

ANTONIN BECVAR ATLAS OF THE HEAVENS - II CATALOGUE 1950.0

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CATALOGUE 1950.0

ANTONIN BECVAR

CZECHOSLOVAK ACADEMY OF SCIENCES

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CATALOGUE 1950.0

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ATLAS COELI II. - CATALOGUE 1950.0

This Catalogue is the second part of the Star Atlas. It contains exact and thorough informations on stars down to visual magnitude 6^m25 and on all the other celestial objects drawn in Atlas Coeli. They include the precise positions, annual changes of the co-ordinates, proper motions on the sphere, apparent and true magnitudes, spectra, parallaxes, distances, radial velocities, angular and linear dimensions, and other physical characteristics, as far as they are known today. All the positions of the bodies have been converted to the standard equinox of 1950.0 of the Atlas. Every observer of the stellar sky and user of the Atlas is thus enabled to acquaint himself with the necessary numerical values, which otherwise are accessible only in special lists at the libraries of scientific institutes. Owing to the steady progress in astronomy and to the great number of new scientific papers and books published since the first edition of this Catalogue its contents have suffered so many changes and so many additions have accumulated that it was felt necessary to submit the Catalogue to a thorough revision. The following are the main changes: replacing the Harvard spectral system of the HD-Catalogue by the Mt. Wilson system, which also contains the physical characteristics of the stars; addition of the absolute magnitudes derived from known parallaxes; and supplementing all the new bodies and data not yet known at the time of the first edition. Thereby the new Catalogue comes close to the contents of the fourth edition of Atlas Coeli. As a new feature there is a detailed list of bright stars in order to facilitate looking up every star designated by a number or letter, and a section on the cosmic radio sources drawn also in the Atlas. Auxiliary tables facilitate the looking up of constellations in the Atlas, the identification of all stars according to their proper names, the determination of distances of cosmic bodies based on parallaxes, the mutual transformation of various distance systems, the computation of integral magnitudes of binaries from the magnitudes of the components and, vice versa, the computation of the magnitude of one component from the knowledge of the integrated magnitude and the magnitude of the other component, the determination of precise co-ordinates of the bodies for any epoch besides the equinox of the Atlas, as well as the change of the co-ordinates for the equinoxes of 1900.0 and 2000.0. The tables of annual precession in right ascension and declination were considerably extended and a new table was added containing the distance modulus and the absolute magnitudes of the stars.

A. B.

Brandýs nad Labem, 1st October 1963.

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STARS

of 6.25 visual magnitude and brighter

GC	Number in Boss General Catalogue
AR 1950.0	Right ascension for the epoch 1950.0
AnV	Annual variation of AR (precession + proper motion in AR)
MP	Proper motion in right ascension per year
Decl 1950.0	Declination for the epoch 1950.0
AnV	Annual variation in declination (precession + proper motion in Decl)
MP	Proper motion in declination per year
m	Apparent visual magnitude (RHP-system)
M	Absolute visual magnitude (with interstellar absorption)
Sp	Spectrum (Mt Wilson classification, faint and southern stars according to HD-Catalogue)
π	Absolute parallax
RV	Radial velocity in km/sec (v = variable RV)
Con	Designation of stars and constellations
N	Notes (d double or multiple star, s spectroscopic double, E eclipsing binary, El elliptical variable, v variable)

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
1	00 ^b 00 ^m 01 ^s 4	+3.08	+0.002	+65°49'14"	+20.0	+0.00	6.02	0.5	gG5	008	-18		d
23	01 10.7	+3.07	+0.002	-17 36 51	+20.0	-0.00	4.62	0.0	A0n	012	-5	2 Cet	
30	01 38.3	+3.09	-0.001	+62 00 34	+20.1	+0.01	6.00	0.5	A2s	008	-18	9 Cas	
33	01 46.1	+3.07	+0.002	-16 48 24	+20.0	-0.05	5.80	0.3	gK2	008	-27		
36	01 56.5	+3.07	-0.001	-10 47 16	+20.0	-0.00	5.16	-2.4	cK5	003	-42v	3 Cet	
38	02 02.1	+3.08	0.000	+41 48 51	+20.0	-0.02	6.03	0.8	A2	009	-8		d
39	02 05.1	+3.12	+0.016	+66 53 16	+20.1	+0.04	5.84	1.2	gK1	012	-27		
42	02 10.2	+3.04	+0.006	-71 42 55	+20.0	-0.02	5.64		B8s		-3		
44	02 16.1	+3.14	+0.061	+34 22 49	+20.1	+0.10	6.23	3.6	dF9	030	+4		
52	02 30.3	+3.10	+0.002	+61 02 09	+20.0	+0.01	5.87	-0.6	B9	005	+14		
59	02 46.5	+3.07	-0.001	-05 59 14	+20.1	+0.10	4.68	1.0	sgK0	018	-6v	33 Psc	s
75	03 07.8	+3.08	+0.003	+13 07 05	+20.0	+0.00	5.66	1.2	gG5	013	+1v?	86 Peg	
88	03 38.0	+3.14	+0.033	+58 09 29	+20.1	+0.03	6.10	4.5	dG4	048	-12		d
92	03 44.1	+3.10	+0.057	-49 21 11	+20.0	-0.04	5.77	4.0	dG0	045	+1		d
94	03 49.7	+3.12	+0.001	+63 55 05	+20.0	+0.00	5.49	0.0	B9ne	008	-0	10 Cas	
95	04 00.7	+3.11	+0.029	+28 44 44	+19.9	-0.18	6.20	5.3	dG8	075	-8		
98	04 16.7	+3.07	+0.007	-23 23 07	+20.0	-0.04	6.06	1.6	dA7	013	-2		
103	04 45.0	+3.06	-0.002	-17 39 55	+20.1	+0.04	6.18		A3		.		
116	05 13.6	+3.06	+0.004	-22 47 12	+20.0	-0.04	5.92		A0		.		d
120	05 31.2	+3.05	-0.004	-33 48 28	+20.0	+0.00	5.71		K0		.		
126	05 44.1	+3.06	-0.004	-09 06 06	+20.0	-0.03	6.11		gG8		+20		
127	05 47.8	+3.10	+0.010	+28 48 52	+19.9	-0.16	2.15	-0.4	B8p	031	-12v	21 α And	s
131	06 06.1	+3.09	-0.009	+36 21 01	+19.9	-0.14	6.14	4.8	dF5	054	-14		s
144	06 27.4	+3.09	+0.009	+17 56 03	+20.0	-0.02	5.69	0.5	gG9	009	-23	87 Peg	
147	06 29.8	+3.20	+0.068	+58 52 27	+19.9	-0.18	2.42	1.6	dF2	070	+12	11 β Cas	
149	06 32.0	+3.32	+0.038	+79 26 13	+20.0	-0.02	6.22	1.2	A3	010	+1		d
155	06 48.2	+3.06	+0.005	-28 15 58	+20.0	-0.00	5.46	1.6	F1n	017	+9	κ^1 Scl	d
158	06 52.7	+3.04	+0.012	-46 01 24	+19.9	-0.18	3.94	1.8	sgG7	037	-9	ϵ Phe	
167	07 27.9	+3.08	+0.002	+10 52 03	+20.0	0.00	5.51	1.1	B8	013	+14	34 Psc	d
169	07 42.7	+3.12	0.000	+45 47 39	+20.0	-0.00	5.08	-1.0	cF2	007	-5	22 And	
171	07 45.2	+3.07	+0.002	-05 31 35	+20.0	-0.03	5.95	0.7	gG9	009	+24		
173	07 48.6	+2.72	-0.008	-82 30 07	+20.0	-0.01	5.30	0.1	gG8	009	+15	γ^a Oct	
181	08 09.2	+3.07	+0.010	-12 51 27	+20.0	-0.03	5.94		dK1		+4		
190	08 43.2	+3.05	-0.006	-15 44 33	+19.8	-0.26	5.05	3.9	dF5	060	+15	6 f Cet	
197	09 02.2	+3.05	+0.000	-28 04 41	+20.0	+0.02	5.56	0.3	gK5	009	-6	κ^a Scl	
202	09 11.7	+3.05	+0.013	-35 24 46	+20.2	+0.13	5.19	2.8	dF4	034	-2	θ Scl	
214	09 37.0	+3.06	+0.004	-18 12 58	+20.0	-0.03	5.47	-1.0	gK5	005	-8v?		
238	10 39.4	+3.09	-0.000	+14 54 20	+20.0	-0.01	2.87	-2.8	B2s	007	+4v	88 γ Peg	v
244	10 54.5	+3.12	-0.011	+40 45 34	+19.9	-0.14	5.73	3.1	dA7	030	-29v?	23 And	
249	11 10.0	+3.04	+0.002	-26 17 57	+20.0	-0.07	6.12		K2		.		
256	11 26.1	+3.12	-0.001	+32 55 42	+20.0	-0.02	6.06	0.6	A0	008	+1		
257	11 27.9	+2.27	+0.006	-85 16 20	+20.0	+0.03	5.74		K5		.		
265	11 54.2	+3.07	-0.004	-08 03 31	+20.0	+0.01	5.36	-0.7	gM4	006	-2		d
270	12 00.7	+3.10	+0.006	+19 55 43	+20.0	+0.00	4.94	-0.5	gM2	008	-46	89 χ Peg	
272	12 06.1	+3.05	-0.002	-19 12 35	+20.0	-0.06	4.68	0.4	gM1	014	-22	7 Cet	
281	12 20.4	+3.11	+0.004	+22 00 23	+20.0	-0.01	6.05	0.6	A0	008	-15		
283	12 21.3	+3.06	+0.002	-09 50 51	+20.0	-0.00	5.76	0.3	B9	008	.		
287	12 24.1	+3.09	+0.006	+08 32 36	+20.0	-0.02	5.87	1.4	gA9s	013	+0v	35 Psc	ds
291	12 34.7	+3.11	+0.001	+27 00 20	+20.0	-0.03	6.06	1.1	A0	010	-7v?		
303	13 21.6	+3.41	+0.006	+76 40 23	+20.0	+0.00	6.23	0.7	B9	008	-8		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
306	00 ^h 13 ^m 37 ^s .3	+3.03	+0.010	-31°43'26"	+20"0	-0"03	5.69	0.7	K0	010	.		
310	13 43.5	+3.15	+0.004	+43 19 03	+20.0	-0.03	6.03	0.8	A0	009	+ 3		d
315	13 59.7	+3.08	-0.002	+07 57 46	+20.0	-0.01	6.19	0.7	gG6	008	+ 1	36 Psc	
329	14 15.0	+3.22	-0.000	+61 15 20	+20.0	+0.00	5.80	0.0	gG4	007	- 4		
334	14 28.3	+3.14	-0.005	+38 24 15	+20.0	-0.02	4.44	1.2	A1n	023	+ 1	24 θ And	
335	14 30.2	+3.17	+0.001	+47 40 12	+20.0	+0.02	5.82	-0.7	B9	006			
345	15 03.3	+3.18	-0.001	+51 09 20	+20.0	-0.00	var	var	O9n	002	-33	AO Cas	E
362	15 42.5	+3.14	-0.005	+36 30 30	+20.0	-0.04	4.51	0.5	A0n	016	- 8v	25 σ And	
363	15 42.6	+3.09	-0.003	+10 55 44	+20.0	-0.03	6.20		G8		+ 9		
373	16 01.2	+3.13	+0.005	+31 14 23	+20.0	-0.00	5.80		A0		- 5		
376	16 03.4	+3.16	+0.001	+43 30 49	+20.0	-0.00	6.04	-0.1	B9s	006	+ 7	26 And	d
388	16 52.8	+3.06	-0.001	-09 06 03	+20.0	-0.03	3.75	-0.5	gK3	014	+19	8 ι Cet	
401	17 28.7	+3.12	+0.271	-65 10 07	+21.1	+1.16	4.34	4.9	F8	139	+ 9	ζ Tuc	
408	17 47.3	+3.14	+0.001	+30 39 30	+20.0	+0.01	5.82	-0.7	B5	005	+ 4		
413	18 01.3	+3.09	-0.000	+07 54 46	+20.0	+0.01	5.58	0.3	gK3	009	+16	41 d Psc	
414	18 08.2	+3.14	-0.002	+32 38 03	+20.0	-0.01	5.97	1.5	K5	013	-36		d
420	18 20.6	+2.78	-0.003	-69 54 09	+20.0	-0.00	5.42	-0.1	B9	008	+12	π Tuc	
425	18 28.8	+3.16	+0.005	+37 41 31	+19.9	-0.04	5.20	1.7	dF2	020	+ 9	27 ρ And	
433	19 00.6	+3.01	+0.002	-29 15 28	+19.9	-0.07	5.35	2.2	G5	024	+21	ι Scl	
437	19 14.5	+3.04	+0.005	-20 20 06	+20.0	-0.00	var	var	gM5e	006	+29	T Cet	
439	19 21.7	+2.56	+0.003	-77 42 15	+20.0	-0.01	5.86		K0		.		
472	21 23.0	+3.17	-0.001	+38 18 02	+20.0	-0.02	var		S6e		-11	R And	
476	21 33.3	+3.23	+0.001	+51 44 35	+20.0	-0.00	5.36	-2.3	B4n	003	-12v		d
481	22 01.0	+3.31	+0.002	+61 33 15	+20.0	+0.00	5.39	-0.1	B9n	008	- 6	12 Cas	
488	22 23.4	+3.25	+0.002	+52 46 12	+19.9	-0.00	5.72	-0.4	B9	006	.		
496	22 50.3	+3.08	-0.001	+01 39 47	+19.9	-0.01	5.99	0.5	gG5	008	- 4	44 Psc	
503	23 09.2	+3.15	+0.686	-77 32 09	+20.3	+0.33	2.90	3.6	dG0	152	+23	β Hyi	
516	23 44.9	+2.95	+0.009	-43 57 26	+20.0	+0.03	3.90	3.0	A3	066	+ 9	κ Phe	
519	23 49.0	+2.96	+0.018	-42 34 39	+19.5	-0.40	2.44	0.6	G5	043	+75v	α Phe	s
530	24 44.4	+3.01	+0.002	-25 49 25	+19.9	-0.02	5.95		G5				
543	25 26.3	+3.13	+0.008	+17 36 59	+19.9	+0.02	var	var	gM3	010	+ 6	47 TV Psc	
544	25 27.1	+2.97	-0.032	-33 16 59	+19.9	-0.05	4.96		M5		+11	η Scl	
546	25 31.9	+3.23	+0.009	+44 07 05	+19.9	-0.01	5.16	0.9	A2	014	+ 2v		s
550	25 44.7	+3.10	+0.002	+09 54 58	+19.7	-0.20	6.02	3.3	dF0	028	-10		
558	25 58.7	+2.96	+0.011	-40 11 27	+19.9	-0.03	5.33	0.3	gK5	010	+32		
579	27 19.8	+3.04	+0.009	-15 08 24	+19.9	-0.03	6.24		F2				
583	27 28.7	+3.17	+0.003	+29 28 34	+19.8	-0.05	5.26	1.3	dF3	016	-10	28 And	d
584	27 29.1	+3.06	+0.000	-04 14 00	+19.9	-0.01	6.04	0.3	gM0	007	+ 5	12 Cet	d
586	27 31.6	+3.35	+0.002	+59 42 05	+19.9	-0.01	5.92	-0.6	B9	005	-20		d
590	27 52.7	+3.00	-0.002	-24 03 51	+19.9	+0.02	5.23	0.6	A1n	012	+ 1v		
593	28 01.2	+2.90	+0.012	-48 29 24	+19.8	-0.09	5.65		F0		+ 2		
609	28 31.5	+3.45	+0.004	+66 14 37	+19.9	-0.00	6.14	-0.4	B7n	005	-10	13 Cas	
611	28 45.9	+3.19	+0.004	+33 18 21	+19.9	-0.02	6.08		gG8		+ 9v?		
614	28 56.2	+3.29	-0.006	+52 33 49	+19.9	-0.02	5.69	-0.4	gK2	006	-52		s
618	29 00.1	+3.31	+0.005	+54 14 47	+19.9	-0.01	4.88	-0.9	B8	007	-12v	14 λ Cas	d
619	29 00.5	+2.89	+0.014	-49 04 47	+19.9	+0.02	4.88	1.8	A2	024	- 5v	λ^1 Phe	s
625	29 15.7	+2.75	+0.013	-63 14 00	+19.8	-0.05	4.52	1.2	B9	022	+10	β^1 Tuc	d
626	29 16.5	+2.75	+0.015	-63 14 28	+19.8	-0.06	4.48	1.2	cA2	022	+10	β^2 Tuc	d
636	29 48.8	+3.10	+0.002	+06 40 47	+19.9	+0.01	5.66		A0n		+19	51 Psc	d
641	29 57.9	+3.15	+0.009	+20 01 09	+19.8	-0.04	5.53	0.5	gK0	010	-12	52 Psc	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
645	00 ^h 30 ^m 08 ^s .4	+3 ^s .41	+0 ^s .001	+62°39'22"	+19 ^s .9	+0 ^s .00	4.24	-6.9	cB1e	001	- 2v	15 \times Cas	
650	30 23.2	+3.33	+0.008	+54 37 11	+19.8	-0.04	6.14		gG8		-35		
651	30 27.6	+2.73	+0.012	-63 18 23	+19.8	-0.04	5.16	2.9	A2	035	+ 5	β^s Tuc	d
665	31 12.7	+2.97	-0.003	-29 50 01	+19.8	-0.03	5.62	0.1	K0	008	.		
667	31 16.8	+2.54	+0.016	-71 32 31	+19.8	-0.02	6.10		A5		+ 2	θ Tuc	
683	32 05.4	+2.85	+0.024	-52 38 57	+19.9	+0.03	5.55		F5		+35		
696	32 40.4	+3.09	+0.027	-03 52 04	+19.8	-0.02	5.24	3.9	dF7	059	+ 9v	13 Cet	ds
701	32 58.7	+3.08	+0.009	-00 46 48	+19.8	-0.06	5.93	3.3	dF2	030	+ 6	14 Cet	
705	33 13.7	+2.80	+0.003	-55 05 47	+19.8	-0.05	5.94		K0		.		
706	33 18.3	+2.86	+0.004	-48 16 30	+19.7	-0.10	5.52		F4		+ 8		
708	33 20.5	+3.34	+0.002	+53 53 36	+19.8	+0.00	5.14	-0.1	B7	009	+ 1		
717	33 35.8	+3.41	-0.001	+60 03 04	+19.8	+0.00	5.76	1.6	A2n	015	- 8		
719	33 37.6	+2.98	-0.006	-23 07 00	+19.8	-0.04	6.13		A3		.		
726	34 02.9	+3.26	-0.002	+44 12 47	+19.9	+0.04	5.44	-0.7	gK5	006	-33		
727	34 10.3	+3.34	+0.002	+53 37 19	+19.8	-0.01	3.72	-3.2	B2s	004	+ 2	17 ζ Cas	
728	34 10.8	+3.13	+0.000	+14 57 24	+19.8	-0.02	5.86	-1.1	B3	004	-12	53 Psc	s
729	34 12.2	+3.21	+0.001	+33 26 40	+19.8	-0.01	4.44	-1.3	B4	007	+ 8v	29 π And	ds
738	34 40.1	+3.21	-0.002	+35 07 29	+19.8	-0.00	5.62	0.6	gG0	010	- 0		
741	34 46.6	+3.08	+0.102	-25 02 32	+19.8	-0.01	5.71	5.6	dG7	068	+17		d
759	35 54.4	+3.17	-0.018	+29 02 26	+19.5	-0.25	4.52	2.2	sgG3	034	-84	30 ϵ And	
770	36 23.4	+3.32	+0.000	+49 04 48	+19.8	-0.01	5.72	0.0	gK5	007	-10		d
774	36 38.8	+3.21	+0.010	+30 35 15	+19.7	-0.09	3.49	0.6	gK3	026	- 7v	31 δ And	
778	36 45.4	+3.12	-0.033	+20 58 52	+19.4	-0.37	6.08	6.2	dK1	104	-34	54 Psc	
784	37 17.3	+3.16	+0.002	+21 09 52	+19.7	-0.03	5.57	0.1	gG7	008	-17	55 Psc	d
788	37 29.1	+2.86	+0.003	-45 04 17	+19.8	+0.00	6.02		K0		.		
792	37 39.3	+3.41	+0.006	+56 15 49	+19.7	-0.03	2.47	-1.0	gK0	020	- 4	18 α Cas	
799	38 01.8	+3.02	+0.047	-24 04 27	+19.4	-0.33	6.24	4.0	G3	036	-54		
801	38 05.5	+2.81	+0.117	-59 44 06	+20.2	+0.45	5.79	4.5	G0	056	.		
804	38 09.6	+3.05	-0.001	-04 37 34	+19.8	-0.01	6.12	0.9	gG7	009	+34		
812	38 24.0	+3.25	-0.001	+39 11 04	+19.8	-0.00	5.42	1.1	gG5	014	- 5	32 And	
822	38 56.5	+3.18	+0.007	+24 21 18	+19.7	-0.02	5.98	1.4	A5p	012	-15		
823	38 58.0	+2.83	-0.002	-46 21 33	+19.8	0.00	4.65	-0.3	G6	010	+16	μ Phe	
825	39 03.4	+3.58	-0.001	+65 52 26	+19.7	-0.00	5.92		gK0		- 3		
828	39 15.8	+3.35	+0.001	+50 14 19	+19.7	-0.01	4.85	-3.1	B3	003	- 8v	19 ξ Cas	
830	39 29.9	+2.73	+0.010	-56 46 35	+19.8	+0.05	5.83		cF0p		+10	ξ Phe	d
837	39 37.6	+3.45	+0.004	+58 28 47	+19.7	-0.00	6.13	0.0	B9	006	- 2		
849	40 18.7	+2.89	-0.000	-38 44 14	+19.7	-0.00	6.07		A0		.	λ^s Scl	d
851	40 20.6	+2.56	+0.008	-65 44 33	+19.8	+0.05	5.46	2.9	F4	031	+14v	ρ Tuc	s
853	40 27.5	+2.69	+0.034	-60 32 09	+19.7	-0.04	5.84		K2		.		
856	40 41.4	+3.32	-0.002	+46 45 05	+19.7	-0.03	5.02	1.2	A5	017	+12v	20 π Cas	s
865	41 04.8	+3.01	+0.016	-18 15 39	+19.8	+0.04	2.24	0.7	gK0	051	+13	16 β Cet	
866	41 06.8	+2.69	-0.001	-57 44 13	+19.7	+0.01	4.53	1.5	A0	025	+10	η Phe	d
869	41 19.0	+3.02	+0.000	-12 16 57	+19.5	-0.20	6.18		G5		.		
874	41 39.0	+3.33	-0.003	+47 35 26	+19.7	+0.02	5.55	-1.0	B5n	005	-60		
875	41 40.0	+3.03	-0.001	-10 52 53	+19.6	-0.11	4.93	0.8	gG6	015	+ 1	17 φ^s Cet	
879	41 47.2	+2.90	+0.020	-38 41 49	+19.8	+0.12	5.97	-0.5	K0	005		λ^s Scl	
882	41 55.7	+3.35	+0.002	+48 00 40	+19.7	-0.01	4.70	-2.7	B4ne	004	- 8	22 \circ Cas	
889	42 16.0	+2.97	-0.005	-22 16 51	+19.8	+0.09	5.30	2.7	A5	030	+10		
891	42 18.4	+3.97	-0.004	+74 42 55	+19.7	-0.02	var	var	A3s	013	+10v	21 YZ Cas	dsE
893	42 21.8	+2.62	+0.020	-62 46 17	+19.7	-0.00	6.17		F5				d

H 4

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
894	00 ^b 42 ^m 25 ^s 4	+3 ^s 42	-0 ^s 003	+54°56'54"	+19 ^s 7	+0 ^s 01	5.47	1.3	A2s	015	-9		d
900	42 35.5	+2.84	-0.006	-42 56 56	+19.6	-0.10	6.00		A5		.		
907	42 58.0	+3.01	-0.002	-13 09 04	+19.5	-0.20	6.11	4.3	dF8	044	-13	18 Cet	
918	43 24.1	+3.32	+0.002	+44 35 19	+19.7	-0.01	5.99		B8		0		s
920	43 25.1	+2.81	+0.017	-47 49 34	+19.8	+0.09	5.79		K0		.		d
922	43 42.7	+2.98	+0.014	-22 47 42	+19.7	-0.00	5.62	1.8	sgG6	017	-15		
928	43 55.7	+3.14	-0.002	+15 12 12	+19.6	-0.04	5.58	-0.2	gM4	007	-27v?	57 Psc	
934	44 23.4	+4.01	+0.004	+74 34 30	+19.7	-0.00	5.39	-0.1	B9s	008	-3v	23 Cas	s
935	44 24.7	+3.13	+0.004	+11 42 05	+19.6	-0.03	5.68	0.7	gG9	010	-1	58 Psc	
938	44 34.8	+3.17	+0.007	+19 18 21	+19.7	+0.01	6.06	1.6	A5n	013	0	59 Psc	
940	44 41.0	+3.18	-0.008	+23 59 44	+19.6	-0.08	5.13	2.8	gK1	034	-24v	34 ζ And	vsEl
941	44 48.3	+3.10	+0.001	+06 28 06	+19.6	-0.01	6.20	0.4	gG6	007	+14	60 Psc	
943	44 51.1	+3.92	+0.029	+72 24 07	+19.7	+0.03	6.04		gK0s		+1		
950	45 13.8	+2.99	+0.003	-18 20 05	+19.7	+0.04	5.88		gK3		+2		
957	45 32.6	+2.97	+0.002	-21 59 42	+19.6	-0.01	5.45	0.2	B9s	009	+21		
958	45 41.6	+3.11	+0.007	+07 01 38	+19.7	+0.01	6.07	0.8	gG7	009	-1	62 Psc	
959	45 45.4	+3.15	+0.050	+05 01 26	+18.5	-1.14	5.82	6.7	dK4	148	-13		
961	45 59.3	+3.40	+0.003	+50 41 45	+19.6	-0.00	5.03	-0.4	B9	008	+1v?	25 ν Cas	
962	46 03.4	+3.63	+0.137	+57 33 03	+19.1	-0.52	3.64	4.9	dF9	182	+9	24 η Cas	d
963	46 05.1	+3.11	+0.006	+07 18 48	+19.6	-0.05	4.55	0.3	gK5	014	+32	63 δ Psc	
968	46 20.8	+3.15	-0.001	+16 40 16	+19.4	-0.20	5.23	3.5	dF5	045	+2v	64 Psc	s
975	46 37.7	+2.78	-0.002	-46 58 13	+19.6	+0.02	6.24	-0.3	K0	005	.		
980	46 46.1	+2.96	+0.005	-24 24 29	+19.6	-0.05	6.06		gK2		+23		d
983	46 51.7	+2.08	+0.034	-75 11 43	+19.6	-0.03	4.96	1.5	M1	020	-9v	λ Hyi	
984	46 54.9	+3.01	+0.007	-13 49 55	+19.5	-0.09	5.84	0.8	gK5	010	+4		d
989	47 02.8	+3.31	+0.001	+40 48 25	+19.6	-0.02	4.42	-1.1	B5s	008	-24v	35 ν And	s
990	47 05.8	+2.95	-0.001	-23 38 03	+19.6	+0.00	6.22		A2		.		
992-3	47 11.4	+3.22	+0.006	+27 26 20	+19.6	-0.01	5.54		F0+F0			65 i Psc	d
999	47 30.1	+3.35	+0.006	+44 43 48	+19.6	+0.01	6.12	0.3	A0	007	+2		
1003	47 37.3	+3.00	-0.016	-10 54 48	+19.4	-0.22	5.24	4.2	dF9	062	+8	19φ ³ Cet	
1004	47 40.3	+3.64	+0.005	+63 58 33	+19.6	-0.01	5.45	1.5	dF1+A2	016	+3v		
1019	48 24.8	+2.73	+0.005	-51 15 34	+19.6	+0.04	5.22	-4.8	F0n	001	+22	g Phe	
1045	50 02.9	+5.62	+0.035	+83 26 12	+19.6	-0.01	5.55	0.5	A2	010	+28		
1047	50 04.0	+3.58	-0.010	+60 51 01	+19.7	+0.18	4.93	3.9	dF8	063	+21		d
1051	50 13.4	+2.94	+0.002	-24 16 40	+19.6	+0.04	5.59	0.1	gK2	008	+34v		d
1055	50 27.0	+3.07	+0.000	-01 24 55	+19.5	-0.01	4.92	-0.8	gM0	007	+16	20 Cet	
1060	50 42.9	+3.30	+0.001	+37 08 51	+19.5	-0.04	6.13	0.6	gK3	008	-6		
1068	50 53.7	+3.46	+0.008	+52 25 06	+19.5	-0.02	6.22	1.9	gA8	014	-1		d
1078	51 33.3	+2.49	+0.009	-63 08 33	+19.5	-0.00	5.64		M5		-12		
1084	51 56.1	+3.18	+0.001	+18 55 03	+19.5	-0.01	5.76	0.8	A0n	010	+12	66 Psc	d
1086	52 01.0	+3.56	-0.004	+58 42 09	+19.5	-0.04	4.95	0.0	gK2	010	-23	26ν ¹ Cas	
1091	52 17.1	+3.21	+0.009	+23 21 29	+19.5	-0.03	5.60	2.1	sgK1	020	+2	36 And	d
1102	53 08.6	+2.24	+0.000	-69 47 50	+19.5	-0.04	5.34	1.2	G7	015	+5	λ Tuc	d
1103	53 10.7	+3.03	-0.000	-07 37 02	+19.5	-0.04	6.00		gK5		+2		
1105	53 16.8	+3.23	-0.002	+26 56 19	+19.5	+0.01	5.94	1.8	A3n	015	-8	67 k Psc	
1110	53 30.0	+2.91	-0.000	-28 02 46	+19.5	+0.01	6.20		Ma		.		
1111	53 31.0	+3.01	-0.002	-11 32 13	+19.5	-0.00	5.49	-0.6	gK5	006	-26	22φ ³ Cet	
1115	53 40.2	+3.58	-0.012	+58 54 41	+19.5	-0.04	4.83	1.8	gG4s	025	-47	28ν ³ Cas	
1117	53 40.3	+3.62	+0.004	+60 26 47	+19.5	-0.00	var	var	B0ne	005	-7	27 γ Cas	dv
1120	53 45.2	+3.62	+0.004	+60 05 33	+19.5	-0.00	5.54	0.2	B9	007	-2v		ds

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
1122	00 ^b 53 ^m 58 ^s .2	+3.33	+0.013	+38°13'43"	+19.5	+0.03	3.94	1.8	A2	037	+ 8	37 μ And	
1136	54 31.9	+3.21	-0.003	+23 08 53	+19.4	-0.04	4.62	-0.6	gG5	009	-10v	38 η And	s
1142	54 49.2	+3.40	+0.001	+45 34 11	+19.5	+0.01	6.24	0.1	gK2	006	+ 5		
1148	55 07.4	+3.25	+0.000	+28 43 20	+19.5	-0.01	5.64	0.2	gG6	008	- 0	68 h Psc	
1156	55 19.7	+3.80	+0.007	+66 04 57	+19.5	-0.00	6.00	0.5	B9	008	-10		
1159	55 29.4	+3.29	+0.004	+33 40 56	+19.4	-0.06	6.22		K0		-17		
1172	56 11.9	+2.89	+0.001	-29 37 38	+19.4	+0.01	4.39	-0.2	B5	012	+10	α Sc1	
1173	56 13.6	+3.00	-0.003	-11 38 58	+19.4	-0.01	5.79	0.8	gG7	010	-19	23 φ^4 Cet	
1192	57 13.1	+3.40	+0.001	+44 26 40	+19.4	-0.02	6.04	0.6	B9n+A0	008	+ 1v		dss
1229	58 58.3	+2.80	+0.006	-39 11 10	+19.4	+0.06	5.57	3.1	K0	032	-31	ξ Sc1	
1250	59 55.2	+2.54	+0.000	-57 16 17	+19.4	+0.02	6.00		K0		.	ω Phe	
1252	01 00 03.2	+2.86	+0.006	-31 49 15	+19.4	+0.01	5.52		A2		-21v?	σ Sc1	
1253	00 04.3	+3.29	+0.001	+31 32 11	+19.3	-0.03	5.46	0.5	B9s	010	+10v	69 σ Psc	s
1254	00 05.1	+3.37	-0.002	+41 04 37	+19.4	-0.01	5.86	0.7	gA5s	010	+ 4	39 And	
1258	00 20.7	+3.11	-0.006	+07 37 17	+19.4	+0.03	4.45	1.4	gG5	025	+ 7	71 ϵ Psc	
1262	00 30.7	+3.03	-0.008	-05 06 13	+19.2	-0.10	5.69	0.7	gK1	010	+15	25 Cet	
1263	00 31.1	+3.70	-0.001	+60 48 24	+19.4	+0.01	5.94	0.7	gA9s	009	- 1		d
1266	00 34.2	+2.70	-0.001	-46 39 57	+19.4	+0.01	5.34	1.1	G6	014	- 1		
1269	00 48.3	+2.30	+0.000	-65 43 28	+19.3	+0.00	6.22		Mb		.		
1279	01 13.1	+3.71	-0.010	+61 18 45	+19.3	-0.02	5.88		dF5		-16		
1281	01 14.5	+3.09	+0.008	+01 05 57	+19.3	-0.04	6.07	2.7	dA8n	021	+ 6	26 Cet	d
1288	01 30.8	+8.21	+0.078	+85 59 24	+19.3	-0.01	4.52	0.0	gK2	013	+ 8	2 UMi	
1290	01 43.3	+3.28	+0.006	+29 23 33	+19.2	-0.11	6.08		dF6		0		
1301	02 17.0	+3.11	+0.002	+05 23 20	+19.3	-0.01	6.17	0.7	gK5	008	-15	73 Psc	
1302	02 26.7	+3.17	+0.000	+14 40 39	+19.4	+0.05	5.65	2.3	dF1	021	+ 4v	72 Psc	s
1309	02 59.8	+3.22	+0.003	+21 12 21	+19.3	-0.01	5.55	1.3	A2	014	- 3	74 ψ^1 Psc	
1310	03 00.5	+3.22	+0.003	+21 11 53	+19.3	-0.02	5.82	1.5	A0	014	- 4	74 ψ^1 Psc	d
1325	03 34.5	+3.01	+0.002	-10 06 24	+19.3	+0.01	5.59		A0		.	28 Cet	
1335	03 51.3	+2.68	-0.003	-46 59 10	+19.3	+0.00	3.35	-0.4	G4	018	- 1	β Phe	d
1336	03 55.5	+3.16	+0.001	+12 41 19	+19.3	+0.04	6.22	1.0	gG7	009	+ 8	75 Psc	
1360	04 55.7	+3.99	+0.394	+54 40 33	+17.7	-1.58	5.26	5.8	dG4	130	-97	30 μ Cas	
1364	05 08.0	+3.45	+0.015	+43 40 35	+19.2	-0.06	5.16	1.9	A2	022	+ 8	41 And	
1369	05 15.3	+3.02	+0.010	-10 03 09	+19.3	+0.02	5.87	3.0	dF3	027	+22	30 Cet	
1370	05 15.9	+3.22	+0.006	+20 28 26	+19.1	-0.09	5.63	1.4	A2	014	- 2	79 ψ^2 Psc	
1372	05 20.1	+2.38	+0.010	-62 02 31	+19.2	-0.00	5.32	1.9	G5	021	- 8	ϵ Tuc	
1376	05 28.6	+3.68	+0.001	+57 59 50	+19.2	-0.00	5.70	-0.1	B8	007	- 4		
1378	05 30.9	+2.74	+0.003	-41 45 15	+19.2	+0.00	5.15	0.5	A3	012	+ 9	ν Phe	d
1383	05 47.5	+3.09	-0.018	+05 23 09	+19.0	-0.18	5.67	2.3	gA8s	021	+ 7	80 ϵ Psc	
1384	06 04.4	+3.02	+0.014	-10 26 48	+19.1	-0.13	3.60	1.0	gK1	030	+12	31 η Cet	
1387	06 17.2	+2.52	+0.002	-55 30 46	+19.2	+0.03	4.13	-1.1	B7	009	+18v	ζ Phe	dsv
1394	06 35.3	+3.48	+0.001	+46 58 33	+19.2	-0.01	4.28	-1.5	B8e	007	- 0v?	42 φ And	ds
1400	06 55.5	+3.36	+0.014	+35 21 22	+19.1	-0.11	2.37	0.4	gM0	040	+ 0	43 β And	d
1404	07 08.5	+3.21	-0.001	+19 23 32	+19.2	+0.01	5.60	1.2	gF5	013	- 8	81 ψ^2 Psc	
1406	07 14.6	+4.06	+0.007	+68 30 48	+19.2	-0.02	5.34	1.2	A0	015	+ 1	31 Cas	
1410	07 27.8	+3.41	-0.012	+41 48 58	+19.1	-0.04	5.74	3.2	dF7	031	-11	44 And	
1415	07 36.3	+3.26	-0.000	+25 11 37	+19.1	-0.11	6.06		gK5		+ 4		
1420	07 52.3	+5.19	+0.034	+79 24 31	+19.2	+0.00	5.68	0.9	A0	011	+18		
1422	07 59.0	+3.09	-0.000	+02 10 48	+19.2	-0.01	6.20	0.1	gK4	006	- 3	33 Cet	
1424	08 02.6	+3.66	+0.026	+54 53 04	+19.1	-0.02	4.52	0.1	A5	013	+ 9	33 θ Cas	
1426	08 10.3	+3.88	+0.006	+63 56 15	+19.2	-0.01	5.46	0.2	B9	009	-10		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
1431	01 ^h 08 ^m 20 ^s .9	+3.31	-0.001	+31°09'33"	+19.1	-0.01	5.04	1.8	A5	023	+ 2v?	82 g Psc	
1432	08 21.2	+3.37	-0.001	+37 27 31	+19.2	-0.01	5.75	-0.7	B8	005	.	45 And	
1434	08 24.6	+3.91	+0.004	+64 45 13	+19.1	-0.01	5.8	0.7	B8n	009	- 2	32 RU Cas	
1437	08 45.6	+3.23	+0.002	+20 46 09	+19.1	-0.01	4.89	0.5	gG9	013	+16	84 γ Psc	
1441	08 54.0	+3.31	+0.005	+29 49 29	+19.1	-0.04	4.70	1.2	sgK1	020	+30v	83 τ Psc	
1444	09 10.8	+3.05	-0.004	-02 30 58	+19.1	-0.02	6.21	0.1	gK4	006	- 9	34 Cet	
1465	10 27.3	+2.76	+0.007	-38 07 16	+19.1	-0.03	5.91		A5		.		
1474	11 01.7	+3.26	+0.001	+24 19 10	+19.1	-0.03	4.64	-0.1	gG7	011	+ 6v	85 ϕ Psc	ds
1476	11 06.9	+3.13	+0.009	+07 18 41	+19.0	-0.05	5.57	2.1	A5+F	020	+ 9v	86 ζ Psc	ds
1482	11 28.0	+3.19	-0.002	+15 52 10	+19.1	-0.02	5.85	-0.3	A2sp	006	-16	87 Psc	
1491	11 52.8	+3.02	+0.008	-08 11 28	+19.3	+0.28	5.21	3.5	dF2	046	+22	37 Cet	d
1496	12 06.1	+3.12	-0.001	+06 43 52	+19.0	-0.02	6.21	0.4	gG6	007	- 9	88 Psc	
1501	12 15.9	+3.06	-0.001	-01 14 27	+19.3	+0.21	5.82	3.1	dF3	028	+25	38 Cet	
1510	12 55.9	+2.71	+0.063	-45 47 53	+19.2	+0.18	4.88	4.4	dG0	079	+12	ν Phe	
1534	14 03.8	+3.05	-0.007	-02 45 47	+18.9	-0.06	5.54	1.3	gG5	014	-20	39 Cet	
1536	14 04.6	+2.03	+0.075	-69 08 29	+19.1	+0.11	5.10	3.5	F2n	047	+ 9	$\alpha^{1,2}$ Tuc	d
1566	15 13.0	+3.10	-0.004	+03 21 06	+19.0	-0.02	5.28	1.0	A1n	014	+ 5v	89 f Psc	
1579	15 57.7	+4.44	+0.000	+72 20 56	+18.9	-0.02	var		S4e		-32	S Cas	
1591	16 42.7	+3.30	+0.002	+27 00 07	+18.9	-0.01	4.67	0.9	A2	018	+ 8v	90 ν Psc	
1594	16 55.1	+3.78	-0.000	+57 58 10	+18.9	+0.00	5.25	-7.0	cF0p	0012	-24v	34 ϕ Cas	
1600	17 14.8	+3.07	+0.001	-00 46 15	+18.9	-0.01	6.01	1.0	gG3	010	+14	42 Cet	d
1630	18 21.1	+3.32	+0.002	+28 28 39	+18.8	-0.07	5.60	0.4	gK5	009	-36	91 l Psc	
1642	19 17.8	+5.29	-0.002	+78 27 54	+18.9	+0.00	6.10	0.6	cA2	008	-75		
1647	19 23.1	+3.53	+0.003	+45 16 03	+18.9	+0.01	4.99	1.5	gG9	020	-12v?	46 ξ And	
1681	20 48.4	+3.43	+0.016	+37 27 17	+18.8	-0.02	5.53	1.5	A3	016	+13v	47 And	s
1687	21 11.4	+2.79	-0.001	-31 12 20	+18.8	-0.04	5.82		K5		.		
1695	21 31.4	+3.00	-0.005	-08 26 27	+18.6	-0.22	3.83	1.1	sgK0	029	+17	45 θ Cet	
1697	21 49.6	+3.02	+0.002	-07 10 30	+18.8	+0.01	5.98		dF2		+29		d
1707	22 22.3	+4.24	+0.014	+67 52 12	+18.8	+0.03	4.96	0.5	gG8	013	-12	36 ψ Cas	d
1711	22 28.1	+2.65	+0.001	-41 45 08	+18.7	-0.03	5.33	-0.1	G8	008	+73		
1715	22 31.5	+3.93	+0.040	+59 58 34	+18.7	-0.05	2.80	1.0	A5n	043	+ 7v	37 δ Cas	E?
1722	22 51.4	+3.28	+0.001	+23 15 06	+18.7	-0.04	6.07	3.0	dF4	024	-16v		s
1725	23 09.6	+2.95	+0.002	-14 51 30	+18.7	-0.01	5.19	0.0	gK3	009	-23	46 Cet	
1729	23 21.6	+3.53	+0.009	+43 11 57	+18.7	-0.06	6.08		dF6		+31		
1730	23 21.6	+2.07	+0.002	-64 37 45	+18.7	-0.02	5.82		K5		.		
1733	23 33.2	+3.23	-0.002	+18 54 46	+18.7	+0.01	5.32	3.1	dF1	036	- 8	93 ρ Psc	
1740	23 59.3	+3.24	+0.003	+18 58 55	+18.7	-0.06	5.63	0.6	gK1	010	-42	94 Psc	
1747	24 23.5	+2.96	+0.001	-13 18 57	+18.7	+0.01	5.68	3.0	dF1	029	+10	47 Cet	
1752	24 39.1	+3.59	+0.032	+45 08 57	+18.6	-0.10	4.96	2.2	dF2	028	+11	48 ω And	d
1753	24 40.0	+2.76	-0.002	-32 48 07	+18.7	-0.03	var		N3p		- 8v	R Scl	
1769	25 17.0	+2.99	+0.012	-11 09 38	+18.7	+0.02	6.25		K0		.		d
1787	26 11.7	+2.60	-0.003	-43 34 26	+18.4	-0.21	3.40	-5.0	M1	0023	+26v	γ Phe	s
1806	27 05.5	+3.60	+0.000	+46 45 00	+18.6	-0.04	5.33	0.7	gK0	012	-11	49 A And	
1807	27 10.6	+3.24	+0.004	+18 05 52	+18.6	-0.00	5.96	1.4	A3	012	+ 4	97 Psc	
1808	27 12.2	+2.88	+0.004	-21 53 15	+18.6	+0.01	5.13	2.0	A0	024	- 8	48 Cet	
1811	27 21.0	+4.20	+0.014	+65 50 26	+18.6	-0.01	6.16	0.4	A2	007	+ 9v		s
1817	27 28.4	+4.47	+0.027	+70 00 30	+18.5	-0.07	5.95	3.8	dF6	037	+ 1v	38 Cas	s
1819	27 33.7	+3.14	+0.020	+05 53 12	+18.6	-0.04	5.12	0.8	gK4	014	+35	98 μ Psc	
1828	28 01.5	+2.83	+0.003	-26 27 56	+18.6	+0.00	6.00	0.2	gK4	007	- 1		d
1839	28 48.2	+3.21	+0.002	+15 05 19	+18.6	-0.01	3.72	-2.0	gG3	008	+15	99 η Psc	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
1847	01 ^b 29 ^m 10 ^s 3	+2 ^s 50	+0 ^s 13	-49°19'55"	+18 ^s 7	+0 ^s 16	3.96	1.1	G4	027	-7	δ Phe	
1855	29 24.6	+2.77	0.000	-30 32 21	+18.5	-0.06	5.77	0.0	K0	007	.		
1870	30 10.0	+3.90	+0.001	+58 04 16	+18.5	+0.01	6.05	-1.6	cK1+A0	003	-1		
1879	30 38.7	+3.92	-0.005	+58 58 35	+18.5	-0.02	4.88	0.9	gG6	016	+6	39 χ Cas	
1881	30 41.9	+2.68	-0.000	-37 07 17	+18.5	-0.02	5.49	0.0	G8	008	+13		
1888	31 11.8	+3.02	+0.012	-07 16 49	+18.4	-0.08	5.88		dG2		-15		
1892	31 22.8	+3.46	+0.001	+36 58 54	+18.5	-0.01	5.77	0.3	B9	008	-4		
1900	32 06.4	+3.25	+0.002	+18 12 21	+18.4	-0.07	6.05	0.3	gM2	007	-26		
1903	32 11.2	+2.93	+0.006	-15 55 55	+18.5	+0.01	5.64		A2		.	49 Cet	
1918	32 33.9	+2.74	-0.006	-32 08 50	+18.4	-0.03	6.18		G5		.		
1929	33 05.7	+3.21	+0.000	+14 24 23	+18.4	-0.01	6.20	0.1	B9n	006	-16	101 Psc	
1931	33 12.1	+3.25	+0.010	+17 10 42	+18.4	+0.01	5.88	1.8	A5n	015	+3		
1934	33 17.9	+0.40	-0.008	-78 45 31	+18.3	-0.13	6.06		G5		.		
1937	33 22.6	+2.25	+0.035	-58 23 39	+18.4	-0.03	6.12	0.3	F2	007	.		
1938	33 23.0	+3.67	-0.002	+48 28 06	+18.4	-0.02	6.17	0.1	gK1	006	-43		
1941	33 32.6	+2.93	+0.001	-15 39 19	+18.4	+0.02	5.48	0.5	gK1	010	+24	50 Cet	
1947	33 49.8	+2.77	+0.007	-30 09 46	+18.4	+0.04	5.68	2.6	F0	024	+5	τ Scl	d
1948	33 51.1	+3.52	-0.016	+41 09 22	+18.0	-0.38	4.18	3.2	dG0	063	-28	50 ν And	
1954	34 26.6	+3.18	-0.005	+11 53 11	+18.4	+0.04	5.63	2.1	dA5n	020	-1	102 π Psc	
1955	34 28.5	+4.80	-0.002	+72 47 10	+18.4	-0.01	5.50	0.5	gG5	010	-4	40 Cas	
1965	34 50.3	+3.92	-0.001	+57 43 25	+18.3	-0.01	5.74	-0.4	gG9	006	-8		
1966	34 54.6	+3.68	+0.006	+48 22 33	+18.2	-0.11	3.77	0.2	gK2	019	+16	51 And	
1967	34 54.9	+2.20	+0.002	-58 31 32	+18.4	+0.01	6.10		Ma		.		
1979	35 51.2	+2.23	+0.011	-57 29 25	+18.3	-0.03	0.60	-1.3	B9n	042	+19	α Eri	
1989	36 14.2	+2.66	-0.002	-36 46 49	+18.2	-0.12	5.96		G5		.		
1991	36 20.4	+3.60	-0.002	+44 07 57	+18.3	+0.01	5.17	0.4	gG5	011	+7v	52 χ And	
1995	36 28.4	+2.87	+0.008	-21 31 46	+18.3	+0.04	5.68	1.4	A4n	014	+18		
2007	36 58.6	+3.24	+0.005	+16 09 10	+18.3	-0.01	6.11	0.6	gK2	008	+18	105 Psc	
2025	37 37.1	+3.54	+0.001	+40 19 29	+18.2	-0.02	4.90	-0.6	B8	008	-14v	53 τ And	s
2026	37 39.2	+3.60	+0.012	+43 02 44	+18.2	-0.03	5.54	1.8	sgA9n	018	+17		
2030	37 54.0	+2.27	+0.033	-56 26 53	+18.3	+0.02	5.25	6.7	dK2	155	+23	p Eri	d
2045	38 36.4	+4.45	+0.010	+67 47 28	+18.2	-0.00	5.54	0.7	A0p	011	+5	43 Cas	
2050	38 43.8	+3.66	+0.073	+42 21 48	+18.1	-0.15	5.10	4.8	dG0	086	+4		
2054	38 49.2	+3.39	-0.001	+29 47 42	+18.2	-0.00	6.02	0.8	gG6	009	+5		
2055	38 49.6	+3.12	-0.002	+05 14 07	+18.2	+0.01	4.68	1.2	gK4	020	+0	106 ν Psc	
2058	38 57.6	+3.98	+0.002	+58 22 33	+18.2	-0.01	6.21		B9		.		d
2059	39 00.9	+4.66	+0.016	+70 22 16	+18.2	-0.01	5.26	0.5	A0	011	+6v	42 Cas	
2063	39 09.0	-1.57	+0.071	-83 13 47	+18.3	+0.13	5.88		G0		.		
2064	39 09.6	+3.47	+0.004	+34 59 39	+18.2	-0.03	5.45	0.2	B9s	009	-2		
2067	39 15.7	+2.63	+0.004	-38 23 09	+18.2	+0.06	6.10		F2		.		
2069	39 16.6	+2.96	+0.003	-11 34 15	+17.8	-0.41	5.84	2.6	dF2	023	-10		d
2080	39 46.6	+3.26	-0.021	+20 01 34	+17.5	-0.67	5.32	6.0	dG9	132	-34	107 Psc	
2082	39 50.7	+2.64	-0.004	-37 05 03	+18.1	-0.02	5.64		A0		+20		
2085	39 53.2	+2.71	-0.005	-32 34 42	+18.2	-0.02	5.28	0.8	G8	013	+10v?	π Scl	
2086	39 55.4	+4.06	+0.001	+60 18 00	+18.2	-0.02	5.75	-0.3	B9	006	-37v	44 Cas	ds
2091	40 05.3	+2.05	+0.001	-61 02 27	+18.1	-0.04	5.58		K0		+2		
2092	40 05.7	-3.39	+0.029	-85 01 23	+18.2	+0.02	5.63		K0		+18		
2093	40 11.7	+3.03	-0.000	-03 56 29	+18.1	-0.03	5.27	0.0	gK3	009	-34		
2102	40 30.8	+3.76	+0.002	+50 26 16	+18.1	-0.01	var	var	B1ep	006	+4v	φ Per	s
2104	40 33.8	+2.31	+0.019	-53 59 27	+18.1	-0.09	5.56		G0		+13	q ¹ Eri	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N		
2109	01 ^b 40 ^m 58 ^s 7	+3 ⁹ 7	+0 ⁰ 005	+57°17'09"	+18"1	-0"04	6.14	0.9	A2	009	+ 5	τ^1 Hyi	d		
2111	41 17.6	+0.04	+0.022	-79 24 01	+18.1	+0.02	6.24		K0		.				
2116	41 27.6	+3.95	+0.002	+56 50 18	+18.1	0.00	6.18	1.2	A0	010	+ 5				
2123	41 44.7	+2.79	-0.119	-16 12 00	+19.0	+0.86	3.65	6.0	dG4	297	-16			52 τ Cet	
2131	42 11.6	+3.28	-0.003	+19 50 03	+18.0	-0.11	6.23	4.7	dG4	050	-44			109 Psc	
2139	42 45.0	+3.17	+0.005	+08 54 25	+18.1	+0.05	4.50	0.6	gG6	017	+14	110 σ Psc	d		
2145	43 18.3	+2.81	+0.012	-25 18 06	+18.0	-0.05	5.39	3.0	dF1	033	+14	ϵ Scl			
2148	43 28.5	+3.01	-0.001	-05 58 58	+18.0	-0.03	5.53	0.0	gK4	008	+11				
2161	44 06.4	+4.34	+0.088	+63 36 24	+17.8	-0.25	5.74	5.6	dK0	111	+ 2				
2163	44 08.3	+2.35	+0.003	-51 03 57	+18.0	-0.02	5.46	2.5	M5	026	- 2				
2165	44 12.0	+2.29	+0.014	-53 46 21	+18.1	+0.07	5.14	1.4	A0	018	+10	q^2 Eri			
2182	45 09.7	+2.54	+0.001	-42 00 35	+18.0	+0.04	6.10		K2		.				
2188	45 27.9	+3.25	+0.004	+16 42 26	+17.9	-0.03	5.73	0.5	A0	009	+10v	4 Ari	s		
2193	45 41.3	+3.54	+0.009	+37 42 17	+17.9	-0.03	6.05	0.6	gG7	008	+36				
2195	45 49.2	+3.44	-0.014	+32 26 16	+18.2	+0.30	5.82	3.7	dF6	038	-26				
2196	45 50.4	+3.11	-0.000	+03 26 12	+18.0	+0.02	6.00		gG6		+ 3				
2200	46 08.6	+3.73	-0.001	+47 38 56	+17.9	-0.00	5.99	0.0	A2	009	- 2		ds		
2212	47 07.6	+2.95	-0.010	-10 55 59	+17.8	-0.08	4.77	2.9	dF1	042	- 1	53 χ Cet			
2216	47 22.4	+3.32	-0.001	+22 01 40	+17.9	-0.01	5.89	1.1	A2	011	+ 1	1 Ari	d		
2222	47 44.1	+3.84	+0.004	+51 41 16	+17.8	-0.12	5.90	3.4	dF3	031	-17				
2228	48 11.9	-0.55	-0.025	-80 25 26	+17.8	-0.06	6.06		F0		.	τ^2 Hyi			
2229	48 12.5	+3.18	-0.005	+10 47 48	+17.8	-0.02	5.94	2.7	dF2	023	+11	54 Cet			
2234	48 19.8	+2.41	+0.011	-48 03 52	+17.9	+0.05	6.18		K0		.				
2241	48 41.3	+3.94	+0.002	+54 54 03	+17.8	-0.01	5.49	-1.5	B3	004	- 3v	1 Per			
2243	48 48.5	+39.3	+0.181	+89 01 44	+17.8	-0.00	2.12	-3.7	cF8v	007	-17v	1 α UMi	vsd		
2246	48 57.7	+3.82	+0.002	+50 32 48	+17.8	-0.02	5.64	0.2	B9	008	.	2 Per			
2247	48 58.0	+2.33	-0.006	-50 27 12	+17.8	-0.01	6.05	2.2	A0	017	.				
2249	48 59.4	+2.96	+0.002	-10 34 53	+17.8	-0.04	3.92	0.6	gK0	022	+ 9v	55 ζ Cet	s		
2265	49 38.1	+3.84	-0.001	+51 13 43	+17.8	-0.01	6.18	0.9	A0	009	+ 6				
2272	50 13.4	+3.42	+0.001	+29 20 10	+17.5	-0.23	3.58	1.8	dF2	051	-13v	2 α Tri	s		
2274	50 16.8	+3.60	-0.000	+40 29 02	+17.8	-0.00	5.63	-0.5	gK1	006	- 7	55 And			
2283	50 27.8	+2.88	+0.003	-17 10 28	+17.7	-0.04	5.72		A3		.				
2289	50 46.4	+4.32	+0.005	+63 25 30	+17.7	-0.02	3.44	-2.3	B3s	007	- 8	45 ϵ Cas			
2290	50 46.9	+3.29	+0.005	+19 03 06	+17.6	-0.11	4.83	1.5	A0p	022	- 1	5 γ^1 Ari	} d		
2291	50 46.9	+3.29	+0.006	+19 02 58	+17.6	-0.10	4.75	1.1	A0p	019	+ 4	5 γ^2 Ari			
2293	50 57.8	+3.11	+0.001	+02 56 29	+17.8	+0.03	4.84	-0.2	gG7	010	+30v	111 ξ Psc			
2297	51 14.0	+2.58	+0.011	-38 50 27	+17.8	+0.03	6.10		K0		.				
2303	51 38.5	+2.40	-0.009	-46 32 49	+17.6	-0.09	4.41		M6		+ 1v	ψ Phe	s		
2309	51 52.3	+3.32	+0.007	+20 33 52	+17.6	-0.11	2.72	1.8	A5	065	- 4v	6 β Ari	s		
2313	52 04.9	+4.66	+0.002	+68 26 27	+17.7	-0.01	5.03	-0.4	B8s	008	-25v	46 ω Cas	s		
2315	52 17.6	+2.49	-0.004	-42 44 30	+17.7	-0.03	5.00		B9		+12v	φ Phe			
2322	52 56.4	+3.55	+0.000	+37 02 01	+17.7	-0.00	6.06	-0.4	gM0	005	+ 6				
2323	53 03.3	+3.35	+0.001	+23 19 59	+17.6	-0.01	6.0	0.2	gG8	007	+14	7RR Ari			
2324	53 10.6	+3.57	+0.015	+37 00 26	+17.7	+0.01	5.82	1.0	gG8	011	+58	56 And	d		
2326	53 18.5	+3.10	+0.010	+01 36 10	+17.8	+0.19	6.18	3.4	dG0	028	+30v		ds		
2331	53 39.9	+1.52	+0.012	-67 53 34	+17.7	+0.08	4.72	1.8	G5	026	-16	η^2 Hyi			
2339	54 00.8	+2.33	+0.073	-51 51 26	+17.9	+0.29	3.73	2.4	sgG4	055	- 6	χ Eri	d		
2341	54 10.5	+1.92	-0.000	-61 06 22	+17.7	+0.06	6.22		F0		.				
2343	54 19.7	+2.81	+0.004	-22 46 13	+17.6	-0.02	5.18	-0.6	gK4	007	+27	56 Cet			
2347	54 36.8	+3.28	+0.002	+17 34 27	+17.6	-0.02	5.16	-0.6	gG7	007	- 5v	8 ι Ari	s		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
2357	01 ^h 54 ^m 52 ^s .9	+3.41	+0.002	+27°33'43"	+17.5	-0.06	6.02		gM2		- 2		
2362	54 59.2	+4.26	+0.002	+61 27 18	+17.6	-0.00	6.05	-0.1	B8	006	.		
2365	55 05.7	+2.29	+0.038	-52 00 48	+17.8	+0.25	6.07	4.1	F8	041	.		
2366	55 08.2	+3.34	-0.007	+23 21 11	+17.6	-0.01	4.83	2.0	dA6+G	027	- 1	9 λ Ari	d
2369	55 11.1	+2.38	+0.009	-47 37 44	+17.6	+0.02	4.74	2.5	G4	036	+12		
2372	55 22.1	+3.81	+0.001	+48 57 39	+17.6	+0.04	5.78	1.2	gG7	012	- 0	3 Per	
2377	55 53.8	-0.10	+0.034	-78 35 35	+17.6	+0.05	6.22		F2		.	σ Hyi	
2379	55 55.1	+4.43	+0.005	+64 22 46	+17.5	-0.01	5.18	1.2	A0	016	+ 5		d
2395	56 45.0	+3.21	+0.000	+12 03 11	+17.5	-0.03	6.14	1.3	A2	011	-12		
2398	56 48.8	+3.33	+0.010	+20 48 59	+17.5	-0.02	6.06		K0		- 2		
2405	57 11.7	+1.89	+0.037	-61 48 45	+17.5	+0.03	3.02	2.5	A7n	080	+ 7v?	α Hyi	
2411	57 25.0	+2.82	+0.000	-21 04 00	+17.5	+0.02	5.67	-0.1	gM1	007	-15	57 Cet	
2416	57 32.9	+3.12	+0.015	+02 51 32	+17.2	-0.24	5.84	2.9	dG1	037	-17	112 Psc	
2418	57 35.2	+2.47	-0.006	-42 16 16	+17.4	-0.10	5.42	0.6	K3	011	+27		
2419	57 38.9	+2.83	+0.009	-21 19 10	+17.4	-0.02	4.18	-0.1	gM1	014	+18	59 ν Cet	
2424	57 48.5	+4.93	-0.013	+70 39 57	+17.5	+0.01	4.61	1.7	A6s	026	- 5	48 A Cas	d
2426	57 57.8	+2.98	+0.006	-08 45 54	+17.4	-0.00	5.72	-0.4	gM5	006	+ 6		
2433	58 22.2	+1.57	+0.003	-66 18 30	+17.4	+0.01	6.14		K2		.		
2438	58 41.8	+5.32	-0.006	+73 36 36	+17.4	0.00	6.24	1.0	A3	009	- 5		d
2442	58 57.3	+4.00	+0.004	+54 14 49	+17.4	+0.00	4.99	-0.2	B8	009	- 2v	4 g Per	
2443	59 00.8	+2.68	-0.008	-30 14 29	+17.3	-0.11	5.39	0.8	G1	012	+24	π For	
2445	59 07.2	+5.13	-0.009	+72 10 51	+17.4	+0.03	4.06	1.0	A1n	025	-14v	50 Cas	
2446	59 07.5	+4.47	0.000	+64 39 40	+17.4	-0.01	5.92	0.9	A2	010	-25v	52 Cas	s
2451	59 16.6	+4.45	+0.001	+64 08 59	+17.4	+0.00	5.62	-5.6	cB8p	0011	-20	53 Cas	
2452	59 27.4	+3.10	+0.002	+02 31 23	+17.4	+0.00	3.94	0.9	A2np	025	+ 8v	113 α Psc	dss
2455	59 42.1	+2.40	-0.003	-44 57 13	+17.3	-0.04	4.96		M0		-31	χ Phe	
2458	02 00 02.2	+3.51	-0.001	+33 02 38	+17.3	-0.01	5.44	0.8	A2n	012	+ 3v?	3 ϵ Tri	d
2459	00 02.3	+6.02	+0.037	+77 02 33	+17.3	-0.05	5.36	-6.6	A2n	0007	-26v?	47 Cas	
2471	00 34.0	+2.89	+0.001	-15 32 46	+17.3	+0.01	5.91		gG5		+ 6		
2474	00 37.6	+3.08	+0.005	-00 06 42	+17.4	+0.02	5.56	1.6	A5	016	.	60 Cet	
2475	00 40.8	+5.74	-0.005	+75 52 35	+17.3	-0.02	5.30	1.0	gG5	014	0v?	49 Cas	d
2476	00 48.7	+3.41	+0.010	+25 41 44	+17.3	+0.02	5.68	2.8	dF4	027	+16v	10 Ari	d
2477	00 49.2	+3.68	+0.004	+42 05 27	+17.3	-0.05	2.28	-1.2	gK2	020	-12	57 γ ¹ And	d
2479	00 50.0	+3.68	+0.003	+42 05 31	+17.3	-0.05	5.08	1.6	A0	020	-14	57 γ ² And	ds
2485	01 09.3	+3.02	+0.001	-04 20 32	+17.2	-0.06	5.92		cK5		+24		
2488	01 14.4	+3.07	+0.005	-00 34 45	+17.3	-0.04	6.01	0.8	gG5	009	+24	61 Cet	d
2506	02 15.0	+2.69	+0.000	-29 32 10	+17.3	+0.01	4.74	-1.0	A0p	007	+18	ν For	
2517	03 07.1	+7.41	-0.014	+81 03 31	+17.2	+0.01	5.99	1.0	A0	010	-13		
2527	03 45.7	+3.36	+0.001	+22 24 39	+17.2	-0.03	5.08	1.2	A0	017	+11v	12 κ Ari	s
2534	03 58.8	+3.40	+0.001	+25 28 02	+17.2	-0.01	6.00	0.2	B8	007	- 9	11 Ari	d
2538	04 20.9	+3.38	+0.014	+23 13 37	+17.0	-0.15	2.23	0.7	gK2	042	-14	13 α Ari	
2549	05 09.9	+4.19	-0.001	+58 11 13	+17.1	+0.01	5.90	1.1	cA1ep	011	-36		
2552	05 27.7	+3.62	+0.013	+37 37 23	+17.1	-0.04	4.77	1.6	A2	023	+ 8v	58 And	
2572	06 33.6	+3.57	+0.012	+34 45 06	+17.0	-0.04	3.08	-0.6	dA5	018	+10v	4 β Tri	s
2573	06 34.2	+3.42	+0.006	+25 42 15	+17.0	-0.04	5.07	2.1	gA5n	025	+ 1	14 Ari	
2587	07 09.5	+2.39	-0.005	-43 45 07	+17.0	-0.05	5.78	0.8	K0	010			
2600	07 50.2	+3.64	-0.001	+38 48 16	+17.0	-0.02	6.05	0.6	A0n	008	+ 1	59 And	d
2601	07 51.0	+3.33	+0.006	+19 15 56	+17.0	-0.02	5.92	-0.2	gM3	006	+61	15 Ari	
2609	08 21.0	+3.41	-0.001	+25 42 07	+17.0	-0.01	6.18	0.4	gK4	007	-19	16 Ari	
2613	08 29.2	+3.51	+0.003	+31 17 30	+17.0	-0.01	6.20	1.8	A0	013	+11v	5 Tri	s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
2618	02 ^h 08 ^m 41 ^s .7	+5 ^s 53	+0 ^s 013	+73°47'39"	+16 ⁹	-0 ⁰³	6.19	0.7	gG6	008	-37		
2619	08 42.5	+3.17	-0.010	+08 20 12	+16.9	-0.11	5.74	3.3	dF8	032	-18	64 Cet	
2623	08 55.0	+2.94	-0.002	-10 17 04	+16.8	-0.17	6.09		dF2		+11		
2624	09 03.3	+3.05	-0.000	-02 03 35	+16.9	-0.03	6.04	0.8	gG9	009	+32	63 Cet	
2633	09 27.8	+3.48	-0.005	+30 04 11	+16.9	-0.06	5.20	0.2	gG4	010	-19v	6 ι Tri	dss
2638	09 47.5	+3.39	+0.003	+23 56 02	+16.9	-0.01	6.19		K2		-1		
2643	09 59.8	+3.36	+0.011	+20 58 37	+16.9	+0.00	5.35	3.2	dF4	038	+6	17 η Ari	
2645	10 04.5	+3.76	-0.002	+43 59 54	+16.9	-0.01	5.08	-0.7	gK3	007	-46v	60 b And	
2652	10 14.1	+3.06	+0.025	-02 37 35	+16.8	-0.06	5.72	3.9	dF9+G4	044	-3	66 Cet	d
2653	10 15.9	+3.99	+0.036	+50 50 05	+16.7	-0.17	5.40	0.4	gG6	010	+27v	6 Per	s
2655	10 19.4	+3.27	+0.007	+15 02 47	+16.9	-0.02	5.99	-0.1	gM1	006	+23	19 Ari	s
2656	10 20.8	+3.18	-0.002	+08 36 47	+16.9	-0.00	4.54	0.1	gG4	013	-4v	65 ξ^1 Cet	
2661	10 31.8	+4.71	-0.001	+66 17 29	+16.9	+0.00	6.15	3.1	dF2+A2	025	-12	55 Cas	
2662	10 41.0	+2.80	+0.004	-21 14 04	+16.9	+0.04	6.02		gG6		+38		
2663	10 42.4	+2.64	+0.001	-30 57 27	+16.9	+0.01	5.24	4.2	A0n	061	+17	μ For	
2668	10 49.5	+3.85	-0.006	+47 15 06	+16.8	-0.06	6.03	3.0	dF2	025	-8		d
2697	12 30.5	+2.43	-0.002	-41 23 57	+16.8	-0.03	5.86	0.1	K0	007	.		
2706	12 52.2	+3.40	-0.007	+24 48 45	+16.7	-0.08	5.64	3.4	dF4	036	-44	21 Ari	
2707	12 53.9	+3.44	+0.013	+25 33 07	+16.7	-0.06	5.84	3.4	dF3	033	+26	20 Ari	
2710	12 58.3	+3.55	-0.001	+33 07 39	+16.7	-0.04	5.26	0.8	A0n	013	-1	7 Tri	
2715	13 11.6	+1.26	+0.006	-68 04 29	+16.8	+0.04	5.44	0.0	M3	008	+26	π^1 Hyi	
2733	13 59.6	+3.66	+0.093	+33 59 48	+16.5	-0.24	5.07	4.6	dG0	096	-6v	8 δ Tri	s
2742	14 20.0	+3.57	+0.004	+33 37 01	+16.6	-0.05	4.07	1.5	A0	030	+14v?	9 γ Tri	
2745	14 25.7	+1.25	+0.006	-67 58 40	+16.7	-0.01	5.52		K3		+17	π^2 Hyi	
2746	14 26.4	+4.25	+0.008	+57 40 09	+16.7	+0.01	6.09	0.4	gK3	007	+3	8 Per	
2748	14 29.3	+2.99	+0.006	-06 39 06	+16.6	-0.10	5.70	0.7	gG8	010	+7	67 Cet	
2752	14 32.4	+4.22	-0.002	+57 17 10	+16.7	+0.01	6.15	0.4	gG6	007	-11	7 χ Per	d
2756	14 43.4	+2.14	+0.009	-51 44 35	+16.7	-0.02	3.78	0.1	B8	018	+10	φ Eri	
2767	15 20.3	+3.34	-0.001	+19 40 15	+16.6	0.00	5.69	0.9	A0n	011	+6	22 θ Ari	s
2770	15 25.4	+3.12	+0.025	+01 31 21	+17.0	+0.38	5.82	3.5	dF8	035	+26v		s
2777	15 57.6	+3.85	-0.002	+46 14 34	+16.6	-0.01	6.12	1.7	A3	013	-14		
2779	16 02.5	+3.87	-0.006	+47 09 02	+16.6	-0.01	5.12	0.5	A1n	012	-30v	62 c And	
2781	16 02.7	+3.48	+0.001	+28 24 46	+16.6	-0.00	5.28	1.3	A3s	016	+3	10 Tri	
2796	16 49.0	+3.03	-0.001	-03 12 13	+16.3	-0.23	var	var	gM6e	004	+64v	68 o Cet	d
2805	17 26.5	+3.88	+0.000	+47 04 56	+16.5	-0.01	6.08	-0.9	B7	004	+2		
2813	17 38.7	+3.97	+0.003	+49 55 24	+16.5	-0.03	5.56	0.8	A0p	011	-2	63 And	
2821	18 17.0	+1.94	+0.002	-56 10 26	+16.5	+0.02	5.56		K5		+49		d
2836	18 51.2	+4.19	0.000	+55 37 05	+16.5	+0.00	5.22	-6.8	cA2p	0006	-15	9 i Per	
2846	19 22.7	+3.07	-0.001	+00 10 06	+16.4	-0.00	5.56	-0.9	gM2	005	+23	69 Cet	
2849	19 34.6	+2.93	+0.009	-11 00 14	+16.4	-0.08	5.57	1.7	gA8n	017	+12		
2850	19 39.4	+3.06	-0.002	-01 06 42	+16.4	-0.05	5.62	1.8	A5	017	+20	70 Cet	s
2851	19 42.9	+3.73	-0.008	+41 10 14	+16.3	-0.10	5.87	2.8	dF2	024	-34		
2853	19 43.6	+2.83	+0.001	-17 53 20	+16.4	-0.06	5.99	0.2	K0	007	.		
2862	20 15.2	+2.75	+0.015	-24 02 34	+16.3	-0.06	5.37	4.6	dG1	069	+18	κ For	
2872	20 51.2	+1.07	-0.009	-68 53 12	+16.4	+0.01	4.26	2.5	A2	045	+11	δ Hyi	
2877	21 04.7	+3.99	+0.002	+49 46 52	+16.3	-0.04	5.49	-0.3	gG5	007	-13	64 And	
2878	21 09.0	+2.11	+0.001	-51 19 11	+16.4	+0.06	6.01		A3		.		
2885	21 43.1	+4.24	-0.000	+56 23 04	+16.3	+0.01	6.24	-6.9	cB1e	0005	-46	10 Per	
2901	22 08.0	+3.22	+0.001	+10 23 07	+16.3	-0.01	5.53	-0.6	B8	006	+4v	24 ξ Ari	
2902	22 16.5	+4.00	+0.002	+50 03 13	+16.3	-0.01	4.86	0.1	gK5	011	-4	65 And	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
2912	02 ^b 22 ^m 33 ^s .1	+2 ^s 41	+0 ^s 019	-41°04'03"	+16"4	+0"11	6.20		G0		.		
2913	22 33.3	+0.36	-0.020	-73 52 20	+16.3	+0.00	6.00		K0		.	κ Hyi	
2931	23 29.9	+1.68	-0.010	-60 32 07	+16.1	-0.14	5.47	1.9	F1n	019	+27	λ Hor	
2932	23 32.0	+2.90	-0.001	-12 30 54	+16.2	-0.00	4.90	1.3	B9n	019	+10v?	72 ρ Cet	
2933	23 37.6	+2.85	-0.004	-15 33 54	+16.2	-0.04	5.84	2.1	A4s	018	-8		d
2940	24 13.4	+3.47	-0.004	+26 47 22	+16.1	-0.06	6.18		K6		-48		
2941	24 15.7	+2.79	+0.005	-20 16 06	+16.3	+0.10	6.05		gK2		+42		
2943	24 29.6	+3.56	-0.002	+31 34 40	+16.2	-0.03	5.80	0.6	gK1	009	-39	11 Tri	
2952	24 54.9	+4.95	-0.002	+67 10 45	+16.2	+0.02	4.57	0.9	cA5sp	018	+1v	ι Cas	vds
2954	25 09.1	+2.20	+0.002	-47 55 39	+16.1	-0.01	4.44	-1.7	B5	006	+29v	κ Eri	
2956	25 13.6	+3.52	-0.001	+29 26 50	+16.1	-0.08	5.38	1.3	gA7n	015	-25	12 Tri	
2960	25 29.8	+3.19	+0.003	+08 14 13	+16.1	-0.00	4.34	0.6	A0	018	+11v	73 ξ^2 Cet	
2964	25 52.0	+3.52	-0.005	+29 42 29	+16.2	+0.08	5.90	3.9	dG0	040	+40	13 Tri	
2967	25 54.7	+2.54	+0.001	-34 02 03	+16.1	+0.01	5.16	0.4	A2	011	+16	φ For	
2974	26 22.2	+3.42	+0.006	+23 14 48	+16.1	-0.03	6.10	2.1	gA5	016	+21		
2976	26 26.1	+2.59	-0.003	-31 19 30	+16.1	-0.02	6.14		G5		.		
2991	27 15.6	+3.61	+0.006	+33 36 47	+16.0	-0.06	6.25		K0		+7		
3001	27 39.4	+3.45	+0.005	+25 00 52	+15.9	-0.08	5.86	3.0	dF4	027	-11		d
3003	27 49.9	+3.37	+0.006	+19 38 03	+16.0	-0.04	6.14	2.3	A4n	017	+19	26 Ari	
3012	28 11.5	+3.07	-0.004	+00 02 06	+15.9	-0.07	6.03		A2		.		
3029	28 54.7	+3.10	+0.002	+02 02 48	+16.0	-0.00	5.44	0.6	sgK3	011	+26		
3032	29 02.5	+3.66	+0.004	+35 55 36	+16.0	+0.02	5.35		gK5		-36	14 Tri	
3043	29 36.6	+3.05	-0.002	-01 15 17	+15.9	-0.03	5.53		K0		.	75 Cet	
3045	29 43.0	+2.84	-0.005	-15 27 47	+15.8	-0.12	4.82	2.2	dF3	030	-29	76 σ Cet	
3048	29 50.9	+3.62	-0.005	+34 19 22	+15.9	-0.01	5.90		gK1		-2		
3055	30 09.6	+3.29	-0.001	+14 48 52	+15.9	+0.04	6.07	3.2	dF7	027	+6v	29 Ari	s
3067	31 01.9	+2.50	-0.002	-34 52 09	+15.8	-0.02	5.88	0.1	K0	007	.	λ^1 For	
3083	31 39.3	+2.63	-0.002	-28 27 04	+15.8	-0.01	4.95	0.2	B9	011	+10v	ω For	d
3091	32 14.5	+2.96	+0.004	-08 04 36	+15.7	-0.06	5.82		gK4		+25	77 Cet	
3096	32 25.0	+3.18	-0.000	+07 15 17	+15.7	-0.10	6.19	1.0	gG6	009	-25		
3100	32 33.4	+3.70	+0.000	+37 05 41	+15.8	-0.01	5.93	-0.2	gK4	006	-6		d
3102	32 40.9	-1.26	+0.046	-79 19 40	+15.7	-0.04	5.29		G4		-14	μ Hyi	
3103	32 44.3	+3.64	+0.003	+34 28 14	+15.7	-0.05	5.62	0.1	gM3	008	-9	15 Tri	
3116	33 13.8	+5.71	-0.006	+72 36 05	+15.7	+0.02	5.34	0.5	gG6	011	-2		
3117	33 14.8	+3.15	-0.002	+05 22 34	+15.7	-0.02	5.02	-0.5	gG5	008	+5	78 ν Cet	d
3121	33 20.1	+3.29	+0.121	+06 38 58	+17.2	+1.46	5.92	6.8	dK4	147	+23		
3125	33 29.4	+4.90	+0.008	+65 31 44	+15.7	-0.01	6.07		cK5		+41		
3126	33 32.2	+2.95	-0.002	-08 02 53	+15.7	-0.06	5.71		gM0		+14	80 Cet	
3130	33 43.7	+3.58	-0.003	+31 23 27	+15.7	-0.00	6.16		K0		+3		
3132	33 49.3	+3.75	+0.012	+38 31 07	+15.5	-0.19	5.94		F5		+1		
3133	33 54.0	+3.27	+0.019	+12 13 55	+15.6	-0.08	5.68	3.3	dF5	034	+7	31 Ari	
3134	33 55.9	+3.18	-0.003	+07 30 47	+15.7	-0.03	6.04	0.6	gK0	008	-25		
3136	33 59.9	+2.59	-0.001	-30 15 43	+15.7	+0.01	5.79		G5		.	ι^1 For	
3153	34 54.0	+2.49	-0.002	-34 47 27	+15.4	-0.26	5.80	4.0	dG1	044	+4	λ^2 For	
3158	35 10.5	+3.02	+0.003	-03 36 42	+15.6	-0.04	5.84		gG5		+8	81 Cet	
3166	35 45.3	+1.98	+0.009	-52 45 32	+15.6	-0.02	5.26	1.9	A5	021	-3	η Hor	
3167	35 58.3	+3.41	-0.001	+21 44 47	+15.6	-0.01	5.36	1.5	A2	017	+8v?	32 ν Ari	
3170	36 09.3	+2.59	+0.008	-30 24 31	+15.5	-0.08	5.79		F5		.	ι^2 For	
3192	36 55.0	+3.08	+0.001	+00 06 50	+15.5	+0.00	4.04	-2.9	B2s	004	+13v	82 δ Cet	v
3199	37 08.6	+2.90	+0.010	-12 05 00	+15.3	-0.23	5.01	3.6	dF5	056	+15	83 ϵ Cet	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
3210	02 ^h 37 ^m 37 ^s 3	+3.16	+0.004	+05°53'52"	+15.5	+0.00	6.25	3.2	dF2	025	+18		
3215	37 45.4	+3.51	+0.005	+26 50 51	+15.5	-0.03	5.38	-0.7	A2	006	+17v	33 Ari	ds
3216	37 46.3	+2.92	-0.010	-09 39 57	+15.4	-0.08	5.93		dF6		-4		
3217	37 53.6	+2.29	+0.009	-43 06 20	+15.4	-0.02	4.53		A2		+20	s Eri	
3235	38 40.1	+3.07	+0.014	-00 54 26	+15.3	-0.13	5.73	3.0	dF6	028	+8	84 Cet	d
3237	38 41.6	+2.37	+0.012	-40 04 07	+15.4	-0.03	4.06	1.4	G7	030	-9	t Eri	
3240	38 48.8	+0.93	+0.017	-68 28 51	+15.4	+0.01	4.26	0.4	B9	017	+6	e Hyi	
3245	39 05.0	+3.79	-0.001	+39 59 01	+15.2	-0.19	4.99	2.1	dF9	027	-22v	12 Per	s
3246	39 06.2	+1.87	+0.005	-54 45 48	+15.4	0.00	5.26	2.4	F2s	027	-1v	z Hor	s
3247	39 11.6	+2.85	-0.002	-14 45 47	+15.4	+0.05	6.05		dF5		+2		
3249	39 17.1	+3.02	-0.001	-03 25 35	+15.4	+0.01	6.11		gG9		+4		
3253	39 27.2	+4.30	+0.005	+54 53 39	+15.4	-0.02	5.66	-0.1	B8	007	.	11 Per	
3254	39 27.3	+4.23	+0.008	+53 18 51	+15.4	-0.03	6.12	0.9	gK0	009	-11		
3256	39 32.5	+3.38	+0.002	+19 47 59	+15.3	-0.04	5.72	0.9	A0	011	-7	34 μ Ari	
3263	40 07.1	+2.39	+0.001	-38 35 47	+15.4	+0.00	5.92		G5		.		
3269	40 20.4	+2.16	+0.001	-46 44 08	+15.2	-0.10	6.19		G5		.		
3270	40 25.6	+8.67	+0.007	+81 14 23	+15.3	-0.07	5.92	1.3	gG9	012	+18		
3271	40 29.6	+5.17	+0.004	+67 36 50	+15.3	-0.03	5.84	1.6	A2	014	+4v		s
3273	40 30.7	+3.52	+0.001	+27 29 44	+15.3	-0.01	4.58	-3.3	B3	003	+19	35 Ari	
3276	40 42.4	+3.11	-0.009	+03 01 34	+15.2	-0.15	3.58	1.6	A2n+F7	040	-5	86 γ Cet	d
3277	40 46.3	+4.10	+0.034	+49 01 06	+15.2	-0.09	4.22	3.7	dF5	078	+25	13 θ Per	d
3278	40 49.1	+3.91	+0.000	+44 05 09	+15.3	-0.00	5.58	-4.7	cG0	0014	-3	14 Per	
3279	40 51.3	+2.04	+0.035	-51 00 55	+15.5	+0.22	5.42	4.7	G0	074	+17	t Hor	
3300	41 44.5	+2.86	-0.000	-14 04 10	+15.2	-0.01	4.39	-0.6	B5	010	+15v	89 π Cet	
3303	41 47.3	+3.31	-0.000	+15 06 04	+15.2	-0.02	5.80	0.0	B8	007	-7	37 σ Ari	
3308	42 13.8	+3.27	+0.008	+12 14 11	+15.1	-0.08	5.16	2.1	sgA7	025	-1	38 Ari	
3309	42 14.1	+3.24	+0.019	+09 54 15	+15.2	-0.03	4.36	1.9	dF4	032	+29v?	87 μ Cet	
3310	42 14.6	+2.52	+0.001	-32 44 07	+15.2	-0.02	6.14		A0		+21v		s
3315	42 43.4	+3.15	+0.004	+04 30 08	+15.2	-0.04	6.02	3.0	gF0n	025	+20		s
3318	42 46.1	+2.80	+0.023	-18 46 59	+15.2	+0.04	4.61	3.7	dF5	066	+26	1 τ^1 Eri	
3346	44 23.1	+1.28	+0.003	-63 54 50	+15.1	-0.01	5.69		G8		-11v	γ Hor	s
3354	44 45.9	+0.93	+0.012	-67 49 35	+15.1	+0.04	4.90	-1.6	A2	005	+4	z Hyi	
3356	44 55.5	+3.57	+0.012	+29 02 27	+15.0	-0.12	4.62	0.9	gK1	018	-15	39 Ari	
3369	45 43.6	+3.36	+0.003	+18 04 36	+15.0	-0.04	6.04	0.3	gK1	007	+47	40 Ari	
3373	45 51.1	+3.49	+0.004	+24 58 50	+15.0	-0.00	5.87	0.4	A0	008	+14		
3378	46 29.8	+3.35	0.000	+17 15 27	+15.0	-0.01	5.30	-1.2	B8	005	+8v	42 π Ari	ds
3387	46 59.8	+2.51	+0.007	-32 36 54	+15.1	+0.16	4.50	1.2	G6	022	+17v?	β For	
3390	47 02.0	+4.38	+0.002	+55 41 22	+14.9	-0.01	3.93	-4.7	cK4	0029	-1	15 η Per	d
3391	47 02.1	+3.53	+0.005	+27 03 20	+14.8	-0.11	3.68	0.4	B8	022	+4v	41 c Ari	
3401	47 25.1	+3.79	+0.016	+38 06 51	+14.8	-0.11	4.27	1.2	sgA6n	024	+14	16 Per	
3403	47 28.9	+5.36	+0.001	+68 40 59	+14.9	-0.01	var	var	cF5v	0025	-6v	SU Cas	
3405	47 44.2	+2.60	+0.003	-28 08 54	+14.9	+0.03	5.39	1.4	A0	016	+24	γ^2 For	
3412	47 54.7	+1.33	+0.013	-63 00 49	+14.9	+0.03	5.39		A0		+31	ν Hor	
3414	48 13.5	+2.43	+0.004	-36 03 00	+14.9	+0.02	5.82	3.1	K0	028	.	η^2 For	d
3418	48 20.1	+4.02	-0.003	+46 38 14	+14.9	-0.02	5.97		gG5		-12		
3419	48 25.6	+3.70	+0.001	+34 51 19	+14.8	-0.06	4.67	-0.6	gM0	009	+14	17 Per	
3426	48 39.1	+2.42	+0.000	-35 52 51	+14.8	-0.06	5.49	1.1	K5	013	+12	η^2 For	
3427	48 43.7	+3.31	+0.002	+14 52 38	+14.8	-0.03	5.46	-1.0	B6n	005	+15	43 σ Ari	
3429	48 46.2	+2.72	-0.004	-21 12 33	+14.8	-0.01	4.81	0.4	gK0	013	-9	2 τ^2 Eri	
3432	48 51.8	+2.32	+0.004	-40 08 14	+14.9	+0.01	6.25		B9				

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
3449	02 ^h 50 ^m 07 ^s .4	+2.89	+0.027	-12°58'16"	+14.6	-0.17	6.14	6.6	dK0	134	+19		
3459	50 32.7	+3.79	+0.004	+38 08 07	+14.7	-0.08	5.32	0.9	sgA6	013	+6	20 Per	d
3462	50 41.9	+4.26	+0.000	+52 33 34	+14.7	-0.00	4.06	0.8	gG1+A5	022	+2v	18 τ Per	ds
3463	50 46.2	-0.38	-0.008	-75 16 17	+14.7	-0.02	4.70	-0.1	K6	011	+5	ν Hyi	
3478	51 14.3	+1.29	+0.010	-63 06 49	+14.7	+0.00	6.10		K0		.		
3480	51 20.2	+2.70	+0.007	-22 34 43	+14.6	-0.08	6.06		G5		.		
3482	51 36.8	+2.35	+0.004	-38 38 26	+14.7	+0.04	5.85		F2		.	ψ For	
3487	51 57.8	+4.76	+0.021	+61 19 08	+14.7	+0.04	5.63	3.3	dF4	035	+29		
3501	52 29.2	+1.94	-0.002	-51 04 29	+14.6	-0.03	6.06		K0		.		
3517	52 59.6	+3.37	-0.000	+18 07 49	+14.6	-0.02	5.94	-0.2	gM6	006	+46	45 RZ Ari	
3520	53 10.0	+4.05	+0.000	+46 57 46	+14.6	+0.00	6.13	-2.4	gK3	002	-13		
3531	53 33.1	+3.21	+0.004	+08 10 54	+14.5	-0.08	6.08	3.5	dF7	031	+29		
3532	53 36.5	+3.39	+0.019	+17 49 30	+14.4	-0.21	5.57	3.3	dF5	035	+15	46 ρ Ari	
3539	53 59.0	+2.93	+0.005	-09 05 46	+14.3	-0.21	4.05	0.9	gK2	024	-20	3 η Eri	
3541	54 06.9	+3.01	-0.002	-03 54 45	+14.5	-0.04	5.27	1.3	A3n	016	-15v?		
3544	54 14.7	+3.64	+0.000	+31 44 03	+14.5	-0.03	5.18	0.2	A0p	010	+8v	21 Per	
3556	54 51.6	+3.81	-0.000	+38 24 55	+14.5	-0.02	6.08		gK3		-41		
3561	55 10.3	+2.67	+0.007	-24 03 42	+14.4	-0.03	5.41	2.3	A5	024	+29	4 Eri	
3562	55 13.2	+3.44	+0.016	+20 28 10	+14.4	-0.03	5.85	3.4	dF4	032	+28	47 Ari	
3567	55 33.3	+3.84	+0.003	+39 27 51	+14.4	-0.04	4.62	0.0	A2	012	+14v?	22 π Per	
3574	55 52.2	+2.67	+0.004	-23 48 22	+14.5	+0.05	5.96	-0.5	gK2	005	+7	6 Eri	
3575	55 57.3	+3.72	-0.004	+34 59 03	+14.4	+0.01	4.97	0.2	gK2	011	-36	24 Per	
3580	56 10.8	+3.02	-0.002	-02 58 51	+14.4	-0.05	5.20	1.1	A2	015	-7		d
3582	56 20.8	+3.43	-0.001	+21 08 30	+14.4	-0.00	4.64	-0.8	A4s	008	-8	48 ϵ Ari	d
3583	56 21.8	+2.91	+0.001	-09 58 31	+14.4	-0.01	6.22		A2		.		
3584	56 21.9	+2.27	-0.005	-40 30 15	+14.4	+0.03	3.42	0.6	A2	027	+12v	θ^1 Eri	} d s
3586	56 22.6	+2.27	-0.006	-40 30 14	+14.4	+0.02	4.42	1.6	A2	027	+19	θ^2 Eri	
3587	56 25.5	+3.88	+0.002	+40 50 07	+14.4	-0.04	6.07		K2		+32		
3588	56 25.6	+4.07	+0.002	+47 01 19	+14.4	+0.02	5.61	0.1	gG4p	008	+7		
3591	56 58.8	+2.56	+0.001	-29 06 18	+14.3	-0.04	6.19		G5		.		
3594	57 01.3	+3.80	+0.001	+37 56 03	+14.3	-0.03	5.92		B9e		-16v		s
3595	57 01.9	+3.22	+0.000	+08 42 33	+14.3	-0.02	4.69	-0.5	B5	009	+10	91 λ Cet	
3597	57 09.5	+3.03	-0.001	-02 39 46	+14.3	-0.02	5.48	0.2	B9n	009	+18	5 Eri	s
3600	57 17.5	+4.28	+0.003	+52 09 16	+14.3	-0.02	5.42	0.6	B8n	011	-4v		ds
3603	57 24.0	+2.64	+0.013	-25 28 25	+14.4	+0.09	5.63	2.1	sgA9n	020	+27v?	ζ For	
3611	57 50.7	+1.13	+0.003	-64 16 11	+14.3	+0.01	5.08		A5		+24v?	β Hor	
3616	58 01.2	+3.26	+0.005	+10 40 24	+14.3	-0.03	6.20		K6		+18		
3627	58 42.4	+2.95	+0.007	-07 51 32	+14.2	-0.06	5.94		dG6		+14	8 ρ^1 Eri	
3629	58 57.0	+3.54	-0.001	+26 15 57	+14.2	+0.01	5.91	1.6	dA7s	014	-4	49 Ari	
3638	59 21.3	+8.01	-0.012	+79 13 26	+14.2	+0.01	5.66	-0.1	gM1	007	-38		d
3641	59 28.2	+2.59	+0.021	-28 16 55	+13.8	-0.42	5.90	3.8	dG5	038	+31	ϵ For	
3642	59 30.6	+2.91	+0.003	-10 09 28	+14.2	-0.01	6.02		gG6		+11		
3643	59 39.8	+3.14	-0.001	+03 53 41	+14.1	-0.07	2.82	-0.2	gM2	025	-26	92 α Cet	
3646	59 45.2	+3.14	+0.001	+04 09 25	+14.2	+0.01	5.63	-0.5	B5	006	+12	93 Cet	
3649	03 00 11.2	+2.65	-0.011	-23 49 10	+14.1	-0.05	4.16	3.0	A0n	058	-10	11 τ^3 Eri	
3651	00 14.9	+2.95	+0.003	-07 52 51	+14.2	+0.00	5.52		gG5		+25	9 ρ^2 Eri	d
3664	01 09.6	+4.35	+0.000	+53 18 44	+14.1	-0.00	3.08	-0.9	cF7+A3	016	+2v	23 γ Per	s
3667	01 13.2	+2.05	+0.002	-47 10 13	+14.1	+0.00	5.66	2.0	G8	019	+17		
3674	01 46.0	+4.51	-0.002	+56 30 40	+14.1	+0.08	5.08	1.2	gG8	017	-45	k Per	
3677	01 49.0	+2.95	+0.004	-07 47 43	+14.1	+0.02	5.43	1.6	A3	017	+15	10 ρ^3 Eri	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
3682	03 ^h 01 ^m 57 ^s .8	+3 ^s 85	+0 ^s 011	+38°38'53"	+13 ^s 9	-0 ^s 11	var	var	gM4	016	+28	25 ρ Per	
3683	02 02.8	+3.10	+0.002	+01 40 11	+14.1	+0.01	6.05		gG6		+1		
3684	02 06.3	+3.88	-0.004	+40 23 19	+14.0	+0.00	6.18		K0		-34		
3687	02 08.3	+0.13	+0.006	-72 05 52	+14.1	+0.02	5.52		B9		+12	ϕ Hyi	
3694	02 25.9	+1.41	-0.010	-59 55 52	+14.0	-0.06	5.16	1.8	F0	021	+17	μ Hor	
3697	02 30.4	+3.52	+0.000	+25 03 43	+14.0	-0.01	5.36	-1.1	B8n	005	+9	52 Ari	d
3705	03 06.5	+5.02	-0.002	+63 51 55	+14.0	+0.01	5.82	-0.3	B9s	006	-2		
3712	03 38.7	+3.29	0.000	+12 59 44	+13.9	-0.06	5.84	1.2	gK0	012	-15v?		
3715	03 48.0	+9.31	-0.022	+81 16 51	+13.9	-0.00	5.95	2.3	A4	019	-2		d
3718	04 05.0	+2.97	+0.000	-06 16 51	+13.9	-0.00	5.56	-0.2	gM3	007	+17		
3725	04 27.7	+4.31	+0.004	+52 01 20	+13.9	-0.02	6.17		B5		+6		
3728	04 36.5	+3.38	-0.002	+17 41 18	+13.9	+0.01	6.09	-1.5	B2s	003	+28v	53 Ari	s
3733	04 54.4	+3.91	+0.000	+40 45 52	+13.9	-0.00	var	var	B8	040	+2v	26 β Per	dssE
3740	05 26.7	+4.33	+0.130	+49 25 27	+13.8	-0.08	4.17	3.8	dG1	085	+50	ι Per	
3747	05 42.6	+2.56	+0.005	-28 01 19	+13.8	-0.02	6.08		A2		.		
3755	06 06.8	+4.05	+0.017	+44 40 10	+13.6	-0.16	4.00	1.0	gG8	025	+29v	27 κ Per	
3759	06 27.8	+6.51	+0.005	+74 12 22	+13.7	-0.09	4.89	1.4	A2	020	+10		
3762	06 35.8	+3.61	+0.002	+28 53 15	+13.7	-0.01	5.60	-0.5	B9n	006	-2	55 Ari	
3782	07 25.2	+0.47	-0.005	-69 27 21	+13.7	-0.01	6.05		G5		.		
3783	07 28.5	+3.56	+0.000	+26 42 23	+13.8	+0.07	6.12	-0.9	gK5	004	-16		
3789	07 54.7	+3.28	+0.003	+11 41 03	+13.7	-0.02	5.91		B9		.		
3791	08 03.2	+3.87	-0.002	+39 25 23	+13.7	+0.01	4.82	1.0	gG9	017	+7	28 ω Per	
3805	08 45.9	+3.43	+0.011	+19 32 20	+13.6	-0.01	4.53	0.9	gK2	019	+25	57 δ Ari	
3809	08 49.8	+1.95	+0.003	-48 55 20	+13.6	-0.03	6.10		K0		.		
3810	08 50.9	+3.96	+0.003	+42 11 19	+13.6	-0.01	6.00		B8		.		
3819	09 11.0	-2.04	+0.027	-79 10 48	+13.7	+0.07	5.70		F0		+3v		ds
3821	09 15.1	+3.58	+0.001	+27 04 12	+13.6	-0.01	5.65	0.6	A0p	010	+11	56 SX Ari	v
3827	09 47.0	+3.18	-0.000	+06 28 26	+13.6	0.00	5.84	-1.1	cG2+A5	004	+5v		s
3830	09 54.9	+4.17	+0.003	+47 59 26	+13.5	-0.02	5.96	1.0	gK1	010	-7		
3831	09 56.7	+2.55	+0.025	-29 11 00	+14.2	+0.64	3.95	3.1	dF5	072	-21	α For	d
3838	10 13.2	+3.06	+0.013	-01 22 55	+13.5	-0.06	5.14	3.2	dF8	056	+18	94 Cet	d
3845	10 40.3	+2.11	+0.008	-44 36 23	+13.5	0.00	5.92	2.8	F2	024	+34		d
3851	11 03.9	+2.35	-0.000	-36 07 48	+13.5	+0.00	6.24		B9		.		
3857	11 16.9	+1.52	+0.001	-57 30 30	+13.5	+0.01	5.72		Na		+14		
3863	11 32.8	+2.50	+0.002	-29 59 24	+13.4	+0.00	6.22		G5		.		
3864	11 37.0	+3.98	+0.006	+42 19 07	+13.4	+0.01	6.16		K0		+22		
3870	11 57.1	+4.60	-0.000	+56 57 22	+13.4	+0.01	5.92	-2.6	cA0p	002	-12		
3872	12 01.3	+3.45	-0.002	+20 51 38	+13.3	-0.07	4.95	0.7	A0	014	+7	58 ζ Ari	
3879	12 17.4	+3.66	-0.000	+30 22 19	+13.4	+0.01	5.53	1.1	A1s	013	-3v		
3883	12 36.9	+4.29	-0.001	+50 45 14	+13.4	-0.02	5.29	-1.2	cG2	005	+2		s
3887	12 51.1	+2.58	-0.002	-26 17 04	+13.3	-0.01	6.11		A0		.		
3899	13 24.1	+2.91	-0.000	-09 00 15	+13.4	+0.05	4.90	1.8	A3	024	-7v	13 ζ Eri	s
3904	13 29.9	+3.70	-0.001	+32 00 05	+13.2	-0.11	6.05		sgG8		+19		
3907	13 32.4	+2.97	+0.000	-06 06 09	+13.3	0.00	6.02	3.9	B9n	037	+7		d
3912	13 54.0	+7.63	+0.021	+77 33 15	+13.2	-0.05	5.50	1.4	A4n	015	+4		d
3918	14 10.2	+2.91	-0.000	-09 20 18	+13.3	+0.05	6.16	3.5	dF4	029	-5	14 Eri	
3923	14 24.9	+4.04	+0.003	+43 50 34	+13.2	-0.03	5.38	-0.4	B7n	007	0v	30 Per	
3927	14 30.8	+3.89	+0.002	+39 06 04	+13.2	-0.01	5.97	1.2	A0	011	+27v?		
3934	15 03.4	+4.28	+0.003	+50 02 26	+13.2	-0.03	5.30	-1.2	B4n	005	-5v	29 Per	
3945	15 33.4	+4.27	+0.002	+49 54 50	+13.2	-0.02	5.08	-1.0	B4n	006	+3	31 Per	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
3947	03 ^b 15 ^m 33 ^s 8	+5 ^s 28	+0 ^s 003	+65°28'18"	+13 ^s 2	-0 ^s 01	4.76	-2.9	B3ep	003	+20v		
3948	15 35.7	+3.75	+0.000	+34 02 28	+13.2	-0.01	4.92	-0.6	gK4	008	+ 2		
3952	15 48.7	+1.95	-0.002	-47 56 03	+13.2	+0.02	5.84		K0		.		
3953	15 48.7	+3.07	+0.017	-01 06 40	+13.1	-0.05	5.62	1.0	gK0	012	+28	95 Cet	d
3954	15 56.3	+2.53	+0.014	-28 58 43	+13.1	-0.01	5.95		A5		.		
3955	16 09.4	+2.65	+0.001	-22 41 35	+13.2	+0.02	5.05	1.2	gG6	017	+24	15 Eri	d
3959	16 24.1	+2.74	+0.010	-18 44 24	+13.1	-0.05	5.83	3.1	dF2	028	+18v		ds
3966	16 40.8	+1.30	+0.194	-62 45 58	+13.8	+0.66	5.48	5.7	dG0	110	+12	ζ^1 Ret	
3969	16 44.1	+3.15	+0.018	+03 11 17	+13.2	+0.10	4.96	5.1	G5	106	+19	96 \times Cet	
3970	16 56.3	+3.58	-0.002	+26 53 30	+13.0	-0.07	5.94	2.0	sgG5	016	- 0	59 Ari	
3975	17 07.4	+1.30	+0.193	-62 41 48	+13.7	+0.66	5.16	5.2	dG0	100	+12	ζ^2 Ret	
3977	17 09.8	-1.49	+0.034	-77 34 17	+13.1	+0.07	5.53		F2		+19v?	ι Hyi	
3979	17 17.5	+2.67	+0.004	-21 56 20	+13.1	+0.04	3.95	-1.3	gM3	009	+42v	16 τ^4 Eri	d
3981	17 18.5	+3.63	+0.000	+28 52 07	+13.0	-0.01	4.72	0.1	gK4	012	- 2		
3983	17 24.0	+2.62	+0.000	-24 18 11	+13.0	-0.02	5.96		gM2		+15		
3984	17 24.6	+0.68	+0.011	-67 06 30	+13.1	+0.01	6.08		A2		.		
4000	17 55.9	+2.40	+0.280	-43 15 36	+13.8	+0.74	4.30	5.2	dG7	161	+87	e Eri	
4004	18 05.0	+4.02	-0.005	+43 09 02	+13.0	-0.00	4.98	1.0	Aln	016	-7v	321 Per	
4006	18 19.1	+4.26	+0.020	+48 53 34	+12.9	-0.07	6.17	2.7	dF6	020	+25		
4007	18 20.1	+3.47	+0.002	+20 58 05	+13.0	-0.03	5.17	-0.6	B7s	007	+14v?	61 τ Ari	
4010	18 29.7	+3.14	+0.004	+03 29 49	+13.0	-0.02	5.76	0.5	gG8	009	+11	97 Cet	
4017	19 11.4	+3.60	+0.001	+27 25 46	+12.9	-0.01	5.64	0.8	gG5	011	+ 6	62 Ari	
4018	19 12.9	+2.62	-0.002	-23 48 49	+12.9	-0.03	5.67	0.7	gG3	010	+ 8		
4024	19 39.9	+4.25	+0.002	+49 02 10	+12.9	-0.02	5.30	-0.5	B5n	007	+ 5		
4026	19 52.3	+3.45	-0.003	+20 33 52	+12.9	-0.02	5.25	0.0	gK5	009	+ 2	63 Ari	
4030	20 06.1	+14.25	+0.051	+84 44 24	+12.7	-013	5.78	0.3	gG4	008	+33v		
4034	20 18.6	+5.21	-0.000	+64 24 34	+12.9	+0.01	5.55	-3.6	gK5	0023	-21		
4041	20 44.4	+4.29	+0.003	+49 41 06	+12.8	-0.02	1.90	-3.9	cF5	007	- 4	33 α Per	
4051	21 21.0	+3.54	+0.001	+24 32 54	+12.7	-0.04	5.66	0.4	gK4	009	+13	64 Ari	
4052	21 21.7	+3.75	+0.003	+33 21 36	+12.8	-0.03	5.64	1.0	A0	012	+ 2		d
4056	21 24.8	+3.30	+0.001	+12 27 13	+12.8	-0.02	6.22		K0		+20		
4057	21 32.8	+3.46	0.000	+20 37 39	+12.8	-0.01	5.92	0.7	B9	009	- 9	65 Ari	
4070	22 07.1	+3.23	-0.004	+08 51 15	+12.7	-0.08	3.80	-0.5	gK1	014	-21v	1 \circ Tau	
4075	22 23.7	+4.26	+0.003	+48 56 46	+12.7	-0.02	5.91	-0.6	B8	005	+10		
4093	23 48.9	+0.26	+0.005	-69 48 01	+12.6	+0.02	6.22		A3		.		
4097	23 59.8	+2.32	+0.002	-36 05 43	+12.6	-0.00	6.25		A2		.	χ^1 For	
4104	24 15.8	+2.53	+0.000	-27 29 32	+12.6	+0.05	6.00		G5		.		
4107	24 27.3	+3.25	+0.004	+09 33 35	+12.6	-0.03	3.75	-0.1	B8	017	- 2v	2 ξ Tau	s
4108	24 29.1	+4.27	+0.003	+48 53 25	+12.6	-0.03	4.94	-0.5	B4s	008	+ 7v		
4109	24 33.2	+3.31	+0.000	+12 33 43	+12.6	-0.02	6.20	0.7	A0	008	+15 v		s
4113	25 00.1	+4.86	+0.000	+59 46 05	+12.5	0.00	4.42	-6.6	cB9p	0012	- 7		d
4120	25 11.9	+3.77	+0.003	+33 38 09	+12.5	-0.06	5.60	1.0	A0	012	+ 6v		s
4122	25 16.5	+4.31	+0.003	+49 40 35	+12.5	-0.03	5.64	-0.5	B6n	006	0v		
4124	25 21.6	+0.28	-0.002	-69 30 40	+12.6	+0.06	5.96		F2		.		
4126	25 30.9	+3.51	+0.000	+22 38 00	+12.4	-0.10	6.11	2.8	sgG6	022	+49v?	66 Ari	d
4129	25 37.1	+2.32	+0.006	-35 51 16	+12.5	-0.01	5.72		K0		+30	χ^2 For	
4130	25 37.8	+2.86	+0.000	-11 27 31	+12.5	-0.05	5.85	0.4	gK2	008	- 2		
4133	25 46.8	+4.29	+0.003	+49 20 15	+12.5	-0.03	4.67	-0.6	B5n	009	- 1	34 Per	d
4140	25 54.2	+4.79	+0.001	+58 42 26	+12.5	+0.00	4.76	-6.7	cA0ep	0011	- 6v		
4142	25 56.3	+4.19	+0.002	+46 46 00	+12.4	-0.04	6.20		B6		- 1		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
4146	03 ^b 26 ^m 10 ^s 5	+4 ^s 58	-0 ^s 005	+55°16'51"	+12 ^s 5	-0 ^s 01	4.98	1.1	A0n	017	+ 0		d
4158	27 02.3	+4.23	+0.001	+47 49 28	+12.4	+0.02	4.55	-0.7	gK4	009	+16	35 σ Per	
4159	27 04.5	+4.24	+0.003	+47 56 00	+12.4	-0.03	6.04	0.6	B8	008	+ 9v		
4162	27 12.0	+2.94	-0.006	-06 58 28	+12.3	-0.10	6.16		G5				
4164	27 14.2	+2.84	+0.001	-12 50 45	+12.4	+0.00	5.59		A1n		+15		
4173	27 40.3	+3.28	-0.001	+11 09 59	+12.3	-0.02	5.12	-0.4	B9n	008	0	4 ϵ Tau	
4183	28 05.8	+3.19	+0.002	+06 01 08	+12.3	-0.01	6.12		gG5		+11		
4184	28 06.5	+3.31	+0.002	+12 46 00	+12.3	0.00	4.28	0.4	gG7	017	+14v	5 f Tau	s
4185	28 08.1	+2.98	+0.001	-05 14 43	+12.3	+0.01	4.80	0.0	B9	011	+15	17 v Eri	
4188	28 10.4	+2.09	-0.007	-42 48 17	+12.3	-0.00	5.71		A3		+12		
4199	28 26.6	+2.14	-0.001	-41 32 16	+12.1	-0.18	6.10		F5		.		
4200	28 29.9	+1.05	+0.055	-63 06 48	+12.7	+0.37	4.80	3.6	F5	059	+12	α Ret	
4205	28 35.9	+4.24	+0.002	+47 51 17	+12.3	-0.02	5.52	-0.6	B8	006	+ 1		
4210	28 57.8	+4.16	-0.005	+45 53 21	+12.2	-0.07	5.35	2.5	dA9s	027	-45	36 Per	
4212	29 00.7	+1.93	+0.007	-47 32 42	+12.3	+0.02	6.01		A0		.		
4222	29 28.6	+3.82	-0.000	+35 17 36	+12.2	+0.00	5.80	-3.2	B1n	002	+25		
4229	29 49.7	+4.57	-0.005	+54 48 25	+12.2	-0.00	5.82	1.0	A2	011	+14v		s
4231	29 53.4	+3.25	+0.002	+09 12 21	+12.2	-0.04	5.64	0.4	B8	009	.	6 t Tau	
4236	30 16.7	+3.96	+0.001	+39 43 57	+12.1	-0.04	5.80	1.4	A0	013	+ 3v		s
4238	30 20.4	+0.62	+0.001	-66 39 31	+12.2	0.00	5.78		B8		.		
4244	30 34.4	+2.83	-0.066	-09 37 35	+12.2	+0.02	3.81	6.2	dK2	303	+15	18 ϵ Eri	
4251	31 05.1	+1.79	+0.008	-50 32 51	+12.2	+0.08	5.60		K0		+40		
4257	31 28.6	+3.56	+0.001	+24 17 54	+12.1	-0.02	5.92	0.7	A2	009	+29	7 Tau	d
4258	31 34.7	+2.65	+0.003	-21 47 58	+12.1	-0.02	4.32	-0.1	B8n	013	+15v	19 τ^5 Eri	s
4260	31 45.3	-2.18	-0.003	-78 31 12	+12.1	-0.02	5.64		K0		+10v		
4266	31 55.5	+2.42	-0.002	-31 14 52	+12.1	+0.07	6.18		F5		.		d
4287	32 55.5	+4.27	+0.003	+48 01 41	+12.0	-0.03	4.26	-1.2	B5ne	008	+ 0	37 ψ Per	
4296	33 34.6	+2.86	+0.002	-11 21 35	+12.0	+0.09	5.69	0.7	gG7	010	+37		
4305	34 00.6	+2.73	+0.002	-17 37 53	+11.9	-0.01	5.32	-0.2	A0p	008	+14	20 Eri	
4311	34 13.2	+3.08	-0.002	+00 25 33	+11.7	-0.16	6.12	3.4	dG9+K	029	-23v		ds
4313	34 19.1	+3.06	-0.016	+00 14 40	+11.4	-0.48	4.40	3.2	dF9	057	+28	10 Tau	
4329	35 17.9	+2.15	-0.002	-40 26 16	+11.8	-0.03	4.58	0.1	K0	013	+11	y Eri	
4340	36 02.6	+2.93	-0.001	-07 33 12	+11.7	-0.05	5.90		G5		.		
4347	36 32.9	+2.96	-0.001	-05 47 07	+11.5	-0.20	6.00	3.6	dK1	033	+40	21 Eri	
4351	36 42.8	+2.50	+0.001	-28 06 19	+11.8	+0.03	6.08		A0		.	τ For	
4365	37 14.7	+3.13	-0.002	+02 53 44	+11.7	+0.01	5.76	1.2	gG6	012	+21	12 Tau	
4370	37 26.8	+3.05	+0.002	-01 16 54	+11.7	+0.02	6.15		G5				
4382	37 46.8	+3.59	+0.001	+25 10 10	+11.6	-0.01	6.15	0.9	A0	009	+ 6v	11 Tau	s
4383	37 47.7	+5.21	-0.002	+63 03 25	+11.7	+0.02	5.32	-0.8	gM4	006	-22v		
4387	37 52.1	+3.91	+0.002	+37 25 13	+11.6	-0.03	5.57	-0.5	B8ne	006	- 1		
4395	38 09.7	+2.97	-0.000	-05 22 15	+11.6	-0.00	5.52	-0.2	B8	007	+16	22 Eri	
4400	38 21.5	-2.28	-0.004	-78 29 07	+11.6	+0.01	6.08		K0		.		
4408	38 34.4	+4.95	-0.000	+59 48 37	+11.6	+0.00	5.98	-0.5	gK5	005	-10		d
4420	39 12.0	+3.80	-0.000	+33 48 22	+11.5	-0.01	5.04	-4.0	B1s	0024	+19v	40 o Per	d
4427	39 21.3	+4.27	+0.003	+47 37 46	+11.5	-0.04	3.10	-1.5	B5n	012	- 9v	39 δ Per	
4430	39 25.6	+3.46	+0.000	+19 32 30	+11.5	-0.01	5.50	0.3	B8n	009	-10v	13 Tau	s
4439	40 15.5	+2.39	-0.000	-32 05 49	+11.5	+0.02	4.93		B5n		+26v	δ For	
4450	40 51.1	+2.87	-0.006	-09 55 53	+12.2	+0.74	3.72	4.0	dK0	112	- 6	23 δ Eri	
4455	40 58.8	+2.22	-0.008	-37 28 13	+11.4	-0.07	4.64	0.7	K5	016	+10	h Eri	
4459	41 10.0	+4.21	-0.000	+45 56 36	+11.4	-0.04	6.09	2.2	gA6	017	+ 9		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
4460	03 ^b 41 ^m 10 ^s 4	+2 ^s 87	-0 ^s 001	-10°38'34"	+11"4	-0"01	5.70		A4s		+16		
4461	41 10.6	+3.76	+0.001	+32 07 53	+11.4	-0.01	3.82	-4.8	B1	0028	+18v	38 o Per	dsEl
4463	41 15.5	+5.68	+0.017	+67 02 50	+11.3	-0.11	5.84	1.4	dF4	013	+ 6		
4464	41 16.8	+3.88	+0.004	+36 18 14	+11.4	-0.04	5.57	1.3	cA3	014	+22		
4467	41 33.3	+3.49	+0.001	+20 46 20	+11.4	-0.02	6.03		B9		+12v		s
4470	41 38.7	+5.25	0.000	+63 11 22	+11.4	-0.01	4.96	-0.8	cF5+A	007	-2v		
4474	41 47.3	+4.08	-0.001	+42 25 21	+11.4	+0.00	3.93	-2.0	cF4	007	-13v?	41 v Per	
4475	41 49.5	+3.57	+0.001	+24 08 01	+11.3	-0.04	5.43	-0.3	B7n	007	+ 3	16 Tau	
4477	41 54.1	+3.56	+0.002	+23 57 28	+11.3	-0.04	3.81	-0.2	B5ne	016	+12	17 Tau	
4481	41 58.0	+3.05	+0.000	-01 19 10	+11.4	-0.00	5.09	-0.1	B9n	009	+39v	24 Eri	
4485	42 10.4	+3.58	+0.002	+24 41 02	+11.3	-0.05	5.63		B9n		+ 4	18 Tau	
4486	42 13.6	+3.57	+0.002	+24 18 43	+11.3	-0.04	4.37	-0.4	B7n	011	+ 5	19 q Tau	
4491	42 22.9	+3.07	+0.004	-00 27 10	+11.3	+0.00	5.84	0.4	gK5	008	+70	25 Eri	
4495	42 28.8	+4.20	+0.002	+45 31 36	+11.3	-0.02	5.64	-0.5	B8	006	+ 2		d
4500	42 50.8	+3.57	+0.002	+24 12 47	+11.2	-0.04	4.02	-0.4	B9s	013	+ 7	20 Tau	
4502	42 55.4	+3.58	+0.001	+24 24 00	+11.2	-0.04	5.85	0.1	B9n	007	- 0	21 Tau	
4505	43 00.8	+3.19	+0.002	+05 53 42	+11.3	-0.01	5.36	-1.1	B3	005	+13v	29 u Tau	
4512	43 21.2	+3.56	+0.002	+23 47 39	+11.2	-0.04	4.25	-0.5	B5ne	011	+ 6	23 Tau	
4515	43 29.1	+3.20	+0.001	+06 38 57	+11.2	-0.07	6.12	0.6	gK1	008	-25		
4517	43 33.9	+0.75	+0.048	-64 57 50	+11.3	+0.08	3.80	2.0	G9	043	+51v	β Ret	s
4518	43 36.2	+4.70	+0.004	+55 46 07	+11.2	-0.01	6.04	0.6	B9	008	.		
4523	43 42.5	+1.86	-0.002	-47 30 53	+11.2	-0.02	5.66		G8		- 2		
4525	43 46.6	+2.84	+0.003	-12 15 26	+11.3	+0.06	4.64	-1.1	gM2	007	+46	26 π Eri	
4530	43 59.6	+6.25	+0.006	+70 43 08	+11.1	-0.06	5.40	0.8	A2	012	+16v		s
4537	44 25.0	+2.45	0.000	-29 29 33	+11.2	+0.02	5.90		A2		.	σ For	d
4541	44 30.4	+3.57	+0.002	+23 57 08	+11.1	-0.04	2.96	-2.5	B7ne	008	+10	25 η Tau	
4544	44 36.5	+4.43	+0.002	+50 35 01	+11.2	-0.00	5.92		B8		.		d
4546	44 40.3	+3.77	-0.002	+32 02 32	+11.1	-0.05	6.23		F6		- 4v		s
4547	44 41.7	+2.58	-0.011	-23 23 46	+10.6	-0.52	4.33	3.1	dF3	056	+ 6	27 τ^8 Eri	
4553	44 55.2	+5.50	-0.000	+65 22 26	+11.1	-0.01	4.71	-0.5	gM1	009	- 3v		
4557	45 02.6	+6.34	+0.005	+71 10 52	+11.1	-0.04	4.67	-0.3	A0	010	- 1	γ Cam	
4560	45 12.2	+5.27	-0.002	+63 08 45	+11.1	-0.05	5.96	1.7	A3	014	-14v		s
4564	45 22.9	+3.55	+0.002	+23 16 09	+11.1	-0.05	5.51	-0.3	B8n	007	- 2v?		
4566	45 30.5	+2.58	+0.003	-24 01 42	+11.1	+0.05	5.04	-0.2	A2	009	+29	28 τ^7 Eri	
4568	45 31.5	+3.29	+0.002	+10 59 27	+11.1	-0.02	5.03	-0.7	B3	007	+19	30 e Tau	d
4572	45 40.7	+4.14	+0.000	+43 48 38	+11.1	+0.02	5.86		F0		-15		
4579	45 54.8	+2.42	+0.002	-30 19 03	+10.8	-0.24	5.61	0.8	gG5	011	+53	ρ For	
4581	45 56.7	+2.26	+0.001	-36 15 32	+11.1	+0.01	6.25		B8n		+ 5		
4584	46 04.8	+3.08	+0.004	+00 04 32	+11.1	-0.00	6.10		gK3		+66		
4586	46 11.0	+3.57	+0.001	+23 54 07	+11.0	-0.04	3.80	-1.0	B9n	011	+ 8	27 Tau	d
4587	46 12.4	+3.57	+0.001	+23 59 07	+11.0	-0.05	var	var	B8ne	006	+ 4	28 BU Tau	s
4592	46 22.6	+3.79	-0.002	+32 56 23	+11.0	-0.00	5.10	-0.7	A1n	007	-14v	42 n Per	s
4593	46 23.6	+2.64	-0.001	-21 03 18	+11.0	-0.02	6.06		gK5		+ 3		
4597	46 35.1	+4.18	-0.002	+44 49 01	+11.0	-0.03	5.79	1.5	gG5	014	+14v		s
4601	46 44.7	+2.21	+0.004	-37 46 26	+11.0	-0.01	5.42	2.3	B9	024	+16		d
4602	46 45.1	+2.21	+0.006	-37 46 20	+11.0	-0.02	4.86	1.8	B8	024	+16	f Eri	d
4603	46 45.2	+3.56	+0.001	+23 33 40	+11.0	-0.05	6.11	-0.4	B8	005	+ 2		
4610	46 58.4	+3.53	+0.001	+22 05 37	+11.0	-0.04	5.92		B9		+14		
4616	47 18.3	+3.61	+0.003	+25 25 48	+10.9	-0.11	5.38	1.7	A3	018	+ 4		d
4624	47 34.9	+2.25	-0.004	-36 21 02	+10.9	-0.05	4.24	0.3	G5	016	+ 2	g Eri	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
4633	03 ^b 47 ^m 59 ^s 5	-0 ^s 93	+0 ^s 013	-74°23'34"	+11"0	+0"11	3.17	-1.3	M3	013	+16	γ Hyi	
4643	48 29.1	+3.33	+0.002	+12 53 48	+10.9	-0.03	6.16		B9		+16		
4649	48 41.6	+3.84	+0.001	+34 12 35	+10.9	-0.01	5.73	-3.1	B1n	0025	+18		
4654	48 56.7	+3.75	-0.002	+31 01 12	+10.8	-0.04	6.22	1.4	A3	011	-38		
4662	49 20.1	+3.20	+0.001	+06 23 10	+10.8	-0.00	5.62		B9		+16	31 Tau	d
4668	49 38.8	+4.87	+0.010	+57 49 43	+10.7	-0.10	5.79	2.2	A2	019	-5		
4671	50 00.6	+4.35	+0.004	+48 30 12	+10.7	-0.03	5.92	0.7	gK2	009	+8		d
4675	50 13.3	+2.96	-0.001	-05 30 33	+10.7	-0.01	5.49	1.8	B7n	018	+15	30 Eri	d
4677	50 18.2	+3.43	+0.010	+17 10 47	+10.7	-0.03	5.96	2.7	dF1	022	+35		
4688	50 59.0	+3.77	+0.001	+31 44 12	+10.7	-0.01	2.91	-5.3	cB1	004	+22	44 ζ Per	ds
4693	51 16.5	+21.67	+0.168	+86 29 19	+10.6	-0.08	5.84	2.3	dF1	020	-4		
4698	51 34.9	+2.55	+0.002	-24 45 33	+10.6	-0.01	4.76	-1.7	B5	005	+23v	33 τ^8 Eri	
4701	51 44.6	+2.29	+0.003	-34 52 45	+10.6	-0.01	5.12		B5		+18	σ Eri	
4706	51 46.7	+3.01	+0.002	-03 06 04	+10.6	+0.01	4.95	0.2	gG4	011	+27	32w Eri	d
4711	52 00.3	+1.86	+0.003	-47 02 24	+10.6	-0.04	5.77		K0				
4720	52 15.2	+3.75	-0.001	+30 54 01	+10.6	-0.01	var		Oepv		+17	XPer	
4721	52 21.5	+4.32	+0.002	+47 43 35	+10.6	-0.03	5.34	-0.8	B4n	006	+10		
4724	52 38.0	+2.10	-0.002	-40 30 11	+10.6	+0.01	5.61		F5+A3		+2v?		
4727	52 51.4	+5.12	+0.000	+60 57 53	+10.5	-0.01	5.22	0.0	gK4+A0	009	-2		d
4728	52 52.7	+4.46	+0.010	+50 33 09	+10.4	-0.13	5.47	2.7	sgF4p	028	+26v	43 A Per	s
4729	52 55.0	+2.82	-0.004	-12 14 39	+10.5	-0.04	5.94		gA9		+22		
4730	52 59.5	+5.30	+0.001	+62 55 41	+10.6	+0.01	4.87	-0.1	B9ne	010	+5		
4734	53 15.0	+3.87	+0.001	+34 56 11	+10.5	-0.00	5.48	-2.4	B2n	0036	+17v		
4744	53 54.5	+3.55	+0.005	+22 20 08	+10.4	-0.11	5.76	2.9	dF3	027	+32	32 Tau	
4747	54 05.7	+3.56	+0.001	+23 01 55	+10.4	-0.02	5.98		B9		.	33 Tau	
4751	54 14.0	+2.88	+0.003	-09 53 41	+10.5	+0.02	6.16		F0		.		
4756	54 21.9	+3.19	+0.002	+05 53 50	+10.4	-0.06	6.02	1.2	A0	011	+8		
4759	54 29.5	+4.03	+0.002	+39 52 02	+10.4	-0.03	2.96	-4.8	B1n	0029	-1v	45 ϵ Per	d
4775	55 24.7	+0.78	+0.010	-63 36 28	+10.4	+0.05	6.04		K0		.		
4778	55 41.7	+2.80	+0.004	-13 38 58	+10.2	-0.11	3.19	-2.4	gM0	0087	+62	34 γ Eri	
4779	55 42.9	+3.89	+0.001	+35 38 56	+10.3	-0.00	4.05	-5.4	O7n	0017	+70v	46 ξ Per	s
4785	56 24.4	+2.96	-0.004	-05 36 33	+10.1	-0.18	5.96		dG9		+36		
4791	57 09.3	+2.81	-0.001	-12 42 53	+10.2	-0.03	5.90	0.1	gK5	007	-5		
4794	57 38.3	+1.29	+0.003	-57 14 37	+10.2	+0.01	6.14		F2		.		
4801	57 47.5	+2.56	+0.001	-24 09 25	+10.2	+0.01	4.69	0.1	A0p	012	+25v	36 τ^9 Eri	s
4805	57 54.4	+3.32	-0.000	+12 21 02	+10.2	-0.01	var	var	B3+A4	007	+16v	35 λ Tau	ssE
4807	57 55.7	+3.46	+0.009	+18 03 16	+10.1	-0.03	5.76	2.3	dA9n	020	+25v		s
4808	57 57.0	+0.95	+0.001	-61 32 27	+10.2	-0.01	4.41		M2		-1	δ Ret	
4824	58 40.9	+2.39	+0.004	-30 37 49	+10.1	+0.01	5.85		A0		.		
4828	58 59.8	+3.04	+0.001	-01 41 18	+10.1	-0.01	5.25	-0.5	B4n	007	+16v	35 Eri	
4830	59 02.3	+3.27	+0.000	+09 51 33	+10.1	-0.00	5.68		B8		+3		
4851	04 00 02.8	+3.08	+0.010	-00 24 12	+09.8	-0.25	5.42	4.0	dF7	054	+17		
4855	00 10.1	+0.87	-0.000	-62 17 55	+10.0	+0.03	4.46		M5		-7v	γ Ret	
4858	00 16.3	+5.00	+0.000	+59 01 08	+10.0	+0.00	5.07	0.8	gF3	014	-20		
4861	00 29.2	+0.97	+0.009	-61 13 06	+10.1	+0.09	4.81	-1.3	M0	006	+60	ι Ret	
4862	00 29.6	+3.19	+0.000	+05 51 07	+10.0	-0.00	3.94	1.0	A0	026	-6	38 ν Tau	
4874	01 00.4	+6.03	+0.002	+68 32 40	+10.0	+0.01	6.14		gM0		-47		
4876	01 05.4	+3.18	+0.000	+05 17 57	+09.9	-0.01	5.33	-3.1	B5	0024	+12	40 Tau	
4883	01 14.0	+3.25	+0.011	+08 03 37	+10.0	+0.03	5.48	2.8	dF2	029	+36		
4886	01 22.0	+3.59	0.000	+23 58 12	+09.9	-0.01	5.67	1.4	dF4+A	014	+18	36 Tau	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
4892	04 ^b 01 ^m 32 ^s 08	+3 ^s 14	+0 ^s 010	+02 ^m 41'33"	+09 ^s 8	-0 ^s 12	5.39	2.2	dF5	023	-18		
4894	01 33.7	+10.0	-0.005	+80 33 56	+09.9	+0.00	5.25	1.1	dF1+A2	015	+ 4		d
4897	01 44.1	+3.55	+0.007	+21 56 49	+09.8	-0.06	4.50	0.4	gK0	015	+ 9	37A ¹ Tau	
4903	01 57.0	+5.62	+0.006	+65 23 12	+09.9	-0.02	6.07	2.1	A2	016	- 3		
4907	02 02.2	+2.81	+0.001	-12 55 42	+09.9	+0.02	5.67	0.7	gK0	010	+32		
4913	02 22.4	+3.55	+0.012	+21 52 32	+09.7	-0.14	5.96	4.8	dG1	069	+26	39A ² Tau	
4924	02 50.9	+4.47	-0.001	+50 13 03	+09.8	-0.04	4.33	0.7	A0	019	+ 6	47 λ Per	
4937	03 32.1	+3.68	+0.002	+27 28 00	+09.7	-0.05	5.27	0.5	A0p	011	- 2v	41 Tau	
4938	03 33.7	+2.47	+0.015	-27 47 15	+09.9	+0.10	5.57	3.6	A5	040	+61		
4944	03 54.7	+3.71	-0.006	+28 52 04	+09.7	+0.01	5.29	2.7	dF1	031	+ 9	42 ψ Tau	
4964	04 52.0	+3.40	+0.009	+15 01 50	+09.6	-0.02	5.94	2.9	dF2	025	+36v		d
4966	04 56.6	+3.97	-0.009	+37 35 53	+09.5	-0.19	6.20	1.8	gK1	013	-40	49 Per	
4967	05 01.3	+4.36	+0.002	+47 34 52	+09.6	-0.03	4.03	-2.0	B3ne	008	+ 3v	48 ν Per	
4971	05 07.4	+3.44	+0.001	+17 12 28	+09.6	-0.02	6.13	0.4	gK5	007	-31		d
4973	05 16.2	+4.00	+0.014	+37 54 39	+09.4	-0.20	5.59	3.9	dF7	046	+25	50 Per	s
4994	06 13.8	+3.35	+0.001	+13 16 02	+09.5	-0.01	6.02		B9		-25		
4995	06 14.9	+3.50	+0.008	+19 28 43	+09.5	-0.03	5.67	0.9	gK1	011	+24v?	43 Tau	
5009	07 01.5	+2.72	+0.000	-16 30 59	+09.5	+0.01	5.45		B5s		+14		
5018	07 46.1	+3.85	+0.000	+33 27 28	+09.4	-0.02	5.91		cK5		+20		
5020	07 46.9	+3.66	-0.002	+26 21 08	+09.4	-0.03	5.55	2.6	dF3	026	+19	44 p Tau	
5027	07 56.0	+2.93	-0.000	-07 03 12	+09.4	-0.01	5.60	1.5	gG6	015	-10v?	37 Eri	
5029	08 07.6	+6.71	+0.004	+71 59 57	+09.4	-0.02	6.15		G8		- 4		
5035	08 23.1	+2.89	+0.002	-08 56 55	+09.4	+0.01	5.88		gG9		+30		
5042	08 40.4	+3.19	+0.010	+05 23 40	+09.4	+0.01	5.71	3.2	dF3	032	+37	45 Tau	
5051	09 09.5	+2.02	+0.017	-42 07 23	+09.4	+0.07	4.85	2.8	F0	003	+37	δ Hor	
5055	09 24.4	+2.63	+0.002	-20 29 06	+09.3	+0.04	5.80		A0		.		
5056	09 25.4	+2.93	+0.001	-06 58 00	+09.4	+0.09	4.14	1.6	dF1	031	+11	38 σ^1 Eri	
5066	09 53.1	+3.56	-0.000	+22 17 12	+09.3	-0.01	6.16		B8		+ 8v		s
5088	10 50.2	+3.29	+0.003	+10 05 12	+09.2	-0.02	6.25		B8		.		
5089	10 51.4	+3.23	-0.000	+07 35 23	+09.2	+0.01	5.35	2.5	dF0	027	+ 4v	46 Tau	d
5091	10 54.8	+4.93	+0.000	+57 20 06	+09.2	-0.01	6.09	1.3	A2	011	-23		
5099	11 13.0	+4.41	+0.001	+48 17 03	+09.1	-0.02	4.28	-4.6	cG2	0026	+ 8v	51 μ Per	s
5100	11 13.0	+3.26	-0.001	+09 08 19	+09.1	-0.04	4.98	-0.5	gG5	008	- 7	47 Tau	d
5103	11 28.7	+4.09	+0.002	+40 21 32	+09.1	-0.02	4.89	-4.6	cG3+A5	0016	- 2v	52 f Per	s
5111	11 52.1	+3.28	+0.000	+09 53 11	+09.1	-0.02	5.15	-0.1	B8	009	+ 7		
5114	12 00.9	+2.85	-0.001	-10 22 45	+08.9	-0.16	5.13	0.7	gK2	013	+ 7	39A Eri	d
5121	12 20.6	+1.99	+0.003	-42 25 00	+08.9	-0.21	3.83	0.5	K1	022	+22	α Hor	
5123	12 28.2	+5.29	+0.002	+61 43 37	+09.1	-0.01	5.64	-0.1	B8	007	- 2		
5132	12 48.4	+4.68	-0.001	+53 29 18	+09.0	-0.00	5.12	1.4	A1n	018	- 3v		s
5134	12 49.0	+3.26	+0.002	+08 46 07	+09.0	-0.02	4.32	-1.2	B3	008	+18	49 μ Tau	
5138	12 58.2	+2.76	-0.150	-07 43 46	+05.6	-3.42	4.48	6.1	dK0	205	-42	40 σ^2 Eri	d
5139	12 59.1	+4.97	+0.004	+57 44 17	+09.0	-0.03	5.80	1.2	gK2	012	-38		
5164	13 46.5	+0.77	+0.006	-62 35 55	+09.0	+0.05	3.36	-2.0	G5	009	+36	α Ret	
5167	14 08.7	+0.79	+0.001	-62 19 01	+09.0	+0.09	5.40	-3.1	K1	002	+36		d
5172	14 19.6	+3.52	-0.003	+20 27 26	+08.9	-0.06	4.80	2.3	A5s	031	+16	50 ω Tau	
5174	14 28.5	+4.51	+0.005	+50 10 29	+08.9	-0.06	var	var	A2	018	+20v	b ¹ Per	sEI
5177	14 40.1	+4.16	+0.003	+42 01 12	+08.9	-0.03	6.12		B8				
5179	14 42.9	+1.57	+0.011	-51 36 43	+09.1	+0.19	4.36	3.6	F5	069	+27	γ Dor	
5183	14 52.4	+2.93	-0.001	-06 35 38	+08.9	+0.00	6.09		gG8		- 2		
5189	15 25.4	+3.55	+0.007	+21 27 31	+08.8	-0.04	5.56	2.1	dA8n	020	+35	51 Tau	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
5191	04 ^b 15 ^m 27 ^s 5	+4 ^s 51	+0 ^s 007	+49°55'44"	+08 ^s 8	—0 ^s 05	5.54		A5		—16		
5194	15 37.0	+1.04	—0.007	—59 25 18	+08.7	—0.16	4.42	2.5	sgK5	041	+29v?	ϵ Ret	
5199	15 56.9	+5.65	—0.004	+65 01 16	+08.8	—0.00	5.40	0.4	gG3	010	—18		
5201	16 00.1	+2.27	+0.005	—33 55 09	+08.8	—0.00	3.59	—0.1	B9	018	+18v	41 v ⁴ Eri	ds
5207	16 23.7	+4.55	+0.001	+50 48 06	+08.8	—0.00	5.54	3.6	B4n	002	—18	b ² Per	
5208	16 24.2	+13.94	—0.006	+83 41 33	+08.8	+0.01	5.39	—1.6	B5n	004	—7		
5210	16 29.0	+3.54	+0.002	+21 01 23	+08.7	—0.04	5.39	—0.1	A1s	008	+10	53 Tau	
5211	16 29.2	+2.56	+0.003	—23 05 27	+08.8	+0.03	6.08		A3		.		
5216	16 38.9	+3.55	+0.002	+21 39 16	+08.7	—0.04	5.32	—0.2	A0p	008	+12	56 Tau	
5220	16 46.8	+4.15	+0.001	+41 41 21	+08.7	—0.03	6.12		gG5		+24		
5226	16 56.7	+3.42	+0.008	+15 30 31	+08.7	—0.02	3.86	0.7	gG9	023	+38	54 γ Tau	
5233	17 06.3	+0.67	—0.000	—63 22 36	+08.7	+0.03	6.20		B9		.	θ Ret	d
5234	17 08.5	+3.38	+0.008	+13 54 58	+08.7	—0.02	5.59	2.4	dF1n	023	+42v	57 h Tau	s
5235	17 09.5	+3.90	—0.002	+34 26 52	+08.7	—0.01	5.10	0.7	gG9	013	—27	54 Per	
5240	17 16.5	+3.69	—0.002	+27 13 58	+08.6	—0.08	5.06	0.5	gK1+F	012	+3	52 φ Tau	d
5244	17 25.8	+5.22	+0.008	+60 37 09	+08.6	—0.11	5.67	—0.4	gM0	006	+28		
5245	17 25.9	+1.48	+0.006	—52 58 52	+08.7	+0.07	6.00		F5		.		d
5246	17 30.5	+3.49	+0.008	+18 37 27	+08.6	—0.04	5.96	2.8	dF2	023	+42v		
5250	17 41.6	+1.90	+0.005	—44 23 13	+08.6	—0.05	5.12	0.3	K2	011	+23		
5252	17 46.0	+3.40	+0.008	+14 58 38	+08.6	—0.02	5.27	2.2	sgA8n	024	+36v	58 Tau	
5253	17 46.9	+4.89	—0.001	+56 23 19	+08.7	+0.02	5.90	1.3	A2	012	—18v		
5256	17 55.7	+4.34	+0.002	+46 22 53	+08.6	—0.04	4.89	—1.2	B4	006	+1	53 d Per	
5259	18 01.1	+3.20	—0.001	+06 00 47	+08.6	—0.05	5.90	0.7	gG6	009	+7		
5260	18 03.8	+3.38	+0.008	+13 44 47	+08.6	—0.02	6.14	3.0	dF3	024	+37v		
5265	18 14.4	+10.45	+0.004	+80 42 35	+08.6	—0.02	5.58	1.0	gG6	012	—9		
5267	18 17.2	+2.91	+0.000	—07 42 38	+08.6	—0.00	5.72		B8		.	d Eri	
5270	18 28.1	+2.62	+0.002	—20 45 28	+08.6	—0.01	5.31	1.8	A1n	020	+32		
5276	18 40.8	+5.13	+0.005	+59 30 00	+08.5	—0.04	6.15	1.1	A0	010	+12		d
5279	18 49.4	+13.21	—0.030	+83 13 35	+08.7	+0.11	5.70	0.9	gG4	011	—38		
5280	18 53.6	+3.07	—0.001	—00 12 50	+08.4	—0.12	6.08	—0.4	K2	005	.		
5287	19 14.3	+3.38	+0.008	+13 57 38	+08.5	—0.02	5.76	2.4	dA6s	021	+41v	60 Tau	s
5289	19 26.0	+3.53	+0.000	+20 42 17	+08.5	0.00	6.11	—0.4	gM0+A0	005	—9		d
5290	19 26.7	+2.49	+0.003	—25 50 42	+08.5	—0.05	5.88	2.5	dF2	021	+24		d
5292	19 32.1	+3.65	+0.002	+25 30 47	+08.5	—0.02	5.38	1.1	A0n	014	+20	59 χ Tau	d
5304	20 02.9	+3.46	+0.008	+17 25 37	+08.4	—0.03	3.93	0.3	gG8	019	+38	61 δ Tau	
5305	20 06.6	+4.18	+0.002	+42 18 46	+08.4	—0.03	5.98	—2.5	B9	002	.		d
5315	20 32.7	+3.44	+0.007	+16 39 44	+08.4	—0.03	5.68	2.4	A4s	022	+35v	63 Tau	s
5317	20 35.4	+3.54	+0.001	+20 52 02	+08.4	—0.03	5.92	2.4	B8	020	.		
5322	20 58.6	+3.62	+0.001	+24 11 11	+08.4	—0.01	6.16		B6		+13	62 Tau	d
5324	21 00.2	+2.51	+0.001	—25 00 27	+08.4	—0.02	5.98		K5		.		
5325	21 08.1	+3.27	—0.001	+09 20 46	+08.4	—0.01	5.06	0.8	A3n	014	—3	66 r Tau	d
5327	21 11.3	+2.99	—0.003	—03 51 35	+08.3	—0.06	5.23	1.5	A1n	018	+11v?	42 ξ Eri	
5328	21 12.6	+3.46	+0.008	+17 19 47	+08.3	—0.04	4.84	1.7	dA6n	024	+37	64 Tau	
5329	21 14.2	+3.89	+0.002	+34 01 00	+08.3	—0.04	5.58		B8		.	55 Per	
5332	21 18.4	—4.04	+0.013	—80 19 59	+08.4	+0.06	5.62		K0p		—20v	δ Men	
5333	21 20.6	+0.65	+0.013	—63 30 17	+08.5	+0.17	5.18	0.6	G7	012	+45	η Ret	
5335	21 22.6	+3.89	+0.004	+33 50 47	+08.3	—0.07	5.81	3.6	dF5	036	—32	56 Per	ds
5344	22 02.1	+3.50	+0.008	+18 55 43	+08.3	—0.04	5.96	2.8	A9n	023	+36		
5349	22 09.4	+2.25	+0.004	—34 07 55	+08.4	+0.05	4.06	—1.4	M1	008	+24	43 v ⁸ Eri	
5350	22 23.1	+3.58	+0.007	+22 10 52	+08.2	—0.05	4.36	1.3	dA5n	024	+40	65 κ Tau	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
5351	04 ^h 22 ^m 26 ^s .1	+3 ^s .58	+0 ^s .008	+22°05'14"	+08"2	-0"05	5.42	2.3	dA6n	024	+32	67 Tau	
5354	22 35.6	+3.47	+0.008	+17 48 55	+08.2	-0.03	4.24	1.2	A3s	025	+35	68 Tau	d
5358	22 51.0	+4.98	+0.002	+57 28 24	+08.2	-0.02	6.23	1.0	A0	009	-1		
5359	22 55.0	+3.82	+0.006	+31 19 40	+08.1	-0.12	5.33	0.9	gG6	013	+27		
5370	23 18.7	+3.59	+0.008	+22 42 07	+08.2	-0.05	4.40	1.5	A4n	026	+35v	69 v Tau	
5375	23 29.6	+3.42	+0.008	+15 30 23	+08.2	-0.02	4.60	1.5	A4n	024	+41v	71 Tau	s
5378	23 38.2	+3.26	+0.000	+08 28 41	+08.2	-0.01	5.99	-0.5	B5n	005	+14		
5380	23 44.7	+1.89	+0.002	-44 16 28	+08.2	+0.07	6.23		F8		.		
5383	23 46.7	+3.39	0.000	+14 36 08	+08.1	-0.03	4.94	0.3	gG6	012	+32	73 π Tau	
5396	24 17.8	+3.59	+0.001	+22 53 07	+08.1	-0.02	5.41	-0.7	B6n	006	+5	72 Tau	
5398	24 23.3	+0.83	-0.004	-61 21 04	+08.1	+0.01	5.58		K5		-19		
5408	24 43.0	+3.31	-0.000	+11 06 06	+08.1	-0.00	5.84	-0.7	B8	005	.		d
5409	24 50.7	+2.52	-0.000	-24 11 32	+08.1	-0.01	6.14	2.5	A2	019	.		d
5412	25 02.5	+3.56	+0.007	+21 30 36	+08.0	-0.04	5.74	2.3	dA8n	021	+36		
5418	25 19.0	-5.31	+0.004	-81 41 45	+08.2	+0.13	5.79		F0		.	v Men	
5421	25 27.9	+3.11	+0.002	+01 44 54	+08.0	+0.01	6.12		gG8		+30		
5425	25 33.3	+3.40	+0.008	+14 37 53	+08.0	-0.02	5.97	2.8	dF0n	023	+44v?	76 Tau	
5427	25 34.7	+3.43	+0.001	+16 14 58	+08.1	+0.03	5.29	0.9	gK1	013	+18	75 Tau	
5428	25 37.6	+1.76	+0.006	-47 03 16	+07.7	-0.28	6.18	3.1	F5	024	.		
5430	25 41.6	+3.50	+0.008	+19 04 16	+08.0	-0.04	3.63	0.6	gG8	025	+37	74 ϵ Tau	
5433	25 42.9	+3.43	+0.007	+15 51 10	+08.0	-0.03	4.04	1.1	gG8	026	+40v	77 θ ¹ Tau	
5436	25 48.2	+3.43	+0.007	+15 45 42	+08.0	-0.03	3.62	0.7	gA7s	026	+39v	78 θ ² Tau	s
5441	25 56.9	+3.10	+0.001	+01 16 17	+08.0	-0.02	5.50	-1.5	B8	004	+18	44 Eri	s
5443	26 01.9	+3.36	+0.008	+12 56 18	+08.0	-0.01	5.12	2.1	dA6n	025	+33	79 b Tau	
5449	26 26.9	+2.64	+0.002	-19 33 59	+07.9	-0.09	6.10		gK1		+26		
5458	26 47.5	+2.79	+0.000	-13 09 26	+07.9	-0.00	5.50	-3.5	B1ne	0022	+12		
5464	27 10.8	+0.70	-0.003	-62 37 50	+07.9	+0.01	5.78		K0		.		
5467	27 17.3	+3.42	+0.007	+15 31 50	+07.9	-0.02	5.70	2.6	A6n	024	+30v	80 Tau	ds
5472	27 25.5	+3.85	0.000	+32 21 02	+07.9	-0.01	6.19		B9		+20		
5478	27 41.0	+6.96	+0.008	+72 25 27	+07.8	-0.08	5.97	0.7	A5	009	+9v		s
5480	27 41.7	+3.44	+0.008	+16 05 12	+07.8	-0.03	4.84	2.1	sgA8n	028	+37v		
5482	27 47.6	+3.42	+0.007	+15 35 05	+07.8	-0.02	5.49	2.4	dA7	024	+39	81 Tau	
5483	27 48.3	+3.38	+0.007	+13 37 02	+07.8	-0.02	5.49	2.5	dF1	025	+39	83 Tau	
5485	27 51.1	+1.78	+0.004	-46 37 26	+07.9	+0.03	6.20		G5		.		
5493	28 03.6	+4.75	+0.000	+53 48 16	+07.8	-0.00	5.86	-5.3	B0n	001	-7v	1 Cam	d
5512	28 51.0	+2.19	-0.000	-35 45 39	+07.8	+0.04	5.92		K0		.		
5517	29 00.2	+3.43	+0.007	+15 44 45	+07.7	-0.03	6.04	2.8	dA9n	023	+36v	85 Tau	s
5520	29 07.3	+2.77	-0.001	-13 45 01	+07.7	-0.06	6.11		A2		+15		d
5527	29 18.1	+1.84	+0.000	-45 03 37	+07.7	-0.00	5.16		B3s		+15	δ Cae	
5528	29 19.1	+3.07	+0.000	-00 08 59	+07.7	-0.01	4.97	-0.8	gK4	007	+17	45 Eri	
5541	29 53.4	+4.22	+0.001	+42 57 33	+07.7	+0.00	6.07	2.3	dF1	018	-23	57mPer	
5543	30 07.2	+3.00	-0.000	-03 18 51	+07.7	-0.00	5.91		B9		.		
5551	30 39.1	+3.47	+0.001	+17 54 46	+07.6	-0.02	6.24	-2.2	B8	002	.		d
5557	31 00.2	+2.83	-0.000	-10 53 24	+07.6	+0.02	6.24		K0		.		
5558	31 00.5	+3.41	+0.007	+14 44 27	+07.6	-0.03	4.75	1.6	dA5n	024	+37v	86 ρ Tau	
5560	31 04.2	+3.28	-0.001	+09 18 36	+07.5	-0.04	6.20		G8		-26		
5569	31 28.4	+2.92	0.000	-06 50 32	+07.5	-0.00	5.66		B9		+2	46 Eri	d
5570	31 28.6	+3.19	-0.001	+05 27 55	+07.5	-0.01	5.78		A3s		-7		
5571	31 30.0	+3.76	+0.000	+28 51 30	+07.5	-0.02	5.70		B9		+13v		d
5572	31 32.8	+2.35	-0.008	-29 52 00	+07.3	-0.27	4.59	0.9	gG6	018	+20	50v ¹ Eri	

GC	AR 1960.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
5574	04 ^b 31 ^m 42 ^o 0	+5 ^s 63	—0 ^s 003	+64°09'35"	+07 ^s .5	—0 ^s .01	5.91		A2s		—16		
5576	31 47.0	+2.89	—0.002	—08 20 05	+07.5	+0.01	5.45	—1.0	gM3	005	—12	47 Eri	
5577	31 48.0	+2.87	—0.002	—09 04 19	+07.4	—0.11	5.50	0.0	gK5	008	—27v?		
5592	32 49.1	+2.63	+0.006	—20 01 26	+07.5	+0.08	6.19		K0				
5599	32 54.3	+3.30	+0.004	+10 03 35	+07.4	—0.04	4.38	1.6	A3s	028	+28v	88 d Tau	s
5600	32 54.8	+1.30	+0.006	—55 08 52	+07.4	—0.00	3.47	—1.3	A0p	011	+26	α Dor	
5604	33 02.3	+0.63	—0.018	—62 55 35	+07.4	—0.03	5.86		K0				d
5605	33 02.9	+3.44	+0.005	+16 24 37	+07.2	—0.19	1.06	—0.6	gK5+M2	051	+54	87 α Tau	d
5609	33 13.2	+4.16	—0.001	+41 09 50	+07.4	—0.02	4.46	—2.5	cG2	005	+6v	58 e Per	s
5611	33 28.3	+3.62	+0.008	+23 14 26	+07.3	—0.06	6.04	3.2	dF2	027	+43		
5614	33 36.3	+2.33	—0.004	—30 39 49	+07.4	—0.01	3.88	—0.9	K0	011	—4	52 ν^2 Eri	
5617	33 49.1	+3.00	0.000	—03 27 11	+07.4	+0.00	4.12	—3.5	B2s	0032	+15v	48 ν Eri	v
5627	34 38.9	+3.09	—0.000	+00 53 55	+07.3	—0.00	5.32	—0.2	B5	008	+24	49 Eri	
5635	35 05.0	+3.02	+0.003	—02 34 19	+07.2	—0.06	5.31	2.4	A4s	026	+21	51 c Eri	
5643	35 17.5	+3.44	+0.007	+15 56 05	+07.2	—0.02	5.80	2.6	dA8n	023	+38	89 Tau	
5644	35 18.6	+3.54	—0.001	+20 35 09	+07.2	—0.01	5.73		B9		—14v		sE
5645	35 21.6	+3.35	+0.007	+12 24 44	+07.2	—0.01	4.30	1.2	dA5n	024	+45v	90 c ¹ Tau	s
5657	35 53.3	+2.75	—0.005	—14 24 02	+07.0	—0.16	3.98	1.5	gK4	032	+42v	53' l Eri	d
5658	35 57.9	+4.73	+0.000	+52 58 56	+07.2	—0.01	5.31	0.5	gG6	011	—40v	3 Cam	ds
5659	35 59.8	+4.76	+0.006	+53 22 37	+07.1	—0.09	5.44	2.1	dA5n	022	+20	2 Cam	d
5661	36 10.4	+0.70	—0.010	—62 10 32	+07.1	—0.08	var		M7		+24	R Dor	
5662	36 17.7	+3.43	+0.003	+15 42 11	+07.1	—0.07	5.15	1.6	dA5s	020	+19	91 σ^1 Tau	
5665	36 23.5	+3.25	+0.006	+07 46 24	+07.2	+0.00	5.55	2.3	dA9s	022	+36v		
5666	36 24.7	+3.43	+0.006	+15 49 14	+07.1	—0.02	4.85	1.3	dA5n	020	+37v	92 σ^2 Tau	
5669	36 33.6	+2.80	—0.004	—12 13 14	+07.1	—0.01	5.02	1.7	A2s	022	+7		
5678	37 01.6	+2.76	+0.008	—14 27 17	+07.0	—0.12	5.61	1.5	sgK1	015	+56		
5682	37 14.6	+3.05	+0.002	—01 08 58	+07.1	—0.02	6.18		K0		.		
5684	37 16.2	+3.34	0.000	+12 06 04	+07.1	—0.01	5.37	—0.7	B9n	006	+23	93 c ² Tau	
5687	37 39.9	+4.48	+0.005	+48 12 21	+07.0	—0.04	5.70	0.7	B9n	010	+23		
5690	38 02.0	+2.50	—0.005	—24 34 44	+07.0	+0.02	5.59	0.6	gG6	010	—18v		s
5694	38 11.7	+3.76	+0.003	+28 31 11	+07.0	—0.04	5.68	1.2	A1n	013	+25		
5695	38 15.2	+2.62	+0.002	—19 45 58	+06.9	—0.09	4.54	—0.5	gM4	010	—34	54 Eri	d
5701	38 26.0	+4.08	+0.020	+38 11 11	+06.9	—0.10	5.82	3.0	dG3	027	+47		
5708	38 56.9	+1.93	—0.013	—41 57 30	+06.9	—0.08	4.52	2.8	F1	045	—1v	α Cae	d
5716	39 14.4	+3.60	+0.000	+22 51 46	+06.9	—0.02	4.33	—3.4	B5n	003	+14v	94 τ Tau	s
5719	39 21.1	+4.26	+0.004	+43 16 19	+06.9	—0.05	5.25	0.6	A0n	012	+9v?	59 Per	
5726	39 33.1	+4.56	—0.000	+49 52 49	+06.9	—0.02	5.77	—0.7	B8	005	.		
5735	40 11.9	+3.63	+0.002	+23 59 45	+06.8	—0.02	6.18	3.2	dF6	025	+8	95 Tau	
5740	40 17.3	+2.12	+0.003	—37 14 28	+07.0	+0.19	5.08	3.7	F0	054	+31	β Cae	
5750	40 35.8	—2.72	—0.009	—77 45 06	+06.8	+0.00	5.88		K0		.		
5752	40 44.9	+4.15	+0.001	+40 41 41	+06.8	—0.01	6.10		B4ne		+41		
5762	41 13.2	+2.32	—0.003	—30 51 27	+06.7	—0.07	5.73		K0		—4v?		
5764	41 29.3	+1.54	—0.005	—50 34 28	+06.8	+0.04	5.26		G7		+5	λ Pic	
5767	41 39.4	+3.33	+0.007	+11 03 16	+06.7	—0.01	5.35		dA6s	025	+39		
5768	41 41.1	+2.88	+0.000	—08 35 44	+06.7	—0.00	5.87	2.3	B5ne		+15	56 Eri	
5773	41 55.5	+2.65	+0.004	—18 45 29	+06.7	—0.00	5.67		A0		.		
5774	42 04.1	+8.08	+0.012	+75 51 15	+06.6	—0.13	6.04	1.9	dA6n	015	—6v	λ Cae	
5775	42 05.5	+1.97	—0.000	—41 09 25	+06.7	+0.01	6.22		K5		.		
5791	42 41.1	+3.62	+0.001	+23 32 16	+06.6	—0.02	6.17		B8		.		
5794	42 55.0	+2.58	+0.001	—21 22 26	+06.6	—0.02	6.03		gK2		+22		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
5796	04 ^h 43 ^m 00 ^s 0	+3.00	+0.001	-03°20'41"	+06.6	-0.01	4.18	-1.7	B5	007	+ 7v	57 μ Eri	s
5802	43 14.7	+3.34	+0.005	+11 36 57	+06.6	-0.00	5.43	1.8	dA5p	019	+41v		
5803	43 17.1	+4.14	+0.000	+40 13 26	+06.6	-0.03	6.12		gG5		+34		
5805	43 21.5	+3.50	+0.005	+18 38 46	+06.5	-0.07	6.13	0.4	gK4	007	+38		
5809	43 33.3	-0.60	+0.002	-71 01 23	+06.6	+0.03	5.69		B9		-26	μ Men	
5810	43 35.7	+0.91	+0.004	-59 49 27	+06.6	+0.04	5.35	1.7	A3	019	+ 2	α Dor	
5811	43 49.8	+5.00	+0.007	+56 40 15	+06.4	-0.15	5.35	1.2	A3	015	+19	4 Cam	
5821	44 13.9	+2.03	-0.006	-39 26 45	+06.5	-0.02	6.04		K0				
5825	44 25.9	+2.40	-0.001	-28 10 36	+06.5	+0.02	5.97		A2				
5843	45 21.5	+2.69	+0.009	-17 01 28	+06.6	+0.17	5.63	4.3	dG1	063	+17	58 Eri	
5853	46 00.3	+3.85	+0.002	+31 21 08	+06.3	-0.10	5.76	1.0	gK1	011	+23		
5856	46 04.7	+3.88	+0.002	+32 30 08	+06.3	-0.03	5.94	1.7	A3	014	+20v		s
5858	46 07.0	+3.15	0.000	+03 30 07	+06.3	-0.02	6.20		K0		-19		
5860	46 08.0	+2.97	+0.020	-05 45 26	+06.1	-0.24	6.00	3.9	dG0	039	+78		
5864	46 17.4	+2.70	+0.000	-16 25 00	+06.4	+0.04	5.97	3.5	dF6	032	+35	59 Eri	
5868	46 32.4	+4.04	-0.003	+37 24 07	+06.3	+0.03	5.10	0.3	gK4	011	-23	1 Aur	
5875	47 07.4	+3.26	+0.031	+06 52 32	+06.3	+0.02	3.31	3.8	dF5	128	+24	1 π^3 Ori	
5880	47 23.4	+4.51	-0.004	+48 39 23	+06.2	-0.04	5.79	0.8	gK0	010	+29		
5881	47 23.7	+5.62	+0.007	+63 25 22	+06.1	-0.10	5.81	-0.3	gM2	006	-36		
5892	47 53.1	+3.27	+0.000	+08 48 58	+06.2	-0.03	4.35	1.3	A0n	025	+24v	2 π^3 Ori	
5894	47 56.3	+2.70	+0.003	-16 18 10	+06.3	+0.06	5.16	0.6	gG9	012	+37	60 Eri	
5907	48 26.8	+3.51	+0.006	+18 45 23	+06.1	-0.04	5.12	1.7	dA5n	021	+38v	97 i Tau	
5911	48 32.4	+3.20	-0.000	+05 31 16	+06.2	+0.00	3.78	-4.5	B2s	0025	+27v	3 π^4 Ori	s
5913	48 38.6	+1.95	-0.000	-41 24 22	+06.2	+0.06	6.02		F0		.	ν Cae	d
5920	48 58.5	+3.30	0.000	+09 53 31	+06.1	-0.01	6.08	-0.9	B5n	004	+10		
5924	49 03.8	+5.97	+0.001	+66 15 39	+06.1	+0.01	4.38	-6.3	O9e	001	+ 6	9 α Cam	
5932	49 15.5	+4.24	-0.000	+42 30 15	+06.1	-0.00	5.62	1.5	A2n	015	- 2		
5934	49 16.9	+4.02	-0.002	+36 37 14	+06.1	-0.01	5.04	0.2	gK3	011	-16	2 Aur	
5939	49 39.0	+2.18	+0.002	-34 59 21	+06.0	-0.03	5.82		A0		.		d
5940	49 39.5	+3.75	+0.004	+27 48 56	+06.0	-0.03	5.91		F2n		+38		
5942	49 42.1	+3.39	-0.000	+14 10 08	+06.0	-0.06	5.19	-0.9	gM4	006	- 7	4 σ^4 Ori	
5945	49 48.1	+1.34	-0.011	-53 32 46	+06.1	+0.08	5.60		F0		+ 5v	ι Pic	ds
5954	50 26.2	+2.95	-0.001	-05 32 05	+06.0	+0.02	4.45	1.3	A4n	023	- 9	61 ω Eri	
5961	50 46.2	+3.13	+0.002	+02 25 38	+05.9	-0.02	5.67	-0.4	gM1	006	+13	5 Ori	
5962	50 54.5	+11.24	0.000	+81 07 00	+06.0	+0.03	5.32	0.7	gK4	012	- 8v?		
5964	50 57.4	+4.91	-0.001	+55 10 45	+05.9	-0.01	5.58	1.0	A0n	012	+ 2	5 Cam	
5969	51 15.6	+4.31	+0.003	+43 58 53	+05.9	-0.06	5.98		B9n		+ 1		
5978	51 38.7	+3.13	-0.000	+02 21 37	+05.9	0.00	var	var	B2s	0025	+21v	8 π^5 Ori	sE1
5983	52 00.3	+3.33	-0.001	+11 20 45	+05.9	+0.02	5.15	1.3	A3n	017	+ 9v?	6 g Ori	
5984	52 01.8	+3.53	+0.005	+19 24 22	+05.8	-0.04	6.24	2.7	F0	020	+31		
5986	52 05.4	+3.24	-0.001	+07 41 59	+05.8	-0.03	5.54	0.5	gK1	010	- 5		
5987	52 08.5	+3.30	+0.003	+10 04 22	+05.7	-0.13	4.74	0.9	A1n	017	+13	7 π^3 Ori	
5988	52 08.9	+4.76	+0.000	+52 47 26	+05.9	+0.01	5.75	1.1	A2s	012	-22v		s
5991	52 16.5	+3.08	0.000	+00 23 16	+05.8	+0.00	5.86		B6		+17v		s
6008	52 52.4	+2.69	+0.010	-16 49 10	+05.8	+0.00	5.80	1.0	gG9	011	+10		
6010	52 59.3	+3.42	+0.001	+14 57 42	+05.8	-0.02	5.74	0.0	B9n	007	+ 9		
6011	52 59.5	+4.00	-0.001	+36 05 26	+05.8	+0.01	6.18	-5.8	B3	001	- 5		
6012	53 03.8	+2.69	+0.001	-16 29 50	+05.8	+0.05	5.4	1.2	gG4	012	+32	R Eri	
6016	53 14.2	+2.01	-0.001	-39 42 29	+05.8	+0.02	6.01		K0				
6017	53 16.2	+4.81	-0.002	+53 40 28	+05.8	+0.01	4.44	-0.6	A2s	010	- 9v	7 Cam	ds

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
6025	04 ^b 53 ^m 33 ^s 5	+3.37	-0.005	+13°26'14"	+05.7	-0.05	4.28	0.4	gK2	017	+ 1	90 ^a Ori	
6029	53 44.0	+3.91	+0.001	+33 05 20	+05.7	-0.02	2.90	-1.3	gK3	014	+17	3 ϵ Aur	
6031	53 54.9	-1.00	-0.013	-72 29 28	+06.0	+0.27	6.18		F5		.		
6032	53 56.3	+2.96	-0.001	-05 14 57	+05.7	-0.00	5.46		B9		+24	62 b Eri	
6034	54 03.6	+0.98	+0.012	-58 37 37	+05.8	+0.08	6.12		F5		.		
6040	54 28.9	+3.47	-0.001	+17 04 37	+05.6	-0.01	5.68	0.2	gK1	008	+25		
6043	54 44.8	+3.04	-0.003	-01 08 38	+05.6	-0.04	6.23		F2		+13		
6044	54 46.5	+3.64	+0.001	+23 52 21	+05.6	-0.01	5.99	0.5	gG8	008	+ 4	99 Tau	d
6048	55 05.6	+3.67	+0.002	+24 58 30	+05.6	-0.05	5.65	0.2	A2s	008	+26v	98 k Tau	s
6055	55 27.4	+2.75	+0.001	-14 18 27	+05.6	+0.01	5.87	-3.5	B1	0016	+11		
6064	55 51.5	+4.07	+0.004	+37 49 00	+05.4	-0.10	4.99	1.0	A0	016	+ 5	4 ω Aur	d
6068	55 57.3	+3.11	-0.000	+01 38 20	+05.5	-0.00	4.73	-2.0	cK3	005	+14	10 π^a Ori	
6070	55 57.8	+7.62	+0.006	+74 11 44	+05.6	+0.04	6.23	-0.3	gK4	005	-52		
6072	56 09.0	+3.41	+0.000	+14 28 05	+05.5	-0.02	5.98	-1.0	B8	004	.		d
6078	56 36.5	-1.72	+0.007	-75 00 53	+05.5	+0.06	5.28	1.4	K6	017	+26	η Men	
6082	56 47.0	+2.68	-0.010	-16 27 08	+05.6	+0.15	5.54	2.7	dF2	027	+31		d
6084	56 51.8	+4.13	-0.001	+39 19 16	+05.5	+0.00	6.00	2.3	dF3	018	+ 6	5 Aur	d
6088	57 05.6	+5.40	+0.002	+61 00 28	+05.3	-0.17	6.12		F4		+11		d
6093	57 19.8	+2.73	+0.002	-14 52 47	+05.4	+0.02	var		N6e		+32	R Lep	
6098	57 28.4	+2.84	+0.002	-10 20 06	+05.3	-0.13	5.69	3.9	dG4	044	-12	63 Eri	
6104	57 36.3	+2.79	+0.003	-12 36 35	+05.3	-0.09	4.9	1.6	F0	022	-15	64 S Eri	
6121	58 20.1	+7.57	+0.004	+73 59 49	+05.3	-0.02	6.00	1.2	A0	011	- 9		
6123	58 22.6	+4.31	+0.000	+43 45 05	+05.3	-0.01	var	var	cF0ep	001	- 2v	7 ϵ Aur	sE
6136	58 57.6	+5.34	-0.000	+60 22 19	+05.3	-0.02	4.22	-5.2	cG2p	0019	- 2	10 β Cam	
6137	58 58.7	+4.20	+0.001	+41 00 18	+05.2	-0.02	var	var	cK4 + B7	0055	+11v	8 ζ Aur	sE
6138	59 00.8	+2.91	+0.000	-07 14 45	+05.3	+0.01	4.81	-1.7	B8	005	+25v	65 ψ Eri	
6142	59 15.4	+2.60	+0.002	-20 07 24	+05.2	-0.01	4.99	1.4	B9	019	+24		
6143	59 15.9	+3.09	+0.001	+00 39 03	+05.2	-0.03	6.18		K1		+21		
6153	59 47.9	+4.21	+0.000	+41 22 17	+05.2	-0.00	6.20	1.2	A0	010	- 1v		
6156	59 54.5	+2.00	-0.001	-39 47 23	+05.2	+0.03	5.99		G5		.		
6158	05 00 06.2	+3.59	+0.005	+21 31 13	+05.1	-0.04	4.70	1.0	A5n	018	+42	102 ι Tau	
6160	00 07.7	+2.44	+0.006	-26 20 41	+05.1	-0.08	5.01	0.2	gK0	011	+27		
6167	00 16.4	+2.98	+0.004	-04 16 49	+05.2	+0.02	6.10		cK3		+38		
6169	00 29.2	+2.27	-0.001	-31 50 35	+05.2	+0.07	6.00		K0		.		
6172	00 38.2	+2.53	+0.004	-22 51 55	+05.2	+0.02	5.84	0.6	gK1	009	+32	1 Lep	
6185	01 30.1	+1.57	-0.005	-49 13 17	+05.1	+0.02	5.44	3.9	F5s	050	+21	η^1 Pic	
6191	01 42.6	+3.43	+0.001	+15 20 10	+05.0	-0.04	4.65	0.0	B9	012	+17v	11 Ori	
6193	01 47.2	+5.22	0.000	+58 54 18	+05.0	-0.01	5.31	-1.2	B3ep	005	-11	11 Cam	
6195	01 48.9	+2.49	+0.002	-24 27 22	+05.0	-0.03	5.55		A2		+ 7v		s
6206	02 24.3	+3.00	0.000	-03 06 27	+05.0	+0.00	5.98		B5		+27		
6212	02 36.4	+2.16	+0.010	-35 33 02	+04.9	-0.05	4.62	0.3	K5	014	+10v	γ Cae	d
6219	02 45.3	+4.70	-0.003	+51 32 01	+04.8	-0.18	4.99	2.7	dF3	035	- 1	9 Aur	d
6221	02 48.7	+3.10	+0.001	+01 06 37	+04.9	-0.01	var		N5		+17	W Ori	
6224	02 53.2	-3.22	-0.006	-78 22 13	+04.9	-0.01	6.19		K0		.		d
6226	03 00.2	+4.21	+0.003	+41 10 08	+04.9	-0.07	3.28	-1.1	B3	013	+ 7	10 η Aur	
6229	03 14.3	+2.44	+0.000	-26 13 07	+04.8	-0.07	5.89	0.9	K2	010	.		
6230	03 15.1	+4.29	+0.001	+43 06 31	+04.9	-0.00	6.21		F2		-12		
6231	03 20.6	+2.54	+0.002	-22 26 13	+04.8	-0.07	3.29	-0.8	gK5	015	+ 1	2 ϵ Lep	
6232	03 21.3	-0.77	-0.000	-71 22 58	+04.9	+0.02	5.30	2.2	G8	024	-11	β Men	
6234	03 40.1	+1.55	+0.006	-49 38 41	+04.9	-0.00	4.92	-3.6	M2	002	+36	η^a Pic	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
6241	05 ^h 03 ^m 57 ^s .6	+1 ^s .26	+0 ^s .000	-54°28'28"	+04 ^s .8	-0 ^s .01	6.14		K5				
6246	04 17.2	+2.97	+0.001	-04 43 14	+04.8	+0.01	5.19	0.8	B9	013	+31v	66 Eri	ds
6248	04 18.1	+2.77	+0.001	-13 11 17	+04.9	+0.04	6.06		A0				
6254	04 29.3	-6.84	-0.001	-82 32 27	+04.8	+0.00	5.85		K0			ξ Men	
6255	04 29.5	+3.55	+0.038	+18 34 47	+04.8	+0.02	5.04	4.0	dG1	057	+20	104 ^m Tau	d
6258	04 39.0	+1.03	-0.005	-57 32 26	+04.9	+0.11	4.76	4.4	F4s	083	-2	ζ Dor	
6259	04 50.7	+3.55	-0.003	+20 21 15	+04.7	-0.04	5.29	1.9	A3	021	-1	106 l Tau	
6263	04 55.9	+3.59	+0.001	+21 38 26	+04.8	-0.01	5.95	-3.0	B3ne	003	+25v	105 Tau	
6267	05 03.6	+3.66	+0.000	+24 12 03	+04.8	-0.00	5.50	-4.2	B3	002	+16v	103 Tau	ds
6268	05 05.2	+2.79	+0.010	-12 33 15	+04.7	-0.08	6.14		dF9		+50		
6269	05 09.4	+3.27	+0.002	+08 26 06	+04.7	-0.06	5.47	1.5	gF2p	016	+6v	14 i Ori	d
6274	05 23.4	+2.95	-0.006	-05 08 58	+04.7	-0.08	2.92	1.0	A3	040	-8	67 β Eri	
6281	05 56.4	+2.87	+0.000	-08 43 43	+04.7	-0.01	5.67	-0.1	B8	007			d
6288	06 02.7	+7.57	+0.002	+73 53 09	+04.6	-0.03	5.38	1.1	A0p	014	+9		
6292	06 14.9	+2.97	+0.003	-04 31 11	+04.7	+0.02	5.23	3.3	dF1	042	+9	68 Eri	
6300	06 34.5	+3.30	+0.004	+09 46 01	+04.6	-0.00	5.42	1.6	sgA9	018	+37	16 h Ori	
6301	06 36.6	+3.77	+0.005	+27 58 07	+04.6	-0.07	5.96	2.1	dF0	017	+41		d
6304	06 45.1	+2.87	+0.000	-08 49 00	+04.6	0.00	4.34	-3.2	B3n	0035	+3v?	69 λ Eri	
6306	06 50.1	+3.44	+0.000	+15 32 06	+04.6	-0.02	4.86	0.1	gF0	011	+31	15 Ori	
6309	06 55.6	+4.06	+0.001	+37 14 25	+04.6	-0.01	6.17	-5.4	B2	0008	+9		d
6311	06 59.2	+4.47	+0.006	+46 54 09	+04.4	-0.15	5.59	2.7	dF3	027	+33		
6313	07 09.2	-1.20	+0.006	-73 06 10	+04.6	+0.07	6.25		A0				
6314	07 10.3	+0.47	+0.002	-63 27 45	+04.5	-0.04	5.24	0.8	M5	013	+19		
6345	08 27.5	+5.50	+0.002	+61 47 26	+04.5	+0.01	5.99	1.2	A1	011	-4		
6348	08 48.0	+3.02	+0.005	-02 33 03	+04.5	+0.01	5.93		dF5		+31		
6350	08 49.1	+3.45	+0.001	+15 59 08	+04.4	+0.01	5.36	0.4	gK5	010	-6		
6358	09 02.8	+2.80	+0.002	-11 54 36	+04.5	+0.06	5.91	-0.5	gM6	005	+46		
6374	09 57.8	+2.80	+0.002	-11 55 40	+04.3	-0.01	4.54	-0.2	B8	011	+25v?	3 ϵ Lep	
6375	10 00.2	+4.11	-0.001	+38 25 38	+04.3	-0.08	4.78	1.8	A3	025	+23v	11 μ Aur	
6377	10 21.4	+2.94	+0.002	-06 06 55	+04.3	-0.03	6.01		gG7		+23		
6381	10 40.5	+3.14	+0.000	+02 48 12	+04.3	-0.00	4.64	-0.8	gK3	008	+41v	17 ρ Ori	ds
6382	10 41.0	+2.70	+0.003	-16 15 48	+04.3	-0.03	3.30	-0.1	A0p	021	+28	5 μ Lep	
6383	10 43.3	+4.82	+0.002	+53 09 25	+04.3	0.00	6.16	1.6	A0	012	-5v		
6387	10 55.3	+2.77	-0.001	-12 59 57	+04.3	-0.01	4.46	0.2	B8	014	+18	4 κ Lep	d
6388	10 55.6	+3.12	+0.001	+01 54 37	+04.3	+0.01	6.25	0.5	A2+G	007	+7		d
6392	11 09.0	+2.88	+0.000	-08 12 19	+04.2	+0.00	6.16		A0				
6405	12 02.0	+7.41	0.000	+73 12 51	+04.1	-0.03	5.76	0.3	A0	008	+0		s
6407	12 04.5	+3.19	-0.000	+05 05 59	+04.2	+0.01	5.82	0.0	gK4	007	-8		
6410	12 08.0	+2.88	+0.000	-08 15 29	+04.2	0.00	0.34	-8.2	cb8ep	0025	+21v	19 β Ori	ds
6411	12 08.8	+3.91	-0.002	+32 37 54	+04.2	+0.01	5.14	0.7	gA7s	013	-11v	14 Aur	ds
6413	12 27.2	+3.61	-0.000	+22 13 46	+04.1	-0.01	6.16	0.9	A0n	009	-7	108 Tau	s
6421	12 42.6	+2.12	+0.001	-36 02 00	+04.1	+0.00	5.79		G8		+13v		
6423	12 43.5	+1.39	-0.001	-52 05 13	+04.1	-0.02	5.88		K5				
6425	12 46.5	+3.04	-0.003	-01 27 55	+04.1	+0.04	6.12		dF2		+14		
6427	12 59.5	+4.43	+0.008	+45 56 58	+03.7	-0.43	0.21	-0.6	gG5+G	073	+28v	13 α Aur	ds
6429	12 59.8	+3.97	+0.001	+34 15 24	+04.1	+0.03	var	var	O9p	0015	+59	AE Aur	d
6436	13 17.4	+3.33	-0.000	+11 17 12	+04.0	-0.01	5.50	0.5	A0	010	-8	18 Ori	
6438	13 23.9	+2.41	+0.000	-26 59 53	+04.0	-0.02	5.04		B9		+29		
6444	13 47.4	-0.05	+0.001	-67 14 30	+04.0	+0.03	4.78	0.7	K6	008	+10v	θ Dor	
6455	14 16.7	+9.90	-0.027	+79 10 43	+04.1	+0.16	5.16	3.8	dF4	053	-10		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
6469	05 ^b 14 ^m 41 ^s 3	+4 ^s 29	+0 ^s 004	+42°44'24"	+03 ^s 9	-0 ^s 02	5.88	0.6	gM4	005	-38		
6473	14 53.6	+3.94	+0.004	+33 19 17	+03.8	-0.16	4.81	0.4	gK3	013	-28v	16 Aur	ds
6476	15 01.3	+3.95	+0.001	+33 42 55	+03.9	-0.03	var	var	A0	007	+26v	17 AR Aur	sE
6478	15 08.7	+5.18	+0.001	+58 03 58	+03.9	-0.02	6.23	-0.8	B5	004	-3	15 Cam	
6480	15 10.6	+2.91	-0.001	-06 53 49	+03.9	-0.00	3.68	-1.8	B8	008	+20	20 τ Ori	
6487	15 22.3	+2.76	-0.001	-13 34 18	+03.8	-0.04	5.66	2.3	sgG9	021	+75		
6494	15 37.2	+4.22	+0.046	+40 03 25	+03.2	-0.66	4.85	3.9	dG0	068	+66	15 λ Aur	
6495	15 40.8	+2.16	+0.007	-34 56 35	+03.5	-0.34	4.91	1.7	sgK0	023	+21	o Col	
6496	15 42.1	+5.60	+0.000	+62 36 11	+03.9	+0.00	5.88	-1.7	cK4	003	-6		s
6497	15 42.4	+3.95	+0.001	+33 41 50	+03.8	-0.03	5.39	-0.4	A0p	007	+29		
6506	16 16.2	+3.61	+0.001	+22 02 48	+03.7	-0.08	5.14	0.5	gG5	012	+19	109 n Tau	
6507	16 17.1	+3.55	-0.002	+20 05 02	+03.8	-0.03	6.22	1.2	gG8	010	-47		d
6509	16 34.6	+3.13	-0.001	+02 32 44	+03.7	-0.05	5.45	1.9	dF3	020	+11	21 Ori	
6511	16 36.9	+2.67	+0.027	-18 10 55	+03.8	+0.06	5.93	4.9	dG0	063	+40		s
6515	16 43.0	+3.96	+0.000	+33 54 28	+03.8	-0.01	5.16	-2.0	cA4p	004	-4	19 Aur	
6516	16 43.9	+4.22	+0.000	+41 02 12	+03.7	-0.06	5.46	1.7	A3	018	+13		
6524	17 05.8	+2.63	+0.001	-18 34 14	+03.7	+0.01	6.17		B8				d
6531	17 16.2	+2.76	-0.000	-13 13 37	+03.7	-0.00	4.29	-4.5	B1	0019	+20	6 λ Lep	
6535	17 24.0	+2.39	-0.000	-27 25 08	+03.7	-0.00	5.75		A0				
6538	17 39.7	+2.78	-0.000	-12 21 56	+03.7	+0.01	5.29		B8n		+16	7 ν Lep	
6550	18 01.7	+3.82	+0.001	+29 31 16	+03.7	+0.00	5.72	0.5	A1n	009	-20v		s
6553	18 08.4	+1.47	+0.002	-50 39 33	+03.9	+0.22	5.52	0.3	F8	019	+45	ζ Pic	
6556	18 15.9	+4.25	+0.002	+41 45 25	+03.6	-0.04	5.12	-0.1	B5	009	+5	20 ρ Aur	
6559	18 18.7	+2.56	+0.000	-21 17 19	+03.6	+0.00	4.73	-0.3	B9s	010	+30		d
6572	18 58.6	+3.06	-0.000	-00 27 52	+03.6	+0.00	5.65	-2.7	B3	0025	+7		
6574	19 00.1	+3.27	+0.000	+08 22 51	+03.6	+0.00	5.71	-2.8	B1	0025	+26v?		
6578	19 10.6	+5.14	+0.003	+57 29 54	+03.5	-0.06	5.25	1.1	A0	015	+10v	16 Cam	s
6579	19 12.5	+3.06	+0.000	-00 25 49	+03.5	-0.00	4.65	-3.7	cB2	0025	+29	22 o Ori	
6582	19 19.4	+4.22	-0.000	+40 58 56	+03.5	+0.00	5.57	1.7	A2n	017	-14		
6588	19 28.2	+2.17	+0.000	-34 23 35	+03.5	+0.00	6.12		B5ne		+20v?		d
6596	19 43.0	+2.46	-0.002	-24 49 13	+03.5	-0.01	5.45	0.8	gG2	012	+4		d
6607	20 12.2	+3.15	-0.000	+03 29 52	+03.5	-0.00	4.99	-3.3	B1n	0025	+18	23m Ori	d
6623	20 44.3	+3.47	-0.002	+16 39 14	+03.4	-0.02	6.09		A1		+21v	110 Tau	
6629	20 54.6	+2.88	+0.000	-08 27 41	+03.4	-0.02	5.83	1.6	A0	014			d
6632	21 08.8	+3.07	-0.001	-00 12 19	+03.4	+0.00	5.64	-2.6	B3	0025	+22		
6635	21 12.8	+2.75	+0.000	-13 58 22	+03.4	+0.00	5.17	-2.4	B3s	003	+18v	8 Lep	
6636	21 15.1	+4.08	+0.000	+37 20 27	+03.4	-0.01	5.22	-0.3	gK5	008	-19	21 σ Aur	d
6637	21 18.7	+3.05	-0.000	-00 54 44	+03.4	-0.01	6.11	2.8	F5	022			d
6643	21 25.0	+3.87	-0.000	+31 05 55	+03.4	-0.01	5.93	0.2	B9	007	+8		
6644	21 26.8	+1.11	-0.000	-56 10 51	+03.4	+0.02	6.20		B9			α Pic	
6645	21 30.3	+3.50	+0.017	+17 20 19	+03.3	-0.01	5.14	4.0	dF0	064	+37	111 Tau	
6646	21 32.2	+2.89	-0.001	-07 51 09	+03.3	-0.04	4.21	-0.4	gG9	012	-18	29 e Ori	
6648	21 44.9	+1.98	+0.001	-39 43 26	+03.3	+0.00	5.81		Ma				
6654	21 56.3	+3.05	-0.000	-00 56 16	+03.4	+0.13	5.15	1.0	gK0	015	+21v?	27 p Ori	
6655	21 57.7	+3.02	+0.000	-02 26 29	+03.3	+0.00	var.	-4.9	B1	0025	+20v	28 η Ori	dssE
6660	22 09.0	+3.11	0.000	+01 48 08	+03.3	0.00	4.73	-3.4	B1ne	0025	+19v	25 Ori	
6666	22 14.8	+2.67	+0.001	-17 01 12	+03.3	-0.02	5.68		A0				
6668	22 26.9	+3.22	-0.000	+06 18 22	+03.3	-0.01	1.70	-3.4	B2s	010	+18	24 ν Ori	
6672	22 40.0	+2.83	-0.001	-10 22 21	+03.2	-0.02	5.90		gK5		+57		
6676	22 58.1	+3.06	+0.001	-00 35 14	+03.2	-0.01	6.25	2.0	B9	014			d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
6681	05 ^h 23 ^m 07 ^s .8	+3 ^o 79	+0 ^o 002	+28°34'02"	+03 ^o 0	-0 ^o 18	1.78	-1.5	B7	023	+ 8	112 β Tau	
6683	23 12.2	+3.47	-0.000	+16 39 27	+03.2	-0.01	6.18	-0.8	B3n	004	+31	113 Tau	
6685	23 12.7	+3.08	-0.000	+00 28 39	+03.2	+0.02	6.02	-2.1	B3n	0025	+17v		s
6688	23 26.1	+1.79	-0.001	-44 16 09	+03.2	+0.00	5.90		K0		.		
6689	23 30.0	+3.98	+0.001	+34 20 59	+03.2	-0.01	5.85	0.8	A0	010	+ 7		
6694	23 35.1	+2.95	+0.001	-05 33 40	+03.2	+0.01	6.13	-2.0	B9	0025	.		
6700	23 49.8	+2.60	+0.000	-19 44 16	+03.1	-0.02	5.79	2.7	dF4	024	+ 6		d
6703	23 56.2	+3.84	+0.001	+30 10 01	+03.1	-0.01	5.72	-5.4	cB9	0008	+17		
6713	24 13.0	+3.14	+0.000	+03 03 14	+03.1	-0.00	4.66	-3.5	B2	0025	+12v	30 ψ Ori	ds
6714	24 15.0	+3.50	+0.001	+17 55 15	+03.1	-0.03	5.31	-0.8	B3	006	+19	115 Tau	d
6715	24 19.9	+3.98	+0.000	+34 26 07	+03.1	-0.05	5.26	0.0	gK5	009	+31	24 φ Aur	
6716	24 22.2	+3.43	-0.001	+15 12 59	+03.1	-0.00	6.13	0.9	A1	009	+25		
6723	24 37.8	+3.60	+0.000	+21 53 46	+03.1	-0.01	4.83	-3.5	B3s	002	+14	114 σ Tau	
6729	24 53.1	+3.45	+0.001	+15 50 01	+03.0	-0.02	5.51	0.3	A0n	009	+15	116 Tau	
6733	25 07.4	+3.48	+0.002	+17 11 57	+03.0	-0.05	6.04		gM1		-23	117 Tau	
6744	25 26.5	+5.67	+0.000	+63 01 42	+03.0	-0.00	5.75	-0.4	gM1	006	-19	17 Cam	
6747	25 28.6	+2.56	+0.001	-21 25 00	+03.0	+0.04	6.14		gG7		+34		
6748	25 28.9	+1.93	-0.000	-40 59 09	+03.1	+0.09	5.85		A2		.		d
6749	25 35.3	+0.88	-0.002	-58 57 16	+03.0	+0.02	5.06	-0.7	G6	007	+10	λ Dor	
6762	26 06.1	+2.57	0.000	-20 47 53	+02.9	-0.09	2.96	-0.7	gG2	018	-14	9 β Lep	d
6764	26 11.7	+3.69	+0.001	+25 06 43	+02.9	-0.03	5.86	1.4	B9n	013	+16	118 Tau	d
6771	26 26.9	+2.99	-0.002	-03 20 47	+02.9	-0.01	6.17	-1.4	B9	003	.		d
6772	26 29.9	+3.81	+0.002	+29 08 54	+02.9	-0.06	6.24	2.7	dF2	020	+13		
6774	26 31.8	+2.07	+0.000	-37 16 16	+03.0	+0.07	5.53		A0		+50		
6779	26 54.0	+2.99	-0.003	-03 29 05	+02.9	-0.01	6.06	0.3	gG8	007	+23		
6792	27 11.6	+3.05	+0.000	-01 07 48	+02.8	-0.02	5.00	-0.5	gK5	008	+ 8	31 CI Ori	d
6795	27 15.5	-0.31	-0.000	-68 39 45	+02.8	-0.02	6.15	1.7	F0	013	+ 1		d
6797	27 16.4	+4.24	-0.001	+41 25 30	+02.8	-0.04	6.09		gG6		+14		
6800	27 19.0	+3.11	+0.001	+01 45 05	+02.8	-0.00	5.67	-2.6	B3	0025	+12		
6805	27 34.3	+3.43	-0.002	+15 19 24	+02.8	-0.05	5.78	1.3	A2	013	-12		
6806	27 41.3	+3.17	+0.000	+04 10 02	+02.8	-0.05	var		K2		.	CK Ori	
6810	27 55.7	+2.90	-0.001	-07 28 20	+02.8	+0.00	6.24	-0.7	B3	004	+11		
6813	28 06.5	+3.21	+0.001	+05 54 42	+02.7	-0.03	4.32	-0.9	B4n	009	+21	32 A Ori	d
6823	28 37.0	+3.15	+0.000	+03 15 21	+02.7	+0.00	5.52	-2.8	B3	0025	+20	33 n ¹ Ori	d
6830	28 46.9	+1.65	+0.002	-47 06 47	+02.6	-0.14	5.54		G5		+16		
6835	28 55.0	+2.92	+0.001	-06 44 40	+02.7	+0.00	6.03		B3s		+23		
6837	28 59.1	+2.57	+0.000	-20 53 58	+02.7	-0.04	5.50	0.7	A0	011	-11	10 Lep	
6841	29 16.8	+3.52	+0.000	+18 33 32	+02.7	-0.00	var	var	cM2	0018	+23	119 CE Tau	
6843	29 20.1	+3.48	+0.000	+17 01 22	+02.7	-0.01	6.02	0.5	B9	008	+15v		ds
6846	29 26.2	+2.13	+0.002	-35 30 22	+02.6	-0.04	3.92	-0.5	K0	013	-- 5v	ϵ Col	
6847	29 27.0	+3.07	+0.000	-00 20 04	+02.7	-0.00	2.48	-6.0	O9	0025	+12v	34 δ Ori	dsE
6849	29 28.3	+3.91	+0.000	+32 19 25	+02.7	-0.00	4.88	-6.2	cB5s	0010	- 0v	25 χ Aur	s
6850	29 30.6	+2.90	-0.000	-07 20 13	+02.7	-0.00	4.64	-3.6	B0	0025	+17v	36 ν Ori	
6863	30 09.5	+3.04	-0.000	-01 37 36	+02.6	-0.01	5.30	-3.0	B1ep	0025	+34		d
6864	30 10.7	+1.70	+0.002	-45 57 40	+02.6	+0.04	5.80		K2		.		
6868	30 18.6	+3.99	-0.003	+34 41 31	+02.6	-0.01	6.05	1.3	A2	011	-14v		s
6875	30 31.4	+2.65	+0.000	-17 51 24	+02.6	+0.00	2.69	-2.9	cF0	008	+25	11 α Lep	
6879	30 35.7	+3.52	+0.000	+18 30 23	+02.6	-0.00	5.50	-1.5	B3ne	004	+44v	120 Tau	
6881	30 40.4	+3.57	0.000	+20 26 26	+02.5	-0.01	6.09		B8		.		
6884	30 59.1	+3.05	-0.000	-01 11 23	+02.5	+0.00	var	var	B1n	0025	+24v	VV Ori	ssE

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
6886	05h31m03s7	+3.41	-0.000	+14°16'20"	+02.5	-0.01	5.58	-0.9	B3	005	+19	35 Ori	
6889	31 10.3	+2.02	+0.003	-38 32 49	+02.5	-0.00	5.45		K5		-1		
6890	31 20.0	+2.15	+0.007	-35 10 22	+02.5	-0.04	5.75		K0		+15v?		
6893	31 31.4	+3.05	+0.000	-01 04 07	+02.5	+0.00	6.18	-2.0	B3	0025	+4		d
6894	31 32.1	+3.04	-0.001	-01 30 11	+02.5	-0.03	6.22		K0		.		
6896	31 38.8	+3.16	-0.002	+03 44 03	+02.5	-0.02	5.32	1.0	A2	014	-9v?	38n ² Ori	
6907	32 04.5	+3.29	+0.000	+09 27 27	+02.4	-0.00	4.53	-4.9	B0s	0017	+33v	37 ρ ¹ Ori	s
6909	32 08.6	+6.15	-0.001	+66 39 57	+02.4	-0.03	6.24	1.8	A5n	013	-24		
6915	32 22.9	+3.30	+0.000	+09 54 08	+02.4	-0.01	3.66	-4.9	O8se	0023	+33	39 λ Ori	d
6916	32 23.8	+3.66	+0.001	+24 00 30	+02.4	-0.02	5.28	-1.2	B3	005	+23	121 Tau	
6917	32 24.4	+5.81	+0.001	+64 07 30	+02.3	-0.07	6.03		B9		.	19 Cam	d
6919	32 27.6	+3.31	+0.002	+10 12 31	+02.4	-0.01	5.59		B8		.		d
6921	32 28.8	+4.93	+0.000	+54 23 53	+02.4	+0.00	5.96	-0.1	gM0	006	+1		
6922	32 29.2	+4.53	+0.001	+47 41 05	+02.4	-0.02	6.05	2.5	dF0	020	+13		
6925	32 34.2	+2.93	-0.001	-06 02 28	+02.4	+0.00	5.58	-2.7	B1	0025	+29		d
6926	32 36.0	+2.93	+0.000	-06 02 01	+02.4	+0.00	4.67	-3.6	B0p	0025	+28		
6927	32 43.1	+0.33	+0.005	-64 15 38	+02.4	-0.01	5.30	-0.8	G8	006	+10v	G Dor	s
6931	32 49.0	+2.95	+0.000	-05 25 16	+02.4	+0.00	5.36	-5.4	O6ep	0025	+24v	41 θ ¹ Ori	ds
6934	32 55.1	+2.96	+0.000	-04 52 11	+02.4	+0.00	4.65	-3.6	B2	0025	+30v	42 c Ori	d
6935	32 55.5	+2.95	0.000	-05 26 51	+02.4	+0.01	5.17	-3.8	O9p	0025	+35v	43 θ ² Ori	ds
6937	32 59.2	+2.94	+0.000	-05 56 28	+02.4	+0.00	2.87	-5.7	O9s	0025	+27v	44 ι Ori	ds
6944	33 11.3	+0.52	-0.001	-62 31 20	+02.3	+0.00	var	var	cF5pv	0036	+7v	β Dor	
6945	33 11.4	+2.96	+0.000	-04 53 14	+02.4	+0.01	5.28	1.6	gF0	018	-9	45 Ori	
6952	33 22.7	+4.19	+0.000	+40 09 08	+02.3	-0.01	6.18		gG5		-18		
6956	33 24.9	+2.21	+0.001	-33 06 45	+02.4	+0.11	5.74		K0		.		
6960	33 40.5	+3.04	0.000	-01 13 56	+02.3	0.00	1.75	-7.0	B0e	0025	+25	46 ϵ Ori	
6966	33 51.3	-2.37	+0.033	-76 22 40	+02.6	+0.29	5.06	0.9	K4	015	+57v	γ Men	ds
6968	34 01.4	+3.75	+0.001	+26 53 42	+02.2	-0.03	5.70	0.2	B8	008	+10v		d
6971	34 09.0	+2.93	-0.000	-06 05 41	+02.2	-0.01	5.62	-2.5	B1	0025	+29		d
6972	34 09.4	+3.30	+0.006	+09 15 55	+02.0	-0.30	4.39	1.5	sgG6	026	+99	40 ρ ² Ori	
6973	34 09.6	+3.48	+0.003	+17 00 40	+02.2	-0.03	5.39	2.4	A5n	025	+41	122 Tau	
6974	34 12.9	+2.35	+0.002	-28 44 17	+02.2	-0.00	6.15		A0		.		
6975	34 17.5	+3.33	+0.003	+11 00 21	+02.2	-0.01	6.10		gM0		-112		s
6981	34 35.2	+3.28	+0.000	+08 55 22	+02.2	-0.00	6.09	-2.2	B3	0025	+42		
6985	34 39.3	+3.59	+0.000	+21 06 50	+02.2	-0.02	3.00	-3.6	B2ep	006	+22v	123 ζ Tau	s
6986	34 41.2	+1.63	-0.002	-47 20 37	+02.2	-0.02	6.04		K0		.		
6988	34 48.8	+2.80	+0.001	-11 48 16	+02.2	-0.03	6.02		A0		.		
6994	35 00.6	+2.94	+0.001	-05 58 02	+02.2	+0.00	5.75	-2.6	B3n	0025	+29		
6999	35 17.9	+2.37	+0.001	-27 53 58	+02.1	-0.06	5.95		A5		.	ν ¹ Col	
7000	35 18.6	+3.25	+0.000	+07 30 48	+02.1	-0.02	5.70		B8		+18v?		
7002	35 25.3	+3.85	-0.001	+30 27 53	+02.1	-0.01	5.49	0.9	dA9n	012	+2	26 Aur	d
7013	35 47.4	+2.34	-0.003	-28 43 06	+02.2	+0.05	5.32	3.0	dF4	035	+36v?	ν ² Col	
7017	35 59.1	-1.50	-0.004	-73 46 18	+02.1	+0.04	5.61		Mb		.		
7026	36 07.5	+3.82	+0.001	+29 11 18	+02.1	-0.00	6.00	-3.3	B3s	0023	+30v		s
7028	36 11.9	+2.92	-0.001	-06 36 04	+02.1	+0.00	5.92	-2.3	B3	0025	+15v		
7031	36 14.1	+3.01	0.000	-02 37 38	+02.1	+0.00	3.78	-4.6	O9	0025	+29v	48 σ Ori	ds
7039	36 27.9	+2.90	-0.001	-07 14 21	+02.0	-0.05	4.88	2.0	A3	026	+4v	49 d Ori	
7042	36 32.6	+3.17	-0.000	+04 05 41	+02.0	+0.00	4.54	-4.1	B3ep	0025	+22v	47 ω Ori	
7047	36 38.2	+3.72	+0.002	+25 52 15	+02.0	-0.02	5.00	-1.5	B3	005	+15v	125 Tau	s
7056	37 01.6	+2.99	-0.000	-03 35 28	+02.0	-0.00	5.97		A5		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
7058	05 ^b 37 ^m 04 ^s 0	+2 ^s 64	+0 ^s 000	-17°52'34"	+02"0	+0"00	6.22		B9				d
7061	37 07.1	+1.93	-0.001	-40 44 04	+02.0	+0.01	5.81		B8				d
7066	37 21.8	+3.88	+0.001	+31 19 58	+02.0	-0.01	5.96		B9		-7		
7068	37 25.5	+6.01	+0.000	+65 40 25	+02.0	-0.02	5.78	0.5	gK5	009	-19		
7078	37 50.2	+2.17	-0.000	-34 05 59	+01.9	-0.03	2.75	-0.5	B8ne	022	+35	α Col	d
7082	37 58.8	+2.22	-0.002	-32 39 16	+01.9	-0.03	5.53	-0.6	K0	006	-8		
7085	38 06.9	+3.01	+0.000	-02 51 01	+01.9	+0.01	6.07	-2.1	B3	0025	+29		
7089	38 14.1	+3.03	+0.000	-01 58 03	+01.9	-0.00	2.05	-6.4	B0ne	0025	+18	50 ζ Ori	d
7091	38 18.3	+3.05	-0.001	-01 09 13	+01.9	-0.00	5.00	-3.1	B3	0025	+26v		s
7094	38 24.3	+3.47	+0.001	+16 30 35	+01.9	-0.02	4.87	-1.6	B3	005	+21v	126 Tau	d
7098	38 31.5	+3.08	+0.001	+00 18 46	+01.9	+0.03	5.99	1.9	A5	015	-12		
7102	38 39.4	-3.67	+0.006	-78 50 56	+01.9	+0.02	6.14		B9			ι Men	
7105	38 47.0	+5.09	+0.002	+56 33 29	+01.9	+0.03	6.19	2.3	sgG9	017	-29	24 Cam	
7119	39 27.8	+2.67	-0.000	-16 44 58	+01.8	+0.01	6.10		B5		+16		
7134	39 50.8	-11.60	-0.005	-84 48 58	+01.8	+0.05	6.24		A0				
7136	39 53.4	+3.10	-0.004	+01 27 07	+01.7	-0.01	5.24	0.4	gK1	011	+88	51 b Ori	
7141	40 07.7	+2.52	-0.000	-22 23 48	+01.8	+0.02	5.86		A2			12 Lep	
7147	40 17.2	+2.29	-0.001	-30 33 30	+01.7	+0.01	6.22		A0				
7148	40 17.2	+3.64	+0.000	+23 10 57	+01.7	-0.02	6.06	-0.7	B3ne	006	+19		
7150	40 27.5	+2.15	-0.001	-34 41 28	+01.8	+0.05	5.31		B9		+34		
7151	40 28.1	+2.91	-0.000	-06 49 09	+01.8	+0.07	5.98	2.4	F5	019	-11		ds
7161	41 07.7	-4.78	+0.116	-80 30 33	+02.7	+1.06	5.65	3.8	G0	042	+12	π Men	
7162	41 10.2	+2.63	+0.001	-18 34 44	+01.6	-0.02	5.75		B9				
7182	42 01.5	+4.65	-0.001	+49 48 24	+01.6	-0.00	5.52	1.2	A2s	014	-6	27 σ Aur	
7191	42 17.4	+5.06	+0.003	+56 05 51	+01.5	-0.06	6.06	1.3	A2	011	+26v	26 Cam	
7197	42 22.7	+2.50	-0.021	-22 27 48	+01.2	-0.37	3.80	4.1	dF6	122	-10v?	13 γ Lep	d
7198	42 23.5	+3.17	+0.001	+03 59 19	+01.5	-0.02	6.14		gF0n		+8		d
7224	43 52.9	+3.45	+0.001	+15 48 17	+01.4	-0.01	5.91	-1.1	B8	004		129 Tau	
7226	44 00.1	+3.10	-0.005	+01 09 08	+01.2	-0.15	6.14		dG4		+29		
7228	44 07.4	+3.29	-0.002	+09 30 20	+01.3	-0.06	5.89		gG7		-26		
7230	44 08.4	+2.23	+0.000	-32 19 27	+01.4	-0.02	5.20		O9n		+110	μ Col	
7236	44 21.5	+5.67	-0.000	+62 47 32	+01.4	-0.01	6.13	1.3	A2n	011	-6		d
7237	44 22.2	+3.42	+0.001	+14 28 18	+01.3	-0.04	5.67	1.4	A2n	014	+21	131 Tau	
7241	44 31.2	+3.50	0.000	+17 42 44	+01.3	-0.01	5.51	1.7	gF4	017	+9	130 Tau	
7246	44 40.9	+0.11	-0.005	-65 45 15	+01.3	+0.00	4.52	1.2	A5	022	-3	δ Dor	
7247	44 41.3	+2.72	-0.001	-14 50 21	+01.3	-0.00	3.67	1.6	A2	038	+20v	14 ζ Lep	
7249	44 52.7	+3.40	+0.001	+13 52 59	+01.3	-0.02	5.20	-1.8	B3s	004	+28	133 Tau	
7257	45 04.1	+1.66	-0.000	-46 36 53	+01.3	+0.02	5.13	0.1	G9	010	+11		
7258	45 05.5	+2.82	-0.002	-10 32 58	+01.3	-0.02	6.00		A3				
7259	45 07.4	+2.34	+0.000	-28 39 22	+01.3	+0.00	6.05		B8				
7262	45 19.0	+3.22	+0.000	+06 26 17	+01.3	-0.02	5.27	1.1	dA5n	015	+42	52 Ori	ds
7264	45 23.0	+2.85	+0.000	-09 41 09	+01.3	-0.00	2.20	-6.7	cB0	0025	+21	53 κ Ori	
7266	45 23.2	+3.58	+0.001	+20 51 14	+01.3	-0.02	5.94	-0.6	B9	005	+7v		ds
7277	45 42.5	+4.16	-0.002	+39 09 58	+01.2	-0.02	4.64	-0.1	gG5	011	-20	29 τ Aur	
7283	45 56.8	+3.68	+0.000	+24 33 09	+01.2	-0.03	5.02	0.4	gK3	012	+16	132 Tau	
7286	46 05.8	+2.98	+0.005	-04 06 24	+01.0	-0.22	5.95		dG4		+29		
7287	46 05.9	+1.42	+0.000	-51 05 02	+01.3	+0.08	3.94	2.8	A3	058	+28	β Pic	
7289	46 12.5	+1.21	-0.002	-54 22 37	+01.2	-0.01	5.96		K5				
7306	46 44.3	+3.37	-0.001	+12 38 14	+01.1	-0.03	4.92	0.1	B9	011	+19	134 Tau	
7314	47 17.3	+3.31	+0.000	+09 51 27	+01.1	-0.01	5.89	0.9	gG3	010	+44		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
7315	05 ^b 47 ^m 20 ^s 1	+2 ^s 73	-0 ^s 002	-14°29'49"	+01"1	-0"04	5.57	0.8	gG6	011	- 2		d
7320	47 34.2	+3.18	+0.001	+04 24 37	+01.0	-0.04	6.12		gK2		+27		
7322	47 37.8	+4.09	+0.004	+37 17 36	+01.0	-0.04	4.99	-0.5	gM1	008	+38	31 ν Aur	
7323	47 38.1	+3.41	+0.001	+14 17 34	+01.0	-0.04	5.71	0.7	gG9	010	+45	135 Tau	
7325	47 48.2	+2.51	-0.001	-22 59 08	+01.1	+0.02	5.78		A2		+44		
7326	47 49.0	+3.78	-0.000	+27 57 17	+01.1	+0.01	5.65	0.2	gG7	008	+ 8		
7327	47 52.7	+5.29	+0.001	+58 57 08	+01.0	-0.02	6.06	0.0	B9	006			
7334	48 01.4	+4.16	0.000	+39 08 10	+01.1	+0.01	4.18	0.2	gK1	016	+10	32 ν Aur	
7353	48 55.0	+1.09	+0.009	-56 10 43	+00.9	-0.07	4.38	0.3	K1	015	+16	γ Pic	
7354	48 57.1	+2.90	+0.000	-07 31 48	+01.0	0.00	5.32	-2.9	B3	0025	+20	55 Ori	
7362	49 10.2	+2.58	+0.016	-20 52 55	+00.3	-0.64	3.90	1.1	dG7	027	+99	15 δ Lep	
7364	49 11.7	+2.12	+0.004	-35 47 10	+01.3	+0.40	3.22	0.4	gK1	027	+89	β Col	
7371	49 23.2	+2.51	+0.000	-22 56 15	+00.9	-0.02	6.09		K0		.		
7372	49 25.6	+3.56	+0.000	+19 51 25	+00.9	+0.00	6.00		B9		.		
7374	49 31.8	+3.41	-0.001	+14 09 39	+00.9	-0.01	5.57	0.2	B9	007	- 4v	137 Tau	
7376	49 44.6	+2.86	-0.002	-09 03 11	+00.9	+0.05	5.96		A0		.		
7377	49 45.3	+1.36	-0.000	-52 07 11	+00.8	-0.08	4.98	1.3	G8	018	+ 1		
7380	49 50.6	+3.12	-0.000	+01 50 40	+00.9	-0.01	5.01	-2.0	cK2	004	+10	56 Ori	
7384	49 56.6	-0.06	-0.003	-66 54 49	+00.9	+0.01	5.15	0.4	B5	011	+16	ϵ Dor	
7389	50 11.0	+3.77	+0.001	+27 36 08	+00.8	-0.02	4.54	0.6	A0	016	-17v	136 Tau	s
7402	50 29.0	+5.38	+0.000	+59 52 47	+00.8	-0.02	var	var	A1	014	+12v	31 TU Cam	sE
7404	50 39.3	+5.03	-0.001	+55 41 52	+00.8	+0.02	4.92	0.8	A2s	015	-12	30 ξ Aur	d
7407	50 50.8	+2.05	+0.002	-37 38 27	+00.8	-0.03	5.64		K0		+32		
7416	51 17.9	+2.18	-0.001	-33 48 41	+00.8	+0.03	4.89	0.1	B5	011	+30	λ Col	
7419	51 25.2	+3.55	-0.013	+20 16 07	+00.7	-0.09	4.62	4.7	dF9	104	-14	54 χ^1 Ori	
7422	51 29.9	+1.01	+0.002	-57 09 54	+00.7	-0.08	5.95		F5		.		
7426	51 44.2	+3.90	-0.003	+31 41 45	+00.5	-0.18	5.81	2.2	A3	019	-21		
7436	51 59.0	+3.55	+0.000	+19 44 30	+00.7	-0.01	5.89	-1.7	B3+B5	003	+ 7v	57 Ori	s
7440	52 09.2	+3.10	+0.000	+00 57 38	+00.7	-0.00	6.23		K1		+22		
7446	52 17.7	+2.33	-0.002	-29 09 19	+00.6	-0.05	6.17		F2		.		
7449	52 23.5	+2.80	+0.004	-11 46 56	+00.7	+0.04	5.81	-0.3	gK4	006	+87		
7451	52 27.8	+3.25	+0.002	+07 23 58	+00.7	+0.01	var	var	cM2	007	+20v	58 α Ori	s
7457	52 51.0	+3.56	+0.000	+20 10 06	+00.6	-0.02	var		gM8e		-21	U Ori	
7463	53 01.8	+2.97	+0.003	-04 37 24	+00.6	-0.02	5.98		gK2		+26		
7466	53 07.3	+2.96	-0.001	-04 47 41	+00.6	-0.02	6.22		A0		.		
7471	53 14.8	+1.95	-0.002	-39 57 56	+00.6	+0.01	5.63		K5		.		
7473	53 26.1	+1.50	+0.000	-49 38 04	+00.6	+0.01	6.16		B5s		+12		
7476	53 38.9	-4.05	-0.005	-79 22 19	+00.6	+0.06	5.56		B9n		+ 5	α Men	
7477	53 43.0	+0.46	+0.020	-63 06 17	+01.1	+0.54	4.53	1.4	sgK3	024	+25		
7478	53 43.1	+3.30	+0.000	+09 30 13	+00.5	-0.00	6.01		B9		.		
7479	53 44.0	+1.32	-0.002	-52 38 45	+00.8	+0.24	5.30	0.1	A5	009	+24		
7481	53 46.6	+2.06	+0.002	-37 07 37	+00.5	-0.03	5.02	-0.7	K1	007	+60v	ξ Col	
7483	53 52.3	+3.68	+0.000	+24 14 39	+00.5	-0.00	6.02	-6.9	cA0	0045	+ 1v		
7488	54 01.7	+3.35	+0.007	+11 30 59	+00.5	-0.05	6.08		G5		+21		
7492	54 07.6	+2.73	-0.003	-14 10 32	+00.7	+0.14	3.77	2.8	dF2	063	- 2	16 η Lep	
7494	54 08.3	+2.52	+0.009	-22 50 47	+00.5	+0.02	6.01		dK0		+34		
7499	54 28.0	+2.26	0.000	-31 23 17	+00.5	+0.01	5.54		F0		+19	σ Col	
7507	54 53.5	+3.72	+0.000	+25 56 59	+00.4	-0.00	4.90	-6.0	B1	0009	+ 8v	139 Tau	
7521	55 24.6	+4.94	+0.010	+54 17 00	+00.3	-0.13	3.88	0.6	gG6	022	+ 8	33 δ Aur	
7523	55 28.7	+4.66	+0.000	+49 55 17	+00.4	-0.01	6.07		gG4		- 4		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
7536	05 ^h 55 ^m 45 ^s .8	+2 ^h 13	-0 ^m 000	-35°17'15"	+00 ^h 4	+0 ^m 00	4.36	-2.4	B3	005	+24	γ Col	
7539	55 48.6	+3.12	+0.000	+01 50 01	+00.4	-0.01	6.06		A5		+45v	59 Ori	ds
7543	55 51.6	+4.40	-0.005	+44 56 41	+00.4	-0.00	var	var	A2n	050	-17v	34 β Aur	sE
7547	56 04.4	+3.38	-0.001	+12 48 19	+00.4	+0.02	5.77	-0.3	gG4+A5	006	+11		d
7554	56 13.4	+4.45	+0.000	+45 56 04	+00.3	-0.01	4.59	-3.0	gM3	0038	+1	35 π Aur	
7556	56 15.3	+3.09	-0.001	+00 32 59	+00.3	-0.00	5.25	-0.5	A1	007	+34v	60 Ori	s
7557	56 18.7	+4.09	+0.004	+37 12 40	+00.2	-0.08	2.71	0.0	A0sp	028	+29	37 θ Aur	d
7565	56 41.8	+2.85	+0.001	-09 33 37	+00.2	-0.05	5.10	0.8	A5	014	+22v	2 Mon	s
7576	57 08.5	+1.78	-0.001	-44 02 14	+00.3	+0.01	5.74		K0		.		
7580	57 10.9	+4.55	+0.001	+47 54 04	+00.2	-0.02	5.68		A0		+16	36 Aur	
7587	57 33.2	+3.00	+0.001	-03 04 29	+00.1	-0.07	4.68	1.2	gK2	020	+26		
7591	57 36.9	+1.84	+0.001	-42 49 02	+00.2	-0.02	4.03	-0.4	K0	013	+17	η Col	
7597	57 51.9	+3.77	+0.000	+27 34 18	+00.2	-0.00	6.08	-6.3	B9p	0005	+17		d
7598	57 52.5	+4.61	-0.001	+48 57 34	+00.2	-0.01	6.24		K0		+11		
7600	57 56.3	+3.88	+0.000	+31 02 03	+00.2	+0.01	6.01	0.8	A0	009	-11		
7616	58 55.5	+4.66	+0.003	+49 54 26	+00.0	-0.05	5.98		A0		+22		
7623	59 11.2	+2.44	-0.000	-25 25 02	+00.1	-0.02	5.90		A0		.		
7630	59 27.5	+2.18	+0.001	-33 54 39	+00.0	-0.02	5.62		K5		+19		
7631	59 29.2	+2.82	-0.000	-10 35 50	+00.0	0.00	4.97	-1.5	B8	005	+39v	3 Mon	ds
7635	59 37.9	+3.30	+0.001	+09 38 57	+00.0	-0.03	4.19	1.2	A2s	025	+45v	61 μ Ori	ds
7636	59 38.3	+3.94	+0.006	+32 38 25	-00.2	-0.21	6.23	3.2	dF5	025	+34		
7637	59 38.8	+1.41	-0.003	-51 13 03	+00.1	+0.09	5.76		A0		+5		
7641	59 41.6	+4.33	+0.011	+42 54 55	-00.1	-0.15	6.13	1.3	gG8	011	+38	38 Aur	
7662	06 00 29.7	+3.55	+0.000	+19 41 36	-00.1	-0.02	5.17	-0.6	B8	007	+12v	64 Ori	s
7665	00 37.3	+3.35	-0.001	+11 41 00	-00.1	-0.02	5.96	0.7	A0	009	-11		
7675	00 57.0	+3.56	+0.000	+20 08 29	-00.1	-0.01	4.71	-7.0	cB2ep	0008	+17v	62 χ^3 Ori	
7676	01 04.8	+3.65	-0.000	+23 16 04	-00.2	-0.10	4.30	1.5	gG5	028	+20v	1 Gem	s
7680	01 14.6	+2.42	+0.004	-26 16 59	-00.0	+0.09	5.18	0.0	gK3	009	+183		d
7685	01 27.6	+4.32	-0.003	+42 59 15	-00.3	-0.15	5.90	2.2	dA8n	018	+34	39 Aur	
7691	01 47.6	+2.92	-0.000	-06 42 19	-00.2	-0.00	5.12		B2ne		+51v		
7701	02 15.9	+3.96	+0.001	+33 36 14	-00.2	-0.02	6.10		B9n		+25		
7702	02 18.2	+3.20	0.000	+05 25 28	-00.2	+0.00	5.84	0.4	gG7	008	+20	63 Ori	
7704	02 19.8	+3.17	0.000	+04 09 47	-00.2	-0.00	5.70	-0.1	gG4	007	+33	66 Ori	
7708	02 28.7	+2.23	-0.001	-32 10 12	-00.1	+0.13	5.64		B4n		+94v?		
7711	02 45.2	+2.68	-0.000	-16 28 47	-00.2	-0.00	5.04	2.5	A0	031	+20v	17 Lep	
7713	02 47.8	+4.01	-0.010	+35 23 50	-00.6	-0.31	6.11	4.2	dG0	045	-12		d
7719	03 02.0	+1.73	-0.008	-45 02 08	-00.0	+0.24	6.22	3.9	F8	034	.		
7721	03 05.3	+2.83	+0.001	-10 14 16	-00.2	+0.02	5.79	2.6	dF4	023	+32v		
7723	03 08.2	+4.14	+0.001	+38 29 21	-00.3	-0.05	5.31	1.5	A3	017	+17v	40 Aur	s
7727	03 13.8	+1.73	-0.008	-45 04 40	-00.0	+0.25	5.82	3.5	F5	035	.		d
7735	03 41.0	+2.12	0.000	-35 30 30	-00.3	+0.02	5.89		A2		.		
7737	03 41.9	+2.47	+0.002	-24 11 23	-00.3	-0.02	var		gM6		+12	S Lep	
7742	03 53.5	+2.72	-0.001	-14 55 45	-00.3	+0.02	4.67	0.8	A0n	017	+32v?	18 θ Lep	
7750	04 09.9	+2.97	-0.001	-04 11 14	-00.4	-0.00	5.37	-1.1	B5p	005	+20		
7751	04 10.0	+2.31	+0.001	-29 45 07	-00.4	-0.04	5.72		A0		.		
7763	04 26.9	+2.50	-0.002	-23 06 13	-00.4	-0.02	5.50	0.5	A2	010	-15		d
7772	04 43.0	+3.43	+0.001	+14 46 34	-00.4	-0.03	4.40	-1.4	B3s	007	+22v	67 ν Ori	s
7779	04 50.6	+2.54	+0.000	-21 48 19	-00.4	-0.02	6.12		Mb		.		
7785	05 08.2	+1.85	-0.004	-42 17 29	-00.4	+0.00	6.25		A2		.	π^1 Col	
7788	05 15.5	+2.16	-0.000	-34 18 16	-00.5	+0.00	5.93		B5ne		+18		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
7794	06 ^h 05 ^m 31 ^s 1	+2 ^h 61	+0 ^m 001	-19 ^o 09'31"	-00 ^h 4	+0 ^m 05	5.51	-1.0	gM2	005	+29	19 Lep	
7796	05 34.4	+5.30	+0.004	+58 56 42	-00.5	+0.02	5.42	0.6	gG8	011	+31	37 Cam	
7805	05 48.7	+2.06	-0.000	-37 14 41	-00.5	-0.00	5.13		B9		+45	θ Col	
7813	06 05.9	+0.07	+0.002	-66 01 57	-00.5	+0.02	5.83		B9		.	η^1 Dor	
7816	06 19.7	+1.86	-0.001	-42 08 43	-00.6	-0.02	5.48	0.9	A0	012	+31	π^2 Col	
7817	06 21.3	+3.13	+0.000	+02 30 33	-00.6	-0.02	5.58		A0		+34		d
7824	06 31.5	+3.62	-0.001	+22 12 00	-00.6	-0.02	6.04		gK4		+ 8		
7825	06 36.0	+0.55	+0.002	-62 08 43	-00.7	-0.08	5.05	-0.4	K5	008	+22		
7827	06 41.8	+3.64	+0.001	+23 07 24	-00.6	-0.00	5.76	-5.9	B2se	0008	+16v	3 Gem	d
7830	06 51.7	+2.52	+0.000	-22 25 02	-00.6	-0.04	5.46	-0.3	A0	007	+44		
7835	07 06.2	+1.77	-0.002	-44 20 48	-00.6	+0.01	6.25		B9		.		
7836	07 08.4	+2.64	+0.001	-18 06 57	-00.6	-0.02	6.17		A0		.		
7837	07 09.0	+2.94	+0.004	-05 42 04	-00.6	+0.02	6.19		F0		.		
7841	07 18.2	+2.72	-0.003	-14 34 29	-00.6	+0.04	5.67	0.7	gK2	010	+31		
7849	07 41.9	+2.52	+0.006	-22 45 52	-00.6	+0.07	5.71	3.3	dF6	033	+22		d
7853	07 46.8	+4.60	+0.002	+48 43 25	-00.7	-0.05	6.09	0.9	A0	009	+33	41 Aur	d
7855	07 47.1	+2.40	-0.001	-26 41 26	-00.7	+0.02	6.19		K0		.		
7856	07 49.3	+6.04	+0.002	+65 43 53	-00.7	-0.03	5.39	0.2	gK2	009	+ 6	36 Cam	s
7872	08 28.3	+3.68	+0.000	+24 25 59	-00.8	-0.06	5.92	0.4	gK0	008	+22v	5 Gem	
7873	08 33.5	+1.94	-0.003	-40 20 36	-00.7	+0.07	5.56		Ma		-19		
7874	08 35.2	+2.39	-0.001	-27 08 31	-00.8	-0.05	5.79	0.8	gK1	010	+ 1		
7875	08 35.4	+2.92	+0.000	-06 44 31	-00.8	-0.00	5.97		A0		.		
7877	08 38.0	+3.40	-0.000	+13 39 04	-00.8	-0.02	5.86	1.4	A2	013	+13		
7886	09 03.6	-0.38	-0.010	-68 49 58	-00.8	+0.02	5.21	1.7	B9	020	+18	ν Dor	
7887	09 03.6	+3.55	+0.000	+19 48 13	-00.8	-0.01	5.70		B9		+31	68 Ori	
7888	09 03.7	+3.93	+0.001	+32 42 23	-00.8	-0.00	5.96		gM1		-51		
7889	09 05.8	+3.41	+0.000	+14 13 18	-00.8	-0.02	4.35	-1.4	B3n	007	+24v	70 ξ Ori	
7891	09 10.3	+3.46	+0.001	+16 08 37	-00.8	-0.02	4.92	-1.8	B3n	005	+22v	69 ρ Ori	
7892	09 13.1	+2.41	-0.001	-26 28 11	-00.8	+0.00	5.98		A0		.		
7893	09 13.6	+1.72	-0.001	-45 16 12	-00.8	-0.00	6.22		B9		.		
7894	09 15.4	+2.96	-0.001	-04 39 10	-00.8	-0.01	6.04		B9		.		d
7896	09 17.2	+3.64	+0.001	+22 55 18	-00.8	-0.01	var	var	cM1	0007	+21	6 BU Gem	E?
7898	09 19.4	+1.17	-0.001	-54 57 25	-00.8	+0.00	4.84		B1n		- 2v	δ Pic	s
7899	09 25.8	+2.92	-0.000	-06 32 15	-00.8	-0.00	5.09	-1.4	B3s	005	+29		
7929	10 37.0	+3.53	+0.002	+18 41 43	-00.9	-0.02	6.21		B8		.		
7946	11 08.5	+0.13	-0.005	-65 34 39	-00.9	+0.11	4.88	-2.1	M4	004	+34	η^3 Dor	
7949	11 11.2	+5.39	+0.005	+60 00 57	-01.0	-0.02	5.56	0.6	gK3	010	+12	40 Cam	
7952	11 25.0	+2.99	-0.001	-03 43 35	-01.0	+0.02	5.93		gG7		+49		
7956	11 33.3	+3.50	-0.000	+17 55 20	-01.0	-0.02	5.74	0.9	A5	011	+24v		ds
7962	11 44.0	-1.79	+0.031	-74 44 13	-01.2	-0.22	5.14	5.4	dG6	118	+35	α Men	
7969	11 51.5	+3.62	-0.005	+22 31 23	-01.1	-0.02	var	var	gM3	013	+18v	7 η Gem	ds
7971	11 54.3	+3.53	-0.007	+19 10 30	-01.2	-0.19	5.18	3.2	dF6	040	+36	71 Ori	
7980	12 08.3	+2.97	-0.001	-04 33 08	-01.1	+0.01	5.76		A0		.		d
7981	12 11.5	+3.82	-0.005	+29 31 06	-01.3	-0.26	4.45	0.7	gG6	018	+20	44 ν Aur	
7984	12 18.3	+3.40	+0.002	+13 52 04	-01.1	+0.01	5.81	-3.6	B1s	0013	+36		
7986	12 25.0	+2.93	-0.000	-06 15 29	-01.1	-0.02	4.09	-0.3	gK2	013	- 5	5 γ Mon	
7987	12 32.1	+3.46	+0.000	+16 09 37	-01.1	-0.02	5.28	-0.2	B8n	008	+23	72 ρ^3 Ori	
7996	12 56.4	+3.37	+0.000	+12 34 07	-01.1	-0.00	5.36	-0.4	B9s	007	+13	73 Ori	
7997	12 59.3	+2.58	+0.000	-20 15 20	-01.1	+0.03	5.74		K0		.		
7998	12 59.3	+3.22	-0.000	+06 05 01	-01.2	-0.02	5.95		B5ne		+26		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
8000	06 ^h 13 ^m 01 ^s .6	+2 ^s 96	+0 ^s 002	-04°53'50"	-01"2	-0"04	6.00		A2		.		d
8001	13 01.6	+3.05	-0.011	-00 29 30	-01.4	-0.22	5.68	2.8	dF6	026	-36		
8002	13 03.0	+2.86	-0.002	-09 01 06	-01.1	+0.02	6.03	-1.6	B9	003	.		d
8008	13 06.0	+2.63	+0.001	-18 27 32	-01.2	-0.05	6.24		K0		.		
8015	13 15.7	+3.67	-0.001	-23 59 17	-01.2	-0.01	6.11	1.1	gG5	010	-21	8 Gem	
8016	13 18.3	+5.53	+0.000	+61 32 03	-01.2	-0.00	5.30	-0.8	gM3	006	+11	1 Lyn	
8020	13 20.4	+6.61	+0.001	+69 20 27	-01.3	-0.11	4.73	1.1	A0	019	-17v		
8024	13 27.4	+2.75	+0.001	-13 42 02	-01.2	-0.01	4.99		B9		+39v?		
8033	13 38.1	+3.37	+0.006	+12 17 16	-01.0	+0.19	5.11	3.3	dF5	043	+9	74 k Ori	
8038	13 53.9	+2.68	0.000	-16 35 59	-01.2	+0.01	5.88		B5		+14		
8051	14 21.2	+3.31	+0.000	+09 57 44	-01.3	-0.06	5.29	1.2	A2n	015	+13	75 l Ori	d
8058	14 37.1	+3.18	-0.014	+05 07 02	-01.1	+0.16	5.81	4.5	dG0	047	+13		
8062	14 46.3	+2.13	-0.001	-35 07 22	-01.2	+0.08	4.51	0.5	G8	016	+24v?	* Col	
8064	14 56.4	+1.98	-0.002	-39 14 42	-01.3	-0.02	6.08		A0		.		
8065	14 57.3	+2.52	+0.009	-22 41 32	-01.6	-0.25	6.04	2.1	dG0	016	-3		d
8068	15 12.8	+5.29	-0.001	+59 01 54	-01.3	+0.02	4.42	1.9	A2s	031	-4	2 Lyn	
8073	15 14.8	+3.41	-0.001	+14 24 11	-01.3	-0.00	5.98	1.4	A0n	012	+11		d
8075	15 19.1	+2.04	-0.000	-37 43 09	-01.3	+0.08	5.62	0.1	K0	008	+70		
8079	15 26.5	+2.06	-0.002	-37 13 59	-01.4	-0.01	6.00		A2		.		
8080	15 28.2	+2.67	-0.001	-16 47 45	-01.3	+0.01	5.28	0.3	gK2	010	-8		
8099	16 04.2	+2.59	-0.000	-19 56 47	-01.4	+0.01	5.31	-1.7	B3	004	+23v		
8101	16 07.4	+3.49	-0.000	+17 20 48	-01.4	-0.01	6.17		B9		+4		
8107	16 27.9	+2.85	+0.000	-09 22 06	-01.5	-0.03	5.67	0.7	gK1	010	+7		
8113	16 44.3	+2.87	-0.002	-08 33 52	-01.5	-0.01	6.07		B9		.		
8114	16 45.5	+1.32	-0.000	-52 42 44	-01.5	-0.01	6.08		K0		.		
8120	16 50.7	+2.56	-0.000	-20 54 15	-01.5	-0.01	5.66	-1.3	B5	004	+31		
8131	17 13.1	+3.42	0.000	+14 40 26	-01.5	-0.02	6.02	-0.1	gM0	006	+33		
8132	17 18.2	+2.89	-0.000	-07 48 02	-01.5	0.00	5.13	-1.4	B3	005	+29v	7 Mon	
8137	17 29.3	+3.00	-0.001	-02 55 18	-01.5	+0.00	5.18	-0.3	gM1	008	+47		
8147	17 37.5	+5.33	+0.000	+59 23 46	-01.5	+0.00	6.02	0.8	A1n	009	-24	4 Lyn	d
8151	17 42.5	+4.88	+0.004	+53 28 38	-01.6	-0.10	5.41	2.3	dF4	024	-1v	45 Aur	s
8154	17 52.8	+2.16	+0.001	-34 22 26	-01.6	0.00	5.83	1.6	B9n	014	+26		
8170	18 23.6	+2.30	+0.000	-30 02 24	-01.6	+0.00	3.10	-1.3	B5s	013	+32v	1 ζ CMa	s
8180	18 47.6	+2.17	-0.000	-34 07 14	-01.6	+0.03	5.60	-2.9	B2n	0028	+73v		
8181	18 49.5	+3.13	-0.001	+02 17 36	-01.7	-0.03	6.25	1.8	A5	013	-26		d
8186	19 04.8	+2.80	-0.001	-11 44 56	-01.7	-0.00	5.49	-3.6	B1ne	0023	+21		d
8203	19 48.1	+3.37	-0.002	+12 35 47	-01.8	-0.04	5.97		dF0		+21		
8208	19 56.1	+3.63	+0.004	+22 32 28	-01.9	-0.11	3.19	-0.8	gM3	016	+55	13 μ Gem	d
8213	20 12.5	+3.02	+0.002	-02 10 10	-01.8	-0.07	var		gM6ev		+30	V Mon	
8214	20 17.1	+2.19	-0.002	-33 24 36	-01.8	-0.06	3.98	0.3	G1	018	-3v	3 CMa =	s
8223	20 29.8	+2.64	-0.000	-17 55 47	-01.8	-0.00	1.99	-4.5	cB1	005	+34v	= δ Col	
8227	20 40.4	+3.16	+0.000	+03 47 28	-01.8	-0.01	6.25		B3s		+29	2 β CMa	
8235	21 02.9	+4.62	+0.000	+49 18 57	-01.8	-0.01	var	var	cM0	001	+5v	46 ψ ¹ Aur	
8240	21 07.1	+3.18	-0.001	+04 37 12	-01.8	+0.01	4.48	1.5	A6n	025	+16v	8 ε Mon	d
8248	21 18.2	+3.28	-0.000	+08 54 45	-01.9	-0.02	6.11	0.6	A0	008	+9		
8265	21 50.3	+2.80	-0.004	-11 30 07	-01.9	-0.04	5.39	0.6	gK3	011	-26		
8267	21 54.0	+2.44	-0.001	-25 32 57	-01.9	-0.03	5.73	-0.4	gK5	006	+34		
8273	22 02.2	+2.77	-0.001	-12 56 03	-01.9	-0.01	5.95		B8		.		d
8274	22 02.3	+1.07	-0.005	-56 20 33	-02.0	-0.03	5.72		A0		+7v?	ν Pic	
8281	22 12.7	+5.07	-0.002	+56 18 51	-01.9	+0.02	var	var	A5s	008	-14v	RR Lyn	sE

GC	AR 1950.0	AnV	MP	Decl 1959.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
8284	06 ^h 22 ^m 16 ^s .9	+2 ^o 08	-0 ^o 002	-36°40'50"	-01"9	+0"05	5.72		G5		.		d
8287	22 27.1	+5.24	-0.000	+58 26 50	-02.0	-0.01	5.48	-0.3	gK5	007	- 3	5 Lyn	d
8288	22 29.7	+1.36	-0.004	-52 09 11	-02.0	-0.03	5.89		G5		.		
8290	22 30.6	+3.65	-0.000	+23 21 23	-02.0	-0.03	6.02	1.0	A0	010	-32		
8291	22 31.1	+3.24	+0.001	+07 06 53	-02.0	+0.00	var	var	cG6vp	0013	+32v	T Mon	
8293	22 32.8	+6.84	+0.001	+70 33 58	-01.9	+0.02	5.99	1.4	A2	012	-32		d
8294	22 37.0	+3.42	-0.001	+14 45 04	-02.0	-0.01	var		Nb		+13	BL Ori	
8295	22 42.1	+0.38	-0.004	-63 39 20	-02.0	+0.01	6.22		Ma		.		
8298	22 43.0	+3.07	+0.015	-00 54 50	-02.2	-0.22	5.85		F0		+45		
8299	22 47.3	+2.33	-0.012	-28 44 59	-02.1	-0.12	6.24		G0		.		
8302	22 50.5	+1.33	+0.002	-52 40 04	-02.0	+0.02	-0.86	-6.0	cF0	009	+20	α Car	
8310	23 06.7	-0.57	+0.004	-69 57 24	-02.0	+0.02	5.56		K0		+16v?	π^1 Dor	
8319	23 36.6	+0.74	-0.006	-60 15 10	-02.0	+0.03	6.02		A0		.		
8322	23 42.8	+2.14	-0.001	-35 02 01	-02.1	-0.04	6.24		K0		.		
8334	24 06.1	+2.97	+0.000	-04 34 00	-02.1	-0.00	6.07	-0.4	B3	005	+10		
8335	24 07.6	+3.04	-0.000	-01 28 35	-02.1	-0.04	5.73		A0		.		
8345	24 24.1	+1.59	-0.001	-48 08 47	-02.2	-0.04	5.94	-1.7	B9	003	.	GPup	d
8355	24 39.7	+3.08	+0.000	+00 19 51	-02.2	-0.01	5.29	-1.8	cK0	005	+33	77 Ori	
8356	24 42.2	+3.07	-0.000	-00 14 40	-02.2	-0.01	5.82	0.3	gK5	008	+39	78 Ori	
8357	24 43.5	+3.14	-0.003	+02 56 22	-02.2	+0.01	5.77	0.3	gG9	008	+53		
8365	24 58.2	+3.57	-0.002	+20 31 41	-02.2	+0.00	6.11		A0		+39	16 Gem	
8368	25 10.4	+2.42	-0.014	-25 49 19	-02.4	-0.22	6.04	4.2	F8	043	.		
8371	25 21.3	+3.86	+0.000	+30 31 33	-02.2	-0.02	var	var	cF8v	0018	+22v	48 RT Aur	
8378	25 29.4	+2.96	-0.000	-04 43 47	-02.2	+0.01	4.98	-1.1	B3	006	+24	10 Mon	
8379	25 32.9	+3.32	+0.002	+10 20 14	-02.3	-0.04	6.19		K1		-20		
8390	25 54.4	-0.51	-0.003	-69 39 43	-02.1	+0.20	5.40	-2.2	G4	003	+ 9	π^2 Dor	
8394	25 59.7	+3.56	-0.000	+20 14 44	-02.3	-0.02	4.06	-0.2	B5ne	014	+39v	18 ν Gem	
8408	26 16.6	+0.95	-0.003	-57 58 11	-02.3	-0.02	5.73		K0		+ 13		
8410	26 18.9	+2.22	-0.002	-32 32 51	-02.3	+0.02	4.48	-0.5	B5	010	+41	λ CMa	
8411	26 19.0	+4.48	-0.000	+46 43 11	-02.3	+0.00	6.01	0.8	gK4	009	-47	47 Aur	
8412	26 23.5	+2.91	-0.001	-06 59 58	-02.3	0.00	4.73	-1.0	B3ne	007	+22v	11 β Mon	} d
8413	26 24.0	+2.91	-0.001	-07 00 03	-02.3	+0.00	4.64	-1.1	B3ne	007	+18v	11 β Mon	
8414	26 24.4	+2.66	-0.000	-17 25 58	-02.3	+0.00	5.94		G5		.		
8416	26 26.8	+3.21	-0.002	+58 12 07	-02.6	-0.34	5.96	2.8	sgG8	023	+36	6 Lyn	
8421	26 47.5	+2.23	-0.001	-32 20 16	-02.3	+0.02	5.80	-0.7	B3n	005	+23		d
8439	27 49.3	+2.84	-0.001	-10 02 47	-02.4	-0.01	6.13		K0		.		
8449	28 16.2	+3.48	+0.000	+16 58 31	-02.5	-0.05	6.19	1.2	gK2	010	+27		d
8450	28 16.6	+2.76	-0.002	-13 06 45	-02.5	+0.00	6.09		B2		+ 2		d
8452	28 22.6	+3.34	-0.000	+11 17 14	-02.5	-0.02	5.83	-2.4	B2ne	0028	-20v		d
8458	28 35.3	+1.48	-0.006	-50 12 11	-02.6	-0.06	5.32	2.2	F2	024	+ 2v	z Pup	ds
8459	28 36.5	+1.04	-0.005	-56 49 05	-02.5	+0.02	5.16	1.8	G8	004	+13		
8463	28 47.5	+2.38	+0.000	-27 44 02	-02.5	-0.01	5.81		B5		.		
8468	29 01.0	+3.35	+0.000	+11 34 51	-02.5	+0.03	5.08	0.8	A2	014	- 3v?		
8470	29 03.7	+2.79	+0.003	-12 21 18	-02.6	-0.02	5.33	0.7	gK2	012	+17		
8474	29 11.5	+3.92	-0.002	+32 29 33	-02.6	-0.02	var		A7sp		-9v	WW Aur	sE
8483	29 23.5	+1.92	-0.002	-40 52 48	-02.6	-0.00	6.12		K2		.		
8485	29 25.8	+2.88	-0.001	-08 07 15	-02.6	-0.01	5.59	-0.4	gK2	009	+ 3		
8486	29 26.2	+2.14	-0.001	-35 13 20	-02.6	-0.00	5.76		G0+A3		.		
8493	29 35.9	+3.35	+0.001	+11 42 41	-02.6	-0.03	6.15		K0		-21		d
8494	29 40.0	+3.18	-0.002	+04 53 36	-02.6	-0.01	5.98	0.2	gG8	007	+21	12 Mon	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
8496	06 ^h 29 ^m 46 ^s .3	+2 ^s .50	-0 ^s .000	-23°22'52"	-02 ^s .6	+0 ^s .01	4.35	-4.5	B1s	0019	+27v	4 ξ ¹ CMa	v
8500	29 56.2	+2.94	0.000	-05 49 50	-02.7	-0.04	5.64		A5		.		d
8504	30 08.2	+1.40	+0.010	-51 47 25	-02.5	+0.09	5.60		F9		+16		
8506	30 12.0	+3.24	+0.000	+07 22 16	-02.6	-0.01	4.50	-5.4	cA0p	001	+12	13 Mon	
8514	30 38.5	+2.06	+0.005	-37 39 27	-02.8	-0.08	5.31	0.7	G6	012	+39		
8518	30 45.8	+3.41	-0.001	+14 11 43	-02.8	-0.09	5.61	0.6	gK2	010	-12		
8520	30 46.6	+2.25	-0.000	-31 59 32	-02.7	-0.00	5.70		B3		+20v		d
8527	31 05.6	+3.05	-0.000	-01 10 51	-02.7	-0.02	5.02	-1.6	B3n	0048	+25v		
8530	31 13.7	+0.89	-0.000	-58 42 57	-02.7	-0.02	5.78		B9		.	μ Pic	d
8540	31 36.9	+7.58	-0.034	+73 44 16	-02.8	-0.03	6.22	4.1	dF4	037	+ 6		
8557	32 03.2	+3.78	+0.000	+28 03 47	-02.8	-0.02	5.05	1.1	A0	016	+17	49 Aur	
8559	32 04.2	+2.10	-0.002	-36 11 37	-02.7	+0.09	5.45	2.5	M1	026	+32		
8566	32 18.2	+1.36	-0.006	-52 17 23	-02.8	+0.04	6.14		G5		.		
8567	32 32.2	+3.31	-0.001	+10 01 47	-02.8	+0.00	6.06		gK5		+39		
8571	32 41.1	+3.09	-0.000	+00 55 52	-02.9	-0.01	5.69		B3s		+10		
8573	32 44.0	+2.22	-0.000	-32 40 32	-02.8	+0.01	5.57		B9		+42		
8574	32 44.2	+9.32	+0.006	+78 02 25	-02.9	-0.00	5.88	0.4	gK5	008	-14		
8577	32 57.6	+2.51	+0.001	-22 55 26	-02.9	+0.01	4.54	0.6	A0	016	+32	5 ξ ² CMa	
8581	33 06.7	+4.13	+0.001	+38 29 16	-02.9	-0.03	var	var	N3	001	+12	UU Aur	
8582	33 07.5	+5.48	-0.028	+61 31 40	-03.2	-0.28	6.05	2.9	sgG7	023	-46	8 Lyn	
8591	33 23.6	+5.10	+0.000	+56 54 01	-02.9	+0.01	5.75		A1n		+ 0	11 Lyn	
8597	33 39.8	+2.09	-0.002	-36 44 19	-02.9	+0.02	5.60	0.8	B9	011	+20		d
8604	33 52.4	+1.32	-0.002	-52 56 03	-02.9	+0.01	4.44	-1.0	A0	008	+23	N Car	
8609	34 07.6	+2.95	0.000	-05 10 05	-03.0	-0.01	5.48		B8ne		+27		
8614	34 11.4	+2.63	-0.001	-18 37 03	-03.0	+0.02	5.81	0.8	gG3	010	+25	6 ν ¹ CMa	d
8624	34 30.1	+2.62	+0.004	-19 12 43	-03.1	-0.08	4.14	2.1	sgK1	039	+ 2	7 ν ² CMa	
8626	34 34.8	+2.52	-0.002	-22 34 19	-03.0	-0.01	6.23	1.6	B8	012	.		d
8630	34 38.6	+7.09	+0.004	+71 47 38	-03.0	+0.00	6.07		gG9		-23		
8631	34 43.2	+3.22	+0.000	+06 10 44	-03.0	-0.00	6.06	-5.2	O8ep	0009	+24v		s
8633	34 49.4	+3.47	+0.003	+16 26 37	-03.1	-0.05	1.93	-0.1	A1	039	-12v	24 γ Gem	
8648	35 11.7	+4.16	-0.002	+39 26 13	-03.2	-0.11	5.71	0.2	gK5	008	+33	51 Aur	
8649	35 12.8	+3.80	-0.001	+29 01 45	-03.1	-0.02	5.54	0.3	A0	009	+14	53 Aur	
8651	35 13.3	+3.19	-0.000	+05 00 04	-03.0	+0.02	6.16	-6.0	B1	0063	+36v		
8653	35 16.0	+1.90	0.000	-41 30 49	-03.1	+0.01	6.25		K0		.		
8654	35 20.0	+2.04	-0.000	-38 06 12	-03.0	+0.04	5.96		G5		.		
8655	35 20.3	+4.18	-0.000	+39 56 51	-03.1	-0.02	5.28	-0.2	B8	008	+ 9	52 ψ ³ Aur	
8656	35 22.3	+2.77	+0.002	-12 56 21	-03.2	-0.12	6.21		K0		.		
8658	35 29.8	+2.08	-0.002	-36 56 49	-03.1	+0.02	5.72		B8		+29		d
8660	35 41.4	+2.64	-0.001	-18 11 34	-03.1	-0.01	4.65	0.0	gK1	012	- 2	8 ν ³ CMa	
8662	35 45.7	+4.29	+0.001	+42 32 06	-03.2	-0.06	5.09	-0.4	gK2	008	+17	50 ψ ² Aur	
8667	35 55.2	+2.25	+0.008	-32 17 46	-03.1	+0.07	5.27	1.1	K2	015	+79		
8671	36 02.6	+3.11	-0.000	+01 39 31	-03.1	-0.00	6.13	-5.8	B0	0008	+58		
8675	36 13.8	+1.84	-0.000	-43 09 04	-03.2	-0.01	3.18	0.0	B8	023	+28v	ν Pup	
8679	36 21.7	+2.67	-0.000	-16 49 40	-03.2	-0.02	5.93		A0		.		
8681	36 24.0	+3.78	-0.000	+28 18 33	-03.2	-0.02	5.84	-0.7	B7	005	+19v	54 Aur	d
8693	36 58.8	+3.38	-0.002	+13 01 46	-03.2	-0.00	5.88	1.1	A2	011	-16		d
8694	36 59.5	+2.74	+0.000	-14 05 58	-03.2	-0.00	4.97	-1.5	gK5	005	+29		
8704	37 17.6	+1.60	-0.000	-48 10 29	-03.2	+0.01	5.00	-0.2	G7	009	+28	Y Pup	d
8708	37 31.4	+2.50	+0.001	-23 38 56	-03.3	-0.00	5.91		A0		.		d
8711	37 44.4	+10.24	-0.031	+79 37 26	-03.9	-0.61	5.60	3.8	dF6	044	+12		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
8712	06 ^b 37 ^m 47 ^s 7	+2 ^o 30	-0 ^o 001	-30°25'15"	-03 ^o 5	-0 ^o 18	5.78		K0		.		
8720	38 13.5	+3.30	+0.000	+09 56 37	-03.3	-0.00	4.68	-5.5	O7sk	001	-33	15 S Mon	dv
8729	38 28.8	+3.46	-0.001	+16 26 45	-03.4	-0.01	6.18	0.7	A0	008	+17		
8732	38 31.1	+3.08	-0.001	+00 32 37	-03.4	-0.00	5.64	-0.5	B9	006	.		
8747	39 18.2	+3.22	+0.001	+06 23 39	-03.4	-0.01	6.20	-5.5	O6	0007	+31v		
8751	39 26.8	+4.37	-0.004	+44 34 29	-03.5	-0.03	5.17	0.7	gK5	013	-73	55 ψ ⁴ Aur	
8755	39 29.7	+3.49	+0.001	+17 41 45	-03.5	-0.09	5.14	1.2	A0	016	+14v	26 Gem	s
8756	39 33.2	+2.86	+0.003	-09 07 03	-03.5	-0.04	5.32	0.9	gM0	013	+1		
8759	39 36.3	+1.96	-0.002	-40 18 04	-03.4	+0.01	6.12		B5		+17		d
8766	39 50.2	+4.08	+0.003	+37 11 51	-03.5	-0.04	6.24		G6		-41		
8779	40 39.5	+2.53	-0.006	-22 24 00	-03.5	+0.08	6.20		F0				d
8786	40 51.4	+3.69	0.000	+25 10 57	-03.6	-0.02	3.18	-5.1	cG8	003	+10	27 ϵ Gem	
8790	41 00.4	+3.17	+0.000	+03 59 01	-03.6	-0.01	5.78	-5.4	B0	0008	+34		
8793	41 10.1	+3.38	-0.000	+13 16 48	-03.6	-0.06	4.65	-0.6	gK2	009	+14	30 Gem	
8799	41 35.4	+3.80	-0.000	+29 01 24	-03.6	-0.03	5.54	0.1	gK4	008	+16	28 Gem	
8805	41 49.4	+5.30	-0.003	+59 29 42	-03.6	-0.00	4.89	1.2	A2n	018	-4v	12 Lyn	d
8823	42 29.0	+3.37	-0.008	+12 57 04	-03.9	-0.20	3.40	2.4	dF5	049	+25	31 ξ Gem	
8826	42 34.1	+5.12	+0.003	+57 13 25	-03.7	-0.04	5.47	1.2	gG6	014	+19	13 Lyn	
8827	42 34.2	+2.28	-0.002	-31 01 05	-03.7	+0.01	5.16		B3ne		+34	10 CMa	
8833	42 56.7	+2.64	-0.037	-16 38 46	-04.9	-1.21	-1.37	1.5	Als	373	-8v	9 α CMa	d
8836	43 08.2	+4.32	+0.000	+43 37 46	-03.6	+0.16	5.34	4.2	dF9	064	-24	56 ψ ⁴ Aur	d
8843	43 18.1	+2.50	-0.003	-23 24 32	-03.7	+0.04	6.23		K0		.		
8846	43 30.6	+2.24	-0.017	-31 44 08	-04.1	-0.32	5.92	4.4	dF6	049	+32		
8850	43 36.8	+2.29	+0.000	-30 53 43	-03.8	+0.00	6.00	-1.6	B3n	003	+17v?		d
8852	43 43.0	+2.73	-0.002	-14 44 30	-03.8	-0.02	5.30	1.7	A2	019	-19		
8856	43 48.8	+3.27	-0.000	+08 38 30	-03.8	-0.01	5.84	-1.8	B3	003	+10v	16 Mon	
8858	43 51.0	+4.57	-0.000	+48 50 41	-03.8	+0.00	5.28	0.3	gK0	010	-8	57 ψ ⁴ Aur	
8869	44 14.6	-4.99	-0.002	-80 45 48	-03.8	+0.05	5.64		A2		+9	ζ Men	
8873	44 17.0	+2.84	-0.000	-10 03 09	-03.8	0.00	5.54	0.5	A0	010	+21		
8877	44 28.2	+3.51	+0.000	+18 14 58	-03.9	-0.05	6.16	0.9	A0	009	+16		d
8878	44 29.2	+2.06	-0.001	-37 43 15	-03.9	-0.00	6.10		B5		.		
8879	44 34.2	+2.74	-0.000	-14 22 15	-03.9	+0.01	5.19	-1.8	B8n	004	+17	11 CMa	
8880	44 36.9	+3.26	-0.002	+08 05 34	-03.9	-0.02	5.00	-0.2	gK5	009	+47	17 Mon	
8882	44 45.0	+1.37	-0.001	-52 21 19	-03.9	-0.01	5.68		K0		+36		
8884	44 53.0	+2.57	-0.001	-20 57 36	-03.9	+0.00	6.00		B8		.	12 CMa	
8891	45 13.8	+2.87	-0.001	-08 56 33	-03.9	+0.00	5.26	-2.3	cM1	003	+24		
8892	45 15.2	+3.13	-0.001	+02 28 06	-03.9	-0.01	4.70	0.1	gK0	012	+11v	18 Mon	
8895	45 26.4	-0.60	+0.001	-70 22 46	-03.9	+0.00	5.88		K2		.		
8899	45 38.6	+2.05	-0.002	-37 52 25	-04.0	-0.02	5.25		B9		+47	x Pup	
8901	45 40.6	+1.44	-0.001	-51 12 31	-04.1	-0.10	5.28	0.7	K2	012	-4		
8902	45 44.9	+6.26	+0.001	+67 37 49	-04.0	+0.00	5.04	-0.7	B3	007	+5	42 Cam	
8903	45 46.9	+3.04	-0.003	-01 15 42	-04.0	-0.04	5.66		A5		.		
8912	46 20.3	+1.17	0.000	-55 29 02	-04.0	+0.01	5.62		K2		.	O Car	
8915	46 25.9	+3.91	-0.003	+32 39 56	-04.1	-0.04	5.76	0.3	gK4	008	-16		
8916	46 28.8	+3.10	+0.000	+01 03 35	-04.0	-0.00	6.06	-3.6	B3	0013	+23		
8922	46 41.7	+2.72	+0.000	-15 05 13	-04.1	-0.00	5.29	-0.5	B7n	007	+23v		d
8923	46 45.3	+3.02	-0.001	-02 12 51	-04.1	-0.00	5.65		A0		.		d
8927	46 57.2	+3.45	-0.001	+16 15 41	-04.1	-0.01	5.69	0.2	B9s	008	+13	33 Gem	
8931	47 14.0	+4.24	-0.002	+41 50 32	-04.2	-0.13	5.04	-0.2	gK3	009	+61	58 ψ ⁴ Aur	
8938	47 36.2	+3.39	-0.000	+13 28 20	-04.1	-0.01	5.90	0.1	gK3	007	+26	35 Gem	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
8939	06 ^b 47 ^m 39 ^s 4	+2 ^s 49	+0 ^s 000	-24°01'02"	-04"1	-0"01	6.24	-2.2	A0	002	.		d
8941	47 40.7	+0.62	-0.010	-61 53 14	-03.9	+0.26	3.30		A5		+21	α Pic	
8946	47 58.4	+2.24	-0.001	-32 26 58	-04.2	+0.00	3.78	-2.3	B2ne	006	+14	13 \times CMA	
8951	48 08.2	+2.67	+0.001	-17 01 29	-04.2	+0.02	5.94		K0				
8954	48 16.7	+3.06	+0.002	-00 28 43	-04.4	-0.18	5.83	3.4	dF2	032	-15		d
8955	48 17.8	+2.89	-0.000	-07 58 53	-04.2	0.00	6.24		A0p				
8957	48 19.4	+6.47	+0.001	+68 56 59	-04.2	+0.01	5.13	-1.0	B7	006	-21	43 Cam	
8960	48 29.9	+1.69	-0.001	-46 33 38	-03.8	+0.37	5.05	3.4	F4s	047	+19		
8961	48 29.9	+2.27	-0.000	-31 38 48	-04.2	+0.01	5.63		B8ne				d
8965	48 33.3	+3.60	-0.000	+21 49 19	-04.2	-0.04	5.22	1.0	A0	013	+34	36 d Gem	
8966	48 34.7	+2.44	-0.001	-25 43 07	-04.2	+0.01	6.24		B3				
8968	48 40.9	+5.29	-0.000	+59 30 38	-04.3	-0.04	5.44	0.0	gG0+A2	008	+13	14 Lyn	d
8969	48 41.7	+1.49	+0.003	-50 33 16	-04.3	-0.08	2.83	-0.2	G8	025	+36v	τ Pup	s
8972	48 46.1	+1.30	-0.001	-53 33 47	-04.2	+0.02	4.38	0.4	G3	016	+26v	A Car	s
8976	48 57.9	+3.64	-0.003	+23 39 45	-04.3	-0.01	5.77	0.5	gK5	009	+40		
8978	49 02.1	+3.14	-0.001	+03 06 11	-04.3	-0.04	6.22	1.0	A0	009	+45		
8979	49 03.2	+2.18	+0.000	-34 18 25	-04.3	+0.00	5.06		K5		+30		
8987	49 21.3	+0.80	+0.000	-60 11 27	-04.2	+0.10	6.14		F5				
8988	49 29.0	+4.38	+0.001	+44 54 08	-04.4	-0.08	6.10	1.8	A5n	014	+3		
8989	49 29.7	+3.95	+0.000	+34 01 25	-04.3	-0.05	3.64	0.5	A2n	024	+20v	34 θ Gem	
8993	49 35.2	+4.13	+0.001	+38 55 51	-04.3	+0.00	6.06	1.6	sgA7n	013	+1	59 Aur	d
8995	49 42.8	+4.01	-0.001	+35 51 01	-04.3	+0.01	6.18		G5		+6		
9003	49 56.5	+2.12	-0.004	-36 10 06	-04.4	-0.07	6.00		A2				
9007	50 06.2	+3.26	-0.003	+08 26 34	-04.4	-0.03	5.76		A5n		+27		
9009	50 11.9	+1.62	+0.003	-48 13 53	-04.4	-0.01	6.23		K0				
9012	50 31.5	+4.11	-0.001	+38 34 06	-04.4	-0.03	6.23		A0		+27	61 ψ^8 Aur	
9021	51 07.7	+2.62	-0.003	-18 58 12	-04.4	+0.00	5.62		F0				
9023	51 10.4	+2.63	-0.002	-18 52 14	-04.4	+0.02	6.16		A2				
9034	51 23.2	+2.59	-0.000	-20 09 40	-04.5	+0.00	4.66	-4.0	B1s	0021	+31	15 CMA	
9038	51 34.5	+2.39	+0.021	-28 28 13	-04.9	-0.44	6.03	4.1	dG3	042	+72		
9042	51 38.3	+4.33	+0.001	+43 58 28	-04.5	-0.01	6.04	2.9	gF0	024	-7		
9049	51 49.4	+3.39	+0.005	+13 14 35	-04.6	-0.09	4.70	2.6	dA8n	039	+22	38 e Gem	d
9050	51 51.3	+2.48	-0.002	-24 28 31	-04.5	-0.02	6.20		A0				
9051	51 52.0	+2.79	-0.010	-11 58 29	-04.5	-0.02	4.25	0.9	gK4	021	+97	14 θ CMA	
9052	51 52.2	+3.05	+0.001	-01 03 47	-04.5	-0.01	5.33	1.1	A2	014	-9		
9057	52 01.6	-0.69	-0.000	-70 54 05	-04.5	+0.02	5.52		B8		+18	ι Vol	
9059	52 03.4	+2.49	-0.001	-24 07 13	-04.5	+0.01	4.12	-5.2	cK5p	002	+36	16 ω^1 CMA	
9063	52 10.3	+3.04	+0.000	-01 41 32	-04.5	+0.01	6.25		B3e+F3		+13		
9064	52 14.2	+3.69	-0.003	+25 26 24	-04.5	+0.02	5.77	4.4	dG0	052	-11	37 Gem	
9070	52 28.3	+3.01	-0.001	-02 44 20	-04.5	+0.00	6.00		gG6		+19		
9072	52 47.9	+1.49	-0.006	-50 33 02	-04.4	+0.21	6.13		K0				
9073	52 48.4	+8.75	+0.023	+77 02 44	-04.6	-0.01	4.75	0.8	gK5	016	-26v		
9075	52 50.5	+4.44	+0.002	+46 20 23	-04.6	+0.01	5.80	-0.3	B8e	006	-41	ψ^9 Aur	
9076	52 51.4	+3.26	-0.001	+08 23 23	-04.6	+0.02	6.14	0.7	A0	008	+33		
9077	52 52.2	+1.89	+0.000	-42 18 04	-04.6	+0.02	6.00		Na		+32		
9078	52 53.1	+2.59	-0.000	-20 20 23	-04.6	-0.00	5.75		A2			17 CMA	d
9081	52 57.2	+5.13	+0.002	+57 37 46	-04.6	+0.02	6.13		gK3		-54		
9082	52 57.2	+5.20	+0.000	+58 29 27	-04.7	-0.13	4.54	0.3	gG6	014	+9	15 Lyn	d
9089	53 13.8	+4.45	-0.010	+46 46 21	-04.7	-0.10	6.03		gK0		+39		
9096	53 27.3	+2.60	+0.003	-20 04 17	-04.6	+0.04	4.62	1.9	gF2	028	+8	18 π CMA	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
9099	06 ^b 53 ^m 40 ^s 6	+2.52	-0.001	-22°52'32"	-04"6	+0"00	5.26	-3.6	B3	002	+38		
9100	53 40.7	+3.30	-0.002	+10 01 22	-04.7	-0.02	5.88	0.1	B8	007	+33		
9101	53 43.6	+3.94	-0.001	+33 44 51	-04.7	-0.00	6.01		gG2		-10		
9103	53 49.1	+2.75	-0.000	-13 58 39	-04.7	+0.00	5.19		M0+A2		+20	18 μ CMa	d
9107	53 54.4	+2.68	-0.000	-16 59 17	-04.7	+0.01	4.39	-4.3	B3	0023	+41	20 ϵ CMa	
9113	53 58.4	+4.38	-0.002	+45 09 41	-04.7	-0.00	4.80	0.8	A2	016	- 9	16 Lyn	
9129	54 38.2	+3.35	+0.001	+11 58 30	-04.7	-0.00	6.16		F0		+ 9		
9137	54 56.1	+1.60	-0.000	-48 39 16	-04.8	+0.01	4.88		M3		+22		
9145	55 30.1	+2.48	-0.004	-24 33 51	-04.7	+0.10	5.43	2.0	dF0	021	+20		d
9146	55 30.2	+2.15	-0.004	-35 26 24	-04.8	+0.00	6.19	5.0	F5	058	.		
9151	55 38.6	+4.09	-0.003	+38 07 22	-04.9	-0.12	6.15	-0.3	gK0	005	+25	62 Aur	
9152	55 41.6	+6.82	+0.004	+70 52 43	-04.8	-0.02	5.83		gK4		-17		
9153	55 42.6	+3.70	-0.012	+26 08 55	-04.7	+0.09	6.10	3.2	dF4	027	+ 6	39 Gem	
9154	55 42.6	+2.40	-0.003	-27 28 10	-04.8	+0.00	6.09		B3		.		
9161	55 56.7	+3.25	-0.001	+07 41 29	-04.9	-0.03	6.10	1.1	A2	010	-27		
9165	56 07.1	+2.41	+0.000	-27 05 46	-04.9	-0.01	6.19		B3		.		d
9175	56 19.2	+3.16	-0.001	+03 40 18	-04.9	-0.01	6.02		gG7		+17		d
9181	56 32.9	+2.46	-0.001	-25 20 42	-04.9	+0.01	5.66	-1.3	B3	004	+28v?		
9184	56 35.2	+2.20	-0.002	-34 02 33	-04.9	+0.01	5.07	-2.5	B4	003	+19	t Pup	
9188	56 39.6	+2.36	+0.000	-28 54 10	-04.9	-0.00	1.63	-4.4	cB1	007	+27	21 ϵ CMa	d
9199	57 14.5	+1.75	-0.001	-45 41 53	-05.0	-0.02	6.22		A0		.		
9200	57 23.4	+3.45	-0.000	+16 08 59	-05.0	-0.01	5.85	-2.6	cK4	002	+22	41 Gem	
9205	57 31.1	+2.56	-0.000	-21 31 58	-05.0	-0.01	6.25		B8		.		
9212	57 41.2	+1.17	-0.009	-55 39 30	-05.1	-0.10	6.11		K0		.		
9224	57 58.2	+2.60	-0.002	-20 05 16	-05.0	-0.01	6.10		B8		.		
9226	57 59.5	+2.88	-0.001	-08 20 09	-05.0	-0.01	5.84		A0		.		d
9253	59 02.6	+2.47	-0.001	-25 08 36	-05.1	+0.02	5.80	-1.2	B3s	004	+ 6v		s
9262	59 20.6	+3.05	+0.000	-01 16 21	-05.2	-0.03	6.18		K0		.		
9263	59 22.1	+3.66	-0.000	+24 17 19	-05.1	-0.00	5.21	-3.0	cG2	003	- 9	42 ω Gem	
9265	59 26.0	+3.43	+0.000	+15 24 34	-05.2	-0.02	5.89		gK1		-14		
9269	59 29.1	+2.94	-0.001	-05 38 58	-05.1	+0.00	5.38	-1.1	gM2	005	+ 3		
9270	59 31.1	+3.49	+0.001	+17 49 43	-05.1	+0.04	6.20		M3		+23		
9273	59 38.6	+1.46	-0.003	-51 19 50	-05.1	+0.02	5.02		M3		+ 5v?		
9275	59 40.4	+3.46	+0.001	+16 44 52	-05.2	-0.02	6.01		gM2		+35		
9276	59 43.6	+2.39	-0.000	-27 51 44	-05.2	0.00	3.68	-1.1	cM0	011	+22	22 σ CMa	
9278	59 46.0	-3.79	-0.002	-79 21 01	-05.2	-0.00	5.51		A0		+ 5	θ Men	
9280	59 55.9	-0.10	-0.007	-67 50 52	-04.9	+0.24	5.08	1.5	M0	019	+39		
9291	07 00 18.7	+0.93	-0.008	-58 52 09	-05.1	+0.13	6.00		A5		.		
9292	00 19.9	+3.81	+0.012	+29 25 22	-06.0	-0.83	5.95	4.7	dG2	060	+22		
9293	00 25.8	+2.98	-0.001	-04 09 55	-05.2	+0.00	4.89	-3.5	B1n	0025	+25	19 Mon	
9295	00 33.9	+3.28	-0.002	+09 12 45	-05.2	+0.00	5.93		A2n		-11v		s
9303	00 51.8	+3.32	-0.000	+11 01 36	-05.3	-0.02	5.25	0.0	gK5	009	+21		
9307	00 56.2	+2.51	0.000	-23 45 33	-05.3	0.00	3.12	-7.0	cB3p	0017	+48	24 σ^d CMa	
9310	01 03.5	+3.36	+0.000	+12 40 10	-05.3	-0.00	6.17		K6		-16		
9313	01 08.7	+3.56	-0.000	+20 38 43	-05.3	-0.00	var	var	cG0v	004	+ 7v	43 ζ Gem	
9320	01 29.8	+2.71	+0.000	-15 33 29	-05.3	-0.01	4.07	-0.9	B8	010	+30	23 γ CMa	
9323	01 37.5	+2.95	-0.000	-05 14 54	-05.3	+0.01	5.88	1.1	gK3	004	+40		
9337	02 17.8	+3.61	-0.000	+22 42 50	-05.4	-0.02	5.91	0.7	A0n	009	- 8	44 Gem	
9340	02 25.2	+1.84	-0.011	-43 32 16	-05.0	+0.38	5.80	4.2	G0	048			d
9342	02 27.6	+1.90	-0.002	-42 15 45	-05.3	+0.06	5.26	1.8	A2	020	+28v	C Pup	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
9344	07 ^b 02 ^m 29 ^s 4	+0 ^o 93	+0 ^o 002	-59 ^o 06'11"	-05"4	+0"00	5.69	1.6	B9	015	- 5		d
9348	02 35.6	+1.56	-0.006	-49 30 36	-05.3	+0.14	5.12	0.8	A2	014	+25	H Pup	
9351	02 39.3	+2.56	+0.002	-21 57 18	-05.5	-0.06	6.19		K0		.		
9354	02 54.0	+3.95	-0.004	+34 33 07	-05.5	-0.05	5.60	1.7	sgG3	017	+ 5		
9355	02 54.8	+3.29	+0.003	+09 15 47	-05.5	-0.02	6.02		gM0		+46		
9368	03 22.4	+1.12	+0.000	-56 40 24	-05.5	+0.00	5.30		A0		+30		
9384	04 05.4	+3.94	-0.002	+34 05 19	-05.6	-0.03	6.13	-0.4	gK4	005	+14v		s
9387	04 16.9	+3.76	+0.001	+28 15 21	-05.5	+0.02	6.23	0.1	B9	006	.		
9388	04 19.2	+2.06	+0.001	-38 18 17	-05.5	+0.01	6.06		gG0		+22		
9389	04 19.8	+2.82	-0.001	-11 12 56	-05.6	-0.01	5.28	-4.8	B1n	0014	+31		d
9390	04 20.8	+3.61	+0.001	+22 46 57	-05.6	-0.01	var		S3ev		-41	R Gem	
9394	04 27.2	+3.18	-0.002	+04 59 21	-05.6	-0.02	5.95	-0.2	B8	006	.		
9402	04 48.5	+2.48	-0.002	-24 52 54	-05.6	+0.00	6.20		K2		.		
9409	05 07.3	+3.24	0.000	+07 33 05	-05.7	-0.04	5.92	0.7	gK0	009	+24		
9414	05 17.1	+2.51	-0.000	-23 45 40	-05.6	+0.02	5.75		B3ne		.		
9419	05 28.8	+1.96	-0.001	-40 48 50	-05.6	+0.00	5.91		B9		.	D Pup	
9421	05 30.0	+3.44	-0.000	+16 00 44	-05.8	-0.10	5.58	0.3	gG8	009	-17	45 Gem	d
9435	06 01.4	+1.44	-0.002	-51 53 20	-05.6	+0.05	5.98		G5		.		
9443	06 21.5	+2.44	-0.000	-26 18 45	-05.7	+0.00	1.98	-5.9	G3c	003	+34v	25 δ CMa	
9459	06 58.2	+2.84	+0.000	-10 15 56	-05.8	-0.02	6.20	-5.5	O6	0007	+58		
9463	07 10.3	+2.02	-0.001	-39 34 28	-05.8	+0.00	4.85	-0.6	B3s	008	+20v	A Pup	
9467	07 18.1	+2.70	-0.001	-16 09 10	-05.8	-0.01	6.03	-5.2	B1	0009	+ 6		d
9473	07 39.3	+2.47	-0.001	-25 08 56	-05.8	+0.00	5.76		B3		+28v		
9477	07 44.6	+2.98	-0.000	-04 09 27	-05.6	+0.22	5.02	1.7	gK1	022	+79	20 Mon	
9483	07 57.1	+2.64	-0.001	-18 36 10	-05.8	+0.01	6.18		F0		.		
9484	07 57.5	+3.82	-0.002	+30 19 45	-05.9	-0.05	4.48	-0.3	gK3	011	+22	46 τ Gem	d
9490	08 13.2	+4.13	+0.004	+39 24 15	-05.9	-0.00	5.07	0.8	gK5	014	-27	63 Aur	
9493	08 17.1	+3.72	-0.001	+26 56 26	-05.9	-0.04	5.60	1.5	A2n	015	+39	47 Gem	
9495	08 18.8	+2.41	-0.000	-27 24 31	-05.9	+0.01	5.55	0.3	gG7	009	+15		
9505	08 50.3	+3.07	-0.002	-00 13 05	-05.9	-0.01	5.40	1.7	dA8n	018	+30	21 Mon	
9513	09 08.2	-0.51	+0.001	-70 24 58	-05.9	+0.10	5.81	2.8	G0	025	- 3v	γ^1 Vol	} d s
9514	09 10.8	-0.51	+0.004	-70 25 05	-05.9	+0.10	3.87	0.9	F5	025	+ 3	γ^2 Vol	
9516	09 11.3	+3.20	-0.001	+05 44 21	-06.0	-0.01	6.04	0.8	A0	009	+46v		s
9518	09 18.6	+3.06	-0.000	-00 24 30	-06.0	+0.01	4.09	0.4	A0	018	+15	22 δ Mon	
9521	09 24.2	+3.65	-0.001	+24 12 50	-06.0	-0.05	5.76	1.6	gF4	015	+13	48 Gem	
9523	09 26.9	+1.61	-0.003	-48 51 03	-05.8	+0.20	5.11	3.8	K4	056	+64		
9524	09 27.7	+3.20	-0.002	+05 33 33	-06.0	+0.00	6.22		K0		+20		
9526	09 29.8	+4.68	+0.001	+51 30 50	-06.0	+0.01	5.69	-0.4	gM3	006	-51		
9528	09 32.1	+2.59	-0.001	-20 47 56	-06.0	+0.03	5.71		A0		.		
9544	10 08.5	+2.31	-0.003	-30 44 13	-06.0	+0.01	6.16		A5		.		
9545	10 09.4	+2.46	-0.001	-25 51 27	-06.0	+0.01	5.86	-0.6	B3	005	+22	26 CMa	
9551	10 30.0	+3.45	+0.001	+16 14 44	-06.1	-0.04	var	var	gM4	007	- 9	51 BQGem	
9554	10 36.4	+1.99	-0.002	-40 24 48	-06.1	-0.02	5.40	-1.1	A2	005	- 7v	E Pup	s
9555	10 39.1	+2.13	-0.002	-36 27 33	-06.1	+0.00	6.01	-1.0	B5	004	+17		d
9558	10 46.0	+2.82	-0.001	-11 09 56	-06.1	+0.01	6.01		K0		.		
9569	11 08.1	+1.71	-0.014	-46 40 30	-06.0	+0.10	4.47	2.6	F0	043	- 1	I Pup	
9574	11 16.6	+2.54	+0.000	-22 35 12	-06.1	-0.01	6.19		K2		.		
9581	11 33.5	+5.24	-0.012	+59 43 45	-06.4	-0.26	5.33	2.4	sgK2	026	+24	18 Lyn	
9582	11 33.9	+0.57	-0.001	-63 06 15	-06.2	-0.00	6.10	-0.4	A0	005	.		d
9583	11 35.5	+2.42	-0.002	-27 16 11	-06.2	+0.00	5.86		B3		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
9585	07 ^h 11 ^m 38 ^s .6	+3 ^s .67	+0 ^s .004	+24°58'25"	-06 ^s .3	-0 ^s .10	6.02	0.2	gM1	007	+47	52 Gem	
9588	11 41.4	+2.54	-0.001	-22 49 09	-06.2	-0.02	6.24		B3		+17		d
9589	11 41.6	+2.99	-0.001	-03 48 52	-06.2	+0.01	6.12		gK5		+22		d
9590	11 42.8	+3.14	-0.000	+03 11 55	-06.2	-0.00	5.56	0.3	gK0	009	+37		
9591	11 43.6	+1.80	-0.003	-45 05 42	-06.3	-0.10	5.04	-1.1	A0p	006	+ 4	L ¹ Pup	
9592	11 45.4	+3.34	-0.004	+12 12 12	-06.2	-0.02	5.84	0.6	gG6	009	+30		
9600	11 52.9	+2.85	-0.000	-09 51 37	-06.2	+0.00	6.06		gK3		+43		
9604	12 00.7	+1.83	+0.010	-44 33 27	-05.9	+0.33	var	var	M5ev	018	+53	L ¹ Pup	
9605	12 06.0	+2.84	-0.000	-10 13 44	-06.2	-0.01	5.99	-4.9	B0	0007	+33		
9606	12 07.6	+4.46	+0.003	+47 19 51	-06.4	-0.19	5.55	3.5	dF8	040	+85		
9608	12 12.9	+2.45	-0.001	-26 15 54	-06.2	+0.00	4.66	-1.8	B5ep	005	0	27 CMa	ds
9625	12 46.9	+2.43	-0.001	-26 41 05	-06.3	+0.00	3.83	-1.6	B3ep	008	+26	28 ω CMa	
9626	12 49.9	+2.42	-0.004	-26 56 58	-06.3	-0.03	5.80	0.6	gK4	009	+15		
9627	12 49.9	+3.75	-0.001	+27 59 11	-06.3	-0.00	5.87	-0.2	gM1	006	+24	53 Gem	
9628	12 56.7	+3.26	+0.002	+08 03 59	-06.3	+0.00	5.97		gM4		- 9		
9635	13 15.4	+1.65	-0.001	-48 11 01	-06.3	0.00	4.88	1.3	B8	019	+44		
9636	13 19.2	+1.96	+0.000	-41 20 16	-06.3	+0.02	6.10		B8		.		
9637	13 19.8	+1.72	-0.003	-46 45 41	-06.3	-0.01	5.82		A0p		.		
9638	13 21.1	+2.84	+0.001	-10 29 41	-06.3	-0.01	6.09		K0		.		
9639	13 24.9	+2.32	-0.002	-30 35 52	-06.3	+0.01	5.31		B5		+33		
9642	13 38.6	+4.71	+0.000	+52 13 17	-06.4	-0.03	6.04		gK1		- 7		
9657	13 58.5	+2.72	-0.004	-15 29 45	-06.4	-0.01	5.39	2.1	A2	022	+10		
9664	14 10.0	+1.42	-0.007	-52 24 43	-06.3	+0.10	5.99		G5		.		
9675	14 30.3	+2.53	-0.001	-23 13 32	-06.4	0.00	4.82	-1.7	gM0	005	+28v?		d
9677	14 33.8	+4.17	-0.001	+40 58 27	-06.4	+0.01	5.75		B9n		-15	64 Aur	
9678	14 34.7	+2.40	-0.001	-27 47 30	-06.4	+0.04	4.77	-0.5	gM3	009	+41		
9681	14 44.3	+4.56	-0.000	+49 33 22	-06.4	+0.01	4.80	0.4	A2	013	-12		
9685	14 48.0	+2.07	-0.002	-38 13 44	-06.4	+0.00	5.76		B3		.		
9686	14 48.9	+1.73	-0.000	-46 41 05	-06.4	+0.03	5.54		K5		+20		
9688	14 52.4	+3.83	-0.002	+31 02 51	-06.5	-0.02	5.98	0.2	B9	007	+34		
9694	15 01.2	+2.32	+0.000	-30 48 21	-06.5	-0.02	6.23		A5		.		d
9696	15 02.6	+2.14	-0.000	-36 30 08	-06.5	-0.00	5.01	-1.5	B3	005	+ 8v		ds
9701	15 13.2	+3.45	-0.003	+16 37 56	-06.5	-0.04	3.65	1.8	A2n	043	- 9	54 λ Gem	d
9706	15 22.6	+2.12	-0.000	-37 00 24	-06.5	+0.00	2.74	-1.5	K5	014	+16	π Pup	
9721	15 58.3	+11.38	+0.000	+81 21 14	-06.6	-0.03	6.20	0.7	B9	008	- 8		
9732	16 31.3	+1.86	-0.002	-43 53 40	-06.6	-0.00	5.96		B9		.	M Pup	
9733	16 31.7	+2.13	-0.001	-36 38 31	-06.6	-0.00	4.68	-1.1	B3ne	007	+19	ν^1 Pup	
9734	16 35.4	+2.50	-0.000	-24 27 59	-06.6	-0.00	var	var	O8s	001	+ 9v	29 UW CMa	sE
9736	16 38.0	+2.49	-0.001	-24 51 43	-06.6	+0.01	4.40	-6.0	O9s	001	+40	30 τ CMa	ds
9739	16 45.6	+3.14	-0.000	+02 50 02	-06.6	-0.02	6.06		gG8		+24		
9740	16 49.0	+2.44	-0.001	-26 29 36	-06.6	+0.00	5.40	-2.2	cG5p	003	+32		
9742	16 50.2	+2.63	+0.001	-19 11 15	-06.6	0.00	6.18		F0		.		
9743	16 51.2	+2.05	+0.000	-39 07 04	-06.6	+0.00	5.24	0.2	A2	010	+32	F Pup	
9746	16 51.5	+2.13	-0.001	-36 39 01	-06.6	0.00	5.11	-1.0	B3	006	+23v	ν^2 Pup	
9747	16 51.6	-0.03	-0.001	-67 51 57	-06.6	-0.00	4.02	-4.4	F5	003	+23	δ Vol	
9752	17 05.9	+3.24	+0.006	+07 14 14	-06.7	-0.05	5.95		dF8		+22		
9755	17 08.3	+3.58	-0.001	+22 04 34	-06.6	-0.02	3.51	2.2	dA8n	056	+ 3v	55 δ Gem	d
9758	17 12.3	+2.72	+0.011	-16 18 00	-06.8	-0.13	var	var	A9	039	-42v	R CMa	sE
9769	17 40.6	+4.34	-0.004	+45 19 22	-06.7	+0.01	5.64	1.8	sgA7	017	+25		
9772	17 50.4	+28.12	-0.050	+87 07 35	-06.7	-0.03	5.26	-0.5	gM2	007	-25		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
9795	07 ^h 18 ^m 40 ^s .6	+2 ^o 75	-0 ^o 001	-14 ^o 15'55"	-06"7	+0"02	5.72	0.7	gG5	010	+13		
9796	18 42.4	+4.01	-0.007	+36 51 23	-06.8	-0.03	5.21	1.2	gG9	016	+23	65 Aur	
9800	18 47.7	+4.90	0.000	+55 22 41	-06.8	-0.03	5.61	1.1	B8n	012	+4v	19 Lyn	ds
9805	18 53.1	+2.44	+0.001	-26 52 07	-06.7	+0.02	5.84		B3	.	.		d
9808	18 59.9	+3.54	-0.004	+20 32 23	-06.8	-0.03	5.16	-0.3	gM0	008	+4	56 Gem	d
9809	19 01.1	+2.46	-0.001	-25 47 47	-06.8	+0.02	6.10	-0.4	gM4	005	+23		
9818	19 25.6	+1.46	-0.003	-51 59 27	-06.8	-0.01	5.50		A0n		+21v		
9821	19 29.5	+3.08	0.000	+00 16 24	-06.8	+0.00	6.00	-0.1	B8	006	.		
9823	19 38.1	+2.88	+0.000	-08 53 00	-06.8	+0.02	6.17	-4.8	O9s	0007	+23		
9833	19 58.2	+2.94	-0.001	-05 53 10	-06.9	-0.00	5.83	2.0	gF2	017	+11		
9836	20 01.4	+2.64	+0.001	-18 55 12	-06.9	-0.01	4.87	-0.6	B8	008	+27		
9843	20 25.7	+3.66	-0.005	+25 08 54	-06.9	-0.03	5.08	1.6	gG2	020	+ 6	57A Gem	
9844	20 28.0	+3.61	-0.001	+23 02 36	-06.9	-0.04	6.02	0.8	A0n	009	+18	58 Gem	
9850	20 40.9	+4.15	-0.000	+40 46 14	-06.9	-0.03	5.28	-0.8	gK0	006	+21	66 Aur	
9851	20 41.0	+12.62	-0.000	+82 30 50	-07.0	-0.04	var	var	gM4	007	+14	VZ Cam	
9860	21 03.6	+4.68	+0.002	+51 59 11	-07.0	-0.04	5.91		gK5		+18		
9862	21 05.9	+2.29	-0.001	-31 49 35	-06.9	+0.00	5.43		B5n		+24		
9868	21 26.9	+3.73	+0.001	+27 44 11	-07.0	+0.01	5.71	1.9	dF0	017	- 5	59 Gem	
9870	21 28.2	+2.42	+0.003	-27 44 10	-07.0	+0.00	5.13	-4.9	M1	001	+48v		s
9877	21 37.5	+2.29	-0.001	-32 06 14	-07.0	+0.00	5.47		B3		+21		
9886	22 07.0	+2.37	-0.000	-29 12 16	-07.0	+0.00	2.43	6.0	cB5p	0025	+41	31 η CMa	
9890	22 09.8	+2.55	-0.001	-22 48 50	-07.0	-0.00	6.10	0.3	B9	007	.		
9891	22 11.6	+3.33	-0.001	+11 46 09	-07.1	-0.02	5.34	0.9	A1n	013	0	1 CMi	
9893	22 24.5	+2.71	-0.001	-16 06 06	-07.1	-0.01	5.20		B3se		- 5		
9897	22 37.4	+3.73	-0.009	+27 53 57	-07.2	-0.09	3.89	1.0	gG7	026	+ 8	60 ι Gem	
9903	22 48.8	+2.30	-0.002	-31 42 34	-07.1	+0.01	5.44		K2		+20		d
9905	22 50.5	+2.75	-0.015	-13 39 08	-07.1	-0.01	5.82	3.1	dF0	029	+ 7		
9908	22 54.9	+3.28	-0.000	+09 22 35	-07.1	-0.01	5.07	-0.4	gG5	008	- 8	2 ϵ CMi	
9909	22 56.9	+4.53	-0.001	+49 18 47	-07.1	-0.05	4.45	0.0	A0	013	+26	21 Lyn	
9916	23 11.4	+2.57	-0.001	-21 52 58	-07.1	0.00	5.93		A5		.		d
9920	23 20.8	+2.49	-0.002	-25 07 03	-07.1	+0.00	5.86		B9		.		
9923	23 23.7	+2.95	-0.002	-05 40 28	-07.1	-0.00	6.08		cG2		+14		
9932	23 42.6	+3.31	-0.001	+10 42 33	-07.2	+0.00	6.22	0.7	A0	008	-12		
9933	23 47.8	+2.30	-0.000	-31 38 17	-07.2	+0.00	6.20		B4s		+10		
9937	23 59.6	+3.54	-0.000	+20 21 32	-07.2	-0.02	5.88	1.9	sgA7n	016	+ 9v	61 Gem	s
9947	24 26.4	+3.25	-0.003	+08 23 30	-07.3	-0.04	3.09	0.0	B8ne	024	+22v	3 β CMi	
9957	24 46.4	+3.56	-0.004	+21 32 57	-07.4	-0.12	5.27	2.7	dF4	030	+24v	63 Gem	ds
9959	24 50.8	+2.23	-0.002	-34 02 21	-07.3	-0.00	5.98		B5n		+ 7		
9960	24 52.2	+2.54	-0.001	-22 59 03	-07.3	+0.00	5.48	-4.5	B0ne	001	+48		
9961	24 54.3	+2.67	+0.000	-17 45 46	-07.2	+0.01	5.70	2.1	dA5n	019	-29		d
9964	25 04.9	+1.54	-0.001	-50 55 01	-07.3	-0.00	5.11	-0.1	K6	009	+ 8		
9965	25 08.4	+4.47	+0.001	+48 17 15	-07.3	-0.06	5.57	-0.5	B9p	006	.		d
9970	25 20.8	+3.23	-0.000	+07 02 43	-07.3	-0.05	5.34	0.7	gF0	012	+18	5 η CMi	d
9974	25 26.5	+3.27	-0.004	+09 01 42	-07.3	+0.01	4.60	0.2	gK4	013	+47v	4 γ CMi	s
9979	25 30.6	+2.82	-0.000	-11 27 15	-07.3	-0.00	5.86	1.9	F8+B3n	016	+15		d
9981	25 35.3	+2.55	-0.000	-22 45 24	-07.3	-0.02	5.69	0.2	B8	008	.		
9985	25 41.7	+6.24	-0.001	+68 34 15	-07.4	-0.04	5.80	0.8	gK2	010	+56		
9987	25 53.9	+3.86	+0.012	+31 53 08	-07.2	+0.17	4.18	2.8	A8s	053	- 6	62 ρ Gem	d
9988	25 56.8	+3.41	+0.000	+15 12 48	-07.4	-0.03	6.07	1.3	A0n	011	+34		
9990	26 00.0	+2.38	-0.001	-29 03 10	-07.3	+0.01	5.52	1.8	B9	018	+ 4		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
9992	07 ^b 26 ^m 08 ^s 6	+4 ^s 55	+0 ^s 012	+49°46'40"	-07"4	-0"08	5.36	3.7	dF5	046	-27	22 Lyn	s
9997	26 13.7	+3.74	-0.003	+28 13 23	-07.4	-0.06	5.04	0.6	A1n	013	+35	64 b ¹ Gem	
10015	26 42.3	+3.73	-0.002	+28 01 16	-07.4	-0.03	5.09	0.3	gK1	011	+36v	65 b ² Gem	
10017	26 47.0	+3.03	-0.001	-01 48 03	-07.4	-0.01	5.80	0.0	gK5	007	-5		
10022	26 59.6	+2.85	-0.001	-10 13 21	-07.5	-0.03	6.00		gK5		-7		
10023	26 59.9	+2.92	+0.004	-07 26 54	-07.3	+0.13	5.99	3.4	dF9	030	+9		d
10024	27 00.8	+3.34	0.000	+12 06 42	-07.4	-0.02	4.85	0.4	gK3	013	-15	6 CMi	
10027	27 05.3	+2.73	-0.013	-14 53 28	-07.7	-0.26	5.94	3.0	dF4	026	-6		
10029	27 09.0	+2.32	-0.001	-31 21 07	-07.4	-0.00	5.80		B3s		+8v?		
10033	27 21.7	+2.08	-0.002	-38 42 28	-07.4	+0.02	5.41		B8		+26	y ¹ Pup	
10040	27 38.6	+1.90	-0.006	-43 11 58	-07.3	+0.18	3.27	-0.4	M0	018	+87v	σ Pup	ds
10043	27 43.9	+2.55	-0.000	-22 55 09	-07.5	-0.01	4.80	-5.0	cA5	002	+36		d
10054	28 24.3	+2.86	-0.001	-09 40 15	-07.5	-0.00	var	var	cG2ev	002	+35	UMon	e Men
10055	28 25.6	-3.30	-0.011	-78 59 27	-07.5	+0.01	5.42		K5		+10		
10071	28 45.9	+2.33	-0.002	-30 51 22	-07.6	-0.00	4.77	0.9	G0	017	+14		
10072	28 46.9	+1.45	-0.004	-52 32 46	-07.5	+0.05	5.94		G5		.		d
10073	28 55.5	+3.46	+0.003	+17 11 38	-07.7	-0.08	5.64	0.2	gK2	008	-40		
10083	29 23.2	+1.35	+0.001	-54 17 35	-07.6	+0.04	5.94		K5		.		
10085	29 30.1	+3.12	-0.001	+02 01 19	-07.6	-0.00	5.26	1.3	A8	016	+29	7 δ^1 CMi	
10090	29 41.9	+2.88	-0.006	-08 46 16	-07.8	-0.16	6.02		F5		.		
10104	30 34.4	+3.15	-0.001	+03 23 54	-07.7	+0.04	5.66		F0n		+1	8 δ^2 CMi	d
10106	30 45.3	+3.42	-0.001	+15 56 09	-07.7	-0.02	5.07	0.9	A0n	015	+13	68 Gem	
10113	31 04.1	+2.76	-0.001	-14 13 46	-07.8	-0.01	6.24	-3.5	B1	0015	+22		
10114	31 04.3	+2.51	-0.001	-24 36 08	-07.7	+0.01	5.74		A3		.		
10115	31 07.3	+2.64	+0.002	-19 18 09	-07.8	-0.07	5.76	0.3	gK3	008	+16		
10117	31 19.9	+3.31	-0.000	+10 40 40	-07.8	-0.01	6.21	1.0	A0	009	0		dss
10120	31 24.7	+3.83	-0.013	+31 59 58	-07.9	-0.11	1.58	0.9	A2s+A0	072	+5v	66 α Gem	
10122	31 30.1	+2.76	-0.001	-14 24 52	-07.8	+0.00	5.05	-3.4	gM3ep	002	+22v		
10128	31 38.5	+3.15	-0.001	+03 28 54	-07.8	-0.02	5.82		A0n		+34	9 δ^2 CMi	
10134	31 54.7	+2.57	-0.003	-22 11 13	-07.8	+0.04	4.52	-2.0	dF5	050	+61		
10137	31 58.3	+3.81	-0.002	+31 04 17	-07.8	+0.01	5.34	-0.4	gK0	007	-6		d
10139	32 02.4	+2.17	-0.002	-36 13 43	-07.8	-0.00	5.51		B5e		-10v	z Pup	
10144	32 11.8	+2.54	-0.007	-23 21 48	-07.8	-0.00	5.86	2.8	dF4	025	-5v?	nPup	
10145	32 12.4	+2.53	-0.008	-23 21 52	-07.9	-0.01	6.01	3.0	dF5	025	-6		
10150	32 19.8	+2.26	-0.005	-33 21 15	-07.8	+0.07	6.14		F0		.		
10161	32 32.5	+2.45	-0.003	-26 54 10	-07.8	+0.08	5.85	0.1	K0	007	.		d
10164	32 43.3	+4.88	-0.002	+55 52 03	-07.9	-0.04	6.04	1.0	gK2	010	+1		
10167	32 50.6	+3.70	-0.002	+27 00 31	-08.0	-0.11	4.22	0.1	gM0	015	-21	69 ν Gem	
10168	32 54.2	+4.36	-0.002	+46 17 33	-07.9	-0.04	5.80	0.3	gM0	008	+29		
10178	33 22.4	+2.41	-0.006	-28 15 28	-08.0	-0.02	4.55	0.1	B8	013	+13	p Pup	
10189	33 45.9	+2.76	-0.001	-14 22 51	-08.0	+0.00	5.57	-3.2	B2ne	0022	+21		d
10194	33 55.0	+3.19	-0.008	+05 58 26	-08.0	+0.01	5.94		F8		+4		
10201	34 10.6	+4.47	-0.002	+48 53 15	-08.0	-0.04	5.92	2.3	A3	010	+10		s
10206	34 25.5	+1.48	+0.002	-52 25 18	-08.1	-0.03	4.92	-0.8	M0	007	+62v	Q Car	
10208	34 29.2	+2.64	+0.001	-19 35 23	-08.0	+0.01	5.66	-3.5	B2s	0015	+22		
10217	34 47.5	+2.98	-0.005	-03 59 53	-08.0	+0.02	5.17	2.1	gF5	024	+46	25 Mon	d
10237	35 16.2	+3.94	+0.003	+35 09 45	-08.1	+0.02	5.61	0.8	gG5	011	-35	70 Gem	
10241	35 19.9	+1.68	-0.001	-48 43 01	-08.1	+0.00	5.86		B9		.	y ² Pup	
10246	35 31.0	+2.22	-0.002	-34 51 18	-08.1	+0.01	4.62	1.6	B8	025	+24	f Pup	
10257	35 54.3	+3.92	-0.002	+34 42 03	-08.3	-0.12	4.92	1.3	dF1	019	+7	71 σ Gem	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
10265	07 ^h 36 ^m 10 ^s .8	+3.62	-0.001	+24°20'15"	-08"2	-0"00	6.04	0.8	A0	009	-11		
10266	36 13.1	+2.50	-0.001	-25 15 01	-08.2	-0.01	4.64	-0.1	B8	011	+41v	mPup	d
10276	36 35.4	+3.46	+0.000	+17 47 24	-08.2	-0.00	5.24	-0.5	gM0	007	+28v?	74 f Gem	
10277	36 41.1	+3.14	-0.047	+05 21 16	-09.2	-1.03	0.48	2.7	dF5	288	-4v	10 α CMi	d
10279	36 42.0	+4.96	-0.002	+57 11 57	-08.2	-0.01	6.20	0.4	gK5	007	-13	23 Lyn	
10280	36 42.4	+3.84	-0.001	+32 07 34	-08.3	-0.05	6.14		gF3		+25		s
10281	36 46.3	+2.46	-0.001	-26 41 13	-08.2	+0.02	4.50	-0.7	B8	009	+24	k ¹ Pup	} d
10283	36 46.8	+2.46	-0.002	-26 41 20	-08.2	+0.02	4.62	-0.6	B5n	009	+33	k ² Pup	
10284	36 47.5	+2.10	+0.002	-38 39 57	-08.2	-0.03	6.24		G5		.		
10288	36 53.0	+4.04	-0.004	+38 27 39	-08.2	-0.01	5.89		gM0		+46		
10289	36 53.4	+1.70	-0.001	-48 29 11	-08.2	+0.00	5.65		cF4p		+11v	y ^a Pup	
10291	36 55.1	+2.17	-0.001	-36 22 54	-08.2	-0.00	5.74		B5		+19v?	e Pup	
10300	37 23.9	+2.46	-0.001	-26 44 50	-08.3	-0.00	6.23		B8		.		
10303	37 27.7	+3.19	-0.001	+05 20 51	-08.3	-0.02	5.81	0.8	A0	010	+16v		ds
10305	37 31.2	+4.43	-0.004	+48 15 01	-08.4	-0.14	5.77	0.8	gG6	010	+40		
10311	37 41.6	+2.11	-0.002	-38 11 32	-08.3	+0.00	4.91	-0.9	B3n	007	+26	d ¹ Pup	
10312	37 48.0	+1.45	-0.002	-53 09 27	-08.3	+0.00	6.22		A0		.		
10316	37 57.7	+2.12	-0.002	-38 01 24	-08.3	+0.01	5.74	-0.4	B9n	006	+30	d ² Pup	d
10318	37 59.0	+3.59	-0.001	+23 08 09	-08.3	-0.00	6.18		K5		+39		
10322	38 01.5	+2.64	+0.001	-19 32 40	-08.3	+0.01	6.08		K0		.		d
10323	38 01.9	+2.12	-0.002	-38 08 40	-08.3	+0.00	5.78		B5		+23	d ² Pup	
10328	38 06.0	+2.74	-0.001	-15 08 48	-08.3	-0.02	5.15	-0.6	gK5	007	+0		
10331	38 10.4	+2.90	+0.001	-08 04 06	-08.4	-0.04	5.99		A2		.		
10332	38 10.9	+2.14	-0.001	-37 27 46	-08.3	-0.01	6.02		B5n		+23v	d ⁴ Pup	
10343	38 47.3	+5.08	-0.005	+58 49 47	-08.4	-0.06	4.96	1.2	A2	018	+9	24 Lyn	d
10345	38 51.5	+2.87	-0.005	-09 26 00	-08.4	-0.02	4.07	0.3	gK0	018	+10	26 α Mon	
10347	38 57.6	+3.15	+0.001	+03 44 34	-08.4	-0.03	5.87	1.1	A0n	011	-24		
10349	39 03.7	+3.36	-0.003	+13 35 56	-08.4	-0.02	6.10		M1		+7		
10351	39 14.1	+3.38	-0.000	+14 19 37	-08.4	-0.01	5.81	-0.7	gM3	005	-16		
10354	39 29.3	+3.89	-0.006	+34 07 09	-08.4	-0.01	6.00		F3		-12v		s
10355	39 30.3	+2.11	-0.002	-38 24 57	-08.4	+0.01	5.48		B3		+40v		s
10373	40 11.4	+3.75	+0.005	+29 00 27	-08.7	-0.24	4.26	-1.6	gK1p	007	+46v	75 σ Gem	s
10374	40 12.4	+2.11	-0.002	-38 24 36	-08.5	0.00	6.24		B8		.		
10377	40 17.4	+4.54	-0.001	+50 33 15	-08.5	-0.04	5.28	0.5	A0	011	+6v		s
10385	40 44.2	+2.48	-0.000	-26 13 53	-08.6	-0.03	5.78	0.8	gG5	010	-18		
10392	41 04.1	+3.66	-0.001	+25 54 18	-08.6	-0.02	5.40	-0.1	gM0	008	+3	76 c Gem	
10401	41 22.1	+2.20	-0.002	-35 55 49	-08.6	+0.01	5.60		B8n		-1		
10402	41 24.3	+1.86	-0.007	-45 02 44	-09.1	-0.56	5.22	3.8	G4	053	+22	T Pup	
10403	41 25.9	+3.62	-0.002	+24 31 11	-08.6	-0.05	3.68	0.5	gG7	023	+21	77 \times Gem	d
10409	41 31.2	+2.42	-0.001	-28 17 28	-08.6	+0.02	4.82	0.0	gK5	011	+33	1 Pup	
10417	41 48.0	+2.41	-0.001	-28 50 03	-08.6	-0.00	4.10	-6.2	cA2ep	001	+25v	3 Pup	s
10420	41 54.4	+5.74	+0.006	+65 34 40	-08.6	+0.02	6.00	0.2	gK2	007	-28	51 Cam	
10423	41 56.9	+1.13	-0.004	-58 06 37	-08.6	+0.03	6.20		K0		.		
10425	41 59.7	+2.04	+0.011	-40 48 39	-08.8	-0.19	5.11	-4.9	K3	001	+53	W Pup	
10438	42 15.6	+3.67	-0.047	+28 08 55	-08.7	-0.05	1.21	1.0	gK0	092	+3	78 β Gem	
10440	42 20.0	+2.19	-0.008	-35 56 33	-08.6	+0.07	5.83		A5		.		
10444	42 27.0	-0.74	+0.006	-72 29 11	-08.7	+0.01	3.89	1.1	K0	028	+48	ζ Vol	
10445	42 27.9	+2.52	-0.002	-24 33 09	-08.7	+0.01	5.53		B3		.		
10450	42 47.3	+2.14	-0.002	-37 49 18	-08.7	+0.00	5.86	0.6	B8n	009	+37		
10455	43 11.1	+2.76	-0.001	-14 34 05	-08.8	-0.03	6.06		A0		.	2 Pup	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
10456	07 ^h 43 ^m 13 ^s 9	+3 ^h 47	-0 ^m 005	+18°38'01"	-08 ^s 8	-0 ^m 06	5.02	0.0	gK5	010	+81v	81 g Gem	s
10460	43 19.3	+4.00	+0.002	+37 38 25	-08.7	-0.01	5.45	1.0	gM3	005	-35		
10462	43 28.4	+2.14	-0.001	-37 50 47	-08.8	+0.00	3.72	-6.3	K5	001	+17	c Pup	
10463	43 31.1	+3.30	-0.002	+10 53 30	-08.8	-0.03	5.30	1.3	B9n	016	+31v	11 CMi	
10465	43 35.4	+2.94	+0.004	-06 38 54	-08.8	-0.10	5.72	0.7	K5	010	-32		
10469	43 38.7	+2.76	-0.001	-14 26 28	-08.8	+0.01	5.11	2.0	A6n	024	- 2	4 Pup	
10472	43 41.7	+1.93	-0.001	-43 37 47	-08.8	+0.00	6.12		B5		+35		
10473	43 43.0	+2.24	-0.024	-34 04 24	-07.1	+1.66	5.39	4.4	dG0	063	+102		
10482	44 17.2	+3.87	-0.001	+33 32 25	-08.8	-0.03	5.29	-0.5	gM0	007	-12	80 π Gem	
10484	44 22.6	-0.18	-0.010	-69 41 58	-08.8	+0.01	6.21		A0		.		
10485	44 23.4	+2.14	-0.004	-37 48 38	-08.8	+0.00	5.86		B9n		+28		
10501	45 03.6	+2.58	-0.001	-22 23 43	-08.9	+0.00	5.84	-1.1	B2	004	+ 7		
10517	45 34.4	+3.59	-0.001	+23 15 59	-08.9	+0.00	6.21	2.5	dF0+A0	018	- 5	82 Gem	d
10522	45 36.2	+2.81	-0.008	-12 04 08	-08.9	+0.06	5.52	2.8	dF5	028	+27	5 Pup	d
10523	45 38.8	+2.12	-0.001	-38 23 11	-08.9	-0.00	5.11	-1.6	B3	005	+12		d
10532	46 00.4	+2.49	-0.001	-25 48 43	-08.9	+0.00	4.59	-3.5	B0ep	003	+16	o Pup	
10533	46 00.8	+1.81	-0.002	-46 29 01	-08.9	-0.00	5.26	-3.5	B1	002	+36v		
10539	46 13.8	+3.36	+0.004	+13 29 50	-09.0	-0.05	6.25		K1		-57		
10542	46 25.9	+2.05	-0.001	-40 31 35	-09.0	-0.03	5.96		Ma		.		
10553	46 50.9	+1.79	-0.010	-46 57 02	-09.1	-0.08	4.64	1.0	G8	018	- 1v	Q Pup	
10556	46 55.6	+2.52	-0.002	-24 47 10	-09.0	+0.02	5.32	1.0	gG3	014	+ 2v		
10560	47 09.0	+2.79	-0.002	-13 13 35	-09.1	-0.02	6.12		B9		.		
10561	47 09.9	+4.73	-0.004	+54 15 22	-09.0	+0.05	6.02	3.5	dF6	032	- 2		
10562	47 11.4	+2.52	-0.000	-24 43 59	-09.0	-0.00	3.47	-4.5	cG6p	003	+ 3v	7 ξ Pup	ds
10563	47 15.3	+1.28	-0.004	-56 20 42	-09.0	-0.00	6.18		K0+A2		.		d
10568	47 22.9	+2.23	-0.001	-35 07 00	-09.0	+0.01	6.06		A0		.		
10569	47 25.7	+2.71	+0.004	-17 05 59	-09.2	-0.12	5.54		gK3		+44	6 Pup	
10574	47 40.7	+2.29	-0.004	-33 09 43	-09.1	+0.00	5.70		K5		.		
10575	47 42.5	+1.81	-0.001	-46 43 52	-09.1	+0.01	5.98		B2		+25		
10576	47 42.8	+1.83	-0.001	-46 14 47	-09.1	+0.00	4.25	-4.8	B0	0017	+24	P Pup	
10578	47 46.4	+2.88	-0.000	-09 03 21	-09.1	+0.00	5.78	-0.7	gK3	005	- 7		
10579	47 49.7	+3.86	-0.001	+33 21 41	-09.1	-0.00	6.02	1.6	A0	013	-10		
10589	48 02.3	+1.29	-0.001	-56 17 01	-09.1	+0.00	5.54		K0		+22v		ds
10601	48 23.4	+0.99	-0.009	-60 09 31	-09.0	+0.15	5.82	-2.4	F2	0044	.		
10608	48 37.5	+4.79	-0.000	+55 20 21	-09.2	-0.04	6.24	1.0	A0n	009	+16		
10618	49 02.3	+1.63	-0.007	-50 22 51	-09.2	-0.05	5.82		K5		.		
10619	49 02.4	+3.49	-0.004	+19 27 17	-09.2	-0.04	6.13		gK1		+39		
10622	49 06.4	+3.11	-0.001	+01 53 45	-09.2	-0.00	5.11	-0.4	B8	008	+32	13 ζ CMi	
10628	49 21.4	+0.40	-0.001	-66 04 05	-09.2	-0.01	5.94		B9		.		
10629	49 27.4	+2.78	-0.004	-13 45 51	-09.6	-0.34	5.34	4.6	dG2	060	-18v	9 Pup	d
10632	49 32.3	+2.61	-0.004	-21 02 42	-09.2	+0.02	5.78	0.8	gG8	010	+32		
10640	50 00.8	+2.76	-0.001	-14 42 59	-09.3	-0.00	5.69	-0.4	sF3	006	+17	10 Pup	
10641	50 01.4	+1.98	-0.002	-42 45 32	-09.3	0.00	6.16		B3s		+32		
10649	50 19.7	+2.96	-0.002	-05 17 51	-09.3	-0.03	5.75		gF5		- 2		d
10651	50 23.6	+2.24	-0.016	-34 34 43	-09.0	+0.24	5.02	4.2	dF3	068	+28		d
10653	50 26.4	+3.67	-0.002	+26 53 49	-09.3	-0.04	4.99	1.3	A4n	018	+ 8v	83 φ Gem	
10655	50 29.9	+2.06	-0.001	-40 26 45	-09.3	+0.00	3.76	0.6	G5	023	+24v	α Pup	s
10661	50 52.4	+2.12	-0.001	-38 43 57	-09.3	-0.01	4.53	-0.5	B3	010	-21v	b Pup	s
10666	51 04.7	+4.37	-0.004	+47 41 46	-09.3	-0.00	5.69	0.2	gK4	008	+17	26 Lyn	
10670	51 13.1	+2.21	-0.001	-36 13 59	-09.4	-0.01	5.46	-0.6	K5	006	+12		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0''G	RV	Con	N
10673	07 ^h 51 ^m 18 ^s 1	+1 ^h 43	-0 ^m 001	-54°14'12"	-09 ^m 4	-0 ^s 00	5.84		B3		+18		
10686	51 39.1	+1.69	-0.001	-49 28 56	-09.4	+0.01	4.83	-1.7	B3n	005	+ 8		
10689	51 50.0	+1.76	-0.000	-47 58 18	-09.4	-0.00	4.32	-6.0	B2n	0013	+41	J Pup	
10695	52 19.7	+2.22	-0.001	-35 44 44	-09.4	-0.01	5.41	-0.6	B5	006	+28		
10701	52 25.5	+3.91	-0.005	+35 32 46	-09.5	-0.02	6.11	0.9	A0	009	+28		
10707	52 44.9	+3.50	-0.001	+20 01 03	-09.5	-0.04	5.36	0.4	A0	010	+13v?	85 Gem	
10709	52 47.1	+2.26	-0.001	-34 42 51	-09.5	-0.02	6.13		K2		.		
10710	52 48.5	+3.26	-0.001	+08 59 50	-09.6	-0.09	5.78	3.2	dF4	031	+22		
10735	53 51.2	+1.24	-0.010	-57 10 12	-09.5	+0.02	5.50	-1.5	M0	004	+26		
10741	54 09.0	+1.95	-0.002	-43 42 40	-09.6	-0.00	6.04		B5n		+14		d
10742	54 09.2	+3.41	-0.002	+15 55 31	-09.6	-0.05	5.96	0.5	gK3	008	+10	1 Cnc	
10745	54 15.1	+7.18	-0.002	+74 03 17	-09.6	-0.04	5.56	0.3	gK5	009	+35		
10751	54 33.3	+3.25	+0.000	+08 46 35	-09.6	-0.02	6.12		gG6		-36		
10756	54 42.5	+2.58	-0.002	-22 44 44	-09.6	+0.00	4.35	-1.8	cG2	006	+14	11 e Pup	
10763	55 17.3	+2.01	+0.002	-42 16 17	-09.6	+0.02	5.95		K2		.		
10765	55 19.4	+1.97	-0.001	-43 21 55	-09.7	+0.01	5.42		B3		+28v		s
10768	55 28.1	+1.01	-0.002	-60 23 30	-09.7	+0.01	5.59		K2		.		
10770	55 30.4	+1.53	-0.004	-52 50 51	-09.7	+0.02	3.60	-1.0	B3	012	+19	γ Car	
10773	55 40.4	+3.42	-0.000	+16 39 17	-09.7	-0.01	6.18		K0		- 1		
10774	55 40.5	+2.39	-0.001	-30 11 57	-09.7	+0.00	4.85	1.6	A2	022	+28		
10775	55 41.2	+1.94	-0.000	-43 58 28	-09.7	+0.00	5.10		B3s		+16	N Pup	d
10776	55 45.1	+3.11	-0.011	+02 21 34	-09.6	+0.10	5.40	1.7	gG6	018	+46	14 CMi	
10778	55 50.7	+1.78	-0.003	-47 45 18	-09.7	+0.01	6.08	0.6	B5n	008	+12		d
10780	55 54.6	+1.13	-0.003	-58 59 27	-09.7	-0.02	6.03		K5		.		
10790	56 17.4	+1.89	-0.002	-45 26 31	-09.7	+0.02	5.16	-1.8	M0	004	+51v	O Pup	s
10793	56 34.5	+0.76	-0.003	-63 09 41	-09.8	+0.01	6.09		B9n		+23		
10801	56 47.7	+3.35	-0.001	+13 22 47	-09.8	-0.02	6.20		K2		+27		
10802	56 48.1	+1.72	-0.002	-49 06 31	-09.8	+0.00	var	var	B1p+B3	003	+20v	V Pup	dsE
10804	56 51.6	+1.11	+0.069	-60 10 06	-09.7	+0.12	5.66	4.3	F8	054	+13		
10805	56 57.0	+2.57	-0.001	-23 10 24	-09.8	-0.00	5.22		cK2		+11	12 Pup	
10808	57 01.0	+9.43	-0.010	+79 37 14	-09.8	-0.05	5.33	0.7	A0	012	+ 3		
10809	57 10.0	+5.03	+0.002	+59 11 07	-09.8	+0.03	5.79	1.8	dF2	016	-39		
10811	57 14.3	+3.00	-0.004	-03 32 31	-09.8	0.00	5.06	2.3	K2	028	-29	27 Men	
10820	57 26.5	+1.90	-0.002	-45 04 43	-09.8	-0.01	6.02		B6n		- 3		
10822	57 27.1	+5.12	-0.004	+60 27 48	-09.8	-0.02	6.00	1.4	A8p	012	- 5	53 Cam	
10825	57 37.5	+2.69	-0.001	-18 15 39	-09.9	-0.05	4.64	1.2	A2	021	-12		
10830	57 42.4	+2.12	-0.008	-39 09 32	-09.9	-0.05	5.20	2.7	F0	031	- 8		
10844	57 54.5	+3.63	+0.001	+25 31 52	-09.9	-0.00	5.88	-0.2	gG8	006	+ 2	2 ω Cnc	
10845	57 55.5	+3.44	-0.001	+17 26 50	-09.9	-0.01	5.79	0.0	gK3	007	+41	3 Cnc	
10848	58 00.6	+1.00	-0.001	-60 41 14	-09.9	+0.01	5.88		B5n		- 3		
10851	58 02.9	+5.38	-0.002	+63 13 48	-09.9	-0.02	6.04	1.2	gG1	011	+20		
10865	58 35.2	+3.17	-0.003	+05 01 07	-09.9	+0.01	5.66	1.1	A0	012	+46		
10868	58 39.4	+3.42	+0.000	+16 35 41	-09.9	-0.01	5.91	0.9	A0n	010	-16v	5 Cnc	s
10870	58 40.7	+3.05	+0.004	-01 15 09	-10.0	-0.08	4.88	-0.1	gK5	010	+27	28 Mon	
10871	58 43.0	+3.62	-0.001	+25 13 44	-09.9	+0.02	6.20	1.2	A1n	010	- 9	4 Cnc	
10873	58 46.4	+1.03	+0.000	-60 26 56	-09.9	+0.01	5.06		M3		+24		
10875	58 47.6	+1.74	-0.002	-48 50 36	-09.9	+0.04	6.12		A2		.		
10878	59 01.3	+1.75	-0.002	-48 43 58	-09.9	+0.01	6.16		A0p		.		
10880	59 07.9	+3.26	-0.000	+09 03 12	-09.9	+0.02	6.11		F5		+ 4		
10889	59 36.2	+1.48	-0.003	-54 00 43	-10.0	0.00	5.89		B6n		0v?		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
10891	07 ^h 59 ^m 39 ^s 9	+3 ^s 12	-0 ^s 002	+02°28'24"	-09 ^s 9	+0 ^s 10	4.52	0.7	gK3	017	+71	D ¹ Car	
10893	59 42.3	+0.76	-0.000	-63 25 43	-10.0	+0.02	4.96	-2.4	B3s	0035	+21		
10894	59 47.6	+2.19	-0.002	-37 08 38	-10.0	+0.01	5.85		A2		.		
10903	08 00 10.0	+1.46	-0.003	-54 22 31	-10.0	+0.02	5.99		B5		+19v		
10912	00 27.0	+3.68	-0.002	+27 56 10	-10.1	-0.04	5.04	0.2	gK2	011	-11v	χ Gem	s
10932	01 01.6	+2.06	-0.001	-41 10 08	-10.1	+0.01	5.55		B9		+56		d
10938	01 07.0	+2.34	-0.002	-32 19 21	-10.1	-0.00	5.80		K2		.		d
10946	01 49.3	+2.00	-0.003	-42 48 24	-10.2	-0.02	6.25		K0		.		
10947	01 49.6	+2.11	-0.003	-39 51 41	-10.1	+0.01	2.27	-5.5	O5n	003	-24	ζ Pup	
10948	01 52.0	+3.47	-0.002	+18 59 06	-10.2	-0.02	6.06	0.6	A0	008	+31		
10959	02 17.5	+3.34	-0.002	+13 15 43	-10.3	-0.07	5.11	0.8	A0	014	+22v	8 Cnc	s
10960	02 19.2	+2.34	-0.001	-32 31 56	-10.2	+0.00	5.40	1.8	M4	019	+36		
10964	02 28.3	+2.66	+0.000	-19 35 07	-10.2	+0.00	6.06		B4		+14	14 Pup	
10967	02 33.3	+3.68	+0.000	+27 40 24	-10.2	-0.01	6.16	0.3	B9	007	.		d
10987	03 18.3	+1.68	-0.001	-50 26 50	-10.3	-0.02	6.00		K0		.		
10988	03 20.8	+3.55	-0.000	+22 46 48	-10.3	-0.01	6.24	-0.7	gM3	004	+26	9 Cnc	
10995	03 42.5	+4.16	-0.000	+43 24 21	-10.3	-0.03	6.24	0.1	A0	006	+8v	28 Lyn	s
10997	03 46.1	+1.56	+0.003	-52 57 51	-10.3	-0.01	5.44	1.5	M0	016	+18		
11002	03 49.0	+2.32	-0.001	-33 25 31	-10.3	+0.01	6.00		G5		.		d
11006	04 02.9	+2.89	0.000	-09 06 00	-10.3	-0.01	5.92		A0		.		d
11018	04 42.3	+4.51	-0.006	+51 39 10	-10.4	-0.01	4.87	-0.1	A2	010	+5	27 Lyn	d
11021	04 49.4	+3.53	+0.002	+21 43 42	-10.5	-0.08	5.38	3.1	dG3	035	-36	10 μ Cnc	
11026	05 04.0	+1.93	-0.001	-45 07 16	-10.4	-0.00	5.02		K5		+25		
11027	05 05.6	+2.65	-0.001	-20 24 32	-10.4	-0.01	5.25		A3		+12		
11034	05 24.8	+2.56	-0.006	-24 09 32	-10.4	+0.05	2.88	-1.1	cF5	016	+47v	15 ρ Pup	
11050	05 58.4	+4.92	-0.003	+58 23 48	-10.5	-0.08	6.05		gK4		+34		
11051	05 04.9	+3.02	-0.001	-02 50 13	-10.5	-0.01	4.41	-4.9	cG6	0017	+30	29 ζ Mon	
11067	06 34.5	+2.85	-0.000	-11 11 33	-10.5	-0.01	6.25		B9		.		
11071	06 47.7	+2.68	-0.001	-19 05 51	-10.5	-0.01	4.34	-1.1	B5n	008	+19v	16 Pup	
11081	07 11.3	+2.74	-0.001	-16 06 04	-10.6	-0.01	5.54	-1.4	B3s	004	+33		d
11085	07 16.7	+2.27	-0.000	-35 18 27	-10.6	+0.01	6.20		G5		.		
11091	07 26.7	+3.61	-0.005	+25 39 38	-10.9	-0.35	5.83	3.4	dG6	032	-43	14 ψ Cnc	
11096	07 40.1	+1.79	-0.001	-48 32 11	-10.6	-0.01	5.86		B8		.		
11098	07 46.6	+0.19	-0.005	-68 28 13	-10.6	+0.02	4.46	-2.1	B8	005	+10v	ϵ Vol	ds
11100	07 51.8	+5.97	+0.000	+68 37 26	-10.6	+0.01	5.48	0.2	G4	009	-9	55 Cam	
11103	07 56.8	+1.85	-0.001	-47 11 51	-10.6	-0.01	4.79		B3n		+20v	γ^1 Vel	} s
11104	07 56.9	+1.98	-0.001	-43 58 29	-10.6	-0.02	5.16	-0.6	B3	007	+8		
11105	07 59.5	+1.85	-0.001	-47 11 18	-10.6	+0.00	2.22	-4.5	O8+WN7	005	+35v	γ^2 Vel	
11114	08 10.4	+3.37	-0.002	+14 46 44	-10.7	-0.02	6.14	1.1	A0	010	+24		
11115	08 11.0	+1.00	-0.022	-61 09 00	-10.9	-0.28	4.80	3.5	F5	055	+25	B Car	
11117	08 11.9	+1.82	-0.001	-47 47 20	-10.6	-0.00	5.40		B3n		+5v?		
11118	08 20.8	+2.78	-0.017	-13 39 03	-10.6	+0.05	5.64	3.5	dF7	037	+38	18 Pup	
11119	08 23.8	+1.40	-0.001	-55 56 15	-10.6	+0.02	5.80		A2		.		
11124	08 33.1	+3.27	-0.001	+09 58 15	-10.7	-0.02	6.07		B9	006	.		
11134	08 55.5	+2.82	-0.002	-12 46 39	-10.7	+0.01	4.68	1.6	dG7	024	+36	19 Pup	d
11138	09 07.0	+2.92	-0.003	-07 37 20	-10.7	-0.02	5.36	0.9	gG8	013	-11		
11141	09 20.8	+3.44	+0.005	+17 48 00	-10.9	-0.14	5.10	3.2	dF7	042	-6	16 ζ^1 Cnc	} d s
11142	09 21.2	+3.44	+0.007	+17 47 58	-10.8	-0.11	6.02	4.1	dG2	042	-11	16 ζ^2 Cnc	
11149	09 34.3	+2.14	-0.001	-39 28 07	-10.7	-0.01	4.43		M0		+16v	h ¹ Pup	
11154	09 40.7	+1.81	+0.001	-48 18 43	-10.8	-0.01	5.94		B3		+15		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
11155	08 ^h 09 ^m 44 ^s .5	+2 ^o 03	-0 ^o 00	-42 ^o 50'14"	-10 ^o 8	0 ^o 00	4.87	-5.1	A3	001	+19		d
11158	09 51.8	+4.78	-0.002	+56 36 15	-10.8	-0.04	5.90	0.1	gG9	007	+7		
11163	10 03.2	+3.72	-0.000	+29 48 29	-10.8	-0.02	5.59	0.6	A2s	010	+20v	15 Cnc	s
11165	10 09.4	+3.41	-0.000	+16 39 56	-10.8	-0.02	6.12		gG3		-20v		
11172	10 25.6	+1.89	-0.001	-46 29 37	-10.8	+0.00	var	var	cF8p	0019	.	AH Vel	
11181	10 55.6	+1.90	-0.000	-46 06 47	-10.8	+0.01	6.08		B4s		+13		d
11184	11 02.1	+2.76	-0.001	-15 38 11	-10.8	-0.00	5.05	0.0	gG6	010	+17v	20 Pup	
11197	11 36.2	+2.27	-0.000	-35 44 51	-10.9	-0.00	4.77	-1.3	B3nc	006	+35	r Pup	
11207	12 02.2	+1.88	-0.001	-46 50 22	-10.9	-0.01	5.28		B5		+25v		
11208	12 05.6	+2.25	+0.000	-36 10 12	-10.9	-0.00	5.12	-3.4	B3n	002	+18		
11209	12 06.0	+2.25	+0.000	-36 11 18	-10.9	-0.01	5.95		B8		.		
11210	12 07.3	+1.74	0.000	-50 02 37	-10.9	-0.01	5.44		M0		-7		
11214	12 12.3	+2.37	-0.001	-31 59 17	-10.9	-0.00	6.10		B5n		-54v		s
11215	12 16.3	+2.13	+0.003	-40 11 39	-11.0	-0.07	4.43	-0.6	K2	010	+14v	h ³ Pup	ds
11217	12 19.4	+2.27	-0.005	-35 20 16	-10.9	+0.00	5.82	0.3	K0	008			
11235	12 47.4	+1.93	-0.001	-45 40 53	-11.0	+0.00	6.02		B3		+20		d
11246	13 19.0	+7.53	+0.008	+75 54 46	-11.0	+0.01	5.73	0.9	gG6	011	+7		
11252	13 42.1	+4.98	+0.000	+59 43 35	-11.0	0.00	5.52	1.9	A4n	019	-17	29 Lyn	
11254	13 48.3	+3.25	-0.003	+09 20 28	-11.1	-0.05	3.76	-0.4	gK4	015	+22	17 β Cnc	
11255	13 48.6	+3.31	+0.001	+11 52 52	-11.1	-0.01	var	var	gM7ev	000	+32	R Cnc	
11263	14 05.3	+2.27	-0.000	-35 44 54	-11.1	+0.01	6.20		K2		.		
11275	14 30.7	+0.91	-0.003	-62 45 40	-11.1	-0.03	5.26	2.4	A2	027	+4	C Car	d
11291	14 57.2	+5.22	-0.002	+62 39 50	-11.1	+0.00	5.77	0.3	gG5	008	-2v	57 Cam	s
11296	15 03.3	+11.6	-0.007	+82 35 26	-11.2	-0.03	6.17		A0n		-16		
11302	15 12.1	+6.61	+0.001	+72 33 55	-11.2	-0.03	6.20	0.1	gM0	006	+11		d
11325	16 01.5	+2.85	+0.018	-12 27 41	-12.2	-0.98	6.04	5.3	dK1	077	+30		
11337	16 22.8	+2.29	+0.001	-35 17 41	-11.2	-0.00	5.66		K2		.		
11338	16 24.6	+4.84	+0.008	+57 54 04	-11.2	+0.01	5.94	3.2	dF2	029	-15	30 Lyn	
11343	16 41.0	+2.25	-0.009	-36 30 12	-11.2	+0.09	4.43	2.4	A5	039	+5	q Pup	
11348	17 01.8	+3.64	-0.001	+27 22 52	-11.7	-0.38	5.16	4.0	dF6	060	+32	18 χ Cnc	
11358	17 26.2	+3.50	+0.005	+20 54 24	-11.4	-0.06	5.93	0.4	gK1	008	-17		
11363	17 33.9	+3.57	-0.002	+24 10 52	-11.3	-0.03	5.87	0.9	A0	010	+24v	19 λ Cnc	
11366	17 46.0	+0.66	+0.004	-65 27 21	-11.3	+0.02	4.98	-0.5	K0	008	0		
11368	17 48.3	+2.98	+0.002	-05 10 12	-11.4	-0.03	6.24		K2		.		
11377	18 16.8	+2.61	-0.001	-22 45 56	-11.4	-0.00	6.09		K0		.		d
11393	19 07.4	+2.68	-0.000	-19 55 08	-11.5	-0.02	5.56	0.6	gG0+A3	010	-8v		s
11400	19 24.8	+2.36	-0.002	-32 53 40	-11.4	+0.00	4.94	1.8	M0	024	+33	w Pup	
11401	19 25.2	+4.11	-0.001	+43 21 01	-11.6	-0.10	4.43	0.3	gK5	015	+24	31 Lyn	
11402	19 27.6	+2.27	-0.001	-36 19 27	-11.5	-0.01	5.17	0.2	B3	010	+16v		d
11405	19 35.5	+2.17	+0.000	-39 27 38	-11.5	-0.01	6.18		A5				
11409	19 38.4	+2.72	-0.007	-17 25 32	-11.5	-0.02	5.85	0.6	gK0	009	+68		
11419	19 51.0	-1.55	+0.031	-76 45 44	-11.4	+0.11	4.08	2.5	F5	049	-14	α Cha	
11421	19 58.6	-0.17	-0.003	-71 21 21	-11.5	+0.03	5.44		B9		+36v	κ^1 Vol	s
11424	20 02.0	+4.54	-0.002	+53 22 57	-11.6	-0.11	5.58	2.1	A2	020	+21		
11425	20 02.5	+2.95	-0.004	-06 01 05	-11.5	+0.00	6.07		A3		.		
11428	20 05.4	+1.33	-0.001	-57 48 47	-11.5	+0.00	6.07		B5		+15		
11430	20 10.0	-0.17	-0.002	-71 20 46	-11.5	+0.04	5.72		A0p		.	κ^3 Vol	
11436	20 26.1	+0.84	-0.000	-63 56 43	-11.6	-0.03	5.98		G5		.		
11437	20 27.5	+2.93	-0.002	-07 22 55	-11.5	0.00	6.15		Ma		.		
11438	20 30.2	+3.44	-0.004	+18 29 39	-11.6	-0.03	5.88	2.2	dF0	018	+36	20 d ¹ Cnc	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
11443	08 ^h 20 ^m 43 ^s 1	+2 ^s 54	-0 ^s 001	-26°11'13"	-11 ^s 5	+0 ^s 00	5.86	-1.7	cF5	003	+64		d
11450	20 59.3	+1.84	-0.002	-48 19 45	-11.6	+0.00	4.90	-3.5	B1n	0023	+26	B Vel	d
11456	21 20.1	+4.06	+0.002	+42 10 04	-11.6	+0.00	6.22	-0.3	gK5	005	+27		
11463	21 29.4	+1.23	-0.004	-59 20 53	-11.6	+0.01	1.74	-3.0	K0+B	010	+12	ϵ Car	s
11464	21 31.3	+1.68	-0.002	-51 57 44	-11.6	+0.00	5.93		B9		.		
11473	21 53.2	+3.84	-0.000	+35 10 29	-11.6	-0.02	6.21		K0		+33		
11479	22 05.5	+2.99	-0.014	-03 35 16	-11.7	-0.03	5.67	3.6	dF2	041	+71v	1 Hya	s
11480	22 07.0	+2.99	+0.001	-04 33 12	-11.7	-0.05	6.00		dF4		-35v		s
11481	22 10.8	-1.80	-0.041	-77 19 26	-11.6	+0.03	4.26	0.6	K5	019	+22	ϕ Cha	
11485	22 32.6	-0.54	-0.006	-73 14 19	-11.7	+0.01	5.40	-1.6	A6s	004	+20	η Vol	
11490	22 44.6	+2.61	-0.003	-22 59 26	-11.7	+0.04	5.65		A2		.		
11491	22 54.1	+2.59	-0.003	-23 52 59	-11.7	+0.02	5.46	1.7	K2	018	+26		d
11493	22 59.8	+3.11	-0.001	+02 15 58	-11.7	-0.02	5.91		gK5		+12		
11494	23 00.2	+3.40	-0.013	+17 12 44	-11.9	-0.16	6.18	3.2	dF4	025	+37	25 d ^h Cnc	
11496	23 06.2	+2.66	-0.001	-20 52 58	-11.7	+0.06	6.00		F2		.		
11499	23 09.8	+3.00	-0.004	-03 44 31	-11.7	-0.03	3.95	0.6	A0n	021	+10	30 Mon	
11504	23 13.3	+2.07	-0.002	-42 36 22	-11.7	+0.02	6.20		B5n		+23		d
11505	23 13.9	+3.22	-0.002	+07 43 44	-11.7	-0.01	5.23	0.0	gG6	009	+14		d
11509	23 25.5	+3.65	-0.002	+28 03 35	-11.9	-0.12	5.83	0.6	gK4	009	+24	22 ϕ ^h Cnc	
11512	23 36.2	+2.79	-0.001	-14 45 57	-11.7	+0.03	5.91		A2		.		
11523	23 57.3	+3.00	-0.004	-03 49 18	-11.8	-0.06	5.41	2.6	dF0	027	+27	2 Hya	
11525	23 58.1	+3.32	-0.002	+12 49 16	-11.9	-0.10	5.75	-0.4	gM3	006	-7	27 Cnc	
11531	24 05.7	+1.71	-0.005	-51 33 49	-11.8	-0.02	5.23		B3n		+18		d
11532	24 06.9	+2.10	-0.002	-41 59 20	-11.8	0.00	5.30		B3		+28		
11539	24 20.4	+2.83	-0.006	-12 22 08	-11.8	-0.02	5.68	0.2	gK3	008	+65		
11559	25 02.4	+1.66	-0.003	-52 38 32	-11.9	-0.01	6.14		A0		.		
11561	25 04.8	+5.66	-0.010	+67 27 51	-11.8	+0.01	6.01	0.8	gG7	009	-3		
11564	25 10.9	+0.82	-0.002	-64 26 09	-11.9	+0.00	6.02		G5		.		
11567	25 12.0	+0.65	-0.004	-65 58 11	-12.0	-0.16	3.65	1.0	K1	029	+27	β Vol	
11580	25 39.1	+3.56	-0.002	+24 18 44	-12.0	-0.06	6.06	1.8	dA6n	014	+12v	28 Cnc	s
11584	25 50.0	+3.35	-0.001	+14 22 40	-11.9	-0.02	5.90	1.8	A4	015	+2	29 Cnc	s
11589	26 03.2	+2.32	-0.002	-34 56 51	-11.9	0.00	5.82		B5		+23		d
11593	26 07.7	+4.98	-0.018	+60 53 14	-12.0	-0.11	3.47	-1.1	gG1	012	+20	1 \circ UMa	d
11595	26 14.3	+1.64	-0.008	-52 55 21	-11.9	+0.01	5.12	1.1	F0	016	+25	F Vel	
11600	26 26.4	+2.89	-0.001	-09 34 53	-11.9	+0.01	5.98		F2		.		
11620	27 10.4	+0.14	-0.002	-69 55 38	-12.0	+0.04	5.62		B9		+20		
11625	27 22.5	-3.56	-0.061	-80 45 06	-11.8	+0.22	5.60		K0		.		
11628	27 25.5	+2.04	+0.000	-43 59 34	-12.0	+0.00	5.94		B3n		+3		
11630	27 29.9	+1.89	-0.002	-47 45 41	-12.0	-0.00	5.52		B5n		+14v	A Vel	ds
11635	27 46.4	+2.02	-0.000	-44 33 25	-12.1	-0.01	5.22	-4.8	B5n	001	+20v		ds
11641	28 05.8	+3.89	-0.001	+37 26 06	-12.1	-0.00	6.06	0.0	B9	006	.		
11642	28 07.5	+1.96	-0.004	-46 09 49	-12.1	-0.00	6.11		B7		+9		
11651	28 28.2	+2.41	-0.002	-31 59 25	-12.1	-0.01	5.63		K2		.		d
11655	28 33.3	+3.55	-0.006	+24 15 04	-12.2	-0.05	5.73	2.1	dA9n	020	+19	30 ν ^h Cnc	
11659	28 44.8	+3.42	-0.004	+18 15 53	-12.2	-0.06	5.57	-0.2	gM1	007	+44	31 ϕ Cnc	
11679	29 16.1	+2.70	-0.002	-19 24 27	-12.2	-0.01	5.38	-0.1	A0	008	+12v?		d
11682	29 33.8	+2.21	-0.002	-38 53 40	-12.2	+0.00	6.24		B3		+11		d
11684	29 40.3	+3.90	-0.008	+38 11 22	-12.3	-0.17	6.05	0.8	gK3	009	+15		
11687	29 49.2	+3.47	-0.003	+20 36 45	-12.2	-0.05	5.52	0.5	gK5	010	+24	33 η Cnc	
11700	30 09.0	+5.37	-0.008	+65 19 04	-12.3	-0.07	5.39	1.5	A0	017	-16	2 A UMa	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
11701	08 ^h 30 ^m 09 ^s .3	+1 ^s .60	+0 ^s .002	-54°13'23"	-12"3	-0"05	6.20		K2				
11702	30 09.6	+3.85	-0.012	+36 36 27	-12.2	-0.01	6.14	3.7	dF1	033	0	32 Lyn	
11713	30 41.6	+1.66	-0.003	-53 02 29	-12.2	+0.00	5.77		G5+A0		+19		d
11724	30 55.1	+2.59	-0.001	-24 26 05	-12.3	-0.02	6.15	1.9	dA7n	014	-8		d
11729	31 01.2	+2.35	-0.001	-34 27 46	-12.3	+0.00	6.16		K0				
11732	31 05.4	+3.16	-0.000	+04 55 43	-12.3	-0.02	6.13		gG5		+1		
11743	31 29.9	+3.03	-0.003	-01 58 47	-12.3	+0.02	5.61		A0				
11744	31 31.4	+3.85	-0.002	+36 35 33	-12.4	-0.05	5.83	1.2	A2	012	+25	33 Lyn	
11745	31 31.7	+3.23	-0.000	+08 37 29	-12.3	-0.04	5.97	2.8	F0	023	+16		
11748	31 46.9	+2.23	-0.004	-38 40 36	-12.3	+0.00	5.95		B8				
11766	32 35.8	+2.27	-0.001	-37 26 19	-12.4	-0.00	6.19		K5				d
11775	33 01.8	+2.93	-0.002	-07 48 32	-12.4	+0.02	5.61	0.8	A4sp	011	+24	3 Hya	
11776	33 03.6	-0.41	-0.009	-73 11 08	-12.3	+0.08	6.02		K0				
11781	33 11.6	+3.19	-0.009	+06 47 44	-12.6	-0.15	6.04	4.1	F6	041	+24v		ds
11783	33 12.0	+1.83	0.000	-49 46 16	-12.4	+0.02	4.87	-2.1	K0	004	+4	C Vel	
11786	33 21.4	+2.54	-0.002	-26 40 12	-12.4	+0.01	5.88	0.4	A2	008			
11796	34 05.9	+1.39	-0.004	-58 03 04	-12.5	0.00	5.40	-1.6	B3	005	+28	e ¹ Car	
11797	34 08.8	+1.42	+0.005	-57 50 08	-12.5	+0.02	4.80	0.2	G6	012	+24	e ² Car	
11805	34 22.4	+1.79	-0.001	-50 47 44	-12.5	-0.01	5.96		B9			E Vel	
11807	34 23.2	+3.25	-0.002	+09 49 50	-12.5	-0.01	5.98		A2		+16	36 c Cnc	
11810	34 38.9	+4.48	-0.008	+53 34 38	-12.5	-0.02	5.74	1.5	gG6	014	-43		
11817	34 46.7	+5.33	-0.004	+65 11 45	-12.4	+0.08	5.69	4.5	dG0	059	-12	3 π^1 UMa	
11821	34 57.8	+2.99	-0.001	-04 45 30	-12.5	+0.02	6.21		K0				
11823	35 00.6	+3.18	-0.005	+05 52 45	-12.6	-0.01	4.18	1.2	A0n	025	+11v	4 δ Hya	
11832	35 11.9	+3.75	-0.002	+32 58 40	-12.6	-0.02	6.09	0.0	gK2	006	+4		
11844	35 36.0	+4.44	-0.003	+52 53 19	-12.6	-0.03	6.03	0.5	gK1	008	+27		
11848	35 44.0	+2.56	-0.002	-26 04 44	-12.6	-0.02	5.20	2.0	A0	023	+31	η Pyx	
11850	35 52.0	+5.24	-0.008	+64 30 17	-12.6	+0.02	4.76	0.6	gK2	015	+15	4 π^2 UMa	
11852	35 53.1	+2.11	-0.001	-42 48 48	-12.6	0.00	4.13	-4.5	A5	002	+19	e Vel	
11856	36 08.7	+3.14	-0.001	+03 31 05	-12.6	-0.02	4.54	-0.1	gK3	012	+24	5 σ Hya	
11867	36 25.8	+1.07	+0.000	-62 40 38	-12.7	-0.03	5.38	1.1	G8	014	+20		d
11877	36 56.6	+2.63	-0.017	-22 29 27	-12.2	+0.43	5.13	4.1	dG6	062	+43v?		ds
11886	37 12.6	+3.72	-0.003	+32 07 13	-12.7	-0.03	6.14		gF3		+12		s
11895	37 27.2	+2.30	-0.015	-36 25 48	-12.7	+0.04	6.06		F0				d
11903	37 34.3	+4.15	+0.003	+46 00 39	-12.6	+0.08	5.52	2.9	sgG6	030	-37	34 Lyn	
11907	37 37.9	+2.49	-0.001	-29 22 56	-12.8	-0.10	5.04	1.3	gG4	018	-32	ζ Pyx	
11908	37 39.3	+2.84	-0.006	-12 17 51	-12.7	-0.00	5.15	0.9	gK5	014	-11	6 Hya	
11917	37 59.4	+1.69	-0.004	-53 15 44	-12.7	+0.01	5.60	0.4	B7n	009	+9		
11923	38 08.7	+2.35	+0.001	-35 07 47	-12.8	-0.02	4.04	-0.2	G5	014	-15	β Pyx	
11931	38 29.0	+2.20	-0.004	-40 05 09	-12.8	-0.01	5.17		B9		+21		d
11933	38 32.0	+1.71	-0.003	-52 52 37	-12.8	+0.01	5.38	-0.4	B5	007	+36v		ds
11943	38 51.6	+1.72	-0.003	-52 44 37	-12.8	+0.01	3.68	-2.8	B3	005	+17v	o Vel	
11944	38 51.7	+1.71	-0.004	-52 50 14	-12.8	+0.02	5.73		B5s		+14v?		
11946	38 53.0	+2.05	+0.000	-45 00 45	-12.8	-0.01	5.74		K5				
11947	38 54.8	+0.22	+0.004	-70 12 30	-12.9	-0.05	5.26		A0		+13	θ Vol	d
11951	38 58.0	+1.99	-0.001	-46 28 12	-12.8	-0.00	4.06	-7.0	cF8p	001	+25v	b Vel	
11959	39 24.1	+2.78	-0.000	-15 45 45	-12.9	-0.09	4.98	2.0	gG8	025	-2	9 Hya	d
11962	39 30.1	+1.90	-0.001	-48 44 36	-12.8	+0.00	6.14		B5		+18		
11964	39 30.8	+1.33	-0.001	-59 34 56	-12.9	-0.01	4.42	-4.3	B1s	0021	+13v	d Car	s
11965	39 32.1	+4.17	-0.004	+47 04 55	-12.9	-0.05	6.21		G5		-7		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
11966	08 ^h 39 ^m 34 ^s 6	+1 ^s 97	-0 ^s 002	-47°08'16"	-12 ^s 9	+0 ^s 00	4.85		A3		+17v	n Vel	
11978	40 14.7	+2.04	-0.001	-45 13 51	-12.9	-0.01	5.23	-3.3	B5	002	+25		
11982	40 23.7	+3.47	-0.007	+21 38 59	-13.0	-0.04	4.73	0.5	A0	014	+29v	43 γ Cnc	s
11983	40 27.2	+3.31	-0.000	+12 51 41	-12.9	-0.00	5.67	2.2	dA9s	020	-13	45 A ¹ Cnc	
11987	40 36.7	+3.14	-0.001	+03 34 46	-12.9	-0.00	4.32	-1.2	B5n	008	+21v	7 η Hya	
11988	40 39.0	+1.94	-0.003	-47 55 08	-12.9	-0.01	5.48	0.0	B3n	008	+58		d
11992	40 52.9	+1.72	-0.004	-52 55 12	-12.9	+0.02	5.68	0.4	B9	009	+20		d
11997	40 59.4	+1.72	-0.002	-52 56 02	-12.9	+0.02	5.04	0.2	B5	011	+22		
11999	41 02.1	+1.58	-0.009	-55 35 40	-12.9	+0.05	6.14		K0				
12006	41 13.1	+2.95	-0.000	-07 03 09	-13.0	0.00	4.70	-4.1	cG4	0023	+31	F Hya = 31 Mon	
12018	41 34.9	+2.41	-0.001	-33 00 19	-13.0	+0.01	3.70	-2.1	B1s	007	+15	α Pyx	
12022	41 50.8	+3.41	-0.001	+18 20 22	-13.2	-0.24	4.17	0.0	gK0	015	+17	47 δ Cnc	d
12029	42 02.3	+3.26	-0.001	+10 15 50	-13.0	-0.02	5.58	0.8	A4sp	011	+24	49 b Cnc	
12031	42 06.4	+1.88	+0.002	-49 38 28	-13.0	-0.00	5.19		B3n		+28	D Vel	
12037	42 17.6	+3.68	0.000	+30 52 49	-13.0	-0.01	6.14	0.4	gG4	007	-12	46 Cnc	
12041	42 22.5	+3.18	-0.000	+05 51 47	-13.0	-0.01	6.00	1.4	A3n	012	-6	10 Hya	s
12050	42 36.7	+2.14	-0.002	-42 28 02	-13.0	+0.02	4.12	0.6	sgG5	020	-2	d Vel	
12052	42 41.0	+2.68	-0.001	-20 59 08	-13.0	+0.00	6.13		A2		.		
12054	42 49.3	+3.03	+0.000	-02 25 05	-13.1	-0.01	6.17	1.2	F5	010	-18		d
12058	42 56.3	+2.31	-0.001	-36 57 53	-13.1	-0.00	5.76		B8		.		
12063	43 04.6	-2.04	-0.011	-78 46 58	-13.1	+0.02	5.62		A0n		+18	η Cha	
12069	43 19.4	+1.66	+0.002	-54 31 29	-13.2	-0.08	2.01	0.4	A0	052	+2	δ Vel	d
12074	43 26.3	+0.57	+0.000	-68 01 47	-13.1	+0.02	6.21		K2		.		
12077	43 30.3	+3.04	+0.003	-01 51 58	-13.1	+0.04	5.82	0.6	gK0	009	+10		
12082	43 39.5	+2.60	-0.002	-25 12 17	-13.1	+0.03	6.01		A0		.		
12083	43 40.6	+3.63	-0.002	+28 56 39	-13.2	-0.05	4.20	0.5	gG6	019	+16	48 t ¹ Cnc	d
12090	43 48.6	+0.83	-0.010	-65 38 39	-13.0	+0.09	6.02		A2		.		
12097	44 00.8	+2.83	+0.001	-13 21 50	-13.2	-0.02	4.44	-0.3	gG4	011	-8v	12 DHya	s
12102	44 07.8	+3.18	-0.013	-06 36 12	-13.2	-0.05	3.48	0.2	dG0	024	+36v	11 ϵ Hya	ds
12104	44 11.7	+3.29	-0.005	+12 17 41	-13.2	-0.06	5.71		A0n		+23	50 A ² Cnc	
12108	44 19.3	+5.43	-0.002	+66 53 36	-13.2	-0.04	6.15	0.0	B8	006	.		
12109	44 19.9	+2.03	-0.001	-45 51 29	-13.2	-0.00	4.09		A0		+24	a Vel	
12118	44 33.8	+2.20	-0.002	-40 56 29	-13.2	-0.00	6.14		A0		.		
12122	44 43.0	+3.04	-0.002	-01 42 46	-13.2	-0.00	5.22	0.6	A0n	012	+2v		s
12125	44 48.4	+2.04	-0.000	-45 43 43	-13.2	-0.02	5.54		cB5p		+25		
12128	44 58.1	-2.05	-0.009	-78 53 15	-13.2	+0.04	6.12		A5		.		
12138	45 25.0	+1.55	-0.000	-56 35 07	-13.2	+0.00	4.63	-1.6	B3ne	006	+27	f Car	
12141	45 36.8	+2.96	+0.001	-06 22 23	-13.3	-0.02	6.22		K0		.		
12142	45 37.0	+2.04	-0.001	-45 58 15	-13.3	-0.01	5.83		cF0p		+32		
12148	45 47.1	+3.18	-0.001	+06 01 25	-13.3	-0.04	4.42	-0.4	A0	011	+33v	13 ρ Hya	s
12164	46 20.6	+2.16	-0.001	-42 16 41	-13.3	-0.01	6.22		B8		.		
12172	46 51.0	+3.01	-0.002	-03 15 23	-13.4	-0.02	5.19	-0.3	B9	008	+33	14 Hya	
12187	47 26.1	+3.73	-0.005	+33 28 24	-13.5	-0.09	6.22	3.9	dF7	034	+5		
12193	47 47.4	+2.23	-0.001	-40 08 00	-13.4	-0.02	5.41	2.9	A2	032	+17	h Vel	
12194	47 49.0	-2.21	-0.010	-79 19 13	-13.3	+0.08	5.76		K2		.		
12195	47 49.6	+2.44	-0.000	-32 35 34	-13.4	-0.05	5.23	1.7	G3	020	-8v		
12200	47 54.5	+3.41	-0.001	+19 01 12	-13.4	-0.03	6.14	1.1	A0	010	+19		
12202	47 56.4	+2.52	-0.001	-29 16 33	-13.4	+0.00	5.98	0.2	gG7	007	-10		
12204	48 03.9	+2.08	+0.000	-45 07 16	-13.4	+0.01	5.02	-0.5	A2	008	+5v	g Vel	
12212	48 14.8	+2.53	-0.002	-28 25 49	-13.5	-0.03	5.99		B9		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
12216	08 ^h 48 ^m 24 ^s .6	+2 ^s 55	-0 ^s 010	-27 ^o 31'25"	-13 ^o 4	+0 ^o 08	4.19	0.3	K4	017	+24	γ Pyx	
12218	48 31.7	+2.18	-0.002	-41 54 08	-13.5	-0.01	6.10		B2		.		
12221	48 36.0	+4.03	-0.001	+43 54 51	-13.4	+0.04	5.24	1.1	gG6	015	+15	35 Lyn	
12226	48 48.2	+4.08	-0.002	+45 30 06	-13.5	-0.04	6.08		gK1		+12		
12227	48 51.6	+2.04	-0.001	-46 20 29	-13.5	-0.01	4.89	-5.1	B0	001	+8v	f Vel	d
12228	48 52.0	+3.97	-0.003	+42 11 31	-13.5	-0.08	6.14		gK2		+57		
12232	49 07.0	+2.95	-0.003	-06 59 20	-13.5	-0.00	5.60	1.5	dF0	015	+37v	15 Hya	ds
12234	49 10.0	+4.74	+0.002	+59 14 43	-13.5	-0.00	6.08		dF2		+9		
12235	49 16.5	+4.94	-0.001	+62 09 04	-13.5	+0.02	5.72	2.8	gF0n	026	-31	5 b UMa	
12242	49 29.6	+3.71	0.000	+32 39 46	-13.5	+0.01	5.75	2.4	A2	022	-23v	51 σ^1 Cnc	ds
12244	49 37.4	+3.57	-0.036	+28 31 23	-13.8	-0.24	6.06	5.0	dK0	069	+27	55 g^1 Cnc	
12249	49 45.8	+3.17	-0.000	+05 31 46	-13.5	-0.02	6.16	1.2	A3	010	-6		d
12252	49 52.6	-0.03	+0.000	-72 21 48	-13.5	+0.02	6.09		A2		.		
12253	49 54.6	+0.81	+0.015	-66 36 22	-13.4	+0.09	5.41	2.5	F0n	026	+42		
12258	50 08.4	+2.85	+0.002	-13 02 38	-13.6	-0.02	6.25		K0		.		
12260	50 20.1	+1.53	-0.002	-57 26 41	-13.6	+0.01	5.70		B8s		+8		
12272	50 47.1	+3.78	-0.002	+35 43 43	-13.6	-0.03	6.02	1.2	A2	011	+22v?		
12274	50 53.4	+2.29	-0.001	-38 32 05	-13.6	+0.01	5.82		Ma		.		
12279	50 59.8	+1.98	-0.002	-48 10 10	-13.6	-0.01	6.11		B5n		+3v?		
12289	51 11.9	+3.66	+0.003	+30 46 12	-13.6	-0.02	5.60	-0.2	gG7	007	-60	57 t^2 Cnc	d
12303	51 44.1	+1.60	-0.002	-56 27 35	-13.6	+0.03	6.03		B9		.		
12307	51 50.1	+2.96	-0.028	-05 14 39	-13.6	+0.03	6.01	5.5	dG3	078	+26		
12314	52 09.9	+2.01	-0.000	-47 19 47	-13.7	-0.03	5.32	1.0	A5	014	-1v		s
12317	52 21.7	+5.14	-0.004	+64 47 50	-13.8	-0.08	5.62	1.5	gG3	015	+3v	6 UMa	s
12322	52 34.1	+3.38	+0.000	+17 25 22	-13.7	+0.00	var		N3		-1	X Cnc	
12325	52 40.2	+1.37	-0.001	-60 09 48	-13.7	-0.00	5.98		B5		+2		
12326	52 40.2	+3.59	-0.001	+28 07 11	-13.8	-0.04	5.25	0.0	gG6	009	+17	58 g^2 Cnc	
12327	52 45.1	+3.17	-0.007	+06 08 13	-13.7	+0.01	3.30	0.4	gG5	026	+23	16 ζ Hya	
12331	52 54.6	+2.76	+0.002	-18 02 59	-13.7	-0.00	5.90		K0		.		
12339	53 11.9	+3.28	-0.001	+11 49 06	-13.8	-0.02	5.70	0.2	gK5	008	+24	60 Cnc	
12341	53 16.2	+3.89	-0.007	+40 23 39	-13.8	-0.05	5.88		gF3		+26		
12343	53 22.8	+2.57	+0.006	-27 29 19	-13.9	-0.11	4.87	2.4	A2	032	+5	δ Pyx	
12346	53 27.4	+4.06	-0.012	+45 49 30	-13.8	-0.04	5.92	1.1	gK2	011	+59		
12354	53 46.7	+1.70	+0.004	-54 46 20	-13.9	-0.09	5.72		F5		-2		
12358	53 51.8	+3.70	-0.004	+33 06 15	-13.9	-0.07	5.48	1.9	A3	019	+5	59 σ^2 Cnc	
12359	53 55.0	+1.36	-0.002	-60 27 11	-13.7	+0.04	3.98	-3.8	B8	0028	+25	c Car	
12365	54 14.8	+2.79	-0.001	-16 30 57	-13.9	-0.05	6.15		K0		.		
12373	54 27.8	+3.35	+0.004	+15 30 56	-13.8	+0.01	5.16	1.8	A4	021	0	62 σ^1 Cnc	
12380	54 47.8	+3.35	+0.004	+15 46 28	-13.8	+0.02	5.64	2.0	A4	019	-4v?	63 σ^2 Cnc	
12381	54 48.7	+1.81	-0.001	-52 31 50	-13.8	+0.00	4.77	-0.2	B5	010	+22v	H Vel	ds
12388	54 56.7	+3.64	+0.004	+30 25 38	-13.8	+0.02	6.20	3.4	dF3	027	+8	61 Cnc	d
12405	55 45.0	+1.47	-0.002	-59 02 09	-13.9	+0.00	5.08	-1.0	B5	006	+25	b ¹ Car	d
12406	55 45.3	+3.28	+0.002	+12 03 09	-13.9	-0.04	4.27	1.9	dF0	033	-14	65 α Cnc	d
12407	55 47.6	+4.11	-0.044	+48 14 22	-14.2	-0.24	3.12	2.2	A4n+M1	066	+12	9 t UMa	d
12413	56 16.1	+1.99	-0.000	-48 22 44	-13.9	-0.01	5.86	-0.2	K0	006	.		
12415	56 23.1	+2.82	+0.017	-15 56 27	-13.7	+0.22	5.92	3.2	dF5	028	+122		
12417	56 28.7	+3.68	-0.003	+32 36 51	-14.0	-0.04	5.64	0.4	gG9	009	+23	64 σ^3 Cnc	
12431	57 10.4	+2.04	-0.009	-47 02 25	-13.9	+0.05	5.22	-0.3	F0s	008	+20		
12434	57 24.1	+3.89	-0.039	+41 58 56	-14.3	-0.26	4.09	3.4	dF2	072	+26	10 UMa	d
12447	58 04.0	+5.41	-0.004	+67 49 35	-14.0	+0.01	4.99	-0.2	gM3	009	+5	8 g UMa	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
12449	08 ^b 58 ^m 10 ^s 6	+1 ^s 47	-0 ^s 23	-58°53'30"	-13"8	+0"27	5.17	3.7	F1s	051	+11	b ² Car	
12451	58 13.3	+2.24	-0.004	-41 03 30	-14.0	+0.04	4.42	1.5	F8	026	-7v	w Vel	s
12456	58 20.4	+3.68	-0.000	+32 26 56	-14.1	-0.00	5.83	0.8	A2n	010	-13	66 Cnc	d
12461	58 27.8	+3.86	-0.004	+39 54 41	-14.2	-0.08	6.21	2.4	F0	017	-8		
12464	58 32.8	+2.19	-0.002	-42 58 38	-14.1	+0.02	6.12		B3		.		
12471	58 50.3	+3.58	-0.004	+28 06 03	-14.2	-0.08	5.95	2.1	A5n	017	+12v?	67 Cnc	s
12487	59 24.7	+3.07	-0.003	-00 17 10	-14.1	+0.07	5.80	0.3	gG8	008	+73		
12489	59 29.3	+2.23	-0.003	-41 40 02	-14.1	+0.00	5.54	-0.3	B7	007	+22v		
12494	59 36.8	+1.38	-0.001	-60 46 01	-14.2	-0.00	5.80		K0		.		
12496	59 49.1	+3.51	-0.000	+24 39 03	-14.2	-0.00	5.45	0.7	A0	011	-15v?	69 ν Cnc	
12499	09 00 05.0	+3.20	-0.001	+07 29 46	-14.2	-0.01	6.07		gK3		+26		
12501	00 11.4	+1.86	-0.002	-51 59 28	-14.2	+0.01	5.42	0.8	B9	012	+32		d
12503	00 13.3	+4.10	-0.003	+47 21 21	-14.2	-0.06	3.68	-0.6	B9n	014	+4	12 \times UMa	d
12507	00 21.4	+4.39	-0.000	+54 28 57	-14.2	-0.00	5.68	1.4	A2n	014	-2		
12510	00 34.7	+0.68	+0.002	-68 29 10	-14.2	-0.00	5.82		K5		.		
12532	01 39.8	+0.95	-0.000	-66 11 46	-14.4	-0.10	4.18	0.5	A5	047	+5v	α Vol	s
12540	01 57.7	+4.14	-0.001	+48 43 50	-14.3	-0.02	5.59	0.6	gF1n	010	-6v		s
12545	02 25.7	+2.07	-0.006	-46 53 53	-14.3	-0.02	3.69	0.0	sgK2	018	+24	c Vel	
12551	02 51.1	+4.66	-0.002	+59 32 44	-14.4	-0.02	6.19	0.7	A0	008	+4		s
12564	03 20.5	+3.16	-0.001	+05 17 36	-14.4	-0.01	5.41	-1.1	gK2	005	+25	18 ω Hya	
12565	03 21.3	+3.82	-0.002	+38 39 12	-14.4	-0.02	4.71	-0.3	gG5	010	+17		
12576	04 01.9	+5.26	-0.003	+67 04 33	-14.5	-0.04	5.33	0.1	gK5	009	+15	11 σ^1 UMa	s
12580	04 20.6	-8.72	-0.101	-85 27 58	-14.4	+0.03	5.38		F0		-2	ζ Oct	
12593	05 00.2	+3.60	-0.002	+29 51 23	-14.5	-0.00	5.38	0.4	gG7	010	-13	72 τ Cnc	
12595	05 01.9	+0.16	+0.002	-72 24 05	-14.5	-0.01	4.50	0.8	F5	018	+22	G Car	
12596	05 02.4	+3.25	-0.002	+10 52 14	-14.5	-0.01	5.14	-0.3	B8	008	+24v	76 \times Cnc	s
12598	05 07.8	+1.72	-0.002	-55 36 04	-14.5	-0.03	6.22		B5		+29		
12602	05 14.5	+0.49	-0.001	-70 20 14	-14.5	-0.01	4.86	-1.2	B3ne	006	+35v?	E Car	
12604	05 21.3	+4.23	-0.014	+51 48 28	-14.5	-0.04	4.54	2.1	dF2p	033	-0	15 f UMa	
12613	05 47.3	+3.68	-0.015	+34 05 12	-14.7	-0.13	5.95		dG0		+27		
12614	05 51.1	+2.63	+0.003	-25 39 21	-14.5	+0.00	4.82	-0.4	gM0	009	-45	\times Pyx	d
12615	05 51.1	+3.53	-0.009	+26 50 14	-14.9	-0.37	5.96	4.1	dG3	043	+12v	75 Cnc	s
12619	06 01.5	+5.28	+0.004	+67 20 21	-14.6	-0.08	4.87	3.5	dF4	050	-2	13 σ^2 UMa	d
12623	06 09.3	+2.21	-0.002	-43 13 48	-14.5	+0.01	2.22	-5.0	cK4	004	+18	λ Vel	
12626	06 15.3	+2.94	-0.002	-08 23 11	-14.6	-0.01	5.50	0.3	B9n	009	+23v	19 Hya	d
12635	06 29.3	+3.45	+0.000	+22 14 56	-14.6	0.00	5.22	0.2	gG9	010	-7v	77 ξ Cnc	s
12636	06 32.9	+2.61	-0.003	-26 33 52	-14.6	+0.01	6.20		A2		.		
12643	06 45.7	+2.77	-0.004	-18 07 31	-14.6	+0.01	5.74		A0		.		
12645	06 47.6	+2.88	+0.001	-12 09 15	-14.6	-0.01	5.81	1.0	gG6	011	-9v		
12646	06 49.1	+4.94	+0.015	+63 43 07	-14.7	-0.07	4.74	0.5	cF6+A5	014	-9v	14 τ UMa	
12649	07 08.8	+2.93	-0.001	-08 35 01	-14.6	-0.01	5.66	0.7	gG6	010	+26	20 Hya	
12655	07 28.7	+3.45	+0.000	+22 12 02	-14.6	0.00	6.09	1.8	gG5	014	-7	79 Cnc	
12657	07 37.7	+3.62	-0.002	+31 10 05	-14.7	-0.04	var		gM6e		+14	RS Cnc	
12659	07 49.2	+2.54	+0.000	-30 09 37	-14.7	-0.05	5.56		A3		-10v	ϵ Pyx	ds
12688	09 15.4	+2.18	-0.001	-44 39 45	-14.7	-0.00	4.96	-2.6	B3	003	+35		
12690	09 17.8	+3.16	-0.007	+05 40 28	-14.8	-0.03	6.21		F0		+3		
12695	09 36.3	+3.13	-0.003	+04 04 23	-14.8	-0.00	6.11	1.1	A0	010	+20		
12696	09 39.0	+1.58	-0.004	-58 45 42	-14.8	+0.00	3.56	-0.9	B3s	013	+23v	a Car	s
12697	09 41.3	+2.75	-0.004	-19 32 33	-14.7	+0.03	5.81	0.8	gG9	010	-1		
12698	09 44.0	+2.34	-0.001	-39 03 12	-14.8	+0.00	6.12		B9		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
12699	09 ^b 09 ^m 47 ^o 0	+2.12	-0.003	-46°22'41"	-14.8	+0.00	5.92		B3s		+ 7		
12704	09 57.9	+2.96	-0.001	-06 54 14	-14.8	+0.02	6.02		A2		.	21 Hya	
12707	10 08.6	+1.36	-0.006	-62 06 41	-14.8	+0.00	4.18	-0.2	B3	013	+17	i Car	
12713	10 24.7	+4.74	+0.000	+61 37 51	-14.8	-0.04	5.23	3.7	dF9	044	-15v	16 c UMa	s
12716	10 32.5	+3.92	-0.002	+43 25 31	-14.8	-0.04	5.30	-0.2	Als	008	+21	36 Lyn	
12719	10 39.4	+2.22	-0.002	-43 24 25	-14.8	-0.00	5.74	-0.8	B8n	005	+ 4		d
12722	10 46.1	+3.43	-0.001	+21 29 25	-14.8	-0.01	6.09	0.6	A0	008	+ 9		
12726	10 54.2	+6.02	-0.019	+73 09 18	-14.9	-0.07	5.89	2.6	A3n	022	+ 2		
12734	11 25.4	+2.26	-0.002	-42 04 02	-14.8	+0.05	6.12		K0		.		
12740	11 37.1	+1.57	-0.000	-59 12 26	-14.9	-0.01	5.58		G5		+16		
12743	11 45.8	+3.12	+0.009	+02 31 35	-15.2	-0.32	3.84	0.5	Aln	022	- 8v	22 δ Hya	s
12746	11 49.0	+2.11	-0.002	-47 07 53	-14.9	-0.00	5.92		B9		.		
12748	12 08.5	+4.44	-0.002	+56 57 00	-14.9	-0.04	5.48	0.5	gM0	010	-30	17 UMa	
12749	12 10.5	+3.68	-0.012	+34 50 28	-14.9	+0.05	6.02	2.3	G3	018	+56		
12754	12 17.5	+2.21	-0.004	-43 56 18	-14.9	-0.00	5.94		B5		.		
12758	12 28.4	+3.31	-0.003	+15 09 00	-14.9	-0.02	5.57	0.3	gK1	009	+26	82 π Cnc	
12759	12 32.4	+2.24	-0.002	-43 01 11	-14.9	+0.01	5.15	-0.9	B5n	007	+32	z Vel	d
12761	12 36.3	+4.32	+0.006	+54 13 47	-14.9	+0.06	4.89	1.6	dA0n	022	-15v	18 e UMa	
12764	12 39.7	+0.66	-0.029	-69 30 40	-14.8	+0.10	1.80	-0.9	A0n	031	- 5	β Car	
12767	12 49.0	+1.78	-0.004	-55 21 43	-14.9	+0.02	5.20	0.0	G5	009	+ 9		
12773	12 57.4	+2.39	+0.000	-37 23 38	-15.0	-0.02	6.04		G0		.	k ¹ Vel	
12774	13 03.0	+2.84	-0.002	-14 48 57	-15.0	-0.02	6.23		A0n		+32		
12784	13 38.4	+2.37	-0.006	-38 21 39	-15.0	-0.01	4.98	0.7	K2	014	+ 2	l Vel	
12787	13 44.9	+2.40	+0.002	-37 12 14	-15.0	-0.01	4.70	3.5	F5	057	+12	k ² Vel	
12792	13 55.4	+1.64	-0.003	-58 10 46	-15.0	-0.01	6.06		B8		+ 7		
12799	14 10.5	+4.02	+0.002	+47 01 37	-15.0	+0.01	5.70	0.5	Als	009	-13v		s
12800	14 12.7	+2.98	+0.001	-06 08 37	-15.0	+0.00	5.40	0.6	gK4	011	- 8v	23 Hya	ds
12801	14 14.1	+2.20	+0.001	-44 41 21	-15.0	+0.00	6.03		B5		.		d
12802	14 14.4	+2.94	-0.002	-08 32 06	-15.0	0.00	5.54	-0.2	B9n	007	+10	24 Hya	
12808	14 32.0	+2.22	-0.000	-44 03 22	-15.0	-0.00	5.01	-2.0	M2	004	- 3		
12811	14 45.2	+2.84	-0.003	-14 21 49	-15.0	+0.01	5.97		gK0		-37		
12813	14 47.4	+1.70	-0.002	-57 19 53	-15.1	-0.01	4.18	-0.1	K5	014	- 5	g Car	
12821	14 59.4	+2.35	-0.001	-39 11 27	-15.1	-0.03	5.37	0.4	K5	010	0		
12827	15 21.3	+3.70	-0.003	+35 34 31	-15.1	-0.03	5.76	0.8	A4n	010	+22		d
12830	15 44.4	+3.73	-0.002	+37 00 56	-15.2	-0.13	3.82	1.2	B9n	030	+ 2v	38 Lyn	d
12831	15 45.1	+1.61	-0.002	-59 03 54	-15.1	-0.00	2.25	-6.0	F0	0023	+13	t Car	
12844	16 25.9	+2.00	-0.003	-50 50 24	-15.1	+0.00	5.34		B9		+66v	K Vel	s
12848	16 35.7	+0.84	-0.020	-68 28 42	-15.2	-0.03	5.44	4.0	F2s	051	+32		
12857	17 00.3	+1.03	-0.000	-66 50 23	-15.2	+0.01	5.88		K0		.		
12859	17 03.1	+1.98	-0.002	-51 20 57	-15.2	-0.00	5.87		cB8p		.		
12862	17 11.5	+2.83	+0.004	-15 37 19	-15.2	-0.05	5.93	0.4	gK4	008	-30		d
12865	17 16.2	+4.16	-0.004	+51 28 35	-15.1	+0.14	6.12	3.7	dF3	033	- 8	37 Lyn	d
12867	17 21.9	+2.89	-0.002	-11 45 47	-15.2	+0.01	4.94	0.1	gG5	011	- 2	26 Hya	
12869	17 31.9	-0.11	-0.004	-74 41 00	-15.2	+0.02	5.45		A0		+11		d
12870	17 32.5	-0.08	-0.010	-74 31 26	-15.2	+0.03	6.02		A0		.		
12875	17 51.8	+3.76	-0.004	+38 24 04	-15.3	-0.02	5.86	2.5	dF3	021	+ 1		d
12880	18 00.9	+3.65	-0.018	+34 36 19	-15.2	+0.01	3.30	-0.3	gM0	019	+38	40 α Lyn	
12881	18 02.5	+2.93	-0.001	-09 20 34	-15.3	-0.03	4.97	0.7	gG9	014	+25	27P Hya	d
12883	18 04.0	+4.40	-0.001	+56 54 45	-15.3	-0.01	5.98		gM4		+21		
12892	18 25.6	+3.64	+0.001	+33 05 56	-15.3	-0.04	6.22	-0.3	gK3	005	+28		

GC	AR 1050.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
12893	09 ^h 18 ^m 29 ^s 0	+2 ^a 41	-0 ^s 002	-37°22'06"	-15 ^a 3	-0 ^s 02	6.10		K0		.		
12916	19 16.7	+2.66	-0.001	-25 45 06	-15.3	-0.01	4.93	0.1	gM1	011	+20	δ Pyx	
12923	19 45.0	+1.44	+0.001	-62 11 28	-15.4	-0.01	4.86	1.5	G4	021	+51	k Car	
12926	19 55.6	+2.30	+0.004	-41 58 49	-15.4	-0.06	5.76		Ma		.		
12933	20 18.6	+1.83	-0.008	-55 18 07	-15.3	+0.05	5.66		A2		+59		
12938	20 33.9	+1.86	-0.001	-54 47 48	-15.4	+0.00	2.63	-1.2	B3	017	+22v	α Vel	s
12939	20 34.3	+2.19	-0.000	-45 50 01	-15.4	+0.01	6.00		G5		.		
12952	21 02.2	+2.60	-0.011	-28 37 09	-15.4	+0.02	4.90	1.3	gG7	019	+10	λ Pyx	
12972	21 44.8	+3.49	-0.002	+26 23 55	-15.5	-0.05	4.61	-0.4	gK2	010	+28	1α Leo	d
12983	22 17.1	+2.38	+0.000	-39 12 34	-15.5	-0.04	6.18		A2		.		
12984	22 19.0	+2.01	+0.001	-51 31 17	-15.5	-0.01	6.14		F0p		.		
12991	22 49.7	+1.52	+0.002	-61 25 56	-15.6	-0.06	5.97		G5		.		
12992	22 54.0	+3.00	-0.001	-04 54 03	-15.5	-0.01	5.81	0.0	gK5	007	+ 5	28 Hya	
13010	23 49.6	+3.05	-0.000	-01 14 48	-15.6	-0.01	6.14		gK3		-15		
13021	24 12.5	+1.49	-0.018	-61 44 03	-15.5	+0.06	6.00		A2		.		d
13033	24 34.0	+2.61	-0.002	-28 34 12	-15.6	-0.00	6.02	-0.5	B8	005	.		d
13035	24 40.3	+1.95	-0.002	-53 09 42	-15.6	-0.00	5.22		B5n		+22v	J Vel	s
13043	25 01.0	+2.75	+0.013	-22 07 25	-15.8	-0.16	4.94	0.7	gK3	014	+29	GHya	
13044	25 07.8	+2.95	-0.001	-08 26 27	-15.6	+0.03	2.16	-1.0	gK3	025	- 4	30 α Hya	
13048	25 18.2	+2.97	-0.015	-05 51 07	-15.7	-0.08	5.44	4.2	dG1	057	+54v		
13051	25 23.9	+3.93	-0.001	+45 49 19	-15.8	-0.13	5.56	1.0	gG5	012	+38	41 Lyn	
13062	25 46.9	+3.21	+0.004	+09 16 32	-15.7	-0.01	5.52	2.8	dF8	029	- 6	2 ω Leo	d
13063	25 49.5	+3.19	-0.002	+08 24 27	-15.7	-0.04	5.88	0.6	gK0	009	+22	3 Leo	d
13066	25 53.4	-2.00	-0.057	-80 34 18	-15.6	+0.12	5.44		F2p		+ 7	ι Cha	
13080	26 36.6	+3.04	+0.008	-02 32 58	-15.7	-0.02	4.78	4.0	dF4	071	+10v?	31 τ^2 Hya	
13082	26 37.4	+0.59	-0.021	-71 23 04	-15.6	+0.07	5.48	2.8	K3	029	+ 3v		s
13087	26 52.4	+3.04	-0.003	-01 59 09	-15.7	-0.01	6.04		A3		.		
13088	26 54.5	+2.76	-0.001	-20 31 47	-15.7	+0.02	5.96		gM1		- 8		s
13091	27 10.8	+2.48	-0.002	-35 43 55	-15.8	-0.01	4.64	-0.8	M0	008	+22	e Ant	
13094	27 15.4	+2.42	-0.008	-38 11 03	-15.8	-0.02	6.24		A2		.		
13101	27 31.7	+1.51	-0.011	-62 03 14	-15.7	+0.02	6.01		K0		.		
13103	27 32.2	+1.17	-0.005	-66 28 59	-15.7	+0.04	6.18		A0		.		
13109	27 36.6	+4.73	+0.016	+63 16 55	-15.7	+0.02	3.75	1.6	A4n	038	- 9	23 h UMa	d
13110	27 41.2	+2.66	-0.002	-26 22 11	-15.8	-0.00	5.67	0.4	gK3	009	+12		d
13112	27 42.3	+3.63	-0.001	+33 52 36	-15.8	-0.05	5.98	0.2	gG8	007	+ 2	7 LMi	
13122	28 00.5	+2.84	-0.005	-15 21 22	-15.9	-0.07	6.10		gK3		+24		
13129	28 22.7	+2.05	-0.001	-51 17 49	-15.8	+0.01	5.60		B5		+10		
13133	28 30.2	+3.65	-0.004	+35 19 31	-15.9	-0.11	5.52	0.3	gM1	009	+38	8 LMi	
13140	28 43.7	+2.36	-0.017	-40 14 50	-15.8	+0.07	3.64	2.7	dA7n	065	+12	ψ Vel	d
13143	28 52.3	+3.42	-0.002	+23 11 22	-15.9	-0.04	4.48	0.8	gK5	018	+27v?	4 λ Leo	
13145	28 55.8	+1.75	-0.004	-58 08 29	-15.8	+0.02	5.78		Ma		.		d
13148	29 12.7	+2.93	+0.001	-10 19 51	-15.9	-0.02	6.06		gA8		-18v		s
13149	29 15.2	+3.23	-0.006	+11 31 20	-16.0	-0.09	5.12	0.3	gK1	011	+29	5 ξ Leo	
13150	29 16.9	+3.22	-0.000	+09 56 14	-15.9	-0.02	5.28	-0.5	gK4	007	+19	6 h Leo	ds
13152	29 23.8	+2.57	-0.003	-31 39 02	-15.9	-0.00	5.96		F0		.	ζ^2 Ant	
13153	29 26.0	+3.06	-0.001	-00 57 48	-15.9	-0.01	4.50	1.7	A3	028	+ 6v	32 τ^3 Hya	
13154	29 27.6	+2.50	+0.011	-35 29 28	-16.1	-0.18	5.96		K0		.		
13157	29 31.5	+4.01	-0.103	+51 54 23	-16.4	-0.54	3.26	2.4	dF6p	058	+15	25 θ UMa	d
13160	29 42.1	+1.82	-0.004	-56 48 48	-15.9	-0.00	3.12	1.8	K5	023	-14	N Vel	
13169	30 01.0	+2.79	-0.001	-19 10 44	-15.9	0.00	5.70		A2		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
13171	09 ^h 30 ^m 05 ^s .9	+5 ^s .30	-0 ^s .012	+70°03'06"	-15"8	+0"07	4.57	3.2	dF9	042	-27	24d UMa	
13172	30 06.4	+3.10	-0.001	+02 05 11	-15.9	-0.04	6.15		F5		+28		
13174	30 07.4	+8.54	-0.007	+81 33 00	-15.9	-0.02	4.58	-0.2	gK5	011	-5		
13178	30 13.3	+5.66	+0.017	+72 25 46	-16.0	-0.08	5.82	3.1	dF6	029	-38	22 UMa	
13180	30 20.1	+2.38	+0.001	-40 25 39	-15.9	-0.02	5.36	1.7	K0	019	-1		d
13185	30 31.7	+2.88	-0.000	-13 17 42	-15.9	-0.02	6.21		K5		.		
13191	30 54.2	+2.76	-0.002	-20 53 37	-15.9	+0.01	5.16	1.7	sg K0	020	+13		
13192	30 59.2	+1.51	-0.005	-62 34 01	-15.9	+0.01	var		gM5ev		+28	R Car	
13201	31 09.5	+2.73	-0.004	-22 38 31	-15.9	+0.06	5.84		A0		.		
13203	31 10.0	+3.67	+0.001	+36 37 14	-16.0	-0.03	4.62	1.0	gG6	019	-12	10 LMi	
13205	31 14.7	+0.45	-0.004	-72 51 33	-16.0	-0.01	5.52		K2		.	H Car	
13212	31 24.7	+4.11	-0.007	+52 16 30	-16.0	-0.04	4.65	1.5	A0	023	+23	26 UMa	
13219	31 56.7	+2.15	-0.002	-48 46 56	-16.0	+0.00	5.35	-1.3	B3n	005	+27		d
13221	31 57.1	+3.74	-0.002	+39 50 40	-16.0	+0.01	4.99	0.6	gG8	013	-12		
13226	32 02.9	+2.99	+0.000	-05 41 27	-16.1	-0.06	5.70	0.5	gK1	009	+13	33 A Hya	
13234	32 24.6	+2.08	-0.002	-51 01 56	-16.0	-0.02	5.16		B3n		+35v	L Vel	s
13242	32 40.0	+3.60	-0.058	+36 02 15	-16.3	-0.25	5.48	5.4	dK0	095	+13	11 LMi	d
13246	32 59.6	+1.74	-0.002	-59 00 22	-16.1	+0.01	4.20	-2.3	B7	005	+22	h Car	
13250	33 09.1	+3.28	-0.003	+14 35 13	-16.1	-0.01	6.21	0.7	A1n	008	+24	7 Leo	d
13254	33 14.2	+2.79	-0.003	-19 21 32	-16.1	-0.05	6.25		A0		.		d
13265	33 45.2	+3.56	+0.001	+31 23 13	-16.1	-0.04	5.74	-0.4	gM2	006	-20		
13277	34 17.2	+3.31	-0.001	+16 39 46	-16.1	-0.01	5.92	0.1	gK1	007	+6	8 Leo	
13283	34 34.4	+3.17	-0.004	+07 03 39	-16.1	-0.00	5.14	0.3	gG9	011	+20	10 Leo=1 Sex	
13287	34 45.2	+2.70	-0.005	-25 04 19	-16.1	+0.04	5.94	0.7	gK1	009	+30		
13292	35 00.7	+2.58	+0.003	-31 57 11	-16.2	-0.02	5.63	0.1	K0	008	.		
13293	35 02.1	+2.15	-0.011	-49 07 49	-16.1	+0.02	4.49	1.0	A5	020	+21	M Vel	
13296	35 05.1	+2.02	-0.014	-52 43 12	-16.1	-0.08	6.10		G5		.		
13301	35 14.9	+3.74	-0.001	+40 27 55	-16.2	-0.00	5.24	1.7	dA6n	020	-3	42 Lyn	
13306	35 23.2	+2.50	-0.003	-35 52 13	-16.2	-0.00	6.09		K0		.		
13308	35 25.9	-1.76	-0.012	-80 43 02	-16.2	+0.00	5.24		B3		-52v	ζ Cha	s
13309	35 32.0	+2.00	-0.007	-53 26 35	-16.2	-0.02	5.53		A2		-13		d
13316	35 50.9	+3.13	-0.011	+04 52 34	-16.3	-0.06	4.78	0.7	gK3	015	+45	2 Sex	
13319	36 04.1	+2.34	+0.002	-42 57 52	-16.3	-0.04	5.50	-0.6	G6	006	+3	y Vel	
13341	37 18.2	+3.06	+0.003	-00 54 54	-16.4	-0.07	4.10	0.6	gK3	020	+23v?	35, Hya	
13343	37 20.9	+2.93	-0.002	-10 20 36	-16.3	+0.00	6.19		B9		.	37 Hya	
13353	37 53.7	+2.93	-0.000	-10 32 20	-16.3	-0.00	6.19		A2		.		
13354	37 54.5	+2.88	-0.002	-14 06 17	-16.3	-0.02	4.96	-0.5	B4n	008	+18	38 x Hya	
13355	37 57.9	+1.66	-0.006	-61 06 04	-16.3	+0.01	4.67	0.4	B9	014	+24v	m Car	
13358	38 00.1	+5.13	-0.012	+69 28 00	-16.4	-0.07	5.74	0.7	gG9	010	-9		
13364	38 23.7	+5.52	-0.006	+72 28 53	-16.4	-0.03	5.39	0.2	gG7	009	-17	27 UMa	
13366	38 29.0	+3.20	-0.010	+10 07 15	-16.4	-0.04	3.76	0.1	cF5+A3	019	+27v	14 o Leo	s
13369	38 38.0	+3.55	+0.002	+31 30 22	-16.4	-0.01	6.08	-0.9	gK6	004	-13		
13372	38 54.9	+3.72	-0.004	+39 59 13	-16.4	-0.05	5.50	0.7	gG6	011	+30	43 Lyn	
13373	39 00.0	+2.74	-0.002	-23 21 48	-16.4	-0.01	4.74	-1.4	B3ne	006	+26	I Hya	d
13376	39 10.1	+1.85	-0.004	-57 45 20	-16.4	-0.00	5.36	2.2	A2	024	+7v		ds
13380	39 27.2	+1.90	+0.010	-57 01 51	-16.4	-0.05	5.83	0.3	K0	008	.		
13388	39 42.3	+3.62	-0.001	+35 19 23	-16.5	-0.06	6.03		dF1		-8	13 LMi	
13394	39 58.9	+2.71	-0.029	-23 41 26	-16.2	+0.25	5.04	4.4	dF7	075	+34		
13399	40 08.8	+1.98	-0.002	-54 59 07	-16.4	-0.01	6.17		B5		.		
13406	40 37.7	+3.52	-0.002	+30 12 19	-16.6	-0.11	5.73	1.5	A2	014	+16	15 f Leo	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
13408	09 ^h 40 ^m 42 ^s .1	+4 ^h 72	-0 ^m 008	+65°12'49"	-16 ^s .4	+0 ^m 01	6.18		F2		-28		
13414	41 00.6	+3.27	+0.000	+14 15 05	-16.5	-0.00	5.62	-0.9	gM2	005	+ 8	16 ψ Leo	
13419	41 28.6	+7.11	-0.008	+79 22 05	-16.5	-0.03	6.13		A3n		- 6		
13425	41 58.3	+2.67	-0.004	-27 32 23	-16.5	+0.03	4.98	2.8	dF7p	037	+24	θ Ant	d
13426	42 00.3	+2.04	-0.008	-53 39 43	-16.5	+0.02	5.71		A0		+ 6v	O Vel	
13442	43 00.2	+4.25	+0.000	+57 21 32	-16.5	+0.03	5.36	-1.1	gM3	005	+ 8		
13443	43 01.0	+3.40	-0.003	+24 00 19	-16.6	-0.02	3.12	-1.9	cG3p	010	+ 5	17 ϵ Leo	
13452	43 31.9	+3.16	+0.000	+06 56 24	-16.6	-0.03	5.99	-0.5	gM1	005	+ 3		
13454	43 41.8	+3.23	-0.001	+12 02 28	-16.6	+0.01	5.87	0.1	gK4	007	+30	18 Leo	
13459	43 48.8	+3.10	-0.004	+02 01 04	-16.7	-0.05	5.69	2.1	gF0	019	+15		s
13462	43 52.4	+1.65	-0.002	-62 16 36	-16.6	+0.01	var	var	cG0v	0042	+ 4v	l Car	
13481	44 33.2	+2.34	-0.001	-44 31 23	-16.6	-0.00	5.68		B5		- 8v?		
13489	44 52.2	+3.23	+0.000	+11 39 42	-16.7	-0.05	var	var	gM8v	001	+13	R Leo	
13497	45 22.5	+3.87	+0.022	+46 15 18	-16.8	-0.10	5.20	4.3	dG0	065	+ 5	15 LMi	
13506	45 51.2	+1.50	-0.002	-64 50 22	-16.7	+0.00	3.15	-2.1	F0	009	+14	v Car	d
13507	45 51.8	+1.50	-0.001	-64 50 25	-16.7	+0.02	6.03	0.8	F0	009	+14		
13514	46 21.2	+0.03	+0.030	-76 32 35	-16.8	-0.06	5.35	1.5	G4	017	+10	v Cha	
13527	47 01.3	+1.97	-0.007	-56 10 43	-16.8	+0.01	6.14		K0		.		
13528	47 02.4	+3.36	-0.003	+21 24 48	-16.8	-0.02	6.01	1.4	gA8s	012	+26v	20 Leo	ds
13539	47 22.1	+2.52	-0.007	-36 57 10	-16.8	+0.02	6.05		K0		.		
13540	47 27.1	+4.26	-0.038	+59 16 30	-16.9	-0.16	3.89	1.6	A6n	035	+31	29 v UMa	
13545	47 54.0	+3.12	-0.010	+04 34 43	-16.9	-0.06	6.24	2.5	dF6	018	+17v	4 Sex	s
13547	48 00.5	+2.33	-0.003	-45 29 56	-16.8	-0.00	5.26	0.5	B8	011	+12	u Vel	
13558	48 42.8	+3.02	+0.001	-04 00 30	-16.9	-0.03	6.00		A5n		-10	6 Sex	
13559	48 43.1	+4.08	-0.000	+54 17 56	-16.8	+0.01	4.54	0.9	A3s	019	-12	30 ϕ UMa	d
13563	48 46.7	+2.30	-0.004	-46 42 00	-16.8	+0.01	6.02		K0		.		
13569	49 03.0	+3.41	+0.001	+24 37 58	-17.0	-0.18	5.33	2.7	A5	030	- 2	22 g Leo	
13570	49 04.3	+2.89	+0.001	-14 36 40	-16.9	-0.03	4.29	0.3	gG6	016	-14	39 v ¹ Hya	
13574	49 23.4	+2.32	-0.004	-45 57 34	-16.8	+0.03	5.72		K0		.		
13578	49 31.3	+1.69	-0.001	-62 30 37	-16.9	0.00	5.59		K0		+12		
13582	49 37.4	+3.09	-0.012	+02 41 17	-16.8	+0.09	5.88	1.1	A1s	011	+97	7 Sex	
13584	49 38.4	+1.87	+0.003	-59 11 24	-16.9	-0.05	5.78		K2		.		
13587	49 44.7	+2.32	-0.001	-46 18 46	-16.9	-0.01	4.56	-5.4	G5	001	+11v	m Vel	s
13590	49 55.4	+3.41	-0.016	+26 14 36	-17.0	-0.06	4.10	0.6	gK3	021	+14	24 μ Leo	
13593	50 01.9	+2.97	-0.004	-07 52 07	-16.9	-0.04	5.16	0.9	A0n	014	+12	8 γ Sex	d
13627	51 56.3	+2.72	-0.014	-25 41 47	-16.9	+0.06	5.00	1.6	gK3	021	+50		
13629	52 00.0	+2.20	-0.001	-50 54 37	-17.0	-0.02	6.00	-3.5	B3s	0014	+ 8		
13637	52 19.3	+2.36	-0.002	-45 02 49	-17.0	-0.01	5.89	-1.6	B5n	0033	+26		d
13643	52 27.8	+3.92	-0.001	+50 03 25	-17.0	+0.02	5.27	0.9	A2	013	- 6	31 SY UMa	v
13644	52 30.6	+2.83	-0.003	-18 46 18	-17.1	-0.04	5.16	-0.1	gM8ev	009	+50v		s
13655	52 59.5	+2.23	-0.004	-50 00 24	-17.0	+0.01	5.89		A0		.		
13677	53 45.4	+4.18	+0.004	+57 39 26	-17.1	-0.06	5.99	0.2	gG5	007	-44		
13679	53 47.0	+3.18	-0.006	+09 10 15	-17.1	+0.01	5.93	0.2	gK2	007	+ 9		
13684	53 57.5	+5.36	-0.017	+73 07 07	-17.1	-0.04	5.96	1.2	gK3	011	+ 4		
13695	54 24.3	+2.62	+0.002	-33 10 50	-17.1	+0.02	5.86		K0		.		
13697	54 30.4	+2.72	-0.008	-26 18 44	-17.1	0.00	6.23		A2		.		d
13700	54 37.8	+3.67	-0.010	+41 17 41	-17.1	-0.03	5.19	3.4	dF5	043	-11v	19 LMi	s
13711	55 06.3	+2.11	-0.002	-54 19 45	-17.1	+0.00	3.70	-5.1	B7s	0018	+14	ϕ Vel	
13718	55 22.0	+2.17	-0.002	-52 24 01	-17.2	-0.01	6.15		B3		+17		
13724	55 32.1	+3.23	-0.002	+12 41 03	-17.2	-0.02	5.18	0.9	A0	014	+19v	27 v Leo	s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N	
13735	09 ^h 56 ^m 26 ^s 1	+4 ^s 13	-0 ^s 004	+57°03'07"	-17 ^s 2	-0 ^s 04	5.71	0.5	gK5	009	-13	η Ant		
13741	56 43.4	+2.57	-0.008	-35 39 04	-17.2	-0.02	5.25	2.2	F0	025	+30			
13742	56 43.5	+3.46	-0.007	+29 53 08	-17.3	-0.04	5.86	0.4	gG9	008	-1			
13743	56 47.5	+2.77	-0.004	-23 42 39	-17.2	+0.02	6.12		B5		.			
13755	57 34.4	+3.17	-0.002	+08 17 06	-17.3	-0.03	4.89	0.3	gM2	012	+23		29 π Leo	
13763	58 08.0	+3.46	-0.041	+32 10 13	-17.7	-0.44	5.60	4.5	dG4	052	+56	20 LMi		
13796	10 00 01.9	+3.34	-0.001	+22 11 28	-17.4	-0.01	5.59	-1.4	B3	004	+3			
13803	00 16.0	+2.04	-0.005	-57 06 30	-17.3	+0.02	6.07		K0		.			
13809	00 24.4	+1.91	-0.002	-60 10 45	-17.4	-0.00	6.11		F0		.			
13827	01 17.8	+3.99	-0.003	+54 08 04	-17.4	-0.01	5.74	3.1	dF4	030	-16			
13834	01 23.3	+1.93	-0.002	-59 56 11	-17.4	-0.00	6.02		A5		.			
13839	01 39.8	+2.86	-0.001	-17 51 31	-17.4	-0.00	5.78		A0		.	d		
13842	01 54.4	+3.93	-0.000	+52 36 51	-17.5	-0.03	6.15	1.4	A2	011	-25v			
13848	02 02.3	+2.77	-0.007	-24 02 34	-17.4	+0.02	5.80		dA8n		+4			
13849	02 08.9	-1.60	-0.011	-81 58 23	-17.4	+0.03	5.62		A0		+16v	μ Cha	s	
13861	02 41.3	+2.92	-0.003	-12 49 17	-17.5	+0.01	4.72	0.3	B8	013	+28v	40 ν^3 Hya	s	
13890	04 12.3	+2.38	+0.000	-47 07 30	-17.6	-0.06	5.22	0.9	G6	014	+20		d	
13896	04 29.2	+3.54	+0.004	+35 29 21	-17.6	-0.00	4.47	1.6	A5n	027	-18v?	21 LMi		
13899	04 36.6	+3.27	-0.000	+17 00 26	-17.6	-0.01	3.58	-5.3	cA0p	0017	+3	30 η Leo		
13902	04 45.5	+2.88	+0.002	-16 53 46	-17.6	-0.05	5.87		gK5		+11			
13911	05 15.2	+3.18	-0.006	+10 14 36	-17.6	-0.07	4.58	0.1	gK5	013	+41	31 A Leo	d	
13916	05 22.7	+3.07	-0.001	-00 07 35	-17.6	-0.01	4.50	-0.1	A0	012	+7	15 α Sex		
13917	05 22.9	+3.46	-0.006	+31 51 01	-17.7	-0.09	6.18		F5		-8		d	
13926	05 42.7	+3.19	-0.017	+12 12 44	-17.6	+0.00	1.34	-0.2	B7n	048	+3	32 α Leo	d	
13933	06 10.6	+2.90	-0.002	-15 21 59	-17.6	+0.01	6.16		A0		.			
13953	07 02.3	+2.28	-0.002	-51 33 56	-17.7	-0.00	5.10	-1.0	B5n	006	+23	Q Vel		
13960	07 19.0	+1.67	-0.011	-65 34 12	-17.6	+0.04	5.36	-1.1	G7	005	+0			d
13965	07 29.4	+2.94	-0.000	-11 50 56	-17.7	-0.04	6.20		A2		.			
13969	07 38.4	+2.98	-0.002	-08 09 43	-17.7	-0.00	6.06		A0		.		17 Sex	
13970	07 39.6	+2.92	-0.009	-12 34 05	-17.8	-0.12	5.42	2.0	A9n	021	+23			
13971	07 46.2	+1.91	-0.013	-61 18 14	-17.6	+0.07	var		K9ev		+289	S Car		
13982	08 09.0	+2.92	-0.014	-12 06 22	-17.8	-0.09	3.83	-0.1	gG9	016	+19v	41 λ Hya	s	
13985	08 15.4	+3.55	-0.002	+37 38 57	-17.7	-0.03	6.14		K3		+9			
13986	08 16.2	+1.49	-0.000	-68 26 13	-17.7	+0.00	6.06	0.6	A0	008	.		d	
13990	08 26.6	+2.98	-0.001	-08 10 16	-17.8	-0.05	5.79	0.3	gK2	008	+0	18 Sex		
13992	08 31.4	+2.53	+0.004	-41 28 00	-17.8	-0.12	6.12		K0		.			
13995	08 47.9	+3.00	+0.001	-07 04 10	-17.7	-0.01	6.06	1.3	A0n	011	+13v		s	
14010	09 45.9	+2.74	-0.002	-28 21 31	-17.8	-0.02	6.10		A0		.		d	
14013	09 52.3	+2.06	-0.006	-58 34 51	-17.8	+0.01	6.16		Mb		.			
14018	10 01.7	+2.09	-0.003	-57 48 48	-17.8	-0.00	6.12		B2ep		.			
14022	10 12.3	+3.12	-0.004	+04 51 45	-17.8	-0.01	5.91	0.4	gK0	008	+32	19 Sex		
14037	11 00.5	+3.39	-0.001	+27 23 03	-17.8	-0.00	6.10		gG2		+10v		s	
14039	11 01.3	+2.76	-0.004	-26 46 53	-17.8	+0.03	6.21		F0		.			
14047	11 26.8	+2.32	-0.005	-50 59 05	-17.9	-0.03	5.54		A5		+48			
14050	11 32.7	+2.30	-0.006	-51 30 28	-17.8	-0.00	6.04		A2		.		d	
14052	11 38.0	+2.55	-0.007	-40 05 52	-17.8	+0.01	5.96		K0		.		d	
14054	11 41.7	+4.14	+0.002	+60 14 03	-17.9	-0.00	6.4		M0		.	U UMa		
14056	11 44.8	+3.30	-0.010	+21 25 03	-17.9	-0.09	6.12		dF8		+17			
14066	12 05.7	+1.70	-0.006	-66 07 28	-17.9	-0.00	5.37		A3		-15	M Car		
14074	12 33.1	+1.43	-0.006	-69 47 21	-17.9	0.00	3.56	-0.2	B8	018	+4	ω Car		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
14076	10 ^h 12 ^m 38 ^s .0	+2 ^s 52	-0 ^s 14	-41°52'26"	-17 ^s 9	+0 ^s 03	4.09	1.5	A2	031	+ 8v	q Vel	s
14081	13 09.2	+2.63	-0.003	-36 16 08	-17.9	-0.01	6.25		K0		.		
14086	13 24.3	+3.41	-0.006	+29 33 37	-17.9	-0.03	5.35	1.1	A0n	014	+16	23 LMi	
14088	13 25.4	+2.52	+0.000	-42 51 44	-18.0	-0.07	5.77		K2		.		
14092	13 41.2	+2.96	-0.001	-10 57 13	-17.9	+0.00	6.17		K0		.		
14096	13 46.4	+3.32	-0.015	+23 45 08	-17.9	+0.03	5.91	3.1	dG2	027	-33	35 Leo	
14106	13 54.5	+3.35	-0.008	+25 37 14	-17.9	+0.02	6.01		gK2		+34		
14107	13 54.8	+3.34	+0.001	+23 40 02	-17.9	-0.01	3.65	-0.1	gF0	018	-15v	36 ζ Leo	
14110	13 59.8	+3.22	-0.002	+13 58 42	-18.0	-0.02	5.74	0.0	gM1	007	+ 2	37 Leo	
14113	14 05.4	+3.62	-0.015	+43 09 53	-18.0	-0.04	3.52	1.0	A2	031	+18	33 λ UMa	
14123	14 25.6	+4.35	-0.014	+65 21 32	-18.0	-0.01	5.74	1.5	A3n	014	- 6	32 UMa	
14124	14 29.7	+3.30	-0.030	+23 21 28	-18.1	-0.11	5.85	4.4	dF3	054	+38	39 Leo	d
14129	15 08.7	+2.98	-0.011	-07 49 07	-18.0	+0.00	5.40	2.4	gF1	025	+15	22 ε Sex	
14133	15 24.6	+2.00	-0.003	-61 04 55	-18.0	-0.00	3.44	-5.0	K5	0025	+ 9	q Car	
14144	15 49.9	+2.75	-0.001	-28 44 29	-18.0	+0.01	5.62		B9		-39		
14154	16 21.1	+3.73	-0.010	+48 38 57	-18.2	-0.13	6.15		K0		- 6		
14164	16 48.3	+2.19	-0.030	-55 51 38	-17.9	+0.12	6.14		F8		.		
14166	16 49.5	+2.95	-0.001	-12 16 36	-18.1	-0.02	6.16		F0		.		d
14170	17 01.0	+3.26	-0.016	+19 43 31	-18.3	-0.22	4.97	3.5	dF5	050	+ 7	40 Leo	
14177	17 13.1	+3.31	+0.022	+20 05 43	-18.2	-0.15	2.61	-0.4	gK0p	025	-37	41 γ ¹ Leo	d
14178	17 13.4	+3.31	+0.022	+20 05 40	-18.2	-0.17	3.80	0.8	gG5	025	-36	41 γ ² Leo	d
14180	17 16.5	+4.57	-0.009	+68 59 59	-18.1	-0.04	5.84		A1n		+ 4		
14181	17 17.8	+3.88	-0.004	+54 28 07	-18.1	-0.01	6.22	0.1	gK3	006	+ 9		
14184	17 31.7	+1.86	-0.006	-64 25 30	-18.1	-0.00	6.24		A0		.		d
14185	17 43.8	+2.26	-0.001	-54 46 40	-18.1	-0.01	4.58	-1.2	K0	007	+13		
14197	18 14.1	+2.45	-0.002	-47 26 50	-18.1	-0.01	5.62		K0		+16		
14220	19 02.9	+2.23	-0.002	-55 47 27	-18.1	-0.00	4.65	-2.4	B5sep	0042	+ 10	I Vel	d
14224	19 09.1	+3.23	-0.002	+15 13 42	-18.2	-0.02	6.10	0.0	B9	006	+ 9	42 Leo	
14225	19 12.6	+3.57	-0.011	+41 29 02	-18.3	-0.14	5.88	3.4	dF6	052	- 7		
14232	19 21.5	+3.57	-0.007	+41 45 06	-18.1	+0.02	3.21	0.7	gM0	032	-20v	34 μ UMa	
14244	19 49.4	+2.87	-0.002	-19 36 50	-18.2	-0.00	6.12		A0		.		
14248	20 10.7	+2.57	-0.002	-41 23 52	-18.1	+0.05	4.99	1.4	K1	019	+21	r Vel	
14252	20 13.9	+3.45	-0.001	+34 09 40	-18.2	-0.02	5.83	1.7	A1n	015	-16	27 LMi	
14260	20 33.0	+4.32	-0.002	+65 49 12	-18.2	-0.02	4.92	1.7	A0	023	- 0v		s
14268	20 54.8	+3.03	-0.004	-03 49 15	-18.2	+0.00	6.10	1.1	A0p	010	+23	25 Sex	
14280	21 16.5	+3.45	-0.001	+33 58 20	-18.2	-0.01	5.78	-0.3	gK1	006	-22	28 LMi	
14281	21 17.7	+2.63	-0.013	-37 45 20	-18.3	-0.06	5.40	0.6	A3	011	+17		
14283	21 29.1	+1.78	-0.004	-66 38 54	-18.2	-0.00	5.28		B8		+12v	L Car	s
14301	22 37.2	+3.16	+0.001	+09 02 23	-18.3	-0.04	5.92	0.1	gM3	007	-20	44 Leo	
14305	22 41.9	+8.71	-0.089	+84 30 29	-18.3	-0.04	5.64	2.2	A2n	021	+ 3		
14315	23 03.2	+3.44	-0.006	+34 03 05	-18.3	-0.07	4.83	2.5	dF3	035	+13	30 LMi	
14319	23 10.4	+2.18	-0.010	-58 19 19	-18.3	0.00	6.22		F0		.		
14321	23 14.2	+3.00	-0.010	-06 48 26	-18.2	+0.12	5.85	-0.6	gM1	005	+32		
14323	23 24.5	+1.19	-0.004	-73 46 37	-18.3	-0.03	4.08	3.6	F2s	079	- 4v	I Car	s
14326	23 40.2	+2.90	-0.009	-16 34 50	-18.4	-0.08	4.06	-0.1	gK5	015	+40	42 μ Hya	
14347	24 30.8	+3.55	-0.005	+41 51 26	-18.4	-0.08	5.80	1.5	A1n	014	+ 7		
14352	24 51.7	+2.75	-0.006	-30 48 45	-18.3	+0.01	4.42	-0.6	M0	010	+13v	α Ant	
14353	24 53.1	+2.31	-0.001	-54 37 20	-18.4	-0.01	5.58		K0		.		
14358	24 59.9	+3.47	-0.010	+36 57 51	-18.5	-0.11	4.41	0.6	gG8	017	+ 6	31 β LMi	d
14361	25 00.6	+3.17	+0.000	+10 01 05	-18.3	-0.00	5.87	0.4	A2s	008	- 7	45 Leo	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
14367	10 ^h 25 ^m 10 ^s 0	+7.29	-0.044	+82°48'52"	-18.3	+0.02	5.34	3.3	dF1	039	+ 7		
14373	25 32.4	+2.24	-0.002	-57 23 00	-18.4	-0.01	4.94		cF1p		- 1	P Car	
14383	25 50.6	+1.89	-0.012	-65 26 58	-18.4	+0.02	6.20		A0		.		
14387	25 58.8	+2.46	+0.000	-49 08 57	-18.4	-0.04	6.04		K2		.		
14388	26 02.3	+2.20	-0.002	-58 29 01	-18.4	-0.01	4.08		F0		+ 9	s Car	
14391	26 11.9	+3.04	+0.000	-03 29 10	-18.4	-0.03	6.11	1.8	A0	014	.		
14403	26 56.3	+3.05	-0.003	-02 28 57	-18.4	-0.02	5.24	0.0	A0n	009	+19	29 δ Sex	
14404	26 59.2	+4.17	-0.009	+64 30 54	-18.5	-0.06	6.00	1.4	A3	012	-12		
14416	27 10.2	+2.77	-0.005	-29 24 27	-18.4	+0.01	5.80	0.0	gK5	007	- 5		
14417	27 11.7	+3.50	-0.001	+39 10 54	-18.4	-0.01	5.87	1.4	A2s	013	+ 3v?	32 LMi	
14419	27 12.7	+2.00	-0.002	-63 54 58	-18.4	-0.00	5.25	-0.9	M1	006	- 3		
14421	27 17.1	+2.76	-0.003	-30 21 02	-18.4	-0.00	5.65	-0.1	A0n	003	+19	δ Ant	ds
14427	27 26.5	+3.84	-0.021	+56 14 16	-18.5	-0.04	4.84	4.4	dF8	081	+ 9	36 UMa	
14431	27 44.1	+3.07	-0.003	-00 22 48	-18.5	-0.02	4.95	-0.3	B5s	009	+12	30 β Sex	
14444	28 32.3	+2.95	-0.003	-13 19 52	-18.5	+0.00	5.51	0.0	B9ne	008	+13v		s
14455	29 01.4	+3.41	+0.001	+32 38 12	-18.5	-0.00	5.83	0.3	B9n	008	-12	33 h LMi	
14457	29 04.4	+1.51	+0.005	-71 44 07	-18.5	-0.04	4.94	-0.5	A2	008	+ 8	K Car	
14464	29 25.0	+2.33	-0.047	-53 27 40	-18.3	+0.20	5.08	2.5	dF6s	031	+20	Y Vel	d
14465	29 28.8	+2.79	-0.007	-27 58 47	-18.5	-0.02	5.98		F8		.		
14468	29 31.7	+3.20	-0.003	+14 23 40	-18.5	+0.02	5.74	-0.8	M2	005	+34	46 Leo	
14478	29 49.1	+2.56	-0.000	-44 48 33	-18.5	-0.01	6.19		B8		.	s Vel	d
14480	29 52.2	+1.40	-0.002	-72 57 51	-18.5	-0.01	4.90		M1		+11		d
14487	30 10.8	+3.16	-0.000	+09 33 52	-18.5	-0.01	3.85	-6.0	cB1p	0012	+42	47 ρ Leo	
14489	30 14.5	+2.13	-0.003	-61 25 40	-18.5	0.00	3.58	-1.0	B5ne	012	+26	p Car	
14491	30 19.3	+3.50	-0.012	+40 41 00	-18.5	-0.01	4.84	1.9	A4n	026	+14v		s
14493	30 24.7	+2.57	-0.002	-44 21 38	-18.6	-0.04	6.05		K0		.		
14501	30 39.7	+3.43	-0.002	+35 14 48	-18.6	-0.01	5.58	1.3	B9n	014	+12	34 LMi	
14505	30 50.0	+2.53	-0.001	-46 44 44	-18.6	-0.01	5.11	-1.0	K4	006	+ 4	t Vel	d
14507	30 54.1	+5.09	-0.009	+75 58 17	-18.6	-0.01	5.04	1.2	G7	017	+17		
14508	30 55.0	+2.25	-0.003	-58 24 32	-18.6	-0.01	6.19		cA2p		.		
14522	31 31.6	+2.27	-0.002	-57 55 55	-18.6	-0.01	6.25		B8s		+ 7		
14524	31 38.0	+2.85	-0.001	-23 29 13	-18.6	+0.02	5.32	0.3	gK4	010	- 4	44 Hya	
14527	31 57.4	+3.86	+0.008	+57 20 27	-18.5	+0.03	5.16	2.4	dA9s	028	-12	37 UMa	
14533	32 11.6	+3.13	-0.007	+07 12 42	-18.5	+0.06	5.17	1.2	gG6	016	+ 5	48 Leo	
14541	32 24.8	+3.15	-0.004	+08 54 33	-18.6	-0.01	var	var	A2	009	+15v	49 TX Leo	sdE
14546	32 34.8	+2.86	-0.007	-22 55 04	-18.6	+0.03	6.16	2.9	dF7	022	+12v		
14552	32 59.4	+2.67	-0.003	-39 18 13	-18.6	-0.01	var		Nb		+37	U Ant	
14553	33 00.2	+2.60	-0.003	-43 24 22	-18.6	+0.02	6.20		G5		.		
14570	33 39.7	+2.31	-0.002	-57 17 54	-18.6	-0.01	4.54	-0.5	M0	010	+10v?	r Car	
14571	33 42.9	+2.83	+0.001	-26 24 53	-18.7	-0.07	6.25	2.9	dF3	021	-21		d
14578	33 50.1	+2.93	-0.002	-16 05 06	-18.6	-0.00	6.23	-0.8	gM1	004	+16	ϕ^3 Hya	d
14582	34 02.9	+2.99	+0.017	-11 57 40	-19.3	-0.68	5.85	4.0	dF5	042	- 9		
14594	34 27.8	+2.25	-0.007	-59 18 16	-18.7	-0.06	5.26	2.9	sgK0	034	-12		
14595	34 29.8	+1.11	-0.005	-76 02 58	-18.7	+0.01	6.24		K0		.		
14603	34 52.8	+2.82	-0.008	-27 09 11	-18.7	+0.01	5.08	-0.4	gM2	008	+17		
14604	34 53.7	+0.71	-0.013	-78 20 54	-18.7	+0.01	4.10	-2.9	M0	004	-22	γ Cha	
14611	35 05.0	+2.96	+0.002	-13 07 26	-18.7	-0.04	var	var	N2		-25	U Hya	
14614	35 11.7	+2.52	-0.015	-47 57 56	-18.7	-0.03	4.06	1.5	F0p+A3	031	+19v	p Vel	ds
14622	35 32.3	+2.28	-0.004	-58 28 24	-18.7	-0.01	5.57	-6.9	cA2p	0009	-12v		s
14624	35 54.7	+3.38	+0.000	+32 14 11	-18.7	-0.00	4.77	-3.8	cG2	0022	- 7	37 LMi	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
14625	10 ^b 36 ^m 00 ^s 3	+3 ^h 72	-0 ^m 11	+53 ^h 55 ^m 47 ^s "	-18 ^h 8	-0 ^m 08	5.72	0.5	gK3	009	+45		
14631	36 08.7	+2.92	-0.007	-16 36 59	-18.7	+0.02	5.11	0.5	gK0	012	+16v	φ^1 Hya	s
14634	36 16.5	+3.43	-0.019	+38 10 17	-18.8	-0.05	5.83	3.1	dF8p	029	+7v	38 LMi	s
14636	36 21.9	+2.97	-0.004	-12 10 59	-18.7	-0.00	5.89		A0		.		
14640	36 38.2	+2.64	-0.002	-42 29 34	-18.8	-0.02	6.22		F5		.		
14647	36 50.5	+2.29	-0.001	-58 55 21	-18.7	-0.01	4.73	-0.1	M1	011	+11	τ^1 Car	d
14654	37 04.8	+2.29	-0.011	-58 33 23	-18.7	+0.00	6.09		M2		.	τ^1 Car	d
14662	37 18.7	+2.39	-0.002	-55 20 33	-18.8	-0.01	4.25	0.4	G0	017	+20	x Vel	d
14679	38 05.9	+1.42	+0.002	-74 13 57	-18.8	-0.01	5.98		K5		.		
14682	38 16.6	+4.26	-0.005	+68 42 19	-18.8	-0.03	5.90	-0.2	gK3	006	+5		
14685	38 27.2	+2.08	-0.003	-64 50 21	-18.8	-0.01	5.82		A0p		+30		
14688	38 33.4	+4.09	-0.027	+65 58 44	-18.9	-0.07	5.12	1.3	gK4	017	-11	38 UMa	s
14713	39 31.0	+4.29	-0.000	+69 20 18	-18.8	-0.02	5.23	0.0	gK4	009	-0		
14730	40 17.4	+3.29	-0.008	+26 35 19	-18.9	-0.07	5.55	1.4	A2	015	+16	40 LMi	d
14732	40 23.9	+2.78	-0.002	-32 27 12	-18.8	-0.00	5.73		A0		+4		
14733	40 27.3	+2.13	-0.003	-64 12 16	-18.8	+0.01	5.20	-0.9	B3	006	+24		
14736	40 34.8	+3.79	+0.002	+57 27 44	-18.9	-0.06	5.79	0.0	B9	007	.	39 UMa	
14737	40 37.1	+3.52	-0.027	+46 28 02	-18.9	-0.07	5.28	1.9	dF0	021	+4		
14740	40 42.0	+3.26	-0.008	+23 27 02	-18.9	+0.00	5.05	1.3	A2	018	+19	41 LMi	
14743	40 44.3	+2.32	-0.001	-58 57 13	-18.9	-0.01	5.44	-4.6	B1se	001	-2		
14753	41 07.9	+4.24	-0.009	+69 02 19	-18.9	-0.03	var		gM6ev		+34	R UMa	
14755	41 10.1	+2.14	-0.003	-64 07 55	-18.9	+0.01	3.03	-4.5	B0n	0035	+24v	θ Car	
14758	41 21.2	+0.64	-0.005	-79 31 16	-18.9	+0.00	6.18		B7		0		
14760	41 33.2	+3.23	-0.008	+20 01 18	-18.9	-0.03	6.10	1.7	A3	013	+8v		
14762	41 37.7	+2.28	-0.004	-60 18 14	-18.9	-0.00	4.49	0.2	M1	014	+9v	w Car	
14769	42 03.1	+2.16	-0.001	-63 59 11	-18.9	-0.00	6.14		B5s		+8		
14778	42 18.1	+2.17	-0.002	-63 41 54	-18.9	+0.00	5.09	-0.7	B3n	007	+26		
14798	43 05.3	+3.34	-0.002	+30 56 46	-19.0	-0.04	5.37	-0.1	B9n	008	+14v	42 LMi	
14799	43 06.9	+2.33	-0.000	-59 25 16	-18.9	+0.00	var	var	Pec	0009	-25	N η Car	
14813	43 43.1	+3.23	+0.007	+19 09 20	-19.0	+0.00	5.64	0.4	gK3	009	-6	51 m Leo	
14814	43 46.5	+3.18	-0.009	+14 27 33	-19.0	-0.07	5.64	0.8	gG4	011	+35	52 k Leo	
14835	44 24.9	+2.94	-0.002	-17 01 58	-19.0	-0.02	5.56		A0		.	b^1 Hya	
14837	44 27.6	+2.17	-0.003	-64 15 04	-19.0	-0.02	5.54	0.3	B8n	009	+32		
14842	44 36.8	+2.58	+0.006	-49 09 20	-19.0	-0.06	2.84	0.3	G5	031	+7	μ Vel	d
14844	44 40.1	+2.19	-0.000	-63 59 58	-19.0	+0.00	5.43	0.4	B8	010	+21		
14848	44 49.1	+0.57	-0.008	-80 12 20	-19.0	-0.04	5.48	-2.1	K1	003	+11	δ^1 Cha	d
14849	44 56.1	+2.42	-0.002	-56 29 36	-19.0	-0.01	5.46		B8		+31	z Vel	
14850	45 01.7	+2.19	-0.003	-64 07 10	-19.0	+0.00	5.10	-1.0	B5n	006	+16		
14863	45 20.4	+0.56	-0.013	-80 16 35	-19.0	0.00	4.62	-0.9	B5	008	+22	δ^2 Cha	
14865	45 30.8	+4.01	+0.001	+65 23 48	-19.0	-0.00	6.24	0.5	B9	007	.		
14873	45 53.4	+2.81	-0.002	-31 25 25	-19.0	-0.02	5.90		A0		.		
14877	46 07.6	+3.06	-0.001	-01 41 40	-19.0	+0.00	6.19		M2		+2		
14878	46 07.6	+2.35	-0.002	-59 39 17	-19.0	-0.01	6.12	-4.9	cA2p	001	.		
14889	46 37.8	+3.15	-0.000	+10 48 37	-19.1	-0.03	5.27	1.1	A0	015	-6v	53 l Leo	
14897	47 09.1	+3.30	-0.000	+28 14 18	-19.0	+0.03	6.12	2.3	dA8n	017	+3	44 LMi	
14898	47 09.4	+2.96	+0.007	-15 55 53	-18.8	+0.20	3.32	0.4	dK3	026	-1	ν Hya	
14900	47 13.3	+3.00	+0.000	-09 35 15	-19.1	-0.04	6.04		gG8		+40		
14902	47 25.1	+2.37	-0.005	-59 03 31	-19.1	-0.01	6.10	1.3	A0	011	.		d
14904	47 37.2	+2.79	-0.004	-33 47 35	-19.0	+0.01	5.73		A0		.		
14906	47 47.5	+3.01	-0.000	-08 37 57	-19.1	-0.02	5.78		A2		.	41 Sex	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
14910	10 ^h 48 ^m 07 ^s .0	+3 ^s 70	-8 ^s 007	+56°50'51"	-19"1	-0"00	5.76	0.3	gK1	008	+15	43 UMa	
14912	48 16.1	+3.77	-0.004	+59 35 10	-19.1	-0.06	5.66	0.7	gK2	010	-17	42 UMa	s
14919	48 32.9	+3.05	-0.003	-02 49 37	-19.1	-0.01	6.18		K2		.		
14929	49 11.3	+2.92	+0.000	-20 59 05	-19.1	-0.03	var		N6e		-15	V Hya	
14954	50 07.1	+4.11	-0.077	+70 07 15	-19.2	-0.08	6.08	3.4	dG9	029	+15		
14960	50 27.6	+2.46	-0.000	-56 58 28	-19.1	-0.01	5.57		B9p		-22		
14961	50 31.3	+3.35	+0.007	+34 29 05	-19.4	-0.29	3.92	1.4	sgK2	032	+16	46 o LMi	
14962	50 33.5	+3.63	-0.008	+54 51 05	-19.1	-0.02	5.36	0.8	gK2	012	+ 1	44 UMa	
14969	50 52.4	+3.05	-0.009	-01 59 16	-19.2	-0.09	6.23		K0		.		d
14971	51 02.6	+2.94	+0.006	-19 52 09	-19.4	-0.24	5.28	3.5	dF6	045	- 5	b ^s Hya	
14974	51 06.5	+3.45	+0.004	+43 27 24	-19.2	-0.05	4.84	0.6	A0	014	-18v	45 ω UMa	s
14975	51 10.9	+3.05	-0.006	-01 51 47	-19.1	+0.01	5.72	1.6	gG6	015	+15	p ¹ Leo	
14980	51 27.3	+2.44	+0.009	-58 35 15	-19.1	+0.02	3.88	1.7	sgK0	036	+ 8	u Car	
14988	51 39.4	+0.99	-0.009	-79 17 36	-19.2	+0.00	6.12		K2		.		
14994	51 48.7	+2.98	0.000	-13 29 29	-19.2	+0.01	5.84	0.8	gG4	010	+ 5		
14999	51 59.5	+3.26	-0.004	+25 45 27	-19.2	-0.00	6.18	1.9	dA5n	014	+10	48 LMi	
15002	52 03.4	+1.97	-0.005	-70 27 13	-19.2	-0.01	6.11	-0.9	B8	004	.		d
15006	52 11.7	+3.33	-0.005	+34 18 07	-19.2	-0.06	5.86	0.9	gG7	010	-28	47 LMi	
15011	52 31.4	+2.36	+0.001	-61 33 35	-19.2	-0.01	6.05		K5		.		d
15016	52 54.6	+3.25	-0.005	+25 01 01	-19.2	-0.02	4.51	0.5	B9n	016	+ 4v	54 Leo	ds
15018	52 58.5	+3.32	-0.009	+33 46 27	-19.2	-0.03	5.23	0.6	gK1	012	-22	46 UMa	
15022	53 08.1	+3.09	+0.007	+01 00 14	-19.2	-0.00	6.05	2.5	dF3	020	-2v	55 Leo	ds
15026	53 17.0	+2.40	-0.004	-60 15 04	-19.1	+0.07	5.91	0.7	K0	005	-26	T Car	
15030	53 23.7	+3.42	+0.001	+42 16 36	-19.3	-0.10	6.11	1.3	gK1	011	-54		
15032	53 25.7	+3.12	-0.002	+06 27 09	-19.2	-0.01	6.05	-1.6	gM5	003	-13	56VYLeo	v
15035	53 35.5	+3.23	-0.002	+22 37 08	-19.2	+0.00	6.24		K5		+25		
15047	54 23.0	+2.80	+0.007	-36 52 07	-19.4	-0.14	4.70	0.4	G5	014	- 2	ϵ Ant	
15057	54 56.7	+2.61	-0.005	-50 29 52	-19.3	-0.01	6.16		A3		.		
15072	55 50.2	+1.71	-0.004	-74 49 55	-19.3	-0.00	6.05		K2		.		
15087	56 40.4	+3.36	-0.028	+40 41 52	-19.2	+0.05	5.14	4.4	dG0	073	+13	47 UMa	
15089	56 45.7	+3.35	+0.006	+36 21 43	-19.3	-0.06	6.22	1.0	gM2	009	-26		
15094	56 51.9	+2.83	+0.001	-33 28 06	-19.3	-0.05	5.76		F0		.		d
15101	57 02.5	+2.97	-0.003	-16 05 07	-19.3	-0.02	6.16		gM2		-33		
15106	57 20.2	+2.92	-0.032	-18 01 56	-19.2	+0.12	4.20	0.7	gK1	020	+50	7 α Crt	
15109	57 22.9	+3.44	+0.001	+45 47 41	-19.3	0.00	5.67	0.2	gK5	008	+ 9		
15113	57 31.0	+3.40	-0.010	+43 10 54	-19.4	-0.14	6.12	2.8	dG0	022	- 6		
15116	57 42.3	+2.98	-0.002	-13 48 52	-19.3	-0.03	6.10		gK5		- 6		
15117	57 42.8	+2.73	-0.006	-43 32 19	-19.3	+0.00	5.94		B9		.		
15118	57 51.3	+2.75	+0.002	-41 57 26	-19.3	0.00	4.56		A2		- 5	i Vel	
15125	57 58.7	+3.10	+0.001	+03 53 11	-19.3	-0.02	5.05	-0.2	gK3	009	+ 6	58 d Leo	
15128	58 02.7	+3.36	-0.006	+39 28 52	-19.3	-0.03	5.12	1.8	A7s	022	+ 3	49 UMa	
15130	58 09.3	+3.11	-0.003	+06 22 13	-19.3	-0.03	5.08	1.5	A2	019	-12	59 c Leo	
15131	58 18.1	+2.85	-0.006	-31 34 19	-19.2	+0.10	6.18		G0		.		
15145	58 50.3	+3.62	+0.010	+56 39 03	-19.3	+0.03	2.44	0.6	A1s	043	-12v	48 β UMa	
15151	59 16.6	+3.06	-0.000	-02 12 54	-19.4	-0.04	4.97	-0.3	gM1	009	-13v	61 p ² Leo	
15162	59 39.8	+3.20	-0.001	+20 26 54	-19.3	+0.03	4.42	0.4	A2	016	-10	60 b Leo	
15171	59 59.0	+2.91	+0.005	-26 33 38	-19.5	-0.13	6.16		F0		.		d
15185	11 00 39.5	+3.70	-0.017	+62 01 17	-19.4	-0.07	1.95	-0.5	gK0	034	- 9v	50 α UMa	d
15186	00 41.1	+3.07	-0.001	-00 28 53	-19.5	-0.12	6.13		A3		.		d
15188	00 44.7	+3.00	-0.005	-11 01 57	-19.5	-0.11	5.62	0.8	gG6	011	- 8		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
15195	11 ^h 01 ^m 03 ^s 0	+3 ^o 07	-0 ^o 004	+00°16'07"	-19 ^o 4	-0 ^o 00	6.15	0.7	gK3	008	- 8	62p ³ Leo	
15215	01 44.8	+3.33	-0.006	+38 30 40	-19.4	-0.00	6.08	2.0	dA6n	015	+ 7	51 UMa	d
15230	02 15.9	+2.70	-0.012	-47 24 34	-19.4	+0.04	5.94		A5		-16		
15235	02 26.3	+3.09	-0.023	+07 36 24	-19.5	-0.05	4.66	1.0	dF3	019	+ 5	63 χ Leo	d
15238	02 32.2	+2.83	-0.002	-35 32 05	-19.4	0.00	5.53		A0		+11		
15248	02 55.2	+2.89	-0.014	-27 01 24	-19.4	-0.01	5.06	2.8	dF4	036	+17	χ^1 Hya	d
15256	03 03.3	+3.01	+0.001	-10 49 04	-19.5	-0.10	6.14		A3		.		
15260	03 31.9	+2.91	+0.002	-27 01 02	-19.5	-0.02	5.69		B8		+53v	χ^2 Hya	s
15282	04 21.2	+3.06	-0.026	+02 13 38	-19.5	-0.09	5.66	3.0	sgG7	029	+55	65p ⁴ Leo	d
15283	04 21.4	+2.55	-0.001	-58 24 17	-19.5	-0.01	6.07		K0		.		d
15288	04 28.9	+2.46	-0.005	-62 09 13	-19.5	+0.00	4.76	1.1	sgG5	019	- 2	z ¹ Car	
15300	04 57.5	+2.77	-0.009	-42 22 07	-19.4	+0.04	5.34	0.1	dA5sp	009	+ 2		d
15305	05 01.3	+2.17	-0.003	-70 36 26	-19.5	-0.01	5.80		B3		+ 7		
15319	06 08.3	+3.22	+0.000	+24 55 46	-19.5	+0.00	5.63	1.2	A3	013	- 6	67 Leo	d
15325	06 18.6	+2.90	-0.006	-27 48 33	-19.5	-0.02	5.49	-0.6	A2	006	+16v?		
15329	06 26.8	+2.56	-0.001	-58 42 14	-19.5	-0.01	4.02		F8p		+ 7v	x Car	s
15331	06 28.6	+2.50	-0.003	-61 40 34	-19.5	+0.00	5.42	-1.6	A0p	004	-22	z ² Car	
15332	06 30.9	+3.80	-0.015	+67 28 55	-19.5	-0.03	6.09	1.7	A5	013	+ 5		
15334	06 34.4	+3.30	-0.004	+36 34 51	-19.5	-0.03	5.99		gM4		+22		
15339	06 51.0	+3.36	-0.006	+43 28 44	-19.5	-0.02	6.03	-1.0	gM2	004	+18		
15340	06 51.6	+3.37	-0.006	+44 46 12	-19.5	-0.04	3.15	0.9	gK1	035	- 4	52 ψ UMa	
15350	07 28.9	+2.88	+0.002	-32 05 44	-19.6	-0.04	5.76		A2		.		
15385	09 11.7	+2.95	0.000	-22 33 09	-19.7	-0.10	4.52	2.9	A2	048	+ 6v	11 β Crt	
15393	09 38.4	+2.22	-0.002	-71 09 52	-19.6	-0.00	6.22		K0		.		
15405	10 01.4	+2.58	-0.001	-18 13 39	-19.6	-0.03	6.09		K0		.	ψ Crt	d
15411	10 15.9	+2.73	-0.012	-48 49 45	-19.5	+0.03	5.67		A2		-28v		s
15415	10 26.8	+2.58	-0.000	-60 02 43	-19.6	-0.01	4.73	-5.7	F5p	001	- 8	y Car	
15421	10 40.6	+2.49	-0.006	-63 53 52	-19.6	-0.01	5.52	1.2	B8	014	+21		
15426	10 54.5	+2.80	-0.000	-44 06 00	-19.6	-0.01	5.84		K5		.		
15430	11 12.0	+3.07	-0.003	+00 12 10	-19.6	-0.01	5.40	1.1	A0	014	+ 5	69p ³ Leo	
15435	11 20.5	+2.60	-0.001	-59 20 49	-19.6	-0.02	5.98		B3s		+17		
15436	11 24.0	+2.70	-0.003	-52 57 35	-19.6	+0.03	5.91		K2		.		
15437	11 26.0	+3.12	+0.003	+08 20 05	-19.7	-0.11	5.90	0.7	gK3	009	+17		
15438	11 27.1	+3.19	+0.010	+20 47 52	-19.7	-0.14	2.58	1.0	A2n	048	-21v?	68 δ Leo	
15441	11 37.1	+3.15	-0.004	+15 42 11	-19.7	-0.08	3.41	0.2	A4s	023	+ 8	70 θ Leo	
15460	12 32.9	+3.19	-0.002	+23 22 06	-19.6	-0.01	4.87	-0.6	gM2	008	+16	72 Leo	
15487	13 15.0	+3.14	-0.000	+13 34 50	-19.6	-0.02	5.48	0.5	gK3	010	+15v	73 n Leo	s
15506	13 53.3	+3.38	-0.009	+49 44 58	-19.7	-0.02	5.97	1.0	gK0	010	0		
15511	14 07.1	+3.05	-0.008	-03 22 41	-19.7	-0.04	4.58	1.3	A5	022	- 3	74 ϕ Leo	d
15514	14 26.0	+3.04	-0.001	-06 51 43	-19.7	-0.01	6.03		gF0p		- 8v		ds
15520	14 43.0	+3.09	+0.004	+02 17 09	-19.8	-0.15	5.44	0.2	gM0	009	-59	75 Leo	
15523	14 48.4	+2.86	-0.008	-37 44 29	-19.6	+0.00	6.24		A0		.		
15532	15 16.2	+2.45	+0.004	-67 33 00	-19.7	-0.02	6.09		Ma		.		d
15537	15 31.2	+3.20	-0.034	+31 48 39	-20.3	-0.59	3.88	4.5	dG0	130	-16v	53 ξ UMa	dss
15547	15 47.0	+3.24	-0.002	+33 22 02	-19.6	+0.02	3.71	-0.9	gK3	012	- 9	54 ν UMa	d
15556	16 21.0	+3.08	-0.003	+01 55 29	-19.7	-0.06	6.02	0.5	gK0	008	+ 5	76 Leo	
15558	16 24.7	+3.27	-0.005	+38 27 36	-19.8	-0.08	4.78	1.2	A0n	019	- 3v	55 UMa	s
15567	16 50.3	+3.00	-0.009	-14 30 28	-19.5	-0.20	3.82	0.8	gK0	025	- 5	12 δ Crt	
15574	17 10.5	+2.51	-0.045	-64 18 34	-19.7	+0.03	6.06		F5		.		
15600	18 33.5	+3.09	-0.006	+06 18 13	-19.7	-0.02	4.13	0.1	B9s	016	- 5v	77 σ Leo	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
15601	11 ^h 18 ^m 43 ^s 2	+2 ^h 73	-0 ^m 004	-54°13'01"	-19 ^m 7	-0 ^s 01	4.26	-0.7	B5n	010	+16	π Cen	d
15619	19 54.1	+3.56	-0.001	+64 36 16	-19.7	+0.03	5.98	1.0	A0	010	+ 2		
15625	20 05.4	+3.29	-0.003	+43 45 26	-19.8	-0.02	5.06	-0.4	gG7	008	+ 3	56 UMa	
15641	20 47.0	+2.91	-0.003	-35 53 25	-19.8	-0.02	5.12	-0.4	K6	008	- 5v		
15643	20 51.3	+2.73	-0.005	-56 30 18	-19.8	-0.01	6.02		A0		.		
15644	20 53.0	+2.98	-0.022	-18 30 18	-19.8	-0.04	5.15	1.4	F3	018	+12v	13 λ Crt	
15649	21 11.4	+2.60	+0.001	-64 40 49	-19.8	-0.02	5.66	0.9	B7	011	+19v?		d
15652	21 19.2	+3.13	+0.012	+10 48 17	-19.8	-0.08	4.03	2.4	dF4	047	-10v?	78 ϵ Leo	d
15656	21 28.3	+3.08	-0.001	+01 40 57	-19.8	+0.00	5.52	0.5	gG7	010	-10	79 Leo	
15665	22 04.9	+3.03	-0.002	-10 35 05	-19.7	+0.02	5.07	0.1	gM0	010	+ 3	14 ϵ Crt	
15667	22 10.9	+2.39	-0.006	-71 58 54	-19.8	-0.02	5.69		B3		.		
15669	22 22.8	+3.00	-0.007	-17 24 33	-19.8	-0.00	4.14	0.8	A5	022	+ 1	15 γ Crt	d
15670	22 23.4	+3.11	-0.007	+11 42 19	-19.8	-0.01	5.96	0.2	gK4	007	+38		
15677	23 00.0	+3.13	-0.010	+16 43 54	-19.8	-0.01	5.63	2.7	dF2	026	+18	81 Leo	
15680	23 03.7	+2.91	-0.010	-35 47 18	-19.8	+0.01	5.34	1.2	G5	015	+ 4		d
15684	23 07.5	+2.91	-0.004	-37 28 21	-19.8	-0.02	6.02		Ma		.		d
15686	23 08.6	+3.38	-0.008	+56 07 29	-19.7	+0.04	5.85	0.6	gG6	009	- 6		
15693	23 32.8	+2.60	-0.046	-63 41 48	-19.9	-0.09	5.34	3.4	F3	041	- 5v		
15705	24 13.5	+3.04	-0.048	+03 17 09	-19.6	+0.18	6.19	4.8	dK0	053	- 3	83 Leo	d
15708	24 19.8	+2.70	-0.003	-60 50 24	-19.8	-0.01	5.54	-1.0	B5	005	+ 9		
15710	24 27.0	+2.80	-0.005	-52 53 06	-19.8	+0.01	5.91		G0+A2		.		d
15714	24 38.2	+3.02	-0.007	-12 04 54	-19.8	+0.02	5.96	2.9	dF4	025	+ 6	16 κ Crt	
15729	25 21.9	+3.09	+0.001	+03 07 54	-19.8	-0.02	5.18	1.8	sgG7	021	- 9	84 τ Leo	
15744	26 10.2	+2.89	-0.004	-42 23 55	-19.8	+0.00	5.34	-0.1	B9	008	+ 3v		ds
15745	26 14.0	+3.43	-0.017	+62 03 02	-19.6	+0.24	5.86	3.2	dF1	029	- 8		
15751	26 22.9	+3.23	-0.004	+39 36 44	-19.8	+0.01	5.26	1.4	A0n	017	-11v	57 UMa	d
15760	26 56.3	+3.36	-0.011	+57 00 49	-19.9	-0.04	6.13	1.9	A2	014	+ 9		
15765	27 05.7	+3.13	-0.002	+15 41 23	-19.9	-0.05	6.00	0.2	gK4	007	-29	85 Leo	
15768	27 09.2	+2.98	-0.004	-24 11 17	-19.8	+0.04	5.73	1.7	F1	016	.		d
15779	27 45.5	+3.07	+0.001	-02 43 39	-19.9	-0.02	5.07	0.1	K5	010	+19	87 ϵ Leo	
15782	27 49.2	+3.25	-0.005	+43 26 52	-19.8	+0.07	5.88	3.3	dF5	030	-30	58 UMa	
15784	27 52.6	+3.13	-0.006	+18 41 07	-19.8	+0.01	5.74	1.3	gK0	013	+27	86 Leo	
15795	28 23.5	+4.22	-0.065	+81 24 10	-19.8	+0.03	6.13	2.1	A2	016	+ 3		
15799	28 27.5	+3.56	-0.008	+69 36 26	-19.9	-0.02	4.06	0.2	gM0	017	+ 7	1 λ Dra	
15811	29 10.1	+3.10	-0.023	+14 38 35	-20.1	-0.20	6.15	3.5	dF7+K5	030	- 4	88 Leo	d
15818	29 26.8	+2.78	-0.000	-59 09 58	-19.9	-0.02	4.96	1.1	cG4p	017	-20v	σ^1 Cen	
15820	29 29.5	+2.77	-0.002	-59 14 23	-19.9	-0.01	5.26	-0.2	cA2p	008	-17	σ^2 Cen	
15822	29 31.7	+3.40	+0.000	+61 21 35	-19.9	-0.07	5.47	3.4	dF4	038	-46		d
15830	29 47.1	+2.97	-0.001	-28 59 21	-19.7	-0.13	5.86	3.3	dF7	031	+10	17 Crt	
15831	29 47.4	+2.97	-0.002	-28 59 13	-19.7	+0.14	5.78	3.2	dF6	031	+ 4	17 Crt = N Hya	d
15837	30 05.9	+2.67	+0.001	-66 41 09	-19.9	-0.01	5.93		K0		.		
15841	30 14.9	+3.05	-0.001	-07 33 05	-19.9	-0.00	6.17	0.4	gK4	007	- 1		
15842	30 21.7	+2.92	-0.006	-40 09 38	-19.8	+0.05	5.71		Ma		.		
15844	30 25.4	+2.97	-0.003	-30 48 40	-19.9	-0.00	5.23	0.6	M2	012	+19		
15845	30 32.3	+2.95	-0.016	-31 34 51	-19.9	-0.05	3.72	0.2	gG7	020	- 5	ξ Hya	
15847	30 43.3	+3.02	-0.000	-16 00 13	-19.9	-0.05	6.00		gG0		- 4		
15854	31 10.7	+2.92	-0.007	-40 18 39	-19.9	+0.02	5.50	1.9	A2	019	+ 9		d
15867	31 48.4	+3.07	-0.012	+03 20 17	-20.0	-0.11	5.81	3.4	dF5	033	+ 3	89 Leo	
15873	32 03.4	+2.92	-0.054	-32 33 59	-19.1	+0.82	6.14	6.0	dK2	091	-23		
15874	32 06.4	+3.12	-0.001	+17 04 24	-19.9	-0.00	6.05	-0.9	B3n	004	+19	90 Leo	ds

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
15875	11 ^h 32 ^m 20 ^s 3	+3 ^h 30	+0 ^m 001	+55°03'42"	-19°9	-0°00	5.76	0.5	gG8	009	+18		
15877	32 22.9	+2.84	-0.007	-53 59 16	-19.9	+0.01	4.82	1.0	B8	017	+ 4	A Cen	
15881	32 32.7	+2.87	-0.018	-48 51 45	-19.7	+0.16	5.57	2.3	K0	022	- 1		
15886	32 48.1	+2.89	-0.010	-47 05 45	-19.9	-0.01	5.63		Ma		+18	C ¹ Cen	d
15893	33 08.3	+3.51	+0.021	+69 36 05	-20.0	-0.13	5.36	1.1	gG6	014	- 2	2 Dra	
15899	33 27.9	+2.77	-0.005	-62 44 35	-19.9	-0.02	3.34	-3.3	B9	0048	+ 8	λ Cen	
15901	33 29.7	+2.91	+0.003	-47 21 52	-20.0	-0.06	5.42	1.4	F2s	016	+ 5	C ² Cen	
15905	33 40.3	+3.16	+0.002	+28 03 27	-19.9	-0.00	5.82	1.2	A4n	012	+ 8		ds
15913	34 01.7	+2.80	-0.002	-60 46 33	-19.9	-0.00	5.84	-2.4	B3	0025	+13		
15917	34 05.9	+2.98	+0.003	-33 17 34	-20.0	-0.04	5.87		K0				d
15921	34 08.6	+3.04	-0.004	-09 31 32	-19.9	+0.00	4.81	0.2	B9n	012	+ 1	21 θ Crt	
15927	34 23.3	+3.07	+0.000	-00 32 51	-19.9	+0.04	4.47	0.6	gG8	017	+ 1	92 ν Leo	
15935	34 41.2	+2.78	-0.030	-61 00 24	-19.9	-0.01	5.10		K2		+ 3		
15945	35 08.1	+2.91	-0.008	-47 28 14	-19.9	+0.02	5.45		K2		- 1	C ³ Cen	
15946	35 11.1	+2.48	-0.032	-75 37 10	-19.9	-0.00	5.74		F0		.	π Cha	
15947	35 11.2	+3.25	-0.006	+50 53 43	-20.0	-0.04	5.99		K0		- 4		
15959	35 31.8	+2.72	-0.013	-67 20 36	-20.0	-0.02	5.90		K0		.		
15962	35 41.1	+3.20	-0.013	+43 54 10	-20.0	-0.04	5.52	2.1	dA7n	021	+ 2	59 UMa	
15965	35 46.5	+2.80	-0.010	-61 32 59	-19.9	+0.00	5.32	1.6	A0	018	+ 4		
15967	35 50.7	+3.07	-0.002	-02 09 33	-19.9	+0.00	6.25	0.1	gK1	006	-15		d
15970	35 52.8	+3.22	-0.004	+47 06 42	-20.0	-0.03	6.25		F2		-24	60 UMa	
15971	35 52.9	+3.09	-0.001	+08 24 40	-19.9	0.00	5.47	0.2	gM6	009	+ 4	1 ω Vir	
15977	36 07.5	+3.05	+0.006	-12 55 35	-19.8	+0.11	5.64	3.4	dF5	036	-24	24 ι Crt	d
16004	37 09.8	+2.78	-0.005	-65 07 14	-20.0	-0.02	5.08		F7+A0		+ 4v		ds
16019	37 43.5	+2.98	-0.003	-34 28 02	-19.9	-0.00	4.88	0.3	B8	012	+ 6	\circ Hya	
16020	37 44.0	+3.28	-0.002	+58 14 51	-19.9	+0.02	6.10	0.3	A0	007	+ 4		
16030	38 11.2	+3.12	-0.004	+21 37 50	-20.0	-0.05	5.43	0.8	gK1	012	+ 9	92 Leo	
16033	38 17.0	+2.90	-0.000	-53 41 28	-20.0	-0.03	5.98.		Ma		.		
16035	38 25.3	+3.16	-0.001	+34 29 03	-20.3	-0.39	5.46	5.5	dG6	108	- 5	61 UMa	s
16037	38 31.1	+2.84	-0.002	-61 48 46	-20.0	-0.00	4.88	1.5	cG6	021	+14v		
16048	38 51.8	+2.95	-0.008	-42 49 07	-20.0	-0.01	5.69		A0		+ 8v		
16051	38 58.4	+3.12	-0.027	+32 01 22	-20.0	+0.02	5.74	3.1	dF1	030	+31	62 UMa	
16055	39 13.9	+3.00	-0.000	-32 13 18	-20.0	-0.05	5.31	0.1	M1	009	+34		
16057	39 17.1	+2.10	-0.015	-82 49 21	-19.9	+0.01	6.22		K0		.		d
16072	39 42.1	+3.34	-0.008	+67 01 18	-19.9	+0.04	5.48	0.0	gK2	008	+ 3	3 Dra	
16086	40 57.5	+2.99	-0.001	-36 54 44	-20.0	-0.03	6.12		K2		.		
16092	41 07.4	+2.86	-0.001	-62 12 43	-20.0	-0.01	5.18	2.7	cG4	032	+10v?		
16097	41 21.8	+3.06	+0.004	-06 23 56	-20.0	-0.05	6.23	0.7	gG8	008	- 3		
16102	41 28.9	+2.87	+0.003	-62 36 02	-20.0	-0.03	6.22		A0		.		
16105	41 37.1	+3.12	-0.001	+25 29 45	-20.0	+0.01	6.19		K5		- 3		d
16112	42 13.5	+3.04	+0.002	-18 04 22	-20.0	-0.04	4.90	1.0	gG8	017	- 5	27 ζ Crt	
16118	42 42.4	+3.09	+0.004	+08 32 10	-20.0	-0.02	5.06	2.3	A3n	028	- 1	2 ξ Vir	
16131	43 14.1	+2.83	-0.015	-66 27 05	-20.0	+0.03	3.80		A5		+16	λ Mus	
16133	43 15.0	+2.97	-0.005	-45 24 45	-20.0	-0.00	5.44	0.2	B8	009	- 7		
16135	43 17.4	+3.08	-0.001	+06 48 35	-20.2	-0.19	4.20	-0.1	gM1	014	+51	3 ν Vir	
16137	43 25.0	+3.17	-0.014	+48 03 24	-20.0	+0.02	3.85	0.1	gK1	018	- 9	63 χ UMa	
16147	44 05.0	+2.90	-0.004	-60 54 01	-20.0	-0.03	4.22	-1.9	G0	006	- 4		
16149	44 07.6	+2.86	-0.134	-40 13 41	-19.6	+0.39	5.04	4.7	dG4	093	+15		
16153	44 15.6	+3.21	+0.002	+55 54 23	-20.0	-0.04	5.41	0.6	gK3	011	+ 2		
16165	44 51.9	+2.93	-0.004	-57 25 08	-20.0	+0.01	5.44		M2		-52		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
16171	11 ^h 45 ^m 20 ^s .8	+3.08	-0.004	+08°31'25"	-20"0	+0"01	5.22	0.8	A1	013	- 1	4 A ¹ Vir	
16173	45 24.5	+3.09	-0.011	+20 29 48	-20.0	-0.01	4.54	2.2	dF4	034	+ 0v	93 Leo	s
16176	45 49.3	+2.89	+0.004	-66 32 12	-20.0	-0.03	4.71	-0.8	M2	008	+37	μ Mus	
16181	46 04.4	+3.09	-0.007	+14 33 43	-20.0	0.00	5.90	2.8	dA6n	024	+ 9		d
16183	46 13.3	+3.03	-0.002	-26 28 18	-20.0	-0.02	5.45	0.0	gM4	008	+ 7		
16187	46 28.2	+3.06	-0.015	-00 02 26	-20.0	+0.00	6.24		F8		+ 4		
16189	46 30.6	+3.06	-0.034	+14 51 06	-20.1	-0.12	2.23	1.6	A4n	077	- 0	94 β Leo	
16192	46 39.9	+3.10	+0.004	+16 31 17	-20.1	-0.07	5.95	1.3	A3	012	-24v		s
16199	47 06.1	+3.12	-0.009	+35 12 34	-20.0	-0.00	5.76	2.1	dF5	027	- 4v		s
16201	47 14.3	+2.92	-0.003	-63 30 38	-20.0	-0.01	4.52	-1.2	B5ne	007	+37	j Cen	
16206	47 32.0	+2.87	-0.003	-69 56 52	-20.0	-0.01	4.90	-2.1	cK2	004	+18		
16213	47 59.6	+2.94	-0.001	-62 22 17	-20.0	-0.02	5.65		cA2p		.		
16215	48 05.4	+3.13	+0.050	+02 02 47	-20.3	-0.28	3.80	3.8	dF8	101	+ 5	5 β Vir	
16219	48 21.5	+3.08	-0.009	+12 33 23	-20.0	+0.01	6.22	1.2	A3	010	+ 7		d
16220	48 28.8	+3.07	+0.000	-05 03 19	-20.0	-0.01	5.81	2.0	sgK0	017	+12v		s
16223	48 33.8	+3.12	-0.002	+33 39 10	-20.0	+0.01	6.14	1.5	dF1+A2	012	+ 2		d
16226	48 38.2	+3.00	-0.008	-44 53 43	-20.0	-0.02	4.71	1.0	K4	018	+ 2	B Cen	
16231	48 49.6	+3.04	-0.015	-11 54 39	-20.0	+0.00	6.22		F0		.		
16236	49 09.6	+3.03	-0.001	-30 33 09	-20.3	-0.30	5.96	2.3	dF5	019	+33		
16241	49 23.7	+2.94	-0.005	-64 55 40	-20.0	-0.02	5.10	-1.4	B7	005	+26		d
16246	49 41.2	+2.97	-0.014	-56 42 36	-20.0	+0.02	5.69		A2		.		d
16258	50 22.6	+3.03	-0.004	-33 37 47	-20.0	-0.00	4.40	-0.2	B9	012	- 1	β Hya	d
16268	51 12.6	+3.15	+0.011	+53 58 22	-20.0	+0.00	2.54	0.6	A0ne	041	-13	64 γ UMa	
16286	52 09.5	+3.05	+0.004	-25 26 12	-20.0	+0.08	5.50	1.8	gG4	018	-11		
16294	52 29.2	+3.08	-0.002	+08 43 19	-20.0	+0.01	5.62	1.0	gK0	012	-10	6A ¹ Vir	
16295	52 29.9	+2.98	-0.003	-63 00 03	-20.0	-0.00	6.05		cA2p		.		
16311	53 06.3	+3.09	+0.001	+15 55 30	-20.0	-0.01	5.49	0.7	A3s	011	-20v	95 o Leo	s
16312	53 07.2	+3.05	+0.000	-28 11 54	-20.1	-0.03	6.12	0.0	gK5	006	+11		
16315	53 22.3	+3.13	+0.001	+56 52 36	-20.0	-0.00	5.93	0.4	gK0	008	+13	66 UMa	
16319	53 27.8	+3.06	-0.004	-16 52 21	-20.0	-0.01	5.16	2.0	A0	023	+15v?	30 η Crt	
16357	55 08.5	+3.02	-0.003	-62 10 13	-20.1	-0.02	5.70	-1.6	B5	0036	+16v?		
16371	55 42.9	+3.03	-0.002	-56 02 21	-20.1	-0.01	5.64		B8		-23		
16383	56 15.5	+3.03	+0.001	-64 03 40	-20.0	-0.00	5.66		cA2p		.		
16389	56 38.0	+3.05	-0.002	-51 25 06	-20.1	-0.01	6.18		K2		.		
16392	56 43.4	+3.09	+0.000	+33 26 44	-20.0	-0.00	6.02		gK0		- 1		d
16402	57 06.9	+2.98	-0.012	-77 56 36	-20.1	-0.01	5.05	0.9	B9	015	+22	ϵ Cha	d
16406	57 23.2	+3.07	-0.001	+03 56 01	-20.1	-0.02	5.24	0.8	A0	013	- 2	7 b Vir	
16421	58 10.4	+3.08	+0.008	-10 09 40	-20.5	-0.48	5.63	4.9	dG7	076	+ 0		
16423	58 17.5	+3.07	-0.001	-19 22 50	-20.0	+0.01	5.28	-2.3	B2n	003	+ 3v	31 Crt	s
16425	58 18.6	+3.07	0.000	+06 53 35	-20.1	-0.03	4.57	1.1	A3	020	-23v	8 π Vir	s
16439	59 06.2	+3.07	-0.008	+36 19 17	-20.1	-0.09	5.62	1.2	gK1	013	+30		
16445	59 34.8	+3.05	-0.030	+43 19 23	-20.0	+0.07	5.07	1.9	A5s	023	+ 5v?	67 UMa	
16449	59 45.5	+3.01	-0.043	-85 21 12	-20.0	+0.00	5.89		K2		.		d
16455	12 00 03.3	+3.07	-0.008	-68 54 50	-20.1	-0.02	6.10		B8		.		
16463	00 27.9	+3.06	-0.022	-63 02 05	-20.0	-0.00	4.48	0.5	A5	016	- 3v	θ^1 Cru	ds
16472	01 03.7	+3.11	+0.029	-42 09 15	-20.2	-0.12	5.28	2.9	dF4	034	+36		
16489	01 43.1	+3.07	+0.003	+21 44 15	-20.1	-0.01	5.77	1.0	dA8s	011	+ 5	2 Com	d
16490	01 43.9	+3.09	-0.002	-62 53 15	-20.0	-0.00	4.98	-3.2	B3	0028	+16v	θ^2 Cru	s
16493	02 03.0	+3.10	-0.008	-68 03 02	-20.1	-0.02	5.42	0.6	A0	011	+23		
16497	02 09.8	+3.10	-0.020	-76 14 29	-20.0	+0.04	5.00		K6		- 2	\times Cha	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
16503	12 ^h 02 ^m 21 ^s .7	+3.09	-0.005	-60°41'25"	-20.1	-0.04	5.96		Ma				
16512	02 39.7	+3.06	-0.015	+09 00 38	-20.0	+0.04	4.24	1.1	sgG5	024	-30	9 o Vir	
16514	02 44.3	+3.05	+0.045	+77 11 07	-20.1	-0.09	5.96	0.5	gG8	008	-20		
16524	03 08.8	+3.03	-0.007	+63 12 44	-20.1	-0.08	6.24	0.1	gK2	006	-26		d
16542	03 42.6	+3.13	-0.001	-68 22 22	-20.0	+0.01	6.24		K0		.		
16544	03 46.6	+3.11	-0.006	-65 25 51	-20.0	-0.01	6.18		F5		.		d
16551	04 15.5	+3.13	+0.005	+64 20 06	-20.1	-0.05	4.30	2.7	F2	049	+ 9v	η Cru	s
16572	05 10.3	+3.16	-0.023	-75 05 20	-20.0	+0.02	5.16	0.7	M0	013	-45		
16576	05 29.2	+3.11	-0.004	-50 22 58	-20.1	-0.02	4.81	-0.7	B5	008	+16		
16581	05 38.8	+3.11	-0.003	-48 24 51	-20.1	-0.03	5.58	1.3	A0	014	+ 6	E Cen	
16584	05 45.4	+3.11	-0.004	-50 26 39	-20.1	-0.02	2.88	-1.2	B3ne	015	+ 9v?	δ Cen	
16585	05 47.3	+3.13	-0.001	-60 34 08	-20.0	-0.01	6.22		K2		.		
16586	05 49.8	+3.09	+0.006	-24 27 00	-20.1	-0.05	4.18	2.8	dF2	052	+ 4	1 α Crv	
16592	06 18.1	+3.10	-0.005	-44 02 50	-20.1	-0.06	5.93		A2		.		
16593	06 18.9	+3.10	-0.003	-40 57 12	-20.0	-0.01	5.62	-2.0	B3	003	0v?		
16608	07 07.5	+3.07	+0.003	+02 10 43	-20.2	-0.18	6.13	1.7	gK3	013	+ 3	10 Vir	
16613	07 27.2	+3.10	-0.005	-34 25 36	-20.1	-0.02	6.14	0.0	A0	006	.		d
16616	07 30.5	+3.06	-0.011	+06 05 06	-20.0	+0.02	5.74	2.1	gF6	019	- 9	11 Vir	
16618	07 32.9	+3.09	-0.005	-22 20 30	-20.0	+0.01	3.21	0.5	gK3	029	+ 5	2 ϵ Crv	
16624	07 57.7	+3.11	+0.003	-37 35 30	-20.1	-0.03	6.08		A2		.		
16630	08 13.9	+3.05	-0.001	+27 33 35	-20.0	-0.02	5.78	1.2	A2	012	- 9v		s
16636	08 26.9	+3.14	-0.018	-60 59 57	-20.1	-0.03	6.24		F0		.		
16638	08 29.1	+3.09	-0.005	-23 19 26	-20.1	-0.02	5.44	1.8	A2	019	+11	3 Crv	
16651	09 01.7	+3.14	-0.004	-52 05 25	-20.1	-0.03	4.20	-1.3	B3n	008	+21	ρ Cen	
16659	09 19.1	+3.04	-0.003	+26 08 55	-20.1	-0.03	5.81	0.0	gK4	007	+22v	4 Com	s
16667	09 36.8	+3.05	-0.001	+20 49 13	-20.1	-0.03	5.67	0.7	gG8	010	-25	5 Com	
16669	09 42.1	+3.18	-0.000	-62 40 22	-20.0	-0.01	6.17	-6.7	B2	0004	- 2		
16672	09 52.8	+2.81	+0.003	+77 53 38	-20.0	+0.02	5.12	2.3	A5	027	+ 0v		s
16679	10 04.2	+3.23	-0.002	-69 52 26	-20.0	-0.02	var	var	cG2vp	0014	0v	S Mus	
16692	10 48.7	+3.12	-0.001	-38 39 04	-20.0	-0.01	5.90		B5		-47		
16693	10 53.2	+3.05	-0.006	+10 32 25	-20.0	-0.02	5.81	1.8	cA8s	016	+ 2	12 Vir	
16703	11 25.3	+3.14	-0.005	-45 26 46	-20.0	-0.00	5.29	0.1	M0	009	+ 7v	D Cen	ds
16723	12 24.3	+3.10	0.000	-20 33 59	-20.0	-0.00	5.98		gG7		+16		
16724	12 28.6	+3.19	-0.005	-58 28 15	-20.0	-0.02	3.08	-3.2	B3	0055	+26	δ Cru	
16731	12 36.0	+3.09	+0.002	-10 01 14	-21.0	-1.02	6.12	3.6	dF3	031	+ 6		
16733	12 46.4	+2.85	-0.006	+70 28 42	-20.0	-0.02	5.89	0.4	gK2	008	-14		
16736	12 57.6	+2.97	+0.013	+57 18 37	-20.0	+0.00	3.44	1.6	A3n	043	-13	69 δ UMa	
16740	13 13.9	+3.09	-0.011	-17 15 52	-20.0	+0.02	2.78	-1.6	B8	013	- 4v	4 γ Crv	
16747	13 27.9	+3.05	-0.006	+15 10 38	-20.0	-0.04	5.08	1.6	A2n	020	+10v	6 Com	s
16750	13 37.5	+3.01	+0.001	+40 56 18	-20.0	-0.04	5.80	0.3	gM0	006	-15	2 CVn	d
16752	13 48.9	+3.04	-0.002	+24 13 23	-20.0	-0.01	5.06	0.1	gG8	010	-28	7 Com	
16754	13 59.5	+3.02	-0.004	+33 20 26	-20.1	-0.12	5.08	0.3	gK0	011	-41v		s
16760	14 22.7	+3.25	-0.008	-65 24 54	-20.0	-0.01	6.23		A0		.		
16762	14 28.4	+3.09	-0.004	-16 24 58	-20.0	-0.00	5.96		A2		.		
16764	14 51.0	+3.24	-0.041	-67 40 58	-20.0	-0.04	4.16	2.2	sgM6	041	+ 7v	ϵ Mus	
16766	14 59.6	+3.02	-0.003	+29 12 51	-20.0	+0.03	5.68	2.3	dA5n	021	- 7		d
16767	15 02.0	+2.96	+0.004	+53 28 10	-20.1	-0.05	6.00	0.8	gK6	009	-41		
16775	15 22.3	+3.52	-0.012	-79 02 05	-20.0	+0.01	4.38	0.0	B5n	013	+23	β Cha	
16785	15 42.7	+3.25	-0.007	-63 43 31	-20.0	-0.02	4.26	-2.4	B3	0048	+19	ζ Cru	
16789	16 00.6	+3.03	-0.007	+30 31 41	-20.1	-0.13	6.14	2.0	dA7n	015	-18v?		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
16790	12 ^h 16 ^m 06 ^s .4	+3.08	+0.002	-00°30'34"	-20.0	-0.02	5.92		A3n		-14	13 Vir	
16792	16 19.1	+3.20	-0.009	-54 51 55	-20.0	-0.03	4.98	-1.5	Ma	005	-7v	F Cen	s
16797	16 36.5	+2.69	-0.007	+75 26 17	-20.0	+0.00	5.41	1.3	A2	015	-4v?		
16799	16 47.7	+3.03	-0.002	+23 18 44	-20.0	-0.02	6.15	1.4	gA8s	011	+1	8 Com	
16806	17 02.3	+3.11	+0.000	-18 58 42	-20.0	+0.00	var		M5cv		-22	R Crv	
16813	17 20.8	+3.07	-0.004	-00 23 21	-20.0	-0.02	4.00	1.1	A0	026	+5v	15 η Vir	s
16814	17 21.3	+2.95	-0.001	+49 15 41	-20.0	-0.00	5.56	-0.9	gM1	005	+8	3 CVn	
16822	17 35.1	+3.11	-0.008	-21 53 52	-20.0	-0.03	6.11	0.9	dG2	009	-1		d
16827	17 47.2	+3.01	-0.011	+26 16 44	-20.0	+0.01	6.11	3.2	dA8n	026	+8		
16828	17 48.6	+3.05	-0.020	+03 35 27	-20.1	-0.07	5.10	-0.7	gK1	007	+35	16 c Vir	
16829	17 49.0	+3.02	-0.005	+26 53 54	-20.1	-0.11	5.72	0.7	gK2	010	-17		s
16830	17 58.0	+3.11	-0.007	-21 56 17	-20.0	-0.04	5.30	-0.2	B8ne	008	+2v?	5 ζ Crv	ds
16835	18 11.5	+3.03	-0.008	+18 04 08	-19.9	+0.08	4.91	1.4	gG6	020	+42	11 Com	d
16841	18 20.6	+3.10	+0.000	-13 17 18	-20.0	+0.01	5.36	0.6	gK3	011	+13		
16843	18 26.0	+2.91	+0.005	+58 08 32	-20.1	-0.08	5.72	0.2	gK5	008	-43	70 UMa	
16849	18 38.8	+3.24	-0.024	-60 07 30	-19.9	+0.07	3.57	0.0	K2	019	-5	ϵ Cru	
16856	19 14.8	+3.24	-0.001	-56 05 50	-20.0	-0.02	5.95		Ma		.		
16857	19 19.5	+3.34	-0.003	-67 14 41	-20.0	-0.02	5.26	-2.3	A5	003	-17v?	ζ^2 Mus	
16860	19 23.2	+3.35	-0.001	-68 01 46	-20.0	-0.07	5.82	0.3	K0	008	.	ζ^1 Mus	
16866	19 40.1	+3.02	-0.005	+25 03 04	-20.0	-0.01	6.02	0.5	A0	008	-3		
16873	19 59.6	+3.02	-0.001	+26 07 24	-20.0	-0.02	4.73	0.7	dF2	016	+0v	12 Com	ds
16877	20 06.1	+3.25	-0.005	-57 23 56	-20.0	-0.03	5.59	1.5	B8	015	+1		
16887	20 44.9	+3.13	-0.002	-24 33 48	-20.0	-0.02	5.81	0.8	gK1	010	-2	6 Crv	
16892	20 57.2	+3.16	-0.003	-35 08 08	-20.0	-0.02	5.42	0.8	B9	012	-10		
16896	21 06.1	+3.17	-0.004	-38 38 02	-20.0	-0.01	5.90		B9n		-8		
16899	21 19.7	+2.95	-0.007	+42 49 10	-19.9	+0.01	5.98		gF0n		-10v	4 CVn	s
16903	21 26.6	+4.80	-0.007	-85 52 25	-20.0	-0.01	6.19		K0		.		
16906	21 36.1	+2.91	+0.001	+51 50 20	-19.9	+0.01	4.97	1.2	sgG6	018	-13v?	5 CVn	
16910	21 48.1	+3.01	-0.001	+26 22 32	-20.0	-0.02	5.10	0.7	A2s	013	+1	13 Com	
16920	22 05.3	+3.18	-0.006	-41 06 23	-20.0	-0.08	6.16		K0		.		d
16931	22 36.8	+3.09	-0.005	-11 19 59	-20.0	-0.03	5.95		A0		.		
16934	22 40.2	+2.87	-0.002	+57 03 17	-20.0	-0.02	5.99	-0.5	gM3	005	-17	71 UMa	
16938	22 43.3	+3.16	-0.003	-34 54 34	-20.0	-0.01	5.77	0.8	B9	010	-11		
16940	22 44.3	+3.02	+0.004	+24 12 13	-20.0	-0.04	6.08	0.0	gK0	006	-5		
16948	23 23.4	+2.96	-0.006	+39 17 45	-20.0	-0.04	5.22	1.9	gG4	022	-4	6 CVn	
16951	23 43.1	+3.34	-0.005	-62 50 44	-20.0	-0.04	5.14	-0.2	B5	011	+27v		
16952	23 48.0	+3.34	-0.005	-62 49 20	-20.0	-0.03	1.58	-3.4	B1n	011	-10v	α^1 Cru	} ds
16953	23 48.7	+3.34	-0.005	-62 49 22	-20.0	-0.02	2.09	-2.9	B1n	011	-1v	α^2 Cru	
16954	23 49.0	+3.24	-0.005	-51 10 26	-20.0	-0.03	5.04	-0.9	B3n	007	+10	G Cen	
16955	23 54.2	+3.00	-0.001	+27 32 42	-19.9	-0.01	5.15	1.4	A8	018	-4	14 Com	
16957	24 09.2	+3.17	-0.064	-48 38 08	-20.0	-0.09	6.22	4.1	G0	038	.		
16959	24 13.2	+3.16	-0.001	-32 33 11	-20.0	-0.04	5.68		A0		.		
16964	24 26.9	+2.99	-0.006	+28 32 46	-20.0	-0.09	4.56	-0.2	gK3	011	+4	15 γ Com	
16965	24 29.4	+3.00	-0.000	+27 06 08	-19.9	-0.02	5.04	1.5	A2	020	+2	16 Com	
16968	24 35.9	+3.36	-0.004	-63 30 45	-20.0	-0.03	6.20		B9n		+42		
16969	24 42.6	+3.31	-0.004	-58 42 55	-19.9	-0.01	5.43	-1.6	M6	004	+71		
16985	25 12.8	+2.85	-0.003	+55 59 22	-19.9	-0.02	5.84	-0.3	gM2	006	+17	73 UMa	
16989	25 17.5	+3.08	-0.006	-04 20 20	-19.9	-0.01	6.03	1.2	dF0n	011	-12v		s
16990	25 19.6	+3.25	-0.003	-49 57 14	-19.9	-0.03	4.16	-1.6	B3n	007	+12	σ Cen	
16994	25 29.5	+3.37	-0.010	-64 03 53	-20.0	-0.04	6.28		A0		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0''	RV	Con	N
16996	12 ^h 25 ^m 37 ^s 5	+3 ^s 34	-0 ^s 004	-61°31'07"	-19 ^s 9	-0 ^s 03	6.23		K0				
17001	25 42.5	+3.19	-0.002	-38 45 53	-19.9	-0.02	5.60	0.8	B8	011	+ 5	u Cen	
17003	25 49.4	+3.27	-0.028	-56 07 42	-20.1	-0.23	6.22	2.5	K0	018			
17012	26 25.0	+3.00	-0.002	+26 11 22	-19.9	-0.02	5.38	1.1	A0p	014	- 3	17 Com	d
17020	26 57.0	+3.00	-0.002	+24 23 06	-19.9	-0.01	5.49	1.6	sgF2	017	+25	18 Com	
17023	27 07.8	+3.31	-0.002	-56 14 56	-20.0	+0.01	5.76		Ma				
17026	27 12.6	+3.01	+0.002	+21 10 22	-19.9	-0.04	5.72	1.3	A1n	013	- 6	20 Com	
17029	27 16.4	+3.10	-0.015	-16 14 14	-20.0	-0.14	3.11	0.0	A0n	024	+ 9	7 δ Crv	d
17030	27 16.7	+3.21	+0.000	-41 27 34	-19.9	-0.03	5.90		Mb				
17038	27 37.7	+2.80	-0.008	+58 40 50	-19.8	+0.08	5.44	1.8	A5	019	+ 7	74 UMa	
17039	27 40.1	+3.14	-0.002	-23 25 13	-19.9	-0.01	5.87	-2.4	gM0	006	-11		
17040	27 41.3	+2.84	-0.031	+51 48 40	-19.9	+0.02	6.25	3.8	dF6	032	+19	7 CVn	
17042	27 44.3	+2.81	+0.004	+59 02 38	-19.9	-0.03	6.22		G8		-16	75 UMa	
17046	27 55.8	+2.63	-0.012	+69 28 41	-19.9	-0.06	5.25	-0.5	gM4	007	-13v	4 Dra	s
17052	28 22.7	+3.33	+0.003	-56 50 01	-20.2	-0.27	1.61	-2.4	M4	015	+21	γ Cru	d
17053	28 27.8	+2.85	+0.002	+53 21 00	-19.7	+0.17	6.23	3.9	dF7	035	-21		
17056	28 30.8	+3.00	-0.001	+24 50 36	-19.9	-0.02	5.39	1.3	A3sp	015	+ 0	21 UU Com	v
17063	28 49.9	+3.05	-0.002	+07 52 48	-19.9	+0.00	6.16		K5		-17		
17065	28 51.9	+3.35	-0.002	-59 08 53	-19.9	-0.02	5.44	-0.7	cG2p	006	-20v		s
17072	29 04.9	+3.40	-0.009	-63 13 49	-19.9	-0.01	6.13		A5				
17075	29 07.1	+3.63	+0.011	-72 43 31	-19.9	-0.04	5.96		K0				
17086	29 27.2	+3.59	-0.009	-71 51 25	-19.9	-0.01	4.04	-0.6	B5n	012	+14	γ Mus	
17087	29 29.4	+3.09	-0.030	-15 55 10	-19.9	-0.07	4.42	3.1	dF2	055	- 4v	8 η Crv	s
17095	30 00.5	+3.11	-0.010	-13 34 57	-19.9	-0.06	5.70	1.3	dA9n	013	- 1		
17108	30 45.4	+3.14	-0.001	-19 30 59	-19.9	-0.01	6.15		A5				
17113	30 58.4	+3.11	-0.002	-12 33 19	-19.8	+0.05	5.76	0.8	gG8	010	-16		
17117	31 04.8	+2.99	-0.001	+24 33 31	-19.9	-0.01	6.14	1.5	cA4s	012	+ 1	22 Com	
17121	31 11.3	+2.95	+0.001	+33 31 25	-19.9	-0.04	5.43	1.6	sgG7	017	-20		
17122	31 11.7	+3.10	-0.006	-09 10 35	-19.9	0.00	5.41	1.1	B9n	014	-11	21 q Vir	
17126	31 21.6	+2.56	-0.011	+70 03 49	-19.8	+0.01	3.88	-0.9	B5e	011	-11v	5 κ Dra	s
17127	31 22.3	+2.85	-0.063	+41 37 44	-19.6	+0.28	4.32	4.5	dG0	108	+ 7	8 β CVn	
17133	31 45.4	+3.15	+0.000	-23 07 14	-19.9	-0.06	2.84	-0.8	gG4	019	- 8	9 β Crv	
17137	31 57.2	+3.52	-0.004	-67 28 54	-19.9	-0.02	var		Mb			BO Mus	
17139	31 59.4	+3.25	-0.008	-44 23 41	-20.1	-0.22	5.86	2.7	G5	023			d
17142	32 21.6	+2.99	-0.005	+22 54 15	-19.8	+0.01	4.78	-0.4	A0	009	-16v	23 Com	
17147	32 37.3	+3.01	-0.000	+18 39 07	-19.8	+0.02	5.18	0.6	gG9+A	012	+ 4v	24 Com	ds
17148	32 37.7	+2.54	-0.006	+70 17 50	-19.8	-0.00	5.18	0.2	gK2	010	+ 5v	6 Dra	
17150	32 38.3	+3.00	+0.001	+22 09 25	-19.9	-0.03	6.06		gK2		-14		
17158	33 03.6	+3.23	-0.010	-40 44 48	-19.8	-0.01	5.23	1.6	A5	019	-11		
17164	33 19.2	+3.23	-0.003	-39 35 39	-19.9	-0.04	5.92		A0				
17165	33 21.1	+3.15	+0.001	-20 15 05	-19.9	-0.04	6.12		dF0n		- 2		
17178	34 07.2	+2.73	-0.003	+59 45 43	-19.8	-0.02	var		gM4ev		-91	T UMa	
17179	34 10.8	+3.58	-0.006	-68 51 37	-19.8	-0.02	2.94	-2.4	B5n	009	+18	α Mus	
17180	34 12.7	+3.09	-0.002	-05 33 24	-19.8	-0.02	5.90	1.3	A0n	012	- 6	25 f Vir	
17183	34 27.9	+3.01	-0.003	+17 21 53	-19.8	-0.02	5.78	0.3	gK5	008	- 8	25 Com	
17194	34 57.4	+3.28	-0.019	-48 15 59	-19.8	-0.02	4.02	0.6	A2	021	+ 5	τ Cen	
17198	35 02.8	+3.18	+0.005	-26 51 46	-19.9	-0.10	5.44	3.0	dF2	033	- 1		d
17203	35 31.4	+3.06	-0.002	+03 33 26	-19.8	-0.02	6.25	1.0	A0	009	0		
17209	35 49.3	+3.06	-0.005	+02 07 46	-19.8	-0.03	6.02	0.2	gM3	007	-16		
17212	35 57.7	+3.04	-0.002	+07 15 47	-19.8	-0.01	var	var	gM6ev	010	-25	R Vir	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
17216	12 ^h 36 ^m 07 ^s .7	+3 ^h 13	-0 ^m 008	-17°58'33"	-19 ^h 8	+0 ^m 01	6.08		dA6n		-13		
17223	36 23.5	+3.19	-0.003	-30 08 52	-19.8	-0.02	6.02	1.0	K0	010	.		
17225	36 38.1	+2.98	-0.006	+21 20 14	-19.8	-0.02	5.51	0.0	gG8	008	-21v	26 Com	s
17227	36 39.8	+3.10	-0.005	-07 43 15	-19.8	-0.03	4.78	0.5	gK3	014	-20	26 χ Vir	
17236	37 09.6	+3.25	-0.005	-39 42 45	-19.8	-0.04	4.79	0.5	B8p	014	+15v	1 Cen	
17257	38 37.5	+3.30	-0.008	-45 52 20	-19.7	+0.04	5.84		K0		.		
17259	38 39.9	+3.12	-0.008	-12 44 23	-19.7	+0.01	6.08	1.6	dF1	013	-14v		d s
17260	38 40.3	+3.12	-0.009	-12 44 27	-19.8	+0.00	5.98	1.5	dF6	013	-11v		d s
17262	38 44.9	+3.31	-0.020	-48 41 08	-19.8	-0.02	2.38	-0.7	A0	025	- 8	γ Cen	d
17267	39 00.4	+3.67	+0.001	-69 08 01	-19.8	-0.01	var	var	G2v	0011	.	R Mus	
17268	39 03.0	+3.45	-0.003	-59 24 42	-19.8	-0.01	5.02	-0.2	B8e	009	+12		
17270	39 07.5	+3.04	-0.038	-01 10 32	-19.7	+0.00	2.91	2.7	dF0+dF0	092	-20	29 γ Vir	d
17273	39 12.0	+3.14	-0.015	-19 29 06	-19.7	+0.02	6.01		dF2n		- 3		
17276	39 21.2	+3.04	+0.006	+10 30 39	-19.8	-0.10	4.95	0.5	B9n	013	+ 2v	30 ρ Vir	
17278	39 23.3	+2.62	-0.005	+62 59 14	-19.8	-0.02	5.92	0.7	A0	009	- 4	76 UMa	
17279	39 25.1	+3.04	-0.005	+07 04 51	-19.8	-0.02	5.49	0.3	B9n	009	+ 4	31d ¹ Vir	d
17282	39 48.7	+3.32	-0.013	-48 32 20	-19.8	-0.04	4.65	0.4	K1	014	-12	w Cen	
17286	39 53.2	+3.52	-0.002	-62 47 06	-19.8	-0.03	6.00		B1ne		v		
17288	39 58.5	+3.41	-0.005	-55 40 23	-19.8	-0.03	6.23	1.2	B9n	010	+37v?		
17294	40 17.7	+3.41	-0.005	-55 54 08	-19.8	-0.02	6.25	0.8	B8n	008	+10		
17309	41 03.8	+3.08	+0.003	-01 18 09	-19.8	-0.08	6.08	2.8	sgG4	022	+ 1		
17315	41 20.2	+3.20	-0.003	-28 03 00	-19.8	-0.05	5.73	0.2	gK4	008	+ 7		
17337	42 37.7	+2.84	-0.031	+39 33 01	-19.6	+0.13	5.97	5.0	dF9	064	+81	10 CVn	
17339	42 40.5	+3.53	+0.014	-60 42 26	-19.8	-0.08	4.68	1.8	G8	026	+ 9	ϵ Cru	ds
17342	42 47.1	+2.82	+0.000	+45 42 48	-19.7	+0.01	var		N3		+12	Y CVn	
17346	43 05.4	+3.03	-0.007	+07 56 47	-19.7	-0.00	5.24	1.7	A6n	020	- 9v	32d ³ Vir	s
17348	43 11.5	+3.68	-0.005	-67 50 05	-19.7	-0.03	3.26	-1.3	B3	012	+42v	β Mus	d
17352	43 29.6	+3.45	-0.005	-56 12 57	-19.7	-0.04	4.86	-2.4	B5s	0038	+17v?		d
17355	43 50.1	+3.05	+0.019	+09 49 08	-20.1	-0.45	5.86	2.2	sgK1	019	+51	33 Vir	
17360	44 03.7	+3.24	-0.001	-33 02 32	-19.7	-0.04	5.98		K0		.		
17363	44 08.9	+3.00	+0.001	+16 51 01	-19.7	0.00	5.33	0.3	gK4	010	+53	27 Com	
17371	44 42.6	+3.02	+0.003	+12 13 52	-19.7	-0.02	6.05	1.9	A3n	015	- 1	34 Vir	
17374	44 47.1	+3.51	-0.005	-59 24 57	-19.7	-0.03	1.50	-4.5	B1s	0066	+20v	β Cru	v s
17377	45 11.3	+2.56	+0.002	+63 03 13	-19.7	-0.01	5.83	1.7	A4n	015	-14		
17387	45 32.2	+2.45	+0.001	+67 03 47	-19.7	-0.01	5.67	-0.1	gK5	007	+ 8	7 Dra	
17391	45 46.0	+3.20	-0.011	-27 19 27	-19.7	-0.07	5.80		G5		.		
17401	46 23.9	+3.01	+0.002	+14 23 42	-19.7	-0.03	5.64	0.6	A0n	010	- 7	29 Com	
17402	46 24.0	+2.76	-0.007	+48 44 20	-19.6	+0.01	6.20	1.8	A8	013	- 2	11 CVn	
17403	46 28.7	+3.89	+0.002	-71 42 50	-19.6	-0.02	5.60	-0.5	K0	006	.		
17404	46 29.3	+2.61	+0.014	+60 35 32	-19.6	-0.00	5.87	3.8	dF6	030	-12		
17410	46 51.4	+2.92	-0.007	+27 49 27	-19.6	+0.02	5.83	0.3	A0n	008	+ 1	30 Com	d
17418	47 13.6	+3.55	-0.000	-60 07 43	-19.6	-0.03	5.96		A2		.		
17430	47 48.3	+2.85	-0.008	+37 47 19	-19.6	+0.02	5.86	1.2	A0n	012	-11		
17433	47 58.0	+3.26	-0.003	-33 43 38	-19.6	-0.03	5.01	0.9	A0	015	+18	p Cen	
17434	48 05.5	+3.43	-0.003	-52 30 55	-19.6	-0.03	5.90		A3		.		
17437	48 19.0	+3.56	-0.003	-60 03 28	-19.6	-0.00	5.94		cA2p		-22		
17440	48 38.8	+0.51	-0.016	+83 41 23	-19.6	+0.02	5.81	0.3	A0	008	- 0v		d s
17443	48 46.1	+0.51	-0.018	+83 41 04	-19.6	+0.02	5.28	0.3	A2	010	+ 3		
17449	49 04.1	+3.05	-0.002	+03 19 41	-19.6	+0.01	6.12	0.3	gK4	007	+ 3	37 Vir	
17452	49 11.2	+3.30	-0.004	-39 24 31	-19.6	-0.04	6.14	0.7	B8	008	+ 5		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
17455	12 ^b 49 ^m 15 ^s 9	+2 ^o 92	-0 ^o 001	+27 ^o 48'44"	-19 ^o 6	-0 ^o 02	5.07	1.2	dF5	017	-1	31 Com	
17456	49 17.2	+3.21	-0.008	-26 28 02	-19.5	+0.03	6.12		A0		.		
17460	49 30.7	+6.31	+0.057	-84 51 09	-19.6	+0.02	5.38		K0		+53	Oct	d
17469	49 58.3	+2.99	-0.003	+16 23 38	-19.6	-0.03	6.25	1.5	A2	011	-28		
17472	50 09.7	+3.47	-0.014	-54 40 52	-19.6	0.00	5.92	-1.1	K0	004	.		
17473	50 16.4	+3.39	-0.009	-48 40 18	-19.6	-0.03	4.35	0.2	K5	015	-2v?	e Cen	
17475	50 22.0	+3.58	-0.001	-60 03 26	-19.6	-0.01	5.84		B9p		-15		
17487	50 37.4	+3.07	-0.017	-03 16 54	-19.6	-0.01	6.15	3.7	dF6	032	-7	38 Vir	
17489	50 39.5	+3.32	+0.006	-39 54 27	-19.6	-0.03	4.34	2.8	A5	050	-2	n Cen	
17492	50 48.9	+3.59	+0.001	-60 06 19	-19.6	-0.03	6.11		B2s		-1		
17493	50 50.1	+2.95	-0.003	+21 30 59	-19.6	-0.03	5.10	1.2	gG8	017	-6	35 Com	d
17512	51 38.4	+3.53	-0.004	-56 54 24	-19.6	-0.02	4.26	-2.4	B3	0048	+12	μ^1 Cru	} d
17513	51 39.6	+3.53	-0.004	-56 53 50	-19.5	-0.01	5.46	-1.2	B3ne	0048	+19	μ^2 Cru	
17514	51 40.1	+3.56	-0.004	-58 52 32	-19.6	-0.02	4.84	-0.9	B3n	007	+16	λ Cru	
17515	51 42.3	+3.12	-0.010	-11 22 40	-19.5	+0.01	5.96		A0		.		
17516	51 45.0	+3.12	-0.002	-09 16 04	-19.6	-0.02	4.91	-0.3	gM3	009	+18	40 ψ Vir	} sv
17518	51 50.1	+2.64	+0.014	+56 13 51	-19.5	-0.01	1.68	-0.2	A0p	042	-9v	77 ϵ UMa	
17523	52 10.8	+3.34	-0.021	-43 52 41	-19.8	-0.24	6.04	4.2	G0	042	.		
17529	52 31.4	+3.35	-0.004	-42 38 42	-19.5	-0.02	5.55		K5		.		
17533	52 39.7	+2.74	-0.002	+47 28 03	-19.5	-0.01	var	var	cM8	003	-17	TUC Vn	
17540	52 59.4	+3.53	-0.003	-56 33 55	-19.5	-0.02	5.58	-4.7	O9	0013	+30		
17543	53 05.0	+3.02	-0.031	+03 40 07	-19.6	-0.06	3.66	-0.1	gM3	018	-18	43 δ Vir	
17545	53 09.2	+4.01	-0.004	-71 54 53	-19.5	-0.02	5.84		K0		.		
17548	53 15.3	+3.16	-0.001	-15 03 24	-19.5	-0.01	6.10		A0		.		
17554	53 29.5	+2.39	-0.001	+65 42 33	-19.5	-0.04	5.27	2.4	A5n	027	+9	8 Dra	
17556	53 40.2	+2.81	-0.020	+38 35 04	-19.4	+0.06	5.39	2.4	A0p	025	-3v	12 α^1 CVn	} ds
17557	53 41.5	+2.81	-0.020	+38 35 17	-19.4	+0.05	2.90	-0.1	A0p	025	-3	12 α^2 CVn	
17567	54 06.4	+2.63	-0.009	+54 22 11	-19.5	-0.01	6.01	1.6	A2	013	0		
17569	54 10.9	+3.46	-0.003	-50 55 42	-19.5	-0.02	5.29	0.9	B8	013	+25	H Cen	
17574	54 28.1	+2.36	-0.001	+66 15 52	-19.5	-0.04	var		N4p		.	RY Dra	
17582	54 51.0	+2.74	-0.002	+46 26 51	-19.5	-0.06	6.22		gG5		+7v		
17616	56 27.1	+2.97	-0.002	+17 40 42	-19.4	+0.02	4.96		gM0		-2	36 Com	
17631	57 04.8	+3.09	-0.002	-03 32 34	-19.4	+0.00	5.87		A0		.	44 k Vir	
17637	57 18.7	+1.77	+0.002	+75 44 30	-19.4	-0.01	6.19		K0		-15		
17645	57 48.0	+3.29	-0.006	-33 14 06	-19.5	-0.08	6.08		F2		.		
17647	57 53.0	+2.87	-0.002	+31 03 15	-19.4	-0.01	5.08	0.3	gG9	011	-13	37 Com	d
17649	58 01.3	+3.09	-0.002	-03 06 01	-19.4	-0.04	6.12	0.9	gK2	009	+23	46 Vir	d
17651	58 02.1	+2.27	-0.024	+66 52 00	-19.4	-0.02	5.50	-0.6	gG9	006	-30	9 Dra	
17654	58 11.6	+2.94	-0.016	+18 38 28	-19.3	+0.05	6.12	3.2	dF4	026	+1		
17664	58 35.3	+2.57	+0.014	+56 38 08	-19.4	-0.02	4.89	2.6	A6n	035	-10	78 UMa	d
17667	58 41.3	+2.97	-0.000	+17 23 32	-19.4	-0.03	6.01	0.5	gG7	008	-6	38 Com	
17672	58 48.0	+4.13	-0.057	-71 16 47	-19.4	-0.04	3.63	0.2	K2	021	+37v	δ Mus	s
17685	59 39.4	+4.08	-0.003	-71 12 26	-19.4	-0.03	5.96		B3ne		-35		
17687	59 41.2	+2.99	-0.019	+11 13 39	-19.4	+0.02	2.95	0.5	gG6	035	-14	47 ϵ Vir	
17690	59 50.0	+2.34	-0.027	+63 52 43	-19.4	+0.02	6.02	3.8	dF4	036	-11		
17704	13 00 38.9	+3.47	-0.006	-49 15 32	-19.4	-0.02	5.02	1.0	A0	016	-10	ξ^1 Cen	
17711	01 05.1	+3.21	+0.010	-20 18 55	-19.3	+0.01	5.68	3.4	dF8	035	+33		d
17729	01 58.6	+3.38	-0.003	-40 55 43	-19.4	-0.04	6.19		Mb		.		
17750	03 22.1	+3.48	-0.004	-48 11 45	-19.3	-0.03	4.96	-2.1	B3n	005	+14	f Cen	
17751	03 24.3	+2.80	-0.002	+36 03 57	-19.3	+0.01	5.11	-0.1	B9n	009	-13	14 CVn	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
17758	13 ^h 03 ^m 37 ^s .5	+2 ^s .70	-0 ^s .002	+45°32'08"	-19 ^s .3	+0 ^s .02	5.72	0.5	gK2	009	-20v?		d
17763	03 44.6	+3.40	+0.004	-41 19 16	-19.3	-0.03	5.74		K0		.		
17767	03 55.0	+2.92	-0.006	+21 25 17	-19.3	-0.04	6.04	3.3	dF1	028	+ 1	39 Com	
17769	03 56.6	+2.92	+0.002	+22 53 02	-19.3	-0.06	5.90	-0.6	sgM5	005	- 5	40 Com	
17773	03 58.8	+3.50	-0.003	-49 38 20	-19.3	-0.02	4.40	-3.2	B3	0032	+14v	ξ^2 Cen	s
17774	04 06.8	+3.34	+0.003	-35 35 37	-19.3	-0.09	5.61		A0		+16		
17778	04 18.2	+3.70	-0.003	-59 35 36	-19.3	-0.02	6.06		B9n		+ 4		d
17783	04 39.2	+3.57	-0.005	-53 11 34	-19.3	-0.04	5.96	1.4	B9	012	.		
17787	04 46.8	+2.88	+0.002	+27 53 33	-19.3	-0.08	4.90	-0.3	gK5	009	-16	41 Com	
17788	04 52.1	+3.87	-0.001	-65 02 22	-19.3	-0.02	5.64	-6.4	B0e	0052	-28	θ Mus	d
17794	04 16.4	+3.14	+0.001	-10 28 25	-19.2	-0.01	5.26	0.7	gK3	012	- 9	49 Vir	
17805	05 55.8	+3.13	-0.002	-08 43 01	-19.3	-0.07	5.70	0.7	gK3	010	+16v?	g Vir	
17813	06 21.3	+3.23	-0.002	-22 51 04	-19.3	-0.05	5.11	-0.1	gK1	009	-19	45 ψ Hya	
17817	06 42.1	+3.00	+0.001	+10 17 19	-19.2	-0.01	5.95	0.7	gK0	009	- 0		
17822	07 08.0	+3.14	-0.001	-10 03 47	-19.2	-0.02	6.20	0.1	gK5	006	- 7	50 Vir	
17825	07 20.3	+2.95	-0.005	+17 06 53	-19.2	-0.02	6.18	-1.4	gK6	003	-17		
17826	07 20.5	+2.77	-0.009	+37 41 20	-19.2	-0.00	6.14		gK4		-19		
17828	07 21.5	+3.11	-0.002	-05 16 21	-19.2	-0.04	4.44	0.5	A2s	016	- 3v	51 θ Vir	d
17829	07 24.1	+2.76	-0.001	+38 47 59	-19.2	-0.00	6.22	-0.8	B9	004	.	15 CVn	
17833	07 33.3	+2.92	-0.030	+17 47 36	-19.0	+0.13	5.22	4.0	dF4	057	-18	42 α Com	d
17835	07 45.6	+2.75	-0.006	+38 45 51	-19.1	+0.04	6.04		F0		0v?	17 CVn	d
17843	08 17.4	+3.42	-0.008	-41 58 01	-19.2	-0.03	5.82		F5		.		
17846	08 22.8	+4.14	+0.009	-69 40 36	-19.2	-0.01	6.13		F2		.		
17850	08 31.1	+3.43	-0.011	-43 06 10	-19.2	-0.04	5.32	0.1	G8	009	- 9		
17866	09 09.2	+3.75	-0.006	-59 39 19	-19.2	-0.04	4.76	0.6	B8	015	+12v		ds
17869	09 15.4	+3.35	-0.033	-37 32 19	-19.1	+0.04	4.89	3.2	dG3	046	-15		
17870	09 23.6	+3.19	+0.007	-15 55 46	-19.4	-0.29	5.09	4.0	dF5	060	+14	53 Vir	
17872	09 28.9	+3.97	+0.005	-65 57 43	-19.1	-0.01	6.03		A0		.		
17874	09 32.5	+2.80	-0.060	+28 07 52	-18.3	+0.88	4.32	4.8	dG0	123	+ 6	43 β Com	
17882	09 58.4	+3.44	-0.002	-42 26 05	-19.1	-0.00	6.12		K0		.		
17884	10 03.6	+2.99	-0.004	+11 49 18	-19.1	-0.03	5.82		K5		+25		
17886	10 03.9	+5.00	+0.000	-78 10 58	-19.1	-0.02	5.77		G5		.		
17890	10 24.7	+3.56	-0.002	-50 26 06	-19.1	-0.04	6.04		A0		.		d
17908	11 04.5	+3.73	-0.010	-58 25 09	-19.1	-0.02	5.96		K2		- 2		
17909	11 05.1	+3.44	-0.016	-42 52 29	-19.0	+0.02	6.14		K0		.		
17910	11 08.3	+3.71	-0.034	-58 50 12	-19.3	-0.17	5.04	3.5	F4	050	-65		d
17916	11 27.1	+2.72	-0.004	+40 25 01	-19.1	+0.01	5.05	-0.7	gG8	007	-21		
17918	11 30.0	+3.21	-0.009	-19 40 07	-18.9	+0.16	5.63	4.7	dG6	066	-45	55 Vir	
17926	11 46.0	+3.53	-0.014	-48 41 29	-19.2	-0.09	5.97	1.7	K0	014	.		
17927	11 50.0	+4.07	-0.006	-67 37 49	-19.1	-0.02	4.95	1.0	B8	016	+ 5v?	η Mus	
17933	12 01.6	+2.99	+0.005	+11 35 48	-19.1	-0.06	5.81	0.0	gM0	007	+12		
17951	13 16.2	+3.24	+0.022	-19 40 40	-19.1	-0.12	5.32	3.0	sgK1	034	+34	57 Vir	
17953	13 17.2	+2.70	-0.010	+41 07 07	-19.0	+0.01	5.68	2.1	A5n	019	-18	19 CVn	
17955	13 25.8	+3.96	-0.015	-64 52 26	-19.1	-0.06	6.12		F5		.		
17959	13 49.4	+4.05	-0.002	-66 31 12	-19.0	-0.03	4.78	-3.7	K6	002	-10		
17968	14 06.1	+3.33	+0.002	-31 14 32	-19.1	-0.05	5.36	0.6	K1	011	+13v	r Cen	
17975	14 17.5	+2.98	-0.023	+09 41 05	-18.8	+0.18	5.22	4.6	dF8	070	-26	59 e Vir	
17978	14 19.3	+3.48	-0.001	-43 42 58	-19.0	-0.02	5.87		A3p		.		
17988	14 47.2	+2.97	+0.000	+13 56 18	-19.0	+0.03	5.45	0.4	gK5	010	-26		
17991	14 50.1	+1.97	-0.003	+68 40 16	-19.0	+0.01	6.11	0.0	B9n	006	-23		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
17995	13 ^h 15 ^m 04 ^s .7	+3.03	-0.001	+05°43'58"	-19.0	+0.01	5.01	-0.2	gM2	009	-27	60 σ Vir	
18000	15 18.2	+2.69	-0.011	+40 50 07	-19.0	+0.01	4.66	0.4	dF5	014	+ 7	20 CVn	
18004	15 37.4	+4.38	-0.004	-71 46 20	-19.0	-0.07	6.07		K2		.		
18007	15 47.1	+3.14	-0.075	-18 02 02	-20.0	-1.08	4.80	5.0	dG6	116	- 8	61 Vir	
18009	16 07.1	+2.55	-0.003	+49 56 40	-18.9	+0.01	5.13	0.9	A0	014	- 3	21 CVn	
18010	16 08.9	+2.78	+0.003	+34 21 38	-19.0	-0.00	5.98		gK5		-20		
18012	16 11.9	+3.26	+0.005	-22 54 30	-19.0	-0.05	3.33	0.3	gG6	025	- 5	46 γ Hya	
18023	16 46.4	+2.76	-0.002	+35 23 24	-18.9	+0.00	5.96	1.8	A5	015	- 2		
18034	17 34.6	+3.65	-0.004	-52 29 09	-18.9	-0.03	5.70		B8		- 6		
18036	17 41.4	+3.72	-0.002	-55 32 20	-18.9	-0.01	6.20	-6.2	B0	0007	- 2		
18039	17 46.7	+3.37	-0.028	-36 26 57	-19.0	-0.09	2.91	1.4	A2	049	+ 0	ι Cen	
18044	18 00.1	+3.54	-0.008	-46 37 08	-18.9	-0.01	5.80		K0		.		
18048	18 04.6	+2.69	-0.005	+40 24 45	-18.9	-0.01	5.69	0.5	gK1	009	-21	23 CVn	
18050	18 09.2	+3.04	-0.004	+03 12 14	-18.9	-0.04	6.23	0.1	A0	006	+ 4		d
18066	18 48.3	+3.23	-0.005	-19 13 39	-18.9	+0.00	6.18		A0		.		
18078	19 07.9	+4.45	-0.003	-71 53 07	-18.9	-0.03	6.12		B5		+33		d
18079	19 09.0	+3.05	-0.004	+02 20 58	-18.9	-0.06	5.68	1.2	A0	013	- 5		
18081	19 12.9	+3.65	-0.001	-51 55 18	-18.9	-0.01	6.10	-3.9	B1s	001	-15		
18087	19 23.0	+3.88	-0.004	-60 43 37	-18.9	-0.02	4.62	-0.6	B5n	009	+26	J Cen	d
18091	19 38.3	+3.03	-0.004	+05 24 59	-18.9	-0.04	5.87	1.1	A5s	011	-10	64 Vir	
18104	20 20.1	+3.21	-0.003	-17 28 27	-18.9	-0.04	5.45	-4.5	gG5	001	-27	63 Vir	
18107	20 37.5	+4.03	+0.005	-64 16 30	-18.9	-0.04	4.50		G4		+12	m Cen	
18109	20 43.2	+3.11	-0.001	-04 39 48	-18.8	-0.02	5.94	0.5	gK3	008	+10	65 Vir	
18116	21 07.9	+4.73	-0.026	-74 37 32	-18.9	-0.14	4.96	0.4	G7	012	+29	ι^1 Mus	
18132	21 51.7	+4.02	-0.025	-64 13 29	-18.8	-0.04	5.46	-1.5	F2s	004	- 2		
18133	21 55.0	+2.42	+0.014	+55 11 09	-18.8	-0.03	2.40	0.6	A2sp	042	- 9v	79 ζ UMa	} d s
18134	21 55.8	+2.41	+0.014	+55 10 56	-18.8	-0.04	3.96	2.1	A6s	042	- 9v		
18135	21 56.9	+3.12	+0.010	-04 54 12	-18.8	-0.04	5.76	3.1	dF3	030	+14v	66 Vir	
18141	22 09.5	+4.38	-0.011	-70 22 03	-18.8	-0.02	5.84		A0p		.		
18144	22 33.3	+3.16	-0.003	-10 54 04	-18.8	-0.04	1.21	-2.9	B2v	015	+ 1v	67 α Vir	sE
18147	22 43.6	+2.86	-0.001	+24 06 52	-18.8	-0.02	5.75	1.1	A3s	012	- 1v?		
18153	23 13.2	+3.48	+0.016	-39 29 41	-18.8	-0.06	5.25	1.3	gK1p	016	+68		
18155	23 13.5	+2.40	+0.014	+55 14 53	-18.8	-0.02	4.02	1.9	A1n	038	- 8v	80 μ UMa	s
18163	23 37.6	+3.07	-0.008	-00 55 59	-18.7	-0.00	6.01		A3		.		
18166	24 01.0	+3.49	-0.001	-41 14 19	-18.7	-0.03	5.76		K2		.		
18168	24 04.4	+3.17	-0.009	-12 26 53	-18.7	-0.02	5.59	0.1	gK5	008	-29	68 i Vir	
18171	24 08.0	+2.57	+0.002	+46 17 15	-18.7	-0.03	5.89	0.9	gK0	010	+ 4		
18181	24 46.9	+3.20	-0.008	-15 42 54	-18.7	+0.02	4.89	-0.6	sgK3	022	-14	69 Vir	
18183	24 51.4	+1.53	+0.005	+72 39 03	-18.7	-0.01	6.07	-0.4	gM1	005	-48		
18189	25 06.9	+4.35	-0.007	-69 22 08	-18.7	-0.06	6.24		B9		.		
18206	25 42.3	+4.08	-0.012	-64 25 02	-18.7	-0.02	6.24		A0		.		
18212	25 59.0	+2.93	-0.016	+14 02 43	-19.2	-0.58	5.16	3.8	dG5	045	+ 4	70 Vir	
18213	25 59.1	+2.41	-0.013	+53 00 16	-18.7	-0.02	6.16	2.5	F0n	019	- 7		
18220	26 20.6	+3.68	-0.001	-50 54 25	-18.7	-0.03	5.31	-0.5	A2	007	- 2	K Cen	
18223	26 30.0	+0.52	-0.047	+78 54 07	-18.6	+0.03	5.94	1.1	gG4	011	+15		
18226	26 37.1	+2.20	-0.011	+60 12 13	-18.6	+0.04	5.41	1.4	A0	016	- 7		d
18234	26 44.3	+2.97	-0.004	+11 04 36	-18.7	-0.05	5.78	0.5	gG9	009	- 1v?	71 Vir	
18239	26 58.5	+3.28	-0.004	-23 01 25	-18.6	+0.01	var		gM7e		-10	R Hya	d
18251	27 49.0	+3.13	+0.003	-06 12 46	-18.6	+0.01	6.07		A5		- 9v	72 β Vir	ds
18254	28 08.1	+3.48	-0.001	-39 08 59	-18.6	-0.02	3.96	-2.1	K0	006	- 3	d Cen	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
18283	13 ^h 29 ^m 05 ^s .7	+2 ^h 60	-0 ^m 008	+42 ^o 21'46"	-18 ^h 5	+0 ^m 02	6.15	0.7	gK2	008	-20		
18287	29 20.7	+3.24	-0.007	-18 28 19	-18.6	-0.02	5.93		A3		.	73 Vir	d
18288	29 21.7	+3.12	-0.007	-05 59 54	-18.6	-0.05	4.83	0.6	gM3	014	+18	74 ^h Vir	
18295	29 48.4	+3.34	-0.008	-28 26 09	-18.6	-0.04	5.67		A0		.		
18305	30 11.1	+3.21	-0.005	-15 06 24	-18.5	-0.01	5.65	0.2	gK2	008	-40	75 Vir	
18309	30 19.8	+3.16	-0.002	-09 54 29	-18.5	-0.04	5.43	1.4	gG5	016	-1	76 ^h Vir	
18312	30 23.5	+3.14	+0.003	-06 56 19	-18.5	-0.01	var		gM7 ^{ev}		+10	S Vir	
18313	30 26.0	+2.84	+0.004	+24 36 20	-18.7	-0.21	6.18	0.1	gG8	006	+6		d
18335	31 35.8	+3.04	+0.003	+03 54 54	-18.5	-0.03	4.93	0.9	A2p	016	-12	78 ^o Vir	
18348	32 00.7	+3.19	-0.003	-12 57 31	-18.5	-0.02	5.81	0.3	A1n	008	-20	y Vir	d
18351	32 08.6	+3.06	-0.019	-00 20 28	-18.4	+0.03	3.44	1.0	A2	033	-13	79 ζ Vir	
18352	32 09.3	+2.65	+0.001	+39 02 40	-18.4	+0.02	6.21	1.6	A3n	012	-9		d
18353	32 12.1	+2.31	-0.002	+55 36 15	-18.5	-0.01	5.48	0.9	A0p	012	-9	81 UMa	
18356	32 24.8	+2.45	-0.013	+49 16 16	-18.4	+0.02	4.63	1.7	A3n	026	-12v	24 CVn	
18357	32 25.5	+9.71	-0.072	-85 31 54	-18.5	-0.02	5.65		A2		-9v	\approx Oct	s
18359	32 33.9	+2.68	+0.007	+37 26 16	-18.4	-0.02	4.96	1.8	dF2	023	+6v		s
18366	32 55.0	+3.12	+0.001	-05 08 32	-18.3	+0.08	5.75	1.0	gG6	011	-8	80 Vir	
18384	33 47.6	+4.07	+0.019	-61 26 09	-18.5	-0.12	5.59	3.2	F5	033	+44		d
18389	34 01.6	+3.33	-0.007	-26 14 27	-18.4	+0.01	5.49	0.9	A2	012	-10		d
18391	34 06.3	+3.58	-0.005	-43 53 18	-18.4	-0.02	5.96		K0		.		
18395	34 21.5	+3.63	-0.001	-46 10 25	-18.4	-0.04	6.04		B8		.		
18399	34 37.9	+2.82	-0.002	+24 52 04	-18.4	-0.01	5.90		gM2		-31		
18410	34 55.9	+4.55	-0.015	-70 11 26	-18.4	-0.05	5.97		K2		.		
18421	35 14.4	+2.67	-0.008	+36 32 55	-18.3	+0.02	4.92	2.0	A3n	026	-6	25 CVn	d
18428	35 32.2	+3.92	-0.000	-57 22 09	-18.3	-0.02	6.04		K0		.		d
18442	35 53.1	+3.37	-0.006	-29 18 22	-18.4	-0.08	5.84		F0		.		
18445	35 58.7	+1.44	-0.008	+71 29 47	-18.3	-0.01	5.67	0.2	gK2	008	+15		
18457	36 39.4	+4.20	-0.008	-64 19 25	-18.3	-0.02	5.78		F0		.		
18458	36 42.3	+3.80	-0.003	-53 12 47	-18.3	-0.02	2.56	-3.5	B2n	0063	+6	ϵ Cen	
18461	36 51.8	+3.53	-0.004	-39 47 52	-18.3	-0.07	5.72		K0		.		
18462	36 53.5	+3.71	-0.012	-49 41 50	-18.3	+0.00	5.62		Mb		.		
18466	37 06.6	+2.96	-0.008	+10 59 58	-18.3	-0.02	5.54	1.4	dA6n	015	-18		d
18473	37 34.5	+2.32	-0.016	+53 10 24	-18.2	+0.05	5.28	1.0	A2n	014	-18	82 UMa	
18479	37 59.0	+2.73	-0.006	+31 15 48	-18.2	+0.08	6.08		gG3		-18		s
18485	38 17.1	+2.87	-0.004	+20 12 28	-18.2	+0.02	5.65	1.7	A3s	016	-25v?	1 Boo	d
18495	38 31.7	+3.84	-0.006	-54 18 26	-18.3	-0.06	5.65	0.2	B9	008	+2	Q Cen	d
18496	38 31.7	+2.19	-0.007	+57 27 35	-18.2	+0.02	6.14	1.1	A1	010	-0		
18499	38 40.4	+2.84	-0.002	+22 44 54	-18.2	-0.03	5.80	0.6	gG9	009	+4	2 Boo	
18500	38 41.0	+3.98	-0.004	-58 32 05	-18.2	-0.02	5.53	0.7	B9n	011	-30		
18504	38 50.6	+2.27	-0.003	+54 56 03	-18.2	-0.01	4.75	0.1	gM2	012	-17	83 UMa	
18505	38 53.2	+3.44	-0.002	-33 20 42	-18.2	+0.02	var		gM0 ^{ev}		+28	T Cen	
18509	38 59.1	+3.15	-0.007	-08 27 05	-18.2	+0.03	5.16	0.2	gM2	010	-37	82 ^m Vir	
18520	39 44.5	+2.96	-0.026	+08 38 28	-18.3	-0.10	6.13	3.4	dF4	029	-11		
18526	39 56.4	+3.56	-0.006	-41 08 56	-18.2	-0.05	6.00		K0		.		
18527	39 56.5	+1.87	+0.008	+65 04 28	-18.2	-0.02	5.70	0.7	B9n	010	-5		s
18539	40 29.8	+2.67	+0.002	+35 14 25	-18.1	+0.00	5.98		gG2		-15		s
18540	40 32.8	+3.02	-0.020	+03 47 25	-18.2	-0.08	5.62	-0.1	gK3	007	-42	84 Vir	d
18546	40 40.4	+3.58	-0.003	-41 48 59	-18.1	-0.01	6.10		B8		.		d
18568	41 47.7	+3.24	+0.001	-15 55 42	-18.1	-0.01	5.71	2.0	dF9	018	+1	83 Vir	
18572	41 58.5	+2.33	-0.003	+52 18 54	-18.1	-0.01	5.82	0.8	A0	010	-12		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
18583	13 ^b 42 ^m 24 ^s .7	+0 ^h 26	-0 ^m 022	+78°18'52"	-18 ^s 0	+0 ^m 04	6.11	1.5	gG7	012	- 7		
18592	42 49.1	+3.35	-0.005	-25 51 57	-18.1	-0.02	5.78		A0		.		
18593	42 50.3	+3.41	-0.036	-32 47 30	-18.2	-0.15	4.36	2.6	dF0	045	-24v	1 Cen	s
18595	42 53.2	+3.23	-0.003	-15 31 02	-18.1	-0.03	6.15		B9n		-41v	85 Vir	
18604	43 16.2	+3.20	-0.001	-12 10 36	-18.0	0.00	5.82	0.8	gG7	010	-11	86 Vir	d
18607	43 28.6	+3.80	+0.000	-51 10 58	-18.1	-0.04	4.68	0.2	G5	013	- 6v	MCen	s
18610	43 40.2	+4.18	-0.003	-62 20 25	-18.0	-0.02	6.23		G5p		.		d
18611	43 40.8	-1.67	+0.018	+83 00 13	-18.1	-0.04	6.16	0.9	gG6	009	-50v?		
18618	44 01.0	+3.50	-0.001	-36 00 09	-18.0	-0.02	5.24	1.0	A0n	014	-10	z Cen	
18620	44 06.2	+2.55	-0.010	+41 20 20	-18.1	-0.05	5.69	1.7	A3n	016	-12v?		
18621	44 09.2	+2.60	-0.004	+38 45 12	-18.0	-0.01	6.00		gG5		-13		
18622	44 18.0	+3.78	+0.007	-50 00 02	-18.0	-0.02	6.06		A3		.		
18623	44 24.0	+2.79	-0.001	+25 57 08	-18.1	-0.06	5.91	2.2	dF3	018	+ 7v	3 Boo	s
18627	44 29.7	+3.76	-0.016	-50 04 18	-18.0	-0.03	5.50	0.3	K5	009	+30		
18630	44 34.6	+3.17	+0.000	-09 27 35	-18.0	-0.04	6.24	0.5	gK5	007	+ 7		d
18632	44 41.9	+3.26	+0.004	-17 36 37	-18.0	-0.04	5.79	-0.7	gM2	005	+64	87 Vir	
18633	44 43.8	+2.24	-0.002	+54 40 55	-18.0	-0.01	5.53	0.7	A2sp	011	- 5	84 UMa	
18636	44 50.4	+2.59	-0.012	+38 47 32	-18.0	-0.02	5.57	0.8	gG9	011	-10		
18637	44 53.1	+2.85	-0.034	+17 42 19	-18.0	+0.03	4.51	3.2	dF6	063	-16	4 τ Boo	d
18643	45 34.3	+2.36	-0.012	+49 33 44	-18.0	-0.02	1.91	-1.6	B3n	020	-11	85 η UMa	
18662	46 23.4	+2.71	-0.001	+31 26 16	-17.9	+0.03	5.81	0.6	gG7	009	-11		
18665	46 29.8	+3.60	-0.002	-41 26 22	-17.9	-0.03	3.53	-2.2	B2	007	+ 9v	ν Cen	s
18666	46 32.4	+3.48	-0.004	-34 12 07	-18.0	-0.06	4.40	3.0	sgM6	052	+41	2 g Cen	
18667	46 35.7	+3.62	-0.002	-42 13 32	-17.9	-0.02	3.32	-1.9	B2ep	009	+13	μ Cen	v
18671	46 48.5	+2.58	+0.002	+39 47 26	-17.9	-0.09	var	var	gM6ev	000	- 6	R CVn	
18674	47 03.9	+2.89	-0.007	+16 02 42	-17.9	+0.03	4.28	-0.1	gM0	013	- 6	5 ν Boo	
18676	47 09.0	+3.26	-0.007	-17 53 09	-17.9	-0.04	5.11	1.4	sgK2	018	-40	89 Vir	
18681	47 16.1	+3.40	-0.004	-28 49 59	-17.9	-0.03	6.10		B9		.		
18683	47 20.9	+2.84	+0.001	+21 30 41	-17.9	+0.01	5.06	0.8	gK5	014	- 3	6 e Boo	
18696	47 52.2	+4.67	+0.002	-69 09 15	-17.9	-0.02	5.74		K2		.		
18698	47 54.0	+3.01	+0.002	+05 44 40	-17.9	-0.02	6.25		G5		-24		
18704	48 07.9	+1.95	+0.010	+61 44 17	-18.0	-0.10	6.05		dG3		-11		
18715	48 40.6	+3.72	-0.002	-46 39 07	-17.9	-0.04	5.87		B3s		- 6v		
18720	48 50.7	+3.87	-0.005	-52 33 53	-17.9	-0.04	5.68		B8		+27	NCen	d
18724	48 55.9	+3.46	-0.003	-32 44 50	-17.9	-0.04	4.72	-1.7	B5	0055	+14	3 k Cen	d
18725	48 56.5	+3.46	-0.005	-32 44 52	-17.9	-0.03	6.17	-0.2	B8n	0055	+ 1		d
18726	48 56.9	+2.65	+0.000	+34 54 43	-17.9	-0.06	6.00	0.2	gM1	007	-40		
18731	49 05.9	+7.67	-0.004	-82 25 13	-17.8	-0.03	5.76		K2		.		
18733	49 08.3	+3.44	-0.004	-31 22 20	-17.9	-0.06	6.20	2.3	F8	017	.		d
18741	49 35.2	+2.65	-0.002	+34 41 28	-17.8	-0.04	4.96	0.7	gM2	014	-44		
18746	49 51.3	+2.94	+0.002	+12 24 41	-17.8	-0.01	5.99	1.2	A1n	011	-16		
18750	49 58.3	+1.75	0.000	+64 58 11	-17.8	-0.01	4.77	-0.2	gM3	010	-11	10 i Dra	
18755	50 19.4	+3.45	-0.001	-31 40 54	-17.8	-0.02	4.76	-1.3	B7	006	+ 5v	4 h Cen	ds
18757	50 27.4	+3.90	-0.003	-53 07 39	-17.8	-0.04	6.06		B7		+ 8		
18761	50 36.9	+3.51	-0.007	-35 25 05	-17.8	-0.02	5.64	0.4	F2	009	- 8v	y Cen	d
18764	50 49.5	+2.87	-0.003	+18 10 42	-17.7	-0.00	5.71	0.5	gG4	009	-10	7 Boo	
18765	50 49.6	+3.73	-0.004	-46 52 57	-17.8	-0.01	5.94		B3e		-21		d
18769	50 54.2	+2.72	-0.009	+28 53 36	-17.7	+0.02	5.84	2.1	dA6	018	-12		
18771	50 59.0	+4.56	-0.003	-67 24 24	-17.8	-0.04	5.68	-0.4	K0	006	.		
18795	51 57.8	+3.87	-0.003	-51 54 57	-17.7	-0.03	5.84	1.2	B8n	012	+ 8		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
18796	13 ^h 52 ^m 00 ^s .7	+2 ^s 21	-0 ^s 003	+53°58'26"	-17 ["] 7	-0 ["] 01	5.65	1.0	A0	012	-21	86 UMa	
18800	52 07.9	+3.08	-0.006	-01 15 29	-17.7	-0.03	5.30	1.0	gK2	014	-7v?	90 p Vir	
18805	52 18.2	+2.86	-0.004	+18 38 51	-18.0	-0.36	2.80	2.8	dG0	103	-0v	8 η Boo	s
18809	52 24.5	+3.74	-0.006	-47 02 35	-17.7	-0.05	3.06	-1.4	B3p	013	+6v	ζ Cen	s
18826	53 12.8	+3.72	-0.016	-46 20 50	-17.7	-0.08	5.88	-0.2	K0	006	.		
18828	53 14.3	+3.96	-0.004	-54 27 26	-17.9	-0.22	6.07		G0		.		
18830	53 25.3	+2.89	-0.020	+14 18 02	-17.6	-0.00	6.15	3.7	dF6	033	-13		
18841	53 54.9	+3.06	-0.020	+01 17 39	-17.6	+0.01	5.94		A3n		-27	92 Vir	
18845	54 00.4	+4.34	-0.005	-63 26 34	-17.7	-0.05	4.68	0.8	K4	017	+22		
18850	54 17.2	+2.74	+0.002	+27 44 11	-17.7	-0.05	5.18	-0.3	gK5	008	-40	9 Boo	
18861	54 45.7	+4.48	-0.005	-65 33 25	-17.6	-0.05	6.22		K0		.		d
18874	55 13.3	+3.65	-0.002	-41 51 27	-17.6	-0.03	4.05	-2.4	B3	0052	+7	φ Cen	
18877	55 18.4	+6.20	-0.002	-78 20 52	-17.6	-0.03	6.20		A0		.		
18883	55 34.8	+3.71	-0.003	-44 33 38	-17.6	-0.03	4.17	-2.4	B3n	0048	+7	ν^1 Cen	
18887	55 42.4	+3.37	-0.004	-24 43 44	-17.6	-0.03	5.17	0.2	B8n	010	+5	47 Hya	s
18895	56 04.0	+3.85	+0.001	-50 07 38	-17.6	-0.04	6.09	0.6	K0	008	.		
18899	56 15.0	+2.90	-0.004	+14 53 33	-17.6	-0.06	6.02	0.5	gK5	008	-41		
18900	56 18.3	+2.81	-0.001	+21 56 21	-17.6	-0.05	5.42	0.6	A0	011	+6	10 Boo	
18914	57 04.6	+4.52	-0.021	-66 01 36	-17.5	-0.03	6.12		A5		.		
18918	57 11.7	+3.36	-0.015	-24 46 02	-17.6	-0.10	5.80	2.7	dF3	024	-17	48 Hya	
18939	58 35.6	+3.74	-0.000	-45 21 44	-17.4	-0.03	4.39	-3.8	F5	0026	-0v	ν^2 Cen	s
18941	58 51.9	+2.97	+0.002	+09 08 10	-17.4	+0.00	5.88	1.4	A2n	013	-14		
18943	58 54.4	+2.72	-0.006	+27 37 38	-17.4	+0.01	6.12	1.8	A3n	014	-23v	11 Boo	
18945	59 06.0	+3.05	+0.001	+01 47 08	-17.4	-0.03	4.34	0.6	A1n	018	-2v?	93 τ Vir	d
18954	59 31.8	+3.41	-0.003	-27 11 22	-17.4	-0.02	5.74	0.5	gK3	009	0		
18964	14 00 02.7	+4.05	-0.010	-55 58 24	-17.4	-0.04	5.91		K0		.		
18965	00 04.6	+2.94	-0.014	+09 55 38	-17.4	-0.07	6.12		sdF5p		-22		
18971	00 16.5	+4.24	-0.003	-60 07 58	-17.4	-0.03	0.86	-4.3	B3	010	-12v	β Cen	ds
18975	00 23.4	+5.85	-0.024	-76 33 25	-17.4	-0.04	var		Mbp		.	θ Aps	
18986	01 05.4	+3.35	-0.000	-22 10 57	-17.3	-0.01	6.21		F2		.		
18990	01 08.1	+2.23	-0.002	+51 12 42	-17.3	-0.01	6.05	0.6	A0	008	-8		
19017	02 59.0	+3.66	-0.002	-40 56 28	-17.3	-0.02	4.54	-2.4	B3s	0042	+12	χ Cen	
19019	03 02.0	+1.62	-0.008	+64 36 51	-17.2	+0.01	3.64	-0.5	A0p	015	-17v	11 α Dra	s
19029	03 31.1	+3.42	+0.003	-26 26 33	-17.4	-0.15	3.48	1.3	gK3	037	+27	49 Hya	
19033	03 43.9	+3.53	-0.043	-36 07 30	-17.7	-0.52	2.26	1.1	gG9	058	+1	5 θ Cen	
19036	03 48.4	+5.51	-0.062	-74 36 56	-17.0	+0.16	6.03	4.0	G0	039	.		
19041	04 03.9	+3.17	-0.010	-09 04 33	-17.2	+0.00	5.53	2.2	dA8n	022	-36	95 Vir	
19084	05 55.9	+2.40	+0.001	+44 05 30	-17.1	-0.03	5.44	0.2	gM4	009	-36		
19089	06 17.0	+3.94	-0.006	-51 16 07	-17.1	-0.03	6.16		B9		.		
19090	06 18.6	+5.00	-0.003	-70 04 10	-17.1	00.0	6.04		K0		.		
19095	06 25.2	+2.24	-0.007	+49 41 37	-17.0	+0.06	5.44	0.0	gM2	008	-13	13 Boo	
19099	06 34.2	+3.99	-0.016	-53 12 07	-17.2	-0.10	4.78	0.7	G5	015	-17		
19101	06 52.6	+4.95	-0.005	-69 29 01	-17.0	-0.04	6.24		A3		.		
19125	08 06.3	+3.28	+0.000	-16 04 00	-17.0	-0.01	5.10	-1.4	gM3	005	+18		
19127	08 07.1	+2.74	-0.002	+25 19 40	-17.1	-0.07	4.82	2.8	dF5	039	+10v	12 d Boo	s
19142	09 00.6	-0.23	-0.010	+77 46 57	-16.9	+0.03	5.00	0.0	gK4	010	+10v	4 UMi	s
19143	09 04.3	+2.62	-0.002	+32 31 47	-16.9	+0.02	6.24		K2		-22		
19157	09 43.8	+3.04	-0.003	+02 38 38	-16.9	-0.03	4.90	-0.1	A0p	010	+3v		s
19162	09 53.6	+4.04	-0.001	-53 25 55	-16.9	-0.03	5.48	-0.3	K0+ A2	007	-3		
19163	09 53.7	+3.44	-0.001	-27 01 37	-16.9	-0.04	5.25	0.8	sgK3	013	+27	50 Hya	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
19168	14 ^h 10 ^m 13 ^s .5	+3.20	+0.000	-10°02'31"	-16.8	+0.13	4.31	0.8	gK2	020	-4	98 \times Vir	
19169	10 15.2	+4.08	-0.002	-54 23 31	-16.9	-0.02	6.23		B9		.		
19188	11 05.9	+3.09	+0.014	-00 36 38	-17.0	-0.15	5.81	2.6	dF4	023	+18v		s
19189	11 07.9	+1.12	-0.005	+69 40 01	-16.9	-0.05	5.36	0.6	gM2	011	-23		
19199	11 27.0	+4.18	-0.004	-56 51 11	-16.9	-0.02	5.20		B3ne		+11		d
19200	11 34.1	+6.33	-0.002	-77 25 55	-16.8	-0.00	6.24		K0		.		
19202	11 36.7	+3.71	-0.012	-41 36 17	-16.9	-0.03	5.82		G5		.		
19205	11 40.8	+2.89	-0.018	+13 11 35	-16.9	-0.06	5.54	1.7	dF6	017	-39	14 Boo	ds
19207	11 41.5	+2.15	+0.007	+52 01 23	-16.8	-0.01	4.60	0.7	dA7n	017	-16v	17 \times λ Boo	s
19211	11 49.2	+7.54	-0.007	-80 46 31	-16.9	-0.07	4.97		A2p		-9v	η Aps	s
19218	12 07.1	+3.48	-0.002	-29 02 58	-16.8	-0.02	6.03		A0		.		
19225	12 22.6	+2.42	-0.002	+41 45 10	-16.9	-0.11	6.22	2.1	gK3	015	-10		s
19226	12 23.8	+2.94	-0.002	+10 20 07	-16.9	-0.16	5.36	1.2	gG6	015	+17	15 Boo	d
19229	12 38.5	+3.31	-0.003	-17 58 07	-16.8	-0.02	5.58	0.3	B9s	009	-17		
19230	12 40.0	+4.74	-0.001	-66 21 22	-16.8	-0.02	5.88	-1.7	B2s	003	-20v?		
19234	12 56.9	+4.32	-0.002	-59 40 55	-16.8	-0.03	var		gM4ev		-20	R Cen	d
19242	13 22.8	+2.74	-0.078	+19 26 31	-18.7	-2.00	0.24	-0.3	gK2p	093	-5	16 α Boo	
19244	13 23.3	-3.15	-0.001	-05 45 46	-17.2	-0.43	4.16	2.4	dF5	044	+11	99 ι Vir	
19251	13 43.0	+2.82	+0.003	+19 08 37	-16.8	-0.04	5.84	1.6	A8	014	+4		
19252	13 43.6	+3.15	-0.002	-06 23 25	-16.7	-0.02	6.24		A3		.		
19255	13 54.5	+3.11	-0.002	-02 57 53	-16.8	-0.04	6.03		A0		+2		
19269	14 23.7	+2.12	-0.016	+51 35 50	-16.6	+0.09	4.78	2.7	A5n	038	-17v	21 ι Boo	d
19273	14 29.0	+2.28	-0.018	+46 19 02	-16.5	+0.15	4.26	1.8	A1n	033	-8	19 λ Boo	
19284	15 04.9	+2.87	+0.001	+15 29 38	-16.7	+0.00	6.05	-0.4	gM3	005	-10		
19293	15 34.4	+2.13	-0.003	+51 32 16	-16.6	-0.01	6.09	1.3	A0	011	-11v		
19295	15 52.0	+3.32	-0.004	-18 29 08	-16.7	-0.05	5.74		A3sp		-9v?	CS Vir	v
19296	15 53.0	+2.54	-0.000	+35 44 22	-16.6	+0.01	4.83	0.7	gK1	015	-26v	A Boo	s
19297	15 57.4	+2.24	-0.001	+48 13 57	-16.7	-0.05	6.25		F5		-17		
19302	16 10.2	+4.40	-0.023	-61 02 33	-16.7	-0.10	5.28	2.6	A3	029	+21		
19303	16 10.2	+3.40	-0.028	-25 35 27	-16.3	+0.34	5.92	4.1	dF4	044	-21		d
19304	16 11.5	+3.84	-0.002	-45 49 42	-16.6	-0.01	4.10	-1.7	B3n	007	+22	ϵ Lup	
19305	16 13.3	+7.26	-0.003	-79 52 49	-16.6	-0.02	5.20		B5n		+5	ϵ Aps	
19309	16 22.0	+3.63	-0.004	-36 46 23	-16.7	-0.06	6.02		A0		.		
19311	16 24.0	+3.25	-0.001	-13 08 31	-16.6	+0.02	4.60	1.3	A2	022	-11v	100 λ Vir	s
19318	16 49.0	+4.19	-0.001	-56 09 27	-16.6	-0.02	4.41	-3.9	B7s	003	+5v?	v Cen	
19319	16 51.0	+2.90	+0.007	+13 14 02	-16.6	-0.04	5.31	2.8	dF1	031	-2	18 Boo	
19323	16 57.7	+3.09	-0.008	-02 02 07	-16.6	-0.07	5.24	0.0	gK0	009	-27	102 ν Vir	
19327	17 00.7	+3.77	-0.001	-42 49 48	-16.6	+0.00	5.71	-0.8	G5	005	.		d
19329	17 07.6	+3.06	-0.003	+00 36 49	-16.6	-0.02	6.17	1.6	a3n	012	-13		
19334	17 23.2	+2.84	-0.010	+16 32 06	-16.5	+0.05	4.97	1.0	gK3	016	-8	20 Boo	
19336	17 30.4	+3.83	+0.003	-44 57 27	-16.6	-0.09	5.03	0.9	F0s	015	0v		s
19337	17 30.4	+3.65	-0.006	-37 39 23	-16.6	-0.01	4.17		A0n		-4	ψ Cen	
19341	17 44.5	+2.46	+0.002	+39 01 23	-16.6	-0.02	5.98	1.0	A0n	010	-11		
19349	18 39.3	+9.63	-0.054	-83 26 30	-16.5	-0.01	4.14	0.2	K2	016	+5	δ Oct	
19361	19 01.1	+4.30	-0.006	-58 13 55	-16.5	+0.00	5.06	1.3	G3	018	+15v		ds
19365	19 19.4	+3.60	-0.003	-34 33 33	-16.4	+0.00	5.72		B8n		-37		
19377	19 56.8	+3.70	-0.003	-39 17 05	-16.5	-0.04	4.55	-1.6	B7s	006	+8	a Cen	d
19379	19 59.3	+4.00	-0.002	-50 32 43	-16.4	-0.02	6.03		K0		.		
19389	20 12.5	+3.46	-0.015	-27 31 32	-16.5	-0.12	4.93	1.1	sgK3	017	+20	51 k Hya	
19392	20 23.4	+4.08	-0.008	-52 56 59	-16.4	-0.03	5.94		K0		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
19400	14 ^h 20 ^m 52 ^s .1	+2 ^s .69	-0 ^s .012	+25°33'50"	-16"3	+0"06	6.15	3.4	dF5	028	-10		
19401	20 55.0	+2.95	-0.005	+08 40 24	-16.4	-0.01	5.11	0.5	B9n	012	-23		ds
19402	20 55.6	+4.98	-0.002	-67 58 10	-16.4	-0.02	5.71		cA2p		-34v		
19417	21 32.9	+2.96	+0.000	+08 28 12	-16.4	-0.03	5.74	1.3	A0	013	-4		
19428	21 41.9	+2.99	-0.006	+06 02 45	-16.3	0.00	5.08	1.6	A3n	020	-5v		s
19433	21 50.6	+2.95	-0.008	+08 18 43	-16.4	-0.10	6.22	4.8	K4	052	-31		
19435	21 57.1	+3.42	-0.004	-24 34 50	-16.3	-0.03	5.39	0.4	gG8	010	-22		
19453	22 55.0	+3.85	-0.001	-44 59 47	-16.3	-0.02	4.65	-1.1	B3	007	-18	τ^1 Lup	
19454	22 57.2	+3.86	+0.001	-45 09 16	-16.3	-0.02	4.49		F1		-1v	τ^2 Lup	ds
19456	23 05.9	+4.79	-0.004	-65 35 49	-16.3	-0.02	5.76		K5		.		
19467	23 29.6	+2.04	-0.026	+52 04 52	-16.6	-0.40	4.06	3.2	dF6+M3	068	-11	23 θ Boo	
19478	23 58.1	+3.87	-0.015	-45 54 33	-16.3	-0.09	5.88		A3		-26		
19480	24 07.7	+2.79	-0.005	+19 27 02	-16.2	+0.02	5.36	2.3	A5	024	-28	22 f Boo	
19483	24 15.6	+6.34	-0.009	-76 30 20	-16.2	-0.04	5.95		K0				
19491	24 46.7	+3.15	-0.005	-05 53 45	-16.2	-0.06	6.16	1.2	A1n	010	-15	104 Vir	
19499	25 14.3	+3.52	-0.002	-29 16 05	-16.2	-0.03	5.00	0.7	B8n	014	+6	52 l Hya	d
19504	25 37.4	+3.09	-0.009	-02 00 18	-16.1	-0.01	4.97	2.8	dF8	039	-10	105 ϕ Vir	d
19516	26 03.2	+3.16	-0.001	-06 40 37	-16.2	-0.06	5.74	0.3	gK5	008	-49	106 Vir	
19519	26 12.2	+2.48	-0.002	+36 25 11	-16.1	-0.01	6.19		K1		-18		
19532	26 53.4	+2.09	-0.032	+50 04 04	-16.1	-0.05	5.61	2.3	sgG4	021	-6	24 g Boo	
19533	26 54.4	+3.87	-0.005	-45 05 57	-16.1	-0.05	5.49	1.5	B9	016	+10		
19539	27 00.3	+4.00	-0.006	-49 17 48	-16.1	-0.05	5.52		A2		+4v		s
19540	27 04.2	+5.01	+0.008	-67 29 42	-16.1	-0.08	5.76		K0				
19542	27 17.3	+3.06	0.000	+01 03 02	-16.0	+0.00	5.80	1.8	A3n	016	-9		
19548	27 36.3	-0.12	+0.002	+75 55 06	-16.0	+0.02	4.37	-0.2	gK4	012	+10	5 UMi	
19553	27 41.1	+2.57	-0.002	+32 00 46	-16.0	-0.00	5.96	-0.1	B9	006	-9v		d
19565	28 04.5	+3.72	+0.000	-38 38 56	-16.0	+0.03	6.02		K0				
19572	28 15.1	+3.00	-0.000	+04 59 37	-16.0	-0.02	6.13		gK4		+6		
19590	29 14.1	+4.04	-0.005	-50 14 12	-16.0	-0.02	4.60	-2.4	B3	0042	-2v?	σ Lup	
19595	29 34.6	+1.43	-0.027	+63 24 22	-15.9	-0.00	6.04	3.8	dF4	035	-3		
19597	29 40.5	+2.59	-0.008	+30 35 24	-15.8	+0.12	3.78	0.6	gK3	023	-14v?	25 ρ Boo	v
19604	30 00.7	+4.21	-0.011	-54 46 44	-15.9	-0.00	5.99		F5		.		
19606	30 02.5	+4.13	-0.001	-52 27 36	-15.9	-0.04	5.88	0.9	K0	010	.		
19607	30 03.9	+2.42	-0.010	+38 31 34	-15.8	+0.15	3.00	0.6	dA7n	033	-36	27 γ Boo	
19608	30 07.4	+2.66	-0.005	+26 53 51	-15.9	-0.04	5.90	1.6	A3n	014	-5		d
19609	30 11.4	+3.56	+0.003	-30 29 40	-15.9	-0.02	6.11	0.0	K0	006	.		d
19611	30 16.1	+2.73	-0.009	+22 28 45	-15.9	+0.03	5.96	2.6	dF2	021	-12	26 Boo	
19613	30 21.2	+1.63	-0.007	+60 26 43	-15.9	+0.02	6.18		gF0		-19		
19627	30 56.9	+1.88	+0.001	+55 37 03	-15.9	-0.02	5.99		gK5		+3		
19656	32 19.3	+3.81	-0.003	-41 56 22	-15.8	-0.03	2.65	-3.3	B3+A2	0066	-0v	η Cen	d
19657	32 21.2	+3.80	-0.002	-41 17 57	-15.8	-0.02	5.82		B8		.		
19659	32 30.2	+2.61	+0.014	+29 57 41	-15.6	+0.12	4.48	3.4	dF2	061	+0	28 σ Boo	
19662	32 35.8	+2.45	-0.003	+36 50 40	-15.8	-0.06	6.24	1.4	gK5	003	-12		
19666	32 45.2	+1.81	+0.026	+57 17 12	-16.0	-0.24	6.25		F5		-22		
19668	32 54.7	+2.10	-0.005	+49 35 08	-15.7	+0.04	5.90	-0.2	gM1	006	-20		
19669	33 01.9	+3.93	-0.004	-46 01 42	-15.7	+0.01	5.41	1.1	K5	014	-60		
19674	33 16.2	+3.75	-0.003	-39 22 47	-15.7	-0.02	6.15		K0		.		
19678	33 32.4	+5.03	-0.064	-67 42 41	-16.0	-0.29	6.09	4.4	F5	047	.		
19682	33 35.3	+3.77	-0.002	-39 59 40	-15.7	-0.03	5.90		B8n		+14		
19689	34 02.9	+3.93	-0.002	-45 55 01	-15.7	-0.03	5.44	0.8	G7	012	-16	a Lup	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
19695	14 ^h 34 ^m 19 ^s 9	+3.19	-0.060	-12°05'38"	-15.3	+0.36	6.24	3.8	dF5	033	-70		
19698	34 30.6	+4.04	-0.004	-49 12 33	-15.7	-0.03	4.14	-0.1	B5n	014	+14	g Lup	
19706	34 59.3	+2.65	-0.001	+26 57 09	-15.6	+0.00	var		gM4ev		-58	R Boo	
19710	35 11.8	+3.75	+0.005	-38 34 41	-15.6	+0.03	6.14		K0				
19725	35 53.5	+3.94	-0.018	-46 21 58	-15.8	-0.22	6.20	2.7	dF8	020	-10		
19726	35 54.4	+2.79	-0.002	+18 30 53	-15.7	-0.08	5.98	1.7	sgK2	014	-14		
19728	36 11.2	+4.08	-0.490	-60 37 49	-14.9	+0.70	0.06	4.1	dG4+K5	756	-25	α Cen	d
19733	36 19.8	+2.25	-0.011	+43 51 25	-15.5	+0.02	5.92	-0.6	gK2	005	-49		
19742	36 40.0	+1.90	+0.002	+54 14 19	-15.6	-0.02	5.52	0.7	A0n	011	-1v?		
19747	36 58.5	+2.23	-0.006	+44 37 10	-15.5	-0.03	5.39	1.0	A0n	013	-10v	33 Boo	s
19758	37 56.6	+3.69	-0.002	-35 55 16	-15.5	-0.01	5.75		A0				
19762	38 05.5	+2.72	-0.001	+22 11 20	-15.4	+0.03	6.17	3.2	dF1	025	-0v		ss
19766	38 18.8	+2.87	+0.004	+13 44 53	-15.5	-0.03	5.98	3.0	A8	016	-8		
19769	38 22.5	+2.82	+0.001	+16 37 54	-15.4	+0.01	4.94	-0.3	A0	009	-1v	29 π^1 Boo	} d s
19770	38 22.9	+2.82	-0.000	+16 37 52	-15.4	+0.00	5.81	0.6	A0n	009	-6v?	29 π^2 Boo	
19772	38 26.4	+4.85	-0.029	-64 45 33	-15.7	-0.24	3.41	2.2	F0	057	+7	α Cir	d
19774	38 35.5	+3.99	-0.002	-47 10 30	-15.5	-0.03	2.89	-4.3	B2s	004	+7v	α Lup	
19777	38 45.6	+2.87	+0.004	+13 56 30	-15.4	-0.03	3.86	-0.4	A2n	014	-5	30 ζ Boo	d
19779	38 50.7	+3.73	-0.002	-37 34 49	-15.5	-0.04	4.09	-1.6	B3n	007	+8	b Cen	
19789	39 11.3	+2.95	-0.000	+08 22 28	-15.4	-0.00	5.03	0.2	gG5	011	-22	31 Boo	
19793	39 19.3	+2.88	-0.011	+11 52 30	-15.5	-0.12	5.63	0.6	gG7	010	-23	32 Boo	
19812	40 19.8	+3.47	-0.002	-24 47 09	-15.3	-0.01	5.75	0.3	B9n	008	-4	4 Lib	
19816	40 25.3	+3.16	+0.007	-05 26 31	-15.7	-0.32	3.95	2.3	dF3	046	+5v	107 μ Vir	
19820	40 35.5	+3.67	-0.006	-34 57 35	-15.5	-0.19	4.13	0.0	gK5	015	-39	c ¹ Cen	
19825	40 48.2	+1.50	+0.010	+61 28 28	-15.3	-0.04	6.17	2.9	dF4	022	-6		d
19830	41 11.4	+4.46	-0.010	-58 15 59	-15.3	-0.06	6.10		K0				
19831	41 13.5	+2.64	-0.001	+26 44 22	-15.3	-0.02	var	var	gM3	006	+6	34W Boo	
19832	41 18.2	+4.76	+0.010	-62 39 50	-15.4	-0.09	5.34	-0.4	A5n	007	+7		d
19834	41 33.1	+7.46	+0.001	-78 50 06	-15.3	-0.02	3.81	-0.5	K5	014	-0	α Aps	
19835	41 33.7	+4.33	-0.002	-55 23 28	-15.3	-0.02	6.24	-3.2	B2s	0014	-6		d
19841	41 48.0	+2.33	-0.001	+40 40 12	-15.2	+0.02	5.79	0.0	gK4	007	+13		s
19845	41 54.7	+3.68	0.000	-34 58 53	-15.3	-0.01	5.00	1.0	A5n	016	-5	c ² Cen	
19852	42 37.1	+3.09	-0.004	-01 12 27	-15.2	-0.01	6.23		gM1		-47		
19856	42 48.2	+2.62	-0.004	+27 17 02	-15.2	+0.01	2.70	-1.6	gK0	014	-16v?	36 s Boo	ds
19858	42 54.4	+2.80	-0.004	+17 10 30	-15.2	-0.06	4.69	0.9	sgG6	028	-9	35 o Boo	
19860	42 57.2	+3.06	-0.003	+00 55 38	-15.2	-0.01	5.54	0.3	B9	009	-17	108 Vir	
19864	43 06.0	+3.47	-0.011	-25 13 55	-15.3	-0.11	5.21	1.9	dF1n	022	-13	54m Hya	d
19866	43 07.7	+4.01	-0.003	-47 13 53	-15.2	-0.02	5.89		A0				
19871	43 14.2	+3.44	+0.002	-22 56 34	-15.2	-0.06	5.91		gG5		+7		
19876	43 30.6	+4.20	-0.002	-52 10 24	-15.2	-0.10	5.20	1.3	G6	017	-21	b Lup	d
19884	43 43.1	+3.03	-0.008	+02 06 08	-15.2	-0.04	3.76	1.1	A0n	030	-6	109 Vir	
19885	43 44.5	+2.83	-0.006	+15 20 27	-15.1	-0.01	6.10		gM5		-22		
19888	43 56.4	+3.76	+0.004	-38 04 51	-15.2	-0.10	6.00		K0				
19895	44 22.8	+3.41	-0.001	-21 06 59	-15.1	-0.00	6.11	0.0	gK5	006	-24		
19897	44 27.7	+3.49	-0.001	-25 24 56	-15.1	-0.02	5.67		A0p		-18	55 Hya	
19898	44 28.7	+5.08	-0.002	-66 23 08	-15.1	-0.04	6.05		B3				
19904	44 49.3	+3.50	+0.003	-25 52 45	-15.1	-0.01	5.39	1.4	gG7	016	-1	56 Hya	
19908	45 01.6	+3.51	-0.001	-26 26 17	-15.1	-0.02	5.80		B9n		+6	57 Hya	
19917	45 31.4	+3.72	-0.001	-36 25 35	-15.1	-0.05	6.12		Mb				
19932	46 19.8	+3.08	-0.001	-00 38 27	-15.0	+0.01	6.06	0.6	A0	008	-16		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
19936	14 ^h 46 ^m 25 ^s 0	+3.47	-0.002	-24°02'41"	-15.0	-0.00	5.78	-0.3	gK1	006	-26		
19938	46 34.3	+3.29	-0.004	-13 56 31	-15.0	-0.02	5.38	0.6	A4sp	011	-4v?	7 μ Lib	d
19949	47 08.9	+2.36	-0.022	+38 00 59	-14.8	+0.10	5.98	3.1	dF3	027	-35		
19954	47 20.7	+3.52	-0.018	-27 45 12	-15.0	-0.07	4.63	-0.4	gK4	010	-10	58 E Hya	
19959	47 31.7	+2.14	-0.000	+46 19 25	-15.0	-0.08	5.76	3.1	dF4	029	-5	38 h Boo	
19966	47 49.2	+2.58	+0.002	+28 49 19	-14.9	-0.00	5.66	1.4	A0n	014	-3		s
19970	47 55.0	+3.32	-0.007	-15 47 26	-15.0	-0.08	5.33	3.4	dF4	042	-23	8 α^2 Lib	
19972	47 59.2	+2.04	-0.008	+48 55 31	-14.8	+0.09	6.10	2.6	dF6	020	-32v	39 Boo	ds
19974	48 01.6	+2.68	+0.011	+24 07 02	-14.9	+0.02	5.81		dG2		-1		s
19975	48 06.5	+3.32	-0.007	-15 50 07	-15.0	-0.07	2.90	1.5	A3n	053	-10v	9 α^2 Lib	
19976	48 10.8	+6.00	+0.007	-72 59 09	-14.9	+0.02	5.62		G5		+38		d
19977	48 21.9	+3.92	-0.002	-43 22 11	-14.9	-0.03	4.49	0.2	B6	014	+7	o Lup	
19978	48 25.3	+3.11	+0.005	-02 05 31	-15.0	-0.13	5.05	1.1	gG6	016	+83	11 Lib	
19979	48 26.3	+3.07	-0.002	-00 03 07	-14.9	+0.01	6.24		K5		-20		
19981	48 29.9	+4.88	-0.003	-63 36 18	-14.9	-0.02	5.78		F5+A2		.		d
19982	48 31.2	+2.37	-0.018	+37 28 34	-14.8	+0.09	5.50	1.8	gK0	018	-66		
19991	49 04.8	+2.77	+0.010	+19 18 27	-14.9	-0.11	4.64	5.5	dG5	147	+4	37 ξ Boo	d
20000	49 42.2	+3.76	-0.003	-37 35 55	-14.8	-0.02	5.11	-2.5	B8	003	+5		
20012	50 10.1	+1.52	-0.016	+59 29 47	-14.6	+0.13	5.67	0.4	gK4	009	+11		
20017	50 26.7	+5.08	-0.002	-65 47 17	-14.8	-0.03	6.16		B5n		-21v?	ζ Cir	
20029	50 49.7	-0.17	-0.008	+74 21 35	-14.7	+0.01	2.24	-0.2	gK4	031	+17	7 β UMi	
20037	51 07.5	+2.72	-0.032	+19 21 11	-14.5	+0.21	5.98	5.6	dK1	084	-34v		s
20047	51 25.5	+3.49	-0.001	-24 26 20	-14.7	-0.04	5.44	0.8	sgK2	012	+9	12 Lib	
20051	51 34.2	+3.67	-0.000	-33 05 52	-14.7	-0.01	5.94		K0		.		
20052	51 39.7	+3.26	-0.004	-11 41 44	-14.7	-0.02	5.84	0.6	gG7	009	-24	13 ξ^1 Lib	
20054	51 42.0	+4.63	-0.017	-59 54 37	-14.8	-0.11	5.24	1.5	K3	018	-15		
20057	52 06.8	+6.84	-0.021	-76 27 41	-14.7	-0.02	var	var	K2	004	-31	R Aps	
20066	52 40.1	+3.68	+0.001	-33 39 15	-14.6	-0.00	5.34	3.1	A0n	002	-9v		s
20067	52 41.0	+4.83	-0.001	-62 34 46	-14.6	-0.01	5.42		B3n		+6	δ Cir	
20068	52 42.8	+4.27	+0.003	-52 36 29	-14.6	-0.01	5.56		A2		+7v	c Lup	s
20070	52 49.0	+10.6	+0.010	-83 01 45	-14.6	+0.05	5.60		K0		.	π^2 Oct	
20078	53 07.5	+4.07	-0.004	-47 40 40	-14.6	-0.03	5.78	0.5	B9	009	+8v		ds
20084	53 27.6	+3.66	-0.001	-32 26 07	-14.6	-0.04	6.19		K0		.		
20087	53 33.6	-4.02	+0.086	+82 43 07	-14.8	-0.23	5.73	0.9	dG0	011	-43		
20092	53 51.5	+2.83	-0.001	+14 38 50	-14.6	-0.01	5.77	0.8	A0n	010	-11		
20093	53 54.4	+2.48	-0.004	+32 30 05	-14.5	-0.00	6.11	1.5	A3n	012	-12		d
20096	54 03.0	+3.26	+0.000	-11 12 33	-14.5	0.00	5.63	0.1	gK4	008	+15	15 ξ^2 Lib	
20103	54 14.2	+3.58	-0.002	-28 57 25	-14.6	-0.04	6.18		B9		.		
20104	54 14.9	+7.09	+0.002	-76 57 40	-14.5	-0.00	5.96		K0		.		
20113	54 32.4	+3.51	+0.074	-21 11 29	-16.3	-1.74	5.76	6.9	dK5+M1	172	+20		d
20115	54 34.1	+3.13	-0.007	-04 08 39	-14.7	-0.16	4.59	2.5	dA7n	038	+22	16 Lib	
20119	54 43.4	+1.99	+0.011	+49 49 56	-14.7	-0.23	5.68	3.1	dF7	030	-15		
20120	54 48.4	+2.70	-0.002	+21 45 22	-14.5	-0.03	6.24	0.8	A0	008	-11		
20121	54 51.7	+2.80	+0.000	+16 35 18	-14.5	-0.01	5.78	0.5	gG5	009	-16		
20122	54 59.2	+3.08	+0.004	+00 01 58	-14.5	-0.03	5.71	1.3	sgK1	013	+19	1 M Ser	
20128	55 14.8	+3.93	-0.004	-42 56 02	-14.5	-0.05	2.81	-1.8	B3np	012	-0v	β Lup	
20140	55 41.3	+3.55	-0.003	-27 27 29	-14.5	-0.02	5.68	0.2	A5	008	-16	59 Hya	d
20145	55 51.5	+10.47	-0.001	-82 50 29	-14.4	-0.02	5.55		K0		-21	π^2 Oct	
20146	55 53.9	+3.90	-0.002	-41 54 18	-14.5	-0.03	3.35	-3.5	B2s	0044	+9v	κ Cen	d
20156	56 09.7	+3.94	-0.002	-42 57 40	-14.4	-0.02	6.21		F8		.		

GC	AR 1950.0	AnV	MP	Decl 1050.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
20157	14 ^h 56 ^m 11 ^s 1	+3 ^o 25	-0 ^o 007	-10 ^o 56'39"	-14 ^o 5	-0 ^o 07	6.02	-0.1	gK4	006	-12	18 Lib	d
20158	56 16.2	+3.13	-0.024	-04 47 20	-14.5	-0.10	6.00	1.9	dF6	015	-29		d
20170	56 46.9	+0.96	-0.013	+66 07 52	-14.3	+0.03	var	var	gM5	010	+ 7v	RRUMi	s
20174	56 53.2	+3.00	+0.000	+04 45 58	-14.4	-0.02	6.16	-0.8	gM1	004	-11		
20183	57 41.9	+2.30	-0.003	+39 27 45	-14.3	+0.03	5.58	2.0	gF3n	019	+12	40 Boo	
20189	58 02.4	+3.80	+0.001	-37 51 39	-14.3	-0.04	5.98		K2		.		
20195	58 17.8	+3.21	-0.004	-08 19 18	-14.3	-0.01	var	var	A1s	016	-35v	19 δ Lib	sE
20202	58 43.8	+3.12	+0.002	-02 33 28	-14.3	-0.03	5.68	-0.4	gM0	006	-15		d
20205	58 56.3	+2.05	-0.001	+47 28 27	-14.2	+0.02	6.16	0.6	A0p	008	-14		
20209	59 07.2	+3.58	+0.007	-27 51 50	-14.3	-0.05	5.87		A5		.	60 Hya	
20212	59 15.1	+3.07	+0.000	+00 03 22	-14.2	-0.03	5.91	1.7	gM2	003	-34	2 Ser	d
20223	59 54.2	+13.1	+0.001	-84 35 44	-14.2	+0.00	5.90		A0		.	ω Oct	
20224	59 55.0	+2.63	-0.000	+25 12 17	-14.2	-0.05	4.93	1.5	gK5	021	+13	41 ω Boo	
20225	59 55.2	+3.67	-0.002	-32 26 51	-14.2	-0.03	5.45	-0.7	B5	006	+ 6		
20226	15 00 03.7	+2.26	-0.004	+40 35 12	-14.2	-0.04	3.63	0.5	gG5	024	-20	42 β Boo	
20233	00 16.6	+1.40	-0.003	+60 24 01	-14.1	+0.01	5.89		A2		- 8		
20237	00 22.3	+3.03	-0.004	+02 17 11	-14.1	+0.01	4.62	0.9	gK0	018	-16	110 Vir	
20242	00 35.9	+5.02	+0.016	-63 50 13	-14.1	-0.01	5.22	2.6	G4	030	+45	η Cir	
20252	01 06.2	+2.39	-0.004	+35 24 02	-14.1	+0.00	5.66	0.4	gG8	009	-27		
20253	01 08.3	+3.51	-0.005	-25 05 13	-14.2	-0.05	3.41	0.9	sgM4	031	- 4	20 σ Lib	
20271	01 42.2	+4.09	-0.002	-46 51 25	-14.1	-0.02	4.02	-1.0	B5n	010	+17	π Lup	d
20278	02 03.6	+3.90	+0.002	-40 52 25	-14.1	-0.01	5.28	0.5	G5	011	- 3		
20281	02 08.3	+1.98	-0.041	+47 50 53	-14.0	+0.03	var	var	dG2	079	-25v	44 i Boo	dsE
20285	02 18.1	+2.57	-0.013	+27 08 29	-14.0	-0.01	4.67	0.4	gK2	014	-26	43 ψ Boo	
20297	03 11.7	+0.91	+0.004	+66 06 49	-14.0	-0.01	6.09	1.3	A0	011	- 5		
20303	03 30.8	+3.64	-0.001	-30 43 33	-14.0	-0.04	6.01		A0p		.		
20305	03 33.7	+3.46	+0.004	-21 50 20	-14.0	-0.07	6.11		K0		+ 5		
20306	03 38.3	+3.14	+0.002	-65 05 01	-14.0	-0.02	6.04		K2		.		
20308	03 46.4	+1.99	-0.006	+48 20 36	-13.9	+0.02	5.59	1.5	A0	015	-13	47 k Boo	d
20311	03 49.9	+3.35	-0.003	-16 03 51	-14.0	-0.03	5.28	0.5	gK5	011	-15	21 ν Lib	
20315	03 56.4	+4.18	+0.001	-48 53 48	-13.9	+0.01	5.83		K0		.		
20332	04 50.9	+1.71	+0.006	+54 44 53	-13.9	+0.01	5.21	1.7	gG4	020	+16		
20335	04 57.0	+3.89	-0.003	-40 23 33	-13.9	-0.05	6.01		A0p		.		
20339	05 01.5	+5.34	+0.000	-66 53 37	-13.9	-0.01	5.80		F8p		.		
20340	05 02.7	+2.75	+0.003	+18 38 02	-13.9	-0.06	6.00		A0		- 5v		ds
20342	05 06.2	+2.64	+0.014	+25 03 46	-14.0	-0.18	5.03	4.0	dF4	062	- 7	45 c Boo	
20346	05 11.3	+2.98	-0.001	+05 41 22	-13.9	-0.02	6.22	0.7	gG6	008	+ 3v		s
20350	05 20.5	+3.96	-0.003	-42 40 36	-13.9	-0.02	6.00		B5n		-12v?		
20356	05 27.9	+4.04	-0.002	-45 05 20	-13.9	-0.03	4.39	-2.4	B3n	0044	+18	λ Lup	d
20367	06 14.2	+2.59	+0.000	+26 29 30	-13.8	-0.02	5.73	0.0	gK2p	007	+21v?	46 b Boo	
20372	06 24.7	+2.61	-0.001	+25 17 56	-13.8	-0.01	5.94	-0.2	gK1	006	-16		
20373	06 31.4	+2.84	-0.004	+13 25 27	-13.7	+0.06	6.07		dG6		-49		
20382	06 54.5	+3.85	-0.001	-38 36 10	-13.8	-0.03	6.02		G5		.		
20389	07 20.8	+3.55	-0.002	-26 08 37	-13.7	-0.02	5.94		K0		.		
20391	07 22.4	+6.18	-0.003	-72 34 55	-13.7	-0.02	6.11		A0		.		
20395	07 31.3	+4.47	-0.001	-55 09 27	-13.7	-0.02	5.56	-0.5	G5	006	- 4		
20409	08 26.8	+4.17	-0.009	-48 32 58	-13.7	-0.06	4.14	0.7	B9n	021	+ 3	κ^3 Lup	} d
20411	08 28.3	+4.17	-0.011	-48 33 19	-13.7	-0.04	6.04	2.6	A0	021	0	κ^3 Lup	
20418	08 40.8	+4.31	-0.012	-51 54 38	-13.7	-0.07	3.50	0.3	G5	023	-10	ζ Lup	
20422	08 55.6	+4.48	-0.001	-61 33 23	-13.6	-0.02	6.10		K2		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
20433	15 ^h 09 ^m 22 ^s .0	+3.42	-0.003	-19°36'14"	-13.6	-0.05	4.66	0.2	B9n	013	-12v	24 ι Lib	ds
20435	09 27.4	+4.04	-0.003	-44 18 47	-13.6	-0.04	4.92	-2.8	B5	0029	+11v	e Lup	s
20442	09 47.7	+2.73	-0.001	+19 09 47	-13.6	+0.00	5.98	-1.0	gM4	004	-35		
20446	09 57.9	+3.78	-0.004	-35 54 16	-13.6	-0.03	6.12		B9		.		
20451	10 11.7	+0.64	-0.000	+67 58 08	-13.5	-0.00	6.15	1.4	A2	011	-8v		
20456	10 28.0	+3.42	-0.004	-19 27 38	-13.6	-0.04	6.05	1.4	A0n	012	+1v	25 Lib	s
20466	10 55.2	+3.55	-0.001	-26 00 28	-13.5	-0.01	6.05		gG6		-28		d
20474	11 19.1	+2.65	+0.004	+23 10 04	-13.4	+0.09	6.25	0.8	A0	008	-5		
20480	11 33.1	+3.68	-0.000	-31 20 02	-13.4	-0.00	4.95	-0.5	cF0	008	-23	1 ι Lup	
20489	12 03.1	+2.46	+0.003	+31 58 25	-13.4	-0.03	6.22		K5		+4		
20495	12 23.6	+2.51	-0.005	+29 20 56	-13.4	+0.02	5.26	1.8	A0n	020	-16	48 ν Boo	
20496	12 24.3	+4.17	+0.001	-47 53 22	-13.4	-0.04	6.19		A2		.		d
20497	12 33.0	+4.84	-0.003	-60 43 12	-13.4	-0.01	5.95		B1e		.		d
20501	12 42.1	+2.98	-0.001	+05 07 25	-13.4	-0.00	5.44	1.0	gK0	013	-34	3 Ser	
20503	12 46.1	+3.95	-0.001	-41 18 25	-13.4	-0.01	5.20		F7+A3		-27		
20507	12 53.0	+4.85	-0.002	-60 46 25	-13.4	-0.02	5.24		O8n		+88	δ Cir	
20515	13 16.1	+3.06	-0.007	+00 33 21	-13.3	+0.01	5.63	1.5	A1n	015	-8	4 Ser	
20519	13 24.1	+5.07	+0.000	-63 25 39	-13.3	+0.00	4.84	-5.2	K4	001	-5	ϵ Cir	
20522	13 28.8	+3.48	-0.002	-22 12 57	-13.4	-0.00	5.71	0.5	gK5	009	-5		
20523	13 29.1	+2.42	+0.007	+33 30 01	-13.4	-0.12	3.54	0.8	gG4	028	-12	49 δ Boo	
20526	13 34.9	+4.70	-0.013	-58 36 59	-13.5	-0.14	4.16		A3		+9	β Cir	
20532	14 03.3	+0.69	+0.038	+67 32 11	-13.7	-0.39	5.23	3.0	dF9	047	-47		
20538	14 12.6	+5.60	-0.011	-68 29 49	-13.3	-0.03	3.06		A0		0	γ TrA	
20539	14 18.7	+3.23	-0.007	-09 11 59	-13.3	-0.03	2.74	-0.5	B8n	022	-35	27 β Lib	
20549	14 46.2	+4.83	-0.003	-60 18 52	-13.2	-0.01	5.50	-6.1	O9s	0006	-5		d
20550	14 46.9	+3.65	-0.001	-29 57 59	-13.2	-0.02	4.43	-0.2	gK0	012	-4	2 f Lup	
20556	15 02.6	+4.17	-0.003	-47 41 34	-13.3	-0.04	4.36	0.5	B8n	017	+15	μ Lup	d
20566	15 39.1	+3.94	-0.001	-40 36 23	-13.2	-0.03	5.78	1.3	B7n	013	+16v		
20570	15 52.1	+3.08	+0.000	-00 16 48	-13.2	-0.01	6.04		gK5		-13		
20575	16 09.9	+2.69	-0.001	+20 45 16	-13.2	-0.03	5.66	0.4	gG5	009	-8		
20581	16 19.9	+3.82	-0.008	-36 54 50	-13.3	-0.13	6.24		G5		.		
20591	16 45.4	+3.06	+0.025	+01 57 12	-13.6	-0.52	5.18	2.8	dF6+K4	039	+53	5 Ser	d
20598	17 07.2	-0.04	+0.001	+72 00 19	-13.1	+0.01	5.14	0.7	gK4	013	-16	11 UMi	
20606	17 29.1	+2.42	-0.001	+32 41 43	-13.0	+0.01	6.14	1.7	A3	013	-26v		s
20618	18 03.3	+3.40	-0.001	-17 58 43	-13.1	-0.07	6.20	0.4	gG8	007	+3	28 Lib	
20619	18 04.3	+2.48	-0.010	+29 47 47	-13.1	-0.05	5.57	-2.4	gG7	0025	-53	1 \circ CrB	
20620	18 04.9	+3.94	-0.001	-40 28 05	-13.0	-0.03	3.43	-1.2	B3n	012	+2	δ Lup	
20628	18 13.4	+3.35	+0.002	-15 22 10	-13.0	+0.02	6.11	1.7	gA8n	013	+5	29 \circ Lib	
20632	18 17.7	+3.94	-0.001	-40 34 13	-13.0	-0.04	6.24		A2		.		
20635	18 25.2	+4.05	-0.162	-48 08 06	-13.3	-0.28	5.71	4.7	dG5	063	-69	ν^* Lup	
20636	18 28.9	+3.17	-0.004	-05 38 45	-13.0	-0.02	5.60	0.6	gK1	010	-33		
20637	18 29.1	+3.05	-0.003	+00 53 45	-13.1	-0.11	5.48	0.0	gK4	008	+9	6 Ser	d
20641	18 36.8	+1.76	+0.001	+52 08 16	-13.0	+0.00	5.52	1.5	A1n	016	+8		
20643	18 37.5	+3.81	-0.008	-36 04 54	-13.1	-0.10	3.59	-1.0	K5	012	-29	φ^* Lup	
20644	18 38.6	+4.18	-0.014	-47 44 51	-13.1	-0.14	5.06	0.3	F5	027	-11	ν^* Lup	
20651	18 58.0	+2.07	+0.002	+44 36 53	-13.1	-0.11	5.88	2.9	dF3	025	-0		
20654	19 06.1	+4.86	-0.012	-60 28 44	-13.0	-0.03	5.63		F5		.		
20659	19 16.5	+4.07	-0.002	-44 30 40	-12.9	-0.02	3.74	-2.4	B3 n	006	+4v	ϵ Lup	ds
20662	19 21.5	+2.44	-0.002	+31 32 46	-12.9	-0.02	var		gM7ev		-1	S CrB	
20663	19 22.6	+4.78	-0.002	-59 08 33	-13.0	-0.05	4.54	-0.1	B5+F8	012	-17	γ Cir	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
20672	15 ^h 19 ^m 48 ^s .4	+2 ^o 40	-0 ^o 004	+33 ^o 06'42"	-12 ^o 9	+0 ^o 01	5.36	-0.1	A0n	008	+22v	50 Boo	s
20676	19 57.2	+3.83	-0.002	-36 40 51	-12.9	-0.03	4.69	-2.4	B3n	004	-1	φ^A Lup	
20681	20 01.0	+2.84	-0.000	+12 44 43	-12.9	-0.02	6.20		A0		+8	7 Ser	
20690	20 46.3	+2.22	-0.000	+39 45 32	-12.9	-0.02	5.85	-0.3	gK4	006	-11		
20692	20 47.4	-0.09	-0.004	+72 00 43	-12.8	+0.02	3.14	-0.6	A2n	018	-4v	13 γ UMi	s
20695	21 07.4	+3.29	-0.003	-12 11 33	-12.9	-0.05	5.78	0.5	gG6	009	-26		
20696	21 08.3	+2.48	+0.010	+30 28 02	-13.0	-0.20	5.05	4.5	dF9	065	-7v	2 η CrB	ds
20697	21 08.9	+3.09	+0.005	-00 50 43	-12.8	-0.04	6.10	2.0	dA5n	015	-2	8 Ser	
20698	21 28.5	+3.92	-0.003	-39 32 01	-12.8	-0.05	5.38	0.8	A0	012	-8	ν Lup	d
20699	21 29.0	+3.25	-0.005	-10 08 38	-12.9	-0.16	5.08	2.5	dF3	031	-10v	31 ϵ Lib	s
20700	21 30.0	+5.66	+0.023	-68 08 02	-12.8	+0.00	5.96		K0		.		
20703	21 41.0	+1.12	+0.001	+62 13 28	-12.8	-0.04	5.80	0.0	B9	007	-24		
20706	21 47.9	+1.00	-0.003	+63 31 10	-12.9	-0.10	5.78	0.5	gK4	009	-46		
20714	22 05.1	+3.89	-0.005	-38 33 29	-12.8	-0.02	4.68	-1.1	A0n	007	-3	k Lup	
20720	22 23.8	+2.02	-0.002	+45 26 48	-12.7	-0.01	6.24		K2		-10		
20724	22 36.0	+2.27	-0.012	+37 33 05	-12.6	+0.08	4.47	2.1	dA7n	033	-9	51 μ^1 Boo	d
20733	23 10.2	+5.23	-0.004	-64 21 27	-12.7	-0.03	5.72		K5		.		
20740	23 28.1	+2.78	-0.001	+15 36 09	-12.7	-0.02	5.46	0.5	gM1	010	-20	9 τ^1 Ser	
20747	23 48.8	+1.34	-0.001	+59 08 26	-12.6	+0.01	3.47	1.0	gK2	032	-11	12 ϵ Dra	
20756	24 05.6	+3.84	-0.001	-36 35 38	-12.6	-0.04	5.52	-0.9	B5	0052	+7		
20761	24 19.9	+2.35	-0.009	+34 30 32	-12.5	+0.05	5.87	0.1	gK5	007	-48		
20767	24 47.5	+4.38	-0.001	-51 25 30	-12.6	0.00	6.16		K0		.		d
20775	25 10.7	+1.63	+0.005	+54 11 37	-12.6	-0.03	6.18	1.7	A2	013	-5		
20782	25 25.9	+3.38	+0.001	-16 32 37	-12.6	-0.04	5.92	0.4	gK5	008	-21	32 Lib	
20795	25 46.0	+2.47	-0.014	+29 16 37	-12.4	+0.08	3.72	1.2	gA8s	032	-18v	3 β CrB	s
20799	25 54.8	+4.18	-0.001	-46 33 40	-12.5	-0.02	5.05	0.8	Mo	014	-18		
20801	26 01.1	+6.54	+0.000	-73 13 08	-12.5	-0.04	5.65		B5ne		+96v?	κ^1 Aps	
20805	26 06.5	+3.03	-0.006	+02 00 52	-12.5	-0.04	5.12	2.2	A5n	026	-10	10 Ser	
20819	26 51.6	+1.19	-0.003	+60 50 32	-12.4	-0.01	6.08		gK5		-47		s
20825	27 07.8	+1.93	-0.002	+47 22 22	-12.4	-0.01	5.96	1.4	A3	012	-17v		s
20834	27 42.6	+3.47	+0.001	-20 33 28	-12.4	-0.03	6.10		A2		.		
20842	27 50.9	+3.38	+0.001	-16 26 22	-12.4	-0.01	5.86	0.1	gG6	007	-2		
20861	28 50.5	+3.45	-0.005	-19 59 43	-12.3	-0.04	6.10		dA5+FO		-40v	34 Lib	ds
20866	29 07.9	+2.16	+0.001	+41 00 09	-12.3	-0.02	5.15	-0.1	gK5	009	-9	52 ν^1 Boo	
20878	29 44.1	+3.45	-0.002	-19 30 06	-12.3	-0.05	5.46	0.7	A2	011	-33		
20880	29 51.3	+2.76	-0.000	+16 13 28	-12.2	0.00	6.14	0.4	B9n	007	-8	12 τ^8 Ser	
20883	29 59.5	+2.15	-0.002	+41 04 05	-12.2	-0.02	4.98	1.4	A2n	019	-16	53 ν^8 Boo	d
20887	30 05.4	+3.39	-0.001	-16 41 05	-12.2	-0.02	5.59	-2.8	B5n	002	+11v	35 ζ Lib	s
20894	30 13.2	+0.84	-0.018	+64 22 35	-12.1	+0.07	5.88	0.6	gG5	009	+10		
20896	30 23.2	+3.09	-0.001	-01 01 05	-12.2	-0.04	5.76	0.5	gG9	009	-16	11 A ¹ Ser	
20901	30 43.2	+3.96	-0.005	-39 53 55	-12.2	-0.03	5.94		Ma				
20908	30 54.7	+2.42	-0.002	+31 31 36	-12.2	-0.02	4.17	0.0	B5ne	015	-25	4 θ CrB	
20914	31 26.5	+3.28	+0.020	-09 53 41	-12.3	-0.24	4.83	1.8	sgK1	025	+48	37 Lib	
20915	31 26.4	+13.9	+0.099	-84 18 15	-12.0	+0.09	5.66		A2		-11	ρ Oct	
20918	31 35.1	+3.64	+0.001	-27 52 48	-12.1	-0.04	5.19	-0.3	gK4	008	+12v	36 Lib	
20923	31 44.3	+3.24	-0.001	-09 01 00	-12.1	-0.03	5.15	-1.0	B7p	006	-5		
20926	31 48.0	+4.00	-0.001	-41 00 01	-12.1	-0.03	2.95	-1.3	B3n	014	+6	γ Lup	d
20932	32 07.1	+5.49	+0.005	-66 09 05	-12.1	-0.07	4.11	1.4	K0	029	-16v?	ϵ TrA	
20941	32 24.6	+2.87	-0.005	+10 42 12	-12.0	-0.01	5.16	1.5	dA9n	019	-38v?	13 δ Ser	} d
20942	32 24.7	+2.87	-0.005	+10 42 17	-12.0	+0.00	4.23	0.6	dA7n	019	-42v	13 δ Ser	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
20943	15 ^h 32 ^m 26 ^s 0	+4.13	-0.003	-44°47'34"	-12.1	-0.04	4.84	-2.4	B3	0036	+ 8v	d Lup	d
20947	32 34.2	+2.54	+0.009	+26 52 54	-12.1	-0.10	2.31	0.6	A0n	046	+ 3v	5 α CrB	vsE
20948	32 35.4	+7.98	-0.022	-77 45 09	-12.2	-0.13	6.04		K2				
20949	32 43.5	+3.36	+0.004	-14 37 28	-12.0	-0.00	4.02	1.4	gG6	030	-27	38 γ Lib	
20950	32 46.0	+4.11	-0.006	-44 13 51	-12.1	-0.05	5.47	1.0	M0	013	-19		
20952	32 51.4	-1.78	-0.015	+77 30 59	-12.0	+0.01	5.33	0.7	gK4	012	-25	15 θ UMi	
20962	33 16.9	+2.72	-0.006	+17 49 15	-12.0	-0.02	6.06	0.6	gG8	008	-22	15 τ^2 Ser	
20964	33 24.8	+2.20	+0.002	+39 10 30	-12.0	-0.00	5.44	-0.7	gM2	006	-19	6 μ CrB	
20968	33 30.4	+2.85	-0.003	+11 25 50	-12.0	-0.02	6.11		gK0		-26		
20977	33 56.7	+1.59	-0.002	+54 05 13	-11.9	-0.01	6.03	1.0	gK4	010	-10		
20979	33 59.0	+3.64	-0.001	-27 58 16	-11.9	-0.01	3.78	0.7	gK5	024	-25	39 ν Lib	d
20981	34 05.3	+2.88	+0.003	+10 10 34	-12.1	-0.14	5.40	1.0	sgG7	013	+ 8v	16 Ser	
20985	34 10.9	+2.76	+0.005	+16 17 00	-11.9	-0.02	5.88	1.9	dA6n	016	- 2	18 τ^2 Ser	
20993	34 28.2	+3.60	-0.001	-26 06 58	-11.9	-0.03	6.03		B9				
20999	34 39.8	+1.54	-0.004	+54 47 41	-11.9	-0.02	5.74		A0n		-19		
21001	34 40.6	+4.04	-0.013	-42 24 18	-11.8	+0.06	4.27	0.0	M0	014	- 7v	ω Lup	s
21003	34 45.9	+6.66	-0.003	-73 17 03	-11.9	-0.03	5.76	1.3	B8s	013	-19	κ^2 Aps	
21005	34 51.4	+3.53	-0.002	-22 58 39	-11.9	-0.09	5.82	0.8	gK0	010	+ 7		
21007	35 05.7	+4.46	-0.005	-52 12 34	-11.9	-0.04	5.48	1.0	A0	013	-12		
21014	35 21.6	+3.49	+0.005	-20 51 09	-11.9	-0.07	5.94	-0.2	K0	006			
21015	35 24.4	+3.95	+0.002	-38 57 55	-11.8	-0.01	6.02		A3				
21019	35 34.7	+3.69	-0.001	-29 36 54	-11.8	-0.04	3.80	-1.6	B3n	008	+ 1v	40 τ Lib	
21025	35 42.4	+7.38	-0.001	-75 55 14	-11.8	-0.04	6.02		A0				
21027	35 50.1	+4.91	-0.017	-59 44 37	-12.0	-0.22	6.06	3.2	F5	027			
21031	36 01.5	+3.45	+0.006	-19 08 20	-11.9	-0.08	5.53	1.3	sgG2	023	+47	41 Lib	
21032	36 01.8	+2.15	+0.005	+40 30 55	-11.7	+0.05	5.41	1.7	gG5	018	-10	54 ϕ Boo	
21036	36 14.7	+1.54	-0.004	+54 40 18	-11.8	-0.02	6.00		gK1		-23		
21039	36 24.5	+3.53	-0.003	-22 59 18	-11.8	-0.04	6.21		A0				
21042	36 35.0	+3.81	+0.001	-34 15 01	-11.7	-0.01	4.63	0.9	G5	018	-23	3 ψ^1 Lup	
21044	36 40.0	+1.92	+0.008	+46 57 41	-11.9	-0.13	5.78	2.4	dF1n	021	- 2		
21048	36 52.9	+2.32	0.000	+34 50 13	-11.7	-0.02	6.19		K0		+ 4		
21054	37 06.5	+1.75	+0.000	+50 35 07	-11.7	-0.04	5.94		G5		-14		
21057	37 19.2	+3.55	-0.002	-23 39 26	-11.7	-0.02	5.06	0.1	sgK4	010	-22	42 Lib	
21063	37 29.1	+2.26	-0.001	+36 47 52	-11.7	-0.02	6.00	1.2	B5	011	-19	7 ζ^1 CrB	} d _s
21064	37 29.6	+2.26	-0.001	+36 47 49	-11.7	-0.01	5.07	0.3	B8n	011	-30v	7 ζ^2 CrB	
21065	37 30.1	+0.17	-0.010	+69 26 40	-11.6	+0.05	5.86		gM0		-29		s
21070	37 44.5	+4.12	-0.017	-44 29 50	-11.9	-0.27	4.69	3.5	F5n	057	- 7	g Lup	
21089	38 41.1	+2.76	+0.002	+16 11 05	-11.6	-0.02	5.97	0.5	gG6	008	+ 3	19 τ^2 Ser	
21092	38 59.4	+4.34	-0.002	-49 19 50	-11.6	-0.03	6.06		K0				
21094	39 03.6	+3.46	-0.003	-19 31 06	-11.7	-0.11	4.96	1.0	gM0	016	- 4v	43 κ Lib	s
21102	39 19.2	+2.68	-0.004	+19 49 48	-11.6	-0.05	4.49	0.1	A2	013	-17v	21 ι Ser	d
21103	39 22.8	+3.90	-0.004	-37 15 58	-11.6	-0.02	5.31	-1.7	G7	004	-16	h Lup	
21105	39 26.1	+2.82	+0.003	+13 00 23	-11.6	-0.02	5.26	1.1	A0p	015	+ 2v	20 χ Ser	v
21106	39 29.4	+3.82	-0.002	-34 33 05	-11.6	-0.04	4.82	-0.9	B6	007	+ 8v	4 ψ^2 Lup	s
21111	39 39.6	+2.70	-0.005	+18 37 19	-11.5	+0.04	5.80	2.1	A0	018	-30	22 τ^2 Ser	
21130	40 38.5	+2.52	-0.008	+26 27 10	-11.4	+0.04	3.93	0.7	A0n	023	-10v	8 γ CrB	ds
21146	41 15.4	+3.38	-0.002	-15 30 54	-11.5	-0.07	5.55		A5			44 η Lib	
21154	41 29.0	+1.63	-0.007	+52 31 04	-11.4	+0.02	5.48	0.7	A0p	011	-16v		
21155	41 30.7	+3.02	-0.006	+02 40 27	-11.5	-0.16	5.80	4.6	dG5	054	+14	23 ψ Ser	ds
21158	41 48.2	+2.96	+0.009	+06 34 53	-11.3	+0.04	2.75	1.6	gK2	040	+ 3	24 α Ser	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
21161	15 ^b 42 ^m 01 ^s 0	+2 ^s 36	-0 ^s 003	+32°40'21"	-11"4	-0"02	5.60	0.8	gG9	011	-4	9 π CrB	
21164	42 25.7	+2.73	-0.002	+17 25 12	-11.3	-0.01	5.89	0.9	A0	010	-6v	26 τ^s Ser	s
21177	42 55.0	+2.97	+0.002	+05 36 10	-11.3	-0.02	5.56	0.3	A2	009	-10		
21184	43 18.5	+5.48	-0.000	-65 17 17	-11.3	-0.05	5.75		A5		.		d
21187	43 30.3	+3.10	-0.002	-01 38 57	-11.3	-0.04	5.37	-0.4	B5n	007	-13v	25A ^s Ser	s
21188	43 32.2	+3.83	-0.002	-34 31 40	-11.3	-0.04	5.61	1.5	B9n	015	-5		d
21194	43 52.7	+2.77	+0.005	+15 34 37	-11.3	-0.06	3.74	0.9	A0n	027	-1	28 β Ser	
21201	44 00.8	+2.91	-0.015	+07 30 30	-11.3	-0.07	4.42	4.3	dG0	095	-66	27 λ Ser	
21205	44 13.7	+3.90	-0.036	-37 45 35	-11.4	-0.22	6.12	5.3	dG6	069	-4		
21224	44 57.9	+2.79	-0.004	+14 16 05	-11.1	+0.03	5.72	1.3	A0	013	-34	31 ν Ser	
21227	45 04.1	+4.51	-0.001	-52 17 07	-11.1	-0.01	6.04		K0		.		d
21233	45 22.9	+1.43	-0.015	+55 37 38	-11.0	+0.07	5.90		gK3		-4		
21243	45 47.9	+2.14	+0.006	+77 56 57	-11.1	-0.00	4.34	0.2	A2n	015	-16v	16 ζ UMi	
21245	45 53.4	+2.80	-0.001	+13 56 34	-11.2	-0.12	6.10		gK2		-54		
21246	45 53.9	+0.92	+0.005	+62 45 13	-11.1	-0.06	5.13	1.1	A2n	016	-6v		
21250	46 18.6	+4.55	-0.006	-53 03 28	-11.1	-0.04	5.96	1.5	A0n	013	+21		
21251	46 19.4	+3.14	-0.002	-03 40 00	-11.0	+0.00	5.61	1.5	A3	015	-16	30 Ser	
21252	46 19.7	+4.34	-0.004	-48 45 38	-11.0	-0.01	6.02		A2		.		
21253	46 25.3	+1.45	+0.001	+55 31 45	-11.0	+0.00	5.79	1.9	A6s	017	-2		d
21255	46 29.2	+2.70	-0.003	+18 17 41	-11.1	-0.10	4.28	0.8	gM1	020	-39	35 κ Ser	
21257	46 30.7	+2.47	-0.000	+28 18 32	-11.0	-0.02	var	var	cG0ep	039	+25	R CrB	
21263	46 45.6	+4.20	+0.004	-45 15 01	-11.1	-0.04	6.21		A5		.		d
21269	47 00.5	+3.13	-0.006	-03 16 43	-11.0	-0.03	3.63	-0.2	A0	017	-9v?	32 μ Ser	
21273	47 12.8	+4.66	-0.000	-54 54 19	-11.0	-0.02	5.84	-2.6	B3s	002	+2		d
21276	47 29.7	+2.52	-0.006	+26 13 12	-11.0	-0.08	4.73	1.3	gG4	021	-19	10 δ CrB	
21280	47 45.9	+3.03	+0.002	+02 20 51	-11.0	-0.06	5.33	1.7	gG6	019	-4	34 ω Ser	
21281	47 46.5	+3.81	-0.001	-33 28 36	-11.0	-0.04	4.11	-0.5	B9	012	-18v	5 χ Lup	s
21284	47 57.9	+4.26	-0.011	-46 54 38	-11.0	-0.04	6.12		K0		.		
21285	47 58.0	+3.61	-0.001	-25 36 03	-11.0	-0.03	4.77	-1.6	B4n	006	-10	1 b Sco	
21288	48 19.3	+2.99	+0.008	+04 37 36	-10.8	+0.06	3.75	1.6	dA6s	038	-9	37 ϵ Ser	
21292	48 23.3	+2.77	-0.000	+15 17 02	-10.9	-0.05	var		M7ev		+8	R Ser	
21301	48 39.1	+3.12	-0.006	-02 56 26	-10.9	-0.03	5.16	1.7	A0n	020	-8	36 b Ser	
21305	48 50.6	+3.35	-0.002	-13 59 03	-10.9	-0.01	6.25	0.5	gG5	007	-22		
21308	49 00.4	+5.23	-0.001	-62 27 30	-10.9	-0.03	6.18		K0		.		
21311	49 04.0	+2.63	-0.004	+21 07 37	-10.8	+0.01	4.88	0.1	gK5	011	-62	38 ρ Ser	
21319	49 20.8	+2.26	-0.001	+35 48 41	-11.2	-0.36	4.77	1.9	sgK1	027	-24	11 κ CrB	
21327	50 25.6	+3.48	-0.001	-20 01 09	-10.8	-0.03	5.06	-2.4	B3n	0042	-4v	45 λ Lib	
21328	50 31.4	+5.93	-0.002	-68 27 23	-10.7	-0.02	5.20	-3.3	cG6	002	+5	κ TrA	
21329	50 36.3	+3.60	-0.001	-25 10 46	-10.8	-0.03	4.66	-1.6	B3n	0063	-12	2A Sco	d
21332	50 43.0	+5.29	-0.028	-63 16 43	-11.1	-0.40	3.04	2.7	F0	085	-0	β TrA	
21337	50 52.2	+2.79	-0.010	+13 21 07	-11.3	-0.56	6.16	4.3	dG0	043	+36v	39 Ser	s
21339	50 54.3	+3.58	-0.002	-24 23 09	-10.7	-0.03	5.44	-1.1	B6n	005	+13		
21340	50 56.7	+2.07	+0.040	+42 35 26	-10.1	+0.63	4.61	3.5	dF7	060	-55	1 χ Her	
21341	50 57.0	+3.57	-0.001	-23 49 51	-10.7	-0.03	5.36	-1.6	B4n	004	-27		
21342	50 58.4	+3.42	+0.007	-16 35 03	-10.6	+0.13	4.34	1.2	gG8	024	+3	46 θ Lib	
21345	51 06.6	+1.40	-0.002	+55 58 25	-10.6	+0.05	5.92	0.7	gG8	009	-30		
21348	51 17.5	+2.75	+0.002	+16 13 20	-10.7	-0.03	6.14		dF2		+2		ds
21350	51 19.9	+5.03	-0.007	-60 01 50	-10.8	-0.08	6.04	3.3	A3	029	.		d
21352	51 27.1	+3.65	-0.002	-27 11 31	-10.7	-0.03	6.01		B5		.		
21355	51 39.1	+3.60	-0.001	-25 05 50	-10.7	-0.03	5.93	-1.7	B9n	003	.	3 Sco	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
21359	15 ^h 51 ^m 52 ^s .1	+5.06	-0.004	-60°20'10"	-10.7	-0.09	5.96		A2		.		
21364	52 06.7	+3.47	-0.001	-19 14 13	-10.6	-0.03	5.90		B5n		-6	47 Lib	d
21367	52 15.2	+2.89	-0.000	+08 43 34	-10.6	-0.01	6.20	1.4	A2n	011	-24	40 Ser	
21368	52 22.3	+2.64	-0.006	+20 27 23	-10.6	+0.04	5.76	0.0	sgM0	007	-61		
21371	52 28.4	+3.63	-0.003	-26 07 13	-10.6	-0.03	5.61		A2		-5	4 Sco	
21377	52 45.4	+4.01	-0.003	-39 43 09	-10.6	-0.02	6.13		B9		.		
21382	52 57.7	+2.00	-0.003	+43 16 59	-10.5	+0.06	5.54	0.3	sgM3	009	-10	2 Her	
21390	53 25.4	+2.69	-0.001	+18 45 56	-10.5	-0.02	6.22	-0.8	B9	004	.		
21395	53 41.3	+3.84	+0.001	-33 49 18	-10.5	-0.05	5.37	1.9	A0	020	-10	ξ^1 Lup	} d
21396	53 41.9	+3.84	+0.001	-33 49 10	-10.5	-0.05	5.73	2.2	A0	020	-12	ξ^2 Lup	
21397	53 44.3	+3.38	+0.005	-14 41 04	-10.5	-0.03	6.17		A0		.		
21398	53 47.5	+3.71	-0.001	-29 04 11	-10.5	-0.03	4.02	-2.4	B4	0052	+3	5 ρ Sco	
21400	53 49.5	+2.02	-0.003	+42 42 38	-10.5	+0.01	5.61	0.1	B9e	008	-17v	4 Her	
21402	53 58.4	+2.18	+0.003	+38 05 25	-10.4	+0.07	5.47	3.2	dF0n	036	-12	12 λ CrB	
21405	54 05.8	+3.90	-0.002	-36 02 29	-10.5	-0.01	5.95		A2+G0		.		
21408	54 08.5	+2.77	+0.021	+15 49 24	-11.8	-1.29	3.86	3.4	dF5	079	+7v	41 γ Ser	
21414	54 21.6	+5.51	-0.001	-64 53 42	-10.5	-0.03	5.88		B8		.		d
21420	54 44.8	+3.51	-0.001	-20 50 23	-10.4	-0.02	5.87		B5		.		
21424	54 51.2	+1.17	-0.003	+59 03 19	-10.4	+0.02	6.17	0.1	B9n	006	-6		
21428	54 56.0	+2.77	-0.008	+14 33 23	-10.3	+0.08	5.66	0.2	gK4	008	-68	φ Ser	
21439	55 23.1	+3.36	-0.001	-14 08 12	-10.4	-0.02	4.68	-0.8	Aenp	008	-6	48 Lib	
21440	55 30.9	+3.48	-0.006	+27 01 17	-10.4	-0.07	4.22	0.1	gK2	019	-30	13 ϵ CrB	d
21442	55 34.6	+3.60	-0.001	-24 41 20	-10.4	-0.03	5.41	-0.4	B6n	007	-11		
21447	55 49.3	+3.63	-0.001	-25 58 18	-10.4	-0.03	3.00	-3.2	B1	0058	-3v	6 π Sco	s
21451	56 05.4	+4.09	-0.004	-41 36 09	-10.3	-0.01	5.07	1.1	G8	016	-27		
21467	56 36.0	+1.42	-0.018	+54 53 25	-10.2	+0.10	4.96	1.8	A5n	023	-8v		
21478	56 48.0	+3.98	-0.002	-38 15 20	-10.3	-0.04	3.64	-1.6	B3n	009	+7	η Lup	d
21486	57 06.8	+2.22	+0.002	+36 47 04	-10.2	+0.02	5.71	-0.1	gK5	007	+11		
21489	57 22.3	+3.55	-0.001	-22 28 52	-10.2	-0.03	2.54	-4.9	B0n	0033	-14v	7 δ Sco	
21491	57 24.5	+2.51	-0.001	+26 03 39	-10.2	+0.01	var		Q+gM3ep		-29	T CrB	s
21495	57 31.0	+3.37	-0.044	-16 23 16	-10.6	-0.40	5.53	3.0	dF7	031	-25v	49 Lib	s
21499	57 39.0	+1.70	+0.001	+50 01 21	-10.3	-0.06	5.90	2.8	dA8	024	+4		
21502	58 05.4	+3.24	-0.001	-08 16 17	-10.2	-0.02	5.55	1.1	A1s	013	-19	50 Lib	
21508	58 22.0	+2.98	-0.003	+04 33 57	-10.1	+0.07	5.90	0.9	gK0	010	-4		
21525	58 59.4	+2.70	-0.004	+17 57 18	-10.0	+0.14	5.28	-0.2	G6	008	-19	5 r Her	
21527	59 07.8	+2.29	-0.016	+33 27 12	-10.9	-0.77	5.43	3.5	dG0	042	+18	15 ρ CrB	
21534	59 26.3	+2.40	-0.002	+29 59 23	-10.1	-0.02	4.91	1.3	A1	019	-19	14 ι CrB	
21535	59 27.1	+4.88	-0.015	-57 38 11	-10.2	-0.09	4.87	1.9	A2n	025	-18v?	ι^1 Nor	d
21539	59 31.7	+4.41	+0.003	-49 05 32	-10.1	0.00	4.74	0.9	G4	017	-0	η Nor	
21540	59 33.3	+3.72	+0.003	-28 59 52	-10.1	-0.02	6.16		K0		.		
21548	16 00 04.2	+3.99	-0.003	-38 27 53	-10.1	-0.04	4.97	-1.6	B5n	005	-3		
21552	00 08.4	+2.58	+0.001	+22 56 31	-10.0	+0.02	4.82	0.8	A2n	016	-26v	44 π Ser	
21556	00 19.0	+3.63	-0.005	-25 43 39	-10.0	-0.05	5.10	0.8	gK5	014	-39		
21557	00 19.3	+6.69	-0.006	-72 15 57	-9.9	+0.07	5.71	-0.1	K0	007	.		
21559	00 24.5	+3.79	-0.004	-31 51 48	-10.0	-0.03	6.11		F5		.		
21569	00 48.8	+1.53	-0.000	+53 03 14	-10.0	-0.04	6.18	0.1	gK5	006	-7		
21572	00 56.9	+1.12	-0.041	+58 41 53	-9.6	+0.33	4.11	2.5	dF8	048	-8v	13 θ Dra	s
21574	01 06.1	+3.83	-0.003	-33 04 38	-10.0	-0.06	6.21		F0		.		
21577	01 08.9	+1.81	-0.004	+47 22 35	-9.9	+0.05	var		M6e		.	X Her	
21580	01 14.3	+1.87	+0.005	+46 10 28	-10.0	-0.07	4.64	-0.1	B9	011	+3	6 v Her	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
21582	16 ^h 01 ^m 17 ^s .2	+2.97	-0.003	+05°07'23"	- 9.9	+0.01	6.18		G8		-44	43 Ser	
21584	01 18.3	+3.96	-0.012	-37 43 32	-10.0	-0.12	5.96		F0		.		
21590	01 29.0	+2.21	+0.001	+36 46 06	- 9.9	-0.02	5.85	3.3	dF9+AO	032	- 2v		s
21593	01 36.9	+3.30	-0.004	-11 14 13	- 9.9	-0.04	4.16	2.1	dF4	039	-29	ξ^1 Sco	ds
21604	02 14.5	+1.09	-0.003	+59 32 51	- 9.9	-0.03	6.20		Ma		- 5		
21609	02 31.5	+3.49	-0.000	-19 40 13	- 9.9	-0.03	2.90	-3.4	B1n	006	- 4v	8 β^1 Sco	} d s
21610	02 31.9	+3.49	-0.001	-19 40 00	- 9.9	-0.03	5.06	-1.2	B3n	006	- 5	8 β^2 Sco	
21615	02 56.9	+4.24	+0.000	-45 02 22	- 9.8	+0.02	4.84	0.6	A3p	014	-16	δ Nor	
21620	03 07.1	+3.58	-0.001	-23 28 18	- 9.8	-0.04	5.94	0.9	B8	010	.		
21622	03 12.5	+2.90	-0.001	+08 13 50	- 9.8	-0.01	6.14	1.1	A2	010	-21v		s
21625	03 18.1	+3.94	-0.002	-36 40 05	- 9.8	-0.04	4.33	-2.4	B3n	0046	+15	θ Lup	
21639	03 52.7	+3.51	-0.001	-20 32 07	- 9.8	-0.03	4.13	-3.5	B1	0036	- 4	9 ω^1 Sco	
21647	03 58.6	+3.95	+0.006	-36 37 18	- 9.8	-0.05	5.77		F0		.		
21659	04 28.1	+3.52	+0.003	-20 44 07	- 9.7	-0.04	4.58	0.5	gG2	015	- 5	10 ω^2 Sco	
21667	04 49.5	+3.33	-0.003	-12 36 45	- 9.7	-0.04	5.64	0.6	B9n	010	-25v	11 Sco	d
21668	04 51.5	+3.60	-0.001	-24 19 46	- 9.7	-0.02	6.22		B8		.		
21673	05 04.4	+3.66	+0.008	-26 11 40	- 9.6	-0.01	5.64	-0.9	gM2	005	-18		
21676	05 08.4	-1.98	-0.006	+7 ξ 35 41	- 9.6	+0.01	5.60	1.3	A0	014	-25v	18 UMi	s
21677	05 11.1	+4.93	-0.002	-57 48 07	- 9.7	-0.06	5.79	1.8	A0n	016	0	ι^2 Nor	
21682	05 14.2	+2.86	-0.001	+10 01 27	- 9.6	-0.02	5.63	1.5	A5	015	-28v	45 Ser	
21694	05 44.2	+3.58	-0.001	-23 33 13	- 9.6	-0.03	5.79		B9		.		
21696	05 49.0	+2.71	-0.003	+17 10 43	- 9.6	-0.02	5.34	0.7	gG4	012	- 9	7 \times Her	d
21702	06 03.2	+2.89	-0.001	+08 39 57	- 9.6	-0.02	5.90	-0.2	gM3	006	-22	47 Ser	
21705	06 10.7	+0.17	-0.007	+67 56 30	- 9.5	+0.06	5.40	0.8	A0n	012	-18		
21717	06 28.9	+3.00	-0.002	+03 35 07	- 9.5	+0.01	6.10		gK5		+ 9		
21718	06 31.2	+2.70	-0.002	+17 20 13	- 9.6	+0.03	6.07	1.1	A0	010	-16	8 Her	
21722	06 39.9	+3.85	-0.002	-33 24 54	- 9.6	-0.06	5.58	1.0	B9n	012	-45v		
21724	06 43.3	+2.95	+0.016	+06 31 11	-10.3	-0.74	6.02	3.3	dK2	029	- 4		
21733	07 08.5	+2.19	-0.005	+36 37 00	- 9.2	+0.32	4.94	2.2	sgK1	028	-18v?	16 τ CrB	ds
21736	07 11.5	+1.89	-0.003	+45 03 54	- 9.4	+0.03	4.26	0.0	A0	014	-16	11 ϕ Her	
21738	07 13.3	+3.14	-0.002	-03 20 12	- 9.5	-0.01	5.41	-0.1	gK5	008	-46v		s
21748	07 52.6	+4.09	-0.009	-40 59 21	- 9.5	-0.13	6.16		F0		.		
21749	07 55.3	+3.73	-0.007	-29 17 10	- 9.5	-0.09	5.16	2.0	gK3	023	-27		
21773	09 05.1	+3.49	-0.001	-19 19 57	- 9.4	-0.03	4.29	-1.6	B2n	009	- 7v	14 ν Sco	ds
21776	09 10.2	+3.71	-0.002	-28 17 21	- 9.4	-0.05	5.70	2.3	B9	021	.	12 c^1 Sco	d
21777	09 12.8	+2.72	+0.000	+16 47 37	- 9.3	-0.00	5.90	0.9	A2s	010	-15	q Her	
21778	09 13.1	+3.70	-0.001	-27 47 54	- 9.3	-0.03	4.70	-1.6	B3n	0055	+10	13 c^2 Sco	
21780	09 15.8	+3.28	-0.001	-09 56 10	- 9.3	-0.02	4.91	1.1	A3s	017	- 6v?	15 ψ Sco	
21782	09 22.5	+4.67	-0.002	-53 32 39	- 9.3	-0.02	5.98		Ma		.		
21783	09 23.1	+4.78	-0.012	-55 24 48	- 9.4	-0.05	5.96		F0		.	ζ Nor	
21784	09 24.5	+3.25	+0.002	-08 25 12	- 9.3	-0.00	5.49	0.0	A1n	008	+ 5	16 Sco	
21786	09 30.2	+2.55	-0.002	+23 37 22	- 9.3	-0.02	var	var	gM4	005	-25	10 LQ Her	
21787	09 31.4	+4.73	-0.001	-54 30 12	- 9.3	-0.03	5.09	0.5	G4	012	-14	\times Nor	
21800	09 58.3	+2.19	-0.001	+36 33 10	- 9.3	-0.04	5.68	-0.1	gK4	007	-31v		s
21802	10 08.2	+1.99	-0.001	+42 30 06	- 9.2	+0.02	6.01		gK5		-21		d
21803	10 18.6	+3.16	-0.002	-04 05 38	- 9.2	-0.02	6.08		A0		-16		
21815	10 46.9	+2.97	+0.003	+05 08 51	- 9.2	-0.01	5.64	0.2	gK5	008	- 2	9 Her	
21819	10 52.1	+5.46	+0.001	-63 33 37	- 9.2	-0.02	4.03	1.0	G0	025	- 5	δ TrA	
21828	11 04.7	+3.32	-0.001	-11 42 42	- 9.2	-0.01	5.50	1.2	gK3	014	-25	17 χ Sco	
21829	11 10.0	+3.84	-0.001	-32 53 08	- 9.2	-0.04	6.07		K0				

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
21836	16 ^h 11 ^m 37 ^s 0	+4.36	-0.004	-47°14'48"	-9.2	-0.06	5.36	0.6	B8n	011	+ 2	θ Nor	
21837	11 41.0	+4.96	-0.003	-57 47 14	-9.2	-0.06	5.86		A2		.		
21838	11 43.3	+3.14	-0.003	-03 34 02	-9.3	-0.15	3.03	0.5	gM1	031	-20	1 δ Oph	
21845	11 51.4	+3.64	+0.000	-25 21 07	-9.1	-0.03	6.16		B9		.		
21846	11 54.9	+4.17	-0.002	-42 46 30	-9.1	-0.02	6.16		K0		.		
21849	12 04.8	+5.99	-0.007	-67 49 00	-9.2	-0.10	6.18		A3		.		
21851	12 13.3	-1.71	-0.000	+76 00 15	-9.1	+0.01	5.51	0.0	B9n	008	- 1	19 UMi	
21861	12 47.7	+4.70	-0.001	-53 41 16	-9.0	-0.00	5.43	1.3	M3	015	-28		
21862	12 48.1	+8.97	-0.002	-78 34 26	-9.1	-0.04	4.78	0.7	M5	015	-12	δ^2 Aps	
21863	12 48.3	+2.25	-0.022	+33 59 02	-9.1	-0.09	5.36	3.7	dF8	046	-12v	17 σ CrB	ds
21864	12 54.0	+3.26	+0.015	-08 14 20	-9.5	-0.51	5.56	4.4	dG1	067	+11	18 Sco	
21865	12 54.7	+8.96	+0.001	-78 32 44	-9.1	-0.03	5.22	1.1	M1	015	-10	δ^2 Aps	
21867	13 01.9	+3.39	+0.000	-14 43 31	-9.0	+0.01	6.10		A0n		-11		
21870	13 15.6	+2.66	-0.005	+18 55 59	-9.1	-0.08	5.86	0.6	gK3	009	-18	16 Her	
21871	13 15.7	+4.49	-0.001	-49 56 43	-9.0	-0.01	5.00		cG4p		-18	γ^2 Nor	
21895	14 17.3	+3.16	+0.002	-03 49 52	-8.9	+0.00	6.12		dA6n		- 8		
21900	14 44.5	+2.40	+0.001	+29 16 21	-8.9	-0.02	5.73	1.7	A3n	016	+ 2v?	18 ν CrB	
21910	15 11.5	+3.72	-0.002	-28 29 30	-9.0	-0.11	4.87	1.9	A0	025	-12	d Sco	
21916	15 21.5	-0.98	-0.004	+73 31 03	-8.8	+0.03	5.98	1.2	A0	011	-15		
21920	15 40.4	+3.17	+0.006	-04 34 20	-8.8	+0.04	3.34	0.9	gG8	033	-10	2 ϵ Oph	
21923	15 48.4	+4.18	+0.001	-42 33 12	-8.8	-0.02	5.62		A2n		-22v?	λ Nor	d
21933	16 05.3	+4.49	-0.017	-50 02 06	-8.8	-0.06	4.14	2.1	G8	040	-29	γ^2 Nor	s
21934	16 10.8	+3.39	-0.002	-14 45 09	-8.8	+0.01	6.06	0.3	gK4	007	-42v		ds
21941	16 22.6	+3.80	+0.006	-30 47 14	-8.7	+0.02	5.42	2.5	F5	026	- 8v		
21942	16 24.9	+4.79	+0.002	-55 01 13	-8.8	-0.03	5.91		K0		.		
21943	16 25.0	+1.00	+0.001	+59 52 32	-8.7	+0.02	5.64	-0.9	gM4	005	-36		
21959	17 09.3	+4.06	-0.001	-39 18 40	-8.8	-0.07	6.22		A0		.		d
21969	17 37.4	+3.61	-0.000	-24 03 02	-8.7	-0.03	4.76	-0.2	A3s	010	- 8	19 \circ Sco	
21974	17 47.3	+1.68	-0.002	+49 09 25	-8.6	+0.03	6.19	0.1	gK6	006	-32		
21976	17 54.1	+2.60	-0.001	+21 15 07	-8.7	-0.06	6.14		dG7		-25		
21982	18 08.7	+3.65	-0.001	-25 28 29	-8.6	-0.03	3.08	-4.3	B1	0052	- 3v	20 σ Sco	sv
21984	18 12.3	+2.06	-0.011	+39 49 38	-8.6	-0.01	5.54	3.3	dF0n	035	-29		d
21987	18 14.1	+1.80	-0.001	+46 25 53	-8.6	+0.03	3.91	-0.7	B7s	012	-14	22 τ Her	d
21997	18 43.2	+4.48	-0.001	-49 27 18	-8.6	-0.03	5.49	0.9	B6n	012	-12		
21999	18 56.4	-1.75	-0.022	+75 52 16	-8.3	+0.25	5.04	2.7	dA8n	034	-10	21 η UMi	
22000	18 57.0	+4.23	-0.003	-43 47 42	-8.6	-0.02	6.00		G5		.		d
22007	19 32.2	+3.04	-0.011	+01 08 42	-8.5	+0.05	4.80	2.6	dA7n	037	-45v?	50 σ Ser	
22012	19 42.8	+2.65	-0.003	+19 16 09	-8.5	+0.04	3.79	0.6	dA6n	023	-35v	20 γ Her	
22019	20 03.0	+3.11	-0.001	-01 57 49	-8.5	-0.00	6.11	0.3	B9	007	.		
22020	20 08.8	+2.34	-0.008	+31 00 25	-8.4	+0.11	4.72	0.6	gK0	015	-29	19 ξ CrB	
22026	20 28.4	+2.26	+0.000	+33 54 56	-8.5	-0.05	5.36	-0.1	gM2	008	-13	20 ν^1 CrB	
22029	20 36.1	+2.26	-0.001	+33 49 07	-8.4	+0.05	5.28	0.8	gK5	013	-39	21 ν^2 CrB	
22030	20 37.7	+4.06	+0.007	-39 04 41	-8.4	-0.01	5.40	4.0	dG5	052	+10		
22040	21 01.2	+2.30	+0.001	+32 26 54	-8.4	-0.02	6.20	1.2	A1n	010	- 3	23 Her	ds
22042	21 10.4	+3.51	-0.002	-19 55 19	-8.4	-0.05	4.59	0.0	gG9	012	+ 0	4 ψ Oph	
22043	21 11.3	+4.00	-0.002	-37 27 04	-8.4	-0.03	5.43		B8n		+ 8		
22054	21 31.0	+3.77	+0.005	-29 35 22	-8.4	-0.09	5.94	3.7	G0	036	.		d
22058	21 44.5	+2.92	0.000	+07 03 44	-8.3	+0.01	5.72	0.7	A1n	010	-34v	21 \circ Her	s
22062	21 54.9	-0.14	-0.004	+69 13 30	-8.3	-0.01	5.44	0.6	gK2	011	- 8		
22078	22 34.9	+3.60	-0.001	-23 19 58	-8.3	-0.02	5.92	-0.6	B5n	008	-10	5 ρ Oph	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
22079	16 ^h 22 ^m 35 ^s 0	+3 ^h 60	+0 ^m 000	-23°20'02"	- 8"3	-0"03	5.22	-1.3	B5n	008	-10	5 ρ Oph	d
22089	23 03.8	+6.46	+0.039	-69 58 29	- 8.1	+0.10	4.93	4.6	dG0	086	+ 8v	ζ TrA	s
22090	23 06.4	+2.77	+0.003	+14 08 49	- 8.3	-0.06	4.53	1.8	A2sp	028	- 7v	24 ω Her	d
22091	23 07.0	+0.79	-0.005	+61 48 35	- 8.2	+0.03	5.64	-0.5	gG7	006	-24		d
22100	23 17.6	+5.57	+0.008	-63 56 49	- 8.2	+0.02	5.30	2.2	F3s	024	- 6v	ι TrA	ds
22101	23 18.5	+0.81	-0.003	+61 37 37	- 8.1	+0.06	2.89	1.0	gG6	036	-14	14 η Dra	d
22102	23 19.5	+1.31	+0.002	+55 19 05	- 8.2	+0.02	5.66	0.7	A2	010	- 4		
22106	23 30.5	+4.40	-0.001	-47 26 35	- 8.2	-0.03	4.80	-1.7	B5	005	-12v	ϵ Nor	dss
22107	23 34.9	+2.65	+0.001	+19 00 18	- 8.2	-0.01	var	var	gM7cv	005	-28	U Her	
22108	23 37.2	+2.14	-0.000	+37 30 24	- 8.2	-0.02	5.53	1.3	A0n	014	- 1	25 Her	
22112	23 50.2	+2.82	-0.002	+11 31 09	- 8.2	+0.01	6.21		K0		-21		
22116	24 01.3	+5.06	-0.004	-58 29 19	- 8.2	-0.04	5.78	0.8	B9	010	.		
22117	24 07.3	+3.48	-0.001	-18 20 41	- 8.2	-0.03	var	var	B3ep	0083	- 5v	7 ζ Oph	
22123	24 18.8	+3.02	+0.001	+02 27 34	- 8.2	-0.03	6.18		G5		+ 4		
22131	24 54.3	+4.00	+0.003	-37 04 08	- 8.1	-0.01	5.87		K0		.		
22133	25 01.6	+3.23	+0.001	-07 29 07	- 8.2	-0.16	5.45	-0.7	gM2	006	+100		
22134	25 05.7	+3.25	-0.005	-08 15 41	- 8.1	+0.00	4.68	1.4	A2	022	-31	3 ν Oph	d
22140	25 34.1	+5.00	-0.002	-57 38 49	- 8.0	+0.01	5.99		K0		.		
22142	25 42.8	+9.21	-0.041	-78 47 20	- 8.1	-0.07	3.90	1.4	sgK0	031	+ 5v	γ Aps	
22148	26 00.9	+3.06	-0.000	+00 46 32	- 8.1	-0.07	5.47	0.0	gK5	008	+ 7		
22150	26 04.4	+4.35	-0.001	-46 08 04	- 8.0	-0.02	5.46	-3.0	B1sp	002	-19		
22157	26 20.2	+3.68	-0.001	-26 19 22	- 8.0	-0.03	1.22	-5.0	cM1+B4	009	- 3v	21 α Sco	dsv
22159	26 21.9	+5.33	-0.001	-61 31 31	- 8.0	-0.01	5.11	-1.0	K0	006	+ 4v?		
22171	26 57.1	+3.39	+0.002	-14 26 34	- 7.9	+0.01	5.75	1.5	gG2	014	-31		
22172	26 59.9	+1.97	+0.002	+41 59 26	- 7.9	-0.01	var	var	gM6	008	+ 3	30 g Her	
22179	27 09.9	+3.65	-0.001	-25 00 25	- 7.9	-0.03	4.87	-1.6	B3n	0055	- 4	22 ι Sco	
22193	28 04.1	+2.58	-0.007	+21 35 50	- 7.8	-0.02	2.81	-0.2	gG8	026	-26v	27 β Her	s
22194	28 04.2	-0.12	-0.005	+68 52 35	- 7.8	+0.03	4.98	0.9	B9np	015	- 7	15 A Dra	
22195	28 06.6	+3.92	-0.001	-34 35 50	- 7.8	-0.02	4.33	-2.4	B3	0048	+ 0v	N Sco	
22198	28 12.8	+4.17	-0.001	-41 42 38	- 7.8	-0.00	5.47	-6.8	B1ep	0066	-14		d
22200	28 16.4	+3.43	-0.004	-16 30 19	- 7.8	-0.04	4.40	0.0	gG5	013	-34	8 φ Oph	
22201	28 18.4	+3.68	-0.002	-26 25 50	- 7.8	-0.04	6.22		K0		.		
22202	28 23.2	+2.61	-0.006	+20 35 14	- 7.9	-0.07	5.29	-0.2	gG4	008	+18	s Her	
22203	28 23.4	+3.03	-0.002	+02 05 31	- 7.9	-0.08	3.85	0.0	A1n	017	-15v	10 λ Oph	d
22205	28 27.7	+3.34	-0.040	+79 04 20	- 7.7	+0.11	5.54	2.6	A3	026	-12		
22211	28 43.5	+1.65	-0.005	+49 04 08	- 7.8	-0.07	6.22	1.2	A0	010	- 8	34 Her	
22212	28 46.5	+6.62	-0.006	-70 53 00	- 7.8	-0.03	5.57		K0		- 3		
22216	29 04.9	+2.57	-0.001	+22 18 06	- 7.7	-0.00	5.96		gK5		-26		
22221	29 10.1	+3.56	+0.001	-21 21 40	- 7.7	+0.03	4.57	1.7	dA6n	027	+ 2	9 ω Oph	
22244	30 07.9	+2.95	+0.001	+05 37 34	- 7.7	-0.00	5.56	-0.2	A1s	007	-27	28 n Her	
22250	30 15.8	+2.81	-0.012	+11 35 38	- 7.7	-0.08	4.92	-0.6	gM0	008	+ 3	29 h Her	
22251	30 16.8	+1.81	-0.001	+45 42 11	- 7.6	+0.04	5.55	1.7	A1n	017	-16		d
22258	30 31.3	+4.26	-0.001	-43 56 29	- 7.6	-0.01	5.15	-4.8	O9sp	001	+ 5v	μ Nor	
22264	30 54.8	+5.78	+0.005	-65 23 32	- 7.6	-0.05	5.38	0.6	G5	011	+10	θ TrA	
22281	31 42.9	+0.85	+0.002	+60 55 39	- 7.5	-0.02	5.85	1.1	A1n	011	-14		
22296	32 29.4	+1.93	-0.001	+42 32 21	- 7.4	+0.04	4.25	1.1	A0	023	-11	35 σ Her	
22303	32 45.9	+3.74	-0.001	-28 06 51	- 7.5	-0.03	2.91	-4.3	B0s	0036	- 1	23 τ Sco	
22304	32 51.1	+4.22	-0.001	-42 45 27	- 7.5	-0.01	5.58		O9		-48v		
22311	33 04.7	+3.95	+0.002	-35 09 16	- 7.4	-0.00	4.30	0.6	Ma	018	- 2v	H Sco	
22321	33 43.7	+3.15	+0.030	-02 13 10	- 7.7	-0.32	5.87	5.4	dK0	090	-15	12 Oph	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
22332	16 ^h 34 ^m 24 ^s .1	+3.30	+0.001	-10°28'03"	- 7.3	+0.02	2.70	-4.6	O9n	006	-19v	13 ζ Oph	
22334	34 26.5	+5.31	-0.001	-60 53 27	- 7.3	-0.03	6.24		B5		.		
22344	34 43.5	+1.75	-0.002	+46 42 49	- 7.3	+0.00	5.95	0.2	gG6	007	-15		
22347	34 53.6	+4.24	-0.002	-43 17 57	- 7.3	-0.03	6.14	-2.6	B3s	0021	+ 2		d
22351	35 00.3	+1.42	-0.001	+52 59 59	- 7.2	+0.03	5.64	0.8	B9	011	- 9	16 Dra	d
22352	35 02.7	+1.42	-0.001	+53 01 27	- 7.2	+0.02	5.56	0.8	A0n	011	-11v?	17 Dra	d
22360	35 20.7	+3.21	-0.000	-06 26 20	- 7.2	-0.01	6.00		A0		.		
22361	35 29.6	+2.76	-0.003	+13 47 13	- 7.3	-0.06	6.20		F2		-21		
22364	35 34.8	+4.98	-0.017	-56 53 36	- 7.2	-0.01	var		B9		.	R Ara	E
22368	35 44.1	+4.02	-0.002	-37 07 07	- 7.2	-0.04	6.10		A0		.		d
22370	35 53.1	+8.57	-0.087	-77 25 00	- 7.5	-0.35	4.16	1.5	G8	030	-30	β Aps	
22379	36 12.5	+6.19	-0.000	-68 11 58	- 7.2	-0.02	6.04		B5		.	η TrA	
22383	36 26.0	+5.27	+0.007	-60 20 55	- 7.2	-0.08	6.24		F8		.		d
22398	36 59.6	+1.21	0.000	+56 06 45	- 7.0	+0.06	5.44	1.0	gK0	013	-19v?		
22412	37 23.3	+1.63	-0.004	+49 01 31	- 7.0	+0.03	5.14	0.5	gM2	012	-55	42 Her	
22419	37 35.1	+4.49	-0.001	-48 40 02	- 7.1	-0.01	5.35	-5.4	O5e	0014	+23v		ds
22425	37 52.7	+4.54	+0.000	-49 33 21	- 7.0	+0.00	5.91		B1p		+ 6		
22430	38 09.6	+2.98	-0.000	+04 18 57	- 7.0	-0.02	5.73		A0n		-34	36, 37m Her	ds
22444	38 31.0	+3.88	-0.005	-33 03 01	- 7.1	-0.09	5.94		G0		.		
22446	38 31.5	+2.79	-0.002	+12 29 26	- 7.0	-0.02	5.98	1.4	A2n	012	-27		
22447	38 34.1	+3.64	-0.004	-24 22 22	- 7.0	-0.02	6.08		A5		.		
22449	38 40.6	+3.47	-0.002	-17 38 50	- 7.0	-0.00	5.04		sgG8		-25	24 Sco	
22452	38 56.1	+2.49	-0.002	+24 57 14	- 6.9	0.00	6.22		K3		-68		
22453	38 57.1	+3.53	+0.002	-19 49 50	- 6.9	+0.03	5.60		dF5		+ 5		
22460	39 10.4	+3.04	-0.007	+01 16 30	- 6.9	+0.05	5.86	3.0	dF2	027	-45	14 Oph	
22464	39 24.0	+2.26	-0.037	+31 41 32	- 6.5	+0.38	3.00	3.2	dG0	108	-70v	40 ζ Her	ds
22468	39 34.9	+2.43	-0.000	+27 00 43	- 6.9	-0.05	5.91	3.3	dF2	030	-12v	39 Her	s
22479	40 24.5	+4.06	-0.001	-38 03 47	- 6.9	-0.05	6.16		A0		.		
22481	40 25.3	+4.16	-0.002	-41 01 13	- 6.8	-0.02	6.17		B8n		- 2		
22489	40 34.0	+0.42	+0.000	+64 41 01	- 6.8	-0.02	5.00	0.2	gK2	011	+ 0	18 g Dra	
22493	40 42.0	+4.74	-0.002	-53 03 36	- 6.8	-0.01	5.97		K0		.		
22502	41 10.8	+2.06	+0.003	+39 00 58	- 6.8	-0.09	3.61	1.6	sgG5	048	+ 8	44 η Her	
22505	41 14.4	+4.15	-0.002	-40 44 51	- 6.8	-0.03	5.68	-0.8	B3n	005	+12		
22513	41 37.0	+6.04	-0.002	-67 01 09	- 6.7	-0.02	5.30	-4.7	A0n	001	- 2		
22519	41 50.5	+22.4	+0.012	-86 16 56	- 6.7	0.00	6.13		A0		.		
22520	41 52.3	+3.75	-0.002	-28 25 06	- 6.7	-0.01	5.96		A2		.		d
22521	41 56.9	+1.23	+0.006	+55 46 53	- 6.6	+0.08	6.18	0.1	A2sp	006	-46v?		
22522	42 00.9	+2.21	-0.006	+34 07 47	- 6.6	+0.05	5.90	1.9	dF0n	016	-10		
22524	42 04.4	+5.12	-0.001	-58 24 47	- 6.7	-0.02	5.94	-1.0	B3	004	-16		
22546	42 57.1	+3.05	-0.000	+01 06 38	- 6.6	+0.01	5.99	-0.5	B9n	005	-14v	16 Oph	
22549	43 03.4	+5.11	-0.002	-58 15 07	- 6.6	-0.03	5.76	-2.7	B0n	002	-51		
22553	43 06.5	+2.72	+0.002	+15 50 10	- 6.6	-0.05	5.78	0.3	gM3	008	-19		
22558	43 21.0	+6.36	+0.004	-68 56 20	- 6.6	-0.04	1.88	-0.5	K5	033	- 4	α TrA	
22559	43 22.3	+4.10	-0.003	-39 17 14	- 6.6	-0.04	5.52	0.0	K0	008	.		
22560	43 25.7	+2.88	-0.000	+08 40 20	- 6.6	+0.01	5.38	0.4	gM0	010	-21	43 i Her	
22564	43 37.5	+1.88	-0.002	+43 18 28	- 6.6	-0.05	6.07		gK4		-13		s
22584	44 20.7	+1.14	+0.002	+56 52 14	- 6.4	+0.06	4.88	3.0	dF1	043	0v?		
22592	44 38.3	+3.02	-0.001	+02 09 11	- 6.5	-0.02	6.04	1.4	A2n	012	- 6v	19 Oph	d
22604	45 17.8	+2.67	+0.016	+77 36 05	- 6.2	+0.21	6.01	2.0	dF2	016	+ 7		d
22605	45 18.6	+2.95	-0.002	+05 20 06	- 6.5	-0.04	5.28	0.7	A0p	012	-16	45 l Her	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
22606	16 ^h 45 ^m 27 ^s .4	+5 ^s 18	+0 ^s 005	-58°57'17"	-6 ^s .4	-0 ^s .04	3.68	0.2	K5	020	+9	η Ara	
22608	45 36.4	+3.41	-0.002	-14 49 20	-6.4	-0.01	6.12		A0		.		
22611	45 43.6	+1.92	-0.000	+42 19 37	-6.4	-0.03	6.15		M4		-7		
22631	46 36.2	+3.43	+0.001	-15 34 55	-6.3	+0.02	6.11		A3		.		
22640	46 55.2	+3.89	-0.049	-34 12 16	-6.5	-0.26	2.36	0.7	gG9	047	-2	26 ϵ Sco	
22643	47 03.9	+3.32	+0.006	-10 41 47	-6.4	-0.10	4.73	2.7	dF5	040	-1	20 Oph	
22648	47 16.0	+2.77	-0.002	+13 20 49	-6.3	-0.03	5.95	1.3	A0	012	-23v?		d
22658	47 37.4	+4.04	-0.003	-37 25 47	-6.2	-0.01	6.22	0.1	B9	006	.		d
22662	47 46.3	+1.76	+0.002	+46 04 10	-6.3	-0.06	4.86	0.9	A4sp	016	-1	52 Her	d
22664	47 53.6	+2.91	+0.003	+07 19 57	-6.2	-0.02	5.46	2.0	A0	020	-4	47 k Her	
22669	48 04.2	+4.18	-0.000	-41 08 48	-6.2	-0.00	5.37	-4.6	O9e	001	-62		
22677	48 28.7	+4.06	-0.001	-37 57 49	-6.2	-0.03	3.09	-3.0	B2np	007	-25v	μ^1 Sco	sE
22682	48 41.8	+2.34	-0.001	+29 53 26	-6.1	-0.01	5.86	-0.2	gM1	006	-10v?	50 Her	d
22688	48 52.6	+3.04	-0.002	+01 17 59	-6.1	-0.01	5.47	0.9	A2	012	-26	21 Oph	
22691	48 56.6	+4.06	-0.001	-37 56 03	-6.1	-0.03	3.64	-3.2	B2	0044	+2v?	μ^3 Sco	
22706	49 37.1	+2.73	+0.000	+15 01 27	-6.1	-0.01	var		gM5ev		-10	S Her	
22708	49 40.8	+2.49	+0.001	+24 44 21	-6.0	+0.00	5.20	0.0	gK1	009	-16	51 Her	
22712	49 45.2	+5.09	-0.004	-57 49 35	-6.2	-0.13	5.95		K5		.		
22725	50 09.1	+4.26	-0.002	-42 58 08	-6.0	-0.03	5.67		Mb		.		
22729	50 27.6	+4.22	-0.000	-41 54 48	-6.0	-0.02	6.18		cB0		-36		
22730	50 27.7	+4.23	+0.000	-42 16 51	-6.0	-0.01	4.88	-3.6	cB1ep	002	-26v	ζ^1 Sco	
22731	50 27.9	+3.54	-0.004	-20 20 01	-6.0	-0.04	5.91	3.0	dG3	026	-17		
22733	50 31.0	+4.21	-0.001	-41 43 31	-6.0	-0.01	5.34	-5.4	cO9	0012	-6v?		d
22737	50 40.7	+4.21	+0.001	-41 46 08	-6.0	-0.04	6.02		cB0s		-24v		d
22739	50 44.0	+5.60	+0.001	-63 11 22	-6.0	-0.03	6.14		A0		.		d
22748	50 54.7	+4.24	-0.000	-42 23 54	-6.0	-0.01	5.78		F5		.		
22749	51 01.0	-6.14	+0.007	+82 07 21	-5.9	-0.00	var	var	gG5	011	-11v	22 ϵ UMi	s
22751	51 03.6	+4.22	-0.011	-42 16 40	-6.2	-0.24	3.75	0.4	gK5	021	-19	ζ^2 Sco	
22752	51 04.1	+2.27	-0.008	+31 46 59	-6.0	-0.03	5.35	1.4	dA8s	016	-22	53 Her	
22768	51 28.8	+4.18	-0.002	-41 04 16	-5.9	-0.02	6.03	-5.2	O7ep	001	-138		d
22773	51 35.0	+3.11	+0.001	-01 31 51	-6.0	-0.08	6.21		F0n		-20		
22775	51 38.4	+2.84	-0.004	+10 14 46	-5.9	-0.04	4.29	0.0	B8n	014	-21v	25 ι Oph	s
22783	51 55.2	+3.21	-0.003	-06 04 26	-5.9	-0.02	5.35	-0.1	gK2	008	-17	23 Oph	
22786	51 59.8	+4.36	+0.004	-45 01 23	-5.9	-0.03	var		gM6ev		+7	RS Sco	
22794	52 32.3	+4.72	-0.005	-52 12 17	-5.9	-0.05	6.16		A0		.		
22802	52 45.8	+2.59	+0.004	+21 02 15	-5.8	-0.00	5.48	0.2	gG7	009	-3		
22808	52 57.7	+2.76	+0.002	+13 41 57	-5.8	-0.04	6.16	3.0	F2	023	-5v		s
22816	53 10.2	+2.64	-0.008	+18 30 42	-5.8	+0.01	5.56	0.1	gK5	008	+12	54 Her	d
22820	53 26.3	+3.83	+0.000	-30 30 09	-5.8	-0.03	var		gM7ev		-36	RR Sco	
22824	53 46.9	+3.62	-0.000	-23 04 22	-5.7	-0.01	5.60	0.4	A0	009	.	24 Oph	d
22830	53 55.3	+3.91	-0.001	-33 10 55	-5.7	-0.01	5.51		K5		.	27 Sco	
22835	54 07.5	+3.53	-0.001	-19 27 45	-5.7	-0.02	6.14	0.9	B8	009	.		d
22837	54 10.7	+6.44	-0.003	-69 11 32	-5.7	-0.02	6.01		A0		.		
22841	54 25.9	+4.63	-0.002	-50 33 52	-5.7	-0.05	5.70		B9n		-44		
22845	54 28.4	+4.97	-0.002	-55 54 49	-5.7	-0.04	3.06	-0.3	K5	021	-6	ζ Ara	
22848	54 39.9	+3.32	+0.001	-10 53 08	-5.7	-0.09	6.23	1.6	G5	012	.		
22862	55 18.0	+2.84	-0.020	+09 27 04	-5.6	-0.01	3.42	0.3	gK2	024	-56	27 κ Oph	
22867	55 29.0	+4.06	+0.002	-37 32 42	-5.6	-0.06	6.24	1.8	A3	013	.		
22869	55 35.4	+4.78	0.000	-53 05 09	-5.5	+0.01	4.15	-1.1	M1	009	+23	ϵ^1 Ara	d
22871	55 44.8	+0.33	+0.038	+65 12 39	-5.5	+0.04	4.82	4.1	dF7	064	-23v	19 h Dra	s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
22878	16 ^h 56 ^m 02 ^s 0	+4 ^s 78	-0 ^s 002	-54°31'18"	- 5"6	-0"07	5.85		A2		.		
22895	56 40.2	+4.53	-0.001	-48 34 23	- 5.5	-0.08	6.08		G5		.		d
22898	56 53.8	+3.67	-0.000	-25 01 05	- 5.5	-0.01	5.92	-0.2	gM3	006	-32		
22905	57 05.5	+3.67	+0.004	-24 54 53	- 5.5	-0.06	5.78	2.9	dF3	026	+19	26 Oph	
22910	57 15.5	-1.19	-0.001	+73 12 14	- 5.4	-0.02	6.24	1.4	A4n	011	- 7		
22911	57 16.5	+4.00	-0.001	-35 51 36	- 5.5	-0.07	6.04		K0		.		
22935	58 22.5	+2.30	-0.004	+30 59 55	- 5.3	+0.02	3.92	0.7	A0	023	-24v	58 ϵ Her	s
22937	58 25.2	+3.16	-0.003	-04 08 58	- 5.4	-0.08	5.00	1.1	gK4	017	- 7	30 Oph	
22938	58 26.3	+1.10	-0.006	+56 45 40	- 5.3	+0.03	6.11	0.9	gK1	009	-15		
22942	58 38.4	+3.88	-0.000	-32 04 16	- 5.4	-0.05	5.06	1.2	B8n	017	+15		
22948	58 51.3	+2.53	-0.001	+22 42 16	- 5.3	-0.03	5.74	-0.8	gK3	005	+11		
22956	59 08.6	+4.79	-0.001	-53 09 51	- 5.4	-0.15	5.36	3.1	F5	035	+ 7	ϵ^3 Ara	
22960	59 16.5	+2.73	+0.000	+15 01 16	- 5.3	-0.01	6.16	1.4	A0p	011	-32		d
22971	59 34.8	+2.88	+0.002	+08 31 18	- 5.2	-0.00	6.24	1.2	A0	010	- 1v		ds
22975	59 45.5	+2.21	0.000	+33 38 22	- 5.2	-0.01	5.27	1.7	A3s	019	-12	59 d Her	
22983	17 00 08.7	+5.11	-0.002	-57 38 33	- 5.2	-0.03	5.88	-0.6	B5	005	+ 6		
22985	00 15.6	+2.46	+0.004	+25 34 29	- 5.1	+0.08	5.95		gG7		-50		
22991	00 26.0	+4.09	+0.006	-38 04 57	- 5.2	-0.03	5.98		F0		.		
22998	00 38.4	+0.76	-0.008	+60 43 09	- 5.1	+0.06	6.24		K0		-17		
23002	00 50.3	+2.75	+0.001	+14 09 44	- 5.2	-0.07	5.10	-0.4	gM3	008	+43		
23014	01 21.3	+2.76	-0.002	+13 40 29	- 5.1	-0.04	5.86	1.3	A2n	012	-32		
23019	01 31.7	+3.95	+0.000	-34 03 17	- 5.1	-0.01	4.87	-4.8	cB1e	0021	+ 8		
23025	01 39.8	+2.76	+0.001	+13 38 16	- 5.2	-0.14	6.14	1.1	gG9	010	+46		
23034	01 47.4	+3.55	-0.000	-20 25 34	- 5.1	-0.03	6.17		B9n		-11		
23035	01 58.4	+0.33	-0.008	+64 40 11	- 5.0	+0.02	6.09	1.8	dG5	014	-25		
23037	02 05.1	+2.17	-0.006	+34 51 32	- 5.0	-0.01	6.01	1.4	A3	012	-17v		s
23046	02 30.6	+2.61	+0.000	+19 40 00	- 5.0	-0.00	6.13	0.9	A0	009	-25		d
23050	02 44.0	+3.06	-0.001	+00 46 28	- 5.3	-0.34	5.94	4.1	dF8	051	-18		
23056	02 57.3	+4.06	+0.001	-37 09 38	- 5.0	-0.03	6.14		A2		.		d
23058	02 57.5	+3.09	0.000	-00 49 31	- 4.9	-0.00	5.62	-3.5	B1n	0022	+15v?		
23061	03 03.4	+2.78	+0.003	+12 48 29	- 4.9	-0.01	4.91	1.3	A3n	019	- 4	60 Her	
23081	03 47.1	+3.72	0.000	-26 26 50	- 4.9	-0.03	6.20		A0		.		
23089	04 11.0	+2.54	-0.007	+22 09 01	- 4.9	-0.05	5.72	0.7	gK4	010	-96		
23091	04 17.2	+3.11	+0.002	-01 35 26	- 4.9	-0.04	6.25	2.3	A2n	016	+ 7		d
23092	04 17.4	+1.24	-0.009	+54 32 08	- 4.7	+0.08	5.06	3.4	dF6	046	-18	21 μ Dra	d
23105	04 53.4	+3.44	-0.001	-16 01 40	- 4.8	-0.02	var		gM5ev		-47	R Oph	
23116	05 20.5	+3.48	+0.000	-17 32 40	- 4.8	-0.03	6.14	0.7	gK0	008	-14		
23118	05 35.8	+3.83	+0.001	-30 20 22	- 4.8	-0.08	5.82		A0n		-21		
23120	05 38.7	+3.09	-0.002	-01 00 54	- 4.7	-0.04	6.02	1.2	A1n	011	-20v		d
23132	06 15.6	+2.13	-0.002	+35 59 56	- 4.7	-0.02	5.38	1.5	A5	017	-30	c Her	d
23145	07 01.9	+3.32	+0.004	-10 27 35	- 4.7	-0.11	5.58	3.2	dF5	033	- 3		
23148	07 04.6	+4.35	-0.003	-44 29 43	- 4.6	-0.06	5.14	0.1	G2	010	- 7		
23158	07 30.5	+3.44	+0.002	-15 39 53	- 4.5	+0.09	2.63	0.9	A2s	045	- 1	35 η Oph	d
23169	07 50.3	+4.56	+0.002	-48 48 48	- 4.6	-0.03	5.95		Ma		.		
23172	07 55.9	+1.94	-0.005	+40 50 19	- 4.5	+0.00	5.12	0.8	gK3	014	-56v		s
23174	08 10.2	+6.13	-0.030	-67 08 10	- 4.6	-0.10	5.94		K0		.		d
23180	08 34.0	+4.30	+0.002	-43 10 31	- 4.8	-0.29	3.44	2.5	A7n	066	-28	η Sco	
23182	08 38.2	+0.17	-0.003	+65 46 34	- 4.4	+0.02	3.22	-0.1	B5s	022	-14	22 ζ Dra	
23184	08 48.7	+4.14	-0.001	-39 26 47	- 4.5	-0.08	5.65		A0n		+12v		
23191	08 58.8	+2.48	-0.001	+24 17 51	- 4.4	+0.03	6.19	1.2	A3	010	- 2	63 Her	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
23198	17 ^h 09 ^m 17 ^s 0	+3 ^o 76	-0 ^o 001	-27 ^o 42'08"	-4 ^o 4	-0 ^o 05	6.10		B9		.		
23200	09 21.8	+1.37	-0.001	+52 28 09	-4.4	-0.01	6.13	0.9	B9	009	-42		
23209	09 43.4	+3.90	+0.001	-32 22 48	-4.4	-0.02	6.00	-4.3	B2	0012	+33v?		
23217	09 59.4	+5.07	-0.002	-56 49 50	-4.3	-0.00	6.05		K5		.		
23220	10 06.3	+2.83	+0.000	+10 38 39	-4.4	-0.03	5.56	-0.5	gM2	006	+26	37 Oph	
23229	10 23.6	+1.53	+0.002	+49 48 19	-4.3	+0.03	6.05	1.6	A0	013	-11		d
23263	12 02.1	+3.94	+0.001	-33 29 33	-4.2	-0.00	5.50		O8ep		+4		
23266	12 06.5	+0.52	+0.002	+62 55 52	-4.1	+0.05	5.47	1.3	A3	015	-3		
23270	12 10.7	+4.10	-0.016	-38 31 58	-4.6	-0.41	6.06	4.1	dF9	040	-51		
23273	12 16.2	+3.69	-0.037	-26 31 48	-5.3	-1.14	5.29	6.5	dK3	178	-1		d
23274	12 16.2	+3.69	-0.035	-26 31 53	-5.3	-1.15	5.33	6.4	dK1	178	-0	36 A Oph	d
23277	12 22.0	+2.74	-0.001	+14 26 45	-4.1	+0.03	var	var	gM5	006	-33	64 α Her	d
23278	12 22.3	+2.74	-0.000	+14 26 43	-4.1	+0.04	5.39	-0.7	F8	006	-37v	α Her	s
23280	12 29.5	+3.41	-0.001	-14 31 42	-4.1	-0.01	6.15		K0		.		d
23287	12 39.6	+3.83	-0.000	-30 09 17	-4.2	-0.04	6.21		A0		.		
23294	12 58.6	+2.46	-0.002	+24 53 48	-4.2	-0.16	3.16	0.6	A3n	031	-41v	65 δ Her	ds
23295	13 01.1	+4.00	-0.010	-35 41 26	-4.4	-0.32	6.18	2.5	F8	018	.		
23302	13 18.2	+2.09	-0.002	+36 51 51	-4.1	-0.00	3.36	-0.2	gK3	019	-26	67 π Her	
23309	13 36.7	+2.49	-0.002	+23 47 50	-4.0	+0.02	6.10		gK2		-42		
23312	13 42.9	+3.02	-0.000	+02 14 26	-4.0	-0.02	6.02	0.9	A0	009	-7		
23313	13 48.3	+3.90	-0.008	-32 36 30	-4.1	-0.06	5.55		F5		-36		
23317	13 59.4	+3.04	-0.000	+01 15 53	-4.0	-0.02	var	var	B5n	003	-11v	38 U Oph	sE
23319	14 01.8	+3.21	-0.001	-06 11 29	-4.0	-0.03	6.16		K0		.		
23320	14 02.5	+3.08	-0.002	-00 23 26	-4.1	-0.07	4.82	-0.2	gK4	010	-2	41 Oph	d
23340	14 46.5	+5.31	-0.002	-59 38 33	-3.9	-0.01	6.03		K2		.		
23344	14 57.5	+3.66	-0.004	-24 14 04	-3.9	-0.02	5.39	0.6	gK1	011	-29	39 o Oph	d
23350	15 10.6	+4.34	-0.000	-44 04 40	-3.9	-0.03	6.08		B9		.		
23353	15 15.2	+4.55	+0.095	-46 35 07	-3.7	+0.21	5.58	6.0	dK0+M0	132	+19		d
23359	15 28.6	+2.22	-0.001	+33 09 10	-3.9	-0.01	var	var	B3+B5	007	-21v	68 u Her	dsE
23362	15 32.7	+4.08	+0.095	-34 56 09	-4.0	-0.18	5.89	6.7	dK5	147	0		d
23371	15 51.6	+2.66	+0.001	+17 22 12	-3.9	-0.02	5.90	0.9	A2	010	-2v		
23372	15 52.8	+0.73	-0.058	+60 43 24	-3.8	+0.01	var	var	gG9	005	+17	VWDra	
23374	15 56.7	+2.07	-0.003	+37 20 34	-3.8	+0.06	4.80	0.8	A1n	016	-10v	69 e Her	
23382	16 15.8	+2.82	+0.000	+10 55 02	-3.9	-0.10	5.28	-0.5	gK5	007	+40	e Oph	
23388	16 30.4	+6.69	-0.000	-70 04 26	-3.8	-0.02	5.60		B9		-4	t Aps	
23390	16 42.4	+2.01	-0.002	+38 51 41	-3.7	+0.07	5.98		gG7		-38		
23392	16 45.3	+6.27	-0.006	-67 43 17	-3.8	-0.00	4.74	-0.3	K5	010	+13	ζ Aps	
23393	16 50.7	+2.35	+0.003	+28 52 26	-3.8	-0.01	5.78	0.5	gG8	009	-14		
23396	16 58.5	+3.49	-0.001	-17 42 21	-3.8	-0.03	6.04	1.4	A0	012	.		d
23423	18 00.3	+3.60	+0.016	-21 03 40	-3.9	-0.21	4.46	3.4	dF2	062	-9	40 ξ Oph	d
23424	18 00.7	+3.37	+0.003	-12 47 52	-3.6	+0.00	4.35	1.1	A0n	022	+5v?	53 ν Ser	d
23426	18 06.5	+2.64	+0.000	+18 06 25	-3.7	-0.06	5.17	-0.6	gM2	007	-46		
23427	18 07.5	+2.45	+0.001	+25 35 13	-3.7	-0.02	5.32	1.2	A2	015	-5v		s
23439	18 36.1	+5.17	-0.003	-57 57 46	-3.6	-0.02	5.94		K0		.		d
23446	18 47.2	+2.24	+0.010	+32 31 51	-4.6	-1.05	5.36	4.8	dG2	076	-78	72 w Her	
23447	18 50.5	+2.47	-0.002	+24 32 52	-3.6	-0.00	5.12	0.5	B9n	012	-17v	70 Her	
23449	18 53.6	+5.06	-0.001	-56 28 42	-3.6	+0.00	5.75		K0		.		
23451	18 56.2	+3.68	-0.000	-24 57 05	-3.6	-0.02	3.37	-3.2	B2	0048	-4v	42 θ Oph	
23452	18 56.3	+1.69	-0.003	+46 17 20	-3.5	+0.04	5.77	-0.3	gM0	006	-57	74 Her	
23458	19 05.4	+4.41	-0.001	-45 34 01	-3.6	-0.01	var		G5		.	V636 Sco	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
23465	17 ^h 19 ^m 18 ^s .8	+5 ^s .63	-0 ^s .001	-62°49'04"	-3 ^s .6	-0 ^s .01	5.88	-2.6	B3s	002	+3	ι Ara	s
23470	19 30.6	+4.50	-0.001	-47 25 17	-3.5	-0.02	5.50		B3ne		-19		
23471	19 31.0	+4.07	+0.003	-37 10 24	-3.6	-0.03	6.02		K0		.		
23481	19 47.7	+5.41	-0.001	-60 37 40	-3.5	-0.01	5.96		B8		-10		
23487	20 05.0	+1.97	+0.000	+40 01 21	-3.5	-0.07	5.72	2.4	dF9	022	+3v		
23492	20 12.6	+3.78	+0.000	-28 05 47	-3.5	-0.04	5.43	-0.7	gK5	006	-14	43 Oph	
23503	20 35.3	+4.35	-0.001	-44 07 00	-3.5	-0.03	5.10	1.1	B8n	016	+8		
23505	20 40.3	+1.30	+0.002	+53 28 02	-3.4	-0.01	5.95		gK5		-8	β Ara γ Ara	
23515	21 08.2	+4.99	-0.001	-55 29 06	-3.4	-0.03	2.80	-5.0	K1	0033	-0		
23517	21 10.7	+5.05	-0.000	-56 19 59	-3.4	-0.02	3.51	-4.3	B1n	0032	-4		
23527	21 34.1	+2.87	+0.000	+08 53 51	-3.4	-0.01	5.92		gK1		+16	75 η Her 73 Her	d d
23533	21 42.4	+3.59	-0.002	-21 23 48	-3.4	-0.03	5.96	1.0	gG7	010	-56		
23543	21 57.1	+2.07	-0.004	+37 11 29	-3.3	-0.00	5.47	0.9	A6n	012	-19		
23544	21 57.4	+2.07	-0.003	+37 11 27	-3.3	0.00	4.52	-0.1	B9n	012	-21		
23546	22 00.9	+2.51	-0.003	+23 00 19	-3.4	-0.04	5.70	2.2	A4	020	-20		
23550	22 03.9	+11.2	+0.003	-80 49 06	-3.3	-0.04	5.93		Mb		.		
23552	22 05.7	+4.68	+0.000	-50 35 25	-3.3	-0.00	5.24	0.4	K1	011	+18	α Ara	
23556	22 17.0	+2.69	+0.000	+16 20 44	-3.3	-0.03	5.69	1.3	A4s	013	+11		
23559	22 18.4	+2.70	+0.000	+15 39 01	-3.3	+0.01	6.25	0.5	B9n	007	-25	d d	
23589	23 09.9	+4.43	-0.004	-45 48 02	-3.3	-0.04	5.55	0.3	B9n	009	-9v?		
23594	23 18.2	+4.68	-0.001	-50 35 18	-3.2	-0.01	6.06		B9n		+11	44 b Oph	s
23597	23 18.8	+3.66	0.000	-24 07 52	-3.3	-0.12	4.28	2.3	dA9s	040	-37		
23599	23 22.7	-4.54	+0.006	+80 10 58	-3.2	0.00	5.91		gK5		-7		
23614	23 54.1	+2.90	-0.000	+07 38 16	-3.2	-0.01	5.98		A0+G		-4v		
23616	23 58.4	+4.78	-0.001	-52 15 18	-3.2	-0.06	5.77		K0		.		
23617	23 58.6	+3.18	-0.006	-05 02 39	-3.2	-0.05	4.61	1.7	dF1	026	+0v	47 Oph 49 σ Oph	s
23621	24 01.9	+2.98	-0.000	+04 10 56	-3.1	+0.00	4.44	-0.8	gK1	009	-27		
23627	24 09.5	+3.83	+0.001	-29 49 26	-3.3	-0.15	4.37	1.2	dF3	023	+38	45 d Oph	s
23637	24 26.1	+3.82	-0.001	-29 40 59	-3.1	-0.03	5.92		B9		.		
23638	24 30.1	+4.97	-0.002	-55 07 45	-3.1	-0.02	6.00		K0		.		
23641	24 39.5	+2.59	-0.000	+20 07 20	-3.1	+0.01	5.42	-0.7	B5n	006	-30	77 x Her	s s s
23647	24 58.2	+2.15	-0.003	+34 44 11	-3.0	+0.04	5.91	0.9	A2	010	-23v		
23649	25 02.4	+0.78	-0.001	+60 05 23	-3.0	+0.02	5.66	1.1	A2	012	+7		
23658	25 24.6	+1.59	-0.000	+48 18 04	-3.0	-0.01	5.81	1.2	A2n	012	-9		
23664	25 32.9	+4.06	0.000	-36 44 19	-3.0	-0.01	6.03		K0		.		
23677	26 16.5	+3.06	-0.004	+00 22 10	-2.9	+0.01	5.16	1.0	A5n	015	-36	δ Ara 34 υ Sco	s d s
23681	26 34.7	+5.42	-0.007	-60 38 41	-3.0	-0.10	3.79	0.5	B8n	022	+12		
23693	27 21.7	+4.08	-0.000	-37 15 29	-2.9	-0.04	2.80	-2.2	B3	010	+18v		
23706	27 49.3	+3.09	-0.008	-01 01 22	-3.0	-0.17	5.34	4.0	dG6	054	-77	α Ara	s
23708	27 58.3	+4.64	-0.003	-49 50 20	-2.9	-0.08	2.97	-1.1	B3ne	015	-2		
23717	28 21.7	+3.66	+0.000	-23 55 33	-2.8	-0.03	4.89	2.7	A0n	036	-12	51 Oph	
23725	28 37.9	+3.73	-0.000	-26 14 00	-2.8	-0.03	6.01		B9		.		
23726	28 43.0	+2.42	+0.001	+26 08 49	-2.7	+0.02	4.48	0.2	gK4	014	-26	76 λ Her	ds
23732	28 50.8	+3.01	-0.001	+02 45 37	-2.7	+0.02	5.59	1.0	gG3p	012	-29v		
23736	29 01.7	+2.27	+0.000	+31 11 39	-2.7	+0.02	5.82	0.6	gG8	009	-26		
23741	29 18.1	+1.36	-0.002	+52 20 15	-2.7	+0.01	2.99	-2.2	cG2	009	-20	23 β Dra	d
23748	29 35.6	+4.23	+0.000	-41 08 19	-2.7	-0.03	6.09		B9		.		
23754	29 51.6	+2.36	+0.000	+28 26 33	-2.6	+0.02	5.58	1.1	A0	013	-26	78 Her	s
23757	29 55.2	+2.79	+0.001	+11 57 54	-2.6	+0.02	6.18	0.1	A0	006	-13v		
23769	30 12.6	+4.07	-0.000	-37 04 10	-2.6	-0.03	1.71	-3.0	B2n	012	0v	35 λ Sco	

GC	AR 1959.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N	
23788	17 ^h 30 ^m 49 ^s .5	+3 ^o 20	-0 ^o 003	-05 ^o 42'36"	- 2 ^o 6	-0 ^o 10	5.69	1.3	A2n	013	-26	24 ^v Dra	} d	
23797	31 11.3	+1.18	+0.017	+55 13 04	- 2.5	+0.05	4.98	2.1	dA8s	027	-15			
23798	31 12.3	+2.61	-0.002	+19 17 29	- 2.6	-0.10	5.59	3.1	dF4	032	-59			
23801	31 16.8	+1.18	+0.017	+55 12 23	- 2.5	+0.05	4.95	2.1	A4	027	-16v			25 ^v Dra
23803	31 25.0	+2.68	-0.002	+16 21 05	- 2.6	-0.06	5.66	1.5	gK0	015	-22			
23804	31 26.3	+3.92	+0.000	-32 32 57	- 2.5	-0.01	5.71	-5.4	O7e	0008	- 4v		ds	
23807	31 32.0	+1.90	-0.007	+41 16 40	- 2.6	-0.07	5.82	1.2	gK1	012	-29			
23815	31 55.9	+4.47	-0.003	-46 28 24	- 2.5	-0.04	4.63		A0n		+ 4	σ Ara		
23816	31 59.3	+3.34	-0.001	-11 12 35	- 2.4	+0.00	5.56	0.3	B8	009	.			
23821	32 09.6	-0.24	-0.003	+68 10 01	- 2.3	+0.13	5.21	1.1	gG9	015	-73	27 f Dra	s	
23824	32 14.2	+2.85	0.000	+09 37 08	- 2.4	-0.01	5.77	0.8	A2	010	-14	53 f Oph	d	
23837	32 36.7	+2.78	+0.008	+12 35 42	- 2.6	-0.23	2.14	0.8	A5n	054	+13v	55 α Oph		
23838	32 42.3	+0.98	+0.002	+57 35 28	- 2.4	+0.01	6.17		F5		- 1v		s	
23846	33 06.0	+4.13	-0.001	-38 36 08	- 2.6	-0.20	4.34	0.6	gK0	018	-49v	Q Sco		
23854	33 34.1	+4.66	-0.002	-50 01 44	- 2.4	-0.10	5.86		K0		.			
23857	33 43.4	+4.31	+0.001	-42 58 05	- 2.3	-0.00	2.04	-3.4	cF0	009	+ 1	θ Sco		
23861	33 51.3	+2.56	+0.001	+21 01 36	- 2.3	-0.02	5.82	1.4	dA6s	013	-17		d	
23862	33 58.9	+4.93	-0.005	-54 28 09	- 2.4	-0.15	5.31	3.9	A3	053	- 4	π Ara		
23863	33 59.2	+2.06	+0.001	+37 19 54	- 2.3	-0.02	6.15		G8		+ 4			
23874	34 28.3	+0.62	+0.036	+61 54 45	- 2.7	-0.51	5.31	4.2	dG1	060	-13	26 Dra	d	
23876	34 33.0	+4.31	-0.000	-42 51 05	- 2.3	-0.05	5.96		B9		.			
23879	34 42.5	+2.28	+0.002	+30 48 53	- 2.2	-0.01	5.76	1.8	A2	016	-17			
23881	34 43.3	+3.44	-0.003	-15 22 08	- 2.3	-0.07	3.64	1.1	A5	031	-43v	55 ξ Ser	s	
23882	34 43.9	+3.44	-0.001	-15 32 32	- 2.2	-0.00	5.92		A5		.			
23889	35 07.5	+3.26	-0.001	-08 05 24	- 2.2	-0.03	4.65	-0.1	B8	011	-18	57 μ Oph		
23894	35 19.1	+1.57	+0.003	+48 36 50	- 2.1	+0.06	5.54	1.1	gK1	013	+29	82 γ Her		
23897	35 22.9	+3.33	-0.001	-10 53 53	- 2.2	-0.01	5.92		gK0		-32			
23901	35 27.4	+2.47	-0.001	+24 20 18	- 2.1	-0.00	5.67	1.2	B9n	013	- 3	79 Her		
23918	36 31.7	+4.63	+0.007	-49 23 13	- 2.2	-0.18	4.84	2.8	F5	040	+ 4	λ Ara		
23944	37 14.4	-0.35	+0.001	+68 46 52	- 1.7	+0.32	4.87	2.8	dF4	039	-14v	28 ω Dra	s	
23951	37 31.2	+4.49	+0.000	-46 53 48	- 2.0	-0.01	6.11		A0		.			
23965	38 03.1	+1.69	-0.001	+46 01 55	- 1.9	0.00	3.79	-2.7	cB3s	005	-20v	85 ι Her		
23968	38 05.3	+1.14	+0.004	+72 28 58	- 1.9	+0.02	5.96		gG8		+ 8			
23970	38 09.2	+4.69	+0.002	-50 29 11	- 1.9	-0.02	6.23		Ma		.			
23978	38 36.1	+3.37	-0.005	-12 51 01	- 1.9	-0.06	4.39	-0.4	A2	011	-30v	56 \circ Ser	s	
23988	39 01.5	+4.15	-0.001	-39 00 23	- 1.9	-0.03	2.51	-2.7	B3	009	-10v	κ Sco		
23991	39 05.9	+2.92	-0.001	+06 20 12	- 1.8	-0.01	5.98		gG7		-31			
24001	39 27.2	+4.07	-0.000	-36 55 21	- 1.8	-0.04	5.58		K2		- 4			
24009	39 43.9	+2.69	+0.000	+15 58 26	- 1.7	+0.10	5.58	3.1	dF1	032	-44		d	
24024	40 10.2	+4.76	-0.002	-51 48 35	- 1.9	-0.20	5.26	3.6	dG0	047	-12	μ Ara		
24025	40 12.8	+1.38	-0.003	+51 50 29	- 1.7	-0.02	6.12		gK0		- 9			
24028	40 25.2	+2.46	-0.004	+24 35 16	- 1.8	-0.11	5.59	0.6	gK5	010	-27	83 Her		
24030	40 25.9	+3.60	-0.007	-21 39 39	- 1.8	-0.05	4.89	3.6	dF5	056	+11	58 Oph		
24034	40 37.2	+5.17	+0.001	-57 31 27	- 1.7	-0.01	6.14		G5		.			
24044	40 49.2	+5.89	-0.001	-64 42 10	- 1.7	-0.06	3.58	-0.1	K1	018	- 8	η Pav		
24048	41 00.0	+2.96	-0.003	+04 35 11	- 1.5	+0.15	2.94	0.1	gK1	026	-12	60 β Oph		
24051	41 05.0	+3.24	-0.000	-07 03 29	- 1.7	-0.01	6.20		B5n		-26v			
24052	41 05.2	+2.73	-0.001	+14 18 59	- 1.6	+0.03	6.21	2.2	dF4	016	-42			
24054	41 06.7	+4.30	+0.000	-42 42 31	- 1.6	+0.01	6.18		A2		.			
24059	41 18.3	+2.46	-0.009	+24 20 53	- 1.6	+0.07	5.72	1.4	gG6	014	-26	84 Her		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
24075	17 ^h 42 ^m 00 ^s .6	+2.73	-0.000	+14°25'49"	- 1"6	+0"01	6.13	0.0	A3p	011	-32v		ds
24077	42 03.3	+3.01	0.000	+02 35 58	- 1.6	+0.01	6.25	0.8	A0	008	-31v	61 Oph	ds
24089	42 49.3	-1.07	+0.004	+72 10 26	- 1.8	-0.27	4.90	3.3	dF5	047	-10	31 ψ Dra	} d
24090	42 51.0	-1.07	+0.005	+72 10 55	- 1.8	-0.28	6.07	4.4	dF6	047	-10	31 ψ Dra	
24093	42 56.5	+1.25	+0.002	+53 49 19	- 1.5	-0.02	5.70	1.1	B9n	012	- 3v?		
24112	43 41.2	+4.12	-0.000	-38 05 38	- 1.4	-0.01	6.24		B9		.		d
24116	43 47.3	+2.26	-0.000	+31 31 23	- 1.4	-0.00	6.25	0.5	B9	007	+ 2		
24125	44 05.1	+4.20	0.000	-40 06 35	- 1.4	-0.00	3.14	-7.0	cF6	0014	-28v	ι^1 Sco	
24135	44 24.7	+3.78	-0.000	-27 48 49	- 1.4	-0.01	var	var	cG2v	003	-14v	3X Sgr	
24138	44 30.0	+2.35	-0.024	+27 44 55	- 2.1	-0.75	3.48	3.7	dG5	109	-16	86 μ Her	d
24147	44 44.2	+3.62	+0.000	-22 27 40	- 1.3	-0.02	6.24		K0		.		
24148	44 45.6	+3.42	-0.001	-14 42 32	- 1.4	-0.03	6.07		B9		.		
24150	44 55.5	+2.65	+0.000	+17 42 51	- 1.3	-0.01	5.58	0.1	A0	008	+ 2v		ds
24160	45 20.1	+3.75	-0.000	-26 57 33	- 1.3	-0.02	6.16	-1.6	B3	0052	.		
24162	45 23.0	+3.01	-0.002	+02 43 28	- 1.4	-0.08	3.74	1.3	A0n	032	- 5	62 γ Oph	
24175	45 50.8	+2.98	+0.000	+03 49 11	- 1.2	+0.00	6.19	0.4	A0	007	-44		
24176	45 55.5	+3.90	+0.001	-31 41 17	- 1.2	-0.02	4.83	-0.2	B8	010	-13		
24184	46 15.9	+2.57	+0.001	+20 34 50	- 1.2	-0.01	5.77	2.2	sgG5	019	-26		
24187	46 24.0	+4.88	-0.002	-53 35 53	- 1.2	-0.01	5.90		B3		- 6v	ν^1 Ara	ds
24188	46 27.2	+4.08	+0.005	-37 01 46	- 1.2	+0.03	3.25	0.4	K2	027	+25	G Sco	
24194	46 37.4	+2.61	-0.001	+19 16 11	- 1.2	+0.02	6.04	0.6	A0	008	-22		
24197	46 41.2	+4.20	+0.000	-40 04 35	- 1.2	-0.01	4.88	-0.6	cA3p	008	-18	ι^2 Sco	
24199	46 47.4	+2.43	-0.001	+25 38 17	- 1.2	-0.04	5.34	0.9	gK1	013	-26	87 Her	
24207	47 05.3	+5.40	-0.001	-60 09 04	- 1.2	-0.03	5.77	-0.3	K0	006	.		
24221	47 52.5	+1.43	-0.006	+50 47 31	- 0.9	+0.20	5.19	0.4	A1n	011	-55v?	30 Dra	
24226	48 01.5	+4.22	-0.003	-40 45 34	- 1.1	-0.06	5.96		Ma		.		
24228	48 02.5	+4.44	+0.000	-45 35 18	- 1.1	-0.01	6.19		G5		.		
24236	48 18.5	-19.4	+0.012	+86 36 35	- 1.0	+0.05	4.44	-0.6	A0	010	- 8	23 δ UMi	
24241	48 26.5	+2.33	+0.002	+29 20 03	- 1.0	+0.05	5.61	0.4	gG8	009	-15		
24251	48 41.9	+2.53	+0.001	+22 19 44	- 1.0	-0.02	5.91	1.5	A2n	013	+ 4		
24259	48 53.4	+4.00	+0.000	-34 47 16	- 1.0	-0.01	5.97	-1.6	B7	003	-14		
24261	49 00.2	+3.99	-0.000	-34 24 19	- 1.0	-0.00	5.84		K0		.		
24266	49 12.1	-22.3	+0.067	+86 59 32	- 0.9	+0.00	5.86	1.6	A3	014	+ 1	24 UMi	
24273	49 30.2	+3.98	-0.000	-34 06 14	- 0.9	+0.01	6.12		K0		.		
24278	49 36.1	+4.03	+0.004	-35 46 47	- 1.0	-0.05	6.04		F2		.		
24288	49 57.8	+3.22	+0.000	-06 07 59	- 9.9	-0.01	var	var	cG2v	0023	- 5v	YOph	
24290	49 59.5	+4.00	+0.000	-34 43 14	- 0.9	-0.00	6.20	-0.3	B9	005	.		d
24294	50 03.0	+4.00	-0.001	-34 53 06	- 0.9	-0.01	5.68	-1.9	K0	003	.		d
24295	50 03.3	+3.04	-0.003	+01 18 56	- 0.9	-0.02	6.15		K5		-65		
24309	50 27.0	+1.95	-0.002	+39 59 31	- 0.8	+0.05	6.06	0.6	gK4	008	-66v		s
24314	50 34.7	+4.00	+0.002	-34 44 35	- 0.8	-0.01	6.08		B9		.		d
24315	50 36.5	+8.50	+0.002	-76 10 14	- 0.8	+0.01	6.11		K2		.		d
24320	50 48.0	+2.92	-0.008	+06 06 36	- 0.7	+0.07	5.82	3.8	dF4	040	-33v		
24329	51 07.5	+3.99	+0.001	-34 27 28	- 0.8	+0.00	6.05		A0		.		
24342	51 40.3	+1.95	+0.001	+40 00 58	- 0.7	+0.05	5.12	-0.1	gK4	009	-35	90 f Her	d
24343	51 41.0	-2.69	+0.011	+76 58 15	- 0.5	+0.24	5.04	2.2	dF5	027	-23	35 Dra	
24344	51 44.8	+4.06	-0.001	-36 28 04	- 0.7	-0.01	6.06		A2		.		
24347	51 49.3	+3.69	-0.000	-24 52 45	- 0.7	-0.01	6.13	-5.1	B0n	0008	-11	63 Oph	
24364	52 39.7	+1.04	+0.011	+56 52 47	- 0.6	+0.07	3.90	1.4	gK3	031	-26v?	32 ξ Dra	
24374	53 08.3	+4.38	-0.001	-44 20 09	- 0.6	-0.02	4.98	0.4	K5	012	+45		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
24382	17 ^h 53 ^m 24 ^s 0	+2 ^h 42	0 ^m 000	+26°03'24"	- 0 ^h 6	+0 ^m 00	5.48	-7.0	cF2c	0003	-29v	89 Her	sv
24384	53 25.3	+3.45	-0.001	-15 48 19	- 0.6	-0.07	5.94		A0	.	.		d
24386	53 32.3	+3.79	+0.003	-28 03 34	- 0.6	-0.02	5.76		A3	.	.		
24392	53 44.7	+2.52	-0.000	+22 28 14	- 0.5	-0.00	5.69	-0.1	gK3	007	-44		
24393	53 45.4	+3.06	-0.001	+00 40 35	- 0.5	0.00	5.73	-1.9	B2n	003	-18		
24398	54 09.2	+3.17	-0.001	-04 04 35	- 0.5	-0.01	5.60	0.6	gG9	010	-39		
24402	54 14.4	+4.26	-0.002	-41 42 40	- 0.5	-0.01	4.89		M1		+ 4		
24410	54 28.6	+1.10	+0.004	+55 58 32	- 0.4	+0.12	6.10	2.4	F1n	018	-27		
24413	54 29.7	+2.92	+0.002	+06 29 35	- 0.5	-0.00	6.16	0.7	A0	008	-14		
24414	54 30.6	+3.07	+0.002	+00 04 18	- 0.5	-0.02	6.14	0.7	A2	008	-11		d
24415	54 32.2	+2.06	+0.000	+37 15 21	- 0.5	+0.00	3.99	-1.5	cK1	008	-27	91 θ Her	
24428	55 22.3	+1.72	+0.000	+45 21 22	- 0.4	-0.03	6.22	-0.8	gM6	004	+13	OP Her	
24432	55 26.6	+1.39	-0.001	+51 29 38	- 0.4	-0.02	2.42	-0.4	gK5	028	-28	33 γ Dra	
24434	55 28.6	+3.81	-0.000	-28 45 20	- 0.4	-0.02	5.95	-2.4	B5	0026	.		
24435	55 31.7	+4.08	+0.000	-36 51 19	- 0.4	+0.01	5.78		G5	.	.		d
24448	55 49.2	+2.33	+0.006	+29 15 07	- 0.4	-0.02	3.82	0.3	gG7	020	- 2	92 ξ Her	
24451	55 52.5	+3.85	-0.000	-30 15 00	- 0.4	-0.02	5.27	1.2	M0	005	-20		d
24459	56 03.0	-1.04	+0.001	+72 00 38	- 0.3	0.00	5.54	2.2	dF2	022	- 2v	34 Dra	
24468	56 16.3	+3.30	-0.001	-09 46 09	- 0.4	-0.12	3.50	-0.3	gK0	017	+12	64 ν Oph	
24478	56 35.3	+2.30	-0.000	+30 11 32	- 0.3	+0.00	4.48	-0.7	sgF1	009	-22	94 ν Her	
24483	56 44.3	+3.66	0.000	-23 48 48	- 0.3	-0.05	4.76	0.6	A0n	015	-22	4 Sgr	
24487	56 57.3	+3.18	-0.001	-04 49 05	- 0.4	-0.10	5.98		gK5		-32		
24488	56 57.6	+2.09	+0.000	+36 17 27	- 0.3	-0.06	5.98		gG5		+10		
24495	57 26.5	+1.71	-0.000	+45 28 41	- 0.2	+0.02	6.22	1.4	A0n	011	-19		
24500	57 47.1	+2.97	-0.000	+04 22 11	- 0.2	-0.02	4.81	-2.4	B5ne	0042	-11	66 Oph	
24502	57 49.8	+2.67	-0.000	+16 45 08	- 0.2	-0.01	4.71	-0.5	gG8	009	-23	93 Her	
24503	57 50.4	+3.17	+0.010	-03 41 19	- 0.2	-0.05	4.60	2.6	dF1	040	-43v	57 ζ Ser	
24509	58 08.4	+3.00	-0.000	+02 55 56	- 0.2	-0.01	3.92	-5.7	cB5	0014	- 4	67 Oph	d
24515	58 26.4	+2.93	0.000	+06 16 07	- 0.1	-0.01	6.18	-1.4	B3s	003	-22		
24518	58 30.4	+1.71	-0.001	+45 30 10	- 0.2	-0.04	5.92	0.4	gM0	008	-10		
24523	58 46.4	+2.20	-0.001	+33 12 52	- 0.1	-0.02	6.07	-0.9	gK5	004	-16		
24526	58 52.5	+3.63	-0.000	-22 46 51	- 0.1	-0.01	5.73	-6.1	B0	0006	-13		d
24534	59 12.9	+3.04	+0.001	+01 18 17	- 0.1	-0.02	4.44	1.0	B9n	021	+ 4v	68 Oph	ds
24538	59 22.6	+2.54	+0.000	+21 35 39	- 0.0	+0.03	5.21	-0.6	gG3	007	-31	95 Her	} d
24539	59 23.0	+2.54	+0.001	+21 35 40	- 0.0	+0.03	5.13	-0.6	A1n	007	-30	95 Her	
24555	59 47.2	+3.68	+0.000	-24 17 02	- 0.0	-0.01	5.49	0.5	dA8s	010	-12	7 Sgr	
24563	18 00 14.7	+2.56	+0.000	+20 49 55	+ 0.0	-0.01	5.09	-1.9	B4s	004	-15v	96 Her	
24565	00 21.5	+3.27	+0.002	-08 10 55	- 0.0	-0.04	4.88	2.4	dF3	032	-40v	69 τ Oph	ds
24568	00 24.6	+2.51	-0.001	+22 55 17	+ 0.0	-0.01	6.12	-0.9	B8	004	-36v	97 Her	s
24574	00 48.4	+3.68	0.000	-24 21 49	+ 0.1	-0.00	5.86	-5.4	O5	0008	+ 9v	9 Sgr	
24597	01 28.3	+4.04	-0.002	-35 54 18	+ 0.1	-0.04	5.82	0.0	K0	007	.		
24605	01 49.5	+3.83	+0.001	-29 35 03	+ 0.2	-0.01	var	var	cG2v	0025	-29v	W Sgr	
24607	01 50.5	+1.57	+0.002	+48 27 40	+ 0.2	+0.01	6.06		A0		-13		d
24617	02 05.8	+3.03	-0.000	+01 54 54	+ 0.2	-0.01	6.09	-4.8	B1n	001	+17v	V 986 Oph	v
24632	02 35.7	+3.85	-0.004	-30 25 36	+ 0.0	-0.19	3.07	0.2	K0	027	+22v	10 γ Sgr	s
24633	02 36.0	+2.48	+0.000	+23 56 19	+ 0.2	-0.06	6.25	2.9	dA8	021	-33		s
24635	02 44.2	+4.67	-0.002	-50 05 50	+ 0.2	-0.02	3.90	-5.2	B1n	002	+ 3	θ Ara	
24641	02 55.6	+3.03	+0.017	+02 30 34	- 0.8	-1.10	4.07	5.6	dK1	195	- 7v	70 ρ Oph	ds
24643	03 00.9	+4.05	+0.009	-36 01 32	+ 0.3	+0.01	5.92	3.3	G5	030	.		
24649	03 12.8	+4.34	-0.000	-43 25 47	+ 0.2	-0.10	5.02	2.1	A3	026	.		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
24656	18 ^h 03 ^m 23 ^s .9	+3.27	+0.000	-08°19'46"	+ 0"3	-0"02	5.79	-0.3	B6n	006	-27v		s
24660	03 35.4	+3.19	+0.009	-04 45 25	+ 0.3	-0.04	5.90	2.0	sgK1	017	-19		
24665	03 45.9	+5.78	+0.002	-63 40 24	+ 0.1	-0.19	4.44	1.6	A5	027	-16v	π Pav	s
24667	03 47.5	-4.48	+0.018	+79 59 48	+ 0.5	+0.13	6.18	3.3	dF6	026	+ 3v	40 Dra	s
24669	03 53.5	-4.49	+0.017	+79 59 59	+ 0.5	+0.12	5.80	2.9	dF6	026	+10v?	41 Dra	d s
24670	03 55.4	+2.53	-0.001	+22 12 46	+ 0.3	-0.01	5.32	0.1	gM2	009	-20	98 Her	
24671	03 57.8	+2.23	+0.001	+32 13 29	+ 0.3	-0.03	5.92		K1		+ 1		
24678	04 11.3	+3.60	-0.001	-21 27 03	+ 0.4	-0.00	6.22	-6.0	B0s	0006	- 2		
24680	04 15.9	+8.39	+0.001	-75 53 48	+ 0.1	-0.29	5.69	0.2	K5	008	.		
24692	04 54.3	+3.48	-0.007	-17 09 46	+ 0.5	+0.06	5.74	0.7	gK1	010	-32		
24693	04 54.8	+2.87	+0.000	+08 43 34	+ 0.5	+0.03	4.73	0.7	gG8	016	- 3	71 Oph	
24694	04 54.9	+3.80	+0.002	-28 27 53	+ 0.4	-0.03	4.66	1.0	G4	019	- 4		
24695	04 58.7	+2.84	-0.004	+09 33 19	+ 0.5	+0.08	3.73	1.7	A5s	040	-24	72 Oph	s
24700	05 07.5	+2.28	-0.008	+30 33 13	+ 0.5	+0.07	5.21	4.0	dF5	051	+ 1	99 b Her	d
24711	05 35.4	+2.34	0.000	+28 45 16	+ 0.5	+0.01	3.83	-0.6	B9n	013	-29	103 o Her	v
24718	05 47.3	+5.57	-0.012	-62 00 55	+ 0.7	+0.22	5.48	3.9	dF5	049	+29v	ϵ Pav	
24720	05 48.5	+2.42	-0.000	+26 05 19	+ 0.5	+0.03	6.00	1.7	A3	014	-17	100 Her	
24721	05 48.5	+2.42	-0.001	+26 05 33	+ 0.5	+0.03	5.92	1.5	A3	014	-15v?	100 Her	d
24724	05 58.3	+1.81	-0.000	+43 27 16	+ 0.5	-0.06	5.11	0.8	gG5	014	-16v?		
24731	06 13.3	+7.62	-0.013	-73 40 48	+ 0.3	-0.24	5.92	3.1	F5	027	.		d
24735	06 18.1	+2.08	-0.008	+36 23 42	+ 0.4	-0.19	5.67	0.9	gK3	011	- 7		
24740	06 37.1	+2.57	0.000	+20 48 19	+ 0.6	-0.01	4.32	-3.3	B2s	003	-14	102 Her	
24743	06 43.2	+2.59	+0.000	+20 02 09	+ 0.6	-0.02	5.24	0.8	A4s	013	-16	101 Her	
24748	06 52.2	+3.87	0.000	-30 44 19	+ 0.6	-0.03	5.58	-0.2	K0	007	0		d
24754	07 04.6	+2.98	+0.002	+03 59 00	+ 0.6	-0.01	5.67	1.9	dF0n	018	-17	73 Oph	d
24761	07 17.7	+4.53	+0.000	-47 31 26	+ 0.6	-0.03	6.08		K0		.		d
24764	07 23.8	+3.00	+0.001	+03 06 43	+ 0.5	-0.20	5.73	2.6	dF4	031	-14		d
24767	07 31.0	+4.45	-0.002	-45 57 55	+ 0.6	-0.04	4.60	-0.2	G5	011	-26	ϵ Tel	
24769	07 32.8	+4.25	+0.002	-41 22 12	+ 0.6	-0.04	5.90		A5		-32		
24771	07 36.8	+3.97	-0.001	-33 48 40	+ 0.7	+0.01	6.24		B3		-22		
24777	07 54.7	+2.68	-0.001	+16 27 56	+ 0.7	-0.01	6.14	2.2	dF3+AO	016	-13		d
24783	08 10.3	+3.00	+0.001	+03 18 46	+ 0.7	-0.00	5.70	0.2	gK2	008	+10		
24787	08 14.5	+2.09	+0.001	+36 27 18	+ 0.7	+0.01	5.87	0.6	gG7	009	-26		
24799	08 40.2	+3.66	+0.001	-23 42 47	+ 0.7	-0.02	5.13	0.7	gK0	013	+ 4	11 Sgr	
24820	09 30.1	+1.23	+0.013	+54 16 15	+ 1.1	+0.25	5.94	2.0	sgK0	016	-16		
24824	09 40.2	+4.25	-0.002	-41 21 00	+ 0.8	-0.01	5.52	-3.0	B3	002	-15		
24829	09 55.3	+2.19	+0.001	+33 26 01	+ 0.9	+0.00	5.85	0.8	A2	010	-32v		ds
24831	10 01.2	+2.26	-0.001	+31 23 29	+ 0.9	+0.02	5.02	-0.2	gM3	009	- 0	104 A Her	
24856	10 46.3	+3.59	+0.000	-21 04 26	+ 0.9	-0.00	var	var	cB8ep	001	- 8v	13 μ Sgr	sE
24861	10 55.9	+5.70	-0.003	-63 04 17	+ 0.9	-0.04	5.61		K0		- 6		
24869	11 09.3	+2.54	+0.004	+21 51 53	+ 1.0	+0.05	6.25	-1.4	gK6	003	-66		
24871	11 15.6	+3.60	-0.001	-21 43 42	+ 1.0	-0.03	5.73	0.5	gK3	009	-59	14 Sgr	
24874	11 24.6	+2.00	-0.001	+38 45 30	+ 1.0	+0.01	5.88	0.6	A0	009	- 9v		s
24892	12 13.7	+4.38	+0.007	-44 13 26	+ 1.1	+0.01	5.55		K0		.		
24893	12 13.9	+3.58	+0.000	-20 44 42	+ 1.1	-0.00	5.42	-6.6	B0n	0007	- 6v	15 Sgr	
24895	12 14.4	+3.57	-0.000	-20 24 17	+ 1.1	-0.00	6.02	-6.1	O9n	0006	- 1v	16 Sgr	d
24900	12 34.5	+3.53	+0.001	-18 40 43	+ 1.1	+0.00	6.08	-6.9	cA0	0003	- 1		
24906	12 54.7	+5.05	-0.002	-56 02 29	+ 1.1	-0.02	5.54		B5		+12v		s
24916	13 36.5	+0.35	+0.053	+64 22 48	+ 1.2	+0.03	5.03	3.2	dF3	044	-35	36 Dra	
24936	14 05.3	+1.87	-0.001	+42 08 28	+ 1.2	-0.01	5.42	-0.3	B8n	007	-21		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
24941	18 ^h 14 ^m 13 ^s .8	+3 ^o 80	+0 ^o 000	-28°40'17"	+ 1"2	-0"03	6.04		A3		.		
24944	14 14.5	+4.06	-0.012	-36 46 44	+ 1.1	-0.17	3.16	0.1	gM4	024	+ 0	η Sgr	d
24945	14 15.7	+3.14	+0.000	-03 01 21	+ 1.0	-0.27	6.11	0.0	gG1	006	+ 2		
24946	14 17.0	+3.49	-0.000	-17 23 35	+ 1.2	-0.02	5.98		gK4		- 7		
24947	14 17.2	+3.98	-0.001	-34 07 36	+ 1.2	-0.01	var		B5+A2		+ 6v	RS Sgr	dsE
24958	14 50.1	+5.80	+0.006	-63 54 14	+ 1.0	-0.29	6.20	2.1	G0	015	.		d
24961	14 55.3	+3.75	+0.000	-27 03 45	+ 1.3	0.00	4.69	0.3	gK5	013	-17		
24973	15 31.6	+1.90	-0.015	+40 54 57	+ 1.4	+0.07	6.10	1.1	gG4	010	-73		
24975	15 34.5	-0.35	+0.003	+68 44 16	+ 1.3	-0.06	6.11	0.3	gK1	007	-10	37 Dra	
24977	15 45.5	+2.75	-0.001	+13 45 23	+ 1.3	-0.03	6.18	-0.8	B5n	004	-21		
24980	15 55.7	+2.64	-0.001	+18 06 39	+ 1.4	-0.01	5.99	0.5	A0	008	-24v		s
24995	16 44.4	+2.90	-0.003	+07 14 16	+ 1.5	0.00	5.57	1.0	gK2	012	- 8		
24999	16 52.9	+8.07	+0.000	-75 04 09	+ 1.5	+0.03	5.61		A0n		+ 1	φ Oct	
25003	17 07.1	+2.47	+0.001	+24 25 26	+ 1.5	-0.00	5.49	-1.0	gK4	005	-14v	105 Her	s
25006	17 16.0	+3.45	+0.002	-15 51 14	+ 1.5	-0.04	5.71	0.2	gK5	008	+30		
25024	17 47.6	+3.84	+0.003	-29 51 05	+ 1.5	-0.03	2.84	0.1	gK2	029	-20	19 δ Sgr	d
25025	17 56.2	+2.31	-0.000	+29 38 36	+ 1.6	-0.00	6.14		gK4		-36		
25032	18 06.4	+2.10	-0.002	+36 02 27	+ 1.6	+0.04	4.34	0.1	gK1	014	-22	1 κ Lyr	
25033	18 10.9	+2.54	+0.001	+21 56 19	+ 1.5	-0.06	4.98	0.4	gM0	012	-33	106 Her	s
25036	18 22.2	+2.99	-0.000	+03 21 11	+ 1.6	+0.01	4.92	0.5	gG5	013	+ 5	74 Oph	d
25038	18 26.5	+3.53	+0.001	-18 53 03	+ 1.6	-0.01	var	var	cG1vp	0018	- 3v	Y Sgr	
25045	18 37.2	+5.53	-0.000	-61 31 10	+ 1.6	0.00	4.25	0.1	M1	015	+12v	ξ Pav	ds
25046	18 43.3	+3.10	-0.037	-02 54 48	+ 0.9	-0.70	3.42	1.8	sgG8	048	+ 9	58 η Ser	
25047	18 45.7	+1.41	-0.004	+51 19 29	+ 1.6	-0.06	6.25	0.8	gK1	008	-10v		
25050	18 50.3	+3.80	+0.001	-28 27 17	+ 1.6	-0.01	6.07		A2		.		
25051	18 51.7	+4.14	-0.003	-38 40 53	+ 1.6	-0.03	5.14	-0.6	M0	007	+18		
25054	19 01.0	+2.95	+0.001	+05 24 41	+ 1.7	-0.01	6.04	-0.9	B5ne	004	- 9v		
25056	19 01.4	+2.31	+0.001	+29 50 02	+ 1.7	+0.05	5.54	1.4	A4s	015	-20v	108 Her	s
25057	19 03.9	+2.34	+0.000	+28 50 42	+ 1.7	+0.05	5.05	1.5	A5	020	-29v	107 t Her	
25067	19 29.7	+4.07	-0.000	+36 41 41	+ 1.7	-0.02	5.39	-0.1	B8	008	-12		
25082	20 03.5	+2.50	+0.001	+23 15 30	+ 1.8	+0.07	5.66	0.2	gK5	008	-58		
25083	20 06.3	+4.05	+0.001	-36 15 53	+ 1.7	-0.01	5.61		K0		.		
25084	20 15.7	+2.79	+0.000	+12 00 11	+ 1.8	-0.01	5.89	0.7	A0	009	-55		
25085	20 15.8	+1.53	-0.003	+49 05 44	+ 1.8	+0.05	5.09	-0.7	gM2	007	+14		
25089	20 20.0	+10.8	-0.009	-80 15 43	+ 1.7	-0.06	5.92		K0				
25090	20 24.2	+3.36	-0.001	-12 02 28	+ 1.7	-0.03	5.73		B8				
25093	20 36.4	+2.65	+0.005	+17 48 00	+ 1.8	+0.02	5.48	1.0	gK2	013	-19		
25094	20 40.0	+4.36	+0.000	-44 08 14	+ 1.8	-0.02	5.42	-1.6	B5n	004	-14		
25100	20 51.2	+3.98	-0.003	-34 24 37	+ 1.7	-0.13	1.95	-1.3	B9	024	-11	20 ϵ Sgr	
25101	20 55.1	+3.29	+0.003	-08 57 43	+ 1.9	+0.04	4.83	0.6	gK0	014	- 6v	ζ Sct	s
25114	21 28.5	-0.86	-0.002	+71 18 42	+ 1.9	+0.04	4.24	-0.6	A0p	010	- 17v	43 φ Dra	ds
25116	21 33.9	+2.56	+0.014	+21 44 44	+ 1.6	-0.25	3.92	0.6	gK2	022	-57	109 Her	
25120	21 48.6	+3.86	-0.010	-30 47 03	+ 1.8	-0.08	5.66		K0		.	18 Sgr	
25122	21 57.5	-1.08	+0.117	+72 42 42	+ 1.6	-0.36	3.69	4.1	dF5	122	+33v	44 χ Dra	s
25124	21 59.7	+4.04	-0.003	-36 01 15	+ 1.9	+0.01	6.25		G5		.		
25131	22 21.5	+3.11	-0.001	-01 36 29	+ 1.9	-0.01	6.11	1.3	dF2n	011	-10		d
25132	22 22.3	+3.57	+0.000	-20 34 13	+ 1.9	-0.03	4.96	0.0	gK1+A0	010	-12	21 Sgr	d
25137	22 34.9	+1.98	-0.002	+39 28 44	+ 2.0	-0.01	5.04	0.0	A2	010	-25v	2 μ Lyr	s
25145	22 43.1	+1.29	+0.001	+53 16 21	+ 2.0	-0.02	6.21	2.1	A2	015	- 4		
25147	22 59.1	+2.38	-0.000	+27 21 58	+ 2.0	+0.01	6.20	0.1	A0	006	-27v?		ds

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
25150	18 ^h 23 ^m 06 ^s 0	+4.56	-0.001	-48°08'48"	+ 2.0	-0.04	5.48	1.0	G4	013	+ 4v	39 b Dra	s
25151	23 10.7	+0.88	-0.005	+58 46 16	+ 2.1	+0.06	4.85	1.6	A2	022	-13v		ds
25153	23 14.4	+2.89	+0.000	+08 00 09	+ 2.0	-0.01	5.69	-0.1	gG2	007	- 8v		s
25154	23 15.9	+4.45	-0.002	-45 59 53	+ 2.0	-0.05	3.76	-2.8	B6	005	- 1v?		α Tel
25165	24 02.9	+2.31	+0.001	+29 47 56	+ 2.1	-0.02	5.71	1.3	A3s	013	+ 8v		s
25174	24 36.7	+3.74	+0.000	-26 39 58	+ 2.1	-0.03	6.23	1.0	A5	009	.		d
25175	24 37.6	+3.84	-0.000	-29 50 56	+ 2.2	+0.03	5.86		G0		.		
25176	24 38.9	+3.07	-0.001	+00 09 53	+ 2.1	-0.00	var	var	G0+A2	012	-23v	59 d Ser	dss
25180	24 53.0	+3.70	-0.004	-25 27 04	+ 2.0	-0.19	2.94	0.9	gK1	039	-43	22 λ Sgr	
25183	24 58.8	+4.62	+0.014	-49 06 01	+ 1.9	-0.24	4.14	0.8	K0	022	-31	ζ Tel	
25185	24 59.6	+4.15	-0.000	-39 01 39	+ 2.1	-0.04	5.65		A2		.		
25186	25 01.4	+3.50	-0.000	-17 49 57	+ 2.2	+0.00	6.03		B8n		-35		
25194	25 20.9	+2.99	-0.001	+03 42 59	+ 2.2	-0.01	6.14		gK3		-19		
25198	25 32.2	+2.93	-0.000	+06 09 43	+ 2.2	-0.03	5.62	-0.1	B8	007	.		
25202	25 38.3	+5.17	+0.005	-57 33 24	+ 2.2	-0.04	5.79	1.2	K0	012	.		d
25207	25 46.7	+35.4	-0.007	-87 39 10	+ 2.1	-0.13	5.22		K5		+34	χ Oct	
25212	25 50.5	+0.17	+0.016	+65 31 57	+ 2.2	-0.03	4.99	1.0	gK1	016	+32	42 Dra	
25216	26 10.2	+4.51	+0.001	-47 15 16	+ 2.3	-0.01	5.70		K0		.		
25218	26 16.9	+3.70	+0.000	-25 17 25	+ 2.3	-0.01	6.23		B2e		.		
25220	26 20.8	+3.42	0.000	-14 35 58	+ 2.3	-0.00	4.73	1.4	A3n	022	-41	γ Sct	
25223	26 30.7	+7.70	+0.002	-74 00 02	+ 2.2	-0.11	5.86		K2		.		
25227	26 42.4	+5.60	-0.000	-62 18 46	+ 2.3	-0.05	4.81	-0.2	B8n	010	+59	ν Pav	
25232	26 55.6	+3.42	+0.001	-14 36 59	+ 2.4	+0.02	5.99	1.2	A2s	011	-16		
25234	27 04.8	+3.12	+0.002	-02 01 09	+ 2.3	-0.03	5.44	1.0	gG8	013	+28v	60 c Ser	s
25239	27 15.5	+3.53	+0.002	-18 45 45	+ 2.3	-0.10	5.76	0.5	gK0	009	- 1		
25250	27 31.2	+2.49	-0.000	+23 49 53	+ 2.4	-0.01	5.72	-1.3	B5	004	-17v		
25263	27 48.0	+3.94	-0.000	-33 01 27	+ 2.4	-0.05	5.44	1.8	A3	019	+ 9		d
25269	28 03.2	+4.44	-0.001	-45 57 03	+ 2.4	-0.04	5.05	-1.4	B8	005	-15v	δ^1 Tel	s
25272	28 19.5	+4.33	-0.001	-43 32 38	+ 2.4	-0.02	5.71		K0		.		
25273	28 20.1	+4.44	-0.000	-45 47 38	+ 2.5	-0.01	5.33	-2.3	B9	003	- 8v	δ^2 Tel	s
25279	28 30.5	+3.51	-0.000	-18 26 20	+ 2.5	-0.03	5.17	0.7	B9n	013	-37		
25282	28 39.2	+3.33	-0.000	-10 49 55	+ 2.5	-0.02	5.80	-2.4	B3s	004	-11		d
25284	28 50.9	+2.67	-0.003	+16 53 32	+ 2.5	-0.03	5.67	1.4	A0	014	- 9v?		
25285	28 52.4	+4.18	+0.003	-39 44 26	+ 2.5	-0.04	5.25	1.1	A2n	015	- 2		
25302	29 22.0	+3.10	+0.000	-01 02 25	+ 2.6	-0.01	5.81		A2		-27	61 Ser	
25310	29 51.9	+3.43	-0.000	-14 54 13	+ 2.6	-0.00	5.88	-2.6	cK5	002	+ 1		
25313	29 55.9	+4.28	+0.002	-42 21 02	+ 2.6	-0.02	4.69	-1.1	G5	007	- 2v?	θ CrA	
25314	29 56.2	+4.14	-0.001	-38 45 51	+ 2.6	-0.03	5.95		B8n		-20	$\chi^{1,2}$ CrA	d
25327	30 40.9	+3.94	+0.000	-33 03 20	+ 2.7	-0.02	5.38	-2.2	B3n	003	-17		
25328	30 41.2	+2.50	+0.000	+23 34 42	+ 2.7	+0.01	5.99	-0.1	gK5	006	- 4		
25333	30 47.5	+3.43	+0.001	-14 53 33	+ 2.7	-0.02	5.74		A0		.		
25334	30 47.9	-7.93	+0.007	+83 08 32	+ 2.7	-0.02	6.15	0.9	A2	009	-11		
25336	30 50.2	+3.66	0.000	-24 04 18	+ 2.7	-0.01	5.71	-1.9	cK4	003	-14	24 Sgr	
25340	30 55.1	+2.29	+0.000	+30 30 55	+ 2.7	+0.00	5.37	-0.1	B8s	008	-10		d
25362	31 42.7	+1.03	-0.001	+57 00 24	+ 2.8	-0.01	4.95	-4.5	cF8p	0017	-12	45 d Dra	
25372	32 10.5	-2.90	-0.001	+77 30 34	+ 2.8	+0.00	5.84	0.4	gK4	008	+ 1		
25374	32 15.6	+3.33	+0.003	-11 01 05	+ 2.8	-0.00	5.25	0.5	gG7	011	+ 7		
25385	32 29.1	+3.26	-0.001	-08 16 51	+ 2.5	-0.31	4.06	0.1	gK5	016	+36	1 Aql= α Sct	
25396	32 48.6	+1.36	-0.001	+52 18 47	+ 2.9	+0.00	5.42	-0.3	gG5	007	-24		d
25398	33 00.5	+2.64	+0.001	+18 09 43	+ 2.9	+0.00	5.73	1.1	A0	012	-20v		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
25406	18 ^h 33 ^m 25 ^s 0	+2 ^m 17	+0 ^s 000	+34°24'58"	+ 2 ^m 9	-0 ^s 00	5.93		B5n		-13v		
25407	33 25.4	+2.50	0.000	+23 33 50	+ 2.9	+0.00	5.76	0.0	gG8	007	+16		d
25411	33 39.4	+2.67	+0.003	+16 56 04	+ 2.9	-0.07	6.17	2.8	G0	021	+ 9		d
25422	34 04.6	+2.86	-0.000	+09 04 54	+ 2.8	-0.13	5.40	2.8	dF2	030	-22		
25427	34 13.1	+2.92	-0.002	+06 37 51	+ 2.8	-0.14	5.41	2.7	dF1	029	-21v		s
25443	34 47.1	+2.20	-0.002	+33 25 33	+ 3.0	-0.00	5.46	-0.3	B9s	007	-27		d
25450	34 54.7	+3.59	-0.000	-21 26 27	+ 3.0	-0.07	5.80		A5		.		
25456	35 01.7	+3.08	+0.000	-00 21 11	+ 3.0	-0.02	5.80	0.8	A3s	010	+12v	e Ser	s
25466	35 14.7	+2.03	+0.017	+38 44 09	+ 3.4	+0.28	0.14	0.5	AJs	124	-14	3 α Lyr	
25474	35 27.3	+4.54	+0.002	-47 57 18	+ 3.1	+0.02	6.04		A5		.		
25475	35 28.2	+3.65	-0.000	-23 32 58	+ 3.1	-0.02	5.75		B9		.		
25484	35 54.5	+3.58	-0.006	-21 05 42	+ 3.0	-0.15	5.91	4.8	dG4	060	+36		
25488	35 59.5	+4.31	-0.005	-43 13 52	+ 3.1	-0.05	5.36		M4		+28		
25491	36 03.9	+0.19	+0.002	+65 26 38	+ 3.2	+0.08	6.00	0.5	A3	008	-16v		s
25502	36 27.3	+1.98	0.000	+39 37 23	+ 3.2	+0.00	var	var	cM4	003	-19	XY Lyr	
25519	37 06.4	+0.54	-0.001	+62 28 50	+ 3.3	+0.04	5.60	0.4	A0	009	-10v?		
25522	37 12.2	+7.01	0.000	-71 28 28	+ 3.1	-0.16	4.10	1.5	K0	030	-17	ζ Pav	
25524	37 17.7	+3.25	-0.000	-07 50 13	+ 3.3	-0.03	6.08		gK4		-23		
25541	37 56.3	+1.93	+0.002	+40 53 17	+ 3.3	-0.00	6.11	1.1	A0	010	-15v		s
25559	38 43.8	+1.38	-0.000	+52 08 54	+ 3.4	+0.02	5.85		B9		.		
25561	38 45.1	+5.85	+0.001	-64 36 01	+ 3.3	-0.04	5.84		K0		.		
25563	38 48.6	+3.66	+0.002	-23 52 55	+ 3.4	-0.03	6.14	2.7	dF0	021	+ 1	26 Sgr	
25580	39 32.1	+3.28	+0.001	-09 06 08	+ 3.4	-0.00	var	var	gF4s	017	-45v	2 Aql = δ Sct	ds
25586	39 54.2	+3.24	-0.001	-07 07 24	+ 3.5	+0.00	6.15		G5		.		
25597	40 19.9	+2.16	+0.000	+34 41 48	+ 3.5	+0.00	6.12	-0.9	B5	004	-19v		d
25599	40 21.2	+4.11	-0.000	-38 22 25	+ 3.5	-0.06	5.13	1.5	A0n	019	-26	λ CrA	d
25603	40 30.1	+0.52	-0.000	+62 41 58	+ 3.6	+0.06	6.01		gK0		-26		
25604	40 32.6	+5.89	+0.003	-64 55 16	+ 3.4	-0.16	4.90	2.3	A2n	030	+ 5		
25606	40 38.5	+5.46	+0.004	-61 08 48	+ 3.5	-0.02	6.16		K2		.		
25610	40 47.8	+3.27	+0.001	-08 19 35	+ 3.6	+0.01	5.09	0.3	gG5	011	-11	3Aql = ϵ Sct	d
25613	40 58.4	+4.02	-0.000	-35 41 36	+ 3.5	-0.04	4.82	-0.9	B5	007	+ 3		
25628	41 28.8	+4.17	+0.000	-39 44 18	+ 3.6	-0.01	5.48	-0.6	F8+A2	006	-17v?		
25635	41 39.8	+1.16	-0.001	+55 29 17	+ 3.6	+0.02	5.08	0.1	A0	010	-31v	46 c Dra	s
25636	41 45.2	+3.69	+0.000	-25 03 47	+ 3.6	-0.03	5.76		B8		.		
25640	41 50.9	+2.10	+0.002	+36 30 15	+ 3.7	+0.06	6.25		G8		-61		
25643	41 58.8	+2.25	-0.003	+31 52 35	+ 3.5	-0.13	5.52	2.6	dF2	026	- 2		
25652	42 18.4	+3.03	+0.000	+02 00 27	+ 3.7	-0.02	5.04	-0.4	B7n	008	-13	4 Aql	
25657	42 25.0	+1.28	+0.000	+53 49 12	+ 3.7	-0.01	6.08	0.8	A2	009	0		
25661	42 32.0	+3.75	+0.004	-27 02 39	+ 3.7	-0.00	3.30	-0.8	B8	015	+22v	27 ϕ Sgr	
25663	42 35.0	+2.50	+0.000	+23 32 18	+ 3.6	-0.09	6.17	3.0	dF5	023	-12		
25666	42 40.9	+1.99	-0.000	+39 37 03	+ 3.8	+0.06	6.00	2.0	A4n	016	-33	4 ϵ^1 Lyr	} d
25667	42 40.9	+1.99	+0.001	+39 37 00	+ 3.8	+0.06	5.06	1.1	A2n	016	-31	4 ϵ^2 Lyr	
25668	42 43.3	+1.99	+0.000	+39 33 34	+ 3.8	+0.06	4.50	0.5	A3n+A5	016	-24	5 ϵ^3 Lyr	d
25674	43 00.9	+2.95	+0.001	+05 26 47	+ 3.7	-0.01	5.72	0.7	A0	010	-10v		ds
25676	43 02.9	+2.07	+0.002	+37 33 06	+ 3.8	+0.02	4.29	1.2	dA9s	024	-26v	6 ζ^1 Lyr	s
25678	43 04.8	+2.07	+0.001	+37 32 28	+ 3.8	+0.02	5.87	2.8	A3n	024	-24v?	7 ζ^2 Lyr	} d
25687	43 19.7	+3.62	+0.002	-22 26 47	+ 3.8	-0.00	5.80	-0.3	gK4	006	- 3	28 Sgr	
25698	43 30.5	+2.58	-0.001	+20 29 49	+ 3.4	-0.34	4.26	2.5	dF4	053	+24	110 Her	
25701	43 35.3	+7.38	+0.000	-73 03 05	+ 3.8	+0.02	6.22		A0		.		d
25705	43 42.9	+0.71	-0.001	+60 59 41	+ 3.8	+0.02	6.23	1.8	sgG7	013	-25		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
25706	18 ^b 43 ^m 43 ^s 3	+5 ⁹⁰	-0 ⁰⁰⁷	-65°07'57"	+ 3 ⁷	-0 ⁰⁹	5.89		A3n		0	θ Pav	
25713	43 53.6	+3.10	+0.001	-01 00 57	+ 3.8	-0.02	5.68	1.4	dA6s	014	+19	5 Aq1	d
25718	43 57.8	+3.31	-0.001	-10 10 47	+ 3.8	0.00	5.81	-3.0	cF4	002	+10		d
25721	44 03.5	+2.42	+0.001	+26 36 26	+ 3.8	+0.02	4.92	1.2	gK1	018	-17		
25722	44 14.8	+4.19	+0.000	-40 27 41	+ 3.8	-0.02	4.28	0.7	G2	019	-18v?	μ CrA	
25730	44 31.2	+3.18	-0.001	-04 48 11	+ 3.8	-0.02	4.47	-4.3	cG7	0025	-22v	6Aq1 = β Sct	s
25732	44 37.0	+1.92	-0.001	+41 23 12	+ 3.9	-0.01	5.88		B9		.		
25734	44 48.7	+2.65	+0.005	+18 07 28	+ 4.0	+0.11	4.37	2.2	A4s	037	-45v	111 Her	
25735	44 48.7	+3.20	-0.003	-05 45 38	+ 3.9	-0.03	var	var	K0evp	002	+44v	R Sct	
22748	45 14.0	+4.33	+0.002	-43 44 12	+ 3.9	-0.02	5.59		A2n		- 6	η^1 CrA	
25757	45 36.0	+1.34	+0.001	+52 55 56	+ 4.0	-0.01	6.76		B5ne		-20v		s
25758	45 45.8	+4.43	+0.006	-45 52 06	+ 4.0	+0.06	5.79	2.1	K0	018	.		
25766	45 59.2	+4.31	-0.001	-43 29 29	+ 4.0	-0.03	5.64		B9		-23v?	η^2 CrA	
25768	46 04.1	+2.26	+0.000	+31 42 00	+ 4.0	-0.01	5.78	-1.2	B3s	004	-15		
25772	46 10.9	+2.51	+0.001	+23 27 27	+ 4.0	-0.03	6.04		F5		- 0		
25785	46 42.1	+2.56	+0.000	-20 23 00	+ 4.1	+0.03	5.37	0.4	gK4	010	-18v	29 Sgr	
25786	46 42.4	+2.62	+0.001	+19 16 16	+ 4.0	-0.02	5.82	1.0	A0	011	+ 6v		
25799	46 56.9	+1.58	-0.002	+48 42 34	+ 4.1	+0.04	6.02		A5n		-31		
25801	47 00.4	+3.21	-0.000	-05 58 16	+ 4.1	-0.01	6.22		K0		.		d
25803	47 02.0	-1.50	+0.001	+74 01 42	+ 4.2	+0.08	5.38	1.1	gG8	014	+ 3		
25823	47 35.4	+5.56	-0.001	-62 14 52	+ 4.1	-0.02	4.42	-3.2	B2ne	003	+20	λ Pav	
25835	47 50.1	+3.60	-0.002	-22 13 17	+ 4.1	-0.04	6.24	1.8	gA7n	013	-35	30 Sgr	
25837	47 54.2	+2.23	0.000	+32 45 14	+ 4.1	-0.01	5.77	-1.2	B3n	004	-16	8 ν^1 Lyr	d
25839	47 59.8	-1.94	-0.004	+75 22 34	+ 4.2	+0.07	5.37	0.4	A0	010	- 9v	50 Dra	s
25841	48 00.8	+2.24	-0.001	+32 29 31	+ 4.2	-0.02	5.16	1.2	A2n	016	+10	9 ν^2 Lyr	
25846	48 13.4	+3.30	-0.000	-09 50 02	+ 4.2	-0.00	5.89		gF2		-18		
25847	48 14.0	+2.21	+0.000	+33 18 12	+ 4.2	-0.01	var	var	B2+B8p	003	-21v	10 β^1 , ν^1 Lyr	dsE
25859	48 41.7	+4.76	+0.004	-52 10 02	+ 4.1	-0.11	5.27	0.7	G5	012	-44	κ Tel	
25861	48 44.2	+4.46	+0.002	-46 39 22	+ 4.2	-0.00	5.49	1.0	M2	005	-28		
25862	48 44.5	+3.15	-0.000	-03 22 41	+ 4.2	-0.03	6.04	1.6	dA6n	013	+12	8 Aq1	
25886	49 44.3	+2.75	-0.001	+13 54 15	+ 4.3	-0.02	6.09	0.0	B9	006	.		
25889	49 51.0	+2.11	-0.001	+36 28 39	+ 4.3	-0.03	6.01		B5s		-21		
25895	50 08.2	+2.56	-0.001	+21 21 49	+ 4.3	-0.01	5.33	0.1	A0s	009	-20v	112 Her	s
25904	50 27.7	+1.34	-0.005	+52 54 35	+ 4.6	+0.27	5.62	4.1	dG8	049	+ 2		
25905	50 27.8	+0.89	+0.010	+59 19 36	+ 4.4	+0.02	4.78	-0.7	gG8	008	-20v	47 σ Dra	ds
25906	50 30.8	+1.92	-0.002	+41 19 17	+ 4.4	-0.00	6.20		B9		.		
25914	51 00.8	+3.58	+0.000	-21 25 22	+ 4.4	-0.02	5.75	-1.2	cK0	004	- 4	33 Sgr	
25918	51 09.1	+3.62	+0.000	-22 48 30	+ 4.4	-0.01	4.96	-0.8	cK2	007	-12	32 ν^1 Sgr	d
25930	51 48.3	+6.19	-0.001	-67 17 57	+ 4.5	+0.01	var	var	cG0v	005	+36v	κ Pav	
25931	51 51.1	+3.44	-0.001	-15 40 02	+ 4.5	-0.01	5.04	-2.8	B8s	0042	- 2		
25934	51 58.7	+2.10	-0.000	+36 54 29	+ 4.5	-0.01	5.51	-1.4	B3n	004	-26v	11 δ^1 Lyr	s
25935	51 59.2	+1.49	0.000	+50 38 42	+ 4.5	-0.03	4.97	1.0	gG4	016	+ 8		
25939	52 05.8	+3.63	+0.007	-22 44 08	+ 4.5	-0.03	5.04	-0.2	sgK5	009	-110v	35 ν^2 Sgr	s
25941	52 09.9	+3.72	+0.001	-26 21 39	+ 4.5	-0.06	2.14	-1.6	B3n	018	-11	34 σ Sgr	
25942	52 13.8	+2.38	-0.002	+27 50 47	+ 4.5	-0.08	5.82		gK4		+15		
25954	52 38.2	+2.53	+0.000	+22 34 50	+ 4.6	+0.00	4.56	0.4	gG0+A3	015	-24v	113 Her	s
25955	52 38.2	+3.46	-0.002	-16 26 21	+ 4.4	-0.18	5.58	2.9	dF5	029	-42		
25956	52 43.2	+4.27	-0.004	-42 46 33	+ 4.5	-0.03	5.42	-1.1	G5	005	-21		
25959	52 45.2	+2.10	-0.001	+36 50 03	+ 4.6	+0.01	var	var	gM4	009	-27	12 δ^2 Lyr	d
25963	52 59.0	+3.63	-0.000	-23 14 21	+ 4.6	-0.01	5.89		B8				

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
25964	18 ^h 53 ^m 01 ^s *1	+2 ^o 92	+0 ^o 001	+06 ^o 33'04"	+ 4"5	-0"09	5.66	0.4	gG9	009	+22v	62 Ser	
25965	53 02.5	+2.20	-0.001	+33 54 13	+ 4.6	-0.00	6.08	0.0	gG2	006	-16v		ds
25972	53 16.0	+1.92	-0.000	+41 32 15	+ 4.6	-0.00	5.57	0.6	gG8	010	- 9		d
25973	53 17.1	+4.07	+0.000	-37 24 33	+ 4.6	-0.03	5.41	-0.1	B8	008	+ 3		d
25980	53 27.9	+1.58	-0.007	+48 47 46	+ 4.5	-0.12	5.87	2.5	dF4	021	-11		d
25991	53 44.0	+2.98	+0.003	+04 08 13	+ 4.7	+0.03	4.50	1.3	A5n	023	-45	63 θ^1 Ser	} d
25993	53 45.4	+2.98	+0.003	+04 08 07	+ 4.7	+0.02	5.37	2.2	A5n	023	-54	63 θ^2 Ser	
25995	53 46.7	+3.11	-0.001	-01 51 57	+ 4.6	-0.02	6.20	0.7	A0	008	-26		
25996	53 48.7	+1.83	+0.002	+43 52 45	+ 4.7	+0.08	var	var	gM6	006	-28v	13 RLyr	ss
25999	53 53.7	+2.65	-0.003	+18 02 29	+ 4.5	-0.17	5.72	0.5	gK2	009	+44v		s
26008	54 10.2	+5.33	-0.017	-60 16 08	+ 4.7	+0.03	5.14	0.7	K2	013	+180	ω Pav	
26012	54 22.2	+3.56	-0.000	-20 43 25	+ 4.7	-0.01	5.06		A0		+ 2	36 ξ^1 Sgr	
26013	54 23.0	+3.21	+0.004	-05 54 46	+ 4.7	-0.04	5.04	0.7	sgK2	025	-93	9Aq1 = η Sct	
26016	54 28.0	+4.80	+0.002	-53 00 23	+ 4.7	-0.00	5.03		B9		- 6v	λ Tel	s
26019	54 44.8	+3.58	+0.002	-21 10 27	+ 4.7	-0.02	3.61	-0.7	gK1	014	-20	37 ξ^2 Sgr	
26020	54 45.7	+3.02	-0.001	+02 28 05	+ 4.7	-0.01	5.65	-0.5	B9n	006	-11	64 Ser	
26023	54 59.4	+6.09	+0.001	-66 43 19	+ 4.7	-0.04	6.06		K0		.		
26024	55 01.0	-0.74	+0.010	+71 13 51	+ 4.8	+0.04	4.91	-0.1	gK0	010	- 7v	52v Dra	
26029	55 08.6	+3.85	-0.004	-31 06 14	+ 4.7	-0.06	6.14		K0		.		
26030	55 09.0	+2.25	+0.013	+32 50 10	+ 4.6	-0.16	5.21	4.2	dG0	063	-47		d
26038	55 21.1	+4.05	-0.011	-37 10 28	+ 4.7	-0.10	4.87	1.9	F0n	026	+53	ϵ CrA	v
26039	55 24.0	+3.61	-0.002	-22 35 53	+ 4.8	+0.01	6.04		A2		.		
26049	55 54.3	+1.01	-0.005	+57 44 52	+ 4.8	-0.07	5.71	0.7	gK3	010	-34	48 Dra	
26052	56 01.2	+2.67	-0.001	+17 17 32	+ 4.8	-0.01	var	var	cF6v	003	-14v	FFAql	ds
26055	56 12.4	+0.26	-0.004	+65 11 27	+ 4.8	-0.02	5.78	0.3	gG5	008	- 5		
26059	56 19.2	+2.05	-0.000	+38 11 51	+ 4.9	-0.00	5.75	-0.7	B7s	005	-31v		s
26064	56 29.1	+2.75	-0.000	+13 50 17	+ 4.8	-0.06	5.94	1.3	A6sp	012	+14	10 Aql	
26067	56 34.5	+2.61	-0.000	+19 43 30	+ 4.9	-0.01	6.22		B7		- 1		
26068	56 35.2	+3.37	-0.000	-12 54 36	+ 4.9	-0.02	5.36	-0.7	B7s	006	-13		ds
26075	56 47.5	+2.76	+0.001	+13 33 16	+ 4.8	-0.13	5.37	3.0	dF6	034	+16	11 Aql	d
26086	57 04.3	+2.24	-0.000	+32 37 11	+ 4.9	-0.00	3.30	-0.8	B9sp	015	-22v	14 γ Lyr	d
26087	57 08.3	+1.96	+0.000	+40 36 34	+ 4.9	-0.00	6.12		B5s		-19		d
26091	57 21.1	+2.72	-0.004	+14 59 56	+ 4.9	-0.08	4.21	0.9	gK0	022	-48v	13 ϵ Aql	
26095	57 31.2	+2.02	-0.000	+39 08 50	+ 5.0	+0.01	6.25		B7n		-14		
26101	57 43.2	+2.44	+0.006	+26 09 36	+ 5.0	-0.01	5.28	0.3	gK2	010	-24v		s
26115	58 07.6	+2.26	+0.001	+32 04 28	+ 5.0	+0.01	5.11	-1.0	gK3	006	-15	15 λ Lyr	
26117	58 09.8	+6.41	-0.002	-68 49 42	+ 5.0	-0.01	5.94		G0		.		
26138	58 58.3	+1.51	+0.002	+50 27 42	+ 5.1	-0.00	5.24	-1.7	B3n	004	-19		
26141	59 00.6	+3.20	-0.002	-05 48 40	+ 5.1	-0.03	4.15	0.4	gK1	018	-44	12 i Aql	
26142	59 04.5	+2.21	+0.000	+33 43 48	+ 5.1	-0.00	6.15	0.4	gK0	007	-28		
26151	59 15.4	+2.44	-0.001	+26 13 09	+ 5.1	-0.01	5.50	-0.6	B3n	006	-14v		
26159	59 24.1	+3.67	-0.002	-24 55 04	+ 5.0	-0.18	5.73	0.2	gK4	008	0		
26161	59 25.9	+3.82	-0.002	-29 57 13	+ 5.1	-0.00	2.71	0.6	A4n	039	+22v?	38 ζ Sgr	d
26165	59 34.5	+4.25	+0.005	-42 10 06	+ 5.1	-0.05	4.85	1.7	A0n	023	- 7	ζ CrA	
26169	59 44.0	+1.19	-0.002	+55 35 10	+ 5.2	-0.01	5.52	0.5	gG3	010	+10	49 Dra	
26177	59 53.0	+4.09	+0.001	-38 19 38	+ 5.2	+0.01	5.73		F0n		+16		
26180	59 57.3	+2.22	-0.001	+33 32 53	+ 5.2	-0.00	6.22	-0.8	B3n	004	-23		
26181	19 00 01.4	+1.70	+0.001	+46 51 47	+ 5.1	-0.09	5.06	2.1	A4n	026	+ 8	16 Lyr	
26182	00 03.8	+4.67	+0.003	-51 05 27	+ 5.0	-0.15	6.01		K5		.		
26184	00 07.5	+3.53	+0.000	-19 19 10	+ 5.2	+0.00	6.03		gG6		-20		d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
26190	19 ^h 00 ^m 16 ^s .5	+3 ^s 16	+0 ^s 001	-03°46'23"	+ 5 ^s .2	+0 ^s .00	5.55	0.8	A0	011	-39	14 g Aql	
26198	00 41.8	+2.61	-0.000	+19 35 12	+ 5.2	-0.01	6.25		K2		- 7		
26205	01 00.4	+3.03	+0.000	+01 44 42	+ 5.2	-0.07	5.72	1.6	A2	015	-20v		s
26209	01 12.5	+3.85	+0.001	-31 07 20	+ 5.3	-0.02	5.53		A0		-20		
26224	01 41.2	+3.59	+0.006	-21 49 00	+ 5.3	-0.06	3.90	1.3	gG8	030	+25	39 o Sgr	
26237	02 19.2	+3.17	+0.001	-04 06 27	+ 5.4	-0.03	5.53	0.0	gK1	008	-18	15 h Aql	d
26240	02 22.7	+4.75	+0.003	-52 24 59	+ 5.3	-0.12	5.18	1.3	F2s	017	+ 2v	e Tel	s
26259	02 49.3	+3.44	-0.000	-15 44 14	+ 5.4	-0.01	5.90		B9n		-26v		s
26263	03 02.4	+4.05	+0.008	-37 08 14	+ 5.2	-0.28	4.26	3.0	dF7	056	-52	γ CrA	d
26266	03 03.5	+2.29	+0.006	+31 40 07	+ 5.4	-0.07	5.80	0.0	gK5	007	+ 6		
26270	03 06.7	+2.76	-0.001	+13 47 15	+ 5.3	-0.10	3.02	0.9	B9n	038	-26v	17 ζ Aql	d
26272	03 09.6	+4.52	+0.001	-48 22 37	+ 5.4	-0.02	6.10		A0		.		
26285	03 35.7	+3.18	-0.002	-04 57 33	+ 5.4	-0.09	3.55	0.6	B9n	026	-14	16 λ Aql	
26290	03 47.7	+1.35	-0.001	+53 19 09	+ 5.5	+0.02	5.35	1.4	A0n	016	-24v	51 Dra	s
26291	03 49.2	+3.74	-0.004	-27 44 43	+ 5.3	-0.26	3.42	1.3	gK1	037	+45v	40 τ Sgr	s
26297	03 57.7	+2.89	0.000	+08 09 10	+ 5.4	-0.07	var		gM7ev		+32	R Aql	
26299	03 59.7	+3.45	+0.001	-16 18 27	+ 5.5	+0.00	5.93		B9		.		d
26308	04 22.0	+3.78	+0.000	-28 42 57	+ 5.5	-0.01	6.19		K2		.		
26310	04 33.2	+2.50	+0.004	+24 10 19	+ 5.6	+0.01	5.72	1.4	A3s	014	-22		
26313	04 35.5	+6.36	+0.027	-68 30 16	+ 5.5	-0.06	5.30	2.0	G4	022	-10		
26315	04 37.3	+2.82	-0.000	+10 59 34	+ 5.5	-0.03	5.10	-0.4	B8	008	-19v	18 Y Aql	sv
26317	04 38.6	+2.38	+0.006	+28 32 55	+ 5.7	+0.08	5.46	2.1	A2n	021	-19v		s
26318	04 39.7	+1.94	-0.000	+41 20 07	+ 5.6	-0.01	6.15	-0.8	B3s	004	-21v		s
26322	04 52.2	+4.17	+0.003	-40 34 34	+ 5.6	-0.03	4.66	0.5	K1	015	+20	δ CrA	
26329	05 11.3	+3.67	+0.001	-24 44 13	+ 5.6	+0.00	6.24		B9		.		
26335	05 20.4	+3.52	+0.000	-19 22 13	+ 5.6	+0.01	5.41	-1.6	B3e	004	-20		
26338	05 31.0	+2.14	-0.001	+36 01 14	+ 5.6	-0.01	5.13	-0.6	B6n	007	-18	18 ι Lyr	
26340	05 32.0	+2.27	+0.010	+32 25 18	+ 5.7	+0.02	5.04	1.4	dA7n	019	+ 4	17 Lyr	d
26347	05 42.6	+2.69	+0.004	+16 46 39	+ 5.4	-0.31	5.99	4.7	dG4	056	+14v		s
26355	05 55.0	+2.57	+0.003	+21 37 03	+ 5.8	+0.07	6.16	2.9	dF3	022	-40		
26360	06 04.4	+4.08	+0.007	-37 59 04	+ 5.6	-0.10	4.12	1.6	A2n	032	-18	α CrA	
26375	06 26.5	+4.23	+0.001	-41 58 26	+ 5.7	-0.02	5.86		B8n		+ 6		
26379	06 32.9	+2.94	-0.001	+05 59 35	+ 5.7	-0.08	5.37	2.8	dF0s	030	-47v	19 Aql	
26380	06 35.5	+4.13	-0.000	-39 25 20	+ 5.7	-0.04	4.16	-1.1	G5	009	+ 3	β CrA	
26386	06 47.4	+3.57	-0.000	-21 06 18	+ 5.7	-0.04	3.02	-0.6	cF3	019	-10	41 π Sgr	d
26397	07 15.5	+1.40	-0.011	+52 20 42	+ 5.7	-0.06	5.93	-1.1	sgK0	004	+ 5v		s
26405	07 36.3	+4.11	-0.001	-39 05 15	+ 5.8	-0.02	6.24		B8n		- 1v		s
26411	08 08.9	+3.80	+0.002	-29 35 08	+ 5.8	-0.02	6.25		B9		.		
26431	08 54.8	+4.63	+0.004	-50 34 14	+ 5.9	-0.04	6.17		K0		.		
26449	09 34.8	+0.22	-0.000	+65 53 41	+ 6.0	+0.03	6.19	1.0	A2	009	.	55 Dra	
26454	09 43.4	+1.99	-0.000	+40 20 42	+ 6.0	-0.02	6.12	1.3	A0	011	+ 6		
26459	09 50.8	+2.30	-0.001	+31 11 56	+ 6.0	-0.00	5.77	0.0	A0	007	-30	19 Lyr	
26461	09 58.0	+3.25	+0.001	-08 01 29	+ 6.0	-0.01	5.37	-1.1	B3n	005	-17	20 Aql	
26463	10 08.9	+3.69	-0.000	-25 59 33	+ 6.0	-0.01	5.86	-1.1	cK0	004	+ 1		
26469	10 27.8	+3.35	+0.001	-12 22 05	+ 6.0	-0.03	5.62	0.6	gK4	010	-18		
26470	10 27.9	+2.57	0.000	+21 28 08	+ 6.1	-0.00	5.90	1.1	A0	011	- 6		
26475	10 43.8	+1.13	+0.004	+56 46 24	+ 6.1	+0.04	5.24	0.4	gG7	011	-15	53 Dra	
26484	11 01.2	-2.20	+0.013	+76 28 42	+ 6.0	-0.12	5.06	3.1	dA9s	041	- 4	59 Dra	
26485	11 01.6	+4.36	+0.005	-45 16 48	+ 6.1	-0.04	5.98	2.3	K0	018	.		
26490	11 11.4	+3.02	+0.000	+02 12 26	+ 6.1	0.00	5.10	-0.7	B8	007	- 5	21 Aql	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
26507	19 ^h 12 ^m 03 ^s .3	+2 ^o 04	-0 ^o 000	+39 ^o 03'32"	+ 6"2	0"00	4.46	-2.5	B5s	004	- 8	20 η Lyr	d
26512	12 11.2	+6.03	+0.002	-66 45 01	+ 6.2	-0.02	5.57		A2n		+12		d
26516	12 28.5	+3.68	+0.003	-25 20 41	+ 6.2	-0.03	4.93	1.0	dF5	016	-34v	42 ψ Sgr	ds
26518	12 30.5	+3.65	+0.008	-24 15 59	+ 6.1	-0.10	6.22		F8		.		
26520	12 32.9	+0.01	+0.016	+67 34 25	+ 6.3	+0.09	3.24	0.4	gG8	027	+25	57 δ Dra	
26526	12 43.5	+4.37	-0.000	-45 33 19	+ 6.3	+0.00	5.32	-1.2	K5	005	+ 6		
26530	12 52.1	+2.61	-0.001	+20 06 53	+ 6.3	-0.00	6.14	0.4	gK0	007	+ 7		
26537	13 01.6	+1.07	-0.002	+57 37 05	+ 6.2	-0.07	5.26	1.6	gK2	019	-27	54 Dra	
26539	13 03.3	+2.73	-0.000	+14 59 42	+ 6.3	-0.01	5.69	-0.4	gG7	006	-25		
26542	13 08.0	+2.58	+0.002	+21 08 36	+ 6.3	+0.01	5.62	1.3	A1n	014	-23	1 Sge	
26544	13 16.9	+3.92	+0.001	-33 36 41	+ 6.3	+0.02	var		G0ep		.	RY Sgr	
26550	13 28.2	+2.33	+0.002	+30 26 16	+ 6.3	-0.03	6.13	-0.4	gM0	005	-63		
26562	13 59.1	+2.40	-0.000	+27 50 13	+ 6.4	+0.02	6.06		F6p		-16		
26567	14 02.5	+2.97	+0.001	+04 44 42	+ 6.3	-0.02	5.40	1.0	A2	013	-22	22 Aql	s
26569	14 04.0	+2.58	-0.001	+21 18 03	+ 6.4	-0.00	4.60	-0.4	B5n	010	-17v?	1 Vul	
26572	14 09.3	+2.75	+0.000	+14 27 17	+ 6.4	+0.01	5.46	1.5	A0n	016	-19		d
26585	14 37.9	+2.08	-0.000	+38 02 37	+ 6.4	0.00	4.46	-1.0	gG9	008	-31	21 θ Lyr	
26589	14 42.6	+3.51	-0.001	-19 02 37	+ 6.4	-0.02	5.03	-0.4	gG5	008	+15	43 d Sgr	
26599	15 16.6	+3.03	-0.001	+01 56 26	+ 6.4	-0.03	6.12	1.1	A0	010	-27v?		
26604	15 25.2	+1.72	-0.002	+46 54 15	+ 6.8	+0.29	6.04	2.7	dF3	022	-44		
26609	15 28.1	+2.82	-0.000	+11 30 14	+ 6.5	+0.01	5.14	1.0	A3n	015	-14	25 ω Aql	
26613	15 36.6	+2.54	-0.000	+22 56 03	+ 6.5	-0.01	5.40	-4.5	B0n	0015	+ 1	2 ES Vul	dv
26621	15 56.8	+1.39	+0.006	+53 16 32	+ 6.6	+0.12	3.98	0.7	gG8	022	-29v?	1 κ Cyg	
26623	15 59.8	+3.05	+0.000	+00 59 34	+ 6.5	+0.02	5.32	-0.2	gK1	008	-24	23 Aql	d
26631	16 21.2	+3.97	-0.001	-35 30 51	+ 6.5	-0.01	5.61	-0.9	B7	005	- 9		
26638	16 31.5	-1.16	-0.033	+73 15 48	+ 6.7	+0.11	4.63	0.4	gK4	014	-30v	60 τ Dra	s
26650	17 15.5	+2.11	+0.001	+37 21 07	+ 6.6	+0.02	6.19	0.7	A0	008	-15v		s
26654	17 19.3	+2.80	+0.000	+12 16 51	+ 6.7	+0.02	5.42	0.6	gF0	011	+ 3	28 A Aql	
26660	17 31.9	+2.82	+0.002	+11 26 27	+ 6.7	+0.02	6.02	-4.0	A2	001	-22	29 ω Aql	
26664	17 38.4	+3.59	-0.001	-22 29 50	+ 6.7	+0.03	5.55	2.2	A5	021	.		
26669	17 52.7	+3.20	+0.007	-05 30 39	+ 6.7	+0.05	5.10	2.3	sgK0	027	-18v	26 f Aql	sE
26673	18 00.8	+3.10	+0.000	-00 59 12	+ 6.7	+0.00	5.46	-0.3	B9	007	-27v	27 d Aql	s
26682	18 30.2	+1.32	+0.002	+54 16 56	+ 6.7	-0.03	6.24		A0		- 6		
26694	18 46.4	+3.48	-0.002	-17 56 35	+ 6.8	+0.02	3.95	2.0	dA7n	040	+ 1	44 ρ Sgr	
26696	18 49.4	+4.84	+0.002	-54 31 08	+ 5.7	-0.07	5.16	0.9	A0n	014	+12	η Tel	
26697	18 51.8	+3.43	-0.000	-16 03 02	+ 6.8	-0.00	4.58	-3.0	B8p+F2	003	+12v	46 v Sgr	sE
26700	18 55.9	+3.50	+0.007	-18 24 10	+ 6.7	-0.09	6.02	0.8	gG9	009	-13v?	45 ρ Sgr	
26703	19 02.8	+4.31	+0.000	-44 33 18	+ 6.8	-0.02	4.24	-0.4	B8	012	- 9	β Sgr	d
26708	19 21.1	+1.10	+0.002	+57 33 00	+ 6.8	+0.01	6.10		gM1		-21		
26718	19 36.6	+4.33	+0.009	-44 53 45	+ 6.8	-0.06	4.51	1.5	A9n	025	+22	β Sgr	
26723	19 47.2	+3.08	+0.003	-00 20 55	+ 6.8	-0.03	5.95	0.5	gG8	008	-11		
26735	20 24.9	+0.31	+0.002	+65 37 05	+ 6.9	+0.04	4.63	1.0	A2	019	-29	58 π Dra	
26736	20 25.5	+2.86	+0.001	+09 48 52	+ 7.0	+0.09	6.25		F8		-20		
26737	20 25.5	+4.16	+0.003	-40 42 43	+ 6.8	-0.12	4.11	-0.3	B9n	013	0v	α Sgr	s
26747	20 47.6	+4.28	+0.002	-43 49 15	+ 6.9	-0.04	6.08		Ma		.		
26748	20 47.9	+2.46	-0.000	+26 09 55	+ 6.9	-0.01	4.92	-0.3	B8s	009	-12	3 Vul	
26766	21 23.2	+3.74	+0.000	-27 57 51	+ 7.0	-0.00	5.94		B3		.		
26777	21 55.2	+3.78	-0.000	-29 24 28	+ 7.0	-0.06	6.09		K0		.		d
26784	22 07.3	+2.69	-0.001	+16 50 20	+ 7.0	-0.01	6.03	0.5	A4s	008	+11v	2 Sge	s
26785	22 09.2	+2.37	+0.001	+29 31 20	+ 7.0	+0.01	4.86	-2.1	B5	004	-21	2 Cyg	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
26789	19 ^h 22 ^m 14 ^s 0	+3 ^s 65	+0 ^s 004	-24 ^o 36'27"	+ 7"0	-0"06	5.01	2.5	A5	031	-42	47 χ^1 Sgr	
26794	22 21.6	+1.90	+0.001	+43 17 23	+ 7.0	-0.03	5.95	0.5	gG5	008	- 0		
26801	22 28.2	+3.63	-0.001	-24 03 43	+ 7.0	-0.01	5.56	0.3	gK4	009	+40	49 χ^A Sgr	
26805	22 32.2	+3.39	+0.005	-13 59 52	+ 7.1	+0.05	5.81	0.6	gK3	009	-34		
26809	22 35.1	+2.86	+0.049	+11 50 09	+ 7.7	+0.64	5.23	4.3	dG7	064	-100	31 b Aql	
26816	22 58.6	+3.02	+0.017	+03 00 49	+ 7.2	+0.08	3.44	2.3	dA5n	059	-30v	30 δ Aql	s
26821	23 16.9	+2.63	+0.006	+19 41 57	+ 7.1	-0.07	5.31	-0.2	gG7	008	+ 1	4 Vul	d
26823	23 20.3	+3.58	+0.002	-21 52 39	+ 7.1	-0.00	5.56	0.8	gK3	011	-20	50 Sgr	
26824	23 20.4	+3.41	+0.001	-15 09 14	+ 7.1	+0.01	5.68		B8		- 7v?		
26825	23 21.5	+2.48	-0.014	+24 49 17	+ 6.5	-0.63	6.17	3.6	dF6	031	- 4		
26826	23 22.5	-2.12	-0.003	+76 27 42	+ 7.1	+0.00	var		N0		+ 6	UX Dra	
26833	23 47.0	+3.79	+0.001	-29 50 38	+ 7.1	-0.05	5.68		B9		+ 2		
26834	23 47.6	+4.82	+0.000	-54 25 38	+ 7.2	+0.01	5.56		K2		.		
26838	23 57.6	+3.07	-0.000	+00 14 15	+ 7.2	0.00	4.86	-4.5	cF5	002	- 1	32 ν Aql	
26839	24 02.2	+2.62	-0.000	+19 59 50	+ 7.1	-0.04	5.58	1.0	B9n	012	-21	5 Vul	s
26840	24 04.6	+2.79	+0.000	+12 55 18	+ 7.2	+0.06	5.77	2.7	dF3	024	-34		
26844	24 17.4	+2.62	-0.000	+19 47 27	+ 7.2	-0.05	6.04	1.0	gM0	010	-36		d
26846	24 21.0	+2.16	0.000	+36 12 59	+ 7.2	+0.01	5.15	-0.3	A0p	008	-22v	4 Cyg	s
26857	24 44.9	-3.65	+0.004	+79 30 16	+ 7.2	-0.03	6.00	0.8	A2n	009	- 3		
26883	25 48.5	+4.89	+0.003	-55 32 42	+ 7.3	-0.06	6.18		K0		.		
26884	25 50.1	+3.01	0.000	+02 49 37	+ 7.3	-0.01	5.92	-0.2	B9	006	.		
26885	25 50.8	+4.26	+0.008	-43 32 52	+ 7.2	-0.14	5.80	0.6	A0	009	.		
26891	26 00.0	+6.24	+0.002	-68 32 19	+ 7.3	-0.01	5.95		K5		.		
26893	26 12.5	+1.47	-0.002	+52 13 04	+ 7.3	-0.03	5.66	0.9	A0s	011	+ 2v	7 Cyg	
26900	26 29.3	+3.03	-0.000	+01 50 48	+ 7.4	-0.03	5.77	1.2	A0n	012	+10	35 c Aql	
26904	26 37.4	+2.50	-0.009	+24 33 45	+ 7.3	-0.11	4.63	0.0	gM1	012	-86	6 α Vul	
26905	26 39.9	+3.23	+0.001	-07 08 53	+ 7.4	+0.00	var	var	cG3v	0015	- 7v	U Aql	d
26911	26 46.7	+3.71	+0.002	-27 05 23	+ 7.4	-0.04	5.53	1.3	K3	014	.		d
26914	26 51.8	+2.50	-0.000	+24 39 51	+ 7.4	+0.01	5.98	0.5	gG6	008	-27	8 Vul	
26919	27 04.3	+2.76	+0.003	+14 29 30	+ 7.4	-0.03	5.73	0.5	gK0	009	-40		
26933	27 56.0	+3.56	+0.001	-21 25 04	+ 7.5	-0.02	6.01		A0n		.		
26936	28 02.9	+3.14	+0.001	-02 53 41	+ 7.5	-0.01	5.22	0.9	gM1	014	-11	36 e Aql	
26947	28 26.7	+1.51	+0.002	+51 37 21	+ 7.7	+0.13	3.94	0.0	A1n	016	-19	10 ϵ Cyg	
26953	28 42.2	+2.42	-0.000	+27 51 12	+ 7.6	-0.01	3.24	-2.2	gK1p	008	-24v	6 β Cyg	
26956	28 44.3	+2.42	-0.001	+27 51 32	+ 7.6	-0.00	5.36	-0.1	B9nc	008	-18	6 β Cyg	d
26959	28 57.3	+4.74	+0.003	-53 17 36	+ 7.6	-0.02	5.91		A5		.		
26960	28 58.2	+2.17	+0.000	+36 07 20	+ 7.6	-0.01	6.04	0.8	A0	009	+ 7		
26968	29 18.7	+2.46	+0.002	+26 30 36	+ 7.6	+0.03	5.96		sgG8		- 2		
26981	29 45.6	+4.32	-0.002	-45 22 47	+ 7.6	-0.03	5.87		A0p		.		
26988	29 54.7	+2.23	-0.000	+34 20 44	+ 7.7	-0.00	4.85	-0.9	B5s	007	-22	8 Cyg	
26990	29 59.8	+1.59	-0.004	+50 11 55	+ 7.7	+0.04	5.73	0.2	gK1	008	- 9		
27006	30 42.9	+4.11	-0.001	-40 08 38	+ 7.7	-0.00	5.90		A2		.		
27023	31 24.9	-0.48	-0.002	+70 52 52	+ 7.8	+0.06	6.25		K4		-43		
27025	31 30.7	+4.45	-0.002	-48 12 33	+ 7.7	-0.04	5.02	-1.1	G9	006	+22	ϵ Tel	
27030	31 38.7	+2.93	+0.014	+07 16 17	+ 7.6	-0.16	4.65	2.0	sgK4	030	-24	38 μ Aql	
27045	32 18.9	+1.65	-0.000	+49 09 10	+ 7.9	-0.01	6.19		gM4		-10		
27046	32 21.9	+3.31	+0.000	-10 40 17	+ 7.9	-0.00	5.24	-0.2	gG7	008	-31	37 k Aql	
27047	32 23.0	+2.63	+0.000	+19 39 46	+ 7.9	-0.00	4.88	-0.1	B9n	010	+ 5	9 Vul	d
27050	32 27.6	-0.12	+0.110	+69 34 34	+ 6.1	-1.74	4.78	6.1	dG8	181	+27	61 σ Dra	
27062	32 51.6	+2.38	+0.001	+29 21 07	+ 7.9	+0.02	5.42	2.0	dF4+A0	021	-11v	9 Cyg	s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
27067	19 ^h 32 ^m 59 ^s .6	+3 ^s .64	+0 ^s .001	-24 [°] 49'49"	+ 7 ⁹	-0 ⁰ .02	5.68	1.4	dA7s	014	-45v	51 h ¹ Sgr	s
27068	33 02.1	+1.55	+0.003	+51 07 43	+ 7.7	-0.19	5.65	3.4	dF6	036	+ 1		
27070	33 03.3	+1.96	-0.001	+42 18 08	+ 7.9	-0.02	5.29	0.5	A2	011	0		
27085	33 31.3	+3.50	+0.002	-18 57 53	+ 7.9	-0.00	6.14		A5		.		
27089	33 40.0	+3.65	+0.005	-24 59 45	+ 7.9	-0.02	4.66	0.9	B9	018	-19v	52 h ⁸ Sgr	d
27097	33 59.9	+2.57	0.000	+22 28 24	+ 8.0	-0.03	6.12	0.3	B9n	007	-31		
27099	34 00.4	+2.16	+0.000	+36 49 57	+ 8.0	-0.00	5.86	0.4	B9ne	008	-15	11 Cyg	
27103	34 08.1	+3.10	0.000	-01 23 56	+ 8.0	-0.02	4.28	-1.5	B8n	007	-22	41 ϵ Aql	d
27105	34 09.3	+3.48	+0.001	-18 20 38	+ 8.0	-0.01	5.87	0.1	gK3	007	- 7		
27107	34 12.1	+3.23	0.000	-07 08 25	+ 8.0	-0.01	5.04	-4.8	B0n	0014	-15	39 κ Aql	
27108	34 14.2	+5.04	+0.004	-58 05 46	+ 8.0	-0.06	6.18		G5		.		
27120	34 30.8	+2.83	+0.001	+11 09 37	+ 8.0	+0.00	6.16		G5		- 1		
27127	34 45.3	+3.38	-0.008	-14 24 48	+ 7.9	-0.14	5.60	3.7	dF6	041	-21		s
27139	35 01.5	+2.72	+0.001	+16 20 57	+ 8.1	+0.01	5.67	-0.1	gG8	007	-33	4 ϵ Sge	
27140	35 04.9	+1.86	-0.010	+44 35 00	+ 8.0	-0.10	5.16	1.5	sgK0	019	- 5		
27141	35 06.0	+1.61	-0.003	+50 06 16	+ 8.3	+0.25	4.64	-1.5	dF2	006	-28	13 θ Cyg	d
27143	35 08.1	+3.18	+0.007	-04 45 38	+ 8.0	-0.05	5.52	2.3	dF1	023	-38	42 Aql	
27152	35 28.7	+1.61	-0.001	+50 05 11	+ 8.1	-0.01	var		S3ev		-25	RCyg	
27167	36 06.7	+4.31	-0.000	-45 23 37	+ 8.2	+0.02	6.24		A5		.		
27185	36 43.5	+2.96	-0.000	+05 16 57	+ 8.2	-0.00	var	var	B3	003	- 5v	44 σ Aql	sE
27187	36 47.7	+5.81	+0.004	-65 58 13	+ 8.1	-0.07	6.00		K2		.		
27189	36 49.2	+3.60	-0.000	-23 32 35	+ 8.2	-0.03	6.24		A0		.	53 Sgr	d
27194	37 06.9	+3.61	+0.002	-23 32 42	+ 8.2	0.00	6.13	0.4	gK1	007	-28		
27203	37 24.0	+2.37	-0.000	+30 02 13	+ 8.3	+0.04	4.79	-0.2	gK0	010	+ 6v	12 φ Cyg	s
27206	37 33.8	+1.35	+0.004	+54 51 21	+ 8.4	+0.17	5.86	3.4	dF4	033	-16v		s
27213	37 48.7	+1.95	+0.002	+42 42 06	+ 8.3	+0.03	5.39	-0.4	A0s	007	-28v	14 Cyg	s
27214	37 51.6	+3.44	+0.004	-16 24 34	+ 8.3	-0.05	5.45	1.5	sgK1	016	-58	54 Sgr	d
27215	37 51.6	+2.68	+0.001	+17 53 51	+ 8.3	-0.02	4.37	-1.7	cF8	006	+ 2	5 α Sge	
27216	37 52.0	+2.26	+0.000	+33 51 45	+ 8.3	+0.01	6.12	2.1	A2	016	-32		d
27222	38 08.8	+3.09	+0.001	-00 44 19	+ 8.3	+0.02	5.52	1.2	A0	014	-46	45 Aql	
27235	38 46.6	+2.78	-0.000	+13 41 53	+ 8.4	-0.02	var	var	B3	004	-14v	QS Aql	dsE
27236	38 48.1	+2.69	+0.000	+17 21 32	+ 8.3	-0.04	4.45	0.0	gG7	013	-22	6 β Sge	
27249	39 17.6	+1.85	+0.008	+45 24 19	+ 8.5	+0.11	5.05	1.5	sgF5	020	-20		
27252	39 26.1	+0.94	-0.002	+60 23 23	+ 8.4	-0.01	6.21	1.6	A4	012	- 1		d
27255	39 39.6	+3.43	+0.004	-16 14 34	+ 8.4	-0.01	5.10	2.8	F0n	034	-28v?	55 ϵ Sgr	s
27272	40 12.8	+2.82	-0.000	+11 42 27	+ 8.5	-0.01	5.32	0.7	dF3+A3	012	- 22v?	47 χ Aql	d
27275	40 14.9	+2.05	-0.003	+40 08 05	+ 8.5	+0.02	6.20	1.6	A3	012	-32		d
27276	40 17.3	+4.01	-0.001	-37 39 30	+ 8.5	-0.01	6.16		B7n		-29v?		
27289	40 42.5	+3.42	+0.010	-15 35 15	+ 8.3	-0.18	5.50	3.6	F4s	041	+13		
27292	40 49.0	+2.31	-0.001	+32 18 25	+ 8.5	-0.01	5.89	1.5	A2	013	- 8		
27297	41 11.4	+2.36	-0.001	+30 33 29	+ 8.6	+0.04	6.06		B9n		-31		
27305	41 38.1	+2.49	+0.000	+25 39 04	+ 8.6	+0.02	5.45	1.0	gG6	013	- 9	10 Vul	
27310	41 58.4	+2.26	-0.000	+34 02 30	+ 8.6	0.00	5.95	0.2	A0	007	-11		
27315	42 04.8	+2.00	+0.001	+41 39 07	+ 8.6	+0.01	6.04	0.6	gM0	008	-41		
27318	42 12.6	+1.70	-0.001	+48 39 25	+ 8.7	+0.02	var		gM2ev		-116	RT Cyg	
27321	42 14.5	+2.79	-0.001	+13 10 53	+ 8.6	-0.01	6.12	0.3	A0s	007	- 4v	48 ψ Aql	s
27328	42 28.3	+2.16	+0.006	+37 13 57	+ 8.7	+0.03	5.02	0.7	gG8	014	-24	15 Cyg	
27337	42 49.9	+3.83	-0.000	-32 01 51	+ 8.7	-0.02	5.56		B9n		-31		
27342	43 13.9	+2.92	+0.003	+07 29 26	+ 8.7	+0.00	5.72	2.3	A2	021	-30	49 ν Aql	
27347	43 24.6	+1.87	+0.004	+45 00 28	+ 8.8	+0.04	2.97	-0.2	A0n	024	-21	18 δ Cyg	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
27349	19 ^h 43 ^m 26 ^s .8	+3 ^s .50	-0 ^s .009	-19°52'59"	+ 8 ^s .7	-0 ^s .09	5.06	1.1	gK0	016	+20	56 f Sgr	
27351	43 41.2	+6.92	+0.002	-72 37 42	+ 8.8	+0.01	5.52	2.8	A3	028	0v		s
27354	43 52.9	+2.85	+0.001	+10 29 24	+ 8.8	-0.00	2.80	-1.5	gK3	014	- 2	50 γ Aql	
27358	43 56.7	+4.90	+0.011	-56 29 06	+ 8.6	-0.14	5.52		A5n		-16v?	ν Tel	
27360	43 59.4	+2.24	+0.001	+34 53 23	+ 8.8	-0.01	6.23	0.5	gK0	007	-19		d
27367	44 23.2	-0.09	+0.002	+69 12 54	+ 8.8	-0.02	5.90	1.1	A0	011	0		
27369	44 31.6	+2.28	+0.001	+33 36 37	+ 8.4	-0.45	5.03	3.2	dF3+K4	045	+ 5	17 Cyg	d
27372	44 40.0	+2.30	-0.003	+32 45 53	+ 8.8	-0.00	6.18		K2		-46		d
27391	45 09.4	+2.67	+0.000	+18 24 35	+ 8.9	+0.01	3.78	-1.7	gM2+A0	008	+ 1v	7 δ Sge	s
27394	45 14.5	+3.37	+0.002	-13 49 41	+ 8.9	-0.01	6.18		A3		.		
27401	45 41.2	+2.13	+0.001	+38 16 58	+ 8.9	-0.00	5.67	0.2	B9	008	.		
27402	45 42.8	+2.51	+0.006	+25 15 33	+ 8.9	-0.03	6.04		gK0		-17		
27407	45 59.1	+1.75	-0.003	+47 46 59	+ 8.9	-0.03	6.24		gM1		+ 3		s
27412	46 04.5	+3.74	+0.009	-28 54 50	+ 8.8	-0.11	6.10		F0		.		d
27416	46 15.2	+5.74	+0.016	-65 43 48	+ 8.8	-0.16	6.12		A5		.		
27417	46 16.8	+3.31	+0.002	-10 59 48	+ 8.9	-0.02	6.23	0.7	gK5	008	-37		
27418	46 20.6	+2.83	+0.001	+11 41 24	+ 9.0	-0.01	5.70	2.6	dF2+A2	024	+13	52 π Aql	d
27424	46 30.9	+5.09	+0.002	-59 19 13	+ 9.0	+0.00	5.54	0.3	A2	009	+ 4		d
27427	46 34.9	+4.38	-0.002	-47 41 03	+ 9.0	-0.01	6.00		Ma		.		
27431	46 45.4	+2.66	+0.001	+19 00 55	+ 9.0	+0.03	4.95	0.5	A2n	013	-7 v	8 ζ Sge	d
27453	47 41.2	+2.12	+0.000	+38 35 00	+ 9.1	-0.01	6.21	0.4	gG3	007	+11		d
27465	48 01.8	+3.30	-0.002	-10 53 31	+ 9.1	+0.04	5.55		dF2n		+ 6	51 Aql	
27470	48 20.6	+2.93	+0.036	+08 44 05	+ 9.5	+0.38	0.89	2.4	A7n	205	-26	53 α Aql	
27471	48 21.1	-0.20	+0.015	+70 08 26	+ 9.2	+0.04	3.99	-0.4	gG3	013	+ 3	63 ϵ Dra	d
27474	48 27.1	+4.07	+0.002	-40 00 11	+ 9.1	-0.02	5.39	1.5	A0p	017	0v		s
27480	48 37.9	+2.87	+0.016	+10 17 21	+ 9.0	-0.14	5.22	3.7	dF8	049	- 0	54 σ Aql	
27481	48 38.5	+2.30	-0.003	+32 47 12	+ 9.1	-0.04	var	var	gS7ev	014	- 2	χ Cyg	
27482	48 39.1	+4.78	+0.001	-55 06 01	+ 9.1	-0.00	6.14		G5		.		d
27486	48 47.6	+2.13	+0.001	+38 35 34	+ 9.3	+0.10	5.43	-1.1	gM2	005	-39	19 Cyg	d
27492	48 54.3	+2.06	-0.001	+40 28 17	+ 9.2	-0.01	var	var	B1	0016	- 4v	V380 Cyg	sE
27493	48 54.8	+2.58	+0.001	+22 28 54	+ 9.1	-0.02	4.91	-0.9	B5ne	007	-26	12 Vul	
27503	49 17.7	+3.49	-0.000	-19 10 25	+ 9.1	-0.06	5.99	1.4	gG5	012	-26v	57 Sgr	s
27506	49 22.4	+1.50	-0.002	+52 51 37	+ 9.1	-0.07	5.17	0.7	gK4	013	-20	20 dCyg	
27510	49 43.0	+2.81	-0.023	+11 30 13	+ 8.9	-0.32	6.18	3.1	G0	024	-17		
27513	49 49.7	+1.79	+0.001	+47 14 52	+ 9.3	+0.02	6.24	2.8	dF0n	021	-18		s
27516	49 55.3	+2.52	-0.001	+24 51 46	+ 9.3	+0.01	5.67	-6.3	F5+A1	001	- 3		
27517	49 55.5	+3.06	+0.000	+00 52 33	+ 9.2	-0.01	var	var	cG0v	0036	-15v	55 η Aql	
27529	50 28.6	+1.81	-0.001	+46 53 51	+ 9.3	-0.00	5.51	-5.7	O9n	0008	- 6		
27531	50 38.7	+1.77	-0.001	+47 48 07	+ 9.3	-0.01	5.70	-3.5	B2s	0017	-18		
27532	50 41.6	+3.14	+0.001	-03 14 44	+ 9.3	+0.02	5.64	0.2	A4sp	008	-19		
27544	51 20.1	+2.55	+0.002	+23 56 53	+ 9.4	+0.04	4.50	-0.1	A0	012	-28v	13 Vul	d
27546	51 25.5	+3.25	-0.000	-08 42 20	+ 9.3	-0.02	6.02	0.2	gK5	007	-50	56 Aql	
27549	51 32.4	+1.77	-0.001	+47 40 36	+ 9.4	-0.01	6.15	-4.8	B1np	0008	-65v		
27557	51 49.0	+4.14	+0.002	-42 00 06	+ 9.4	+0.05	4.21	0.9	K0	022	+36	ι Sgr	
27558	51 49.4	+2.91	+0.006	+08 19 50	+ 9.3	-0.08	4.86	1.1	gK0	018	-42	59 ξ Aql	
27562	51 55.2	+3.25	+0.000	-08 21 32	+ 9.4	-0.02	5.78	0.0	B5n	007	- 6v	57 Aql	d
27565	52 11.1	+3.07	+0.002	+00 08 30	+ 9.4	-0.01	5.57		A0n		-42	58 Aql	
27567	52 13.6	+2.93	+0.002	+07 00 29	+ 9.4	-0.00	5.97	1.2	A0n	011	-16		
27571	52 15.9	+1.23	+0.001	+57 23 31	+ 9.4	+0.01	5.04	-0.7	B5	007	-25	23 Cyg	
27574	52 23.7	+2.55	+0.002	+24 11 13	+ 9.4	-0.00	5.47	0.9	A1n	012	- 8		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
27581	19 ^h 52 ^m 41 ^s .8	+1.07	+0.005	+59°34'33"	+ 9.5	+0.06	6.03	0.8	A0	009	—13v		s
27583	52 46.7	+3.67	+0.015	—26 26 02	+ 9.5	+0.08	4.81	3.4	dG5	053	—21	58 ω Sgr	
27587	52 51.4	+2.95	+0.003	+06 16 50	+ 9.0	—0.48	3.90	3.3	dG8	077	—40	60 β Aql	d
27588	52 54.9	+5.04	+0.002	—59 02 07	+ 9.5	—0.02	5.35	1.6	Ao	018	— 2		
27589	52 58.6	+2.19	+0.001	+36 51 47	+ 9.5	+0.02	5.77	1.2	dF6	012	—24		
27594	53 32.9	+6.20	+0.014	—69 17 52	+ 9.4	—0.10	5.82	3.0	A3	027	.		
27601	53 44.9	+2.73	—0.000	+16 30 04	+ 9.5	—0.01	var	var	cG1v	002	—10v	10 S Sge	s
27604	53 52.1	+2.84	+0.002	+11 17 23	+ 9.6	+0.01	5.29	1.4	A2	017	—28v	61 φ Aql	s
27605	53 52.9	+3.68	+0.000	—27 18 15	+ 9.5	—0.02	4.62	—0.4	gK3	010	—16v	59b ¹ Sgr	s
27613	54 04.4	+2.14	—0.000	+38 21 10	+ 9.6	0.00	4.87	—1.2	B6s	006	—30v	22 Cyg	
27618	54 20.2	+1.55	—0.004	+52 18 20	+ 9.6	—0.03	4.90	—0.1	A0n	010	—11	24 ψ Cyg	d
27620	54 22.6	+1.19	+0.002	+58 07 03	+ 9.5	—0.07	6.19		G8		—16		
27622	54 25.7	+2.25	—0.003	+34 56 58	+ 9.6	—0.03	4.03	0.2	gK0	017	—26	21 η Cyg	d
27631	54 50.7	+6.93	+0.018	—73 02 44	+ 9.5	—0.14	4.10	—0.5	A0	012	+ 0v?	ϵ Pav	
27632	54 53.1	+2.22	—0.000	+36 06 57	+ 9.6	+0.00	6.04	—0.9	B3	004	—23		
27635	54 58.2	+1.14	—0.002	+58 42 43	+ 9.6	—0.02	5.13	—0.1	gK5	009	+ 5		
27637	55 06.9	+3.40	+0.001	—15 37 32	+ 9.6	—0.09	5.05	2.6	A0	032	— 4	61 g Sgr	
27641	55 13.8	+1.30	+0.002	+56 33 07	+ 9.7	+0.02	6.10	1.1	A2	010	—29		
27648	55 29.1	+2.72	+0.000	+16 39 11	+ 9.7	+0.01	5.38	—0.1	B9	008	—26	11 Sge	
27649	55 29.6	+2.08	+0.000	+40 13 56	+ 9.7	—0.00	5.43	—0.7	B5n	006	—26v		
27651	55 32.2	+5.84	—0.004	—67 05 01	+ 9.5	—0.20	5.72	2.0	K0	018	.	μ^1 Pav	
27657	55 47.8	+3.77	+0.007	—30 40 26	+ 9.6	—0.06	6.24		K0		.		
27658	55 54.6	+3.65	+0.002	—26 19 58	+ 9.7	+0.03	4.95	0.0	gG5	010	—49v	60 A Sgr	s
27670	56 29.1	+3.90	+0.001	—35 24 48	+ 9.7	—0.03	4.39	—1.1	B5	008	+ 1v	θ^1 Sgr	s
27672	56 31.9	+2.67	+0.004	+19 21 18	+ 9.8	+0.02	3.71	—0.1	gM0	017	—33	12 γ Sge	
27676	56 36.8	+3.89	+0.008	—34 50 03	+ 9.7	—0.08	5.34	2.6	A3	028	—18	θ^2 Sgr	
27677	56 38.9	+2.38	+0.002	+30 50 49	+ 9.8	—0.00	5.44	0.0	B8n	008	— 7		
27678	56 44.1	+4.43	—0.009	—49 29 20	+ 9.8	—0.02	6.25		K0		.		
27683	56 57.1	+3.98	+0.001	—37 50 23	+ 9.8	—0.02	6.00		K0		.		
27685	56 58.2	+4.17	+0.002	—43 10 53	+ 9.8	+0.01	6.07		K5		.		
27687	57 01.7	+5.84	+0.005	—67 04 54	+ 9.7	—0.08	5.19	0.6	K0	012	+42	μ^2 Pav	
27688	57 01.7	+2.57	—0.006	+22 57 50	+ 9.8	+0.00	5.70		F0		—38v	14 Vul	
27689	57 04.2	+3.26	—0.019	—10 05 25	+ 9.4	—0.40	5.91	3.7	dF8	037	+23		
27693	57 07.1	+3.86	+0.010	—33 50 15	+ 9.5	—0.31	5.67	3.8	dF4	042	— 6		s
27697	57 16.1	+4.25	—0.001	—45 15 05	+ 9.8	—0.00	5.95	1.7	A5	014	.		
27704	57 32.6	+5.05	+0.001	—59 30 52	+ 9.8	—0.03	5.12	—4.9	M6	001	—10		
27709	57 46.2	+1.88	+0.001	+45 38 06	+ 9.8	—0.02	5.80	1.8	A2	016	+ 6		
27711	57 47.8	+2.71	—0.000	+17 22 43	+ 9.8	—0.01	var	var	gM4	009	—17	13 VZ Sge	
27716	57 51.4	+0.75	—0.001	+63 23 50	+ 9.8	—0.02	5.96	1.0	A0	010	— 9		
27720	57 55.8	+1.59	+0.001	+51 55 04	+ 9.9	+0.00	6.02	—0.5	B6n	005	—16		
27724	58 05.1	+2.20	—0.000	+36 54 17	+ 9.9	+0.00	5.15	—1.0	B3e	006	— 4v	25 Cyg	
27737	58 25.7	+3.56	+0.001	—22 52 35	+ 9.9	—0.01	6.08		dG7		+ 8		
27739	58 33.8	+2.90	+0.000	+08 25 09	+ 9.9	—0.01	6.08		gK5		—40		
27753	59 02.4	+2.47	+0.004	+27 36 51	+10.0	+0.01	4.74	1.7	A5	025	—21	15 Vul	
27758	59 10.6	+3.36	+0.002	—13 46 38	+10.0	+0.02	5.76		A2		.	63 Sgr	
27763	59 35.2	+3.69	+0.003	—27 51 02	+10.0	+0.02	4.60	0.3	gM4	014	+10	62 c Sgr	
27764	59 37.5	+2.54	0.000	+24 39 38	+10.0	—0.00	5.75	—1.2	B8	004	—15		
27768	59 54.1	+2.54	+0.006	+24 47 48	+10.1	+0.07	5.32	1.4	dF0n	014	—33	16 Vul	d
27770	59 56.7	+1.70	+0.002	+49 57 53	+10.0	+0.00	5.28	0.5	gG9	011	+ 1	26 e Cyg	d
27779	20 00 14.4	+3.98	+0.006	—38 04 51	+10.0	—0.09	4.79	0.0	M0	011	—38		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
27793	20 ^h 00 ^m 33 ^s .8	+6 ^s 00	+0 ^s 146	-67°27'14"	+ 9 ^s .4	-0 ^s .68	6.02	4.6	dG5	052	-14		
27806	00 57.0	+0.63	+0.001	+64 40 50	+10.1	-0.01	5.43	0.0	gM1	008	-34	64 e Dra	
27808	01 01.7	+2.69	+0.001	+18 21 34	+10.1	-0.03	6.14		K2		+ 9		
27811	01 09.5	+3.80	+0.003	-32 11 54	+10.1	-0.00	5.05	0.4	K2	012	-12		
27812	01 12.7	+2.74	-0.000	+15 53 23	+10.1	-0.01	5.47	0.2	A0	009	-22v	14 Sge	
27820	01 34.0	+2.47	+0.052	+29 45 44	+ 9.6	-0.53	5.68	4.3	dG8	049	-46		
27824	01 41.7	+2.93	+0.001	+07 08 08	+10.2	+0.01	5.65	-0.2	gK0	007	-28	63 τ Aql	
27832	01 48.6	+3.09	-0.000	-00 51 01	+10.0	-0.12	5.84	0.6	gK4	009	+ 0	62 Aql	
27835	01 51.3	+2.69	-0.028	+16 56 00	+ 9.7	-0.42	5.89	4.4	dG1	060	+ 4	15 Sge	
27856	02 36.0	+0.27	+0.002	+67 43 51	+10.3	+0.05	4.66	-1.1	gK2	007	- 9	67 ρ Dra	
27858	02 38.4	+2.35	-0.001	+32 04 32	+10.2	-0.01	5.69	-7.0	cB1e	0009	+21		
27868	02 56.3	+2.66	+0.002	+19 50 47	+10.3	+0.08	5.26	1.9	sgK1	021	-40	16 η Sge	
27869	02 59.0	+1.79	+0.001	+48 05 17	+10.2	+0.00	5.98	1.2	A0	011	-14		
27879	03 33.8	+4.59	-0.002	-53 01 34	+10.3	+0.00	4.86	-0.4	M2	009	+36v?	ξ Tel	s
27886	03 50.4	+5.88	+0.197	-66 18 44	+ 9.2	-1.14	3.64	4.7	dG4	168	-22	δ Pav	
27894	04 07.1	+0.75	+0.001	+63 44 46	+10.4	+0.04	6.18	1.7	A3s	013	-19		d
27899	04 13.3	+1.36	-0.001	+56 11 46	+10.4	+0.08	6.18		gF4		-12		
27904	04 30.2	+2.23	-0.019	+35 50 01	+ 9.9	-0.44	5.52	3.2	dG6	035	-34	27b ¹ Cyg	
27910	04 44.4	+2.58	+0.001	+23 28 09	+10.4	+0.00	5.08	-1.0	B4n	006	- 5	17 Vul	
27911	04 45.2	+0.95	+0.017	+61 51 00	+10.5	+0.07	5.57	0.8	gK3	011	+ 6	66 Dra	
27912	04 54.8	+1.58	+0.024	+53 01 02	+10.6	+0.26	5.72	2.9	dF4	027	-41		
27930	05 26.9	+3.10	+0.007	-00 49 25	+10.4	-0.07	6.04	0.8	gK1	009	- 4	64 Aql	
27938	05 46.4	+2.30	-0.001	+34 16 36	+10.4	-0.02	6.07	-5.7	B5	0006			
27939	05 47.3	+3.28	+0.000	-10 12 32	+10.4	-0.04	6.17	0.7	A0	008	-16v		s
27951	06 15.1	+2.86	-0.001	+10 34 43	+10.5	-0.01	6.23		B5s		-38		
27980	07 34.1	+2.23	-0.000	+36 41 29	+10.6	+0.01	4.82	-1.3	B3ne	006	-14v	28b ¹ Cyg	s
27992	07 55.0	+3.94	+0.037	-36 13 43	+ 9.0	-1.57	5.34	6.6	dK4+M5	177	-131		d
27999	08 28.2	+2.50	+0.001	+26 45 17	+10.7	+0.01	5.46		A1np		-13v	18 Vul	s
28010	08 43.5	+3.09	+0.002	-00 58 16	+10.7	+0.00	3.37	-1.1	B9s	013	-28v	65 θ Aql	s
28024	09 09.8	+2.62	-0.000	+21 43 32	+10.7	+0.00	6.11	-6.0	B1	0005	-18		
28035	09 38.8	+3.34	+0.013	-12 45 56	+10.5	-0.19	5.88	3.7	dF6	037	+23	2 ξ ² Cap	
28037	09 42.5	+2.51	+0.000	+26 39 31	+10.7	-0.01	5.77	-0.7	gK4	005	-23	19 Vul	
28042	09 54.8	+2.52	+0.000	+26 19 42	+10.8	-0.01	5.91	0.1	B8ne	007	-22v	20 Vul	
28048	10 01.1	+5.33	-0.006	-63 34 06	+10.8	+0.03	6.20		F0		.		
28063	10 32.1	+4.55	+0.002	-52 35 49	+10.8	-0.04	5.69	1.6	K5	015	.		
28066	10 36.6	-2.02	+0.003	+77 33 42	+10.8	+0.03	4.40	-0.6	B9	010	-23	1 κ Cep	d
28068	10 38.9	+3.10	+0.001	-01 09 38	+10.8	-0.03	5.64	0.8	gK5	011	-28	66 Aql	
28071	10 45.9	+0.98	+0.017	+61 55 36	+10.9	+0.08	5.72	3.0	dF5	028	-15	68 Dra	
28091	11 43.6	+1.89	+0.001	+46 39 49	+10.9	-0.00	4.96	0.5	A0n	013	-21	30 Cyg	
28097	11 57.7	+2.78	+0.004	+15 02 38	+11.0	+0.05	4.96	1.2	A2n	018	-23v?	67 ρ Aql	
28098	12 01.7	+2.02	-0.001	+43 13 35	+10.9	+0.00	6.25		K5		-24		d
28099	12 03.3	+1.89	0.000	+46 35 20	+10.9	0.00	3.95	-2.5	cK1+B8	005	- 7v	31o ¹ Cyg	sv
28104	12 10.4	+3.74	+0.093	-27 11 02	+10.7	-0.18	5.69	6.1	dK5	110	-55		s
28105	12 11.2	+2.46	+0.001	+28 32 32	+10.9	-0.02	5.20	0.6	A3n	012	+ 5	21 Vul	
28108	12 14.2	+1.39	+0.007	+56 24 51	+11.0	+0.08	4.32	0.8	A3	020	-26v	33 Cyg	s
28120	12 32.6	+1.10	+0.006	+60 29 14	+11.0	+0.06	6.16	0.0	gK5	006	- 0		
28124	12 39.6	+2.25	+0.005	+36 39 08	+11.0	+0.07	4.98	1.4	A2n	019	-17	29b ¹ Cyg	
28140	13 08.7	+2.54	+0.000	+25 25 17	+11.0	-0.01	4.82	-1.3	B3n	006	- 2v		d
28144	13 20.5	+2.59	-0.000	+23 21 17	+11.0	-0.02	5.38	-5.5	cG4	0012	-24v	22 Vul	s
28145	13 27.1	+2.33	-0.004	+33 34 36	+10.9	-0.11	5.78	1.3	gG6	013	-10		d

GC	AR 1950.0	AnV	MP	Decl 1940.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
28152	20 ^h 13 ^m 41 ^s .7	+2.49	-0.003	+27°39'35"	+11.0	+0.01	4.73	-0.5	gK2	009	+ 3	23 Vul	
28160	13 55.5	+1.85	-0.000	+47 33 35	+11.1	+0.00	4.16	-1.9	cK5+B	006	- 6v	32 α Cyg	sv
28166	14 07.8	+2.64	-0.000	+21 26 39	+11.0	-0.03	6.16	0.4	gK1	007	- 4	18 Sge	
28169	14 14.3	+2.18	-0.000	+38 44 36	+11.0	-0.04	6.14	0.9	A0	009	+ 4		
28174	14 23.3	+1.94	+0.000	+45 25 31	+11.0	-0.05	5.87	3.3	dF4	031	-40		
28183	14 38.6	+2.57	+0.001	+24 30 57	+11.1	-0.02	5.45	-0.3	gG7	007	+15	24 Vul	
28189	14 52.6	+3.32	+0.001	-12 39 51	+11.1	+0.00	4.55	-3.1	cG5p	003	-26v	5 α Cap	d
28194	15 03.2	+77.1	+0.118	-89 08 19	+11.1	-0.00	5.48		A7n		+12	σ Oct	
28195	15 05.3	+3.52	+0.002	-21 57 58	+11.1	-0.03	5.96	1.4	sgG8	012	-18	4 Cap	
28197	15 08.4	+2.13	-0.000	+40 12 34	+11.1	-0.00	5.50	-0.6	gK5	006	-20		
28200	15 16.9	+3.33	+0.004	-12 42 05	+11.2	+0.00	3.77	1.2	gG8	028	+ 0	6 α Cap	d
28218	15 56.5	+2.21	-0.001	+37 52 35	+11.2	-0.00	var	var	B1ep	0007	- 9	34 P Cyg	
28228	16 20.6	+2.13	-0.000	+40 34 31	+11.2	-0.00	5.82	-5.2	O8p	001	- 7v		d
28233	16 30.6	+3.46	+0.000	-19 16 34	+11.2	-0.01	5.46	0.2	gK4	009	-11	7 σ Cap	
28239	16 36.1	+2.25	+0.003	+36 50 32	+11.3	+0.02	5.52	0.7	A1n	011	- 9v	36 Cyg	s
28241	16 39.6	+4.67	+0.001	-55 12 32	+11.2	-0.05	6.16		K5		.		
28242	16 43.8	+2.30	+0.000	+34 49 31	+11.3	-0.01	5.18	-4.5	cF5p	0015	-14v	35 Cyg	s
28252	17 02.1	+0.59	+0.079	+66 41 34	+11.6	+0.30	6.08	5.3	dG1	070	- 5		
28256	17 08.2	+3.10	+0.002	-01 14 14	+11.3	+0.03	6.23		K0		.		
28258	17 10.7	+1.48	-0.001	+55 14 24	+11.3	-0.02	6.00	0.5	dA7s	008	+ 1		dss
28275	17 39.6	+2.81	+0.000	+13 23 23	+11.3	-0.01	5.96	1.5	A5	013	- 8		
28282	17 53.5	+3.33	+0.001	-12 55 05	+11.3	-0.02	4.84	1.0	A0	017	- 2	8 ν Cap	
28286	17 58.1	+3.37	+0.003	-14 56 38	+11.4	+0.00	6.16	1.7	B9	013	.		d
28290	18 03.2	+1.86	-0.005	+47 44 10	+11.4	+0.03	var		Nep		+10	U Cyg	
28292	18 05.1	+2.72	+0.001	+17 28 04	+11.3	-0.04	6.04		gK5		-32		
28295	18 12.2	+3.37	+0.003	-14 56 27	+11.4	+0.00	3.25	-1.2	dF8+B8	013	-19v	9 β Cap	ss
28297	18 20.6	+1.91	-0.000	+46 40 42	+11.4	+0.01	6.15	0.4	B9	007	.		
28299	18 26.4	+2.17	-0.001	+39 14 40	+11.4	-0.02	6.20	0.7	A0n	008	- 1		d
28304	18 46.8	+1.00	+0.001	+62 05 53	+11.4	+0.03	5.61	0.4	B9	009	-25v	71 Dra	s
28309	19 04.2	+4.07	+0.004	-42 12 32	+11.3	-0.09	5.64	3.8	A0n	042	-17v?	κ ¹ Sgr	
28324	19 53.2	+0.27	+0.003	+68 43 13	+11.5	+0.04	5.99	-0.1	gM5	006	-43	AC Dra	
28325	19 54.3	+2.58	-0.000	+24 17 08	+11.5	-0.01	5.41	-0.7	B8ne	006	-13	25 Vul	
28338	20 25.9	+2.15	+0.000	+40 05 44	+11.5	0.00	2.32	-3.9	cF8p	006	- 8	37 γ Cyg	d
28339	20 27.4	+1.96	+0.002	+45 38 01	+11.6	+0.04	5.87	0.4	gK0	008	-26v		s
28340	20 29.1	+0.85	-0.001	+63 49 10	+11.6	+0.02	5.92		gK5		+30		d
28341	20 29.6	+4.08	-0.000	-42 35 06	+11.6	+0.02	5.68	1.1	A3n	012	+ 2	κ ³ Sgr	d
28343	20 32.3	+2.80	+0.005	+14 23 24	+11.5	-0.00	6.22	4.4	dF5	044	+ 2		
28347	20 36.6	+2.41	0.000	+31 06 14	+11.5	-0.03	6.16	0.4	K2	007	+12		
28351	20 42.0	+2.97	-0.002	+05 10 55	+11.5	-0.04	5.41	-0.4	gG7	007	-12		
28356	20 58.7	+2.13	-0.000	+40 51 54	+11.5	-0.05	6.08	-0.4	gM0	005	+ 1		
28374	21 42.2	+4.74	+0.001	-56 53 50	+11.5	-0.09	2.12	-2.3	B3s	014	0v	α Pav	s
28378	21 51.7	+2.40	+0.003	+32 01 40	+11.6	-0.00	4.60	0.3	gK5	014	-15	39 Cyg	
28379	21 52.0	+2.24	0.000	+37 18 50	+11.6	-0.00	5.68	-1.9	B3ne	003	-31		
28382	22 04.6	+3.06	-0.000	+00 54 19	+11.7	+0.01	6.11		A0n		+ 4		d
28394	22 23.3	+3.67	+0.001	-28 49 37	+11.7	+0.01	5.97	1.2	G9	011	.		
28395	22 27.8	+4.01	-0.009	-40 57 32	+11.6	-0.09	6.11		K0		.		
28408	23 06.0	+3.13	-0.001	-02 57 50	+11.7	-0.03	6.10		gK1		+24		
28418	23 27.8	+2.65	+0.000	+21 14 44	+11.7	-0.01	5.80	0.8	gG6	010	-22		
28435	24 06.1	+2.74	+0.001	+17 09 02	+11.8	-0.02	6.17		K0		-17		
28442	24 27.6	+3.43	+0.001	-18 22 38	+11.8	-0.01	5.20	-0.6	B8sp	007	-13	10 π Cap	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
28453	20 ^h 25 ^m 06 ^s .4	+9 ^o 99	+0 ^o 008	-81 ^o 08'00"	+11 ^o 8	-0 ^o 02	5.81		K0				
28456	25 11.0	+1.45	+0.001	+56 28 24	+11.9	+0.01	6.21	1.2	A0	010	-24v		ds
28462	25 30.5	+1.83	+0.007	+49 13 00	+11.9	+0.06	5.72	2.6	dF0+A0	024	-20	43 Cyg	
28464	25 34.5	+3.85	+0.000	-35 45 45	+11.9	-0.02	6.22		A0				
28467	25 43.0	+2.22	-0.002	+38 16 30	+11.8	-0.07	5.45	1.3	A1n	015	+ 0	40 Cyg	
28472	25 47.8	+3.14	+0.001	-03 31 27	+11.9	-0.01	6.03		B9			68 Aql	d
28481	26 00.6	+3.42	-0.001	-17 58 50	+11.9	-0.02	4.96	2.6	dF1	034	+18	11 ρ Cap	d
28496	26 35.5	+3.52	+0.001	-22 33 32	+11.9	-0.03	6.22	-0.3	gM1	005	+55		
28503	27 02.0	+3.44	+0.002	-18 45 00	+11.9	-0.08	6.10	0.3	A2	007		12 σ Cap	d
28504	27 02.2	+3.13	+0.004	-03 03 11	+12.0	-0.02	5.11	0.5	gK3	012	-23	69 Aql	
28513	27 21.1	+2.45	+0.000	+30 12 02	+12.0	-0.00	4.09	-1.4	cF4p	008	-18	41 Cyg	
28515	27 25.8	+2.29	-0.000	+36 17 13	+12.0	-0.00	5.94	-1.7	A1	003	-18	42 Cyg	
28524	27 53.2	+3.67	+0.001	-29 16 54	+12.1	+0.00	6.14		A5				
28525	27 54.3	+2.87	+0.001	+10 43 38	+12.1	+0.00	5.92	-0.2	A0e	006	-16	1 Del	d
28531	28 12.2	+1.50	+0.000	+55 53 59	+12.1	+0.01	5.87	0.1	B9	007	-22		d
28533	28 16.3	+3.36	-0.003	-15 13 30	+12.0	-0.06	6.19	1.0	gG5	009	+30		d
28537	28 30.5	+1.86	+0.001	+48 46 58	+12.1	+0.01	4.89	-1.6	B3n	005	-22	45 ω Cyg	d
28540	28 43.9	+2.68	+0.006	+20 26 09	+12.2	+0.04	6.00	1.2	A2	011	-40		
28541	28 44.7	+1.01	+0.006	+62 49 32	+12.1	-0.01	4.28	1.8	A5	032	- 8v	2 θ Cep	s
28563	29 39.6	+3.28	+0.020	-10 01 31	+12.3	+0.10	5.81	3.4	dG3	033	+ 9		d
28569	29 46.1	+1.85	+0.001	+49 03 03	+12.2	-0.03	5.57	-0.2	gM2	007	-64	46 ω Cyg	
28573	29 53.9	+3.57	+0.001	-25 06 51	+12.2	-0.04	6.20		A0				
28578	30 00.4	+10.1	+0.005	-81 27 43	+12.2	-0.03	5.76		K5				
28588	30 29.3	+4.12	+0.001	-44 41 14	+12.2	-0.04	5.30	-0.5	G5	007	+ 9	ν Mic	
28593	30 49.4	+2.87	+0.000	+11 07 56	+12.2	-0.02	3.98	-0.6	B7	012	-19	2 ϵ Del	
28597	30 55.9	+5.95	+0.006	-69 46 59	+12.2	-0.06	6.12		K2				
28608	31 24.8	+3.34	+0.005	-13 53 39	+12.4	+0.07	6.24		dF8		-43		
28609	31 27.3	+4.97	+0.009	-60 45 07	+12.1	-0.18	4.84	1.5	F0n	022	-19	φ^1 Pav	
28611	31 28.1	-3.77	+0.012	+81 15 11	+12.3	+0.02	5.62	0.4	gG9	009	- 6	75 Dra	
28617	31 35.1	+2.84	+0.005	+12 51 17	+12.3	+0.03	5.23	1.0	A2	014	-18v?	3 η Del	
28630	31 57.4	+2.33	-0.000	+35 04 43	+12.3	-0.01	4.85	-3.6	cK4+A3	002	- 4	47 Cyg	
28639	32 11.4	-0.79	+0.002	+74 47 01	+12.3	-0.02	5.12	0.6	A3p	012	+ 9	73 AF Dra	v
28642	32 16.5	+1.96	+0.001	+46 31 17	+12.4	-0.00	5.59	-0.2	B9	007	-22		
28648	32 26.1	-3.47	+0.029	+80 55 04	+12.6	+0.22	6.10	3.0	sgG8	024	-14v	74 Dra	s
28652	32 42.6	+3.39	+0.006	-16 41 56	+12.4	-0.02	6.20		A5				
28659	32 58.2	+2.80	+0.003	+14 30 02	+12.4	+0.01	4.69	0.8	A2n	017	-25	4 ζ Del	
28668	33 24.8	+5.03	+0.007	-61 42 13	+12.4	-0.07	5.03		F6		+ 8	ρ Pav	
28682	34 03.5	+4.22	+0.005	-47 28 03	+12.5	+0.07	3.21	0.7	G2	032	- 1	α Ind	
28684	34 07.4	+3.12	+0.000	-02 43 27	+12.5	-0.00	5.22	-0.5	gK5	007	-10	70 Aql	
28690	34 14.1	-6.02	+0.014	+83 27 17	+12.5	-0.02	6.16		A2		+10v		s
28697	34 44.6	+3.07	-0.000	-00 04 41	+12.5	-0.02	6.16		B8		-23		
28702	34 56.6	+2.56	+0.001	+26 17 13	+12.5	-0.01	5.52	0.0	B9	008	-10v	27 Vul	s
28709	35 12.2	+2.81	+0.007	+14 25 12	+12.5	-0.03	3.72	1.4	dF3	034	-23v	6 β Del	ds
28711	35 25.5	+2.87	+0.002	+11 12 07	+12.6	-0.01	5.43	1.2	A2s	014	- 5v	5 ι Del	s
28713	35 29.7	+2.44	+0.000	+31 23 49	+12.6	0.00	6.24	1.0	A0n	009	-19	48 Cyg	
28725	35 45.3	+3.10	+0.001	-01 16 52	+12.6	-0.02	4.51	-0.3	gG5	011	- 6v	71 Aql	s
28730	35 55.0	+4.97	+0.041	-60 43 05	+12.0	-0.57	5.30	3.6	F4s	045	-32	φ^1 Pav	
28731	35 56.3	+7.41	+0.056	-76 21 31	+12.6	-0.01	6.14		F0			μ^1 Oct	
28740	36 17.2	+2.68	+0.004	+21 01 29	+12.6	+0.01	4.78	0.2	B9	012	-18	29 Vul	
28741	36 21.1	+2.61	+0.000	+23 56 22	+12.6	-0.00	5.04	-0.4	B7n	008	-22	28 Vul	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
28743	20 ^h 36 ^m 22 ^s 3	+2 ^s 83	-0 ^s 000	+13°08'18"	+12"6	-0"00	6.06	-1.5	cK4	003	-14	8 θ Del	
28745	36 23.8	+2.62	+0.001	+23 30 14	+12.6	-0.01	6.13		cK0+A3		+ 9		s
28748	36 28.7	+3.35	+0.000	-15 07 54	+12.6	-0.02	5.30	-0.8	B5n	006	- 5	14 τ Cap	d
28756	36 42.0	+2.91	+0.021	+09 54 32	+12.7	+0.02	5.23	2.5	dG2	029	-52	7 κ Del	
28758	36 45.7	+2.78	-0.000	+15 39 41	+12.6	-0.02	5.92	-1.7	B3n	003	+ 2		d
28761	36 51.1	+3.07	+0.006	+00 18 34	+12.7	-0.01	5.39	0.4	gG9	010	-43	1 Aqr	
28764	36 55.9	+2.47	-0.003	+30 09 29	+12.6	-0.06	5.86	0.4	gG9	008	+13		
28766	36 57.2	+2.66	+0.001	+21 38 24	+12.7	+0.01	5.94	0.7	A0	009	-37v?		
28776	37 11.9	+3.76	+0.002	-33 36 37	+12.7	+0.04	5.54	0.1	K2	008	+14v?		
28777	37 12.3	+3.41	-0.002	-18 18 58	+12.7	-0.02	5.33	-0.1	gM2	008	-12	15 ν Cap	
28780	37 18.9	+2.79	+0.004	+15 44 04	+12.7	-0.00	3.86	-0.7	B8n	012	- 6	9 α Del	
28782	37 23.4	+5.50	+0.002	-66 56 21	+12.7	-0.02	5.36		B9		+ 8	ν Pav	
28796	37 43.4	+2.20	+0.000	+40 24 06	+12.7	-0.00	5.93	-0.6	B8	005	.		d
28797	37 44.0	+3.37	-0.005	-16 18 12	+12.8	+0.07	5.91		gG7		- 4		
28808	38 17.8	+3.72	+0.008	-31 46 35	+12.7	-0.05	5.80	2.2	Ma	019	.		
28809	38 18.2	+2.10	-0.007	+43 16 53	+12.7	-0.06	6.15		K0		-19		
28816	38 31.6	+2.45	+0.000	+29 37 35	+12.8	+0.04	6.09	1.3	A0n	011	-27v		ds
28826	38 55.7	+2.81	-0.001	+14 24 14	+12.8	+0.00	6.19	0.1	gK4	006	-32	10 Del	
28827	39 01.0	+2.43	+0.000	+32 07 42	+12.8	-0.02	5.90	0.2	gG7+A	007	-29	49 Cyg	d
28832	39 14.2	+1.27	+0.001	+60 19 26	+13.0	+0.19	5.95	3.0	dF4	026	-12		
28846	39 43.5	+2.04	-0.000	+45 06 03	+12.9	+0.00	1.33	-6.2	cA2e	0035	- 5v	50 α Cyg	
28854	40 08.0	+2.17	+0.001	+41 32 13	+12.9	+0.00	5.60	-0.5	B8s	006	-27v		s
28860	40 22.7	+4.40	+0.017	-52 06 05	+12.8	-0.06	4.70	2.2	A7n	032	- 2	η Ind	
28862	40 28.6	+5.40	-0.007	-66 23 05	+12.9	+0.01	3.60	0.9	A5	029	+10	β Pav	
28865	40 40.1	+1.85	0.000	+50 09 35	+12.9	+0.00	5.41	-1.6	B3s	004	-3v?	51 Cyg	d
28873	41 07.4	+2.80	-0.002	+14 53 38	+12.9	-0.05	4.53	0.1	A5	013	+ 9	11 δ Del	
28886	41 26.6	+2.35	-0.001	+35 24 24	+13.0	-0.00	var	var	cG4vp	001	+10	X Cyg	
28894	41 35.7	+1.28	-0.001	+60 25 14	+13.0	-0.01	6.11	0.9	A0	009	- 5		
28919	42 33.9	+0.75	+0.004	+66 28 31	+13.1	+0.04	5.57	2.5	A5	024	+35	4 Cep	
28920	42 42.6	+2.60	-0.003	+25 05 26	+12.9	-0.18	5.13	-0.1	gK2	009	+31v	30 Vul	s
28926	43 04.1	+1.56	+0.000	+56 18 21	+13.1	-0.02	6.24		gM3		-28		
28927	43 04.9	+3.91	+0.004	-39 22 56	+13.1	-0.03	5.53		B9n		-49		
28929	43 08.3	+3.55	-0.004	-25 27 07	+12.9	-0.16	4.26	3.7	dF1	086	+26v	16 ψ Cap	
28930	43 10.8	+2.75	-0.000	+17 54 26	+13.1	+0.00	var		cM5		-21	U Del	
28933	43 16.2	+3.48	+0.001	-21 41 49	+13.1	-0.01	5.89		A0		.	17 Cap	
28942	43 35.8	+2.48	-0.001	+30 32 10	+13.1	+0.03	4.34	0.5	gG7	017	- 1	52 Cyg	d
28956	44 06.7	+1.49	-0.008	+57 23 59	+12.9	-0.23	4.63	2.8	dF9	042	-31		
28959	44 11.2	+2.43	+0.028	+33 46 55	+13.5	+0.32	2.64	1.1	gK0	041	-10v	53 ϵ Cyg	ds
28962	44 16.5	+1.22	+0.013	+61 38 39	+14.0	+0.82	3.59	2.8	dG7	070	-87	3 η Cep	
28965	44 19.5	+2.78	-0.002	+15 56 35	+13.0	-0.20	5.47	2.8	F6	029	- 8	12 γ ^A Del	
28966	44 20.2	+2.78	-0.003	+15 56 35	+13.0	-0.20	4.49	1.8	sgK1	029	- 7	12 γ ^A Del	
28969	44 35.9	+5.68	-0.014	-68 57 40	+13.1	-0.05	5.47	-0.6	K0	006	+19	σ Pav	
28978	44 58.2	+3.25	+0.002	-09 40 48	+13.2	-0.03	3.83	0.2	A1n	019	-16v?	2 ϵ Aqr	
28979	45 06.0	+3.16	-0.000	-05 12 43	+13.2	-0.04	4.60	-0.6	gM3	009	-22	3 κ Aqr	
28980	45 06.2	+4.07	+0.017	-44 10 20	+13.1	-0.11	5.14	3.4	A7n	046	-18	ι Mic	d
28981	45 10.9	+2.39	+0.004	+34 11 22	+13.2	+0.00	var	var	gK3	009	-23	T Cyg	d
28986	45 19.7	+2.97	+0.000	+05 49 24	+13.2	-0.00	5.59	-0.2	A0	007	- 8	13 Del	d
28994	45 27.5	+2.34	+0.000	+36 18 22	+13.2	-0.01	4.47	-1.0	B6ne	008	-23	54 λ Cyg	d
29008	46 02.9	+4.13	+0.004	-46 24 48	+13.3	+0.02	4.90	-0.6	M1	008	- 5	ζ Ind	
29012	46 10.5	+1.98	+0.001	+47 38 48	+13.3	-0.03	5.65	-0.5	gK5	006	-30v		s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
29018	20 ^b 46 ^m 19 ^s .7	+3 ^s 56	+0 ^s 001	—25°58'02"	+13"3	—0"02	5.78		B8n		—12		
29019	46 20.0	—4.35	+0.015	+82 20 52	+13.3	+0.02	5.69	1.8	A0	017	—20v	76 Dra	s
29026	46 51.0	+3.75	+0.000	—33 57 58	+13.3	—0.02	5.00	—0.2	G6	009	—14	α Mic	d
29036	47 14.0	+2.04	+0.000	+45 55 40	+13.4	—0.00	4.89	—7.0	cB3e	001	— 7	55 Cyg	
29037	47 14.7	+2.86	+0.004	+12 21 25	+13.5	+0.10	6.00	3.6	dF4	033	+ 2	15 Del	
29039	47 21.1	+2.94	+0.001	+07 40 38	+13.4	+0.01	6.23		A2		—30v	14 Del	s
29053	47 48.4	+3.85	—0.001	—38 06 03	+13.4	—0.02	5.55	0.1	K0	008	+15v		s
29055	47 53.8	+4.34	+0.000	—51 47 46	+13.4	—0.01	5.16	—0.9	K3	006	+21	ϵ Ind	
29057	47 56.5	+3.31	+0.008	—12 43 53	+13.3	—0.07	5.99	1.0	gK1	010	—44v?		
29066	48 18.2	+2.13	+0.011	+43 52 12	+13.6	+0.13	5.07	2.1	dA6n	025	—21	56 Cyg	
29078	48 46.7	+3.18	+0.006	—05 48 53	+13.5	+0.00	5.99	2.8	dF3	023	—25	4 Aqr	d
29079	48 50.5	+3.58	—0.000	—27 06 28	+13.5	—0.01	4.24	—1.0	gM1	009	+ 9	18 ω Cap	
29080	48 52.7	+3.73	+0.001	—33 21 58	+13.5	+0.02	6.03		A2n		— 7	β Mic	
29089	49 20.7	+2.55	—0.000	+28 03 44	+13.5	—0.00		var	cF9v	0016	— 1v	T Vul	
29094	49 30.1	+3.17	—0.000	—05 41 45	+13.5	+0.00	5.50	0.9	B9s	012	— 2	5 Aqr	
29107	49 54.8	—2.74	—0.013	+80 21 57	+13.5	—0.03	5.58	0.6	gK1	010	—26		
29109	49 57.5	+3.24	+0.003	—09 10 20	+13.5	—0.03	4.80	1.0	dA8s	017	— 9	6 μ Aqr	
29112	49 59.1	+2.57	—0.005	+26 54 32	+13.5	—0.06	4.76	1.0	sgG2	018	+ 1v	31 Vul	s
29127	50 25.3	+3.90	+0.004	—39 59 55	+13.5	—0.10	5.42	1.4	K5	016	+20		
29133	50 55.1	+4.69	+0.003	—58 38 40	+13.6	—0.02	3.72	—0.9	K2	012	— 5v?	β Ind	
29150	51 28.5	+2.12	+0.001	+44 11 50	+13.6	+0.00	4.68		B3		—24v	57 Cyg	s
29153	51 33.7	+2.10	+0.001	+44 59 30	+13.6	+0.00	5.59	—0.2	gG8	007	—24		s
29159	51 52.2	+2.43	—0.001	+33 14 48	+13.7	+0.03	5.68	—0.1	gK5	007	— 9		
29164	51 58.4	+3.39	—0.004	—18 06 50	+13.6	—0.02	5.91	0.9	gKo	010	—39	19 Cap	
29171	52 14.9	+2.53	+0.000	+28 19 52	+13.7	—0.01		var	B2s		—12v	BW Vul	
29178	52 25.6	+2.56	—0.000	+27 51 59	+13.7	—0.00	5.24	—0.2	gK5	008	+ 8	32 Vul	
29201	53 14.6	+2.84	+0.001	+13 31 47	+13.7	—0.01	5.39	0.6	gK0	011	—10	17 Del	
29202	53 15.4	+2.86	+0.002	+12 22 34	+13.8	+0.02	5.54	0.3	A2	009	— 1v	16 Del	s
29213	53 49.2	+3.56	+0.007	—26 29 18	+13.7	—0.07	5.77		F8		.		
29219	54 08.4	+2.03	—0.001	+47 13 31	+13.8	—0.00	5.76	—6.7	cB8ep	0007	—16		
29220	54 11.9	+3.24	—0.001	—09 53 26	+13.8	—0.01	5.68	0.2	gK5	008	—33	7 Aqr	d
29239	54 47.6	+1.96	+0.001	+49 00 10	+13.9	+0.01	5.98	0.2	gK0	007	—15		
29241	54 48.8	+2.12	—0.001	+44 43 54	+13.9	+0.01	6.01	—5.5	O6	0008	— 6v		s
29243	54 50.2	+1.90	+0.003	+50 32 09	+13.8	—0.02	5.80		A8n		—15		ds
29245	54 52.8	+3.36	+0.003	—16 13 31	+13.9	0.00	5.95		A3		.		
29246	54 56.7	+1.60	+0.000	+56 41 40	+13.9	+0.01	6.14	—1.5	B3	003	—19		
29251	55 18.4	+2.24	+0.001	+40 58 26	+13.9	—0.02	4.04	—0.4	B9n	013	—27v	58 ν Cyg	s
29254	55 21.3	—0.71	+0.010	+75 43 57	+13.9	+0.04	6.21		G5		—25		
29265	55 55.8	+3.32	—0.003	—14 40 38	+13.9	0.00	6.02		A3		.		
29266	56 01.4	+2.89	—0.004	+10 38 43	+13.9	—0.04	5.61	1.2	gG6	013	0	18 Del	
29267	56 02.1	+2.68	—0.001	+22 07 54	+13.9	+0.00	5.57	0.3	gK4	009	—28	33 Vul	
29274	56 32.0	+2.15	—0.010	+44 16 34	+14.0	+0.07	5.76	1.2	gG7	012	—21		
29276	56 34.5	+3.00	—0.008	+04 06 02	+13.8	—0.15	5.29	1.7	dF4	019	+18	1 ϵ Equ	d
29284	56 39.8	+2.22	—0.000	+41 44 43	+14.0	+0.01	6.03	—0.1	B9	006	.		
29287	56 45.8	+3.41	+0.001	—19 13 49	+14.0	—0.01	6.23		A0p		.	20 Cap	
29288	56 48.6	+4.26	—0.012	—51 27 46	+14.1	+0.13	5.88		F5		.		
29290	56 50.6	+2.79	+0.008	—36 19 27	+13.9	—0.04	6.12		F0		.		
29291	56 53.9	+1.92	+0.001	+50 16 01	+14.0	+0.01	5.48	—1.0	B8n	005	—21		d
29309	57 36.2	+2.95	+0.002	+07 19 03	+14.0	+0.02	6.03	1.8	A3n	014	—24		d
29327	58 07.4	+2.04	0.000	+47 19 30	+14.1	+0.00	4.86	—4.0	B1ne	0018	+ 1v	59 f ¹ Cyg	dv

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
29329	20 ^h 58 ^m 10 ^s .5	+2.74	-0.002	+19°08'03"	+14"0	-0"05	5.96	0.2	gM3	007	-15	1PsA= γ Mic α Oct	s
29330	58 11.4	+1.48	+0.005	+59 14 33	+14.1	+0.01	5.75	-0.4	gK4	006	-17		
29331	58 13.8	+3.68	+0.001	-32 27 16	+14.1	+0.00	4.71	0.4	G4	014	+18		
29343	58 44.0	+7.26	+0.002	-77 13 01	+13.7	-0.37	5.24	1.9	F4	022	+60v		
29344	58 47.4	+3.56	+0.001	-27 04 40	+14.1	-0.02	5.92		A2		.		
29350	59 13.3	+2.39	+0.001	+35 49 45	+14.1	+0.01	6.08		gG5		-10v	60 Cyg ζ Mic	d
29351	59 15.1	+3.85	+0.014	-38 43 34	+14.0	-0.16	5.94	1.7	K0	014	.		
29354	59 26.1	+2.09	+0.000	+45 57 31	+14.1	-0.01	5.24	-3.5	B1ne	002	-10v	12 Aqr 22 η Cap	d
29363	59 46.6	+3.83	-0.002	-38 49 41	+14.0	-0.11	5.35	1.8	F3	020	+ 5v?		
29372	21 00 11.5	+3.58	+0.002	-27 55 47	+14.1	-0.04	6.19		K0		.	4 Equ δ Mic	d
29393	00 46.3	+1.65	+0.002	+56 28 18	+14.2	+0.00	5.74	-0.4	B9	006	.		
29403	01 02.9	+2.11	-0.001	+45 39 01	+14.2	-0.00	6.23	-0.8	B8	004	-12v	22 η Cap	ds
29408	01 08.3	+2.33	+0.001	+38 27 32	+14.2	-0.01	6.22	0.7	gG8	008	- 3		
29417	01 26.0	+3.17	+0.001	-06 01 20	+14.3	-0.01	5.89	0.4	gG4	008	- 1	3 Equ δ Mic	d
29419	01 33.7	+3.41	-0.003	-20 03 14	+14.2	-0.04	4.93	2.6	A4s	035	+24		
29420	01 34.3	+4.41	+0.001	-54 55 35	+14.2	-0.04	5.20	1.5	K1	018	+12	62 ξ Cyg 23 θ Cap	s
29430	02 05.2	+2.99	+0.001	+05 18 11	+14.3	0.00	5.93	-0.2	gK5	006	-16		
29438	02 16.0	+1.83	+0.006	+53 05 09	+14.3	+0.02	6.08	0.8	gK0	009	-27	4 Equ δ Mic	d
29451	02 58.0	+2.97	-0.006	+05 45 34	+14.2	-0.13	6.03	2.2	dF7	017	-22		
29453	03 00.2	+3.62	+0.002	-30 19 30	+14.3	-0.07	5.71		K0		.	2 PsA	d
29459	03 06.6	+2.18	+0.000	+43 43 39	+14.4	+0.00	3.92	-2.2	cK4	006	-20v		
29460	03 08.3	+3.37	+0.006	-17 25 58	+14.3	-0.06	4.19	0.6	A0	019	-11	25 χ Cap	d
29461	03 10.7	+3.90	+0.002	-41 35 13	+14.4	-0.02	5.56	0.3	K0	009	.		
29465	03 21.5	+3.67	-0.000	-32 32 34	+14.4	+0.01	5.26	-0.2	K2	008	+ 3	61 Cyg	d
29489	04 10.9	+6.28	+0.100	-73 22 16	+14.1	-0.34	5.83	4.0	sgK6	043	-14		
29490	04 12.4	+3.51	-0.002	-25 12 25	+14.4	-0.04	4.60	0.2	gM1	013	+32	24 A Cap	d
29491	04 12.8	+2.61	+0.002	+26 43 24	+14.4	-0.02	6.23	2.1	sgK1	015	- 6		
29502	04 24.2	+2.52	-0.000	+30 59 00	+14.4	-0.00	var	var	cF6v	002	0v	DT Cyg	d
29503	04 24.8	+4.99	+0.001	-64 07 52	+14.4	-0.01	5.80		K0		.		
29509	04 39.8	+2.69	+0.351	+38 29 59	+17.6	+3.18	5.12	7.5	dK6	299	-64	63 f^3 Cyg	d
29519	04 52.6	+2.07	+0.000	+47 26 48	+14.5	-0.00	4.88	-1.2	gK6	006	-26		
29520	04 56.2	+3.37	+0.001	-17 39 26	+14.4	-0.02	6.03	1.6	A0	013	.	25 χ Cap	d
29543	05 41.9	+3.44	+0.001	-21 23 45	+14.5	-0.06	5.27	1.0	A0n	015	- 7		
29550	06 06.0	+0.36	-0.011	+71 13 53	+14.4	-0.11	5.96	3.5	dF0n	032	+ 2	5 γ Equ	d
29558	06 21.3	+6.04	+0.007	-72 44 54	+14.5	-0.02	6.22		K0		.		
29562	06 31.5	+2.55	+0.002	+30 00 10	+14.6	-0.02	var	var	B8v	004	-27v	V389 Cyg 77 Dra	ds
29563	06 32.0	-1.21	+0.007	+77 55 27	+14.6	+0.03	5.90	0.7	B9	009	-16v		
29567	06 41.6	+3.43	+0.008	-20 45 30	+14.5	-0.12	6.15	3.2	dF1	026	-43	27 Cap 13 ν Aqr	d
29571	06 52.3	+3.27	+0.006	-11 34 31	+14.6	-0.01	4.52	0.7	gG8	017	-12		
29591	07 54.6	+2.92	+0.004	+09 55 45	+14.5	-0.15	4.76	1.0	cF1p	018	-17v?	6 Equ o Pav	s
29596	08 05.4	+2.91	-0.001	+09 50 38	+14.7	+0.02	5.99	1.0	A2	010	+ 7		
29606	08 41.4	+5.62	+0.009	-70 19 56	+14.7	-0.02	5.08	-3.4	M2	002	-19v	T Cep	d
29608	08 42.8	+1.85	+0.003	+53 21 30	+14.7	+0.00	5.73	-1.3	B9	004	-21v		
29611	08 52.9	+0.79	-0.006	+68 17 12	+14.6	-0.06	var	var	gM7ev	000	-12	64 ζ Cyg	d
29614	09 01.3	+3.85	+0.004	-40 28 20	+14.5	-0.22	5.84	3.6	dF5	035	+11		
29640	09 51.5	+3.84	+0.016	-39 37 48	+14.6	-0.12	5.26	2.4	dF4	027	-44v	3 PsA	d
29648	10 11.8	+3.75	+0.002	-36 37 50	+14.8	-0.01	6.07	0.0	K0	006	.		
29652	10 19.7	+3.56	+0.008	-27 49 29	+14.7	-0.12	5.55	0.1	gK5	008	-42	64 ζ Cyg	d
29655	10 31.9	+1.53	-0.000	+59 46 49	+14.8	-0.00	5.65	-4.8	B0s	0014	-16		
29661	10 48.4	+2.55	-0.000	+30 01 15	+14.8	-0.06	3.40	-0.4	gG8	017	+17v		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
29673	21 ^h 11 ^m 07 ^s .6	+2 ^s 82	+0 ^s 003	+15°46'32"	+14"8	-0"02	6.20	1.2	A3n	010	-30		d
29682	11 25.6	+2.41	-0.002	+36 25 34	+14.9	+0.01	6.05	1.8	A5	014	-13		
29695	12 02.0	+2.56	-0.000	+29 41 36	+14.9	+0.01	6.25		K0		-4		
29697	12 02.7	+2.92	+0.003	+09 48 12	+14.6	-0.30	4.61	3.6	dF3	063	-15v	7 δ Equ	ds
29704	12 12.2	+4.28	+0.002	-53 28 17	+14.9	-0.02	5.84		A5		.		
29709	12 18.9	+3.36	-0.000	-17 33 11	+14.9	-0.02	6.22		G5		.		
29717	12 40.3	+3.73	+0.002	-36 25 10	+14.9	-0.01	6.14		K0		.		
29722	12 47.3	+3.41	+0.001	-20 51 38	+14.9	+0.00	5.35	0.3	gK0	010	-5	28 φ Cap	
29723	12 47.6	+2.40	+0.013	+37 49 52	+15.4	+0.44	3.82	2.2	dF0n	048	-21v	65 τ Cyg	ds
29727	12 58.9	+3.32	+0.002	-15 22 50	+15.0	+0.01	5.50	-0.3	gM3	007	-38	29 σ Cap	
29735	13 19.4	+3.00	+0.004	+05 02 24	+14.9	-0.09	4.14	0.8	dF6+A3	022	-17	8 α Equ	s
29765	14 29.3	+3.28	-0.002	-13 29 20	+15.0	0.00	6.18		A0		.		
29774	14 54.6	+3.64	+0.004	-32 22 58	+15.0	-0.02	4.79	2.1	A0n	029	-1	4PsA= ϵ Mic	
29781	15 09.2	+3.36	+0.001	-18 11 45	+15.1	0.00	5.39	-0.4	B8	007	-11	30 σ Cap	
29786	15 26.9	+2.36	-0.000	+39 11 03	+15.1	-0.00	4.28	-6.2	cB9p	001	-4v	67 σ Cyg	s
29789	15 28.0	+1.88	+0.003	+53 47 12	+15.1	+0.03	5.99	1.0	A0	010	-8		
29791	15 29.6	+2.27	+0.001	+42 28 23	+15.1	-0.01	6.09	0.0	B8	006	.		
29792	15 30.8	-2.49	-0.001	+81 01 19	+15.1	+0.00	6.02	1.0	A2	010	-1		
29793	15 33.7	+3.15	+0.001	-04 43 50	+15.1	+0.02	5.68	-0.8	B8	005	.	15 Aqr	
29798	15 44.5	+1.79	+0.002	+55 35 14	+15.1	+0.02	6.18	-0.3	gK4	005	-19		
29802	15 51.6	+2.47	+0.001	+34 41 10	+15.1	-0.00	4.42	-0.4	B3ne	011	+4	66 ν Cyg	
29816	16 16.7	-0.66	+0.004	+76 48 07	+15.2	+0.01	6.17	0.1	gK5	006	+15		
29819	16 18.8	+4.27	+0.012	-53 39 38	+15.1	-0.07	4.60	2.7	A5n	042	-14	θ Ind	d
29823	16 35.1	+2.24	-0.000	+43 44 05	+15.2	-0.01	5.06	-5.1	O8n	0013	+1v	68 A Cyg	
29836	16 59.2	+2.32	-0.001	+40 49 45	+15.2	+0.01	6.23	1.2	A5	010	+7		
29847	17 22.4	+2.39	+0.001	+38 01 32	+15.2	-0.01	5.83		F2		-7		ds
29848	17 23.2	+1.43	+0.021	+62 22 24	+15.3	+0.05	2.60	1.7	A7n	067	-10	5 α Cep	
29854	17 34.2	+3.84	+0.007	-41 01 20	+15.2	-0.00	4.92	-0.6	A2p	008	+2	θ^1 Mic	
29856	17 45.4	+2.06	+0.001	+49 17 53	+15.2	+0.01	5.65	-2.0	B5	003	-23v		s
29860	17 52.6	+1.66	+0.000	+58 24 41	+15.2	0.00	5.79	-1.2	gM+B3	004	-21		d
29864	17 57.6	+2.73	-0.000	+21 48 49	+15.2	+0.01	6.15		B9		-17		
29875	18 20.1	+1.24	+0.001	+64 39 34	+15.3	+0.00	5.18	-2.4	B3ne	003	-18v	6 Cep	
29877	18 27.0	+3.14	-0.001	-04 46 24	+15.3	+0.01	5.97	1.2	gG7	011	-6	16 Aqr	
29880	18 36.3	+2.97	+0.002	+07 08 29	+15.3	-0.02	6.01	-0.5	gM2	005	-20	9 Equ	
29884	18 48.6	+2.71	+0.017	+23 38 39	+15.2	-0.13	5.82	0.3	gG8	008	-89	34 Vul	
29896	19 15.4	+2.53	+0.001	+32 23 58	+15.3	-0.01	6.03	0.5	A0	008	-4v		s
29898	19 16.4	+1.54	-0.006	+60 32 37	+15.3	+0.00	6.24		G8		-27		
29903	19 27.9	+3.34	+0.002	-17 02 55	+15.3	+0.01	4.30	1.1	gG6	023	+12	32 ι Cap	
29914	19 46.3	+2.77	+0.007	+19 35 23	+15.4	+0.06	4.24	0.4	gK0	017	-76	1 Peg	d
29915	19 47.0	+5.43	+0.001	-69 56 56	+15.3	-0.02	var		N0		.	YPav	
29923	20 08.7	+3.44	+0.003	-22 53 01	+15.4	+0.01	5.72	-0.4	gM1	006	-7		
29925	20 15.5	+3.22	-0.002	-09 32 01	+15.3	-0.02	6.24	0.1	gM0	006	+18	17 Aqr	
29926	20 16.0	+2.08	+0.003	+49 10 26	+15.4	+0.07	5.87	0.6	gK0	009	-2v		
29931	20 24.7	+2.98	+0.003	+06 35 47	+15.4	+0.01	5.14	1.5	A2s	019	-11v	10 β Equ	s
29934	20 34.7	+5.72	+0.005	-72 00 54	+15.4	-0.01	6.08		K0		.		
29950	21 14.0	+3.82	+0.002	-41 13 20	+15.4	+0.00	5.86	0.1	A0np	007	+11	θ^2 Mic	d
29953	21 19.6	+3.40	+0.000	-21 03 56	+15.3	-0.13	5.47	0.7	gK2	011	+22	33 Cap	
29957	21 27.6	+3.28	+0.006	-13 05 37	+15.4	+0.01	5.54	2.4	A5	024	.	18 Aqr	
29965	21 43.5	+2.70	+0.010	+24 03 30	+15.5	+0.02	5.66	1.9	dF0	018	-18		
29968	21 53.4	+2.68	+0.002	+25 05 47	+15.5	+0.00	6.22	1.0	A1+A1	009	-19v		ds

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
29979	21 ^h 22 ^m 20 ^s 1	+4.96	+0.014	-65°35'39"	+16"3	+0"80	4.30	4.6	F8	113	-30	γ Pav	
29980	22 20.7	+2.66	+0.003	+25 57 30	+15.5	+0.00	5.74	2.4	dF1	022	- 3		s
29988	22 31.9	+3.22	+0.001	-09 57 45	+15.3	-0.17	5.76		A2		.	19 Aqr	
29993	22 40.5	+3.13	-0.001	-03 46 20	+15.4	-0.07	5.69	0.2	gK4	008	-24	21 Aqr	
29994	22 42.2	+4.28	+0.001	-54 52 40	+15.5	+0.04	6.24		F0		.	γ Ind	
30007	23 15.8	+3.75	+0.015	-38 02 47	+15.5	-0.01	5.69	0.2	K0	008			
30013	23 29.3	+2.20	+0.019	+46 29 49	+15.6	+0.05	5.54	2.9	A7n	030	+ 1		
30016	23 44.3	+2.45	+0.000	+36 27 02	+15.6	-0.00	5.84	-6.1	B0n	0008	+ 3	69 Cyg	d
30020	23 48.9	+3.42	-0.000	-22 37 45	+15.6	+0.02	3.86	-2.2	cG4p	006	+ 3v	34 ζ Cap	
30021	23 49.6	+3.85	-0.005	-42 45 56	+15.6	+0.02	5.61		A3p		+18v?		d
30023	24 07.2	+2.79	+0.005	+19 09 29	+15.6	+0.01	6.06	2.3	A3	018	-12v		s
30026	24 18.7	+5.36	+0.015	-69 43 23	+15.5	-0.05	var	var	M6	018	+43	SXPav	
30027	24 24.9	+3.40	-0.002	-21 24 49	+15.6	-0.03	6.03	0.5	gK5	008	+23	35 Cap	
30040	25 04.9	+2.13	+0.006	+48 37 01	+15.7	+0.02	5.31	0.9	A3	013	-13		
30041	25 05.9	+1.98	+0.002	+52 40 51	+15.6	+0.01	5.95	2.1	B8	017	.		
30044	25 18.9	+2.45	0.000	+36 53 55	+15.7	+0.00	5.20	-1.8	B3n	004	-20	70 Cyg	
30048	25 27.7	+2.64	+0.003	+27 23 24	+15.7	+0.02	5.38	1.1	A0	014	- 8	35 Vul	
30059	25 52.5	+3.42	+0.010	-22 01 34	+15.7	-0.01	4.59	0.7	gG5	017	-22	36 b Cap	
30063	25 59.9	+2.56	+0.010	+32 00 20	+15.8	+0.08	5.74	3.1	dF2	030	-24		
30069	26 21.9	-1.77	+0.018	+80 18 27	+15.7	-0.01	6.13	0.9	gG6	009	+ 3		
30078	26 42.6	+2.74	+0.003	+21 57 36	+15.7	+0.01	6.18		gM4		-22		
30081	26 48.3	+1.16	-0.003	+66 35 26	+15.7	-0.02	5.42	-0.1	B7n	008	+ 3	7 Cep	
30099	27 18.3	+1.89	+0.001	+55 11 56	+15.8	+0.01	6.06		B9		.		
30108	27 36.1	+2.21	+0.004	+46 19 10	+15.9	+0.10	5.34	1.7	sgK0	019	-19	71 g Cyg	
30109	27 40.8	+2.72	+0.001	+23 25 07	+15.8	+0.00	4.76	0.2	gM1	012	-19	2 Peg	
30118	28 01.4	+0.77	+0.002	+70 20 28	+15.8	+0.01	3.32	-3.5	B2s	0044	- 2v	8 β Cep	vds
30131	28 40.3	+2.00	+0.002	+52 44 14	+15.8	+0.02	6.08	1.3	A0	011	-17v		s
30133	28 44.4	+2.90	+0.001	+11 55 01	+15.8	-0.01	5.94	0.5	A0	008	-10v		s
30137	28 55.6	+3.16	+0.001	-05 47 32	+15.8	-0.01	3.07	-5.1	cG0	003	+ 6	22 β Aqr	
30138	28 56.4	+3.80	+0.001	-41 24 03	+15.8	+0.01	5.35	0.3	K5	010	- 8	ξ Gru	
30142	29 13.4	+3.63	-0.001	-34 09 58	+15.9	-0.01	5.99		A2		.	6 PsA	d
30150	29 36.8	+1.65	-0.000	+60 14 18	+15.9	+0.00	5.52	-5.2	B1s	0012	-15		
30157	29 46.6	+2.02	+0.001	+52 23 55	+15.9	+0.00	6.20	-0.8	cG2p	004	-23v?		
30163	30 09.6	+3.89	-0.002	-45 04 15	+15.9	-0.01	5.73	0.7	K0	010	.		
30185	31 10.4	+2.12	+0.002	+49 45 18	+16.0	+0.01	5.76		A0n		-33v		s
30204	32 02.7	+3.37	-0.003	-20 18 30	+16.0	+0.03	5.79	3.3	dF2	032	+ 6	37 Cap	
30207	32 05.8	+2.26	-0.002	+45 22 12	+15.9	-0.09	4.22	0.1	gG5	015	+ 7	73 ρ Cyg	
30218	32 41.0	+3.13	-0.001	-04 12 25	+16.0	+0.00	5.85	0.1	gG9	007	- 2		
30219	32 43.8	+2.45	+0.010	+38 18 33	+16.1	+0.10	4.98	0.2	gG7	011	-66	72 Cyg	
30220	32 43.9	+2.07	+0.000	+51 28 30	+16.0	0.00	5.96	-0.5	B9ne	005	-22		
30231	33 11.1	+2.71	+0.000	+24 13 42	+16.1	-0.01	6.13	0.9	A3	009	-28v		ds
30235	33 17.2	+3.48	+0.008	-26 23 44	+16.1	-0.02	5.77		A3		.	8 PsA	
30243	33 49.0	+3.60	+0.007	-33 16 22	+16.1	-0.00	6.09		A5		.	7 PsA	
30250	34 08.2	+2.28	+0.004	+45 09 00	+16.1	+0.01	var		gM4ev		-14	W Cyg	
30252	34 17.0	+3.36	+0.001	-19 41 28	+16.1	+0.00	4.72	-1.0	B5ep	007	-24	39 ϵ Cap	
30263	34 56.5	+2.41	-0.000	+40 11 17	+16.2	+0.01	5.09	1.4	A5n	018	+ 7	74 Cyg	
30268	35 05.4	+3.19	+0.007	-08 04 46	+16.1	-0.02	4.78	0.7	A5	015	-18	23 ξ Aqr	
30274	35 24.9	+2.81	+0.007	+19 05 34	+16.2	+0.01	5.29	0.9	dA5n	013	-25v?	5 Peg	
30278	35 32.7	+2.30	-0.000	+44 28 17	+16.2	-0.03	6.11	1.8	A4	014	+ 4	CP Cyg	
30288	35 58.7	+2.00	-0.002	+53 48 59	+16.2	0.00	6.20		G8		- 2		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
30289	21 ^h 35 ^m 59 ^s .8	+6.67	+0.016	-77°36'50"	+16.0	-0.23	3.74	1.7	K0	039	+35v	ν Oct	s
30291	36 01.6	+3.00	+0.007	+05 32 42	+16.2	+0.03	5.80	2.5	dA6n	022	-18	4 Peg	
30302	36 34.7	+1.61	-0.000	+61 51 21	+16.2	-0.00	4.87	-5.9	cB2p	0014	-13	9 Cep	
30307	36 41.2	+2.80	+0.008	+20 02 20	+16.2	+0.00	5.76	1.9	dA5n	017	-13		
30309	36 47.0	+3.22	+0.002	-10 48 10	+16.2	-0.04	6.18		K0				
30315	37 01.0	+3.04	-0.002	+02 01 04	+16.2	-0.08	5.33	0.5	gG9	011	-35	25 d Aqr	
30320	37 19.4	+3.32	+0.013	-16 53 21	+16.3	-0.02	3.80	1.2	dF2p	030	-31v	40 γ Cap	
30322	37 24.4	+1.86	-0.000	+57 15 45	+16.3	-0.00	5.64	-5.5	O6n	0013	-8v		ds
30338	38 13.2	+2.35	+0.005	+43 02 46	+16.3	+0.02	5.35	-0.1	gM0	008	-28	75 UU Cyg	d
30354	38 49.8	+3.26	-0.008	-14 16 18	+16.1	-0.30	5.28	3.0	dG1	035	-2v	42 Cap	s
30362	39 03.8	+1.99	+0.001	+54 38 39	+16.4	-0.00	6.16		K0		+4		
30365	39 10.1	+3.42	+0.007	-23 29 24	+16.3	-0.09	5.32	0.9	gG9	013	-44	41 Cap	d
30376	39 33.4	+2.41	-0.001	+40 34 39	+16.4	-0.04	6.05	1.3	A0n	011	+3v	76 Cyg	s
30377	39 37.1	+3.06	-0.000	+01 03 24	+16.4	-0.00	5.80	-0.7	gK4	005	+10	26 Aqr	
30378	39 45.3	+3.00	+0.001	+05 27 05	+16.4	-0.00	5.63	-0.1	gM2	007	-4	7 Peg	
30382	39 52.1	+3.35	+0.010	-19 05 43	+16.4	-0.00	4.82	0.8	gG4	016	-3	43 κ Cap	
30384	39 54.4	+2.53	-0.000	+35 16 53	+16.4	-0.00	var		N1		+10	V460 Cyg	
30386	40 06.3	+2.93	+0.001	+10 35 44	+16.4	0.00	5.95	-0.5	B8	005	+5v?		
30391	40 19.0	+2.13	+0.000	+50 57 39	+16.4	+0.00	4.78	-1.3	B3	006	-8v	80 π^1 Cyg	s
30393	40 20.8	+3.27	-0.000	-14 37 45	+16.5	+0.03	5.99		A5			44 Cap	
30394	40 22.0	+2.41	+0.002	+40 50 53	+16.4	+0.00	5.48	-0.6	A0	006	-25v	77 Cyg	ds
30396	40 25.8	+3.35	+0.005	-19 51 01	+16.4	-0.01	6.17	1.2	A8n	010	-25v		s
30407	40 49.4	+2.19	+0.001	+49 22 16	+16.5	-0.00	6.12		gG5		-2		
30411	41 04.9	+3.32	+0.002	-71 14 20	+16.5	-0.00	6.18		B8				
30412	41 05.7	+2.41	-0.002	+40 55 32	+16.5	-0.01	5.54	0.1	gM2	008	-23		
30415	41 11.8	+0.88	+0.024	+71 04 51	+16.6	+0.10	4.85	0.1	gK1	011	-37	11 Cep	
30418	41 15.0	+1.80	-0.001	+59 02 29	+16.5	+0.01	6.21		K2		-2		
30419	41 17.2	+3.27	-0.002	-14 58 46	+16.5	+0.01	5.90		A3n		-4v	45 Cap	s
30421	41 21.4	+2.48	+0.003	+38 03 15	+16.5	+0.00	5.62	1.0	A0n	012	-23	79 Cyg	d
30431	41 43.7	+2.95	+0.002	+09 38 41	+16.5	+0.00	2.54	-5.0	cK2	004	+5	8 ϵ Peg	
30437	41 54.2	+2.68	+0.017	+28 30 58	+16.3	-0.22	6.08	4.6	dF3	050	+16	78 μ^A Cyg	} d
30438	41 54.2	+2.68	+0.022	+28 30 58	+16.3	-0.24	4.73	3.3	dF6	050	+18	78 μ^1 Cyg	
30439	41 58.4	+3.57	+0.003	-33 15 18	+16.4	-0.09	4.35	2.1	A0	035	+2v	9 ι PsA	s
30440	41 58.5	+1.84	0.000	+58 33 00	+16.5	-0.00	var	var	cM2e	003	+19v	μ Cep	
30443	42 06.7	+2.90	+0.018	+14 32 37	+16.4	-0.09	6.10		dG0		-19		
30444	42 08.5	+2.84	+0.000	+17 07 11	+16.5	-0.01	4.52	-4.0	cG3	0026	-22	9 Peg	
30448	42 20.4	+3.20	+0.001	-09 18 47	+16.5	-0.00	5.28	-0.8	gG7	006	-5v	46 c^1 Cap	
30450	42 22.7	+2.72	+0.002	+25 24 52	+16.5	+0.01	4.27	1.3	dF2	025	-8v	10 κ Peg	ds
30452	42 28.0	+0.73	-0.010	+72 05 27	+16.5	-0.03	5.40	0.6	gK1	011	-38v?	78 Dra	
30472	43 28.0	+9.18	+0.040	-82 57 06	+16.6	-0.03	5.50	0.7	G5	011	-10	λ Oct	d
30473	43 30.7	+1.65	-0.001	+62 13 47	+16.6	+0.00	5.97	-6.1	O9s	0009	-18		
30474	43 36.3	+3.20	+0.001	-09 30 27	+16.6	+0.01	6.20	-0.3	gM3	005	+21	47 c^2 Cap	
30479	43 46.2	+2.76	+0.000	+22 43 03	+16.6	-0.00	5.45	-6.0	cK1	0008	-12	12 Peg	
30481	43 50.7	+3.23	+0.002	-11 35 51	+16.6	-0.01	5.43	0.6	A0n	011	+1v	48 λ Cap	
30483	44 00.3	+1.73	-0.000	+60 53 22	+16.6	0.00	4.46	-7.0	cA2p	001	-21	10 ν Cep	
30491	44 17.0	+3.31	+0.018	-16 21 19	+16.3	-0.29	2.98	2.0	A5n	065	-6v	49 δ Cap	s
30501	44 41.8	+3.04	+0.001	+02 27 15	+16.7	+0.00	5.50	0.3	A0	009	+17	27Aqr=11Peg	
30502	44 41.9	+2.85	+0.006	+16.57 44	+16.6	-0.01	6.24		F2		-19		
30509	44 48.4	+3.52	-0.002	-31 07 51	+16.7	-0.00	5.09	-2.5	A2n	003	+14	10 θ PsA	
30512	44 56.6	+2.22	+0.000	+49 04 39	+16.7	-0.00	4.26	-2.7	B3	004	-12v	81 π^2 Cyg	s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
30513	21 ^h 45 ^m 00 ^s 3	+3.16	+0.003	-06°08'59"	+16.7	+0.00	6.20		A3		.		
30516	45 01.2	+3.90	+0.016	-47 31 56	+16.4	-0.30	5.70	5.0	dG5	071	- 7		d
30526	45 56.7	+1.77	-0.001	+60 27 37	+16.7	+0.00	5.64	0.8	gM1	011	-20	12 Cep	
30531	46 08.9	+4.65	+0.000	-64 56 43	+16.7	-0.02	5.65		K0		- 1		
30537	46 24.6	+2.49	+0.002	+38 24 56	+16.7	-0.00	5.80	0.3	B9	008	-20		
30541	46 35.4	+5.07	-0.006	-69 51 49	+16.7	-0.00	5.50	2.3	M0	023	+20	o Ind	
30550	46 59.0	+3.24	-0.000	-12 57 25	+16.8	+0.02	6.12	1.3	gA8s	011	0		
30555	47 06.5	+2.80	-0.001	+20 13 43	+16.8	0.00	6.16		B3		-12		
30565	47 37.8	+2.65	+0.001	+29 56 26	+16.8	-0.02	5.00	0.2	A0	011	-24v	14 Peg	s
30569	47 45.8	+2.85	+0.005	+17 03 08	+16.7	-0.06	5.32	1.3	dA8n	016	- 4	13 Peg	
30590	48 55.3	+3.33	+0.010	-18 51 25	+16.8	-0.08	6.14		dF1		-42		
30593	49 00.6	+2.48	+0.000	+39 18 06	+16.9	+0.01	6.19	0.3	B9	005	+ 0		
30594	49 13.2	+2.82	+0.001	+19 35 29	+16.9	+0.02	5.68	-1.3	B9	004	-20		d
30625	50 15.8	+2.68	-0.005	+28 33 31	+16.9	-0.06	5.62	3.5	dF0	037	+19	15 Peg	
30627	50 19.3	+2.03	+0.001	+55 33 40	+16.9	+0.00	5.54	-0.6	B6n + B9	006	- 6v		ds
30631	50 34.3	+3.27	+0.021	-13 47 17	+16.9	+0.01	5.18	3.2	dF0	040	-21	51 μ Cap	
30635	50 47.1	+2.73	+0.000	+25 41 21	+16.9	0.00	5.05	-1.9	B3ne	004	-12v	16 Peg	
30640	50 54.4	+3.63	+0.008	-37 36 04	+16.9	-0.01	3.16	-0.3	B8	020	- 2	γ Gru	
30648	51 16.1	+2.82	+0.001	+19 25 54	+17.0	+0.01	5.76	1.0	A0	011	+ 6		
30654	51 31.4	+4.42	+0.007	-62 07 20	+16.9	-0.08	5.89		F0		.		d
30655	51 33.7	+3.13	+0.003	-04 30 41	+16.9	-0.09	5.91	0.4	gK2	008	-37		
30664	51 59.9	+3.12	+0.001	-03 32 16	+17.0	-0.02	6.18		F8		-16		d
30691	53 12.1	+2.02	-0.001	+56 22 26	+17.1	-0.00	6.01	-5.4	B8p	0017	-15	13 Cep	
30696	53 22.6	+3.61	-0.002	-37 29 29	+17.1	0.00	5.55		A2n		+28v?		
30702	53 50.7	+1.80	+0.000	+61 18 15	+17.1	+0.01	6.22	-5.1	gK0	0008	-32v		s
30708	54 01.5	+3.62	+0.001	-37 59 08	+17.1	-0.00	6.19		F0		.		
30712	54 12.3	+1.57	+0.001	+65 04 59	+17.1	+0.01	5.85	-1.8	B3ne	003	-15v		d
30719	54 30.0	+2.93	-0.002	+11 50 18	+17.1	-0.01	5.59	1.2	A0	013	+15	17 Peg	
30720	54 31.7	+4.08	+0.006	-55 13 53	+17.1	-0.01	4.56	0.7	F0n	017	+15	δ Ind	d
30731	55 14.5	+1.69	-0.000	+63 23 13	+17.1	+0.00	var	var	cM2e + B9	0006	-21v	VV Cep	sE
30742	55 36.0	+3.14	+0.002	-05 39 46	+17.1	-0.10	6.21		dF2		+ 1		
30746	55 56.6	+3.34	+0.001	-21 25 21	+17.2	-0.00	6.23	-0.3	gM4	005	+ 3		
30753	56 16.9	+3.63	+0.003	-38 38 06	+17.2	-0.00	5.59	-0.2	K0	007	-10		
30767	57 00.2	+4.09	+0.001	-56 07 24	+17.2	+0.02	6.21		B9		+ 3		
30774	57 24.9	+1.77	+0.000	+62 27 29	+17.3	+0.03	6.16		gM3		-16		
30779	57 38.0	+3.00	+0.000	+06 28 37	+17.3	-0.00	5.99	-2.8	B3s	0021	- 7	18 Peg	
30785	57 58.1	+3.45	+0.001	-28 41 40	+17.3	+0.01	5.42	0.6	B8n	011	- 5	12 η PsA	d
30788	58 13.7	+5.87	+0.005	-76 21 32	+17.2	-0.07	5.91		F2		.		d
30799	58 31.5	+3.07	+0.000	+00 21 53	+17.3	-0.01	5.75	0.3	gK4	008	+ 7	28 Aqr	
30800	58 32.6	+0.86	-0.016	+72 56 30	+17.1	-0.16	5.15	2.7	dF3	032	+21	16 Cep	
30803	58 39.1	+2.92	+0.004	+12 52 47	+17.2	-0.05	5.66	2.6	dF2	024	+ 7	20 Peg	
30804	58 40.3	+2.98	-0.001	+08 00 58	+17.3	+0.00	5.85	0.1	gK5	007	-23	19 Peg	
30817	59 31.0	+4.59	+0.481	-56 59 34	+14.8	-2.56	4.74	7.0	dK5	288	-40	s Ind	
30828	22 00 00.4	+2.20	+0.000	+52 38 26	+17.4	+0.00	5.66	-0.4	B7s	006	-22		
30837	00 23.5	+2.02	-0.001	+57 45 31	+17.4	+0.00	5.50	-4.8	O9n	0014	-11v	14 Cep	
30842	00 38.7	+3.15	+0.003	-06 45 54	+17.4	+0.01	5.60	-0.9	G5	005	+30	30 Aqr	
30844	00 43.6	+3.10	+0.001	-02 23 51	+17.4	-0.01	4.66	-0.3	B6ne	010	+12	31 o Aqr	
30846	00 51.7	+2.94	+0.001	+11 08 39	+17.4	-0.01	5.75	0.3	A0	008	- 0	21 Peg	
30848	00 55.4	+2.42	-0.002	+44 24 29	+17.4	-0.03	5.52	0.0	B9n	008	- 1		d
30862	01 46.4	+3.41	+0.001	-27 03 55	+17.4	-0.00	5.84		B5		.		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
30872	22 ^h 02 ^m 13 ^s .1	+3.08	-0.001	-01°08'57"	+17.4	-0.05	5.23	1.1	gA8s	015	+20v	32 Aqr	s
30877	02 20.5	+1.74	+0.032	+64 23 02	+17.5	+0.09	4.57	2.3	F7+G	036	-7	17 ξ , ³ Cep	d
30878	02 21.3	+4.21	+0.006	-59 52 44	+17.4	-0.06	5.60		K5		.	* Ind	
30880	02 22.9	+1.80	+0.004	+62 52 34	+17.5	+0.06	5.46	-0.6	gM5	006	-4	18 Cep	
30887	02 53.6	+2.75	+0.002	+26 25 47	+17.5	+0.03	5.93	0.4	gK3	008	-25		
30892	03 06.5	+3.61	-0.002	-39 47 08	+17.4	-0.12	4.60	0.3	M0	013	+39	λ Gru	
30894	03 09.4	+3.03	+0.007	+04 48 48	+17.6	+0.10	4.90	0.1	gK5	011	-16v	22 ν Peg	s
30896	03 12.9	+3.08	+0.001	-00 33 49	+17.5	-0.00	3.19	-5.5	cG1	0024	+7	34 α Aqr	
30899	03 18.5	+2.72	+0.002	+28 43 13	+17.5	-0.01	5.58	0.8	A0n	011	-12v	23 Peg	s
30904	03 29.2	+1.82	+0.002	+62 32 28	+17.6	+0.06	5.39	-0.4	gK5	007	-21	20 Cep	
30907	03 36.2	+1.85	+0.000	+62 02 10	+17.5	+0.00	5.17	-6.2	O9n	0008	-13	19 Cep	
30914	03 44.3	+3.24	+0.003	-14 06 47	+17.5	-0.06	4.35	-0.1	B8	013	-10v	33 ι Aqr	s
30917	03 53.3	+2.35	-0.001	+47 59 16	+17.5	+0.00	6.16	-1.2	B3	003	-18v		s
30919	04 00.2	+2.43	-0.001	+44 46 14	+17.5	-0.01	5.32	-0.2	gM0	008	-23		
30924	04 10.7	+2.43	+0.003	+45 00 16	+17.5	-0.01	6.08	1.5	A2	012	-2		
30926	04 27.6	+2.11	+0.001	+56 05 56	+17.5	-0.01	6.22	1.2	B9	010	-20		
30932	04 40.8	+2.79	+0.022	+25 06 00	+17.6	+0.02	3.96	3.4	dF3	077	+7v	24 ι Peg	s
30942	05 05.4	+3.78	+0.012	-47 12 15	+17.4	-0.15	2.16	-0.5	B5n	036	+12	α Gru	
30943	05 05.6	+2.86	+0.008	+19 13 49	+17.6	+0.04	5.78	2.4	dF2	021	-15		
30954	05 28.3	+3.50	+0.006	-33 14 01	+17.6	-0.04	4.62	1.7	A2n	026	+12	14 μ PsA	
30956	05 29.2	+2.82	-0.004	+21 27 31	+17.5	-0.07	5.66	-0.4	B8ne	006	-52v	25 Peg	
30957	05 30.7	+3.51	+0.000	-34 17 18	+17.5	-0.05	5.09	-2.5	M2	003	+20	ν PsA	
30968	05 58.5	+2.77	-0.003	+25 17 55	+17.6	-0.04	6.03	2.9	A9	024	+2v		
30977	06 14.6	+3.29	0.000	-18 45 55	+17.6	-0.01	5.74	-1.9	B2	003	-5	35 Aqr	
30985	06 39.5	+2.43	-0.003	+45 29 45	+17.7	+0.03	var		sG5+gK0		-36v	AR Lac	sE
30995	07 00.5	+2.66	-0.005	+32 55 39	+17.6	-0.06	5.65	0.6	gG6	010	-6	27 π^3 Peg	
30996	07 00.7	+3.50	-0.002	-34 15 41	+17.7	+0.04	5.49	2.3	A5n	023	+2		
31003	07 13.3	+3.51	+0.034	-32 47 41	+17.7	+0.01	5.06	3.4	dF5	046	-15	15 τ PsA	
31004	07 15.7	+5.69	+0.020	-76 21 45	+17.6	-0.04	6.21		K0		.		
31013	07 40.6	+3.03	+0.018	+05 57 04	+17.7	+0.03	3.70	1.7	A2n	040	-6v	26 θ Peg	
31015	07 45.1	+3.12	+0.001	-04 08 24	+17.6	-0.05	6.10		A0		.		
31016	07 45.8	+2.66	-0.001	+32 55 56	+17.7	-0.02	4.38	-0.2	gA7n	012	+2	29 π^3 Peg	
31019	07 55.9	+2.86	+0.006	+19 22 17	+17.6	-0.07	6.07		G0		+40		
31021	07 57.2	+3.21	+0.002	-11 48 42	+17.7	+0.01	5.40	-0.4	B5s	007	+2v?	38 ϵ Aqr	
31022	07 57.3	+3.13	+0.005	-04 30 49	+17.7	0.00	6.13	0.6	gK0	008	-18		
31026	08 10.2	+2.94	-0.002	+11 22 43	+17.7	-0.05	5.92		gM1		+17		s
31029	08 16.1	+3.33	+0.009	-21 28 44	+17.7	-0.03	6.10	2.9	dF6	023	-13		
31037	08 51.0	+1.15	+0.007	+72 05 41	+17.7	+0.01	4.99	0.2	gG3	011	-15	24 Cep	
31044	09 06.9	+2.08	+0.002	+57 57 15	+17.7	+0.01	3.62	-4.9	cK5	0024	-18v	21 ζ Cep	s
31046	09 13.1	+2.33	+0.014	+50 34 33	+17.8	+0.04	5.44	1.2	A2n	014	-8		d
31052	09 26.3	+2.90	-0.001	+15 47 36	+17.7	-0.02	6.06	0.8	gG7	009	+11		
31056	09 30.5	+1.37	-0.012	+69 53 07	+17.8	+0.03	5.54	3.2	dF3	034	+1		d
31061	09 44.1	+3.23	+0.002	-14 26 27	+17.7	-0.04	6.17	3.2	dF2	025	+15	39 Aqr	
31064	09 48.4	+2.79	-0.001	+24 42 10	+17.8	-0.02	6.14	-1.5	K0	003	-3		
31066	09 48.6	+2.04	+0.000	+59 10 02	+17.8	-0.01	5.19	-6.4	O6ne	0009	-74	22 λ Cep	
31070	10 00.2	+2.17	+0.028	+56 35 24	+17.9	+0.12	5.42	2.4	dF6	025	-19		
31075	10 08.7	+3.38	-0.002	-26 34 31	+17.8	-0.03	6.16		A2		.		
31077	10 22.5	+1.98	-0.001	+60 30 41	+17.8	+0.02	5.52	0.5	gG9	010	-3		
31081	10 34.9	+2.66	+0.002	+34 21 27	+17.8	-0.05	5.42	0.4	gK2	010	-7v?		
31086	10 48.8	+1.87	-0.001	+63 02 37	+17.8	-0.01	6.06		gM3		-14		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
31088	22 ^h 10 ^m 56 ^s .1	+3.37	+0.005	-25°25'46"	+17.8	+0.02	5.58		F8		-28		
31094	11 21.0	+2.75	+0.005	+28 21 36	+17.8	+0.00	6.01	0.5	gK3	008	-19		
31095	11 28.9	+3.40	+0.002	-28 00 56	+17.8	-0.00	5.40	-0.1	B9	008	-6	16 λ PsA	
31099	11 32.4	+3.31	+0.001	-21 19 26	+17.9	+0.07	5.45	0.8	G8	012	-24	41 Aqr	d
31104	11 43.7	+2.58	+0.004	+39 27 58	+17.9	+0.01	4.64	0.0	gK4	012	-11v		s
31105	11 45.6	+2.47	+0.007	+45 11 32	+17.9	+0.01	5.51	1.4	A0	015	-9		
31110	11 58.8	+1.09	+0.005	+73 03 31	+17.9	+0.02	6.11	0.6	gG7	008	+1		d
31116	12 15.0	+1.89	-0.003	+62 54 50	+17.9	0.00	6.21		B8n		+12v		s
31123	12 31.9	+3.67	+0.000	-44 42 04	+17.9	-0.02	6.16		K0		.		
31125	12 36.6	+3.61	+0.004	-41 35 47	+17.9	+0.03	4.86	-1.6	G2	005	-7v	μ^1 Gru	s
31127	12 38.1	+2.52	+0.005	+42 42 19	+17.9	-0.02	5.70	1.1	A0	012	-38		
31133	13 02.9	+5.83	-0.015	-77 45 42	+17.9	+0.01	5.63		A5		.	ψ Oct	
31135	13 11.4	+2.21	+0.054	+56 47 37	+18.0	+0.05	4.23	2.3	dA6n	042	-1v?	23 ϵ Cep	
31138	13 26.5	+3.61	-0.001	-41 52 37	+17.9	-0.01	5.19	-0.3	G5	008	+12v?	μ^3 Gru	
31139	13 30.3	+2.99	+0.000	+08 18 01	+17.9	+0.01	6.03	1.2	A0	011	0v		s
31143	13 47.2	+2.62	+0.001	+37 29 57	+17.9	+0.00	4.22	-0.8	gK4	010	-8	1 Lac	
31147	13 59.1	+3.09	-0.002	-01 50 46	+17.9	-0.01	6.09		A2		.		
31150	14 07.5	+3.21	+0.001	-13 04 54	+18.0	+0.01	5.55	0.3	gK0	009	+13	42 Aqr	
31152	14 11.8	+3.16	+0.008	-08 01 59	+17.9	-0.02	4.32	0.5	gG6	017	-15	43 θ Aqr	
31155	14 14.2	+3.17	-0.004	-09 17 24	+17.9	-0.01	6.08	0.6	gK3	008	+12		
31163	14 29.9	+3.13	0.000	-05 38 15	+18.0	+0.02	5.80	0.8	gG4	010	+7	44 Aqr	
31166	14 32.9	+6.72	+0.030	-80 41 24	+17.9	-0.04	5.11		M6		+12	ϵ Oct	
31167	14 37.9	+2.17	+0.005	+56 58 13	+18.0	+0.01	6.05	0.3	gG4	007	-8		
31178	14 59.6	+3.93	+0.048	-53 52 09	+17.3	-0.67	5.44	5.0	dF7	080	-14		d
31183	15 05.6	+4.11	-0.009	-60 30 35	+17.9	-0.04	2.91	-0.3	K5	023	+42v	α Tuc	s
31199	16 19.8	+3.22	+0.005	-13 33 22	+18.0	-0.01	6.09	1.1	gG7	010	+30	45 Aqr	
31205	16 34.6	+1.96	+0.006	+62 33 12	+18.1	+0.02	5.99	0.2	gK3	007	-2	25 Cep	
31210	16 44.4	+2.63	+0.005	+37 31 03	+18.1	+0.04	6.11	2.6	dF2	020	+7		d
31223	17 33.7	-4.85	+0.050	+85 51 27	+18.1	+0.05	5.38	0.6	A0n	011	+4v		s
31225	17 34.1	+3.16	+0.001	-08 04 23	+18.1	+0.00	5.36	-0.1	B8	008	-9	46 ρ Aqr	
31230	17 56.6	+3.02	+0.001	+05 32 15	+18.1	+0.00	5.35	-1.1	B6s	005	-8v	30 Peg	d
31239	18 25.9	+3.00	+0.003	+07 56 03	+18.1	+0.03	6.17	3.6	dF4	031	+10		
31247	18 50.6	+3.30	-0.001	-21 50 59	+18.0	-0.09	5.40	0.4	gK2	010	+49	47 Aqr	
31252	18 57.3	+2.48	+0.002	+46 17 03	+18.1	+0.00	4.66	-0.6	B5	009	-10v	2 Lac	s
31253	19 00.6	+2.77	+0.001	+28 04 41	+18.1	+0.00	4.88	-0.6	B8n	008	+8	32 Peg	
31255	19 03.3	+2.95	+0.000	+11 57 10	+18.1	+0.01	4.93	-1.2	B3e	006	+10	31 Peg	
31257	19 04.4	+3.10	+0.008	-01 38 24	+18.1	+0.01	3.97	1.9	A0	038	-15v	48 γ Aqr	s
31273	19 41.1	+3.66	0.000	-46 12 03	+18.1	-0.01	var		S5e		.	π^1 Gru	d
31279	20 04.2	+3.68	+0.022	-46 10 51	+18.1	-0.05	5.82	2.2	F0	019	.	π^3 Gru	d
31284	20 21.9	+5.15	+0.288	-72 29 59	+17.5	-0.69	5.42	3.0	dG0	033	+20	ν Ind	d
31291	20 43.9	+3.34	+0.007	-25 00 58	+18.2	0.00	5.61	0.4	gG9	009	-10	49 Aqr	
31293	20 54.8	+3.15	-0.000	-07 26 53	+18.2	+0.01	6.11	0.3	gG6	007	-14		
31297	21 09.2	+2.21	+0.002	+57 01 52	+18.2	+0.00	6.19	0.1	B8	006	.		
31299	21 14.0	+2.25	-0.001	+55 42 36	+18.2	+0.01	var		cM0		.	RW Cep	
31300	21 15.1	+2.89	+0.024	+20 35 42	+18.2	-0.01	6.13	3.7	dF4	033	-23	33 Peg	d
31301	21 18.0	+4.69	+0.025	-70 41 05	+18.2	-0.06	5.95		F0		.		
31303	21 19.2	+2.02	-0.001	+62 09 58	+18.3	+0.04	6.01	1.2	A0	011	-15		
31307	21 30.6	+3.12	+0.002	-05 05 26	+18.2	-0.00	5.85	1.6	A0	014	+6	51 Aqr	d
31308	21 33.9	+5.20	+0.015	-75 16 12	+18.2	+0.02	6.17		G0		.		d
31310	21 35.3	+2.36	-0.002	+51 58 41	+18.0	-0.19	4.58	1.0	gK0	019	-10	3 β Lac	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
31311	22 ^b 21 ^m 37 ^s 9	+3.98	+0.018	-58°02'48"	+17.9	-0.34	5.39	4.1	dG0	055	+ 8		
31315	21 41.2	+2.66	+0.022	+38 19 05	+18.3	+0.12	6.20	2.1	dF5	015	+ 5		
31317	21 46.4	+3.21	+0.003	-13 47 01	+18.2	+0.01	5.92	0.7	gG6	009	-21	50 Aqr	
31326	22 29.0	+2.43	-0.001	+49 13 20	+18.3	-0.00	4.64	-3.0	cB8p	003	-26	4 Lac	
31327	22 39.6	+11.4	-0.033	-86 13 27	+18.3	+0.06	5.74		K0			v Oct	
31328	22 43.4	+3.06	+0.001	+01 07 23	+18.3	+0.00	4.64	-3.5	B1nc	0025	+ 4v	52 π Aqr	
31343	23 24.9	+3.32	+0.000	-23 56 14	+18.3	+0.00	6.17		A0		-15		
31346	23 48.0	+4.26	+0.011	-65 13 18	+18.3	+0.00	4.80	0.7	B9n	015	+12	δ Tuc	d
31355	24 04.7	+3.05	+0.020	+04 08 17	+18.4	+0.05	5.85	3.1	dF5+K4	037	-18	34 Peg	d
31365	24 43.1	+1.55	+0.002	+70 30 58	+18.4	+0.02	5.69	0.2	gK2	008	-17v?		
31371	24 58.3	+4.41	+0.026	-67 44 38	+18.3	-0.08	5.70		A3		.		
31375	25 14.8	+2.63	-0.000	+39 33 16	+18.3	-0.01	6.07	-1.5	B3	003	-17		
31377	25 19.6	+3.04	+0.005	+04 26 39	+18.0	-0.31	4.93	1.6	sgK0	022	+54	35 Peg	
31380	25 28.6	+1.93	+0.000	+64 52 37	+18.4	+0.00	5.66	-5.9	B1n	0012	-15	26 Cep	
31387	25 43.8	+3.52	+0.004	-39 23 08	+18.2	-0.16	5.48	0.2	G4	009	+11	v Gru	
31398	26 15.2	+3.09	+0.012	-00 16 35	+18.4	+0.01	4.59	1.4	dF1	023	+29v?	55 ζ ¹ Aqr	} d
31399	26 15.5	+3.09	+0.014	-00 16 36	+18.4	+0.05	4.42	1.2	dF2	023	+25	55 ζ ² Aqr	
31400	26 17.3	+3.58	+0.002	-43 45 06	+18.4	-0.00	4.02	-0.2	G2	014	+ 5	δ ¹ Gru	
31401	26 21.2	+0.45	-0.005	+78 31 51	+18.4	-0.04	5.77	1.6	A2	015	- 6	28 Cep	
31408	26 38.2	+2.99	+0.004	+08 52 23	+18.4	-0.02	5.82	-0.7	gK5	005	-30v?	36 Peg	
31412	26 46.7	+3.58	-0.001	-44 00 21	+18.4	+0.00	4.31		M4		+ 2v	δ ² Gru	
31415	26 49.4	+2.81	+0.002	+26 30 25	+18.4	-0.00	5.96	-0.1	gK2	006	-45		
31417	26 58.4	+3.36	+0.010	-27 21 49	+18.4	-0.01	5.95		F0		.		
31421	27 18.5	+2.23	+0.002	+58 09 32	+18.4	+0.00	var	var	cG0v	0035	-17v	27 δ Cep	d
31423	27 21.2	+3.21	+0.011	-13 10 18	+18.4	+0.00	6.21	2.2	dF1	016	-11		
31425	27 26.2	+3.03	-0.002	+04 10 37	+18.3	-0.14	5.47	2.2	dF2	022	+ 1	37 Peg	d
31426	27 26.5	+2.50	+0.000	+47 27 01	+18.4	-0.00	4.61	-3.0	cK6p	003	- 4v	5 Lac	s
31430	27 44.4	+2.74	+0.002	+32 18 58	+18.4	-0.01	5.51	1.2	A0	014	-16	38 Peg	
31440	28 00.1	+3.17	-0.000	-10 56 04	+18.4	-0.03	4.89	1.0	A1s	017	+11v	57 σ Aqr	s
31449	28 19.5	+2.59	-0.001	+42 52 00	+18.5	-0.00	4.54	-2.0	B3s	005	- 8	6 Lac	
31459	28 40.1	+3.41	+0.005	-32 36 11	+18.5	-0.01	4.36	0.2	A0	015	+ 6	17 β PsA	d
31461	28 41.0	+3.15	+0.011	-06 48 39	+18.4	-0.10	6.20	4.5	F8	046	.		
31471	29 13.6	+2.47	+0.014	+50 01 30	+18.5	+0.02	3.85	1.6	A0n	036	- 4	7 α Lac	
31474	29 27.6	+0.53	+0.001	+78 34 04	+18.5	-0.02	5.50	0.7	A1n	011	+ 1v	29 ρ Cep	s
31478	29 38.3	+4.05	+0.005	-62 14 23	+18.5	-0.03	4.92	-2.1	M5	004	- 3	v Tuc	
31488	30 13.5	+2.65	+0.000	+39 31 20	+18.5	-0.00	5.80	1.4	A3	013	+ 5		d
31498	30 45.6	+5.71	+0.017	-79 01 49	+18.5	-0.00	6.08		K0				
31506	31 24.1	+1.05	-0.005	+75 58 07	+18.6	-0.01	5.74	0.5	A0	009	-22v		s
31507	31 28.2	+3.09	+0.002	-01 49 56	+18.5	-0.04	5.92	0.7	gG6	009	- 8	60 Aqr	
31510	31 35.7	+1.74	+0.022	+69 39 16	+18.6	+0.07	6.02	1.0	dF2+A5	010	- 2		d
31513	31 43.9	+2.33	+0.008	+56 21 57	+18.6	+0.05	5.80	0.8	gG9	010	-11v		
31516	31 57.7	+3.28	+0.016	-20 57 54	+18.4	-0.14	5.29	3.2	dF3	039	- 2	59 v Aqr	
31534	32 47.2	+3.08	+0.006	-00 22 33	+18.6	-0.05	4.13	0.7	B8n	021	- 8	62 η Aqr	
31535	32 51.6	+3.30	+0.003	-24 15 01	+18.6	-0.00	6.04	0.6	gK0	008	- 3		
31547	33 34.5	+3.50	+0.004	-40 50 29	+18.6	-0.07	6.11		A2		.	σ ¹ Gru	
31551	33 38.6	+2.67	0.000	+39 22 30	+18.6	-0.00	5.83	-3.5	B1nc	0018	-11v	8 Lac	d
31555	33 46.8	+3.38	-0.004	-31 55 23	+18.6	-0.04	5.75		K0		.		
31556	33 48.4	+2.49	+0.000	+49 48 41	+18.6	+0.01	6.20	-1.4	B3+B8	003	-15v		s
31558	33 51.3	+2.73	-0.000	+35 19 07	+18.6	-0.07	6.20		K0		-16		
31563	34 04.1	+3.50	+0.003	-40 51 00	+18.6	-0.07	5.75		A2		+15	σ ² Gru	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
31567	22 ^b 34 ^m 32 ^o	+1.48	+0.040	+73°23'00"	+18.7	+0.02	5.22	1.2	gF3	016	+ 0	31 Cep	
31581	35 10.0	+3.11	-0.005	-04 29 11	+18.6	-0.11	5.33	1.2	gK1	015	+ 8	63 κ Aqr	
31586	35 18.8	+2.47	-0.006	+51 17 12	+18.6	-0.10	4.83	1.5	A5	022	+12	9 Lac	s
31598	36 02.3	+3.39	+0.001	-33 20 32	+18.7	+0.02	5.60		A0		+ 4v		s
31604	36 08.8	+1.29	+0.012	+75 06 41	+18.7	+0.01	6.06		gM1		- 6		
31610	36 27.3	+2.90	-0.003	+19 15 46	+18.6	-0.10	5.80	0.8	gG7	010	-20	40 Peg	d
31615	36 39.6	+2.36	+0.006	+56 32 08	+18.7	-0.03	5.47	-1.0	gM4	005	+ 8		
31620	36 52.3	+2.13	-0.001	+63 19 27	+18.7	-0.02	5.21	0.4	A1n	011	+11v	30 Cep	s
31626	37 00.8	+2.69	0.000	+38 47 22	+18.7	-0.01	4.91	-4.8	O9	0013	-10	10 Lac	
31632	37 18.3	+2.71	+0.000	+37 19 54	+18.8	0.00	6.14		gG0		- 7		
31634	37 21.5	+2.91	-0.001	+19 25 13	+18.7	-0.01	6.14	1.1	A2s	010	-11	41 Peg	
31639	37 35.2	+3.35	-0.008	-30 55 02	+18.6	-0.21	5.98	1.0	gK2	010	+79		
31641	37 38.5	+3.82	+0.008	-57 41 01	+18.8	-0.00	5.91		K0		.		
31646	37 53.6	+3.32	+0.002	-27 18 18	+18.8	0.00	4.22	-0.2	B8ne	013	+ 3	18 ε PsA	
31650	38 16.0	+2.44	-0.000	+53 35 06	+18.8	-0.01	6.10		gG4		- 6		
31652	38 19.0	+2.63	+0.008	+44 00 53	+18.8	+0.01	4.64	0.0	gK2	012	-10	11 Lac	
31655	38 23.9	+2.97	+0.018	+14 17 09	+18.9	+0.14	5.81	4.2	dG3	036	-10		d
31664	38 58.0	+2.99	+0.005	+10 34 11	+18.8	-0.01	3.61	-0.1	B8n	018	+ 7	42 ζ Peg	
31670	39 14.0	+2.69	-0.001	+39 57 50	+18.8	-0.00	var	var	B2n	002	-14v	12 DD Lac	
31672	39 21.7	+2.68	+0.013	+41 17 12	+18.9	+0.06	6.07	0.8	K0	009	-14		
31674	39 24.3	+2.82	-0.001	+29 02 46	+18.8	-0.03	4.85	1.0	A2s	017	+ 9	43 σ Peg	
31677	39 29.1	+2.96	+0.006	+14 15 17	+18.8	-0.02	6.14	0.0	gK0	006	-26		
31685	39 41.4	+3.58	+0.013	-47 08 48	+18.8	-0.01	2.24	-2.4	M6	012	+ 2	β Gru	
31701	40 36.4	+3.48	+0.002	-41 40 32	+18.8	-0.09	4.89	0.9	G5	016	+29v?	ρ Gru	
31704	40 39.0	+2.73	+0.001	+37 32 26	+18.8	-0.01	6.22	-3.5	B1	0015	-18		
31706	40 39.3	+2.81	+0.001	+29 57 33	+18.8	-0.02	3.10	-1.2	gG2	014	+ 4v	44 η Peg	s
31708	40 53.9	+3.23	-0.002	-19 05 33	+18.8	-0.02	4.88	-0.3	gK3	009	+22	66g ¹ Aqr	
31712	41 04.6	+6.12	-0.022	-81 38 41	+18.9	+0.00	4.34		F1		+24v	β Oct	s
31731	41 49.5	+2.71	+0.000	+39 12 11	+18.9	-0.02	6.12	-0.9	gK5	004	-27		d
31732	41 51.4	+2.68	-0.001	+41 33 23	+18.9	+0.01	5.24	0.4	gG7	011	+13	13 Lac	
31744	42 34.4	+3.68	+0.003	-53 45 49	+18.9	+0.02	4.86	0.6	G8	014	+28v	η Gru	s
31750	42 44.1	+3.54	-0.004	-46 48 38	+18.9	-0.02	5.42		K6		+42v?		
31771	43 56.8	+2.66	+0.013	+44 16 55	+19.0	+0.03	5.84	2.1	dA8n	018	-10		
31776	44 07.2	+2.89	+0.004	+23 18 07	+18.9	-0.01	4.14	0.5	gG6	022	- 4	47 λ Peg	
31778	44 11.6	+3.00	+0.016	+11 54 57	+18.5	-0.50	4.31	3.1	dF3+M1	050	- 5	46 ξ Peg	d
31794	44 52.1	+3.22	-0.008	-19 52 29	+18.8	-0.20	5.43	2.8	gG7	030	+23	68g ² Aqr	
31802	45 03.5	+3.18	+0.002	-14 19 14	+19.0	-0.01	5.70	0.9	A0n	011	+15v	69 τ^1 Aqr	ds
31813	45 32.7	+3.62	+0.011	-51 34 49	+18.9	-0.06	3.69	1.7	A2n	041	0	ε Gru	
31821	45 48.8	+5.60	+0.014	-80 23 19	+19.0	-0.02	5.52		B8		+16v?	ξ Oct	
31822	45 52.4	+3.16	+0.002	-10 49 13	+19.0	+0.01	6.15		dF0		- 6	70 Aqr	
31824	45 53.3	+2.75	-0.005	+37 09 11	+18.9	-0.06	6.00		gG8		-25		
31831	46 42.9	+2.49	-0.002	+54 09 01	+19.0	+0.01	6.08	-0.4	B8ne	005	.		
31834	46 50.6	+2.26	+0.001	+62 40 28	+19.0	-0.05	6.16		K0		-27		
31836	46 56.7	+3.18	-0.001	-13 51 25	+19.0	-0.03	4.21	-0.1	gM0	014	+ 1	71 τ^2 Aqr	
31851	47 35.2	+2.90	+0.011	+24 20 14	+19.0	-0.04	3.67	1.1	gG6	031	+14	48 μ Peg	
31854	47 42.1	+2.48	+0.010	+55 38 14	+19.1	+0.04	5.56	0.6	gK0	010	-36		
31855	47 44.2	-0.24	+0.012	+82 53 19	+19.1	+0.05	4.97	0.0	gK3	010	-31		d
31857	47 53.6	+2.14	-0.011	+65 56 14	+18.9	-0.12	3.68	1.3	gK1	035	-12	32 ι Cep	
31861	48 06.1	+2.71	+0.001	+41 41 18	+19.1	0.00	5.84	-1.1	B3	004	-14	14 Lac	
31863	48 11.8	+3.41	+0.002	-39 25 20	+19.1	-0.01	5.39		M0		+27		

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
31868	22 ^h 48 ^m 35 ^s .7	+3.31	-0.001	-29°48'06"	+19.1	-0.01	6.03		K0		.	21 PsA	
31872	48 56.3	+3.89	+0.002	-63 27 14	+19.0	-0.04	6.08		K0		.		d
31884	49 25.1	+2.34	+0.015	+61 25 50	+19.1	+0.05	6.09	0.6	G3	008	+ 2		d
31895	49 45.0	+3.33	-0.003	-33 08 28	+19.1	-0.02	4.52	0.8	A0	018	+16v	22 γ PsA	d
31896	49 46.4	+2.71	+0.010	+43 02 47	+19.1	+0.03	5.17	1.2	gM0	016	-17	15 Lac	
31899	49 51.9	+3.04	+0.035	+09 34 09	+19.2	+0.05	5.30	2.9	dF5	041	+12	49 σ Peg	
31903	50 00.4	+3.13	+0.000	-07 50 46	+19.2	+0.04	3.84	-0.4	gM2	014	- 9	73 λ Aqr	
31908	50 34.4	+0.95	-0.002	+16 34 31	+19.1	-0.03	5.72	0.2	gK1	008	-13v		s
31918	50 50.8	+3.16	+0.001	-11 52 58	+19.1	+0.00	5.89	0.4	B9	008	.	74 Aqr	
31920	50 53.9	+2.74	-0.000	+39 54 04	+19.1	-0.01	6.24	-0.3	B8	005	+ 6		
31926	51 12.5	+4.17	-0.008	-70 20 29	+19.2	+0.07	6.14		G0		.	ρ Ind	
31930	51 25.5	+2.68	-0.002	+44 28 58	+19.1	-0.01	5.62	2.1	A4	020	+12v		ds
31940	51 49.1	+2.75	+0.009	+40 06 36	+19.2	+0.04	5.94	2.3	gK2	019	- 6		
31943	51 59.9	+3.18	-0.003	-16 05 14	+19.1	-0.02	3.51	1.6	A2n	042	+18	76 δ Aqr	
31944	52 06.8	+3.17	-0.016	-16 32 15	+19.1	-0.09	5.66	1.7	gK4	016	-36	77 Aqr	
31955	52 23.7	-1.46	+0.005	+85 06 22	+19.3	+0.11	6.18		K5		-30		
31956	52 26.0	+3.07	+0.001	+00 47 52	+19.2	+0.00	6.05	2.1	A3	016	+13	1 Psc	
31960	52 35.4	+3.11	+0.002	-05 15 17	+19.2	-0.00	5.87	0.6	gG7	009	- 9		d
31963	52 42.5	+3.02	+0.005	+08 32 56	+19.2	+0.02	4.95	-0.3	A0	009	-10	50 ρ Peg	
31964	52 42.8	+2.79	+0.007	+36 48 35	+19.2	+0.01	6.00	3.0	F3	025	-28		
31972	53 06.0	+3.31	-0.003	-31 54 01	+19.2	-0.00	6.13		K0		.		
31974	53 11.0	+3.32	+0.001	-32 48 26	+19.2	+0.03	4.33	0.6	G3	018	-12	23 δ PsA	d
31976	53 24.4	+2.80	+0.002	+36 05 04	+19.2	+0.00	5.63	-0.1	B9	007	+ 1		d
31980	53 53.4	+3.50	-0.004	-48 14 12	+19.2	+0.00	5.90		A3		.	τ^3 Gru	
31987	54 06.3	+2.74	-0.001	+41 20 12	+19.2	0.00	5.54	-1.4	B2s	004	-13v	16 EN Lac	s v
31989	54 14.1	+2.63	-0.000	+49 27 58	+19.2	-0.00	5.10	-5.1	cK3	0014	-10		
31998	54 51.6	+2.65	+0.001	+48 25 00	+19.2	-0.00	5.20	-1.3	B3ne	005	-11	EW Lac	v
31999	54 53.4	-0.47	+0.064	+84 04 44	+19.3	+0.03	4.96	0.2	gK5	011	+ 3		
32000	54 53.5	+3.31	+0.025	-29 53 16	+19.1	-0.16	1.29	2.0	A2s	141	+ 6	24 α PsA	
32003	55 00.3	+2.95	+0.014	+20 30 01	+19.3	+0.06	5.59	4.8	dG0	069	-31	51 Peg	
32010	55 21.8	+2.77	-0.001	+39 02 28	+19.3	+0.00	6.07	-1.5	B2	003	-16		
32015	55 40.9	+3.09	-0.001	-02 39 47	+19.3	-0.00	6.21		G5		.		
32034	56 41.6	+3.00	+0.002	+11 27 40	+19.2	-0.04	5.79	0.8	F0	010	+20	52 Peg	d
32036	56 51.9	+3.28	-0.001	-29 43 51	+19.3	+0.01	5.54		A5n		0		
32037	56 53.6	+3.07	+0.005	+00 41 44	+19.2	-0.07	5.59	0.8	gK1	011	-13	2 Psc	d
32049	57 23.5	+3.25	+0.002	-25 25 54	+19.2	-0.08	5.85	0.4	gK0	008	-35		
32061	57 56.3	+3.54	-0.007	-53 01 22	+19.3	-0.01	4.18	0.9	G4	022	- 1v	ζ Gru	s
32063	57 58.2	+2.53	-0.001	+56 40 37	+19.3	+0.01	5.48	-3.0	cG3p	002	-58v?		
32067	58 10.0	+3.06	+0.000	+02 44 39	+19.2	-0.08	5.96		gK4		+19		
32068	58 11.7	+3.52	+0.008	-51 13 08	+19.3	-0.00	5.63		K2		+ 8		
32075	58 35.8	+3.27	+0.005	-29 07 21	+19.3	-0.01	5.72	0.2	K0	008	.		
32082	58 56.4	+3.10	+0.001	-04 58 50	+19.3	+0.01	6.17		K0		.		
32095	59 36.9	+2.76	+0.002	+42 03 25	+19.3	-0.00	var	var	B6n+A2	010	-14v	1 σ And	
32105	23 00 04.2	+3.20	-0.004	-21 08 18	+19.2	-0.12	6.19		G5		.		
32110	00 17.9	+2.76	+0.005	+42 29 19	+19.4	-0.00	5.08	2.2	A2n	026	+ 2v	2 And	ds
32122	00 44.1	+3.32	+0.006	-35 01 13	+19.5	+0.08	5.13	3.5	F1s	047	-14v	π PsA	s
32129	01 11.0	+3.38	+0.000	-41 44 57	+19.5	+0.07	5.76	0.0	K0	007	.		
32134	01 19.9	+3.05	+0.000	+03 33 02	+19.4	-0.10	4.58	-0.4	B5ep	010	+ 3	4 β Psc	
32135	01 20.8	+2.91	+0.014	+27 48 40	+19.5	+0.14	2.61	-1.0	gM2v	019	+ 9	53 β Peg	v
32141	01 35.4	+3.96	+0.007	-69 05 28	+19.5	+0.07	5.64		F0		+ 4v		s

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
32142	23 ^h 01 ^m 38 ^s 1	+2 ^h 29	+0 ^m 004	+66°56'22"	+19 ^h 4	+0 ^m 02	5.50	-0.3	gK3	007	-7		
32143	01 42.8	+3.55	+0.006	-54 14 01	+19.3	-0.12	5.26	-0.2	M0	008	+18v	κ Gru	
32144	01 55.9	+2.69	+0.017	+49 46 48	+19.6	+0.17	4.91	0.3	gG8	012	-35	3 And	
32149	02 16.1	+2.99	+0.004	+14 56 09	+19.4	-0.04	2.57	0.1	B9	032	-4v	54 α Peg	
32153	02 33.4	+3.13	+0.008	-07 57 50	+19.4	+0.02	5.56	2.4	dF0n	023	-13	83 h Aqr	ds
32178	03 48.9	+2.98	+0.016	+18 14 47	+19.5	+0.06	6.14	2.8	dF4	022	-12		s
32182	03 59.9	+3.22	+0.005	-24 00 49	+19.4	-0.00	4.77	1.3	gG9	020	+15	86 c ⁴ Aqr	d
32184	04 04.1	+3.38	-0.004	-43 47 27	+19.4	-0.02	4.35	0.8	F4	020	+10	θ Gru	d
32186	04 06.9	+3.34	+0.003	-39 09 47	+19.5	+0.01	5.59		A0n		+16	ν Gru	d
32192	04 21.9	+3.46	-0.005	-50 57 24	+19.4	-0.02	6.12		F5		.		d
32194	04 23.9	+4.88	+0.035	-79 45 04	+19.4	-0.03	6.20		A2		.		
32196	04 29.0	+3.02	+0.000	+09 08 20	+19.4	-0.01	4.69	0.4	gM2	014	-5	55 Peg	
32197	04 29.5	+2.54	+0.001	+59 08 57	+19.5	+0.00	4.93	-4.4	cB1	002	-8	1 Cas	
32201	04 40.3	+2.92	-0.001	+25 11 53	+19.4	-0.03	4.98	-2.0	cK0	004	-27	56 Peg	s
32209	05 00.5	+2.96	+0.008	+20 51 51	+19.4	-0.05	5.93	3.0	A5	026	-12		
32211	05 03.9	+2.87	-0.002	+32 33 18	+19.5	+0.01	6.20	1.0	A3	009	-1		d
32213	05 09.0	+4.17	+0.006	-73 51 26	+19.5	-0.01	6.09		K0		.		
32216	05 21.7	+2.74	-0.002	+46 07 00	+19.4	-0.03	5.56	-0.2	gK4	007	-6	4 And	
32220	05 28.7	+2.73	+0.015	+49 01 23	+19.6	+0.13	5.83	2.6	dF3	023	-2	5 And	
32226	05 38.9	+3.24	-0.004	-29 05 39	+19.4	-0.03	5.85	1.6	K0	014	.		
32228	05 44.7	+2.45	+0.000	+63 21 45	+19.5	0.00	6.19	-1.4	B3	003	-36		d
32233	06 07.2	+3.07	+0.009	+01 51 19	+19.6	+0.11	5.56	2.1	sgG4	020	-18	5 APsc	
32237	06 18.0	+1.91	+0.002	+75 07 01	+19.5	-0.02	4.56	-0.2	gG1	011	-19v	33 π Cep	ds
32246	06 47.0	+3.20	+0.004	-21 26 39	+19.5	+0.04	3.80	-0.5	gK1	014	+21	88 c ⁴ Aqr	
32252	06 59.9	+3.03	-0.000	+08 24 21	+19.5	+0.01	5.41	-0.7	gM4	006	+14v	57 Peg	d
32256	07 02.8	+3.24	+0.002	-28 21 36	+19.5	+0.01	6.06		K0		.		
32260	07 11.2	+3.33	-0.030	-43 07 55	+19.5	-0.01	5.78	3.6	F8	037	.		d
32261	07 11.9	+3.16	+0.005	-14 46 55	+19.5	-0.02	6.23		A0		.		
32262	07 14.8	+3.20	+0.002	-22 43 44	+19.5	-0.01	4.94	1.0	sgG2 A2	016	-5	89 c ⁴ Aqr	d
32264	07 23.1	+3.34	+0.003	-40 51 45	+19.5	-0.04	6.04		Mb		.		
32267	07 30.3	+3.02	-0.001	+09 33 02	+19.5	-0.01	5.34	0.1	B8n	009	+9	58 Peg	
32270	07 32.1	+3.39	+0.012	-45 31 05	+19.5	-0.03	4.10	0.9	G5	023	-4v	ι Gru	s
32272	07 35.3	+2.57	-0.001	+59 03 41	+19.5	+0.01	5.63	1.9	dA9s	018	-12	2 Cas	
32288	08 08.2	+2.77	-0.018	+43 16 31	+19.3	-0.19	5.85	3.2	dF3	029	-43	6 And	
32291	08 13.3	+2.98	+0.001	+17 19 23	+19.5	-0.03	5.94	0.2	gK4	007	+2		
32302	09 12.6	+3.03	-0.001	+08 26 53	+19.5	-0.01	5.15	1.9	B9n	022	+10	59 Peg	
32316	10 15.1	+2.75	+0.009	+49 07 58	+19.7	+0.10	4.62	3.0	dF2	047	+12v	7 And	s
32329	10 51.9	+2.89	+0.253	+56 53 31	+19.9	+0.30	5.65	6.5	dK5	150	-18		
32331	10 55.4	+3.02	-0.001	+10 47 34	+19.6	+0.01	5.94		gG5		+16		d
32333	11 02.5	+3.70	+0.069	-62 58 00	+19.2	-0.43	6.24	3.5	G0	029	.		
32346	11 44.0	+3.11	+0.002	-06 19 08	+19.4	-0.19	4.40	0.1	gM2	014	-0	90 ϕ Aqr	
32350	11 56.8	+2.74	+0.004	+50 20 43	+19.6	-0.01	6.25	1.0	A0	009	-14		
32357	12 12.6	+3.33	+0.010	-41 22 36	+19.5	-0.12	5.76	0.5	K0	009	+26		
32366	12 50.0	+2.14	+0.012	+73 57 30	+19.6	+0.01	5.74	1.1	A0	012	-3		
32369	12 59.7	+3.09	-0.001	-03 46 09	+19.6	+0.00	5.55	0.9	A2	012	+11v		s
32374	13 16.3	+3.14	+0.025	-09 21 38	+19.6	-0.01	4.46	1.8	sgK0	028	-26	91 ψ ¹ Aqr	d
32388	13 41.4	+2.31	+0.003	+70 36 55	+19.6	+0.01	5.62	2.1	A3	020	+12v		s
32392	13 53.1	+3.34	-0.001	-44 45 44	+19.6	-0.01	5.87	0.9	K0	010	.		d
32393	13 58.2	+3.60	+0.024	-62 16 27	+19.6	-0.03	5.69		G0		-9		
32401	14 15.4	+3.11	-0.002	-07 59 58	+19.6	-0.01	var	var	gM5	009	-15	92 χ Aqr	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
32409	23 ^h 14 ^m 25 ^s .1	+2 ^s 74	+0 ^s 012	+52°56'37"	+19 ["] 4	-0 ["] 24	5.65	3.8	dF7	043	-25		
32413	14 31.4	+3.50	-0.004	-58 30 37	+19.7	+0.08	4.10	2.0	F0	038	+18	γ Tuc	
32415	14 34.3	+3.11	+0.050	+03 00 32	+19.7	+0.02	3.85	0.9	gG5	026	-14	6 γ Psc	
32426	15 15.5	+3.71	+0.002	-67 44 41	+19.7	+0.02	6.04		K0				
32429	15 18.3	+3.12	+0.001	-09 27 21	+19.7	-0.01	4.56	-0.9	B5n	008	-6v?	93 ψ ² Aqr	
32431	15 24.7	+3.31	+0.012	-41 05 47	+19.5	-0.13	5.55		F0		+14	ϕ Gru	
32432	15 25.1	+2.78	+0.003	+48 44 30	+19.7	+0.01	4.99	0.4	gM2	012	-8	8 And	d
32447	16 00.6	+2.85	-0.001	+41 30 01	+19.7	-0.01	var	var	A7s+Ap	014	-5v	9 AN And	sE
32450	16 07.7	+3.24	+0.001	-32 48 17	+19.6	-0.07	4.51	1.1	sgG8	021	+18	γ Scl	
32459	16 21.6	+3.12	+0.003	-09 53 04	+19.7	+0.00	5.16	0.6	A0n	012	-10	95 ψ ² Aqr	d
32462	16 28.9	+3.15	+0.020	-13 43 52	+19.6	-0.10	5.27	3.0	dG5	036	+10v	94 Aqr	ds
32463	16 33.6	+2.47	+0.010	+67 50 16	+19.7	+0.02	4.90	1.2	gG7	018	-18	34 o Cep	d
32467	16 46.3	+3.16	-0.001	-18 20 57	+19.7	+0.02	6.08		gK3		+5		
32468	16 48.4	+3.11	+0.013	-05 23 52	+19.7	-0.02	5.70	3.0	dF0	029	-9v	96 Aqr	ds
32473	17 01.9	+2.90	+0.001	+34 31 10	+19.7	-0.00	6.14	-0.4	B9	005	-1		
32476	17 09.5	+2.80	+0.002	+48 21 03	+19.7	+0.06	5.42	0.6	gK0	011	+11	11 And	
32485	17 29.2	+2.86	+0.003	+41 48 15	+19.7	+0.01	5.98	0.2	gM0	007	+3	10 And	
32491	17 47.6	+3.06	+0.005	+05 06 29	+19.6	-0.06	5.18	0.7	gK0	013	+38	7 b Psc	
32498	18 01.8	+3.37	+0.002	-50 34 47	+19.6	-0.08	6.20		F5				d
32503	18 09.5	+2.97	+0.002	+23 27 59	+19.7	-0.01	4.65	2.0	A5n	029	+16	62 τ Peg	
32506	18 21.7	+2.84	-0.002	+43 50 34	+19.7	-0.03	6.14	1.3	A3	011	-2		d
32507	18 22.3	+2.94	+0.006	+30 08 40	+19.6	-0.07	5.78	0.3	gM0	008	-19v?	63 Peg	
32510	18 28.1	+2.90	+0.010	+37 54 32	+19.6	-0.07	5.75	3.2	dF5	031	-9	12 And	
32511	18 35.8	+3.20	-0.002	-27 15 40	+19.7	-0.02	5.81	1.5	G5	014			
32522	19 28.1	+2.93	+0.000	+31 32 17	+19.7	-0.01	5.37	-1.1	B8n	005	+2	64 Peg	d
32531	20 02.0	+3.14	+0.007	-15 18 50	+19.8	+0.02	5.30	1.7	A3n	019	-12	97 Aqr	d
32534	20 02.9	+3.49	+0.012	-60 19 49	+19.7	-0.01	6.08		Ma				
32535	20 10.9	+2.99	+0.001	+20 23 16	+19.7	-0.02	6.22	0.4	A2s	007	-14v	65 Peg	s
32538	20 18.1	+2.68	+0.000	+59 51 33	+19.7	-0.00	5.93	-0.6	gK5	005	-12		
32540	20 20.8	+3.15	-0.009	-20 22 26	+19.7	-0.09	4.20	1.2	gK0	025	-6	98 b ¹ Aqr	
32543	20 33.1	+3.03	+0.002	+12 02 22	+19.7	-0.01	5.28	0.0	gK4	009	-4	66 Peg	d
32548	21 01.2	+3.29	+0.001	-43 23 58	+19.8	+0.01	6.06		K0				
32558	21 21.9	+8.83	+0.028	-87 45 27	+19.8	+0.01	5.56		K0			τ Oct	
32559	21 25.4	+3.36	0.000	-52 09 56	+19.7	-0.04	5.70		K5				
32577	22 23.6	+2.94	+0.001	+32 06 36	+19.8	-0.00	5.46	0.5	A0	010	+18	67 Peg	
32579	22 29.0	+3.42	+0.010	-57 07 26	+19.8	-0.02	5.61	0.6	K0	010	-19		
32582	22 36.3	+2.67	+0.001	+62 00 29	+19.8	-0.01	5.20	-0.6	gM2	007	-37	4 Cas	
32585	22 52.8	+2.99	+0.014	+23 07 43	+19.8	+0.04	4.57	0.8	dF6	024	-11	68 v Peg	
32594	23 25.3	+3.15	-0.004	-20 54 59	+19.7	-0.06	4.52	-0.3	gK5	011	+16	99 b ² Aqr	
32603	23 49.2	+3.35	+0.003	-52 59 55	+19.9	+0.12	5.54		F0		+18v	o Gru	s
32620	24 22.1	+3.08	+0.006	+00 58 54	+19.7	-0.09	4.94	2.2	A3sp	028	-3	8 κ Psc	
32624	24 24.5	+3.42	+0.005	-58 45 09	+19.9	+0.08	5.62	0.6	K0	010	-11		
32629	24 42.4	+2.89	+0.008	+42 38 11	+19.8	+0.02	5.65	-0.1	B9	007	-9v	13 And	s
32639	25 09.0	+2.54	+0.023	+70 05 04	+19.8	-0.00	5.63	1.9	A2	018	-3v		s
32640	25 11.0	+2.98	+0.002	+24 53 32	+19.8	-0.04	5.87	0.4	A0	008	-16	69 Peg	
32647	25 25.8	+3.04	-0.008	+06 06 15	+19.8	-0.04	4.45	0.3	gK0	015	+6	10 θ Psc	
32657	26 08.2	+3.47	+0.006	-63 23 10	+19.8	-0.01	5.74		A0p		+15		
32667	26 37.4	+3.03	+0.004	+12 29 04	+19.9	+0.03	4.67	-0.3	gG9	010	-15	70 q Peg	
32680	27 34.2	-0.46	+0.102	+87 01 54	+19.9	+0.02	5.62		dA8		-11		
32683	27 42.8	+2.77	+0.002	+58 16 23	+19.9	+0.01	var	var	B3	006	-17v	AR Cas	dsE

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
32692	23 ^b 28 ^m 12 ^s 8	+2.93	+0.003	+38°23'10"	+19.9	+0.01	6.21		G8		-9		
32702	28 44.2	+3.26	+0.003	-45 07 10	+19.8	-0.02	5.93	1.7	K0	014	.		
32703	28 49.5	+2.95	+0.024	+38 57 41	+19.8	-0.08	5.34	0.7	gG8	012	-59	14 And	
32714	29 04.8	+3.14	-0.000	-21 38 44	+19.9	+0.00	6.24	1.2	gA8n	010	-8v	100 Aqr	s
32719	29 14.0	+2.98	-0.002	+28 07 40	+19.9	-0.01	6.23	0.7	A0	008	-6v		
32742	30 08.4	+3.87	+0.005	-77 39 42	+19.9	+0.01	5.78		K0		.		
32744	30 17.7	+3.22	+0.007	-38 05 43	+19.9	+0.02	4.46	0.0	B9	013	+2	β Scl	
32750	30 39.7	+3.14	-0.001	-21 11 28	+19.9	+0.02	4.76		A0n		+15	101 b ^s Aqr	d
32759	30 57.6	+3.00	+0.000	+22 13 21	+19.9	-0.02	5.51	-1.0	gM5	005	+3	71 Peg	
32772	31 28.0	+2.98	+0.004	+31 02 57	+19.9	-0.01	5.21	-0.6	gK4	007	-24	72 Peg	d
32774	31 34.7	+3.08	+0.007	-01 31 26	+19.9	-0.01	5.98		A2		-3	14 Psc	
32779	32 09.5	+2.97	-0.000	+33 13 14	+19.9	+0.02	5.74	0.7	gK0	010	-3	73 Peg	
32780	32 10.4	+2.94	-0.002	+39 57 38	+19.9	-0.04	5.50	0.9	A1n	012	+13	15 And	
32781	32 13.3	+3.12	+0.003	-15 31 17	+19.8	-0.08	6.15		K0		.		
32787	32 23.5	+3.23	+0.004	-42 53 31	+19.9	-0.00	4.80	-5.2	A2p	001	+19v	ι Phe	d
32793	32 48.0	+2.61	+0.001	+71 21 56	+19.9	+0.00	6.13		cK1		-3		
32818	33 50.1	+3.06	-0.007	+01 49 28	+20.0	+0.06	5.65	3.0	dF0	030	+39	16 Psc	
32830	35 04.0	+3.11	+0.002	-13 20 15	+20.0	+0.03	5.74		gG6		-13		d
32831	35 04.9	+2.93	+0.001	+44 09 09	+19.9	-0.01	5.86	-0.2	B9n	006	-11		d
32832	35 06.5	+2.94	+0.015	+46 11 14	+19.5	-0.42	4.00	3.0	sgG8	039	+7v	16 λ And	sv
32833	35 07.6	+3.04	+0.009	+16 32 55	+19.9	0.00	6.18	1.4	A0	011	-27v	74 Peg	s
32836	35 09.8	+3.23	+0.006	-45 46 09	+19.9	-0.01	4.86	0.1	A2	011	+10		
32840	35 19.8	+3.73	+0.026	-77 08 48	+19.9	-0.03	5.99		K0		.		
32842	35 25.1	+3.03	+0.003	+18 07 24	+19.9	+0.02	5.42	1.0	A0	013	-16v	75 Peg	s
32850	35 40.6	+2.94	+0.002	+42 59 28	+19.9	0.00	4.28	-0.3	B8	012	-0v	17 ι And	
32864	36 42.4	+2.91	-0.002	+50 11 41	+19.9	-0.00	5.32	-0.2	B9n	008	+9v	18 And	s
32869	37 00.6	+2.58	+0.003	+75 00 56	+20.0	+0.01	6.04	1.0	A2n	010	+3		s
32872	37 09.5	+2.62	-0.002	+73 43 32	+20.0	+0.01	6.08		gG5		+9v		s
32873	37 11.5	+3.11	+0.004	-14 29 54	+19.9	-0.03	5.16	1.8	A5	021	-2v	102 ω^s Aqr	s
32875	37 16.6	+2.46	-0.020	+77 21 12	+20.1	+0.15	3.42	2.5	sgK1	065	-42	35 γ Cep	
32878	37 22.1	+3.06	+0.006	+09 24 01	+19.9	-0.01	6.07	1.6	A2	013	0		
32879	37 22.6	+3.09	+0.025	+05 21 18	+19.5	-0.44	4.28	3.4	dF5	068	+5	17 ι Psc	
32882	37 33.8	+2.97	-0.002	+37 22 35	+19.9	-0.08	6.23	2.9	dF2	022	-16		d
32886	37 56.2	+2.96	+0.007	+44 03 25	+19.9	-0.02	4.33	0.3	A0n	016	-9	19 κ And	
32888	38 00.9	+3.15	-0.008	-32 20 59	+19.9	-0.06	5.33	1.1	K1	014	+14	μ Scl	
32898	38 33.6	+3.10	+0.004	-11 57 29	+20.0	+0.01	6.13	0.6	gG9	008	-11		
32908	38 59.0	+3.11	-0.003	-18 18 13	+19.9	-0.07	5.60	-0.2	gK5	007	+25	103 A ^s Aqr	
32911	39 10.1	+3.11	+0.001	-18 05 38	+20.0	+0.01	4.95	-2.7	cG1	003	+3	104 A ^s Aqr	
32914	39 23.7	+3.06	-0.002	+06 58 25	+19.9	-0.04	5.85	0.8	A0	010	+1		
32917	39 29.6	+3.06	-0.009	+01 30 17	+19.8	-0.15	4.61	1.5	A5	024	+12	18 λ Psc	
32925	39 52.5	+3.11	+0.001	-15 43 30	+20.0	-0.00	5.44	0.6	gK5	011	+7v		s
32931	40 07.8	+3.11	+0.006	-14 49 18	+19.9	-0.06	4.62	1.6	A0	025	+3v	105 ω^s Aqr	ds
32945	40 49.5	+3.05	+0.000	+10 03 14	+20.0	+0.02	5.39	0.4	gM2	010	-34	77 Peg	
32948	41 14.2	+3.11	+0.002	-15 33 42	+20.0	-0.02	var	var	gM7e	0025	-22	R Aqr	
32953	41 27.6	+3.30	+0.002	-64 40 58	+20.0	+0.03	5.66	-0.1	K5	007	.		
32954	41 28.2	+3.02	+0.005	+29 05 04	+19.9	-0.04	4.98	0.9	gG8	015	-7v	78 Peg	d
32957	41 35.1	+3.43	+0.049	-70 46 08	+20.0	+0.06	6.04	1.2	G5	011	.		
32958	41 36.5	+3.11	+0.002	-18 33 16	+20.0	+0.01	5.26	-0.2	B8n	008	+14	106 i ^s Aqr	
32960	41 41.0	+3.64	+0.017	-79 04 10	+20.0	-0.00	5.68	0.9	K0	011	.		
32985	43 25.2	+3.12	+0.009	-18 57 22	+20.0	+0.03	5.45	1.5	A5	016	-2	107 i ^s Aqr	d

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
32988	23 ^h 43 ^m 32 ^s .9	+2 ^h 97	+0 ^m 000	+46°08'33"	+20 ^s 0	-0 ^s 00	5.09	-2.5	cG5p	003	-25	20 ψ And	
32995	43 50.1	+3.07	-0.003	+03 12 34	+20.0	-0.02	var	var	N0		-11	19 TX Psc	
33004	44 12.7	+2.86	+0.001	+66 30 16	+20.0	+0.00	5.94	-1.7	B2s	003	-14		
33009	44 34.6	+2.93	+0.000	+57 10 25	+20.0	0.00	5.78	-0.3	gK3	006	-6		
33010	44 36.1	+2.94	+0.008	+58 22 24	+20.1	+0.06	5.09	0.7	gG9	013	-21	5 τ Cas	
33012	44 37.2	+3.18	+0.000	-50 30 14	+20.0	-0.02	5.37		B5n		+11	σ Phe	
33014	44 41.4	+3.09	-0.004	-12 11 15	+19.9	-0.08	5.90	0.4	gK1	008	+11		
33021	45 03.6	+2.98	+0.001	+46 33 17	+20.0	-0.00	5.84	-1.8	B3	003	-24v		d
33029	45 22.2	+3.08	+0.006	-03 02 23	+20.0	+0.01	5.60	0.6	gG8	010	-7	20 Psc	
33031	45 30.3	+2.87	+0.002	+67 31 44	+20.0	+0.00	5.02	0.9	A0	015	+10v		
33050	46 19.4	+3.12	+0.008	-28 24 25	+19.9	-0.10	4.64	1.0	A0n	020	+14	δ Scl	d
33051	46 23.3	+2.92	-0.001	+61 56 12	+20.0	+0.00	5.61	-7.1	cA3ep	0006	-46v	6 Cas	d
33059	46 53.8	+3.07	-0.000	+00 47 54	+20.0	-0.02	5.77	1.5	A3	014	+5	21 Psc	s
33062	47 07.2	+3.04	+0.005	+28 33 50	+20.0	+0.03	5.91	1.6	A3	014	-4	79 Peg	
33063	47 09.6	+3.02	-0.001	+36 08 52	+20.0	-0.05	5.91	1.8	sgG0	015	+1		
33074	47 39.9	+3.10	+0.009	-10 15 12	+20.1	+0.08	6.08		sgK0		-18		
33081	47 58.6	+3.09	+0.002	-14 40 46	+20.0	-0.03	5.92	0.4	gK5	008	-58		
33092	48 46.4	+3.10	+0.001	-19 11 14	+20.0	+0.00	5.32	1.0	A0p	014	+13	108 i ^a Aqr	
33094	48 48.0	+3.06	-0.002	+09 02 10	+20.0	-0.06	6.11	-0.4	gM3	005	-9	80 Peg	
33107	49 14.5	+3.52	-0.017	-82 17 49	+20.0	-0.01	5.10	1.0	G7	015	+14	γ^1 Oct	
33112	49 24.1	+3.07	+0.001	+02 39 09	+20.0	-0.01	5.85	-0.6	gK5	005	+0	22 Psc	
33118	49 55.9	+3.08	-0.007	-14 31 45	+20.0	+0.01	6.00	0.5	gK3	008	+2		
33119	49 56.4	+3.05	-0.001	+18 50 33	+20.0	-0.04	5.23	0.4	gM3	011	-8	81 ϕ Peg	
33122	50 03.9	+3.06	-0.002	+10 40 09	+20.0	+0.00	5.39	1.3	A2n	015	-3	82 Peg	
33128	50 16.1	+3.09	+0.004	-09 16 28	+20.0	-0.02	5.96	0.5	gK0	008	-18	h Aqr	
33130	50 21.4	+3.08	+0.005	-03 25 59	+20.0	-0.04	6.09	0.6	gG9	008	-6	24 Psc	
33136	50 31.0	+3.07	+0.001	+01 48 45	+20.0	-0.01	6.24	0.5	A2s	007	+5	25 Psc	
33140	50 45.8	+3.10	+0.003	-24 30 27	+20.0	-0.01	6.24		A3		.		
33160	51 52.4	+3.00	-0.001	+57 13 16	+20.0	+0.00	var	var	cG0v	004	-43	7 ρ Cas	
33162	52 01.6	+3.14	+0.032	-40 34 44	+20.1	+0.03	6.01	3.2	F8	027	.		
33165	52 13.0	+3.07	-0.003	-00 10 07	+20.0	-0.01	5.98	-0.5	gM5	005	-2		
33172	52 34.1	+3.07	+0.001	+06 47 35	+20.0	-0.02	6.12	0.0	A1s	006	+17	26 Psc	
33175	52 41.6	+3.10	+0.001	-32 11 59	+20.0	+0.01	6.05		B5		-12v		s
33183	53 01.6	+3.03	-0.001	+47 04 39	+20.0	-0.00	6.13	-1.5	gK0	003	-17		
33184	53 02.6	+3.01	-0.001	+57 08 02	+20.0	0.00	6.05	-5.5	B0n	001	-24v	V 373 Cas	sv
33205	54 04.0	+2.82	+0.026	+82 54 46	+20.0	+0.01	6.6		A0		.	V Cep	
33211	54 31.0	+3.04	+0.000	+42 22 48	+20.0	-0.00	6.04	2.9	dF3	024	-7		
33214	54 36.6	+3.03	-0.002	+55 25 39	+20.0	-0.01	5.69	2.0	F3	018	+12v		s
33215	54 43.1	+3.14	+0.010	-63 14 07	+20.1	+0.02	6.04		A2		.		
33219	54 51.7	+3.29	-0.012	-82 26 53	+20.0	-0.02	5.68	-0.1	G8	007	+27	γ^3 Oct	
33223	54 58.4	+3.15	+0.014	-64 34 33	+20.0	-0.07	5.16	2.7	A2n	032	+32	η Tuc	
33230	55 12.4	+3.06	-0.003	+24 51 49	+20.0	-0.03	4.75	0.0	gM3	011	-4	84 ψ Peg	
33244	55 51.7	+3.05	+0.008	+51 06 36	+20.0	+0.01	var		gM7ev		+21	RCas	d
33248	56 06.7	+3.07	-0.004	-03 50 00	+20.0	-0.07	5.07	0.8	gG6	014	-0	27 Psc	d
33256	56 20.8	+3.11	+0.006	-53 01 31	+20.1	+0.06	5.14	0.7	K1	013	-14	π Phe	
33257	56 27.7	+3.04	+0.001	+55 28 36	+20.0	-0.00	4.93	-3.5	B1n	0025	-13	8 σ Cas	d
33262	56 44.5	+3.08	+0.010	+06 35 11	+19.9	-0.11	4.03	0.8	dF3	023	+2v	28 ω Psc	s
33266	56 53.8	+3.08	-0.001	-29 45 49	+20.0	+0.00	5.70		K5		.		
33268	56 56.0	+3.06	-0.005	+33 26 50	+20.0	-0.08	5.83	3.4	dG0	032	-8		d
33280	57 19.9	+3.12	+0.008	-65 51 19	+20.0	-0.03	4.71	0.4	B9n	014	+11	ϵ Tuc	

GC	AR 1950.0	AnV	MP	Decl 1950.0	AnV	MP	m	M	Sp	π 0"	RV	Con	N
33292	23 ^h 57 ^m 44 ^s .8	+3.09	+0.007	-44°34'03"	+19.9	-0.11	6.23		K0		.		d
33298	58 10.0	+3.06	+0.002	+44 58 30	+20.0	+0.01	6.25	0.8	A0p	008	- 3v?	CGAnd	v
33305	58 30.7	+3.08	-0.003	-49 05 18	+20.0	-0.01	5.66	-0.1	K0	007	.	τ Phe	
33312	58 46.2	+3.08	-0.000	-50 36 58	+20.1	+0.01	5.38	-1.6	M1	004	+ 2		
33320	59 03.0	+3.06	-0.001	+60 56 41	+20.1	+0.01	5.70	2.2	A5s	020	-23		
33321	59 03.3	+3.08	-0.017	-77 20 30	+19.9	-0.17	4.73	0.3	K5	013	+24	ϕ Oct	
33325	59 09.9	+3.07	0.000	+42 05 20	+20.0	-0.00	6.13	-0.4	B9s	005	-11		
33327	59 15.6	+3.07	+0.001	-03 18 21	+20.0	-0.00	5.15	-0.3	B8	008	+23	29 Psc	
33330	59 23.7	+3.08	+0.003	-06 17 31	+20.0	-0.03	4.66	0.4	sgM3	014	-12	30 Psc	
33334	59 33.2	+3.13	+0.062	+26 49 03	+19.1	-0.99	5.85	5.4	dG1	090	-36	85 Peg	d
33337	59 46.3	+3.07	+0.001	-29 59 57	+20.0	+0.00	4.99	-2.5	B7	0033	0v	ζ Scl	d
33341	59 56.2	+3.07	-0.007	+08 12 28	+20.0	-0.05	5.78	2.6	dF0s	023	+10	32 c Psc	

INDEX OF NAMED STARS

I

Constellation in alphabetic order
Number of the star according to Flamsteed
Greek letter according to Bayer
Latin letters according to various authors
Designation of variable stars (letters or numbers)
Approximate right ascension of the star



Andromeda			Andromeda			Apus			Aquarius			Aquarius		
1	o	22 ^h 59 ^m 6	44		01 ^h 07 ^m 5	γ	16 ^h 25 ^m 7	41		22 ^h 11 ^m 5	90	φ	23 ^h 11 ^m 7	
2		23 00.3	45		08.4	β	35.9	42		14.1	91	ψ^1	13.3	
3		01.9	46	ξ	19.4	ϵ	17 16.5				92	χ	14.3	
4		05.4	47		20.8	ζ	16.8	43	θ	22 14.2				
5		05.5	48	ω	24.7			44		14.5	93	ψ^2	23 15.3	
6		23 08.2	49	A	01 27.1	Aquarius			45	X	15.9	95	ψ^3	16.4
7		10.3	50	ν	33.9	1			46	ϱ	17.6	96		16.8
8		15.4	51		34.9		W	20 36.9	47		22 18.8	97		20.0
9	AN	16.0	52	χ	36.3		V	43.9	48	γ	19.1	98	b^1	23 20.3
11		17.2	53	τ	37.6	2	ϵ	44.3	49		20.7	99	b^2	23.4
10		23 17.5	55		01 50.3	3	k	45.1	51		21.5	100		29.1
12		18.5	56		53.2				50		21.8	101	b^3	30.7
13		24.7	57	γ^1	02 00.8		T	20 47.3	52	π	22 22.7	102	ω^1	37.2
14		28.8	57	γ^2	00.8	4		48.8	53	f	23.8	103	A ¹	23 39.0
15		32.2	58		05.5	5		49.5	54		24.0	104	A ²	39.2
16	λ	23 35.1	59		02 07.8	6	μ	50.0	55	ζ^1	26.3	105	ω^2	40.1
17	ι	35.7	60	b	10.1	7		54.2	55	ζ^2	26.3	106	R	41.2
18		36.7	60	W	14.3	8		20 57.1				107	i ¹	41.6
19	κ	37.9	62	c	16.0	9		58.0	56		22 27.5	108	i ²	23 43.4
20	ψ	43.5	63		17.6	10		58.0	57	σ	28.0			48.8
						11		58.0	58		29.1		Z	49.7
	TZ	23 48.4	64		02 21.1	12		21 01.4	60		31.5			
	RS	52.8	65		22.3	13		21 06.9	59	ν	32.0			
	CG	58.2	66		25.0	14		13.2	62	η	22 32.8			
	SV	00 01.8				15		15.6	61		33.0	Aquila		
21	α	05.8	Antlia			16		18.4	63	κ	35.2	1		18 32.5
22		00 07.7		ϵ	09 27.2	17		20.3	64		36.6	2		39.5
23		10.9		ζ^1	28.5	18		21 21.5	65		40.0	3		40.8
24	θ	14.5		ζ^2	29.4	19		22.5	66	g^1	22 40.9	4		42.3
25	σ	15.7		S	30.1	20		22.6	67		40.6	5		43.9
26		16.1		θ	42.0	21		22.7	68	g^2	44.9	6		18 44.5
27	ϱ	00 18.5				22	β	28.9	69	τ^1	45.1	6	V603	46.8
	T	19.8		η	09 56.7				70		45.9	7		48.4
	R	21.4		R	10 07.6	23	ξ	21 35.1	71	τ^2	22 46.9	8		48.7
	AQ	24.8		V	18.9	24		37.0	73	λ	50.0		BL	53.4
28		27.5		α	24.9	25	d	37.0	74		50.8	9		18 54.4
				δ	27.3	26		39.6	75		51.4	9	FF	56.0
29	π	00 34.2				27		44.7	76	δ	52.0	10		56.5
30	ϵ	35.9		U	10 33.0	28		21 58.5	77		22 52.1	11		56.8
31	δ	36.6		ι	54.4	29		59.7	78		52.1	13	ϵ	57.4
32		38.4	Apus			30		22 00.6	81	S	54.6	12	i	18 59.0
	S	40.0				31	o	00.7	82		58.7	12	V604	59.5
	RW	00 44.6		θ	14 00.4	32		02.2	83		59.9	14	V599	59.8
34	ζ	44.7		η	11.8	34	α	22 03.2	84	h	23 02.6	14	g	19 00.3
35	ν	47.0		ϵ	16.2	35	ι	03.7	85		02.8	15	V	01.7
36		52.3		α	41.6	36		06.2	86		03.7	17	h	19 02.3
37	μ	54.0		R	52.1	37		06.7	87	c^1	04.0	17	ζ	03.1
38	η	00 54.5				38		07.8	88		04.5	16	V805	03.5
39		01 00.1		κ^1	15 26.0	39	e	22 08.0	89	c^2	23 06.8	16	λ	03.6
41		05.1		κ^2	34.8	40		10.6		c^3	07.2		R	04.0
42	φ	06.6		δ^1	16 12.8									
43	β	06.9		δ^2	12.9									

Aquila			Aquila			Aries			Aries			Auriga					
18	Y	19 ^h 04.6	60	β	19 ^h 52 ^m 9	13	α	02 ^h 04 ^m 4	64		03 ^h 21 ^m 4	40		06 ^h 03 ^m 1			
	TT	05.8	61	φ	53.9	14		06.6	65		21.5	41		07.7			
19		06.5		RR	55.0	15		07.9	66		25.5	44	κ	12.2			
20		10.0	63	τ	20 01.7	16		08.4	Auriga								
21		11 ^m 2	62		01.8										1		04 46.5
	W	19 ^h 12.7	64		20 05.4	17	η	02 10.0	2		49.3	46	ψ^1	21.0			
22		14.0	65	θ	08.7	19	V	12.3	AB		52.6	48	RT	25.4			
	V356	14.7	66		10.6	21		12.9	3	ι	53.7	47		26.3			
25	ω^1	15.5	67	ρ	12.0	20		12.9	4	ω	55.9		WW	29.2			
23		16.0	68		25.8		R	02 13.3	5		04 56.9		TU	06 31.8			
			69		20 27.0	22	θ	15.4	6		57.0	49		32.1			
24		19 16.3	70		34.1	24	ξ	22.1	RX		58.0		UU	33.1			
	V528	16.8	71		35.8	25		24.7	7	ε	58.4	51		35.2			
28	A	17.3	Ara			26		27.8	8	ζ	59.0	53		35.2			
29	ω^2	17.5				27		02 28.0	29		30.1	9		05 02.7	52	ψ^2	06 35.4
26	f	17.9				31		33.9	31		33.9	10	η	03.0	50	ψ^2	35.8
	d	19 18.0				30	OY	36.9	30		34.0	11	μ	10.0	54		36.4
	V606	18.8				32	η	45.5	32	ν	36.0	12	UZ	11.7	55	ψ^4	39.4
31	b	22.6				33	ζ	54.5	33		02 37.8	13	α	05 13.0	56	ψ^5	43.1
30	δ	23.0				34	ε^1	55.6	34	μ	39.5	14	AE	13.0	57	ψ^6	06 43.9
32	ν	24.0				35			35		40.5		12.1	59		49.6	
	V368	19 24.1				36	ε^2	16 59.1	36		41.0	R	13.3	60		49.8	
35	c	26.5				37	ι	17 19.5	37	o	41.8	EO	14.9	61	ψ^8	50.5	
	U	26.7				38	β	21.1	38		02 42.2	16		05 14.9		ψ^9	06 52.8
36	e	28.0	39	γ	21.2	39		44.9	17	AR	15.0	62		55.6			
	V822	28.7	40	κ	22.1	40	T	45.5	15	λ	15.6	63		07 08.2			
			41	δ	17 26.6	42	π	46.5	19		16.7	64		14.6			
38	μ	31.6	42	α	28.0	42		46.5	20	ρ	18.3	65		18.7			
37	k	32.4	43	RW	30.5	43	c	02 47.0	22		05 20.3	66		07 20.7			
39	κ	34.2	44	σ	31.9	44	σ	48.7	21	σ	21.3	Bootes					
41	ι	34.1	45	π	34.0	45	RZ	53.0	24	φ	24.3						
			46	λ	17 36.5	46	ρ	53.6	T		28.8						
42		19 35.1	47	μ	40.2	47		02 55.2	25	χ	29.5						
	RT	35.6	48	ν^1	46.4	48	ε	56.3	26		05 35.4						
44	σ	36.7	49	ν^2	46.6	49		59.0	U		38.9						
45	QS	38.8	50	θ	18 02.7	50		59.4	27	o	42.0						
						51		03 02.5	28	τ	45.4						
46		19 40.0				52		03 04.6	29		45.7						
47	χ	40.2	Aries			53		03 05.7	31	v	05 47.6						
48	ψ	42.2	4		01 45.5	54		05.7	32	ν	48.0						
49	v	43.2	1		47.4	55		06.6	30	ξ	50.7						
50	γ	43.9	5	γ^1	50.8	56	U	08.2	33	δ	55.4						
			5	γ^2	50.8	57	δ	08.8	34	β	55.9						
52	π	19 46.3	6	β	51.9	58	SX	03 09.3	35	π	05 56.2						
51		48.0	7	RR	01 53.1	59	ζ	12.1	37	θ	56.3						
53	α	48.3	8	ι	54.6	60		16.9	36		57.2						
54	o	48.6	9	λ	55.1	61	c	17.5	38		59.7						
55	η	49.9	10		02 00.8	62	τ	18.4	39		06 01.5						
			11		04.0	63		03 19.2									
	V500	19 50.0	12	κ	02 03.8			19.9									
56		51.4										10		13 56.3			
59	ξ	51.8										11		58.9			
57		52.0										13		14 06.4			
58		52.2										12	d	08.1			
												14		11.7			

Bootes	Caelum	Camelopardalis	Cancer	Cancer
17 κ^a 14 ^h 11 ^m 7	δ 04 ^h 29 ^m 3	43 06 ^h 48 ^m 3	32 ν^a 08 ^h 30 ^m 0	81 09 ^h 09 ^m 5
15 12.4	R 38.7	45 07 14.9		82 π 12.5
16 α 13.4	α 38.9	46 15.6	35 08 32.5	83 16.4
21 ϵ 14.4	β 40.3	47 17.9	36 c 34.4	
19 λ 14.5	λ 42.1	YZ 20.7	37 35.3	
A 14 15.9	ζ 04 45.4	48 07 35.7	38 36.5	Canes Venatici
18 16.8	ν 48.6	51 41.9	39 37.3	1 12 12.0
20 17.4	γ 05 02.6	49 41.9	40 08 37.3	2 13.6
Y 19.7		52 52.4	41 ϵ 37.6	3 17.4
UV 20.3		53 57.5	42 38.0	4 21.3
S 14 21.2	Camelopardalis	54 07 58.6	VZ 38.2	5 21.6
RX 22.0	U 03 37.5	55 08 07.9	43 γ 40.4	6 12 23.4
23 θ 23.5	RX 04 00.8	56 11.6	45 A ¹ 08 40.5	7 27.7
22 f 24.1	SZ 03.4	57 15.0	47 δ 41.8	8 β 31.4
24 g 26.9	Ry 26.2		49 b 42.0	9 36.3
V 14 27.7	1 28.1	Cancer	46 42.3	10 42.6
25 ρ 29.7	T 04 35.2	1 07 54.2	48 ϵ^1 43.7	Y 12 42.8
27 γ 30.1	3 36.0	2 ω 57.9	50 A ^a 08 44.2	11 46.4
26 30.3	2 36.0	3 57.9	54 48.2	TU 52.7
28 σ 32.5	X 39.2	5 58.7	52 48.4	12 α^1 53.6
R 14 35.0	4 43.8	4 58.7	53 49.4	12 α^2 53.7
33 37.0	ST 04 46.0	7 08 01.0	51 σ^1 49.5	14 13 03.4
RV 37.2	α 49.1	8 02.3	55 σ^1 08 49.6	15 07.4
29 π^1 38.4	5 51.0	9 03.4	57 ϵ^2 51.2	16 07.6
29 π^2 38.4	6 52.4	10 μ 04.8	X 52.6	17 07.8
30 ζ 14 38.8	7 53.3	11 05.8	58 ρ^a 52.7	
RW 39.1	8 04 55.6	12 08 05.9	60 53.2	19 13 13.3
31 39.2	10 β 59.0	13 07.2	T 08 53.8	20 15.3
32 39.3	11 05 01.8	14 ψ 07.4	59 σ^a 53.9	21 16.1
34 W 41.2	12 01.9	16 ζ^1 09.3	62 σ^1 54.5	V 17.3
36 ϵ 14 42.8	14 08.9	16 ζ^2 09.3	63 σ^a 54.8	23 18.1
35 o 42.9	15 05 15.1	15 08 10.1	61 54.9	24 13 32.4
38 h 47.5	16 19.2	17 β 13.8	RT 08 55.5	25 35.2
RY 47.5	17 25.4	R 13.8	65 α 55.8	R 46.8
39 48.0	18 28.1	18 χ 17.0	64 σ^2 56.5	
37 ξ 14 49.1	19 32.4	19 λ 17.6	66 58.4	
40 57.7	S 05 35.6	V 08 18.9	67 58.8	Canis Maior
41 ω 15 00.0	21 35.9	20 d ¹ 20.5	68 08 58.9	1 ζ 06 18.4
42 β 00.1	24 38.8	21 21.2	69 ν 59.8	3 20.3
44 i 02.1	23 39.6	25 d ^a 23.0	70 09 01.0	2 β 20.5
43 ψ 15 02.3	25 39.8	22 φ^1 23.4	71 02.9	λ 26.3
47 k 03.8	26 05 42.3	23 φ^2 08 23.7	72 τ 05.0	4 ξ^1 29.8
45 c 05.1	28 42.4	24 23.7	76 κ 09 05.0	5 ξ^2 06 33.0
46 b 06.2	29 46.3	27 24.0	75 05.9	6 ν^1 34.2
48 χ 12.4	31 TU 50.5	28 25.7	78 06.2	7 ν^2 34.5
49 δ 15 13.5	35 06 00.5	29 25.8	77 ξ 06.5	8 ν^3 35.7
50 19.8	37 06 05.6	30 ν^1 08 28.6	W 06.9	10 42.6
51 μ^1 22.6	36 07.8	31 θ 28.7	79 09 07.5	9 α 06 42.9
51 μ^2 22.6	40 11.2	33 η 29.8	RS 07.6	11 44.6
52 ν^1 29.1	41 35.9	34 29.9	80 09.0	12 44.9
53 ν^2 15 30.0	42 45.7			
54 φ 36.0				

Canis Maior		Capricornus		Carina		Carina		Cassiopeia	
13	κ 06 ^h 48 ^m 0	8	ν 20 ^h 17 ^m 9	α	06 ^h 22 ^m 8	η	10 ^h 43 ^m 1	RV	00 ^h 49 ^m 9
15	51.4	9	β 18.2	N	33.9	u	51.5	26	ν^1 52.0
14	ϕ 06 51.9	10	π 20 24.5	O	46.3	BZ	52.2	28	ν^2 53.7
16	σ^1 52.1	11	ρ 26.0	A	48.8	T	53.3	27	γ 53.7
17	52.9	12	σ 27.0	Q	07 34.4	AG	54.2	30	μ 01 04.9
19	π 53.5	13	τ 34.3	χ	07 55.5	U	10 55.8	31	01 07.2
18	μ 53.8	14	τ 36.5	D ¹	59.7	z ¹	11 04.5	33	ϕ 08.0
20	ι 06 53.9	15	ν 20 37.2	D ²	08 03.5	RS	06.0	32	RU 08.4
21	ϵ 56.7	16	ψ 43.1	B	08.2	z ²	06.5	S	16.0
22	σ 59.7	17	ω 48.9	C	14.5	x	06.5	34	φ 16.9
24	σ^2 07 00.9	19	52.0	e	08 21.5	ER	11 07.5	35	01 17.6
23	γ 01.5	20	20 56.8	V	27.7	y	10.4	36	ψ 22.4
W	07 05.7	21	57.9	e ¹	34.1			37	δ 22.5
25	δ 06.4	22	η 21 01.6	e ²	34.1			38	27.5
26	10.1	23	ϕ 03.1	d	39.5	Cassiopeia		39	χ 30.6
27	12.2	24	A 04.2	f	08 45.4	1	23 04.5	40	01 34.5
28	ω 12.8	25	χ 21 05.7	c	53.9	2	07.6	43	38.6
29	UW 07 16.6	26	06.4	b ¹	55.7	V	09.5	42	39.0
30	τ 16.6	27	06.7	b ²	58.2	4	22.6	44	39.9
R	17.2	28	φ 12.8	G	09 05.0	AR	27.7	45	ϵ 50.8
31	η 22.1	29	13.0	E	09 05.2	SV	23 36.6	46	ω 01 52.1
		30	21 15.1	a	09.6	5	τ 44.6	48	A 57.8
		31	15.4	i	10.1	6	46.4	50	59.1
		32	19.5	β	12.7	7	ρ 51.9	52	59.1
Canis Minor		33	21.3	g	14.8	R	55.9	53	59.3
R	07 06.0	34	ζ 23.8	ι	09 15.8	8	σ 23 56.5	47	02 00.0
1	22.2	35	21 24.4	k	19.7	WZ	58.7	49	00.7
2	ϵ 22.9	36	b 25.9	n	25.0	9	00 01.6	51	01.2
3	β 24.4	37	32.0	R	31.0	10	03.8	54	04.9
5	η 25.3	38	32.2	H	31.2	11	β 06.5	55	10.5
4	γ 07 25.4	39	ϵ 34.3	h	09 33.0	AO	00 15.1	ι	02 24.9
6	27.0	40	γ 21 37.3	m	38.0	TV	16.5	RZ	44.3
7	δ^1 29.5	42	38.8	l	43.9	T	20.5	SU	47.5
S	30.0	41	39.2	v	45.9	B	21.9	CC	03 10.1
8	δ^2 30.6	43	κ 39.9	RR	56.5	12	22.0		
9	δ^3 07 31.6	44	40.3	S	10 07.8	TU	00 23.6		
10	α 36.7	45	21 41.3	M	12.1	13	28.5		
11	43.5	46	c ¹ 42.3	ω	12.6	14	λ 29.0		
13	ζ 49.1	47	c ² 43.6	q	15.4	15	κ 30.1		
14	55.7	48	λ 43.8	L	21.5	16	31.4		
Capricornus		49	δ 44.3	I	10 23.4	17	ζ 00 34.2		
1	ξ^1 20 09.0	50	21 44.3	P	25.5	18	α 37.7		
2	ξ^2 09.6	51	μ 50.6	s	26.0	19	ξ 39.3		
3	13.6			K	29.1	20	π 40.7		
RT	14.1			p	30.2	22	σ 41.9		
5	α^1 14.9			r	10 33.7	21	YZ 00 42.3		
4	20 15.1			r ²	36.8	U	43.6		
6	α^2 15.3			r ¹	37.1	23	44.4		
7	σ 16.5			ϕ	41.2	25	ν 46.0		
				w	41.6	24	η 46.1		
								Centaurus	
								RS	11 18.3
								π	18.7
								σ^1	29.4
								σ^2	29.5
								A	32.4
								C ¹	11 32.8
								λ	33.5
								C ²	33.5
								C ³	35.1
								X	46.7
								j	11 47.2
								B	48.6
								E	12 05.6

Centaurus		Centaurus		Cepheus		Cetus		Cetus	
δ	12 ^h 05 ^m 8	R	14 ^h 12 ^m 9	28	22 ^h 26 ^m 4	28	01 ^h 03 ^m 6	U	02 ^h 31 ^m 3
ρ	09.0	RR	13.4	27	δ 22 27.3	30	01 05.3	77	32.2
D	12 11.4	v	14 16.8	29	ST 28.4	29	05.4	79	02 32.8
F	16.3	ψ	17.5	29	ρ 29.5	31	η 06.1	78	ν 33.2
S	21.9	a	20.0	31	W 34.5	32	07.8	80	33.5
G	23.8	Y	28.0	30	34.5	33	08.0	81	35.2
σ	25.3	V	28.9	30	22 36.9	34	01 09.2	82	δ 36.9
u	12 25.7	η	14 32.3	32	AH 46.1	35	09.8	83	ϵ 02 37.1
U	30.7	α	36.2	32	ι 47.9	36	10.1	84	38.7
τ	35.0	b	38.8		AR 52.6	37	11.9	85	39.8
l	37.2	c ¹	40.6		CW 23 02.1	38	12.3	86	γ 40.7
γ	38.7	c ²	41.9	33	π 23 06.3	39	01 14.1	89	π 41.7
w	12 39.8	κ	55.9	34	o 16.6	40	14.8	87	μ 02 42.2
p	48.0	Cepheus		35	γ 37.3	41	15.0	91	λ 57.0
e	50.3	1	κ 20 10.6		V 54.1	42	17.2	92	α 59.7
n	50.7	2	θ 28.7		RX 00 45.4	43	19.6	93	59.8
YZ	51.4	VW	38.1		U 00 57.7	45	θ 01 21.5	94	03 10.2
H	12 54.2	4	42.6		SS 03 41.5	44	21.5	95	03 15.8
ξ^1	13 00.6	3	η 44.3	Cetus		46	23.2	96	κ 16.7
f	03.4	DQ	20 58.4	1	23 55.8	47	24.4	97	18.5
ξ^2	04.0	T	21 08.9		W 59.6	48	27.2	Chamaeleon	
UY	13.6	5	α 17.4	2	00 01.2	49	01 32.2	α	08 19.9
r	13 14.1	6	18.3	3	01.9	50	33.5	ϕ	22.2
ι	17.8	7	26.8	4	05.1	52	UV 36.4	η	43.1
J	19.4	8	β 21 28.0	5	00 05.6	53	τ 41.7	ι	09 25.9
m	20.6	S	35.9	6	f 08.7	54	χ 47.1	ζ	35.4
K	26.3	9	36.6	7	12.1	55	01 48.2	ν	09 46.4
d	13 28.1	11	41.2	8	ι 16.9	56	49.0	μ	10 02.1
RV	34.3	μ	42.0	8	T 19.2	58	54.3	γ	34.9
ϵ	36.7	10	ν 21 44.0	9	00 20.0	57	55.4	δ^1	44.8
XX	37.0	12	45.9	9	S 21.5	59	57.4	δ^2	45.3
Q	38.5	13	53.2	10	24.0	60	01 57.6	π	11 35.2
T	13 38.9	16	VV 55.2	11	27.4	61	02 00.6	ϵ	57.1
1	42.8	14	58.5	12	27.5	62	01.2	κ	12 02.2
M	43.5	15	22 00.4	13	00 32.7	64	06.6	β	15.4
z	44.0	17	02.2	14	33.0	63	08.7	S	13 28.8
ν	46.5	17	ξ^1 02.3	15	35.3	66	02 09.1		
2	g 13 46.5	17	ξ^2 02.3	16	β 41.1	65	10.2		
μ	46.6	18	02.4	17	φ^1 41.7	67	10.3		
N	48.8	20	22 03.5	17	φ^1 41.7	68	14.5		
3	k 48.9	19	03.6	18	00 43.0	68	16.8	Circinus	
4	h 50.3	19	08.8	18	φ^2 47.6	69	02 19.4	α	14 38.4
y	13 50.6	20	09.1	19	φ^2 47.6	69	19.7	X	38.6
ζ	52.4	21	09.8	20	50.5	70	22.5	ζ	50.4
φ	55.2	22	λ 09.8	21	φ^3 53.5	71	23.5	θ	52.7
ν^1	55.6	23	ϵ 22 13.2	22	φ^3 53.5	72	23.5	η	15 00.6
ν^2	58.6	25	16.6	23	φ^4 00 56.2		R 23.5	δ	12.9
β	14 00.3	26	21.2	25	01 00.5	73	ξ^2 02 25.5	ϵ	13.4
χ	03.0	27	25.5	26	01.2	75	29.6	β	13.6
5	θ 03.7			27	03.5	76	σ 29.7	γ	19.4

Columba		Coma Berenices		Corona Borealis		Crux		Cygnus	
<i>o</i>	05 ^h 15 ^m 7	32	12 ^h 49 ^m 6	RS	15 ^h 56 ^m 7	<i>e</i>	12 ^h 18 ^m 6	26	<i>e</i> 20 ^h 00 ^m 0
T	17.5	33	49.7	T	57.4	R	20.9	Z	00.0
<i>ε</i>	29.4	35	50.8	15	<i>ρ</i> 59.1	<i>α</i> ¹	23.8	27	<i>b</i> ¹ 04.5
<i>ν</i> ¹	35.3	36	56.5	14	<i>ι</i> 59.4	<i>α</i> ²	23.8	28	<i>b</i> ² 07.6
<i>ν</i> ²	35.8	37	57.9	16	<i>τ</i> 16 07.1	<i>γ</i>	12 28.4	RX	09.3
<i>α</i>	05 37.8	38	12 58.7	17	<i>σ</i> 16 12.8	<i>ι</i>	42.7	RS	20 11.6
<i>μ</i>	44.1	39	13 03.9	W	13.6	<i>β</i>	44.8	30	11.7
<i>β</i>	49.2	40	03.9	18	<i>υ</i> 14.7	<i>κ</i>	50.8	31	<i>o</i> ¹ 12.1
<i>λ</i>	51.3	41	04.8	19	<i>ξ</i> 20.1	S	51.4	33	12.2
<i>ξ</i>	53.8	42	<i>α</i> 07.6	20	<i>ν</i> ¹ 20.5	<i>μ</i> ¹	12 51.6	29	<i>b</i> ³ 12.7
<i>σ</i>	05 54.5	43	<i>β</i> 13 09.5	21	<i>ν</i> ² 16 20.6	<i>μ</i> ²	51.7	32	<i>o</i> ² 20 13.9
<i>γ</i>	55.8	Corona Australis		Corvus		<i>λ</i>	51.7	34	P 15.9
<i>η</i>	57.6	V394	17 56.9	1	<i>α</i> 12 05.8	Cygnus		36	16.6
<i>π</i> ¹	06 05.1	<i>θ</i>	18 29.9	2	<i>ε</i> 07.5	1	<i>κ</i> 19 15.9	35	CN 16.9
<i>θ</i>	05.8	<i>κ</i> ^{1,2}	29.9	3	08.5	2	22.1	U	20 18.1
<i>π</i> ²	06 06.3	<i>λ</i>	40.4	4	<i>γ</i> 13.2	CH	23.2	37	<i>γ</i> 20.4
<i>κ</i>	14.8	<i>μ</i>	44.2	R	17.0	4	24.3	39	21.9
<i>δ</i>	20.3	<i>η</i> ¹	18 45.2	5	<i>ζ</i> 12 18.0	7	26.2	43	25.5
Coma Berenices		<i>η</i> ²	46.0	6	20.7	10	<i>ι</i> 19 28.4	40	25.7
1	11 59.2	<i>ε</i>	55.3	7	27.3	6	<i>β</i> 28.7	41	RW 20 27.0
2	12 01.7	<i>ζ</i>	59.6	8	<i>η</i> 29.5	AF	28.7	42	27.4
R	01.7	<i>γ</i>	19 03.0	9	<i>β</i> 31.8	UV	29.6	45	<i>ω</i> ¹ 28.5
3	08.0	<i>δ</i>	19 04.9	Crater		8	29.9	44	29.1
4	09.3	<i>α</i>	06.1	7	<i>α</i> 10 57.3	9	19 32.9	46	<i>ω</i> ² 20 29.8
5	12 09.6	<i>β</i>	06.6	11	<i>β</i> 11 09.2	11	34.0	47	32.0
6	13.5	Corona Borealis		<i>ψ</i>	10.0	13	<i>θ</i> 35.1	48	35.5
7	13.8	U	15 16.1	12	<i>δ</i> 16.8	R	35.5	49	39.0
8	16.8	1	<i>o</i> 18.1	13	<i>λ</i> 20.9	12	<i>φ</i> 37.4	50	<i>α</i> 39.7
9	16.9	S	19.4	14	<i>ε</i> 11 22.1	14	19 37.8	V	20 39.7
11	12 18.2	2	<i>η</i> 21.1	15	<i>γ</i> 22.4	13	TT 39.0	V568	40.4
12	20.0	3	<i>β</i> 25.8	16	<i>κ</i> 24.6	16	c 40.5	51	40.7
13	21.8	4	<i>θ</i> 15 30.9	17	29.8	RT	42.2	X	41.4
14	23.9	5	<i>α</i> 32.6	21	<i>θ</i> 34.1	15	42.5	52	43.6
15	<i>γ</i> 24.4	6	<i>μ</i> 33.4	24	<i>ι</i> 11 36.1	SU	19 42.8	53	<i>e</i> 20 44.2
16	12 24.5	7	<i>ζ</i> ¹ 37.5	27	<i>ξ</i> 42.2	18	<i>δ</i> 43.4	T	45.2
17	26.4	7	<i>ζ</i> ² 37.5	30	<i>η</i> 53.5	17	44.5	54	<i>λ</i> 45.5
18	26.9	SW	15 39.0	31	58.3	19	<i>χ</i> 48.6	55	47.2
20	27.2	RR	39.6	Crux		20	V380 19 48.9	56	48.3
21	28.5	8	<i>γ</i> 40.6	<i>θ</i> ¹	12 00.5	d	49.4	Y	20 50.1
22	12 31.1	9	<i>π</i> 42.0	<i>θ</i> ²	01.7	V449	51.5	57	51.5
23	32.4	R	46.5	<i>η</i>	04.3	23	52.3	UX	53.0
24	32.6	10	<i>δ</i> 15 47.5	<i>δ</i>	12.5	22	54.1	<i>ν</i>	55.3
25	34.5	11	V 47.7	<i>ζ</i>	15.7	24	<i>ψ</i> 19 54.3	V450	56.7
26	36.6	12	<i>κ</i> 49.3	T	12 18.6	21	<i>η</i> 54.4	59	<i>f</i> ¹ 20 58.1
27	12 44.1	13	<i>λ</i> 54.0			AX	55.7	60	59.4
28	45.7		<i>ε</i> 55.5			V476	57.1	62	<i>ξ</i> 21 03.1
29	46.4					25	58.1	DT	04.4
30	46.9							61	04.6
31	49.3								

Cygnus			Delphinus			Draco			Draco			Eridanus		
63	f ²	21 ^h 04 ^m 9	17		20 ^h 53 ^m 2	21	μ	17 ^h 04 ^m 3	68		20 ^h 10 ^m 8	14		03 ^h 14 ^m 2
	V389	06.5	16		53.3	22	ζ	08.7	71		18.8	15		16.2
64	ζ	10.8	18		56.0		VW	15.9		AC	19.9	16	τ ⁴	17.3
65	τ	12.8				23	β	29.3	75		31.5		e	18.8
67	σ	15.4				24	ν ¹	31.2	73	AF	32.2			
66	v	21 15.9	Dorado			25	ν ²	17 31.3	74		20 32.4	17	v	03 28.1
68	A	16.6	γ	04	14.7	27	f	32.2	76		46.3	18	ε	30.6
69		23.7	α		32.9	26		34.5	77		21 06.5	19	τ ⁵	31.6
70		25.3	R		36.2	29		34.5	78		42.5	20		34.0
71	g	27.6	κ		43.6	28	ω	37.2					y	35.3
73	ρ	21 32.1	ζ	05	04.6	31	ψ	17 42.8	Equuleus			21		03 36.5
72		32.7				30		47.9	1	ε	20 56.6	22		38.2
	w	34.1	θ	05	13.8	35		51.7	2	λ	59.5	23	δ	40.9
	AB	34.4	λ		25.6	32	ξ	52.7	3		21 02.1		h	41.0
74		34.9	G		32.7	33	γ	55.4	4		03.0	24		42.0
	CP	21 35.5	β		33.2				5		07.9	25		03 42.4
75		38.2	δ		44.7		T	17 55.7	6		21 08.1	26	π	43.8
	RU	39.0	ε	05	49.9	34		56.0	7	δ	12.0	27	τ ⁶	44.7
76		39.6	η ¹	06	06.1	40	UW	56.5	8	α	13.3	28	τ ⁷	45.5
	Q	39.8	ν		09.1	41		03.9	9		18.6		f	46.8
	V460	21 39.9	η ²		11.1				10	β	20.4			
80	π ¹	40.3	π ¹		23.1	36		18 13.6				29	g	03 47.6
77		40.4				37		15.6				30		50.2
	RV	41.2	π ²	06	25.9	38		17.4	Eridanus			33	τ ⁸	51.6
79		41.4				43	φ	21.5	α	01 35.9		32	w	51.8
78	μ ²	21 41.9	Draco			44	κ	22.0	p	37.9			T	03 53.1
78	μ ¹	41.9	1	λ	11 28.5	39	b	18 23.2	q ¹	40.6		34	γ	55.8
81	π ²	44.9	2		33.1	42		25.8	q ²	44.2		36	τ ⁹	57.8
	WY	46.9	3		39.7	45	d	31.7	χ	54.0		35		59.0
Delphinus			4		12 28.0	46	c	41.7	Y	02 03.0		37		04 07.9
	R	20 12.5	5	κ	31.4	50		48.0	φ	14.7			o ¹	04 09.4
1		27.9	6		12 32.6	47	o	18 50.5	κ	25.1		38	A	12.0
2	ε	30.8	7		45.5	52	v	55.0	s	37.9		39	o ²	13.0
3	η	31.6	8		53.5	48		55.9	i	38.7		40	v ¹	16.0
4	ζ	33.0	9	RY	58.0	49		59.7	1	τ ¹	02 42.8	41	d	18.3
6	β	20 35.2	10	i	13 50.0	51		19 03.8	Z	45.5		42	ξ	04 21.2
5	ι	35.4	11	α	14 03.0	55		19 09.6	2	τ ²	48.8	43	v ²	22.2
	EU	35.6	12	ι	15 23.8	53		10.7	RR	49.8		44		25.9
8	θ	36.4		TW	33.1	59		11.0	3	η	54.0	45		29.3
7	κ	47.7		VY	39.2	57	δ	12.5	4		02 55.2	46		31.5
9	α	20 37.3	13	θ	16 01.0	54		13.0	6		55.9		v ¹	04 31.5
10		38.9	14	η	23.3	60	τ	19 16.5		θ ¹	56.4	50		31.8
11	δ	41.1	15	A	28.1	58	π	20.4		θ ²	56.4	47		31.8
	U	43.2		R	32.5	61	UX	23.4	5		57.2	52	v ²	33.6
12	γ ¹	44.3	16		35.0	63	σ	32.5	7		02 58.3	48	v	33.8
12	γ ²	20 44.3	17		16 35.0	64	e	20 00.9	8	ρ ¹	58.7	49		34.7
13		45.3	18	g	40.6	69		01.0	11	τ ²	03 00.2	51	c	04 35.1
	V	45.5		S	41.9	65		01.6	9	ρ ²	00.2	53	l	35.9
15		47.2	19	h	55.7	67	ρ	02.6	10	ρ ³	01.8	54		38.3
14		47.4	20		55.8	66		04.8	13	ζ	03 13.4	55		41.0
												56		41.7

Eridanus			Gemini		Gemini		Grus		Hercules		
57	μ	04 ^h 43 ^m 0	3	06 ^h 06 ^m 7	45	07 ^h 05 ^m 5	μ^1	22 ^h 12 ^m 6	23	16 ^h 21 ^m 0	
58		45.4	4	07.5	46	τ 08.0	μ^2	13.4	21	\circ 21.7	
59		46.3		TU 07.8	47	08.3	π^1	19.7			
60		47.9			48	09.4	π^2	20.1	24	ω 16 23.1	
61	ω	50.4	5	06 08.5	49	09.9	S	23.0	25	23.6	
	R	04 53.1		TV 08.8						U 23.6	
62	b	53.9	6	WY 08.9	51	BQ 07 10.5	ν	22 25.7	30	g 27.0	
63		57.5		BU 09.3	52	11.6	δ^1	26.3	27	β 28.1	
64	S	57.6	7	η 11.9	53	12.8	δ^2	26.8			
65	ψ	59.0	8	06 13.3	54	λ 15.2	σ^1	33.6		s 16 28.4	
			9	13.9	55	δ 17.1	σ^2	34.1	34	28.7	
66		05 04.3	10	15.8	56	07 19.0	β	22 39.7	31	29.6	
67	β	05.4	11	16.2		V 20.3	ρ	40.6	28	n 30.1	
68		06.2	12	16.3	57	A 20.4	η	42.6	29	h 30.3	
69	λ	06.8			58	20.5	ϵ	45.5			
			13	μ 06 19.9	59	21.4	τ^1	50.0		SS 16 30.4	
Fornax			14	22.7					32	31.0	
	π	01 59.0	15	24.8	60	ι 07 22.6	τ^2	22 52.5	35	σ 32.5	
	ν	02 02.2	16	25.0	61	24.0	τ^3	53.9		W 33.4	
	μ	10.7	18	ν 28.0	63	24.8	ζ	57.9		Y 34.4	
	κ	20.3	19	06 28.7	62	ρ 25.9	κ	23 01.7	42	16 37.4	
	φ	25.9	20	29.2	64	b ¹ 26.2	θ	04.1	36	m 38.2	
	λ^1	02 31.0	22	31.7	65	b ² 07 26.7	υ	23 04.1	37	m 38.2	
	ω	31.7		W 32.1	67	30.5	ι	07.5	40	ζ 39.4	
	ι^1	34.0	23	33.2	68	30.8	φ	15.4	39	39.6	
	λ^2	34.9	24	γ 06 34.8	66	α 31.4	\circ	23.8	44	η 16 41.2	
	ι^2	36.2	25	38.2	69	υ 32.8			41	42.6	
	η^1	02 46.2		VW 38.9		BN 07 34.2			43	i 43.4	
	$\upsilon^1, 2$	46.9	26	39.5	70	35.3			45	l 45.3	
	β	47.0	27	ϵ 40.9	71	\circ 35.9		ST 15 49.3	48	47.4	
	γ^1	47.6		DM 06 41.0	74	f 36.6	1	χ 50.9			
	γ^2	47.7	30	41.2	75	σ 40.2	2	53.0	52	16 47.8	
	η^2	02 48.2	28	41.6	76	c 07 41.1	4	53.8	47	k 47.9	
	η^3	48.7	31	ξ 42.5	77	κ 41.4	5	τ 59.0	50	48.7	
	ψ	51.6		X 43.9	78	β 42.3		X 16 01.1		S 49.6	
	ζ	57.4	33	06 47.0	81	g 43.2	6	υ 01.2	51	49.7	
	ϵ	59.5	35	47.6	80	π 44.3		R 04.0	49	16 49.8	
	α	03 10.0	36	d 48.6	82	07 45.6		SX 05.3	53	51.1	
	χ^1	24.0	34	θ 49.5	84	T 46.3	7	κ 05.8	54	53.2	
	χ^2	25.6		DN 51.7	83	φ 50.4	8	16 06.5	56	53.2	
	χ^3	26.8	38	e 06 51.8	85	52.7	11	φ 07.2	57	55.3	
	τ	36.7	37	52.2		χ 08 00.4	14	RU 08.2	58	ϵ 16 58.4	
	δ	03 40.3	39	55.7				09.0	59	d 59.8	
	σ	44.4	40	56.3				09.2	61	17 01.7	
	ρ	45.9	41	57.4					60	03.1	
Gemini			42	ω 06 59.4			10	LQ 16 09.5		c 06.3	
			43	ζ 07 01.1			9	10.8			
1		06 01.1	44	02.3			16	13.3		62	17 06.5
2		03.7		R 04.3			15	13.7		63	09.0
				TW 04.3			17	13.9		64	$\alpha^1, 2$ 12.4
							19	16 16.2		65	δ 13.0
							22	τ 18.2		67	π 17 13.3
							20	γ 19.7			

Hercules			Hercules		Hydra		Hydra		Lacerta					
68	u	17 ^h 15 ^m 5	112	18 ^h 50 ^m 1	25	09 ^h 15 ^m 0	54	m	14 ^h 43 ^m 1	AR	22 06.7			
69	e	15.9	113	52.6	26	09 17.4	55		14 44.5	1	13.8			
72	w	18.8			27	P	56		44.8	CP	13.8			
70		18.8			28		57		45.0	2	19.0			
					29		58	E	47.3	3	β	21.6		
74		17 18.9	Horologium			G	59		55.7	4		22 22.5		
	RS	19.6	λ	02 23.5			60		14 59.1	S		26.8		
75	ρ	22.0	η	35.8	30	α	09 25.1			5		27.4		
73		22.0	ζ	39.1	31	τ^1	26.6			6		28.3		
77	x	25.4	ι	40.9	32	τ^2	29.4			7	α	29.2		
			γ	44.4	33	A	32.0							
76	λ	17 28.7	ν	02 47.9		X	33.4			8		22 33.6		
78		29.9	R	52.3	34		09 35.4		β	00 23.2	DI	33.8		
82	y	35.3	β	57.8	35	ι	37.3		λ	46.9	9		35.3	
79		35.5	T	59.5	37		37.3		τ^1	01 41.3	10		37.0	
85	ι	38.1	V	03 02.3	38	κ	37.9		τ^2	48.2	11		38.3	
			μ	03 02.6		I	39.0		η^1	51.3				
83		17 40.4	δ	04 09.1		Y	09 48.8		η^2	01 53.7	12	DD	22 39.2	
84		41.3	α	12.3	39	ν^1	49.1		σ	55.9	13		41.9	
86	μ	44.5			40	ν^2	10 02.7		α	57.2		DK	47.7	
87		46.8			41	λ	08.1		π^1	02 13.2	14		48.1	
88		48.7			42	μ	23.7		π^2	14.4	15		49.8	
									δ	02 20.9	16	EN	22 54.1	
90	f	17 51.7	Hydra		44		10 31.6		κ	22.6	EW	54.8		
89		53.4	1	08 22.1		φ^2	33.8		μ	32.7				
91	θ	54.5	2	24.0		U	35.1		ϵ	38.8				
	OP	55.4		RT	27.2	φ^1	36.1		ζ	44.8				
92	ξ	55.8	3	33.0		b^1	44.4		ν	02 50.8				
	Z	17 55.9	4	δ	35.0				θ	03 02.1				
94	ν	56.6	5	σ	08 36.1	ν	10 47.2		ι	17.2				
93		57.8		RV	37.3	b^2	48.5		γ	48.0				
95		59.4		AK	37.6	V	49.2							
96		18 00.2	6		37.7	b^3	51.0							
			9		39.4	χ^1	11 02.9							
97		18 00.6												
98		03.9	7	η	08 40.6	χ^2	11 03.5				6	h	09 29.3	
99	b	05.1		F	41.2	TT	10.8				7		33.2	
103	o	05.6	10		42.4	N	29.8		α	20 34.1	8		34.3	
100		05.8	12	D	44.0	ξ	30.5		η	40.4	10		34.6	
			11	ϵ	44.1	o	37.7		ζ	46.0	9		34.8	
	DQ	18 06.1							ι	47.9				
102		06.6	13	ρ	08 45.8	β	11 50.4		β	50.9	11		09 35.3	
101		06.7	14		46.8	45	ψ	13 06.4			14	o	38.5	
	T	07.2	15		49.1	46	γ	16.2		S	20 52.7	13		38.6
104	A	10.0		S	51.0		R	27.0		μ	21 01.6	15	f	40.6
			16	ζ	52.8	SS	27.7		θ	16.3	16	ψ	41.0	
	IQ	18 15.7							T	16.9				
105		17.1	17		08 53.0	TV	13 34.4		γ	22.7	17	ϵ	09 43.0	
106		18.2		T	53.2	W	46.2				18		43.7	
108		19.0	18	ω	09 03.3	47		55.7		o	21 46.6	19		44.6
107	t	19.1	19		06.3	48		57.2		π	52.5	15	R	44.9
			20		07.1	49	π	14 03.5		δ	54.5	20		47.0
109		18 21.6								ϵ	59.5	21		09 48.1
	AC	28.1	21		09 10.0	RU	14 08.5		κ	22 02.4	23		48.3	
	RX	28.3	22	θ	11.8	50		09.9		ν	22 20.4	22	g	49.1
110		43.5	23		14.2	51	k	20.2		ρ	51.2	24	μ	49.9
111		44.8	24		14.2	52	l	25.2				26		55.4

Leo			Leo			Leo Minor			Libra			Lupus		
27	ν	09 ^h 55 ^m 5	78	ϵ	11 ^h 21 ^m 3	35		10 ^h 33 ^m 3	9	α^2	14 ^h 48 ^m 1		σ	14 ^h 29 ^m 2
29	π	57.6	79		21.5	36		35.0	11		48.4		a	34.0
30	η	10 04.6	81		23.0	37		35.9	10		48.5		ρ	14 34.5
31	A	05.3	82		23.1				12		51.4		α	38.6
32	α	05.7	80		23.2	38		10 36.2	13	ξ^1	14 51.7		b	43.5
						39		37.8	15	ξ^2	54.0		o	48.3
34		10 09.0	83		11 24.2	40		40.3	16		54.6		c	52.7
35		13.8	84	τ	25.4	41		40.7	17		55.5		β	14 55.2
36	ζ	13.9	85		27.1	42		43.1	18		56.2		π	15 01.7
37		14.0	87	e	27.8				19	δ	14 58.3		λ	05.5
39		14.5	86		27.9	43		10 46.2	20	σ	15 01.1		κ^1	08.4
						44		47.2	21	ν	03.8		κ^2	08.5
40		10 17.0	88		11 29.2	46	o	50.5	22		04.1		ζ	15 08.7
41	γ^1	17.2	89		31.8	48		52.0	24	ϵ	15 09.4		e	09.5
41	γ^2	17.2	90		32.1	47		52.2	25		10.5	1	i	11.6
42		19.2	91	v	34.4				23		10.6	2	f	14.8
43		20.3	92		38.2	51		11 02.6	26		12.8		μ	15.0
						52		04.4	27	β	14.3		δ	15 18.1
44		10 22.6	93		11 45.4	Lepus			28		15 18.1		ν^2	18.4
45		25.0	94	β	46.5	R		04 57.3	29	o	18.2		φ^1	18.6
46		29.5	95	o	53.1	1	T	05 00.6	30	S	18.5		ν^1	18.6
47	e	30.2	Leo Minor			2	ϵ	03.3		RS	21.4		ϵ	19.3
48		32.2	7		09 27.7	3	ι	10.0	31	ϵ	15 21.5		φ^2	15 20.0
49	TX	10 32.4	8		28.5	5	μ	05 10.7	32		25.4		v	21.5
50		36.3	9		30.4	4	κ	10.9	33		26.3		k	22.1
51	m	43.7	10		31.2	6	λ	17.3	34		27.8		γ	31.8
52	k	43.8	11		32.7	7	ν	17.7	35	ζ	30.1		d	32.4
53	l	46.6	13		09 39.7	8		21.2		RU	15 30.5		ω	15 34.7
	p^1	10 51.2	14	R	42.6	9	β	05 26.1	37		31.4	3	ψ^1	36.6
54		52.9	15		45.4	10		29.0	36		31.6		g	37.7
55		53.1	16		47.1	11	α	30.5	38	γ	32.7		h	39.4
56	VY	53.4	17		09 49.3	12		40.1	39	v	34.0	4	ψ^2	39.5
57		53.6	18	S	50.8	13	γ	42.4	40	τ	15 35.6	5	χ	15 47.8
58	d	10 58.0	19		54.6	14	ζ	05 44.7	41		36.0		$\xi^1, 2$	53.7
59	c	58.1	20		58.1	15	δ	49.2	42		37.3		η	56.8
61	p^2	59.3	21		10 04.5	16	η	54.1	43	κ	39.1		θ	16 03.3
60	b	59.7	22		12.2	17	S	06 02.7	44	η	41.3	Lynx		
62	p^3	11 01.0	23		13.4	18	θ	06 03.9	45	λ	15 50.4	1		06 13.3
			24		13.6	19		05.5	46	θ	51.0	2		15.2
63	χ	11 02.4	27		20.3	Libra			47		52.1	3		17.3
65	p^4	04.4	28		10 21.3	2		14 20.8	48		55.4	4		17.6
64		04.5	29		23.0	3		36.4	49		57.5		RR	22.2
67		06.1	30		23.1	4		40.3	50		15 58.1	5		06 22.5
66		06.7	31	β	25.0	5		43.2	Lupus			6		26.4
69	p^5	11 11.2	32		27.2	7	μ	46.6	ι		14 16.2	9		31.8
68	δ	11.5	33	h	10 29.0	8	α^1	14 47.9	τ^1		22.9	8		33.1
70	θ	11.6	34		30.7				τ^2		23.0	11		33.4
72		12.5												
73	n	13.2												
74	φ	11 14.1												
75		14.7												
76		16.3												
77	σ	18.6												
71		18.8												

Ophiuchus			Orion			Orion			Pavo			Pegasus		
	BF	17 ^h 03 ^m 0	2	π^a	04 ^h 47 ^m 9	46	ϵ	05 ^h 33 ^m 7	T	19 ^h 45 ^m 1	29	π	22 ^h 07 ^m 8	
	R	04.9	3	π^a	48.5	40	φ^a	34.2	S	51.0	28		08.1	
35	η	07.5	4	σ^1	49.7	48	σ	36.2	ϵ	54.8	30		17.9	
37		10.1	5		50.8	49	d	36.5			32		19.0	
						47	ω	36.5	μ^1	19 55.6	31		19.1	
36	A	17 12.3	8	π^b	04 51.6				μ^a	57.0				
38	U	14.0	6	g	52.0	50	ζ	05 38.2	δ	20 03.8	33		22 21.3	
41		14.0	7	π^1	52.1	51	b	39.9	α	21.7	34		24.1	
39	o	15.0	9	σ^a	53.6	52		45.3	φ^1	31.5	35		25.3	
	e	16.3	10	π^e	56.0	53	κ	45.4			36		26.6	
						55		49.0	ρ	20 33.4	37		27.4	
	Z	17 17.0	11		05 01.7				φ^a	35.9				
40	ξ	18.0		W	02.8	56		05 49.8	ν	37.4	38		22 27.7	
42	θ	18.9	13		04.9	54	χ^1	51.4	β	40.5	39		30.1	
43		20.2	14	i	05.2	57		52.0	σ	44.6	40		36.5	
44	b	23.3	16	h	06.6	58	α	52.5	o	21 08.7	41		37.4	
							U	52.9	Y	19.8	42	ζ	39.0	
			15		05 06.8				γ	22.3	43	o	22 39.4	
47		17 24.0	17	ρ	10.7		BQ	05 54.1	SX	24.3	44	η	40.7	
49	σ	24.0	19	β	12.1	59		55.8			45		42.8	
45	d	24.2	18		13.3	60		56.3			47	λ	44.1	
	V843	27.6	20	τ	15.2	61	μ	59.6			46	ξ	44.2	
51		28.4				64		06 00.5	Pegasus					
			21		05 16.6				1	21 19.8	48	μ	22 47.6	
54		17 32.1	22	o	19.2	62	χ^a	06 01.0	2	27.7	49	σ	49.9	
53	f	32.2	23	m	20.2	63		02.3	3	35.3	50	ρ	52.7	
52		32.3	29	e	21.5	66		02.3	5	35.4	51		55.0	
55	α	32.6	27	p	21.9	67	ν	04.7	4	36.0	52		56.7	
57	μ	35.1				68		09.1						
			28	η	05 22.0				EE	21 37.6	53	β	23 01.3	
58		17 40.4	25		22.1	70	ξ	06 09.1	7	39.8	54	α	02.3	
60	β	41.0	24	γ	22.4	69	f ¹	09.2	8	41.7		R	04.1	
61		42.1	30	ψ	24.2	71		11.9	9	42.1	55		04.5	
62	γ	45.4		S	26.5	72	f ^a	12.5	10	42.4	56		04.7	
	RS	47.5				73		12.9						
			31	CI	05 27.2				12	21 43.8	57		23 07.0	
	Y	17 50.0		CK	27.7	74	k	06 13.6	11	44.7	58		07.5	
63		51.8	32	A	28.1	75	l	14.4	14	47.6	59		09.2	
	V566	54.4	33	n ¹	28.6		BL	22.6	13	47.8	60		09.3	
64	ν	56.3	34	δ	29.5	77		24.7		48.6	61		13.3	
66		57.8				78		24.7	AG					
67		17 58.1	36	ν	05 29.5				AW	21 50.0		W	23 17.4	
68		59.2		RT	30.5				15	50.3		S	18.0	
69	τ	18 00.4		VV	31.0	Pavo			16	50.8	62	τ	18.2	
70	p	03.0	35		31.1	η	17 40.8		17	54.5	63		18.4	
71		04.9	38	n ^a	31.6	π	18 03.8		18	57.6	64		18.5	
						ι	05.8							
72		18 05.0	37	φ^1	05 32.1	R	08.1		20	21 58.7	65		23 20.2	
73		07.1	39	λ	32.4	ξ	18.6		19	58.7	66		20.6	
	V849	11.8		KX	32.6				21	22 00.9	67		22.4	
	RY	14.1	41	θ^1	32.8	ν	18 26.7			01.7	68	ν	22.9	
74		18.4	42	c	32.9	ζ	37.2		22	03.2	69		25.2	
						θ	43.7							
	X	18 36.0	43	θ^a	05 32.9	λ	47.6		23	22 03.3	70	q	23 26.6	
			44	ι	33.0	κ	51.8		24	04.7	71		31.0	
				NU	33.1	ω	18 54.2		25	05.5	72		31.5	
				V359	33.1	τ	19 11.0		27	07.7	73		32.2	
			45		33.2				26	07.7	74		35.1	
Orion														
1	π^a	04 47.1												

Pegasus			Perseus			Phoenix			Pisces			Pisces		
75	23 ^h 35 ^m 5		26	β	03 ^h 04 ^m 9	σ	23 ^h 44 ^m 6	5	A	23 ^h 06 ^m 1	57		00 ^h 43 ^m 9	
76	40.2			ι	05.4	R	53.9				58		44.4	
77	40.8							6	γ	23 14.6				
78	41.5		27	κ	03 06.1	π	23 56.3	7	b	17.8	59	00	44.6	
79	47.1		28	ω	08.1	S	56.5	8	κ	24.4	60		44.8	
			30		14.4	τ	58.5	9		24.6	61		45.3	
80	23 48.8		29		15.1	ε	00 06.9	10	θ	25.4	62		45.7	
81	φ	49.9	31		15.6	κ	23.7				63	δ	46.1	
82	50.1							11		23 27.1				
83	50.2		32	ι	03 18.1	α	00 23.8	12		27.1	64		00 46.3	
84	ψ	55.2	33	α	20.7	λ ¹	29.0	13		29.4	65	i	47.2	
			34		25.8	λ ²	33.0	14		31.6	66		51.9	
85	30 59.6			R	26.9	μ	39.0	15		32.9	67	k	53.3	
86	03.1		35	σ	27.0	ξ	39.5				68	h	55.1	
87	06.5							16		23 33.8				
88	γ	10.7		GK	03 27.8	η	00 41.1	17	ι	37.4	70		00 59.7	
89	χ	12.0	36		29.0	ρ	48.4	18	λ	39.5	69	σ	01 00.1	
			37	ψ	32.9	ω	59.9	19	TX	43.8	71	ε	00.3	
			40	ο	39.2	β	01 03.9	20		45.4	73		02.3	
			39	δ	39.4	ν	05.5				72		02.4	
						ζ	01 06.3	21		23 46.9				
			38	ο	03 41.2	ν	12.9	22		49.6	74	ψ ¹	01 03.0	
			41	ν	41.8	γ	26.2	24		50.4	77		03.2	
1	φ	01 40.5	42	n	46.4	δ	29.2	25		50.5	76		03.3	
2		48.7	44	ζ	51.0	ψ	51.6	26		52.6	75		03.9	
3		49.0		X	52.3						78		05.2	
	U	55.4				φ	01 52.3	27		23 56.1				
		56.2				χ	59.7	28	ω	56.9	79	ψ ²	01 05.3	
			43	A	03 52.9			29		59.3	80		05.8	
4	V	01 58.5	45	ε	54.5			30		59.4	81	ψ ²	07.1	
5	g	59.0	46	ξ	55.7			31		59.8	82	g	08.3	
6		02 08.0		IQ	56.1						84	χ	08.8	
8		10.3	47	λ	04 02.8									
		14.4												
7	χ	02 14.5				Pictor								
	h	16.0				λ	04 41.5	32	c	23 59.9				
	AD	16.9		AG	04 03.7	R	44.8	33		00 02.8	83	τ	01 08.9	
	SU	18.6	48	ν	05.0	ι	49.8	34		07.5	85	φ	11.0	
9	i	18.9	49		05.0	η ¹	05 01.5	35		12.6	86	ζ	11.1	
			50		05.3	η ²	03.7	36		14.0	87		11.5	
			51	μ	11.2						88		12.1	
	S	02 19.3				S	05 09.6	37		00 14.0				
10		21.7	52	f	04 11.5	ζ	18.1	38		14.8		Z	01 13.4	
	DM	22.4		b ¹	14.5	κ	21.4	39		15.2	89	f	15.2	
12		39.1		b ²	16.4	θ	23.0	40		17.2	90	ν	16.7	
11		39.5	54		17.2	W	42.0	41	d	18.0	91	ι	18.4	
			53	d	17.9						93	ρ	23.6	
13	θ	02 40.8				β	05 46.1	42		00 19.8				
14		40.8	55		04 21.2	γ	48.9	43		22.2	94		01 24.0	
15	η	47.0	56		21.4	δ	06 09.3	44		22.8	95		25.1	
16		47.4	57	m	29.9	ν	22.0	45		23.1	96		26.6	
17		48.4	58	e	33.2	μ	31.2	46		25.4	97		27.2	
			59		39.4						98	μ	27.6	
20		02 50.5				RR	06 35.1	47	TV	00 25.4				
18	τ	50.7		AW	04 44.4	α	47.7	48		25.6		R	01 28.1	
21		54.2						49		28.2	99	η	28.8	
22	π	55.6						51		29.8	100		32.2	
24		56.0						52		30.0	101		33.1	
				Phoenix							102	π	34.4	
23	γ	03 01.2				1	22 52.4	53		00 34.2				
	k	01.8		ι	23 32.4	2	56.9	54		36.8	103		01 36.6	
25	ρ	02.0		θ ^{1,2}	37.0	3	58.0	55		37.3	104		36.7	
				SX	43.9	4	β	23 01.3						

Pisces		Puppis		Puppis		Sagitta		Sagittarius	
105	01 ^h 37 ^m 0	I	07 ^h 11 ^m 1	AP	07 ^h 56 ^m 0	1	19 ^h 13 ^m 1	V1016	18 ^h 16 ^m 9
106	ν 38.8	L ¹	11.7	O	56.3	U	16.6	19	δ 17.8
107	39.8	L ²	12.0	V	56.8	2	22.1	Y	18.4
		π	15.4	12	56.9	3	22.5	GR	19.7
109	01 42.2			ζ	08 01.8	WY	30.5	20	ϵ 20.9
110	o 42.7	M	07 16.5	14	08 02.5	4	ϵ 19 35.0	18	18 21.8
111	ξ 51.0	ν^1	16.5	15	ρ 05.4	5	α 37.9	21	22.4
112	57.5	F	16.9	16	06.8	6	β 38.8	V909	22.5
113	α 59.5	ν^2	16.9	18	08.3	7	δ 45.2	RV	24.6
		γ^1	27.4	19	08.9	8	ζ 46.8	22	λ 24.9
			07 27.6			9	19 50.2	U	18 28.9
Piscis Austrinus		RY	29.2	h^1	08 09.6	10	S 53.7	V1017	28.9
1	20 58.2	Z	30.5	CP	09.9	11	55.5	24	30.8
2	21 03.4	z	32.0	RS	11.2	12	γ 56.5	25	31.5
3	10.3	n	32.2	XZ	11.4	13	VZ 57.8	26	38.8
4	14.9			r	11.6				
5	26.1	p	07 33.4			14	20 01.2	V350	18 42.3
		γ^2	35.3	DY	08 11.7	15	01.9	27	φ 42.5
6	21 29.2	f	35.5	h^2	12.3	16	η 02.9	28	43.3
8	33.3	m	36.2	q	16.7	WZ	05.3	V356	44.9
7	33.8	$\kappa^1, 2$	36.8	w	19.4	17	07.7	YZ	46.6
9	ι 42.0								
10	θ 44.8	y	07 36.9			18	20 14.1	29	18 46.7
		e	36.9					30	47.7
11	21 56.7	d^1	37.7	Pyxis				BB	48.0
12	η 58.0	d^2	38.0	η	08 35.7			31	48.8
13	22 01.2	d^3	38.0	ζ	37.6	Sagittarius		33	51.0
14	μ 05.5	d^4	07 38.2	β	38.1	3	X 17 44.4		
15	τ 07.2	R	38.9	α	41.6	V732	52.9	32	ν^1 18 51.1
		T	41.4	γ	48.4	V1275	55.7	UX	51.9
16	λ 22 11.5	1	41.5	δ	08 53.4	4	56.7	35	ν^2 52.1
	ζ 28.0	3	41.8	T	09 02.6	V787	56.8	34	σ 52.2
17	β 28.7			κ	05.9	V999	17 56.9	36	ξ^1 54.4
18	ϵ 37.9	W	07 42.0	e	07.8	5	57.2	37	ξ^2 18 54.7
19	39.5	2	43.2	θ	19.3	6	58.5	ST	58.7
		RZ	43.4	λ	09 21.0	7	59.8	V1059	59.0
20	22 42.7	c	43.5			9	18 00.8	38	ζ 59.4
21	48.6	4	43.6					39	o 19 01.7
22	γ 49.8	S	07 45.3	Reticulum		10	W 18 01.8	40	τ 19 03.8
23	δ 53.2	5	45.6	ζ^1	03 16.7	γ	02.6	41	π 06.8
24	α 54.9	o	46.0	ζ^2	17.1	V630	05.5	42	ψ 12.5
		Q	46.8	χ	28.5	V1015	05.8	RY	13.3
		7	ξ 47.2	β	43.6	11	08.7		
				δ	57.9	AP	18 10.0		
		6	07 47.4	γ	04 00.2	μ	10.8	R	19 13.8
		P	47.7	ι	00.5	V1175	11.0	43	d 14.7
		8	49.2	α	13.8	14	11.3	S	16.5
		9	49.5	ϵ	15.6	15	12.2	U	16.6
		10	50.0	θ	17.1	16	18 12.2	44	ρ^1 18.8
		α	07 50.5	η	04 21.3	17	13.7	46	ν 19 18.9
		b	50.9	R	33.0	WZ	14.1	45	ρ^2 18.9
		J	51.8			η	14.2	β^1	19.0
		11	e 54.7			RS	14.3	β^2	19.6
		N	55.7					α	20.4
Puppis									
G	06 24.4								
ν	36.2								
Y	37.3								
x	45.6								
τ	48.7								
t	06 56.6								
C	07 02.5								
H	02.6								
D	05.5								
A	07.2								
E	07 10.6								

Ursa Maior		Ursa Minor		Vela		Virgo		Virgo	
VW	10 ^h 55 ^m 5	2	01 ^h 01 ^m 5	c	09 ^h 02 ^m 4	13	12 ^h 16 ^m 1	67	α 13 ^h 22 ^m 6
47	56.7	1	α 48.8	λ	06.1	14	16.8	68	i 13 24.1
49	58.0		V 13 37.8	z	12.5	15	η 17.3	69	24.8
		3	14 06.5	k^1	13.0	16	c 17.8	70	26.0
48	β 10 58.8	4	09.0	l	13.6	17	20.0	71	26.7
50	α 11 00.7							72	i^1 27.8
51	01.7		U 14 16.2	k^2	09 13.7		SS 12 22.7		
52	ψ 06.8	5	27.6	K	16.4	20	30.5		
53	ξ 15.5	7	β 50.8	κ	20.6	21	q 31.2	73	13 29.3
			RR 56.8	V	20.8	25	f 34.2	74	i^2 29.4
54	ν 11 15.8	9	15 00.3	J	24.7		R 36.0	75	30.2
55	16.4							76	h 30.3
56	20.1	11	17.1	ψ	09 28.7	26	χ 12 36.7		S 30.4
	ST 25.1	13	γ 20.8	N	29.7	27	39.1		
57	26.4		S 31.4	L	32.4	29	γ 39.1	77	13 31.0
		15	θ 32.9	M	35.0	30	ρ 39.3	78	o 31.6
58	11 27.8	16	45.8	y	36.1	28	ψ 39.4	79	y 32.0
59	35.7							80	ξ 32.1
60	35.9	17	15 56.2	O	09 40.0	31	d^1 12 39.4		32.9
61	38.4	19	16 12.2	u	48.0	32	d^2 43.1		
62	39.0	20	13.5	m	49.7	33	43.8	81	13 35.0
		21	η 18.9	φ	55.1	34	44.7	82	m 39.0
63	χ 11 43.4	22	ϵ 51.0	R	10 04.2	35	45.2	84	40.5
64	γ 51.2							83	41.8
65	52.5	23	δ 17 48.3	Q	10 07.0		U 12 48.6	85	42.9
66	53.4	24	49.2	q	12.6				
	Z 53.9			I	19.0	37	49.1	86	13 43.3
		Vela		r	20.2	38	50.6	87	44.7
67	11 59.6			Y	29.4	41	51.0	88	45.7
68	12 09.3			s	10 29.8	40	51.7	89	47.1
69	δ 13.0	γ^1	08 07.9	t	30.8	43	δ 12 53.1	90	p 52.1
	RY 18.1	γ^2	08.0	p	35.2	44	k 57.1	92	13 53.9
70	18.4	AH	10.4	x	37.3	46	58.0	93	τ 59.1
		AI	12.4	μ	44.6	47	ϵ 59.7	94	14 03.5
71	12 22.7	B	21.0	z	10 44.9	48	13 01.3	95	04.1
73	25.2			i	57.9	49	13 05.3	96	06.3
74	27.6	F	08 26.2				g 05.9	97	14 09.8
75	27.7	A	27.5	Virgo			07.1	98	κ 10.2
	T 34.1	C	33.2	1	ω 11 35.9	50	θ 07.4	99	ι 13.4
	Y 12 38.1	E	34.4	2	ξ 42.7	51	09.4	100	CS 15.9
76	39.4	RZ	25.3	3	ν 43.3	53		101	λ 16.4
	S 41.8			4	A^1 45.3	54	13 10.8	102	ν 16.9
77	ϵ 51.8	e	08 35.9	5	48.1	55	11.5	103	19.5
78	58.6	T	36.1	6	A^2 11 52.5	56	12.4	104	24.8
		o	38.9	7	b 57.4	57	13.3		RS 24.8
		b	39.0	8	π 58.3	59	e 13 14.3	105	φ 14 25.6
79	ζ 13 21.9	n	39.6	X	59.4	58	14.8	106	26.1
80	g 23.2			RX	12 02.2	60	σ 15.1	107	μ 40.4
81	32.2	D	08 42.1	9	o 12 02.7	61	15.8	108	43.0
82	37.6	d	42.6		RW 04.7	62	17.7	109	43.7
83	38.8	δ	43.3	10	07.1	64	13 19.6		
		a	44.3	11	07.5	63	20.3	110	15 00.4
84	13 44.7	h	47.8	12	10.9	65	20.7		
85	η 45.6					66	21.9		
86	52.0	g	08 48.1						
		f	48.9						
		H	54.8						
		w	58.2						
		CV	59.0						

Volans		Vulpecula	
ι	06 ^h 52 ^m 0	T	20 ^h 49 ^m 3
R	07 06.6	31	50.0
γ^1	09.1	BW	52.2
γ^2	09.2	32	52.4
δ	16.9	33	56.0
ζ	07 42.4	R	21 02.2
ϵ	08 07.8	34	18.8
κ^1	20.0	35	25.5
κ^2	20.2		
η	22.5		
β	08 25.2		
ϕ	38.9		
α	09 01.7		
Vulpecula			
	RT	19 09.3	
1		14.1	
2		15.6	
	RS	15.6	
	Z	19.6	
3		19 20.8	
4		23.3	
5		24.0	
6	α	26.6	
8		26.9	
7		19 27.3	
9		32.4	
	U	34.4	
10		41.6	
	CK	45.5	
12		19 48.9	
	SV	49.5	
13		51.3	
14		57.0	
15		59.0	
16		19 59.9	
17		20 04.7	
18		08.5	
19		09.7	
20		09.9	
21		20 12.2	
22		13.3	
23		13.7	
24		14.6	
25		19.9	
27		20 34.9	
29		36.3	
28		36.4	
30		42.7	

INDEX OF NUMBERS HENRY DRAPER CATALOGUE



GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
1	225009	306	1187	645	2905	894	4222	1122	5448	1431	7034
23	225132	310	1185	650	2952	900	4293	1136	5516	1432	7019
30	225180	315	1227	651	3003	907	4307	1142	5526	1434	6972
33	225197	329	1239	665	3059	918	4335	1148	5875	1437	7087
36	225212	334	1280	667	3112	920	4391	1156	5550	1441	7106
38	225218	335	1279	683	3158	922	4398	1159	5608	1444	7147
39	225216	345	1337	696	3196	928	4408	1172	5737	1465	7312
42	225253	362	1404	701	3229	934	4382	1173	5722	1474	7318
44	225239	363	1419	705	3303	935	4482	1192	5789	1476	7344
52	225289	373	1439	706	3302	938	4490	1229	6055	1482	7374
59	28	376	1438	708	3240	940	4502	1250	6192	1491	7439
75	87	388	1522	717	3283	941	4526	1252	6178	1496	7446
88	123	401	1581	719	3326	943	4440	1253	6118	1501	7476
92	142	408	1606	726	3346	950	4585	1254	6116	1510	7570
94	144	413	1635	727	3360	957	4622	1258	6186	1534	7672
95	166	414	1632	728	3379	958	4657	1262	6203	1536	7788
98	203	420	1685	729	3369	959	4628	1263	6130	1566	7804
103	256	425	1671	738	3421	961	4636	1266	6245	1579	7769
116	319	433	1737	741	3443	962	4614	1269	6311	1591	7964
120	344	437	1760	759	3546	963	4656	1279	6210	1594	7927
126	360	439	1801	770	3574	968	4676	1281	6288	1600	8036
127	358	472	1967	774	3627	975	4737	1288	5848	1630	8126
131	400	476	1976	778	3651	980	4732	1290	6301	1642	8065
144	448	481	2011	784	3690	983	4815	1301	6386	1647	8207
147	432	488	2054	788	3750	984	4730	1302	6397	1681	8374
149	431	486	2114	792	3712	989	4727	1309	6456	1687	8498
155	493	503	2151	799	3795	990	4772	1310	6457	1695	8512
158	496	516	2262	801	3823	992	4757	1325	6530	1697	8556
167	560	519	2261	804	3807	999	4778	1335	6595	1707	8491
169	571	530	2363	812	3817	1003	4813	1336	6557	1711	8651
171	587	543	2411	822	3883	1004	4775	1360	6582	1715	8538
173	636	544	2429	823	3919	1019	4919	1364	6658	1722	8634
181	645	546	2421	825	3856	1045	4853	1396	6706	1725	8705
190	693	550	2454	828	3901	1047	5015	1370	6695	1729	8671
197	720	558	2490	838	3980	1051	5098	1372	6793	1730	8810
202	739	579	2630	837	3924	1055	5112	1376	6676	1733	8723
214	787	583	2628	849	4065	1060	5118	1378	6767	1740	8763
238	886	584	2637	851	4089	1068	5128	1383	6763	1747	8829
244	905	586	2626	853	4088	1078	5276	1384	6805	1752	8799
249	942	590	2696	856	4058	1088	5267	1387	6882	1753	8879
256	952	593	2726	865	4128	1086	5234	1394	6811	1769	8921
257	1032	609	2729	866	4150	1091	5286	1400	6860	1787	9053
265	1014	611	2767	869	4145	1102	5457	1404	6903	1806	9057
270	1013	614	2774	874	4142	1103	5384	1406	6829	1807	9100
272	1038	618	2772	875	4184	1105	5382	1410	6920	1808	9132
281	1048	619	2834	879	4211	1110	5445	1415	6953	1811	9030
283	1064	625	2884	882	4180	1111	5437	1420	6798	1817	9021
287	1061	626	2885	889	4247	1115	5695	1422	7014	1819	9138
291	1083	636	2913	891	4161	1117	5394	1424	6961	1828	9228
303	1141	641	2910	893	4294	1120	5408	1426	6960	1839	9570

HD 2

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
1847	9362	2109	10543	2357	11928	2618	13222	2912	15064	3210	16647
855	377	111	859	362	857	619	421	913	248	215	628
870	352	116	587	365	12042	623	456	931	233	216	673
879	408	123	700	366	11973	624	468	932	130	217	754
881	525	131	697	369	12055	633	480	933	144	235	765
1888	9562	2129	10761	2372	11949	2638	13522	2940	15152	3237	16815
892	531	145	830	377	12363	643	555	941	220	240	978
900	640	148	824	379	11946	645	520	943	176	245	739
903	672	161	780	395	12140	652	612	952	089	246	920
918	742	163	934	398	139	653	630	954	371	247	825
1929	9766	2165	10939	2405	12311	2655	13596	2956	15257	3249	16824
931	780	182	11022	411	255	656	611	960	318	253	727
934	10042	188	10982	416	235	661	474	964	335	254	735
937	9896	193	975	418	296	662	692	967	427	256	811
938	746	195	11007	419	274	663	709	974	385	263	975
1941	9856	2196	11037	2424	12111	2668	13594	2976	15471	3269	17006
947	906	200	031	426	292	697	940	991	464	270	16458
948	826	212	171	433	477	706	872	3001	524	271	769
954	919	216	154	438	173	707	871	003	550	273	908
955	774	322	151	442	303	710	869	012	633	276	970
1965	9900	2228	11604	2443	12438	2715	14141	3029	15694	3277	16895
966	927	229	257	445	216	733	13974	032	656	278	901
967	10052	234	332	446	279	742	14055	043	779	279	17051
979	144	241	241	451	301	745	287	045	798	300	081
989	142	243	8890	452	446	746	13982	048	755	303	036
1991	10072	2246	11291	2455	12524	2748	14129	3055	15814	3308	17093
995	148	247	413	458	471	752	13994	067	975	309	094
2007	164	249	353	459	230	756	14228	083	16046	310	168
025	205	265	335	471	583	767	191	091	074	315	163
026	204	272	443	474	573	770	214	096	060	318	206
2030	10360	2274	11428	2475	12339	2777	14213	3100	16028	3346	17504
045	221	283	522	476	558	779	212	102	522	354	566
050	307	289	415	477	533	781	252	103	058	356	361
054	348	290	502	479	534	796	386	116	15920	369	459
055	380	291	503	485	642	805	372	117	16161	373	471
2058	10293	2293	11559	2488	12641	2813	14392	3121	16160	3378	17543
059	250	297	643	506	767	821	641	125	024	387	652
063	800	303	695	517	467	836	489	126	212	390	506
064	390	309	636	527	869	846	652	130	187	391	573
067	481	313	529	534	885	849	691	132	176	401	584
2069	10453	2315	11753	2538	12929	2850	14690	3133	16234	3403	17463
080	476	322	727	549	953	851	622	134	247	405	729
082	538	323	763	552	13041	853	728	136	307	412	848
085	537	324	749	572	161	862	802	153	417	414	793
086	425	326	803	573	174	872	15008	158	400	418	656
2091	10615	2331	11977	2587	13336	2877	14770	3166	16555	3419	17709
092	11025	339	937	600	294	878	943	167	432	426	829
093	10550	341	995	601	325	885	818	170	538	427	769
102	516	343	930	609	363	901	951	192	582	429	824
104	647	347	909	613	372	902	872	199	620	432	864

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
3449	17925	3682	19058	3947	20336	4146	21447	4460	23281	4633	24512
459	904	683	121	948	468	158	552	461	180	643	155
462	878	684	066	952	640	159	551	463	005	649	131
463	18293	687	400	953	559	162	665	464	193	654	167
478	185	694	319	954	606	164	688	467	258	662	263
3480	18071	3697	19134	3955	20610	4173	21686	4470	23089	4668	24141
482	149	705	065	959	631	183	755	474	230	671	240
487	17948	712	270	966	766	184	754	475	288	675	388
501	18265	715	18778	969	630	185	790	477	302	677	357
517	191	718	19349	970	618	188	882	481	363	688	398
3520	18155	3725	19268	3975	20807	4199	21899	4485	23324	4693	22701
531	262	728	374	977	21024	200	22001	486	338	698	24587
532	256	733	356	979	20720	205	21699	491	413	701	626
539	322	740	373	981	644	210	770	495	300	706	555
541	331	747	545	983	729	212	981	500	408	711	706
3544	18296	3755	19476	3984	20888	4222	21856	4502	23432	4720	24534
556	339	759	275	4000	794	229	819	505	466	721	504
561	454	762	548	004	677	231	933	512	480	724	744
562	404	782	940	006	675	236	912	515	526	727	480
567	411	783	637	007	756	238	22252	517	817	728	546
3574	18535	3789	19698	4010	20791	4244	22049	4518	23383	4729	24712
575	449	791	656	017	825	251	231	523	719	730	479
580	543	805	787	018	894	257	091	525	614	734	640
582	519	809	948	024	809	258	203	530	277	744	740
583	557	810	736	026	893	260	676	537	738	747	769
3584	18622	3819	20313	4030	20084	4266	22262	4541	23630	4751	24832
586	623	821	19832	034	797	287	192	544	552	756	817
587	482	827	926	041	902	296	409	546	626	759	760
588	474	830	845	051	21017	305	470	547	754	775	25170
591	650	831	20010	052	20995	311	468	553	475	778	025
3594	18552	3838	19994	4056	21051	4313	22484	4557	23401	4779	24912
595	604	845	20121	057	050	329	663	560	523	785	25069
597	633	851	144	070	120	340	675	564	753	791	165
600	537	857	234	075	071	347	713	566	878	794	346
603	692	863	176	093	563	351	789	568	793	801	267
3611	18866	3864	20063	4097	21423	4365	22796	4572	23728	4805	25204
616	700	870	041	104	430	370	819	579	940	807	202
627	784	872	150	107	364	382	805	581	958	808	422
629	769	879	149	108	278	383	649	584	887	824	371
638	438	883	123	109	379	387	780	586	850	828	340
3641	18907	3887	20293	4113	21291	4395	22920	4587	23862	4830	25330
642	885	899	320	120	402	400	23474	592	848	851	457
643	884	904	277	122	362	408	22764	593	978	855	705
646	883	907	319	124	722	420	951	597	838	858	291
649	978	912	19978	126	467	427	928	601	24071	861	728
3651	18953	3918	20395	4129	21574	4430	23016	4602	24072	4862	25490
664	925	923	315	130	530	439	227	603	23923	874	274
667	19141	927	346	133	428	450	249	610	950	876	558
674	18970	934	365	140	389	455	319	616	985	883	570
677	19107	945	418	142	455	459	139	624	24160	886	555

HD 4

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
4892	25621	5191	27084	5351	27946	5574	28780	5796	30211	6025	31421
894	007	194	442	354	962	576	29064	802	210	029	398
897	604	199	022	358	855	577	065	803	138	031	975
903	425	201	376	359	971	592	184	805	197	032	512
907	723	207	192	370	28024	599	140	809	612	034	746
4913	25680	5208	26356	5375	28052	5600	29305	5810	30478	6040	31539
924	642	210	27295	378	114	604	399	811	121	043	623
937	823	211	411	380	246	605	139	821	432	044	553
938	945	216	309	383	100	609	094	825	422	048	592
944	867	220	278	396	149	611	169	843	495	055	726
4964	26015	5226	27371	5398	28413	5614	29291	5853	30454	6064	31647
966	25975	233	657	408	217	617	248	856	453	068	767
967	940	234	397	409	312	627	335	858	545	070	312
971	26038	235	348	412	226	635	391	860	562	072	764
973	25998	240	382	418	29116	643	375	864	606	078	32440
4994	26171	5244	27245	5421	28352	5644	29365	5868	30504	6082	31925
995	162	245	604	425	294	645	388	875	652	084	761
5009	326	246	429	427	292	657	503	880	557	088	662
018	311	250	588	428	454	658	317	881	442	093	996
020	322	252	459	430	305	659	316	892	739	098	32008
5027	26409	5253	27322	5433	28307	5661	29712	5894	30814	6104	32045
029	076	256	396	436	319	662	479	907	780	121	31590
035	464	259	497	441	375	665	499	911	836	123	964
042	462	260	483	443	355	666	488	913	985	136	910
051	612	265	26836	449	479	669	573	920	870	137	32068
5055	26591	5267	27563	5458	28497	5678	29613	5924	30614	6138	32249
056	574	270	616	464	732	682	610	932	823	142	309
066	571	276	402	467	485	684	589	934	834	143	263
088	676	279	26659	472	459	687	526	939	31093	153	188
089	690	280	27611	478	204	690	737	940	30912	156	453
5091	26553	5287	27628	5480	28527	5694	29646	5942	30959	6158	32301
099	630	289	639	482	546	695	755	945	31203	160	436
100	722	290	710	483	556	701	645	954	109	167	393
103	673	292	638	485	700	708	875	961	139	169	515
111	793	304	697	493	446	716	763	962	30338	172	503
5114	26846	5305	27650	5512	28776	5719	29722	5964	30958	6185	32743
121	967	315	749	517	677	726	721	969	31069	191	549
123	670	317	742	520	763	735	859	978	237	193	343
132	764	322	778	527	873	740	992	983	283	195	667
134	912	324	881	528	749	750	30479	984	236	206	686
5138	26965	5325	27820	5541	28704	5752	29866	5986	31296	6212	32831
139	755	327	861	543	843	762	30080	987	295	219	537
164	27256	328	819	551	867	764	185	988	134	221	736
167	304	329	777	557	970	767	034	991	331	224	33519
172	045	332	28525	558	910	768	076	6008	414	226	32630
5174	26961	5333	28093	5560	28930	5773	30127	6010	31373	6229	32890
177	27026	335	27786	569	29009	774	29678	011	327	230	655
179	290	344	901	570	28978	775	30202	012	444	231	887
183	179	349	28028	571	929	791	122	016	529	232	33285
189	176	350	27934	572	29085	794	238	017	278	234	042

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
6241	33116	6469	34269	6681	35497	6886	36653	7058	37643	7315	39070
246	32964	473	334	683	532	889	848	061	717	320	051
248	996	476	364	685	588	890	874	066	519	322	38944
254	34172	478	233	688	765	893	779	068	289	323	39019
255	32923	480	503	689	520	894	780	078	795	325	190
6258	33262	6487	34538	6694	35640	6896	36777	7082	37811	7326	39004
259	32977	494	411	700	736	907	822	085	741	327	38831
263	991	495	642	703	600	909	496	089	742	334	39003
267	990	496	255	713	715	915	861	091	756	353	523
268	33093	497	452	714	671	916	819	094	711	354	291
6269	33054	6506	34559	6715	35620	6917	36570	7098	37788	7362	39364
274	111	507	579	716	693	919	881	102	38602	364	425
281	224	509	658	723	708	921	678	105	37601	371	385
288	32650	511	721	729	770	922	719	119	971	372	286
292	33256	515	578	733	802	925	959	134	39780	374	317
6300	33254	6516	34557	6744	35583	6926	36960	7136	37984	7376	39421
301	204	524	798	747	991	927	37297	141	38090	377	640
304	328	531	816	748	36060	931	022	147	138	380	400
306	276	535	868	749	189	934	018	148	37967	384	844
309	203	538	863	762	079	935	041	150	38170	389	357
6311	33167	6550	34790	6764	35943	6937	37043	7151	38089	7402	39220
313	875	553	35072	771	36058	944	350	161	39091	404	283
314	684	556	34759	772	35984	945	077	162	38206	407	720
345	266	559	968	774	36187	952	36891	182	104	416	764
348	608	572	35007	779	134	956	37192	191	091	419	587
6350	33554	6574	34989	6792	36167	6960	37128	7197	38393	7422	39937
358	664	578	787	795	584	966	763	198	309	426	586
374	802	579	35039	797	040	968	098	224	478	436	698
375	641	582	34904	800	166	971	209	226	529	440	775
377	833	588	35165	805	162	972	160	228	527	446	891
6381	33856	6596	35162	6806	36217	6973	37147	7230	38666	7449	39853
382	904	607	149	810	285	974	286	236	284	451	801
383	654	623	189	813	267	975	171	237	545	457	816
387	949	629	281	823	351	981	232	241	558	463	910
388	883	632	299	830	553	985	202	246	39014	466	927
6392	33948	6635	35337	6835	36430	6986	37434	7247	38678	7471	40091
405	541	636	186	837	473	988	306	249	622	473	200
407	34043	637	317	841	389	994	303	257	871	476	953
410	085	643	239	843	408	999	430	258	735	477	409
411	33959	644	580	846	597	7000	320	259	804	478	39985
6413	34053	6645	35296	6847	36486	7002	37269	7262	38710	7479	40292
421	266	646	369	849	371	013	495	264	771	481	176
423	347	648	515	850	512	017	993	266	670	483	39970
425	180	654	410	863	591	026	367	277	656	488	40020
427	029	655	411	864	734	028	481	283	751	492	136
6429	34078	6660	35439	6868	36499	7031	37468	7286	38858	7494	40151
436	203	666	505	875	973	039	507	287	39060	499	248
438	310	668	468	879	576	042	490	289	110	507	111
444	649	672	536	881	589	047	438	306	38899	521	035
455	33564	676	548	884	695	056	594	314	39007	523	084

HD 6

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
7536	40494	7794	42042	8000	43319	8284	45145	8496	46328	8712	47946
539	372	796	41597	001	318	287	44708	500	304	720	839
543	183	805	42167	002	362	288	45291	504	569	729	863
547	369	813	525	008	429	290	44927	506	300	732	964
554	239	816	303	015	261	291	990	514	568	747	48099
7556	40446	7817	42111	8016	42973	8299	44472	8518	46374	8751	47914
557	312	824	049	020	818	294	984	520	547	755	48097
565	536	825	540	024	43445	295	45461	527	487	756	217
576	733	827	087	033	386	298	067	530	860	759	383
580	394	830	301	038	544	299	184	540	947	766	073
7587	40657	7835	42448	8051	43525	8302	45348	8557	46553	8779	48501
591	808	836	327	058	587	310	669	559	815	786	329
597	589	837	276	062	785	319	557	566	47001	790	434
598	486	841	341	064	847	322	383	567	46709	793	433
600	588	849	443	065	745	334	321	571	769	799	450
7616	40626	7853	42127	8068	43378	8335	45320	8573	46936	8805	48250
623	972	855	486	073	683	345	572	574	45866	823	737
630	41047	856	41927	075	899	355	416	577	46933	826	432
631	40967	872	42398	079	940	356	433	581	687	827	917
635	932	873	682	080	827	357	415	582	480	833	915
7636	40832	7874	42621	8099	43955	8365	45394	8591	46590	8836	48682
637	41214	875	536	101	819	368	588	597	47144	843	49001
641	40801	877	477	107	993	371	412	604	306	846	095
662	41040	886	43107	113	44037	378	546	609	054	850	131
665	076	887	42509	114	267	379	512	614	138	852	048
7675	41117	7888	42471	8120	44081	8390	46116	8624	47205	8856	48977
676	116	889	560	131	033	394	45542	626	247	858	781
680	312	891	545	132	112	408	984	630	46509	869	50506
685	074	892	729	137	131	410	813	631	47129	873	49147
691	335	893	834	147	43812	411	466	633	105	877	059
7701	41269	7894	42657	8151	43905	8412	45725	8648	47070	8878	49336
702	361	896	543	154	44323	413	726	649	152	879	229
704	380	898	933	170	402	414	765	651	240	880	161
708	534	899	690	180	506	416	410	653	475	882	517
711	511	929	784	181	333	421	871	654	463	884	333
7713	41330	7946	43455	8186	44458	8439	45976	8655	47100	8891	49331
719	700	949	42633	203	497	449	951	656	366	892	293
721	547	952	43023	208	478	450	46064	658	500	895	50002
723	357	956	42954	213	639	452	45995	660	442	899	49591
727	742	962	43834	214	762	458	46273	662	174	901	689
7735	41759	7969	42995	8223	44743	8459	46355	8667	47536	8902	48879
737	698	971	43042	227	700	463	189	671	432	903	49434
742	695	980	157	235	537	468	089	675	670	912	877
750	692	981	039	240	769	470	184	679	561	915	380
751	843	984	112	248	783	474	052	681	395	916	567
7763	41841	7986	43232	8265	44951	8483	46365	8693	47575	8922	49662
772	753	987	153	267	45018	485	229	694	667	923	643
779	933	996	247	273	44996	486	349	704	973	927	606
785	42078	997	396	274	45229	493	178	708	827	931	520
788	054	998	285	281	44691	494	241	711	46588	938	738

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
8939	49891	9099	51283	9344	53921	9585	55621	9795	57478	9992	58855
941	50241	100	104	348	811	588	856	796	264	997	59037
946	013	101	000	351	629	589	775	800	103	10015	148
951	49980	103	250	354	329	590	751	805	593	017	311
954	933	107	309	355	510	591	56022	808	423	022	381
8955	49976	9113	50973	9368	54118	9592	55730	9809	57615	10023	59380
957	340	129	51330	384	53686	600	832	818	917	024	294
960	50223	137	799	387	744	604	56096	821	608	027	438
961	123	145	733	388	54153	605	55879	823	682	029	550
965	49908	146	825	389	53974	606	575	833	749	033	635
8966	50093	9151	51440	9390	53791	9608	56014	9836	57821	10040	59717
968	49618	152	50885	394	929	625	139	843	727	043	612
969	50310	153	51530	402	54173	626	160	844	744	054	693
972	337	154	823	409	079	627	55870	850	669	055	60816
976	49968	161	693	414	309	628	56031	851	55966	071	59890
8978	50062	9165	51925	9419	54475	9635	56456	9860	57646	10072	60060
979	235	175	814	412	131	636	410	862	58155	073	59686
987	571	181	52018	435	732	637	455	868	57927	083	60228
988	49949	184	092	443	605	638	207	870	58215	085	59881
989	50019	188	089	459	662	639	342	877	286	090	984
8993	50018	9199	52362	9463	54893	9642	55866	9886	58350	10104	60111
995	056	200	005	467	764	657	56405	890	346	106	107
9003	445	205	273	473	912	664	705	891	187	113	325
007	277	212	603	477	810	675	577	893	343	114	345
009	621	224	348	483	958	677	221	897	207	115	341
9012	50204	9226	52312	9484	54719	9678	56618	9903	58535	10117	60275
021	644	253	670	490	716	681	169	905	461	120	178
023	643	262	611	493	801	685	733	908	367	122	414
034	707	263	497	495	55070	686	813	909	142	128	357
038	806	265	556	505	057	688	389	916	585	134	532
9042	50420	9269	52666	9513	55864	9694	56731	9920	58612	10137	60318
049	635	270	554	514	865	696	779	923	526	139	606
050	853	273	53047	516	111	701	537	932	552	144	584
051	778	272	52609	518	185	706	855	933	766	145	585
052	747	276	877	521	052	721	55075	937	579	150	646
9057	51557	9278	54239	9523	55526	9732	57197	9947	58715	10161	60666
059	50877	280	53501	524	184	733	150	957	528	164	294
063	820	291	349	526	54895	734	060	959	59026	167	522
064	692	292	52711	528	55344	736	061	960	58978	168	437
070	890	293	918	544	568	739	56989	961	954	178	863
9072	51266	9295	52913	9545	55522	9740	57146	9964	59219	10189	60855
073	49878	303	960	551	383	742	118	965	58661	194	803
075	50658	307	53138	554	719	743	240	970	923	201	652
076	931	310	52976	555	718	746	219	974	972	206	61248
077	51208	313	973	558	589	747	623	979	59067	208	068
9078	51055	9320	53244	9569	55892	9752	57006	9981	59136	10217	61064
081	50551	323	208	574	762	755	56986	985	58425	237	60986
082	522	337	257	581	280	758	57167	987	946	241	61391
089	763	340	705	582	56239	769	56963	988	59059	246	330
096	51199	342	704	583	55857	772	51802	990	256	257	110

HD 8

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
10265	61219	10456	62721	10673	64722	10891	66141	11155	68601
266	429	460	647	686	740	893	591	158	077
276	338	462	63032	689	760	894	358	163	351
277	421	463	62832	695	802	903	546	165	461
279	106	465	902	701	491	912	216	172	808
10280	61295	10469	62952	10707	64648	10932	66624	11181	68895
281	555	472	63118	709	876	938	598	184	752
283	556	473	077	710	685	946	812	197	980
284	642	482	62898	735	65273	947	811	207	69144
288	294	484	63584	741	211	948	552	208	081
10289	61715	10485	63215	10742	64960	10959	66664	11209	69082
291	641	501	271	745	307	960	888	210	194
300	672	517	208	751	65066	964	834	214	080
303	563	522	336	756	228	967	684	215	142
305	363	523	465	763	442	987	67249	217	123
10311	61831	10532	63462	10765	65460	10988	66875	11235	69302
312	966	533	578	768	662	995	824	246	68375
316	878	539	352	770	575	997	67364	252	930
318	603	542	640	773	257	11002	243	254	69267
322	775	553	744	774	456	006	159	255	243
10323	61899	10556	63660	10775	65551	11018	67006	11263	69511
328	772	560	655	776	345	021	228	275	863
331	749	561	332	778	598	026	582	291	148
332	925	562	700	780	750	027	456	296	67934
343	497	563	926	790	685	034	523	302	68951
10345	61935	10568	63786	10793	65908	11050	67224	11325	69830
347	887	569	697	801	522	051	594	337	70002
349	885	574	852	802	818	067	725	338	69548
351	913	575	949	804	907	071	797	343	70060
354	859	576	922	805	699	081	880	348	69897
10355	62226	10578	63752	10808	64486	11085	67977	11358	69994
373	044	579	589	809	65301	091	767	363	70011
374	376	589	64067	811	695	096	68161	366	514
377	61931	601	185	820	904	098	520	368	148
385	62412	608	63586	852	339	100	67447	377	302
10392	62285	10618	64225	10825	65810	11103	68243	11393	70442
401	578	619	63889	830	925	104	217	400	555
402	644	622	975	844	714	105	273	401	272
403	345	628	64484	845	759	114	67959	402	556
409	576	629	096	828	66194	115	68456	405	612
10417	62623	10632	64152	10851	65448	11117	68324	11409	70523
420	066	640	238	865	900	118	146	419	71243
423	897	641	365	868	873	119	434	421	046
425	713	649	235	870	953	124	099	424	70313
438	509	651	379	871	856	134	290	425	574
10440	62781	10653	64145	10873	66342	11138	68312	11428	70839
444	63295	655	440	875	210	141	257	430	71066
445	62747	661	503	878	255	142	256	436	70982
450	893	666	144	880	011	149	553	437	652
455	864	670	572	889	441	154	657	438	569

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
11443	70761	11701	72650	11966	74272	12216	75691	12449	77370
450	930	702	291	978	371	218	759	451	258
456	647	713	737	982	198	221	506	456	104
463	71129	724	626	983	228	226	523	461	093
464	043	729	688	987	280	227	821	464	320
11473	70771	11732	72561	11988	74455	12228	75556	12471	77190
479	958	743	660	992	535	232	737	487	353
480	937	744	524	997	560	234	487	489	475
481	71701	745	617	999	622	235	486	494	615
485	576	748	832	12006	395	242	698	496	350
11490	71141	11766	72993	12018	74575	12244	75732	12499	77445
491	176	775	968	022	442	249	811	501	653
493	095	776	73468	029	521	252	76270	503	327
494	030	781	72945	031	753	253	143	507	309
496	196	783	73155	037	485	258	75916	510	887
11499	71155	11786	73072	12041	74591	12260	76113	12532	78045
504	302	796	390	050	772	272	75896	540	77601
505	115	797	389	052	706	274	76110	545	78004
509	093	805	340	054	688	279	161	551	77692
512	267	807	143	058	824	289	75959	564	996
11523	71297	11810	73017	12063	75416	12303	76346	12565	77912
525	250	817	72905	069	74956	307	151	576	800
531	510	821	73281	074	75116	314	360	580	79837
532	459	823	262	077	74794	317	75958	593	78235
539	377	832	192	082	879	322	76221	595	791
11559	71722	11844	73171	12083	74739	12325	76538	12596	78316
561	088	848	495	090	75171	326	219	598	548
564	863	850	108	091	74918	327	294	602	764
567	878	852	634	102	874	331	376	604	209
580	496	856	471	104	873	339	351	613	366
11584	71555	11867	73887	12108	74604	12341	76292	12614	78541
589	801	877	752	109	75063	343	483	615	418
593	369	886	596	118	081	346	291	619	154
595	935	895	900	122	74988	354	653	623	647
600	766	903	593	125	75149	358	398	626	556
11620	72337	11907	73898	12128	75747	12359	76728	12635	78515
625	922	908	840	138	311	365	579	636	676
628	067	917	74071	141	140	373	543	643	702
630	108	923	006	142	276	380	582	645	668
635	127	931	067	148	137	381	805	646	362
11641	71906	11933	74146	12164	75387	12388	76572	12649	78732
642	72232	943	195	172	333	405	77002	655	715
651	227	944	196	187	332	406	76756	657	712
655	041	946	167	193	630	407	644	659	922
659	094	947	405	194	76236	413	77020	688	79186
11679	72310	11951	74180	12195	75605	12415	76932	12690	79066
682	436	959	137	200	469	417	813	695	108
684	184	962	273	202	629	431	77140	696	351
687	292	964	375	204	710	434	76943	697	181
700	037	965	73971	212	649	447	827	698	241

HD 10

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
12699	79275	12893	80774	13171	82210	13408	83962	13735	86378
704	193	916	874	172	543	414	84194	741	629
707	447	923	81101	174	81817	419	83727	742	513
713	028	926	034	178	82189	425	84367	743	612
716	158	933	157	180	694	426	461	755	663
12719	79416	12938	81188	13185	82660	13442	84335	13763	86728
722	248	939	136	191	734	443	441	796	87015
726	78935	952	169	192	901	452	542	803	238
734	79524	972	146	201	747	454	561	809	283
740	698	983	411	203	635	459	607	827	141
12743	79469	12984	81471	13205	83095	13462	84810	13834	87436
746	621	991	613	212	82621	481	816	839	344
748	345	992	420	219	984	489	748	842	243
749	452	13010	567	221	741	497	737	848	427
754	694	021	830	226	870	506	85123	849	971
12758	79554	13033	81753	13234	83058	13507	85124	13861	87504
759	735	035	848	242	82885	514	396	890	783
761	439	043	799	246	83183	527	250	896	696
764	80007	044	797	250	023	528	040	899	737
767	79846	048	809	254	104	539	206	902	808
12773	79807	13051	81688	13265	83069	13540	84999	13911	87837
774	752	062	858	277	189	545	85217	916	887
784	917	063	873	283	240	547	355	917	822
787	940	066	82554	287	332	558	364	926	901
792	80094	080	81997	292	380	559	235	933	88025
12799	79763	13082	82350	13293	83446	13563	85483	13953	88206
800	910	087	043	296	465	569	376	960	323
801	80057	088	077	301	287	570	444	965	182
802	79931	091	150	306	441	574	563	969	195
808	80108	094	165	308	979	578	656	970	215
12811	80050	13101	82347	13309	83520	13582	85504	13971	88366
813	230	103	406	316	425	584	655	982	284
821	170	109	81937	319	548	587	622	985	231
827	024	110	82205	341	618	590	503	986	473
830	081	112	087	343	650	593	558	990	333
12831	80404	13122	82232	13353	83731	13627	85859	13992	88399
844	456	129	419	354	754	629	953	995	372
848	671	133	198	355	944	637	980	14010	522
857	710	140	434	358	489	643	795	013	647
859	558	143	308	364	506	644	951	018	661
12862	80479	13145	82536	13366	83808	13655	86087	14022	88547
865	290	148	428	369	787	677	85945	037	639
867	499	149	395	372	805	679	86080	039	699
869	951	150	381	373	953	684	85841	047	824
870	950	152	513	376	84121	695	86267	050	842
12875	80441	13153	82446	13380	84152	13697	86266	14052	88809
880	493	154	514	388	83951	700	146	054	651
881	586	157	328	394	84117	711	440	056	737
883	390	160	668	399	228	718	466	066	981
892	546	169	573	406	107	724	360	074	89080

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
14076	88955	14367	90089	14625	92095	14910	93859	15195	95849
081	89015	373	772	631	214	912	875	215	934
086	88960	383	874	634	168	919	94014	230	96113
088	89062	387	794	636	245	929	—	235	097
092	033	388	853	640	328	954	132	238	146
14096	89010	14391	90763	14647	92397	14960	94367	15248	96202
106	024	403	882	654	436	961	264	256	220
107	025	404	745	662	449	962	247	260	314
110	056	416	957	679	682	969	363	282	436
113	021	417	840	682	354	971	388	283	544
14123	88983	14419	91056	14685	92664	14974	94334	15288	96566
124	89125	421	90972	688	424	975	402	300	616
129	254	427	839	713	523	980	510	305	706
133	388	431	994	730	769	988	717	319	738
144	353	444	91120	732	845	994	481	325	819
14154	89319	14455	91130	14733	92938	14999	94480	15329	96918
164	569	457	375	736	728	15002	650	331	919
166	455	464	324	737	787	006	497	332	707
170	449	465	280	740	825	011	683	334	813
177	484	468	232	743	964	016	601	339	834
14178	89485	14478	91355	14753	92763	15018	94600	15340	96833
180	343	480	496	755	93030	022	672	350	97023
181	414	487	316	758	237	026	776	385	277
184	715	489	465	760	92941	030	669	393	472
185	682	491	312	762	93070	032	705	405	411
14197	89736	14493	91437	14769	93163	15035	94720	15411	97495
220	890	501	365	778	194	047	890	415	534
224	774	505	504	798	152	057	985	421	583
225	744	507	190	799	308	072	95208	426	576
232	758	508	533	813	257	087	128	430	585
14244	89911	14522	91619	14814	93291	15089	95129	15435	97670
248	998	524	550	835	397	094	221	436	651
252	904	527	480	837	540	101	234	437	605
260	822	533	612	842	497	106	272	438	603
268	90044	541	636	844	549	109	212	441	633
14280	90040	14546	91706	14848	93779	15113	95241	15460	97778
281	132	552	793	849	563	116	314	487	907
283	264	553	805	850	607	117	347	506	989
301	254	570	942	863	845	118	370	511	98058
305	89571	571	881	865	427	125	345	514	088
14315	90277	14578	91880	14873	93657	15128	95310	15520	98118
319	454	582	889	877	655	130	382	523	161
321	362	594	92063	878	737	131	456	532	292
323	589	595	209	889	702	145	418	537	230
326	432	603	036	897	765	151	578	547	262
14347	90470	14604	92305	14898	93813	15162	95608	15556	98366
352	610	611	055	900	833	171	698	558	353
353	677	614	139	902	943	185	689	567	430
358	537	622	207	904	905	186	771	574	560
361	569	624	125	906	903	188	808	600	664

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
15601	98718	15875	100615	16171	102510	16503	104933	16790	107070
619	772	877	673	173	509	512	979	792	079
625	839	881	708	176	584	514	985	797	193
641	993	886	733	181	590	524	105043	799	168
643	99022	893	696	183	620	542	138	806	199
15644	98991	15899	100841	16187	102634	16544	105151	16813	107259
649	99104	901	825	189	647	551	211	814	274
652	028	905	808	192	660	572	340	822	295
656	055	913	929	199	713	576	382	827	326
665	167	917	893	201	776	581	416	828	328
15667	99264	15921	100889	16206	102839	16584	105435	16829	107325
669	211	927	920	213	878	585	437	830	348
670	196	935	101021	215	870	586	452	835	383
677	285	945	067	219	910	592	509	841	418
680	322	946	132	220	928	593	521	843	465
15684	99333	15947	101013	16223	102942	16608	105639	16849	107446
686	283	959	162	226	964	613	686	856	543
693	453	962	107	231	990	616	702	857	566
705	491	965	189	236	103026	618	707	860	567
708	556	967	154	241	079	624	776	866	655
15710	99574	15970	101133	16246	103101	16630	105805	16873	107700
714	564	971	153	258	192	636	841	877	696
729	648	977	198	268	287	638	850	887	815
744	803	16004	379	286	462	651	937	892	832
785	747	019	431	294	484	659	981	896	860
15751	99787	16020	101391	16295	103516	16667	106057	16899	107904
760	859	030	484	311	578	669	068	903	739
765	902	033	541	312	596	672	112	906	950
768	922	035	501	315	605	679	111	910	966
779	998	037	570	319	632	692	231	920	998
15782	99984	16048	101615	16357	103884	16693	106251	16931	108107
784	100006	051	606	371	961	703	321	934	135
795	99945	055	666	383	104035	723	485	938	114
799	100029	057	782	389	081	724	490	940	123
811	180	072	673	392	075	731	516	948	225
15818	100261	16086	101883	16402	104174	16733	106574	16951	108250
820	262	092	947	406	181	736	591	952	248
822	203	097	933	421	304	740	625	953	249
830	286	102	995	423	337	747	661	954	257
831	287	105	980	425	321	750	690	955	283
15837	100382	16112	102070	16439	104438	16752	106714	16957	108309
841	343	118	124	485	513	754	760	959	323
842	378	131	249	449	555	760	797	964	381
844	393	133	232	455	600	762	819	965	382
845	407	135	212	463	671	764	849	968	355
15847	100418	16137	102224	16472	104731	16766	106887	16969	108396
854	493	147	350	489	827	767	884	985	502
867	563	149	365	490	841	775	911	989	506
873	623	153	328	493	878	785	983	990	483
874	600	165	461	497	902	789	107054	994	501

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
16996	108530	17216	109931	17455	111812	17758	113847	17995	115521
17001	541	223	960	456	786	763	778	18000	604
003	570	225	110024	460	482	767	848	004	439
012	662	227	014	469	893	769	866	007	617
020	722	236	073	472	884	773	791	009	735
17023	108732	17257	110287	17473	111915	17774	113852	18010	115723
026	765	259	317	475	904	778	823	012	659
029	769	260	318	487	998	783	902	023	810
030	759	262	304	489	968	787	996	034	823
038	844	267	311	492	973	788	904	036	842
17039	108821	17268	110335	17493	112033	17794	114038	18039	115892
040	845	270	379	512	092	805	113	044	912
042	861	273	385	513	091	813	149	048	116010
046	907	276	411	514	078	817	256	050	115995
052	903	278	462	515	131	822	287	066	116061
17056	108954	17279	110423	17516	112142	17825	114326	18078	115967
056	945	282	458	518	185	826	357	079	116160
063	985	286	432	523	164	828	330	081	084
065	968	288	461	529	213	829	376	087	087
072	109000	294	506	533	264	833	378	091	235
17075	108970	17309	110646	17540	112244	17835	114447	18104	116292
086	109026	315	666	543	300	843	435	107	243
087	085	337	897	545	219	846	371	109	365
095	141	339	829	548	304	850	474	116	244
108	238	342	914	554	429	866	529	132	457
17113	109272	17346	110951	17556	112412	17869	114613	18133	116656
117	307	348	879	557	413	870	642	134	657
121	317	352	956	567	486	872	570	135	568
122	309	355	111028	569	409	874	710	141	458
126	387	360	032	574	559	882	707	144	658
17127	109358	17369	111067	17582	112570	17884	114780	18147	116706
133	379	371	164	616	769	886	533	153	713
137	372	374	123	631	846	890	772	155	842
139	409	377	270	637	113049	908	835	163	831
142	485	387	335	645	112935	909	873	166	835
17147	019511	17391	111295	17647	112989	17910	114837	18168	116870
148	551	401	397	649	992	916	115004	171	957
150	519	402	421	651	113092	918	114946	181	976
158	536	403	315	654	022	926	971	183	117187
164	573	404	456	664	139	927	911	189	116890
17165	109585	17410	111469	17667	113095	17933	115046	18206	117025
178	729	418	463	672	112985	951	202	212	176
179	668	430	604	685	113120	953	271	213	242
180	704	433	597	687	226	955	149	220	150
183	742	434	588	690	337	959	211	223	566
17194	109787	17437	111613	17704	113314	17968	115310	18226	117376
198	799	440	112014	711	415	975	383	234	304
203	860	443	028	729	523	978	331	239	287
209	896	449	111765	750	703	988	478	251	436
212	914	452	774	751	797	991	612	254	440

HD 14

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
18283	117710	18583	120084	18796	121409	19168	124294	19400	126141
288	661	592	119752	800	299	169	195	401	129
288	675	593	756	805	370	188	425	402	125835
295	716	595	786	809	263	189	730	417	126200
305	789	604	853	826	416	199	367	428	248
18309	117818	18607	119834	18828	121384	19200	124099	19433	126271
312	833	610	796	830	560	202	433	435	218
313	876	611	120565	841	607	205	570	453	341
335	118022	618	119921	845	474	207	675	454	354
348	054	620	120047	850	710	211	123998	456	241
18351	118098	18621	120048	18861	121557	19218	124576	19467	126660
352	156	622	119938	874	743	225	755	478	504
353	214	623	120064	877	439	226	679	480	661
356	232	627	119971	883	790	229	683	483	209
357	117374	630	120033	887	847	230	471	491	722
18359	118216	18632	120052	18895	121853	19234	124601	19499	126769
366	219	633	198	899	980	242	897	504	868
384	261	636	164	900	996	244	850	516	927
389	349	637	136	914	932	251	953	519	127065
391	338	643	315	918	122066	252	915	532	243
18395	118354	18662	120420	18939	122223	19255	124931	19533	126981
399	508	665	307	941	365	269	125161	539	983
410	344	666	323	943	405	273	162	540	862
421	623	667	324	945	408	284	180	542	127167
428	520	671	499	954	430	293	349	548	700
18442	118646	18674	120477	18964	122438	19295	125248	19553	127304
445	904	676	452	965	563	296	351	565	193
457	666	681	455	971	451	297	406	572	337
458	716	683	539	975	250	302	158	590	381
461	899	696	404	986	703	303	276	595	821
18462	118767	18698	120602	18990	122866	19304	125238	19597	127665
466	889	704	787	19017	980	305	124771	604	486
473	119024	715	640	019	123299	309	125283	606	501
479	035	720	642	029	123	311	337	607	762
485	055	724	709	033	139	318	288	608	726
18495	118991	18725	120710	19036	122862	19319	125451	19609	127624
496	119213	726	819	041	123255	323	454	611	739
499	126	731	213	084	657	327	383	613	929
500	118978	733	759	089	515	329	489	627	128000
504	119228	741	933	090	377	334	560	656	127972
18505	119090	18746	120934	19095	123782	19336	125442	19657	127971
509	149	750	121130	099	569	337	473	659	128167
520	288	755	120955	101	492	341	642	662	198
526	250	787	908	125	934	349	124882	666	332
527	476	761	987	127	999	361	125628	668	333
18539	119458	18764	121107	19142	124547	19365	125745	19669	128068
540	425	765	120991	143	186	378	823	674	152
546	361	769	121164	157	224	379	810	978	020
568	605	771	120913	162	147	389	932	682	207
572	765	795	121190	163	206	392	869	689	266

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
19695	128429	19936	130329	20157	132345	20433	134759	20672	136849
698	345	938	559	158	375	435	687	676	664
706	609	949	817	170	813	442	943	681	831
710	488	954	694	174	525	446	837	690	137071
725	582	959	945	183	772	451	135384	692	422
19726	128750	19966	130917	20189	132604	20456	134967	20695	136956
728	620	970	819	195	742	466	135051	696	137107
733	902	972	131041	202	833	474	263	697	006
742	998	974	130948	205	133029	480	153	698	136933
747	129002	975	841	209	132851	489	438	699	137052
19758	128974	19976	130458	20212	132933	20495	135502	20700	136672
762	129132	977	807	223	131596	496	235	703	137389
766	153	978	952	224	133124	497	160	706	443
769	174	979	970	225	132955	501	482	714	058
770	175	981	701	226	133208	503	345	720	390
19772	128898	19982	131111	20233	133388	20507	135240	20724	137391
774	129056	991	156	237	165	515	559	733	066
777	247	20000	120	242	132905	519	291	740	471
779	116	012	507	252	133392	522	534	747	759
789	312	017	058	253	216	523	722	756	432
19793	129336	20029	131873	20271	133242	20526	135379	20761	137704
812	433	037	511	278	340	532	136064	767	465
816	502	047	430	281	640	538	135382	775	928
820	456	051	432	285	582	539	742	782	744
825	798	052	530	297	994	549	591	795	909
19830	129462	20054	131342	20303	133652	20550	135758	20799	137709
831	712	057	109	305	670	556	734	801	387
832	422	066	625	306	456	566	876	805	898
834	078	097	492	308	962	570	136028	819	138265
835	557	068	562	311	774	575	138	825	213
19841	129846	20070	130650	20315	133631	20581	136014	20834	138105
845	685	078	131657	332	134190	591	202	842	137
852	902	084	774	335	133880	598	726	861	268
856	989	087	133002	339	683	606	403	866	481
858	972	092	131951	340	134064	618	366	878	413
19860	129956	20093	132029	20342	134083	20619	136512	20880	138527
864	926	096	131918	346	047	620	298	883	629
866	858	103	919	350	133937	628	407	887	485
871	944	105	425	356	955	632	334	894	852
876	893	116	977	367	134320	635	352	896	562
19884	130109	20115	132052	20372	134335	20636	136479	20901	138505
885	144	119	254	373	323	637	514	908	749
888	055	120	145	382	255	641	729	914	716
895	157	121	146	389	373	643	422	915	333
897	158	122	132	391	133981	644	351	918	688
19898	129954	20128	132058	20395	134270	20651	136751	20923	138764
904	130259	140	219	409	481	654	359	926	890
908	274	145	246	411	482	659	504	932	538
917	328	146	200	418	505	662	753	941	917
932	557	156	242	422	468	663	415	942	918

HD 16

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
20943	138769	21161	140716	21359	142139	21582	144046	21836	145842
947	139006	164	729	364	378	584	143928	837	782
948	138289	177	775	367	500	590	144208	838	146051
949	905	184	483	368	574	593	069	845	001
950	816	187	873	371	445	604	542	846	145921
20952	139669	21188	140784	21377	142448	21609	144217	21849	145689
962	074	194	141003	382	780	610	218	851	146926
964	153	201	004	390	763	615	197	861	003
968	087	205	140901	395	629	620	334	862	366
977	357	224	141187	396	630	622	426	863	364
20979	139063	21227	140979	21397	142703	21625	144294	21864	146233
981	195	233	141472	398	669	639	470	865	388
985	225	243	142105	400	926	647	415	867	254
993	160	245	141353	402	908	659	608	870	388
999	493	246	653	405	691	667	708	871	143
21001	139127	21250	141168	21408	142860	21668	144661	21895	146514
003	138800	251	378	414	514	673	690	900	738
005	139254	252	194	420	883	676	145622	910	624
007	129	253	675	424	143187	677	144480	916	147321
014	329	255	477	428	142980	682	874	920	146791
21015	139271	21257	141527	21439	142983	21694	144844	21923	146667
019	365	263	296	440	143107	696	145001	933	686
025	138867	269	513	442	142990	702	002	934	850
027	139211	273	318	447	143018	705	454	941	836
031	446	276	714	451	009	717	085	942	690
21032	139641	21280	141680	21467	143466	21718	145122	21943	147232
036	778	281	556	478	118	722	144987	959	146954
039	518	284	544	486	435	724	145148	969	147084
042	521	285	637	489	275	733	328	974	352
044	798	288	795	491	454	736	389	976	266
21048	139761	21292	141850	21495	143333	21738	145206	21982	147165
054	906	301	851	499	584	748	191	984	365
057	663	305	853	502	459	749	250	987	394
063	891	308	585	508	553	773	502	997	152
064	892	311	992	525	666	776	483	999	148048
21065	140227	21319	142091	21527	143761	21777	145647	22000	147225
070	139664	327	096	534	807	778	482	007	449
089	140027	328	141767	535	474	780	570	012	547
092	139871	329	142114	539	546	782	384	019	550
094	997	332	141891	540	619	783	361	020	677
21102	140159	21337	142267	21548	143699	21784	145607	22026	147749
103	139980	339	165	552	894	786	713	029	767
105	140160	340	373	556	787	787	397	030	513
106	008	341	184	557	346	800	849	040	835
111	232	342	198	559	790	802	931	042	700
21130	140436	21345	142531	21569	144204	21803	145788	22043	147628
146	417	348	357	572	284	815	892	054	723
154	728	350	049	574	143902	819	544	058	869
155	538	352	250	577	144205	828	897	062	148293
158	573	355	301	580	206	829	838	078	147934

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
22079	147933	22332	149757	22606	151249	22878	153053	23198	155401
089	584	334	485	608	527	895	221	200	711
090	148112	344	150030	611	732	898	336	209	450
091	374	347	149711	631	676	905	363	217	341
100	147787	351	150100	640	680	910	154099	220	644
22101	148387	22352	150117	22643	151769	22911	153368	23229	155860
102	330	360	149911	648	862	935	808	263	806
106	147971	361	150012	658	771	937	687	266	156295
107	148206	364	149730	662	152107	938	956	270	155826
108	283	368	886	664	151956	942	613	273	886
22112	148228	22370	149324	22669	151804	22948	153834	23274	155885
116	147977	379	971	677	890	956	580	277	156014
117	148184	383	837	682	152173	960	882	278	015
123	287	398	150449	688	127	971	914	280	155970
131	247	412	450	691	151985	975	154029	287	940
22133	148349	22419	150136	22706	152276	22983	153716	23294	156164
134	367	425	168	708	326	985	154084	295	155974
140	218	430	378	712	151967	991	153890	302	156283
142	147675	444	331	725	152161	998	154391	309	284
148	148513	446	483	729	235	23002	143	312	208
22150	148379	22447	150366	22730	153236	23014	154228	23313	156098
157	478	449	416	731	311	019	090	317	247
159	291	452	580	733	234	025	278	319	227
171	604	453	453	737	249	034	204	320	266
172	783	460	557	739	082	035	633	340	091
22179	148605	22464	150680	22748	152293	23037	154431	23344	556349
193	856	468	682	749	153751	046	441	350	293
194	149212	479	608	751	152334	050	417	353	274
195	148708	481	591	752	598	056	310	359	633
198	688	489	151101	768	408	058	445	362	384
22200	148786	22493	150576	22773	152569	23061	154494	23371	156653
201	760	502	997	775	614	081	481	372	947
202	897	505	742	783	601	089	733	374	729
203	857	513	549	786	476	091	660	382	681
205	149681	519	148542	794	527	092	905	388	190
22211	149081	22520	150894	22802	552815	23105	154721	23390	156891
212	148488	521	151199	808	830	116	779	392	277
216	149009	522	087	816	879	118	783	393	874
221	148898	524	150745	820	783	120	895	396	717
244	149121	546	151133	824	849	132	155103	423	897
22250	149161	22549	150898	22830	152820	23145	155078	23424	156928
251	303	553	151203	835	909	148	154948	426	157049
258	038	558	150798	837	564	158	155125	427	087
264	148890	559	151078	841	824	169	035	439	156768
281	149650	560	217	845	786	172	410	446	157214
22296	149630	22564	151388	22848	153021	23174	154903	23447	157198
303	438	584	613	862	210	180	155203	449	156854
304	404	592	431	867	072	182	763	451	157056
311	447	604	152303	869	152980	184	259	452	325
321	661	605	151525	871	153597	191	514	458	156979

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
23465	156838	23788	159170	24075	161321	24382	163506	24656	165402
470	157042	797	541	077	270	384	336	660	438
471	097	798	332	089	162003	386	318	665	040
481	156942	801	560	090	004	392	547	667	166865
487	157482	803	353	093	161693	393	472	669	866
23492	157236	23804	159176	24112	161390	24398	163532	24670	165625
503	283	807	501	116	695	402	376	671	683
505	681	815	217	125	471	410	929	678	516
515	244	816	358	135	592	413	641	680	164712
517	246	821	966	138	797	414	624	692	165687
23527	157617	23824	159480	24147	161664	24415	163770	24693	165760
533	527	837	561	148	701	428	990	694	634
543	778	838	870	150	833	432	164058	695	777
544	779	846	433	160	756	434	163685	700	908
546	728	854	463	162	868	435	652	711	166014
23550	156513	23857	159532	24175	161941	24448	163993	24718	165499
552	157457	861	834	176	840	451	755	720	166046
556	740	862	492	184	162076	459	164613	721	045
559	741	863	925	187	161763	468	163917	724	208
589	661	874	160269	188	892	478	164136	731	165259
23594	157662	23876	159707	24194	162161	24483	163955	24735	166229
597	792	879	160054	197	161912	487	164064	740	182
599	158996	881	159876	199	162211	488	280	743	230
614	157978	882	877	207	161814	495	429	748	023
616	753	889	975	221	162579	500	284	754	233
23617	157950	23894	160290	24226	162189	24502	164349	24761	166006
621	999	897	018	228	123	503	259	764	285
627	919	901	181	236	166205	509	353	767	063
637	955	918	032	241	162555	515	432	769	114
638	819	944	922	251	570	518	646	771	197
23641	158148	23951	160263	24259	162374	24523	164614	24777	166479
647	261	965	762	261	391	526	402	783	460
649	460	968	161178	266	166926	534	577	787	640
658	414	970	160342	273	162496	538	668	799	464
664	105	978	613	278	517	539	669	820	167042
23677	158352	23988	160578	24288	162714	24555	164584	24824	166596
681	094	991	781	290	586	563	852	829	988
693	408	24001	668	294	587	565	764	831	167006
706	614	009	910	295	774	568	900	856	166937
708	427	024	691	309	989	574	794	861	599
23717	158643	24025	161193	24314	162724	24597	164870	24869	167193
725	704	028	074	315	161988	605	875	871	036
726	899	030	160915	320	162917	607	165358	874	370
732	837	035	720	329	817	617	174	892	096
736	974	044	635	342	163217	632	135	893	264
23741	159181	24048	161096	24343	163989	24633	165373	24895	167263
748	158799	051	056	344	162926	635	024	900	356
754	159139	052	149	347	978	641	341	906	128
757	082	054	160928	364	163588	643	185	916	168151
769	158926	059	161239	374	145	649	189	936	167965

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
24941	167666	25150	169405	25406	171780	25706	173168	25964	175515
944	618	151	170073	407	745	713	654	965	635
945	768	153	169689	411	746	718	638	972	740
946	720	154	467	422	802	721	780	973	362
947	647	165	981	427	834	722	540	980	824
24958	167425	25174	169851	25443	172044	25730	173764	25991	175638
961	818	175	830	450	171856	732	936	993	639
973	168322	176	985	456	978	734	880	995	640
975	653	180	916	466	172167	735	819	996	865
977	199	183	767	474	171819	748	715	999	743
24980	168270	25185	169853	25475	171961	25757	174237	26008	175329
995	387	186	990	484	172051	758	173791	012	687
999	167468	194	170137	488	171967	766	861	013	751
25003	168532	198	200	491	172569	768	174179	016	510
006	415	202	169836	502	380	772	160	019	775
25024	168454	25207	164461	25519	172728	25785	174116	26020	175869
025	694	212	170693	522	171759	786	262	023	401
032	775	216	069	524	172348	799	481	024	176524
033	720	218	235	541	671	801	208	029	175794
036	656	220	296	559	883	803	980	030	176051
25038	168608	25223	169570	25561	172211	25823	173948	26038	175813
045	339	227	978	563	546	835	174309	039	892
046	723	232	170397	580	748	837	585	049	176408
047	169028	234	474	586	831	839	175286	052	155
050	168646	239	433	597	173087	841	174602	055	598
25051	168592	25250	170650	25599	172777	25846	174464	26059	176318
054	797	263	479	603	173398	847	638	064	232
056	913	269	465	604	172555	859	295	067	301
057	914	272	521	606	630	861	387	068	162
067	733	273	523	610	173009	862	589	075	303
25082	169110	25279	170680	25613	172910	25886	174853	26086	176437
083	168838	282	740	628	991	889	959	087	502
084	169111	284	878	635	173524	895	933	091	411
085	305	285	642	636	117	904	175225	095	582
089	167714	302	920	640	416	905	306	101	527
25090	169033	25310	170975	25643	173417	25906	175132	26115	176670
093	191	313	845	652	370	914	174947	117	175986
094	168905	314	867	657	664	918	974	138	177003
100	169022	327	171034	661	300	930	694	141	176678
101	156	328	245	663	494	931	175156	142	896
25114	170000	25333	171130	25666	173583	25934	175426	26151	176871
116	169414	334	172864	667	582	935	535	159	704
120	233	336	171115	668	607	939	190	161	687
122	170153	340	301	674	495	941	191	165	638
124	169236	362	635	676	648	942	443	169	177249
25131	169493	25372	172340	25678	173649	25954	175492	26177	176723
132	420	374	171391	687	460	955	317	180	177109
137	702	385	443	698	667	956	219	181	196
145	885	396	779	701	172881	959	588	182	176664
147	718	398	623	705	173949	963	360	184	884

HD 20

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
26190	176984	26507	180163	26789	182369	27067	184552	27349	186648
198	177199	512	179366	794	694	068	960	351	219
205	178	516	950	801	416	070	875	354	791
209	074	518	949	805	477	085	705	358	543
224	241	520	180711	809	672	089	707	360	927
26237	177463	26526	179886	26816	182640	27097	184961	27367	187340
240	171	530	180242	821	762	099	185037	369	013
259	517	537	610	823	629	103	184930	372	038
263	474	539	262	824	645	105	835	391	076
266	808	542	317	825	807	107	915	394	186984
26270	177724	26544	180093	26826	183556	27108	184585	27401	187235
272	406	550	450	833	182681	120	185018	402	193
285	756	552	021	834	509	127	184985	407	372
290	178207	567	482	838	835	139	185194	412	098
291	177716	569	554	839	919	140	351	416	186786
26297	177940	26572	180555	26840	182900	27141	185395	27417	187195
299	817	585	809	844	955	143	124	418	259
308	846	589	540	846	183056	152	456	424	186957
310	178187	599	782	857	184102	167	139	427	187086
313	177389	604	181096	883	182893	185	507	431	362
26315	178125	26609	180868	26884	183227	27187	184996	27453	187638
317	230	613	968	885	007	189	185404	465	532
318	329	621	181276	891	182709	194	467	470	642
322	177873	623	180972	893	183534	203	734	471	188119
329	178075	631	885	900	324	206	912	474	187474
26335	178175	26638	181984	26904	183439	27213	185872	27480	187691
338	475	650	470	905	244	214	644	481	796
340	449	654	333	911	275	215	758	482	420
347	428	660	383	914	491	216	837	486	849
355	476	664	240	919	492	222	762	492	879
26360	178253	26669	181391	26933	183545	27235	185936	27493	187811
375	322	673	440	936	630	236	958	503	739
379	596	682	960	947	184006	249	186155	506	188056
380	345	694	577	953	183912	252	340	510	187923
386	524	696	296	956	914	255	005	513	188074
26397	179094	26697	181615	26959	183552	27272	186203	27516	187982
405	178628	700	645	960	986	275	307	517	929
411	840	703	454	968	184010	276	042	529	188209
431	845	708	182190	981	183806	289	185	531	252
449	179933	718	181623	988	184171	292	377	532	041
26454	179583	26723	181907	26990	184293	27297	186440	27544	188260
459	527	735	182564	27006	035	305	486	546	154
461	406	736	101	023	958	310	568	549	439
463	323	737	181869	025	127	315	619	557	114
469	497	747	925	030	406	318	686	558	310
26470	179648	26748	182255	27045	184786	27321	186547	27562	188293
475	180006	766	180	046	492	328	675	565	350
484	777	777	286	047	606	337	500	567	385
485	179433	784	490	050	185144	342	689	571	665
490	761	785	568	062	184759	347	882	574	485

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
27581	188793	27793	189567	28152	192806	28453	193721	28743	196725
583	376	806	190544	160	909	456	195066	745	753
587	512	808	211	166	836	462	068	748	662
588	162	811	056	169	934	464	194783	756	755
589	650	812	229	174	985	467	195050	758	775
27594	188097	27820	190360	28183	192944	28472	194939	28761	196758
601	727	824	327	189	876	481	943	764	852
604	728	832	299	194	177482	496	195006	766	821
605	603	835	406	195	192879	503	195094	776	737
613	892	856	940	197	193092	504	135	777	777
27618	189037	27858	190603	28200	192947	28513	195295	28780	196687
620	127	868	608	218	193237	515	324	782	519
622	188947	869	781	228	322	524	206	796	197018
631	228	879	421	233	150	525	325	797	196857
632	189066	886	248	239	369	531	554	808	917
27635	189276	27894	191174	28241	193002	28533	195330	28809	197139
637	188899	899	096	242	370	537	556	816	120
641	296	904	026	252	664	540	479	826	121
648	189090	910	190993	256	329	541	725	827	177
649	178	911	191277	258	592	563	564	832	373
27651	188584	27912	191195	28275	193472	28569	195774	28846	197345
657	981	930	067	282	432	573	549	854	392
658	189005	938	243	286	452	578	194612	860	157
670	103	939	110	290	680	588	195569	862	051
672	319	951	263	292	579	593	810	865	511
27676	189118	27980	191610	28295	193495	28597	195402	28873	197461
677	395	992	408	297	722	608	838	886	572
678	080	999	747	299	702	609	627	894	734
683	195	28010	191692	304	964	611	196787	919	950
685	140	024	877	309	571	617	195943	920	752
27687	188887	28035	191862	28324	194258	28630	196093	28926	197939
688	189410	037	192004	325	193911	639	502	927	630
689	340	042	044	338	194093	642	178	929	692
693	245	048	191603	339	552	648	925	930	812
697	198	063	829	340	298	652	078	933	725
27704	189124	28066	192907	28341	193807	28659	196180	28942	197912
709	684	068	107	343	194012	668	195961	956	198084
711	577	071	455	347	097	682	196171	959	197989
716	900	091	514	351	013	684	321	962	198149
720	775	097	425	356	193	690	197508	965	197963
27724	189687	28098	192535	28374	193924	28697	196426	28966	197964
737	561	099	577	378	194317	702	504	969	635
739	695	104	310	379	335	709	524	978	198001
753	849	105	518	382	244	711	544	979	026
758	741	108	696	394	215	713	606	980	197937
27763	189763	28120	192781	28395	194184	28725	196574	28981	198134
764	944	124	640	408	454	730	378	986	069
768	190004	140	685	418	577	731	051	994	183
770	147	144	713	435	688	740	724	29008	048
779	189931	145	787	442	636	741	740	012	345

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GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
29018	198174	29329	200044	29673	202128	29979	203608	30289	205478
019	199095	330	205	682	240	980	925	291	924
026	198232	331	199951	695	314	988	875	302	206165
036	478	343	532	697	275	993	926	307	043
037	390	344	200052	704	103	994	760	309	005
29039	198391	29350	200253	29709	202261	30007	203949	30315	206067
053	357	351	073	717	287	013	204153	320	088
055	308	354	310	722	320	016	172	322	267
057	431	363	163	723	444	020	075	338	330
066	639	372	245	727	369	021	018	354	301
29078	198571	29393	200614	29735	202447	30023	204188	30362	206509
079	542	403	595	765	606	026	203881	365	356
080	529	408	577	774	627	027	204139	376	538
089	726	417	497	781	671	040	411	377	445
094	667	419	499	786	850	041	428	378	487
29107	199437	29420	200365	29789	202923	30044	204403	30382	206453
109	198743	430	644	791	862	048	414	384	570
112	809	438	817	792	203501	059	381	386	540
127	716	451	790	793	202753	063	485	391	672
133	700	453	718	798	987	069	205072	393	561
29150	199081	29459	200905	29802	202904	30078	204585	30394	206644
153	098	460	761	816	203399	081	770	396	546
159	101	461	702	819	202730	099	754	407	731
164	012	465	763	823	203064	108	771	411	399
171	140	489	525	836	096	109	274	412	749
29178	199169	29490	200914	29847	203156	30118	205021	30415	205952
201	253	491	201051	848	280	131	204965	418	842
202	254	502	078	854	006	133	862	419	677
213	260	503	200751	856	245	137	867	421	774
219	478	509	201091	860	338	138	783	431	778
29220	199345	29519	201251	29864	203206	30142	204854	30437	206827
239	612	520	057	875	467	150	205139	438	826
241	579	543	184	877	222	157	114	439	742
243	611	550	636	880	291	163	204960	440	936
245	443	558	200924	884	344	185	205314	443	860
29246	199661	29562	201433	29896	203439	30204	205289	30444	206859
251	629	563	908	898	574	207	435	448	834
254	200039	567	352	903	387	218	423	450	901
265	199603	571	381	914	504	219	512	452	207130
266	665	591	601	915	133	220	551	472	206240
29267	199697	29596	201616	29923	203475	30231	205541	30473	207198
274	870	606	371	925	525	235	471	474	005
276	766	608	834	926	644	243	529	479	089
284	892	611	202012	931	562	250	730	481	052
287	728	614	201647	934	212	252	637	483	260
29288	199623	29640	201772	29950	203585	30263	205835	30491	207098
290	684	648	852	953	638	268	767	501	203
291	955	652	901	957	705	274	852	502	223
309	942	655	202214	965	803	278	939	509	155
327	200120	661	109	968	858	288	206040	512	330

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
30513	207235	30872	209625	31088	210848	31311	212330	31567	214470
516	129	877	790	094	211006	315	487	581	376
526	528	878	529	095	210934	317	430	586	454
531	229	880	772	099	960	326	593	598	484
537	516	887	761	104	211073	327	211539	604	710
30541	207241	30892	209688	31105	211096	31328	212571	31610	214567
550	503	894	747	110	300	343	643	615	665
555	563	896	750	116	242	346	581	620	734
565	650	899	833	123	053	355	754	626	680
569	652	904	960	125	088	365	213022	632	714
30590	207760	30907	209975	31127	211211	31371	212728	31634	214698
593	857	914	819	133	210853	375	978	639	690
594	840	917	961	135	336	377	943	641	632
625	978	919	945	138	202	380	213087	646	748
627	208095	924	993	139	287	387	212953	650	878
30631	207958	30926	210071	31143	211388	31398	213051	31652	214868
635	208057	932	027	147	356	399	052	655	850
640	207971	942	209952	150	361	400	009	664	923
648	208108	943	210074	152	391	401	403	670	993
654	207964	954	049	155	392	408	119	672	215030
30655	208111	30956	210129	31163	211434	31412	213080	31674	214994
664	177	957	066	166	210967	415	179	677	995
691	501	968	210	167	211554	417	135	685	952
696	321	977	191	178	415	421	306	701	215104
702	606	985	334	183	416	423	198	704	191
30708	208435	30995	210354	31199	211676	31425	213235	31706	215182
712	682	996	271	205	833	426	310	708	167
719	565	31003	302	210	797	430	323	712	214846
720	450	004	056	223	212710	440	320	731	215359
731	816	013	418	225	211838	449	420	732	373
30742	208703	31015	210419	31230	211924	31459	213398	31744	215369
746	735	016	459	239	976	461	429	750	405
753	737	019	460	247	212010	471	558	771	664
767	796	021	424	252	120	474	798	776	665
774	209112	022	434	253	097	478	442	778	648
30779	209008	31026	210502	31255	212076	31488	213660	31794	215721
785	014	029	464	257	061	498	402	802	766
788	208741	037	807	273	087	506	214035	813	789
799	209128	044	745	279	132	507	213789	821	573
800	369	046	715	284	211998	510	973	822	874
30803	209166	31052	210702	31291	212271	31513	213930	31824	215943
804	167	056	884	293	320	516	845	831	216057
817	100	061	705	297	454	534	998	834	102
828	419	064	762	299	466	535	986	836	032
837	481	066	839	300	395	547	214085	851	131
30842	209396	31070	210855	31301	212211	31551	214168	31854	216174
844	409	075	739	303	495	555	122	855	446
846	459	077	939	307	404	556	240	857	228
848	515	081	889	308	168	558	200	861	200
862	522	086	211029	310	496	563	150	863	149

GC	HD	GC	HD	GC	HD	GC	HD	GC	HD
31868	216210	32178	218235	32462	219834	32793	221861	33112	223719
872	187	182	240	463	916	818	950	118	774
884	380	184	227	467	879	830	222093	119	768
895	336	186	242	468	877	831	109	122	781
896	397	192	269	473	927	832	107	128	807
31899	216385	32194	218108	32476	219945	32833	222098	33130	223825
903	386	196	329	485	981	836	095	136	855
908	489	197	376	491	220009	840	060	140	884
918	494	201	356	498	003	842	133	160	224014
920	538	209	396	503	061	850	173	162	022
31926	216437	32211	218395	32506	220105	32864	222304	33165	224062
930	608	213	288	507	088	869	386	172	103
940	646	216	452	510	117	872	387	175	113
943	627	220	480	511	096	873	345	183	165
944	640	226	434	522	222	875	404	184	151
31955	217157	32228	218537	32531	220278	32878	222377	33205	224309
956	216701	233	527	534	263	879	368	211	342
960	718	237	658	535	318	882	399	214	355
963	735	246	594	538	369	886	439	215	361
964	756	252	634	540	321	888	433	219	362
31972	216761	32256	218619	32543	220363	32898	222493	33223	224392
974	763	260	630	548	401	908	547	230	427
976	831	261	639	558	219765	911	574	244	490
980	823	262	640	559	220440	914	602	248	533
987	916	264	655	577	599	917	603	256	554
31989	216946	32267	218700	32579	220572	32925	222643	33257	224572
998	217050	270	670	582	652	931	661	262	617
999	382	272	753	585	657	945	764	266	630
32000	216956	288	804	594	704	948	800	268	635
003	217014	291	792	603	729	953	820	280	686
32010	217101	32302	218918	32620	220825	32954	222842	33292	224750
015	107	316	219080	624	790	957	805	298	801
034	232	329	134	629	885	958	847	305	834
036	236	331	139	639	974	960	806	312	865
037	264	333	077	640	933	985	223024	320	893
32049	217303	32346	219215	32647	220954	32988	223047	33321	224889
061	364	350	290	657	221006	995	075	325	906
063	476	357	263	667	115	33004	128	327	926
067	459	366	485	680	525	009	173	330	935
068	403	369	402	683	253	010	165	334	930
32075	217484	32374	219449	32692	221293	33012	223145	33337	224990
082	563	388	586	702	323	014	170	341	225003
095	675	392	507	703	345	021	229		
105	703	393	482	714	357	029	252		
110	782	401	576	719	394	031	274		
32122	217792	32409	219623	32742	221420	33050	223352		
129	842	413	571	744	507	051	385		
134	891	415	615	750	565	059	429		
135	906	426	644	759	615	062	461		
141	831	429	688	772	673	063	460		
32142	218029	32431	219693	32774	221675	33074	223524		
143	217902	432	734	779	758	081	559		
144	218031	447	815	780	756	092	640		
149	045	450	784	781	745	094	637		
153	060	459	832	787	760	107	647		

DOUBLE AND MULTIPLE STARS

D

down to total visual magnitude 6^m75 .

GC	Number in Boss General Catalogue
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
ADS	Number in Aitken's New General Catalogue of Double Stars
Cat	Designation in other catalogues of double stars
D	Duplicity: o optical
	c common proper motion
	b binary system
	d type uncertain
	f fixed
m m ₁ m ₂	Total visual magnitude and magnitudes of components
P° d" E	Position angle, distance and epoch, or
e a" P	Eccentricity, major semi-axis and period of revolution (for binaries with period smaller than 100 years)
Con	Designation of star and constellation
N	Notes (el elements, sp spectroscopical component, sp sp two spectroscopical components etc).



GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	e P°	a'' d''	O E	Con	N
1—2	00 ^h 00 ^m 0 +65°49'	1	Σ 3053	b	5.77	6.02	7.47	71	15.3	1924	Cas	
38	02.0 +41 49	30	OΣ 514	o	6.03	6.1	9.8	168	5.3	1917	And	
41	02.1 +33 59	32	Σ 3056	d	7.15	7.9	7.9	145	0.7	1953	And	
				d	6.97	7.15	9.0	1	23.1	1926		
	02.3 +58 15	36	Σ 3057	c	6.51	6.7	9.3	300	3.7	1925	Cas	
	02.4 +26 22	42	Fox	d	6.52	6.5	10.8	122	23.1	1907	Peg	
88	03.6 +58 09	61	Σ 3062	b	6.10	6.5	7.3	235	1.2	1958	Cas	el
92	03.7 —49 21			c	5.77	5.77	11.8	176	5.4	1928	Phe	
116	05.2 —22 47	89	See 2	c	5.92	5.9	12.3	160	1.5	1940	Cet	
148	06.5 —54 17		HdO 181	b	6.34	6.5	8.5	246	0.5	1942	Phe	
149	06.5 +79 26	102	Σ 2	b	6.22	6.9	7.1	26	0.4	1955	Cep	el
155	08.8 —28 16	111	β 391	b	5.46	6.2	6.3	86	1.4	1942	κ ¹ Scl	
167	07.5 +10 52	122	Σ 5	b	5.51	5.5	10.5	161	7.7	1925	34 Psc	
184	08.2 —73 30			c	6.76	7.0	8.5	320	0.5	1931	Tuc	
208	09.5 +53 21	148	β 1026	b	6.80	7.4	7.8	0.8	0.2	72.0	Cas	el
243	10.8 +26 43	161	OΣ 2	b	6.30	6.5	8.0	350	0.2	1954	And	el
				d	6.25	6.30	9.6	225	17.9	1923		
265	11.9 —08 04	180	β 486	c	5.34	5.36	10.0	4	2.9	1929	Cet	
287—8	12.4 +08 33	191	Σ 12	b	5.66	5.87	7.6	148	11.8	1926	35 Psc	sp
	12.7 +43 56	197	A 1266	d	6.64	7.3	7.5	25	0.1	72.0	And	
303	13.4 +76 40	207	Σ 13	b	6.23	6.9	7.1	63	0.9	1953	Cep	
310	13.7 +43 19	215	h 1947	c	5.97	6.03	9.9	76	9.0	1910	And	
	14.8 +08 36	238	A 1803	b	6.62	7.3	7.5	303	0.2	1926	38 Psc	
			Σ 22	d	6.36	6.62	8.0	237	4.2	1926		
	15.8 —21 25	251	β 393	b	6.74	9.9	8.0	18	0.8	1926	Cet	
376	16.0 +43 31	254	OΣ 5	c	6.02	6.04	10.2	238	6.2	1923	26 And	
414	18.1 +32 38		Ac 1	b	5.97	6.5	7.0	287	1.4	1944	And	
419	18.3 +10 42	287	β 1093	b	6.55	6.9	7.8	100	0.6	1953	Psc	
	19.8 +13 12	303	Σ 27	d	6.40	6.4	10.7	330	29.0	1922	42 Psc	
476	21.6 +51 45	328	Hu 506	b	5.36	5.4	8.6	232	0.2	1923	Cas	
	24.5 +49 42	361	Σ 30	d	6.68	6.9	8.7	302	17.3	1925	Cas	
554	25.8 —20 37		B 1909	b	6.41	7.1	7.2	0.6	0.1	5.56	Cet	el
583	27.5 +29 29	409	β 1095	c	5.26	5.26	13.3	358	2.6	1919	28 And	
584	27.5 —04 14	410	h 322	b	6.03	6.04	11.0	190	9.9	1909	12 Cet	
586	27.6 +59 42	412	β 1094	c	5.92	6.0	9.5	241	0.6	1925	Cas	
618	29.0 +54 15	434	OΣ 12	b	4.88	5.5	5.8	171	0.5	1954	λ Cas	
625—6	29.3 —63 14		I 260	c	3.75	4.52	4.48	170	27.1	1935	β ¹ Tuc	
				d	4.52	4.52	14.0	149	2.2	1926	β ¹ Tuc	
				b	4.48	4.9	5.7	0.8	0.4	43.1	β ² Tuc	el
636	29.8 +06 41	449	Σ 36	c	5.63	5.66	9.5	83	27.7	1922	51 Psc	
647	30.2 +28 00	455	OΣ 14	c	6.38	6.40	11.0	160	8.6	1921	And	
651	30.5 —63 18		I 260	d	5.16	5.7	6.1	196	0.2	1937	β ² Tuc	
696	32.7 —03 52	490	Ho 212	b	5.24	5.9	6.1	0.7	0.2	6.91	13 Cet	el sp
729	34.2 +33 27	513	H V 7	c	4.42	4.44	8.7	174	36.1	1924	π And	sp
741	34.8 —25 03	520	β 395	b	5.71	6.4	6.5	0.2	0.7	25.0	Cet	el
770	36.4 +49 05	546	OΣ 16	c	5.71	5.72	10.8	23	13.8	1913	Cas	
784	37.3 +21 10	558	Σ 46	b	5.52	5.57	8.8	193	6.6	1920	55 Psc	
830	39.5 —56 47			c	5.82	5.83	10.5	253	13.1	1933	ξ Phe	
849	40.3 —38 44		HdO 182	b	6.07	6.7	6.9	355	0.7	1942	λ ¹ Scl	
866	41.1 —57 44			d	4.53	4.53	11.4	216	19.8	1933	η Phe	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
891	00 ^b 42 ^m 3 +74°43'	624	HM 122	o	var	var	9.7	160	36.1	1918	YZ Cas	sp
893	42.4 -62 46		Cord 3	d	6.17	6.3	8.2	66	2.3	1942	Tuc	
894	42.4 +54 57	625	β 492	c	5.47	5.47	12.0	159	2.2	1924	Cas	
913	43.2 -16 42	636	Mul 1	d	6.32	6.4	9.4	198	2.4	1937	Cet	
920	43.4 -47 50			o	5.79	5.79	13.0	307	14.3	1901	Phe	
962	46.1 +57 33	671	Σ 60	b	3.61	3.64	7.5	293	10.1	1955	η Cas	el
980	46.8 -24 24	679	B 13	d	6.06	6.06	13.5	167	8.8	1926	Cet	
984	46.9 -13 50	680	β 1160	c	5.84	5.84	12.0	113	1.3	1902	Cet	
992-3	47.2 +27 26	683	Σ 61	c	5.54	6.3	6.3	296	4.4	1954	65 Psc	
1037	49.5 -43 59		I 47	d	6.64	7.2	7.7	6	1.1	1942	Phe	
1047	50.1 +60 51	721	β 497	o	4.93	5.0	9.0	171	129.7	1923	Cas	
				d	9.0	9.1	11.7	154	0.6	1922		
1051	50.2 -24 17	726	β 734	b	5.57	5.59	10.0	346	11.5	1917	Cet	
1063-4	50.8 -25 03	733	Stone 4	b	6.35	6.44	9.1	10	5.4	1937	Cet	
1068	50.9 +52 25	735	Σ 70	c		6.22	10.0	246	8.1	1917	Cas	
				o	6.17	6.22	10.0	148	78.5	1913		
				d		10.6	11.0	88	1.7	1909		
1084	51.9 +18 55	746	OΣ 20	b	5.76	6.2	6.9	240	0.4	1958	66 Psc	el
1091	52.3 +23 21	755	Σ 73	b	5.60	6.2	6.6	183	0.7	1958	36 And	el
1102	53.1 -69 48			o	5.18	5.34	7.3	80	20.8	1926	λ Tuc	
1117	53.7 +60 27	782	β 1028	c	var	var	11.0	248	2.1	1956	γ Cas	
1120	53.8 +60 06	784	β 1099	b	5.54	6.0	6.7	0.3	0.2	76.5	Cas	el sp
1160	55.6 +21 08	805	β 302	b	6.41	6.7	8.1	133	0.6	1953	Psc	
1191-2	57.2 +44 27	824	Σ 79	b	5.62	6.84	6.04	193	8.0	1948	And	sp sp
	58.2 +69 05	836	A 2901	d	6.67	7.4	7.4	10	0.2	1917	Cas	
1257	01 00.1 +47 07	862	OΣ 21	b	6.36	6.7	8.0	176	0.6	1955	And	el
1263	00.5 +60 48	868	β 396	d	5.94	6.0	9.2	65	0.9	1913	Cas	
1281	01.2 +01 06	875	Σ 84	b	6.00	6.07	9.3	254	16.5	1922	26 Cet	
1309-10	03.0 +21 12	899	Σ 88	c	4.93	5.55	5.82	160	30.0	1922	ψ ¹ Psc	
	03.2 +04 39	903	Σ 90	c	6.35	6.75	7.64	83	33.3	1906	77 Psc	
1335	03.9 -46 59		Slr 1	b	3.35	4.1	4.1	352	1.3	1943	β Phe	
	04.2 +53 14	915	H IV 66	d	6.49	6.5	10.2	75	21.7	1925	Cas	
1378	05.5 -41 45		Rst 3352	d	5.15	5.9	6.1	330	0.2	1946	ν Phe	
1387	06.3 -55 31		Rmk 2	b	4.13	4.2	7.2	39	0.8	1949	ζ Phe	
				c		4.2	8.2	243	6.4	1938		sp
1394	06.6 +46 59	940	OΣ 515	b	4.28	4.8	5.4	146	0.3	1958	φ And	el sp
1400	06.9 +35 21	949	Bar 1	o	2.37	2.37	14.0	186	28.4	1898	β And	
	07.0 +23 32	955	β 303	d	6.65	7.3	7.5	287	0.7	1925	Psc	
1455	10.0 +61 26	987	β 258	d	6.29	6.4	9.0	261	1.0	1921	Cas	
1458-9	10.1 +31 49	988	Σ 98	d	6.21	7.6	6.57	249	19.6	1921	Psc	
	10.2 +29 48	990	OΣ 26	d	6.40	6.4	10.0	258	10.8	1914	Psc	
1474	11.0 +24 19	995	Σ 99	c	4.63	4.64	10.0	223	7.7	1921	φ Psc	sp
1476-7	11.1 +07 19	996	Σ 100	c	5.18	5.57	6.49	63	23.6	1921	ζ Psc	sp
1490-1	11.9 -08 11	1003	Σ 3 AppI	c	5.12	7.8	5.21	331	49.6	1922	37 Cet	
1517	13.3 -69 05		I 27	b	7.56	8.1	8.5	20	1.2	1940	Tuc	el
1535-6	14.1 -69 08		h 3423	b	4.97	7.3	5.10	341	5.7	1940	κ ^{1,2} Tuc	
1568	15.3 -66 40		h 3426	b	6.30	6.4	9.4	337	2.6	1920	Tuc	
1578	15.9 +37 07	1055	Σ 108	b	6.34	6.4	9.5	62	6.0	1923	And	
1600	17.2 -00 46	1081	Σ 113	b	6.01	6.4	7.3	6	1.6	1953	42 Cet	
	17.6 +64 24	1088	S 397	d	6.20	6.32	8.6	347	53.8	1919	35 Cas	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
1658	01 ^b 20 ^m 1 —19°20'	1106	h 2043	c	6.44	6.6	8.9	74	5.2	1926	Cet	
1662	20.2 +57 53	1105	Σ 115	b	6.45	7.1	7.3	142	1.0	1938	Cas	
	21.2 —24 37	1113	Se 1	d	6.66	6.8	8.8	85	2.9	1925	Cet	
1697	21.8 —07 10	1123	β 1163	b	5.98	6.7	6.8	0.97	0.4	16.0	Cet	
1707	22.4 +67 52	1129	β 1101	c	4.96	4.96	13.5	45	3.0	1902	ψ Cas	
			H V 83	o	4.95	4.96	9.8	112	25.2	1925		
			Σ 117	d	8.41	8.9	9.5	254	3.0	1924		
1745	24.3 +03 17	1148	Σ 122	b	6.32	6.42	9.0	329	6.0	1922	Psc	
1752	24.6 +45 09	1152	β 999	b	4.96	4.96	12.0	103	2.4	1926	ω And	
			o		4.95	4.96	10.0	111	119.0	1925		
			β 82	d	10.0	10.7	10.7	138	4.8	1925		
	25.0 —22 36		Rst 2261	d	6.6	6.6	11.5	332	0.6	1949	Cet	
1769	25.3 —11 10	1162	β 399	d	6.25	6.3	10.0	302	1.5	1923	Cet	
	27.0 +22 34	1183	A 1910	d	6.75	7.4	7.6	86	0.1	1921	Psc	
1828	28.0 —26 28	1193	β 1230	c	5.99	6.00	11.5	226	2.7	1936	Scl	
1839	28.8 +15 05	1199	β 506	c	3.72	3.72	11.0	19	1.0	1915	η Psc	
	30.7 +07 57	1214	OΣ 31	d	6.59	6.6	11.0	83	3.3	1923	Psc	
	32.5 —23 57		Rst 2264	d	6.5	6.5	13.0	137	10.9	1944	Cet	
1920	32.7 —30 10		δ 31	b	7.19	7.8	7.9	0.3	0.2	4.56	Scl	el
			β 1000	d	7.14	7.19	10.5	109	1.4	1936		
1947	33.8 —30 10		h 3447	b	5.68	6.0	7.2	101	1.8	1924	τ Scl	
1971	35.1 —09 40			d	6.40	6.9	7.4	153	0.3	1938	Cet	
2030	37.9 —56 27		Dunl 5	b	5.25	6.0	6.1	202	10.3	1955	p Eri	el
	38.6 +25 30	1326	Σ 145	d	6.26	6.3	10.0	32	10.8	1910	Psc	sp
2058	39.0 +58 23	1334	h 1088	o	6.16	6.21	9.5	167	19.8	1925	Cas	
2069	39.3 —11 34	1339	Σ 147	b	5.84	6.2	7.3	86	2.4	1933	Cet	
2086	39.9 +60 18	1344	β 1103	d	5.75	5.75	12.5	4	1.7	1889	44 Cas	sp
2109	41.0 +57 17	1359	β 870	b	6.14	6.4	7.8	38	1.0	1923	Cas	
	42.2 —07 01	1376	β 6	d	6.52	6.6	9.2	166	2.5	1922	Cet	
2145	43.3 —25 18	1394	h 3461	b	5.36	5.39	9.4	48	4.7	1924	ε Scl	
2200	46.1 +47 39	1438	Σ 162	b	5.99	6.5	7.1	208	1.8	1939	Per	
			o		5.94	5.99	9.3	178	20.7	1925		
2216	47.4 +22 02	1457	Σ 174	b	5.89	6.3	7.4	166	2.8	1937	l Ari	
2243	48.8 +89 02	1477	Σ 93	o	2.12	2.12	9.0	217	18.3	1924	α UMi	sp
2290—1	50.8 +19 03	1507	Σ 180	b	4.00	4.83	4.75	359	8.2	1949	γ ^{1,2} Ari	
2324	53.2 +37 00	1534	Σ 4 AppI	o	5.81	5.82	11.4	78	18.8	1925	56 And	
2326	53.3 +01 36	1538	Σ 186	b	6.18	6.9	7.0	51	1.5	1955	Cet	el sp
2339	54.0 —51 51		h 3473	c	3.73	3.73	11.0	200	4.7	1938	χ Eri	
2366—7	55.1 +23 21	1563	H V 12	c	4.73	4.83	7.4	46	37.4	1922	λ Ari	
	55.4 —02 18	1567	β 7	b	6.57	6.6	12.0	16	2.9	1923	58 Cet	
2379	55.9 +64 23	1571	h 1100	o	5.17	5.18	10.0	310	39.5	1925	Cas	
	57.3 +75 16	1588	Σ 185	d	6.64	6.9	8.5	20	1.3	1921	Cas	sp
2424	57.8 +70 40	1598	β 513	b	4.61	4.8	6.5	0.4	0.7	63.3	48 Cas	el
2438	58.7 +73 37	1606	Σ 191	b	6.18	6.24	9.3	192	5.4	1925	Cas	
2452	59.4 +02 31	1615	Σ 202	b	3.94	4.33	5.23	297	2.1	1953	α Psc	el sp sp
2458	02 00.0 +33 03	1621	Σ 201	c	5.44	5.44	11.3	118	4.0	1923	ε Tri	
2475	00.7 +75 53	1625	β 785	c	5.30	5.30	13.0	244	5.4	1911	49 Cas	
2476	00.8 +25 42	1631	Σ 208	b	5.68	5.9	7.4	271	0.6	1958	10 Ari	el
2477—9	00.8 +42 06	1630	Σ 205	c	2.21	2.28	5.08	63	10.0	1925	γ ^{1,2} And	
			OΣ 38	b	5.08	5.50	6.30	0.9	0.3	61.1	γ ² And	el sp

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
2488	02 ^h 01 ^m 2 —00°35'	1634	H V 102	c	5.99	6.01	10.5	193	42.9	1916	61 Cet	
2534	04.0 +25 28	1658	Ho 312	d	6.00	6.00	12.0	342	1.5	1925	11 Ari	
2600—2	07.8 +38 48	1683	Σ 222	c	5.58	6.05	6.71	34	16.7	1949	59 And	
2604	08.0 +57 25	1685	β 874	d	6.36	6.36	12.5	268	5.7	1915	5 Per	
2633	09.5 +30 04	1697	Σ 227	b	5.20	5.43	6.99	71	3.6	1936	ι Tri	sp sp
2652	10.2 —02 38	1703	Σ 231	b	5.57	5.72	7.7	232	16.3	1925	66 Cet	
2668	10.8 +47 15	1709	Σ 228	b	6.03	6.5	7.1	244	0.7	1958	And	el
2749—1	14.5 +28 31	1752	Σ 239	d	6.25	7.4	6.61	210	14.0	1922	Tri	
2752	14.5 +57 17	1753	β 1170	o	6.14	6.15	10.8	354	69.9	1911	in x Per	
				d	10.84	11.5	11.7	313	0.3	1890		
2796	16.8 —03 12	1778	Joy 1	b	var	var	10.0	131	0.8	1945	o Cet	
2821	18.3 —56 10		h 3497	d	5.53	5.56	9.5	82	34.2	1913	Hor	
2876	21.1 —30 06		β 738	b	6.94	7.5	7.8	36	0.6	1937	For	
2933	23.6 —15 34	1849	H III 80	c	5.80	5.84	9.5	293	12.3	1923	Cet	
2952	24.9 +67 11	1860	Σ 262	b	4.59	4.7	7.0	240	2.3	1958	ι Cas	el sp
				d	4.56	4.59	8.2	116	7.2	1937		
2959	25.4 +01 44			b	6.49	7.1	7.4	28	0.5	1948	Cet	
2965	25.9 +55 19	1878	Σ 268	b	6.57	6.85	8.2	130	2.6	1923	Per	
	26.0 +37 06	1881	A 1816	d	6.60	6.6	11.2	250	1.6	1917	And	
2983	26.9 +09 21	1896	β 518	b	6.30	6.3	11.0	147	1.4	1924	Cet	
3001	27.6 +25 01	1904	Σ 271	b	5.85	5.86	11.0	182	12.4	1924	Ari	
	27.7 —22 54	1906	h 3502	c	6.56	6.6	11.0	85	28.3	1919	Cet	
3030—1	28.9 +00 52	1924	Σ 274	d	6.13	7.1	6.75	219	13.4	1924	Cet	
3049	29.9 +52 05	1938	OΣ 42	b	6.51	7.0	7.5				Per	
3082—3	31.6 —28 27	1954	h 3506	b	4.92	4.95	8.69	245	10.8	1939	ω For	
	32.3 +39 27	1961	h 1120	d		6.3	11.5	89	17.5	1925	And	
				d	6.28	6.3	11.3	320	39.9	1925		
3100	32.6 +37 06	1964	Σ 279	b	5.92	5.93	11.1	67	17.9	1926	And	
3117	33.2 +05 23	1971	Σ 281	b	5.00	5.02	9.8	83	7.8	1921	ν Cet	
3137—0	34.1 +24 26	1982	Σ5 AppI	c	6.15	7.37	6.57	274	38.7	1920	30 Ari	
3168	36.0 +03 14			b	6.37	6.4	9.4				Ari	
3199	37.1 —12 05		φ 312	b	5.01	5.7	5.7	0.3	0.1	1.59	ε Cet	el sp
3215	37.8 +26 51	2033	Σ 289	d	5.36	5.38	9.5	1	28.8	1925	33 Ari	
3235	38.7 —00 54	2046	Σ 295	b	5.69	5.73	9.4	316	3.8	1930	84 Cet	
3258	39.7 +48 03	2064	β 521	f	6.54	6.56	11.0	151	5.8	1925	Per	
3276	40.7 +03 02	2080	Σ 299	b	3.58	3.7	6.4	293	3.0	1935	γ Cet	
3277	40.8 +49 01	2081	Σ 296	o	4.21	4.22	10.0	301	18.2	1923	θ Per	
3282	40.8 +25 26	2082	β 306	c	6.35	6.37	11.0	16	2.8	1926	Ari	
3290	41.4 —40 44		h 3527	b	6.34	7.0	7.1	43	1.9	1924	Eri	
3337	44.0 +35 21	2117	β 9	b	6.34	6.5	8.6	183	1.6	1954	Per	
3378	46.5 +17 15	2151	Σ 311	c	5.26	5.30	8.3	119	3.2	1923	π Ari	sp
3390	47.0 +55 41	2157	Σ 307	c	3.91	3.93	8.6	301	28.4	1925	η Per	
	47.0 +30 19	2158	OΣ 46	d	6.74	6.8	10.2	74	4.7	1922	Ari	
3414	48.2 —36 03		h 3536	b	5.81	5.82	11.3	11	5.0	1919	η ³ For	
3439	49.3 +52 48	2185	A 2906	d	7.05	7.2	9.5	117	0.2	1921	Per	
			Σ 314	b	6.42	7.05	7.3	307	1.6	1952		
3446	50.0 +48 21	2192	OΣ 48	d	6.48	6.51	10.5	317	6.7	1854	Per	
3459	50.5 +38 08	2200	β 524	b	5.32	6.0	6.1	0.8	0.2	31.6	20 Per	el
			Σ 318	c	5.31	5.32	9.5	237	14.0	1917		
	50.6 +46 57	2199	β 1293	d	6.73	6.8	10.7	349	1.9	1924	Per	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
3462	02 ^h 50 ^m 7 +52°34'	2202	Edgec.	o	4.06	4.06	11.3	106	51.7	1923	τ Per	sp
			β	—	d	11.3	11.6	87	3.5	1925		
3580	56.2 —02 59			b	5.20	5.20	12.0		3.0		Eri	
	56.2 +21 35	2253	β	525	b	6.68	7.4	188	0.3	1925	Ari	
3582	56.4 +21 08	2257	Σ	333	b	4.64	5.25	208	1.5	1952	ε Ari	
3584—6	56.3 —40 30		Pz	2	b	3.06	3.42	88	8.5	1941	φ ^{1,2} Eri	sp
3600—2	57.3 +52 09	2270	Σ	331	c	5.15	5.42	86	12.2	1923	Per	sp
	58.4 +32 13	2286	Σ	336	d	6.71	6.9	8	8.5	1924	Per	
3638	59.4 +79 13	2294	Σ	320	b	5.61	5.66	231	4.8	1925	Cep	
3651	03 00.2 —07 53	2312	β	11	c	5.50	5.52	81	2.2	1939	ρ ³ Eri	
3697	02.5 +25 04	2336	Σ	346	b	5.36	6.11	282	0.1	1945	52 Ari	
				d	5.35	5.36	10.8	356	5.2	1922		
3715	03.8 +81 17	2348	Σ	327r	d	5.94	5.95	284	23.7	1925	Cep	
3733	04.9 +40 46	2362	β	526	o	var	var	193	82.1	1924	β Per	sp sp
3819	09.2 —79 11		h	3568	c	5.55	5.70	224	15.4	1919	Hya	sp
3831	09.9 —29 12	2402	h	3555	b	3.95	4.1	208	0.4	1958	α For	el
3838	10.2 —01 23	2406	h	663	b	5.14	5.14	246	4.0	1925	94 Cet	
3845	10.7 —44 36		Jc	8	b	5.92	6.49	0.8	0.5	39.9	Eri	el
			h	3556	b	5.88	5.92	202	3.5	1944		
	12.2 +50 46	2425	Hu	544	d	6.68	6.8	96	0.7	1922	Per	
3893	13.1 +65 29	2436	OΣ	52	b	6.35	6.8	83	0.5	1954	Cam	
3907	13.5 —06 06	2440	β	84	b	6.02	6.7	18	0.7	1934	Eri	
3912	13.9 +77 33	2450	β	1176	c	5.50	5.50	278	1.2	1890	Cep	
3914	13.9 +40 18	2443	Σ	369	c	6.44	6.8	30	3.4	1923	Per	
3953	15.8 —01 07	2459	Ac	2	b	5.62	5.64	236	1.0	1956	95 Cet	
3955	16.2 —22 42	2463	See	23	b	5.05	5.1	266	0.3	1938	15 Eri	
3959	16.4 —18 44	2465	h	3565	b	5.71	5.83	116	6.8	1925	Eri	sp
3979	17.3 —21 56	2472	Jac	1	b	3.95	3.95	288	5.7	1926	τ ⁴ Eri	
4043	20.9 —07 58	2507	β	531	b	6.27	6.38	50	3.5	1921	Eri	
4045	21.0 +04 42	2509	β	1178	b	6.47	6.48	283	0.8	1921	Tau	
4052	21.4 +33 22	2514	Σ	382	c	5.61	5.64	155	3.7	1924	Per	
4105	24.3 +60 05	2538	A	980	b	6.48	6.8	155	0.4	1925	Cam	
4113	25.0 +59 46	2544	Σ	385	d	4.40	4.42	160	2.4	1923	Cam	
	25.0 +20 17	2546	Σ	394	d	6.68	7.0	162	6.9	1923	Ari	
4126	25.5 +22 38	2552	β	878	b	6.11	6.11	70	1.0	1923	66 Ari	
4133	25.8 +49 20	2558	β	4920	c	4.67	4.67	163	0.7	1890	34 Per	
4142	25.9 +46 46	2560	OΣ	55	o	6.18	6.20	294	27.9	1916	Per	
			A	982	d	10.73	10.8	223	3.5	1916		
4145	26.1 +59 12	2563	Σ	389	b	6.06	6.42	67	2.9	1925	Cam	
4146	26.2 +55 17	2565	Σ	390	c	4.96	4.98	159	14.8	1920	Cam	
4148	26.3 —36 02		I	58	b	6.48	6.50	248	6.5	1941	For	
4193—4	28.3 +27 24	2582	Σ	401	c	5.93	6.85	270	11.0	1923	Tau	
	29.4 +11 23	2591	AG	68	d	6.68	6.8	250	17.6	1917	Tau	
4223	29.5 +58 36	2592	Σ	396	b	6.02	6.27	245	20.4	1923	Cam	
4250	30.9 +59 52	2612	Σ	400	b	6.48	6.8	245	0.6	1958	Cam	el
4257	31.5 +24 18	2616	Σ	412	b	5.92	6.62	21	0.5	1955	7 Tau	el
				c	5.90	5.92	9.7	58	22.5	1926		
4266	31.9 —31 15		B	52	b	6.18	6.7	0.3	0.2	19.4	For	el
4281	32.5 —32 02		B	53	d	6.40	6.4	226	1.5	1941	For	
4311	34.2 +00 26	2644	Σ	422	b	6.04	6.12	254	6.3	1932	Tau	sp

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N				
4408	03 ^h 37 ^m 8 +04°58'	2681	Σ 430	d	6.73	6.8	9.0	55	26.1	1912	Tau					
				d									301	37.0	1919	
				o									35	54.8	1925	Cam
				b									238	20.0	1925	40 Per
4420	39.2 +33 48	2699	Σ 431	b	5.03	5.04	10.1	238	20.0	1925	40 Per					
	39.3 +32 47	2701	h 336	d	6.67	6.7	10.6	318	38.4	1913	Per					
4443	40.5 +48 22	2712	β 1182	d	6.28	6.28	14.0	261	4.3	1890	Per					
4461	41.2 +32 08	2726	β 535	b	3.94	4.0	8.5	41	1.0	1923	o Per	sp				
4490	42.3 -40 49		h 3589	c	6.46	6.5	9.5	349	5.2	1939	Eri					
4495	42.5 +45 32	2746	β 1183	c	5.64	5.64	14.7	137	6.5	1905	Per					
4510	43.3 -54 26		h 3592	c	6.20	6.26	9.3	13	5.3	1914	Ret					
4537	44.4 -29 30		Hd (187)	d	5.89	5.90	11.0	180	5.0	1902	σ For					
4544	44.6 +50 35	2769	OΣ 63	c	5.91	5.92	11.5	270	6.9	1848	Per					
4548	44.7 +33 27	2772	Σ 448	b	6.32	6.36	10.0	17	3.5	1921	Per					
4568	45.5 +10 59	2778	Σ 452	b	5.01	5.03	9.3	59	9.2	1923	30 Tau					
4586	46.2 +23 54	2786	Σ 453	d	3.80	3.8	8.0	39	0.4	1924	27 Tau					
4601-2	46.7 -37 46		Δ 16	b	4.35	5.42	4.86	211	7.7	1944	f Eri					
				d									142	30.2	1906	Per
				d									290	7.4	1906	
				d									239	3.1	1921	Tau
	47.0 +34 40	2794	Es 277	d	6.67	6.7	10.0	142	30.2	1906	Per					
	47.0 +23 42	2795	OΣ 64	d	6.68	6.7	9.9	239	3.1	1921	Tau					
				d	6.68	6.7	9.0	235	9.9	1921						
4616	47.3 +25 26	2799	OΣ 65	b	5.38	5.9	6.3	0.6	0.4	62.3	Tau	el				
				d									251	4.6	1921	Eri
4662	47.7 -01 40	2803	β 401	b	6.53	6.6	10.8	251	4.6	1921	Eri					
4662	49.3 +06 23			b	5.62	6.3	6.4		0.0		31 Tau					
4671	50.0 +48 30			b	5.92				10.0		Per					
4675	50.2 -05 31	2832	h 338	d	5.48	5.49	10.5	134	8.2	1912	30 Eri					
4688	51.0 +31 44	2843	Σ 464	c	2.91	2.91	9.4	208	12.9	1923	ζ Per	sp				
4694	51.4 -85 25		R 38	b	6.46	6.70	8.2	246	1.7	1943	Oct					
4705-6	51.8 -03 06	2850	Σ 470	b	4.68	6.33	4.95	348	6.7	1942	w Eri					
4727	52.9 +60 58	2867	OΣ 67	c	5.17	5.22	8.5	42	1.6	1938	Cam					
4759	54.5 +39 52	2888	Σ 471	c	2.97	2.96	8.1	9	9.0	1924	e Per					
4784	56.3 +38 40	2910	OΣ 69	b	6.29	6.38	9.1	326	1.9	1926	Per					
				b									128	7.2	1925	Tau
	58.0 +23 04	2926	Σ 479	d	5.87	6.54	9.4	241	53.1	1925						
4872	04 00.7 +39 22	2959	Σ 483	b	7.18	7.4	8.9	126	0.8	1955	Per	el				
4894	01.6 +80 34	2963	Σ 460	b	5.25	5.7	6.4	90	0.9	1954	Cep	el				
4964	03.8 +33 19	2990	OΣ 71	b	6.61	6.8	9.0	210	0.9	1912	AG Per					
				c									221	3.8	1922	Tau
				b									131	0.3	1922	Eri
				c									326	4.4	1922	Tau
4971	04.9 +15 02	2999	Σ 495	c	5.86	5.94	8.8	221	3.8	1922	Tau					
	04.9 -22 08	3000	Hu 1363	b	6.58	7.3	7.3	131	0.3	1922	Eri					
	05.1 +17 12	3006	OΣ 72	c	6.07	6.13	9.2	326	4.4	1922	Tau					
	07.0 -46 00		Rst 98	d	6.4	6.4	11.0	311	0.9	1949	Hor					
5087	10.8 +08 46	3063	β 1278	d	6.45	6.45	10.0	303	7.4	1898	Tau					
5089	10.9 +07 35	3064	A 1938	b	5.35	6.1	6.1	0.2	0.1	7.20	46 Tau	el				
5100	11.2 +09 08	3072	β 547	b	4.98	5.1	7.3	356	1.0	1923	47 Tau					
5114	12.0 -10 23	3079	Σ 516	b	5.10	5.13	8.9	147	6.4	1921	39 Eri					
				b									258	0.8	1955	Per
	12.7 +31 34	3082	OΣ 77	b	7.42	8.1	8.2	258	0.8	1955	Per	el				
			OΣ App 43	o	6.92	7.42	8.0	42	56.3	1923						
	12.7 -46 15		Rst 2338	b	6.29	7.0	7.1	0.4	0.2	25.0	Hor	el				
5130-5	12.8 +06 04	3085	H VI 98	c	6.05	7.16	6.54	315	65.3	1912	Tau					
5138-0	13.0 -07 44	3093	Σ 518	c	4.47	4.48	9.37	105	82.8	1940	40 Eri					
5140				b	9.37	9.6	11.1	348	7.3	1958		el				

GC	AR 1959 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
5160	04 ^h 13 ^m 7 +58°40'	3098	Σ 511	b	6.91	7.4	7.8	134	0.3	1958	Cam	el
5167	14.1 —62 19		h 3641	b	5.40	5.40	11.5	242	9.0	1927	Ret	
5193	15.6 —61 04		Gale 1	b	6.32	6.7	7.8	19	0.6	1939	Ret	
5201	16.0 —33 55		I 270	b	3.59	4.0	5.0	148	0.4	1914	v ⁴ Eri	sp
5230	17.0 +16 24	3135	OΣ 79	b	6.86	7.2	8.3	0.6	0.6	90.0	55 Tau	el
5232—3	17.1 —63 23		Rmk 3	c	6.05	8.3	6.20	4	3.9	1943	φ Ret	
5236—7	17.1 —34 02		h 3642	b	6.37	8.5	6.53	159	6.0	1924	Eri	
5240	17.3 +27 14	3137	Sh 40	o	5.02	5.06	8.7	250	52.1	1925	φ Tau	
5245	17.4 —52 59			d	6.00	6.03	10.0		0.6		Dor	
	17.9 —01 26		Rst 4769	d	6.7	7.5	7.5	17	0.3	1949	Eri	
5276	18.7 +59 30	3146	Arg —	o	6.09	6.15	9.3	59	32.5	1925	Cam	
				b	6.15	6.16	11.2		1.0			
5289	19.4 +20 42	3158	β 87	b	6.04	6.11	9.1	169	2.0	1932	Tau	
5290—1	19.4 —25 51	3159	β 744	b	5.88	6.5	6.7	0.6	0.5	76.9	Eri	el
				o	5.88	5.88	11.7	5	37.1	1926		
				c	5.80	5.88	8.61	41	44.5	1926		
5292	19.5 +25 31	3161	Σ 528	c	5.30	5.38	8.2	25	19.9	1924	χ Tau	
	19.9 +14 56	3169	OΣ 82	b	7.09	7.40	8.6	12	1.1	1955	Tau	el sp
5305	20.1 +42 19	3172	OΣ 80	b	5.98	6.5	7.0	167	0.7	1938	Per	
5322	21.0 +24 11	3179	Σ 534	c	5.96	6.16	7.9	290	29.0	1923	62 Tau	
5325	21.1 +09 21	3182	Hu 304	b	5.06	5.8	5.9	0.7	0.2	51.6	66 Tau	el
5335	21.4 +33 51	3188	OΣ 81	b	5.77	5.81	9.2	36	4.2	1923	56 Per	sp
5354	22.6 +17 49	3206	H VI 101	b	4.24	4.27	8.3	325	1.5	1955	68 Tau	
	22.8 +18 45	3210	β 1185	b	7.72	8.4	8.5	0.2	0.2	30.4	Tau	el
5365—6	23.2 —57 11		Rmk 4	b	6.54	7.45	7.15	240	5.9	1943	Dor	
	24.2 +18 06	3226	Σ 545	d	6.74	6.9	9.3	58	18.8	1924	Tau	
5408	24.7 +11 06	3228	β 1186	b	5.84	5.9	8.8	167	0.6	1922	Tau	
5409	24.8 —24 12	3230	β 311	b	6.14	6.7	7.2	28	0.3	1938	Eri	el
5431—2	25.7 +30 15	3243	Σ 548	b	6.26	6.47	8.15	36	14.4	1924	Tau	
	25.8 —21 37	3247	β 184	d	6.73	7.1	7.9	256	1.5	1923	Eri	
5445	26.1 +16 03	3248	Hu 1080	b	6.58	7.2	7.5	0.4	0.4	40.4	Tau	el
5467	27.3 +15 32	3264	Σ 554	b	5.70	5.85	7.9	20	1.6	1955	80 Tau	el sp
5489—0	28.0 +39 54	3273	Σ 552	c	6.26	6.92	7.12	114	9.0	1949	Per	
5491—3	28.1 +53 48	3274	Σ 550	b	5.50	6.9	5.86	308	10.2	1924	1 Cam	
5520	29.1 —13 45	3284	Σ 560r	o	6.06	6.11	9.5	45	29.8	1919	Eri	
5551	30.7 +17 55	3297	Σ 559	b	6.24	7.0	7.1	276	3.1	1954	Tau	
5569	31.5 —06 51	3305	β 881	c	5.65	5.66	10.8	59	1.4	1925	46 Eri	
5571	31.5 +28 52	3304	h 5461	d	5.69	5.70	10.9	102	26.0	1924	Tau	
	32.9 —09 50	3318	Σ 570	d	6.32	6.69	7.66	259	12.8	1922	Eri	
5604	33.0 —62 56		h 3670	o	5.76	5.86	8.4	99	32.0	1917	Ret	
5605	33.0 +16 25	3321	β 550	b	1.06	1.06	11.0	112	31.4	1924	α Tau	
	33.5 —03 43	3328	Σ 571	c	6.28	6.29	11.0	258	17.7	1901	Eri	
5648	35.4 +26 51	3353	Σ 572	b	6.49	7.2	7.3	194	4.0	1954	Tau	
5657	35.9 —14 24		Kuiper	d	3.98	4.0	7.5	358	1.3	1937	53 Eri	
5658	36.0 +52 59	3359	β 1043	c	5.31	5.31	12.0	300	3.8	1919	3 Cam	sp
5659	36.0 +53 23	3358	β 1295	b	5.44	5.6	7.6	145	0.3	1952	2 Cam	
			Σ 566	b	5.30	5.44	7.6	259	1.1	1952		
5695	38.3 —19 46	3380	Stone 9	d	4.54	5.2	5.4	162	0.4	1923	54 Eri	
5708	38.9 —41 57		Hd 190	c	4.52	4.52	13.0	118	5.9	1927	α Cae	
5709	38.9 +59 26	3391	A 1013	b	6.53	7.28	7.28	163	0.3	1955	Cam	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ²	P ^o e	d'' a''	E P	Con	N
5724	04 ^h 39 ^m 5 —59°02'		h 3683	b	6.38	7.1	7.2	93	2.4	1955	Dor	el
5759—0	41.2 —08 53	3409	Σ 590	c	5.96	6.75	6.67	317	9.2	1923	55 Eri	
5906	48.4 +10 59	3475	β 883	b	6.96	7.7	7.7	0.4	0.2	16.3	Ori	el
5913	48.6 —41 24		h 3697	b	5.97	6.02	9.3	271	14.6	1927	ν Cae	
5923	49.0 +13 34	3483	β 552	b	6.70	6.9	8.5	304	1.0	1955	Ori	el
5939	49.6 —34 59		Finsen	d	5.82			45	0.2	1952	Col	
5945—6	49.8 —53 33		Δ 18	c	5.19	5.60	6.44	58	12.0	1917	ι Pic	sp
	52.0 —03 18		Rst 5501	d	6.6	7.4	7.4	85	0.2	1950	Ori	
6017	53.3 +53 40	3536	Δ 5	b	4.44	4.5	7.9		0.0	1956	7 Cam	sp
6044	54.8 +23 52	3557	β 1045	d	5.99	5.99	12.3	9	6.3	1911	99 Tau	
6064	55.9 +37 49	3572	Σ 616	b	4.92	4.99	8.0	355	5.8	1925	ω Aur	
6071—2	56.2 +14 28	3579	Sh 49	f	5.82	8.0	5.98	305	35.4	1924	Ori	
				o	5.76	5.82	9.0	89	54.4	1921		
	56.8 +27 15	3587	Σ 623	d	6.38	6.59	8.3	204	20.7	1921	Tau	
6082	56.8 —16 27	3588	β 314	b	5.54	5.8	7.3	0.8	0.6	56.0	Lep	el
				o	5.45	5.54	8.2	34	52.9	1914		
6084	56.9 +39 19	3589	OΣ 92	b	5.96	6.00	9.7	263	3.2	1936	5 Aur	
6088	57.1 +61 00	3590	Ho 1093	c	6.12	6.12	12.5	4	5.4	1920	Cam	
6108—9	57.9 +03 33	3597	Σ 627	f	6.35	6.95	6.63	260	21.0	1924	Ori	
6147—8	58.4 +01 32	3623	Σ 630	d	6.27	7.36	6.75	50	14.4	1925	Ori	
			A 2630	b	7.36	7.40	11.0	25	0.5	1921		
	05 01.2 —02 36	3650	J 307	d	6.47	6.85	7.8	322	52.2	1916	Ori	
				d	7.8	8.6	8.6	196	0.3	1910		
	01.8 +46 51	3659	A 1023	d	6.62	6.9	8.2	65	0.4	1916	Aur	
6199	01.9 —06 06	3662	A 481	b	6.72	7.0	8.0	333	0.4	1936	Eri	
6211	02.6 +19 44	3672	OΣ 95	b	6.46	6.9	7.6	314	0.9	1954	Tau	
6212	02.6 —35 33		Jc 9	b	4.59	4.62	8.5	311	3.1	1921	γ Cae	
6219	02.8 +51 32	3675	β 1046	c	4.99	4.99	12.7	89	5.4	1922	9 Aur	
6224	02.9 —78 22		h 3741	o	6.15	6.19	9.9	122	46.5	1919	Men	
6246	04.3 —04 43	3698	Σ 642	d	5.16	5.19	9.2	10	52.8	1922	66 Eri	sp
6255	04.5 +18 35	3701	A 3010	b	5.04	5.8	5.8	0.0	0.1	2.38	104 Tau	el
6267	05.1 +24 12	3709	Edgec.	d	5.46	5.50	9.0	197	35.3	1924	103 Tau	sp
6269	05.2 +08 26	3711	OΣ 98	b	5.47	5.9	6.6	81	1.0	1957	14 Ori	el
6281	05.9 —08 44	3722	Σ 649	o	5.63	5.67	9.2	77	20.9	1926	Eri	
	06.3 +03 09	3728	A 2636	d	6.54	6.9	8.0	76	0.2	1921	Ori	
6301—2	06.6 +27 58	3730	Σ 645	c	5.83	5.96	8.17	28	11.9	1922	Tau	
			β 1047	b	8.17	8.7	9.2	82	0.3	1914		
6309	06.9 +37 14	3734	Σ 644	c	6.17	6.9	7.0	222	1.6	1954	Aur	
	07.5 +76 25	3738	Hu 1097	d	6.31	6.3	11.0	116	1.6	1922	Cam	
6359	09.1 +00 27			b	6.58	7.1	7.6	334	0.1	1937	Ori	
6361	09.2 +00 58	3764	Σ 652	b	6.07	6.3	7.7	186	1.7	1953	Ori	
	09.3 +00 27	3767	Hu 33	d	6.58	6.9	8.0	315	0.2	1923	Ori	
6381	10.7 +02 48	3797	Σ 654	f	4.61	4.64	8.6	63	7.0	1921	ε Ori	sp
6387	10.9 —13 00	3800	Σ 661	c	4.40	4.46	7.5	258	2.6	1940	κ Lep	
6388	10.9 +01 55	3799	OΣ 517	b	6.25	6.9	7.1	24	0.2	1938	Ori	
6410	12.1 —08 15	3823	Σ 668	f	0.34	0.34	7.0	206	9.2	1941	β Ori	sp
			β 555	b	7.00	7.7	7.7	130	0.2	1925		?
6409—1	12.1 +32 38	3824	Σ 653	b	5.07	8.1	5.14	226	14.5	1922	14 Aur	sp
6427	13.0 +45 57	3841	H VI 30	b	0.21	0.89	1.04	0.0	0.05	0.28	α Aur	el sp
6429	13.0 +34 15	3843	Sei 136	d	var	var	10.0	355	8.4	1895	AE Aur	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
6455	05 ^h 14 ^m 3 +79°11	3864	Σ 634	o	5.12	5.16	8.9	62	9.1	1926	Cam	sp
6473	14.9 +33 19	3872	OΣ 103	c	4.80	4.81	10.5	57	4.2	1917	16 Aur	
6504	16.1 +33 56	3893	Ho 18	d	6.52	6.52	13.0	168	4.1	1922	18 Aur	
6507	16.3 +20 05	3894	Σ 680	c	6.19	6.22	10.2	204	9.0	1921	Tau	
	16.9 +46 55	3903	Σ 681	d	6.29	6.48	8.3	181	23.2	1924	Aur	
6524—5	17.1 —18 34	3910	S 476	f	5.51	6.17	6.36	18	39.2	1918	Lep	
6547	18.0 —05 25	3926	β 189	c	6.28	6.29	11.0	284	4.2	1922	Ori	
6559	18.3 —21 17	3930	h 3750	f	4.72	4.73	9.5	281	4.4	1912	Lep	
6588	19.5 —34 24		δ 166	d	6.11	6.12	11.8	7	2.2	1922	C 1	
6596—7	19.7 —24 49	3954	h 3752	b	5.12	5.45	6.67	98	3.1	1944	Lep	
				o	5.09	5.12	9.0	106	58.8	1837		
6607—0	20.2 +03 30	3962	Σ 696	f	4.84	4.99	7.07	28	32.0	1923	23 Ori	
6629	20.9 —08 28	3978	Σ 701	b	5.74	5.83	8.5	146	6.0	1926	Ori	
6636	21.3 +37 20	3984	β 888	f	5.22	5.22	12.0	167	8.7	1922	σ Aur	
6637	21.3 —00 55	3991	Wn 2	b	6.11	6.7	7.0	161	2.4	1952	Ori	
			A 847	b	7.02	7.7	7.8	0.9	0.2	37.0		el
6655	22.0 —02 26	4002	Da 5	b	3.44	3.7	5.1	83	1.5	1957	η Ori	sp sp
6676	23.0 —00 35	4020	A 848	b	6.25	6.7	7.3	47	0.2	1924	Ori	
6692—5	23.6 —52 22		Δ 20	o	5.78	6.32	6.8	287	38.2	1916	θ Pic	
			I 345	b	6.32	6.9	7.3	193	0.6	1925		
6700	23.8 —19 44	4034	h 3759	c	5.71	5.79	8.6	318	27.1	1918	Lep	
6713	24.2 +03 03	4039	Knt 3	f	4.65	4.66	10.0	327	2.6	1923	ψ Ori	sp
6714	24.2 +17 55	4038	OΣ 107	c	5.30	5.31	10.8	306	10.3	1914	115 Tau	
6748	25.5 —40 59		I 346	o	5.85	5.85	14.0	180	18.0	1901	Col	
6762	26.1 —20 48	4066	β 320	b	2.96	2.96	11.0	308	2.6	1931	β Lep	
6763—4	26.2 +25 07	4068	Σ 716	b	5.43	6.64	5.86	204	5.1	1926	118 Tau	
	26.4 +35 20	4072	Hu 217	d	6.71	7.0	8.5	263	0.5	1926	Aur	
	26.4 +18 20	4073	OΣ 108	d	6.58	6.6	10.5	132	3.7	1917	Tau	
6771	26.4 —03 21	4078	Da 6	b	6.17	6.8	7.1	110	0.4	1939	Ori	
6792	27.2 —01 08	4097	Σ 725	c	5.0	5.0	11.0	88	12.7	1829	CI Ori	
6795	27.3 —68 40		I 276	b	6.15	6.8	7.1	178	1.1	1944	Dor	
6813	28.1 +05 55	4115	Σ 728	b	4.32	4.6	5.9	52	0.7	1955	32 Ori	
	28.5 +49 21	4119	Σ 718	d	6.68	7.4	7.4	74	7.9	1925	Aur	
6823	28.6 +03 15	4123	Σ 729	f	5.52	5.9	6.9	25	1.9	1957	33 Ori	
6843—4	29.3 +17 01	4131	Σ 730	f	5.49	6.02	6.52	141	9.8	1922	Tau	sp
6847—8	29.4 —00 20	4134	β 558	c	2.46	2.48	6.87	0	52.8	1922	δ Ori	sp
6858	29.9 —63 58		Hd (192)	d	6.27	6.28	12.0	68	8.6	1900	Dor	
6863	30.2 —01 38	4141	β 1048	c	5.29	5.30	10.7	357	2.0	1912	Ori	
6878	30.6 —01 45	4150	Σ 734	c		6.70	8.3	295	0.6	1938	Ori	
			H V 119	d	6.36	6.70	8.6	243	29.7	1922		
			β 1049	d		8.6	9.7	65	0.5	1922		
6893	31.5 —01 04	4159	H V 118	o	6.16	6.18	10.7	264	27.5	1901	Ori	
6915	32.4 +09 54	4179	Σ 738	f	3.49	3.66	5.56	42	4.4	1957	λ Ori	
6917	32.4 +64 07	4177	Hu 1107	c	6.03	6.05	10.5	47	1.3	1921	19 Cam	
6919	32.5 +10 13	4181	OΣ 111	c	5.57	5.59	10.2	349	2.6	1922	Ori	
6925—6	32.6 —06 02	4182	Σ 747	f	4.28	5.58	4.67	223	36.0	1924	Ori	
6931	32.8 —05 25	4186	Σ 748	f		6.84	var	32	8.8	1940	θ ¹ Ori	sp
				f		6.84	5.36	240	13.6	1940		
				f		6.84	6.85	96	21.6	1925		
				f	4.86	6.84	11.3	351	4.3	1925		

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
				f		5.36	10.8	123	4.1	1924		
				f		5.36	16.0	34	7.4	1888		
				f		6.84	16.0	178	7.9	1889		
6934	05 ^h 32 ^m 9 —04°52'	4187	Da 4	b	4.65	4.7	8.6	212	1.6	1926	42 Ori	
6935—6	32.9 —05 27	4188	Σ 16 AppI	c	4.89	5.17	6.5	93	52.4	1924	θ ² Ori	sp
6937	33.0 —05 56	4193	Σ 752	f	2.85	2.87	7.4	142	11.4	1941	ι Ori	sp
6939	33.0 —04 24	4192	Σ 750	c	6.29	6.4	8.4	58	4.1	1941	Ori	
	33.1 —03 17		Rst 4281	d	6.3	6.3	12.5	353	1.1	1947	Ori	
	33.4 +21 58	4200	Σ 742	b	6.74	7.2	7.8	262	3.6	1924	Tau	
6966	33.9 —76 23		h 3795	o	5.06	5.06	11.4	107	38.2	1918	γ Men	sp
6968	34.0 +26 54	4208	Σ 749	b	5.70	6.4	6.5	333	1.1	1952	Tau	
6971	34.2 —06 06	4212	Σ 754	c	5.59	5.62	9.7	287	5.3	1922	Ori	
7002	35.4 +30 28	4229	β 1240	b	5.49	6.1	6.4	0.6	0.1	53.2	26 Aur	el
			β 90	c	5.43	5.49	8.5	268	12.5	1926		
7031—4	36.2 —02 38	4241	β 1032	b	3.78	3.9	5.9	205	0.2	1954	σ Ori	sp
			Σ 762	c	3.73	3.78	7.2	85	12.8	1924		
				c	3.65	3.73	6.50	61	41.6	1924		
7058	37.1 —17 53	4254	β 321	d	6.22	6.4	8.0	149	0.6	1944	Lep	
	37.4 +15 20	4256	Σ 766	d	6.66	7.0	8.0	275	9.9	1923	Ori	
	37.6 —20 28	4260	Hd 78	d	6.54	6.9	8.0	123	11.8	1870	Lep	
7078	37.8 —34 06		Hd (193)	d	2.75	2.75	11.5	0	12.6	1926	α Col	
	38.2 +29 28	4262	Σ 764	d	6.29	6.75	7.45	13	26.0	1925	Aur	
7089	38.2 —01 58	4263	Σ 774	b	1.91	2.05	4.21	164	2.4	1957	ζ Ori	
7094	38.4 +16 31	4265	β 1007	b	4.87	5.5	5.7	233	0.2	1953	126 Tau	
7116	39.1 —02 55	4279	β 1052	c	6.33	6.7	7.7	177	0.8	1938	Ori	
7151	40.5 —06 49	4299	A 494	b	5.98	6.4	7.1	114	0.2	1924	Ori	el sp
7198	42.4 +03 59	4333	Σ 789r	d	6.09	6.14	9.5	150	17.0	1925	Ori	
			A 2655	d	9.50	9.5	13.0	108	1.3	1921		
7197	42.4 —22 28	4334	S 498	d	3.61	3.80	6.41	351	94.9	1914	γ Lep	
7219	43.3 —04 17	4361	Σ 790	c	6.42	6.5	9.4	88	7.1	1921	Ori	
7236	44.4 +62 48	4376	Σ 3115	b	6.13	6.5	7.4	7	1.1	1953	Cam	
7262	45.3 +06 26	4390	Σ 795	b	5.27	6.1	6.2	210	1.5	1957	52 Ori	sp
7266	45.4 +20 51	4392	OΣ 118	b	5.94	6.2	7.7	314	0.4	1914	Tau	sp
	46.0 +65 44	4405	Σ 780	d		7.0	7.9	104	3.5	1925	Cam	
				d	6.65	7.0	10.2	152	11.3	1915		
	46.3 +56 54	4412	H V 25	d	6.33	6.38	9.7	130	25.3	1924	29 Cam	
	46.7 +31 46	4421	Σ 796	d	6.72	7.1	8.0	62	3.8	1923	Aur	
7315	47.3 —14 30	4432	β 94	c	5.52	5.57	9.0	169	2.8	1941	Lep	
	48.0 +14 26	4441	Ku 23	d	6.61	6.8	9.0	102	1.0	1911	Tau	
7370	49.4 —52 47			d	6.34	6.8	7.6		0.3		Pic	
	50.1 +37 20	4472	β 1053	d	6.66	6.8	9.5	283	0.4	1889	Aur	
7407	50.8 —37 38		I 64	o	5.64	5.64	11.6	233	18.8	1900	Col	
7412	51.1 —38 32		I 16	d	6.74	6.77	10.8	128	1.2	1927	Col	
	52.2 +05 51	4499	Σ 816	d	6.73	6.9	8.7	289	4.3	1923	Ori	
	53.2 +13 56	4519	S 503	o		6.48	9.0	326	26.9	1926	Ori	
				d	6.38							
7539	55.8 +01 50	4555	H V 100	d	6.02	6.06	9.7	252	9.5	1923		
7547	56.1 +12 48	4562	OΣ 124	d	5.77	6.0	7.8	295	0.3	1956	Ori	sp
7549—1	56.2 —53 26		h 3822	d	6.06	7.64	6.35	304	56.1	1917	Pic	
				d	7.64	7.65	12.5	125	20.2	1917		

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
7557	05 ^h 56 ^m 3 +37°13'	4566	OΣ 545	b	2.70	2.71	7.5	320	3.0	1954	♁ Aur	
7563	56.7 +44 35	4576	β 1055	b	6.36	6.44	11.5	326	1.7	1904	Aur	
			H VI 91	d		6.44	9.2	330	33.9	1922		
7597	57.9 +27 34	4589	Ho 21	o	6.08	6.08	13.0	243	9.1	1924	Gem	
7631	59.5 -10 36	4615	β 16	b	4.96	4.97	10.0	353	1.8	1915	3 Mon	sp
7635	59.6 +09 39	4617	A 2715	b	4.19	4.31	5.4	0.8	0.3	17.5	μ Ori	sp el
	06 00.5 +51 35	4633	OΣ 128r	c	6.18	6.30	8.6	13	39.3	1924	35 Cam	
			Hu 559	c	8.6	9.0	10.0	332	0.5	1921		
7680	01.2 -26 17	4645	B 96	d	5.18	5.18	14.0	130	2.2	1926	Lep	
	02.1 +48 15	4655	Es 1234	d	6.50	6.51	11.5	267	9.8	1913	Aur	
7713	02.8 +35 24			d	6.11	6.11	14.0		2.0		Aur	
7725	03.2 +29 31	4673	OΣ 129	d	6.31	6.32	11.0	211	10.0	1899	Aur	
7727	03.2 -45 05		h 3834	b	5.82	5.9	9.3	224	4.0	1925	Pup	
7731	03.5 -48 27		Δ 23	b	6.44	7.0	7.4	83	2.2	1941	Pup	
7763	04.4 -23 06	4704	h 3833	o	5.49	5.50	10.8	72	44.9	1920	Lep	
7817	06.4 +02 31	4749	Σ 855	c	5.32	5.58	7.0	114	29.4	1922	Ori	
7827	06.7 +23 07	4751	β 1241	d	5.76	5.8	10.0	345	0.5	1891	3 Gem	
	07.5 +23 01	4768	β 1058	d	6.68	7.3	7.6	265	0.3	1924	4 Gem	
7849	07.7 -22 46		Rst 3442	b	5.71	6.5	6.5	0.4	0.2	18.3	Lep	el
7851—3	07.8 +48 43	4773	Σ 845	b	5.64	6.82	6.09	356	7.7	1949	41 Aur	
7894	09.3 -04 39	4799	AC 3	b	6.04	6.2	8.6	189	0.8	1956	Mon	
7956	11.6 +17 55		Kuiper	b	5.74	6.5	6.5	134	0.4	1952	Ori	sp
7969	11.9 +22 31	4841	β 1008	b	var	var	8.8	278	1.3	1925	η Gem	sp
7980	12.1 -04 33	4846	β 566	d	5.76	5.76	12.5	206	1.2	1926	Mon	
7982—3	12.3 -36 10	4849	Σ 872	d	6.42	7.48	6.93	217	11.3	1940	Aur	
8000	13.0 -04 54	4865	β 567	d	5.99	6.00	11.0	243	4.2	1924	Mon	
8002	13.0 -09 01	4866	A 668	b	6.03	6.8	6.8	355	0.3	1922	Mon	
	13.3 +01 11		Rst 5225	d	6.3	7.1	7.1	201	0.2	1950	Ori	
8051	14.4 +09 58	4890	β 96	o	5.25	5.29	9.0	159	117.3	1925	75 Ori	
			Finsen	b	5.29			127	0.1	1954		
8065	14.9 -22 42		h 3845	o	6.01	6.04	10.0	19	35.5	1907	CMa	
8073	15.2 +14 24	4901	Ho 229	d	5.98	5.98	13.0	342	2.2	1921	Ori	
	15.8 -05 38	4910	A 323	d	6.65	6.7	10.3	221	1.2	1924	Mon	
8119	16.8 +28 27	4929	β 895	b	7.16	7.9	7.9	0.9	0.2	56.0	Aur	el
			Σ 888	d	7.04	7.16	9.5	254	3.0			
8147	17.6 +59 24	4950	Σ 881	b	6.02	6.2	7.9	113	0.8	1924	4 Lyn	
	17.6 +07 45	4951	A 2719	d	6.69	7.4	7.6	60	0.4	1921	Ori	
8181	18.8 +02 18	4971	A 2667	b	6.25	6.9	7.2	116	0.5	1955	Mon	
8186	19.1 -11 45	4978	Σ 3116	c	5.47	5.49	9.7	23	4.2	1912	CMa	
8208	20.0 +22 32	4990	β 1059	o	3.19	3.19	9.8	141	122.5	1889	μ Gem	
8240—1	21.1 +04 37	5012	Σ 900	c	4.33	4.48	6.54	27	13.2	1923	ε Mon	
8260	21.6 -19 45	5023	β 568	b	6.56	7.2	7.5	153	0.8	1925	CMa	
	21.9 -60 12		Jsp 101	d	6.6	6.6	10.6	51	16.0	1930	Pic	
	22.0 -01 23	5029	β 97	d	6.56	6.6	9.2	270	1.1	1921	Mon	
8273	22.0 -12 56	5030	Σ 903	c	5.94	5.95	11.0	295	23.2	1909	CMa	
	22.1 -16 12	5034	S 518	d	6.55	6.67	9.0	87	15.9	1917	CMa	
8284	22.3 -36 41		h 3857	c	5.68	5.72	9.3	255	13.2	1920	Col	
8287	22.5 +58 27	5036	S 514	o	5.39	5.48	8.2	272	96.0	1924	5 Lyn	
8293	22.5 +70 34	5039	OΣ 136	c	5.97	5.99	10.3	76	5.6	1914	Cam	
	23.8 +15 33	5062	OΣ 140	d	6.71	6.8	9.5	117	3.2	1921	Gem	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
8345 8412—3	06 ^h 24 ^m 3 —07°29'	5070	Σ 914	d	6.30	6.4	9.0	298	20.9	1916	Mon	
	24.8 +20 49	5080	Sh 70	d	6.30	6.55	8.0	205	28.6	1923	15 Gem	
	24.4 —48 09		I 156	b	5.94	6.0	8.5	131	1.4	1927	G Pup	
	26.4 —07 00	5107	Σ 919	d	3.93	4.73	4.64	132	7.4	1923	β Mon	
8421	26.8 —32 20	5128	β 753	b	5.80	6.0	7.6	42	1.4	1926	CMa	
			h 3863	d	6.69	6.9	8.8	119	2.6	1898	CMa	
8449	28.3 +16 59	5146	OΣ 143	b	6.15	6.19	9.9	104	7.7	1922	Gem	
8450	28.3 —13 07	5148	Gallo 242	o	6.08	6.09	11.0	66	36.6	1902	CMa	
8452—3	28.4 +11 17	5133	Σ 921	b	5.76	5.83	8.7	3	16.4	1924	Mon	
8457—8	28.6 —50 12		Δ 30	c	5.28	5.32	8.96	314	12.4	1926	z Pup	sp
			R 65	b	5.32	6.0	6.0	0.9	0.5	50.0		el
			Hd 195	c	8.96	9.7	9.8	53	0.5	1926		el
8493	29.4 +17 49	5166	Σ 924	b	6.05	6.72	6.9	211	19.8	1922	20 Gem	
	29.6 +11 43	5170	OΣ 146r	o	6.09	6.15	9.3	140	31.7	1925	Mon	
8500	29.9 —05 50		Rst 4308	d	5.64	5.64	13.5	94	4.3	1948	Mon	
8517—0	30.8 —32 00		h 3869	o	5.54	7.70	5.70	260	24.9	1919	CMa	
	30.9 +38 07	5188	OΣ 147	d	6.33	6.61	8.5	74	42.5	1926	Aur	
				d	9.2	9.8	10.2	117	46.3	1926		
8530	31.2 —58 43		h 3874	c	5.74	5.78	9.3	231	2.4	1937	μ Pic	
8558	32.1 +07 37	5211	Σ 938	f	6.40	6.42	11.0	209	10.2	1925	14 Mon	
8589	33.3 +27 19	5234	OΣ 149	b	6.89	7.1	8.7	13	0.6	1958	Gem	ei
8597	33.7 —36 44		β 755	b	5.60	6.0	7.0	256	1.3	1925	Col	
8611	34.2 —36 02		φ 19	b	6.28	6.9	7.2	0.4	0.3	26.5	Col	el
8613—4	34.2 —18 37	5253	Sh 73	c	5.66	7.9	5.81	263	17.5	1926	ν ¹ CMa	
8626	34.6 —22 34	5260	h 3876	b	6.16	6.23	9.2	336	9.2	1920	CMa	
8658	35.5 —36 57		Rst 4819	d	5.72	6.3	6.7	356	0.5	1951	Col	
8681	36.4 +28 19	5289	OΣ 152	b	5.84	6.1	7.7	34	0.8	1950	54 Aur	
8693	37.0 +13 02	5302	β 571	d	5.88	5.88	12.0	322	2.4	1915	Gem	
8702—4	37.3 —48 10		Δ 31	b	4.95	8.31	5.0	320	12.8	1922	Y Pup	
8707	37.5 —61 29		I 5	c	6.26	6.4	8.4	269	2.9	1925	Pic	
8708	37.5 —23 39		Finsen	d	5.91			184	0.1	1952	CMa	
8720	38.2 +09 57	5322	Σ 950	b	4.68	4.7	8.0	209	2.9	1941	S Mon	
	38.4 +09 02	5328	Σ 953	d	6.93	6.65	8.0	330	7.0	1924	Mon	
8759	39.6 —40 18		h 5443	o	6.09	6.12	9.8	107	15.6	1920	Pup	
8776—7	40.6 —38 21		Δ 32	b	6.24	9.2	6.31	277	8.2	1920	Pup	
8779—0	40.7 —22 24	5377	S 534	c	6.06	6.20	8.3	144	18.1	1940	CMa	
8804—5	41.8 +59 30	5400	Σ 948	b	4.89	5.4	6.0	90	1.8	1957	12 Lyn	el
				d	4.85	4.89	8.5	309	8.5	1957		
8833	42.9 —16 39	5423	AGC 1	b	—1.37	—1.37	8.7	0.6	7.6	49.9	α CMa	el
8835	43.1 —30 32		Cor 44	c	6.43	6.47	10.0	223	4.6	1922	CMa	
8836	43.1 +43 38	5425	Sh 75	o	5.29	5.34	8.6	26	41.3	1925	56 Aur	
8849—0	43.6 —30 54		h 3891	b	5.91	8.4	6.0	222	5.1	1919	CMa	
8862—4	44.0 +55 46	5436	Σ 958	c	5.57	6.28	6.33	257	4.9	1926	Lyn	sp
8877	44.5 +18 15	5447	OΣ 156	b	6.16	6.8	7.0	262	0.7	1953	Gem	el
8900	45.7 —54 38		I 157	b	6.35	6.42	9.4	347	1.7	1944	Car	
8922	46.7 —15 05	5487	AC 4	b	5.29	5.4	8.0	307	8.9	1956	CMa	
8923	46.8 —02 13		Finsen	d	5.65			88	0.1	1952	Mon	
8939	47.7 —24 01	5498	β 324	b	6.24	6.6	7.6	203	1.9	1926	CMa	

GC	AR 1950	D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d" a"	E P	Con	N
8954	06 ^h 48 ^m 3	-00°29'	5505	S 537	o	6.23	6.24	11.0	282	30.4	1926		
8961—4	48.5	-31 39		β 897	c	5.83	5.83	11.0	28	6.2	1920	Mon	
8962	48.5	-45 23		H V 108	o	5.53	5.63	8.17	65	43.0	1919	CMa	
8968	48.7	+59 31	5514	I 159	d	6.35	6.37	11.0		7.0		Pup	
				Σ 963	b	5.44	5.9	7.1	215	0.3	1954	14 Lyn	el
8993	49.6	+38 56	5534	Σ 974	f	6.03	6.06	9.9	224	22.4	1926	59 Aur	
	51.4	+21 14	5553	OΣ 160	d	6.60	6.7	9.8	179	1.4	1921	Gem	
9044	51.7	-05 47	5557	Σ 987	b	6.35	7.0	7.2	170	1.3	1940	Mon	
9049	51.8	+13 15	5559	Σ 982	b	4.62	4.70	7.6	151	6.8	1957	38 Gem	el
	52.3	+37 59	5574	Σ 978	d	6.61	6.67	9.8	91	17.3	1912	Aur	
9078	52.9	-20 20	5585	S 540	o	5.73	5.75	10.0	147	44.1	1915	17 CMa	
9082	53.0	+58 29	5586	OΣ 159	b	4.54	4.9	6.1	32	0.9	1952	15 Lyn	
9096	53.5	-20 04	5602	HN 123	c	4.61	4.62	9.5	18	12.0	1915	π CMa	
9103	53.8	-13 59	5605	Σ 997	f	5.19	5.2	8.5	339	3.0	1926	μ CMa	
9145	55.5	-24 34	5629	B 122	d	5.43	5.7	7.2	265	1.0	1938	CMa	
9146	55.6	-35 26		I 65	b	6.19	6.85	6.9	0.4	0.2	16.7	Pup	el
9165	56.1	-27 06		B 707	d	6.19	6.7	7.3	22	0.2	1927	CMa	
9175	56.3	+03 40	5648	β 1060	d	6.02	6.02	13.0	60	3.4	1937	Mon	
9188	56.7	-28 54	5654	CO 7	f	1.63	1.63	8.1	160	7.4	1924	ε CMa	
9226	58.0	-08 20		Rst 4329	d	5.84	5.84	13.0	360	1.5	1941	Mon	
	58.4	-20 34	5692	β 572	d	6.62	6.6	11.0	140	5.3	1918	CMa	
	59.5	-11 14	5713	Hu 112	d	6.57	6.9	8.2	187	0.6	1919	CMa	
9326	07 01.7	+52 50	5746	Σ 1009	b	6.25	6.95	7.05	151	3.3	1939	Lyn	
9340—1	02.4	-43 32		Δ 38	c	5.47	5.80	6.92	122	20.6	1913	Pup	
9344	02.5	-59 06		Δ 39	b	5.69	6.2	6.8	81	2.0	1942	Car	
9371	03.5	-10 35	5782	D 12	d	6.30	6.38	11.0	278	6.5	1921	Mon	
				Σ 1019	d	6.30	6.38	9.3	295	37.9	1920		
9376—7	03.7	-34 42		h 3928	b	6.01	6.32	7.7		4.0		Pup	
9389	04.3	-11 13	5795	β 328	d	5.28	5.6	6.9	136	0.7	1909	CMa	
				Σ 1026r	o	5.25	5.28	9.0	355	17.1	1923		
9421	05.5	+16 01	5812	OΣ 165	d	5.57	5.58	10.7	24	6.3	1924	45 Gem	
	06.1	+36 39	5820	Σ 1022	d	6.64	6.67	10.2	130	5.4	1924	Aur	
9467	07.3	-16 09	5837	β 329	o	6.02	6.03	11.7	100	32.5	1915	CMa	
9484	08.0	+30 20	5846	β 1009	c	4.48	4.48	11.5	177	1.9	1925	τ Gem	
	08.0	-18 36		Rst 2456	d	6.5	6.5	11.5	336	0.8	1950	CMa	
					d	6.5	6.5	13.5	91	8.0	1941		
9513—4	09.1	-70 25		Δ 42	b	3.70	5.81	3.87	299	13.8	1941	γ ^{1,2} Vol	sp
	09.2	-21 43	5863	h 3934	d	6.44	6.73	8.0	235	13.8	1918	CMa	
9532	09.7	+27 19	5871	Σ 1037	b	6.44	7.2	7.2	332	1.2	1957	Gem	el
9555	10.7	-36 28		β 757	b	5.94	6.01	8.9	67	2.6	1937	Pup	
9582	11.6	-63 06		Hd (199)	b	6.10	6.7	7.1	134	0.4	1944	Car	
9587—8	11.7	-22 49	5912	h 3938	c	6.20	9.8	6.24	250	19.7	1919	CMa	
9589	11.7	-03 49	5911	A 524	d	6.11	6.12	11.7	150	2.7	1916	Mon	
9608	12.2	-26 16		Finsen	d	4.66			112	0.1	1952	27 CMa	sp
9622	12.8	-00 04	5933	β 1268	d	6.51	6.52	12.0	313	3.8	1892	24 Mon	
9675—6	14.5	-23 14	5951	h 3945	d	4.66	4.82	6.82	58	27.4	1926	CMa	
	14.8	-11 57	5956	A 2123	b	6.70	7.5	7.5	344	0.4	1919	CMa	
				Σ 1064	d	6.54	6.70	9.7	241	15.0	1919		
9693—4	15.0	-30 48		Brs 2	c	6.04	8.0	6.23	182	38.0	1919	CMa	
9701	15.2	+16 38	5961	Σ 1061	c	3.65	3.65	10.0	33	10.0	1914	λ Gem	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d" a"	E P	Con	N
9736	07 ^h 16 ^m 6 —24°52'	5977	h 3948	f	4.40	4.40	10.5	90	8.3	1901	τ CMa	sp
9755	17.1 +22 05	5983	Σ 1066	o	3.50	3.51	8.1	211	6.8	1923	δ Gem	
9775	17.9 +60 00	5995	Σ 1055	d	6.25	6.28	10.0	327	2.3	1910	47 Cam	
9799—0	18.8 +55 23	6012	Σ 1062	b	5.22	6.53	5.61	315	14.7	1949	19 Lyn	sp
9805	18.9 —26 52	6015	See 76	o	5.84	5.84	15.0	216	8.0	1897	CMa	
9808	19.0 +20 32	6016	β —	o	5.16	5.16	13.0	203	17.2	1912	56 Gem	
9811—2	19.2 —52 13		Rmk 6	b	5.88	6.36	6.99	21	9.7	1917	Car	
9899	22.7 —18 55			b	6.27	6.28	12.0	310	2.6	1936	CMa	
9903	22.8 —31 43		δ 179	d	5.44	5.44	11.5	309	2.2	1922	CMa	
9912—3	23.0 —37 12		h 3966	d	6.28	7.07	6.99	142	7.2	1920	Pup	
	23.0 —21 04	6065	β 199	d		7.1	8.2	22	1.9	1925	CMa	
			Ho 522	d	6.73	7.1	13.0	120	6.1	1898		
9916	23.2 —21 53		Rst 4360	d	5.93	5.93	15.5	63	2.3	1949	CMa	
9957	24.8 +21 33	6089	Sh 368	c	5.26	5.27	10.8	324	42.9	1917	63 Gem	sp
9961	24.9 —17 46	6093	β 578	b	5.70	5.70	11.8	48	1.8	1944	CMa	
9965	25.1 +48 17	6095		b	5.57	5.6	10.0		1.0		Lyn	
			β 758	c	5.55	5.57	10.2	94	17.1	1906		
9970	25.3 +07 03	6101	β 21	c	5.34	5.34	11.3	26	4.1	1933	η CMi	
9977—9	25.5 —11 27	6104	β 332	f		8.6	5.86	313	20.2	1908	CMa	
			Σ 1097	o	5.75	5.86	9.8	157	23.4	1878		
			β 332	f	5.86	6.0	8.0	168	1.0	1925		
9987	25.9 +31 53	6109	A 2124	c	4.18	4.18	12.5	10	3.0	1920	g Gem	
10020—1	26.9 —31 45		Δ 49	d	6.06	6.51	7.24	52	9.1	1920	Pup	
10027	27.1 —14 53	6126	Σ 1104	b	5.94	6.2	7.6	357	2.1	1950	Pup	
10040—2	27.6 —43 12		Δ 51	c	3.27	3.27	8.5	74	22.4	1922	σ Pup	sp
10043	27.7 —22 55		Rst 2482	d	4.80	4.80	11.0	181	2.7	1943	Pup	
10090	29.7 —08 46	6158	Σ 1120r	c	5.98	6.02	9.5	112	23.6	1910	Mon	
	29.8 +23 00	6160	Σ 1108	d	6.29	6.44	8.5	178	11.5	1926	Gem	
	30.6 —35 51		Rst 4855	d	6.3	6.5	8.1	33	0.4	1942	Pup	
10120	31.4 +32 00	6175	Σ 1110	b	1.58	1.96	2.89	171	2.2	1958	α Gem	el sp sp
				c	1.58	1.58	9.5	165	73.4	1925		sp
10137	32.0 +31 04	6185	OΣ 175	b	5.34	5.9	6.3	326	0.5	1957	Gem	
10144—5	32.2 —23 22	6190	S 552	b	5.18	5.86	6.01	113	9.4	1944	n Pup	
10156	32.4 +43 09	6191	OΣ 174	b	6.30	6.5	8.1	86	2.0	1925	Lyn	
10178	33.4 —28 15	6205	h 3982	o		4.55	9.3	156	38.4	1920	p Pup	
				o		4.53						
10189	33.8 —14 23	6208	Σ 1120	f	5.54	5.57	9.5	130	42.2	1920		
10246	35.5 —34 51		Finsen	d	4.62			35	20.0	1926	Pup	
10266	36.2 —25 15	6246	BΣ 731	d	4.64	5.2	5.6	44	0.1	1926	f Pup	
10269	36.4 —74 10		h 3997	b	6.46	7.16	7.26	116	2.1	1918	m Pup	
				b							Vol	
10277	36.7 +05 21	6251	Schaeb.	b	0.48	0.48	9.5	0.3	4.3	40.2	α CMi	el
10281—3	36.8 —26 41	6255	β 1061	b	3.81	4.50	4.62	318	9.8	1916	α ^{1,2} Pup	
				d	4.50	4.50	13.8	229	6.5	1889		
10303	37.5 +05 21	6263	Σ 1126	b	5.81	6.4	6.8	156	1.1	1957	CMi	sp
10316	38.0 —38 01		I 160	b	5.74	5.8	8.5	147	1.2	1926	Pup	
10322	38.0 —19 33	6273	See 84	d	6.07	6.08	11.0	287	9.3	1897	d ² Pup	
10343	38.8 +58 50	6285	h 2405	c	4.96	4.96	10.8	320	54.8	1911	24 Lyn	
10381	40.5 +00 19	6313	A 2534	d	6.36	6.5	8.5	215	0.7	1937	CMi	
10384	40.6 —16 57	6315	Hu 710	b	6.65	6.3	7.3	0.6	0.3	64.8	Pup	el
10403	41.4 +24 31	6321	OΣ 179	b	3.67	3.68	9.5	236	6.8	1924	α Gem	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d" a"	E P	Con	N
10413	07 ^b 41 ^m 6 —25°23'		B 738	d	6.66	6.66	14.0	305	5.3	1927	Pup	
10453—5	43.2 —14 34	6348	Σ 1138	b	5.62	6.80	6.06	340	16.9	1923	2 Pup	
10517	45.6 +23 16	6378	β 1062	d	6.21	6.21	13.5	32	4.1	1889	82 Gem	
10521—2	45.6 —12 04	6381	Σ 1146	b	5.28	7.1	5.52	3	2.1	1950	5 Pup	
10523	45.6 —38 23		I 161	d	5.10	5.11	10.2	84	10.6	1902	Pup	
10562	47.2 —24 44	6393	β 1063	d	3.47	3.47	13.5	189	4.3	1942	ξ Pup	sp
10563	47.3 —56 21		HC 221	d	6.18	6.4	8.2		1.0		Car	
10589	48.0 —56 17		λ 88	d	5.53	5.54	11.0	180	6.9	1912	Car	sp
10592	48.2 +03 24	6405	A 2880	d	6.30	7.05	7.05	189	0.2	1920	CMi	
	48.9 —09 17	6412	β 1195	d	6.66	7.3	7.6	82	0.8	1909	Mon	
10613	48.9 —24 24	6414	B 146	d	6.42	6.46	10.0	62	1.0	1939	Pup	
10629	49.5 —13 46	6420	β 101	b	5.34	5.9	6.2	0.7	0.6	23.2	9 Pup	el
10649	50.3 —05 18		Finsen	d	5.75			182	0.4	1952	Mon	
10651	50.4 —34 35		Hwe 65	b	4.99	5.02	9.0	280	3.0	1927	Pup	
10741	54.2 —43 43		λ 91	d	6.04	6.7	6.9	317	0.4	1926	Car	
10755	54.7 +01 16	6483	OΣ 185	b	6.44	7.2	7.2	0.8	0.4	57.0	CMi	el
10775	55.7 —43 58		Hd (200)	o	5.10	5.10	12.6	36	9.8	1897	N Pup	
10778	55.8 —47 45		I 26	b	6.08	6.5	7.4	54	1.1	1944	Pup	
10802	56.8 —49 07		Hrg 131	d	var	var	10.0	68	7.0	1913	V Pup	sp
10832—4	57.8 —49 50		Δ 59	c	5.78	6.43	6.65		17.0		Pup	
10849	58.0 +23 43	6513	Σ 1171	b	6.40	6.42	10.7	330	2.3	1926	Cnc	
	59.9 —27 04	6535	β 202	d		6.52	9.0	163	7.4	1913	Pup	
				d	6.40	6.52	12.0	239	29.4	1897		
10903	08 00.2 —54 23		Δ 60	o	5.86	5.99	8.2	161	40.5	1914	Car	sp
	00.7 +12 19	6546	Ho 350	d	6.66	6.67	11.8	189	4.2	1891	Cnc	
	01.0 +33 10	6549	OΣ 187	b	6.61	7.1	7.7	0.5	0.3	160	Gem	el
10931—2	01.0 —41 10		h 4038	f	5.48	8.5	5.55	346	27.0	1920	Pup	
10938	01.1 —32 19		h 4035	o	5.72	5.80	8.6	134	34.8	1919	Pup	
	02.4 —25 33	6566	I 487	d	6.66	6.7	10.7	26	1.2	1912	Pup	
10967	02.6 +27 40	6569	Σ 1177	b	6.16	6.5	7.5	352	3.6	1924	Cnc	
11002	03.8 —33 26		h 4046	o		6.00	8.2	88	22.0	1919	Pup	
			I 189	o	5.83	6.00	9.5	58	27.8	1919		
11006	04.0 —09 06	6588	Σ 1183	d	5.71	5.92	7.60	326	30.9	1923	Mon	
			A 543	d	7.60	8.2	12.2	324	1.1	1917		
11018	04.7 +51 39	6600	Es 70	o	4.87	4.87	12.5	267	45.6	1916	27 Lyn	
	06.4 +32 22	6623	Σ 1187	b	6.74	7.1	8.0	40	2.1	1926	Cnc	
11076	07.1 —30 10			d	6.66	6.68	11.0		1.2		Pup	
11081	07.2 —16 06	6632	Ho 352	d	5.54	5.54	12.7	184	5.2	1906	Pup	
11098	07.8 —68 28		Rmk 7	c	4.42	4.46	8.0	22	6.1	1922	ε Vol	sp
11103—5	07.9 —47 12		Δ 65	c	2.12	4.79	2.22	220	41.0	1913	γ ^{1,2} Vel	sp sp
11111—2	08.1 —42 30		Δ 63	b	6.40	6.71	7.9	82	5.8	1915	Pup	
11134	08.9 —12 47	6647	β 1064	d	4.68	4.68	12.5	245	1.8	1889	19 Pup	
11141—2	09.3 +17 48	6650	Σ 1196	b	5.10	5.7	6.0	0.3	0.9	59.6	ζ ¹ Cnc	el sp
				b	4.71	5.10	6.02	89	5.9	1957	ζ ^{1,2} Cnc	el
				b	6.02	6.26	7.8	0.2	0.2	17.6	ζ ² Cnc	el
11155	09.7 —42 50		h 4057	f	4.85	4.87	9.0	299	25.2	1915	Pup	
11181	10.9 —46 07		λ 96	d	6.08	6.6	7.2	287	0.4	1942	Vel	
11189	11.3 +17 50	6673	β 1243	d	6.43	6.43	13.0	345	1.7	1891	Cnc	
	11.4 +43 11	6675	OΣ 189	d	6.62	6.68	9.8	292	4.2	1915	Lyn	
11199	11.6 +60 32	6680	Σ 1192	d	6.30	6.36	10.0	258	3.4	1921	UMa	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
11199	08 ^h 11 ^m 6 +60°32'	6680	Σ 1192	d	6.30	6.36	10.2	224	48.4	1921	UMa	
11215	12.3 -40 12		h 4062	c	4.42	4.43	9.1	341	51.1	1920	h ² Pup	sp
11233-5	12.8 -45 41			d	6.02	6.2	7.8		0.4		Vel	
			h 4069	o	5.95	6.02	9.02	252	33.3	1913		
11256	13.9 -30 46		β 454	b	6.30	6.5	8.5	14	2.3	1926	Pup	
11275-6	14.5 -62 46		Rmk 8	c	5.21	5.26	8.5	63	3.8	1917	C Car	
11302	15.2 +72 34	6724	Σ 1193	d	6.16	6.20	9.9	87	43.1	1925	Uma	
	16.2 +74 59	6736	OΣ 188	d	6.49	6.53	10.0	193	10.5	1914	Cam	
11336	16.3 -37 13		h 4073	b	6.54	7.1	7.6	176	1.9	1926	Pup	
11377	18.3 -22 46		Don 238	d	6.09	6.1	13.0	11	5.8	1941	Pup	
11387	18.8 -01 27	6762	Σ 1216	b	6.35	7.0	7.3	256	0.5	1955	Hya	el
11402	19.5 -36 19		h 4085	o	5.17	5.17	13.0	275	6.5	1925	Pup	
11443	20.7 -26 11	6782	B 767	d	5.86	6.5	6.8	233	0.1	1915	Pup	
11450	21.0 -48 20		I 67	d	4.90	5.2	6.6	138	1.0	1941	B Vel	
11454	21.2 +10 48	6787	A 2961	d	6.28	6.29	12.0	260	1.0	1922	21 Cnc	
11491-2	22.9 -23 53	6800	S 568	c	5.42	5.46	9.0	86	42.1	1917	Pup	
11504	23.2 -42 36		Rst 4888	d	6.20	6.8	7.2	136	0.4	1947	Pup	
11505	23.2 +07 44	6805	H VI 109	c	5.22	5.23	10.0	342	31.5	1911	Cnc	
11517-8	23.7 +24 42	6811	Σ 1224	b	6.58	7.10	7.64	47	5.8	1957	24 Cnc	
			A 1746	b	7.64	8.4	8.4	0.0	0.2	21.8		el
11519-0	23.8 +27 06	6815	Σ 1223	b	5.56	6.32	6.30	216	5.0	1957	φ ³ Cnc	
	23.9 -55 19		Rst 3593	d	6.7	6.9	8.7	75	0.3	1937	Car	
11530-1	24.1 -51 34		Δ 69	o	5.22	10.16	5.23	220	25.7	1920	Vel	
11541-2	24.5 -38 54		h 4093	b	6.19	6.68	7.28	123	8.2	1920	Pup	
				d	7.28	7.9	8.1		0.2			
11566	25.2 -04 15	6825	A 550	b	6.68	7.4	7.5	0.1	0.2	40.0	Hya	el
11587	26.1 -02 21	6828	A 551	b	6.29	7.0	7.1	0.5	0.3	51.0	Hya	el sp
			Σ 1233	b	6.28	6.29	11.0	33	18.1	1910		
11589-0	26.1 -34 57		Gls 96	o	5.80	5.82	10.0	143	25.2	1919	Pyx	
11593	26.2 +60 53	6830	β 1067	c	3.47	3.47	15.2	191	7.0	1889	o UMa	
11630	27.5 -47 46		h 4104	d	5.34	5.52	7.4	244	3.7	1917	A Vel	sp
11634-5	27.8 -44 33		Δ 70	b	4.96	6.66	5.22	350	5.1	1915	Vel	sp
	28.2 -54 03		Rst 2562	d	6.6	6.6	14.0	9	2.4	1948	Car	
11651	28.5 -31 59		Jsp 276	d	5.63	7.4	7.4	38	0.1	1934	Pyx	
11669	29.0 -44 34		I 168	d	6.47	6.49	11.0	76	3.3	1915	Vel	
11679	29.3 -19 24	6862	I 489	b	5.38	5.9	6.5	78	0.5	1943	Pyx	
11682	29.6 -38 54		h 4107	d	6.24	6.4	8.3	329	4.5	1920	Vel	
11713	30.7 -53 02		Slr 8	b	5.77	6.1	7.3	302	1.0	1925	Vel	
11724	30.9 -24 26	6871	β 205	b	6.15	6.8	6.9	0.6	0.5	83.7	Pyx	el
11730	31.0 +74 54	6872	OΣ 192r	c	6.25	6.28	10.0	234	1.7	1924	Cam	sp
	32.6 -32 25			d	6.38	7.1	7.1	134	0.8	1955	Pyx	
11766	32.6 -37 26		I 195	d	6.19	6.3	8.7	42	1.6	1926	Vel	
11781-2	33.2 +06 48	6886	Σ 1245	c	5.71	6.04	7.15	23	10.4	1949	Cnc	sp
11865	36.4 -19 34	6903	β 207	b	6.49	6.53	10.0	103	4.4	1938	Cnc	
11867	36.4 -62 41		h 4125	d	5.37	5.38	10.4	237	7.6	1918	Car	
11877	36.9 -22 29	6914	β 208	b	5.13	5.37	6.9	212	1.9	1955	Pyx	el sp
11895	37.5 -36 26		J 314	b	6.06	6.3	7.8	0.8	0.5	54.0	Pyx	el
11924	38.2 -60 08		h 4128	b	6.40	6.9	7.6	213	1.6	1926	Car	
	38.4 +20 39	6930	β 585	b	6.60	6.7	9.0	105	0.5	1913	Cnc	
11931	38.5 -40 05		I 69	b	5.13	5.17	8.8	62	4.1	1926	Vel	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
11933	08 ^h 38 ^m 5 —52°53'		h 4126	c	5.36	5.38	9.7	30	16.7	1917	Vel	sp
11947	38.9 —70 13		h 4134	o	5.24	5.26	9.8	108	45.0	1917	ϑ Vol	
11959	39.4 —15 46	6937	h 4124	o	4.98	4.98	11.8	111	31.0	1920	9 Hya	
11963	39.5 —57 22		h 4130	b	6.40	6.53	8.8	232	3.8	1913	Car	
11988	40.6 —47 55		Rst 5304	d	5.48	5.6	8.5	316	0.3	1949	Vel	
11992	40.9 —52 55			d	5.68	5.9	7.6		0.5		Vel	
12022	41.8 +18 20	6967	h 457	o	4.17	4.17	13.0	101	38.8	1924	δ Cnc	
12053—4	42.8 —02 25	6977	Σ 1270	b	5.89	7.5	6.17	262	4.7	1943	Hya	
12069	43.3 —54 31		I 10	b	2.00	2.01	6.5	164	2.9	1927	δ Vel	
12080—3	43.7 +28 57	6988	Σ 1268	b	4.09	6.61	4.20	307	30.7	1927	ι ¹ Cnc	
12102	44.1 +06 36	6993	Sp —	b	3.48	4.10	4.4	0.6	0.2	15.0	ε Hya	el sp
			Σ 1273	b	3.43	3.48	6.9	269	2.9	1957		el
	45.1 —16 52	6999	β 586	b	6.62	6.7	9.0	59	0.6	1919	Hya	
	47.6 +35 15	7034	Σ 1282	c	6.73	7.5	7.5	278	3.7	1924	Lyn	
	47.8 +18 11	7039	A 2473	b	6.72	7.5	7.5	335	0.3	1920	Cnc	
12227	48.9 —46 20		Hd (205)	c	4.89	4.89	11.5	84	3.4	1925	f Vel	
12232	49.1 —06 59	7050	β 587	b	5.60	5.8	7.6	126	1.1	1941	15 Hya	sp
			H V 20	o	5.58	5.60	10.1	0	45.9	1924		
12242	49.5 +32 40	7057	Hu 1125	d	5.75	5.75	13.5	272	3.8	1920	σ ¹ Cnc	sp
12249	49.8 +05 32	7061	A 2900	d	6.16	6.2	10.5	298	0.8	1922	Hya	
12267	50.7 —36 21		HC 184	d	6.54	7.3	7.3		0.2		Pyx	
12288	51.2 —51 56		Cp 9	d	6.48	6.65	8.5	79	3.1	1926	Vel	
12289	51.2 +30 46	7071	Σ 1291	b	5.60	6.3	6.5	319	1.5	1957	ι ² Cnc	
				o	5.56	5.60	9.2	198	55.8	1921		
12310	52.0 +26 24	7082	A 2131	b	6.67	7.0	8.1	0.8	0.6	43.5	Cnc	el
12334—5	53.0 —07 47	7093	Σ 1295	b	6.56	6.91	6.67	3	4.3	1953	17 Hya	
12381	54.8 —52 32		R 87	d	4.77	4.9	7.7	339	2.7	1938	H Vel	sp
12388	54.9 +30 26	7107	Ho 252	d	6.20	6.9	6.9	135	0.3	1925	61 Cnc	
12398	55.6 +01 44			b	6.50	6.51	12.0		3.0		Hya	
12405—8	55.7 —59 02		Δ 74	f	4.97	5.08	7.5	75	40.4	1917	b ¹ Car	
12406	55.8 +12 03	7115	h 110	b	4.27	4.27	11.0		11.0		α Cnc	
12407	55.8 +48 14	7114	h 2477	b	3.12	3.12	10.8	14	5.0	1956	ι UMa	
			Hu 628	b	10.80	11.4	11.7	150	0.2	1925		el
12434	57.4 +41 59		Kuiper	d	4.09	4.3	6.2	0.2	0.6	22.2	10 UMa	el
12456	58.3 +32 27	7137	Σ 1298	f	5.83	6.0	8.1	136	4.6	1923	66 Cnc	
12501	09 00.2 —51 59		h 4165	b	5.42	5.7	7.1	112	0.9	1941	Vel	
12503	00.2 +47 21	7158	A 1585	b	3.68	4.3	4.5	0.3	0.3	57.5	κ UMa	el
12567	03.5 —57 39		h 4178	d	6.46	6.50	10.0	160	3.5	1913	Car	
12582—3	04.6 +23 11	7187	Σ 1311	b	6.20	7.2	6.77	199	7.7	1923	Cnc	
12614	05.9 —25 39	7202	I 491	d	4.81	4.82	10.1	263	2.1	1911	κ Pyx	
12619	06.0 +67 20	7203	Σ 1306	b	4.87	4.91	8.5	24	2.2	1957	σ ² UMa	el
12626	06.3 —08 23			b	5.50	5.5	10.5	298	1.3	1938	19 Hya	
12659	07.8 —30 10		HN 96	c	5.52	5.56	9.25	147	17.8	1920	ε Pyx	sp
				d	9.25	10.0	10.0		0.3			
12719	10.7 —43 24		h 4188	b	5.74	6.2	6.9	283	2.6	1937	Vel	
			Rst 2619	d	6.7	6.8	11.5	99	1.5	1945	Pyx	
12759	12.3 —32 21		h 4191	d	5.11	5.15	9.6	16	5.6	1926	z Vel	
12782	13.4 —45 21		I 11	b	6.34	6.7	7.8	278	0.9	1938	Vel	
12800	14.2 —06 09			b	5.40	5.4	11.0		2.0		23 Hya	sp
12801	14.2 —44 41		Don 329	d	6.03	6.03	15.5	146	6.1	1947	Vel	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
12816	09 ^h 14 ^m 9 +28°47'	7284	Σ 1321	b	7.26	8.0	8.1	0.3	0.7	34.2	Cnc	el
12827	15.4 +35 35	7286	Σ 1333	b	5.76	6.4	6.6	47	1.8	1957	Lyn	
12830	15.7 +37 01	7292	Σ 1334	b	3.82	4.0	6.0	231	2.9	1957	38 Lyn	
12862	17.2 -15 37	7302	A 3077	d	5.92	5.93	11.0	190	4.1	1925	Hya	
12865	17.3 +51 29	7303	OΣ 199	b	6.10	6.12	10.2	125	5.7	1924	37 Lyn	
12869	17.5 -74 41		I 12	b	5.45	5.8	6.7	79	0.3	1927	Car	
			h 4206	c	5.44	5.45	10.5	343	7.0	1926		
12875	17.9 +38 24	7307	Σ 1338	b	5.86	6.5	6.7	222	1.2	1958	Lyn	el
12877-1	18.0 -09 21	7311	Sh 105	c	4.80	6.87	4.97	211	229.0	1923	27 Hya	
			Doo —	c		6.87	9.0	196	9.6	1907		
12900-2	18.6 -31 33		h 4200	c	6.80	7.24	8.0	73	3.0	1938	Pyx	
12936	20.4 -09 37	7334	A 1342	b	6.53	7.3	7.3	0.1	0.2	15.0	Hya	el
				d	6.53	6.53	12.5	204	1.9	1943		
12962	21.5 +51 47	7348	OΣ 200	c	6.37	6.5	8.7	334	1.4	1954	UMa	
12972	21.7 +26 24	7351	β 105	b	4.61	4.61	9.7	208	2.6	1926	* Leo	
13021	24.2 -61 44		h 4213	c	5.95	6.00	9.4	327	8.8	1917	Car	
13033	24.6 -28 34	7379	Jac 5	b	6.02	6.4	7.2	254	0.6	1926	Pyx	
	24.7 +06 27	7380	Σ 1355	c	6.71	7.5	7.5	337	2.6	1924	Hya	
13039	24.8 -09 00	7382	A 1588	c	6.44	7.2	7.2	184	0.2	1916	29 Hya	
			β 590	d	6.44	6.44	11.7	174	10.8	1914		
13062	25.8 +09 17	7390	Σ 1356	b	5.52	6.00	6.7	224	0.2	1956	ω Leo	el
13063	25.8 +08 24	7291	H IV 47	c	5.87	5.88	10.7	81	25.7	1908	3 Leo	
	26.5 -01 02	7396	A 1763	d	6.29	6.3	11.7	110	1.6	1918	Hya	
13109	27.6 +63 17	7402	Σ 1351	b	3.74	3.75	9.3	271	22.8	1924	23 UMa	
13110	27.7 -26 22	7405	See 113	d	5.67	5.67	14.8	178	4.1	1897	Ant	
13135-7	28.6 -31 40		Δ 78	b	5.94	7.21	6.35	211	8.2	1919	ζ ¹ Ant	
13140	28.7 -40 15		Copeland	b	3.64	4.2	4.7	0.4	0.9	34.1	ψ Vel	el
13145	28.9 -58 08		Rst 408	d	5.78	5.8	13.5	99	2.1	1930	Car	
13150	29.3 +09 56	7416	Sh 107	f	5.26	5.28	9.6	75	37.4	1921	6 Leo	sp
13157	29.5 +51 54	7420	β 1071	b	3.26	3.26	13.7	75	5.1	1889	θ UMa	
13180	30.3 -40 26		Rst 1435	d	5.36	5.4	9.5	83	1.1	1945	Vel	
	30.4 +28 35	7426	HN 29	d	6.35	6.4	10.0	258	31.6	1923	Leo	
13219	31.9 -48 47		h 4220	b	5.35	5.8	6.4	111	1.9	1943	Vel	
13227-9	32.3 +40 11	7438	Σ 1369	f	6.28	6.56	7.9	149	24.7	1924	Lyn	sp
13242	32.7 +36 02	7441	Hu 1128	o	5.48	5.48	14.0	33	4.1	1922	11 LMi	
13250	33.2 +14 36	7448	H V 58	c	6.17	6.21	9.7	80	41.7	1926	7 Leo	
13252	33.2 +73 18	7446	Σ 1362	b	6.43	7.1	7.3	130	5.0	1925	Dra	
13254	33.2 -19 22		S 604	d	6.22	6.25	10.0		51.0		Hya	
13284	34.6 -48 32		R 125	b	6.48	6.6	9.4	172	3.4	1925	Vel	
13309	35.5 -53 27		λ 115	c	5.53	6.2	6.3	174	0.3	1927	Vel	
13334	36.6 -39 23		I 202	c	6.66	6.7	9.5	161	1.1	1938	Ant	
13373	39.0 -23 22		HN 20	o	4.74	4.8	8.1	292	54.4	1904	I Hya	
13376	39.2 -57 45		B 780	b	5.36	6.1	6.1	0.3	0.2	10.0	Car	el sp
13421	41.7 -51 00			d	6.45	6.46	12.0	199	2.1	1930	Vel	
13425	42.0 -27 32		Finsen	d	4.98			51	0.1	1953	θ Ant	
13506-7	45.9 -64 50		Rmk 11	c	3.08	3.15	6.03	126	4.6	1943	v Car	
13528	47.0 +21 25		Kpr	d	6.01	6.6	6.9	208	0.4	1957	20 Leo	sp
13559	48.7 +54 18	7545	OΣ 208	b	4.54	5.2	5.3	16	0.4	1958	φ UMa	el
13593	50.0 -07 52	7555	AC 5	b	5.16	5.8	6.1	0.7	0.4	78.4	γ Sex	el
	50.7 -27 06		Rst 5341	d	6.3	6.3	13.0	4	1.1	1944	Ant	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
13637	09 ^h 52 ^m 3 —45°03'		Δ 81	d	5.78	8.3	5.89	240	5.4	1938	Vel	
13697	54.5 —26 19	7591	β 216	d	6.22	6.23	11.2	159	3.2	1918	Hya	
	55.2 —01 42	7596	A 1767	d	6.72	6.8	11.0	13	1.7	1918	Sex	
13839	10 01.7 —17 52	7627	Sh 110	d	5.65	8.0	5.78	274	21.0	1926	Hya	
			β 1072	o	5.78	5.78	12.3	43	10.9	1889		
13845	02.1 —61 38		Hrg 47	b	6.34	6.6	8.0	352	1.2	1925	Car	
13890	04.2 —47 07		I 173	b	5.22	5.4	7.1	144	0.2	1926	Vel	
13911	05.3 +10 15	7649	GAn 5	c	4.58	4.58	13.6	44	7.9	1914	31 Leo	
13917	05.4 +31 51	7651	h 475	c	6.18	6.18	13.5	173	26.7	1924	LMi	
13922—6	05.7 +12 13	7654	Σ 6AppII	c	1.34	7.64	1.34	307	176.5	1924	α Leo	
			Hd 127	b	7.64	7.65	13.0	87	2.7	1923		
13941	06.6 +20 35	7662	A 2145	b	6.65	7.4	7.4	0.9	0.2	60.0	Leo	el
13960	07.3 —65 34		h 4292	o	5.33	5.36	9.1	124	61.3	1919	Car	
	07.4 —35 37		Rst 2678	d	6.3	6.3	10.0	275	1.7	1945	Ant	
13986	08.3 —68 26		I 13	b	6.06	6.8	6.9	136	0.9	1941	Car	
13999	08.9 +13 36	7674	Hu 874	c	6.41	6.8	7.6	298	0.2	1941	34 Leo	
14010	09.8 —28 22	7681	B 194	d	6.10	6.8	6.9	191	0.2	1926	Ant	
14050	11.5 —51 30		Rst 5517	d	6.04	6.1	8.5	241	0.3	1949	Vel	
14052	11.6 —40 06		Rst 1488	d	5.96	6.0	15.0	103	4.9	1945	Vel	
14090	13.6 +17 59	7704	O Σ 215	b	6.56	7.2	7.4	187	1.2	1957	Leo	el
14102—4	13.9 +71 18	7705	Σ 1415	b	6.09	6.58	7.20	167	16.7	1925	UMa	
14119	14.3 —59 39		Hu 1597	b	6.44	7.2	7.2	194	0.3	1937	Car	
14121	14.4 —20 25	7711	Hn 101	d	6.52	6.56	10.1	112	1.3	1937	Hya	
14124	14.5 +23 21	7712	O Σ 523	b	5.84	5.85	11.4	299	7.8	1923	39 Leo	
14166	16.8 —12 17		Rst 3688	d	6.16	6.3	8.4	308	0.8	1943	Hya	
14177—8	17.2 +20 06	7724	Σ 1424	b	2.30	2.61	3.80	122	4.3	1957	$\gamma^1, 2$ Leo	el
14184	17.5 —64 25		h 4306	c	6.24	7.0	7.0	134	2.1	1941	Car	
14220—2	19.0 —55 47		Rmk 13	b	4.61	4.65	8.3	102	7.2	1927	I Vel	
14227	19.2 —22 17	7739	β 219	b	6.45	6.7	8.4	187	1.9	1937	Hya	
14245	20.1 +15 36	7744	O Σ 216	b	7.37	7.5	9.7	303	0.7	1958	Leo	el
	20.9 —13 07	7749	h 4311	d	6.54	6.6	10.7	119	4.1	1921	Hya	
	23.4 +03 11	7769	A 2570	d	6.75	7.5	7.5	320	0.4	1924	Sex	
14358	25.0 +36 58	7780	Hu 879	b	4.41	4.6	6.3	224	0.6	1935	β LMi	el
14361	25.0 +10 01	7781	h 832	o	5.87	5.87	12.0	132	37.2	1924	45 Leo	
14421	27.3 —30 21		h 4321	b	5.62	5.65	9.7	226	11.0	1920	δ Ant	sp
14442	28.5 —07 23	7808	Σ 1441	c	6.37	6.40	10.0	167	2.7	1937	Sex	sp
14464—7	29.4 —53 28		h 4329	o	5.04	5.08	8.76	89	37.9	1917	Y Vel	
14477—8	29.8 —44 49		Δ 88	f	5.60	6.54	6.19	218	13.4	1941	s Vel	
14480	29.9 —72 58		h 4333	o	4.90	4.90	11.5	100	32.1	1917	Car	
14505	30.8 —46 45		h 4330	c	5.07	5.11	8.6	162	40.5	1915	t Vel	
14541	32.4 +08 55	7837	Σ 1450	c	var	var	8.5	157	2.3	1957	TX Leo	sp
14571	33.7 —26 25	7846	β 411	b	6.25	6.6	7.5	223	0.3	1936	Hya	el
14578	33.8 —16 05	7847	β 1075	d	6.23	6.23	13.0	284	3.3	1901	φ^2 Hya	
	34.3 —28 31	7852	I 857	d	6.75	7.4	7.6	299	0.3	1926	Hya	
14614	35.2 —47 58		λ 119	b	4.06	4.6	5.1	287	0.3	1926	p Vel	el sp
14647—9	36.8 —58 55		Δ 94	f	4.68	4.73	8.2	20	14.6	1917	t ² Car	
14654—7	37.1 —58 33		Gls 152	o	6.02	6.09	9.11	75	21.1	1920	t ¹ Car	
14662—5	37.3 —55 21		h 4341	c	4.13	4.25	6.62	176	20.2	1913	x Vel	
14689	38.6 —35 29			d	6.51	6.6	8.9	63	0.8	1937	Ant	
14730	40.3 +26 35	7899	β 913	o	5.55	5.55	13.0	112	17.8	1954	40 LMi	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
14744	10 ^h 40 ^m 7 +05°01'	7902	Σ 1466	b	5.99	7.4	6.34	325	6.4	1923	35 Sex	
	44.4 —60 20		Rst 4463	d	6.5	6.5	14.0	293	4.3	1939	Car	
14842	44.6 —49 09		R 155	b	2.82	2.84	7.0	79	1.0	1939	μ Vel	
14848	44.8 —80 12		I 294	b	5.48	6.1	6.4	68	0.5	1926	δ ¹ Cha	
14891	46.7 —03 46	7936	Σ 1476	b	6.48	6.96	7.6	4	2.3	1923	40 Sex	
14902	47.4 —59 04		R 161	b	6.10	6.4	7.7	276	1.0	1927	Car	
14969	50.9 —01 59	7967	S 617	c	6.20	6.23	10.0	179	35.1	1925	Leo	
15002	52.1 —70 27		h 4383	b	6.11	6.6	7.2	284	1.5	1917	Car	
15011	52.5 —61 34		Rst 4468	d	6.05	6.0	11.0	152	7.2	1939	Car	
15016—7	52.9 +25 01	7979	Σ 1487	b	4.32	4.51	6.30	109	6.4	1957	54 Leo	sp
15022	53.1 +01 00	7982	β 1076	b	6.05	6.07	10.3	88	0.6	1957	55 Leo	sp
15094	56.9 —33 28		I 211	b	5.73	5.76	9.6	203	1.7	1939	Hya	
15104	57.2 —61 03		R 164	d	6.27	6.31	10.0	79	3.9	1927	Car	
	57.9 +43 00	8015	Es —	d	6.73	6.8	11.0	200	13.5	1913	UMa	
15143	58.7 —81 17		I 212	b	6.67	7.4	7.5	163	0.6	1918	Cha	
15171	11 00.0 —26 34	8028	B 208	d	6.16	6.7	7.1	10	0.1	1937	Hya	
15185	00.7 +62 01	8035	β 1077	b	1.95	2.0	4.8	0.3	0.6	44.0	α UMa	el
15188	00.7 —11 02	8037	A 1774	c	5.60	5.62	10.0	271	3.7	1918	Crt	
15215	01.7 +38 31	8046	Ho 377	c	6.08	6.08	12.5	251	8.1	1923	51 UMa	
15228	02.2 —03 57	8048	Σ 1506	d	7.53	7.83	9.8	217	11.2	1917	Leo	
			A 676	b	9.8	10.6	10.6	0.1	0.2	23.5		el
15235	02.4 +07 36			b	4.66	4.7	11.0		2.0		χ Leo	
15248	02.9 —27 01		φ 47	b	5.06	5.8	5.8	0.3	0.1	7.40	χ ¹ Hya	el
15282	04.4 +02 14	8060	β 599	b	5.66	5.66	11.5	90	2.3	1924	65 Leo	
15283	04.4 —58 24		Hd (210)	o	6.06	6.07	12.0	230	12.0	1900	Car	
				o		6.07	12.6	180	15.0	1900		
15300	05.0 —42 22		h 4409	b	5.28	5.34	8.5	267	1.9	1926	Cen	
15319	06.1 +24 56	8071	A 677	d	5.63	5.63	14.5	243	4.5	1918	67 Leo	
15405	10.0 —18 14	8086	β 220	c	6.09	6.6	7.2	125	0.2	1936	ψ Crt	
15425	10.9 +41 22	8093	Ho 50	f	6.45	6.49	10.0	37	3.3	1923	UMa	
15484—5	13.2 +53 03	8108	Σ 1520	c	6.08	7.8	6.34	344	12.6	1924	UMa	
15512	14.1 —45 36		h 4423	b	6.50	7.12	7.4	275	2.0	1942	Cen	
15514	14.4 —06 52	8115	β 600	c	6.03	6.03	12.0	220	1.3	1922	Crt	sp
15532	15.3 —67 33		Don 471	d	6.09	6.1	15.0	202	7.0	1931	Car	
15537	15.5 +31 49	8119	Σ 1523	b	3.88	4.4	4.8	0.4	2.5	59.9	ξ UMa	el sp sp
15547	15.8 +33 22	8123	Σ 1524	c	3.71	3.71	9.7	147	7.2	1926	ν UMa	
	16.4 +14 33	8128	Σ 1527	d	6.65	7.0	8.1	20	2.9	1924	Leo	
	16.8 —01 23	8131	Σ 1529	d	6.33	6.59	8.0	253	9.4	1922	Leo	
15601	18.7 —54 13		I 879	b	4.26	4.7	5.5	111	0.2	1940	π Cen	el
15648—9	21.2 —64 41		h 4432	b	5.34	6.84	5.66	299	2.5	1918	Mus	
15652	21.3 +10 48	8148	Σ 1536	b	4.03	4.1	7.0	219	1.0	1958	ι Leo	el
15669	22.4 —17 25	8153	h 840	c	4.13	4.14	9.5	97	5.2	1913	γ Crt	
	22.6 —61 22		Brsb 5	b	7.40	7.7	8.9	236	3.5	1958	Cen	el
15680	23.1 —35 47		I 1542	d	5.34	5.35	10.0	120	1.3	1927	Cen	
15684	23.1 —37 28		B 796	d	6.01	6.02	11.0	59	5.0	1927	Cen	
15705—6	24.2 +03 17	8162	Σ 1540	b	5.84	6.19	7.22	150	28.9	1922	83 Leo	
15710	24.5 —52 53		I 883	b	5.91	6.5	6.9	289	0.3	1926	Cen	
	24.8 —15 22	8166	Hu 462	b	7.72	8.4	8.6	0.2	0.5	48.4	Crt	el
15744	26.2 —42 24		Brs 6	b	5.26	5.34	8.1	167	13.1	1917	Cen	sp
15746	26.2 —72 12			d	6.31	7.0	7.1	359	0.3	1939	Mus	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
15751	11 ^h 26 ^m 4 +39°37'	8175	Σ 1543	b	5.21	5.26	8.5	1	5.5	1924	57 UMa	
15768—9	27.2 —24 11	8183	Jac 16	b	5.67	5.73	8.94	83	8.4	1926	Crt	
15787	28.1 +41 34	8189	OΣ 234	b	6.99	7.6	7.9	0.4	0.4	86.0	UMa	el
15810—1	29.2 +14 39	8196	Σ 1547	b	6.05	8.6	6.15	326	15.4	1924	88 Leo	
15822	29.5 +61 22	8197	OΣ 235	b	5.47	5.7	7.1	0.4	0.8	73.4	UMa	el
	29.5 +36 31	8198	Hu 1134	b	6.56	7.3	7.3	130	0.1	1923	UMa	
15830—1	29.8 —28 59	8202	H III 96	c	5.07	5.86	5.78	210	9.1	1926	17 Crt	
15854	31.2 —40 19		I 78	b	5.50	6.3	6.3	94	1.0	1927	Cen	
15874	32.1 +17 04	8220	Σ 1552	b	5.71	6.05	7.1	208	3.4	1957	90 Leo	sp
15886	32.8 —47 06		Rst 548	d	5.63	5.6	13.5	163	6.4	1949	C ¹ Cen	
15905	33.7 +28 03	8231	Σ 1555	b	5.82	6.4	6.8	135	0.3	1957	Leo	sp
			h 503	d	5.81	5.82	10.8	149	21.3	1924		
15917	34.1 —33 18		h 4455	c	5.82	5.87	9.2	243	3.3	1938	Hya	
15967	35.8 —02 10	8247	Σ 1560	c	6.22	6.25	10.2	278	4.9	1923	Vir	
15974	36.0 +64 37	8249	Σ 1559	b	6.44	6.7	8.0	323	2.2	1938	UMa	
15975—6	36.1 +45 23	8250	Σ 1561	b	6.16	8.2	6.34	258	9.9	1924	UMa	
15977	36.1 —12 56			b	5.64	5.65	11.0		2.0		ε Crt	
16004	37.2 —65 07		I 34	d	5.08	5.5	6.3		0.2		Mus	sp
16009	37.3 —14 11	8259	β 1078	c	6.39	6.39	13.0	50	8.1	1912	Crt	
16057	39.3 —82 49		h 4468	o	6.19	6.22	10.3	147	22.3	1919	Oct	
16105	41.6 +25 30	8285	OΣ 239r	o	6.15	6.19	9.8	24	37.2	1924	Leo	
16181	46.1 +14 34	8311	β 603	b	5.90	6.0	11.0	23	0.7	1956	Leo	el
16219	48.4 +12 33	8320	h 1201	c	6.21	6.22	11.3	189	14.9	1924	Leo	
16241	49.4 —64 56		Cor 130	c	5.10	5.2	7.8	159	1.8	1915	Mus	
16246	49.7 —56 43			o	5.66	5.69	9.7	124	49.1	1911	Cen	
			I 892	d	9.67	10.2	10.7	128	4.1	1911		
16258	50.4 —33 38		h 4478	b	4.40	4.8	5.6	1	1.2	1943	β Hya	
16266	51.0 +74 02	8337	β 794	b	6.78	7.3	7.9	0.5	0.4	77.1	Dra	el
	51.4 +72 12	8344	A 75	b	7.54	8.1	8.5	0.1	0.3	78.6	Dra	el
16280	51.9 —37 28		Hwe 71	c	6.53	6.7	9.0	276	1.6	1939	Cen	
16296—8	52.5 +46 45	8347	Σ 1579	c	5.87	6.46	6.81	114	63.0	1925	65 UMa	sp
			A 1777	b		7.2	9.0	11	0.3	1919		
			Σ 1579	b	6.81	7.2	8.3	42	3.7	1924		
	53.7 +35 44	8355	OΣ 241	b	6.55	6.7	8.6	133	1.6	1924	UMa	
	54.8 —49 05		Rst 564	d	6.7	6.7	11.2	1	2.5	1941	Cen	
16368	55.5 +32 33	8368	β 918	c	6.30	6.30	13.0	231	7.5	1913	UMa	
16374	55.8 —40 40		h 4484	b	6.71	6.81	9.4	309	3.5	1920	Cen	
16384	56.3 —25 38	8371	I 510	b	6.39	6.9	7.4	119	0.1	1926	Hya	
16392	56.7 +33 27	8374	β 919	f	6.02	6.02	12.3	16	4.5	1924	UMa	
16402	57.1 —77 57		h 4486	b	5.05	5.5	6.3	183	1.1	1925	ε Cha	
16449	59.8 —85 21		h 4490	c	5.82	5.89	8.9	145	25.0	1919	Oct	
16463	12 00.5 —63 02		Cp 55	o	4.48	4.48	13.8	326	4.5	1921	♁ ¹ Cru	sp
16471	01.1 —38 44		λ 143	b	6.64	7.3	7.5	118	1.0	1955	Cen	el
16489	01.7 +21 44	8406	Σ 1596	b	5.77	6.0	7.5	239	3.8	1957	2 Com	
16524	03.1 +63 13	8417	Hu 1136	c	6.23	6.24	11.4	223	2.0	1921	UMa	
16535	03.5 +68 59	8419	Σ 3123	b	7.14	7.9	7.9	110	0.3	1956	Dra	el
				d	7.89	7.89	15.5	308	3.0	1924		
16544	03.8 —65 26		h 4498	c	6.00	6.18	8.0	61	8.7	1918	Mus	
16613	07.5 —34 26		Jc 17	b	6.14	6.3	8.1	20	3.4	1938	Hya	
16631	08.3 —40 10	8446	Σ 1606	d	6.82	7.3	7.9	302	0.7	1954	CVn	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
16634	12 ^h 08 ^m 4 —45°09'		I 423	d	6.46	6.48	11.0	164	2.9	1913	Cen	
16696	11.0 —33 30		Hwe 72	c	6.35	6.4	9.0	169	1.3	1927	Hya	
16703	11.4 —45 27		Rmk 14	b	5.29	5.6	6.8	245	2.9	1926	D Cen	sp
16739	13.2 —23 05	8481	β 920	b	6.42	7.0	7.5	284	1.2	1936	Crv	
16750	13.6 +40 56	8489	Σ 1622	b	5.74	5.80	8.9	260	11.5	1925	2 CVn	
16766	15.0 +29 13	8501	OΣ 245	c	5.66	5.68	10.2	277	8.2	1908	Com	
16770	15.2 —35 49		R 193	b	6.28	6.9	7.2	165	0.7	1939	Cen	
16781—2	15.6 —03 41	8505	Σ 1627	b	6.05	6.97	6.65	196	19.9	1925	Vir	
16822	17.6 —21 54	8515	β 605	b	6.11	6.3	8.3	170	1.0	1939	Crv	
16825	17.8 +38 11	8516	Σ 1632	d	6.67	6.7	9.9	193	10.4	1925	CVn	
16830	18.0 —21 56	8517	β 1245	o	5.30	5.30	13.8	54	7.8	1912	ζ Crv	sp
16832—3	18.1 +27 20	8519	Σ 1633	b	6.30	7.1	7.0	246	8.9	1949	Com	
16835	18.2 +18 04	8521	Ho 52	c	4.91	4.91	13.0	44	9.3	1911	11 Com	
16871	20.0 +05 35	8531	Σ 1636	b	6.32	6.46	8.6	337	19.6	1925	17 Vir	
16873	20.0 +26 07	8530	Sh 143	o		4.73	11.5	54	34.9	1911	12 Com	sp
				d	4.69							
16911	21.9 +25 52	8539	Σ 1639	b	6.31	6.7	7.7	336	1.3	1957	Com	el
16920	22.1 —41 06		h 4518	c	6.16	6.3	8.6	208	10.1	1920	Cen	
16952—3	23.8 —62 49		Fontenay	b	1.05	1.58	2.09	114	4.7	1943	α ^{1,2} Cru	
17007—2	26.4 +26 11	8568	OΣ 21 Appl	c	5.10	6.69	5.38	251	145.3	1925	17 Com	
			β 1080	d	6.69	6.69	13.7	157	1.8	1889		
17027—9	27.3 —16 14	8572	Sh 145	c	3.10	8.4	3.11	212	24.2	1926	δ Crv	
17036	27.5 —13 07	8573	β 28	b	6.41	6.5	9.2	288	1.1	1958	Crv	el
17052—5	28.4 —56 50		Δ 124	o	1.60	1.61	6.68	31	110.6	1919	γ Cru	
17139	32.0 —44 24			d	5.86	5.86	12.0		1.0		Cen	
17146—7	32.6 +18 39	8600	Σ 1657	b	4.96	6.72	5.18	271	20.3	1949	24 Com	sp
17198	35.0 —26 52	8612	B 230	d	5.44	5.44	12.2	152	1.6	1926	Hya	
17214	36.0 —75 06		I 296	c	6.52	6.7	8.7	272	2.1	1931	Mus	
17259—0	38.7 —12 44	8627	Σ 1669	b	5.28	6.08	5.98	130	5.2	1953	Crv	sp sp
17262	38.7 —48 41		h 4539	b	2.38	3.1	3.2	0.8	0.9	84.5	γ Cen	el
17270	39.1 —01 11	8630	Σ 1670	b	2.91	3.63	3.6	309	5.2	1958	γ Vir	el
17279	39.4 +07 05	8633	β 924	b	5.49	5.49	11.6	33	4.0	1932	31 Vir	
17300	40.6 —58 38		Rst 606	d	6.5	6.5	10.0	163	2.5	1939	Cru	
				b	10.0	10.2	12.2	32	0.6	1948		
17339	42.7 —60 42		h 4547	o	4.68	4.68	7.8	27	26.4	1922	ι Cru	sp
17344—5	42.9 +14 38	8659	Σ 1678	d	6.25	7.3	6.76	189	32.8	1923	Com	
17348	43.2 —67 50		R 207	b	3.26	3.9	4.2	7	1.6	1945	β Mus	
17352—3	43.5 —56 13		h 4548	c	4.84	4.86	9.2	168	52.6	1913	Cru	
17410	46.9 +27 49	8674	h 522	o	5.83	5.83	11.7	13	42.5	1912	30 Com	
17440—2	48.6 +83 41	8682	Σ 1694	c	4.76	5.81	5.28	325	21.5	1949	Cam	sp
17460	49.5 —84 51		Rst 2819	d	5.38	5.9	6.4	227	0.7	1935	ι Oct	
17461	49.5 —53 33		Hd (220)	d	6.33	6.34	12.0	210	6.4	1927	Cen	
17493	50.8 +21 31	8695	Σ 1687	b	5.10	5.3	7.3	134	1.0	1957	35 Com	el
				c	5.07	5.10	9.0	126	28.8	1921		
17512—3	51.6 —56 54		Δ 126	c	3.95	4.26	5.46	17	34.9	1913	μ ^{1,2} Cru	
17556—7	53.7 +38 35	8706	Σ 1692	b	2.80	5.39	2.90	228	19.7	1925	α ^{1,2} CVn	sp sp
17560	53.9 —00 41	8708	OΣ 256	b	6.56	7.1	7.5	79	0.8	1926	Vir	
17567	54.1 +54 22	8710	Σ 1695	b	5.81	6.01	7.7	283	3.7	1923	UMa	sp
17647	57.9 +31 03	8731	β 1081	c	5.08	5.08	13.8	351	5.1	1889	37 Com	
17649	58.0 —03 06	8732	AGC 5	c	6.11	6.12	11.0	164	1.2	1956	46 Vir	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P _e	d ^o a ^o	E P	Con	N
17664	12 ^h 58 ^m 6 +56°38'	8739	β 1082	b	4.89	5.0	7.4	344	1.0	1952	78 UMa	el
17711	13 01.1 —20 19	8757	β 341	c	5.68	6.2	6.7	131	0.8	1942	Vir	
17715	01.3 —03 24	8759	β 929	b	6.51	7.1	7.4	205	0.8	1957	48 Vir	
17748	03.3 +73 18	8772	β 799	b	6.33	6.5	8.5	260	1.1	1957	UMi	
17758	03.6 +45 32	8775	β 930	b	5.72	5.72	12.3	120	2.7	1924	CVn	
17764	03.8 +29 18	8777	h 2638	c	6.42	6.44	10.8	219	6.3	1924	Com	
			β 1083	b	10.8	11.5	11.7	237	0.5	1889		
17778	04.3 —59 36		R 213	d	6.06	6.7	6.9	24	0.8	1941	Cen	
17788	04.9 —65 02		Rmk 16	c	5.42	5.64	7.2	186	5.7	1922	ϕ Mus	
17828	07.4 —05 16	8801	Σ 1724	c	4.42	4.44	8.6	345	7.2	1934	ϕ Vir	
17833	07.6 +17 48	8804	Σ 1728	b	4.47	5.2	5.2	0.5	0.7	25.9	α Com	el
17835	07.8 +38 46	8805	β 608	d	6.02	6.04	10.5	277	1.4	1913	17 CVn	
17861	08.9 —26 17			b	6.48	7.2	7.3		0.2		Hya	
17866	09.2 —59 39		λ 170	b		5.3	5.7	160	0.1	1936	Cen	sp
			I 424	b	4.76	4.8	8.0	352	1.8	1927		
17876	09.7 +32 21	8814	O Σ 261	b	6.66	7.2	7.7	344	1.8	1925	CVn	
17890	10.4 —50 26		I 1227	b	6.04	6.8	6.8	109	0.4	1937	Cen	
17902—3	10.8 —18 34	8824	Sh 151	b	6.27	6.95	7.2	34	5.3	1941	54 Vir	sp sp
17910	11.1 —58 50			d	5.03	5.04	10.5		2.7		Cen	
17932	11.9 +80 44			d	6.32	6.36	10.0		0.8		Cam	
17981	14.3 +17 17	8841	β 800	d	6.55	6.6	10.2	107	5.7	1955	Com	
18050	18.2 +03 12	8864	Σ 1734	b	6.23	6.8	7.2	182	1.1	1957	Vir	
18078	19.2 —71 53			d	6.12	6.4	7.8		0.3		Mus	
18084—7	19.4 —60 44		Δ 133	c	4.44	6.51	4.62	343	60.5	1885	J Cen	
18095	19.9 —47 41		Slr 18	d	6.32	6.9	7.4	233	0.5	1928	Cen	
18120	21.2 —20 40	8885	β 610	d	6.60	6.7	10.5	15	3.9	1926	Vir	
18133—4	21.9 +55 11	8891	Σ 1744	b	2.17	2.40	3.96	150	14.5	1925	ζ UMa	el sp sp
18226	26.6 +60 12	8919	Σ 1752	o	5.20	5.41	7.1	110	182.3	1924	UMa	
18239	27.0 —23 01	8920	Ho 381	c	var	var	12.5	324	21.6	1910	R Hya	
18251	27.8 —06 13	8924	Σ 1750	b	6.06	6.07	11.5	16	29.6	1911	72 Vir	sp
18254	28.1 —39 09		λ 179	b	3.96	4.6	4.8	0.3	0.2	62.6	d Cen	el
18287	29.3 —18 28			b	5.93	6.6	6.8	196	0.1	1941	73 Vir	
18313	30.4 +24 36	8937	A 567	b	6.18	6.18	12.0	265	1.3	1924	Com	
18319	30.6 +35 10	8939	O Σ 269	b	6.80	7.5	7.7	0.8	0.2	54.8	CVn	el
18333	31.4 —48 01		Rst 4985	d	6.44	6.5	9.0	165	0.5	1949	Cen	
18338	31.7 —00 04	8949	Σ 1757	b	7.36	7.7	8.7	103	2.6	1956	Vir	el
18348	32.0 —12 58	8954	β 932	b	5.81	6.5	6.8	9	0.3	1955	y Vir	el
18352	32.2 +39 03	8956	h 1234	o	6.20	6.21	11.3	19	32.4	1925	CVn	
18384	33.8 —61 26		I 365	b	5.59	6.3	5.4	0.8	0.5	34.8	Cen	el
18388—9	34.0 —26 14	8966	S 651	b	5.25	7.0	5.49	192	10.9	1938	Hya	
18405	34.8 —58 10		R 223	d	6.36	6.38	11.0	21	2.4	1927	Cen	
18421	35.2 +36 33	8974	Σ 1768	b	4.92	5.1	7.1	113	1.7	1957	25 CVn	el
18428	35.5 —57 22		Finsen	d	6.04			27	0.1	1957	Cen	
18437	35.7 +50 58	8979	Σ 1770	b	6.59	6.9	8.2	121	1.9	1925	UMa	
18466	37.1 +11 00	8987	β 612	b	5.54	6.3	6.3	0.5	0.2	22.4	Boo	el
18485	38.3 +20 12	8991	Σ 1772	b	5.65	5.7	9.3	139	4.5	1932	1 Boo	
18492	38.4 +50 46	8992	Σ 1774r	d	6.33	6.4	10.0	135	17.6	1925	UMa	
18494—5	38.5 —54 18		Δ 141	b	5.39	7.1	5.65	164	5.3	1941	Cen	
18532	40.2 +77 05	8997	h 2682	d	6.63	6.7	10.0	279	26.1	1912	UMi	
18540	40.5 +03 47	9000	Σ 1777	b	5.62	5.7	8.6	230	3.3	1924	84 Vir	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
18546	13 ^h 40 ^m 7 —41 49			d	6.10	6.1	10.0	71	0.7	1945	Cen	
18604	43.3 —12 11	9018	β 935	c	5.81	5.82	10.5	303	1.4	1940	86 Vir	
			Σ 1780r	d	5.80	5.81	11.3	164	27.1	1940		
				b	11.3	11.6	12.8	271	2.7	1940		
18610	43.7 —62 20		Cor 157	d	6.21	6.23	10.4	318	9.7	1919	Cen	
18630	44.6 —09 28		Kuiper	b	6.24	6.5	8.1	261	0.8	1938	Vir	
18637	44.9 +17 42	9025	O Σ 270	o	4.51	4.51	10.6	7	5.7	1956	τ Boo	
18670	46.8 +27 14	9031	Σ 1785	b	7.26	7.8	8.3	142	2.9	1958	Boo	el
18718—0	48.8 —52 34		Rmk 18	c	5.53	7.72	5.68	288	18.1	1919	N Cen	
18724—5	48.9 —32 45		H III 101	b	4.47	4.72	6.17	110	7.6	1922	k Cen	
18733	49.1 —31 22		β 343	b	6.20	6.5	7.8	101	0.9	1926	Cen	
18754—5	50.3 —31 41		HN 51	c	4.72	8.5	4.76	186	15.1	1919	h Cen	sp
18761	50.6 —35 25		Hwe 28	b	5.64	6.4	6.4	113	0.9	1942	y Cen	
18765	50.8 —46 53		h 4624	o	5.93	5.94	10.6	350	21.4	1913	Cen	
18791	51.8 —22 00	9050	Hu 1262	d	6.69	6.7	10.0	292	1.0	1923	Vir	
18807	52.4 —07 49	9053	Σ 1788	b	6.20	6.7	7.3	85	3.2	1941	Vir	
18822	53.0 —53 53		R 227	b	6.36	6.7	8.0	3	1.6	1942	Cen	
18861	54.8 —65 33		h 4632	d	6.19	6.22	10.2	13	6.4	1918	Cir	
18945	59.1 +01 47	9085	Sh 171	o	4.33	4.34	9.5	290	80.1	1924	τ Vir	
18966	14 00.1 —31 27		β 1197	b	6.32	6.6	8.0	205	1.7	1926	Cen	
18971	00.3 —60 08			d	0.86	0.9	9.0	255	1.4	1939	β Cen	sp
19053	04.4 —49 38		Slr 19	d	6.59	7.1	7.6	275	1.2	1928	Cen	
19090	06.3 —70 04		Don 646	d	6.04	6.1	15.0	161	5.3	1948	Cir	
				d	6.04	6.1	15.5	144	8.7	1948		
19197	11.4 +12 14	9168	O Σ 279	d	6.63	6.8	9.0	253	2.3	1925	Boo	
19199	11.5 —56 51		Hd (228)	o	5.19	5.20	10.8	170	33.9	1913	Cen	
19204—7	11.7 +52 01	9173	Σ 1821	b	4.44	6.61	4.60	236	13.2	1949	$\alpha^{1,2}$ Boo	sp
19226	12.4 +10 20		Kuiper	b	5.36	5.5	8.1	120	0.9	1956	15 Boo	
19233	12.8 +03 22	9182	Σ 1819	b	7.04	7.7	7.8	260	1.0	1957	Vir	el
19234	12.9 —59 41		I 1240	o	var	var	12.2	218	28.0	1900	R Cen	
19263	14.2 +20 21	9192	Σ 1825	b	6.36	6.5	8.6	162	4.2	1957	Boo	
19267	14.4 +56 55	9197	Σ 1831	d	6.60	6.7	9.0	140	5.9	1920	UMa	
19269—1	14.4 +51 36	9198	Σ 26 AppI	c	4.74	4.78	8.3	33	38.4	1922	ϵ Boo	
19303	16.2 —25 35	9212	β 1246	c	5.92	5.92	13.3	188	2.4	1898	Hya	
19327	17.0 —42 50		h 4672	c	5.71	5.8	8.7	301	3.8	1925	Lup	
19347	18.5 +48 44	9229	Σ 1834	b	7.23	7.9	8.1	102	0.9	1955	Boo	el
19361—2	19.0 —58 14		Δ 159	c	4.91	5.06	7.1	160	9.6	1913	Cen	sp
19367	19.4 —48 06		R 244	c	6.20	6.26	9.4	121	4.3	1926	Lup	
19379	20.0 —50 33			c	6.03	6.06	10.0		1.3		Lup	
19401	20.9 +08 40	9247	Σ 1835	b	4.87	5.11	6.64	190	6.4	1925	Boo	sp
			β 1111	b	6.64	7.4	7.4	0.3	0.2	39.5		el
19423—5	21.6 +11 28	9251	Σ 1838	d	6.28	7.5	6.70	334	9.1	1922	Boo	
19437	22.0 —11 27	9254	Σ 1837	b	6.48	6.7	8.5	293	1.1	1936	Lib	
19448—9	22.6 —19 44	9258	Sh 179	b	5.79	6.66	6.43	295	35.0	1916	Lib	
			β 225	b	6.66	6.8	8.8	97	1.4	1924		
19454	23.0 —45 09		I 402	b	4.49	5.2	5.3	181	0.2	1937	τ^3 Lup	sp
19499	25.2 —29 16	9270	β 940	c	5.00	5.00	11.3	129	0.1	1934	52 Hya	
19504	25.6 —02 00	9273	Σ 1846	b	4.95	4.97	9.2	110	4.7	1924	φ Vir	
19553	27.7 +32 01	9288	Σ 1854r	o	5.94	5.96	10.5	256	25.7	1923	Boo	
19608	30.1 +26 54	9301	A 570	b	5.90	6.6	6.7	0.1	0.2	30.0	Boo	el

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
19609	14 ^h 30 ^m 2 —30°30'		β 1112	b	6.07	6.11	9.6	9	2.5	1936	Cen	
19656	32.3 —41 56		λ 207	o	2.65	2.65	13.5	270	5.6	1897	η Cen	
19689—0	34.0 —45 55		h 4690	c	5.40	5.44	8.9	25	19.4	1913	a Lup	
19704	35.0 +02 30	9323	A 2227	d	6.62	6.6	11.0	141	2.0	1924	Vir	
19728	36.2 —60 38		Richaud	b	0.06	0.33	1.70	0.5	17.6	80.1	α Cen	el
19769—0	38.4 +16 38	9338	Σ 1864	b	4.54	4.94	5.81	108	5.6	1957	$\pi^{1,2}$ Boo	sp
19771—2	38.4 —64 46		Δ 166	b	3.40	8.8	3.41	235	15.8	1925	α Cir	
19777	38.8 +13 57	9343	Σ 1865	b	3.86	4.6	4.6	313	1.2	1957	ζ Boo	el
19780	38.9 —30 43		β 414	b	6.47	6.8	8.0	346	0.9	1927	Gen	
19825	40.8 +61 28	9357	Σ 1878	b	6.17	6.3	8.5	327	3.8	1924	Dra	
19832	41.3 —62 40		Hd (239)	o	5.33	5.34	10.2	64	36.5	1900	Cir	
19835—8	41.6 —55 23		Δ 169	o	5.98	6.24	7.68	106	68.5	1913	Cir	
19857	42.8 +61 19	9371	Σ 1882	d	6.60	6.8	8.3	0	11.6	1924	Dra	
19856	42.8 +27 17	9372	Σ 1877	b	2.59	2.70	5.12	338	2.9	1957	ϵ Boo	sp
19864—5	43.1 —25 14	9375	HIII 97	b	5.03	5.21	7.09	128	8.8	1915	54 Hya	
19870	43.2 —15 15	9376	Hn 20	b	6.58	6.60	11.0	249	3.1	1937	5 Lib	
19873	43.3 —20 58		φ 309	d	6.40	7.1	7.2	0.0	0.3	25.0	Lib	el
19876	43.5 —52 10		h 4698	c	5.20	5.20	13.4	260	8.9	1928	b Lup	
19881	43.6 +42 35	9378	$O\Sigma$ 285	b	7.24	7.9	8.1	0.5	0.3	87.7	Boo	el
19886	43.8 +09 52	9380	Σ 1879	b	7.17	7.7	8.3	97	1.2	1955	Boo	el
19928	46.2 +24 34	9389	Σ 1884	b	6.05	6.4	7.5	55	2.0	1957	Boo	
19934	46.4 +06 10	9392	Σ 1883	b	6.72	7.0	7.0	107	0.4	1955	Vir	el
19938	46.6 —13 57	9396	β 106	b	5.38	5.8	6.7	355	1.7	1951	μ Lib	
19972	48.0 +48 56	9406	Σ 1890	b	5.56	6.10	6.6	45	3.1	1957	39 Boo	sp
19976	48.2 —72 59		I 236	c	5.62	5.7	8.5	107	1.6	1941	Aps	
19981	48.5 —63 36		I —	b	5.78	6.5	6.5	143	0.5	1913	Cir	
19991	49.1 +19 18	9413	Σ 1888	b	4.64	4.8	6.9	350	6.7	1958	ξ Boo	el
20032	51.0 +15 54	9425	$O\Sigma$ 288	b	6.43	6.9	7.6	178	1.6	1957	Boo	el
20077—8	53.1 —47 41		h 4715	c	5.54	7.3	5.78	278	2.5	1921	Lup	sp
20083	53.4 —34 26		I 227	b	7.35	8.1	8.2	0.9	0.2	37.7	Cen	el
20093	53.9 +32 30	9442	$O\Sigma$ 289	d	7.35	7.35	13.8	116	6.5	1927	Boo	
29111—3	54.5 —21 11	9446	HN 28	o	5.64	8.1	5.76	298	19.9	1926	Lib	
20140	55.7 —27 27	9453	β 239	b	5.68	6.4	6.4	334	0.7	1942	59 Hya	
20146	55.9 —41 54		I 1260	d	3.35	3.35	11.5	84	3.8	1926	κ Cen	
20157	56.2 —10 57	9456	Σ 1894	c	6.00	6.02	10.2	39	19.6	1923	18 Lib	
20158	56.3 —04 47	9457	β 1085	c	6.00	6.00	13.2	23	9.3	1908	Lib	
20205	58.9 +47 28	9477	$O\Sigma$ 991	c	6.10	6.16	9.3	159	35.5	1925	Boo	
20212	59.1 +00 03	9480	β 348	c	5.91	6.2	7.4	114	0.5	1925	2 Ser	
20266	15 01.6 +05 41	9493	Σ 1904	b	6.44	7.34	7.06	347	9.9	1922	Vir	
20271	01.7 —46 51		h 4728	b	4.02	4.7	4.8	76	1.7	1943	π Lup	
20281	02.1 +47 51	9494	Σ 1909	b	var	var	5.98	267	1.0	1958	44 Boo	el sp
20308	03.8 +48 21	9500	β 1086	c	5.59	5.59	13.2	254	5.8	1924	47 Boo	
20340	05.0 +18 38	9505	A 2385	b	6.00	6.75	6.75	0.4	0.1	8.0	Boo	el sp
20356	05.5 —45 05		λ 219	b	4.39	5.0	5.4	62	0.2	1938	λ Lup	
20403—5	08.2 —45 05		Δ 178	o	5.93	7.06	6.40	269	34.4	1913	Lup	
20409—1	08.5 —48 33		Δ 177	d	6.40	6.4	10.0		1.1			
20433	09.4 —19 36	9532	H VI 44	c	3.97	4.14	6.04	144	27.0	1913	$\kappa^{1,2}$ Lup	
			β 618	b	4.65	4.66	9.7	111	58.6	1914	ι Lib	sp
					9.75	10.5	10.5	19	1.9	1913		

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
20457	15 ^h 10 ^m 5 +19°28'	9535	Σ 1919	b	6.40	6.83	7.68	10	24.2	1926	Ser	
20466	10.9 —26 00	9538	B 288	d	6.04	6.05	11.1	76	1.8	1939	Lib	
20475	11.4 —01 09	9544	A 691	b	6.66	7.4	7.4	13	0.1	1919	Ser	
20496	12.4 —47 53		h 4750	d	6.16	6.19	10.2	19	13.3	1913	Lup	
20497	12.5 —60 43		I 428	d	5.95	6.0	9.0	317	10.5	1901	Cir	
20549	14.8 —60 19		I 370	d	5.50	5.50	12.0	114	5.7	1926	Cir	
20556—7	15.0 —47 42		h 4753	b	4.36	5.0	5.2	146	1.4	1943	μ Lup	
				c	4.28	4.36	7.17	131	24.3	1913		
20569	15.8 +01 07	9574	β 943	d	6.72	6.7	12.2	92	2.3	1925	Ser	
20573	16.1 —67 18		I 332	d	6.48	6.6	9.0	108	1.3	1913	TrA	
20576	16.2 +27 01	9578	Σ 1932	b	6.55	7.29	7.32	235	0.8	1958	CrB	el
20579—0	16.3 +10 37	9580	Σ 1931	b	6.42	6.71	8.0	171	13.3	1926	Ser	
20591	16.8 +01 57	9584	Σ 1930	b	5.17	5.18	10.0	37	11.0	1923	5 Ser	
20630—1	18.3 —38 02		Hwe 76	c	6.57	6.72	8.8	124	5.2	1913	Lup	
20637	18.5 +00 54	9596	β 32	c	5.48	5.5	9.5	16	2.8	1923	6 Ser	
20659	19.3 —44 31		Copeland	b	3.74	3.9	6.0	266	1.1	1924	ε Lup	sp
			Δ 182	c	3.73	3.74	9.1	173	26.6	1913		
20663	19.4 —59 09		h 4757	b	4.54	5.2	5.3	51	1.3	1944	γ Cir	
20696	21.1 +30 28	9617	Σ 1937	b	5.05	5.7	6.0	0.3	0.8	41.6	η CrB	el sp
20698	21.5 —39 32			d	5.38	5.38	11.4	40	1.5	1945	ν Lup	
20724—5	22.6 +37 33	9626	Σ 28 AppI	c	4.33	4.47	6.67	171	108.8	1941	μ ^{1,3} Boo	
			Σ 1938	b	6.67	7.2	7.8	25	2.0	1957		el
20767	24.8 —51 26		Δ 185	d	6.10	6.16	9.2	32	13.2	1917	Lup	
20860—1	28.8 —20 00	9681	h 4783	c	6.02	8.8	6.10	282	10.7	1926	34 Lib	sp
20883	30.0 +41 04	9688	A 1634	b	4.98	5.7	5.7	140	0.1	1921	ν ² Boo	
20892—3	30.2 —24 19	9689	S 673	b	6.27	7.06	7.02	301	9.3	1941	Lib	
			λ 238	b	7.06	7.7	7.8	0.6	0.2	54.6		el
20926	31.8 —41 00		h 4786	b	2.95	3.6	3.7	315	0.1	1936	γ Lup	el
20925	31.8 —65 27		Rst 778	d	6.5	6.5	13.5	323	4.4	1930	TrA	
20929—5	32.0 +80 37	9696	Σ 1972	b	6.04	6.47	7.2	81	31.0	1925	π ¹ UMi	
20941—2	32.4 +10 42	9701	Σ 1954	b	3.85	5.16	4.23	179	3.9	1957	δ Ser	
20943	32.4 —44 48		h 4788	b	4.84	5.0	7.0	1	2.4	1925	d Lup	
20979	34.0 —27 58		I 1271	d	3.78	3.78	11.8	160	3.3	1926	ν Lib	
20990	34.3 +39 58	9716	OΣ 298	b	6.78	7.5	7.6	0.6	0.9	56.0	Boo	el
20929—0	36.0 —08 38	9728	Σ 1962	b	6.08	6.61	6.54	189	11.8	1926	Lib	sp
21063—4	37.5 +36 48	9737	Σ 1965	b	4.69	6.00	5.07	305	6.3	1957	ζ ^{1,2} CrB	sp
21073	37.8 +12 13	9740	OΣ 300	d	6.31	6.4	9.8	263	15.3	1922	Ser	
21102	39.3 +19 50	9744	Hu 580	b	4.49	5.2	5.2	0.0	0.2	21.3	ι Ser	el
21130	40.6 +26 27	9757	Σ 1967	b	3.93	4.2	5.6	0.4	0.7	91.0	γ CrB	el sp
21132	40.8 +13 50	9758	β 619	b	6.44	6.8	8.0	4	0.6	1936	Ser	
21137—8	41.0 —41 40		Hwe 79	c	6.35	8.2	6.57	346	4.1	1914	Lup	
21155	41.5 +02 40	9763	A 2230	b	5.80	5.80	12.3	65	4.2	1956	ψ Ser	sp
21163	42.3 +80 08	9769	Σ 1989	b	6.93	7.4	8.1	35	0.6	1954	π ² UMi	el
21182	43.2 —27 54	9775	β 620	b	6.45	7.2	7.2	345	0.4	1942	Lib	
			h 4803	f	6.35	6.45	9.0	214	50.8	1914		
21184	43.3 —65 17		Rmk 20	c	5.75	6.48	6.52	150	2.0	1937	TrA	
21188	43.5 —34 32		B 847	d	5.61	6.2	6.5	36	0.1	1927	Lup	
21192—5	43.9 —35 22		Δ 192	d	6.05	6.72	6.89	144	34.8	1919	Lup	
				d	6.72	7.2	7.9	19	0.2	1939		
21227	45.1 —52 17			d	6.04	6.04	12.0		1.2		Nor	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
21253	15 ^h 46 ^m 4 +55°32'	9793	β 946	b	5.79	5.80	10.9	136	1.9	1956	Dra	
21263	46.8 —45 15		I 548	d	6.20	6.21	11.2	178	2.7	1927	Nor	
				d	11.2	11.9	12.1	298	0.6	1948		
21273	47.2 —54 54		Δ 193	d	5.76	5.84	8.6	17	19.3	1925	Nor	
21329	50.6 —25 11	9823	β 36	c	4.66	4.8	7.3	272	2.5	1933	2 Sco	
21330	50.6 —60 36		Slr 11	d		6.5	8.2	97	1.1	1938	TrA	
			Δ 194	d	6.12	6.5	9.2	48	45.0	1917		
				d		6.5	8.7	257	48.1	1917		
21348	51.3 +16 13	9828	A 2079	d	6.14	6.14	13.5	60	3.5	1918	Boo	sp
21350	51.3 —60 02		h 4813	b	6.01	6.04	9.8	99	3.8	1927	Nor	
21364	52.1 —19 14	9834	Hu 1274	b	5.90	6.1	8.0	128	0.5	1944	47 Lib	
21389	53.3 —02 03	9842	Σ 1985	b	6.72	7.1	8.2	340	5.7	1925	Ser	
21395—6	53.7 —33 49		Δ 146	b	4.78	5.37	5.73	49	10.6	1919	$\xi^{1,2}$ Lup	
21414	54.4 —64 54		B 854	d	5.88	5.88	12.5	284	9.7	1927	TrA	
21440	55.5 +27 01	9859	AGC 7	c	4.22	4.22	12.6	359	2.1	1924	ϵ CrB	
21478—9	56.8 —38 15		Rmk 21	b	3.61	3.64	7.7	21	15.2	1919	η Lup	
21494	57.5 —40 18		I 1280	d	6.50	6.54	10.0	240	0.8	1925	Lup	
			Cor 190	d	6.46	6.50	10.0	159	8.0	1920		
21533—5	59.5 —57 38		λ 258	b	4.87	5.57	5.68	0.5	0.4	26.4	ι^1 Nor	el
			h 4825	c	4.83	4.87	8.5	246	10.6	1943		
21593	16 01.6 —11 14	9909	Σ 1998	b	4.16	4.9	4.9	0.8	0.7	45.7	$\xi^{1,2}$ Sco	el sp
				b	4.10	4.16	7.2	54	7.9	1941		
21609—0	02.5 —19 40	9913	β 947	b	2.90	2.90	9.7	105	0.8	1936	$\beta^{1,2}$ Sco	sp
			H III 7	c	2.76	2.90	5.06	23	13.7	1925		
21616	03.1 —06 09	9918	β 948	b	6.36	6.4	9.1	120	1.0	1956	Oph	
			Σ 2005r	f	6.32	6.36	10.0	233	28.7	1924		
21632—3	03.7 +13 27	9922	Σ 2007	d	6.48	8.5	6.66	324	35.5	1925	Ser	
21667	04.8 —12 37	9924	β 39	c	5.63	5.64	10.4	258	3.5	1941	11 Sco	
21675	05.1 —55 56		Rst 1878	d	6.55	6.55	13.5	215	8.7	1932	Nor	
21679—0	05.2 —38 57		Δ 199	c	5.81	6.44	6.71	185	44.3	1920	Sco	
				d	6.44	6.44	13.0	104	1.3	1945		
21693	05.7 —09 58	9932	β 949	b	6.63	7.3	7.4	0.9	0.5	55.0	Sco	el
21696—8	05.8 +17 11	9933	Σ 2010	c	5.02	5.34	6.52	12	29.4	1925	κ Her	
21713—4	06.3 —32 31		Brs 11	c	6.30	6.74	7.48	85	7.8	1914	Sco	
21733	07.1 +36 37	9939	β 1087	c	4.94	4.94	13.8	169	3.1	1889	τ CrB	sp
21771—3	09.1 —19 20	9951	H V 6	c	4.16	6.49	4.29	337	41.4	1925	ν Sco	sp
			Mitchell	b	6.49	6.8	7.8	50	2.1	1924		
			β 120	b	4.29	4.4	6.4	2	1.0	1924		
21776	09.2 —28 17	9953	h 4839	b	5.70	5.8	7.8	75	3.9	1938	12 Sco	
21792	09.7 +33 28	9958	O Σ 305	b	6.39	6.41	10.7	263	5.8	1924	CrB	
21802	10.1 +42 30	9962	Σ 2024	c	6.00	6.01	10.4	44	23.5	1924	Her	
21811	10.7 +26 48	9966	Σ 2022	b	6.29	6.37	10.0	141	2.5	1926	CrB	
21814	10.7 —24 18	9967	B 307	d	6.31	6.34	10.4	228	1.5	1926	Sco	
21821	11.0 +13 40	9969	Σ 2021	d	6.84	7.5	7.6	346	4.1	1957	49 Ser	
21863	12.8 +33 59	9979	Σ 2032	b	5.36	5.7	6.7	229	6.2	1957	σ CrB	el sp
21873	13.4 —24 10		Rst 3010	d	6.62	6.62	12.1	314	1.3	1940	Sco	
21923	15.8 —42 33		λ 271	b	5.62	6.0	6.8	98	0.4	1936	λ Nor	
21940—1	16.4 —30 47		Brs 12	c	5.18	6.9	5.42	319	23.3	1897	Sco	sp
21959	17.2 —39 19		I 91	d	6.19	6.22	10.0	298	9.7	1903	Sco	
21984	18.2 +39 50		Kuiper	b	5.54	5.6	11.0	137	1.8	1956	Her	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
21987	16 ^h 18 ^m 2 +46°26'	10010	β 1198	c	3.91	3.91	14.6	147	6.7	1924	τ Her	
22000	18.9 -43 48		Δ 200	c	5.96	6.00	9.6	196	40.7	1914	Nor	
22031-2	20.7 -33 05		h 4848	b	6.54	7.06	7.59	154	6.3	1919	Sco	
22040	21.0 +32 27	10031	H V 38	d	6.15	6.20	9.5	19	34.7	1914	23 Her	sp
22046	21.3 -45 14		I 1291	d	6.45	6.46	12.0	39	5.1	1926	Nor	
22053-4	21.5 -29 35	10035	h 4850	b	5.46	6.59	5.94	352	6.2	1919	Sco	
22078-9	22.6 -23 20	10049	Sh 228	b	4.76	5.92	5.22	347	3.5	1943	ρ Oph	
				c	4.47	4.76	7.13	0	151.8	1925		
				c	4.47	4.76	6.56	253	156.4	1925		
				b	6.56	6.9	8.0		1.0			
22090	23.1 +14 09	10054	β 625	c	4.53	4.53	12.0	172	1.5	1925	ω Her	
22091	23.1 +61 49	10052	Σ 2054	b	5.64	6.0	7.2		1.1	1938	Dra	
22100	23.3 -63 57		Δ 201	o	5.28	5.30	9.7	61	19.7	1918	ι TrA	sp
22101	23.3 +61 38	10058	O Σ 312	b	2.89	2.89	8.8	142	6.1	1925	η Dra	
22104-6	23.5 -47 27		h 4853	c	4.71	7.46	4.80	335	22.0	1913	ϵ Nor	sp sp
22134	25.1 -08 16		Rst 3949	d	4.68	4.7	11.0	82	0.8	1951	ν Oph	
22145	25.8 +26 06	10070	Σ 2049	b	6.68	7.1	7.9	206	1.2	1926	Her	
22152	26.1 -08 01	10072	Σ 2048	b	6.31	6.41	9.0	298	5.1	1922	Oph	sp
22157	26.3 -26 19	10074	Grant	c	1.22	1.22	6.5	274	2.9	1938	α Sco	el sp
22166	26.7 +18 31	10075	Σ 2052	b	7.04	7.7	7.8	164	0.8	1958	Her	el
22185	27.4 +51 31	10079	Hu 748	d	6.37	6.4	12.8	79	5.6	1923	Dra	
22198	28.2 -41 43		δ 146	d	5.47	5.47	12.6	131	8.5	1926	Sco	
22203	28.4 +02 06	10087	Σ 2055	b	3.85	4.20	5.25	333	0.8	1958	λ Oph	el
22219	29.1 -06 56	10092	Σ 3105	b	6.48	7.2	7.2	20	0.3	1921	Oph	
22235	29.6 +33 37	10100	β 816	d	6.74	6.7	11.8	322	5.1	1924	31 Her	
22251	30.3 +45 42	10105	Σ 2063	b	5.50	5.55	8.8	196	16.4	1924	Her	
22276	31.5 +30 36	10116	818	d	6.66	6.7	13.5	37	3.7	1926	32 Her	sp
22347	34.9 -43 18		h 4867	c	6.09	6.14	9.4	294	16.4	1914	Sco	
22351-2	35.0 +53 01	10129	Σ 30AppI	c	4.65	5.64	5.20	194	90.6	1924	16, 17 Dra	
			Σ 2078	d	5.20	5.56	6.58	111	3.5	1925		
22368	35.7 -37 07		Finsen	d	6.10			147	0.1	1957	Sco	
22383	36.4 -60 21			d	6.24	6.3	9.0	36	1.3	1939	Ara	
22418-9	37.6 -48 40		Δ 206	c		7.1	5.6	266	9.8	1914	Ara	sp
				b	5.35	5.6	8.6	17	1.6	1925		
				o		5.6	9.6	160	13.4	1914		
22428-0	38.2 +04 19			c	5.41	5.73	6.9		70.0		m Her	sp
22464	39.4 +31 42	10157	Σ 2084	b	3.00	3.1	5.6	0.5	1.4	34.4	ζ Her	el sp
22503	41.2 -27 22	10173	β 1116	b	6.36	6.38	11.0	9	2.2	1937	Sco	
22520	41.9 -28 25		Rst 1901	d	5.96	6.0	14.0	217	5.4	1940	Sco	
22592	44.6 +02 09	10207	Σ 2096	c	6.00	6.04	9.5	92	23.2	1923	19 Oph	
22604	45.3 +77 36	10214	Ku 1	c	5.98	6.01	10.0	189	2.9	1920	UMi	
22633-4	46.8 -49 57		Cor 201	b	6.55	7.3	7.3	43	3.0	1937	Ara	
22648	47.3 +13 21	10225	Σ 2103	b	5.92	5.95	10.0	39	5.5	1923	Her	
22658	47.6 -37 26		h 4889	b	6.08	6.22	8.3	6	6.8	1925	Sco	
22662	47.8 +46 04	10227	β 627	b	4.86	4.87	10.3	2	1.5	1955	52 Her	
22688	48.9 +01 18	10230	A 1866	b	10.3	11.0	11.1	263	0.3	1955		
22715	49.8 +28 45	10235	O Σ 315	b	5.47	5.7	7.3	129	0.6	1957	21 Oph	
22733	50.5 -41 44		Σ 2107	b	6.52	6.8	8.2	74	1.2	1957	Her	el
22739	50.7 -63 11		See —	d	5.34	5.5	7.5		0.4		Sco	
			Hd (261)	o	6.14	6.14	13.7	340	7.0	1909	Ara	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
22768	16 ^h 51 ^m 5 —41°04'		I 576	d	6.03	6.03	12.5	269	5.0	1913	Sco	
22810	53.0 +25 49	10259	Σ 2110r	d	6.33	6.4	10.0	94	18.4	1910	56 Her	
22816	53.2 +18 31	10262	β 954	c	5.56	5.56	12.3	177	2.2	1923	54 Her	
22824	53.8 —23 04	10265	β 1117	b	5.60	6.3	6.5	292	0.8	1941	24 Oph	
22834—5	54.1 —19 28	10266	Sh 240	b	5.81	7.3	6.14	232	4.5	1926	Oph	
22869	55.6 —53 05			c	4.15	4.2	11		4.0		ε ¹ Ara	
22881	56.2 +65 07	10279	Σ 2118	b	6.44	7.1	7.3	71	1.0	1955	20 Dra	el
22895	56.7 —48 34		λ 316	b	6.08	6.4	7.7	176	0.8	1924	Ara	
22922	57.9 —51 03		I 1306	d	6.57	7.1	7.6	200	0.4	1926	Ara	
22960	59.3 +15 01	10310	Σ 2115	f	6.14	6.16	10.7	238	19.0	1905	Her	
22971	59.6 +08 31	10312	Σ 2114	b	6.24	6.7	7.5	177	1.2	1957	Oph	sp
22977	17 00.0 —47 05		Hd (264)	d	6.27	6.28	12.0	247	6.3	1927	Ara	
23028	01.7 +19 46	10323	β 822	c	6.55	6.57	11.0	229	1.3	1925	Her	
23046	02.5 +19 40	10326	Pry —	d	6.08	6.13	9.5	232	1.3	1935	Her	
23056	03.0 —37 10		λ —	d	6.11	6.14	10.0	85	7.1	1897	Sco	
23063	03.1 —35 23			d	6.26	6.27	12.0		3.0		Sco	
23091	04.3 —01 35	10347	Σ 2122	c	6.20	6.25	9.4	280	20.4	1923	Oph	
23092	04.3 +54 32	10345	Σ 2130	b	5.06	5.79	5.84	81	2.2	1955	μ Dra	el
23120	05.6 —01 01	10355	A 1145	b	6.02	6.2	8.2	215	0.4	1925	Oph	
23132	06.3 +36 00	10360	Hu 1176	b	5.38	6.1	6.1	0.2	0.2	8.0	c Her	el
23158	07.5 —15 40	10374	β 1118	b	2.63	3.2	3.5	341	0.3	1955	η Oph	el
23174	08.2 —67 08		Δ 214	o	5.90	5.94	9.4	356	30.1	1918	Ara	
23229	10.4 +49 48	10397	Σ 2142	c	6.00	6.05	9.5	114	4.6	1920	Her	
23273—4	12.3 —26 32	10417	Sh 243	b	4.54	5.29	5.33	178	4.8	1926	36 Oph	el
23277—8	12.4 +14 27	10418	Σ 2140	b	var	var	5.39	109	4.6	1957	α ^{1,2} Her	sp
23280	12.5 —14 32	10419	β 282	c	6.14	6.15	11.8	147	4.2	1913	Oph	
23294	13.0 +24 54	10424	Σ 3127	o	3.15	3.16	8.8	216	10.0	1939	δ Her	sp
23320	14.0 —00 23	10429	A 2984	b	4.82	4.9	7.6	339	1.0	1957	41 Oph	
23337	14.6 —69 59		I 104	d	6.56	6.61	10.0	134	1.6	1903	Aps	
23343—4	15.0 —24 14	10442	H III 25	b	5.15	6.90	5.39	355	10.8	1925	o Oph	
23353	15.3 —46 35		Brs 13	b	5.58	5.64	8.77	232	5.1	1955	Ara	el
23359	15.5 +33 09	10449	OΣ 328	c	var	var	10.0'	60	4.5	1909	u Her	sp
23362	15.5 —34 56		Mlb 4	b	5.89	6.13	7.6	0.6	1.8	42.1	Sco	el
				b	5.87	5.89	10.0	133	32.0	1942		
23367	15.8 —44 10		Hd (269)	b	6.91	7.6	7.7	17	0.3	1939	Sco	
23396	17.0 —17 42	10465	β 126	b	6.04	6.3	7.7	260	2.0	1925	Oph	
23420	17.6 —19 17	10476	A 2241	c	6.55	6.55	14.0	78	5.2	1917	Oph	
23423	18.0 —21 04			d	4.44	4.46	9.0	63	2.8	1940	ξ Oph	
23424	18.0 —12 48	10481	Sh 247	o	4.33	4.35	8.7	31	47.3	1914	ν Ser	
23425	18.1 —10 39		Rst 3971	d	6.42	6.42	14.0	82	8.5	1943	Ser	
23439	18.6 —57 58		Hd (270)	d	5.93	5.94	11.0	187	1.9	1938	Ara	
23462	19.2 —37 45			d	6.29	6.30	12.0		3.0		Sco	
23476	19.6 +05 03	10498	β 959	d	6.74	6.8	12.0	257	3.4	1924	Oph	
23474	19.6 +28 48		Kuiper	d	6.33	6.5	8.5	154	0.7	1956	Her	
23533	21.7 —21 24	10522	Hn 134	d	5.95	5.96	11.5	144	4.3	1910	Oph	
23543—4	22.0 +37 11	10526	Σ 2161	b	4.14	5.47	4.52	317	4.0	1957	ε Her	
23559	22.3 +15 39	10528	Σ 2160	f	6.22	6.25	10.0	66	3.9	1918	Her	
23560	22.3 +38 38	10531	Hu 1179	c	6.42	7.1	7.2	78	0.2	1945	Her	
23571	22.7 +37 00	10535	OΣ 329r	d	6.48	6.5	9.9	13	33.0	1925	Her	
23589—0	23.2 —45 48		h 4949	b	5.55	6.0	6.7	257	2.4	1943	Ara	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d" a"	E P	Con	N
23673	17 ^h 26 ^m 00 —38°29'		B 342	d	6.44	7.0	7.3	67	0.4	1926	Sco	
23687	27.1 —05 53	10583	β 1089	d	6.42	6.5	10.5	331	1.0	1953	Oph	
23706	27.8 —01 01	10598	Σ 2173	b	5.34	6.0	6.1	0.2	1.0	46.1	Oph	el
23732	28.8 +02 46	10607	A 2386	b	5.59	6.3	6.3	184	0.1	1940	Oph	sp
23741	29.3 +52 20	10611	β 1090	d	2.99	2.99	14.0	11	4.5	1916	β Dra	
23797—1	31.2 +55 13	10628	Σ 35 AppI	b	4.20	4.98	4.95	312	62.0	1924	ν ^{1,2} Dra	
23804	31.4 —32 33		h 4862	d	5.70	5.71	10.5	102	5.5	1919	Sco	sp
23823—4	32.2 +09 37	10635	Σ 34 AppI	f	5.61	7.7	5.77	101	41.3	1923	53 Oph	
23861	33.8 +21 02	10655	Σ 2190	c	5.78	5.82	9.4	23	10.5	1922	Her	
23874	34.5 +61 55	10660	β 962	b	5.31	5.4	8.5	0.2	1.5	74.2	26 Dra	el
23947	37.4 —00 37	10696	β 631	b	6.66	7.4	7.4	40	0.4	1925	Oph	
23971	38.3 —72 12		Hd (275)	b	6.66	7.2	7.6	32	0.7	1937	Aps	
24009	39.7 +15 58	10723	β 1251	b	5.58	5.58	11.5	25	0.8	1926	Her	
24075	42.0 +14 26	10749	h 1303	o	6.09	6.13	9.8	150	38.0	1924	Her	sp
24077—8	42.1 +02 36	10750	Σ 2202	c	5.67	6.25	6.64	93	20.6	1924	61 Oph	sp
24089—0	42.8 +72 11	10759	Σ 2241	c	4.58	4.90	6.07	16	30.3	1949	ψ Dra	
24112	43.7 —38 06		I 1336	d	6.24	6.8	7.1	208	0.2	1926	Sco	
24138	44.5 +27 45	10786	Σ 2220	b	3.48	3.48	9.9	247	33.5	1955	μ Her	
			AC 7	b	9.90	10.4	10.9	0.2	1.3	43.0		
24150	44.9 +17 43	10795	Σ 2215	b	5.58	5.9	7.1	278	0.7	1954	Her	sp
24179	46.1 —30 35		Rst 1990	d	6.68	6.7	12.5	243	2.2	1944	Sco	
24178	46.1 +34 18	10807	β 632	d	6.57	6.6	12.5	344	5.9	1924	Her	
24187	46.4 —53 36		h 4978	b	5.86	5.90	9.5	268	12.4	1916	ν ¹ Ara	sp
24223—4	48.0 —30 33		Stn 37	f	6.37	8.68	6.51	189	9.8	1910	Sco	
24281	49.7 +15 20	10850	OΣ 338	b	6.54	7.2	7.4	178	0.8	1957	Her	
24290	50.0 —34 43		β 1123	b	6.20	6.9	7.0	77	0.2	1941	Sco	
24294	50.0 —34 53		λ 342	b	5.68	6.4	6.5	268	0.4	1926	Sco	
24314	50.6 —34 45			d	6.08	6.4	7.7	251	0.4	1941	Sco	
24315	50.6 —76 10		h 4974	o	6.11	6.11	13.7	120	25.5	1918	Aps	
24342	51.7 +40 01	10875	β 130	b	5.12	5.1	8.5	123	1.7	1924	90 Her	
24384	53.4 —15 48	10891	h 2814	o	5.88	5.94	9.0	157	20.8	1898	Ser	
24411	54.5 —39 08		I 1013	b	6.39	6.6	8.5	170	0.8	1926	Sco	
24414	54.5 +00 04	10912	Σ 2244	b	6.14	6.8	7.0	290	0.4	1957	Oph	
24435	55.5 —36 51		Δ 219	o	5.71	5.78	8.2	260	49.4	1919	Sgr	
24451—2	55.9 —30 15		h 5003	c	5.07	5.27	7.0	106	5.5	1919	Sgr	
24509	58.1 +02 56	10966	H VI 2	f	3.90	3.92	8.2	142	54.6	1925	67 Oph	
			β 1124	o	3.92	3.92	14.8	197	6.4	1900		
			β 634	o	8.2	8.2	13.0	120	8.5	1925		
24526	58.9 —22 47	10983	β 283	d	5.73	5.73	12.5	236	8.2	1920	Sgr	
24534	59.2 +01 18	10990	β 1125	b	4.44	4.4	9.0	37	0.7	1926	68 Oph	sp
24538—9	59.4 +21 36	10993	Σ 2264	b	4.42	5.21	5.13	258	6.5	1953	95 Her	
24553	59.8 —27 50		B —	d	6.68	6.7	13.0	26	8.9	1931	Sgr	
24565	18 00.4 —08 11	11005	Σ 2262	b	4.88	5.3	6.0	270	2.0	1957	τ Oph	el sp
24607	01.8 +48 28	11028	Σ 2277	o	6.00	6.06	8.2	123	27.2	1925	Her	
24641	02.9 +02 31	11046	Σ 2272	b	4.07	4.27	6.0	0.5	4.6	87.8	70 Oph	el sp
24649	03.2 —43 26		h 5014	b	5.02	5.7	5.9	33	1.7	1950	CrA	el
24655	03.4 +12 00	11056	Σ 2276	b	6.46	7.05	7.41	258	7.1	1924	Oph	
24664	03.7 +21 26	11060	OΣ 341	b	6.92	7.4	8.0	0.9	0.3	20.0	Her	el
24667—9	03.9 +80 00	11061	Σ 2308	b	5.22	6.18	5.80	232	19.4	1952	40-1 Dra	sp sp
24687	04.8 —45 46		h 5015	d	6.40	6.42	11.0	260	4.0	1913	Ara	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e.	d" a"	E P	Con	N
24700	18 ^h 05 ^m 1 +30°33'	11077	AC 15	b	5.21	5.26	8.5	0.8	1.0	56.4	99 Her	el
24720—1	05.8 +26 06	11089	Σ 2280	b	5.21	6.00	5.92	182	14.1	1923	100 Her	
24722	05.8 +49 42	11090	OΣ 344	b	6.30	6.31	11.0	145	2.2	1925	Her	
24731	06.2 —73 41		Hd (284)	b	5.92	5.9	9.5	242	2.0	1926	Aps	
24747—8	06.9 —30 44		Hd 149	b	5.46	7.9	5.58	352	3.9	1920	Sgr	
24754	07.1 +03 59	11111	Σ 2281	b	5.67	6.0	7.1	36	0.5	1958	73 Oph	el
24761	07.3 —47 31			d	6.08	6.08	12.0		1.8		Tel	
24764	07.4 +03 07	11113	β 637	b	5.73	5.73	12.5	191	7.3	1911	Oph	
24777	07.9 +16 28	11123	Σ 2289	b	6.14	6.6	7.3	228	1.3	1941	Her	
24788	08.3 —19 51	11127	β 132	b	6.33	7.0	7.2	209	1.1	1935	Sgr	
24829	09.9 +33 26	11149	Ho 82	f	5.85	5.87	10.0	218	0.7	1955	Her	sp
24844	10.4 —31 59			d	6.64	7.3	7.4	147	0.1	1941	Sgr	
24895	12.2 —20 24	11191	β 286	d	6.02	6.02	12.0	218	6.2	1905	16 Sgr	
24902	12.7 —68 15		Hd (289)	d	6.23	6.26	10.0	298	2.5	1901	Pav	
24944	14.2 —36 47		β 760	b	3.16	3.16	9.2	104	3.6	1926	η Sgr	
24947	14.3 —34 08		h 5036	o	var	var	9.5	86	39.0	1919	RS Sgr	sp
24950	14.5 —18 29		Rst 3170	d	6.37	6.4	13.5	169	8.3	1940	Sgr	
24958	14.8 —63 54		I 249	d	6.18	6.20	10.8	0	7.4	1928	Pav	
24978—9	15.8 —18 38	11240	β 639	b	6.38	6.9	7.4	146	0.4	1923	Sgr	
			Sh 264	d	6.16	6.38	8.0	51	17.6	1921		
			β 300	d	8.00	8.0	13.5	320	7.5	1919		
25013	17.4 —08 02	11262	Σ 2303	d	6.51	6.6	9.1	328	2.4	1922	Ser	
25024	17.8 —29 51	11264	See 350	o	2.84	2.84	14.5	276	25.8	1896	δ Sgr	
25036	18.4 +03 21	11271	h 5495	o	4.92	4.92	11.6	285	28.1	1925	74 Oph	
25045	18.6 —61 31		Gale 2	b	4.23	4.25	8.6	151	3.3	1924	ξ Pav	sp
25114	21.5 +71 19	11311	OΣ 353	b	4.24	4.5	6.2	330	0.2	1945	φ Dra	sp
25131	22.4 —01 36	11324	AC 11	b	6.11	6.8	7.0	358	0.8	1956	Ser	el
25132	22.4 —20 34	11325	Jac 6	b	4.96	5.0	8.4	290	1.8	1924	21 Sgr	
25147	23.0 +27 22	11334	Σ 2315	b	6.20	6.7	7.3	140	0.6	1957	Her	el sp
25151	23.2 +58 46	11336	Σ 2323	b	4.85	4.9	7.7	353	3.8	1926	39 Dra	sp
25174	24.6 —26 40	11354	β 133	b	6.23	6.9	7.0	257	1.6	1926	Sgr	
25176	24.6 +00 10	11353	Σ 2316	b	var	var	7.8	317	3.9	1957	59 Ser	sp sp
25178	24.7 +26 25	11356	β 1326	d	6.36	6.4	13.4	107	5.5	1925	Her	
25202	25.6 —57 33		Hd (290)	d	5.79	5.79	12.0	346	1.8	1929	Pav	
25263	27.8 —33 01		Hwe 43	c	5.43	5.44	11.0	193	3.2	1941	Sgr	
25282	28.7 —10 50	11414	Σ 2325	c	5.75	5.80	9.1	257	12.4	1925	Sct	
25314—5	29.9 —38 46		Δ 222	d	5.46	5.95	6.55	359	21.6	1913	κ ^{1,2} CrA	
25340	30.9 +30 31	11446	β 1253	o	5.37	5.37	13.5	157	7.2	1924	Lyr	
25396	32.8 +52 19	11468	A 1377	b	5.42	6.2	6.2	71	0.3	1955	Dra	el
			Σ 2348	f	5.38	5.42	8.9	272	25.8	1925		
25407	33.4 +23 34	11479	OΣ 359	b	5.76	6.5	6.6	16	0.4	1955	Her	el
25411	33.7 +16 56	11483	OΣ 358	b	6.17	6.8	7.0	174	1.8	1957	Her	el
25443	34.8 +33 26	11504	Σ 2349	f	5.45	5.46	10.1	202	7.3	1906	Lyr	
25465	35.2 —14 03	11512	β 135	b	6.43	6.45	11.0	186	2.3	1916	Sct	
25481	35.8 —03 14	11520	A 88	b	6.47	7.2	7.2	0.3	0.2	12.2	Ser	el
25580	39.5 —09 06	11581	H V 36	f	var	var	10.0	130	52.5	1912	δ Sct	sp
25597—0	40.3 +34 42	11593	Σ 2372	f	5.90	6.12	7.8	83	25.1	1924	Lyr	
25599	40.4 —38 22		Cor 227	o		5.13	8.9	214	25.6	1903	λ CrA	
				o	5.11	5.13	9.6	57	40.2	1900		
25610	40.8 —08 20	11601	J 104	o	5.09	5.09	14.5	97	13.6	1910	ε Sct	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
25610	18 ^b 40 ^m 8 —08°20'	11601	J 104	o	5.09	5.09	13.6	195	37.6	1910	ε Sct	
25666—8	42.7 +39 37	11635	Σ 37 App I	c	3.83	4.68	4.50	172	207.8	1924	ε _{1,2} Lyr	
			Σ 2382	b	4.68	6.00	5.06	2	2.8	1957	ε ¹ Lyr	el
			Σ 2383	b	4.50	5.14	5.37	101	2.3	1957	ε ² Lyr	el
25674	43.0 +05 27	11640	Σ 2375	b	5.72	6.3	6.7	117	2.5	1953	Ser	sp
25676—8	43.0 +37 32	11639	β 968	c	4.06	4.29	5.87	150	43.7	1924	ζ ^{1,2} Lyr	sp
25701	43.6 —73 03		R 314	b	6.22	6.3	8.7	269	2.0	1913	Pav	
25705	43.7 +61 00	11661	Σ 2403	b	6.23	6.3	9.0	271	1.6	1926	Dra	
25713	43.9 —01 01	11667	Σ 2379	b	5.45	5.68	7.3	121	13.0	1924	5 Aql	
25718	44.0 —10 11	11670	A 1887	f	5.81	5.81	14.0	256	3.3	1917	Sct	
25761	45.8 —18 39			d	6.46	6.9	7.6	194	0.3	1941	Sgr	
25771	46.2 —83 29		Rst 3188	d	6.58	7.4	7.4	320	0.2	1934	Oct	
25801—2	47.0 —05 58	11719	H VI 50	o	6.11	6.22	8.7	171	113.4	1923	Sct	
25837	47.9 +32 45	11732	H V 40	o	5.77	5.77	11.6	122	58.2	1923	ν ¹ Lyr	
25847—8	48.2 +33 18	11745	Σ 39 App I	f	var	var	7.8	149	46.6	1925	β ^{1,2} Lyr	sp
25851	48.4 +10 55	11750	Σ 2404	b	6.63	7.0	8.1	181	3.5	1957	Aql	
25905	50.5 +59 20	11779	Σ 2420	o	4.73	4.78	8.2	330	34.0	1925	o Dra	sp
25918	51.2 —22 49	11794	β 1033	f	4.96	4.96	11.0	98	2.2	1925	ν ¹ Sgr	
25959	52.8 +36 50	11825	h 5072	o	4.95	4.96	10.5	58	29.0	1878		
			Es 2028	o	var	var	10.6	349	86.2	1923	δ ² Lyr	
25965	53.0 +33 54	11834	OΣ 525	f	10.6	11.2	11.6	138	2.2	1923		
			Sh 282	f	6.08	6.1	10.3	128	1.7	1924	Lyr	sp
25972	53.3 +41 32	11840	Ho 270	o	5.57	5.57	13.0	306	8.4	1907	Lyr	
25980	53.5 +48 48	11846	β 1255	b	5.87	5.87	12.5	90	1.5	1915	Dra	
25991—3	53.8 +04 08	11853	Σ 2417	b	4.10	4.50	5.37	103	22.6	1941	θ ^{1,2} Ser	
26030	55.2 +32 50	11871	β 648	b	5.21	5.3	7.7	0.2	1.3	59.8	Lyr	el
26035—6	55.2 +75 43	11870	Σ 2452	b	6.18	7.4	6.60	218	5.7	1924	Dra	sp sp
26052	56.0 +17 18	11884	Ho 91	f	var	var	11.7	133	6.3	1907	FF Aql	sp
26068	56.6 —12 55		Kuiper	d	5.36	5.9	6.4	194	0.3	1953	Sgr	sp
26069	56.6 +58 09	11897	Σ 2438	b	6.31	6.9	7.2	9	0.8	1955	Dra	el
26074	56.8 +62 20	11901	Σ 2440	d	6.44	6.5	9.0	123	17.2	1924	Dra	
26075	56.8 +13 33	11902	Σ 2424	o	5.35	5.37	9.5	275	16.2	1925	11 Aql	
26086	57.1 +32 37	11908	AGC 9	o	3.30	3.30	12.0	300	13.8	1898	γ Lyr	
26087	57.1 +40 37	11910	Σ 2431	f	6.06	6.12	9.2	236	19.1	1922	Lyr	
26099—0	57.7 —37 08		Brs 14	c	5.97	6.84	6.62	282	12.8	1919	CrA	sp sp
26161	59.4 —29 57	11950	Hd 150	b	2.71	3.4	3.5	0.2	0.5	20.8	ζ Sgr	el
26184	19 00.1 —19 19	11972	h 5082	c	5.96	6.03	9.1	89	7.6	1920	Sgr	
				o	5.96	6.03	10.7	113	20.1	1920		
26202	00.9 +52 11	11979	Σ 2450	c	6.42	6.5	9.3	301	5.0	1923	Dra	
			Hu 757	b	9.3	10.0	10.1	72	0.3	1923		
26214	01.3 —21 36	11989	HN 126	b	6.87	7.5	7.7	226	1.0	1950	Sgr	el
26235—7	02.3 —04 06	12007	Sh 286	c	5.31	7.15	5.53	209	38.1	1950	15 Aql	
26263	03.0 —37 08		h 5084	b	4.26	5.0	5.1	54	2.7	1943	γ CrA	el
26270	03.1 +13 47	12026	β 287	b	3.02	3.02	12.0	57	5.6	1938	ζ Aql	
26295	04.0 +07 05	12037	Σ 2449	d	6.72	7.2	7.9	290	8.2	1925	Aql	
26300	04.0 —01 25	12038	Σ 2447	d	6.72	6.8	9.1	345	14.0	1925	Aql	
26299	04.0 —16 18	12039	S 710	d	5.87	5.93	9.0	359	6.0	1925	Sgr	
26340	05.5 +32 25	12061	Σ 2461	b	5.02	5.04	9.4	308	3.7	1926	17 Lyr	
26386	06.8 —21 06			d	3.02	3.7	3.8	152	0.1	1936	π Sgr	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d" a"	E P	Con	N
26386	19 ^h 06 ^m 8 —21°06'			d	3.02	3.0	6.0	121	0.4	1936	π Sgr	
26392	06.9 +34 41	12093	Σ 2470	d	6.63	6.9	8.4	270	13.5	1926	Lyr	
26389	06.9 —19 53	12096	B 427	b	6.33	7.0	7.1	0.5	0.1	2.68	Sgr	el
26396	07.2 +34 31	12101	Σ 2474	b	6.54	6.8	8.2	262	16.7	1925	Lyr	
26415	08.3 —07 31	12126	A 95	b	6.76	7.50	7.53	0.6	0.2	94.0	Aql	el
26442	09.5 +38 42	12145	Σ 2481	b	7.51	8.2	8.3	218	4.3	1926	Lyr	
			Se 2	b	8.3	8.9	9.2	0.6	0.4	59.0		el
26467	10.3 +16 46	12160	β 139	c	6.44	6.7	8.0	137	0.7	1953	Sge	
			OΣApp177	d	6.11	6.44	7.6	285	113.4	1919		
26476—7	10.8 +49 46	12169	Σ 2486	b	5.97	6.84	6.62	213	8.7	1940	Cyg	
26507	12.1 +39 04	12197	Σ 2487	f	4.44	4.46	8.7	82	28.2	1925	η Lyr	
26512	12.2 —66 45		Gale 3	b	5.57	5.8	7.3	67	0.5	1926	Pav	
26516	12.5 —25 21	12214	B 430	b	4.93	5.6	5.7	0.4	0.1	18.6	ψ Sgr	el sp
26560	13.9 +27 22	12239	OΣ 371	b	6.26	6.8	7.2	158	0.9	1953	Lyr	
				d	6.10	6.26	9.0	268	47.4	1922		
26565	14.0 +49 59	12240	Σ 2496	c	6.33	6.34	11.0	78	2.2	1925	Cyg	
26572	14.2 +14 27	12248	Σ 2489	c	5.43	5.46	9.3	346	8.3	1924	Aql	
26613	15.6 +22 56	12287	β 248	b	5.38	5.40	9.5	124	2.0	1923	2 Vul	
26623	16.0 +01 00	12289	Σ 2492	b	5.30	5.32	9.5	8	3.4	1920	23 Aql	
26703—4	19.0 —44 33		Δ 226	c	4.18	4.24	7.3	77	18.4	1914	β ¹ Sgr	
26777	21.9 —29 24	12400	h 5113	o	6.06	6.09	10.1	166	14.5	1920	Sgr	
26821	23.3 +19 42	12425	h 2871	o	5.31	5.31	11.5	104	22.6	1924	4 Vul	
26844	24.3 +19 47	12445	Σ 2521	o	6.03	6.04	10.7	37	26.0	1925	Vul	
26905	26.7 —07 09	12503	h 887	b	var	var	12.0	348	35.1	1912	U Aql	
26911	26.8 —27 05	12506	HN 119	b	5.48	5.53	8.8	142	7.5	1913	Sgr	
26951	28.6 —02 14	12538	D 20	d	6.73	6.9	10.1	67	1.1	1924	Aql	
26953—6	28.7 +27 52	12540	Σ 43 App I	f	3.10	3.24	5.36	55	34.6	1924	β Cyg	
27047	32.4 +19 40	12622	β 1130	o	4.88	4.88	14.0	31	9.5	1889	9 Vul	
27089	33.7 —25 00	12654	β 654	c	4.66	4.66	10.8	167	2.6	1936	52 Sgr	
27091	33.8 +05 54	12661	Σ 2543	d	6.71	6.8	9.9	154	12.7	1917	Aql	
27103	34.1 —01 24	12663	J 118	o	4.28	4.28	13.2	161	47.0	1910	ι Aql	
27141	35.1 +50 06	12695	β 1131	c	4.64	4.64	13.0	40	2.1	1923	θ Cyg	
27189	36.8 —23 33	12741	See 389	b	6.24	6.8	7.1	326	0.1	1937	53 Sgr	
27214—7	37.9 —16 25	12767	h 599	c	5.41	5.45	8.9	42	45.6	1925	54 Sgr	
27216	37.9 +33 52	12765	Ho 111	d	6.12	6.12	11.0	3	1.2	1953	Cyg	
27252	39.4 +60 23	12789	Σ 2573	d	6.07	6.21	8.4	27	18.4	1923	Dra	
27261	39.8 +27 16	12798	OΣ 382	b	6.74	7.3	7.7	347	0.4	1914	Vul	
27272	40.2 +11 42	12808	OΣ 380	b	5.32	5.6	6.8	73	0.4	1954	χ Aql	
27275	40.2 +40 08		Kuiper	b	6.20	6.5	7.8	139	0.3	1955	Cyg	
27284—5	40.5 +50 24	12815	Σ 46 App I	b	5.56	6.26	6.37	134	39.0	1952	16 Cyg	
27298	41.2 +40 36	12831	OΣ 383	b	6.72	7.0	9.0	24	0.9	1925	Cyg	
27308	41.9 +27 01	12850	β 658	f	6.56	6.6	10.0	288	0.5	1954	Vul	
27347	43.4 +45 00	12880	Σ 2579	b	2.97	3.0	6.5	246	2.1	1957	δ Cyg	el
27350	43.7 +33 29	12889	Σ 2576	b	7.83	8.5	8.6	33	1.1	1958	Cyg	el
27352—3	43.8 +35 58	12893	Σ 2578	b	6.01	6.50	7.10	125	15.1	1924	Cyg	
27360	44.0 +34 53	12900	H V 137	c	6.09	6.23	8.4	29	38.0	1925	Cyg	
27369—1	44.5 +33 37	12913	Σ 2580	b	5.00	5.03	8.5	70	25.9	1925	17 Cyg	
27372	44.7 +32 46	12920	Ho 114	b	6.18	6.18	13.0	221	2.9	1922	Cyg	
			β —	o	6.10	6.18	14.0	215	9.7	1901		
			S 726	o		6.18	9.0	197	31.3	1925		

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
27374	19 ^h 44 ^m 7 —61°56'		I 120	b	7.48	8.2	8.3	0.7	0.3	61.4	Pav	el
				d	7.28	7.48	9.2	343	14.0	1916		
27412	46.1 —28 55	12956	I 1039	d	6.10	6.11	11.9	290	2.0	1913	Sgr	
27418	46.3 +11 41	12962	Σ 2583	b	5.70	6.2	6.8	111	1.5	1957	π Aql	
	46.4 +14 56	12961	A 1658	b	7.61	8.3	8.4	0.2	0.2	73.5	Aql	el
27424	46.5 —59 19		I 121	b	5.54	5.7	7.5	108	0.4	1926	Pav	
27431	46.8 +19 01	12973	AGC 11	b	4.95	5.6	5.8	0.8	0.1	22.8	ζ Sge	el
			Σ 2585	c	4.92	4.95	8.8	311	8.5	1925		
27432	46.9 +35 11	12972	OΣ 387	b	6.52	7.0	7.5	207	0.4	1958	Cyg	el
27453	47.7 +38 35	12992	Es 84	f		6.21	11.9	157	11.5	1924	Cyg	
				o	6.20							
				b		6.21	12.0	97	23.1	1924		
27471	48.4 +70 08	13007	Σ 2603	b	3.99	4.0	7.1	12	3.3	1926	ε Dra	
27482—3	48.7 —55 06		Δ 227	c	5.55	6.14	6.76	149	22.9	1940	Tel	
27486	48.8 +38 36	13014	h 603	o	5.42	5.43	11.0	106	54.6	1923	19 Cyg	
27544	51.3 +23 57		Đurkovič	b	4.50	4.6	8.0	244	0.8	1956	13 Vul	
27562—3	51.9 —08 22	13087	Σ 2594	c	5.34	5.78	6.53	179	36.1	1936	57 Aql	
27580	52.6 —06 52	13104	Σ 2597	b	6.45	6.8	7.8	81	0.6	1954	Aql	
27587	52.9 +06 17	13110	OΣ 532	b	3.90	3.90	11.4	15	12.5	1899	β Aql	
27592	53.1 +30 04	13117	OΣ 390	c		6.27	6.36	22	9.7	1922	Cyg	
				d			6.36	174	16.4	1922		
				b	7.37	7.9	8.4	0.5	0.2	25.7	Cyg	el
27618	53.4 +41 44	13125	Ho 581	b								
	54.3 +52 18	13148	Σ 2605	b	4.80	4.90	7.4	180	3.1	1925	ψ Cyg	
27622	54.4 +34 57	13149	β 980	c	4.03	4.03	13.0	206	7.0	1925	η Cyg	
27665	56.2 +42 07	13186	OΣ 392	b	6.48	6.8	8.6	285	0.3	1924	Cyg	sp
			Σ 2607	b	6.40	6.48	9.3	290	3.1	1910		
27679	56.8 +37 58	13198	Σ 2609	b	6.28	6.6	7.8	23	2.3	1925	Cyg	
27707	57.7 +31 41	13223	β 1133	b	6.69	6.8	9.5	337	1.1	1956	Cyg	
27768	59.9 +24 48	13277	OΣ 395	b	5.32	5.9	6.2	116	0.9	1953	16 Vul	
27770	19 59.9 +49 58	13278	H V 47	o	5.25	5.28	9.1	148	41.9	1924	26 Cyg	
				d	9.1	9.5	11.0	74	9.0	1878		
27851	20 02.3 —39 09		λ 404	b	6.55	6.7	8.7	81	0.5	1940	Sgr	
27872	03.1 +15 21	13344	β 57	c	6.54	6.56	11.0	116	2.3	1926	Aql	
27894	04.1 +63 45	13371	Σ 2640	b	6.14	6.18	9.7	18	5.5	1924	Dra	
27929	05.4 +09 15	13403	Σ 2628	b	6.38	6.5	8.9	345	4.0	1923	Aql	
27966	07.1 —57 40		Hd (295)	b	6.50	7.0	7.6	250	0.6	1927	Pav	
27986—7	07.7 +20 46	13442	Σ 2637	b	6.20	8.7	6.32	328	11.6	1922	θ Sge	
	07.7 +08 18	13443	2635	d	6.61	6.6	10.5	79	7.5	1924	Aql	
27992	07.9 —36 14		h 5173	c	5.34	5.34	11.5	123	7.4	1944	Sgr	
28005	08.6 +43 48	13461	OΣ 400	b	7.14	7.7	8.1	0.5	0.5	84.4	Cyg	el
28050—1	10.0 +00 43	13506	Σ 2644	b	6.18	7.0	6.84	207	2.9	1954	Aql	
28066	10.6 +77 34	13524	Σ 2675	b	4.37	4.40	8.2	122	7.4	1922	κ Cep	
28077	11.1 +51 19	13535	AC 17	c	6.34	6.35	11.0	78	4.0	1922	Cyg	
28084	11.5 +24 05	13543	Σ 2653	b	6.44	6.48	10.0	262	2.5	1922	Vul	
28098	12.0 +43 14	13555	β 660	o	6.25	6.25	13.5	318	9.3	1914	Cyg	
28123	12.6 +41 57	13572	OΣ 403	b	6.42	7.1	7.2	174	0.9	1939	Cyg	
			Σ 2657r	d	6.37	6.42	9.5	33	11.7	1924		
28140	13.1 +25 25	13589	β 983	f	4.82	4.82	10.2	166	0.7	1955	Vul	
28145	13.5 +33 35	13596	A 283	c	5.78	5.78	14.0	295	2.8	1917	Cyg	
28189	14.9 —12 40	13632	β 295	o	4.53	4.55	9.0	221	45.5	1924	α ¹ Cap	
28200	15.3 —12 42	13645	h 608	b	3.77	3.77	10.6	158	7.1	1924	α ² Cap	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
28200	20 ^h 15 ^m 3 —12°42'	13645	AGC 12	b	10.6	11.2	11.5	238	1.2	1924	α ³ Cap	
28208	15.5 +28 59	13648	β 441	b	6.36	6.38	11.0	64	6.0	1925	Vul	
28228	16.3 +40 35	13672	Σ 2666	b	5.82	5.9	8.5	247	2.7	1926	Cyg	
				o	5.77	5.82	9.2	208	34.3	1908		
28258	17.2 +55 14	13692	Σ 2671	b	5.71	6.00	7.4	338	3.4	1924	Cyg	sp sp
28267—9	17.4 —29 21	13702	h 5188	d	6.15	8.28	6.32	55	4.4	1926	Sgr	
				o	5.97	6.15	8.0	322	27.4	1878		
28286	18.0 —14 57	13717	Bar 12	b	6.16	6.2	10.0	99	0.9	1925	Cap	
28294	18.2 +45 12	13723	OΣ 406	b	7.02	7.5	8.1	0.8	0.3	96.0	Cyg	el
28299	18.4 +39 15	13728	A 1427	d	6.20	6.3	8.8	0.9	0.2	90.0	Cyg	el
			Σ 2668	b	6.10	6.20	8.7	284	3.3	1922		
28338	20.4 +40 06	13765	β 665	o	2.32	2.32	9.6	196	141.7	1923	γ Cyg	
				d	9.6	10.0	11.0	303	2.0	1924		
28340	20.5 +63 49	13769	β 1134	d	5.92	5.92	12.7	81	4.2	1925	Dra	
28341	20.5 —42 35		β 763	b	5.68	5.9	7.3	229	0.9	1942	κ ³ Sgr	
28364	21.2 +42 49	13786	Ho 128	b	6.32	6.33	11.0	10	1.2	1954	Cyg	
28382	22.1 +00 54	13811	Σ 2677	o	6.09	6.11	10.5	30	32.9	1921	Aql	
28425	23.6 —37 34		R 321	b	6.26	6.5	7.7	153	0.6	1958	Sgr	el
28434	24.0 +59 26	13850	A 730	b	6.48	7.1	7.3	0.8	0.2	83.7	Cyg	el sp
28442	24.5 —18 23	13860	β 60	c	5.15	5.20	8.5	146	3.2	1935	π Cap	
28456	25.2 +56 28	13870	Σ 2687	c	6.06	6.21	8.3	119	26.5	1925	Cyg	sp
28472	25.8 —03 31		Rst 4667	d	6.03	6.03	14.0	178	9.6	1943	68 Aql	
28481	26.0 —17 59	13887	Sh 323	b	4.96	4.97	10.0	161	0.9	1955	ρ Cap	
28502—3	27.0 —18 45	13902	Sh 324	c	5.58	6.64	6.10	238	21.9	1923	o Cap	
28523—8	27.8 +19 16	13921	S 752	o	6.02	6.99	6.59	288	106.1	1915	Del	
			β 987	d	6.59	6.60	11.5	130	2.1	1924		
28525	27.9 +10 44	13920	β 63	b	5.92	6.1	8.0	347	0.9	1937	1 Del	
28531	28.2 +55 54		Kuiper	b	5.87	6.0	8.5	136	0.6	1955	Cyg	
28533	28.3 —15 13		Finsen	d	6.19			117	0.1	1954	Cap	
28537	28.5 +48 47	13932	β 669	o	4.88	4.89	10.0	87	56.5	1918	ω ¹ Cyg	
28551	29.1 +36 46	13949	AC 18	f	6.29	6.30	11.0	154	2.0	1955	44 Cyg	
28563	29.7 —10 02	13960	β 668	c	5.81	5.81	11.7	25	4.5	1913	Cap	
28571	29.8 +25 38	13964	Σ 2695	b	5.29	6.4	8.3	81	0.5	1955	Vul	
28709	35.2 +14 25	14073	β 151	b	3.72	4.1	5.1	0.4	0.5	26.6	β Del	el sp
28748	36.5 —15 08	14099	Hu 200	b	5.30	5.8	6.5	0.3	0.2	94.7	τ Cap	el
28758	36.8 +15 40	14106	β 288	o		5.92	13.5	161	7.4	1905	Del	
				o	5.92	5.92	11.9	279	43.8	1913		
28796	37.7 +40 24	14126	OΣ 410	b	5.93	6.7	6.7	8	0.8	1957	Cyg	
28816	38.5 +29 38	14149	Ho 137	b	6.09	6.10	11.0	304	0.9	1955	Cyg	sp
28827	39.0 +32 08	14158	Σ 2716	b	5.82	5.90	8.6	46	2.8	1954	49 Cyg	
28865	40.7 +50 10	14189	β 675	f	5.41	5.41	13.0	100	2.9	1916	51 Cyg	
28916	42.5 +12 08	14233	Σ 2723	b	6.70	6.9	8.6	111	1.2	1954	Del	
28942	43.6 +30 32	14259	Σ 2726	b	4.33	4.34	9.6	65	6.4	1925	52 Cyg	
28959	44.2 +33 47	14274	β 676	o	2.64	2.64	12.0	289	44.3	1923	ε Cyg	sp
28965—6	44.3 +15 57	14279	Σ 2727	b	4.12	5.47	4.49	269	10.4	1952	γ ^{1,2} Del	
28980	45.1 —44 10		Don 992	d	5.14	5.14	15.5	271	4.3	1948	ι Mic	
28981	45.2 +34 11	14290	β 667	c	var	var	12.0	122	10.2	1916	T Cyg	
28986	45.3 +05 49	14293	β 65	b	5.59	5.6	8.8	189	1.4	1925	13 Del	
28994	45.5 +36 18	14296	OΣ 413	b	4.47	4.7	6.1	28	0.8	1956	λ Cyg	el
28995—6	45.6 —18 23	14299	S 763	d	6.27	7.5	6.70	294	15.8	1925	Cap	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
29026	20 ^b 46 ^m 9 —33°58'		h 5224	c	4.99	5.00	10.0	166	20.6	1919	α Mic	
29033	47.2 +51 43	14336	Σ 2732	c	6.28	6.4	8.4	72	4.2	1921	Cyg	
29042—3	47.5 —62 37		Rmk 26	b	5.84	6.59	6.59	268	2.5	1942	Pav	
29078	48.8 —05 49	14360	Σ 2729	b	5.99	6.4	7.2	1	1.1	1955	4 Aqr	el
29116	50.1 —23 58	14380	h 3003	c	6.21	6.4	8.4	213	2.1	1924	Cap	
29182	52.5 +40 31	14413	OΣ 412	f	6.46	6.48	11.0	1	5.7	1926	Cyg	
29200	53.2 +04 20	14430	Σ 2735	b	6.04	6.3	7.7	284	2.1	1933	Del	
29220	54.2 —09 53	14449	β 1034	f	5.68	5.68	11.7	166	2.1	1901	7 Aqr	
29243	54.8 +50 32	14460	β 1137	o	5.80	5.80	13.7	344	7.2	1898	Cyg	sp
29276—7	56.6 +04 06	14499	Σ 2737	b	5.29	5.9	6.2	287	0.9	1958	ε Equ	el
29291	56.9 +50 16	14504	Σ 2741	b	5.11	5.29	7.1	72	10.9	1924		
29309	57.6 +07 19		Kuiper	d	5.48	5.9	6.8	27	1.9	1957	Cyg	
29327	58.1 +47 20	14526	Σ 2743	f	6.03	6.3	7.7	0.5	0.4	40.0	Equ	el
29345—6	58.9 —43 12		Δ 236	c	4.84	4.86	9.3	353	20.3	1922	59 Cyg	
29354	59.4 +45 58	14549	OΣ 426	d	5.95	6.51	6.94	73	57.8	1913	Mic	
29361	59.8 +06 59	14556	Σ 2742	b	5.24	5.26	9.5	163	2.9	1923	60 Cyg	
29372	21 00.2 —27 56	14565	See 435	b	6.64	7.4	7.4	220	2.7	1926	λ Equ	
29382	00.5 +01 20	14573	Σ 2744	b	6.19	6.5	7.5	293	0.2	1937	Mic	
29393	00.8 +56 28	14575	Σ 2751	b	6.50	7.0	7.5	138	1.5	1954	Aqr	
29403	01.0 +45 39	14585	β 1138	b	5.74	6.1	6.8	351	1.7	1924	Cep	
29416—7	01.4 —06 01	14592	Σ 2745	c	6.23	7.0	7.0	171	0.2	1954	Cyg	sp
29489	04.2 —73 22		Hd (305)	o	5.63	7.31	5.89	192	2.8	1912	12 Aqr	
29509	04.7 +38 30	14636	Σ 2758	b	5.83	5.83	14.5	136	8.1	1901	Pav	
29562	06.5 +30 00	14682	Σ 2762	b	5.12	5.54	6.35	140	27.0	1952	61 Cyg	el
29589	07.8 —52 33		Hu 1626	o	var	var	9.2	227	58.0	1915		
29591	07.9 +09 56	14702	Knt —	b	6.97	7.5	8.0	167	1.1	1942	Ind	
29610	08.8 +47 29	14720	β 159	f	4.76	4.76	11.0	273	2.4	1918	γ Equ	
29655	10.5 +59 47	14749	Σ 2780	b	6.36	6.4	9.3	318	1.3	1925	Cyg	
29673	11.1 +15 47	14761	Hu 767	b	5.65	6.1	6.8	219	1.1	1926	Cep	
29697	12.0 +09 48	14773	OΣ 535	b	6.20	6.9	6.9	0.6	0.3	33.4	Peg	el
29718	12.7 +64 12	14783	Σ 2777	o	4.61	5.3	5.4	0.4	0.3	5.7	δ Equ	el sp
29723	12.8 +37 50	14787	AC 19	b	4.60	4.61	10.4	14	47.7	1925		
29804	15.9 +58 24	14832	AGC 13	b	6.41	7.1	7.3	0.8	0.6	84.4	Cep	el
29812	16.2 +11 22	14839	β 1140	f	3.82	3.9	6.3	0.2	0.9	49.8	τ Cyg	el sp
29818—9	16.3 —53 40		β 163	b	6.40	6.41	12.0	270	3.9	1910	Cep	sp sp
29832	16.9 —26 34	14887	h 5258	b	6.97	7.2	8.7	0.8	0.5	72.0	Equ	el
29837	17.0 +39 32	14850	β 271	b	4.49	7.0	4.60	276	5.3	1943	θ Ind	
29847	17.4 +38 02	14859	OΣ 434r	d	6.46	6.50	10.0	247	3.2	1934	Cap	sp
29860	17.9 +58 25	14864	Ho 286	b	6.64	6.7	10.3	122	24.5	1925	Cyg	
29881	18.7 +32 14	14889	Σ 2790	b	5.83	6.6	6.6	92	0.2	1925	Cyg	sp
29914	19.8 +19 35	14909	Σ 11 App II	c	5.77	5.79	9.9	45	4.9	1920	Cep	
29950	21.2 —41 13		OΣ 437	b	6.44	7.0	7.4	29	2.1	1954	Cyg	
29968	21.9 +25 06	14943	β 766	b	4.23	4.24	9.3	312	36.3	1922	1 Peg	
30016	23.7 +36 27	14969	S 790	o	5.86	6.3	7.0	287	0.7	1937	θ ^a Mic	
30021	23.8 —42 46		MLb 6	b	6.22	6.22	12.5	322	9.0	1913	Vul	sp
				o	5.82	5.84	10.5	29	33.7	1923	69 Cyg	
				o	5.82	5.84	11.1	98	53.5	1922		
				b	5.61	5.7	8.5	148	3.1	1939	Mic	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P _e	d'' a''	E P	Con	N
30071	21 ^b 26 ^m 4 +10°52'	15007	Σ 2799	b	6.70	7.4	7.4	289	1.5	1925	Peg	
30118	28.0 +70 20	15032	Σ 2806	f	3.32	3.32	8.0	250	13.7	1922	β Cep	sp
30142	29.2 -34 10		B 1009	o	5.99	5.99	13.3	59	6.8	1927	6 PsA	
30231	33.2 +24 14	15115	Hu 371	b	6.13	6.7	7.2	190	0.2	1924	Peg	sp
30246	34.0 +29 50	15126	β 167	c	6.45	6.47	11.0	89	2.2	1916	Cyg	
30265	35.0 -00 37	15142	Σ 2809	d	6.27	6.4	8.4	163	31.6	1923	Aqr	
30269-0	35.2 +06 24	15147	Σ 56 App I	c	6.08	7.8	6.34	163	31.6	1923	3 Peg	
30314	36.9 -00 17	15176	β 1212	b	6.80	7.4	7.7	0.3	0.4	48.7	24 Aqr	el sp
				d	6.78	6.80	10.2	150	40.7	1926		
30322	37.4 +57 16	15184	β 1143	d	5.64	5.64	13.7	324	1.6	1889	Cep	sp
			Σ 2816	f	5.52	5.64	8.0	121	12.0	1923		
30338	38.2 +43 03	15208	AC 20	b	5.34	5.35	10.5	328	2.8	1923	75 Cyg	
				o	5.32	5.34	9.4	254	57.9	1924		
30365	39.2 -23 29	15223	See 454	c	5.32	5.32	13.0	203	5.3	1926	41 Cap	
30394	40.4 +40 51		Kuiper	b	5.48	6.1	6.3	0.2	0.3	19.5	77 Cyg	el sp
30421	41.4 +38 03			b	5.62	5.63	11.0		1.0		79 Cyg	
30437-8	41.9 +28 31	15270	Σ 2822	b	4.45	6.08	4.73	277	1.6	1958	μ ^{1,2} Cyg	el
30450	42.4 +25 25	15281	β 989	b	4.27	5.0	5.1	0.3	0.2	11.5	κ Peg	el sp
30472	43.5 -82 57		h 5278	b	5.38	5.50	7.6	69	3.1	1926	λ Oct	
30514-6	45.0 -47 32		Brs 15	o	5.63	8.68	5.70	358	50.2	1914	Gru	
30594	49.2 +19 36	15383	h 947	o	5.66	5.68	10.0	95	19.4	1924	Peg	
30626-7	50.3 +55 34	15405	Σ 2840	c	5.34	7.26	5.54	197	19.8	1925	Cep	sp
30629	50.4 +65 31	15407	Σ 2843	b	6.41	7.1	7.4	141	1.8	1938	Cep	
30654	51.5 -62 07		HdO 296	b	5.89	6.5	6.7	0.5	0.2	25.8	Ind	el
30663	52.0 +19 29	15431	Σ 2841	d	6.33	6.5	8.6	110	22.7	1923	Peg	
30664	52.0 -03 32	15432	Σ 2838	o	6.13	6.18	9.6	184	8.9	1924	Aqr	
30712	54.2 +65 05	15467	OΣ 457	b	5.85	6.0	8.2	254	1.3	1938	Cep	
30720	54.5 -55 14		φ 307	b	4.56	5.3	5.3	0.1	0.2	12.0	δ Ind	el
30785	58.0 -28 42	15536	β 276	b	5.42	5.8	6.8	119	1.6	1937	η PsA	
30788	58.2 -76 22		h 5306	o	5.89	5.91	10.3	72	34.6	1917	Oct	
30812	59.1 +62 15		Kuiper	f	6.48	6.64	6.8	216	0.7	1952	Cep	
30822-3	59.7 -17 12	15562	S 802	b	6.51	7.4	7.15	244	3.9	1922	29 Aqr	
30830	22 00.2 +82 38	15571	Σ 2873	b	6.48	7.12	7.37	70	13.7	1952	Cep	sp
30848	00.9 +44 24	15578	β 694	c	5.52	5.6	8.0	353	0.5	1926	Lac	
30876-7	02.3 +64 23	15600	Σ 2863	b	4.41	6.6	4.57	280	7.2	1940	ξ ^{1,2} Cep	
31002	07.2 +44 36	15679	h 1735	d	6.62	6.9	8.2	110	27.0	1921	Lac	
31046	09.2 +50 35	15708	h 1741	o	5.43	5.44	11.0	303	27.6	1923	Lac	
31056	09.5 +69 53	15719	Σ 2883	c	5.40	5.54	8.6	254	14.7	1924	Cep	
31099	11.5 -21 19	15753	Sh 339	b	5.45	5.7	7.2	116	5.0	1926	41 Aqr	
31110	12.0 +73 04	15764	Σ 2893	c	5.99	6.11	8.4	348	29.1	1923	Cep	
31111	12.0 +07 44	15767	Σ 2878	b	6.60	6.8	8.3	121	1.4	1956	Peg	
31178	15.0 -53 52		Hd (298)	b	5.43	5.44	10.5	27	3.4	1938	Gru	
31210	16.7 +37 31	15828	Σ 2894	b	6.03	6.11	8.9	193	15.9	1938	Lac	
31230	18.0 +05 32	15847	h 962	c	5.35	5.35	12.0	16	6.1	1914	30 Peg	
31273	19.7 -46 12		I 135	d	var	var	11.0	202	2.6	1937	π ¹ Gru	
31279	20.1 -46 11		I 382	c	5.82	5.82	12.0	214	4.7	1937	π ² Gru	
31281	20.2 +66 27	15881	Σ 2903	b	6.74	7.1	8.1	96	4.2	1924	Cep	
31284	20.4 -72 30			d	5.42	6.1	6.2	1	0.1	1933	ν Ind	
31300	21.3 +20 36	15896	Σ 2900	b	6.13	6.1	9.5	171	0.5	1955	33 Peg	
31307	21.5 -05 06	15902	β 172	b	5.85	6.6	6.6	333	0.6	1952	51 Aqr	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
31307	22 ^h 21 ^m 5 —05°06'	15902	β 172	o	5.84	5.85	11.0	342	55.6	1917	51 Aqr	
31308	21.6 —75 16		Δ 238	d	6.07	6.17	8.7	81	20.1	1917	Oct	
31345—6	23.8 —65 13		h 5334	c	4.78	9.3	4.80	283	6.8	1928	δ Tuc	
31348—9	23.8 —17 00	15934	Sh 345	b	5.70	5.67	6.35	313	5.8	1924	53 Aqr	
31355	24.1 +04 08	15935	β 290	b	5.85	5.85	11.7	223	3.5	1937	34 Peg	
31360	24.5 +37 11	15942	Σ 2906	f	6.37	6.39	11.0	3	4.3	1924	Lac	
31398—9	26.3 —00 17	15971	Σ 2909	b	3.75	4.59	4.42	266	2.0	1958	$\zeta^{1,2}$ Aqr	el
31419—1	27.3 +58 10	15987	Σ 58 App I	c	var	7.5	var	192	41.0	1924	δ Cep	
31425	27.4 +04 11	15988	Σ 2912	b	5.47	5.7	7.0	117	1.0	1950	37 Peg	el
31433	27.9 +52 09	15993	O Σ 472r	d	6.60	6.7	11.7	1	14.4	1910	Lac	
31451	28.4 +56 58	16001	O Σ 473	d	6.73	6.8	10.6	356	14.5	1921	Cep	
31459—0	28.7 —32 36		Δ 240	o	4.32	4.36	7.9	172	30.4	1918	β PsA	
31488	30.2 +39 31	16031	Roe 47	c		5.80	10.2	158	42.5	1910	Lac	
				o	5.77	5.80	10.5	344	32.4	1910		
31510	31.6 +69 39	16057	Σ 2924	b	6.02	6.6	7.0	81	0.3	1958	Cep	el
31515	31.9 +70 07	16062	Σ 2923	c	6.20	6.26	9.4	46	9.4	1922	Cep	
31550—1	33.6 +39 23	16095	Σ 2922	c		6.55	5.83	186	22.3	1923	8 Lac	
				o	5.37	5.83	10.2	155	27.9	1925		
			A 1469	d		10.2	14.5	254	1.3	1917		
31563	34.1 —40 51		β 771	c	5.74	5.75	10.4	262	2.6	1925	σ^2 Gru	
31593	35.7 —08 09	16130	A 2695	b	6.35	6.5	8.3	120	0.3	1939	Aqr	
31610	36.5 +19 16			b	5.80	5.8	11.0		2.0		40 Peg	
31623—5	37.0 —28 36	16149	HN 117	c	5.80	6.33	6.84	160	86.8	1919	PsA	
			h 5356	b	6.84	7.4	7.9	64	3.2	1925		
31649	38.2 —03 49			d	6.40	7.0	7.3	131	0.3	1938	Aqr	
31655	38.4 +14 17	16173	Ho 296	b	5.81	6.4	6.7	0.7	0.3	20.1	Peg	el
31684	39.6 —47 28		Cor 252	b	6.23	6.26	10.0	130	7.7	1926	Gru	
31697	40.4 —08 34	16208	Σ 2935	b	6.57	6.85	8.2	310	2.5	1932	Aqr	
31709	40.9 +46 54	16214	O Σ 476	b	6.42	7.0	7.4	310	0.6	1956	Lac	sp
			Hu 91	b	7.43	7.6	9.5	218	0.2	1923		
31731	41.8 +39 12	16228	Σ 2942	b		6.3	8.5	273	2.9	1917	Lac	
			β 450	o	6.12	6.3	12.5	238	9.8	1917		
31769	43.8 —47 12		h 5362	c	6.78	6.84	10.0	140	10.4	1918	Gru	
31778	44.2 +11 55	16261	h 301	b	4.31	4.31	11.7	108	11.9	1924	ξ Peg	
31802	45.1 —14 19	16268	Σ 2243	o	5.67	5.70	9.6	120	25.6	1925	τ^1 Aqr	sp
31808—9	45.3 —04 29	16270	Σ 2944	b	6.75	7.8	7.3	264	3.1	1925	Aqr	
				d	6.07	6.7	8.2	119	46.5	1925		
31840	47.2 —33 04		Hd 301	b	6.35	7.0	7.2	91	0.2	1927	PsA	el
31841—2	47.3 +68 18	16291	Σ 2947	b	6.39	7.09	7.2	63	3.9	1924	Cep	
31855	47.7 +82 53	16294	O Σ 482	b	4.96	4.97	9.9	37	3.4	1905	Cep	
31872	48.9 —63 27		I 340	b	6.08	6.2	9.0	6	1.1	1927	Tuc	
31876	49.0 +26 08	16314	Ho 482	b	6.71	7.5	7.5	80	0.2	1956	Peg	el
				o	6.59	6.71	9.0	198	51.1	1914		
31884	49.4 +61 26	16317	Σ 2950	b	5.78	6.09	7.3	300	1.9	1938	Cep	
31895	49.8 —33 08		h 5367	b	4.48	4.52	8.1	264	4.3	1927	γ PsA	
31930	51.4 +44 29	16345	β 382	b	5.62	5.8	7.8	174	0.6	1956	Lac	el sp
			h 1828	o	5.61	5.62	10.7	356	28.0	1925		
31960	52.6 —05 15	16365	β 178	b	5.87	6.0	7.8	328	0.4	1923	Aqr	
31974	53.2 —32 48		Hwe 91	c	4.33	4.33	10.5	242	5.0	1938	δ PsA	
31976	53.4 +36 05	16376	h 975	o	5.60	5.63	9.4	243	51.0	1923	Lac	

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P ^o e	d'' a''	E P	Con	N
31991	22 ^b 54 ^m 3 +11°35'	16389	Σ 2958	b	6.46	6.6	9.0	11	3.8	1924	Peg	
32021	56.0 +09 05	16417	OΣ 536	b	6.50	7.2	7.3	0.7	0.4	27.0	Peg	el
32034	56.7 +11 28	16428	OΣ 483	b	5.79	6.1	7.4	267	0.7	1956	52 Peg	el
32037	56.9 +00 42	16431	Bar 18	b	5.59	5.59	13.7	89	3.6	1921	2 Psc	
32072	58.3 +30 49	16443	Σ 2968	c	6.52	6.6	9.0	88	3.3	1933	Peg	
32098	59.8 -36 41		β 1011	b	6.46	6.50	10.0	298	2.2	1925	Gru	
32103	23 00.0 -18 49	16465	β 384	b	6.62	6.7	9.2	65	1.3	1924	Aqr	
32110	00.3 +42 29	16467	β 1147	b	5.08	5.1	8.8	345	0.4	1912	2 And	sp
32114	00.5 +43 47	16472	Σ 2973	f	6.30	6.32	10.5	39	7.2	1906	And	
32116	00.6 +54 57	16474	OΣ 485r	d	6.39	6.48	9.3	51	20.7	1924	Cas	
32133	01.3 +60 10	16481	OΣ 486r	d	6.39	6.57	8.4	276	33.9	1920	Cep	
32153	02.6 -07 58	16497	A 417	b	5.56	6.2	6.2	0.3	0.2	22.0	83 Aqr	el sp
32182	04.0 -24 01	16511	B 588	d	4.77	4.77	14.8	83	2.9	1925	86 Aqr	
32184	04.1 -43 47		Jc 20	b	4.35	4.5	7.0	52	1.4	1937	ϕ Gru	
32186	04.1 -39 10		β 773	d	5.59	5.6	9.1	214	1.2	1922	v Gru	
32190-2	04.4 -50 57		Δ 246	c	5.65	6.79	6.12	257	8.4	1927	Gru	
32211-2	05.1 +32 33	16519	Σ 2978	b	5.98	6.02	7.8	145	8.4	1924	Peg	
32228	05.7 +63 22	16530	Hu 994	b	6.19	6.7	7.2	147	0.1	1945	Cep	
32237	06.3 +75 07	16538	OΣ 489	b	4.56	4.7	6.7	300	0.7	1957	π Cep	el sp
32252	07.0 +08 24	16550	Σ 2982	o	5.40	5.41	10.9	198	32.9	1923	57 Peg	
32260	07.2 -43 08			b	5.78	5.8	9.5	186	0.9	1947	Gru	
32262	07.2 -22 43			d	4.94	5.4	6.2	14	0.4	1951	89 Aqr	
32318	10.4 -49 53		I 1467	d	6.61	6.8	8.3	41	1.4	1926	Gru	
32331	10.9 +10 48	16603	Σ 2991r	o	5.91	5.94	9.8	359	33.6	1923	Peg	
32354	12.1 -10 58	16618	β 715	c	6.34	6.35	11.0	258	3.8	1939	Aqr	
32373-4	13.3 -09 22	16633	Σ 12App II	c	4.45	9.4	4.46	312	49.4	1923	ψ ¹ Aqr	
			β 1220	b	9.4	9.6	11.3	102	0.6	1916		
32392	13.9 -44 46		h 5390	o	5.85	5.87	10.5	45	22.2	1927	Gru	
32423	15.1 +18 02	16650	Hu 400	b	6.71	7.0	8.4	214	0.4	1923	Peg	
32432	15.4 +48 45	16656	β 717	c	4.99	4.99	13.0	162	7.7	1922	8 And	
32459	16.4 -09 53	16671	Ho 199	b	5.16	5.16	11.0	226	1.2	1888	ψ ³ Aqr	
32461-2	16.5 -13 44	16672	Σ 2998	b	5.14	7.5	5.27	348	13.3	1922	94 Aqr	sp
32463	16.6 +67 50	16666	Σ 3001	b	4.90	5.02	7.3	208	2.7	1938	o Cep	el
32468	16.8 -05 24	16676	h 5394	c	5.69	5.70	11.2	23	10.4	1911	96 Aqr	sp
32496-8	18.0 -50 35		Δ 248	c	6.11	8.8	6.20	210	16.7	1916	Gru	
				b	6.20	6.2	10.0	243	0.6	1947		
32506	18.4 +43 51	16685	Σ 3004	c	6.11	6.14	10.1	178	13.2	1916	And	
32522	19.5 +31 32	16702	β 718	b	5.37	5.4	9.0	117	0.4	1923	64 Peg	
32531	20.0 -15 19	16708	Hu 295	b	5.30	5.9	6.1	0.1	0.4	63.2	97 Aqr	el
32537	20.3 +20 17	16713	Σ 3007	d	6.51	6.58	9.5	85	5.8	1921	Peg	
32543	20.6 +12 02	16715	Ho 300	b	5.28	6.0	6.0	347	0.3	1922	66 Peg	
32549-1	21.1 -54 05		Δ 249	c	6.08	7.37	6.48	212	26.6	-1913	Gru	
32619	24.3 -15 31	16758	Hu 297	d	6.89	7.0	9.0	300	0.5	1943	Aqr	
32683	27.7 +58 16	16795	OΣ 496	c	var	var	10.9	344	1.2	1898	AR Cas	sp
			Sh 355	o	var	var	8.0	269	75.5	1922		
			Da 2	d	8.0	8.2	9.8	223	1.4	1925		
32687	28.0 +30 33	16800	β 1266	b	7.26	8.0	8.0	0.4	0.2	47.9	Peg	el sp
32732	29.7 +06 49	16819	Hu 298	b	6.84	7.6	7.7	0.2	0.2	31.0	Psc	el
32750	30.7 -21 11			d	4.76	4.9	7.2	126	0.7	1938	101 Aqr	
32772	31.5 +31 03	16836	β 720	b	5.21	5.9	5.9	230	0.5	1950	72 Peg	el

GC	AR 1950 D 1950	ADS	Cat	D	m	m ₁	m ₂	P° e	d'' a''	E P	Con	N
32787	23 ^h 32 ^m 4 —42°54'		B 603	d	4.80	4.80	13.8	268	6.0	1926	ι Phe	
32823	34.4 —32 09		Hwe 93	b	6.46	6.51	9.8	251	5.4	1937	Scl	
32830	35.1 —13 20	16878	h 316	o	5.73	5.74	10.8	93	32.9	1909	Aqr	
32831	35.1 +44 09	16877	OΣ 500	b	5.86	6.2	7.2	347	0.6	1953	And	
32865—6	36.7 —46 55		Δ 251	b	6.27	7.4	6.74	272	4.2	1921	β ^{1,2} Phe	
32882	37.6 +37 23	16913	OΣ 501	c	6.20	6.23	10.2	163	14.9	1915	And	
32927	40.0 +64 14	16940	β 993	f	6.84	6.85	11.0	278	2.9	1912	Cas	
32931	40.1 —14 49	16944	β 279	c	4.62	4.62	11.0	86	5.7	1916	ω [*] Aqr	sp
32954	41.5 +29 05	16957	AGC 14	h	4.98	5.0	8.1	231	1.0	1956	78 Peg	
32962	41.9 —26 31	16963	h 5417	c	6.20	6.26	9.3	321	9.1	1916	Scl	
32979	43.0 +20 08	16970	OΣ 505	d	6.70	6.8	10.0	59	2.2	1923	Peg	
32985—6	43.4 —18 57	16979	Sh 356	b	5.45	5.74	7.0	136	6.5	1932	107 Aqr	
33021	45.1 +46 33	17006	β 995	b	5.84	6.0	6.8	242	0.8	1956	And	
33045	46.2 +64 35	17020	OΣ 507	b	6.38	6.8	7.5	259	0.4	1925	Cas	
				d	6.25	6.38	8.6	352	49.7	1925		
33050	46.3 —28 24	17021	β 1013	b	4.64	4.64	12.0	236	3.8	1926	δ Scl	
33051	46.4 +61 56	17022	OΣ 508	b	5.61	5.7	8.2	189	1.8	1925	6 Cas	
33120	49.9 +75 16	17062	β 996	b	6.54	6.55	12.0	74	5.6	1914	Cep	sp
33157—8	51.8 —27 19	17090	Δ 253	b	6.26	7.4	6.73	269	6.7	1937	Scl	
33244	55.9 +51 07	17135	Es 37	o	var	var	14.5	273	14.0	1910	R Cas	
33248	56.1 —03 50	17137	β 730	b	5.07	5.07	10.8	276	1.5	1922	27 Psc	
33257	56.5 +55 29	17140	Σ 3049	b	4.93	5.1	7.2	332	3.1	1926	σ Cas	
33268	56.9 +33 27	17149	Σ 3050	b	5.83	6.5	6.7	270	1.4	1956	And	el
33292	57.7 —44 34		I 1477	d	6.23	6.9	7.0	253	0.8	1927	Phe	
33296	58.0 —53 23		h 5437	d	6.52	6.6	10.0	306	2.3	1928	Phe	
33334	59.6 +26 49	17175	β 733	b	5.85	5.9	9.0	0.4	0.8	26.3	85 Peg	el
33337	59.8 —30 00		B 631	d	4.99	4.99	15.0	330	3.0	1927	ζ Scl	

ELEMENTS OF VISUAL BINARY STARS

E1

GC	Number in Boss General Catalogue
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
ADS	Number in Aitken's New General Catalogue of Double Stars
Cat	Designation in other catalogues of double stars
Con	Designation of star and constellation
m m ₁ m ₂	Magnitudes of the binary and its components
Sp	Spectrum
Comp	Designation of components
P	Period of revolution in years
T	Epoch of periastron
e	Eccentricity
n	Mean annual motion = $360^\circ/P$
a	Major semi-axis
i	Inclination (0° — 90° direct, 90° — 180° retrograde motion)
ω	Longitude of periastron from ascending node
Ω	Position angle of the ascending node for the epoch 1900.0
π dyn	Dynamical parallax of the system
Aut	Authority

El 1a

GC	AR 1950	D 1950	ADS	Cat	Con	m	m ₁	m ₂	Sp	Comp
88	00 ^h 03 ^m 6	+58°09'	61	Σ 3062	Cas	6.10	6.5	7.3	dG6+dG8	A—B
149	06.5	+79 26	102	Σ 2	Cep	6.22	6.9	7.1	A3	A—B
208	09.5	+53 21	148	β 1026	Cas	6.80	5.4	7.8	A9	A—B
243	10.8	+26 43	161	OΣ 2	And	6.30	6.5	8.0	F5	A—B
	14.1	+36 13	221	OΣ 4	And	7.72	8.16	8.5	F7	A—B
	18.6	+66 44	293	OΣ 6	Cep	7.08	7.4	8.4	A0	A—B
554	25.8	—20 37		B 1909	Cet	6.41	7.1	7.2	G1	A—B
626	29.3	—63 14		I 260	β ² Tuc	4.48	4.9	5.7	cA2	A—B
696	32.7	—03 52	490	Ho 212	13 Cet	5.24	5.9	6.1	dF7	A—B
741	34.8	—25 03	520	β 395	Cet	5.71	6.4	6.5	dG7	A—B
	39.8	+03 54	588	OΣ 18	Psc	7.61	7.76	9.37	F6	A—B
962	46.1	+57 33	671	Σ 60	η Cas	3.61	3.64	7.5	dF9	A—B
1084	51.9	+18 55	746	OΣ 20	66 Psc	5.76	6.2	6.9	A0n	A—B
1091	52.3	+23 22	755	Σ 73	36 And	5.60	6.2	6.6	sgK1	A—B
1120	53.8	+60 06	784	β 1099	Cas	5.54	6.0	6.7	B9	A—B
1257	01 00.1	+47 07	862	OΣ 21	And	6.36	6.7	8.0	A3n	A—B
	04.3	+38 23	918	A 1516	And	7.27	8.0	8.0	F6	A—B
1394	06.6	+46 59	940	OΣ 515	φ And	4.28	4.8	5.4	B8e	A—B
	11.6	+60 41	999	1100	Cas	7.46	8.2	8.2	F5	A—B
1517	13.3	—69 05		I 27	Tuc	7.56	8.1	8.5	G6	A—B
1634	18.7	+11 17	1097	β 4	Psc	6.89	7.4	7.9	F0	A—B
1697	21.8	—07 10	1123	β 1163	Cet	5.98	6.7	6.8	dF2	A—B
1766	25.1	+05 06	1158	β 1164	95 Psc	7.33	7.9	8.2	G0	A—B
1920	32.7	—30 10		δ 31	Scl	7.19	7.8	7.9	K3	A—B
2030	37.9	—56 27		Dunl 5	p Eri	5.57	6.0	6.1	dK2	A—B
2326	53.3	+01 36	1538	Σ 186	Cet	6.18	6.9	7.0	dG0	A—B
2424	57.8	+70 40	1598	β 513	48 Cas	4.61	4.8	6.5	A6s	A—B
2452	59.4	+02 31	1615	Σ 202	α Psc	3.94	4.33	5.23	A2pn	A—B
2476	02 00.8	+25 42	1631	Σ 208	10 Ari	5.68	5.9	7.4	dF4	A—B
2479	00.8	+42 06	1630	OΣ 38	γ ² And	5.08	5.50	6.30	A0	B—C
2668	10.8	+47 15	1709	Σ 228	And	6.03	6.5	7.1	dF2	A—B
2895	21.9	+61 20	1833	Σ 257	Cas	7.11	7.7	8.0	B8	A—B
2952	24.9	+67 11	1860	Σ 262	ι Cas	4.59	4.7	7.0	cA3ps	A—B
2952	24.9	+67 11	1860	Σ 262	ι Cas	4.59	4.7	7.0	cA3ps	A—a
3199	37.1	—12 05		φ 312	ε Cet	5.01	5.7	5.7	dF5	A—B
	44.6	+19 10	2122	Σ 305	Ari	6.95	7.4	8.2	F7	A—B
3459	50.5	+38 08	2200	β 524	20 Per	5.32	6.0	6.1	sgA6	A—B
3577	56.0	+21 25	2253	β 525	Ari	6.68	7.4	7.4	A3	A—B
3831	03 09.9	—29 12	2402	h 3555	α For	3.95	4.1	6.6	dF5	A—B
3845	10.7	—44 36		Jc 8	Eri	5.92	6.49	6.9	F2	A—B
3926	14.5	+38 27	2446	OΣ 53	Per	7.30	7.7	8.2	G1	A—B
	22.1	—15 50	2524	A 2909	Eri	7.55	8.3	8.3	G0	A—B
4250	30.9	+29 52	2612	Σ 400	Cam	6.48	6.8	7.8	F4	A—B
4257	31.5	+24 18	2616	Σ 412	7 Tau	5.92	6.62	6.7	A2	A—B
4266	31.9	—31 15		B 52	For	6.18	6.7	7.2	F5	A—B
4616	47.3	+25 26	2799	OΣ 65	Tau	5.38	5.9	6.3	A3	A—B
4872	04 00.7	+39 22	2959	Σ 483	Per	7.18	7.4	8.9	G5	A—B
4894	01.6	+80 34	2963	Σ 460	Cep	5.25	5.7	6.4	dF1+A2	A—B
	03.0	+43 17	2980	A 1710	Per	7.46	8.2	8.2	G5	A—B
	04.2	+37 57	2995	OΣ 531	Per	7.10	7.3	9.0	G5	A—B

P	T	e	n	a	i	ω	Ω	π dyn	Aut
106*83	1943.05	0.45	3°37	1°43	—44°4	98°8	39°1	0°053	Baize 1957
275	1889.8	0.57	1.31	0.72	109.7	329.6	166.8	0.010	Van Arnam 1933
72.0	1919.18	0.77	5.00	0.22	25.1	122.4	17.5	0.008	Baize 1954
693.5	1963.77	0.84	0.52	1.02	119.1	86.5	2.4		Arend 1955
112.5	1908.1	0.56	3.20	0.40	153.9	106.3	118.7		Muller 1958
240	1927.0	0.80	1.50	0.46	103.0	184.3	147.3	0.007	Muller 1954
5.56	1938.17	0.61	64.75	0.14	62.1	196.9	109.9	0.037	van den Bos 1937
43.07	1920.66	0.77	8.36	0.41	131.2	293.8	65.6	0.020	Hirst 1945
6.91	1939.76	0.73	52.10	0.24	52	73	24	0.049	Luyten 1933
25.00	1949.00	0.22	14.40	0.67	78.0	142.0	112.0	0.063	van den Bos 1937
296.05	1779.5	0.39	1.22	1.37	47.7	276.7	58.7	0.026	Rabe 1948
526	1889.35	0.53	0.68	12.50	32.3	269.1	277.6	0.170	Strand
204.54	1922.4	0.06	1.76	0.61	125.5	180.0	115.8	0.010	Rabe 1948
164.68	1957.15	0.31	2.19	1.01	46.4	4.6	171.5	0.022	Muller 1956
76.5	1954.2	0.30	4.72	0.24	53	13	157	0.006	van Biesbroeck 1954
120	1901	0.6	3.0	0.39	86	160	178	0.010	Baize 1951
33.66	1929.22	0.20	10.69	0.15	19.3	213.2	155.7	0.009	Eggen 1946
314.13	1974.5	0.16	1.15	0.51	126.8	14.2	147.4		Vidal 1956
75	1947.0	0.88	4.80	0.40	117.6	240.7	81.4	0.017	Muller 1954
81.5	1901.1	0.00	4.42	1.10	30.6	28.2	89.8	0.056	Woolley
180	1943	0.85	2.00	0.34	141.4	253.9	157.4	0.007	Muller 1954
32.00	1933.00	0.00	11.25	0.37	95.7	0.0	33.0	0.023	van den Bos 1956
63.8	1945.70	0.86	5.64	0.31	110.8	222.0	174.9	0.014	van den Bos 1950
4.56	1955.41	0.32	78.97	0.17	25.2	41.6	68.1		Wieth-Knudsen 1954
251	1821.0	0.80	1.43	8.31	120.5	120.6	163.7	0.202	Luyten, Ebbighausen 1934
158.4	1891.7	0.69	2.28	1.00	69.7	216.7	41.0	0.023	Volet 1933
60	1904.1	0.35	6.00	0.64	21.2	9.1	58.1	0.028	Muller 1949
720	2060.0	0.60	0.50	2.65	142.2	200.6	9.6		Rabe 1954
545.45	1928.0	0.70	0.66	1.77	49.4	147.4	24.5		Rabe 1954
61.1	1952.1	0.93	5.89	0.30	111.1	171.1	104.1	0.012	Muller 1957
144.7	1898.2	0.26	2.49	0.91	63.4	320.9	97.6	0.023	Heintz 1954
264.3	1949.6	0.42	1.36	0.46	52.6	204.3	143.9	0.007	Baize 1953
900	1430.0	0.5	0.40	2.83	115.2	283.3	17.7		Rabe 1954
50	1953.0	0.4	7.20	0.10	180.0	45	0		Rabe 1954
1.59	1952.58	0.27	226.4	0.12	32.2	20.6	24.4	0.068	Finsen 1953
720	1790.0	0.77	0.5	2.91	114.3	55.7	145.6	0.014	Rabe 1954
31.6	1933.6	0.76	11.39	0.22	118.5	260.2	20.0	0.013	van den Bos 1938
375	1948.0	0.25	0.96	0.56	54.9	139.2	79.0		Vidal 1956
154.5	1949.60	0.68	2.33	2.70	81.0	59.0	121.0	0.070	van den Bos 1956
39.95	1933.05	0.84	9.01	0.52	133.0	24.6	7.0	0.034	Finsen 1935
118.19	1929.0	0.76	3.05	0.57	131.4	47.4	116.3	0.018	Rabe 1948
25	1949	0.18	14.40	0.15	53.5	254.7	2.2	0.013	Muller 1954
221	1939.5	0.66		1.11	65.2	38.0	84.0	0.021	van Biesbroeck 1954
576	1910.7	0.71	0.62	0.69	155.2	228.4	5.6	0.005	Luyten 1934
19.40	1941.0	0.30	18.56	0.24	85.5	32.6	139.8	0.024	van den Bos 1953
62.28	1937.80	0.62	5.78	0.43	83.2	349.5	26.1		Wierzbński 1955
394.7	1909.10	0.65	0.91	2.10	110.6	140.1	10.3		Couteau 1958
481.2	1950.0	0	0.75	0.88	0	0	87.1		Franz 1955
100	1948.0	0.65	3.60	0.38	120.2	322.8	112.0	0.013	Muller 1956
705.88	1998.24	0.50	0.51	3.60	112.8	166.9	161.8		Rabe 1956

GC	AR 1950	D 1950	ADS	Cat	Con	m	m ₁	m ₂	Sp	Comp
5033	04 ^h 08 ^m 2	-05°00	3041	A 2801	Eri	7.50	8.2	8.2	G0	A-B
5089	10.8	+07 35	3064	A 1938	46 Tau	5.35	6.1	6.1	dF0	A-B
	12.7	-46 15		Rst 2338	Hor	6.29	7.0	7.1	F0	A-B
	12.7	+31 34	3082	OΣ 77	Per	7.42	8.1	8.2	G0	A-B
5140	13.0	-07 44	3093	Σ 518	40 Eri	9.37	9.6	11.1	B9+M5e	B-C
5160	13.7	+58 40	3098	Σ 511	Cam	6.91	7.4	7.8	A2	A-B
5230	17.0	+16 24	3135	OΣ 79	55 Tau	6.86	7.2	8.3	F6	A-B
5290-1	19.4	-25 51	3159	β 744	Eri	5.88	6.5	6.7	dF2	A-B
	19.9	+14 56	3169	OΣ 82	Tau	7.09	7.40	8.6	F8	A-B
5325	21.1	+09 21	3182	Hu 304	66 Tau	5.06	5.8	5.9	A3n	A-B
	22.8	+18 45	3210	β 1185	Tau	7.72	8.4	8.5	G5	A-B
5409	24.8	-24 12	3230	β 311	Eri	6.14	6.7	7.2	A2	A-B
5445	26.1	+16 03	3248	Hu 1080	Tau	6.58	7.2	7.5	F8	A-B
5467	27.3	+15 32	3264	Σ 554	80 Tau	5.70	5.85	7.9	A6n	A-B
5724	39.5	-59 02		h 3683	Dor	6.38	7.1	7.2	G0	A-B
5906	48.4	+10 59	3475	β 883	Ori	6.96	7.7	7.7	F7	A-B
5923	49.0	+13 34	3483	β 552	Ori	6.70	6.9	8.5	F5	A-B
6082	56.8	-16 27	3588	β 314	Lep	5.54	5.8	7.3	dF2	A-B
6255	05 04.5	+18 35	3701	A 3010	104 Tau	5.04	5.8	5.8	dG1	A-B
6269	05.2	+08 26	3711	OΣ 98	14 Ori	5.47	5.9	6.6	gF2p	A-B
6427	13.0	+45 57	3841	H VI 30	α Aur	0.21	0.89	1.04	gG5+G0	A-B
	20.0	+63 21	3956	Σ 677	Cam	7.1	7.7	8.0	G0	A-B
6637	21.3	-00 55	3991	A 847	Ori	7.02	7.7	7.8	F5	B-C
7002	35.4	+30 28	4229	β 1240	26 Aur	5.49	6.1	6.4	dA9n	A-B
7151	40.5	-06 49	4299	A 494	Ori	5.98	6.4	7.1	F5	A-B
7635	59.6	+09 39	4617	A 2715	μ Ori	4.19	4.6	5.4	A2	A-B
7849	06 07.7	-22 45		Rst 3442	Lep	5.71	6.5	6.5	dF6	A-B
8119	16.8	+28 27	4929	β 895	Aur	7.16	7.9	7.9	A4	A-B
8457	28.6	-50 12		R 65	z Pup	5.32	6.0	6.0	F2	A-a
8458	28.6	-50 12		Hd 195	z Pup	8.96	9.7	9.8	—	B-b
8589	33.3	+27 19	5234	OΣ 149	Gem	6.89	7.1	8.7	G2	A-B
8611	34.2	-36 02		φ 19	Col	6.28	6.9	7.2	F5	A-B
8804-5	41.8	+59 30	5400	Σ 948	12 Lyn	4.89	5.4	6.0	A2n	A-B
8833	43.0	-16 39	5423	AGC 1	α CMa	-1.37	-1.37	8.7	A1s+A5	A-B
8877	44.5	+18 15	5447	OΣ 156	Gem	6.16	6.8	7.0	A0	A-B
8968	48.7	+59 31	5514	Σ 963	14 Lyn	5.44	5.9	7.1	gG0+A2	A-B
9049	51.8	+13 15	5559	Σ 982	38 Gem	4.62	4.70	7.6	dA8n	A-B
9146	55.6	-35 26		I 65	Pup	6.19	6.85	6.9	F5	A-B
9532	07 09.7	+27 19	5871	Σ 1037	Gem	6.44	7.2	7.2	F6	A-B
10120	31.4	+32 00	6175	Σ 1110	α Gem	1.58	1.96	2.89	A2s+A0	A-B
10277	36.7	+05 21	6251	Schaeb.	α CMi	0.48	0.48	9.5	dF5	A-B
10384	40.6	-16 57	6315	Hu 710	Pup	6.65	6.3	7.3	G5	A-B
	43.7	+60 25	6354	Hu 1247	Cam	6.86	7.6	7.6	F5	A-B
10629	49.5	-13 46	6420	β 101	9 Pup	5.34	5.9	6.2	dG2	A-B
10755	54.7	+01 16	6483	OΣ 185	CMi	6.44	7.2	7.2	F6+F6	A-B
	08 01.0	+33 10	6549	OΣ 187	Gem	6.61	7.1	7.7	A0	A-B
11141	09.3	+17 48	6650	Σ 1196	ζ ¹ Cnc	5.10	5.7	6.0	dF7	A-B
11141-2	09.3	+17 48	6650	Σ 1196	ζ ^{1,2} Cnc	4.71	5.10	6.02	dF7+dG2	AB-Cc
11142	09.3	+17 48	6650	Σ 1196	ζ ² Cnc	6.02	6.26	7.8	dG2	C-c
11387	18.8	-01 27	6762	Σ 1216	Hya	6.35	7.0	7.3	A2	A-B

P	T	e	n	a''	i	ω	Ω	π dyn	Aut
20*	1951.5	0.76	18°00	0''14	62°3	42°0	172°7	0°011	Muller 1954
7.20	1947.98	0.22	50.00	0.14	72.2	165.5	134.2	0.024	Eggen 1946
25.00	1954.20	0.45	14.40	0.22	35.7	238.7	94.2	0.019	van den Bos 1953
200	1887.6	0.46	1.80	0.58	56.7	35.6	72.4	0.012	Muller 1956
247.92	1848.9	0.40	1.45	6.89	108.4	327.0	151.0	0.199	van den Bos 1926
161.2	1806.0	0.42	2.23	0.51	121.2	240.9	319.4	0.011	Hopmann 1952
90.0	1897.6	0.61	4.00	0.57	54.0	131.0	64.0	0.022	van den Bos 1937
76.92	1924.0	0.58	4.68	0.50	35.0	106.0	0.0	0.019	van den Bos 1952
225	1878.0	0.22	1.60	1.05	41.4	254.2	18.8	0.022	Mc Leod 1940
51.6	1937.4	0.70	6.98	0.18	0	215	0	0.003	van Biesbroeck 1954
30.4	1948.2	0.20	11.84	0.24	101.4	298.7	21.2	0.019	Kuiper 1937
175.7	1917.5	0.87	2.05	1.25	79.7	107.0	163.4	0.025	Horeschi 1957
40.4	1917.8	0.41	8.91	0.42	92.6	197.4	77.7	0.026	van den Bos 1956
170	1890.0	0.82	2.12	1.03	110.5	161.8	10.5	0.021	Kuiper 1937
552.3	1923.61	0.99	0.65	3.16	140.1	134.7	48.1	0.038	Wierzbinski 1957
16.34	1939.71	0.44	22.03	0.19	11.6	71.2	153.9	0.022	Kuiper 1937
104.57	1887.20	0.64	3.44	0.77	54.9	307.8	148.0	0.028	Baize 1953
56.0	1926.0	0.80	6.43	0.56	103.0	0.0	139.0	0.027	van den Bos 1935
2.38	—	0.0	151.26	0.10	0	—	—	—	Eggen 1956
162.78	1814.96	0.32	2.21	1.04	133.0	80.3	78.0	0.022	Baize 1953
0.2848	1920.74	0.01	3.46/d	0.05	—138.9	114.3	38.7	0.058	Merill 1922
393.8	1988.2	0.39	0.91	1.41	146.6	308.4	70.5	0.020	Friedemann 1957
37.0	1934.8	0.90	97.30	0.19	85	20.0	140.9	0.012	Baize 1952
53.2	1922.0	0.56	6.77	0.13	136.2	340.2	147.5	0.005	Baize 1955
20.57	1939.47	0.29	17.50	0.21	60.0	287.0	88.0	0.019	van den Bos 1937
17.5	1946.75	0.76	20.57	0.28	+95	228	31	0.023	Alden 1942
18.31	1943.30	0.37	19.66	0.21	41.0	107.3	102.4	0.021	Wieth-Knudsen 1956
56.0	1913.0	0.90	6.43	0.22	48.2	280.0	36.0	0.008	Baize 1953
50.0	1917.0	0.95	7.20	0.46	123.3	—	—	0.022	Eggen 1952
105.6	1907.3	0.25	3.41	0.53	27.7	—	—	0.020	Eggen 1952
116.13	1923.0	0.72	3.10	0.86	110.8	277.2	73.5	0.029	Rabe 1948
26.5	1935.5	0.41	13.58	0.34	102.1	282.6	157.7	0.028	Finsen 1954
699.0	1740	0.03	0.51	1.66	180.0	0	25.2	0.019	Brosche 1956
49.98	1944.04	0.58	7.20	7.62	+134.2	210.8	47.0	0.359	de Mottoni 1948
1057.8	1858.52	0.61	0.34	1.54	113.6	147.8	134.7	0.008	Dommanget 1954
614.3	1952.6	0.67	0.59	0.85	51.9	336.9	44.8	0.006	Couteau 1957
3190	1636	0.48	0.11	9.55	—49.4	148.4	185.6	0.030	Hopmann 1953
16.70	1942.25	0.38	21.56	0.22	37.2	224.1	147.9	0.024	Hirst 1945
116.5	1920.29	0.94	3.09	0.93	137.3	264.9	43.9	0.032	Karmel 1940
420.07	1965.30	0.33	0.86	6.29	115.9	261.4	40.5	0.067	Rabe 1957
40.23	1966.96	0.31	8.95	4.26	—30.6	65.7	127.8	0.277	Spencer Jones
64.76	1956.1	0.58	5.56	0.26	131.4	223.6	23.2	0.010	Muller 1955
18.46	1935.40	0.50	19.50	0.20	131.2	294.7	61.8	0.022	Baize 1954
23.18	1938.89	0.69	15.63	0.58	77.8	67.7	103.3	0.056	Woolley-Symms 1937
57.04	1945.62	0.77	6.31	0.44	79.0	252.0	9.0	0.023	van den Bos 1949
160	1928.0	0.52	2.25	0.32	121.0	310.0	88.5	0.006	van Biesbroeck 1954
59.60	1930.62	0.31	6.04	0.95	150.6	189.1	10.3	0.046	Makemson 1933
1137	1871.6	0.25	0.32	7.28	161.3	357.1	137.0	0.046	Makemson 1933
17.64	1946.19	0.22	20.41	0.24	—123.3	268.3	260.8	0.046	Makemson 1933
435	1842.9	0.20	0.83	0.65	45	0	133.2	0.006	Ekenberg 1945

GC	AR 1950	D 1950	ADS	Cat	Con	m	m ₁	m ₂	Sp	Comp
	08 ^h 23 ^m 5	—48°59'		Rst 321	Vel	7.6	8.7	8.9	G6	A—B
11518	23.7	+24 42	6811	A 1746	24 Cnc	7.64	8.4	8.4	F5	B—C
11566	25.2	—04 15	6825	A 550	Hya	6.68	7.4	7.5	F0	A—B
11574	25.6	—52 32		B 1606	Vel	6.6	7.3	7.3	F1	A—B
11587	26.0	—02 21	6828	A 551	Hya	6.29	7.0	7.1	F0	A—B
	28.4	+35 08	6851	Hu 716	Lyn	7.32	7.6	8.6	G5	A—B
11724	30.9	—24 26	6871	β 205	Pyx	6.15	6.8	6.9	dA7n	A—B
11877	36.9	—22 29	6914	β 208	Pyx	5.13	5.37	6.9	dG6	A—B
11895	37.5	—36 26		J 314	Pyx	6.06	6.3	7.8	F0	A—B
12102	44.2	+06 36	6993	Sp —	ε Hya	3.48	4.10	4.4	dG0	A—B
12102	44.2	+06 36	6993	Σ 1273	ε Hya	3.43	3.48	6.9	dG0	AB—C
12310	52.0	+26 24	7082	A 2131	Cnc	6.67	7.0	8.1	G1	A—B
12407	55.8	+48 14	7114	Hu 628	ι UMa	10.80	11.4	11.7	M1	B—C
12434	57.4	+41 59		Kuiper	10 UMa	4.09	4.3	6.2	dF2	A—B
12503	09 00.2	+47 21	7158	A 1585	κ UMa	3.68	4.3	4.5	B9n	A—B
12619	06.0	+67 20	7203	Σ 1306	σ ² UMa	4.87	4.91	8.5	dF4+K4	A—B
12816	14.9	+28 47	7284	Σ 1321	Cnc	7.26	8.0	8.1	K4+K4	A—B
12875	17.9	+38 24	7307	Σ 1338	Lyn	5.86	6.5	6.7	dF3+F2	A—B
12936	20.4	—09 37	7334	A 1342	Hya	6.53	7.3	7.3	A3	A—B
13062	25.8	+09 17	7390	Σ 1356	ω Leo	5.52	6.00	6.7	dF8	A—B
13140	28.7	—40 15		Copeland	ψ Vel	3.64	4.2	4.7	dA7n	A—B
13376	39.2	—57 45		B 780	Car	5.36	6.1	6.1	A2	A—B
13559	48.7	+54 18	7545	OΣ 208	φ UMa	4.54	5.2	5.3	A3s	A—B
13593	50.0	—07 52	7555	AC 5	γ Sex	5.16	5.8	6.1	A0n	A—B
13941	10 06.6	+20 35	7662	A 2145	Leo	6.65	7.4	7.4	F5+A2	A—B
14090	13.6	+17 59	7704	OΣ 215	Leo	6.56	7.2	7.4	F0	A—B
14177—8	17.2	+20 06	7724	Σ 1424	γ ^{1,2} Leo	2.30	2.61	3.80	gK0+gG5	A—B
14245	20.1	+15 36	7744	OΣ 216	Leo	7.37	7.5	9.7	G2	A—B
14358	25.0	+36 58	7780	Hu 879	β LMi	4.41	4.6	6.3	gG8	A—B
14571	33.7	—26 25	7846	β 411	Hya	6.25	6.6	7.5	dF3	A—B
14614	35.2	—47 58		λ 119	p Vel	4.06	4.6	5.1	F0p+A3	A—B
15185	11 00.7	+62 01	8035	β 1077	α UMa	1.95	2.0	4.8	gK0	A—B
15228	02.2	—03 57	8048	A 676	Leo	9.8	10.6	10.6	—	B—C
15248	02.9	—27 01		φ 47	χ ¹ Hya	5.06	5.8	5.8	dF4	A—B
15537	15.5	+31 49	8119	Σ 1523	ξ UMa	3.88	4.4	4.8	dG0+dG0	Aa—Bb
15537	15.5	+31 49	8119	Σ 1523	ξ UMa	4.41			dG0	A—a
15601	18.7	—54 13		I 879	π Cen	4.26	4.7	5.5	B5n	A—B
15652	21.3	+10 48	8148	Σ 1536	ι Leo	4.03	4.1	4.7	dF4+dF5	A—B
	22.6	—61 22		Brsb 5	Cen	7.40	7.7	8.9	K8	A—B
	24.8	—15 22	8166	Hu 462	Crt	7.72	8.4	8.6	K0	A—B
15787	28.1	+41 34	8189	OΣ 234	UMa	6.99	7.6	7.9	F1	A—B
15822	29.5	+61 22	8197	OΣ 235	UMa	5.47	5.7	7.1	dF4	A—B
16181	46.1	+14 34	8311	β 603	Leo	5.90	6.0	11.0	dA6n	A—B
16266	51.0	+74 02	8337	β 794	Dra	6.78	7.3	7.9	F7+G1	A—B
	51.4	+72 12	8344	A 75	Dra	7.54	8.1	8.5	F6	A—B
16471	12 01.1	—38 44		λ 143	Cen	6.64	7.3	7.5	F6	A—B
16535	03.5	+68 59	8418	Σ 3123	Dra	7.14	7.9	7.9	F5	A—B
16911	21.9	+25 52	8539	Σ 1639	Com	6.31	6.7	7.7	A6n	A—B
17036	27.5	—13 07	8573	β 28	Crv	6.41	6.5	9.2	F8	A—B
17262	38.7	—48 41		h 4539	γ Cen	2.38	3.1	3.2	A0	A—B

P	T	e	n	a	i	ω	Ω	π dyn	Aut
27*7	1948.10	0.18	13°00	0"27	21°5	225°0	109°4	0"023	van den Bos 1949
21.8	—	0.00	16.5	0.17	0.0	—	—	0.016	Eggen 1946
40.0	1954.5	0.10	9.0	0.22	108.5	60	172	0.013	Baize 1953
13.73	1939.65	0.23	26.2	0.16	58	195	118	0.020	van den Bos 1946
51.0	1949.0	0.50	7.06	0.30	80.8	232.0	62.0	0.015	Baize 1953
31.0	1952.4	0.85	11.61	0.47	113.6	257.5	156.9	0.043	Baize 1954
83.7	1953.06	0.63	4.30	0.54	130.2	85.6	121.2	0.020	Mason 1948
214	1896.5	0.2	1.68	1.9	82	76	30	0.041	Hirst 1942
54.0	1926.50	0.80	6.67	0.48	101.9	354.7	58.6	0.024	van den Bos 1953
15.04	1946.01	0.61	23.94	0.21	+39.1	266.8	104.9	0.019	Betty Adams 1939
2044.13	1914.61	0.63	0.18	9.08	57.6	196.2	52.2	0.032	Slonim 1935
43.5	1901.0	0.76	8.28	0.55	72.2	96.5	30.7	0.037	Baize 1953
39.0	1958.6	0.39	9.23	0.68	110.5	338.0	20.0	0.063	Baize 1942
22.20	1949.97	0.17	16.22	0.61	134.8	211.8	26.5	0.057	Baize 1954
57.5	1902.7	0.30	6.26	0.27	78.5	110.2	102.0	0.009	Baize 1951
705.9	1918.0	0.75	0.51	4.92	137.0	328.7	93.6	0.046	Rabe 1954
34.20	1946.70	0.35	10.53	0.66	77.0	130.0	25.0	0.055	van den Bos 1938
389.05	1998.59	0.29	0.92	1.52	15.8	258.9	28.1	0.018	Arend 1954
15.0	1945.75	0.10	24.00	0.17	120	180	23	0.019	Ekenberg 1945
116.85	1959.55	0.56	3.08	0.87	64.5	124.6	145.9	0.026	Muller 1956
34.14	1969.98	0.44	10.54	0.94	—58.3	227.3	109.8	0.063	Jannini
10.00	1952.85	0.30	36.00	0.16	133.8	21.8	73.4	0.024	van den Bos 1953
107.02	1882.01	0.44	3.36	0.35	27.5	33.1	133.3	0.008	Wierzbiński 1956
78.39	1881.67	0.65	4.59	0.37	144.2	181.2	63.4	0.011	Wierzbiński 1954
60.0	1916.88	0.94	6.00	0.19	124.1	104.8	157.0	0.007	Baize 1956
552	1929.0	0.82	0.65	1.30	131.0	122.3	117.6	0.013	Wierzbiński 1955
618.56	1743.32	0.84	0.58	2.50	36.4	162.5	143.2	0.026	Rabe 1954
250	1943.44	0.48	1.44	1.53	151.0	33.3	34.3	0.031	Baize 1954
37.90	1917.0	0.61	9.50	0.39	82.0	327.0	230.8	0.020	Baize 1950
211.0	1948.22	0.79	1.71	1.00	125.0	42.0	154.0	0.020	van den Bos 1952
16.0	1953.0	0.70	22.50	0.32	132.5	303.0	3.0	0.028	van den Bos 1950
44.0	1953.9	0.35	8.18	0.63	161.8	174.0	319.2	0.021	Spencer Jones 1937
23.5	1942.5	0.12	15.32	0.23	43	34	59	0.026	Finsen 1937
7.40	1945.90	0.28	48.6	0.14	94.7	180.0	45.7	0.023	van den Bos 1956
59.86	1935.03	0.41	6.01	2.54	+122.8	127.2	101.4	0.118	Strand-Hall 1954
1.83	1950.06	0.53	196.49	0.05	95.5	320.0	309.4	0.122	van den Bos 1950
42.77	1933.50	0.74	8.42	0.28	59.8	166.2	139.1	0.011	van den Bos 1950
181	1949.23	0.54	1.99	1.85	132	148	54.8	0.036	van Biesbroeck 1954
265	1919.73	0.56	1.36	4.01	40.0				Eggen 1956
48.40	1910.17	0.17	7.44	0.48	149.0	250.0	35.8	0.031	Baize 1952
86.0	1883.0	0.38	4.19	0.37	59.0	217.9	153.1	0.013	Muller 1954
73.35	1908.46	0.40	4.91	0.85	45.7	130.5	79.6		Hable 1954
134.25	1939.55	0.68	2.68	0.81	141.1	215.3	9.2	0.022	Baize 1956
77.1	1910.8	0.47	4.67	0.38	26.3	229.0	42.1	0.015	Finsen
78.6	1914.6	0.11	4.58	0.29	109	241	24	0.011	Baize 1953
115	1913.65	0.58	3.13	0.74	153.0	121.6	44.5	0.024	van den Bos 1936
115	1973.22	0.50	3.13	0.28	150	120	103.6	0.007	Ekenberg
753.14	1890.92	0.94	0.48	1.40	148.0	356.9	128.9	0.011	Schrutka 1949
180	1944.5	0.75	2.00	1.51	32.3	65.4	104.0	0.042	Muller 1954
84.59	1931.22	0.79	4.26	0.94	113.1	188.7	3.4		Wierzbiński 1958

GC	AR 1950	D 1950	ADS	Cat	Con	m	m ₁	m ₂	Sp	Comp
17270	12 ^h 39 ^m 1	—01°11'	8630	Σ 1670	γ Vir	2.91	3.63	3.6	dF0+dF0	A—B
	48.2	+20 48	8680	Hu 640	Com	9.3	10.0	10.1	K0	A—B
17493	50.8	+21 31	8695	Σ 1687	35 Com	5.10	5.3	7.3	gG8	A—B
17559	53.8	—47 25		J 83	Cen	6.86	7.5	7.7	F5	A—B
17664	58.6	+56 38	8739	β 1082	78 UMa	4.89	5.0	7.4	A6n	A—B
17833	13 07.6	+17 48	8804	Σ 1728	α Com	4.47	5.2	5.2	dF4	A—B
18133-4	21.9	+55 11	8891	Σ 1744	ζ UMa	2.17	2.40	3.96	A2sp	A—a
18254	28.1	—39 09		λ 179	d Cen	3.96	4.6	4.8	K0	A—B
18319	30.6	+35 10	8939	OΣ 269	CVn	6.80	7.5	7.7	A3n	A—B
18338	31.7	—00 04	8949	Σ 1757	Vir	7.36	7.7	8.7	K1	A—B
18348	32.0	—12 58	8954	β 932	γ Vir	5.81	6.5	6.8	A1n	A—B
18384	33.8	—61 26		I 365	Cen	5.59	6.3	5.4	F5	A—B
18421	35.2	+36 33	8974	Σ 1768	25 CVn	4.92	5.1	7.1	A3n	A—B
18466	37.1	+11 00	8987	β 612	Boo	5.54	6.3	6.3	dA6n+dA6n	A—B
18609	43.6	+05 22	9019	Σ 1781	Vir	7.22	7.8	8.2	G1	A—B
18670	46.8	+27 14	9031	Σ 1785	Boo	7.26	7.8	8.3	K6+K6	A—B
	14 01.2	+08 44	9094	β 1270	Boo	7.8	8.5	8.6	F5+F5	A—B
	10.3	+44 25	9159	OΣ 278	Boo	7.67	8.3	8.5	F2	A—B
19233	12.8	+03 22	9182	Σ 1819	Vir	7.04	7.7	7.8	F7+F8	A—B
19347	18.5	+48 44	9229	Σ 1834	Boo	7.23	7.9	8.1	F6	A—B
19401	20.9	+08 40	9247	β 1111	Boo	6.64	7.4	7.4	F2+F2	B—C
	24.4	+16 38	9264	A 2069	Boo	7.7	8.4	8.6	F6	A—B
19608	30.1	+26 54	9301	A 570	Boo	5.90	6.6	6.7	A3n	A—B
	35.2	+48 26	9324	A 347	Boo	7.8	8.5	8.5	F1	A—B
19728	36.2	—60 38		Richaud	α Cen	0.06	0.33	1.70	dG4+dK5	A—B
19777	38.8	+13 57	9343	Σ 1865	ζ Boo	3.86	4.6	4.6	A2n	A—B
19873	43.3	—20 58		φ 309	Lib	6.40	7.1	7.2	F9	A—B
19881	43.6	+42 35	9378	OΣ 285	Boo	7.24	7.9	8.1	F5	A—B
19886	43.8	+09 52	9380	Σ 1879	Boo	7.17	7.7	8.3	G1	A—B
19934	46.4	+06 10	9392	Σ 1883	Vir	6.72	7.0	7.0	F8	A—B
19991	49.1	+19 18	9413	Σ 1888	ξ Boo	4.64	4.8	6.9	dG5+dK5	A—B
20007	50.1	—66 13		h 4707	Cir	6.90	7.9	8.5	G1	A—B
20032	51.0	+15 54	9425	OΣ 288	Boo	6.43	6.9	7.6	F9	A—B
20083	53.4	—34 26		I 227	Cen	7.35	8.1	8.2	F6	A—B
20281	15 02.2	+47 51	9494	Σ 1909	44 Boo	var	var	5.98	dG1+G2p	A—B
20340	05.0	+18 38	9505	A 2385	Boo	6.00	6.75	6.75	A2	A—B
	13.4	—04 43	9557	Σ 3091	Lib	7.14	7.9	7.9	F6	A—B
20576	16.2	+27 01	9578	Σ 1932	CrB	6.55	7.29	7.32	F8	A—BC
20696	21.1	+30 28	9617	Σ 1937	η CrB	5.05	5.7	6.0	dF9	A—B
20725	22.6	+37 33	9626	Σ 1938	μ ^a Boo	6.67	7.2	7.8	G0	B—C
20893	30.2	—24 19	9689	λ 238	Lib	7.06	7.7	7.8	K8	B—C
20926	31.8	—41 00		h 4786	γ Lup	2.95	3.6	3.7	B3n	A—B
20990	34.3	+39 58	9716	OΣ 298	Boo	6.78	7.5	7.6	K4+K4	A—B
21102	39.3	+19 50	9744	Hu 580	ι Ser	4.49	5.2	5.2	A2	A—B
21130	40.6	+26 27	9757	Σ 1967	γ CrB	3.93	4.2	5.6	A0n	A—B
21163	42.3	+80 08	9769	Σ 1989	UMi	6.93	7.4	8.1	F0p	A—B
21535	59.5	—57 38		λ 258	ι Nor	4.87	5.57	5.68	A2n	A—B
21593	16 01.6	—11 14	9909	Σ 1998	ξ ¹ Sco	4.16	4.9	4.9	dF4+dF4	A—B
21693	05.7	—09 58	9932	β 949	Sco	6.63	7.3	7.4	F6	A—B
21863	12.8	+33 59	9979	Σ 2032	σ CrB	5.36	5.7	6.7	dF8+dG1	A—B

P	T	e	n	a	i	ω	Ω	π dyn	Aut
171*85	1836.50	0.88	2°10	3"72	146°4	251°2	29°7	0"084	Wolf 1949
105.88	1910.22	0.34	3.34	0.62	64.7	31.4	109.5	0.024	Baize 1956
1144.03	1947.41	0.68	0.31	2.91	53.3	217.6	106.7	0.016	Rosino 1944
294	1923.88	0.87	1.22	0.69	42.6	308.7	105.0	0.010	van den Bos 1953
115.7	1921.74	0.44	3.91	1.26	51.5	121.0	89.2	0.039	Baize 1948
25.87	1937.52	0.50	13.92	0.66	89.9	278.9	11.6	0.058	Haffner 1948
0.056	1927.44	0.53	17.5/d	0.01	60	284	102	0.046	Russell 1927
62.6	1957.45	0.33	5.75	0.15	142.8	149.1	39.1	0.003	van den Bos 1954
54.8	1934.6	0.80	6.57	0.18	68.6	2.0	44.0	0.008	Baize 1952
334.0	1723.0	0.24	1.08	2.35	58.0	140.8	97.1	0.041	Heintz 1955
195.2	1929.32	0.90	1.84	0.44	53.7	99.2	138.0	0.007	Baize 1952
34.80	1932.43	0.80	10.34	0.50	113.6	96.2	75.0	0.034	van den Bos 1935
240.0	1863.95	0.83	1.50	1.09	144.0	137.9	67.0		Wierzbński 1956
22.35	1952.34	0.52	16.11	0.21	49.4	358.7	34.2	0.017	Danjon 1942
368	1984.0	0.98	0.98	0.93	15.7	281.9	122.5		Ziller 1954
155.0	1916.90	0.44	2.32	2.42	46.8	200.9	155.1		Strand 1955
38.4	1950.4	0.41	9.38	0.20	20.5	22.6	131.0	0.013	Finsen 1938
200.5	1980.7	0.30	1.79	0.34	135.8	226.0	151.1	0.006	Baize 1953
358.72	1899.55	0.18	1.00	1.69	127.5	2.8	4.0	0.028	Hopmann 1945
321	1902.5	0.88	1.12	0.90	76.9	168.2	110.5	0.014	van den Bos 1938
39.50	1957.98	0.25	9.11	0.23	37.5	149.9	39.5	0.014	Couteau 1957
44.10	1933.85	0.35	8.16	0.19	145.1	9.4	52.5	0.011	Baize 1953
30.00	1924.36	0.15	12.00	0.21	148.0	66.0	29.0	0.014	van den Bos 1949
322.6	1910.9	0.46	1.12	0.70	134.0	0.0	56.2	0.010	Güntzel-Ligner 1956
80.09	1875.76	0.52	4.49	17.59	+79.3	52.2	25.4	0.759	Strand-Hall 1954
123.44	1897.59	0.96	2.92	0.59	142.0	1.5	130.0	0.013	Wierzbński 1954
25.0	1949.65	0.0	14.4	0.31	59.1	0.0	139.6	0.026	Finsen 1954
87.71	1969.29	0.54	4.10	0.32	151.5	135.7	42.2	0.011	Simonov 1937
225.97	1866.82	0.67	1.59	0.99	121.0	150.1	73.5	0.020	Wierzbński 1956
1027	1941.9	0.62	0.35	1.45	115.8	291.5	88.6	0.008	Heintz 1955
149.42	1909.44	0.50	2.41	4.90	140.1	24.2	168.3		Kümmritz 1956
288	1932.0	0.30	1.25	1.39	119.4	354.2	60.6	0.026	Woolley-Mason 1948
215.4	1819.3	0.60	1.67	1.09	112.5	0	4.3	0.021	Heintz 1955
37.7	1954.04	0.90	9.55	0.24	125.5	182.1	98.0	0.016	Bruwer 1952
281.94	1784.83	0.24	1.28	4.33	84.7	51.3	59.3	0.082	Zagar
8.0	1947.97	0.45	45.00	0.10	122.6	71.4	41.3	0.015	Eggen 1946
144	1910	0.70	2.50	0.39	100	321	34.5	0.009	Baize 1953
191	1941.83	0.64	1.88	1.16	57.7	51.5	66.5	0.037	van Biesbroeck 1954
41.56	1933.95	0.28	8.66	0.84	-58.9	219.6	24.2	0.054	Danjon 1938
260.10	1865.00	0.59	1.38	1.46	135.4	338.5	174.9	0.028	Baize 1952
54.6	1938.4	0.61	6.59	0.25	35.3	173.7	170.0	0.012	Finsen 1937
147	1887.0	0.49	2.45	0.59	95.6	301.0	92.8	0.008	Heintz 1956
56.05	1938.99	0.59	6.42	0.88	67.4	208.9	178.9	0.050	Stephens 1939
21.30	1957.52	0.00	16.90	0.23	84.3	0.0	70.0	0.018	van den Bos
91.0	1840.5	0.42	3.96	0.74	96.0	106.0	111.0	0.018	Baize 1953
150.75	1902.46	0.90	2.39	0.35	139.6	144.8	0	0.008	Giannuzzi 1956
26.4	1937.4	0.50	13.62	0.36	160.4	45.0	124.2	0.026	Woolley-Mason 1948
45.69	1951.14	0.74	7.88	0.72	+36.9	168.2	21.7	0.038	Baize 1942
55.0	1958.0	0.88	6.54	0.48	84.4	300.4	23.0	0.025	Wilson 1940
1000	1828.0	0.78	0.36	6.60	33.3	84.3	7.7		Rabe 1954

GC	AR 1950	D 1950	ADS	Cat	Con	m	m ₁	m ₂	Sp	Comp
22157	16 ^h 26 ^m 3	-26°19'	10074	Grant	α Sco	1.22	1.22	6.5	cM1+B4n	A-B
22166	26.7	+18 31	10075	Σ 2052	Her	7.04	7.7	7.8	K2+K2	A-B
22203	28.4	+02 06	10087	Σ 2055	λ Oph	3.85	4.20	5.25	A1n	A-B
22464	39.4	+31 42	10157	Σ 2084	ζ Her	3.00	3.1	5.6	dG0	A-B
22683	48.7	+09 30	10229	Σ 2106	Oph	6.77	7.0	8.7	F8	A-B
22715	49.8	+28 45	10235	Σ 2107	Her	6.52	6.8	8.2	F5	A-B
22867	55.5	-37 33		λ 315	Sco	6.24	6.86	6.93	A4	A-B
22881	56.2	+65 07	10279	Σ 2118	20 Dra	6.44	7.1	7.3	F0	A-B
23092	17 04.3	+54 32	10345	Σ 2130	μ Dra	5.06	5.79	5.84	dF6+dF6	A-B
23132	06.3	+36 00	10360	Hu 1176	c Her	5.38	6.1	6.1	A5	A-B
23158	07.5	-15 40	10374	β 1118	η Oph	2.63	3.2	3.5	A2s	A-B
23274	12.3	-26 32	10417	Sh 243	36 Oph	4.54	5.29	5.33	dK1	A-B
	12.8	-10 15	10421	β 957	Oph	7.26	8.0	8.0	F5	A-B
23353	15.3	-46 35		Brs 13	Ara	5.58	5.64	8.8	dK0+M0	A-B
23362	15.5	-34 56		Mlb 4	Sco	5.89	6.13	7.6	dK5	A-B
23706	27.8	-01 01	10598	Σ 2173	Oph	5.34	6.0	6.1	dG6	A-B
23874	34.5	+61 55	10660	β 962	26 Dra	5.31	5.4	8.5	dG1	A-B
24565	18 00.4	-08 11	11005	Σ 2262	τ Oph	4.88	5.3	6.0	dF3	A-B
24641	02.9	+02 31	11046	Σ 2272	70 Oph	4.07	4.27	6.0	dK1+K6	A-B
24649	03.2	-43 26		h 5014	CrA	5.02	5.7	5.9	A3	A-B
24664	03.7	+21 26	11060	OΣ 341	Her	6.92	7.4	8.0	G1	A-B
24700	05.1	+30 33	11077	AC 15	99 Her	5.21	5.26	8.5	F5	A-B
24754	07.1	+03 59	11111	Σ 2281	73 Oph	5.67	6.0	7.1	dF0n	A-B
25131	22.4	-01 36	11324	AC 11	Ser	6.11	6.8	7.0	dF2n	A-B
25147	23.0	+27 22	11334	Σ 2315	Her	6.20	6.7	7.3	A0	A-B
25396	32.8	+52 19	11468	A 1377	Dra	5.42	6.2	6.2	gG5+G5	A-B
25407	33.4	+23 34	11479	OΣ 359	Her	5.76	6.5	6.6	gG8	A-B
25411	33.7	+16 56	11483	OΣ 358	Her	6.17	6.8	7.0	G0	A-B
	33.6	+11 41	11484	OΣ 357	Oph	7.37	8.1	8.2	A2	A-B
25481	35.8	-03 14	11520	A 88	Ser	6.47	7.2	7.2	F8	A-B
25575	39.5	+30 15	11579	Σ 2367	Lyr	6.88	7.5	7.8	G6	A-B
25666-7	42.7	+39 37	11635	Σ 2382	e ¹ Lyr	4.68	6.00	5.06	A2n+A4n	A-B
25668	42.7	+39 37	11635	Σ 2383	e ² Lyr	4.50	5.14	5.37	A3n+A5	C-D
25975	53.3	+03 23	11842	A 2192	Ser	6.94	7.7	7.7	A3	A-B
26030	55.2	+32 50	11871	β 648	Lyr	5.21	5.3	7.7	dG0+K5	A-B
26069	56.6	+58 09	11897	Σ 2438	Dra	6.31	6.9	7.2	A3	A-B
26161	59.4	-29 57	11950	Hd 150	ζ Sgr	2.71	3.4	3.5	A4n	A-B
26214	19 01.3	-21 36	11989	HN 126	Sgr	6.87	7.5	7.7	G1	A-B
26263	03.0	-37 08		h 5084	γ CrA	4.26	5.0	5.1	dF7+dF7	A-B
26389	06.9	-19 53	12096	B 427	Sgr	6.33	7.0	7.1	K0	A-B
26415	08.3	-07 31	12126	A 95	Aql	6.76	7.50	7.53	G1	A-B
26442	09.5	+38 42	12145	Sec 2	Lyr	8.3	8.9	9.2	K0+K0	B-C
26516	12.5	-25 21	12214	B 430	ψ Sgr	4.93	5.6	5.7	dF5	A-B
26617	15.7	-33 22		J 253	Sgr	6.85	7.6	7.7	G0	A-B
26851	24.5	+27 13	12447	Σ 2525	Vul	7.8	8.4	8.6	F9+F9	A-B
27199	37.3	+22 08	12752	Σ 2556	Vul	7.22	7.3	7.8	F2	A-B
27347	43.4	+45 00	12880	Σ 2579	δ Cyg	2.97	3.0	6.5	A0n	A-B
27350	43.7	+33 29	12889	Σ 2576	Cyg	7.83	8.5	8.6	K5+K5	A-B
27374	44.7	-61 56		I 120	Pav	7.48	8.2	8.3	G1	A-B
	46.4	+14 56	12961	A 1658	Aql	7.61	8.3	8.4	F5	A-B

P	T	e	n	a	i	ω	Ω	π dyn	Aut
853*4	1880.0	0.0	0°42	3"27	89°3	177°6	95°1	0"011	Hopmann 1956
217.1	1921.23	0.75	1.66	2.20	108.2	131.7	94.0	0.052	Finsen
131.96	1939.53	0.62	2.73	0.93	21.7	125.6	83.3	0.021	Rabe 1948
34.38	1933.35	0.47	10.47	1.37	-131.4	111.0	48.2	0.097	Baize 1949
2022	1913	0.70	0.18	1.40	119.7	240.0	145	0.005	Janová 1957
261.82	1895.51	0.56	1.38	1.01	27.1	242.1	52.7	0.018	Rabe 1927
31.16	1951.97	0.23	11.56	0.17	34.5	38.4	27.7	0.011	van den Bos 1950
729.35	1853.50	0.47	0.49	0.47	97.0	220.3	66.2	0.009	Giannuzzi 1956
1922.3	1934.3	0.72	0.19	7.99	138.5	11.6	116.4	0.038	Hopmann 1945
8.04	1949.79	0.91	44.78	0.21	115.2	88.3	6.0	0.035	Eggen 1945
80.0	1936.9	0.90	4.50	1.05	97.5	279.5	40.7	0.032	Baize 1950
548.7	1643.48	0.90	0.66	13.91	99.2	90	93.6		Brossche 1958
106	1934.60	0.58	3.40	0.35	171.3	356.6	21.5	0.011	van den Bos 1953
693.24	1907.18	0.78	0.52	10.41	35.6	333.4	131.8		Wieth-Knudsen 1957
42.09	1933.8	0.57	8.55	1.82	-128.2	67.5	133.0	0.143	Hirst 1943
46.08	1916.06	0.17	7.81	1.02	99.2	327.5	152.7	0.061	Duncombe, Ashbrook 1952
74.16	1949.73	0.19	4.85	1.50	105.6	322.7	153.3	0.070	Hall 1949
223.82	2038.61	0.53	1.61	1.31	66.1	17.8	76.2	0.022	Doberck 1906
87.85	1895.90	0.50	4.10	4.56	-121.1	12.9	302.0	0.202	Strand 1952
191.23	1841.68	0.52	1.88	1.06	145.2	190.4	49.2		Wierzbiński 1958
20.0	1938.20	0.97	18.00	0.27	76.0	160.0	98.0	0.027	van Biesbroeck 1954
56.40	1942.00	0.76	6.38	1.03	-32.0	105.0	55.8	0.054	van Biesbroeck 1947
391	1910.40	0.67	0.92	1.33	105.0	306.0	74.5	0.016	van den Bos 1937
240	1870.0	0.34	1.50	0.59	93.3	5.0	176.0		Heintz 1958
284.7	2018.02	0.12	1.26	0.35	129.6	71.5	123.4	0.004	Voronov 1933
184.6	1912.0	0.40	1.95	0.26	45.0	45	256	0.003	Wilson 1950
190.8	1932.02	0.82	1.89	0.42	119.3	201.3	10.3	0.005	Arend 1951
292	1784.0	0.48	1.23	1.36	134.2	19.4	16.6	0.021	Heintz 1954
256.0	1731.0	0.21	1.41	0.43	123.7	0	87.4	0.007	Florsch 1955
12.8	1922.17	0.26	29.56	0.20	117.4	78.8	174.2	0.028	van den Bos 1953
90.0	1889.0	0.90	4.00	0.25	116.5	165.0	63.5	0.008	Baize 1950
1165.6	2318	0.19	0.31	2.78	138	165.7	29	0.016	Güntzel-Lingner 1954
585	2229.5	0.49	0.61	2.95	120.5	92.0	17.4	0.024	Güntzel-Lingner 1956
72	1925.0	0.81	5.00	0.50	103.3	91.4	38.1	0.022	Muller 1954
59.80	1910.91	0.24	6.02	1.26	113.6	281.7	48.3	0.066	Baize 1943
233.0	1882.50	0.92	1.55	0.53	180.0	181.7	0.0	0.008	See 1908
20.80	1942.34	0.23	17.31	0.52	110.6	1.4	74.5	0.040	Finsen 1937
665	1912.7	0.62	0.54	2.26	118.1	142.5	70.4	0.023	Gottlieb 1948
119.28	1878.58	0.31	3.02	2.07	149.6	165.2	48.4	0.062	Dawson 1924
2.68	1950.57	0.53	134.33	0.13	45.6	86.1	45.0	0.055	Voronov 1934
94	1942.8	0.60	3.83	0.20	144.2	246.6	129.2	0.005	Couteau 1957
59.02	1954.47	0.56	6.10	0.35	114.3	185.0	91.5	0.019	Baize 1956
18.55	1935.50	0.45	19.40	0.14	78.4	179.1	110.8	0.010	van den Bos 1957
60.0	1937.50	0.78	6.00	0.51	92.2	133.1	138.2	0.026	van den Bos 1954
474	1889.0	0.94	0.76	1.35	144.2	69.7	163.2	0.017	Finsen 1937
256.37	1979.58	0.55	1.40	0.52	126.5	54.8	39.5	0.019	Güntzel-Lingner 1956
537.3	1890.0	0.30	0.67	2.56	141.5	124.5	84.2		Rabe 1954
243.55	1945.24	0.78	1.48	2.15	156.7	113.5	77.0	0.051	Baize 1954
61.45	1932.01	0.67	5.86	0.30	154.6	131.1	110.6	0.014	Wierzbiński 1957
73.47	1897.28	0.20	4.90	0.22	150.6	290.0	162.0	0.009	Baize 1955

GC	AR 1950	D 1950	ADS	Cat	Con	m	m ₁	m ₂	Sp	Comp
27431	19 ^h 46 ^m 8	+19 ^o 01	12973	AGC 11	ζ Sge	4.95	5.6	5.8	A0n	A—B
27432	46.9	+35 11	12972	OΣ 387	Cyg	6.52	7.0	7.5	F2	A—B
	53.4	+41 44	13125	Ho 581	Cyg	7.37	7.9	8.4	K0	A—B
	57.8	—38 44		HdO 294	Sgr	7.7	8.2	8.9	F2	A—B
28005	20 08.6	+43 48	13461	OΣ 400	Cyg	7.14	7.7	8.1	G4	A—B
28294	18.2	+45 12	13723	OΣ 406	Cyg	7.02	7.5	8.1	F5	A—B
28299	18.4	+39 15	13728	A 1427	Cyg	6.20	6.3	8.8	A0n	A—B
28425	23.6	—37 34		R 321	Sgr	6.26	6.5	7.7	K1	A—B
28434	24.0	+59 26	13850	A 730	Cyg	6.48	7.1	7.3	A0	A—B
28542	28.8	+15 38	13944	A 1625	Del	6.80	7.5	7.5	A3	A—B
28709	35.2	+14 25	14073	β 151	β Del	3.72	4.1	5.1	dF3	A—B
28748	36.5	—15 08	14099	Hu 200	τ ^a Cap	5.30	5.8	6.5	B5n	A—B
28994	45.5	+36 18	14296	OΣ 413	λ Cyg	4.47	4.7	6.1	B6ne	A—B
29078	48.8	—05 49	14360	Σ 2729	4 Aqr	5.99	6.4	7.2	dF3	A—B
29181	52.5	+59 07	14412	A 751	Cep	6.82	7.4	7.7	F2+A2	A—B
29276	56.6	+04 06	14499	Σ 2737	ε Equ	5.29	5.9	6.2	dF4+dF4	A—B
29309	57.6	+07 19		Kuiper	Equ	6.03	6.3	7.7	A3n	A—B
29509	21 04.7	+38 30	14636	Σ 2758	61 Cyg	5.12	5.54	6.35	dK6+Mo	A—B
29673	11.1	+15 47	14761	Hu 767	Peg	6.20	6.9	6.9	A3n	A—B
29697	12.0	+09 48	14773	OΣ 535	δ Equ	4.61	5.3	5.4	dF3+dF3	A—B
29699	12.1	—01 02	14775	A 883	Aqr	7.31	8.1	8.1	A2	A—B
29718	12.7	+64 12	14783	AC 19	Cep	6.41	7.1	7.3	G1	A—B
29723	12.8	+37 50	14787	AGC 13	τ Cyg	3.82	3.9	6.3	dF0n	A—B
29812	16.2	+11 22	14839	β 163	Equ	6.97	7.2	8.7	G1	A—B
30314	36.9	—00 17	15176	β 1212	24 Aqr	6.80	7.4	7.7	F7	A—B
30394	40.4	+40 51		Kuiper	77 Cyg	5.48	6.1	6.3	A0	A—B
30437—8	41.9	+28 31	15270	Σ 2822	μ ^{1,2} Cyg	4.45	6.08	4.73	dF3+F6	A—B
30450	42.4	+25 25	15281	β 989	κ Peg	4.27	5.0	5.1	dF2	A—B
30654	51.5	—62 07		HdO 296	Ind	5.89	6.5	6.7	F0	A—B
30720	54.5	—55 14		φ 307	δ Ind	4.56	5.3	5.3	F0n	A—B
31398—9	22 26.3	—00 17	15971	Σ 2909	ζ ^{1,2} Aqr	3.75	4.59	4.42	dF1+dF2	A—BC
31425	27.4	+04 11	15988	Σ 2912	37 Peg	5.47	5.7	7.0	dF2	A—B
	30.8	+49 08	16046	Hu 1320	Lac	7.7	8.4	8.4	F5	A—B
31510	31.6	+69 39	16057	Σ 2924	Cep	6.02	6.6	7.0	dF2+A5	A—B
31613	36.5	+44 03	16138	Ho 295	Lac	6.93	7.7	7.7	F9	A—B
31655	38.4	+14 17	16173	Ho 296	Peg	5.81	6.4	6.7	dG3+dG3	A—B
	46.1	+30 50	16278	β 1146	Peg	7.26	7.7	8.4	B9	A—B
31840	47.2	—33 04		Hd 301	PsA	6.35	7.0	7.2	A5	A—B
31876	49.0	+26 08	16314	Ho 482	Peg	6.71	7.5	7.5	A4	A—B
31930	51.4	+44 29	16345	β 382	Lac	5.62	5.8	7.8	A4	A—B
31995	54.6	+72 34	16393	OΣ 484	Cep	7.23	7.6	8.5	A2	A—B
	55.7	—45 47		Hu 1335	Gru	7.7	8.4	8.5	G6	A—B
32021	56.0	+09 05	16417	OΣ 536	Peg	6.50	7.2	7.3	G1	A—B
32034	56.7	+11 28	16428	OΣ 483	52 Peg	5.79	6.1	7.4	F0	A—B
32153	23 02.6	—07 58	16497	A 417	83 Aqr	5.56	6.2	6.2	dF0n	A—B
32236	06.3	+10 41	16539	A 1238	Peg	7.51	8.0	8.2	F5	A—B
32237	06.3	+65 07	16538	OΣ 489	π Cep	4.56	4.7	6.7	gG1	A—B
32458	16.3	+05 08	16665	β 80	Psc	8.6	9.1	9.7	K1	A—B
32463	16.6	+67 50	16666	Σ 3001	o Cep	4.90	5.02	7.3	gG7	A—B
32531	20.0	—15 19	16708	Hu 295	97 Aqr	5.30	5.9	6.1	A3n	A—B

P	T	e	n	a	i	ω	Ω	π dyn	Aut
22*8	1933.35	0.85	15°79	0°15	135°0	180°0	163°7	0°010	Finsen 1937
157.21	1849.2	0.08	2.29	0.61	135.0	60.1	162.4	0.014	Rabe
25.69	1937.06	0.52	14.01	0.25	39.2	245.0	34.6	0.022	van Biesbroeck 1927
339	1921.40	0.69	1.06	0.81	40.7	126.2	125.0	0.012	van den Bos 1956
84.39	1884.58	0.47	4.27	0.48	115.1	339.6	144.3	0.019	Wierziński 1956
96.0	1913.2	0.78	3.75	0.31	130.7	155.0	104.9	0.010	Wierziński 1956
90	1944.5	0.92	4.00	0.21	45.6	176.0	111.5	0.006	Muller 1954
108	1946.0	0.68	3.33	0.75	147.0	253.7	157.2	0.024	Finsen 1937
83.72	1932.09	0.77	4.30	0.17	136.5	281.3	75.0	0.005	Baize 1954
48.25	1948.95	0.47	7.46	0.17	114.7	66.3	147.0	0.008	Baize 1954
26.60	1936.18	0.35	13.53	0.48	62.2	351.2	177.2	0.034	Finsen 1938
94.7	1907.0	0.30	3.80	0.23	76.5	216	97	0.005	Baize 1953
391.30	1795.0	0.45	0.92	0.78	133.8	298.8	138.6	0.006	Rabe 1948
155.17	1893.30	0.42	2.32	0.79	68.7	31.3	175.4	0.019	Baize 1943
59.30	1917.50	0.52	6.07	0.18	132.7	115.3	23.0	0.007	Baize 1955
101.4	1920.21	0.70	3.55	0.66	92.8	339.3	105.2	0.020	van den Bos 1933
40	1952.8	0.52	9.00	0.35	109.4	280.5	167.0	0.021	Muller 1954
691.61	1689.14	0.41	0.52	24.44	+52.7	153.2	173.4	0.300	Zagar
33.36	1910.28	0.62	10.79	0.26	74.0	118.4	165.0	0.017	Wierziński 1955
5.70	1952.67	0.42	63.10	0.26	100.0	169.0	23.0	0.062	Luyten-Ebbighausen 1934
78.35	1950.48	0.17	4.59	0.17	133.8	275.2	111.7	0.005	Baize 1954
84.4	1922.0	0.85	4.26	0.61	82.4	38.0	63.0	0.023	Baize 1950
49.80	1939.70	0.24	7.23	0.85	134.5	120.8	160.4	0.046	van Biesbroeck 1940
72	1908.0	0.80	5.00	0.55	98.9	350.0	73.6	0.025	Baize 1955
48.7	1923.01	0.86	7.39	0.42	55.2	295.0	139.8	0.025	Danjon 1942
19.5	1951.2	0.16	18.46	0.16	145.0	28.5	165.2	0.013	Muller 1954
514.08	1971.72	0.43	0.70	4.56	79.8	150.8	111.5	0.051	Komendantov 1936
11.53	1955.98	0.30	31.25	0.21	+109	131	111	0.024	Luyten 1934
25.80	1937.75	0.51	13.95	0.24	64.0	204.0	90.8	0.019	van den Bos 1956
12.0	1954.7	0.12	30.00	0.16	65.4	307.2	102.3		Finsen 1956
361.45	2000.68	0.40	1.00	2.59	164.3	0.0	180.0	0.041	Rabe 1954
150.0	1908.00	0.51	2.40	0.81	90.0	200.0	117.0	0.019	van Biesbroeck 1927
60.9	1956.6	0.57	5.91	0.21	29.1	4.5	139.5	0.010	Muller 1954
225.6	1975.8	0.27	1.60	0.78	79.0	6.7	82.6	0.013	Heintz 1955
30	1950	0.3	12.00	0.35	90	84.3	153.3	0.028	Harris 1947
20.93	1942.00	0.72	17.20	0.30	131.4	204.2	69.8	0.029	Baize 1956
144	1938.0	0.18	2.50	0.18	149.0	325.1	164.8	0.004	Muller 1954
27.22	1835.95	0.52	13.22	0.21	160.2	230.7	168.0	0.015	van den Bos 1946
124.14	1920.2	0.12	2.90	0.28	134.1	328.3	165.3	0.007	Muller 1954
106.67	1939.71	0.51	3.37	0.74	56.3	13.5	28.3	0.022	Baize 1953
128.57	1918	0.64	2.80	0.24	128.7	168.7	100.8	0.006	Muller 1954
31.70	1929.24	0.69	11.36	0.31	62.8	143.7	100.5	0.025	van den Bos 1950
27.0	1954.0	0.69	13.33	0.43	90	270	166	0.039	Crawford 1937
286	2041	0.33	1.26	0.88	44.6	42.6	6.3	0.028	Güntzel-Lingner 1956
22.00	1939.64	0.34	16.36	0.20	43.6	268.6	18.2	0.017	Hirst 1943
72.0	1961.2	0.28	5.00	0.26	143.9	132.5	109.1	0.011	Muller 1954
147.0	1935.3	0.56	2.45	0.92	32	100	84	0.020	van Biesbroeck 1954
108.0	1905.1	0.80	3.33	0.83	32.7	288.0	176.6	0.033	Tannenbaum 1938
796.16	2134.38	0.17	0.45	2.99	58.2	268.7	37.9	0.022	Wierziński 1955
63.16	1942.00	0.12	5.70	0.42	78.0	178.0	99.0	0.017	van den Bos 1953

El 7a

GC	AR 1950	D 1950	ADS	Cat		Con	m	m ₁	m ₂	Sp	Comp
32687	23 ^b 28 ^m 0	+30°33'	16800	β	1266	Peg	7.26	8.0	8.0	F5	A—B
32732	29.7	+06 49	16819	Hu	298	Psc	6.84	7.6	7.7	F5	A—B
32772	31.5	+31 03	16836	β	720	72 Peg	5.21	5.9	5.9	gK4	A—B
32802	33.0	—27 46	16850	See	492	Scl	6.68	6.8	7.8	F6+G2	A—B
33067	47.3	+27 24	17030	A	424	Peg	6.94	7.5	8.0	F0	A—B
33078	47.8	—51 59		Slr	14	Phe	7.73	8.5	8.7	G6	A—B
33268	56.9	+33 27	17149	Σ	3050	And	5.83	6.5	6.7	dG0	A—B
33334	59.6	+26 49	17175	β	783	85 Peg	5.85	5.9	9.0	dG1	A—B

P	T	e	n	a	i	ω	Ω	π dyn	Aut
47 ^a 9	1957.8	0.43	7°52	0"21	40°6	164°4	78°6	0"011	Russell 1948
31.0	1926.6	0.25	11.61	0.20	38.4	45.2	145.5	0.015	Muller 1954
218	1828.0	0.15	1.65	0.40	32.0	313.0	78.0	0.005	Widorn 1954
146	1898.1	0.15	2.47	0.66	33.2	206.0	63.4	0.017	Woolley-Mason 1948
85.2	1948.17	0.10	4.22	0.20	75.5	283.1	60.5		Florsch 1955
188	1935.0	0.01	1.91	1.00	145.6	45.2	33.2	0.025	Woolley 1948
813.6	1876.6	0.37	0.44	5.09	68.0	192.1	18.8		Franz 1955
26.27	1936.38	0.38	13.70	0.83	-50.0	274.4	108.6	0.085	Hall 1949



ELEMENTS OF SPECTROSCOPIC BINARY STARS

GC	Number in Boss General Catalogue
Con	designation of star and constellation
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
m	Apparent visual magnitude
Sp	Spectrum
P	Period of revolution (in days, a = in years)
T	Epoch of periastron
ω	Longitude of periastron from the ascending node in the direction of motion
e	Eccentricity
K_1, K_2	Semi-amplitude of radial velocity for components
γ	Radial velocity of barycentre of the system
a_1, a_2	Semi-major axes of orbits of the components (in millions of km)
MF	Mass-function $\frac{m_2^3 \sin^3 i}{(m_1 + m_2)^2}$
i	Inclination of orbit
N	Notes (E eclipsing variable, El elliptical variable)

Sp 1a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
59	33 Psc	00 ^h 02 ^m 8	—05 ^s 59	4.68	sgK0	72 ^a 93	22530.330	337 ^o 71	0.272
124	5 Cet	05.6	02 44	6.32	K2	96.41	20006.84	222.1	0.124
127	α And	05.8	+28 49	2.15	B8p	96.697	22136.821	74.83	0.533
193	+58 ^o 28	09.0	+57 56	7.08	cB9e+B5n	55.904	25634.780	313.3	0.033
287	35 Psc A	12.4	+08 33	5.87	gA9s	0.84166	26974.194	119.55	0.027
345	AO Cas	15.0	+51 09	var	O9np	3.52355	32191.85	335	0.030
	TV Cas	16.6	+58 51	var	A0+A0	1.81261	20117.742		0.0
450	1826	20.2	+29 11	6.89	A5	3.28325	29191.218	151.63	0.056
	2019	22.0	+31 06	6.8	B9	3.11276	31731.970	330	0.026
519	α Phe	23.8	—42 35	2.44	G5	3849	16202	20	0.33
546	B 82	25.5	+44 07	5.16	A2	3.95583	18841.590	233.2	0.152
696	13 Cet A	32.7	—03 52	5.24	dF7	2.08189	18402.33	var	0.1
	3264	33.4	+48 17	7.42	B2	13.504	31673.550	152	0.507
729	π And	34.2	+33 27	4.44	B4+B4	143.6065	27898.567	349.03	0.562
851	ρ Tuc	40.3	—65 45	5.46	F4	4.82022	19299.106	269.01	0.02
856	π Cas	40.7	+46 45	5.02	A5	1.96418	27535.740	—	0.0
891	YZ Cas	42.3	+74 43	var	A3s	4.46718	23964.657	—	0.0
934	23 Cas	44.4	+74 35	5.39	B9s	33.75	20577.41	269.71	0.405
940	ζ And	44.7	+24 00	5.13	gK1	17.7673	20037.675	80.60	0.017
989	ν And	47.0	+40 48	4.42	B5s	4.28284	18155.661	—	0.0
1136	η And	54.5	+23 09	4.62	gG5	115.71	30119.11	166.38	0.005
1169	5638	55.8	+46 46	6.75	B5s	10.418	28013.922	20.90	0.132
1202	U Cep	57.7	+81 36	var	B8+G2	2.493	23966.644	10	0.15
1253	σ Psc	01 00.1	+31 32	5.46	B9s	81.12	31308.667	345.2	0.898
1387	ζ Phe	06.3	—55 31	4.13	B7	1.66958	20709.85	90	0.14
1477	ζ Psc B	11.1	+07 19	6.49	F6	9.07504	39999.162	122.1	0.033
1681	47 And	20.8	+37 27	5.53	A3	39.393	—	—	0.6
1722	8634	22.9	+23 15	6.07	dF4	5.42908	33243.762	322.5	0.378
1787	γ Phe	26.2	—43 34	3.40	M1	193.79	17945.0	267	0.005
1817	9021	27.5	+70 00	5.95	dF6	134.078	29000.433	188.2	0.310
1852	9312	29.4	+16 42	6.81	G5	36.588	28088.87	178.8	0.203
2042	Σ 145 A	38.5	+25 30	6.26	F3+F3	4.43474	21940.987	295.58	0.108
2102	φ Per	40.5	+50 26	var	B1ep	126.626	24473.500	270.9	0.10
2108	10588	41.0	+31 56	6.42	G5	78.0073	31730.549	359.40	0.017
2243	α UMi	48.8	+89 02	2.12	cF8v	29*6	1899.5	332.0	0.63
2249	ζ Cet	49.0	—10 35	3.92	gK0	1652	14377.6	85.0	0.586
2272	α Tri	50.2	+29 20	3.58	dF2	1.73652	20793.821	135.56	0.121
2309	β Ari	51.9	+20 34	2.72	A5	106.9973	28010.944	24.17	0.892
2313	ω Cas	52.1	+68 26	5.03	B8s	69.92	20426.02	49.97	0.30
2347	ι Ari	54.6	+17 34	5.16	gG7	1567.66	20961.1	94.04	0.356
2527	κ Ari	02 03.8	+22 25	5.08	A0	15.2938	21844.134	359.19	0.608
2572	β Tri	06.6	+34 45	3.08	dA5	31.4009	25191.160	293.9	0.456
2633	ι Tri A	09.5	+30 04	5.43	gG4	14.732	22243.157	5.39	0.043
2633	ι Tri B	09.5	+30 04	6.99	F2	2.2365	22246.698	3.68	0.010
2653	6 Per	10.3	+50 50	5.40	gG6	1650	25200	270	0.75
2733	δ Tri	14.0	+34 00	5.07	dG0	9.92912	23309.427	21.50	0.059
2770	B 523	15.4	+01 31	5.82	dF8	93.50	23389.995	100.95	0.445
2855	14688	19.8	+16 39	6.78	A1s	4.37140	31705.498	90.00	0.047
3140	30 Ari A	34.1	+24 26	6.57	F5	9.851	21586.899	129.6	0.146
3245	12 Per	39.1	+39 59	4.99	dF9	331.0	15021.7	267.7	0.67

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^2 i$	$m_2 \sin^2 i$	N	Aut
16.43		- 6.56	15.856		0.030				Harper 1926
23.88		+ 1.11	31.400		0.133				Christie 1933
30.49		-11.69	34.310		0.172				Pearce 1937
85.5	215.5	-24.5	65.700	165.600		113.2	44.9		Pearce 1932
87.96	92.57	+ 0.37	1.018	1.071		0.26	0.25		McCormack 1934
236	200	-32.9	11.4		4.81			E	Struve, Horak 1950
87.92	150	+ 0.54	2.191	3.739		1.60	0.94	E	Plaskett 1922
54.49		+ 5.90	2.460		0.055				Tidy 1940
79.6	134.7	+ 4.76	3.41	5.76		1.07	0.63		Heard 1949
5.8		+75.2	290.000		0.066				Lunt 1924
41.7		+ 2.04	2.240		0.0288				Udick 1912
37		+ 9	1.060		0.0108				Luyten 1933
23.65		- 5.15	0.38		0.000012				Sharp 1949
47.50	117.4	+ 8.35	77.588	191.760		26.9	10.9		Pearce 1936
25.7		+13.55	1.700		0.0085				Lunt 1924
120.46	122.13	+12.86	3.253	3.298		1.47	1.45		Mannino, Grubissich 1955
71.46		+ 9.97	4.390		0.169			E	Plaskett 1926
16.32		- 4.06	7.020		0.0121				Young 1915
25.96		-23.75	6.342		0.0323			EI	S. Jones 1928
75.63	104	-23.91	4.454	6.125		1.50	1.10		Jordan 1910
17.89	19.83	-10.33	28.5	31.5		0.34	0.31		Gordon 1946
64.3		+12.9	9.131		0.2802				Šajn 1937
85		+22	2.9		0.16			E	Hardie 1950
54.27	60.00	+10.40	26.6	29.5		0.56	0.51		Pisani 1947
125	180	+18	2.840	4.093		2.8	2.0		Colacevich 1935
51.07		+10.35	6.340		0.124				Christie 1933
		+13							Jose 1951
14.50		-15.85	1.002		0.0014				Wright, Pugh 1954
15.8		+25.7	42.100		0.079				Wilson 1918
19.22		+ 1.10	34.900		0.095				Wright, Pugh 1954
29.97		- 3.49	14.780		0.0964				Heard 1940
81.5	88.6	4.6	4.942	5.372		1.16	1.06		Sanford 1921
40	80	+ 4	69	140		15	7.5		Hynek 1940
20.14		- 3.65	2.160		0.0662				Northcott 1949
4.05		-17.4	466.000		0.035				Moore 1929
3.30		+ 9.21	60.750		0.0033				S. Jones 1928
12.10		-12.65	0.287		0.0003				Harper 1915
37.63		- 3.68	25.027		0.0547				Petrie 1938
29.64		-24.82	27.190		0.164				Young 1915
10.78		- 4.86	217.000		0.166				Gordon 1946
34.45	35.48	+11.48	5.752	5.924		0.14	0.13		R. Jones
26.1		+10.4	9.930		0.0397				Struve, Pogo 1928
56.53	56.98	-19.09	11.441	11.532		1.12	1.12		Harper 1935
95.43	101.04	-19.8	2.934	3.107		0.91	0.86		Harper 1935
13.5		+27.3	199.830		0.1222				Christie 1936
8.82		- 6.4	1.200		0.0007				Pearce 1923
19.43		+25.75	22.371		0.051				Harper 1930
59.64		+13.86	3.574		0.092				Heard 1949
22.48		+14.42	3.013		0.0113				Adams, Joy 1916
21.4	24.8	-22.5	72.100	83.600		0.74	0.64		Colacevich 1935

Sp 2a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	c
3271	B 613	02 ^h 40 ^m 5	+67°37'	5.84	A2	2 ⁴ 53636	21895.898	0°93	0.014
3345	RZ Cas	44.4	+69 26	var	A0	1.19525	19449.732	154.7	0.052
3378	π Ari	46.5	+17 15	5.30	B8	3.854	20370.259	78.27	0.042
3413	+57°651	48.0	+58 07	6.27	A1	8.2504	24854.892	212.74	0.027
3462	τ Per	50.7	+52 34	4.06	gG1+A5	1515.6	15693.4	234.6	0.734
3733	β Per ab	03 04.9	+40.46	var	B8	2.86730	—	267.8	0.033
3733	β Per abc	04.9	+40 46	var	B8	1*873	1903.38	93.0	0.14
3733	β Per d	04.9	+40 46	var	B8	188*4	1841.60	87	0.25
3836	CC Cas	10.1	+59 22	var	O8+O8	3.36897	24426.705	300.78	0.102
3888	+34°610	12.9	+34 30	6.42	A2	5.54348	23080.361	90.66	0.040
4070	σ Tau	22.1	+08 51	3.80	gK1	1654.9	29974.34	155.63	0.263
4184	5 Tau	28.1	+12 46	4.28	gG7	960	14889.565	326.32	0.397
4236	21912	30.3	+39 44	5.80	A0	0.91719	—	—	0.0
4258	τ^s Eri	31.6	—21 48	4.32	B8n	6.2236	24446.55	313	0.20
4264	22124	31.9	+31 51	6.76	F2	1.32639	29146.808	32.6	0.024
4461	σ Per	41.2	+32 08	3.94	B1	4.41916	18217.924	—	0.0
4517	β Ret	43.6	—64 58	3.80	G9	1911.5	20086.1	13.8	0.210
4530	B 850	44.0	+70 43	5.40	A2	15.5132	29186.817	107.41	0.221
4688	ζ Per	51.0	+31 44	2.91	cB1	1.765	32865.600	349	0.45
4728	43 Per	52.9	+50 33	5.47	sgF4+F4p	30.4338	23797.270	214.36	0.612
4801	τ^s Eri	57.8	—24 09	4.69	A0p	5.95367	17600.161	151	0.100
4805	λ Tau ab	57.9	+12 21	var	B3	3.95294	21510.707	72.6	0.055
4805	λ Tau abc	57.9	+12 21	var	B3	30.0	23764.58	169	0.05
4943	SZ Cam	04 03.3	+62 12	7.04	O9.5	2.698	—	—	0.0
4943	AG Per	03.7	+33 19	var	B3+B3	2.02858	24039.335	30.10	0.051
5099	μ Per	11.2	+48 17	4.28	cG2	283.272	30518.418	266.51	0.057
5103	52 Per	11.5	+40 22	4.89	cG3+A5	1576.44	25927.40	66.7	0.407
5174	b ¹ Per	14.5	+50 10	var	A2	1.52738	18956.643	270.95	0.047
5201	v ⁴ Eri	16.0	—33 55	3.59	B9	5.0105	17562.266	124.33	0.014
5201	57 Tau	17.9	+13 45	6.86	F5	3.05911	31706.09	193.8	0.017
5315	O Σ 82 A	19.9	+14 56	7.09	F9	4.00000	22274.812	12.74	0.060
5315	63 Tau	20.5	+16 40	5.68	A4s	8.4178	19818.843	189.2	0.101
5436	θ^s Tau	25.8	+15 46	3.62	gA7s	140.751	28608.791	48.8	0.76
5478	+72°227	27.7	+72 25	5.97	A5	4.195	15950.989	18.90	0.043
5599	88 Tau	32.9	+10 04	4.38	A3s	3.57124	19734.996	—	0.0
5609	58 Per	33.2	+41 10	4.46	cG2	10470	22768	197.0	0.65
5642	+7°676	35.2	+07 13	6.89	B3p+B5	2.2075	24807.936	2.38	0.076
5658	3 Cam A	36.0	+52 59	5.31	gG6	121	21137.55	285	0.019
5716	τ Tau	39.2	+22 52	4.33	B5n	1.5047	17892.500	242.88	0.087
5716	30353	45.2	+43 12	7.7	A5p	359.7	35138	265	0.27
5847	B 1131	45.8	+18 38	6.79	G1	45.454	23030.461	26.48	0.391
5856	+32°840	46.1	+32 30	5.94	A3	7.0507	26327.626	289.66	0.033
5911	π^4 Ori	48.5	+05 31	3.78	B2s	9.5201	32855.212	161	0.10
5978	π^s Ori	51.6	+02 22	var	B2s	3.70037	17921.64	161.8	0.073
6017	7 Cam	53.3	+53 40	4.44	A2s	3.8846	18281.176	217.14	0.013
6123	ϵ Aur	58.4	+43 45	var	cF0ep	27*08	1924.2	350	0.33
6137	ζ Aur	59.0	+41 00	var	cK4+B7	972.16	15122.471	330.13	0.411
6246	66 Eri	05 04.3	—04 43	5.19	B9+B9	5.52242	23087.575	335.9	0.074
6267	103 Tau	05.1	+24 12	5.50	B3	58.21	24221.266	273.88	0.189
6381	ρ Ori	10.7	+02 48	4.64	gK3	1031.40	26182.46	17.9	0.098

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^2 i$	$m_2 \sin^2 i$	N	Aut
55.03		+ 4.22	1.918		0.044				Harper 1930
69.30		-38.32	1.137		0.041			E	Jordan 1914
24.77		+ 7.81	1.312		0.0061				Young 1917
12.88		- 5.80	1.423		0.0017				Harper 1935
19.00		+ 2.15	268.900		0.337				Colacevich 1936
43.96		+16.30	1.732		0.0253			E	McLaughlin 1934
9.30		+ 2.21	78.000		0.0583				Eggen 1948
			37						Eggen 1948
141.65	291.79	- 4.19	6.528	13.447		18.88	9.17	E	Pearce 1927
62.18		+24.24	4.732		0.138				Harper 1932
4.39		-20.1	96.4		0.0131				Jackson 1956
8.25		+14.18	99.955		0.0433				Harper 1924
95.66		+ 2.72	1.206		0.0834			EI	Harper 1935
107	103	+15.0	8.970	8.640		2.87	2.76		Struve 1926
63.67		- 4.90	1.161		0.0355				Northcott 1940
111.92	160.0	+18.46	6.801	9.717		5.42	3.79		Jordan 1910
5.19		+51.11	133.400		0.0259				S. Jones 1928
22.20	24.69	+15.99	4.597	5.113		0.080	0.072		Petrie 1940
6.0		+22.2			0.13				Bouigue 1950
49.38	57.10	+25.66	16.343	18.898		1.01	0.88		Harper 1928
37.6		+24.9	3.1		0.032				Sahade 1950
55.95		+15	3.037		0.072			E	McLaughlin 1934
8.60		+16.5	3.540		0.0020				McLaughlin 1934
100		- 3							Wesselink 1941
164.97	187.32	+15.84	4.549	5.165		4.86	4.29	E	Plaskett 1925
20.67		+ 7.74	80.4		0.25				Johnson, Neubauer 1946
18.08		- 4.5	358		0.737				Osawa 1956
43.10		+19.83	0.904		0.0127			EI	Heard 1938
63.76	63.85	+17.6	4.393	4.468		0.56	0.55		Paddock 1915
71.03	73.86	+36.13	2.988	3.107		0.492	0.474		Northcott, Wright 1952
36.1		+37.4	1.980		0.0193				Sanford 1921
37.6		+35.0	4.330		0.0457				Jantzen, Harper 1935
26.7		+38.5	33.585		0.0764				Petrie 1940
31.81		+ 8.87	1.831		0.0140				Harper, 1930
76.32		+28.4	3.748		0.164				Wilson 1913
12.8		+ 5.9	1.400		1.01				Sanford 1953
124.9	235.8	+25.3	3.780	7.140		7.0	3.7		Pearce 1932
28.19		-40.47	46.900		0.28				Cannon 1918
44.34		+13.55	0.914		0.0135				Parker 1910
51.3		+ 7.1	244		4.5				Heard, Boshko 1955
13.57		+54.66	7.810		0.0092				Sanford 1925
57.81		+20.32	5.602		0.141				Harper 1932
25.04		+26.82	3.262						Bouigue, Castanet 1954
60.41		+21.47	3.07					EI	Miczaika 1950
35.15		- 8.93	1.877		0.018				Harper 1911
15.7		- 2.5	2014		3.34			E	Kuiper, Struve 1937
23.78		+10.73	294.300			22	10	E	Harper, Wood 1951
97.0	111.0	+30.9	7.300	8.400		2.5	2.2		Frost, Struve 1924
36.73		+16.22	28.900		0.280				Hill 1930
8.70		+40.5	122.8		0.0695				Bertiau 1956

Sp 3a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	a	e
6410	β Ori BC	05 ^h 12 ^m 1	-08°15'	6.67	B9	9 ^a 860	29633.196	10°	0.1
6411	14 Aur	12.1	+32 38	5.14	gA7s	3.789	20802.715	19.70	0.033
6427	α Aur	13.0	+45 57	0.21	gG5+G0	104.023	33481.10	343.04	0.015
6463	CD Tau	14.6	+20 05	6.84	F2s+F2s	3.4347	24837.932	—	0.0
	EO Aur	14.8	+36 34	7.56	B5	4.0657	30734.445	51.1	0.051
6473	16 Aur	14.9	+33 19	4.81	gK3	434.8	18690	40	0.1
6476	AR Aur	15.0	+33 43	var	A0	4.13458	28110.463	42.5	0.009
6543	+27°758	17.8	+27 55	6.30	B9	5.43373	28203.121	74.6	0.076
6550	B 1275	18.0	+29 31	5.72	A1n	2.15165	21138.241	—	0.0
6655	η Ori Aab	21.9	-02 26	var	B1	7.98926	15720.821	42.3	0.016
6655	η Ori Aabc	21.9	-02 26	var	B1	9*2	1900.0	270	0.1
6685	35587	23.2	+00 29	6.02	B3n	2.88840	33202.34	198.81	0.12
6713	ψ Ori A	24.2	+03 03	4.66	B2	2.52596	34011.83	190.8	0.063
6847	δ Ori A	29.4	-00 20	2.48	O9	5.73248	32509.466	70.8	0.085
6849	χ Aur	29.5	+32 19	4.88	cB5s	655.16	20629.78	135.52	0.171
6884	VV Ori ab	31.0	-01 11	var	B1n	1.48538	19836.021	—	0.0
6884	VV Ori abc	31.0	-01 11	var	B1n	120	19819	40	0.30
6907	φ^1 Ori	32.1	+09 27	4.53	B0s	8*4	1908.3	105	0.22
6927	G Dor	32.7	-64 16	5.30	G8	180.8757	23108.42	333.0	0.51
6935	θ^a Ori A	32.9	-05 27	5.17	O9p	21.0315	30639.455	151.0	0.131
6937	ϵ Ori	33.0	-05 56	2.87	O9s	29.13507	29999.610	116.8	0.758
6985	ζ Tau	34.7	+21 07	3.00	B2ep	132.91	318.51	318.51	0.162
7047	125 Tau	36.6	+25 52	5.00	B3	27.864	20471.607	335	0.55
7091	37756	38.3	-01 09	5.00	B3	27.1546	29991.098	84.6	0.73
7389	136 Tau	50.2	+27 36	4.54	A0	5.969	19362.52	191.44	0.022
7402	TU Cam	50.5	+59 53	var	A0	2.93325	21938.356	8.51	0.037
7436	57 Ori	52.0	+19 45	5.89	B3+B5	7.8271	24141.590	67.0	0.250
7451	α Ori	52.5	+07 24	var	cM2	5*781	25444.7	323	0.200
7539	59 Ori	55.8	+01 50	6.06	A5	2.74050	32141.143	183.0	0.108
7543	β Aur	55.9	+44 57	var	A2n+A2np	3.96004	17100.732	204.35	0.0
7565	2 Mon	56.7	-09 34	5.10	A5	9.3553	19673.815	35.41	0.208
	RW Gem	58.4	+23 08	var	B5+F5	2.87	—	—	0.0
7635	μ Ori A	59.6	+09 39	4.31	A2s	4.44746	23862.224	—	0.0
7676	1 Gem	06 01.1	+23 16	4.30	gG5	9.590	21898.741	203.28	0.206
7723	40 Aur	03.1	+38 29	5.31	A3	28.28	20468.197	178.41	0.556
7772	ν Ori	04.7	+14 47	4.40	B3s	131.26	17975.16	1.58	0.599
7969	η Gem	11.9	+22 31	var	gM3	2983	26570	168	0.53
8013	43246	13.2	+28 52	7.3	F8+B8	23.1756	29926.119	133.6	0.024
8151	45 Aur	17.7	+53 29	5.41	dF4	6.5013	23634.166	330.60	0.019
8170	ζ CMa	18.4	-30 02	3.10	B5s	675	16508.0	207	0.57
8214	δ Col	20.3	-33 25	3.98	G1	868.78	19915.02	117.08	0.695
8224	IM Mon	20.5	-03 15	6.58	B5n+B8n	1.19033	24942.706	9.2	0.036
8281	RR Lyn	22.2	+56 19	var	A5s	9.945	19341.776	152.9	0.081
	45910	27.9	+05 55	6.7	Be+gM2	232	32865	—	0.0
8474	WW Aur	29.2	+32 30	var	A4s+A4sp	2.52501	29781.692	—	0.0
	46792	30.9	-61 50	6.34	B5	2.9723	32001.129	39	0.10
8631	+6°1309	34.7	+06 11	6.06	O8ep	14.414	23031.870	181.95	0.035
8969	τ Pup	48.7	-50 33	2.83	G8	1066.0	20992.8	64.0	0.088
8972	A Car	48.8	-53 34	4.38	G3	195.32	21344.0	—	0.0
9449	+25°1594	07 06.5	+25 49	7.01	G6	32.8092	23071.941	82.1	0.080

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^3 i$	$m_2 \sin^3 i$	N	Aut
25.0	32.6	+19.1	3.373	4.398		0.1134	0.0837		Sanford 1942
21.56		-10.74	1.123		0.0039				Harper 1916
26.38	27.47	+29.14	37.723	46.430		2.91	3.03		Struve, Kilby 1953
95.8	101.3	-27.4	4.525	4.784		1.40	1.33	E	Sanford 1928
226.9	227.5	-1.06	12.67	12.70		19.75	19.69	E	Pearce 1946
14.8		-27.5	88.04		0.146				Christie 1936
106.5	120.9	+25.6	6.055	6.873		2.68	2.36	E	Harper 1937
26.8		+5.8	1.995		0.011				Stilwell 1947
113.27	129.80	-19.70	3.351	3.840		1.71	1.50		Harper 1926
103.7		+27.6	15.900		2.51			E	Miczaika 1951
17.5		+19.5	805.000		1.84				Pogo 1928
71.2		+16.8	2.808		0.106				Duflot 1953
141.1		+12.21	4.890		0.732				Chopinnet 1953
99.7	262.6	+11.8	7.9	20.6		20.5	7.9	E	Pismis, Haro, Struve 1950
20.53		-0.15	182.300		0.56				Young 1916
138.4	138.0	+23.6	2.826	2.826		1.6	1.6	E	Huffer 1949
13.0			20.460		0.0238				Daniel 1915
13.3		+33.2	54.000		0.6954				Struve 1925
22.4		+9.85	47.900		0.1344				Lunt 1924
105.8		+34.5	30.0		2.52				Munch 1943
115.2	195.8	+26.6				15.9	9.4		Pearce 1953
8.92		+21.5	16.08		0.0094				Underhill 1952
25.5		+14.8	8.160		0.0280				Cannon 1916
88.5	137.9	+36.2	22.380			6.36	4.08		Pearce 1953
48.9	71	-17.1	4.011	5.826		0.63	0.44		Cannon 1915
76.32		+11.92	3.065		0.1337			E	Mannino 1954
74.3	194.0	+7.2	7.750	20.240		10.3	3.9		Pearce 1932
3.08		+20.33	81.773						
55.6		+45.3	2.093		0.0600				Nadeau 1952
107.46	111.49	-17.06	5.851	6.071		2.21	2.17	E	Smith 1948
57.1	66	+22.2	7.200	8.370		0.92	0.79		Elvey 1924
65		+5	2.56		0.082				Struve 1946
29.0		+45	1.800		0.0113				Bourgeois 1929
11.74		+19.71	1.510		0.0015				Young 1919
51.38	62.51	+16.91	16.550	20.140		1.35	1.11		Young 1917
34.09		+22.10	49.270		0.2773				Harper 1911
8.8		+17.6	306.000		0.1287				McLaughlin 1944
67.2	31.3	+0.5	21.4	10.0		0.73	1.57		Petrie 1948
31.74		-1.52	2.837		0.0216				Harper 1925
13.5		+32.2	104.000		0.098				Colacevich 1944
10.61		-2.56	91.120		0.0405				S. Jones 1928
172.8	263.5	+8.3	2.827	4.310		6.2	4.1		Pearce 1932
67.19		-13.74	9.127		0.3101			E	Harper 1935
52		+10	166						Merill 1952
117.11	121.51	-9.39	4.066	4.219		1.81	1.75	E	Slocum 1942
119		+34	4.8		0.50				Sahade, Dessy 1950
206.38	246.7	+23.94	40.880	48.868		75.6	63.3		Plaskett 1922
4.14		+36.36	60.5		0.0078				S. Jones 1928
24.8		+26.0	66.880		0.313				Wilson, Huffer 1918
27.5		+19.7	12.383		0.0705				Sanford 1922

Sp 4a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
9643	56310	07 ^h 13 ^m 7	-16°09'	6.79	B3	2 ^a 77035	28148.438	143°53	0.21
9734	UW CMa	16.6	-24 28	var	O8sp	4.39351	29665.038	51.5	0.062
9736	τ CMa	16.6	-24 52	4.40	O9s	154.80	25201.22	102.5	0.36
9758	R CMa	17.2	-16 18	var	A9	1.13594			0.013
9800	19 Lyn A	18.8	+55 23	5.61	B8n	2.25960	19031.632	126.1	0.076
9957	63 Gem	24.8	+21 33	5.27	dF4	1.93265	23430.048	104.84	0.002
9974	γ CMi	25.4	+09 02	4.60	gK4	389.0	00388.53	107.4	0.31
10038	59543	27.6	-13 53	6.94	B5	17.911	28141.544	214.77	0.52
10040	σ Pup	27.6	-43 12	3.27	M0	257.8	20418.6	349.3	0.17
10120	α Gem A	31.4	+32 00	1.99	A2s	9.21280	27543.938	266.38	0.499
10120	α Gem B	31.4	+32 00	2.85	A0	2.92832	27501.703	94.70	0.002
10277	α CMi	36.7	+05 21	0.48	dF5	40 ^a 23	1886.50	65.7	0.310
10354	+34°1657	39.5	+34 07	6.00	F3+F3	31.50	23884.45	44.0	0.208
10373	σ Gem	40.2	+29 00	4.26	gK1p	19.605	15824.019	330.25	0.022
10417	3 Pup	41.8	-28 50	4.10	cA2ep	137.767	30278.777	247.34	0.29
10655	α Pup	50.5	-40 27	3.76	G5	2660	17165	190	0.4
10802	V Pup	56.8	-49 07	var	B1p+B3	1.4545	—	—	0.0
10864	54 Cam	58.5	+57 25	6.52	G0	11.0764	22374.453	103.84	0.107
10995	28 Lyn	08 03.7	+43 24	6.24	A0	18.722	22015.449	208.1	0.174
11098	ϵ Vol	07.8	-68 28	4.46	B8	14.16833	19453.562	—	0.0
11215	h ² Pup	12.3	-40 12	4.43	K2	930	18060	140	0.4
	XZ Pup	12.4	-23 51	var	A0	2.19231	25850.943	200	0.10
11479	1 Hya	22.1	-03 35	5.67	dF2	1.56297	22650.082	123.92	0.051
11730	β 4638 A	31.0	+74 54	6.28	A5	4.285	24971.150	101.71	0.109
11781	Σ 1245 A	33.2	+06 48	6.04	F6	14.296	21599.474	220.80	0.276
11879	β 4705 C	37.0	+19 43	7.15	F1s+F1s	12.9117	25250.803	168.2	0.2
12102	ϵ Hya C	44.1	+06 36	7.5	F7	9.9047	23800.007	117.6	0.62
12243	+8°2134	49.6	+08 15	6.59	dG1	10.2504	24891.018	314	0.1
12381	H Vel	54.8	-52 32	4.77	B5	0.91470	17967.119	44.33	0.131
12451	w Vel	58.2	-41 03	4.42	F8	74.1469	22728.629	90.0	0.05
	CV Vel	59.0	-51 21	var	B3+B3	3.445	34094.567	143	0.016
12596	κ Cnc	09 05.0	+10 52	5.14	B8	6.39316	29012.081	161.04	0.139
12615	75 Cnc	05.9	+26 50	5.96	dG3	19.4589	22426.634	252.5	0.206
12635	ξ Cnc	06.5	+22 15	5.22	gG9	1700.76	28876.86	301.1	0.060
12696	a Car	09.7	-58 46	3.56	B3s	6.744	16533.81	115.84	0.18
12713	16 UMa	10.4	+61 38	5.23	dF9	16.2382	23049.617	169.25	0.09
12799	B 2484	14.2	+47 02	5.70	A1s	15.986	19408.027	355.2	0.054
12800	23 Hya	14.2	-06 09	5.40	gK4	922	18549.21	92.27	0.293
12938	κ Vel	20.6	-54 48	2.63	B3	116.65	16459.00	96.23	0.19
13173	S Ant	30.1	-28 24	var	A8+A8	0.64834	35139.929	—	0.0
13366	o Leo	38.5	+10 08	3.76	cF5+A3	14.4980	14656.477	—	0.02
13545	4 Sex	47.9	+04 35	6.24	dF6	3.05459	26435.252	0	0.014
13587	m Vel	49.7	-46 19	4.56	G5	329.30	16967.60	311.48	0.019
13700	19 LMi	54.6	+41 18	5.19	dF5	9.283	23498.595	361.09	0.048
13982	λ Hya	10 08.1	-12 06	3.83	gG9	1585.8	18795.1	238.9	0.138
14232	μ UMa	19.4	+41 45	3.21	gM0	230.089	25577.03	236.4	0.061
14260	89822	20.6	+65 49	4.92	A0	11.5832	18468.212	171.9	0.381
14541	TX Leo	32.4	+08 55	var	A2	2.445	27160.906	315.7	0.061
14609	36 LMi	35.0	+34 20	6.65	K2	1510.0	27408.4	37.6	0.65
14614	p Vel	35.2	-47 58	4.06	F0p+A3	10.21095	20259.381	184.62	0.541

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^2 i$	$m_2 \sin^2 i$	N	Aut
62.2		+24.4	2.317		0.041				E Neubauer, Rosen-Raad 1940 Struve, Sherman 1941 Struve, Pogo 1928 Struve, Smith 1950 Pearce 1932
216.4		+ 9.3	13.046		4.597				
52.1		+40.4	103.700		1.86				
31.5		-42.5	0.491		0.0037				
106.4	199.1	+ 4.2	3.296	6.168		4.3	2.3		
94.56	116.76	+24.38	2.513	3.103		1.05	0.85		Harper 1925 Christie 1934 Neubauer, Rosen-Raad 1940 Wilson 1918 Vinter-Hansen 1940
18.57		+46.80	94.400		0.26				
45.6		+ 4.7	9.592		0.10				
18.55		+87.3	64.800		0.164				
12.90		+ 5.21	1.417		0.0013				
31.88		- 1.16	1.284		0.0096				Vinter-Hansen 1940 S. Jones 1928 Harper 1926 Harper 1911 Neubauer, Johnson 1946
1.32		- 3.77	253.57		0.003				
45.18	52.43	-12.11	19.142	22.214		1.53	1.32		
34.21		+45.80	9.220		0.0812				
3.60		+25.43	6.24		0.0005				
11.8		+24.0	396.6		0.35				E Christie 1936 Popper 1943 Harper 1939 Harper 1936 Sanford 1909
199	342	+20	3.98	6.84		15.12	8.80		
60.69	62.03	+24.80	9.19	9.39		1.06	1.03		
64.6	71.5	+ 8.3	16.38	18.13		2.5	2.2		
66.67		+ 9.68	12.999		0.437				
10.8		+13.5	126.6		0.094				E Christie 1936 Struve 1946 Sanford 1922 Harper 1930 Joy, Abetti 1919
75		+22	2.24		0.094				
30.28		+71.3	0.650		0.0045				
63.53		- 7.42	3.721		0.1123				
22.74		+24.23	4.300		0.015				
64.0	65.6	+32.1	11.134	11.395		1.39	1.35		Sanford 1931 Sanford 1926 Sanford 1931 Neubauer 1931 Lunt 1924
35.0		+31.2	3.700		0.0206				
24.5		+ 3.5	3.436		0.0164				
46.31		+22.20	0.534		0.0081				
17.8		- 7.4	18.130		0.0433				
122.24	126.63	+27.9	11.53	11.94		5.61	5.41		E Feast 1954 Pearce, Riddle 1940 Sanford 1922 Shane 1956 Curtis 1907
66.87		+25.33	5.821		0.1928				
20.21		+12.3	5.296		0.0157				
4.41		- 7.7	103.0		0.0185				
21.5		+23.3	1.960		0.0066				
34.78		-14.99	7.730		0.07				Young 1923 Harper 1916 S. Jones 1928 Curtis 1907 Popper 1956
63.34	73.64	-13.11	12.026	13.981		1.48	1.27		
9.98		- 7.65	121.000		0.0832				
46.5		+21.9	73.200		1.15				
92.3		+15	1.2		0.05				
54.0	63.1	+27.07	10.775	12.571		1.30	1.12		Plummer 1908 Popper, Šajn 1948 S. Jones 1928 Harper 1935 S. Jones 1928
100.3	105.4	+17.4	4.808	4.418		1.41	1.41		
14.07		+11.02	63.700		0.0953				
15.24		-10.78	1.943		0.0034				
3.74		+19.39	80.800		0.0084				
7.43		-20.4	23.46		0.0097				E Lynds 1956 Schlesinger 1912 Mohler 1936 Christie 1934 Sanford 1918
34.07		- 0.10	5.020		0.0376				
55.4		+14.9	1.860		0.043				
9.22		+12.62	145.000		0.054				
42.34	52	+19.25	4.981	6.107		0.28	0.24		

Sp 5a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
14631	φ^1 Hya	09 ^h 36 ^m 1	-16°37'	5.11	gK0	1200 ^d	20760	270°	0.1
14783	TX UMa	42.4	+45 50	var	B8+F2	3.06332		356.4	0.029
14793	93075	42.9	+57 11	7.03	A9	1.8052	30170.030	—	0.0
14974	ω UMa	51.1	+43 27	4.84	A0	15.8401	17991.101	11.95	0.264
15302	64 Leo	11 05.0	+23 36	6.39	A2	40.45	28294.094	330	0.10
15335	+82°325	06.7	+82 00	7.06	dG3	18.8922	23154.071	332.97	0.282
15424	TT Hya	10.8	-26 12	var	A3+G5	6.95340		319.8	0.12
15514	98088	14.4	-06 52	6.03	gF0p	5.905	34419.012	309.25	0.176
15537	ξ UMa A	15.5	+31 49	4.41	dG0	669.17	18582.0	320.0	0.531
15537	ξ UMa B	15.5	+31 49	4.87	dG0	3.9805	25000.000	—	0.0
15558	55 UMa	16.4	+38 28	4.78	A0n	2.5	21412.762	173.4	0.11
15778	99967	27.7	+46 56	6.49	K0	74.861	30852.014	218.70	0.029
	100018	28.1	+41 35	6.99	F2	7.39902	33716.669	71.6	0.377
16173	93 Leo	45.4	+20 30	4.54	dF4	71.70	18088.405	270.81	0.008
16192	+17°2402	46.7	+16 31	5.95	A3	2.7818	23521.231	61.75	0.018
16199	B 3102	47.1	+35 13	5.76	dF5	32.864	26003.941	228	0.175
16311	95 Leo	53.1	+15 55	5.49	A3s	6.6254	24940.615	4.1	0.02
16423	31 Crt	58.3	-19 23	5.28	B2n	2.96310	16378.385	68.8	0.057
16463	θ^1 Cru	12 00.5	-63 02	4.48	A5	24.4828	19453.347	358.87	0.609
16490	θ^2 Cru	01.7	-62 53	4.98	B3	3.4280	18747.367	—	0.0
16659	4 Com	09.3	+26 09	5.81	gK4	461	22360.79	235.29	0.169
16672	B 3182	09.9	+77 54	5.12	A5	1.27100	20685.265	—	0.00
16754	B 3195	14.0	+33 20	5.08	gK0	1300	21750	300	0.3
16813	η Vir	17.3	-00 23	4.00	A0	71.9	17644.410	191.63	0.336
16829	107325	17.8	+26 54	5.72	gK2	0.49116	32285.030	180	0.30
16873	12 Com A	20.0	+26 07	4.79	dF2	396.49	23885.847	101.29	0.602
16952	α^1 Cru	23.8	-62 49	1.58	B1n	59.31	23959.0	164	0.20
16953	α^2 Cru	23.8	-62 49	2.09	B1n	56	23973.6	191	0.25
17005	108642	26.1	+26 30	6.48	A3	11.786	32291.386	133	0.09
17126	κ Dra	31.4	+70 04	3.88	B5e	0.89038	33407.360	282.82	0.09
17252	110533	38.4	+83 55	7.25	F7	5.0003	28260.828	128	0.034
17346	32 Vir	43.1	+07 57	5.24	A6n	38.324	34039.463	210.02	0.074
17440	112014	48.6	+83 41	5.81	A0	3.28655	24226.669	211.05	0.041
17672	δ Mus	58.8	-71 17	3.63	K2	847	21790	0.0	0.4
17773	ξ^2 Cen	13 04.0	-49 38	4.40	B3	7.64965	18077.493	308.63	0.353
18133	ζ UMa A	21.9	+55 11	2.40	A2sp	20.53839	31636.582	102.61	0.536
18144	α Vir	22.6	-10 54	1.21	B1	4.01416	26041.26	40	0.10
18359	B 3511	32.6	+37 26	4.96	dF2	2.61314	17022.522	214.76	0.040
18593	1 Cen	42.8	-32 47	4.36	dF0	9.94480	22737.382	137.7	0.247
18607	M Cen	43.5	-51 11	4.68	G5	437.00	24162.96	58.6	0.134
18616	+31°2540	44.0	+31 09	6.55	F5	39.28	28711.847	326.7	0.786
18623	3 Boo	44.4	+25 57	5.91	dF3	36.04	22014.483	258.15	0.490
18665	ν Cen	46.5	-41 26	3.53	B2	2.62516	20301.39	—	0.0
18755	h Cen	50.3	-31 41	4.76	B7	6.927	18733.25	147.23	0.23
18805	η Boo	52.3	+18 39	2.80	dG0	484.173	28136.19	326.33	0.257
18809	ζ Cen	52.4	-47 03	3.06	B3p	8.02352	29798.46	290	0.5
18939	ν^2 Cen	58.6	-45 22	4.39	F5	1025	23960	140	0.4
19019	α Dra	14 03.0	+64 37	3.64	A0p	51.38	17403.284	19.07	0.384
19127	12 Boo	08.1	+25 20	4.82	dF5	9.6045	17679.523	273	0.169
19142	4 UMi	09.0	+77 47	5.00	gK4	575.24	23104.38	287.3	0.07

K_1	K_2	γ	$a_1 \sin i$.10° km	$a_2 \sin i$.10° km	MF	$m_1 \sin^3 i$	$m_2 \sin^3 i$	N	Aut
0.0		+16.2	63.2		0.0075				E Christie 1936 Hiltner 1945 Northcott 1943 Parker 1911 Heard 1937
51.8	56.53	-16.5	2.18		0.0442				
49.19		-19.26	1.221	1.221		0.118	0.103		
20.64		-18.45	4.336		0.0130				
18		+2.9	9.913		0.0024				
40.1		-46.75	9.975		0.1111				
41.2	+17.5	3.9			0.05			E Sanford 1924 Sahade, Cesco 1946 Abt 1953 van den Bos 1928 Berman 1930	
73.12	-8.06	5.85		0.229					
7.97	-16	62.200		0.0214					
5.04	-16	0.276		0.0000					
38.5	54.5	-3	1.315	1.862		0.12	0.08		
28.77		+27.86	29.61		0.185				Henroteau 1919 Northcott 1947 Petrie, Laidler 1952 Cannon 1910 Petrie 1926
76.2	84.5	-3.02	7.180	7.965		1.33	1.20		
26.54		+0.17	26.170		0.1392				
30.97		-24.21	1.184		0.009				
36		-3.8	16.108		0.152				
57.6	80.0	-20.4	5.250	7.300		1.00	0.72		Šajn 1949 Struve, Morgan 1927 van Arnarn 1932 Moore 1931 Grattan 1926
120.5	225	+3	4.900	9.150		8.22	4.40		
46.07	56.1	-2.75	12.301	14.978		0.74	0.61		
51.34		+16.03	2.420		0.0482				
14.25		+21.30	89.032		0.1326				
63.2		+0.3	1.104		0.0333				Harper 1930 Lee 1916 Christie 1936 Harper 1935 Fehrenbach 1948
6.8		-41.5	115.96		0.0368				
30.51	43.72	+5.53	28.410	40.712		1.50	1.05		
36.6		-17	0.236		0.0022				
25.34		+0.48	110.4		0.34				
23.4		-10.3	18.500		0.070				Vinter-Hansen 1940 Luyten 1935 Luyten 1935 Fehrenbach 1948 Miczaika 1952
24.1		-1.4	18.000		0.073				
41.3		-1.9	6.667						
22.54		-10.97	0.275		0.0010				
79.72	82.67	-16.24	5.480	5.680		1.08	1.04		
48.05		-10.6	25.35		0.438				McKellar, Reeves 1954 Bertiau 1956 Plaskett 1926 Christie 1936 Neubauer 1931
108.34	128.86	-0.05	5.426	6.454		2.47	2.08		
7.8		+36.5	83.269		0.0321				
38.8		+14.3	3.680		0.038				
68.02	68.21	-8.50							
126.8	202	+0.5	6.965	11.096		8.97	5.63		Strobel Struve, Ebbighausen 1935 Harper 1938 S. Jones 1928 S. Jones 1928
9.48		+6.43	0.340		0.0002				
6.00		-23.91	0.795		0.0002				
12.29		-5.55	73.200		0.0818				
43.22		-8.22	14.432		0.0778				
54.01	65.82	+6.50	23.333	28.435		2.34	1.92		Šajn 1939 Petrie 1926 Wilson 1914 Paddock 1916 Bertiau 1956
20.63		+9.05	0.745		0.0024				
21.4		+5.2	1.984		0.0065				
8.42		+1.01	55.3		0.0276				
110.7	159.4	+6.5	10.58	15.24		6.4	4.4		
8.2		-0.5	105.9		0.0452				Popper 1943 Christie 1936 Harper 1910 Harper 1911 Young 1927
46.25		-17.03	30.173		0.4156				
68.40	72.05	+9.80	8.904	9.380		1.36	1.29		
11.57		+9.49	91.300		0.11				

Sp 6a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
19188	B 3644	14 ^h 11 ^m 1	—00°37'	5.81	dF4	2 ^a 6960	22744.103	—	0.00
19296	A Boo	15.9	+35 44	4.83	gK1	211.95	20561.18	223°42	0.54
19301	+11°2662	16.2	+10 44	7.13	A3	7.369	26466.450	317.43	0.199
19311	λ Vir	16.4	—13 09	4.60	A2	206.9	16263.0	92.2	0.25
19762	+22°2731 abc	38.1	+22 11	6.17	dF1	3320	25630.01	55.12	0.218
19762	+22°2731 bc	38.1	+22 11	6.17	dF1	101.56	23491.829	186.82	0.042
19972	39 Boo B	48.0	+48 56	6.8	F1	12.822	22379.490	97.05	0.394
20170	RR UMi	56.8	+66 08	var	gM5	750	22065.0	—	0.0
20195	δ Lib	58.3	—08 19	var	A1s	2.32735	23204.144	300.2	0.012
20281	i Boo B	15 02.1	+47 51	var	dG1+dG1	0.26781	—	—	0.0
20574	U CrB	16.1	+31 50	var	B5+B9	3.45220	25809.969	5.8	0.13
20606	+33°2574	15.5	+32 42	6.14	A3	3.5753	23211.641	24.54	0.079
20699	ϵ Lib	21.5	—10 09	5.08	dF3	266.95	14785.116	339.52	0.68
20795	β CrB	25.8	+29 17	3.72	gA8s	10 ^a 496	28971.3	185.4	0.406
20825	+47°2227	27.1	+47 22	5.96	A3	105.8	24346	30	0.1
20947	α CrB	32.6	+26 53	2.31	A0n	17.36	23175.835	304.22	0.377
	TW Dra	33.2	+64 04	var	A6+K2	2.80669	28532.508	11.1	0.027
21064	ζ^a CrB A	37.5	+36 48	5.07	B8n	12.58485	23855.681	90	0.030
21187	25 Ser	43.5	—01 39	5.37	B5n	38.937	19528.565	206.8	0.796
21447	π Sco	55.8	—25 58	3.00	B1	1.571	25047.023	90	0.05
21572	θ Dra	16 00.9	+58 42	4.11	dF8	3.0708	15368.962	126.11	0.014
21590	B 4088	01.5	+36 46	5.85	dF9+A0	108.075	29765.532	—	0.0
21609	β^a Sco	02.5	—19 40	2.90	B1n	6.82814	28286.484	35.0	0.262
21622	+8°3134	03.2	+08 14	6.14	A2	8.855	22846.704	265.41	0.376
21800	B 4129	10.0	+36 33	5.68	gK4	2150	24290	340	0.6
21863	σ CrB A	12.8	+33 59	5.76	dF8	1.13980	23869.111	94	0.017
21982	σ Sco	18.1	—25 28	3.08	B1	34.08	21715.35	308	0.36
22058	21 Her	21.7	+07 04	5.72	A1n	4.951	21773.086	355.92	0.511
22089	ζ TrA	23.1	—69 58	4.93	dG0	12.9762	18103.642	274.54	0.060
22100	ι TrA	23.3	—63 57	5.30	F3s	39.88796	23236.454	87.24	0.280
22193	β Her	28.1	+21 36	2.81	gG8	410.575	15500.374	24.6	0.550
22276	32 Her A	31.5	+30 36	6.66	F0	3.39430	28006.493	355.23	0.025
22314	+17°3053	33.2	+17 10	6.27	A0	10.56	22422.236	4.12	0.430
22468	39 Her	39.6	+27 01	5.91	dF2+dF2	2.3076	23923.856	—	0.0
22736	152248	50.7	—41 45	7.3	O9	3.10	—	—	0.0
22749	ϵ UMi	51.0	+82 07	var	gG5	39.4809	33083.47	323.5	0.039
22808	+13°3258	53.0	+13 42	6.16	F2	11.857	26576.253	267.90	0.298
22871	19 Dra	55.7	+65 13	4.82	dF7	52.11	14816.015	351.05	0.149
22935	ϵ Her	58.4	+31 00	3.92	A0	4.0235	18086.253	180	0.023
23071	B 4351	17 03.5	+48 52	6.32	K0	786	26275	0.00	0.3
23178	+12°3161	08.4	+12 32	6.46	A0	23.245	21780.290	129.85	0.427
23278	α^2 Her B	12.4	+14 27	5.39	F8	51.578	34791.026	67.5	0.022
23317	U Oph	14.0	+01 16	var	B5n+B5n	1.67735	18026.703	—	0.0
23359	u Her	15.5	+33 09	var	B3+B5	2.05102	18125.80	194	0.053
23564	158013	22.5	+57 03	6.55	A2	8.2159	31979.003	132.1	0.033
23617	47 Oph	24.0	—05 03	4.61	dF1	26.2742	18411.524	14.48	0.491
23647	+34°2971	25.0	+34 44	5.91	A2	5.9182	23585.527	35.74	0.031
	158013	26.1	+57 02	6.55	A2	8.2159	31979.003	132.1	0.033
23757	+12°3241	29.9	+11 58	6.18	A0	6.7984	22878.154	116.26	0.069
23804	B 4444	31.4	—32 33	5.71	Oe7	3.36657	26461.928	—	0.0

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^2 i$	$m_2 \sin^2 i$	N	Aut
24.34		+17.60	0.902		0.0040				Duncan 1921
18.02		-25.62	44.000		0.076				Young 1915
34.36		-28.99	3.344		0.029				Harper 1932
24.3	38.3	-10.9	66.900	105.000		2.93	1.86		Colacevich 1941
7.81		-0.11	247.973						Harper, Blanchet 1937
19.22		+1	26.818						Harper, Blanchet 1937
58.31	72.19	-28.23	9.450	11.700		1.27	1.03		Harper 1922
6.67		+6.85	68.800		0.023				Young 1927
75.60		-35.38	2.419		0.0144			E	McLaughlin 1934
115.4	231.1	+3.4	0.425	0.851		0.77	0.39	E	Popper 1943
50.8		-8.7	2.4		0.05			E	Sahade, Struve 1945
58.63		-25.85	2.865		0.0741				Christie 1927
14.00		-9.66	32.037		0.0255				R. Jones 1930
9.19		-18.03	442.000		0.24				Neubauer 1944
11.2		-17.0	16.210		0.015				Christie 1936
34.83		+2.61	7.701		0.0605			E	McLaughlin 1933
63.5		+2.6	2.447		0.0743			E	Pearce 1937
134.82	137.71	-29.61	23.310	23.820		13.35	13.06		Plaskett 1925
53.56		-12.57	17.38		0.138				Petrie, Phibbs 1950
138	180	-3.0	2.977	3.884		2.96	2.27		Struve, Elvey 1927
23.47		-8.5	0.900		0.0041				Curtis 1907
19.61	23.16	-1.92	29.100	34.400		0.48	0.40		Petrie
126.0	212	-3.8	10.32	17.36		14.24	8.46		Luyten, Struve, Morgan 1940
31.62		-21.54	3.568		0.023				Campbell 1921
16.0		-30.6	378.4		0.468				Christie 1936
60.12	68.18	-11.87	0.942	1.068		0.133	0.117		Tanner 1949
34.0		+2.5	14.8		0.112				Struve, Namara, Zebergs 1955
16.28		-34.36	0.953		0.0014				Harper 1928
7.41		+7.58	1.320		0.0005				S. Jones 1928
38.72		-5.59	20.380		0.213				S. Jones 1928
12.78		-25.52	60.280		0.0519				Plummer 1908
68.18		-16.24	3.181		0.112				McKellar 1935
62.41	101.36	-9.88	8.180	13.280		2.19	1.35		Young 1920
97.4	108.7	-12.6	3.114	3.426		1.11	0.99		Sanford 1926
215	215	-35.0	9	9	12.2				Struve 1944
31.77		-10.57	17.24		0.131				Climenhaga 1951
27.03		-5.05	4.207		0.021				Šajn, Melnikov 1936
17.14		-22.87	12.144		0.0263				Harper 1935
70.39	112.1	-24.03	3.890	6.200		1.6	1.0		Baker 1910
10.0		+12.8	103.1		0.0709				Christie 1936
27.67		+3.51	7.997		0.038				Harper 1920
36.12		-38.43	25.618		0.2583				Deutsch 1956
179.8	204.6	-11.5	4.147	4.718		5.27	4.63	E	Plaskett 1919
94.7		-20.9	2.667		0.1806			E	Smith 1945
33.93		-8.43	3.62		0.0280				Norris 1949
47.49	50.67	+0.44	14.947	15.948		0.88	0.82		Parker 1915
25.09		-22.73	2.041		0.0097				Christie 1925
33.931		-8.427	3.62		0.028				Norris 1949
50.18		-12.79	4.680		0.0886				Campbell 1922
215	215	-4	9.952	9.952		13.90	13.90		Trumpler 1930

Sp 7a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
23881	ξ Ser	17 ^h 34 ^m 7	-15°22'	3.64	A5	2 ^a 29228	19209.618	—	0.0
23944	ω Dra	37.2	+68 47	4.87	dF4	5.27968	17415.493	333°76	0.011
24075	+14°3329	42.0	+14 26	6.13	A3p	3.894	24701.985	74.29	0.04
24173	B 4507	45.8	+47 38	6.34	A2	2.82424	22106.713	30	0.017
24187	ν^1 Ara	46.4	-53 36	5.90	B3	3.170		29	0.04
24371	V453 Sco	53.0	-32 28	6.62	B05e	12.00421	28433.83	23.7	0.10
24450	Z Her	55.9	+15 09	var	F2p+F2p	3.99277		—	0.0
24549	164898	59.7	+45 21	7.44	B9	2.91694	31655.648	11.50	0.022
24641	70 Oph A	18 02.9	+02 31	4.28	dK1	18*101	1900.643	97.51	0.279
24667	40 Dra	03.8	+80 00	6.18	dF6	10.5217	21764.648	256.76	0.314
24856	μ Sgr	10.8	-21 04	var	cB8ep	108.2	17495.64	79.13	0.447
24927	168092	13.8	+56 34	6.41	F1	2.0476	22147.630	195.10	0.039
24947	RS Sgr	14.3	-34 08	var	B5+A2	2.41568	15023.085	41	0.09
25003	105 Her	17.1	+24 25	5.49	gK4	478	23540.65	234.47	0.398
25045	ξ Pav	18.6	-61 31	4.25	M1	2214	18076.27	187.2	0.264
25056	108 Her	19.0	+29 50	5.54	A4s	5.51460	19551.742	—	0.0
25122	γ Dra	22.0	+72 43	3.69	dF5	280.531	22440.160	122.56	0.452
	RZ Sct	23.8	-09 13	var	B2	15.19016	19643.07	138	0.05
25165	B 4669	24.0	+29 48	5.71	A3s	9.6120	22048.711	326.43	0.468
25176	d Ser abc	24.6	+00 10	var	G0+A2+A0	386		277	0.47
25176	d Ser bc	24.6	+00 10	var	A2+A0	1.85052		—	0.0
25234	60 Ser	27.1	-02 01	5.44	gG8	3.1558	20000.146	—	0.0
25273	δ^1 Tel	28.3	-45 48	5.33	B9	21.70564	35216.67	12.65	0.218
25274	RX Her	28.3	+12 35	var	A0+A0	1.77857	19658.588	—	0.0
25280	170829	28.5	+20 47	6.59	G5	26.390	30573.532	222	0.176
25348	+65°1276	31.1	+65 24	6.31	A3	14.3450	24710.897	295.93	0.210
25456	e Ser	35.0	-00 21	5.80	A3s+A3s	14.674	32304.628	224.8	0.211
25635	46 Dra	41.7	+55 29	5.08	A0	9.810	27945.341	155.5	0.022
25676	ζ^1 Lyr A	43.0	+37 33	4.29	dA9s	4.29991	18109.722	—	0.0
25730	β Sct	44.5	-04 48	4.47	cG7	834	22480.9	33.9	0.35
25773	174343	46.2	+49 23	7.18	F1+F1	4.2435	22160.044	—	0.0
25839	50 Dra	48.0	+75 23	5.37	A0	4.1175	20293.519	107.6	0.012
25847	β Lyr	48.2	+33 18	var	B8p+B2	12.92559	26758.137	310.7	0.024
25895	112 Her	50.1	+21 22	5.33	A0s	6.3624	24589.683	195.53	0.116
25905	o Dra A	50.5	+59 20	4.78	gG8	138.420	19258.16	274.31	0.114
	V356 Sgr	51.0	-20 19	var	B3+A2	8.89610	33900.827	—	0.0
25934	δ^1 Lyr	52.0	+36 54	5.51	B3n	88.112	19220.727	204.55	0.28
25954	113 Her A	52.6	+22 35	4.56	gG0+A3	245.3	19805.0	169.5	0.12
25996	R Lyr	53.8	+43 53	var	gM5	41.3	15621.6	41.25	0.14
25996	R Lyr ab	53.8	+43 53	var	gM5	41.3	18932.2	42.48	0.09
25996	R Lyr c	53.8	+43 53	var	gM5	5*		263.92	0.52
26052	FF Aq1	56.0	+17 18	var	cF6v	4.4714	25064.481	84.14	0.07
26059	176318	56.3	+38 12	5.75	B7s	2.91225		30.2	0.169
26147	+20°4022	59.2	+20 46	6.55	B2	15.9526	24698.747	262.24	0.159
26175	V599 Aq1	59.8	-10 48	var	B8	1.84908	25074.648	156.16	0.033
26315	Y Aq1	19 04.6	+11 00	5.10	B8	1.30226	18157.502	—	0.0
26318	B 4870	04.7	+41 20	6.15	B3s	1.03088	21735.647	20.02	0.015
26347	+16°3752	05.7	+16 47	5.99	dG4	21.998	26206.422	92.70	0.205
26361	Σ 2469 A	06.1	+38 51	7.48	A3	1.54039	22128.084	14.26	0.008
26374	+16°3758	06.4	+16 46	6.46	F2	4.812	23630.622	59.16	0.073

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^2 i$	$m_2 \sin^2 i$	N	Aut
19.35		-42.77	0.610		0.0017				Young 1911
36.26		-14.0	2.632		0.0261				Turner 1907
96.56	108.14	-32.39	5.148	5.786		1.83	1.63		Petrie 1928
60.15		-27.30	2.336		0.06				Harper 1919
154	181	-6	6.7	7.9		6.7	6.7		Sahade, Dessy 1952
192.6		-39.8	31.62		8.771			E	Struve 1944
88.2	101.8	-46.5	4.800	5.600		1.5	1.3	E	Adams, Joy 1919
65.18		-14.93	2.614						Northcott 1952
1.37		-7	119.6		0.0016				Berman 1932
46.16	51.50	+2.93	6.341	7.074		0.46	0.41		Boothroyd 1920
66.82		-8.23	148.110		4.0			E	Kohl 1923
105.09	108.12	-8.51	2.957	3.042		1.04	1.01	E	Harper 1921
85.1		+6.0	2.8		0.15			E	Sahade 1949
16.07		-14.36	96.904		0.16				Harper 1925
17.92		+12.40	526		1.188				S. Jones 1928
70.1	101.7	-20.2	5.320	7.710		1.72	1.18		Daniel, Jenkins 1914
17.96		+32.53	61.8		0.12				Vinter-Hansen 1942
23.5		-28.3	4.900		0.02			E	Neubauer, Struve 1945
28.49		+7.54	3.330		0.016				Young 1919
28		-23.3	131.000		1.16				Tilley 1943
90	100	0.0	2.270			0.694	0.624		Tilley 1943
3.55		+28.03	0.154		0.0000				Christie 1933
34.9		-7.6			0.0891				Buscombe 1956
130.6	146.5	-24.9	3.194	3.583		2.08	1.85	E	Sanford 1928
12.42		-58.96	4.44		0.0050				Norris 1949
68.29	72.01	-10.34	13.173	13.885		1.97	1.87		Petrie 1928
38.56	38.07	+11.39	7.621	7.523		0.320	0.324		Petrie 1948
28.10	34.11	-30.97	3.696	4.486		0.12	0.10		Petrie 1935
51.24		-25.97	3.030		0.0601				Jordan 1909
16.65		-21.9	178.000		0.33				Young 1927
79.72	82.67	-16.24	5.480	5.680		1.08	1.04		McKellar, Reeves 1954
79.12	83.90	-8.79	4.480	4.751		0.95	0.90		Harper 1919
183.48		-21.24	32.602		8.282			E	Sherman 1941
17.68		-19.8	1.537		0.0036				Meyer 1927
23.46		-19.52	44.363		0.183				Young 1920
73	190	+7	12.1	4.7					Popper 1955
33.68		-25.85	39.220		0.309				Jordan 1914
16.0		-23.8	53.580		0.102				Wilson 1913
2.63		-27.5	1.479		0.000076				
3.95		-36.6	2.235		0.00026				
4.55		-31.8	97.683		0.0112				
7.11		-14.37							Sanford 1935
79.3		-31.1	3.17		0.150				Bacchus 1950
55.08		-10.29	11.930		0.266				Millman 1928
150.58	241.18	-12.86	3.826	6.129		7.10	4.43		Pearce 1928
27.59		-18.65	0.494		0.0028				Jordan 1914
12.12		-21.19	0.172		0.0002				Boothroyd 1922
12.77		+14.44	3.952		0.0045				Albitzky 1933
88.69		-29.79	1.878		0.112				Harper 1930
86.03	86.04	+8.80	5.677	5.678		1.26	1.26		Harper 1925

Sp 8a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
26397	179094	19 ^h 07 ^m 3	+52°21'	5.93	sgK0	28 ^d 59	31048.179	330°1	0.041
26611	RS Vul	15.7	+22 21	var	B8+B9	4.47732	19654.866	236.26	0.053
26637	181144	16.5	+16 24	6.92	F7	5.3803	31638.518	348.74	0.018
26639	U Sge	16.6	+19 31	var	B9n+G2	3.38062	24721.497	196.4	0.030
26650	+37°3413	17.3	+37 21	6.19	A0	10.3932	23570.622	198.68	0.520
26669	26 Aq1	17.9	—05 31	5.10	sgK0	266.544	33420.207	152.65	0.833
26697	v Sgr	18.9	—16 03	4.58	B8p+F2p	137.939	19648.72	28.6	0.087
	Z Vu1	19.6	+25 29	var	B3n+B3n	2.45492	19679.911	—	0.0
26784	2 Sge	22.1	+16 50	6.03	A4s	7.390	20943.233	332.6	0.05
26995	+55°2215	30.2	+55 37	6.52	cG6	108.5707	23375.760	87.0	0.054
27185	σ Aql	36.7	+05 17	var	B3+B3	1.95027	28201.103	—	0.0
27206	B 5026	37.6	+54 51	5.86	dF4	7.6383	22201.398	46.74	0.527
27235	QS Aql	38.8	+13 42	var	B3	2.4968	23963.599	95.7	0.056
27391	δ Sge	45.2	+18 25	3.78	gM2+A0	3988	22500	270	0.75
	187399	46.6	+29 17	7.7	B9c	27.97	32465.98	210.7	0.35
27492	V380 Cyg	48.9	+40 28	var	B1	12.4255	19636.432	115.75	0.222
27525	187949	50.3	—14 43	var	A2	1.18287			
27601	S Sge	53.7	+16 30	var	cG1v	76.2	20279.0	202.28	0.246
27604	φ Aql	53.9	+11 17	5.29	A2	3.32068	23324.045	55.87	0.026
27670	θ^1 Sgr	56.5	—35 25	4.39	B5	2.10514	11140.645	—	0.0
27754	Σ 2613 A	59.1	+10 37	7.6	F4	4.4696	23802.192	294.5	0.10
	O Σ 398 A	20 05.5	+35 35	7.7	B0	8.33425	24039.940	0.50	0.264
27980	28 Cyg	07.6	+36 41	4.82	B3ne	226.0	22379.5	258.39	0.746
27999	18 Vul	08.5	+26 45	5.46	A1np	9.316	20304.628	103.15	0.012
28010	θ Aql	08.7	—00 58	3.37	B9s	17.12426	31636.344	34.45	0.607
28099	σ^1 Cyg	12.1	+46 35	3.95	cK1+B8	3802.84	22064.7	209.65	0.131
28144	22 Vul	13.3	+23 21	5.38	cG4	251.0	23415.850	121.0	0.042
28160	σ^2 Cyg	13.9	+47 34	4.16	cK5+B	1140.8	33126.8	216.6	0.274
28242	35 Cyg	16.7	+34 50	5.18	cF5p	2440.0	27388.8	342.7	0.506
28261	+45°3139	17.2	+46 10	6.28	B2	2.98474	23951.678	103.17	0.098
28295	β Cap abc	18.2	—14 56	3.25	dF8+B8	1374.126	21521.26	119.12	0.417
28295	β Cap bc	18.2	—14 56	3.25	B8	8.6780	28383.898	343.24	0.36
28374	α Pav	21.7	—56 54	2.12	B3s	11.753	16379.90	224.80	0.01
28405	194495	23.0	+21 19	7.09	B9	4.9052	28693.640	54.5	0.133
28604	195986	31.1	+43 01	6.41	B6s	5.38275	28775.557	57.1	0.069
28631	196133	32.0	+45 00	6.62	A2	87.687	31669.080	231	0.760
28679	+25°4299	34.0	+25 43	6.29	A2	11.088	26492.609	50.11	0.284
28711	ι Del	35.4	+11 12	5.43	A2s	11.039	22139.862	61.8	0.227
28725	71 Aql	35.8	—01 17	4.51	gG5	205.0	22311.55	321.43	0.128
28804	VW Cep	39.8	+75 13	var	G5	0.278		—	0.0
29010	V367 Cyg	46.1	+39 06	var	cA7se	12*3	1932.5	110	0.2
29010	V367 Cyg	46.1	+39 06	var	cA7se	18.5972	34268.398	133.19	0.070
29039	14 Del	47.4	+07 41	6.23	A2	10.883	26526.412	162.1	0.386
29098	198784	49.6	+37 48	6.97	B3	3.30353	31301.457	294	0.018
29114	Y Cyg	50.0	+34 28	var	O9n+O9n	2.99633		86.3	0.133
29150	57 Cyg	51.5	+44.12	4.68	B3	2.85483	28055.351	97.5	0.138
29241	+44°3639	54.8	+44 44	6.01	O6	46.608	22892.226	66.75	0.099
	200391	21 00.2	+27 36	7.29	G0+G5	0.69808	33130.752	62.6	0.017
29457	201032	03.1	+63 11	7.26	A5	2.29883	31709.396	81	0.047
29562	V389 Cyg	06.5	+30 00	var	B8v	3.3137	22521.230	—	0.0

K_1	K_2	γ	$a_1 \sin i$ ·10 ⁴ km	$a_2 \sin i$ ·10 ⁴ km	MF	$m_1 \sin^2 i$	$m_2 \sin^2 i$	N	Aut
40.31		+ 5.18	15.800		0.194				Young 1944
54.98	175.9	-22.04	3.388	10.842		4.34	1.35	E	Plaskett 1919
38.18		- 4.44	2.824		0.0311				Northcott 1947
69.69		-10.01	3.24					E	McNamara 1947
60.26	84.0	-14.86	7.356	10.254		1.18	0.84		Harper 1928
29.86		-18.00	60.57		0.1249				Franklin 1952
48.15		+11.9	91.010		1.582			E	Wilson 1914
96.35	213.74	-15.08	3.252	7.215		5.24	2.36	E	Plaskett 1920
52.95	73.8	+11.0	5.380	7.490		0.91	0.65		Young 1917
22.1		- 5.2	33.040		0.1222				Sanford 1925
164.2	208	- 4.5	4.403	5.491		5.84	4.61	E	Luyten, Struve 1939
89.81	91.12	-15.59	8.017	8.134		1.85	1.83		Harper 1919
47.31		-14.21	1.620		0.0293				Hill 1931
13.0		+ 1.4	2660		1.486				Christie 1936
104.5		-18.9	37.6		2.72				Merill 1949
94.01		- 3.87	15.590		0.99			E	Harper 1935
104		- 2	2.46		0.141				Popper 1949
15.03		-10.0	135.5		0.217				Herbig, Moore 1952
37.12		-28.24	1.694		0.0176				Harper 1935
15.9		+ 0.9	0.460		0.0009				Wilson, Huffer 1921
41.3		-43.0	2.526		0.0032				Sanford 1925
156.97	168.5	- 5.44	17.351	18.626		13.85	12.90		Plaskett 1926
12.20		-13.60	25.249		0.013				Losh 1932
78.49	86.31	-13.04	10.054	11.055		2.27	2.06		Harper 1918
51.01	63.68	-27.94	9.5	11.9		0.75	0.60		Cesco, Struve 1946
13.78	17	- 6.87	720.000	1224.000		12.0	7.0		Vinter-Hansen 1944
26.99		-23.75	93.072		0.5112				Harper 1924
16.65		- 6.12							Wright 1951
9.57		-17.3	277		0.142				Osawa 1956
115.54	142.61	- 8.93	4.719	5.825		2.90	2.35		Plaskett 1928
21.93	20.00	-18.94	395.050	360.300		4.35	4.77		Sanford 1939
37.9		0.0	4.226		0.040				Sanford 1939
7.25		+ 2.0	1.170		0.0005				Curtis 1907
82.2		+11.1	5.495		0.275				Šajn 1939
31.68		-16.88	2.339		0.0176				McKellar 1938
32.47		- 9.03	25.43		0.0854				Northcott 1948
58.7		-18.8	8.581		0.205				Šajn 1933
26.02		- 4.92	3.846		0.019				Harper 1935
9.78		- 6.09	27.347		0.0194				Harper 1926
230	75	-35				0.62	0.20		Popper 1948
17.5		- 2.0	1000		2.3			E	Christie 1933
51.3		- 2.8	13.1		0.259				Abt 1954
31.4		-30.2	4.335		0.0275				Šajn 1933
63.81		- 4.02							Jacobsen, Kraft 1949
245.0	241.5	-61.8	9.96	9.86		17.2	17.4	E	Redman 1921
117	126	-24	4.549	4.899		2.14	1.99		Luyten, Struve, Morgan 1940
42.22		- 5.78	28.076		0.374				Plaskett 1922
138.49	149.32	-25.22	1.326	1.433		0.90	0.83	E	Northcott, Bakoš 1956
47.68		- 6.59	1.50		0.026				Tanner 1949
26		-26.8	1.185		0.0060				Young 1921

Sp 9a

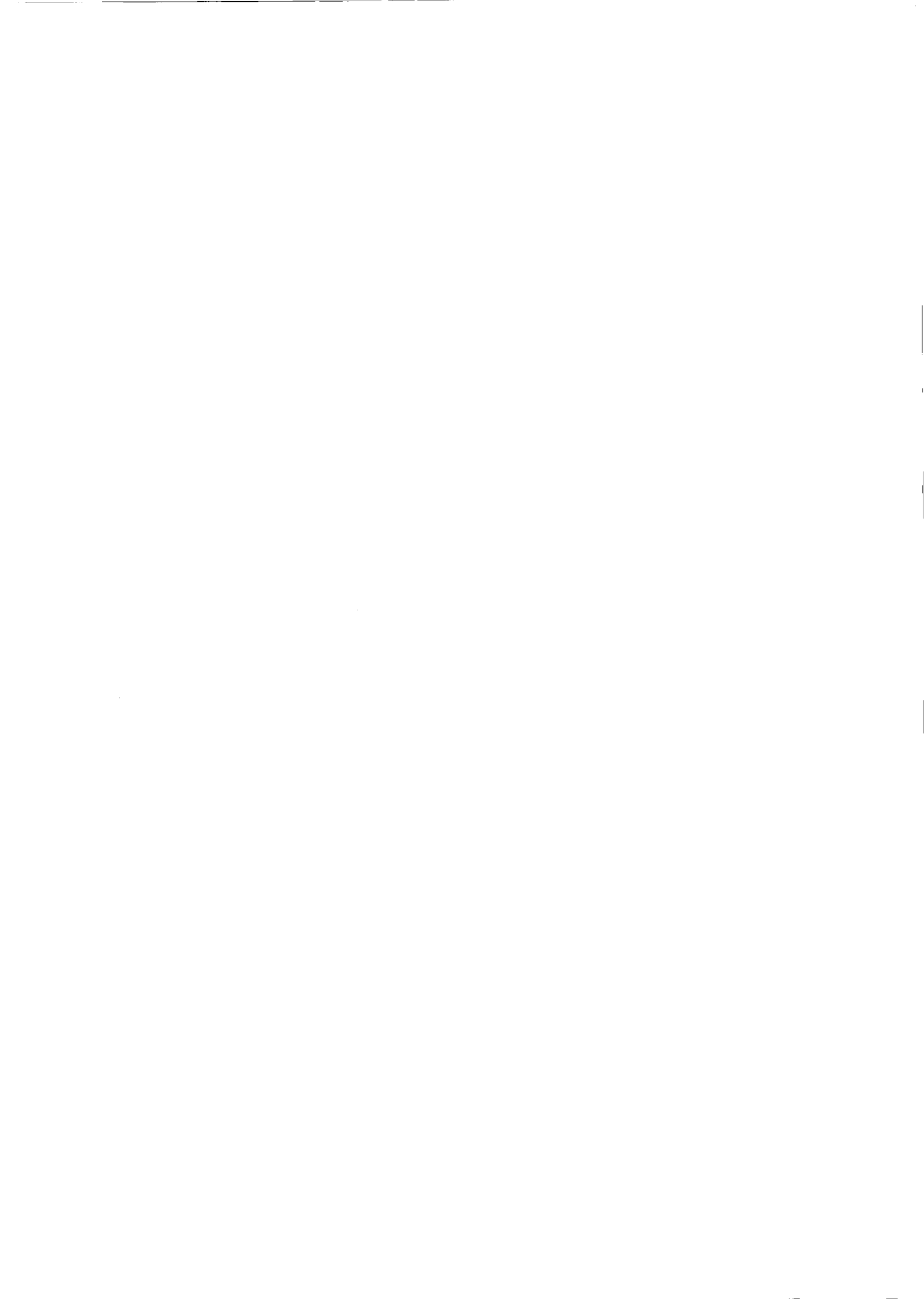
GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
29735	α Equ	21 ^h 13 ^m 3	+05°02'	4.14	dF6+A3	97 ^a 56	34162.05		0.0
29786	σ Cyg	15.4	+39 11	4.28	cB9p	11.043	21069.27	119°1	0.40
29804	+57°2309 ab	15.9	+58 24	6.41	B3e	5.41364	23635.140	58.5	0.014
29804	+57°2309 abc	15.9	+58 24	6.41	B3e	225.44	23803.98	16.6	0.226
29889	39°4529	19.1	+40 08	6.47	F8	3.24343	21801.549	357.55	0.022
29896	+32°4134	19.3	+32 24	6.03	A0	20.30	24363.558	219.67	0.441
29968	203858	21.9	+25 06	6.22	A1	6.9463	30006.249	—	0.0
30023	+18°4794	24.1	+19 09	6.06	A3	21.724	23302.555	—	0.0
30118	β Cep	28.0	+70 20	3.32	B2s	0.19048	—	—	0.0
30132	B 5536	28.7	+76 11	7.67	A6n	8.4455	17978.327	12.2	0.039
30229	+27°4107	33.1	+27 58	6.35	F3	12.21	23710.068	46.79	0.318
30289	ν Oct	36.0	—77 37	3.74	K0	1037	17506	90	0.25
30322	β 11160 A	37.4	+57 16	5.64	O6n	3.70861	22889.592	58.79	0.111
30328	EE Peg	37.6	+08 57	var	A4	2.62675	33881.509	5.1	0.08
30354	42 Cap	38.8	—14 16	5.28	dG1	13.17358	22069.255	175.42	0.158
30391	π^1 Cyg	40.3	+50 58	4.78	B3	26.23	31299.9	—	0.0
30394	77 Cyg	40.4	+40 51	5.48	A0	1.72897	21774.161	256.0	0.033
30396	B 5575	40.4	—19 51	6.17	A8n+A8n	6.3702	25486.567	—	0.0
30442	B 5591	42.1	+28 33	6.90	A9+A9	3.74860	22175.158	262.66	0.189
30450	κ Peg A	42.4	+25 25	4.27	dF2	5.97152	19054.957	148	0.031
30491	δ Cap	44.3	—16 21	2.98	A5n	1.02275	21451.86	149.06	0.019
30512	π^2 Cyg	44.9	+49 05	4.26	B3	72.0162	28410.6	238.1	0.034
30565	14 Peg	47.6	+29 56	5.00	A0	5.30465	29117.474	302.7	0.528
30574	B 5620	48.0	+66 34	6.51	F2	2.72574	28396.623	146.9	0.025
30618	AW Peg	50.0	+23 47	var	A2+F0	10.6228	—	—	0.0
30627	208095	50.3	+55 34	5.54	B6n+B9	17.3263	24415.682	269.9	0.224
30731	VV Cep	55.2	+63 23	var	cM2ep+B9	7450	23104	339	0.25
	208835	55.9	+46 37	7.39	A0	4.72015	23473.092	263.3	0.075
30830	Σ 2873 B	22 00.1	+82 38	7.37	G5	1.15221	23213.363	—	0.0
30872	32 Aqr	02.2	—01 09	5.23	gA8s	7.8327	21806.644	—	0.0
30890	209813	03.0	+46 59	6.52	K0	24.431	31660.819	60.38	0.027
30917	+47°3692	03.9	+47 59	6.16	B3	2.1721	22138.172	—	0.0
30932	ι Peg	04.7	+25 06	3.96	dF3	10.21304	27360.270	171.0	0.006
30985	AR Lac	06.7	+45 30	var	sG5+gK0	1.98324	26625.732	334.82	0.041
31183	α Tuc	15.1	—60 31	2.91	K5	4197.7	18666.4	48.5	0.385
31252	2 Lac	19.0	+46 17	4.66	B5	2.61639	27700.07	—	0.0
31442	213389	28.0	+49 06	6.52	K1	17.755	31656.953	103.34	0.023
31473	+28°4389	29.2	+29 17	6.32	A5	2.3409	24715.985	30.11	0.016
31556	214240	33.8	+49 49	6.20	B3+B8	10.9114	24340.542	67.54	0.253
31617	214652	36.8	+37 07	6.67	B3	1.25453	28253.055	307	0.022
31637	B 5846	37.5	—09 37	6.74	F6	21.6997	25172.797	213.1	0.38
31706	η Peg	40.7	+29 58	3.10	gG2	818.0	15288.7	5.60	0.155
31826	AH Cep	46.1	+64 48	var	B0n+B0n	1.77476	24076.621	106.3	0.034
31908	B 5900	50.6	+16 35	5.72	gK1	24.65	22240.992	—	0.0
31987	EN Lac	54.1	+41 20	5.54	B2s	12.097	33875.10	28	0.007
32169	218154	23 03.0	+24 23	7.01	A0	2.18063	26917.637	189.4	0.12
32208	+45°4147	05.0	+45 48	6.56	B3	3.3372	22151.272	125.67	0.233
32210	+58°2546	05.1	+59 27	6.28	B3s+B5	7.25105	21825.038	71.6	0.376
32237	π Cep A	06.3	+75 07	4.56	gG1	556.2	14126.33	5.70	0.281
32270	ι Gru	07.5	—45 31	4.10	G5	409.614	16115.569	240.76	0.656

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^3 i$	$m_2 \sin^3 i$	N	Aut
19.14	4.91	-17.08	25.8	6.64	0.0000	0.029	0.113		Deutsch 1954
1.98		-3.80	0.276						
40.0		-17.2	2.960						
21.9		-17.2	65.989						
62.23		+0.16	2.773						
45.71	78.95	-3.98	10.278	17.753	0.1607	1.87	1.08		Harper 1926
71.44	81.46	-19.46	6.820	7.780		1.37	1.20		Patten, McKellar 1942
41.45		-12.42	12.382						Harper 1927
21.3		-1.8							Rudkjobing 1949
79.71	80.28	-4.69	9.250	9.316		1.79	1.78		Harper 1935
51.95	65.24	-43.17	8.270	10.385	0.050	0.97	0.77		Harper 1925
8.0		+34.7	110.400						
75.86		-7.65	3.761						
84.1		-24.5	3.03						
23.0		-1.8	4.103						
16.5	110.35	-8.2	5.95	2.622	0.045	0.96	0.95		Fehrenbach 1948
109.70		-25.47	2.607						
82.1		-25.5	7.191						
92.1		+4.2	4.662						
41.7		-8	3.430						
65.67	40.35	-5.52	0.926	2.500	0.0301	0.082	0.075		Crump 1921
7.8		-12.3	7.720						
37.01		-23.89	2.293						
30.69		-15.25	1.15						
50		0	7.3						
108.3	165.8	-6.5	25.170	38.530	6.05	20.8	13.6	E	Pearce 1932
20.5	-20.6	2030							
42.0	-4.9	2.718							
105.6	112.4	-17.0	1.673						
6.82	+20.45	0.735							
33.14	119.19	-22.21	11.13	3.247	0.0922	1.39	1.40	E	Northcott 1947
127.7		-17.76	3.810						
41.5		+7.4	5.83						
120.02		-36.25	3.263						
7.23		+42.24	385.100						
74.8	96	-10	2.691	3.453	0.119	0.75	0.59		Luyten, Struve, Morgan 1940
40.17	+5.36	9.806							
79.18	+1.73	2.548							
83.27	129.44	-15.28	12.088						
63.78	-12.61	1.100							
56.5	60.3	-39.3	15.599	15.648	0.2345	1.47	1.38		Sanford 1931
14.20	+4.31	157.800							
225.3	261.2	-20.6	5.495						
33.20	-12.84	11.254							
23.4	-13.6	3.883							
54.0	146.7	+8.7	1.697	13.554	0.094	11.4	9.8	E	Crawford 1901
87.70		-15.13	3.910						
87.9		-4.6	8.121						
23.02		-19.63	168.970						
13.62		-4.17	57.900						
					0.215	4.8	2.9		Albickij 1949
					0.6228				Young 1920
					0.0462				Pearce 1932
									Harper 1925
									S. Jones 1928

Sp 10a

GC	Con	AR 1950	D 1950	m	Sp	P	T 2400000+	ω	e
32447	AN And	23 ^h 16 ^m 0	+41°30'	var	A7s+Ap	3 ^d 2195	21059.912	40°57	0.036
32462	94 Aqr	16.5	-13 44	5.27	G5	2323.6	29308.4	225.7	0.082
32683	AR Cas	27.7	+58 16	var	B3	6.06638	27881.842	45	0.27
32832	λ And	35.1	+46 11	4.00	sgG8	20.5212	29202.389	313.6	0.040
32833	74 Peg	35.1	+16 33	6.18	A0	11.2298	21916.942	326.38	0.037
33120	B 6129	50.0	+75 16	6.55	dK5	7.75310	20001.264	—	0.0
33168	+27°4642	52.5	+28 21	7.30	G8p	6.72418	22219.699	324.8	0.032
33184	224151	53.0	+57 08	6.05	B0n	13.4187	20801.379	0.0	0.1
33214	B 6148	54.6	+55 26	5.69	F3	12.155	22162.601	213.45	0.278

K_1	K_2	γ	$a_1 \sin i$.10 ⁶ km	$a_2 \sin i$.10 ⁶ km	MF	$m_1 \sin^3 i$	$m_2 \sin^3 i$	N	Aut
73.56		- 4.87 +10.8	3.240 174.8		0.133 0.040			E	Young 1917 Sarma 1962
60.0		-17.0	4.819		0.121			E	Luyten, Struve, Morgan 1940
6.64		+ 6.84	1.872		0.0006				Pearce, Walker 1944
26.70		-27.38	4.120		0.022				Smith 1925
39.88	49.70	+ 1.68	4.250	5.300		0.32	0.26		Christie 1934
37.3		-18.1	3.448		0.0361				Halliday
117.5	144	-24.3	21.600	26.400		13.5	11.0		Sanford 1936
71.82	72.97	+11.98	11.483	11.716		1.70	1.67		Harper 1923



VARIABLE STARS AND NOVAE

GC	Number in Boss General Catalogue		
Var	Designation of variable star and constellation		
AR 1950	Right ascension and declination for the epoch 1950.0		
D 1950			
Max min	Maximum and minimum (v visual, p photographic, pv photovisual, e photoelectric magnitudes)		
P	Period of variation (in days)		
Sp	Spectrum		
Type: E	eclipsing variable	RV	RV Tauri type
EA	eclipsing of the Algol type	RVa	RV Tau type with constant mean brightness
EB	eclipsing β Lyr type	RVb	RV Tau type with varying mean brightness
EW	eclipsing W UMa type	β C	β Cephei type
Ell	ellipsoidal variable	δ Sc	δ Scuti type
C	cepheid	α CV	α^2 Canum Venaticorum type
C δ	cepheid δ Cep type	RCB	R Coronae Borealis type
CW	cepheid W Vir type	RW	RW Aurigae type
RR	shortperiod cepheid of RR Lyr type	UG	U Geminorum type
RRa	shortperiod cepheid with asymmetrical light curve	UV	UV Ceti type
RRc	shortperiod cepheid with symmetrical light curve	Z	Z Camelopardalis type
M	Mira Ceti type	N	nova
SR	semiregular variable	Na	nova with a rapid development
SRa	semiregular of Z Aqr type	Nb	nova with a slow development (RR Pic)
SRb	semiregular of RR CrB type	Nc	nova with particularly slow development (RT Ser)
SRC	semiregular of μ Cep type	Nd	recurrent nova (T CrB)
SRd	semiregular of S Vul type	Ne	nova-like variable
I	irregular variable	SN	supernova
Ia	irregular of RW Aur type		
Ib	irregular of CO Cyg type		
Ic	irregular of TZ Cas type		

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GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
238	SV And	00 ^h 01 ^m 8	+39°49'	7.7 v	14.3 v	315 ^d 96	M6e	M
296	γ Peg	10.7	+14 54	2.8 v	2.86v	0.15175	B2s	βC
345	S Scl	12.9	-32 19	6.1 v	13.6 v	366.2	M3e-M8e	M
	AO Cas	15.1	+51 09	5.91p	6.08p	3.5232	O9n+O9n	EB
	TV Cas	16.5	+58 51	7.3 p	8.39p	1.81261	A0	EA
437	T Cet	19.2	-20 20	6.6 p	7.7 p	159	gM5e	SRb
444	T And	19.8	+26 43	7.7 v	14.3 v	280.44	M3e-M4e	M
458	T Cas	20.5	+55 31	7.3 v	12.4 v	445.0	M6e-M8e	M
472	R And	21.4	+38 18	6.0 v	14.9 v	409.20	S6e	M
474	S Cet	21.5	-09 36	7.6 v	14.7 v	319.75	M3e-M4e	M
	B Cas	21.9	+63 52	-4.0 v	>19? v			SN 1572 gal.
	TU Cas	23.6	+51 00	6.88v	8.03v	2.13930	F3-F5	CW (7.5-8.7p)
	AQ And	24.8	+35 18	6.9 v	8.2 v	346	Nb	SR (9.9-11.8p)
543	TV Psc	25.4	+17 37	4.6 v	5.2 v	49.1	gM3	SR
789	Z Scl	37.5	-34 14	6.8 v			F8	Invar
792	α Cas	37.7	+56 16	2.47v			gK0	Invar
	S And	40.0	+40 59	6 v	>16 v		Qu?	SN 1885 M 31
891	YZ Cas	42.3	+74 43	5.6 p	6.01p	4.46722	A3s	EA
	U Cas	43.6	+47 58	8.0 v	15.4 v	277.59	S5e-S8e	M
	RW And	44.6	+32 24	7.9 v	15.4 v	429.27	M5e-M8e	M
940	ζ And	44.7	+24 00	5.1 p	5.19p	17.7684	gK1	Ell
	RX Cep	45.4	+81 41	7.5 v	7.8 v		G5	I
	RV Cas	49.9	+47 08	7.6 v	15.5 v	331.00	M6e-M7e	M
1117	γ Cas	53.7	+60 27	1.6 v	3.0 v		B0pne	Ne
1202	U Cep	57.7	+81 36	6.63p	9.79p	2.49286	B8+gG8	EA
1387	ζ Phe	01 06.3	-55 31	3.6 p	4.10p	1.66976	B7	E
1434	RU Cas	08.4	+64 45	5.8 v			B8n	Invar
1518	Z Psc	13.4	+25 30	7.0 v	7.9 v	144	N	SRb (8.8-10.1p)
1579	S Cas	16.0	+72 21	7.9 v	15.2 v	611.5	S4e	M
1715	δ Cas	22.5	+59 59	2.8 v	2.88v	759	A5n	EA?
1753	R Scl	24.7	-32 48	5.8 v	7.7 v	363.06	N3p	SRa (9.1-12.8p)
1830	R Psc	28.1	+02 37	7.1 v	14.8 v	344.14	M3e-M4e	M
	UV Cet	36.4	-18 13	6.8 v	12.9 v		dM5e	UV
2102	φ Per	40.5	+50 26	4.3 p	4.4 p		Blpe	Ia
2243	α UMi	48.8	+89 02	2.52p	2.67p	3.96975	cF8v	CW
2298	η ¹ Hyi	51.3	-68 11	6.7 p			A0	Invar?
2323	RR Ari	53.1	+23 20	6.0 v			gG8	Invar?
2385	U Per	56.2	+54 35	7.6 v	12.3 v	320.63	M6e-M7e	M
	V Per	58.5	+56 30	4.0 p	>17.5 p		Q	N 1887
	Y Eri	02 03.0	-57 23	10.7 p	13.5 p	302.7	M7e	M
	V Ari	12.3	+12 00	9.8 p	10.8 p	76	R4	SRb
2718	R Ari	13.3	+24 50	7.5 v	13.7 v	186.70	M3e	M
	W And	14.3	+44 04	6.7 v	14.5 v	397.02	M7e-M8e	M
2796	o Cet	16.8	-03 12	2.0 v	10.1 v	331.62	gM5e-M9e	M
	AD Per	16.9	+56 46	7.7 v	8.4 v	320	cM2v	SRc (10.0-10.8p)
	SU Per	18.6	+56 23	7.0 v	8.5 v	470	cM3	SRc(9.3-10.5p)
2843	S Per	19.3	+58 22	7.9 v	11.1 v		cM3e	SRc
	DM Per	22.4	+55 53	7.71p	8.48p	2.72773	B5	EA
2929	R Cet	23.5	-00 24	7.2 v	14 v	166.23	M4e	M
2952	i Cas	24.9	+67 11	4.57v	4.60v	1.7405	cA5sp	αCV

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
3072	U Cet	02 ^b 31 ^m 3	-13 22	6.8 v	13.4 v	234 ^d 53	M2e-M4e	M
	R Tri	34.0	+34 03	5.4 v	12.0 v	266.40	M4e-M8e	M (5.7-12.6e)
3192	δ Cet	36.9	+00 07	4.04v	4.07v	0.16114	B2s	β C (3.8-3.86p)
3345	RZ Cas	44.3	+69 26	6.38v	7.80v	1.19525	A0	EA (6.38-7.89p)
3364	T Ari	45.5	+17 18	7.5 v	11.3 v	319.6	M6e-M8e	SRa
3366	Z Eri	45.5	-12 40	6.4 v	7.8 v	80	M4	SRb (7.0-8.6p)
3403	SU Cas	47.5	+68 41	6.21p	6.78p	1.94932	cF5-F7	C δ
	RR Eri	49.8	-08 29	7.2 v	8.5 v	97	M5	SRb (7.4-8.6p)
	R Hor	52.3	-50 06	4.7 v	14.3 v	402.67	M7e	M (6.3-15p)
	RZ Ari	53.0	+18 08	7.2 p	7.65p		gM6	I?
	T Hor	59.5	-50 50	7.2 v	13.7 v	217.22	M4e	M
3682	ρ Per	03 02.0	+38 39	3.3 v	4.0 v	33-55	gM4	SRb
3690	V Hor	02.3	-59 07	8.7 p	9.8 p		Mb	SRb
3733	β Per	04.9	+40 46	2.2 v	3.47v	2.86734	B8	EA
	U Ari	08.2	+14 36	6.4 v	15.2 v	371.44	M4e-M6e	M (7.2-15.2p)
3821	SX Ari	09.3	+27 04	5.76p	5.82p	0.728	A0p	α CV
3836	CC Cas	10.1	+59 23	7.39p	7.54p	3.36897	O9	EA
4154	R Per	26.9	+35 30	8.1 v	14.8 v	209.98	M2e-M3e	M
	GK Per	27.8	+43 44	0.2 v	14.0 v		Q	Na 1901
4371	U Cam	37.5	+62 29	7.7v	8.7 v	400	N5	SRb (11.0-12.8p)
4461	\circ Per	41.2	+32 08	3.82v	3.85v	4.41917	B1+B1	EII
4466	SS Cep	41.5	+80 10	6.7 v	7.8 v	90	M5	SRb
4587	BU Tau	46.2	+23 59	5.0 v	5.5 v		B8	Ia (4.9-5.5p)
4679	X Tau	50.5	+07 37	7.4 v			F5	Invar
4720	X Per	52.3	+30 54	6.0 v	6.6 v		Oepv	RWn
4733	T Eri	53.1	-24 11	7.4 v	13.2 v	251.96	M3e-M5e	M
	IQ Per	56.1	+48 10	7.5 p	8.0 p		B9	EA
4805	λ Tau	57.9	+12 21	3.5 p	4.00p	3.95295	B3+A4	EA
	RX Cam	04 00.8	+58 31	8.14p	9.38p	7.91185	G2-K2	C δ
	SZ Cam	03.4	+62 12	7.0 p	7.3 p	2.69842	B0n	EB
4943	AG Per	03.7	+33 19	6.50p	6.80p	2.02873	B3+B3	EA
5174	b ¹ Per	14.5	+50 10	4.6 p	4.66p	1.52732	A2	EII
5426	R Tau	25.6	+10 03	8.1 v	14.7 v	324.34	M5e-M7e	M
	RY Cam	26.2	+64 20	7.6 v	9.3 v	135.75	M3	SRb (8.9-11.0p)
5603	R Ret	33.0	-63 08	6.8 v	14.0 v	278.30	M4e	M (8.5-14.6p)
5617	ν Eri	33.8	-03 27	3.4 p	3.60p	0.17351	B2s	β C
5621	SZ Tau	34.3	+18 27	6.93p	7.46p	3.14899	F6-F9	C (7.08-7.59e)
	T Cam	35.2	+66 03	7.3 v	14.2 v	373.98	S4e	M
5661	R Dor	36.2	-62 11	7.1 p	8.1 p	338	M7	SRb
	R Cae	38.7	-38 20	6.7 v	13.7 v	391.02	M6e	M
	X Cam	39.2	+75 00	7.4 v	13.7 v	143.40	M3e	M
	AW Per	44.4	+36 38	7.5 v	8.2 v	6.46338	F6-G1	C δ (7.9-8.8p)
5833	R Pic	44.8	-49 20	6.7 v	10.0 v	171.0	M1e-M4e	SRa (8.3-11.9p)
	KS Per	45.3	+43 11	7.60v	7.70v	31	A5ep	SR
5854	ST Cam	46.0	+68 05	6.9 v	8.3 v		N5	SRb (9.2-12.0p)
5978	π^5 Ori	51.6	+02 22	3.6 p	3.65p	3.70045	B2	EII
5998	AB Aur	52.6	+30 28	7.2 p	8.4 p		A0ep	RWn
6012	R Eri	53.1	-16 30	5.4 v	6.0 v		G4	Invar?
6093	R Lep	57.3	-14 53	5.9 v	10.5 v	432.47	N6e	M
6104	S Eri	57.6	-12 37	4.9 v	5.7 v		F0	?

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
6123	RX Aur	04 ^b 58 ^m 0	+39°54'	8.0 p	9.0 p	11 ^d 6248	F8—G8	Cδ (8.16—9.15e)
6137	ε Aur	58.4	+43 45	3.34p	4.58p	9898.5	cF0ep	EA
6218	ζ Aur	59.0	+41 00	5.00p	5.69p	972.176	cK4+B7	EA
6221	T Lep	05 02.7	-21 58	7.4 v	13.5 v	368.13	M6e—M8e	M
	W Ori	02.8	+01 07	5.9 v	7.7 v	212	N5	SRb (8.6—11.1p)
	S Pic	09.6	-48 34	7.2 v	14.0 v	426.70	M7e—M8e	M (9.3—16p)
	UZ Aur	11.7	+40 04	8.2 v	9.0 v	65	M3	Ib (9.7—10.9p)
6429	AE Aur	13.0	+34 15	5.4 v	6.1 v		O9p	Ia
6435	R Aur	13.3	+53 32	6.7 v	13.7 v	458.89	M7e—M9e	M
6463	CD Tau	14.6	+20 05	7.0 p	7.6 p	3.43515	F2+F2	EA
	EO Aur	14.9	+36 34	7.5 p	7.8 p	4.0657	B3+B3	EA
6476	AR Aur	15.0	+33 43	5.82p	6.49p	4.13466	A0+A0	EA
	XX Tau	16.5	+16 40	6.0 p	>15 p		Q	Na 1927
6536	T Col	17.5	-33 45	6.6 v	12.7 v	225.28	M4e—M6e	M
6655	η Ori	22.0	-02 26	3.2 p	3.35p	7.98926	B1	EB
6755	S Ori	26.5	-04 44	7.5 v	13.5 v	416.33	M7e	M
6792	CI Ori	27.2	-01 08	5.00v			gK5	Invar
6806	CK Ori	27.7	+04 10	6.2 v	6.6 v	120?	K2	SR?
	T Aur	28.8	+30 24	4.1 p	15.8 p		Q	Nb 1891
6841	CE Tau	29.3	+18 34	6.1 p	6.5 p	165	cM2	SRc
	δ Ori	29.5	-00 20	2.40p	2.55p	5.73248	O9	EA
	RT Ori	30.5	+07 07	8.1 v	8.9 v	321	Nb	SRb (9.7—11.8p)
6884	VV Ori	31.0	-01 11	5.14p	5.51p	1.48538	B1n	EB
	CM Tau	31.5	+21 59	-5 v	15.9 p		Cont	SN 1054 M1
	KX Ori	32.6	-04 46	6.9 p	8.1 p		B3	RWn
	NU Ori	33.1	-05 18	6.5 v	7.3 v		B1	RWn (7.0—8.1p)
	V359 Ori	33.1	-04 52	6.9 p	8.1 p		B3	RWn
6944	β Dor	33.2	-62 31	4.5 p	5.7 p	9.8415	cF6—G2	Cδ
7005	S Cam	35.6	+68 46	8.1 v	11.0 v	326.4	R8e	SRa
	U Aur	38.9	+32 01	7.5 v	15.5 v	407.30	M7e—M9e	M
	R Oct	41.1	-86 26	6.4 v	13.2 v	405.11	M6e	M (8.0—14.3p)
	W Pic	42.0	-46 29	11.8 p	13.3 p		N	Ib
	Y Tau	42.7	+20 40	6.8 v	9.2 v	240.9	N2	SRa (10.1—12.2p)
7402	TU Cam	50.5	+59 53	5.0 v	5.2 v	2.93323	A1	EB
7451	α Ori	52.5	+07 24	0.4 v	1.3 v	2070	cM2	SRc
7457	U Ori	52.9	+20 10	5.3 v	12.6 v	372.23	gM8e	M
	BQ Ori	54.1	+22 50	6.9 v	8.9 v	110	M5e	SRa (9.6—11.5p)
7543	β Aur	55.9	+44 57	1.92p	2.01p	3.96004	A2+A2	EA (2.07—2.16e)
7737	S Lep	06 03.7	-24 11	7.1 p	8.9 p	90	gM6	SRb
7854	TU Gem	07.8	+26 02	7.4 v	8.3 v	230	N3	SRb (9.4—12.5p)
7881	TV Gem	08.8	+21 53	6.6 v	8.0 v	182	cM1	SRc (8.7—9.5p)
	WY Gem	08.9	+23 13	7.4 v	7.9 v		M2ep+B	Ic (9.2—9.8p)
7896	BU Gem	09.3	+22 55	6.1 v	7.5 v	32?	cM1	Ic? EA?
7969	η Gem	11.9	+22 31	3.1 v	3.9 v	233.4	gM3	SRb (E)
8213	V Mon	20.2	-02 10	6.0 v	13.7 v	334.69	gM5e—M8e	M
	IM Mon	20.5	-03 15	6.5 p	6.60p	1.19042	B5n+B8n	Eb
8235	ψ ¹ Aur	21.0	+49 19	6.6 p	7.2 p		cM0	Ic?
8281	RR Lyn	22.2	+56 19	5.6 p	5.97p	9.94502	A5s	EA
8291	T Mon	22.5	+07 07	6.26p	7.82p	27.0205	F7—K1	Cδ (6.46—7.96e)
8294	BL Ori	22.6	+14 45	6.3 v	6.9 v		Nb	Ib (9.0—9.7p)

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
8371	RT Aur	06 ^h 25 ^m 4	+30°32'	5.45p	6.55p	3 ^h 72826	cF1—GO	Cδ
8442	AX Mon	27.9	+05 54	7.0 p	7.2 p	?	Beq+gM2	I?
8474	WW Aur	29.2	+32 30	5.70v	6.36v	2.52502	A7+A7	EA (5.7—6.43p)
8496	ξ ¹ CMa	29.8	-23 23	4.35v	4.36v	0.20957	B1s	βC
	TU Aur	31.8	+45 40	8.0 v	9.1 v	73	M5	SRb (9.8—10.6p)
8560	W Gem	32.1	+15 22	6.9 v	7.9 v	7.91467	cF6—G5	Cδ (7.4—8.9e)
8581	UU Aur	33.1	+38 29	5.1 v	6.8 v	235	N3	SRb (8.2—10.0p)
	RR Pic	35.1	-62 36	1.2 p	12.8 p		Qp	Nb 1925
8720	S Mon	38.2	+09 57	4.68v			O7sk	Ia? (4.2—4.6p)
	VW Gem	38.9	+31 30	8.1 v	8.5 v		R8	Ib
	DM Gem	41.0	+30 00	4.8 p	16.5 v		Q	Na 1903
	BT Mon	41.2	-01 58	4.5 p	16 p		Q	Na 1939
	X Gem	43.9	+30 20	7.6 v	13.6 v	263.47	M5e	M
	DN Gem	51.7	+32 13	3.6 p	14.9 v		Q	Nb 1912
	X Mon	54.8	-09 00	6.9 v	10.0 v	155.7	M3e—M4e	SRb
	RV Mon	55.7	+06 14	6.8 v	8.3 v	131.5	Nb	SRb (10.3—11.9p)
9197	R Lyn	57.2	+55 24	7.2 v	14.0 v	378.61	S3e—S6e	M
9313	ζ Gem	07 01.1	+20 39	4.44p	5.20p	10.15172	cF7—G3	Cδ (4.37—5.14e)
9390	R Gem	04.3	+22 47	6.0 v	14.0 v	369.93	S3e—S6e	M
	TW Gem	04.3	+22 35	8.3 v			M0	Invar?
	RY Mon	04.5	-07 29	7.7 v	9.2 v	466	R	SRa
	W CMa	05.7	-11 51	6.9 v	7.5 v		N	Ib (8.7—9.7p)
9432	R CMi	06.0	+10 06	7.4 v	11.6 v	337.93	Sep	M
	R Vol	06.6	-72 56	8.8 v	13.9 v	448.37	Me	M
9551	BQ Gem	10.5	+16 15	6.8 p	7.2 p		gM4	?
9604	L ² Pup	12.0	-44 33	2.6 v	6.0 v	140.83	M5e—M6e	SRb
9734	UW CMa	16.6	-24 28	4.5 p	4.8 p	4.3934	O8+O8	EB
9758	R CMa	17.2	-16 18	6.24p	6.84p	1.13594	A9	EA
	V Gem	20.3	+13 12	7.8 v	14.4 v	275.38	M4e—M5e	M
9851	VZ Cam	20.7	+82 31	4.8 v	5.2 v	23.7	gM4	SR (6.40—6.70p)
	GI Mon	24.3	-06 35	5.2 p	15.1 p		Q	Na 1918
9951	Y Lyn	24.6	+46 06	6.9 v	7.4 v	110	cM5	SRc (7.8—10.3p)
10054	U Mon	28.4	-09 40	6.1 p	8.1 p	92.26	cF8e—K0p	RVb
10078	RY Pup	29.2	-34 53	7.0 v	8.0 v		K5	Invar?
10095	S CMi	30.0	+08 26	7.0 v	13.2 v	332.20	M6e—M8e	M
	Z Pup	30.5	-20 33	7.2 v	14.6 v	509.9	M6e—M9e	M
	BN Gem	34.2	+17 01	6.0 p	6.6 p	?	O8ne	Ia?
10346	R Pup	38.9	-31 33	6.6 v			G0p	Invar
	SU Mon	39.9	-10 46	7.7 v	9.0 v		S3	SRb (9.6—12.4p)
10461	RZ Pup	43.4	-39 44	6.8 v			K2	Invar
10504	S Pup	45.3	-47 59	7.2 v			A2	Invar
10540	T Gem	46.3	+23 52	8.0 v	15.0 v	287.61	Se	M
	AP Pup	56.0	-39 59	7.6 p	8.7 p	5.08431	F5—F8	Cδ (7.69—8.64e)
10802	V Pup	56.8	-49 07	4.53v	5.14v	1.45449	B1p+B3	EB (4.74—5.25p)
	CP Pup	08 09.9	-35 12	0.5 p	>17 p		Q	Na 1942
11172	AH Vel	10.4	-46 30	5.83p	6.44p	4.22717	cF8p	C (5.96—6.49e)
	RS Pup	11.2	-34 26	7.4 p	9.4 p	41.3875	F8—K5	Cδ (7.55—9.28e)
	XZ Pup	11.4	-23 48	8.0 p	10.7 p	2.19238	A0	EA
	DY Pup	11.7	-26 25	7 p	>16 p			N 1902
11221	AI Vel	12.4	-44 25	6.4 v	7.13v	0.11157	A2p—F2p	RR

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
11255	R Cnc	08 ^b 13 ^m 8	+11°53'	6.2 v	11.8 v	362 ^d 06	gM6e—M8e	M
11390	V Cnc	18.9	+17 27	7.5 v	13.9 v	272.14	S2e	M
	RT Hya	27.2	-06 09	7.1 v	10.2 v	253.2	M6e—M7e	SRa (8.7—10.7p)
11632	V Car	27.7	-59 57	7.4 v	8.1 v	6.6967	cG2—cK0	Cδ (7.74—8.85p)
11834	RZ Vel	35.3	-43 56	7.04p	8.5 p	20.39652	cG8	Cδ (7.14—9.06e)
11855	T Vel	36.1	-47 11	8.29p	9.1 p	4.63978	G0—G5	Cδ
	RV Hya	37.3	-09 24	7.6 v	8.3 v	116	M5	SRb (8.7—10.0p)
11906	AK Hya	37.6	-17 07	6.8 v	7.2 v	112?	M4	SRb (7.8—8.2p)
	VZ Cnc	38.2	+10 00	7.19v	7.94v	0.17836	A7—F2	RR (7.51—8.28e)
12278	S Hya	51.0	+03 16	7.4 v	13.3 v	256.71	M4e	M
12322	X Cnc	52.6	+17 25	5.9 v	7.3 v	170?	N3	SRb (9.3—10.9p)
12340	T Hya	53.2	-08 57	7.2 v	13.2 v	288.48	M3e—M4e	M
12356	T Cnc	53.8	+20 02	7.6 v	10.5 v	482.35	N3	SRa
	RT Cnc	55.6	+11 02	7.3 v	8.6 v	90?	M5	SRb (8.3—9.4p)
	CV Vel	59.0	-51 21	6.6 p	7.3 p	6.892	B2+B2	EA
	T Pyx	09 02.6	-32 11	7.0 p	14.0 p		Pec	Nd 1920, 1944
	W Cnc	06.9	+25 27	7.4 v	14.4 v	393.26	M7e	M
12657	RS Cnc	07.6	+31 10	5.5 v	7.0 v	120	gM6e	SRc? (6.2—7.2p)
12946	V Vel	20.8	-55 45	7.65p	8.75p	4.37099	cF8—G5	Cδ (7.75—8.76e)
13160	N Vel	29.7	-56 49	5.0 p			K5	Invar?
13173	S Ant	30.1	-28 24	6.39v	6.83v	0.64834	A8	EW (6.8—7.31p)
13192	R Car	31.0	-62 34	3.9 v	10.0 v	308.63	gM4e—M7e	M (5.6—11.1p)
13247	X Hya	33.4	-14 28	8.0 v	13.6 v	302.44	M7e	M
13437	R LMi	42.6	+34 45	6.3 v	13.2 v	372.34	M7e—M8e	M
13462	l Car	43.9	-62 17	4.24p	5.50p	35.5412	cF8—K0	Cδ
13489	R Leo	44.9	+11 40	5.4 v	10.5 v	312.57	gM7e—M9e	M
13560	Y Hya	48.8	-22 47	6.9 v	7.9 v	302.8	N3p	SRb (8.3—12.0p)
	S LMi	50.8	+35 10	7.9 v	14.3 v	234.10	M4e	M
13643	SY UMa	52.5	+50 03	5.1 v	6.0 v		A2	?
13736	RR Car	56.5	-58 37	7.3 v	8.5 v	109	M6	SRb (9.1—10.4p)
13891	R Vel	10 04.2	-51 57	6.8 v			K0	Invar
13967	R Ant	07.6	-37 29	7.1 v			A0	Invar
13971	S Car	07.8	-61 18	4.5 v	9.9 v	149.53	K7e—M4e	M (6.9—11.0p)
14054	U UMa	11.7	+60 14	6.4 v			M0	Invar?
14204	RS Sex	18.5	+02 33	6.4 p	6.44p		B3	βC?
	V Ant	18.9	-34 33	9.2 p	>12.5 p	302.76	M7e	M
14541	TX Leo	32.4	+08 55	5.7 p	5.80p	2.45506	A2	EA
14552	U Ant	33.0	-39 18	5.7 v	6.8 v	365	Nb	SR (8.8—9.7p)
14611	U Hya	35.1	-13 07	4.8 v	5.8 v		N2	Ib (7.9—9.2p)
14753	R UMa	41.1	+69 02	6.7 v	13.4 v	301.65	M3e—M6e	M
14761	VY UMa	41.6	+67 40	6.0 v	6.6 v		N0	Ib
14783	TX UMa	42.4	+45 50	6.8 p	8.89p	3.06332	B8+gF2	EA (6.83—8.92e)
14799	η Car	43.1	-59 25	-0.8 v	7.9 v		Pec	QN 1843
14929	V Hya	49.2	-20 59	6.0 v	12.5 v	533.0	N6e	M (10.9—16p)
15004	BZ Car	52.2	-61 46	8.9 p	10.8 p	97	M2	SRb
15026	T Car	53.3	-60 15	7.25p			K0	Invar?
15032	VY Leo	53.4	+06 27	7.3 p	7.58p		gM5	Ib?
15044	AG Car	54.2	-60 11	7.1 p	9.0 p		A2e—B5e	Ne
	VW UMa	55.5	+70 16	7.2 v	7.8 v	125	M5	SR (8.4—9.1p)
15071	U Car	55.8	-59 28	6.43p	8.38p	38.7560	cG0—K3	Cδ

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
15351	RS Car	11 ^h 06 ^m 0	-61°40'	7.0 p	>15.8 p		Q	Na 1895
15424	ER Car	07.5	-58 34	7.6 p	8.0 p	7 ^d 71781	cF8v	Cδ
	TT Hya	10.8	-26 12	7.5 p	9.5 p	6.95341	A3e+dG6p	EA
	RS Cen	18.3	-61 36	7.8 v	13.9 v	164.36	M2e-M4e	M (9.2-15p)
15723	ST UMa	25.1	+45 28	6.4 v	7.5 v	81	M4	SRb (8.2-9.5p)
	TU Mus	28.9	-65 28	8.40p	8.84p	1.38728	B3	EB
	X Cen	46.7	-41 28	7.0 v	13.9 v	314.58	M5e-M6e	M
16328	Z UMa	53.9	+58 09	6.0 v	9.1 v	198	M5e	SRb (7.9-10.4p)
	X Vir	59.4	+09 24	7.3 v	11.2 v		Fp	?
	R Com	12 01.7	+19 01	7.3 v	14.6 v	362.20	M5e	M
	RX Vir	02.2	-05 29	8.7 p	9.1 p	200	K0	SR?
16559	RW Vir	04.7	-06 29	7.0 v	8.2 v		M5	Ib (8.6-9.1p)
16679	S Mus	10.1	-69 52	6.52p	7.30p	9.65869	cF8-G4	Cδ (6.60-7.34e)
16806	R Crv	17.0	-18 59	6.7 v	14.4 v	316.74	M5e-M7e	M
	RY UMa	18.1	+61 36	7.0 v	8.0 v	311.2	M2e-M3e	SRa (8.1-9.3p)
16848	T Cru	18.6	-62 00	6.96p	7.7 p	6.73322	cG1-G5	Cδ (7.09-7.88e)
16890	R Cru	20.9	-61 21	6.85p	8.0 p	5.82575	cF6-G7	Cδ (6.95-8.16e)
	S Cen	21.9	-49 09	6.7 v	7.7 v	65	Np	SR (9.2-10.7p)
	SS Vir	22.7	+01 03	6.0 v	9.6 v	354.66	Ne	M
17056	UU Com	28.5	+24 51	5.39v	5.41v	2.1953	A3sp	αCV
	U Cen	30.7	-54 23	7.2 v	14.0 v	220.20	M3e-M4e	M (9.3-15p)
17137	BO Mus	32.0	-67 29	6.0 v	6.7 v		Mb	Ib
17178	T UMa	34.1	+59 46	6.6 v	13.4 v	256.88	M3e-M6e	M
17212	R Vir	36.0	+07 16	6.2 v	12.1 v	145.61	gM4e-M8e	M
	Y UMa	38.1	+56 08	7.7 v	9.3 v	168	M7	SRb (10.0-11.2p)
17267	R Mus	39.0	-69 08	6.30p	7.3 p	7.50990	F9-G6	Cδ
17322	S UMa	41.8	+61 22	7.4 v	12.3 v	226.06	S2e	M
17342	Y CVn	42.8	+45 43	5.2 v	6.6 v	158.0	N3	SRb (8.2-10.0p)
17374	β Cru	44.8	-59 25	1.50v	1.56v	0.25	B1s	βC (1.02-1.08e)
17439	U Vir	48.6	+05 50	7.5 v	13.5 v	206.78	M3e-M5e	M
17509	S Cru	51.4	-58 10	6.65p	7.7 p	4.69002	F5-G5	Cδ
17518	ε UMa	51.8	+56 14	1.68v	1.83v	5.0887	A0p	αCV
17533	TU CVn	52.7	+47 28	7.2 p	7.7 p		cM8	Ib
17557	α ² CVn	53.7	+38 35	2.75p	2.80p	5.46939	A0p	αCV
17574	RY Dra	54.5	+66 16	5.6 v	8.0 v	172.5	N4p	SRb (10.0-11.2p) 1.4p)
	SW Vir	13 11.5	-02 33	6.8 v	8.1 v	150	M7	SRb (8.2-9.4p)
17957	UY Cen	13.6	-44 26	7.1 v	8.1 v	114.6	K5p	SR (9.5-11.2p)
	V CVn	17.3	+45 47	6.8 v	8.8 v	191.88	M4e-M6e	SRa
18144	α Vir	22.6	-10 54	0.7 p	0.80p	4.01416	B2v+B3v	EA (1.2-1.3e)
18239	R Hya	27.0	-23 01	4.0 v	10.0 v	386.2	gM7e	M
	SS Hya	27.7	-23 23	7.4 v	8.1 v	?	B9	E? (8.1-8.3p)
18279	S Cha	28.8	-77 19	6.6 p			F5	Invar
18312	S Vir	30.4	-06 56	6.3 v	13.2 v	377.96	gM6e-M7e	M
	RR Cha	30.8	-82 04	7.1 p	>15 p			N 1953
	RV Cen	34.3	-56 13	7.0 v	10.8 v	446.04	N3	M (9.2-14p)
18396	TV Hya	34.4	-23 22	6.9 v	7.4 v	?	A3	E? (8.0-8.2p)
18463	XX Cen	37.0	-57 22	7.9 p	9.4 p	10.95613	F6-K0	Cδ (8.02-9.44e)
	V UMi	37.8	+74 34	7.4 v	8.8 v	72.0	M4	SRb (8.8-9.9p)
18505	T Cen	38.9	-33 21	5.5 v	9.0 v	90.60	gK7e-gM3e	SRa
18659	W Hya	46.2	-28 07	7.7 p	11.6 p	382.2	M8e	SRa

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
18667	μ Cen	13 ^h 46 ^m 6	-42°14'	3.0 p	3.2 p		B2ep	Ia
18671	R CVn	46.8	+39 47	7.3 v	12.9 v	328 ^d 17	gM6e-M8e	M
18840	ZZ Boo	53.9	+26 10	7.0 p	7.8 p	4.99175	F0+F0	EA
18975	θ Aps	14 00.4	-76 33	6.4 p	8.6 p	119	Mbp	SRb
	RU Hya	08.5	-28 39	7.2 v	14.3 v	333.58	M6e	M
19234	R Cen	12.9	-59 41	5.4 v	11.8 v	546.6	gM4e-M5e	M (7.7-12.0p)
19246	RR Cen	13.4	-57 37	7.5 p	8.0 p	0.60569	F2	EW
19295	CS Vir	15.9	-18 29	5.7 p	5.75p	9.2983	A3sp	α CV
	U UMi	16.2	+67 01	7.4 v	12.7 v	326.48	M6e	M
19370	Y Boo	19.7	+20 02	8.0 v			K0	Invar?
	UV Boo	20.3	+25 46	7.8 v	8.3 v		F5	Ia (8.5-9.2p)
19407	S Boo	21.2	+54 02	8.0 v	13.8 v	270.69	M3e-M5e	M
19410	R Cam	21.3	+84 04	7.9 v	14.4 v	269.70	S2e	M
	RX Boo	22.0	+25 56	6.9 v	9.1 v		M7e-M8e	SRb (8.6-11.3p)
	RS Vir	24.8	+04 55	7.0 v	14.4 v	352.47	M6e-M7e	M
19554	V Boo	27.7	+39 05	7.0 v	11.3 v	258.22	M6e	SRa
19563	Y Cen	28.0	-29 53	8.9 p	10.0 p	180?	M4	SRb?
19582	V Cen	28.9	-56 40	6.97p	8.1 p	5.49397	F5-G5	C δ
19607	γ Boo	30.1	+38 32	3.20p	3.25p		dA7n	?
19706	R Boo	35.0	+26 57	6.7 v	12.8 v	223.34	gM3e-M5e	M
	RV Boo	37.2	+32 45	7.5 v	8.8 v	137	M5e-M7e	SRb (7.9-9.6p)
	X Cir	38.6	-65 00	6.5 p	>16.5 p		Q	Nb 1926
	RW Boo	39.1	+31 47	7.6 v	9.5 v	209	M5	SRb (8.0-9.5p)
19831	W Boo	41.2	+26 44	5.0 v	5.4 v		gM3	?
19957	RY Boo	47.5	+23 14	7.0 v	7.4 v	?	F6	Invar? (7.6-8.1p)
20057	R Aps	52.1	-76 28	5.0 v	6.2 v		K2	Invar?
20170	RR UMi	56.8	+66 08	6.2 p	6.5 p	40?	gM5	SR?
20195	δ Lib	58.3	-08 19	4.79p	5.93p	2.32735	A1s	EA
20281	i Boo	15 02.1	+47 51	5.9 v	6.50v	0.26780	dG2+dG2	EW (6.6-7.02p)
20336	T TrA	05.0	-68 32	7.0 v			A0	Invar
	Y Lib	09.1	-05 49	7.6 v	14.7 v	274.74	M5e	M
20561	R TrA	15.3	-66 19	6.81p	7.7 p	3.38929	F6-G4	C δ (6.88-7.75e)
20574	U CrB	16.1	+31 50	7.04p	8.35p	3.45220	B5-A2?	EA
20639	S Lib	18.5	-20 13	8.0 v	13.0 v	192.61	M2e	M
20660	S Ser	19.3	+14 30	7 v	14.1 v	366.71	M5e-M6e	M
20662	S CrB	19.4	+31 33	6.6 v	14.0 v	360.68	gM6e-M8e	M
	RS Lib	21.4	-22 43	7.0 v	13.0 v	217.46	M7e-M8e	M
	IL Nor	25.8	-50 24	5.5 p	16.3 p		Q	Nb 1893
	RU Lib	30.5	-15 09	7.4 v	14.2 v	316.93	M5e-M6e	M
	S UMi	31.4	+78 48	8.0 v	12.9 v	326.62	M7e-M9e	M
20939	R Nor	32.3	-49 21	6.5 v	13.9 v	490.24	M3e	M (8.5-14.0p)
20947	α CrB	32.6	+26 53	2.2 p	2.31p	17.35991	A0	EA
	TW Dra	33.1	+64 04	7.7 v	10.0 v	2.80687	A5+K0	EA (8.2-10.5p)
	r ⁴ Ser	34.2	+15 16	7.5 p	8.9 p		M6	Ib
	SW CrB	39.0	+38 52	7.6 v	8.3 v		M0	Ib? (8.9-9.3p)
21098	VY Dra	39.2	+64 49	7.5 v			K2	Invar?
21105	χ Ser	39.4	+13 00	5.4 v	5.43v	1.59584	A0p	α CV
21108	RR CrB	39.6	+38 43	7.1 v	8.6 v	60.8	M5	SRb (8.4-10.1p)
21118	T Nor	40.2	-54 50	6.2 v	13.4 v	242.94	M3e-M6e	M (7.2-13.1p)
	CT Ser	43.3	+14 32	6 p	>15 p		Q	Na 1948

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
21257	R CrB	15 ^h 46 ^m 5	+28°19'	5.8 v	>14.8 v		cG0ep	R CrB
21278	V CrB	47.7	+39 43	6.9 v	12.2 v	357 ^d 82	N2e	M
21292	R Ser	48.4	+15 17	5.7 v	14.4 v	356.83	M7e—M8e	M
21318	ST Her	49.3	+48 38	7.0 v	8.7 v	148.0	M7	SRb (8.8—10.3p)
	RS CrB	56.7	+36 09	7.6 v	9.6 v	322.2	M7	SRb (8.7—11.5p)
21470	S TrA	56.7	-63 38	6.42p	7.63p	6.32344	F6—G8	Cδ (6.50—6.67e)
21491	T CrB	57.4	+26 04	2.0 v	10.8 v		Q+gM3ep	Nd 1866, 1946
21577	X Her	16 01.1	+47 23	6.3 v	7.4 v	95.0	M6e	SRb (7.5—8.6p)
21614	U TrA	02.9	-62 47	7.9 p	8.7 p	2.56844	F4—G2	C (7.78—8.96e)
21644	R Her	04.0	+18 30	8.2 v	15.0 v	318.45	M6e	M
	U Ser	04.9	+10 04	7.8 v	14.0 v	238.2	M3e	M
	SX Her	05.3	+25 03	7.7 v	9.4 v	102.90	gG3e—K0	SRd (8.6—10.9p)
	RU Her	08.2	+25 12	6.9 v	14.3 v	484.46	M7e	M
21786	LQ Her	09.5	+23 37	7.1 p	7.31p		gM4	Ib?
	W CrB	13.6	+37 54	7.8 v	14.3 v	238.02	M2e—M4e	M
	T Sco	14.1	-22 51	7.0 v	>12 v			N 1860 (SN?)
21898	S Nor	14.7	-57 47	6.84p	7.81p	9.75418	F8—G2	Cδ (6.90—7.86e)
21982	σ Sco	18.1	-25 28	2.83p	2.91p	0.24684	B1	βC
22107	U Her	23.6	+19 00	7.0 v	13.4 v	406.02	gM7e—M8e	M
22115	V Oph	23.9	-12 19	7.3 v	11.0 v	297.99	N3e	M
								Ne
22117	χ Oph	24.1	-18 21	4.4 v	5.0 v		B3ep	Ne
22157	α Sco	26.3	-26 19	0.9 v	1.8 v	1733	cM1+B4	SRc
22172	g Her	27.0	+41 59	4.6 v	6.0 v	70	gM6	SRb (5.7—7.2p)
	SS Her	30.4	+06 58	8.5 v	13.2 v	107.30	M3e	M
22297	R Dra	32.5	+66 51	6.9 v	13.0 v	245.55	M5e—M7e	M
22317	W Her	33.4	+37 27	7.7 v	14.4 v	279.76	M3e	M
22330	TX Dra	34.3	+60 34	6.8 v	8.1 v	78	M4e—M5	SRb (7.9—10.2p)
22333	Y Her	34.4	+07 12	7.5 v			B9	Invar?
22364	R Ara	35.6	-56 54	6.0 p	6.9 p	4.42507	B9	EA
	OY Ara	36.9	-52 20	6.0 p	17.5 p		Q	Nb 1910
	SU Sco	37.4	-32 17	8.0 v	9.4 v	414	N0	SR (11.7—13.2p)
	S Dra	41.9	+55 00	8.2 v	9.4 v	136	M6	SRb (10.5—11.5p)
22677	μ ¹ Sco	48.5	-37 58	3.00v	3.31v	1.44027	B2n+B6	EB (3.00—3.28p)
22706	S Her	49.6	+15 01	7.0 v	13.8 v	307.40	gM5e—M7e	M
22749	ε UMi	51.0	+82 07	4.4 v	4.44v	39.4809	gG5	E (5.0—5.14p)
	V 840 Oph	51.6	-29 33	6.2 p	>17 p			Na 1917
	SS Sco	52.0	-32 33	7.5 v	9.5 v		K2	I (10—11.5p)
22786	RS Sco	52.0	-45 01	6.2 v	13.0 v	320.16	gM2e—M8e	M
22820	RR Sco	53.4	-30 30	5.0 v	12.4 v	279.74	gM5e—M8e	M
22857	RV Sco	55.1	-33 32	7.22p	8.4 p	6.06133	F5—G5	Cδ (7.32—8.57e)
22862	κ Oph	55.3	+09 27	3.4 v			gK2	Invar?
	V 841 Oph	56.7	-12 49	4.1 v	13.1 v			Nb 1848
	RT Sco	17 00.2	-36 51	7.0 v	>14.6 v	448.02	M6e—M7e	M
23059	BF Oph	03.0	-26 31	7.54p	8.4 p	4.06782	F8—K2	Cδ (7.63—8.59e)
23105	R Oph	04.9	-16 02	7.0 v	13.6 v	302.46	gM4e—M6e	M
23277	α ¹ Her	12.4	+14 27	3.0 v	4.0 v		gM5	SRc
	UW Her	12.7	+36 26	7.5 v	8.6 v	100	M5e	SRb (8.6—9.5p)
23317	U Oph	14.0	+01 16	5.8 p	6.52p	1.67734	B5n+B5n	EA
23359	u Her	15.5	+33 09	4.6 p	5.25p	2.05103	B3+B5	EB (4.6—5.14e)
23372	VW Dra	15.9	+60 43	6.0 v	6.5 v		gG9	I

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
23458 23477	Z Oph	17 ^h 17 ^m 0	+01°34'	7.6 v	13.2 v	348 ^d 49	M2e	M
	V 636 Sco	19.1	-45 34	7.03p	7.84p	6.79663	G5	C (7.11-7.92e)
	RS Her	19.6	+22 58	7.4 v	12.9 v	219.46	M5e-M6e	M
	V 696 Sco	19.8	-35 49	7.5 p	>16.5 p		Q	Na 1944
	V 843 Oph	27.6	-21 26	-2.5 v	>19 v			SN 1604 gal.
23856 23957	RW Ara	30.5	-57 07	8.7 p	12.1 p	4.36741	A0	EA
	V 449 Sco	33.7	-32 06	7.0 p	7.6 p		A2	?
	BM Sco	37.7	-32 11	6.8 p	8.7 p	850	K0	SR
24135	V 703 Sco	39.0	-32 07	7.7 p	7.9 p	0.11528	F0	RRc
	X Sgr	44.4	-27 49	4.8 p	5.8 p	7.01225	cF5-G9	Cδ (4.76-5.74e)
24216	V 393 Sco	45.5	-35 02	7.7 p	8.6 p	7.71249	B9	EA
	S Oct	46.0	-86 48	7.4 v	14.0 v	258.76	M4e-M5e	M (8.8-15.4p)
	RS Oph	47.5	-06 42	5.3 p	12.3 p		Ocp	RN 1898-1933-1958
	RY Sco	47.6	-33 42	8.3 p	9.5 p	20.3092	G0-G7	Cδ
	V 720 Sco	48.6	-35 21	7.5 p	>18 p		Q	Na 1950
24288	Y Oph	50.0	-06 08	7.01p	7.83p	17.12326	cF8-G3	C (7.06-7.83e)
	TX Sco	51.9	-34 14	7.7 p			A2n	Invar
	V 732 Sgr	52.9	-27 21	6.4 p	>16.0 p		Q	Na 1936
24371	V 453 Sco	53.0	-32 28	6.5 p	7.0 p	12.00421	B0se	EB
24382	V 441 Her	53.4	+26 03	5.4 v	5.48v	70	cF2e	SRd
24407	V 566 Oph	54.4	+04 59	7.60p	8.09p	0.4096	F4	EW
24427	OP Her	55.4	+45 21	7.7 p	8.3 p		gM6	Ib
	T Dra	55.7	+58 14	7.2 v	13.5 v	421.67	N0e	M
	V 1275 Sgr	55.7	-36 18	7.5 p	>13 p		Q	Na 1954
24450	Z Her	55.9	+15 09	7.2 v	7.72v	3.99279	F4	EA (7.3-8.1p)
24477	UW Dra	56.5	+54 40	7.0 v	8.0 v		K5p	Ib?
	V 787 Sgr	53.8	-30 30	9.0 p	>16.5 p		Pec	Na 1937
	V 999 Sgr	56.9	-27 33	7.5 p	16.6 p		Q	Nb 1910
24605	W Sgr	18 01.8	-29 35	4.70p	5.92p	7.59471	cF2-G6	Cδ (4.80-6.00e)
24617	V 986 Oph	02.1	+01 55	6.09v	6.13v	0.2890	B1n	βC?
24711	V 630 Sgr	05.5	-34 20	4.3 v	15.0 v		Q	Na 1936
	o Her	05.6	+28 45	4.1 p	4.2 p	?	B9 n	Ia?
	V 1015 Sgr	05.8	-32 29	7.1 p	>12 p		Q	Na 1905
24757	DQ Her	06.1	+45 51	1.3 v	15 p		Q	Nb 1934 (EA)
	T Her	07.2	+31 01	7.1 v	13.6 v	165.00	M2e-M4e	M
24780	R Pav	08.1	-63 38	7.5 v	13.8 v	230.32	M4e	M (8.2-15.0p)
24830	AP Sgr	10.0	-23 08	7.00p	8.27p	5.05781	F6-G5	Cδ
24856	μ Sgr	10.8	-21 04	3.80v	3.94v	180.45	cB8ep	EA (4.01-4.15e)
	V 1175 Sgr	11.0	-31 08	7 p	>12 p		Q	N 1952
	V 849 Oph	11.8	+11 36	7.2 p	>15.0 p		Q	Nb 1919
24947	W Lyr	13.2	+36 39	7.5 v	13.0 v	196.40	M3e	M
	RY Oph	14.1	+03 40	7.6 v	13.8 v	150.49	M4e-M5e	M
	WZ Sgr	14.1	-19 06	8.44p	10.28p	21.84971	G3-K6	Cδ
	RS Sgr	14.3	-34 08	6.0 p	6.9 p	2.41568	B5+A2	EA
	IQ Her	15.7	+17 53	7.3 v	8.2 v	75	M4	SRb (8.3-9.2p)
25038	V 1016 Sgr	16.9	-25 12	7.0 p	15 p			Na 1899
	Y Sgr	18.4	-18 53	5.86p	6.96p	5.77335	cF6-G5	Cδ
	GR Sgr	19.7	-25 36	7.5 p	16.6 p			N 1924
	V 909 Sgr	22.5	-35 03	6.8 p	>16.0 p		Q	Na 1941
	RZ Sct	23.8	-09 14	7.70p	8.87p	15.19023	B3	EA

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
25176	d Ser	18 ^h 24 ^m 6	+00°10'	5.2 v	5.5 v		G0+A2	?
	RV Sgr	24.6	-33 21	7.2 v	14.8 v	317 ^d 68	M5e	M
	AC Her	28.1	+21 50	7.4 p	9.6 p	75.4619	F2p-K4e	RVa
25274	RX Her	28.3	+12 35	7.26p	7.89p	1.77857	A0+A0	EA (7.1-7.75e)
25287	U Sgr	28.9	-19 10	7.02p	8.16p	6.74503	F7-G5	Cδ (7.12-8.25e)
	V 1017 Sgr	28.9	-29 26	7.2 p	14.3 p			Nd 1919
	T Lyr	30.7	+36 58	7.8 v	9.6 v		R6	Ib
25485	X Oph	36.0	+08 47	5.9 v	9.2 v	334.22	M5e-M7e	M
25502	XY Lyr	36.5	+39 37	6.1 v	6.6 v		cM4	Ib (7.3-7.8p)
25580	δ Sct	39.5	-09 06	4.9 p	5.19p	0.19377	gF4s	δ Sct
	V 350 Sgr	42.3	-20 42	7.67p	8.75p	5.15424	F5-G4	Cδ
25735	R Sct	44.8	-05 46	6.3 p	8.6 p	144	G0c-K0p	RVa
25739	V 356 Sgr	44.9	-20 20	6.8 p	7.9 p	8.89610	B3+A2	EA (7.00-7.87e)
	YZ Sgr	46.6	- 47	7.77p	8.87p	9.55345	G0-G7	Cδ
	V 603 Aql	46.9	+00 31	-1.1 p	10.8 p		Q	Na 1918
25824	S Sct	47.6	-07 58	7.0 v	8.0 v	148.0	N3	SR (9.7-10.9p)
25842	BB Sgr	48.0	-20 21	7.36p	8.2 p	6.63699	F8-G5	Cδ
25847	β Lyr	48.2	+33 18	3.4 p	4.34p	12.90794	cB8p	EB
	HR Lyr	51.5	+29 10	6.5 p	15.4 p		Q	Na 1919
25930	κ Pav	51.8	-67 18	4.8 p	5.7 p	9.0653	cF5-G5	CW (4.34-5.64e)
	UX Sgr	51.9	-16 35	7.6 v	8.4 v	100	Mb	SRb (8.9-9.6p)
25959	δ ² Lyr	52.8	+36 50	6.1 p	6.5 p	?	gM4	?
	EL Aql	53.4	-03 23	5.5 p	19.0 p		Q	Na 1927
25996	R Lyr	53.8	+43 53	4.0 v	5.0 v	46.0	gM6	SRb
	V 446 Her	55.0	+13 06	3.0 p	16.5 p		Q	Na 1960
26038	ε CrA	55.4	-37 10	5.01p	5.24p	0.59142	F0n	EW
26052	FF Aql	56.0	+17 18	5.80p	6.31p	4.47096	cF5-F9	Cδ
	ST Sgr	58.7	-12 50	7.6 v	>15.2 v	395.21	Se	M
	V 1059 Sgr	59.0	-13 14	4.5 p	16.5 p		Q	Na 1898
	V 604 Aql	59.5	-04 31	7.6 p	16.8 p		Q	Na 1905
26175	V 599 Aql	59.8	-10 48	6.50p	6.61p	1.84908	B5+B8	EA
26226	V Aql	19 01.7	-05 46	6.7 v	8.2 v	353	N6	SRb (10.6-12.4p)
26253	BL Tel	02.7	-51 30	7.5 p	9.61p	778.0	cF8+M	EA
	V 805 Aql	03.5	-11.44	7.81p	8.48p	2.40823	A2	EA
26297	R Aql	04.0	+08 09	5.7 v	12.0 v	300.3	gM5e-M8e	M (6.2-12.1p)
26315	Y Aql	04.6	+11 00	4.8 p	4.83p	1.30227	B8	EII
	TT Aql	05.8	+01 13	7.35p	9.15p	13.7544	F8+K0	Cδ
	RT Vul	09.3	+22 18	7.5 p			B8	Invar
	SS Lyr	11.9	+46 54	8.4 v	13 v	349.3	M5e	M
26525	W Aql	12.7	-07 08	7.8 v	14.2 v	490.16	S4e	M
	T Sgr	13.3	-17 04	7.7 v	12.9 v	391.93	S6e	M
26544	RY Sgr	13.3	-33 37	6.5 v	14.0 v		G0ep	R CrB
26557	R Sgr	13.8	-19 24	6.7 v	12.8 v	268.56	M4e-M6e	M
	V 356 Aql	14.7	+01 38	7.0 p	>16.5 p		Q	Nb 1936
26611	RS Vul	15.5	+22 21	6.9 p	7.63p	4.47766	B5+A2	EA
26613	ES Vul	15.6	+22 56	5.40v	5.46v	0.6096	B0n	βC?
	V 1942 Sgr	16.3	-16 00	6.7 v	7.1 v		N2	Ib
	S Sgr	16.5	-19 07	9.5 v	16.0 v	230.71	M4e	M
26639	U Sge	16.6	+19 31	6.36v	9.04v	3.38062	B9e+gG2	EA (6.31-9.92p)
	V 528 Aql	16.8	+00 32	7.2 p	18.5 p		Q	Na 1945

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
26669	f Aql	19 ^h 17 ^m 9	-05°31'	5.10v			sgK0	E
V 26697	606 Aql	18.8	-00 14	5.5 p	>15.6 p		Q	Na 1899
	v Sgr	18.9	-16 03	4.34p	4.44p	137 ^d 939	B8p+F2p	EB
	Z Vul	19.6	+25 29	6.97v	8.60v	2.45493	B5n+A2	EA (7.1-8.88p)
26820	CH Cyg	23.2	+50 09	6.6 v	7.8 v	97	M6	SRa (7.4-9.1p)
26826	UX Dra	23.4	+76 28	6.2 v	6.9 v	168	N0	SRb (8.5-9.4p)
26836	RR Lyr	23.9	+42 41	6.94p	8.03p	0.56684	A8-F7	RRa (7.43-8.55e)
V 26905	368 Aql	24.1	+07 30	5.0 v	>15.7 v		Q	Na 1936
	U Aql	26.7	-07 09	6.79p	7.95p	7.02393	cG0-G6	Cδ
26954	AF Cyg	28.7	+46 03	7.4 p	9.4 p	94.1	M5e	SRb
26951	V 822 Aql	28.7	-02 13	6.7 p	7.1 p	2.641	B8	EA
	UV Cyg	29.6	+43 32	9.9 p	10.5 p	135.5	M6	SRb
	WY Sge	30.5	+17 38	5.4 v	19.5 p			N 1783
27020	V 450 Aql	31.3	+02 21	6.3 v	6.9 v	64.20	M8	SR
	AQ Sgr	31.4	-16 30	6.6 v	7.6 v	199.6	N3	SRb (9.1-10.9p)
27119	U Vul	34.4	+20 13	7.8 p	9.0 p	7.99068	F8-K0	C
27152	R Cyg	35.5	+50 05	6.5 v	14.2 v	426.32	S3e-S6e	M
	RT Aql	35.6	+11 37	7.8 v	14.5 v	327.13	M6e-M8e	M
27185	σ Aql	36.7	+05 17	5.0 p	5.18p	1.95026	B3+B3	EB
27235	QS Aql	38.8	+13 42	5.80p	5.95p	2.5133	B3	EA
	TT Cyg	39.0	+32 30	7.4 v	8.7 v	118	N3e	SRb (10.8-11.9p)
27318	RT Cyg	42.2	+48 39	6.4 v	12.7 v	190.44	gM2e-M4e	M
27336	SU Cyg	42.8	+29 09	6.8 p	7.66p	3.84566	F0-G1	Cδ (6.84-7.69e)
27388	T Pav	45.1	-71 54	7.0 v	14.0 v	244.05	M4e	M (8.8-15p)
	CK Vul	45.5	+27 11	2.7 v	>17? v			Nb 1670
27481	χ Cyg	48.6	+32 47	3.3 v	14.2 v	406.95	S7e-S10e	M
27492	V 380 Cyg	48.9	+40 28	5.5 p	5.62p	12.4257	Bi	EA (5.62-5.74e)
	SV Vul	49.5	+27 19	7.79p	9.62p	45.1027	cF7-K0	Cδ (7.68-9.52e)
27517	η Aql	49.9	+00 53	4.08p	5.25p	7.17664	CF6-G4	Cδ
V 27525	500 Aql	50.0	+08 21	6.1 p	>17 p		Q	Na 1943
V 27538	505 Sgr	50.3	-14 44	6.36p	7.58p	1.18287	A1+F5	EA
	S Pav	51.0	-59 20	6.6 v	10.4 v	387.02	M7e	SRa (8.6-11.2p)
V 27601	449 Cyg	51.5	+33 49	7.9 p	8.7 p		M3	Ib
	RR Sgr	52.8	-29 19	5.6 v	14.0 v	334.25	M5e	M
	S Sge	53.7	+16 30	6.87p	7.02p	8.38217	cF6-G5	Cδ (5.79-6.99e)
	RR Aql	55.0	-02 01	7.8 v	14.5 v	394.33	M6e-M7e	M
27642	RU Sgr	55.3	-41 59	6.0 v	13.8 v	240.15	M3e-M6e	M
	AX Cyg	55.7	+44 08	11.4 p	12.4 p		Nb	Ib
V 27711	476 Cyg	57.1	+53 29	2.0 v	16.2 v		Q	Na 1920
	VZ Sge	57.8	+17 23	7.0 p	7.24p	?	gM4	? (6.9-7.1e)
	Z Cyg	20 00.0	+49 54	7.6 v	14.7 v	263.77	M5e	M
	RR Tel	00.3	-55 52	6.5 p	16.5 p		F5ep	Ne
	WZ Sge	05.3	+17 33	7.0 p	15.5 p		Pec	Nd 1913, 1946
28028	RX Cyg	09.3	+47 40	8.0 v			B3	Invar
28087	RS Cyg	11.6	+38 35	6.5 v	9.3 v	417.75	N0ep	SRa
28099	o ¹ Cyg	12.1	+46 35	4.91p	5.29p	3803	cK1+B8	EA
28119	R Del	12.5	+08 56	7.6 v	13.7 v	284.50	M5e-M6e	M
28160	o ² Cyg	13.9	+47 34	5.3 p	5.6 p	1148.0	cK5+B	EA
	RT Cap	14.1	-21 29	6.4 v	8.1 v	393	N3	SRb (8.9-11.7p)
	RT Sgr	14.4	-39 16	6.0 v	14.1 v	305.17	M5e-M7e	M (7.2-15p)

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
28218	P Cyg	20 ^b 15 ^m 9	+37°53'	3 v	6 v		B1ep	QN 1600
	CN Cyg	16.9	+59 38	7.3 v	14.0 v	198 ^d 58	M5e	M
28290	U Cyg	18.1	+47 44	6.7 v	11.4 v	464.69	Nep	M
28324	AC Dra	19.9	+68 43	7.0 p	7.25p		gM5	? (7.4-7.65e)
28448	T Mic	24.9	-28 26	7.7 p	9.6 p	347	M6e	SRb
	RW Cyg	27.0	+39 49	7.6 v	9.0 v	586	cM3	SRc (10.7-11.9p)
28639	AF Dra	32.2	+74 47	5.12v	5.24v	20.27	A3p	α CV
28720	EU Del	35.6	+18 06	6.0 v	6.9 v	59.5	M5	SRb
28804	VW Cep	38.1	+75 25	7.8 p	8.21p	0.27832	dG5+dK1	EW
28844	V Cyg	39.7	+47 58	7.7 v	13.9 v	421.27	Nep	M
28861	V 568 Cyg	40.4	+35 17	6.6 p	6.9 p		B2e	Ia?
28886	X Cyg	41.4	+35 24	6.5 p	8.20p	16.3866	cF7-G8p	C δ
28930	U Del	43.2	+17 54	5.6 v	7.5 v		cM5	Ib (7.6-8.9p)
	W Aqr	43.9	-04 16	8.7 v	14.9 v	381.00	M7e	M
28964	V Aqr	44.3	+02 15	7.6 v	9.4 v	244.0	M6e	SRb
28981	T Cyg	45.2	+34 11	5.0 v	5.5 v		gK3	Ib?
	V Del	45.5	+19 09	8.1 v	15.5 v	533.82	M4e-M6e	M
29038	T Aqr	47.3	-05 20	7.2 v	14.2 v	202.12	M2e-M5e	M
29089	T Vul	49.3	+28 04	5.82p	6.82p	4.43558	cF5-G0	C (5.90-6.86e)
29114	Y Cyg	50.1	+34 28	7.00v	7.64v	2.99633	B0+B0	EA (7.2-7.8p)
29171	BW Vul	52.2	+28 20	6.2 p	6.43p	0.20103	B2s	β C
	S Ind	52.7	-54 31	7.4 v	>14.0 v	399.56	M6e	M (7.9-17.0p)
	UX Cyg	53.0	+30 13	9.0 v	14.8 v	561.24	M4e-M6e	M
29273	DQ Cep	56.1	+55 19	7.41p	7.48p	0.07886	F1	δ Sc
	V 450 Cyg	56.7	+35 45	7.0 p	>17 p		Q	Nb 1942
29327	V 832 Cyg	58.1	+47 20	4.49v	4.6 v		B1ne	Ia
29433	R Vul	21 02.2	+23 37	7.4 v	13.4 v	136.83	M4e-M5e	M
29502	DT Cyg	04.4	+30 59	6.0 p	6.46p	2.49934	cF5-F7	C δ (6.08-6.53e)
29562	V 389 Cyg	06.5	+30 00	5.5 p	5.69p		B8-A0	SR? I?
29611	T Cep	08.9	+68 17	5.4 v	11.0 v	389.27	gM5e-M7e	M
29831	T Ind	16.9	-45 14	7.69p	9.40p	320	Na	SRb
29915	Y Pav	19.8	-69 57	5.7 v	8.5 v	233.3	N0	SR (8.6-10.3p)
30026	SX Pav	24.3	-69 43	5.3 v			M6	Invar?
30118	β Cep	28.0	+70 20	3.32p	3.35p	0.19048	B2s	β C
30250	W Cyg	34.1	+45 09	5.0 v	7.6 v	130.85	gM4e-M6e	SRb (6.8-8.9p)
	AB Cyg	34.4	+31 52	7.4 v	8.5 v	520	M4e	SRb (9.5-10.1p)
30278	CP Cyg	35.5	+44 28	6.2 v			A4	Invar
30287	S Cep	35.9	+78 24	7.4 v	12.9 v	487.46	N8e	M
30328	EE Peg	37.6	+08 57	6.9 v	7.5 v	2.62675	A4	EA
30360	RU Cyg	39.0	+54 06	6.9 v	10.2 v	234.45	M7e	SRa (9.2-11.6p)
	Q Cyg	39.8	+42 37	3.0 v	15.2 v		Q	Na 1876
30384	V 460 Cyg	39.9	+35 17	6.1 v	7.0 v		N1	Ib
30416	RV Cyg	41.2	+37 47	7.1 v	9.3 v	300	N5	SRb (10.8-12.4p)
30440	μ Cep	42.0	+58 33	3.6 v	5.1 v		cM2e	SRc
	R Gru	45.3	-47 09	7.4 v	14.9 v	332.49	M5e	M (8.7-16.9p)
	WY Cyg	46.9	+44 01	7.6 v	14.9 v	303.90	M6e	M (9.5-17.0p)
	AG Peg	48.6	+12 24	6.0 v	9.4 v		Bep+M	Ne (6.8-7.8p)
30618	AW Peg	50.0	+23 47	7.4 p	9.0 p	10.62254	A2+F0	EA
30671	EM Cep	52.3	+62 23	7.10v	7.13v	0.80624	B1	EB
30731	VV Cep	55.2	+63 23	6.75p	7.46p	7430	cM2ep+Be	EA

GC	Var	AR 1950	D 1950	Max	min	Per	Sp	Typ
30985	TW Peg	22 ^h 01 ^m 7	+28°07'	7.0 v	9.2 v	956 ^d 4	M7	SR
	AR Lac	06.7	+45 30	6.87p	7.69p	1.98322	sG5+sgK0	EA (7.31-8.20e)
	CP Lac	13.8	+55 22	2.1 v	15.6 p		Q	Na 1936
	X Aqr	15.9	-21 09	7.5 v	14.8 v	311.27	S6e	M (9.7-15.9p)
31273	π^1 Gru	19.7	-46 12	5.92v	6.30v	?	S5e	Ib
31299	RW Cep	21.2	+55 43	6.2 v	7.6 v		cM0	Ic (8.6-10.5p)
	S Gru	23.0	-48 41	6.0 v	15.0 v	400.98	M5e-M7e	M (7.3-15.8p)
31414	S Lac	26.8	+40 04	7.6 v	13.9 v	239.98	M5e-M6e	M
31421	δ Cep	27.3	+58 10	4.1 p	5.2 p	5.36634	cF5-G2	C δ
	ST Cep	28.4	+56 44	9.7 p	11.1 p		cM0	Ic
31569	DI Lac	33.8	+52 27	4.3 p	14.4 p		Q	Na 1910
	W Cep	34.5	+58 10	6.9 v	8.6 v	1100	K0ep	SRc (8.9-10.0p)
31670	DD Lac	39.2	+39 58	4.9 p	5.10p	0.19309	B2n	β C
31826	AH Cep	46.1	+64 48	6.63v	6.85v	1.77473	B0+B0	EB (6.9-7.12p)
	DK Lac	47.7	+53 01	5.0 p	15.5 p		Q	Na 1950
31962	AR Cep	52.6	+84 47	7.1 v	7.8 v	116	M4	SRb
31987	EN Lac	54.1	+41 20	5.3 p	5.41p	0.16916	B2s	β C
31992	S Aqr	54.6	-20 37	7.6 v	15.0 v	379.15	M4e	M (9.3-15.6p)
31998	EW Lac	54.8	+48 25	5.0 p	5.3 p		B3ne	?
32095	\circ And	59.6	+42 03	3.53p	3.66p	1.59984	B6n+A2p	EB (3.59-3.72e)
32135	β Peg	23 01.3	+27 49	2.1 v	3.0 v		gM2v	Ib
	CW Cep	02.1	+63 08	8.04p	8.50p	2.72913	B3+B3	EA
32187	R Peg	04.1	+10 16	7.1 v	13.8 v	377.53	M6e-M9e	M
	V Cas	09.5	+59 25	7.3 v	12.8 v	227.90	M5e-M7e	M
32401	χ Aqr	14.3	-08 00	6.5 p	6.8 p	?	gM5	?
32447	AN And	16.0	+41 30	6.0 p	6.16p	3.2196	A7s+A	EB
	W Peg	17.4	+26 00	7.9 v	13.0 v	344.00	M2e-M8e	M
32497	S Peg	18.0	+08 39	7.4 v	13.8 v	318.82	M5e-M8e	M
32683	AR Cas	27.7	+58 16	4.7 p	4.83p	6.06652	B3	EA
32832	λ And	35.1	+46 11	4.9 p	5.29p	54	sgG8	SR
32862	SV Cas	36.6	+51 59	6.8 v	10.1 v	276.3	M6	SRa (9.1-12.5p)
32948	R Aqr	41.2	-15 34	5.8 v	11.5 v	386.92	gM7e+Pec	M Neb (6.7-11.6p)
32995	TX Psc	43.8	+03 13	6.9 p	7.7 p		N0	Ib
32998	SX Phe	43.9	-41 51	6.54v	7.53v	0.05496	sdA2	RR (6.7-7.5p)
	TZ And	48.4	+47 13	9.4 p	10.8 p	974	cM6	SRb
33160	Z Aqr	49.7	-16 09	7.2 v	9.8 v	136.0	M1e-M3e	SRa (9.5-12.0p)
	ρ Cas	51.9	+57 13	4.1 v	6.2 v		cF5-cK5	R CrB?
	RS And	52.8	+48 21	9.5 p	10.8 p	130	M7	SRb
33184	V 373 Cas	53.0	+57 08	6.05v	6.10v	13.4187	B0+B0	?
	R Phe	53.9	-50 05	7.5 v	14.4 v	268.00	M3e	M (9.2-15p)
33205	V Cep	54.1	+82 55	6.6 v			A0	Invar
33244	R Cas	55.9	+51 07	5.5 v	13.0 v	431.2	gM5e-M8e	M
33258	S Phe	56.5	-56 51	7.4 v	8.2 v	141	M5e	SR (8.6-10.6p)
33298	CG And	58.2	+44 58	6.2 p	6.24p	3.7422	A0p	α CV
33308	WZ Cas	58.7	+60 05	6.9 v	8.5 v	186.0	N1p	SRb (9.4-11.1p)
	W Cet	59.6	-14 58	7.1 v	14.6 v	350.88	S7e	M(9.2-16p)

OPEN STAR CLUSTERS

CI

NGC	Number in Dreyer's New General Catalogue or Index Catalogue
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
\varnothing	Apparent diameter
\varnothing pc	Linear diameter in parsecs
Δ pc	Distance of cluster in parsecs
m	Apparent integrated visual magnitude
N*	Approximate number of stars
T	Shapley's classification:
	c very loose and irregular
	d loose and poor
	e intermediate rich
	f fairly rich
	g considerably rich and concentrated
Con	Constellation
N	Notes

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NGC	AR 1950	D 1950	\varnothing	\varnothing pc	Δ pc	m	N*	T	Con	N
103	00 ^h 22 ^m 6	+61°03'	13'	14.4	3800	10.8	35	f	Cas	
129	27.0	+59 57	11	6.4	2000	10.0	50	e	Cas	
133	28.4	+63 04	7	5.6	2750	9.1	50	e	Cas	
136	28.7	+61 15	2	4.8	8330	11.3	10		Cas	
146	30.3	+63 01	6	2.5	1450	9.8	50	e	Cas	
188	39.4	+85 03	15	45.8	10500	9.3	70	c	Cep	
225	40.5	+61 31	12	1.7	520	9.1	20		Cas	
381	01 05.2	+61 18	8	6.5	2780	9.2	30		Cas	
436	12.4	+58 33	4	1.3	1150	8.8	40	d	Cas	
457	15.9	+58 04	10	1.9	660	7.5	100	e	Cas	
559	26.1	+63 02	7	5.6	2750	7.3	60	e	Cas	
581	29.9	+60 27	5	1.7	1150	7.4	60	d	Cas	M 103
637	38.3	+63 47	3	1.2	1380	7.1	20	d	Cas	
654	40.5	+61 39	5	1.7	1150	9.1	50	d	Cas	
659	40.8	+60 28	5	2.8	1910	9.8	30	d	Cas	
663	42.6	+61 01	11	2.5	790	7.1	80	e	Cas	
744	55.1	+55 14	11	7.1	2220	9.4	25		Per	
752	54.7	+37 25	45	13.8	1050	7.0	70	d	And	
869	02 15.5	+56 55	36	23.5	2250	4.4	350	f	h Per	
884	18.9	+56 53	36	23.5	2250	4.7	300	e	x Per	
I. 1805	28.7	+61 13	20	3.8	660	7.0	20	d	Cas	
957	28.9	+57 18	10	6.6	2290	7.2	40	e	Per	
1027	38.8	+61 20	7	2.3	1150	7.5	11	d	Cas	
1039	38.8	+42 34	18	2.3	440	5.5	80	d	Per	M 34
I. 1848	47.3	+60 14	17	5.4	1060	7.6	40		Cas	
H 1	03 07.2	+63 03	15	7.9	1820	7.2	30	e	Cas	
1220	07.8	+53 10	1.6	4.2	9000	11.8	10	e	Per	
1245	11.2	+47 03	30	3.5	5000	6.9	40	e	Per	
1342	28.4	+37 09	15	3.6	830	7.1	40	c	Per	
Mel 22	43.9	+23 58	100	8.4	126	1.4	130	c	Tau	M 45 Pleiades
1444	45.6	+52 31	4	2.3	2000	6.4	15		Per	
1502	04 03.0	+62 11	7	2.3	1150	5.3	15	e	Cam	
1513	06.2	+49 23	12	16.0	4570	8.8	40	d	Per	
1528	11.4	+51 07	25	6.3	870	6.2	80	e	Per	
I. 361	14.8	+58 11	6	7.3	3850	11.2	40		Cam	
Mel 25	16.7	+15 31	330	10.0	40	0.8	40	c	Tau	Hyades
1545	17.1	+50 08	18	6.9	1320	8.0	25		Per	
1647	43.2	+18 59	40	12.8	1100	6.3	30	c	Tau	
1664	47.4	+43 37	15	8.3	1910	7.5	40	e	Aur	
1746	05 00.6	+23 44	45	13.1	1000	6.0	60	e	Tau	
1807	07.8	+16 28	10	3.2	1100	7.8	15	e	Tau	
1817	09.2	+16 38	15	9.1	2090	7.9	10	d	Tau	
1857	16.6	+39 18	9	4.3	1660	8.6	45	d	Aur	
1883	22.2	+46 30	3	3.6	4170	12.2	20	f	Aur	
1893	22.4	+33 21	12	2.8	790	8.0	20	d	Aur	
1907	24.7	+35 17	5	3.0	2090	9.9	40	f	Aur	
1912	25.3	+35 48	20	6.4	1100	7.4	100	e	Aur	M 38
1960	32.0	+34 07	12	4.0	1160	6.3	60	f	Aur	M 36
2099	49.0	+32 33	20	8.4	1450	6.2	150	f	Aur	M 37
2112	51.3	+00 23	12	6.3	1890	8.6	90		Ori	

NGC	AR 1950	D 1950	∅	∅ pc	Δ pc	m	N*	T	Con	N
2126	05 ^h 58 1	+49°55'	6'5	6.1	3220	9.8	28	d	Aur	
2129	58.1	+23 18	5	3.2	2190	7.2	25	d	Gem	
2141	06 00.3	+10 26	10	6.9	2380	10.8	100	f	Ori	
I. 2157	01.8	+24 02	4	2.5	2190	8.5	20	d	Gem	
2158	04.3	+24 06	4	5.8	5000	12.5	40	g	Gem	
2168	05.7	+24 20	40	9.4	790	5.3	120	e	Gem	M 35
2169	05.7	+13 58	5	1.1	790	6.4	18	d	Ori	
2175	06.8	+20 20	18	12.5	2380	6.7	15		Ori	
2186	09.4	+05 27	5	4.4	3020	9.3	30	e	Ori	
2192	11.0	+39 50	6	6.5	3700	10.9	30	f	Aur	
2194	11.0	+12 50	8	11.7	5010	9.2	100	e	Ori	
2204	13.5	-18 35	13	7.8	2080	9.1	90	e	CMa	
2215	18.4	-07 16	8	5.1	2190	8.6	20	d	Mon	
2236	27.0	+06 53	5	12.1	8320	11.9	50	f	Mon	
2243	27.6	-31 15	4	10.6	9120	10.2	10	f	CMa	
2244	29.7	+04 54	40	19.2	1660	6.2	16	c	Mon	
2251	32.0	+08 24	10	5.5	1790	8.5	35		Mon	
2259	35.8	+10 55	3	13.8	15800	10.8	20	d	Mon	
2264	38.4	+09 56	30	7.6	870	4.7	20	c	Mon	
2266	40.5	+27 02	5	3.3	2290	9.8	30	f	Gem	
2286	45.1	-03 07	15	7.6	1750	8.0	50		Mon	
2287	44.9	-20 42	30	6.6	760	5.0	50	e	CMa	M 41
2281	45.8	+41 07	17	7.2	1660	6.7	30	e	Aur	
2301	49.2	+00 31	15	3.3	760	5.8	60	d	Mon	
2304	52.3	+18 05	5.5	8.4	5250	10.1	30	d	Gem	
2311	52.8	-04 31	7	5.7	2780	9.6	25		Mon	
2309	53.8	-07 08	3	5.1	5880	10.5	15		Mon	
2324	07 00.4	+01 08	9	18.1	6920	8.8	30	e	Mon	
2323	00.5	-08 16	16	3.7	800	6.9	100	e	Mon	M 50
2335	04.2	-10 00	12	7.7	2220	9.1	35		Mon	
2343	05.9	-10 34	7	4.3	2130	8.0	15		Mon	
2345	06.0	-13 05	12	5.3	1510	8.3	60		CMa	
2354	12.2	-25 38	25	15.9	2190	8.9	60	e	CMa	
2353	12.3	-10 12	20	5.5	950	5.3	25	d	Mon	
2355	14.2	+13 52	9	7.3	2780	12.2	70	g	Gem	
2360	15.4	-15 33	12	3.3	950	9.5	50	g	CMa	
2362	16.6	-24 52	6	2.6	1450	10.5	40	d	CMa	
2395	24.3	+13 41	12	6.2	1720	9.4	30		Gem	
2421	34.1	-20 30	8	2.2	950	9.4	50	f	Pup	
2422	34.3	-14 22	25	8.4	1150	4.5	50	d	Pup	
2423	34.8	-13 45	20	10.6	1820	6.9	60	d	Pup	
Mel 71	35.3	-11 56	8	4.2	1820	9.0	65	g	Pup	
2420	35.4	+21 41	7	6.5	3200	10.2	20	e	Gem	
Mel 72	35.7	-10 33	5	6.7	4570	9.4	40	d	Mon	
2439	38.9	-31 32	9	4.3	1660	7.1	50	g	Pup	
2437	39.6	-14 42	24	12.8	1820	6.0	150	f	Pup	M 46
2447	42.4	-23 45	25	8.0	1100	6.0	60	g	Pup	M 93
2451	43.6	-37 51	45	3.7	280	3.6	50		c Pup	
2453	45.7	-27 07	5	4.7	3220	9.4	20		Pup	
2455	46.8	-21 10	5.5	6.4	4370	10.3	20	d	Pup	

NGC	AR 1950	D 1950	∅	∅ pc	Δ pc	m	N*	T	Con	N
2477	07 ^h 50 ^m 5	—38°25'	25'	13.9	1910	5.7	300	g	Pup	glob ?
2482	52.8	—24 10	18	6.6	1260	8.7	50	e	Pup	
H 2	53.1	—25 47	7	3.0	1450	9.1	20	d	Pup	
2479	54.7	—17 35	8	6.1	2630		40	f	Pup	
2489	56.2	—29 56	7	4.3	2090	9.4	30	g	Pup	
2506	57.7	—10 29	10	6.6	2290	11.5	50	g	Mon	M 48 ?
2509	58.5	—18 56	4	1.6	1380	9.3	40	g	Pup	
2516	59.7	—60 44	60	23.8	1320	3.0	80	g	Car	
2527	08 03.2	—28 01	22	7.3	1110	8.0	50		Pup	
2533	05.0	—29 45	4	4.6	4550	9.8	20		Pup	
2539	08.4	—12 41	21	11.2	1820	8.2	150	f	Pup	
2547	08.9	—49 07	15	4.2	950	5.1	50	d	Vel	
2546	10.6	—37 29	40	7.9	660	4.6	50		Pup	
2548	11.2	—05 38	30	8.3	950	5.3	80	f	Hya	
2567	16.6	—30 29	10	3.7	1260	8.3	50	f	Pup	
2571	16.9	—29 35	8	2.2	950	7.5	25	c	Pup	M 44 Praesepe
2580	19.4	—30 09	9	5.0	1910	9.6	30	c	Pup	
2587	21.3	—29 20	6	3.3	1910	9.1	30	c	Pup	
2627	35.2	—29 46	8	5.8	2510	8.3	40	f	Pyx	
2635	36.5	—34 35	3	3.8	4370	10.2	20	d	Pyx	
2632	37.5	+19 52	95	3.9	158	3.7	75	d	Cnc	
I. 2391	38.8	—52 53	40	3.2	260	2.6	20	c	O Vel	
2659	40.9	—44 46	10	11.6	3980	9.7	40	d	Vel	
2660	41.0	—47 02	1.5	2.2	5000	10.8	25	d	Vel	
I. 2391	41.2	—52 45	20	0.5	60		10	c	Vel	
2658	41.4	—32 29	9	9.1	3470	9.2	30	f	Pyx	M 67
I. 2395	43.4	—48 00	10	3.8	1320	4.6	16	e	Vel	
2671	44.4	—41 42	3	4.4	5000	11.2	20	e	Vel	
2670	44.6	—48 36	15	9.5	2190	9.3	16	d	Vel	
H 3	44.6	—52 36	7	3.1	1510	6.2	35	e	Vel	
2682	48.3	+12 00	15	3.6	830	6.1	65	f	Cnc	
2818	09 14.0	—36 24	9	13.0	5000	9.8	20	e	Pyx	
I. 2488	25.7	—56 45	20	12.8	2190	7.2	50	d	Vel	
2910	28.4	—52 41	6	3.8	2190	8.2	30	f	Vel	
2925	31.9	—53 13	11	5.6	1740	8.1	30	d	Vel	
2972	38.5	—50 06	6	7.3	3850	10.2	25		Vel	
3033	47.1	—56 11	6	4.1	2320	8.4	20		Vel	
3105	58.9	—54 32	1.5	1.7	3980	11.1	15	f	Vel	
3114	10 01.1	—59 53	30	2.6	300	4.4	100	e	Car	
3228	19.7	—51 28	30	11.5	1320	6.5	12	f	Vel	
I. 2581	25.4	—57 23	5	4.2	2880	5.2	35	f	Car	M 67
3293	31.5	—57 58	8	1.0	460	7.5	50	d	Car	
H 4	36.9	—53 54	8	3.2	1380	9.0	25	f	Vel	
Mel 101	40.4	—64 50	15	10.5	2400	8.4	40	e	Car	
I. 2602	41.0	—64 08	70	4.1	200	1.6	32	c	Car	
3532	11 03.4	—58 24	60	9.1	520	3.3	130	f	Car	
3572	07.3	—59 58	5	1.5	1050	8.8	30	d	Car	
3590	09.8	—60 32	3	1.1	1200	7.9	25	f	Car	
I. 2714	15.2	—62 26	12	6.1	1740	7.9	150	e	Car	
Mel 105	17.2	—63 14	4	2.3	2000	9.5	50	f	Car	

NGC	AR 1950	D 1950	\varnothing	\varnothing pc	Δ pc	m	N*	T	Con	N
3680	11 ^h 23 ^m 3	—42°58'	11'	5.5	1730	8.6	26		Cen	
3766	34.2	—61 19	10	1.5	520	5.1	60	g	Cen	
I. 2948	36.2	—63 15	15	2.9	660		25	c	Cen	
3960	47.4	—55 25	6	9.1	5250	9.0	50	g	Cen	
4052	12 00.6	—62 54	10	7.6	2630	9.0	50	e	Cru	
4103	04.1	—60 58	9	2.5	950	7.8	25	d	Cru	
4337	21.2	—57 50	4	6.1	5250	10.0	20	f	Cru	
4349	21.4	—61 37	15	6.6	1510	8.1	100	g	Cru	
Mel 111	22.6	+26 24	275	6.6	83	2.7	30	c	Com	
H 5	25.2	—60 29	7	2.1	1050	8.5	30	d	Cru	
4439	25.4	—59 49	3	1.2	1380	9.2	10	d	Cru	
4463	27.1	—64 30	3	1.2	1380	8.5	20	f	Cru	
H 6	35.0	—68 10	7	13.5	6610	10.6	75	e	Mus	
H 7	35.9	—60 20	18	41.4	7900	9.9	200	c	Cru	
4609	39.4	—62 42	4	1.1	910	8.9	20	e	Cru	
4755	50.6	—60 05	10	0.9	300	5.2	50	g	Cru	
4815	54.9	—64 41	4	7.7	6610	10.6	40	f	Mus	
4852	57.1	—59 20	10	3.5	1200	8.8	40	d	Cen	
H 8	13 15.0	—66 49	4	7.7	6610	10.1	25	f	Mus	
5281	43.1	—62 39	3	1.1	1320	8.0	20	d	Cen	
5316	50.4	—61 37	12	5.5	1580	8.4	50	d	Cen	
5460	14 04.5	—48 05	30	7.3	830	6.3	25	d	Cen	
5593	22.4	—54 35	8	5.8	2510		10	e	Lup	
5617	26.0	—60 30	15	7.9	1820	8.5	50	f	Cen	
5662	31.5	—56 21	8	2.6	1100	8.2	30	d	Cen	
5715	39.8	—57 20	6	6.6	3800	9.8	30	e	Cir	
5749	45.3	—54 19	10	4.6	1580	9.0	16	e	Lup	
5822	15 01.6	—54 09	40	21.2	1820	6.4	120	d	Lup	
5823	01.9	—55 24	9	4.8	1820	8.5	80	f	Cir	
5925	23.9	—54 21	25	7.0	970	8.3	65		Cir	
H 9	29.8	—53 26	3	5.8	6610		30	e	Nor	
5999	48.2	—56 20	4	4.4	3800	9.2	100	f	Nor	
6005	51.8	—57 18	3	5.8	6610	11.8	30	f	Nor	
6025	59.4	—60 22	10	1.8	630	5.8	30	d	TrA	
6067	16 09.3	—54 05	15	8.3	1910	6.7	120	f	Nor	
6087	14.7	—57 47	20	6.4	1100	6.0	35	d	Nor	
H 10	15.6	—54 52	30	14.5	1660		30	d	Nor	
6124	22.2	—40 35	25	6.0	830	6.3	120	e	Sco	
6134	24.0	—49 04	9	6.0	2290	9.1	60	f	Nor	
6152	28.8	—52 31	30	17.5	2000	7.7	60	e	Nor	
6167	30.6	—49 30	18	5.6	1065	6.4	110		Ara	
6178	32.1	—45 31	4	1.7	1450	7.1	10	f	Sco	
6192	36.8	—43 17	7	1.6	790	8.7	50	f	Sco	
6193	37.6	—48 40	20	8.8	1510	5.0	30	e	Ara	
6208	45.5	—53 44	22	25.4	3980	9.6	50	e	Ara	
6204	45.7	—46 56	5	2.4	1660	8.7	25	f	Ara	
6222	47.1	—44 39	3	4.0	4570	10.2	20	d	Sco	
6231	50.7	—41 43	15	1.7	380	8.5	120	e	Sco	
6242	52.2	—39 25	10	1.7	570	8.1	40	f	Sco	
H 12	52.7	—40 38	40	4.4	380	8.5	200	c	Sco	

NGC	AR 1950	D 1950	\varnothing	\varnothing pc	Δ pc	m	N*	T	Con	N
6253	16 ^h 55 ^m 1	—52°38'	6'	8.7	5010	10.2	70	f	Ara	
6259		57.1 —44 36	15	10.0	2290	8.6	100	e	Sco	
6268		58.6 —39 39	10	4.4	1510	9.5	30	f	Sco	
6281	17	01.4 —37 49	9	0.8	300	8.6	25	d	Sco	
H 13		01.7 —48 06	15	22.0	5000		70	d	Ara	
6318		14.3 —39 24	5	3.8	2510	12.0	60	g	Sco	
6322		15.2 —42 50	12	3.7	1050	7.0	20	e	Sco	
I. 4651		20.7 —49 54	14	5.9	1450	7.8	200	e	Ara	
H 14		21.2 —39 00	10	7.6	2630	11.8	30	f	Sco	
H 15		26.0 —29 29	10	2.0	690	9.2	15	e	Oph	
H 16		27.4 —36 49	15	2.6	600		20	e	Sco	
6383		31.4 —32 33	6	1.8	1050	5.5	12	e	Sco	
6400		36.1 —36 55	6	1.2	690	8.9	25	d	Sco	
6404		36.3 —33 13	3	0.9	1050	10.6	20	g	Sco	
6405		36.8 —32 11	25	4.1	570	5.3	50	e	Sco	M 6
H 17		37.2 —40 03	10	3.0	1050	7.5	20	d	Sco	
6416		41.0 —32 20	20	3.3	570	8.5	25	e	Sco	
6425		43.7 —31 31	8	5.3	2270	9.2	25		Sco	
I. 4665		43.8 +05 44	60	5.2	300	5.9	13	c	Oph	
6451		47.4 —30 11	6	2.5	1450	8.3	50	e	Sco	
6469		49.9 —22 20	12	10.1	2880	8.0	40	e	Sgr	
6475		50.7 —34 48	60	6.6	380	3.2	50	e	Sco	M 7
H 18		53.0 —35 17	15	3.0	690	8.8	80	d	Sco	
6494		54.0 —19 01	25	10.0	1380	6.9	120	e	Sgr	M 23
6520	18	00.3 —27 54	5	1.0	690	8.1	25	g	Sgr	
6530		01.6 —24 20	10	4.5	1580	6.3	25	e	Sgr	
6531		01.8 —22 30	10	2.6	910	6.5	50	d	Sgr	M 21
6540		03.1 —27 50	0.5	4.5	31200	14.5	20	g	Sgr	
6546		04.2 —23 19	12	5.7	1720	8.6	20		Sgr	
6558		07.0 —31 46	1.5	4.4	10000	11.3		g	Sgr	
6583		12.8 —22 09	1.5	2.2	5000	12.4	30	g	Sgr	
H 19		14.5 —13 18	5	8.0	5500	12.2	20	g	Ser	
6603		15.5 —18 27	4	5.8	5010	4.6	50	g	Sgr	M 24
6611		16.0 —13 48	25	12.1	1660	6.4	55	c	Ser	M 16
6613		17.0 —17 09	12	6.7	1910	7.5	12	d	Sgr	M 18
6618		17.9 —16 12	22	6.2	1000	7.5	35	c	Sgr	M 17
6633		25.1 +06 32	20	2.9	500	4.9	65	d	Oph	
I. 4725		28.8 —19 17	40	6.4	550	6.5	50	d	Sgr	M 25
6642		28.8 —23 31	0.8	7.3	9100	7.9		d	Sgr	glob?
6645		29.8 —16 56	10	6.6	2290	8.5	75	g	Sct	
6649		30.7 —10 26	8	7.7	3310	8.8	35	f	Sct	
6664		34.0 —08 16	18	12.0	2290	8.9	25	d	Sct	
I. 4756		36.6 +05 26	70	10.2	500	5.1	80	d	Ser	
6694		42.5 —09 27	9	7.9	3920	9.3	20	f	Sct	M 26
6704		48.2 —05 16	5	4.7	3220	9.1	20		Sct	
6705		48.4 —06 20	10	5.0	1740	6.3	200	g	Sct	M 11
6709		49.1 +10 17	12	2.8	790	8.1	40	d	Aql	
6716		51.6 —19 57	7	1.9	950	6.9	20		Sgr	
6755	19	05.3 +04 09	10	5.8	2000	8.3	50	d	Aql	
6756		06.2 +04 35	3	4.4	5010	10.7	20	f	Aql	

NGC	AR 1950	D 1950	∅	∅ pc	Δ pc	m	N*	T	Con	N
6791	19 ^h 19 ^m 0	+34°40'	13'				20	e	Lyr	
6802	28.4	+20 10	3.5	5.1	5000	11.0	60	e	Vul	
6811	36.7	+46 27	15	12.6	2880	9.2	50	d	Cyg	
6819	39.6	+40 06	6	8.8	5010	10.1	150	d	Cyg	
6823	41.1	+23 12	5	1.1	790	9.8	30	d	Vul	
6830	48.9	+22 58	8	1.8	790	9.0	20	d	Vul	
6834	50.2	+29 17	4	5.8	5010	10.3	15	d	Vul	
H 20	50.9	+18 13	10	2.3	790	9.6	20	d	Sge	
6866	20 02.1	+43 51	6	1.7	950	8.8	50	d	Cyg	
6871	04.0	+35 38	37	13.2	1210	5.6	60		27 Cyg	
I. 1311	09.1	+41 02	5	7.3	5010	13.1	30	e	Cyg	
6883	09.4	+35 42	12	5.1	1540	7.8	20		Cyg	
6885	09.9	+26 20	20	6.7	1150	9.1	35	e	Vul	
I. 4996	14.6	+37 29	6	3.1	1640	7.2	40		Cyg	
6910	21.3	+40 37	8	1.8	790	6.7	40	d	Cyg	
6913	22.2	+38 21	12	3.3	950	7.1	20	d	Cyg	M 29
6939	30.4	+60 28	5	7.3	5000	10.0	80	g	Cep	
6940	32.5	+28 08	20	16.8	2880	8.2	100	e	Vul	
7044	21 11.1	+42 17	3.5	5.6	5550	11.3	40		Cyg	
7062	21.5	+46 10	5	3.5	2400	11.6	30	e	Cyg	
7086	29.8	+51 22	8	6.7	2880	9.4	50	e	Cyg	
7092	30.4	+48 13	30	2.2	250	5.2	25	e	Cyg	M 39
I. 1396	37.5	+57 16	50	5.8	400	5.1	30		Cep	
7127	42.2	+54 24	1	0.8	2880		10	d	Cyg	
7128	42.4	+53 29	2	1.7	2880	11.2	20	d	Cyg	
7142	44.7	+65 34	11	7.7	2320	10.4	35		Cep	
7160	52.3	+62 22	7	3.0	1370	6.6	25		Cep	
7209	22 01.8	+46 16	20	7.7	1320	7.6	50	d	Lac	
I. 1434	08.6	+52 35	8	6.5	2780	10.0	40		Lac	
7243	13.2	+49 38	20	4.7	790	7.4	40	d	Lac	
7245	13.6	+54 05	3	4.4	5010	11.5	40	d	Lac	
7261	18.6	+57 50	6	5.4	3120	9.8	18		Cep	
7296	26.2	+52 02	4	4.5	3850	9.4	15		Lac	
7380	44.9	+57 49	10	2.1	790	8.8	50	d	Cep	
7419	52.6	+60 34	2	2.9	5010	13.0	25	e	Cep	
7510	23 09.2	+60 18	2	1.6	2750	8.8	27	d	Cep	
7654	22.0	+61 20	12	4.1	1170	7.3	120	e	Cas	M 52
7686	27.8	+48 51	15	7.4	1690	8.0	35		And	
7762	47.5	+67 44	10	13.3	4570	10.0	70	d	Cep	
H 21	51.8	+61 29	5	4.0	2750	9.0	22	d	Cas	
7788	54.2	+61 07	2	1.2	2000	9.4	18	e	Cas	
7789	54.5	+56 26	30	34.8	3980	9.6	200	e	Cas	
7790	54.5	+60 56	6	4.8	2750	7.1	25	d	Cas	

GLOBALAR CLUSTERS

G1

NGC	Number in Dreyer's New General Catalogue or Index Catalogue
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
\varnothing	Apparent diameter in minutes of arc
\varnothing pc	Linear diameter in parsecs
m_p	Apparent integrated photographic magnitude
m_v	Apparent integrated visual magnitude
Sp	Spectrum
RV	Radial velocity in km/s
Δ kpc	Distance in kiloparsecs
T	Concentration: I largest, XII smallest concentration
Con	Constellation
N	Notes

THE HISTORY OF THE UNITED STATES

The first part of the book is devoted to the early history of the United States, from the discovery of the continent by Christopher Columbus in 1492 to the establishment of the first permanent settlements. The second part covers the period from the American Revolution to the Civil War, and the third part deals with the Reconstruction period and the rise of the industrial revolution.

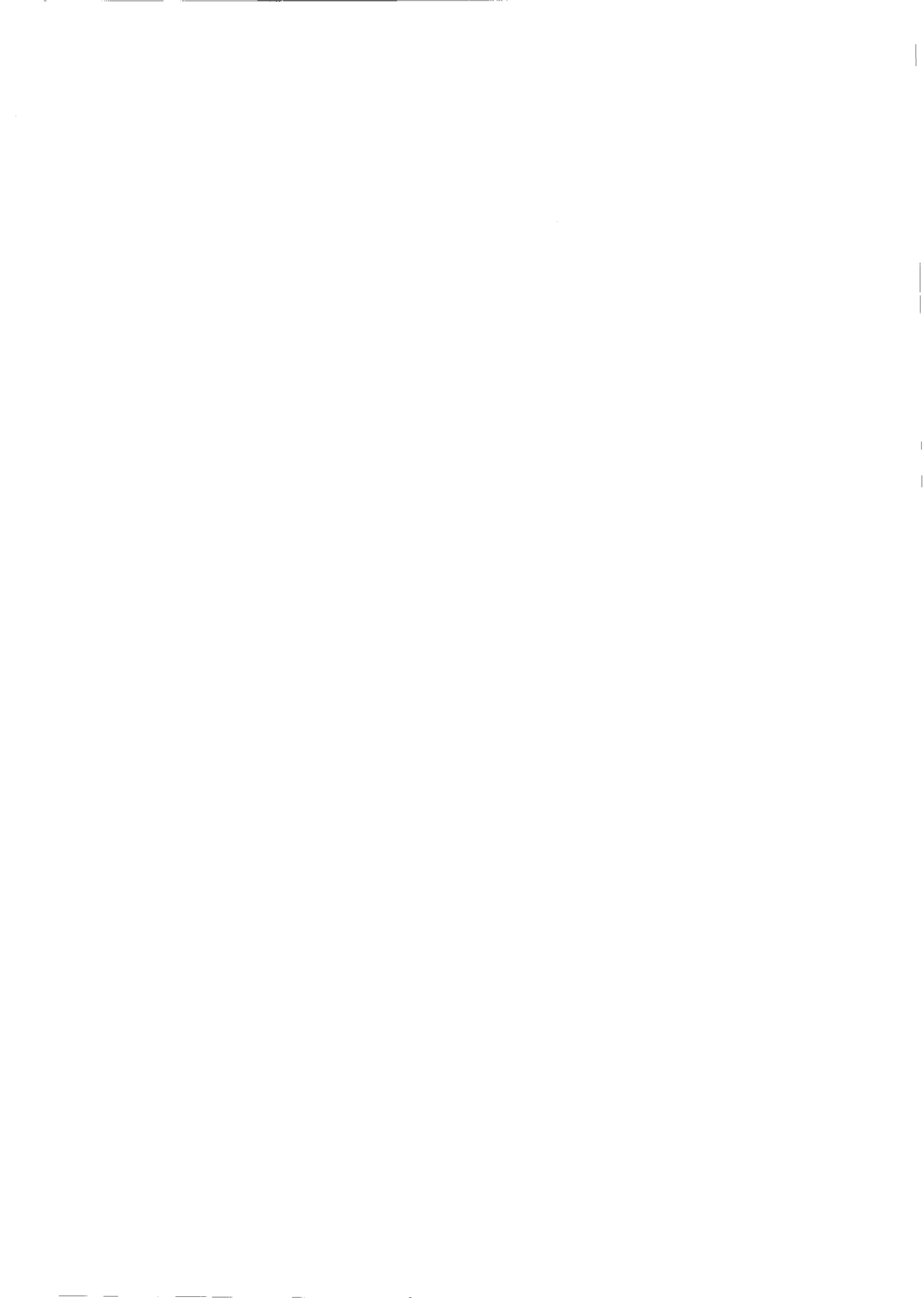
NGC	AR 1950	D 1950	\varnothing	\varnothing pc	m_p	m_v	Sp	RV	Δ kpc	T	Con	N
104	00 ^b 21 ^m 9	-72°21	23'0	45	3.0		G5		5.8	III	Tuc	47 Tuc
288	50.2	-26 52	10.0	42	7.2				12.6	X	Scl	
362	01 00.6	-71 07	5.3	20	6.8		G5		12.6	III	Tuc	
1261	03 10.9	-55 25	2.0	13	8.5		G		29	II	Hor	
1841	04 52.5	-84 05	2.4		12.2						Men	
1851	05 12.4	-40 05	5.3	22	6.0	8.1	dF5	+291	16.6	II	Col	M 79
1904	22.2	-24 34	3.2	19	8.1	8.4	dF3	+231	13.2	V	Lep	
2298	06 47.2	-35 57	1.8	14	10.1	10.5	F8	+ 64	31	VI	Pup	
2419	07 34.8	+39 00	1.7	15	11.0	11.5	F5	+ 14	69	VII	Lyn	
2808	09 10.9	-64 39	6.3	30	5.7		K0		8.0	I	Car	
3201	10 15.5	-46 09	7.7	21	7.4				4.6	X	Vel	M 68
4147	12 07.6	+18 49	1.7	12	10.3	9.4	A7	+191	26	IX	Com	
4372	23.0	-72 24	12.0	34	7.8				6.0	XII	Mus	
4590	36.8	-26 29	2.9	13	7.6	8.2	A6	-111	11.5	X	Hya	
4833	56.0	-70 36	4.7		6.8				5.2	VIII	Mus	
5024	13 10.5	+18 26	3.3	17	6.9	7.6	A8n	-112	20.0	V	Com	M 53
5053	13.9	+17 57	3.5	18	10.5				15.1	XI	Com	ω Cen
5139	23.8	-47 03	23.0	47	3.0	3.7			5.0	VIII	Cen	
5272	39.9	+28 38	9.8	35	4.5	6.4	dF4	-150	13.8	VI	CVn	
5286	43.0	-51 07	1.6	11	8.5		G0		11.5	V	Cen	
5466	14 03.2	+28 46	5.0	25	10.0	8.5			14.5	XII	Boo	
5634	27.0	-05 45	1.3	12	10.4	10.4	F4	- 63	23	IV	Vir	M 5
5694	36.7	-26 19	2.2		10.9		A9	-187	42	VII	Hya	
I 4499	52.7	-82 02	3.1	22	11.5				18.2	XI	Aps	
5824	15 00.9	-32 53	1.0	9	9.3	10.1	dF5	- 63	46	I	Lup	
5897	14.5	-20 50	7.3	35	7.3	10.9			13.8	XI	Lib	
5904	16.0	+02 16	12.7	40	3.6	6.2	dF7	+ 45	8.3	V	Ser	
5927	24.4	-50 29	3.0	18	8.8				3.2	VIII	Lup	
5946	31.8	-50 30	1.3	12	10.6				3.3	IX	Nor	
5986	42.8	-37 37	3.7	18	7.0	8.7	F8	+ 2	13.8	VII	Lup	
6093	16 14.1	-22 52	3.3	17	6.8	7.7	dF4	+ 18	11.0	II	Sco	M 80
6101	20.0	-72 06	3.8	23	9.5				7.6	X	Aps	M 4
6121	20.6	-26 24	14.0	29	5.2	6.4	F		2.3	IX	Sco	
6139	24.3	-38 44	1.3	12	9.8				12.6	II	Sco	
6144	24.2	-25 56	3.3	17	10.3				10.0	XI	Sco	
6171	29.7	-12 57	2.2	14	8.9	9.2	G2	-147	3.0	X	Oph	
6205	39.9	+36 33	10.0	30	4.0	5.7	dF2	-228	6.9	V	Her	M 13
6218	44.6	-01 52	9.3	30	6.0	6.6	F7	+ 36	5.8	IX	Oph	M 12
6229	45.6	+47 37	1.2	10	9.7	8.7	dF6	-150	25	VII	Her	
6235	50.4	-22 05	1.9	16	10.8	10.4			15.8	X	Oph	
6254	54.5	-04 02	8.2	26	5.4	6.7	G0	+ 73	5.0	VII	Oph	M 10
6266	58.1	-30 03	4.3	14	7.0	6.6	dF6	- 81	6.9	IV	Oph	M 62
6273	59.5	-26 11	4.3	20	6.8	6.6	dF2	+102	6.9	VIII	Oph	M 19
6284	17 01.5	-24 41	1.5	12	10.0	9.7	G1	+ 22	16.6	IX	Oph	M 9
6287	02.1	-22 38	1.7	14	10.4	9.9			8.7	VII	Oph	
6293	07.1	-26 30	1.9	13	8.8	8.4	A9	- 73	14.5	IV	Oph	
6304	11.4	-29 24	1.6	12	9.2	9.8	G3	- 98	5.8	VI	Oph	
6316	13.4	-28 05	1.1	10	9.9		G5		11.5	III	Oph	
6325	15.0	-23 42	0.7	10	11.9				15.8	IV	Oph	
6333	16.2	-18 28	2.4	15	7.4	7.3	F1	+224	8.0	VIII	Oph	

NGC	AR 1950	D 1950	\varnothing	\varnothing pc	m_p	m_v	SP	RV	Δ kpc	T	Cor	N
6341	17 ^h 15 ^m 6	+43°12'	8'3	27	5.1	6.1	A5n	-118	11.0	IV	Her	M 92
6342	18.2	-19 32	0.5	58	11.4	10.0			12.0	IV	Oph	
6352	21.6	-48 26	2.5	14	7.9				4.0	XI	Ara	
6355	20.1	-26 19	1.0		9.6						Oph	
6356	20.7	-17 46	1.7	25	8.6	8.7	gG2	+ 31	10.5	II	Oph	
6362	26.6	-67 01	6.7	29	7.1				6.9	X	Ara	
6366	25.1	-05 02	4.0	34	12.1				2.4	XI	Oph	
6388	32.6	-44 43	3.4	17	7.1		K		12.6	III	Sco	
6397	36.8	-53 39	19.0	31	4.7		G		2.3	IX	Ara	
6401	35.6	-23 53	1.0								Oph	
6402	35.0	-03 13	3.0	17	7.4	7.7	G0	-131	7.2	VIII	Oph	M 14
6426	42.4	+03 12	1.3	14	12.2				25	IX	Oph	
	45.7	-60 45	0.5		15.1						Pav	
6440	45.9	-20 21	0.7	10	11.4	10.4	G3	-133	4.4	V	Sgr	
6441	46.8	-37 02	2.3	14	8.4		G4	- 70	8.7	III	Sco	
6453	48.0	-34 37	0.7	10	11.2				22	IV	Sco	
6496	55.5	-44 15	2.2	15	9.7				6.0	XII	Sco	
6517	59.1	-08 57	0.4	58	12.1				9.1	IV	Oph	
6522	18 00.4	-30 02	0.7	73	11.0				9.1	VI	Sgr	
6528	01.6	-30 04	0.5	65	11.8				7.2	V	Sgr	
6535	01.3	-00 18	1.3	10	11.9				14.5	XI	Ser	
6539	02.1	-07 35	1.3	15	12.6				1.6	X	Ser	
6541	04.4	-43 44	6.3	16	5.8		G		4.2	III	CrA	
6544	04.3	-25 01	1.0				G1	- 12			Sgr	
6553	06.3	-25 56	1.7	13	10.0				1.3	XI	Sgr	
6569	10.4	-31 50	1.4	12	10.2				7.2	VIII	Sgr	
6584	14.6	-52 14	2.5	15	8.3				12.6	VIII	Tel	
6624	20.5	-30 23	2.0	13	8.6		G4	+ 69	12.6	VI	Sgr	
6626	21.5	-24 54	4.7	23	6.8	7.3	G0	+ 1	4.6	IV	Sgr	M 28
6638	27.9	-25 32	1.4	14	9.2	9.8	G3	- 14	13.8	VI	Sgr	
6637	28.1	-32 23	2.8	21	7.5	8.9	G5	+ 95	7.2	V	Sgr	M 69
6652	32.5	-33 02	1.7	12	8.7		G3	-124	15.8	VI	Sgr	
6656	33.3	-23 58	17.3	34	6.3	5.9	F6	-148	3.0	VII	Sgr	M 22
6681	40.0	-32 21	2.5	18	7.5	9.6	G2	+198	20	V	Sgr	M 70
6712	50.3	-08 47	2.1	16	9.9	8.9	G4	-131	6.0	IX	Sct	
6715	52.0	-30 32	2.1	17	7.1		F7	+107	15.1	III	Sgr	M 54
6723	56.2	-36 42	5.8	15	6.0		G3	- 3	10.0	VII	Sgr	
6752	19 06.4	-60 04	13.3	30	4.6		G0		6.3	VI	Pav	
6760	08.6	+00 57	1.9	17	10.9	10.7			2.1	XI	Aql	
6779	14.9	+30 05	1.8	10	8.8	8.2	F5	-154	13.8	X	Lyr	M 56
6809	36.9	-31 03	10.0	25	4.4				5.8	XI	Sgr	M 55
6838	51.5	+18 39	6.1				gG5	- 80	5.5		Sge	M 71
6864	20 03.2	-22 04	1.9	27	8.6	8.0	dG1	-222	24	I	Sgr	M 75
6934	31.7	+07 14	1.5	11	9.4	9.2	F9	-360	16.6	VIII	Del	
6981	50.7	-12 44	2.0	13	8.6	9.8	G2	-255	18.2	IX	Aqr	M 72
7006	59.1	+16 00	1.1	18	11.8	10.3	F1	-348	60	I	Del	
7078	21 27.6	+11 57	7.4	27	5.2	6.0	dF0	-114	15.1	IV	Peg	M 15
7089	30.9	-01 03	8.2	32	5.0	6.3	dF0	- 3	15.8	II	Aqr	M 2
7099	37.5	-23 25	5.7	23	6.4	8.4	A7n	-164	12.6	V	Cap	M 30
7492	23 05.7	-15 54	3.3	19	10.8				29	XII	Aqr	

PLANETARY NEBULAE

PI

NGC	Number in Dreyer's New General Catalogue or Index Catalogues
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
Typ	Classification Voronsov—Veljaminov:
	I stellar
	IIa oval, homogeneously bright, concentrated
	IIb oval, homogeneously bright, without concentration
	IIIa oval, unhomogeneously bright
	IIIb oval, unhomogeneously bright, with brighter edges
	IV annular
	V irregular, intermediate to diffuse nebulosity
	VI anomalous
\varnothing''	Largest and smallest diameter in seconds of arc
m_{neb} m^*	Apparent photographic magnitude of nebula and central star
Sp_{neb} Sp^*	Spectrum of nebula and central star
T 1000°	Temperature of the central star in 1000°
RV	Radial velocity in km/s
Δ pc	Distance in parsecs
Con	Constellation
N	Notes



NGC	AR 1950	D 1950	Typ	∅"	m _{neb}	m*	Sp neb	Sp *	T* 1000°	RV	Δ pc	Con	N
40	00 ^b 10 ^m 2	+72°15'	IIIb	60×38	10.2	11.4	Pf	Oa	21	-20.5	1000	Cas	
	25.5	+55 37	I	5	13.3						4170	Cas	
246	44.6	-12 09	IIIa	240×210	8.5	11.3		O7	42		460	Cet	
650-1	01 38.8	+51 19	V?	157×87	12.2	16.6	Pd		60	-23.6	2510	Per	M 76
I. 1747	53.8	+63 04	IIIb	13	13.6	15.0	Pd	Oa	51	-62.7	4790	Cas	
I. 289	03 06.2	+61 08	IV	45×30	12.3	15.0			61		2630	Cas	
I. 351	44.3	+34 54	IIa	8×6	12.4	15.0	P	WR	51	-10.3	2760	Per	
	50.6	+19 19	IV	40	13.9	17.3						Tau	
I. 2003	53.2	+33 44	I	5	12.6	18.4		WR	70	-23.3	3020	Per	
1501	04 02.6	+60 47	IIIa	56×48	13.3	13.4			25	+36.9	4170	Cam	
1514	06.1	+30 38	V	120×90	10.8	9.7		O7	25		1320	Tau	
1535	12.1	-12 52	IV+VI	20×17	9.3	11.8	Pd	cont	37	-1.4	660	Eri	
1714	52.0	-67 01		8	10.0							Dor	LMC
1722	52.4	-69 28		15×7								Dor	LMC
1743	54.4	-69 17		15								Dor	LMC
J. 320	05 02.7	+10 39	VI	11×8	12.9	13.5	P		23	-23.4	3470	Ori	
I. 418	25.4	-12 44	IV	14×11	12.0	10.9	Pa	O2	23	+62.5	2290	Lep	
1952	31.5	+21 59	VI	360×240	8.4	15.9			100		280	Tau	M 1*
2022	39.3	+09 03	IV+II	28×27	12.8	14.6	Pf	cont	31	+14.2	3310	Ori	
	43.4	-67 53	I	420	10.6	12.6					2000	Dor	LMC
I. 2149	52.6	+46 07	IIIb+II	15×10	9.9	14.0	Pd	O7	31	-32.5	870	Aur	
I. 2165	06 19.6	-12 57	IIIb	9×7	12.5	16.8	Pe			+55.3	2880	CMa	
J. 900	23.0	+17 49	IIIb+II	12×10	12.5		P			+47.2	2760	Gem	
2371-2	07 22.4	+29 35	IIIa+II	54×35	13.0	13.3			25	+21	3630	Gem	
2392	26.2	+21 01	IIIb+IV	47×43	8.3	10.5	Pe	O8e	40	+84.2	420	Gem	
2438	39.6	-14 36	IV	68	11.3	16.8	Pd		74	+77	1660	Pup	
2440	39.9	-18 05	V	54×20	11.7	16.5	Pe		56	+62.7	2000	Pup	
2452	45.6	-27 13	IV	22×16	12.6	19			100	+68	3020	Pup	
2474-5	53.8	+53 33	IV	450×400	13.6	16.6						Lyn	
2610	08 31.2	-15 58	IV	38×31	13.6	15.7	Pe		40	+88	4790	Hya	
I. 2448	09 06.6	-69 44		8	11.5		Pe			-24	1820	Car	
2792	10.6	-42 14		13	13.5		Pd			+14	4570	Vel	
2818	14.4	-36 24	IIIb	40	13.0						3630	Pyx	
2867	20.0	-58 06	IIIb	13×11	9.7		Pd			+18	790	Car	
I. 2501	37.4	-59 52	I	2	11.3		P			+32.7	1660	Car	
3132	10 04.9	-40 11	IV	84×53	8.2	10.6	P		41	-8	400	Ant	
I. 2553	07.8	-62 22	I	4	13.2		P			+46	360	Car	
3195	10.1	-80 37		44×33								Cha	
3211	16.2	-62 26		14	11.8		Pd			-16	2090	Car	
3242	22.4	-18 23	IIIb+IV	40×35	9.0	11.4	Pe	cont	58	+4.7	580	Hya	
I. 2621	58.4	-64 58	I	2	10.3		Pd			+20		Car	
3587	11 12.0	+55 18	IIIa	203×199	12.0	14.3	P		55	+8	2290	UMa	M 97*
	26.2	-52 39		45×30	11.4	11.5	P			+28		Cen	
3918	47.8	-56 54		13	8.4		Pe			-16.4	4400	Cen	
4361	12 21.9	-18 29	IIIa	81	10.8	12.8	Pf		38	+10	1320	Crv	
I. 3568	32.4	+82 51	IIa	18	11.6	12.0	Pd	cont	45	-39.9	1900	Cam	
I. 4191	13 05.5	-67 22	I	5	12.0		Pd			-7		Mus	
5307	47.9	-50 58		15×10	12.1		Pd			+42	2400	Cen	
5315	50.2	-66 16	I	5	13.0		Pe			-23	3630	Cir	
I. 4406	14 19.3	-43 55	IIIb	100×37	10.6		Pb			-22	1200	Lup	

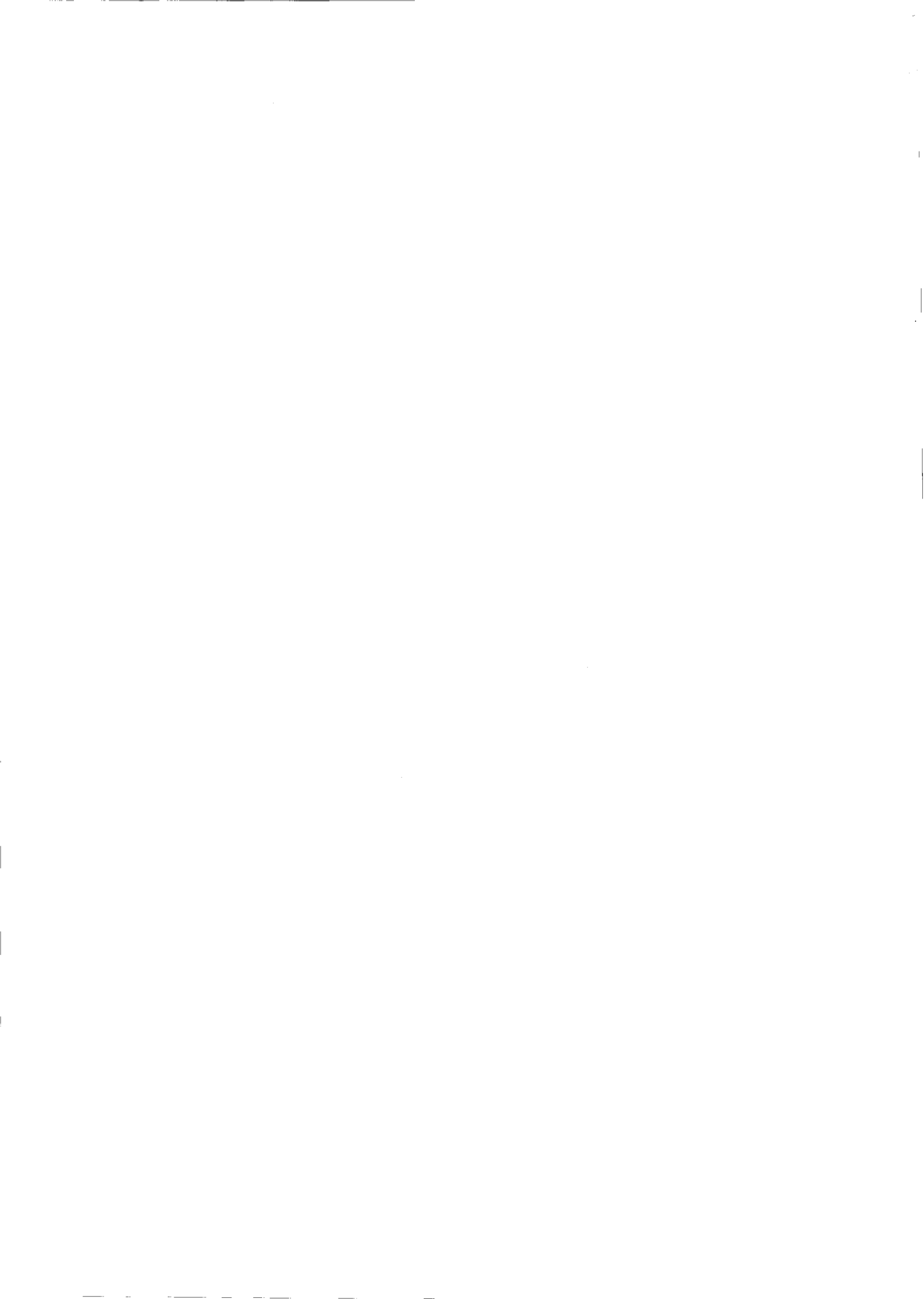
1952: Crab n. 3587: Owl n.

NGC	AR 1950	D 1950	Typ	\varnothing''	m_{neb}	m^*	Sp neb	Sp neb *	T* 1000°	RV	Δ pc	Con	N
5873	15 ^h 09 ^m 4	-37°54	I	3	9.7		Pe			-130.3	4170	Lup	
5882	13.3	-45 27		7	10.5		Pd			+ 7.7	1140	Lup	
	19.5	-23 27	II	6	12.0					+ 44		Lib	
	30.2	-58 59		55×34	12.5						2880	Nor	
5979	43.4	-61 02		8	13.8		Pe			+ 23		TrA	
	47.4	-51 21	IV	72	8.4	13.6						Nor	
6058	16 02.8	+40 49	IIIa	25×20	12.3	13.4		cont	25	+ 1	4170	Her	
I. 4593	09.5	+12 12	IIa	15×11	10.2	10.2	Pc	cont	30	+ 22.0	1000	Ser	
6072	09.7	-36 07	IIIa	50×30	14.1	17.5			36		6020	Sco	
	10.5	-54 50	IV	45×28	12.6							Nor	
	13.5	-51 52	IV	35×16								Nor	
6153	28.0	-40 08	I	28×21	11.5		Pd			+ 39	1820	Sco	
6210	42.5	+23 53	II+VI	20×13	9.7	12.5	Pe	O6	40	- 35.6	790	Her	
I. 4634	58.5	-21 44	IIa	20×9	12.3	17.4	Pd	cont	61	- 34.4	2630	Oph	
	17 01.6	-40 48	I	2	13.6		Pd			+ 15	4790	Sco	
I. 4642	07.6	-55 20	I	18×15	12.4		Pf			+ 44	2760	Ara	
6302	10.4	-37 03			11.4		Pe			- 36		Sco	
6309	11.2	-12 51	IIIb	19×10	11.6	14.1	Pe		42	- 47	1900	Oph	
6326	16.8	-51 42		16×11	12.2		Pd			+ 11	2510	Ara	
6369	26.3	-23 44	IV	28	9.9	16.6	Pd			-106	7240	Oph	
	38.9	-24 39	I	5	13.6		P			- 61	4790	Oph	
I. 4663	41.7	-44 53			13.1		Pe			- 47	3800	Sco	
	44.8	-29 55	I	3	12.0		P			- 28	2290	Sgr	
6439	45.4	-16 28	IIa	5	13.8	18.5	P		65	- 93	5250	Ser	
6445	46.3	-20 00	IIIb	38×29	13.2	19.1	P		85	+ 16.2	3980	Sgr	
	51.2	-34 22			13.8						5240	Sco	
	52.2	-21 45	I	5	13.6		P			+ 12	4790	Sgr	
	56.7	-38 49	I	2	11.4		Pc			+ 4.6	1740	CrA	
6543	58.8	+66 38	IIIa	22	8.8	11.1	Pd	Ob	35	- 65.7	520	Dra	
6537	18 02.2	-19 51	IIa	5	12.5					- 17.3	2880	Sgr	
6565	08.7	-28 11	IV	10×8	13.2		Pc			- 5	3980	Sgr	
6563	08.8	-33 53	IIIa	50×37	13.8	18.3	Pb		62	- 30.7	5250	Sgr	
6572	09.7	+06 50	IIa	16×13	9.6	12	Pd	Ob	41	- 8.7	760	Oph	
6567	10.8	-19 05	IIa	11×7	11.7	15.0	Pd		48	+119.8	2000	Sgr	
6578	11.9	-20 18	IIa	8	14.6	15.8				+ 4.5		Sgr	
I. 4699	14.8	-46 01	II	5	11.9					-122	2160	Tel	
	15.5	+10 07	II	6	12.9	13		WR			3470	Oph	
6620	18.7	-26 52	IIb	5	15.0	15.8			25	+ 72.6	9110	Sgr	
6629	22.7	-23 14	IIa	16×14	10.6	13.6	Pd	cont	40	+ 13	2190	Sgr	
6630	27.7	-63 19		19×15	15.3							Pav	S?
6644	29.5	-25 11	I	2	12.2		Pd			+193.9	2510	Sgr	
I. 4732	30.9	-22 42	I	2	13.3		Pd			-145.4	4170	Sgr	
I. 4723	31.1	-63 26		19	15.4							Pav	S?
I. 4776	42.6	-33 23	IIa	8×6	12.5	15.6	Pd		41	+ 18.9	2880	Sgr	
	47.7	+20 47			12.2	13	P			+ 17.0	2510	Her	
6720	51.7	+32 58	IV	83×59	9.3	14.7	Pb	cont	75	- 19.1	660	Lyr	M 57*
I. 1295	51.9	-08 51	IV	120×90	15						9120	Sct	
	51.9	-32 19	I	4	10.9		P			- 62.4	1380	Sgr	
6741	19 00.1	-00 31	IV	9×7	11.7	16.7	Pd		58	+ 42.9	2000	Aql	
	02.0	-33 15	I	5	13.4						4370	Sgr	

6720: Ring n.

NGC	AR 1950	D 1950	Typ	\varnothing''	m_{neb}	m^*	Sp neb	Sp *	T* 1000°	RV	Δ pc	Con	N
6751	19 ^b 03m2	—06°05'	IIIa	21	12.2	13.3	Pf	Oa	32	— 36	2510	Aql	
6772	12.0	—02 48	IIIb	75 × 56	14.2	18.1			54		6310	Aql	
I. 4846	13.7	—09 09	I	2	12.7	16.3	Pd		44	+ 151.0	3020	Aql	
I. 1297	14.0	—39 42	I	2	11.8		Pe			+ 19		CrA	
6778	15.7	—01 43	IIIa	25 × 19	13.3	15.0	Pc		34	+ 91	3980	Aql	
6781	16.0	+06 26	IIIa	106	12.5	15.4	P		42	+ 6	2880	Aql	
6790	20.4	+01 24	I	2	11.4	18.4	Pd		93	+ 41.8	1740	Aql	
6803	28.9	+09 58	IIa	5	11.4	14.1	Pd	cont	47	+ 13.1	1740	Aql	
6804	29.2	+09 07	IV × II	63 × 50	13.3	13.3	Pe		25	— 13	4170	Aql	
6807	32.1	+05 35	I	2	13.8	19.3	P		66	— 67.7	5250	Aql	
	32.8	+30 25	IV	5	9.6	10.3		Ocp		— 30.4	760	Cyg	
	37.1	+15 50	IV	2	12.6					— 6		Aql	
6818	41.1	—14 17	IV	22 × 15	9.9	15.0	Pe		51	— 13.8	870	Sgr	
6826	43.4	+50 24	IIIa	27 × 24	8.8	10.8	Pd	Ob	38	— 6.2	520	Cyg	
6833	48.5	+48 50	I	2	13.8	20.3	Pd		82	—108.7	5250	Cyg	
6842	53.0	+29 09	IV	50 × 45	13.6	14.1			25		4790	Vul	
6853	57.4	+22 35	IIIa	480 × 240	7.6	13.4	P		85	— 41.5	300	Vul	M 27*
6857	20 00.0	+33 23	III	40	14.3							Cyg	
6879	08.1	+16 46	IIa	5	12.1	15.2	P	cont	41	+ 7.1	2400	Sge	
6884	08.8	+46 19	IIb	7	12.6	18.2	Pd		67	— 35.6	3020	Cyg	
6881	09.0	+37 16	IIa	5	14.3	15.1	P			— 15	6610	Cyg	
6886	10.5	+19 50	II	9 × 6	12.2	16.6	P		52	— 36.4	2510	Sge	
6891	12.8	+12 35	IIa + IIb	15 × 7	11.4	11.6	Pd	cont	44	+ 42.1	1740	Aql	
6894	14.4	+30 25	IV	44	14.4	17.0	P		40	— 58	6920	Cyg	
I. 4997	17.9	+16 35	I	2	11.4	13.7	Pc	cont	35	— 64.4	1740	Sge	
6905	20.2	+19 57	IIIa	44 × 37	11.9	14.2	Pd	Oa	40	— 4.3	2190	Del	
7008	59.1	+54 21	IIIb	86 × 69	13.3	12.9			25	— 73	4170	Cyg	
7009	21 01.4	—11 34	IV + IIIa	44 × 26	8.4	11.7	Pe	cont	52	— 46.6	440	Aqr*	
7026	04.6	+47 39	III	25 × 5	12.7	14.8	Pe	Oa	45	— 40.3	3160	Cyg	
7027	05.1	+42 02	VI	18 × 11	10.4	17.1	Pe		86	+ 8.9	1100	Cyg	
7048	12.6	+46 04	IIIb	60 × 50	11.3	18.3			110		1660	Cyg	
	27.7	+11 57	I		13.8			Oae		—122	5260	Peg M15 inv.	
I. 5117	30.6	+44 23	I	2	13.3	18.3	P		58	— 25.8	4170	Cyg	
	31.2	+39 24	II	5	12.7		P			+ 9.8	3160	Cyg	
7139	44.6	+63 35	IIIa	86 × 67	13.8	18.0					3310	Cep	
I. 5217	22 21.9	+50 43	II	8 × 6	12.6	14.6	Pd	Ob	55	— 98.6	3020	Lac	
7293	27.0	—21 06	IV	900 × 720	6.5	13.3	P		106	— 15	180	Aqr	
	35.5	—57 29		30	15							Tuc	S?
7354	38.4	+61 01	IV + III	32	12.9	16.6	P		52	— 42.5	111	Cep	
	54.4	+56 54	II	8	14.0							Cep	
I. 1470	23 03.2	+59 59	V	70 × 45	8.1	11.9		O7	25		2090	Cep	
7635	18.5	+60 54	V	205 × 180	8.5	8.5		O7	25	— 35	520	Cas	
7662	23.5	+42 14	IV + IIIa	32 × 28	8.9	12.5	Pe	cont	78	— 12.2	550	And	
	24.2	+57 54		10	14.0							Cas	

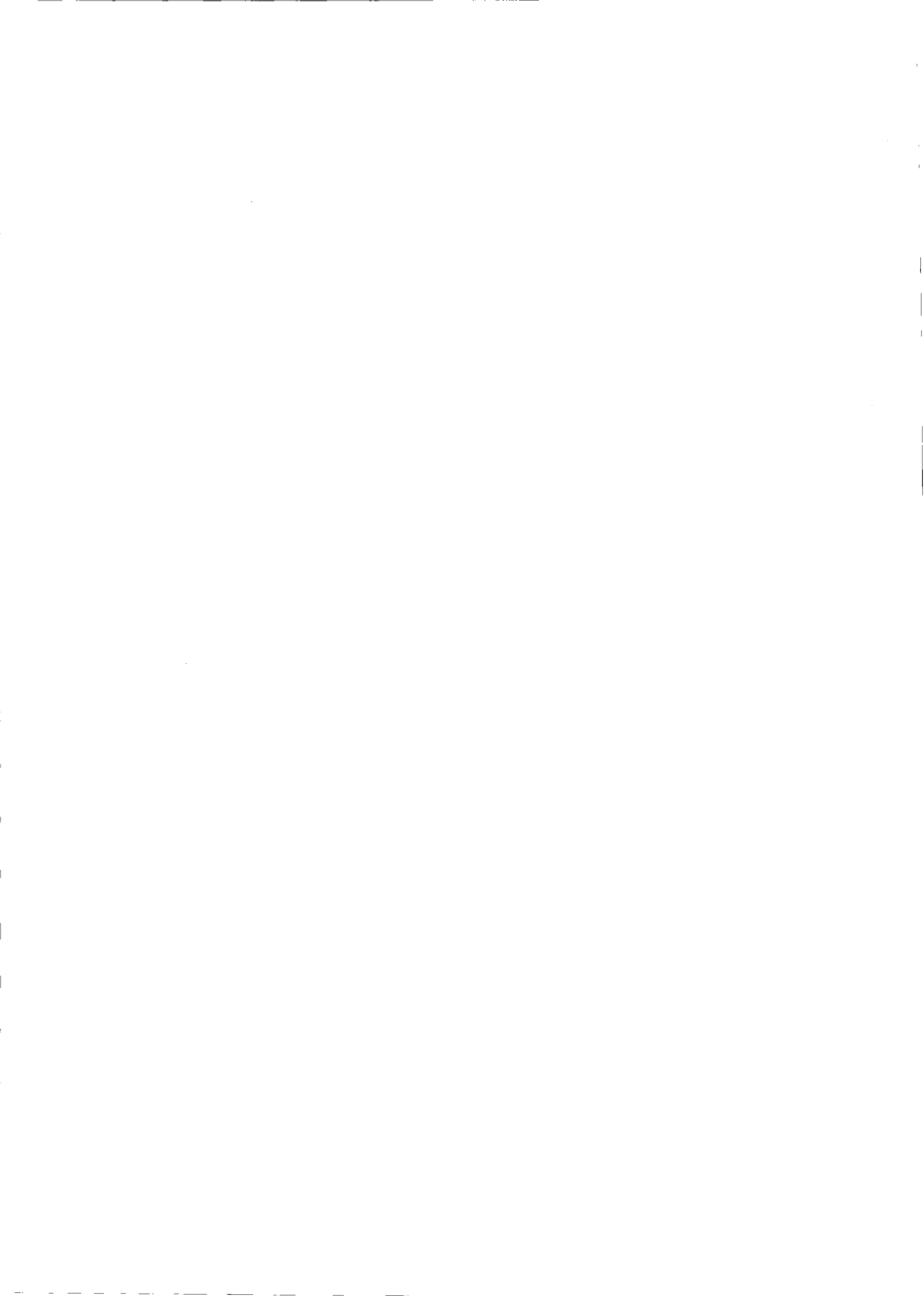
6853: Dumbbell n. 7009: Saturn n.



BRIGHT DIFFUSE NEBULAE

N

NGC	Number in Dreyer's New General Catalogue or Index Catalogue
AR 1950	Right ascension and declination for the epoch 1950.0
D 1950	
\varnothing	Largest and smallest diameter in minutes of arc
Sp	Spectrum of the nebula (e emission, c continuum)
*	Star physically connected with the nebula
m*	Apparent visual magnitude of the star
Sp*	Spectrum of the star
Δ pc	Distance of the nebula in parsecs
Con	Constellation
N	Notes



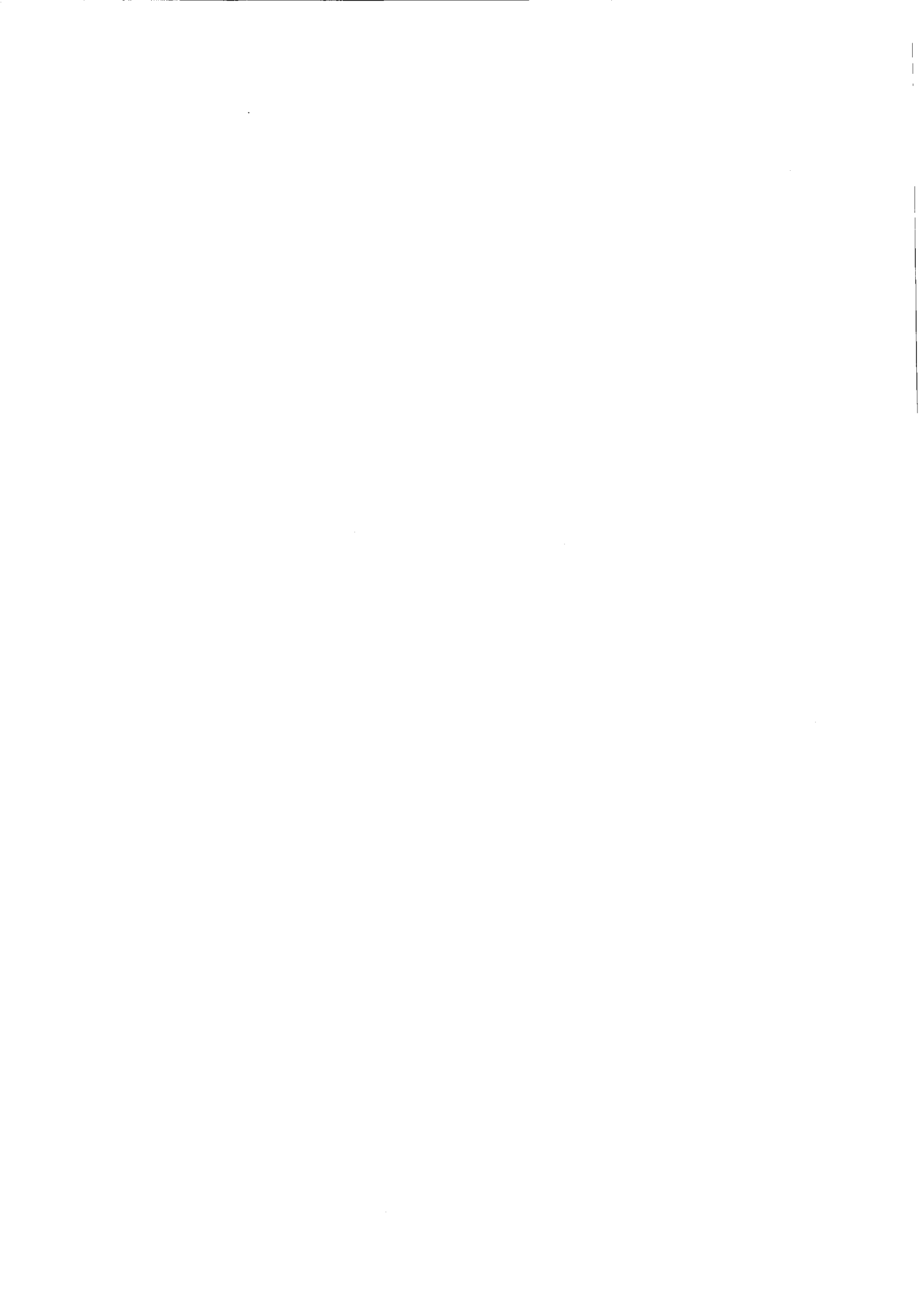
NGC	AR 1950	D 1950	∅	Sp	*	m*	Sp*	Δ pc	Con	N
I. 11	00 ^b 10 ^m 7	+65°19'	3'×3'	c	+64°	13		1100	Cas	
		17.7	+56 18						Cas	
		48.1	+57 50	2×2					Cas	
281	50.4	+56 19	27×23	e	HD 5005	8.6	O5e	1700	Cas	
I. 59	53.7	+60 48	18×12	e	GC 1117	2.25	B0ne	200	γ Cas	
I. 63	53.7	+60 48	11×11	e	GC 1117	2.25	B0ne	200	γ Cas	
I. 1795	02 21.0	+61 40	27×13		+61°	411		1700	Cas	
I. 1805	28.2	+61 15	50×44	e	C1	6.0	B0	770	Cas	
I. 1848	47.4	+60 13	60×30	e	GC 3398	7.11	O7	670	Cas	
I. 1851	47.8	+58 06	6×4	c	GC 3413	6.27	A0	110	Cas	
I. 1871	03 02.3	+60 29	1×1	c	+60°	624		100	Cas	
		22.3	+31 34	5×2	c	GC 4072	7.49	K2	250	Per
		22.8	+30 46	4×4		+30°	540		200	Ari
		25.2	+29 39	11×5	c	+29°	565		330	Ari
		25.6	+58 42	30×20	c	+58°	607		830	Cam
1333	26.1	+31 12	9×5	c	+30°	549		1200	Per	
	28.0	+43 44	var	e	N	1901		110	Per	
	28.0	+59 30	100×20						Cam	
	41.8	+24 08	16×16	c	GC 4475	5.43	B7n	126	16 Tau	
	41.9	+23 57	20×16	c	GC 4477	3.81	B5ne	126	17 Tau	
I. 8	42.0	+32 00	120×60	c	GC 4465	8.6	A1	250	o Per	
	42.2	+24 19	21×21	c	GC 4486	4.37	B7n	126	19 Tau	
	42.8	+24 13	30×30	c	GC 4500	4.02	B9s	126	20 Tau	
	42.9	+24 23	15×15	c	GC 4502	5.85	B9n	126	21 Tau	
I. 349	43.2	+23 36	30×30	c	GC 4512	4.25	B5ne	126	23 Tau	
	44.5	+23 57	27×27	c	GC 4541	2.96	B7ne	126	25 Tau	
I. 1995	46.2	+23 54	11×11	c	GC 4586	3.80	B9n	126	27 Tau	
	46.2	+23 59	10×10	c	GC 4587	5.18	B8ne	126	28 Tau	
	47.3	+25 26	2×2	c	GC 4616	5.38	A3	56	Tau	
1465	50.5	+32 21	2×2	c					Per	
I. 353	50.5	+25 32	2×2	c	GC 4680	7.16	A0	120	Tau	
	1491	59.5	+51 10	3×3	e					Per
I. 359	04 00.1	+36 17	145×40	e	GC 4779	4.05	O7n	600	Per	
	03.3	+27 29	2×2	c	GC 4937	5.27	A0p	90	41 Tau	
1554-5	17.1	+28 06	1×1	c				120	Tau	
	18.8	+28 20	5×4	c	+28°	645		9.5	330	
	19.9	+19 25	var	c	+19°	706		var	Gpe	
	24.0	+25 58	8×6	c					1000	
	24.1	+22 53	8×1	c	GC 5396	5.41	B6n	170	72 Tau	
1579	26.9	+35 10	12×8	c	C1	12	A0-B5	2000	Per	
1624	27.0	+35 22	2×2					1000	Per	
	36.5	+50 21	3×3	e				12.0	O5e	
I. 2087	36.9	+25 38	28×19	c					3300	
	45.0	-05 55	100×40							
1788	05 04.5	-03 24	8×5		-3°	1013		10.1	B9	
I. 2118	04.5	-07 17	140×40	c	GC 6410	0.34	cB8ep	400	Eri	
	12.0	-05 00	95×65							
I. 405	13.0	+34 16	30×19	e	GC 6429	5.81	O9p	670	AE Aur	
	13.0	-02 30	130×40						Ori	
	17.0	-01 45	40×25						Ori	

NGC	AR 1950 D 1950	\varnothing	Sp	*	m*	Sp*	Δ pc	Con	N
I. 410 I. 417	05 ^h 18 ^m 00 —03°30'	120' × 40'						Ori	
	18.0 —05 30	50 × 15						Ori	
	19.1 +08 23	39 × 30	c	GC 6574	5.71	B1	400	Ori	
	19.3 +33 28	23 × 20	c	CI			670	Aur	
	20.0 +34 12	13 × 12		CI			830	Aur	
1931	22.0 —05 40	50 × 30						Ori	
	22.4 +06 19	40 × 40	c	GC 6668	1.70	B2s	100	γ Ori	
	26.0 +12 31	8 × 8	e	GC 6760	6.81	F8	20	Ori	
	28.1 +34 13	3 × 3		CI			2500	Aur	
	28.6 +12 07	90 × 45	e	+11° 836	8.9			Ori	
I. 423 I. 424	28.8 +30 24	0'5var	e	N 1892			1000	T Aur	
	30.9 —00 39	6 × 4						Ori	
1973	31.1 —00 21	2 × 1						Ori	
	32.3 +09 54	60 × 30	e	GC 6915	3.66	O8se	430	λ Ori	
	32.7 —04 46	40 × 25		HD 36958	8.0	B5		Ori	
1975	32.9 —04 43	40 × 25			10.9			Ori	
1976	32.9 —05 25	66 × 60	e	CI		O7-B8	400	θ^1 Ori	M 42
1977	33.0 —04 54	40 × 25	ce	GC 6934	4.65		400	42 Ori	
1980	33.0 —05 56	14 × 14	e	CI		O8		Ori	
1982	33.1 —05 18	20 × 15	ce	HD 37061	9.1	O7		Ori	M 43
1990 1999	33.7 —01 14	50 × 50	e	GC 6960	1.75	B0e	400	ϵ Ori	
	34.1 —06 45	16 × 12		—6° 1253	9.5			Ori	
I. 426 1985	34.3 —00 16	5 × 5	c	HD 37140	9.3	B9		Ori	
	34.5 +31 58	1 × 1			13.3		2500	Aur	
	36.0 +13 35	20 × 15						Ori	
I. 430	36.2 —07 06	11 × 11	c	GC 7039	4.88	A3	38	49 Ori	
I. 431	37.8 —01 29	5 × 3	c	HD 37674	7.8	B5		Ori	
I. 432	38.5 —01 31	8 × 4	c	HD 37776	7.1	B5		Ori	
I. 434	38.6 —02 26	60 × 10	ce	GC 7089	1.91	B0ne	400	ζ Ori	
2023	39.2 —02 15	10 × 10	ce	HD 37903	7.8	B2		Ori	
2024	39.4 —01 52	30 × 30	e	GC 7089	1.91	B0ne	400	ζ Ori	
2070	39.9 —69 04	20 × 20						Dor	Tarantula
I. 435 2045	40.5 —02 20	4 × 3	c	HD 38087	8.2	B8		Ori	
	42.1 +12 52	2 × 2	c	GC 7186	6.60	A3		Tau	
	42.6 +09 03	var	ce		var	cF5		FU Ori	
2064	43.0 +02 00	330 × 40	c	GC 7089	1.91	B0ne	400	ζ Ori	
2067	43.8 —00 02	11 × 2	c	—0° 1077	9.9			Ori	
2068	44.0 +00 05	7 × 3	c	HD 38563	10.3	B8		Ori	
2068	44.2 +00 02	8 × 6	c	HD 38563	10.3	B8		Ori	M 78
2071	44.6 +00 17	4 × 3	c	+8° 1181	10.4	B9		Ori	
2170	52.0 —06 30	180 × 55						Ori	
	55.0 —03 30	105 × 45						Ori	
	06 01.3 +30 30	3 × 3		+30° 1096	10.5		1200	Aur	
	04.8 +18 42	2 × 1			13.0	B1		Ori	
	05.2 —06 23	1 × 1	c	—6° 1415	10.2	B1	2000	Mon	
2174-5 2182 2183	05.7 —06 13	6 × 6	c	HD 42004	9.9	B8	140	Mon	
	05.7 —06 21	3 × 3	c	—6° 1418	9.1	B8	500	Mon	
	06.7 +20 31	29 × 25	e	HD 42088	7.4	O6e	1000	Ori	
	07.1 —06 19	3 × 3	c	HD 42261	9.1	B6	1000	Mon	
	08.4 —06 12	1 × 1	c		13.5	B6	3300	Mon	

NGC	AR 1950	D 1950	∅	Sp	*	m*	Sp*	∓ pc	Con	N
2185	06 ^h 08 ^m 7	—06°12'	2' × 2'	c		12.5	B6	3300	Mon	
	09.4	—06 09	1 × 1	c	—6° 1444	10.7	B6	1700	Mon	
I. 2162	10.4	+18 09	1 × 1			10.0		1400	Ori	
I. 443	13.9	+22 48	27 × 5						Gem	
I. 444	17.5	+23 19	5 × 5	c	GC 8106	7.03	B9	250	12 Gem	
	20.1	+05 10	40 × 30	c	HD 44586	8.3	B9	500	Mon	
2238	27.9	+05 05	64 × 61	e	CI		O6	1100	Mon	
I. 446	28.1	+10 29	5 × 5	c		10.5	B1	2500	Mon	
I. 2167	28.3	+10 29	2 × 1						Mon	
I. 2169	28.4	+10 03	22 × 17	c	CI	8.1	B1	500	Mon	
	28.6	—09 38	6 × 5		HD 46060	8.6	B8		Mon	
2237-9	29.6	+04 40	64 × 61	e	CI		O6	1100	Mon	Rosetta
I. 448	29.7	+07 27	2 × 2		GC 8506	4.5	cA0p	1000	13 Mon	
2245	29.9	+10 12	5 × 3	c		10.8	B1p	3300	Mon	
2247	30.3	+10 23	4 × 3	c	+10° 1172	8.5	B2p	330	Mon	
2261	36.4	+08 46	var	ce	+8° 1427	var	Bp	2000	R Mon	Hubble's var
2264	38.2	+09 57	60 × 30	e	GC 8720	4.68	O7n	1000	S Mon	Conus
2283	43.8	—18 09	2 × 2			12.0		2500	CMA	
2282	44.3	+01 23	3 × 3	c	+1° 1503	9.7	B5	1100	Mon	
2327	07 01.9	—11 14	20 × 20			10.0			CMA	
	02.1	—12 16	10 × 10	c	HD 53623	8.5	B1	2000	CMA	
I. 2177	03.1	—10 29	85 × 25	e	HD 53367	7.1	B0p	560	Mon	
I. 466	04.3	—04 15	1 × 1			11.5		1700	Mon	
	07.0	—18 24	8 × 7	e		10.5		1200	CMA	
I. 468	15.2	—13 04	1 × 1	e		11.0	O8		CMA	
2359	15.4	—13 07	8 × 6	e		11.0	O8		CMA	
	17.7	—23 56	5 × 3	c	HD 57281	9.2	B9	1000	CMA	
	27.9	—22 55	10 × 7	c	GC 10043	4.8	cA5	500	Pup	
	34.3	—25 13	15 × 15	c	GC 10207	6.8	B5	500	Pup	
2467	51.3	—26 16	4 × 4		HD 64315	8.5	B	1000	Pup	
2568	08 16.4	—36 58							Pup	
2626	33.8	—40 28		c	—40° 4427	9.4			Vel	
3199	10 15.1	—57 43		c					Car	
3324	35.5	—58 22	15 × 14	e	GC 14621	8.39	O5e	3300	Car	
3372	43.1	—59 25	85 × 80	e	GC 14799	var	Pec	1100	η Car	
3503	59.3	—60 27		e	CI				Car	
3576	11 09.1	—61 06		c	HD 97452	9.2	B4	1100	Car	
3579	09.7	—60 57		c	—60° 2626	9.8	B5		Car	
3581	09.9	—61 02				12.0			Car	
3582	10.1	—61 00		c	HD 97499	9.2	B5		Car	
3584	10.2	—60 56							Car	
3586	10.4	—61 05							Car	
3699	25.6	—59 40							Cen	
I. 2872	26.1	—62 40	5 × 2						Cen	
	26.6	—62 22	15 × 10	c	HD 99897	8.8	B5	1000	Cen	
	28.1	—63 32	8 × 8	e	HD 100099	8.0	B0	1400	Cen	
I. 2944	33.5	—62 44	66 × 36	c	GC 15899	3.34	B9	210	λ Cen	
3882	43.6	—56 05		c	HD 102277	8.2	A0	400	Cen	
I. 2966	47.9	—64 36	1 × 1						Mus	
	13 21.4	—63 46	150 × 150	c				67	Cen	

NGC	AR 1950 D 1950	\varnothing	Sp	*	m*	Sp*	Δ pc	Con	N
5189	13 ^h 29 ^m 9 —65°43		e	HD 117694	10.0	B9		Mus	P1?
	15 48.0 —25 20	240 × 120		GC 21285	4.77	B4n	170	1 Sco	
	56.0 —26 30	70 × 40		GC 21447	3.00	B1	170	Sco	
I. 4592	16 09.1 —19 20	175 × 45	c	GC 21773	4.16	B2n	110	γ Sco	
I. 4591	09.2 —27 48	23 × 15	c	GC 21778	4.70	B3n	180	13 Sco	
I. 4601	15.9 —20 06	22 × 12	c	GC 21958	7.0	B9	200	Sco	
	18.2 —25 28	85 × 40	c	GC 21982	3.08	B1	190	σ Sco	
I. 4603-4	22.3 —23 20	145 × 70	c	GC 22079	4.76	B5n	120	ρ Oph	
I. 4606	26.4 —26 20	85 × 80	c	GC 22157	1.22	cM1	110	α Sco	Antares
I. 4605	27.0 —25 03		c	GC 22179	4.87	B3n	180	22 Sco	
6164-5	30.0 —47 59		e	GC 22246	6.89	B0	670	Nor	
6188	35.9 —48 55	19 × 12	e	GC 22419	5.35	O5e	710	Ara	
I. 4628	49.3 —40 18	34 × 16		CI				Sco	
6302	17 10.5 —37 03	2 × 1	e	HD 155520	10.0	neb	3300	Sco	Bug neb.
6334	17.2 —36 01	20 × 20	c	HD 156369	8.0	A0	380	Sco	
6335	17.4 —30 06							Sco	
6357	21.3 —34 07	57 × 44	e	—34° 11671	10.0		1000	Sco	
6360	22.2 —29 57							Oph	
I. 4657	29.9 —17 29							Oph	
I. 4659	31.1 —17 54							Oph	
	41.2 —33 43	7 × 5		CI				Sco	
6514	58.9 —23 02	29 × 27	e	GC 24537	6.91	O7	670	Sgr	M 20 Trifid
6523	18 01.6 —24 20	60 × 35	e	GC 24618	6.79	O5e	770	Sgr	M 8 Lagoon
I. 4678	04.9 —23 53	4 × 1		—23° 13906	10.2	B6		Sgr	
I. 4683	05.2 —26 15							Sgr	
I. 4681	05.2 —23 27		c	HD 165705	9.55	B9	800	Sgr	
I. 4684	06.0 —23 27		c	HD 167852	9.64	B9	800	Sgr	
	06.0 +45 50	var		Nova 1934			500	DG Her	
I. 4685	06.2 —24 01		c	GC 24732	7.48	B0		Sgr	
I. 1275	06.7 —23 51	9 × 6	c	GC 24753	7.38	B5		Sgr	
I. 1274	06.7 —23 41	9 × 7	c	—23° 13997	9.10	B1		Sgr	
6559	06.8 —28 08	8 × 5	e	—24° 13984	9.78	B1		Sgr	
6589	13.4 —19 49	5 × 3	c	HD 167638	9.50	B5		Sgr	
6590	13.5 —19 54	3 × 2	c	—19° 4946	10.0	B6		Sgr	
I. 4701	14.0 —16 44							Sgr	
I. 1283	14.4 —19 45	4 × 2	c	HD 167722	8.80	B5		Sgr	
I. 1284	14.7 —19 41	16 × 15	c	GC 24954	7.59	B5	670	Sgr	
6611	16.2 —13 48	35 × 28	e	CI	8.3	O5e	1400	Ser	M 16
I. 4706	16.9 —16 02	6 × 4	c	HD 168302	9.8	B5	290	Sgr	
6618	18.0 —16 12	46 × 37	e	GC 25035	8.9	A0se	1000	Sgr	M 17 Omega
I. 4715	23.0 —18 27							Sgr	
I. 1287	27.6 —10 50	44 × 34	c	GC 25282	5.80	B3s	250	Sct	
	46.4 +00 31	var		Nova 1918			330	Aql	
6726-7	58.4 —36 58		c	GC 26118	7.1	B9		CrA	
6729	58.4 —37 02	var	cc		var	Gpe		R CrA	
I. 4812	19 01.8 —37 08		c	GC 26099	5.98	B8	150	CrA	
	24.2 +22 39	6 × 4	c	HD 182918	8.4	A2	330	Vul	
	28.3 +18 05	6 × 6	e	+17° 3986	10.2	O		Sge	
I. 1305	37.2 +20 06	2 × 1			11.0			Vul	
6820	40.5 +22 58	1 × 1			13.3			Vul	

NGC	AR 1950	D 1950	∅	Sp	*	m*	Sp*	Δ pc	Con	N
I. 1307	19 ^h 40 ^m 7	+27°23'								Vul
	58.3	+35 08	15' × 8'		+34° 3828	9.5				Cyg
I. 4954	20 02.8	+29 06	1 × 1	c		11.8	B6	1400		Vul
6888	10.7	+38 16	18 × 12	e	GC 28056	7.44	O6	910		Cyg
I. 1318	14.7	+41 39	24 × 17	e	GC 28338	2.32	cF8p	170		γ Cyg
	17.0	+40 30	50 × 25		GC 28338	2.32	cF8p	170		γ Cyg
	18.0	+39 57	45 × 25		GC 28338	2.32	cF8p	170		γ Cyg
	22.0	+40 35	85 × 50		GC 28338	2.32	cF8p	170		γ Cyg
6914	23.4	+42 10	6 × 6	c	+41° 3737	9.0	B6			Cyg
I. 1318	26.7	+39 47	70 × 20		GC 28338	2.32	cF8p	170		γ Cyg
	29.1	+36 46		ce	GC 28551	6.30	F8p	830		44 Cyg
	32.2	+45 29	9 × 7		+45° 3216	8.8				Cyg
6960	43.6	+30 32	70 × 6	e				400		52 Cyg
	46.0	+42 40	30 × 12							Cyg
	46.0	+31 30	40 × 20					400		Cyg
I. 5067-0	46.9	+44 11	85 × 75	ce	GC 28846	1.33	cA2e	280		α Cyg
I. 5068	48.8	+42 21	43 × 20	ce	GC 28846	1.33	cA2e	280		α Cyg
	49.3	+56 37	10 × 10	c	GC 29082	7.01	B8	210		Cyg
I. 5076	54.2	+47 13	9 × 6	c	GC 29219	5.76	cB8e	1400		Cyg
6992-5	54.3	+31 30	78 × 8	e				400		Cyg
	56.0	+42 25	30 × 25							Cyg
7000	57.0	+44 08	120 × 100	ce	GC 28846	1.33	cA2e	280		α Cyg
7023	21 01.4	+67 58	18 × 18	c	GC 29401	7.20	B5e	280		Cep
	01.6	+50 01	3 × 2							Cyg
	02.1	+50 04	2 × 2							Cyg
	02.3	+49 56	3 × 3							Cyg
I. 1369	10.5	+47 33	2 × 2		C1			3300		Cyg
	10.7	+59 47	100 × 65	e	GC 29655	5.65	B0s	710		Cep
	16.0	+58 22	15 × 13	c	GC 29804	6.41	B3e	530		Cep
	37.2	+67 58	8 × 8	c	HD 206135	8.2	B7	330		Cep
I. 1396	37.5	+57 14	165 × 135	e	GC 30322	5.64	O6n	770		Cep
7129	42.0	+65 52	7 × 7	c		10.3	B6	1100		Cep
I. 1400	42.5	+52 43								Cyg
7133	43.4	+65 56	3 × 3							Cep
I. 5146	51.3	+47 02	12 × 12	c	+46° 3474	10.0	B1	1700		Cyg
	7538	23 11.5	+61 14			10.0				Cep
	41.2	-15 34	1 × 1	e	GC 32948	var	M7e	400		R Aqr
7748	42.7	+69 28	3 × 3	c	GC 32974	7.03	B8	330		Cep
I. 5366	55.1	+52 30	30 × 10							Cas
	59.9	+66 52	40 × 16	c	GC 39	5.84	gK1	83		Cep



ANAGALACTIC NEBULAE

NGC	Number in Dreyer's New General Catalogue or Index Catalogues
AR 1950.0	Right ascension and declination for the epoch 1950.0
Decl 1950.0	
m_p, m_v	Apparent photographic and visual magnitude
App Diam	Apparent largest and smallest diameter in minutes of arc
T	Classification Hubble:
E	Elliptical
S	Spiral
SB	Barred spiral
I	Irregular
a	Early type (bright nucleus, arms less developed)
b	Intermediate type (lesser nucleus, arms fairly developed)
c	Late type (weak nucleus, arms very conspicuous)
p	Peculiar
$m-M_0$	Distance modulus
Con	Designation of nebula and constellation



NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_c$	Con
7814	00 ^h 00 ^m 7	+15°51'	12.4			3'0	0'8	Sa		Peg
16	06.5	+27 27	13.2		G5	1.0	0.7	E3	32.6	Peg
23	07.3	+25 39	13.0		F5	1.6	0.6	S	33.4	Peg
24	07.4	-25 15	12.2			5.0	0.7	Sb	30.0	Scl
45	11.4	-23 27	12.1		Em	8.0	5.5	S	28.4	Cet
55	12.5	-39 30	7.8			25.0	3.0	S		Scl
95	19.6	+10 12	13.1			1.1	0.9	Sc		Psc
128	26.7	+02 33	12.7		G7	2.2	0.4	E8	33.2	Psc
134	27.9	-33 32	11.4			5.0	1.0	S		Scl
147	30.4	+48 14	12.1			4.5	2.5	E4p		Cas
148	30.8	-32 04	12.9			1.2	0.5	E		Scl
151	31.6	-09 58	12.4			3.1	1.1	Sb	31.6	Cet
150	31.8	-28 05	12.2			2.0	1.0	SB		Scl
157	32.3	-08 40	11.2	11.2	G4	2.8	2.1	Sc	31.4	Cet
175	34.9	-20 12	12.8			1.2	1.2	SBb	33.0	Cet
185	36.1	+48 04	10.3	11.7	G0	2.2	2.2	E0		Cas
178	36.6	-14 27	13.0			1.2	0.7	Pec		Cet
205	37.6	+41 25	8.9	9.4	A8	10.0	4.5	E6		And
210	38.0	-14 09	11.8			4.5	2.4	Sb	31.3	Cet
214	38.7	+25 14	12.8		G3	1.6	1.0	Sb	33.4	And
224	40.0	+41 00	4.3	4.8	G5	160	35	Sb	23.6	M 31 And
221	40.0	+40 36	9.1	8.7	G3	3.4	2.8	E2		M 32 And
227	40.1	-01 48	13.5		G3	0.8	0.6	Sa	33.7	Cet
237	40.9	-00 24	13.2			1.2	0.8	Sc	32.3	Cet
245	43.7	-01 59	12.9			1.0	1.0	Sc		Cet
247	44.6	-21 01	9.5		Em	18.2	4.5	S	26.5	Cet
253	45.1	-25 34	7.0	8.9	Em	24.6	4.5	Scp		Scl
255	45.2	-11 45	12.4			3.3	2.5	Sb	31.5	Cet
254	45.2	-31 42	12.8			1.3	0.5	E		Scl
268	47.6	-05 28	13.2			1.1	0.9	Sc	32.3	Cet
274	48.5	-07 20	13.0			0.9	0.8	E1		Cet
275	48.5	-07 20	13.0			1.1	0.8	S		Cet
278	49.2	+47 18	11.5	11.3	F0	1.3	1.3	E0p	29.7	Cas
SMC	50	-73	1.5			216	216	I		Tuc
289	50.4	-31 29	12.1			2.0	1.5	S		Scl
300	52.6	-37 58	11.3			20	10	S		Scl
309	54.0	-10 13	12.5			2.4	2.1	Sc	32.0	Cet
337	57.3	-07 51	12.2			2.0	1.5	Sc	30.8	Cet
357	01 00.8	-06 37	13.0		G4	1.6	1.1	SBa	32.1	Cet
...	02.6	-06 29	12.8			4.5	3.4	SB	28.7	Cet
406	05.8	-70 09	12.9			3.5	1.5	S		Tuc
404	06.6	+35 27	11.2	10.7	F8	2.1	2.0	E0	25.9	And
434	10.2	-58 31	13.0							Tuc
428	10.4	+00 43	11.7			3.9	3.6	Scp	30.3	Cet
439	11.5	-32 00	13.0							Scl
450	13.0	-01 07	12.6			2.6	2.0	S	28.4	Cet
470	17.1	+03 09	12.4	12.5		1.7	1.1	Sc		Psc
473	17.5	+16 14	13.1			1.0	0.6	E4		Psc
474	17.5	+03 10	13.0	11.9	G5	0.4	0.4	E	31.9	Psc
488	19.1	+05 00	11.1	11.1	G7	4.2	3.3	Sb	31.8	Psc

NGC	AR 1950	D 1950	m_p	m	Sp	App.	Diam.	T	$m-M_0$	Con
491	01 ^h 19 ^m 1	-34°19'	13.0							Scl
514	21.3	+12 39	12.3		G0	2'7	2'2	Sc	32.1	Psc
520	22.0	+03 32	12.4			3.0	0.7	Pec	31.7	Psc
521	22.0	+01 28	13.0					SBb		Cet
524	22.1	+09 16	11.6	11.1	G3	1.8	1.7	E1	32.1	Psc
533	22.9	+01 30	13.0			0,9	0.7	E2		Cet
578	28.0	-22 56	11.4			4.1	2.2	Sc	31.5	Cet
584	28.8	-07 07	11.4	10.8	G5	1.6	1.0	E4	31.4	Cet
596	30.3	-07 17	12.1	11.5	G3	1.5	1.2	E2	31.6	Cet
598	31.1	+30 24	6.2	6.7	A7	65	35	Sc	24.6	M 33 Tri
613	32.0	-29 40	11.1	10.2		4.0	2.0	SBc		Scl
615	32.6	-07 35	12.6	11.6		2.5	1.0	Sb	30.9	Cet
625	32.9	-41 41	12.3			2.5	1.0	S		Phe
628	34.0	+15 32	9.7	10.2	F5	10.6	9.0	Sc	29.2	M 74 Psc
643	34.1	-75 48	13.0							Hys
636	36.6	-07 45	12.4		G5	0.9	0.8	E1	31.5	Cet
670	44.5	+27 38	13.0			0.9	0.5	E4		Tri
672	45.0	+27 11	11.3	12.2		5.5	1.5	SBc	28.5	Tri
685	45.9	-53 02	12.7			2.3	2.3	S		Eri
681	46.7	-10 40	12.8		G5	1.6	0.8	Sb	31.2	Cet
697	48.6	+21 06	12.5			2.0	1.0	E		Ari
701	48.6	-09 57	12.7			2.2	0.8	S		Cet
720	50.6	-13 59	11.3	10.5	G4	1.6	1.1	E3	31.3	Cet
718	50.7	+03 57	12.5			1.2	1.0	Sb	31.4	Psc
741	53.8	+05 23	13.0		G5	0.9	0.8	E1	33.8	Psc
753	54.6	+35 41	12.9			1.9	1.6	Sc	33.5	And
750	54.6	+32 58	13.7		G7	0.6	0.3	E	33.6	Tri
782	56.1	-58 01	12.7			2.0	2.0	S		Eri
772	56.6	+18 46	11.1	10.9	G4	5.0	3.0	Sb	32.0	Ari
779	57.2	-06 12	11.9	11.3		3.7	0.9	SB	30.2	Cet
777	57.3	+31 12	13.0			0.9	0.7	E2		Tri
788	58.6	-07 03	12.4		G0	1.2	0.9	Sa	33.1	Cet
821	02 05.6	+10 46	12.0	11.2	G5	1.2	0.9	E2	31.4	Ari
864	12.8	+05 45	11.6			3.5	2.3	Sc	31.1	Cet
877	15.3	+14 19	12.4			1.7	1.1	Sc	33.1	Ari
890	19.1	+33 02	12.6		G4	1.1	0.7	E4	33.1	Tri
895	19.1	-05 45	12.2			2.8	2.2	Sb	31.3	Cet
891	19.3	+42 07	10.9		G1	11.8	1.1	Sb	27.0	And
908	20.8	-21 27	10.7	11.5		5.0	2.3	Sc	31.1	Cet
922	22.9	-25 01	12.4			1.2	1.2	Scp	31.0	For
925	24.3	+33 22	10.5		F0	9.5	4.3	SBc	29.1	Tri
936	25.1	-01 22	11.2	10.7	G3	3.3	2.5	SBa	30.7	Cet
941	26.0	-01 22	12.8			1.9	1.3	Sc	30.5	Cet
949	27.6	+36 56	12.8	12.7		1.2	0.5	Sb		Tri
955	28.0	-01 19	13.1			2.0	0.5	E8		Cet
958	28.1	-03 09	13.0			1.8	0.6	Sb	32.6	Cet
976	31.2	+20 44	12.7			1.1	1.0	Sb	31.7	Ari
972	31.3	+29 06	12.1	12.7	F3	2.5	0.9	Sc	31.1	Ari
986	31.6	-39 15	11.8			1.5	0.8	S		For
991	33.2	-07 22	12.7			1.8	1.8	S	29.7	Cet

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam	T	$m-M_0$	Con
1022	02 ^h 36 ^m 1	-06°53'	12.0	11.2		1'8	1'4	SB		Cet
1035	37.0	-08 20	12.8			1.9	0.6	Sc		Cet
1023	37.2	+38 52	10.5		G5	4.0	1.2	E7p	29.3	Per
1048	38.2	-08 45	12.5			4.5	2.6	Sc		Cet
1052	38.6	-08 28	11.7	11.2	G5	1.3	1.0	E2	30.8	Cet
1055	39.2	+00 16	11.4			6.7	1.5	Sb	29.7	Cet
1068	40.1	-00 14	9.6	8.9	F0	6.0	5.0	Sbp		M 77
1058	40.2	+37 08	11.7			2.3	2.1	Sc	26.7	Per
1073	41.2	+01 10	11.4			4.5	4.2	SBc	31.4	Cet
1079	41.6	-29 13	12.6			1.1	0.8			For
1084	43.5	-07 47	11.1	11.0	F5	2.1	1.1	Sc	30.9	Eri
1087	43.9	-00 42	11.4	11.9	F0	2.2	1.2	Sc	31.3	Cet
1090	44.0	-00 27	12.5			2.8	1.0	S	29.5	Cet
1097	44.3	-30 29	10.6			9.0	5.5	SB		For
1140	52.2	-10 24	12.8		F2	1.1	0.5	Pec	30.9	Eri
1156	56.7	+25 03	11.8		Em	2.5		I	28.5	Ari
1172	59.3	-15 02	13.1			0.8	0.7	E1		Eri
1179	59.7	-19 06	13.0			5.4	3.1	Sp		Eri
1169	03 00.1	+46 12	13.0			2.2	1.9	SBb		Per
1187	00.4	-23 04	11.3			5.5	3.7	SBc	30.8	Eri
1175	01.3	+42 08	13.0			1.1	0.2	S		Per
1199	01.3	-15 48	12.7		G2	0.9	0.7	E2	32.0	Eri
1201	02.0	-26 15	11.7		G5	2.2	1.2	Sa	31.1	For
1209	03.8	-15 48	12.6		G4	1.1	0.5	E5	32.0	Eri
1232	07.5	-20 46	10.5			7.0	5.5	Sc	31.2	Eri
1249	08.6	-53 32	12.3			4.5	2.5	S		Hor
1241	08.8	-09 07	13.0			1.8	1.0	Sb		Eri
1255	11.4	-25 58	12.1			3.5	2.4	Sc	31.2	For
1288	15.3	-32 46	13.0							For
1291	15.5	-41 17	10.2			5.0	2.0	E		Eri
1270	15.6	+41 18	12.7		G4	0.6	0.5	E2	33.5	Per
1292	16.0	-27 48	12.8							For
1297	17.0	-19 16	13.0			1.0	0.8	E2		Eri
1300	17.5	-19 35	11.1			5.7	3.5	SBb	30.9	Eri
1313	17.6	-66 40	10.8			4.5	3.0			Ret
1302	17.7	-26 14	11.1		G3	3.4	3.2	SBa	31.0	For
1309	19.8	-15 35	11.8	11.4		1.9	1.7	Sc	30.4	Eri
1316	20.7	-37 25	10.1			3.5	2.5	S		For
1317	20.8	-37 17	12.2			0.7	0.6	S		For
1326	22.0	-36 39	11.8			3.0	2.5	SB		For
1325	22.3	-21 43	12.2			4.2	1.1	Sb		Eri
1332	24.1	-21 31	11.0	10.4	G2	3.4	1.0	E7	30.9	Eri
1337	25.6	-08 34	12.3			5.2	0.9	S	29.2	Eri
1339	26.1	-32 27	12.8			1.0	1.0	E		For
1344	26.7	-31 14	11.6			2.0	1.0	E		For
1351	28.6	-35 02	12.8			0.8	0.6	E		For
1350	29.1	-33 38	11.8			3.0	1.5	S		For
1353	29.8	-21 00	12.4			2.5	0.9	Sb	30.7	Eri
I 1954	30.2	-52 05	12.2			3.0	1.5	S		Hor
1357	30.9	-13 50	12.5			1.4	0.9	S		Eri

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_o$	Con
1358	03 ^h 31 ^m 2	-05°16'	13.1			2'0	1'2	SBb	32.2	Eri
I 1953	31.4	-21 39	12.5			2.1	1.9	Sc	31.1	Eri
1359	31.5	-19 41	12.5			1.6	1.3	SBp	31.4	Eri
1365	31.8	-36 18	11.2			8.0	3.5	SB		For
1366	32.0	-31 23	13.0							For
1371	32.8	-25 06	12.2			5.6	3.5	SBa		For
1374	33.4	-35 24	12.4			0.8	0.8	E		For
1379	34.2	-35 37	12.3			0.6	0.6	E		For
1380	34.6	-35 09	11.4			3.0	1.0	E		For
1376	34.7	-05 12	12.9			1.4	1.3	Sc	31.4	Eri
1381	34.7	-35 28	12.6			2.0	0.5	E		For
1386	35.0	-36 10	12.4			2.5	1.0	S		Eri
1387	35.1	-35 41	12.1			1.0	0.9	E		For
1385	35.2	-24 40	11.5			2.4	1.8	Sc	31.4	For
1389	35.3	-35 55	12.8			1.0	0.8	E		Eri
1395	36.3	-23 11	11.4		G7	2.1	1.4	E3	31.1	Eri
1399	36.6	-35 37	10.9			1.4	1.4	E		For
1398	36.8	-26 30	10.4			6.8	4.5	SBb	30.7	For
1404	37.0	-35 45	11.5			1.0	1.0	E		For
1411	37.1	-44 15	12.0			1.1		E		Hor
1400	37.2	-18 51	12.3	10.7	G4	0.8	0.7	E1	27.9	Eri
1406	37.5	-31 28	12.7			3.0	0.8	S		For
1407	37.9	-18 44	11.2	10.6	G3	1.1	1.1	E0	31.2	Eri
1415	38.7	-22 43	12.8		F8	1.7	0.7	Sb	30.7	Eri
1417	39.5	-04 48	12.9		G0	1.7	1.1	Sb	33.0	Eri
1425	40.1	-30 04	12.1			3.5	1.7	S		For
1421	40.2	-13 40	12.0			3.0	0.6	Sb	32.1	Eri
1427	40.4	-35 34	12.4							For
1433	40.4	-47 24	11.4			7.0	6.0	SB		Hor
1426	40.6	-22 16	12.6		G4	0.6	0.4	E2	30.5	Eri
1437	41.7	-36 01	12.9			2.0	1.5	S		Eri
1448	42.1	-44 48	11.8			8.0	1.0	S		Hor
1439	42.6	-22 05	12.9		G2	1.0	0.9	E1	31.4	Eri
1440	42.8	-18 27	13.0			1.0	0.7	SBa		Eri
1452	43.1	-18 47	13.0			1.7	0.9	SBa		Eri
1453	44.0	-04 08	12.9	11.4	G0	0.8	0.6	E2	33.0	Eri
1461	46.1	-16 32	12.8			0.9	0.5	Sa		Eri
I 2006	52.2	-36 08	12.8							Eri
1487	54.1	-42 31	12.6			1.2	1.0	I		Eri
1493	55.9	-46 21	11.8			2.0	2.0	S		Hor
1494	56.2	-49 03	12.2			2.5	2.0	S		Hor
1511	59.3	-67 46	12.1			2.5	0.8	S		Tuc
1507	04 01.8	-02 20	12.9			3.2	0.5	S		Eri
1512	02.3	-43 29	11.8			3.0	2.5	SB		Hor
1515	02.7	-54 14	12.1			6.0	1.0	S		Dor
1518	04.7	-21 18	12.3			2.4	0.9	Scp	29.7	Eri
1521	06.2	-21 11	13.0		G5	0.7	0.5	E3	33.0	Eri
1527	06.9	-48 01	12.1			1.5	0.5	E		Hor
I 2035	07.6	-45 38	12.6			0.6	0.6	E		Hor
1533	08.8	-56 15	12.3			2.3	2.0	E		Dor

NGC	AR 1950	D 1950	m _p	m _v	Sp	App.	Diam.	T	m-Mr	Con
1531	04 ^b 10 ^m 1	-32°59'	13.0							Hor
1532	10.2	-33 00	11.8			5'0	1'0	S		Hor
1543	11.7	-57 52	12.0			2.5	1.0	E		Ret
1537	11.8	-31 41	12.0			1.2	0.6	S		Eri
1546	13.6	-56 11	12.5			2.0	0.8	S		Dor
1549	14.7	-55 42	11.0			3.0	2.7	E		Dor
1553	15.2	-55 54	10.2			3.0	2.5	S		Dor
I 2056	15.6	-60 20	12.3			0.6	0.6	E		Ret
1559	17.0	-62 55	11.1			3.0	1.5	S		Ret
1566	18.9	-55 04	10.5			8.0	6.0	S		Dor
1574	21.0	-57 05	12.2			1.0	1.0	E		Ret
1569	26.0	+64 45	11.8		Em	2.1	0.8	Ip	25.4	Cam
1596	26.6	-55 07	12.3			3.0	1.0	E		Dor
1600	29.2	-05 10	12.2	12.1	G7	0.8	0.6	E2	33.4	Eri
1617	30.6	-54 42	11.7			4.0	1.5	S		Dor
1625	34.6	-03 24	13.1			1.8	0.3	S		Eri
1637	38.9	-02 56	11.3	12.1	F8	2.6	1.9	Sc	28.6	Eri
1638	39.1	-01 53	13.1			0.6	0.5	E2		Eri
1640	40.1	-20 32	12.4			2.0	1.1	SBb	30.9	Eri
1659	44.0	-04 53	13.2			1.1	0.9	Sc	31.0	Eri
1672	44.9	-59 20	11.4			4.0	3.0	S		Dor
1667	46.2	-06 24	12.9			1.0	0.8	Sb	31.8	Eri
1688	47.6	-59 53	12.7			1.7	1.5	S		Dor
1705	53.2	-53 26	12.9			0.6	0.4			Pic
1700	54.4	-04 56	12.1	11.9	G4	0.9	0.8	E1	32.9	Eri
1726	57.3	-07 49	13.0			0.6	0.5	E2		Eri
1744	57.9	-26 06	12.1			7.6	3.1	Sc	28.4	Lep
1796	05 02.1	-61 12	12.9			1.5	0.8	S		Dor
1784	03.2	-11 56	12.4			4.5	2.3	Sc	31.3	Lep
1792	03.5	-38 04	10.7			3.0	1.0	S		Col
1800	04.6	-32 01	12.9			0.8	0.4	S		Col
1808	05.9	-37 34	11.2			4.0	1.0	S		Col
1832	10.0	-15 47	12.0		G4	2.2	1.1	Sc	31.4	Lep
1947	26.0	-63 49	12.2			1.3	1.3	S		Dor
LMC	26	-69	0.5			432	432	I		Dor
1964	31.2	-21 59	11.6			5.4	1.1	Sb	31.1	Lep
1961	36.8	+69 24	11.7			3.7	1.6	Sbp	33.0	Cam
2082	41.6	-64 20	12.8			1.3	1.3	S		Dor
2090	45.2	-34 15	12.4			2.5	1.0	S		Col
2139	58.6	-23 49	11.9			1.6	1.3	Scp	31.1	Lep
2179	06 05.9	-21 44	13.0			0.9	0.7	Sa		Lep
2188	08.3	-34 05	12.6			3.0	0.6	I		Col
2196	10.1	-21 47	12.6			1.7	1.3	Sb	31.7	CMa
2146	10.7	+78 23	11.3			5.1	2.8	S	29.9	Cam
2207	14.3	-21 21	11.4		G1	2.8	1.9	Sc	32.0	CMa
2217	18.7	-27 14	11.8		G2	5.0	4.0	SBa	30.6	CMa
2223	22.5	-22 49	12.7			3.5	2.5	SBb		CMa
2280	42.8	-22 35	12.7			2.0	1.0	S		CMa
2310	52.4	-40 48	12.8			2.0	0.5	S		Pup
2325	07 00.7	-28 38	12.9							CMa

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
2268	07 ^h 01 ^m 3	+84°30'	12.2			2'3	1'5	Sb	32.0	Cam
2314	03.8	+75 19	13.3		G5	0.7	0.6	Elp	33.0	Cam
2339	05.4	+18 52	12.5	12.5	G0	2.1	1.3	Sc	31.8	Gem
2276	11.0	+85 52	12.9			2.2	1.9	Sc	32.1	Cep
2347	11.6	+64 54	13.1			1.0	0.8	Sb	33.3	Cam
2336	16.2	+80 20	11.0			5.7	2.8	Sb	31.9	Cam
2300	16.5	+85 50	12.2		G5	1.0	0.9	El	31.7	Cep
2397	21.5	-68 54	12.8			1.6	1.0	S		Vol
2366	23.6	+69 08	11.4			4.5	2.0	I	26.5	Cam
2403	32.0	+65 43	8.8	8.9		16.8	10.0	Sc	26.5	Cam
2434	35.0	-69 10	12.8			0.6	0.5	E		Vol
2427	35.1	-47 30	12.4			5.0	3.0	S		Pup
2442	36.5	-69 25	11.8			6.0	0.5	S		Vol
2441	47.1	+73 06	13.0			1.2	1.0	Sc	32.9	Cam
2460	52.7	+60 31	12.7		G2			Sb	30.9	Cam
2500	58.2	+50 54	12.1			2.5	1.9	S	28.5	Lyn
2525	08 03.3	-11 17	12.3			2.4	1.3	Scp	31.3	Pup
2523	09.2	+73 45	12.6			2.3	1.1	SBb	32.8	Cam
2537	09.7	+46 09	12.3	12.3	Em	1.1	1.0	S	27.8	Lyn
2541	11.1	+49 15	12.9			4.9	2.2	S	28.8	Lyn
2545	11.3	+21 30	13.0			1.1	0.9	Sb		Cnc
2549	14.9	+57 58	12.2		G4	1.8	0.7	E6	30.3	Lyn
2552	15.4	+50 11	12.5			2.6	2.0	I	28.2	Lyn
2551	18.8	+73 35	13.2			1.2	0.8	Sb	32.0	Cam
2613	31.1	-22 48	10.9		G1	6.6	1.3	Sb	30.7	Pyx
2608	32.2	+28 38	12.8		F5	1.7	0.9	Sc	31.6	Cnc
2642	38.3	-03 57	12.7			1.8	1.8	SBb	33.1	Hya
2639	40.1	+50 24	12.6	11.6	G5	1.2	0.6	Sa	32.6	UMa
2633	42.7	+74 18	12.8			2.0	1.1	SBbp	31.9	Cam
2654	44.3	+60 28	12.6		G5	3.7	0.5	Sb	30.8	UMa
2646	44.6	+73 40	12.8			0.5	0.3		32.8	Cam
2672	46.6	+19 16	13.2	12.2		0.8	0.7	E1	33.1	Cnc
2655	49.4	+78 25	10.9	10.7	G1	5.0	3.4	S	30.8	Cam
2683	49.6	+33 38	10.5	9.6	G0	8.0	1.3	Sb	27.3	Lyn
2681	50.0	+51 31	11.3	10.4	F8	2.8	2.5	Sa	29.4	UMa
2685	52.2	+58 59	12.0		G5	3.0	1.6	Sbp	29.9	UMa
2693	53.5	+51 33	13.2	11.7	G2	0.8	0.6	Ep	33.5	UMa
2713	54.8	+03 08	12.7			3.2	1.0	Sb	31.6	Hya
2701	55.5	+53 59	12.5			1.6	1.0	Sc	31.5	UMa
2712	56.2	+45 07	12.8	11.7	G1	2.8	1.1	Sb	31.3	Lyn
2715	09 02.0	+78 16	11.9	11.9		4.4	1.1	Sc	30.6	Cam
2749	02.5	+18 31	13.5		G0	0.8	0.6	E2	33.0	Cnc
2742	03.7	+60 41	12.5	11.2		2.5	1.0	Sc	31.5	UMa
2763	04.5	-15 17	12.6			1.7	1.7	S	29.2	Hya
2764	05.4	+21 39	13.3			0.9	0.5	E		Cnc
2732	07.3	+79 24	12.7	11.7		1.3	0.5	S	31.8	Cam
2775	07.7	+07 15	11.3	10.7	G3	2.3	1.9	Sa	29.9	Cnc
2768	07.8	+60 16	11.2	10.5	G5	2.0	1.0	E5	30.9	UMa
2748	08.2	+76 41	12.3	11.4		2.3	0.8	Sc	31.1	Cam
2776	08.9	+45 11	11.9	11.7		2.1	2.1	Sc	32.1	Lyn

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
2781	09 ^h 09 ^m 1	-14 36	12.7	11.7		3'2	1'3	Sb	30.7	Hya
2784	10.1	-23 58	11.8			3.0	1.1	E8	28.2	Hya
2782	10.9	+40 19	12.5	11.7	F0	1.8	1.6	Sb	32.0	Lyn
2793	13.7	+34 39	12.9			0.8	0.8	Scp		Lyn
2811	13.9	-16 06	12.4	11.7	G3	1.6	0.5	Sb	31.8	Hya
2815	14.1	-23 24	12.9			3.0	0.7	Sbp		Hya
2798	14.4	+42 10	13.1		F5	2.3	0.6	S	31.2	Lyn
2787	14.9	+69 25	12.0	10.9		2.0	1.3	Sap	29.3	UMa
2835	15.7	-22 08	12.0			5.8	2.8	Sp	29.0	Hya
2832	16.8	+33 59	13.5		G0	0.6	0.6	E	34.2	Lyn
2848	17.8	-16 18	12.8			2.1	1.4	S	29.5	Hya
2841	18.6	+51 12	10.1	9.3	G0	6.4	2.4	Sb	29.2	UMa
2844	18.6	+40 22	13.0			0.9	0.5	Sa		Lyn
2855	19.1	-11 41	12.6	12.2	G3	1.1	1.0	Sa	31.1	Hya
2865	21.2	-22 58	12.5		G2	0.8	0.5	E4	31.9	Hya
2859	21.3	+34 44	12.2	10.7	G3	4.4	3.5	SBa	31.1	LMi
2889	24.8	-11 25	12.4			1.3	1.2	Sb	31.8	Hya
2880	25.7	+62 44	12.6	11.4	G4	1.0	0.7	E3	31.0	UMa
2902	28.5	-14 30	13.1			0.5	0.5	E0		Hya
2903	29.3	+21 44	9.5	9.1	F0	11.0	4.6	Sb	28.6	Leo
2907	29.3	-16 32	12.9			1.0	0.8	Sb		Hya
2911	31.0	+10 22	13.6		F8	0.6	0.5	E2p	32.4	Leo
2924	32.8	-16 11	13.2			0.5	0.5	E0		Hya
2935	34.5	-20 54	12.4			3.2	2.4	SBb	32.2	Hya
2942	36.2	+34 14	12.9			1.5	1.2	Sb	32.0	LMi
2962	38.3	+05 24	12.9			2.1	1.5	Sb	30.5	Hya
2955	38.8	+36 07	13.1			1.2	0.6	Sb	32.2	LMi
2950	39.1	+59 05	11.9	10.9	G2	1.3	0.9	Sap	30.8	UMa
2967	39.5	+00 34	12.4			2.2	2.0	Sc	31.6	Sex
2964	40.0	+32 05	11.9	11.0	F5	2.2	1.1	Sc	30.5	Leo
2974	40.0	-03 29	11.9	11.0	G5	1.5	0.9	Sa	31.3	Sex
2968	40.3	+32 10	12.8	11.9		1.2	0.8	Pec		Leo
2983	41.3	-20 15	12.6		G5	1.8	1.0	SBa	31.2	Hya
2986	42.0	-21 03	12.2		G7	1.0	0.9	E1	31.6	Hya
2989	43.1	-18 09	13.1			1.0	0.7	Sb	32.0	Hya
2976	43.2	+68 08	10.7	11.4		3.5	1.3	S	26.5	UMa
2992	43.3	-14 06	13.0					Pec		Hya
2993	43.4	-14 08	13.0					Pec		Hya
2997	43.5	-30 58	11.0			6.0	5.0	S		Ant
2990	43.6	+05 57	13.0			1.0	0.5	S		Sex
3003	45.6	+33 39	12.0	12.7	F0	5.0	0.9	Sc	30.8	LMi
2998	45.8	+44 19	12.8			3.9	1.1	Sc	31.9	UMa
2985	46.0	+72 31	11.1	10.6	G3	5.5	5.0	Sb	30.8	UMa
3021	48.0	+33 47	12.7	11.7		1.1	0.5	Sb		LMi
3032	49.2	+29 28	12.8		G2	0.9	0.7	Sa	30.9	Leo
3038	49.2	-32 32	12.9							Ant
3059	49.5	-73 41	12.2			2.8	2.8	S		Car
3041	50.3	+16 55	12.7			2.7	1.5	Sc	31.3	Leo
3044	51.0	+01 49	12.6			4.6	0.5	Sc		Sex
3031	51.5	+69 18	7.9	7.9		21.0	9.8	Sb	26.5	M 81 UMa

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
3034	09 ^h 51 ^m 9	+69°56'	9.2	8.8		9'0	4'0	Pec	26.5	M 82 UMa
3052	52.0	-18 24	12.8			1.7	1.1	Sc	31.7	Hya
3054	52.1	-25 28	12.6			3.3	1.3	Sb	30.6	Hya
3056	52.3	-28 04	12.8			0.5	0.5	E		Ant
3055	52.7	+04 31	12.6			1.7	1.0	Sc	31.2	Sex
3043	52.8	+59 32	13.2			1.1	0.4	Sb		UMa
I 2522	53.1	-32 54	12.9			1.5	1.5	S		Ant
3067	55.4	+32 37	12.6		F2	1.8	0.5	Sb	30.8	Leo
3078	56.2	-26 41	12.1		G0	0.6	0.4	E3	31.7	Hya
3081	56.8	-22 33	12.8			1.1	0.8	Sb	30.2	Hya
3087	57.0	-33 59	13.0							Ant
3089	57.3	-28 04	13.0							Ant
3065	57.7	+72 25	12.9			0.5	0.5	Sa	31.7	UMa
3091	57.8	-19 23	12.7			1.0	0.8	E2		Hya
3095	57.9	-31 18	12.7			2.0	1.2	S		Ant
3079	58.6	+55 57	11.1	11.2		8.0	1.0	Sb	30.5	UMa
3077	59.4	+68 58	10.6	10.9		2.3	1.9	E2 _p	26.5	UMa
3098	59.5	+24 58	13.0			1.4	0.4	E7		Leo
3109	10 00.8	-25 55	11.2			12.0	2.0	I	26.1	Hya
I 2537	01.7	-27 19	12.8			2.1	1.5	S	28.3	Ant
3115	02.8	-07 28	10.2	9.3	G5	4.0	1.2	E6	28.1	Sex
3124	04.2	-19 00	12.8			3.0	2.1	Sb	32.7	Hya
3125	04.2	-29 41	13.0							Ant
3136	04.5	-67 08	12.4			1.0	0.7	E		Car
3145	07.7	-12 10	12.5			2.4	1.0	Sb	32.8	Hya
3156	10.1	+03 22	13.1			1.0	0.5	E5		Sex
3162	10.7	+22 59	12.3		F5	2.3	2.1	Sc	30.4	Leo
3158	10.9	+39 00	13.1		G3	0.6	0.5	E2	34.2	LMi
3166	11.2	+03 40	11.5	11.4	G1	4.4	1.7	S	30.4	Sex
3169	11.7	+03 43	11.2	11.7	G5	4.0	1.7	Sb	30.2	Sex
3175	12.4	-28 38	12.1			2.0	0.5	S		Ant
3147	12.8	+73 39	11.3	10.9		3.0	2.3	Sb	32.3	Dra
3177	13.9	+21 22	12.8		F8	0.8	0.7	Sb	30.4	Leo
3185	14.9	+21 56	12.9		F5	1.4	0.9	Sb	30.4	Leo
3184	15.2	+41 40	10.3	12.1	F3	5.6	5.6	Sc	28.1	UMa
3190	10 15.4	+22 05	12.0	11.3	G3	3.0	1.0	Sb	30.4	Leo
3193	15.7	+22 09	11.8	11.5	G1	0.9	0.9	E0	30.4	Leo
3200	16.2	-17 44	12.8			4.2	0.9	Sb	31.8	Hya
3203	16.3	-26 27	13.2			2.0	0.3	E8		Hya
3198	16.7	+45 49	10.8	12.4		9.0	3.2	Sc	29.1	UMa
3223	19.4	-34 00	12.1			3.5	1.4	S		Ant
3226	20.7	+20 09	12.6	11.4	G2	1.0	0.8	E2	30.5	Leo
3227	20.7	+20 07	11.3	11.4	F3	3.0	1.2	Sb	30.0	Leo
3241	22.1	-32 13	13.0							Ant
3250	24.3	-39 41	12.4							Ant
3245	24.5	+28 46	11.8	11.2	G2	1.8	0.9	E5	30.4	LMi
3256	25.7	-43 38	12.1			2.0	1.5	S		Vel
3254	26.5	+29 45	12.1	12.2	G4	4.0	1.0	Sb	30.3	LMi
3258	26.6	-35 20	13.0							Ant
3261	26.8	-44 23	12.8			3.0	2.5	S		Vel

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
3268	10 ^h 27 ^m 6	-35°06'	13.0							Ant
3271	27.8	-35 06	12.9			1'0	0'6			Ant
3275	28.6	-36 28	12.8							Ant
3259	29.2	+65 18	12.9			1.3	0.7	Ip	31.5	UMa
3274	29.6	+27 56	13.0			2.0	0.7	Sc		Leo
3281	29.7	-34 36	12.9			2.0	1.0	S		Ant
3277	30.2	+28 46	12.4	12.0	F5	1.1	0.9	Sb	30.7	LMi
3285	31.3	-27 12	13.2			1.3	0.8	S		Hya
3287	32.1	+21 55	12.8			2.2	0.7	S		Leo
3294	33.4	+37 35	11.6	11.4		2.6	1.2	Sc	30.8	LMi
3300	34.0	+14 26	13.1			1.0	0.5	SBa		Leo
3301	34.3	+22 08	12.2	11.8	G2	2.5	0.6	Sa	30.5	Leo
3309	34.3	-27 16	12.7			0.5	0.5	E0		Hya
3312	34.8	-27 20	13.1			2.4	0.9	S		Hya
3318	35.1	-41 22	12.6							Vel
3310	35.7	+53 46	11.3	10.1	A8	4.0	3.0	I	30.2	UMa
3319	36.4	+41 56	11.7			6.2	3.2	Sc	29.6	UMa
3320	36.7	+47 40	12.9			1.8	0.8	Sc	30.6	UMa
3338	39.5	+14 00	11.3			4.5	3.0	Sb	30.4	Leo
3347	40.5	-36 06	12.8			4.0	2.0	S		Ant
3329	40.6	+77 05	12.9			1.2	0.6	S		Dra
3344	40.7	+25 11	11.9	10.4	F5	7.6	6.2	Sc	28.5	LMi
3346	41.0	+15 09	12.4	11.7		2.2	2.0	Sc	31.5	Leo
3351	41.3	+11 58	10.5	10.4	F5	6.1	3.9	Sb	29.1	M 95 Leo
3358	41.3	-36 07	13.0							Ant
3353	42.3	+56 14	13.0			0.8	0.5	S		UMa
3359	43.4	+63 30	10.9			7.0	3.5	Sc	30.2	UMa
3348	43.5	+73 07	12.0	11.2	G5	0.9	0.8	E	32.4	UMa
3367	44.0	+14 01	11.9		F5	1.9	1.7	Sc	32.2	Leo
3368	44.2	+12 05	10.1	9.1	G0	5.0	4.0	Sbp	29.1	M 96 Leo
3370	44.5	+17 32	12.4			2.4	1.2	Sc	30.6	Leo
3377	45.1	+14 15	11.3	10.5	G2	1.9	1.0	E5	29.1	Leo
3379	45.2	+12 51	10.5	9.2	G7	2.2	2.0	E1	29.1	M 105 Leo
3384	45.7	+12 54	10.9	10.2	G5	4.4	1.4	E7	29.1	Leo
3389	45.8	+12 48	12.1	12.5		2.3	1.0	Sc	30.4	Leo
3395	47.1	+33 15	12.4	12.0		1.5	0.9	Sc	31.2	LMi
3396	47.2	+33 16	12.8	12.7		0.8		Pec	31.0	LMi
3412	48.3	+13 41	11.5	10.4	G0	2.4	1.1	E5	29.1	Leo
3414	48.6	+28 15	12.0	11.0	G5	1.4	1.0	SBa	30.7	LMi
3423	48.7	+06 07	11.5			3.5	2.8	Sc	30.6	Sex
3415	48.9	+43 59	13.1			0.8	0.5	E4		UMa
3433	49.4	+10 26	12.9			2.5	2.2	Sb	33.0	Leo
3430	49.5	+33 14	12.0	12.0		3.4	2.0	Sc	31.2	LMi
3432	49.7	+36 54	11.6	11.4		5.8	0.8	S	28.8	LMi
3437	49.9	+23 11	12.6	11.8		2.1	0.5	Sb		Leo
3403	50.1	+73 57	12.9			1.9	0.6	Sb	30.7	Dra
3445	51.6	+57 15	12.9	12.5		1.1	1.1	Sc		UMa
3448	51.7	+54 34	12.6	11.7		1.8	0.3	S		UMa
3455	51.8	+17 33	13.1			2.4	1.0	Sb		Leo
3464	52.2	-20 49	13.2			2.6	1.4	Sb	31.4	Hya

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
3458	10 ^h 53 ^m 0	+57°22'	13.0	12.2		0'8	0'6	S		UMa
3478	56.5	+46 23	13.2			2.2	0.8	Sb	32.8	UMa
3485	57.4	+15 06	12.8			1.5	1.1	Sb	31.9	Leo
3489	57.7	+14 10	11.3	10.5	G0	2.0	0.9	E6	28.8	Leo
3486	57.8	+29 15	11.0	11.2	G3	6.8	4.5	Sc	30.1	LMi
3495	58.6	+03 53	12.7			4.0	0.8	Sb	31.8	Leo
3504	11 00.5	+28 15	11.6	10.9	F3	2.2	2.2	Sb	30.8	LMi
3506	00.6	+11 21	13.2			0.8	0.7	Sc		Leo
3511	00.8	-22 50	11.9			4.6	2.0	Sc	30.9	Crt
3510	01.0	+29 09	12.8			3.5	0.4	S	29.1	LMi
3513	01.1	-22 58	12.0			1.9	1.3	Sc	31.0	Crt
3512	01.3	+28 18	12.9	11.7		1.2	1.0	Sc	30.8	LMi
3521	03.2	+00 14	10.1	9.5	G3	7.0	4.0	Sc	28.9	Leo
3516	03.4	+72 50	12.5	11.6	F0	0.8	0.6	Sa	32.2	UMa
3547	07.3	+11 00	12.9			1.1	0.8	S		Leo
I 2627	07.5	-23 28	12.8			2.0	1.6	Sb	31.8	Crt
3557	07.5	-37 16	12.1			1.5	1.5	E		Cet
3549	08.2	+53 39	12.8			2.6	0.9	Sb	31.1	UMa
3556	08.7	+55 57	10.6	10.7	F0	7.7	1.3	Sc	29.3	M 108 UMa
3571	08.9	-18 01	13.1			2.6	1.0	Sa		Crt
3585	10.9	-26 29	11.0		G3	2.0	1.0	E5	30.5	Hya
3583	11.4	+48 39	12.2			2.2	1.4	Sc	31.3	UMa
3593	12.0	+13 06	11.6	11.3	F5	2.5	0.9	Sb	28.9	Leo
3596	12.4	+15 04	12.2			3.6	2.8	Sc	31.3	Leo
3605	14.2	+18 18	14.0		G3	0.7	0.5	E3	28.9	Leo
3607	14.3	+18 20	11.0	9.6	G3	1.7	1.5	E1	29.6	Leo
3608	14.4	+18 26	12.1	11.1	G0	1.4	1.0	E3	30.2	Leo
3611	14.9	+04 50	12.8		F5	1.5	1.1	Sa	31.0	Leo
3610	15.6	+59 04	11.6	11.2	G2	1.3	1.0	E2p	31.4	UMa
3614	15.6	+46 02	12.9			4.3	1.8	Sc	32.0	UMa
3613	15.7	+58 17	11.7	11.2	G3	1.6	0.8	E5	31.4	UMa
3621	15.9	-32 32	10.6			5.0	2.0	S		Hya
3623	16.3	+13 23	10.2	9.3	G0	7.8	1.5	Sb	28.9	M 65 Leo
3619	16.5	+58 02	12.7	11.7	G3	1.0	1.0	S	31.4	UMa
3626	17.5	+18 38	11.0	10.5	G0	1.6	1.1	Sb	30.7	Leo
3627	17.6	+13 17	9.7	8.4	G2	8.0	2.5	Sb	28.9	M 66 Leo
3628	17.7	+13 53	10.2	10.9		12.0	1.5	Sb	28.9	Leo
3630	17.7	+03 15	12.8			1.5	0.5	E7		Leo
3629	17.9	+27 15	12.9			1.8	1.1	Sc	31.0	Leo
3637	18.1	-09 58	12.8			1.1	1.0	Sa		Crt
3631	18.3	+53 28	10.9	11.2		4.3	3.2	Sc	30.3	UMa
3640	18.5	+03 31	11.6	10.7	G4	1.1	1.0	E1	30.4	Leo
3646	19.2	+20 27	11.8			3.2	1.9	Sc	33.2	Leo
3642	19.6	+59 21	11.5	11.4	G0	5.7	4.4	Sc	31.4	UMa
3655	20.3	+16 51	12.3	11.3		1.2	0.9	S		Leo
3659	21.1	+18 05	12.9			1.1	0.5	S		Leo
3664	21.7	+03 35	12.9			1.3	1.3	S	28.7	Leo
3666	21.9	+11 37	12.6	12.2		3.7	0.8	Sb	30.3	Leo
3665	22.1	+39 02	11.9	11.4	G1	1.6	1.2	E2	31.5	Uma
3672	22.5	-09 32	11.8	12.4		3.6	1.3	Sb	31.3	Crt

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
3673	11 ^h 22 ^m 8	-26°28'	12.9			2'9	2'3	Sb	31.9	Hya
3675	23.5	+43 52	11.0	10.6	G2	4.0	1.7	Sb	29.3	UMa
3681	23.9	+17 09	12.5	12.4	G3	1.0	0.9	S	30.4	Leo
3684	24.5	+17 18	12.3	12.4	F0	2.8	1.8	Sc	30.6	Leo
3683	24.8	+57 09	13.2			1.3	0.5	S		UMa
3686	25.1	+17 30	11.7	11.4	F3	2.4	1.8	Sc	29.8	Leo
3687	25.3	+29 47	13.0			1.3	1.3	Sb	31.4	UMa
3689	25.5	+25 56	12.8			1.0	0.8	Sc	32.0	Leo
3691	25.5	+17 11	13.1			0.9	0.7	S		Leo
3690	26.0	+58 49	12.1	12.0		1.4	0.4	S		UMa
3706	27.3	-36 08	12.7							Cen
3705	27.6	+09 33	12.2			3.5	1.2	Sb	30.5	Leo
3717	29.0	-29 59	12.6			2.0	0.4	S		Hya
3720	29.8	+01 05	13.0			0.5	0.5	E0		Leo
3718	29.9	+53 21	11.2	11.2	G0	3.0		S	30.2	UMa
3726	30.7	+47 19	10.8		A8	5.7	3.4	Sc	30.0	UMa
3729	31.0	+53 24	11.9	11.7		1.8	1.3	Pec		UMa
3732	31.7	-09 34	12.9			0.6	0.6	E0		Crt
3735	33.1	+70 48	12.6	12.7		3.8	0.5	Sb	31.7	Dra
3738	33.1	+54 48	12.0	11.8		1.3	1.1	Pec		UMa
3756	34.1	+54 34	12.1			3.3	1.6	Sc	31.2	UMa
3769	35.1	+48 11	12.5	12.2		2.5	0.6	Sb		UMa
3773	35.6	+12 23	13.0			0.5	0.5	E0p		Leo
3783	36.5	-37 28	12.8			1.0	0.9	E		Cen
3780	36.7	+56 33	12.6	12.4		2.4	1.9	Sc	31.7	UMa
3782	36.9	+46 44	12.9			1.2	0.7	Scp		UMa
3810	38.4	+11 45	11.3	10.8	G0	3.6	2.5	Sc	29.7	Leo
3813	38.7	+36 49	12.6	11.7		1.7	0.8	S		UMa
3818	39.4	-05 53	13.0			0.8	0.6	E2	30.6	Vir
3865	42.7	-08 56	13.0			1.6	1.0	Sb		Crt
3872	43.2	+14 03	13.0		G1	0.8	0.5	E4	32.4	Leo
3877	43.5	+47 46	12.0	10.9		4.4	0.8	Sb		UMa
3885	44.3	-27 39	12.9			1.0	0.7	E		Hya
3887	44.6	-16 35	11.6	11.7		2.8	2.2	Sc	29.9	Crt
3888	45.0	+56 15	13.0			1.3	0.9	Sb	31.3	UMa
3892	45.5	-10 41	12.9			1.3	1.0	Sa		Crt
3893	46.1	+49 00	11.1	11.3	F2	3.7	1.9	Sc	30.0	UMa
3900	46.6	+27 17	12.4	11.5	G1	1.7	0.8	Sb	31.1	Leo
3898	46.7	+56 22	11.7	11.4	G5	2.6	1.0	Sb	30.3	UMa
3904	46.7	-29 02	11.9			1.5	1.0	E		Hya
3912	47.5	+26 46	13.0			0.9	0.5	Sb		Leo
3917	48.3	+52 06	12.8			4.4	0.7	S		UMa
3923	48.5	-28 33	11.1			1.5	1.2	E		Hya
3936	49.9	-26 37	13.0			3.3	0.3	Sb	30.6	Hya
3938	50.2	+44 24	10.8	11.5		4.5	3.8	Sc	29.8	UMa
3941	50.3	+37 16	11.3	9.8	G7	1.8	1.2	Sa	29.9	UMa
3945	50.6	+60 57	11.7	10.8	G3	5.2	2.2	SBa	30.6	UMa
3949	51.1	+48 08	11.4	11.0	G0	2.3	1.1	Sb	29.4	UMa
3952	51.1	-03 43	13.0			1.0	0.4	Pec		Vir
3953	51.2	+52 37	10.7	10.7	G3	5.6	2.3	Sb	30.1	UMa

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m - M_0$	Con
3955	11 ^h 51 ^m 5	-22°54'	12.8			2'1	0'4	Sb	30.4	Crt
3957	51.6	-19 17	12.9			2.5	0.5	E8		Crt
3956	51.6	-20 18	12.6			3.2	0.5	S	29.5	Crt
3962	52.2	-13 42	11.9	11.3	G2	1.1	0.9	E2	31.0	Crt
3963	52.4	+58 46	12.7			2.1	1.9	Sc	32.1	UMa
3976	53.4	+07 02	12.4			3.3	0.8	Sb	31.5	Vir
3981	53.7	-19 37	12.7			3.2	1.3	Sb		Crt
3982	53.9	+55 24	11.8	11.3		1.7	1.3	Sb		UMa
3985	54.1	+48 37	12.9			0.9	0.6	S		UMa
3992	55.0	+53 39	10.6	10.8	G4	6.2	3.5	Sb	30.3	M 109 UMa
3995	55.2	+32 35	12.9			2.1	0.6	S	32.6	UMa
3998	55.3	+55 44	11.6	11.3	G1	1.6	1.2	E2	30.4	UMa
4008	55.7	+28 28	12.9	12.2		0.7	0.5	Sa		Leo
4013	56.0	+44 13	12.7	12.7		4.4	0.5	Sb		UMa
4024	56.0	-18 05	12.9			0.9	0.7	E2		Crv
I 749	56.0	+43 01	13.2			1.8	1.1	Sc	31.2	UMa
I 750	56.3	+43 00	13.0			1.7	0.6	Sb		UMa
4026	56.9	+51 14	11.7	10.7	G5	3.6	0.7	E8	29.9	UMa
4027	57.0	-18 59	11.6			2.4	2.0	Sc		Crv
4030	57.8	-00 49	11.2	11.0		3.1	2.2	Sc	30.7	Vir
4032	58.0	+20 21	13.0			1.1	1.0	I	31.0	Com
4033	58.0	-17 34	12.8			1.0	0.5	E5		Crv
4037	58.8	+13 41	12.8			1.5	1.1	S		Vir
4036	58.9	+62 10	11.5	10.7	G2	2.4	0.9	E6	30.9	UMa
4038	59.3	-18 35	11.0		F0	2.5	2.5	Sc	30.8	Crv
4041	59.7	+62 25	11.5	11.0		2.4	1.8	Sc	30.6	UMa
4047	12 00.2	+48 55	12.8	12.0		1.1	1.0	Sb	30.5	UMa
4045	00.2	+02 15	12.8			1.2	1.0	Sp		Vir
4050	00.4	-16 06	12.5			2.5	1.3	Sb	31.6	Crv
4051	00.6	+44 48	10.8	11.0	A5	4.5	3.6	Sc	29.2	UMa
4062	01.5	+32 10	12.1	12.0		3.4	1.1	Sb	31.3	UMa
4064	01.6	+18 43	12.8			2.0	0.9	Sb	29.9	Com
4073	01.9	+02 11	13.2			0.7	0.6	E1		Vir
4085	02.8	+50 38	12.8	11.8		2.2	0.5	Sb	30.5	UMa
4088	03.0	+50 49	11.0	10.9		4.5	1.4	Sc	29.6	UMa
I 2995	03.0	-27 39	12.7			3.2	1.0	S		Hya
4094	03.3	-14 16	13.0			3.5	1.0	S	30.0	Crv
4096	03.5	+47 45	10.9	11.9		5.7	1.0	Sc	30.0	UMa
4100	03.6	+49 51	11.9	11.9		5.0	1.2	Sb	31.5	UMa
4102	03.8	+52 59	12.3	11.8	F8	2.2	1.0	Sc	30.0	UMa
4105	04.1	-29 30	12.0			1.5	1.5	E		Hya
4106	04.2	-29 31	12.5			1.0	0.8	E		Hya
4111	04.5	+43 21	11.6	9.7	G3	3.3	0.6	E8	29.7	UMa
4116	05.1	+02 58	12.3			3.1	1.2	SBc	30.3	Vir
4124	05.6	+10 40	12.5	12.9		3.3	0.9	Sa	30.3	Vir
4123	05.6	+03 09	11.8			3.2	2.0	SBb	30.3	Vir
4125	05.7	+65 27	11.0	10.2	G5	2.2	1.1	E5p	30.9	Dra
4128	06.1	+69 03	12.9	12.3		1.6	0.4	Sa	32.0	Dra
4129	06.3	-08 45	12.9			2.2	0.3	S		Vir
4136	06.7	+30 12	12.1		F8	3.4	2.8	Sc	28.2	Com

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
4138	12 ^h 07 ^m 0	+43°58′	12.3	11.9	G2	1.3	0.8	E4	30.2	CVn
4143	07.1	+42 49	12.1	11.0	G5	1.4	0.9	E4	29.6	CVn
4144	07.5	+46 44	12.4			5.2	0.7	Sb	29.8	UMa
4145	07.5	+40 10	12.2	11.9		5.4	3.1	Sc	31.4	CVn
I 764	07.6	-29 28	12.9			5.0	2.0	S		Hya
4151	08.0	+39 41	11.3	11.6	A8	2.5	1.6	Pec	30.0	CVn
4150	08.0	+30 41	12.6	11.6	G2	1.2	0.9	E2	28.2	Com
4152	08.1	+16 19	12.7			1.7	1.3	Sc	30.3	Com
4157	08.6	+50 46	12.0	11.9		6.5	0.8	Sb	31.1	UMa
4158	08.6	+20 27	12.9			0.9	0.8	Sa		Com
4160	09.1	+44 01	12.6			4.4	0.4	S	29.6	CVn
4162	09.4	+24 24	12.6			2.0	1.0	Sc	32.0	Com
4168	09.8	+13 29	12.3			1.0	1.0	E0	30.3	Vir
4178	10.2	+11 09	11.8			4.4	1.1	SBc	30.3	Vir
4179	10.3	+01 35	11.7	11.6	F8	2.7	0.6	E8	30.3	Vir
4190	11.1	+36 54	13.2			1.1	0.8	I		CVn
4189	11.2	+13 42	12.5			1.7	1.5	Sc	30.3	Vir
4192	11.3	+15 11	10.9	10.7	G0	8.4	1.9	Sb	30.3	M 98 Com
4203	12.5	+33 29	11.5	11.0	G3	1.8	1.5	Ep	30.0	Com
4214	30.1	+36 36	10.1	10.3	Em	6.6	5.8	I	28.2	CVn
4212	13.1	+14 11	11.7	11.9		2.3	1.3	Sc	30.3	Com
4217	13.3	+47 22	11.9			4.5	0.9	Sb		CVn
4216	13.4	+13 25	10.9	10.4	G3	7.4	0.9	Sb	30.3	Vir
4215	13.4	+06 41	12.8			1.1	0.4	Sb	30.3	Vir
4220	13.7	+48 10	12.2	11.7	G2	2.6	0.8	Sa	30.1	CVn
4219	13.8	-43 03	12.7							Cen
4224	14.0	+07 44	12.9			1.5	0.6	Sa	30.3	Vir
4236	14.3	+69 45	10.1	12.4		20.0	5.0	SB	26.5	Dra
4233	14.6	+07 54	13.0			1.0	0.4	E	30.3	Vir
4235	14.6	+07 28	12.6			2.6	0.5	Sa	30.3	Vir
4234	14.6	+03 58	13.0			0.8	0.7	SB	30.3	Vir
4237	14.7	+15 36	12.6			1.3	0.8	S	30.3	Com
4242	14.9	+45 54	11.4			3.6	3.0	S	28.2	CVn
4244	15.0	+38 05	10.5	11.9		14.5	1.0	S	28.2	CVn
4245	15.2	+29 53	12.4	11.1	G0	1.5	1.0	Sb	29.6	Com
4251	15.7	+28 27	11.6	10.2	G3	2.3	0.8	Sa	29.6	Com
4254	16.3	+14 42	10.4	10.1	G2	4.6	3.9	Sc	30.3	M 99 Com
4256	16.4	+66 01	13.0			4.0	0.5	Sb	32.2	Dra
4258	16.5	+47 35	8.9	8.6	G0	19.5	7.0	Sbp	28.2	M 106 CVn
4260	16.8	+06 23	12.7			2.0	0.9	SBb	30.3	Vir
4261	16.8	+06 06	11.7	10.3	G7	0.9	0.7	E2	30.3	Vir
4262	17.0	+15 09	12.6			0.9	0.8	E1	30.3	Com
4267	17.2	+13 03	12.0			2.2	2.2	E2	30.3	Vir
4270	17.3	+05 44	13.1	11.9	G5	1.2	0.4	Sa	30.3	Vir
4274	17.4	+29 53	11.3	10.8	G3	6.7	1.3	Sb	29.6	Com
4273	17.4	+05 37	12.3	11.6	F5	1.5	1.0	Sc	30.3	Vir
4278	17.7	+29 34	11.2	10.3	G5	1.4	1.3	E1	29.6	Com
4281	17.8	+05 40	12.3	11.3	G3	1.1	0.6	E5	30.3	Vir
4283	17.9	+29 35	13.3	11.8	G8	0.7	0.7	E0	29.6	Com
4291	18.1	+75 40	12.4	11.9	G3	0.8	0.7	E1	31.5	Dra

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
4290	12 ^h 18 ^m 5	+58°22'	12.7			1'6	1'2	SBb	31.8	UMa
4293	18.7	+18 40	11.7			4.6	1.6	Pec	30.3	Com
4294	18.7	+11 47	12.5			2.4	0.9	Sc	30.3	Vir
4298	19.0	+14 53	12.0			2.2	1.1	S	30.3	Com
4299	19.2	+11 47	12.7			1.1	0.9	S	30.3	Vir
4302	19.2	+14 53	12.4			4.7	0.5	Sc	30.3	Com
4303	19.4	+04 45	10.0	10.1	G1	5.6	5.3	Sc	30.3	M 61 Vir
4307	19.5	+09 20	13.0			2.8	0.4	Sb	30.3	Vir
4304	19.6	-33 12	12.4			1.0	1.0	S		Hya
4314	20.0	+30 10	11.5	10.8	G2	3.1	2.9	SBa	29.6	Com
4321	20.4	+16 06	10.1	10.6	F5	5.3	4.5	Sc	30.3	M 100 Com
4324	20.6	+05 31	12.5		G5	1.3	0.6	Sb	30.3	Vir
4346	21.0	+47 16	12.4	11.6		1.9	0.7	E6		CVn
4340	21.0	+17 00	13.0			2.2	1.4	SBa	30.3	Com
4339	21.0	+06 22	12.6		G3	0.7	0.7	E0	30.3	Vir
4342	21.1	+07 22	13.5			2.1	0.3	Sa	30.3	Vir
I 3253	21.1	-34 21	12.3			2.5	1.0	S		Cet
4348	21.3	-03 10	13.1			2.8	0.4	Sb	31.4	Vir
4350	21.4	+16 58	11.9		G5	1.8	0.5	E7	30.3	Com
4365	22.0	+07 36	11.1	11.1	G5	1.3	1.0	E2	30.3	Vir
4369	22.1	+39 39	12.4	12.6		1.4	1.3	Sa	30.3	CVn
4386	22.4	+75 48	12.8	11.9		1.0	0.5	Sa	31.5	Dra
4371	22.4	+11 59	11.8	11.6		2.2	1.2	SBa	30.3	Vir
4374	22.6	+13 10	10.2	9.3	G5	1.6	1.4	E1	30.3	M 84 Vir
4377	22.7	+15 02	12.9	11.5		0.7	0.6	E1	30.3	Com
4373	22.7	-39 28	12.2							Cen
4382	22.8	+18 28	10.1	9.3	G5	2.1	1.7	Ep	30.3	M 85 Com
4379	22.8	+15 53	13.0			0.7	0.6	E1	30.3	Com
4378	22.8	+05 12	12.8	11.7		3.0	2.7	E	30.3	Vir
4380	22.9	+10 17	12.8			2.6	1.3	S	30.3	Vir
4383	23.0	+16 45	12.9			0.8	0.5	Ep	30.3	Com
4389	23.1	+45 58	12.8			1.7	0.9	SB		CVn
4385	23.1	+00 50	12.9			1.1	0.9	SBb	30.3	Vir
4388	23.3	+12 56	11.7			5.0	0.9	Sb	30.3	Vir
4395	23.4	+33 49	10.7			10.0	8.0	S	28.2	CVn
4394	23.4	+18 29	11.8	11.2	G3	2.3	2.3	SBb	30.3	Com
4406	23.7	+13 13	10.1	9.7	G7	2.1	1.4	E3	30.3	M 86 Vir
4414	24.0	+31 30	10.9	9.7	G2	3.2	1.5	Sc	29.6	Com
4412	24.0	+04 14	12.8			0.9	0.8	Sp	30.3	Vir
4417	24.3	+09 52	12.1			1.8	0.5	E7	30.3	Vir
4419	24.4	+15 19	12.2	11.4		2.2	0.6	Ep	30.3	Com
4420	24.4	+02 46	12.5			1.9	0.7	Sc	30.3	Vir
4424	24.6	+09 42	12.3			2.0	1.0	Sb	30.3	Vir
4425	24.7	+13 01	12.8		G2	2.0	0.5	Sb	30.3	Vir
4428	24.9	-07 54	13.1			1.5	0.6	Sc	30.3	Vir
4429	24.9	+11 23	11.1	11.2	G3	3.3	1.0	Sa	30.3	Vir
4433	25.0	-08 01	12.9			1.5	0.6	S	30.3	Vir
I 3370	25.0	-39 04	12.4							Cen
4435	25.2	+13 21	11.9	10.3	G5	1.3	0.8	E4	30.3	Vir
4438	25.3	+13 17	10.9	10.8	G3	8.0	3.0	S	30.3	Vir

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_p$	Con
4442	12 ^h 25 ^m 6	+10°05'	11.6	10.8	G5	1'8	0'9	E5p	30.3	Vir
4449	25.8	+44 22	9.9	9.2	F0	4.1	3.4	I	28.2	CVn
4448	25.8	+28 54	11.7	11.4	G2	2.8	1.0	Sb	29.6	Com
4450	25.9	+17 21	10.8	10.0	G3	3.0	2.5	Sb	30.3	Com
4452	26.2	+12 02	13.2			1.3	0.3	S	30.3	Vir
4455	26.2	+23 06	13.0			2.4	0.5	S	30.1	Com
4454	26.3	-01 40	12.8			1.3	1.1	Sb	30.3	Vir
4460	26.4	+45 08	12.5	11.7		2.0	0.5	E8		CVn
4457	26.4	+03 51	11.7			2.4	2.0	Sa	30.3	Vir
4459	26.5	+14 15	11.5	10.9	G3	1.2	1.0	E2	30.3	Com
4461	26.6	+13 28	12.0			1.6	0.7	Sa	30.3	Vir
4462	26.7	-22 54	13.0			2.7	0.8	Sb	30.6	Crv
4469	27.0	+09 02	12.5			2.9	0.8	Sp	30.3	Vir
4473	27.3	+13 42	11.3	10.1	G7	1.6	0.9	E4	30.3	Vir
4472	27.3	+08 16	9.3	8.6	G7	2.8	1.8	E4	30.3	M 49 Vir
4474	27.4	+14 21	12.7		G3	1.3	0.5	E6	30.3	Com
4476	27.5	+12 37	13.4			0.7	0.4	E4	30.3	Vir
4477	27.6	+13 55	11.4	10.7	G3	2.4	2.2	Sa	30.3	Com
4478	27.8	+12 36	12.3	10.9	G5	0.8	0.7	E1	30.3	Vir
4483	28.2	+09 17	13.3			0.8	0.5	Sa	30.3	Vir
4485	28.2	+41 58	12.2	11.6		1.5	0.8	I	30.0	CVn
4490	28.3	+41 55	10.1	9.7	A5	5.6	2.1	Sc	28.2	CVn
4486	28.3	+12 40	9.6	9.2	G5	1.9	1.8	E1	30.3	M 87 Vir
4487	28.3	-07 48	12.0			3.3	2.5	Sc	30.0	Vir
4494	28.9	+26 03	10.9	9.6	G7	1.3	1.2	E1	30.6	Com
4517	29.0	+00 21	11.1	12.0		8.9	0.9	Sc	30.3	Vir
4496	29.1	+04 12	11.9			3.3	2.7	Sc	30.3	Vir
4501	29.5	+14 42	10.1	10.2	G5	5.5	2.4	Sb	30.3	M 88 Com
4503	29.6	+11 27	12.8			0.8	0.6	E2	30.3	Vir
4504	29.7	-07 17	12.3	11.7		5.8	1.8	Sc	30.3	Vir
....	29.9	+00 38	12.5			3.7	1.7	S	30.3	Vir
4519	31.0	+08 56	12.2			2.2	1.7	Sc	30.3	Vir
4522	31.2	+09 27	12.9			2.5	0.5	Scp	30.3	Vir
4526	31.6	+07 58	10.6	10.9	G4	3.3	1.0	E7	30.3	Vir
4527	31.6	+02 56	11.3		G2	5.3	1.0	Sb	30.3	Vir
4535	31.8	+08 28	10.4		F0	6.0	4.0	Sc	30.3	Vir
4532	31.8	+06 44	12.2			2.2	0.5	I	30.3	Vir
4536	31.9	+02 28	10.9	11.9		6.9	2.6	Sc	30.3	Vir
4540	32.3	+15 50	12.9			1.0	0.8	I	30.3	Com
4548	32.9	+14 46	10.9	10.8	G5	3.7	3.2	SBb	30.3	Com
4550	32.9	+12 30	12.6	11.7	G3	1.4	0.4	E7	30.3	Vir
4546	32.9	-03 31	11.4	10.0	G3	1.8	0.8	E6	30.3	Vir
....	32.9	-39 31	12.9			1.2	1.2			Cen
4552	33.1	+12 50	11.0	9.5	G7	1.3	1.3	E0	30.3	M 89 Vir
4559	33.5	+28 14	10.3	10.6		11.0	4.5	Sc	29.7	Com
4561	33.6	+19 36	12.9			1.0	1.0	Sc	30.7	Com
4565	33.9	+26 16	10.3	10.2	G0	14.4	1.2	Sb	30.4	Com
4564	34.0	+11 43	12.2			1.6	0.6	E6	30.3	Vir
4567	34.0	+11 32	12.0			2.4	1.6	Sc	30.3	Vir
4568	34.1	+11 31	11.7			3.6	1.8	Sc	30.3	Vir

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
4571	12 ^h 34 ^m 3	+14°28'	11.6			2'6	2'2	S	30.3	M 91 Com
4569	34.3	+13 26	10.1	10.0	G0	7.5	2.2	Sc	30.3	M 90 Vir
4570	34.4	+07 31	11.8	10.9	G7	2.4	0.5	E8	30.3	Vir
4578	35.0	+09 50	12.5			1.9	1.3	Sa	30.3	Vir
4579	35.1	+12 05	10.3	9.2	G3	4.4	3.5	SB	30.3	M 58 Vir
4580	35.3	+05 38	12.8	11.7		1.3	1.0	Sb	30.3	Vir
4589	35.6	+74 28	12.1	10.9	G5	1.0	0.8	Ep	31.5	Dra
4586	35.9	+04 35	12.5	12.5		2.6	0.7	Sb	30.3	Vir
4592	36.7	-00 16	12.4			2.8	0.8	Sb	30.3	Vir
4593	37.0	-05 04	12.1	12.0		3.5	2.7	SBb	30.3	Vir
4594	37.3	-11 21	9.2	8.7	G3	6.0	2.5	Sb	30.3	M 104 Vir
4595	37.3	+15 34	13.1			1.1	0.8	Sc	30.3	Com
4596	37.4	+10 27	11.4	11.4		2.8	2.2	SBa	30.3	Vir
4597	37.5	-05 32	12.9			3.7	1.1	SBc	30.3	Vir
4605	37.8	+61 53	10.9	9.6		5.0	1.2	S	26.5	UMa
4602	38.0	-04 52	12.4			3.0	1.5	Sc	30.3	Vir
4603	38.3	-40 42	12.5			2.5	1.2	S		Cen
4608	38.7	+10 26	12.0			1.4	1.4	SBa	30.3	Vir
4612	39.0	+07 35	12.6			0.9	0.8	Ep	30.3	Vir
4618	39.2	+41 25	11.1	11.7		3.5	3.0	Sc	28.2	CVn
4621	39.5	+11 55	11.0	9.6		2.7	1.6	E3	30.3	M 59 Vir
4623	39.6	+07 56	13.2			1.1	0.6	E5	30.3	Vir
4631	39.8	+32 49	9.7	9.3	Em	12.6	1.4	Sc	28.2	CVn
4630	40.0	+04 14	13.1			1.1	0.8	Pec	30.3	Vir
4632	40.0	+00 11	12.1	12.5		2.6	0.8	Sc	30.3	Vir
4635	40.2	+20 12	13.0			1.5	0.9	?		Com
4638	40.2	+11 43	12.2		G3	1.1	0.5	E5	30.3	Vir
4639	40.3	+13 31	12.1			2.4	1.5	SBb	30.3	Vir
4636	40.3	+02 57	10.8	10.4	G2	1.4	1.3	E1	30.3	Vir
4643	40.8	+02 15	11.6	10.6		1.5	0.9	SBa	30.3	Vir
4647	41.0	+11 51	12.0			2.0	1.5	Sc	30.3	Vir
4649	41.1	+11 49	9.9	8.9	G7	2.0	1.8	E1	30.3	M 60 Vir
4651	41.2	+16 40	11.2			3.0	2.5	Scp	30.3	UMa
4653	41.4	-00 18	12.7			2.2	1.9	S	30.3	Vir
4654	41.4	+13 23	11.0			4.2	2.2	Sc	30.3	Vir
4656	41.6	+32 26	10.7	11.2		19.5	2.0	Sc	29.4	CVn
4660	42.0	+11 26	12.1	10.9	G2	1.5	0.8	E5	30.3	Vir
4658	42.1	-09 49	12.4			1.3	0.5	Sc	30.3	Vir
4665	42.6	+03 19	11.8	11.1	G3	3.1	2.1	SBa	30.3	Vir
4666	42.6	-00 12	11.4	11.4		3.8	0.8	Sc	30.3	Vir
4670	42.8	+27 23	12.7			0.9	0.7	Ep		Com
4668	43.0	-00 17	13.4			0.8	0.6	Pec	30.3	Vir
4679	44.5	-39 18	12.9							Cen
4682	44.7	-09 48	13.1			1.4	0.8	S	30.3	Vir
4684	44.7	-02 28	12.2	11.6		1.8	0.5	Sa	30.3	Vir
4689	45.2	+14 01	11.5			2.4	1.9	Sb	30.3	Com
4688	45.3	+04 36	13.0			2.2	2.2	S	30.3	Vir
4691	45.6	-03 04	11.8			2.2	1.7	S	30.3	Vir
4694	45.7	+11 15	12.6			1.8	0.9	E5	30.3	Vir
4698	45.8	+08 45	11.6	11.3	G3	3.0	1.1	Sb	30.3	Vir

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
4697	12 ^h 46 ^m 0	-05°32'	10.4	9.6	G4	2'2	1'4	E4	30.3	Vir
4696	46.1	-41 02	12.2			1.7	1.2	S		Cen
4699	46.5	-08 24	10.2	9.3		3.0	2.0	Sa	30.3	Vir
4700	46.5	-11 08	12.2			2.2	0.3	S	30.3	Vir
4701	46.6	+03 39	12.8			2.2	1.6	S	30.3	Vir
....	46.0	-09 51	12.5			2.1	1.7	S	28.3	Vir
4710	47.1	+15 26	12.0			3.3	0.5	E8	30.3	Com
4712	47.2	+25 44	13.5			1.8	0.9	S	30.5	Com
4713	47.5	+05 35	12.3	11.7		2.2	1.3	Sc	30.3	Vir
4725	48.1	+25 46	10.1	8.9	G4	10.0	5.5	Sb	30.2	Com
4750	48.4	+73 09	12.2	11.2		1.7	1.5	Sbp	31.3	Dra
4731	48.4	-06 08	12.2			5.5	3.0	SBcp	30.3	Vir
4736	48.6	+41 23	8.9	7.9	G0	5.0	3.5	Sbp	28.2	M 94 CVn
4742	49.2	-10 12	12.5	11.7	G0	0.9	0.6	E3	30.3	Vir
4747	49.4	+26 01	12.9			3.0	0.5	Pec		Com
4754	49.7	+11 35	11.6	10.5	G4	2.0	1.2	E	30.3	Vir
4753	49.8	-00 55	10.7	10.8		3.3	1.1	S	30.3	Vir
4756	50.3	-15 08	13.3			0.5	0.4	E2	30.3	Crv
4762	50.4	+11 31	11.0	11.0	G2	3.7	0.4	S	30.3	Vir
4760	50.5	-10 13	12.5			0.6	0.5	E2	30.3	Vir
4763	50.6	-16 43	13.2			0.9	0.6	Sa		Crv
4765	50.7	+04 45	12.9			0.7	0.5	S	30.3	Vir
4771	50.8	+01 33	12.9			2.8	0.5	Sb	30.3	Vir
4772	51.0	+02 27	12.6			2.3	1.0	Sa	30.3	Vir
4775	51.1	-06 21	11.6			1.7	1.6	Sc	30.3	Vir
4767	51.2	-39 27	12.8							Cen
4781	51.8	-10 16	11.7	11.2		2.3	1.1	Sc	30.3	Vir
4782	51.9	-12 11	12.9			0.5	0.5	E0	30.3	Crv
4786	52.0	-06 35	12.7			0.6	0.5	E2p	30.3	Vir
4783	52.0	-12 12	12.7			0.5	0.5	E0	30.3	Crv
4790	52.2	-09 58	12.5			1.2	0.9	Sc	30.3	Vir
4793	52.3	+29 13	12.3	11.8		2.3	1.1	Sc	32.0	Com
4800	52.4	+46 48	12.3	11.1	F8	1.2	1.0	S	29.6	CVn
4795	52.5	+08 20	13.1			1.5	1.0	S	30.3	Vir
....	52.6	+00 23	12.9			2.3	1.1	?	30.3	Vir
4814	53.3	+58 37	12.8	12.1	G3	2.2	2.1	Sbp	32.1	UMa
4808	53.3	+04 35	12.5	12.0		2.0	0.8	Sc	30.3	Vir
I 3896	53.7	-50 03	13.0							Cen
4826	54.3	+21 57	9.3	8.8	G7	6.5	3.2	Sb	27.8	M 64 Com
4818	54.3	-08 15	12.1			3.1	0.9	SB	30.3	Vir
4825	54.3	-13 24	12.9			0.6	0.5	E2p	30.3	Vir
4835	55.3	-45 59	12.5			2.3	0.7	S		Cen
4845	55.5	+01 51	12.6			4.2	0.7	Sb	30.3	Vir
4861	56.7	+35 08	12.9			3.9	0.9	I	29.6	CVn
4856	56.7	-14 46	11.4		G5	2.0	0.7	E	30.3	Vir
4868	56.8	+37 35	13.1			1.1	1.0	Sb	32.3	CVn
4866	57.0	+14 27	12.0	11.4	G3	6.8	0.8	Sb	30.3	Vir
4872	57.2	+28 43	12.6			1.3	0.9	S		Com
4880	57.7	+12 45	13.1			2.2	1.3	Sa	30.3	Vir
4889	57.7	+28 15	13.2		G2	1.0	0.6	E4	34.1	Com

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
4891	12 ^h 58 ^m 1	-13°09'	13.0			1'6	1'4		30.3	Vir
4900	58.2	+02 46	11.9	11.3		1.7	1.5	Sc	30.3	Vir
4899	58.3	-13 41	12.7			1.8	1.0	Sp	30.3	Vir
4902	58.3	-14 15	11.7			2.1	2.0	SBb	32.1	Vir
4914	58.4	+37 35	13.0			1.0	0.8	E2p		CVn
4904	58.4	+00 15	12.8			1.7	1.0	SBc	30.3	Vir
4915	58.8	-04 16	13.0		G5	0.8	0.7	Sa	32.4	Vir
4928	13 00.3	-07 49	12.9			0.9	0.6	S	30.3	Vir
4933	01.2	-11 14	12.8			1.2	0.6	Ep	30.3	Vir
4936	01.5	-30 15	12.6			1.0	1.0	E		Cen
4941	01.6	-05 17	12.0		F8	3.0	1.0	Sbp	30.3	Vir
4939	01.7	-10 05	12.2			5.0	1.9	S	30.3	Vir
4945	02.4	-49 01	9.2			11.5	2.0	S		Cen
4951	02.5	-06 14	12.7			4.0	1.0	S	30.3	Vir
4947	02.6	-35 04	12.6							Cen
4958	03.1	-07 45	11.5	10.9	G3	1.7	0.7	E6	30.3	Vir
4961	03.4	+28 00	13.2			1.0	0.7	Sc	31.3	Com
4976	05.9	-49 14	11.6			2.0	1.5	E		Cen
4981	06.1	-06 31	12.2			2.0	1.5	Sc	30.8	Vir
4984	06.4	-15 15	11.9			1.1	0.9	S		Vir
4995	07.0	-07 34	11.9	11.2		2.0	1.1	Sb	31.2	Vir
4999	07.2	+01 55	12.8			1.8	1.6	S		Vir
5005	08.5	+37 19	10.5	9.8	G0	4.4	1.7	Sb	30.2	CVn
5012	09.3	+23 11	12.6	11.2		2.2	1.2	Sb	31.8	Com
5016	09.7	+24 21	12.8			1.2	0.8	Sb	31.2	Com
5011	10.0	-42 50	12.9							Cen
5017	10.3	-16 30	13.3			0.5	0.4	E2		Vir
5018	10.3	-19 15	12.2		G7	1.7	1.0	Sa	32.2	Vir
5033	11.2	+36 51	10.6	10.3	G1	9.9	4.8	Sb	30.0	CVn
5037	12.4	-16 20	13.1			1.6	0.5	Sb	30.8	Vir
5044	12.8	-16 08	12.2	11.2		0.9	0.9	E0		Vir
5055	13.5	+42 17	9.3	9.5	F8	10.0	5.0	Sb	28.2	M 63 CVn
5054	14.3	-16 23	11.9			3.8	2.2	Sb	31.0	Vir
5061	15.3	-26 36	11.7			1.2	0.9	E2	31.4	Hya
5068	16.2	-20 47	11.6			5.6	5.6	SBc	28.1	Vir
5074	16.2	+31 44	13.2			0.5	0.5	Pec		CVn
5077	16.9	-12 24	12.6		G2	0.9	0.6	E3	32.0	Vir
5084	17.5	-21 34	12.4			6.6	1.0	E8		Vir
5085	17.6	-24 09	12.3			2.8	2.0	Sb		Hya
5087	17.7	-20 21	12.1		G2	1.0	0.6	E4	31.1	Vir
5090	18.3	-43 28	12.9			1.3	1.3	E		Cen
5101	19.0	-27 11	12.5			5.6	4.7	SBa		Hya
5102	19.1	-36 23	10.8			1.5	0.5	E		Cen
5112	19.6	+39 00	12.6			3.3	2.1	Sc		CVn
5116	20.5	+27 14	12.9			1.5	0.7			Com
5121	21.9	-37 25	12.5			0.6	0.6			Cen
5128	22.4	-42 45	7.2			10.0	8.0	I		Cen
5134	22.6	-20 51	12.4			1.8	0.8	Sb	30.0	Vir
5135	22.9	-29 34	12.8			1.8	0.5	S		Hya
5147	23.7	+02 22	12.1			1.4	1.0	Sc	30.7	Vir

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
5156	13 ^h 25 ^m 7	-48°39'	12.9			1'5	1'5	S		Cen
5161	26.3	-32 54	12.5			4.0	1.5	S		Cen
5172	26.9	+17 19	12.5			2.2	1.3	Sb	32.2	Com
5170	27.1	-17 42	12.6			7.6	0.7	S		Vir
5194	27.8	+47 27	8.9	8.1	F8	10.0	5.5	Sc	28.2	M 51 CVn
5195	27.9	+47 31	10.5	8.4	F5	2.0	1.5	Pec	28.2	CVn
5198	28.2	+46 56	12.9		G2	0.6	0.5	E2	32.1	CVn
5204	28.3	+58 40	11.6	12.2		3.9	2.2	I	28.2	UMa
5188	28.6	-34 32	12.7			1.0	0.8	S		Cen
5193	29.1	-32 58	12.6			1.0	1.0	E		Cen
5230	33.0	+13 56	12.9			1.6	1.5	Sc	32.4	Vir
I 4296	33.8	-33 43	11.9			0.6	0.6	E		Cen
5236	34.3	-29 37	8.0	(10.1)		10.0	8.0	Sc		M 83 Hya
5248	35.1	+09 08	10.4	11.3	F8	6.1	4.4	Sc	30.3	Boo
5247	35.3	-17 38	11.9	12.7		4.4	3.7	Sb	31.4	Vir
5253	37.1	-31 24	10.8			4.0	1.5	E		Cen
5273	39.9	+35 55	12.6	11.5	F0	0.9	0.8	E1	30.2	CVn
5266	39.9	-47 56	12.8			1.5	1.0	E		Cen
5297	44.3	+44 05	13.0	12.0		5.2	0.8	Sb	32.2	CVn
5301	45.0	+46 24	13.0			3.4	0.5	Sb	31.3	CVn
5308	45.4	+61 14	12.5	11.7	G5	2.1	0.5	E8	31.7	UMa
5300	45.7	+04 11	12.3			3.1	2.1	Sc	31.4	Vir
I 4329	46.2	-30 03	12.8			1.5	0.5	E		Cen
5322	47.6	+60 26	11.1	10.0		1.4	1.1	E2	31.6	UMa
5313	47.7	+40 13	13.0			1.3	0.7	Sb	32.2	CVn
5326	48.7	+39 49	13.1			1.5	0.4	Sb	30.8	CVn
5324	49.4	-05 48	12.6			1.7	1.6	Sc	31.2	Vir
5328	50.0	-28 14	12.9			1.0	0.9	E		Hya
5334	50.4	-00 53	12.5			3.3	2.2	S	28.3	Vir
5347	51.1	+33 43	13.2			1.1	0.9	SBb	31.0	CVn
5350	51.2	+40 37	12.9			2.1	1.3	Sb	33.0	CVn
5351	51.2	+38 09	13.0			2.4	1.1	Sb	32.2	CVn
5353	51.3	+40 31	12.1		G3	1.3	0.6	E5	31.8	CVn
5362	52.8	+41 30	13.2			1.8	0.7	Sb		CVn
5376	53.6	+59 45	13.0	12.2		1.2	0.8	Sa		UMa
5371	53.6	+40 43	11.4		G3	3.4	3.2	Sb	32.2	CVn
5363	53.6	+05 29	11.1	10.7	G0	2.0	1.4	Ep	30.2	Vir
5364	53.7	+05 15	11.0	12.7	G2	6.2	3.0	Sbp	30.7	Vir
5377	54.3	+47 27	12.0	11.2	F8	3.0	0.6	Sap	31.4	CVn
5365	54.8	-43 42	13.0							Cen
5380	54.8	+37 51	13.2			0.5	0.5	Sa		CVn
I 4351	54.9	-29 05	12.8			5.0	0.5	S		Hya
5383	55.0	+42 05	12.7	12.0		2.0	1.9	SBb	31.8	CVn
5395	56.5	+37 39	12.4	12.2		2.1	1.0	Sb	32.6	CVn
....	57.7	-45 10	13.0							Cen
5406	58.2	+39 09	13.0			1.4	1.0	Sb	32.6	CVn
5398	58.3	-32 50	12.8			1.5	1.5	S		Cen
5422	59.0	+55 24	13.0	11.5		2.9	0.4	E9		UMa
5430	59.1	+59 34	12.8			1.0	1.0	Sb		UMa
5419	14 00.7	-33 44	12.4			1.0	0.7	E		Cen

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m - M_o$	Con
5427	14 ^h 00 ^m 8	-05°47'	12.0			2'0	1'6	Sc	31.7	Vir
5426	00.8	-05 49	12.7			1.9	1.1	Sc		Vir
5448	00.9	+49 25	12.1		G2	4.0	1.2	Sb	31.6	UMa
5444	01.2	+35 22	13.1			0.7	0.6	E1		CVn
5457	01.4	+54 35	8.2	9.6	F8	22.0	22.0	Sc	28.2	M 101 UMa
5473	03.0	+55 08	12.4	11.4	G3	0.9	0.7	E2	31.7	UMa
5474	03.2	+53 54	11.2	11.4		4.0	2.9	Sc	28.2	UMa
5468	04.0	-05 14	12.4			2.0	1.9	Sc	31.5	Vir
5480	04.6	+50 57	12.6			1.1	0.9	Sc	32.0	UMa
5485	05.5	+55 14	12.4	11.7	G5	0.8	0.7	Sa	31.6	UMa
5483	07.4	-43 05	12.4			2.0	1.8	S		Cen
5493	08.9	-04 49	12.5		G5	0.8	0.5	?	32.0	Vir
5496	09.0	-00 56	12.8			3.8	0.5	S	29.8	Vir
5494	09.5	-30 26	12.6			1.5	1.5	S		Cen
5523	12.6	+25 34	12.8			3.9	0.8	Sb	31.2	Boo
5533	14.1	+35 35	12.6		G0	1.8	0.8	S	32.9	Boo
5534	15.0	-07 11	13.0					S		Vir
5530	15.4	-43 09	12.3			3.5	2.0	S		Lup
5548	15.7	+25 22	13.3		F5	0.5	0.5	Sp	33.5	Boo
5557	16.4	+36 43	12.2	11.6	G3	0.9	0.8	E1	32.6	Boo
5556	17.6	-29 01	12.5			2.5	2.2	S		Hya
5566	17.8	+04 11	11.4	10.4	G5	5.6	1.1	Sb	30.8	Vir
5585	18.0	+56 57	11.2	11.7		5.5	3.0	S	28.2	UMa
5574	18.4	+03 28	13.4		G0	0.9	0.3	?	31.1	Vir
5576	18.5	+03 30	12.0	11.7	G1	1.0	0.8	E2	30.9	Vir
5584	19.8	-00 10	12.2			2.6	2.0	Sc	31.3	Vir
5600	21.4	+14 52	12.4			1.0	0.9	Sc		Boo
5595	21.5	-16 30	12.4			1.4	0.8	Sc		Lib
5597	21.7	-16 33	12.6			1.3	1.1	Sb		Lib
5614	22.0	+35 05	12.6		G4	1.0	0.8	S	33.0	Boo
5605	22.3	-12 57	13.1			1.3	1.0	Sc	32.7	Lib
5631	25.1	+56 48	12.5	11.4	G3	0.7	0.7	Sa	31.7	UMa
5633	25.6	+46 22	12.9	12.4	F5	0.8	0.6	S	32.0	Boo
5638	27.1	+03 27	12.4		G3	0.9	0.8	E1	31.1	Vir
5641	27.1	+29 02	13.1			2.1	0.9	SBb	32.7	Boo
5653	28.0	+31 25	12.9			1.2	0.9	S	32.8	Boo
5660	28.1	+49 50	12.3			1.8	1.7	Sc	31.4	Boo
5645	28.1	+07 29	12.9			2.0	1.0	Sc	31.5	Vir
5612	28.2	-78 11	13.0							Aps
I 4444	28.5	-43 12	12.2			1.5	1.3	S		Lup
5643	29.4	-43 59	11.4			2.5	2.3	S		Lup
5665	29.9	+08 18	12.7			1.1	0.9	Sc		Boo
5669	30.3	+10 08	12.5			3.3	2.4	Sc	31.6	Boo
5678	30.7	+58 08	12.1	11.2		2.3	1.2	Scp	32.0	Dra
5668	30.9	+04 40	12.2		F0	2.5	2.3	Sc	31.2	Vir
5676	31.0	+49 41	11.7	11.2		3.0	1.3	Sc	31.9	Boo
5687	33.3	+54 42	12.8		G3	1.0	0.6	Sa	31.8	Boo
5689	33.7	+48 57	12.9	11.4	G2	2.0	0.5	S	31.9	Boo
5690	35.2	+02 30	12.9			2.8	0.6	Sb	31.2	Vir
5691	35.3	-00 11	13.0			1.1	0.8	S		Vir

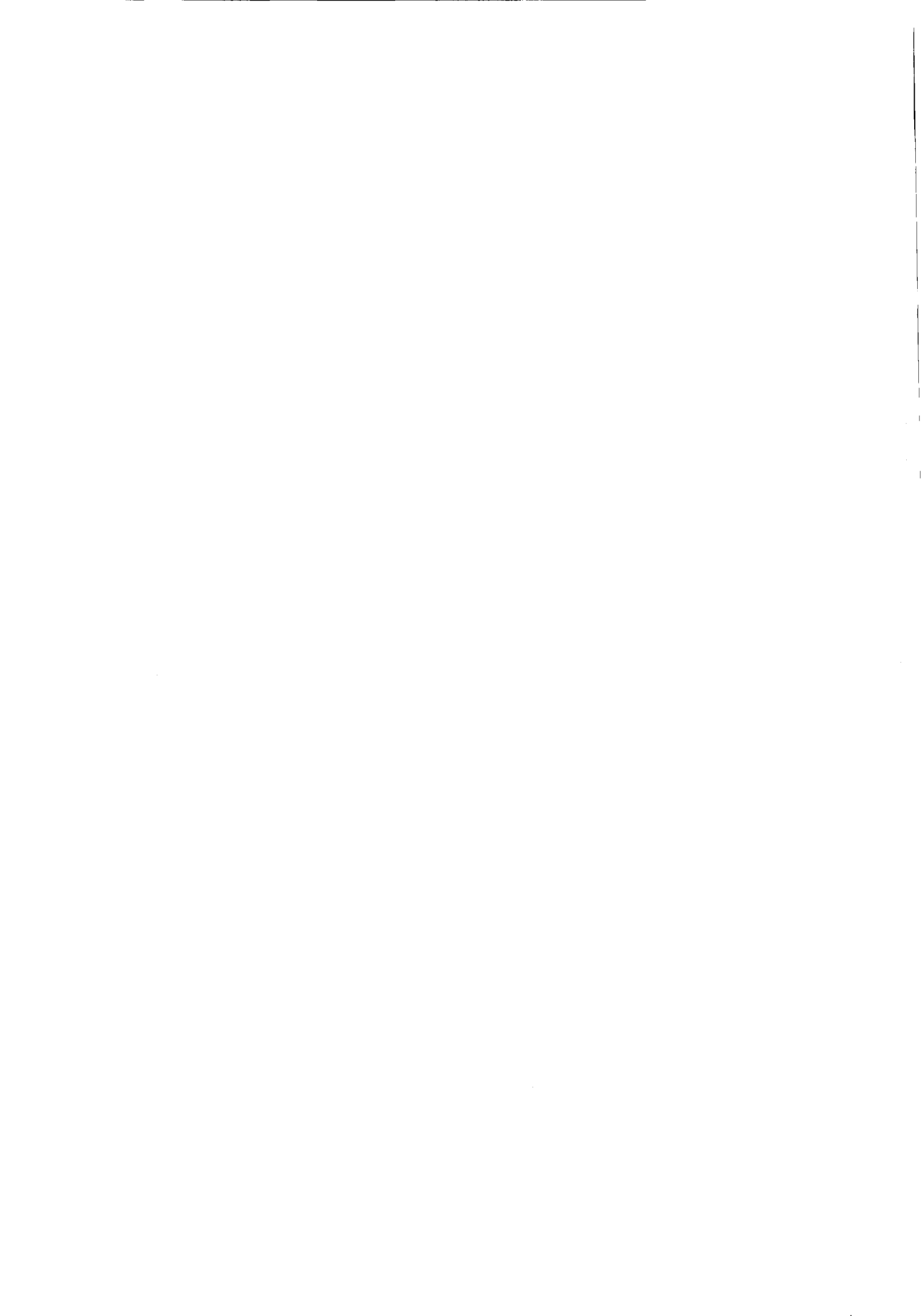
NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
5701	14 ^h 36 ^m 7	+05°34	12.8	11.8		4'0	3/4	Sb	32.4	Vir
5713	37.6	-00 05	11.8	11.7		2.0	1.8	Sc	31.4	Vir
5728	39.6	-17 03	12.4			2.0	0.8	SBb	31.4	Lib
5739	40.6	+42 03	13.1					S		Boo
5740	41.9	+01 54	12.6	11.7		2.2	1.0	Sb	30.8	Vir
5746	42.3	+02 10	11.6	10.1	G2	6.2	0.8	Sb	31.3	Vir
5750	43.6	-00 01	12.6	12.2		1.6	0.8	Sb	30.3	Vir
5756	44.9	-14 39	13.1			1.3	0.6	Scp		Lib
5757	45.0	-18 53	12.6			1.3	1.2	SBb		Lib
5768	49.6	-02 20	12.9			1.4	0.6	I	29.9	Lib
5775	51.5	+03 45	12.2			3.6	0.5	Sb		Vir
5792	55.8	-00 54	12.9			6.6	1.0	Sbp		Lib
5791	56.0	-19 04	13.0			1.0	0.6	Sa		Lib
5796	56.6	-16 26	12.8			0.7	0.7	E0		Lib
5820	57.2	+54 05	13.4		G4	1.0	0.5	E5	32.7	Boo
5806	57.5	+02 05	12.4	11.7	G0	1.8	0.8	Sb	31.3	Vir
5812	58.2	-07 16	12.6	11.4	G7	0.8	0.7	E1	31.5	Lib
5813	58.7	+01 54	12.0	12.0	G5	0.9	0.8	E1	31.3	Vir
5831	15 01.6	+01 24	12.7		G5	0.6	0.5	Ep	31.3	Vir
5838	02.9	+02 18	12.1		G2	3.2	0.7	Sa	31.3	Vir
5846	04.0	+01 48	11.2	10.5	G0	0.9	0.9	E0	31.3	Vir
5850	04.6	+01 44	11.6		G4	2.6	2.2	SBb	31.3	Vir
5866	05.1	+55 57	10.9	10.8	G2	2.8	1.0	E6p	30.0	M 102 Dra
5854	05.3	+02 45	12.6		G1	1.8	0.4	Sa	31.3	Vir
5861	06.4	-11 08	12.4			2.3	1.1	Scp		Lib
5864	07.0	+03 14	12.8			1.7	0.5	E7p		Vir
5879	08.4	+57 12	12.2		F8	4.5	1.1	Sb	30.1	Dra
5878	11.0	-14 05	12.4			2.9	0.9	S	31.6	Lib
....	11.0	-15 18	12.8			2.4	1.9	S		Lib
5885	12.4	-09 53	12.4			2.4	2.4	S		Lib
5899	13.2	+42 14	12.5		F5	2.3	0.6	Sb	32.2	Boo
5905	14.1	+55 42	13.1			4.4	3.2	SBb	33.2	Dra
5907	14.6	+56 31	11.0	11.3	G3	11.1	0.7	Sb	29.3	Dra
5898	15.2	-23 55	12.6		G2	0.8	0.7	E1p	31.7	Lib
5908	15.4	+55 36	13.0			2.4	0.4	Sb		Dra
5903	15.6	-23 51	12.7		G3	0.8	0.7	E1	32.0	Lib
5915	18.8	-12 55	12.5			1.1	0.8	Sb		Lib
5921	19.5	+05 15	11.7	12.2	G0	3.6	3.0	SBb	30.8	Ser
5949	27.2	+64 55	12.9			2.0	0.8	S	28.8	Dra
5936	27.6	+13 09	12.9			1.0	0.9	Sc	32.6	Ser
5962	34.2	+16 46	11.9		G0	2.4	1.8	Sc	31.6	Ser
5970	36.1	+12 20	12.4		F8	2.3	1.6	Sc	31.7	Ser
5982	37.6	+59 32	12.3	10.9	G7	1.2	0.8	E3p	32.5	Dra
5985	38.6	+59 30	11.9	11.4	G0	4.9	2.2	Sb	32.1	Dra
5984	40.6	+14 22	13.0			2.6	0.5	Sb	31.3	Ser
5967	41.9	-75 31	12.9			2.5	1.5	S		Aps
6015	50.7	+62 28	11.7		F8	5.6	1.7	Sc	29.8	Dra
6026	58.1	-34 25	12.5			1.0	0.8	E		Lup
6052	16 03.1	+20 41	13.0			0.8	0.6	?		Her
6070	07.4	+00 50	12.3			3.2	1.8	Sc	31.7	Ser

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
6106	16 ^h 16 ^m 3	+07°31'	12.9			2'1	1'0	Sb	31.1	Her
6118	19.3	-02 11	12.3			4.3	1.3	Sb	31.2	Ser
6181	30.1	+19 56	12.3	11.9	G2	2.0	0.9	Sc	31.8	Her
6217	34.8	+78 18	11.8	11.5	F8	1.8	1.2	Sc	31.0	UMi
6207	41.3	+36 56	12.3	11.3	F8	2.0	1.1	Sc	30.2	Her
6215	46.8	-58 55	11.2			1.7	1.3	S		Ara
6239	48.4	+42 50	12.9			2.1	0.8	Sb		Her
6221	48.5	-59 08	11.4			2.7	2.0	S		Ara
6340	17 11.1	+72 22	12.0		G3	2.0	1.8	Sap	31.9	Dra
6300	12.3	-62 46	11.4			3.0	3.0	S		Ara
6384	29.9	+07 06	12.2		G5	5.0	4.0	Sb	31.4	Oph
6412	30.8	+75 45	12.2			1.9	1.5	Sc	31.2	Dra
I 4662	42.1	-64 39	11.7			1.3	0.9	I		Pav
6482	49.8	+23 05	12.2			0.9	0.6	E3p	33.1	Her
6503	49.9	+70 10	10.8	9.6		4.5	1.0	Sb	27.3	Dra
6574	18 09.5	+14 58	12.8		F8	0.9	0.7	S	32.1	Her
6643	21.2	+74 33	11.6	11.3	G0	3.0	1.3	Sc	31.3	Dra
I 4710	23.5	-67 01	12.8			4.0	2.5	S		Pav
I 4721	30.1	-58 32	12.9			3.5	1.3	S		Pav
6684	44.1	-65 14	11.7			2.0	1.5	S		Pav
6699	47.8	-57 23	12.4			1.2	1.2	S		Pav
I 4797	52.3	-54 22	12.2			1.3	0.6	E		Tel
....	52.9	-54 36	12.4			0.7	0.5	E		Tel
6744	19 05.0	-63 56	10.6			9.0	9.0	S		Pav
6753	07.2	-57 08	11.7			2.5	2.0	S		Pav
6758	09.8	-56 24	12.7			1.0	0.8	E		Tel
I 4837	11.3	-54 46	12.9			1.4	1.0	S		Tel
6769	13.9	-60 35	12.7			2.0	1.2	E		Pav
6776	17.3	-63 59	12.8			0.7	0.7	E		Pav
6782	19.5	-60 02	12.8			1.5	0.8	E		Pav
6808	38.5	-70 46	13.0							Pav
6810	39.4	-58 47	12.4			2.5	0.8	E		Pav
6814	39.9	-10 25	12.2		F0	2.0	2.0	Sb	31.0	Aql
I 4889	41.3	-54 29	12.5			1.6	0.8	E		Tel
6822	42.1	-14 53	9.2		Em	16.2	11.2	I	24.6	Sgr
6835	51.8	-12 42	13.0			2.0	0.3	E8		Sgr
6851	59.9	-48 25	12.8			1.0	0.7	E		Tel
6861	20 03.7	-48 31	12.3			1.3	0.7	E		Tel
6868	06.3	-48 31	12.1			1.4	1.0	E		Tel
6875	09.6	-46 19	12.6			1.0	0.5	E		Tel
6876	13.1	-71 01	12.7			1.5	0.8	E		Pav
6887	13.4	-52 56	12.8			3.3	1.3	S		Tel
6890	14.8	-44 58	12.7			1.2	1.0	E		Sgr
6893	17.2	-48 25	12.5			1.5	1.0	S		Tel
....	20.6	-44 10	12.3							Sgr
6902	21.2	-43 50	12.4							Sgr
6907	22.1	-24 58	12.1			2.5	2.2	SBb	31.6	Cap
6909	24.1	-47 12	12.8			0.8	0.6	E		Sgr
6923	28.6	-31 01	12.9			2.0	1.0	S		Mic
6925	31.2	-32 09	12.1			3.0	1.0	S		Mic

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
6946	20 ^h 33 ^m 9	+59°58'	9.7		F5	9'0	7'5	Sc	27.6	Cyg
6935	34.7	-52 17	12.9							Ind
6951	36.5	+65 56	11.8			3.3	2.3	Sbp	31.1	Cep
6942	37.0	-54 30	12.9							Ind
6943	39.8	-68 55	12.5			3.5	1.8	S		Pav
6958	45.4	-30 11	12.5			0.6	0.6	E		Mic
I 5052	47.5	-69 25	12.3			6.0	0.8	S		Pav
I 5063	48.2	-57 16	13.0							Ind
6970	48.6	-48 59	12.7			0.6	0.6	S		Ind
7007	21 01.9	-52 45	12.9			1.0	0.6	E		Ind
7029	08.4	-49 30	12.3			1.0	0.9	E		Ind
7038	11.7	-47 26	12.5			2.5	1.8	S		Ind
7041	13.0	-48 35	12.2			0.8	0.4	E		Ind
7049	15.6	-48 47	11.8			0.8	0.5	E		Ind
....	20.0	-46 00	12.9			4.0	1.0	S		Ind
I 5105	21.2	-40 50	13.0							Mic
7064	25.5	-53 00	12.7			3.5	0.5	S		Ind
7070	27.3	-43 19	12.6			2.0	1.8	S		Gru
7079	29.3	-44 18	12.3			0.5	0.5			Gru
7083	31.8	-64 07	12.6			4.0	2.8			Ind
7090	32.9	-54 47	11.8			6.0	1.0	S		Ind
7097	37.1	-42 46	12.6			0.6	0.5			Gru
7124	44.8	-50 48	12.9			2.5	1.5	S		Ind
7137	45.9	+21 56	13.1			0.9	0.9	S	31.2	Peg
7135	46.8	-35 07	13.0							PsA
7144	49.5	-48 29	12.2			0.5	0.5			Gru
7145	50.1	-48 07	12.7			0.5	0.5			Gru
7155	52.9	-49 46	12.8							Ind
7166	57.6	-43 39	12.6			1.5	0.5	E		Gru
7177	58.3	+17 29	12.0		G0	2.1	1.1	Sb	30.7	Peg
7171	58.3	-13 31	13.1		G0	2.1	0.9	Sb	32.2	Aqr
7168	58.9	-52 00	12.7			0.5	0.4	E		Ind
I 5152	59.6	-51 32	12.3			4.0	2.0	S		Ind
7184	59.9	-21 04	12.0			5.1	0.9	Sb	30.3	Aqr
7196	22 02.6	-50 22	12.3			0.8	0.6	E		Ind
7192	03.2	-64 33	12.9			1.0	1.0	E		Ind
7205	05.1	-57 40	11.7			4.0	2.0	S		Ind
7217	05.6	+31 07	11.0		G7	2.6	2.3	Sb	30.4	Peg
7213	06.2	-47 25	11.8			1.0	1.0	E		Gru
7218	07.5	-16 54	12.7			2.1	0.7	Sc	31.4	Aqr
I 5181	11.3	-46 09	12.6			2.0	0.5	E		Gru
7232	12.6	-46 05	13.0							Gru
I 5186	13.4	-37 05	12.5			2.0	0.8	S		Gru
7252	18.0	-24 56	13.1					Pec	33.4	Aqr
I 5201	18.3	-46 19	12.8			8.0	4.0	S		Gru
7300	28.3	-14 17	13.2			1.9	0.8	Sb	32.8	Aqr
7302	29.7	-14 23	13.1		G7	0.9	0.6	E3	32.2	Aqr
7309	31.6	-10 37	13.1			1.4	1.1	Sc	32.2	Aqr
7314	33.0	-26 18	11.6		F8	3.9	1.9	Sc	31.3	PsA
7331	34.8	+34 10	10.3	9.7	G8	10.0	2.3	Sb	30.3	Peg

NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
7332	22 ^h 35 ^m 0	+23°32'	11.8		G3	2'3	0'6	E7	30.8	Peg
7329	37.0	-66 44	13.0							Tuc
I 5240	39.0	-45 04	12.6			2.3	1.5	SB		Gru
7361	41.5	-30 19	12.8			3.0	1.0	S		Aqr
7371	43.4	-11 16	12.9			1.0	1.0	Sb	30.6	Aqr
7377	45.1	-22 35	12.7		G2	0.9	0.8	E1	32.7	Aqr
7392	49.2	-20 53	12.6			1.5	0.8	Sb	32.4	Aqr
7410	52.1	-39 56	11.8			4.0	1.0	S		Gru
7412	53.0	-42 55	12.2			3.0	2.0	S		Gru
7418	53.8	-37 17	11.8			2.5	2.5	S		Gru
7421	54.1	-37 37	12.8			1.5	1.5	S		Gru
I 5267	54.4	-43 43	11.8							Gru
I 1459	54.5	-36 41	11.3			1.0	0.7	E		Gru
7424	54.5	-41 20	12.0			6.0	6.0	S		Gru
I 5271	55.3	-34 01	12.6			2.0	0.8	S		PsA
I 5273	56.5	-38 02	12.0			1.8	1.4	S		Gru
7448	57.6	+15 43	11.9	11.2	G2	2.0	1.0	Sc	32.1	Peg
7457	58.6	+29 53	12.6	12.2	G2	1.9	1.0	Ep	29.5	Peg
7456	59.3	-39 51	12.5			6.0	1.0	S		Gru
7462	23 00.0	-41 06	12.7			3.0	1.0	S		Gru
7469	00.7	+08 36	12.7		F5	1.3	1.0	S	33.5	Peg
7479	02.4	+12 03	11.6	11.6	G3	3.4	2.6	SBb	32.1	Peg
7496	07.0	-43 42	12.2			2.0	1.0	S		Gru
7507	09.5	-28 49	12.0			1.0	1.0	E		Scl
7531	12.1	-43 53	12.5			1.5	0.5	S		Gru
7541	12.2	+04 15	12.6	12.1	F2	2.9	0.9	Sc	32.3	Psc
7552	13.5	-42 53	11.6			3.0	3.0	S		Gru
7585	15.4	-04 56	12.7		G0	2.0	1.5	S	32.7	Aqr
7582	15.8	-42 38	11.8			3.0	0.5	S		Gru
7590	16.3	-42 31	11.9			2.2	0.8	S		Gru
7600	16.3	-07 52	13.0		G3	1.1	0.4	E6	32.7	Aqr
7606	16.5	-08 46	11.6	11.5	G2	4.4	1.5	Sb	32.0	Aqr
7599	16.7	-42 32	12.0			4.0	1.0	S		Gru
7619	17.8	+07 55	12.4	11.2	G5	1.0	0.9	E1	33.0	Psc
7625	18.0	+16 57	13.2		G1	1.0	0.8	Ep	31.5	Peg
7626	18.2	+07 56	12.7	11.7	G3	1.0	0.8	E2p	32.8	Psc
7640	19.7	+40 35	11.3			11.0	1.4	SBb	29.2	And
I 5325	26.0	-41 36	12.5			2.0	1.8	S		Phe
7678	26.1	+22 09	12.5		F5	1.7	1.1	Sc	32.8	Peg
7679	26.2	+03 15	13.2		F5	1.4	0.8	S	33.6	Psc
7689	29.9	-54 22	12.3			3.0	2.0	S		Phe
7690	30.2	-51 58	13.0							Phe
I 5328	30.5	-45 19	12.7							Phe
I 5332	31.1	-36 22	11.9			4.0	4.0	S		Scl
7713	33.8	-38 13	11.8			4.0	1.5	S		Scl
7716	33.9	+00 01	12.9		G8	1.3	1.1	Sb	32.2	Psc
7721	36.2	-06 48	12.4			3.0	0.9	Sc	31.5	Aqr
7723	36.4	-13 14	11.8	11.1		2.2	1.6	Sb	31.6	Aqr
7727	37.3	-12 34	11.6	10.7	G8	2.7		S	31.5	Aqr
7741	41.4	+25 48	11.6		F2	3.0	2.0	SBc	29.9	Peg

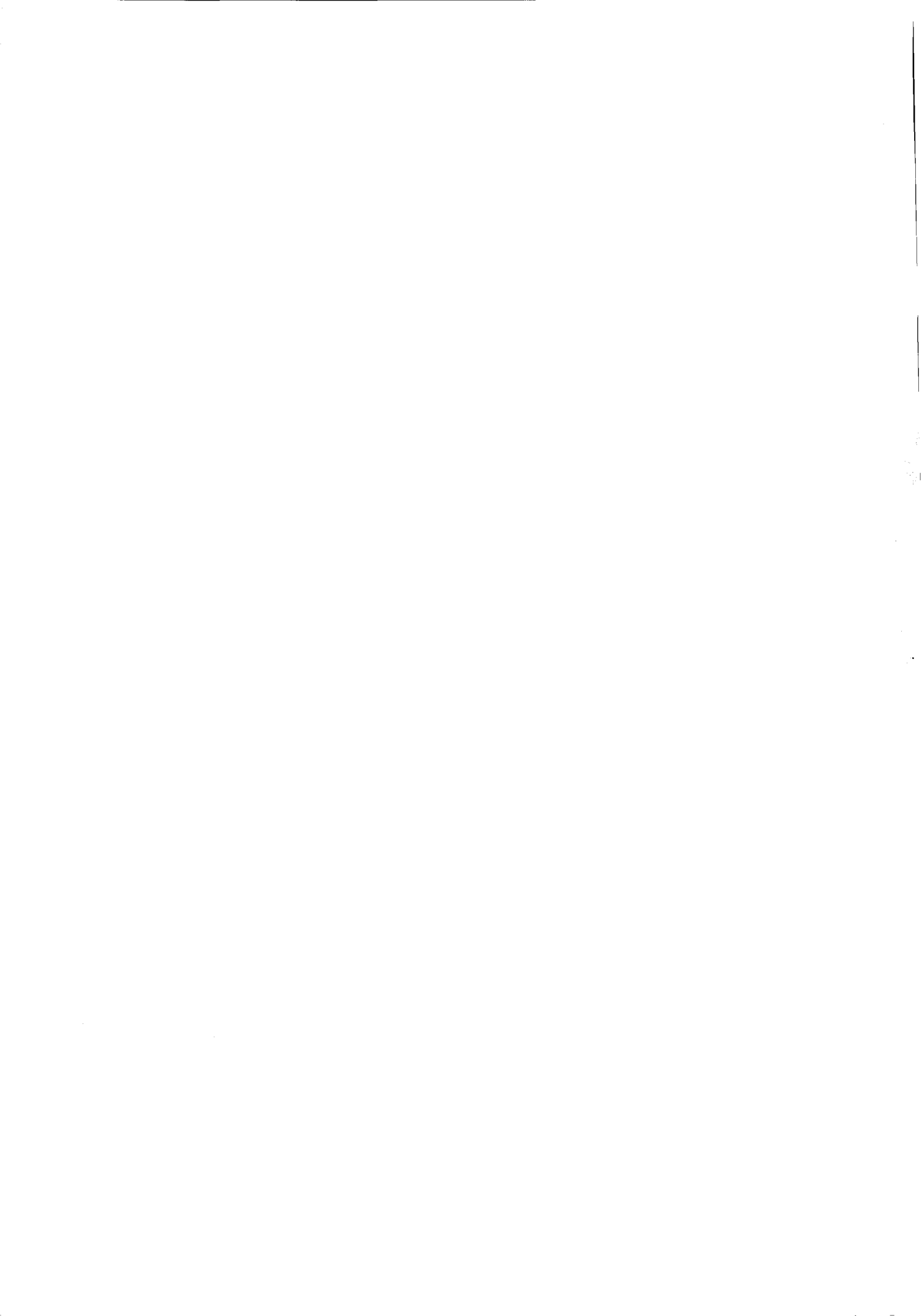
NGC	AR 1950	D 1950	m_p	m_v	Sp	App.	Diam.	T	$m-M_0$	Con
7742	23 ^h 41 ^m 8	+10°29'	12.2		G0	0'9	0'9	E0p	31.4	Peg
7743	41.8	+09 39	12.3		G0	1.6	1.4	Sa	31.5	Peg
7744	42.4	-43 12	12.8							Phe
7755	45.3	-30 48	12.5			4.0	3.0	S		Scl
7764	48.4	-41 01	12.8							Phe
7769	48.5	+19 52	12.5			1.3	1.2	Sc	33.3	Peg
7782	51.4	+07 42	13.1			2.1	0.9	Sb		Psc
7785	52.8	+05 38	13.0			1.1	0.6	E5	33.0	Psc
7793	55.3	-32 51	9.7			6.0	4.0	S		Scl
7796	56.5	--55 44	12.9			0.8	0.8	E		Phe



CATALOGUE OF MESSIER

M

Messier	Number in Messier's catalogue
NGC	Number in Dreyer's New General Catalogue or Index Catalogues
T	Cl Open cluster
	G1 Globular cluster
	P1 Planetary nebula
	N Diffuse nebula
	S Anagalactic nebula
Con	Constellation
AR 1950	Right ascension and declination for the epoch 1950.0
Decl 1950	
Magn	Apparent visual magnitude
N	Notes



Messier	NGC	T	Con	AR 1950	Decl 1950	Magn	N
1	1952	Pl	Tau	05 ^h 31 ^m 5	+21°59'	8.4	Crab neb.
2	7089	Gl	Aqr	21 30.9	−01 03	6.3	
3	5272	Gl	CVn	13 39.9	+28 38	6.4	
4	6121	Gl	Sco	16 20.6	−26 24	6.4	
5	5904	Gl	Ser	15 16.0	+02 16	6.2	
6	6405	Cl	Sco	17 36.8	−32 11	5.3	Lagoon neb.
7	6475	Cl	Sco	17 50.7	−34 48		
8	6523	N	Sgr	18 01.6	−24 20		
9	6333	Gl	Oph	17 16.2	−18 28	7.3	
10	6254	Gl	Oph	16 54.5	−04 02	6.7	
11	6705	Cl N	Sct	18 48.4	−06 20	6.3	
12	6218	Gl	Oph	16 44.6	−01 52	6.6	
13	6205	Gl	Her	16 39.9	+36 33	5.7	
14	6402	Gl	Oph	17 35.0	−03 13	7.7	
15	7078	Gl	Peg	21 27.6	+11 57	6.0	
16	6611	Cl	Ser	18 16.0	−13 48	6.4	Omega neb.
17	6618	N	Sgr	18 18.0	−16 12		
18	6613	Cl	Sgr	18 17.0	−17 09	7.5	
19	6273	Gl	Oph	16 59.5	−26 11	6.6	Trifid neb.
20	6514	N	Sgr	17 58.9	−23 02		
21	6531	Cl	Sgr	18 01.8	−22 30	6.5	
22	6656	Gl	Sgr	18 33.3	−23 58	5.9	
23	6494	Cl	Sgr	17 54.0	−19 01	6.9	
24	6603	Cl	Sgr	18 15.5	−18 27	4.6	
25	I. 4725	Cl	Sgr	18 28.8	−19 17		
26	6694	Cl	Sct	18 42.5	−09 27	9.3	Dumbbell neb.
27	6853	Pl	Vul	19 57.4	+22 35	7.6	
28	6626	Gl	Sgr	18 21.5	−24 54	7.3	
29	6913	Cl	Cyg	20 22.2	+38 21	7.1	
30	7099	Gl	Cap	21 37.5	−23 25	8.4	
31	224	S	And	00 40.0	+41 00	4.8	
32	221	S	And	00 40.0	+40 36	8.7	
33	598	S	Tri	01 31.1	+30 24	6.7	
34	1039	Cl	Per	02 38.8	+42 34	5.5	
35	2168	Cl	Gem	06 05.7	+24 20	5.3	
36	1960	Cl	Aur	05 32.0	+34 07	6.3	
37	2099	Cl	Aur	05 49.0	+32 33	6.2	
38	1912	Cl	Aur	05 25.3	+35 48	7.4	
39	7092	Cl	Cyg	21 30.4	+48 13	5.2	
40	..	2 stars	UMa	12 33.0	+58 30		
41	2287	Cl	CMa	06 44.9	−20 42	4.6	Praesepe Pleiades
42	1976	N	Ori	05 32.9	−05 25		
43	1982	N	Ori	05 33.1	−05 18		
44	2632	Cl	Cnc	08 37.5	+19 52	3.7	
45	..	Cl	Tau	03 43.9	+23 58	1.6	
46	2437	Cl	Pup	07 39.6	−14 42	6.0	?
47	2422	Cl	Pup	07 34.3	−14 22	4.5	
48	2548	Cl	Hya	08 11.2	−05 38	5.3	
49	4472	S	Vir	12 27.3	+08 16	8.6	
50	2323	Cl	Mon	07 00.5	−08 16	6.3	

M 2

Messier	NGC	T	Con	AR 1950	Decl 1950	Magn	N
51	5194	S	CVn	13 ^h 27 ^m 8	+47°27'	8.1	
52	7654	Cl	Cas	23 22.0	+61 20	7.3	
53	5024	Gl	Com	13 10.5	+18 26	7.6	
54	6715	Gl	Sgr	18 52.0	-30 32		
55	6809	Gl	Sgr	19 36.9	-31 03		
56	6779	Gl	Lyr	19 14.6	+30 05	8.2	
57	6720	Pl	Lyr	18 51.7	+32 58	9.3	Ring neb.
58	4579	S	Vir	12 35.1	+12 05	9.2	
59	4621	S	Vir	12 39.5	+11 55	9.6	
60	4649	S	Vir	12 41.1	+11 49	8.9	
61	4303	S	Vir	12 19.4	+04 45	10.1	
62	6266	Gl	Oph	16 58.1	-30 03	6.6	
63	5055	S	CVn	13 13.5	+42 17	9.5	
64	4826	S	Com	12 54.3	+21 47	8.8	
65	3623	S	Leo	11 16.3	+13 23	9.3	
66	3627	S	Leo	11 17.6	+13 17	8.4	
67	2682	Cl	Cnc	08 48.3	+12 00	6.1	
68	4590	Gl	Hya	12 36.8	-26 29		
69	6637	Gl	Sgr	18 28.1	-32 23	8.9	
70	6681	Gl	Sgr	18 40.0	-32 21	9.6	
71	6838	Gl	Sge	19 51.5	+18 39		
72	6981	Gl	Aqr	20 50.7	-12 44	9.8	
73	6994	Cl	Aqr	20 56.4	-12 50		
74	628	S	Psc	01 34.0	+15 32	10.2	
75	6864	Gl	Sgr	20 03.2	-22 04	8.0	
76	650	Pl	Per	01 38.8	+51 19	12.2	
77	1068	S	Cet	02 40.1	-00 14	8.9	
78	2068	N	Ori	05 44.2	+00 02		
79	1904	Gl	Lep	05 22.2	-24 34	7.9	
80	6093	Gl	Sco	16 14.1	-22 52	7.7	
81	3031	S	UMa	09 51.5	+69 18	7.9	
82	3034	S	UMa	09 51.9	+69 56	8.8	
83	5236	S	Hya	13 34.3	-29 37	10.1	
84	4374	S	Vir	12 22.6	+13 10	9.3	
85	4382	S	Com	12 22.8	+18 28	9.3	
86	4406	S	Vir	12 23.7	+13 13	9.7	
87	4486	S	Vir	12 28.3	+12 40	9.2	
88	4501	S	Com	12 29.5	+14 42	10.2	
89	4552	S	Vir	12 33.1	+12 50	9.5	
90	4569	S	Vir	12 34.3	+13 26	10.0	
91	4571	S					= M 58 ?
92	6341	Gl	Her	17 15.6	+43 12	6.1	
93	2447	Cl	Pup	07 42.4	-23 45	6.0	
94	4736	S	CVn	12 48.6	+41 23	7.9	
95	3351	S	Leo	10 41.3	+11 58	10.4	
96	3368	S	Leo	10 44.2	+12 05	9.1	
97	3587	Pl	UMa	11 12.0	+55 18	12.0	Owl neb.
98	4192	S	Com	12 11.3	+15 11	10.7	
99	4254	S	Com	12 16.3	+14 42	10.1	
100	4321	S	Com	12 20.4	+16 06	10.6	

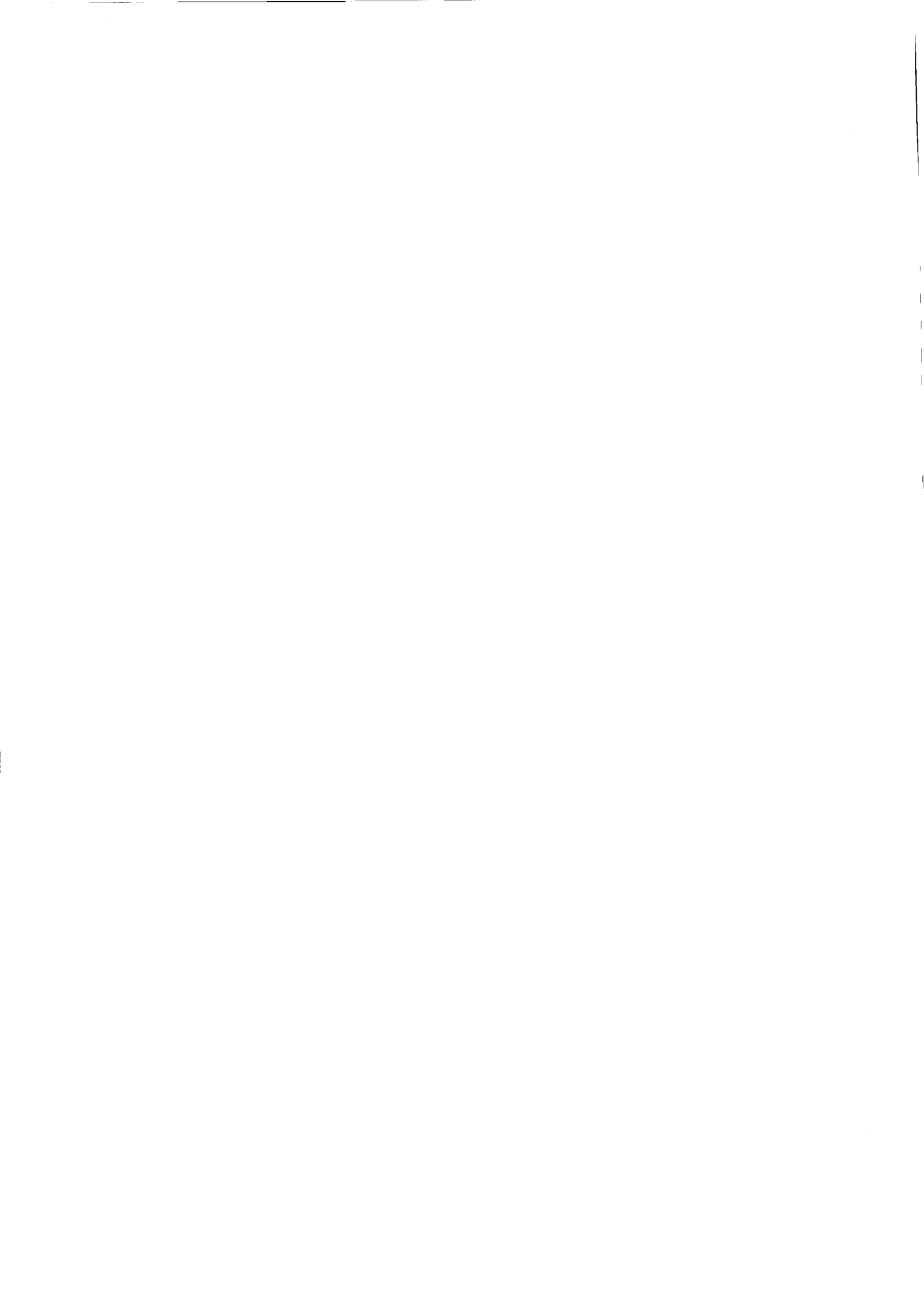
Messier	NGC	T	Con	AR 1950	Decl 1950	Magn	N
101	5457	S	UMa	14 ^h 01 ^m 4	+54°35'	9.6	=M 101 Sombrero
102	5866	S					
103	581	Cl	Cas	01 29.9	+60 27	7.4	
104	4594	S	Vir	12 37.3	-11 21	8.7	
105	3379	S	Leo	10 45.2	+12 51	9.2	
106	4258	S	CVn	12 16.5	+47 35	8.6	
107	6171	Gl	Oph	16 29.7	-12 57	9.2	
108	3556	S	UMa	11 08.7	+55 57	10.7	
109	3992	S	UMa	11 55.0	+53 39	10.8	

COSMIC SOURCES OF RADIO WAVES

R

I. A. U. Num Designation according to the International Astronomical Union
AR 1950 Right ascension and declination for the epoch 1950.0
Decl 1950
Flux Flux-density in Watts m^{-2} $(c/s)^{-1}$. 10^{-24}
Freq Frequency in megacycles/sec
Con Constellation
NGC, IC Number in Dreyer's New General Catalogue or Index Catalogue
Identif. Object probably connected with the source

I. A. U. Num.	AR 1950.0	Decl 1950.0	Flux \bar{W} m ⁻² c/s ⁻¹ · 10 ⁻³⁴	Freq. Mc/s	Con	NGC IC	Identif.
00N6A	00 ^h 22 ^m	+64°15'	1.7	158	Cas		Supernova 1572
00N4A	00 42	+38	1.6	158	And	224	M 31 gal
02S0A	02 35	-04	0.7	100	Cet		
02S1A	02 00	-11	0.85	100	Cet		
03N4A	03 12	+43 45	2.4	101	Per	1275	gal
03S3A	03 19	-37 18	35	18.3	For		
04N3A	04 30	+31	3.3	81.5	Per		
04N4A	04 57	+46 30	0.8	158	Aur		neb
05S4A	05 30	-46	35	18.3	Pic		
05N2A	05 31	+22 00	18.5	100	Tau	1952	M 1 Crab neb
05S0A	05 33	-05 27	4.5	3200	Ori	1976	M 42 neb
06N2A	06 14	+22 38	6.5	38	Gem	I. 443	neb
08N4A	08 08	+48 15	1.0	81.5	Lyn		
08S0A	08 10	-04	0.6	100	Mon		
08S4A	08 20	-42 30	70	18.3	Pup		neb
09N4A	09 16	+47	0.7	100	Lyn		
09S1A	09 16	-11 55	40	18.3	Hya		
09N6A	09 51	+69	0.12	158	UMa	3031	M 81 gal
10N5B	10 33	+56	0.33	81.5	UMa		
10S4A	10 10	-42 30	1.0	101	Vel		
11S1A	11 45	-14	0.5	100	Crt		
12N4A	12 15	+47	0.5	158	CVn	4258	M 106 gal
12N1A	12 28	+12 44	110	18.3	Vir	4486	M 87 gal
12N4B	12 55	+49	1.2	101	CVn		
13S4A	13 22	-42 46	32.0	60	Cen	5128	gal
13N4A	13 26	+48	0.055	158	CVn	5195	M 51 gal
13S6A	13 35	-60 15	7.5	101	Cen		
14N5A	14 10	+51 30	2.0	101	Boo	5457	gal
15N1A	15 10	+11	1.0	101	Ser		
16N4A	16 40	+41	0.8	100	Her		
16S6A	16 10	-60 45	8.5	101	TrA		
16N0A	16 49	+06	4.0	100	Her		
17S2A	17 42	-29 01	26	1200	Sgr		
18S0A	18 10	-06	2.5	101	Oph		
18S1A	18 18	-16 14	6.8	3200	Sgr	6618	M 17 Omega neb
19N4A	19 58	+40 35	220	60	Cyg		gal
20N4A	20 27	+40 30	87	1210	Cyg		neb
23N5A	23 21	+58 32	220	81.5	Cas		neb Supernova \approx 1700



TABLES

I.	Constellations
II.	Names of stars
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IV.	Parallax and distance in light-years
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VI.	Transformation of light-years into parsecs
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XII.	Change of declination in 50 years



Con		AR 1950	D 1950	Tab.
Andromeda	And Andr	22 ^h 56 ^m 02 ^s 36 ^m	+21 ^o 4 +52 ^o 9	II V VI I XI
Antlia	Ant Antl	09 25—11 03	—24.3 —40.1	XIII VIII
Apus	Aps Apus	13 45—18 17	—67.5 —82.9	XVI XIV
Aquarius	Aqr Aqar	20 36—23 54	+03.1 —25.2	XI XV VI
Aquila	Aql Aqil	18 38—20 36	—11.9 +18.6	X XI V
Ara	Ara Arae	16 31—18 06	—45.5 —67.6	XIV XV XVI
Aries	Ari Arie	01 44—03 27	+10.2 +30.9	VI II
Auriga	Aur Auri	04 35—07 27	+27.9 +56.1	II III
Bootes	Boo Boot	13 33—15 47	+07.6 +55.2	IV IX I
Caelum	Cae Cael	04 18—05 03	—27.1 —48.8	XII
Camelopardalis	Cam Caml	03 11—14 25	+52.8 +85.1	I II III
Cancer	Cnc Canc	07 53—09 19	+06.8 +33.3	VIII III VII
Canes Venatici	CVn CVen	12 04—14 05	+28.0 +52.7	IV III I
Canis Maior	CMa CMaj	06 09—07 26	—11.0 —33.2	VII VIII
Canis Minor	CMi CMin	07 04—08 09	—00.1 +13.2	VII VIII
Capricornus	Cap Capr	20 04—21 57	—08.7 —27.8	XI XV X
Carina	Car Cari	06 02—11 18	—50.9 —75.2	XIII XVI XII XIV
Cassiopeia	Cas Cass	22 56—03 36	+46.4 +77.5	I II V
Centaurus	Cen Cent	11 03—14 59	—29.9 —64.5	XIV XIII XVI
Cepheus	Cep Ceph	20 01—08 30	+53.1 +88.5	I V II
Cetus	Cet Ceti	23 55—03 21	—25.2 +10.2	VI XII XI XV
Chamaeleon	Cha Cham	07 32—13 48	—75.2 —82.8	XVI
Circinus	Cir Circ	13 35—15 26	—54.3 —70.4	XVI XIV
Columba	Col Colm	05 03—06 28	—27.2 —43.0	XII XIII
Coma Berenices	Com Coma	11 57—13 33	+13.8 +33.7	IV IX VIII III
Corona Australis	CrA CorA	17 55—19 15	—37.0 —45.6	XV XIV
Corona Borealis	CrB CorB	15 14—16 22	+25.8 +39.8	IV
Corvus	Crv Corv	11 54—12 54	—11.3 —24.9	IX XIV VIII XIII
Crater	Crt Crat	10 48—11 54	—06.5 —24.9	VIII XIII IX
Crux	Cru Crux	11 53—12 55	—55.5 —64.5	XIV XVI XIII
Cygnus	Cyg Cygn	19 07—22 01	+27.7 +61.2	V I IV
Delphinus	Del Dlph	20 13—21 06	+02.2 +20.8	XI X V
Dorado	Dor Dora	03 52—06 36	—48.8 —70.1	XVI XII XIII
Draco	Dra Drac	09 18—21 00	+47.7 +86.0	I IV V III
Equuleus	Equ Equl	20 54—21 23	+02.2 +12.9	XI
Eridanus	Eri Erid	01 22—05 09	+00.1 —58.1	VI VII XII XVI XV
Fornax	For Forn	01 44—03 48	—24.0 —39.8	XII VI VII
Gemini	Gem Gemi	05 57—08 06	+10.0 +35.4	III VII VIII
Grus	Gru Grus	21 25—23 25	—36.6 —56.6	XV XVI XII
Hercules	Her Herc	15 47—18 56	+03.9 +51.3	IV X V IX
Horologium	Hor Horo	02 12—04 18	—39.8 —67.2	XII XVI
Hydra	Hya Hyda	08 08—14 58	+06.8 —35.3	VIII XIII XIV IX VII
Hydrus	Hys Hydi	00 02—04 33	—58.1 —82.1	XVI XII XV
Indus	Ind Indi	20 25—23 25	—45.4 —74.7	XV XVI
Lacerta	Lac Lacr	21 55—22 56	+34.9 +56.8	V I II
Leo	Leo Leon	09 18—11 56	—06.4 +33.3	VIII III IX IV
Leo Minor	LMi LMin	09 19—11 04	+23.1 +41.7	III VIII
Lepus	Lep Leps	04 54—06 09	—11.0 —27.1	VII XII XIII
Libra	Lib Libr	14 18—15 59	—00.3 —29.9	IX XIV X
Lupus	Lup Lupi	14 13—16 05	—29.8 —55.3	XIV XVI

Con 2

Con		AR 1950	D 1950	Tab.
Lynx	Lyn Lync	06 ^h 13 ^m 09 ^s 40 ^m	+33°4 +62°0	III II I
Lyra	Lyr Lyra	18 12—19 26	+25.6 +47.7	V IV
Mensa	Men Mens	03 20—07 37	—69.9 —85.0	XVI
Microscopium	Mic Micr	20 25—21 25	—27.7 —45.4	XV
Monoceros	Mon Mono	05 54—08 08	—11.0 +11.9	VII VIII
Musca	Mus Musc	11 17—13 46	—64.5 —75.2	XVI XIV XIII
Norma	Nor Norm	15 25—16 31	—42.2 —60.2	XIV XV XVI
Octans	Oct Octn	00 00—24 00	—74.7 —90.0	XVI
Ophiuchus	Oph Ophi	15 58—18 42	+14.3 —30.1	X XIV IX
Orion	Ori Orio	04 41—06 23	—11.0 +23.0	VII III II
Pavo	Pav Pavo	17 37—21 30	—56.8 —75.0	XVI XV XIV
Pegasus	Peg Pegs	21 06—00 13	+02.2 +36.3	XI V VI II
Perseus	Per Pers	01 26—04 46	+30.9 +58.9	II I III
Phoenix	Phe Phoe	23 24—02 24	—39.8 —58.2	XII XVI XV
Pictor	Pic Pict	04 32—06 51	—43.1 —64.1	XII XIII
Pisces	Psc Pisc	22 49—02 04	—06.6 +33.4	VI XI II
Piscis Austrinus	PsA PscA	21 25—23 04	—25.2 —36.7	XV
Puppis	Pup Pupp	06 02—08 26	—11.0 —50.8	XIII VII XII VIII
Pyxis	Pyx Pyxi	08 26—09 26	—17.3 —37.0	XIII VIII
Reticulum	Ret Reti	03 14—04 35	—53.0 —67.3	XII XVI XIII
Sagitta	Sge Sgte	18 56—20 18	+16.0 +21.4	X XI V
Sagittarius	Sgr Sgr	17 41—20 25	—11.8 —45.4	XV X XIV XI
Scorpius	Sco Scor	15 44—17 55	—08.1 —45.6	XIV X IX XV
Sculptor	Scl Scul	23 04—01 44	—25.2 —39.8	XII XV
Scutum	Sct Scut	18 18—18 56	—04.0 —16.0	X XV
Serpens Caput	Ser Serp	15 08—16 20	—03.4 +25.7	IX X IV
Serpens Cauda	Ser Serp	17 14—18 56	+06.3 —16.0	X XIV XV
Sextans	Sex Sext	09 39—10 49	+06.6 —11.3	VIII
Taurus	Tau Taur	03 20—05 58	+00.1 +30.9	VII II VI III
Telescopium	Tel Tele	18 06—20 26	—45.4 —56.9	XV XIV
Triangulum	Tri Tria	01 29—02 48	+25.4 +37.0	II
Triangulum Australe	TrA TrAu	14 50—17 09	—60.3 —70.3	XVI XIV XV
Tucana	Tuc Tucn	22 05—01 22	—56.7 —75.7	XVI XV XII
Ursa Maior	UMa UMaj	08 05—14 27	+28.8 +73.3	III IV I
Ursa Minor	UMi UMin	00 00—24 00	+65.6 +90.0	I IV
Vela	Vel Velr	08 02—11 24	—37.0 —57.0	XIII XVI XIV
Virgo	Vir Virg	11 35—15 08	+14.6 —22.2	IX VIII XIV
Volans	Vol Voln	06 35—09 02	—64.2 —75.0	XVI XIII
Vulpecula	Vul Vulp	18 56—21 28	+19.5 +29.4	V X XI

TAB. II.

NAMES OF STARS

Nom 1

*	Con	GC	AR 1950 D 1950	Tab.
Acamar	ϑ Eri	3584	02 ^h 56 ^m —40°30'	XII
Achernar	α Eri	1979	01 36 —57 29	XII XVI
Achird	η Cas	962	00 46 +57 33	I II V
Acrab	β Sco	21609	16 03 —19 40	IX XIV
Acubens	α Cnc	12406	08 56 +12 03	VIII
Adara	ϵ CMa	9188	06 57 —28 54	XIII
Adhafera	ζ Leo	14107	10 14 +23 40	III VIII
Ain	ϵ Tau	5430	04 26 +19 04	II VII
Alamak	γ And	2477	02 01 +42 05	II
Alaraph	β Vir	16215	11 48 +02 03	VIII IX
Albali	ϵ Aqr	28978	20 45 —09 41	XI
Albireo	β Cyg	26953	19 29 +27 51	V
Alchita	α Crv	16586	12 06 —24 27	VIII IX XIV
Alcor	80 UMa	18155	13 23 +55 15	I III IV
Alcyone	η Tau	4541	03 45 +23 57	II VI VII
Aldebaran	α Tau	5605	04 33 +16 25	VII
Alderamin	α Cep	29848	21 17 +62 22	I V
Aldib	δ Dra	26520	19 13 +67 34	V
Alfard	α Hya	13044	09 25 —08 26	VIII
Algenib	γ Peg	238	00 11 +14 54	VI XI
Algenib	α Per	4041	03 21 +49 41	II
Algieba	γ Leo	14177	10 17 +20 06	III VIII
Algol	β Per	3733	03 05 +40 46	II
Algorab	δ Crv	17029	12 27 —16 14	IX XIV
Alhajoth	α Aur	6427	05 13 +45 57	II III
Alhena	γ Gem	8633	06 35 +16 27	III VII
Alioth	ϵ UMa	17518	12 52 +56 14	I III IV
Alkaid	η UMa	18643	13 46 +49 34	IV
Alkalurops	μ Boo	20724	15 23 +37 33	IV
Alkes	α Crt	15106	10 57 —18 02	VIII XIII
Alnair	α Gru	30942	22 05 —47 12	XV
Alnilam	ϵ Ori	6960	05 34 —01 14	VII
Alnitak	ζ Ori	7089	05 38 —01 58	VII
Alphecca	α CrB	20947	15 33 +26 53	IV
Alpheratz	α And	127	00 06 +28 49	II V
Alphirk	β Cep	30118	21 28 +70 20	I
Alrai	γ Cep	32875	23 37 +77 21	I
Alrami	α Sgr	26737	19 20 —40 43	XV
Alrisha	α Psc	2452	01 59 +02 31	VI
Alruccaba	α UMi	2243	01 49 +89 02	I
Alshain	β Aql	27587	19 53 +06 17	X XI
Alsuhail	λ Vel	12623	09 06 —43 14	XIII
Altair	α Aql	27470	19 48 +08 44	X XI
Aludra	η CMa	9886	07 22 —29 12	XIII
Alula Australe	ξ UMa	15537	11 16 +31 49	III
Alula Boreale	ν UMa	15547	11 16 +33 22	III
Alwaid	β Dra	23741	17 29 +52 20	IV V
Alya	ϑ Ser	25991	18 54 +04 08	X
Ancha	ϑ Aqr	31152	22 14 —08 02	XI
Antares	α Sco	22157	16 26 —26 19	XIV

Nom 2

*	Con	GC	AR 1950 D 1950	Tab.
Arcturus	α Boo	19242	14 ^h 13 ^m +19°27'	IV IX
Arich	γ Vir	17270	12 39 —01 11	IX
Arided	α Cyg	28846	20 40 +45 06	V
Arkab Prior	β^1 Sgr	26703	19 19 —44 33	XV
Arkab Posterior	β^2 Sgr	26718	19 20 —44 54	XV
Arneb	α Lep	6875	05 31 —17 51	VII XII
Arrakis	μ Dra	23092	17 04 +54 32	V IV
Ascella	ζ Sgr	26161	18 59 —29 57	XV
Asellus Australis	δ Cnc	12022	08 42 +18 20	VIII
Asellus Borealis	γ Cnc	11982	08 40 +21 39	III VIII
Asterion	β CVn	17127	12 31 +41 38	III IV
Asterope	21 Tau	4502	03 43 +24 24	II VI VII
Atiks	σ Per	4461	03 41 +32 08	II
Atlas	27 Tau	4586	03 46 +23 54	II VI VII
Auva	δ Vir	17543	12 53 +03 40	IX
Azelfafage	π^1 Cyg	30391	21 40 +50 58	I V
Azha	η Eri	3539	02 54 —09 06	VI
Azimech	α Vir	18144	13 23 —10 54	IX
Azmidiske	ξ Pup	10562	07 47 —24 44	VII VIII XIII
Baten Kaitos	ζ Cet	2249	01 49 —10 35	VI
Beid	σ^1 Eri	5056	04 09 —06 58	VI VII
Bellatrix	γ Ori	6668	05 22 +06 18	VII
Benetnash	η UMa	18643	13 46 +49 34	IV
Betelgeuse	α Ori	7451	05 52 +07 24	VII
Botein	δ Ari	3805	03 09 +19 32	VI
Canicula	α CMa	8833	06 43 —16 39	VII XIII
Canopus	α Car	8302	06 21 —52 40	XII XIII
Capella	α Aur	6427	05 13 +45 57	II III
Caph	β Cas	147	00 06 +58 52	I II V
Castor	α Gem	10120	07 31 +32 00	III
Ceginus	φ Boo	21032	15 36 +40 31	IV
Celaeno	16 Tau	4475	03 42 +24 08	II VI VII
Chara	α CVn	17557	12 54 +38 35	IV
Cor Caroli	α CVn	17557	12 54 +38 35	IV
Cor Hydrae	α Hya	13044	09 25 —08 26	VIII
Cor Serpentis	α Ser	21158	15 42 +06 35	IX X
Coxa	θ Leo	15441	11 12 +15 42	VIII
Cursa	β Eri	6274	05 05 —05 09	VII
Cynosura	α UMi	2243	01 49 +89 02	I
Dabih	β Cap	28295	20 18 —14 56	X XI
Deneb Cygni	α Cyg	28846	20 40 +45 06	V
Deneb Algiedi	δ Cap	30491	21 44 —16 21	XI
Deneb Kaitos	β Cet	865	00 41 —18 16	VI XII
Deneb Okab	δ Aql	26816	19 23 +03 01	X
Denebola	β Leo	16189	11 47 +14 51	VIII IX
Diadem	α Com	17833	13 08 +17 48	IV IX
Diphda	β Cet	865	00 41 —18 16	VI XII
Dschubba	δ Sco	21489	15 57 —22 29	IX X XIV
Dubhe	α UMa	15185	11 01 +62 01	I III IV
Dziban	φ Dra	24089	17 43 +72 10	I

*	Con	GC	AR 1950 D 1950	Tab.
Elacrab	β Sco	21609	16 ^b 03 ^m —19°40'	IX X XIV
Electra	17 Tau	4477	03 42 +23 57	VII VI II
Elgomaisa	α CMi	10277	07 37 +05 21	VII
Enif	ϵ Peg	30431	21 42 +09 39	XI
Etamin	γ Dra	24432	17 55 +51 30	V IV
Erakis	μ Cep	30440	21 42 +58 33	I
Fomalhaut	α PsA	32000	22 55 —29 53	XV
Furud	ζ CMa	8170	06 18 —30 02	XIII
Gemma	α CrB	20947	15 33 +26 53	IV
Gianfar	λ Dra	15799	11 28 +69 36	I
Gienah	ϵ Cyg	28959	20 44 +33 47	V
Gnosia	α CrB	20947	15 33 +26 53	IV
Gomeisa	β CMi	9947	07 24 +08 23	VII
Gorgona	β Per	3733	03 05 +40 46	II
Grafias	ζ Sco	22751	16 51 —42 17	XIV
Gredi	α Cap	28200	20 15 —12 42	X XI
Grumium	ξ Dra	24364	17 53 +56 53	IV V
Hamal	α Ari	2538	02 04 +23 14	II VI
Haris	γ Boo	19607	14 30 +38 32	IV
Hassaleh	ι Aur	6029	04 54 +33 05	II
Hatysa	ι Ori	6937	05 33 —05 56	VII
Heka	λ Ori	6915	05 32 +09 54	VII
Heze	ζ Vir	18351	13 32 —00 20	IX
Hoedus I	ζ Aur	6137	04 59 +41 00	II
Hoedus II	η Aur	6226	05 03 +41 10	II
Homam	ζ Peg	31664	22 39 +10 34	XI
Izar	ϵ Boo	19856	14 43 +27 17	IV
Kaffa	δ UMa	16736	12 13 +57 19	I III IV
Kaffaljdhma	γ Cet	3276	02 41 +03 02	VI
Kaitain	α Psc	2452	01 59 +02 31	VI
Kajam	ω Her	22090	16 23 +14 09	X
Kalb	α Leo	13926	10 06 +12 13	VII
Kaus Australis	ϵ Sgr	25100	18 21 —34 25	XIV XV
Kaus Borealis	λ Sgr	25180	18 25 —25 27	XV
Kaus Medius	δ Sgr	25024	18 18 —29 51	XV
Kelb Alrai	β Oph	24048	17 41 +04 35	X
Kerb	τ Peg	32503	23 18 +23 28	V XI
Kiffa Australis	α Lib	19975	14 48 —15 50	IX
Kiffa Borealis	β Lib	20539	15 14 —09 12	IX
Kochab	β UMi	20029	14 51 +74 22	I
Kornephoros	β Her	22193	16 28 +21 36	IV X
Kraz	β Crv	17133	12 32 —23 07	IX XIV
Ksora	δ Cas	1715	01 23 +59 59	I II V
Kuma	ν Dra	23797	17 31 +55 13	IV V
Lesath	ν Sco	21773	16 09 —19 20	XIV IX X
Maasym	λ Her	23726	17 29 +26 09	IV
Maia	20 Tau	4500	03 43 +24 13	II VI VII
Markab	α Peg	32149	23 02 +14 56	XI
Markeb	κ Pup	10281	07 37 —26 41	XIII
Marsik	κ Her	21696	16 06 +17 11	IX X

Nom 4

*	Con	GC	AR 1950 D 1950	Tab.
Matar	η Peg	31706	22 ^h 41 ^m +29°58'	V
Mebsuta	ε Gem	8786	06 41 +25 11	II III
Megrez	δ UMa	16736	12 13 +57 19	I III IV
Mekab	α Cet	3643	03 00 +03 54	VI
Mekbuda	ζ Gem	9313	07 01 +20 39	III VII
Menkalinan	β Aur	7543	05 56 +44 57	II III
Menkar	α Cet	3643	03 00 +03 54	VI
Menkhib	ζ Per	4688	03 51 +31 44	II
Merak	β UMa	15145	10 59 +56 39	I III IV
Merez	β Boo	20226	15 00 +40 35	IV
Merga	38 Boo	19959	14 48 +46 19	IV
Merope	23 Tau	4512	03 43 +23 48	II VI VII
Mesarthim	γ Ari	2290	01 51 +19 03	II VI
Metallah	α Tri	2272	01 50 +29 20	II
Miaplacidus	β Car	12764	09 13 -69 31	XIII XVI
Minelauva	δ Vir	17543	12 53 +03 40	IX
Minkar	ε Crv	16618	12 08 -22 20	VIII IX XIV
Mintaka	δ Ori	6847	05 29 -00 20	VII
Mira	α Cet	2796	02 17 -03 12	VI
Mirach	β And	1400	01 07 +35 21	II
Mirak	ε Boo	19856	14 43 +27 17	IV
Miram	η Per	3390	02 47 +55 41	I II
Mirfak	α Per	4041	03 21 +49 41	II
Mirzam	β CMa	8223	06 20 -17 56	VII XIII
Misam	κ Per	3755	03 06 +44 40	II
Mizar	ζ UMa	18133	13 22 +55 11	I III IV
Mothallah	α Tri	2272	01 50 +29 20	II
Mufrid	η Boo	18805	13 52 +18 39	IX
Muliphein	γ CMa	9320	07 01 -15 33	VII
Museida	π^a UMa	11850	08 36 +64 30	I III
Naos	ζ Pup	10947	08 02 -39 52	XIII
Nash	γ Sgr	24632	18 03 -30 26	XV
Nashira	γ Cap	30320	21 37 -16 53	XI
Nath	β Tau	6681	05 23 +28 34	II
Nekkar	β Boo	20226	15 00 +40 35	IV
Nihal	β Lep	6762	05 26 -20 48	VII XII
Nodus I	ζ Dra	23182	17 09 +65 47	I IV
Nodus II	δ Dra	26520	19 13 +67 34	I V
Nunki	σ Sgr	25941	18 52 -26 22	XV
Nusakan	β CrB	20795	15 26 +29 17	IV
Nushaba	γ Sgr	24632	18 03 -30 26	XIV XV
Okda	α Psc	2452	01 59 +02 31	VI
Paliicium	α Tau	5605	04 33 +16 25	VII
Phakt	α Col	7078	05 38 -34 06	XII
Phekda	γ UMa	16268	11 51 +53 58	III IV
Pherkad	γ UMi	20692	15 21 +72 01	I
Pherkard	δ UMi	24236	17 48 +86 37	I
Pleione	28 Tau	4587	03 46 +23 59	II VI VII
Polaris	α UMi	2243	01 49 +89 02	I
Pollux	β Gem	10438	07 42 +28 09	III

*	Con	GC	AR 1950 D 1950	Tab.
Porrina	γ Vir	17270	12 ^h 39 ^m -01°11'	IX
Praesepe	ϵ Cnc	11904	08 38 +19 52	VIII
Procyon	α CMi	10277	07 37 +05 21	VII
Pulcherrima	ϵ Boo	19856	14 43 +27 17	IV
Rana	δ Eri	4450	03 41 -09 56	VI VII
Ras Algethi	α Her	23277	17 12 +14 27	X
Ras Alhague	α Oph	23837	17 33 +12 36	X
Ras Elased Austr.	ϵ Leo	13443	09 43 +24 00	III VIII
Ras Elased Bor.	μ Leo	13590	09 50 +26 15	III
Rastaban	γ Dra	24432	17 55 +51 30	IV V
Reda	γ Aql	27354	19 44 +10 29	X XI
Regulus	α Leo	13926	10 06 +12 13	VIII
Rescha	α Psc	2452	01 59 +02 31	VI
Rigel	β Ori	6410	05 12 -08 15	VII
Rotanev	β Del	28709	20 35 +14 25	XI
Rucha	δ Cas	1715	01 23 +59 59	I II V
Rukbat	α Sgr	26737	19 20 -40 43	XV
Rutilicus	β Her	22193	16 28 +21 36	IV X
Sabik	η Oph	23158	17 08 -15 40	X
Sadalachbia	γ Aqr	31257	22 19 -01 38	XI
Sadalmelek	α Aqr	30896	22 03 -00 34	XI
Sadalsud	β Aqr	30137	21 29 -05 48	XI
Sador	γ Cyg	28338	20 20 +40 06	V
Saiph	κ Ori	7264	05 45 -09 41	VII
Sarin	δ Her	23294	17 13 +24 54	IX X
Scheat	β Peg	32135	23 01 +27 49	V
Scheddi	δ Cap	30491	21 44 -16 21	XI
Schedir	α Cas	792	00 38 +56 16	I II V
Segin	ϵ Cas	2289	01 51 +63 25	I II
Sertan	α Cnc	12406	08 56 +12 03	VIII
Sham	α Sge	27215	19 38 +17 54	X
Shaula	λ Sco	23769	17 30 -37 04	XIV XV
Sheliak	β Lyr	25847	18 48 +33 18	V
Sheratan	β Ari	2309	01 52 +20 34	II VI
Sirius	α CMa	8833	06 43 -16 39	VII XIII
Sirrah	α And	127	00 06 +28 49	II V
Situla	κ Aqr	31581	22 35 -04 29	XI
Skat	δ Aqr	31943	22 52 -16 05	XI
Spica	α Vir	18144	13 23 -10 54	IX
Sceptrum	53 Eri	5657	04 36 -14 24	VII
Subra	\circ Leo	13366	09 38 +10 07	VIII
Suhel	α Car	8302	06 21 -52 40	XII XIII
Sulaphat	γ Lyr	26086	18 57 +32 37	V
Svalocin	α Del	28780	20 37 +15 44	XI
Tabit	π^3 Ori	5875	04 47 +06 53	VII
Talitha	ι UMa	12407	08 56 +48 14	III
Tania Australis	μ UMa	14232	10 19 +41 45	III
Tania Borealis	λ UMa	14113	10 14 +43 10	III
Tarazed	γ Aql	27354	19 44 +10 29	X XI
Taygeta	19 Tau	4486	03 42 +24 19	II VI VII

Nom 6

*	Con	GC	AR 1950 D 1950	Tab.
Tejat Prior	η Gem	7969	06 ^h 12 ^m +22°31	III VII
Tejat Posterior	μ Gem	8208	06 20 +22 32	III VII
Theemin	ν^3 Eri	5614	04 34 -30 40	XII
Thuban	α Dra	19019	14 03 +64 37	I IV
Toliman	α Cen	19728	14 36 -60 38	XIV XVI
Tureis	ϵ Car	12831	09 16 -59 04	XIII XVI
Tyl	ϵ Dra	27471	19 48 +70 08	I
Unuk Elhaia	α Ser	21158	15 42 +06 35	IX X
Vega	α Lyr	25466	18 35 +38 44	IV V
Vespertilio	α Sco	22157	16 26 -26 19	XIV
Vindemiatrix	ϵ Vir	17687	13 00 +11 14	IX
Wasat	δ Gem	9755	07 17 +22 05	III VII
Wezen	δ CMa	9443	07 06 -26 19	XIII
Yed Prior	δ Oph	21838	16 12 -03 34	IX X
Yed Posterior	ϵ Oph	21920	16 16 -04 34	IX X
Yildun	δ UMi	24236	17 48 +86 37	I
Zaurak	γ Eri	4778	03 56 -13 39	VI VII
Zavijah	β Vir	16215	11 48 +02 03	VIII IX
Zibal	ζ Eri	3899	03 13 -09 00	VI
Zosma	δ Leo	15438	11 11 +20 48	III VIII
Zuben Elakribi	δ Lib	20195	14 58 -08 19	IX
Zuben Elakrab	γ Lib	20949	15 33 -14 37	IX
Zuben Elgenubi	α Lib	19975	14 48 -15 50	IX
Zuben Elschemali	β Lib	20539	15 14 -09 12	IX
Zuben Hakrabi	ν Lib	20311	15 04 -16 04	IX

TAB. III.

PARALLAX AND DISTANCE IN PARSECS

π parsec	π parsec	π parsec	π parsec	π parsec
0"001 1000	0"021 47.62	0"041 24.39	0"061 16.39	0"081 12.35
002 500.0	022 45.45	042 23.81	062 16.13	082 12.20
003 333.3	023 43.48	043 23.26	063 15.87	083 12.05
004 250.0	024 41.67	044 22.73	064 15.63	084 11.90
005 200.0	025 40.00	045 22.22	065 15.38	085 11.76
0"006 166.7	0"026 38.46	0"046 21.74	0"066 15.15	0"086 11.63
007 142.9	027 37.04	047 21.28	067 14.93	087 11.49
008 125.0	028 35.71	048 20.83	068 14.71	088 11.36
009 111.1	029 34.48	049 20.41	069 14.49	089 11.24
010 100.0	030 33.33	050 20.00	070 14.29	090 11.11
0"011 90.91	0"031 32.26	0"051 19.61	0"071 14.08	0"091 10.99
012 83.33	032 31.25	052 19.23	072 13.89	092 10.87
013 76.92	033 30.30	053 18.87	073 13.70	093 10.75
014 71.43	034 29.41	054 18.52	074 13.51	094 10.64
015 66.67	035 28.57	055 18.18	075 13.33	095 10.53
0"016 62.50	0"036 27.78	0"056 17.86	0"076 13.16	0"096 10.42
017 58.82	037 27.03	057 17.54	077 12.99	097 10.31
018 55.56	038 26.32	058 17.24	078 12.82	098 10.20
019 52.63	039 25.64	059 16.95	079 12.66	099 10.10
020 50.00	040 25.00	060 16.67	080 12.50	100 10.00

TAB. IV.

PARALLAX AND DISTANCE IN LIGHT-YEARS

π l. y.	π l. y.	π l. y.	π l. y.	π l. y.
0"001 3263	0"021 155.4	0"041 79.60	0"061 53.49	0"081 40.30
002 1632	022 148.3	042 77.70	062 52.64	082 39.81
003 1088	023 141.9	043 75.91	063 51.79	083 39.32
004 815.9	024 136.0	044 74.18	064 51.01	084 38.84
005 652.7	025 130.5	045 72.51	065 50.19	085 38.38
0"006 544.0	0"026 125.5	0"046 70.95	0"066 49.44	0"086 37.95
007 466.4	027 120.9	047 69.45	067 48.72	087 37.50
008 407.9	028 116.5	048 67.98	068 48.01	088 37.07
009 362.6	029 112.5	049 66.61	069 47.29	089 36.68
010 326.3	030 108.8	050 65.27	070 46.64	090 36.26
0"011 296.7	0"031 105.3	0"051 64.00	0"071 45.95	0"091 35.87
012 271.9	032 102.0	052 62.76	072 45.33	092 35.47
013 251.0	033 98.88	053 61.58	073 44.71	093 35.08
014 233.1	034 95.98	054 60.44	074 44.09	094 34.72
015 217.6	035 93.24	055 59.33	075 43.50	095 34.36
0"016 204.0	0"036 90.66	0"056 58.29	0"076 42.95	0"096 34.01
017 192.0	037 88.21	057 57.24	077 42.39	097 33.65
018 181.3	038 85.89	058 56.26	078 41.84	098 33.29
019 171.8	039 83.68	059 55.32	079 41.32	099 32.96
020 163.2	040 81.59	060 54.40	080 40.79	100 32.63

TAB. V.

TRANSFORMATION OF PARSECS INTO LIGHT-YEARS

pc	0	1	2	3	4	5	6	7	8	9	pc
0	0.00	3.26	6.53	9.79	13.05	16.32	19.58	22.84	26.11	29.37	l. y.
1	32.63	35.90	39.16	42.43	45.69	48.95	52.22	55.48	58.74	62.01	
2	65.27	68.53	71.80	75.06	78.32	81.59	84.85	88.11	91.38	94.64	
3	97.90	101.2	104.4	107.7	111.0	114.2	117.5	120.7	124.0	127.3	
4	130.5	133.8	137.1	140.3	143.6	146.9	150.1	153.4	156.6	159.9	
5	163.2	166.4	169.7	173.0	176.2	179.5	182.8	186.0	189.3	192.6	
6	195.8	199.1	202.3	205.6	208.9	212.1	215.4	218.6	221.9	225.2	
7	228.4	231.7	235.0	238.2	241.5	244.8	248.0	251.3	254.6	257.8	
8	261.1	264.3	267.6	270.9	274.1	277.4	280.7	283.9	287.2	290.4	
9	293.7	297.0	300.2	303.5	306.8	310.0	313.3	316.6	319.8	323.1	

TAB. VI.

TRANSFORMATION OF LIGHT-YEARS INTO PARSECS

l. y.	0	1	2	3	4	5	6	7	8	9	l. y.
0	0.00	0.31	0.61	0.92	1.23	1.53	1.84	2.14	2.45	2.76	pc
1	3.06	3.27	3.68	3.98	4.29	4.60	4.90	5.21	5.52	5.82	
2	6.13	6.43	6.74	7.05	7.35	7.66	7.97	8.27	8.58	8.89	
3	9.19	9.50	9.81	10.11	10.42	10.72	11.03	11.34	11.64	11.95	
4	12.26	12.56	12.87	13.18	13.48	13.79	14.10	14.40	14.71	15.01	
5	15.32	15.63	15.93	16.24	16.55	16.85	17.16	17.47	17.77	18.08	
6	18.39	18.69	19.00	19.30	19.61	19.92	20.22	20.53	20.84	21.14	
7	21.45	21.76	22.06	22.37	22.68	22.98	23.29	23.59	23.90	24.21	
8	24.51	24.82	25.13	25.43	25.74	26.05	26.35	26.66	26.97	27.27	
9	27.58	27.88	28.19	28.50	28.80	29.11	29.42	29.72	30.03	30.34	

 $\pi^{\circ} = 8''790$

1 pc = 3.263483 l. y.

1 l. y. = 0.306421 pc.

TAB. VII.

ADDITION OF STELLAR MAGNITUDES

$m_B - m_A$	$m_A - m_{\Sigma}$	$m_B - m_A$	$m_A - m_{\Sigma}$	$m_B - m_A$	$m_A - m_{\Sigma}$	$m_B - m_A$	$m_A - m_{\Sigma}$
5 ^m 84	0 ^m 00	1 ^m 82—1 ^m 77	0 ^m 19	0 ^m 96—0 ^m 93	0 ^m 38	0 ^m 41—0 ^m 39	0 ^m 57
5.84—4.65	0.01	1.76—1.71	0.20	0.92—0.90	0.39	0.38—0.37	0.58
4.64—4.09	0.02	1.70—1.65	0.21	0.89—0.87	0.40	0.36—0.35	0.59
4.08—3.72	0.03	1.64—1.60	0.22	0.86—0.84	0.41	0.34—0.32	0.60
3.71—3.44	0.04	1.59—1.55	0.23	0.83—0.80	0.42	0.31—0.30	0.61
3.43—3.22	0.05	1.54—1.50	0.24	0.79—0.77	0.43	0.29—0.28	0.62
3.21—3.03	0.06	1.49—1.45	0.25	0.76—0.74	0.44	0.27—0.25	0.63
3.02—2.87	0.07	1.44—1.40	0.26	0.73—0.71	0.45	0.24—0.23	0.64
2.86—2.73	0.08	1.39—1.36	0.27	0.70—0.68	0.46	0.22—0.21	0.65
2.72—2.60	0.09	1.35—1.31	0.28	0.67—0.66	0.47	0.20—0.19	0.66
2.59—2.49	0.10	1.30—1.27	0.29	0.65—0.63	0.48	0.18—0.17	0.67
2.48—2.38	0.11	1.26—1.23	0.30	0.62—0.60	0.49	0.16—0.14	0.68
2.37—2.29	0.12	1.22—1.19	0.31	0.59—0.57	0.50	0.13—0.12	0.69
2.28—2.20	0.13	1.18—1.15	0.32	0.56—0.55	0.51	0.11—0.11	0.70
2.19—2.12	0.14	1.14—1.11	0.33	0.54—0.52	0.52	0.09—0.08	0.71
2.11—2.04	0.15	1.10—1.07	0.34	0.51—0.49	0.53	0.07—0.06	0.72
2.03—1.97	0.16	1.06—1.04	0.35	0.48—0.47	0.54	0.05—0.04	0.73
1.96—1.90	0.17	1.03—1.00	0.36	0.46—0.44	0.55	0.03—0.02	0.74
1.89—1.83	0.18	0.99—0.97	0.37	0.43—0.42	0.56	0.01—0.00	0.75

 m_A = velikost prvé složky m_B = velikost druhé složky m_{Σ} = velikost soustavy.

TAB. VIII.

PARALLAX AND ABSOLUTE MAGNITUDE

π	M—m	π	M—m	π	M—m	π	M—m
0"0001	-15.00	0"0051	-6.46	0"001	-10.00	0"051	-1.46
0002	-13.49	0052	-6.42	002	-8.49	052	-1.42
0003	-12.61	0053	-6.38	003	-7.61	053	-1.38
0004	-11.99	0054	-6.34	004	-6.99	054	-1.34
0005	-11.51	0055	-6.30	005	-6.51	055	-1.30
0"0006	-11.11	0"0056	-6.26	0"006	-6.11	0"056	-1.26
0007	-10.77	0057	-6.22	007	-5.77	057	-1.22
0008	-10.48	0058	-6.18	008	-5.48	058	-1.18
0009	-10.23	0059	-6.15	009	-5.23	059	-1.15
0010	-10.00	0060	-6.11	010	-5.00	060	-1.11
0"0011	-9.79	0"0061	-6.07	0"011	-4.79	0"061	-1.07
0012	-9.60	0062	-6.04	012	-4.60	062	-1.04
0013	-9.43	0063	-6.00	013	-4.43	063	-1.00
0014	-9.27	0064	-5.97	014	-4.27	064	-0.97
0015	-9.12	0065	-5.94	015	-4.12	065	-0.94
0"0016	-8.98	0"0066	-5.90	0"016	-3.98	0"066	-0.90
0017	-8.85	0067	-5.87	017	-3.85	067	-0.87
0018	-8.72	0068	-5.84	018	-3.72	068	-0.84
0019	-8.61	0069	-5.81	019	-3.61	069	-0.81
0020	-8.49	0070	-5.77	020	-3.50	070	-0.77
0"0021	-8.39	0"0071	-5.74	0"021	-3.39	0"071	-0.74
0022	-8.29	0072	-5.71	022	-3.29	072	-0.71
0023	-8.19	0073	-5.68	023	-3.19	073	-0.68
0024	-8.10	0074	-5.65	024	-3.10	074	-0.65
0025	-8.01	0075	-5.62	025	-3.01	075	-0.62
0"0026	-7.93	0"0076	-5.60	0"026	-2.92	0"076	-0.60
0027	-7.84	0077	-5.57	027	-2.84	077	-0.57
0028	-7.76	0078	-5.54	028	-2.76	078	-0.54
0029	-7.69	0079	-5.51	029	-2.69	079	-0.51
0030	-7.61	0080	-5.48	030	-2.61	080	-0.48
0"0031	-7.54	0"0081	-5.46	0"031	-2.54	0"081	-0.46
0032	-7.47	0082	-5.43	032	-2.47	082	-0.43
0033	-7.41	0083	-5.40	033	-2.41	083	-0.40
0034	-7.34	0084	-5.38	034	-2.34	084	-0.38
0035	-7.28	0085	-5.35	035	-2.28	085	-0.35
0"0036	-7.22	0"0086	-5.33	0"036	-2.22	0"086	-0.33
0037	-7.16	0087	-5.30	037	-2.16	087	-0.30
0038	-7.10	0088	-5.28	038	-2.10	088	-0.28
0039	-7.04	0089	-5.25	039	-2.05	089	-0.25
0040	-6.99	0090	-5.23	040	-1.99	090	-0.23
0"0041	-6.94	0"0091	-5.20	0"041	-1.94	0"091	-0.20
0042	-6.88	0092	-5.18	042	-1.88	092	-0.18
0043	-6.83	0093	-5.16	043	-1.83	093	-0.16
0044	-6.78	0094	-5.13	044	-1.78	094	-0.13
0045	-6.73	0095	-5.11	045	-1.73	095	-0.11
0"0046	-6.69	0"0096	-5.09	0"046	-1.69	0"096	-0.09
0047	-6.64	0097	-5.07	047	-1.64	097	-0.07
0048	-6.59	0098	-5.04	048	-1.59	098	-0.04
0049	-6.55	0099	-5.02	049	-1.55	099	-0.02
0050	-6.51	0100	-5.00	050	-1.50	100	0.00
				0"101	+0.02	0"151	+0.89
				102	+0.04	152	+0.91
				103	+0.06	153	+0.92
				104	+0.08	154	+0.94
				105	+0.11	155	+0.95
				0"106	+0.13	0"156	+0.97
				107	+0.15	157	+0.98
				108	+0.17	158	+0.99
				109	+0.19	159	+1.01
				110	+0.21	160	+1.02
				0"111	+0.23	0"161	+1.03
				112	+0.25	162	+1.05
				113	+0.26	163	+1.06
				114	+0.28	164	+1.07
				115	+0.30	165	+1.09
				0"116	+0.32	0"166	+1.10
				117	+0.34	167	+1.11
				118	+0.36	168	+1.13
				119	+0.38	169	+1.14
				120	+0.40	170	+1.15
				0"121	+0.41	0"171	+1.16
				122	+0.43	172	+1.18
				123	+0.45	173	+1.19
				124	+0.47	174	+1.20
				125	+0.48	175	+1.21
				0"126	+0.50	0"176	+1.23
				127	+0.52	177	+1.24
				128	+0.54	178	+1.25
				129	+0.55	179	+1.26
				130	+0.57	180	+1.28
				0"131	+0.59	0"181	+1.29
				132	+0.60	182	+1.30
				133	+0.62	183	+1.31
				134	+0.64	184	+1.32
				135	+0.65	185	+1.34
				0"136	+0.67	0"186	+1.35
				137	+0.68	187	+1.36
				138	+0.70	188	+1.37
				139	+0.71	189	+1.38
				140	+0.73	190	+1.39
				0"141	+0.75	0"191	+1.40
				142	+0.76	192	+1.42
				143	+0.78	193	+1.43
				144	+0.79	194	+1.44
				145	+0.81	195	+1.45
				0"146	+0.82	0"196	+1.46
				147	+0.84	197	+1.47
				148	+0.85	198	+1.48
				149	+0.87	199	+1.49
				150	+0.88	200	+1.50

TAB. IX.

ANNUAL PRECESSION IN RIGHT ASCENSION

α 1

δ α	0°	+5°	+10°	+15°	+20°	+25°	+30°	+35°	+40°	+45°	
00 ^h 00 ^m	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	12 ^h 00 ^m
10	3.07	3.08	3.08	3.09	3.09	3.10	3.11	3.11	3.12	3.13	10
20	3.07	3.08	3.09	3.10	3.11	3.12	3.14	3.15	3.17	3.19	20
30	3.07	3.09	3.10	3.12	3.13	3.15	3.17	3.19	3.21	3.25	30
40	3.07	3.09	3.11	3.13	3.16	3.18	3.21	3.23	3.26	3.30	40
50	3.07	3.10	3.12	3.15	3.18	3.21	3.24	3.27	3.31	3.36	50
01 00	3.07	3.10	3.13	3.16	3.20	3.23	3.27	3.31	3.36	3.42	13 00
10	3.07	3.11	3.14	3.18	3.22	3.26	3.30	3.35	3.41	3.47	10
20	3.07	3.11	3.15	3.20	3.24	3.28	3.34	3.39	3.45	3.53	20
30	3.07	3.12	3.16	3.21	3.26	3.31	3.37	3.43	3.50	3.58	30
40	3.07	3.12	3.17	3.22	3.28	3.33	3.40	3.47	3.55	3.64	40
50	3.07	3.12	3.18	3.24	3.30	3.36	3.43	3.50	3.59	3.69	50
02 00	3.07	3.13	3.19	3.25	3.32	3.38	3.46	3.54	3.63	3.74	14 00
10	3.07	3.13	3.20	3.26	3.33	3.39	3.49	3.57	3.67	3.79	10
20	3.07	3.14	3.21	3.28	3.35	3.41	3.52	3.61	3.71	3.84	20
30	3.07	3.14	3.22	3.29	3.37	3.43	3.54	3.64	3.75	3.88	30
40	3.07	3.15	3.22	3.30	3.39	3.45	3.57	3.67	3.79	3.93	40
50	3.07	3.15	3.23	3.31	3.41	3.47	3.59	3.70	3.83	3.97	50
03 00	3.07	3.15	3.23	3.33	3.42	3.49	3.62	3.73	3.86	4.02	15 00
10	3.07	3.16	3.24	3.34	3.43	3.51	3.64	3.76	3.90	4.06	10
20	3.07	3.16	3.25	3.35	3.44	3.53	3.66	3.79	3.93	4.10	20
30	3.07	3.16	3.26	3.36	3.46	3.55	3.68	3.81	3.96	4.13	30
40	3.07	3.17	3.26	3.37	3.47	3.57	3.70	3.84	3.99	4.17	40
50	3.07	3.17	3.27	3.38	3.48	3.58	3.72	3.86	4.02	4.20	50
04 00	3.07	3.17	3.28	3.38	3.49	3.60	3.74	3.88	4.04	4.23	16 00
10	3.07	3.17	3.28	3.39	3.50	3.61	3.75	3.90	4.06	4.26	10
20	3.07	3.18	3.29	3.40	3.51	3.62	3.77	3.92	4.09	4.28	20
30	3.07	3.18	3.29	3.40	3.52	3.64	3.78	3.94	4.11	4.30	30
40	3.07	3.18	3.29	3.41	3.53	3.65	3.80	3.95	4.12	4.32	40
50	3.07	3.18	3.29	3.41	3.54	3.66	3.81	3.96	4.14	4.34	50
05 00	3.07	3.18	3.30	3.42	3.54	3.67	3.82	3.98	4.15	4.36	17 00
10	3.07	3.19	3.30	3.42	3.55	3.67	3.82	3.99	4.17	4.38	10
20	3.07	3.19	3.30	3.42	3.55	3.68	3.83	3.99	4.18	4.39	20
30	3.07	3.19	3.31	3.43	3.55	3.69	3.84	4.00	4.18	4.40	30
40	3.07	3.19	3.31	3.43	3.56	3.69	3.84	4.00	4.19	4.40	40
50	3.07	3.19	3.31	3.43	3.56	3.69	3.84	4.01	4.19	4.41	50
06 00	3.07	3.19	3.31	3.43	3.56	3.70	3.84	4.01	4.19	4.41	18 00
	0°	-5°	-10°	-15°	-20°	-25°	-30°	-35°	-40°	-45°	α δ

δ \ α	+50°	+55°	+60°	+65°	+70°	+75°	+80°	+82°	+84°	+85°	
00 ^h 00 ^m	3 ^s 07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	12 ^h 00 ^m
10	3.14	3.15	3.17	3.20	3.23	3.29	3.40	3.49	3.63	3.74	10
20	3.21	3.24	3.27	3.32	3.39	3.51	3.73	3.90	4.18	4.41	20
30	3.28	3.32	3.37	3.45	3.55	3.72	4.06	4.31	4.73	5.07	30
40	3.35	3.40	3.47	3.57	3.71	3.94	4.39	4.72	5.28	5.72	40
50	3.42	3.48	3.57	3.69	3.97	4.15	4.72	5.13	5.83	6.37	50
01 00	3.48	3.57	3.67	3.81	4.02	4.36	5.04	5.53	6.37	7.02	13 00
10	3.55	3.65	3.77	3.93	4.18	4.57	5.35	5.93	6.90	7.66	10
20	3.62	3.72	3.86	4.05	4.33	4.77	5.66	6.32	7.42	8.30	20
30	3.68	3.80	3.96	4.17	4.47	4.98	5.97	6.71	7.94	8.92	30
40	3.74	3.88	4.05	4.28	4.62	5.18	6.27	7.09	8.44	9.53	40
50	3.81	3.96	4.14	4.39	4.77	5.37	6.57	7.46	8.94	10.12	50
02 00	3.87	4.03	4.23	4.50	4.91	5.56	6.86	7.82	9.43	10.70	14 00
10	3.93	4.10	4.31	4.61	5.04	5.75	7.14	8.18	9.90	11.28	10
20	3.98	4.17	4.40	4.71	5.18	5.93	7.42	8.52	10.36	11.83	20
30	4.04	4.23	4.48	4.81	5.31	6.11	7.70	8.86	10.81	12.37	30
40	4.09	4.30	4.56	4.91	5.43	6.28	7.93	9.18	11.24	12.89	40
50	4.15	4.36	4.63	5.01	5.55	6.44	8.19	9.50	11.66	13.39	50
03 00	4.20	4.42	4.71	5.10	5.66	6.60	8.43	9.79	12.06	13.87	15 00
10	4.25	4.48	4.78	5.18	5.77	6.75	8.66	10.08	12.44	14.33	10
20	4.29	4.53	4.84	5.27	5.88	6.90	8.88	10.35	12.81	14.77	20
30	4.33	4.59	4.91	5.35	5.98	7.03	9.08	10.61	13.16	15.19	30
40	4.38	4.63	4.97	5.42	6.08	7.16	9.28	10.86	13.49	15.58	40
50	4.41	4.68	5.02	5.49	6.17	7.28	9.46	11.09	13.79	15.95	50
04 00	4.45	4.72	5.08	5.55	6.25	7.39	9.63	11.30	14.08	16.30	16 00
10	4.48	4.76	5.13	5.61	6.33	7.49	9.80	11.50	14.34	16.62	10
20	4.51	4.80	5.17	5.67	6.40	7.59	9.94	11.68	14.59	16.91	20
30	4.54	4.83	5.21	5.72	6.46	7.68	10.07	11.86	14.82	17.18	30
40	4.57	4.86	5.25	5.76	6.52	7.76	10.19	12.00	15.02	17.42	40
50	4.59	4.89	5.28	5.80	6.57	7.83	10.30	12.14	15.20	17.64	50
05 00	4.61	4.91	5.31	5.84	6.62	7.89	10.39	12.25	15.35	17.82	17 00
10	4.63	4.93	5.33	5.87	6.65	7.94	10.47	12.35	15.48	17.98	10
20	4.64	4.95	5.35	5.90	6.69	7.98	10.53	12.43	15.59	18.11	20
30	4.65	4.96	5.37	5.92	6.71	8.01	10.58	12.50	15.68	18.21	30
40	4.66	4.97	5.38	5.93	6.73	8.03	10.62	12.54	15.74	18.28	40
50	4.67	4.98	5.38	5.93	6.74	8.05	10.64	12.57	15.77	18.33	50
06 00	4.67	4.98	5.39	5.94	6.74	8.06	10.65	12.58	15.78	18.34	18 00
	-50°	-55°	-60°	-65°	-70°	-75°	-80°	-82°	-84°	-85°	α
											δ

$\alpha 3$

δ α	0°	+5°	+10°	+15°	+20°	+25°	+30°	+35°	+40°	+45°	
06 ^h 00 ^m	3.07	3.19	3.31	3.43	3.56	3.70	3.84	4.01	4.19	4.41	18 ^h 00 ^m
10	3.07	3.19	3.31	3.43	3.56	3.69	3.84	4.01	4.19	4.41	10
20	3.07	3.19	3.31	3.43	3.56	3.69	3.84	4.00	4.19	4.40	20
30	3.07	3.19	3.31	3.43	3.55	3.69	3.84	4.00	4.18	4.40	30
40	3.07	3.19	3.30	3.42	3.55	3.68	3.83	3.99	4.18	4.39	40
50	3.07	3.19	3.30	3.42	3.55	3.67	3.82	3.99	4.17	4.38	50
07 00	3.07	3.18	3.30	3.42	3.54	3.67	3.82	3.98	4.15	4.36	19 00
10	3.07	3.18	3.29	3.41	3.54	3.66	3.81	3.96	4.14	4.34	10
20	3.07	3.18	3.29	3.41	3.53	3.65	3.80	3.95	4.12	4.32	20
30	3.07	3.18	3.29	3.40	3.52	3.64	3.78	3.94	4.11	4.30	30
40	3.07	3.18	3.29	3.40	3.51	3.62	3.77	3.92	4.09	4.28	40
50	3.07	3.17	3.28	3.39	3.50	3.61	3.75	3.90	4.06	4.26	50
08 00	3.07	3.17	3.28	3.38	3.49	3.60	3.74	3.88	4.04	4.23	20 00
10	3.07	3.17	3.27	3.38	3.48	3.58	3.72	3.86	4.02	4.20	10
20	3.07	3.17	3.26	3.37	3.47	3.57	3.70	3.84	3.99	4.17	20
30	3.07	3.16	3.26	3.36	3.46	3.55	3.68	3.81	3.96	4.13	30
40	3.07	3.16	3.25	3.35	3.44	3.53	3.66	3.79	3.93	4.10	40
50	3.07	3.16	3.24	3.34	3.43	3.51	3.64	3.76	3.90	4.06	50
09 00	3.07	3.15	3.23	3.33	3.42	3.49	3.62	3.73	3.86	4.02	21 00
10	3.07	3.15	3.23	3.31	3.41	3.47	3.59	3.70	3.83	3.97	10
20	3.07	3.15	3.22	3.30	3.39	3.45	3.57	3.67	3.79	3.93	20
30	3.07	3.14	3.22	3.29	3.37	3.43	3.54	3.64	3.75	3.88	30
40	3.07	3.14	3.21	3.28	3.35	3.41	3.52	3.61	3.71	3.84	40
50	3.07	3.13	3.20	3.26	3.33	3.39	3.49	3.57	3.67	3.79	50
10 00	3.07	3.13	3.19	3.25	3.32	3.38	3.46	3.54	3.63	3.74	22 00
10	3.07	3.12	3.18	3.24	3.30	3.36	3.43	3.50	3.59	3.69	10
20	3.07	3.12	3.17	3.22	3.28	3.33	3.40	3.47	3.55	3.64	20
30	3.07	3.12	3.16	3.21	3.26	3.31	3.37	3.43	3.50	3.58	30
40	3.07	3.11	3.15	3.20	3.24	3.28	3.34	3.39	3.45	3.53	40
50	3.07	3.11	3.14	3.18	3.22	3.26	3.30	3.35	3.41	3.47	50
11 00	3.07	3.10	3.13	3.16	3.20	3.23	3.27	3.31	3.36	3.42	23 00
10	3.07	3.10	3.12	3.15	3.18	3.21	3.24	3.27	3.31	3.36	10
20	3.07	3.09	3.11	3.13	3.16	3.18	3.21	3.23	3.26	3.30	20
30	3.07	3.09	3.10	3.12	3.13	3.15	3.17	3.19	3.21	3.25	30
40	3.07	3.08	3.09	3.10	3.11	3.12	3.14	3.15	3.17	3.19	40
50	3.07	3.08	3.08	3.09	3.09	3.10	3.11	3.11	3.12	3.13	50
12 00	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	24 00
	0°	-5°	-10°	-15°	-20°	-25°	-30°	-35°	-40°	-45°	α δ

$\delta \backslash \alpha$	+50°	+55°	+60°	+65°	+70°	+75°	+80°	+82°	+84°	+85°	
06 ^h 00 ^m	4 ^s 67	4.98	5.39	5.94	6.74	8.06	10.65	12.58	15.78	18.34	18 ^h 00 ^m
10	4.67	4.98	5.38	5.93	6.74	8.05	10.64	12.57	15.77	18.33	10
20	4.66	4.97	5.38	5.93	6.73	8.03	10.62	12.54	15.74	18.28	20
30	4.65	4.96	5.37	5.92	6.71	8.01	10.58	12.50	15.68	18.21	30
40	4.64	4.95	5.35	5.90	6.69	7.98	10.53	12.43	15.59	18.11	40
50	4.63	4.93	5.33	5.87	6.65	7.94	10.47	12.35	15.48	17.98	50
07 00	4.61	4.91	5.31	5.84	6.62	7.89	10.39	12.25	15.35	17.82	19 00
10	4.59	4.89	5.28	5.80	6.57	7.83	10.30	12.14	15.20	17.64	10
20	4.57	4.86	5.25	5.76	6.52	7.76	10.19	12.00	15.02	17.42	20
30	4.54	4.83	5.21	5.72	6.46	7.68	10.07	11.86	14.82	17.18	30
40	4.51	4.80	5.17	5.67	6.40	7.59	9.94	11.68	14.59	16.91	40
50	4.48	4.76	5.13	5.61	6.33	7.49	9.80	11.50	14.34	16.62	50
08 00	4.45	4.72	5.08	5.55	6.25	7.39	9.63	11.30	14.08	16.30	20 00
10	4.41	4.68	5.02	5.49	6.17	7.28	9.46	11.09	13.79	15.95	10
20	4.38	4.63	4.97	5.42	6.08	7.16	9.28	10.86	13.49	15.58	20
30	4.33	4.59	4.91	5.35	5.98	7.03	9.08	10.61	13.16	15.19	30
40	4.29	4.53	4.84	5.27	5.88	6.90	8.88	10.35	12.81	14.77	40
50	4.25	4.48	4.78	5.18	5.77	6.75	8.66	10.08	12.44	14.33	50
09 00	4.20	4.42	4.71	5.10	5.66	6.60	8.43	9.79	12.06	13.87	21 00
10	4.15	4.36	4.63	5.01	5.55	6.44	8.19	9.50	11.66	13.39	10
20	4.09	4.30	4.56	4.91	5.43	6.28	7.93	9.18	11.24	12.89	20
30	4.04	4.23	4.48	4.81	5.31	6.11	7.70	8.86	10.81	12.37	30
40	3.98	4.17	4.40	4.71	5.18	5.93	7.42	8.52	10.36	11.83	40
50	3.93	4.10	4.31	4.61	5.04	5.75	7.14	8.18	9.90	11.28	50
10 00	3.87	4.03	4.23	4.50	4.91	5.56	6.86	7.82	9.43	10.70	22 00
10	3.81	3.96	4.14	4.39	4.77	5.37	6.57	7.46	8.94	10.12	10
20	3.74	3.88	4.05	4.28	4.62	5.18	6.27	7.09	8.44	9.53	20
30	3.68	3.80	3.96	4.17	4.47	4.98	5.97	6.71	7.94	8.92	30
40	3.62	3.72	3.86	4.05	4.33	4.77	5.66	6.32	7.42	8.30	40
50	3.55	3.65	3.77	3.93	4.18	4.57	5.35	5.93	6.90	7.66	50
11 00	3.48	3.57	3.67	3.81	4.02	4.36	5.04	5.53	6.37	7.02	23 00
10	3.42	3.48	3.57	3.69	3.97	4.15	4.72	5.13	5.83	6.37	10
20	3.35	3.40	3.47	3.57	3.71	3.94	4.39	4.72	5.28	5.72	20
30	3.28	3.32	3.37	3.45	3.55	3.72	4.06	4.31	4.73	5.07	30
40	3.21	3.24	3.27	3.32	3.39	3.51	3.73	3.90	4.18	4.41	40
50	3.14	3.15	3.17	3.20	3.23	3.29	3.40	3.49	3.63	3.74	50
12 00	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	24 00
	-50°	-55°	-60°	-65°	-70°	-75°	-80°	-82°	-84°	-85°	$\alpha \backslash \delta$

δ α	0°	+5°	+10°	+15°	+20°	+25°	+30°	+35°	+40°	+45°	
12 ^h 00 ^m	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	00 ^h 00 ^m
10	3.07	3.07	3.06	3.06	3.05	3.04	3.04	3.03	3.02	3.01	10
20	3.07	3.06	3.05	3.04	3.03	3.02	3.01	2.99	2.98	2.96	20
30	3.07	3.05	3.04	3.02	3.01	2.99	2.97	2.95	2.93	2.90	30
40	3.07	3.05	3.03	3.01	2.99	2.96	2.94	2.91	2.88	2.84	40
50	3.07	3.04	3.02	2.99	2.97	2.94	2.91	2.87	2.83	2.78	50
13 00	3.07	3.04	3.01	2.98	2.95	2.91	2.87	2.83	2.78	2.72	01 00
10	3.07	3.03	3.00	2.96	2.93	2.88	2.84	2.79	2.74	2.67	10
20	3.07	3.03	2.99	2.95	2.91	2.86	2.81	2.75	2.69	2.61	20
30	3.07	3.03	2.98	2.93	2.89	2.83	2.78	2.71	2.64	2.55	30
40	3.07	3.02	2.97	2.92	2.87	2.81	2.75	2.67	2.60	2.50	40
50	3.07	3.02	2.96	2.91	2.85	2.78	2.72	2.64	2.56	2.45	50
14 00	3.07	3.02	2.96	2.89	2.83	2.76	2.69	2.60	2.51	2.40	02 00
10	3.07	3.01	2.95	2.88	2.81	2.74	2.66	2.57	2.47	2.35	10
20	3.07	3.00	2.94	2.87	2.79	2.71	2.63	2.53	2.43	2.30	20
30	3.07	3.00	2.93	2.85	2.78	2.69	2.60	2.50	2.39	2.25	30
40	3.07	3.00	2.92	2.84	2.76	2.67	2.58	2.47	2.35	2.20	40
50	3.07	2.99	2.91	2.83	2.74	2.65	2.55	2.44	2.32	2.16	50
15 00	3.07	2.99	2.91	2.82	2.73	2.63	2.53	2.41	2.28	2.13	03 00
10	3.07	2.98	2.90	2.81	2.71	2.60	2.50	2.38	2.25	2.08	10
20	3.07	2.98	2.89	2.80	2.70	2.59	2.48	2.35	2.21	2.03	20
30	3.07	2.98	2.89	2.79	2.69	2.58	2.46	2.32	2.18	2.01	30
40	3.07	2.97	2.88	2.78	2.67	2.56	2.44	2.30	2.15	1.98	40
50	3.07	2.97	2.87	2.77	2.66	2.54	2.42	2.28	2.13	1.94	50
16 00	3.07	2.97	2.87	2.76	2.65	2.53	2.40	2.26	2.10	1.91	04 00
10	3.07	2.97	2.86	2.75	2.64	2.52	2.39	2.24	2.08	1.89	10
20	3.07	2.97	2.86	2.75	2.63	2.50	2.37	2.22	2.06	1.86	20
30	3.07	2.96	2.86	2.74	2.62	2.49	2.36	2.20	2.04	1.84	30
40	3.07	2.96	2.85	2.73	2.62	2.49	2.35	2.19	2.02	1.82	40
50	3.07	2.96	2.85	2.73	2.61	2.48	2.34	2.17	2.00	1.80	50
17 00	3.07	2.96	2.85	2.73	2.60	2.47	2.33	2.16	1.99	1.78	05 00
10	3.07	2.96	2.84	2.72	2.60	2.46	2.32	2.15	1.98	1.77	10
20	3.07	2.96	2.84	2.72	2.59	2.45	2.31	2.14	1.97	1.76	20
30	3.07	2.96	2.84	2.72	2.59	2.45	2.31	2.14	1.96	1.75	30
40	3.07	2.96	2.84	2.72	2.59	2.45	2.30	2.14	1.96	1.74	40
50	3.07	2.96	2.84	2.71	2.59	2.45	2.30	2.14	1.95	1.74	50
18 00	3.07	2.96	2.84	2.71	2.59	2.45	2.30	2.14	1.95	1.74	06 00
	0°	-5°	-10°	-15°	-20°	-25°	-30°	-35°	-40°	-45°	α δ

δ α	+50°	+55°	+60°	+65°	+70°	+75°	+80°	+82°	+84°	+85°	
12 ^h 00 ^m	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	00 ^h 00 ^m
10	3.00	2.99	2.97	2.94	2.91	2.85	2.74	2.65	2.51	2.40	10
20	2.93	2.90	2.87	2.82	2.75	2.63	2.41	2.24	1.96	1.73	20
30	2.87	2.82	2.77	2.69	2.59	2.42	2.08	1.83	1.41	1.07	30
40	2.80	2.74	2.67	2.57	2.43	2.20	1.75	1.42	0.86	0.41	40
50	2.73	2.66	2.57	2.45	2.17	1.99	1.42	1.01	0.31	-0.24	50
13 00	2.66	2.58	2.47	2.33	2.12	1.78	1.10	0.61	-0.23	-0.88	01 00
10	2.59	2.50	2.38	2.21	1.96	1.57	0.79	0.21	-0.76	-1.52	10
20	2.53	2.42	2.28	1.99	1.81	1.37	0.48	-0.18	-1.28	-2.16	20
30	2.46	2.34	2.19	1.97	1.67	1.16	0.17	-0.57	-1.80	-2.78	30
40	2.40	2.26	2.09	1.86	1.52	0.96	-0.13	-0.95	-2.30	-3.39	40
50	2.34	2.19	2.00	1.75	1.37	0.77	-0.43	-1.32	-2.80	-3.98	50
14 00	2.28	2.12	1.92	1.64	1.23	0.58	-0.72	-1.68	-3.29	-4.56	02 00
10	2.22	2.05	1.83	1.53	1.10	0.39	-1.00	-2.04	-3.76	-5.13	10
20	2.16	1.98	1.75	1.43	0.96	0.21	-1.28	-2.38	-4.22	-5.69	20
30	2.10	1.91	1.66	1.33	0.83	0.03	-1.56	-2.72	-4.67	-6.23	30
40	2.05	1.84	1.58	1.23	0.71	-0.14	-1.79	-3.04	-5.10	-6.75	40
50	2.00	1.78	1.51	1.13	0.59	-0.30	-2.05	-3.35	-5.52	-7.25	50
15 00	1.95	1.72	1.44	1.04	0.48	-0.46	-2.29	-3.65	-5.92	-7.73	03 00
10	1.90	1.66	1.37	0.96	0.37	-0.61	-2.52	-3.94	-6.30	-8.19	10
20	1.85	1.61	1.30	0.87	0.26	-0.75	-2.74	-4.21	-6.67	-8.63	20
30	1.81	1.56	1.24	0.79	0.16	-0.89	-2.94	-4.47	-7.02	-9.05	30
40	1.77	1.51	1.18	0.72	0.06	-1.02	-3.14	-4.72	-7.35	-9.44	40
50	1.73	1.46	1.12	0.65	-0.03	-1.14	-3.32	-4.95	-7.65	-9.81	50
16 00	1.69	1.42	1.07	0.59	-0.11	-1.25	-3.49	-5.16	-7.94	-10.16	04 00
10	1.66	1.38	1.02	0.53	-0.19	-1.35	-3.66	-5.36	-8.20	-10.48	10
20	1.63	1.34	0.97	0.47	-0.26	-1.45	-3.80	-5.54	-8.45	-10.77	20
30	1.60	1.31	0.93	0.42	-0.32	-1.54	-3.93	-5.71	-8.68	-11.04	30
40	1.58	1.28	0.90	0.38	-0.38	-1.62	-4.05	-5.86	-8.88	-11.28	40
50	1.55	1.25	0.87	0.34	-0.43	-1.69	-4.16	-6.00	-9.06	-11.50	50
17 00	1.53	1.23	0.84	0.30	-0.48	-1.75	-4.25	-6.11	-9.21	-11.68	05 00
10	1.52	1.21	0.81	0.27	-0.52	-1.80	-4.33	-6.21	-9.34	-11.84	10
20	1.50	1.19	0.79	0.24	-0.55	-1.84	-4.39	-6.29	-9.45	-11.97	20
30	1.49	1.18	0.78	0.22	-0.57	-1.87	-4.44	-6.36	-9.54	-12.07	30
40	1.49	1.17	0.77	0.21	-0.59	-1.89	-4.48	-6.40	-9.60	-12.14	40
50	1.48	1.16	0.76	0.21	-0.60	-1.91	-4.50	-6.43	-9.63	-12.19	50
18 00	1.48	1.16	0.76	0.20	-0.60	-1.92	-4.51	-6.44	-9.64	-12.20	06 00
	-50°	-55°	-60°	-65°	-70°	-75°	-80°	-82°	-84°	-85°	α δ

α 7

$\delta \backslash \alpha$	0°	+5°	+10°	+15°	+20°	+25°	+30°	+35°	+40°	+45°	
18 ^h 00 ^m	3.07	2.96	2.84	2.71	2.59	2.45	2.30	2.14	1.95	1.74	06 ^h 00 ^m
10	3.07	2.96	2.84	2.71	2.59	2.45	2.30	2.14	1.95	1.74	10
20	3.07	2.96	2.84	2.72	2.59	2.45	2.30	2.14	1.96	1.74	20
30	3.07	2.96	2.84	2.72	2.59	2.45	2.31	2.14	1.96	1.75	30
40	3.07	2.96	2.84	2.72	2.59	2.45	2.31	2.14	1.97	1.76	40
50	3.07	2.96	2.84	2.72	2.60	2.46	2.32	2.15	1.98	1.77	50
19 00	3.07	2.96	2.85	2.73	2.60	2.47	2.33	2.16	1.99	1.78	07 00
10	3.07	2.96	2.85	2.73	2.61	2.48	2.34	2.17	2.00	1.80	10
20	3.07	2.96	2.85	2.73	2.62	2.49	2.35	2.19	2.02	1.82	20
30	3.07	2.96	2.86	2.74	2.62	2.49	2.36	2.20	2.04	1.84	30
40	3.07	2.97	2.86	2.75	2.63	2.50	2.37	2.22	2.06	1.86	40
50	3.07	2.97	2.86	2.75	2.64	2.52	2.39	2.24	2.08	1.89	50
20 00	3.07	2.97	2.87	2.76	2.65	2.53	2.40	2.26	2.10	1.91	08 00
10	3.07	2.97	2.87	2.77	2.66	2.54	2.42	2.28	2.13	1.94	10
20	3.07	2.97	2.88	2.78	2.67	2.56	2.44	2.30	2.15	1.98	20
30	3.07	2.98	2.89	2.79	2.69	2.58	2.46	2.32	2.18	2.01	30
40	3.07	2.98	2.89	2.80	2.70	2.59	2.48	2.35	2.21	2.03	40
50	3.07	2.98	2.90	2.81	2.71	2.60	2.50	2.38	2.25	2.08	50
21 00	3.07	2.99	2.91	2.82	2.73	2.63	2.53	2.41	2.28	2.13	09 00
10	3.07	2.99	2.91	2.83	2.74	2.65	2.55	2.44	2.32	2.16	10
20	3.07	3.00	2.92	2.84	2.76	2.68	2.58	2.47	2.35	2.20	20
30	3.07	3.00	2.93	2.85	2.78	2.69	2.60	2.50	2.39	2.25	30
40	3.07	3.00	2.94	2.87	2.79	2.71	2.63	2.53	2.43	2.30	40
50	3.07	3.01	2.95	2.88	2.81	2.74	2.66	2.57	2.47	2.35	50
22 00	3.07	3.02	2.96	2.89	2.83	2.76	2.69	2.60	2.51	2.40	10 00
10	3.07	3.02	2.96	2.91	2.85	2.78	2.72	2.64	2.56	2.45	10
20	3.07	3.02	2.97	2.92	2.87	2.81	2.75	2.67	2.60	2.50	20
30	3.07	3.03	2.98	2.93	2.89	2.83	2.78	2.71	2.64	2.55	30
40	3.07	3.03	2.99	2.95	2.91	2.86	2.81	2.75	2.69	2.61	40
50	3.07	3.03	3.00	2.96	2.93	2.88	2.84	2.79	2.74	2.67	50
23 00	3.07	3.04	3.01	2.98	2.95	2.91	2.87	2.83	2.78	2.72	11 00
10	3.07	3.04	3.02	2.99	2.97	2.94	2.91	2.87	2.83	2.78	10
20	3.07	3.05	3.03	3.01	2.99	2.96	2.94	2.91	2.88	2.84	20
30	3.07	3.05	3.04	3.02	3.01	2.99	2.97	2.95	2.93	2.90	30
40	3.07	3.06	3.05	3.04	3.03	3.02	3.01	2.99	2.98	2.96	40
50	3.07	3.07	3.06	3.06	3.05	3.04	3.04	3.03	3.02	3.01	50
24 00	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	12 00
	0°	-5°	-10°	-15°	-20°	-25°	-30°	-35°	-40°	-45°	$\alpha \backslash \delta$

$\delta \backslash \alpha$	+50°	+55°	+60°	+65°	+70°	+75°	+80°	+82°	+84°	+85°	
18 ^h 00 ^m	1.48	1.16	0.76	0.20	-0.60	-1.92	-4.51	-6.44	-9.64	-12.20	06 ^h 00 ^m
10	1.48	1.16	0.76	0.21	-0.60	-1.91	-4.50	-6.43	-9.63	-12.19	10
20	1.49	1.17	0.77	0.21	-0.59	-1.89	-4.48	-6.40	-9.60	-12.14	20
30	1.49	1.18	0.78	0.22	-0.57	-1.87	-4.44	-6.36	-9.54	-12.07	30
40	1.50	1.19	0.79	0.24	-0.55	-1.84	-4.39	-6.29	-9.45	-11.97	40
50	1.52	1.21	0.81	0.27	-0.52	-1.80	-4.33	-6.21	-9.34	-11.84	50
19 00	1.53	1.23	0.84	0.30	-0.48	-1.75	-4.25	-6.11	-9.21	-11.68	07 00
10	1.55	1.25	0.87	0.34	-0.43	-1.69	-4.16	-6.00	-9.06	-11.50	10
20	1.58	1.28	0.90	0.38	-0.38	-1.62	-4.05	-5.86	-8.88	-11.28	20
30	1.60	1.31	0.93	0.42	-0.32	-1.54	-3.93	-5.71	-8.68	-11.04	30
40	1.63	1.34	0.97	0.47	-0.26	-1.45	-3.80	-5.54	-8.45	-10.77	40
50	1.66	1.38	1.02	0.53	-0.19	-1.35	-3.66	-5.36	-8.20	-10.48	50
20 00	1.69	1.42	1.07	0.59	-0.11	-1.25	-3.49	-5.16	-7.94	-10.16	08 00
10	1.73	1.46	1.12	0.65	-0.03	-1.14	-3.32	-4.95	-7.65	-9.81	10
20	1.77	1.51	1.18	0.72	0.06	-1.02	-3.14	-4.72	-7.35	-9.44	20
30	1.81	1.56	1.24	0.79	0.16	-0.89	-2.94	-4.47	-7.02	-9.05	30
40	1.85	1.61	1.30	0.87	0.26	-0.75	-2.74	-4.21	-6.67	-8.63	40
50	1.90	1.66	1.37	0.96	0.37	-0.61	-2.52	-3.94	-6.30	-8.19	50
21 00	1.95	1.72	1.44	1.04	0.48	-0.46	-2.29	-3.65	-5.92	-7.73	09 00
10	2.00	1.78	1.51	1.13	0.59	-0.30	-2.05	-3.35	-5.52	-7.25	10
20	2.05	1.84	1.58	1.23	0.71	-0.14	-1.79	-3.04	-5.10	-6.75	20
30	2.10	1.91	1.66	1.33	0.83	0.03	-1.55	-2.72	-4.67	-6.23	30
40	2.16	1.98	1.75	1.43	0.96	0.21	-1.28	-2.38	-4.22	-5.69	40
50	2.22	2.05	1.83	1.53	1.10	0.39	-1.00	-2.04	-3.76	-5.13	50
22 00	2.28	2.12	1.92	1.64	1.23	0.58	-0.72	-1.68	-3.29	-4.56	10 00
10	2.34	2.19	2.00	1.75	1.37	0.77	-0.43	-1.32	-2.80	-3.98	10
20	2.40	2.26	2.09	1.86	1.52	0.96	-0.13	-0.95	-2.30	-3.39	20
30	2.46	2.34	2.19	1.97	1.67	1.16	0.17	-0.57	-1.80	-2.78	30
40	2.53	2.42	2.28	1.99	1.81	1.37	0.48	-0.18	-1.28	-2.16	40
50	2.59	2.50	2.38	2.21	1.96	1.57	0.79	0.21	-0.76	-1.52	50
23 00	2.66	2.58	2.47	2.33	2.12	1.78	1.10	0.61	-0.23	-0.88	11 00
10	2.73	2.66	2.57	2.45	2.17	1.99	1.42	1.01	0.31	-0.24	10
20	2.80	2.74	2.67	2.57	2.43	2.20	1.75	1.42	0.86	0.41	20
30	2.87	2.82	2.77	2.68	2.59	2.42	2.08	1.83	1.41	1.07	30
40	2.93	2.90	2.87	2.82	2.75	2.63	2.41	2.24	1.96	1.73	40
50	3.00	2.99	2.97	2.94	2.91	2.85	2.74	2.65	2.51	2.40	50
24 00	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	12 00
	-50°	-55°	-60°	-65°	-70°	-75°	-80°	-82°	-84°	-85°	$\alpha \backslash \delta$

TAB. X.

ANNUAL PRECESSION IN DECLINATION

§ 1

	00 ^h	01 ^h	02 ^h	03 ^h	04 ^h	05 ^h	06 ^h	07 ^h	08 ^h	09 ^h	10 ^h	11 ^h	
00 ^m	20.04	19.36	17.35	14.17	10.02	5.19	0.00	-5.19	-10.02	-14.17	-17.35	-19.36	60 ^m
01	20.04	19.34	17.31	14.11	9.95	5.11	-0.09	-5.27	-10.10	-14.23	-17.40	-19.38	59
02	20.04	19.31	17.27	14.05	9.87	5.02	-0.17	-5.35	-10.17	-14.29	-17.44	-19.40	58
03	20.04	19.29	17.23	13.99	9.79	4.94	-0.26	-5.44	-10.25	-14.35	-17.49	-19.43	57
04	20.04	19.26	17.18	13.92	9.71	4.85	-0.35	-5.52	-10.32	-14.41	-17.53	-19.45	56
05	20.04	19.24	17.14	13.86	9.64	4.77	-0.44	-5.61	-10.40	-14.48	-17.57	-19.47	55
06	20.03	19.21	17.09	13.80	9.56	4.68	-0.52	-5.69	-10.47	-14.54	-17.61	-19.49	54
07	20.03	19.19	17.04	13.74	9.49	4.60	-0.61	-5.78	-10.55	-14.60	-17.65	-19.51	53
08	20.03	19.16	16.99	13.67	9.41	4.51	-0.70	-5.86	-10.62	-14.66	-17.69	-19.53	52
09	20.02	19.14	16.95	13.61	9.33	4.43	-0.79	-5.95	-10.70	-14.72	-17.73	-19.55	51
10	20.02	19.11	16.90	13.54	9.25	4.34	-0.87	-6.03	-10.77	-14.77	-17.77	-19.56	50
11	20.02	19.09	16.86	13.48	9.18	4.26	-0.96	-6.11	-10.84	-14.83	-17.81	-19.58	49
12	20.01	19.06	16.81	13.41	9.10	4.17	-1.05	-6.19	-10.91	-14.89	-17.85	-19.60	48
13	20.01	19.03	16.76	13.35	9.02	4.09	-1.14	-6.28	-10.99	-14.95	-17.89	-19.62	47
14	20.00	19.00	16.71	13.28	8.94	4.00	-1.22	-6.36	-11.06	-15.01	-17.93	-19.64	46
15	20.00	18.98	16.66	13.22	8.86	3.91	-1.31	-6.44	-11.14	-15.07	-17.97	-19.66	45
16	19.99	18.95	16.61	13.15	8.78	3.82	-1.40	-6.52	-11.21	-15.12	-18.01	-19.67	44
17	19.99	18.92	16.56	13.08	8.71	3.74	-1.49	-6.61	-11.28	-15.18	-18.05	-19.69	43
18	19.98	18.89	16.51	13.01	8.63	3.65	-1.57	-6.69	-11.35	-15.24	-18.09	-19.70	42
19	19.97	18.86	16.46	12.95	8.55	3.57	-1.66	-6.77	-11.42	-15.30	-18.13	-19.72	41
20	19.96	18.83	16.41	12.88	8.47	3.48	-1.75	-6.85	-11.49	-15.35	-18.16	-19.73	40
21	19.96	18.80	16.36	12.82	8.39	3.40	-1.84	-6.94	-11.57	-15.41	-18.20	-19.75	39
22	19.95	18.77	16.31	12.75	8.31	3.31	-1.92	-7.02	-11.64	-15.46	-18.24	-19.76	38
23	19.94	18.74	16.26	12.68	8.23	3.22	-2.01	-7.10	-11.71	-15.52	-18.28	-19.78	37
24	19.93	18.71	16.21	12.61	8.15	3.13	-2.09	-7.18	-11.78	-15.57	-18.31	-19.79	36
25	19.92	18.68	16.16	12.54	8.07	3.05	-2.18	-7.26	-11.85	-15.63	-18.35	-19.81	35
26	19.91	18.64	16.11	12.47	7.99	2.96	-2.27	-7.34	-11.92	-15.68	-18.38	-19.82	34
27	19.90	18.61	16.06	12.41	7.91	2.88	-2.36	-7.43	-11.99	-15.74	-18.42	-19.84	33
28	19.89	18.58	16.00	12.34	7.83	2.79	-2.44	-7.51	-12.06	-15.79	-18.45	-19.85	32
29	19.88	18.55	15.95	12.27	7.75	2.71	-2.53	-7.59	-12.13	-15.84	-18.48	-19.86	31
30	19.87	18.51	15.89	12.20	7.67	2.62	-2.62	-7.67	-12.20	-15.89	-18.51	-19.87	30
	23 ^h	22 ^h	21 ^h	20 ^h	19 ^h	18 ^h	17 ^h	16 ^h	15 ^h	14 ^h	13 ^h	12 ^h	

	00 ^h	01 ^h	02 ^h	03 ^h	04 ^h	05 ^h	06 ^h	07 ^h	08 ^h	09 ^h	10 ^h	11 ^h	
30	19.87	18.51	15.89	12.20	7.67	2.62	-2.62	-7.67	-12.20	-15.89	-18.51	-19.87	30
31	19.86	18.48	15.84	12.13	7.59	2.53	-2.71	-7.75	-12.27	-15.95	-18.55	-19.88	29
32	19.85	18.45	15.79	12.06	7.51	2.44	-2.79	-7.83	-12.34	-16.00	-18.58	-19.89	28
33	19.84	18.42	15.74	11.99	7.43	2.36	-2.88	-7.91	-12.41	-16.06	-18.61	-19.90	27
34	19.82	18.38	15.68	11.92	7.34	2.27	-2.96	-7.99	-12.47	-16.11	-18.64	-19.91	26
35	19.81	18.35	15.63	11.85	7.26	2.18	-3.05	-8.07	-12.54	-16.16	-18.68	-19.92	25
36	19.79	18.31	15.57	11.78	7.18	2.09	-3.13	-8.15	-12.61	-16.21	-18.71	-19.93	24
37	19.78	18.28	15.52	11.71	7.10	2.01	-3.22	-8.23	-12.68	-16.26	-18.74	-19.94	23
38	19.76	18.24	15.46	11.64	7.02	1.92	-3.31	-8.31	-12.75	-16.31	-18.77	-19.95	22
39	19.75	18.20	15.41	11.57	6.94	1.84	-3.40	-8.39	-12.82	-16.36	-18.80	-19.96	21
40	19.73	18.16	15.35	11.49	6.85	1.75	-3.48	-8.47	-12.88	-16.41	-18.83	-19.96	20
41	19.72	18.13	15.30	11.42	6.77	1.66	-3.57	-8.55	-12.95	-16.46	-18.86	-19.97	19
42	19.70	18.09	15.24	11.35	6.69	1.57	-3.65	-8.63	-13.01	-16.51	-18.89	-19.98	18
43	19.69	18.05	15.18	11.28	6.61	1.49	-3.74	-8.71	-13.08	-16.56	-18.92	-19.99	17
44	19.67	18.01	15.12	11.21	6.52	1.40	-3.82	-8.78	-13.15	-16.61	-18.95	-19.99	16
45	19.66	17.97	15.07	11.14	6.44	1.31	-3.91	-8.86	-13.22	-16.66	-18.98	-20.00	15
46	19.64	17.93	15.01	11.06	6.36	1.22	-4.00	-8.94	-13.28	-16.71	-19.00	-20.00	14
47	19.62	17.89	14.95	10.99	6.28	1.14	-4.09	-9.02	-13.35	-16.76	-19.03	-20.01	13
48	19.60	17.85	14.89	10.91	6.19	1.05	-4.17	-9.10	-13.41	-16.81	-19.06	-20.01	12
49	19.58	17.81	14.73	10.84	6.11	0.96	-4.26	-9.18	-13.48	-16.86	-19.09	-20.02	11
50	19.56	17.77	14.77	10.77	6.03	0.87	-4.34	-9.25	-13.54	-16.90	-19.11	-20.02	10
51	19.55	17.73	14.72	10.70	5.95	0.79	-4.43	-9.33	-13.61	-16.95	-19.14	-20.02	09
52	19.53	17.69	14.66	10.62	5.86	0.70	-4.51	-9.41	-13.67	-16.99	-19.16	-20.03	08
53	19.51	17.65	14.60	10.55	5.78	0.61	-4.60	-9.49	-13.74	-17.04	-19.19	-20.03	07
54	19.49	17.61	14.54	10.47	5.69	0.52	-4.68	-9.56	-13.80	-17.09	-19.21	-20.03	06
55	19.47	17.57	14.48	10.40	5.61	0.44	-4.77	-9.64	-13.86	-17.14	-19.24	-20.04	05
56	19.45	17.53	14.41	10.32	5.52	0.35	-4.85	-9.71	-13.92	-17.18	-19.26	-20.04	04
57	19.43	17.49	14.35	10.25	5.44	0.26	-4.94	-9.79	-13.99	-17.23	-19.29	-20.04	03
58	19.40	17.44	14.29	10.17	5.35	0.17	-5.02	-9.87	-14.05	-17.27	-19.31	-20.04	02
59	19.38	17.40	14.23	10.10	5.27	0.09	-5.11	-9.95	-14.11	-17.31	-19.34	-20.04	01
60	19.36	17.35	14.17	10.02	5.19	0.00	-5.19	-10.02	-14.17	-17.35	-19.36	-20.04	00 ^m
	23 ^h	22 ^h	21 ^h	20 ^h	19 ^h	18 ^h	17 ^h	16 ^h	15 ^h	14 ^h	13 ^h	12 ^h	

TAB. XI.

CHANGE OF RIGHT ASCENSION IN 50 YEARS

An V	Δ AR	An V	Δ AR	An V	Δ AR	An V	Δ AR	An V	Δ AR
0°01	00 ^m 00 ^s .5	0°51	00 ^m 25 ^s .5	1°01	00 ^m 50 ^s .5	1°51	01 ^m 15 ^s .5	2°01	01 ^m 40 ^s .5
0.02	01.0	0.52	26.0	1.02	51.0	1.52	16.0	2.02	41.0
0.03	01.5	0.53	26.5	1.03	51.5	1.53	16.5	2.03	41.5
0.04	02.0	0.54	27.0	1.04	52.0	1.54	17.0	2.04	42.0
0.05	02.5	0.55	27.5	1.05	52.5	1.55	17.5	2.05	42.5
0.06	03.0	0.56	28.0	1.06	53.0	1.56	18.0	2.06	43.0
0.07	03.5	0.57	28.5	1.07	53.5	1.57	18.5	2.07	43.5
0.08	04.0	0.58	29.0	1.08	54.0	1.58	19.0	2.08	44.0
0.09	04.5	0.59	29.5	1.09	54.5	1.59	19.5	2.09	44.5
0.10	05.0	0.60	30.0	1.10	55.0	1.60	20.0	2.10	45.0
0.11	05.5	0.61	30.5	1.11	55.5	1.61	20.5	2.11	45.5
0.12	06.0	0.62	31.0	1.12	56.0	1.62	21.0	2.12	46.0
0.13	06.5	0.63	31.5	1.13	56.5	1.63	21.5	2.13	46.5
0.14	07.0	0.64	32.0	1.14	57.0	1.64	22.0	2.14	47.0
0.15	07.5	0.65	32.5	1.15	57.5	1.65	22.5	2.15	47.5
0.16	08.0	0.66	33.0	1.16	58.0	1.66	23.0	2.16	48.0
0.17	08.5	0.67	33.6	1.17	58.5	1.67	23.5	2.17	48.5
0.18	09.0	0.68	34.0	1.18	59.0	1.68	24.0	2.18	49.0
0.19	09.5	0.69	34.5	1.19	59.5	1.69	24.5	2.19	49.5
0.20	10.0	0.70	35.0	1.20	01 00.0	1.70	25.0	2.20	50.0
0.21	10.5	0.71	35.5	1.21	00.5	1.71	25.5	2.21	50.5
0.22	11.0	0.72	36.0	1.22	01.0	1.72	26.0	2.22	51.0
0.23	11.5	0.73	36.5	1.23	01.5	1.73	26.5	2.23	51.5
0.24	12.0	0.74	37.0	1.24	02.0	1.74	27.0	2.24	52.0
0.25	12.5	0.75	37.5	1.25	02.5	1.75	27.5	2.25	52.5
0.26	13.0	0.76	38.0	1.26	03.0	1.76	28.0	2.26	53.0
0.27	13.5	0.77	38.5	1.27	03.5	1.77	28.5	2.27	53.5
0.28	14.0	0.78	39.0	1.28	04.0	1.78	29.0	2.28	54.0
0.29	14.5	0.79	39.5	1.29	04.5	1.79	29.5	2.29	54.5
0.30	15.0	0.80	40.0	1.30	05.0	1.80	30.0	2.30	55.0
0.31	15.5	0.81	40.5	1.31	05.5	1.81	30.5	2.31	55.5
0.32	16.0	0.82	41.0	1.32	06.0	1.82	31.0	2.32	56.0
0.33	16.5	0.83	41.5	1.33	06.5	1.83	31.5	2.33	56.5
0.34	17.0	0.84	42.0	1.34	07.0	1.84	32.0	2.34	57.0
0.35	17.5	0.85	42.5	1.35	07.5	1.85	32.5	2.35	57.5
0.36	18.0	0.86	43.0	1.36	08.0	1.86	33.0	2.36	58.0
0.37	18.5	0.87	43.5	1.37	08.5	1.87	33.5	2.37	58.5
0.38	19.0	0.88	44.0	1.38	09.0	1.88	34.0	2.38	59.0
0.39	19.5	0.89	44.5	1.39	09.5	1.89	34.5	2.39	59.5
0.40	20.0	0.90	45.0	1.40	10.0	1.90	35.0	2.40	02 00.0
0.41	20.5	0.91	45.5	1.41	10.5	1.91	35.5	2.41	00.5
0.42	21.0	0.92	46.0	1.42	11.0	1.92	36.0	2.42	01.0
0.43	21.5	0.93	46.5	1.43	11.5	1.93	36.5	2.43	01.5
0.44	22.0	0.94	47.0	1.44	12.0	1.94	37.0	2.44	02.0
0.45	22.5	0.95	47.5	1.45	12.5	1.95	37.5	2.45	02.5
0.46	23.0	0.96	48.0	1.46	13.0	1.96	38.0	2.46	03.0
0.47	23.5	0.97	48.5	1.47	13.5	1.97	38.5	2.47	03.5
0.48	24.0	0.98	49.0	1.48	14.0	1.98	39.0	2.48	04.0
0.49	24.5	0.99	49.5	1.49	14.5	1.99	39.5	2.49	04.5
0.50	25.0	1.00	50.0	1.50	15.0	2.00	40.0	2.50	05.0

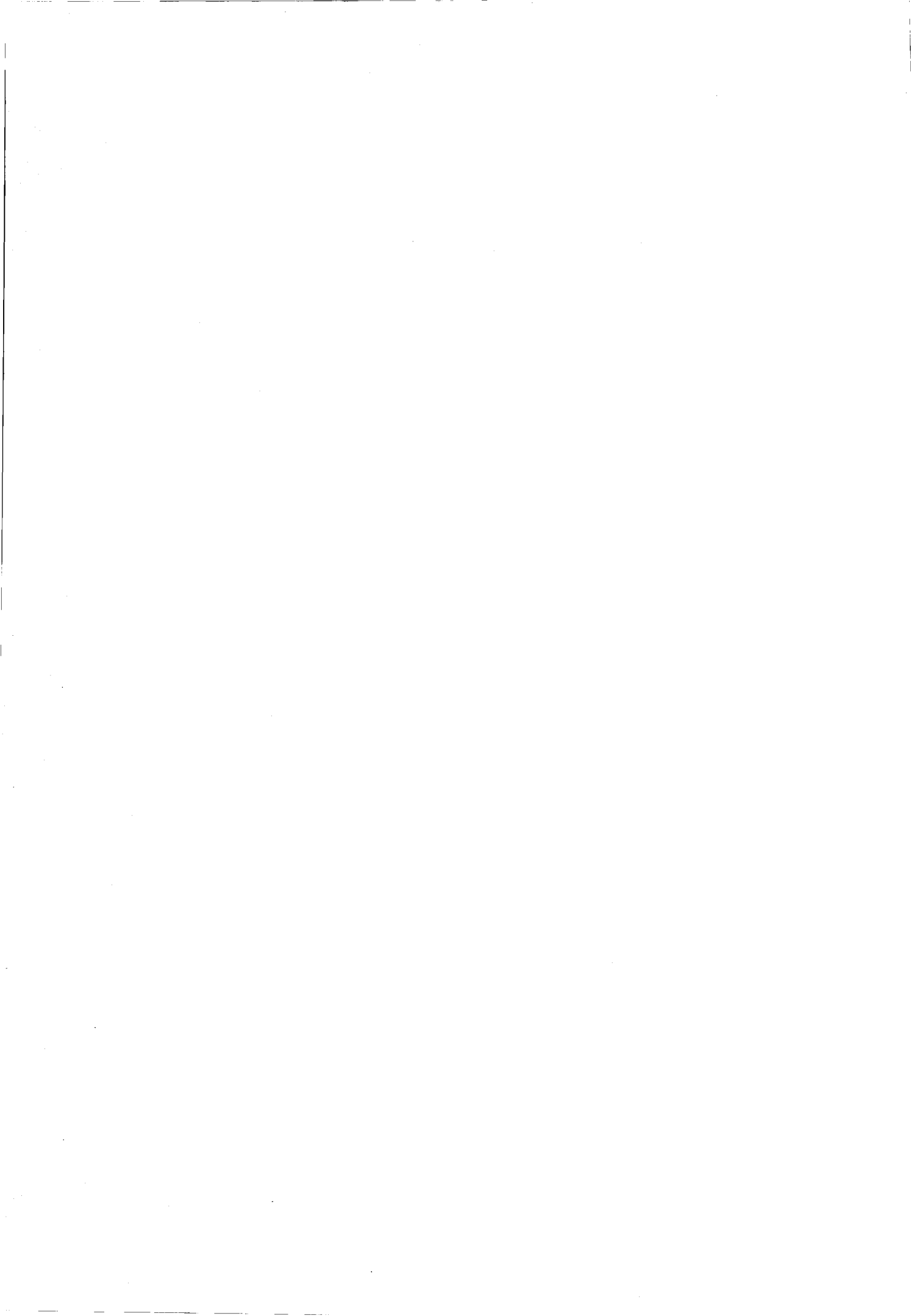
An V	Δ AR	An V	Δ AR	An V	Δ AR	An V	Δ AR	An V	Δ AR
2 ^s 51	02 ^m 05 ^s 5	3 ^s 01	02 ^m 30 ^s 5	3 ^s 51	02 ^m 55 ^s 5	4 ^s 02	03 ^m 21 ^s 0	5 ^s 02	04 ^m 11 ^s 0
2.52	06.0	3.02	31.0	3.52	56.0	4.04	22.0	5.04	12.0
2.53	06.5	3.03	31.5	3.53	56.5	4.06	23.0	5.06	13.0
2.54	07.0	3.04	32.0	3.54	57.0	4.08	24.0	5.08	14.0
2.55	07.5	3.05	32.5	3.55	57.5	4.10	25.0	5.10	15.0
2.56	08.0	3.06	33.0	3.56	58.0	4.12	26.0	5.12	16.0
2.57	08.5	3.07	33.5	3.57	58.5	4.14	27.0	5.14	17.0
2.58	09.0	3.08	34.0	3.58	59.0	4.16	28.0	5.16	18.0
2.59	09.5	3.09	34.5	3.59	59.5	4.18	29.0	5.18	19.0
2.60	10.0	3.10	35.0	3.60	03 00.0	4.20	30.0	5.20	20.0
2.61	10.5	3.11	35.5	3.61	00.5	4.22	31.0	5.22	21.0
2.62	11.0	3.12	36.0	3.62	01.0	4.24	32.0	5.24	22.0
2.63	11.5	3.13	36.5	3.63	01.5	4.26	33.0	5.26	23.0
2.64	12.0	3.14	37.0	3.64	02.0	4.28	34.0	5.28	24.0
2.65	12.5	3.15	37.5	3.65	02.5	4.30	35.0	5.30	25.0
2.66	13.0	3.16	38.0	3.66	03.0	4.32	36.0	5.32	26.0
2.67	13.5	3.17	38.5	3.67	03.5	4.34	37.0	5.34	27.0
2.68	14.0	3.18	39.0	3.68	04.0	4.36	38.0	5.36	28.0
2.69	14.5	3.19	39.5	3.69	04.5	4.38	39.0	5.38	29.0
2.70	15.0	3.20	40.0	3.70	05.0	4.40	40.0	5.40	30.0
2.71	15.5	3.21	40.5	3.71	05.5	4.42	41.0	5.42	31.0
2.72	16.0	3.22	41.0	3.72	06.0	4.44	42.0	5.44	32.0
2.73	16.5	3.23	41.5	3.73	06.5	4.46	43.0	5.46	33.0
2.74	17.0	3.24	42.0	3.74	07.0	4.48	44.0	5.48	34.0
2.75	17.5	3.25	42.5	3.75	07.5	4.50	45.0	5.50	35.0
2.76	18.0	3.26	43.0	3.76	08.0	4.52	46.0	5.52	36.0
2.77	18.5	3.27	43.5	3.77	08.5	4.54	47.0	5.54	37.0
2.78	19.0	3.28	44.0	3.78	09.0	4.56	48.0	5.56	38.0
2.79	19.5	3.29	44.5	3.79	09.5	4.58	49.0	5.58	39.0
2.80	20.0	3.30	45.0	3.80	10.0	4.60	50.0	5.60	40.0
2.81	20.5	3.31	45.5	3.81	10.5	4.62	51.0	5.62	41.0
2.82	21.0	3.32	46.0	3.82	11.0	4.64	52.0	5.64	42.0
2.83	21.5	3.33	46.5	3.83	11.5	4.66	53.0	5.66	43.0
2.84	22.0	3.34	47.0	3.84	12.0	4.68	54.0	5.68	44.0
2.85	22.5	3.35	47.5	3.85	12.5	4.70	55.0	5.70 ^m	45.0
2.86	23.0	3.36	48.0	3.86	13.0	4.72	56.0	5.72	46.0
2.87	23.5	3.37	48.5	3.87	13.5	4.74	57.0	5.74	47.0
2.88	24.0	3.38	49.0	3.88	14.0	4.76	58.0	5.76	48.0
2.89	24.5	3.39	49.5	3.89	14.5	4.78	59.0	5.78	49.0
2.90	25.0	3.40	50.0	3.90	15.0	4.80	04 00.0	5.80	50.0
2.91	25.5	3.41	50.5	3.91	15.5	4.82	01.0	5.82	51.0
2.92	26.0	3.42	51.0	3.92	16.0	4.84	02.0	5.84	52.0
2.93	26.5	3.43	51.5	3.93	16.5	4.86	03.0	5.86	53.0
2.94	27.0	3.44	52.0	3.94	17.0	4.88	04.0	5.88	54.0
2.95	27.5	3.45	52.5	3.95	17.5	4.90	05.0	5.90	55.0
2.96	28.0	3.46	53.0	3.96	18.0	4.92	06.0	5.92	56.0
2.97	28.5	3.47	53.5	3.97	18.5	4.94	07.0	5.94	57.0
2.98	29.0	3.48	54.0	3.98	19.0	4.96	08.0	5.96	58.0
2.99	29.5	3.49	54.5	3.99	19.5	4.98	09.0	5.98	59.0
3.00	30.0	3.50	55.0	4.00	20.0	5.00	10.0	6.00	05 00.0

An V	Δ AR	An V	Δ AR	An V	Δ AR	An V	Δ AR
6 ^s 02	05 ^m 01 ^s 0	7 ^s 02	05 ^m 51 ^s 0	8 ^s 02	06 ^m 41 ^s 0	9 ^s 05	07 ^m 32 ^s 5
6.04	02.0	7.04	52.0	8.04	42.0	9.10	35.0
6.06	03.0	7.06	53.0	8.06	43.0	9.15	37.5
6.08	04.0	7.08	54.0	8.08	44.0	9.20	40.0
6.10	05.0	7.10	55.0	8.10	45.0	9.25	42.5
6.12	06.0	7.12	56.0	8.12	46.0	9.30	45.0
6.14	07.0	7.14	57.0	8.14	47.0	9.35	47.5
6.16	08.0	7.16	58.0	8.16	48.0	9.40	50.0
6.18	09.0	7.18	59.0	8.18	49.0	9.45	52.5
6.20	10.0	7.20	06 00.0	8.20	50.0	9.50	55.0
6.22	11.0	7.22	01.0	8.22	51.0	9.55	57.5
6.24	12.0	7.24	02.0	8.24	52.0	9.60	08 00.0
6.26	13.0	7.26	03.0	8.26	53.0	9.65	02.5
6.28	14.0	7.28	04.0	8.28	54.0	9.70	05.0
6.30	15.0	7.30	05.0	8.30	55.0	9.75	07.5
6.32	16.0	7.32	06.0	8.32	56.0	9.80	10.0
6.34	17.0	7.34	07.0	8.34	57.0	9.85	12.5
6.36	18.0	7.36	08.0	8.36	58.0	9.90	15.0
6.38	19.0	7.38	09.0	8.38	59.0	9.95	17.5
6.40	20.0	7.40	10.0	8.40	07 00.0	10.00	20.0
6.42	21.0	7.42	11.0	8.42	01.0	10.05	22.5
6.44	22.0	7.44	12.0	8.44	02.0	10.10	25.0
6.46	23.0	7.46	13.0	8.46	03.0	10.15	27.5
6.48	24.0	7.48	14.0	8.48	04.0	10.20	30.0
6.50	25.0	7.50	15.0	8.50	05.0	10.25	32.5
6.52	26.0	7.52	16.0	8.52	06.0	10.30	35.0
6.54	27.0	7.54	17.0	8.54	07.0	10.35	37.5
6.56	28.0	7.56	18.0	8.56	08.0	10.40	40.0
6.58	29.0	7.58	19.0	8.58	09.0	10.45	42.5
6.60	30.0	7.60	20.0	8.60	10.0	10.50	45.0
6.62	31.0	7.62	21.0	8.62	11.0	10.55	47.5
6.64	32.0	7.64	22.0	8.64	12.0	10.60	50.0
6.66	33.0	7.66	23.0	8.66	13.0	10.65	52.5
6.68	34.0	7.68	24.0	8.68	14.0	10.70	55.0
6.70	35.0	7.70	25.0	8.70	15.0	10.75	57.5
6.72	36.0	7.72	26.0	8.72	16.0	10.80	09 00.0
6.74	37.0	7.74	27.0	8.74	17.0	10.85	02.5
6.76	38.0	7.76	28.0	8.76	18.0	10.90	05.0
6.78	39.0	7.78	29.0	8.78	19.0	10.95	07.5
6.80	40.0	7.80	30.0	8.80	20.0	11.00	10.0
6.82	41.0	7.82	31.0	8.82	21.0	11.10	15.0
6.84	42.0	7.84	32.0	8.84	22.0	11.20	20.0
6.86	43.0	7.86	33.0	8.86	23.0	11.30	25.0
6.88	44.0	7.88	34.0	8.88	24.0	11.40	30.0
6.90	45.0	7.90	35.0	8.90	25.0	11.50	35.0
6.92	46.0	7.92	36.0	8.92	26.0	11.60	40.0
6.94	47.0	7.94	37.0	8.94	27.0	11.70	45.0
6.96	48.0	7.96	38.0	8.96	28.0	11.80	50.0
6.98	49.0	7.98	39.0	8.98	29.0	11.90	55.0
7.00	50.0	8.00	40.0	9.00	30.0	12.00	10 00.0

TAB. XII.

CHANGE OF DECLINATION IN 50 YEARS

An V	Δ Decl		An V	Δ Decl		An V	Δ Decl		An V	Δ Decl	
0 ^o 1	0'05" = 0'1		5 ^o 1	4'15" = 4'2		10 ^o 1	8'25" = 8'4		15 ^o 1	12'35" = 12'6	
0.2	0 10	0.2	5.2	4 20	4.3	10.2	8 30	8.5	15.2	12 40	12.7
0.3	0 15	0.2	5.3	4 25	4.4	10.3	8 35	8.6	15.3	12 45	12.8
0.4	0 20	0.3	5.4	4 30	4.5	10.4	8 40	8.7	15.4	12 50	12.8
0.5	0 25	0.4	5.5	4 35	4.6	10.5	8 45	8.8	15.5	12 55	12.9
0.6	0 30	0.5	5.6	4 40	4.7	10.6	8 50	8.8	15.6	13 00	13.0
0.7	0 35	0.6	5.7	4 45	4.8	10.7	8 55	8.9	15.7	13 05	13.1
0.8	0 40	0.7	5.8	4 50	4.8	10.8	9 00	9.0	15.8	13 10	13.2
0.9	0 45	0.8	5.9	4 55	4.9	10.9	9 05	9.1	15.9	13 15	13.2
1.0	0 50	0.8	6.0	5 00	5.0	11.0	9 10	9.2	16.0	13 20	13.3
1.1	0 55	0.9	6.1	5 05	5.1	11.1	9 15	9.2	16.1	13 25	13.4
1.2	1 00	1.0	6.2	5 10	5.2	11.2	9 20	9.3	16.2	13 30	13.5
1.3	1 05	1.1	6.3	5 15	5.2	11.3	9 25	9.4	16.3	13 35	13.6
1.4	1 10	1.2	6.4	5 20	5.3	11.4	9 30	9.5	16.4	13 40	13.7
1.5	1 15	1.2	6.5	5 25	5.4	11.5	9 35	9.6	16.5	13 45	13.8
1.6	1 20	1.3	6.6	5 30	5.5	11.6	9 40	9.7	16.6	13 50	13.8
1.7	1 25	1.4	6.7	5 35	5.6	11.7	9 45	9.8	16.7	13 55	13.9
1.8	1 30	1.5	6.8	5 40	5.7	11.8	9 50	9.8	16.8	14 00	14.0
1.9	1 35	1.6	6.9	5 45	5.8	11.9	9 55	9.9	16.9	14 05	14.1
2.0	1 40	1.7	7.0	5 50	5.8	12.0	10 00	10.0	17.0	14 10	14.2
2.1	0 45	1.8	7.1	5 55	5.9	12.1	10 05	10.1	17.1	14 15	14.2
2.2	1 50	1.8	7.2	6 00	6.0	12.2	10 10	10.2	17.2	14 20	14.3
2.3	1 55	1.9	7.3	6 05	6.1	12.3	10 15	10.2	17.3	14 25	14.4
2.4	2 00	2.0	7.4	6 10	6.2	12.4	10 20	10.3	17.4	14 30	14.5
2.5	2 05	2.1	7.5	6 15	6.2	12.5	10 25	10.4	17.5	14 35	14.6
2.6	2 10	2.2	7.6	6 20	6.3	12.6	10 30	10.5	17.6	14 40	14.7
2.7	2 15	2.2	7.7	6 25	6.4	12.7	10 35	10.6	17.7	14 45	14.8
2.8	2 20	2.3	7.8	6 30	6.5	12.8	10 40	10.7	17.8	14 50	14.8
2.9	2 25	2.4	7.9	6 35	6.6	12.9	10 45	10.8	17.9	14 55	14.9
3.0	2 30	2.5	8.0	6 40	6.7	13.0	10 50	10.8	18.0	15 00	15.0
3.1	2 35	2.6	8.1	6 45	6.8	13.1	10 55	10.9	18.1	15 05	15.1
3.2	2 40	2.7	8.2	6 50	6.8	13.2	11 00	11.0	18.2	15 10	15.2
3.3	2 45	2.8	8.3	6 55	6.9	13.3	11 05	11.1	18.3	15 15	15.2
3.4	2 50	2.8	8.4	7 00	7.0	13.4	11 10	11.2	18.4	15 20	15.3
3.5	2 55	2.9	8.5	7 05	7.1	13.5	11 15	11.2	18.5	15 25	15.4
3.6	3 00	3.0	8.6	7 10	7.2	13.6	11 20	11.3	18.6	15 30	15.5
3.7	3 05	3.1	8.7	7 15	7.2	13.7	11 25	11.4	18.7	15 35	15.6
3.8	3 10	3.2	8.8	7 20	7.3	13.8	11 30	11.5	18.8	15 40	15.7
3.9	3 15	3.2	8.9	7 25	7.4	13.9	11 35	11.6	18.9	15 45	15.8
4.0	3 20	3.3	9.0	7 30	7.5	14.0	11 40	11.7	19.0	15 50	15.8
4.1	3 25	3.4	9.1	7 35	7.6	14.1	11 45	11.8	19.1	15 55	15.9
4.2	3 30	3.5	9.2	7 40	7.7	14.2	11 50	11.8	19.2	16 00	16.0
4.3	3 35	3.6	9.3	7 45	7.8	14.3	11 55	11.9	19.3	16 05	16.1
4.4	3 40	3.7	9.4	7 50	7.8	14.4	12 00	12.0	19.4	16 10	16.2
4.5	3 45	3.8	9.5	7 55	7.9	14.5	12 05	12.1	19.5	16 15	16.2
4.6	3 50	3.8	9.6	8 00	8.0	14.6	12 10	12.2	19.6	16 20	16.3
4.7	3 55	3.9	9.7	8 05	8.1	14.7	12 15	12.2	19.7	16 25	16.4
4.8	4 00	4.0	9.8	8 10	8.2	14.8	12 20	12.3	19.8	16 30	16.5
4.9	4 05	4.1	9.9	8 15	8.2	14.9	12 25	12.4	19.9	16 35	16.6
5.0	5 10	4.2	10.0	8 20	8.3	15.0	12 30	12.5	20.0	16 40	16.7
									20.1	16 45	16.8



ANTONIN BECVAR ATLAS OF THE HEAVENS - II CATALOGUE 1950.0