ν 7	1654	—	14.4	−12 26	6·5	5·6	—	5.7	3	5.16	.11	—	—
961	Lepus . .	—	1655	—	14.6	−27 30	F	6	—	6.1	7	5.68	.08	—	—
962	Orion . .	—	1656	+ 8° 933	15.2	+ 8 19	6	6	6.5	6.1	3	5.75	.07	5.9	.07
963	Lepus . .	—	—	—	15.3	−21 21	5	5	—	4.9	3	4.63	.09	—	—
964	Orion . .	o 22	1660	− 0° 930	15.6	− 0 30	5	5	4.8	5.1	3	4.65	.07	—	—
965	Auriga . .	σ 21	1663	+37° 1175	16.5	+37 16	6	6	5.3	—	3	5.24	.03	5.3	.08
966	Orion . .	m 23	1665	+ 3° 871	16.5	+ 3 26	5·6	5·6	5.3	5.2	3	5.00	.12	5.0	.05
967	Lepus . .	—	1670	—	16.8	−24 53	5·6	5·6	—	5.4	4	5.34	.17	—	—
968	Auriga . .	—	1668	+31° 954	16.9	+31 7	6	6	6.6	—	3	6.37	.08	5.6	.03
969	Auriga . .	—	1669	+31° 955	16.9	+31 2			6.4	—	3	5.87	.08		
970	Taurus . .	111	1671	+17° 920	17.4	+17 17	6·5	6·5	5.5	—	3	5.17	.05	5.5	.11
971	Orion . .	—	—	—	17.5	− 8 32	F	F	—	—	3	5.82	.08	—	—
972	Lepus . .	8	1679	—	18.0	−14 2	6	6	—	5.7	3	5.14	.03	—	—
973	Orion . .	e 29	1680	—	18.2	− 7 55	5·4	5	—	4.4	3	4.30	.05	—	—
974	Orion . .	p 27	1682	− 1° 886	18.4	− 1 0	6	6	6.0	5.6	3	5.15	.03	—	—
975	Orion . .	η 28	1684	—	18.4	− 2 31	3·4	3·4	—	3.4	6	3.49	.08	—	—
976	Lepus . .	—	1688	—	18.4	−26 49	F	6·7	—	6.5	4	6.42	.02	—	—
977	Orion . .	25	1685	+ 1° 1005	18.5	+ 1 44	5	5	5.0	5.4	6	4.64	.06	4.8	.03
978	Taurus . .	β 112	1681	+28° 795	18.7	+28 30	2	2	2.0	—	15	1.90	.04	2.1	.07
979	Orion . .	γ 24	1687	+ 6° 919	18.7	+ 6 14	2	2	2.0	1.7	16	1.86	.06	2.0	.11
980	Camelopard.	17	1676	+62° 759	18.8	+62 58	6	6	6.0	—	18	5.76	.04	5.7	.05
981	Lepus . .	—	—	—	19.1	−17 4	F	6	—	5.9	3	5.70	.05	—	—
982	Orion . .	—	—	—	19.4	−10 26	6	6	—	6.4	3	5.98	.03	—	—
983	Auriga . .	—	—	+30° 989	19.5	+30 7	6	6	6.2	—	3	5.76	.04	5.5	.03
984	Auriga . .	φ 24	1690	+34° 1048	19.7	+34 23	5·6	6·5	6.0	—	3	5.30	.03	5.1	.15
985	Auriga . .	—	—	+53° 912	20.2	+53 19	F	6	7.3	—	8	6.86	.08	6.5	.00
986	Taurus . .	115	1692	+17° 928	20.2	+17 52	6	6	6.0	—	7	5.38	.07	5.7	.09
987	Taurus . .	o 114	1695	+21° 847	20.4	+21 50	6	6	5.8	—	3	4.82	.09	5.1	.11
988	Orion . .	ψ 30	1700	+ 2° 962	20.6	+ 2 59	5	5	5.3	5.0	3	4.73	.11	4.7	.03
989	Lepus . .	—	—	—	20.8	−19 48	F	6	—	6.2	3	5.88	.12	—	—
990	Taurus . .	116	1701	+15° 826	20.9	+15 47	6	6	6.0	—	3	5.47	.11	5.6	.17
991	Orion . .	—	—	+ 1° 1021	21.8	+ 1 11	6	6·7	7.2	6.8	4	6.39	.12	6.3	.09
992	Taurus . .	118	1707	+25° 839	21.9	+25 3	6	6·5	5.5	—	3	5.39	.03	5.7	.15
993	Lepus . .	—	—	—	22.5	−21 29	F	F	—	6.5	7	6.05	.09	—	—
994	Lepus . .	β 9	1715	—	23.1	−20 51	3·4	3·4	—	2.9	6	3.03	.10	—	—
995	Orion . .	—	—	—	23.4	− 3 33	F	6	—	6.5	5	5.96	.08	—	—
996	Cepheus .	—	1662	+85° 80	23.5	+85 8	6	6·7	6.0	—	7	6.40	.06	6.2	.09
997	Orion . .	31	1717	− 1° 913	23.6	− 1 11	5	5·6	5.5	var.	6	4.90	.03	—	—
998	Camelopard.	—	1706	+74° 252	23.7	+74 58	F	F	6.5	—	6	6.37	.07	—	—
999	Orion . .	—	—	+ 1° 1032	23.7	+ 1 40	6	6	7.2	6.4	7	5.55	.04	5.9	.04
1000	Orion . .	A 32	1722	+ 5° 939	24.4	+ 5 51	5·6	5·6	5.5	4.8	3	4.34	.19	4.8	.05

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
951	354,398,402		5.7	023	—	. . . . . F 4 . . 14 . . .	. . .	Y	
952	82,398,405,609,613,619	*166*,436,640	5.4	*120211*	600	. . *5* . . 0 4 5 . 3 3 . . 2	. . .	*y*	vg
953	63,368,402	161,440,652	5.3	*122*	*351*	. . *4* . . 1 3 *1* . . 0 . . *3*	. . .	W	
954	44,351,402	*161,440,653*	5.1	021	596	. . 2 . . 3 7 7 . . 6 . 7 7	. . 3	W	
955	75,367,402		5.9	*211*	—	. . . . . F *1* . . 3 *2* . . .	. . .	.	dtc
956	38,351,402		5.6	*212*	—	. . . . . F F 2 . . 5 . . .	. . .	*y*	
957	54, 84,370		6.4	*531*	—	. . . . . *6 6 1* . 1 F . . .	. . .	.	
958	51, 79,405	*161,440,653*	5.5	*100*	341	. . . . . 3 3 3 . . F . . 3	. . 2	.	
959	51,368,402		4.3	*220*	—	7 6 3 1 . 1 3 . . *1* 6 . *2* .	. . .	W	
960	44, 51,402		5.2	*302*	—	*2 3* 0 . . 2 0 . . 2 5 . 2 .	. . .	*r*	
961	75, 87,398,402,604,609,617		5.7	2730023	—	. . . . . F 1 . 3 2 0 . . .	. . .	.	n
962	38, 60, 82	*166*,436,641	5.8	*210*	21*1*	. . . . . 0 0 5 . 1 *1* . . 1	. . .	w	
963	51, 63, 84		4.6	*122*	—	. . . . . 4 4 . 1 1 7 . 1 .	. . .	.	
964	47, 79,370		4.6	*210*	—	. . *2* . . 4 4 2 . 3 1 . 3 .	. . .	W	d
965	75,351,402	*135*,436,642	5.2	*100*	31*1*	. . *1* . . 6 6 0 . . 5 . 6 1	. . .	O	
966	63, 82,398	166,436,640	5.0	*321*	*111*	. . 0 . 1 2 2 2 . *1* 7 . 1 0	. . .	*y*	dg
967	54, 57, 87,398		5.3	F*432*	—	. . . . . *1 1* . *3 2* 0 . *2* .	. . .	*y*	d
968	72, 84,398		6.4	*211*		. . . . . 0	. . .	.	e
969	51, 72, 84	*135*,436,*642*	5.9	*121*	122-	. . . . . 4 4 3 . . 3 . . 2	. . .	.	e
970	70,368,402	*166*,436,641	5.2	*111*	226	. . 0 . . 2 4 2 . . 5 . . 3	. . .	*y*	
971	354,363,402		5.8	*211*	—	. . . . 7 F F . . . F . . .	.*4*.	.	d
972	367,383,398		5.1	*010*	—	. . *1* . . 7 7 . . 3 6 . . .	. . .	w	
973	60,363,402		4.3	1*11*	—	1 *1* 7 . . 3 7 . . 1 6 . 0 .	.*5*.	Y	t
974	82,398,408		5.2	00*1*	—	. . *2* . . 6 6 6 . 1 9 . 1 .	. . .	Y	dt
975	87,370,389,604,613,617		3.5	*122323*	—	*2 1 1* 1 . *1* 0 . . 0 9 . 1 .	*2 1*.	w	d
976	63,398,405,408		6.4	1*100*	—	. . . . . F *3* . *4 1* F . . .	. . .	.	n
977	87,351,408,609,611,617	166,436,640	4.6	01*3*014	322	. 3 *1* . . 4 4 4 . 5 7 . 5 2	. . .	*y*	nva
978	41, 44, 79, 82,354,368,370	127,128,166	1.9	*2*142113-	*131*-	8 1 0 2 . 3 3 2 . . 1 . 0 2	*4 1*.	W	nea
979	41, 44, 94,351,354,368,370	166,168,174	1.9	*121*1374-	*442*-	2 1 *2* 1 . 3 3 2 . *3* 1 . 0 1	*5 3*.	W	vpeg
980	47, 54, 57, 70, 75, 80, 87	124,*161,162*	5.8	0453*233*-	*200*	. . *4* . . 0 0 0 . . *1* . . *1*	. . .	O	s
981	80,367,402		5.7	*111*	—	. . . . . F 1 . . 0 4 . . .	. . .	.	
982	60,370,402		6.0	00*1*	—	. . . . . *2 2* . . 2 1 . . .	. . .	.	
983	72,377,402	*135*,436,*642*	5.8	1*10*	*332*	. . . . . 0 0 2 . . 3 . . *3*	. . .	.	
984	47,351,402	*135*,436,642	5.3	001	2*43*	*3* 0 0 . . *1* 3 5 . . 4 . 8 *2*	. . .	O	
985	41,377,402,408,608,615,617	*161,162,652*	6.9	1171b33-	*44*F	. . . . . F b 2 . . F . . *4*	. . .	.	
986	94,389,399,402,601,613,619	*166*,436,641	5.4	8*111102*	215	. . 0 . . 4 4 4 . . 7 . . 3	. . .	w	
987	70, 82,383	166,436,641	4.8	*212*	613	2 1 0 . . **0 0** 8 . . 5 . 8 3	. . .	*g*	
988	60,354,402	166,436,640	4.7	3*11*	001	3 6 0 . . 3 3 5 . 1 2 . 1 0	. . .	*g*	na
989	63,354,408		5.9	3*12*	—	. . . . . F *1* . . 1 *2* . . .	. . .	.	
990	63, 84,380	*166*,436,641	5.5	3*20*	3*34*	. . *1* . . 3 3 3 . . 6 . . 1	. . .	W	
991	75,411,601,617	*166,436*,642	6.4	5*221*	*312*	. . . . . *6 3* 6 . 2 F . . *1*	. . .	.	p
992	44, 80,408	*136*,436,641	5.4	010	*163*	. . 4 . 0 4 2 0 . . 3 . . 3	. . .	w	d
993	41, 60,408,411,609,611,617		6.0	7*412*712	—	. . . . . F F . 0 3 F . . .	. . .	.	
994	44, 82,399,609,611,617		3.0	4*23*511	—	3 6 1 2 . 4 5 . 0 0 5 . 0 .	. . .	Y	vg
995	87, 94,629,630,631		6.0	F12*11*	—	. . . . . F *2* . . 3 F . . .	. . .	.	tp
996	72, 80,351,408,604,606,619	*125*,428,638	6.4	F*321012*	0*41*	. . . . . *6 3 6* . . F . . *2*	. . .	*y*	np
997	82,363,375,609,611,617		4.9	100*111*	—	. . 0 . 9 1 3 5 . v 8 . 1 .	. . .	O	dvtg
998	408,413,419,609,611,621		6.4	*123212*	—	. . . . . F F *1* . . *3* . . .	. . .	.	
999	47, 70, 84,383,386,399,411	*166*,436,642	5.6	*2001231*	432	. . . . . 2 2 4 . 6 5 . . 3	. . .	.	p
1000	41, 60,413	166,436,642	4.3	05*4*	464	3 2 0 . 9 9 9 1 . 4 6 . 3 5	.*3*.	W	d

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1001	Auriga . .	χ 25	1723	+32° 1024	24.6	+32 6	5	5	4.8	—	6	5.00	.05	4.9	.12
1002	Orion . .	n^1 33	1725	+ 3° 948	25.0	+ 3 12	6	6	6.5	6.0	4	5.50	.10	5.5	.07
1003	Taurus . .	119	1726	+18° 875	25.2	+18 30	6·5	5	4.4	—	5	4.57	.06	4.9	.19
1004	Taurus . .	—	1728	+16° 794	25.2	+16 58	6	6	6.1	—	3	5.51	.13	5.8	.11
1005	Orion . .	δ 34	1730	− 0° 983	25.9	− 0 23	2	var.	2.0	2.3	9	2.36	.07	—	—
1006	Lepus . .	10	1732	—	26.0	−20 57	F	6	—	5.9	3	5.36	.08	—	—
1007	Orion . .	υ 36	1731	—	26.1	− 7 23	5·4	5	—	5.1	7	4.66	.11	—	—
1008	Taurus . .	120	1734	+18° 877	26.5	+18 28	F	6	6.2	—	4	5.32	.09	5.9	.11
1009	Auriga . .	—	—	+54° 914	26.7	+54 20	F	6	6.0	—	4	5.96	.08	6.1	.16
1010	Orion . .	—	—	− 1° 935	26.7	− 1 41	6	6	6.0	6.1	3	5.20	.15	—	—
1011	Columba .	ε	1739	—	27.0	−35 34	4	4	—	4.1	6	3.78	.09	—	—
1012	Orion . .	35	1737	+14° 947	27.1	+14 13	6	6	5.7	—	3	5.67	.11	5.4	.15
1013	Auriga . .	—	1736	+47° 1178	27.2	+47 40	F	6	6.0	—	3	6.07	.08	5.7	.11
1014	Lepus . .	α 11	1741	—	27.4	−17 55	3	3	—	2.7	6	2.67	.07	—	—
1015	Orion . .	n^2 38	1743	+ 3° 964	28.0	+ 3 41	6	6	6.2	5.8	7	5.33	.05	5.4	.04
1016	Taurus . .	121	1742	+23° 954	28.1	+23 58	6	6	5.9	—	4	5.43	.07	5.2	.05
1017	Orion . .	φ^1 37	1748	+ 9° 777	28.2	+ 9 24	5	5	5.0	5.0	6	4.40	.04	4.9	.03
1018	Orion . .	—	—	+10° 818	28.5	+10 9	F	F	6.5	—	6	5.50	.03	—	—
1019	Orion . .	λ 39	1749	+ 9° 879	28.5	+ 9 51	3·4	3·4	3.5	3.5	6	3.49	.09	3.8	.19
1020	Orion . .				28.5	+ 9 51									
1021	Orion . .	—	1752	—	29.2	− 6 5	F	F	—	var.	6	4.47	.06	—	—
1022	Columba .	—	—	—	29.2	−30 1	F	F	—	—	3	6.19	.12	—	—
1023	Orion . .	41	1758	—	29.4	− 5 28	4	4	—	5.0	7	4.41	.13	—	—
1024	Orion . .	θ 43	1760	—	29.5	− 5 30			—	5.2	6	4.90	.12	—	—
1025	Orion . .	42	1759	—	29.5	− 4 55	5·4	5·4	—	5.5	6	4.60	.06	—	—
1026	Orion . .	c 45	1763	—	29.7	− 4 56			—	6.1	3	4.95	.16	—	—
1027	Orion . .	ι 44	1762	—	29.6	− 5 59	3	3·4	—	2.9	6	2.97	.08	—	—
1028	Taurus . .	122	1764	+16° 822	30.1	+16 58	6	6	6.2	—	3	5.37	.03	5.8	.11
1029	Orion . .	ε 46	1765	− 1° 969	30.1	− 1 17	2	2	2.0	1.8	16	1.76	.04	1.8	.06
1030	Orion . .	φ^2 40	1766	+ 9° 898	30.3	+ 9 13	5·4	5·4	4.6	4.5	3	4.42	.04	4.6	.08
1031	Camelopard.	—	1751	+65° 485	30.5	+65 38	6	6	6.0	—	17	5.78	.04	5.7	.05
1032	Taurus . .	ζ 123	1767	+21° 908	30.5	+21 4	3·4	3·4	3.1	—	6	2.98	.04	3.5	.11
1033	Auriga . .	26	1768	+30° 963	30.9	+30 25	6	6	6.0	—	6	5.56	.04	5.5	.08
1034	Columba .	—	1775	—	31.5	−28 47	F	F	—	6.5	4	6.05	.07	—	—
1035	Orion . .	—	—	+ 7° 953	31.6	+ 7 28	6	6	6.1	6.3	3	5.62	.08	5.8	.24
1036	Orion . .	—	—	—	31.6	−11 51	6	6	—	6.5	3	5.99	.00	—	—
1037	Taurus . .	125	1778	+25° 902	32.3	+25 50	6	6	5.7	—	3	4.93	.05	5.2	.04
1038	Lepus . .	—	1783	—	32.5	−27 56	F	F	—	6.4	3	5.68	.12	—	—
1039	Orion . .	σ 48	1780	—	32.7	− 2 40	4·3	4·3	—	4.0	6	3.74	.04	—	—
1040	Orion . .	ω 47	1782	+ 4° 1002	32.9	+ 4 3	5	5	5.0	5.0	3	4.50	.04	4.7	.00
1041	Orion . .	d 49	1785	—	33.1	− 7 17	5	5·6	—	5.2	3	4.96	.11	—	—
1042	Columba .	—	1787	—	33.1	−28 46	5·6	5·6	—	5.3	4	5.25	.07	—	—
1043	Orion . .	—	1789	—	33.5	− 3 38	6	6	—	6.7	3	5.96	.08	—	—
1044	Taurus . .	126	1792	+16° 841	34.4	+16 29	5	6·5	5.5	—	7	4.93	.09	5.2	.09
1045	Orion . .	ζ 50	1794	—	34.7	− 2 0	2	2	—	1.8	15	1.89	.05	1.7	0.6
1046	Orion . .				34.7	− 2 0									
1047	Orion . .	—	—	− 1° 1004	34.8	− 1 11	6	6	6.2	5.7	7	5.06	.08	—	—
1048	Columba .	α	1802	—	35.3	−34 8	2	2	—	2.5	13	2.72	.04	3.1	.08
1049	Taurus . .	—	1801	+23° 1015	36.0	+23 9	6	6	6.3	—	3	5.99	.07	6.1	.16
1050	Orion . .	b 51	1806	+ 1° 1105	36.3	+ 1 25	6·5	6·5	5.7	5.3	3	5.26	.11	5.5	.21

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1001	57, 87,389,601,613,615	135,436,642	5.0	4*1*0*1*1*1*	140	0 3 2 . 7 0 0 *2* . . 3 . 4 *1*	. . .	*y*	d
1002	63, 82,383,389	166,436,642	5.5	4*3*0*1*	*201*	*1* . 0 . . 3 3 8 . 3 6 . 1 0	. . .	*y*	a
1003	59, 60, 75, 80, 94	166,*436*,642	4.6	*12*211	525	. 3 2 . . 8 4 *2* . . 7 . 7 3	. . .	R	ta
1004	72, 84,380	*166*,436,642	5.5	3*22*	350	. . . . 5 3 3 4 . . 6 . 1 3	. . .	*y*	d
1005	70, 80,354,363,370,375,606		2.4	23*43*241-	—	*3 4 1* 0 *3 2* v *3* . *1* 1 . 2 .	*3 1*.	W	dvg
1006	44, 82,399		5.4	*121*	—	. . 5 . . F 4 . 6 3 F . . .	. . .	*r*	
1007	57,351,386,411,606,617,619		4.7	7*42*2034	—	*3 2 1* . . *1* 3 . . 2 **0** . 2 .	. *4*.	w	pa
1008	87, 94,375,389	166,*436*,642	5.3	F*12*2	595	. . . . . F 5 7 . . 4 . . 6	. . .	*w*	h
1009	72, 75,370,408	*161*,440,*652*	6.0	F*121*	*205*	. . . . . F *2 2* . . 1 . . 1	. . .	.	
1010	80,354,386		5.2	4*12*	—	. . . . . 6 6 6 . 7 9 4 . .	. . .	.	
1011	87,375,399,632,633,634		3.8	12*4*323	—	6 8 . 2 . 3 3 . 1 4 2 . 3 .	. . .	.	
1012	57,351,386	*166*,436,642	5.7	3*2*0	*163*	. . *5* . . 11*1* . . 0 . . *3*	. . .	.	
1013	70, 84,408	*161*,440,*652*	6.1	*112*	*373*	. . . . . F *3 3* . . 0 . . *4*	. . .	w	
1014	52,370,408,606,617,619		2.7	31*2*30*2*	—	6 9 *1* 1 . 5 5 . . 1 3 . 0 .	. . .	*y*	
1015	72, 82,383,389,604,608,617	166,436,642	5.3	**2***1*02401	012	1 0 *1* . . 5 5 7 . 3 4 . 1 1	. . .	*y*	
1016	63, 87, 94,380	*136*,436,642	5.4	0F*2*1	*113*	*4 5 4* . . 4 4 3 . . 3 . 0 *2*	. . .	w	
1017	60,363,413,609,611,617	*138*,436,642	4.4	1*13*101	545	. . 2 . . 6 6 6 . 4 5 . 4 5	. 0 .	*y*	
1018	354,363,413,609,611,621		5.5	1*1*001*2*	—	. . . . . F F 8 . . F . 3 .	. 0 .	*w*	vm
1019	60,363,413,604,613,619	138,432,642	*3.7*	*113*51*3*	118	. . 5 2 $\frac{7}{4}$ *1* 0 2 . 1 5 . 1 3	*2* 0 .	1	dvg
1020			*5.6*						dvg
1021	354,375,386,611,613,620		4.5	*112*222	—	. . . . . F F . . v **2** . 5 .	. *2*.	.	dvgc
1022	44, 84,411		6.2	1*32*	—	. . . . . F F . *2* . F . . .	. . .	*r*	
1023	72,351,413,611,613,619,620		4.4	3*422*475	—	4 . R	. . .	.	ndag
1024	72,351,413,611,613,620		4.9	2*24*551	—	*1 3* *4 . 5* 2 2 . . 4 5 . . . 0 . . .	. . .	*y*	ndag
1025	52,351,413,611,613,619		4.6	003*3*30	—	2 . 4	. . .	w	ndvag
1026	70,351,413		5.0	*4*13	—	4 2 *2* . **1** 6 6 . . 6 3 . . 9 F . **0** .	. . .	*y*	ndvag
1027	63,351,413,611,613,620		3.0	31*2*330	—	3 6 1 2 6 2 5 . . 0 5 . 1 .	*3 1*.	W	d
1028	82,377,419	*166*,436,642	5.4	100	461	. 2 *1* . . 4 4 6 . . 7 . . 4	. . .	w	a
1029	44, 70, 75, 84, 90, 94,363	166,174,175	1.8	**b***122211*-	022-	3 2 1 *2* . 4 4 3 . *1 2* . 1 0	*1 1*.	W	eh
1030	75,363,413	138,436,642	4.4	0*11*	303	. . *4* . . 2 2 2 . 0 0 . 0 2	. *2*.	*o*	t
1031	57, 63, 82, 90, 94,354,375	124,*161*,*162*	5.8	2*113112*-	*202*	. . . . . 0 0 0 . . *1* . . *1*	. . .	w	s
1032	80,380,413,611,615,621	136,436,642	3.0	2*11*002	626	3 2 5 2 . 4 5 3 . . 0 . 6 5	. 0 .	W	
1033	80,383,411,615,617,620	*135*,436,642	5.6	001113	*131*	. . *2* . 1 2 2 2 . . 1 . . *1*	. . .	*y*	dv
1034	94,377,419,424		6.0	1*3*20	—	. . . . . F F . 0 3 F . **b** .	. . .	.	p
1035	60,380,413	*138*,436,642	5.6	2*11*	446	. . . . . 2 2 3 . 5 5 . . 2	. . .	.	
1036	70, 82,419		6.0	000	—	. . . . . *2 2* . . *3 3* . . .	. . .	.	
1037	52,411,413	*136*,436,642	4.9	*111*	432	1 0 4 . . 9 9 7 . . 8 . 7 3	. . .	*y*	
1038	63,377,413		5.7	*3*21	—	. . . . . F F . 3 5 0 . 2 .	. . .	.	n
1039	75,375,413,611,615,621		3.7	1*21*101	—	. 5 0 . 6 0 0 . . 4 7 . 5 .	. 0 .	*w*	dt
1040	84, 90,389	166,436,642	4.5	*1*10	222	*1 3 1* . . 5 5 5 . 3 4 . 3 2	. . .	Y	
1041	70,380,408		5.0	30*2*	—	*6 5* 0 . . 0 2 . . *1 7* . 0 .	. *5*.	*y*	
1042	63, 84,377,413		5.2	10*23*	—	. . . . . 0 0 . *5 2 3* . . .	. . .	.	
1043	80,375,413		6.0	2*11*	—	. . . . . *2 2* . . 5 F . . .	. . .	*y*	
1044	72,380,413,422,601,620,621	166,436,642	4.9	81*23122*	512	1 . 1 . . 1 7 5 . . 4 . 6 3	. . .	w	a
1045	52, 55, 83, 94,375,377,380	166,174,175	*2.0*	22*42112*-	042-	2 1 0 1 *1* $\frac{1}{6}$ 3 3 . . *2* 1 . 0 *2*	*4 1*.	W	de
1046			*4.2*						de
1047	55,413,416,601,615,621,624		5.1	0*38113*1	—	. . . . . 7 7 9 . 3 **0** . . .	. . .	.	tp
1048	87, 90, 94,380,389,396,399	176,182,441	2.7	*3*601*2*42-	085-	*6 5* . 3 . *5 5* . *5 1* 3 . 2 4	. . .	.	veg
1049	75,389,416	*166*,436,642	6.0	*10*2	432	. . . . . *2 2* 1 . . F . . 1	. . .	.	
1050	80, 84,392	*166*,436,642	5.3	0*3*2	70*2*	. . **b** . . 1 3 3 . *3* 0 . *1* 2	. . .	Y	t

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1051	Auriga . .	*26*	1797	+56° 1058	36.4	+56 4	F	6·7	6.1	—	3	6.03	.03	—	—
1052	Auriga . .	*o* 27	1804	+49° 1398	36.6	+49 46	6·5	6	5.7	—	6	5.45	.03	5.4	.11
1053	Orion . .	—	—	—	37.1	− 6 51	6	6·7	—	6.4	3	5.97	.05	—	—
1054	Lepus . .	12	1807	—	37.2	−22 26	F	F	—	6.4	3	5.73	.12	—	—
1055	Lepus . .	—	—	—	38.1	−18 36	F	6	—	6.0	4	6.00	.12	—	—
1056	Orion . .	—	1816	+ 3° 1025	38.7	+ 3 57	6	6·7	7.0	6.6	3	6.17	.03	6.1	.05
1057	Lepus . .	*γ* 13	1823	—	39.5	−22 29	4	4	—	3.5	6	3.76	.09	—	—
1058	Camelopard.	—	1813	+68° 412	40.0	+68 25	6	6	6.2	—	7	6.34	.08	6.2	.08
1059	Orion . .	—	1826	+ 9° 954	40.3	+ 9 29	6	6	6.0	6.2	3	5.82	.16	5.8	.09
1060	Taurus . .	130	1828	+17° 1004	40.4	+17 41	6	6	6.1	—	7	5.52	.03	5.8	.13
1061	Taurus . .	131	1827	+14° 1025	40.4	+14 27	F	F	6.0	—	3	5.67	.05	—	—
1062	Orion . .	—	1831	+ 1° 1126	40.4	+ 1 8	6	6	6.5	6.4	3	6.32	.15	5.9	.12
1063	Auriga . .	*τ* 29	1830	+39° 1418	40.9	+39 8	5	5·4	4.7	—	3	4.60	.19	4.7	.08
1064	Taurus . .	133	1834	+13° 979	40.9	+13 52	6	5·6	5.3	—	3	5.24	.04	5.2	.05
1065	Lepus . .	*ζ* 14	1840	—	41.5	−14 52	4·3	4·3	—	3.6	7	3.74	.04	—	—
1066	Orion . .	52	1839	+ 6° 1027	41.6	+ 6 25	6·5	6·5	5.7	5.9	3	5.28	.11	5.5	.12
1067	Taurus . .	132	1837	+24° 970	41.7	+24 33	5·6	5·6	5.3	—	3	5.09	.07	4.9	.07
1068	Orion . .	*κ* 53	1843	—	42.1	− 9 43	3·2	3·2	—	2.3	15	2.22	.04	2.4	.10
1069	Columba .	—	—	—	42.4	−28 41	F	F	—	6.2	3	5.75	.08	—	—
1070	Orion . .	—	—	—	42.5	− 4 6	6	6	—	6.5	4	5.68	.13	—	—
1071	Taurus . .	134	1846	+12° 912	42.8	+12 37	5·6	5·6	5.1	5.4	7	4.83	.08	5.0	.12
1072	Auriga . .	*υ* 31	1844	+37° 1336	43.0	+37 16	5	5	5.0	—	3	5.20	.05	4.8	.05
1073	Auriga . .	*ν* 32	1845	+39° 1429	43.2	+39 7	4	4	4.0	—	6	4.19	.07	4.2	.04
1074	Orion . .	—	1851	+ 9° 978	43.4	+ 9 50	6	6	6.0	6.2	7	5.73	.07	6.0	.07
1075	Taurus . .	135	1852	+14° 1041	43.6	+14 16	6	6	5.7	—	3	5.71	.07	5.7	.03
1076	Orion . .	—	—	+ 4° 1052	43.9	+ 4 23	6	6	6.0	6.5	3	6.03	.13	6.0	.05
1077	Lepus . .	—	—	—	44.1	−14 31	F	6·7	—	5.8	3	5.59	.15	—	—
1078	Camelopard.	31	1849	+59° 920	44.2	+59 52	5·6	5·6	5.7	—	3	5.23	.03	5.2	.09
1079	Auriga . .	*ξ* 30	1854	+55° 1027	44.8	+55 41	5	5	5.0	—	3	5.03	.03	5.1	.07
1080	Lepus . .	—	1860	—	44.9	−23 1	F	6	—	6.2	3	5.69	.05	—	—
1081	Orion . .	—	—	+19° 1110	45.3	+19 50	F	F	6.0	—	3	6.08	.09	—	—
1082	Taurus . .	137	1862	+14° 1060	45.5	+14 8	6	6	6.0	6.0	3	5.64	.08	5.7	.03
1083	Orion . .	55	1864	—	45.6	− 7 33	6·5	6·5	—	5.9	3	5.26	.11	—	—
1084	Taurus . .	136	1863	+27° 899	45.8	+27 36	5	5·6	5.5	—	7	4.46	.04	4.7	.08
1085	Orion . .	56	1869	+ 1° 1151	46.2	+ 1 49	6·5	6·5	5.8	5.5	6	4.97	.06	5.0	.13
1086	Lepus . .	*δ* 15	1871	—	46.2	−20 53	4	4	—	3.7	6	3.98	.07	—	—
1087	Lepus . .	—	—	—	46.5	−22 57	F	F	—	6.5	3	5.92	.08	—	—
1088	Columba .	*β*	1878	—	46.7	−35 49	3	3	—	2.9	7	2.93	.10	—	—
1089	Orion . .	χ^1 54	1876	+20° 1162	47.3	+20 16	5·4	5·4	5.0	—	3	4.65	.08	4.9	.07
1090	Orion . .	57	1880	+19° 1126	47.9	+19 44	6	6	6.3	—	7	5.85	.09	5.6	.17
1091	Orion . .	*α* 58	1883	+ 7° 1055	48.7	+ 7 23	var.	var.	var.	var.	10	0.91	.10	0.7	.07
1092	Orion . .	—	—	—	49.5	− 4 39	6	6	—	6.0	3	5.92	.07	—	—
1093	Auriga . .	*δ* 33	1885	+54° 970	49.6	+54 16	4·5	4	4.0	—	6	3.79	.03	4.1	.03
1094	Taurus . .	—	—	+24° 1033	49.6	+24 14	F	F	6.0	—	3	5.99	.03	—	—
1095	Columba .	—	1894	—	49.6	−29 10	F	F	—	6.4	3	6.10	.11	—	—
1096	Orion . .	—	1893	+ 9°1016	49.8	+ 9 30	6	6·7	6.5	6.4	3	6.12	.08	5.9	.04
1097	Auriga . .	—	—	+49° 1428	50.1	+49 55	F	6·7	6.0	—	3	6.00	.03	5.8	.03
1098	Orion . .	—	—	+11° 975	50.1	+11 30	6	6	6.5	6.5	3	6.10	.09	6.0	.08
1099	Taurus . .	139	1896	+25° 1052	50.6	+25 56	5·6	5·6	5.2	—	3	5.06	.08	5.0	.04
1100	Auriga . .	*β* 34	1895	+44° 1328	50.7	+44 56	2	2	2.0	—	14	2.07	.04	2.1	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1051	380,411,416		6.0	001	—	. . 2 . . F 11 . . 1 . . .	. . .	y	n
1052	72,383,411,620,621,624	161,440,652	5.4	210110	032	. . 0 . . 042 . . 1 . 10	. . 2	y	
1053	380,411,416		6.0	111	—	. . . . . 21 . . 2F . . .	. . .	.	
1054	80,389,413		5.7	312	—	. . 4 . . FF . 35F . . .	. . .	w	
1055	63, 87,416,419		6.0	1F32	—	. . . . . F2 . . 23 . . .	. . .	.	
1056	84,383,392	166,436,642	6.2	100	020	. . . . . 416 . 21 . . 1	. . .	.	
1057	55, 94,422,611,620,621		3.8	135212	—	0 0 21 . 33 . 222 . 2 .	. . .	y	d
1058	60, 87,428,601,617,621,625	140,166,657	6.3	6231220	221	. . . . . 553 . . 2 . . 1	. . .	y	
1059	80,375,416	172,436,642	5.8	341	122	. . . . . 000 . 231 . 0	. . .	y	
1060	72,383,419,422,601,617,624	172,436,642	5.5	5101111	620	. . 1 . . 334 . . 2 . . 3	. . .	y	
1061	84,416,423		5.7	111	—	. . 3 . . FF 1 . . 4 . . .	. . .	r	
1062	383,392,422	172,436,642	6.3	214	237	. . . . . 550 . 12 . . 4	. . .	y	
1063	52, 94,392	135,436,642	4.6	315	113	. . 1 . . 401 . . 3 . 61	. 1 .	y	
1064	84,416,423	172,436,642	5.2	110	111	. . 1 . . 600 . . 5 . 00	. . .	y	
1065	383,392,424,611,620,631,633		3.7	2120110	—	1 1 20 . 00 . . 07 . 0 .	. . .	y	t
1066	75,386,423	172,436,642	5.3	230	015	. . 1 . 2133 . 44 . 12	. . .	y	d
1067	80,383,423	135,436,642	5.1	201	023	12 3 . . 111 . . 2 . . 2	. . .	Y	
1068	52, 55, 58, 61, 94,380,389	166,174,176	2.2	2021211-	002-	5 4 6 2 . 56 . . 12 . 72	32 .	W	veg
1069	63,389,424		5.8	211	—	. . . . . FF . 22F . . .	. . .	.	
1070	52,396,422,424		5.7	5042	—	. . . . . 11 . . 6F . . .	. . .	.	
1071	83,383,396,416,604,617,620	172,436,642	4.8	2650111	501	. . 1 . . 443 . 35 . 32	. . .	w	
1072	58,392,419	135,436,642	5.2	111	553	. . 2 . . 222 . . 3 . 04	. . .	y	vt
1073	392,411,416,604,617,620	135,436,642	4.2	220223	011	2 7 2 . . 111 . . 2 . 3 0	. 1 .	Y	t
1074	375,396,416,424,604,617,620	172,436,642	5.7	5240112	235	. . . . . 111 . 30 . . 3	. . .	Y	
1075	55,377,386	172,436,642	5.7	021	001	. . 3 . . 111 . . 4 . . 0	. . .	Y	h
1076	75,383,396	172,436,642	6.0	223	111	. . . . . 222 . 311 . 0	. . .	.	t
1077	383,392,424		5.6	142	—	. . . . . F5 . . 0F . . .	. . .	.	
1078	375,399,416	140,166,657	5.2	100	212	. . 3 . . 004 . . 1 . . 0	. . .	W	
1079	392,416,426	161,166,652	5.0	010	112	6 1 2 . . 000 . . 1 . 21	. . .	W	n
1080	389,424,428		5.7	111	—	. . . . . F1 . 33F . . .	. . .	y	
1081	61,386,419		6.1	122	—	. . . . . FF 3 . . F 2 . .	. . .	.	
1082	377,392,416	172,436,642	5.6	121	110	. . 4 . . 222 . 25 . . 1	. . .	y	
1083	80,380,422		5.3	320	—	. . 1 . . 13 . . 44 . . .	. . .	w	
1084	52,392,416,424,604,606,624	135,436,642	4.5	7310200	204	5 4 4 . . 5 7 9 . . 8 . 8 2	. . .	y	e
1085	75,392,422,606,621,624	172,436,642	5.0	031230	331	. . 2 . . 4 6 6 . 21 . 4 0	. . .	o	vtg
1086	63,392,422,611,621,624		4.0	122231	—	2 2 0 1 . 11 . 124 . 2 .	. . .	Y	
1087	61, 83,424		5.9	121	—	. . . . . FF . 14F . . .	. . .	.	
1088	380,399,402,606,621,624,626		2.9	3511172	—	8 3 . 5 . 3 3 . 111 . 1 .	. . .	.	
1089	52,386,392	136,436,642	4.6	022	325	4 3 1 . . 0 0 4 . . 3 . 0 3	. 2 .	Y	na
1090	60, 87,386,392,604,606,624	136,436,642	5.8	5232222	524	. . 2 . . 0 0 3 . . F . . 2	. . .	y	n
1091	52, 58, 97,380,402,419,428	172,439,642	0.9	3222323-	302	3 2 7 4 . V V V . V 4 . . 2	1 1 .	O	vtgc
1092	55,380,422		5.9	102	—	. . . . . 11 . . 16 . . .	. . .	.	d
1093	63,399,426,611,620,621	140,166,652	3.8	120010	433	6 4 0 . . 6 3 3 . . 2 . 4 3	. . .	Y	t
1094	80,380,422		6.0	100	—	. . . . . FF 2 . . F . . .	. . .	.	
1095	75,389,424		6.1	203	—	. . . . . FF . 110 . 2 .	. . .	.	dc
1096	72,383,392	172,442,642	6.1	202	213	. . . . . 302 . 10 . . 2	. . .	.	
1097	87,389,416	161,166,652	6.0	001	232	. . . . . F12 . . F . . 2	. . .	.	
1098	375,392,422	172,442,642	6.1	221	003	. . . . . 332 . 2F . . 1	. . .	.	
1099	80,392,424	135,436,642	5.1	202	012	1 2 3 . . 111 . . 2 . 3 1	. . .	y	e
1100	55, 58, 70, 87,363,375,377	127,168,174	2.1	9221103-	111-	0 1 2 2 . 110 . . 4 . 20	3 1 2	W	e

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
1101	Lepus . .	η 16	1901	—	50.9	−14 11	4·3	4·3	—	3.8	6	3.74	.06	—	—
1102	Auriga . .	π 35	1897	+45° 1217	51.0	+45 56	5	5	4.8	—	3	4.47	.04	4.7	.12
1103	Lepus . .	—	—	—	51.2	−22 51	F	6·7	—	6.4	3	6.05	.17	—	—
1104	Auriga . .	θ 37	1900	+37° 1380	51.5	+37 12	3	3	3.0	—	6	2.67	.06	3.2	.07
1105	Lepus . .	—	—	—	51.6	−23 14	F	F	—	6.7	3	6.31	.16	—	—
1106	Auriga . .	36	1902	+47° 1227	51.9	+47 52	6	6	6.0	—	3	5.50	.07	5.7	.04
1107	Orion . .	—	1907	+12° 968	52.2	+12 47	6	6	6.5	6.2	3	5.66	.09	6.1	.09
1108	Orion . .	59	1908	+ 1° 1171	52.2	+ 1 49	6	6·7	6.5	6.1	6	6.07	.12	5.5	.00
1109	Orion . .	60	1913	+ 0° 1239	52.7	+ 0 32	6·5	6·5	5.7	5.7	3	5.25	.11	5.2	.05
1110	Columba .	γ	1922	—	53.3	−35 18	4	4	—	4.5	3	4.08	.17	—	—
1111	Monoceros .	2	1920	—	53.4	− 9 34	6·5	6·5	—	5.7	3	5.14	.09	—	—
1112	Auriga . .	—	1914	+49° 1441	53.5	+49 53	6	6·7	6.0	—	3	6.00	.11	5.7	.04
1113	Orion . .	—	—	− 1° 1083	53.6	− 1 27	F	6	7.4	6.8	4	6.24	.09	—	—
1114	Orion . .	—	—	—	54.1	− 3 5	5·6	6·5	—	5.2	8	4.73	.10	—	—
1115	Auriga . .	38	1923	+42° 1473	54.7	+42 55	6	6	6.4	—	6	6.19	.04	5.8	.15
1116	Orion . .	μ 61	1928	+ 9° 1064	55.8	+ 9 39	5·4	5·4	5.0	4.7	3	4.29	.11	4.6	.12
1117	Monoceros .	3	1936	—	56.2	−10 36	5·6	5·6	—	5.6	7	4.77	.08	—	—
1118	Lepus . .	—	—	—	56.3	−25 25	F	F	—	6.3	3	5.89	.07	—	—
1119	Orion . .	64	1934	+19° 1186	56.4	+19 42	6	6	5.6	—	3	5.08	.03	5.1	.04
1120	Orion . .	—	—	+11° 1009	56.7	+11 41	6	6	6.5	6.5	3	5.86	.07	5.9	.12
1121	Gemini . .	1	1938	+23° 1170	56.8	+23 16	5	5	5.1	—	3	4.33	.03	4.6	.11
1122	Orion . .	χ^2 62	1939	+20° 1233	56.8	+20 9	5	5	5.1	—	3	4.78	.11	5.1	.05
1123	Auriga . .	40	1942	+38° 1377	58.4	+38 30	6	6	6.0	—	3	5.30	.05	5.6	.19
1124	Orion . .	—	—	—	58.4	− 6 42	6	6	—	5.8	3	5.04	.12	—	—
1125	Columba .	—	1946	—	58.4	−26 17	F	6	—	5.5	3	4.96	.03	—	—
1126	Orion . .	63	1944	+ 5° 1085	58.6	+ 5 25	6	6·7	6.4	6.3	3	5.68	.13	6.2	.03
1127	Orion . .	66	1945	+ 4° 1116	58.6	+ 4 10	.6	6	6.0	6.2	6	5.70	.06	5.7	.15
1128	Auriga . .	—	—	+29° 1112	58.7	+29 31	F	F	6.0	—	7	6.24	.01	—	—
1129	Camelopard.	37	1943	+58° 897	59.4	+58 57	6	6	6.0	—	3	5.26	.12	5.6	.07
1130	Lepus . .	17	1955	—	59.6	−16 29	5	5	—	5.5	3	4.94	.04	—	—
1131	Monoceros .	—	1956	—	59.8	−10 14	6	6	—	6.4	3	5.88	.07	—	—
1132	Orion . .	ν 67	1958	+14° 1152	0.7	+14 47	5·4	5·4	4.6	4.7	6	4.37	.05	4.7	.04
1133	Orion . .	—	—	—	0.7	− 4 11	6	6	—	5.9	7	5.15	.09	—	—
1134	Lepus . .	θ 18	1959	—	0.7	−14 56	5	5	—	5.2	3	4.63	.11	—	—
1135	Camelopard.	36	1952	+65° 517	0.8	+65 44	6·5	6	5.7	—	6	5.27	.08	5.6	.07
1136	Lepus . .	—	1965	—	1.5	−23 6	6	6	—	5.8	3	5.39	.11	—	—
1137	Columba .	—	1967	—	1.5	−29 45	F	F	—	5.9	3	5.58	.07	—	—
1138	Gemini . .	—	1962	—	1.8	+24 15	cum.	cum.	cum.	—	2	cum.	—	5.2	.08
1139	Auriga . .	41	1963	+48° 1352	2.4	+48 45	6	6	6.0	—	3	5.60	.11	5.7	.05
1140	Lepus . .	19	1973	—	2.5	−19 9	F	6	—	5.9	3	5.53	.11	—	—
1141	Lepus . .	—	—	—	2.5	−20 58	F	F	—	F	6	F	—	—	—
1142	Orion . .	—	—	+ 2° 1139	2.7	+ 2 31	6	6	6.5	5.8	3	5.51	.13	5.5	.03
1143	Lepus . .	—	—	—	4.0	−22 24	F	6	—	5.8	3	5.50	.07	—	—
1144	Lepus . .	—	—	—	4.1	−14 34	F	6·7	—	6.0	6	5.68	.04	—	—
1145	Auriga . .	—	—	+51° 1163	4.3	+51 12	F	6·7	6.0	—	7	6.26	.07	6.0	.19
1146	Auriga . .	—	—	+32° 1217	4.5	+32 43	F	6·7	6.0	—	3	6.10	.15	6.0	.16
1147	Orion . .	—	—	+13° 1151	4.7	+13 40	6	6	6.5	—	3	5.66	.13	5.7	.07
1148	Lepus . .	—	—	—	4.7	−22 45	F	6	—	5.9	3	5.66	.09	—	—
1149	Camelopard.	40	1979	+60° 938	4.9	+60 2	6	6	5.8	—	3	5.49	.07	5.7	.03
1150	Orion . .	68	1986	+19° 1253	4.9	+19 49	6	6	6.0	6.3	3	5.62	.09	5.4	.07

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1101	61,383,419,604,606,620		3.7	211*5*10	—	1131.00..27.1.	...	*y*	
1102	70, 87,363	*161*,166,652	4.5	1*1*0	*1*25	..1..553..4.62	.1*1*	O	t
1103	63,386,392		6.0	414	—	.....F1.02F...	...	.	
1104	52,380,424,608,611,621	135,443,642	2.7	031*2*31	635	15*1*3.555..3.85	*2*3.	W	
1105	63,386,392		6.3	*4*13	—	.....FF.*3*2F...	...	.	
1106	80,399,422	*161*,166,*652*	5.5	20*1*	312	..*3*..333..6..2	..2	w	
1107	75,422,428	*172*,*442*,642	5.7	21*2*	236	.....116.3F..4	...	Y	p
1108	363,389,422,606,611,620	172,436,642	6.1	63*2224*	*666*	..*3*..302.*24*..*6*	...	*y*	v
1109	55,375,416	172,436,642	5.2	13*1*	11*1*	..3..244.25.20	...	*y*	e
1110	61, 94,419		4.1	4*4*1	—	34.3.00.333.3.	...	.	
1111	75,386,424		5.1	2*2*1	—	..R..35..32.3.	...	*y*	dh
1112	80,389,416	*161*,166,*652*	6.0	30*2*	*234*	.....*2*12..F..*3*	..0	Y	
1113	62, 70, 87,396		6.2	F2*12*	—	.....F*4*0.4*1*...	...	.	
1114	52, 58, 94,389,392,604,606		4.7	*43*FF312-	—	.....59..22.3.	...	.	vtg
1115	80,413,419,606,608,611	*135*,443,642	6.2	*12*1003	*4*R0	..0..*44*0..F..*4*	..*1*	Y	dvec
1116	52, 61, 94	172,437,642	4.3	20*3*	612	11..337.36.33	...	W	
1117	55, 87, 92,386,604,606,615		4.8	2*3*6110*3*	—	..R..44..51.5.	...	w	h
1118	75,380,416		5.9	0*1*2	—	.....FF.122...	...	.	
1119	80,386,392	*136*,443,642	5.1	001	*1*01	..1..774..6..0	.*3*.	*y*	n
1120	63,380,413	*172*,*442*,642	5.9	20*1*	03*3*	.....*11*4.4F..0	...	.	
1121	61, 83,416	135,443,642	4.3	00*1*	404	133..778..6.53	.*2*.	Y	
1122	52, 94,392	*136*,443,642	4.8	3*2*0	422	220..223..5.03	.*4*.	*y*	na
1123	52,416,419	*135*,443,642	5.3	1*1*1	5*2*5	..0..555..F..3	...	*y*	
1124	55, 75, 94		5.0	03*3*	—	.....88..6*1*...	...	.	
1125	61, 80,416		5.0	010	—	.....F8.023...	...	.	nt
1126	63, 92,413	*172*,*443*,642	5.7	3*1*3	565	..1..145.44..5	...	.	
1127	72,380,413,608,611,625	*172*,443,642	5.7	4*1*1301	4*2*1	..*1*..111.34..0	...	*y*	
1128	58, 83,389,413,604,606,615		6.2	b000001	—	.....FF*4*..F0..	...	.	
1129	61, 92,413	*140*,166,*657*	5.3	3*2*1	523	..*2*..555..4..3	...	*o*	
1130	70, 83, 97		4.9	10*1*	—	..*1*..11..34.3.	...	*r*	
1131	55, 80, 94		5.9	01*2*	—	.....*11*..3*6*...	...	.	
1132	55, 85,424,608,614,625	172,437,642	4.4	0*11*213	324	054..222.25.23	...	W	
1133	63, 75,416,424,614,615,625		5.2	75*11*401	—	.....66..5*3*...	...	.	
1134	402,405,411		4.6	02*3*	—	..*2*..44..33.4.	...	*y*	
1135	72, 92, 97,614,620,621	*140*,166,*657*	5.3	*3*01432	523	..*2*..153..F..3	...	O	
1136	55,399,424		5.4	02*3*	—	.....44.62*1*...	...	w	d
1137	80, 94,419		5.6	02*1*	—	.....FF.411...	...	.	
1138	389,396	136,443,643	cum	CC	RRR	.....CCC..F..R	...	.	e
1139	63, 97,419	*161*,166,*652*	5.6	30*2*	200	..*2.5*222..5.21	..3	*y*	d
1140	70,389,424		5.5	*131*	—	..0..F3..22...	...	*o*	t
1141	72, 75, 85, 92, 94,389		F	FFFFFF	—	.....FF.RFF...	...	.	pcm
1142	52, 80,416	172,443,*643*	5.5	22*3*	0*1*0	....*1*338.12..0	...	.	d
1143	52, 63, 97		5.5	01*2*	—	.....F3.512...	...	.	
1144	83,402,405,616,621,625		5.7	210*21*1	—	.....F4..1F...	...	.	v
1145	55, 85,424,608,612,614,627	*161*,*166*,*657*	6.3	07*14*030	*552*	.....F*25*..*2*..*3*	...	.	p
1146	94,419,423	*135*,*443*,643	6.1	*3*04	*333*	.....F0*3*..0*1*.*1*	...	.	p
1147	75,405,424	*172*,443,643	5.7	*3*22	20*1*	.....116..F..0	...	.	
1148	80,399,424		5.7	21*2*	—	.....F1.30F...	...	.	t
1149	92,405,423	*140*,166,*657*	5.5	*1*20	322	..0..331..2..2	...	O	
1150	97,402,419	*136*,443,643	5.6	*21*2	*302*	..*2*..222.55..*2*	...	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
1151	Columba .	—	—	—	5.0	−26 41	F	F	—	6.6	3	5.95	.15	—	—
1152	Orion . .	f1 69	1989	+16° 1035	5.1	+16 9	6·5	6·5	5.8	5.5	3	5.01	.07	5.3	.04
1153	Orion . .	ξ 70	1990	+14° 1187	5.1	+14 14	5·4	5·4	4.8	4.7	3	4.21	.15	4.6	.13
1154	Auriga . .	—	—	+37° 1443	5.4	+37 11	F	6	7.0	—	3	6.64	.09	6.4	.04
1155	Camelopard.	—	1980	+69° 371	5.6	+69 22	5·4	5·4	4.7	—	19	4.66	.04	4.7	.04
1156	Columba .	—	1995	—	5.8	−27 8	F	F	—	6.0	6	5.78	.06	—	—
1157	Monoceros .	—	1994	—	6.0	− 6 31	6·5	6·5	—	5.9	3	4.97	.07	—	—
1158	Columba .	—	1997	—	6.4	−26 27	F	6	—	6.4	3	5.86	.09	—	—
1159	Lynx . .	1	1992	+61° 869	6.9	+61 33	6	6	5.5	—	21	5.37	.04	5.4	.07
1160	Gemini . .	η 7	2002	+22° 1241	7.6	+22 32	3·4	3·4	3.2	—	17	3.46	.07	3.7	.08
1161	Auriga . .	κ 44	2001	+29° 1154	7.7	+29 32	5·4	5·4	4.4	—	6	4.46	.05	4.9	.07
1162	Orion . .	71	2004	+19° 1270	7.8	+19 12	6·5	6	6.2	5.7	3	5.12	.11	5.3	.03
1163	Orion . .	—	—	+13° 1173	8.3	+13 53	6	6	6.3	6.6	3	5.67	.09	5.7	.07
1164	Orion . .	f2 72	2009	+16° 1060	8.5	+16 10	6·5	6·5	5.7	5.9	3	5.44	.08	5.3	.03
1165	Monoceros .	—	—	—	8.7	− 4 32	6	6	—	6.2	3	5.62	.07	—	—
1166	Auriga . .	42	2008	+46° 1122	8.6	+46 28	6	6	6.5	—	3	6.40	.05	5.8	.07
1167	Auriga . .	43	2010	+46° 1124	9.3	+46 25			6.5	—	3	6.50	.03		
1168	Lynx . .	2	2007	+59° 959	9.0	+59 3	5·4	5·4	5.0	—	6	4.33	.04	4.6	.08
1169	Orion . .	73	2012	+12° 1081	9.0	+12 35	6	6	6.0	—	3	5.36	.07	5.6	.16
1170	Monoceros .	5	2015	—	9.0	− 6 14	5·4	5·4	—	4.3	6	4.04	.05	—	—
1171	Monoceros .	—	—	+ 4° 1181	9.4	+ 4 20	6	6	7.0	7.0	3	6.47	.03	6.4	—
1172	Orion . .	—	—	− 0° 1234	9.5	− 0 28	6	6	6.5	6.1	3	5.65	.03	—	—
1173	Monoceros .	—	—	—	9.5	− 4 52	6	6	—	6.3	3	5.95	.04	—	—
1174	Orion . .	k 74	2017	+12° 1084	9.7	+12 19	5·6	6·5	6.1	—	3	5.10	.09	5.2	.13
1175	Orion . .	—	—	+ 1° 1275	9.7	+ 1 12	6	6	6.5	6.6	3	6.26	.17	5.6	.08
1176	Monoceros .	—	—	—	9.7	− 9 0	F	6	—	6.7	3	6.12	.04	—	—
1177	Canis Major	—	—	—	10.2	−13 40	5	5	—	5.5	3	4.84	.03	—	—
1178	Orion . .	l 75	2022	+ 9° 1173	10.5	+ 9 59	6	6	6.3	5.9	3	5.19	.09	5.6	.05
1179	Canis Major	—	—	—	10.8	−16 34	F	6	—	6.5	3	5.87	.13	—	—
1180	Orion . .	—	—	+14° 1235	11.3	+14 26	F	F	6.0	—	3	6.04	.04	—	—
1181	Monoceros .	6	2030	—	11.9	−10 41	F	F	—	F	6	6.50	.03	—	—
1182	Auriga . .	45	2024	+53° 1008	12.1	+53 30	6	6	5.8	—	3	5.47	.12	5.3	.05
1183	Canis Major	—	—	—	12.4	−16 46	F	6	—	5.8	7	5.12	.08	—	—
1184	Monoceros .	—	—	—	13.1	− 9 20	6	6	—	6.0	3	5.69	.09	—	—
1185	Orion . .	—	—	+14° 1247	13.2	+14 41	6	6	5.8	—	3	6.07	.05	5.8	.09
1186	Canis Major	—	—	—	13.2	−19 55	F	6·7	—	5.8	3	5.08	.16	—	—
1187	Auriga . .	—	—	+29° 1190	13.5	+29 36	6	6	6.4	—	3	6.03	.05	6.4	.04
1188	Monoceros .	7	2040	—	13.9	− 7 46	6	6·5	—	5.9	3	5.06	.09	—	—
1189	Monoceros .	—	—	—	14.0	− 2 53	6	6	—	5.5	6	5.11	.06	—	—
1190	Canis Major	—	—	—	14.0	−20 52	F	6·7	—	6.2	3	5.43	.09	—	—
1191	Camelopard.	—	—	+70° 401	14.5	+70 37	6	6	6.0	—	3	5.91	.09	6.0	.03
1192	Monoceros .	—	—	+ 2° 1197	15.2	+ 2 20	6	6·7	7.0	6.5	4	6.16	.11	6.1	.13
1193	Auriga . .	ψ1 46	2044	+49° 1488	15.7	+49 21	5	5·6	6.0	—	6	5.05	.11	5.5	.05
1194	Gemini . .	μ 13	2047	+22° 1304	15.7	+22 34	3	3	3.0	—	6	3.22	.05	3.2	.08
1195	Canis Major	ζ 1	2051	—	15.7	−30 1	3·2	3·2	—	3.2	6	3.01	.04	—	—
1196	Monoceros .	—	—	—	15.9	−11 44	6·5	6·5	—	6.1	3	5.29	.12	—	—
1197	Lynx . .	5	2045	+58° 927	16.3	+58 29	6	6	6.0	—	3	5.46	.04	5.5	.05
1198	Lynx . .	—	2046	+56° 1125	16.3	+56 21	6	6	6.2	—	3	5.36	.08	5.4	.00
1199	Monoceros .	—	—	+ 3° 1221	17.0	+ 3 49	F	6	7.5	6.4	7	6.14	.05	6.2	.09
1200	Monoceros .	8	2059	+ 4° 1236	17.4	+ 4 39	5·4	5·4	4.9	4.8	7	4.40	.03	4.8	.17

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1151	94,424,614		6.0	*3*40	—	. . . . . FF. 0 4F. . .	. . .	.	n
1152	75,402,405	*172*,437,643	5.0	120	324	4 3 0. . 4 6 6. 2 3. 4 3	. . .	w	a
1153	92,405,413	172,437,643	4.2	*4*30	517	2 7 4. . 4 4 6. 4 7. 4 4	. . .	*y*	
1154	72,405,419	*135*,*443*,644	6.6	*212*	F*21*	. . . . . F*8* 2. . F. . *2*	. . .	.	
1155	52, 55, 58, 61, 88, 94,384	124,128,161	4.7	4252*211*-	11*3*	. . . . . *1* 1 0. . *3*. 0 0	. . .	W	s
1156	80,408,424,621,625,630		5.8	40*2220*	—	. . . . . FF. 2 0 *5*. . .	. . .	.	nvtg
1157	399,406,426		5.0	*1*02	—	. . . . . 4 6. . 7 7. . .	. . .	w	
1158	80,402,424		5.9	122	—	. . . . . F*1*. 1 3F. . .	. . .	.	n
1159	52, 55, 58, 61, 72, 75, 92	124,*134*,134	5.4	5022324-	*116*	. . *1*. . 4 4 0. . 3. . 0	. . .	O	ts
1160	55, 70, 94,363,387,396,406	136,432,644	3.5	3066*343*-	024	3 3 *4 2*. *1 0 1*. . 0. . 2	2 *1*.	Y	vth
1161	97,408,411,621,624,625	135,443,644	4.5	*211112*	634	*7 0 3*. . 1 1 *1*. . 4. 8 4	. . .	Y	v
1162	92,408,424	*136*,443,643	5.1	*3*11	221	. . 3. . 3 7 9. 3 6. . 2	. . .	*y*	
1163	52,408,413	*172*,443,643	5.7	*2*12	20*1*	. . . . . 1 1 4. 7 4. . 0	. . .	.	
1164	58, 80,402	*172*,437,643	5.4	11*2*	*110*	0 *1 3*. . 0 2 2. 3 3. 0 *1*	. . .	w	a
1165	75,387,408		5.6	120	—	. . . . . 2 2. . 4F. . .	. . .	.	
1166	63, 72,405	*161*,166,670	6.4	*1*11	103	. . *1*. . *1*. . . .	. . 0	*y*	
1167	72,405,424		6.5	001		. . 0. . 11 *2*. . 4. . . 1	. . *3*	o	
1168	70, 97,414,610,620,621	*140*,166,656	4.3	10*112*1	414	. . 4. . 3 3 7. . 6. 9 3	. . .	W	
1169	55, 75, 94	*174*,*443*,643	5.4	2*1*0	6*11*	. . *2*. . 4 4 4. . 3. . 2	. . .	*w*	n
1170	92,399,408,621,625,630		4.0	401111	—	. . 3. . 6 6. . 3 4. 3.	. . .	Y	t
1171	52,408,424	175,*443*,*643*	6.5	00*1*	h*20*	. . . . . *7 7 3*. 3F. . *1*	. . .	.	eg
1172	88,408,424		5.6	00*1*	—	. . . . . 2 2 7. 3 1. . .	. . .	.	
1173	387,408,424		6.0	0*11*	—	. . . . . *2 2*. . 1 1. . .	. . .	.	
1174	377,408,424	174,437,643	5.1	*221*	420	3 2 1. . 1 5 8. . 2. 3 1	. . .	*y*	na
1175	72,408,424	175,443,*643*	6.3	4*32*	*885*	. . . . . *5 5* 0. 1 *2*. . *7*	. . .	.	de
1176	58, 80,392		6.1	01*1*	—	. . . . . F*3*. . 4 0. . .	. . .	.	
1177	70,384,416		4.8	0*1*0	—	. . . . . 2 2. . 4 5. 4.	. . .	.	
1178	55, 92, 97	175,444,643	5.2	*221*	353	. . *4*. . 6 6 9. 5 5. 4 4	. . .	*y*	
1179	64, 83, 94		5.9	22*3*	—	. . . . . F*1*. . 4F. . .	. . .	.	
1180	61, 75,408		6.0	*1*01	—	. . . . . FF*2*. . F2. .	. . .	.	
1181	424,426,610,621,625,630		6.5	01*1*01*1*	—	. . R. . FF. . FF. . .	. . .	.	h
1182	55, 80, 94	*140*,166,*656*	5.5	*132*	*113*	. . *6*. . 3 3 1. . *2*. . *2*	. . .	*y*	
1183	64, 83, 97,428,612,621,625		5.1	57*11*2*1*0	—	. . . . . F 7. . 5 6. . .	. . .	.	t
1184	392,629,426		5.7	02*1*	—	. . . . . 1 1. . 1 4. . .	. . .	.	
1185	88,408,414	*175*,*444*,643	6.1	1*11*	*145*	. . . . . *3 3 5*. . F*3 1 3*	. . .	.	t
1186	92,396,424		5.1	*422*	—	. . . . . F**0**. 9 5 6. . .	. . .	.	
1187	55, 94,424	*135*,*444*,644	6.0	*111*	543	. . . . . *2 2* 2. . F. . 4	. . .	.	
1188	92,408,424		5.1	*221*	—	. . 3. . 7 5. . 6**0**. 4.	. . .	*g*	
1189	75,384,416,621,625,630		5.1	0*1*0*23*3	—	. . . . . 7 7. . 1 6. *1*.	. . .	.	vtg
1190	70,396,424		5.4	*221*	—	. . . . . F 7. 6 6 7. . .	. . .	.	
1191	58, 80,428	*125*,*164*,*670*	5.9	*221*	121	. . . . . *1 1 1*. . 2. . 1	. . .	.	
1192	55, 88, 94,424	*175*,*444*,*643*	6.2	2F*3*0	*224*	. . . . . *4 1* 6. 1 *1*. . *1*	. . .	.	dce
1193	61,392,424,612,619,621	*161*,166,*652*	5.0	15*24*2*3*	644	. . 2. . 0 2 8. . **1**. 6 5	. . *3*	*o*	n
1194	64,392,428,612,624,625	136,432,644	3.2	*121*301	220	6 6 0 0. 0 0 0. . *2*. *1* 0	3 *1*.	Y	t
1195	70, 90, 97,612,625,627		3.0	*11*1*2*1	—	3 2 *1* 4. *3 2*. 0 3 0. 3.	. . .	.	v
1196	92,426,629		5.3	2*3*1	—	. . . . 9 1 3. . 6 4. 1.	. . .	.	d
1197	75,384,424	*140*,172,*657*	5.5	10*1*	*111*	. . *1*. . 3 3 3. . 6 *5*. 0	. .	*o*	t
1198	70, 90, 94	*140*,172,*656*	5.4	2*2*0	000	. . . . . 4 4 6. . F. . 0	. . .	.	
1199	64, 88, 97,424,610,614,618	*175*,*443*,*643*	6.1	6*2*10*1*01	*1*30	. . . . . F*3 2*. 1F. *1* 1	. . .	.	
1200	64, 88,424,426,616,619,627	175,439,643	4.4	0f00*2*20	805	. . *2*. *1* 2 2 5. 3 0. 2 4	. . .	*y*	d

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											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1201	Canis Major	β 2	2061	—	17.4	−17 54	3·2	3.2	—	2.2	15	2.01	.04	2.3	.06
1202	Monoceros .	—	—	+ 8° 1316	17.5	+ 8 57	6	6	6.4	6.6	3	5.99	.03	5.9	.12
1203	Columba .	δ 3	2066	—	17.7	−33 23	4	4	—	3.9	3	4.07	.11	—	—
1204	Monoceros .	—	—	—	18.6	−11 28	6	6	—	5.6	4	5.48	.06	—	—
1205	Monoceros .	T	—	+ 7° 1273	18.8	+ 7 9	F	F	7.3	var.	6	6.08	.12	—	—
1206	Monoceros .	—	—	—	19.0	+11 16	cum.	cum.	cum.	—	2	cum.	—	cum.	—
1207	Canis Major	—	—	—	19.1	−25 31	F	6	—	6.0	3	5.79	.05	—	—
1208	Orion . .	—	—	− 0° 1287	19.2	− 0 52	F	6	6.4	6.3	3	5.81	.05	—	—
1209	Camelopard.	—	—	+79° 208	19.6	+79 40	6	6	6.3	—	3	6.34	.09	6.4	.11
1210	Canis Major	—	—	—	20.1	−28 43	F	6	—	6.7	3	6.08	.17	—	—
1211	Auriga . .	48	2082	+30° 1238	20.9	+30 34	6·5	6·5	6.0	—	3	5.23	.05	5.5	.08
1212	Monoceros .	—	—	+ 2° 1237	21.0	+ 2 59	6	6	6.1	6.2	3	5.83	.11	5.8	.09
1213	Auriga . .	47	2081	+46° 1149	21.1	+46 46	F	6·7	6.0	—	3	6.00	.03	6.3	.13
1214	Orion . .	77	2086	+ 0° 1426	21.1	+ 0 22	6	6	5.9	5.9	3	5.15	.07	5.4	.04
1215	Camelopard.	—	2069	+78° 227	21.8	+78 5	6	6·5	6.0	—	3	5.68	.11	6.0	.12
1216	Gemini . .	ν 18	2090	+20° 1441	21.8	+20 17	5·4	5·4	4.3	—	13	3.98	.04	4.3	.20
1217	Monoceros .	10	2094	—	22.0	− 4 41	5	5	—	5.4	6	4.98	.06	—	—
1218	Canis Major	—	2100	—	22.4	−25 47	F	6	—	6.5	3	6.02	.03	—	—
1219	Camelopard.	—	2083	+73° 340	22.8	+73 46	F	6·7	6.0	—	20	6.15	.03	6.2	.05
1220	Monoceros .	11	2105	—	23.0	− 6 57	4·5	4·5	—	4.1	6	3.94	.05	—	—
1221	Monoceros .				23.0	− 6 57									
1222	Canis Major	λ	2109	—	23.7	−32 30	4·5	4·5	—	4.7	6	4.13	.08	—	—
1223	Auriga . .	—	2110	+32° 1324	24.6	+32 32	6	6	5.8	—	3	5.97	.16	5.7	.04
1224	Monoceros .	—	—	+11° 1209	25.1	+11 38	5	5	5.5	—	3	4.86	.09	5.2	.13
1225	Camelopard.	—	2095	+79° 212	25.7	+79 41	5·6	5·6	5.5	—	6	5.51	.06	5.7	.03
1226	Canis Major	—	—	—	25.9	−12 18	6·5	6·5	—	5.6	3	5.26	.09	—	—
1227	Monoceros .	12	2123	+ 4° 1304	26.0	+ 4 56	5	6	7.0	6.3	7	5.69	.06	5.3	.16
1228	Canis Major	—	2127	—	26.0	−27 41	F	6	—	6.1	6	5.74	.07	—	—
1229	Monoceros .	—	—	—	26.1	− 8 4	6	6	—	6.0	3	5.56	.09	—	—
1230	Camelopard.	—	—	+71° 359	26.4	+71 51	6	6	6.0	—	3	6.13	.08	6.0	.03
1231	Monoceros .	13	2126	+ 7° 1337	26.4	+ 7 26	5·4	5·4	5.0	5.0	3	4.31	.04	5.0	.15
1232	Monoceros .	—	—	—	26.5	− 5 47	6·5	6·5	—	6.0	3	5.72	.13	—	—
1233	Lynx . .	8	2120	+61° 893	26.7	+61 35	6	6	6.1	—	6	6.13	.08	5.7	.11
1234	Gemini . .	—	2129	+14° 1339	26.8	+14 14	F	6·7	6.0	—	3	5.61	.03	5.7	.04
1235	Canis Major	ξ^1 4	2132	—	26.9	−23 20	5	5	—	4.5	3	4.21	.16	—	—
1236	Monoceros .	—	—	—	27.2	−11 5	6	6	—	6.8	3	6.30	.08	—	—
1237	Lynx . .	11	2128	+56° 1136	27.4	+56 58	6	6·7	6.2	—	4	5.81	.10	5.7	.05
1238	Monoceros .	—	—	− 1° 1274	27.6	− 1 7	5·6	5·6	5.9	5.7	3	4.95	.13	—	—
1239	Auriga . .	49	2133	+28° 1168	27.7	+28 7	6·5	6·5	5.1	—	3	4.86	.04	5.2	.05
1240	Canis Major	—	—	—	28.1	−27 51	F	6	—	F	5	5.74	.08	—	—
1241	Canis Major	—	2147	—	28.2	−31 57	F	6·5	—	6.0	4	5.66	.09	—	—
1242	Canis Major	ξ^2 5	2160	—	30.0	−22 52	5	5	—	4.8	7	4.35	.05	—	—
1243	Canis Major	—	2162	—	30.1	−32 37	F	6·5	—	6.1	3	5.28	.15	—	—
1244	Auriga . .	51	2155	+39° 1690	30.3	+39 30	F	6·7	6.5	—	8	5.73	.06	—	—
1245	Auriga . .	ψ^3 52	2156	+40° 1665	30.5	+40 0	6	6	6.1	—	7	5.14	.09	5.2	.04
1246	Monoceros .	—	—	—	30.7	− 5 7	6	6	—	5.9	3	5.22	.07	—	—
1247	Auriga . .	ψ^2 50	2159	+42° 1585	30.8	+42 36	5	5·6	4.8	—	3	5.17	.08	5.0	.04
1248	Auriga . .	53	2161	+29° 1293	30.8	+29 5	6	6	6.2	—	3	5.46	.12	5.5	.03
1249	Gemini . .	γ 24	2163	+16° 1223	30.8	+16 30	2·3	2·3	2.1	—	17	2.00	.03	2.2	.09
1250	Monoceros .	—	—	+ 6° 1309	31.0	+ 6 14	6	6	6.5	6.7	3	6.04	.07	5.7	.13

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S Hh Σ U *H* D B G *h* R F E	s w p		
1201	58, 61, 80, 85, 94, 97,375	176,176,182	2.0	2123111-	262-	**3 2** 4 4 . 7 8 . . 2 0 . 1 3	1 . .	W	e
1202	92,408,424	*175*,439,*643*	6.0	100	241	. . . . . 2 2 2 . 4 F . . 1	. . .	.	
1203	90,406,428		4.1	311	—	3 1 3 4 . 0 0 . 0 1 1 . 2 .	. . .	.	nh
1204	70, 88,392,426		5.5	1022	—	. . . . . 3 3 . . 2 2 . 2 .	. . .	.	tg
1205	92,381,403,405,408,411		6.1	614035	—	. . . . . F F **0** . V F . . .	. . .	.	vg
1206	381,403	*175*,439,643	cum	CC	RRR	. . . . . C C C . . F . . R	. . .	.	e
1207	58,375,405		5.8	111	—	. . . . . F 0 . 2 0 F . . .	. . .	.	
1208	80, 94,424		5.8	111	—	. . . . . F 0 4 . 3 F . . .	. . .	.	
1209	94,414,629	*125,168,670*	6.3	414	222	. . . . . 5 5 2 . . F . . 1	. . .	.	
1210	381,403,426		6.1	342	—	. . . . . F 3 . F 4 F . . .	. . .	.	
1211	61, 90,424	*135*,439,644	5.2	111	441	. . 1 . . 2 4 6 . . 5 . . 3	. . .	*y*	
1212	64, 75,426	*175,439,643*	5.8	032	212	. . . . . 0 0 1 . 2 1 . . 0	. . .	.	
1213	70,405,414	*161,172*,657	6.0	001	550	. . 2 . . F 1 2 . . F . . 3	. . .	O	
1214	80,384,424	175,439,463	5.2	021	312	. . R . . 6 6 5 . 5 5 . . 2	. . .	Y	h
1215	92.405,414	*125,168,670*	5.7	320	540	. . . . . 1 1 1 . . 4 3 . 3	. . .	*o*	
1216	85, 97,377,405,408,411,714	136,439,644	4.0	1023242-	724	2 4 1 . . 6 6 3 . . 4 . 5 3	. 2 .	w	
1217	92,406,428,612,616,625		5.0	312301	—	. . 4 . . 0 0 . . 1 7 . 1 .	. . .	*y*	
1218	375,405,426		6.0	100	—	. . . . . F 2 . 0 3 1 . . .	. . .	.	
1219	64, 70, 75, 80, 90, 92, 94	*124,134,134*	6.2	2212122-	004	. . . . . F 1 4 . . F 1 . 0	. . .	*y*	s
1220	94,392,417,631,632,633		4.7	112211	—	. . 2 . $\frac{5}{4}$ 5 5 . . 3 5 . 3 .	. . .	*y*	dv
1221			5.2						dv
1222	102,406,414,632,633,634		4.1	522111	—	3 8 . 2 . 3 3 . 3 5 8 . 5 .	. . .	.	na
1223	67,406,426	*135,439*,644	6.0	413	234	. . . . . 2 2 4 . . 1 . . 3	. . .	w	
1224	97,387,414	175,439,643	4.9	122	611-	. . . . . 1 1 5 . . F 6 3 3	. . .	.	e
1225	64,392,434,612,618,627	125,168,670	5.5	312220	122	. . . . . 3 3 1 . . 2 . . 2	. . .	*y*	
1226	375,397,414		5.3	122	—	. . . . . 1 3 . . 0 0 . 0 .	. . .	.	t
1227	88,412,414,434,610,614,627	*175*,439,*643*	5.7	b114111	381	. . 8 . . 7 1 **1** . 4 8 . 1 4	. . .	Y	dvteg
1228	375,417,428,610,618,627		5.7	3FF021	—	. . . . . F 1 . F 2 4 . . .	. . .	.	p
1229	375,409,428		5.6	212	—	. . . . . 2 2 . . 2 5 . . .	. . .	.	t
1230	377,392,430	*125,164,670*	6.1	220	101	. . . . . 3 3 3 . . 0 4 . 1	. . .	.	
1231	375,409,426	175,439,643	4.3	101	938	. . 7 . . 3 3 7 . 5 6 . 5 7	. . .	W	
1232	94,392,417		5.7	331	—	. . . . . 3 1 . . 1 4 . . .	. . .	.	
1233	377,392,430,612,624,627	*140*,172,*657*	6.1	331122	373	. . R . . 3 3 2 . . 0 . . 4	. . .	Y	dhc
1234	375,409,426	175,*439*,643	5.6	001	210	. . . . . F 5 2 . . 5 2 . 1	. . .	*y*	
1235	90,397,409		4.2	440	—	8 7 0 . . 8 8 . 8 2 7 . 2 .	. . .	*g*	
1236	409,428,433		6.3	022	—	. . . . . 5 5 . . 3 F . . .	. . .	.	
1237	97,392,381,414	*140,172,656*	5.8	3221	020	. . 2 . . 0 3 2 . . 3 . . 1	. . .	*y*	
1238	94,409,433		5.0	130	—	. . . . . 2 2 7 . 4 3 9 . .	. . .	.	
1239	92,409,426	135,439,644	4.9	101	224	. . 1 . . 5 7 2 . . 8 . . 3	. . .	W	
1240	90,387,409,411,428		5.7	20152	—	. . . . . F 1 . F F F . . .	. . .	.	nvp
1241	76, 88,406,428		5.7	F221	—	. . . . . F 1 . 7 1 F . 1 .	. . .	.	d
1242	76,397,403,409,610,616,627		4.4	5033011	—	6 5 0 . . 6 6 . 6 3 5 . 2 .	. . .	*g*	
1243	384,397,406		5.3	214	—	. . . . . F 3 . 3 6 F . 1 .	. . .	.	
1244	420,428,433,435,439,614,618		5.7	1363002-	—	. . 2 . . F 4 6	. . .	.	
1245	90,397,403,411,614,618,627	134,439,644	5.1	5234112	201	. . 3 . . 7 7 **2** . . $\frac{1}{}$ . . 1	. . 3	W	nc
1246	384,397,403		5.2	021	—	. . . . . 6 6 . . 5 5 . . .	. . .	*y*	
1247	375,387,412	134,439,644	5.2	022	321	. . 6 . . 2 0 4 . . 5 . 4 2	. . 3	Y	n
1248	375,387,397	*135*,439,644	5.5	213	001	. . 0 . . 3 3 5 . . 2 . . 0	. . .	.	
1249	64, 90, 94, 97,375,378,381	166,166,174	2.0	1110030-	023-	**3 2** 3 4 . 5 5 2 . . 5 . 7 2	2 1 .	W	e
1250	94,381,399	*175*,439,643	6.0	021	062	. . . . . 2 2 3 . 5 3 . . 3	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1251	Canis Major	ν^2 7	2171	—	31.5	−19 9	5	5	—	4.1	6	4.25	.06	—	—
1252	Auriga . .	54	2170	+28° 1196	32.0	+28 22	6	6	6.0	—	4	5.66	.08	5.5	.00
1253	Canis Major	ν^3 8	2174	—	32.6	−18 8	6	6	—	4.9	7	4.68	.08	—	—
1254	Canis Major	—	—	—	33.8	−14 2	6·5	6·5	—	5.3	3	4.97	.04	—	—
1255	Auriga . .	ψ^4 55	2182	+44° 1518	34.4	+44 39	5	5·6	5.5	—	7	5.21	.07	5.2	.07
1256	Monoceros .	S 15	2185	+10° 1220	34.4	+10 1	4	var.	4.0	var.	12	4.57	.04	4.7	.04
1257	Canis Major	—	—	—	34.6	−23 35	6	6	—	6.6	8	5.77	.07	—	—
1258	Monoceros .	—	2189	+ 0° 1646	34.9	+ 0 36	F	6·7	6.5	6.3	6	5.71	.05	—	—
1259	Canis Major	—	—	—	35.1	−30 21	F	F	—	5.9	3	5.81	.11	—	—
1260	Gemini . .	26	2191	+17° 1357	35.4	+17 46	6·5	6·5	5.5	5.7	3	5.05	.08	5.3	.20
1261	Lynx . .	12	2187	+59° 1015	35.7	+59 33	5	5	5.0	—	6	4.68	.09	4.9	.03
1262	Monoceros .	—	—	—	36.2	− 9 3	6	6	—	5.7	3	5.42	.12	—	—
1263	Gemini . .	ε 27	2194	+25° 1406	36.5	+25 15	3·4	3·4	3.2	—	6	3.19	.05	3.4	.15
1264	Lynx . .	13	2192	+57° 1004	36.6	+57 18	6	6	6.1	—	3	5.39	.07	5.4	.03
1265	Gemini . .	28	2197	+29° 1327	37.2	+29 6	6	6	6.0	—	3	5.39	.13	5.4	.03
1266	Gemini . .	30	2199	+13° 1390	37.2	+13 21	5	5	5.1	5.2	7	4.62	.08	4.9	.03
1267	Lynx . .	—	—	+55° 1122	38.1	+55 49	6	6	6.0	—	3	5.46	.04	5.4	.00
1268	Lynx . .	—	—		38.1	+55 49									
1269	Auriga . .	ψ^5 56	2200	+43° 1595	38.1	+43 42	6	6·5	5.7	—	6	5.39	.03	5.3	.12
1270	Camelopard.	42	2198	+67° 454	38.4	+67 42	5	5	5.2	—	21	4.93	.05	4.9	.04
1271	Auriga . .	ψ^6 57	2201	+48° 1436	38.5	+48 54	6	6	5.5	—	3	5.27	.00	5.6	.13
1272	Gemini . .	ξ 31	2206	+13° 1396	38.6	+13 1	4·3	4·3	3.7	—	13	3.36	.04	3.9	.19
1273	Canis Major	—	—	—	39.6	−30 4	F	F	—	F	6	F	—	—	—
1274	Auriga . .	—	—	—	39.9	+41 26	F	cum.	cum.	—	3	5.34	.13	6.4	.04
1275	Canis Major	α 9	2213	—	39.9	−16 33	1	1	—	0.1	16	−1.43	.05	—	—
1276	Canis Major	10	2214	—	39.9	−30 57	5	5	—	5.7	4	5.18	.19	—	—
1277	Monoceros .	16	2211	+ 8° 1486	40.0	+ 8 43	6	6	6.0	6.5	4	5.62	.15	6.0	.09
1278	Canis Major	—	—	—	40.5	−14 40	F	6·7	—	5.7	3	5.29	.09	—	—
1279	Camelopard.	43	2209	+69° 394	40.8	+69 1	5	5·6	5.2	—	6	5.06	.02	4.9	.07
1280	Monoceros .	17	2216	+ 8° 1496	40.8	+ 8 10	5	5	5.3	5.3	3	5.02	.08	5.0	.08
1281	Canis Major	—	2217	—	40.8	−20 39	cum.	cum.	—	$5\frac{1}{2}$	—	cum.	—	—	—
1282	Canis Major	—	—	—	41.0	− 9 58	6	6	—	6.1	3	5.54	.09	—	—
1283	Canis Major	11	2221	—	41.4	−14 18	5	5	—	5.5	3	4.89	.05	—	—
1284	Monoceros .	18	2222	+ 2° 1397	41.6	+ 2 33	5	5	4.9	5.2	7	4.75	.08	5.0	.07
1285	Gemini . .	—	—	+32° 1414	41.9	+32 44	6	6	5.8	—	3	5.70	.03	5.7	.05
1286	Monoceros .	—	—	—	41.9	− 8 51	6	6	—	5.6	3	5.32	.04	—	—
1287	Auriga . .	ψ^7 58	2223	+41° 1536	42.3	+41 56	5	5	5.2	—	3	5.00	.17	5.2	.12
1288	Camelopard.	—	2210	+77° 266	42.5	+77 8	5·4	5·4	4.7	—	6	4.62	.04	4.9	.03
1289	Lynx . .	14	2220	+59° 1028	42.6	+59 35	6	6	6.0	—	3	5.39	.11	5.4	.03
1290	Gemini . .	33	2228	+16° 1298	42.9	+16 20	6	6	6.5	—	3	5.44	.00	5.4	.11
1291	Canis Major	—	—	—	43.5	−15 1	6·5	6·5	—	5.8	3	5.33	.17	—	—
1292	Cepheus .	—	2157	+87° 51	43.8	+87 14	5	5·6	5.0	—	13	5.32	.06	5.3	.05
1293	Gemini . .	d 36	2233	+21° 1405	44.4	+21 55	6	6	6.0	—	3	5.18	.07	5.3	.03
1294	Canis Major	—	—	—	44.8	−23 56	F	F	—	6.6	6	6.15	.07	—	—
1295	Gemini . .	θ 34	2237	+34° 1480	44.9	+34 6	3·4	3·4	3.2	—	6	3.74	.04	3.8	.08
1296	Monoceros .	—	—	—	44.9	− 7 54	6	6	—	6.6	7	6.12	.09	—	—
1297	Canis Major	—	2244	—	45.3	−27 12	F	6	—	7.0	7	6.53	.09	—	—
1298	Auriga . .	60	2239	+38° 1636	45.0	+38 35	6	6	6.2	—	3	6.30	.03	5.3	.08
1299	Auriga . .	ψ^8 61	2241	+38° 1638	45.8	+38 39			6.3	—	3	6.14	.03		
1300	Canis Major	$\varkappa$ 13	2246	—	45.4	−32 22	4	4	—	4.0	6	3.92	.04	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1251	81,387,412,631,632,633		4.2	*122112*	—	8701. 88.. 02. 0.	...	*o*	vta
1252	67, 76, 90,397	*135*,439,644	5.7	*1*F*21*	*222*	..*1*.. 111.. 0..*2*	...	w	
1253	73, 92,412,433,618,627,629		4.7	f*212*520	—	723.. 11.. 02. 0.	...	O	tpg
1254	64, 97,393		5.0	1*1*0	—	..... 46.. 03. 0.	...	.	t
1255	67, 83,412,420,614,622,627	134,439,644	5.2	61*1111*	*102*	..*6*..*2*02.. 1. 00	..*3*	*o*	n
1256	76, 85,102,378,409,412,417	175,439,643	4.6	**36***22402*-	102	.. 2. **3***5* v*5*.. 7.. 1	...	*g*	dv
1257	73, 90, 92,397,406,618,622		5.8	5F*34020*-	—	..... 00. 26*1*...	...	.	
1258	420,428,439,618,622,627		5.7	*213110*	—	..... F46. 4F...	...	.	
1259	81, 97,393		5.8	3*20*	—	..... FF. 2*1*F...	...	.	
1260	64,384,412	*175*,439,643	5.0	*202*	*812*	..6.. 464. 47. 23	...	*y*	
1261	76, 81, 83,406,412,417	140,172,656	4.7	F114*23*	223	..0. 3333.. 6. 62	...	*r*	d
1262	67, 90,397		5.4	03*3*	—	..... 44.. 03. 2.	...	.	t
1263	85,102,409,610,616,627	135,432,644	3.2	*221120*	*612*	1410. 232.. *2*. 22	20.	Y	vt
1264	83,428,618	*140*,172,*656*	5.4	*102*	001	..*2*.. 445.. 3.. 0	...	*y*	
1265	64, 97,393	*135*,439,644	5.4	22*3*	*010*	..1.. 444.. 3.. 0	...	*o*	
1266	81, 92,412,414,622,625,629	*139*,*444*,643	4.6	*7521110*	323	..*4*.. 445. 37. 83	.1.	*σ*	
1267	90,381,397	*140*,172,*656*	*6.2*	101	*111*	....*2* ..F..	...	*y*	d
1268			*6.2*			....*2* 333 ..F.. *1*	...		d
1269	97,384,409,610,616,629	134,444,644	5.4	*120110*	041	..*3*.. 422.. 3..*1*	..*2*	*y*	nd
1270	64, 73, 81, 83, 85, 88, 92	124,128,134	4.9	0*254325*-	*110*	..2.. 113.. 0. 30	...	w	s
1271	97,387,428	134,172,*656*	5.3	000	116	..2.. 551.. 0.. 3	..*1*	*y*	ne
1272	102,378,406,409,412,414,417	139,444,643	3.4	*1123250*-	509	**0**87.. 335.. 6. 55	.2.	*y*	
1273	73, 88, 90,397,403,406		F	FFFFFF	—	..... FF. RFF...	...	.	pcm
1274	81, 97,102	*139*,*444*,*644*	5.3	3*13*	F**12**	..... FCC .. F.. **2**	...	.	e
1275	64, 76, 85, 92,102,375,381		-1.4	2144*2*16-	—	**9**fR.. **77**.. R**9**. **6**R	*3*..	W	ehgcm
1276	88, 90,381,397		5.2	0F*54*	—	..*9*..*22*.*2*21. 2.	...	.	
1277	83, 92,426,434	*175*,*439*,644	5.6	3603	256	..*2*.. 222. 75.. 4	...	w	
1278	381,397,406		5.3	221	—	..... F8.. 1F. 1.	...	.	tgc
1279	90,381,428,614,619,627	125,164,*670*	5.1	10010*1*	*241*	..*4*..*1*11..*2*.*22*	...	*b*	
1280	92,384,426	175,439,643	5.0	*121*	*211*	..0.. 002. 0*1*. 10	...	*o*	t
1281	381,387,397		cum	ccc	—	..... cc. cRF...	...	.	dg
1282	88,387,426		5.5	*212*	—	..... 33.. 42...	...	.	
1283	64, 95,397		4.9	1*1*1	—	..4.. 11.. 34. 3.	...	*y*	dt
1284	81, 97,400,406,610,619,627	175,444,643	4.8	5*332112*	412	..*2*.. 221. 11. 22	...	Y	
1285	378,387,426	*135*,444,644	5.7	010	1*11*	..... 11*1*.. F2.0	...	.	
1286	85,387,400		5.3	*101*	—	..... 55.. 04...	...	.	
1287	67,400,406	134,444,644	5.0	*423*	105	..4.. 002.. 3.02	..0	Y	n
1288	73, 88,430,614,618,627	125,168,*670*	4.6	2*10*210	334	..... 001.. 3.13	...	Y	
1289	85,400,417	*140*,172,657	5.4	3*11*	*010*	..1. 2444.. 3. 00	...	Y	d
1290	64, 97,400	136,444,644	5.4	000	*230*	.. R.. 449.. 3.. 2	...	w	h
1291	81, 92,397		5.3	4*23*	—	..... 13.. 34...	...	.	
1292	67,384,421,425,440,442,445	127,130,507	5.3	*4213116*-	*300*-	..... *313*..0.*10*	...	Y	nte
1293	85, 97,400	136,444,644	5.2	20*1*	112	*220*.. 666.. 5. 41	...	W	
1294	95,378,426,612,616,627		6.2	*211*421	—	..... FF. *2*2F...	...	.	d
1295	85,387,428,610,619,627	134,432,644	3.7	0*2310*1	1*13*	710.. *323*.. 7. 51	02.	W	
1296	81,102,400,406,610,616,625		6.1	5*173102*	—	..... *33*.. 3F...	...	.	
1297	67,387,409,412,616,618,627		6.5	6F00053	—	..... F7. F3F. *1*.	...	.	vg
1298	73,387,426	*139*,444,644	6.3	100	*221*	..R.. 44 *3*.. F.. *1*	...	*y*	neh
1299	73,387,426		6.1	0*10*		..R.. 0.. F..	...	w	neh
1300	97,387,406,612,616,625		3.9	*210211*	—	5360. 22. 225. 1.	...	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
1301	Monoceros .	—	—	+ 8° 1543	46.3	+ 8 31	6	6	6.2	6.3	3	5.72	.08	5.6	.11
1302	Lynx . .	15	2248	+58° 982	46.9	+58 35	5	5	5.0	—	7	4.52	.04	4.7	.03
1303	Camelopard.	—	2247	+70° 430	47.7	+70 58	F	6·7	6.0	—	4	5.84	.07	6.0	.07
1304	Auriga . .	ψ^9	—	+46° 1203	47.7	+46 26	6	6	6.3	—	3	5.87	.04	5.8	.09
1305	Gemini . .	e 38	2255	+13° 1462	47.9	+13 20	5	5	5.3	—	6	4.78	.06	4.8	.04
1306	Canis Major	—	—	—	48.1	−18 53	6	6	—	6.1	3	5.50	.04	—	—
1307	Monoceros .	—	—	− 0° 1487	48.3	− 0 58	F	6·7	6.4	5.9	3	5.21	.11	—	—
1308	Canis Major	15	2263	—	48.4	−20 5	6·5	6·5	—	5.3	3	4.43	.13	—	—
1309	Canis Major	θ 14	2264	—	48.6	−11 53	4·5	4·5	—	4.4	7	4.23	.05	—	—
1310	Auriga . .	ψ^{10} *16*	2261	+45° 1367	48.9	+45 17	5	5·6	6.0	—	3	4.74	.15	5.1	.07
1311	Canis Major	—	—	—	49.2	−23 47	F	F	—	F	3	6.37	.09	—	—
1312	Canis Major	o^1 16	2267	—	49.2	−24 2	5	5	—	3.9	9	4.04	.07	—	—
1313	Monoceros .	—	—	+10° 1335	49.9	+10 6	6	6	6.1	—	3	5.72	.00	5.6	.09
1314	Canis Major	17	2269	—	49.9	−20 15	F	F	—	6.5	3	5.88	.12	—	—
1315	Canis Major	19	2272	—	50.4	−19 59	6·5	6·5	—	4.9	6	4.45	.08	—	—
1316	Canis Major	μ 18	2273	—	50.6	−13 53	5	5	—	5.5	3	5.17	.12	—	—
1317	Canis Major	—	—	—	50.7	−22 47	6	6	—	5.9	3	5.19	.15	—	—
1318	Canis Major	ι 20	2274	—	50.8	−16 54	5·4	5·4	—	4.9	3	4.46	.11	—	—
1319	Camelopard.	—	—	+70° 432	52.3	+70 55	6	6·7	6.5	—	8	6.49	.14	6.3	.09
1320	Canis Major	—	2281	—	52.6	−24 29	F	F	—	5.9	7	5.19	.08	—	—
1321	Canis Major	—	2284	—	52.8	−24 49	F	F	—	F	7	F	—	—	—
1322	Monoceros .	—	—	+ 7° 1544	52.9	+ 7 29	6	6	7.0	6.8	3	6.32	.04	5.7	.05
1323	Gemini . .	41	2285	+16° 1354	53.4	+16 14	6	6	6.0	—	4	5.89	.12	5.7	.07
1324	Canis Major	—	2291	—	53.7	−25 15	F	6·5	—	6.0	9	5.38	.04	—	—
1325	Canis Major	ε 21	2293	—	53.9	−28 49	2·1	2·1	—	1.8	17	1.49	.05	1.7	.10
1326	Gemini . .	ω 42	2299	+24° 1502	55.1	+24 23	6	6·5	5.8	—	3	5.26	.08	5.4	.09
1327	Gemini . .	—	—	+17° 1479	55.4	+17 55	F	6·7	6.0	—	3	6.18	.19	6.4	.03
1328	Gemini . .	—	—	+15° 1431	55.4	+15 30	F	6·7	6.0	—	3	5.94	.08	6.1	.12
1329	Gemini . .	—	2301	+29° 1441	55.9	+29 32	F	6·7	6.3	—	6	6.03	.05	—	—
1330	Monoceros .	—	—	—	56.0	− 5 33	6	6	—	5.6	3	5.38	.19	—	—
1331	Canis Major	—	—	—	56.2	−25 3	F	6·7	—	6.0	7	5.96	.12	—	—
1332	Monoceros .	—	2304	+ 9° 1496	56.7	+ 9 19	6	6	6.5	6.4	3	5.99	.09	5.8	.03
1333	Canis Major	22	2309	—	56.9	−27 46	5·4	4	—	3.6	7	3.49	.09	—	—
1334	Gemini . .	ζ 43	2305	+20° 1687	57.0	+20 45	4	var.	var.	—	17	4.00	.05	4.1	.25
1335	Gemini . .	—	2306	+11° 1428	57.0	+11 7	6	6·5	5.0	—	3	5.20	.09	5.6	.15
1336	Monoceros .	19	2307	—	57.0	− 4 4	6	6·5	—	5.5	7	4.82	.05	—	—
1337	Canis Major	o^2 24	2318	—	58.0	−23 40	3·4	3·4	—	3.4	6	3.05	.06	—	—
1338	Gemini . .	44	2313	+22° 1566	58.1	+22 49	F	6	7.1	—	3	5.85	.12	5.6	.03
1339	Auriga . .	—	2314	+34° 1524	58.2	+34 40	5·6	6·5	6.0	—	3	5.67	.08	5.7	.04
1340	Canis Major	γ 23	2319	—	58.3	−15 27	4·5	4·5	—	4.5	6	4.10	.08	—	—
1341	Auriga . .	—	—	+34° 1530	59.5	+34 11	6	6	6.0	—	8	6.11	.08	6.2	.12
1342	Canis Major	—	—	—	59.7	−21 51	F	6	—	6.7	4	6.11	.15	—	—
1343	Camelopard.	—	—	+72° 352	0.0	+72 1	6	6·7	6.4	—	3	6.40	.05	6.2	.11
1344	Monoceros .	—	—	+ 5° 1543	0.7	+ 5 6	6	6	6.5	6.5	3	5.71	.08	5.6	.07
1345	Canis Major	—	—	—	1.1	−11 6	6	6	—	6.0	3	5.13	.09	—	—
1346	Monoceros .	—	—	+ 7° 1607	1.3	+ 7 40	6	6	5.9	6.1	3	5.95	.09	5.7	.04
1347	Gemini . .	45	2330	+16° 1397	1.5	+16 7	6	6·5	5.8	—	3	5.57	.11	5.5	.12
1348	Auriga . .	63	2338	+39° 1882	3.4	+39 31	5	5	5.4	—	6	5.17	.06	5.5	.25
1349	Gemini . .	τ 46	2340	+30° 1439	3.5	+30 26	5·4	5·4	4.7	—	3	4.63	.03	4.6	.13
1350	Canis Major	δ 25	2345	—	3.5	−26 12	2	2	—	2.1	15	1.85	.03	2.2	.08

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1301	76, 97,409	*175*,444,644	5.7	*121*	*222*	. . . . . 113. 40. . *1*	. . .	*y*	p
1302	67, 85,102,614,618,619,627	140,172,656	4.5	0*311112*	223	. . 1. . 555. . 8. 52	. . .	Y	
1303	81, 88,406,412	*125,168,670*	5.8	*1122*	412	. . . . . F30. . F. . 2	. . .	O	
1304	85,384,426	*134,444*,644	5.9	*101*	10*3*	. . . . . *112*. . 2. . *1*	. . *1*	.	ne
1305	81,437,631,632,633,634	136,444,644	4.8	3*12012*	*101*	. . *1*. 6224. . 5. 30	.1.	*y*	dvp
1306	97,378,417		5.5	1*10*	—	. . . . . 33. . 42. . .	. . .	.	
1307	378,387,428		5.2	*113*	—	. . . . . F90. 55. . .	. . .	.	dc
1308	102,378,414		4.4	*331*	—	656. . **0**2. 669. 6.	. . .	W	
1309	85, 97,414,610,618,619,625		4.2	*1205102*	—	2311. 22. . 27. 1.	. . .	*o*	vt
1310	81, 95,426	134,444,644	4.7	2*41*	425	. . 6. . 351. . 2. 74	. . 3	W	n
1311	634,635,636		6.4	*212*	—	. . . . . FF. FFF. . .	. . .	.	tm
1312	73, 92,412,414,378,610,618		4.0	7*23*1123-	—	**0**940. **00**. 104. *1*.	. . .	Y	tg
1313	67, 85,102	*175*,444,644	5.7	000	10*3*	. . . . . 112. . 4. . *1*	. . .	.	
1314	67, 83,428		5.9	3*21*	—	. . b. . FF. 14F. . .	. . .	*w*	
1315	378,390,412,610,618,627		4.4	0*30153*	—	. . *1*. . **0**2. 635. 3.	. . .	*y*	pg
1316	83, 88,412		5.2	*132*	—	*234*. *322*. . 01. 0.	. . .	Y	t
1317	81, 92,102		5.2	2*41*	—	. . . . . 66. 355. . .	. . .	.	
1318	73, 88,428		4.5	3*20*	—	*131*. . 11. . 2*1*. 2.	. . .	*y*	
1319	73, 97,417,420,430,612,616	*125,168,670*	6.5	*8*732471-	0*34*	. . . . . *7425*. *8*. . *2*	. . .	.	t
1320	390,400,412,414,612,616,625		5.2	107*1*332	—	. . . . . FF. F5F. . .	. . .	Y	
1321	81,414,428,629,631,634,636		F	RRFFRFR	—	. . . . . FF. RFF. . .	. . .	.	vpcm
1322	88,428,612	*175*,444,644	6.3	*110*	*577*	. . . . . *555*. 3*6*. . *6*	. . .	.	degc
1323	85,393,430,434	*136*,444,644	5.9	3034	0*23*	. . 0. . *111*. . *2*. . *2*	. . .	o	dc
1324	83, 88,378,393,400,412,610		5.4	0412*102*-	—	. . . . . F2. 64F. 2.	. . .	.	p
1325	73, 81, 95, 97,102,378,381	182,510,649	1.5	810*12*21-	530-	**8**722. 00. 025. 32	*3* . .	.	ve
1326	76, 95,397	*136*,444,644	5.3	20*2*	3*12*	. . *1*. . 533. . 0. 11	. . .	*y*	
1327	85, 97,400	*136,444*,644	6.2	5*13*	322	. . . . . F*14*. . F*5*. 2	. . .	.	
1328	73, 88,102	*136,444,644*	5.9	*220*	34*1*	. . . . . F2*1*. . F0. 2	. . .	.	
1329	612,619,622,627,629,631		6.0	3*21*200	—	. . . . . F11. . *3*. . .	. . .	.	
1330	81, 98,424		5.4	5*22*	—	. . . . . 44. . *17*. . .	. . .	.	t
1331	88,400,406,412,610,614,629		6.0	*4841*035	—	. . . . . F1. 0*2*F. . .	. . .	.	p
1332	85,381,424	*175*,444,644	6.0	2*12*	*232*	. . . . . *223*. 2F. . *2*	. . .	w	e
1333	83,381,390,397,622,625,629		3.5	0660*412*	—	. . 31. **1**6. 629. 2.	. . .	.	vtg
1334	73, 76,378,384,390,393,397	136,432,644	4.0	*2161033*	*327*	*721*. . 1vv. . 4. . 1	.1.	*y*	vah
1335	95,384,397	*175*,444,644	5.2	*221*	832	. . . . . 642. . 5. . 4	. . .	*o*	n
1336	88, 98,426,612,616,619,627		4.8	0412*301*	—	. . *2*. . **0**8. . 45. 5.	. . .	*r*	vg
1337	81,102,390,631,632,633		3.0	*223011*	—	**42**15. 45. 95**0**. 5.	. . .	*g*	v
1338	83,381,397	*136*,444,644	5.8	21*3*	*223*	. . 1. . F01. . *1*. . *2*	. . .	w	
1339	85, 98,400	*135,444*,644	5.7	2*11*	10*1*	. . . . . *511*. . 0. . 0	. . .	*y*	n
1340	73, 95,426,612,616,629		4.1	2*32123*	—	3132. 33. . 33. 3.	. . .	*g*	vg
1341	85,102,400,414,612,616,619	*135,444*,644	6.1	710*1*523	42*1*	. . . . . *333*. . F*2*. 1	. . .	.	pe
1342	81, 83, 88,397		6.1	F03*4*	—	. . . . . F3. F4F. . .	. . .	.	
1343	381,387,420	*125,168,670*	6.4	1*11*	1*33*	. . . . . *632*. . F. . *2*	. . .	.	
1344	95,384,420	*175*,444,644	5.7	*112*	1*21*	. . . . . 116. 60. . *1*	. . .	.	
1345	83,387,420		5.1	2*21*	—	. . . . . 77. . 76. . .	. . .	.	
1346	95,393,420	*175*,444,644	6.0	21*2*	*234*	. . . . . *223*. *1*F*1*. *3*	. . .	.	
1347	85,102,414	*136*,444,644	5.6	3*11*	01*4*	. . 0. . 200. . 5. . *1*	. . .	*y*	
1348	83,102,414,619,629,631	*136*,444,644	5.2	2*23*102	90*1*	. . 0. . *221*. . 5. 33	. . .	O	
1349	91, 98,426	139,444,644	4.6	00*1*	1*33*	*241*. . 001. . 3. 00	. b.	*o*	
1350	85, 88,102,381,384,390,393	182,510,649	1.8	*1013100*-	522-	**54**43. 44. 037. 24	1 . .	.	ve

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
1351	Gemini . .	47	2343	+27° 1327	3.9	+27 4	6	6	5.7	—	4	5.49	.03	5.6	.11
1352	Lynx . .	—	2341	+51° 1295	4.0	+51 37	F	F	6.0	—	3	5.64	.03	—	—
1353	Canis Major	—	—	—	4.1	−16 2	F	6	—	6.6	3	5.97	.11	—	—
1354	Monoceros.	20	2348	—	4.3	− 4 3	6	6·5	—	5.4	6	5.09	.04	—	—
1355	Gemini . .	48	2350	+24° 1558	5.2	+24 20	F	6	6.0	—	3	5.79	.07	5.6	.08
1356	Lynx . .	18	2349	+59° 1065	5.4	+59 51	6	5·6	5.0	—	17	5.30	.03	5.4	.07
1357	Canis Minor	—	2356	+ 5° 1577	5.5	+ 5 51	6	6	6.0	6.3	3	6.04	.11	5.4	.12
1358	Canis Major	—	—	—	5.5	−27 18	F	F	—	6.3	3	5.40	.12	—	—
1359	Monoceros.	22	2358	− 0° 1636	5.7	− 0 18	4·5	4·5	4.2	4.6	3	4.01	.05	—	—
1360	Camelopard.	—	2326	+82° 201	5.8	+82 38	5	5·6	5.5	—	6	5.29	.03	5.4	.08
1361	Gemini . .	51	2362	+16° 1417	6.5	+16 22	6	6·5	5.5	—	3	5.37	.11	5.5	.09
1362	Canis Major	—	—	—	6.6	−20 41	F	6	—	6.3	4	5.57	.08	—	—
1363	Lynx . .	—	2361	+47° 1419	7.0	+47 28	6	6	5.7	—	3	5.60	.05	5.4	.15
1364	Monoceros.	—	2373	+ 3° 1609	8.1	+ 3 19	6	6·5	6.0	5.9	3	5.47	.09	5.6	.13
1365	Lynx . .	—	2367	+52° 1188	8.2	+52 21	6	6	6.2	—	3	6.04	.07	5.9	.24
1366	Monoceros.	—	—	—	8.8	−10 6	6	6	—	6.3	3	5.88	.07	—	—
1367	Lynx . .	—	2379	+49° 1612	9.4	+49 41	6	6·7	5.3	—	6	4.77	.05	4.9	.15
1368	Canis Major	27	2388	—	9.4	−26 9	6·5	6·5	—	5.4	7	4.54	.09	—	—
1369	Auriga . .	64	2381	+41° 1630	9.7	+41 6	6	6	6.0	—	7	5.80	.06	5.6	.05
1370	Canis Major	28	2391	—	9.9	−26 34	5·4	5·4	—	4.2	7	3.69	.05	—	—
1371	Gemini . .	—	—	+31° 1529	10.4	+31 11	6	6	6.5	—	3	5.87	.08	6.0	.20
1372	Canis Major	—	—	—	10.8	−15 23	6	6	—	5.9	3	5.25	.08	—	—
1373	Gemini . .	λ 54	2398	+16° 1443	11.2	+16 45	4·3	4	4.1	—	11	3.58	.05	3.7	.03
1374	Canis Major	—	—	—	11.6	−23 6	5	5	—	5.0	6	4.67	.06	—	—
1375	Canis Major	—	2405	—	11.8	−27 40	F	6	—	5.4	3	4.92	.15	—	—
1376	Lynx . .	—	—	+45° 1422	12.6	+45 27	F	6·7	6.0	—	3	5.60	.07	5.8	.07
1377	Gemini . .	δ 55	2410	+22° 1645	13.0	+22 12	3·4	3·4	3.5	—	11	3.65	.03	3.8	.08
1378	Lynx . .	19	2407	+55° 1192	13.1	+55 30	5	5·6	5.5	—	6	5.21	.06	5.2	.08
1379	Lynx . .	20	2409	+50° 1420	13.1	+50 22	F	F	7.2	—	3	6.57	.04	—	—
1380	Canis Major	29	2417	—	13.7	−24 20	5	5	—	5.6	6	4.77	.07	—	—
1381	Canis Major	30	2418	—	13.7	−24 44	5·4	5·4	—	4.6	3	4.31	.09	—	—
1382	Auriga . .	65	2416	+37° 1707	14.0	+36 59	6	6·5	5.3	—	3	5.34	.05	5.1	.16
1383	Canis Major	—	—	—	14.0	−26 22	F	F	—	6.0	3	5.36	.15	—	—
1384	Gemini . .	56	2423	+20° 1775	14.9	+20 39	6·5	6·5	6.0	—	3	4.98	.13	5.5	.15
1385	Camelopard.	—	2419	+66° 502	15.5	+66 34	6	6	6.2	—	3	6.22	.11	6.0	.03
1386	Auriga . .	66	2429	+40° 1852	15.8	+40 54	6	6	5.8	—	3	5.27	.04	5.5	.04
1387	Gemini . .	A 57	2431	+25° 1660	16.2	+25 17	5·6	6·5	5.0	—	3	5.03	.03	5.3	.15
1388	Gemini . .	58	2434	+23° 1698	16.3	+23 11	6	6·7	6.3	—	3	6.06	.12	6.3	.09
1389	Monoceros.	—	—	—	16.3	− 8 45	F	F	—	6.6	6	6.20	.03	—	—
1390	Monoceros.	—	—	—	16.5	− 5 45	6	6	—	6.2	3	5.75	.08	—	—
1391	Argo. . .	—	—	—	17.0	−18 47	6·5	6·5	—	4.7	3	4.90	.12	—	—
1392	Lynx . .	21	2441	+49° 1623	17.7	+49 27	5	5	4.5	—	3	4.57	.12	4.8	.05
1393	Canis Minor	1	2444	+11° 1578	18.2	+11 54	6	6	5.8	5.8	3	5.36	.05	5.4	.03
1394	Gemini . .	ι 60	2442	+28° 1385	18.3	+28 2	4	4	4.0	—	6	4.03	.03	4.4	—
1395	Camelopard.	—	2439	+68° 480	18.4	+68 42	6	6	5.5	—	17	5.80	.03	5.9	.08
1396	Argo. . .	ν	2449	—	18.4	−31 42	6·5	6·5	—	5.9	3	5.41	.16	—	—
1397	Canis Minor	ε 2	2451	+ 9° 1643	19.1	+ 9 31	5·6	5·6	5.4	5.6	3	4.99	.09	5.3	.20
1398	Argo. . .	—	2454	—	19.2	−15 58	6	6	—	6.0	8	4.91	.03	—	—
1399	Canis Major	η 31	2458	—	19.3	−29 4	3·2	3·2	—	2.9	6	2.41	.03	—	—
1400	Gemini . .	61	2457	+20° 1805	19.9	+20 30	6	6	6.5	—	7	5.69	.10	5.7	.19

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1351	81, 95,384,420	*139*,444,644	5.5	F001	321	. . 5 . . 331 . . 2 . . 1	. . .	w	
1352	102,387,417		5.6	001	—	. . . . . FF 2 . . 1 . . .	. . .	*y*	t
1353	91,393,424		6.0	*131*	—	. . . . . F *2* . . 41 . . .	. . .	.	t
1354	381,397,417,619,629,631		5.1	320001	—	. . *1* . . 75 . . 0 *2* . 1 .	. . .	*y*	
1355	83,387,420	*139*,444,644	5.8	201	033	. . *4* . . F 0 0 . . *1* . . *2*	. . .	w	
1356	83, 85, 88, 95,102,378,390	128,134,174	5.3	2420101-	010	. . R . . 5 *1 3* . . 4 . 11	. . .	*y*	sh
1357	76,393,420	*175*,444,644	6.0	311	*954*	. . . . . *2 2 2* . 1 *3* . . *6*	. . .	w	dec
1358	381,397,414		5.4	330	—	. . . . . FF . 67 F . . .	. . .	.	
1359	102,384,417		4.0	111	—	4 2 4 . . 4 4 3 . 5 4 . 4 .	. . .	W	a
1360	81,403,430,619,629,631	125,168,671	5.3	001210	311	. . . *:* . *3 1* 1 . . 0 . . 1	. . .	*o*	t
1361	85,384,424	*136*,444,644	5.4	311	231	. . *4* . . 420 . . 3 . . 1	. . .	*o*	t
1362	91, 95,397,409		5.6	F202	—	. . . . . F 2 . F 5 5 . . .	. . .	.	
1363	81,393,420	*140*,172,*656*	5.6	111	*225*	. . . . . 2 2 0 . . *3* . . *2*	. . *1*	*y*	
1364	95,387,420	*175*,444,644	5.5	*122*	402	. . . . . 3 1 3 . 2 2 . . 1	. . .	Y	n
1365	83,397,417	*140*,172,*656*	6.0	021	*625*	. . . . . *2 2* 0 . . 1 . *4 1*	. . .	.	
1366	102,393,417		5.9	012	—	. . . . . *1 1* . . *2 2* . . .	. . .	.	dc
1367	85,384,397,632,633,634	140,444,656	4.8	101213	501	. . . . . **0 3** 4 . . F . . 1	. . 2	W	v
1368	83, 91,102,381,622,629,631		4.5	3612123	—	. . *3* . . 91 . **5** 6 *1* . 6 .	. . .	.	v
1369	76, 95,420,424,619,622,629	*136*,444,644	5.8	**1**304102	*131*	. . *4* . . 000 . . 3 . . *2*	. . 1	w	
1370	102,381,390,397,619,629,631		3.7	**6**122201	—	. . 47 . 99 . **0** 5 F . 5 .	. . .	.	v
1371	81,378,420	*139*,444,644	5.9	202	603	. . . . . *1 1* 4 . . F . . 1	. . .	.	
1372	85,397,414		5.2	202	—	. . . . . 66 . . 55 . . .	. . .	.	
1373	95,406,409,412,417,424,428	136,432,644	3.6	3004314-	112	*3 0 1* . 0 1 5 6 . . 8 . 61	. 3 .	W	dv
1374	81,387,424,629,630,631		4.7	*411*111	—	. . . . . 33 . 31 **0** . 3 .	. . .	.	dvt
1375	381,393,424		4.9	412	—	. . . . . F 9 . 624 . . .	. . .	.	t
1376	378,397,414	*139*,*444*,644	5.6	012	214	. . . . . F 52 . . 1 . . 2	. . .	.	
1377	378,406,409,412,414,417,424	139,432,644	3.6	1203210-	204	*3 4 0 4 0 2 1* 1 . . 4 . 22	02 .	W	da
1378	384,403,424,626,629,630	140,172,*656*	5.2	022311	112	. . 0 . *1* 202 . . *3* . *1* 0	. . .	w	dc
1379	384,397,417		6.6	110	—	. . **b** . 7 FF 4 . . **b** . 2 .	. . .	.	dc
1380	89,387,424,626,629,631		4.8	222410	—	. . *4* . . 22 . 75 **3** . 5 .	. . .	*y*	v
1381	89,387,424		4.3	221	—	. . 1 . . 33 . 426 . 2 .	. . .	*y*	d
1382	86, 98,428	*136*,444,644	5.3	111	611	. . *1* . . 53 *1* . . 4 . . *2*	. . .	*o*	
1383	381,387,424		5.4	421	—	. . . . . FF . 64 F . . .	. . .	.	ntp
1384	81,397,406	*139*,444,644	5.0	313	815	. . 2 . . 468 . . 7 . . 5	. . .	*o*	
1385	89, 98,428	*125*,*168*,*670*	6.2	023	*221*	. . . . . *4 4 2* . . F . . *2*	. . .	*y*	
1386	95,393,430	*136*,444,644	5.3	011	123	. . 3 . . 553 . . 4 . . 2	. . 0	*y*	
1387	95,393,426	*139*,444,644	5.0	010	514	0 0 4 . . 260 . . 7 . 43	. . .	*y*	
1388	98,384,426	*139*,*444*,644	6.1	330	401	. . R . . *3* 0 0 . . 0 . . 2	. . .	.	h
1389	434,437,443,629,630,631		6.2	211010	—	. . . . . FF . . 2 F . . .	. . .	.	
1390	76,434,437		5.8	022	—	. . . . . 00 . . 2 *1* . . .	. . .	.	p
1391	89,403,430		4.9	303	—	. . . . . 57 . . *3 4* . . .	. . .	.	
1392	95,403,428	140,172,656	4.6	213	113	. . **2** . . 44 *1* . . 3 . 02	. . 0	W	
1393	384,403,428	175,444,644	5.4	111	001	. . 0 . . 442 . 2 *5* . . 0	. . .	w	
1394	91,393,430,626,628,629	139,432,644	4.0	030010	734	4 2 3 . . 111 . . 0 . 04	. *1* .	Y	e
1395	76, 81, 86, 89, 98,381,384	128,134,162	5.8	1520720-	134	. . . . . 004 . . 3 . . 1	. *2* .	Y	s
1396	381,409,437		5.4	404	—	. . . . . 02 . *4 3 1* . . .	. . .	.	n
1397	95,403,430	175,*444*,644	5.0	*212*	472	. . 0 . . 223 . 3 *1* . 13	. *1* .	*y*	
1398	86,403,434,437,622,630,631		4.9	8011401-	—	. . . . . 99 . . 98 . . .	. . .	*y*	nt
1399	108,417,437,626,628,629		2.4	*211*010	—	**4** 2 2 2 . 34 . 266 . 6 .	0 . .	.	vt
1400	81,403,430,434,626,628,629	*139*,444,644	5.7	7312125	531	. . 4 . . 116 . . 4 . . 0	. . .	.	v

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1401	Lynx . .	—	—	+48° 1538	20.0	+48 26	6	6·7	6.0	—	3	5.54	.05	5.6	.19
1402	Gemini . .	63	2460	+21° 1602	20.6	+21 41	6·5	6·5	5.8	—	3	5.28	.07	5.3	.19
1403	Canis Minor	β 3	2462	+ 8° 1774	20.6	+ 8 32	3	3	3.0	3.0	6	3.07	.06	3.5	.13
1404	Lynx . .	22	2459	+49° 1630	20.9	+49 55	6	6	6.0	—	7	5.37	.04	5.3	.04
1405	Gemini . .	ϱ 62	2464	+32° 1562	21.4	+32 1	5	5·4	5.0	—	6	4.15	.08	4.9	.19
1406	Canis Minor	γ 4	2468	+ 9° 1660	21.6	+ 9 10	5	5	5.0	5.1	3	4.62	.04	4.9	.07
1407	Canis Minor	η 5	2465	+ 7° 1729	21.6	+ 7 11	6	6	6.0	5.9	3	5.31	.04	5.4	.04
1408	Argo . . .	—	—	—	21.8	−17 37	F	6	—	6.2	3	5.55	.11	—	—
1409	Gemini . .	64	2467	+28° 1396	21.9	+28 23	5	5·6	6.0	—	3	5.06	.00	5.2	.24
1410	Argo . . .	—	—	—	21.9	−22 50	F	F	—	5.7	3	5.39	.05	—	—
1411	Monoceros .	—	2470	—	22.2	−11 19	6	6	—	6.3	6	5.77	.09	—	—
1412	Gemini . .	b 65	2469	+28° 1400	22.4	+28 10	5	5	5.0	—	6	5.13	.08	5.2	.21
1413	Canis Minor	6	2473	+12° 1567	23.1	+12 15	5	5	5.0	5.0	3	4.96	.15	5.0	.15
1414	Monoceros .	—	—	− 1° 1738	23.3	− 1 39	F	6·7	6.5	6.0	6	5.74	.04	—	—
1415	Gemini . .	—	—	+17° 1596	24.8	+17 20	6	6	6.2	—	7	5.57	.03	5.5	.12
1416	Argo . . .	—	—	—	24.8	−22 46	6·5	6·5	—	5.7	3	4.83	.08	—	—
1417	Monoceros .	U	—	—	25.0	− 9 31	F	F	—	var.	6	6.01	.06	—	—
1418	Gemini . .	—	—	+23° 1744	25.7	+23 9	F	F	6.0	—	3	6.46	.08	—	—
1419	Canis Minor	δ¹ 7	2480	+ 2° 1691	25.9	+ 2 10	6	6·5	5.8	5.9	3	5.06	.03	5.5	.15
1420	Argo . . .	—	2484	—	26.0	−30 43	5	5	—	5.3	3	4.79	.09	—	—
1421	Gemini . .	68	2486	+16° 1510	26.8	+16 5	6·5	6·5	5.7	—	3	4.97	.13	5.3	.11
1422	Canis Minor	δ² 8	2487	+ 3° 1715	26.9	+ 3 33	6	6	6.5	6.2	4	5.63	.05	5.9	.05
1423	Gemini . .	α 66	2485	+32° 1581	26.9	+32 9	2·1	2·1	1.5	—	15	1.56	.04	1.8	.05
1424	Gemini . .				26.9	+32 9									
1425	Lynx . .	—	—	+56° 1227	27.0	+56 2	F	6·7	6.0	—	3	6.09	.09	5.9	.08
1426	Gemini . .	—	2489	+31° 1620	27.5	+31 13	F	6	6.5	—	3	5.40	.07	5.8	.16
1427	Lynx . .	—	2488	+46° 1286	27.9	+46 27	6	6	6.0	—	4	5.77	.04	5.8	.23
1428	Argo . . .	—	2494	—	28.1	−24 27	F	F	—	6.7	3	5.58	.08	—	—
1429	Argo . . .	—	—	—	28.3	−14 16	6·5	6·5	—	5.2	3	5.00	.09	—	—
1430	Gemini . .	υ 69	2493	+27° 1424	28.5	+27 10	4·5	4·5	4.2	—	8	4.18	.03	4.4	.03
1431	Argo . . .	—	—	—	29.0	−22 2	5	6·5	—	5.2	6	4.51	.05	—	—
1432	Argo . . .	—	2497	—	29.2	−23 13	F	5	—	5.7	7	5.15	.05	—	—
1433	Argo . . .	ϱ	2508	—	30.6	−28 6	5·6	5·6	—	5.3	3	4.40	.05	—	—
1434	Gemini . .	70	2504	+35° 1662	30.7	+35 20	6	6	5.8	—	3	5.60	.03	5.9	.19
1435	Argo . . .	—	2511	—	31.1	−14 17	cum.	cum.	—	cum.	2	cum.	—	—	—
1436	Gemini . .	o 71	2509	+34° 1649	31.3	+34 52	5·6	5·6	5.0	—	3	4.67	.16	5.5	.15
1437	Monoceros .	25	2513	—	31.3	− 3 50	5·6	5·6	—	5.7	6	5.08	.02	—	—
1438	Lynx . .	—	—	+38° 1803	32.2	+38 37	F	6·7	5.9	—	6	5.97	.04	6.1	.07
1439	Lynx . .	—	—	+48° 1561	32.4	+48 24	6	6·7	5.8	—	3	5.80	.07	5.7	.23
1440	Gemini . .	f 74	2519	+18° 1701	32.6	+17 58	6	6	5.4	—	3	5.22	.03	5.4	.11
1441	Lynx . .	24	2516	+59° 1103	32.8	+58 59	5	5·6	5.0	—	6	4.88	.03	5.2	.08
1442	Canis Minor	α 10	2522	+ 5° 1739	33.0	+ 5 32	1	1	1.0	1.2	15	0.46	.03	0.4	.05
1443	Argo . . .	π	2525	—	33.3	−25 6	5	5	—	5.4	3	4.34	.11	—	—
1444	Gemini . .	—	—	+23° 1780	33.8	+23 19	F	6·7	6.0	—	4	6.09	.11	6.3	.07
1445	Argo . . .		2530	—	33.9	−26 32	4·5	4·5	—	4.5	6	3.86	.06	—	—
1446	Argo . . .	ϰ	2531	—	33.9	−26 32									
1447	Argo . . .	—	2538	—	34.9	−14 59	6	6	—	5.4	3	5.16	.08	—	—
1448	Lynx . .	50	2532	+50° 1460	35.0	+50 42	6	5	5.8	—	3	5.20	.07	5.0	.13
1449	Ursa Minor	—	2320	+89° 13	35.1	+88 59	F	F	7.0	—	6	7.08	.04	—	—
1450	Camelopard.	51	2527	+65° 593	35.2	+65 44	6	6	6.2	—	3	5.92	.07	5.9	.05

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1401	89,403,428	*140*,172,*656*	5.5	1*11*	33*4*	. . . . . 3 6 3 . . 2 . . 1	. . 3	w	.
1402	384,406,430	139,444,644	5.3	02*1*	5*4*0	. . 0 . . 1 3 3 . . 0 . . 0	. . .	*w*	
1403	108,403,430,622,630,632	175,432,644	3.1	23*2*110	616	**3** 1 7 1 . 1 1 1 . 0 *1* . 0 4	*3 1* .	W	
1404	86,409,428,430,622,630,631	140,172,*656*	5.4	*4*120*2*1	0*12*	. . b . . 4 4 4 . . *1* . . *1*	. . *1*	*y*	
1405	89,417,430,626,628,629	136,444,644	4.2	*232*213	264	. 7 2 . . 8 4 8 . . 2 . 3 7	. 1 .	*y*	
1406	108,417,430	175,*444*,644	4.6	0*1*1	325	. . *1* . . 4 4 4 . 3 *2* . 4 3	. *3* .	O	
1407	81,406,437	175,*444*,644	5.3	*1*10	120	. . *1* . . 5 5 5 . 4 0 . 2 1	. . .	*y*	
1408	384,406,437		5.6	0*2*3	—	. . . . . F 2 . . 4 5 . . .	. . .	.	
1409	384,406,430	*139*,*447*,646	5.1	000	4*7*0	. . 1 . . *1* 1 7 . . *2* . 1 1	. 1 .	W	ndc
1410	393,406,437		5.4	*111*	—	. . . . . F F . F 0 7 . . .	. . .	.	
1411	89,393,437,626,628,631		5.8	*331*421	—	. . . . 6 0 0 . . *3 1* . . .	. . .	*y*	d
1412	95,390,430,622,630,631	*139*,*447*,646	5.1	*311*223	460	. *5 4* . . *1 1 1* . . R . *3* 1	. 0 .	*o*	ndvac
1413	81,417,437	175,447,645	5.0	4*12*	3*4*0	. . 1 . . 0 0 0 . *2 6* . *4* 0	. . .	*o*	
1414	393,409,437,622,630,631		5.7	0*21*1*1*	—	. . . . . F 4 6 . 1 0 . . .	. . .	.	vp
1415	86,409,437,440,622,626,631	*136*,*447*,646	5.6	4*0*10102	*322*	. . . . . 2 2 4 . . F . . *1*	. . .	.	
1416	89,390,430		4.8	0*22*	—	. . . . . 6 8 . 7 6 9 . . .	. . .	.	n
1417	393,417,430,622,626,631		6.0	*311113*	—	. . . . . F F . . V F . . .	. . .	.	vg
1418	95,409,430		6.5	*2*11	—	. . . . . F F *7* . . F *1* . .	. . .	.	
1419	95,409,433	175,447,645	5.1	0*1*0	481	. . 1 . . 7 5 5 . 6 2 . 3 4	. . .	*y*	n
1420	100,406,430		4.8	1*22*	—	*4* 2 . . . 2 2 . *1* 2 1 . . .	. . .	.	nta
1421	81,409,437	*136*,447,646	5.0	*3*13	361	. . 3 . . 4 6 6 . . 3 . . 3	. . .	*g*	
1422	86,393,417,430	*175*,*447*,645	5.6	F*1*11	442	. . R . . 2 2 7 . 4 1 . 2 3	. . .	*y*	nh
1423	91, 96, 98,106,109,390,393	168,174,175	*2.0*	221*3*121-	350-	5 4 1 1 **0**	.	*g*	dve
1424			*2.8*			**3** *1 1 1* . . 4 . 7 2	*2* 1 .	*g*	dve
1425	393,417,437	*140*,172,*656*	6.1	*2*21	0*33*	. . . . . F 0 *3* . . *4* . . *2*	. . .	.	
1426	393,417,437	*136*,*447*,646	5.4	*1*02	840	. . . . . F 4 9 . . F . . 4	. . .	Y	
1427	91,393,415,424	*136*,444,646	5.8	F1*1*0	36*2*	. . . . . 0 0 0 . . F . . 0	. . *3*	*o*	
1428	393,417,433		5.6	20*2*	—	. . . . . F F . 4 9 F . . .	. . .	*y*	n
1429	415,430,433		5.0	12*2*	—	. . . . 4 4 6 . . *1* 3 . . .	. . .	.	t
1430	81,406,409,417,420,424,437	136,432,646	4.2	*1211*101-	223	2 0 0 . . 2 2 1 . . 2 . 1 2	. 0 .	*o*	t
1431	89,404,433,622,626,631		4.5	*113*102	—	. . . . . 5 1 . 5 4 4 . . .	. . .	.	ndvg
1432	86,404,424,433,622,626,631		5.2	7*2*10*1*0	—	. . . . . F *2* . 8 2 5 . 2 .	. . .	*y*	ndvg
1433	89,390,424		4.4	*1*11	—	0 *2* . 1 . 8 8 . 3 6 5 . . .	. . .	.	na
1434	91,404,437	*136*,*447*,646	5.6	001	55*2*	. . 2 . . 2 2 0 . . 5 . 2 3	. . .	Y	
1435	404,406		cum	cc	—	. . . . . c c . . R F . . .	. . .	.	pg
1436	81,404,430	*136*,447,646	4.7	4*0*4	184	. . 6 . . 5 5 3 . . 6 . 5 8	. . .	*y*	
1437	108,404,433,622,626,632		5.1	*1*10001	—	. . 2 . . 1 1 . . 3 *2* . 3 .	. . .	*y*	
1438	91,404,424,632,633,634	*136*,*447*,646	6.0	20*1111*	21*1*	. . . . . F 1 *3* . . 1 . . 1	. . .	.	v
1439	103,406,437	*140*,172,*656*	5.8	20*1*	307-	. . . . . 0 3 *2* . . *1* . . *1*	. . *1*	.	
1440	390,409,437	136,447,646	5.2	00*1*	151	*2 2 1* . . 6 6 1 . . 5 . 4 2	. . .	O	
1441	100,415,437,628,632,633	140,172,656	4 9	1*12*00*1*	441	. . *1* . . 1 3 1 . . 0 . 3 3	. . .	W	
1442	89, 96, 98,106,109,390,404	176,182,198	0.5	1*20*1711-	*223*-	0 1 3 0 . *2 2 2* . 4 0 . 4 *1*	*2* 0 .	W	e
1443	404,409,433		4.3	11*3*	—	1 7 . . . 7 7 . 7 8 8 . . .	. . .	w	nda
1444	91,404,409,426	*136*,*447*,646	6.1	F*311*	421	. . . . . F 0 *3* . . 0 *3* . 2	. . .	.	t
1445	98,406,433,632,633,634		*4.6*	40*32*10	—	*6 1* . 0 . 5 5 . 2 5 5 . 5	. . .	.	ndvac
1446			*4.6*				. . .	.	ndvc
1447	100,406,424		5.2	20*2*	—	. . . . . 6 6 . . *1 5* . . .	. . .	*o*	nt
1448	103,415,424	140,172,656	5.2	2*1*0	1*15*	. . 0 . . 6 2 4 . . 1 . 0 *2*	. . .	W	n
1449	628,632,638,639,640,641		7.1	*21*1201	—	. . . . . F F *3* . . F . . .	. . .	.	
1450	390,417,433	*125*,*168*,*670*	5.9	2*1*0	*1*11	. . 2 . . *1 1* 1 . . 2 . . 0	. . .	Y	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1451	Gemini . .	—	—	+14° 1729	35.3	+14 29	F	6·7	6.0	—	3	5.87	.09	—	—
1452	Monoceros .	26	2542	—	35.5	− 9 16	4·5	4·5	—	4.0	6	4.20	.07	—	—
1453	Gemini . .	σ 75	2540	+29° 1590	35.8	+29 10	5	5	5.0	—	3	4.13	.07	4.6	.05
1454	Argo . . .	—	—	—	35.8	−27 40	F	6	—	F	7	6.38	.08	—	—
1455	Camelopard.	—	2521	+80° 238	36.5	+80 34	6·5	6·5	6.5	—	3	6.37	.13	6.4	.07
1456	Gemini . .	c 76	2549	+26° 1633	36.8	+26 4	6	6	6.3	—	3	5.33	.09	5.8	.19
1457	Gemini . .	κ 77	2551	+24° 1759	37.2	+24 41	4·3	4·3	3.7	—	6	3.61	.04	3.6	.19
1458	Argo . . .	—	2557	—	37.8	−26 4	F	6	—	6.5	3	5.84	.12	—	—
1459	Gemini . .	β 78	2555	+28° 1463	38.0	+28 19	1·2	1·2	1.3	—	15	1.12	.04	1.1	.07
1460	Lynx . .	—	—	+37° 1769	38.6	+37 48	6	6	5.3	—	3	5.50	.13	5.9	.13
1461	Argo . . .	1	2560	—	38.7	−28 7	F	6	—	5.0	3	5.04	.15	—	—
1462	Argo . . .	τ 3	2562	—	39.0	−28 40	4	4	—	4.2	3	4.15	.08	—	—
1463	Gemini . .	g 81	2558	+18° 1733	39.2	+18 48	6·5	5·6	5.1	—	3	5.08	.07	5.0	.16
1464	Argo . . .	—	2565	—	39.5	−24 23	F	6·7	—	6.4	3	5.39	.16	—	—
1465	Canis Minor	11	2564	+11° 1670	39.7	+11 4	5·6	6·5	5.0	5.6	3	5.46	.15	5.5	.13
1466	Gemini . .	π 80	2563	+33° 1585	39.8	+33 43	6	6	5.3	—	6	5.35	.06	5.5	.13
1467	Camelopard.	—	2548	+80° 240	40.1	+80 10	F	F	6.5	—	3	6.93	.15	—	—
1468	Monoceros .	—	—	—	40.1	− 6 29	6	6	—	6.1	3	5.91	.11	—	—
1469	Argo . . .	4	2573	—	40.4	−14 16	5	5	—	5.0	7	5.15	.03	—	—
1470	Argo . . .	—	—	—	42.2	−15 42	F	6	—	6.8	3	6.28	.03	—	—
1471	Argo . . .	5	2589	—	42.3	−11 54	6	6	—	5.9	3	5.42	.07	—	—
1472	Argo . . .	o	2594	—	43.1	−25 38	5	5	—	5.3	3	4.68	.07	—	—
1473	Argo . . .	6	2601	—	44.3	−16 55	6	6	—	5.7	3	5.66	.07	—	—
1474	Argo . . .	ξ 7	2602	—	44.3	−24 34	4·3	4·3	—	3.5	6	3.40	.06	—	—
1475	Monoceros .	—	—	—	44.4	− 8 53	6	5·6	—	6.2	3	5.75	.15	—	—
1476	Canis Minor	ζ 13	2612	+ 2° 1808	45.5	+ 2 4	6	5·6	5.7	5.7	3	4.99	.04	5.3	.17
1477	Camelopard.	—	2590	+79° 265	45.8	+79 48	5	5·6	5.8	—	3	5.34	.03	5.1	.20
1478	Camelopard.	—	2596	+74° 338	45.8	+74 14	6·5	5·6	5.2	—	18	5.60	.04	5.6	.06
1479	Lynx . .	25	—	+47° 1498	45.8	+47 44	6	6	6.1	—	3	6.34	.03	—	—
1480	Lynx . .	26	2609	+47° 1499	46.0	+47 52			5.5	—	6	5.75	.06	5.5	.17
1481	Gemini . .	φ 83	2617	+27° 1499	46.2	+27 5	5	5	5.0	—	6	4.89	.03	5.1	.13
1482	Argo . . .	9	2622	—	46.3	−13 35	6	6	—	5.7	6	5.49	.11	—	—
1483	Monoceros .	—	—	—	46.8	− 5 7	6	6	—	6.4	3	5.68	.07	—	—
1484	Argo . . .	10	2624	—	46.8	−14 32	F	6	—	6.1	3	5.56	.08	—	—
1485	Camelopard.	—	2585	+84° 169	48.0	+84 24	6	6	6.0	—	3	6.48	.08	6.3	.05
1486	Gemini . .	85	2632	+20° 1946	48.7	+20 13	6·5	6	6.0	—	3	5.32	.05	5.4	.05
1487	Cancer . .	1	2639	+16° 1590	50.2	+16 6	F	6·7	6.0	—	3	5.94	.16	5.9	.16
1488	Canis Minor	—	2647	+ 9° 1824	50.8	+ 8 58	F	6·7	6.0	6.5	3	6.22	.08	6.1	.12
1489	Camelopard.	—	—	+59° 1130	51.3	+59 23	6	6	6.0	—	3	5.73	.17	5.9	.08
1490	Camelopard.	53	2643	+60° 1105	51.4	+60 39	6	6	6.1	—	6	5.98	.03	6.0	.03
1491	Cancer . .	—	2649	+16° 1598	51.7	+16 49	F	6·7	6.0	—	3	6.31	.05	5.9	.25
1492	Argo . . .	e 11	2652	—	51.7	−22 34	5·4	5·4	—	4.9	6	4.26	.05	—	—
1493	Camelopard.	—	—	+63° 749	51.9	+63 25	6	6	6.0	—	17	5.97	.02	5.8	.04
1494	Canis Minor	14	2653	+ 2° 1833	52.1	+ 2 33	6	6	6.0	6.0	3	5.32	.03	5.7	.17
1495	Camelopard.	54	2650	+57° 1118	52.8	+57 36	6	6·5	6.5	—	3	6.53	.11	6.3	.08
1496	Argo . . .	χ	2655	—	52.9	−30 1	6·5	6·5	—	5.5	6	4.81	.07	—	—
1497	Cancer . .	ω 2	2657	+25° 1812	53.6	+25 43	6	6	6.5	—	6	5.86	.03	6.0	.04
1498	Monoceros .	27	2660	—	53.7	− 3 21	6·5	5·6	—	5.6	6	5.08	.03	—	—
1499	Cancer . .	3	2659	+17° 1731	53.9	+17 39	F	6	5.8	—	3	6.01	.13	5.9	.16
1500	Argo . . .	12	2662	—	53.9	−22 59	6	6	—	5.9	3	5.22	.12	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1451	89,404,424		5.9	*22*1	—	. . . . . F 2 *1* . . 2 0 . .	. . .	.	t
1452	91,406,426,628,632,633		4.2	11*3*1*3*2	—	. . 0 . . 2 2 . . *1* 2 . 0 .	. . .	Y	nt
1453	96,409,433	136,447,646	4.1	*2*10	646	. 8 6 . . 9 9 9 . . 3 . 3 5	.2.	Y	t
1454	404,406,417,433,437,632,633		6.4	06*41222*	—	. . . . . F *6* . F F F . . .	. . .	.	p
1455	390,407,433	*125,168,671*	6.4	*13*3	01*2*	. . . . . **b** *8 1* . . F . . 0	. . .	*y*	
1456	100,415,433	*136*,447,646	5.3	*212*	860	. . 0 . . 5 5 8 . . 8 . 5 5	. . .	*o*	
1457	89,407,428,626,632,633	136,432,646	3.6	0*5*0020	*252*	8 2 0 . . 1 1 3 . . 4 . 2 0	2 2 .	Y	
1458	91,404,424		5.8	*321*	—	. . . . . F 0 . 2 6 F . . .	. . .	.	nt
1459	86, 89,103,109,390,404,407	174,176,182	1.1	000*3212*-	*311*-	**0** 9 2 2 **0** 1 1 2 . . 3 . 7 0	1 1 .	Y	dtec
1460	91,407,420	*136*,447,646	5.5	1*3*3	731	. . . . . 3 3 *3* . . 2 2 . 4	. . .	.	
1461	96,103,424		5.0	21*4*	—	. . *2* . . F 8 . *3 2* 3 . .	. . .	.	nvtgc
1462	96,410,424		4.2	2*2*0	—	2 0 *1 2* . *1 1* . 5 0 2 . 0 .	. . .	.	ntag
1463	86,407,424	*136*,447,646	5.1	20*1*	*432*	*1 1* 0 . . 3 1 0 . . 2 . 3 *1*	. . .	*o*	
1464	108,404,420		5.4	1*4*3 .	—	. . . . . F 7 . 6 8 F . . .	. . .	Y	
1465	103,108,420	176,447,645	5.5	4*2*1	*331*	. . *3* . . *3* 1 5 . *2 6* . *3* 0	. . .	*y*	
1466	100,415,424,626,632,633	*136,447*,646	5.4	*131*121	15*2*	. . *4* . *3* 4 4 *2* . . *1* . 0 1	. . .	Y	d
1467	407,415,420		6.9	*214*	—	. . . . . F F *6* . . **b** . . .	. . .	.	
1468	86,103,420		6.0	*3*02	—	. . . . . *2 2* . . *1 3* . . .	. . .	.	
1469	91,100,420,626,631,632,633		5.2	02110**0**1	—	. . 2 . . *2 2* . . *4* 1 . . .	. . .	*y*	nd
1470	86,407,420		6.3	100	—	. . . . . F *5* . . 3 F . . .	. . .	.	dp
1471	86, 91,420		5.4	*1*02	—	. . 2 . *1* 4 4 . . 3 7 . . .	. . .	*y*	nd
1472	91, 98,420		4.7	02*1*	—	*3* 2 . . . 3 3 . 0 3 2 . . .	. . .	.	na
1473	91,103,420		5.7	102	—	. . *3* . . 1 1 . . *3* F . . .	. . .	o	nt
1474	96,103,420,626,630,631		3.4	*3*1040*1*	—	0 4 2 1 . 3 3 . 5 2 6 . 2 .	. . .	Y	ta
1475	100,390,420		5.8	*214*	—	. . . . . 0 6 . . 2 *1* . *2* .	. . .	.	g
1476	100,415,424	176,447,645	5.0	*1*10	65*1*	. . *1* . . 8 2 6 . 4 *1* . 1 3	. . .	w	
1477	100,417,430	125,168,671	5.3	010	3*6*3	. . . . . *3* 1 3 . . F . . *2*	. . .	*g*	t
1478	89, 91, 96, 98,103,106,108	*128*,134,*162*	5.6	0221*43*-	150	. . . . . *2 4* 4 . . 1 . . 0	. . .	*o*	s
1479	410,417,430		6.3	00*1*	—	. . 1 . . 5 5 *4* . . *2* . . .	. . *2*	.	dc
1480	106,108,430,628,630,631	*176*,444,646	5.8	*211*22	07*1*	. . *2* . . 4 . . *1* . . *3*	. . *3*	*y*	de
1481	108,410,424,628,631,632	136,447,646	4.9	*1*10110	51*1*	. . *3* . . 1 1 1 . . 4 . 2 2	.2.	w	
1482	106,108,426,628,630,632		5.5	26*1*25*1*	—	. . 0 . . 3 3 . . *1 2* . . .	. . .	*y*	n
1483	108,410,426		5.7	2*1*0	—	. . . . . 1 1 . . 5 0 . . .	. . .	.	vg
1484	390,407,426		5.6	*22*0	—	. . R . . F 2 . . 3 5 . . .	. . .	*y*	nh
1485	89, 98,420	*125,168*,671	6.5	*112*	*133*	. . . . . *7 7* 7 . . *4* . . *2*	. . .	w	n
1486	103,420,424	*136*,447,646	5.3	1*1*1	020	*3 3* 3 . . 1 5 5 . . 4 . 3 1	. . .	w	
1487	89,103,420	*176,447*,646	5.9	*341*	31*4*	. . R . . F 2 *1* . . 2 . . 0	. . .	*y*	h
1488	91,415,424	176,*447*,645	6.2	*121*	*124*	. . . . . F *1 4* . 1 F . . *1*	. . .	.	e
1489	98,410,424	*174,177,657*	5.7	4*2*3	330	. . . . . 1 1 1 . . F . . 2	. . .	.	
1490	108,410,428,628,630,632	*174,177,657*	6.0	101*1*20	00*1*	. . 0 . . *2 2* 1 . . 7 . . 0	. . .	w	
1491	420,424,432	*176,447*,646	6.3	*111*	*1*F7	. . . . . F *2 5* . . F *5* . *4*	. . .	.	
1492	390,410,426,626,630,632		4.3	*21*0212	—	7 6 0 . . 3 3 . 4 4 **0** . . .	. . .	Y	nh
1493	86, 89, 91, 93,100,108,390	*128*,134,*174*	6.0	2043*0*10-	06*0*	. . . . . *2 2 2* . . *3* . . *2*	. . .	.	s
1494	108,410,424	176,*447*,645	5.3	010	760	. . 1 . . 5 5 5 . 5 0 . . 4	. . .	Y	
1495	103,410,420	*174,177,657*	6.5	1*3*1	*141*	. . R . . *7 9 2* . . *4* . . *2*	. . .	*y*	h
1496	108,410,426,628,630,632		4.8	*112313*	—	*4 2* . . . 6 8 . 7 4 1 . . .	. . .	.	nvag
1497	86,410,426,626,630,631	*136,447*,646	5.9	*21*0100	210	. . 3 . . *1 1* 4 . . *2* . *3* 1	. . .	Y	n
1498	93,390,428,628,630,632		5.1	*111*110	—	. . *1* . . 3 1 . . *2 2* . 2 .	. . .	Y	
1499	103,410,424	*176,447*,646	6.0	3*22*	02*5*	. . *6* . . F *2 4* . . 1 . . *1*	. . .	*o*	
1500	103,410,426		5.2	3*21*	—	. . *5* . . 6 6 . 3 5 9 . . .	. . .	Y	n

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7^h–8^h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
1501	Argo. . .	—	2666	—	54.5	−18 4	5·6	5·6	—	5.2	7	4.62	.07	—	—
1502	Canis Minor	—	—	+ 5° 1857	54.9	+ 5 12	6	6	6.5	6.0	7	5.65	.05	5.8	.11
1503	Monoceros.	28	2668	− 0° 1882	55.1	− 1 3	5·6	5·6	5.3	5.2	7	4.88	.08	—	—
1504	Canis Minor	*13*	2673	+ 2° 1854	56.0	+ 2 40	6	5	5.0	4.9	6	4.56	.08	5.1	.13
1505	Gemini . .	*χ 6*	2672	+28° 1532	56.1	+28 8	5	5	5.4	—	6	5.01	.02	5.2	.12
1506	Monoceros.	—	—	—	56.5	− 6 0	6	6	—	6.6	4	6.31	.11	—	—
1507	Cancer . .	8	2690	+13° 1831	58.4	+13 28	6	6	5.8	5.4	7	5.13	.05	5.3	.08
1508	Cancer . .	9	2700	+23° 1887	59.2	+22 59	F	6·7	6.0	—	3	6.22	.09	6.4	.07
1509	Lynx . .	27	2697	+51° 1391	59.4	+51 51	5·4	5·4	5.1	—	6	4.79	.06	4.8	.24
1510	Lynx . .	—	2704	+58° 1102	0.2	+58 36	6	6	6.2	—	3	5.96	.00	6.0	.00
1511	Cancer . .	*μ* 10	2714	+22° 1862	0.7	+21 56	6·5	6·5	5.4	—	3	5.25	.08	5.5	.08
1512	Monoceros.	—	—	—	0.7	− 8 54	6	6	—	6.5	3	5.79	.15	—	—
1513	Ursa Major	*55*	2707	+68° 524	0.9	+68 50	6	5·6	4.8	—	16	5.48	.03	5.4	.04
1514	Argo. . .	—	2723	—	2.0	−20 12	6	6	—	5.9	3	5.05	.13	—	—
1515	Argo. . .	*ι* 15	2728	—	2.4	−23 58	3	3	—	3.2	6	2.88	.02	—	—
1516	Monoceros.	29	2725	—	2.6	− 2 38	5	5·4	—	4.9	3	4.47	.08	—	—
1517	Cancer . .	*ψ* 14	2730	+25° 1865	3.2	+25 52	6	6·5	6.1	—	6	5.78	.04	6.0	.08
1518	Argo. . .	16	2736	—	3.7	−18 54	5	5	—	5.1	3	4.23	.19	—	—
1519	Lynx . .	—	2732	+56° 1278	4.2	+56 49	6·5	6	5.7	—	3	5.86	.04	5.8	.07
1520	Camelopard.	—	2722	+76° 310	4.4	+76 7	5	5·6	6.0	—	6	5.72	.03	5.6	.15
1521	Cancer . .				5.3	+18 1									
1522	Cancer . .	*ζ* 16	2744	+18° 1867	5.3	+18 1	5·4	5·4	4.7	5.1	6	4.72	.03	4.8	.12
1523	Cancer . .	—	2745		5.3	+18 1									
1524	Argo. . .	19	2750	—	5.6	−12 34	5	5	—	5.2	3	4.61	.05	—	—
1525	Camelopard.	56	2741	+60° 1119	5.7	+60 44	F	F	6.8	—	3	6.26	.04	—	—
1526	Gemini . .	*ψ 15*	2747	+30° 1664	5.7	+30 1	6	6·5	5.6	—	3	5.59	.09	5.6	.08
1527	Monoceros.	—	—	—	5.7	− 7 24	6	6·5	—	5.7	3	5.30	.03	—	—
1528	Monoceros.	—	2766	—	7.7	− 5 25	cum.	cum.	—	cum.	3	cum.	—	—	—
1529	Argo. . .	20	2769	—	7.8	−15 26	6	6	—	5.7	6	5.10	.02	—	—
1530	Lynx . .	29	2757	+60° 1124	7.9	+59 56	6	6	6.0	—	3	5.43	.11	5.8	.07
1531	Argo. . .	—	—	—	7.9	−29 33	F	F	—	6.9	3	6.18	.13	—	—
1532	Ursa Major	—	2765	+62° 991	8.9	+62 52	6	6·7	6.0	—	3	5.72	.03	6.0	.04
1533	Cancer . .	*β* 17	2778	+ 9° 1917	10.0	+ 9 33	4·3	4·3	3.7	3.5	6	3.82	.05	4.0	.16
1534	Lynx . .	30	2776	+58° 1112	10.7	+58 7	6	6·7	6.2	—	3	5.86	.04	6.0	.00
1535	Argo. . .	—	—	—	12.7	−12 14	F	F	—	6.5	6	5.99	.03	—	—
1536	Cancer . .	*χ* 18	2786	+27° 1589	12.8	+27 37	6	6·5	5.7	—	3	5.09	.05	5.5	.05
1537	Cancer . .	*λ* 19	2789	+24° 1909	13.4	+24 24	6	6·5	6.0	—	3	5.73	.03	5.8	.11
1538	Cancer . .	—	2788	+21° 1817	13.4	+21 6	6	6	6.0	—	3	5.88	.03	5.9	.05
1539	Lynx . .	31	2793	+43° 1815	14.6	+43 35	5	5	5.0	—	6	4.42	.07	4.6	.17
1540	Lynx . .	—	2792	+53° 1246	14.7	+53 36	6	6	6.0	—	3	5.77	.16	5.5	.08
1541	Argo. . .	—	—	—	15.2	−22 33	F	F	—	6.0	3	5.76	.19	—	—
1542	Argo. . .	—	—	—	16.0	−19 42	6	6	—	6.0	4	5.42	.13	—	—
1543	Argo. . .	—	—	—	16.4	−17 12	F	F	—	5.9	3	5.90	.07	—	—
1544	Cancer . .	d^1 20	2799	+18° 1930	16.5	+18 43	6	6	6.5	—	3	5.88	.11	5.9	.05
1545	Lynx . .	—	—	+35° 1819	17.4	+35 25	F	6	6.0	—	3	6.10	.09	6.2	.00
1546	Argo. . .	—	2811	—	17.8	−25 58	F	F	—	6.5	3	5.74	.12	—	—
1547	Ursa Major	—	2803	+67° 545	18.4	+67 42	6	6	6.0	—	3	5.84	.12	5.9	.08
1548	Cancer . .	d^2 25	2816	+17° 1842	19.0	+17 27	6	6	6.2	—	6	6.19	.09	5.8	.09
1549	Cancer . .	φ^1 22	2815	+28° 1602	19.2	+28 17	6	6	6.0	—	3	5.93	.13	6.1	.11
1550	Lynx . .	—	—	+46° 1398	19.3	+46 3	F	6·7	6.0	—	3	6.20	.05	6.3	.09

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1501	103,390,426,428,628,630,631		4.6	3603111	—	. . . . . 66. . 3F. . .	. . .	*y*	ng
1502	93,410,424,426,628,630,631	176,447,645	5.6	3601100	421	. . . . . 227. 2F. . 2	. . .	.	
1503	86, 96,424,426,628,630,631		4.9	8222042	—	. . 1. . 333. 00. 1.	. . .	*o*	t
1504	93,100,424,628,630,631	176,447,645	4.6	312114	682	. . 1. . 244. 12. 05	. . .	*o*	nvg
1505	91, 98,426,628,630,632	136,447,646	5.0	000120	431	. . 1. . 003. . 3. 22	. . .	*y*	n
1506	86, 89, 96,426		6.3	F302	—	. . . . . 55. . 12. . .	. . .	.	d
1507	86, 91,424,426,628,630,631	135,447,645	5.1	3012122	330	. . 5. . 775. 00. 72	. . .	*y*	.
1508	89, 93,424	136,447,646	6.2	221	302	. . 6. . F14. . 1. 42	. . .	O	nt
1509	89, 98,109,626,630,631	135,444,646	4.8	132102	651	. . 1. . 223. . 4. 60	. . .	W	
1510	86,407,424	174,177,657	6.0	000	000	. . . . . 220. . F. 20	. . .	w	nt .
1511	93,407,424	136,447,646	5.2	022	153	216. . 241. . 5. 33	. . .	*y*	ne
1512	103,407,424		5.8	340	—	. . . . 300. . 51. . .	. . .	.	d
1513	89, 93, 96, 98,100,108,404	128,134,174	5.5	0104300-	140	. . 2. . 337. . 2. . 1	. . .	*y*	ns
1514	96,109,415		5.0	322	—	. . . . . 88. F77. . .	. . .	*y*	n
1515	100,106,428,634,635,636		2.9	201000	—	4352. 33. 146. 4.	. . .	G	nva
1516	96,418,430		4.5	121	—	. . 1. 551. . 21. 3.	. . .	Y	d
1517	93,109,410,634,635,636	136,447,646	5.8	020113	330	. . 2. . 021. . 1. 42	. . .	*y*	nv
1518	86,100,428		4.2	135	—	. . 2. . 88. . 77. . .	. . .	W	n
1519	93,106,109	174,177,657	5.9	101	211	. . . . . 513. . 2. . 1	. . .	Y	dc
1520	89, 96,424,634,635,636	125,168,671	5.7	120104	143	. . . . . 751. . 0. . 1	. . .	*y*	
1521			5.6			. 4 . .	. . .		da
1522	86,100,424,634,635,636	135,447,647	6.3	101011	223	325. 5110. 22. 11	. . .	Y	da
1523			6.0			. 4 . .	. . .		da
1524	89,100,109		4.6	111	—	. . 3. . 44. . 37. . .	. . .	*y*	n
1525	404,410,424		6.3	101	—	. . 3. . FF3. . b. . .	. . .	*y*	n
1526	93,106,426	136,448,647	5.6	221	220	. . 2. . 201. . 3. 20	. . .	w	n
1527	93,108,426		5.3	100	—	. . . . . 53. . 14. . .	. . .	.	
1528	106,108,410		cum	FFF	—	. . . . . CC. . CF. . .	. . .	.	
1529	89,108,426,634,635,636		5.1	000210	—	. . 3. . 77. . 36. . .	. . .	Y	n
1530	89,106,424	174,177,657	5.4	311	364	. . 4. . 444. . 3. . 4	. . .	*y*	
1531	86,109,410		6.2	133	—	. . . . . FF. 25F. . .	. . .	.	n
1532	86, 93,426	174,177,670	5.7	010	342	. . . . . 141. . 0. . 3	. . .	*y*	n
1533	93, 99,426,634,635,636	135,447,647	3.8	210122	523	0421. 111. 22. 02	.2.	*o*	
1534	86, 99,424	174,177,672	5.9	101	111	. . 2. . 121. . 2. . 1	. . .	*y*	n
1535	420,424,438,634,635,636		6.0	100120	—	. . . . . FF. . 3F. . .	. . .	.	
1536	89, 99,109	136,448,647	5.1	111	353	. . 2. . 755. . 2. 24	. . .	W	
1537	100,424,634	136,447,647	5.7	100	411	. . 3. . 111. . 4. 31	. . .	*y*	
1538	89, 93,426	135,447,647	5.9	010	111	. . . . . 111. . 2. 10	. . .	*y*	
1539	89, 96,110,634,635,636	135,444,647	4.4	251012	126	. 92. . 666. . 5. 12	. . 2	*o*	ah
1540	99,106,426	174,177,657	5.8	242	315	. . . . . 000. . 1. . 3	. . .	*y*	
1541	404,415,424		5.8	405	—	. . . . . FF. F0F. . .	. . .	.	t
1542	89, 96,100,110		5.4	2F23	—	. . . . . 44. . 43. . .	. . .	.	
1543	404,433,437		5.9	201	—	. . . . . FF. . 22. . .	. . .	.	
1544	86, 99,428	135,447,647	5.9	203	111	. . 1. . 114. . 2. 30	. . .	w	
1545	96,106,109	135,447,647	6.1	212	111	. . . . . F33. . 02. 1	. . .	.	
1546	89,100,110		5.7	033	—	. . . . . FF. 264. . .	. . .	.	n
1547	86, 99,428	174,177,670	5.8	123	221	. . . . . 000. . 3. . 1	. . .	*y*	
1548	89,634,635,636,637,638	135,447,647	6.2	063123	265	. . 1. . 442. . 1. 44	. . .	*y*	
1549	96,108,109	136,448,647	5.9	232	241	. . 2. . 111. . 2. 22	. . .	*o*	
1550	108,110,415	135,448,647	6.2	111	310	. . . . . F14. . 1. . 1	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1551	Cancer . .	φ^2 23	2817	+27° 1612	19.5	+27 20	6	6·5	5.7	—	6	5.46	.05	5.8	.12
1552	Cancer . .	24	2818	+25° 1920	19.5	+24 56	F	F	6.5	—	3	6.33	.07	—	—
1553	Cancer . .	—	2822	+ 8° 2053	19.5	+ 7 57	6	6·5	5.2	5.7	3	5.09	.03	5.3	.11
1554	Monoceros.	30	2825	—	19.7	− 3 31	4·3	4·3	—	3.8	6	3.86	.03	—	—
1555	Argo. . .	—	—	—	19.7	−22 46	F	F	—	5.0	3	5.50	.07	—	—
1556	Argo. . .	—	2827	—	19.9	−23 39	F	6	—	5.8	3	5.50	.08	—	—
1557	Cancer . .	27	2826	+13° 1912	20.1	+13 3	6	6·5	5.8	6.3	3	5.63	.08	6.1	.08
1558	Ursa Major	o 1	2819	+61° 1054	20.3	+61 7	3·4	3·4	3.3	—	18	3.43	.04	3.8	.06
1559	Argo. . .	—	—	—	20.4	−14 32	6	6	—	6.3	3	5.96	.12	—	—
1560	Monoceros.	—	—	—	21.1	−12 8	6	6	—	5.9	7	5.76	.04	—	—
1561	Cancer . .	28	2833	+24° 1931	21.5	+24 33	F	F	5.8	—	3	5.93	.07	—	—
1562	Cancer . .	29	2836	+14° 1899	21.9	+14 36	6	6	6.2	6.2	3	5.94	.12	6.1	.04
1563	Argo. . .	—	2839	—	21.9	−28 49	F	6	—	6.9	7	6.40	.08	—	—
1564	Argo. . .	—	2846	—	22.8	−25 44	F	F	—	6.9	4	6.45	.16	—	—
1565	Argo. . .	—	—	—	23.4	−22 41	F	6	—	6.8	3	6.23	.00	—	—
1566	Ursa Major	A 2	2842	+65° 638	23.9	+65 33	5	5·6	5.8	—	3	5.32	.07	5.5	.08
1567	Cancer . .	v^1 30	2850	+24° 1940	24.4	+24 29	6	6	5.8	—	3	5.76	.04	5.7	.12
1568	Argo. . .	—	—	—	24.4	−26 56	F	F	—	7.0	6	6.36	.07	—	—
1569	Cancer . .	θ 31	2853	+18° 1963	24.7	+18 30	6	6·5	6.0	—	3	5.75	.04	5.5	.07
1570	Lynx . .	—	2855	+38° 1920	25.1	+38 26	F	6·7	6.5	—	6	6.02	.04	—	—
1571	Lynx . .	32	2860	+36° 1836	25.6	+36 50	F	6·7	6.3	—	3	6.14	.07	6.2	.08
1572	Cancer . .	η 33	2862	+20° 2109	25.8	+20 51	6	6·5	5.6	—	6	5.53	.03	5.5	.05
1573	Cancer . .	v^2 32	2864	+24° 1946	25.9	+24 30	6	6·5	6.5	—	3	6.36	.12	5.7	.11
1574	Argo. . .	—	2868	—	26.1	−19 10	6	6	—	5.6	6	5.37	.04	—	—
1575	Camelopard.	—	2852	+74° 370	26.3	+74 3	6	6	6.4	—	6	6.33	.06	6.2	.04
1576	Lynx . .	33	2871	+36° 1840	27.1	+36 50	6	6·7	5.9	—	3	5.74	.03	6.0	.11
1577	Cancer . .	—	—	+ 8° 2077	27.8	+ 8 51	6	6	7.0	6.5	3	5.75	.03	6.0	.07
1578	Argo. . .	—	—	—	27.9	−24 12	F	F	—	6.4	3	5.92	.07	—	—
1579	Monoceros.	—	—	− 1° 2074	28.0	− 1 44	6	6	6.5	6.4	3	5.57	.04	—	—
1580	Ursa Major	π^1 3	2876	+65° 643	28.5	+65 26	F	6·5	5.8	—	3	5.65	.04	5.6	.09
1581	Ursa Major	—	2887	+53° 1268	29.4	+53 49	6	6	6.6	—	3	5.59	.03	5.8	.07
1582	Hydra . .	—	2889	+ 7° 1997	29.5	+ 7 2	F	6·7	6.0	6.2	4	5.68	.03	5.7	.13
1583	Monoceros.	3	2893	—	29.6	− 7 34	F	6·7	—	6.1	6	5.66	.03	—	—
1584	Ursa Major	π^2 4	2884	+64° 698	29.7	+64 46	5·4	5·4	4.7	—	17	4.79	.03	4.8	.03
1585	Ursa Major	—	2892	+53° 1272	30.4	+53 8	6	5·6	6.4	—	6	5.95	.06	6.1	.11
1586	Argo. . .	—	2898	—	30.4	−26 26	F	6	—	6.5	3	5.70	.13	—	—
1587	Cancer . .	c 36	2897	+10° 1837	30.6	+10 5	6	6	6.0	6.2	3	5.92	.12	5.9	.05
1588	Hydra . .	δ 4	2901	+ 6° 2001	31.3	+ 6 7	4·5	4·5	4.5	4.2	6	4.13	.07	4.4	.16
1589	Hydra . .	σ 5	2911	+ 3° 2026	32.5	+ 3 46	5	5	4.9	4.9	6	4.40	.09	4.6	.15
1590	Argo. . .	—	2916	—	32.7	−25 50	F	6·5	—	5.6	3	5.05	.08	—	—
1591	Lynx . .	34	2909	+46° 1422	32.8	+46 16	6	6	5.7	—	3	5.57	.08	5.5	.20
1592	Cancer . .	ε 41	2922	—	33.6	+19 58	cum.	cum.	cum.	—	2	cum.	—	—	—
1593	Argo. . .	—	—	—	33.9	−22 16	6	6	—	5.6	3	5.11	.11	—	—
1594	Hydra . .	6	2929	—	34.3	−12 3	6	6	—	5.4	6	5.19	.01	—	—
1595	Argo. . .	—	2932	—	34.7	−29 8	6·5	6·5	—	5.4	6	4.93	.03	—	—
1596	Hydra . .	9	2940	—	36.2	−15 31	6	6	—	5.3	3	5.02	.05	—	—
1597	Cancer . .	γ 43	2937	+21° 1895	36.3	+21 55	4·5	4·5	4.5	—	7	4.75	.09	4.6	.09
1598	Cancer . .	A^1 45	2942	+13° 1972	36.6	+13 7	6	6	6.0	5.9	3	5.56	.05	5.6	.09
1599	Hydra . .	η 7	2945	+ 3° 2039	37.0	+ 3 50	5·4	5·4	5.0	4.6	3	4.17	.17	4.6	.21
1600	Monoceros.	31	2954	—	37.8	− 6 48	5	5	—	4.9	3	4.77	.03	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1551	96,108,109,634,635,636	*136*,448,647	5.5	*133*100	630	. . 0 . 0311 . . 2 . *23*	. . .	*y*	dv
1552	404,415,428		6.3	01*2*	—	. . 2 . *6* F F 0 . . F . *1* .	. . .	.	nd
1553	106,110,415	135,447,647	5.1	0*1*0	3*13*	. . . . . 751 . 32 . . 2	.1.	*y*	
1554	106,407,426,634,635,636		3.9	*110*110	—	*6 7 11* . *22* . . 05 . 1 .	. . .	W	n
1555	404,426,430		5.5	*2*01	—	. . . . . F F . F *7* F . . .	. . .	.	p
1556	108,404,426		5.5	1*2*1	—	. . . . . F 3 . 012 . . .	. . .	O	nt
1557	106,407,428	*135,448*,647	5.6	0*2*2	474	. . 2 . . 200 . 51 . . 5	. . .	O	t
1558	86, 89, 96, 99,100,108,110	128,174,175	3.4	*11*31212-	632	**0** 8 *2* . . 011 . . **0** . 44	3 . .	Y	s
1559	103,407,430		6.0	2*3*1	—	. . . . . *22* . . *13* . . .	. . .	.	
1560	99,112,407,430,634,635,636		5.8	0F01*22*1	—	. . . . . 00 . . *11* . . .	. . .	.	vtg
1561	407,415,430		5.9	*2*01	—	. . 2 . . F F *3* . . F . *4* .	. . .	.	n
1562	86,407,430	*135,448*,647	5.9	*12*3	1F2	. . *2* . . *111* . 12 . . 1	. . .	Y	
1563	103,407,430,634,635,637,638		6.4	3*523121*	—	. . . . . F *6* . F 3 F . . .	. . .	.	ng
1564	99,112,415,430		6.4	*3*F*14*	—	. . . . . F F . *43* F . . .	. . .	.	n
1565	86,110,415		6.2	000	—	. . . . . F *4* . F *45* . . .	. . .	.	
1566	103,418,430	*174,177*,670	5.3	1*2*0	240	*34* 0 . . *313* . . 0 . *12*	. . .	*y*	d
1567	99,418,430	*135,447*,647	5.8	10*1*	410	. . 1 . . 002 . . *1* . *21*	. . .	*y*	n
1568	110,407,418,634,635,637		6.4	*3*02141	—	. . . . . F F . *44* F . . .	. . .	.	nvg
1569	86,112,407	135,447,647	5.8	10*1*	*413*	b b *2* . . 020 . . *5* . *63*	. . .	O	
1570	433,438,440,634,635,636		6.0	*221101*	—	. . . . . F 13 . . F . . .	. . .	.	
1571	99,404,430	*135,447*,647	6.1	02*1*	*131*	. . *3* . . F 00 . . R . . 1	. . .	*y*	dc
1572	108,404,430,634,635,636	135,447,647	5.5	*12*1010	*111*	*9* b 4 . . 310 . . *6* . *20*	.*4*.	Y	
1573	105,404,430	*135,447*,647	6.4	2*3*1	b*66*	. . *2* . . *681* . . F . . *7*	. . .	*y*	n
1574	86,110,430,634,635,636		5.4	*221*100	—	. . . . . 44 . . *13* . . .	. . .	w	nd
1575	99,418,430,634,635,636	125,*168,671*	6.3	*241021*	*120*	. . . . . *551* . . *2* . . *1*	. . .	*y*	n
1576	108,404,430	*135,447*,647	5.7	*1*00	350	. . 3 . . 140 . . 0 . . 3	. . .	W	dc
1577	109,407,418	*135,447*,647	5.8	010	230	. . . . . 00 **0** . 51 . . 2	. . .	.	
1578	108,407,437		5.9	0*1*2	—	. . . . . F F . 13 F . . .	. . .	.	nt
1579	106,407,433		5.6	*1*01	—	. . . . . 227 . 61 . . .	. . .	.	
1580	410,418,430	*174,177*,670	5.6	1*1*0	12*2*	. . *6* . . F 00 . . 5 . . 0	. . .	*y*	n
1581	99,110,407	*174,177*,657	5.6	001	412	. . . . . 228 . . 5 . . 2	. . .	Y	n
1582	410,415,430,433	135,*446*,647	5.7	*1*0F0	*331*	. . . . . F 41 . 30 . *10*	. . .	*y*	t
1583	421,433,437,634,635,636		5.7	102*1*0	—	. . *1* . . F 4 . . 20 . . .	. . .	.	n
1584	99,104,106,108,109,118,121	128,147,175	4.8	0120*221*-	*111*	218 . . *221* . . 1 . 00	. . .	Y	ns
1585	108,407,430,634,635,637	*174,177,657*	6.0	*14*1120	004	. . . . . *282* . . *3* . . 1	. . .	*o*	ndec
1586	106,109,407		5.7	*223*	—	. . . . . F 1 . 364 . . .	. . .	.	n
1587	99,112,118	*135,447*,647	5.9	*132*	11*1*	. . R . . *111* . 12 . *30*	. . .	w	nh
1588	86,110,121,634,635,637	135,446,647	4.1	*223*310	*164*	3122 . 334 . 13 . 03	.1.	W	
1589	104,108,118,635,637,638	135,446,647	4.4	*233132*	061	013 . . 665 . 35 . 42	.1.	Y	
1590	106,407,437		5.0	*2*02	—	. . . . . F 6 . 537 . . .	. . .	.	n
1591	99,112,410	175,*177*,657	5.6	*2*11	*344*	. . *1* . . 220 . . *3* . . *1*	. . *3*	*o*	
1592	110,407		cum	cc	—	. . R . . ccc . . F . . .	. . .	.	hm
1593	106,112,118,410		5.1	*3*11	—	. . . . . 77 . 926 . . .	. . .	.	n
1594	93,108,110,635,637,638		5.2	001010	—	. . *1* . . 66 . . *15* . . .	. . .	*o*	
1595	99,106,109,635,637,638		4.9	00*2*101	—	. . . . . 57 . 628 . . .	. . .	.	nvt
1596	93,104,110		5.0	*111*	—	. . *4* . . 88 . . 07 . . .	. . .	Y	d
1597	99,108,112,433,635,637,638	135,446,647	4.8	*32*52*222*	*401*	b *60* . . *443* . . *4* . *52*	.0.	W	
1598	106,109,410	*135,447*,647	5.6	1*1*1	*212*	. . 6 . . 222 . 1*3* . 40	. . .	*y*	
1599	101,110,410	135,446,647	4.2	*234*	191	2001 . 448 . 32 . 24	.1.	*g*	
1600	93,108,118		4.8	100	—	. . *1* . . 22 . . *11* . *1* .	. . .	Y	n

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1601	Ursa Major	—	2943	+67° 560	37.9	+67 8	6	6·7	6.0	—	3	6.01	.05	6.1	.17
1602	Cancer . .	δ 47	2953	+18° 2027	37.9	+18 36	4	4	4.5	3.9	6	4.27	.06	4.3	.12
1603	Cancer . .	b 49	2958	+10° 1864	38.2	+10 31	6	6·5	6.0	6.0	3	5.50	.15	5.5	.21
1604	Argo. . .	o²	2964	—	39.2	−32 45	4	4	—	3.8	6	3.55	.04	—	—
1605	Cancer . .	ι 48	2965	+29° 1824	39.4	+29 12	4	4	4.2	—	6	4.16	.04	4.3	.07
1606	Hydra . .	—	—	− 1° 2125	40.0	− 1 36	F	6	7.0	6.3	6	5.97	.11	—	—
1607	Cancer . .	A²50	2970	+12° 1905	40.4	+12 33	6	6	6.2	—	3	5.80	.11	5.6	.16
1608	Hydra . .	ε 11	2971	+ 6° 2036	40.4	+ 6 51	3·4	3·4	3.5	3.3	7	3.58	.06	3.7	.12
1609	Argo. . .	—	—	—	40.6	−24 57	F	6·7	—	6.5	3	5.77	.00	—	—
1610	Hydra . .	12	2975	—	40.7	−13 6	5·4	5·4	—	4.4	3	4.38	.08	—	—
1611	Hydra . .	—	2976	− 1° 2130	41.2	− 1 27	5	5·6	6.0	5.6	6	5.14	.01	—	—
1612	Argo. . .	—	—	—	41.2	−18 19	F	6	—	7.0	6	6.54	.09	—	—
1613	Hydra . .	ϱ 13	2978	+ 6° 2040	42.1	+ 6 17	5	5	4.8	4.8	3	4.31	.12	4.7	.11
1614	Hydra . .	14	2987	—	43.3	− 3 0	6	5·6	—	5.7	3	5.13	.05	—	—
1615	Ursa Major	b 5	2982	+62° 1027	43.5	+62 24	5	5·6	5.7	—	3	5.58	.03	5.7	.07
1616	Lynx . .	35	2989	+44° 1794	43.9	+44 11	6	6	5.5	—	3	5.17	.04	5.5	.21
1617	Cancer . .	—	—	+12° 1926	44.9	+12 14	F	neb.	neb.	—	3	5.63	.04	F	—
1618	Argo. . .	—	3005	—	45.0	−29 1	F	6	—	6.5	8	5.93	.09	—	—
1619	Cancer . .	σ¹ 51	2999	+33° 1770	45.2	+32 56	6	6	6.0	—	3	5.67	.08	5.6	.11
1620	Argo. . .	—	3007	—	45.3	−28 10	F	6	—	6.4	3	5.84	.11	—	—
1621	Argo. . .	o³	3010	—	45.4	−27 16	5	5	—	4.4	3	4.33	.15	—	—
1622	Cancer . .	ϱ¹ 55	3002	+28° 1660	45.5	+28 47	6	6	6.0	—	4	6.16	.02	5.6	.08
1623	Hydra . .	15	3011	—	45.7	− 6 44	6	6	—	6.0	6	5.49	.06	—	—
1624	Ursa Major	6	3003	+65° 673	46.4	+65 4	6	6	6.0	—	3	5.58	.05	5.8	.03
1625	Cancer . .	57	3016	+31° 1907	46.9	+31 2	6	6·5	5.3	—	7	5.52	.08	5.5	.07
1626	Cancer . .	ϱ² 58	3026	+28° 1666	48.5	+28 23	6	6·5	5.5	—	3	5.19	.15	5.5	.04
1627	Lynx . .	—	3027	+40° 2125	48.7	+40 40	F	F	6.0	—	3	5.84	.07	—	—
1628	Lynx . .	—	3025	+46° 1459	48.8	+46 6	6	6	6.5	—	3	5.90	.11	5.9	.15
1629	Hydra . .	ζ 16	3032	+ 6° 2060	49.1	+ 6 24	3·4	3·4	3.0	3.1	6	3.33	.04	3.4	.00
1630	Cancer . .	60	3035	+12° 1941	49.4	+12 6	F	6	5.8	—	7	5.70	.08	5.5	.11
1631	Cancer . .	σ² 59	3033	+33° 1785	49.6	+33 22	6	6·5	6.0	—	3	5.54	.09	5.7	.11
1632	Camelopard.	—	—	+84° 196	50.2	+84 40	6	6	6.0	—	3	6.21	.05	6.1	.05
1633	Argo. . .	o⁴	3051	—	50.4	−27 13	6·5	6·5	—	5.4	3	4.80	.00	—	—
1634	Cancer . .	o 62	3047	+15° 1945	50.6	+15 47	6	6·5	5.7	—	3	5.21	.03	5.4	.07
1635	Cancer . .	63	3052	+16° 1864	50.9	+16 2	6	6	6.1	—	3	5.57	.03	5.7	.12
1636	Ursa Major	ι 9	3048	+48° 1707	51.0	+48 31	3	3	3.1	—	6	3.17	.06	3.2	.03
1637	Cancer . .	—	3053	+ 9° 2093	51.2	+ 9 51	F	6·7	6.0	6.5	3	6.32	.04	6.4	.08
1638	Ursa Major	ϱ 8	3049	+68° 551	51.7	+68 6	5	5	5.1	—	17	5.04	.04	4.9	.02
1639	Cancer . .	α 65	3055	+12° 1948	51.9	+12 19	4	4	4.3	4.5	8	4.26	.05	4.4	.03
1640	Cancer . .	σ³ 64	3056	+32° 1821	52.2	+32 53	5	5	5.5	—	3	5.74	.15	5.6	.08
1641	Ursa Major	10	3059	+42° 1956	52.8	+42 15	4	4	4.1	—	7	4.19	.06	4.2	.19
1642	Hydra . .	—	3065	—	53.1	−15 41	F	F	—	6.4	6	5.92	.01	—	—
1643	Cancer . .	67	3069	+28° 1674	54.7	+28 22	6	6	6.2	—	3	5.83	.07	5.9	.04
1644	Ursa Major	—	3072	+54° 1272	55.2	+54 45	6	6	5.8	—	6	5.63	.04	5.8	.09
1645	Ursa Major	κ 12	3075	+47° 1633	55.4	+47 38	3·4	3·4	3.5	—	6	3.70	.04	3.5	.15
1646	Cancer . .	ν 69	3079	+25° 2029	55.8	+24 56	6	5·6	5.3	—	3	5.56	.12	5.5	.05
1647	Hydra . .	—	—	+ 0° 2449	55.8	− 0 1	6	6	6.2	6.2	3	5.61	.09	—	—
1648	Argo. . .	—	3082	—	56.0	−26 12	F	F	—	6.8	3	6.41	.13	—	—
1649	Ursa Major	—	3085	+49° 1801	57.1	+49 0	F	6	6.5	—	3	5.67	.08	5.6	.07
1650	Ursa Major	—	3086	+59° 1217	57.4	+59 50	6	6·7	6.2	—	3	6.13	.05	6.1	.04

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1601	99,106,433	*174,177,670*	6.0	1*11*	50*3*	. . . . . *2* 1 *2* . . *31* . 1	. . .	w	
1602	104,109,112,635,637,638	135,446,647	4.3	*12*013	*321*	*51* 3 . . *22* 2 . *31* . *10*	. *1* .	*y*	
1603	101,108,433	*135*,447,647	5.5	142	*551*	. . R . . 3 1 3 . 3 2 . 1 0	. . .	w	h
1604	93,106,118,635,637,638		3.6	*22*0101	—	*36* . . . 5 5 . 5 3 4 . 2 .	. . .	.	na
1605	99,104,112,635,636,637	135,446,647	4.2	*220*101	*121*	2 0 0 . 4 *11* 1 . . 2 . 2 1	. *2* .	*o*	v
1606	101,407,430,635,637,638		6.0	*225332*	—	. . . . . F *2* 8 . 1 *3* . . .	. . .	.	vg
1607	93,109,410	*135,447*,647	5.8	131	*442*	. . 1 . . 0 0 2 . . *5* . *62*	. . .	*y*	
1608	108,109,407,635,636,637,638	135,446,647	3.6	141121*2*	*223*	8 6 *11* 5 *2* 1 1 . *24* . 0 1	1 2 .	Y	
1609	106,110,410		5.8	000	—	. . . . . F 3 . 2 5 F . . .	. . .	.	n
1610	104,118,415		4.4	220	—	. . *2* . . 2 2 . . 0 5 . *1* .	. . .	Y	g
1611	99,407,437,635,637,638		5.1	0*11*000	—	. . . . . *11* 7 . 2 2 . . 2 .	. . .	w	
1612	101,407,430,635,637,638		6.5	4*22*2*2*	—	. . . . . F *7* . . 3 F . . .	. . .	.	
1613	108,407,437	135,446,647	4.3	1*3*2	472	. 7 0 . . 7 7 5 . 4 6 . 3 4	. 1 .	W	
1614	108,110,415		5.1	1*11*	—	. . 6 . . 7 1 . . 3 2 . 3 .	. . .	*g*	
1615	93,109,410	*174,177*,670	5.6	100	*121*	. . *6* . . *6* 4 0 . . *3* . *41*	. . .	*y*	
1616	99,112,410	175,*177*,657	5.2	0*11*	18*1*	. . 2 . . 6 6 2 . . 1 . . 3	. . 5	*y*	h
1617	106,118,410	*135,447*,647	5.6	*10*1	FF9	. . . . . F N N . . F . . F	. . .	.	
1618	93,112,407,415,437,635,637		5.9	F7*32*13*1*-	—	. . . . . F *1* . 1 4 2 . . .	. . .	.	ntp
1619	108,110,418	*135*,448,647	5.7	*211*	*312*	. . *1* . . 1 1 1 . . 0 . *11*	. . .	*y*	n
1620	93,112,407		5.8	*32*0	—	. . . . . F 0 . 2 4 F . . .	. . .	.	n
1621	93,112,418		4.3	4*12*	—	1 3 . 0 . 7 7 . 7 1 1 . 0 .	. . .	.	na
1622	99,105,410,451	135,448,647	6.2	010*1*	*864*	. . *4* . . *444* . . *5* . *66*	. . .	Y	n
1623	108,407,437,635,637,638		5.5	2*32*101	—	. . 1 . . 3 3 . . 3 2 . . .	. . .	w	vg
1624	106,110,418	175,*177*,670	5.6	1*11*	122	. . 7 . . 2 2 2 . . 1 . . 2	. . .	Y	
1625	99,118,418,635,636,637,638	*135*,448,647	5.5	11*51*523	*102*	. . *1* . 1 3 1 *3* . . 2 . 1 0	. . .	Y	n
1626	410,418,450	135,448,647	5.2	4*21*	234	. . 3 . . 6 4 2 . . 1 . 2 3	. . .	Y	n
1627	99,112,433		5.8	01*2*	—	. . . . . F F 0 . . *1* . . .	. . .	*y*	
1628	106,410,430	175,*177,657*	5.9	*11*3	*421*	. . . . . *11* 4 . . *2* . . 0	. . *2*	*o*	
1629	106,118,418,635,636,637	135,446,647	3.3	0*12202*	111	1 5 0 *1* . 1 2 *1* . *17* . *11*	0 1 .	Y	
1630	105,410,433,437,635,636,637	*135*,447,647	5.7	58*20320*	*331*	. . *1* . . F 1 *1* . . 0 . *32*	. *4* .	o	vtp
1631	93,110,418	*135*,448,647	5.5	2*12*	*133*	. . 3 . . 3 1 3 . . *6* . *12*	. . .	*g*	n
1632	93,110,410	*143,168*,671	6.2	*111*	*200*	. . . . . *444* . . F . . *1*	. . .	.	
1633	108,112,418		4.8	000	—	*42* . . . 6 8 . 7 3 1 . . .	. . .	.	na
1634	99,115,418	*135,447*,647	5.2	00*1*	241	. . 5 . . 6 4 4 . . F . 0 2	. 0 .	W	n
1635	99,115,418	135,*447*,647	5.6	010	*232*	. . *5* . . 2 2 3 . . F . 0 1	. 0 .	*w*	n
1636	110,118,124,635,636,637	175,178,657	3.2	0*31*31*2*	010	1 4 4 1 . 0 0 1 . . 3 . 3 0	0 1 *1*	*y*	
1637	108,410,430	*135,448,652*	6.3	1*10*	*212*	. . . . . F *25* . 0 6 0 . 1	. . .	*y*	
1638	93,104,105,106,108,110,112	128,132,132	5.0	1022414-	*111*	0 *1* 0 . . 0 0 1 . . 3 . 0 *1*	. . .	O	ts
1639	99,107,124,410,430,636,637	135,446,647	4.3	2b12021-	011	1 *11* . . *22* 0 . 1 1 . *11*	. 2 .	*g*	
1640	101,105,638	*135*,448,647	5.7	30*4*	*300*	. . *1* . . *773* . . *8* . *91*	. . .	Y	ndec
1641	93,112,118,636,637,638,639	176,455,650	4.2	242*3*010	*522*	. . *2* . . *110* . . 2 . 2 0	. . *2*	*y*	n
1642	421,430,437,636,637,638		5.9	000*110*	—	. . . . . F F . . 3 *2* . . :	. . .	.	d
1643	93,105,112	*135*,448,647	5.8	*20*1	201	. . 3 . . 0 0 2 . . F . . 1	. . .	*y*	
1644	99,107,115,635,636,637	175,178,657	5.6	0*31*200	104	. . . . . 2 2 0 . . 1 . . 2	. . .	w	
1645	104,108,118,635,636,637	175,178,657	3.7	1*10*2*11*	*234*	*4114* . *320* . . 3 . *22*	*212*	*g*	
1646	104,110,418	135,448,647	5.6	1*32*	*202*	*674* . . 2 *44* . . *3* . *41*	. . .	w	
1647	107,110,118		5.6	1*22*	—	. . . . . 2 2 4 . 4 *3* . . .	. . .	.	
1648	110,410,418		6.4	*313*	—	. . . . . F F . *423* . . .	. . .	.	ndc
1649	107,112,418	175,178,657	5.7	*220*	*211*	. . . . . F 1 6 . . 0 . . *1*	. *43*	Y	
1650	99,410,433	*175,178,657*	6.1	*111*	*101*	. . . . . *301* . . F . . 0	. . .	w	

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8h–9h

No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
1651	Ursa Major	σ^1 11	3087	+67° 573	57.9	+67 21	5	5·6	5.2	—	3	5.31	.03	5.2	.03
1652	Argo. . .	—	3096	—	57.9	−25 2	F	6	—	6.9	5	6.64	.19	—	—
1653	Ursa Major	—	3097	+39° 2200	58.9	+38 56	5	5·4	4.7	—	6	4.69	.06	4.7	.09
1654	Hydra . .	ω 18	3105	+ 5° 2116	59.7	+ 5 35	6	6	5.6	5.4	3	5.64	.19	5.8	.26
1655	Ursa Major	σ^2 13	3099	+67° 577	59.8	+67 37	5	5	5.3	—	8	4.79	.02	4.8	.08
1656	Ursa Major	f 15	3106	+52° 1365	0.4	+52 5	5	5	5.0	—	3	4.44	.05	4.8	.05
1657	Cancer . .	τ 72	3109	+30° 1817	0.7	+30 9	6	6	6.0	—	3	5.39	.05	5.4	.11
1658	Ursa Major	τ 14	3108	+64° 723	1.0	+64 0	5·4	5	5.0	—	14	4.76	.04	4.8	.05
1659	Cancer . .	$\varkappa$ 76	3111	+11° 1984	1.3	+11 9	5	5	5.5	5.4	6	5.03	.08	5.1	.12
1660	Cancer . .	75	3113	+27° 1715	1.7	+27 7	6	6	6.0	—	3	6.03	.07	6.0	.00
1661	Cancer . .	ξ 77	3117	+22° 2061	2.5	+22 31	5	5	4.8	—	3	5.22	.07	5.4	.09
1662	Hydra . .	19	3120	—	2.8	− 8 6	F	6	—	5.8	6	5.53	.06	—	—
1663	Argo. . .	—	3121	—	2.8	−25 22	5	5	—	4.9	6	4.79	.04	—	—
1664	Cancer . .	—	—	+31° 1946	3.4	+31 28	6	6	6.5	—	6	6.50	.08	6.0	.00
1665	Hydra . .	—	—	—	3.4	−11 52	F	6	—	6.2	3	5.82	.11	—	—
1666	Argo. . .	—	—	—	3.5	−26 17	F	F	—	6.5	3	6.23	.16	—	—
1667	Hydra . .	20	3124	—	3.7	− 8 18	6	6	—	5.7	7	5.59	.08	—	—
1668	Ursa Major	—	3116	+73° 452	3.8	+73 26	6	6·7	6.0	—	3	5.76	.13	5.9	.05
1669	Ursa Major	c 16	3125	+62° 1058	4.9	+61 55	5	5·6	5.0	—	15	5.17	.03	5.0	.03
1670	Argo. . .	—	3130	—	4.9	−29 53	F	F	—	6.0	3	5.43	.03	—	—
1671	Lynx . .	36	3131	+43° 1893	6.0	+43 43	5	5	5.0	—	6	5.24	.03	5.2	—
1672	Argo. . .	—	—	—	6.3	−19 16	F	F	—	6.4	6	5.74	.07	—	—
1673	Hydra . .	21	3137	—	6.5	− 6 37	6	6	—	6.3	7	6.10	.09	—	—
1674	Ursa Major	17	3135	+57° 1211	6.9	+57 13	6	6·5	5.0	—	7	5.60	.05	5.7	.04
1675	Ursa Major	e 18	3140	+54° 1285	7.6	+54 31	5	5	5.7	—	9	4.92	.09	5.0	.07
1676	Hydra . .	θ 22	3146	+ 2° 2167	8.1	+ 2 49	4	4	4.3	3.8	6	3.93	.04	4.2	—
1677	Cancer . .	π 82	3147	+15° 2009	8.6	+15 26	6	6	5.8	—	3	5.57	.09	5.9	.12
1678	Ursa Major	—	3150	+47° 1658	9.4	+47 19	6	6·7	5.6	—	3	5.54	.09	5.8	.13
1679	Hydra . .	23	3160	—	10.7	− 5 51	6	6	—	5.6	3	5.44	.08	—	—
1680	Hydra . .	24	3161	—	10.8	− 8 15	6	6	—	6.0	3	5.50	.03	—	—
1681	Lynx . .	38	3162	+37° 1965	11.4	+37 19	4	4	4.2	—	6	3.82	.04	4.0	.05
1682	Cancer . .	83	3171	+18° 2165	12.3	+18 13	6	6·5	7.0	—	6	6.63	.04	6.4	.04
1683	Ursa Major	—	3172	+57° 1214	12.9	+57 13	6	6	5.8	—	3	6.03	.15	6.1	.11
1684	Argo. . .	—	3180	—	13.4	−23 58	6	6	—	F	9	F	—	—	—
1685	Lynx . .	40	3178	+35° 1979	13.7	+34 54	3·4	3·4	3.1	—	6	3.44	.05	3.5	.13
1686	Hydra . .	—	—	—	13.9	−15 20	F	6·7	—	6.0	3	5.92	.05	—	—
1687	Hydra . .	26	3184	—	14.0	−11 28	6	6·5	—	5.3	3	4.90	.04	—	—
1688	Hydra . .	27	3188	—	14.6	− 9 3	6	6	—	5.2	3	4.89	.15	—	—
1689	Camelopard.	—	—	+75° 377	15.2	+75 38	6	6	6.2	—	3	6.42	.12	6.1	.04
1690	Argo. . .	—	3195	—	16.2	−25 27	6·5	6·5	—	5.2	6	4.93	.08	—	—
1691	Leo . . .	6	3194	+25° 2088	16.5	+25 42	F	6	6.5	—	4	6.36	.08	6.0	.04
1692	Leo . . .	$\varkappa$ 1	3204	+26° 1939	17.7	+26 42	5	4·5	4.2	—	3	4.63	.03	4.8	.13
1693	Argo. . .	—	3207	—	18.0	−28 19	6·5	6·5	—	5.3	3	4.93	.19	—	—
1694	Hydra . .	28	3216	—	19.4	− 4 36	6	6	—	6.0	3	5.75	.16	—	—
1695	Draco . .	—	3199	+81° 302	19.8	+81 51	4·5	4·5	4.3	—	6	4.58	.03	4.4	.13
1696	Ursa Major	41	3218	+46° 1509	20.9	+46 8	6	6·5	5.5	—	7	5.56	.07	5.4	.16
1697	Argo. . .	—	3224	—	21.5	−28 16	F	F	—	6.5	6	5.99	.06	—	—
1698	Hydra . .	α 30	3223	—	21.7	− 8 8	2	2	—	2.1	15	2.02	.03	2.3	—
1699	Hydra . .	—	3226	—	21.8	− 5 33	6	6	—	5.7	3	5.32	.11	2.4	.09
1700	Hydra . .	—	—	—	21.8	−21 49	6	6	—	5.1	3	5.02	.11	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1651	99,112,418	*175*,178,670	5.3	*1*00	*211*	. . *1* . . *3 1 1* . . 4 . . *1*	. . .	O	nt
1652	107,108,110,410,418		6.6	FF*5*22	—	. . . . . F *8* . *6* 1 F . . .	. . .	.	ng
1653	93,110,115,635,636,638	135,448,647	4.7	0*12*132	122	. . . . . 3 *1* 0 . . 2 . 1 0	. . *1*	Y	n
1654	99,107,112	*176,449*,649	5.6	5*13*	645	*6 3 8* . . 2 *2 1* . *5* 1 . *4* 2	. . .	Y	t
1655	105,108,115,430,435,635,638	*175*,178,670	4.8	**6***11***3**100-	*112*	2 1 1 . 3 2 2 4 . . 1 . 2 0	. . .	*r*	nd
1656	110,121,435	175,178,657	4.4	1*11*	353	0 2 0 . . 6 6 6 . . 5 . 6 4	. *1* .	Y	
1657	121,427,429	176,455,649	5.4	1*11*	*2*03	. . 3 . . 4 4 4 . . 3 . 4 0	. . .	*y*	
1658	104,107,112,118,124,429,438	132,147,175	4.8	512*2211*-	30*1*	*4 3* 3 . . *2* 2 2 . . 1 . 2 0	. . .	*y*	s
1659	107,115,435,639,640,641	135,447,647	5.0	2*2*2114	42*1*	*4 5* 2 . . 0 0 4 1 *1* . *2* 1	. 2 .	w	
1660	110,427,429	*176,456*,649	6.0	0*2*1	000	. . *6* . . *2 2 2* . . 1 . . 0	. . .	Y	
1661	106,121,433	176,*681*,649	5.2	0*2*1	401	*2 3* 4 . . *2 2 4* . . *3* . *4* 2	. . . .	Y	
1662	110,427,429,637,639,640		5.5	*23*1211	—	. . 0 . . F 3 . . 1 F . . .	. . .	*y*	
1663	110,427,429,639,640,641		4.8	*11*2110	—	. . . . . 2 2 . 7 *1 4* . . .	. . .	.	nvtg
1664	107,429,454,639,640,641	176,*455*,649	6.5	2*15211*	*555*	. . . . . *7 7 2* . . *4* . . *5*	. . .	.	vt
1665	115,429,454		5.8	*2*30	—	. . . . . F 0 . . 2 *1* . . .	. . .	.	
1666	112,427,429		6.2	4*4*0	—	. . . . . F F . *2 1 1* . . .	. . .	.	n
1667	105,427,440,442,637,639,640		5.6	4*70111*	—	. . 0 . . 2 2 . . *2 3* . . .	. . .	O	
1668	107,121,437	*143,168*,671	5.8	2*3*2	202	. . . . . 0 3 0 . . 3 1 . 1	. . .	*w*	
1669	104,107,110,115,127,427,433	132,147,175	5.2	3310*141*-	*313*	. . *2* . . *2 0 2* . . 1 . 0 *2*	. . .	*y*	s
1670	107,115,435		5.4	001	—	. . . . . F F . 6 4 3 . . .	. . .	.	n
1671	101,104,110,637,639,640	176,456,650	5.2	10*10**11*	0**b***1*	. **b** 0 . . *2 2 2* . . 1 . 0 0	. . 3	w	eah
1672	427,429,440,639,640,641		5.7	*41*121*2*	—	. . . . . F F . . 5 0 . . .	. . .	.	
1673	105,115,435,440,637,639,640		6.1	3*532312*	—	. . *4* . . *3 3* . . 0 *8* . . .	. . .	*y*	d
1674	105,106,112,127,639,640,641	175,*178*,657	5.6	04*23011*	102	. . *3* . . 2 0 *6* . . 1 . . 1	. . .	O	
1675	101,112,433,438,443,637,640	175,178,657	4.9	1*161227*-	301	*5 3* 0 . . 1 1 7 . . 0 . *1 1*	. . .	*y*	
1676	105,110,124,639,640,641	178,449,649	3.9	2*1*110*1*	**C**23	5 3 4 . . 2 2 4 . 0 5 . 1 3	. 2 .	W	e
1677	107,110,115	176,*449*,649	5.6	21*2*	054	**b b** R . . 2 2 0 . . 1 . 0 3	. . .	*o*	ntah
1678	121,427,433	*175,178*,657	5.5	*122*	055	. . . . . 3 6 0 . . 2 . . 3	. . 5	w	
1679	107,110,121		5.4	2*2*0	—	. . 0 . . 4 4 . . *1 1* . . .	. . .	O	
1680	107,112,124		5.5	*1*00	—	. *6* 2 . . 3 3 . . 3 2 . *1* .	. . .	*y*	
1681	106,115,127,637,640,641	176,455,650	3.8	00*3022*	133	6 4 2 . 4 3 3 5 . . 6 . 0 2	2 . 0	w	h
1682	101,110,124,639,640,641	*176,449*,649	6.6	*13*2001	*12*F	. . . . . *8* **b** 2 . . *5* . **b** *2*	. . .	*y*	
1683	112,437,443	*175,178,657*	6.0	4*2*1	004	. . R . . *2 2 4* . . 1 . . 1	. . .	*o*	tph
1684	107,110,112,115,124,427,639		F	FFFFFFF-	—	. . . . . R R . F F F . . .	. . .	.	nvp
1685	110,121,127,639,640,641	176,455,650	3.4	*130112*	*2*33	**0** 8 *1 2* . 0 1 *1* . . 6 . 1 1	3 . .	O	nth
1686	121,427,429		5.9	1*11*	—	. . . . . F 2 . . *1 2* . . .	. . .	.	
1687	107,115,431		4.9	1*1*0	—	. 4 4 . . 9 7 . . 1 0 . 2 .	. . .	Y	
1688	112,121,431		4.9	21*4*	—	. . *1* . . 9 9 . . 0 0 . 3 .	. . .	*o*	dg
1689	101,110,438	*143,168,671*	6.4	3*21*	*432*	. . . . . *6 6 4* . . F . . *3*	. . .	.	
1690	107,427,440,639,640,641		4.9	*160*212	—	. . . . . 5 7 . *2* 0 0 . . .	. . .	.	nt
1691	107,121,124,435	*176,456*,649	6.4	*1*F*21*	F*43*	. . 0 . . F *6 1* . . F . . *4*	. . .	.	n
1692	106,110,127	176,456,649	4.6	00*1*	15*1*	*2 4* 1 . . 4 *2 3* . . 3 . 0 2	. . .	*o*	
1693	105,121,435		4.9	31*5*	—	. . . . . 5 7 . *2* 1 0 . . .	. . .	.	n
1694	106,115,124		5.8	*22*4	—	*4 2 2* . . 0 0 . . 0 *1* . . .	. . .	*o*	na
1695	104,110,127,639,641,642	143,168,671	4.6	1001*21*	*511*	. . . . . *2 2 3* . . 3 . *4 2*	. . .	Y	
1696	101,121,435,438,637,641,642	175,178,657	5.6	55*22*100	*352*	. . *2* . . 2 0 *2* . . 1 . . *2*	. . *2*	Y	nh
1697	105,124,435,639,641,642		6.0	4*10130*	—	. . . . . F F . 0 3 1 . . .	. . .	.	nv
1698	101,106,110,113,115,119,429	182,185,198	2.0	0*201221*-	018-	1 0 0 1 . 2 2 . . 1 **0** . 3 4	4 . .	O	vteg
1699	115,127,435		5.3	11*3*	—	1 3 . . . 5 5 . . 1 F . . .	. . .	*y*	
1700	115,429,438		5.0	*3*02	—	. . . . . 8 8 . 5 *1 1* . 0 .	. . .	.	g

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1701	Ursa Major	h 23	3221	+63° 845	22.0	+63 35	3·4	3·4	3.5	—	15	3.71	.03	3.8	.04
1702	Leo . . .	ω 2	3227	+ 9° 2188	22.0	+ 9 35	6	6·5	5.3	5.9	3	5.55	.05	5.8	.03
1703	Leo . . .	3	3228	+ 8° 2226	22.1	+ 8 43	6	6	6.0	6.3	3	5.95	.00	6.0	.08
1704	Hydra . .	τ^1 31	3237	—	23.1	− 2 15	5	5	—	4.8	3	4.94	.15	—	—
1705	Ursa Major	22	3231	+72° 462	23.6	+72 44	6	6	6.0	—	15	5.79	.03	5.8	.07
1706	Ursa Major	d 24	3232	+70° 565	23.8	+70 21	5·4	5·4	5.2	—	6	4.59	.06	4.7	.03
1707	Leo Minor .	8	3241	+35° 2015	24.3	+35 39	6	6	5.7	—	3	5.50	.03	5.5	.07
1708	Argo . . .	—	3248	—	24.6	−26 4	F	6	—	6.0	3	5.74	.12	—	—
1709	Ursa Major	θ 25	3242	+52° 1401	24.8	+52 13	3	3	3.0	—	6	3.22	.03	3.4	.11
1710	Leo . . .	λ 4	3246	+23° 2107	24.9	+23 30	5·4	5·4	4.5	—	3	4.39	.07	4.8	.13
1711	Leo . . .	ξ 5	3250	+11° 2053	25.5	+11 50	6	5·6	5.3	5.4	6	5.20	.03	5.5	.08
1712	Leo . . .	h 6	3251	+10° 2014	25.5	+10 15	6	6·5	6.0	5.6	3	5.35	.09	5.8	.03
1713	Hydra . .	—	—	—	25.8	−10 2	6	6	—	6.5	3	6.04	.15	—	—
1714	Hydra . .	τ^2 32	3253	− 0° 2211	25.9	− 0 39	5	5	4.8	4.8	6	4.60	.07	—	—
1715	Ursa Major	26	3256	+52° 1402	26.6	+52 36	5	5	5.0	—	3	4.57	.00	4.8	.17
1716	Hydra . .	—	—	—	26.8	−18 53	6	6	—	6.1	3	5.70	.04	—	—
1717	Leo Minor .	10	3261	+37° 2004	26.9	+36 56	5	5·4	4.8	—	6	4.67	.05	4.8	.05
1718	Argo . . .	—	—	—	27.1	−28 6	F	6	—	6.9	3	6.47	.04	—	—
1719	Lynx . .	—	3265	+40° 2224	27.7	+40 9	5	5·6	4.7	—	3	5.04	.11	5.0	.11
1720	Hydra . .	—	—	—	27.7	−20 36	6	6	—	5.6	7	5.22	.04	—	—
1721	Hydra . .	—	—	—	28.1	−22 18	F	6·7	—	6.3	3	5.81	.11	—	—
1722	Leo Minor .	11	3268	+36° 1979	28.5	+36 22	6	6	5.5	—	3	5.47	.12	5.5	.11
1723	Hydra . .	A 33	3271	—	28.6	− 5 23	6	6	—	6.0	3	5.65	.08	—	—
1724	Leo . . .	—	3273	+31° 2011	29.6	+31 42	6	6·5	5.2	—	3	5.70	.15	5.7	.05
1725	Leo . . .	8	3278	+17° 2109	30.5	+16 59	6	6·5	6.3	—	3	5.94	.08	6.1	.15
1726	Sextans . .	1	3286	+ 7° 2160	30.9	+ 7 22	6	6	5.8	5.4	3	4.98	.13	5.7	.11
1727	Lynx . .	42	3281	+40° 2232	31.0	+40 47	6	6	5.5	—	3	5.27	.08	5.3	.15
1728	Hydra . .	—	—	—	31.2	−24 10	F	F	—	6.8	3	6.69	.12	—	—
1729	Hydra . .	—	—	—	31.6	−24 46	F	F	—	6.4	3	5.98	.08	—	—
1730	Ursa Major	—	3287	+69° 531	31.9	+69 47	6	6·5	6.1	—	6	5.82	.03	5.8	.11
1731	Ursa Major	27	3283	+72° 466	32.0	+72 48	6	5·6	5.3	—	4	5.48	.10	5.3	.07
1732	Sextans . .	2	3295	+ 5° 2207	32.2	+ 5 11	5	5	5.0	5.1	3	4.78	.11	5.2	.09
1733	Draco . .	—	3284	+79° 319	33.0	+79 41	F	F	6.0	—	7	6.11	.07	—	—
1734	Hydra . .	ι 35	3303	− 0° 2231	33.7	− 0 36	4·5	4	4.0	3.9	3	4.15	.09	—	—
1735	Hydra . .	37	3305	—	33.9	−10 1	6	6	—	6.5	3	6.04	.07	—	—
1736	Leo . . .	—	—	+31° 2026	34.5	+31 48	6	6	6.2	—	3	6.10	.13	6.0	.03
1737	Hydra . .	—	3310	—	34.5	−10 14	F	6	—	6.7	3	5.98	.07	—	—
1738	Lynx . .	43	3307	+40° 2241	34.6	+40 18	6	6	5.8	—	3	5.47	.12	5.5	.11
1739	Hydra . .	κ 38	3311	—	34.6	−13 47	5	5	—	5.4	6	4.94	.04	—	—
1740	Leo . . .	ο 14	3312	+10° 2044	34.7	+10 26	4·3	4·3	3.7	3.7	6	3.80	.06	4.0	.09
1741	Hydra . .	—	—	—	35.8	−23 4	5	5	—	5.2	7	4.62	.07	—	—
1742	Leo . . .	f 15	3317	+30° 1901	36.5	+30 32	5	5·6	5.3	—	3	5.93	.15	5.5	.07
1743	Hydra . .	—	—	—	36.8	−23 23	5	5	—	5.4	3	4.88	.11	—	—
1744	Leo . . .	ψ 16	3321	+14° 2136	37.2	+14 34	6	6	6.0	—	6	5.66	.04	6.0	.08
1745	Ursa Major	44	3324	+57° 1231	38.1	+57 40	6	6	5.0	—	3	5.59	.09	5.4	.09
1746	Argo . . .	—	3332	—	38.9	−27 13	5	5	—	5.1	3	4.93	.13	—	—
1747	Leo . . .	ε 17	3331	+24° 2129	39.0	+24 20	3	3	3.2	—	6	3.14	.06	3.3	.04
1748	Sextans . .	—	3336	+ 7° 2181	39.8	+ 7 15	6	6	5.8	6.3	3	5.98	.07	6.2	.04
1749	Leo . . .	18	3337	+12° 2090	39.9	+12 22	6	6	6.2	—	3	6.10	.17	6.2	.12
1750	Sextans . .	—	3339	+ 2° 2246	40.2	+ 2 20	6	6	5.6	6.0	3	5.69	.08	6.0	.09

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1701	101,107,110,115,119,127,435	105,132,147	3.7	*1232*152-	421	752. 5*32*0. . 3. 51	. . .	*y*	ds
1702	121,429,435	*178*,449,649	5.6	*1*11	322	. . 2. 2204. 11. *1*2	. . .	*y*	d
1703	113,435,440	*178,449*,649	6.0	212	202	. . *1*. . *222*. 11. . 0	. . .	*y*	
1704	104,429,454		4.9	214	—	*545*. . 11. . *20*. *3*.	. . .	*y*	
1705	119,121,124,425,435,438,440	132,*147,176*	5.8	*4022*110-	242	. . 1. . 000. . *1*. . 0	. . .	w	s
1706	107,115,435,639,640,641	142,168,670	4.6	*221*211	110	. . 0. . 006. . 3. 41	. . .	*y*	
1707	101,121,438	139,455,650	5.5	001	*102*	. . 1. . 331. . *2*. . 0	. . .	*o*	
1708	107,124,438		5.7	*312*	—	. . . . F1. 710. . .	. . .	.	n
1709	107,127,431,637,641,642	142,178,657	3.2	*111110*	520	1010. 000. . 3. 22	110	*y*	
1710	111,119,440	176,456,649	4.4	*210*	371	0*21*. . 221. . 0. 14	. . .	*o*	t
1711	101,124,438,637,640,641	178,449,649	5.2	*110101*	531	21*1*. . 600. *11*. 03	. . .	Y	v
1712	104,429,454	*178*,449,649	5.4	212	544	. . 0. . 424. *11*. 04	. . .	*o*	dt
1713	431,438,440		6.0	*241*	—	. . . . . *22*. . *33*. . .	. . .	.	d
1714	119,431,440,639,640,641		4.6	131*213*	—	*2*02. . 442. 13. 0.	. . .	W	
1715	107,431,440	*142,178*,657	4.6	000	612	. . 0. . 444. . 3. 52	.*12*	*g*	
1716	124,438,448		5.7	011	—	. . . . . 11. . 20. . .	. . .	.	
1717	127,431,438,637,641,642	178,455,650	4.7	*131*201	020	. 60. . 3*11*. . 2. 11	. . .	*y*	
1718	438,448,452		6.5	011	—	. . . . . F*7. 52*F. . .	. . .	.	n
1719	124,431,438	178,455,650	5.0	131	*131*	. . . . . 02*3*. . 3. 20	. .*2*	*o*	
1720	127,438,448,452,637,639,640		5.2	F121*111*	—	. . . . . 66. 31*3*. . .	. . .	.	
1721	107,438,452		5.8	*320*	—	. . . . . F3. 23F. . .	. . .	.	
1722	113,431,440	139,455,650	5.5	*312*	*131*	. . *2*. . 331. . *2*. . 0	. . .	*y*	
1723	107,115,438		5.6	022	—	. . 3. . 22. . 21. 0.	. . .	Y	n
1724	104,119,440	*141*,456,649	5.7	430	111	. . . . . 1*15*. . 0. . 0	. . .	o	
1725	115,438,442	*178*,449,649	5.9	211	612	. . 0. . *132*. . *2*. . 2	. . .	O	
1726	115,124,443	*178*,449,649	5.0	*133*	075	. . *3*. . 886. 13. 17	. . .	*o*	ng
1727	107,431,440	*139*,455,650	5.3	220	*142*	. . *2*. . 551. . 4. . 0	. . 1	*y*	h
1728	104,431,440		6.7	30*3*	—	. . . . . FF. *71*F. . .	. . .	.	
1729	104,431,440		6.0	112	—	. . . . . FF. 021. . .	. . .	.	t
1730	127,425,440,639,641,642	*142,168,670*	5.8	*211*001	032	. . . . . 0*21*. . *1*. . 0	. . .	*y*	
1731	104,105,113,440	*142,168*,671	5.5	41*12*	*302*	. . *1*. . *333*. . *2*. . *2*	. . .	W	
1732	119,438,442	*178*,454,649	4.8	02*3*	632	*42*6. . 222. 11. 24	. . .	O	
1733	104,127,440,442,639,641,642		6.1	0*37112*0	—	. . . . . FF*3*. . F. . .	. . .	*y*	
1734	105,122,442		4.2	*122*	—	2302. *211*. *22*. *2*.	. . .	O	tg
1735	115,425,440		6.0	*120*	—	. . R. . *22*. . *33*. . .	. . .	.	h
1736	124,425,440	*141,456*,649	6.1	*331*	*112*	. . . . . *331*. . 0. . *1*	. . .	o	
1737	115,425,440		6.0	*201*	—	. . . . . F*2*. . 5F. . .	. . .	.	
1738	431,451,654	*139*,455,650	5.5	*224*	032	. . 2. . 331. . 2. . 0	. . 1	Y	h
1739	119,124,442,639,641,642		4.9	*110013*	—	*5*. 1. . 11. . 20. . .	. . .	W	a
1740	104,122,442,639,640,641	142,449,649	3.8	*211222*	401	602. . *111*. 02. 12	*11*.	*y*	
1741	105,115,438,440,639,640,641		4.6	2621*120*	—	. . . . . 44. 133. 4.	. . .	.	v
1742	101,113,440	*141*,454,649	5.9	214	*643*	. . *5*. . *977*. . *2*. *54*	. . .	*g*	
1743	105,115,438		4.9	131	—	. . . . . 11. *220*. 3.	. . .	.	
1744	105,122,127,639,641,642	*178*,449,649	5.7	130003	513	*740*. . 111. . *8*. *53*	. . .	O	vt
1745	111,122,440	*142*,178,657	5.6	122	*140*	b. 0. . 226. . *3*. . *2*	. . .	Y	nah
1746	104,425,440		4.9	133	—	. . . . . 11. *200*. 1.	. . .	.	n
1747	105,119,440,639,641,642	141,681,649	3.1	*110133*	312	*451*1. 113. . *1*. 02	23.	Y	
1748	111,122,440	*178,451*,649	6.0	*201*	231	. . . . . *224*. 1F. . 2	. . .	O	n
1749	113,124,440	*178,449*,649	6.1	*423*	410	. . R. . *331*. . 0. . 1	. . .	*o*	h
1750	105,115,127	182,685,649	5.7	220	451	. . . . . 112. 14. . 3	. . .	*y*	

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9h—10h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
1751	Ursa Major	*15*	3341	+46° 1551	40.8	+46 35	5	5·6	5.9	—	3	5.34	.09	5.3	.11
1752	Leo . . .	R	3345	+12° 2096	41.1	+11 59	var.	var.	var.	—	3	var.	—	var.	—
1753	Ursa Major	*v* 29	3346	+59° 1268	42.4	+59 36	4·3	4·3	4.0	—	15	3.98	.04	3.8	.08
1754	Leo Minor .	16	3352	+40° 2261	42.9	+40 11	F	F	7.0	—	8	6.64	.08	—	—
1755	Leo . . .	20	3355	+21° 2113	43.3	+21 44	F	6	6.9	—	3	6.05	.08	5.8	.03
1756	Ursa Major	*φ* 30	3358	+54° 1331	44.0	+54 38	5·4	5·4	5.0	—	3	4.43	.11	4.7	.11
1757	Leo . . .	g 22	3366	+25° 2169	45.1	+24 58	5	6·5	5.8	—	3	5.29	.19	5.5	.11
1758	Sextans . .	6	3368	—	45.2	− 3 41	F	6·7	—	6.2	6	5.89	.06	—	—
1759	Hydra . .	*v*1 39	3372	—	45.7	−14 17	5·4	5·4	—	4.0	3	4.30	.11	—	—
1760	Leo . . .	*μ* 24	3371	+26° 2019	45.9	+26 34	4	4	4.0	—	6	4.14	.06	4.3	.03
1761	Sextans . .	7	3374	+ 3° 2280	46.0	+ 3 1	6	6	6.0	6.3	3	5.97	.11	6.0	.04
1762	Sextans . .	8	3378	—	46.6	− 7 32	5	5	—	5.4	3	5.26	.03	—	—
1763	Ursa Major	—	3376	+73° 478	47.6	+73 27	F	6	6.3	—	7	6.00	.07	5.9	.11
1764	Argo. . .	—	3385	—	47.6	−26 46	F	F	—	6.6	5	6.32	.12	—	—
1765	Ursa Major	31	3381	+50° 1698	47.9	+50 24	5	5·6	5.6	—	3	5.30	.05	5.2	.03
1766	Argo. . .	—	—	—	48.7	−27 26	F	F	—	7.0	6	6.83	.03	—	—
1767	Ursa Major	—	3390	+58° 1224	48.8	+57 59	6	6·7	6.2	—	3	5.79	.03	6.1	.13
1768	Argo. . .	—	3391	—	48.8	−25 22	6·5	6·5	—	5.3	4	5.09	.05	—	—
1769	Hydra . .	—	—	—	49.2	−18 26	6	6	—	5.6	6	5.29	.04	—	—
1770	Leo . .	*10*	3398	+ 9° 2262	50.1	+ 9 30	F	6	6.2	6.1	4	5.95	.11	6.2	.03
1771	Leo Minor .	19	3399	+41° 2033	50.3	+41 38	5	5·6	5.2	—	6	5.15	.04	5.1	.07
1772	Argo. . .	—	—	—	51.3	−25 59	F	F	—	6.6	8	6.13	.08	—	—
1773	Argo. . .	—	—	—	51.5	−26 54	F	F	—	6.7	7	6.46	.12	—	—
1774	Ursa Major	—	3402	+57° 1242	51.6	+57 23	6	6·5	5.0	—	3	5.73	.15	5.9	.13
1775	Leo . . .	*ν* 27	3406	+13° 2183	51.8	+13 0	5	5·6	5.5	—	3	5.30	.05	5.2	.04
1776	Leo . . .	*11*	3407	+ 9° 2269	51.8	+ 8 53	F	6	6.8	6.5	4	6.35	.11	6.2	.07
1777	Leo . . .	—	3409	+30° 1946	52.7	+30 13	6	6·5	6.0	—	3	5.93	.09	5.6	.11
1778	Hydra . .	—	—	—	52.7	−24 34	F	F	—	6.9	4	6.71	.09	—	—
1779	Leo . . .	—	—	+22° 2148	52.8	+21 55	F	6	6.7	—	4	6.52	.03	6.1	.03
1780	Sextans . .	12	3412	+ 4° 2276	53.5	+ 3 57	6	6·7	6.5	6.8	6	6.65	.03	6.4	.07
1781	Hydra . .	—	—	—	53.6	−23 23	F	F	—	6.2	3	6.11	.04	—	—
1782	Leo . . .	*π* 29	3415	+ 8° 2301	53.9	+ 8 37	5	5	5.0	5.2	6	4.97	.07	5.0	.11
1783	Leo Minor .	20	3416	+32° 1964	54.1	+32 31	5	5·6	5.8	—	3	5.97	.16	5.3	.19
1784	Leo . . .	—	3423	+22° 2164	56.1	+22 33	6	6·5	5.3	—	3	5.65	.04	5.6	.00
1785	Ursa Major	—	3425	+54° 1348	56.6	+54 28	6	6	6.2	—	3	5.69	.13	5.9	.04
1786	Sextans . .	13	3436	+ 3° 2311	58.0	+ 3 47	6	6·7	6.5	6.7	3	6.47	.07	6.3	.09
1787	Hydra . .	—	—	—	58.7	−24 31	F	F	—	6.8	4	6.55	.13	—	—
1788	Hydra . .	—	—	—	58.8	−23 42	F	F	—	6.1	4	5.73	.13	—	—
1789	Hydra . .	*v*2 40	3444	—	59.3	−12 29	5·4	5·4	—	4.6	6	4.69	.06	—	—
1790	Argo. . .	—	—	—	59.4	−27 36	F	F	—	6.9	4	6.62	.11	—	—
1791	Argo. . .	—	—	—	59.8	−27 37	F	F	—	6.9	4	6.72	.13	—	—
1792	Leo Minor .	21	3446	+35° 2010	0.4	+35 50	4·5	4·5	4.4	—	3	4.57	.08	4.3	.09
1793	Leo . . .	*η* 30	3453	+17° 2171	0.8	+17 21	3·4	3·4	3.4	3.7	6	3.59	.08	3.8	.05
1794	Hydra . .	—	—	—	1.4	−16 33	6	6	—	6.0	4	6.07	.05	—	—
1795	Leo . . .	A 31	3457	+10° 2112	1.5	+10 35	5	5·4	5.0	4.5	3	4.60	.19	5.2	.07
1796	Sextans . .	15	3458	+ 0° 2615	1.8	+ 0 13	4·5	4·5	4.1	4.9	3	4.51	.03	4.6	.08
1797	Leo . . .	*α* 32	3459	+12° 2149	2.0	+12 33	1·2	1·2	1.3	—	15	1.42	.03	1.7	.09
1798	Leo Minor .	—	3468	+38° 2110	4.1	+38 0	F	6·7	6.0	—	3	6.14	.07	5.8	.23
1799	Hydra . .	—	3471	—	4.2	−12 13	F	6	—	5.9	6	5.34	.04	—	—
1800	Hydra . .	*λ* 41	3473	—	4.7	−11 46	4	4	—	3.4	7	3.92	.07	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1751	111,115,124	142,178,657	5.3	*212*	*113*	. . 2 . . *3 1 4* . . 0 . . 0	. . *3*	*y*	n
1752	113,122,438	*178*,449,649	var.	RRF	RRF	. . . . . V V V . . R . . V	. . .	.	vtpe
1753	101,105,111,115,119,124,127	132,147,176	4.0	0*1*5*11*2-	*304*	4 2 3 . . *3 3* 1 . . 4 . 6 *2*	. . .	*g*	s
1754	122,130,429,440,639,640,641		6.6	6F0122b-	—	. . R . . F F 2 . . b . . .	. . .	R	vph
1755	105,113,442	*141*,*456*,649	6.0	*121*	*221*	. . *1* . . F *2* 7 . . 1 . . *2*	. . .	.	
1756	101,111,127	142,178,657	4.4	*3*11	530	. 1 *2* . . 2 2 6 . . 5 . 4 3	. . .	W	a
1757	111,115,124	*141*,*456*,649	5.3	*135*	*133*	. . 2 . . *3* 3 3 . . 4 . 1 2	. 1 .	*y*	
1758	431,435,440,639,640,641		5.9	221*13*1	—	. . *2* . . F 2 . . 1 F . . .	. . .	.	
1759	101,119,130		4.3	*2*03	—	1 *1* 0 *1* . 3 3 . . *2* 1 . *2* .	. . .	Y	a
1760	113,122,127,639,641,643	141,681,649	4.1	4*3*1*0*1*0*	221	*8 5* 1 . . 0 0 0 . . 3 . 1 2	. *1* .	Y	t
1761	115,122,440	182,*681*,649	6.0	*3*20	10*1*	. . R . . *2 2 2* . 1 *3* . . 0	. . .	*w*	h
1762	111,124,440		5.3	010	—	. . 2 . . *3 3* . . *2 4* . *2* .	. . .	W	
1763	113,127,442,446,639,641,643	*142*,*168*,671	6.0	6300*221*	*222*	. . . . . F *2* 1 . . 1 . . *1*	. . .	.	
1764	115,130,435,448,452		6.3	*5*F122	—	. . . . . F F . *3* 1 F . . .	. . .	.	n
1765	111,130,442	142,178,657	5.3	1*11*	*112*	. 0 2 . . *3 1* 2 . . 4 . . *1*	. . 1	W	
1766	124,435,440,448,650,651		6.8	F001FF	—	. . . . . F F . *8* 0 F . . .	. . .	.	np
1767	127,431,442	*142*,*178*,657	5.8	001	026	. . . . . 0 3 2 . . *1* . . 3	. . .	*y*	
1768	111,130,440,442		5.1	1F*11*	—	. . . . . 3 5 . 4 *1* 2 . . .	. . .	.	n
1769	113,435,440,639,640,641		5.3	20*11*30	—	. . . . . 5 5 . . 0 *4* . . .	. . .	.	t
1770	122,130,442,446	*182*,*451*,649	6.0	3F*2*0	221	. . *2* . . F *2* 0 . *13* . . 2	. . .	*y*	np
1771	111,124,442,639,641,643	139,455,650	5.2	0*21211*	0*31*	. . R . . *2* 0 0 . . F . . *1*	. . 0	*y*	h
1772	113,130,440,442,448,639,641		6.1	*8*F0232*1*-	—	. . . . . F F . *1* 3 3 . . .	. . .	.	n
1773	113,130,425,440,448,650,651		6.5	5F*221*FF	—	. . . . . F F . *5* 0 F . . .	. . .	.	n
1774	119,431,442	*142*,*178*,657	5.7	2*4*1	1*15*	. . . . . 1 *1 7* . . 0 . . 2	. . .	Y	
1775	111,431,440	142,449,649	5.3	*111*	*102*	*3 4* 1 . . *3 1* 1 . . *4* . *4 1*	. *1* .	W	
1776	122,122,442,446	*182*,451,649	6.4	30*2*0	*214*	. . 0 . . F *6* 2 . *1 7* . . *2*	. . .	Y	np
1777	124,431,446	*141*,*681*,649	5.9	*221*	*440*	. . . . . *1 3 1* . . *2* . . *3*	. . .	*y*	
1778	130,431,448,452		6.7	F12*2*	—	. . . . . F F . 7 0 F . . .	. . .	.	n
1779	130,431,442,446	*141*,*456*,649	6.5	F0*1*0	*443*	. . . . . F *7* 0 . . F . . *4*	. . .	.	
1780	111,446,451,639,641,643	*182*,681,649	6.6	1*1*0102	*124*	. . R . . *8 5 3* . 0 F . *3 2*	. . .	*y*	vhg
1781	124,431,448		6.1	*1*01	—	. . . . . F F . *11* F . . .	. . .	.	n
1782	127,442,446,639,640,641	182,449,649	5.0	3*31112*	3*11*	*6 8* 0 . . 0 0 0 . *11* . 0 0	. . .	*o*	t
1783	111,119,442	141,*454*,650	6.0	*224*	b*27*	. . *6* . . b *8 4* . . *3* . . *7*	. . .	*y*	
1784	111,124,431	*141*,*456*,649	5.6	0*11*	000	. . . . . 2 0 *4* . . 1 . . 0	. . .	*y*	
1785	124,130,446	*142*,*178*,657	5.7	3*31*	132	. . . . . 1 1 3 . . 0 . . 2	. . .	*y*	
1786	124,448,454	*182*,681,649	6.5	01*2*	0*14*	. . R . . *7 4 2* . 0 *4* . . *2*	. . .	.	h
1787	130,448,452,454		6.6	F*322*	—	. . . . . F F . *6* 0 F . . .	. . .	.	
1788	130,448,452,454		5.7	F*33*1	—	. . . . . F F . 3 2 0 . . .	. . .	.	
1789	113,448,452,639,640,641		4.7	41*2201*	—	*3 5* 0 . . *11* . . *22* . *3* .	. . .	W	vag
1790	116,124,448,452		6.6	F*2*30	—	. . . . . F F . $\frac{1}{1}$ 0 *2* . . .	. . .	.	nc
1791	116,124,448,452		6.7	F*33*1	—	. . . . . F F . $\frac{1}{0}$ *2* . . .	. . .	.	nc
1792	127,443,456	139,454,650	4.6	*2*20	*541*	. . 2 . . *2 2 2* . . *2* . *2 3*	. . .	W	
1793	113,130,456,642,643,644	141,681,649	3.6	3*22222*	331	*3 4* 1 . . *2* 1 0 . 2 4 . 2 2	0 1 .	*g*	t
1794	130,438,449,452		6.1	F11*1*	—	. . . . . *33* . . *34* . . .	. . .	.	t
1795	127,443,456	142,449,649	4.6	2*5*2	658	*2 4* 0 . . 4 0 4 . *2 3* . 2 6	. . .	*o*	t
1796	119,441,451	182,449,649	4.5	100	*212*	b *3 2 2* . *11 3* . 2 4 . 1 1	. 0 .	*g*	
1797	111,113,116,130,431,435,438	182,182,185	1.4	*202*1100-	465-	*9 8 2 1* 0 *2 2 1* . . *9* . 4 3	*3* 0 .	W	de
1798	122,130,456	*139*,*456*,650	6.1	1*2*0	*901*	. . . . . F 0 *3* . . *4* . . *3*	. . .	.	
1799	116,127,446,642,643,644		5.3	0*22*120	—	. . . . . F 5 . . 4 4 . . .	. . .	*g*	v
1800	116,127,446,456,642,643,644		3.9	2540021	—	. *11* 0 . 2 2 . . *4* 1 . *4* .	. . .	*y*	ta

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1801	Sextans . .	18	3474	—	5.0	− 7 50	6	6	—	5.9	6	5.85	.09	—	—
1802	Sextans . .	19	3483	+ 5° 2301	6.6	+ 5 12	6	6	6.5	6.2	3	5.98	.13	—	—
1803	Argo . . .	—	—	—	6.6	−28 1	F	F	—	6.4	3	6.10	.07	—	—
1804	Ursa Major	—	—	+60° 1246	6.9	+60 37	6	6	6.3	—	3	6.19	.13	6.1	.13
1805	Hydra . .	—	3489	—	7.8	−26 26	F	F	—	6.4	4	6.20	.05	—	—
1806	Leo Minor .	22	3490	+32° 2005	8.2	+32 4	6	6·7	6.3	—	3	6.60	.07	6.2	.07
1807	Ursa Major	32	3496	+65° 767	9.3	+65 42	6	6	5.8	—	15	5.70	.05	5.6	.06
1808	Leo Minor .	23	3500	+30° 1981	9.4	+29 54	5	6	6.0	—	3	5.39	.05	5.7	.05
1809	Leo . . .	—	3506	+18° 2338	9.7	+18 20	F	6	6.7	—	3	6.55	.08	6.1	.00
1810	Ursa Major	λ 33	3505	+43° 2005	9.9	+43 31	3·4	3·4	3.5	—	6	3.57	.05	3.7	.03
1811	Leo . . .	35	3507	+24° 2207	9.9	+24 6			7.0	—					
1812	Leo . . .	ζ 36	3508	+24° 2209	10.0	+24 1	3	3	3.5	—	6	3.61	.07	3.7	.12
1813	Leo . . .	—	—	+26° 2064	10.0	+25 59	F	6	6.2	—	3	6.03	.11	5.9	.05
1814	Leo . . .	37	3510	+14° 2228	10.2	+14 21	F	6·5	5.7	—	3	5.87	.15	5.9	.05
1815	Sextans . .	22	3517	—	11.7	− 7 28	6	6·5	—	5.6	6	5.36	.06	—	—
1816	Camelopard.	—	3495	+84° 234	12.0	+84 51	6	5·6	5.0	—	3	5.58	.16	5.6	.15
1817	Ursa Major	—	3514	+69° 568	12.0	+69 22	6	6	6.0	—	3	5.91	.03	5.9	.04
1818	Ursa Major	—	—	+49° 1940	12.0	+49 0	F	6·7	6.0	—	3	6.17	.04	6.1	.11
1819	Ursa Major	—	—	+54° 1366	12.5	+54 24	6	6·7	7.0	—	4	6.46	.04	6.3	.19
1820	Hydra . .	—	3521	—	12.6	−28 23	F	F	—	5.8	3	5.53	.11	—	—
1821	Leo . . .	40	3522	+20° 2466	13.3	+20 5	F	6·7	5.9	—	6	4.95	.03	5.5	.24
1822	Hydra . .	—	—	—	13.3	−11 55	F	6	—	6.4	3	6.22	.09	—	—
1823	Leo . . .				13.4	+20 27									
1824	Leo . . .	γ 41	3523	+20° 2467	13.4	+20 27	2	2	2.0	—	15	2.24	.04	2.2	.05
1825	Sextans . .	23	3532	+ 3° 2352	14.9	+ 2 54	6	6	6.5	6.6	3	6.60	.12	6.2	.03
1826	Sextans . .	—	—	—	15.1	− 4 48	F	6	—	6.9	5	6.98	.05	—	—
1827	Ursa Major	μ 34	3533	+42° 2115	15.2	+42 6	3	3	3.1	—	6	3.12	.08	3.2	.07
1828	Leo . . .	42	3534	+15° 2192	15.4	+15 35	F	6	6.3	6.3	4	6.21	.09	6.0	.03
1829	Ursa Major	—	3531	+66° 664	15.5	+66 10	5	5	5.0	—	15	5.00	.06	5.0	.06
1830	Leo Minor .	27	3542	+34° 2120	16.2	+34 31	6	6	6.0	—	3	5.90	.11	5.8	.17
1831	Camelopard.	—	3528	+83° 297	16.3	+83 10	5	5	5.2	—	6	5.29	.01	5.4	.20
1832	Leo Minor .	28	3548	+34° 2123	17.2	+34 19	F	F	5.8	—	3	5.87	.12	—	—
1833	Sextans . .	25	3551	—	17.4	− 3 28	F	6	—	6.2	6	5.93	.04	—	—
1834	Leo Minor .	30	3560	+34° 2128	19.0	+34 25	5·4	5·4	4.5	—	3	5.07	.08	4.8	.17
1835	Leo . . .	44	3561	+ 9° 2351	19.0	+ 9 25	6	6	6.0	6.0	4	6.15	.13	5.8	.03
1836	Sextans . .	—	3563	—	19.7	− 6 27	F	6·7	—	6.0	3	6.04	.04	—	—
1837	Hydra . .	μ 42	3568	—	20.3	−16 13	4	4	—	4.0	6	4.14	.09	—	—
1838	Ursa Major	—	3567	+49° 1961	20.7	+49 27	6	6	6.2	—	3	6.40	.09	6.2	.17
1839	Sextans . .	27	3573	—	20.7	− 3 47	F	6	—	6.8	7	6.54	.07	—	—
1840	Leo Minor .	31	3572	+37° 2080	20.9	+37 19	4·5	4·5	4.0	—	6	4.42	.02	4.3	.08
1841	Leo . . .	45	3575	+10° 2152	21.3	+10 22	6·	6	7.0	6.4	3	5.90	.03	5.9	.03
1842	Hydra . .	—	3578	—	21.7	−30 27	.4	4	—	4.4	6	4.50	.06	—	—
1843	Ursa Major	—	—	+64° 789	22.1	+64 51	6	6	6.2	—	3	5.88	.11	5.8	.08
1844	Ursa Major	36	3580	+56° 1459	22.9	+56 36	5	5	4.7	—	6	4.89	.03	5.0	.19
1845	Leo Minor .	32	3584	+39° 2357	23.1	+39 34	6	6	6.2	—	3	5.77	.00	5.8	.05
1846	Sextans . .	29	3590	− 1° 2395	23.4	− 2 8	5	5	5.0	5.5	3	5.17	.00	—	—
1847	Camelopard.	—	3577	+81° 343	23.6	+81 7	F	6	6.2	—	7	6.50	.09	6.4	.05
1848	Hydra . .	—	3596	—	23.9	−29 3	F	F	—	6.0	3	5.90	.07	—	—
1849	Hydra . .	—	3598	—	24.1	−30 0	F	F	—	6.0	3	5.56	.13	—	—
1850	Sextans . .	30	3597	+ 0° 2663	24.2	− 0 1	5	5	5.3	5.2	7	4.94	.07	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1801	119,431,438,642,643,644		5.8	*52*0332	—	. . R. . 0 0. . *1 9* . *2* .	. . .	*o*	dvth
1802	113,130,451		6.0	*331*	—	. . R. . *2 2* 3 . 0 *3* . 2 .	. . .	.	h
1803	111,438,452		6.1	*21*0	—	. . . . . F F . *6* 1 0 . . .	. . .	.	n
1804	122,443,452	*142,178*,666	6.2	*3*22	*4*02	. . . . . *4 4 1* . . *5* . . *1*	. . .	.	dec
1805	116,438,452,454		6.2	F*111*	—	. . . . . F F . *2* 0 F . . .	. . .	.	
1806	431,438,451	*141,455*,650	6.6	02*1*	*364*	. . R. . *8 5 5* . . F . . *4*	. . .	*y*	eh
1807	111,113,116,119,122,130,438	*132,147,176*	5.7	5511*211*-	050	. . *8* . . 1 1 *1* . . 0 . . *1*	. . .	*y*	s
1808	431,438,454	*141,455*,650	5.4	*1*11	422	. . R. . *4* 4 4 . . 3 . . 3	. . .	w	h
1809	438,449,451	*141,456*,650	6.6	02*2*	*555*	. . . . . F *81* . . *5* . . *5*	. . .	*y*	
1810	130,443,465,642,643,644	140,453,650	3.6	012212	110	*3* 0 0 . . *2 1* 1 . . *1* . *2* 1	*3 2* 0	W	
1811			*5.8*						d
1812	125,443,451,642,643,644	141,685,650	*3.8*	230*222*	322	*12*1 $\frac{2}{4}$ *22* $\frac{0}{1}$ 1 03	13	*r*	d
1813	130,441,449	*141,455*,650	6.0	*3*02	02*2*	. . . . . F *2* 0 . . F . . *1*	. . .	.	
1814	122,441,454	*141,456*,650	5.9	*42*1	*1*11	. . *1* . . F *33* . . 2 . . 0	. . .	O	t
1815	119,441,451,643,644,645		5.4	12*3*21*1*	—	. . R. . 42 . . *15* . . .	. . .	*y*	h
1816	122,443,454	*143*,168,671	5.6	*44*0	142	. . . . . 2 *46* . . 1 . . 0	. . .	*y*	n
1817	438,454,456	*142,178*,671	5.9	00*1*	*1*01	. . . . . *111* . . 2 . . 0	. . .	*y*	
1818	130,443,449	*142,178,666*	6.2	*1*10	*4*00	. . . . . F *14* . . *5* 2 . *1*	. . *1*	.	
1819	130,438,451,454	*142,178,667*	6.5	F*1*10	700	. . . . . *7 4* 3 . . *4* . . *2*	. . .	.	
1820	438,449,452		5.5	*3*20	—	. . . . . F F . *5* 1 *2* . . .	. . .	.	n
1821	116,441,454,642,643,644	*141,456*,650	5.0	*2*00020	8*1*8	. . 0 . . F 1 7 . . 7 . . 5	. 2 .	*y*	ve
1822	438,449,452		6.2	*21*2	—	. . . . . F *4* . . 0 *5* . . .	. . .	.	
1823			*2.5*						dte
1824	111,113,116,119,122,130,435	182,182,185	*3.7*	31*22113*-	*2*03-	*12*40 $\frac{4}{2}$ 0 0 1 . . *2* . *1*0	20	.	dte
1825	113,441,454	*182*,681,650	6.6	*33*0	*445*	. . R. . *883* . *29* . . *4*	. . .	o	h
1826	116,119,438,449,451		7.0	FF11*1*	—	. . . . . F b . . *3* b . . .	. . .	.	d
1827	122,443,451,642,643,644	140,453,650	3.1	*12*1216	1*1*2	2 5 *2* 1 . 1 1 2 . . *1* . 2 1	3 0 0	O	t
1828	119,438,449,451	*141,456*,650	6.2	F*122*	*221*	. . 1 . . F *41* . *1* F . . *2*	. . .	w	
1829	113,116,125,128,130,438,443	132,147,176	5.0	5b*1*232-	02*1*	. . . . . 0 0 0 . . 3 . *2* 0	. . .	*y*	s
1830	113,122,452	*140,454*,650	5.9	*311*	*5*03	. . 1 . . *111* . . *2* . . *1*	. . .	w	e
1831	122,130,449,642,643,644	*143*,168,671	5.3	00001*1*	443	. . . . . *331* . . 0 . *11*	. . .	*y*	n
1832	113,122,451		5.9	12*3*	—	. . *2* . . F F *3* . . *2* . . .	. . .	*o*	
1833	119,125,452,643,644,645		5.9	02*1111*	—	. . R. . F *1* . . 1 *2* . . .	. . .	w	h
1834	113,128,452	*140*,454,650	5.1	*211*	*156*	. . 4 . . *556* . . 7 . *43*	. . .	*y*	
1835	119,125,130,451	*140*,454,650	6.2	22F*3*	*443*	. . *4* . . *444* . *45* . . *4*	. . .	*o*	t
1836	122,441,451		6.0	01*1*	—	. . . . . F 1 . . *21* . . .	. . .	.	t
1837	122,128,454,643,644,645		4.1	154103	—	*852*0 . 0 0 . . 0 3 . *1* .	. . .	O	t
1838	119,443,454	*142,178*,666	6.4	1*2*2	*6*10	. . . . . *664* . . *3* . . *2*	. . 2	Y	dec
1839	125,130,441,451,643,644,645		6.5	5F*31*020	—	. . R. . F 7 . . 1 F . *2* .	. . .	*y*	vh
1840	122,443,452,643,644,646	140,454,650	4.4	00*1101*	*131*	. . 1 . . 0 0 *3* . . 0 . *11*	. . *1*	Y	n
1841	125,441,454	*140*,454,650	5.9	00*1*	*1*00	. . 3 . . *119* . 32 . . 0	. . .	w	
1842	113,432,452,643,644,645		4.5	5100*13*	—	. . . *2* . *44* . *111* . *2* .	. . .	.	nvt
1843	119,443,454	*142,178*,671	5.9	*32*0	*221*	. . . . . *111* . . 2 . . *1*	. . .	.	
1844	122,443,454,643,646,647	142,178,666	4.9	10021*0*	*2*06	. . 2 . . 1 1 *2* . . 0 . 1 1	. . .	*y*	
1845	439,443,454	183,454,650	5.8	000	*111*	. . 2 . . 0 0 2 . . *1* . . 0	. . 2	*y*	
1846	119,441,451		5.2	000	—	. . 1 . . *222* . 01 . *1* .	. . .	W	
1847	116,443,454,456,643,645,646	*143,178,672*	6.5	*8*121321	*3*F0	. . . . . F *75* . . *4* . . *1*	. . .	*o*	npe
1848	125,432,452		5.9	01*2*	—	. . . . . F F . *412* . . .	. . .	.	nt
1849	432,439,452		5.6	*322*	—	. . . . . F F . *121* . 0 .	. . .	.	nd
1850	122,449,451,452,642,643,645		4.9	*8*103*11*	—	. . 0 . . 113 . 04 . 1 .	. . .	W	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1851	Draco . .	—	3593	+76° 393	24.9	+76 20	5·4	5·4	5.0	—	6	5.10	.03	5.0	.07
1852	Leo Minor .	33	3602	+33° 1999	25.0	+33 0	F	6	6.1	—	7	5.67	.07	5.8	.00
1853	Sextans . .	—	3603	—	25.0	− 7 1	F	6·7	—	6.6	6	6.44	.05	—	—
1854	Hydra . .	—	—	—	25.1	−12 59	6	6	—	5.9	3	5.68	.08	—	—
1855	Hydra . .	—	—	—	25.2	−25 52	F	F	—	6.6	3	6.38	.11	—	—
1856	Leo . . .	46	3606	+14° 2255	25.8	+14 45	6	6·5	6.0	—	3	5.71	.03	5.9	.11
1857	Ursa Major	—	3607	+41° 2101	26.2	+41 3	5	5	5.2	—	3	5.10	.07	4.8	.05
1858	Hydra . .	—	—	—	26.2	−27 37	F	F	—	6.4	3	5.96	.07	—	—
1859	Leo . . .	ϱ 47	3609	+10° 2166	26.5	+ 9 55	4	4	4.1	3.9	6	3.99	.06	4.1	.07
1860	Leo Minor.	34	3610	+35° 2154	26.7	+35 36	6	6	6.0	—	3	5.54	.07	5.5	.09
1861	Ursa Major	37	3612	+57° 1277	27.4	+57 42	5	5·6	5.0	—	6	5.16	.01	5.2	.20
1862	Hydra . .	44	3620	—	28.3	−23 8	6	6	—	5.6	6	5.42	.04	—	—
1863	Leo . . .	48	3621	+ 7° 2330	28.5	+ 7 34	6	6·5	6.3	5.5	3	5.15	.11	5.4	.04
1864	Leo . . .	49	3622	+ 9° 2374	28.8	+ 9 16	F	6	6.2	6.0	6	5.74	.06	5.7	.03
1865	Hydra . .	—	3627	—	28.9	−22 33	F	6·7	—	6.5	3	6.03	.16	—	—
1866	Leo Minor .	35	3625	+37° 2100	29.4	+36 57	6	6	6.3	—	3	6.34	.07	6.0	.00
1867	Hydra . .	—	—	—	30.4	−26 3	F	F	—	6.6	3	6.11	.05	—	—
1868	Hydra . .	—	—	—	31.0	−28 9	F	F	—	7.0	4	6.77	.04	—	—
1869	Hydra . .	—	3637	—	31.6	−12 46	6·5	6·5	—	5.4	6	5.35	.08	—	—
1870	Hydra . .	—	3638	—	31.6	−26 47	5·6	5·6	—	5.3	3	5.19	.15	—	—
1871	Ursa Major	—	3639	+54° 1387	31.7	+54 17	6	6	6.0	—	3	5.79	.11	5.8	.13
1872	Leo Minor .	37	3640	+32° 2061	32.0	+32 36	5·4	5·4	4.8	—	7	4.76	.05	5.0	.07
1873	Leo Minor .	38	3641	+38° 2166	32.3	+38 32	6	6·5	5.7	—	3	5.77	.08	5.8	.08
1874	Leo . . .	50	3643	+16° 2144	32.5	+16 45	6	6·7	6.5	—	3	6.54	.00	6.2	—
1875	Hydra . .	φ 2	3646	—	32.7	−16 15	5	5	—	5.3	6	5.16	.06	—	—
1876	Ursa Major	—	3645	+69° 583	33.4	+69 3	6	6	5.5	—	4	5.94	.00	5.9	.04
1877	Ursa Major	38	3647	+66° 678	33.8	+66 20	5	5	5.2	—	3	5.02	.19	5.3	.16
1878	Ursa Major	—	3652	+69° 586	34.5	+69 42	5	5·6	4.7	—	17	5.25	.03	5.2	.03
1879	Sextans . .	33	3663	− 0° 2364	35.3	− 1 7	F	6·7	6.5	6.5	6	6.24	.03	—	—
1880	Ursa Major	R	—	+69° 587	36.1	+69 24	F	var.	var.	—	7	var.	—	var.	—
1881	Ursa Major	39	3664	+57° 1286	36.2	+57 49	6	6·5	5.8	—	3	5.69	.05	5.6	.05
1882	Ursa Major	—	3665	+46° 1657	36.5	+46 56	5	5	5.2	—	3	5.34	.07	5.2	.11
1883	Leo Minor .	40	3666	+27° 1927	36.5	+26 58	6	6·5	5.3	—	3	5.63	.05	5.3	.15
1884	Leo Minor .	41	3671	+23° 2253	36.9	+23 49	5	6·5	5.5	—	6	5.09	.04	5.1	.07
1885	Sextans . .	35	3672	+ 5° 2384	37.2	+ 5 23	6	6·7	6.2	6.2	3	6.01	.04	6.0	.08
1886	Leo Minor .	42	3685	+31° 2180	39.2	+31 19	5	5	5.2	—	6	5.44	.06	5.2	.08
1887	Sextans . .	37	3690	+ 7° 2356	39.8	+ 7 0	F	6·7	7.2	6.7	6	6.24	.09	—	—
1888	Leo . . .	m 51	3691	+19° 2371	39.9	+19 32	6	6·5	5.6	—	3	5.72	.11	5.8	.07
1889	Leo . . .	k 52	3693	+14° 2294	40.1	+14 51	6	6·5	5.8	5.9	3	5.71	.03	5.8	.07
1890	Ursa Major	—	—	+65° 803	40.8	+65 46	6	6	6.5	—	3	6.32	.09	6.0	.15
1891	Hydra . .	b^1 3	3697	—	41.0	−16 40	6	6	—	5.8	3	5.40	.07	—	—
1892	Leo . . .	l 53	3708	+11° 2283	42.9	+11 11	5	5·6	5.3	5.5	6	5.31	.06	5.3	—
1893	Hydra . .	ν 4	3715	—	43.7	−15 34	3·4	3·4	—	3.0	7	3.26	.07	—	—
1894	Ursa Major	43	3713	+57° 1294	43.8	+57 13	6	6	6.1	—	3	5.86	.04	5.7	.08
1895	Hydra . .	—	—	—	43.8	− 9 13	6	6	—	6.4	3	6.22	.04	—	—
1896	Ursa Major	42	3714	+60° 1296	43.9	+59 57	6	6	5.8	—	3	5.69	.03	5.9	.16
1897	Sextans . .	41	3718	—	44.3	− 8 16	5	5	—	6.0	6	5.75	.04	—	—
1898	Ursa Major	—	—	+70° 634	45.4	+70 29	6	6	6.0	—	3	6.07	.07	5.9	.08
1899	Ursa Major	—	—	+53° 1439	45.4	+53 13	6	6	6.2	—	3	6.64	.13	6.1	.03
1900	Ursa Major	—	—	+53° 1440	45.4	+53 9			6.0	—	4	6.50	.13		

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1851	119,443,454,643,644,645	*143*,178,672	5.1	0*21*011	*211*	. . . . . *551* . . 2 . *31*	. . .	Y	
1852	116,443,454,456,643,644,646	*140,454*,650	5.7	7021301	111	. . *1* . . F12 . . 4 . . 1	. . .	w	
1853	432,439,451,643,646,648		6.4	*211211*	—	. . . . . F*3* . . 0F . . .	. . .	.	d
1854	432,439,451		5.7	20*2*	—	. . . . . 11 . . 0*8* . . .	. . .	.	
1855	125,443,452		6.4	3*2*0	—	. . . . . FF . *9* 0F . . .	. . .	.	
1856	111,443,454	*140,456*,650	5.7	0*1*0	*133*	*34*0 . . 1*11* . . 4 . . 2	. . .	O	n
1857	122,443,454	140,454,650	5.1	02*1*	*422*	. . . . . *111* . . 7 . . *3*	. . *2*	W	
1858	432,439,452		6.0	1*2*0	—	. . . . . FF . *5*21 . . .	. . .	.	n
1859	114,443,454,643,644,646	140,454,650	4.0	*222031*	*121*	420 . . 112 . 00 . 01	. 0 .	W	
1860	125,443,454	183,454,650	5.5	01*2*	*122*	. . 4 . . 333 . . *2* . . 0	. . .	W	
1861	111,443,454,643,644,646	142,178,666	5.2	00*1*100	*505*	. . 0 . . *202* . . 1 . . 0	. . .	*y*	
1862	432,439,452,643,646,647		5.4	21*1011*	—	. . *2* . . 44 . 1*15* . . .	. . .	o	
1863	125,443,454	*140*,454,650	5.2	*2*03	213	. . 3 . . 649 . 0F . . 2	. . .	*y*	
1864	125,443,454,643,646,648	*140*,454,650	5.7	13*2*021	100	. . 0 . 2F13 . 10 . *1*0	. . .	w	dv
1865	111,439,452		6.0	3*4*1	—	. . . . . F1 . 03*3* . . .	. . .	*r*	
1866	432,443,454	183,*454*,650	6.3	01*2*	*333*	. . *4* . . *552* . . F . . *3*	. . *6*	*y*	
1867	111,436,452		6.1	*111*	—	. . . . . FF . *1*3F . . .	. . .	.	g
1868	116,432,439,452		6.8	F10*1*	—	. . . . . FF . *8*0F . . .	. . .	.	n
1869	114,443,451,644,645,646		5.4	5*21022*	—	. . . . . 02 . . *35* . *4* .	. . .	.	vtg
1870	432,436,452		5.2	3*4*0	—	. . . . . 00 . *525* . . .	. . .	.	t
1871	436,439,452	*142,178*,667	5.8	*131*	*313*	. . . . . 000 . . *1* . . 0	. . .	*o*	
1872	111,446,454,456,644,646,647	140,454,650	4.8	1*6*20110	412	. . 2 . . *22*0 . . 1 . *12*	. . .	Y	
1873	116,446,452	183,454,650	5.8	1*2*1	*220*	. . *1* . . 0*22* . . *1* . . 0	. . 2	*o*	
1874	432,446,454	*140,183*,650	6.5	000	*314*	. . *4* . . *742* . . *4* . . *3*	. . .	*y*	
1875	432,443,451,645,646,647		5.2	2*2*2102	—	*878* . . *22* . . *25* . *4* .	. . .	*y*	n
1876	111,128,436,451	*142,178,672*	5.9	0000	0*1*1	. . . . . *115* . . 2 . . 0	. . .	*o*	
1877	116,446,451	*142,178*,672	5.0	*5*31	*7*13	. . . . . 002 . . 7 . 03	. . .	O	
1878	114,120,125,128,128,432,436	132,*147,176*	5.2	233*0312*-	1*1*0	. . . . . *205* . . 5 . . 0	. . .	*o*	s
1879	436,446,452,647,649,650		6.2	1010*1*1	—	. . R . . F*1*1 . 1F . . .	. . .	.	h
1880	432,443,446,449,646,647,648	*142,178,672*	var.	FFFFRRR	FFR	. . . . . FVV . . F . . V	. . .	.	vtpe
1881	111,446,452	*142,178*,666	5.7	1*1*1	*200*	. . 0 . . 1*11* . . *4* . . *1*	. . .	w	
1882	114,449,451	142,*178*,666	5.3	10*2*	*400*	. . . . . *331* . . 0 . *31*	. . 1	*y*	
1883	436,449,451	140,454,650	5.6	*111*	*415*	. . 1 . . 2*0*4 . . *3* . . *3*	. . .	*y*	
1884	128,446,451,646,647,648	140,454,650	5.1	21*1*10*1*	10*2*	*12*1 . . *1*53 . . *2* . . 0	. . .	*y*	n
1885	111,436,454	*140,183*,650	6.0	10*1*	*220*	. . R . *22*10 . 0*3* . *20*	. . .	*o*	dh
1886	114,128,451,646,647,648	140,454,650	5.4	31*1131*	*033*	. . 0 . . *442* . . *5* . *62*	. . .	W	
1887	646,649,650,651,652,654		6.2	*225113*	—	. . 4 . . F*1*8 . 3F . *6* .	. . .	.	
1888	111,436,452	*140,454*,650	5.7	*3*11	310	. . R . . 1*12* . . 00*11*	. . .	*o*	h
1889	116,449,451	140,*456*,650	5.7	00*1*	*121*	*342* . . 1*11* . 00 . *11*	. . .	w	
1890	114,449,451	*142,178,672*	6.3	*221*	*361*	. . . . . *550* . . F . . *3*	. . .	.	
1891	111,449,451		5.4	01*2*	—	. . 0 . . 44 . . 23 . 0 .	. . .	w	n
1892	111,123,452,644,647,649	140,183,650	5.3	121*23*0	*100*	102 . . *311* . *1*F . 10	. . .	w	
1893	114,125,451,645,647,648,649		3.3	0702*132*	—	0*1*01 . 12 . . *22* . 0 .	. . .	Y	nta
1894	117,436,454	*142,178*,666	5.9	01*1*	*420*	. . 0 . . *110* . . *2* . . *2*	. . .	*o*	
1895	123,449,451		6.2	*1*10	—	. . . . . *44* . . 0*1* . . .	. . .	.	
1896	123,449,451	*142,178*,666	5.7	001	*253*	. . 2 . . 11*1* . . 0 . . 2	. . .	*y*	
1897	111,449,451,645,647,649		5.8	2101*21*	—	. . R . . *88* . . 0*5* . *2* .	. . .	*y*	vhg
1898	111,449,451	*142,178,672*	6.1	20*1*	*240*	. . . . . *333* . . 0 . . *2*	. . .	.	
1899	128,432,452	*142,178,667*	6.6	*331*	24R	. . . . . 00 *6* . . *5* . . 7 . . F . . 3	. . .	.	dec
1900	117,432,447,452		6.5	F2*32*			. . .	.	dec

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10h–11h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
1901	Ursa Major	44	3725	+55° 1418	46.3	+55 13	5	5·6	5.7	—	3	5.39	.07	5.4	.16
1902	Leo Minor.	46	3728	+34° 2172	46.6	+34 52	4	4	4.0	—	6	3.92	.08	3.9	.04
1903	Ursa Major	ω 45	3729	+43° 2058	47.1	+43 50	5	5	5.2	—	3	4.90	.07	4.6	.05
1904	Leo . . .	p¹	3732	− 1° 2460	47.6	− 1 30	6	5·6	5.7	5.9	3	5.87	.08	—	—
1905	Hydra . .	b² 6	3733	—	47.6	−19 30	5	5	—	5.4	7	5.19	.07	—	—
1906	Leo Minor.	47	3736	+34° 2178	48.4	+34 40	F	F	7.0	—	3	5.80	.07	—	—
1907	Ursa Major	46	3741	+34° 2181	49.1	+34 9	6	5·6	5.5	—	3	5.24	.13	5.1	.04
1908	Leo . . .	54	3742	+25° 2314	49.1	+25 23	4·5	4·5	4.0	—	3	4.33	.03	4.3	.07
1909	Leo . . .	55	3749	+ 1° 2501	49.5	+ 1 22	6	6	6.2	6.2	3	5.99	.04	5.7	.13
1910	Leo . . .	—	—	+23° 2279	49.9	+23 0	6	6	6.2	—	4	6.25	.10	6.2	.03
1911	Draco . .	—	3747	+78° 367	50.3	+78 25	6	6	6.2	—	8	6.26	.06	6.4	.11
1912	Ursa Major	—	—	+52° 1528	52.2	+52 32	6	6	6.0	—	3	6.40	.15	6.2	.08
1913	Ursa Major	47	3757	+41° 2147	52.8	+41 4	5	5	4.8	—	3	5.17	.04	5.1	.08
1914	Ursa Major	—	—	+36° 2139	52.8	+36 46	6	6	6.0	—	3	6.34	.09	6.0	.15
1915	Ursa Major	—	3758	+46° 1680	53.4	+46 9	6	6	6.0	—	3	5.70	.05	5.6	.16
1916	Ursa Major	—	3760	+43° 2068	53.5	+43 34	6	6	6.0	—	3	6.10	.03	5.9	.09
1917	Crater . .	—	—	—	53.5	−15 43	F	6	—	6.4	3	6.28	.03	—	—
1918	Crater . .	α 7	3766	—	53.9	−17 40	4	4	—	4.4	3	4.09	.07	—	—
1919	Ursa Major	49	3765	+39° 2400	54.1	+39 51	5	5	4.9	—	3	5.40	.09	5.0	.08
1920	Crater . .	—	—	—	54.2	−13 26	F	6	—	6.3	3	6.18	.12	—	—
1921	Leo . . .	d 58	3768	+ 4° 2407	54.4	+ 4 16	5	5·4	4.5	5.3	6	4.97	.06	5.1	.20
1922	Leo . . .	c 59	3769	+ 6° 2384	54.5	+ 6 44	5	5·6	5.2	5.3	3	5.14	.07	5.3	.15
1923	Ursa Major	β 48	3767	+57° 1302	54.6	+57 1	2·3	2·3	2.3	—	15	2.60	.04	2.5	.07
1924	Leo . . .	p² 61	3775	− 1° 2471	55.7	− 1 50	5	5	5.2	5.4	6	5.00	.08	—	—
1925	Leo . . .	b 60	3776	+20° 2547	55.9	+20 49	4·5	5·4	4.3	—	3	4.48	.11	4.4	.20
1926	Ursa Major	α 50	3777	+62° 1161	56.3	+62 24	2	2	2.0	—	15	1.96	.03	2.1	.07
1927	Hydra . .	8	3778	—	56.6	−26 11	F	F	—	6.5	4	6.04	.12	—	—
1928	Crater . .	—	—	—	57.3	−10 39	F	6·5	—	5.7	3	5.63	.11	—	—
1929	Leo . . .	p³ 62	3782	+ 0° 2729	57.4	+ 0 38	6	6	6.5	6.3	3	6.15	.17	5.9	.05
1930	Ursa Major	51	3784	+39° 2414	57.9	+38 53	6	6·5	6.2	—	3	5.84	.03	5.7	.24
1931	Leo . . .	χ 63	3788	+ 8° 2455	58.8	+ 7 59	5	5·4	5.2	4.8	6	4.74	.04	5.0	.15
1932	Hydra . .	χ 9	3793	—	59.6	−26 39	4·5	4·5	—	4.8	3	5.19	.07	—	—
1933	Hydra . .	—	3794	—	0.1	−26 38	F	6·5	—	6.4	7	5.55	.10	—	—
1934	Leo . . .	p⁴ 65	3798	+ 2° 2387	0.8	+ 2 37	6	6·5	6.0	5.9	6	5.69	.06	5.7	.25
1935	Hydra . .	—	3799	—	0.9	−28 5	F	F	—	6.9	5	6.40	.03	—	—
1936	Ursa Major	—	—	+68° 632	2.0	+67 52	6	6	6.5	—	4	6.04	.02	5.8	.08
1937	Hydra . .	—	—	—	2.2	−29 31	F	F	—	6.7	3	6.49	.09	—	—
1938	Leo . . .	67	3809	+25° 2344	2.4	+25 20	6	6·5	6.0	—	3	5.56	.00	5.5	.15
1939	Hydra . .	—	—	—	2.5	−29 19	F	F	—	6.5	4	6.25	.03	—	—
1940	Ursa Major	—	3811	+37° 2162	2.8	+36 58	6	6	5.9	—	3	6.14	.09	5.8	.08
1941	Ursa Major	ψ 52	3812	+45° 1897	2.9	+45 9	3	3·4	3.5	—	6	3.12	.03	3.4	.12
1942	Hydra . .	10	3815	—	2.9	−27 26	5	5	—	5.8	6	5.35	.03	—	—
1943	Hydra . .	—	—	—	2.9	−29 6	F	F	—	F	3	7.06	.09	—	—
1944	Hydra . .	—	3822	—	4.1	−31 43	5	5	—	5.9	6	5.59	.03	—	—
1945	Ursa Major	—	3821	+69° 602	4.5	+68 54	6	6·7	6.2	—	3	6.57	.11	6.2	.11
1946	Crater . .	β 11	3826	—	5.8	−22 10	4	4	—	4.6	6	4.42	.03	—	—
1947	Crater . .	—	—	—	6.5	−17 51	6	6	—	6.2	3	6.15	.07	—	—
1948	Leo . . .	p⁵ 69	3832	+ 0° 2761	7.6	+ 0 36	5	5·6	5.3	5.7	3	5.48	.12	5.1	.04
1949	Leo . . .	δ 68	3834	+21° 2298	7.7	+21 11	2·3	2·3	2.3	—	11	2.75	.04	2.7	.20
1950	Leo . . .	—	3837	+ 8° 2476	7.8	+ 8 43	6	6	7.0	6.3	3	5.85	.07	6.1	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1901	114,436,452	142,178,666	5.4	20*1*	*224*	. . 0 . . *4 2 2* . . 3 . . 0	. . .	*o*	
1902	111,131,454,644,645,646	140,453,658	3.9	4*4*220*1*	*011*	. . 0 . . 2 2 2 . . 1 . 3 0	. . .	Y	
1903	117,125,452	140,453,658	4.9	*21*0	*224*	. . *4* . . 1 1 3 . . *5* . *1 3*	. . 0	W	
1904	123,449,452		5.9	*22*0	—	. . . . . *1 7 3* . *2 6* . *4* .	. . .	*y*	nd
1905	114,131,447,452,645,647,648		5.2	5*122211*	—	. . 3 . . *22* . . *13* . . .	. . .	Y	nvg
1906	111,436,454		5.8	*21*0	—	. . 3 . . F F **0** . . F . . .	. . .	*o*	n
1907	111,436,454	140,453,658	5.2	3*31*	*012*	. . 0 . . 6 0 2 . . *3* . . *1*	. . .	Y	n
1908	117,125,451	140,454,655	4.3	*01*0	*210*	7 6 1 . 7 1 1 *2* . . 1 . 1 0	. 2 .	w	d
1909	114,447,454	140,*454*,653	6.0	*11*0	*206*	. . 0 . . *22* 0 . 0 *3* . . *3*	. . .	Y	
1910	117,447,452,655	*140*,454,655	6.2	*31*22	*01*0	. . . . . *4 4 2* . . F . . 0	. . .	.	
1911	123,450,456,459,644,645,647	*143,178*,672	6.3	1*22223*1-	*222*	. . . . . *5 5 3* . . *6* . . 1	. . .	*o*	p
1912	117,123,452	*142,178,667*	6.4	*43*0	*420*	. . . . . *6 6 6* . . F *2* . *2*	. . .	.	e
1913	114,131,454	140,453,658	5.2	*10*1	*03*0	. . 1 . . *22 4* . . *3* . *21*	. . *1*	Y	
1914	120,125,454	*183*,453,658	6.3	*12*2	*361*	. . . . . *5 5 5* . . *21* . *3*	. . .	Y	
1915	123,436,454	*141*,182,666	5.7	*11*1	*333*	. . . . . 1 1 1 . . 0 . . *1*	. . *1*	*o*	
1916	120,439,454	*183*,453,658	6.1	010	*140*	. . . . . *3 3 3* . . *4* . . *2*	. . 0	o	dec
1917	125,439,451		6.3	100	—	. . . . . F *5* . . *12* . *7* .	. . .	.	t
1918	117,439,451		4.1	*12*0	—	3 1 2 . . 0 0 . . 3 3 . 2 .	. . .	*o*	t
1919	128,439,452	140,453,658	5.4	*22*1	*255*	. . 0 . . *4 4 5* . . *5* . *24*	. . *3*	*y*	
1920	123,436,451		6.2	30*3*	—	. . . . . F *4* . . *15* . . .	. . .	.	
1921	139,432,447,644,645,646	140,452,653	5.0	*231130*	*360*	0 *1* 0 . . 0 *45* . 0 *1* . 0 1	. . .	O	
1922	141,432,454	140,452,653	5.1	*12*0	160	*123* . . *111* . *17* . *32*	. . .	w	
1923	114,120,123,125,128,134,142	101,132,145	2.6	0*312721*-	*102*	*5* 0 0 0 . *111* . . *6* . *41*	*42* .	W	ve
1924	114,139,447,644,645,646		5.0	6*20121*	—	. . 3 . . 0 0 2 . 1 *1* . 1 .	. . .	O	nt
1925	117,144,451	140,454,655	4.5	*23*0	*216*	9 1 *3* . . *112* . . 4 . *21*	. 9 .	*g*	t
1926	114,117,120,123,125,128,131	145,147,*176*	2.0	3*201132*-	*210*	1 0 *22* . 2 2 1 . . *6* . 5 1	0 0 .	Y	vtslhm
1927	139,436,439,454		6.0	F*23*1	—	. . *2* . . F F . 0 3 1 . . .	. . .	.	n
1928	117,139,439		5.6	30*2*	—	. . . . . F 0 . . *23* . *2* .	. . .	.	t
1929	120,125,452	142,*454*,653	6.2	*44*1	*422*	. . 0 . . *44* 1 . *15* . . *3*	. . .	O	n
1930	114,123,452	*183*,453,658	5.8	*01*0	272	. . 0 . . 0 *22* . . *1* . . *1*	. . 3	w	
1931	117,125,454,644,645,646	140,452,653	4.7	3*11*110	073	*120* . . 3 *15* . 0 *3* . *13*	. . .	W	
1932	114,123,451		5.2	0*12*	—	*8* **b** 0 . . *88* . *85* $_3$. *6* .	. . .	.	ndag
1933	120,134,439,447,647,648,649		5.6	*5523221*	—	. . . . . F 0 . *16* ^{3} . . .	. . .	.	n
1934	117,128,452,647,649,650	142,*452*,653	5.7	22*1131*	*463*	. . 0 . . 1 *11* . 0 0 . *30*	. . .	*o*	n
1935	114,123,125,436,450		6.4	0FF10	—	. . . . . F F . *43* F . . .	. . .	.	
1936	117,136,439,452	*142,182*,672	6.0	10*10*	*330*	. . . . . *223* . . F . . *2*	. . .	.	
1937	125,436,452		6.5	*221*	—	. . . . . F F . *504* . . .	. . .	.	
1938	120,444,452	140,*454*,655	5.6	000	*233*	. . *1* . . 202 . . 1 . . *1*	. . .	w	n
1939	125,134,436,439		6.2	F100	—	. . . . . F F . *211* . . .	. . .	.	
1940	114,444,452	183,453,658	6.1	2*12*	*441*	. . . . . *334* . . *4* . . *3*	. . .	o	t
1941	120,444,452,647,649,650	141,182,666	3.1	0*10022*	504	7 5 2 1 . 1 4 6 . . *1* . 2 3	3 . *1*	O	vt
1942	117,436,450,647,649,650		5.4	00*13*10	—	. . 1 . . *44* . *423* . 0 .	. . .	.	ndvg
1943	125,436,452		7.1	22*1*	—	. . . . . F F . **b** F F . . .	. . .	.	
1944	114,436,452,647,650,652		5.6	*210*110	—	. . . . . *66* . *611* . 0 .	. . .	.	vg
1945	128,439,452	*142,183,672*	6.6	30*2*	*614*	. . . . . *856* . . F . . *4*	. . .	.	n
1946	114,120,451,647,648,649		4.4	020*11*	—	0 *221* . *33* . *510* . 1 .	. . .	W	n
1947	117,439,451		6.2	*12*0	—	. . . . . *44* . . *25* . . .	. . .	.	
1948	114,439,451	*140*,454,653	5.5	3*21*	*354*	. . *3* . . *533* . *12* . *24*	. . .	w	n
1949	117,128,436,439,444,447,450	140,183,653	2.8	*160202*1-	*641*	*2831* . *333* . . 2 . *11*	*31* .	*r*	
1950	120,444,451	*140,452*,653	5.8	*10*2	252	. . . . . 0 0 **0** . 3 F . . 3	. . .	*o*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
1951	Leo . . .	θ 70	3838	+16° 2234	7.9	+16 5	3·4	3·4	3.3	—	10	3.47	.05	3.5	.08
1952	Leo . . .	72	3842	+23° 2322	8.8	+23 45	5	5	5.0	—	7	4.89	.08	5.2	—
1953	Ursa Major	—	—	+53° 1480	9.1	+53 26	6	6·7	6.5	—	3	6.17	.12	6.3	.13
1954	Leo . . .	n 73	3843	+14° 2367	9.6	+13 58	6	6·5	5.4	5.9	7	5.54	.10	5.8	.16
1955	Ursa Major	—	3846	+50° 1807	9.9	+50 8	6	6	6.0	—	6	5.99	.06	6.0	—
1956	Leo . . .	φ 74	3848	—	10.5	− 3 0	5·4	5·4	—	4.2	6	4.53	.05	—	—
1957	Crater . .	—	—	—	10.9	− 6 29	F	6·7	—	6.0	3	5.97	.15	—	—
1958	Leo . . .	75	3850	+ 2° 2409	11.1	+ 2 41	6	6·5	5.5	5.7	4	5.40	.08	5.4	.08
1959	Ursa Major	ξ 53	3851	+32° 2132	11.8	+32 12	4·3	4	3.7	—	6	3.80	.01	3.9	.12
1960	Ursa Major				11.8	+32 12									
1961	Ursa Major	ν 54	3852	+33° 2098	12.0	+33 45	3·4	3·4	3.4	—	7	3.78	.09	3.5	.07
1962	Ursa Major	55	3856	+38° 2125	12.6	+38 51	5	5	4.8	—	7	4.75	.06	4.6	.08
1963	Crater . .	δ 12	3859	—	13.3	−14 8	3·4	3·4	—	3.8	7	3.86	.09	—	—
1964	Ursa Major	—	—	+67° 692	13.5	+67 45	6	6	6.2	—	3	6.37	.07	6.2	.08
1965	Leo . . .	σ 77	3862	+ 6° 2437	14.9	+ 6 41	4	4·5	4.3	4.1	6	4.13	.07	4.4	.27
1966	Ursa Major	—	3864	+65° 828	15.7	+64 59	6	6·7	6.0	—	17	5.93	.03	5.8	.04
1967	Ursa Major	56	3868	+44° 2083	16.3	+44 9	6	6	5.3	—	3	5.07	.08	5.5	.07
1968	Crater . .	λ 13	3874	—	17.4	−18 7	6·5	6·5	—	5.4	4	5.04	.11	—	—
1969	Leo . . .	ι 78	3877	+11° 2348	17.7	+11 11	4	4	4.1	4.0	6	3.98	.04	4.2	.11
1970	Leo . . .	79	3879	+ 2° 2418	17.9	+ 2 4	6	6·5	6.0	6.0	3	5.49	.08	5.5	.05
1971	Crater . .	ε 14	3881	—	18.5	−10 12	5	5	—	5.5	3	4.98	.13	—	—
1972	Leo . . .	—	3882	+12° 2335	18.8	+12 5	6	6	6.1	6.3	3	5.80	.07	6.0	.15
1973	Crater . .	γ 15	3883	—	18.9	−17 2	4	4	—	4.2	6	4.16	.04	—	—
1974	Ursa Major	—	3885	+56° 1518	19.2	+56 31	6	6	6.2	—	3	5.86	.04	5.8	—
1975	Leo . . .	81	3886	+17° 2356	19.4	+17 8	6	6	6.0	—	3	5.47	.05	5.9	.17
1976	Leo . . .	83	3894	+ 3° 2502	20.7	+ 3 40	F	F	7.5	6.5	6	6.10	.08	—	—
1977	Crater . .	κ 16	3897	—	21.1	−11 42	6	6	—	6.1	6	5.81	.03	—	—
1978	Leo . . .	τ 84	3900	+ 3° 2504	21.8	+ 3 31	5	5	5.0	5.3	6	5.12	.02	5.0	.16
1979	Ursa Major	—	3904	+62° 1183	22.3	+62 26	F	6·7	6.4	—	3	5.78	.07	5.8	.08
1980	Ursa Major	57	3905	+40° 2433	22.6	+40 0	5	5	5.0	—	3	5.24	.11	5.0	.08
1981	Ursa Major	—	—	+57° 1324	23.0	+57 24	6	6	6.5	—	3	5.89	.09	6.0	.03
1982	Camelopard.	—	3906	+81° 373	23.4	+81 47	6	5·6	6.2	—	3	6.13	.03	6.1	.04
1983	Leo . . .	85	3910	+16° 2266	23.5	+16 5	6	6·5	6.2	—	3	6.04	.08	6.1	.12
1984	Hydra . .	—	—	—	23.7	−23 48	6	6	—	5.9	3	5.70	.08	—	—
1985	Ursa Major	58	3913	+43° 2122	24.0	+43 50	6	6	6.2	—	6	5.90	.08	5.9	.16
1986	Leo . . .	86	3915	+19° 2459	24.2	+19 4	6	6	5.7	—	3	5.72	.07	6.0	.15
1987	Leo . . .	e 87	3916	—	24.2	− 2 20	5	5	—	5.3	6	5.05	.04	—	—
1988	Draco . .	λ 1	3914	+70° 665	24.3	+70 0	3·4	3·4	3.3	—	15	4.09	.04	4.1	.09
1989	Ursa Major	—	3918	+61° 1246	25.5	+61 44	6	6	6.0	—	3	5.56	.04	5.3	.07
1990	Leo . . .	88	3919	+15° 2345	25.6	+15 2	6	6·5	6.4	—	3	6.11	.09	6.2	.09
1991	Hydra . .	*17*	3922	—	26.3	−28 36	5	5	—	5.2	4	4.98	.09	—	—
1992	Hydra . .	—	—	—	26.4	−26 5	F	F	—	6.6	5	6.57	.13	—	—
1993	Hydra . .	*18*	3926	—	27.0	−30 25	F	6·7	—	5.8	3	5.40	.11	—	—
1994	Hydra . .	ξ *19*	3928	—	27.1	−31 12	4	4	—	3.7	6	3.76	.08	—	—
1995	Crater . .	—	—	—	27.2	−15 37	F	6	—	6.3	3	5.68	.17	—	—
1996	Leo . . .	89	3930	+ 3° 2521	28.2	+ 3 44	6	6	6.2	6.2	3	5.73	.07	6.2	.08
1997	Ursa Major	—	3931	+55° 1473	28.5	+55 27	6	6	6.0	—	3	5.76	.12	5.8	.05
1998	Leo . . .	90	3932	+17° 2374	28.5	+17 27	6	6	5.7	—	3	5.71	.07	6.1	.11
1999	Draco . .	2	3933	+70° 670	29.0	+70 0	F	6·5	5.2	—	3	5.54	.04	5.4	.19
2000	Leo . . .	—	—	+11° 2377	29.5	+11 35	6	6	6.8	—	3	6.23	.04	6.4	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
1951	123,131,451,646,647,648,649	141,452,653	3.5	0040201-	112	*23*1. . *1*00. . 0. 00	*2*1.	*g*	
1952	120,136,444,452,646,647,648	140,183,653	4.9	1342113	343	. 01. . 111. . 0. *1*3	.0.	O	t
1953	114,450,456	*141,183*,672	6.2	132	332	. . . . 0*4*11. . *1*. . 1	. . .	.	d
1954	117,128,451,454,646,647,648	*140,183*,653	5.5	b350242	371	. . *1*. . 312. 22. *1*3	. . .	o	
1955	123,131,452,647,648,649	*141,183*,667	6.0	132012	001	. . . . . *222*. . *3*. . 0	. .*4*	*o*	
1956	114,120,452,646,647,648		4.5	300113	—	. *302*. 11. . *35*. *3*.	. . .	*y*	vag
1957	123,439,452		6.0	430	—	. . . . . F1. . *23*. . .	. . .	.	
1958	117,123,150,452	*140*,454,653	5.4	21F1	202	. . *1*. . 420. 0*1*. 20	. . .	*o*	t
1959	120,128,451,646,647,648	140,453,658	*4.8*	001100	104	*52*51 4/4 *1*31 . . 2 . *1*1	. . .		d
1960			*4.3*				. . .	*y*	d
1961	114,131,451,452,646,647,648	140,453,658	3.8	173*1*322	*341*	*523*. 3*4*32. . *3*. *43*	. . .	O	dt
1962	117,123,142,456,646,647,649	140,453,658	4.8	b222210	*141*	. . 2. . 220. . 1. 4*2*	. . .	W	
1963	120,128,452,454,647,649,650		3.9	3630142	—	5324. *54*. . 01. *3*.	. . .	Y	
1964	114,123,451	*142,183,672*	6.4	210	*402*	. . . . . *664*. . *7*. . *2*	. . .	.	
1965	114,120,139,647,649,650	140,452,653	4.1	040133	484	3*33*. . 032. 1*1*. 13	.0.	W	
1966	117,128,131,136,142,432,439	*132,145,147*	5.9	0342201-	*122*	. . . . . *121*. . 2. . *1*	. . .	w	s
1967	120,136,444	*142,183*,666	5.1	220	634	. . 0. . 771. . 2. . 4	. .*1*	Y	
1968	117,131,134,139		5.0	*1*F31	—	. . 0. . 46. . 1*1*. 1.	. . .	Y	
1969	123,142,444,647,649,650	140,452,653	4.0	212110	142	*74212*112. 10. 02	12.	*y*	d
1970	120,139,444	*140*,454,653	5.5	?20	111	. . 1. . 313. 32. . 0	. . .	*y*	
1971	123,136,439		5.0	322	—	*652*. . 00. . 2*1*. 2.	. . .	O	a
1972	117,128,450	*140,183*,653	5.8	102	261	. . . . . 001. 3F. . 2	. . .	*o*	
1973	123,131,450,649,650,651		4.2	131001	—	2000. *11*. . 02. 0.	. . .	W	d
1974	120,136,447	*141,183*,667	5.9	101	211	. . . . . *111*. . 2. . *1*	. . .	Y	
1975	117,128,142	*140,454*,653	5.5	111	380	. . 2. . 333. . 6. . 4	. . .	w	
1976	646,649,650,651,652,653		6.1	214302	—	. . R. *2*FF2. 2F. 3.	. . .	.	th
1977	120,132,450,649,650,651		5.8	001130	—	. . 2. . 00. . 15. *1*.	. . .	Y	
1978	117,126,142,646,647,649	140,452,653	5.1	020010	432	7. 1. 0*111*. *12*. *11*	. . .	*y*	da
1979	123,136,447	*142,183*,672	5.8	012	121	. . . . . F34. . 5. . 0	. . .	w	
1980	129,134,139	140,453,658	5.2	320	042	. . 0. 1*22*. . 1. 3*2*	. . 2	W	d
1981	117,136,447	*141,183,667*	5.9	221	112	. . . . . *114*. . *2*. . 1	. . .	.	e
1982	126,142,432	*143,183,672*	6.1	010	110	. . . . . *391*. . F. . 0	. . .	*o*	n
1983	120,142,432	*140,454*,655	6.0	112	041	. . *1*. . *240*. . *3*. . 1	. . .	*o*	
1984	132,436,450		5.7	220	—	. . . . : 11. *204*. . .	. . .	.	d
1985	129,432,450,647,649,650	*142,183*,666	5.9	332022	134	. . 0. . *111*. . F. . 0	. . 1	Y	
1986	134,144,444	*140,454*,655	5.7	201	172	. . *6*. . 11*1*. . 4. . 3	. . .	*o*	
1987	136,144,444,647,649,650		5.0	121120	—	. . 1. . 00. . 0*1*. 0.	. . .	*o*	t
1988	120,123,126,131,132,134,136	105,145,147	4.1	2252204-	*451*	*854*. . *766*. . 3. *40*	22.	O	ts
1989	132,447,655	*142,183*,672	5.6	021	*523*	. . . . . 222. . *3*. . *3*	. . .	*y*	p
1990	123,139,444	*140,454*,655	6.1	122	130	. . 1. 1*35*1. . 0. *51*	. . .	Y	d
1991	129,132,144,450		5.0	F212	—	. . 3. . 00. 0*11*. 0.	. . .	.	nd
1992	120,139,144,436,439		6.6	F2F2*3*	—	. . . . . FF. *625*. . .	. . .	.	t
1993	126,142,444		5.4	230	—	. . *5*. . F7. 623. . .	. . .	.	nt
1994	123,134,444,647,649,650		3.8	432220	—	606*1*. 33. *2*02. 0.	. . .	.	na
1995	132,439,450		5.7	432	—	. . . . . F1. . 40. . .	. . .	.	
1996	126,136,439	*140,452*,654	5.7	201	375	. . R. . 113. 30. . 5	. . .	*y*	h
1997	120,139,447	*141,183*,667	5.8	231	111	. . . . . 000. . *1*. . 0	. . .	Y	
1998	123,134,142	*140,454*,655	5.7	120	373	. . 1. 011*1*. . 0. *14*	. . .	w	dt
1999	132,142,447	*142,185*,672	5.5	110	611	. . *4*. . F1*3*. . *2*. . *1*	.0.	Y	
2000	120,136,444	*140,183*,655	6.2	110	033	. . . . . *444*. . *1*. *22*	. . .	.	e

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
2001	Leo . . .	—	3937	+28° 2021	30.0	+28 26	6	6·5	6.0	—	3	5.83	.07	5.5	.08
2002	Crater . .	θ 21	3943	—	30.6	− 9 8	4·5	4·5	—	5.0	6	4.72	.06	—	—
2003	Leo . . .	υ 91	3946	− 0° 2458	30.8	− 0 10	5·4	5	4.7	4.4	6	4.48	.08	—	—
2004	Ursa Major	—	3949	+51° 1679	31.4	+51 18	6	6·7	6.0	—	3	5.74	.07	6.2	.07
2005	Ursa Major	59	3952	+44° 2110	32.0	+44 17	6	6	6.0	—	3	5.47	.08	5.4	.00
2006	Ursa Major	—	—	+65° 843	32.1	+65 0	6	6·7	6.7	—	3	6.32	.15	6.2	.11
2007	Ursa Major	60	3953	+47° 1894	32.1	+47 30	F	6	6.1	—	3	6.20	.05	5.9	.13
2008	Virgo . .	ω 1	3954	+ 8° 2532	32.2	+ 8 48	6	6	6.1	5.9	3	5.49	.03	5.8	.09
2009	Crater . .	ι 24	3956	—	32.6	−12 33	6·5	6·5	—	5.8	3	5.65	.05	—	—
2010	Leo . . .	92	3964	+22° 2391	34.6	+22 1	5	5	5.5	—	3	5.48	.07	5.3	.08
2011	Ursa Major	61	3965	+35° 2270	34.8	+34 53	5	5·6	5.1	—	3	5.84	.13	5.2	.09
2012	Hydra . .	—	—	—	35.3	−28 32	F	6·7	—	6.7	3	6.36	.04	—	—
2013	Ursa Major	62	3966	+32° 2179	35.4	+32 25	6	6	6.0	—	3	5.70	.07	5.5	.05
2014	Hydra . .	*26*	3969	—	35.7	−31 50	F	6	—	5.7	3	5.37	.11	—	—
2015	Draco . .	3	3968	+67° 714	35.8	+67 25	5·6	5·6	5.3	—	15	5.47	.03	5.2	.11
2016	Crater . .	ζ 27	3978	—	38.7	−17 41	5	5	—	5.2	6	4.89	.08	—	—
2017	Virgo . .	ξ 2	3979	+ 9° 2545	39.1	+ 8 55	5·4	5·4	5.0	5.3	3	4.92	.08	5.0	.07
2018	Ursa Major	χ 63	3981	+48° 1966	39.7	+48 27	4	4·3	4.0	—	6	3.89	.06	4.0	.08
2019	Virgo . .	ν 3	3982	+ 7° 2479	39.7	+ 7 12	4·5	4·5	4.3	4.0	3	4.24	.03	4.4	.13
2020	Ursa Major	—	3985	+56° 1544	40.5	+56 19	6	6·5	5.7	—	3	5.33	.07	5.7	.08
2021	Hydra . .	—	—	—	41.3	−29 37	F	F	—	6.8	3	6.61	.12	—	—
2022	Leo . . .	93	3990	+21° 2358	41.8	+20 53	4·5	4·5	4.0	—	3	4.55	.00	4.7	.07
2023	Virgo . .	A1 4	3989	+ 9° 2549	41.8	+ 8 55	6	6	6.0	5.8	3	5.22	.08	5.5	.12
2024	Hydra . .	—	3994	—	42.7	−26 5	6·5	6·5	—	5.8	3	5.67	.11	—	—
2025	Leo . . .	β 94	3995	+15° 2383	42.9	+15 15	2	2	2.0	—	14	2.23	.04	2.3	.07
2026	Leo . . .	—	3997	+17° 2402	43.1	+16 55	6	6·5	6.5	—	3	5.81	.11	6.0	.08
2027	Ursa Major	—	3998	+35° 2284	43.3	+35 36	6	6	5.3	—	3	5.64	.05	5.9	.07
2028	Virgo . .	β 5	4002	+ 2° 2489	44.4	+ 2 26	3·4	3·4	3.3	3.7	6	3.72	.05	3.9	.03
2029	Hydra . .	—	4003	—	44.6	−26 37	F	F	—	6.8	3	6.49	.05	—	—
2030	Leo . . .	—	4005	+13° 2465	44.7	+12 57	6	6	6.2	6.7	3	6.00	.11	6.1	.11
2031	Ursa Major	—	—	+34° 2264	44.9	+34 3	6	6	6.2	—	3	6.14	.13	6.0	.08
2032	Virgo . .	—	4006	—	44.9	− 4 40	F	6	—	6.1	3	5.68	.11	—	—
2033	Hydra . .	—	4009	—	45.6	−30 9	F	6·7	—	6.2	3	6.12	.17	—	—
2034	Ursa Major	—	4010	+38° 2285	46.1	+38 35	F	F	6.5	—	6	6.44	.03	—	—
2035	Hydra . .	*β 28*	4015	—	46.8	−33 14	4	4	—	4.5	3	4.18	.07	—	—
2036	Ursa Major	γ 64	4017	+54° 1475	47.5	+54 22	2·3	2·3	2.5	—	13	2.56	.05	2.5	.07
2037	Hydra . .	—	4024	—	48.6	−25 3	6	6	—	5.8	3	5.57	.16	—	—
2038	Virgo . .	A2 6	4027	+ 9° 2560	48.9	+ 9 7	6	6	5.5	6.1	3	5.59	.09	6.0	.07
2039	Ursa Major	65	4026	+47° 1913	48.9	+47 9	6	6	7.3	—	3	5.84	.07	5.9	.11
2040	Ursa Major		4028	+47° 1914	49.0	+47 8			7.5	—					
2041	Leo . . .	o 95	4031	+16° 2319	49.5	+16 20	6	6·5	6.0	—	4	5.41	.07	5.7	.12
2042	Hydra . .	*29*	4032	—	49.5	−27 48	F	F	—	6.5	3	6.35	.15	—	—
2043	Ursa Major	66	4033	+57° 1343	49.7	+57 15	6	6	6.0	—	3	5.76	.04	5.8	.07
2044	Crater . .	η 30	4035	—	49.9	−16 29	6	6	—	5.4	6	5.01	.06	—	—
2045	Ursa Major	—	4036	+62° 1204	50.6	+62 13	6	6	6.2	—	3	6.18	.07	6.0	.20
2046	Ursa Major	—	—	+41° 2253	51.0	+41 2	6	6	6.5	—	5	6.37	.16	5.8	.09
2047	Hydra . .	—	4042	—	52.8	−25 14	F	6	—	6.7	3	6.33	.11	—	—
2048	Ursa Major	—	—	+33° 2176	53.1	+33 50	F	6·7	6.0	—	3	6.04	.15	6.2	.12
2049	Virgo . .	b 7	4049	+ 4° 2456	53.8	+ 4 20	6	6·5	5.8	5.8	6	5.22	.07	5.7	.16
2050	Crater . .	—	—	—	54.6	− 9 45	6	6	—	5.9	6	5.54	.06	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2001	126,134,439	*183*,454,655	5.8	012	*135*	. . . . 0 0 2 0 . . *1* . . *3*	. . .	*y*	nd
2002	123,144,450,649,650,651		4.7	113221	—	*3 1 1* . . *3 3* . . 1 *3* . 1 .	. . .	W	ag
2003	120,142,444,649,650,651		4.5	312222	—	5 4 *1* . . 1 5 2 . *1 1* . *2* .	. . .	Y	t
2004	129,132,450	*142,185,667*	5.7	120	457	. . . . . 1 4 1 . . 0 . . 5	. . 7	*y*	
2005	123,136,447	*142,183*,666	5.5	121	*111*	. . 2 . . 3 3 3 . . 2 . . *1*	. . 1	Y	
2006	129,144,450	*142,183*,672	6.3	421	*222*	. . . . . *5* 2 2 . . F . . *1*	. . .	*y*	
2007	126,134,447	*142,185*,666	6.2	111	*206*	. . *2* . . F *4 3* . . *1* . . *3*	. . 2	*y*	
2008	123,142,447	*140*,452,655	5.5	010	125	. . *4* . . 3 3 4 . 2 2 . 1 3	. . .	*y*	t
2009	120,134,447		5.6	*111*	—	. . *2* . . *2* 0 . . 0 7 . *2* .	. . .	Y	d
2010	136,144,447	140,454,655	5.5	021	*114*	. . 1 . . *5 5 1* . . 2 . *1 2*	. 0 .	*o*	
2011	126,144,450	183,454,658	5.8	*223*	*845*	. . *4* . . *8 6 7* . . *1* . . *6*	. . .	Y	
2012	439,447,451		6.4	101	—	. . . . . F *3* . *4* 1 F . . .	. . .	.	
2013	136,439,444	183,454,658	5.7	*120*	*313*	. . 0 . . 1 1 1 . . 0 . . *2*	. . .	*y*	
2014	144,439,450		5.4	131	—	. . 4 . . F 4 . 1 0 3 . . .	. . .	.	nt
2015	120,123,126,129,132,134,142	104,105,145	5.5	010*121*1-	*813*	. . *1* . . *3 3 3* . . 2 . . *3*	. . .	*y*	s
2016	120,129,142,649,651,652		4.9	*341211*	—	b *4 1* . . 1 1 . . 0 0 . 1 .	. . .	*o*	a
2017	120,136,444	140,452,655	4.9	*121*	301	1 0 0 . . *3 3* 1 . 1 8 . 1 1	. . .	W	
2018	126,144,450,649,651,652	142,*185*,666	3.9	131*121*	221	. 3 0 . . 2 2 2 . . *4* . 1 1	. . *2*	O	t
2019	123,142,447	140,452,654	4.2	100	531	8 7 0 . . 2 2 1 . *1 2* . *1 2*	. . .	*o*	t
2020	120,129,450	*141,185*,667	5.3	102	426	. . . . . 5 3 3 . . 4 . . 4	. . .	*o*	d
2021	132,142,447		6.6	033	—	. . . . . F F . *6* 0 F . . .	. . .	.	
2022	120,144,450	151,454,655	4.6	000	121	. . 2 . 4 *2 2 5* . . *2* . *2* 1	. 3 .	*y*	
2023	126,444,450	*151*,452,655	5.2	220	450	. . 2 . . 6 6 6 . 4 5 . 2 3	. . .	w	
2024	132,134,447		5.7	311	—	. . . . . *3 1* . *2* 1 0 . . .	. . .	.	
2025	120,123,134,142,144,444,447	102,185,198	2.2	*45*111*47*-	371-	b b 4 2 . 0 0 *1* . . *2* . *2* 1	*2* 2 .	W	vte
2026	126,444,450	*151,183*,655	5.8	311	042	. . . . . 0 2 5 . . *1* . . 2	. . .	*y*	
2027	123,444,450	*154,454*,658	5.6	*111*	314	. . . . . 2 2 *4* . . 1 . . 3	. . .	*y*	
2028	142,146,444,649,651,652	151,452,654	3.7	120131	212	*4 5* 0 1 . *3 2 2* . 1 *2* . *1 2*	1 . .	*y*	
2029	134,447,652		6.5	111	—	. . . . . F F . *5* 1 F . . .	. . .	.	
2030	126,444,450	*151,183*,655	6.0	302	222	. . . . . *2 2* 0 . 5 F . . 1	. . .	w	
2031	144,444,450	*150*,454,658	6.1	313	030	. . . . . *3 3 1* . . 0 . . *1*	. . .	.	
2032	120,450,456		5.7	023	—	. . . . . F 1 . . 2 0 . . .	. . .	O	
2033	132,142,447		6.1	324	—	. . . . . F 0 . *1 1* 0 . . .	. . .	.	t
2034	649,651,652,653,654,655		6.4	003100	—	. . . . . F F *1* . . F . *2* .	. . .	.	m
2035	120,453,454		4.2	102	—	*9* b *2 2* . *1 1* . *2* 2 2 . 2 .	. . .	.	na
2036	123,126,142,144,149,444,447	101,145,147	2.6	*14*11*43*1-	040-	*5* 0 2 *1* . *1 1* 1 . . *6* . 1 *1*	*3 1 1*	W	ve
2037	120,134,447		5.6	404	—	. . . . . 2 2 . *1* 0 1 . . .	. . .	.	
2038	123,146,453	*151*,452,*655*	5.6	*212*	425	. . 0 . . 2 2 2 . 3 5 . 1 4	. . .	*y*	
2039	126,142,453	*142*,185,666	*6.4*	201	222	. . 2 . *4* 7	. . 8		dp
2040			*6.8*			. . . *3* 0 0 5 . . *1* . . 1	. . .	w	dp
2041	129,134,144,453	*151*,183,655	5.4	F10*2*	630	. . *2* . . 4 2 4 . . 3 . 2 3	. . .	*y*	
2042	142,453,454		6.4	30*4*	—	. . R . . F F . *4 1 3* . . .	. . .	.	nh
2043	132,144,450	*141,687*,667	5.8	*101*	*102*	. . 1 . . 0 0 0 . . 3 . . 0	. . .	o	
2044	120,146,453,649,651,652		5.0	*122131*	—	*4* 0 1 . . 8 8 . . 1 1 . 1 .	. . .	W	a
2045	126,444,450	*143,687*,667	6.2	012	*721*	. . . . . *4 4 2* . . *5* . . *2*	. . .	Y	e
2046	120,129,142,444,453	*144,687*,666	6.4	FF31*4*	*485*	. . . . . *6 6 1* . . *7* . . *6*	. . 2	.	
2047	134.142,444		6.3	11*3*	—	. . . . . F *5* . *3* 2 F . . .	. . .	.	
2048	120,146,453	*150,454*,658	6.0	142	*215*	. . . . . F 1 *2* . . 1 0 . 2	. . .	.	
2049	123,146,453,649,651,652	*151*,452,655	5.2	*220151*	861	. . 2 . . 6 4 4 . 4 1 . 2 5	. . .	w	v
2050	120,142,453,649,651,652		5.5	131*221*	—	. . . . . 3 3 . . 2 6 . . .	. . .	.	

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11h–12h

No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
2051	Virgo . .	π 8	4052	+ 7° 2502	54.7	+ 7 17	4·5	4·5	4.5	4.9	3	4.44	.17	4.5	.19
2052	Crater . .	31	4053	—	54.7	−18 59	6	6	—	5.5	7	5.10	.08	—	—
2053	Ursa Major	—	—	+36° 2230	55.5	+36 43	6	6	5.5	—	3	5.67	.04	6.0	.09
2054	Ursa Major	67	4057	+43° 2179	56.0	+43 43	5	5·6	5.1	—	3	5.10	.17	4.9	.09
2055	Coma Beren.	2	4066	+22° 2437	58.6	+22 7	6	6	6.0	—	3	5.72	.03	5.9	.08
2056	Draco . .	—	—	+77° 461	59.1	+77 35	6	6·5	5.8	—	6	5.83	.06	5.7	.20
2057	Virgo . .	o 9	4072	+ 9° 2583	59.1	+ 9 24	4	4	4.2	4.2	6	4.27	.07	4.3	.17
2058	Ursa Major	—	4074	+63° 999	59.7	+63 36	6	6	6.0	—	15	6.21	.04	6.2	.02
2059	Virgo . .	—	4077	—	59.9	− 2 28	F	6·7	—	6.7	6	6.42	.06	—	—
2060	Corvus . .	α 1	4090	—	2.2	−24 4	4	4	—	4.2	3	4.32	.05	—	—
2061	Virgo . .	10	4094	+ 2° 2517	3.5	+ 2 34	6	6·5	6.4	6.4	7	6.10	.09	6.0	.11
2062	Virgo . .	11	4096	+ 6° 2559	3.9	+ 6 29	6	6	6.5	6.1	3	5.74	.11	5.9	.08
2063	Corvus . .	ε 2	4097	—	4.0	−21 57	3	3	—	3.3	6	3.14	.09	—	—
2064	Coma Beren.	3	4099	+17° 2446	4.4	+17 28	F	6·7	6.0	—	3	6.31	.09	6.2	.03
2065	Coma Beren.	—	4100	+28° 2084	4.7	+27 57	F	6·7	5.9	—	3	5.73	.03	6.0	.07
2066	Corvus . .	3	4101	—	4.9	−22 56	6	6·7	—	5.8	3	5.25	.09	—	—
2067	Camelopard.	—	4106	+82° 356	5.6	+82 23	6	6	6.7	—	7	6.30	.09	6.1	.04
2068	Coma Beren.	4	4107	+26° 2316	5.8	+26 32	6	6	5.7	—	3	5.93	.11	5.7	.17
2069	Coma Beren.	5	4110	+21° 2398	6.1	+21 13	6	6	6.0	—	3	5.58	.11	5.8	.07
2070	Draco . .	—	4112	+78° 412	6.6	+78 17	5·4	5·4	5.1	—	6	5.14	.01	4.9	.07
2071	Virgo . .	12	4114	+11° 2440	7.3	+10 56	6	6	6.4	5.9	3	5.76	.07	5.8	.05
2072	Ursa Major	—	4121	+54° 1504	8.8	+54 7	6	6·7	6.7	—	3	6.26	.12	F	—
2073	Corvus . .	—	—	—	8.8	−20 10	6	6·7	—	6.2	3	6.11	.11	—	—
2074	Virgo . .	—	—	—	9.0	− 9 35	6	6	—	6.2	3	6.11	.08	—	—
2075	Canes Venat.	—	—	—	9.3	+47 47	F	cum.	cum.	—	2	cum.	—	6.5	.03
2076	Draco . .	—	4122	+71° 610	9.4	+70 53	F	6·5	6.0	—	3	5.91	.07	5.7	.21
2077	Ursa Major	δ 69	4123	+57° 1363	9.5	+57 42	3·4	4·3	3.3	—	6	3.41	.03	3.6	.20
2078	Corvus . .	γ 4	4124	—	9.6	−16 53	2	2	—	2.5	13	2.76	.04	2.3	.09
2079	Coma Beren.	6	4125	+15° 2436	9.9	+15 34	5	5	5.1	5.4	3	5.11	.11	5.0	.09
2080	Canes Venat.	2	4126	+41° 2284	10.1	+41 20	6	5·6	5.5	—	6	5.99	.07	5.9	.11
2081	Coma Beren.	7	4127	+24° 2443	10.3	+24 37	5·6	5·6	5.3	—	3	5.16	.12	5.2	.13
2082	Canes Venat.	—	4128	+33° 2213	10.5	+33 44	5	5	5.0	—	3	5.14	.03	5.1	.11
2083	Coma Beren.	—	—	+29° 2275	10.5	+29 37	6	6	5.8	—	3	5.63	.09	5.8	.15
2084	Draco . .	—	4143	+75° 470	11.5	+75 51	6·5	6·5	5.8	—	7	5.41	.06	5.3	.08
2085	Virgo . .	—	4134	—	12.0	− 3 17	F	6	—	6.3	3	6.03	.17	—	—
2086	Ursa Minor	—	4150	+87° 107	13.4	+87 6	6	6·7	6.5	—	3	6.30	.13	6.3	.05
2087	Canes Venat.	3	4148	+49° 2130	13.8	+49 39	6	5·6	5.7	—	3	5.64	.13	5.5	.08
2088	Virgo . .	η 15	4145	+ 0° 2926	13.8	+ 0 0	3·4	3·4	3.2	4.0	10	4.05	.05	4.0	.09
2089	Coma Beren.	—	4153	+27° 2114	14.3	+27 17	F	F	5.0	—	3	5.83	.07	—	—
2090	Virgo . .	c 16	4151	+ 4° 2604	14.3	+ 3 59	5	5	5.2	5.5	7	5.15	.07	5.3	.17
2091	Corvus . .	ζ 5	4154	—	14.3	−21 33	5	5	—	5.3	3	5.48	.19	—	—
2092	Ursa Minor	—	4165	+88° 71	14.4	+88 22	6	6	6.5	—	13	6.29	.05	6.0	.05
2093	Coma Beren.	—	—	+27° 2115	14.7	+27 44	F	F	6.0	—	3	6.39	.09	—	—
2094	Coma Beren.	11	4156	+18° 2592	14.7	+18 27	5	5	4.5	5.1	3	4.88	.07	5.0	.03
2095	Corvus . .	—	4157	—	14.7	−12 54	6	6	—	5.7	6	5.36	.04	—	—
2096	Ursa Major	70	4159	+58° 1371	15.0	+58 32	6	6	6.0	—	3	5.76	.16	5.9	.08
2097	Coma Beren.	—	—	+25° 2498	16.2	+25 26	6	6	6.5	—	3	5.89	.11	5.9	.19
2098	Coma Beren.	12	4169	+26° 2337	16.5	+26 31	5	5	5.0	—	7	4.75	.06	4.7	.07
2099	Corvus . .	—	—	—	16.8	−24 12	F	6	—	F	3	6.96	.11	—	—
2100	Corvus . .	6	4173	—	17.1	−24 10			—	6.0	3	5.86	.11	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2051	129,146,453	182,452,654	4.4	423	334	652..001.35.21	...	*y*	
2052	126,134,146,444,651,652,653		5.1	F210414	—	..0..77..12.1.	...	W	v
2053	123,134,453	154,454,658	5.7	110	215	.....113..4..3	...	.	
2054	120,126,146	144,687,666	5.1	234	403	.11..110..2..2	..1	*y*	dc
2055	146,444,453	154,454,655	5.7	100	303	..1.1111..0..2	...	*r*	d
2056	132,444,450,649,651,652	143,163,679	5.8	103140	443	.....022..3..1	...	.	
2057	129,134,453,649,651,652	151,452,654	4.3	133130	414	763..220.11.10	...	*y*	
2058	120,123,129,144,146,444,450	102,145,147	6.2	2143302-	210	.....444..1..0	...	*o*	s
2059	444,450,453,651,652,653		6.4	111204	—	.....F3..17...	...	.	
2060	126,132,149		4.3	111	—	b751.22.213.1.	...	*y*	
2061	129,144,457,460,653,654,655	182,452,655	6.1	6213331	141	..3..351.10..1	...	*y*	g
2062	126,453,457	101,452,655	5.7	113	420	..0..116.20..2	...	*y*	
2063	129,140,457,653,655,656		3.1	430106	—	2110.11.131.3.	...	*o*	vtg
2064	132,453,457	101,454,655	6.3	212	121	..R..F25..2..1	...	.	h
2065	146,453,461	102,457,658	5.7	100	413	.....F40..4..3	...	w	
2066	132,455,457		5.2	212	—	..4..69.84F...	...	w	
2067	126,459,461,466,652,653,654	143,171,679	6.3	1820332	123	.....552..2..2	...	*y*	ndt
2068	129,453,463	102,457,658	5.9	302	245	..6..113..2..2	...	*o*	
2069	146,455,461	101,453,655	5.6	203	203	..1..222..1..2	...	*y*	
2070	129,459,461,652,653,654	143,163,679	5.1	000020	230	.....550..2..2	...	*y*	
2071	126,453,468	101,452,655	5.8	201	111	..3..004.11..0	...	*y*	v
2072	144,453,463	143,687,675	6.3	330	FF2	..4..522..2..F	...	.	n
2073	144,455,463		6.1	320	—	.....30..14...	...	.	
2074	146,457,460		6.1	202	—	.....33..14...	...	*o*	dc
2075	453,461	144,687,685	cum	CC	RRR	.....FCC..F..R	...	.	de
2076	459,461,466	143,170,679	5.9	210	711	.....F31..2..2	...	Y	
2077	132,461,468,652,653,654	142,687,677	3.4	012011	721	124..031..1.42	13.	*y*	v
2078	126,129,137,140,143,150,453	198,198,204	2.8	2024123-	893-	5421.66..23.45	.1.	*g*	veg
2079	149,457,460	101,453,655	5.1	203	013	..4..110.02.31	...	W	
2080	143,461,468,652,653,654	144,687,672	6.0	421121	400	..0.3286..F.01	..4	*o*	d
2081	132,453,463	101,453,658	5.2	312	133	..0..000..3.20	...	Y	a
2082	137,149,461	101,453,658	5.1	001	023	.....111..2.20	...	*o*	
2083	132,140,463	102,453,658	5.6	221	324	.....220..50.2	...	.	
2084	126,144,459,461,471,652,653	143,163,679	5.4	7011031	311	.....022..3..1	...	w	
2085	129,143,468		6.0	342	—	....6F2..11.4.	...	w	d
2086	135,146,459	143,163,679	6.3	331	111	.....520..2..0	...	*y*	
2087	129,140,463	144,687,675	5.6	232	212	..5..240..1..1	..0	O	t
2088	126,135,149,652,653,654,655	183,452,655	4.0	2123121-	221	7811.656.10.10	43.	W	vg
2089	137,144,463		5.8	102	—	.....FF8..F...	...	w	
2090	126,146,457,653,655,656,657	183,452,655	5.2	2511b11	251	..4..220.03.01	...	*y*	v
2091	132,143,463		5.5	153	—	567..55.556.5.	...	Y	d
2092	135,146,425,440,442,445,458	108,112,113	6.3	1202121-	165-	.....550..2..3	...	.	e
2093	137,144,463		6.4	212	—	.....FF6..F0..	...	.	
2094	129,149,461	101,453,655	4.9	012	110	..4..114.00.31	...	*y*	
2095	144,453,463,653,654,655		5.4	020302	—	.....44..01.1.	...	Y	
2096	143,453,463	142,687,677	5.8	242	122	..7..000..1..1	...	o	
2097	126,143,463	102,453,658	5.9	023	252	.....114..2..0	...	.	e
2098	126,143,463,466,653,654,655	102,453,658	4.8	1621210	211	.12..222..1.31	.1.	*y*	da
2099	132,457,460		7.0	230	—	..... F2.1 F13...	...	.	dc
2100	132,457,460		5.9	302	—	..1.. F2.1 F13...	...	*o*	dc

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P. E.
					m.	° ′									
2101	Canes Venat.	4	4177	+43° 2218	17.9	+43 12	6	6	6.3	—	7	5.91	.10	6.0	.03
2102	Canes Venat.	5	4180	+52° 1626	18.2	+52 12	5	5·6	5.2	—	3	5.04	.03	5.1	.12
2103	Coma Beren.	13	4181	+26° 2344	18.3	+26 46	5	5·6	5.3	—	3	5.09	.05	4.9	.07
2104	Virgo . .	—	—	—	19.0	−10 56	6	6	—	6.1	6	5.95	.04	—	—
2105	Hydra . .	—	—	—	19.0	−27 5	F	6	—	6.6	3	6.54	.15	—	—
2106	Coma Beren.	—	4184	+24° 2455	19.2	+24 36	F	6·7	6.0	—	3	6.16	.04	6.0	.11
2107	Ursa Major	—	—	+64° 896	19.5	+64 29	F	F	6.0	—	15	6.31	.06	6.2	.02
2108	Canes Venat.	6	4188	+39° 2521	19.9	+39 41	5·6	5·6	5.4	—	6	5.34	.06	5.1	.07
2109	Coma Beren.	14	4191	+28° 2115	20.4	+27 56	5·4	5	5.1	—	3	5.13	.09	4.9	.12
2110	Coma Beren.	15	4195	+29° 2288	21.0	+28 56	4·5	4·5	4.7	—	3	4.73	.09	4.7	.05
2111	Coma Beren.	16	4196	+27° 2134	21.0	+27 29	5	5	5.2	—	6	5.09	.01	4.9	.11
2112	Canes Venat.	—	—	+42° 2307	21.7	+42 2	6	6	6.5	—	3	7.37	.12	6.2	.08
2113	Virgo . .	—	4200	—	21.7	−30 57	F	6·7	—	6.3	6	5.70	.06	—	—
2114	Ursa Major	73	4203	+56° 1598	21.8	+56 23	6	6·5	6.0	—	3	5.89	.17	6.0	.00
2115	Corvus . .	—	—	—	21.8	−13 47	F	F	—	F	3	7.00	.05	—	—
2116	Coma Beren.	—	4206	+26° 2353	22.8	+26 34	5	5·6	7.2	—	4	5.18	.11	4.9	.11
2117	Coma Beren.	17	4207	+26° 2354	22.9	+26 35			6.0	—					
2118	Coma Beren.	18	4209	+24° 2464	23.5	+24 46	6	6	5.7	—	7	5.50	.08	5.5	.11
2119	Coma Beren.	20	4212	+21° 2424	23.7	+21 34	6	6	5.8	—	6	5.70	.09	5.5	.04
2120	Corvus . .	δ 7	4211	—	23.7	−15 51	2·3	2·3	—	3.0	6	3.13	.03	—	—
2121	Corvus . .	—	4214	—	24.0	−23 2	F	6·7	—	6.2	7	5.98	.09	—	—
2122	Ursa Major	74	4216	+59° 1444	24.3	+59 4	6	5·6	5.7	—	7	5.57	.09	5.4	.00
2123	Canes Venat.	7	4217	+52° 1631	24.3	+52 12	6	6	6.5	—	3	6.27	.08	6.1	.04
2124	Draco . .	4	4222	+70° 700	25.0	+69 52	5	5	4.7	—	16	5.28	.04	5.4	.06
2125	Coma Beren.	21	4223	+25° 2517	25.0	+25 14	6·5	6·5	5.3	—	3	5.49	.17	5.6	.12
2126	Canes Venat.	—	—	+53° 1554	25.1	+53 43	6	6	6.5	—	3	6.17	.08	6.2	.12
2127	Hydra . .	—	—	—	25.8	−26 54	F	F	—	F	3	7.44	.09	—	—
2128	Corvus . .	η 8	4226	—	25.9	−15 32	5	5	—	4.5	3	4.45	.08	—	—
2129	Corvus . .	—	—	—	26.4	−13 11	6	6	—	5.9	3	5.71	.09	—	—
2130	Corvus . .	—	—	—	27.4	−12 10	6	6	—	5.8	3	5.89	.08	—	—
2131	Virgo . .	q 21	4230	—	27.6	− 8 47	6	6	—	5.7	3	5.65	.05	—	—
2132	Canes Venat.	—	4233	+33° 2332	27.8	+33 55	5	5·6	5.4	—	3	5.30	.15	5.4	.17
2133	Canes Venat.	8	4235	+42° 2321	28.0	+42 1	4·5	4·5	4.5	—	6	4.30	.05	4.4	—
2134	Corvus . .	β 9	4234	—	28.1	−22 44	2·3	2·3	—	2.6	6	2.81	.04	—	—
2135	Draco . .	ϰ 5	4239	+70° 703	28.4	+70 27	3·4	3·4	3.3	—	6	3.84	.05	4.0	.08
2136	Coma Beren.	23	4240	+23° 2475	28.9	+23 17	5	5	4.8	—	7	4.89	.09	4.7	.03
2137	Coma Beren.	24	4242	+19° 2584	29.1	+19 2	5	5	4.3	5.4	6	4.98	.09	5.1	.03
2138	Canes Venat.	—	4244	—	29.4	+37 3	cum.	cum.	cum.	—	3	cum.	—	6.4	.04
2139	Corvus . .	—	—	—	29.3	−11 21	6	6·7	—	6.5	3	6.73	.11	—	—
2140	Corvus . .	—	—	—	29.6	−11 24			—	6.3	3	6.53	.03	—	—
2141	Draco . .	6	4246	+70° 705	29.7	+70 42	F	6·5	4.8	—	6	5.06	.03	5.3	.15
2142	Virgo . .	f 25	4247	—	30.6	− 5 10	6	6	—	6.0	6	5.93	.09	—	—
2143	Coma Beren.	25	4248	+17° 2504	31.0	+17 45	F	6	5.8	—	3	5.61	.15	6.1	.08
2144	Hydra . .	—	4253	—	31.3	−26 28	6·5	6·5	—	5.6	3	5.50	.07	—	—
2145	Virgo . .	—	—	+ 4° 2631	32.0	+ 3 57	6	6	6.5	6.3	3	6.30	.12	6.1	.07
2146	Virgo . .	—	4254	+ 2° 2560	32.3	+ 2 31	6	6	6.0	6.1	3	6.12	.09	5.9	.09
2147	Virgo . .	R	—	+ 7° 2561	32.4	+ 7 39	var.	var.	var.	var.	3	var.	—	F	—
2148	Corvus . .	—	—	—	32.5	−17 35	6	6	—	6.0	7	5.97	.06	—	—
2149	Canes Venat.	9	4258	+41° 2312	33.0	+41 32	6	6	7.0	—	7	6.13	.09	6.0	.03
2150	Virgo . .	χ 26	4257	—	33.0	— 7 20	5	5	—	5.2	6	4.66	.03	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2101	143,453,463,466,653,654,655	*144*,687,672	5.9	*6216330*	121	. . 3 . . *112* . . *6* . . 1	. . 1	*r*	
2102	453,455,463	142,687,675	5.0	*001*	*401*	. . 1 . . 022 . . *1* . . 1	. . .	*y*	
2103	453,455,463	102,453,658	5.1	*111*	*421*	. . 6 . . *111* . . *2* . . *2*	. . .	w	
2104	132,457,460,653,654,655		6.0	*110410*	—	. . . . . *22* . . *13* . *3* .	. . .	.	v
2105	143,457,460		6.5	*421*	—	. . . . . F *7* . F *14* . . .	. . .	.	
2106	143,455,463	102,*453,658*	6.2	*101*	*151*	. . . . . F *14* . . F . . *2*	. . .	*y*	
2107	126,129,146,149,462,463,466	*102,145,147*	6.3	*3332116-*	*211*	. . . . . F F *5* . . *2* . . *1*	. . .	.	sp
2108	140,149,461,654,655,656	144,*687*,672	5.3	*211321*	*230*	. . 0 . . *110* . . 0 . *32*	. . *3*	*y*	
2109	144,453,463	102,453,658	5.1	*212*	*501*	. . 1 . . *510* . . *2* . 1*2*	. *5* .	*y*	
2110	144,457,460	101,453,658	4.7	*122*	*111*	. *21* . . *330* . . 2 . 00	. *4* .	Y	nta
2111	144,453,463,653,655,656	102,453,658	5.1	100100	*511*	. . *2* . . *111* . . *2* . *12*	. *4* .	W	v
2112	132,143,463	*144*,672,*687*	7.4	*312*	**bbb**	. . . . . **b b b** . . F . . **b**	. . **b**	.	npm
2113	471,475,653,654,655,658		5.7	*124170*	—	. . . . . F 4 . F 4 F . . .	. . .	.	
2114	146,455,461	*142,687*,677	5.9	*414*	111	. . R . . *131* . . 2 . . 1	. . .	o	th
2115	150,453,455,463		7.0	*111*	—	. . . . . F F . . F **b** . . .	. . .	.	
2116	132,135,140,468	102,453,658	*6.9*	*5301*	*631*	. . *1* . *9* . . 1 . . F . . *3*	. . .	.	d
2117			*5.5*			. . *1* . *5* 2 0 3 . . F . . *3*	. *1* .	W	d
2118	137,143,463,466,653,654,655	102,*453*,658	5.5	*4631111*	*113*	. . *2* . . 331 . . 2 . 10	. . .	W	
2119	149,460,466,653,655,656	102,*453*,658	5.7	*414411*	*123*	. . *1* . . 111 . . 0 . . *2*	. . .	w	
2120	153,457,460,654,656,657		3.1	*010211*	—	2 1 4 *1* R *66* . . 0 *1* . 0 .	*31* .	*w*	dvtg
2121	149,460,466,468,654,655,656		6.0	*6301144*	—	. . . . . F 1 . 00 F . . .	. . .	o	vg
2122	153,455,463,466,654,655,656	*142*,171,677	5.6	*2372131*	*222*	. . *4* . . 2 4 0 . . *3* . . *2*	. . .	*y*	
2123	143,455,463	*144,687,675*	6.3	*211*	*132*	. . *3* . . *550* . . *2* . . *2*	. . .	*y*	
2124	132,137,140,143,144,146,153	102,145,*147*	5.3	*3241311-*	510	. . *2* . . *336* . . 4 . . 1	. 1 .	O	ts
2125	135,137,463	102,*453*,658	5.5	*144*	*104*	. *62* . . *113* . . *6* . 11	. . .	W	a
2126	144,455,463	*144,687,675*	6.2	*121*	*321*	. . . . . *441* . . *1* . . 0	. . .	.	
2127	457,460,466		7.4	*221*	—	. . . . . F F . **b** F F . . .	. . .	.	
2128	153,457,460		4.4	*112*	—	0 *2* 5 . . 66 . . 00 . 0 .	. *2* .	*y*	
2129	135,149,462		5.7	*122*	—	. . . . . 11 . . 0 F . . .	. . .	.	
2130	135,149,462		5.9	*112*	—	. . . . . *11* . . *32* . . .	. . .	.	
2131	144,457,462		5.6	*111*	—	. . *2* . . 22 . . *27* . *2* .	. . .	w	
2132	146,462,466	102,453,658	5.3	*034*	*125*	. . . . . *310* . . 0 . . 1	. . .	Y	e
2133	155,462,466,654,657,658	144,687,679	4.3	*401111*	**110**	7 6 6 . . 112 . . 1 . 01	. . 2	*y*	ne
2134	155,462,466,654,657,658		2.8	*112102*	—	5 4 2 0 . *33* . *613* . *2* .	. . .	*y*	vtg
2135	146,155,455,654,657,658	143,170,679	3.8	*121202*	024	*52* 4 . . *433* . . 6 . *32*	13 .	W	e
2136	137,457,466,471,653,657,658	102,453,658	4.9	*6321321*	*212*	. . 2 . . 111 . . 0 . 3*2*	. . .	W	
2137	140,457,466,653,657,658	102,453,655	5.0	*511412*	110	. . 0 . *2* 007 . 13 . 31	. . .	*o*	
2138	453,457,462	*144*,687,*685*	cum	ccc	RRR	. . . . . ccc . . F . . R	. . .	.	de
2139	149,462,466		6.7	*023*	—	. . . . . 03 . . *4* F . . .	. . .	.	d
2140	149,462,466		6.5	100	—	. . . . *4* F . . .	. . .	.	d
2141	146,155,455,660,661,662	143,*163*,679	5.1	*102020*	160	. . 2 . . F *53* . . 6 . . 2	. 1 .	O	v
2142	140,453,463,654,658,659		5.9	*421431*	—	. . *1* . . *11* . . *12* . *3* .	. . .	w	
2143	453,455,463	102,*457*,655	5.6	*214*	375	. . R . . F 20 . . 1 . . 5	. . .	o	h
2144	453,457,462		5.5	*021*	—	. . . . . *11* . 0 *22* . . .	. . .	.	
2145	140,453,468	*183*,452,655	6.3	*231*	*230*	. . . . . *550* . *22* . . *2*	. . .	.	
2146	144,457,466	*183*,452,655	6.1	*212*	*140*	. . . . . *333* . *28* . . *2*	. . .	Y	vt
2147	19,150,455	*150*,452,*655*	var.	FRF	FRF	. . . . . V V V . V F . . F	. . .	.	vtpeg
2148	462,463,466,468,654,658,659		6.0	**0**021042	—	. . . . . *22* . . *21* . . .	. . .	.	vg
2149	140,468,471,473,657,658,659	*144*,689,672	6.1	*6144022*	*011*	. . *2* . . *337* . . F . . *1*	. . 2	.	
2150	155,463,466,654,657,658		4.7	*001171*	—	3 2 5 . . 33 . . *23* . 3 .	. . .	Y	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2151	Hydra . .	—	—	—	33.0	−28 53	F	F	—	F	6	F	—	—	—
2152	Coma Beren.	26	4260	+21° 2439	33.2	+21 44	6	6	5.7	—	3	5.45	.08	5.8	.12
2153	Canes Venat.	—	—	+36° 2295	33.4	+36 38	6	6	6.0	—	3	6.30	.03	6.1	.05
2154	Corvus . .	—	—	—	35.0	−12 21	6	5	—	5.7	3	5.29	.16	—	—
2155	Virgo . .				35.6	− 0 47									
2156	Virgo . .	γ 29	4268	− 0° 2601	35.6	− 0 47	3·2	3·2	2.8	3.1	7	2.84	.08	—	—
2157	Virgo . .	ϱ 30	4271	+11° 2485	35.8	+10 54	5	5	5.2	5.0	3	5.10	.11	4.6	.23
2158	Virgo . .	d^1 31	4274	+ 7° 2568	35.9	+ 7 28	6	6	6.0	5.8	3	5.62	.12	5.5	.13
2159	Ursa Major	76	4276	+63° 1026	36.3	+63 22	6	6	6.5	—	6	6.05	.05	5.9	.12
2160	Corvus . .	—	—	—	37.3	−13 12	F	5	—	6.9	7	7.00	.07	—	—
2161	Hydra . .	—	4278	—	37.6	−27 40	F	6	—	5.9	3	5.86	.05	—	—
2162	Canes Venat.	—	4282	+44° 2221	38.9	+44 45	6	6	6.1	—	3	6.37	.08	6.2	.00
2163	Canes Venat.	10	4285	+40° 2570	39.3	+39 56	6	6·5	6.1	—	3	5.87	.08	6.0	.07
2164	Canes Venat.	—	4287	+46° 1817	39.5	+46 5	5·6	5·6	5.5	—	6	5.59	.04	5.9	.05
2165	Virgo . .	d^2 32	4286	+ 8° 2639	39.6	+ 8 20	6	6	6.0	5.7	3	5.35	.03	5.5	.12
2166	Virgo . .	33	4288	+10° 2468	40.3	+10 13	6	6	6.4	6.1	3	5.89	.07	5.7	.12
2167	Coma Beren.	27	4290	+17° 2533	40.7	+17 14	5	5	5.2	5.6	3	5.34	.12	5.4	.08
2168	Virgo . .	34	4292	+12° 2512	41.2	+12 36	F	6·7	6.5	6.4	3	5.90	.13	6.1	.08
2169	Virgo . .	—	4294	—	41.4	− 5 39	F	6·7	—	6.6	6	6.12	.10	—	—
2170	Hydra . .	—	4297	—	42.0	−26 56	F	6·7	—	6.0	3	5.91	.04	—	—
2171	Ursa Major	—	4300	+63° 1034	42.3	+63 26	6	6	6.0	—	3	5.88	.05	5.8	.07
2172	Canes Venat.	—	—	+50° 1948	42.4	+50 49	6	6·7	6.5	—	3	6.80	.11	6.5	.03
2173	Draco . .	7	4302	+67° 764	42.6	+67 27	6	5·6	5.3	—	3	5.84	.04	5.7	.19
2174	Coma Beren.	29	4301	+14° 2549	42.9	+14 47	6	6·5	5.9	—	3	5.74	.12	5.7	.23
2175	Coma Beren.	—	—	+25° 2568	43.0	+25 30	F	6·7	6.0	—	3	6.43	.09	6.3	.08
2176	Canes Venat.	11	4303	+49° 2163	43.2	+49 8	6	6	6.0	—	3	6.20	.13	6.1	.03
2177	Ursa Major	—	4305	+61° 1320	43.5	+60 58	F	6·7	6.0	—	3	5.96	.08	6.0	.03
2178	Coma Beren.	30	4304	+28° 2153	43.5	+28 12	6	6	6.2	—	3	6.03	.07	5.8	.16
2179	Canes Venat.	—	4311	+38° 2373	44.4	+38 11	6	5·6	6.0	—	3	5.87	.08	5.9	.13
2180	Hydra . .	—	—	—	45.4	−26 4	F	F	—	6.3	3	6.21	.09	—	—
2181	Coma Beren.	31	4315	+28° 2156	45.9	+28 12	5	5	5.0	—	6	5.04	.03	5.1	.11
2182	Coma Beren.	32	4318	+17° 2551	46.2	+17 44			6.3	—	—	—	—	—	—
2183	Coma Beren.	33	4319	+17° 2553	46.4	+17 46	F	6·7	7.2	—	—	—	—	—	—
2184	Coma Beren.	35	4328	+22° 2519	47.4	+21 54	5	5	5.2	—	3	5.08	.05	5.1	.12
2185	Virgo . .	41	4329	+13° 2602	47.8	+13 4	6	6	6.0	6.5	3	6.36	.19	6.2	.08
2186	Virgo . .	ψ 40	4330	—	48.1	− 8 53	5	5	—	5.2	6	4.97	.08	—	—
2187	Virgo . .	—	—	—	48.1	−11 0	6	6	—	6.1	6	5.95	.07	—	—
2188	Camelopard.	—	4339	+84° 289	48.1	+84 4			6.5	—					
2189	Camelopard.	—	4342	+84° 290	48.3	+84 4	5·4	5·4	5.5	—	6	5.01	.07	4.7	.11
2190	Canes Venat.	—	—	+34° 2369	48.5	+34 11	6	6	6.5	—	3	6.37	.12	5.9	.09
2191	Ursa Major	ε 77	4335	+56° 1627	48.7	+56 37	2	2	2.0	—	13	1.85	.05	2.1	.06
2192	Canes Venat.	—	4341	+47° 2003	49.5	+47 51	6	6	5.8	—	3	6.07	.04	6.2	.08
2193	Virgo . .	δ 43	4340	+ 4° 2669	49.6	+ 4 3	3	3	3.0	3.5	6	3.73	.06	3.6	.05
2194	Hydra . .	—	4343	—	50.1	−25 49	F	6	—	6.9	3	6.65	.08	—	—
2195	Canes Venat.	12	4346		50.4	+38 58									
2196	Canes Venat.	—	4345	+39° 2580	50.4	+38 58	3	3·2	3.0	—	7	3.00	.12	3.2	—
2197	Draco . .	8	4347	+66° 778	50.7	+66 5	5	5	5.0	—	16	5.29	.04	5.1	.07
2198	Ursa Major	—	4348	+54° 1556	51.0	+54 45	6	6·7	6.2	—	3	5.69	.11	5.6	.23
2199	Canes Venat.	—	4350	+46° 1833	51.7	+46 50	6	6	6.5	—	3	6.17	.04	6.2	.08
2200	Corvus . .	—	—	—	51.7	−22 23	F	6·7	—	7.0	3	6.66	.15	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2151	149,462,466,654,658,659		F	FRRFFF	—	. . . . . FF. RFF. . .	. . .	.	pcm
2152	149,455,468	102,453,658	5.4	202	516	. . 2. . 442. . *1*. . 4	. . .	*y*	
2153	144,455,468	*144*,689,672	6.3	001	*113*	. . . . . *555*. . F. . *2*	. . .	.	
2154	135,153,468		5.3	224	—	. . . . 553. . 1F. 1.	. . .	*y*	dg
2155	135,143,468,471,654,657,658		*3.5*	3712112	—	5401 *1* *1*102 42 5	00	w	dvg
2156			*3.5*					*y*	dvg
2157	137,149,468	150,452,655	5.1	023	*187*	*111*. . *111*. *37*. *35*	. . .	W	
2158	149,455,460	*150*,452,655	5.6	*321*	*323*	. . 0. . 222. 07. 01	. . .	w	
2159	140,153,457,657,658,659	*144*,*163*,677	6.0	031202	*322*	. . *8*. . *22*3. . 1. . *1*	. . .	w	h
2160	143,457,468,656,661,662,663		7.0	*131*b510	—	. . . . . Fb. . *3*b. *2*.	. . .	.	v
2161	457,466,475		5.9	*111*	—	. . . . . F*1*. 126. . .	. . .	.	t
2162	150,460,468	*144*,689,675	6.4	*121*	*222*	. . . . . *665*. . *3*. . *2*	. . *1*	*y*	
2163	143,457,460	*144*,689,672	5.9	202	301	. . *1*. . *13*0. . 2. . 1	. . 1	Y	
2164	133,150,468,654,657,658	*144*,689,675	5.6	004201	424	. . . . . *442*. . 5. . 3	. . *9*	R	vt
2165	150,460,468	*150*,452,655	5.4	001	041	0*1*0. . 444. 05. 01	. . .	*y*	
2166	140,153,465	*150*,452,655	5.9	120	*125*	. *6*R. . *11*3. 06. . *2*	. . .	Y	h
2167	133,146,468	105,457,655	5.3	231	131	. . 0. . *331*. 04. 11	. . .	O	
2168	143,453,465	*150*,*457*,655	5.9	*133*	141	. . 2. . F24. 36. . 2	. . .	w	
2169	471,475,654,656,658,659		6.1	43*1134*	—	. . . . . F0. . 3F. . .	. . .	.	
2170	150,453,468		5.9	011	—	. . . . . F2. 1*12*. . .	. . .	.	
2171	153,460,465	*144*,*163*,677	5.9	111	*211*	. . . . . *111*. . *2*. . *1*	. . .	w	
2172	143,457,460	*144*,689,*675*	6.8	*113*	*343*	. . . . . b*75*. . F. . *3*	. . .	.	
2173	133,457,460	*143*,*163*,677	5.8	110	620	. . 0. . 0*66*. . *1*. . *1*	. . .	O	
2174	453,457,468	*150*,*457*,655	5.7	*132*	065	. . *1*. . 110. . *4*. . 0	. . .	w	n
2175	455,457,468	104,*457*,*658*	6.4	*122*	300	. . . . . F*36*. . F*1*. *1*	. . .	.	
2176	146,460,468	*144*,689,*675*	6.2	*223*	*211*	. . 7. . *444*. . *5*. . *1*	. . 1	w	h
2177	143,460,463	*144*,*163*,677	6.0	201	001	. . . . . F*12*. . F. . 0	. . .	*y*	
2178	140,150,155	104,457,658	6.0	120	060	. . *8*. . *22*0. . *3*. . *2*	. . .	w	
2179	133,457,468	*144*,689,672	5.9	220	*331*	. . . . . *171*. . 2. . 0	. . 1	w	
2180	133,150,453		6.2	*122*	—	. . . . . FF. *211*. . .	. . .	.	
2181	140,155,468,654,657,658	104,457,658	5.0	101*102*	114	. . 4. . 000. . *1*. 41	. . .	*y*	
2182			*5.9*		—	. . R. *5* 2. . F. . .	. . .	.	dthcm
2183			*6.8*		—	. . R. 7F6 2. . F. . .	. . .	.	dthcm
2184	133,137,155	104,457,658	5.1	111	033	. . 2. 1*11*. . *2*. 30	. . .	*y*	d
2185	140,146,465	*150*,*457*,*658*	6.4	522	*402*	. . *3*. . *666*. *17*. . *2*	. . .	w	
2186	143,153,463,654,657,658		5.0	502*312*	—	0*1*R. . 00. . *11*. 0.	. . .	*o*	th
2187	143,153,465,654,658,659		6.0	*311*14	—	. . . . . *22*. . *11*. . .	. . .	.	vt
2188	146,150,460,654,656,657	*143*,163,679	*6.0*	*313*121	*163*	. . . . 5 3. . .	. . .	*b*	nd
2189			*5.5*			. . . . *4 44 1*. . *1* *23*	. . .	W	nd
2190	140,153,465	*144*,689,672	6.4	*321*	*734*	. . . . . *661*. . *3*. . *5*	. . .	.	
2191	133,137,143,145,146,153,155	101,145,147	1.8	*3252*203-	624-	3220. 443. . 2. 33	*21*.	W	ve
2192	143,155,465	*144*,689,*675*	6.1	011	113	. . . . . *335*. . 0. . 1	. . *4*	o	
2193	150,460,465,654,656,657	151,452,655	3.7	*222*040	020	*45*0*1*. *555*. *12*. *21*	0*2*.	Y	t
2194	140,150,465		6.6	220	—	. . . . . F*8*. F1F. . .	. . .	.	
2195	147,153,465,468,654,656,657	144,689,672	*3.1*	*3*631263	2R2	32 0 5 222 0 02	*312*	*y*	nde
2196			*5.7*			. . 1 . . .			nde
2197	135,137,143,145,153,455,457	101,145,*147*	5.3	*1524121*-	101	. . *1*. . *333*. . 4. . *2*	. . .	W	s
2198	143,150,468	144,*163*,677	5.7	230	*453*	. . . . 4143. . 0. . *1*	. . .	w	d
2199	145,150,468	*144*,689,*675*	6.2	110	022	. . . . . *441*. . *1*. . 0	. . *2*	*g*	
2200	140,150,468		6.7	403	—	. . . . . F*6*. *716*. . .	. . .	.	

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12h–13h

No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
2201	Coma Beren.	36	4351	+18° 2682	53.0	+18 4	5	5·6	4.8	—	6	5.00	.07	5.0	.17
2202	Virgo . .	k 44	4352	—	53.4	− 3 10	6	6	—	5.9	4	5.88	.16	—	—
2203	Virgo . .	46	4358	—	54.4	− 2 44	6	6	—	6.1	3	6.14	.11	—	—
2204	Coma Beren.	37	4360	+31° 2434	54.5	+31 26	5	5	5.2	—	3	5.14	.07	5.3	.21
2205	Draco . .	—	—	+76° 473	55.2	+76 7	F	6·7	6.0	—	3	6.22	.12	6.2	.00
2206	Draco . .	9	4365	+67° 773	55.3	+67 15	6	5·6	5.8	—	3	5.64	.04	5.6	.17
2207	Ursa Major	78	4366	+57° 1408	55.6	+57 1	6	6·5	5.0	—	3	4.79	.13	5.2	.27
2208	Virgo . .	ε 47	4367	+11° 2529	56.2	+11 36	3·2	3·2	3.0	—	6	3.00	.11	3.3	.25
2209	Draco . .	—	4371	+64° 927	57.0	+64 16	6	6	6.0	—	16	6.01	.03	6.0	.03
2210	Corvus . .	—	—	—	57.4	−19 57	F	6·7	—	5.9	6	5.56	.06	—	—
2211	Virgo . .	48	4373	—	57.7	− 3 1	6	6	—	6.7	3	6.59	.05	—	—
2212	Canes Venat.	—	—	+43° 2296	58.4	+43 39	F	6	6.0	—	3	7.07	.08	6.5	.03
2213	Canes Venat.	14	4384	+36° 2337	0.1	+36 26	5	5	5.5	—	3	5.27	.16	4.9	.09
2214	Canes Venat.	—	4389	+46° 1847	0.5	+45 55	6	6	6.0	—	7	5.71	.07	5.9	.17
2215	Coma Beren.	39	4387	+21° 2487	0.5	+21 48	6	6	6.0	—	3	6.08	.11	6.1	.07
2216	Coma Beren.	40	4388	+23° 2538	0.6	+23 16	6	6	5.8	—	3	6.06	.08	6.2	.07
2217	Ursa Minor	—	—	+73° 583	1.1	+73 40	F	6·7	6.0	—	3	6.33	.08	6.3	.08
2218	Coma Beren.	41	4390	+28° 2185	1.4	+28 16	5	5	5.1	—	3	4.89	.19	4.5	.21
2219	Virgo . .	49	4391	—	1.6	−10 6	6	6	—	5.6	7	5.22	.08	—	—
2220	Ursa Major	—	4392	+62° 1275	1.7	+62 42	6	6·7	6.0	—	3	6.25	.12	6.2	.07
2221	Virgo . .	g	4394	—	2.3	− 8 20	6	6	—	5.9	3	5.86	.05	—	—
2222	Hydra . .	ψ 45	4395	—	2.6	−22 29	5·6	5	—	5.3	3	5.13	.16	—	—
2223	Virgo . .	—	—	+10° 2516	3.2	+10 40	F	6	6.7	6.1	3	5.96	.05	5.5	.07
2224	Virgo . .	θ 51	4401	—	3.7	− 4 54	4·5	4·5	—	4.7	6	4.37	.06	—	—
2225	Canes Venat.	—	4407	+38° 2407	4.1	+38 5	F	6·7	6.0	—	3	6.17	.08	6.0	.12
2226	Coma Beren.	42	4406	+18° 2697	4.2	+18 10	4·5	5·4	5.0	4.5	3	4.38	.15	4.6	.05
2227	Coma Beren.				4.2	+18 10									
2228	Canes Venat.	15	4408	+39° 2611	4.2	+39 10	5	5	6.3	—	3	6.34	.07	5.1	.09
2229	Canes Venat.	17	4415	+39° 2614	4.5	+39 8			6.2	—	6	6.07	.04		
2230	Hydra . .	—	—	—	5.2	−25 55	F	F	—	6.6	3	6.74	.08	—	—
2231	Virgo . .	53	4418	—	5.7	−15 33	5	5	—	5.3	6	5.13	.06	—	—
2232	Coma Beren.	43	4421	+28° 2193	6.3	+28 29	4	4·5	5.0	—	6	4.38	.07	4.3	.08
2233	Virgo . .	—	4423	+12° 2565	6.6	+12 12	F	6·7	6.0	—	3	5.73	.12	5.7	.03
2234	Coma Beren.	—	—	+19° 2648	6.7	+19 23	6	6	6.5	—	—	—	—	6.2	.09
2235	Coma Beren.	—	—	+19° 2649	7.3	+19 21			6.3	—	3	6.75	.12		
2236	Virgo . .	55	4430	—	7.8	−19 18	6	6	—	5.8	4	5.76	.13	—	—
2237	Canes Venat.	—	4433	+40° 2633	8.3	+40 47	5	5	5.0	—	3	5.04	.07	4.9	.07
2238	Virgo . .	—	—	+12° 2572	8.5	+11 58	6	6	6.4	6.0	7	5.70	.07	5.6	.03
2239	Draco . .	—	—	+68° 720	8.9	+67 57	F	F	6.7	—	—	—	—	—	—
2240	Virgo . .	57	4435	—	9.5	−19 18	6	6	—	5.7	7	5.41	.04	—	—
2241	Canes Venat.	19	4438	+41° 2374	10.2	+41 30	6	5·6	6.0	—	4	5.72	.12	5.6	.09
2242	Centaurus	—	4437	—	10.2	−30 52	5·4	5·4	—	5.7	8	5.53	.13	—	—
2243	Coma Beren.	—	—	+20° 2814	10.7	+20 25	6	6·7	6.8	—	3	6.28	.05	6.3	.07
2244	Virgo . .	e 59	4440	+10° 2531	10.8	+10 3	5	6·5	6.0	5.6	3	5.12	.16	5.2	.09
2245	Virgo . .	—	4444	+14° 2591	11.3	+14 18	6	6·5	5.5	5.8	7	5.57	.09	5.5	.07
2246	Virgo . .	σ 60	4446	+ 6° 2722	11.5	+ 6 6	5	5	5.2	5.4	3	4.98	.19	4.8	.05
2247	Virgo . .	61	4449	—	12.1	−17 39	5	5	—	5.3	6	4.82	.05	—	—
2248	Canes Venat.	20	4451	+41° 2380	12.2	+41 12	5·4	5·4	4.3	—	6	4.72	.06	4.8	.08
2249	Hydra . .	γ 46	4450	—	12.4	−22 32	3	3	—	3.2	6	3.35	.09	—	—
2250	Draco . .	—	—	+69° 694	12.5	+69 2	F	6·7	6.0	—	14	6.10	.04	6.1	.04

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2201	135,140,465,654,656,657	104,457,659	5.0	*440003*	*324*	. . 5 . . 0 2 2 . . *1* . 1 0	. . .	O	vt
2202	137,143,150,457		5.9	*6*070	—	. . 4 . 1 *11* . . *22* . *3* .	. . .	W	d
2203	137,143,463		6.1	1*3*1	—	b *83* . . *33* . . *24* . . .	. . .	*y*	a
2204	140,150,468	104,457,659	5.1	1*2*0	0*2*7	. . 0 . . *11* . . 2 . 2 2	. . .	Y	n
2205	145,457,460	*143,163,682*	6.2	2*3*1	000	. . . . . F *14* . . F . . 0	. . .	.	
2206	143,150,460	*143,163*,677	5.6	1*1*0	*4*41	. . 0 . . 2 *4* 0 . . 5 . . 0	. . .	O	t
2207	143,150,460	144,*163*,677	4.8	*3*31	59*3*	. . 7 . . 0 8 2 . . 5 . . 4	. . .	*y*	
2208	137,147,457,654,656,657	151,458,659	3.0	*37*1151	0*1*9	8 2 0 *1* . *3* 2 2 . . 0 . *1* 3	1 2 .	Y	a
2209	137,140,145,147,153,155,455	*102,104,145*	6.0	*304*2002-	*111*	. . . . . *222* . . 1 . . 0	. . .	*y*	s
2210	143,150,155,654,656,658		5.6	*200241*	—	. . . . . F 5 . . 1 1 . . .	. . .	.	
2211	140,465,468		6.6	11*1*	—	. . *5* . . *88* . . *15* . . .	. . .	w	
2212	137,150,155	*144*,689,*675*	7.1	20*2*	67F	. . . . . F b b . . F . . *6*	. . *2*	.	
2213	135,145,477	144,689,672	5.3	04*4*	*625*	. . *1* . . *33* 1 . . 0 . *54*	. . .	*y*	
2214	147,155,471,473,658,659,660	*144*,689,*675*	5.7	*525*1101	5*24*	. . . . . 1 1 1 . . *4* . . 2	. . *1*	*y*	
2215	150,462,471	104,*457*,659	6.1	0*2*3	02*1*	. . *2* . . *333* . . 0 . . 0	. . .	w	
2216	145,463,465	104,*457*,659	6.1	*2*02	031	. . 1 . . *335* . . *4* . . 1	. . .	*o*	te
2217	143,471,475	*144,163,682*	6.3	2*11*	2*11*	. . . . . F *25* . . F . . 0	. . .	.	
2218	140,153,477	102,457,659	4.9	5*13*	0*29*	. . 0 . . 1 1 2 . . 0 . 3 *4*	. *1* .	*o*	
2219	137,463,469,471,658,659,660		5.2	2364020	—	*23* R . . 6 6 . . 1 5 . 1 .	. . .	*o*	nh
2220	150,471,473	*144,163*,677	6.2	*132*	2*1*0	. . . . . *414* . . *5* . . 0	. . .	*y*	
2221	143,155,469		5.9	1*71*	—	. . . . . *11* . . *22* . *3* .	. . .	*o*	n
2222	145,153,479		5.1	*422*	—	. . *3* . . 1 *1* . *412* . 0 .	. . .	O	
2223	143,150,465	*151*,457,659	6.0	1*71*	*365*	. . . . . F *25* . *13* . . *5*	. . .	.	
2224	145,153,475,658,659,660		4.4	*4*11111	—	0 *21* . 0 0 0 . . 2 *4* . 1 .	. . .	w	d
2225	135,155,271	*144,672,689*	6.2	12*1*	*501*	. . . . . F *14* . . F . . *2*	. . .	*y*	
2226			*5.1*			. . 9	. . .		nd
2227	133,137,477	104,457,659	*5.1*	4*3*0	133	. . 0 9 0 2 6 . 0 0 . 6 2	. . .	*y*	nd
2228	135,155,471		6.3	*2*01		: . *3* . *4* *2* . . 3 . *93*	. . 0	*b*	dec
2229	135,155,471,658,659,661	144,672,689	6.1	201*21*0	*125*	. . 3 . *5* *44* *1* . . .	. . 0	*y*	dec
2230	145,150,469		6.7	0*2*2	—	. . . . . F F . *736* . . .	. . .	.	
2231	137,150,469,658,659,660		5.1	*240111*	—	3 2 0 . . *11* . . *12* . *1* .	. . .	*y*	
2232	133,147,477,658,659,661	102,457,659	4.4	*223*031	1*13*	. . *2* . . *3* 0 6 . . 0 . 1 *1*	. 0 .	*g*	ne
2233	135,462,477	*151*,457,659	5.7	12*3*	010	. . . . . F 4 1 . . F . . 0	. . .	O	
2234			*7.0*			. . . . . 7 . . .	. . .	.	dpc
2235	137,464,660	104,457,*659*	6.8	0*3*3	03*1*	. . . . . *33* 7 . . *4* . . 1	. . .	.	dpc
2236	133,137,477,479		5.8	13F*3*	—	. . *6* . . 0 0 . . *29* . . .	. . .	*o*	
2237	141,471,475	144,689,672	5.0	01*2*	*310*	. . . . . 0 0 0 . . 7 . 0 *1*	. . 1	Y	
2238	135,145,477,479,658,659,661	*151*,457,659	5.7	31*6*120*1*	01*1*	. . . . . 1 1 5 . 1 0 . . *1*	. . .	.	
2239			*6.2*		—	. . . . *3* F F 3 . . F . . .	. . .	.	dcm
2240	133,137,479,658,659,660,661		5.4	*10*12102	—	. . 0 . . 44 . . 07 . . .	. . .	*o*	
2241	135,137,141,475	*144*,689,672	5.7	4222	03*1*	. . 0 . . 1 5 1 . . 4 . *11*	. . 3	*y*	
2242	143,462,475,479,658,659,660		5.5	645*3*614-	—	. . . . . 99 . 0 *16* . . .	. . .	.	
2243	137,464,479	104,*457,659*	6.3	*1*11	2*1*0	. . . . . *523* . . *6* . . 0	. . .	.	
2244	145,464,465	*151*,457,659	5.1	*4*22	2*1*3	. . 4 . . *1* 57 . 22 . 11	. . .	*y*	
2245	137,464,467,471,660,661,662	*150*,458,659	5.6	821114*1*	1*12*	. . . . . 202 . 012 . *1*	. . .	*y*	
2246	133,141,477	151,452,656	5.0	40*5*	*311*	. . *1* . . 002 . 1 *1* . 0 *2*	. . .	O	t
2247	145,153,475,658,660,661		4.8	*103121*	—	2 1 4 . . 2 2 . . 2 1 . 2 .	. . .	*y*	a
2248	145,475,477,660,661,662	144,689,672	4.7	*111*132	003	. . 5 . . *114* . . 2 . 1 1	. . 3	*y*	
2249	147,462,475,658,660,661		3.4	710*241*	—	4 2 0 *1* . *22* . 2 *1* 6 . 0 .	. . .	*o*	vt
2250	133,145,147,151,155,462,464	*104*,107,*145*	6.1	00*33*310-	*122*	. . . . . F 0 *3* . . F *1* . 0	. . .	.	s

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
2251	Virgo . .	—	—	+ 4° 2721	12.8	+ 4 19	6	6	6.7	6.5	4	6.30	.08	5.8	.12
2252	Virgo . .	—	—	+ 4° 2723	13.0	+ 4 21			7.7	7.1	—	—	—		
2253	CanesVenat.	21	4456	+50° 1994	13.1	+50 19	5	5	5.0	—	7	5.16	.06	4.8	.19
2254	CanesVenat.	—	4457	+35° 2435	13.6	+35 45	F	6	6.7	—	3	6.67	.04	5.9	.08
2255	CanesVenat.	23	4467	+40° 2647	15.0	+40 48	6·5	6·5	5.5	—	7	5.60	.10	5.6	.13
2256	Virgo . .	—	4470	+ 2° 2664	15.6	+ 2 43	6	6·5	5.8	6.0	3	5.77	.07	5.4	.08
2257	Virgo . .	64	4472	+ 5° 2737	16.1	+ 5 48	6	6	6.5	6.1	3	5.68	.11	5.7	.16
2258	Virgo . .	63	4474	—	16.6	−17 6	6	6	—	5.5	6	5.50	.09	—	—
2259	CanesVenat.	—	—	+44° 2269	16.8	+44 32	6	6	6.4	—	3	6.44	.05	6.1	.03
2260	Virgo . .	65	4477	—	17.1	− 4 18	6	6	—	6.1	3	6.06	.08	—	—
2261	Virgo . .	66	4478	—	18.3	− 4 32	6	6	—	6.0	3	5.82	.11	—	—
2262	CanesVenat.	—	4479	+37° 2404	18.5	+37 39	F	F	6.0	—	3	6.40	.13	—	—
2263	Virgo . .	α 67	4480	—	18.9	−10 32	1	1	—	1.5	13	1.23	.06	1.3	.10
2264	Ursa Major	ζ 79	4484		19.1	+55 33									
2265	Ursa Major	—	4486	+55° 1598	19.1	+55 33	2	2	2.0	—	13	2.38	.05	2.1	.03
2266	Coma Beren.	—	—	+24° 2578	19.4	+24 28	6	6	5.5	—	3	5.93	.03	5.7	.23
2267	Ursa Major	g 80	4493	+55° 1603	20.4	+55 37	5	5	5.0	—	6	4.18	.06	4.8	.19
2268	Virgo . .	i 68	4492	—	20.4	−12 5	6	6	—	5.7	6	5.52	.06	—	—
2269	Virgo . .	69	4494	—	21.0	−15 21	5·6	5·6	—	5.0	6	4.85	.06	—	—
2270	CanesVenat.	—	—	+46° 1868	21.1	+46 39	6	6	6.0	—	3	5.67	.12	6.0	.05
2271	Virgo . .	70	4499	+14° 2621	22.6	+14 27	5	5·6	5.5	5.4	3	5.21	0.5	5.1	.13
2272	Ursa Minor	—	4506	+73° 592	23.1	+73 1	6	5·6	6.0	—	6	6.11	.07	6.1	.07
2273	Draco . .	—	—	+65° 935	23.1	+65 21	6	6	6.7	—	3	6.05	.16	6.0	.00
2274	Draco . .	—	—	+65° 936	23.2	+65 19			6.7	—					
2275	Hydra . .	R	4501	—	23.1	−22 40	var.	var.	—	F	2	var.	—	—	—
2276	CanesVenat.	—	—	+41° 2400	23.2	+41 21	6	6	6.2	—	3	6.47	.04	6.4	.07
2277	Virgo . .	71	4504	+11° 2575	23.3	+11 27	6	6	6.4	6.0	3	5.66	.05	5.6	.12
2278	Ursa Major	—	—	+51° 1847	23.8	+51 21	6	6	6.7	—	3	6.34	.15	6.3	.07
2279	Ursa Major	—	4510	+60° 1461	24.0	+60 34	5·6	5·6	5.3	—	16	5.42	.05	5.3	.07
2280	Virgo . .	72	4508	—	24.2	− 5 49	F	F	—	6.7	6	6.14	.06	—	—
2281	Hydra . .	—	—	—	24.9	−27 30	F	F	—	6.7	3	6.71	.03	—	—
2282	Virgo . .	73	4514	—	25.6	−18 7	6	6	—	6.2	6	5.98	.06	—	—
2283	Virgo . .	l 74	4516	—	25.8	− 5 38	5	5	—	5.1	7	4.91	.07	—	—
2284	Hydra . .	—	—	—	25.9	−28 4	F	F	—	5.9	3	5.64	.13	—	—
2285	Centaurus	—	4517	—	25.9	−28 57	F	F	—	6.8	3	6.37	.05	—	—
2286	Camelopard.	—	4527	+79° 422	26.1	+79 15	6	6	6.0	—	3	6.08	.07	6.1	.03
2287	CanesVenat.	—	4519	+42° 2405	26.1	+42 43	6	6	6.3	—	3	6.24	.03	6.2	.07
2288	Virgo . .	75	4520	—	26.5	−14 45	6	6	—	6.0	3	5.73	.07	—	—
2289	Virgo . .	S	—	—	26.7	− 6 35	F	var.	—	var.	1	var.	—	—	—
2290	Virgo . .	h 76	4521	—	26.7	− 9 33	5	5	—	5.8	3	5.54	.19	—	—
2291	Coma Beren.	—	4526	+ 25° 2643	27.1	+24 59	F	6·7	6.0	—	3	6.29	.07	5.9	.09
2292	Virgo . .	o 78	4529	+ 4° 2764	28.1	+ 4 16	5	5	5.0	5.2	3	4.87	.05	4.7	.07
2293	Virgo . .	—	4531	—	28.3	−12 36	F	6·7	—	var.	6	5.71	.08	—	—
2294	Virgo . .	ζ 79	4532	+ 0° 3076	28.6	+ 0 1	3·4	3·4	3.5	3.6	6	3.53	.04	3.4	.07
2295	CanesVenat.	—	—	+39° 2658	28.9	+39 25	6	6·7	6.2	—	3	6.27	.08	6.3	.08
2296	Virgo . .	80	4535	—	29.3	− 4 47	6	6	—	6.1	3	5.85	.08	—	—
2297	CanesVenat.	—	4536	+37° 2426	29.4	+37 48	5	6	5.1	—	6	4.99	.04	4.7	.17
2298	Ursa Major	81	4540	+56° 1667	29.6	+55 58	6	6	6.0	—	3	5.46	.08	5.7	.13
2299	CanesVenat.	24	4538	+49° 2127	29.6	+49 38	5	5	4.8	—	3	4.84	.03	4.7	.19
2300	CanesVenat.	—	4545	+44° 2285	30.1	+44 49	6	6	6.5	—	3	6.50	.19	6.4	.04

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	Measures.	Estimates.				P S Hh Σ U *H* D B G *h* R F E	s w p		
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2252			*6.8*			. . . . . 7.1F. . 0	. . .	.	dp
2253	151,471,475,477,661,662,663	144,163,677	5.2	*3611011*	*517*	. . 0 . . *222* . . 5.*24*	. . 3	W	
2254	137,155,471	105,457,659	6.7	*110*	*68b*	. . . . . F*92* . . F. . *8*	. . .	.	
2255	137,145,475,477,661,662,663	*144*,689,672	5.6	*1706222*	*133*	. . *2* . . *202* . . 1.00	. . 2	*o*	
2256	133,141,467	151,452,656	5.8	*210*	*624*	. . . . . 0*22* . 0*10* . *4*	. . .	w	
2257	147,153,467	*151*,452,656	5.7	*311*	*224*	. . *4* . . 116 . 20 . . 0	. . .	*y*	
2258	141,462,475,660,661,662		5.5	*151241*	—	. . *4* . . 33 . . *32* . *2* .	. . .	Y	vtg
2259	133,155,471	*144,689,675*	6.4	*111*	*334*	. . . . . *662* . . *7* . . *3*	. . 0	*y*	e
2260	147,464,477		6.1	*022*	—	. . *6* . . *33* . . *24* . . .	. . .	*o*	
2261	147,464,477		5.8	*113*	—	. . 1 . . 00 . . 0*5* . . .	. . .	w	
2262	462,465,469		6.4	*322*	—	. . . . . FF*6* . . *3* . *8* .	. . .	*o*	t
2263	133,145,147,158,160,462,464	109,198,204	1.2	*0551624-*	*450-*	*7130* . *99* . . 12 . *21*	*51* .	W	e
2264	138,145,151,153,160,462,464	103,104,145	*2.6*	*1614124-*	*243-*	*3422* $\frac{4}{4}$ *223* . . *4* . *03*	. . .	W	dvpe
2265			*4.2*				. . .	*g*	dvpe
2266	151,465,469	104,458,662	5.9	*010*	*281*	. . . . . *115* . . F. . *2*	. . .	.	
2267	138,160,470,661,662,663	*144,163*,677	4.2	*112*221	513	. . 8 . . 888 . . 7.66	.0.	*y*	ve
2268	141,464,467,658,660,661		5.5	*211132*	—	*5* . 0 . . 33 . . *12* . *1* .	. . .	o	vta
2269	133,145,475,658,660,661		4.8	*033112*	—	. . 3 . . 44 . . 01 . 0 .	. . .	Y	vg
2270	138,151,457	*144,171,675*	5.7	*330*	244	. . . . . 111 . . 4 . . 3	. . 3	.	
2271	133,141,479	*150*,458,659	5.2	*111*	*332*	. . *5* . . *202* . *13* . *01*	. . .	*y*	
2272	145,153,475,660,661,662	*144,163*,682	6.1	*233210*	*021*	. . . . . *393* . . 0 . *80*	. . .	*o*	
2273	141,471,477	*144,163*,677	*6.6*	044	000	. . . . . *22* *1* . . *3* . . 0	. . .	.	d
2274			*7.0*			. . . . . *5*	. . .	.	d
2275	151,465		var.	RF	—	. . . . . VV . VF F . . .	. . .	*r*	vtpg
2276	153,471,479	*144,183,675*	6.5	*101*	*031*	. . . . . *775* . . F. . *1*	. . 1	.	
2277	153,465,473	*150*,458,659	5.7	*111*	*223*	. . *4* . . 115 . 10 . . *1*	. . .	*y*	
2278	133,471,477	*144,163,677*	6.3	*214*	*201*	. . . . . *552* . . *2* . . 0	. . 1	.	e
2279	138,145,147,151,153,160,465	101,101,104	5.4	*0342632-*	*313*	. . . . . *222* . . 3 . . *1*	. . .	*y*	ts
2280	462,471,477,658,660,661		6.1	*144100*	—	. . *2* . . FF . . 4F . . .	*.5.*	.	nvtgc
2281	462,465,473		6.7	*100*	—	. . . . . FF . *72*F . . .	. . .	.	
2282	133,465,473,658,661,662		6.0	*111133*	—	. . R . . *22* . . 0*3* . . .	. . .	w	h
2283	141,465,473,477,658,661,662		4.9	*5520201*	—	123 . . 11 . . 00 . 1 .	*.1.*	O	nt
2284	462,465,473		5.6	*133*	—	. . . . . FF . 411 . . .	. . .	.	
2285	462,465,473		6.4	*111*	—	. . . . . FF . *423* . . .	. . .	.	n
2286	462,467,469	*144,163*,682	6.1	*021*	100	. . . . . *333* . . 0 . . 0	. . .	Y	n
2287	462,467,469	*144,183,675*	6.2	*001*	*102*	. . . . . *441* . . *1* . . 0	. . 0	Y	
2288	133,467,469		5.7	*021*	—	. . 0 . . 11 . . 10 . *1* .	. . .	Y	
2289	462		var.	R	—	. . . . . FV . . VF . . .	. . .	.	vtpg
2290	147,465,473		5.5	*513*	—	*121* . . *55* . . 16 . *1*:	. . .	*y*	
2291	141,467,473	104,458,662	6.3	*201*	*263*	. . . . . F*25* . . *2* . . *4*	. . .	*o*	
2292	133,465,473	151,452,656	4.9	*111*	*230*	. . 0 . . 111 . 00 . *12*	. . .	W	ng
2293	462,471,477,658,661,662		5.7	*052041*	—	. *6* . . . F4 . . V0 . *3* .	. . .	w	vag
2294	158,465,473,658,661,662	151,452,656	3.5	*011230*	*130*	*212* . . *102* . 25 . *11*	01 .	W	g
2295	464,465,473	*144,183,675*	6.3	*022*	*211*	. . . . . *523* . . *2* . . 0	. . 3	.	
2296	133,469,477		5.8	*202*	—	. . 2 . . 00 . . *11* . . .	. . .	*y*	
2297	464,465,473,660,661,662	105,458,662	5.0	*021130*	*017*	. . . . . 081 . . 3 . . *3*	. . .	*y*	
2298	464,467,470	*144,163*,677	5.5	*022*	*351*	. . *3* . . 333 . . 2 . . 2	. . .	w	
2299	464,467,469	144,163,677	4.8	*100*	*145*	. . 0 . . 220 . . 9 . *21*	. . 1	W	
2300	464,467,473	*144,171,675*	6.5	*351*	*021*	. . . . . *772* . . F. . *1*	. . 4	w	v

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
2301	Hydra . .	—	4541	—	30.2	−25 53	6·5	6·5	—	5.8	3	5.64	.04	—	—
2302	Coma Beren.	—	—	+25° 2652	31.3	+25 13	6	6	6.0	—	3	5.93	.05	5.8	.16
2303	Centaurus .	—	4548	—	32.0	−28 57	F	6	—	6.3	7	5.64	.06	—	—
2304	Canes Venat.	25	4552	+37° 2433	32.1	+36 54	5	5	5.3	—	6	5.00	.10	4.7	.15
2305	Camelopard.	—	—	+77° 516	33.1	+77 10	F	6·7	6.0	—	3	6.75	.11	6.5	.03
2306	Bootes . .	—	4559	+11° 2589	33.6	+11 21	5	5	5.7	5.9	3	5.60	.09	5.4	.12
2307	Ursa Minor	—	—	+71° 659	34.3	+71 51	6	6	5.8	—	6	5.60	.05	6.0	.04
2308	Canes Venat.	—	—	+31° 2526	34.8	+31 37	6	6	6.0	—	3	6.10	.07	5.9	.17
2309	Ursa Major	82	4564	+53° 1640	34.9	+53 31	6	6·5	5.8	—	7	5.30	.04	5.6	.09
2310	Bootes . .	1	4562	+20° 2858	34.9	+20 34	6	6·5	5.5	—	3	5.72	.09	5.4	.11
2311	Canes Venat.	—	—	+28° 2248	35.1	+28 41	6	6	6.5	—	3	6.29	.07	5.9	.17
2312	Virgo . .	m 82	4565	—	35.3	− 8 6	6	6	—	5.7	6	5.30	.09	—	—
2313	Bootes . .	2	4566	+23° 2600	35.4	+23 9	6	6·5	5.5	—	3	5.83	.07	5.5	.11
2314	Ursa Major	—	—	+57° 1456	36.0	+57 48	6	6·7	6.1	—	3	6.16	.16	6.1	.07
2315	Ursa Major	83	4568	+55° 1625	36.2	+55 17	6·5	5·6	5.5	—	6	4.83	.05	5.1	.21
2316	Canes Venat.	—	—	+29° 2450	36.6	+28 59	F	neb.	neb.	—	2	neb.	—	6.0	.12
2317	Virgo . .	84	4570	+ 4° 2775	37.1	+ 4 9	6	6·5	5.7	5.8	3	5.73	.11	5.4	.11
2318	Canes Venat.	—	—	+42° 2431	37.4	+42 17	6	6·7	6.0	—	3	6.44	.09	6.4	.04
2319	Virgo . .	—	4572	—	37.6	− 4 53	6	6	—	6.5	4	6.37	.04	—	—
2320	Draco . .	—	4577	+65° 953	37.7	+65 26	6	6	6.0	—	3	5.62	.03	6.0	.03
2321	Virgo . .	83	4574	—	38.0	−15 35	6	6	—	6.0	3	5.78	.09	—	—
2322	Hydra . .	—	—	—	38.1	−24 54	F	F	—	6.5	3	6.44	.09	—	—
2323	Canes Venat.	—	—	+46° 1895	38.4	+46 7	6	6·7	6.5	—	3	6.70	.07	6.5	.03
2324	Hydra . .	—	4581	—	38.9	−25 31	6·5	6·5	—	6.1	3	5.79	.07	—	—
2325	Ursa Major	—	—	+52° 1733	39.3	+52 38	6	6	6.2	—	3	5.94	.07	5.8	.13
2326	Virgo . .	86	4585	—	39.5	−11 49	6	6	—	5.9	3	6.02	.13	—	—
2327	Ursa Major	—	—	+56° 1683	40.8	+56 30	6	6·7	7.0	—	3	6.26	.04	6.2	.07
2328	Virgo . .	—	4591	—	40.9	− 9 6	6	6	—	6.6	3	6.25	.05	—	—
2329	Virgo . .	87	4590	—	40.9	−17 16	F	6·7	—	5.8	9	5.69	.09	—	—
2330	Canes Venat.	—	—	+39° 2678	41.1	+39 6	F	F	6.0	—	3	5.84	.11	—	—
2331	Canes Venat.	—	4596	+41° 2424	41.2	+41 41	6·5	6·5	5.7	—	3	5.80	.03	5.9	.15
2332	Bootes . .	3	4594	+26° 2494	41.2	+26 18	6	6	6.0	—	3	5.83	.07	5.9	.15
2333	Bootes . .	τ 4	4597	+18° 2782	41.6	+18 3	5·4	5·4	4.6	4.7	6	4.50	.04	4.6	.04
2334	Canes Venat.	—	4600	+39° 2680	41.8	+39 10	5·6	5·6	5.5	—	3	5.54	.03	5.3	.19
2335	Virgo . .	88	4599	—	42.0	− 6 14	6	6	—	6.8	3	6.64	.04	—	—
2336	Camelopard.	—	—	+78° 466	42.1	+78 40	F	F	5.8	—	3	6.28	.09	—	—
2337	Ursa Major	84	4605	+55° 1634	42.1	+55 2	6	6	6.5	—	3	5.56	.00	5.7	.13
2338	Ursa Major	η 85	4607	+50° 2027	42.8	+49 55	2	2	2.0	—	13	2.02	.04	1.9	.06
2339	Canes Venat.	—	4609	+42° 2440	43.0	+42 39	6	6·7	6.5	—	3	6.70	.03	6.5	.00
2340	Canes Venat.	—	4610	+31° 2547	43.3	+31 47	6	6	5.5	—	3	5.80	.19	5.8	.24
2341	Virgo . .	89	4608	—	43.3	−17 32	5	5	—	5.4	6	5.24	.07	—	—
2342	Centaurus .	—	—	—	43.4	−28 27	F	F	—	6.5	7	6.00	.09	—	—
2343	Bootes . .	υ 5	4615	+16° 2564	43.7	+16 24	4·5	4·5	4.2	4.2	3	4.11	.13	4.1	.13
2344	Bootes . .	e 6	4618	+21° 2578	44.0	+21 52	5	5	5.1	—	3	4.98	.07	4.9	.09
2345	Camelopard.	—	4643	+83° 397	45.8	+83 21	6	6	6.5	—	3	6.29	.12	5.9	.05
2346	Canes Venat.	—	4627	+35° 2492	45.8	+35 22	6	6·5	6.8	—	3	6.37	.12	5.9	.09
2347	Canes Venat.	—	4628	+35° 2493	45.9	+35 17			5.8	—	3	5.97	.04		
2348	Draco . .	—	—	+62° 1318	46.0	+62 5	6·5	6	6.0	—	14	6.09	.05	6.1	.01
2349	Centaurus .	h 4	4629	—	46.3	−31 20	4·5	4·5	—	5.2	3	4.66	.03	—	—
2350	Ursa Major	—	—	+59° 1533	46.4	+59 8	6	6·7	6.5	—	3	6.33	.05	6.2	.05

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2301	462,465,473		5.6	110	—	. . . . . *2*0. *1*01. . .	. . .	.	d
2302	133,467,473	104,458,662	5.9	111	250	. . . . . *111*. . *2431*	. . .	.	t
2303	462,469,479,482,661,662,663		5.6	2212221	—	. . . . . F2. *1*51. . .	. . .	.	n
2304	151,153,467,661,662,663	105,458,662	5.0	512251	*127*	. . b. 6002. . *1*.0*3*	. . .	W	d
2305	147,467,473	*144,163,682*	6.8	302	*334*	. . . . . F7b. . F. . *3*	. . .	.	
2306	151,153,470	150,458,659	5.6	*221*	152	. . . . . *660*. 17. *42*	. . .	w	n
2307	133,158,470,660,661,662	*144,163*,682	5.6	211112	534	. . . . . 220. . 1. . 4	. . .	.	
2308	147,467,469	*106*,458,662	6.1	021	160	. . . . . *333*. . 02. *2*	. . .	.	
2309	151,469,470,473,661,662,663	*144,163*,677	5.3	0110112	541	. . 3. . 533. . 8. . 3	. . .	w	h
2310	153,469,470	102,458,662	5.7	*122*	*350*	. . *1*. 41*13*. . *4*. . *3*	. . .	w	d
2311	464,467,469	*106*,458,662	6.3	021	*182*	. . . . . *550*. . F. . *4*	. . .	*o*	
2312	133,473,477,660,662,663		5.3	122234	—	*732*. . 55. . 14. 1.	. . .	*o*	ta
2313	158,469,470	102,458,662	5.8	012	*440*	. . *2*. . 0*24*. . *1*. . *3*	. . .	*y*	
2314	147,153,470	*144,171*,677	6.2	431	*211*	. . . . . *413*. . F. . *1*	. . .	.	
2315	151,469,479,660,662,663	*144,163*,677	4.8	210203	752	. . 0. . 646. . 5 . 43	. . .	O	vt
2316	464,469	*106,458*,662	neb.	RR	RRR	. . . . . FNN. . F. . R	. . .	.	pe
2317	133,473,479	*151*,452,656	5.7	311	053	. . *2*. 01*11*. *18*. *43*	. . .	Y	ndc
2318	147,473,479	*144,171*,675	6.4	221	110	. . . . . *636*. . F. . 0	. . 0	.	
2319	464,473,476,477		6.4	0111	—	. . . . . *66*. . *13*. *4*.	. . .	.	
2320	153,473,479	*144,163*,677	5.6	001	445	. . . . . 222. . 5. . 4	. . .	*g*	
2321	151,467,473		5.8	122	—	. . *4*. . 00. . 0*1*. . .	. . .	*y*	
2322	464,469,479		6.4	221	—	. . . . . FF. *41*F. . .	. . .	.	
2323	147,473,479	*144,171,683*	6.7	012	*223*	. . . . . *964*. . F. . *2*	. . 1	.	
2324	464,467,469		5.8	120	—	. . . . . *42*. 211. . .	. . .	.	
2325	151,467,476	145,*163*,677	5.9	012	411	. . . . . *111*. . 2. . *1*	. . .	.	
2326	147,153,477		6.0	313	—	b b *2*. . *22*. . *3* b. *6*.	. . .	*y*	
2327	473,476,477	*145,171*,677	6.3	011	*211*	. . . . . *525*. . F. . *1*	. . .	.	
2328	153,469,477		6.2	111	—	. b. . . *44*. . *21*. . .	. . .	.	
2329	151,465,476,479,482,660,661		5.7	6332221-	—	. . 2. . F4. . *14*. . .	. . .	*o*	
2330	153,464,467		5.8	302	—	. . . . . FF0. . F. . .	. . 3	.	
2331	464,469,479	*145*,171,675	5.8	010	*251*	. . . . . *422*. . F. . 1	. . *5*	w	
2332	464,467,476	104,458,662	5.8	012	332	. . 4. . 000. . 3. . 1	. . .	*y*	
2333	138,465,476,660,661,662	102,457,659	4.5	032011	201	*130*. . 111. *11*. 31	*.1*.	*y*	
2334	469,476,482	105,458,*662*	5.5	100	443	. . . . . *331*. . 2. . *2*	. . 3	.	e
2335	464,477,479		6.6	110	—	. . R. . *88*. . 05. . .	. . .	.	nh
2336	147,469,479		6.3	221	—	. . . . . FF7. . *2*. . .	. . .	.	
2337	147,467,476	*145,163*,677	5.6	000	242	. . *3*. . 227. . 1. . 1	. . .	w	
2338	133,138,145,151,160,165,168	103,105,145	2.0	1521211-	022-	1000. 221. . 0. 0*1*	*411*	W	ve
2339	464,469,479	*145,171,675*	6.7	100	*222*	. . . . . *964*. . *6*. . *2*	. . 1	*y*	
2340	147,476,482	*106*,458,662	5.8	531	462	. . . . . 004. . F. . 0	. . .	.	
2341	160,465,469,660,661,662		5.2	102314	—	214. . *22*. . *15*. *1*.	. . .	*y*	a
2342	145,476,479,482,660,662,663		6.0	5611132	—	. . . . . FF. 03F. . .	. . .	.	
2343	151,153,470	102,458,659	4.1	322	331	313. . 332. 1*1*. 50	*.1*.	O	vt
2344	138,153,470	102,457,662	5.0	012	10*3*	. . 2. . 001. . *1*. 4*1*	. . .	*o*	
2345	147,469,470	*145,163*,679	6.3	*132*	*553*	. . . . . *550*. . *2*. . *4*	. . .	*y*	n
2346	151,158,467	*106,458,662*	6.4	321	*374*	. . . . . 42 *2*. . F. . 5	. . .	o	ec
2347	158,476,485		6.0	011		. . . . . 4 *4*. . F3.	. . .	.	ec
2348	138,151,153,158,160,465,467	*104,104,105*	6.1	1713252-	110	. . . . . *733*. . 0. . 0	. . .	.	s
2349	464,479,482		4.7	010	—	02R. . *33*. 322. . .	. . .	.	dah
2350	153,482,485	*145,171*,677	6.3	111	*202*	. . . . . *520*. . F. . *1*	. . .	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
2351	Bootes . .	—	—	+12° 2635	46.4	+12 46	6	6	6.8	—	3	6.13	.08	6.1	.04
2352	CanesVenat.	—	4632	+35° 2496	46.5	+35 2	5	5·6	5.7	—	3	4.94	.03	5.0	.21
2353	Bootes . .	7	4637	+18° 2795	47.5	+18 31	F	F	6.5	—	3	5.65	.08	—	—
2354	Centaurus .	—	4636	—	47.5	−27 59	F	6	—	6.5	3	6.55	.15	—	—
2355	CanesVenat.	—	4640	+29° 2464	47.7	+29 14	6	6	6.0	—	3	5.79	.03	5.8	.20
2356	Draco . .	i 10	4646	+65° 963	47.9	+65 19	5	5	4.8	—	14	4.71	.05	5.2	.06
2357	Draco . .	—	—	+69° 724	48.1	+68 54	F	F	6.0	—	3	6.51	.07	—	—
2358	Virgo . .	p 90	4645	− 0° 2758	48.5	− 0 55	6·5	6·5	6.2	5.6	7	5.27	.07	—	—
2359	Virgo . .	—	4647	—	48.7	− 7 28	6	6	—	6.4	3	6.36	.03	—	—
2360	Bootes . .	η 8	4648	+19° 2725	49.0	+19 0	3	3	3.2	—	7	2.89	.07	2.8	.17
2361	Virgo . .	n	—	—	49.4	− 8 58	6	6	—	6.8	3	7.05	.15	—	—
2362	Ursa Major	86	4649	+54° 1630	49.5	+54 19	6	6	6.0	—	3	5.53	.03	5.6	.09
2363	CanesVenat.	—	4652	+32° 2411	50.4	+32 37	6	6	6.5	—	3	6.44	.17	6.0	.12
2364	Virgo . .	92	4651	+ 1° 2865	50.4	+ 1 38	6	6	5.8	6.2	3	5.99	.12	5.8	.13
2365	Bootes . .	9	4656	+28° 2278	51.1	+28 5	5	5	5.0	—	5	5.14	.13	5.5	.15
2366	Hydra . .	47	4657	—	51.8	−24 23	6	6	—	5.7	6	5.09	.06	—	—
2367	Bootes . .	—	4662	+15° 2651	52.8	+15 14	6	6·7	6.7	—	3	5.59	.12	6.2	.08
2368	Bootes . .	10	4664	+22° 2650	53.0	+22 17	6	6	5.5	—	3	5.28	.15	5.7	.09
2369	Hydra . .	48	4663	—	53.3	−24 25	F	6	—	6.3	3	5.89	.08	—	—
2370	Draco . .	—	—	+62° 1325	53.8	+62 5	6	6·7	6.7	—	3	6.12	.07	6.3	.08
2371	Hydra . .	—	—	—	53.8	−25 41	F	F	—	F	3	6.72	.15	—	—
2372	Bootes . .	—	—	+ 9° 2835	55.4	+ 9 29	6	6	6.0	6.3	7	5.89	.03	6.1	.13
2373	Virgo . .	τ 93	4672	+ 2° 2761	55.5	+ 2 8	4	4	4.2	4.4	7	4.36	.05	4.3	.08
2374	Hydra . .	—	4671	—	55.6	−26 51	F	6	—	6.0	3	5.71	.04	—	—
2375	Bootes . .	11	4675	+28° 2287	55.7	+27 58	6	6	6.3	—	6	6.11	.04	5.9	.19
2376	CanesVenat	—	—	+46° 1922	57.4	+46 20	6	6	6.0	—	3	6.50	.09	6.2	.05
2377	Bootes . .	—	4684	+51° 1889	58.6	+51 34	F	6·7	6.0	—	3	6.17	.08	6.1	.03
2378	Hydra . .	π 49	4685	—	59.5	−26 6	4·3	4·3	—	3.6	7	3.51	.10	—	—
2379	Centaurus .	θ 5	4686	—	59.6	−35 47	3	3	—	2.2	6	1.73	.10	—	—
2380	Virgo . .	95	4690	—	0.4	− 8 44	6	6	—	6.0	3	5.72	.08	—	—
2381	Draco . .	α 11	4696	+65° 978	1.1	+64 57	3·4	3·4	3.4	—	6	3.63	.03	3.6	.12
2382	Bootes . .	—	4699	+44° 2325	3.1	+44 25	6·5	6·5	5.3	—	3	5.47	.08	5.4	.03
2383	Bootes . .	13	4701	+50° 2047	3.7	+50 2	6	6	5.5	—	7	5.48	.06	5.6	.11
2384	Virgo . .	—	4700	—	4.3	−15 44	6	6	—	5.6	7	5.25	.11	—	—
2385	Bootes . .	d 12	4706	+25° 2737	4.9	+25 40	5	5	4.8	—	6	4.84	.07	5.1	.16
2386	Draco . .	—	—	+60° 1516	5.1	+59 54	F	F	6.0	—	3	6.43	.07	—	—
2387	Hydra . .	50	4708	—	5.9	−26 42	6·5	6·5	—	5.5	7	5.17	.07	—	—
2388	Virgo . .	—	4713	+ 2° 2867	6.2	+ 2 58	5·4	5·4	4.8	5.4	6	4.97	.03	5.0	.09
2389	Hydra . .	—	4711	—	6.4	−26 3	F	F	—	6.8	7	6.27	.07	—	—
2390	Virgo . .	$\varkappa$ 98	4716	—	6.5	− 9 43	4·5	4·5	—	4.2	5	4.29	.13	—	—
2391	Hydra . .	—	4719	—	8.1	−28 43	F	6·7	—	6.4	3	6.08	.07	—	—
2392	Bootes . .	14	4721	+13° 2764	8.3	+13 31	6	6·5	6.2	6.0	6	5.46	.06	5.8	.09
2393	Virgo . .	—	4722	—	8.7	−17 38	6	6	—	5.8	3	5.49	.13	—	—
2394	Bootes . .	15	4724	+10° 2654	9.0	+10 40	6	6·5	5.3	5.8	3	5.23	.12	5.4	.15
2395	Bootes . .	$\varkappa$ 17	4726	+52° 1782	9.2	+52 21	4·5	4·5	4.5	—	3	4.44	.11	4.4	.07
2396	Ursa Minor	4	4733	+78° 478	9.3	+78 7	5	5	5.0	—	6	4.88	.03	5.3	.12
2397	Bootes . .	—	4728	+42° 2472	9.5	+42 5	6	6	6.1	—	3	6.04	.07	6.0	.12
2398	Virgo . .	ι 99	4727	—	9.7	− 5 26	4	4	—	4.1	6	4.23	.08	—	—
2399	Ursa Minor	—	4732	+70° 778	9.9	+70 0	6·5	6·5	5.3	—	15	5.28	.04	5.5	.08
2400	Bootes . .	α 16	4729	+19° 2777	10.2	+19 48	1	1	1.0	—	13	0.03	.05	0.3	.03

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2351	465,476,482	*148,475*,659	6.1	*220*	*110*	. . . . . *335* . . *4* . . 0	. . .	.	
2352	153,467,476	106,458,662	4.9	*001*	*316*	. . . . . 137 . . 0 . . 1	. . .	O	dc
2353	662,663,664		5.6	*220*	—	. . *2* . . FF7 . . F . . .	.1.	Y	
2354	151,467,476		6.6	*142*	—	. . . . . F*8* . *639* . . .	. . .	.	n
2355	153,467,476	*106*,458,662	5.8	010	352	. . . . . 000 . . *1* . . 0	. . .	*b*	n
2356	145,147,160,165,464,467,470	104,104,105	4.7	*262422I*-	374	*311* . . 331 . . 2 . 15	.1.	O	nts
2357	138,160,479		6.5	*021*	—	. . . . . FF7 . . F . . .	. . .	.	
2358	147,465,476,482,663,664,665		5.3	*7410021*	—	*342* . . 137 . 04 . 0 .	. . .	*y*	
2359	160,465,476		6.4	*100*	—	. . . . . *66* . . *23* . . .	. . .	*y*	
2360	151,153,470,660,661,662,663	102,458,659	2.9	*2101722*	350	431*1*. 335 . . 1 . 2*1*	0*1*.	y	
2361	138,151,470		7.0	*241*	—	. . . . . **bb** . . *4*F . 7 .	. . .	.	n
2362	145,464,467	*145,163*,677	5.5	*010*	321	. . 0 . . 333 . . 6 . . 1	. . .	w	
2363	147,160,476	106,458,662	6.4	*243*	*273*	. . . . . *661* . . F . . *4*	. . .	.	
2364	145,153,482	*150*,452,656	6.0	*330*	*050*	. . *5* . . *224* . 0F . . *2*	. . .	*y*	
2365	138,145,151,464,467	104,458,662	5.1	17322	407	. . 3 . . *111* . . 2 . 14	. . .	Y	
2366	147,464,482,663,664,665		5.1	*023122*	—	. . 4 . . 77 . 436 . . .	. . .	*y*	
2367	147,153,482	*148,457,659*	5.6	*321*	477	. . . . . 259 . . F . . 6	. . .	o	
2368	145,158,467	102,458,662	5.3	*421*	526	. . 6 . . 551 . . F . . 4	. . .	*b*	
2369	147,464,482		5.9	*211*	—	. . *4* . . F*1* . 12*2* . . .	. . .	*w*	
2370	145,465,479	*145,163*,677	6.1	*210*	240	. . . . . *304* . . F . . 2	. . .	.	
2371	138,147,465		6.7	*043*	—	. . . . . FF . *7* FF . . .	. . .	.	
2372	465,485,488,663,664,665,666	*148*,452,656	5.9	**3**10*1011*	115	. . . . . *111* . 2F3 . 2	. . .	.	
2373	151,156,165,660,662,663,664	150,452,656	4.4	1410220	*212*	. *21* . . *331* . 04 . *11*	. . .	W	
2374	151,464,482		5.7	*101*	—	. . . . . F1 . *21*4 . . .	. . .	.	
2375	479,482,485,660,663,664	106,458,662	6.1	311*110*	*171*	. . *5* . . *330* . . *4* . . *2*	. . .	*w*	
2376	138,151,160	*145,163*,677	6.5	*122*	*424*	. . . . . *777* . . F*3* . *3*	. . 1	.	
2377	138,151,467	*145,171*,677	6.2	*121*	*112*	. . . . . F*14* . . *5* . . *1*	. . 2	.	
2378	138,151,165,662,663,664,665		3.5	*332***b***134*	—	312*0* . 22 . 425 . 2 .	. . .	.	t
2379	662,663,664,665,666,672		1.7	*614*31	—	**65**R6 . **55** . 95F . 6 .	. . .	.	vah
2380	138,151,160		5.7	*022*	—	. . *8* . . 11 . . *18* . . .	. . .	*y*	t
2381	145,151,160,663,665,666	145,171,678	3.6	*301010*	*132*	*302* . . *210* . . 4 . *20*	33.	W	
2382	138,158,165	145,163,677	5.5	*112*	*121*	. . . . . *113* . . 2 . . *1*	. . *1*	Y	t
2383	145,158,165,663,664,665,666	*145*,171,677	5.5	*6122110*	321	. . *3* . . 331 . . 2 . *31*	. . *1*	*o*	t
2384	138,160,165,664,666,669,671		5.2	*1553116*	—	. . . . . 66 . . 11 . 0 .	. . .	w	t
2385	147,158,474,664,665,666	106,458,662	4.8	*610301*	117	. . *1* . . 220 . . 1 . 63	. . .	*y*	
2386	158,472,485		6.4	*210*	—	. . . . . FF*6* . . F . . .	. . .	.	
2387	158,472,482,485,664,665,666		5.2	**0***411041*	—	. . 0 . . 24 . 309 . . .	. . .	.	d
2388	138,158,474,664,665,669	150,452,656	5.0	*4*10002	*122*	. . . . . *442* . 13 . *20*	. . .	w	vg
2389	158,472,482,485,664,665,669		6.3	*7104011*	—	. . . . . FF . *33*F . . .	. . .	.	
2390	147,160,485,495,663		4.3	54*042*	—	1*141*. 11 . . *11* . *1*.	. . .	Y	vtp
2391	138,472,482		6.1	*201*	—	. . . . . F0 . *11*0 . . .	. . .	.	dc
2392	158,474,491,663,666,667	149,452,662	5.5	*221*014	215	. . *3* . . 315 . 32 . . 3	. . .	*y*	v
2393	472,482,491		5.5	*313*	—	. . . . . 33 . . 1*2* . . .	. . .	w	
2394	138,474,491	149,452,662	5.2	*231*	*216*	. . 5 . . 640 . 4*3* . . 2	. . .	*y*	
2395	160,474,491	106,163,678	4.4	023	*120*	625 . 8001 . . *4* . 40	. 04	*g*	d
2396	474,485,491,664,665,667	145,163,682	4.9	*200110*	516	. . *2* . . 111 . . 0 . 24	. . .	*y*	t
2397	474,488,491	*106*,458,662	6.0	*012*	231	. . . . . *221* . . 1 . . 0	. . 5	*y*	
2398	158,485,491,663,666,669		4.2	*243103*	—	203*1*. *11* . . 0*2* . *1*.	. . .	*y*	
2399	138,156,158,165,474,476,478	104,105,108	5.3	*2143*137-	*121*	. . . . . 13*1* . . 4 . . 2	. . .	*w*	ts
2400	138,148,160,163,164,165,168	109,197,663	0.0	*1147*100-	242-	566*3* . 333 . . 5 . 13	11.	Y	vte

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2401	Virgo . .	—	—	—	10.3	− 2 38	6	6	—	6.5	6	6.07	.06	—	—
2402	Bootes . .	—	4738	+40° 2760	11.5	+40 18	6	6	6.3	—	3	6.30	.09	5.9	.13
2403	Bootes . .	λ 19	4741	+46° 1949	11.8	+46 38	4	4	4.0	—	6	4.29	.07	4.1	.04
2404	Bootes . .	ι 21	4742	+52° 1784	11.9	+51 55	4·5	4·5	4.5	—	6	4.79	.03	4.4	.09
2405	Draco . .	—	—	+57° 1498	12.1	+57 15	6	6	6.5	—	3	6.53	.13	6.1	.03
2406	Draco . .	—	—	+57° 1499	12.3	+57 15			6.5	—	3	—	—		
2407	Hydra . .	—	4740	—	12.2	−25 16	6·5	6·5	—	6.3	3	5.89	.07	—	—
2408	Virgo . .	λ100	4743	—	12.6	−12 49	5·4	5·4	—	5.0	6	4.56	.06	—	—
2409	Bootes . .	A	4747	+36° 2468	13.0	+36 4	5	5	4.8	—	3	4.77	.12	4.9	.07
2410	Virgo . .	υ102	4748	− 1° 2938	13.4	− 1 42	5	5	5.0	5.6	6	5.19	.03	—	—
2411	Bootes . .	18	4751	+13° 2782	13.5	+13 34	6	6·5	5.7	5.8	3	5.23	.12	5.4	.07
2412	Virgo . .	—	—	+ 1° 2913	13.6	+ 0 56	6	6	6.3	6.5	6	6.11	.03	5.6	.15
2413	Bootes . .	20	4753	+16° 2637	14.1	+16 51	5	5	5.3	—	7	4.86	.07	5.1	.07
2414	Bootes . .	—	4758	+39° 2750	14.9	+39 22	6	6	6.0	—	3	5.94	.19	5.9	.16
2415	Bootes . .	—	—	+26° 2554	15.3	+26 36	6	F	7.0	—	3	6.83	.11	—	—
2416	Virgo . .	103	4762	− 1° 2943	15.7	− 1 26	F	6	6.7	6.9	3	6.67	.08	—	—
2417	Hydra . .	51	4763	—	16.2	−27 12	6·5	6	—	5.0	6	4.90	.06	—	—
2418	Libra . .	2	4765	—	17.0	−11 10	F	F	—	6.5	6	6.28	.04	—	—
2419	Virgo . .	—	—	+ 1° 2920	17.2	+ 1 49	6	6	6.5	6.5	3	6.32	.05	5.9	.13
2420	Bootes . .	—	4766	+ 9° 2882	17.5	+ 9 0	5·4	5	5.0	5.2	3	5.05	.07	4.7	.12
2421	Bootes . .	—	—	+25° 2770	17.7	+25 53	F	6	6.1	—	3	5.99	.11	5.9	.12
2422	Hydra . .	—	4767	—	18.0	−24 16	F	F	—	5.7	6	5.36	.05	—	—
2423	Bootes . .	—	4773	+ 6° 2875	18.2	+ 6 22	5	5	5.5	5.6	8	5.05	.11	4.8	.13
2424	Hydra . .	—	4776	—	18.9	−26 18	F	F	—	7.0	3	6.90	.11	—	—
2425	Bootes . .	f 22	4785	+19° 2810	20.9	+19 46	5	6·5	6.4	—	6	5.37	.06	5.4	.03
2426	Bootes . .	θ 23	4789	+52° 1804	21.0	+52 24	4·3	4	4.0	—	6	4.25	.02	4.1	.00
2427	Hydra . .	52	4784	—	21.1	−28 57	6·5	6·5	—	4.8	6	5.01	.06	—	—
2428	Virgo . .	φ105	4792	− 1° 2957	22.0	− 1 41	5	5	5.0	5.4	6	4.89	.06	—	—
2429	Virgo . .	106	4795	—	22.4	− 6 22	6	6	—	5.9	3	5.94	.04	—	—
2430	Virgo . .	—	4798	+ 1° 2941	23.7	+ 1 22	6	6	6.1	6.4	3	5.76	.07	5.7	.11
2431	Hydra . .	—	4800	—	24.1	−24 47	F	6	—	F	3	7.78	.04	—	—
2432	Bootes . .	g 24	4804	+50° 2084	24.6	+50 23	6	6	5.8	—	3	5.64	.03	5.6	.09
2433	Bootes . .	ρ 25	4808	+31° 2628	26.7	+30 54	4·3	4·3	4.0	—	6	3.64	.08	4.0	.23
2434	Bootes . .	—	4809	+27° 2388	27.0	+27 13	6	6	6.2	—	3	5.89	.03	5.9	.11
2435	Bootes . .	26	4810	+22° 2715	27.1	+22 47	6	6·5	5.3	—	3	5.88	.11	5.7	.15
2436	Bootes . .	γ 27	4812	+38° 2565	27.2	+38 50	3·2	3·4	2.8	—	7	3.10	.08	3.1	.11
2437	Ursa Minor	5	4822	+76° 527	27.8	+76 14	5·4	5·4	5.0	—	6	4.29	.08	4.7	.04
2438	Draco . .	—	4817	+63° 1136	27.9	+63 43	6	6	6.2	—	7	5.98	.09	6.2	.00
2439	Libra . .	—	4814	—	28.1	−19 55	F	F	—	6.8	6	6.43	.06	—	—
2440	Draco . .	—	—	+60° 1547	28.5	+60 45	6	6	6.2	—	6	6.09	.04	6.2	.00
2441	Draco . .	—	—	+56° 1746	28.8	+55 56	6	6	5.9	—	3	5.96	.12	6.1	.03
2442	Bootes . .	σ 28	4823	+30° 2536	29.5	+30 16	5·4	5	5.0	—	3	4.49	.09	4.9	.05
2443	Bootes . .	—	4830	+49° 2095	30.5	+49 54	6	6	5.7	—	3	5.84	.11	5.7	.13
2444	Draco . .	—	—	+57° 1519	30.6	+57 35	F	6	6.3	—	3	6.13	.15	6.2	.03
2445	Bootes . .	R	—	+27° 2400	31.9	+27 15	F	F	var.	—	4	var.	—	—	—
2446	Bootes . .	—	4841	+44° 2376	33.7	+44 10	F	6	6.0	—	7	5.96	.07	5.5	.12
2447	Bootes . .	—	4845	+54° 1693	34.4	+54 32	6	6	5.8	—	3	5.56	.08	5.9	.09
2448	Bootes . .	33	4843	+45° 2204	34.4	+44 55	6	5·6	5.3	—	7	5.28	.03	5.2	.09
2449	Bootes . .				35.1	+16 56									
2450	Bootes . .	π 29	4847	+17° 2768	35.1	+16 56	4	4	3.8	—	6	4.59	.07	4.6	.12

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2411	156,474,485	149,452,664	5.2	213	230	. . 0. . 644. 41. . 2	. . .	y	
2412	472,476,482,663,666,669	150,452,656	6.1	101120	167	. . . . : 330. 24. . 5	. . .	.	dveg
2413	160,482,491,492,664,665,669	106,458,664	4.9	8125111	230	. . 3. . 113. . 4. 32	. . .	o	
2414	138,474,485	106,458,662	5.9	513	341	. . . . . 111. . 2. . 0	. . 3	w	
2415	158,474,480		6.8	302	—	. . . . . bF0. . F. . .	. . .	.	c
2416	158,474,476		6.7	022	—	. . 8. . F92. 0b. 4.	. . .	Y	ng
2417	165,476,485,663,666,669		4.9	112201	—	. . 1. . 59. 614. 1.	. . .	.	vg
2418	476,482,491,663,666,669		6.3	251200	—	. . R. . FF. . 0F. . .	. . .	.	h
2419	474,480,485	150,452,656	6.3	111	371	. . . . . 550. 0F. . 4	. . .	.	
2420	158,168,485	149,452,656	5.0	102	162	. 1. . 3400. 11. 03	. . .	w	d
2421	474,476,480	106,458,664	6.0	023	232	. . . . . F21. . 1. . 1	. . .	.	c
2422	138,472,485,663,666,669		5.4	121103	—	. . . . . FF. 603. . .	. . .	o	nv
2423	154,165,488,492,663,666,667	149,452,656	5.0	6133712-	151	. 1. . . 004. 31. 22	. . .	w	n
2424	158,476,485		6.9	203	—	. . . . . FF. 91F. . .	. . .	.	
2425	158,165,480,664,665,669	106,458,664	5.4	211005	010	. . 4. . 428. . 3. 20	. . .	w	
2426	138,156,488,671,674,675	106,163,678	4.2	001011	111	843. . 511. . 2. 11	. 13	y	
2427	158,165,168,664,665,671		5.0	104113	—	. . 0. . 46. 033. 4.	. . .	.	vg
2428	154,165,168,664,665,671		4.9	412110	—	541. 5111. 25. 1.	. . .	y	dvg
2429	148,158,485		5.9	011	—	. . 6. . 11. . 22. . .	. . .	o	t
2430	154,158,165	150,452,656	5.8	210	231	. . . . . 001. 43. . 1	. . .	w	
2431	138,158,485		7.8	101	—	. . . . . Fb. FFF. . .	. . .	.	nc
2432	148,152,165	106,163,678	5.6	100	221	. . 3. . 220. . 1. 00	. . 3	Y	
2433	148,154,165,664,665 669	106,458,662	3.6	250024	726	2201. 115. . 1. 44	. 0.	O	t
2434	148,158,168	106,458,664	5.9	001	320	. . . . . 111. . 2. . 0	. . .	w	
2435	158,163,167	106,458,664	5.9	302	243	. . 1. . 137. . 2. . 2	. . .	w	
2436	158,163,167,474,664,665,666	106,458,662	3.1	1261303	311	2101. 441. . 1. 60	2 1 2	W	v
2437	152,163,167,664,665,669	145,163,682	4.3	125112	453	114. . 337. . 1. 34	. . .	O	t
2438	154,163,168,664,665,666,669	106,163,678	6.0	7401123	222	. . . . . 220. . 1. . 2	. . .	Y	
2439	474,476,480,663,666,671		6.4	020034	—	. . . . . FF. . 2F. . .	. . .	.	
2440	148,165,474,664,665,671	106,163,678	6.1	101211	111	. . . . . 331. . 4. . 1	. . .	y	
2441	152,158,168	106,171,678	6.0	213	110	. . . . . 223. . 13. 1	. . .	.	
2442	148,154,168	106,458,662	4.5	122	533	133. . 155. . 1. 34	. 0.	y	
2443	148,154,165	106,163,678	5.8	113	042	. . . . . 002. . 3. . 1	. . 4	o	
2444	152,156,165	106,171,678	6.1	403	101	. . . . . F30. . F. . 1	. . .	.	
2445	152,156,168,483		var.	RFFF	—	. . . . . FFV. . F. . .	. . .	.	vt
2446	148,154,164,664,665,666,667	106,458,462	6.0	1760001	258	. . . . . F22. . 3. . 5	. . .	y	
2447	148,156,165	106,171,678	5.6	022	451	. . . . . 220. . 1. . 3	. . .	w	
2448	148,154,164,664,665,666,667	106,458,662	5.3	121101	132	. . 1. . 511. . 0. . 1	. . 4	W	
2449	152,156,171,664,666,671	148,458,664	5.0	141023	321	. 34. 1 557. . 2. 40	. 1.	W	dv
2450			5.9			. 1		r	dv

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2451	Bootes . .	—	—	+22° 2731	34.9	+22 30	F	6·7	6.0	—	3	6.25	.08	6.0	.11
2452	Bootes . .	ζ 30	4849	+14° 2770	35.4	+14 15	3·4	3·4	3.5	—	6	3.84	.06	3.9	.07
2453	Bootes . .				35.4	+14 15									
2454	Bootes . .	31	4850	+ 8° 2903	35.8	+ 8 41	5·4	5	5.5	5.4	6	4.99	.09	4.9	.09
2455	Bootes . .	32	4853	+12° 2729	36.0	+12 9	6	6·5	5.3	6.0	3	5.60	.03	5.5	.07
2456	Hydra . .	53	4854	—	36.3	−24 29	F	F	—	5.8	3	5.85	.17	—	—
2457	Virgo . .	μ107	4855	—	36.7	− 5 8	4	4	—	4.0	6	3.92	.04	—	—
2458	Ursa Minor	—	—	+80° 448	37.0	+80 11	F	6	6.3	—	3	6.13	.13	6.5	.03
2459	Bootes . .	34	4864	+27° 2413	38.2	+27 3	6	5	5.8	—	6	4.93	.06	5.0	.15
2460	Draco . .	—	4874	+61° 2451	39.0	+61 46	6	6	6.0	—	17	6.23	.02	6.0	.04
2461	Virgo . .	—	—	− 0° 2867	39.0	− 0 54	F	6·7	6.0	6.4	3	6.28	.08	—	—
2462	Bootes . .	—	4870	+41° 2523	39.1	+40 57	F	6·5	5.5	—	3	5.64	.13	5.8	.11
2463	Hydra . .	54	4865	—	39.1	−24 56	6	6	—	5.2	3	5.04	.11	—	—
2464	Libra . .	—	—	—	39.2	−22 38	6	6	—	6.1	3	6.06	.15	—	—
2465	Virgo . .	108	4869	+ 1° 2972	39.4	+ 1 13	6	6	6.5	6.0	3	5.59	.04	5.4	.12
2466	Bootes . .	o 35	4873	+17° 2780	39.7	+17 29	5·4	5·4	4.5	—	3	4.81	.05	4.7	.04
2467	Bootes . .	ε 36	4876	+27° 2417	39.8	+27 35	2·3	2·3	2.3	—	6	2.56	.03	2.6	.08
2468	Virgo . .	109	4878	+ 2° 2862	40.2	+ 2 24	4·3	4·3	4.0	4.0	6	3.72	.05	3.9	.15
2469	Hydra . .	55	4877	—	40.4	−25 7	F	F	—	6.1	3	5.84	.13	—	—
2470	Bootes . .	—	—	+15° 2758	40.5	+15 39	6	6	5.5	—	3	6.24	.12	5.8	.07
2471	Hydra . .	56	4880	—	40.7	−25 35	F	F	—	5.5	3	5.68	.17	—	—
2472	Hydra . .	57	4882	—	40.9	−26 9	F	F	—	6.3	3	6.07	.19	—	—
2473	Libra . .	—	4888	—	42.4	−23 45	F	F	—	6.3	3	5.70	.04	—	—
2474	Libra . .	μ 7	4890	—	42.7	−13 39	6	6	—	5.7	3	5.37	.04	—	—
2475	Virgo . .	—	—	+ 6° 2946	43.0	+ 6 27	6	6·7	7.5	6.8	6	6.61	.05	6.3	.05
2476	Bootes . .	—	—	+24° 2779	43.1	+24 52	6	6	6.1	—	3	6.06	.00	5.8	.04
2477	Hydra . .	58	4891	—	43.2	−27 28	6·5	6·5	—	4.8	3	4.96	.19	—	—
2478	Bootes . .	—	—	+ 8° 2925	43.8	+ 8 30	6	6	7.5	7.1	6	7.02	.06	6.5	.00
2479	Libra . .	8	4894	—	44.1	−15 30	2·3	2·3	—	6¼	7	5.30	.06	—	—
2480	Libra . .	α 9	4895	—	44.3	−15 33			—	3	6	3.02	.06	—	—
2481	Bootes . .	—	4897	+38° 2593	44.4	+38 18	6	6	6.2	—	3	5.97	.16	5.8	.08
2482	Bootes . .	—	4902	+29° 2581	44.8	+29 6	6	6	6.2	—	3	5.73	.09	5.8	.03
2483	Libra . .	11	4898	− 1° 2991	44.8	− 1 48	6	6	4.5	5.3	3	5.24	.13	—	—
2484	Bootes . .	—	—	+24° 2786	44.9	+24 25	6	6	5.8	—	3	5.83	.15	5.7	.05
2485	Bootes . .	h 38	4903	+46° 1993	45.1	+46 37	6	6·5	6.0	—	3	5.64	.13	5.5	.07
2486	Lupus . .	—	—	—	45.4	−30 5	F	F	—	6.7	3	6.46	.11	—	—
2487	Bootes . .	39	4907	+49° 2326	45.6	+49 13	6	6	5.8	—	3	5.47	.08	5.6	.09
2488	Bootes . .	—	4906	+37° 2580	45.6	+37 46	6	6	5.7	—	6	5.49	.07	5.3	.25
2489	Bootes . .	ξ 37	4905	+19° 2870	45.9	+19 36	4	5·4	5.0	4.9	6	4.60	.04	4.7	.09
2490	Libra . .	12	4913	—	47.4	−24 9	6	6	—	5.8	3	5.69	.12	—	—
2491	Virgo . .	—	—	+ 6° 2957	47.7	+ 6 45	6	6	6.7	6.8	6	6.76	.04	6.3	.03
2492	Libra . .	13	4915	—	47.8	−11 24	6	6	—	6.1	3	5.89	.12	—	—
2493	Draco . .	—	4918	+59° 1615	48.4	+59 47	6	6·5	5.7	—	6	5.73	.06	5.8	.17
2494	Virgo . .	—	—	+ 7° 2865	49.6	+ 7 18	6	6·7	7.5	6.9	6	6.86	.07	6.4	.04
2495	Lupus . .	—	—	—	50.1	−28 40	F	F	—	6.5	3	6.28	.05	—	—
2496	Libra . .	ξ 15	4922	—	50.3	−10 55	6	6	—	5.7	6	5.77	.05	—	—
2497	Libra . .	—	4923	—	50.4	−20 52	F	F	—	6.1	6	5.89	.04	—	—
2498	Bootes . .	—	4926	+15° 2796	50.6	+14 56	6	6	6.2	6.2	6	5.72	.07	5.5	.04
2499	Libra . .	16	4927	—	50.9	− 3 51	5·4	5·4	—	4.8	3	4.53	.03	—	—
2500	Ursa Minor	β 7	4936	+74° 595	51.1	+74 39	2	2	2.1	—	16	2.13	.04	2.0	.09

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2451	152,158,168	*106*,458,664	6.2	220	052	. . . . . F *14* . . F *2* . *2*	. . .	.	
2452	152,158,165,664,666,667	146,458,664	*4.8*	*122122*	310	*503*$^{.5}_{.5}$ *431* . . 2 . *41*	00.	*y*	dv
2453			*4.4*						dv
2454	156,163,168,664,667,671	146,452,656	5.0	*611402*	*321*	. . 2 . . *404* . *11* . *21*	. . .	*y*	vg
2455	148,158,165	146,458,664	5.6	*001*	*211*	. . *2* . . 204 . 21 . . *1*	. . .	*y*	
2456	158,168,664		5.8	*144*	—	. . *4* . . FF . 2*29* . . .	. . .	*y*	np
2457	152,163,171,664,667,671		3.9	*001122*	—	*61*01 . 22 . . 21 . 1 .	. . .	*g*	
2458	148,156,165	*145,171,682*	6.1	*331*	443	. . . . . F *30* . . F . . 4	. . .	.	c
2459	154,158,171,664,666,667	148,*459*,664	4.9	*222220*	*510*	. . 2 . . 917 . . *5* . *21*	81.	O	vt
2460	148,152,158,163,165,168,472	104,107,145	6.2	*2130100*-	*103*	. . . . . *444* . . *1* . . *2*	. . .	w	s
2461	152,168,483		6.3	*220*	—	. . . . . F *25* . *1* F *1* . .	. . .	.	
2462	163,171,491	*148*,459,662	5.6	*331*	*214*	. . . . . F *02* . . 1 . . 2	. . .	*y*	
2463	163,168,491		5.0	*032*	—	. . 2 . . 88 . 5*11* . 0 .	. . .	*y*	dtg
2464	472,480,485		6.1	*241*	—	. . . . . *33* . *124* . . .	. . .	.	
2465	472,478,488	146,452,656	5.6	*110*	*143*	. . R . . 227 . 2 F . . *2*	. . .	w	h
2466	154,474,483	146,458,664	4.8	*111*	*120*	. 1*3* . . *223* . . 1 . *11*	.0.	*o*	
2467	168,480,488,664,666,667	148,459,664	2.6	10*1*10	*121*	76007*111* . . 4 . *20*	00.	Y	dvt
2468	164,165,483,664,667,671	146,452,656	3.7	*201311*	610	. . *22* . 004 . 43 . 72	. . .	W	
2469	148,478,485		5.8	*232*	—	. . 0 . . FF . *311* . . .	. . .	*y*	
2470	156,480,488	*146*,458,664	6.2	*213*	*254*	. *9* . . . *448* . . F . . *4*	. . .	.	t
2471	148,478,485		5.7	14*4*	—	. . 3 . . FF . *250* . . .	. . .	.	
2472	148,478,485		6.1	*351*	—	. . *4* . . FF . *600* . . .	. . .	.	
2473	168,480,491		5.7	*110*	—	. . . . . FF . 34 F . . .	. . .	.	t
2474	168,480,483		5.4	10*1*	—	*434* . . 44 . . 0*1* . 0 .	. . .	W	
2475	472,478,488,666,667,671	*146,452*,664	6.6	*330101*	*424*	. . . . . *857* . 0 F . . *3*	. . .	.	vg
2476	472,488,491	*148*,459,664	6.1	000	*243*	. . . . *1332* . . 0 . . *3*	. . .	.	d
2477	164,478,485		5.0	045	—	. . 4 . . 46 . 0*33* . 2 .	. . .	.	ndtgc
2478	472,480,488,665,666,671	*146,452,664*	7.0	*331210*	*5F5*	. . . . . **bb** 3 . *1* F . . *5*	. . .	.	vg
2479	472,480,488,666,667,669,671		5.3	0*102*264	—	*94*$^{0\ .\ .}_{3\ .\ .}$ $^{.\ .\ 8\,F\ .\ .}_{44\ .\ .\ 20\ .\ 1\ .}$	. . .	*r*	gc
2480	163,177,472,664,666,667		3.0	*123112*	—		*22*.	*g*	gc
2481	472,478,488	*148*,459,662	6.0	341	*240*	. . . . . *220* . . 1 . . *2*	. . .	.	
2482	163,488,492	*148*,459,664	5.7	*212*	101	. . . . . 113 . . 0 . . 1	. . .	w	
2483	478,483,485		5.2	*322*	—	. . 1 . . 667 . *25* . *1* .	. . .	*o*	
2484	164,488,492	*148*,459,664	5.8	21*4*	*220*	. . . . . 002 . . *10* . *1*	. . .	.	
2485	471,483,488	*107,460*,678	5.6	*313*	03*1*	. . 1 . . 202 . . 1 . 2*1*	. . 5	*y*	
2486	168,180,494		6.5	*311*	—	. . . . . FF . *50* F . . .	. . .	.	n
2487	171,483,492	106,*163*,678	5.5	02*2*	*310*	. . *1* . *2* 331 . . 2 . *21*	. . 5	w	d
2488	478,483,488,664,666,669	148,459,662	5.5	*131321*	*814*	. . . . . 331 . . 2 . . *2*	. . .	*y*	
2489	156,177,492,665,666,669	146,458,664	4.6	1*13*101	*123*	. 31 . 2*5*04 . 13 . *21*	.0.	.	d
2490	148,480,485		5.7	*312*	—	. . *1* . . 11 . 3*10* . . .	. . .	*y*	
2491	478,483,485,665,666,671	*146,452,664*	6.8	*221011*	*655*	. . . . . **bb** *3* . *2* F . . *5*	. . .	.	vg
2492	485,494,500		5.9	*321*	—	. . 1 . . *11* . . *02* . *2* .	. . .	*y*	n
2493	156,483,488,664,666,669	106,*163*,678	5.7	*302311*	*343*	. . . . . 1*11* . . 0 . . 1	. . .	O	
2494	148,478,485,666,671,672	*146,452,664*	6.9	*112133*	*4F5*	. . . . . **b** *84* . *2* F . . *5*	. . .	.	vg
2495	156,480,488		6.3	11*1*	—	. . . . . FF . *30* F . . .	. . .	.	n
2496	168,480,485,666,672,674		5.8	*221111*	—	. . 2 . . 00 . . *41* . *4* .	. . .	*o*	np
2497	664,666,672,675,677,679		5.9	22*0*011	—	. . . . . FF . F 02 . *1* .	. . .	.	dv
2498	478,483,488,666,671,672	146,458,664	5.7	*230231*	*321*	. . . . . 113 . 30 . . *2*	. . .	w	
2499	156,478,488		4.5	0*10*	—	. . 2 . . 11 . . 2*1* . 1 .	. . .	*y*	
2500	148,152,156,158,163,166,168	103,107,119	2.1	5101270-	*218*	0*122* . 111 . . 9 . 0*1*	41.	Y	vts

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P. E.
					m.	° ′									
2501	Libra . .	*1*	4931	+ 0° 3277	51.4	+ 0 19	F	6·7	6.0	6.0	3	5.61	.11	—	—
2502	Bootes . .	—	4933	+16° 2715	51.6	+16 53	6	6·5	6.1	—	3	5.81	.09	5.6	.09
2503	Hydra . .	59	4930	—	51.6	−27 10	F	F	—	5.9	3	5.83	.03	—	—
2504	Bootes . .	—	4937	+50° 2126	52.4	+50 6	6	6	6.0	—	3	5.60	.07	5.6	.09
2505	Virgo . .	—	—	+ 5° 2954	53.3	+ 5 3	6	6	6.2	6.4	7	6.28	.07	5.9	.09
2506	Libra . .	δ 19	4939	—	54.5	− 8 3	5	var.	—	var.	6	4.91	.08	—	—
2507	Lupus . .	*60*	4940	—	55.0	−27 35	F	F	—	6.2	3	5.66	.07	—	—
2508	Bootes . .	40	4943	+39° 2820	55.1	+39 45	5	5·6	5.5	—	3	5.44	.11	5.3	.05
2509	Libra . .	—	4941	—	55.1	− 2 17	6	6	—	5.9	3	5.87	.12	—	—
2510	Ursa Minor	—	4949	+66° 878	55.7	+66 25	5	5	4.5	—	18	4.84	.03	5.0	.08
2511	Bootes . .	—	4952	+47° 2192	56.5	+47 45	F	6	6.3	—	3	6.20	.05	6.0	.16
2512	Virgo . .	110	4951	+ 2° 2905	56.8	+ 2 34	5	5	4.7	4.9	3	4.56	.07	4.6	.05
2513	Bootes . .	ω 41	4953	+25° 2861	56.9	+25 29	5·4	5·4	4.7	—	3	4.86	.12	4.7	.12
2514	Scorpius .	*γ 20*	4950	—	57.0	−24 48	3·4	3·4	—	3.5	6	3.25	.05	—	—
2515	Bootes . .	β 42	4958	+40° 2840	57.4	+40 52	3	3	3.0	—	6	3.62	.02	3.6	.05
2516	Camelopard.	—	4982	+83° 431	58.3	+83 1	6	6	6.0	—	3	5.79	.08	5.7	.13
2517	Bootes . .	—	4961	+35° 2642	58.3	+35 41	6	6	5.8	—	3	5.60	.11	5.6	.13
2518	Draco . .	—	4967	+60° 1582	58.6	+60 41	6	6	6.0	—	3	5.83	.05	5.9	.15
2519	Bootes . .	—	4965	+45° 2251	58.9	+45 7	F	6	6.2	—	3	6.30	.09	6.0	.12
2520	Bootes . .	ψ 43	4969	+27° 2447	59.3	+27 25	4·5	4·5	4.7	—	6	4.46	.04	4.7	.12
2521	Bootes . .	i 44	4974	+48° 2259	59.8	+48 7	5	5·4	4.5	—	3	4.90	.05	4.8	.11
2522	Libra . .	*ν* 21	4970	—	0.0	−15 47	6	6	—	5.5	3	5.38	.11	—	—
2523	Bootes . .	k 47	4980	+48° 2262	1.5	+48 38	5	5·6	5.5	—	7	5.57	.05	5.3	.15
2524	Virgo . .	—	—	+ 6° 3001	1.7	+ 5 57	6	6	6.3	6.5	7	6.18	.07	6.0	.11
2525	Bootes . .	—	—	+19° 2924	1.8	+18 55	F	6	6.1	—	7	5.94	.08	5.8	.13
2526	Bootes . .	—	—	+37° 2608	1.9	+36 55	6	6	6.1	—	3	6.34	.07	5.9	.16
2527	Bootes . .	c 45	4981	+25° 2873	2.0	+25 20	5·4	5	4.8	—	3	5.03	.19	4.7	.12
2528	Ursa Minor	—	4989	+66° 887	2.1	+66 23	6	6	5.8	—	3	5.95	.12	6.1	.00
2529	Draco . .	—	4992	+55° 1730	2.9	+55 1	6·5	5	5.5	—	3	5.16	.04	5.2	.17
2530	Bootes . .	b 46	4991	+26° 2656	3.2	+26 46	6	6	6.3	—	3	5.79	.03	5.7	.09
2531	Libra . .	ι 24	4995	—	5.4	−19 20	5·4	5·4	—	5.0	7	4.87	.07	—	—
2532	Bootes . .	—	—	+19° 2935	6.6	+19 26	6	6	5.9	—	3	6.02	.03	5.8	.17
2533	Bootes . .	—	—	+23° 2789	8.2	+23 26	6	6	6.4	—	3	6.26	.04	6.0	.16
2534	Bootes . .	—	5026	+38° 2629	9.0	+38 42	F	6·7	6.0	—	3	6.37	.12	5.9	.13
2535	Serpens . .	3	5024	+ 5° 2985	9.2	+ 5 23	6	6·5	5.3	5.8	6	5.41	.10	5.2	.15
2536	Libra . .	—	—	—	9.4	−21 57	F	6·7	—	5.8	3	5.79	.05	—	—
2537	Bootes . .	χ 48	5031	+29° 2640	9.5	+29 37	5	5	5.5	—	3	5.33	.07	5.2	.03
2538	Serpens . .	4	5030	+ 0° 3327	9.7	+ 0 49	6	6·5	5.9	6.0	3	5.39	.12	5.4	.09
2539	Libra . .	β 27	5034	—	10.5	− 8 56	2	2	—	3.1	14	2.74	.04	2.7	.05
2540	Lupus . .	δ 2	5032	—	10.5	−29 42	5·4	5·4	—	4.7	6	4.69	.07	—	—
2541	Bootes . .	δ 49	5036	+33° 2561	10.7	+33 46	3	3	3.0	—	6	3.50	.05	3.5	.12
2542	Bootes . .	—	5048	+21° 2755	13.0	+21 1	6	6	6.2	—	3	5.62	.07	5.9	.08
2543	Bootes . .	—	—	+27° 2477	13.2	+27 17	F	F	6.5	—	—	—	—	—	—
2544	Serpens . .	5	5047	+ 2° 2943	13.2	+ 2 13	5	5	5.0	5.3	7	5.12	.07	5.1	.05
2545	Ursa Minor	—	5058	+67° 876	13.3	+67 48	5·6	5·6	5.2	—	6	5.47	.06	5.1	.23
2546	Bootes . .	—	—	+46° 2052	14.2	+46 3	F	F	6.0	—	7	6.97	.10	—	—
2547	Libra . .	*o* 29	5057	—	14.3	−15 7	6	6	—	6.4	3	5.98	.07	—	—
2548	Serpens . .	6	5059	+ 1° 3067	14.9	+ 1 9	6	6	6.1	6.0	3	5.46	.15	5.6	.16
2549	Corona . .	o 1	5061	+30° 2647	15.3	+30 2	6	6·5	6.0	—	7	5.69	.11	5.2	.15
2550	Corona . .	—	—	+25° 2902	15.9	+25 24	F	F	6.0	—	3	6.36	.12	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2501	478,483,488		5.6	3*11*	—	. . *1* . . F 5 2 . 2 1 . . .	. . .	*y*	
2502	168,483,492	146,458,664	5.8	2*21*	*430*	. . . . . 0 *2* 1 . . *1* . . *2*	. . .	*y*	
2503	152,480,485		5.8	100	—	. . *2* . . F F . 2 *11* . . .	. . .	.	n
2504	148,156,494	106,*163*,678	5.6	2*10*	*221*	. . . . . 2 2 2 . . 5 . . 0	. . .	*y*	
2505	148,168,492,494,666,671,672	*146*,452,664	6.3	6*123011*	*362*	. . . . . *5 5 3* . *12* . . *4*	. . .	.	
2506	156,171,492,494,500,501		4.9	31*31*R*1*	—	1 2 R . . 1 V . . V *5* . .	. . .	w	vpahg
2507	156,168,494		5.7	*2*01	—	. . 5 . . F F . 3 3 4 . . .	. . .	.	n
2508	152,171,492	148,460,662	5.4	02*3*	*022*	. . 6 . . *4* 2 0 . . 3 . 0 *1*	. . .	w	
2509	163,478,488		5.9	3*21*	—	. . . . . *11* . . *22* . .	. . .	o	
2510	148,154,156,163,168,170,175	104,108,146	4.8	4*17*0302-	*126*	. . . . . 2 2 *3* . . 1 . 2 2	. . .	O	nts
2511	152,171,492	*107,460*,678	6.2	1*11*	*161*	. . . . . F *41* . . F . . *2*	. . 6	*w*	
2512	154,478,488	146,165,665	4.6	1*20*	*111*	. . *2* . . 4 4 1 . 1 *2* . 1 0	. . .	Y	
2513	156,474,492	148,460,664	4.9	*312*	*501*	1 0 3 . . *332* . . 4 . 1 *2*	. *1* .	O	a
2514	163,175,488,666,672,675		3.2	0222*11*	—	1 4 6 5 . 2 3 . 4 4 *2* . 4 .	. . .	O	nt
2515	159,177,492,664,665,666	148,460,662	3.6	*101010*	*111*	8 2 *11* . *444* . . *1* . *2* 0	1 1 1	*y*	v
2516	148,171,492	*145,163*,682	5.8	1*21*	042	. . . . . 0 0 0 . . F . . *1*	. . .	*y*	n
2517	152,175,499	*148,460*,662	5.6	30*2*	*223*	. . . . . 2 2 0 . . 7 . . 0	. . .	.	
2518	171,474,492	106,*163*,678	5.8	*111*	23*3*	. . . . . 0 0 0 . . *10* . 1	. . .	*y*	
2519	156,474,492	*148,460*,662	6.3	*2*12	*261*	. . . . . F *53* . . *2* . . *3*	. . .	Y	
2520	148,166,177,664,665,666	148,460,664	4.5	1*21*002	*143*	5 4 1 . . *112* . . 4 . 3 2	. 2 .	*y*	a
2521	152,171,483	107,*163*,678	4.9	*111*	*222*	. . 5 . 1 1 *34* . . 0 . *11*	. . 1	*y*	dv
2522	156,175,494		5.4	3*20*	—	b *3* R . . 44 . . *21* . *2* .	. . .	*o*	nth
2523	152,166,499,501,668,674,679	107,163,678	5.6	*1*b*23110*	*451*	. . *4* . . *642* . . *3* . *13*	. . 4	W	v
2524	156,166,494,499,671,672,675	*146*,452,*664*	6.2	701*1*302	*250*	. . . . . *441* . 1 *1* . . *2*	. . .	.	g
2525	166,483,494,499,672,674,675	*148*,458,664	5.9	640*3*022	042	. . . . . F *10* . . *2* . . *1*	. . .	.	
2526	156,483,499	*148,460*,662	6.3	10*2*	*282*	. . . . . *554* . . F . . *4*	. . .	.	
2527	159,166,171	148,460,662	5.0	3*51*	*612*	0 *12* . . *402* . . *1* . 4 *3*	. *2* .	*y*	a
2528	170,494,500	*107,163*,682	6.0	3*30*	111	. . . . . *224* . . F . . 1	. . .	w	n
2529	163,175,499	107,171,602	5.2	01*1*	342	. . . . . 2 2 2 . . 1 . . 0	. . .	*y*	
2530	152,163,489	*148*,460,664	5.8	100	*231*	*894* . . 0 0 3 . . 3 . *21*	. *4* .	*o*	a
2531	154,163,485,492,668,675,679		4.9	30*0*0*224*	—	*570* . . *33* . . *15* . *1* .	. . .	*g*	n
2532	152,156,494	*148*,460,*664*	6.0	0*10*	*162*	. . . . . *223* . . *3* . . *2*	. . .	.	dte
2533	152,154,494	*148,460*,664	6.3	01*1*	*461*	. . . . . *551* . . F . . *3*	. . .	.	
2534	154,163,489	*148,460*,662	6.4	21*3*	*383*	. . . . . F *36* . . *3* . . *5*	. . .	w	
2535	156,171,489,668,672,675	146,165,665	5.4	*1*17214	*216*	. . *5* . . 4 2 2 . 2 3 . . *2*	. . .	*y*	
2536	159,169,494		5.8	1*11*	—	. . . . . F 3 . F *21* . . .	. . .	.	
2537	159,171,489	154,461,669	5.3	01*2*	*121*	*34* 1 . . *331* . . 4 . *31*	. . .	W	
2538	166,175,494	*146,165,665*	5.4	*3*12	21*2*	. . 2 . . 4 2 3 . 4 3 . . 0	. . .	*y*	
2539	152,157,161,166,169,170,171	145,145,147	2.7	23*31*113-	*121*-	*613* 2 . *55* . . 5 3 . 3 0	*11* .	*g*	e
2540	154,166,171,672,675,677		4.7	5*11211*	—	*999* . . *11* . 3 *13* . . .	. . .	.	nvta
2541	161,164,171,671,672,675	154,461,669	3.5	*122*012	*132*	3 3 3 0 1 *333* . . 0 . 0 0	2 1 .	Y	dv
2542	152,166,171	*148*,458,*664*	5.6	1*20*	315	. . . . . 2 2 4 . . 1 . . 3	. . .	*y*	
2543			R			. . . . R F F R . . F . . .	. . .	.	cm
2544	159,169,177,501,672,674,675	146,165,*665*	5.1	5*51*1020	*111*	. . 2 . 1 *111* . *12* . *10*	. . .	*y*	dt
2545	154,163,175,668,674,679	107,171,682	5.5	301*22*	*672*	. . . . . *333* . . *2* . *24*	. . .	*y*	
2546	159,169,494,501,668,674,679		7.0	4*531331*	—	. . . . . F F b . . F *5* . .	. . .	.	
2547	152,163,171		6.0	20*1*	—	b b 0 . . *22* . . 2 F . *1* .	. . .	*y*	n
2548	154,166,494	*146,165,665*	5.5	3*40*	*333*	. . *2* . . 3 3 4 . 3 2 . . 1	. . .	*o*	t
2549	159,169,177,501,668,674,679	154,461,669	5.7	4*702351*	*934*	. . 1 . . 1 *11* . . 4 . *15*	. . .	*y*	dc
2550	152,166,171		6.4	1*32*	—	. . . . . F F *6* . . F . . .	. . .	.	

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No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
2551	Ursa Minor	—	5140	+87° 143	16.5	+87 42	F	F	7.0	—	6	7.06	.06	—	—
2552	Draco . .	—	5071	+52° 1869	16.5	+52 25	6	6	5.5	—	7	5.64	.10	5.5	.26
2553	Corona . .	S	—	+31° 2725	16.5	+31 49	F	F	var.	—	2	var.	—	—	—
2554	Bootes . .	50	5072	+33° 2581	17.0	+33 21	5·6	5·6	5.5	—	3	5.34	.11	5.1	.11
2555	Ursa Minor	11	5079	+72° 678	17.2	+72 15	F	5	5.5	—	7	5.11	.08	5.5	.17
2556	Serpens . .	8	5073	− 0° 2961	17.5	− 0 34	F	6·7	6.5	6.4	7	6.09	.07	—	—
2557	Libra . .	ε 31	5074	—	17.7	− 9 53	5	5	—	5.5	7	5.15	.09	—	—
2558	Bootes . .	—	5076	+40° 2877	18.2	+40 1	6	6	5.5	—	3	5.94	.13	5.9	.13
2559	Corona . .				18.2	+30 43									
2560	Corona . .	η 2	5075	+30° 2653	18.2	+30 43	5	5	5.2	—	6	4.98	.13	5.2	.03
2561	Bootes . .	μ 51	5084	+37° 2636	20.0	+37 48	4·3	4	4.0	—	7	4.38	.10	4.2	.05
2562	Hercules .	—	—	+45° 2284	20.1	+45 42	F	F	5.9	—	3	6.17	.08	—	—
2563	Serpens . .	τ^1 9	5085	+15° 2858	20.2	+15 51	6	5	4.8	—	6	5.49	.04	5.5	.13
2564	Draco . .	—	—	+62° 1410	20.4	+62 27	F	6·7	6.0	—	7	5.68	.07	6.0	.07
2565	Draco . .	—	5091	+63° 1192	20.6	+63 47	6	6	6.0	—	7	5.69	.09	5.9	.03
2566	Ursa Minor	γ 13	5094	+72° 679	20.9	+72 16	3	3	2.8	—	22	3.18	.03	3.3	.06
2567	Libra . .	32	5089	—	21.5	−16 18	F	6·7	—	5.9	6	6.21	.09	—	—
2568	Bootes . .	—	—	+34° 2645	21.7	+34 45	6	6	6.0	—	3	6.27	.20	5.9	.16
2569	Draco . .	ι 12	5097	+59° 1654	22.3	+59 23	3	3	3.0	—	19	3.35	.04	3.6	.11
2570	Corona . .	—	—	+25° 2916	22.5	+25 31	F	6	6.0	—	3	6.29	.07	6.3	.05
2571	Serpens . .	10	5095	+ 2° 2965	22.6	+ 2 16	6	6	6.3	5.5	3	5.06	.11	5.3	.12
2572	Corona . .	β 3	5098	+29° 2670	22.9	+29 31	4·3	4	4.0	—	6	3.79	.09	3.8	.04
2573	Libra . .	34	5100	—	23.9	−16 12	6	6	—	6.0	3	5.81	.07	—	—
2574	Hercules .	—	—	+47° 2227	24.9	+47 38	F	F	5.5	—	3	5.90	.07	—	—
2575	Draco . .	—	5115	+61° 1509	25.5	+61 5	6	6·7	6.2	—	3	6.29	.07	6.0	.05
2576	Libra . .	—	5109	—	25.7	−19 15	6	6	—	6.2	3	5.42	.11	—	—
2577	Libra . .	ζ 35	5112	—	26.1	−16 27	6	6	—	5.8	3	5.41	.07	—	—
2578	Bootes . .	—	—	+37° 2651	25.9	+37 12	6	6	6.5	—	3	6.60	.03	6.2	—
2579	Bootes . .	—	—	+37° 2653	26.8	+37 1			6.5	—	7	6.25	.03	6.3	—
2580	Draco . .	—	5116	+62° 1416	26.5	+62 42	6	6	6.1	—	3	6.28	.15	6.0	.17
2581	Serpens . .	τ^2 12	5120	+16° 2797	26.6	+16 28	6	6	6.2	—	7	6.15	.06	5.8	.13
2582	Serpens . .	A^1 11	5119	− 0° 2982	26.7	− 0 47	6	6	6.0	5.9	3	5.85	.05	—	—
2583	Bootes . .	52	5122	+41° 2609	26.6	+41 14	4	4	4.5	—	6	5.09	.07	4.5	.12
2584	Bootes . .	ν 53	5130	+41° 2611	27.5	+41 18			4.8	—	7	5.04	.03		
2585	Scorpius .	*36*	5121	—	27.3	−27 38	F	F	—	5.7	3	5.26	.11	—	—
2586	Libra . .	37	5125	—	27.6	− 9 39	5	5	—	5.5	6	4.86	.04	—	—
2587	Libra . .	—	5129	—	27.9	− 8 47	5	5	—	5.6	3	4.95	.07	—	—
2588	Corona . .	θ 4	5131	+31° 2750	28.1	+31 46	4	4	4.2	—	6	4.27	.05	4.1	.05
2589	Libra . .	γ 38	5134	—	28.8	−14 23	4·5	4·5	—	4.4	6	4.01	.12	—	—
2590	Serpens . .				29.1	+10 57									
2591	Serpens . .	δ 13	5135	+11° 2821	29.1	+10 57	3·4	3·4	3.3	—	6	3.96	.05	3.9	.15
2592	Serpens . .	—	—	+ 2° 2977	29.1	+ 2 4	6	6	7.1	6.7	3	6.49	.08	6.2	.09
2593	Draco . .	—	5147	+64° 1074	29.4	+64 35	6	6	5.8	—	19	5.94	.03	6.0	.06
2594	Corona . .	α 5	5143	+27° 2512	29.6	+27 7	2	2	2.0	—	13	2.37	.05	2.4	.09
2595	Scorpius .	*39*	5138	—	29.7	−27 44	4·5	4·5	—	3.9	6	3.93	.11	—	—
2596	Serpens . .	τ^8 15	5146	+18° 3044	30.1	+18 3	6	6	6.0	—	3	6.08	.05	6.0	.12
2597	Serpens . .	16	5150	+10° 2884	30.7	+10 25	6	6	6.2	—	3	5.33	.16	5.4	.03
2598	Corona . .	μ 6	5155	+39° 2889	30.9	+39 25	5	5	5.0	—	3	5.44	.07	5.1	.13
2599	Serpens . .	τ^4 17	5152	+15° 2890	30.9	+15 30	6	6	6.7	—	6	6.89	.06	6.1	.15
2600	Serpens . .	τ^5 18	5153	+16° 2807	31.0	+16 31	6	6	6.0	—	3	5.74	.08	5.8	.13

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2551	668,671,672,674,675,679		7.1	30*4*11*1*	—	. . . . . FF*3* . . F . . .	. . .	.	
2552	154,170,489,492,668,674,679	107,171,678	5.6	5*234*420	*185*	. . . . . 2 2 *2* . . 1 . . *1*	. . .	w	n
2553	155,169		var.	RR	—	. . . . . FFV . . F . . .	. . .	.	vt
2554	159,164,177	154,461,669	5.3	20*3*	*511*	. . *3* . . *11* 1 . . 0 . . *2*	. *3* .	w	
2555	161,164,171,501,668,674,679	107,*171*,682	5.1	*514*0241	038	. . b . . F *1* 3 . . F . 3 4	. . .	O	t
2556	483,492,494,672,674,675,677		6.1	2*222*610	—	. . *1* . . F 0 2 . 1 F . . .	. . .	.	
2557	152,163,170,668,674,679,681		5.2	*114*603	—	. . *2* . . *22* . . 0 *3* . 0 .	. . .	*y*	v
2558	154,163,171	*154*,461,662	5.9	3*13*	342-	. . . . . *115* . . *2* . . 0	. . *2*	*o*	
2559	152,161,177,670,674,675	154,461,669	*5.5*	*37*1262	223	*641* . *1* 002 . . 3 . 02	. *1* .	*y*	da
2560			*6.0*			. *2* . . .	. .		da
2561	154,161,177,504,670,674,675	154,461,669	4.4	6821211	*133*	0 1 0 . *17* 3 *3* . . 0 . *12*	0 3 2	*y*	dv
2562	159,481,499		6.2	2*3*0	—	. . . . . FF*5* . . F*2* . .	. . .	.	
2563	152,171,175,671,672,675	154,461,667	5.5	301*1*20	3*31*	. . *2* . . 3 *5* 7 . . *2* . *3* 0	. . .	*o*	t
2564	166,489,499,501,671,672,675	*107*,*171*,682	5.7	6301103	352	. . . . . F 4 1 . . 0 . . 3	. . .	.	p
2565	166,175,499,501,671,672,675	*107*,*171*,682	5.7	7721101	322	. . . . . 1 1 1 . . 4 . . 2	. . .	.	
2566	154,157,161,164,166,171,179	106,106,146	3.2	403*23*10-	4*41*	b 0 1 *1* . 0 0 2 . . 8 . *11*	*2* 1 .	W	se
2567	159,478,494,672,674,675		6.2	315023	—	. . *5* . . F *1* . . *5* F . *8* .	. . .	*o*	n
2568	164,171,481	*154*,461,669	6.3	*5*31	*183*	. . . . . *555* . . *6* . . *4*	. . .	.	
2569	152,159,161,164,169,175,177	106,108,146	3.4	*235*1110-	4*12*	*1* 2 0 . . *222* . . 6 . 0 2	*3* 2 .	Y	ts
2570	169,177,486	*154*,*461*,671	6.3	0*12*	*111*	. . . . . F *55* . . F *2* . 0	. . .	.	
2571	169,177,499	146,*165*,665	5.1	11*3*	34*1*	. . 0 . . 7 7 0 . 1 *2* . . 2	. . .	w	
2572	159,175,179,672,674,675	154,461,669	3.8	314*312*	10*1*	0 4 2 . . *1* 3 3 . . 2 . 0 0	0 4 .	*y*	
2573	152,169,171		5.8	10*2*	—	. . 1 . . 0 0 . . 0 F . . .	. . .	*o*	n
2574	159,175,182		5.9	02*1*	—	. . . . . FF*5* . . F 2 . .	. . .	.	
2575	152,171,489	*107*,*171*,*682*	6.3	02*1*	*244*	. . . . . *523* . . *2* . . *3*	. . .	*o*	
2576	169,478,494		5.4	*131*	—	. . . . . 4 4 . . 6 3 . .	. . .	w	
2577	169,478,494		5.4	2*0*1	—	. . 5 . . 4 4 . . 2 F . . .	. . .	W	n
2578	171,481,486	*154*	6.6	0*11*	*4*	. . . . . 2 2 *3* . . *5* . . *4*	. . .	.	de
2579	175,481,499,501,672,674,677	*154*,*461*,669	6.2	b*3*00020	0*5*0	. . . . . 1 . . F . . *2*	. . .	.	de
2580	159,483,499	*107*,*171*,682	6.3	4*12*	*271*	. . . . . *554* . . *2* . . *3*	. . .	w	dc
2581	481,486,499,501,672,674,675	*154*,461,*667*	6.2	*5*210*1*40	*173*	. . 5 . . *442* . . F . . *4*	. . .	w	de
2582	171,478,483		5.8	*111*	—	. . *2* . . 0 0 0 . *11* . *2* .	. . .	*o*	nt
2583	175,179,186,672,674,677	154,461,669	5.1	700143	105	1 2 1 . . *22* 6 . . . . 6 . . 2	. . 0	O	ntea
2584	179,186,491,495,672,674,677		5.0	0202*011*		0 . . *22* 2	. . 2	*b*	nea
2585	169,177,483		5.3	311	—	. . *8* . . FF . 7 1 4 . . .	. . .	.	nt
2586	175,182,489,672,674,677		4.9	0*31*120	—	1 0 2 . . 1 1 . . 3 *5* . 3 .	. . .	*o*	
2587	161,182,489		5.0	20*1*	—	. . . . . 0 0 . . 3 *6* . 3 .	. . .	w	
2588	157,182,186,672,674,677	154,461,669	4.3	1*23*110	*131*	7 2 0 . . *22* 0 . . 1 . 1 *2*	. *1* .	W	
2589	169,179,483,672,674,677		4.0	*502*264	—	4 2 *2* 0 . 4 4 . . 4 0 . 3 .	. . .	*o*	t
2590	164,175,182,672,674,677	158,450,667	*4.4*	*121*121	4*13*	*7432* b *655* . . 4 . *61*	*10* .	*y*	dt
2591			*5.3*			*9* . . .	.	w	d
2592	159,478,499	*146*,*165*,*665*	6.5	20*2*	*125*	. . . . . *774* . 0 F . . *3*	. . .	.	
2593	152,154,157,159,164,171,177	106,107,145	5.9	1214*10*1-	*123*	. . . . . *113* . . *21* . 1	. . .	*y*	s
2594	152,154,161,167,177,179,182	146,147,147	2.4	12*15*021-	*242*-	b *41* 1 . *223* . . 6 . *30*	*31* .	W	vte
2595	157,179,186,672,674,677		3.9	4*23*134	—	5 3 *1* 1 . 5 5 . 5 1 1 . 0 .	. . .	.	nt
2596	164,182,501	*154*,*461*,667	6.1	1*11*	2*41*	. . 1 . . *333* . . 0 . . *1*	. . .	*y*	
2597	151,489,499	*158*,*450*,667	5.3	3*51*	011	. . 3 . . 5 5 7 . . 4 . . 1	. . .	*o*	
2598	152,179,501	154,461,669	5.4	01*2*	*620*	. . *2* . . *444* . . *1* . *43*	. . .	O	
2599	157,177,501,674,677,679	*154*,*461*,*667*	6.9	2*21*211	6*37*	. . *5* . . b b *4* . . *8* . *78*	. . .	O	vt
2600	161,481,499	*154*,461,667	5.7	*212*	422	. . b . . 1 1 1 . . 0 . . 1	. . .	*y*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2601	Scorpius .	*o 40*	5151	—	31.3	−29 23	4·5	4·5	—	3.8	8	3.91	.12	—	—
2602	Corona . .	—	—	+30° 2682	32.0	+30 23	6	6·7	6.5	—	3	6.36	.08	6.3	.04
2603	Libra . .	41	5161	—	32.0	−18 54	F	F	—	5.9	6	5.68′	.09	—	—
2604	Draco . .	—	—	+54° 1756	32.1	+54 20	F	6·7	6.0	—	4	6.06	.12	6.0	.16
2605	Lupus . .	γ 3	5160	—	32.1	−34 1	F	5	—	5.1	3	4.58	.09	—	—
2606	Libra . .	—	—	—	32.2	− 8 24	6	6	—	6.2	3	5.65	.09	—	—
2607	Draco . .	—	—	+52° 1886	32.7	+52 28	F	F	6.0	—	3	6.17	.12	—	—
2608	Draco . .	—	—	+55° 1766	32.9	+55 1	F	F	6.0	—	7	5.78	.07	5.2	—
2609	Corona . .	—	—	+24° 2901	33.2	+24 55	6	6·7	7.4	—	3	7.19	.19	6.4	.04
2610	Libra . .	42	5166	—	33.2	−23 26	F	F	—	5.7	7	5.22	.08	—	—
2611	Bootes . .	φ 54	5168	+40° 2907	33.5	+40 45	5	5	5.0	—	7	5.44	.03	5.2	.15
2612	Draco . .	—	—	+54° 1758	34.4	+54 55	6	6	6.0	—	3	6.06	.04	5.5	.16
2613	Hercules .	—	5177	+47° 2253	34.5	+47 12	6	6·5	5.5	—	3	5.74	.09	5.6	.24
2614	Corona . .				34.9	+37 2									
2615	Corona . .	ζ 7	5178	+37° 2665	34.9	+37 2	4	4	4.3	—	6	4.75	.04	4.4	.00
2616	Ursa Minor	θ 15	5191	+77° 592	35.0	+77 45	6·5	5·6	5.0	—	3	5.31	.16	5.1	.13
2617	Draco . .	—	5181	+50° 2206	35.0	+50 48	6	6·5	6.0	—	3	6.00	.11	5.7	.08
2618	Libra . .	$\varkappa$ 43	5176	—	35.0	−19 17	5	5	—	5.5	6	4.97	.08	—	—
2619	Serpens . .	τ^6 19	5180	+16° 2816	35.5	+16 26	6	6	6.0	—	3	5.84	.08	6.0	.13
2620	Serpens . .	χ 20	5185	+13° 2982	36.1	+13 14	6	6·5	5.5	5.8	3	5.13	.08	5.2	.15
2621	Serpens . .	ι 21	5187	+20° 3138	36.2	+20 3	5·4	5·4	4.5	4.8	3	4.55	.12	4.9	.11
2622	Serpens . .	τ^7 22	5189	+18° 3059	36.5	+18 52	6	6	6.0	—	3	5.82	.13	5.9	.15
2623	Libra . .	η 44	5190	—	37.3	−15 17	6	6	—	5.9	6	5.50	.03	—	—
2624	Ursa Minor	—	—	+69° 806	37.4	+69 40	6	6	6.0	—	3	5.97	.07	6.0	.05
2625	Corona . .	γ 8	5192	+26° 2722	37.7	+26 41	4·3	4	4.0	—	6	4.18	.09	3.9	.07
2626	Serpens . .	ψ 23	5194	+ 2° 2989	38.0	+ 2 54	6	6·5	6.1	6.2	4	5.62	.13	5.8	.11
2627	Serpens . .	α 24	5196	+ 6° 3088	38.4	+ 6 48	2·3	2·3	2.2	2.6	6	2.71	.05	3.0	.09
2628	Corona . .	π 9	5204	+32° 2621	39.3	+32 54	6	6	6.2	—	3	5.60	.11	5.9	.13
2629	Serpens . .	τ^8 26	5203	+17° 2906	39.3	+17 38	6	6	6.2	—	3	5.71	.19	5.9	.09
2630	Draco . .	—	5210	+52° 1898	39.6	+52 45	6	6·5	5.0	—	3	5.60	.19	5.2	.16
2631	Serpens . .	A^{2}25	5206	− 1° 3092	39.8	− 1 26	6	6	5.5	5.8	3	5.37	.04	—	—
2632	Serpens . .	β 28	5216	+15° 2911	40.6	+15 48	3·4	3·4	3.3	—	6	3.84	.05	3.6	.07
2633	Serpens . .	λ 27	5214	+ 7° 3023	40.6	+ 7 44	4·5	4·5	5.0	4.8	3	4.35	.11	4.6	.16
2634	Serpens . .	υ 31	5223	+14° 2939	41.7	+14 30	6	6	6.0	6.2	3	5.67	.09	5.3	.17
2635	Serpens . .	30	5226	—	42.7	− 3 27	F	F	—	6.1	3	5.53	.05	—	—
2636	Serpens . .	κ 35	5234	+18° 3074	43.3	+18 31	4	4	4.0	4.4	6	4.25	.04	4.3	.20
2637	Lupus . .	λ 5	5227	—	43.3	−33 16	5	5	—	4.2	3	4.01	.12	—	—
2638	Serpens . .	μ 32	5230	—	43.4	− 3 4	3·4	3·4	—	3.3	6	3.48	.09	—	—
2639	Corona . .	R	5236	+28° 2477	43.6	+28 31	var.	var.	var.	—	4	var.	—	var.	—
2640	Scorpius .	b 1	5232	—	43.8	−25 23	5	5	—	5.3	7	4.79	.08	—	—
2641	Serpens . .	ω 34	5238	+ 2° 3007	44.2	+ 2 33	6	6·5	5.8	5.5	3	5.19	.04	5.3	.00
2642	Draco . .	—	5248	+55° 1779	44.6	+55 44	6·5	5	6.0	—	3	6.03	.03	5.4	.09
2643	Corona . .	δ 10	5244	+26° 2737	44.6	+26 26	4·5	4·5	4.5	—	7	4.56	.09	4.4	.09
2644	Draco . .	—	5249	+62° 1225	44.8	+62 58	5	6·5	5.8	—	6	5.15	.08	5.2	.19
2645	Serpens . .	ε 37	5245	+ 4° 3069	44.8	+ 4 50	3·4	3·4	3.5	3.7	6	3.67	.04	3.7	.08
2646	Serpens . .	b 36	5246	—	45.0	− 2 44	5	5·6	—	5.7	3	5.17	.12	—	—
2647	Serpens . .	R	—	+15° 2918	45.1	+15 30	F	var.	var.	—	2	var.	—	F	—
2648	Draco . .	—	—	+60° 1635	45.2	+59 57	F	6·7	6.0	—	3	6.96	.08	6.2	.09
2649	Serpens . .	ϱ 38	5252	+21° 2829	46.0	+21 20	5	5	5.0	—	3	4.78	.11	5.2	.09
2650	Libra . .	λ 45	5251	—	46.3	−19 48	6	6	—	5.5	7	5.04	.06	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2601	164,186,504,506,674,677,679		3.9	4361713-	—	. . 4 . . 55 . 201 . *1* .	. . .	.	n
2602	169,492,501	154,*462*,669	6.4	202	012	. . . . . *631* . . F . . *1*	. . .	.	
2603	159 489,499,670,674,677		5.7	*115*071	—	. . R . . FF . . 04 . . .	. . .	*g*	h
2604	486,495,499,501	*107*,*171*,682	6.1	3412	513	. . . . . F03 . . F . . *1*	. . .	.	
2605	179,495,504		4.6	*221*	—	. . 0 . . F4 . 932 . . .	. . .	.	ndtc
2606	157,489,504		5.6	212	—	. . . . 022 . . 41 . 0 .	. . .	*w*	d
2607	186,492,499		6.2	*3*21	—	. . . . . FF4 . . F*1* . .	. . .	.	p
2608	175,486,499,504,670,677,679	171	5.8	5431021	*6*	. . . . . FF0 . . F . . *6*	. . .	.	
2609	169,492,501	*154*,*462*,*671*	7.2	*315*	7F8	. . . . . **bb**0 . . F . . *8*	. . .	.	e
2610	164,489,504,506,670,674,677		5.2	5*341*220	—	. . 0 . . FF . 325 . . .	. . .	*y*	nt
2611	161,492,501,504,674,677,679	154,461,669	5.4	f011011	*601*	. . *1* . . *444* . . 3 . *42*	. . *1*	Y	
2612	175,486,501	*107*,171,602	6.1	101	*927*	. . . . . *333* . . *4* . . *6*	. . .	.	
2613	164,189,501	*154*,462,669	5.7	*122*	553	. . . . . 1*13* . . 0 . . *1*	. . 3	*y*	n
2614	184,492,501,674,677,679	154,463,669	*6.1*	020311	*444*	. . . *9*	. . .	*y*	dte
2615			*5.2*			. . *4* . *7*775 . . 1 . *44*	. . .	W	dte
2616	186,492,501	145,171,682	5.3	*242*	151	. . *3* . . 1*13* . . 4 . 1*2*	. 0 .	O	t
2617	189,492,501	*107*,*171*,682	6.0	*2*30	*153*	. . . . . *242* . . 1 . . *3*	. . .	*y*	n
2618	179,489,504,670,679,681		5.0	*142*123	—	*682* . . 00 . . *21* . 2 .	. . .	*o*	t
2619	478,492,504	*154*,461,667	5.8	121	513	. . 4 . . 000 . . *1* . . 2	. . .	w	
2620	189,495,504	154,462,667	5.1	220	332	. *22* . . 753 . 56 . 31	. . .	*y*	
2621	179,492,495	152,463,667	4.6	12*3*	440	*240* . . 00*1* . *12* . 13	. *2* .	W	
2622	478,492,499	152,461,667	5.8	*232*	332	. . *2* . . 000 . . *1* . . 1	. . .	W	
2623	175,489,504,670,679,681		5.5	211001	—	*521* . . 33 . . *22* . 0 .	. . .	w	a
2624	492,495,501	*107*,171,682	6.0	*1*20	*111*	. . . . . *222* . . *13* . 0	. . .	.	c
2625	184,492,504,670,679,681	154,463,669	4.2	521*3*04	*235*	2*0*5 . 1*5*11 . . *2* . *43*	*33* .	*g*	d
2626	483,489,499,504	*159*,*450*,667	5.6	0533	421	. . *2* . . 203 . 41 . 22	. . .	*y*	
2627	177,182,489,674,679,681	158,450,667	2.7	03*1*12	125	6500 . *224* . 0F . *1*3	21 .	Y	t
2628	161,486,499	*154*,463,669	5.6	*2*30	604	*23*1 . . 224 . . *3* . 03	. . .	*o*	
2629	169,495,504	152,*461*,667	5.7	513	403	. . *2* . . 113 . . 4 . . 2	. . .	*w*	
2630	175,495,501	101,171,602	5.6	540	084	. . . . . 206 . . *3* . . *4*	. . .	W	
2631	179,489,504		5.4	011	—	. . *3* . . 440 . 21 . 0 .	. . .	w	n
2632	157,179,504,674,675,679	152,450,667	3.8	*113*210	*214*	*5421443 3* . . *3* . *42*	01 .	*y*	d
2633	167,182,489	158,450,667	4.4	*113*	006	022 . . 006 . 30 . 22	. 3 .	*g*	
2634	157,179,501	*152*,462,667	5.7	122	083	*782* . . 111 . 30 . *14*	. . .	w	
2635	167,483,504		5.5	*111*	—	. . *2* . . FF . . 4F . . .	. . .	w	
2636	175,189,493,674,677,679	152,450,667	4.2	2*11*10	630	272 . . *111* . *22* . 21	. *1* .	O	t
2637	169,483,504		4.0	*231*	—	464 . . **00** . 720 . 2 .	. . .	.	nage
2638	177,483,495,674,679,681		3.5	*441*312	—	970 . . *10* . . *15* . *1* .	. 1 .	*y*	
2639	179,483,498,499	*152*,463,669	var.	RRRR	RRR	. . . . . V V V . . F . . R	. . .	*w*	vte
2640	489,495,498,499,675,677,679		4.8	*147*1102	—	. 50 . . 22 . 221 . 2 .	. . .	.	
2641	167,189,497	159,450,667	5.2	101	111	. . 2 . . 644 . 01 . 21	. . .	*o*	t
2642	175,486,504	*107*,*171*,602	6.0	*1*00	*458*	. . . . . *6***b***2* . . *3* . . *6*	. . .	w	de
2643	159,198,497,498,670,675,679	154,463,669	4.6	5*242*12	*104*	*242* . . *221* . . 3 . *42*	. 1 .	Y	t
2644	179,489,497,674,679,681	107,171,682	5.2	024*222*	540	. . . . . *244* . . 1 . . 0	. . .	W	
2645	184,495,497,670,681,683	158,450,667	3.7	0*1*0131	*121*	*4122* . *320* . 17 . 10	11 .	W	
2646	161,481,498		5.2	043	—	. . 0 . . *20* . . *23* . 1 .	. *4* .	*y*	
2647	179,481	*152*,*462*,*667*	var.	RR	FFF	. . . . . F V V . . F . . F	. . .	.	vt
2648	175,486,504	*107*,*171*,682	7.0	220	*76***b**	. . . . . F*9***b** . . F . . *8*	. . .	.	
2649	159,198,497	152,463,669	4.8	3*11*	652	*434* . . 222 . . 1 . *24*	. . .	o	t
2650	161,481,498,499,670,681,683		5.0	*135*0031	—	432 . . 88 . . 23 . 2 .	. . .	w	v

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P. E.
					m.	° ′									
2651	Scorpius .	A 2	5250	—	46.4	−24 58	5	5	—	5.2	3	4.74	.05	—	—
2652	Corona . .	$\varkappa$ 11	5259	+36° 2652	46.7	+36 2	5·4	5·4	5.0	—	3	4.74	.03	4.7	.07
2653	Scorpius .	—	5253	—	46.7	−24 10	F	F	—	5.8	8	5.58	.10	—	—
2654	Scorpius .	—	5254	—	46.8	−23 37	6	6	—	5.8	3	5.38	.05	—	—
2655	Libra . .	θ 46	5257	—	47.0	−16 23	5·4	5·4	—	4.8	3	4.31	.03	—	—
2656	Scorpius .	4	5265	—	48.3	−25 55	F	F	—	6.3	8	5.48	.11	—	—
2657	Ursa Minor	ζ 16	5285	+78° 527	48.4	+78 10	4·5	4·5	4.7	—	6	4.49	.07	4.3	.11
2658	Hercules .	χ 1	5271	+42° 2648	48.6	+42 47	4·5	5·4	4.3	—	3	4.47	.16	4.8	.07
2659	Lupus . .	μ	5268	—	49.2	−33 37	F	5	—	5.2	3	4.49	.08	—	—
2660	Serpens . .	—	5273	+20° 3166	49.3	+20 40	6	6·5	6.2	—	3	6.05	.08	5.7	.13
2661	Draco . .	—	5279	+56° 1838	49.5	+56 11	6	6	6.4	—	7	5.93	.09	5.9	.07
2662	Scorpius .	ϱ 5	5272	—	49.5	−28 52	5·4	5	—	4.5	7	4.01	.08	—	—
2663	Serpens . .	—	—	+ 9° 3120	49.6	+ 9 35	F	cum.	7.9	F	4	7.09	.13	F	—
2664	Serpens . .	—	—	+19° 3036	50.2	+18 58	6	6	6.2	—	3	6.45	.04	6.1	.07
2665	Hercules .	2	5287	+43° 2542	50.7	+43 30	6	6·5	5.5	—	3	5.47	.12	5.3	.20
2666	Serpens . .	γ 41	5284	+16° 2849	50.9	+16 3	4·3	4·3	3.8	3.9	7	4.00	.07	4.0	.07
2667	Corona . .	λ 12	5295	+38° 2712	51.4	+38 18	6·5	6	5.7	—	3	5.60	.07	5.2	.17
2668	Scorpius .	—	5286	—	51.4	−24 29	F	6·7	—	6.1	3	5.38	.04	—	—
2669	Hercules .	4	5298	+42° 2652	51.5	+42 54	6	6	6.0	—	6	5.72	.07	5.4	.23
2670	Libra . .	48	5290	—	51.5	−13 56	5	5	—	5.4	6	4.80	.03	—	—
2671	Scorpius .	π 6	5289	—	51.6	−25 46	3	3	—	3.4	3	3.08	.07	—	—
2672	Serpens . .	φ	5293	+14° 2969	51.7	+14 46	6	6·5	6.0	—	3	5.44	.12	5.5	.08
2673	Corona . .	ε 13	5302	+27° 2558	52.6	+27 14	4	4	4.0	—	6	4.13	.10	4.3	.03
2674	Scorpius .	δ 7	5303	—	53.3	−22 17	2·3	2·3	—	2.4	6	2.52	.03	—	—
2675	Draco . .	—	5307	+59° 1691	53.5	+59 16	F	6	6.6	—	3	6.06	.08	5.9	.00
2676	Libra . .	49	5304	—	53.6	−16 10	F	6	—	5.9	6	5.61	.05	—	—
2677	Libra . .	50	5306	—	54.3	− 8 4	6	6	—	6.0	3	5.56	.07	—	—
2678	Corona . .	T	—	+26° 2765	54.4	+26 16	F	F	9.5	—	1	var.	—	—	—
2679	Corona . .	—	5310	+37° 2695	54.5	+36 58	6	6·5	5.8	—	3	5.77	.08	5.8	.16
2680	Draco . .	—	5313	+55° 1793	54.9	+55 5	5·6	5	5.1	—	7	5.02	.08	5.0	.07
2681	Serpens . .	3	5309	+ 4° 3096	54.9	+ 4 46	F	6	6.1	6.2	3	6.00	.08	5.9	.05
2682	Hercules .	—	5316	+50° 2239	55.7	+50 14	F	6	6.0	—	3	5.87	.04	5.9	.00
2683	Hercules .	r 5	5315	+18° 3101	55.9	+18 9	6·5	6·5	5.0	—	3	5.32	.11	5.3	.11
2684	Scorpius .	—	5314	—	56.1	−25 32	F	6	—	5.7	9	5.44	.11	—	—
2685	Corona . .	ϱ 15	5319	+33° 2663	56.5	+33 40	6·5	6·5	5.7	—	3	5.17	.16	5.1	.13
2686	Corona . .	ι 14	5321	+30° 2738	56.7	+30 11	5·4	5·4	5.0	—	3	5.09	.05	5.0	.09
2687	Serpens . .	π 44	5322	+23° 2886	57.1	+23 8	5·4	5·4	4.6	—	3	4.99	.05	4.7	.12
2688	Scorpius .				57.7	−11 2									
2689	Scorpius .	ξ 51	5324	—	57.7	−11 2	4·5	4·5	—	4.6	3	4.10	.04	—	—
2690	Scorpius .	β 8	5329	—	58.5	−19 29			—	$2\frac{1}{2}$					
2691	Scorpius .	—	5330	—	58.5	−19 28	2	2	—	$7\frac{3}{4}$	13	2.91	.04	2.7	.03
2692	Corona . .	—	5336	+37° 2708	58.9	+36 58	6	6	6.3	—	3	5.87	.00	5.9	.11
2693	Draco . .	—	5341	+53° 1834	59.0	+53 15	F	6·7	6.0	—	3	6.24	.11	6.2	.08
2694	Hercules .	v 6	5338	+46° 2142	59.1	+46 22	4·5	5·4	4.1	—	3	4.70	.07	4.4	.03
2695	Libra . .	—	—	—	59.4	− 5 58	F	F	—	F	7	6.41	.09	—	—
2696	Draco . .	θ 13	5348	+58° 1608	59.6	+58 53	4·3	4·3	3.5	—	20	4.15	.02	4.3	.05
2697	Libra . .	—	—	—	59.7	− 5 49	F	F	—	F	3	6.64	.12	—	—
2698	Scorpius .	ω^1 9	5337	—	59.7	−20 20	4	5·4	—	4.4	3	4.10	.15	—	—
2699	Scorpius .	—	—	—	0.4	−13 45	F	6·5	—	6.8	3	6.20	.03	—	—
2700	Scorpius .	ω^2 10	5342	—	0.4	−20 33	F	5	—	4.6	7	4.57	.10	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2651	167,184,186		4.7	1*11*	—	. 60 . . 33 . 322 . 3 .	. . .	*y*	d
2652	172,198,497	154,464,669	4.7	00*1*	0*12*	. . 3 . . *113* . . 2 . *10*	. . .	*y*	
2653	167,184,493,497,498,670,677		5.6	*1560631-*	—	. . . . . FF . 40F . . .	. . .	w	
2654	161,184,493		5.4	*111*	—	. . . . . 44 . 62F . . .	. . .	w	
2655	159,172,189		4.3	0*10*	—	3*111* . 33 . . 41 . 3 .	. . .	Y	t
2656	159,169,186,495,504,670,677		5.5	*4525432-*	—	. . *2* . . FF . 56F . . .	. . .	.	
2657	175,196,493,673,679,681	145,171,682	4.5	311*114*	*331*	*133* . . *112* . . *1* . *12*	.0.	W	
2658	157,167,189	*154*,464,669	4.5	4*40*	143	*146* . . *112* . . *1* . 13	. . 2	*y*	
2659	167,172,504		4.5	2*20*	—	*16* . . . F5 . 54*1* . . .	. . .	.	ndac
2660	161,486,504	*152*,464,669	6.0	*112*	0*62*	. . . . . *240* . . 1 . . *3*	. . .	o	
2661	172,489,497,498,673,679,681	*107*,*171*,682	5.9	6060*411*	*201*	. . . . . *113* . . 2 . . 0	. . .	*g*	
2662	169,484,498,499,670,681,683		4.0	*3070240*	—	*7331* . 60 . 444 . 4 .	. . .	.	
2663	159,167,189,504	*158*,464,667	7.1	*13*F3	FbF	. . . . . FC6 . FF . . F	. . .	.	c
2664	157,486,504	*152*,*464*,667	6.4	101	*314*	. . . . . *664* . . F . . *3*	. . .	w	
2665	161,189,486	*154*,*464*,669	5.5	*123*	701	. . 4 . . 311 . . 2 . . *2*	. . *1*	O	t
2666	159,198,497,498,674,679,681	152,450,667	4.0	624*1002*	*210*	*7450* . *331* . 00 . *20*	*32* .	Y	
2667	157,198,486	154,464,669	5.6	0*12*	*812*	. . *2* . . *220* . . 1 . 0*4*	. . .	*g*	
2668	169,484,498		5.4	0*11*	—	. . . . . F7 . 653 . . .	. . .	.	
2669	175,189,486,673,679,681	*154*,*464*,669	5.7	*2*14112	*910*	. . *5* . . 111 . . 0 . . *3*	. . 3	w	
2670	179,484,497,670,677,683		4.8	0*11101*	—	*230* . . 22 . . 31 . 3 .	. . .	w	
2671	161,184,497		3.1	*102*	—	2101 . 11 . *144* . 4 .	. . .	.	
2672	198,486,497	152,464,667	5.4	*231*	300	. . . . 424 . . 3 . 21	. . .	Y	
2673	179,481,497,673,679,681	154,463,669	4.1	1*16233*	122	311 . . 000 . . 3 . *12*	.1.	*o*	t
2674	157,177,198,670,677,683		2.5	112*001*	—	874 . . 00 . *305* . *1* .	. . .	*g*	v
2675	161,489,504	*107*,*171*,682	6.1	*202*	*222*	. . . . . F*33* . . 0 . . *2*	. . .	*r*	
2676	159,481,499,670,677,681		5.6	0*31112*	—	. . 0 . . F2 . . 11 . *3* .	. . .	*y*	
2677	172,484,504		5.6	*210*	—	. . b . . 22 . . 21 . . .	. . .	*r*	
2678	159		var.	R	—	. . . . . FFR . . F . . .	. . .	.	vtpc
2679	157,177,486	*154*,464,669	5.8	2*20*	*431*	. . . . . 0*22* . . *1* . . 0	. . .	o	
2680	175,186,497,504,670,674,681	107,171,602	5.0	6*150212*	*120*	. . . . . 201 . . 3 . . 0	. . .	W	
2681	159,198,489	*158*,450,667	6.0	2*20*	*200*	. . *5* . . F*21* . 0F . . *1*	. . .	Y	n
2682	179,486,497	*107*,*686*,682	5.9	01*1*	000	. . . . . F*11* . . F4 . 0	. . .	w	n
2683	157,186,198	152,450,667	5.3	20*3*	*311*	. . 3 . . 13*3* . . *4* . 10	. . .	*y*	
2684	172,198,493,495,497,498,670		5.4	*257*b*323-*	—	. . . . . F4 603 . . .	. . .	.	
2685	161,198,495	154,464,669	5.2	04*4*	*402*	. . 3 . . 244 . . 1 . 2*1*	. . .	*o*	
2686	179,486,498	154,464,669	5.1	1*11*	*321*	*798* . . *551* . . *2* . *51*	. . .	w	
2687	167,179,498	154,463,669	5.0	*111*	*540*	*651* . . *444* . . *6* . *43*	. . .	W	
2688	157,161,184		*5.0*	*110*	—	. . $^{4}_{4}$	. . .		ndg
2689			*4.7*			*21* 33 . . 43 . 4 .	. . .	*y*	ndg
2690	159,161,169,175,179,184,189	145,147,159	*5.2*	30*35010-*	*131-*	43*41* $^{R}_{R}$ *77* . . *34* . *42*	. . .	*g*	dveag
2691			*3.0*				. . .	l	dveag
2692	175,177,486	*154*,464,669	5.9	000	320	. . . . . *112* . . *6* . . 0	. . .	*y*	
2693	172,198,486	*157*,*686*,682	6.2	1*31*	022	. . . . . F*14* . . *1* . . 0	. . .	O	
2694	167,184,486	154,464,669	4.7	*102*	*343*	*351* . . *315* . . 2 . *33*	. . 2	W	
2695	175,186,493,495,670,674,677		6.4	7*114014*	—	. . . . . FF . . Fb . . .	. . .	.	dc
2696	157,159,169,175,177,179,186	106,146,147	4.2	20f*1210-*	14*1*	*402* . . *555* . . 2 . 71	.0.	*y*	s
2697	175,186,493		6.6	3*30*	—	. . . . . FF . . FR . . .	. . .	.	dc
2698	159,481,498		4.1	4*22*	—	312 . 0 05 . 331 . 2 .	. . .	W	n
2699	169,189,507		6.2	010	—	. . . . . F*6* . . 4F . . .	. . .	.	g
2700	159,184,495,499,676,681,683		4.6	70*41323*	—	. . *2* . . F4 . 1*12* . *1* .	. . .	*g*	nt

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
2701	Scorpius .	—	5347	—	0.8	−26 0	F	6·5	—	6.0	3	5.84	.16	—	—
2702	Scorpius .	11	5351	—	1.0	−12 25	6	6	—	6.0	6	5.64	.06	—	—
2703	Serpens . .	45	5359	+10° 2958	1.9	+10 13	6	6	6.2	6.0	3	5.55	.09	5.6	.19
2704	Hercules .	—	—	+22° 2926	2.2	+22 9	6	6	6.5	—	3	6.38	.05	6.1	.15
2705	Serpens . .	47	5366	+ 8° 3141	2.6	+ 8 51	6	6	6.4	6.2	3	5.85	.05	5.6	.11
2706	Hercules .		5367	+17° 2964	2.7	+17 22			5.5	—					
2707	Hercules .	$\varkappa$ 7	5368	+17° 2965	2.7	+17 23	5	5·6	7.0	—	7	4.81	.09	4.8	.11
2708	Libra . .	—	—	—	3.6	− 3 9	F	F	—	5.9	3	5.46	.12	—	—
2709	Scorpius .	—	5374	—	3.6	−29 6	F	6	—	5.8	3	5.06	.11	—	—
2710	Corona . .	τ 16	5385	+36° 2699	4.6	+36 47	5·4	5·4	5.0	—	3	5.20	.15	4.9	.09
2711	Scorpius .	c^1 13	5381	—	4.9	−27 37	5	5	—	5.3	3	4.69	.12	—	—
2712	Scorpius .	12	5380	—	4.9	−28 6	F	F	—	6.1	6	5.52	.07	—	—
2713	Hercules .	φ 11	5388	+45° 2376	5.0	+45 15	4	4	3.8	—	6	4.22	.06	4.2	.12
2714	Scorpius .	ν 14	5382	—	5.0	−19 9	4	4	—	4.3	7	4.17	.08	—	—
2715	Scorpius .	ψ 15	5386	—	5.4	− 9 45	5	5	—	5.2	3	4.81	.08	—	—
2716	Scorpius .	16	5387	—	5.6	− 8 14	6	6	—	5.7	3	5.50	.07	—	—
2717	Draco . .	—	5406	+68° 864	6.0	+68 8	6·5	6·5	6.0	—	16	5.35	.04	5.3	.06
2718	Hercules .	q 48	5392	+17° 2982	6.1	+16 59	6	6	6.1	—	4	5.86	.11	5.8	.12
2719	Hercules .	10	5399	+23° 2909	6.5	+23 49	6	6	6.0	—	3	6.06	.08	6.0	.20
2720	Draco . .	—	5415	+58° 1622	6.6	+58 16	6	6·7	6.7	—	3	6.29	.07	—	—
2721	Scorpius .	χ 17	5401	—	7.2	−11 32	6	6	—	5.6	3	5.57	.17	—	—
2722	Hercules .	9	5405	+ 5° 3165	7.3	+ 5 20	6	6	5.8	6.0	3	5.68	.03	5.8	.09
2723	Corona . .	—	5411	+36° 2706	7.4	+36 44	6	6	6.2	—	3	5.70	.17	5.6	.08
2724	Ursa Minor	—	—	+77° 516	7.6	+77 7	6	6	6.0	—	3	5.69	.09	5.9	.12
2725	Hercules .	—	—	+39° 2961	7.9	+39 21	F	F	6.0	—	3	6.80	.19	—	—
2726	Ophiuchus .	δ 1	5414	—	8.1	− 3 23	3	3	—	2.7	11	2.77	.05	—	—
2727	Hercules .	—	—	+16° 2908	8.4	+16 45	F	6	7.8	—	3	7.84	.08	F	—
2728	Scorpius .	18	5420	—	9.1	− 8 3	6	6·5	—	5.7	3	5.66	.15	—	—
2729	Scorpius .	—	—	—	9.1	−14 33	F	6	—	6.3	6	5.98	.04	—	—
2730	Corona . .	σ 17	5432	+34° 2750	10.2	+34 10	6	6·5	5.7	—	6	5.29	.06	5.1	.15
2731	Hercules .	16	5426	+19° 3075	10.2	+19 8	F	6·7	6.0	—	3	5.88	.05	5.9	.11
2732	Scorpius .	c^2	5429	—	10.9	−28 19	6	6	—	5.5	3	4.96	.04	—	—
2733	Corona . .	υ 18	5440	+29° 2803	11.9	+29 27	6·5	6·5	5.7	—	7	5.80	.09	6.0	2.4
2734	Scorpius .	—	5435	—	11.9	−30 37	F	6	—	5.8	3	5.40	.11	—	—
2735	Draco . .	—	—	+67° 930	12.0	+67 27	6	6	6.3	—	3	6.21	.09	6.1	.04
2736	Ophiuchus .	ε 2	5437	—	12.0	− 4 24	3·4	3·4	—	3.3	6	3.37	.04	—	—
2737	Scorpius .	19	5445	—	13.4	−23 53	6	6	—	5.1	7	4.70	.11	—	—
2738	Scorpius .	σ 20	5447	—	13.9	−25 18	3·4	3·4	—	3.4	6	2.99	.08	—	—
2739	Ursa Minor	19	5462	+76° 594	14.3	+76 11	6	6·5	6.0	—	7	5.48	.06	5.9	.11
2740	Hercules .	—	5452	+21° 2902	14.9	+21 25	6	6·7	6.5	—	3	6.28	.19	6.0	.11
2741	Draco . .	—	5459	+60° 1665	15.3	+60 4	6	6	5.5	—	3	5.43	.17	5.8	.07
2742	Hercules .	—	5460	+40° 3005	15.7	+39 58	6	6	5.5	—	8	5.53	.08	5.4	.15
2743	Hercules .	—	5461	+49° 2491	15.8	+49 19	F	6·7	6.0	—	3	6.14	.11	—	—
2744	Serpens . .	σ 50	5456	+ 1° 3215	16.0	+ 1 19	5	5	5.0	5.4	3	4.76	.05	4.8	.12
2745	Hercules .	τ 22	5463	+46° 2169	16.1	+46 36	3·4	3·4	3.5	—	6	3.87	.09	3.8	.03
2746	Ursa Minor	—	5483	+73° 713	16.6	+73 41	6	6	6.2	—	3	5.96	.05	5.9	.11
2747	Hercules .	γ 20	5466	+19° 3086	16.6	+19 26	3	3·4	3.0	3.8	6	3.83	.06	3.8	.05
2748	Ophiuchus .	ψ 4	5467	—	17.0	−19 45	5	5	—	4.8	6	4.57	.04	—	—
2749	Scorpius .	—	5464	—	17.1	−29 25	F	6	—	5.9	3	5.42	.08	—	—
2750	Corona . .	ξ 19	5473	+31° 2845	17.4	+31 10	5	5	5.1	—	3	4.50	.19	5.0	.04

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2701	172,184,507		5.8	431	—	. . . . . F 2 . F 0 3 . . .	. . .	.	t
2702	170,179,495,676,681,683		5.6	111222	—	. . 2 . . 2 2 . . 2 1 . . .	. . .	w	
2703	189,484,505	152,464,667	5.6	221	252	. . R . . 2 2 4 . 2 1 . . 0	. . .	o	h
2704	172,184,505	154,464,671	6.4	111	271	. . . . . 6 6 1 . . 3 . . 3	. . .	.	t
2705	170,489,495	152,464,667	5.8	111	052	. . R . . 0 0 4 . 2 1 . . 2	. . .	Y	dteh
2706	167,177,506,508,676,681,683	152,450,671	5.1	4613112	230	4 3 3 . 1 2 4 3 . . 4 0	. . .	y	d
2707			6.3			. 3 5 . . 4 .	. . .	p	d
2708	169,179,495		5.5	123	—	. . . . . F F . . 2 6 . . .	. . .	.	
2709	161,189,499		5.1	023	—	. . . . . F 7 . 9 5 2 . . .	. . .	.	t
2710	167,170,495	154,464,672	5.2	421	512	. . 3 . . 6 6 2 . . 3 . 4 3	. . .	y	
2711	169,179,189		4.7	312	—	3 3 4 . . 3 3 . 3 3 2 . 3 .	. . .	.	n
2712	169,179,189,676,681,683		5.5	231311	—	. . 4 . . F F . 5 4 6 . . .	. . .	.	nvtg
2713	169,186,506,673,678,683	154,464,672	4.2	031122	033	2 0 1 . . 1 1 3 . . 2 . 2 0	. . 4	W	h
2714	175,196,499,508,676,681,683		4.2	7130032	—	2 0 9 5 . 1 1 . . 1 2 . 0 .	. . .	y	
2715	484,489,507		4.8	220	—	. . 5 . . 2 2 . . 1 1 . 2 .	. . .	W	
2716	177,486,507		5.5	102	—	. . 2 . . 3 3 . . 1 2 . . .	. . .	w	
2717	167,172,175,186,192,198,484	107,108,146	5.4	3021543-	432	. . . . . 0 2 4 . . 3 . . 1	. . .	W	s
2718	172,172,186,495	152,465,671	5.9	2232	241	. . R . . 1 1 0 . . F . 3 1	. . .	w	nh
2719	161,495,506	154,464,671	6.1	121	162	. . R . . 3 3 3 . . 0 . . 1	. . .	o	h
2720	172,493,506		6.3	210	—	. . . . . 5 2 2 . . F . . .	. . .	w	n
2721	198,489,493		5.6	144	—	. . 2 . . 2 2 . . 3 3 . 3 .	. . .	o	t
2722	192,486,506	152,450,667	5.7	010	301	. . 7 . . 1 1 1 . 1 0 . . 1	. . .	o	
2723	198,493,495	154,464,672	5.7	324	221	. . . . . 1 1 3 . . 0 . . 1	. . .	Y	
2724	198,506,508	157,688,686	5.7	212	431	. . . . . 1 1 1 . . 4 . . 2	. . .	.	
2725	159,186,506		6.8	513	—	. . . . . F F b . . F . . .	. . .	.	
2726	161,196,505,507,676,678,680		2.8	5160233-	—	5 4 2 0 . 4 4 . . 0 2 . 4 .	. 1 .	O	t
2727	189,495,506	152,465,671	7.8	112	bFF	. . . . . F b 2 . . F . . F	. . .	.	e
2728	161,184,505		5.7	230	—	. . 1 . . 1 1 . . 3 4 . .	. . .	y	v
2729	486,495,507,681,683,685		6.0	230101	—	. . . . . F 2 . . 1 1 . . .	. . .	.	vg
2730	159,495,506,673,678,683	154,464,672	5.3	430101	522	. . 0 . 5 5 3 3 . . F . 3 2	. . .	w	d
2731	177,486,489	154,464,671	5.9	111	023	. . 2 . . F 2 1 . . F . . 0	. . .	y	
2732	161,184,505		5.0	110	—	0 0 . . . 8 8 . 5 2 1 . . .	. . .	.	n
2733	159,184,505,506,673,678,683	154,464,671	5.8	7351012	831	. . 7 . . 4 2 2 . . 9 . 4 2	. . .	w	
2734	167,177,507		5.4	023	—	. . . . . F 4 . 6 2 5 . . .	. . .	.	d
2735	167,177,506	157,688,686	6.2	221	012	. . . . . 4 4 1 . . 1 . . 1	. . .	.	
2736	161,169,196,673,678,683		3.4	303001	—	1 2 0 3 . 0 1 . . 0 1 . 1 .	. 1 .	y	vt
2737	159,169,186,192,676,680,683		4.7	5602432	—	. 3 4 8 . 1 1 . 3 2 2 . 2 .	. . .	y	tg
2738	161,170,184,676,680,683		3.0	211422	—	3 6 3 3 . 4 5 . 2 5 0 . . .	. . .	W	t
2739	169,175,186,509,676,680,683	157,688,686	5.5	6311011	551	. . 3 . . 3 1 3 . . 6 . . 4	. . .	w	
2740	159,184,495	154,464,671	6.3	513	163	. . . . . 5 2 0 . . F . . 3	. . .	y	
2741	167,170,506	107,688,686	5.4	144	524	. . . . . 4 4 0 . . 3 . . 4	. . .	w	t
2742	169,172,192,495,506,678,680	154,464,672	5.5	1183230-	521	. . . . . 3 3 1 . . 2 . . 1	. . 2	W	
2743	486,495,506		6.1	230	—	. . . . . F 0 3 . . 4 . . .	. . .	.	
2744	170,184,505	146,165,665	4.8	111	312	. 5 6 . . 2 2 2 . 3 1 . 3 0	. 2 .	W	
2745	170,180,506,676,683,685	154,464,672	3.9	433220	110	1 1 1 . . 5 4 2 . . 1 . 3 1	0 . 3	W	
2746	167,198,506	157,688,686	6.0	111	114	. . . . . 2 2 0 . . 1 . . 1	. . .	y	
2747	175,495,498,676,683,685	154,450,671	3.8	221211	111	5 2 2 . . 6 3 6 . 1 2 . 1 0	1 0 .	y	v
2748	169,198,507,673,678,683		4.6	211111	—	1 3 0 . . 4 4 . . 1 3 . 0 .	. . .	y	
2749	172,186,507		5.4	121	—	. . . . . F 4 . 6 3 F . . .	. . .	.	d
2750	170,184,505	154,464,672	4.5	450	564	. . 7 . . 5 5 6 . . 4 . 6 5	. . .	W	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
2751	Corona . .	20	5479	+34° 2773	17.8	+34 5	5	5	5.2	—	3	5.14	.17	5.0	.04
2752	Corona . .	ν 21	5480	+34° 2774	18.0	+33 59			5.3	—	3	4.97	.16		
2753	Hercules .	23	5484	+32° 2716	18.3	+32 37	6	6·7	6.5	—	7	6.14	.09	6.2	.03
2754	Hercules .	o 21	5481	+ 7° 3164	18.4	+ 7 13	6	6	6.0	6.2	3	5.74	.09	5.7	.04
2755	Ophiuchus .				18.4	−23 10			—	5¾					
2756	Ophiuchus .	5	5477	—	18.4	−23 10	5	5	—	5½	3	4.82	.08	—	—
2757	Hercules .	ω 24	5490	+14° 3049	19.9	+14 19	5	5	5.2	4.8	6	4.69	.04	4.8	.12
2758	Ophiuchus .	χ 7	5489	—	20.0	−18 11	6	6	—	4.6	6	5.03	.09	—	—
2759	Ursa Minor	η 21	5511	+76° 596	21.0	+76 2	5	5	5.3	—	6	5.00	.02	5.2	.00
2760	Hercules .	25	5496	+37° 2750	21.1	+37 40	6·5	6·5	5.7	—	3	5.50	.11	5.3	.12
2761	Ophiuchus .	—	5494	—	21.2	− 7 19	F	6·7	—	5.7	7	5.40	.10	—	—
2762	Ophiuchus .	ν 3	5495	—	21.3	− 8 6	5	5	—	5.2	3	4.60	.09	—	—
2763	Draco . .	—	5502	+55° 1845	21.8	+55 29	6·5	6·5	5.7	—	6	5.66	.08	5.4	.15
2764	Scorpius .	α 21	5498	—	22.0	−26 10	1·2	1·2	—	1.4	13	1.06	.05	0.7	.12
2765	Draco . .	—	5514	+69° 845	22.2	+69 24	6·5	6·5	5.5	—	3	5.41	.03	5.7	.17
2766	Draco . .	η 14	5512	+61° 1591	22.4	+61 47	3·2	3·2	2.5	—	18	2.82	.04	3.0	.11
2767	Ophiuchus .	—	—	+ 0° 3529	22.5	+ 0 55	6	6	6.0	5.9	3	5.55	.03	5.7	.12
2768	Ophiuchus .	—	—	+ 0° 3530	22.6	+ 0 19	F	F	7.2	F	3	6.51	.03	—	—
2769	Scorpius .	22	5501	—	22.9	−24 51	5	5	—	5.3	3	4.64	.09	—	—
2770	Ophiuchus .	—	—	—	23.0	−14 17	6	6	—	6.1	3	5.84	.03	—	—
2771	Ophiuchus .	φ 8	5516	—	24.3	−16 21	5	5	—	4.6	6	4.44	.06	—	—
2772	Hercules .	g 30	5523	+42° 2714	24.7	+42 9	5·6	var.	4.9	—	10	5.08	.08	5.0	.03
2773	Ophiuchus .	λ 10	5520	+ 2° 3118	24.9	+ 2 15	4·3	4·3	4.0	3.8	6	3.97	.09	4.1	.08
2774	Hercules .	β 27	5525	+21° 2934	25.1	+21 45	2·3	2·3	2.5	—	9	2.76	.04	2.8	.03
2775	Ophiuchus .	ω 9	5519	—	25.1	−21 12	5	5	—	4.7	7	4.66	.11	—	—
2776	Hercules .	s	5527	+20° 3283	25.4	+20 45	6	6	6.0	—	4	4.70	.05	5.3	.19
2777	Draco . .	—	—	+51° 2106	25.6	+51 42	6	6	6.2	—	3	6.37	.08	6.4	.07
2778	Hercules .	n 28	5531	+ 5° 3223	26.7	+ 5 46	6	6	5.9	6.0	3	5.51	.04	5.6	.09
2779	Hercules .	34	5535	+49° 2514	26.8	+49 14	F	6·7	5.8	—	3	6.14	.19	6.4	.07
2780	Hercules .	h 29	5532	+11° 3008	27.0	+11 45	5·6	5·6	5.2	—	3	5.00	.03	5.0	.11
2781	Draco . .	A 15	5545	+69° 850	28.2	+69 2	5	5	5.2	—	17	5.03	.03	5.0	.05
2782	Hercules .	—	—	+45° 2422	28.3	+45 53	6	6	5.7	—	3	5.30	.09	5.7	.08
2783	Scorpius .	τ 23	5539	—	28.4	−27 58	3·4	3·4	—	3.2	6	2.90	.06	—	—
2784	Ophiuchus .	—	—	− 1° 3218	29.8	− 1 33	F	F	5.4	F	3	F	—	—	—
2785	Hercules .	—	—	+17° 3053	30.0	+17 18	F	6	6.2	—	3	6.07	.13	5.7	.04
2786	Ophiuchus .	12	5547	− 1° 3220	30.1	− 2 4	6	6·5	5.8	6.3	7	5.84	.06	—	—
2787	Hercules .	σ 35	5552	+42° 2724	30.2	+42 42	4	4·5	4.0	—	6	4.25	.02	4.4	.00
2788	Ophiuchus .	ζ 13	5548	—	30.6	−10 19	3·2	3·2	—	2.6	7	2.84	.04	—	—
2789	Draco . .	—	5560	+61° 1598	30.7	+61 5	6	6	6.0	—	3	5.96	.04	5.9	.07
2790	Ophiuchus .	—	—	—	31.6	− 6 18	6	6	—	6.4	3	6.01	.11	—	—
2791	Hercules .	—	5563	+13° 3177	32.3	+13 56	F	F	6.0	6.7	3	6.07	.11	—	—
2792	Ursa Minor	—	5592	+79° 498	32.4	+79 13	6	6	6.0	—	3	5.54	.03	6.0	.04
2793	Hercules .	—	5568	+46° 2194	32.8	+46 52	6	6·7	6.0	—	3	5.97	.12	6.0	.11
2794	Draco . .				33.4	+53 10									
2795	Draco . .	17	5575	+53° 1876	33.4	+53 10	4·5	4·5	5.0	—	3	5.24	.15	4.8	.09
2796	Draco . .	16	5574	+53° 1875	33.4	+53 8			5.3	—	3	5.57	.08		
2797	Scorpius .	24	5579	—	34.6	−17 30	5	5	—	5.5	6	5.17	.08	—	—
2798	Hercules .	36	5581	+ 4° 3234	34.6	+ 4 26			7.5	7.5	8	6.59	.08		
2799	Hercules .	m 37	5582	+ 4° 3235	34.7	+ 4 27	6	6	6.1	6.0	3	5.73	.05	5.6	.09
2800	Scorpius .	—	5580	—	34.8	−19 42	6	6	—	6.0	3	5.72	.05	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2751	167,198,505	154,464,672	5.1	*243*	768	. . *6* . *1* 7 7 1 . . 6 . . 7	. . .	Y	ndte
2752	167,198,505		5.0	*044*		. . 6 . 3 2 . .	. . .	*y*	ndte
2753	170,184,495,505,678,680,683	*154,464*,672	6.1	*8110251*	121	. . *6* . . *3* 0 2 . . F . . 1	. . .	w	
2754	175,186,505	148,463,667	5.7	*221*	10*1*	. . 2 . . 111 . 30 . 10	. . .	W	
2755	170,486,507		*6.0*	*121*	—	*4 1 2* . . 22 . *11* . 0 .	. . .	*y*	nvpg
2756			*5.3*			. . . . .	. . .		nvpg
2757	162,170,505,678,683,685	148,450,671	4.7	*151*000	223	3 *5 3* . . 335 . 0 *3* . 11	. . .	W	na
2758	167,493,507,673,678,683		5.0	06*1215*	—	0 *11* . . 88 . . *5* b . *4* .	. . .	w	vg
2759	170,493,506,673,678,683	*157,688*,686	5.0	*101010*	R22	*6 4* 3 . . 002 . . *1* . *22*	. . .	*y*	e
2760	162,493,507	154,464,672	5.5	*230*	*501*	. . 1 . . *111* . . *2* . . *2*	. . .	W	
2761	175,487,507,509,683,685,686		5.4	6722120	—	. . . . . F 7 . . 03 . . .	. . .	O	t
2762	487,495,507		4.6	*122*	—	. . . . . 44 . . 3 *2* . 4 .	. 0 .	W	
2763	167,487,507,673,683,685	157,404,*686*	5.7	*152*202	*721*	. . . . . *311* . . 0 . . *3*	. . .	*y*	
2764	159,167,169,170,489,676,680	145,147,159	1.1	1211*140*-	061-	0 9 2 *2* . 11 . 116 . 1 *4*	1 . .	O	dte
2765	162,493,507	*157*,401,686	5.4	00*1*	7*12*	. . . . . 020 . . F . . 3	. . .	*o*	
2766	159,167,172,184,186,192,198	106,108,146	2.8	*3313*122-	4*10*	5 4 *2* 0 . *10 1* . . 2 . 22	21 .	Y	sp
2767	162,487,567	*146*,165,*665*	5.6	*100*	41*2*	. . . . . 222 . 1 F 2 . 1	. . .	.	
2768	169,489,507		6.5	100	—	. . . . . F F 5 . F b . . .	. . .	.	
2769	178,487,507		4.6	*122*	—	. 4 . . . 44 . 943 . 4 .	. . .	w	d
2770	169,489,507		5.8	00*1*	—	. . . . . 00 . . 1 *1* . . .	. . .	.	
2771	162,178,507,673,683,685		4.4	*331120*	—	3 5 *1* . . 66 . . 10 . 1 .	. . .	*y*	
2772	167,170,180,487,493,495,500	154,464,672	5.1	71*10614*-	*121*	. . 0 . . 1 v *2* . . 2 . . *1*	. . *1*	Y	vt
2773	170,478,497,673,681,683	146,165,665	4.0	*205521*	22*1*	4 2 *3 1 3 3 3* 1 . *10* . *21*	*8* . .	y	da
2774	172,189,487,495,498,500,673	154,450,671	2.8	00*13*111-	001	5 4 1 2 . *331* . . *3* . *4* 0	31 .	Y	vt
2775	192,493,495,505,673,681,686		4.7	355*3321*	—	3 2 *9* . . 33 . 0 *13* . *1* .	. . .	w	
2776	189,487,495,500	154,464,671	4.7	1*111*	179	. . . . . 111 . . 0 . . 6	. 4 .	*y*	nv
2777	167,493,507	*157,688,686*	6.4	02*2*	*201*	. . . . . *664* . . F . . 0	. . .	.	
2778	180,487,507	148,463,667	5.5	1*10*	30*1*	. . 0 . . 332 . 3 *2* . 01	. . .	W	n
2779	180,493,507	*154,464*,672	6.1	*522*	431	. . *8* . . F 0 *5* . . 0 . . 3	. . .	*w*	
2780	162,493,507	148,450,671	5.0	*100*	*203*	. 31 . . 222 . . *1* . 00	. . .	*o*	v
2781	172,180,186,189,196,198,200	107,108,146	5.0	39*3*1013-	0*10*	. . *1* . . 002 . . 3 . 00	. . .	*y*	sp
2782	167,180,507	154,464,672	5.3	1*22*	624	. . . . 4553 . . 46 . 4	. . 7	.	d
2783	169,196,495,676,681,683		2.9	*211410*	—	4343 . 56 . 341 . 4 .	. . .	*g*	
2784	180,495,500		F	FFF	—	. . . . . FFR . FF . . .	. . .	.	c
2785	162,487,498	*148*,464,671	6.1	*331*	*543*	. . . . . F *31* . . 0 . . *4*	. . .	.	
2786	167,495,497,506,676,685,686		5.8	*3311*310	—	. . 5 . . 0 *22* . 33 . . .	. . .	w	p
2787	178,507,509,676,683,685	154,464,672	4.2	10*2*000	R22	2 0 1 . . *121* . . *2* . 02	. . 2	W	e
2788	192,493,505,676,678,680,685		2.8	2001*281*	—	5 4 3 0 . *10* . . *12* . 3 .	*21* .	W	
2789	172,493,506	*157,688,686*	6.0	10*1*	1*12*	. . . . . *222* . . 1 . . *1*	. . .	w	
2790	167,196,500		6.0	02*3*	—	. . . . . *22* . . 21 . . .	. . .	.	
2791	186,487,500		6.1	30*2*	—	. . . . . F F *3* . . 40 . .	. . .	.	
2792	496,506,507	*157,688,686*	5.5	001	654	. . . . . 333 . . 2 . . 5	. . .	*y*	
2793	162,189,500	154,*464*,672	6.0	*132*	*131*	. . . . . *212* . . F *3* . 0	. . 0	*y*	
2794	178,196,505	157,404,602	*5.5*	412	014	. . *6*	. . .	*y*	da
2795			*6.6*			. *3* 0 . *322* 2 . . *2* . 22	. . .	w	da
2796	178,196,505		5.6	*220*	—	. 0 . *4* 4 . . .	. . .	w	da
2797	162,493,506,678,683,685		5.2	*341041*	—	. . 7 . . *22* . . 0 *3* . 0 .	. . .	*y*	
2798	189,490,493,506,683,685,686	148,463,667	6.6	b*232361*-	521	. . *1* . 4 7 . 7 . . 3	. . .	.	ndg
2799	487,496,498		5.7	11*1*		. . 1 . 3 5 5 2 . 1 4 . .	. . .	*y*	ndg
2800	172,192,500		5.7	11*1*	—	. . . . . 11 . . 14 . . .	. . .	..	t

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2801	Hercules .	—	5587	+12° 3063	35.3	+12 39	F	6·7	6.0	6.4	3	5.90	.15	6.0	.12
2802	Hercules .	42	5596	+49° 2531	35.5	+49 10	5·4	5	5.0	—	3	5.17	.12	5.1	.05
2803	Draco . .	—	5599	+56° 1907	35.6	+56 15	6·5	6·5	5.4	—	3	5.49	.03	5.3	.13
2804	Ophiuchus .	14	5591	+ 1° 3290	35.6	+ 1 24	6	6	6.5	6.2	6	5.87	.04	5.4	.05
2805	Ursa Minor	—	5611	+77° 627	35.8	+77 41	6	6	6.5	—	7	6.22	.11	6.3	.05
2806	Hercules .	—	5597	+25° 3115	36.0	+25 5	F	6	6.0	—	3	6.13	.11	6.0	.15
2807	Hercules .	ζ 40	5604	+31° 2884	36.8	+31 49	3·2	3·2	3.0	—	6	3.09	.07	3.0	.08
2808	Hercules .	39	5602	+27° 2668	36.8	+27 9	F	6·7	6.0	—	3	5.76	.04	5.9	.15
2809	Hercules .	—	—	+36° 2768	37.4	+36 42	neb.	neb.	neb.	—	3	7.17	.12	5.9	.11
2810	Hercules .	η 44	5617	+39° 3029	38.8	+39 9	3	3·4	3.0	—	6	3.69	.06	3.6	.09
2811	Hercules .	—	5619	+34° 2830	39.4	+34 16	6	6·5	6.0	—	3	5.80	.03	5.8	.15
2812	Hercules .	—	5620	+16° 3013	40.0	+15 58	6	6	6.1	6.1	3	5.57	.07	5.9	.07
2813	Draco . .	g 18	5628	+64° 1145	40.1	+64 49	5·6	5·6	5.2	—	17	4.99	.03	5.0	.03
2814	Hercules .	i 43	5621	+ 8° 3271	40.1	+ 8 48	6·5	6·5	5.6	5.9	3	5.52	.04	5.4	.03
2815	Ophiuchus .	19	5627	+ 2° 3175	41.1	+ 2 17	6	6	6.6	6.4	3	6.12	.07	5.5	.12
2816	Hercules .	—	—	+43° 2642	41.4	+43 26	F	6·7	6.0	—	3	5.94	.15	F	—
2817	Hercules .	l 45	5631	+ 5° 3272	41.9	+ 5 28	6	6·5	5.3	5.7	3	5.48	.09	5.4	.04
2818	Scorpius .	ε 26	5632	—	42.4	−34 4	3	3	—	2.3	8	2.15	.04	—	—
2819	Hercules .	—	—	+13° 3225	42.6	+13 48	F	F	5.9	—	3	6.31	.05	—	—
2820	Draco . .	—	5643	+57° 1702	43.0	+57 0	5	5	5.0	—	6	4.93	.08	5.0	.03
2821	Ophiuchus .	20	5637	—	43.2	−10 34	5	5	—	5.1	7	4.68	.03	—	—
2822	Hercules .	—	5647	+13° 3233	44.0	+13 29	6	6	5.6	6.1	3	5.96	.15	5.8	.16
2823	Draco . .	—	5658	+55° 1878	44.4	+55 37	6	6	7.0	—	3	6.83	.05	5.7	.05
2824	Hercules .	k 47	5648	+ 7° 3256	44.5	+ 7 28	6·5	6·5	6.0	5.8	3	5.39	.07	5.4	.00
2825	Ophiuchus .	21	5659	+ 1° 3323	45.3	+ 1 25	6	6	6.0	5.8	3	5.49	.04	5.3	.07
2826	Hercules .	52	5667	+46° 2220	45.7	+46 12	4·5	5	5.0	—	3	5.00	.05	4.8	.08
2827	Hercules .	50	5666	+30° 2884	46.0	+30 1	6	6	6.1	—	3	5.83	.15	5.9	.11
2828	Hercules .	S	—	+15° 3063	46.4	+15 9	F	var.	var.	—	5	var.	—	—	—
2829	Hercules .	49	5674	+15° 3066	46.6	+15 11	6	F	6.1	—	9	6.41	.06	6.2	.25
2830	Hercules .	51	5677	+24° 3069	46.8	+24 52	6	5·6	5.3	—	3	5.16	.08	5.1	.07
2831	Ophiuchus .	23	5688	—	48.2	− 5 57	6	6	—	5.8	3	5.57	.05	—	—
2832	Ophiuchus .	ι 25	5692	+10° 3092	48.3	+10 22	4·5	4·5	4.1	5.0	6	4.41	.08	4.2	.03
2833	Ursa Minor	—	5705	+77° 634	48.4	+77 42	F	6·7	6.0	—	3	5.91	.08	6.3	.08
2834	Hercules .	53	5693	+31° 2925	48.4	+31 54	5	6·5	6.2	—	3	5.40	.11	5.3	.16
2835	Ophiuchus .	24	5698	—	49.6	−22 57	F	F	—	5.9	7	5.55	.08	—	—
2836	Hercules .	—	—	+21° 3002	49.7	+21 11	6	6·5	6.0	—	3	5.55	.00	5.7	.09
2837	Hercules .	54	5702	+18° 3266	50.1	+18 38	6	5·6	4.8	6.0	3	5.52	.11	5.6	.16
2838	Ophiuchus .	κ 27	5708	+ 9° 3298	52.0	+ 9 34	3·4	3·4	3.0	3.4	6	3.37	.04	3.4	.07
2839	Ophiuchus .	—	—	—	52.8	−12 42	F	F	—	F	5	var.	—	—	—
2840	Ophiuchus .	—	—	—	53.0	+ 0 29	F	F	F	F	3	F	—	—	—
2841	Scorpius .	—	5718	—	54.1	−31 58	5	5	—	5.7	3	5.26	.07	—	—
2842	Ophiuchus .	30	5724	—	54.7	− 4 2	5	5	—	5.5	6	4.98	.06	—	—
2843	Draco . .	h 19	5740	+65° 1157	55.4	+65 19	5	5	5.3	—	3	4.68	.11	5.0	.03
2844	Hercules .	ε 58	5731	+31° 2947	55.7	+31 6	3·4	3·4	3.5	—	6	4.04	.06	3.9	.12
2845	Hercules .	—	—	+22° 3045	55.9	+22 49	6	6	5.8	—	3	5.72	.03	5.9	.12
2846	Draco . .	—	5752	+56° 1934	57.2	+56 52	F	6·7	6.0	—	3	6.19	.07	6.3	.05
2847	Hercules .	d 59	5747	+33° 2817	57.2	+33 45	5	5	5.1	—	6	5.27	.05	5.0	.00
2848	Hercules .	—	—	+25° 3183	57.4	+25 41	6	6	6.0	—	3	6.09	.03	5.8	.12
2849	Hercules .	*32*	5749	+14° 3179	57.6	+14 18	5	5·6	4.8	—	3	5.11	.13	5.4	.03
2850	Hercules .	—	—	+32° 2835	57.8	+32 4	F	6	7.4	—	3	6.87	.12	6.4	.08

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2801	172,487,506	*148,463,671*	5.9	*4*03	*22*3	. . . . . F 2 *1*. 3 *2*. . 1	. . .	w	
2802	178,493,506	154,464,672	5.2	*32*1	*2*00	. . *2*. *8 6 2 2*. . *3*. *5 1*	. . *3*	*o*	dt
2803	493,500,506	157,404,*686*	5.5	010	*51*1	. . . . . *1 1 2*. . 2. . *2*	. . .	Y	
2804	487,496,498,675,678,683	146,165,*665*	5.9	10*32*0*1*	*646*	. . *1*. . *1 1* 4. 1 F. . *5*	. . .	w	e
2805	162,192,506,508,678,683,685	*157,688,686*	6.2	*8132*333	020	. . . . . *4 4* 1. . *1*. . 1	. . .	*y*	
2806	162,192,500	*156*,465,*671*	6.1	*3*20	05*1*	. . . . . F *3 3*. . 0. . *1*	. . .	.	
2807	176,199,506,673,683,685	160,465,672	3.1	12*14 12*	*122*	**3** 1 *1* 0 3 *4 3* 1. . *1*. *1 1*	*1 2*.	*y*	d
2808	176,192,500	*156*,465,*671*	5.8	10*1*	1*34*	. . *4*. . F 3 0. . *1*. 6 1	. . .	*y*	
2809	167,192,500	160,464,672	7.2	2*31*	**bbb**	. . . . . N N N. . F. . **b**	. . .	.	p
2810	176,180,196,673,678,682	154,465,672	3.7	*120411*	0*31*	1 5 *7*. . *5 2 5*. . *2*. *1 1*	.8 *1*	*y*	
2811	487,496,498	160,465,672	5.8	100	*142*	. . . . . 0 *2* 0. . *11*. 0	. . .	w	
2812	176,196,199	*148,463*,671	5.6	*10*2	314	. . . . . 2 2 3. 3 F. . 3	. . .	*y*	
2813	162,170,172,176,178,180,190	107,107,108	5.0	*4*183*111*-	*102*	0 *1* 1. . 2 2 **0**. . *1*. 0 0	.1.	*y*	ts
2814	180,490,506	148,463,667	5.5	1*10*	*101*	. . 0. R *1* 1 0. 2 *2*. *1 1*	. . .	O	ndt
2815	176,205,507	146,165,*665*	6.1	0*21*	*837*	. . *2*. *2 3 3* 3. 1 F. . *6*	. . .	*w*	d
2816	162,199,498	*160,464,673*	5.9	*4*12	2FF	. . . . . F *2 1*. . F 2. F	. . .	.	
2817	170,196,490	148,463,667	5.5	*221*	*102*	. . *2*. . 3 1 *3*. *1* **b**. *1 1*	. . .	*y*	
2818	180,500,507,509,512,680,682		2.2	280*10 21*-	—	**10f** 3. **00**. 8 1 3. 1.	. . .	.	t
2819	185,205,507		6.3	*111*	—	. . . . . F F *6*. . F. . .	. . .	.	
2820	176,187,506,676,680,685	157,404,602	4.9	*421*140	011	. . . . . 1 1 1. . 4. . 1	. . .	*w*	
2821	167,196,496,680,682,685,686		4.7	100*412*0	—	. 2. . . 3 3. . 2 2. 1.	. . .	*y*	
2822	176,185,205	*148,463*,673	6.0	*3*40	*442*	. . . . . *2 2 5*. *1* F. . *2*	. . .	.	
2823	167,490,506	*157*,404,*686*	6.8	*111*	**bbb**	. . . . . **b b** *3*. . F. . **b**	. . .	*w*	npm
2824	180,205,507	148,463,667	5.4	*2*10	000	. . 3. . 0 2 4. 2 *5*. 0 0	. . .	*y*	
2825	180,199,506	146,165,*665*	5.5	1*10*	*203*	. . 0. . 3 3 3. 1 2. . *2*	. . .	W	
2826	176,196,200	160,465,673	5.0	1*11*	*240*	. . *1*. . *6* 0 0. . *1*. 0 *2*	. . 2	W	
2827	180,205,507	160,465,673	5.8	2*41*	1*14*	. . 4. . 0 0 1. . *1*. *2* 1	. . .	Y	
2828	187,200,205,487,496		var.	FFFFF	—	. . . . . F V V. . F. . .	. . .	.	vct
2829	172,187,200,205,487,496,676	*148,463*,673	6.4	*461*1021-	*5*F1	. . *7*. . *6* F *5*. . *7*. . *2*	. . .	*y*	c
2830	167,196,507	156,465,673	5.2	*220*	*211*	. . 3. . 6 0 0. . 1. . *1*	. . .	*y*	
2831	176,506,507		5.6	11*1*	—	. . . . . 2 2. . 0 7. . .	. . .	*y*	
2832	180,195,196,487,490,496	148,465,667	4.4	*241132*	*212*	0 *2* 5. . 0 0 *2*. 4 0. *1 2*	2 1.	W	
2833	167,199,506	*157,688,686*	5.9	1*21*	633	. . . . . F *2 1*. . 2. . 4	. . .	w	
2834	176,190,506	160,465,673	5.4	0*23*	0*52*	. . *4*. . *4* 2 6. . *1*. 0 *1*	. . .	*y*	
2835	176,187,490,506,682,683,685		5.6	751*11 10*	—	. . R. . F F. F 1 F. . .	. . .	w	h
2836	173,180,506	156,465,673	5.6	000	3*12*	. . . . . 2 0 2. . 1 *2*. 1	. . .	.	
2837	167,176,506	156,465,673	5.5	*311*	*432*	. . *4*. . 3 *37*. 3 2. . 1	. . .	*y*	vh
2838	167,176,506,676,680,682	148,465,667	3.4	011*032*	*102*	**0** 3 *2* 3. 0 1 *2*. 1 1. 1 0	*11*.	Y	vt
2839	180,187,190,199,200		var.	RFFRF	—	. . . . . F F. . F F. . .	. . .	.	vp
2840	185,487,507		F	FFF	—	. . . . . F F F. F F. . .	. .	.	pm
2841	190,199,506		5.3	01*2*	—	. . . . . *33*. 7 1 0. 1.	. . .	.	g
2842	167,196,507,676,682,685		5.0	*121*113	—	. . . . . 0 0. . *21*. 2.	. . .	Y	vtg
2843	185,205,496	157,*688*,686	4.7	*2*30	334	3 2 1. . 3 3 5. . 2. 3 3	.4.	W	ndc
2844	183,196,490,676,680,685	160,465,673	4.0	3*11 22*	*223*	. . 0. . *6 5 3*. . 0. *41*	0 0.	w	v
2845	167,192,507	156,465,673	5.7	00*1*	4*13*	. . . . . 1 1 *1*. . 4 *1*. 2	. . .	.	
2846	176,185,506	*193,688,686*	6.2	0*12*	020	. . . . . F *14*. . *1*. . 1	. . .	w	
2847	167,196,496,676,680,685	160,465,673	5.3	*222*002	*333*	*3 2 1*. . *3 3 2*. . 0. *3 3*	. . .	W	
2848	173,190,506	*160*,465,673	6.1	001	*261*	. . . . . *3 3 3*. . 0. . *3*	. . .	.	
2849	187,490,512	148,463,673	5.1	*331*	334	. . 7. . *11 3*. . **0**. 3 3	.0.	*o*	nt
2850	183,190,196	*160,465,673*	6.9	*231*	*474*	. . . . . F **b** 3. . F. . *5*	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P. E.
					m.	° ′									
2851	Ursa Minor	ε 22	5780	+82° 498	58.3	+82 14	4·5	4·5	4.0	—	6	4.47	.06	4.4	.12
2852	Hercules .	*33*	5753	+13° 3292	58.1	+13 47	6	6·5	6.4	—	3	6.04	.08	5.5	.03
2853	Hercules .	*34*	5757	+13° 3295	58.5	+13 45			6.6	—	3	6.14	.16		
2854	Ursa Minor	—	5769	+73° 751	58.6	+73 17	F	6·7	6.0	—	18	6.21	.04	6.2	.02
2855	Ophiuchus .	—	—	+ 0° 3629	59.2	+ 0 53	F	6·7	6.3	6.2	8	5.94	.04	—	—
2856	Hercules .	—	—	+19° 3220	59.3	+19 46	6	6	6.0	—	3	6.05	.08	5.9	.12
2857	Ophiuchus .	—	5760	− 0° 3224	59.3	− 0 43	6	6	5.8	5.9	12	5.56	.04	—	—
2858	Hercules .	—	—	+34° 2890	59.6	+34 58	6	6	6.2	—	3	5.90	.09	5.9	.11
2859	Hercules .	60	5765	+12° 3142	59.8	+12 54	5	5	4.5	5.4	8	4.88	.07	4.8	.04
2860	Ophiuchus .	—	—	− 1° 3292	0.6	− 1 29	F	6	6.3	6.6	12	6.23	.04	—	—
2861	Hercules .	—	—	+22° 3073	1.2	+22 15	6	6	6.0	—	3	5.85	.04	5.9	.15
2862	Hercules .	—	5775	+44° 2652	1.4	+43 59	F	6	6.5	—	3	6.24	.15	6.3	.03
2863	Hercules .	—	5776	+49° 2583	1.7	+48 59	F	6·7	5.8	—	3	6.30	.09	6.1	.15
2864	Ophiuchus .	—	5774	− 0° 3230	2.0	− 0 56	F	6	6.2	6.3	12	5.94	.03	—	—
2865	Draco . .	μ 21	5785	+54° 1857	2.8	+54 38	5·4	5·4	4.8	—	6	5.18	.04	5.1	.06
2866	Draco . .				2.8	+54 38									
2867	Ophiuchus .	—	—	—	3.2	−10 22	F	6	—	5.8	3	5.64	.11	—	—
2868	Ophiuchus .	η 35	5781	—	3.5	−15 34	2·3	2·3	—	2.4	10	2.62	.04	—	—
2869	Hercules .	c	5788	+36° 2827	3.8	+36 6	5	6·5	5.5	—	3	5.54	.15	5.6	.09
2870	Hercules .	—	5790	+40° 3103	3.9	+40 40	6	6	6.2	—	6	6.29	.03	5.9	.12
2871	Ursa Minor	—	5811	+75° 613	5.5	+75 28	6	6	5.8	—	3	6.65	.03	6.2	.08
2872	Hercules .	—	—	+40° 3109	5.7	+40 56	5	5	5.2	—	3	5.10	.13	5.3	.15
2873	Hercules .	63	5798	+24° 3140	6.1	+24 23	6	6	6.2	—	8	6.15	.09	5.7	.13
2874	Ophiuchus .	37	5802	+10° 3165	6.8	+10 44	6	6·5	5.8	5.9	3	5.53	.04	5.3	.19
2875	Ophiuchus .	—	—	+ 0° 3654	6.8	+ 0 30	F	F	7.0	6.8	8	6.58	.06	—	—
2876	Draco . .	—	—	+52° 2032	7.9	+52 33	6	6	6.0	—	3	6.24	.07	6.0	.08
2877	Ophiuchus .	36	5808	—	8.0	−26 25	5	5	—	4.9	7	4.72	.11	—	—
2878	Draco . .	ζ 22	5823	+65° 1170	8.4	+65 52	3	3	3.0	—	19	3.27	.04	3.2	.05
2879	Hercules .	α 64	5821	+14° 3207	9.2	+14 32	var.	var.	var.	—	9	3.22	.05	3.0	.07
2880	Hercules .	δ 65	5828	+25° 3221	10.1	+24 59	3	3	3.0	—	8	3.28	.07	3.2	.08
2881	Ophiuchus .	—	—	+ 2° 3282	10.2	+ 2 19	F	F	6.5	6.4	9	6.10	.03	—	—
2882	Ophiuchus .	41	5830	− 0° 3255	10.4	− 0 18	5	5	4.3	5.1	6	4.95	.04	—	—
2883	Ophiuchus .	—	—	+ 1° 3408	10.5	+ 1 21	6	6	5.5	6.7	13	5.76	.03	6.0	.03
2884	Ophiuchus .	39	5827	—	10.7	−24 9	6	6	—	5.5	3	5.19	.04	—	—
2885	Hercules .	π 67	5834	+36° 2844	10.9	+36 57	3·4	3	3.0	—	7	3.36	.05	3.2	.13
2886	Ophiuchus .	—	—	+ 1° 3411	11.5	+ 1 52	F	F	6.8	6.9	8	6.67	.03	—	—
2887	Draco . .	—	5840	+63° 1336	11.6	+63 1	6	6·5	5.8	—	7	5.48	.11	5.4	.07
2888	Ophiuchus .	—	—	—	12.6	− 2 41	F	6	—	6.7	8	6.58	.08	—	—
2889	Hercules .	—	—	+17° 3216	12.8	+17 27	F	6	6.0	—	7	5.92	.08	5.8	.12
2890	Hercules .	u 68	5842	+33° 2864	12.9	+33 14	5	5	5.0	—	9	4.91	.08	4.7	.11
2891	Ophiuchus .	e *66*	5841	+11° 3156	13.0	+11 0	5	5	5.0	5.7	3	5.46	.03	5.0	.13
2892	Hercules .	—	—	+43° 2711	13.5	+43 15	neb.	neb.	neb.	—	3	7.24	.15	6.5	.00
2893	Hercules .	e 69	5847	+37° 2864	13.5	+37 25	5	5·4	4.5	—	3	4.94	.03	4.8	.03
2894	Hercules .	—	5853	+49° 2614	13.8	+49 49	6	6	7.2	—	3	5.90	.03	5.9	.11
2895	Ophiuchus .	40	5844	—	13.8	−20 59	5	5	—	5.1	6	4.51	.06	—	—
2896	Hercules .	—	—	+28° 2719	14.1	+28 56	6	6·5	5.8	—	3	5.93	.11	5.7	.13
2897	Serpens . .	ν 53	5845	—	14.1	−12 43	5·4	5·4	—	4.6	3	4.38	.04	—	—
2898	Hercules .	—	—	+38° 2910	14.4	+38 56	6	6	6.0	—	3	5.90	.11	6.0	.13
2899	Ophiuchus .	θ 42	5851	—	14.6	−24 53	3·4	3·4	—	3.6	6	3.44	.06	—	—
2900	Hercules .	—	5856	+18° 3351	15.0	+18 11	6	6.5	5.5	—	3	5.12	.09	5.7	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2851	167,490,506,676,680,682	193,402,686	4.5	*123111*	*232*	*136..114..1.11*	...	*y*	
2852	176,187,506	148,463,673	6.0	*121*	122	*..4.2 53 2..7..*	...	w	nd
2853	176,187,506		6.1	*413*		*..1.3 53 3..0..2*	...	*y*	nd
2854	167,176,180,187,199,200,205	*108,193,197*	6.2	*2228221-*	*001*	.....F*14..1..*0	...	*r*	s
2855	686,688,689,690,692,693,694		5.9	1101*210-*	—	.....F22.1F...	...	.	
2856	176,190,205	*156*,465,673	6.0	*211*	*150*	.....*222..12.1*	...	.	c
2857	173,178,192,685,686,688,689		5.6	*4401122-*	—	.....220.11...	...	w	
2858	173,187,506	*160*,465,673	5.9	*221*	*023*	.....*111..2..*0	...	.	
2859	167,183,496,680,682,686,692	148,465,673	4.9	*331*6105-	*120*	..3..114.28.*11*	.1.	W	h
2860	176,178,192,685,686,688,689		6.2	*411131-*	—	....2F*41.*2F...	...	.	d
2861	183,187,200	156,465,673	5.8	*101*	*332*	.....000..*12.*1	...	.	
2862	176,187,502	*160*,465,*673*	6.2	*430*	211	.....F41..F..1	...	w	
2863	185,199,205	*160*,465,*673*	6.3	*221*	*160*	.....F*27..F..2*	..0	*y*	
2864	190,192,496,685,686,688,689		5.9	*3141*001-	—	.....F*11.*22...	...	w	p
2865	180,195,196,682,688,692	193,404,601	*5.9*	220003	*211-*	*830 7 7664 5 01*	...	*y*	dv
2866			*6.0*				...	w	dv
2867	190,199,502		5.6	*302*	—	.....F2..*03*...	...	.	
2868	195,200,500,682,684,686,688		2.6	*2210212-*	—	7611.*11..14.*1.	*10.*	W	
2869	190,208,496	160,465,673	5.5	*124*	*103*	b*4...511..2.11*	...	w	n
2870	183,190,208,682,684,688	*160,465,673*	6.3	210*011*	*471*	.....*553..*F..*4*	..2	*o*	
2871	185,199,502	*193,688,686*	6.6	100	*624*	.....*88*b..F..*4*	...	*y*	
2872	190,208,500	*160*,465,673	5.1	13*3*	324	.....*111..*2532	..1	.	
2873	190,208,496,500,502,682,688	*160*,465,673	6.2	274*4*101-	*383*	..*8..442..5..5*	...	.	
2874	195,200,502	148,463,673	5.5	1*10*	700	.*24*..311.26..*2*	...	*o*	
2875	685,686,688,689,690,692,693		6.6	4210*114-*	—	.....FF2.0F...	...	.	
2876	195,197,502	*193,688,686*	6.2	01*2*	*033*	.....*444..*F*5.2*	...	.	
2877	183,199,502,508,682,686,693		4.7	5*452133*	—	*31*0..33.30*3.*5.	...	.	ndvtag
2878	173,176,178,180,185,190,200	108,193,197	3.3	0*145*140-	*003*	0*101.111..2.11*	*13.*	W	s
2879	176,195,197,496,500,502,684	148,465,673	3.2	*3110*402-	*032*	1421*1*vvv..3..*2*	40.	*o*	dvt
2880	173,199,213,496,500,502,684	160,465,673	3.3	*1116*332-	*030*	0*101111..2.41*	*10.*	W	dvt
2881	685,686,688,689,690,692,693		6.1	1021*200-*	—	.....FF2.1F...	...	.	
2882	183,199,502,684,686,688		5.0	10*211*1	—	.....007.*11.1.*	...	Y	
2883	183,199,502,683,685,686,688	*146,165*,672	5.8	*01*R200R-	232	.....004.73312	...	.	vpg
2884	199,208,502		5.2	*011*	—	..*4*..66.805.2.	...	o	dt
2885	183,195,200,208,684,686,688	160,465,673	3.4	13*10411*	*441*	0422.*022..4.12*	20.	*o*	vt
2886	686,688,689,690,692,693,694		6.7	*2101012-*	—	.....FF*1.*0F...	...	.	
2887	178,185,208,512,686,688,692	193,*688,686*	5.5	*7*332151	*130*	.....311..2..*1*	...	w	
2888	187,208,502,508,684,688,689		6.6	70*323*22-	—	.....F*8..15*...	...	.	
2889	178,200,213,511,686,688,693	156,463,673	5.9	b*242311*	140	.....F*11..*20.*1*	...	.	
2890	176,190,214,496,500,502,684	160,465,673	4.9	*2524104-*	*511*	..3..111..0..*2*	...	W	dvt
2891	173,195,200	148,465,673	5.5	100	*842*	.*23..555.12.15*	...	*o*	n
2892	173,195,200	*160,465*,673	7.2	*421*	*7*F*7*	.....NNN..F..*7*	..3	.	p
2893	180,199,208	*160*,465,673	4.9	00*1*	*101*	*501..134..5.31*	*42.*	*g*	
2894	185,205,496	*193,688,686*	5.9	001	*311*	.....*111*..F..0	...	*w*	
2895	190,213,500,684,688,689		4.5	2*21*400	—	71...55.244.3.	...	W	na
2896	190,208,496	*160*,465,673	5.9	20*3*	*050*	.....*133..2..2*	...	*y*	e
2897	197,213,500		4.4	*101*	—	0*2*...22..10.1.	...	*g*	d
2898	178,213,500	160,465,673	5.9	*311*	*323*	.....*111..*F..1	...	.	
2899	180,213,500,684,688,689		3.4	021*412*	—	4466.01.236.4.	...	*g*	a
2900	195,199,213	156,463,673	5.1	*212*	846	.....753..6..6	...	*o*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2901	Draco . .	—	—	+60° 1743	15.1	+60 47	6	6·7	6.3	—	3	6.33	.15	5.9	.05
2902	Hercules .	—	—	+25° 3246	15.3	+25 39	6	6	6.0	—	3	5.36	.16	5.2	.11
2903	Ophiuchus .	43	5857	—	15.8	−28 1	F	F	—	5.8	3	5.60	.09	—	—
2904	Hercules .	70	5860	+24° 3167	16.0	+24 36	6	6·5	6.0	—	3	5.33	.03	5.2	.09
2905	Hercules .	w 72	5863	+32° 2896	16.2	+32 38	5·6	5·6	5.7	—	6	5.44	.04	5.1	.04
2906	Hercules .	74	5871	+46° 2293	17.1	+46 21	6·5	6·5	5.5	—	3	5.80	.11	5.8	.13
2907	Hercules .	—	5874	+40° 3136	17.9	+40 5	5	5·6	5.2	—	3	5.77	.04	5.5	.13
2908	Ophiuchus .	—	—	+ 8° 3405	18.3	+ 8 57	6	6	6.2	6.1	3	6.02	.12	5.8	—
2909	Ophiuchus .	44	5876	—	19.0	−24 4	5	5	—	4.5	6	4.47	.08	—	—
2910	Hercules .	73	5883	+23° 3100	19.1	+23 5	6	6	5.8	—	7	5.77	.06	5.5	.04
2911	Ophiuchus .	—	—	+16° 3174	19.1	+16 26	6	6·5	5.5	—	3	5.77	.03	6.0	.17
2912	Ophiuchus .	—	—	+15° 3179	19.1	+15 43	6	6	6.2	—	3	6.07	.07	5.9	.11
2913	Draco . .	—	—	+53° 1937	19.2	+53 32	F	6	6.0	—	3	5.97	.08	6.0	.08
2914	Hercules .	ϱ 75	5886	+37° 2878	19.6	+37 16	4	4	4.0	—	3	4.14	.05	4.3	.05
2915	Hercules .				19.6	+37 16									
2916	Ophiuchus .	d 45	5881	—	19.7	−29 45	5	5	—	4.6	6	4.38	.04	—	—
2917	Hercules .	—	—	+38° 2928	20.0	+38 43	6	6·7	6.7	—	3	6.37	.08	6.4	.05
2918	Ophiuchus .	—	5890	—	20.3	− 4 59	5·4	5·4	—	4.5	7	4.62	.02	—	—
2919	Serpens . .	47	5888	—	20.3	−12 24	F	6	—	6.5	3	6.32	.07	—	—
2920	Ophiuchus .	—	5894	+ 7° 3368	20.5	+ 7 42	6	6	6.5	6.3	3	6.02	.08	5.7	—
2921	Ophiuchus .	σ 49	5893	+ 4° 3422	20.6	+ 4 15	5	4·5	4.0	4.5	6	4.42	.07	4.7	.16
2922	Hercules .	—	5900	+20° 3481	21.6	+20 12	6	6	5.7	—	3	5.42	.15	5.5	.19
2923	Hercules .	—	—	+34° 2971	22.4	+34 49	6	6	6.1	—	3	6.00	.07	5.7	.07
2924	Scorpius .	υ 34	5901	—	22.6	−37 12	4	4	—	3.2	6	2.84	.08	—	—
2925	Ophiuchus .	—	5903	+ 0° 3697	22.7	+ 0 27	5·6	5·6	5.5	5.6	3	5.18	.04	5.5	.21
2926	Hercules .	x 77	5911	+48° 2517	23.6	+48 22	6	6·5	6.0	—	6	5.77	.06	5.5	.09
2927	Ophiuchus .	51	5907	—	24.1	−23 52	5	5	—	5.2	6	4.88	.06	—	—
2928	Draco . .	—	5917	+60° 1754	24.2	+60 9	6	6·5	5.5	—	3	5.79	.09	5.5	.05
2929	Ophiuchus .	—	5910	− 0° 3300	24.2	− 0 57	6	6·5	5.4	5.7	3	5.38	.04	—	—
2930	Draco . .	—	5918	+58° 1731	24.3	+58 46	F	6·7	6.0	—	3	6.56	.08	6.0	.09
2931	Ophiuchus .	—	5919	+ 2° 3337	25.3	+ 2 50	6	6	5.5	5.9	3	5.57	.19	6.0	.08
2932	Scorpius .	λ 35	5915	—	25.5	−37 1	3	3	—	2.0	6	1.68	.08	—	—
2933	Hercules .	λ 76	5922	+26° 3034	25.9	+26 12	5	5·4	5.0	—	3	4.29	.07	4.8	.03
2934	Hercules .	—	5927	+31° 3047	26.4	+31 15	6	6	5.8	—	3	5.80	.09	5.8	.03
2935	Ophiuchus .	—	—	—	27.0	− 5 39	6	6	—	5.9	3	5.82	.03	—	—
2936	Hercules .	78	5931	+28° 2767	27.1	+28 29	6	6	5.7	—	3	5.59	.15	5.9	.11
2937	Draco . .	β 23	5937	+52° 2065	27.7	+52 23	3·2	3·2	3.0	—	6	2.97	.04	2.9	.05
2938	Hercules .	—	—	—	27.7	+18 50	6	F	F	—	11	—	—	—	—
2939	Hercules .	—	—	+19° 3354	28.1	+19 21	F	6	5.0	—	3	6.45	.16	5.7	.19
2940	Ophiuchus .	—	—	+16° 3218	28.3	+16 26	6	6·5	5.0	—	3	5.54	.08	5.8	.16
2941	Ursa Minor	—	—	+80° 544	28.8	+80 14	6	6	6.2	—	3	5.87	.17	5.9	.08
2942	Ophiuchus .	f 53	5940	+ 9° 3424	28.9	+ 9 40	6	6	6.7	5.8	3	5.89	.11	5.7	—
2943	Hercules .	—	5944	+41° 2850	29.3	+41 20	6	6	5.5	—	3	5.90	.03	6.0	.09
2944	Ophiuchus .	α 55	5941	+12° 3252	29.4	+12 39	2	2	2.0	—	16	2.18	.05	2.2	.04
2945	Draco . .	24	5950	+55° 1944	29.8	+55 16	4	4	5.2	—	7	4.86	.07	4.2	.07
2946	Draco . .	ν 25	5951	+55° 1945	29.9	+55 15			5.2	—	7	4.75	.10		
2947	Serpens . .	ξ 55	5949	—	30.7	−15 19	4·3	4·3	—	3.7	6	3.67	.04	—	—
2948	Hercules .	—	—	+21° 3157	30.9	+21 5	6	6	6.0	—	3	5.82	.09	5.8	.15
2949	Ophiuchus .	μ 57	5953	—	31.3	− 8 3	5·4	5·4	—	4.7	6	4.73	.03	—	—
2950	Hercules .	—	5962	+30° 3033	32.0	+30 52	6	6	6.0	—	3	5.73	.13	6.0	.09

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2901	185,205,502	*193*,403,*686*	6.3	*430*	*535*	. . . . *2 5 2 2* . . *2* . . *4*	. . .	.	d
2902	183,187,508	160,465,673	5.4	13*4*	*421*	. . . . . 4 5 4 . . 3 2 . *2*	. *2* .	w	
2903	180,200,502		5.6	*212*	—	. . . . . F F . 4 0 5 . . .	. . .	.	t
2904	173,199,214	160,465,673	5.3	0*10*	*321*	. . *2* . . 5 3 5 . . 0 . *11*	. *1* .	W	
2905	176,199,214,682,688,692	160,465,673	5.4	*200112*	*432*	. . 2 . . *2 2 2* . . *1* . *43*	. . .	*y*	
2906	183,197,496	*160*,465,673	5.8	*230*	*133*	. . 4 . . *4 2 4* . . *1* . . 0	. . *2*	*o*	t
2907	176,199,205	*160*,465,673	5.8	*011*	*260*	. . . . . *8 6 6* . . *1* . *43*	. . 0	*y*	
2908	195,200,508	148,463,667	6.0	*231*	b*30*	. . . . . *2 2 0* . *11* . . *2*	. . .	*o*	e
2909	185,205,215,682,688,693		4.5	303*232*	—	*101* . . 55 . 5*11* . 1 .	. . .	*y*	nvtag
2910	187,213,215,511,682,688,692	160,465,673	5.8	55*11*010	*432*	. . *1* . . 0 0 2 . . *1* . . *3*	. . .	w	
2911	193,213,215	*156*,463,673	5.8	100	6*10*	. . . . . 0 *24* . . 3 2 . 2	. . .	w	
2912	193,213,496	*156*,463,673	6.1	20*1*	1*42*	. . . . *5 3 3 1* . . F . . *2*	. . .	.	d
2913	176,200,214	*193*,*688*,*686*	6.0	0*22*	2*11*	. . . . . F *22* . . F *4* . 0	. . .	.	
2914 2915	213,502,511	160,465,673	*5.3* *4.5*	1*11*	131	*3* 11 . 0 *1* 0 0 0 . . . *1* . *12*	22 .	*r* *g*	dp dp
2916	200,213,215,682,688,693		4.4	*111021*	—	65 . . . 66 . 315 . 1 .	. . .	.	
2917	200,213,502	*160*,465,*673*	6.4	*211*	1*11*	. . . . . *63* 1 . . F . . 0	. . .	.	
2918	183,214,502,508,682,689,692		4.6	010*1020*	—	. 0 . . . 00 . . *22* . 1 .	. . .	*y*	g
2919	187,208,215		6.3	20*1*	—	. . *2* . . F *5* . . 0 *2* . . .	. . .	w	n
2920	176,200,214	148,465,667	6.0	*220*	b*51*	. . . . . *223* . 11 . . *3*	. . .	*y*	e
2921	195,197,508,682,689,693	146,165,672	4.4	*223*211	207	. 90 . . 60 *3* . 00 . 33	. . .	Y	g
2922	183,199,215	160,686,675	5.4	*241*	451	. . . . . 4 4 2 . . *1* . . 1	. . .	w	
2923	173,187,214	*160*,690,675	6.0	*102*	*143*	. . . . . *221* . . F . . *3*	. . .	.	
2924	190,214,509,682,688,692		2.8	312*222*	—	**6** 8 *5* . . **33** . 252 . 5 .	. . .	.	p
2925	215,496,509	*146*,165,672	5.2	01*1*	8*11*	. . . . . 002 . 11 . . 3	. . .	w	
2926	173,502,508,684,689,690	*160*,465,675	5.8	*232111*	*251*	*45 2* . . 0 2 0 . . *1* . *23*	. . 2	*y*	p
2927	193,213,502,684,689,690		4.9	31*2111*	—	100 . . 11 . 100 . 3 .	. . .	w	nvag
2928	183,213,508	193,403,*686*	5.8	12*2*	*424*	. . . . . 0 *24* . . 3 . . *3*	. . .	.	
2929	199,213,215		5.4	*101*	—	. . . . *2* 42 *1* . 033 . .	. . .	*y*	d
2930	190,213,502	*193*,403,*686*	6.6	*202*	*458*	. . . . . F *58* . . F . . *6*	. . .	*y*	
2931	173,193,212	*146*,*165*,672	5.6	*252*	633	. . . . . 2 2 *2* . 11 . . 4	. . .	*y*	
2932	181,190,214,682,688,692		1.7	034*231*	—	**65** 50 . **55** . 138 . 2 .	. . .	.	
2933	185,200,214	160,686,675	4.3	0*12*	565	*5* 61 . . 737 . . 1 . 55	. 3 .	*o*	t
2934	173,195,200	*160*,690,675	5.8	12*2*	100	. . . . . 00 *2* . . 3 . . 0	. . .	*y*	
2935	176,187,214		5.8	0*10*	—	. . . . . 00 . . *11* . . .	. . .	.	nc
2936	181,208,215	*160*,686,675	5.6	*142*	350	. . *2* . . 220 . . 1 . . 3	. . .	w	
2937	181,197,214,682,688,692	193,403,601	3.0	*101121*	*200*	36 *21* . *322* . . 0 . 0 *1*	10 .	W	t
2938	176,185,208,509,513,521,682		R	FRRRFFF-	—	. . . . . R F F . . F . . .	. . .	.	npc
2939	176,185,208	160,*686*,675	6.4	*422*	b*28*	. . . . . F *6* b . . *37* . *7*	. . .	.	npc
2940	190,203,214	160,686,675	5.5	*211*	*173*	. . . . . 3 1 *5* . . 24 . 3	. . .	.	e
2941	187,208,215	*193*,*688*,*686*	5.9	*441*	*121*	. . . . . *111* . . 2 . . 0	. . .	.	
2942	181,195,197	148,465,667	5.9	*311*	b*40*	. . . . *4 11 6* . *32* . *32*	. . .	w	de
2943	176,193,214	160,690,675	5.9	010	*310*	. . . . . *115* . . *2* . . 1	. . 0	*y*	
2944	173,176,181,190,193,199,200	146,147,149	2.2	*2022533*-	022-	5 **0** *12* . 00 *1* . . 8 . *30*	*20* .	W	e
2945	183,199,496,502,682,688,692	193,403,601	4.9	136012*1*	103	*3* 1 *2* . 0 2 . 1 0 0 *3* . . *1* . . 1	. .	w	ndpa
2946	183,199,496,502,682,687,688		4.8	2074*143*			*1* .	w	ndpa
2947	181,203,214,688,690,693		3.7	12210*1*	—	11 . . . 00 . . 13 . 1 .	. 1 .	*g*	d
2948	176,212,215	160,686,675	5.8	*122*	421	. . . . 2000 . . 3 . . 0	. . .	.	d
2949	193,205,502,688,690,692		4.7	000*112*	—	*313* . . *11* . . *13* . *1* .	. . .	W	
2950	173,203,212	*160*,690,675	5.7	3*31*	521	. . . . . 111 . . 4 . . 3	. . .	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
2951	Draco . .	f 27	5972	+68° 938	32.4	+68 13	5·6	5·6	5.5	—	6	5.26	.06	5.1	.08
2952	Hercules .	79	5967	+24° 3218	32.6	+24 23	6	6	6.0	—	3	5.79	.07	5.7	.13
2953	Ophiuchus .	—	—	+ 2° 3373	33.1	+ 2 6	F	6	6.7	6.5	3	6.32	.15	6.2	.05
2954	Hercules .	y 82	5975	+48° 2542	33.5	+48 40	6	6·5	6.0	—	3	5.47	.04	5.7	.19
2955	Draco . .	26	5978	+61° 1678	33.8	+61 58	6·5	6·5	6.0	—	19	5.34	.03	5.3	.05
2956	Serpens . .	o 56	5976	—	34.7	−12 49	5·4	5·4	—	4.7	6	4.41	.06	—	—
2957	Hercules .	—	5986	+31° 3075	35.4	+31 16	6	6	6.5	—	3	6.40	.13	6.6	.15
2958	Ophiuchus .	—	—	+15° 3246	35.7	+15 14	F	6·7	6.0	—	3	6.27	.11	6.3	.05
2959	Hercules .	ι 85	5990	+46° 2349	36.1	+46 4	3·4	3·4	4.0	—	6	3.92	.08	3.6	.13
2960	Ophiuchus .	58	5987	—	36.2	−21 37	5	5	—	5.4	3	4.98	.07	—	—
2961	Ophiuchus .	—	5991	+16° 3256	36.6	+16 2	6	6	5.1	—	3	5.67	.13	5.7	.13
2962	Ophiuchus .	β 60	5996	+ 4° 3489	37.5	+ 4 37	3	3	3.0	2.8	9	2.90	.03	3.3	.00
2963	Hercules .	83	5999	+24° 3231	37.6	+24 38	F	F	6.0	—	3	5.69	.11	—	—
2964	Draco . .	ω 28	6006	+68° 949	37.7	+68 49	5	5	4.8	—	17	4.86	.05	4.9	.05
2965	Ophiuchus .	—	—	+14° 3321	37.9	+14 21	F	F	6.0	—	3	6.21	.05	—	—
2966	Hercules .	84	6005	+24° 3237	38.4	+24 23	6	6	6.2	—	3	5.96	.04	5.9	.07
2967	Ophiuchus .	61	6002	+ 2° 3390	38.5	+ 2 38	6	6	6.5	5.9	3	5.79	.12	5.9	.07
2968	Ophiuchus .	—	6003	+ 2° 3391	38.6	+ 2 38			6.5						
2969	Draco . .	—	—	+51° 2243	38.6	+51 53	6	6	6.0	—	3	6.24	.05	6.1	.05
2970	Ophiuchus .	—	—	+14° 3329	38.8	+14 28	6	6	6.0	6.4	3	6.11	.15	6.0	.15
2971	Draco . .	—	—	+72° 800	39.4	+72 31	F	F	6.0	—	3	5.96	.03	—	—
2972	Sagittarius .	X 3	6008	—	40.0	−27 47	5	var.	—	4.6	9	4.87	.05	—	—
2973	Ophiuchus ·	—	—	—	40.1	+ 5 45	cum.	cum.	cum.	cum.	3	cum.	—	5.9	.16
2974	Hercules .	—	—	+31° 3090	41.1	+31 33	6	6	6.5	—	3	6.47	.04	6.2	.03
2975	Draco . .	—	—	+53° 1978	41.6	+53 50	6·5	6·5	5.7	—	3	5.83	.07	5.7	.07
2976	Hercules .	μ 86	6021	+27° 2888	41.8	+27 48	3·4	3·4	3.5	—	9	3.49	.03	3.7	.07
2977	Hercules .	—	—	+17° 3334	41.8	+17 47	6	6·5	5.5	—	3	5.68	.03	5.8	.16
2978	Hercules .	—	—	+38° 2997	41.9	+38 56	6	6·7	6.0	—	3	6.24	.11	6.4	.03
2979	Ophiuchus .	γ 62	6020	+ 2° 3403	41.9	+ 2 45	4·3	4·3	3.5	3.8	6	3.82	.04	4.3	.05
2980	Hercules .	—	—	+39° 3219	42.0	+39 22	F	6·7	6.0	—	3	6.50	09	6.4	.03
2981	Hercules .	—	—	+20° 3570	43.3	+20 36	6	6·5	5.8	—	3	5.88	.03	5.9	.04
2982	Hercules .	—	6030	+19° 3435	43.6	+19 17	6	6·7	6.0	—	3	6.02	.05	5.9	.08
2983	Hercules .	—	6036	+47° 2537	43.9	+47 39	6	6·5	6.2	—	3	6.30	.13	5.8	.19
2984	Hercules .	87	6033	+25° 3353	44.0	+25 40	6	6·5	5.7	—	3	5.39	.13	5.6	—
2985	Draco . .	31	6047	+72° 804	44.1	+72 13	4·5	4·5	4.8	—	17	4.52	.03	4.3	.03
2986	Draco . .	ψ	6048	+72° 805	44.1	+72 13			6.2	—					
2987	Hercules .	—	—	+29° 3126	45.7	+29 22	6	6·5	6.0	—	3	5.66	.08	5.8	.04
2988	Hercules .	—	—	+22° 3227	45.8	+22 20	6	6	6.5	—	5	5.89	.08	6.0	.05
2989	Draco . .	30	6052	+50° 2468	46.2	+50 50	5	5	5.0	—	3	5.24	.03	5.3	.05
2990	Ophiuchus .	—	—	+ 1° 3528	46.5	+ 1 21	F	6	6.0	6.3	7	6.18	.08	5.7	.15
2991	Hercules .	z 88	6056	+48° 2581	46.9	+48 25	6	6	6.5	—	3	6.37	.12	6.2	.07
2992	Ophiuchus .	—	—	+ 6° 3566	47.4	+ 6 7	F	6·7	5.9	6.2	3	5.88	.15	6.1	.15
2993	Hercules .	—	—	+46° 2379	48.8	+46 42	6	6	6.4	—	3	6.54	.11	6.3	.07
2994	Sagittarius .	—	6060	—	48.9	−18 47	6	6	—	6.7	6	6.52	.06	—	—
2995	Sagittarius .	—	6063	—	49.1	−28 3	F	F	—	6.0	3	5.80	.07	—	—
2996	Ophiuchus .	—	6065	—	49.4	−15 47	6	6	—	5.9	3	5.92	.09	—	—
2997	Hercules .	f 90	6068	+40° 3233	49.5	+40 2	5	5	5.0	—	3	5.29	.12	5.2	.08
2998	Ophiuchus .	—	6069	+ 0° 3813	50.2	+ 0 42	F	6	5.8	6.1	3	5.76	.11	5.8	.09
2999	Serpens . .	—	6071	—	50.4	− 4 4	F	6	—	5.8	3	5.69	.09	—	—
3000	Hercules .	89	6073	+26° 3120	50.6	+26 5	6	6	5.7	—	3	5.63	.05	5.7	.13

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
2951	176,195,197,684,687,689	193,401,601	5.3	*140211*	*303*	10*1*..*11*1..4022	...	*y*	
2952	185,187,205	160,686,675	5.8	02*1*	*422*	..*2*..000..3..*1*	...	*y*	v
2953	181,197,212	*146,165*,672	6.3	*142*	022	.....F52.02..*1*	...	.	p
2954	181,193,212	*193*,403,617	5.5	110	700	*12*2..313..2.*1*2	..1	Y	
2955	173,176,183,187,190,193,199	108,193,197	5.3	0432211-	*130*	..*1*..135..4..0	...	*y*	s
2956	183,187,203,689,690,692		4.4	153100	—	02...22..20.2.	.*2*.	*g*	
2957	173,190,205	*160,690*,675	6.4	313	252	.....*661*..*3*..2	...	*o*	dtec
2958	176,187,207	*160,686*,675	6.3	032	111	.....F*25*..F..0	...	.	
2959	183,197,203,684,687,689	160,406,675	3.9	321*412*	*206*	53*1*..*54*2..1.*13*	213	w	
2960	181,203,214		5.0	012	—	.0R..00.516.1.	...	*y*	ah
2961	176,187,207	160,686,675	5.7	313	*331*	.....116..0..0	...	w	
2962	190,199,200,203,207,496,682	146,165,672	2.9	2020110-	444	9701.333.01.24	30.	Y	tg
2963	187,200,205		5.7	203	—	..3.4FF1..0...	...	*o*	dc
2964	173,176,181,183,190,195,197	108,193,197	4.9	3230225-	*131*	540..111..0.00	...	*y*	s
2965	187,207,212		6.2	111	—	.....FF4..F1..	...	.	
2966	187,200,205	*160*,686,675	6.0	011	*112*	..*2*..*22*0..R..*1*	...	w	dec
2967	197,207,214	*146,165*,672	*6.4*	321	211	...*8*.00*1*.*11*..	...	w	d
2968			*6.8*			..*8*.b00*5*.*11*..1	...	w	d
2969	190,205,214	*193,403,617*	6.2	111	022	.....444..F*3*.*1*	...	.	
2970	197,207,212	160,*686*,675	6.1	304	*233*	.....*333*.141.*1*	...	.	e
2971	173,212,215		6.0	100	—	.....FF*2*..F*3*..	...	.	n
2972	190,203,208,496,511,512,682		4.9	*1033113*-	—	104..1v.v40...	...	.	vahg
2973	173,190,193	*146*,467,672	cum	FCC	RRR	.....CCC.CF..R	...	.	pe
2974	173,190,205	*160*,690,675	6.5	011	*334*	.....*772*..*4*..*3*	...	.	
2975	183,195,197	193,*403*,617	5.8	*201*	013	.....*422*..30.*1*	...	.	
2976	188,203,207,496,511,512,684	160,686,675	3.5	2100030-	320	373.7102..0.32	31.	*y*	d
2977	190,205,511	160,*686*,675	5.7	100	*351*	....011*3*..*4*..1	...	.	d
2978	199,207,496	*160,690,675*	6.2	131	322	.....*414*..*13*.2	..4	.	
2979	199,208,511,684,687,689	146,467,672	3.8	030301	446	640..*111*.12.05	.2.	W	g
2980	199,207,496	*160,690,675*	6.5	*221*	011	.....F*47*..F2.*1*	..*1*	.	
2981	193,205,496	*160*,686,675	5.9	010	011	.....*133*..F*2*.0	...	.	
2982	193,205,496	*160*,686,675	6.0	*111*	*113*	.....*212*..1..*1*	...	w	e
2983	193,200,207	193,*403,617*	6.3	313	*950*	.....*573*..*2*..*5*	..4	.	dc
2984	193,205,511	160,686,*675*	5.4	*322*	040	..*2*..422..3..2	...	Y	e
2985	173,181,183,188,195,197,199	108,108,146	*4.8*	0211240-	*033*	*130*.4 0.. .	...	l	ndvs
2986			*6.0*			.*6*11 0.. *1*.12	...	*y*	ndvs
2987	181,193,215	*160*,690,675	5.7	112	201	.....111..F*1*.1	...	.	
2988	173,203,208,212,215	*160*,686,675	5.9	04105	020	.....*114*..F..1	...	.	
2989	195,197,205	193,403,601	5.2	001	220	..*2*..*222*..5..1	.*1*.	W	
2990	181,199,208,511,682,688,691	*146*,467,672	6.2	3620213	*671*	.....F*44*.*15*..*5*	...	.	te
2991	193,200,207	*193,403,617*	6.4	*330*	*241*	bb*5*..*661*..F..*2*	..5	.	v
2992	173,193,208	*146*,467,672	5.9	142	423	.....F*22*.122.2	...	.	
2993	181,195,197	*160,690*,675	6.5	*302*	023	.....*773*..F..*2*	..1	.	
2994	193,200,208,682,688,691		6.5	212*121*	—	.....*77*..04...	...	.	n
2995	173,181,207		5.8	201	—	.....FF.20F...	...	.	
2996	193,200,208		5.9	*122*	—	.....*11*..*22*...	...	w	n
2997	199,205,214	160,406,675	5.3	*330*	*311*	.0*1*..*333*..*4*.*31*	..0	O	e
2998	197,205,214	*146*,467,672	5.8	113	221	.....F02.13..0	...	w	
2999	173,193,205		5.7	212	—	.....F1..10...	...	*o*	
3000	195,197,214	160,686,675	5.6	*111*	*240*	..1..220..1..1	...	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P. E.
					m.	° ′									
3001	Hercules .	—	—	+22° 3237	50.8	+22 28	6	6	5.0	—	4	5.77	.04	5.8	.09
3002	Sagittarius .	—	6072	—	51.0	−28 45	F	F	—	6.2	3	5.82	.13	—	—
3003	Draco . .	ξ 32	6079	+56° 2033	51.5	+56 54	3·4	3·4	3.5	—	6	3.93	.04	3.8	.16
3004	Hercules .	θ 91	6082	+37° 2982	52.1	+37 16	4	4	3.5	—	9	4.00	.04	4.1	.08
3005	Ophiuchus .	ν 64	6078	—	52.4	− 9 45	4·3	4·3	—	3.5	6	3.46	.06	—	—
3006	Sagittarius .	4	6077	—	52.5	−23 48	5	5	—	5.4	3	4.60	.08	—	—
3007	Hercules .	ξ 92	6084	+29° 3156	53.1	+29 16	4·3	4·3	4.0	—	9	3.91	.03	4.0	.08
3008	Serpens . .	—	—	—	53.2	− 4 47	F	6	—	6.1	3	6.02	.15	—	—
3009	Draco . .	γ 33	6091	+51° 2282	53.8	+51 30	2·3	2·3	2.2	—	6	2.35	.06	2.4	.09
3010	Hercules .	ν 94	6087	+30° 3093	53.9	+30 12	4·5	4·5	4.5	—	3	4.63	.15	4.8	.03
3011	Sagittarius .	—	—	—	54.1	−22 47	F	5·6	—	6.3	7	5.75	.06	—	—
3012	Sagittarius .	—	—	—	54.2	−22 43			—	7.0	6	6.52	.05	—	—
3013	Serpens . .	ζ 57	6085	—	54.2	− 3 41	5	5	—	4.9	3	4.46	.08	—	—
3014	Ophiuchus .	66	6089	+ 4° 3570	54.3	+ 4 23	5	5	5.3	5.4	3	4.83	.17	5.1	.07
3015	Sagittarius .	6	6086	—	54.4	−17 9	6	6	—	6.9	3	6.10	.07	—	—
3016	Hercules .	—	—	+36° 2986	54.5	+36 17	F	6	6.0	—	3	5.97	.12	5.9	.12
3017	Ophiuchus .	67	6092	+ 2° 3458	54.6	+ 2 56	4	4	4.0	4.2	6	4.02	.07	4.3	.11
3018	Hercules .	93	6094	+16° 3335	54.7	+16 46	5	5	4.9	5.3	3	4.53	.03	5.1	.07
3019	Draco . .	35	6114	+76° 667	54.8	+76 59	5	5	5.2	—	6	5.10	.07	5.1	.05
3020	Hercules .	—	—	+45° 2635	55.4	+45 28	6	6	6.4	—	3	6.07	.04	5.9	.15
3021	Hercules .	—	—	+15° 3327	55.5	+15 7	F	6	6.5	—	7	6.29	.06	6.3	.05
3022	Sagittarius .	7	6097	—	55.5	−24 17	F	F	—	5.9	3	5.39	.04	—	—
3023	Ophiuchus .	68	6101	+ 1° 3560	55.7	+ 1 18	4·5	5·4	4.5	5.1	3	4.42	.09	4.5	.17
3024	Hercules .	—	—	+33° 3006	56.2	+33 13	6	6·5	5.5	—	3	6.14	.09	6.0	.08
3025	Serpens . .	—	—	—	56.3	− 5 21	F	6	—	6.9	3	6.25	.12	—	—
3026	Hercules .	95	6106	+21° 3280	56.4	+21 37	4·5	5·4	4.2	—	3	4.55	.04	4.8	.09
3027	Hercules .				56.4	+21 37									
3028	Ophiuchus .	τ 69	6104	—	56.5	− 8 11	5	5	—	5.3	6	4.93	.04	—	—
3029	Ophiuchus .				56.5	− 8 11									
3030	Sagittarius .	9	6102	—	56.5	−24 22	5·4	6	—	6.0	3	5.66	.09	—	—
3031	Hercules .	—	6109	+45° 2638	56.6	+45 31	6	6·7	6.0	—	3	5.87	.12	6.0	.16
3032	Hercules .	—	—	+33° 3009	57.2	+33 20	F	F	6.0	—	3	6.37	.04	—	—
3033	Hercules .	96	6110	+20° 3649	57.3	+20 50	5	5	5.2	—	3	5.08	.11	5.1	.05
3034	Draco . .	34	6122	+72° 818	57.4	+72 0	6	5·6	6.0	—	3	5.56	.07	5.4	—
3035	Sagittarius .	W	6107	—	57.4	−29 35	F	var.	—	var.	9	4.88	.08	—	—
3036	Sagittarius .	γ 10	6115	—	58.1	−30 25	3·4	3·4	—	2.8	6	3.05	.08	—	—
3037	Ophiuchus .	70	6123	+ 2° 3482	59.4	+ 2 32	4·5	4·5	4.0	4.2	6	4.11	.03	4.3	.15
3038	Serpens . .	—	—	—	59.9	− 4 46	F	F	—	6.0	3	5.85	.00	—	—
3039	Sagittarius .	—	6127	—	0.5	−28 28	F	6·5	—	5.1	3	4.69	.05	—	—
3040	Sagittarius .	—	—	—	0.8	−17 10	F	F	—	5.9	3	5.93	.04	—	—
3041	Hercules .	—	6129	+48° 2627	1.0	+48 28	6	6·7	6.2	—	3	R	—	6.2	.00
3042	Hercules .	98	6134	+22° 3273	1.0	+22 12	6	6	5.2	—	3	5.38	.05	5.5	.04
3043	Hercules .	—	—	+32° 3047	1.4	+32 14	6	6	6.0	—	3	5.97	.04	5.9	.12
3044	Ophiuchus .	71	6142	+ 8° 3582	1.6	+ 8 43	5	5	5.0	5.0	4	4.82	.05	4.9	.05
3045	Ophiuchus .	72	6143	+ 9° 3564	1.7	+ 9 33	3·4	3·4	3.3	3.6	6	3.85	.06	4.1	.05
3046	Sagittarius .	—	6145	—	2.4	−30 45	F	5·6	—	5.9	3	5.73	.11	—	—
3047	Hercules .	b 99	6147	+30° 3128	2.5	+30 33	5	5	5.0	—	3	5.36	.08	4.9	.15
3048	Hercules .	o 103	6150	+28° 2925	2.9	+28 45	4·3	4	3.9	—	9	3.99	.06	4.0	—
3049	Hercules .	100	6151	+26° 3178	3.0	+26 5	5·6	6	5.9	—	3	5.23	.11	5.4	.04
3050	Hercules .	—	6152		3.0	+26 5									

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3001	212,215,682,691	*160*,686,675	5.8	*1*020	*22*1	. . . . . 0 0 *8* . . F *5* . 0	. . .	.	
3002	181,203,207		5.8	*13*3	—	. . . . . F F . 2 2 F . . .	. . .	.	
3003	197,205,511,682,688,691	193,401,601	3.9	2*11*200	*225*-	5 3 1 . . *5 4 2* . . 1 . 0 *1*	3 1 .	Y	t
3004	173,199,200,203,207,496,682	160,406,675	4.0	400*2*12*2*-	*113*	4 2 1 . . 1 1 *3* . . 0 . *2* 1	4 0 *4*	O	
3005	183,197,511,682,687,688		3.5	*22*02*1*	—	**1** 3 1 . . 2 2 . . 1 5 . 2 .	. 2 .	*y*	
3006	181,197,214		4.6	*2*11	—	. . 8 . . 4 4 . 9 5 3 . 5 .	. . .	*y*	
3007	188,203,208,496,510,511,684	160,406,675	3.9	5*12*0*11*-	*212*	5 3 0 . . *2 2 2* . . 1 . 1 1	2 *1* .	Y	v
3008	193,205,212		6.0	30*4*	—	. . . . . F *2* . . *11* . . .	. . .	.	
3009	173,207,215,684,688,689	193,403,601	2.4	3*11211*	*212*	9 1 2 0 . 1 1 *1* . . 1 . 0 0	2 2 .	Y	t
3010	188,203,208	160,406,675	4.6	2*4*1	221	*8 4 1* . . *2 2 1* . . *2* . *3 2*	2 2 .	Y	
3011	213,215,496,511,684,688,689		5.8	3210*312*	—	. . . . . F *1* . 3 R F . . .	. . .	.	dpgc
3012	213,496,511,684,688,689		6.5	202*4*00	—	. . . . . F *1* . 3 R F . . .	. . .	.	dpgc
3013	181,203,214		4.5	*2*11	—	*13 1* . . 5 5 . . 2 *1* . 1 .	. . .	*y*	
3014	183,199,511	146,467,672	4.8	3*4*2	523	*4 6* 4 . . 2 2 4 . 3 1 . 2 3	. 2 .	w	
3015	193,207,212		6.1	*2*10	—	. . R . . *3 3* . . 6 0 . . .	. . .	.	h
3016	199,207,510	*160*,690,675	6.0	*3*30	*232*	. . . . F *2 2* . . F *1* . *1*	. . .	.	
3017	191,202,214,684,687,689	146,467,611	4.0	2*23211*	440	4 2 0 . . 1 1 1 . 2 0 . 4 3	. 2 .	W	d
3018	199,212,510	160,686,675	4.5	100	568	. . **3** . . 5 5 4 . 5 4 . 3 6	. . .	*y*	
3019	173,205,215,684,688,689	193,466,622	5.1	4*10*510	11*1*	. . 1 . . *1 1 1* . . 6 . . 0	. . .	*y*	
3020	203,212,510	*160*,406,*612*	6.1	*1*01	16*2*	. . . . . *3 3* 1 . . 0 . . *2*	. . 6	.	
3021	193,212,511,513,684,687,689	*160,691,611*	6.3	**3**223101	*1*11	. . . . . F *5* 0 . . *6* . . 0	. . .	.	
3022	199,212,496		5.4	01*1*	—	. . *9* . . F F . 6 3 3 . . .	. . .	w	
3023	202,212,215	146,672,611	4.4	*2*12	25*3*	0 2 0 . . 0 2 1 . 5 0 . 2 1	. 2 .	W	vg
3024	205,213,510	*160,692,612*	6.1	*12*2	1*22*	. . . . . *3 5 7* . . *4* 0 . *1*	. . .	O	dc
3025	173,212,215		6.2	*3*21	—	. . . . . F *4* . . 5 F . . .	. . .	.	g
3026	202,213,215	160,691,611	*5.3*	01*1*	410	. . 4 . *2* *2 0 3* . . *2* . 0 2	. . .	*g*	d
3027			*5.3*			. . . . *2*	. . .	R	d
3028	197,213,215,684,687,689		*5.4*	102*2*10	—	*5* 0 1 . *2* *3* 1 1 . . 1 0 . 1 .	. *5* .	*y*	dv
3029			*6.1*						dv
3030	183,199,496		5.7	*2*12	—	. . *8* . . **b** 1 . c 1 0 . *1* .	. . .	*y*	dg
3031	203,212,510	*160,202,612*	5.9	0*3*3	33*3*	. . . . . *1 2 1* . . *2* . . 1	. . *1*	Y	e
3032	205,215,511		6.4	1*1*0	—	. . . . . F F *6* . . R *3* . .	. . .	.	dc
3033	202,213,215	160,691,611	5.1	*11*3	*111*	. . 1 . . *1 1 1* . . *2* . *3* 0	. . .	w	
3034	214,511,513	193,401,601	5.6	0*12*	*4***b**0	. . *1* . . 2 4 2 . . 1 . . *2*	. . .	*y*	ne
3035	188,207,215,496,511,513,684		4.9	1*52*5044-	—	. . . . . F v . v v 8 . . .	. . .	.	nvg
3036	173,188,207,684,687,689		3.0	*141132*	—	3 6 5 4 . 4 5 . 2 *1* 5 . *1* .	. . .	.	nvtg
3037	173,191,214,684,687,689	146,467,611	4.1	2*11*100	34*2*	3 1 1 . 2 3 3 0 . 1 *1* . 2 2	. 2 .	*y*	d
3038	181,197,214		5.8	000	—	. . . . . F F . . 0 *1* . . .	. . .	.	
3039	183,197,511		4.7	1*11*	—	. . . . . F 9 . 3 2 6 . 2 .	. . .	.	t
3040	191,208,511		5.9	10*1*	—	. . . . . F F . . *2* F . . .	. . .	*y*	g
3041	193,212,512	*197,691,617*	*6.2*	RRR	C00	. . . . *1 4* 1 0 . . *1* . . 0	. . 2	.	d
3042	181,208,512	160,*691*,611	5.4	11*1*	021	. . *3* . . 4 4 *2* . . *1* . . 1	. . .	*o*	t
3043	183,197,512	*160,692*,612	6.0	*1*10	2*14*	. . . . . *2 2 2* . . 1 *3* . *1*	. . .	.	
3044	191,199,512,529	160,691,611	4.8	*2*011	220	. . *4* . . 2 2 2 . 0 1 . **6** 1	. . .	Y	
3045	191,199,512,529,531,533	160,691,611	3.8	022*231*	442	6 4 1 . . *4 3 3* . *12* . *13*	1 1 .	W	
3046	193,202,512		5.7	20*3*	—	. . . . . F *5* . 3 0 F . *2* .	. . .	.	dtg
3047	181,213,512	160,406,612	5.4	*2*02	*815*	. . *3* . . *4 4 4* . . F . *6 5*	. . .	*y*	
3048	183,197,208,503,511,512,529	160,406,612	4.0	4*141*120-	R*1*0	*2* 2 0 . . *3* 1 0 . . 0 . 0 0	*11* .	W	ve
3049	191,198,512	160,*691*,611	*5.9*	*3*11	231	. . *2* . *2* 0 6 5 . . F . 4 2	. . .	.	dp
3050			*6.1*				. . .	.	dp

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					m.	° ′									
3051	Hercules .	102	6157	+20° 3674	3.6	+20 49	4·5	4·5	4.2	—	3	4.48	.05	4.4	.15
3052	Ophiuchus .	73	6155	+ 3° 3610	3.6	+ 3 58	6	6	6.2	6.0	3	5.70	.08	5.9	.12
3053	Hercules .	101	6159	+20° 3675	3.7	+20 3	5	5	5.5	—	3	5.18	.11	5.0	—
3054	Hercules .	—	—	+36° 3027	3.9	+36 23	6	6	5.9	—	3	5.64	.05	5.5	.11
3055	Hercules .	—	6162	+43° 2892	4.0	+43 27	5	5·6	5.2	—	3	5.07	.08	4.8	.07
3056	Ophiuchus .	—	—	+ 3° 3613	4.0	+ 3 7	6	6	6.5	6.2	3	5.70	.16	5.8	.09
3057	Hercules .	—	—	+49° 2732	4.1	+49 41	6	6·7	6.5	—	3	6.34	.09	6.3	.04
3058	Sagittarius .	—	6161	—	4.4	−23 43	F	6	—	5.7	3	5.30	.04	—	—
3059	Ophiuchus .	—	—	+ 3° 3620	4.7	+ 3 18	F	F	6.0	5.8	3	5.73	.13	—	—
3060	Hercules .	—	—	+16° 3390	4.8	+16 27	F	6·7	6.0	—	3	6.21	.07	6.2	.11
3061	Hercules .	—	—	+36° 3039	5.8	+36 26	6	6	6.0	—	3	5.87	.08	5.5	.11
3062	Sagittarius .	μ 13	6168	—	6.6	−21 5	4	4	—	4.3	6	4.08	.07	—	—
3063	Sagittarius .	14	6172	—	7.1	−21 45	F	F	—	6.0	3	5.92	.09	—	—
3064	Hercules .	—	—	+33° 3044	7.4	+33 26	6	6	6.1	—	3	5.90	.13	6.0	.08
3065	Hercules .	A 104	6178	+31° 3199	7.4	+31 22	5	5	5.0	—	3	4.87	.04	4.7	.29
3066	Draco . .	—	6185	+54° 1950	8.1	+54 15	6	6	6.0	—	3	5.86	.08	5.9	.05
3067	Lyra . . .	—	—	+41° 3011	8.1	+41 8	F	6	5.8	—	3	6.57	.08	6.1	.08
3068	Sagittarius .	16	6180	—	8.1	−20 25	F	F	—	6.6	3	6.17	.08	—	—
3069	Sagittarius .	15	6179	—	8.1	−20 46	5	5	—	5.8	3	5.60	.13	—	—
3070	Hercules .	—	—	+48° 2652	8.5	+48 17	6	6·7	6.5	—	3	6.70	.09	6.5	.00
3071	Draco . .	40	6206	+79° 570	9.0	+79 58	5	5	6.5	—	3	5.20	.00	5.1	.07
3072	Draco . .	41	6208	+79° 571	9.1	+79 58			6.5	—					
3073	Lyra . . .	—	6193	+38° 3113	9.1	+38 46	6	6	6.0	—	3	5.90	.07	5.7	.09
3074	Sagittarius .	η	6186	—	9.5	−36 48	4	4	—	3.3	6	2.97	.06	—	—
3075	Serpens . .	—	—	—	9.6	− 3 40	F	6	—	6.6	3	6.26	.12	—	—
3076	Sagittarius .	—	6194	—	10.5	−27 5	6	6·5	—	5.1	3	4.71	.08	—	—
3077	Ursa Minor	δ 23	6281	+86° 269	11.0	+86 37	4·5	4·5	4.5	—	14	4.34	.02	4.3	.08
3078	Sagittarius .	—	6201	—	11.6	−18 40	cum.	cum.	—	7.0	4	cum.	—	—	—
3079	Lyra . . .	—	6203	+42° 3035	11.9	+42 8	6·5	5·6	5.5	—	7	5.34	.08	5.3	.12
3080	Hercules .	—	—	+18° 3623	12.8	+18 5	6	6	6.4	—	3	6.05	.04	6.2	.00
3081	Draco . .	36	6224	+64° 1252	13.2	+64 21	5	5	5.0	—	18	4.98	.03	5.0	.04
3082	Lyra . . .	—	6218	+40° 3332	13.3	+40 53	6	6	6.0	—	3	6.14	.03	6.1	.11
3083	Sagittarius .	—	6210	—	13.3	−15 53	F	F	—	5.8	3	5.81	.03	—	—
3084	Sagittarius .	δ 19	6209	—	13.3	−29 53	3·4	3·4	—	2.8	6	2.83	.05	—	—
3085	Ophiuchus .	—	6213	+ 7° 3629	13.4	+ 7 13	6	6	5.8	5.8	3	5.71	.00	5.8	.07
3086	Sagittarius .	—	—	—	14.1	−24 58	F	F	—	var.	6	6.62	.04	—	—
3087	Hercules .	105	6223	+24° 3381	14.3	+24 24	6	6	5.5	—	3	5.46	.04	5.9	.13
3088	Sagittarius .	—	—	—	14.3	−18 55	F	F	—	6.0	3	6.00	.12	—	—
3089	Ophiuchus .	74	6227	+ 3° 3680	15.0	+ 3 20	5	5	5.5	5.5	3	4.97	.09	5.1	.08
3090	Serpens . .	η 58	6229	—	15.1	− 2 56	3	3	—	3.5	10	3.35	.03	—	—
3091	Hercules .	106	6231	+21° 3390	15.2	+21 55	6	6·5	6.0	—	7	4.81	.05	5.4	.11
3092	Ursa Minor	24	6320	+86° 272	15.5	+86 59	6	6	6.0	—	3	5.87	.12	5.8	.16
3093	Lyra . . .	$\varkappa$ 1	6235	+36° 3094	15.7	+36 1	5·4	5·4	4.7	—	6	4.37	.05	4.5	.04
3094	Draco . .	37	6243	+68° 984	15.9	+68 42	6	6·7	6.0	—	3	6.07	.07	6.1	.09
3095	Sagittarius .	ε 20	6233	—	16.2	−34 26	3·2	3·2	—	2.2	8	2.12	.10	—	—
3096	Hercules .	108	6237	+29° 3241	16.3	+29 48	5·6	6	5.5	—	3	5.59	.09	5.7	.03
3097	Hercules .	t 107	6238	+28° 2981	16.3	+28 49	5	5	4.9	—	6	5.03	.03	4.9	.05
3098	Scutum . .	—	—	—	16.5	−12 40	F	F	—	6.0	3	5.86	.05	—	—
3099	Ophiuchus .	—	—	+11° 3442	17.0	+11 59	F	6	6.0	6.1	3	5.90	.07	6.1	.11
3100	Draco . .	—	6246	+51° 2357	17.1	+51 18	6	6	6.2	—	3	6.30	.05	6.1	.20

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3051	199,202,512	160,691,611	4.5	*1*11	*33*2	. . *1* . . *11*2 . . *1* . *21*	. . .	W	
3052	191,212,503	*146*,464,611	5.7	11*2*	501	. . *6* . *1*113 . 10 . . 2	. . .	w	d
3053	199,202,512	160,691,611	5.2	*113*	b*13*	. . *3* . . *222* . . *3* . *22*	. . .	w	e
3054	181,197,512	*179,692*,612	5.6	*111*	*222*	. . . . . 221 . . F *1* . *1*	. . .	.	
3055	201,213,511	179,406,612	5.1	11*2*	*253*	. . . . . *111* . . 2 . . *3*	. . 0	Y	
3056	191,212,503	*146*,672,611	5.7	4*22*	32*1*	. . . . . 116 . 3 F . . 1	. . .	.	g
3057	193,207,512	*197,691,617*	6.3	*221*	*1*10	. . . . . *52*0 . . *2* . . 0	. . 1	.	
3058	188,208,513		5.3	1*1*0	—	. . . . . F 5 . 714 . . .	. . .	Y	nth
3059	183,191,212		5.7	13*3*	—	. . . . . FF 1 . *142* . .	. . .	.	g
3060	188,207,512	179,*202*,612	6.2	1*2*0	03*2*	. . . . *5* F *14* . . F 1 . 0	. . .	.	d
3061	181,197,512	*179,692*,612	5.9	*2*11	*515*	. . . . . *111* . . *2*0 . *4*	. . .	.	
3062	201,207,513,533,689,690		4.1	1221*23*	—	310 . . 00 . *2*23 . 1 .	. . .	*y*	t
3063	201,207,513		5.9	*221*	—	. . 0 . . FF . 1 *1* F . . .	. . .	O	t
3064	181,213,512	*160,692,612*	5.9	*3*22	31*1*	. . . . . *11*0 . . *2* . . 1	. . .	.	dc
3065	212,215,503	160,406,612	4.9	01*1*	19*3*	. . 9 . . 111 . . 0 . *12*	. . .	O	t
3066	203,213,512	*197,691,617*	5.9	*112*	*111*	. . . . *111* . . 2 . . 0	. . .	*y*	
3067	203,214,512	*186,202,612*	6.6	*202*	*447*	. . . . . F *8* b . . F . . *5*	. . *4*	.	
3068	201,207,511		6.2	2*11*	—	. . *2* . . FF . *22* F . . .	. . .	*y*	
3069	201,207,511		5.6	22*3*	—	. . *4* . . *66* . *1*05 . *2* .	. . .	*y*	tg
3070	181,212,512	*200,691*,617	6.7	221	*22*F	. . . . . *964* . . F . . *2*	. . 0	.	
3071	213,215,511	193,466,622	*5.8*	000	0*13*	. . 8 . *3* 5 . . .	. . .		dp
3072			*6.2*			. . *8* . *1* *22* 1 . . 5 . *11*	. . .	*y*	dp
3073	188,214,511	186,*692*,612	5.9	20*1*	*104*	. . . . . *111* . . *2* . . *2*	. . 2	w	
3074	199,214,514,687,689,690		3.0	*122*022	—	36 . . . 11 . 240 . 4 .	. . .	.	ta
3075	202,215,513		6.3	*213*	—	. . . . . F *5* . . 1 *2* . . .	. . .	.	
3076	181,203,512		4.7	2*11*	—	. . . . . 19 . 820 . 2 .	. . .	.	t
3077	202,207,226,421,425,440,442	125,128,130	4.3	*11122*10-	114-	1 *1* 0 . . 112 . . 1 . *1*0	. 3 .	*y*	e
3078	181,202,203,503		cum	FFCC	—	. . . . . CC . . RF . . .	. . .	.	dg
3079	213,215,511,529,531,533,687	179,406,612	5.3	3*211*302	12*3*	. . . . . 111 . . 4 . *2*0	. . 5	w	
3080	191,214,226	*179,691,607*	6.0	01*1*	222	. . . . . *222* . . F . . 2	. . .	.	
3081	188,191,199,201,202,203,207	146,193,197	5.0	1003*5*00-	004	. . 1 . . 000 . . 7 . . 0	. . .	*y*	s
3082	181,210,513	*186,202,612*	6.1	0*1*0	11*3*	. . . . . *333* . . 0 . . 0	. . 1	y	
3083	207,511,513		5.8	*1*00	—	. . . . . FF . . *21* . . .	. . .	Y	t
3084	202,213,513,533,687,690		2.8	3200*12*	—	5401 . 67 . 217 . 1 .	. . .	.	t
3085	201,214,513	*160,691*,611	5.7	000	21*1*	. . . . . 111 . *14* . . 1	. . .	Y	
3086	191,210,513,690,691,693		6.6	200*30*2	—	. . . . . FF . FV F . . .	. . .	.	vtg
3087	188,210,514	*180,692*,611	5.5	01*1*	731	. . *3* . . 33 *1* . . 2 . . 4	. . .	*o*	
3088	181,203,512		6.0	12*3*	—	. . . . . FF . . *2* F . . .	. . .	.	
3089	194,215,226	146,467,611	5.0	*122*	300	. . 5 . . 004 . 2*1* . 21	. . .	*y*	e
3090	201,213,512,531,533,688,689		3.4	3*22*421-	—	44 *3* 13 *22* . . 26 . 1 .	. 1 .	Y	d
3091	207,214,503,511,529,531,533	180,692,611	4.8	012*11*23	694	. . 5 . . 080 . . 5 . . 6	. . .	Y	
3092	191,210,514	*197,507,622*	5.9	*132*	*511*	. . b . . *111* . . 2 . . *1*	. 2 .	*y*	
3093	199,201,203,503,511,512	186,406,612	4.4	*123*011	012	. . 1 . . 223 . . 0 . 21	. *1* .	Y	
3094	174,188,511	*193,507*,601	6.1	2*1*0	*122*	. . *1* . . *303* . . F . . 0	. . .	O	e
3095	181,215,513,514,533,687,690		2.1	*4151434*-	—	2580 . 67 . 119 . 0 .	. . .	.	
3096	191,213,511	*180,692*,611	5.6	21*2*	211	. . *1* . . *422* . . 1 . . 1	. . .	*y*	
3097	191,213,511,689,690,691	180,406,612	5.0	*1*0012	02*0*	. . 2 . . 00 *1* . . 3 . 2 *1*	. . .	*y*	
3098	194,207,512		5.9	1*11*	—	. . . . . FF . . *12* . . .	. . .	.	v
3099	199,215,226	*160,691*,612	5.9	10*2*	33*1*	. . . . . F *11* . 0 F 2 . 2	. . .	.	
3100	203,213,226	*197,691,617*	6.3	*1*11	*50*F	. . . . . *553* . . F . . *2*	. . .	*y*	e

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3101	Hercules .	—	6241	+23° 3316	17.1	+23 14	6	6·7	6.5	—	3	5.69	.11	5.8	.15
3102	Scutum . .	—	—	—	17.1	− 9 0	6	6·5	—	5.3	3	4.95	.11	—	—
3103	Sagittarius .	—	6239	—	17.3	−30 49	F	6	—	6.0	5	5.74	.13	—	—
3104	Hercules .	—	6245	+17° 3555	17.5	+17 46	6	6	5.2	—	3	5.52	.05	5.5	.17
3105	Sagittarius .	21	6247	—	18.2	−20 36	5	5	—	5.1	3	4.87	.04	—	—
3106	Draco . .	—	6255	+49° 2782	18.5	+49 4	5	5	5.1	—	3	5.10	.17	5.4	.00
3107	Hercules .	109	6251	+21° 3411	18.6	+21 43	4	4	4.5	—	6	3.92	.09	4.3	.15
3108	Ophiuchus .	—	—	+ 7° 3682	19.9	+ 7 58	6	6	5.8	5.9	3	5.79	.11	5.9	.11
3109	Sagittarius .	—	6260	—	20.2	−29 53	F	F	—	6.2	9	6.02	.11	—	—
3110	Lyra . . .	μ 2	6268	+39° 3410	20.3	+39 27	5·6	5	5.1	—	3	4.94	.03	4.8	.07
3111	Sagittarius .	λ 22	6263	—	20.6	−25 29	3	3	—	2.7	6	3.06	.08	—	—
3112	Serpens . .	d 59	6269	+ 0° 3936	21.1	+ 0 8	6	6	5.4	5.5	3	5.21	.05	5.4	.12
3113	Lyra . . .	—	—	+29° 3259	21.4	+29 46	6·5	6·5	6.1	—	3	5.83	.03	5.8	.03
3114	Hercules .	—	—	+26° 3257	21.7	+26 23	6	6	6.5	—	3	6.86	.12	6.0	.09
3115	Hercules .	—	—	+26° 3259	21.9	+26 23			6.1	—	3	6.23	.03		
3116	Draco . .	b 39	6289	+58° 1809	22.2	+58 44	5	5	4.8	—	6	4.83	.06	4.9	.05
3117	Ophiuchus .	—	6280	—	22.2	+ 6 30	cum.	cum.	cum.	cum.	4	cum.	—	—	—
3118	Ophiuchus .	—	—	+ 6° 3790	22.2	+ 6 7	F	F	6.5	6.0	6	5.66	.07	5.8	.04
3119	Scutum . .	—	6279	—	22.4	−14 38	5·4	5·4	—	4.8	6	4.71	.03	—	—
3120	Draco . .	φ 43	6297	+71° 889	22.5	+71 16	4·5	4·5	4.7	—	17	4.21	.03	4.4	.04
3121	Sagittarius .	—	6287	—	23.1	−18 48	F	F	—	6.0	3	5.73	.07	—	—
3122	Draco . .	χ 44	6302	+72° 839	23.2	+72 41	4·3	4	3.8	—	15	3.72	.02	3.9	.04
3123	Serpens . .	e 60	6290	—	23.5	− 2 3	6	6	—	5.8	3	5.54	.07	—	—
3124	Sagittarius .	—	6294	—	24.4	−18 29	6	6	—	5.5	3	5.21	.12	—	—
3125	Hercules .	—	6300	+23° 3346	24.6	+23 47	6	6	6.0	—	3	5.73	.09	5.9	.12
3126	Draco . .	42	6316	+65° 1271	25.6	+65 29	5	5·6	5.0	—	15	4.98	.04	5.0	.03
3127	Hercules .	—	—	+16° 3529	25.7	+16 51	6	6·5	5.6	—	3	5.71	.05	5.6	.16
3128	Scutum . .	—	6306	—	25.9	−14 57	F	F	—	5.9	3	5.79	.13	—	—
3129	Sagittarius .	24	6312	—	26.6	−24 7	F	F	—	5.9	7	5.90	.09	—	—
3130	Scutum . .	—	6313	—	26.8	−14 57	6	6	—	6.4	3	5.76	.04	—	—
3131	Hercules .	—	6322	+23° 3363	27.8	+23 32	6	6	6.0	—	3	6.03	.07	6.0	.11
3132	Lyra . . .	—	—	+30° 3223	28.3	+30 28	6·5	6·5	6.5	—	3	5.39	.05	5.7	.11
3133	Scutum . .	—	6324	—	28.4	−11 4	6	6·5	—	5.7	6	5.28	.03	—	—
3134	Scutum . .	1	6325	—	28.7	− 8 20	4·5	4·5	—	3.6	7	4.01	.04	—	—
3135	Hercules .	—	—	+18° 3740	29.9	+18 6	6	6	6.1	—	3	5.65	.04	5.8	.23
3136	Draco . .	d 45	6348	+56° 2113	30.5	+56 57	5	5	5.4	—	3	4.83	.11	4.9	.05
3137	Hercules .	—	6341	+23° 3385	30.5	+23 31	6	6	6.0	—	3	5.79	.05	5.7	.21
3138	Ophiuchus .	—	—	+ 9° 3783	30.7	+ 9 2	6	5·6	5.3	5.7	3	5.49	.11	5.7	.08
3139	Ophiuchus .	—	—	+ 6° 3855	30.8	+ 6 34	6	6·5	5.8	5.8	3	5.31	.04	5.7	.09
3140	Lyra . . .	—	—	+34° 3245	30.9	+34 21	6	6	6.4	—	3	5.90	.09	5.9	.19
3141	Draco . .	—	6350	+52° 2238	31.2	+52 15	5·6	5·6	5.5	—	3	5.40	.09	5.4	.03
3142	Sagittarius .	—	6343	—	31.2	−23 36	F	F	—	6.1	9	5.81	.04	—	—
3143	Serpens . .	e	—	− 0° 3521	31.4	− 0 25	6	6	5.5	6.1	3	5.78	.04	—	—
3144	Sagittarius .	—	6347	—	31.7	−21 9	F	6·7	—	6.0	3	5.99	.05	—	—
3145	Hercules .	—	—	+16° 3563	31.8	+16 6	6	6	6.1	—	3	6.37	.07	6.2	.03
3146	Lyra . . .	—	—	+33° 3154	32.2	+33 22	6·5	6	5.8	—	3	5.34	.07	5.5	.12
3147	Lyra . . .	α 3	6355	+38° 3238	32.9	+38 40	1	1	1.0	—	15	0.19	.03	0.3	.07
3148	Lyra . . .	—	—	+43° 3027	33.1	+43 8	F	6·7	6.0	—	3	6.20	.11	6.2	.16
3149	Sagittarius .	26	6356	—	34.5	−23 57	F	F	—	6.6	3	6.20	.08	—	—
3150	Draco . .	—	6375	+77° 699	35.5	+77 27	6	6	6.5	—	6	5.66	.04	6.0	.07

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3101	202,214,514	*180,692*,611	5.7	30*2*	51*2*	. . . . . 146. . 4. . *1*	. . .	o	
3102	210,226,513		5.0	0*23*	—	. 3. . . 86. . 0*1*. . .	. . .	.	g
3103	181,188,226,687,690		5.7	16*332*	—	. . . . . F1. 314. . .	. . .	.	
3104	174,194,511	*179,691*,607	5.5	1*11*	*4*41	. . . . . 33*3*. . *2*. . 0	. . .	Y	
3105	201,213,226		4.9	*1*10	—	. . 1. . 11. *5*04. 0.	. . .	*o*	t
3106	194,207,514	197,404,601	5.1	14*4*	333	. . . . . *11*0. . 2. . 3	. . *1*	Y	t
3107	174,201,226,529,531,533	180,692,611	3.9	24*30 23*	382	. . 3. . 226. . 5. 34	. . .	*o*	t
3108	181,202,210	*160,691*,611	5.8	2*3*0	41*1*	. . . . . 002. *1*30. 1	. . .	.	
3109	188,215,226,513,533,687,690		6.0	4*34*0542-	—	. . . . . FF. 00F. . .	. . .	.	
3110	181,207,514	186,406,612	4.9	00*1*	12*1*	. . 1. . 312. . 0. 3*1*	. *13*	*y*	
3111	174,191,512,687,690,691		3.1	*121233*	—	21*32*. 11. *13*4. *4*.	. . .	.	t
3112	191,215,512	146,467,611	5.2	11*1*	510	. . R. 3661. 05. 12	. . .	*y*	dh
3113	194,210,514	*180,692*,611	5.8	*1*00	00*1*	. . . . . *42*1. . F. . 0	. . .	.	
3114	194,213,511	*181,692,611*	6.9	3*21*	521	. . . . . 11 *6*. . F. . 3	. . .	.	
3115	194,213,511		6.2	*1*00		. . . . . *3*. . F. .	. . .	.	
3116	174,207,511,529,531,687	197,401,601	4.8	40*10 32*	002	*4*12. 0220. . *4*. 01	.3.	Y	
3117	174,181,191,194	*160*,619	cum	CCCC	RR	. . . . . CCC. CF. . R	. . .	.	e
3118	201,203,210,214,512,514	*160*,691	5.7	*112133*	21	. . . . . FF6. 1F. . 1	. . .	.	np
3119	203,213,512,690,691,692		4.7	003011	—	. . . . . *11*. . 02. 1.	. . .	W	n
3120	181,188,199,201,210,214,226	108,161,193	4.2	0*111133*-	42*1*	24*1*. . 225. . *2*. 02	. . .	W	vs
3121	210,214,510		5.7	0*12*	—	. . . . . FF. . 1F. 3.	. . .	*y*	
3122	194,199,201,203,207,213,215	108,193,197	3.7	1*10*1011-	50*1*	754. . 042. . *2*. . 2	. . .	*y*	s
3123	210,215,510		5.5	1*2*0	—	. . 2. . 33. . 12. 0.	. . .	*y*	t
3124	210,214,510		5.2	*23*1	—	. . . . . 66. . 0F. . .	. . .	*y*	
3125	214,511,514	*181,692,611*	5.7	2*12*	510	. . . . . 111. . 0. . 2	. . .	w	p
3126	181,188,194,203,214,233,503	146,193,197	5.0	0330*1*10-	0*41*	. . 2. . 020. . 7. . 0	. . .	*o*	s
3127	210,215,511	*179,691*,607	5.7	*111*	5*2*0	. . . . . 1*12*. . 0. . *1*	. . .	.	
3128	213,215,510		5.8	2*32*	—	. . . . . FF. . *11*. 2.	. . .	*o*	ndtc
3129	214,513,516,520,687,690,691		5.9	*4433221*	—	. . . . . FF. F*22*. . .	. . .	*o*	dtpgc
3130	213,215,510		5.8	01*1*	—	. . . . . 00. . 4R. . .	. . .	*w*	ndtc
3131	174,188,511	*181,692,611*	6.0	0*21*	20*3*	. . . . . *222*. . F. . 0	. . .	*o*	
3132	201,213,220	*180,692*,611	5.4	11*1*	440	. . . . . 029. . 38. 3	. . .	.	
3133	210,214,513,531,690,691		5.3	*120200*	—	. . . . . 53. . 10. . .	. . .	*y*	n
3134	174,226,233,513,531,690,691		4.0	f0*12121*	—	. 5*2*. . 44. . *3*0. *2*.	.0.	.	nvtg
3135	201,213,226	*179,691,607*	5.6	01*1*	*4*54	. . . . . 223. . 5. . 2	. . .	Y	
3136	174,215,511	197,401,601	4.8	0*23*	002	*4*12. . 225. . *4*. 01	.2.	*y*	
3137	174,206,214	*181,692*,611	5.8	1*11*	*44*	. . . . . 000. . *1*. . *1*	. . .	*y*	t
3138	210,220,513	*160*,201,611	5.5	*3*11	411	. . . . . 3*33*. *1*F*2*. 2	. . .	.	
3139	213,226,233	*160,691*,611	5.3	*1*10	652	. . . . . 533. 344. 4	. . .	.	
3140	188,215,226	186,*692*,609	5.9	12*2*	*5*04	. . . . *111*3. . 2. . 0	. . .	.	
3141	213,220,511	197,404,601	5.4	*2*12	0*1*0	. . . . . *22*0. . 3. . 0	. . .	Y	d
3142	174,204,210,214,233,510,690		5.8	2*3*01*221*-	—	. . . . . FF. 213. . .	. . .	*y*	p
3143	191,214,512		5.8	10*1*	—	. . . . . 004. 1*13 1*.	. . .	.	n
3144	206,213,226		6.0	*1*11	—	. . . . . F1. F*2*F. . .	. . .	.	
3145	174,194,512	179,*691*,607	6.4	02*1*	*223*	. . . . . *665*. . F. . *2*	. . .	.	
3146	188,215,226	186,*692*,609	5.3	01*2*	*1*34	. . . . 3153. . 45. 2	. . .	.	d
3147	174,181,188,191,203,207,210	109,149,159	0.2	22*10*100-	*1*34-	3463411 1. . 3. 41	*3*0.	*b*	de
3148	188,201,233	*186,201*,611	6.2	30*2*	*4*31	. . . . . F*14*. . *1*. . 0	. . .	.	
3149	204,214,233		6.2	1*2*1	—	. . 3. . FF. *2*2F. . .	. . .	*y*	
3150	191,206,220,529,531,539	*193,507,622*	5.7	200*3*20	134	. . . . . 116. . 4. . 3	. . .	*o*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3151	Scutum . .	2	6361	—	35.7	− 9 10	5	5	—	5.1	3	4.75	.15	—	—
3152	Draco . .	—	—	+65° 1283	35.8	+65 23	6	6	6.0	—	6	5.85	.06	5.8	.25
3153	Draco . .	—	—	+62° 1637	36.5	+62 25	6	6	5.7	—	3	5.48	.15	5.6	.07
3154	Scutum . .	3	6367	—	37.0	− 8 24	5	5	—	5.2	6	5.10	.06	—	—
3155	Draco . .	—	6372	+52° 2263	37.2	+52 5	6	6	5.7	—	3	5.84	.03	5.6	.07
3156	Sagittarius .	—	6369	—	37.4	−25 8	F	6	—	6.2	3	5.74	.11	—	—
3157	Sagittarius .	φ 27	6371	—	38.2	−27 7	4·3	4·3	—	3.7	6	3.33	.06	—	—
3158	Aquila . .	4	6379	+ 1° 3766	38.8	+ 1 56	5	5	5.0	5.5	3	5.12	.07	5.0	.13
3159	Sagittarius .	28	6380	—	39.1	−22 31	F	F	—	5.6	3	5.63	.04	—	—
3160	Lyra . . .	—	—	+31° 3348	39.4	+31 49	6	6	5.5	—	3	5.47	.08	5.8	.07
3161	Hercules .	—	—	+23° 3439	39.6	+23 27	6	6	6.5	—	3	6.16	.00	6.1	.05
3162	Serpens . .	—	—	+ 5° 3941	39.6	+ 5 22	F	F	6.3	5.9	3	5.71	.04	—	—
3163	Draco . .	—	6393	+62° 1641	39.8	+62 36	6	6	6.3	—	3	5.95	.12	5.8	.04
3164	Scutum . .	—	—	—	40.1	−10 15	6	6	—	6.2	3	5.78	.11	—	—
3165	Aquila . .	5	6384	− 1° 3559	40.2	− 1 5	6	6	6.2	6.2	3	5.75	.07	—	—
3166	Draco . .	c 46	6395	+55° 2107	40.3	+55 25	5·6	5·6	5.3	—	3	5.16	.12	4.9	.04
3167	Lyra . . .	4	6390	+39° 3510	40.4	+39 33	4	4·5	4.6	—	9	4.59	.05	4.0	.16
3168	Lyra . . .				40.4	+39 33									
3169	Lyra . . .	ε 5	6391	+39° 3509	40.4	+39 29		5·4	4.3	—	9	4.55	.04		
3170	Lyra . . .				40.4	+39 29									
3171	Hercules .	110	6387	+20° 3926	40.5	+20 26	4	4	4.1	—	6	4.25	.05	4.6	.07
3172	Lyra . . .	6	6392	+37° 3222	40.6	+37 29	4·5	4·5	4.5	—	6	4.34	.05	4.1	.17
3173	Lyra . . .	ζ 7	6394	+37° 3223	40.7	+37 28			5.5	—	2	5.92	.21		
3174	Scutum . .	6	6388	—	40.8	− 4 53	5·4	5·4	—	4.5	6	4.35	.05	—	—
3175	Draco . .	—	—	+53° 2126	40.9	+53 45	F	F	6.0	—	3	6.06	.04	—	—
3176	Scutum . .	R	—	—	41.1	− 5 50	var.	var.	—	var.	3	5.51	.11	—	—
3177	Lyra . . .	—	—	+26° 3349	41.2	+26 32	5	5	4.9	—	3	4.86	.04	5.2	.09
3178	Hercules .	111	6397	+18° 3823	41.7	+18 3	4·5	4	4.1	—	3	4.52	.07	4.6	.07
3179	Lyra . . .	—	6404	+41° 3137	42.3	+41 19	6	6	6.0	—	3	5.74	.03	5.7	.05
3180	Draco . .	—	—	+54° 2034	42.5	+54 46	F	6·7	6.0	—	3	6.26	.04	6.1	.09
3181	Sagittarius .	29	6399	—	42.6	−20 28	F	6·7	—	5.5	6	5.49	.06	—	—
3182	Draco . .	—	6410	+60° 1845	43.0	+60 55	F	6·7	6.0	—	3	6.26	.12	6.3	.08
3183	Hercules .	—	—	+23° 3461	43.2	+23 23	6	6	6.2	—	3	5.99	.05	6.0	.13
3184	Lyra . . .	—	—	+31° 3369	43.5	+31 38	6	6	6.0	—	3	5.80	.15	6.0	.08
3185	Hercules .	—	—	+19° 3798	43.6	+19 12	6	6	6.1	—	3	5.92	.07	5.9	.20
3186	Sagittarius .	30	6407	—	43.6	−22 18	F	6·7	—	6.6	6	6.14	.04	—	—
3187	Draco . .	—	6419	+52° 2280	44.0	+52 52	F	6	6.3	—	3	5.84	.05	5.6	.09
3188	Lyra . . .	—	—	+24° 3545	44.3	+24 54	F	F	6.0	—	3	6.63	.05	—	—
3189	Sagittarius .	—	6414	—	45.0	−30 52	F	6	—	6.7	3	6.55	.16	—	—
3190	Draco . .	—	6428	+48° 2770	45.1	+48 37	6	6	6.0	—	3	5.97	.04	5.7	.13
3191	Lyra . . .	8	6426	+32° 3227	45.3	+32 41	F	F	6.3	—	3	5.57	.00	—	—
3192	Lyra . . .	ν 9	6427	+32° 3228	45.4	+32 25	5·6	6·5	5.5	—	3	5.10	.13	5.6	.07
3193	Lyra . . .	β 10	6429	+33° 3223	45.6	+33 13	var.	var.	var.	—	9	3.57	.08	3.4	.03
3194	Aquila . .	—	—	+13° 3787	46.5	+13 50	6	6	5.9	6.6	3	6.01	.03	6.3	.08
3195	Sagittarius .	33	6432	—	46.8	−21 31	F	6·7	—	6.0	3	5.98	.05	—	—
3196	Sagittarius .	ν^1 32	6434	—	46.9	−22 53	5	5	—	5.0	3	5.02	.16	—	—
3197	Hercules .	112	6438	+21° 3582	47.1	+21 17	5	5·6	5.5	—	3	5.52	.03	5.2	.07
3198	Sagittarius .	—	—	—	47.8	−15 45	6	6	—	5.5	3	5.12	.07	—	—
3199	Sagittarius .	σ 34	6440	—	47.8	−26 27	2·3	2·3	—	2.4	6	2.30	.09	—	—
3200	Sagittarius .	ν^2 35	6441	—	47.9	−22 49	5	5	—	5.1	3	5.15	.15	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3151	194,206,220		4.8	*412*	—	. 12. . 22. . 14. 2.	.*3*.	*y*	n
3152	174,201,233,529,531,539	*197,507,622*	5.8	3101*41*	*661*	. . . . . 000. . 3. . 0	. . .	*y*	
3153	191,191,218	*197,507*,622	5.5	*3*04	310	. . . . . 331. . 2. . 1	. . .	.	
3154	194,206,220,531,538,541		5.1	313020	—	. *22*. . *11*. . *22*. *1*.	.*4*.	Y	n
3155	201,207,512	197,*691*,617	5.8	0*10*	*421*	. . . . . 002. . 3. . *2*	. . .	w	
3156	174,206,233		5.7	11*3*	—	. . . . . F 1. 334. . .	. . .	.	
3157	191,210,512,690,691,692		3.3	211*311*	—	1542. 44. 652. 5.	. . .	.	v
3158	201,213,513	146,467,611	5.1	*102*	*224*	. . 3. . *111*. 1*2*. 1*1*	. . .	*y*	e
3159	206,212,512		5.6	10*1*	—	. . R. . FF. F*3*5. . .	. . .	*o*	th
3160	210,218,503	*186,692*,609	5.5	*121*	134	. . . . . 33*1*. . 24. 3	. . .	.	
3161	212,215,226	*181,692*,609	6.2	000	00*2*	. . . . . *44*1. . F. . *1*	. . .	.	
3162	188,214,513		5.7	*110*	—	. . . . . FF 4. 00. . .	. . .	.	
3163	212,218,514	*197*,507,622	6.0	12*3*	*213*	. . . . . *22*1. . F. . *2*	. . .	w	
3164	174,215,226		5.8	20*3*	—	. . . . . 00. . 2F. . .	. . .	.	
3165	210,218,513		5.8	021	—	. . *5*. *3*002. 2*1*. *2*.	. . .	*y*	d
3166	188,214,233	197,401,601	5.2	*132*	*432*	*835*. . 000. . *8*. *23*	.0.	*y*	
3167	212,220,226,503,510,511,529		*5.0*	1312111-		*2*. *1* 20	103	*y*	ndac
3168			*6.0*			*2*. 3 20		*b*	ndac
3169		186,406,611	*5.3*		*250*	*11* . *2* 2 . . 1 . . 1	.	*y*	ndac
3170			*5.5*	0520110-		1 . *2* 03	.*12*	*y*	ndac
3171	213,215,222,529,531,541	179,692,604	4.2	111032	463	. . 4. . *11*0. . 2. 04	. . .	*y*	
3172	213,220,503,510,511,512		4.3	02*131*1		2. 3 2. . . .	.00	*y*	ndpac
3173	503,511	186,406,611	5.9	*23*	*441*	*33* *8*. *3* 33 *5*. *1* . . 0	. . *1*	l	ndpac
3174	212,218,510,531,541,687		4.4	402110	—	. 54. . 22. . 00. 1.	. . .	Y	n
3175	188,214,233		6.1	*110*	—	. . . . . FF*3*. . F. . .	. . .	.	
3176	212,214,218		5.5	02*3*	—	. . . . . VV. . VF. . .	. . .	.	vtg
3177	191,215,512	181,692,609	4.9	1*10*	514	. . . . . 110. . 0613	. . .	.	
3178	174,201,514	179,692,604	4.5	10*2*	12*1*	. . 5. . *143*. . *1*. *51*	. . .	*y*	
3179	194,213,222	*186,692*,611	5.7	00*1*	*111*	. . . . . 111. . 4. . 0	. . 5	w	
3180	188,214,233	*197,507,617*	6.3	01*1*	*140*	. . . . . F*25*. . F*4*. *2*	. . .	.	
3181	201,218,512,687,690,691		5.5	123*1*1	—	. . 0. . F 6. 5*3*2. *3*.	. . .	*o*	vg
3182	174,204,512	*197,507,622*	6.3	2*31*	12*1*	. . . . *2*F*25*. . F. . 0	. . .	*y*	d
3183	194,213,233	*186,692*,609	6.0	1*11*	22*3*	. . . . . *220*. . *3*. . 0	. . .	.	
3184	188,210,226	*186,692,609*	5.8	4*12*	204	. . . . . 000. . F*4*. 2	. . .	.	
3185	194,213,512	179,*201*,607	5.9	0*21*	*532*	. . . . . *110*. . *2*. . 0	. . .	.	
3186	204,220,226,687,690,691		6.1	112*1*10	—	. . 1. . F 0. *13*F. . .	. . .	*y*	
3187	188,214,222	197,*691*,617	5.8	*111*	*401*	. . . . . F 03. . 3. . *2*	. . .	w	
3188	174,194,512		6.6	*111*	—	. . . . . FF*8*. . F*1*. .	. . .	.	
3189	191,214,226		6.6	*422*	—	. . . . . F*8*. F*1*F. . .	. . .	.	
3190	191,206,214	197,*691*,617	6.0	0*11*	*620*	. . . . . *222*. . 1. . *3*	. . 2	W	
3191	188,210,226		5.6	000	—	. . *3*. . FF 5.	. . .	*y*	ndac
3192	188,210,226	*180,692*,609	5.1	31*3*	574	*56*3. . 153. . 1 . 55	.*1*.	*y*	ndac
3193	188,210,512,513,516,517,529	186,692,611	3.6	2223*231*-	*212*	*3* 0R. . VVV. . *1*. . *2*	*21*.	*y*	dvth
3194	174,194,206	*181,201*,607	6.0	*100*	252	. . . . . *223*. 4F*2*. 3	. . .	.	
3195	204,220,226		6.0	11*1*	—	. . *3*. . F 1. F*2*F. . .	. . .	Y	
3196	204,218,233		5.0	4*31*	—	. . 1. . 00. 0*21*. *2*.	. . .	*o*	ta
3197	191,201,512	179,692,604	5.5	0*10*	*143*	. . 7. . *531*. . *2*. . *3*	. . .	w	a
3198	174,191,206		5.1	01*2*	—	. . . . . 77. . 12. . .	. . .	.	dac
3199	194,214,512,533,687,690		2.3	140*153*	—	09R*1*. 22. *1*27. 1.	. . .	.	vah
3200	204,218,233		5.2	4*21*	—	. . 2. . *22*. *23*1. *3*.	. . .	*o*	ta

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
3201	Lyra . . .	—	—	+41° 3167	48.3	+41 15	6	6	6.5	—	3	6.07	.04	6.1	.12
3202	Sagittarius .	—	6447	—	48.6	−16 31	6	5	—	5.8	3	5.57	.07	—	—
3203	Sagittarius .	—	6448	—	48.7	−23 19	F	6	—	6.4	7	5.94	.11	—	—
3204	Draco . .	—	6469	+73° 835	48.8	+73 57	6	6	5.3	—	3	5.43	.12	5.3	.07
3205	Draco . .	—	6452	+52° 2294	48.9	+52 49	6	6	5.5	—	3	5.64	.05	5.5	.07
3206	Draco . .	o 47	6463	+59° 1925	49.4	+59 15	5·4	5·4	4.3	—	6	4.64	.04	4.9	.05
3207	Lyra . . .	δ^1 11	6456	+36° 3307	49.6	+36 49	F	6	6.1	—	6	5.34	.03	—	—
3208	Serpens . .	62	6451	+ 6° 3978	49.6	+ 6 28	6	6	5.8	5.8	3	5.68	.13	5.9	.12
3209	Hercules .	113	6453	+22° 3524	49.7	+22 30	4·5	4·5	5.0	—	3	4.55	.08	4.8	.07
3210	Lyra . . .	δ^2 12	6466	+36° 3319	50.0	+36 45	4·5	4·5	4.5	—	9	4.53	.05	4.3	.12
3211	Draco . .	50	6478	+75° 682	50.2	+75 17	6	6	5.8	—	3	5.55	.11	5.3	.08
3212	Aquila . .	—	—	− 1° 3602	50.2	− 1 57	6	6	6.5	6.6	3	6.04	.09	—	—
3213	Sagittarius .	36	6454	—	50.2	−20 49	F	6	—	5.7	3	4.97	.12	—	—
3214	Draco . .	—	6470	+50° 2686	50.3	+50 34	5	5·6	5.2	—	3	4.94	.05	5.0	.08
3215	Serpens . .	θ 63	6460	+ 4° 3916	50.3	+ 4 3	4·3	4·3	4.0	4.4	6	4.08	.04	4.2	.07
3216	Serpens . .		6462	+ 4° 3917	50.3	+ 4 3			4.3						
3217	Lyra . . .	—	6468	+33° 3257	50.5	+33 49	6	6·7	7.0	—	3	5.97	.12	6.2	.03
3218	Sagittarius .	ξ 37	6461	—	50.6	−21 16	4	4	—	3.5	6	3.53	.05	—	—
3219	Scutum . .	g	6464	—	50.7	− 6 0	5	5	—	5.4	3	5.14	.08	—	—
3220	Hercules .	—	—	+17° 3779	50.8	+17 58	6	6	5.9	—	3	5.75	.08	6.0	.09
3221	Lyra . . .	—	6473	+41° 3177	51.0	+41 27	6	6	5.5	—	3	5.44	.07	5.8	.04
3222	Serpens . .	64	6471	+ 2° 3738	51.2	+ 2 23	6	6	5.8	6.0	3	7.16	.05	5.5	.12
3223	Draco . .	—	6476	+48° 2793	51.7	+48 43	6	6	5.5	—	3	5.90	.15	5.7	.12
3224	Lyra . . .	R 13	6475	+43° 3117	51.7	+43 47	5·4	var.	var.	—	10	4.35	.06	4.8	.07
3225	Lyra . . .	—	6480	+32° 3267	52.5	+32 47	F	6	6.7	—	4	5.32	.15	5.7	.05
3226	Sagittarius .	—	—	—	52.7	−13 0	6	6	—	5.6	3	5.28	.04	—	—
3227	Aquila . .	—	—	+17° 3799	52.9	+17 12	5	6·5	5.8	5.7	3	5.24	.16	5.9	.13
3228	Hercules .	—	—	+19° 3858	53.5	+19 38	F	F	5.8	—	3	6.15	.08	—	—
3229	Aquila . .	11	6483	+13° 3841	53.6	+13 28	5	5	5.3	5.8	3	5.20	.03	5.3	.08
3230	Lyra . . .	—	—	+38° 3373	53.9	+38 6	6	6·5	6.2	—	4	5.89	.04	5.7	.07
3231	Aquila . .	ε 13	6487	+14° 3736	54.2	+14 54	4	4	3.9	—	9	4.10	.03	4.3	.05
3232	Lyra . . .	γ 14	6491	+32° 3286	54.5	+32 32	3·4	3·4	3.2	—	9	3.29	.07	3.3	.03
3233	Draco . .	48	6496	+57° 1922	54.7	+57 39	6	6	5.8	—	3	5.59	.05	5.8	.20
3234	Sagittarius .	—	6488	—	54.7	−15 27	F	F	—	6.6	6	6.42	.09	—	—
3235	Lyra . . .	—	6493	+40° 3544	54.8	+40 31	6	6	6.5	—	3	6.14	.15	6.1	.16
3236	Lyra . . .	—	—	+26° 3418	54.9	+26 4	6	6	5.8	—	3	5.29	.11	5.7	.05
3237	Sagittarius .	ζ 38	6489	—	55.0	−30 3	3·4	3·4	—	3.1	6	2.89	.08	—	—
3238	Sagittarius .	—	6490	—	55.1	−25 1	F	F	—	6.1	3	5.70	.15	—	—
3239	Lyra . . .	—	6495	+39° 3602	55.2	+39 3	6	6	6.2	—	3	6.24	.07	6.1	.12
3240	Aquila . .	12	6492	—	55.3	− 5 54	5·4	4·5	—	3.8	6	4.02	.03	—	—
3241	Lyra . . .	λ 15	6497	+31° 3424	55.5	+31 59	5·6	5·6	5.8	—	6	5.12	.06	5.3	.11
3242	Draco . .	v 52	6510	+71° 915	55.9	+71 8	5·6	5	5.3	—	6	4.83	.06	4.8	.03
3243	Sagittarius .	—	—	—	55.9	−19 25	6	6	—	6.4	3	5.89	.04	—	—
3244	Draco . .	—	—	+65° 1309	56.0	+65 7	6	6	5.5	—	3	5.82	.13	5.9	.19
3245	Hercules .	—	—	+20° 4022	56.2	+20 40	F	F	6.0	—	3	6.45	.08	—	—
3246	Lyra . . .	—	—	+26° 3429	56.4	+26 7	6	6	6.2	—	3	5.46	.04	5.7	.04
3247	Aquila . .	g 14	6501	—	56.6	− 3 52	6	6	—	5.7	3	5.49	.03	—	—
3248	Sagittarius .	—	6499	—	56.7	−31 13	F	5	—	5.9	3	5.53	.04	—	—
3249	Draco . .	—	—	+50° 2708	57.2	+50 22	5·6	5·6	4.8	—	3	5.37	.08	5.1	.12
3250	Lyra . . .	—	—	+33° 3285	57.4	+33 27	6	6	7.1	—	3	6.10	.05	6.3	.05

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3201	204,215,226	*186,692*,611	6.1	10*1*	12*3*	. . . . . *3 3* 2. 0	. . 2	.	
3202	191,206,512		5.6	0*12*	—	. . . . . 2*6*. . 0 1. . .	. . .	*y*	g
3203	204,218,233,513,690,691,692		5.9	8*332321*	—	. . . . . F *1*. 1 3 2. . .	. . .	*y*	
3204	213,220,514	193,*507*,622	5.4	*3*21	1*12*	. . . . . 4 4 *2*. . 3 . . *1*	. . .	*o*	
3205	174,214,514	197,*691*,617	5.6	1*11*	*211*	. . . . . 2 2 *2*. . 5 . . *1*	. . .	*y*	
3206	213,218,514,529,531,541	197,404,601	4.6	20*1121*	224	*2* 3 3 . 2 0 0 *3*. . *2*. 0 3	. . .	Y	d
3207	191,210,226,503,510,511		5.3	*3*00100	—	. . *1*. . F 5 6 . . F . . .	.*7*.	*b*	nv
3208	212,220,514	*181,691*,611	5.7	*232*	52*1*	. . 3 . . 1 1 *1*. *1* 0 . . 2	. . .	Y	t
3209	213,218,514	179,692,604	4.6	2*20*	230	. . 2 . . *2* 2 4 . . 3 . . 2	. . .	Y	
3210	191,210,226,503,510,511,529	186,406,611	4.5	0*320301-*	*413*	*1* 7 1 . . *1* 1 0 . . b . 1 *2*	. . .	O	nt
3211	206,214,512	193,*507*,622	5.6	*131*	*135*	. . *6*. . 2 2 0 . . *7*. . *3*	. . .	*y*	
3212	210,214,231		6.0	*122*	—	. . . . . *2 2 3*. 4 *3*. . .	. . .	.	
3213	212,218,231		5.0	3*30*	—	*6 8 8*. . F 8 . F 4 1 . . .	. . .	*g*	na
3214	213,218,514	197,404,601	4.9	*111*	*122*	. . . . . 1 3 3 . . 4 . . 1	. . .	*y*	
3215			*4.7*						
3216	213,220,222,529,531,539	146,467,611	*5.1*	12*1030*	12*1*	3 1 . . *3* 6. . *5* 4 4 *8*. 3 3 . 2 1	. . .	*y*	dvpg dvpg
3217	174,214,510	*186,692*,611	6.0	12*3*	223	. . . . . *2* 1 8 . . 1 . . 2	. . .	*o*	
3218	212,231,513,690,691,692		3.5	*221111*	—	1 0 7 . . 6 6 . 4 1 5 . 1 .	. . .	Y	nt
3219	212,215,513		5.1	*112*	—	. 2 *2*. . *11*. . 0 *2*. 1 .	. . .	Y	nt
3220	206,214,222	*181,692*,607	5.8	20*2*	410	. . . . . 0 0 *1*. . *1* 5 . 2	. . .	.	t
3221	204,215,226	*186,692*,611	5.4	*2*10	453	. . . . . 4 4 0 . . 3 . . 4	. . 2	*y*	
3222	206,214,512	146,467,611	*5.7*	*111*	0*51*	. . *4*. . 1 1 *1*. *4* 1 . . *2*	. . .	*y*	pem
3223	191,218,512	197,*691*,617	5.9	0*34*	*510*	. . . . . *1 1 5*. . 2 . . *2*	. . 0	*y*	
3224	204,214,512,513,514,516,529	197,404,601	4.4	4024*332-*	436	. . 2 . . 2 v v . . *4*. . 4	. . 0	Y	vth
3225	174,191,214,510	*186,692*,609	5.3	42*33*	553	. . . . . F 5 *2*. . 8 . . 4	.*2*.	*y*	
3226	212,218,231		5.3	0*11*	—	. . . . . 5 5 . . 0 4 . . .	. . .	.	
3227	206,214,222	*181,692*,607	5.2	*143*	064	. . . . . *2* 4 4 . 2 9 7 . 7	. . .	.	
3228	213,218,231		6.2	*112*	—	. . . . . F F *6*. . F 1 . .	. . .	.	
3229	213,220,514	186,691,604	5.2	*100*	22*1*	. . 2 . 6 *22* 0 . 4 5 . 0 1	.*2*.	*y*	dc
3230	174,212,233,511	*186,692*,611	5.9	0*102*	*124*	. . . . . *1 3* 1 . . *2* . . *2*	. . .	.	
3231	213,220,222,503,510,511,529	181,408,604	4.1	2*10*1*102-*	311	. . 6 . . 0 0 *1*. . 3 . 0 2	.*1*.	Y	
3232	191,214,226,503,510,511,529	186,692,611	3.2	14*16213-*	121	1 0 4 1 . 2 3 2 . . *2*. 2 1	0 1 .	*y*	
3233	210,218,514	197,*508*,617	5.6	*111*	*271*	. . 2 . . 2 2 0 . . 1 . . 2	. . .	Y	
3234	510,512,513,539,690,691		6.4	213*215*	—	. . . . . F F . . 0 F . . .	. . .	.	
3235	204,215,226	*186,692*,611	6.1	21*4*	13*4*	. . . . . *3 3* 2 . . F . . 0	. . 2	w	
3236	212,215,511	*184*,692,608	5.3	*2*30	533	. . . . . 5 5 3 . . 0 6 . 4	. . .	.	
3237	206,214,513,533,535,541		2.9	10*245*0	—	4 3 1 *1*. 5 6 . 1 3 1 . 3 .	. . .	.	
3238	212,233,513		5.7	0*34*	—	. . . . . F F . 3 2 4 . . .	. . .	.	t
3239	212,233,511	*186,692*,611	6.2	0*21*	01*4*	. . . . . *4 4 2*. . *1*. . *1*	. . .	*y*	
3240	213,215,231,690,691,692		4.0	0*31010*	—	. 5 *4*. . 6 4 . . *10*. 0 .	. . .	Y	vtg
3241	174,191,214,690,691,692	*186*,692,611	5.1	32*1111*	33*1*	*5 11*. . 1 1 5 . . *2*. 3 2	9 0 .	Y	vt
3242	206,214,222,529,531,538	194,404,601	4.8	022*123*	00*1*	2 *2* 4 . . 4 2 4 . . 5 . 2 0	. . .	O	
3243	212,215,510		5.9	0*11*	—	. . . . . *11*. . 3 2 . . .	. . .	.	dc
3244	212,220,514	197,507,601	5.8	*133*	*361*	. . . . . 0 0 *4*. . 3 0 . 1	. . .	.	
3245	213,231,512		6.4	2*20*	—	. . . . . F F *6*. . F 0 . .	. . .	.	
3246	212,215,511	*184*,692,611	5.5	*110*	321	. . . . . 3 3 5 . . F . . 2	. . .	.	
3247	212,213,513		5.5	010	—	. . *1*. . 3 3 . . *16*. *1*	. . .	w	
3248	213,215,513		5.5	1*10*	—	. . . . . F *5*. 0 2 2 . . .	. . .	.	g
3249	174,214,222	197,404,601	5.4	02*2*	*621*	. . . . . *2 2 6*. . *11*. *3*	. . .	.	
3250	213,217,224	*186,201*,609	6.1	*111*	131	. . . . . *3 3* 8 . . 0 . . 2	. . .	.	dec

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P. E.
					m.	° ′									
3251	Aquila . .	—	—	+ 1° 3865	57.5	+ 1 38	6	6	6.0	6.3	3	5.76	.15	5.8	.11
3252	Sagittarius .	*o* 39	6507	—	57.5	−21 55	4	4	—	3.8	6	3.91	.05	—	—
3253	Hercules .	—	—	+19° 3888	57.7	+19 29	F	F	6.0	—	3	6.38	.03	—	—
3254	Lyra . . .	16	6520	+46° 2602	58.0	+46 47	5	5·6	5.5	—	3	5.04	.07	5.0	.13
3255	Draco . .	49	6522	+55° 2137	58.4	+55 29	6	6	5.7	—	3	5.69	.09	5.5	.08
3256	Aquila . .	h 15	6518	—	58.6	− 4 12	6	6	—	5.6	3	5.59	.03	—	—
3257	Sagittarius .	—	—	—	58.8	−15 51	6	6	—	5.9	3	6.02	.07	—	—
3258	Sagittarius .	*τ* 40	6521	—	59.4	−27 51	4·3	4·3	—	3.6	6	3.48	.10	—	—
3259	Aquila . .	*ζ* 17	6528	+13° 3899	59.9	+13 41	3	3	3.0	—	6	3.10	.06	3.3	.05
3260	Aquila . .	*λ* 16	6526	—	59.9	− 5 4	3·4	3	—	3.3	6	3.62	.03	—	—
3261	Sagittarius .	—	—	—	0.0	−16 25	F	F	—	6.0	3	5.81	.09	—	—
3262	Lyra . . .	—	6534	+31° 3453	0.4	+31 34	F	6	6.0	—	3	5.67	.04	5.9	.03
3263	Sagittarius .	—	6536	—	1.2	−19 29	6	6	—	5.8	7	5.50	.09	—	—
3264	Aquila . .	18	6543	+10° 3787	1.3	+10 53	5	5	5.2	5.6	3	5.06	.17	5.1	.05
3265	Vulpecula .	—	6542	+24° 3640	1.6	+24 4	6	6	5.4	—	7	5.62	.08	5.9	.11
3266	Aquila . .	—	—	+16° 3752	1.6	+16 41	6	5·6	5.5	—	3	5.94	.12	6.2	.07
3267	Lyra . . .	—	6547	+28° 3193	1.9	+28 26	6·5	6·5	5.7	—	3	5.49	.07	5.9	.15
3268	Draco . .	51	6551	+53° 2178	2.2	+53 14	6·5	6	5.4	—	3	5.37	.08	5.5	.03
3269	Lyra . . .	—	—	+41° 3232	2.4	+41 14	6	6	6.3	—	3	6.00	.09	6.1	.05
3270	Sagittarius .	*π* 41	6548	—	2.6	−21 13	3	3	—	3.1	6	3.11	.06	—	—
3271	Lyra . . .	17	6553	+32° 3326	2.9	+32 18	5·6	6·5	6.0	—	3	4.94	.03	5.5	.04
3272	Lyra . . .	*ι* 18	6556	+35° 3485	3.0	+35 55	5	5	5.2	—	6	5.17	.05	5.3	.16
3273	Vulpecula .	—	—	+21° 3672	3.0	+21 30	6	6	6.2	—	3	6.15	.04	6.1	.12
3274	Aquila . .	19	6552	+ 5° 4040	3.1	+ 5 53	5·6	6·5	5.0	5.7	3	5.28	.09	5.7	.08
3275	Lyra . . .	—	—	+34° 3437	4.4	+34 33	6	6	6.5	—	3	6.64	.05	6.5	—
3276	Lyra . . .	—	—	+34° 3439	4.7	+34 23			6.5	—	3	6.60	.05	6.5	.00
3277	Aquila . .	20	6564	—	6.2	− 8 8	6	6·5	—	5.9	6	5.30	.06	—	—
3278	Sagittarius .	—	—	—	6.5	−12 30	6	6·5	—	5.8	3	5.76	.09	—	—
3279	Cepheus .	—	—	+82° 572	6.6	+82 12	F	F	6.0	—	3	6.89	.08	—	—
3280	Lyra . . .	—	—	+26° 3476	6.7	+26 4	6	6	7.7	—	3	7.43	.07	6.3	.09
3281	Lyra . . .	—	—	+26° 3477	6.8	+26 3			7.5	—	—	—	—		
3282	Lyra . . .	19	6571	+31° 3497	7.2	+31 5	6	6	6.0	—	3	5.74	.07	6.2	.11
3283	Vulpecula .	—	6574	+21° 3690	7.5	+21 21	6	6	6.0	—	3	5.78	.09	5.9	.11
3284	Aquila . .	21	6572	+ 2° 3815	7.7	+ 2 5	6·5	6·5	5.6	5.7	3	5.22	.15	5.2	.11
3285	Aquila . .	—	—	+ 5° 4081	7.8	+ 5 18	F	6	6.0	6.8	6	6.34	.09	6.5	.03
3286	Sagittarius .	—	6576	—	8.2	−24 23	F	F	—	6.7	3	6.42	.13	—	—
3287	Sagittarius .	*ψ* 42	6575	—	8.2	−25 28	6	6	—	5.4	4	5.19	.19	—	—
3288	Cygnus . .	—	6579	+49° 2959	9.0	+49 37	6	6	6.2	—	3	5.80	.13	5.9	.03
3289	Draco . .	53	6583	+56° 2209	9.4	+56 39	6·5	6·5	5.5	—	3	5.19	.09	5.2	.20
3290	Lyra . .	—	—	+36° 3458	9.6	+36 13	6	6	6.9	—	3	6.94	.13	6.6	.11
3291	Lyra . . .	*η* 20	6581	+38° 3490	9.7	+38 56	4·5	4·5	4.5	—	3	4.47	.16	4.4	.09
3292	Vulpecula .	—	—	+19° 3956	9.8	+20 0	F	F	6.0	—	3	6.12	.05	—	—
3293	Aquila . .	—	—	+14° 3846	9.8	+14 52	6·5	6	6.1	6.0	3	5.54	.04	5.8	.15
3294	Sagitta . .	1	6582	+20° 4088	10.1	+21 1	6	6	6.0	—	3	5.78	.11	5.5	.05
3295	Aquila . .	22	6585	+ 4° 4045	10.6	+ 4 38	6	6	5.7	6.1	3	5.43	.11	5.8	.08
3296	Sagittarius .	d 43	6584	—	10.6	−19 10	5	5	—	5.6	6	4.90	.08	—	—
3297	Lyra . . .	—	—	+30° 3491	10.8	+30 19	F	6·7	5.8	—	3	6.23	.03	6.1	.16
3298	Aquila . .	—	—	+14° 3852	11.0	+14 20	6·5	6·5	5.9	6.2	3	5.37	.05	5.7	.12
3299	Lyra . . .	—	—	+27° 3313	11.1	+27 15	6	F	7.0	—	3	6.26	.08	—	—
3300	Vulpecula .	1	6589	+21° 3713	11.1	+21 11	5·4	5·4	4.7	—	4	4.67	.11	4.9	.08

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3251	206,214,222	146,467,611	5.8	*4*03	2*3*0	. . . . . 0 0 0 . 3 *1* 4 . 0	. . .	.	
3252	213,215,510,542,690,691		3.9	100*5*02	—	5 3 3 . . 2 2 . 2 0 5 . *1* .	. . .	Y	t
3253	214,217,233		6.4	001	—	. . . . . F F *6* . . F *5* . .	. . .	.	
3254	213,215,231	197,404,601	5.0	*2*01	*3*13	. . 0 . . 0 2 4 . . *1* . 2 0	. . 1	W	
3255	174,220,511	197,*5*08,617	5.7	21*2*	*3*0*3*	. . *2* . . 1 1 *1* . . 0 . . *2*	. . .	*y*	
3256	213,224,513		5.6	001	—	. . 1 . . 2 2 . . *3 3* . *2* .	. . .	*y*	t
3257	210,217,222		6.0	01*2*	—	. . . . . *2 2* . . *3* 1 . . .	. . .	.	
3258	191,214,222,542,690,691		3.5	6*1*0*6*12	—	3 3 4 . . 2 2 . 4 2 0 . 2 .	. . .	.	t
3259	213,215,511,529,531,533	181,408,604	3.1	11*4*0*2*2	113	2 1 *1* 0 . 1 1 1 . . 9 . 0 2	*1* 0 .	*g*	
3260	174,510,512,531,533,537		3.6	*1*10*1*10	—	*3* 0 *2* 2 . *2 4* . . *2 1* . *2* .	*1 1* .	W	
3261	210,217,516		5.8	*2*12	—	. . . . . F F . . 0 3 . 2 .	. . .	.	
3262	210,231,515	*186,201*,608	5.7	*1*10	122	. . . . . F 1 1 . . 4 . . 2	. . .	*o*	
3263	206,220,521,523,539,542,543		5.5	*2*181*4*30	—	. . . . . 3 3 . . 1 F . . .	. . .	w	p
3264	211,222,520	181,691,607	5.1	*4*14	*111*	. . *3* . . *1 1* 1 2 6 . 1 0	. . .	*y*	
3265	174,224,520,523,530,532,539	*184*,692,*612*	5.6	2721*2*21	631	. . . . . 2 2 *3* . . 5 . . 3	. . .	w	
3266	211,511,520	*181,691,612*	5.9	*2*13	352	. . . . . *1 7 5* . . F *2* . 3	. . .	.	e
3267	210,511,520	*184*,692,608	5.5	*1*02	740	. . . . . *1* 1 1 . . 2 . . 4	. . .	*y*	
3268	212,233,511	197,*509*,617	5.4	1*2*1	101	. . 1 . . 0 4 *1* . . 3 . . 1	. . .	w	
3269	211,233,515	*197,201*,619	6.0	*2*21	220	. . . . . *2 2* 1 . . *3* . . 1	. . 5	.	
3270	212,510,516,534,538,541		3.1	*2*12*1 2*	—	3 7 0 1 . 1 1 . 1 1 4 . 1 .	. . .	*y*	vg
3271	211,231,515	186,201,608	4.9	00*1*	577-	. . 3 . 9 3 7 9 . . 8 . . 6	. . .	*y*	d
3272	174,201,520,530,532,537	186,201,612	5.2	12*1*3*0*	24*3*	. *3 2* . . *2 2* 0 . . *3* . 4 1	. . .	W	
3273	210,220,516	*184*,692,608	6.2	*1*10	2*4 1*	. . . . . *4 4 2* . . F . . *1*	. . .	.	
3274	206,222,527	*181,691,607*	5.3	*2 2 1*	525	. . 0 . . *1 3 3* . 1 0 . 1 4	. . .	*y*	
3275	174,210,209	*186,201*,	6.6	*1 1 1*	*1*F	. . . . . *3* . . F . . *1*	. . .	.	
3276	174,210,209	*186*,201,612	6.6	1*1*1	*111*	. . . . . *1 1 3* . . F . . *1*	. . .	.	
3277	206,210,222,534,539,542		5.3	11*7*2*5*0	—	. . 1 . . 5 3 . . 4 *4* . 2 .	. . .	*y*	v
3278	204,233,516		5.8	2*1 2*	—	. . . . . 0 *2* . . *2 1* . . .	. . .	.	vt
3279	209,218,511		6.9	2*1 1*	—	. . . . . F F *b* . . F *3* . .	. . .	.	
3280	211,220,517		7.4	2*1*0		. . . . . 1 . . F . .	. . .	.	
3281		*184,692*,608	*7.3*		*152*	. . . . . *8 8* 0 . . F . . *3*	. . .	.	p
3282	174,201,511	*184,201*,608	5.7	01*2*	527	. . *3* . . 1 1 1 . . F . . 5	. . .	*y*	
3283	210,233,517	*184*,692,608	5.8	12*2*	400	. . . . . 0 0 0 . . F . . 1	. . .	w	
3284	206,511,521	*146*,467,611	5.2	4*3*0	1*3 1*	. . 2 . . 2 4 3 . 2 *3* . 2 0	. . .	*y*	
3285	209,218,231,696,697,698	*181,691*,607	6.3	22*4*12*3*	212	. . . . . F *5 5* . 3 F . . 2	. . .	.	vg
3286	174,204,224		6.4	22*3*	—	. . . . . F F . *4* 1 F . . .	. . .	*y*	
3287	204,224,521,527		5.2	50F*4*	—	*2 2* 5 . . 6 6 . 8 *1* 5 . *1* .	. . .	.	
3288	206,220,515	197,*691*,617	5.8	*3*22	110	. . . . . 0 0 2 . . 3 . . 1	. . 2	Y	d
3289	211,222,515	197,*508*,617	5.2	21*2*	*5*32	. . 3 . . 2 4 2 . . *3* . . 0	. . .	Y	
3290	211,511,520	*186,201,612*	6.9	3*3 1*	*440*	. . . . . *b b* 2 . . F . . *3*	. . .	.	ec
3291	211,233,511	197,406,612	4.5	40*4*	*213*	*1 0 2* . *1 1* 1 0 . . *5* . 0 *1*	. 2 0	W	d
3292	210,511,520		6.1	*1 1 1*	—	. . . . . F F *3* . . *b* . . .	. . .	.	
3293	212,222,229	*181,692,607*	5.5	*1*01	*136*	. . . . . *1* 3 4 . 3 6 . . 3	. . .	.	
3294	174,210,233	*184,408*,608	5.8	3*1 1*	*442*	. . 1 . . 0 0 0 . . F . . *3*	. . .	*y*	n
3295	209,218,231	*181,691,607*	5.4	30*2*	633	. . 1 . . 4 4 2 . 5 3 . . 4	. . .	w	
3296	206,220,523,534,538,541		4.9	12*4*302	—	1 1 6 . . 1 1 . . 4 0 . 4 .	. . .	Y	vt
3297	201,511,521	*184,201*,608	6.2	00*1*	*333*	. . . . . F *1 6* . . F *2* . *1*	. . .	.	
3298	212,222,229	*181,692*,607	5.4	11*1*	045	. . . . **0** 0 2 3 . 6 F 4 . 3	. . .	.	d
3299	215,510,520		6.3	*2*11	—	. . . . . *5* F 5 . . F . . .	. . .	.	c
3300	174,210,233,543	*184,408*,604	4.7	2124	330	. . 6 . . *1 1* 0 . . **0** . 1 2	. . .	*y*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3301	Lyra . . .	—	—	+27° 3314	11.2	+27 43	F	6	6.2	—.	3	6.16	.12	6.1	.19
3302	Draco . .	54	6601	+57° 1968	11.8	+57 30	5·6	5·6	5.3	—	3	5.26	.04	5.1	.13
3303	Aquila . .	—	—	+ 1° 3960	11.8	+ 1 50	6	6·7	6.5	6.7	3	6.22	.13	6.2	.07
3304	Lyra . . .	θ 21	6599	+37° 3398	12.2	+37 55	4·5	4·5	4.6	—	6	4.34	.04	4.4	.07
3305	Aquila . .	ω 25	6595	+11° 3790	12.2	+11 23	6·5	6·5	5.4	5.7	6	5.13	.06	5.4	.16
3306	Aquila . .	23	6597	+ 0° 4168	12.4	+ 0 52	6	6·5	5.0	5.7	3	5.41	.15	5.5	.12
3307	Draco . .	δ 57	6612	+67° 1129	12.5	+67 27	3	3	3.4	—	19	3.21	.02	3.1	.07
3308	Vulpecula .	2	6602	+22° 3648	12.7	+22 48	6	6·5	6.1	—	3	5.55	.08	5.6	.08
3309	Aquila . .	24	6600	+ 0° 4170	12.7	+ 0 8	6	6·7	7.0	6.8	3	6.59	.04	6.2	.03
3310	Aquila . .	—	—	+ 9° 4057	13.2	+ 9 24	F	F	6.0	6.8	7	6.32	.06	—	—
3311	Cygnus . .	—	—	+46° 2658	13.4	+46 47	6	6	6.1	—	3	6.07	.08	5.9	.03
3312	Sagittarius .	—	6607	—	13.4	−22 37	F	6·7	—	5.9	3	5.66	.09	—	—
3313	Draco . .	59	6625	+76° 817	13.5	+76 21	6·5	6·5	5.5	—	3	4.92	.04	5.1	.07
3314	Aquila . .	A 28	6615	+12° 3879	14.0	+12 9	6	6	5.5	5.9	3	5.40	.03	5.4	.16
3315	Aquila . .	f 26	6614	—	14.1	− 5 38	5	6·5	—	5.6	3	5.22	.09	—	—
3316	Cygnus . .	κ 1	6623	+53° 2216	14.3	+53 9	4	4	4.5	—	7	3.94	.11	4.1	.11
3317	Aquila . .	d 27	6618	− 1° 3716	14.4	− 1 7	6	6·5	5.3	5.9	3	5.61	.11	—	—
3318	Lyra . . .	—	—	+37° 3410	14.7	+37 23	6	F	7.5	—	3	7.64	.11	—	—
3319	Sagittarius .	ϱ 44	6619	—	14.7	−18 4	4	4	—	4.2	6	3.93	.04	—	—
3320	Lyra . . .	—	—	+37° 3413	14.8	+37 14	6	6	6.2	—	7	6.13	.10	6.1	.16
3321	Sagittarius .	v 46	6621	—	14.8	−16 11	5·4	5·4	—	4.9	6	4.67	.06	—	—
3322	Sagittarius .	45	6620	—	14.8	−18 32	F	F	—	6.5	6	6.06	.03	—	—
3323	Lyra . . .	—	—	+37° 3417	15.4	+37 7	F	6	6.2	—	3	6.40	.05	6.1	.15
3324	Lyra . . .	—	—	+34° 3503	16.2	+34 58	6	6	6.4	—	3	6.14	.07	5.8	.00
3325	Aquila . .	—	—	− 0° 3725	16.2	− 0 28	6	6·5	5.0	6.3	3	6.01	.11	—	—
3326	Sagittarius .	—	6628	—	17.0	−28 6	F	6	—	5.9	3	5.90	.09	—	—
3327	Aquila . .	—	—	+ 9° 4081	17.1	+ 9 41	F	6	6.5	6.6	7	6.32	.10	6.2	.00
3328	Draco . .	τ 60	6650	+73° 857	17.9	+73 8	5	5·4	4.4	—	19	4.54	.03	4.9	.02
3329	Vulpecula .	3	6637	+25° 3811	17.9	+26 2	5·6	6·5	5.5	—	4	5.01	.07	5.3	.12
3330	Lyra . . .	—	—	+33° 3434	18.0	+33 17	6	6	6.2	—	3	6.34	.05	5.8	.00
3331	Sagittarius .	χ 47	6633	—	18.0	−24 44	6	6	—	5.4	3	5.11	.15	—	—
3332	Sagittarius .	49	6636	—	18.2	−24 12	F	6·7	—	5.6	6	5.87	.03	—	—
3333	Sagittarius .	—	—	—	18.6	−14 9	F	F	—	5.9	3	5.77	.12	—	—
3334	Draco . .	—	6640	+57° 1986	18.1	+57 25	6	6	6.0	—	4	6.01	.10	6.0	.20
3335	Draco . .	—	—	+57° 1993	19.3	+57 31			7.5	—	7	6.27	.08		
3336	Draco . .	—	—	+64° 1344	18.9	+64 10	6	6·7	6.5	—	3	6.25	.08	6.3	.05
3337	Sagitta . .	2	6642	+16° 3839	19.0	+16 43	6	6	5.8	—	7	6.04	.11	6.0	.19
3338	Sagitta . .	3	6647	+16° 3842	19.4	+16 43			6.7	—	8	6.64	.10		
3339	Sagittarius .	50	6638	—	19.2	−22 1	6	6	—	5.9	3	5.54	.12	—	—
3340	Aquila . .	b 31	6644	+11° 3833	19.3	+11 41	5·6	5·6	5.5	5.6	6	5.30	.04	5.5	.20
3341	Sagittarius .	—	6643	—	19.3	−15 17	6	6	—	5.9	3	5.68	.11	—	—
3342	Cygnus . .	2	6648	+29° 3584	19.4	+29 23	5	5·6	5.2	—	3	4.93	.11	5.0	.08
3343	Aquila . .	δ 30	6646	+ 2° 3879	19.4	+ 2 53	3·4	3·4	3.2	3.4	14	3.46	.04	3.8	.11
3344	Sagittarius .	—	6639	—	19.4	−29 59	F	6	—	5.8	3	5.82	.07	—	—
3345	Draco . .	π 58	6662	+65° 1345	20.1	+65 29	5	5	5.3	—	3	4.55	.08	4.8	.03
3346	Lyra . . .	—	6656	+43° 3229	20.2	+43 9	6	6·5	5.6	—	3	6.00	.07	6.3	.13
3347	Vulpecula .	4	6654	+19° 4010	20.2	+19 34	5	5	5.0	—	3	5.18	.09	5.2	.09
3348	Vulpecula .	3	6657	+24° 3737	20.4	+24 42	F	6·5	6.1	—	3	5.99	.11	6.2	.03
3349	Aquila . .	ν 32	6653	+ 0° 4206	20.4	+ 0 6	5	5	5.0	5.4	6	4.80	.06	4.8	.03
3350	Aquila . .	—	—	+12° 3907	20.8	+12 48	6	6	6.0	6.2	3	5.76	.11	5.6	.08

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates				P S H h Σ U *H* D B G *h* R F E	s w p		
3301	215,510,520	*186,692*,608	6.2	231	602	. . . . . F *4 2* . . *1* . . *1*	. . .	.	c
3302	174,222,515	197,404,601	5.3	10*1*	*511*	. . *3* . . *111* . . *4* . . *2*	. . .	*o*	
3303	201,209,523	*146*,467,611	6.2	22*3*	01*2*	. . . . . *411* . 3 F . . 0	. . .	.	
3304	211,233,511,530,532,537	*201*,406,612	4.3	101*22*0	130	1 2 3 . . 1 1 3 . . 1 . *11*	. *11*	Y	e
3305	206,218,521,530,532,537	181,692,607	5.1	*222031*	*155*	. . 4 . . 3 5 2 . 3 6 . 5 3	. . .	*y*	
3306	201,209,520	*146*,672,611	5.4	*142*	32*2*	. . 5 . 2 4 2 *4* . 0 3 . 0 1	. . .	*o*	dt
3307	174,201,209,210,211,215,218	121,197,197	3.2	121*1020*-	40*3*	**2** 4 0 0 . 0 0 4 . . *2* . *1 1*	0 0 .	Y	ts
3308	212,220,516	*184,201*,608	5.6	*211*	*220*	. . *5* . . 2 0 3 . . F . . 0	. . .	w	dh
3309	201,209,520	*146*,672,611	6.6	*110*	*445*	. . **b** . **b** *85* 2 . 0 *5* . . *4*	. . .	*y*	de
3310	216,229,521,523,530,532,538		6.3	6311010	—	. . . . . F F *5* . 3 *2* . . .	. . .	.	
3311	217,238,520	*197,691*,617	6.1	0*22*	*232*	. . . . . *3 3 2* . . 0 . . *2*	. . *1*	.	
3312	212,516,517		5.7	*212*	—	. . . . . F 4 . F 0 0 . . .	. . .	*y*	
3313	217,522,525	193,*507*,622	4.9	1*10*	412	. . **0** . . 5 7 5 . . 0 . . 2	. . .	w	
3314	206,218,521	181,692,*607*	5.4	*100*	422	. . 4 . . 4 4 0 . 3 7 . 2 0	. . .	*y*	
3315	212,220,517		5.2	*122*	—	. . 0 . . *24* . . 1 *3* . 2 .	. . .	Y	
3316	206,218,522,526,530,532,539	197,402,601	3.9	*2283142*	*214*	*131* . . 2 2 6 . . 1 . 2 2	. *1* .	Y	
3317	174,206,220		5.6	*311*	—	. . *4* . . 2 0 *4* . 1 *3* . *1* .	. . .	*y*	
3318	212,233,516		7.6	131	—	. . . . . **b** F *3* . . F . . .	. . .	.	c
3319	212,222,520,542,543,545		3.9	*102022*	—	5 6 2 . . 2 2 . . 3 5 . 3 .	. . .	*g*	n
3320	209,211,228,233,530,542,543	*186,202,612*	6.1	36*33303*	*341*	. . . . . *3 3 1* . . *4* . . 0	. . .	.	
3321	212,231,521,524,539,541		4.7	002143	—	*3 2 2* . . *11* . . 0 2 . 0 .	. . .	W	a
3322	212,231,520,696,697,698		6.1	0*10*202	—	. . *7* . . F F . . 2 F . . .	. . .	*o*	nv
3323	209,211,516	*186,202,612*	6.4	11*1*	61*3*	. . . . . F *64* . . F . . *3*	. . .	.	c
3324	174,201,233	*186*,695,612	6.1	10*2*	*333*	. . . . . *33* 1 . . *4* . . *3*	. . .	.	
3325	206,220,521		6.0	*113*	—	. . . . . *24* **b** . 1 F 2 . .	. . .	.	t
3326	210,218,516		5.9	122	—	. . . . . F *1* . 1 *22* . . .	. . .	.	
3327	216,229,521,523,530,538,546	*181,202,607*	6.3	*8721011*	*111*	. . . . . F *5* 0 . 1 F . . *1*	. . .	.	
3328	206,210,212,216,217,220,222	193,193,197	4.5	0303102-	455	5 1 *1* . . 5 1 *1* . . *1* . 3 4	. . .	Y	s
3329	217,522,528,530	186,695,608	5.0	0*4*02	405	. . 2 . . 2 6 4 . . 7 . . 3	. 0 .	W	
3330	216,510,521	186,695,612	6.3	*111*	*555*	. . . . . *55* 3 . . F . . *5*	. . .	.	
3331	211,233,517		5.1	4*30*	—	. . 7 . . 7 7 . 4 0 *2* . 0 .	. . .	*y*	ndc
3332	211,233,517,696,697,698		5.9	0*10220*	—	*9 9 6* . . F 2 . 1 *6* F . *6* .	. . .	*o*	nvgc
3333	217,238,521		5.8	*213*	—	. . . . . F F . . *1* F . . .	. . .	o	
3334	210,220,520,523	*197,509,617*	6.0	*3032*	189	. . . . . 4 4 *2* . . *1* . . 6	. . .	.	dc
3335	210,220,525,526,534,541,543		6.3	155*2112*		. . . . . 4 4 **0** . . F . . 6	. . .	.	dc
3336	211,516,520	*194,507*,601	6.2	*220*	020	. . . . . *411* . . F . . 1	. . .	.	c
3337	218,522,526,528,541,543,545	*181*,696,*607*	6.0	055*3234*	707	. . 4 . *1* 3 3 *4* . . 2 . . 5	. . .	.	de
3338	218,231,522,523,532,543,545		6.6	*1740336*-		. . *4* . 1 3 3 *1* . . 2 . . 5	. . .	*w*	de
3339	217,238,523		5.5	*213*	—	. . 5 . . 3 3 . 5 2 6 . . .	. . .	*o*	t
3340	218,510,522,532,541,543	181,*696*,607	5.3	10*22*10	*363*	. . *1* . . *111* . 0 4 . 1 2	. . .	*y*	
3341	217,238,521		5.7	*113*	—	. . . . . 1 1 . . 0 0 . . .	. . .	w	
3342	217,238,522	*184*,695,604	4.9	11*3*	13*1*	. . 1 . . 1 3 3 . . 8 . 1 1	. 1 .	W	
3343	210,224,510,516,517,520,532	146,672,611	3.5	2021212-	350	3 1 1 *1* . *10 1* . 0 5 . 0 3	*1* 0 .	*y*	
3344	238,510,525		5.8	*102*	—	. . . . . F 0 . 2 *2 1* . . .	. . .	.	
3345	201,238,522	194,402,601	4.6	02*2*	122	*2 4 2* . . 4 4 6 . . *6* . 1 2	. . .	w	
3346	220,238,516	*197,201*,619	6.0	*210*	505	. . . . . *24 5* . . 1 . . 3	. . *1*	*y*	ne
3347	211,224,238	*184,408*,604	5.2	122	21*2*	. . 1 . . *222* . . F . *10*	. . .	*y*	ec
3348	201,222,522	*201*,695,608	6.0	02*3*	212	. . *2* . . F *41* . . F . *42*	. . .	w	nt
3349	220,229,510,516,517,520	146,467,611	4.8	*100332*	*100*	. . 1 . . 2 2 2 . 3 1 . 3 0	. . .	*y*	
3350	218,510,522	*181,202,607*	5.8	*311*	*402*	. . . . . 0 0 0 . 2 3 1 . *2*	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
3351	Vulpecula .	5	6661	+19° 4015	21.0	+19 52	6	6	6.2	—	4	5.40	.07	5.6	.17
3352	Cygnus . .	4	6667	+36° 3557	21.8	+36 5	5	5	5.0	—	3	5.07	.16	5.3	.12
3353	Aquila . .	—	—	+13° 4020	22.0	+14 2	6	6	6.0	6.6	3	6.17	.05	5.8	.17
3354	Cygnus . .	—	—	+44° 3133	22.4	+44 46	6	6·7	6.2	—	3	6.64	.03	6.3	.08
3355	Sagittarius .	—	6666	—	22.4	−27 14	F	6	—	5.8	3	5.60	.08	—	—
3356	Aquila . .	c 35	6670	+ 1° 4010	23.0	+ 1 42	6·5	6	6.3	6.1	3	5.69	.08	5.7	.12
3357	Vulpecula .	6	6674	+24° 3759	23.7	+24 25	4·5	4·5	4.2	—	3	4.69	.07	4.8	.09
3358	Vulpecula .	—	—	+24° 3761	23.9	+24 31			6.4	—	—	—	—		
3359	Aquila . .	—	—	+14° 3936	23.9	+14 21	6	6	6.0	5.9	3	5.71	.09	5.6	.09
3360	Aquila . .	e 36	6679	—	24.4	− 3 2	5·6	5·6	—	5.6	6	5.23	.09	—	—
3361	Cygnus . .	7	6687	+52° 2434	24.5	+52 5	6	6	6.1	—	3	5.74	.05	5.6	.07
3362	Cygnus . .	β 6	6690	+27° 3410	25.9	+27 43	3	3	3.0	—	6	2.99	.05	3.2	.05
3363	Cygnus . .	—	6691	+27° 3411	25.9	+27 43			6.5	—					
3364	Cygnus . .	—	—	+35° 3658	26.4	+35 59	6	6	6.5	—	3	5.79	.12	6.3	.08
3365	Cygnus . .	ι 10	6697	+51° 2605	26.7	+51 28	4	4·5	4.0	—	6	3.89	.07	4.1	.12
3366	Cygnus . .	8	6698	+34° 3590	27.4	+34 12	5·4	5·4	4.6	—	3	4.80	.05	4.9	.08
3367	Cygnus . .	—	—	+49° 3034	28.2	+50 3	6	6	6.0	—	5	5.72	.02	5.6	.08
3368	Aquila . .	μ 38	6701	+ 7° 4132	28.2	+ 7 8	5·4	5·4	4.8	5.3	9	4.68	.04	5.2	—
3369	Aquila . .	37	6703	—	28.5	−10 49	6·5	6·5	—	5.8	3	5.30	.12	—	—
3370	Sagittarius .	51	6704	—	28.7	−24 59	F	5·4	—	var.	6	5.82	.04	—	—
3371	Draco . .	—	—	+79° 628	28.9	+79 22	F	6·7	6.3	—	6	5.94	.10	—	—
3372	Vulpecula .	9	6709	+19° 4063	29.3	+19 31	5	5·6	5.8	—	3	4.98	.11	5.1	.03
3373	Sagittarius .	h 52	6706	—	29.4	−25 9	5·4	4·5	—	4.7	6	4.64	.09	—	—
3374	Sagittarius .	—	6707	—	29.5	−19 7	F	6	—	6.3	3	6.20	.12	—	—
3375	Aquila . .	—	—	+15° 3872	30.0	+15 21	F	F	6.0	—	3	6.64	.12	—	—
3376	Sagittarius .	—	6710	—	30.0	−18 30	F	6	—	5.8	3	6.04	.07	—	—
3377	Cygnus . .	9	6714	+29° 3651	30.1	+29 12	6	6	5.8	—	3	5.43	.11	5.6	.04
3378	Cepheus .	—	—	+83° 552	30.2	+83 14	F	6	6.0	—	3	6.29	.04	6.4	.07
3379	Cygnus . .	—	6717	+48° 2914	30.4	+49 0	F	6	6.5	—	3	6.10	.11	5.9	.16
3380	Aquila . .	ϰ 39	6713	—	30.4	− 7 18	5	5	—	5.4	6	4.93	.04	—	—
3381	Aquila . .	ι 41	6715	− 1° 3782	30.5	− 1 33	4·5	4·5	4.2	4.6	7	4.27	.06	—	—
3382	Cygnus . .	—	6718	+42° 3386	30.8	+42 8	6	6·5	5.8	—	3	5.24	.05	5.1	.20
3383	Sagittarius .	—	—	—	30.8	−14 34	6	6	—	5.8	3	5.63	.05	—	—
3384	Cygnus . .	—	6723	+50° 2815	31.2	+50 59	6	6	6.0	—	3	5.57	.08	5.6	.07
3385	Aquila . .	—	—	+10° 3984	31.2	+11 0	6	6	6.1	6.5	3	6.03	.08	6.4	.07
3386	Aquila . .	42	6719	—	31.4	− 4 55	6	6·5	—	5.8	3	5.58	.03	—	—
3387	Cygnus . .	11	6722	+36° 3619	31.5	+36 41	6	6	6.0	—	3	5.97	.08	6.0	.24
3388	Sagitta . .	ε 4	6724	+16° 3918	31.9	+16 12	6	6	5.2	—	3	5.64	.08	5.9	.21
3389	Draco . .	σ 61	6735	+69° 1053	32.6	+69 27	5·6	5·6	5.0	—	20	4.74	.04	4.8	.05
3390	Sagittarius .	53	6726	—	32.6	−23 42	6	6	—	6.7	3	6.20	.04	—	—
3391	Sagittarius .	—	6727	—	32.9	−23 42			—	6.2	3	6.20	.04	—	—
3392	Cygnus . .	—	6731	+44° 3185	32.9	+44 26	6	6·5	5.3	—	3	5.24	.07	5.1	.16
3393	Cygnus . .	θ 13	6734	+49° 3062	33.2	+49 57	5·4	5·4	4.9	—	6	4.65	.06	4.7	.04
3394	Aquila . .	σ 44	6729	+ 5° 4225	33.3	+ 5 8	5	5	5.0	5.7	3	4.98	.07	5.4	—
3395	Cygnus . .	R	—	+49° 3064	33.6	+49 56	F	F	var.	—	3	var.	—	—	—
3396	Sagittarius .	54	6733	—	33.8	−16 34	6	6	—	5.5	3	5.57	.13	—	—
3397	Cygnus . .	φ 12	6740	+29° 3684	34.6	+29 53	5	5	5.3	—	3	4.89	.09	5.1	.13
3398	Aquila . .	45	6736	− 0° 3813	34.6	− 0 54	6	6	5.8	5.9	3	5.51	.09	—	—
3399	Sagitta . .	α 5	6739	+17° 4042	34.7	+17 44	4·5	4·5	4.3	—	3	4.27	.11	4.7	.04
3400	Aquila . .	—	—	+13° 4098	35.5	+13 33	6	6	5.8	6.1	3	5.90	.11	6:1	.23

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
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3352	201,243,522	186,695,612	5.1	*314*	*341*	. . 3 . . *111* . . 2 . *32*	. . .	W	
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3354	238,516,541	*197,201,620*	6.6	*100*	*144*	. . . . . *856* . . *9* . . *3*	. . 7	.	dc
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3357	201,218,222	186,408,604	4.7	*210*	623	. . R . 0 . 0 0 *4* . . 5 . *14*	. 0 .	O	ndtph
3358			*5.8*			. . . . 0 0 4	. . .	*r*	ndph
3359	211,220,516	*181,202,607*	5.7	*221*	310	. . . . . 111 . 044 . *1*	. . .	.	
3360	218,229,524,534,537,542		5.2	*323033*	—	. . 0 . . 00 . . 11 . 1 .	. . .	O	t
3361	210,218,525	*197,509*,605	5.7	*111*	*211*	. . 0 . . 112 . . 4 . . *1*	. . .	*y*	n
3362	201,220,227,530,538,542	186,406,612	*3.1*	032*120*	313	3 6 *1* . 3 1 . .	2 0 .	Y	dvt
3363			*5.2*			. 2 2 2 *1* . . 0 . 52	. . .	B	dvt
3364	211,222,522	*197,201*,620	5.8	*213*	447	. . . . . 005 . . F . . 5	. . .	.	
3365	210,218,246,530,538,541	197,402,601	3.9	*213212*	215	*1* 30 . . 252 . . 1 . 12	. *1* .	*y*	n
3366	209,222,227	186,695,612	4.8	*111*	*221*	. . 0 . . *222* . . 1 . 01	. . .	W	
3367	210,530,541,542,543	*197,509*,605	5.7	02b00	*212*	. . . . . 111 . . F . . *1*	. . .	.	p
3368	211,224,229,510,516,517,696	181,*696*,603	4.7	0160*211*-	37R	3 6 2 . . *111* . 32 . 35	. 0 .	Y	vteg
3369	209,224,523		5.3	*123*	—	. . *1* . . 13 . . 34 . . .	. . .	*y*	n
3370	217,227,521,696,697,698		5.8	02*1121*	—	. . *3* . . F b . *3* V F . . .	. . .	*y*	nvpg
3371	525,526,543,545,548,549		5.9	*133432*	—	. . . . . F 22 . . F . . .	. . .	.	
3372	217,222,521	181,408,604	5.0	*113*	011	. 3 *1* . . 026 . . 7 . 21	. . .	w	
3373	217,227,521,539,541,543		4.6	012*434*	—	*21* 8 . . 0 *2* . 102 . 0 .	. . .	*y*	na
3374	211,238,517		6.2	*033*	—	. . . . . F *4* . . *15* . . .	. . .	.	d
3375	218,234,525		6.6	*231*	—	. . . . . F F *8* . . F 3 . .	. . .	.	
3376	211,238,525		6.0	*210*	—	. . . . . F *2* . . *41* . . .	. . .	.	t
3377	210,231,525	186,695,612	5.4	*203*	132	. . *2* . . 442 . . 7 . . 2	. . .	*y*	
3378	222,229,521	*193,507,622*	6.3	*110*	*112*	. . . . . F *55* . . F 5 . 1	. . .	.	
3379	210,231,525	*197,509*,622	6.1	*302*	*622*	. . . . . F *32* . . 0 . . *2*	. . .	O	t
3380	217,516,521,539,541,543		4.9	0*11220*	—	1 0 1 . . 11 . . 20 . 2 .	. . .	W	t
3381	211,229,516,517,520,539,541		4.3	*2231130*	—	b 2 *2* . . 110 . *23* . 0 .	. 0 .	*y*	vtg
3382	217,521,527	*197,696*,620	5.2	*111*	*524*	. . . . . 644 . . 9 . . *1*	. . 2	*y*	
3383	222,227,521		5.6	*111*	—	. . . . . 22 . . 01 . . .	. . .	.	v
3384	210,520,525	*197,696*,605	5.6	*022*	*120*	. . . . . 222 . . 51 . 0	. . .	*y*	
3385	211,237,523	*181,202,607*	6.0	*122*	524	. . . . . *221* . 3 F . . 4	. . .	.	
3386	222,243,527		5.6	*100*	—	. . 0 . . 20 . . 01 . . .	. . .	*y*	
3387	209,224,527	*197,694,620*	6.0	*202*	*246*	. . *7* . . *222* . . 1 . . 0	. . .	*y*	
3388	217,234,521	187,*202*,607	5.6	*112*	*228*	. . *6* . R 224 . . 5 . *23*	. . .	*y*	d
3389	210,217,222,227,231,237,243	193,193,197	4.7	*1023210*-	300	3 *1* 2 . . 553 . . *3* . 41	. 1 .	*y*	s
3390	211,243,526		6.2	*110*	—	. . 1 . . 33 . 5 3 2 2 . . .	. . .	*w*	dh
3391	211,243,526		6.2	*011*	—	. . *2* . .	. . .	*y*	dh
3392	209,229,527	*194,696*,620	5.2	*120*	*502*	. . . . . 640 . . 9 . . *1*	. . *1*	*y*	
3393	210,234,525,530,539,543	197,696,601	4.6	*123032*	201	*21* 0 . . 003 . . 3 . *11*	. 01	Y	
3394	221,243,527	181,*696*,603	5.0	*021*	08R	*33* 0 . . 000 . 43 . 44	. . .	*y*	e
3395	237,243,246		var.	RRR	—	. . . . . F F V . . F . . .	. . .	.	vt
3396	210,521,526		5.6	*322*	—	*236* . . 22 . . *43* . *4* .	. . .	Y	nta
3397	224,243,246	186,695,604	4.9	*122*	*151*	1 2 0 . . 113 . . 4 . *12*	. *2* .	Y	
3398	209,227,527		5.5	*221*	—	. . 2 . . 331 . 22 . . .	. . .	*y*	
3399	229,515,522	181,408,604	4.3	*311*	354	7 6 1 . . 110 . . 1 . 24	. 3 .	Y	
3400	209,221,527	*181,696,607*	5.9	*230*	643	. . . . . *113* . 020 . 2	. . .	.	

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No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
3401	Cygnus . .	14	6745	+42° 3413	35.6	+42 32	6·5	6·5	6.0	—	7	5.29	.09	5.1	.16
3402	Sagitta . .	β 6	6744	+17° 4048	35.7	+17 12	4·5	4·5	4.2	—	7	4.40	.10	4.7	.03
3403	Sagittarius.	e 55	6742	—	35.7	−16 24	5	5	—	5.4	3	4.97	.13	—	—
3404	Cygnus . .	—	6748	+54° 2193	36.1	+54 41	6	6·5	5.8	—	3	5.73	.09	6.0	—
3405	Sagittarius.	—	6746	—	36.7	−15 45	6	6	—	5.8	3	5.48	.03	—	—
3406	Aquila . .	χ 47	6749	+11° 3954	36.9	+11 32	6	6·5	5.7	5.8	3	5.40	.13	5.8	.15
3407	Cygnus . .	—	6754	+45° 2949	37.2	+45 14	6·5	6·5	5.5	—	3	5.07	.12	5.1	.16
3408	Cygnus . .	—	—	+39° 3878	37.9	+39 58	6	6	6.2	—	7	6.13	.08	6.4	.08
3409	Cygnus . .	—	—	+32° 3531	38.1	+32 9	6	6	6.0	—	3	5.84	.05	6.0	.05
3410	Cygnus . .	c 16	6763	+50° 2847	38.7	+50 15	6·5	6·5	6.3	—	3	5.54	.13	5.3	.21
3411	Cygnus . .		6764	+50° 2848	38.7	+50 14			6.2	—					
3412	Vulpecula .	10	6758	+25° 3933	38.7	+25 29	6	6	5.8	—	3	5.36	.08	5.7	.11
3413	Aquila . .	ψ 48	6759	+12° 4059	39.0	+13 1	6	6·7	6.0	6.2	3	6.06	.07	6.3	.08
3414	Sagittarius.	f 56	6760	—	39.4	−20 3	5	5	—	5.2	6	5.06	.07	—	—
3415	Cygnus . .	—	6769	+41° 3469	39.8	+41 29	F	F	6.0	—	3	6.07	.08	—	—
3416	Aquila . .	υ 49	6767	+ 7° 4210	39.8	+ 7 19	6	6·7	6.0	6.2	3	5.81	.04	6.3	.08
3417	Cygnus . .	15	6771	+37° 3586	39.9	+37 4	5·6	5·6	5.4	—	7	5.03	.06	5.2	.17
3418	Aquila . .	γ 50	6772	+10° 4043	40.6	+10 19	3	3	3.0	—	6	2.77	.07	3.0	.11
3419	Cygnus . .	δ 18	6779	+44° 3234	41.2	+44 50	3	3·2	3.0	—	6	3.05	.06	3.4	.03
3420	Cygnus . .	17	6784	+33° 3587	41.8	+33 27	5·6	5·6	5.4	—	3	5.04	.07	5.4	.11
3421	Sagitta . .	δ 7	6783	+18° 4240	42.0	+18 14	4	4	4.0	—	6	3.72	.05	4.3	.05
3422	Aquila . .	—	6785	—	42.5	−11 10	6	6	—	6.4	3	6.27	.03	—	—
3423	Aquila . .	π 52	6789	+11° 3994	43.2	+11 31	6	6	5.8	6.6	3	5.70	.09	5.9	.13
3424	Sagitta . .	ζ 8	6794	+18° 4254	43.7	+18 51	5	5·6	5.0	—	3	4.95	.08	5.1	.04
3425	Cygnus . .	—	6799	+47° 2916	44.0	+47 38	6	6	5.8	—	3	6.20	.13	6.3	.05
3426	Ursa Minor	λ	6999	+88° 112	44.2	+88 57	F	6·7	6.5	—	14	6.51	.04	6.8	.06
3427	Aquila . .	51	6796	—	44.2	−11 4	6	6·5	—	5.8	6	5.55	.06	—	—
3428	Draco . .	—	6808	+68° 1079	44.5	+69 3	6	6	6.2	—	3	5.77	.07	5.6	.04
3429	Aquila . .	α 53	6802	+ 8° 4236	44.9	+ 8 33	1·2	1·2	1.2	1.1	15	0.97	.04	1.3	.08
3430	Aquila . .	—	—	—	44.9	− 2 45	6	6	—	6.5	3	6.34	.11	—	—
3431	Sagittarius.	57	6803	—	45.2	−19 21	F	6	—	6.1	3	6.19	.08	—	—
3432	Aquila . .	o 54	6805	+10° 4073	45.3	+10 7	6·5	6·5	5.5	5.7	3	5.19	.03	5.6	.07
3433	Vulpecula .	12	6810	+22° 3833	45.9	+22 18	5	6·5	5.7	—	3	5.02	.05	5.2	.08
3434	Cygnus . .	χ	—	+32° 3593	46.0	+32 37	var.	var.	var.	—	13	var.	—	var.	—
3435	Cygnus . .	19	6813	+38° 3780	46.4	+38 25	6	6	5.5	—	3	5.47	.12	5.7	.07
3436	Aquila . .	η 55	6811	+ 0° 4337	46.4	+ 0 42	var.	var.	var.	var.	7	3.89	.06	4.1	.11
3437	Cygnus . .	—	6817	+40° 3902	46.5	+40 18	6	6	5.5	—	3	5.54	.09	5.8	.16
3438	Vulpecula .	—	—	+24° 3914	47.0	+24 41	F	5·6	5.7	—	6	5.76	.06	5.8	.08
3439	Aquila . .	—	—	—	47.0	− 3 25	5	6·5	—	5.9	3	5.73	.09	—	—
3440	Cygnus . .	d 20	6824	+52° 2547	47.6	+52 41	5·6	5·6	5.3	—	8	5.04	.05	5.2	.15
3441	Aquila . .	57	6822	—	48.1	− 8 32	5	5·6	—	5.7	3	5.32	.04	—	—
3442	Cygnus . .	—	—	+46° 2793	48.4	+46 43	6	6	5.8	—	3	5.64	.07	5.6	.23
3443	Vulpecula .	13	6827	+23° 3820	48.4	+23 46	5·4	5	4.6	—	3	4.66	.12	5.0	.03
3444	Aquila . .	ξ 59	6825	+ 8° 4261	48.5	+ 8 9	·5	5·6	5.2	5.3	3	4.92	.08	5.2	.08
3445	Aquila . .	58	6826	− 0° 3871	48.5	+ 0 3	6	6·5	6.0	5.9	7	5.58	.11	—	—
3446	Sagittarius .	ω 58	6823	—	48.5	−26 37	5	5	—	5.1	3	4.95	.15	—	—
3447	Draco . .	ε 63	6836	+69° 1070	48.6	+69 58	4	4·3	3.8	—	19	3.93	.04	4.0	.04
3448	Cygnus . .	—	6830	+47° 2939	48.7	+47 39	6	6	5.8	—	3	5.77	.04	5.8	.00
3449	Vulpecula .	—	6835	+23° 3829	49.4	+24 0	6	6	5.9	—	3	5.59	.03	5.7	.05
3450	Aquila . .	β 60	6833	+ 6° 4357	49.4	+ 6 6	4	4	4.0	3.9	8	3.95	.06	3.9	.11

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3401	227,522,526,527,530,536,539	*197,696*,620	5.3	3431142	622	. . *3* . . 1 3 5 . . 4 . . *2*	. . 2	w	e
3402	224,229,515,522,532,536,543	181,408,604	4.4	3522162	233	6 5 2 . . 0 0 1 . . 0 . 0 3	. 1 .	*o*	
3403	210,237,526		5.0	124	—	. . 5 . . 0 0 . . 1 *1* . 1 .	. . .	*y*	n
3404	221,237,527	197,*506*,619	5.7	211	b50	. . . . . 1 *1 1* . . 0 . . 3	. . .	*y*	e
3405	210,243,526		5.5	100	—	. . . . . 3 3 . . 1 2 . .	. . .	w	
3406	209,222,527	*181,693,607*	5.4	313	841	. . 2 . . 4 2 2 . 2 7 . 0 4	. . .	*y*	
3407	229,518,522	*197,696*,620	5.1	123	422	. . . . . 3 5 3 . . 6 . . 0	. . 1	*y*	
3408	221,237,526,527,530,541,543	*197,694,620*	6.1	4160213	144	. . . . . *3 3 1* . . *4* . . 3	. . 2	.	dec
3409	210,243,246	*186,693*,612	5.8	111	131	. . . . . 0 0 0 . . F *5* . 2	. . .	.	
3410	209,243,526	197,*696*,605	*6.2*	133	711	. . . *9* . *1* . . .	. . .		ndp
3411			*6.3*			. . 0 . *9 1 1 3* . . 2 . 1 2	. . .	*y*	ndp
3412	229,515,522	*186,693*,612	5.4	022	440	. . *2* . . 4 4 2 . . 3 . . 3	. . .	*y*	
3413	229,520,527	*181,696,607*	6.1	021	402	. . R . . *3 0 3* . *1* 0 . *2* 2	. . .	w	h
3414	221,237,527,534,536,539		5.1	013223	—	3 2 5 . . *1 1* . *1 2* 2 . *1* .	. . .	*y*	t
3415	210,515,527		6.1	112	—	. . . . . F F *3* . . F . . .	. . *5*	O	v
3416	217,520,527	*181,693,607*	5.8	110	447	. . *1* . . 0 5 0 . 2 3 . 0 5	. . .	w	
3417	209,227,522,530,534,538,541	*197*,200,620	5.0	2431102	254	. . *2* . . 2 2 3 . . 3 . . 2	. . .	Y	
3418	234,518,522,532,536,537	181,693,612	2.8	103340	025	5 4 *3* 0 . 4 4 4 . . 2 . 6 2	4 0 .	*o*	vta
3419	209,231,526,530,538,542	200,506,602	3.0	121221	434	3 2 1 0 4 2 2 2 . . 5 . 0 4	*1* 0 0	*y*	d
3420	224,243,246	200,694,620	5.0	120	164	. . *2* . 3 2 2 3 . . **1** . 0 4	. . .	Y	nd
3421	210,520,523,532,534,538	181,407,604	3.7	013220	557	**3 2** 1 . . 4 4 4 . . 3 . 5 6	. 3 .	O	t
3422	229,520,527		6.3	100	—	. . . . . *5 5* . . *1 2* . . .	. . .	*y*	t
3423	209,227,527	*181,693*,603	5.7	122	511	. . *3* . *1* 1 1 *1* . 7 4 . *1* 2	. . .	*y*	d
3424	210,520,523	181,408,604	5.0	022	021	4 3 1 . 8 0 2 0 . . 3 . 2 1	. 3 .	*g*	d
3425	229,234,522	*200,696,620*	6.2	223	200	. . . . . *4 4 6* . . F . . 1	. . *1*	*o*	
3426	231,237,421,425,440,442,445	*110*,611,*614*	6.5	1111022-	444-	. . . . . F *4 2* . . F . . 3	. . .	.	nvtpe
3427	210,227,238,536,543,546		5.6	100521	—	. . *1* . . 2 0 . . 0 7 . *2* .	. . .	W	
3428	209,518,527	*194,506,622*	5.8	210	231	. . . . . 0 0 2 . . 3 . . *2*	. . .	w	
3429	209,211,217,227,234,237,238	147,201,202	1.0	2212112-	246-	2 3 3 0 4 2 2 1 . *2 5* . 0 3	*3 1* .	W	e
3430	520,527,528		6.3	113	—	. . . . . *5 5* . . 0 *2* . . .	. . .	.	tp
3431	234,520,527		6.2	202	—	. . *5* . . F *4* . . *3 1* . . .	. . .	*y*	
3432	237,515,527	*181,693*,603	5.2	000	643	. . 1 . . 2 4 2 . 2 F . . 4	. . .	*y*	c
3433	237,521,526	186,408,604	5.0	011	411	. . 0 . . 0 6 6 . . 3 . 4 2	. . .	*g*	
3434	209,217,520,521,522,524,525	*186*,406,612	var.	289b382-	RRR	. . . . . V V V . . F . . V	. . .	.	nvtpe
3435	234,238,527	*197*,694,*620*	5.5	213	032	. . *3* . . 3 3 *1* . . 2 . *2* 2	. . .	*o*	t
3436	238,252,515,520,532,538,543	146,467,611	3.9	0222024	142	*6 3* 1 . . V V V . V 1 . . 2	. 2 .	Y	vhg
3437	238,515,527	197,694,*620*	5.5	212	072	. . . . . 3 3 *1* . . 2 . . 3	. . 3	*y*	
3438	211,521,528,696,697,698	*186*,408,604	5.8	212212	022	. . . . . F *6 2* . . 3 1 . 0	. . .	.	v
3439	211,515,520		5.7	221	—	. . . . . *7 1* . . 0 0 . . .	. . .	.	
3440	209,516,518,526,530,537,541	197,402,601	5.0	1b12230-	234	. . *1* . . 2 2 2 . . 3 . 2 2	. . .	O	p
3441	223,229,524		5.3	011	—	. . 8 . *3 3 1* . . *1 9* . 6 .	. . .	*y*	dg
3442	211,515,527	*200,696,620*	5.6	120	164	. . . . . 2 2 0 . . 1 0 . 0	. . 2	.	
3443	211,521,528	*186*,695,604	4.7	213	334	. . 4 . . *1 3 1* . . *3* . 1 3	. . .	*w*	
3444	234,521,527	181,*693,603*	4.9	220	144	b 0 *1* . . 1 3 3 . 1 8 . 1 3	. 0 .	*y*	a
3445	238,521,528,548,551,552		5.6	445*3312*	—	. . 0 . . 2 0 2 . 1 1 . . .	. *1* .	*w*	
3446	229,252,527		5.0	*142*	—	0 *1* 0 . . 0 0 . 0 *1 6* . *1* .	. . .	.	
3447	209,211,234,237,238,252,515	193,196,197	3.9	30*21*221-	044	5 *1* 1 . 4 2 *2* 0 . . 1 . 4 1	. 1 .	*y*	dsa
3448	211,515,527	*200,696,620*	5.8	110	000	. . . . . 0 0 *2* . . *1* 0 . 0	. . .	w	dec
3449	211,521,528	*186,695*,613	5.6	001	220	. . . . . 2 2 1 . . 1 . . 1	. . .	w	
3450	223,229,518,520,521,532,534	181,693,612	4.0	2303312-	231	*7 4 2* . . 1 1 1 . 0 0 . 0 *1*	1 *3* .	*y*	v

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19h – 20h

No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3451	Sagittarius.	b 59	6832	—	49.6	−27 29	5	5	—	4.6	3	4.72	.09	—	—
3452	Cygnus . .	—	—	+36° 3766	50.4	+36 41	F	6	6.0	—	3	5.74	.15	5.9	.12
3453	Aquila . .	φ 61	6838	+11° 4055	50.4	+11 6	5·6	5·6	5.5	5.7	3	5.43	.04	5.4	.07
3454	Sagitta . .	10	6839	+16° 4067	50.6	+16 19	6	6·5	5.2	—	7	5.54	.13	6.1	.13
3455	Cygnus . .	23	6847	+57° 2084	50.8	+57 12	5·6	5·6	5.4	—	3	5.09	.11	5.1	.16
3456	Sagittarius.	g 61	6840	—	51.1	−15 49	6·5	6·5	—	5.3	3	4.98	.09	—	—
3457	Cygnus . .	—	6852	+59° 2137	51.4	+59 23	6·5	6	5.8	—	3	5.99	.07	5.9	.08
3458	Cygnus . .	22	6849	+38° 3817	51.6	+38 10	5·6	5·6	5.5	—	3	4.67	.12	5.2	.13
3459	Sagittarius.	A 60	6842	—	51.6	−26 31	5	5	—	5.3	3	5.03	.08	—	—
3460	Cygnus . .	η 21	6851	+34° 3798	51.8	+34 46	4·5	4·5	4.2	—	3	4.04	.05	4.2	.32
3461	Sagittarius.	—	6843	—	51.9	−35 36	F	5	—	4.5	3	4.19	.07	—	—
3462	Sagitta . .	11	6853	+16° 4081	52.3	+16 29	6	6	5.8	—	3	5.31	.15	5.7	.12
3463	Cygnus . .	ψ 24	6856	+52° 2572	52.5	+52 7	5	5·6	5.5	—	7	4.77	.07	5.0	.08
3464	Cygnus . .	—	6857	+39° 3968	53.1	+40 3	6·5	6·5	5.8	—	7	5.57	.10	5.6	.07
3465	Cygnus . .	—	6865	+50° 2930	53.4	+50 35	6	6·7	6.2	—	3	6.27	.12	6.4	.11
3466	Sagitta . .	γ 12	6858	+19° 4229	53.4	+19 10	4·3	4·3	3.8	—	7	3.65	.10	3.9	.08
3467	Aquila . .	—	—	—	53.4	−10 16	·6	6·7	—	6.1	3	5.94	.09	—	—
3468	Cepheus .	—	6867	+58° 2013	53.6	+58 32	6·5	6·5	5.1	—	3	5.23	.03	5.3	.07
3469	Cygnus . .	—	—	+56° 2331	53.8	+56 22	6	6	6.3	—	3	6.06	.00	6.0	.09
3470	Cygnus . .	—	—	+41° 3549	53.9	+41 56	6	6	6.5	—	3	6.64	.13	6.0	.13
3471	Cygnus . .	—	—	+30° 3837	53.9	+30 39	6	6	5.8	—	3	5.36	.08	5.6	.09
3472	Vulpecula .	14	6866	+22° 3872	54.0	+22 46	6·5	6	5.9	—	3	5.72	.17	5.7	.11
3473	Sagittarius.	—	6864	—	54.3	−23 4	F	F	—	5.9	3	6.02	.08	—	—
3474	Sagitta . .	13	6868	+17° 4183	54.6	+17 11	6	6	5.8	—	3	5.51	.13	5.8	.17
3475	Aquila . .	—	—	+ 8° 4300	55.2	+ 8 14	6	6	6.2	6.2	7	6.14	.06	6.4	.07
3476	Sagittarius.	63	6871	—	55.3	−13 58	6	6	—	5.7	6	5.85	.11	—	—
3477	Sagittarius.	c 62	6870	—	55.3	−28 3	5	5	—	4.7	6	4.69	.08	—	—
3478	Cygnus . .	—	6876	+45° 3025	55.5	+45 27	6	6	5.8	—	3	5.74	.03	5.8	.09
3479	Cygnus . .	25	6875	+36° 3806	55.5	+36 43	6·5	6·5	5.8	—	3	5.20	.03	5.5	.03
3480	Cygnus . .	—	6881	+51° 2728	56.1	+51 44	6	6·5	6.5	—	3	5.97	.04	5.9	.17
3481	Vulpecula .	15	6879	+27° 5687	56.2	+27 26	5	5	5.0	—	3	4.93	.05	5.1	.09
3482	Sagittarius.	—	6878	—	56.6	−22 56	F	F	—	6.5	7	6.44	.03	—	—
3483	Vulpecula .	—	6882	+24° 3975	56.7	+24 28	F	F	6.2	—	3	5.89	.11	—	—
3484	Sagittarius.	—	6877	—	56.7	−32 23	F	6·5	—	5.4	3	5.10	.11	—	—
3485	Vulpecula .	16	6883	+24° 3977	56.9	+24 36	5	6·5	5.5	—	3	5.43	.15	5.6	.16
3486	Cygnus . .	e 26	6895	+49° 3158	58.0	+49 46	6·5	5·6	5.1	—	3	5.20	.03	5.4	.03
3487	Sagitta . .	14	6890	+15° 4033	58.0	+15 42	6	6·5	5.0	6.0	3	5.25	.00	5.6	.08
3488	Aquila . .	62	6891	− 1° 3887	58.2	− 1 3	6	6	6.5	6.1	3	5.91	.05	—	—
3489	Aquila . .	τ 63	6893	+ 6° 4416	58.3	+ 6 57	6·5	6	6.0	5.9	7	5.63	.06	5.8	.15
3490	Cygnus . .	—	—	+29° 3872	58.7	+29 35	6	6	6.0	—	3	5.83	.03	5.6	.09
3491	Sagitta . .	15	6897	+16° 4121	58.7	+16 45	6	6	5.5	—	3	6.01	.17	5.8	.15
3492	Sagittarius.	65	6894	—	58.8	−13 0	F	6	—	6.7	3	6.51	.09	—	—
3493	Draco . .	—	—	+69° 1084	59.1	+70 2	F	6	6.5	—	3	6.34	.04	6.2	.11
3494	Draco . .	—	—	+69° 1085	59.5	+70 3			8.3	—	—	—	—		
3495	Aquila . .	—	—	+15° 4040	59.5	+15 10	F	F	6.0	—	3	6.47	.05	—	—
3496	Sagitta . .	η 16	6901	+19° 4277	59.8	+19 39	5·6	5·6	5.5	—	3	5.35	.12	5.2	.11
3497	Cygnus . .	—	—	+31° 3925	59.9	+31 53	6	6	6.0	—	7	5.50	.06	5.7	.11
3498	Draco . .	e 64	6905	+64° 1405	0.2	+64 29	6·5	6·5	5.0	—	18	5.42	.03	5.6	.04
3499	Cygnus . .	—	—	+47° 3004	0.9	+47 53	6	6	6.2	—	3	5.97	.08	6.1	.05
3500	Vulpecula .	17	6912	+23° 3896	1.7	+23 16	5·6	5·6	5.2	—	3	5.26	.12	4.9	.09

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3451	229,252,527		4.7	212	—	325..33.327.2.	...	.	t
3452	209,258,522	*199,695,620*	5.7	304	015	.....F11..F1.2	...	.	
3453	211,238,525	181,*693*,613	5.4	170	021	*414*..*220*.03.*20*	...	*y*	p
3454	221,252,522,528,532,534,538	*181,696,607*	5.5	*4537421*	739	..2..313..2.16	...	*y*	
3455	223,515,522	195,402,602	5.1	320	413	..*3*..112..2..0	...	W	
3456	238,528,536		5.0	122	—	007..46..01.0.	...	W	
3457	223,238,526	*195*,402,619	6.0	210	*113*	.....*624*..F..*1*	...	w	n
3458	234,255,522	201,694,620	4.7	123	286	..5..557..0..5	...	W	
3459	229,252,527		5.0	022	—	0*12*..00.006.0.	...	.	
3460	243,246,252	199,694,620	4.0	*111*	*657*	*2*92..443..4.52	.0.	Y	v
3461	227,520,528		4.2	*210*	—	.....F8.822.2.	...	.	
3462	221,252,522	*181,696,607*	5.3	034	156	..0..553..4.34	...	w	
3463	227,522,530,539,541,544,547	197,402,601	4.8	1300541	042	..1.3246..1.22	...	W	d
3464	211,523,526,527,530,542,543	*201*,694,620	5.6	*2182421*	102	.....*200*..1..0	..0	*y*	
3465	227,237,522	*199,506*,619	6.3	313	*114*	.....*523*..F..1	...	w	
3466	211,520,524,525,532,541,543	181,407,604	3.6	*7141403*	144	863..113..*1*.23	*3*1.	O	t
3467	209,229,528		5.9	212	—	.....*12*..02...	...	O	
3468	223,238,526	195,402,602	5.2	*100*	322-	.....241..5..1	...	.	n
3469	223,515,522	*195,402*,619	6.1	000	103	.....*330*..F..*1*	...	w	
3470	216,255,526	*199,696,620*	6.6	*331*	*944*	.....*883*..F..*6*	..0	.	
3471	223,522,528	*186,695,613*	5.4	220	043	.....442..31.2	...	.	
3472	211,232,528	*186,695*,613	5.7	423	113	..*1*..*3*10..0..0	...	*y*	
3473	238,520,528		6.0	*121*	—	.....FF.F*3*1...	...	Y	t
3474	221,252,522	*186,696,607*	5.5	*331*	*147*	..6..331..2.13	...	o	t
3475	209,528,532,539,543,545,548	*181,693*,607	6.1	*111*b042	413	.....*331*.*10*..3	...	.	tp
3476	234,249,528,536,541,542		5.8	*124622*	—	..R..00..*45*...	...	w	th
3477	223,229,527,541,542,545		4.7	*330*151	—	321..33.*313*.*1*.	...	.	vt
3478	211,221,528	*199,696,620*	5.7	*100*	*013*	.....111..4..1	..2	*y*	vp
3479	223,232,526	*201,695,620*	5.2	001	343	..*2*..244..9..3	...	W	
3480	238,258,521	*200,506*,619	6.0	*011*	*215*	.....*243*..1..*1*	...	*w*	
3481	209,520,523	186,408,604	4.9	*111*	140	..*3*..111..0.*12*	...	*y*	
3482	520,527,528,539,541,545,548		6.4	b*111*011	—	.....FF.F*1*F...	...	.	
3483	211,223,523		5.9	302	—	.....FF1..F...	...		d
3484	229,255,527		5.1	*131*	—	.....F5.402..	...	.	t
3485	211,223,523	*186,695*,613	5.4	304	442	..*9*..*420*..*1*.02	...	w	de
3486	211,232,523	*199*,696,601	5.2	100	322	..*1*.R201..1..2	..0	Y	d
3487	209,518,525	*181,696,607*	5.2	000	264	..6..642.69..4	...	w	
3488	238,243,528		5.9	*111*	—	..*2*..*114*.02...	...	Y	
3489	229,255,525,528,532,542,543	*181*,693,607	5.6	*2321201*	*261*	b*3*0..222.11.*12*	...	*y*	t
3490	211,250,523	*186,695*,613	5.8	*001*	*403*	.....000..*11*.*2*	...	.	
3491	232,518,525	*181,696,607*	6.0	*414*	*610*	..*6*..*226*..*3*.*42*	...	*y*	
3492	234,249,528		6.5	*210*	—	..R..F7..0F...	...	*w*	h
3493	211,229,521	*194,506,622*	6.3	101	*411*	.....F5 0..F..	...	.	d
3494			7.8			..... 3..F..1	...	.	dpc
3495	209,518,521		6.5	111	—	.....FF7..F.5.	...	.	
3496	232,249,525	181,408,604	5.4	*303*	*412*	..0..*220*..3.*22*	...	*y*	
3497	211,249,525,527,530,532,542	*186,695,613*	5.5	3402040	*142*	.....333..62.2	...	.	p
3498	216,221,227,234,238,255,258	*196*,197,200	5.4	1003143-	502	..R..024..3.22	...	Y	dtshc
3499	216,249,255	*199,696,620*	6.0	*112*	220	.....*220*..1..1	..3	.	
3500	238,252,258	189,408,604	5.3	123	*362*	..1..*111*..*4*.*14*	...	w	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
3501	Aquila . .	—	—	—	1.7	− 7 6	F	F	—	F	6	7.01	.10	—	—
3502	Cygnus . .	—	6918	+51° 2763	1.8	+51 30	6	6	6.2	—	4	6.22	.05	6.4	.07
3503	Aquila . .	64	6910	− 1° 3899	1.8	− 1 1	F	6	7.0	6.7	3	6.05	.05	—	—
3504	Cygnus . .	b^1 27	6915	+35° 3959	1.9	+35 38	6·5	6·5	5.5	—	3	5.47	.08	5.9	.11
3505	Aquila . .	—	—	+ 8° 4344	2.1	+ 9 2	6	6	6.5	6.6	6	6.44	.02	6.4	.07
3506	Draco . .	ϱ 67	6926	+67° 1222	2.3	+67 32	5	5	5.1	—	16	4.58	.05	4.7	.04
3507	Aquila . .	—	—	+10° 4189	2.9	+10 22	6	6	6.0	6.4	3	6.03	.12	6.3	.07
3508	Draco . .	69	6936	+76° 771	3.0	+76 8	F	6·7	6.0	—	3	6.45	.05	6.3	.08
3509	Cygnus . .	—	6928	+52° 2623	3.1	+52 49	6·5	6	5.9	—	3	5.70	.09	5.8	.17
3510	Cygnus . .	—	—	+34° 3881	3.1	+34 4	F	6·7	6.0	—	3	6.17	.00	6.6	.13
3511	Draco . .	66	6932	+61° 1970	3.6	+61 38	6	6	5.0	—	3	5.63	.07	5.7	.05
3512	Sagitta . .	θ 17	6933	+20° 4453	4.6	+20 33	6	6	6.4	—	3	6.15	.12	6.1	.15
3513	Cygnus . .	b^2 28	6937	+36° 3907	5.0	+36 29	5	5·6	5.5	—	3	4.84	.07	5.4	.07
3514	Aquila . .	θ 65	6934	− 1° 3911	5.1	− 1 11	3	3	3.3	3.0	10	3.39	.06	—	—
3515	Vulpecula .	18	6940	+26° 3815	5.5	+26 33	6	6·5	5.7	—	3	5.46	.08	5.6	.07
3516	Capricornus	ξ 2	6938	—	5.8	−12 58	6	6	—	6.3	3	6.01	.03	—	—
3517	Vulpecula .	—	—	+21° 4088	6.1	+21 31	F	F	6.0	—	3	6.15	.04	—	—
3518	Aquila . .	—	—	+ 0° 4444	6.5	+ 0 30	6	6·7	6.9	6.6	3	6.25	.07	6.2	.12
3519	Vulpecula .	19	6943	+26° 3825	6.8	+26 27	6	6	5.8	—	3	5.76	.04	5.7	.09
3520	Vulpecula .	20	6944	+26° 3828	7.0	+26 7	6	6	6.2	—	3	5.89	.19	5.7	.09
3521	Aquila . .	66	6942	− 1° 3920	7.0	− 1 22	6	6·7	6.7	5.8	3	5.74	.07	—	—
3522	Sagittarius .	—	6947	—	7.8	−27 23	6	6	—	6.2	6	5.97	.05	—	—
3523	Aquila . .	ϱ 67	6952	+14° 4227	8.7	+14 50	5	5	5.0	5.4	3	5.11	.07	5.0	.03
3524	Cygnus . .	—	6959	+51° 2796	9.2	+51 6	6	6	6.1	—	3	6.50	.05	6.3	.05
3525	Vulpecula .	21	6957	+28° 3675	9.3	+28 20	6·5	6	6.0	—	7	5.33	.08	5.6	.07
3526	Draco . .	68	6970	+61° 1983	9.6	+61 43	6	6	5.8	—	3	5.66	.04	5.7	.07
3527	Cygnus . .	30	6962	+46° 2880	9.5	+46 27	4	4·5	5.0	—	3	4.94	.03	4.0	.09
3528	Cygnus . .	o^1 31	6965	+46° 2881	9.9	+46 23			4.0	—	6	3.80	.09		
3529	Cygnus . .	b^3 29	6967	+36° 3955	10.1	+36 27	5	5	5.4	—	3	5.04	.03	5.2	.04
3530	Vulpecula .	—	6966	+25° 4165	10.2	+25 14	5	5	5.2	—	3	4.76	.08	5.0	.07
3531	Vulpecula .	22	6968	+23° 3944	10.3	+23 8	6	6·5	5.5	—	3	5.49	.05	5.5	.07
3532	Cygnus . .	33	6976	+56° 2376	10.6	+56 12	4·5	4·5	4.5	—	7	4.41	.04	4.7	.15
3533	Cygnus . .	—	—	+33° 3827	10.8	+33 22	6	6·5	6.2	—	3	5.80	.07	5.9	.07
3534	Vulpecula .	23	6973	+27° 3666	10.8	+27 27	5	5	4.8	—	3	4.79	.05	4.9	.05
3535	Capricornus	4	6971	—	11.0	−22 11	F	6	—	6.1	6	6.01	.04	—	—
3536	Sagitta . .	18	6975	+21° 4130	11.1	+21 14	6	6	6.0	—	4	6.15	.07	6.0	.07
3537	Capricornus	α^1 5	6972	—	11.0	−12 53	3·4	4	—	4.5	6	4.53	.07	—	—
3538	Capricornus	α^2 6	6974	—	11.4	−12 55		3	—	3.6	6	3.78	.08	—	—
3539	Draco . .	—	6980	+60° 2099	11.3	+60 17	F	F	6.0	—	3	6.26	.04	—	—
3540	Vulpecula .	24	6979	+24° 4075	11.7	+24 18	6	6·5	6.0	—	6	5.46	.06	5.7	.05
3541	Cygnus . .	o^2 32	6983	+47° 3059	11.8	+47 21	4·5	5·4	5.0	—	3	4.07	.12	4.5	.07
3542	Cygnus . .	—	—	+45° 3119	12.1	+45 13	6	6	6.2	—	3	5.80	.03	6.2	.09
3543	Capricornus	σ 7	6981	—	12.4	−19 29	6·5	6·5	—	5.6	3	5.59	.12	—	—
3544	Cygnus . .	—	6986	+39° 4114	12.5	+39 59	6	6·5	5.4	—	3	5.47	.08	5.9	.12
3545	Cepheus .	$\varkappa$ 1	7005	+77° 764	12.9	+77 21	4·5	4·5	4.8	—	6	4.38	.09	4.4	.09
3546	Sagittarius .	—	6984	—	13.1	−29 34	F	F	—	6.2	3	6.44	.11	—	—
3547	Cygnus . .	P 34	6990	+37° 3871	13.4	+37 39	5	var.	5.3	—	6	4.90	.04	5.3	.11
3548	Aquila . .	—	—	− 1° 3951	13.5	− 1 28	6	6	6.5	6.4	3	6.34	.05	—	—
3549	Delphinus .	—	—	+12° 4289	13.9	+12 52	6	6	5.6	—	3	6.50	.03	6.2	.12
3550	Cygnus . .	36	6997	+36° 3998	14.0	+36 37	6	6	6.1	—	3	5.57	.12	6.1	.11

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3501	536,539,542,545,548,550		7.0	422143	—	. . . . . FF . . F b . . .	. . .	.	
3502	216,227,249,249	200,506,619	6.2	1210	320	. . . . . 442 . . F . . 2	. . .	o	
3503	238,243,258		6.0	111	—	. . 0 . . F28 . 5F . . .	. . .	y	
3504	216,252,264	200,695,620	5.5	220	742	. . 5 . . 111 . . 2 . 54	. . .	o	e
3505	234,249,255,697,698,699	181,693,607	6.4	001101	120	. . . . 4661 . 03 . . 0	. . .	.	dvg
3506	216,219,229,232,249,252,522	193,196,200	4.6	3312111-	245	200 . . 445 . . 2 . 21	. . .	Y	s
3507	216,252,264	181,693,607	6.0	321	523	. . . . . 222 . 210 . 3	. . .	.	v
3508	238,249,258	193,506,622	6.4	111	212	. . 8 . . F36 . . 3 . . 1	. . .	O	
3509	221,255,264	200,506,605	5.7	221	152	. . . . . 310 . . 4 . . 1	. . .	y	
3510	249,255,258	189,695,615	6.2	000	227	. . . . . F14 . . 11 . 4	. . .	.	
3511	238,255,258	194,402,622	5.6	012	020	. . 0 . . 226 . . 5 . . 1	. . .	y	
3512	216,249,255	189,695,615	6.2	033	332	. . 3 . 1440 . . 1 . 41	. . .	.	dpe
3513	216,252,264	200,694,620	4.8	012	746	. . 3 . . 246 . . 9 . 06	.5.	y	
3514	238,243,258,536,541,542,545		3.4	1216102-	—	1211 . 221 . 34 . 3 .	20 .	W	
3515	232,243,258	189,695,615	5.5	112	130	. . 3 . . 311 . . 2 . . 1	. . .	w	
3516	234,243,262		6.0	100	—	6 . R . . 22 . . 13 . 2 .	. . .	y	ndahc
3517	249,255,258		6.2	101	—	. . . . . FF4 . . F0 . .	. . .	.	
3518	227,252,264	146,467,611	6.2	102	213	. . . . . 415 . 21 . . 0	. . .	w	
3519	232,243,258	189,695,615	5.8	011	103	. . 4 . . 002 . . 1 . 21	. . .	y	t
3520	232,243,258	189,695,615	5.9	225	014	. . 2 . . 111 . . 2 . 92	. . .	w	
3521	234,243,264		5.7	021	—	. . 1 . . 148 . 1F . 3 .	. . .	o	t
3522	229,246,255,697,698,699		6.0	101213	—	. . . . . 22 . 503 . . .	. . .	.	vt
3523	223,234,264	181,695,614	5.1	012	121	. . 6 . . 111 . 02 . 11	. . .	w	
3524	255,264,267	200,506,619	6.5	111	313	. . . . . 776 . . 8 . . 2	. . .	o	
3525	216,229,255,293,536,542,545	189,695,615	5.3	5051221	532	. . 4 . . 155 . . 4 . . 3	. . .	y	
3526	238,246,264	194,402,622	5.7	101	120	. . 2 . . 111 . . 0 . . 0	. . .	Y	
3527	234,249,264		4.9	010		93 3 . 3 1 . .	. 23	b	ndac
3528	234,249,264,541,545,548	200,696,602	3.8	424013	347	1 . 3 69 3 . . 5 . . 5	. 02	o	ndtac
3529	232,255,258	200,694,620	5.0	001	123	. . 1 . . 003 . . 3 . 32	. 2 .	y	
3530	223,232,258	189,408,604	4.8	211	230	. . . . . 224 . . 1 . . 2	. . .	W	
3531	223,246,264	189,695,615	5.5	111	120	. . 1 . . 311 . . 2 . . 0	. . .	y	
3532	227,252,267,293,536,541,545	195,402,601	4.4	f112111	163	. . 1 . . 001 . . 0 . 13	. . .	y	
3533	234,252,267	189,695,615	5.8	201	013	. . . . . 022 . . 3 . . 1	. . .	.	
3534	216,229,255	189,408,604	4.8	111	220	. . 3 . . 220 . . 4 . 01	. . .	Y	t
3535	219,243,262,539,545,548		6.0	102012	—	. . 2 . . F2 . F13 . . .	. . .	o	
3536	221,221,262,541	189,695,615	6.2	1203	032	. . 4 . . 444 . . 1 . . 2	. . .	y	e
3537	216,243,267,536,542,545		4.5	222311	—	01 3 . 1 1 4 . . 11 . 1 .	. 5 .	Y	dta
3538	216,243,267,536,542,545		3.8	111522	—	3 22 6 . . 18 . 1 .	. 6 .	y	dta
3539	219,252,267		6.3	112	—	. . . . . FF5 . . 2 . . .	. . .	O	
3540	223,246,264,541,545,548	189,695,615	5.5	013114	331	. . 1 . . 313 . . 2 . . 2	. . .	Y	
3541	223,249,258	200,696,602	4.1	132	254	312 . . 359 . . 3 . 24	. 00	o	ntc
3542	223,249,258	200,696,620	5.8	001	623	. . . . . 002 . . 1 . . 4	. . 2	.	
3543	223,246,262		5.6	312	—	631 . . 20 . . 37 . 3 .	. . .	y	t
3544	221,243,267	200,695,620	5.5	202	732	. . . . . 312 . . 6 . 14	. . 2	O	t
3545	232,258,267,541,542,545	193,506,622	4.4	133115	212	021 . 0004 . . 0 . 00	. . .	y	d
3546	227,246,262		6.4	302	—	. . . . . FF . 447 . . .	. . .	.	d
3547	234,243,246,249,252,267	200,695,620	4.9	170121	733	. . 1 . . 1v3 . . 8 . 34	.4 .	y	
3548	219,243,267		6.3	111	—	. . . . . 550 . 12 . . .	. . .	.	t
3549	221,246,262	181,696,614	6.5	100	045	. . . . . 77 b . . F0 . 3	. . .	.	
3550	232,255,258	200,695,620	5.6	123	662	. . 5 . . 223 . . 5 . . 5	. . .	y	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U.N.	H.	DM.	U.A.	Measures. No. Obs.	Measures. Magn.	Measures. P.E.	Estimates. Magn.	Estimates. P.E.
					m.	° ′									
3551	Cygnus . .	35	6998	+34° 3967	14.0	+34 37	5·6	5·6	5.4	—	3	5.20	.07	5.2	.08
3552	Capricornus	ν 8	6991	—	14.0	−13 9	5	5·6	—	5.2	3	4.68	.08	—	—
3553	Capricornus	—	6992	—	14.0	−15 10	3	3	—	6.7	—	—	—	—	—
3554	Capricornus	β 9	6995	—	14.3	−15 10			—	3.2	6	3.38	.04	—	—
3555	Aquila . .	—	—	+17° 4294	14.9	+17 25	6·5	6	6.2	6.2	3	6.17	.05	6.4	.20
3556	Cygnus . .	—	—	+54° 2329	15.5	+55 1	6·5	6·5	6.0	—	3	5.69	.03	5.9	.11
3557	Cepheus .	R	—	+88° 117	15.7	+88 46	F	F	var.	—	3	var.	—	—	—
3558	Cygnus . .	—	—	+46° 2910	16.1	+46 28	6	6	6.5	—	3	6.07	.08	6.5	.00
3559	Draco . .	—	7017	+66° 1281	16.3	+66 28	6	6	6.2	—	3	6.15	.04	5.7	.05
3560	Vulpecula .	25	7013	+23° 3981	16.9	+24 4	6	6	6.1	—	3	5.39	.07	5.7	.11
3561	Aquila . .	—	7014	+ 4° 4434	17.2	+ 4 58	6·5	6·5	5.5	5.8	3	5.41	.04	5.1	.25
3562	Delphinus .	—	—	+14° 4275	17.3	+14 9	6	6	5.8	—	3	6.27	.13	6.4	.21
3563	Draco . .	71	7024	+61° 2000	17.6	+61 52	6	6	5.8	—	3	5.55	.08	5.7	.04
3564	Cygnus . .	γ 37	7022	+39° 4159	17.9	+39 52	3·2	2·3	2.8	—	13	2.31	.04	2.7	.05
3565	Sagittarius.	—	7018	—	18.1	−29 3	F	F	—	6.1	3	6.13	.12	—	—
3566	Cygnus . .	—	—	+45° 3152	18.2	+45 24	6	6	5.8	—	3	5.84	.03	6.1	.04
3567	Cygnus . .	—	7027	+40° 4141	18.5	+40 39	6	6	6.0	—	3	6.00	.13	6.5	.03
3568	Aquila . .	—	—	+ 0° 4495	18.6	+ 0 41	6	6	6.5	6.4	6	6.09	.05	6.1	.15
3569	Cygnus . .	39	7029	+31° 4062	19.1	+31 48	5	5	5.0	—	3	4.60	.03	4.8	.07
3570	Cygnus . .	—	—	+37° 3916	19.3	+37 5	6	6·5	6.0	—	3	5.74	.11	5.9	.11
3571	Draco . .	—	—	+63° 1618	19.5	+63 37	F	F	5.9	—	3	5.82	.15	—	—
3572	Draco . .	—	7037	+68° 1121	19.6	+68 30	6	6	6.0	—	3	6.07	.13	5.8	.05
3573	Vulpecula .	—	—	+20° 4559	20.4	+21 1	6	6	5.6	—	3	5.88	.05	5.8	.04
3574	Capricornus	π 10	7031	—	20.4	−18 36	5	5	—	5.5	6	5.22	.04	—	—
3575	Capricornus	ρ 11	7042	—	22.0	−18 13	5	5·6	—	5.3	6	4.98	.06	—	—
3576	Aquila . .	68	7046	—	22.2	− 3 45	6	6	—	6.3	3	6.16	.04	—	—
3577	Capricornus	o 12	7054	—	23.0	−18 59	5·6	5·6	—	5.9	3	5.57	.07	—	—
3578	Cygnus . .	40	7061	+37° 3941	23.1	+38 3	6	6	6.0	—	3	5.54	.03	5.9	.13
3579	Cygnus . .	43	7062	+48° 3128	23.3	+48 59	F	6	6.0	—	3	5.64	.13	5.6	.07
3580	Aquila . .	69	7058	—	23.4	− 3 17	5	5	—	5.3	3	5.19	.11	—	—
3581	Cygnus . .	—	7064	+56° 2421	23.5	+56 15	6	6·7	6.6	—	3	6.09	.11	6.0	.13
3582	Capricornus	—	7063	—	24.4	−15 27	6	6	—	6.4	3	6.15	.04	—	—
3583	Cygnus . .	41	7067	+29° 4057	24.5	+29 58	4·5	4·5	4.2	—	3	4.13	.11	4.2	.13
3584	Delphinus .	1	7065	+10° 4303	24.6	+10 30	F	6	5.8	6.1	3	5.93	.12	5.6	.05
3585	Cygnus . .	42	7073	+35° 4141	24.7	+36 3	6	6	6.2	—	3	6.04	.07	5.8	.27
3586	Capricornus	—	7080	—	25.8	−10 16	6	6	—	6.0	6	5.63	.03	—	—
3587	Cygnus . .	ω¹ 45	7085	+48° 3142	26.3	+48 33	5	5	4.9	—	3	4.97	.08	5.3	.16
3588	Aquila . .	—	—	+ 1° 4309	26.3	+ 1 49	6	6	8.2	6.5	—	—	—	6.2	.12
3589	Aquila . .	—	—	+ 1° 4310	26.3	+ 1 43			7.5	7.5	3	6.59	.04		
3590	Cygnus . .	—	7086	+55° 2411	26.4	+55 40	6	6	6.0	—	3	5.86	.08	5.7	.07
3591	Vulpecula .	—	—	+25° 4272	26.8	+25 24	F	6·7	6.0	—	3	6.33	.11	6.6	.12
3592	Delphinus .	ε 2	7088	+10° 4321	27.5	+10 54	4	4	3.8	4.2	6	4.13	.05	4.0	.15
3593	Capricornus	—	7087	—	27.5	−14 8	6	6	—	6.3	3	6.17	.08	—	—
3594	Cepheus .	θ 2	7098	+62° 1821	27.6	+62 35	4	4	4.0	—	13	4.33	0.3	4.4	.04
3595	Cygnus . .	ω² 46	7091	+48° 3154	27.6	+48 49	6·5	6·5	5.9	—	3	5.57	.08	5.3	.17
3596	Cygnus . .	—	—	+51° 2882	27.9	+51 54	F	F	6.0	—	3	6.04	.19	—	—
3597	Delphinus .	η 3	7094	+12° 4378	28.3	+12 38	6·5	6·5	6.0	5.8	3	5.18	.08	5.4	.16
3598	Cygnus . .	—	7105	+56° 2444	28.8	+56 22	6	6	6.3	—	3	6.29	.13	6.3	.04
3599	Cygnus . .	47	7103	+34° 4079	29.3	+34 51	5·6	5·6	5.4	—	3	4.77	.04	4.9	.04
3600	Delphinus .	ζ 4	7107	+14° 4353	29.7	+14 16	5·4	5·4	4.5	5.2	3	4.71	.07	4.7	.09

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3551	232,249,258	189,*693*,615	5.2	0*12*	20*2*	. . *2* . . 0 0 1 . . 5 . . 0	. . .	*y*	
3552	216,243,267		4.7	*22*0	—	7 3 3 . . 3 5 . . 2 2 . 3 .	.*1*.	*g*	
3553			*6.2*		—	*1 2 2 3* $^{2}_{6}$ *2 2* . . 3 . . $^{4}_{1}$. *1* .	. . .	.	dg
3554	216,252,267,535,536,541		3.4	000*141*	—		.*5*.	Y	dg
3555	219,232,267	*181,696,614*	6.2	1*11*	0*17*	. . . . . *8 4 2* . *2 5* . . 2	. . .	.	
3556	216,227,262	*195,506*,619	5.7	001	250	. . . . 0 *3 1* 1 . . 4 . . 2	. . .	w	d
3557	252,258,279		var.	RRR	—	. . . . . F F V . . F . . .	. . .	.	vp
3558	216,246,262	*200,696,620*	6.1	*2*11	444	. . . . . *3 3* 2 . . F . . 4	. . 4	.	
3559	219,252,273	*194,506,622*	6.2	*1*10	*664*	. . . . . *4 4 2* . . *1* . . *5*	. . .	w	p
3560	234,243,267	*189,695*,615	5.4	20*1*	440	. . 2 . . 4 4 5 . . 3 . . 3	. . .	*g*	
3561	227,249,267	159,*696*,614	5.4	01*1*	*901*	. . . . . 0 2 0 . *2 5* . . *3*	. . .	*y*	
3562	221,252,267	*181,696,614*	6.3	*3*22	*136*	. . . . . *5 5 7* . . *6 1* . 1	. . .	.	
3563	234,249,267	*194,402,622*	5.6	*1*12	021	. . 1 . . 2 2 0 . . 1 . . 1	. . .	W	
3564	216,219,230,232,238,240,243	201,202,202	2.3	1210*2*20-	753-	0 3 1 1 . 4 2 7 . . 7 . 2 4	1 0 3	*y*	e
3565	234,243,267		6.1	*3*12	—	. . . . . F F . *1 2 4* . . .	. . .	.	
3566	216,246,262	*200,696,620*	5.8	0*1*0	432	. . . . . 0 0 *2* . . *1* 0 . 3	. . *1*	.	
3567	230,298,305	*200,695*,620	6.0	3*13*	554	. . . . . *2 2 2* . . F . *2* 5	. . *1*	*o*	tpe
3568	225,240,261,597,598,599	*146*,467,611	6.1	*4*11110	12*4*	. . . . *1 3 3* 2 . 1 0 . . 0	. . .	.	dvg
3569	221,246,261	189,693,615	4.6	010	412	. *1* 2 . . 4 4 4 . . *2* . 2 2	.*1*.	Y	t
3570	216,240,261	*200,695*,620	5.7	*3*20	511	. . . . . 1 *1* 1 . . F *3* . 2	. . .	.	
3571	221,246,261		5.8	*4*12	—	. . . . . F F *1* . . F *1* . .	. . .	.	
3572	234,243,262	*194,506*,622	6.1	1*3*3	*244*	. . . . . *3 3 3* . . F . . *3*	. . .	.	t
3573	221,252,262	*189,693*,615	5.9	*1*11	*102*	. . . . . *1 1 4* . . *2 1* . *1*	. . .	.	e
3574	230,252,262,535,536,539		5.2	02*1*20*2*	—	2 1 1 . . *2 2* . . 0 *8* . 0 .	. . .	w	d
3575	230,252,262,535,536,539		5.0	*122*221	—	4 3 0 . . 0 2 . . 0 b . 0 .	. . .	*y*	d
3576	234,240,261		6.2	10*1*	—	. . *7* . . *4 4* . . *1 1* . .	. . .	w	
3577	230,243,262		5.6	10*2*	—	*2 3* 0 . . *4 4* . . 1 1 . 2 .	. . .	*w*	dc
3578	216,240,261	*200,695*,620	5.5	*1*00	731	. . *1* . . 3 3 3 . . 2 . . 4	. . .	w	
3579	216,230,261	*200,506*,620	5.6	*22*3	0*12*	. . 6 . . F 2 2 . . *3* . 0 0	. . 3	*y*	nt
3580	234,240,261		5.2	30*2*	—	. . 5 . . *2 2* . . *2 3* . *1* .	. . .	*y*	
3581	225,252,267	*195,506*,619	6.1	*2*03	11*4*	. . . . 2 *3* 0 3 . . 0 . . *1*	. . .	w	nd
3582	221,232,293		6.2	0*1*1	—	. . . . . *4 4* . . 0 F . . .	. . .	.	
3583	238,262,264	189,408,615	4.1	11*3*	*2*33	. 1 0 . . 3 3 2 . . *1* . 5 1	.*1*.	*y*	
3584	225,243,262	*159,410*,614	5.9	*21*3	*244*	. . 3 . . F 1 3 . 0 F . . *3*	. . .	*y*	
3585	223,240,262	*189,693,615*	6.0	1*2*0	*294*	. . *3* . . *2 2* 0 . . 1 . . *2*	. . .	y	
3586	223,243,258,535,548,550		5.6	1*1*110*1*	—	. . . . . 2 2 . . 2 1 . . .	. . .	*y*	p
3587	216,230,261	*200*,506,602	5.0	11*2*	6*14*	0 *1* 8 . . 0 0 *1* . . *1* . *2* 3	. . 3	W	nea
3588			7.4			. . . . . 6 . b . .	. . .	.	dtpgc
3589	221,249,264	*146*,467,611	6.6	*1*10	21*3*	. . . . . *4 4* 7 . 7 *1* . . 0	. . .	.	dg
3590	225,252,267	*195,506*,619	5.9	*2*11	0*32*	. . . . . *1 1 1* . . F . . *2*	. . .	w	n
3591	223,234,264	*189,693*,615	6.3	*3*20	216	. . . . *3* F *2 5* . . F *3* . 3	. . .	.	d
3592	225,243,262,535,536,539	159,410,614	4.1	*301*30	*510*	*3 3* 3 . . 0 0 *2* . 1 *6* . *1 1*	2 0 .	W	
3593	232,240,262		6.2	*2*02	—	. . . . . *4 4* . . *1 1* . . .	. . .	.	
3594	216,228,234,238,243,255,258	149,194,200	4.3	*2*101*2*12-	222	1 *1 1* . . *2 2 2* . . 1 . 0 1	4 2 .	W	s
3595	216,230,255	*200,506,620*	5.6	*1*12	*710*	. . *7* . . *2* 0 1 . . *7* . *1 3*	. . *1*	o	ndt
3596	239,252,262		6.0	*5*22	—	. . . . . F F *2* . . F . . .	. . .	.	
3597	225,240,255	*159,410*,614	5.2	02*2*	060	2 1 4 . . 2 4 6 . 4 1 . 2 2	. . .	w	a
3598	225,252,267	*195,506,619*	6.3	*3*13	*1*01	. . . . . *5 5 2* . . *2* . . 0	. . .	O	n
3599	221,249,262	189,693,615	4.8	*1*01	210	. 5 *6* . . 4 4 5 . . 1 . 2 1	. . .	O	t
3600	223,230,239	*159,410*,614	4.7	01*2*	*2*12	7 6 3 . . *1 1 2* . *2 3* . 0 0	.*2*.	*y*	a

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3601	Cygnus .	—	7112	+46° 2977	30.3	+46 17	6	6	6.0	—	3	5.60	.03	5.8	.15
3602	Aquila . .	70	7109	—	30.4	− 2 57	5	5	—	5.1	7	5.30	.08	—	—
3603	Draco . .	—	7124	+72° 957	30.6	+72 7	F	6	6.3	—	6	6.50	.08	6.2	.03
3604	Draco . .	—	—	+79° 675	31.4	+79 48	F	6	7.3	—	3	7.41	.04	6.2	.04
3605	Delphinus .	β 6	7121	+14° 4369	31.9	+14 11	3·4	3·4	3.5	3.5	6	3.74	.06	3.9	.11
3606	Vulpecula .	27	7126	+25° 4302	32.0	+26 3	6·5	6	6.0	—	3	5.63	.15	5.7	.11
3607	Delphinus .	ι 5	7125	+10° 4339	32.1	+10 58	6	6·5	5.0	5.9	3	5.30	.09	5.3	.15
3608	Aquila . .	71	7122	− 1° 4016	32.1	− 1 31	4·5	5·4	4.7	4.5	6	4.44	.08	—	—
3609	Capricornus	τ 14	7127	—	32.6	−15 23	5	6·5	—	5.6	3	5.30	.05	—	—
3610	Cygnus . .	48	7131	+31° 4159	32.6	+31 9	6	5·6	6.2	—	3	6.27	.04	5.4	.16
3611	Cygnus . .	—	7132	+31° 4160	32.7	+31 6			6.4	—	3	6.40	.13		
3612	Cygnus . .	—	—	+37° 4002	32.9	+37 55	6	6	6.0	—	3	6.40	.05	6.2	.00
3613	Aquila . .	—	7130	—	32.9	− 2 50	F	6	—	6.5	3	6.30	.09	—	—
3614	Draco . .	73	7156	+74° 872	33.1	+74 33	5·6	5·6	5.5	—	6	5.10	.06	5.2	.05
3615	Delphinus .	θ 8	7137	+12° 4411	33.1	+12 54	6	6	5.5	6.3	3	6.10	.15	5.7	.07
3616	Vulpecula .	29	7140	+20° 4658	33.2	+20 47	5	5	4.7	—	3	4.82	.07	4.9	.05
3617	Aquarius .	1	7138	− 0° 4064	33.2	+ 0 4	5	5	5.4	5.6	3	5.45	.03	5.4	.24
3618	Capricornus	υ 15	7134	—	33.2	−18 34	6·5	6·5	—	5.7	7	5.31	.11	—	—
3619	Vulpecula .	28	7143	+23° 4084	33.3	+23 42	5·6	5·6	5.3	—	3	5.09	.07	5.2	.03
3620	Delphinus .	κ 7	7141	+ 9° 4600	33.3	+ 9 40	5	5	5.5	5.6	6	5.09	.06	4.9	.15
3621	Vulpecula .	—	—	+23° 4085	33.4	+23 15	F	6	6.8	—	3	6.26	.12	6.0	.11
3622	Delphinus .	—	7146	+15° 4220	33.5	+15 26	F	F	6.0	—	3	5.91	.13	—	—
3623	Vulpecula .	—	—	+21° 4305	33.8	+21 24	F	6	6.0	—	3	5.92	.09	5.9	.13
3624	Delphinus .	α 9	7149	+15° 4222	34.1	+15 29	4·3	4·3	3.5	—	6	3.96	.06	3.9	.13
3625	Cygnus . .	—	7158	+40° 4266	35.2	+40 9	6	6	6.0	—	4	6.07	.12	5.9	.12
3626	Delphinus .	10	7160	+14° 4393	35.6	+14 11	F	F	6.0	—	3	6.27	.07	—	—
3627	Draco . .	75	7178	+80° 659	35.7	+81 1	6	6	5.8	—	3	5.63	.03	5.6	.21
3628	Cygnus . .	—	—	+42° 3818	35.8	+43 2	6	6	6.0	—	3	6.30	.11	6.3	.09
3629	Cygnus . .	49	7164	+31° 4181	36.2	+31 53	6	6·5	6.0	—	3	5.84	.05	5.9	.12
3630	Draco . .	74	7185	+80° 660	36.3	+80 40	F	6	6.1	—	3	6.10	.00	5.9	.13
3631	Cygnus . .	α 50	7171	+44° 3541	37.3	+44 51	2·1	2·1	1.7	—	13	1.47	.06	1.4	.06
3632	Cygnus . .	—	7174	+41° 3856	37.6	+41 17	6	6·5	5.3	—	4	5.52	.12	5.8	.05
3633	Cepheus .	—	7176	+59° 2272	37.7	+60 6	6	6	6.2	—	3	5.89	.11	6.0	.09
3634	Cygnus . .	—	—	+34° 4127	37.7	+35 1	6	6	7.5	—	3	6.54	.05	6.4	.04
3635	Delphinus .	δ 11	7173	+14° 4403	37.9	+14 39	4	4	4.2	4.5	6	4.57	.04	4.5	.09
3636	Cygnus . .	51	7182	+49° 3353	38.5	+49 55	6·5	5·6	5.7	—	3	5.44	.11	5.4	.05
3637	Cygnus . .	—	—	+35° 4234	38.7	+35 9	6	6	6.4	—	3	6.20	.11	6.4	.04
3638	Capricornus	ψ 16	7177	—	39.0	−25 42	4·5	4·5	—	4.3	6	4.33	.06	—	—
3639	Capricornus	17	7179	—	39.2	−21 57	6	6	—	6.0	3	5.77	.09	—	—
3640	Vulpecula .	30	7188	+24° 4229	39.7	+24 51	6·5	5·6	5.7	—	3	5.13	.07	5.1	.12
3641	Cepheus .	—	7193	+60° 2154	40.1	+60 10	6	6	6.2	—	3	6.23	.01	6.1	.08
3642	Cygnus . .	—	7198	+46° 3033	40.7	+46 51	6	6	6.5	—	3	6.74	.07	6.5	.00
3643	Cygnus . .	52	7194	+30° 4167	40.7	+30 17	4·5	4·5	4.3	—	3	4.29	.05	4.3	.08
3644	Cepheus .	—	—	+55° 2462	41.1	+56 3	F	6·7	6.0	—	4	6.34	.09	6.3	.05
3645	Delphinus .	—	7199	+15° 4255	41.1	+15 42	3·4	4	3.5	—	6	4.16	.02	3.9	.11
3646	Delphinus .	γ 12	7200		41.1	+15 42									
3647	Aquarius .	ε 2	7196	—	41.2	− 9 56	4·3	4·3	—	3.8	6	3.81	.03	—	—
3648	Cygnus . .	ε 53	7204	+33° 4018	41.4	+33 31	3·2	3·2	2.6	—	6	2.69	.06	2.6	—
3649	Aquarius .	3	7201	—	41.4	− 5 28	4·5	4·5	—	4.8	6	4.62	.09	—	—
3650	Cepheus .	4	7211	+66° 1318	41.7	+66 13	6·5	6·5	5.5	—	12	5.54	.04	5.4	.06

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3601	232,243,258	*200,506*,623	5.6	010	601	. . . . . 222. . F. . 2	. . 4	w	
3602	219,247,262,535,536,540,548		5.3	1200*716*	—	. . *3*. . *33*. . *44*. *3*.	. . .	Y	t
3603	219,249,279,536,539,541	194,*506,623*	6.5	0*11451*	*343*	. . . . . F *74*. . F. . *3*	. . .	*o*	
3604	252,255,281	*193,506,623*	7.4	1*10*	bbF	. . . . . F b *3*. . F. . b	. . .	.	
3605	223,230,273,536,540,541,563	159,410,614	3.7	401005	*133*	1 *11*. *3320*. *17*. *32*	3 *1*.	Y	d
3606	223,258,273	*189,693*,615	5.6	1*42*	*222*	. . R. . *222*. . 1. . 1	. . .	*y*	h
3607	240,249,273	*159,410*,614	5.3	*221*	*142*	*701*. . 5 *33*. 40. 10	. . .	w	
3608	223,258,273,696,698,699		4.4	2*10315*	—	. . 2. . 023. 00. 1.	. . .	*y*	vg
3609	232,258,273		5.3	*111*	—	1 *02*. . *33*. . *04*. 0.	. . .	*y*	n
3610	225,249,270		6.3	10*1*	600	. . 0. *3* *3*. .	. . .	*y*	dh
3611	225,249,270	189,*693*,615	6.4	*313*		. . 0. *3* *24* *2*. . 5. *42*	. . .	*y*	dh
3612	232,255,273	*202,507,698*	6.4	*111*	*2F2*	. . . . . *666*. . *7*. . *2*	. . .	.	e
3613	219,247,262		6.3	21*2*	—	. . . . . F *5*. . 0 *2*. . .	. . .	.	n
3614	223,258,279,539,541,548	194,*506*,622	5.1	2*21*220	020	. . 2. . 113. . 2. . 1	. . .	W	
3615	223,247,273	*159,410*,614	6.1	*421*	*436*	*785*. . *337*. 04. *54*	. . .	Y	
3616	221,255,273	190,693,615	4.8	*210*	202	. . 2. . 22 *1*. . 1. 21	. . .	*y*	
3617	232,258,273	*146*,467,611	5.4	*100*	6*42*	. . 1. . *441*. *11*. *10*	. . .	*y*	
3618	232,252,273,540,541,548,550		5.3	124*2454*	—	*3*01. . 13. . 14. 1.	. . .	O	t
3619	232,258,273	190,693,615	5.1	0*12*	110	. . *2*. . 111. . 6. 01	. . .	*y*	
3620	240,261,273,539,541,548	159,410,614	5.1	*122302*	*601*	*721*. . *113*. 22. *52*	32.	*y*	t
3621	232,258,273	*190*,693,615	6.3	*231*	*136*	. . . . . F *53*. . *2*. . *3*	. . .	.	
3622	230,261,262		5.9	*232*	—	. . . . . F F *1*. . F. . .	. . .	.	
3623	221,255,273	*190*,693,615	5.9	*221*	313	. . . . . F *11*. . 22. 0	. . .	.	
3624	230,261,262,535,540,548	159,410,614	4.0	*313*110	402	*240*. . *333*. . b. *21*	*.2*.	*y*	v
3625	221,252,282,293	*200,506*,620	6.1	*4321*	1*43*	. . . . . *333*. . *4*. . *2*	. . 1	w	
3626	258,262,279		6.3	20*1*	—	. . *2*. . F F *5*. . F. . .	. . .	*o*	
3627	240,255,279	193,*506*,623	5.6	010	5*33*	. . 1. . 220. . 1. . 0	. . .	*y*	dc
3628	255,258,279	*200,506,620*	6.3	30*2*	212	. . . . . *555*. . *23*. 0	. . *4*	.	p
3629	249,258,270	*189,693*,615	5.8	1*11*	412	. . *1*. 1020. . *1*. . 1	. . .	*y*	d
3630	240,255,279	*193,506,623*	6.1	000	*511*	. . *3*. . F *32*. . R. . *2*	. . .	*y*	dc
3631	219,221,223,225,228,230,232	121,201,202	1.5	1226120-	*254*-	6512. 002. . *1*. 41	*313*	W	e
3632	221,252,282,293	*200,506*,620	5.5	*4411*	422	. . . . . 313. . 2. . 3	. . 2	w	
3633	219,249,261	*194,506,623*	5.9	*113*	301	. . . . . *111*. . F. . 1	. . .	.	
3634	232,264,244	*189,693*,615	6.5	*111*	01F	. . . . . *778*. . F. . *1*	. . .	.	
3635	228,235,262,535,540,545	159,410,614	4.6	101112	*213*	*8* b *3*. . *553*. *22*. *61*	*.2*.	w	
3636	223,235,279	506,506,602	5.4	0*32*	111	. . *2*. . 022. . 3. . 1	. . 4	w	
3637	232,244,264	*189*,693,615	6.2	*131*	32F	. . . . . *440*. . F. . 2	. . .	.	
3638	228,249,264,539,541,548		4.3	30*1113*	—	1 *11*. . 11. 10 *3*. *1*.	. . .	.	
3639	221,255,270		5.8	*221*	—	. . *9*. . 00. 20 *1*. . .	. . .	*y*	
3640	223,230,282	190,693,615	5.1	1*20*	3*30*	. . 1. . 315. . 6. 30	. . .	*o*	
3641	219,249,261	*194,506,623*	6.2	0*32*	0*30*	. . . . . *442*. . F. . *1*	. . .	w	
3642	221,252,282	*191,506*,620	6.7	*201*	*22F*	. . . . . *994*. . F. . *2*	. . 3	o	
3643	223,258,282	189,408,615	4.3	11*1*	*112*	. 60. 1110. . 1. 20	.0.	.	dv
3644	230,261,262,293	*194,506,619*	6.3	4210	*111*	. . . . . F *25*. . F *3*. 0	. . .	.	t
3645	228,235,262,540,541,545	159,410,614	*5.6*	011010	*622*	*462*. *4* *2* *815*. . . b. *73*	*33*.	y	d
3646			*4.6*						d
3647	235,244,273,539,541,548		3.8	1*11*00	—	*504*. . *11*. . 1 *3*. 0.	1. .	W	
3648	240,261,270,540,541,548	189,406,615	2.7	021024	*121*	6500. 011. . 3. 0 *1*	2 *1*.	Y	te
3649	223,258,270,539,541,548		4.6	*105413*	—	. . 5. . *22*. . 12. 0.	. . .	O	t
3650	225,230,232,240,261,262,270	149,196,200	5.5	4011320-	*340*	. . 0. . *111*. . 2. . *1*	. . .	W	s

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
3651	Delphinus .	13	7206	+ 5° 4613	41.9	+ 5 34	6	6·5	5.5	5.8	6	5.53	.07	5.6	.28
3652	Capricornus	—	7205	—	42.2	−26 13	F	6	—	6.1	3	5.73	.12	—	—
3653	Cepheus .	—	7215	+57° 2240	42.4	+57 9	5·4	5	4.5	—	6	4.56	.08	4.4	.04
3654	Cygnus . .	T	—	+33° 4028	42.4	+33 56	F	var.	6.0	—	3	5.20	.13	5.1	.08
3655	Cygnus . .	λ 54	7213	+35° 4267	42.7	+36 3	5·4	5·4	4.7	—	6	4.57	.03	4.9	.12
3656	Cepheus .	η 3	7220	+61° 2050	42.8	+61 22	4·3	4·3	3.7	—	13	3.59	.03	3.8	.08
3657	Cygnus . .	—	—	+47° 3188	43.9	+47 23	F	6·7	5.5	—	3	5.54	.15	6.3	.05
3658	Delphinus .	15	7223	+12° 4472	43.9	+12 7	6	6	5.5	6.4	3	6.20	.09	5.8	.04
3659	Delphinus .	14	7222	+ 7° 4556	43.9	+ 7 25	6	6	5.5	6.4	6	6.14	.05	6.3	.25
3660	Cygnus . .	—	—	+51° 2954	44.3	+51 58	F	6·7	6.0	—	3	6.40	.03	6.5	.07
3661	Capricornus	ω 18	7227	—	44.7	−27 22	4·5	4·5	—	4.1	3	4.43	.11	—	—
3662	Cygnus . .	55	7233	+45° 3291	44.9	+45 40	6·5	6·5	5.6	—	3	5.00	.09	5.6	.13
3663	Cygnus . .	—	—	+51° 2957	45.1	+51 28	F	6·7	6.0	—	3	6.37	.04	6.6	.12
3664	Aquarius .	5	7236	—	45.8	− 5 57	5	5·6	—	5.8	6	5.52	.04	—	—
3665	Cygnus . .	56	7241	+43° 3639	45.9	+43 36	5·6	6·5	5.5	—	3	5.00	.15	5.5	.03
3666	Aquarius .	μ 6	7239	—	46.2	− 9 26	5·4	5·4	—	5.0	6	4.77	.06	—	—
3667	Vulpecula .	—	—	+27° 3890	46.4	+27 48	F	6	6.1	—	3	6.13	.07	5.9	.12
3668	Vulpecula .	31	7246	+26° 4017	47.0	+26 38	5	5	5.0	—	3	4.73	.05	5.0	.08
3669	Delphinus .	—	—	+17° 4438	47.0	+17 34	F	6·7	6.0	—	3	6.71	.03	6.5	.16
3670	Cepheus .	—	—	+63° 1663	47.1	+63 36	6	6	6.5	—	3	6.38	.11	6.1	.09
3671	Aquarius .	—	7247	—	47.6	− 7 20	6	6·7	—	6.7	3	6.56	.07	—	—
3672	Capricornus	19	7249	—	48.0	−18 22	6	6	—	6.1	6	6.03	.08	—	—
3673	Cygnus . .	57	7253	+43° 3755	49.0	+43 56	5·6	5·6	5.4	—	4	4.59	.04	5.1	.12
3674	Cygnus . .	—	—	+32° 3980	49.0	+32 59	F	6·7	6.0	—	3	5.77	.04	6.1	—
3675	Cygnus . .	—	7254	+44° 3617	49.1	+44 44	6	6	6.2	—	3	5.60	.05	6.0	.09
3676	Vulpecula .	32	7256	+27° 3911	49.4	+27 36	5·6	5·6	5.3	—	6	5.11	.07	5.3	.07
3677	Equuleus .	—	7255	+ 3° 4461	49.7	+ 4 4	6	6·5	5.7	6.2	3	5.90	.12	6.2	.07
3678	Capricornus	—	7252	—	49.7	−26 45	F	6	—	6.1	3	5.92	.00	—	—
3679	Delphinus .	17	7258	+13° 4572	49.9	+13 16	6·5	6·5	5.6	5.6	3	5.43	.04	5.2	.15
3680	Delphinus .	16	7257	+12° 4501	49.9	+12 7	6·5	6·5	5.7	5.9	3	5.43	.04	5.3	.13
3681	Aquarius .	7	7261	—	50.4	−10 9	5	6·5	—	5.9	6	5.69	.07	—	—
3682	Capricornus	—	7263	—	51.0	−16 29	6	6	—	5.9	3	6.01	.09	—	—
3683	Draco . .	76	7291	+81° 718	51.2	+82 5	6	6	6.0	—	6	5.65	.03	5.6	.04
3684	Cygnus . .	—	7268	+46° 3111	51.8	+46 58	6	6·7	6.0	—	3	5.84	.03	5.9	.09
3685	Capricornus	—	—	—	52.1	−14 56	F	6	—	6.1	3	5.96	.12	—	—
3686	Cygnus . .	—	7278	+50° 3233	52.6	+50 16	F	6	5.5	—	4	5.87	.12	5.7	.03
3687	Cygnus . .	ν 58	7277	+40° 4364	52.7	+40 42	4	4	4.0	—	6	4.09	.02	4.3	.09
3688	Delphinus .	18	7271	+10° 4425	52.7	+10 24	6·5	6·5	5.2	5.8	4	5.61	.11	5.1	.11
3689	Capricornus	20	7270	—	52.8	−19 30	F	6	—	6.3	3	6.22	.07	—	—
3690	Vulpecula .	33	7275	+21° 4424	52.9	+21 52	6·5	6·5	5.1	—	3	5.75	.12	5.5	.04
3691	Draco . .	—	7299	+80° 672	53.0	+80 6	6	6	5.3	—	6	5.45	.04	5.6	.03
3692	Cepheus .	—	—	+56° 2515	53.1	+56 26	F	F	6.0	—	3	6.09	.05	—	—
3693	Equuleus .	1	7276	+ 3° 4473	53.1	+ 3 50	5	5	5.5	5.6	3	5.37	.05	5.2	.11
3694	Cygnus . .	—	7290	+43° 3777	54.0	+44 0	6	6·5	6.0	—	3	5.94	.13	5.7	.09
3695	Equuleus .	—	7285	+ 6° 4718	54.2	+ 7 3	F	F	6.5	6.0	3	6.14	.15	—	—
3696	Delphinus .	—	—	+16° 4425	54.3	+16 22	6	6	6.2	—	3	6.64	.04	6.3	.23
3697	Aquarius .	11	7284	—	54.3	− 5 11	6	6	—	6.2	6	6.33	.06	—	—
3698	Cygnus . .	—	7294	+49° 3426	54.6	+50 0	6	6·5	5.5	—	3	5.47	.08	5.6	.00
3699	Capricornus	—	7287	—	54.6	−27 21	F	6	—	6.2	3	5.90	.04	—	—
3700	Delphinus .	—	—	+18° 4675	55.0	+18 52	6	6	5.9	—	3	6.08	.05	5.9	.21

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
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3653	230,261,262,539,541,548	194,507,602	4.6	132213	*123*	. . . . . 041. . 7. . *2*	. . .	.	
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3656	219,228,239,247,249,252,258	145,196,200	3.6	0122020-	537	. . 1. . 113. . 4. 32	11.	*y*	se
3657	221,252,282	*191,506,620*	5.5	412	797	. . . . . F 61. . F 4. 8	. . 2	.	s
3658	235,252,293	*159,696*,614	6.2	*221*	*534*	. . 4. . 448. 0 F. . 4	. . .	.	
3659	240,244,262,696,698,699	159,*411,614*	6.1	101321	447	. . 2. . 337. 14. . 2	. . .	w	v
3660	219,232,249	*191,506,619*	6.4	100	112	. . . . . F 36. . F. . 1	. . .	.	
3661	228,249,264		4.4	320	—	021. . 00. 020. 3.	. . .	.	t
3662	223,230,261	*191*,506,620	5.0	122	944	. . 2. . 465. . 3. . 6	. . 1	*y*	
3663	219,247,262	*191,506*,619	6.4	110	105	. . . . . F 36. . F 3. 2	. . .	.	p
3664	223,255,264,696,698,699		5.5	110221	—	. . 5. . 53. . 12. 1.	. . .	*y*	vg
3665	225,240,262	191,506,620	5.0	304	554	. . 1. . 264. . 1. . 5	. . 2	W	
3666	232,262,264,535,540,548		4.8	112311	—	422. . 22. . 04. 0.	. . .	*y*	
3667	228,235,270	190,*693,615*	6.1	021	314	. . . . . F 32. . 0. . 2	. . .	.	
3668	228,235,270	190,693,615	4.7	111	351	. . 1. . 333. . 6. 53	. . .	*y*	
3669	249,255,264	*190,696,614*	6.7	001	262	. . . . . F 69. . b 0. 2	. . .	.	
3670	232,247,261	*194,506,623*	6.4	131	215	. . . . . 661. . F. . 3	. . .	.	
3671	223,255,264		6.6	021	—	. . . . . 85. . 19. . .	. . .	.	
3672	232,264,282,535,540,548		6.0	022504	—	. . 9. . 22. . 11. . .	. . .	*y*	
3673	225,225,240,262	191,506,602	4.6	0111	276	. . 2. . 667. . 3. . 5	. . 4	W	
3674	223,230,282	*189,696,615*	5.8	011	241	. . . . . F 30. . F 103	. . .	.	te
3675	240,244,262	*191,506,620*	5.6	111	362	. . . . . 224. . 5. . 4	. . 1	*y*	
3676	228,235,270,535,540,550	190,411,615	5.1	132104	320	. . 1. . 111. . 6. 32	. . .	*o*	v
3677	232,244,261	*159,411,614*	5.9	132	352	. . . . 1133. 12. . 3	. . .	*y*	d
3678	219,230,279		5.9	000	—	. . . . . F 1. 102. . .	. . .	.	
3679	225,230,262	*159*,410,614	5.4	110	252	. . 2. . 021. 15. . 2	. . .	Y	
3680	225,230,262	*159*,410,614	5.4	110	242	. . 1. . 022. 35. . 1	. . .	w	
3681	240,249,282,696,698,699		5.7	114401	—	. 43. . 71. . 08. 2.	. . .	o	vg
3682	235,247,279		6.0	122	—	. . . . . 22. . 33. . .	. . .	.	
3683	223,255,264,535,539,550	*193,506*,623	5.6	012110	021	. . 6. . 222. . 5. . 0	. . .	w	
3684	244,252,282	*191,506,620*	5.8	010	013	. . . . . 030. . 3. . 1	. . 1	*y*	
3685	244,249,282		6.0	213	—	. . . . . F 2. . 13. . .	. . .	.	
3686	239,247,247,279	*191,506,619*	5.9	5212	322	. . . . . F 15. . 2. . 2	. . .	*y*	p
3687	239,261,273,535,539,550	191,506,602	4.1	110010	014	311. . 000. . 3. 12	. 11	W	
3688	239,255,273,294	159,410,614	5.6	5301	752	. . 2. . 204. 03. . 5	. . .	*y*	
3689	244,249,282		6.2	012	—	. . 8. . F 4. . 11. . .	. . .	*y*	
3690	239,247,270	190,411,615	5.8	132	423	. . 4. . 427. . 9. . 3	. . .	Y	
3691	244,252,264,535,539,550	*193,506*,623	5.4	202201	212	. . . . . 442. . 7. . 2	. . .	*y*	n
3692	225,244,255		6.1	111	—	. . . . . F F 3. . 0. . .	. . .	.	
3693	232,264,273	159,411,614	5.4	111	502	. . 3. 4440. 1 b. 32	. . .	*y*	
3694	247,252,264	*191*,507,*620*	5.9	313	041	. . . . . 131. . F. . 2	. . 3	Y	
3695	239,249,261		6.1	214	—	. . . . . F F 2. 3 F. . .	. . .	.	ge
3696	255,264,282	190,*410*,614	6.6	101	833	. . . . . 886. . 9. . 3	. . .	.	
3697	219,261,284,539,556,559		6.3	140310	—	. . 3. . 55. . 36. . .	. . .	*y*	p
3698	253,262,282	*191*,506,*619*	5.5	112	111	. . . . . 311. . 2. . 1	. . 2	w	
3699	239,255,282		5.9	110	—	. . . . . F 1. 112. . .	. . .	.	
3700	225,255,284	190,*411,614*	6.1	111	733	. . . . . 334. . 81. 2	. . .	.	t

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
3701	Cygnus . .	f¹ 59	7301	+46° 3133	55.7	+47 3	5·6	5·6	5.3	—	3	4.57	.12	4.8	.13
3702	Cepheus .	—	7311	+75° 764	56.2	+75 27	F	6	6.0	—	3	6.29	.09	6.0	.07
3703	Equuleus .	2	7302	+ 6° 4731	56.3	+ 6 43	6	6	6.7	6.9	3	6.58	.11	6.3	.05
3704	Cepheus .	—	7310	+58° 2201	56.6	+58 58	6	6	5.6	—	3	5.83	.19	5.7	.08
3705	Cygnus . .	60	7306	+45° 3364	57.0	+45 41	6	5·6	5.7	—	7	5.18	.07	5.3	.19
3706	Capricornus	η 22	7305	—	57.6	−20 20	5·6	5·6	—	5.1	3	5.17	.08	—	—
3707	Aquarius .	12	7309	—	57.7	− 6 18	5·6	5·6	—	5.7	3	5.81	.15	—	—
3708	Cygnus . .	—	7320	+38° 4325	58.4	+38 11	F	6·7	6.0	—	3	6.24	.03	6.2	.04
3709	Equuleus .	3	7318	+ 4° 4606	58.6	+ 5 1	6	6	5.5	5.7	3	5.91	.12	5.8	.23
3710	Equuleus .	—	—	+ 1° 4418	58.7	+ 1 49	6	6	7.0	6.5	3	6.46	.05	6.5	.15
3711	Cepheus .	—	—	+56° 2524	58.9	+56 11	6	6	5.8	—	9	5.89	.12	5.7	.04
3712	Capricornus	θ 23	7322	—	59.2	−17 43	4	4	—	4.1	6	4.29	.08	—	—
3713	Equuleus .	4	7324	+ 5° 4697	59.5	+ 5 30	6	6	6.2	6.0	3	6.18	.05	6.4	—
3714	Cygnus . .	—	7332	+52° 2859	0.1	+52 49	F	6	5.5	—	3	6.24	.13	5.8	.08
3715	Capricornus	A 24	7328	—	0.1	−25 29	5	5	—	4.8	3	4.63	.19	—	—
3716	Cygnus . .	ξ 62	7333	+43° 3800	0.6	+43 27	4	4	4.0	—	7	3.73	.06	4.3	.12
3717	Cygnus . .	61	7336	+38° 4343	1.5	+38 10	5·6	5	5.0	—	7	5.11	.05	5.1	.13
3718	Cygnus . .	—	7337	+38° 4344	1.5	+38 10			5.3	—					
3719	Cygnus . .	—	—	+30° 4318	1.5	+30 42	6	6	5.6	—	3	5.99	.07	5.6	.23
3720	Capricornus	χ 25	7335	—	1.7	−21 40	6	6·5	—	5.4	3	5.28	.05	—	—
3721	Cygnus . .	f² 63	7345	+47° 3292	2.5	+47 10	5·6	5·6	4.6	—	3	5.07	.08	4.7	.11
3722	Capricornus	27	7343	—	2.7	−21 2	F	6	—	6.5	3	6.16	.04	—	—
3723	Aquarius .	ν 13	7344	—	3.1	−11 51	4·5	4·5	—	4.7	7	4.63	.07	—	—
3724	Cygnus . .	—	—	+29° 4324	3.6	+29 43	6	6	6.1	—	3	5.49	.03	5.5	.12
3725	Aquarius .	—	—	—	4.2	− 9 51	6	6	—	6.5	3	6.61	.00	—	—
3726	Equuleus .	γ 5	7350	+ 9° 4732	4.5	+ 9 39	5·4	5·4	4.0	4.4	3	4.79	.03	4.6	.16
3727	Equuleus .	6	7351	+ 9° 4735	4.7	+ 9 34	F	F	6.2	6.2	3	5.89	.03	—	—
3728	Cepheus .	—	7363	+70° 1164	5.6	+70 57	6	6	6.0	—	3	5.97	.09	5.8	.09
3729	Piscis Austr.	3	7357	—	6.2	−28 6	F	F	—	5.8	3	5.74	.07	—	—
3730	Cygnus . .	—	7365	+52° 2880	6.5	+53 4	6	6	5.5	—	3	5.74	.15	5.7	.08
3731	Cepheus .	—	—	+62° 1903	6.9	+62 48	6	6·7	7.0	—	4	6.43	.09	6.4	.04
3732	Cygnus . .	ζ 64	7368	+29° 4348	7.8	+29 44	3	3	3.0	—	6	3.48	.09	3.7	.07
3733	Cepheus .	77	7381	+77° 800	7.9	+77 38	6	6·5	6.1	—	6	5.78	.06	5.9	.13
3734	Capricornus	—	—	—	8.4	−17 50	6	6·7	—	6.4	3	6.39	.03	—	—
3735	Equuleus .	δ 7	7372	+ 9° 4746	8.7	+ 9 31	5·4	5·4	4.7	4.4	8	4.60	.07	4.5	.21
3736	Cepheus .	—	7377	+59° 2334	8.7	+59 30	6·5	6	6.0	—	6	5.54	.04	5.6	.00
3737	Capricornus	φ 28	7371	—	8.8	−21 9	5·6	6·5	—	5.5	3	5.26	.12	—	—
3738	Capricornus	29	7374	—	9.1	−15 40	6	6	—	5.7	6	5.47	.06	—	—
3739	Equuleus .	α 8	7380	+ 4° 4635	9.8	+ 4 45	4	4	4.5	4.2	7	4.11	.06	3.8	.09
3740	Aquarius .	14	7379	—	9.8	− 9 43	6	6	—	6.6	3	6.91	.16	—	—
3741	Cygnus . .	τ 65	7385	+37° 4240	10.0	+37 32	4	4	4.0	—	6	3.94	.03	4.4	.11
3742	Piscis Austr.	4	7386	—	10.6	−32 40	5	5	—	4.9	3	4.78	.15	—	—
3743	Capricornus	30	7390	—	11.2	−18 29	6	6	—	5.5	3	5.41	.12	—	—
3744	Aquarius .	15	7394	—	11.9	− 5 2	6	6	—	5.8	3	5.82	.11	—	—
3745	Cygnus . .	σ 67	7398	+38° 4431	12.7	+38 53	4·5	4·5	4.5	—	6	4.32	.04	4.9	.12
3746	Cygnus . .	—	—	+42° 4046	12.8	+42 11	6	6	6.4	—	3	6.04	.07	6.2	.23
3747	Cygnus . .	υ 66	7399	+34° 4371	13.0	+34 24	4·5	4·5	4.2	—	3	4.44	.15	4.6	—
3748	Cygnus . .	—	—	+53° 2588	13.3	+53 30	F	F	5.8	—	3	6.00	.03	—	—
3749	Cepheus .	—	7401	+55° 2549	13.7	+55 17	F	F	6.0	—	3	6.19	.11	—	—
3750	Cygnus . .	A 68	7402	+43° 3877	14.1	+43 26	5	5	5.3	—	4	5.05	.09	4.9	.31

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3701	239,259,279	191,506,602	4.6	132	144	. . 5 . 4666 . . 3 . 22	. . 8	y	d
3702	235,247,279	194,506,686	6.3	122	314	. . . . . F55 . . F . . 3	. . .	y	n
3703	239,249,261	181,411,614	6.6	302	422	. . 2 . . 881 . 19 . 83	. . .	y	dgc
3704	239,255,264	195,506,619	5.8	522	311	. . . . . 003 . . 3 . . 1	. . .	o	n
3705	239,253,270,294,535,539,550	191,506,602	5.2	2421033	433	. . 4 . . 604 . . 5 . . 1	. . 4	w	
3706	228,247,264		5.2	211	—	222 . . 00 . 233 . 3 .	. . .	w	t
3707	219,261,284		5.8	214	—	. . 3 . 266 . . 41 . 4 .	. . .	y	d
3708	240,262,282	202,507,698	6.2	010	011	. . . . . F14 . . 1 . . 0	. . .	y	
3709	219,240,270	159,411,614	5.9	132	741	. . 2 . . 115 . 52 . . 1	. . .	Y	t
3710	230,255,284	159,411,614	6.5	111	304	. . . . . 773 . 28 . . 0	. . .	.	e
3711	247,259,279,294,535,539,550	195,506,619	5.9	6712263-	312	. . . . 3113 . . 2 . . 2	. . .	w	d
3712	228,259,264,535,539,550		4.3	203322	—	114 . . 22 . . 13 . 2 .	. . .	W	
3713	219,240,270	159,411,614	6.2	111	b14	. . 0 . . 442 . 41 . . 2	. . .	y	e
3714	219,255,264	191,506,619	6.2	232	624	. . . . . F48 . . F . . 4	. . .	y	
3715	230,253,279		4.6	450	—	216 . . 44 . 113 . 0 .	. . .	.	t
3716	235,259,284,298,542,544,550	191,507,602	3.7	3610102	639	153 . . 444 . . 3 . 46	. 04	Y	t
3717	240,259,262,282,540,542,550	202,507,698	5.5	1214111	133	. . 3 . 1 . 5 . . 2 . 00	. . .	o	d
3718			6.3			. . . 4 11 b . . .	. . .	o	d
3719	219,230,270	189,411,615	6.0	210	267	. . . . . 225 . . F3 . 4	. . .	.	
3720	235,256,279		5.3	111	—	303 . . 53 . 224 . 2 .	. . .	y	
3721	240,261,267	191,506,602	5.1	220	641	. . 2 . . 115 . . 2 . . 4	. . 5	Y	vg
3722	235,256,279		6.2	011	—	. . R . . F4 . F1F . . .	. . .	y	h
3723	240,253,284,293,540,544,550		4.6	3511221	—	b32 . . 22 . . 06 . 0 .	. . .	y	a
3724	219,230,270	189,411,615	5.5	100	312	. . . . 3334 . . 2 . . 0	. . .	w	d
3725	228,235,267		6.6	000	—	. . . . . 88 . . 3F . . .	. . .	.	g
3726	240,259,270	159,411,614	4.8	100	424	. 223222 7 . 44 . 42	. 4 .	y	da
3727	540,544,550		5.9	001	—	. . 7 . 1FF1 . 1F . . .	. . .	w	d
3728	225,256,284	194,506,686	6.0	221	403	. . . . . 222 . . 3 . . 2	. . .	y	n
3729	230,256,279		5.7	012	—	. . . . . FF . 310 . . .	. . .	.	
3730	235,253,270	191,506,619	5.7	124	121	. . . . . 113 . . 0 . . 0	. . .	y	
3731	225,284,293,295	195,506,686	6.4	2122	110	. . . . . 634 . . F . . 0	. . .	.	
3732	235,261,267,540,542,550	189,406,615	3.5	332052	214	233 . . 333 . . 5 . 12	01 .	y	
3733	240,261,267,540,542,550	194,506,686	5.8	031204	242	. . 2 . . 021 . . 1 . . 1	. . .	w	n
3734	230,253,270		6.4	100	—	. . . . . 63 . . 2F . . .	. . .	Y	
3735	247,259,279,293,295,540,544	159,411,614	4.6	3631101-	642	. 42 . 1001 . 22 . 21	. 2 .	.	da
3736	240,256,284,544,546,550	195,506,619	5.5	112012	111	. . . . 3133 . . 6 . . 1	. . .	w	d
3737	240,250,279		5.3	330	—	301 . . 13 . 210 . 1 .	. . .	Y	t
3738	235,250,279,698,699,700		5.5	013311	—	. . 7 . . 33 . . 12 . 1 .	. . .	O	vt
3739	235,261,267,293,544,546,550	159,411,614	4.1	2610103	521	. 11 . . 004 . 11 . 13	. . .	y	a
3740	247,256,284		6.9	224	—	. . 1 . . bb . . 5F . . .	. . .	.	d
3741	235,262,267,540,544,550	202,507,698	3.9	110110	725	111 . . 222 . . 1 . 15	. 11	y	
3742	230,256,284		4.8	421	—	. . . . . 22 . 114 . 1 .	. . .	.	
3743	230,253,270		5.4	231	—	. . 3 . . 44 . . 25 . 2 .	. . .	y	
3744	235,259,279		5.8	311	—	. . 0 . . 00 . . 2F . . .	. . .	y	
3745	230,261,267,540,544,550	202,507,698	4.3	022201	945	511 . . 112 . . 1 . 06	. 31	y	
3746	225,250,284	191,506,620	6.0	120	436	. . . . . 222 . . F . . 2	. . 3	.	n
3747	239,261,267	202,507,698	4.4	034	004	. 22 . . 001 . . 0 . 12	. . .	W	e
3748	235,253,270		6.0	001	—	. . . . . FF4 . . F1 . .	. . .	.	
3749	225,256,284		6.2	230	—	. . . . . FF4 . . F . . .	. . .	y	
3750	240,253,270,293	191,506,602	5.0	1132	923	. . 2 . . 002 . . 7 . 21	. . 3	W	n

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3751	Pegasus .	—	—	+21° 4521	14.8	+21 32	6	6	6.0	—	3	5.98	.09	5.9	.17
3752	Aquarius .	16	7404	—	14.8	− 5 4	6	6	—	6.1	6	5.88	.08	—	—
3753	Equuleus .	9	7405	+ 6° 4802	15.1	+ 6 52	6	6	6.0	6.1	3	6.01	.04	6.1	.15
3754	Cygnus . .	—	7411	+48° 3345	15.4	+49 0	5·6	6·5	5.4	—	3	5.44	.11	5.6	.12
3755	Pegasus .	*34*	7410	+23° 4294	15.6	+23 22	6	6	5.9	—	3	5.79	.03	5.9	.21
3756	Capricornus	ι 32	7407	—	15.6	−17 21	4·5	4·5	—	4.4	3	4.35	.11	—	—
3757	Cepheus .	α 5	7416	+61° 2111	15.7	+62 5	3·2	3·2	3.0	—	14	2.58	.04	2.5	.07
3758	Cepheus .	—	7417	+58° 2249	15.9	+58 7	6	6	5.6	—	3	5.69	.11	6.0	.09
3759	Capricornus	—	7413	—	16.1	−23 11	6	6	—	6.0	3	5.82	.04	—	—
3760	Cygnus . .	—	—	+32° 4134	16.3	+32 6	6	6	6.0	—	3	6.10	.13	6.1	.12
3761	Pegasus .	1	7418	+19° 4691	16.5	+19 17	4·5	4·5	4.4	—	6	4.28	.03	4.4	.24
3762	Aquarius .	17	7415	—	16.5	− 9 50	6	6	—	6.2	3	6.38	.11	—	—
3763	Equuleus .	—	—	+ 2° 4348	16.6	+ 2 25	6	6	7.2	6.6	3	6.52	.07	6.2	.19
3764	Cepheus .	6	7428	+64° 1527	16.9	+64 22	6	5·6	5.5	—	3	5.28	.07	5.0	.12
3765	Equuleus .	β 10	7421	+ 6° 4811	16.9	+ 6 18	·5	5	5.1	5.5	3	4.94	.09	5.1	.11
3766	Cepheus .	—	7438	+76° 833	17.0	+76 31	F	6	6.0	—	3	6.19	.07	6.0	.07
3767	Capricornus	33	7425	—	17.3	−21 21	5·6	6·5	—	5.7	3	5.59	.11	—	—
3768	Cepheus .	—	—	+60° 2224	17.3	+60 11	6	6	6.5	—	3	6.76	.04	6.0	.16
3769	Cepheus .	—	7430	+60° 2227	17.5	+60 15			6.8	—	—	—	—		
3770	Aquarius .	18	7427	—	17.6	−13 23	6	6	—	5.7	3	5.38	.08	—	—
3771	Cygnus . .	—	7431	+48° 3357	17.9	+48 52	6·5	6	5.5	—	3	5.77	.08	5.7	.09
3772	Equuleus .	—	—	+ 9° 4800	18.5	+ 9 39	6	6	6.5	6.4	3	6.39	.05	6.6	.11
3773	Pegasus .	—	7437	+23° 4300	18.6	+23 46	6	6	5.8	—	3	5.56	.08	5.8	.13
3774	Cygnus . .	—	—	+36° 4537	18.5	+36 53	F	6·7	6.3	—	—	—	—	5.9	.24
3775	Cygnus . .	—	—	+36° 4543	18.9	+36 50			6.0	—	3	6.54	.07		
3776	Aquarius .	19	7435	—	18.7	−10 15	6·5	6·5	—	5.8	3	5.74	.05	—	—
3777	Aquarius .	21	7440	—	19.0	− 4 4	6	6	—	5.7	7	5.76	.08	—	—
3778	Vulpecula .	—	7444	+25° 4531	19.3	+25 41	6	6	5.0	—	3	5.76	.08	5.9	.07
3779	Capricornus	ζ 34	7445	—	19.8	−22 56	4	4	—	3.7	6	3.79	.04	—	—
3780	Capricornus	35	7447	—	20.4	−21 43	F	F	—	6.2	5	6.03	.04	—	—
3781	Cygnus . .	—	7455	+46° 3305	20.9	+46 12	6	6	6.0	—	3	5.47	.04	5.7	.08
3782	Cygnus . .	69	7453	+36° 4557	20.9	+36 9	6	6	6.0	—	3	5.77	.08	6.0	.21
3783	Capricornus	b 36	7460	—	21.9	−22 20	5·4	5·4	—	4.7	3	4.46	.09	—	—
3784	Cygnus . .	70	7462	+36° 4568	22.4	+36 36	6·5	5	5.0	—	3	5.10	.13	5.4	.11
3785	Vulpecula .	35	7461	+26° 4164	22.4	+27 5	6·5	6·5	5.4	—	3	5.36	.00	5.6	.07
3786	Cygnus . .	—	—	+48° 3390	22.6	+48 19	5	5·6	5.5	—	3	5.30	.09	5.3	.17
3787	Cygnus . .	—	7468	+52° 2939	22.8	+52 22	F	6	5.8	—	4	5.67	.10	5.9	.03
3788	Cygnus . .	—	7465	+31° 4402	23.1	+31 42	6	6	5.8	—	3	5.74	.03	5.9	—
3789	Cepheus .	—	7504	+86° 319	23.3	+86 32	F	F	7.0	—	6	7.35	.04	—	—
3790	Pegasus .	—	—	+21° 4555	23.5	+21 40	F	6	5.5	—	3	6.25	.04	6.0	.15
3791	Pegasus .	—	—	+11° 4577	24.2	+11 37	neb.	neb.	neb.	—	3	7.26	.19	6.5	.04
3792	Pegasus .	2	7474	+23° 4325	24.5	+23 6	5	5·4	4.5	—	3	4.76	.12	4.9	.03
3793	Cygnus . .	g 71	7480	+45° 3558	25.0	+46 1	5	5	5.4	—	6	5.29	.02	5.2	.17
3794	Pegasus .	—	—	+11° 4583	25.3	+11 37	6	6	6.0	—	3	5.86	.15	6.1	.17
3795	Aquarius .	β 22	7478	—	25.2	− 6 6	3	3	—	2.6	10	3.14	.03	—	—
3796	Cepheus .	7	7482	+66° 1405	25.6	+66 17	6	6·5	5.5	—	3	5.38	.03	5.5	.04
3797	Cygnus . .	—	7483	+52° 2957	26.3	+52 26	6	6	6.3	—	8	5.87	.07	5.8	.05
3798	Cepheus .	β 8	7493	+69° 1173	27.1	+70 2	3	3	3.0	—	14	3.39	.03	3.3	.09
3799	Cygnus . .	—	—	+47° 3449	27.4	+48 4	cum.	cum.	6.3	—	3	6.77	.08	cum.	—
3800	Cygnus . .	—	7489	+51° 3079	27.5	+52 6	F	6	6.5	—	7	6.22	.04	6.3	.05

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3751	235,250,279	*190,411*,615	6.0	212	*433*	. . . . . *222* . . *37* . *1*	. . .	.	dc
3752	235,259,279,540,546,550		5.9	231222	—	. . 1 . . *11* . . 02 . . .	. . .	*y*	
3753	247,262,265	*167,413*,616	6.0	011	*314*	. . 7 . . *222* . *11* . . 1	. . .	o	
3754	239,261,265	*190,506,620*	5.4	131	510	. . . . . *221* . . 7 . . 2	. . 4	w	
3755	225,253,270	*190,411,615*	5.8	100	*262*	. . 4 . . 00*1* . . 3 . . 1	. . .	*o*	n
3756	247,256,284		4.4	*311*	—	0*2*2 . . 00 . . 0*4* . *1* .	. . .	*o*	t
3757	230,240,244,247,250,256,261	113,126,200	2.6	2212*421*-	*253*	7641 . 126 . . 4 . 5*1*	*10* .	W	s
3758	244,250,279	*195,506,619*	5.7	023	251	. . . . 0112 . . 4 . . 3	. . .	o	d
3759	239,253,284		5.8	011	—	. . . . . 00 . 203 . . .	. . .	o	
3760	247,259,279	*203,507,698*	6.1	232	*213*	. . . . . *333* . . *42* . 0	. . .	.	e
3761	247,262,265,540,546,550	190,411,615	4.3	020101	*731*	. . *1* . 5111 . . 1 . 01	. . .	Y	d
3762	235,262,267		6.4	*311*	—	. . *2* . . *66* . . *47* . . .	. . .	O	d
3763	239,253,284	*167*,461,*624*	6.5	*120*	*811*	. . . . . *775* . *14* . . *3*	. . .	.	de
3764	244,250,279	195,405,*686*	5.3	*210*	*603*	. . *2* . . 5*11* . . *4* . . *3*	. . .	w	
3765	244,250,262	*167*,413,615	4.9	*122*	33*1*	. 43 . . 112 . 30 . *12*	. . .	W	a
3766	239,256,279	*194,506,686*	6.2	*210*	*203*	. . . . . F*44* . . F . . *2*	. . .	*o*	n
3767	244,256,284		5.6	*212*	—	. . b . . *40* . *125* . *2* .	. . .	*o*	vth
3768	256,279,293	*195,506,618*	6.8	011	052	. . . . . *11* 5 . . F . . 1	. . .	.	dpc
3769			*6.5*			. . . . . 1 . . F . .	. . .	.	dpc
3770	239,250,284		5.4	*202*	—	. . *2* . . 44 . . 03 . . .	. . .	*y*	
3771	239,261,265	*190,506,620*	5.8	*112*	*132*	. . . . . *404* . . F . . *1*	. . 2	*y*	
3772	244,253,270	*167,413*,616	6.4	*111*	115	. . . . . *661* . *23* . . 2	. . .	.	
3773	239,250,284	*190*,411,*615*	5.6	*202*	050	. . . . . 220 . . *3* . . 2	. . .	*y*	n
3774		*202,507,698*	*6.7*		*713*	. . . . *1* 6	. . .	.	dpe
3775	235,261,267		6.5	012		. . . . 1 F 3 7 . . . . 3 . . 1	. . .	.	dpe
3776	235,262,267		5.7	*111*	—	. . 5 . . *31* . . *10* . . .	. . .	*y*	
3777	247,253,293,295,540,546,550		5.8	351310*3*	—	. . *1* . . 00 . . *41* . . .	. . .	O	d
3778	247,262,265	*190*,411,*615*	5.8	20*2*	21*1*	. . . . . 008 . . *1* . . 1	. . .	*y*	
3779	247,262,265,540,546,550		3.8	110*121*	—	672 . . 33 . 306 . 0 .	. . .	y	
3780	256,284,698,699,700		6.0	*21*200	—	. . R . . FF . F0F . . .	. . .	.	h
3781	235,253,262	*190,507,620*	5.5	011	402	. . . . . 333 . . 6 . . 2	. . 4	.	
3782	235,261,267	*202,507,698*	5.8	11*2*	731	. . *4* . . 000 . . *1* . . 2	. . .	w	
3783	247,262,265		4.5	*122*	—	514 . . 11 . 214 1 .	. . .	y	a
3784	235,261,267	*202,507,698*	5.1	33*1*	622	. . 3 . . 3*11* . . 6 . 13	. . .	W	
3785	247,262,265	*190*,411,615	5.4	000	230	. . *4* . . 02*1* . . 3 . . 2	. . .	w	
3786	235,250,268	190,502,*698*	5.3	221	325	. . . . . *311* . . *43* . 0	. . 2	.	
3787	239,259,268,293	190,*502,619*	5.7	*13*22	221	. . . . . F*11* . . F . . 2	. . .	*y*	
3788	247,256,276	*203,507,698*	5.7	00*1*	25*1*	. . . . . 11*1* . . 0 . . 2	. . .	*y*	e
3789	546,549,552,556,558,560		7.4	*112*300	—	. . . . . FF*6* . . F . . .	. . .	.	
3790	247,262,265	*190,411*,615	6.2	011	*324*	. . . . . F*48* . . *15* . *2*	. . .	.	t
3791	247,262,268	*167,413,624*	7.3	540	*8F9*	. . . . . NNN . . F . . *8*	. . .	.	e
3792	247,262,265	*190*,411,615	4.8	12*3*	211	. . 1 . . 6*23* . . 1 . *11*	. . .	*o*	t
3793	262,273,284,540,546,552	190,502,*698*	5.3	*100*101	305	. . *3* . . *330* . . 0 . *21*	. . 2	*y*	
3794	247,262,268	*167*,413,616	5.9	*340*	*216*	. . . . . *111* . . 22 . 2	. . .	.	
3795	250,262,273,540,544,546,549		3.1	4121010-	—	25*1* . . 11 . . *41* . *5* .	3*5* .	*y*	t
3796	235,262,273	*194*,405,618	5.4	001	201	. . 2 . . 420 . . 7 . . 1	. . .	w	
3797	239,259,268,293,295,540,546	*190,502,619*	5.9	0*81*2212-	00*2*	. . . . . *112* . . F . . *1*	. . .	w	
3798	235,239,244,250,253,259,262	120,196,200	3.4	*11121*b1-	244	**0**31*20222* . . *4* . 11	*30* .	W	ds
3799	253,262,273	190,502,699	6.8	20*2*	*6*Rb	. . . . . CC7 . . F . . R	. . .	.	e
3800	239,259,268,295,540,546,550	*190,502,619*	6.2	b*102022*	022	. . . . . F*41* . . *1* . . 1	. . .	*o*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3801	Cepheus .	—	7495	+59° 2395	27.7	+59 56	6	6·5	5.7	—	3	5.39	.15	5.7	—
3802	Capricornus	37	7490	—	28.3	−20 37	6	6	—	6.0	5	5.87	.12	—	—
3803	Cepheus .	—	7510	+79° 707	28.4	+80 1	F	6·7	6.0	—	3	6.03	.07	6.0	.07
3804	Cygnus . .	—	—	+49° 3553	28.7	+49 25	F	6	6.0	—	3	5.70	.07	5.8	.15
3805	Aquarius .	—	7499	—	29.0	− 4 31	6	6	—	6.2	3	5.75	.12	—	—
3806	Piscis Austr.	8	7500	—	29.2	−26 42	6·5	6·5	—	6.0	3	5.82	.16	—	—
3807	Cygnus . .	ϱ 73	7503	+44° 3865	29.5	+45 4	4·5	4	4.1	—	3	4.17	.00	4.4	.05
3808	Cygnus . .	72	7505	+37° 4359	29.9	+38 0	5	5·6	5.0	—	3	5.00	.09	5.1	.04
3809	Capricornus	ε 39	7506	—	30.4	−20 0	5·4	5·4	—	4.7	6	4.53	.04	—	—
3810	Aquarius .	—	7515	— 1° 4180	31.4	− 0 56	6	6	6.6	6.2	3	6.18	.04	—	—
3811	Aquarius .	ξ 23	7514	—	31.4	− 8 24	5·4	5	—	5.0	7	4.77	.06	—	—
3812	Pegasus .	3	7519	+ 5° 4830	31.7	+ 6 5	6	6	6.3	6.0	3	5.88	.09	5.6	.08
3813	Pegasus .	5	7520	+18° 4827	32.1	+18 47	F	6·5	5.8	—	3	5.25	.12	5.4	.11
3814	Cygnus . .	74	7521	+39° 4612	32.1	+39 52	5	5	5.0	—	6	5.14	.05	5.1	.04
3815	Pegasus .	4	7522	+ 5° 4834	32.5	+ 5 14	6·5	6	6.2	5.8	3	5.71	.00	5.5	.04
3816	Pegasus .	—	7528	+19° 4754	33.4	+19 44	F	6	6.0	—	3	5.78	.05	5.7	.03
3817	Aquarius .	d 25	7527	+ 1° 4517	33.5	+ 1 43	6·5	5·6	5.0	5.5	3	5.36	.05	5.2	.00
3818	Capricornus	γ 40	7525	—	33.4	−17 12	4·3	4·3	—	3.7	6	3.78	.03	—	—
3819	Cepheus .	9	7542	+61° 2169	34.7	+61 32	5·6	5·6	5.0	—	3	4.79	.02	4.9	.08
3820	Capricornus	42	7537	—	35.0	−14 35	5	6·5	—	5.6	3	5.29	.05	—	—
3821	Cepheus .	—	7545	+56° 2617	35.2	+56 57	6·5	6	6.2	—	8	5.54	.06	5.4	.09
3822	Capricornus	41	7539	—	35.2	−23 48	5·6	6·5	—	5.8	3	5.17	.07	—	—
3823	Cygnus . .	75	7544	+42° 4177	35.4	+42 44	6·5	6·5	5.2	—	3	5.30	.11	5.5	.07
3824	Capricornus	ϰ 43	7543	—	36.0	−19 24	5	5·6	—	5.0	3	4.72	.09	—	—
3825	Aquarius .	26	7546	+ 0° 4770	36.1	+ 0 45	6	6	5.8	6.0	3	5.82	.13	5.6	.03
3826	Pegasus .	7	7547	+ 5° 4850	36.3	+ 5 8	6·5	6·5	5.5	5.6	3	5.51	.16	5.4	.00
3827	Capricornus	—	7550	—	36.5	−20 10	6	6	—	6.3	3	6.25	.05	—	—
3828	Capricornus	44	7551	—	36.6	−14 57	F	F	—	6.1	3	5.76	.00	—	—
3829	Cepheus .	—	7555	+54° 2595	36.7	+54 20	F	F	6.0	—	3	6.23	.09	—	—
3830	Pegasus .	—	7553	+10° 4604	36.7	+10 16	6	6	6.3	6.1	3	5.95	.05	6.0	.13
3831	Capricornus	45	7556	—	37.4	−15 18	6	6	—	6.3	3	5.82	.05	—	—
3832	Cygnus . .	77	7559	+40° 4615	37.5	+40 32	F	F	5.9	—	3	5.34	.09	—	—
3833	Cygnus . .	π^1 80	7560	+50° 3410	37.8	+50 38	5·4	5·4	5.1	—	3	4.87	.08	4.8	.07
3834	Piscis Austr.	ι 9	7557	—	37.8	−33 34	5	5	—	4.4	5	4.23	.10	—	—
3835	Cygnus . .	—	7565	+40° 4623	38.3	+40 37	5·6	6·5	5.1	—	3	5.50	.11	5.9	.00
3836	Pegasus .	ε 8	7561	+ 9° 4891	38.3	+ 9 20	2·3	2·3	2.3	2.3	15	2.41	.02	2.8	.08
3837	Cygnus . .	79	7566	+37° 4408	38.5	+37 44	5·6	6·5	6.0	—	3	5.50	.07	5.3	.11
3838	Capricornus	c 46	7563	—	38.6	− 9 38	5·4	5	—	5.4	3	5.21	.08	—	—
3839	Pegasus .	—	—	+14° 4668	38.7	+14 14	F	6·5	6.5	—	3	6.07	.03	5.7	.04
3840	Cygnus . .		7568		38.8	+28 12									
3841	Cygnus . .	μ 78	7569	+28° 4169	38.8	+28 12	4·5	4·5	4.5	—	3	4.39	.07	4.8	.21
3842	Pegasus .	9	7567	+16° 4582	38.8	+16 48	5	4·5	4.0	4.8	3	4.44	.04	4.6	.13
3843	Pegasus .	ϰ 10	7571	+24° 4463	39.2	+25 6	4	4	4.1	—	6	4.21	.04	4.5	.25
3844	Capricornus	47	7573	—	39.9	− 9 50	6	6	—	6.4	3	6.21	.04	—	—
3845	Cepheus .	μ	7582	+58° 2316	40.0	+58 14	6·5	var.	var.	—	9	3.92	.05	4.5	.03
3846	Capricornus	λ 48	7577	—	40.1	−11 55	5·6	5·6	—	5.7	6	5.36	.09	—	—
3847	Cepheus .	11	7588	+70° 1193	40.2	+70 46	5	5	5.0	—	6	4.79	.03	4.7	.05
3848	Capricornus	δ 49	7580	—	40.4	−16 40	3	3	—	2.8	6	3.01	.03	—	—
3849	Pegasus .	12	7585	+22° 4472	40.6	+22 24	6·5	5·6	5.0	—	3	5.38	.11	5.2	.11
3850	Piscis Austr.	θ 10	7583	—	40.7	−31 27	5·4	5·4	—	5.2	3	5.05	.09	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3801	250,265,273	190,502,699	5.4	*3*04	b24	. . . . . 4 2 2 . . 7 . . 3	. . .	*y*	e
3802	235,256,276,293,295		5.9	16*322*	—	. . *6* . . *11*. 1 *12*. . .	. . .	.	dc
3803	239,253,279	*193,506,698*	6.0	0*12*	02*1*	. . . . . F 1 *2* . . 1 . . 0	. . .	w	
3804	250,265,273	*190,502,620*	5.7	0*12*	5*10*	. . . . . F 1 1 . . F 0 . 1	. . 4	.	
3805	235,259,279		5.8	*231*	—	. . . . . 0 0 . . 2 3 . . .	. . .	Y	
3806	250,256,276		5.8	*341*	—	. . 0 . . *4 2*. 2 0 *1*. . .	. . .	.	
3807	250,265,273	194,502,605	4.2	000	113	. . *2* . . *2* 1 0 . . *2* . 0 2	. *4* 0	*y*	
3808	250,265,273	195,503,*698*	5.0	*2*12	102	. . 1 . . 0 2 0 . . 7 . 2 1	. . .	*y*	
3809	1,235,256,540,546,550		4.5	*11*4100	—	*1 3 5* . . 1 1 . 2 1 4 . 1 .	. . .	*y*	d
3810	241,250,276		6.2	0*11*	—	. . . . *3 4 4* 2 . *2* F . *6* .	. . .	.	d
3811	241,259,276,293,540,549,556		4.8	1b01*142*	—	2 1 *4* . . *2 2* . . 0 1 . 0 .	. . .	W	
3812	235,265,286	191,*413*,616	5.9	*212*	*522*	. . *4* . *3 1 1* 2 . *1* 2 . *3 3*	. . .	*y*	
3813	250,259,268	*167*,413,624	5.2	1*32*	052	. . 4 . . F 4 4 . . 5 . . 2	. . .	*y*	
3814	1,259,284,540,549,556	195,503,*698*	5.1	12*3*10	01*1*	. . *1* . . *111* . . 2 . 1 0	. . 2	w	
3815	235,265,286	191,*413*,616	5.7	000	*321*	. . 1 . . *3* 1 3 . *1* 0 . . *2*	. . .	*y*	
3816	250,268,284	*167*,413,624	5.8	*1*11	*112*	. . . . . F 0 0 . . *1* . . *1*	. . .	*y*	
3817	235,256,276	191,413,615	5.4	*111*	*222*	*4* 2 1 . . 0 *2 4* . *2 1* . *2 2*	. . .	o	n
3818	1,235,284,544,546,550		3.8	*2*1000*2*	—	*5 2 4 1* . *11* . . 0 *3* . 0 .	. . .	Y	
3819	241,284,286	195,405,605	4.8	100	*122*	. . 2 . . 4 4 2 . . 5 . . 1	. . .	*y*	
3820	241,268,284		5.3	1*11*	—	*9 3 1* . . *3* 3 . . 0 0 . 0 .	. . .	*o*	
3821	1, 2,280,284,286,544,549	195,502,619	5.5	1*3*10*12*4-	10*3*	. . . . *2* 1 3 5 . . 6 . . *1*	. . .	w	d
3822	244,265,284		5.2	*2*01	—	. . 2 . . 0 4 . 3 4 1 . 2 .	. . .	o	
3823	247,274,284	*195*,503,698	5.3	30*2*	203	. . *3* . . 1 3 *1* . . 4 . . 2	. . *1*	Y	
3824	247,265,284		4.7	*2*12	—	*3 2* 3 . . 3 5 . . 1 6 . 1 .	. . .	*o*	t
3825	235,256,276	*191*,413,616	5.8	1*33*	*212*	. . 0 . . 0 0 *2* . 0 *1* . . *2*	. . .	*o*	
3826	235,265,286	191,413,616	5.5	31*4*	*111*	. . 3 . . *111* . *22* . . *1*	. . .	O	t
3827	247,256,276		6.2	*111*	—	. . . . . *44* . *2 1 1* . . .	. . .	*y*	
3828	241,268,284		5.8	000	—	. . *1* . . F F . . 1 *1* . . .	. . .	*y*	
3829	1,256,286		6.2	*122*	—	. . . . . F F *4* . . *1* . . .	. . .	*y*	
3830	235,265,280	*167*,*413*,616	6.0	11*1*	2F*1*	. . . . . *22* 1 . *1* F . . 0	. . .	*y*	
3831	241,268,284		5.8	*111*	—	. . 1 . . 0 0 . . 3 *1* . . .	. . .	*y*	
3832	241,284,286		5.3	*122*	—	. . 2 . . F F 4 . . 0 . . .	. . 6	w	
3833	250,265,286	190,502,605	4.9	*121*	*130*	. . 1 . . *3 3* 2 . . 8 . *3 1*	. . .	W	
3834	256,284,286,293,294		4.2	0*3*5*22*	—	2 0 *2* 1 . 8 8 . 5 *2 2* . 1 .	. . .	.	g
3835	250,284,286	*195*,503,*698*	5.5	0*32*	4R4	. . . . . *3* 1 *4* . . F . . 4	. . 0	*o*	e
3836	1, 2, 4,235,241,244,250	110,203,507	2.4	0*1*02*2*2*1*-	232-	3 8 *2* 0 . 1 1 1 . *11* . 5 4	5 1 .	Y	vteg
3837	250,265,286	*195*,503,*698*	5.5	*1*02	0*25*	. . 1 . . *3* 1 3 . . 2 . . *2*	. . .	w	
3838	268,274,284		5.2	11*2*	—	*2 3* 4 . . *6 2* . . *13* . 0 .	. . .	*o*	nd
3839	250,256,276	*167*,*413*,624	6.1	001	*345*	. . . . . F *5* 2 . . 0 . . *4*	. . .	.	
3840	250,265,286	503,*698*	*4.6*	012	16	. . 1 . *2* 0 0 1 . . 0 1 4	. . .	w	d
3841			*6.1*			. . . *9*	. . .	l	d
3842	250,271,276	167,413,624	4.4	*1*01	*144*	. . 0 . . 6 0 *3* . 3 0 . *2 2*	. . .	Y	
3843	241,265,284,540,544,550	503,*698*	4.2	*1*0110*4*	06	*4* 0 2 . 1 *1 1* 0 . . *2* . *2 3*	. . .	*y*	d
3844	1,268,274		6.2	10*1*	—	. . *4* . . *44* . . 0 F . *3* .	. . .	o	n
3845	241,256,268,284,293,297,540	195,502,605	3.9	*312*1130-	656	1 . . . . 5 v v . . 4 . 4 6	. . .	O	nvta
3846	4,256,286,540,549,554		5.4	2*3*1*3*0*5*	—	*4 5 1* . . *2 2* . . 0 *1* . 0 .	. . .	*y*	
3847	263,265,284,540,549,556	194,405,618	4.8	*111*10	0*22*	. . *2* . . 2 2 2 . . 1 . . *1*	. *1*.	Y	
3848	250,271,276,546,549,554		3.0	1*1*001*2*	—	3 2 2 0 . 2 2 . . *1* 0 . *1*.	. . .	*y*	
3849	248,268,274	167,413,624	5.4	3*11*	*241*	. . *3* . . 0 *24* . . *1* . . *2*	. . .	Y	
3850	248,256,286		5.0	2*21*	—	*64* b . . *44* . *311* . 0 .	. . .	.	

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$21^h - 22^h$

No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
3851	Pegasus .	11	7587	+ 2° 4414	41.1	+ 2 8	6·5	6·5	5.6	5.8	3	5.56	.07	5.5	.04
3852	Pegasus .	—	—	+16° 4598	41.4	+16 39	F	F	6.0	—	3	6.17	.09	—	—
3853	Cepheus .	*78*	7597	+71° 1082	41.6	+71 46	6	6·5	5.5	—	3	5.43	.16	5.5	.15
3854	Cepheus .	—	—	+61° 2193	41.6	+61 54	6	6·7	6.2	—	7	6.05	.12	6.1	.03
3855	Cepheus .	*v* 10	7595	+60° 2288	42.0	+60 34	5	5	4.5	—	14	4.50	.04	4.5	.03
3856	Cygnus . .	π^2 81	7598	+48° 3504	42.4	+48 45	4·5	4·5	4.5	—	6	4.44	.05	4.4	.09
3857	Cygnus . .	—	—	+38° 4611	43.3	+38 24	6	F	7.7	—	3	7.20	.11	—	—
3858	Cygnus . .	—	—	+37° 4427	43.5	+38 6	F	6	6.3	—	3	5.80	.15	6.0	.08
3859	Cepheus .	12	7605	+60° 2294	43.9	+60 9	F	6	6.0	—	3	5.63	.11	5.9	.07
3860	Pegasus .	13	7606	+16° 4612	44.4	+16 45	6	6·5	5.5	—	3	5.34	.04	5.0	.09
3861	Pegasus .	14	7607	+29° 4525	44.5	+29 37	5	5	5.3	—	3	4.96	.00	5.2	.00
3862	Cygnus . .	—	—	+40° 4648	44.7	+40 35	6	6	6.2	—	3	6.44	.15	6.4	.07
3863	Pegasus .	—	—	+19° 4797	45.9	+19 16	6	6	5.5	—	7	5.55	.08	5.5	.12
3864	Capricornus	μ 51	7618	—	46.8	−14 7	5	5	—	5.4	6	5.24	.04	—	—
3865	Pegasus .	15	7623	+28° 4215	47.2	+28 14	6·5	6	5.9	—	3	5.63	.09	5.6	.04
3866	Capricornus	—	7620	—	47.2	−10 53	6	6	—	6.5	3	6.53	.05	—	—
3867	Pegasus .	16	7627	+25° 4535	47.6	+25 22	5·6	5·6	5.5	—	6	5.03	.03	5.0	.00
3868	Aquarius .	—	7628	—	47.8	− 4 51	6	6	—	6.0	6	6.05	.03	—	—
3869	Pegasus .	—	—	+18° 4879	48.0	+19 6	6	6·5	5.8	—	3	5.68	.03	5.3	.04
3870	Cygnus . .	—	7631	+55° 2639	48.1	+55 14	6	6	6.0	—	3	5.53	.07	5.6	.15
3871	Aquarius .	—	—	—	48.4	− 3 52	6	6·7	—	6.4	3	6.23	.07	—	—
3872	Cygnus . .	—	7642	+53° 2735	50.7	+53 22	F	F	7.2	—	3	6.90	.03	—	—
3873	Cepheus .	13	7643	+55° 2644	50.8	+56 3	F	6	6.2	—	3	6.06	.04	5.8	.16
3874	Pegasus .	—	—	+20° 5046	50.8	+20 42	F	F	5.8	—	3	6.48	.09	—	—
3875	Pegasus .	17	7641	+11° 4696	51.1	+11 32	6·5	6·5	6.0	5.7	3	5.46	.05	5.6	.04
3876	Cepheus .	*79*	7654	+72° 1003	51.4	+73 8	F	F	6.5	—	6	6.58	.07	—	—
3877	Aquarius .	—	7650	—	51.8	− 6 0	6	6	—	6.5	4	6.17	.13	—	—
3878	Aquarius .	—	7649	—	52.0	−21 45	F	F	—	6.6	6	6.38	.04	—	—
3879	Cepheus .	—	7658	+62° 2007	53.2	+63 3	6·5	6·5	5.7	—	4	5.17	.11	5.6	.03
3880	Piscis Austr.	η 12	7657	—	53.9	−29 2	5·6	5·6	—	5.7	3	5.47	.11	—	—
3881	Pegasus .	18	7659	+ 6° 4940	54.1	+ 6 9	6	6·5	6.0	6.1	3	5.98	.03	5.6	.07
3882	Cepheus .	—	—	+65° 1691	54.1	+65 35	F	6	6.5	—	3	6.25	.04	5.8	.05
3883	Cepheus .	—	—	+65° 1693	54.3	+65 34			6.8	—	—	—	—		
3884	Aquarius .	28	7660	− 0° 4296	54.9	+ 0 2	6	6	6.0	5.9	3	5.81	.07	5.9	.24
3885	Pegasus .	19	7662	+ 7° 4779	55.2	+ 7 41	6	6	5.8	5.9	3	5.85	.03	5.7	.07
3886	Pegasus .	20	7664	+12° 4737	55.2	+12 33	6·5	6	6.0	5.8	6	5.55	.07	5.7	.05
3887	Aquarius .	—	7665	—	55.6	−18 29	F	F	—	6.6	6	6.36	.06	—	—
3888	Aquarius .	30	7670	—	57.0	− 7 6	5·6	5·6	—	5.8	3	5.57	.05	—	—
3889	Aquarius .	*o* 31	7672	—	57.1	− 2 44	5·4	5·4	—	4.9	3	4.70	.09	—	—
3890	Cygnus . .	—	7676	+52° 3083	57.4	+52 18	6	6	5.3	—	3	5.60	.05	5.7	.08
3891	Pegasus .	21	7674	+10° 4681	57.4	+10 49	6·5	6·5	6.2	5.9	3	5.76	.11	5.6	.08
3892	Cepheus .	16	7686	+72° 1009	57.5	+72 36	5·6	5·6	5.0	—	16	5.16	.03	5.0	.05
3893	Piscis Austr.	—	7675	—	57.8	−27 24	F	F	—	6.1	3	5.83	.09	—	—
3894	Cepheus .	14	7683	+57° 2441	58.0	+57 26	6	6	6.4	—	7	5.49	.04	5.5	.11
3895	Lacerta . .	—	7681	+43° 4119	58.2	+44 4	6	6·5	6.0	—	3	5.64	.11	5.1	.07
3896	Aquarius .	32	7685	− 1° 4242	58.6	− 1 29	6	6	6.0	5.7	3	5.24	.03	—	—
3897	Pegasus .	—	—	+25° 4671	59.6	+26 6	6	6·5	6.2	—	3	5.99	.07	5.6	.05
3898	Pegasus .	*v* 22	7689	+ 4° 4800	59.6	+ 4 28	5	5	5.0	5.3	3	4.80	.12	4.8	.17
3899	Aquarius .	*a* 34	7688	− 1° 4246	59.6	− 0 54	3	3	2.8	2.7	10	3.16	.04	—	—
3900	Cepheus .	15	7696	+59° 2456	0.0	+59 14	6	6·7	6.6	—	3	6.73	.11	6.5	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3851	245,271,276	*190*,413,616	5.6	*2*10	0*12*	. . 0 . . *2* 0 *1* . 0 1 . . *1*	. . .	*y*	n
3852	250,271,276		6.2	*2*21	—	. . . . . F F *4* . . F . . .	. . .	.	
3853	263,265,284	194,*502,618*	5.4	3*4*1	3*3*2	. . 0 . . 4 2 0 . . *1* . . 1	. 1 .	*y*	n
3854	245,265,280,293,540,546,556	*195,502,699*	6.0	2*8*1*2*2*2*7	211	. . . . . *2* 1 0 . . F . . 1	. . .	.	
3855	2, 4, 6,241,245,256,263	110,149,200	4.5	72*1*1*3*2*1*-	*421*	. 1 *2* . . 5 5 0 . . 4 . 3 0	. . .	*y*	sa
3856	248,263,268,546,549,558	190,502,605	4.4	12*1*2*0*2	*122*	. . 2 . . 0 0 1 . . 5 . 0 0	. . 1	*y*	
3857	245,268,280		7.2	*1*13	—	. . . . . b F 3 . . b . . .	. . .	.	c
3858	2,245,268	*195,503,698*	5.8	*3*04	141	. . . . . F 0 3 . . F . . 2	. . .	.	c
3859	6,263,271	*195,502,618*	5.6	*3*20	341	. . *4* . . F 2 2 . . F . . 3	. . .	o	
3860	250,271,276	167,413,624	5.3	*1*01	*521*	. . *3* . . 5 3 1 . . 0 . . *3*	. . .	*y*	
3861	241,268,286	503,698	5.0	000	22	. . 1 . . 0 0 2 . . *1* . *2* 2	. . .	w	
3862	4,268,274	*195,503,698*	6.4	0*4*3	*2*01	. . . . . *6 6 4* . . F . . 0	. . 3	.	e
3863	8,284,286,293,540,549,554	*167,413*,624	5.6	1712222*1*	*4*10	. . . . . 2 2 *2* . . 1 . . *1*	. . .	w	
3864	1, 2,280,549,554,558		5.2	*1*20012	—	*2 3* 2 . . *2 2* . . *1 3* . *1* .	. . .	*y*	
3865	4,280,286	503,*698*	5.6	*1*22	10	. . *4* . . *2* 2 1 . . 5 . . 0	. . .	*y*	
3866	248,268,274		6.5	*1*11	—	. . . . . *7 7* . . b *4* . . .	. . .	*y*	n
3867	6,284,286,546,549,554	503,*698*	5.0	00*2*01*1*	00	. . 2 . . 2 2 4 . . *1* . 3 0	7 . .	w	
3868	248,268,274,549,554,558		6.0	0*2*0011	—	. . . . . *2 2* . . *2 3* . . .	. . .	Y	v
3869	6,253,284	*167,413*,624	5.7	010	*543*	. . . . . 1 *1 1* . . 0 1 . *4*	. . .	.	dc
3870	6,271,280	195,502,*619*	5.5	*2*10	14*3*	. . . . 1 3 3 3 . . F . . 1	. . .	w	n
3871	4,268,274		6.2	0*2*1	—	. . . . *3 4 1* . . 0 F . . .	. . .	.	d
3872	268,274,286		6.9	001	—	. . . . . F F 1 . . F . . .	. . .	w	n
3873	4,271,280	*195,502,619*	6.1	*1*01	*614*	. . *8* . . F *3 1* . . *4* . . *3*	. . .	*y*	nd
3874	6,284,286		6.5	*2*21	—	. . . . . F F *9* . . *4 3* . .	. . .	.	
3875	8,271,284	*173*,413,624	5.5	1*1*1	201	. . 1 . . *1* 1 3 . *1 2* . . 1	. . .	*y*	
3876	245,253,276,546,549,558		6.6	13*2212*	—	. . R . . F F *3* . . *9* . . .	. . .	*y*	nh
3877	4, 6,268,286		6.2	F*3*13	—	. . . . . *4 4* . . 0 *1* . . .	. . .	*y*	
3878	549,551,554,558,560,562		6.4	0011*22*	—	. . . . . F F . F 0 F . . .	. . .	.	
3879	4,268,274,293	*195*,502,699	5.2	*4*203	544	. . . . . 2 4 4 . . 9 . 2 4	. . .	*o*	t
3880	6,256,286		5.5	*2*03	—	b *6 8* . . *3 3* . *5 1 2* . *1* .	. . .	.	
3881	245,284,286	*173,413*,616	6.0	0*1*0	*254*	. . *4* . . *2 4 2* . *1 3* . . *4*	. . .	*y*	
3882	8,245,265	*195*,405,618	6.2	0*1*1	132	. . . . $F\,4\,\overset{1}{1}\,.\,F\,.\,.\,\overset{2}{2}$	. . .	.	d
3883			*6.5*				. . .	.	dtp
3884	2,253,276	173,*413*,616	5.8	0*1*2	7*13*	. . *4* . . 0 0 0 . *3 3* . . 1	. . .	*o*	
3885	8,241,286	*173,413*,616	5.8	010	0*31*	. . *3* . . 0 0 *2* . *1 1* . . *1*	. . .	*o*	t
3886	6,271,284,549,554,558	*173*,413,624	5.6	*1*13141	200	. . 4 . . *2* 2 2 . 0 1 . . 1	. . .	*y*	
3887	549,551,554,556,558,560		6.4	1*15*002	—	. . . . . F F . . 0 F . . .	. . .	.	
3888	6,241,276		5.6	*1*11	—	. . 1 . . *4 4* . . 0 1 . . .	. . .	*y*	
3889	8,271,276		4.7	2*2*1	—	3 2 1 . . *1 1* . . 0 *3* . 0 .	. *5* .	*y*	
3890	241,253,276	*192*,506,*619*	5.6	*1*11	3*1*1	. . . . . 2 2 4 . . F . . 1	. . .	.	n
3891	245,263,265	*173*,413,624	5.8	*2*03	0*42*	. . *3* . . *4 2 2* . *1 1* . . *2*	. . .	*y*	
3892	1, 2, 4, 6, 8,248,256	149,196,200	5.2	*2212*320-	*235*	. . 0 . . 0 0 *2* . . 1 . . *2*	. 0 .	Y	s
3893	245,256,276		5.8	1*22*	—	. . . . . F F . 2 1 *1* . . .	. . .	.	
3894	8,253,284,286,546,549,554	195,502,*619*	5.5	1*2*03*1*10	11*3*	. . 7 . . 3 3 7 . . 2 . . 0	. . .	W	n
3895	241,263,265	*194*,503,*698*	5.6	20*3*	*547*	. . . . . 2 0 2 . . 5 3 . *5*	. . 3	W	n
3896	245,263,268		5.2	*1*00	—	. . 2 . . 6 6 6 . 2 5 . . .	. . .	y	
3897	2,241,276	*167,413*,624	6.0	2*1*0	*353*	. . . . . *2 4* 0 . . F . . *4*	. . .	.	
3898	8,253,276	173,413,615	4.8	*3*03	14*4*	*4* 2 3 . . 2 2 2 . 2 5 . 2 0	. . .	Y	
3899	245,263,268,540,546,549,551		3.2	*2311222*-	—	1 *4 2 4* . 0 0 *2* . *4 2* . *5* .	7 *3* .	y	tg
3900	241,248,263	*195*,502,*619*	6.7	2*3*0	2b*1*	. . *5* . . *9 6 3* . . *6* . . *1*	. . .	w	e

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3901	Aquarius .	ι 33	7691	—	0.0	−14 27	4	4	—	4.4	6	4.34	.04	—	—
3902	Pegasus .	23	7693	+28° 4284	0.2	+28 23	6·5	6	5.9	—	3	5.46	.08	5.6	.00
3903	Cepheus .	ξ 17	7700	+63° 1802	0.3	+64 3	5·4	5·4	4.5	—	16	4.45	.02	4.5	.03
3904	Cepheus .	18	7699	+62° 2028	0.3	+62 36	F	F	5.9	—	3	5.42	.05	—	—
3905	Lacerta . .	—	7705	+44° 4043	1.2	+44 26	6	6·5	4.7	—	3	5.34	.03	5.0	.05
3906	Cepheus .	20	7707	+62° 2029	1.4	+62 12	6	6·5	6.0	—	6	5.42	.06	5.7	.12
3907	Pegasus .	ι 24	7706	+24° 4533	1.4	+24 46	4	4	4.0	—	6	3.99	.05	3.8	.07
3908	Piscis Austr.	μ 14	7701	—	1.4	−33 34	5·4	5·4	—	4.7	8	4.53	.08	—	—
3909	Cepheus .	19	7708	+61° 2246	1.5	+61 42	6·5	6·5	6.0	—	3	5.16	.08	5.3	.11
3910	Pegasus .	25	7712	+21° 4695	2.2	+21 7	F	6	5.8	—	5	5.71	.08	5.5	.11
3911	Aquarius .	35	7711	—	2.4	−19 6	6	6·5	—	5.9	3	5.83	.07	—	—
3912	Pegasus .	27	7721	+32° 4349	3.9	+32 35	F	F	5.7	—	6	5.70	.04	—	—
3913	Pegasus .	θ 26	7723	+ 5° 4961	4.1	+ 5 36	3·4	3·4	3.4	3.6	6	3.76	.06	3.8	.08
3914	Aquarius .	—	7720	—	4.1	− 4 29	6	6	—	6.5	3	5.85	.08	—	—
3915	Aquarius .	e 38	7722	—	4.2	−12 9	5·6	5·6	—	5.6	3	5.42	.03	—	—
3916	Aquarius .	—	7724	—	4.4	−21 49	F	F	—	6.4	5	6.13	.12	—	—
3917	Pegasus .	π 29	7731	+32° 4352	4.7	+32 35	4	4	3.8	—	7	4.41	.07	4.4	.19
3918	Pegasus .	—	—	+10° 4701	4.8	+11 2	F	6·7	6.0	—	3	5.93	.04	5.6	.07
3919	Pegasus .	28	7733	+20° 5093	4.9	+20 23	F	6	6.0	—	3	6.38	.11	6.0	.21
3920	Piscis Austr.	—	—	—	6.2	−26 55	F	F	—	6.4	3	6.18	.03	—	—
3921	Aquarius .	—	7744	—	6.3	− 5 19	6	6	—	6.7	7	6.32	.09	—	—
3922	Lacerta . .	—	7746	+50° 3602	6.5	+50 14	5·6	5·6	6.0	—	3	5.44	.19	5.6	.03
3923	Cepheus .	ζ 21	7749	+57° 2475	6.7	+57 37	4·3	4·3	4.1	—	9	3.54	.02	3.7	.09
3924	Piscis Austr.	—	7745	—	7.0	−25 46	6	6	—	5.9	3	5.68	.07	—	—
3925	Cepheus .	24	7758	+71° 1111	7.5	+71 45	5·4	5	5.2	—	6	4.95	.07	4.7	.04
3926	Cepheus .	—	7754	+56° 2727	7.5	+56 15	6	6	6.0	—	3	5.36	.12	5.5	.05
3927	Pegasus .	—	7753	+33° 4456	7.5	+34 0	6·5	6·5	5.8	—	3	5.37	.08	5.5	.03
3928	Piscis Austr.	λ 16	7750	—	7.5	−28 22	5	5	—	5.6	3	5.59	.03	—	—
3929	Cepheus .	λ 22	7755	+58° 2402	7.6	+58 49	6·5	6·5	5.6	—	3	5.29	.03	5.4	.07
3930	Aquarius .	41	7751	—	7.7	−21 40	6	5·6	—	5.8	3	5.48	.11	—	—
3931	Cepheus .	—	7760	+69° 1228	7.9	+69 32	6	6	5.9	—	4	5.51	.19	5.6	.07
3932	Cepheus .	—	7759	+60° 2358	8.1	+60 10	6	6	5.0	—	3	5.43	.09	5.6	.04
3933	Pegasus .	—	7757	+27° 4280	8.2	+28 1	6	6	6.4	—	7	6.08	.03	6.1	.21
3934	Cepheus .	—	7766	+62° 2048	8.6	+62 42	6	6	6.5	—	3	6.12	.03	5.9	.21
3935	Lacerta . .	—	7765	+38° 4711	8.7	+39 7	5	5	4.9	—	6	4.65	.11	4.9	.04
3936	Lacerta . .	—	—	+44° 4073	8.8	+44 51	6	6	6.0	—	3	5.77	.12	5.7	.03
3937	Lacerta . .	—	7770	+42° 4333	9.7	+42 21	F	6	6.0	—	3	5.67	.04	5.6	.15
3938	Piscis Austr.	—	7768	—	9.9	−26 30	F	F	—	6.5	3	6.50	.11	—	—
3939	Aquarius .	42	7771	—	10.4	−13 26	6	6	—	5.8	3	5.71	.03	—	—
3940	Aquarius .	θ 43	7773	—	10.5	− 8 23	4·5	4·5	—	4.3	6	4.32	.06	—	—
3941	Aquarius .	—	7774	—	10.5	− 9 38	F	6	—	6.4	3	6.18	.07	—	—
3942	Cepheus .	ε 23	7778	+56° 2741	10.6	+56 27	5·4	5·4	5.1	—	8	4.24	.04	4.5	.03
3943	Cepheus .	—	7779	+72° 1022	10.7	+72 43	F	6	6.5	—	3	6.00	.07	6.1	.00
3944	Lacerta . .	1	7777	+37° 4526	10.7	+37 9	5·4	5·4	4.8	—	3	4.14	.03	4.5	.07
3945	Aquarius .	44	7776	—	10.9	− 5 59	6·5	6·5	—	6.4	6	5.91	.04	—	—
3946	Aquarius .	ϱ 46	7784	—	13.9	− 8 25	5·6	5·6	—	5.6	3	5.35	.13	—	—
3947	Cepheus .	25	7789	+62° 2059	14.3	+62 11	6	6·7	6.0	—	3	6.18	.05	6.3	.25
3948	Pegasus .	30	7788	+ 5° 4998	14.4	+ 5 11	5·6	6·5	6.1	5.4	3	5.18	.13	5.3	.08
3949	Aquarius .	47	7790	—	15.0	−22 12	6·5	6·5	—	5.6	6	5.37	.08	—	—
3950	Aquarius .	γ 48	7795	—	15.5	− 1 59	4·3	3·4	—	3.9	6	4.07	.05	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3901	245,253,268,549,558,560		4.3	*22*3000	—	1 3 0 . . *2 2* . . 1 *3* . 0 .	. . .	*y*	
3902	245,256,268	503,*698*	5.5	*220*	11	. . 2 . . *1* 3 2 . . 2 . . 1	. . .	*y*	
3903	1, 2, 4, 6, 8,253,263	110,149,200	4.4	10*1*0010-	121	6 5 0 . 4 2 2 1 . . 9 . 4 1	. . .	W	ds
3904	241,245,268		5.4	*111*	—	. . 0 . . F F 3 . . 7 . . .	. . .	*y*	t
3905	241,263,265	*194*,503,*698*	5.3	*100*	*224*	. . . . . 5 3 *6* . . 4 . . *3*	. . 1	Y	
3906	241,248,268,546,549,554	*195*,502,*699*	5.4	*301231*	306	. . 1 . . 4 2 4 . . F . 2 3	. . .	o	t
3907	4,253,263,546,549,556	167,413,624	4.0	*211112*	*203*	*2 2 1* . . 1 1 1 . . *5* . 0 *2*	. . .	*y*	v
3908	245,253,268,293,294,549,558		4.5	0*272222*-	—	5 4 *4* . . 1 1 . *1 1 5* . 1 .	. . .	.	
3909	6,241,268	*195*,506,699	5.2	*121*	321	. . 1 . . 2 4 6 . . 5 . . 1	. . .	*y*	
3910	8,256,280,294,546	*173*,413,624	5.7	3*4*201	12*4*	. . 3 . . F 1 *1* . . 0 . . *2*	. . .	W	
3911	4,248,263		5.8	0*1*2	—	. . 0 . . 0 *2* . . *1 1* . . .	. . .	*y*	
3912	1,253,276,546,551,556		5.7	3*10*101	—	. . *9* . . F F *1* . . R . . .	. . .	Y	ndc
3913	6,256,271,546,558,560	173,413,615	3.8	*113*022	220	*5 2* 0 . . *4 3 2* . *1 3* . *1* 0	0 *6* .	w	vg
3914	4,265,271		5.8	2*11*	—	**b b** . . . 0 0 . . 5 F . . .	. . .	.	
3915	8,248,263		5.4	001	—	0 *1* 1 . . *2 2* . . *1 1* . *1* .	. . .	*y*	na
3916	11,245,253,268,294		6.1	F5*132*	—	. . . . . F F . *1* 1 0 . . .	. . .	.	
3917	2, 11,253,294,546,551,558	195,503,*698*	4.4	*303*2232	*135*	*6 2* 9 . . *3 3 5* . . *4* . *2* 0	. . .	*g*	ndvc
3918	8,256,276	*173*,*413*,624	5.9	0*11*	*143*	. . . . . F 2 *1* . . *2* 0 . *3*	. . .	.	
3919	1, 2,256	*173*,413,*624*	6.4	0*23*	177	. . *3* . . F *6 6* . . *3* . . *4*	. . .	*y*	
3920	4,265,280		6.2	*100*	—	. . . . . F F . *2* 0 F . . .	. . .	.	
3921	6,265,271,294,546,551,558		6.3	*6351*102	—	. . . . . *5 5* . . 2 *2* . . .	. . .	.	
3922	2,248,263	192,403,619	5.4	*5*13	232	. . . . . *2 2* 4 . . 3 . . 2	. . .	*y*	
3923	8,256,263,282,284,297,546	195,502,605	3.5	*120*1110-	014	9 7 1 . . 2 2 7 . . 5 . 4 2	4 0 .	*o*	t
3924	6,265,280		5.7	*102*	—	. . . . . 1 1 . 3 0 0 . . .	. . .	.	nt
3925	245,268,276,546,551,560	194,405,618	5.0	1*13312*	*234*	. . 0 . . *4* 0 2 . . F . . *3*	. *2* .	Y	
3926	11,276,280	*195*,502,*619*	5.4	*132*	022	. . . . . 4 4 4 . . F . . 1	. . .	*y*	
3927	245,248,276	*195*,503,*698*	5.4	*220*	121	. . . . . 0 2 2 . . *1* . . 1	. . .	*y*	
3928	248,256,280		5.6	001	—	**b** 7 3 . . *6 6* . *6 3 3* . *3* .	. . .	.	
3929	256,263,268	*195*,502,619	5.3	100	301	*3 0 2* . . 1 3 2 . . 4 . 1 1	. . .	*y*	
3930	6,253,268		5.5	*131*	—	. . 0 . . 3 *3* . 0 1 *2* . *1* .	. . .	Y	d
3931	1, 2,253,268	*195*,405,*618*	5.5	F*5*22	1*1*2	. . . . 5 3 3 2 . . 2 2 . 1	. . .	*y*	d
3932	8,253,280	*195*,502,*619*	5.4	*21*2	321	. . . . . 4 4 *4* . . F . . 2	. . .	.	
3933	245,248,263,294,549,558,560	*503*,*698*	6.1	12**b**0002	*32*	. . . . . *3 3* 1 . . 0 . . 0	. . .	*y*	
3934	248,276,280	*195*,*403*,*699*	6.1	0*1*0	*4*F1	. . . . . *3 3* 2 . . 0 . . *2*	. . .	o	t
3935	6,253,276,698,699,700	194,503,624	4.6	*132*254	234	. . R . . 4 4 3 . . 3 . 4 3	. . .	Y	vht
3936	248,276,280	190,403,699	5.8	0*33*	*112*	. . . . . 0 0 0 . . *1* . . *1*	. . 1	.	
3937	8,263,276	194,503,*698*	5.7	01*1*	*125*	. . . . . F 1 1 . . 0 . . *1*	. . .	W	
3938	248,265,280		6.5	1*31*	—	. . . . . F F . *5 2 8* . .	. . .	.	
3939	294,297,299		5.7	001	—	. *4 2* . . 1 1 . . *1* 0 . .	. . .	*o*	a
3940	4,265,280,549,558,560		4.3	0*312*13	—	1 *1 2* . . 1 1 . . 0 *3* . *1* .	. . .	*y*	
3941	248,265,280		6.2	1*20*	—	. . . . . F *4* . . 0 *5* . . .	. . .	*y*	v
3942	11,248,280,282,286,297,546	195,502,605	4.2	0101*1*12-	323	8 7 0 . . 4 4 9 . . 7 . 4 3	. 1 .	*y*	
3943	14,276,280	*194*,*506*,*618*	6.0	*201*	111	. . . . *5* F *2 3* . . 1 . 0 1	. . .	.	dc
3944	8,265,280	194,503,624	4.1	*100*	425	. . 4 . . 5 5 7 . . 3 . 5 4	. . .	Y	t
3945	2,263,268,698,699,700		5.9	*120030*	—	. . 0 . . *5 3* . . 3 *2* . . .	. . .	Y	vg
3946	241,263,268		5.4	3*31*	—	*4 4* 0 . . *2 2* . . *1 5* . *1* .	. . .	w	
3947	265,276,280	*196*,403,*699*	6.2	1*11*	750	. . 0 . . *4 1 4* . . *5* . . 1	. . .	*y*	
3948	2, 14,268	191,413,616	5.2	*313*	31*1*	. . 1 . . 0 4 7 . *1 1* . . 1	. . .	*y*	
3949	6,248,280,549,558,560		5.4	*324*102	—	. . 0 . . 0 2 . 6 *1 1* . . .	. . .	*o*	t
3950	8,265,280,549,558,560		4.1	011*312*	—	*8 5* 2 . . *4 6* . . *1 6* . *2* .	0 *5* .	*g*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
3951	Pegasus .	31	7796	+11° 4784	15.6	+11 36	5·4	5	5.5	—	6	5.06	.08	4.9	.03
3952	Pegasus .	32	7798	+27° 4299	15.8	+27 44	5	5	5.0	—	3	4.89	.07	4.7	.04
3953	Lacerta . .	2	7800	+45° 3894	16.1	+45 56	5·4	5·4	5.0	—	3	4.77	.04	4.5	.12
3954	Aquarius .	49	7802	—	16.8	−25 22	6	6	—	5.9	3	5.63	.09	—	—
3955	Aquarius .	—	7804	—	17.2	− 7 48	F	6	—	6.2	3	6.13	.04	—	—
3956	Pegasus .	33	7807	+20° 5139	17.9	+20 14	F	6·7	6.0	—	4	6.02	.15	6.0	.13
3957	Aquarius .	51	7805	—	17.9	− 5 26	6	6	—	5.8	3	5.75	.04	—	—
3958	Aquarius .	50	7806	—	18.0	−14 8	F	6·7	—	6.1	6	5.95	.08	—	—
3959	Lacerta . .	3	7815	+51° 3358	18.8	+51 38	4·5	5·4	4.7	—	6	4.52	.08	4.7	.07
3960	Aquarius .	π 52	7814	+ 0° 4872	19.1	+ 0 46	5·4	5·4	4.5	4.9	6	4.59	.04	4.8	.03
3961	Aquarius .	—	7817	—	19.5	−24 18	F	F	—	6.3	3	6.29	.04	—	—
3962	Lacerta . .	4	7820	+48° 3715	19.7	+48 52	5	5	5.0	—	3	4.64	.07	4.7	.07
3963	Aquarius .	f 53	7819	—	20.0	−17 21	6	6	—	5.8	7	5.63	.06	—	—
3964	Pegasus .	34	7823	+ 3° 4705	20.5	+ 3 47	6	6	6.0	6.2	3	5.73	.07	5.6	.12
3965	Pegasus .	35	7827	+ 3° 4710	21.8	+ 4 6	6·5	6·5	4.8	5.0	3	4.97	.05	5.1	.11
3966	Lacerta . .	—	—	+39° 4841	22.2	+39 12	6	6	6.0	—	3	6.07	.04	5.8	.12
3967	Pegasus .	—	—	+31° 4701	22.2	+31 14	6	6·5	6.2	—	3	6.34	.07	6.1	.15
3968	Cepheus .	28	7851	+85° 383	22.7	+85 30	5·6	5·6	5.0	—	3	5.41	.15	5.0	.09
3969	Cepheus .	—	—	+70° 1240	22.7	+70 9	6	6·5	6.0	—	15	5.70	.04	5.7	.05
3970	Aquarius .	ζ 55	7832	− 0° 4365	22.7	− 0 38	3·4	3·4	3.3	3.5	6	3.81	.09	—	—
3971	Aquarius .				22.7	− 0 38									
3972	Piscis Austr.	—	—	—	23.0	−27 43	F	F	—	6.3	3	5.92	.07	—	—
3973	Pegasus .	36	7833	+ 8° 4874	23.1	+ 8 31	6	6	5.8	5.9	3	5.82	.12	5.7	.07
3974	Cepheus .	26	7837	+64° 1664	23.3	+64 31	6·5	6·5	5.8	—	3	5.55	.12	5.6	.07
3975	Pegasus .	—	—	+26° 4439	23.5	+26 9	6	6·5	5.7	—	3	6.03	.03	5.6	.03
3976	Pegasus .	37	7838	+ 3° 4713	23.9	+ 3 49	6·5	6·5	6.3	5.8	3	5.27	.07	5.4	.19
3977	Piscis Austr.	ζ	7839	—	24.2	−26 41	5·6	5·6	—	6.7	6	6.62	.08	—	—
3978	Aquarius .	σ 57	7840	—	24.3	−11 17	5·4	5	—	5.1	6	4.83	.03	—	—
3979	Pegasus .	38	7843	+31° 4708	24.5	+31 57	6·5	6·5	6.0	—	3	5.50	.07	5.7	.19
3980	Lacerta . .	5	7845	+46° 3719	24.6	+47 6	5	5	4.8	—	3	4.57	.04	4.7	.08
3981	Cepheus .	δ 27	7848	+57° 2548	24.7	+57 48	var.	var.	var.	—	9	4.00	.07	4.4	.16
3982	Cepheus .	—	7847	+57° 2547	24.7	+57 47	F	F	7.5	—					
3983	Piscis Austr.	β 17	7842	—	24.7	−32 58	4	4	—	4.4	3	4.26	.03	—	—
3984	Aquarius .	—	—	—	25.0	− 7 9	6	6	—	6.2	3	6.23	.08	—	—
3985	Lacerta . .	6	7850	+42° 4420	25.3	+42 30	5	5	5.0	—	3	4.57	.08	4.5	.04
3986	Cepheus .	28	7857	+78° 796	25.8	+78 10	6·5	6·7	6.0	—	7	5.78	.03	5.5	.09
3987	Lacerta . .	7	7855	+49° 3875	26.3	+49 40	4	4	4.0	—	9	3.90	.04	4.2	.07
3988	Pegasus .	39	7856	+19° 4949	26.7	+19 37	6	6	6.2	—	3	6.32	.07	6.0	.12
3989	Lacerta . .	—	7858	+39° 4871	27.1	+39 10	6	6	6.2	—	3	5.64	.03	5.7	.04
3990	Aquarius .	60	7863	—	27.8	− 2 12	6	6	—	6.2	3	5.90	.07	—	—
3991	Aquarius .	ν 59	7864	—	28.1	−21 19	6·5	5·6	—	5.7	6	5.21	.06	—	—
3992	Cepheus .	ϱ 29	7874	+78° 801	28.9	+78 12	6·5	6·7	5.7	—	3	5.38	.11	5.3	.13
3993	Aquarius .	—	7866	—	29.0	−24 37	6	6	—	6.2	3	6.15	.11	—	—
3994	Aquarius .	η 62	7868	− 0° 4384	29.2	− 0 44	4·3	4	3.9	4.1	7	4.22	.05	—	—
3995	Cepheus .	—	7876	+69° 1262	29.6	+69 16	6	6·7	6.0	—	3	6.01	.09	6.3	.24
3996	Cepheus .	—	7881	+75° 836	30.2	+75 35	5·6	5·6	5.7	—	7	5.66	.07	5.6	.08
3997	Lacerta . .	8	7880	+38° 4808	30.6	+39 1	6	6·5	5.7	—	3	5.30	.07	5.2	.07
3998	Piscis Austr.	—	—	—	31.2	−34 5	F	6	—	5.9	5	5.58	.09	—	—
3999	Aquarius .	$\varkappa$ 63	7884	—	31.6	− 4 51	5	5·6	—	5.2	3	5.48	.03	—	—
4000	Pegasus .	40	7893	+18° 5014	32.1	+18 56	6	6	6.0	—	3	5.75	.04	5.7	.05

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
3951	11,257,265,551,553,560	173,413,624	5.1	*5*21301	*223*	. . *2* . . *5 1* 3 . . 2 . *5 2*	. . .	*y*	
3952	6,265,271	190,413,624	4.9	02*1*	*213*	. . 2 . . 1 1 1 . . 0 . *1 2*	. . .	w	
3953	8,248,271	192,403,699	4.8	01*1*	*162*	. . *5* . . *2 2* 2 . . 1 . *2 3*	. . 1	W	
3954	241,248,271		5.6	*221*	—	. . 3 . . 2 2 . *1 1 3* . . .	. . .	.	
3955	2, 14,268		6.1	*1*10	—	. . . . . F *3* . . *1 4* . . .	. . .	.	
3956	4, 8,251,276	*190,413,624*	6.0	F412	2*3*2	. . 4 . *1* F 1 *2* . . F . . 0	. . .	*y*	d
3957	6,251,276		5.8	1*1*0	—	. . 0 . . 0 0 . . *2 1* . . .	. . .	*y*	
3958	551,553,558,560,562,564		6.0	*2*141*23*	—	. . R . . F 1 . . *1 3* . . .	. . .	.	h
3959	294,297,299,546,551,554	192,403,619	4.5	222115	412	. . 1 . . *1* 1 2 . . 4 . 1 2	. . .	Y	nt
3960	1, 2,276,546,553,560	191,413,615	4.6	2*12*100	221	**b** *8 1* . . 0 0 *1* . 1 *6* . 1 2	. *4* .	W	
3961	8,248,271		6.3	*1*10	—	. . . . . F F . *3 2* F . . .	. . .	*w*	
3962	11,251,280	192,403,699	4.6	02*1*	310	. . 0 . . 4 4 4 . . 3 . 2 1	. . 4	w	
3963	2, 14,268,294,546,553,560		5.6	0631003	—	*6 3* 3 . . 2 2 . . 0 1 . *2* .	. . .	*y*	ndtac
3964	241,251,268	*191,413*,616	5.7	012	2*23*	. . *2* . . 1 1 1 . 3 0 . . *1*	. . .	*y*	
3965	8,251,271	191,*413*,616	5.0	*11*1	13*2*	. . 0 . . 4 6 *2* . *2 1* . . 1	. . .	Y	t
3966	4,257,276	*192*,503,*621*	6.1	01*1*	*54*0	. . . . . *3 3 3* . . F *1* . *3*	. . .	.	
3967	11,248,274	*194,506*,624	6.3	*2*01	*106*	. . . . . *5 7 3* . . F . . *2*	. . .	O	
3968	241,257,268	117,506,699	5.4	*142*	*562*	. . *8* . . *2 2 4* . . *1* . . *4*	. 0 .	*y*	n
3969	8, 11, 14, 16,241,245,248	196,*200,200*	5.7	*1132211*-	*211*	. . . . . 1 1 1 . . F 2 . *1*	. . .	.	s
3970	8,271,276,577,578,580		*4.7*	211*24*4	—	*5 2* 0 . *2* . *1 4 3 3* . *2 3* . *2* .	*4 3* .	*r*	dt
3971			*4.5*					*y*	dt
3972	245,248,266		5.9	*12*0	—	. . . . . F F . *4* 2 F . . .	. . .	.	
3973	245,257,268	*173*,414,616	5.8	1*3*2	0*31*	. . *2* . . 0 0 *2* . *1 1* . . *1*	. . .	.	t
3974	245,257,268	196,403,699	5.6	*3*03	12*0*	. . 1 . . *2* 0 0 . . 1 . . 0	. . .	*y*	
3975	8,257,276	190,414,624	6.0	00*1*	*454*	. . . . . *2 4 4* . . *3 2* . *4*	. . .	.	
3976	14, 16,251	*191,413*,616	5.3	*2*01	61*3*	. . 1 . 2 1 3 8 . 3 0 . . 1	. . .	*y*	d
3977	245,248,266,698,699,700		6.6	*113115*	—	. . . . . **b b** . **b** *1 9* . *4* .	. . .	.	vg
3978	8,251,274,546,551,554		4.8	0*1*0021	—	*4 3 3* . . *2 2* . . 1 1 . 1 .	. . .	w	
3979	245,248,274	*194,506*,624	5.5	*1*02	17*1*	. . *3* . . *1* 1 3 . . 2 . . 2	. . .	*y*	
3980	11,276,280	192,403,699	4.6	01*1*	3*11*	. . 0 . . 4 4 2 . . *2* . 2 1	. . 0	O	t
3981	245,251,268,274,276,280,546	196,403,605	*4.1*	*3333*131-	228	4 *2* R . *6* V V V	. 0 .	*y*	dvtph
3982			*6.6*			4 2 R . **b** F F 8 . . 0 . . 4		.	dp
3983	248,254,276		4.3	100	—	1 *1 4* . . *2 2* . *2* 1 6 . 0 .	. . .	.	d
3984	14, 16,266		6.2	*220*	—	. . . . . *4 4* . . *2 5* . . .	. . .	.	d
3985	1, 2,276	192,503,621	4.6	02*2*	*120*	. . *1* . . 4 4 4 . . 3 . 4 *1*	. . 4	W	h
3986	4,245,268,294,546,553,560	*196,506*,699	5.8	**6***101*101	*152*	. . *8* . . *4* 3 0 . . 3 . . *3*	. . .	*y*	c
3987	11,251,271,276,280,282,546	196,403,699	3.9	*231*0120-	413	. . 3 . . 2 2 2 . . 1 . 3 3	. . 2	W	n
3988	1, 2,282	*190,413,624*	6.3	12*0*	*162*	. . *2* . . *5 5 3* . . *6* . . *3*	. . .	*y*	
3989	14, 16,248	*192,503,621*	5.6	00*1*	012	. . . . . 2 2 4 . . 5 . . 1	. . .	w	
3990	6,251,266		5.9	*1*02	—	. . 1 . . *1 1* . . 1 *2* . . .	. . .	*y*	
3991	1, 2,282,549,551,557		5.2	*2*0312*1*	—	. . 0 . . 2 0 . 3 2 1 . 2 .	. . .	*y*	
3992	6,245,268	*196,506*,699	5.4	11*3*	*332*	. . 8 . . 0 7 2 . . 3 . . *1*	. . .	*y*	c
3993	8,251,282		6.2	*3*20	—	. . . . . *4 4* . *7 2 5* . . .	. . .	Y	
3994	1, 2,266,546,549,553,558		4.2	*221*2400	—	*9 6 2* . . *5 1 2* . 0 7 . *1* .	0 *3* .	*b*	
3995	294,297,299	196,*506,699*	6.0	*221*	92*2*	. . . . . *2 1 2* . . 1 . . 3	. . .	w	dc
3996	8,245,257,294,549,553,554	196,*506*,618	5.7	*233*2203	*212*	. . . . . *5 5 1* . . 0 . . *1*	. . .	*y*	
3997	6,248,271	192,503,621	5.3	*2*10	03*1*	. . *7* . 2 5 3 3 . . 4 . . *1*	. . .	W	d
3998	14, 16, 19,254,260		5.6	FF21*2*	—	. . . . . F 2 . *1 1* F . . .	. . .	.	n
3999	294,297,299		5.5	010	—	. . 1 . . *5 3* . . *6 6* . *5* .	. . .	Y	
4000	2,245,275	*190,413,624*	5.8	01*1*	*220*	. . 1 . . 0 0 0 . . *1* . . *1*	. . .	Y	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures. No. Obs.	Measures. Magn.	Measures. P. E.	Estimates. Magn.	Estimates. P. E.
					m.	° ′									
4001	Lacerta . .	9	7888	+50° 3770	32.5	+50 56	5	5·6	5.5	—	3	4.80	.07	4.9	.03
4002	Cepheus .	31	7896	+72° 1049	32.8	+73 1	5	5·6	5.5	—	6	5.26	.04	5.1	.09
4003	Piscis Austr.	—	7891	—	33.1	−28 57	F	6	—	6.5	3	6.34	.08	—	—
4004	Cepheus .	—	—	+56° 2821	33.9	+56 10	F	6	6.0	—	3	5.63	.09	5.7	—
4005	Lacerta . .	10	7901	+38° 4826	33.9	+38 26	5	5	5.0	—	6	5.04	.01	4.9	.11
4006	Pegasus .	41	7900	+18° 5021	34.0	+19 3	6	6	6.5	—	3	6.08	.09	5.9	.11
4007	Piscis Austr.	ε 18	7898	—	34.0	−27 40	4	4	—	4.3	3	4.06	.19	—	—
4008	Lacerta . .	—	—	+36° 4902	34.2	+36 58	6	6	6.0	—	3	6.00	.09	5.9	.20
4009	Cepheus .	30	7902	+62° 2102	34.4	+62 58	5·6	5·6	5.3	—	17	5.23	.03	5.2	.05
4010	Pegasus .	—	—	+13° 4971	34.9	+13 55	6·5	6	5.8	—	3	5.81	.05	5.5	.03
4011	Lacerta . .	11	7906	+43° 4266	35.3	+43 39	5	5	4.8	—	3	4.70	.11	4.9	.12
4012	Lacerta . .	—	—	+53° 2950	35.4	+53 13	F	6	6.0	—	3	6.04	.09	6.5	.15
4013	Pegasus .	ζ 42	7908	+10° 4797	35.5	+10 12	3·4	3·4	3.5	3.5	6	3.59	.06	3.7	.09
4014	Lacerta . .	12	7915	+39° 4912	36.1	+39 37	6	6	5.3	—	3	5.14	.03	5.2	.13
4015	Pegasus .	o 43	7914	+28° 4436	36.1	+28 40	5	5	4.5	—	3	4.93	.05	4.9	.27
4016	Pegasus .	—	7912	+13° 4974	36.1	+13 54	6	6·5	6.2	—	8	6.15	.06	5.7	.05
4017	Aquarius .	67	7921	—	37.0	− 7 35	6	6	—	6.4	3	6.20	.05	—	—
4018	Aquarius .	g 66	7922	—	37.1	−19 28	5·6	5·6	—	4.9	6	4.81	.04	—	—
4019	Lacerta . .	—	—	+53° 2960	37.4	+53 16	F	F	6.0	—	3	6.04	.11	—	—
4020	Pegasus .	η 44	7923	+29° 4741	37.4	+29 36	3	3	3.2	—	9	3.06	.03	3.2	.07
4021	Lacerta . .	—	7931	+38° 4855	38.6	+38 50	F	6	6.3	—	3	6.24	.05	6.0	.17
4022	Lacerta . .	13	7932	+41° 4594	38.7	+41 11	6	6	5.2	—	6	5.10	.04	5.4	.05
4023	Pegasus .	45	7937	+18° 5046	39.7	+18 44	6	6	6.2	—	7	6.41	.07	6.0	.20
4024	Pegasus .	ξ 46	7943	+11° 4875	40.7	+11 33	5·4	5·4	4.8	4.3	3	4.23	.08	4.5	.04
4025	Lacerta . .	—	7948	+43° 4300	40.8	+43 55	F	6·7	6.0	—	7	5.74	.08	6.2	.12
4026	Pegasus .	λ 47	7945	+22° 4709	40.8	+22 56	4	4	3.9	—	6	4.18	.03	4.1	.05
4027	Aquarius .	68	7947	—	41.1	−20 14	6	6	—	5.4	3	5.51	.07	—	—
4028	Aquarius .	69	7949	—	41.3	−14 41	6	6	—	5.8	7	5.55	.07	—	—
4029	Aquarius .	70	7952	—	42.2	−11 11	F	6	—	6.2	3	6.30	.12	—	—
4030	Lacerta . .	—	—	+36° 4934	42.7	+36 46	F	F	6.0	—	3	6.04	.11	—	—
4031	Aquarius .	τ 71	7954	—	43.2	−14 14	4	4	—	4.2	7	4.07	.09	—	—
4032	Lacerta . .	—	—	+53° 2993	43.8	+53 47	F	6·7	6.0	—	3	6.03	.11	6.4	.13
4033	Cepheus .	—	—	+62° 2115	44.2	+62 18	F	6·7	6.0	—	3	6.15	.08	6.4	.15
4034	Pegasus .	μ 48	7958	+23° 4615	44.2	+23 58	4	4	3.9	—	6	3.74	.04	3.4	.12
4035	Cepheus .	—	7961	+55° 2820	44.8	+55 16	F	F	5.9	—	3	5.39	.09	—	—
4036	Lacerta . .	14	7962	+41° 4623	44.9	+41 19	6	6	6.1	—	4	5.82	.12	5.6	.05
4037	Cepheus .	ι 32	7967	+65° 1814	45.4	+65 34	4·3	3·4	3.8	—	16	3.62	.03	3.8	.05
4038	Piscis Austr.	γ 22	7966	—	45.9	−33 31	5·4	5·4	—	4.6	3	4.29	.12	—	—
4039	Pegasus .	σ 49	7971	+ 9° 5122	46.3	+ 9 13	5	5	5.0	5.3	3	5.29	.07	5.2	.15
4040	Aquarius .	λ 73	7970	—	46.4	− 8 13	4	4	—	3.6	6	3.80	.06	—	—
4041	Cepheus .	—	7973	+60° 2450	46.7	+61 3	F	6	6.0	—	3	5.76	.08	6.0	.12
4042	Lacerta . .	15	7972	+42° 4521	46.7	+42 39	6	6·5	5.0	—	3	5.10	.11	5.2	.11
4043	Pegasus .	—	7975	+16° 4831	47.1	+16 12	6	6·5	5.5	—	3	5.71	.07	5.8	.17
4044	Aquarius .	74	7974	—	47.2	−12 15	6	6	—	6.0	3	5.82	.11	—	—
4045	Cepheus .	—	7990	+82° 703	47.9	+82 31	5	5	5.0	—	3	4.82	.05	4.8	.04
4046	Lacerta . .	—	7983	+43° 4331	48.3	+44 7	6	6·7	6.0	—	3	5.67	.16	5.8	.07
4047	Aquarius .	δ 76	7980	—	48.3	−16 28	3	3	—	3.2	6	3.42	.08	—	—
4048	Aquarius .	78	7981	—	48.4	− 7 49	F	6	—	6.4	7	6.26	.08	—	—
4049	Lacerta . .	—	7984	+39° 4964	48.6	+39 44	6	6	5.8	—	3	6.07	.04	5.7	.00
4050	Aquarius .	—	7986	—	49.0	− 5 37	6	6	—	5.9	7	5.77	.03	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
4001	8,248,257	192,403,619	4.8	021	121	. . *1* . . 246 . . 1 . . 1	. . .	*y*	
4002	6,242,266,549,553,558	196,405,618	5.3	212100	043	. . 0 . . *3* 11 . . 4 . . *2*	. . .	*y*	
4003	294,297,299		6.3	121	—	. . . . . F *5* . F 0 *2* . . .	. . .	.	
4004	14, 16,257	*196*,403,*619*	5.6	212	R11	. . . . . F 22 . . 5 . 01	. . .	.	te
4005	11,248,271,549,553,557	192,503,621	5.0	001001	231	. . 2 . . 000 . . 3 . 0 *1*	. . .	W	
4006	19,245,266	*190,413,624*	6.1	122	142	. . *1* . . *3* 32 . . *4* . . *2*	. . .	w	dc
4007	11,251,260		4.1	522	—	*3* 12 . . 00 . 02 *1* . 1 .	. . .	.	
4008	242,248,266	*192*,506,*621*	6.0	221	434	. . . . . *222* . . *11* . *1*	. . .	.	de
4009	3, 4, 6, 8, 14, 16, 19	113,149,158	5.2	1150200-	240	. . *1* . . 000 . . 1 : . 0	. . .	w	s
4010	8,245,271	*173,414*,624	5.8	111	*332*	. . . . . *402* . . *1* . . *3*	. . .	*y*	
4011	242,251,266	192,503,621	4.7	131	501	. . 1 . . 331 . . 6 . 52	. . *1*	*o*	t
4012	294,299,305	*192*,403,*619*	6.0	212	259	. . . . . F *22* . . F . . 5	. . .	.	
4013	11,254,266,549,553,554	173,414,624	3.6	313102	031	*3* 02 . . *21* 1 . 06 . *21*	02.	*y*	
4014	14, 16,260	192,503,621	5.1	010	411	. . 1 . . 771 . . F . . 1	. . .	W	
4015	19,242,277	189,414,624	4.9	111	715	102 . . 114 . . 0 . *10*	.*3*.	*y*	v
4016	6,245,271,294,297,549,551	*173,414*,624	6.2	0121212-	466	. . . . . *462* . . *1* . . *5*	. . .	Y	
4017	11,251,263		6.2	111	—	b b 0 . . *44* . . 05 . . .	. . .	w	a
4018	8,251,263,549,551,554		4.8	021202	—	221 . . 44 . . *11* . *1* .	. . .	O	nvg
4019	14, 16,260		6.0	302	—	. . . . . F F *2* . . 1 . . .	. . .	.	
4020	5, 19,277,280,282,284,549	189,414,624	3.1	0020102-	112	2130 . 113 . . 4 . 01	11.	*y*	
4021	294,297,299	*192*,503,*621*	6.2	111	623	. . . . . F *41* . . *5* . . *2*	. . .	*o*	dc
4022	3, 14, 16,551,553,554	*192*,503,*621*	5.1	011121	442	. . 3 . . 771 . . 6 . . 3	. . 3	Y	
4023	294,297,299,305,549,553,554	*190,413,624*	6.4	640*3*200	185	. . 1 . . *664* . . *3* . . *4*	. . .	Y	
4024	3, 19,275	173,414,624	4.2	202	432	232 . . 446 . 12 . 43	.0.	*y*	
4025	5, 14, 16,294,549,553,554	*194,503,621*	5.7	b050322	258	. . . . . F 41 . . F . . 5	. . .	*y*	
4026	6,245,266,551,553,554	189,414,624	4.2	011101	002	240 . . *112* . . *2* . 01	.*3*.	Y	
4027	8,251,263		5.5	210	—	*55* 0 . . 33 . 5*42* . *4* .	. . .	Y	na
4028	294,297,299,305,549,553,554		5.6	7131111	—	. . 7 . 322 . . 0*3* . *2* .	. . .	w	ndt
4029	3, 19,260		6.3	033	—	. . *6* . . F *5* . . *32* . . .	. . .	*y*	
4030	5,242,263		6.0	131	—	. . . . . F F *2* . . F . . .	. . .	.	
4031	294,297,299,305,549,553,554		4.1	5323221	—	313 . . 00 . . 18 . 1 .	. . .	O	nvt
4032	245,254,275	403,*619*	6.0	311	36	. . . . . F 12 . . 1 . . 4	. . .	.	
4033	11,251,260	*196,403,699*	6.2	121	522	. . . . . F *14* . . F . . 2	. . .	.	
4034	8,245,266,551,553,554	189,414,624	3.7	221110	162	71 *1* . . 443 . . *2* . 5*3*	2 *1*.	Y	
4035	19,251,277		5.4	212	—	. . . . . F F 3 . . 7 . . .	. . .	Y	
4036	254,263,294,318	*192*,503,*621*	5.8	3151	311	. . *4* . . 001 . . *1* . . *2*	. . 3	*y*	
4037	3, 9, 11, 14, 16, 19,242	112,149,158	3.6	2811001-	214	221 . . 113 . . 4 . 42	21.	Y	st
4038	11,242,277		4.3	132	—	112 . . 33 . 121 . 2 .	. . .	.	g
4039	19,251,263	191,413,624	5.3	210	314	*311* . . *333* . *34* . *31*	. . .	*y*	a
4040	11,254,266,549,553,557		3.8	130105	—	670 . . 33 . . *12* . *1* .	. . .	Y	t
4041	3,260,280	*196,403*,699	5.8	112	341	. . . . *3* F 00 . . *1* . . 2	. . .	Y	d
4042	19,260,280	*192*,503,*621*	5.1	023	411	. . *1* . . 751 . . 6 . 11	. . 1	*o*	t
4043	14, 16,280	*190*,414,624	5.7	201	521	. . . . . 1*13* . . 4 . . 1	. . .	Y	
4044	11,260,277		5.8	203	—	. . 6 . . 00 . . 01 . . .	. . .	*b*	
4045	3,242,280	117,506,701	4.8	111	101	. . . . . 222 . . 5 . . 0	. . .	O	
4046	9,251,275	*194*,503,*621*	5.7	431	211	. . . . . 141 . . 4 . . 1	. . 4	*y*	
4047	5,260,275,549,553,557		3.4	322312	—	*12* 31 . *22* . . *14* . *1* .	1 . .	*y*	
4048	19,254,266,294,549,553,557		6.3	343110	—	. . 0 . . F *5* . . *1* F . . .	. . .	*o*	
4049	11,251,275	173,*506,621*	6.1	101	444	. . . . . *335* . . F . . *4*	. . .	*o*	e
4050	14, 16,266,294,549,551,557		5.8	1171110	—	b b . . . 00 . . *11* . *3* .	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
4051	Pegasus .	ϱ 50	7988	+ 8° 4961	49.2	+ 8 11	5	5	4.7	5.2	3	4.95	.07	4.9	.11
4052	Piscis Austr.	δ 23	7987	—	49.3	− 33 11	5·4	5·4	—	4.4	10	4.43	.16	—	—
4053	Lacerta . .	—	—	+36° 4956	49.5	+36 27	6	6	5.9	—	3	6.00	.05	5.7	.07
4054	Lacerta . .	—	—	+35° 4917	50.2	+35 44	6	6	6.0	—	3	5.60	.09	5.5	.08
4055	Lacerta . .	16	7994	+40° 4949	50.9	+40 58	6	6·5	6.2	—	3	5.60	.15	5.5	.09
4056	Aquarius .	—	7993	—	51.0	− 5 27	F	F	—	6.6	6	6.50	.02	—	—
4057	Piscis Austr.	α 24	7992	—	51.0	−30 15	1·2	1·2	—	1.4	16	1.26	.05	1.9	.13
4058	Lacerta . .	—	7995	+48° 3887	51.2	+49 6	6	6·5	4.6	—	3	5.17	.12	5.2	.05
4059	Pegasus .	51	7997	+19° 5036	51.6	+20 8	6·5	6·5	5.0	—	3	5.55	.08	5.4	.11
4060	Lacerta . .	—	7999	+47° 3985	51.8	+48 2	6	5·6	5.3	—	3	5.14	.15	4.8	.13
4061	Lacerta . .	—	—	+38° 4904	52.1	+38 42	6	6	6.5	—	3	6.07	.08	5.6	.05
4062	Pegasus .	52	8003	+10° 4859	53.2	+11 5	6	6	6.1	—	3	5.86	.13	5.6	.03
4063	Pisces . .	2	8005	+ 0° 4950	53.3	+ 0 20	6	6	6.0	5.4	7	5.62	.09	5.6	.13
4064	Aquarius .	—	8007	—	53.6	−25 48	F	F	—	6.1	3	5.88	.13	—	—
4065	Lacerta . .	—	—	+51° 3514	54.0	+52 0	F	F	6.0	—	3	6.37	.04	—	—
4066	Pisces . .	3	8012	− 0° 4443	54.4	− 0 27	6	6	6.8	6.4	3	6.51	.07	—	—
4067	Aquarius .	—	—	—	54.8	−29 30	F	F	—	5.9	3	5.59	.15	—	—
4068	Aquarius .	—	—	—	54.9	−23 26	F	6·7	—	6.7	3	6.11	.08	—	—
4069	Pegasus .	—	—	+30° 4859	55.0	+30 27	F	F	6.0	—	3	6.53	.11	—	—
4070	Cassiopeia .	—	—	+56° 2923	55.1	+56 18	F	F	6.0	—	3	5.63	.05	—	—
4071	Cepheus .	—	8026	+83° 640	55.3	+83 42	5·6	5·6	5.0	—	3	4.96	.03	4.9	.11
4072	Cassiopeia .	—	8024	+56° 2927	56.4	+56 28	6	6·5	6.1	—	3	6.46	.08	5.5	.07
4073	Andromeda	o 1	8023	+41° 4664	56.4	+41 41	4·3	4·3	3.7	—	6	3.77	.06	3.6	.00
4074	Pegasus .	—	—	+22° 4762	56.5	+22 40	F	F	6.0	—	3	6.75	.08	—	—
4075	Pegasus .	—	—	+22° 4763	56.9	+22 31	6	6·7	6.6	—	3	7.12	.09	6.4	.11
4076	Andromeda	2	8028	+41° 4665	57.1	+42 7	6	6	6.2	—	3	5.10	.05	5.3	.16
4077	Pisces . .	β 4	8031	+ 3° 4818	57.8	+ 3 10	5·4	5·4	4.7	4.4	3	4.57	.11	4.6	.15
4078	Pegasus .	β 53	8032	+27° 4480	58.0	+27 26	2·3	var.	var.	—	11	2.56	.04	2.6	.05
4079	Andromeda	3	8036	+49° 4028	58.8	+49 24	5·6	5	4.8	—	3	4.87	.16	4.7	.10
4080	Pegasus .	α 54	8034	+14° 4926	58.8	+14 34	2	2	2.0	—	18	2.61	.04	2.5	.06
4081	Aquarius .	h 83	8035	—	58.9	− 8 20	6·5	6·5	—	5.4	6	5.45	.07	—	—
4082	Cepheus .	—	8039	+66° 1575	59.0	+66 34	6	5·6	5.5	—	3	5.42	.11	5.7	.08
4083	Aquarius .	c^1 86	8047	—	0.2	−24 23	4·5	5·4	—	4.4	3	4.82	.15	—	—
4084	Pegasus .	55	8051	+ 8° 4997	1.0	+ 8 46	5	5	5.2	4.5	3	4.65	.03	4.7	.07
4085	Pegasus .	56	8052	+24° 4716	1.3	+24 49	5	5	5.3	—	3	4.89	.09	4.7	.12
4086	Cassiopeia .	1	8054	+58° 2545	1.5	+58 47	5·6	5	5.3	—	3	4.99	.05	5.0	.07
4087	Pegasus .	—	—	+20° 5278	1.5	+20 30	6	6·5	6.2	—	3	5.88	.13	5.9	.12
4088	Andromeda	—	—	+52° 3371	1.7	+52 10	F	F	5.5	—	3	6.20	.17	—	—
4089	Piscis Austr.	—	8053	—	1.9	−29 28	F	F	—	6.0	3	5.89	.11	—	—
4090	Andromeda	4	8058	+45° 4149	2.2	+45 44	6	6	5.5	—	3	5.67	.08	5.6	.03
4091	Andromeda	5	8059	+48° 3944	2.3	+48 39	F	6·7	6.0	—	5	5.93	.07	5.9	—
4092	Pisces . .	A 5	8060	+ 1° 4686	2.6	+ 1 27	6	6·5	6.0	5.6	7	5.52	.04	5.6	.09
4093	Aquarius .	c^2 88	8062	—	3.0	−21 49	4	4	—	3.7	6	3.55	.06	—	—
4094	Piscis Austr.	—	8064	—	3.3	−28 44	F	F	—	6.3	4	6.08	.07	—	—
4095	Pegasus .	57	8070	+ 7° 4981	3.5	+ 8 2	5·6	5·6	5.3	5.4	3	5.45	.05	4.9	.12
4096	Aquarius .	c^3 89	8069	—	3.5	−23 6	5	5	—	4.9	3	4.89	.13	—	—
4097	Pegasus .	58	8071	+ 9° 5170	4.0	+ 9 11	5·6	5·6	5.5	5.7	3	5.32	.04	5.0	.13
4098	Cepheus .	π 33	8074	+74° 1006	4.1	+74 44	5·4	5·4	4.6	—	16	4.48	.04	4.7	.05
4099	Cassiopeia .	2	8075	+58° 2552	4.6	+58 41	6	6·5	6.1	—	3	5.39	.19	5.7	03
4100	Pegasus .	—	—	+16° 4882	4.7	+16 56	6	6	5.8	—	3	6.11	.07	5.7	.07

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
4051	5,251,275	191,413,624	5.0	*1*02	*222*	02*1*. . 00*3*. *1*3. 0*1*	. . .	*y*	a
4052	3, 9, 19,242,277,294,297		4.4	FF6*33*68-	—	. . 0. . 22. 000. *1*.	. . .	.	dt
4053	242,254,266	173,*506,621*	6.0	*1*11	*314*	. . . . . *223*. . 13. *3*	. . .	.	
4054	5,242,266	173,*506,621*	5.6	*2*12	*212*	. . . . . 222. . 15. *1*	. . .	.	
4055	11,254,263	173,503,*621*	5.6	*1*24	10*3*	. . 3. *1*204. . 1. . *1*	. . 3	W	dt
4056	549,551,553,557,559,560		6.5	*110*100	—	. . . . . FF. . *18*. . .	. . .	.	dc
4057	3, 5, 11, 14, 16, 19,242	118,119,121	1.3	*1032331*-	881-	*8*. 40. *11*. *118*. . 6	*2*. .	*o*	neah
4058	242,251,269	194,403,700	5.2	*132*	*111*	. . . . . 646. . 5. . 0	. . 0	.	v
4059	242,254,263	189,414,624	5.6	02*2*	*511*	. . 0. . *2*06. . 1. . *2*	. . .	*y*	
4060	19,251,269	194,403,700	5.1	21*4*	*611*	. . . . . 711. . 6. . *3*	. . 3	*b*	
4061	9,251,275	173,506,*621*	6.1	*112*	*446*	. . . . . *33*2. . 0. . *5*	. . .	*y*	
4062	3,254,275	191,415,626	5.9	*3*13	*343*	. . *4*. . *11*0. . *2*. . *3*	. . .	*y*	
4063	11,254,269,297,557,559,560	*191*,415,626	5.6	61*32412*	31*3*	. . 1. . 222. *53*. . 0	. . .	Y	
4064	9,251,275		5.9	*3*22	—	. . . . . FF. 102. 5.	. . .	.	t
4065	14, 16,263		6.4	01*1*	—	. . . . . FF*6*. . *72*. .	. . .	.	dc
4066	19,254,269		6.5	20*1*	—	. . R. . 771. *34*. . .	. . .	*o*	h
4067	3,275,277		5.6	*4*30	—	. . . . . FF. 41F. . .	. . .	.	t
4068	11,251,269		6.1	*2*02	—	. . . . . F0. *1*4F. . .	. . .	.	
4069	242,254,263		6.5	*13*1	—	. . . . . FF*7*. . *42*. .	. . .	.	
4070	242,254,269		5.6	*111*	—	. . . . . FF2. . F*1*. .	. . .	.	m
4071	19,251,263	196,506,701	5.0	*1*00	*141*	. . . . . 220. . 7. . *1*	. . .	o	
4072	242,254,269	*194*,403,700	6.5	02*2*	*9*bb	. . . . . *796*. . F. . b	. . .	.	nm
4073	9,254,275,557,559,560	173,506,621	3.8	*212*122	*222*	. . 0. . *111*. . 2. 2*2*	. . 0	W	eh
4074	242,251,269		6.8	22*0*	—	. . . . . FFb. . F*2*. .	. . .	.	
4075	242,251,269	*189*,415,*624*	7.1	*221*	*6*b*6*	. . . . . bb*7*. . b. . *7*	. . .	.	de
4076	11,254,275	173,503,621	5.1	*1*11	35*2*	bb3. . 779. . 6. . 2	. . 4	*y*	a
4077	9,254,275	191,412,626	4.6	*3*11	034	*847*. . 001. *22*. *2*0	.*3*.	W	
4078	5,254,272,275,277,285,288	189,415,626	2.6	*3*112402-	*111*	0*11*2. *1*vv. . *6*. *2*0	1*1*.	Y	vt
4079	9,254,275	194,403,700	4.9	*422*	*410*	. . 1. . 31*1*. . 8. 3*2*	. . *2*	Y	
4080	3, 7, 11, 14, 16, 19,242	110,112,118	2.6	*0761013*-	*105*-	0*102*. *445*. . *6*. *71*	*10*.	W	e
4081	251,254,275,553,557,559		5.4	033*221*	—	b*94*. 002. . *35*. *3*.	. . .	*y*	nd
4082	251,269,275	194,405,701	5.4	*13*1	351	. . . . . 420. . 3. . 3	. . .	Y	
4083	7, 19,285		4.8	*142*	—	*463*. . *42*. *441*. 5.	. . .	*o*	
4084	16,269,288	191,413,626	4.6	001	*121*	. . 3. . 446. *23*. 11	.*5*.	*o*	t
4085	251,283,285	189,415,626	4.9	21*2*	*501*	. . 6. . 113. . 0. *12*	. . .	*o*	
4086	3,277,283	*194*,403,700	5.0	*1*11	20*1*	. . *4*. . 202. . 3. 00	. . .	*y*	
4087	7,281,283	189,*415*,624	5.9	*3*22	*303*	. . . . . *13*1. . *2*. . 0	. . .	.	
4088	9,281,283		6.2	*441*	—	. . . . . FF*8*. . F. . .	. . .	.	
4089	251,281,283		5.9	*3*11	—	. . . . . FF. 1*12*. . .	. . .	.	n
4090	14,281,283	196,403,700	5.7	02*2*	01*1*	. . *2*. . 11*3*. . 0. . *1*	. . *3*	*o*	
4091	242,254,275,281,285	*196*,403,700	5.9	201*14*	04*3*	. . *3*. . F2*1*. . 2. . 0	. . *1*	*y*	ve
4092	16,281,285,294,553,559,564	191,415,625	5.5	*2*800013	03*1*	. . *4*. . 313. *22*. *21*	. . .	*y*	
4093	7,281,283,553,559,564		3.6	*431*110	—	862. . 55. 324. 2.	. . .	*y*	d
4094	9,251,281,283		6.1	F*1*02	—	. . . . . FF. *104*. . .	. . .	.	nm
4095	251,269,288	191,413,626	5.4	*1*11	*726*	. . 1. 5*222*. *33*. *35*	.*9*.	Y	dtc
4096	14,281,283		4.9	*313*	—	*572*. . 11. 1*2*0. *2*.	. . .	*y*	
4097	16,269,288	191,413,626	5.3	01*1*	*611*	. . *1*. . *111*. 14. 1*3*	.*2*.	w	
4098	3, 5, 9, 12, 14, 16, 19	110,112,118	4.5	10*32124*-	*113*	. . 1. . 111. . 4. 32	. . .	Y	s
4099	9,277,283	*194*,403,700	5.4	*4*05	332	. . 4. . 425. . 3. . 3	. . .	.	
4100	251,272,294	189,*415*,626	6.1	02*1*	*542*	. . . . . *335*. . 0. . *4*	. . .	*o*	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
4101	Andromeda	6	8076	+42° 4592	4.9	+42 55	F	6·7	6.0	—	3	5.87	.04	6.2	.15
4102	Pegasus .	59	8078	+ 7° 4991	5.7	+ 8 4	5	6·5	6.0	5.4	4	5.12	.04	4.8	.07
4103	Pegasus .	60	8079	+26° 4580	6.0	+26 12	6	6	6.5	—	3	6.49	.05	6.2	.13
4104	Andromeda	7	8082	+48° 3964	7.1	+48 45	5	5	5.0	—	3	4.70	.07	4.7	.07
4105	Cassiopeia .	—	8083	+56° 2966	7.5	+56 30	6	6	6.0	—	6	5.46	.09	5.6	.03
4106	Aquarius .	φ 90	8085	—	8.1	− 6 41	4·5	4·5	—	4.1	6	4.24	.08	—	—
4107	Pegasus .	—	—	+23° 4704	8.7	+23 27	6	6	6.5	—	3	6.43	.15	6.1	.13
4108	Aquarius .	—	8094	—	9.3	− 4 8	5·6	5·6	—	5.4	7	5.58	.04	—	—
4109	Aquarius .	ψ^1 91	8095	—	9.6	− 9 44	5·4	5·4	—	4.1	7	4.48	.08	—	—
4110	Pegasus .	61	8097	+27° 4521	9.9	+27 36	F	6	6.5	—	3	6.66	.04	6.5	—
4111	Pegasus .	—	—	+23° 4712	10.0	+24 7	6	6	7.0	—	3	6.59	.05	6.2	.12
4112	Cepheus .	—	8104	+73° 1023	10.3	+73 35	6	6	6.2	—	3	5.56	.11	5.5	.17
4113	Aquarius .	χ 92	8102	—	10.7	− 8 22	5·6	5·6	—	5.3	3	5.15	.13	—	—
4114	Pisces . .	γ 6	8105	+ 2° 4648	10.9	+ 2 38	4	4	3.8	3.6	6	3.82	.04	3.9	.13
4115	Cepheus .	—	8106	+70° 1311	11.0	+70 14	6	6·5	6.0	—	3	5.47	.11	5.4	.07
4116	Andromeda	—	8107	+52° 3410	11.0	+52 34	6	6	5.4	—	3	5.64	.07	5.7	.04
4117	Aquarius .	—	—	—	11.4	−12 22	6	6	—	6.6	6	6.29	.06	—	—
4118	Andromeda	—	8110	+44° 4368	11.6	+44 31	6	6	6.2	—	3	6.47	.04	6.0	.17
4119	Aquarius .	ψ^2 93	8109	—	11.7	− 9 50	5·4	5·4	—	4.2	4	4.53	.11	—	—
4120	Andromeda	8	8114	+48° 3991	12.2	+48 22	5·6	5·6	4.9	—	3	4.87	.16	4.9	.16
4121	Piscis Austr.	—	8113	—	12.3	−33 11	5·4	5·4	—	4.4	3	4.59	.09	—	—
4122	Piscis Austr.	—	—	—	12.5	−31 12	F	6	—	6.9	7	7.14	.04	—	—
4123	Andromeda	9	8118	+40° 5043	12.7	+41 7	6	6	6.2	—	3	6.00	.09	6.0	.21
4124	Aquarius .	ψ^3 95	8116	—	12.7	−10 15	5	5	—	4.8	6	5.08	.03	—	—
4125	Aquarius .	94	8117	—	12.8	−14 7	6·5	6·5	—	5.5	3	5.20	.11	—	—
4126	Aquarius .	96	8119	—	13.2	− 5 46	6·5	6·5	—	5.6	3	5.72	.05	—	—
4127	Cepheus .	o 34	8124	+67° 1514	13.8	+67 28	6·5	5·6	5.2	—	15	4.86	.04	4.9	.05
4128	Andromeda	11	8125	+47° 4110	13.9	+47 58	6	6	6.0	—	3	5.34	.09	5.4	.11
4129	Andromeda	10	8128	+41° 4752	14.2	+41 25	F	6	5.9	—	3	6.10	.05	6.0	.21
4130	Pisces . .	b 7	8127	+ 4° 4997	14.3	+ 4 43	6	6·5	5.5	5.4	3	5.07	.07	5.4	.07
4131	Andromeda	12	8136	+37° 4817	14.7	+37 31	6	6	6.0	—	3	5.77	.04	5.7	.03
4132	Pegasus .	τ 62	8131	+22° 4810	14.7	+23 5	5·4	5·4	5.0	—	6	4.71	.03	4.5	.19
4133	Piscis Austr.	—	8132	—	14.9	−27 39	F	F	—	6.0	3	5.89	.00	—	—
4134	Pegasus .	63	8133	+29° 4908	15.0	+29 46	6	6·5	6.1	—	3	5.69	.19	5.7	.09
4135	Cassiopeia .	—	8138	+61° 2428	15.3	+61 33	F	6	6.0	—	3	6.26	.04	6.6	.11
4136	Pegasus .	64	8141	+31° 4897	16.1	+31 9	6	6	5.8	—	3	5.37	.12	5.4	.17
4137	Aquarius .	97	8142	—	16.4	−15 42	6·5	6·5	—	5.3	7	5.27	.02	—	—
4138	Pegasus .	65	8146	+20° 5317	16.7	+20 10	6	6	6.3	—	3	6.12	.03	6.0	.11
4139	Aquarius .	b^1 98	8144	—	16.7	−20 45	5·4	5·4	—	3.9	6	4.12	.07	—	—
4140	Pegasus .	66	8149	+11° 4993	17.0	+11 39	6·5	6·5	5.3	5.5	7	5.22	.05	5.5	.19
4141	Cassiopeia .	—	8153	+59° 2710	17.2	+59 28	F	6·7	6.0	—	3	5.99	.05	6.2	.15
4142	Pegasus .	67	8159	+31° 4904	19.0	+31 43	6	6	6.0	—	7	5.50	.03	5.4	.19
4143	Pegasus .	v 68	8160	+22° 4833	19.4	+22 45	5·4	5·4	4.5	—	6	4.57	.04	4.4	.17
4144	Cassiopeia .	4	8162	+61° 2444	19.5	+61 37	6	6·5	5.3	—	7	5.17	.05	5.4	.13
4145	Aquarius .	b^2 99	8161	—	19.7	−21 18	5	5	—	4.4	3	4.36	.04	—	—
4146	Pisces . .	$\varkappa$ 8	8169	+ 0° 4998	20.8	+ 0 36	5·4	5·6	5.7	4.7	6	5.01	.08	4.6	.13
4147	Andromeda	13	8171	+42° 4672	21.3	+42 15	6	6	6.2	—	3	5.77	.08	5.5	.03
4148	Pegasus .	69	8174	+24° 4779	21.7	+24 31	6	6	6.5	—	3	5.96	.04	5.7	.21
4149	Pisces . .	θ 10	8177	+ 5° 5173	21.9	+ 5 43	4·5	5·4	4.7	4.2	6	4.41	.03	4.5	.12
4150	Cepheus .	—	8180	+69° 1332	22.2	+69 42	6	6	6.2	—	7	5.71	.08	5.5	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates				P S H h Σ U *H* D B G *h* R F E	s w p		
4101	19,272,281	173,*503,621*	5.9	*1*01	*1*45	. . 0 . . F 2 *1* . . 2 . . 3	. . 1	*y*	
4102	3, 14,269,288	191,413,626	5.1	F*1*10	*413*	. . *1* . . *1* 5 7 . 0 2 . 0 *3*	. *1* .	w	
4103	5, 16,281	*189,415,626*	6.5	*1*11	*161*	. . *3* . . *7 7 2* . . *8* . . *3*	. . .	Y	
4104	3, 19,288	194,403,700	4.7	*1*02	*2*01	. . *2* . . 3 3 3 . . 2 . 4 0	. . 1	*y*	
4105	9,272,294,547,553,559	*194*,403,700	5.5	*441320*	211	. . . . . 3 3 3 . . F . 5 *1*	. . .	y	
4106	7, 19,281,547,553,561		4.2	*414111*	—	2 3 4 . . 2 2 . . 0 2 . *1* .	. . .	O	t
4107	3,254,283	*189,415,626*	6.4	*4*21	062	. . . . . *6 6 1* . . *3* . . *3*	. . .	.	
4108	9,272,288,297,547,561,562		5.6	b112030	—	. . . . . *4 4* . . *5 7* . . .	. . .	*y*	
4109	7, 19,281,297,547,553,561		4.5	b101*433*	—	*1 3 5* . 3 1 1 . . *3 5* . *4* .	. . .	Y	dt
4110	12,272,294	*189,415,626*	6.7	10*1*	*3*b2	. . 0 . . F *9 4* . . b . . *3*	. . .	*y*	e
4111	3,254,283	*189,415,626*	6.6	11*1*	*273*	. . 0 . . *8 8* 2 . . F . . *4*	. . .	.	
4112	5, 16,285	*196,506*,701	5.6	0*2*3	521	. . . . . 2 2 4 . . 5 . . *1*	. . .	w	
4113	9,254,288		5.2	*3*31	—	*8* b 0 . . 0 0 . . *2 3* . *2* .	. . .	*o*	t
4114	12,272,294,547,561,562	118,412,626	3.8	011*2*02	42*2*	6 7 1 . . 3 3 1 . *1 2* . 0 1	. *1* .	*y*	g
4115	16,242,285	*194*,506,701	5.5	*131*	*211*	. . . . . 3 1 3 . . 2 . . *1*	. . .	W	
4116	19,266,285	*194*,403,700	5.6	1*2*0	012	. . . . . 2 2 *3* . . 5 . . 1	. . .	*y*	n
4117	7,254,283,698,699,700		6.3	*3*20122	—	. . . . . *5 5* . . 1 *2* . . .	. . .	.	vg
4118	5,254,294	173,*503,621*	6.5	*1*01	*817*	. . . . . *7 7 5* . . F . . *5*	. . 1	Y	
4119	5, 9,269,553		4.5	3*222*	—	*1* . *3* . . 1 1 . . *3 1* . *3* .	. . .	*g*	ta
4120	15,266,288	194,403,700	4.9	*4*13	*4*31	. . 1 . . 3 3 0 . . 8 . . 0	. . 0	O	t
4121	242,272,277		4.6	*221*	—	. . . . . 0 0 . *2 2 2* . *3* .	. . .	.	n
4122	242,272,277,283,297,298,299		7.1	0FF1FF*1*	—	. . . . . F b . F 4 F . . .	. . .	.	
4123	7,277,283	*173*,503,*621*	6.0	*2*12	*335*	. . 2 . . *2 2* 0 . . *3* . . 0	. . 2	w	dc
4124	269,281,283,698,699,700		5.1	*11*1001	—	. *9* 1 . . *1 1* . . *4 2* . *5* .	. . .	w	vag
4125	12,254,283		5.2	*2*03	—	*2 1 3* . 0 2 4 . . 0 *3* . 0 .	. . .	Y	dta
4126	16,254,288		5.7	1*11*	—	. . *3* . . *3 1* . . *4* 0 . . .	. . .	*y*	
4127	3, 5, 9, 12, 15, 16, 19	110,112,149	4.9	*1211*223-	*4*02	. . 0 . 4 5 3 3 . . 0 . 2 0	. . .	Y	dvs
4128	251,266,294	*196*,403,700	5.3	2*12*	*213*	. . 1 . . 5 5 5 . . 4 . . 1	. . 3	Y	dc
4129	254,277,283	*173*,503,*621*	6.1	1*11*	*444*	. . *1* . . F *3 4* . . R . . *1*	. . *1*	Y	dc
4130	12,266,294	191,415,626	5.1	*2*01	431	*7 6* 1 . 3 7 5 3 . 0 *2* . 1 3	. . .	*y*	
4131	254,266,294	173,506,*621*	5.8	0*11*	*112*	. . *2* . . 0 0 0 . . *1* . . *1*	. . .	*y*	
4132	254,277,294,553,561,564	189,414,626	4.7	022*10*	*227*	*3 5 2* . . *1 1* 3 . . *3* . 0 *2*	. *2* .	*y*	
4133	16,272,288		5.9	000	—	. . . . . F F . 1 *1 2* . . .	. . .	.	n
4134	12,266,294	*189*,415,626	5.7	*3*15	*122*	. . 1 . . 1 *1 2* . . 4 . . 0	. . .	*o*	
4135	7,277,302	*194,403*,701	6.3	1*1*0	622	. . . . . F *5 5* . . F . . 3	. . .	.	de
4136	285,294,298	189,415,626	5.4	*3*21	*243*	. . *4* . . 4 4 2 . . 3 . . 0	. . .	w	
4137	9,254,294,298,553,561,564		5.3	f110001	—	. *3* 0 . . 1 3 . . *3 4* . . .	. . .	*y*	a
4138	5,257,294	*189*,415,627	6.1	*1*00	1*14*	. . 1 . . *3 3* 0 . . 0 . . *1*	. . .	w	
4139	16,285,288,553,561,564		4.1	3*11132*	—	3 1 *1* . . 5 5 . 0 *11* . *2* .	. . .	*y*	n
4140	15,281,294,298,561,562,564	191,415,626	5.2	*5*320001	37*2*	. 1 1 . . 2 4 0 . 0 1 . . 3	. . .	*o*	
4141	254,257,294	*194,403*,701	6.0	11*1*	34*2*	. . . . . F 1 *2* . . 1 . . 2	. . .	*o*	
4142	3, 15,294,298,561,562,564	189,415,626	5.5	0*221*100	*343*	. . *1* . . 3 3 3 . . 2 . . *1*	. . .	w	
4143	5, 16,285,561,562,564	189,414,626	4.6	*3*10120	*126*	*2 4 1* . . 0 0 *1* . . *2* . 1 *2*	. *2* .	Y	
4144	7, 19,285,294,561,562,564	*194*,403,701	5.2	0411014	500	. . 0 . . 6 4 0 . . 5 . 4 2	. . .	*o*	t
4145	9,285,288		4.4	*1*10	—	0 *2* 0 . . 6 6 . 0 0 0 . *1* .	. . .	Y	nt
4146	3, 15,288,547,561,562	118,415,626	5.0	*13*5201	*317*	*6 8* R . . *4* 2 6 . *4 6* . *4 4*	. . .	W	dhc
4147	5, 19,242	173,503,*621*	5.8	*2*11	*433*	. . 0 . . 0 0 2 . . 3 . . *3*	. . 2	w	
4148	7,285,294	*189*,414,*627*	6.0	1*1*0	28*4*	. . *2* . . *2 2* 3 . . *3* . . *3*	. . .	w	
4149	9,257,288,547,561,562	118,415,626	4.4	*101*10	041	0 *2* 4 . . 0 2 3 . *2* 0 . 0 1	. *2* .	*y*	
4150	3, 15,288,298,561,562,564	*194*,403,701	5.7	*2712*30	4b*1*	. . . . . 1 1 3 . . 0 . . *3*	. . .	W	e

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
4151	Pegasus .	70	8182	+11° 5009	23.1	+12 6	5	5	4.8	4.7	6	4.65	.04	4.7	.00
4152	Aquarius .	—	8184	—	23.2	− 5 11	6·5	6·5	—	6.3	6	6.28	.08	—	—
4153	Cassiopeia .	—	8188	+57° 2748	24.5	+57 53	5	5	5.7	—	4	4.76	.05	4.7	.16
4154	Andromeda	14	8195	+38° 5023	25.5	+38 34	6	6	5.8	—	4	5.34	.11	5.3	.09
4155	Pegasus .	—	—	+27° 4566	25.5	+28 0	F	6·7	6.0	—	3	6.66	.16	6.5	.00
4156	Aquarius .	—	—	—	26.2	−11 40	6	6	—	6.8	6	6.67	.06	—	—
4157	Aquarius .	$b^3$101	8202	—	27.0	−21 34	5·4	5·4	—	4.5	6	4.73	.03	—	—
4158	Pegasus .	71	8203	+21° 4952	27.5	+21 52	6	6·5	6.0	—	3	5.42	.15	5.6	.11
4159	Cepheus .	—	8213	+86° 344	27.8	+86 39	6	6	6.0	—	5	5.57	.04	5.6	.23
4160	Pegasus .	—	—	+20° 5352	27.9	+20 11	F	6·7	6.0	—	3	6.35	.08	5.9	.13
4161	Pisces . .	14	8205	—	27.9	− 1 55	6	6	—	5.9	3	5.94	.15	—	—
4162	Pegasus .	72	8206	+30° 4978	28.0	+30 40	6	5·6	5.0	—	6	5.23	.04	5.0	.03
4163	Aquarius .	—	—	—	28.6	−15 54	6	6	—	6.6	3	6.27	.17	—	—
4164	Pegasus .	73	8211	+32° 4667	28.7	+32 50	6	6	6.0	—	3	5.80	.07	5.7	.08
4165	Andromeda	15	8212	+39° 5114	28.8	+39 34	6	6	6.0	—	7	5.54	.03	5.4	.04
4166	Pegasus .	—	—	+23° 4767	28.9	+23 45	6	6·7	6.5	—	3	6.66	.00	6.3	.13
4167	Aquarius .	—	8214	—	29.3	− 8 8	F	F	—	6.5	6	6.51	.06	—	—
4168	Cepheus .	—	8217	+70° 1227	29.7	+70 58	6	6·7	6.0	—	3	6.17	.03	6.5	.15
4169	Pegasus .	—	—	+23° 4769	29.9	+23 53	6	6	6.7	—	3	6.69	.09	6.2	.13
4170	Pisces .	16	8218	+ 1° 4744	30.3	+ 1 26	6	6	6.8	5.8	3	5.59	.12	5.9	.12
4171	Pegasus .	—	—	+32° 4671	30.5	+32 14	6	6	6.8	—	7	6.49	.06	6.0	.08
4172	Aquarius .	—	8221	—	31.4	−13 44	6	6	—	6.0	3	5.60	.11	—	—
4173	Pegasus .	74	8222	+16° 4954	31.6	+16 10	6	6	6.4	—	3	6.27	.07	6.1	.04
4174	Andromeda	λ 16	8224	+45° 4283	31.7	+45 48	4	4	3.5	—	7	3.95	.07	4.0	.16
4175	Pegasus .	75	8227	+17° 4952	31.9	+17 46	6·5	6·5	5.8	—	3	5.38	.05	5.6	.13
4176	Andromeda	ι 17	8229	+42° 4720	32.3	+42 36	4	4	4.2	—	6	4.30	.08	4.1	.09
4177	Andromeda	18	8231	+49° 4180	33.3	+49 48	6·5	6·5	5.7	—	3	5.30	.09	5.2	.05
4178	Aquarius .	$\omega^1$102	8232	—	33.6	−14 53	5·4	5·4	—	5.2	4	5.23	.15	—	—
4179	Pegasus .	—	8234	+ 8° 5095	33.7	+ 9 1	6	6	6.0	6.3	4	6.15	.03	5.8	.13
4180	Pisces . .	ι 17	8233	+ 4° 5035	33.8	+ 4 59	4·5	4·5	4.2	4.1	6	4.28	.06	4.1	.11
4181	Cepheus .	—	—	+73° 1047	34.2	+73 18	F	6·7	5.6	—	16	6.05	.05	6.1	.04
4182	Cepheus .	γ 35	8238	+76° 928	34.4	+76 58	3·4	3·4	3.5	—	10	3.37	.04	3.5	.04
4183	Andromeda	ϰ 19	8237	+43° 4522	34.5	+43 40	4	4·5	4.7	—	6	4.42	.04	4.1	.09
4184	Andromeda	—	—	+35° 5074	34.7	+36 3	F	6·7	6.0	—	3	6.37	.04	6.5	.07
4185	Aquarius .	—	8239	—	34.9	−12 21	6	6	—	6.2	3	6.09	.04	—	—
4186	Aquarius .	103	8240	—	35.4	−18 41	F	F	—	5.8	3	5.70	.04	—	—
4187	Aquarius .	A 104	8242	—	35.5	−18 29	4	4	—	5.0	3	4.78	.11	—	—
4188	Pisces . .	λ 18	8243	+ 0° 5037	35.9	+ 1 7	5	5	4.6	4.5	3	4.69	.04	4.3	.03
4189	Aquarius .	—	—	—	36.2	−16 7	6	6	—	5.7	7	5.51	.05	—	—
4190	Aquarius .	$\omega^2$105	8246	—	36.5	−15 12	4·5	5	—	4.7	6	4.68	.03	—	—
4191	Cassiopeia .	—	—	+63° 2038	36.7	+63 51	F	F	6.0	—	12	6.92	.04	6.4	.05
4192	Pegasus .	77	8250	+ 9° 5268	37.3	+ 9 40	6·5	5·6	5.0	5.3	3	5.42	.16	5.5	.12
4193	Aquarius .	R	—	—	37.6	−15 57	F	var.	—	var.	6	var.	—	—	—
4194	Pegasus .	78	8256	+28° 4627	38.0	+28 42	5	5	5.2	—	3	4.93	.13	4.9	.07
4195	Aquarius .	i^1 106	8255	—	38.0	−18 57	5	5	—	5.2	6	5.28	.04	—	—
4196	Aquarius .	107	8259	—	39.8	−19 20	5·6	5·6	—	5.4	3	5.39	04	—	—
4197	Andromeda	ψ 20	8261	+45° 4321	40.1	+45 45	5	6·5	5.2	—	3	5.00	.07	5.1	.09
4198	Pisces . .	19	8262	+ 2° 4709	40.2	+ 2 49	6	6	6.2	4.9	6	5.15	.08	5.7	.08
4199	Cepheus .	—	—	+65° 1943	40.6	+66 6	F	6	6.3	—	3	5.98	.03	5.7	—
4200	Aquarius .	—	8266	—	41.1	−12 34	6	6	—	5.9	3	5.95	.09	—	—

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
4151	5, 16,281,547,561,562	191,415,626	4.6	101*212*	111	. 53. . 442. 03. 41	...	Y	n
4152	9,275,285,698,699,700		6.3	*530*310	—	. . . . . *97. . 2*F. . .	...	.	nvg
4153	9,272,285,561	194,506,700	4.8	0*121*	250	. . . . . 228. . 5. 0*1*	...	W	vp
4154	3, 7, 19,257	173,506,621	5.3	F311	122	. . 0. . 553. . 4. . 0	...	*y*	
4155	9,275,281	*189,415,627*	6.7	*4*31	2F2	. . . . . F*69*. . b6. *2*	...	.	dc
4156	5, 17,288,698,699,700		6.7	021015	—	. . . . . *99*. . *1*F. *4*.	...	.	vg
4157	7,242,285,547,561,562		4.7	00*12*20	—	*353*. . *11*. *333*. *3*.	...	w	nv
4158	5, 15,288	189,415,627	5.4	340	250	. . 0. . 424. . 3. . 2	...	*o*	t
4159	9, 17,277,288,298	117,506,701	5.6	FF110	*461*	. 7. . . 222. . 1. . 0	...	*y*	n
4160	12,275,288	*189*,415,*627*	6.4	*211*	*248*	. . . . . F*36*. . F*1. 5*	...	.	
4161	19,288,290		5.9	304	—	. . R. . *11*. . *22*. . .	...	*y*	h
4162	19,275,290,561,562,564	113,415,626	5.2	10*2111*	*221*	. . *6*. . 602. . 1. . *2*	...	*o*	e
4163	7,254,288		6.3	*4*41	—	. . . . . *55*. . 1F. . .	...	*o*	
4164	15,277,283	*189*,415,*626*	5.8	*1*02	*212*	. . 0. . 000. . *1*. . *1*	...	*y*	
4165	9,257,288,299,561,562,564	173,506,*621*	5.5	701*1*020	*102*	. . 1. . 333. . 2. . *1*	...	w	
4166	5,275,288	*189,415,627*	6.7	000	*272*	. . . . . *964*. . *6*. . *4*	...	.	dcc
4167	547,561,562,564,567,569		6.5	*111*132	—	. . . . . FF. . *2*F. . .	...	.	
4168	12,254,288	*194,506*,701	6.2	100	703	. . . . . *414*. . F. . 3	...	O	
4169	7, 17,275	*189,415,627*	6.7	*2*12	*284*	. . . . . *992*. . R. . *5*	...	.	dc
4170	20,275,290	*191*,415,626	5.6	*132*	630	. . *1*. . 220. 01. . 3	...	*y*	
4171	17,277,283,299,547,562,567	*189*,415,*626*	6.5	b122110	*357*	. . . . . *771*. . F. . *5*	...	.	
4172	7,269,288		5.6	*113*	—	. . . . . 22. . 25. . .	...	*y*	
4173	12,275,290	*114*,415,*626*	6.3	*120*	*132*	. . *7*. . *551*. . *2*. . *2*	...	.	
4174	9,277,287,294,547,562,567	194,403,700	4.0	f*033221*	341	. . 0. . 113. . 0. 30	.*31*	Y	t
4175	15,275,290	119,415,626	5.4	*1*11	*153*	. . 4. . 022. . 3. . 2	...	W	
4176	7,242,299,547,562,567	173,503,621	4.3	*242*103	*410*	. . 1. . *22*0. . 1. 1*2*	.*1*1	W	v
4177	7,277,302	*194*,403,700	5.3	12*2*	020	. . *2*. . 133. . 4. . *1*	.. 2	w	
4178	9, 17,269,288		5.2	F043	—	*233*. . *66*. . *33*. *2*.	...	*y*	a
4179	12,254,283,290	*118*,415,*626*	6.2	F010	*713*	. . . . . *444*. *15*. . *4*	...	*b*	
4180	20,272,294,561,564,567	118,415,626	4.3	*422110*	133	112. . 110. *13*. *12*	...	*y*	
4181	9, 12, 15, 17, 20,242,269	110,110,158	6.0	2276*012*-	*231*	. . . . . F*15*. . 1. . 1	...	.	s
4182	242,269,285,287,288,290,294	122,506,606	3.4	0*122220*-	201	0861. 013. . *4*. 01	21.	Y	e
4183	242,285,299,555,564,567	173,503,621	4.4	0*22111*	*512*	. . 0. . *3*03. . *4*. 0*3*	.*4*0	W	
4184	254,275,290	*173,506,621*	6.4	10*1*	103	. . . . . F*36*. . *34*. 1	...	.	
4185	254,287,305		6.1	10*1*	—	. . . . . *33*. . *1*0. . .	...	*o*	
4186	254,269,294		5.7	1*1*0	—	. . 7. . FF. . *1*. . *3*.	...	*o*	ndvt
4187	254,269,294		4.8	1*3*1	—	216. . 77. . 0^{0}. 0.	...	*y*	nda
4188	20,287,302	118,415,626	4.7	10*1*	*344*	*353*. . 331. *37*. *14*	...	*g*	
4189	17,269,283,299,547,561,567		5.5	b*41*2010	—	. . . . . 33. . *16*. . .	...	.	
4190	17,269,283,561,564,567		4.7	*1*20001	—	323. . *33*. . *13*. *1*.	...	W	
4191	7, 15,277,288,290,294,299	110,112,113	6.9	12*1012*1-	*47*F	. . . . . FFb. . F. . *5*	...	.	s
4192	254,283,290	118,415,626	5.4	22*4*	241	. . 2. . 0*24*. *41*. . 1	...	Y	t
4193	12,269,283,288,299,305		var.	RRRRRR	—	. . . . . FV. . VF. . .	...	.	vtg
4194	20,275,290	113,415,626	4.9	*232*	2*1*0	. . 0. . 113. . 4. 10	...	*y*	t
4195	7,254,294,561,564,569		5.3	2*11*02	—	*342*. . *33*. . *40*. *3*.	...	w	na
4196	12,254,294		5.4	10*1*	—	. . *1*. . *22*. . *31*. *3*.	...	w	nd
4197	7,288,305	194,403,700	5.0	02*1*	3*1*0	. . 1. . 062. . *1*. 41	.. 1	y	
4198	12,302,305,698,699,700	*118*,415,626	5.2	*403321*	573	. . *2*. . 668. *53*. *55*	...	R	vtg
4199	15,275,290	*194,506*,702	6.0	001	b*32*	. . . . . F*21*. . F. . *3*	...	.	e
4200	20,283,305		6.0	*212*	—	. . . . . *22*. . *33*. . .	...	*o*	

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No.	Constellation.	B.Fl.	B.A.C.	DM.	R.A.	Dec.	U.N.	H.	DM.	U.A.	Measures.			Estimates.	
											No. Obs.	Magn.	P.E.	Magn.	P.E.
					m.	° ′									
4201	Cassiopeia .	τ 5	8268	+57° 2804	41.2	+57 59	5	5	5.3	—	3	5.16	.12	5.2	.20
4202	Cassiopeia .	—	—	+56° 3085	41.2	+56 47	F	6·7	6.0	—	3	5.73	.11	6.0	.13
4203	Pisces . .	20	8271	—	41.7	− 3 25	6	6·5	—	5.5	3	5.66	.04	—	—
4204	Cepheus .	—	8273	+67° 1562	42.2	+67 8	6	5·6	5.5	—	7	5.09	.04	5.2	.21
4205	Piscis Austr.	—	8275	—	42.7	−28 48	4·5	4·5	—	4.6	6	4.56	.07	—	—
4206	Cassiopeia .	6	8279	+61° 2533	43.1	+61 32	6	6	5.9	—	3	5.53	.05	5.6	.07
4207	Pisces . .	21	8281	+ 0° 5054	43.3	+ 0 25	6	6	6.5	5.8	4	6.06	.13	5.7	.12
4208	Andromeda	—	—	+35° 5110	43.6	+35 46	6	6	5.9	—	3	5.90	.07	6.0	.16
4209	Pegasus .	79	8284	+28° 4649	43.6	+28 10	6	6	6.2	—	3	5.86	.12	6.0	.15
4210	Aquarius .	—	—	—	44.0	−11 46	F	6	—	6.9	3	6.52	.11	—	—
4211	Aquarius .	—	8285	—	44.1	−10 39	F	6·7	—	5.8	6	6.27	.08	—	—
4212	Aquarius .	—	8288	—	44.4	−15 4	6	6	—	6.0	7	5.85	.08	—	—
4213	Aquarius .	i² 108	8292	—	45.2	−19 34	5	5	—	5.1	6	5.31	.04	—	—
4214	Pegasus .	80	8293	+ 8° 5127	45.3	+ 8 39	F	6·7	6.5	5.8	6	6.02	.05	6.0	.07
4215	Pisces . .	22	8295	+ 2° 4725	45.9	+ 2 16	F	6·7	6.5	5.6	3	5.86	.11	5.7	.07
4216	Pegasus .	23	8296	+20° 5386	46.3	+21 0	6	6·5	5.8	—	3	6.25	.04	5.7	.05
4217	Pegasus .	φ 81	8299	+18° 5231	46.4	+18 27	6·5	6·5	5.0	—	7	5.20	.09	5.5	.07
4218	Pegasus .	82	8300	+10° 5004	46.5	+10 16	6·5	6	6.0	5.3	3	5.32	.04	5.5	.13
4219	Aquarius .	—	—	—	46.7	− 9 40	F	6	—	5.6	3	5.88	.13	—	—
4220	Pegasus .	—	—	+17° 4999	46.9	+17 14	6	6	6.5	—	3	6.77	.09	6.2	.15
4221	Pisces . .	25	8303	+ 1° 4729	46.9	+ 1 25	6	6	7.2	6.4	3	6.26	.05	5.8	.08
4222	Cetus . .	—	8304	—	47.1	−24 54	F	F	—	6.3	3	6.14	.07	—	—
4223	Cetus . .	—	8308	—	48.2	−27 43	F	F	—	6.4	4	6.35	.07	—	—
4224	Cassiopeia .	ϱ 7	8310	+56° 3111	48.4	+56 50	5	5·4	5.0	—	7	4.56	.09	4.9	.03
4225	Pisces . .	—	8311	− 0° 4585	48.7	− 0 33	F	F	6.2	5.9	3	6.05	.03	—	—
4226	Cepheus .	—	8314	+73° 1063	49.0	+73 45	F	F	7.0	—	6	6.55	.02	—	—
4227	Pisces . .	26	8312	+ 6° 5216	49.0	+ 6 24	F	6	6.8	6.3	3	6.11	.12	6.2	.13
4228	Andromeda	—	—	+46° 4214	49.5	+46 41	F	F	5.9	—	3	6.07	.16	—	—
4229	Pegasus .	—	—	+21° 4999	50.6	+21 59	6	6	6.0	—	3	6.08	.13	6.1	.15
4230	Cepheus .	—	8321	+82° 743	50.9	+82 31	6	6·7	6.0	—	3	6.29	.04	6.4	.08
4231	Andromeda	—	—	+41° 4902	51.0	+41 59	6	6	6.0	—	6	6.00	.03	6.1	.15
4232	Cassiopeia .	—	8322	+54° 3076	51.2	+55 3	6	6	6.0	—	7	5.49	.08	5.6	.05
4233	Pegasus .	ψ 84	8324	+24° 4865	51.6	+24 28	5	4·5	4.3	—	3	4.56	.04	4.8	.04
4234	Cassiopeia .	R	—	+50° 4202	52.4	+50 43	F	var.	var.	—	7	var.	—	6.5	.00
4235	Pisces . .	27	8328	—	52.5	− 4 13	5·6	5·6	—	5.1	6	5.03	.05	—	—
4236	Andromeda	—	—	+31° 5012	52.8	+31 41	6	6	6.2	—	3	6.34	.07	6.1	.15
4237	Cassiopeia .	σ 8	8330	+54° 3082	53.0	+55 5	5	5	5.0	—	3	4.96	.04	4.8	.07
4238	Pisces . .	ω 28	8331	+ 6° 5227	53.1	+ 6 12	4	4	4.4	4.0	6	4.16	.03	4.1	.17
4239	Andromeda	—	—	+32° 4747	53.4	+33 4	F	6	5.8	—	3	5.77	.04	5.8	.16
4240	Andromeda				53.4	+33 4									
4241	Pisces . .	—	—	− 1° 4514	53.6	− 0 57	6	6	7.0	7.1	7	6.91	.09	—	—
4242	Andromeda	—	—	+44° 4538	54.6	+44 35	F	F	6.0	—	3	6.14	.07	—	—
4243	Cassiopeia .	—	8344	+60° 2657	55.5	+60 33	F	6·7	6.0	—	3	5.66	.08	5.9	.15
4244	Andromeda	—	8345	+41° 4920	55.6	+41 42	6	6	6.5	—	3	6.10	.15	6.0	.15
4245	Pisces . .	29	8346	—	55.7	− 3 42	5·6	5·6	—	5.0	6	5.08	.07	—	—
4246	Pegasus .	85	8350	+26° 4734	55.8	+26 27	6	6	6.1	—	3	5.83	.03	5.6	.03
4247	Pisces . .	30	8349	—	55.8	− 6 41	5	5·4	—	4.4	6	4.59	.09	—	—
4248	Piscis Austr.	—	8352	—	56.2	−30 23	5	5	—	5.2	3	4.98	.08	—	—
4249	Pisces . .	c 32	8354	+ 7° 5121	56.3	+ 7 49	6	6	6.3	5.7	3	5.95	.19	5.6	.08
4250	Cetus . .	—	—	—	57.0	−24 49	F	F	—	6.7	7	6.56	.05	—	—

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	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
4201	272,283,290	194,403,700	5.2	123	352	. . 2 . . 220 . . 1 . 00	. . .	Y	
4202	272,275,290	194,403,702	5.7	203	611	. . . . . F41 . . F2 . 3	. . .	.	
4203	7,302,305		5.7	101	—	. . 5 . . 11 . . 54 . . .	. . .	y	
4204	12,275,305,315,547,564,569	194,405,702	5.1	f121120	640	. . . . . 713 . . 2 . . 1	. . .	W	
4205	15,302,305,561,562,564		4.6	143111	—	. . . . . 22 . 512 . 1 .	. . .	.	n
4206	7,275,305	122,403,702	5.5	111	211	. . 3 . . 332 . . 2 . . 1	. . .	Y	
4207	17,283,302,315	119,415,626	6.1	5222	417	. . 3 . . 332 . 54 . . 4	. . .	y	
4208	269,302,305	113,415,627	5.9	201	315	. . . . . 112 . . 23 . 1	. . .	.	
4209	272,305,313	113,415,627	5.9	132	215	. . 6 . . 111 . . 2 . . 1	. . .	y	
4210	20,283,305		6.5	131	—	. . . . . F7 . . 2F . . .	. . .	.	g
4211	283,302,313,561,562,567		6.3	131124	—	. . . . . F2 . . 76 . . .	. . .	y	
4212	7,275,290,305,555,561,564		5.8	7113212	—	. . . . . 00 . . 05 . . .	. . .	o	d
4213	15,275,302,555,562,564		5.3	012121	—	342 . . 33 . . 44 . 4 .	. . .	w	a
4214	254,283,290,698,699,700	118,415,626	6.0	133001	102	. . 2 . . F13 . 41 . . 0	. . .	.	vg
4215	254,283,305	118,415,626	5.9	113	203	. . 2 . . F24 . 62 . . 2	. . .	o	t
4216	7,278,302	119,415,627	6.2	110	664	. . R . . 466 . . 5 . . 5	. . .	o	neh
4217	17, 20,305,313,555,562,567	119,415,626	5.2	F531006	134	. . 0 . . 242 . . 1 . 43	. . .	o	
4218	12,275,302	118,415,626	5.3	011	151	. . 3 . . 155 . 30 . . 2	. . .	y	
4219	15,275,305		5.9	313	—	. . . . . F1 . . 62 . . .	. . .	.	
4220	20,278,305	119,415,626	6.8	212	6b3	. . . . . bb5 . . 7 . . 6	. . .	.	
4221	283,302,315	118,415,626	6.3	111	537	. . 0 . . 557 . 16 . . 5	. . .	w	
4222	12,275,305		6.1	012	—	. . . . . FF . 104 . . .	. . .	w	
4223	12, 15,281,305		6.4	F102	—	. . . . . FF . 423 . . .	. . .	.	d
4224	7,281,302,313,547,555,561	122,403,700	4.6	5423202	343	87 R . . 404 . . 3 . 43	. . .	Y	th
4225	272,278,305		6.0	001	—	. . . . . FF0 . 31 . . .	. . .	y	tg
4226	547,555,561,562,564,567		6.6	010002	—	. . . . . FF2 . . F . . .	. . .	.	
4227	17,278,302	118,411,626	6.1	330	240	. . b . . F35 . 0F . . 1	. . .	w	
4228	20,281,305		6.1	413	—	. . . . . FF4 . . F2 . .	. . .	.	
4229	7,287,305	119,415,627	6.1	313	142	. . . . . 333 . . F1 . 0	. . .	.	t
4230	10,287,302	117,506,701	6.3	110	221	. . . . . 525 . . F . . 1	. . .	.	
4231	15,278,305,547,561,562	114,506,624	6.0	121000	413	. . . . . 222 . . 3 . . 1	. . 4	.	
4232	278,283,290,302,547,555,561	122,403,700	5.5	7322101	202	. . . . . 333 . . 6 . . 1	. . .	y	
4233	7,281,302	113,119,415	4.6	110	133-	. . 0 . . 423 . . 7 . 42	.1.	Y	t
4234	10, 17,283,289,300,302,315	194,403,700	var.	FRFRRRR	RFR	. . . . . FVV . . F . . R	. . .	.	vte
4235	15,272,305,547,562,567		5.0	111401	—	684 . . 22 . . 11 . 0 .	. . .	y	
4236	272,289,302	113,416,627	6.3	102	160	. . . . . 553 . . F . . 2	. . .	.	
4237	7,283,290	122,403,700	5.0	110	124	432 . 2000 . . 7 . 02	. . .	g	d
4238	10,287,302,547,555,562	118,416,626	4.2	220100	334	205 . . 112 . 12 . 01	. . .	y	
4239	20,278,305	113,416,627	6.5	101	134	. . . . 5 F02 . . F . . 0	. . .	y	dc
4240			6.5			. . . . 5 F02 . . F . . 0	. . .	y	dc
4241	281,283,290,305,547,555,562		6.9	5342211	—	. . . . . bb1 . 0F . . .	. . .	.	d
4242	7,278,310		6.1	201	—	. . . . . FF3 . . F1 . .	. . .	.	
4243	17,283,290	122,403,702	5.7	220	160	. . . . . F41 . . F . . 2	. . .	y	
4244	20,269,310	114,506,625	6.1	430	015	. . . . . 332 . . 4 . . 1	. . 5	y	
4245	272,287,305,698,699,700		5.1	320123	—	792 . . 11 . . 37 . 3 .	. . .	b	v
4246	272,281,310	113,416,627	5.8	100	122	. . 1 . . 001 . . 1 . 22	. . .	y	
4247	15,272,310,547,555,562		4.6	362121	—	241 . . 40 . . 22 . 2 .	. . .	o	t
4248	7,281,310		5.0	220	—	. . . . . 00 . 617 . 0 .	. . .	.	n
4249	17,281,310	118,411,626	6.0	522	363	. . 5 . . 221 . 63 . 64	. . .	y	n
4250	15,281,310,313,561,562,571		6.6	0361010	—	. . . . . FF . 61F . . .	. . .	.	

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No.	Constellation.	B. Fl.	B. A. C.	DM.	R. A.	Dec.	U. N.	H.	DM.	U. A.	Measures.			Estimates.	
											No. Obs.	Magn.	P. E.	Magn.	P. E.
					m.	° ′									
4251	Pegasus .	—	—	+16° 5034	57.1	+16 52	F	F	6.0	—	7	6.57	.09	—	—
4252	Cetus . .	2	8358	—	57.6	−18 0	4·5	4·5	—	4.3	6	4.56	.06	—	—
4253	Cassiopeia .	9	8359	+61° 2586	58.1	+61 37	6	6·5	5.6	—	3	6.13	.07	5.9	.11
4254	Cetus . .	—	8360	—	58.2	−17 11	F	6·7	—	5.9	3	5.83	.00	—	—
4255	Cetus . .	3	8361	—	58.4	−11 11	6	6	—	5.3	6	5.22	.06	—	—
4256	Cepheus .	—	—	+66° 1679	58.5	+66 29	F	6	6.0	—	13	5.80	.04	6.1	.09
4257	Andromeda	—	—	+41° 4933	58.5	+41 26	F	F	6.0	—	3	5.94	.03	—	—
4258	Cassiopeia .	—	8366	+60° 2667	58.9	+60 39	6	6	6.0	—	3	5.96	.04	5.9	.12
4259	Pisces . .	33	8368	—	59.2	− 6 23	5	5	—	4.8	6	4.62	.04	—	—
4260	Pegasus .	86	8370	+12° 5063	59.6	+12 44	6	6·5	5.5	5.5	4	5.76	.07	5.8	.11

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No.	Numbers of Series.		Ph. Mag.	Meas.	Est.	Estimates of Magnitude.	Phot.	Col. Fr.	Remarks.
	Measures.	Estimates.				P S H h Σ U *H* D B G *h* R F E	s w p		
4251	7,281,310,313,561,562,564		6.6	7214*1*2	—	. . . . . F F *8* . . F *4* . .	. . .	.	
4252	10,269,310,561,562,564		4.6	300*222*	—	*8 8 2* . . *2 2* . . *3 2* . *4* .	. . .	W	
4253	12, 20,283	*122,403*,702	6.1	1*2*0	*3 1 3*	. . *6* . . *3 5 6* . . 0 . . *2*	. . .	*y*	
4254	269,278,310		5.8	000	—	. . . . . F 3 . . *1 1* . . .	. . .	.	
4255	278,310,313,698,699,700		5.2	2201*13*	—	. . *1* . . 6 6 . . *2* 1 . *2* .	. . .	Y	vg
4256	10, 13, 15, 20,287,290,295	110,112,113	5.8	*125131*4-	314	. . . . . F 0 0 . . *5* . . 3	. . .	.	s
4257	269,287,310		5.9	0*1*0	—	. . . . . F F *1* . . F . . .	. . 5	.	
4258	20,283,290	*122,403*,702	6.0	*1*01	*223*	. . . . . *2 2 2* . . 1 . . *1*	. . .	*y*	
4259	269,278,310,547,562,564		4.6	210*301*	—	*2 4 1* . . 4 4 . . 1 *2* . 1 .	. . .	*y*	t
4260	17,269,278,310	*118*,411,*626*	5.8	F20*1*	1*3*1	. . *4* . . 0 *2 4* . *6 1* . . 0	. . .	*y*	

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TABLE XXVIII.

ADDITIONAL MEASUREMENTS.

No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
5	283,289,290,298,300,302,563, 565,569	2.1	4122211 10	287	133,138,145,147,153,158,160, 465,467,470,476,477,479,660, 661,662,663	3.6	1418301 0304814 400
7	571	7.4	0	289	325,331,343,345,349,566,570, 575	3.6	3010334 0
9	305,311,317,321,327,565,569, 571,573,574	2.4	1302110 312	295	319,325,343,345,349,575,576, 578	2.8	0231123 1
9	134,137,140,143,144,146,149, 453,454,457,460,461,463,652, 653,654	2.3	1751210 3424742 01	304	343,347,349,364,575,577,578, 579	4.6	2141171 1
23	555,563,565,567,569,571	3.0	112302	304	138,145,147,151,153,158,160, 464,476,477,479,482,660,661, 662,663	4.7	4714122 1252120 42
51	302,308,324,333	var.	FRRR	320			
54	321,333	var.	RR	321	371,566,570,575,576	4.0	21212
71	305,311,321,317,333,335,340, 555,565,567,569,574	4.2	1121112 12321	324			
71	126,133,135,137,144,146,149, 153,453,457,460,462,454,655, 656	4.3	0131150 2110012 3	325	309,314,345,347,570,576,577	2.1	2111103
94	563,569,573	2.2	011	333	307,309,331,334,336,338,341, 352,364,576,579,580	2.0	3200111 22114
103	291,295,300,302,310,311,313, 317,333,335,340,565,571,573	2.1	1112213 1291114	336	314,319,334,336,344,357,364, 576,579,580	3.1	2130121 214
104	313,318,324,335,337,340,563, 565,568,571,573	5.6	1034011 2121	347	371	6.1	0
104	135,137,140,143,145,146,150, 155,455,460,465,468,475,657, 658,659	5.8	6b64213 4412510 32	352	584,586	4.4	10
				361	355,364,379,575,579,584	4.2	022220
				384	341,349,359,361,365,584,588, 590,592	4.6	3231212 23
134	574	5.5	0	384	138,148,152,154,156,163,165, 476,480,482,664,665,666,667, 669	4.7	2000330 4221163 1
142	295,303,306,311,313,317,318, 327,568,569,571,574,576	2.3	2610121 210110				
142	135,137,140,145,146,153,155, 455,457,460,465,468,475,657, 658,659	2.3	1426720 5421061 12	389	582,584	4.4	30
				399	361,364,365	5.6	020
184	330,337,343,563,566,568,570, 576	5.3	3200141 1	401	344,349,355,361,365,575,579, 580,581,584,586	5.3	2011021 b011
184	133,137,140,143,147,150,153, 463,465,466,470,471,659,660, 661	5.6	4546211 3114113 2	401	152,156,158,163,165,472,474, 476,478,480,482,485,663,664, 665,666,667,671	5.4	1035231 4614110 1222
185	308,313,316,322,328,330,335, 337,566,570,574	2.2	2124124 3120	409	364,365	4.9	00
				418	361,364,365,575,581,582	4.1	122120
219	328,337,347,563,566,568,570, 572	2.8	1102111 1	433	359,361,364,365,580,581,582	3.6	1102010
				437	361,364,365,373,581,584,586	4.4	1140121
219	133,137,141,145,147,151,153, 158,465,467,469,471,473,479, 661,662,663	2.9	44733f0 3030178 024	439	586	4.6	1
				456	346,352,357,364,373,580,581, 582,584,586	5.6	2222111 101
220	572,574,576,577,578	3.8	00400	456	148,154,163,168,485,488,492, 494,672,674,675,677	5.6	0413123 21342
287	331,341,345,566,570,572,575, 576	3.6	2420002 0	477	371,373	4.6	72

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No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
482	580,581,582,584	2.7	5022	649	346,362,371,395,587,594,595	3.0	0225211
483	373,376,379,580,581,584	3.1	001312	653	598,602,603	3.0	170
488	353,357,359,364,369,379,580,	5.8	1112201	657	362,366,593,594,598	3.6	41101
	581,582,586,588,590,592		011001	665	366,395,402,593,595,598	4.0	111122
488	148,154,159,163,168,480,483,	5.8	3040221	686	600	5.7	1
	485,488,491,492,494,665,669,		1424224	705	358,367,379,382,388,391,395,	5.6	1012211
	671,686		14		589,593,602,603,605,613		101221
489	373,376,379,580,581,584	3.7	001522	705	159,167,169,170,177,179,198,	5.6	4368112
496	326,332,350,364,366,369,379,	2.3	1021F23		486,493,495,500,505,507,673,		1322141
	582,585,588		131		678,680,681,683,685		21132
498	373,376,379,582,588,590	4.0	121121	717	591,596,600	6.0	0R0
510	590	5.0	2	718			
516	326,348,353,364,369,379,582,	4.8	1221021	725	602	5.4	1
	585,586,588,590,592		10111	737	391,394,395,583,587,600	3.9	110211
516	152,156,159,163,170,175,177,	4.8	2422638	742	602	5.1	1
	478,480,483,485,492,499,501,		2610212	767	356,360,368,379,382,384,398,	6.0	1011142
	504,670,671,672,674		22211		589,596,602,603,605,607		621121
541	320,326,329,332,342,353,364,	1.9	110F221	767	159,162,169,172,175,178,184,	6.1	7131622
	366,369,582,590,592		31111		192,198,484,486,489,498,500,		1232143
550	371,373,376,588,590,592	3.8	121212		506,676,678,680,681		02131
552	592	5.0	4	773	391,394,398,583,587,600	3.7	411200
554	373,376,379,585,590,592	3.8	301311	780	587,600	5.6	02
564	594	5.7	0	796	615	4.4	1
578	595	4.2	0	797	362,367,370,372,374,376,583,	1.0	1222101
583	402,403,583,591,594,595,598,	5.2	1111210		587,593		31
	600		1	836	358,368,370,374,383,391,395,	4.4	1311021
583	154,159,161,164,167,171,175,	5.4	3016510		593,596,599,601,605,607,613		0122311
	177,184,481,489,491,499,504,		1721612	836	162,170,178,180,185,189,190,	4.5	0114522
	670,672,674,675,677,679		032560		192,195,196,200,205,498,506,		3110163
591	376,379,385,388,583,585,594	3.2	2142540		673,676,678,680,683,685		b61534
596	68, 77,360,366,369,373	5.0	640210	845	607	4.0	0
600	388,391,397,585,592,594	4.0	021311	869	609	6.0	1
602	388,391,397,583,585,594	4.0	123122	876	370,374,376,383,385,394,596,	4.2	4010111
607	350,353,362,366,371,583,585,	4.6	1111103		599,601,603,607,608,609,611		0012321
	587,591,594		012	876	167,173,178,180,187,192,199,	4.3	0144124
607	154,159,167,175,179,186,196,	4.7	3532201		200,205,484,487,496,497,506,		6132261
	478,481,486,492,493,495,501,		1123331		507,673,676,682,683,685		310123
	674,675,677,679		0521	879	394,395,398,599,608,613	4.0	311210
608	589,591,593	3.8	312	896	391,394,395,596,599,613	3.3	233211
610	591,593	4.4	42	918	395,398,413,601,604,606,609,	5.7	2131102
612	326,346,353,360,376,402,585,	4.6	2103212		611,613,615,619		0210
	591,594,595,598		2122	918	173,176,180,187,190,195,197,	5.7	3342311
612	157,159,161,169,171,175,184,	4.5	1325413		199,200,496,497,500,509,682,		2214211
	186,196,486,489,492,493,499,		2336005		686,688,692,693,694,695		100000
	670,679,681,683		4520	932	370,374,395,398,401,402,604,	0.2	1102031
613	591,593	4.0	12		606,615		01
615	591,593	4.2	02	936	374,396,398,401,408,609,615,	0.3	2712011
618	593	3.0	3		617		5
625	593	3.8	2	938	408,413,416,606,608,613,615,	5.8	3120101
638	350,362,366,587,594,595	3.1	322410		617		1

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No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
938	173,180,185,190,195,197,200, 205,208,496,502,508,509,682, 686,688,692,694	*5.9*	*2155106 4730724 1003*		514,529,531,533,687,690		*061422*
				1244	627	5.7	0
				1249	387,393,397,399,409,411,412, 612,616,625	2.0	*332*1171 201
978	377,380,386,396,399,601,617, 619	1.9	*4112015 2*	1256	419,420,618,622,625	4.6	10301
				1257	627	5.8	1
979	377,380,386,396,399,411,601, 613,619	1.9	*31523*F1 *11*	1270	97,102,375,403,411,412,424, 610,612,618,619,622,625,627	4.9	*1123322 134121 2*
980	94,405,413,416,604,606,608, 615,617,619,621	5.8	*521*3000 *1121*	*1270*	174,188,191,194,201,204,210, 212,213,214,215,220,222,226, 233,529,531,533,538,691	*5.2*	4113222 *1110213* 113311
980	173,176,185,187,193,199,200, 205,208,496,502,508,509,684, 686,688,689,693	*5.8*	*1423621 5232513 113*0	1272	419,420,424,612,616,625	3.4	111401
				1275	387,397,399,412,414,419,610, 622,629	–1.4	216*412*0 12
985	619	6.9	*1*				
1005	617,619	2.4	*21*				
1029	370,375,377,386,396,411,604, 617,620	1.8	3*204111* 32	1292	517,519,527,614,618,627	5.3	*341211*
				1312	619,625	4.0	10
1031	377,405,411,416,604,617,620, 624,629,630	5.8	1*211321* 233	1319	627	6.5	2
				1324	614,625	5.4	*11*
1031	173,176,181,185,187,190,195, 197,199,200,207,212,213,214, 511,684,687,688,689,690	*5.9*	*1013*001 *4122b12 025122*	1325	384,390,393,397,400,417,610, 616,619,625	1.5	051*4203 211*
				1334	397,403,409,414,417,420,424, 612,616,627	4.0	*1360*343 *211*
1045	383,386,392,396,416,615,617, 620	1.9	320*1233* 3	1341	629	6.1	0
1046				1350	397,400,409,414,417,619,622, 629	1.8	6112111 0
1048	402,416,419,606,621,624	2.7	000031				
1068	392,396,319,413,606,620,630, 631	2.2	0*142145 1*	1356	406,412,417,424,426,622,627, 629,630,631	5.3	303*1213 222*
1091	601,611,621	0.9	02*1*	*1356*	174,201,206,209,211,212,217, 220,222,231,233,511,517,521, 527,538,541,543	*5.4*	*2259312* 0*120*043 *2003*
1100	380,396,399,413,601,608,621, 620	2.1	1*320221 3*				
1114		4.7					
1155	387,389,396,399,408,419,610, 614,616,618,620,621	4.7	*6205032 2201 1*	1373	437,622,630,631	3.6	11*21*
				1377	428,622,630,631	3.6	0*221*
1155	183,188,191,193,197,199,201, 202,203,206,212,213,215,503, 510,511,529,531,533,684,689, 691,695	*4.9*	9*220122 223101 6* 0233016 02	1395	396,406,417,420,428,622,626, 628,631,632	5.8	*2111120 110*
				1395	201,206,209,210,211,212,216, 217,220,222,224,229,231,233, 523,532,534,538	*5.9*	3*212411 231134*3 3820
1159	97,377,387,392,405,411,414, 423,612,614,616,618,624,625	5.4	*1013201* 0311401	1398	632	4.9	1
1159	183,188,191,197,199,201,203, 206,208,212,214,503,511,512, 513,514,687,690,691,692	*5.4*	26*13*464 *4413311 222100*	1423	409,415,417,420,424,622,626, 629	1.6	*333*3011 3
				1424			
1160	408,416,610,614,620,621,624, 625,627,629	3.5	0*138*534 322	1430	440	4.2	1
				1442	406,409,415,417,420,628,630, 632	0.5	01*2121*2 1
1201	381,384,387,392,396,612,618, 625	2.0	*2123131* 0	1459	409,415,417,420,424,626,630, 632	1.1	*164*2122 4
1216	417,419,610,614,619,627	4.0	*111*122				
1219	377,384,389,390,399,405,610, 612,614,616,621,624,625	6.2	20*13*110 *423112*	1478	404,410,415,417,420,430,433, 626,631,632,633	5.6	*113*1221 *2211*
1219	174,181,188,191,194,203,207, 210,213,214,503,510,512,513,	*6.4*	*4221211 1012*111	*1478*	209,210,227,229,231,238,252, 515,516,518,520,521,522,523,	*5.6*	*2051132 1402002*

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No.	Numbers of Series.	Ph. Mag.	Residuals.
	525,530,532,534,536,537,539		0741023
1493	404,410,424,426,428,430,437, 628,632,634	6.0	0121011 102
1493	209,211,227,232,234,237,238, 252,255,258,518,520,526,528, 534,539,541,545	6.2	1131021 0011302 4610
1513	407,410,415,418,420,430,628, 634,635	5.5	0133420 12
1513	216,219,223,227,229,232,234, 243,523,526,527,535,537,542, 554	5.5	1142101 1411422 3
1558	112,407,415,418,421,428,433, 634,636,637,638	3.4	1012611 0101
1558	219,223,225,228,232,234,238, 240,246,258,261,535,539,542, 545,548	3.4	0315223 1112041 15
1584	404,410,415,418,430,433,437, 635,636,638	4.8	1123030 204
1584	216,221,223,225,230,232,240, 249,261,262,264,279,535,539, 542,545,548	5.0	7717121 1121464 223
1638	115,118,121,124,421,445,448, 635,637,638	5.0	2331070 011
1638	219,235,240,244,255,258,261, 262,264,270,273,279,539,541, 542,548,550	4.9	2003102 2562104 f57
1639	638	4.3	2
1655	639	4.8	0
1658	442,445,448,451,637,639,640	4.8	0122111
1658	230,240,247,253,255,261,262, 267,273,279,540,544,562,564	4.8	1112470 1011462
1669	438,442,445,448,451,639,641, 642	5.2	1010121 0
1669	219,225,235,247,253,259,265, 270,284,540,544,550	5.3	0202301 23043
1675	641,642	4.9	31
1684	640,641	F	FF
1698	435,438,440,442,446,637,641, 642	2.0	1121132 1
1701	440,445,446,452,454,639,641, 642	3.7	2000111 1
1701	240,241,244,247,250,262,268, 273,276,284,286,540,546,560	3.7	3101212 2110020
1705	442,445,446,451,452,640,641, 642	5.8	0101121 2
1705	1,239,244,250,256,259,265, 268,273,276,279,284,546,549, 560	5.8	73110b3 4111020 4
1753	130,446,452,454,456,640,643, 644	4.0	0238003 0
1753	6,241,245,248,256,263,265, 268,271,274,276,284,286,546, 549,552,554	3.8	4321202 3101113 214
1772	643	6.1	1
1797	443,451,452,454,456,642,643, 644	1.4	1001323 2
1807	441,446,451,454,456,643,644, 645	5.7	1361232 0
1807	1, 4, 6, 8, 11, 14,245, 253,263,265,280,284,297,549, 551,554,558	5.7	824b640 5113110 102
1823	438,443,451,452,454,642,643, 644	2.2	0511131 1
1824			
1829	~~464~~,451,452,454,456,643,644, 645	5.0	6233201 2
1829	2, 4, 6, 8, 11, 14,248, 257,265,274,280,282,294,297, 549,551,554,556,558	5.2	4246919 1223021 13210
1878	436,443,446,449,451,454,456, 646,647,648	5.2	2101112 112
1878	14, 16, 19,242,245,248,251, 260,263,271,276,282,294,297, 553,556,558,560	5.2	2472231 2302243 3342
1911	649	6.3	3
1923	436,439,443,452,454,644,645, 646	2.6	2103113 1
1926	134,450,452,454,456,646,647, 648	2.0	021b010 1
1926	11, 14, 16, 19,242,251,263, 266,269,275,280,285,294,297, 553,556,559,561	1.8	3013313 2311014 0442
1949	452,646,647,648	2.8	0141
1951	650,651,652	3.5	352
1966	444,450,452,454,456,458,646, 648,651,652	5.9	0021112 020
1966	3, 5, 7, 9, 12, 15, 16, 19,251,272,277,283,290,299, 547,557,564,567,573	6.2	4438613 4212322 42107
1988	139,142,144,450,454,649,650, 651	4.1	0252120 0
1988	3, 5, 7, 9, 12, 15, 16, 17, 19,272,277,283,290,298, 305,547,553,557,561,562	3.9	1608213 1153041 332312
2015	447,453,454,456,458,651,652, 653	5.5	1212111 4
2015	7, 12, 15, 20,254,269,272, 275,281,285,287,288,294,299, 305,547,555,557,561,564	5.5	1520214 2110241 063122
2025	450,453,454,456,649,650,651	2.2	0011100

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No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
2036	453,454,456,649,651,652	2.6	14223 1		314,315,319,322,325,328,334,		2340343
2058	453,454,456,460,461,650,651,	6.2	0021225		336,341,345,349,566,575,577,		4403220
	652		1		579,581		13
2058	13, 15,269,272,275,278,281,	6.3	3134121	2399	482,485,488,491,664,665,666,	5.3	0021222
	283,287,289,290,302,305,547,		3121222		667		0
	567,569		43	2399	22, 24, 28, 31,292,301,309,	5.4	ff29132
2078	455,457,460,653,655,656	2.8	320100		319,334,338,344,345,349,352,		4081231
2088	656,657,658	4.0	311		357,359,364,365,371,575,577,		0031212
2092	517,519,527,652,653,654	6.3	392113		578,579,580		013
2107	466,468,471,475,653,654,655,	6.3	1152332	2400	472,474,476,663,666,667	0.0	330412
	657		3	2423	669	5.0	4
2107	10, 13, 21,278,287,300,308,	6.4	3022111	2460	474,478,480,485,494,664,665,	6.2	1312320
	317,318,321,324,327,555,563,		1124224		666,667,669		011
	565,567,571,573,574		04011	2460	292,307,312,325,336,338,341,	6.0	1705332
2124	155,461,463,466,468,653,654,	5.3	1312113		344,348,349,352,355,357,359,		4621111
	655,657		11		361,364,365,579,580,581,584,		2411111
2124	18,278,287,289,300,305,310,	5.1	5304131		586		0
	317,318,321,324,333,335,337,		3014130	2500	170,175,478,480,488,664,665,	2.1	1142100
	555,563,565,568,569,576		052123		669,671		11
2191	455,457,460,654,655,656	1.8	12110 6	2500	25, 26, 31, 33, 34, 36, 39,	2.1	2123111
2197	460,463,465,468,473,475,656,	5.3	2221412		45, 48,307,338,341,348,353,		1331022
	657,658		01		357,361,364,371,373,580,581,		0641422
2197	13, 21, 23, 26,289,291,303,	5.3	1013122		582,585		11
	308,313,317,322,327,330,335,		3212021	2510	175,177,478,480,485,488,494,	4.8	0110201
	340,563,565,568,571,573,574		3215122		665,666,669,671		2011
2209	460,463,465,468,473,656,657,	6.0	0001220	2510	25, 26, 31, 33, 34, 36, 39,	4.8	8225210
	658,659		11		45,312,336,346,348,350,355,		2142152
2209	21, 23,278,289,291,295,306,	6.1	0321210		359,361,365,369,373,586,588,		1530133
	311,313,318,324,327,333,337,		0006022		590,592		50
	569,571,576,584		6291	2539	179,478,480,485,672,674,675	2.7	0212011
2242	661	5.5	3	2566	186,481,483,486,489,499,501,	3.2	0330112
2250	469,471,473,659,660,661,662	6.1	0412120		668,670,671,672,674,675,677,		1140212
2250	21, 23,291,295,301,303,308,	6.0	1330153		679		0
	311,316,322,328,330,335,337,		1621042	2566	25, 26, 29, 31, 34, 42, 56,	3.1	2360140
	343,347,566,568,570,572,576		1402031		68, 77,320,329,332,342,350,		6231b25
2263	465,467,471,661,662,663	1.2	172012		360,364,366,373,582,585,588,		2112221
2264	465,467,470,661,662,663	2.4	201112		590,592		02
2279	465,467,469,470,471,658,661,	5.4	1311213	2569	182,184,478,481,489,499,504,	3.4	1044122
	662,663		11		668,670,672,674,675		b1121
2279	22, 27, 28, 30,291,301,306,	5.3	2302632	2569	25, 26, 29, 31, 34, 37, 42,	3.3	2322230
	312,319,322,328,334,340,343,		2022222		45, 53,320,329,332,342,350,		1324505
	345,347,570,572,574		03011		364,369,373,376,379,582,588,		9130303
2329	662,663	5.7	63		590,592,594,595,598		41005
2338	464,465,467,660,661,662	2.0	120012	2593	179,186,483,499,501,504,670,	5.9	2312021
2348	476,477,479,660,661,662,663	6.1	0521003		672,674,675,677,679		52210
2348	22, 24, 30,292,296,306,314,	6.0	9920712	2593	25, 26, 29, 31, 34, 42, 45,	5.8	0114141
	315,319,325,331,334,338,343,		0402714		48, 53, 56, 77,329,339,346,		3063311
	566,570,572,575,577,584		012021		360,364,369,371,583,585,594,		4443031
2356	476,477,479,660,661,662,663	4.7	1013102		595,598		12
2356	22, 24, 28, 30,296,301,306,	4.7	f88b803	2594	481,486,489,672,674,677	2.4	015203

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No.	Numbers of Series.	Ph. Mag.	Residuals.
2601	681	3.9	4
2653	681	5.6	3
2656	681	5.5	2
2684	677,683	5.4	15
2690 2691	481,486,493,670,673,679	2.9	202320
2696	179,184,186,189,196,498,504, 673,674,676,677,679,681	4.2	1101121 12100 2
2696	29, 32, 37, 40, 43, 49, 53, 62, 77,320,339,350,353,362, 366,369,376,382,583,587,593, 595,598,600	3.9	0116331 21493f3 0011211 402
2717	497,500,505,506,507,673,680, 681,686	5.4	4101313 10
2717	32, 46, 56, 59, 62, 65, 69, 71,329,342,353,358,367,368, 372,376,379,382,388,394,589, 593,596,599,600,607,613	5.3	2552013 1501311 1110342 212100
2726	681,683,685,686	2.8	0100
2742	683	5.5	3
2764	192,487,489,676,680,683	1.1	613231
2766	484,487,489,493,495,497,673, 678,680,683,685	2.8	1323330 1010
2766	32, 35, 38, 40, 43, 46, 59, 66, 69, 71, 74, 78, 79,356, 360,367,368,376,379,382,394, 583,587,591,593,596,599,600	2.6	1112263 3123222 2311141 3041520
2772	673,681,683	5.1	232
2774	678,686	2.8	22
2781	200,487,493,495,497,507,676, 678,680,681	5.0	0112210 002
2781	32, 35, 38, 43, 56, 60, 66, 69, 71, 74, 78, 79,351,362, 367,370,376,379,391,398,591, 602,603,605,607,613	4.8	032b112 2034102 1221123 21011
2798	688	6.6	0
2813	196,199,200,498,500,676,678, 682,683,685	5.0	0110220 022
2813	35, 38, 51, 54, 57, 66, 69, 71, 74, 78, 79, 82,351,354, 356,358,362,374,383,385,391, 395,596,599,602,603,605,613	4.9	4113624 0150100 2432024 2303120
2818	683	2.2	0
2829	682,685	6.4	11
2854	490,496,497,500,506,676,682, 683,692,694,695	6.2	1041210 2312
2854	35, 38, 44, 47, 54, 57, 66, 69, 71, 74,351,354,358,368, 370,374,385,391,395,596,601, 602,603,607,608,609,611	6.2	3210731 1011233 4322121 113141
2855	695	5.9	4
2857	690,692,693,694,695	5.6	12010
2860	690,692,693,694,695	6.2	11203
2864	690,692,693,694,695	5.9	00104
2868	689,690,692	2.6	212
2873	693	6.2	4
2875	694	6.6	1
2878	205,208,213,496,497,682,684, 688,689,692,694,695	3.3	2213102 42223
2878	38, 44, 47, 51, 54, 57, 60, 63, 82, 84, 87,351,368,386, 396,398,405,408,601,604,606, 608,609,611,613,615	3.2	4331343 1123020 6212152 50222
2879	686,688	3.2	21
2880	693	3.3	1
2881	694,695	6.1	12
2883	689,690,692,693,694,695	5.8	10010R
2886	695	6.7	1
2888	693	6.6	2
2890	686,688	4.9	33
2938	690,693,694,695	R	FRFR
2944	205,207,208,212,213,214,682, 688,692	2.2	1331311 31
2955	200,207,213,215,496,509,684, 686,688,689,691,692	5.3	2111442 01112
2955	52, 58, 61, 80, 90, 94,354, 377,380,383,386,389,392,402, 405,411,419,601,606,609,611, 615,617,620	5.3	9112510 3123333 2111341 421
2962	690,691	2.9	11
2964	203,205,212,214,215,509,684, 687,688,693	4.9	7343221 121
2964	52, 55, 58, 70, 72, 75, 87, 90, 94,351,377,380,386,389, 392,402,405,413,419,606,617, 620,621,624	4.7	2020611 3322002 2101101 222
2972	690,691	4.9	03
2976	687,689	3.5	21
2985 2986	200,203,207,214,510,511,687, 689,690,693	4.5	1224003 202
2985	52, 55, 58, 70, 72, 75, 80, 83, 84, 94,363,375,377,380, 399,402,413,416,604,615,617 620,621,624	4.3	6010125 4231201 1322000 312
2986 3004	688,691	4.0	11
3007	688,689	3.9	10
3035	687,689	4.9	02
3048	531,533	4.0	31

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No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
3077	445,517,519,527,529,531,542	4.3	0111102		634		1
3081	210,212,213,214,215,513,529, 531,533,687,689	5.0	1310231 2222	3338	548	6.6	2
				3343	537,538,539,541,543,545,548	3.5	1132305
3081	58, 64, 75, 80, 88, 92, 97, 102,377,387,392,396,399,405, 411,416,424,610,612,614,616, 619,625	4.9	5036251 0035311 1120422 12	3368	697,698	4.7	11
				3389	515,516,518,520,522,526,528, 530,532,536,537,538,541	4.7	0321173 330221
				3389	81, 86, 89, 98,100,103,106, 108,390,404,406,409,417,420, 424,426,430,437,626,630,632	4.6	2104318 6013044 2020102
3090	690,691,692	3.4	113				
3095	691	2.1	3				
3109	691,692	6.0	82	3426	458,517,519,527,548,554,559	6.5	1336011
3120	502,503,510,511,512,529,533, 687,691,693	4.2	2200111 121	3429	515,523,524,525,534,536,538, 539	1.0	3522041 1
3120	60, 75, 80, 85, 88, 97,377, 384,387,389,390,399,405,408, 409,419,610,612,614,616,618, 625	4.2	f110331 5101100 0211224 6	3434	528,532,534,536,538,548	var.	232053
				3440	543	5.0	1
				3447	518,520,521,522,524,525,530, 532,537,538,539,541	3.9	1112214 23121
3122	503,510,511,513,516,531,690, 691	3.7	1002320 1	3447	86, 89, 91, 96,100,106,108, 109,390,404,407,415,417,420, 424,428,433,626,631,632,633	4.0	2103731 5611452 2022125
3122	66, 70, 90, 92, 94,102,375, 377,387,390,392,403,406,408, 409,411,612,614,616,618,619, 621,624	3.6	2211122 2142031 0322022 01	3450	538	4.0	1
				3498	523,524,525,526,527,535,537, 538,540,541,545	5.4	4022003 0411
3126	511,512,513,514,516,531,690, 691	5.0	2444240 2	3498	91, 96,100,103,106,108,404, 407,415,417,418,424,628,634, 636,638	5.4	0324113 4106211 66
3126	60, 70, 73, 76, 88, 90,102, 375,384,390,397,399,403,409, 411,610,618,619,625,627,630	4.9	6001921 2032012 4142021	3506	523,524,525,526,528,536,540, 542,548	4.6	3522014 05
3142	691,692	5.8	02	3506	89, 93, 98,103,108,109,404, 407,415,420,424,433,628,635, 637	4.6	0046422 1233111 2
3147	212,214,503,511,512,539,690, 691	0.2	1220301 2				
3167				3514	548,550,552	3.4	430
3168	531,538	4.6	60	3564	535,536,541,542,545,548	2.3	131213
3169				3594	264,267,279,535,536,539	4.3	011131
3170	531,538	4.6	30	3594	86, 99,104,106,110,112,404, 410,418,421,433,437,635,636, 637	4.1	3201110 0141017 0
3193	531,533	3.6	63				
3210	531,533	4.5	14				
3224	531,533,538	4.4	131	3631	239,244,535,540,545,548	1.5	622033
3231	531,533	4.1	30	3650	273,282,540,548,550	5.5	21232
3232	531,533	3.3	51	3650	93,101,106,110,112,115,410, 437,445,448,451,454,637,638, 639	5.5	1301023 1001021 1
3307	229,231,238,517,520,527,530, 532,534,537,538,539	3.2	0120111 12102				
3307	81, 83, 86, 89, 91, 95, 98, 106,378,384,393,409,412,417, 426,428,622,627,629,630,631, 632	3.1	7811010 2443180 0111201 1	3656	264,273,279,542,548,550	3.6	213212
				3656	99,104,107,108,110,112,118, 410,421,426,430,440,635,638, 639	3.4	9200014 1712101 3
3328	224,229,233,520,521,523,530, 532,534,537,538,539	4.5	1102112 02118	3711	552,559	5.9	60
				3735	550	4.6	3
3328	81, 83, 86, 89, 91, 95, 98, 381,387,390,397,406,417,420, 426,428,622,626,628,629,631,	4.7	5211412 2234102 0200001	3757	265,270,279,284,540,544,552	2.6	1211302
				3757	104,105,107,110,115,121,124, 425,431,435,442,448,639,640,	2.5	2042330 2162511

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	641		0
3795	550,552,556	3.1	102
3797	552	5.9	2
3798	268,273,286,293,544,550,560	3.4	3121121
3798	101,104,105,113,115,119,127, 435,438,440,442,448,640,641, 642	3.4	1202728 1122202 1
3821	550	5.5	2
3836	265,268,274,280,297,544,549, 550	2.4	0030002 1
3845	546,550	3.9	14
3855	268,271,276,284,546,549,554	4.5	2021121
3855	101,111,113,119,122,124,425, 429,442,446,448,451,452,640, 641,642	4.5	3102433 1227141 25
3892	265,274,280,284,293,546,549, 554,558	5.2	1140011 30
3892	111,113,116,119,122,425,429, 431,435,441,446,452,643,644, 645,646	5.2	2022421 0013011 21
3899	554,556,558	3.2	310
3903	271,276,282,286,297,546,551, 554,558	4.4	1212101 01
3903	116,125,130,435,443,446,449, 451,452,454,456,458,643,644, 645	4.3	6432104 0440032 0
3908	560	4.5	2
3923	551,558	3.5	00
3942	554	4.2	4
3969	266,271,280,284,297,551,557, 560	5.7	2132211 3
3969	113,116,125,130,432,436,438, 449,451,452,454,459,643,644, 645	5.8	6132011 4112211 3
3981			
3982	551,554	4.0	41
3987	551,554	3.9	40
4009	16, 19,263,282,294,299,551, 553,556,558	5.2	3221310 021
4009	111,114,120,436,446,449,451, 454,458,459,461,646,647,648	5.1	1020030 1112331
4016	554	6.2	4
4020	551,554	3.1	12
4037	245,260,277,288,299,553,556, 559,560	3.6	2101920 20
4037	114,120,123,128,131,136,139, 443,452,454,456,458,646,647, 648	3.7	1158740 6012711 4
4052	549,553,557	4.4	346
4057	251,254,263,266,275,277,549, 557,559	1.3	1203213 63
4078	290,553,559,560	2.6	2021
4080	242,251,254,266,272,275,277, 283,553,559,560	2.6	1200122 2402
4098	19,269,275,281,297,547,553, 557,562	4.5	1222301 02
4098	117,120,123,131,134,444,450, 452,454,456,458,459,647,648, 649,652	4.5	2332312 3111120 21
4127	251,254,272,283,547,561,562, 564	4.9	1213311 5
4127	117,126,131,134,136,139,447, 454,456,458,459,461,649,650, 651	5.2	2232312 1125432 5
4181	277,281,285,288,302,547,557, 561,564	6.0	4104131 01
4181	120,132,136,142,432,439,444, 453,454,456,458,459,651,652, 653	6.1	1121112 1202633 0
4182	547,555,567	3.4	121
4191	305,547,555,567,573	6.9	22341
4191	132,134,439,447,450,453,454, 456,458,459,461,463,652,653, 654,655,656,658	6.7	0142040 27344b1 9b77
4256	300,310,555,561,564,567	5.8	201111
4256	120,132,134,144,444,450,454, 456,460,461,463,466,651,652, 653	6.0	4533231 0187165 1

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TABLE XXIX.

ADDITIONAL ESTIMATES.

No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
5	121,121,422,423,427,627,630, 632	2.1	*3*144232	607	*155*,420,423,638,639,640	4.6	*2*22324
			2	612	422,423,429,636,637,639	4.6	*17*2355
9	118,423,427,428,627,629,634, 635,636	2.4	*1113312*	*612*	662	–	4
			30	705	155,*162*,440,638,639,640	5.6	4*22353*
9	105,108,135,136,139,193	–	88**3300**	767	*155*,*162*,431,638,639,639,640, 640	6.0	*4533435*
71	424,424,427,634,635,636,647	4.2	*2*044**b**14				*2*
71	602,656	–	5**b**	797	182,468,507,638,639,640	1.0	0*21*162
93	119	5.5	*2*	836	162,440,468,638,639,640	4.4	000432
99	*426*	6.0	*3*	*836*	145,150,657	–	212
103	423,428,429,634,635,636,674	2.1	*3*420R17	876	162,440,468,638,639,640	4.2	202559
104	*427*,*428*,*429*,634,636,637	5.6	*110051*	*876*	141,142,144,147	–	8044
140	426	5.8	*4*	896	670	3.3	4
142	121,423,427,428,627,630,634, 636,636,637,640	2.3	*3001121*	918	*162*,*424*,*431*,*638*,639,640	5.7	0*30332*
			0*314*	932	469,510,643,648,650	0.2	*21713*
142	108,109,109,135,140,197,200, 652,653	–	9995*910*	936	640,644,645	0.3	*320*
			36	938	174,467,640,672,675	5.8	1*3224*
184	*123*,*424*,*426*,427,634,636,637	5.3	*1428013*	978	175,468,469,507,640,643,644	1.9	07**b**243*1*
185	121,421,422,424,627,630,632	2.2	*111*0114	979	175,441,640,643,644	1.9	04824
213	146,608,622,629,634,636,636	2.2	0101*2*01	980	*174*,467,640,672,675	5.8	0*3032*
215	629	7.4	*9*	1029	182,441,640,644,645	1.8	*34201*
219	423,427,428,627,634,635,636, 637	2.8	*2*412634	1031	*174*,*431*,467,640,*670*,672	5.8	10*3123*
			1	1045	182,441,640,644,645,685	1.9	*450111*
219	601,609,655	–	413	1046			
287	423,427,428,634,636,637	3.6	*222111*	1048	644,645,649	2.7	346
287	139,140,202,601,602,605,606, 609,653,654,655,656	–	5561735	1068	182,680,681,684	2.2	4R37
			11344	1100	174,507,640,643,645	2.1	*62*442
304	120,123,423,427,428,634,636, 637	4.6	*4230*231	1155	162,175,467,640,668,670	4.7	*1*02021
			4	*1155*	148,151,154,658,659,662,664, 665,666,667,668,671	–	*1*301*2*14
304	136	–	1				30124
324	422,423,424,628,630,634	2.1	010563	1159	*162*,467,670,675,676	5.4	3*3121*
325				1201	182,649,650,681	2.0	0254
333	422,423,424,630,634,635,648	2.0	22152R5	1219	*162*,467,670,672,675	6.2	01*242*
384	121,424,426,427,634,636,637, 639,640,672	4.6	00*31222*	1249	182,432,644,648,650	2.0	*13*575
			*21*R	1270	162,467,668,670,675	4.9	1*1213*
384	142,202,601,605,607,610,611, 653	–	*3*2062*10*	*1270*	146,158,658,659,662	–	0600*1*
			1	1292	608,624,629	5.3	31*1*
401	124,423,*427*,*428*,634,636,637	5.3	10*311123*	1325	650,681	1.5	5*1*
401	652	–	4	1350	650,681	1.8	48
456	*124*,*124*,*125*,444,634,636,637	5.6	223*1*381	1356	175,670,675,676	5.3	*1*450
488	423,427,*428*,634,636,637,*672*	5.8	330*1313*	*1356*	114	–	*1*
496	422,423,427,629,636,637	2.3	23313*1*	1395	*182*,*432*,670,675,676	5.8	306*21*
516	124,423,427,428,634,636,637	4.8	0000122	1423	182,432,449,648,650,681	1.6	172322
516	665	–	1	1424			
541	427,428,444,634,634,636	1.9	143334	1442	645,648,650,650	0.5	*1213*
583	423,*427*,428,634,636,637	5.2	*22*0554	1459	432,449,648,650,681	1.1	5*3220*

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No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
1478	182,431,670,675,676	5.6	12142	2107	501,502,689,695,696	6.3	11211
1478	620	–	3	2124	501,502,689,695,696	5.3	00233
1493	182,431,680,680,681	6.0	14222	2191	182,502,506,672,689,695	1.8	442423
1513	182,431,670,680,681	5.5	11023	2197	445,501,502,689,695,696	5.3	068431
1513	617	–	4	2209	501,502,689,695,696	6.0	11711
1558	182,670,670,680	3.4	2457	2250	501,502,689,695,695,696	6.1	023101
1558	110,112,113,145,146,146,157,	–	9621895	2250	119	–	b
	159,160,165,171,173,614,617,		8732160	2263	204,662,663,672,704	1.2	51234
	621,622,664,669,672,675,677,		3532337	2264			
	679		1	2265	185,502,506,506,660,672,689	2.4	4416223
1584	175,431,670,680,681	4.8	20021	2279	104,146,501,689,695,696	5.4	263322
1584	110,115,116,117,622	–	91443	2338	185,445,649,650,672,686	2.0	201522
1638	175,670,680,685	5.0	2011	2348	501,502,689,695,696	6.1	00000
1658	431,431,432,670,680,681	4.8	110422	2356	501,502,689,695,696	4.7	68253
1658	615,616,670,673	–	1001	2356	130,680	–	55
1669	182,670,680,681	5.2	0022	2399	506,695,696	5.3	445
1669	615	–	4	2400	667,671,672	0.0	242
1698	652,685,687	2.0	633	2460	695,696,704	6.2	312
1701	174,431,432,680,682,685	3.7	311321	2500	149,506,634,695,696	2.1	330331
1701	112,120,157,163,607,612,618,	–	8143883	2510	401,506,695,696	4.8	0054
	623,667,669,671,672,677		341616	2510	128	–	4
1705	680,680,682	5.8	201	2539	667,671,672	2.7	221
1753	432,670,680,682	4.0	2612	2558	669	5.9	2
1753	113,114,118,119,125,415,608,	–	0255770	2566	401,506,695,696,697	3.2	04100
	611,613,614,622,678		55336	2566	130,641	–	48
1797	449,649,660,685	1.4	5101	2569	697,698,699	3.4	545
1807	682,684,687	5.7	011	2569	124,128,166,172,628,631,636,	–	6022299
1823					638,639,693,695,696		04569
1824	649,650,658	2.2	011	2593	695,697,698	5.9	300
1829	682,684,687,689	5.0	4013	2594	669,671,672	2.4	313
1878	682,684,687	5.2	101	2690			
1923	182,667,671,672,672	2.6	4243R	2691	667,671,672	2.0	123
1926	667,682,684	2.0	314	2696	697,698,699	4.2	022
1926	118,121,122,123,125,155,161,	–	4344333	2696	626,629,697	–	455
	164,168,187,188,189,411,612,		6435305	2717	501,503,697,698,699,699	5.4	232400
	612,627,629,634,635,670,674,		3324557	2764	663,667,671	1.1	718
	676,683,686,686,690,692		251354	2766	697,698,698,699	2.8	5555
1966	682,684,687	5.9	110	2766	175,176,182,189,194,626,629,	–	6048054
1988	682,684,685,687	4.1	1512		631,636,640,680,684,695,699		4614346
1988	124,127,162,620,623,625,627,	–	1265522	2781	501,503,695,697,698,698	5.0	223141
	628,628,630,682,688		21313	2813	501,503,697,698,698,699,699,	5.0	2221001
2015	682,684,687	5.5	821		702		1
2015	623	–	6	2854	501,503,695,695,695	6.2	12011
2025	453,510,659,660,662	2.2	61112	2865	602	5.9	1
2036	185,650,667,667,671,672	2.6	462214	2878	501,503,697,698,699,702	3.3	331131
2058	501,502,505,689,695,695,696	6.2	0111011	2878	192,195,196,626,630,631,636,	–	3331714
2078	204,704,705	2.8	055		637,638,639,639,698		94313
2092	118,124,127,506,507,611,614,	6.3	6522455	2944	672,675,676	2.2	003
	629,636,700		342	2955	501,503,697,698,699	5.3	13131

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No.	Numbers of Series.	Ph. Mag.	Residuals.	No.	Numbers of Series.	Ph. Mag.	Residuals.
2964	501,503,697,698,699	4.9	*1*1311	3594	402,501,506,700,702,703	4.3	002322
2985	161,501,503,697,698,699	4.5	*323*101	*3594*	645,647,650,701,702	–	44011
2986				3631	503,506,698,699	1.5	*1*101
2985	638,642,643,644,645,650	–	*125*361	3650	501,506,700,702,703	5.5	10*2*12
2986				3656	402,501,506,700,702,703	3.6	*221*131
3003	403	3.9	*6*	*3656*	102,649,651,687,702,703	–	**2**5942*2*
3077	402,507,608,622,624,629	4.3	*226*31*1*	3757	402,405,501,624,634,652	2.6	0*21226*
3081	401,501,503,697,698,699	5.0	2112*11*	*3757*	102,104,105,133,135,193,194,	–	0468882
3120	401,501,503,697,698,699	4.2	324*1*21		689		**3**
3120	640,641,642,681,681,700	–	205335	3798	501,501,634,700,702	3.4	12*631*
3122	501,503,697,698,699	3.7	22243	*3798*	103,106,107,642,643,644,646	–	2370*2*12
3122	641,698	–	7*3*	3836	624,627,632	2.4	267
3126	401,401,501,503,697,698,699	5.0	*11*00202	3855	405,409,501,506,700,702,703	4.5	00*12*000
3147	503,663,667,672	0.2	2*111*	3892	410,501,506,700,702,703	5.2	*322*01
3271	609	4.9	6	3903	501,501,634,700,702	4.4	31300
3307	501,506,649,697,697,699	3.2	03*5*400	*3903*	650	–	5
3307	101,101,132,637,643,644	–	99*2*252	3969	405,410,501,506,700,700,702,	5.7	*2125*314
3328	501,506,697,700,702	4.5	33344		703		0
3328	699	–	7	4009	405,501,506,536,700,702	5.2	*320*31
3351	604	5.4	*2*	*4009*	106	–	**b**
3389	501,506,697,700,702	4.7	0*1*121	4037	402,501,506,700,702,703	3.6	411*1*33
3389	648,649	–	8*3*	*4037*	102,104,646,689	–	55**6**2
3426	*636,700,702,703*	6.5	3444	4057	507	1.3	8
3429	667,704	1.0	10	4080	120,507,627,630,632	2.6	*22222*
3447	401,501,506,697,700,702	3.9	011000	4098	405,410,501,506,700,702,703	4.5	2033353
3447	647	–	6	*4098*	107	–	2
3468	619	5.2	1	4127	501,506,634,700,702	4.9	02*2*11
3498	401,501,506,700,702,703	5.4	1*12*224	4181	405,410,501,506,700,702,703	6.0	*1*3011*3*0
3506	401,501,506,700,702,703	4.6	101120	4191	501,*506*,700,702,703	6.9	*69444*
3506	697,700	–	46	4233	626	–	2
3564	503,506,698,699	2.3	3253	4256	501,506,700,702,703	5.8	6*2*191

The remarks printed below are designed to supply information of various kinds, which could not readily be brought into a tabular form, with regard to the stars contained in the catalogue. The subjects to which these remarks relate have been indicated in the description of the catalogue, page 98. The occurrence of large residuals is denoted in the catalogue, and also in Tables XXVIII. and XXIX., by the letters **b** and **f**. The values of these residuals are given in the remarks, in tenths of a magnitude, and are printed in Italics when negative. Thus *16* denotes —1.6. In order to distinguish the photometric observations from the estimates, the series numbers occurring in the remarks are preceded either by *P* or by *E*.

The abbreviations employed in the catalogue for the titles of various collections of observations are often retained in the remarks. Those employed on the left-hand pages of the catalogue are explained on page 95, and those employed on

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the right-hand pages are explained on pages 97 and 98. In the remarks, the name of an observer is sometimes given instead of one of these abbreviations; thus, Behrmann, Flammarion, Heis, Houzeau, Ptolemy, Struve, and Sûfi refer to the same works otherwise denoted by B, F, *H*, *h*, P, Σ, and S. The abbreviation H, in Roman type, which denotes Heis on the left-hand pages of the catalogue, is employed in the remarks exclusively for the observations of Sir William Herschel, as on the right-hand pages of the catalogue. When Struve, or Σ, is mentioned, the reference is to the Summary of the Mensuræ Micrometricæ in Vol. I. of the Publications of the Dun Echt Observatory.

The abbreviation H. P. for the photometric catalogue, Table XXVII., which has been proposed on page 94, is used throughout the remarks. A few other abbreviations not previously employed may here require explanation. When Bayer is mentioned, the first edition of his Uranometria, published in 1603, is the work to which reference is made. B. F. signifies Baily's Account of Flamsteed, published in 1835, and, more particularly, the revised edition of the British Catalogue contained in that work. Bm. denotes Birmingham's Catalogue of Red Stars, in Vol. XXVI. of the Transactions of the Royal Irish Academy. This catalogue is supplemented by two lists of Addenda, to which reference is made in these remarks as Add. I. and Add. II. G. C. denotes Sir John Herschel's General Catalogue of Nebulæ and Clusters of Stars. Lacaille and Lalande signify Baily's editions of their observations. The abbreviation Ll. is often used for Lalande. The use of Messier's name refers to his list of nebulæ, most of which are comprised in G. C. By Oeltzen are signified the various catalogues prepared by him from Argelander's zone observations. The abbreviation OΣ refers to the revised catalogue of double and multiple stars discovered at Pulkowa (Recueil de Mémoires présentés à l'Académie des Sciences, St. Pétersbourg, 1853, Vol. I. p. 295). Schönfeld's Zweiter Catalog von veränderlichen Sternen, Mannheim, 1875, is referred to as Schönfeld. Stone signifies the Cape Catalogue of 12,441 stars, published at London in 1881. The Vierteljahrsschrift der Astronomischen Gesellschaft is denoted by the usual abbreviation V. J. S., and W. signifies either of the two catalogues prepared by Weisse from Bessel's zone observations. Similarly, P. denotes Piazzi's Catalogue.

Discrepancies in nomenclature are frequently indicated in the remarks, as in the following note on H. P. 161: "69 *Piscium* = 40 *Andromedæ*. B. A. C.; σ^1 = H. P. 161; σ^2 = B. A. C. 310." This signifies that Flamsteed's stars 69 *Piscium* and 40 *Andromedæ* are identical, according to Baily; also that in the B. A. C., the letter σ^1 is used as a designation of this star, while σ^2 is applied to the star B. A. C. 310 (76 *Piscium*), which is not contained in H. P. Remarks like that on H. P. 11,

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"*Sculptor* in B. A. C.," indicate the constellation in which the star is placed by the authority quoted.

Abbreviations used in the U. A. and Houzeau are retained; in the U. A. these are *dpl.*, *trpl.*, *r*, *rr*, *c*, for double, triple, red, very red, and colored; in Houzeau, D, T, Q, for double, triple, and quadruple. The abbreviations U. A. *dpl.* and U. A. *trpl.* are also employed when the occurrence of adjacent stars is indicated by a brace in the Uranometria Argentina.

The standard stars given in Table XIX, page 76, are mentioned in the remarks as they successively occur in the catalogue.

The remarks on the spectra of stars form a special class. The types of spectra denoted by the Roman numerals III. and IV. are those originally described and designated by Secchi as the third and fourth types. The letters following these numerals indicate the observers. A denotes d'Arrest, and refers to his communications to the Astronomische Nachrichten, LXXXIV. 263, 369; LXXXV. 249; LXXXVI. 53; C refers to observations made here and chiefly published in the Astronomische Nachrichten, XCIX. 375; CI. 73; D refers to Dunér (Astr. Nachr., XCII. 250; XCIII. 6, 306); P, to the observations in the third volume of the Publicationen des Astrophysikalischen Observatoriums zu Potsdam; S, to Secchi's observations, chiefly described in his two memoirs, "Sugli Spettri Prismatici dei Corpi Celesti," and the accompanying catalogue; and V to Vogel (Astr. Nachr., LXXXIV. 113). Exclamation and interrogation marks after the Roman numeral indicate respectively that the spectrum is described as an unusually well-marked specimen of its class, and that its character appears to be doubtful.

The method employed to compute the magnitude to be assigned to a pair of stars, regarded as one object, has been explained on page 89. The "combined magnitudes" thus obtained are given in the remarks, when they seemed likely to be useful, as in the case of H. P. 3 and 4, where the note is "Combined, 5.6." When the two stars thus combined were not both separately observed with the meridian photometer, the authority for the adopted difference of magnitude is given. This is generally Vol. XI. of these Annals; less frequently, page 91 of the present volume, and in a few cases the estimates of magnitude made by Struve.

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REMARKS.

2. Residuals in *P* 15, *15*; in B, *13*; in G, *16*; in *h*, *12*. See Part II. Chapter XI.
3, 4. Combined, 5.6.
5. *α Andromedæ* = *δ Pegasi*. According to Ptolemy, the star belongs to both constellations. Σ 13[II]. Standard 101.
6. U. A. *r*. III? C.
7. Residual in *P* 302, *12*; in U, *16*; in *H*, *18*.
9. Standard 1. At lower culmination, residual in Series *P* 143, 22, hazy.
12. Σ 5.
14. In Series *E* *122*, perhaps F. In Series *E* *631*, nebulous or cluster.
15. Residual in *P* 308, *10*.
17. Residuals in P, *11*; in S, *11*.
18. *Sculptor* in B. A. C. U. A. *r*. Residual in B, *11*.
21. U. A. *r*.
22. In Series *E* *116* "157 5 156" adopted for "156 — 157."
26. Marked Q in *h*.
29. III. C.
30. III. C.
32. Σ 12. U. A. *dpl.* 6, 7½.
45. Bm. 3.
46. DM. +30° 43, 7.9, follows closely. In Series *P* 13, "brighter of close double." In Series *P* 300, "too close to observe separately."
50. *ι Sculptoris* in B. A. C.
51. Schönfeld 1. Variability discovered by Krüger in 1870. Max. 6.5-7.0. Min. 11-11.2. Period 436[d]. Bm. 5. III. D. Magnitudes in Series *P* 283, 295, 300, 308, 324, 333; 8.1, 8.2, 7.8, 7.9, 7.9, 7.7. DM. magn. 8.5 reduced to 8.3 for difference in scales.
52. H "9, 1."
53. Residual in *P* 278, *15*.
54. Schönfeld 2. Variability discovered by Argelander in 1858. Max. 5.6-8.6. Min. < 12.8. Period 404[d].7. Bm. 6. Magnitudes in Series *P* 17, 285, 295, 308, 321, 333; 4.3, 6.5, 7.9, 7.2, 6.9, 7.2. In Series *P* 17 not identified; perhaps H. P. 49 was observed. In Series *E* *114*, magn. 6.5. In Series *E* 631, magn. 6.5, perhaps F.
58. H "44, 43 44 — 10 Ceti."
60. III! A. P.
61. Residual in *E* 411, *10*.
62. *Sculptor* in B. A. C.
71. Standard 2. Series *E* 635 rejected; see page 81.
72. Σ 36.
77. Brightness according to eye estimates apparently reduced by neighborhood of H. P. 82, which see.
82. Combined by Houzeau with H. P. 77; resulting residual 10.
84. H "49, 53."
91. Residual in *P* 302, *12*.
92. Bm. 8. Spectrum contains faint resolvable bands, S.
93. Σ 46. In Series *E* 119, combined with DM +20° 85. In Series *E* *119*, magn. of H. P. 93 alone also 5.3 by an independent estimate.
94. Σ Unnum. Schönfeld 6. Variability discovered by Birt in 1831. Max. 2.2. Min. 2.8. Period irregular. Bm. 9. In Series *E* 427, "109 6 105" adopted for "109 6 155."
101. Nebula in Andromeda. Messier 31, 32, G. C. 116, 117. Spectrum continuous. In Series *E* 114, magn. 6.1; nebula; observation difficult. Magnitudes in Series *E* 438, 628; 4.8, 5.0.
103. Bm. 10. U. A. *c*. Standard 102. In Series *E* 634 "60 — 60" adopted for "60 — 62." Series *E* 635 rejected; see page 81.
104. Standard 3. At lower culmination, residual in *P* 137, *10*. See H. P. 114.
106. Residual in P, *17*.
108. Marked D in *h*. In Series *P* 291, the object observed was not identified, and was probably H. P. 127. Residuals in *P* 291, *29*; in *h*, *21*.
109. U. A. p. 312.
110. In Series *E* 628, "Hazy in cluster."
112. Residual in S, *11*.
114. Combined by Houzeau with H. P. 104; resulting residual 10.
115. U. A. *r*.
116. III! A. P.
120. Σ 60. Binary, period 222 years according to Doberck.
123. U. A. *r*.
125. III. faint, V.
128. Marked D in *h*.
129. In Series *P* 343, identification doubtful.
131, 132. Combined 5.6; diff. from Σ 61.
137. U. A. *dpl.* 5¾, 9¼.
138. U. A. *r*.
139. In Series *E* 631, decidedly red, therefore difficult.
141. Σ 73. Binary, period 349 years according to Doberck.
142. Secchi found a bright line in the spectrum at F. E. von Gothard sometimes saw several bright lines. See Astr. Nachr. CVIII. 233. Standard 4.
143. In Series *E* 631, decidedly red, therefore difficult.
147. U. A. *r*.
150. Spectrum seems to be banded, S.
155. *Ursa Minor* in B. F. and B. A. C. Bm. 12. Placed by Flammarion in *Ursa Minor*, with the magnitude 5.0, on page 737; in *Cepheus*, with the magnitude 4.7, on pages 37 and 737.
158. *α Sculptoris* in B. A. C.
161. 69 *Piscium* = 40 *Andromedæ*. B. A. C.; σ^1 = H. P. 161; σ^2 = B. A. C. 310.
169, 170. B. A. C.; ψ^1 = 74 *Piscium* = H. P. 169. Combined, 5.0; diff. from Vol. XI. Σ 88. In Series *P* 21, components separated.
171. Σ 90.
175. Bm. Add. I. 6. This star has a proper motion of +0[s].39 in right ascension, and —1″.6 in declination.
178. Residuals in P, *13*; in S, *15*.
180. *Cassiopeia* in B. A. C.
182. OΣ 515.
183. Bm. 16.

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184. Standard 5.
185. Bm. 17. Standard 104.
186. Residual in P, *12*.
191. H "32 — 35." Residual in *P* 316, *11*.
198. Σ 99.
199, 200. Combined, 5.0; diff. from Vol. XI. Σ 100. Residual of H. P. 200 in Σ, *10*.
203. Σ 3[I].
210. *Cassiopeia* in B. A. C.
211. Σ 113. H. "40. 42. 43."
213. *Polaris*. The magnitude 2.15 is that assumed for this star; see page 68. The number of observations is about two thousand; but these observations determine the instrumental corrections, not the brightness of the star. The residuals will be found in Table II. Σ 93. Standard 105.
215. Residual in *H*, *16*.
218. Σ 117.
219. Standard 6. At lower culmination, residual in *P* 151, 25.
223. Marked D in *h*.
225. U. A. *r*.
226, 227. Combined, 4.6. In Series *E* 124, seen double with opera-glass. In Series *E* 630, seen double.
232. See H. P. 304.
238. *Sculptor* in B. A. C.
242. Spiral nebula in Triangulum. Messier 33, G. C. 352. Spectrum continuous. In Series *E* 421, magn. 6.2 unsatisfactory. In Series *E* 631, faint and diffuse nebulous mass.
248. No letter in B. A. C.
250. In Series *E 628*, northern of two equal components.
251. In *Andromeda* according to Ptolemy, Flamsteed, and B. A. C.; but in *Perseus* according to Bayer and Heis.
252. In Series *E* 630, double; brighter component observed.
256. H "105, 101."
257. See H. P. 290.
259. Flammarion places τ *Andromedæ* and 53 *Andromedæ* on separate lines, with the magnitudes 4.6 and 4.8, on page 70, where the number 50, assigned to τ, should apparently be placed one line lower, opposite υ. The same errors occur on page 738.
262. Σ 145.
264. *Andromeda* in B. A. C.
265. 106 *Piscium* = 51 *Ceti*. Bm. 29.
267. Σ 147.
268. 107 *Piscium* = 2 *Arietis*. *Aries* in B. F.
269. In *Andromeda* according to Ptolemy, Flamsteed, and B. A. C.; in *Perseus* according to Bayer and Heis.
274. ϵ *Sculptoris* in B. A. C.
279. *Andromeda* in B. A. C.
281. Σ 174. Not found by H. See B. F., p. 516.
284. See H. P. 314.
285. *Cetus* in B. F. and B. A. C.
287. Standard 7.
290. Apparently correctly identified by Argelander and Heis with Bayer's ω; brighter than H. P. 257, which is marked ω in B. A. C.
291, 292. B. A. C.; γ^1 = H. P. 291, γ^2 = H. P. 292. Combined, 4.3; diff. from Vol. XI. Σ 180. Two stars given in U. N., one only in Heis. Components differ greatly in color; for photometric comparisons of their spectra, see Vol. XI. page 179. H "99 Pisc, 5" adopted for "99 Pisc 5."
294. U. A. p. 335.
295. U. N. magn. 3; altered by Corrigenda to 3·2.
296, 297. Combined, 5.0. Σ 4[I].
298. Residual in *P* 298, *10*.
302. U. A. *r*.
303. Σ Unnum.
304. Apparently correctly identified by Argelander and Heis with Bayer's A; brighter than H. P. 232, which is marked A in B. A. C. Standard 8.
307. *Fornax* in Behrmann, who identifies the star visible in this vicinity with Lacaille 589, the place of which is given for H. P. 307. But Stone identifies Lacaille 589 with a star the place of which for 1880 is $1^h\ 55^m.0$, $-26°\ 48'$. The U. A. and Houzeau identify the star visible in this vicinity with Lalande 3702, the place of which for 1880 is $1\ 53^m.8$, $-27°\ 1'$. See Part II. Chapter XI.
313. III. C.
314. Identified by Heis (in his errata) with Bayer's g *Persei*. B. A. C.; g = H. P. 284.
315. III! D.
316, 317. Combined, 5.5. H. P. 316, III. A.
318. *Cassiopeia* in B. A. C.
319. *Fornax* in B. A. C. Near this place are two stars, Ll. 3754 and Ll. 3813, the U. A. magnitudes of which are 7.0 and 6.2. The first of these is assumed by Behrmann as the star visible in this neighborhood, and was consequently observed with the meridian photometer.
320, 321. Combined, 4.0; diff. from Vol. XI. Σ 202. Residuals in Σ, *10*, *12*.
322. *Fornax* in B. A. C.
323. Σ 201.
324, 325. Combined, 2.1; diff. from Vol. XI. Σ 205. Components differ greatly in color; for photometric comparisons of their spectra, see Vol. XI. p. 179. Standard 106.
326. Σ 208.
330. U. A. p. 312.
331. *Fornax* in B. A. C.
333. Bm. 35. Standard 107. Series *E* 635 rejected; see page 79; perhaps H. P. 94 was used instead of Standard 2.
337. Combined by Houzeau with 16 *Arietis*.
341. III. A.
345. Σ 227.
349. Bm. 37.
353. Σ 231. U. A. *dpl.* 8, 6.
355. μ *Fornacis* in B. A. C.
357. Bm. 38.
362. Cluster in the sword handle of *Perseus*. G. C. 512. See Krüger's work, "Der Sternhaufen *h* Persei," Helsingfors, 1865. Considered in Baily's note to B. A. C. 700 to be probably Flamsteed's 61 *Andromedæ*. The cumulus in which this star occurs is identified in U. N. and in Heis with Bayer's h *Persei*. B. A. C.; h = B. A. C. 658. Series *P* 304 rejected, as DM. +56° 470, 471 was probably the object observed. Series *P* 307 and *P* 336 are not inserted, since the object observed was apparently the combination of H. P. 362 and DM. +56° 530. Residuals in *P* 304, *10*; in *E 120*, *14*; in *E* 438, *19*; in *E* 628, *18*; in E, *17*. In Series *E 120*, nebula with bright concentra-

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tion. In Series *E* 628, observation uncertain. The object observed by the eye is obviously the entire cumulus.

370. Schönfeld 12. Variability discovered by Fabricius in 1596. Max. 1.7 – 5.0. Min. 8 – 9. Period 331^{d}. Bm. 40. III. S. Not identified in Series *P* 341, 566; magnitudes 7.2, 7.1. For observations of H, see Proc. Amer. Acad., XIX. 269. U. A. p. 313.

372. Cluster in *Perseus*. G. C. 521. See Vogel's work, "Der Sternhaufen χ Persei," Leipzig, 1878. This cumulus is identified in U. N. and apparently in Heis with Bayer's χ *Persei*. Heis designates the object as B. A. C. 719, but gives the place of B. A. C. 718. B. A. C.; χ = B. A. C. 696. Bm. 41 refers to several red stars in and about this cluster. Examined with photometer, but measurement not attempted. Magnitudes in Series *E* 120, 438, 628; 5.8, 4.9, 5.1; the last uncertain.

375. III! P.

380. κ *Fornacis* in B. A. C.

381. Bm. Add. II. 2.

382. Bayer's ξ *Arietis* and ψ *Ceti* are apparently the same, according to Baily's note on B. F. 300. In Series *E 125*, 422, "Saturn near."

383. *Fornax* in Behrmann.

384. No letter in B. A. C. See Baily's notes to B. F. 257, 292. Σ 262. Standard 9. Series *E* 672 rejected; see page 81; observation uncertain.

386. U. A. *dpl.* 9, $5\frac{3}{4}$.

387. Houzeau's *d Trianguli* is here assumed to be identical with this star.

390. Marked D in *h*.

392. H "29, 26, 27."

393. Near *Cetus*, but by boundary drawn on map of Heis would belong to *Eridanus*. Connected with H. P. 396 by a brace in U. A. A star mistaken for this was observed in Series *P* 30. The right star was carefully looked for in Series *P* 621 and on some other evenings, but was invisible owing to twilight. The magnitude accordingly depends upon two observations only. See Part II. Chapter XI.

395. *Fornax* in B. A. C. Very near *Eridanus* by map of Heis.

396. *Fornax* in B. A. C. See H. P. 393.

401. Standard 10. Residual in *P* 580, *14*.

402. Σ 279.

403. Bm. Add. I. 9. III. A.

404. *Fornax* in B. A. C. U. A. *dpl.*, 8, 5. In Series *P* 344, the separate readings were recorded as 85.0, 108.8, 358.0, 298.8. The third reading has been assumed to be 258.0.

406. Combined by Houzeau with H. P. 413; resulting residual 8. A star mistaken for this was observed in Series *P* 36, 336, 352. When the error was detected, the star culminated during twilight, and was therefore seen with difficulty in the later observations.

407. *Fornax* in Behrmann. Residual in B, *11*.

409. Σ 281. In Series *P* 341, identification uncertain.

410, 411. According to Baily's note on B. F. 319, Flamsteed's number 30 applies only to the preceding star; but this depends on Piazzi's estimates of magnitude. According to Σ and the DM. the following star is the brighter. Combined, 6.1; diff. from page 91. Σ 5^{I}. Elongated, not separated, in the photometer. The object observed by H is assumed to be the combination of both stars.

412. In Series *E* 125, "Saturn near."

413. See H. P. 406.

415. *Cassiopeia* in B. A. C.

416. H "81, 71." Residual in *P* 575, *22*.

417. Residual in *P* 575, *19*.

419. Σ 289.

424. Residual in H, *16*.

426. This cluster is Messier 34, G. C. 584. See Pihl's "Micrometric Examination of the Stellar Cluster in Perseus," Christiania, 1869. Stars too scattered for observation with photometer. Magnitudes in Series *E 123*, 438, 628; 5.5, 5.5, 5.6. In Series *E 123*, a second nebula visible with field-glass.

429. Σ 296.

430. *Aries* in B. A. C.

433. Σ 299. U. A. *dpl.* 3, 6.5; p. 313.

435. 38 *Arietis* = 88 *Ceti*.

437. *Aries* in Ptolemy and B. A. C.

438. 1 *Eridani* = 90 *Ceti*. III! S.

440. *Triangulum* in B. F. Residual in Series *E* 632, *10*.

442. *Fornax* in Behrmann. Residual in B, *10*.

443. Σ 307. Bm. 49. Not found by H; but see B. F., p. 522.

444. Σ 311.

445. Σ Unnum. U. N. magn. 4·3; altered by Corrigenda to 4.

448. β *Fornacis* in B. A. C.

450. γ *Fornacis* in B. A. C.

451. *Fornax* in B. A. C.

455. Σ 318.

456. Standard 11.

458. See H. P. 459. III! P.

459. B. A. C.; ρ^{1} = B. A. C. 898; ρ^{2} = H. P. 458; ρ^{3} = H. P. 459.

462. *Cassiopeia* in B. A. C. Σ 320.

466. In Series *E* 129, *430*, "Jupiter near."

470. Σ 331.

472, 473. Combined 4.6; diff. from Σ 333. In Series *E* 129, 430, "Jupiter near."

476. *Cassiopeia* in B. A. C.

478. H "5 —, 7."

479. *Fornax* in B. A. C.

480. *Fornax* in B. A. C.

481. Combined by Houzeau with 51 *Arietis*. In Series *E* 129, "Jupiter near."

482. U. A. *c*. III. S. III! P. H "92, δ *Arietis*" adopted for "92, 4 *Arietis*."

484. No letter in B. A. C.

485. *Fornax* in B. A. C.

486. B. A. C.; ρ^{1} = B. A. C. 946; ρ^{2} = H. P. 486; ρ^{3} = H. P. 492. U. A. *r*.

488. Standard 12.

489. Schönfeld 16. Variability discovered by Schmidt in 1854. Max. 3.4. Min. 4.2. Period irregular. Bm. 53. III. S. For observations of H, see Proc. Amer. Acad., XIX. 269.

490, 491. Combined, 5.3; diff. from Σ 346. In Series *E* 129, "Jupiter near."

492. See H. P. 486. Residual in P, *10*.

494. In Series *E* 129, *430*, "Jupiter near."

496. Schönfeld 17. Variability discovered by Montanari in 1669. Max. 2.2. Min. 3.7. Period 2^{d} 20^{h} 49^{m}. The

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star remains at its maximum, except during a few hours in each period. Bm. 55. Standard 108. See Schönfeld's discussion in the 36ter Jahresbericht des Mannheimer Vereins, p. 70; also Proc. Amer. Acad., XVI. 1, 370.

499. Residual in Series *P* 31, *12*.
500. In Series *E* 129, "Jupiter near."
501. *Fornax* in B. A. C.
502. In Series *E* 129, "Jupiter near."
503. Bm. 56.
504. *Ursa Minor* in B. A. C.
505. In Series *E* 129, 430, "Jupiter near."
506. *Cassiopeia* in B. A. C.
507. In Series *E* 129, "Jupiter near."
508. Residual in Series *P* 25, *13*.
509. *Cetus* in B. A. C.
512. In B. A. C., *α Eridani*; apparently by error, as B. A. C. 507 is also, and correctly, called *α Eridani*.
515. In Series *E* 129, 430, "Jupiter near."
516. *Cassiopeia* in B. A. C. Standard 13.
519. Residual in P, *15*.
521, 522. Combined, 4.4. Observed as one object, magnitude 4.9, in Series *E* 431 and *E* 647.
526. In Series *E* 129, "Jupiter near."
529. B. A. C.; κ^1 = H. P. 529; κ^2 = H. P. 538.
535. B. A. C.; τ^1 = H. P. 535; τ^2 = H. P. 542. In Series *E* 129, *430*, "Jupiter near." Residual in S, *10*.
536. U. A. *r*. III. C.
537. Series *E 127* rejected; see page 81.
538. See H. P. 529.
539. In Series *E* 129, "Jupiter near."
540. In U. A., connected by a brace with Lacaille 1063, magnitude 7.0.
541. Standard 109.
542. See H. P. 535. In Series *E* 129, *430*, "Jupiter near."
546. In Series *E* 129, "Jupiter near."
547. In Series *E* 129, "Jupiter near."
550. U. A. *r*. In Series *E* 430, "Jupiter near."
551. Σ 385.
554. In Series *E* 430, "Jupiter near."
557. Σ 390.
558. Marked D in *h*.
559. In Series *E* 129, "Jupiter near."
560. Bm. 62.
561. U. A. *r*.
563. In Series *E* 430, "Jupiter near."
565. Σ 401.
567. In Series *E* 430, "Jupiter near."
575. *Ursa Minor* in B. A. C.
576. Residual in Series *P* 68, *10*.
577. In Series *E* 129, "Jupiter near."
583. III! D. Standard 14.
584. In Series *E* 129, "Jupiter near."
586. In Series *E* 129, "Jupiter near."
594. Σ 431.
595. In Series *E* 129, "Jupiter near."
601. In Series *E* 129, "Jupiter near."
603. In Series *E* 129, "Jupiter near."
604. III? S. Misprints occur in Secchi's publications relating to *γ* and *δ Eridani*; see Comptes Rendus, LXIII. 626, 627, and Catalogo, p. 19.
607. *γ Camelopardi* in B. A. C. Standard 15.
608. One of the Pleiades. See H. P. 618. Residual in *P* 27, *10*.
610. One of the Pleiades. No letter in B. A. C. See H. P. 618.
612. Bm. 69. III. A. Standard 16.
613. One of the Pleiades. See H. P. 618.
615. One of the Pleiades. See H. P. 618.
616. B. A. C.; u^1 = H. P. 616; u^2 = H. P. 635.
618. Brightest of the Pleiades; for description of this group see Bessel's Astron. Untersuchungen, I. 209, reprinted in Engelmann's edition of Bessel's Works, II. 299; also Tempel's observations in "Pubblicazioni del R. Osservatorio di Brera in Milano," No. V. p. 19, and Wolf's memoir in "Annales de l'Observatoire de Paris," Mémoires, Tome XIV., Deuxième Partie, p. A. 1. Σ 8^{I}. H "25 —, 27" adopted for "27 —, 27." H. P. 608, 610, 613, 615, and 625, also belong to this group. Several other stars of the group were observed, and all the observations are discussed in Part II. Chapter XI. The apparent diminution in brightness of adjacent stars is well exhibited in the residuals of the stars composing the Pleiades.
619. Bm. 70. III. C.
622. Σ 452.
625. One of the Pleiades. See H. P. 618. Σ 453.
628. The neighboring star H. P. 633 is of nearly equal brightness with this. The star visible to the naked eye is identified in U. N. with H. P. 633 and in Heis with H. P. 628. In Series *E* 129, "Jupiter near."
629. Series *E 127* rejected; see page 81. Residuals in P, *11*; in S, *13*.
630. U. A. c. Residual in B, *13*.
633. See H. P. 628.
634. Series *E* 634 rejected; see page 81. Residual *10*.
635. See H. P. 616.
637. In U. N. magn. 6; struck out in Corrigenda.
638. Σ 464.
640. U. A. *dpl.* $5\frac{3}{4}$, 10.
641. Bm. 71.
644, 645. Combined, 4.8; diff. from Vol. XI. Σ 470.
649. Σ 471. Residual in *P* 339, *11*.
650. *Cassiopeia* in B. A. C. Σ 460.
653. U. A. *r*. III.? S. A. See H. P. 604.
657. Schönfeld 19. Variability discovered by Baxendell in 1848. Max. 3.4. Min. 4.2. Period $3^d\ 22^h\ 52^m$. The character of the variation resembles that of H. P. 496, which see.
661. U. A. *r*.
668. Residual in Series *P* 35, 20.
670. B. A. C.; A^1 = H. P. 670.; A^2 = B. A. C. 1260.
673. Residual in Series *E* 431, *10*.
674, 675. Combined, 5.8; diff. from page 91. H. P. 675 too close to H. P. 674 for observation with photometer; care required in identification.
678. *Ursa Minor* in B. A. C.
679. In U. N., a star 1° south of this place, magn. 6; struck out in Corrigenda.
684. *Ursa Minor* in B. A. C.
686. Observed also in Series *P* 65; readings 60.0, 83.8, 24.7, 260.7. Record of third reading evidently erroneous; observation rejected.

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691. See H. P. 722.
694. *Ursa Minor* in B. A. C.
696. U. A. *r*. Residual in H, *11*.
698. U. A. *r*.
704. *Camelopardus* in B. A. C.
705. Standard 17.
706. The two observations in Series *P* 49 refer to a supposed separation of the object. The results 6.4 and 7.1 were rejected; if combined, the result would be 5.9.
712. U. A. *r*. Series *E* 130 rejected; see page 81.
713. U. A. *r*.
714. Σ 516.
715. Residual in H, *12*.
717, 718. Combined 6.0; diff. from page 91. In Series *P* 596 the two components were separately observed; resulting magnitudes 6.9, 6.1, rejected. DM. magn. of H. P. 717, 8.5 reduced to 8.3 for difference in scales.
719. B. A. C.; b^1 = H. P. 719; b^2 = H. P. 724.
721. Σ 518. This star has a proper motion of —0ˢ.15 in right ascension and —3″.4 in declination.
722. B. A. C.; ω^1 = H. P. 691. ω^2 = H. P. 722.
723. Care required in identification with photometer.
724. See H. P. 719.
725. Care required in identification with photometer.
726. Residual in S, *19*.
728, 729. Combined, 6.6. Care required in identification with photometer. Residuals in Series *E* 127, *14*; in Series *E* 425, *16*; in Series *E* 638, *10*; in *E*, *13*; in p, *14*. The large negative residuals may be due to the combination of other stars in the neighborhood with these.
736. Σ Unnum.
737. Series *E* 130 rejected; see page 81. Residual *11*.
740. B. A. C.; υ^1 = B. A. C. 1159; υ^2 = B. A. C. 1201; υ^3 = B. A. C. 1220; υ^4 = H. P. 740; υ^5 = H. P. 766; υ^6 = H. P. 796; υ^7 = H. P. 802.
744. Bm. 73. III ? S; but identification doubtful. Residual in *P* 40, *10*.
745. Residual in B, *14*.
747. Σ 528. Series *E* 639 rejected; see page 81. Residual *11*.
750. B. A. C.; δ^1 = H. P. 750; δ^2 = H. P. 756; δ^3 = H. P. 763. Series *E* 130 rejected; see page 81. Residual *12*. In forming the observing list, Σ 533, magnitudes 6.0, 7.5, was confounded with this star, and thus escaped observation. See Part II. Chapter XI.
753. Combined by Houzeau with H. P. 755; resulting residual 8. In Series *E* 638, considered equal to H. P. 755.
754. Σ 534. Residuals in P 40, *10*; in H, *10*.
755. See H. P. 753.
756. See H. P. 750. Series *E* 130 rejected; see page 81.
759. U. A. *r*.
760, 761. B. A. C.; κ^1 = H. P. 760; κ^2 = H. P. 761. Σ 9^{I}.
762. *Taurus* in B. A. C.
763. See H. P. 750. Series *E* 130 rejected; see page 81.
764. B. A. C.; υ^1 = H. P. 764; υ^2 = H. P. 769.
766. See H. P. 740. U. A. *r*.
767. Marked T in *h*. Standard 18.
769. See H. P. 764.
772. Σ 548.
775, 776. Σ 10^{I}.
779. Σ 550.
780, 781. Combined 4.8. Σ 554 = H. P. 780. The proximity of H. P. 797 and other bright stars in the Hyades makes this star appear faint to the unaided eye. Residual of H. P. 781, in Series *P* 82, *14*.
783. Series *E* 130 rejected; see page 81.
787. U. A. *r*.
793. Bm. 80.
794. Bm. Add. I. 14. U. A. *r*. III! A.
795. U. A. *r*.
796. See H. P. 740.
797. Σ 2^{II}. Bm. 81. Standard 110. Parallax 0″.52 according to Struve.
800. Σ 566.
802. See H. P. 740.
805. B. A. C.; c^1 = H. P. 805; c^2 = H. P. 814.
807, 808. Combined, 4.2. Σ 11^{I}. In U. N. 92 *Tauri* only is mentioned, but the magnitude given has been assumed to relate to the combination of the two stars.
814. See H. P. 805.
821. U. A. *r*.; p. 273. III. S, A.
822. *Taurus* in B. A. C.
823. Σ 590. U. A. *dpl*. 6.8, 7.5.
824. *Camelopardus* in B. A. C.
827. U. A. *r*.
831. III! A.
836. α *Camelopardi* in B. A. C. Standard 19. At lower culmination, residual in Series *P* 673, *14*.
839. U. A. *r*. In Series *E* 641, double in opera-glass; combined light observed.
840. B. A. C.; π^1 = H. P. 840; π^2 = H. P. 841; π^3 = H. P. 845; π^4 = H. P. 859; π^5 = H. P. 857; π^6 = H. P. 875. H. P. 840 is called q *Orionis* by J. Herschel, who follows Bode. U. A. p. 23, magn. 3.2; p. 222, magn. 3.1 var. ?; p. 342, magn. 3.1.
841. See H. P. 840.
845. See H. P. 840.
846. U. A. *r*.
847. In Series *E* 641, double or hazy.
850. Bm. 87. III. S. III! P.
855. Bm. 88. U. A. *r*. III. S.
856. Σ 610.
857. See H. P. 840.
859. See H. P. 840.
860. Bm. 89. U. A. *r*. III. S.
863. The place of the star visible in this vicinity, according to U. N., is that of H. P. 916, and, according to Heis, that of H. P. 863.
866, 867. Combined, 5.0. Both stars U. A. *r*. In Series *P* 35 some neighboring star was probably observed by mistake for H. P. 867.
868. Is perhaps Flamsteed's 100 *Tauri*, which Baily regards as non-existent. See his notes to B. F. 611 and B. F. 639.
869. Residual in Series *P* 44, *10*.
873. Σ 616.
874. The place given by Heis depends apparently upon Lalande, and requires a correction of +0ᵐ.5.
875. See H. P. 840. U. A. *r*. Residual in P, *14*.
876. β *Camelopardi* in B. A. C. Standard 20.
877. Schönfeld 25. Variability discovered by Fritsch in 1821. Max. 3.0. Min. 4.5. Period irregular. Series *E* 652 rejected; see page 81.

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879. Bm. 93. III., faint, S.
880. Schönfeld 26. Variability discovered by Schmidt in 1855. Max. 6 - 7. Min. 8.5? Period 437d.8. Bm. 94. U. A. *rr*, 6 to 8½, var., p. 308. IV. V, A. One of the reddest stars known. Magnitudes in Series *P* 57, 351, 376; 5.8, 7.1, 6.9. Not identified in Series *P* 57, 376.
881. ⧖ 627. U. A. *dpl.*
884. U. A. *r.*
885, 886. Combined, 4.7; diff. from Vol. XI. ⧖ 13I.
887. Bm. 95. U. A. *c.*
892. U. A. *r.*
899. Bm. 96. U. A. *r.* IV! S. C. P. Flammarion, on page 750, assigns the magnitude 6 v to Ll. 9581, and the magnitude 6.5 to a red star in the place of H. P. 899.
901. Bm. 97. U. A. *r.*
911. ⧖ 645.
913. ⧖ 634.
915. Residual in H, *10.*
916. See H. P. 863.
918. Standard 21.
919. Bm. 100. U. A. *c.*
925. III! A.
927. ⧖ 655. Bm. Add. I. 17.
928. ⧖ 654. U. A. *c.*
929. U. A. *r.*
930. ⧖ 653.
931. ⧖ 661.
932. Standard 111. In Series *E* 174 and *E* 469, altitude low; observations corrected for atmospheric absorption.
933. *Columba* in Behrmann. U. A. *dpl.* 7, 7¾.
935. U. A. *r.* Spectrum banded? C.
936. ⧖ 668. Standard 112.
937. Residual in H, *11.*
938. Standard 22. Care required in identification with photometer.
941. III. A.
943. *Columba* in B. A. C.
944. ⧖ 3II.
945. Marked T in *h.*
946. Series *E 435* rejected; see page 81. The star visible in this vicinity is identified by Houzeau with 17 *Aurigæ*, which precedes H. P. 946 0m.7, 1′ north. Its DM. magnitude is 6.5. See Part II. Chapter XI.
947. Bm. Add. I. 18.
948. Series *P* 54 should apparently have been rejected, as the star observed seems not to be H. P. 948.
952. U. A. magn. 5.9, p. 24; 5.8 var.? p. 222.
955. Marked D in *h.* U. A. *r.*
961. *Columba* in B. A. C.
964. U. A. *dpl.*
966. ⧖ 696. U. A. magn. 5.2, p. 24; magn. 5.3, *dpl.* 5.4, 7½, p. 222.
967. U. A. *dpl.* 5¾, 7.
968, 969. Combined, 5.4. An additional observation in Series *E 166*, with the field-glass, gave the magnitudes 6.1 and 6.0.
971. ⧖ 701.
973. U. A. *c.*
974. U. A. *dpl. rr.*
975. Close double, discovered by Dembowski.
976. *Columba* in B. A. C.
977. See H. P. 988.
978. β 112 *Tauri* = γ 23 *Aurigæ.* According to Ptolemy, the star belongs to both constellations. Standard 113. Series *E* 469 rejected; see page 81.
979. Series *P* 411 rejected, as the observation was made 15m or 20m after culmination, when part of the light of the star might be lost. Standard 114. In Series *E* 440, "4 2 2" adopted for "4 8 2."
980. Standard 23.
985. Residuals in Series *P* 608, *11;* in *H*, *11.*
988. B. A. C.; ψ^1 = H. P. 977; ψ^2 = H. P. 988.
991. Care required in identification with photometer.
992. ⧖ 716.
995. U. A. *r.* Ll. 10308, a star nearly as bright, precedes 0m.5, 8′ north, and was observed by mistake in Series *P* 57 and *P* 380.
996. *Ursa Minor* in B. A. C.
997. ⧖ 725. Bm. 110. U. A. *rr.* III? S. D.
999. Care required in identification with photometer.
1000. ⧖ 728.
1001. ⧖ 729.
1003. Bm. 111. III! S. A. P.
1004. ⧖ 730.
1005. ⧖ 14I. Schönfeld 29. Variability discovered by J. Herschel in 1843. Max. 2.2? Min. 2.7. Period irregular. U. A. var.? p. 328.
1007. Care required in identification with photometer.
1008. H "120. 110."
1019, 1020. Combined, 3.5; diff. from Vol. XI. ⧖ 738.
1021. Sometimes separated in photometer, but always observed as one object. The place given by Wolff on page 105 identifies the star called by him "Anon. Orionis" on page 100 with H. P. 1021.
1023, 1024. Nebula in Orion, Messier 42, G. C. 1179; see Vol. V. Spectrum gaseous; see Vol. XIII. page 75. B. A. C.; θ^1 = H. P. 1023; θ^2 = H. P. 1024. Combined, 4.8. ⧖ 17I. H. P. 1023 = ⧖ 748. H. P. 1024 = ⧖ 16I. For measurements of the differences of magnitude between the components of these stars, see Vol. XI. pages 120, 146; also the correction given in Vol. XIII. page 25. U. A., combined magnitude, 4.8.
1025, 1026. B. A. C.; c = H. P. 1025. Combined, 4.0. Houzeau refers only to the first of the two stars. U. A., combined magnitude, 5.1.
1027. ⧖ 752. U. A. *dpl.* 3, 8; p. 223, magn. 2.9; p. 342, magn. 2.8.
1029. Standard 115. H "46, 50" adopted for "46, 50 — 34." Residual in Series *P* 44, *12.* In Series *E* 182, "4 2 2" adopted for "4 8 2." In Series *E* 644, "136 — 136" adopted for "36 — 36."
1030. Bm. 113. U. A. *r.*
1031. Standard 24. At lower culmination, residual in Series *P* 212, *10.*
1033. ⧖ 753.
1034. Care required in identification with photometer. Residual in F, *10.*
1038. *Columba* in B. A. C.
1039. ⧖ 762. U. A. *dpl.* 4, 7¾. Bm. 116.
1045, 1046. Combined, 1.9; diff. from Vol. XI. ⧖ 774. Standard 116. In Series *E* 644, "136 — 136" adopted for "36 — 36."

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1047. U. A. *r.* Care required in identification with photometer.
1048. Standard 117.
1050. Bm. 119. U. A. *rr.* Residual in H, *17.*
1051. *Camelopardus* in B. A. C.
1057. U. A. *dpl.* $7\frac{1}{2}$, $3\frac{1}{2}$.
1065. U. A. *r.*
1066. ⧖ 795.
1068. Standard 118. Series *E* 680 rejected; see page 81. Perhaps "88 — 88" should be adopted for "89 — 89."
1072. III. A.
1073. Bm. Add. I. 24.
1075. H "132, 135" adopted for "132, 135 — 138"; since, as Herschel correctly states below, 138 *Tauri* does not exist.
1076. U. A. *r.*
1079. 30 *Aurigæ* = 32 *Camelopardi.*
1084. In Series *E* 642, "Mars near."
1085. U. A. *r.*
1089. B. A. C.; χ^1 = H. P. 1089; χ^2 = H. P. 1090; χ^3 = H. P. 1119; χ^4 = H. P. 1122.
1090. See H. P. 1089.
1091. Schönfeld 30. Variability discovered by J. Herschel in 1836. Max. 1. Min. 1.4. Period irregular. Bm. 127. U. A. *r*; p. 330. Spectrum contains well-marked bands and lines. III. S. III! P. U. N. magn. 1; altered by Corrigenda to var.
1092. U. A. *trpl.*
1093. Bm. 129.
1095. Marked D in *h.*
1099. In Series *E 436*, 642, "Mars near."
1100. Standard 119.
1102. Bm. 130. III! S.
1107. Care required in identification with photometer.
1109. In Series *E* 436, "Mars near."
1111. U. A. *dpl.* H "1 —, 2, 4."
1114. U. A. *c.*
1115. In Series *E 135*, a companion of equal magnitude noticed. In Series *E* 443, double or triple; combined magnitude, 5.5. Houzeau considers the star visible in this vicinity to be 39 *Aurigæ*, which follows H. P. 1115 $1^m.8$, 5′ north; DM. magn. 6.8.
1117. H "3 —, 1."
1119. See H. P. 1089.
1122. See H. P. 1089.
1125. *Lepus* in B. A. C. U. A. *r.*
1128. Residual in Series *P* 58, *17.*
1136. U. A. *dpl.* 6, 7.
1138. This cluster is Messier 35, G. C. 1360. In Series *E* 136 and *E* 172, too diffuse for observation. In Series *E* 443, magn. 5.1. In Series *E* 643, extended and diffuse nebula; magn. 5.3.
1139. ⧖ 845.
1140. III? C.
1141. A star in this place is given by Behrmann, with the magnitude 6. Looked for with the photometer in six series, but not seen. See Part II. Chapter XI.
1142. ⧖ 845.
1145. In Series *P* 608, clouds suspected.
1146. Care required in identification with photometer.
1148. Bands? C.
1151. *Lepus* in Behrmann.
1155. Standard 25.
1156. *Canis Major* in B. A. C. U. A. *r.*
1158. *Canis Major* in B. A. C.
1159. III! A. Standard 26.
1160. Schönfeld 31. Variability discovered by Schmidt in 1865. Max. 3.2. Min. 3.7 – 4.2. Period $229^d.1$. Bm. 139. III. V. For observations of H, see Proc. Amer. Acad., XIX. 269.
1166, 1167. Combined, 5.7.
1169. See H. P. 1174.
1170. Bm. 140.
1171. U. A. p. 330. Series *E* 175 rejected; see page 81. Residual *10.*
1174. B. A. C.; k^1 = H. P. 1169; k^2 = H. P. 1174.
1175. U. A. *dpl.* In Series *E 643*, double; combined light observed.
1181. H "4 — 6."
1183. Bm. Add. II. 3. U. A. *r.*
1185. Bm. 142.
1189. U. A. *c.*
1192. U. A. *dpl.* Marked D in *h.* In Series *E 643*, nebulous.
1193. Baily does not attempt to identify the stars called ψ by Bayer (B. A. C., p. 67, note).
1194. Bm. 143. III. V.
1196. ⧖ 3116. U. A. *dpl.* $6\frac{1}{2}$, $8\frac{1}{2}$.
1197. Bm. Add. I. 28.
1200. ⧖ 900.
1201. Standard 120.
1203. *Canis Major* in Ptolemy, B. F., and B. A. C. H "3; 8 *Columbæ*" rejected on account of uncertainty in the designation. The comparison occurs in this form in all three original manuscripts of Herschel; but *Columba* does not occur in the British Catalogue, and the number 8 is therefore unintelligible.
1204. U. A. *r.*; p. 331.
1205. Schönfeld 32. Variability discovered by Gould in 1871. Max. 6.2. Min. 7.6. Period 26.8^d. U. A. var., 6 to $7\frac{1}{2}$; p. 304.
1206. In Series *E 175*, cluster; magn. 6.0. In Series *E* 439, observation unsatisfactory; magn. 5.4. In Series *E* 643, magn. 5.5.
1214. H "77 — 78."
1219. Standard 27.
1220, 1221. The third component of ⧖ 919 appears from Vol. XI. to have the magnitude 5.6. The photometric magnitude 3.9 relates to the combination of all three stars; differences from Vol. XI.
1222. No letter in B. A. C.
1224. In Series *E 175*, double; magnitude of principal component, 5.7.
1226. U. A. *r.*
1227. U. A. *r. dpl.* In Series *E 175*, a slightly fainter companion noted. In Series *E 643*, observation difficult; a nebula or cluster precedes. Residual in Series *P* 88, *10.*
1228. Care required in identification with photometer. See H. P. 1240.
1229. U. A. *r.*
1233. Combined by Houzeau with 10 *Lyncis.* H "8, 41 Camelop. 8 — 3."
1240. Care required in identification with photometer. H. P. 1228 near. See Part II. Chapter XI.

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1241. U. A. *dpl.* 7¾, 6¼.
1245. See H. P. 1193. Combined by Houzeau with H. P. 1244; the residual becomes 6 if we assume H. P. 1245 to be the object observed by Houzeau.
1247. See H. P. 1193.
1249. Standard 121.
1251. U. A. *r.*
1253. U. A. *r.*; p. 304. In Series *P* 92, identification doubtful.
1254. U. A. *r.*
1255. See H. P. 1193.
1256. Σ 950. Schönfeld 34. Variability discovered by Winnecke in 1867. Max. 4.9. Min. 5.4. Period $3^d.4$.
1261. Σ 948.
1262. Bm. 151. U. A. *r.*
1263. Bm. 152.
1267, 1268. Combined, 5.5; diff. from Σ 958.
1269. See H. P. 1193. Σ Unnum.
1270. Standard 28.
1271. See H. P. 1193. In Series *E 656*, observation uncertain.
1273. A star in this place is given by Behrmann with the magnitude 6. Looked for with the photometer in six series, but not seen. See Part II. Chapter XI.
1274. In Series *E 139*, and *E 644*, nebula.
1275. Standard 122. On account of the brightness of this star, no satisfactory observation of its light can be made with the unaided eye. H. "9 — — — all 1m." h; see Part II. Magn. 1 in P, S, U, *H*, and F. U. A. p. 196, magn. 1; p. 342, magn. 0.1. Residual in S, 20. For the relative brightness of Sirius and its companion, see Vol. XI. pages 147, 177. Binary; period 49 years, according to Auwers. Parallax 0″.38 according to Gill.
1278. U. A. *r.* The place of this star is taken from the U. A., and agrees with that of W. VI. 1198. It is 5′ north of that of Ll. 13059, which is adopted by Heis.
1280. Bm. Add. II. 4.
1281. This cluster is Messier 41, G. C. 1454. U. A. cum. neb.
1283. U. A. *r. dpl.* 7.3, 5.5.
1287. See H. P. 1193.
1289. Σ 963.
1290. H "35, 33."
1292. *Ursa Minor* in B. A. C. Bm. 154. III. A. Standard 154.
1294. U. A. cum. 6.6, 7.5.
1298, 1299. See H. P. 1193. Combined, 5.4. In Series *E 139* magnitude of each star 5.9; hence combined magnitude assumed to be 5.2. In Series *E* 644, three stars seen with opera-glass; combined light of two estimated by the eye. H. P. 1298, H "59, 60." H. P. 1299, H "61, 62."
1301. Care required in identification with photometer. Identification doubtful in Series *P* 76 and *P* 97.
1304. See H. P. 1193. In Series *E* 644, southern and brighter of two.
1305. Σ 982. Care required in identification with photometer.
1307. Marked D in *h.*
1309. Bm. 156. U. A. *r.*
1310. See H. P. 1193. *Lynx* in B. F. and B. A. C.
1311. Inserted on account of its peculiar spectrum, which consists mainly of three bright lines.
1312. Bm. 157. U. A. *r*; p. 304.
1314. Residual in H, *11.*
1315. Care required in identification with photometer. U. A. p. 305.
1316. Bm. 158.
1319. Bm. 160.
1321. Care required in identification with photometer. In Series *P* 81, the star measured was not identified; magn. 5.6. In Series *P* 414, observation marked OK; see page 6; magnitude 5.4. In Series *P* 631, the magn. was 6.5; five companions were noted. Stone adopts as Lacaille 2538 a star $0^m.8$ preceding and 1′ north of the place here given from Lacaille. See Part II. Chapter XI.
1322. Marked D in *h.* In Series *E 175*, a distant companion of equal brightness. U. A. p. 332.
1323. Combined by Houzeau with No. 275 of Mayer's Zodiacal Catalogue.
1324. Care required in identification with photometer.
1325. Standard 123.
1330. Bm. Add. I. 31. U. A. *r.* III. A.
1331. Care required in identification with photometer.
1332. In Series *E 175*, a distant companion of equal brightness.
1333. Bm. 162. U. A. *rr.*
1334. Schönfeld 36. Variability discovered by Schmidt in 1844. Max. 3.7. Min. 4.5. Period $10^d.2$. For observations of H, see Proc. Amer. Acad. XIX. 269.
1335. *Monoceros* in B. A. C.
1339. *Gemini* in B. A. C.
1341. Care required in identification with photometer. In Series *E 135*, double; components equal. In Series *E* 644, northern and brightest of three.
1349. Residual in w, *13.*
1350. Standard 124.
1352. III. A.
1353. U. A. *r.*
1356. Standard 29. H "18 —, 47 Camelop. 10 —, 17."
1357. Marked D in *h.* In Series *E 175*, double; magnitude of each component, 5.8; hence, combined, 5.1. In Series *E* 644, separated by opera-glass; the estimate relates to the combined light. The photometric magnitude relates only to the northern star. The other is DM. +5° 1580, magn. 6.5.
1360. Bm. 168.
1361. III! A. P.
1364. *Canis Minor* in B. A. C.
1366. Marked D in *h.*
1373. Σ 1061.
1374. U. A. *r. dpl.* 5¼, 7.
1375. U. A. *r.* Spectrum banded, C.
1377. Σ 1066.
1378. Σ 1062. Houzeau's observation appears to relate only to the brighter component, as his designation of the star is 19_2 *Lyncis.*
1379. Σ 1065. Designated by Houzeau as 20_{1+2} *Lyncis.* Residuals in H, *12*, in *h*, *17.*
1381. U. A. *trpl.* 4¾, 9½, 9¾.
1383. The place here given is derived from the U. A., where the star visible in this vicinity is identified with Oeltzen 6600. Stone identifies this star with Lacaille 2730, the place of which in Baily's Lacaille is 8′ farther north.

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U. A. *r*. Care required in identification with photometer. See Part II. Chapter XI.
1388. H "52, 58, 49."
1390. Care required in identification with photometer.
1394. Series *E* 139 rejected; see page 81.
1395. Standard 30.
1396. s *Puppis* in B. A. C.
1398. *Canis Major* in B. A. C. U. A. *r*.
1399. III. S.
1404. Residual in H, *12*.
1409. See H. P. 1412. Houzeau combines H. P. 1409 and H. P. 1412; resulting residual 5.
1411. Σ 1097. U. A. *dpl.* 8½, 9½.
1412. B. A. C.; b^1 = H. P. 1409; b^2 = H. P. 1412. Schönfeld, in his corrections of Heis (V. J. S., VIII. 68), calls this star b; although Heis in his Corrigenda applies that letter to H. P. 1409, and Bayer says "in humero dextro borealior." See H. P. 1409.
1414. Care required in identification with photometer.
1416. *Puppis* in Behrmann.
1417. Variability discovered by Gould in 1873. Max. 6.0. Min. 7.2. Period $46^d.0$. U. A. var., 6 to 7; p. 333.
1419. B. A. C.; δ^1 = H. P. 1419; δ^2 = H. P. 1422; δ^3 = B. A. C. 2491.
1420. *Puppis* in B. A. C. U. A. *r*.
1422. See H. P. 1419. H "9. 8."
1423, 1424. Combined, 1.6; diff. from Vol. XI. Σ 1110. Binary; period 1001 years, according to Doberck. Standard 125.
1428. *Puppis* in B. A. C.
1429. Bm. Add. II. 6. U. A. *r*. III. D.
1430. Bm. 181.
1431, 1432. *Puppis* in Behrmann and B. A. C. One star only mentioned in U. N. as visible in this vicinity, and there identified with H. P. 1431. But in Astr. Nachr., XXVI. 318, Argelander assumes the object observed to be H. P. 1432, the components of which are B. A. C. 2497 and 2498, the first only being named in the fourth column of the catalogue. On the other hand, later investigations by Marth, Argelander, and Schönfeld (V. J. S., VIII. 290, 291) again identified the U. N. star with H. P. 1431. For this reason the asterisk placed by Heis against his No. 9 should be transferred to No. 10.
1433. p *Puppis* in B. A. C.
1435. In Series *P* 404 and *P* 406, stars too scattered for measurement. In U. A. four stars near this place; magnitudes 6.0 *r*, 7.0, 7.3, and 7.0.
1442. Standard 126.
1443. m *Puppis* in B. A. C. U. A. *dpl.* 5½, 10.
1444. Bm. 182.
1445, 1446. k^1 and k^2 *Puppis* in B. A. C. Heis mentions only the preceding star (B. A. C. 2530), but is here assumed to have observed both as one object. Combined, 3.9; diff. from Vol. XI. U. A. *dpl.* 4½, 5.
1447. *Puppis* in B. A. C. U. A. *r*.
1448. *Camelopardus* in B. F.
1451. III. A. III! P.
1452. γ *Monocerotis* in B. A. C. Bm. Add. II. 8.
1453. Bm. 183.
1454. Care required in identification with photometer.
1455. Residual in U, *10*.
1458. *Puppis* in B. A. C. U. A. *r*.
1459. Σ 5^{II}. Bm. 188. Standard 127. U. N. magn. 2·1; altered by Corrigenda to 1·2.
1461. *Puppis* in B. A. C. U. A. *c*. Identified by Baily, in his note to B. A. C. 2560, with Bayer's σ *Argus*, but not so regarded by Heis.
1462. *Puppis* in B. A. C. U. A. *r*; p. 281.
1466. Σ 1135.
1467. Residual in *h*, *16*.
1469. *Puppis* in B. A. C. U. A. *dpl.* 6.4, 5.5.
1470. Separated in photometer, but observed as a single object. In Series *P* 420, easily separated, and observed as a single object with difficulty.
1471. *Puppis* in B. A. C. Σ 1146.
1472. *Puppis* in B. A. C.
1473. *Puppis* in B. A. C. U. A. *r*.
1474. Bm. Add. II. 9. U. A. *r*.
1475. U. A. p. 333.
1477. Bm. 192.
1478. Standard 31.
1479, 1480. Combined, 5.3. Heis mentions only 26 *Lyncis*, but 25 *Lyncis* should probably be added, as in U. N. In Series *E* 646, H. P. 1480 is mentioned as the northern and brighter of two.
1482. *Puppis* in B. A. C.
1484. *Puppis* in B. A. C. H "2, 10, 8."
1485. *Ursa Minor* in B. A. C.
1487. H "5. 1."
1488. In Series *E* 645, north preceding and brighter of two.
1492. *Puppis* in B. A. C. H "11 —, 665 De la Caille." This is No. 665 of Lacaille's Cœlum Australe Stelliferum, which is identical with H. P. 1445–6.
1493. Standard 32.
1495. H "52 — 54."
1496. *Puppis* in B. A. C.
1497. B. A. C.; ω^1 = H. P. 1497; ω^2 = B. A. C. 2663.
1500. *Puppis* in B. A. C.
1501. *Puppis* in B. A. C. U. A. p. 282.
1503. Bm. Add. II. 10.
1504. *Argo* (*Navis*) in B. F., by accidental error of Flamsteed; see B. A. C., p. 55.
1505. *Cancer* in B. F. and B. A. C.
1506. U. A. *dpl.*
1508. See H. P. 1511. III. A.
1510. *Camelopardus* in B. A. C. Bm. 196.
1511. B. A. C.; μ^1 = H. P. 1508; μ^2 = H. P. 1511. In Series *E* 447, "Mars near."
1512. Σ 1183.
1513. 55 *Camelopardi* in B. F. and B. A. C. Standard 33.
1514. *Puppis* in B. A. C.
1515. ρ *Argus* in B. A. C. *Puppis* in Behrmann.
1516. ≷ 1190.
1517. B. A. C.; ψ^1 = B. A. C. 2727; ψ^2 = H. P. 1517.
1518. *Puppis* in B. A. C.
1519. Marked D in *h*.
1521, 1522, 1523. Combined, 4.7; diff. of H. P. 1521 and H. P. 1522 from ≷ 1196; diff. of their combination and H. P. 1523 from Vol. XI. For details with regard to this interesting stellar system, see Observations de Poulkova, IX. 75; also Comptes Rendus, LXXIX. 1463. Period of revolution of H. P. 1521 and 1522, 62 years, according to O. Struve.

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1524. *Puppis* in B. A. C.
1525. *Camelopardus* in B. A. C. Residual in *h*, *10*.
1526. *Cancer* in B. A. C.
1528. This cluster is G. C. 1637.
1529. *Puppis* in B. A. C.
1531. *Puppis* in Behrmann.
1532. *Camelopardus* in B. A. C.
1534. 30 *Lyncis* = 58 *Camelopardi*. *Camelopardus* in B. A. C.
1539. H "19 — 30" adopted for "19 — 30, 28."
1541. U. A. *r*.
1546. *Puppis* in B. A. C.
1551. ≥ 1223.
1552. See H. P. 1567. ≥ 1224.
1554. *Hydra* in B. A. C.
1555. Care required in identification with photometer.
1556. *Puppis* in B. A. C. Bm. Add. I. 37. U. A. *r*.
1557. III! A. P.
1558. Standard 34.
1560. U. A. *r*.
1561. See H. P. 1567.
1563. *Puppis* in B. A. C. U. A. p. 283.
1564. *Puppis* in B. A. C.
1566. ≥ Unnum.
1567. B. A. C.; υ^1 = H. P. 1552; υ^2 = H. P. 1561; υ^3 = H. P. 1567.
1568. *Malus* in Behrmann.
1569. Residuals in P, *12*; in S, *12*.
1571. See H. P. 1576.
1572. Residual in S, *10*.
1573. See H. P. 1567. Residual in *E* 135, *10*.
1574. *Monoceros* in B. A. C. U. A. *dpl.* $7\frac{3}{4}$, $5\frac{3}{4}$.
1575. *Ursa Major* in B. A. C.
1576. Combined by Houzeau with H. P. 1571; resulting residual *6*.
1578. *Malus* in Behrmann. U. A. *r*.
1580. B. A. C.; π = H. P. 1584. Bayer mentions only one π.
1581. *Lynx* in B. A. C.
1582. Bm. Add. I. 38.
1583. *Hydra* in B. F. and B. A. C.
1584. See H. P. 1580. Standard 35.
1585. *Lynx* in B. A. C. Marked D in *h*. In Series *E 174*, *E 177*, and *E 657*, southern of two.
1586. *Malus* in B. A. C.
1587. B. A. C.; c^1 = H. P. 1587; c^2 = B. A. C. 2902. H "34. 36."
1590. g *Mali* in B. A. C.
1592. H "39, 41, 42." Præsepe, a conspicuous cluster, barely resolved into stars by the naked eye; Messier 44, G. C. 1681. See Washington Observations for 1867, Appendix IV., Catalogue of 151 Stars in Præsepe, by Asaph Hall.
1593. *Malus* in Behrmann.
1595. f *Mali* in B. A. C. U. A. *r*.
1596. U. A. *dpl*.
1597. Residual in P, *10*.
1600. *Hydra* in B. A. C.
1603. H "49 — 37."
1604. a *Mali* in B. A. C.
1609. *Malus* in Behrmann.
1610. U. A. p. 298.
1616. An error was made in the numbering of the stars in *Lynx* by Miss Carolina Herschel; see Baily's note in B. F., p. 562. In W. Herschel's catalogues of the brightness of the stars, the numbers in *Lynx* from 36 to 45 inclusive should each be diminished by one.
1617. This cluster is Messier 67, G. C. 1712.
1618. *Malus* in B. A. C. U. A. *r*. IV. C. Care required in identification with photometer. Residual in Series *P* 639, *2*.
1619. B. A. C.; σ^1 = B. A. C. 2952; σ^2 = H. P. 1625; σ^3 = B. A. C. 3046.
1620. *Malus* in B. A. C.
1621. *Malus* in B. A. C.
1622. B. A. C.; ρ^1 = B. A. C. 3000; ρ^2 = H. P. 1622; ρ^3 = H. P. 1626.
1625. See H. P. 1619.
1626. See H. P. 1622.
1630. Bm. 212. Series *P* 410 rejected. See Part II. Chapter XI.
1631. See H. P. 1619.
1633. d *Mali* in B. A. C.
1634. B. A. C.; o^1 = H. P. 1634; o^2 = H. P. 1635.
1635. See H. P. 1634.
1638. III! D. Standard 36. Care required in identifying this star at its lower culmination, with photometer. At lower culmination, residual in Series *P* 542, 25.
1639. Residual in *P* 107, *10*.
1640. See H. P. 1619. Combined by Houzeau with σ^4 *Cancri*. In Series *E 135*, double; combined light observed.
1641. *Lynx* in B. A. C.
1642. U. A. *dpl*.
1648. *Malus* in B. A. C. Marked D in *h*.
1651. Bayer mentions only one σ. Bm. Add. I. 39.
1652. *Malus* in B. A. C. U. A. p. 297.
1653. *Lynx* in B. A. C.
1654. U. A. *r*.
1655. See H. P. 1651. ≥ 1306.
1658. Standard 37.
1663. *Malus* in B. A. C. Bm. 217. U. A. *c*. Bands? S.
1664. Bm. 218. III! S. A.
1666. *Malus* in Behrmann.
1669. Standard 38.
1670. e *Mali* in B. A. C.
1671. Series *E* 456 rejected; see page 81. See H. P. 1616. Residuals in *E* 456, *10*; in S, *10*.
1673. U. A. *dpl*.
1676. Series *E* 178 rejected; see page 81.
1677. B. A. C.; π^1 = B. A. C. 3132; π^2 = H. P. 1677. Bm. 219. H "82, 54." Residuals in P, *10*; in S, *11*.
1681. See H. P. 1616.
1682. Residuals in *H*, *10*; in F, *10*.
1683. III. D. Care required in identification with photometer. H "81, 83 80 — 83, 78."
1684. *Malus* in B. A. C. Too faint for observation with photometer. Magn. 6 in U. N. and in Heis. See Part II. Chapter XI.
1685. α *Lyncis* in B. A. C. Bm. 220. III. D. See H. P. 1616. In J. Herschel's Outlines of Astronomy, 5th ed., p. 691, for γ *Lyncis* read r *Lyncis*. See Cape Observations, pp. 325 and 348. Bode, whom Herschel followed, applies the letter r to this star.
1688. U. A. *dpl*. $7\frac{1}{2}$, $5\frac{1}{4}$; p. 298.
1690. h *Mali* in B. A. C. U. A. *r*.

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1691. *Leo Minor* in B. F.
1693. *Malus* in B. A. C.
1694. See H. P. 1723.
1696. *Lynx* in B. F. and B. A. C. See H. P. 1616.
1697. *Malus* in B. A. C.
1698. Bm. 223. U. A. *r.* III? S. Standard 128.
1700. U. A. p. 298.
1701. Σ 1351. Standard 39.
1702. Σ 1356. Binary; period 111 years, according to Doberck.
1705. Standard 40. At lower culmination, residual in *P* 259, *18.*
1708. *Malus* in B. A. C.
1710. Bm. 224.
1712. Σ Unnum. Bm. Add. I. 41.
1713. U. A. *dpl.*
1718. *Antlia* in Behrmann.
1723. B. A. C.; A = H. P. 1694. Bayer describes A as "antecedens lucidam," on which Baily probably relied for his identification. In Bayer's map the letter A stands near three stars north of α *Hydræ.*
1726. 10 *Leonis* = 1 *Sextantis.* Leo in B. F. and B. A. C. U. A. p. 336.
1727. See H. P. 1616.
1729. U. A. *r.*
1734. Bm. 226. U. A. p. 298.
1735. H "37. 34."
1738. See H. P. 1616.
1744. III. A.
1745. *Lynx* in B. F. by accidental error of Flamsteed. See Baily's note in B. A. C., page 55. See H. P. 1616. Residual in P, *10.*
1746. θ *Antliæ* in B. A. C.
1748. *Leo* in B. A. C.
1749. H "18, 23."
1751. *Leo Minor* in B. F. and B. A. C.
1752. Schönfeld 52. Variability discovered by Koch in 1782. Max. 5.2 – 6. 4. Min. 9.4 – 10.0. Period $312^d.6$. III! A. P.; III. S. Magnitudes in Series *P* 113, 122; 6.9, 5.9. Not identified in Series *P* 122. Magnitudes in Series *E 178,* 449; 6.5, 5.7.
1753. Standard 41.
1754. H "17, 16." Residuals in *P* 641, *13;* in *P* 644, *1;* in *h, 13.*
1760. III? S.
1761. H "7, 4."
1764. *Antlia* in B. A. C.
1766. *Antlia* in Behrmann. Care required in identification with photometer.
1768. *Hydra* in B. A. C.
1769. U. A. *r.*
1770. *Sextans* in B. F. In Series *P* 442, identification doubtful.
1771. H "19 — — 17."
1772. *Hydra* in Behrmann.
1773. *Antlia* in Behrmann.
1776. *Sextans* in B. F. The first of the two observations in Series *P* 122 perhaps relates to another star, as identification is wanting.
1778. Behrmann calls this star Lacaille 4087, which Stone does not find. The star is apparently Stone 5402, U. A., *Hydra,* 187. See Part II. Chapter XI.
1780. H "4 — 12, 9."
1781. Behrmann calls this star Lacaille 4126, which Stone identifies with 5455 of his own catalogue.
1782. Bm. 231. III. A. III! P.
1783. Residuals in *E* 141, *11;* in U, *10.*
1786. H "9. 13."
1790, 1791. *Antlia* in Behrmann. Combined, 5.9.
1793. In his catalogue published in 1867, Secchi describes η *Leonis* as of the type of α *Lyræ;* but in the Prodromo he says that the star has faint bands.
1794. U. A. *r.*
1795. Bm. 233.
1796. Residual in P, *12.*
1797. Σ 6^{II}. Standard 129. Series *E* 660 rejected; see page 81.
1800. U. A. *r.*
1801. U. A. *dpl. c.* Bm. 234. Faint bands, S. H "17. 18 — 20."
1802. H "14. 19, 16."
1803. *Antlia* in Behrmann.
1804. Marked D in *h.* In Series *E* 142 and *E* 666, double; combined light observed.
1806. In Series *E* 650, nebulous. H "24 — 22."
1807. Standard 42. At lower culmination, residual in *P* 8, *14.*
1808. H "23 —, 24."
1811, 1812. Combined, 3.6; diff. from Vol. XI. Σ 18^I.
1814. III. A.
1815. H "22, 17."
1816. *Ursa Major,* perhaps a misprint for *Ursa Minor,* in B. A. C.
1820. *Antlia* in B. A. C.
1821. In Series *E* 650, observation difficult on account of proximity of H. P. 1823, 1824.
1823, 1824. Combined, 2.2; diff. from Vol. XI. Σ 1424. Binary; period 407 years according to Doberck. Bm. 237. Standard 130.
1825. H "23, 26."
1826. U. A. *dpl.* Residuals in *H, 12;* in *h, 13.*
1827. Bm. 238. III. D.
1829. Standard 43. Residual in *P* 116, *10.*
1830. In Series *E* 650, observation difficult on account of the proximity of H. P. 1832 and H. P. 1834.
1831. *Draco* in B. A. C.
1833. H "25. 26."
1835. III. A.
1836. U. A. *r.*
1837. U. A. *r.*
1838. Marked D in *h.* In Series *E* 666, double; combined light observed.
1839. H "27, 28."
1840. β *Leonis Minoris* in B. A. C.
1842. α *Antliæ* in B. A. C. U. A. *c.*
1847. *Draco* in B. A. C. Care required in identification with photometer. In Series *E 178,* double; each component F. In Series *E 672,* preceding and brighter of two.
1848. *Antlia* in B. A. C. U. A. *r.*
1849. δ *Antliæ* in B. A. C. U. A. *dpl.* 10, 6.
1853. Σ 1441.
1856. i *Leonis* in B. F. and B. A. C.; but identification uncertain, according to Baily's note, B. F. page 575.
1858. *Antlia* in Behrmann.

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1864. ≷ 1450.
1867. U. A. p. 299.
1868. *Antlia* in Behrmann.
1869. Variability discovered by Gould. Max. 4½. Min. 6. Bm. 242. U. A. *rr*, var.; p. 299. IV. with cylindrical, III. with spherical eyepiece; S.
1870. U. A. *r*.
1875. *Crater* in B. F. B. A. C.; ϕ^1 = B. A. C. 3611; ϕ^2 = B. A. C. 3632; ϕ^3 = H. P. 1875.
1878. Standard 44.
1879. H "33, 24."
1880. Schönfeld 53. Variability discovered by Pogson in 1853. Max. 6.0 - 8.1. Min. 12. Period 303ᵈ.4. Bm. 244. III! D. Magnitudes in Series *P* 646, 647, 648; 7.0, 6.7, 7.1. In Series *E 672*, magnitude 6.5.
1884. *Leo* in B. A. C.
1885. ≷ 1466. H "35 — 34."
1888. H "46. 51" adopted for "46. 50."
1891. *Crater* in B. F. B. A. C.; b^1 = H. P. 1891; b^2 = B. A. C. 3722; b^3 = H. P. 1905.
1893. *Crater* in B. F. U. A. *r*.
1897. H "41 —, 39 41 — 40."
1899, 1900. Combined, 5.8. In Series *E 667*, the observed magnitude 6.3 relates only to H. P. 1899. Not marked D in *h*; but probably the observation relates to the two stars combined.
1904. B. A. C; p^1 = H. P. 1924; p^2 = H. P. 1929; p^3 = H. P. 1934; p^4 = B. A. C. 3816; p^5 = H. P. 1948. U. A. *dpl.*
1905. *Crater* in B. F. See H. P. 1891.
1906. The object in this vicinity identified in U. N., from Harding's Atlas, with this star, apparently should be H. P. 1907. See V. J. S., VIII. 62. Near boundary of *Ursa Major*, according to Heis. See places of H. P. 1902 and H. P. 1907.
1907. *Leo Minor* in B. A. C. See H. P. 1906.
1908. Σ 1467.
1911. Care required in identification with photometer.
1912. In Series *E 178*, another star of equal brightness near. In Series E *667*, the south following star observed.
1916. Marked D in *h*. In Series *E* 658, northern and brighter of two.
1917. Bm. 249. U. A. *r*. III., faint, S.
1918. U. A. *r*.
1923. Standard 131. Series *E* 672 "2 9 6" rejected. Probably H. P. 94 was observed by mistake for Standard 2.
1924. See H. P. 1904. U. A. *r*. III. A.
1925. Bm. 251.
1926. Color supposed to be variable. Bm. 252. Standard 45. Residual in *P* 454, *14*. H "50; 77" adopted for "70; 77."
1927. *Crater* in B. F.
1928. U. A. *r*.
1929. See H. P. 1904.
1932. *Crater* in B. F. B. A. C.; χ^1 = H. P. 1932; χ^2 = H. P. 1933. U. A. *dpl.*; p. 299. Residual in S, *10*.
1933. See H. P. 1932.
1934. See H. P. 1904.
1938. 67 *Leonis* = 53 *Leonis Minoris*.
1940. III. A.
1941. Bm. 254.
1942. *Crater* in B. F. U. A. *dpl.* 10, 6.
1943. Residual in B. *11*.
1945. *Draco* in B. A. C.
1946. *Hydra* in Ptolemy; see Baily's note in B. A. C., p. 56.
1948. See H. P. 1904.
1952. Bm. 256. III! A.
1953. Σ 1520.
1954. Residual in *P* 117, *12*.
1958. Bm. 258. U. A. *r*. III. A.
1959, 1960. Combined, 3.8; diff. from Vol. XI. ≷ 1523. Binary; period 61 years, according to Hind.
1961. Σ 1524. Bm. 259.
1962. Residual in *P* 117, *10*.
1966. Standard 46.
1969. Σ 1536.
1973. U. A. *dpl.* 4½, 6½.
1976. Bm. 260. U. A. *r*. H "80 — 83, 82."
1978. Σ 19ᴵ.
1980. Σ 1543.
1981. In Series *E 667*, nebulous in the opera-glass.
1982. *Draco* in B. A. C.
1984. U. A. *dpl.* 6, 8¼.
1987. Bm. 261.
1988. Bm. 262. III. D. Standard 47.
1989. In Series *P* 136, identification doubtful.
1990. Σ 1547.
1991. *Crater* in B. F. U. A. *dpl.* 6, 6.
1992. U. A. *r*. Spectrum banded, C.
1993. *Crater* in B. F. U. A. *r*. Spectrum banded, C.
1994. *Crater* in B. F. No letter in B. A. C.
1996. H "89 — 80."
1998. Σ 1552. Bm. 263.
2000. In Series *E* 655, observation uncertain, owing to haze.
2001. *Ursa Major* in B. A. C. Σ 1555.
2002. U. A. p. 314.
2003. U. A. *r*.
2008. U. A. *r*. III! A. P.
2009. U. A. *dpl.*
2014. *Crater* in B. F. U. A. *r*.
2015. Standard 48.
2016. Residual in P, *11*.
2018. Bm. 266.
2019. III! A.
2020. ≷ 7ᴴ.
2025. Bm. 267. Standard 133. Residuals in P, *10*; in S, *16*.
2033. U. A. *r*.
2034. Groombridge 1830. This star has a proper motion of +0ˢ.35 in right ascension and —5″.8 in declination.
2035. *Crater* in B. F. No letter in B. A. C. Residual in S, *10*.
2036. Standard 134.
2039, 2040. Combined, 5.8; diff. from page 91. ≷ 20ᴵ. In Series *P* 453, elongated.
2042. *Crater* in B. F. H "17. 29."
2045. In Series *E 143*, another star of equal brightness near.
2054. Marked D in *h*.
2055. ≷ 1595.
2058. Standard 49.
2060. Residual in P, *10*.
2061. U. A. p. 318.
2063. Bm. 272.
2064. H "1, 3."
2067. *Ursa Minor* in B. A. C. ≷ Unnum. III., faint, A.

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2072. *Canes Venatici* in B. A. C.
2074. Marked D in *h*.
2075. Too scattered for observation with photometer. Magnitudes in Series *E 144, 687, 685;* 6.5, 6.4, 6.5.
2078. Standard 135.
2080. Σ 1622.
2085. Σ 1627.
2087. III. A.
2090. Residual in *P* 655, *11.*
2091. U. A. *dpl.*
2092. Standard 157.
2097. In Series *E 658*, south following and brighter of two.
2098. Σ Unnum.
2099, 2100. Combined, 5.6. Not marked D in *h*.
2107. Standard 50. Care required in identification with photometer.
2110. γ *Comæ* in B. A. C. Bm. 279.
2112. The recorded companions make it probable that the stars observed in the three photometric series were identical, but the object may have been DM. +42° 2302, which precedes DM. +42° 2307 $3^m.0$, 1′ south, DM. magnitude 6.9. Residuals in Series *E 144, 12;* in Series *E* 672, *14;* in Series *E 687, 10;* in U, *16;* in *H, 16;* in D, *11;* in E, *12;* in p, *10.* See Part II. Chapter XI.
2114. III. D. H "71, 73 —, 72 71, 73 — 72 73 — 68."
2115. Residual in *h, 17.*
2116, 2117. Combined, 5.2; diff. from Vol. XI. Σ 21^I.
2120. Σ Unnum. The magnitudes 3.0, 9.0, occur only in the foot-notes of the Dun Echt Catalogue, which were not used in obtaining the residuals in column Σ. Hydrogen lines in spectrum unusually wide; S.
2124. Bm. Add. I. 44. III. D. Standard 51.
2127. Residual in B, *14.*
2132. In Series *E* 658, double; combined light observed.
2133. β *Canum Venaticorum* in B. A. C. Series *E* 679 rejected; see page 81; comparison unsatisfactory.
2134. U. A. *r.*
2135. In Series *E* 143, "147 2 134" adopted for "134 2 147." This change of record confirmed in Series *E* 185.
2138. Too scattered for observation with photometer. Magnitudes in Series *E 144,* 687, *685;* 6.5, F, 6.4.
2139, 2140. Combined, 5.8.
2143. H "25, 8."
2146. III. A. III! P.
2147. Schönfeld 63. Variability discovered by Harding in 1809. Max. 6.5 – 7.5. Min. 10.0 – 10.9. Period $145^d.7$. Bm. 284. U. A. *r*, var. 6½ — 10½; p. 318. III., faint, D. Not identified in Series *P* 150; magnitude 5.9. In Series *E 452*, magn. 5.8.
2151. Identified by two companions in Series *P* 462 and *P* 466; magnitudes 8.2 and 7.5. Magnitude in Behrmann, 6; star identified by him with Lacaille 5230; but Lacaille 5229, which precedes $0^m.4$, 53′ south, may have been the object observed. Its magnitude in U. A. is 6.4. See Part II. Chapter XI.
2154. ⧖ 1669. U. A. *dpl.*
2155, 2156. Combined, 2.8; diff. from Vol. XI. ⧖ 1670. Binary, period 185 years, according to Thiele; 175 years, according to Flammarion.
2159. H "76 — 74" adopted for "76. 76 — 74," since 76 *Ursæ Majoris* is not double.
2160. Residuals in *P* 656, *13;* in *H, 20;* in *h, 21.*
2161. U. A. *r.*
2164. Bm. 290. IV!! S.
2166. H "33, 27."
2172. Residual in U, *10.*
2174. 29 *Comæ* = 36 *Virginis. Virgo* in B. F.
2176. H "11. 11." This may be a comparison with DM. +49° 2165, magn. 6.5.
2182, 2183. Inserted, too late for observation, from ⧖ 23^I, the magnitudes of the components being 5.3 and 6.1 according to Struve. The authorities here compared indicate 5.5 as the combined magnitude; diff. from page 91. Bm. 294. H "38, 32. 33." See Part II. Chapter XI.
2184. ⧖ 1687.
2186. U. A. *r.* III! A. H "40 — — 39."
2187. III. A.
2188, 2189. *Ursa Minor* in B. A. C. Combined, 5.0; diff. from Vol. XI. ⧖ 1694.
2191. Standard 136.
2193. Bm. 297. III. S. III! P.
2195, 2196. H. P. 2195 = α *Canum Venaticorum* in B. A. C. Combined, 3.0; diff. from Vol. XI. ⧖ 1692. Series *E* 689 rejected; see page 81.
2197. Standard 52.
2198. ⧖ 1695.
2201. Bm. 300. III. A.
2202. ⧖ 1704.
2203. Residual in P, *11.*
2204. 37 *Comæ Berenices* = 13 *Canum Venaticorum.*
2206. Bm. Add. I. 46.
2209. Standard 53.
2212. Residuals in *H, 13;* in D, *13.*
2216. III! A. In Series *E* 659, northern and brighter of two.
2219. See H. P. 2221. H "49 —, 50" adopted for "49 —, 50 — — 56."
2221. B. A. C.; g = H. P. 2219.
2224. ⧖ 1724.
2226, 2227. α *Comæ* in B. A. C. Combined, 4.4; diff. from ⧖ 1728. Binary; period 26 years, according to O. Struve.
2228, 2229. Combined, 5.4. Not separated in Series *E* 144, 672, 689. These stars combined by Houzeau with 16 *Canum Venaticorum.*
2232. β *Comæ* in B. A. C. In Series *E* 659, "79 6 74" adopted for "74 6 79."
2234, 2235. Combined, 6.1; diff. from page 91. Not marked D in *h*.
2239. Inserted, too late for observation, from ⧖ 25^I, the magnitudes of the components being 5.9 and 6.3 according to Struve. The authorities here compared indicate 6.2 as the combined magnitude. See Part II. Chapter XI.
2246. Bm. 302. III. V. III! P.
2249. Bm. 303. U. A. *r.*
2250. Standard 54. At lower culmination, residual in *E* 119, *37;* probably wrong star observed.
2251, 2252. Combined, 5.8; diff. from page 91.
2254. Residual in Series *E* 659, *10.*
2258. U. A. *r.*
2259. In Series *E 675*, following and brighter of two.
2262. Bm. 304. III. A.
2263. Standard 137. In Series *E* 672, observation uncertain.

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2264, 2265. Combined 2.4; diff. from Vol. XI. Separated with photometer, although only 14″ apart. Standard 138.
2267. In Series *E 163*, altitude low.
2268. Bm. 306. IV. S. III. D.
2273, 2274. Combined, 6.0; diff. from page 91.
2275. Schönfeld 68. Variability discovered by Maraldi in 1704. Max. 4.0 – 5.5. Min. 10? Period 469^d.3. Bm. 308. U. A. *r*, var.; p. 300. III! S. Not identified in Series *P* 151; magnitude 8.2.
2278. In Series *E 677*, northern and brighter of two.
2279. III. A. Standard 55.
2280. See H. P. 2283. U. A. *r*. The place given by Wolff on page 105 identifies the star called by him "Anon. Virginis" on page 104 with H. P. 2280.
2282. H "73, 54."
2283. B. A. C.; l^1 = H. P. 2280; l^2 = H. P. 2283. Bm. 309. U. A. *r*. III. V. A.
2285. *Hydra* in B. A. C.
2286. *Ursa Minor* in B. A. C.
2289. Schönfeld 69. Variability discovered by Hind in 1852. Max. 5.7 – 7.8. Min. 12.5. Period 374^d.0. Bm. 310. U. A. *rr*, var.; p. 319. Not identified in Series *P* 462.
2292. B. A. C.; o = H. P. 2317. U. A. magn. 5.2, p. 29; 5.3, p. 216.
2294. U. A. p. 320.
2301. U. A. *dpl.*
2302. Bm. 311. III. A.
2303. *Hydra* in B. A. C.
2304. ⧖ 1768. Binary; period 124 years according to Doberck. Residual in H, *11*.
2305. Residual in D, *10*.
2306. *Virgo* in B. A. C.
2309. H "86. 82" adopted for "86. 8."
2310. ⧖ 1772.
2312. III! A.
2315. Bm. 312. III. A.
2316. This cluster is Messier 3, G. C. 3636. In Series *P* 464 and *P* 469, too large for measurement with photometer. Magnitude in Series *E 106*, 6.2; in Series *E 458*, 5.7; in Series *E* 662, 6.1; nebula.
2317. See H. P. 2292. ⧖ 1779. Flammarion, on page 747, repeats this star, with the magnitudes 5.5 and 5.8.
2326. Residuals in P, *10*; in S, *10*; in *h*, *11*.
2334. In Series *E 662*, double; combined light observed.
2335. See H. P. 2361. H "81. 88."
2338. Standard 139.
2343. Bm. 314. III., peculiar, A.
2345. *Ursa Minor* in B. A. C.
2346, 2347. Combined, 5.4. In Series *E 662*, combined light observed. These two stars are indicated as the objects visible in this vicinity by the places given in U. N. and in Heis; but these objects are probably H. P. 2346 and H. P. 2347, seen as one, and H. P. 2352. See V. J. S., VIII. 284. See H. P. 2352.
2348. Standard 56.
2349. U. A. *dpl.* H "4, 3."
2352. See H. P. 2346, 2347. The object seen by Houzeau in this vicinity is here assumed to be H. P. 2352, but is designated by him as 213* and 214* *Ursæ Majoris*. Perhaps Bode's 213 and 214 *Canum Venaticorum* are intended. The first of these is apparently identical with H. P. 2346 and 2347.
2354. *Hydra* in B. A. C.
2355. *Bootes* in B. A. C.
2356. 10 *Draconis* = 87 *Ursæ Majoris*. Bm. 315. III. D. Standard 57. At lower culmination, residuals in *P* 22, 21; in *P* 30, *12*.
2361. B. A. C.; n = H. P. 2335. Residuals in U, *12*; in *H*, *12*.
2378. Bm. 318. Residual in *P* 662, *11*.
2379. H "1. 5 — 2."
2380. U. A. *r*.
2382. III! A.
2383. Bm. 320. III! D.
2384. Bm. 321. U. A. *r*. III! A.
2387. U. A. *dpl.*
2390. Bm. 322. The observation in Series *P* 160 is discordant, but, owing to accident, two additional observations, which would regularly have been made, were omitted.
2391. Marked D in *h*.
2395. ⧖ 1821.
2396. Bm. 324.
2399. III. A. Standard 58. At lower culmination, residuals in *P* 22, 30; in *P* 24, 25.
2400. Bm. 326. Standard 140.
2402. Marked D in *h*.
2404. ⧖ 3124. Marked D in *h*.
2405, 2406. Combined, 5.9; diff. from page 91. H. P. 2406 = ⧖ 1831. It is too near H. P. 2405 for satisfactory measurement with photometer.
2407. Marked D in *h*.
2410. B. A. C.; v^1 = H. P. 2410; v^2 = H. P. 2416.
2412. DM. +0° 3165, magn. 7.0, follows 0^m.8, 12′ south, and may affect estimates. In Series *E 150*, H. P. 2412 only observed.
2415. The star given in the U. N. should probably be H. P. 2421. Residual in U, *10*.
2416. See H. P. 2410. U. A. p. 320. Residual in *h*, *18*.
2418. H "2 — 96 *Virginis* the largest of two."
2420. ⧖ 1835.
2421. See H. P. 2415.
2422. *Libra* in B. A. C.
2423. *Virgo* in B. A. C.
2428. ⧖ 1846.
2429. U. A. *r*.
2431. *Libra* in B. A. C. Perhaps the star actually observed by Heis was H. P. 2422. Residual in *H*, *20*.
2433. Spectrum banded, S.
2437. Bm. 332.
2445. Schönfeld 73. Variability discovered at Bonn in 1858. Max. 5.9 – 7.5. Min. 11.3 – 12.2. Period 223^d.0. III. D. Not identified in Series *P* 152, 156; magnitudes 7.8, 7.7.
2449, 2450. Combined, 4.6; diff. from Vol. XI. ⧖ 1864.
2452, 2453. Combined, 3.8; diff. from ⧖ 1865.
2456. 53 *Hydræ* = 4 *Libræ*. *Libra* in B. F. and B. A. C. Care required in identification with photometer.
2458. In Atlas of U. N., but not in Catalogue.
2459. Variability discovered by Schmidt in 1867. Max. 5.2. Min. 6.1. Period about 370^d. III. S.; III! A.
2460. Standard 59.
2463. Bm. 338. U. A. *dpl.* 5½, 7; p. 303.

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2465. H "104, 108."
2467. Σ 1877. Bm. 339.
2470. III! A. P.
2473. U. A. *r*.
2476. Σ 1884.
2477. 58 *Hydræ* = 6 *Libræ*. *Libra* in B. F. U. A. *dpl.*, p. 303. Bm. 340. Flammarion, on page 747, assigns the magnitude 5.5 to 6 *Libræ*, and, on pages 534 and 752, assigns the magnitude 4.8 to 58 *Hydræ*.
2478. U. A. magn. 7.1, p. 30; 7.0, p. 234. Residuals in U, *12*; in *H*, *12*.
2479, 2480. Combined, 2.9. U. A., combined, 3.1. Seidel and Wolff probably observed H. P. 2480 only.
2486. *Centaurus* in Behrmann.
2487. Σ 1890.
2489. Σ 1888. Binary; period 127 years, according to Doberck.
2491. Residuals in U, *10*; in *H*, *10*.
2492. See H. P. 2496.
2494. Residual in U, *11*.
2495. *Hydra* in Behrmann.
2496. B. A. C.; ξ^1 = H. P. 2492; ξ^2 = H. P. 2496. Care required in identification with photometer.
2497. U. A. *dpl.*
2500. Bm. 341. Standard 60.
2503. Near boundary of *Lupus*.
2506. Schönfeld 74. Variability discovered by Schmidt in 1859. Max. 4.9. Min. 6.1. Period $3^d\ 10^h\ 51^m$. The character of the variation resembles that of H. P. 496, which see. For observations of H, see Proc. Amer. Acad. XIX., 269. U. A. var.; p. 308. Residual in Series *P* 500, 7; not included in mean, as the star was near its minimum.
2507. In *Lupus* by boundary of Heis, but near *Hydra*. *Hydra* in B. A. C.
2510. *Draco* in B. A. C. Bm. 342. Standard 61.
2514. Appended to *Libra* by Ptolemy. *Libra* in B. F. and B. A. C. Bm. 343. U. A. *r*. Spectrum banded, C.
2516. *Ursa Minor* in B. A. C.
2521. Σ 1909. Binary; period 261 years, according to Doberck.
2522. B. A. C.; ν^1 = H. P. 2522; ν^2 = B. A. C. 4971. Bm. 344. U. A. *r*. H "21 —, 22 21 — 26." Residual in P, *10*.
2523. Residual in *P* 166, *12*.
2524. U. A. magn. 6.5, p. 30; 6.6, p. 217.
2528. *Draco* in B. A. C.
2531. B. A. C.; ι^1 = H. P. 2531; ι^2 = B. A. C. 5003.
2532. III!! A. P. In Series *E* *148*, preceding and brighter. In Series *E* *664*, north preceding and brighter.
2539. Standard 142.
2540. B. A. C.; δ = B. A. C. 5046. Bm. 346.
2541. Σ 27^1.
2543. Inserted, too late for observation, from Σ 1932, the magnitudes of the components being 5.6 and 6.1 according to Struve. Magnitude in D, 6.5. See Part II. Chapter XI.
2544. Σ 1930. U. A. *r*.
2546. Residual in D, *12*.
2547. B. A. C. o^1 = H. P. 2547; o^2 = B. A. C. 5063. Residuals in P, *16*; in S, *18*.
2548. U. A. *r*.
2549. Marked D in *h*.
2552. *Bootes* in B. A. C.
2553. Schönfeld 78. Variability discovered by Hencke in 1860. Max. 6.1 – 7.8. Min. 11.9 – 12.5. Period $361^d.0$. Bm. 350. III. D. Magnitudes in Series *P* 159, 166; 8.0, 4.6. Not identified in Series *P* 166.
2555. Bm. 351. Residual in H, *11*.
2559, 2560. Combined, 5.0; diff. from Σ 1937. Binary; period 40 years, according to Flammarion.
2561. Σ 1938. Binary; period 280 years, according to Doberck.
2563. III. D.
2564. Care required in identification with photometer.
2566. Standard 62. Series *E* 501 rejected; see page 80. At lower culmination, residual in *P* 332, *11*. Residual in P, *11*.
2567. See H. P. 2577.
2569. Bm. 352. Standard 63. Residual in *P* 668, *12*.
2573. See H. P. 2577.
2577. B. A. C.; ζ^1 = H. P. 2567; ζ^2 = B. A. C. 5096; ζ^3 = H. P. 2573; ζ^4 = H. P. 2577.
2578, 2579. Combined, 5.6. In Series *E* *461* probably, and in Series *E* 669 certainly, the star observed was H. P. 2579.
2580. Marked D in *h*.
2581. In Series *E* *667*, preceding and brighter of two.
2582. B. A. C.; A^1 = B. A. C. 5148; A^2 = H. P. 2631. U. A. *r*.
2583, 2584. According to Ptolemy, this star is common to *Bootes* and *Hercules*. *ν Bootis* = *ψ Herculis*. B. A. C.; ν^1 = H. P. 2583; ν^2 = H. P. 2584. Combined, 4.3. H. P. 2583, III. S. In Series *E* 669, noted as double.
2585. *Libra* in B. F. and B. A. C. U. A. *r*.
2589. Bm. 343.
2590, 2591. Combined, 4.0; diff. from Vol. XI. Σ 1954. III. S. Residual of H. P. 2590 in Σ *10*.
2593. Standard 64.
2594. Bm. 354. Standard 143. Residual in P, *12*.
2595. *Libra* in B. F. and B. A. C. Bm. 355. U. A. *r*.
2599. Bm. 356. III. S, D. III! P. Residuals in *E* 461, *12*; in P, *11*; in *H*, *11*.
2600. Residual in H, *15*.
2601. *Libra* in B. F. and B. A. C. In notes to B. F., Baily regards Bayer's *o Scorpii* as equivalent to this star and H. P. 2595 jointly.
2603. H "47, 41."
2605. B. A. C.; ψ^1 = H. P. 2605; ψ^2 = B. A. C. 5173. *ψ Lupi* originally in Heis, corrected by Schönfeld (V. J. S., VIII. 70) to *γ Lupi*. B. A. C.; γ = B. A. C. 5118. Marked D in *h*. U. A. *rr*.
2606. Σ 1962. U. A. *dpl.* $6\frac{3}{4}$, 7.
2607. In Series *P* 499, observed a second time by mistake for H. P. 2630. The mean of the two results has been employed.
2609. In Series *E* *154*, perhaps F. Residuals in U, *14*; in *H*, *11*.
2610. Near *Scorpius*, but probably in *Libra* by boundary of Heis. The star probably occurs on his Map XI. But in his Catalogue he gives Ll. 28414, which would be farther north preceding. *Libra* in B. A. C. *Scorpius* in Behrmann. U. A. *r*.
2613. *Bootes* in B. A. C.

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2614, 2615. Combined, 4.8; diff. from Vol. XI. Σ 1965. Bm. Add. II. 12. In Series *E* 669, "76 3 69" adopted for "76 3 79."
2616. Bm. 357.
2617. *Bootes* in B. A. C.
2618. U. A. *r*.
2624. In U. N., p. 1, for 234° 33′, +69° 20′, the reading 234° 20′, +69° 48′, has been adopted.
2625. Σ 1967. Binary; period 96 years, according to Doberck.
2627. III. S.
2631. See H. P. 2582.
2632. Σ 1970.
2636. Bm. 358. III. A. III! P.
2637. B. A. C.; χ = H. P. 2637; λ = B. A. C. 4073. U. A. p. 278. In Behrmann, magn. 5.5; but in his synopsis, p. 81, it is considered as magn. 5.
2639. Schönfeld 79. Variability discovered by Pigott in 1795. Max. 5.8. Min. 13.0. Period irregular. Bm. 359. Magnitudes in Series *P* 179, 483, 498, 499; 7.0, 6.0, 5.7, 5.5. Not identified in Series *P* 179, 499. Magnitudes in Series *E 152*, 463, 669; 6.2, 5.5, 6.2.
2641. U. A. *r*.
2642. In Series *E 107*, the neighboring star DM. +55° 1777 was estimated to be equal to this. In Series *E 171*, the estimate of DM. + 55° 1777 was 5.9, and that of the two stars combined, without using the opera-glass, was 4.8. In Series *E* 602, the combination was perhaps observed. Residual in *H, 10*.
2643. Bm. Add. II. 13.
2647. Schönfeld 80. Variability discovered by Harding in 1826. Max. 5.6 - 7.6. Min. < 11. Period 357ᵈ.6. Bm. 360. III. V.; IV. D. Not identified in Series *P* 179, 481.
2648. Residuals in Series *E* 682, *10*; in D, *12*.
2649. Bm. 363.
2651. U. A. *dpl.* 5½, 7½.
2655. Bm. 365. U. A. *r*.
2659. B. A. C.; ξ = H. P. 2659; μ = B. A. C. 5028. ξ *Lupi* originally in Heis, corrected by Schönfeld (V. J. S., VIII. 70) to μ *Lupi*. U. A. *dpl.* 5.6, 6.2.
2663. DM. magn. 7.9 reduced to 7.7 for difference in scales. Residual in *E* 464, *14*.
2665. III. A.
2673. Bm. Add. II. 14. III., faint, S.
2677. Residual in H, *18*.
2678. Schönfeld 82. Appeared as a temporary star on May 12, 1866; first noticed by Birmingham. Max. 2.0; diminishing to 9.0 during the month following the discovery. When bright, the spectrum of the star consisted principally of the bright lines of hydrogen. Magnitude in D, 9.5. Not identified in Series *P* 159.
2681. *Hercules* in B. F.
2682. *Bootes* in B. A. C.
2684. Residual in *P* 495, *10*.
2688, 2689. *Libra* in B. F. and B. A. C. Combined, 4.1; diff. from Σ. Binary; period 95 years, according to Doberck. There are five stars in this neighborhood, which form Σ 1998 and Σ 1999. Except the two principal components of Σ 1998, these stars are fainter than the sixth magnitude, and hence omitted in this catalogue. In U. A., the magnitude 4.6 relates to the combination of all the five stars; the combination of the two principal stars has the magnitude 4¾, and the remaining magnitudes are 7¾, 7¾, and 8.
2690, 2691. Combined, 2.9; diff. from Vol. XI. Standard 144. In U. A., combined, 2.5. Σ Unnum.; the magnitudes 2.0, 4.0, occur only in the foot-notes of the Dun Echt Catalogue, which were not used in obtaining the residuals in column Σ.
2695. Residual in *h, 11*. The star was combined by Houzeau with H. P. 2697; resulting residual *4*.
2696. Standard 65. At lower culmination, residual in *P* 353, 20.
2697. See H. P. 2695.
2698. Bayer mentions only one ω. See H. P. 2700.
2699. U. A. p. 284.
2700. U. A. *r*. See H. P. 2698.
2701. U. A. *r*. III? C.
2703. H "40. 45."
2704. Bm. 369.
2705. U. A. *dpl.*; *r*. III. A. III! P. In Series *E 667*, double or nebulous. H "46 — 47."
2706, 2707. Combined, 4.8; diff. from Vol. XI. Σ 2010.
2709. U. A. *r*.
2711. B. A. C.; c^1 = H. P. 2712; c^2 = H. P. 2711.
2712. U. A. *r*. See H. P. 2711.
2713. H "11. 35" adopted for "11. 35 — 6."
2716. Standard 66.
2718. *Serpens* in B. F. B. A. C.; q = B. A. C. 5376. H "8 *Herculis*; 48 —, 49."
2719. H "10 — 17 10 — 19."
2720. B. A. C. 5415, the place of which depends upon U. N., is here assumed to be identical with DM. +58° 1622, although following 0ᵐ.5, south 8′.
2721. U. A. *r*.
2725. Residual in D, *10*.
2726. Bm. 373. U. A. *r*. III. S.
2727. Residuals in Series *E 152, 17*; in *H, 20*.
2730. Σ 2032. Binary; period 846 years, according to Doberck.
2732. See H. P. 2711.
2734. U. A. *dpl.* 7¼, 6.
2736. U. A. *c*. Bm. 375.
2737. U. A. *r*; p. 284.
2738. U. A. *r*.
2741. III! A.
2749. U. A. *dpl.* 6¾, 6¼.
2751, 2752. B. A. C.; ν^1 = H. P. 2751; ν^2 = H. P. 2752. Combined, 4.3. Σ 29ᴵ. Bm. 376, 377. Each III. A. In Series *E* 672, double in opera-glass.
2755, 2756. ρ *Ophiuchi* in B. A. C. Combined, 4.8; diff. from page 91. Two more stars near; in U. A., 7½, 7¾; all the four stars combined, 4.8.
2757. 24 *Herculis* = 51 *Serpentis*.
2758. Residual in *h, 10*.
2759. Series *E 157*, rejected; "69 — 69" should perhaps be adopted for "64 — 69."
2761. U. A. *r*. III. A.
2764. U. A. *dpl.*, 7, 1½ *r*. Bm. 381. III., like α *Orionis*, S. See H. P. 1091. Standard 145.
2766. Standard 67. In Series P 198, "clouds suspected."
2768. Residual in *h, 12*.

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2769. U. A. *dpl.*, 7½, 5.5.
2772. Schönfeld 89. Variability discovered by Baxendell in 1857. Max. 5. Min. 6.2. Period irregular. Bm. 382. III! A. For observations of H, see Proc. Amer. Acad., XIX. 269.
2773. Σ 2055. Binary; period 234 years, according to Doberck.
2774. Bm. 383.
2776. No letter in B. A. C.
2778. 28 *Herculis* = 11 *Ophiuchi*.
2781. Standard 68. In Series P 198, "clouds suspected." At lower culmination, residual in *P* 43, *10*.
2782. Σ 2063.
2784. DM. magnitude 5.4. See Part II. Chapter XI.
2786. Care required in identification with photometer.
2787. Series *E* 154 rejected; "64 — 64" should perhaps be adopted for "65 — 64."
2794, 2795, 2796. Combined, 4.6. Σ 2078 = H. P. 2794, 2795. Σ 30[I] = H. P. 2794, 2796. Combined magnitude of H. P. 2794, 2795, 5.2; diff. from Vol. XI.
2798, 2799. B. A. C.; m^1 = H. P. 2798; m^2 = H. P. 2799. Combined, 5.3. Σ 31[I]. In U. A., combined, 5.9. Residual of H. P. 2798 in *P* 189, *12*.
2800. U. A. *r*.
2802. Σ 2082. III. A.
2804. In Series *E 665*, south following of two.
2807. Σ 2084. Binary; period 35 years, according to Flammarion.
2809. Cluster in *Hercules*. Messier 13, G. C. 4230. See H. P. 2892. Nebulous in photometer. Residuals in Series *E* 160, *13*; in Series *E* 464, *16*; in Series *E* 672, *11*; in E, *13*.
2813. Bm. Add. I. 49. Standard 69.
2814. 43 *Herculis* = 17 *Ophiuchi*. Σ Unnum.; the magnitude 5.0 occurs only in the foot-notes of the Dun Echt Catalogue, which were not used in obtaining the residuals in column Σ. Bm. 387.
2815. Σ 2096.
2817. Residual in *h*, *11*.
2818. U. A. *r*. Residual in H, 34.
2823. DM. +55° 1872 is near and brighter. Possibly this star was that observed by Argelander in the U. N., by Heis, and in the estimates. It was used to identify H. P. 2823 in the photometric observations. The place given in the U. N. and in Heis is that of H. P. 2823. Another explanation of the large negative residuals is that the group formed by H. P. 2823 with DM. +55° 1876 and DM. +55° 1879 may have appeared as a single object to the unaided eye. Residuals in Series *E 157*, *12*; in Series *E* 404, *10*; in Series *E 686*, *10*; in U, *10*; in *H*, *10*; in E, *11*. See Part II. Chapter XI.
2828. Heis erroneously identifies S *Herculis* with 49 *Herculis* (H. P. 2829). Schönfeld (V. J. S., VIII. 68) suggests that the star seen by Heis in this region was 49 *Herculis* rather than S *Herculis*. Schönfeld 92. Variability discovered at Bonn in 1856. Max. 5.9 - 6.8. Min. 11.5 - 12.2. Period 303[d]. Bm. 392. III! V.
2829. See H. P. 2828.
2835. H. "24 — 26."
2837. H; 54 and 55 *Herculis*. "One of these two does not exist." The star observed is here assumed to be 54 *Herculis*; see B. F., p. 610.
2838. Bm. 395.
2839. *Nova Ophiuchi*. Schönfeld 93. Appeared as a temporary star on April 27, 1848; first noticed by Hind. Max. 5.5. Min. 12.5. Not identified in Series *P* 180, 199; magnitudes 7.1, 7.7.
2840. Inserted on the authority of Houzeau, who assigns to a star in this place the magnitude 5·6. In Series *P* 185, 487, 507, looked for, but not seen. See Part II. Chapter XI.
2841. U. A. p. 286.
2842. Bm. 399. U. A. *r*.
2843. B. A. C.; h^1 = H. P. 2843; h^2 = B. A. C. 5745. These stars combined by Houzeau.
2849. *Ophiuchus* in B. F. III! A.
2850. Residual in *H*, *11*.
2852, 2853. *Ophiuchus* in B. F. Combined, 5.3. Σ 33[I].
2854. Standard 70.
2856. In Series *E 156*, brighter of two. In Series *E* 673, brighter and following of two.
2859. H "24, 60; 29" adopted for "24, 6; 29"; "60, 54" adopted for "60, 54 or 55"; see H. P. 2837.
2860. Σ 2122.
2864. Care required in identification with photometer.
2865, 2866. Combined, 5.2; diff. from Vol. XI. Σ 2130.
2869. B. A. C.; c = B. A. C. 5763. Residual in P, *22*.
2871. Residual in D, *10*.
2877. A *Ophiuchi* in B. A. C. U. A. *dpl.* 5¾, 5¾; *r*.
2878. Standard 71.
2879. Σ 2140. Schönfeld 95. Variability discovered by W. Herschel in 1795. Max. 3.1. Min. 3.9. Period irregular. Bm. 402. III! S. P. Spectrum typical.
2880. ⧖ 3127. Bm. 403.
2883. U *Ophiuchi*. In Series *P* 502, *P* 688, and *P* 695, near minimum. U. A. var.? p. 306. Variability discovered by Sawyer in 1881. Max. 6.1. Min. 6.8. Period 20[h] 8[m]. The character of the variation resembles that of H. P. 496, which see.
2884. U. A. *dpl.* 6, 7; *c*.
2885. Bm. 404.
2889. Residual in *P* 178, *13*.
2890. O⧖ 328. Schönfeld 96. Variability discovered by Schmidt. Max. 4.6. Min. 5.4. Period 38[d].5. Bm. 405. For observations of H, see Proc. Amer. Acad., XIX. 269.
2891. *Hercules* in B. F.; no letter in B. A. C.
2892. Smaller of two clusters in *Hercules*. Messier 92, G. C. 4294. See H. P. 2809. Nebulous in photometer.
2895. ξ *Ophiuchi* in B. A. C.
2896. In Series *E 160*, faint companion north preceding.
2897. ⧖ Unnum.
2901. ⧖ 2155.
2903. Bm. 408. U. A. *r*. Bands, S.
2906. Bm. 410. III. A.
2908. Series *E* 148 rejected; see page 82.
2909. b *Ophiuchi* in B. A. C. U. A. *r*; p. 306.
2912. ⧖ 2160.
2914, 2915. Combined, 4.1; diff. from Vol. XI. ⧖ 2161. Care required in identification with photometer.
2918. U. A. p. 306.
2919. *Ophiuchus* in B. F.
2920. Series *E* 148 rejected; see page 82.
2921. U. A. magn. 4.7, p. 31; 4.5, p. 200. See also U. A. p. 307.

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2924. Star low; in Series *P* 509, branches of trees visible in field.
2926. Care required in identification with photometer.
2927. B. A. C.; c^1 = B. A. C. 5904; c^2 = H. P. 2927. U. A. var.? p. 307.
2929. Σ 2173. Binary; period 45 years, according to Dunér.
2933. Bm. 411.
2935. In Heis, for Ll. 31951 read Ll. 31952. In Baily's Lalande, and in the Histoire Céleste, it appears to be placed 20′ too far north. W. XVII. 470 agrees with U. A., *Ophiuchus*, 153.
2937. Bm. 412.
2938. In the U. N., Argelander identifies the star he saw with the brightest star observed by Lalande in that region, Ll. 31992. Heis identifies the visible star with Ll. 32012, which occurs in the DM., while Ll. 31992 does not. If not the result of error in Lalande, it may be variable. Magnitudes in Series *P* 185, 208; 8 2, 5.7; but identification insufficient. In later series, region carefully identified. Magnitudes in Series *P* 509, 693, 695; 8.3, 7.5, 6.7. See Part II. Chapter XI.
2939. See H. P. 2938. Residual in *E* 160, *10;* in D, *14.*
2940. In Series *E* 675, preceding and brighter of two.
2942. Σ 34[I]. Series *E* 148 rejected; see page 82.
2944. Standard 146.
2945, 2946. B. A. C.; ν^1 = H. P. 2945; ν^2 = H. P. 2946. Combined, 4.1. Σ 35[I]. Measurements with photometer difficult on account of proximity of components.
2947. U. A. *dpl.*
2948. Σ 2190.
2953. In the photometer, observed together with a close companion, probably DM. +2° 3372, which must be brighter than 8.5, the magnitude given in the DM., or it could not have been noticed.
2955. Standard 72.
2957. Marked D in *h.* Bm. 416. Bands, A. In Series *E 160, E 690,* and *E* 675, an adjacent star of equal brightness was noticed, presumably DM. +31° 3076. In Series *E 690* and *E* 675 the combined light was observed as 6.2 and 5.9; the corresponding magnitudes for H. P. 2957 were assumed to be 6.9 and 6.6.
2960. H "58 — 52."
2962. Bm. 417. U. A. p. 307.
2963. Σ 2194. Combined by Houzeau with H. P. 2966; resulting residual 6.
2964. Standard 73.
2966. See H. P. 2963. In Series *E 160,* a faint companion north preceding, probably H. P. 2963.
2967, 2968. Combined, 5.8; diff. from page 91. Σ 2202. Residual of H. P. 2968 in Σ, *10.*
2970. In Series *E* 160, a neighboring star noticed of equal brightness; in Series *E 686,* a third star south following and fainter.
2971. Near boundary of *Ursa Minor.*
2972. Schönfeld 98. Variability discovered by Schmidt in 1866. Max. 4. Min. 6. Period 7[d].0. U. A. var.; p. 287. For observations of H, see Proc. Amer. Acad., XIX. 269.
2973. In Series *P* 190 and 193 "too scattered." In Series *E 146,* magnitude 6.3; object diffuse. In Series *E* 467 and 672, magnitudes 5.5 and 5.9.
2976. Σ 2220.
2977. Σ 2215.
2979. Magnitude in U. A., 3.8, p. 31; 3.9, p. 200.
2982. In Series *E* 675, northern and brighter of two.
2983. Marked D in *h.*
2984. Series *E 675* rejected; see page 82.
2985, 2986. B. A. C.; ψ^1 = H. P. 2985; ψ^2 = H. P. 3034. Combined, 4.5; diff. from Vol. XI. Σ 2241. Standard 74.
2990. U. A. *r.* DM. +1° 3525 and 3526, magnitudes 7.5, 6.8, are near, and appeared as a companion of equal brightness in Series *E 146* and 672. In Series *E* 672, combined, 6.1. The combination was probably observed in Series *E* 467.
2991. Residuals in P, *10;* in S, *11.*
2994. *Serpens* in B. A. C.
2996. *Serpens* in B. A. C.
2997. In Series *E* 675, seen in the opera-glass as the following and brightest of three.
3003. Bm. 421.
3009. Bm. 423.
3011, 3012. Combined, 5.3. Care required in identification with photometer. The U. A. has a group of five stars in this region, and assigns the magnitude 6.0 to them jointly, the separate magnitudes being 6.3, 7.4, 7.1, 7.0, 6.8. The second of these is *dpl.* 8½, 7½. Heis saw an object with the magnitude 5.6, which he identified with P. XVII. 330 and 334, but apparently this was an error. Possibly he saw 7 *Sagittarii,* H. P. 3022. Behrmann also has an object of the magnitude 5.6, identified by him with two stars near these.
3015. H. "65 *Ophiuchi* — 6."
3017. Σ Unnum.
3024. Combined by Houzeau with H. P. 3032; resulting residual 2.
3025. U. A. p. 307.
3026, 3027. Combined, 4.6; diff. from Vol. XI. Σ 2264.
3028, 3029. Combined, 4.9; diff. from Σ 2262. Binary; period 218 years, according to Doberck.
3030. U. A. *cum.;* p. 287. Residual in U, *11.*
3031. In Series *E 202,* following of two.
3032. See H. P. 3024.
3034. See H. P. 2985, 2986. Series *E* 401 rejected; see page 82.
3035. B. A. C.; γ^1 = H. P. 3035; γ^2 = H. P. 3036. Schönfeld 99. Variability discovered by Schmidt in 1866. Max. 5. Min. 6.5. Period 7[d].6. U. A. var. 5 — 6½; p. 287.
3036. See H. P. 3035. Bm. 425. U. A. *r.*
3037. Σ 2272. Binary; period 93 years, according to Flammarion.
3039. U. A. *r.*
3040. U. A. p. 287.
3041. Σ 2277. A revision of the identification, by means of the recorded companions, makes it probable that DM. +48° 2621, preceding 2[m].1 in the same declination, magnitude 6.8, was the object observed with the photometer. The resulting magnitude was 6.97, and the residuals 033. The various authorities here compared indicate 6.2 as the magnitude of the star which was to be observed. This value is entered in the column "Ph. Mag.," and has been used in obtaining the residuals. See Part II. Chapter XI.

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3042. III. A.
3046. U. A. *dpl.* 7¾, 6¼ *r*; p. 287.
3048. Series *E* 160 rejected; see page 82. The star observed was probably H. P. 3053, the corresponding observation of which seems to belong to this star.
3049, 3050. Combined, 5.2; diff. from page 91. ⧖ 2280.
3052. ⧖ 2281.
3053. Series *E* 160 rejected; see page 82. See H. P. 3048.
3056. U. A. p. 38.
3058. 1 *Sagittarii*, according to Baily's note in B. F., p. 618. U. A. *r*. H "33 *Scorpii*, 1," entered as an observation of 1 *Sagittarii*, can hardly refer to this star, since the place given by Flamsteed was in error by 10°.
3059. U. A. pp. 38, 307.
3060. ⧖ 2289.
3062. Bm. 429.
3063. U. A. *r*.
3064. Marked D in *h*.
3065. Bm. 430. III. A.
3067. Residual in D, *10*.
3069. U. A. *r*; p. 288.
3071, 3072. Combined 5.2; diff. from page 91. ⧖ 2308. Separated with the photometer, but observed as one.
3074. Bm. 432. U. A. *r*. III. C.
3076. U. A. *r*.
3077. Standard 155.
3078. This cluster is Messier 24, G. C. 4397. U. A. 7.0; *dpl.* 7¼, 8; connected by a brace with two other stars, magnitudes 6.9 and 7.1.
3081. Standard 75.
3083. U. A. *r*.
3084. Bm. 434. U. A. *r*.
3086. U. A. *c*. Spectrum banded, C.
3089. In Series *E* 611, "92 7 94" adopted for "94 7 92."
3090. ⧖ 8ᴴ.
3092. Residual in H, *22*.
3094. In Series *E 507*, elongated.
3100. In Series *E 617*, "northernmost of a triangle of stars."
3102. U. A. p. 322.
3105. Bm. 439. U. A. *rr*.
3106. III. D.
3107. Bm. 440.
3111. Bm. 441. U. A. *r*.
3112. ⧖ 2316. H "59 —, 61."
3114, 3115. Combined, 5.7.
3117. This cluster is G. C. 4419. In Series E *160*, magnitude 6.5; nebula; observation difficult. In Series *E* 619, magnitude 6.5; nebula; observation uncertain.
3118. The star of Houzeau at 18 $22^m.3$, +6° 2′, assumed to be identical with this. Care required in identification with photometer.
3119. *Sagittarius* in B. A. C.
3120. Standard 76. At lower culmination, residual in Series *P* 60, 21.
3122. Standard 77.
3123. U. A. *r*.
3125. Care required in identification with photometer.
3126. Standard 78.
3128. *Sagittarius* in B. A. C. Bm. 446. II. to III. S. Combined by Houzeau with H. P. 3130; resulting residual 6.
3129. U. A. *r*; p. 290. Care required in identification with photometer. Combined by Houzeau with No. 1531 of Lacaille's Cœlum Australe Stelliferum.
3130. *Sagittarius* in B. A. C. U. A. *rr*. See H. P. 3128.
3133. *Aquila* in B. A. C.
3134. *Aquila* in B. F. and B. A. C. Bm. 449.
3137. Bm. 452.
3141. Σ 2348.
3142. Care required in identification with photometer.
3143. B. A. C.; e = B. A. C. 6307.
3146. Σ 2349.
3147. Σ 9ᴵᴵ. Standard 147. Parallax 0″.18 according to Hall.
3151. *Aquila* in B. F. and B. A. C.
3154. *Aquila* in B. F. and B. A. C.
3158. In Series *E* 611, "92 4 94" adopted for "94 4 92."
3159. U. A. *r*. H. "28 — 31."
3165. Σ 2379. U. A. *dpl.* 6¼, 8.
3167 to 3170. B. A. C.; ϵ^1 = H. P. 3167–8; ϵ^2 = H. P. 3169–70. Σ 2382 = H. P. 3167–8; Σ 2383 = H. P. 3169–70; Σ 37ᴵ = H. P. 3167–3170. As Heis separated H. P. 3167–8 and 3169–70, he marks the last with an asterisk as not contained in the U. N. Combined magnitude of H. P. 3167, 3168, 4.6; of H. P. 3169, 3170, 4.6; diff. in both cases from Vol. XI.
3172, 3173. B. A. C.; ζ^1 = H. P. 3172; ζ^2 = H. P. 3173. Combined, 4.1. Σ 38ᴵ. In Series *P* 204, combined, 4.1; in Series *P* 214, magnitude 4.6, probably combined; in Series *P* 511, H. P. 3173 too close to H. P. 3172 for satisfactory measurement. The measurement of Wolff is assumed to apply only to H. P. 3172.
3174. *Aquila* in B. F. and B. A. C.
3176. Schönfeld 105. Variability discovered by Pigott in 1795. Max. 4.7 – 5.7. Min. 6.0 – 8.5. Period $71^d.1$. Bm. 462. U. A. 5 — 9, *r*; p. 322. III? C.
3182. Σ 2403.
3191, 3192. B. A. C.; ν^1 = H. P. 3191; ν^2 = H. P. 3192. The measurement of Wolff is assumed to apply only to H. P. 3192.
3193, Σ 39ᴵ. Schönfeld 106. Variability discovered by Goodricke in 1784. Max. 3.4. Min. 4.5. Period $12^d.9$. Secchi found a bright line in the spectrum at F, and suspected another line between F and *b*. See H. P. 142. For observations of H, see Proc. Amer. Acad., XIX. 269.
3196. Bm. 466.
3198. Marked D in *h*.
3199. In H, the comparison "34 *Sagittarii*. 33 *Capricorni*" occurs both under *Sagittarius* and *Capricornus*. But the first of these stars, H. P. 3199, has the magnitude 2.3, and the second, H. P. 3767, 5.6. The residual would therefore be 3.2 magnitudes. 33 *Sagittarii*, H. P. 3195, has the magnitude 6.0, and 34 *Capricorni*, H. P. 3779, 3.8.
3200. Bm. 468. U. A. *r*.
3202. U. A. p. 290.
3206. Σ 2420.
3207. See H. P. 3210.
3208. U. A. *r*.
3210. δ *Lyræ* in U. N. Bayer mentions only one δ. See H. P. 3207. Bm. 470. III. S. Residual in *h*, *10*.
3213. See H. P. 3218.
3215, 3216. Combined, 4.1; diff. from a series of photometric observations, to be described in Part II. Chapter XI.

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Σ 2417. U. A. p. 32, magn. 4.4; p. 219, 4.2 var.?; components 4.5, 4.7.

3218. B. A. C.; ξ^1 = H. P. 3213; ξ^2 = H. P. 3218. Bm. 471.

3219. *Aquila* in B. F. and B. A. C. U. A. *r.*

3220. Bm. 468.

3222. DM. +2° 3756, magn. 7.3, was observed with the photometer instead of DM. +2° 3738, with the result 7.2. The error in identification which occurred in Series *P* 206 was not recognized in the usual examination of the record. The magnitude 5.7 has been assumed for H. P. 3222 from the various catalogues, in the absence of a photometric determination. In Series *E* 146, seen double in opera-glass; combined light estimated by unaided eye. See Part II. Chapter XI.

3224. Schönfeld 107. Variability discovered by Baxendell in 1856. Max. 4.3. Min. 4.6. Period $46^d.0$. Bm. 474. III! V. For observations of H, see Proc. Amer. Acad., XIX. 269.

3229. Σ 2424. Combined by Houzeau with 10 *Aquilæ.*

3238. U. A. *r.*

3240. Bm. 478. U. A. *r.*

3241. Bm. 479. III? S.

3243. U. A. *dpl.* 6½, 9. Marked D in *h.*

3248. U. A. p. 290.

3250. Marked D in *h.* In Series *E 186* and *E 201*, double; components equal. DM. +33° 3285 and 3287, magnitudes 7.0 and 6.8, precede the place of H. P. 3250 about 1^m, 10′ north. These were probably the stars observed in Series *E 186* and *E 201.*

3252. Bm. 481.

3256. U. A. *r.*

3258. Bm. 485. U. A. *r.* Bands, S.

3263. Care required in identification with photometer. A companion about 1^m following, a little south, and 1 magnitude fainter, was seen in Series *P* 220; it was not visible in Series *P* 539, 542, although H. P. 3263 was identified by three other companions.

3266. In Series *E 612*, preceding and brighter of two. In Series *E 691*, preceding of two.

3270. U. A. p. 180, magn. 3.1; p. 342, magn. 3.0.

3271. Σ 2461.

3278. U. A. *r.*

3279. Residual in D, *11.*

3280, 3281. Combined, 6.6; difference from page 91; distance too small for measurement of H. P. 3281 with photometer.

3288. Σ 2486.

3290. In Series *E 612*, south preceding and brighter of two. The north following star may be DM. +36° 3466. The star mentioned by the U. N. in this region has been assumed to be H. P. 3290, although the U. N. position, apparently derived from Bode, is 6ˢ preceding and 5′ south. Residual in U, *11*; in *H*, *11.*

3291. Σ 2487.

3292. Residual in *h*, *12.*

3294. *Vulpecula* in B. A. C.

3296. U. A. *r.*

3298. Σ 2489.

3299. Heis assigns the position of H. P. 3301 to a star in this region.

3301. The U. N. assigns the position of H. P. 3299 to a star in this region.

3304. In Series *E 184* "157 — 157" rejected, and omitted in the catalogue.

3306. Σ 2492. U. A. *r.*

3307. Bm. 491. Standard 79.

3308. H "1 — 2" adopted for "1 — 2, Sagitta."

3309. Σ 40^I. U. A. *dpl.* In Series *E 672*, double; combined light observed. Residual in H, *10*; in Σ, *13.*

3318. The U. N. assigns the place of H. P. 3318, probably derived from Lalande, to a star in this region. But the star seen may have been H. P. 3323, which was not observed by Lalande. Residual in U, *18.*

3319. B. A. C.; ρ^1 = H. P. 3319; ρ^2 = H. P. 3322.

3322. See H. P. 3319.

3323. See H. P. 3318.

3325. U. A. *r.* Residual in D, *10.*

3328. Standard 80.

3331. B. A. C.; χ^1 = H. P. 3331; χ^2 = B. A. C. 6634; χ^3 = H. P. 3332. The first two are combined by Houzeau.

3332. See H. P. 3331.

3334, 3335 Schönfeld (V. J. S., VIII. 67) thinks that the observations of Argelander and Heis may have related exclusively to H. P. 3334. Combined, 5.4.

3336. The U. N. has a star in this region in a position apparently derived from Bode, $0^m.7$ preceding H. P. 3336, and 6′ north. The DM. gives no star in this place.

3337, 3338. Combined, 5.5. Σ 41^I. Perhaps the estimates relate only to H. P. 3337, as two stars are not mentioned in the record.

3339. U. A. *r.*

3346. *Cygnus* in B. A. C. In Series *E 201*, north following of two.

3347. In Series *E* 604, in cluster; observation difficult. Flammarion, on page 207, assigns the magnitude 5.2 to 4 *Vulpeculæ*, and, on page 743, assigns the magnitude 5.0 to a star in the place of H. P. 3347.

3348. *Cygnus* in B. F. Bm. 494.

3351. In Series *E 181*, double; components equal. In Series *E* 601, uncertain. In Series *E* 604, in cluster; observation difficult.

3354. Marked D in *h.*

3355. U. A. *dpl.* 6, 8.

3357, 3358. *α Vulpeculæ* in B. A. C. Combined, 4.4; diff. from page 91. Σ 42^I. Spectrum of H. P. 3357, III! A. H "6 — — 8."

3360. Bm. 500. U. A. *r.* II to III. S.

3361. See H. P. 3365.

3362, 3363. Combined, 3.0; diff. from Vol. XI. Σ 43^I. Bm. 503 = H. P. 3362. Components differ greatly in color; for photometric comparisons of their spectra, see Vol. XI. p. 179.

3365. B. A. C.; ι^1 = H. P. 3361; ι^2 = H. P. 3365.

3367. Care required in identification with photometer. Residual in *P* 541, *11.*

3368. III. S. Series *E* 603 rejected; see page 80.

3369. B. A. C.; k = H. P. 3369.

3370. See H. P. 3373. Care required in identification with photometer. Residual in *H*, *12.*

3373. B. A. C.; h^1 = H. P. 3370; h^2 = H. P. 3373.

3374. U. A. *dpl.* 6.4, 8.

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3376. U. A. *r.*
3379. III! A.
3380. III. S.
3381. III. S. Residual in P, *10.*
3388. Σ Unnum.; the magnitudes 4.7, 7.7, occur only in the foot-notes of the Dun Echt Catalogue, which were not used in obtaining the residuals in column Σ.
3389. Standard 81.
3390, 3391. Combined, 5.5. H "51, 53. 53." In this comparison of "53," it is uncertain whether H. P. 3390 is brighter or fainter than H. P. 3391.
3394. Series *E* 603 rejected; see page 80.
3395. Schönfeld 114. Variability discovered by Pogson in 1852. Max. 5.9 – 8.0. Min. 13. Period 425ᵈ.3. Bm. 507. Magnitudes in Series *P* 237, 243, 246; 4.9, 4.6, 4.5. Not identified in Series *P* 243.
3396. See H. P. 3403. U. A. *r.*
3401. In Series *E* 620, observation uncertain.
3403. B. A. C.; e^1 = H. P. 3396; e^2 = H. P. 3403.
3404. In Series *E* 197, rejected; see page 82.
3408. In Series *E 694*, a small cluster. Marked D in *h.*
3410, 3411. In B. A. C., the letter c is applied exclusively to H. P. 3410. Combined, 5.5; diff. from page 91. Σ 46ˡ. Elongated in photometer.
3413. H "46, 48."
3414. U. A. *r.*
3418. Bm. 512. Spectrum with wide band in green, according to S.
3419. Σ 2579. Binary; period 415 years, according to Behrmann.
3420. See H. P. 3434. Σ 2580.
3421. III., faint, V. III! A. P.
3422. U. A. *r.*
3423. Σ 2583.
3424. Σ 2585.
3425. Banded, C.
3426. Commonly known as λ *Ursæ Minoris*, and so called by Bode, but not by Heis or the B. A. C. Color reddish. III., faint, D. Care required in identification with photometer. Observed in connection with a series of faint stars very near the pole. Standard 156.
3429. Standard 148.
3430. U. A. *r.* Care required in identification with photometer.
3434. B. A. C.; χ = H. P. 3420. Schönfeld 117. Variability discovered by Kirch in 1686. Max. 4.0 – 6.0. Min. 12.8. Period 406ᵈ.5. Bm. 518. III., faint, S. III! D. In order to represent the observations, the residuals have been derived from an assumed magnitude, 6.6. Measurements with photometer uncertain from faintness; star not identified in Series *P* 520, 521, 522. In Series *E 186*, invisible. Magnitudes in Series *E* 406, 612; 4.3, 6.0.
3435. Bm. 519. III. A.
3436. Schönfeld 118. Variability discovered by Pigott in 1784. Max. 3.5. Min. 4.7. Period 7ᵈ.2. U. A. 3½ — 4½; p. 324. For observations of H, see Proc. Amer. Acad., XIX. 269.
3440. In Series *P* 516, clouds suspected over Pole-star; residual, *12.*
3441. Σ 2594. U. A. *dpl.* 6.4, 7.1.
3444. Residual in P, *11.*
3447. Σ 2603. Standard 82.
3448. Marked D in *h.* In Series *E 200*, preceding of two. In Series *E 696*, north preceding of two.
3451. U. A. *r.*
3453. Care required in identification with photometer.
3457. *Draco* in B. A. C.
3463. Σ 2605.
3466. III., faint, V.
3468. *Cepheus* in B. A. C.
3473. U. A. *r.*
3474. III. A.
3475. U. A. *r.* In Series *P* 249, the recorded presence of a bright companion (H. P. 3429) proves that H. P. 3444 was observed by mistake for H. P. 3475; the observation is accordingly rejected. In Series *P* 539, the residual is *15*, showing that the same error probably occurred.
3476. U. A. *c.* H "63 — 64."
3477. Bm. 522. U. A. *r.* III. C.
3478. DM. + 45° 3022, magn. 8.4, seen in Series *P* 522, looked for but not seen in Series *P* 528. Perhaps variable.
3482. Residual in *P* 520, *16.*
3483. The proximity of H. P. 3485 may affect the visibility of this star.
3484. U. A. *r.*
3485. In Series *E 186*, north following of two. In Series *E 695*, northern of two. See H. P. 3483.
3486. Σ Unnum.; the magnitudes 4.5, 8.2, occur only in the foot-notes of the Dun Echt Catalogue, which were not used in obtaining the residuals in column Σ.
3489. U. A. *r.* Residual in P, *12.*
3492. H "64, 65."
3493, 3494. Combined, 6.1; diff. from page 91. Both stars combined by Heis; but H. P. 3494 is apparently too faint to affect the observation. It was visible in the photometer, but too close to H. P. 3493 for measurement. DM. magn. 8.3 reduced to 8.1 for difference in scales.
3497. Care required in identification with photometer.
3498. Marked D in *h.* III. D. Standard 83. H "64 —, 65."
3501. Residual in *h, 13.* Several stars of about the seventh magnitude near this place. Houzeau's observation may relate to the group.
3504. In Series *E 200*, northern of two. Observation confirmed in Series *E 201.*
3505. Σ 2628.
3506. Standard 84.
3512. Σ 2637. Close double in photometer; brighter component observed. In Series *E* 615, difficult on account of adjacent stars.
3516. B. A. C.; ξ^1 = B. A. C. 6935; ξ^2 = H. P. 3516. Both combined by Houzeau. H "2, 1."
3519. Bm. 537.
3521. Bm. 538. U. A. *r.* Faint bands suspected in the spectrum by Secchi.
3522. U. A. *r.*
3527, 3528. B. A. C.; o^1 = H. P. 3527; o^2 = H. P. 3528. The U. N. mentions only a single object, called 31 *Cygni;* but probably the joint effect of both stars was observed. Combined, 3.5. Σ 50ˡ. Bm. 543 = H. P. 3528.
3534. Bm. 546.
3536. In Series *E* 615, difficult on account of adjacent stars.

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3537, 3538. Combined, 3.3. Σ 51[1]. Bm. 547, 548.
3541. See H. P. 3527, 3528. Bm. 549. III., faint, V. Flammarion, on page 190, assigns the magnitude 4.3 to o^2 *Cygni*, and, on page 741, assigns the magnitude 4.5 to 32 *Cygni*.
3543. Bm. 550. U. A. *r*.
3544. Bm. 551.
3545. Σ 2675.
3546. U. A. *dpl.* 7.4, 6.5; the second of these components also *dpl.* 6.5, 9.5.
3547. Schönfeld 124. Variability discovered by Janson in 1600. Max. 3 – 5. Min. < 6. Period irregular.
3548. U. A. *r*.
3549. Residual in D, *10*.
3553, 3554. Combined, 3.3; diff. from Vol. XI. Σ 52[1]. U. A., combined, 3.1; p. 342.
3556. Σ 2671.
3557. Schönfeld 126. Variability discovered by Pogson in 1856. Max. 5? Min. 10? Period irregular. Magnitudes in Series *P* 252, 258, 275; 8.4, 8.6, 8.6.
3559. Care required in identification with photometer.
3564. Standard 149.
3567. Bm. 555. Much care required in identification with photometer. In Series *E 695*, group of three; combined light observed.
3568. Σ 2677.
3569. Bm. 557.
3572. III! A.
3573. In Series *E* 615, observation difficult; a faint companion north preceding.
3574. U. A. *dpl.*
3575. U. A. *dpl.* Residual in *h*, *10*.
3577. Σ Unnum. U. A. *dpl.* 7½, 6½. Marked D in *h*.
3579. See H. P. 3587. Bm. 560. III. S.
3581. *Cepheus* in B. A. C. ≥ 2687.
3586. In Series *P* 258, a companion recorded at 270°, distance 4, 1 magnitude fainter. The angle should probably be 70°.
3587. B. A. C.; ω^1 = H. P. 3579; ω^2 = H. P. 3587; ω^3 = H. P. 3595. In Series *E* 602, observation difficult on account of adjacent stars.
3588, 3589. Combined, 6.2; diff. from page 91. U. A. *r*. In Series *P* 221, both stars were observed. The magnitude 7.4 obtained for H. P. 3588 was rejected, as in Series *P* 249 and *P* 264 the star was considered too close to H. P. 3589 for measurement. In U. A., residual *11*. Perhaps in the U. A. the magnitudes of H. P. 3588 and H. P. 3589 are reversed. In Series *P* 221, *P* 249, and *P* 264, the northern star appeared to be the fainter. DM. magn. 8.2 reduced to 8.0, and U. A. magn. 7.5 to 7.3, for difference in scales.
3590. *Cepheus* in B. A. C.
3591. ≥ 2695.
3594. Standard 85.
3595. See H. P. 3587. ≥ Unnum. Bm. 562. III. A.
3598. *Cepheus* in B. A. C.
3599. Bm. 563.
3602. Bm. 564.
3604. Residuals in Series *E 193, 12*; in Series *E 506, 11*; in *H, 16*; in E, *12*. See Part II. Chapter XI.
3605. ≥ 2704.
3606. H. "27, 26."
3609. B. A. C.; τ^1 = B. A. C. 7110; τ^2 = H. P. 3609.
3610, 3611. Combined, 5.6. ≥ 53[1]. H seems to use 48 as a designation for each of these stars. In reducing his comparisons, it has been assumed that where 48 is repeated the first star so designated is H. P. 3610.
3612. In Series *E 507* not seen, on account of twilight.
3613. *Aquarius* in B. A. C.
3618. U. A. *r*.
3620. U. A. *r*.
3624. Residual in *h*, *10*.
3627. Combined by Houzeau with H. P. 3630; resulting residual 6.
3628. Care required in identification with photometer.
3629. ≥ 2916.
3630. See H. P. 3627.
3631. Standard 150.
3635. Residual in S, *10*.
3643. ≥ 2726.
3644. III. D.
3645, 3646. Combined, 4.2; diff. from Vol. XI. ≥ 2727. Residual in *h*, *12*.
3648. Bm. 570. Series *E* 615, "88 5 89" should probably be adopted for "85 5 89." Rejected; see page 82.
3649. U. A. *r*. III. V.
3650. Standard 86.
3652. U. A. *r*.
3654. Schönfeld 130. Variability discovered by Schmidt in 1864. Max. 5.5? Min. 6? Period irregular. In Series *E* 615, observation difficult, as H. P. 3648 is near.
3656. Standard 87. In Series *E* 702, "79 7 82" adopted for "81 7 82."
3657. Standard 88.
3661. U. A. *r*. III. C.
3663. In Series *P* 219, a slightly fainter companion was recorded at 185°, distance 7. The angle should probably have been 265°, as such a companion was seen in Series *P* 262, while none could be found at 185° in Series *P* 247 and *P* 262. The star was identified by two other companions.
3669. Residual in *h*, *10*.
3674. Bm 572. Series *E 615* rejected; see page 82.
3677. ≥ 2735.
3686. In Series *P* 247, observed twice by mistake; both observations retained with full weight.
3691. *Cepheus* in B. A. C.
3693. Residual in *h*, *10*.
3695. U. A. p. 338. See H. P. 3703.
3697. Much care required in identification with photometer.
3700. III. A. III! P.
3701. ≥ 2463.
3702. *Draco* in B. A. C.
3703. U. A. *dpl.* 7¼, 7¾; pp. 38, 338. Gould is probably right in thinking that H. P. 3695 is the star placed here in the U. N. and in Heis.
3704. *Cygnus* in B. A. C. This would involve a great distortion of the boundary of *Cygnus*. B. A. C. 7176, 7215, 7220, 7281, and 7401 are all placed in *Cepheus*.
3706. U. A. *r*.
3707. ≥ 2745.
3709. U. A. *r*.
3710. In Series *E 614*, nebulous; observation difficult.

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3711. ⧖ 2751.
3713. Series *E 159* rejected · see page 82. Stars low.
3715. Bm. 575. U. A. *r.*
3716. Bm. 576. III. S.
3717, 3718. Combined, 5.1; diff. from Vol. XI. ⧖ 2758. These stars have a proper motion of +0ˢ.36 in right ascension and +3″.2 in declination. Parallax 0″.48, according to Hall. Residual in D, *11.*
3722. H "26. 27."
3723. Residual in P, *13.*
3724. ⧖ 2762.
3725. U. A. p. 309.
3726, 3727. ⧖ 54ᴵ.
3728. *Draco* in B. A. C.
3733. *Draco* in B. F. and B. A. C.
3735. ⧖ 2777. The principal component of this double star is the binary O⧖ 535. Period 11 years, according to Burnham.
3736. ⧖ 2780.
3737. U. A. *r.*
3738. U. A. *r.* III. C.
3740. U. A. *trpl.* Residual in U, *11;* in *H, 11.*
3746. See H. P. 3750.
3747. Series *E* 202 rejected; see page 82. Star low.
3750. The position assigned by Bayer's map to A *Cygni* with respect to the neighboring stars is more than a degree from the place of either H. P. 3746 or H. P. 3750. It is identified with H. P. 3746 by the U. N., and by Peirce in these Annals, IX. 34; Heis and Baily identify it with H. P. 3750, which is the brighter of the two.
3751. Marked D in *h.*
3755. *Vulpecula* in B. F. and B. A. C.
3756. U. A. *r.*
3757. Standard 88.
3758. ⧖ 2790.
3760. In Series *E 203*, "100 5 99" adopted for "99 5 100." In Series *E 698*, nebula.
3761. ⧖ 11ᴵᴵ.
3762. U. A. *dpl.*
3763. U. A. *cum.* 6.3. In Series *E* 461, an independent observation gave the result F. In Series *E 624*, observation difficult; star the brightest of a cluster.
3766. *Draco* in B. A. C.
3767. Bm. 581. U. A. *r.* See H. P. 3199.
3768, 3769. Combined, 6.2; diff. from page 91. The star observed in Series *P* 256, 279, 293, was H. P. 3768; H. P. 3769 was noted as a companion of equal brightness. The magnitudes given in the U. N. and in Heis probably relate to the combined light of both stars. The place of B. A. C. 7430 is approximate, depending only on the U. N.; it agrees with that of H. P. 3769. Heis gives the place of H. P. 3768, which is the brighter of the two stars according to the DM.
3773. *Vulpecula* in B. A. C.
3774, 3775. Combined, 5.8; diff. from page 91. ⧖ 51ᴵ. In Series *E 698*, double.
3777. U. A. *dpl.*
3780. H "33, 35."
3788. Series E *203* rejected; see page 82; "100 — 100" should perhaps be adopted for "99 — 99." Altitude low.
3790. III. A.
3791. This cluster is Messier 15, G. C. 4670. In Series *E 413*, observation unsatisfactory.
3792. Bm. 583. III., peculiar, A.
3795. U. A. *r.*
3798. ⧖ 2806. Standard 89. Residual in *P* 259, *16.*
3799. This cluster is Messier 39, G. C. 4681. In Series *E* 190, nebula; observation difficult. In Series *E* 502, cumulus; too large for estimate in opera-glass, and too faint for the naked eye. In Series *E* 699, residual *12.*
3800. Residual in *P* 239, *11.*
3801. Series *E* 190 rejected; see page 82.
3802. Marked D in *h.*
3809. U. A. *dpl.*
3810. ⧖ 2809.
3811. Residual in *P* 259, *16.*
3817. 25 *Aquarii* = 6 *Pegasi.*
3821. ⧖ 56ᴵ.
3824. U. A. *r.*
3826. U. A. *r.* III? C.
3834. U. A. p. 296.
3835. In Series *E 195* and *E 698*, middle of three. In Series *E* 503, combined light of three; magn. 4.8.
3836. Bm. 591. U. A. *r.*
3838. B. A. C.; c^1 = H. P. 3838; c^2 = H. P. 3844. U. A. *dpl.* 7, 5½.
3840, 3841. Combined, 4.4; diff. from Vol. XI. ⧖ 2822.
3843. ⧖ 2824.
3844. See H. P. 3838.
3845. B. A. C.; μ = H. P. 3873. U. N.; μ = H. P. 3894. Bayer's place for μ will scarcely agree with that of H. P. 3873, but agrees perhaps equally well with those of H. P. 3894 and H. P. 3845. Schönfeld 135. Variability discovered by Hind in 1848. Max. 4? Min. 5? Period irregular. Bm. 594. III! A.
3850. Residual in H, *12.*
3851. 11 *Pegasi* = 27 *Aquarii.* *Aquarius* in B. F. and B. A. C.
3853. *Draco* in B. F. and B. A. C.
3855. Standard 90.
3857. Identification in U. N. and *h* probably wrong; star really visible H. P. 3858. Residual in U, *14;* in *h, 11.*
3858. See H. P. 3857.
3862. In Series *E 698*, nebulous.
3866. *Aquarius* in B. A. C.
3869. Marked D in *h.*
3870. *Cepheus* in B. A. C. In the catalogue of Heis the star occurs both in *Cepheus* and in *Cygnus*, but in the atlas it lies in *Cygnus.*
3871. ⧖ 2838.
3872. *Cepheus* in B. A. C.
3873. See H. P. 3845. ⧖ Unnum.
3876. *Draco* in B. F. and B. A. C. H "80 — 79."
3879. Bm. 599. III. D.
3880. Residual in P, *11.*
3882, 3883. Combined, 5.6; diff. from page 91. H. P. 3883 = Bm. Add. I. 50. Magnitude of H. P. 3883 in Series *P* 245, 6.3. In Series *P* 265, 268, too close to H. P. 3882 for observation.
3885. U. A. *r.*
3890. *Cepheus* in B. A. C.
3892. Standard 91.
3894. See H. P. 3845.

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3895. *Cygnus* in B. A. C.
3899. U. A. *r*; p. 309.
3900. Series *E* 502 rejected; see page 82.
3903. Σ 2863. Standard 92.
3904. III! D.
3906. Bm. 602.
3912. See H. P. 3917.
3914. Residual in P, *14*; in S, *16*.
3915. B. A. C.; e^1 = B. A. C. 7719; e^2 = H. P. 3915.
3917. B. A. C.; π^1 = H. P. 3912; π^2 = H. P. 3917. Perhaps H. P. 3912 affects observations of H. P. 3917 made with the naked eye. The two stars are combined by Houzeau.
3923. Bm. 604.
3924. *Aquarius* in B. A. C. U. A. *r*.
3928. Residual in P, *12*.
3930. U. A. *dpl.* 6, 7¾.
3931. Σ 2883.
3933. Residual in *P* 263, *10*.
3934. Bm. 606.
3935. Bm. 607. See H. P. 3985.
3943. Σ 2893. Houzeau's star at $22^h\ 10^m.9$, +71° 47′, is here assumed to be identical with H. P. 3943.
3944. Bm. 608.
3949. U. A. *r*.
3956. Σ 2900.
3958. H "45. 50, 56."
3959. *β Lacertæ* in B. A. C. Bm. 611.
3960. Residual in P, *13*.
3963. No letter in B. A. C. Σ Unnum. U. A. *dpl.* 6¾, 6½; *c*. Marked D in *h*.
3965. U. A. *r*.
3968. *Ursa Minor* in B. A. C.
3969. Standard 93.
3970, 3971. Combined, 3.8; diff. from Vol. XI. Σ 2909. Binary; period 1578 years, according to Doberck. U. A. *dpl.* 4½, 4½; *c*.
3973. U A. *r*.
3976. Σ 2912.
3977. Residual in U, *14*; in *H*, *14*; in B, *11*.
3980. Bm. 612.
3981, 3982. Combined, 4.0; diff. from Vol. XI. Σ 58I. Residual of H. P. 3982 in Σ, *12*. H. P. 3981 is Schönfeld 137. Variability discovered by Goodricke in 1784. Max. 3.7. Min. 4.9. Period $5^d.4$. Bm. 613. Separated in Series *P* 546, 551, 554. For observations of H, see Proc. Amer. Acad., XIX. 269.
3983. U. A. *dpl.* 4¾, 6.
3984. U. A. *dpl.*
3985. H "1 Hevel. 6." 1 Hevel. = H. P. 3935.
3986. See H. P. 3992.
3987. *α Lacertæ* in B. A. C.
3992. H. P. 3986 and H. P. 3992 are the stars jointly designated as *ρ Cephei* in the U. N. and in Heis, but with separate magnitudes in those catalogues.
3995. Marked D in *h*.
3997. Σ 2922.
3998. The star visible in this vicinity is identified by Heis with Lacaille 9190, the place of which is here given, but in U. A. with Lacaille 9197, which follows $0^m.9$, 23′ north.
4004. Bm. 615. III! D. Series *E* *196* rejected; see page 82; altitude low.
4006 Marked D in *h*.
4008. In Series *E* *192*, double; components equal.
4009. Standard 94. At lower culmination, residual in *E* 106, *11*.
4011. Bm. 616.
4017. Residual in P, *18*; in S, *20*.
4018. B. A. C.; g^1 = H. P. 4018; g^2 = H. P. 4027.
4021. Marked D in *h*.
4025. Residual in *P* 5, *14*.
4027. See H. P. 4018.
4028. See H. P. 4031. Σ 2943. U. A. *r*.
4031. B. A. C.; τ^1 = H. P. 4028; τ^2 = H. P. 4031. Bm. 620. U. A. *r*. III? C.
4037. Standard 95. III. S.
4038. U. A. p. 297.
4040. Bm. 621. U. A. *r*. III. V.
4041. Σ 2950.
4042. Bm. 622.
4049. In Series *E* 173, double; components equal; magnitude of each 5.8.
4050. Residual in P, *14*; in S, *16*.
4052. U. A. *dpl.* 9, 4½ *r*.
4055. Σ 2960. Bm. 624.
4056. Marked D in *h*.
4057. 24 *Piscis Austrini* = 79 *Aquarii*. According to Ptolemy, the star belongs to both constellations; according to Bayer, only to *Piscis Austrinus*. Standard 152.
4064. Bm. 625. U. A. *r*. IV. S.
4065. Marked D in *h*.
4066. H "1 — 3."
4067. U. A. *r*.
4070. See H. P. 4072.
4072. *Cepheus* in B. A. C. H. P. 4070 is near and brighter. Possibly this star was that observed by Argelander in the U. N., by Heis, and in the estimates. It was used to identify H. P. 4072 in the photometric observations. The place given in the U. N. and in Heis is that of H. P. 4072. Residuals in Series *E* 403, *12*; in Series *E* 700, *10*; in E, *10*.
4073. Series *E* 403 rejected; see page 82. H "51 — 1" adopted for "15 — 1."
4074. Residual in D, *10*.
4075. In Series *E* 624, brightest in cluster. Residual in Series *E* 415, *10*; in U, *13*; in *H*, *10*; in *h*, *10*.
4076. Residuals in P, *18*; in S, *13*.
4078. Schönfeld 139. Variability discovered by Schmidt in 1847. Max. 2.2. Min. 2.7. Period irregular. Bm. 627. III. S.
4080. Standard 153.
4081. B. A. C.; h^1 = H. P. 4081; h^2 = B. A. C. 8038; h^3 = B. A. C. 8041; h^4 = B. A. C. 8050. Σ 59I. U. A. *dpl.* 5.4, 7.4. Residual in P, *10*.
4084. Bm. 629. U. A. *r*. III., faint, V.
4089. *Aquarius* in B. A. C.
4091. Series *E* *196* rejected; see page 82; altitude low.
4093. U. A. *dpl.* 10, 3¾.
4094. Near boundary of *Aquarius*. Inserted because it occurs in Behrmann.
4095. Σ 2982. Bm. 630. U. A. *r*. III. V. III! P.
4098. Standard 96.
4106. Bm. 632. U. A. *r*. III. V.

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4108. Residual in *P* 9, *10*.
4109. ≷ 12ᴴ. Bm. 633. U. A. *r*. Residual in *P* 7, *11*.
4110. Series *E 415* rejected; see page 82. Residual in *h*, *10*.
4113. Bm. 634. U. A. *r*. III. V. Residual in S, *10*.
4114. Magnitude in U. A., p. 227, 3.6; p. 342, 3.8.
4116. *Cassiopeia* in B. A. C.
4119. U. A. *r*.
4120. Bm. 635. III. S.
4121. γ *Sculptoris* in B. A. C.
4122. Residual in *H*, *13*.
4123. Combined by Houzeau with H. P. 4129; resulting residual 4. These stars are 29′ apart.
4125. ≷ 2998. U. A. *dpl.* 5½, 8½. Bm. 636.
4127. ≷ 3001. Standard 97.
4128. Marked D in *h*.
4129. See H. P. 4123.
4133. *Aquarius* in B. A. C.
4135. In Series *E 194*, double; components equal. In Series *E 403*, companion near.
4137. Residual in *P* 9, 28; but star not identified.
4139. B. A. C.; b^1 = H. P. 4139; b^2 = H. P. 4145; b^3 = B. A. C. 8194; b^4 = H. P. 4157.
4144. III. D.
4145. See H. P. 4139. U. A. *r*.
4146. Marked D in *h*. H "9 — — 8."
4150. Series *E* 403 rejected; see page 82.
4151. q *Pegasi* in B. A. C.
4152. *Pisces* in B. A. C.
4153. Care required in identification with photometer.
4155. Marked D in *h*; residual, *10*.
4157. See H. P. 4139.
4158. Bm. 643. III! A.
4159. *Ursa Minor* in B. A. C.
4161. H "14, 11."
4162. In Series *E* 113, "7 8 10" adopted for "6 8 10."
4166. Combined by Houzeau with H. P. 4169; resulting residual 1. In Series *E 627*, the brightest of three, and the nearest to H. P. 4169.
4169. See H. P. 4166.
4171. Residual in *P* 17, *11*.
4174. Bm. 644.
4181. Standard 98.
4182. In Series *E* 606, "89 7 95" adopted for "98 7 95."
4186. See H. P. 4187. U. A. *r*. Spectrum perhaps banded, C.
4187. B. A. C.; A^1 = H. P. 4186; A^2 = H. P. 4187.
4189. Residual in *P* 17, *11*.
4191. Standard 99. At lower culmination, residual in *P* 652, *14*; in *P* 655, *11*. Residual in D, *11*.
4192. Bm. 645. III. A.
4193. Schönfeld 142. Variability discovered by Harding in 1811. Max. 5.8 – 8.5. Min. 11? Period 388ᵈ.0. Bm. 646. *U. A. *rr*; var. 6 – 11. III. D. Magnitudes in Series *P* 12, 269, 283, 288, 299, 305; 8.5, 7.1, 7.0, 6.3, 6.7, 7.1. Not identified in Series *P* 12, 283. In Series *P* 269, the fourth reading, 267.1, is adopted for 67.1.
4194. Bm. 647.
4195. B. A. C.; i^1 = H. P. 4195; i^2 = H. P. 4196.
4196. See H. P. 4195. U. A. *dpl.* 5½, 7.
4198. Bm. 648. U. A. *r*. III. to IV., peculiar, S. IV! P.
4199. Series *E 194* rejected; see page 82.
4205. δ *Sculptoris* in B. A. C.
4210. U. A. p. 310.
4212. U. A. *dpl*.
4215. U. A. *r*.
4216. *Pisces* in B. F. In Series *E 119*, magnitudes of components 6.2, 6.5; hence, combined, 5.6. H "23 — 8 *Peg.*" This comparison is given under *Pisces*, but not under *Pegasus*. It is doubtless in error, as the magnitude of 23 *Piscium* is 6.2, that of 8 *Pegasi*, 2.4.
4220. Residual in *E 415*, *10*; in U, *10*; in *H*, *10*.
4223. U. A. *dpl.* 7¼, 6¾.
4224. Bm. 652. H "7. 3."
4225. IIIʳ! A. P. U. A. p. 334.
4227. Residual in H, 11.
4229. Bm. 653.
4233. Bm. 655.
4234. Schönfeld 143. Variability discovered by Pogson in 1853. Max. 4.8 – 6.8. Min. < 12. Period 425ᵈ.9. Bm. 656. Magnitudes in Series *P* 12, 269, 283, 288, 299, 305; 8.7, 7.1, 7.0, 6.3, 6.7, 7.1. Not identified in Series *P* 12, 283. Magnitudes in Series *E* 194, 700; 6.5, 6.5.
4237. ≷ 3049.
4239, 4240. Combined, 5.8; diff. from ≷ 3050.
4241. U. A. *dpl.* Residual in U, *11*; in *H*, *11*.
4247. U. A. *r*. III! D.
4248. ζ *Sculptoris* in B. A. C.
4249. B. A. C.; c^1 = B. A. C. 8353; c^2 = H. P. 4249.
4256. Standard 100.
4259. U. A. *r*.

The following list includes all the residuals occurring in the photometric observations which are numerically greater than 19.

108.	Series 291, *29*.	404.	Series 24, 26.	783.	Series 40, 20.	2696.	Series 161, 21.
260.	" 244, 24.	416.	" 575, *22*.	840.	" 35, 20.	3134.	" 174, 25.
271.	" 255, 32.	439.	" 336, 22.	858.	" 49, 24.	3532.	" 227, 20.
308.	" 22, 28.	578.	" 592, 28.	1200.	" 88, 20.	4137.	" 9, 28.
373.	" 24, 26.	668.	" 35, 20.	1253.	" 73, 23.	4174.	" 9, 29.
391.	" 24, 20.	780.	" 40, 20.	2611.	" 161, 25.	4204.	" 12, 20.

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