ПЕРЕМЕННЫЕ ЗВЕЗДЫ

Приложение Том 2, № 9 1974

Сверхгиганты в Млечном Пути

В. Баскомб

Представленная далее сводка фотометрических и спектральных данных имеет целью содействовать исследованиям кинематики звезд в Галактике и исследованиям в радиодиапазоне взаимодействия звезд высокой светимости с межзвездным газом. Была сделана попытка включить большую часть опубликованной информации о звездах I класса светимости с $M_V > -4$. Мы надеемся, что пробелы в этих данных будут учтены при составлении оптических наблюдательных программ; требуется подтверждение предварительной классификации, основанной на обзорах снимков с объективной призмой методами щелевой спектроскопии.

В таблице звезды расположены в порядке возрастания галактической долготы, обозначения звезд взяты из каталога Генри Дрэпера (HD) или Боннского, Капского и Кордобского обозрений (DM), если в этих каталогах они имеются. В таблицу включены лучевые скорости звезд по отношению к Солнцу, визуальные величины (фотоэлектрические величины имеют два десятичных знака, фотографические — подчеркнуты), спектральная классификация в системе МК (Моргана и Кинана), для цефеид — период пульсаций, принятая абсолютная звездная величина (основанная на калибровке Блаау (1963)), избыток цвета из UBV-наблюдений и оценка расстояния. Переменные звезды, относящиеся, как предполагают, к населению гало (звезды типа RV Тельца, полуправильные и некоторые цефеиды) исключены.

Усилия наблюдателей в Чили в последнее время восстановили равновесие в исследованиях на различных галактических долготах. Большинство цефеид населения I ярче 12^m должно входить в каталог, но непеременные сверхгиганты слабее 9^m возможно еще будут обнаружены во многих областях неба.

Июль 1973 г. *Поступила в редакцию 29 августа 1974 г.*

Supergiants in the Milky Way

by W. Buscombe

To facilitate studies of kinematics in the Galaxy, and of the relation of luminous stars with the interstellar gas as observed with radio telescopes, a summary of photometric and spectroscopic data is presented on the following pages. An attempt is made to include most of the published information about stars of luminosity class I, with $M_V < -4$. It is hoped that the gaps in the data will suggest optical observing programs; confirmation from slit spectrograms of provisional classifications based on objective-prism surveys would also be desirable.

Arranged in order of galactic latitude, the stars are identified by numbers in the Henry Draper Catalogue or Durchmusterung if available. Included are the radial velocity relative to the sun, visual magnitude (to two decimals if photoelectric, and underlined if only an approximate photographic estimate is given), spectral classification on MK system (or for cepheids the period of pulsation), the assumed absolute magnitude (based on Blaauw's 1963 calibration), the colour excess from UBV measures, and an estimate of the distance. Variable stars believed to be associated with the halo population (of type RV Taury, semi-regular and some cepheids) are omitted.

The recent efforts of observers in Chile have redressed the imbalance of searches in different galactic longitudes. Most cepheids of population I brighter than 12th magnitude must have been included, but non-variable supergiants fainter than 9th magnitude probably await discovery in many regions.

1973 July. Received 1974 August 29

Каталог сверхгигантов Млечного Пути

Обозначение		l_o	b_o	V_r *км/сек*	V/m_{pg} *зв.вел.*	*Спектр (МК) или период переменной в сут.*	M_V	E_{B-V} *зв.вел.*	r *кпс*
BD/Co D/CpD	HD								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-35 12911		0.3	-14.2		10.4	A0 Ia			
-31 15068	165019	0.3	- 4.8		9.6	F8 I			
		0.7	- 6.8		13	(cep	30.48?)		
-28 13565		0.8	+ 0.3		9.5	M1 I			
-32 14145	169541	0.9	- 9.5		10.9	A0 Iab			
V1816 Sgr		1.0	- 4.7		15	(cep	31.6)		
V1822 Sgr		1.0	- 5.2		15	(cep	7.52)		
X Sgr	161582	1.2	+ 0.2	-14	4.50	(cep	7.01	0.20	0.34
V1833 Sgr		1.3	- 6.8		14	(cep	48.9)		
V1304 Sgr		1.5	- 9.9		12.3	(cep	12.93)	1.2	4.6 :
-27 12032	KW Sgr	1.5	- 0.7		9.7	M3 Ia	-6.5	1.15	3.0
W Sgr	164975	1.6	- 4.0	-26	4.61	(cep	7.59)	0.2	0.40
-31 15466		1.8	- 8.4		11.2	A2 Ib			
-30 15649		2.4	- 8.3		10.5	A5 Ib			
V 777 Sgr	161387	2.4	+ 1.3		9 v	K5 Ib			
-30 15602		2.8	- 7.6		10.9	B7 Iab			
V 773 Sgr		2.8	- 0.5		12.5	(cep	5.75)	1.0	3.9 :
-27 12302	164562	2.9	- 2.7		7.4	M0 I			
		3.2	- 7.0		14	(cep	31.32)		
V 541 Oph		3.4	+ 4.2		12.3	(cep	29.53)	1.8	3.5 :
		3.5	- 6.9		14	(cep	16.85)		
V1281 Sgr		3.7	- 4.2		14	(cep	50.7)		
-29 15034		3.9	- 9.1		11.4	F3 Ib			
V1882 Sgr		3.9	- 8.4		15	(cep	2.71)		
-30 15886		3.9	-10.3		10.7	A0 Iab			
V1181 Sgr		4.1	- 4.9		12.1	(cep	21.34)	1.7	2.7 :
-28 14525		4.2	- 7.2		11.4	B9 Ib			
-29 15031	170478	4.2	- 9.0		10.3	F8 Ib			
-30 16051		4.3	-11.4		11.0	F5 I			
-28 14464		4.5	- 6.2		11.0	F3 Ib			
-24 13583		4.6	+ 0.8		10	M3 I			
V1828 Sgr		5.3	- 4.1		11.7	(cep	13.0)	1.5	2.3 :
-23 13678	163428	5.6	+ 0.3	-12	6.65	M1 Ib	-4.8	0.40	1.5
V 554 Oph		6.0	+ 4.4		11.6	(cep	14.87)	1.4	2.7 :
-24 13826	164865	6.2	- 1.2		7.62	B9 Iab	-6.5	0.88	2.0

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-23 13733		6.3	+ 0.1		9.2	M3 I			
-22 4510	164514	7.1	- 0.2	- 1	7.20	A5 Ia	-7.7	0.99	2.4
AV Sgr		7.5	- 0.6		12.0	(cep	15.4)	1.31	3.6 :
-26 13298		7.6	- 8.4		10.7	A0 Ia			
π PsA	217792	8.0	-65.7	- 7	5.1	(cep	7.98)		
HR 6144	148743	8.0	+26.7	+ 2	6.53	A7 Ib	-4.8	0.16	1.4
AP Sgr	166767	8.1	- 2.4	-18	6.95	(cep	5.06)		
-22 4575	VX Sgr	8.3	- 0.9		6.5	(semi-reg	732)		
V1996 Sgr		8.6	- 6.7		13	(cep	18.15)		
-26 13521		9.0	-11.4		10.4	A7 Ia-0			
-21 4866	165784	9.1	- 0.7	-16	6.58	A2 Ia	-7.5	0.90	1.9
-21 4858	165553	9.2	- 0.4		7.68	F9 Ib	-4.6	0.32	1.8
-25 13425		9.2	-10.5		10.1	F5 Ib			
-21 4879	166167	9.4	- 1.0		8.29	B9 Ib	-5.5	0.63	2.4
-21 4897	Case 126	9.8	- 1.0		9.78	M4 I	-5 :	0.62	3 :
μ Sgr	166937	10.0	- 1.6	- 6	3.86	B8 Ia	-7.1	0.24	1.1
-27 13617		10.0	-15.7		10.8	F6 Ib			
VY Sgr		10.1	- 1.1	- 6	11.4	(cep	13.6)	1.1	3 :
-20 5056		10.3	- 1.2		11.21	M2.5 I	-5 :	1.09	3 :
V1954 Sgr		10.6	- 1.7		12	(cep	6.18)		
-26 13857		10.6	-15.4		12.5	F0 Ib			
-26 13871		10.7	-15.6		11.5	F3 Ib			
-23 14850	172052	10.8	- 7.3		6.72	F5 Ib	-4.6	-0.29	1.2
-19 4841	165405	10.9	+ 0.9		9.1	F I			
WS 5114		11.0	- 8.4		10.0	B7 Ia			
HR 7277	179323	11.6	-16.0	+ 3	5.80	K1 I	-6 :	0	2 :
-19 4907		11.6	- 0.7		9.40	M2.5 Ib	-4.5	0.34	3.5
AX Sgr	165782	11.6	+ 0.7	+15	7.40	G8 Ia	-8.0	1.00	3.0
-27 14043		11.8	-20.5		10.6	B8 Iab			
WZ Sgr	167660	12.1	- 1.3	-10	8.0	(cep	21.8)	0.50	1.8
HR 6825	167356	12.3	- 0.8	- 1	6.10	A0 Ia	-7.1	0.24	3.2
Y Sgr	168608	12.8	- 2.1	- 4	5.74	(cep	5.77)	0.3	0.50
ν^1 Sgr	174974	12.8	-10.7	-12	5.0	K I			
AY Sgr		13.3	- 2.4	-26	10.51	(cep	6.57)	0.83	2.0
U Sgr	170764	13.7	- 4.4	+ 4	6.58	(cep	6.74)	0.5	0.60
V 350 Sgr	173297	13.8	- 8.0	+ 9	7.5	(cep	5.15)	0.32	0.92
-19 5059	170886	13.9	- 4.5	0	6.95	G3 I	-6 :	0.55:	1.8 :
RT Ser		13.9	+10.0	+73	10 v	A8 I			
HR 7114	174947	14.0	-10.1	- 8	5.69	K0 Ib	-4.4	0.06	0.96
W Ser	166126	14.4	+ 1.8	-13	8 v	G2 I			
BB Sgr	174383	14.7	- 9.0	+ 8	6.97	(cep	6.64)	0.42	0.71
WS 5043		14.8	- 2.5		12.1	F8 I			
-16 4829	168607	14.9	- 1.0	-30:	8.29	B9 Ia-0	-8.4	1.66	2.2
-16 4830	168625	14.9	- 1.0	- 4:	8.42	B8 Ia-0	-8.3	1.55	2.6
XX Sgr	169315	15.0	- 1.9	+ 2	8.9	(cep	6.42)	0.5	1.6
Case 47		15.5	+ 0.4		11.81	M1.5 I	-5:	1.69	3 :
-17 5245	171347	16.0	- 4.2		7.6	A5 Ib :			
CR Ser		16.2	+ 2.8		11.2	(cep	5.30)	0.88	1.8
-14 5013	168814	16.8	- 0.2	-15	7.26	A2 Ib	-5.0	0.67	1.10
-14 5099	170975	17.6	- 2.7	+ 1	5.9	K I			
YZ Sgr	174089	17.8	- 7.1	+19	7.20	(cep	9.55)	0.4	1.0
Case 49		17.8	- 0.6		11.12	M2 Iab	-5.6	1.46	2.9
-14 5105	171094	18.3	- 2.4		8 v	M2 Iab	-5.6	0.61	2.1
Case 48	FR Sct	18.4	+ 0.3		10.v	M2.5 Iab	-5.8	1.04	4 :
HR 7014	172594	18.8	- 4.5		6.42	F2 Ib	-4.6	0.54	0.86

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-13 5014	X Sct	19.0	- 1.6		9.99	(cep	4.20)	0.56	1.8
-12 5055	UY Sct	19.1	- 0.4		9 v	M3 Iab	-5.6	1.32	1.5
-13 5061		19.2	- 3.7		9.86	A3 Ia	-7.6	0.91	8 :
UZ Sct		19.2	- 1.5	+12	11.28	(cep	14.74)	1.00	4 :
-11 4596	168393	19.3	+ 1.8		7.4	F I			
-12 5102	171129	19.6	- 1.9		8.9	F2 I			
Y Oph	162714	20.6	+10.1	- 5	6.14	(cep	17.1)	0.74	0.44
V 367 Sct		21.6	- 0.8		13	(cep	6.29)		
υ Sgr	181615	21.8	-13.8	+ 9	4.6	A pe			
-10 4738		22.4	- 1.5		9.55	M3 I	-5.6	0.58	4.2
- 8 4645		23.2	- 0.6		10.38	M3.5 I	-5.6	0.76	4.6
HR 7055	173638	23.4	- 3.6	+10	5.70	F2 Ib:	-4 :	0.22	0.6
- 9 4790	172403	23.5	- 1.7		8.48	B9 Ib	-5.5	0.86	1.9
- 8 4663	Y Sct	24.0	- 0.9	+ 6	9.6	(cep	10.34)	0.74	2.1
- 8 4652	EV Sct	24.0	- 0.5	+24	10.15	(cep	3.09)	0.6	2.2
SS Sct	173058	25.2	- 1.8	-14	8.24	(cep	3.67)	0.37	1.0
- 6 4827	Case 132	25.7	- 0.4		10.46	M0 I	-5.6	1.19	2.9
- 6 4830	CK Sct	26.3	- 0.5		10.61	(cep	7.42)	0.8	2.5
Z Sct	172902	26.8	- 0.8	+29	9.62	(cep	12.90)	0.6	2.9
ζ Cap	204075	27.0	-43.6	+ 3	3.74	G4 Ibp	-4.5	0.08	0.4
CM Sct		27.2	- 0.4		11.0	(cep	3.92)	0.8	2.1
AN Sct		27.2	- 3.3		12.6	(cep	32.73)	1.1	10 :
- 5 4743		27.6	- 0.6		10.20	M2 I	-5.6	0.57	5 :
- 4 4573		28.0	- 0.8		9.71	B8 Iab	-6.5	1.12	3.8
TY Sct		28.0	+ 0.1	+ 7	10.8	(cep	11.05)	1.2	2.0
- 4 4548	172527	28.1	+ 0.5		8.4	A0 Ib	-5.0	0.93	1.3
CN Sct		28.1	0.0		11.9	(cep	10.0)	1.2	3.6
RU Sct	172730	28.2	+ 0.2	-12	9.5	(cep	19.70)	0.82	2.6
V 496 Aql	178287	28.2	- 7.1	+ 5	7.72	(cep	6.81)	0.63	1.1
BX Sct		28.9	- 1.7	-18	12.5	(cep	5.41)	1.1	3.6
V1162 Aql	187820	29.4	-18.6		9	(cep	5.38)		
Case 51		29.7	+ 1.9		11.03	M0 I	-5 :	1.51	2 :
HR 6497	157978	30.0	+22.4	- 4	6.0	G2 Ib	-4.5		
- 1 3542		30.7	+ 1.5		9.22	B8 Ia	-7.1	1.52	2.3
AA Ser		30.8	+ 1.7	- 9	12.0	(cep	17.14)	1.3	4 :
U Aql	183344	30.9	-11.6	- 7	6.42	(cep	7.02)	0.43	0.63
PZ Aql		30.9	- 2.3		13	(cep	8.76)		
α Cap	192876	31.1	-24.7	-26	4.55	G3 Ib	-4.5	0.19	0.5
+ 0 4030		33.5	+ 0.5		10.44	M1 I	-5.6	0.78	4.2
+ 0 4064	UW Aql	34.0	- 1.2		8.v	M0 Iab	-5.6	0.92	2.1
- 0 3627	V336 Aql	34.2	- 2.1	+12	9.9	(cep	7.30)	0.68	2.3
Case 52		35.1	+ 2.3		12.20	M2 I	-5 :	1.37	4 :
SZ Aql	177441	35.6	- 2.3	+10	8.65	(cep	17.1)	0.84	1.7
TT Aql	178359	36.0	- 3.1	0	6.94	(cep	13.8)	0.53	0.9
HR 7008	172365	36.3	+ 5.0	-18	6.38	F9 Ib	-4.6	0.2	1.2
ν Aql	182835	37.3	- 7.6	- 1	4.68	F2 Ib	-4.6	0.34	0.46
FN Aql	179474	38.5	- 3.1	+ 7	8.30	(cep	9.48)	0.60	1.7
Case 55	V492 Aql	38.6	+ 0.7		10.v	M2 Ia	-6.5	1.57	3.0
RZ Oph		38.7	+ 4.5	+ 1	10 v	F3 Ib	-4.6	1.33	1.0
+ 6 3979	175580	39.8	+ 2.3		6.8	G I			
η Aql	187929	40.9	-13.1	-15	3.88	(cep	7.18)	0.21	0.26
+ 5 4087	180028	41.0	- 2.4	- 6	6.97	F6 Ib	-4.6	0.39	1.2
Case 146		41.6	- 2.6		11.69	M2 I	-5 :	1.28	3 :
+ 6 4090	181214	42.5	- 2.9		7.7	F I			
V 600 Aql		43.9	- 2.6		10.02	(cep	7.24)	0.85	1.8

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FM Aql	178695	44.3	+ 0.9	-10	8.16	(cep	6.11)	0.94	0.6 :
+ 8 4072	182296	44.3	- 3.1	-14 :	7.07	G3 Ib	-4.5	0.27	1.5 :
V 916 Aql	230808	46.2	+ 1.6		12	(cep	13.44)		
+ 9 4226	186293	47.4	- 7.0	-17	7.79	K0 Ib	04.4	0.06	2.5
+ 9 4233	186442	47.5	- 7.1		6.52	G5 Ib	-4.5	0.23	1.2
β Aqr	204867	48.0	-37.9	+ 6	2.93	GO Ib	-4.5	0.14	0.3
EV Aql		48.0	+ 3.4		11.2	(cep	39.6)	1.2	4.7 :
Case 58		48.2	- 0.1		10.67	M0 I	-5 :	1.24	2 :
HR 7389	182900	48.5	- 1.6	-34	5.73	F5 Ib	-4.6	0.11	1.0
+14 3829	179784	48.8	+ 2.1		6.69	G5 Ib	-4.5	0.39	1.0
HR 7542	187203	49.0	- 7.5	- 5	6.54	GO Ib	-4.5	0.21	1.2
+14 3881	231195	49.1	+ 0.2		7.75	F5 Ia	-8.2	1.1	3 :
FF Aql	176155	49.2	+ 6.4	-20	5.37	(cep	4.47)	0.31	0.36
+16 3780		50.0	+ 2.8		9.9	F4 Ib	-4.6		
V 441 Her	163506	51.4	+23.2	-28	5 v	F2 Ia	-8.4	0.09	5.2
V1165 Aql	188420	51.7	- 7.8		10	(cep	6.83)		
Case 59		52.5	- 0.1		11.63	M0.51	-5 :	1.55	2 :
HR 7475	185622	53.1	- 2.7	- 4	6.37	M0 Ib	-4.7	0.43	1.2
+18 4085	183143	53.2	+ 0.6	+13	6.87	B7 Ia	-6.9	1.36	0.87
HR 7079	174160	53.8	+11.1	0	6.0	F7 Ib	-4.6		
α Sge	185758	54.4	- 2.1	+ 2	4.33	GO Ib	-4.5	0.16	0.46
+14 4158	190323	54.7	- 8.6	+25	6.77	GO Ib	-4.5	0.18	1.4
KL Aql	354511	55.1	- 7.6	- 2	10.19	(cep	6.11)	0.24	3.7
S Sge	188727	55.2	- 6.1	- 5 :	5.64	(cep	8.38)	0.20	0.60
+19 4086		55.4	- 0.9		10.3	A0 Ib	-5.2		
DG Sge		55.6	- 1.6		15	(cep	4.44)		
U Vul	185059	56.1	- 0.3	-11	7.1	(cep	7.99)	0.76	0.6
Case 60		56.2	- 0.9		11.04	M2 I	-5 :	1.33	2 :
+20 4166		56.2	+ 1.5		9.3	F I			
HR 6619	161695	56.4	+26.9	+ 2	6.20	A0 Ib	-5.2	0.06	1.7
+17 4206	190405	57.1	- 7.2	-18	6.86	F2 Ib	-4.6	0.23	1.4
+19 4165	187428	57.1	- 3.1		7.97	F8 Ib :	-4 :	0.14	2 :
HR 6676	168913	57.4	+19.2	-20	5.6	F9 Ib	-4.6	0.13	0.9
θ Del	196725	58.0	-16.6	-14	5.72	K3 Ib	-4.4	0.06	0.9
+28 3085	174104	58.6	+13.4	-14	8.37	F0 Ib	-4.5	0.07	3.5
+23 3706	184943	59.1	+ 1.6	+21	8.20	B9 Ib	-5.6	0.77	2.0
Case 148		59.2	- 2.0		11.40	M0.5 I	-5 :		
BR Vul		59.4	- 1.0		12	(cep	5.20)		
+22 3812	187238	59.5	- 1.4		7.20	K3 I	-5 :	0.5	1.5 :
+24 3768	183864	59.6	+ 3.2		8.65	G2 Ib	-4.5	0.3	2.9
+23 3730		59.7	+ 0.8	+17	9.28	B8 Ib	-5.6	0.08	2.1
+22 3840	188037	59.7	- 2.5		8.v	M2 I	-5.6	1.4	0.6
α Aqr	209750	59.9	-42.0	+ 8	2.98	G2 Ib	-4.5	0.16	0.3
+23 3760	186745	60.2	- 0.3	+ 1	7.03	B8 Ia	-7.1	1.02	1.7
HR 7308	190583	60.6	+ 7.5	-16	6.24	F6 Ib :	-4 :	0.12	0.9 :
+24 3889	187299	61.5	- 0.3	+ 1	7.12	G5 Iab	-6.2	0.52	2.3
+24 3902		61.6	- 0.7		9.v	M2 Ia	-6.5	1.42	1.9 :
+24 3914	187983	61.9	- 1.0	- 3	5.58	A1 Iab	-6.5	0.68	1.0
HR 7573	187982	61.9	- 1.0	- 3	5.52	A2 Iab	-6.7	0.72	1.0
GQ Vul		62.3	+ 0.3		15	(cep	12.65)		
HR 7657	190004	63.0	- 3.0	-33	5.23	F2 Ib	-4.6	0.09	0.83
S Vul	338867	63.4	+ 0.8	- 2	9.00	(cep	67.9)	0.90	3.9
HR 7741	192713	63.5	- 6.3	-23	5.27	B2 Ib	-4.5	0.04	0.8
X Vul	339279	63.8	- 1.3	-13	10	(cep	6.32)	0.8	1.0
+27 3513	332757	63.9	+ 1.5	+ 3	8.31	A2 Ia	-7.5	0.41	8 :

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
AS Vul		63.9	+ 1.3		12.2	(cep	12.22)	1.1	5 :
SV Vul	187921	64.0	+ 0.3	- 1	7.24	(cep	45.10)	0.58	2.1
+25 4103	191010	64.2	- 3.5	+22	8.29	G3 Ib	-4.5	0.18	2.8
+24 4085	193205	64.6	- 6.3		8.7	F6 Ib	-4.6		
SU Cyg	186688	64.8	+ 2.5	-31	6.88	(cep	3.85)	0.19	0.94
+28 3511	188121	65.0	+ 0.7	-14	8.6	F I			
+27 3550		65.0	+ 0.3	+ 1	8.94	A2 Iab	-6.7	0.98	3.5
DG Vul		65.0	- 0.9		14	(cep	13.6)	1.0	1.5
+29 3754	187399	65.3	+ 1.8	-19	6.92	B7 Iae	-7.1	0.26	4.6
ε Peg	206778	65.6	-31.5	+ 5	2.44	K2 Ib	-4.4	0.15	0.19
GH Cyg		66.5	- 0.1	-19	9.94	(cep	7.82)	0.6	2.1
KP Cyg		66.6	+ 3.5		14	(cep	4.29)		
+32 3503	V924 Cyg	66.9	+ 5.3		10.71	(cep	5.57)	0.29	4.6
EZ Cyg		67.1	+ 0.6		11.0	(cep	11.7)	0.8	3.8 :
+28 3612		67.1	- 1.3		9.50	F2 Ib	-4.6	1.11	1.4
+29 3861	333251	67.2	- 0.4	-24	8.38	F5 Ib	-4.6	0.56	1.8
+31 3797		67.2	+ 2.7		9.9	F3 Ib	-4.6		
+29 2873	190403	67.5	- 0.6	-12	6.80	G5 Ib	-4.5	0.1	1.5
EX Cyg		67.5	+ 1.7		13.2	(cep	4.79)	1.1	5 :
Case 61	V717 Cyg	67.9	+ 0.3		10v	M2 Iab	-5.6	1.03	3.0
Case 62		67.9	- 0.3		10.29	M2.5 I	-5.6	1.0	3.8 :
V1025 Cyg		67.9	+ 0.4		14	(cep	6.96)		
XY Lyr	172380	68.4	+19.3	-19	5.8	M4 Ib :	-4 :		
Case 149		68.5	- 1.8		11.00	M1.5 I	-5 :	0.94	4 :
+31 3907	331777	69.1	+ 0.5		8.16	F8 Ia	-8.0	1.0	4 :
V1020 Cyg		69.3	+ 1.6		15	(cep	4.92)		
V1033 Cyg		69.9	+ 0.5		15	(cep	4.94)		
+30 3980		69.9	- 2.8		8.28	B9 Ib	-5.5	0.82	1.8
GI Cyg		70.2	+ 2.1		11.9	(cep	5.78)	0.9	4 :
+31 3996		70.4	- 1.3		10.8	B9 Ib	-5.5		
+33 3697		70.6	+ 1.6		9.7	F8 Ib	-4.6		
+32 3720	191496	70.8	+ 0.1	-40	7.48	A9 Ib	-4.8	0.08	2.5
+33 3729		70.9	+ 1.0		10.1	F4 Ib	-4.6		
MW Cyg	331970	70.9	- 0.6	-13	9.51	(cep	5.95)	0.63	1.5
CD Cyg	227463	71.1	+ 1.4	-11	8.94	(cep	17.07)	0.54	2.6
+32 3761		71.2	- 1.4		9.97	B3 Iap	-6.8	0.64	9 :
HR 8313	206859	72.0	-26.5	-22	4.31	G5 Ib	-4.5	0.19	0.4
T Vul	198726	72.1	-10.1	- 1	5.8	(cep	4.44)	0.15	0.62
+35 3920	190113	72.1	+ 2.7	+11	7.95	G5 Ib	-4.5	0.5	1.4
		72.2	+ 1.5		16	(cep	12.98)		
+36 3841	190467	72.9	+ 2.8	-32 :	8.0	B I			
V 492 Cyg		72.9	+ 1.0		11.6	(cep	7.58)	1.0	3.3
+38 3786		73.0	+ 6.3		9.86	F6 Ib	-4.6	0.39	4.6
V 495 Cyg		73.1	- 0.1		12	(cep	6.72)		
V 425 Cyg	227836	73.2	+ 1.9	-16 :	10 v	A2 Iab	-6.8		
HR 7770	193370	73.4	+ 0.5	-14	5.17	F5 Ib	-4.6	0.30	1.0
QY Cyg		73.5	+ 4.2		15	(cep	3.89)		
V 383 Cyg		73.9	- 2.8	-20	10.8	(cep	4.61)	0.96	1.7
+38 3790	226223	73.7	+ 6.0		9.28	F6 Ib	-4.6	0.47	3.2
+35 4077		74.2	- 0.6		9.77	M3 Iab	-5.6	1.34	1.9
+25 4498	202618	74.3	-15.6		7.3	F2 Ib	-4.6		
V1046 Cyg		74.5	+ 0.6		15	(cep	4.94)		
V 336 Cyg		74.6	+ 4.7		16	(cep	15.8)		
+36 4030	229086	74.9	0.0	- 6 :	9.6	A5 Ib	-4.8		
V 343 Cyg		75.3	+ 4.2		15	(cep	11.93)		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GL Cyg		75.3	+ 4.3		14	(cep	3.37)		
+36 4025	BI Cyg	75.3	+ 0.2		9.v	M3 Iab	-5.8	1.28	1.3
HR 7866	196093	75.4	- 2.9	- 4	4.58	K2 Ib	-4.4	0.3	0.40
+37 3872		75.5	+ 1.0		10.3	F5 Ib	-4.6		
+37 3827		75.6	+ 2.3		8.22	F3 Ib	-4.6	0.66	1.4
HR 7835	195324	75.9	- 1.5	-18	5.88	A1 Ib	-5.1	0.57	0.72
+37 5903	BC Cyg	75.8	+ 0.4	- 3	10v	M3.5 Ia	-6.5	1.51	1.7
+39 4020	190446	76.2	+ 4.9		8.29	F6 Ib	-4.6	0.06	3.5
HR 7847	195593	76.4	- 1.4	-22	6.24	F5 Iab	-6.4	0.7	1.4
V 554 Cyg		76.5	+ 4.2		13.7	(cep	4.33)	1.2	4.6 :
DT Cyg	201078	76.6	-10.8	0	5.78	(cep	2.50)	0.14	0.5
HR 8321	207089	76.6	-22.8	-12	5.29	K0 Ib	-4.4	0.2	0.6
HR 8126	202314	76.7	-12.9	- 4	6.2	G2 Ib	-4.5	0.09	1.2
+38 4003	193469	76.8	+ 1.7	+14	6.30	K5 Ib	-4.4	0.3	1.0
X Cyg	197572	76.9	- 4.2	+ 9	6.39	(cep	16.4)	0.48	0.8
+39 4087		77.0	+ 3.3		11.1	A7 Ib	-4.8		
Case 66	KY Cyg	77.0	+ 0.2		11.v	M3 Ia	-6.5	1.96	2.0 :
+39 4115	193182	77.1	+ 2.3	-11 :	6.52	A0 Ia			
+50 2457	161796	77.1	+ 30.9	-53	7.05	F3 Ib	-4.6	0.12	1.8
V1154 Cyg		77.2	+ 8.8		10	(cep	4.93)		
+40 4015	190916	77.3	+ 5.0		7.62	B9 Iab	-6.5	0.51	3.3
+38 4098		77.5	+ 0.2		8.96	B9 Ib	-5.6	0.94	2.2
+39 4130	193426	77.7	+ 2.4	-19	8.0	B9 Ia	-7.1	1.21	2.0
V 438 Cyg		77.6	+ 2.3		11.0	(cep	11.21)	1.2	2.2
γ Cyg	194093	78.2	+ 1.9	- 8	2.24	F8 Ib	-4.6	0.18	0.20
+39 4208	RW Cyg	78.6	+ 0.7		9v	M2 Iab	-5.6	1.22	1.4
KX Cyg		78.6	+ 1.7		11.4	(cep	20.05)	1.82	1.6
V 396 Cyg		79.0	+ 3.8		10.6	(cep	33.25)	1.6	2.2
+43 3477		79.1	+ 6.3		10.11	M0 I	-5.6	0.89	3.0 :
Case 67		79.3	+ 1.8		11.93	M1 I	-5 :	1.80	2 :
Case 69		79.5	+ 0.7		11.79	M1 I	-5 :	1.80	2 :
β Dra	159181	79.6	+33.3	-20	2.85	G2 Ib	-4.5	0.11	0.3
VI Cyg #12		80.1	+ 0.3		11.5	B8 Ia-0	-8.3	3.20	1.1
+42 3692	193610	80.1	+ 3.8	- 9	7.7	A0 Ib :	-5.2	1.00	1.0 :
V 367 Cyg	198287	80.3	- 2.7	- 2	7 v	A7 Ia	-8.0	0.57	4 :
V 381 Cyg		80.4	+ 9.2		14	(cep	4.88)		
+41 3770	195405	80.8	+ 2.1		8.2	G I			
+39 4379	VX Cyg	82.2	- 3.5	-18	10.04	(cep	20.1)	0.85	3.5 :
KU Cyg		83.1	+ 7.3		11 v	F4 pe I	-6		
+39 4423	VY Cyg	82.9	- 4.6	-10	9.60	(cep	7.86)	0.6	1.8
HR 8157	203156	83.6	- 8.0	+ 9	5.8	(cep	3.34)	0.12	0.5
HR 7751	192909	83.7	+ 7.0	-14	4.1	B5 Ib	-4.4	0.32	0.2
σ Cyg	202850	84.2	- 6.9	- 4	4.24	B9 Iab	-6.5	0.16	1.2
α Cyg	197345	84.3	+ 2.0	- 5	1.33	A2 Ia	-7.5	0.11	0.50
+42 3935	TX Cyg	84.4	- 2.3	-20	9.44	(cep	14.71)	1.34	1.0 :
SZ Cyg	196018	84.5	+ 4.0	-12	9.40	(cep	15.11)	0.56	2.3
+44 3571	BZ Cyg	84.8	+ 1.4	-14	10.26	(cep	10.14)	1.1	1.4 :
V 514 Cyg		85.0	+ 1.5		11.4	(cep	5.10)	1.1	2.2 :
+41 4049	V386 Cyg	85.5	- 4.9	-10	9.60	(cep	5.26)	0.9	1.2
+45 3303		85.9	+ 1.2	-20	8.8	A0 Ib	-5.2		
ξ Cyg	200905	85.9	- 2.1	-20	3.70	K5 Ib	-4.4	0.05	0.40
V 347 Cyg		86.0	+ 1.2		12.4	(cep	8.74)	1.4	2.9 :
+44 3646		86.1	00.0	-21	9.1	A5 Ib	-4.8		
+44 3661	200102	86.1	- 0.7	-24	6.62	G1 Ib	-4.5	0.3	1.1
HR 6978	171635	86.2	+25.0	-12	4.79	F7 Ib	-4.6	0.1	0.60

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
+45 3326	199311	86.5	+ 0.8	-32 :	6.69	A3 Ib	-4.8	0.02	1.9
+44 3688	200805	86.8	- 1.2		8.26	F5 Ib	-4.6	0.3	2.5
HR 9103	225212	87.0	-70.0	-42	5.06	K3 Ib	-4.4	0.18	0.60
+45 3349	AZ Cyg	87.1	+ 0.5		9v	M3 Ia	-6.5	0.83	2.9
+47 3201		87.3	+ 2.2		9.5	Ai I			
+47 3200	198794	87.5	+ 2.4	-20	7.2	K3 Ib	-4.4		
HR 8020	199478	87.5	+ 1.4	-16	5.66	B8 Ia	-7.1	0.5	1.7
HR 7428	184398	87.5	+16.9	- 6	6.5	G I			
V 520 Cyg		87.5	+ 1.6		10.8	(cep	4.05)	0.9	1.9 :
+45 3406		87.6	- 1.0		9.3	A I			
+45 3395		87.9	- 0.3		8.09	K2 Ib	-4.4	0.43	2.2 :
Case 72		87.8	+ 0.6		11.15	M2.5 I	-5 :	0.91	5 :
+46 3174	201066	88.3	- 0.1	-40	7.59	K5 Ib	-4.4	0.32	2.0
+46 3167	200945	88.3	+ 0.1	-44	7.73	K2 Ib	-4.4	0.35	2.1
+38 4611	207489	88.3	-11.3	-58	7.18	F5 Ib	-4.6	0.30	1.5
V 356 Cyg		88.3	- 0.6		12.1	(cep	5.06)	1.1	3 :
HR 8089	201251	88.9	+ 0.2	-26	4.54	K3 Ib	-4.4	0.20	0.46
+44 3779	V532 Cyg	89.0	- 3.0		9.08	(cep	3.28)	0.58	1.0
+47 3302		89.1	0.0		9.5	A I			
+44 3832	204710	89.7	- 4.5		6.95	B8 Ib	-5.6	0.35	2.0
HR 8345	207673	89.9	- 9.8	- 2	6.49	A2 Ib	-5.0	0.5	0.9
V 459 Cyg		90.5	+ 0.7		10.63	(cep	7.25)	0.84	2.2
HR 8248	205349	90.8	- 4.3	- 5	6.24	K1 Ib	-4.4	0.52	0.7
+42 4233	VZ Cyg	91.5	- 8.5	-16	8.94	(cep	4.86)	0.3	1.7
+47 3421		91.8	- 2.2		9.54	AO Ib	-6.5	0.58	4 :
V 641 Cyg		92.2	- 4.3		15	(cep	3.53)		
Cyg		92.4	- 1.8		14	(cep	4.35)		
+49 3516	204022	92.9	+ 0.1		7.40	GO Ib	-4.5	0.63	1.0
+42 4267	BG Lac	93.0	- 9.3	-20	8.92	(cep	5.33)	0.40	1.8
V 621 Cyg		93.0	- 1.8		11.9	(cep	5.86)	0.6	5 :
+50 3344	235518	93.7	- 0.2		8.22	F8 Ib	-4.6	0.54	1.7
NGC 7243	no. 17	93.9	-12.7		10.27	K2 Ib	-4.4	0.49	4.4
+44 4014		94.3	- 7.5		9.6	AO I			
+47 3584	207991	95.0	- 4.3	+36 :	6.87	K5 Ib	-4.4	0.21	1.3
HR 8796	218356	95.1	-31.7	-27	5 v	KO Ibp	-4.4	0.25	0.5
HR 8242	205114	95.2	+ 0.9	-24	6.17	G2 Ib :	-4.5	0.04	1.3
V 538 Cyg		95.3	- 0.4		10.46	(cep	6.12)		
+49 3631	207647	95.4	- 3.2		7.00	M4 Ib	-4.5	0.25	1.4
AR Lac	210334	95.4	- 8.3	-35	7 v	K + G			
DR Cep		95.8	+ 9.5		14	(cep	19.07)		
V 609 Cyg		96.0	+ 2.7		10.8	(cep	31.1)	1.4	2.8
+47 3660	209329	96.1	- 5.5		7.9	FO Ib	-4.7		
+51 3135	207119	96.6	- 0.8		6.42	K5 Ib	-4.4	0.29	1.0
+31 4829	217754	97.4	-25.6	-17	6.59	F2 Ib	-4.6	0.06	1.6
HR 8164	203338	98.2	+ 6.4	-21	5.66	M1 Ibep	-4.7	0.4	0.7
Z Mic	202380	98.7	+ 8.0	-15	6.62	M3 Ib	-4.8	0.75	0.7
Vat 329		98.7	- 3.6		16	(cep	2.63)		
Y Lac	235739	98.7	- 4.0	-18	9.17	(cep	4.32)	0.2	2.4
+56 2621		99.2	+ 3.6		10.3	A5 Ib	-4.8		
+56 2626		99.1	+ 2.9		9.5	A I			
+52 3095	209900	99.7	- 1.7	-58	8.71	AO Ib	-5.2	0.45	3 :
HR 8752	213310	99.7	- 8.6	- 4	4.35	MO Iab	-5.8	0.04	1.0
HR 8443	210221	99.8	- 2.0	-26	6.14	A3 Ib	-5.6	0.34	1.4
HR 8541	212593	99.9	- 6.7	-26	4.51	B9 Iab	-6.5	0.13	1.3
HR 8371	208501	100.4	+ 1.7	-15	5.79	B8 Ib	-5.6	0.83	0.60

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CP Cep		100.4	+ 1.1		10.55	(cep	17.9)	0.68	3.5 :
μ Cep	206936	100.6	+ 4.3	+19	4 v	M2e Ia	-6.5	0.6	0.6 :
+52 3147		100.8	- 2.3		10.3	A1 I			
WX Lac		101.0	- 1.7		14	(cep	7.52)		
+52 3167	235781	101.2	- 2.6	-66	8.59	B6 Ib	-5.7	0.57	3.3
+54 2698		101.5	- 0.8	-56	10	M I			
+55 2682		101.5	+ 0.3	+16	8.63	F2 Ib	-4.6	0.78	1.7
Vat 300		101.5	+ 1.5		15	(cep	7.35)		
+61 2134	SW Cep	101.5	+ 8.5		9 v	M3.5 I	-5.2	0.61	2.5
Vat 337		102.0	+ 0.1		16	(cep	4.56)		
DF Lac		102.2	- 2.2		11.84	(cep	4.48)	0.60	4.8
ν Cep	207260	102.3	+ 5.9	-21	4.29	A2 Ia	-7.5	0.46	1.15
+56 2733	239886	102.7	+ 0.8	-59	8.84	B9 Iab	-6.5	0.91	3.3
+54 2756	212455	102.8	- 1.7	-55	7.87	B5 Iab	-5.7	0.48	3.5
+55 2712		102.8	- 0.2		9.45	A5 Ib	-4.8	0.80	2.2
+54 2750	212312	102.9	- 1.4	-57	8.43	F2 Ib	-4.6	0.40	2.0
+49 3932		103.0	- 7.9		10.1	A0 Ib	-5.2		
+56 2735	239895	103.0	+ 1.1	-53	8.63	B8 Ia	-7.1	1.11	3.0
ζ Cep	210745	103.1	+ 1.7	-18	3.31	K1 Ib	-4.4	0.43	0.19
+56 2748		103.2	+ 0.4		11.6	A9 Ib	-4.8		
RW Cep	212466	103.2	- 1.1	-54	7 v	K5 Ia-0	-7.5	0.6	3 :
+60 2321		103.4	+ 4.9		9.2	F I			
HR 8374	208606	103.5	+ 5.5	-32	6.13	G8 Ib	-4.5	0.54	0.63
+57 2493	211540	103.5	+ 1.1	+ 9	8.2	K5 I			
+58 2396	AZ Cep	103.7	+ 3.0		10.0 v	M2 Ia	-6.5	0.96	4.0
+55 2753		103.9	- 1.3		10.0	F2 Ib	-4.6		
+56 2774		104.1	- 0.2		10.4	A4 Ib	-4.8		
HR 8692	216206	104.1	- 7.7	- 9	6.19	G4 Ib	-4.5	0.2	1.0
+56 2795	213482	104.5	- 0.9		8.6	F8 Ib	-4.6		
HR 8726	216946	104.6	- 7.0	-10	4.92	K5 Ib	-4.4	0.21	0.6
ST Cep	239978	104.6	- 0.8		8.v	M2 Ib	-4.5	0.57	1.2
+56 2794	213470	104.7	- 0.6	-61	6.65	A3 Ia	-7.6	0.47	2.5
+60 2349		104.9	+ 4.7		9.9	A3 Ib	-4.8		
VV Cep	208816	104.9	+ 7.1	-19	5 v	M2 Iaep	-6.5	0.3	1.3
+59 2506	211971	105.1	+ 2.7	-17	6.89	A2 Ib	-5.6	0.93	0.87
AK Cep		105.1	+ 0.4	-46	11.23	(cep	7.23)	0.75	3.8
δ Cep	213306	105.2	+ 0.5	-17	3.96	(cep	5.37)	0.13	0.26
Case 74		105.5	+ 1.3		11.15	M1.5 I	-5 :	1.59	2 :
+61 2265		105.6	+ 5.2		9.2	A I			
RR Lac	240024	105.6	- 2.0	-35	8.91	(cep	6.42)	0.30	2.2
U Lac	215924	105.8	- 3.4	-68	8.7 v	M4 Iab	-5.8	0.7	2.9
Z Lac	214975	105.8	- 1.6	-25	8:37	(cep	10.9)	0.4	1.7
Case 75		105.9	+ 0.6		11.v	M3.5 Ia	-6.5	1.50	4.0 :
Vat 322		105.9	- 3.4		14	(cep	5.66)		
W Cep	214369	106.0	+ 0.1	-32	8 v	K0 Iaep	-8.0		
+63 1815		106.4	+ 6.6		7.8	A I			
V Lac	240073	106.5	- 2.6	-20	8.89	(cep	4.98)	0.3	1.5
X Lac	216105	106.5	- 2.5	-26	8.39	(cep	5.44)	0.46	1.1 :
+58 2468		107.1	+ 0.9		11.5	A0 I			
CR Cep	240059	107.6	+ 0.3		9.63	(cep	6.23)	0.70	1.7
Case 78		107.9	0.0		10.76	M2 Ib	-4.8	1.26	2 :
+56 2902		108.0	- 1.7		11.0	A3 Ib	-4.8		
HR 8752	217476	108.2	- 2.7	-58	5 v	G0 Ia	-8.0	0.7	1.7
+58 2511	216927	108.5	- 0.7	-58 :	8.31	B9 Ia	-7.1	0.92	3.5 :
+56 2953	218600	109.2	- 3.2		8.7	F2 Ib	-4.6		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Case 76		109.4	+ 0.5		10.95	M1 I	-5 :	2.01	2 :
+55 2919	219135	109.6	- 3.8		7.61	G0 Ib	-4.5	0.33	1.7
SW Cae		109.7	- 1.6	-38	9.64	(cep	5.44)	0.50	2.0
+57 2700		109.9	- 2.1		9.5	A I			
Case 80		111.1	+ 0.7	-61	9.72	M2 Iab	-5.6	0.96	3.1
Case 81		111.1	- 0.1	-82	9.87	M2 Ib	-4.4	1.04	2.1
ψ And	223047	111.3	-15.0	-25	4.95	G5 Ib	-4.5	0.11	0.7 :
+60 2499		111.4	+ 0.6	-27	10.6	B6 Ib	-5.6	0.54	4.5
+59 2695		111.5	- 0.9	-45	8.77	B9 Ib	-5.5	0.65	4.2
	240250	111.6	- 0.8	-54	8.81	B9 Iab	-6.5	0.66	4.6
	240256	111.7	- 0.4	-64	8.87	B8 Ib	-5.6	0.37	4.0
+59 2700		111.9	- 0.3		10.2	F1 Ib	-4.6		
+59 2701	220102	111.9	- 0.6	-24	6.7	F2 Ib :	-4 :		
+58 2588p		112.1	- 1.3	-57	9.43	B5 I	-6 :	0.9	
BSD 622	(SA19)	112.1	- 1.4	-39	10.60	B5 I	-6 :	0.9	
BSD 629	(SA19)	112.2	- 1.1	- 9	10.84	B5 I	-6 :	0.7	
+58 2588f		112.2	- 1.3	+21	10.3	A0 Ib	-5.2		
+66 1569		112.3	+ 6.6		9.3	F8 I			
+57 2750	V358 Cae	112.3	- 3.2	-76	10 v	M3 Ia	-6.5	1.07	3.2
BSD 1233	(SA19)	112.4	- 0.5	-25	11.1	B7 Ib	-5.6	0.49	4 :
+57 2757		112.5	- 3.4		10.4	B9 Ib	-5.5		
+61 2423	219978	112.6	+ 1.7	-19 :	6.71	K5 Ib	-4.5	0.69	0.63
+58 2597		112.6	- 1.6	-43 :	10.08	A2 Ib	-5.0	1.44	1.4
Case 86		112.7	- 1.4		11.37	M0.5 I	-5 :	1.22	3 :
+60 2532		112.8	+ 0.4	-42	8.33	F7 Ib	-5.6	0.81	1.3
BSD 1250	(SA19)	112.8	- 0.2	-12	10.8	A0 Ia	-7.1		
+58 2608		112.8	- 2.2	-12 :	9.98	B5 I	-6 :	0.70	
+58 2609	221439	112.8	- 2.2	- 3	7.36	K0 Ib :	-4.4	0.23	1.7 :
+62 2210		112.8	+ 2.5	-22	8.42	B9 Ia	-7.1	1.21	2.4
+60- 2546		112.9	- 0.4	-49	8.87	A2 Iab	-6.7	1.06	3.0
CH Cas		112.9	+ 1.6		11.04	(cep	15.1)	1.0	3.5
+60 2539	220770	112.9	+ 0.2	-53	7.84	A5 Ib	-4.8	0.73	1.3
+60 2554		113.0	- 0.4	+ 2 :	9.76	A5 Ia :	-8 :	0.36	
+56 3043		113.0	- 4.3		9.9	A0 Ib	-5.2		
+60 2542		113.0	+ 0.2	- 6	8.81	A2 Ib	-5.6	0.60	3.3
Case 88		113.1	- 1.1		11.05	M2 I	-5 :	1.60	2 :
+61 2452		113.1	+ 0.6		9.88	A5 Ib	-4.8	0.43	4.8
HR 9053	224165	113.2	-14.4	-16	6.03	G8 Ib	-4.5	0.15	1.0
+58 2613	240331	113.3	- 1.6	-15	9.12	A4 Ib	-4.8	0.46	3.2
DT Cas		113.3	- 21		12.9	(cep	4.79)	1.3	3 :
Case 6		113.4	- 0.6		11.69	B7 Ib	-5.6	0.81	
+61 2450		113.4	+ 1.5		9.26	F I			
+60 2582		113.8	- 0.6	-64	8.68	B8 Iab	-6.5	0.86	3.3
DW Cas		113.8	- 2.2		11.12	(cep	5.00)	0.76	3.1
+61 2472		113.9	+ 0.7		9.65	B6 Iab	-6.4	1.19	2.8
CY Cas		119.6	+ 2.0		11.62	(cep	14.4)	1.08	4 :
CN Cep		113.9	+ 3.4		12.1	(cep	9.50)	1.2	3.4
+60 2589		114.2	+ 0.1		9183	F I	-6 :		
+58 2637		114.2	- 2.7		9.12	B8 Ib	-5.6 :	1.01	2.0 :
+61 2487	RS Cas	114.5	+ 0.8	-25	9.91	(cep	6.30)	0.8	1.7 :
CZ Cas		114.7	+ 0.7		11.77	(cep	5.66)	0.70	4.5
+60 2613	PZ Cas	115.0	0.0	-59	9 v	M3 Ia	-6.5	1.05	2.2
+58 2651		115.0	- 2.4		9.93	B5 Ib	-5.7	0.72	5.0
V 405 Cas		115.1	+ 1.2		12	(cep	7.80)		
Case 35		115.2	+ 0.3		10.52	A4 Ib	-4.8	0.87	3.2

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RY Cas		115.3	- 3.2	-70	9.86	(cep	12.14)	0.66	2.6
ρ Cas	224014	115.3	- 4.5	-43	4.38	F8 Iaep	-8.0	0.6	1.3
KK Cas		115.3	- 2.0		11.9	(cep	8.19)	1.0	3.8 :
Case 47		115.4	+ 0.3		11.42	B6 Iab	-6.3	0.86	
+65 2515		115.4	+ 0.4		9.5	A I			
CD Cas		115.5	+ 1.1		10.74	(cep	7.80)	0.75	2.6
HR 9018	223385	115.7	+ 0.2	-46	5.42	A3 Ia-0	-8.5	0.65	2.3
+60 2634	TZ Cas	115.9	- 1.1	-52	9 v	M2 Iab	-5.6	0.87	2.3
+61 2551	223767	116.0	- 0.2		7.22	A5 Ib	-5.6	0.61	1.6
+60 2636	223960	11.60	- 1.2	-48	6.91	AO Ia-0	-8.4	0.71	4.4
Case 88		116.1	- 0.5		10.18	F4 I	-6 :	0.69	
Case 21		116.2	- 2.2		9.10	F6 I	-6 :	0.50	
V 407 Cas		116.3	- 0.1		13	(cep	4.58)		
+58 2683		116.4	- 3.0		9.12	AO Iab	-6.6	0.76	4.8
CE Cas-a		116.6	- 1.0		10.5	(cep	5.13)	0.46	3.8
CE Cas-b		116.6	- 1.0		10.5	(cep	4.45)	0.46	3.8
+63 2073	Case 109	116.7	+ 2.1		10.26	MO Ib	-4.6	0.62	2.6
DD Cas		116.8	+ 0.5	-70	9.87	(cep	9.81)	0.5	3.1
CG Cas		116.8	- 1.3	-87	11.31	(cep	4.37)	0.68	3.1
HR 8952	221861	116.9	+ 9.7	- 3	5.86	KO Iab	-6.1	0.68	1.1
+61 2575		116.9	+ 0.4	-15	8.48	F7 Ib	-4.6	0.60	2.1
SX Cas	232121	117.1	- 7.5	-10	9 v	A + F			
Case 57		117.2	+ 0.3		12.00	B6 Iab	-6.3	0.40	
+57 2870		117.2	- 4.0		9.92	B8 Iab :	-6.5	0.56	
Case 28		117.2	- 2.1		10.15	F8 I	-6 :	0.43	
EX Cas		117.2	- 0.4		12.4	(cep	4.31)	1.1	3.3 :
+63 2089		117.3	+ 1.7		10.2	A1 Iab	-6.6		
Case 87		117.4	- 2.1		10.90	B9 Iab	-6.5	0.59	
+55 21	842	117.5	- 6.6		7.95	A9 I	-6 :	0.35	
+56 16	725	117.6	- 5.2		7.12	F6 Iab	-6.4	0.27	3.5
Case 123		117.6	- 0.4		10.69	AO Ib	-5.2	0.87	4.2
FM Cas	236049	117.8	- 6.2		9.12	(cep	5.81)	0.29	2.1
Case 124		117.8	- 0.5		11.05	B7 Ib	-5.6	0.55	
BD Cas		118.0	- 0.9		13	(cep	3.65)	0.54	2.5
+59 5	611	118.0	- 1.7	-10	8.20	GO Ib	-4.5	0.44	1.9
+61 8	KN Cas	118.2	+ 0.2	-87	9 v	M1 Ibep	-4.7	0.5	2.9
	236346	118.2	- 3.1		8.86	FO I	-6 :	0.71	
+57 42	SY Cas	118.2	- 4.1	-43	9.81	(cep	4.07)	0.5	2.0
+63 3		118.3	+ 1.5	-48	9.8	M I			
HP Cas		118.4	- 1.5		12.6	(cep	3.63)	0.8	4.8 :
+58 18	1070	118.4	- 2.8		8.04	A4 Ib	-4.8	0.46	2.0
+62 12		118.4	+ 0.9		8.13	G9 Ib	-4.4	0.62	1.7
+62 20	774	118.5	+ 0.4	0	7.49	KO Ib	-4.4	0.45	1.3
FO Cas		118.8	- 1.8		13.7	(cep	6.80)	1.5	4.0 :
+59 30	1457	118.9	- 2.3		7.82	FO I	-6 :	0.45	
TU Cas	2207	118.9	-11.4	-20	7.61	(cep	2.14)	0.02	0.9
+61 22	1201	118.9	0.0	-20 :	8.68	A2 Ib	-5.0	0.64	2.1
+59 38	MZ Cas	119.2	- 2.7	-47	9 v	M2 Iab	-5.6	0.81	2.4
CT Cas		119.4	+ 0.5		12.5	(cep	3.81)	0.8	4.7 :
+61 40		119.4	- 0.2		9.1	A I	-6 :		
NU Cas		119.8	+ 0.3		13.2	(cep	6.17)	1.3	4 :
+61 67		119.8	- 0.9		8.79	AO Ib	-5.2	0.40	3.5
+61 81		120.0	- 0.5		10.22	AO Ib	-5.2	0.69	4.4
+61 79		120.0	- 0.5		9.52	A1 Ib	-5.1	0.73	2.9
+60 51		120.0	- 1.3		9.23	A2 Ib	-5.6	0.56	4.4

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
φ Cas	7927	126.7	- 4.4	-24	4.96	FO Ia	-8.5	0.44	2.6
+60 221		126.7	- 0.9		8.05	A2 Ia	-7.5	0.87	3.8
+60 225		126.9	- 1.8		9.18	AO Ib	-5.2	0.93	2.1
+57 269	8159	127.0	- 4.3		8.5	A1 Ib	-5.1		
BV Cas		127.4	- 0.2		12.2	(cep	5.39)	1.1	3 :
+62 264	9250	127.5	+ 1.1	-19 :	7.21	GO Ib	-4.5	0.72	0.8
+59 258	8906	127.6	- 2.5		7.12	F3 Ib	-4.6	0.45	1.2
+60 257	9167	127.7	- 1.0	-46	7.9	A7 Iab	-6.8		
+64 202	9811	127.8	+ 2.3		7.4	A6 Ib	-4.8		
+58 249	8992	127.9	- 3.7		7.79	F6 Ib	-4.6	0.40	1.7
AY Cas		127.9	+ 2.6		11.57	(cep	2.87)	0.72	2.6
+59 274		128.0	- 1.8	-54	8.50	MO Iab	-5.6	0.42	3.5
+61 301	9722	128.3	- 0.6	- 9	8.2	AO Iab	-6.6		
HR 439	9352	128.4	- 4.1	- 1	5.70	K3 Iab	-6.0	0 :	2.1
+59 287	9788	128.5	- 1.7	-18	8.7	K1 Ib	-4.4		
+60 292	9926	128.6	- 1.5	-14	8.1	KO Ib	-4.4		
+60 296	9973	128.7	- 1.3	-27	6.86	F5 Iab	-6.4	0.50	2.3
+54 315	9366	128.7	- 7.8	-32 :	6.97	K3 Ib	-4.4	0.47	1.0
+57 342	RW Cas	129.0	- 4.6	-64	9.29	(cep	14.8)	0.45	3.0
+60 310	AZ Cas	129.0	- 0.9	-40	9 V	MO Ib	-4.6	0.3	3.2
+61 315		129.1	- 0.4		9.2	B8 Ib	5.6		
+61 316	10494	129.1	- 0.4	-46	7.3	F5 Ia	-8.2	1.01	3.8
ES 1181		129.2	- 0.6		9.91	M Ib	-4.8	0.53	4.2
+64 243	11092	129.2	+ 2.7	-29	6.57	K5 Iab	-5.9	0.50	1.6 :
+60 336		129.4	- 0.7		9.09	B9 Iab	-6.5	0.84	4.2
+60 331		129.4	- 0.9		8.95	B8 Iab	-6.5	0.94	3.3
+60 348	BY Cas	129.5	- 0.7	-45	10.35	(cep	3.22)	0.86	1.4
+60 335		129.5	- 1.2	-48	9.16	M3 Iab	-5.5	0.70	3.2
+60 339		129.5	- 0.9	-30 :	8.50	B6 Iab	-6.5	0.80	3.3
+60 347		129.6	- 0.9		10.4	B9 Ib			
+59 318	10756	129.7	- 1.5	-30	7.54	B7 Ia	-7.1	0.47	4.4
+55 375	10063	129.7	- 6.5	-32	7.39	B8 Iab	-6.5	0.34	3.8
	236871	129.8	- 1.8	-55	8.74	M3 Iab	-5.5	0.63	4 :
IO Cas		129.9	- 2.5		13.4	(cep	5.60)	1.2	4 :
+64 277		130.1	+ 3.3		10.6	A1 Iab	-6.6		
+55 388	Case 122	130.1	- 5.6	-45	8.77	M2 Ib	-4.8	0.32	3 :
+59 335	VV Cas	130.4	- 2.1	-50	10.72	(cep	6.21)	0.49	3.4 :
+60 375	WX Cas	130.4	- 0.8		9.97	M2 Iab	-5.6	0.88	3.8
HR 589	12301	130.6	+ 2.6	-20	5.58	B8 Ib	-5.6	0.47	0.91
+63 277	12399	130.7	+ 2.5	-28	7.49	G5 Ia	-8.0	0.71	4.6
+60 395		130.7	- 0.2	-18 :	8.56	G5 Ib	-4.5	0.19	3.2
+45 380	9548	130.7	-16.2	+ 7	9.6	K1 Ib	-4.4		
+59 350	11472	130.8	- 2.0	-28	8.33	A5 Ib	-4.8	0.38	2.5
+44 326	9549	130.8	-16.6	-34	8.5	F5 Ia	-8.2		
+64 295	12882	131.0	+ 3.4	-15 :	7.50	B6 Ia	-6.9	0.52	3.6
+59 364	11831	131.1	- 1.4	-37	8.04	A2 Ia	-7.5	0.90	3.6
+59 363	11800	131.1	- 1.6	+22	7.79	K5 Ib	-4.4	0.47	1.4
+59 366		131.2	- 1.7		8.59	AO Ib	-5.2	0.11	5.0
+45 394	9880	131.2	-16.2	-27	9.2	FO Ib	-4.7		
+59 372		131.3	- 1.5	-60	9.30	MO Ib	-4.6	0.65	2.5
	236915	131.4	- 2.5	-40	8.30	M2 Iab	-5.6	0.56	2.8
+44 337		131.4	-16.4	-54	9.8	K5 Ib	-4.6		
+55 437	11544	131.6	- 5.2		6.82	G2 Ib	-4.5	0.33	1.2
+58 345	12014	131.6	- 2.5	-49	7.58	KO Ib	-4.4	0.8 :	0.8 :
+66 205		131.7	+ 5.8		9,35	B9 Ib :	-5.5	0.58	4.2 :

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
+59 389		131.7	- 1.4	-51	9.07	F0 Ib	-4.7	0.82	1.8
+63 315	14010	132.2	+ 3.1	-48	7.05	B9 Iab	-6.5	0.60	2.3
+62 369	13686	132.3	+ 1.9	+ 2	7.01	K3 Ib	-4.4	0.31	1.1
	236947	132.5	- 2.6	-48	8.72	M2 Ib	-4.8	0.53	3.5
+57 487	12842	132.7	- 2.7	-37	8.47	F3 Ib	-4.6	0.54	1.9
VX Per	236948	132.8	- 3.0	-33	9.35	(cep	10.89)	0.6	2.4
+61 400		132.9	+ 1.4	-13	9.2	A5 Ib	-4.8		
HR 618	12953	132.9	- 3.0	-36	5.65	A1 Ia	-7.3	0.57	2.7
GL Cas		132.9	- 2.1		12.6	(cep	4.01)	1.1	3.5 :
+59 420		133.1	- 1.1		9.27	K5 I			
XX Per	12401	133.1	- 6.2	-39	8 v	M4 Ib	-4.5	0.44	3.2
+57 519	13476	133.5	- 2.6	-40	6.41	A3 Ia	-7.6	0.60	2.7
HR 627	13267	133.5	- 3.6	-35	6.40	B6 Ia	-7.0	0.39	2.8
+57 524	13658	133.5	- 2.9	-47	8.90	M1 Iab	-5.7	0.68	3.2
SU Cas	17463	133.5	+ 8.5	- 8	5.95	(cep	1.95)	0.3	0.4
UX Per		133.6	- 3.1	-41	11.70	(cep	4.57)	0.6	5 :
HR 747	16024	133.6	+ 5.1	+41	5.78	K5 I	-6 :	0	2 :
KK Per	13136	133.7	- 4.7	-42	7.7 v	M2 Ib	-5.2	0.35	2.3
+57 526	13744	133.9	- 2.8	-52	7.58	A0 Iab	-6.5	0.75	2.3
T Per	14142	134.1	- 2.0	-46	8 v	M2 Iab	-5.5	0.69	2.3
+58 445	14242	134.2	- 2.0	-34	8.54	M2 Iab	-5.6	0.78	2.3
+63 342		134.3	+ 3.4		9.2	A5 Iab	-6.9		
+60 478		134.4	0.0		10.86	M1 Iab	-5.6	1.48	2.7
GM Cas		134.4	- 0.1		14	(cep	6.06)		
+59 489		134.5	- 0.2		11.5	A0 Ib	-5.2		
+56 512	BU Per	134.5	- 3.5	-46	9 v	M4 Ib	-4.2	0.56	2.3
S Per	14528	134.6	- 2.2	-38	9 v	M3e Ia	-7	0.69	2.3
+57 550	14404	134.7	- 2.9	-39	7.83	M2 Ib	-5.9	0.63	2.0
+58 470	SZ Cas	134.8	- 1.2	-41	9.80	(cep	13.6)	0.8	2.4
AD Per	14270	134.9	- 3.8	-47	8 v	M3 Iab	-5.7	0.56	2.3
FZ Per	14330	134.9	- 3.6	-44	8 v	M1 Iab	-5.5	0.56	2.3
+56 568	14433	135.0	- 3.5	-46	6.42	A1 Ia	-7.3	0.54	2.6
+56 593	14542	135.8	- 3.3	-47	6.95	B8 Ia	-7.7	0.70	2.4
+56 591	14535	135.1	- 3.5	-53	7.45	A1 Iab	-6.6	0.62	2.3
RS Per	14488	135.1	- 3.6	-38	8 v	M4 Iab	-5.2	0.56	2.3
VY Per		135.1	- 1.7	-40	11.26	(cep	5.53)	1.03	2.2
+56 595		135.1	- 3.5	-47	8.13	M0 Iab	-5.4	0.56	2.3
+56 597	14580	135.2	- 3.5	-49	8 v	M0 Iab	-5.1	0.56	2.3
SU Per	14469	135.2	- 4.1	-40	8 v	M3 Iab	-5.8	0.55	2.3
+55 588	14322	135.3	- 4.8	-35	6.79	B8 Ib	-5.6	0.38	1.7 :
+56 699	14826	135.3	- 3.2	-43	8.26	M2 Iab	-5.4	0.62	2.3
LT Cas		135.4	+ 3.2		12.6	(cep	5.91)	1.0	4.3 :
+56 621	14899	135.5	- 3.3	-42	7.38	B8 Ib	-5.6	0.53	1.9
HR 685	14489	135.5	- 4.8	-15	5.17	A2 Ia	-7.5	0.31	2.2
+57 576	15316	135.8	- 2.6	-44	7.21	A3 Iab	-6.5	0.68	2.2
GO Cas		135.8	- 0.9		13.7	(cep	3.24)	1.4	3.4 :
HR 690	14662	135.9	- 5.2	-26	6.27	F7 Ib	-4.6	0.38	0.8
UY Per		135.9	- 1.4	-59	11.29	(cep	5.37)	0.9	2.4
+63 367	17857	135.9	+ 4.4	-42	7.66	B8 Ib	-5.6	0.84	1.4
+63 365		136.0	+ 4.1		9.13	A1 Ia :	-7.3	0.99	5.0 :
HR 861	17958	136.0	+ 4.6	-22	6.23	K3 Ib	-4.4	0.6 :	0.6
DF Cas		136.0	+ 1.5		10.87	(cep	3.83)	0.54	3.1
+57 584	15620	136.1	- 2.3	-22	8.35	B8 Iab	-6.5	1.01	1.4
+57 582	15497	136.1	- 2.6	-39	6.98	B6 Ia	-6.9	0.93	1.7
+54 544		136.3	- 5.3		9.73	B8 Iab :	-6.5	0.22	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Case 157		120.1	- 1.1		11.57	B7 Iab	-6.4	0.29	
+61 87		120.2	- 0.5		9.50	A0 Ib	-5.2	0.60	3.6
AS Cas		120.1	+ 1.5		11.5	(cep	1.49)	0.7	2.2 :
+59 67		120.3	- 2.6		8.87	F5 Ib	-4.6	0.60	2.0
+59 65	DL Cas	120.3	- 2.5	-11	8.94	(cep	8.00)	0.51	1.8
Case 116		120.5	- 0.5		11.36	A3 Ia	-7.6	0.34	
+56 84		120.6	- 5.2		8.80	G I			
+61 113	2928	120.8	- 0.3		8.61	A0 Iab	-6.5	0.62	4.6
AP Cas		120.9	+ 0.1	-44	11.64	(cep	6.85)	0.81	3.8
+58 77		120.9	- 3.5		9.13	F4 I	-6 :	0.58	
+62 105		121.0	+ 0.3		8.80	G I			
HR 146	3283	121.1	- 2.5	- 8	5.80	A3 Ib	-4.8	0.19	1.0
+62 109	3123	121.1	+ 0.2		7.27	F2 I	-6 :	0.33	
FW Cas		121.2	- 0.5		12.4	(cep	6.24)	1.2	3.0 :
NY Cas		121.5	- 4.2		14	(cep	2.82)		
+59 96		121.5	- 2.9		9.96	A4 Ib	-4.8	0.69	3.6
+66 52		121.9	+ 4.0		10.77	A0 Iab :	-6.6	0.77	
+63 81	3940	122.0	+ 1.4	-48 :	7.26	A1 Ia	-7.3	0.70	3.2
BI Cas		122.0	- 0.2		12.1	(cep	10.77)	1.3	3.4 :
+61 153		122.0	- 0.6		9.33	A0 Ib	-5.6	0.84	3.0
HR 207	4362	122.3	- 3.3	-15	6.42	G0 Ib	-4.5	0.25	1.2
OP Cas		122.4	+ 0.7		12.1	(cep	5.51)	1.1	3.0 :
Case 111		122.7	+ 2.1		9.90	M2 I	-5 :	0.89	3 :
+62 155	4717	122.8	+ 0.3	-50 :	8.8	A2 Ib	-5.0		
XY Cas		122.8	- 2.8	-42	9.92	(cep	4.50)	0.4	2.4
Case 23		122.8	+ 1.9		10.62	M1 Iab	-5.6	1.25	3.2
HR 237	4817	122.9	- 1.1	-21	6.04	K5 Ib	-4.4	0.34	1.0
+63 110		123.3	+ 1.2		10.4	A7 Iab	-6.8		
α UMi	8890	123.3	+26.5	-17	2.00	(cep	3.97)	0.07	0.09
BM Cas		123.3	+ 1.2		9 v	F0 Ia	-8.5		
+65 121		123.9	+ 3.1		10.54	B9 Iab :	-6.5	1.07	
+62 181	5776	124.0	+ 0.2	-37 :	8.05	A0 Ib	-5.6	0.52	2.6
+61 201	6199	124.4	- 0.1		8.56	G5 Ib	-4.5	0.19	3.2
+59 174		124.5	- 2.7		8.33	A5 Ib	-4.8	0.43	2.3
VW Cas		124.6	- 1.1	-58	10.70	(cep	5.99)	0.57	3.1
+77 49	8065	124.6	+16.0	-75	6.23	B9 Iab	-6.5	0.20	2.7
+63 141	6474	124.7	+ 1.0		7.60	G0 Ia	-8.0	0.9	4 :
+61 207		124.7	- 0.4		8.82	B8 Ib	-5.6	0.34	4.8
+62 207	HS Cas	124.8	+ 0.8		9 v	M4 Ia	-6.5	0.86	3 :
BSD 584	(SA 8)	125.0	- 3.0	-37 :	12.5	A5 Ib	-4.8		
+59 187		125.0	- 2.4	- 7	7.79	K5 Ib	-4.4	0.42	1.5
+61 219		125.2	- 0.3	-40	9.5	M I			
+61 220		125.3	0.0		9.68	B7 Ib	-5.7	1.04	2.9
+67 16		125.4	+ 4.7		10.34	A0 Ib :	-5.2	0.94	3.5 :
BP Cas		125.4	+ 2.8	-42	10.92	(cep	6.27)	0.9	2.4
UZ Cas		125.5	- 1.6	-51	11.38	(cep	4.26)	0.5	4 :
+59 203		125.6	- 2.4	-53	9.8	B8 Ib	-5.6		
+59 199	7010	125.4	- 2.3	+11	6.71	A2 Ia	-7.5	0.17	5.5
AW Cas		125.8	- 1.1		12.5	(cep	4.25)	1.0	3.5 :
+61 240	7720	126.1	- 0.8	-12 :	9.7	A4 Iab	-6.8		
+61 252		126.4	- 0.7		10.2	A1 Iab	-6.6		
+63 180		126.5	+ 1.3		10.01	B8 Iab	-6.5	1.09	4.3 :
+57 258	236697	126.6	- 4.4	-31	8.65	M2 Ib	-4.8	0.52	2.4
+60 213		126.6	- 1.4		9.90	A0 Ib	-5.2	0.29	7 :
+57 257	7902	126.7	- 4.4	-31	6.93	B6 Ibe	-5.7	0.54	1.6

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
+58 501	GP Cas	136.3	- 0.5	-51	9.5 v	M2 Iab	-5.6	1.04	2.3
+59 535	16778	136.6	0.0	-36	7.68	A2 Ia	-7.5	0.83	3.5
DW Per		136.6	- 3.1		11.59	(cep	3.65)	0.59	3.5
+55 643		136.8	- 3.8		10.0	A2 Ib	-5.0		
YZ Per	236979	137.1	- 2.8	-44	8 v	M3 Iab	-5.6	0.65	2.0
+57 629	236995	137.3	- 1.1	-52	8.64	A0 Ib	-5.2	0.51	2.9
+59 569	17971	137.7	+ 1.2	-51	7.75	F5 Ia	-8.2	0.70	5 :
+64 387	20567	137.8	+ 6.9		8.52	B8 Ib	-5.6	0.87	1.9
+57 632	17088	137.9	- 1.8	-40	7.50	B9 Ia	-7.1	0.88	2.5
	237006	138.0	- 1.4	-43	9.10	M1 Ib	-4.7		
+58 527		138.1	+ 0.4		9.80	F6 I	-6 :	0.18	
+57° 647	237010	138.3	- 1.4		9.v	M2 Iab	-6.0	1.10	1.8
+59 580	Case 90	138.3	+ 1.1		9.91	M1 Ib	-4.5	0.61	2.6
HR 825	17378	138.5	- 2.2	-38	6.25	A5 Ia	-7.5	0.83	1.8
W Per	237008	138.7	- 2.2	-50	9 v	M3 Iab	-5.5	0.89	4 :
Case 32		138.8	+ 1.1		9.74	M0 Ib	-4.6	0.44	4.0
+59 594		139.0	+ 1.9	-62	9 v	M1 Iab	-5.6	1.14	1.9
η Per	17506	139.1	- 3.2	- 1	3.73	K3 Ib	-4.4	0.3	0.29
Case 31		139.2	- 1.3		9.95	M1 Ib :	-4.8	1.11	1.9
+57 672	18391	139.5	- 1.0	-45	6.89	G0 Ia	-8.0	1.28	1.6
Case 114		139.6	- 1.2		11.31	A2 Ib	-5.0	1.02	4.1
+53 574	17306	139.7	- 4.9	-41	7.8	K3 Iab	-6.0		
+56 771	19039	140.3	- 0.8		7.93	F0 I	-6 :	0.47	
AM Cam		140.8	+ 5.3		15	(cep	4.00)		
Case 33	IO Per	141.3	- 2.3		10 v	M2 Iab	-5.6	1.49	2.4
AD Cam		141.3	+ 3.3		14	(cep	11.2)		
Case 186		141.4	+ 3.0		10.59	A2 Iab	-6.7	1.04	6 :
HR 1035	21291	141.5	+ 2.9	- 7	4.20	B9 Ia	- 7.1	0.49	0.91
QQ Per		141.5	- 6.6		15	(cep	11.19)		
+56 798	20041	141.6	- 0.4	-12	5.74	A0 Ia	-7.1	0.67	1.3
Case 43		141.8	- 2.5		9.87	A0 Ia	-7.1	1.54	2.5
+59 672	21843	142.2	+ 3.1		7.77	A0 Ib	-5.2	0.77	1.3
HR 1040	21389	142.2	+ 2.0	- 6	4.53	A0 Ia	-7.1	0.56	0.96
+54 651		142.5	- 2.4	-50	9.23	M0 Iab	-5.6	0.87	2.8
Case 34		142.7	- 2.4	-37	10 v	M1 Iab	-5.8	1.1	2.2
HR 1112	22764	142.8	+ 3.9	-10	5.71	K4 Ib	-4.4	0.38	0.6
+58 622	237153	142.8	+ 2.2	-39	9.19	B8 Ib	-5.6	1.13	1.9
HR 800	16901	143.3	-14.1	- 3	5.41	G0 Ib	-4.5	0.17	0.7
+55 780		143.5	- 1.0		9.77	K5 Ib	-4.4	0.49	2.7
AB Cam		143.9	+ 3.2		11.92	(cep	5.79)	0.64	5 :
+54 685	21465	144.2	- 0.8	- 7	7.10	K5 I	-6 :	0.40	
Case 195		144.7	+ 4.9		10.62	A5 Ib	-4.8	0.83	3.6
RW Cam	237190	144.8	+ 3.8	-26	8.63	(cep	16.42)	0.70	1.8
+56 843	237181	145.1	+ 2.1		9.93	A4 Ib	-4.8	0.83	2.6
+32 452	15452	145.6	-25.1		7.00	B8 Ia	-7.1		
RX Cam	25361	145.9	+ 4.7	-36	7.76	(cep	7.91)	0.83	0.7
Case 92		146.0	+ 2.4		10.26	B6 Ia	-7.0	0.75	
α Per	20902	146.6	- 5.9	- 2	1.86	F5 Ib	-4.6	0.11	0.16
+56 884	25914	147.4	+ 3.9	-20	7.99	B6 Ia	-6.9	0.74	3.5
+30 409	15382	147.2	-26.6	- 8	8.7	K3 Ib			
+52 712		147.4	- 0.8		9.34	G0 Ib :	-4.5	0.0	6 :
Case 114 =	AG Cam	147.7	+ 1.8		10 v	M3 I	-5 :	1.05	3 :
Case 115		148.2	+ 2.0		10.52	M1 I	-5 :	0.95	3 :
+53 722	25056	148.7	+ 0.8	- 5	7.06	F9 Ib	-4.6	0.57	1.6
HR 1720	34255	148.8	+14.3	- 6	5.60	K4 I	-6 :	0.2	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
β Cam	31910	149.6	+11.4	- 2	4.02	G0 Ib	-4.5	0.2	0.38
+51 827	25030	149.8	- 0.5	- 6	8.58	K1 Ib	-4.4	0.3	2.5
+51 817	24775	150.0	- 1.3	+ 4	7.58	K2 Ib	-4.4	0.36	1.5
+51 843	25305	150.3	- 0.5	-10	8.88	A2 Ib	-5.0	0.29	4.0
MM Per		150.4	- 5.3		12	(cep	4.12)		
μ Per	26630	153.9	- 1.8	+ 8	4.11	G0 Ib	-4.5	0.27	0.36
+48 1080	AS Per	154.1	- 0.9	-26	9.61	(cep	4.97)	0.7	1.4
BM Per		155.7	- 0.1		10.8	(cep	23.0)	1.0	4 :
OT Per		157.2	+ 0.6		16	(cep	26.12)		
HZ Per		157.2	- 2.6		15	(cep	11.28)		
+36 742	23193	157.6	-14.5	+22	5.57	A3 I	-6 :	0.2	
GP Per		157.9	- 3.8		14	(cep	2.04)		
SX Per		158.9	- 6.3	+ 6	11.10	(cep	4.29)	0.56	3.0
+49 1316	BK Aur	159.0	+ 5.9		9.40	(cep	8.00)	0.44	2.2
+45 984	30178	159.5	+ 0.6	-13	8.0	M2 Ib	-4.8		
Case 38		159.7	+ 0.2		11.29	M1 I	-5 :	0.79	6 :
CY Aur		160.5	+ 2.0		11.7	(cep	13.8)	1.0	4.6
KS Per	30353	161.7	- 1.0	+ 7	7.76	Ape :			
EV Aur		162.4	- 1.0		13	(cep	4.87)		
+43 1131	31220	162.4	+ 0.1	+ 6	7.38	M2 Ib	-4.8	0.12	2.3
+43 1124	31118	162.4	0.0	+12	7.01	K5 Ib	-4.4	0.2	2.3
SV Per	276861	162.6	- 1.5	- 9	8.95	(cep	11.1)	0.4	2.6
ε Aur	31964	162.8	+ 1.2	- 2	3 v	F0 Iap	-8.5	0.30	1.2
+43 1168		162.8	+ 1.2		9.39	B9 Iab	-6.5	0.98	3.8
BR 611	12642	162.9	-61.3	+24	5.62	K5 I	-6 :	0.0	
HQ Per		163.0	- 3.3		13	(cep	8.64)		
+43 1183	Case 93	163.1	+ 1.8		9.45	M2 I	-5 :	0.49	4 :
+41 1033	31895	164.2	0.0	-35	8.0	K3 Ib	-4.4		
SY Aur	277622	164.8	+ 2.1	- 2	9.06	(cep	10.14)	0.5	2.5
AN Aur		164.9	- 1.0	-10	10.5	(cep	10.29)	0.83	2.2
ζ Aur	32068	165.0	+ 0.4	+13	3 v	K4 Ib	-4.4		
FF Aur		165.0	- 2.2		14	(cep	2.12)		
ψ^1 Aur	44537	165.4	+16.2	+ 5	4 v	M0 Iab	-5.8	0.30	0.91
ER Aur		165.5	+ 1.7		11.2	(cep	15.7)	0.9	4.2
GT Aur		165.7	+ 6.7		13	(cep	4.40)		
RX Aur	31913	165.8	- 1.3	-21	7.67	(cep	11.6)	0.40	1.6
EW Aur		166.0	- 3.9		14	(cep	2.66)		
AW Per	30282	166.6	- 5.4	+14	7.44	(cep	6.46)	0.5	0.8
+42 1288		166.7	+ 4.0		7.9	B8 Ib	-5.6		
Y Aur	278195	166.8	+ 4.3	+ 8	9.59	(cep	3.86)	0.34	2.0
YZ Aur		167.3	+ 0.9	-20	10.3	(cep	18.2)	0.93	2.4 :
+38 1162	Case 94	169.5	+ 2.3		9.77	M2 I	-5 :	0.72	3 :
IN Aur		169.5	- 0.6		15	(cep	4.91)		
HR 1884	36891	169.5	+ 4.4	-18	6.08	G3 Ib	-4.5	0.15	1.0
Y Lyn	58521	172.3	+25.3		8 v	M5 I	-5 :		
GV Aur		172.5	+ 4.3		13	(cep	5.26)		
+ 1 502	17780	172.8	-49.2	-14	7.9	A2 Ib	-5.0		
HR 958	19926	173.4	-42.0	+ 5	5.52	G2 I	-6 :	0.82	
+ 0 475	17842	173.4	-49.4	+ 4	9.0	A7 Ib	-4.8		
+30 804	33299	174.2	- 5.3		6.67	K1 Ib	-4.4	0.41	0.8
+33 1138	246901	176.0	+ 2.3	- 1	8.08	B + G	-4.5 :	0.24	2.4 :
+31 1013		176.5	- 0.5		9.31	A5 Ib	-4.8	0.22	4.8 :
HR 1804	35600	176.7	- 2.7	+17	5.72	B9 Ib	-5.5	0.32	1.15
HR 1939	37536	176.9	+ 0.7	+ 5	6.16	M2 Iab	-5.6	0.44	1.4
+29 897	35601	177.0	- 2.9	- 1	7.35	M1 Ib	-4.7	0.57	1.6

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
AO Aur		177.6	+ 2.0	-14	12	(cep	6.76)		
AX Aur		177.9	+ 1.6		13	(cep	3.05)		
+28 834		179.0	- 1.4		9.89	M2 I	-5 :	0.44	5 :
SZ Tau	29260	179.5	-18.7	- 3	6.5	(cep	3.15)	0.23	0.5
+28 856	37819	179.6	- 0.5		8.10	F5 Ib	-4.6	0.19	2.6
AE Tau		181.0	- 3.5		13	(cep	3.90)		
HR 2066	39866	181.2	+ 2.1	+19	6.42	A2 Ib	-5.0	0.25	1.4
AV Tau		181.6	- 0.9		12.4	(cep	3.62)	0.9	3.8 :
+29 1140	42454	182.4	+ 5.3	+11	7.33	G2 Ib	-4.5	0.47	1.2
AS Tau		182.4	+ 3.4	+16	13	(cep	3.18)		
+27 938	40297	182.7	+ 1.8	+ 4	7.27	A0 Ib	-5.6	0.29	2.5
+27 923	39949	182.7	+ 1.4	+14	7.5	G2 Ib	-4.5	0.28	1.7
HR 2111	40589	182.9	+ 2.2	+17	6.05	B9 Iab	-6.5	0.31	2.1
RT Aur	45412	183.2	+ 8.9	+21	5.50	(cep	3.73)	0.13	0.46
+23 982	37387	184.0	- 4.2	+ 6	7.57	K1 Ib	-4.4	0.63	1.1
AA Gem	251549	184.6	+ 2.7	+10	9.70	(cep	11.3)	0.5	3.7
+28 1097	44391	184.8	+ 6.7	- 9	7.74	K0 Ib	-4.4	0.28	1.8
HR 2074	39970	185.3	+ 0.2	0	6.02	A0 Ia	-7.1	0.39	2.4
+23 1138		186.1	0.0		10.26	M1 I	-5 :	0.82	4 :
HR 2453	47731	186.5	+10.4	- 6	6.42	G5 Ib	-4.5	0.09	1.4
CE Tau	36389	187.2	- 8.1	+22	4 v	M2 Ib	-4.8	0.3	0.6
RZ Gem	250642	187.7	- 0.1	+ 6	9.9	(cep	5.53)	0.5	2.6
BW Gem		187.9	+ 3.4		11.4	(cep	2.64)	0.8	2.1 :
WY Gem	42474	187.9	+ 2.3	+16	7 v	M2 Iabep	-5.6	0.11	3.3
BU Gem	42543	188.2	+ 2.2	+22	6 v	M1 Ia	-6.5	0.54	1.8
+18 950	38247	188.7	- 5.4		6.61	G8 Iab	-6.1		
EU Tau	38321	188.8	- 5.3		7 v	(cep	2.10)	0.4	2.1
TV Gem	42475	189.1	+ 1.6	+17	7 v	M1 Iab	-5.7	0.55	1.3
+19 1111	248587	189.2	- 3.7		7.94	A0 Ib	-5.2	0.65	1.7
ε Gem	48329	189.5	+ 9.6	+10	2.98	G8 Ib	-4.5	0.18	0.25
+24 1386	48640	190.1	+ 9.7	+24	7.20	K1 Ib	-4.4		
+19 1262	42841	191.5	+ 0.8	-48	7.71	G5 Ib	-4.5	0.27	1.9
+19 1281	43282	192.0	+ 1.1	-37	7.71	G5 Ib	-4.5	0.3	1.9
ST Tau	38262	193.1	- 8.1	+ 1	8.2	(cep	4.03)	0.30	1.3
AD Gem	262433	193.3	+ 7.6	+36	9.83	(cep	3.79)	0.2	3.0
+17 1178		193.4	- 0.2		10.5	B8 Ib	-5.6		
+16 1059	43152	194.2	- 0.3	- 4	7.5	K5 Ib	-4.4		
RS Cas	78712	194.5	+42.1	+14	5 v	M5 I	-5 :		
+16 1105		194.6	- 1.4		9.7	A0 Iab	-6.6		
ζ Gem	52973	195.8	+11.9	+ 7	3.92	(cep	10.15)	0.15	0.33
CR Ori		195.9	- 3.9	+40	12.31	(cep	4.91)	0.53	4 :
	255017	196.2	- 0.4	+33	9.4	A5 Ib	-4.8		
HR 2269	44033	196.3	+ 0.1	+36	5.72	K3 Ib	-4.4	0.20	0.8
+14 1260	44414	196.4	+ 0.5	+14	8.4	F5 Ib	-4.6		
CV Ori		196.5	- 2.5		13.2	(cep	3.56)	1.1	4 :
RS Ori	444145	196.6	+ 0.4	+40	8.41	(cep	7.57)	0.51	1.3
+13 1194	43820	197.0	- 0.8	+27	8.76	A2 Ib	-5.0	0.12	4.8
+13 1212		197.1	- 0.3		10.44	M4 Iab	-5.6	0.78	5 :
+14 1276	44738	197.3	+ 0.4	+13 :	7.3	A2 Ib	-5.0		
W Gem	46595	197.4	+ 3.4	0	6.8	(cep	7.91)	0.4	0.8
+13 1196	43910	197.7	- 1.1	+45	7.7	A2 Ia	-7.5		
CU Ori		197.9	- 3.3		14	(cep	2.16)		
CS Ori		198.0	- 4.5	+16	11.40	(cep	3.89)	0.4	4 :
DX Gem		198.1	+ 2.8		11	(cep	3.14)		
+13 1229	44812	198.3	0.0	-12	7.4	G5 Ib	-4.5		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
BB Gem		199.4	+ 2.3		11.24	(cep	2.31)	0.3	3 :
DF Ori		199.4	- 0.6		13.1	(cep	3.18)	1.0	4 :
HR 2615	52005	199.5	+ 9.1	+22	5.68	K3 Ib	-4.4	0.28	0.7
α Ori	39801	199.8	- 9.0	+21	0 v	M2 Ia	-7.0	0.19	0.4
GQ Ori	42532	199.8	- 4.3		8.6	(cep	8.62)	0.5	1.8 :
VZ Mon		200.1	+ 1.0		13.2	(cep	5.08)	1.2	4.7 :
+10 1172	259431	201.7	+ 0.7	+30	8.84	B6 Pe		0.42	
VW Mon		202.2	- 1.2		13.20	(cep	1.53)	0.6	6 :
... Mon		202.3	+ 1.7		17	(cep	8.00)	0.65	8 :
WW Mon		202.7	+ 0.3	+56	12.47	(cep	4.66)	0.6	5 :
+ 8 1367	45829	203.5	- 1.1		6.63	KO Iab	-6.1	0.23	2.5
T Mon	44990	203.6	- 2.6	+31	6.02	(cep	27.0)	0.37	1.2
SV Mon	44320	203.7	- 3.7	+26	8.27	(cep	15.2)	0.3	2.5
+ 9 1295	46783	204.1	+ 3.8		8.06	B9 Ib	-5.6	0.37	3.3
HR 2385	46300	204.3	+ 0.7	+12	4.44	AO Ib	-5.2	0.00	0.83
+ 5 1198	44213	204.3	- 4.2	+16	7.98	M2 Iab	-5.6	0.26	3.6
CS Mon		204.8	- 1.2		12	(cep	4.17)		
+ 7 1394	BE Mon	204.9	+ 1.0		10.5	(cep	2.71)	0.64	2.1
Case 41		205.8	+ 6.7		11.53	M2.5 I	-5 :		
+ 6 1316	47314	206.1	- 0.2	+18	8.4	B8 Ib	-5.6		
+ 5 1370		207.3	+ 0.1	-51	9.3	K2 Ib	-4.4		
V 447 Mon		208.1	+ 0.5		15	(cep	2.48)		
+22 2102	82394	208.2	+44.7	- 4	7.45	G7 I	-6 :	0.0	5 :
CV Mon		208.6	- 1.8		10.30	(cep	5.38)	0.80	1.8
+ 2 1292	46559	208.8	- 2.7	+20	8.15	B8 Iab	-6.9	0.70	3.8
V 508 Mon		208.9	+ 0.9		12	(cep	4.13)		
β Ori	34085	209.2	-25.2	+21	0.08	B8 Ia	-7.1	0.02	0.28
+ 3 1379	48616	209.3	- 0.1		6.85	F5 Ib	-4.6	0.42	1.1
BV Mon		209.5	+ 3.2		11.4	(cep	3.01)	0.8	2.7 :
V 510 Mon		210.2	+ 0.3		15	(cep	7.31)		
+ 0 1491	46769	210.3	- 3.2	+10	5.79	B8 Ib	-5.6	0.06	1.7
CU Mon		210.8	- 4.1		13.55	(cep	4.71)	0.85	7 :
+ 1 1517		211.0	0.0		9.3	F I			
V 446 Mon		211.0	- 1.3		15	(cep	1.92)		
+ 2 1451		211.4	+ 1.1		9.20	M2 I	-5 :	0.53	3 :
V 484 Mon		212.5	- 5.5		15	(cep	3.14)		
+ 0 1651	50064	212.7	+ 0.2	+62	8.21	B6 Ia	-6.9	0.91	3.0
+ 1 1622	51956	213.0	+ 2.2		8.3	F I			
TY Mon		213.4	+ 1.2		11.4	(cep	4.02)	0.7	3 :
V 495 Mon		213.8	- 4.5		13	(cep	4.10)		
TZ Mon		214.0	+ 1.3	+39	10.78	(cep	7.43)	0.5	3 :
TX Mon		214.1	- 0.8	+51	10.95	(cep	8.70)	0.6	4.5 :
SZ Mon		214.2	- 0.6	+35	10.1	(cep	16.4)	0.5	4 :
- 4 1534	45626	214.3	- 7.1		9.36	B7 Pe		0.17	
V 465 Mon		214.9	+ 3.7		11	(cep	2.71)		
V 526 Mon	52610	215.1	+ 1.8		9	(cep	2.68)		
XX Mon		215.5	- 1.1	+64	11.89	(cep	5.46)	0.6	5 :
BK Mon		215.3	- 0.8		11.18	(cep	3.96)	0.68	2.8
- 3 1655	51304	216.8	- 0.5		8.5	F I			
AA Mon		217.1	- 0.3		13.3	(cep	3.94)	1.0	5 :
- 4 1845	55036	219.4	+ 2.2	+80 :	7.8	A3 Ib	-4.8		
η Leo	87737	219.6	+50.8	+ 3	3.53	AO Ib	-5.2	0.0	0.50
EE Mon		220.0	- 3.8		12.5	(cep	4.81)	0.9	4 :
YY Mon		220.1	- 2.9		13.1	(cep	3.45)		
α Lep	36673	220.9	-25.1	+25	2.56	FO Ib	-4.7	0.07	0.26

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
- 5 2037	56037	221.0	+ 2.5		8.3	F I			
- 7 1716	53301	221.4	- 0.8		9.1	F I			
FI Mon		221.5	+ 1.0		12.6	(cep	3.29)		
FG Mon		221.7	- 0.1		12.9	(cep	4.50)	1.0	4 :
AC Mon		221.8	- 1.8	+40	10.06	(cep	8.02)	0.59	2.4
HR 2833	58526	222.0	+ 4.9	+14	5.97	G3 Ib	-4.5	0.0	1.2
- 9 1790	52537	222.5	- 2.1		9.1	F I			
ζ Mon	67594	223.1	+16.5	+30	4.34	G2 Ib	-4.5	0.0	0.58
-10 1774	51480	223.2	- 3.7	+58	6.97	Ae			
- 8 1780		223.2	+ 0.3		9.7	A2 Ib			
RY CMa	56450	226.0	+ 0.3	+37	8.05	(cep	4.68)	0.29	1.3
WS 170		226.5	- 2.7		12.1	B7 I	-6 :		
TV CMa		227.2	- 2.4	+39	10.57	(cep	4.67)	0.6	2.4
HR 2859	59067	227.4	+ 2.7	+15	5.9	G8 Ib :	-4.5		
UX Mon	65607	227.6	+11.4	-20	8 v	A + G			
VV CMa		227.6	- 3.3		12	(cep	3.86)		
-14 1747		228.3	- 2.6		10.8	A0 Iab	-6.6		
TW CMa		229.1	+ 0.1	+66	10	(cep	6.99)	0.6 :	1.9
WS 341		228.3	+ 0.5		10.7	B9 Ib	-5.5		
DZ CMa		229.4	- 1.5		13	(cep	1.75)		
-15 1748	56847	229.9	- 1.3	+66	8.86	B7 Ib :	-5.6	0.22	5 :
KQ Pup	60414	230.7	+ 2.5	+22	5 v	M2ep Iab	-5.6	0.2	1.0
-20 1549	49068	231.1	-10.5	+22	7.31	K0 Ib	-4.4	0	2.4
-16 1918	RZ CMa	231.2	- 1.1		9.70	(cep	4.25)	0.49	2.0
-15 1862	59589	231.4	+ 1.1		10.4	K2 I	-6 :		
-15 1863	59601	231.4	+ 1.0		10.8	K0 I	-6 :		
-26 2578		231.5	-23.0		11.3	F2 Ib	-4.6		
-15 1867	59698	231.5	+ 1.2		11.2	K0 I	-6 :		
-15 1864		231.4	+ 1.2		11.2	G5 I	-6 :		
RW CMa		232.0	- 3.8	+50	11.8	(cep	5.73)	0.6	5 :
-17 1952		232.7	- 1.4		11.6	A0 Ib	-5.2		
-14 2198	62953	232.7	+ 4.8		9.0	F0 Ib	-4.7		
-20 1706	53598	233.0	- 6.5	+54	6.97	M I	-5 :		
HR 2785	57118	233.2	- 2.8		6.7	F3 I	-6 :		
HR 3459	74395	233.3	+21.0	+31	4.62	G2 Ib	-4.5	0.02	0.63
-20 1740	54519	233.4	- 5.8	+15	6.66	K I	-6 :		
-18 1847	59075	233.4	- 0.7		7.65	B8 I	-6 :	0.43	
-19 1923		233.4	- 2.7		9.7	F2 Ib	-4.6		
-29 2371		233.5	-28.3		12.1	A2 Iab			
HR 3026	63302	233.6	+ 4.7	+14	6.40	G8 Iab	-6.1		
-17 2010	59771	233.6	+ 0.1	+10 :	9.1	F I	-6 :		
HR 2831	58439	233.6	- 1.5	+70 :	6.23	A2 Ib	-5.0	0.31	1.2
-25 4523	VZ CMa	234.2	- 1.9		9.3	(cep	3.13)	0.4	1.5 :
-19 1854	58131	234.5	- 2.4	+32	7.37	B9 Ia	-7.1	0.34	4 :
HR 2580	50877	235.0	-10.2	+36	4.09	K3 Iab	-6.0	0.35	0.6
-19 1916		235.0	- 1.0		11.8	B6 Ib	-5.6		
-16 2163	64058	235.0	+ 5.0		8.5	F I	-6 :		
VW Pup		235.4	- 0.6	+24	11.40	(cep	4.28)	0.6	4 :
CM Pup		235.5	- 1.0		13.8	(cep	3.17)	0.9	7 :
X Pup	60266	236.1	- 0.8		8.5	(cep	26.0)	0.5 :	3 :
-30 2700		236.2	-25.0		11.3	F5 I	-6 :		
HR 2764	56577	236.5	- 5.2	+28	4.83	K3 Ib	-4.4	0.35	0.4
-18 2032		236.5	+ 3.4		10.0	G5 I	-6 :		
LX Pup		236.6	+ 8.8		10	(cep	13.88)		
VX Pup	60219	237.0	- 1.3	+12	8.3	(cep	3.01)	0.53	1.4 :

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-21 2026	60831	237.0	- 0.5		8.7	A I	-6 :		
-22 4589		237.3	- 2.2		10.1	F8 I	-6 :		
-20 2125	WW Pup	237.4	+ 1.0	+87	10.45	(cep	5.52)	0.3	4 :
HR 2874	59612	237.7	- 2.4	+36	4.85	A5 Ib	-4.8	0.0	0.85
BC Pup		238.3	- 2.7		13.7	(cep	3.54)	0.8	7 :
δ CMa	54605	233.4	- 7.3	+34	1.83	F8 Ia	-8.0	0.2	0.72
WS 613		238.8	- 0.6		11.3	B8 I	-6 :		
σ CMa	52877	239.2	-10.3	+22	3.46	M0 Iab	-5.8	0.10	0.6
BD Pup		239.2	- 3.0		13.4	(cep	3.92)	0.7	7 :
-25 4516	SS CMa	239.2	- 4.2	+60	9.8	(cep	12.4)	0.57	3 :
VY CMa	58061	239.4	- 5.1	+60	7 v	M3e Iab	-5.5	0.47	2.3
-25 4523	VZ CMa	239.9	- 4.4		10	(cep	3.13)		
AO CMa		239.9	- 4.9		12.5	(cep	5.82)	0.7	7 :
-23 6178	63170	240.5	+ 0.4		8.9	F I			
EK Pup		240.8	- 1.0		12	(cep	2.63)		
-24 5910	62888	240.8	- 0.1		7.80	B9 Ib	-5.5	0.38	2.8
-24 5870	62637	240.9	- 0.5		8.7	F I			
-22 2142	66929	241.3	+ 4.9		7.8	F I			
HR 3123	65699	241.3	+ 3.3	+11	5.10	K2 I	-6 :		
ξ Pup	63700	241.4	+ 0.6	+ 3	3.54	GO Ib	-4.5	0.2	0.3
-25 4923	WX Pup	241.5	- 1.4	+53	9.1	(cep	8.94)	0.58	1.6
-30 3791	52702	241.5	-11.5		9.3	F2 Ib	-4.6		
BY CMa		241.6	- 5.4		14	(cep	3.18)		
-23 6645	WZ Pup	241.8	+ 3.3	+64	10.15	(cep	5.03)	0.24	4.0
-23 6586	WY Pup	241.8	+ 2.7	+44	10.45	(cep	5.25)	0.40	4 :
AD Pup	63446	241.9	0.0	+68	9.84	(cep	13.6)	0.43	5 :
-26 4741	61874	241.9	- 2.0		7.9	F I			
-28 4645	VZ Pup	243.4	- 9.3	+49	9.52	(cep	23.2)	0.3	5 :
-26 5107	64220	243.5	+ 0.1		8.4	M0 I			
-27 4649		243.9	- 0.1		9.6	F I			
HR 2993	62576	243.9	- 2.3	+33	4.58	K3 Ib	-4.4	0.25	0.4
-27 4675		244.3	- 0.1		8.5	M3 I			
HR 2996	62623	244.4	- 2.5	+25	3.96	A2 Iab :	-6.7	0.12	1.1
-20 4634	60017	244.4	- 5.7		8.3	F I			
-27 4605	BM Pup	244.5	- 1.0		10.82	(cep	7.20)	0.5	4 :
HR 2881	59890	244.8	- 6.0	+14	4.64	G1 Ib	-4.5	0.14	0.5
BW Pup		244.8	+ 0.8		12	(cep	13.45)		
-28 4950	63964	245.1	- 1.3		8.20	F5 Ib	-4.6	0.45	1.9
LR Pup		245.2	+ 0.4		12	(cep	3.33)		
-29 4956	63463	245.8	- 2.4		8.9	A0 I			
-25 5843	69756	246.1	+ 5.2		7.5	F I			
AQ Pup	65589	246.2	+ 0.1	+60	8.78	(cep	29.9)	0.60	3.3
R Pup	62058	246.4	- 4.4	+68	6.61	G0 Ia	-8.0	0.45	4.5
-28 5221	LS Pup	246.4	+ 0.2		9	(cep	14.14)	0.7 :	
-31 4916		246.5	- 4.4	+75	8.77	M2 Iab	-5.6	0.40	4.3
-30 5193		246.5	- 1.8		9.5	M0 I			
LL Pup		246.8	- 1.4		12	(cep	5.08)		
-30 5135		246.8	- 2.6		10.2	G0 I			
HR 3291	70761	246.8	+ 6.2	+64	5.89	F2 Ib	-4.6	0.11	1.1
-29 5386		246.9	+ 0.7		9.3	M0 I			
-30 5135		246.9	- 2.6	+141 :	9.2	F2e Iab	-6.6		
-30 5307	62532	247.1	- 0.9		9.4	F I			
-31 5008		247.4	- 3.9		9.6	M1 I	-5 :		
-29 5430		247.5	+ 0.6		8.9	M0 I			
-29 5535	RN Pup	247.9	+ 1.1		9.7	(cep	13.7)	0.3	4 :

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-32 4372		247.9	- 4.1		9.9	M3 I	-5 :		
-32 4417		248.6	- 3.9		9.0	M3 I	-5 :		
-33 4186	63804	248.8	- 3.7		9.0	B6 I	-6 :		
WS 922		248.8	- 1.0		11.6	A1 Iab	-6.6		
-31 5339		248.8	- 1.3		9.0	M0 I	-5 :		
-33 4156		248.8	- 4.0		8.5	M0 I	-5 :		
IQ Pup		248.9	- 2.1		13	(cep	4.52)		
-25 6465	74368	249.0	+10.7		8.9	A2 Ib	-5.0		
WS 950		249.2	- 0.3		11.6	B7 Ib	-5.6		
-39 2915		249.2	-16.4		12.6	A3 Ib	-5.0		
-32 4815		249.8	- 0.4		9.6	M0 I	-5 :		
-25 6606		250.2	+11.0		9.5	K I			
CO Pup		250.4	+ 4.5		10.8	(cep	16.0)	0.25	8 :
-34 4053	64571	250.6	- 3.8		6.6	F I			
-29 6323		250.8	+ 5.8		10.2	A7 Ib	-4.8		
-29 6324		251.0	+ 5.7		10.5	A2 Ib	-5.0		
-33 4642	HL Pup	251.3	+ 0.1		11	(cep	3.48)		
-34 4332		251.9	- 1.4		9.5	M1 I	-5 :		
-29 6619		252.0	+ 7.7		10.8	F8 Ib	-4.6		
-33 4781		252.5	+ 0.7		9.2	A2 Ib	-5.0		
RS Pup	68860	252.4	+ 0.2	+21	7.00	(cep	41.4)	0.64	1.7
-36 4363		254.2	- 1.0		9.3	F I			
-36 4319	AT Pup	254.3	- 1.6	+29	7.99	(cep	6.66)	0.2	1.7
-27 6284		254.6	+12.9		10.2	F6 Ia	-8.1		
-39 3669	64012	254.8	- 7.0		8.9	F I			
036 4462		255.4	- 0.7		9.6	M0 I			
AP Pup	65592	255.5	- 5.7	+18	7.35	(cep	5.08)	0.4	0.9
-37 4555	70289	255.5	- 0.6		6.9	F I			
-44 3175		255.8	-15.8		11.0	M0 I	-5 :		
-45 2961		256.2	-16.1		11.0	M0 I	-5 :		
HR 3225	68553	256.5	- 3.2	+16	4.44	K3 Ib	-4.4	0.18	0.46
-26 7150		257.0	+17.9		10.2	F6 Iab	-6.4		
-38 4408		257.6	- 1.1		9.6	F I			
-46 3043		257.7	-15.1		9.3	K I			
-34 5441		258.6	+ 6.7		11.3	B8 Ib			
CO Vul		259.0	- 0.7		12.57	(cep	4.28)	1.4	2.1 :
CE Pup		259.2	- 4.4		10.8	(cep	49.5)	1.4	3.7 :
HR 3226	68601	259.3	- 5.1	+19	4.44	A7 Ib	-4.8	0.06	0.76
-36 5150		259.7	+ 4.7		10.0	F8 Ib	-4.6		
BH Vel		259.8	- 1.3		11.6	(cep	7.20)	1.3	2.0 :
-35 5407		260.4	+ 8.1		9.8	F6 Ia	-8.1		
-43 4195	70583	260.8	- 4.0		9.7	B8 Ib	-5.6		
-38 5085		261.0	+ 4.6		10.0	F8 Ib	-4.6		
α Car	45348	261.2	-25.3	+20	-0.7	F0 Ib	-4.7	0.0	0.06
HR 2957	61715	261.3	-12.8	+11	5.65	(cep	5.70)	0.03	0.83
-48 3211		262.0	-11.3		11.9	F I			
HR 3426	73634	262.0	- 1.1	+19	4.13	A9 Ib	-4.7	0.0	0.6
-43 4420		262.1	- 1.9		9.4	F I			
-51 2268		262.2	- 19.2		11.9	F2 Ia	-8.4		
-43 4361		262.3	- 2.7		10	M0 I	-5 :		
AH Vel	68808	262.5	- 7.0	+26	5.7	(cep	4.23)	0.14	0.49
-43 4449	73270	262.5	- 1.9		8.8	F I			
-36 5569		262.6	+ 8.9		10.5	A1 Ib	-4.6		
-44 4491		262.6	- 2.9		9.7	F I			
WS 1098		262.7	- 2.1		11.0	A6 I	-6 :		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-49 2973	61993	262.9	-13.4		8.9	A2 Ib	-4.6		
RZ Vel	73502	262.9	- 1.9	+26	7.03	(cep	20.40)	0.30	1.7
-44 4475		262.9	- 3.3		9.7	M0 I	-5 :		
-43 4530	AP Vel	263.0	- 1.4		10	(cep	3.13)		2 :
WS 1107		263.1	- 1.9		11.3	A2 I	-6 :		
-48 3351	65833	263.1	-10.0		9.5	F8 I	-6 :		
AX Vel	68556	263.2	- 7.7	+24	8.2	(cep	2.59)	0.23	1.05
-47 4589	77552	268.3	- 0.8		9.29	M3 Ia	-7.0	0.12	
-36 5776	T Ant	264.5	+11.1	+30	9.5	(cep	5.91)	0.15	3.3
-36 5714		264.5	+ 9.8		9.7	F6 Ia	-8.1		
-45 4407		264.5	- 2.2		9.3	F I			
-47 4072	72800	265.3	- 4.6	+34	6.61	B9 I	-6 :	0.18	
HR 3445	74180	265.3	- 2.9	+25	3.84	F2 Ia	-8.4	0.45	1.5
SX Vel	74884	265.5	- 2.2	+31	8.28	(cep	9.55)	0.33	2.0
HR 3496	75276	265.6	- 1.7	+32	5.75	F2 Iab	-6.6	0.31	2.0
T Vel	73678	265.6	- 3.8	+ 8	7.95	(cep	4.64)	0.4	1.1
AM Vel		265.6	- 4.2		12.2	(cep	7.52)	0.8	5 :
-51 2790		265.9	-11.5		10.5	A1 Ib	-5.1		
λ Vel	78647	265.9	+ 2.8	+18	2.2	K5 Ib	-4.4	0.1	0.18
SW Vel	74712	266.2	- 3.0	+35 :	8.15	(cep	23.5)	0.4	2.8
WS 1179		266.3	- 1.6		11.4	A1 Ia :			
-41 5023	81034	266.8	+ 5.5	+49	5.6	M3 Ib	-4.8		
-47 4380	75520	267.0	- 2.6		8.9	A7 Ib	-4.8		
-46 4716		267.1	- 1.5		9.2	M0 I	-5 :		
-47 4430	75888	267.3	- 2.4		8.9	F0 Ib	-4.7		
CP Vel		267.6	- 3.2		12.1	(cep	9.84)	0.9	5 :
HR 3692	80108	267.6	+ 3.4	- 3	5.11	K3 Ib	-4.4	0.26	0.7
-41 5140	82415	267.9	+ 6.7		8.3	F8 Ib	-4.6		
-44 5305	89957	268.0	+ 2.9		6.03	A5 Ib	-4.8	0.27	1.0
-49 3899	76006	268.7	- 3.3		8.6	F5 Ib	-4.6		
-50 3533	ST Vel	268.8	- 4.8		9.65	(cep	5.86)	0.58	2.0
-56 1384	61358	269.0	-16.8		10.7	B9 Ib	-5.5		
-47 4646		269.1	- 0.6		9.5	M0 I	-5 :		
-47 4761		269.8	+ 0.7		9.8	M0 I	-5 :		
-40 5513	84903	269.8	+ 9.3		8.3	G Ia	-8.0		
ST Pic	43769	270.7	-28.0		10	(cep	18.75)		
-49 4273	80210	271.4	- 0.3		7.1	F I			
DD Vel		271.5	- 1.4		12.5	(cep	13.20)	1.0	2.5 :
β Der	37350	271.7	-32.8	+ 8	3.75	(cep	9.84)	0.2	0.25
BG Vel	78801	271.9	- 2.6	+11	7.64	(cep	6.92)	0.60	0.88
CX Vel		272.4	- 3.4		11.3	(cep	6.26)	1.0	2.4 :
HR 3708	80558	273.1	- 1.5	+22	5.86	B7 Iab	-6.4	0.60	1.3
-49 4411		273.2	+ 0.5		10	M0 I	-5 :		
-49 4435		273.2	+ 1.0		9.9	M0 I	-5 :		
-49 4469	DR Vel	273.2	+ 1.3		9.57	(cep	11.20)	0.85	1.9
HR 3739	81471	273.8	=1.0	+28	6.06	A7 Iab	-6.8	0.46	2.0
	298383	274.2	- 1.6		9.72	A0 Ib	-5.2		
EX Vel		274.1	- 2.2		11.68	(cep	13.23)	0.88	5.4
EZ Vel		274.9	- 1.9		12.3	(cep	34.54)	1.2	7 :
V Car	72275	275.2	-12.3	+16	7.38	(cep	6.70)	0.4	0.8 :
DP Vel		275.4	- 1.3		11.9	(cep	5.48)	0.76	4.2
FG Vel		275.5	- 0.8		118	(cep	6.45)	0.89	4 :
-52 2616	AE Vel	276.1	- 0.6		10.3	(cep	7.13)	0.60	2.9
-52 2723		276.5	+ 0.2		11	M2 I	-5 :		
V Vel	81222	276.6	- 4.2	-29	7.55	(cep	4.37)	0.24	1.1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
HR 8340	83520	276.6	- 1.0	-13	5.45	A2 I :	-7 :	0.17	
CS Vel		277.1	- 0.8		13	(cep	5.91)		
-56. 2096	80576	277.1	- 5.4		9.8	A5 Iab	-6.9		
-36 6725	93971	277.6	+19.9		9.6	A0 Ib	-5.2		
-58 1469	80457	278.1	- 6.6		9.1	F8 Ib	-4.6		
ι Car	80404	278.4	- 7.0	+13	2.24	F0 Ib	-4.7	0.01	0.24
-52 2073	87084	278.8	+ 2.0		8.9	M1 I	-5 :		
-54 2739	FN Vel	279.0	- 1.4		11	(cep	5.32)		
-34 7205		279.7	+23.0		10.5	M I			
-54 3035		280.2	+ 0.2		9.3	M1 I	-5 :		
GX Car	302430	281.6	- 3.1		9.3	(cep	7.20)	0.26	2.1
-58 1737	86646	282.3	- 3.5		9.8	F3 Ib	-4.6		
HR 4063	89682	282.3	+ 1.6	+13	4.56	K1 Iab	-6.1	0.21	1.0
-53 3793	90586	282.5	+ 3.1	+ 2	7.0	M2 Iab	-5.6	0.43	1.8
RY Vel	89841	282.6	+ 1.5		8.25	(cep	28.12)	0.59	2.6
-57 2780	88606	283.0	- 1.5	-10	8.25	A3 Iab	-6.8	0.88	3.2
AB Vel		283.0	+ 0.6		13.5	(cep	6.25)	1.3	5 :
-55 3231		283.0	+ 0.5		9.0	M0 I	-5 :		
1 Car	84810	283.2	- 7.0	+ 2	3.64	(cep	35.5)	0.3	0.7
-57 2803		283.4	- 1.5		9.7	M2 I	-5 :		
-57 2880	CN Car	283.6	- 1.3		10.64	(cep	4.93)	0.49	3.2
-60 1742	88694	283.6	- 2.2	0	8.33	B8 Iab	-6.5	0.71	3.4
-56 3290		284.0	+ 0.3		9.2	F8 I	-6 :		
-30 9311	100503	284.0	+28.9		10.2	M1 I	-5 :		
-34 7456		284.2	+24.2		12.6	F3 I	-6 :		
-57 3035	89925	284.3	- 1.2	+ 1	7.29	G0 Iab	-6.3	0.11	4.1
-56 3300	90489	284.3	- 0.1		8.64	F8 Ib	-4.6	0.09	4.0
HR 4091	90289	284.4	- 0.5	-13	6.33	K5 Ib	-4.4	0.0	1.2
WS 1597		284.4	+ 0.6		12.0	A2 Ia	-7.5		
HR 4110	90772	284.6	0.0	- 1	4.64	F0 Ia	- 8.5	0.37	2.5
GZ Car	302719	284.7	- 1.9		10.2	(cep	4.16)	0.42	2.2
UX Car	91039	284.8	+ 0.2	+10	8.29	(cep	3.68)	0.11	1.6
-55 3615	XX Vel	284.8	+ 2.0	+15	10.65	(cep	6.98)	0.52	3.8
-57 3334	91093	285.0	- 0.1	- 9	7.76	M2 Iab	-5.6	0.70	2.0
HR 4114	90853	285.2	- 0.9	+ 9	3.82	F0 Ib	-4.7	0.12	0.4
EV Car	89845	285.3	- 2.8	+10	7.7	M4 Ia	-7.0	0.70	3.6
HS Car		285.3	- 1.8		12.3	(cep	5.09)	0.7	5 :
-56 3586	300934	285.4	+ 1.4		8.6	M3 Iab	-5.6	0.6	2.5
-56 3593		285.5	+ 1.4		9.0	M0 I	-5 :		
-58 2229	90873	285.5	- 1.4		8.8	A2 Ib	05.0		
HR 4050	89388	285.5	- 3.8	+ 9	3.40	K5 Ib	-4.4	0.0	0.4
CK Car	90382	285.6	- 2.2	-11	7.2	M3 Iab	-5.6	0.60	1.7
YZ Car	90912	285.6	- 1.4		8.69	(cep	18.2)	0.43	3.0
CS Car		285.6	+ 0.2		12.4	(cep	6.66)	0.7	6 :
UW Car	302924	285.6	- 1.8		9.45	(cep	5.35	0.38	2.2
HR 4144	91533	285.7	- 0.5	+10	5.99	A2 Iab	-6.7	0.3	2.4
Y Car	91595	285.7	- 0.3	- 6	7.92	(cep	3.64)	0.04	1.2
CR Car		285.7	- 0.4	+37 :	11.55	(cep	9.76)	0.70	5 :
-57 3502		285.8	+ 0.1	-15	7.4	M0 Iab	-5.8	0.47	2.1
-57 3508		285.8	+ 0.2		8.3	M0 Iab	-5.8		
-58 2245	91054	285.8	- 1.6	- 3 :	7.67	A0 Ib	-5.2	0.62	1.1
AQ Car	89991	285.8	- 3.3		8.85	(cep	9.77)	0.38	2.6
EW Car		285.8	- 3.8		15	(cep	4.24)	0.9	7 :
CQ Car		286.2	- 1.7		13.4	(cep	5.32)	0.9	7 :
-55 3816		286.2	+ 2.2		9.28	M2 Ib	-4.8	0.50	3.3

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-57 3663	92693	286.3	+ 0.7	0	6.99	A2 Ia	-7.5	1.09	1.9
HR 4169	92207	286.3	- 0.3	- 9	5.44	A2 Ia	-7.5	0.50	1.9
HV 8319		286.3	+ 5.4		10.2	(cep	51.3)		
-60 1925	91024	286.4	- 2.7	- 8	7.61	B8 Ib	-5.6	0.29	4.4
-58 2461	92406	286.4	- 0.2		9	A1 Iab	-6.6		
-60 1935	91127	286.6	- 2.6		9.1	M0 I	-5 :		
HR 4177	92397	286.6	- 0.5	+11	5.0	K I			
VY Car	93208	286.6	+ 1.2	- 1	7.42	(cep	19.0)	0.4	1.4
SX Car	93444	286.7	+ 1.3		9.1	(cep	4.86)	0.31	1.9
-57 3746	303250	286.8	+ 0.8	-11	8.96	M3 Iab	-5.6	0.97	2.2
FF Car		286.9	+ 0.6		12.3	(cep	16.3)	0.9	7 :
-59 2345	92274	287.0	- 1.4		8.5	B9 Ib	-5.5		
-57 3805		287.1	+ 1.2		8.73	M3 I	-5 :		
UY Car	305340	287.2	- 3.2		9.0	(cep	5.54)	0.28	2.2
-61 1686	91128	287.2	- 3.7	+10 :	7.54	A5 Ib	-4.8	0.49	2.5
UZ Car	305394	287.3	- 2.3		9.33	(cep	5.20)	0.32	2.3
HR 4250	94367	287.4	+ 2.0	-22	5.24	A0 Ia	-7.1	0.16	2.4
-58 2663	RT Car	287.4	- 0.4	-20	8.36	M2 Ia	-7.0		
WS 1925		287.5	+ 0.4		10.3	A5 Ia	-7.5		
η Car	93308	287.6	- 0.6	-25	7 v	F I			2.4
-60 2120	92506	287.6	- 2.1		8.0	M0 I	-5 :		
CT Car		287.6	- 2.8	+138 :	12.0	(cep	18.1)	0.61	6 :
BO Car	93420	287.6	- 0.3	+ 1	7.55	M4 Ib	-4.8	0.27	2.0
-59 2611	93281	287.7	- 0.8	- 5	8.8	M1 Iab	-5.6	0.43	2.7
HR 4200	93070	287.8	- 1.5	+ 9	4.56	K3 Ib	-4.4	0.34	0.4
-60 2141	92632	287.8	- 2.1		8.3	M2 I	-5 :		
FI Car		287.8	+ 0.7		11.65	(cep	13.5)	0.88	5 :
-57 3895	94304	287.8	+ 0.9		7.1	B6 I	-6 :		
-58 2734	93795	287.9	- 0.3	-12	8.56	B9 Iab	-6.5	0.75	3.4
HR 4228	93737	288.0	- 0.6	-19	6.00	A1 Ia	-8.5	0.30	2.9 :
-60 2187	EY Car	288.0	- 2.1	+18	10.3	(cep	2.88)	0.4	2.5
-57 3939	94509	288.0	+ 1.0		8.6	A0 Ib	-5.2		
HR 4120	91056	288.1	- 5.5	- 3	5.26	K3 Ib	-4.4	0.48	0.4
-46 7062		288.2	+13.2		12.1	A I			
WW Car	94259	288.2	0.0		9.65	(cep	4.68)	0.34	2.4
II Car		288.2	- 0.7		14	(cep	64.2)		
IX Car	94096	288.3	- 0.5	- 8	7.4	M2 Iab	-5.6	0.60	1.7
-60 2271	93503	288.3	- 1.6		8.3	A2 Ib	-5.0		
FZ Car		288.4	+ 0.3	+15 :	11.8	(cep	3.58)	0.60	4.2
FH Car		288.4	- 1.3		12.5	(cep	5.66)	0.7	6 :
-60 2275	93599	288.5	- 1.9		8.9	B8 Iab	-6.5		
-60 2307	93912	288.5	- 1.3		8.7	A3 Ib	-4.8		
-60 2315		288.7	- 1.2		9.1	M0 Ib	-4.8	0.43	3.4
FK Car		288.7	- 0.4		12.2	(cep	23.2)	0.9	8 :
DY Car		288.8	- 0.9		11.5	(cep	4.67)	0.40	5.0
U Car	95109	289.1	0.0	0	6.31	(cep	38.7)	0.3	1.6
GT Car		289.1	+ 0.4		13.1	(cep	13.2)	1.0	8 :
IM Car		289.1	- 0.8		12.3	(cep	5.34)	0.7	5 :
WS 1994		289.1	- 1.6		10.9	B8 Ib	-5.6		
GS Car		289.2	- 1.8		12.5	(cep	4.06)	0.7	5 :
-60 2370	94599	289.2	- 1.4	+ 6	8.15	M4 Iab	-5.6	0.53	2.7
-46 7151		289.2	+13.5		11.0	F2 Ia	-8.5		
WZ Car	94777	289.3	- 1.2	-13	9.4	(cep	24.0)	0.33	4.7
IO Car		289.3	- 0.9	+30	10.9	(cep	13.6)	0.4	7 :
CC Car		289.4	- 1.6	+31 :	12.0	(cep	4.76)	0.60	5.3

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CF Car		289.04	-0.4		12.4	(cep	5.49)	0.7	6 :
CY Car	305784	289.5	-0.9		9.77	(cep	4.27)	0.40	2.2
-59 2927	95540	289.6	-0.3		7.91	A0 Ib	-5.2	0.42	2.3
FN Car		289.6	-0.1		11.45	(cep	4.59)	0.3	4 :
BZ Car	94613	289.6	-2.2	-22	7.7	M2 Iab	-5.6	0.50	2.3
-59 2972	95880	289.6	+0.3	+ 4	6.96	B8 Ib	-5.6	0.40	1.9
FM Car		289.9	-1.0		12.4	(cep	7.64)	0.8	6 :
WS 2098		290.0	-0.9		9.8	B6 I	-6 :		
RR 4337	96918	290.0	+1.3	+ 7	3.90	G0 Ia-0	-9.0	0.6	1.7 :
-60 2459	95687	290.0	-1.0	- 8	7.38	M2 Ib :	-4.8	0.5	1.8
ER Car	97082	290.1	+1.5	-18	6.75	(cep	7.72)	0.30	0.90
-60 2478	95933	290.1	-0.7		7.8	F5 Ib	-4.6		
HK Car	305974	290.1	-0.5	+ 8	10.2	(cep	6.70)	0.3	3.0
-60 2455	95635	290.1	-1.1		8.2	B6 Ib	-5.7		
IK Car		290.1	-4.4		13.4	(cep	5.10)	0.7	7 :
-60 2479	95950	290.1	-0.6	-32 :	6.75	M2 Ib	-4.8	0.43	1.1
-60 2460	95707	290.3	-1.4	-11	7.55	B8 Ib	-5.6	0.32	2.9
GI Car	97746	290.3	+2.5	-21	8.25	(cep	4.43)	0.26	1.5
XZ Car	305996	290.3	-0.8		8.59	(cep	16.6)	0.4	2.5
FO Car		290.5	-2.1		10.8	(cep	10.4)	0.64	4.4
GH Car	306077	290.9	-0.2		9.15	(cep	5.73)	0.46	1.8
FQ Car		290.9	-0.4		12.3	(cep	10.27)	0.8	7 :
-60 2554	96883	291.0	-1.2	-15	7.88	B8 Ib	-5.6	0.45	2.8
-59 3188		291.0	+0.3		8.3	M2 I	-5 :		
HR 4352	97534	291.0	+0.2	- 8	4.60	F0 Ia	-8.5	0.40	2.4
-59 3813	97671	291.0	+0.6	-18	8.5	M3 Ia	-7.0	1.07	2.8
FR Car	306247	291.1	+0.6	- 4	9.65	(cep	10.7)	0.52	3.2
-58 3414		291.2	+1.2		9.2	M2 I	-5 :		
HR 4338	96919	291.2	-1.5	-22	5.13	B9 Ia	-7.1	0.24	2.0
XX Car	310331	291.3	-4.9	-11	9.3	(cep	15.72)	0.30	3.6
-63 1794	95752	291.4	-3.9		7.3	A9 Ib :			
XY Car	308149	291.4	-3.9		9.32	(cep	12.4)	0.49	2.5
IT Car	97485	291.5	-1.1	-14	8.05	(cep	7.54)	0.46	1.3
-59 3334	98409	291.6	+1.0		7.5	A0 Ib	-5.2		
V 419 Cen	100148	292.1	+4.3	-17	8.15	(cep	5.51)	0.34	1.2
-60 2852	98817	292.2	+0.1	+ 2	7.96	M0 Iab	-5.6)	0.63	2.2
AY Cen	99325	292.6	+0.4		8.7	(cep	5.31)	0.45	1.5
-58 3661	99893	292.4	+2.4		7.8	A0 Ib	-5.2		
AZ Cen	99355	292.8	-0.2	-12	8.64	(cep	3.21)	0.26	1.5
01 Cen	100261	292.9	+1.9	-20	5 v	G0 Ia	-8.0	0.5	2.2
-54 4707	101584	293.0	+6.0	+30	7.02	F0 Iape	-8.5	0.25	8 :
02 Cen	100262	293.0	+1.8	-17	5.13	A2 Ia	-7.5	0.51	1.7
-60 2948	99619	293.0	0.0		7.0	M2 Ib	-4.8		
-61 2333	99702	293.2	-0.5		7.9	M I			
-62 2003	99316	293.4	-2.2	+ 6	7.44	B8 Ib	-5.6	0.34	2.6
HR 4438	100198	293.4	+ 0.1	+ 2	6.37	A3 Ia	-7.1	0.54	2.3
V 686 Cen		293.4	+ 0.3		13	(cep	69.9		
-61 2380	100278	293.7	- 0.3		8.1	F8 Ib :			
-60 3094		294.0	- 0.1	-15	7.27	M0 Ib	-4.8	0.33	1.6
-60 3090	100826	294.0	+ 0.3	- 7	6.22	A0 Ib	-5.2	0.14	1.6
-60 3152	100930	294.0	+ 0.3	-19	7.85	M2 Iab	-5.6	0.33	3.0
-59 3664	101222	294.1	+ 1.1		8.0	M0 I	-5 :		
-60 3161		294.1	0.0	-13	7.62	M0 Ib	-4.8	0.23	2.2
-60 3178	101007	294.1	+ 0.5	-13	8.0	M2 Iab	-5.6	0.30	2.2
-60 3152		294.1	+ 0.2		9.3	M I			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
HR 4768	108968	300.4	+ 3.4	-20	5.43	(cep	3.34)	0.23	0.7
VX Cru		300.9	+ 1.6	+15 :	11.91	(cep	12.2)	0.88	5 :
VW Cru	109176	300.9	- 0.7		9.63	(cep	5.26)	0.70	1.6
-62 2844	109699	301.3	+ 0.2		9.5	M1 I	-5 :		
-61 3330	110040	301.6	+ 1.2		8.8	M1 I	-5 :		
-51 6945		301.7	+10.4		11.3	F6 Ia	-8.1		
AG Cru	110258	301.7	+ 3.0	- 4	8.22	(cep	3.84)	0.19	1.3
R Mas	110311	302.1	- 6.6	+ 4	6.36	(cep	7.51)	0.17	0.92
-61 3356	110786	302.2	+ 0.6		8.2	F0 Ia	-8.5		
X Cru	110945	302.3	+ 3.7	-25	8.35	(cep	6.22)	0.37	1.3
-59 4549	111194	302.5	+ 2.5	-19	7.58	M2 Ib	-4.8	0.3	2.0
-42 7921		302.6	+19.6		11.2	A7 Iab	-6.8		
HR 4876	111613	302.9	+ 2.5	-21	5.72	A1 Ia	-7.3	0.43	2.2
-68 1777	111558	302.9	- 6.8	-28	7.28	B8 Ia	-7.1	0.14	6 :
WS 2805		303.2	- 4.0		11.9	B7 Ia :			
		303.2	+ 2.5	-21	7.66	M2 Iab	-5.6	0.6	1.7
HR 4887	111904	303.2	+ 2.5	-15	5.76	B9 Ia	-7.1	0.35	2.4
S Cru	112044	303.3	+ 4.4	- 7	6.55	(cep	4.69)	0.21	0.70
-62 2965	112366	303.6	- 0.6	- 7	7.61	B9 Ia	-7.1	0.74	2.7
-63 2479		303.9	- 1.3		9.7	M2 I	-5 :		
-61 3431		304.3	+ 1.1		9.6	M3 I	-5 :		
-60 4400	V496 Cen	304.4	+ 2.0		9.9	(cep	4.42)	0.56	1.8
-60 4508	114489	305.4	+ 1.7		7.3	F2 Ib	-4.6		
MY Cen		305.3	+ 1.2		12.5	(cep	3.72)	1.0	3.5
MZ Cen		305.4	- 1.5		13	(cep	10.4)		
-61 3516	114792	306.6	+ 0.1		7.9	F8 Ib	-4.6		
-60 4533		305.6	+ 1.9		9.6	M2 I	-5 :		
-63 2682	115336	305.8	- 1.7		8.2	M1 I	-5 :		
WS 2999		305.5	- 0.8		11.4	B6 I	-6 :		
V 397 Cen		305.9	+ 0.1		15	M4 I	-5 :		
V 378 Cen	115514	306.1	+ 0.3	-18	8.42	(cep	6.46)	0.51	1.3
-59 4878	115223	306.1	+ 2.3		8.1	A0 Iab	-6.6		
WS 3029		306.1	+ 0.4		10.7	F5 Ib	-4.6		
-54 5489	114855	306.2	+ 8.0		8.8	F9 Ib			
-41 7625		306.5	+20.9		10.9	F8 Ia	-8.0		
-61 3638	116119	306.6	+ 0.6	-22	7.91	B6 Ib	-5.6	0.68	2.0
00 Cen		306.9	- 0.6		11.9	(cep	12.9)	1.2	4 :
-61 3732	117000	307.3	+ 0.4		7.8	F5 Iab	-6.4		
-60 4700	117058	307.5	+ 1.8		9.4	A5 Ib :			
VW Cen		307.6	- 1.6		10.14	(cep	15.0)	0.59	3.3
-60 4739	V659 Cen	307.7	+ 0.9	-13	7	(cep	5.62)		
KN Cen		307.8	- 2.1		9.82	(cep	34.0)	0.81	4.4
AS Mus		307.8	- 6.1		15	(cep	26.4)		
-63 2869	118385	308.0	- 1.6		7.6	A1 Ib	-5.1		
-61 3835	118227	308.3	+ 0.8		9.1	M0 I	-5 :		
-61 3897	118846	30.8.6	- 0.1		7.6	M0 I	-5 :		
-57 6156	118196	308.8	+ 3.9		8.2	F8 Ib :			
-61 3926		309.0	+ 0.5	- 9	6.86	B8 Ia	-7.1	0.29	4 :
HR 5171	119796	309.3	+ 0.4		6.8 v	G8 Ia-0	-8.9	1.2	3.7
XX Cen	118769	309.5	+ 4.6	-16	7.8	(cep	11.0)	0.35	1.9
-40 7868		309.6	+21.5		10.7	F0 Ib	-4.7		
V 381 Cen	120400	310.8	+ 4.4	-31	7.6	(cep	5.08)	0.25	1.3
-59 5278	121022	310.6	+ 1.4		9.2	M3 I	-5 :		
-61 4332	122905	311.5	- 0.7		7.9	M3 I	-5 :		
HR 5379	125835	311.5	-6.9	-34 :	6.09	A2 Ib	-5.0	0.5	0.83

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
KK Cen		294.2	+ 2.7		11.49	(cep	12.2)	0.57	7 :
LV Cen		294.3	- 1.7		11.9	(cep	4.97)	1.1	4.6
WS 2378		294.4	- 2.7		10.0	FO Ib	-4.7		
-59 3717	101711	294.4	+ 1.5		7.2	FO Ib	-4.7		
-59 3728	101814	294.4	+ 1.4		7.6	M2 I	-5 :		
HR 4499	101570	294.8	- 0.3	+14	4.93	G6 I	-6 :	0.21	1.5
IZ Cen		294.9	- 0.5		12.1	(cep	5.89)	0.8	5 :
UZ Cen	101602	295.0	- 0.9	- 5	8.75	(cep	3.33)	0.24	1.7
-62 2234	101712	295.2	- 1.6	+ 3	7.80	M2ep Ib	-4.8	0.77	1.2
-44 7820	105578	295.5	+16.8		8.7	A7 Ib	-4.8		
HR 4511	101947	295.2	- 0.6	-12	4.99	GO Ia	-8.0	0.12	3.3
-63 1943	101684	295.3	- 2.0		7.23	F8 Ib	-4.6	0.36	1.4
HR 4492	101379	295.5	- 3.6	+14	5.16	GO Ib	-4.5	0.1	0.8 :
-60 3442	103052	295.8	+ 1.0	-12	7.9	M3 Ia	-7.0	0.63	3.2
HR 4541	102878	296.0	- 0.6	-13	5.69	A2 Ia	-7.5	0.28	3.0
-59 3922	103465	296.0	+ 1.4		8.3	FO Ib :			
-62 2320	BK Cen	296.0	- 1.0	-16	10.03	(cep	3.17)	0.5	1.6
-61 2690		296.1	- 0.5		8.0	MO I	-5 :		
-61 2725	103168	296.2	- 0.2		8.0	M1 I	-5 :		
-34 8089	107541	296.1	+27.7		9.9	K I			
BB Cen	309218	296.4	- 0.7		9.8	(cep	4.00)	0.4	2.3
RT Mus	310831	296.5	- 5.3	- 2	8.9	(cep	3.09)	0.30	1.4
TZ Mus		296.6	- 3.0	-14 :	11.75	(cep	4.94)	0.69	4.0
HR 4563	103516	296.6	- 1.1	-21 :	5.95	A2 Ib	-5.0	0.18	1.2
-60 3540	103999	296.7	+ 0.7		8.75	K3 Ib :	-4.4	0.3	2.9
SV Cru		296.8	- 0.4	-17 :	12.4	(cep	7.00)	0.9	5.:
UU Mus	103137	296.8	- 3.2	-14	9.79	(cep	11.6)	0.4	3.9
-62 2459	103807	297.0	- 1.4		7.6	F7 Ib :			
-62 2498		297.1	- 0.4		9.0	MO I	-5 :		
HR 4578	104035	297.3	- 2.0	- 3 :	5.60	A2 Ib	-4.8	0.12	1.1
-61 2933	104901	297.5	+ 0.4		7.8	B8 Ib :			
-61 2935		297.5	+ 0.4		8.4	FO Ib :			
HR 4538	102839	297.7	- 8.0	+18	4.96	G5 Ib	-4.5	0.40	0.46
W Cru	105998	297.8	+ 3.7	-23	9 v	G_2 Iab	-6.2		
-61 2961	105298	297.8	+ 0.8		8.5	MO I			
TY Cru		297.8	- 0.2		11.7	(cep	4.99)	0.8	4.0 :
-60 3780	105456	297.8	+ 1.3		8.5	M1 I	-5 :		
-64 1791	105071	298.2	- 3.1	-19	6.40	B8 Ia	-7.1	0.22	3.2
-63 2160	105563	298.3	- 1.2		7.5	M2 I	-5 :		
-53 5072		298.3	+ 8.7		9.9	A9 Iab	-6.8		
HR 4644	106068	298.5	+ 0.4	-2	5.91	B9 Ia	-7.1	0.30	2.6
AD Cru		298.5	+ 0.4		11.06	(cep	6.40)	0.65	3.7
-62 2646	106505	298.8	- 0.2		9.0	MO I	-5 :		
AO Cru	106873	299.2	- 0.9		8.8	M1 I	-5 :		
SU Cru		299.2	- 0.6		9.78	(cep	12.8)	0.9	2.1
-62 2688	107209	299.3	- 0.2	- 7	6.80	AO Iab	-6.6	0.23	3.4
T Cru	107447	299.4	+ 0.4	- 6	6.58	(cep	6.73)	0.37	0.66
-64 1854	106984	299.4	- 2.0		8.8	MO I	-5 :		
UX Mus		299.5	- 3.1		12.8	(cep	7.14)	1.0	5 :
S Mus	106111	299.6	- 7.5	+12	6.15	(cep	9.66)	0.32	0.70
R Cru	107805	299.6	+ 1.1	-14	6.80	(cep	5.83)	0.19	0.91
WS 2676		299.7	+ 3.9		12.5	B7 Ib :			
VV Cru		299.9	- 1.8		12.3	(cep	6.12)	1.3	2.0
-65 1857	107822	300.1	- 2.9		8.9	MO I	-5 :		
WS 2686		300.3	+ 0.9		11.9	B7 Ia	-7.1		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-54 6868	142696	327.8	- 1.1		8.6	MO I	-5 :		
S Nor	146323	327.8	- 5.4	+ 3	6.45	(cep	9.75)	0.18	0.96
-53 6947	143183	328.5	-0.9		8.1	M3 I	-5 :		
-17 4022	123884	328.2	+41.0		9.36	AO Ib	-5.2	0.10	
-53 6937		328.8	- 0.5		9.6	M2 I	-5 :		
HR 5742	137709	329.1	+ 8.0	-18	5.23	K5 Ib	-4.4	0.46	0.7
-53 7039	RS Nor	329.1	- 1.2		10.0	(cep	6.20)	-.66	2.0
-54 7159	144972	329.5	- 2.1		8.71	F6 I	-6 :	0.40	
-54 7226	145324	329.6	- 2.3	-44	7.32	A5 Ib	-4.8	0.26	1.8
-31 11449	129981	329.6	+24.7		9.0	K I			
-53 7344		329.7	- 2.2	-32 :	8.79	K2 Ib	-4.4	0.4	2.5
-53 7364		329.7	- 2.2		9.13	K4 Ib	-4.4	0.3	3 :
-53 7366N		329.7	- 2.2		9.69	K3 Ib	-4.4	0.9	3 :
-53 7400p		329.8	- 2.2	-46	8.25	GO Ib	-4.5	0.4	2 :
-53 7400f		329.8	- 2.2	-36 :	9.01	FO Ib	-4.7	0.31	3 :
-53 7442		329.8	- 2.2	-36 :	8.86	G I			
-52 9258	144386	330.0	- 0.8		7.3	M1 I	-5 :		
HR 5667	135345	330.0	+13.6	-27	5.20	G5 Ia	-8.0		
HR 6022	145384	330.1	- 1.7		5.89	M0 I	-5 :	0.32	
TW Nor		330.4	+ 0.3		12.1	(cep	10.8)	1.3	2.1
-53 7517	GU Nor	330.5	- 1.7		10.41	(cep	3.45)	0.72	1.7
WS 3593		330.6	- 3.7		10.1	B8 Iab	-6.5		
-34 10121		330.9	+20.4		11.0	A1 Ib	-5.1		
-51 9803	144417	331.0	+ 0.3		7.5	M3 I	-5 :		
II Nor		331.1	- 3.0		15	(cep	23.5)		
FW Lup	136483	331.3	+13.5		9	(cep	16.73)		
-63 4361	199997	331.6	-38.7	+ 3	7.66	G3 I	-6 :	0.0	
-49 10463		332.9	+ 0.4		10	M3 I	-5 :		
γ-2 Nor	146143	333.0	+ 0.4	-18	4.97	F8 Iab	-6.3	0.22	1.3
-38 10724		333.3	+11.2		11.3	F8 I	-6 :		
-51 10255	148506	333.5	- 2.3		8.4	A2 Ib	-5.0		
-38 10377		333.6	+14.2		11.6	F8 Ia	-8.0		
-28 11073		333.8	+26.1		11.6	Ao Iab	-6.6		
-49 10568		333.8	+ 0.2		9.9	M3 I	-5 :		
-49 10566		334.0	+ 0.4		10	M3 I	-5 :		
-51 10318		334.0	- 2.6		9.0	M1 I	-5 :		
-36 10102		334.0	+17.0		10.9	GO Ib	-4.5		
-49 10778	149019	334.3	- 1.0	-35	7.45	A1 Ia	-7.3	0.84	2.7
beta Ara	157244	335.2	-11.0	0	2.84	K3 Ib	-4.4	0.06	0.26
V 340 Ara		335.2	- 3.7		8.7	(cep	20.8)	1.1	5 :
HR 5660	135153	335.5	+22.1	-23	4.90	FO I	-7 :	0.2	
-49 10790	149077	335.5	- 1.2		8.2	A2 Ib	-5.0		
-48 10941	148922	335.6	- 0.9		8.0	A5 Ib :			
-40 9989		335.8	+10.3		11.3	F3 I	-6 :		
WS 3673		336.1	- 1.1		12.9	B6 I	-6 :		
-35 10364		336.2	+16.5		11.4	AO Ib	-5.2		
WS 3667		336.2	- 0.9		11.0	F8 I	-6 :		
-46 10843	149076	336.9	+ 1.0	-34	7.48	B6 Ia	-7.0	0.67	3.2
-46 10834	148900	337.5	+ 0.9		7.8	M1 I	-5 :		
-46 10896		337.6	- 0.2		10	M2 I	-5 :		
-47 11017	150675	337.9	- 1.3		7.07	E1 Ib	-4.4	0.19	1.5
WS 3479		338.2	+ 7.8		11.7	B9 Iab	-6.5		
-46 11005	150884	338.8	- 0.7		7.01	F8 Ia	-8.0	0.19	7 :
HR 6197	150421	338.9	0.0		6.23	F2 Ib	- 4.6	0.51	0.72
-50 11129		339.2	- 7.0		10.3	FO Iab	-6.6		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-61 4343		311.8	- 0.1		8.9	M2 I	-5 :		
-61 4359	123229	311.8	- 0.8		8.9	F3 Ib	-4.6		
QY Cen		311.9	- 0.2		12.4	(cep	17.8)	1.3	4 :
-60 5225		312.5	+ 0.6		8.7	M0 I	-5 :		
-33 9130		312.5	+28.0		9.5	F3 Ia	-8.3		
-61 4434	124328	312.6	- 0.5		7.4	M0 I	-5 :		
-47 8660	120574	313.2	+13.4		9.3	F4 Ib	-4.6		
IU Cen		313.3	+ 4.6		14	(cep	3.32)		
-60 5315	V339 Cen	313.5	- 0.5	-24	8.5	(cep	9.47)	0.61	1.4
EN TrA	131356	314.0	- 8.6		9	(cep	38.0)		
AV Cir	130233	314.0	- 7.2		8	(cep	3.07)		
WS 3205		314.2	+ 6.0		10.5	B7 I	-6 :		
-60 5420		314.8	- 0.7		9.5	M3 I	-5 :		
V 737 Cen	128037	315.0	- 1.6		7	(cep	7.07)		
-42 8849		315.1	+18.1		11.3	A5 Ib	-4.8		
TX Cen		315.2	- 0.6		10.5	(cep	17.1)	0.86	2.8
-60 5438	127755	315.4	- 0.2		7.5	M0 I	-5 :		
ups-2 Cen	122223	315.6	+15.5	0	4.34	F7 Ib	-4.6	0.14	0.5
HR 5621	133683	315.8	- 7.7	- 8	5.76	F8 Ia	-8.0	0.16	4 :
AX Cir	130701	315.8	- 4.0	-19	5.9	(cep	5.28)	0.17	0.6
-60 5502	129405	316.0	- 1.5		7.5	M0 I	-5 :		
V Cen	127297	316.4	+ 3.3	-22	6.8	(cep	5.49)	0.3	0.7
R TrA	135592	317.0	- 7.8	- 9	6.66	(cep	3.39)	0.21	0.63
WS 3290		317.2	- 1.6		10.3	B8 Ib	-5.6		
-60 5541	130831	317.2	- 1.3		7.4	M0 I	-5 :		
-46 9165		317.3	+13.7		10.9	B9 Ib	-5.5		
-58 5719p	130205	317.4	+ 0.2		7.5	M0 I	-5 :		
-41 8494		317.9	+18.5		10.7	B8 Ia	-7.1		
-59 5761	131780	318.2	- 0.8		8.6	M0 I	-5 :		
-60 5617		318.4	- 1.9		9.5	M0 I	-5 :		
kappa Tri	141767	318.5	-11.5	+ 5	5.08	G6 I	-6 :	0.1	
-57 6833		318.8	+ 1.3		9.4	M0 I	-5 :		
-42 9354		321.2	+16.4		11.7	F I			
-55 6387		321.2	+ 1.7		8.3	M0 I	-5 :		
-57 6995	135672	321.7	- 0.1		8.1	M3 I	-5 :		
-57 7031	136470	321.9	- 0.9		7.8	M2 I	-5 :		
-57 7025	136170	322.0	- 0.3		9.5	M2 I	-5 :		
S TrA	142941	322.1	- 8.2	+ 7	6.35	(cep	6.32)	0.18	0.80
-55 6493		322.4	+ 0.9		9.6	M2 I	-5 :		
-54 6382	IQ Ner	322.5	+ 2.7		10	(cep	8.23)		
-40 8758		322.6	+17.5		11.0	F3 Ia	-8.2		
-44 9543		322.7	+13.6		11.0	A1 Ib	-5.1		
-32 9976		323.0	+27.2		12.3	F3 Ia	-8.3		
U TrA	143999	323.2	- 8.0	-14	7.85	(cep	2.57)	0.13	1.00
-58 6120	139027	323.2	- 2.6		8.3	M0 I	-5 :		
-50 9113	133901	323.8	+ 6.0		9.2	A5 Ib	-4.8		
-47 9706	133656	325.0	+ 8,6		8.2	A5 Iab	-6.9		
GH Lup	136739	325.0	+ 3.3		8	(cep	9.28)		
AA Nor		325.0	- 2.6		13.0	(cep	12.2)	1.6	4 :
-62 5377	RT TrA	325.3	-10.4		9.4	(cep	1.95)	0.3	1.5
U Nor	139717	325.7	- 0.1		9.12	(cep	12.6)	0.85	1.6
GR Nor		326.0	- 5.2		12.4	(cep	1.96)	0.7	4 :
WS 3591		326.8	- 7.5		9.7	B8 Ia	-7.1		
-53 6723	141647	327.5	- 0.2		7.4	M0 I			
-54 6774	SY Nor	327.5	- 0.7		9.42	(cep	12.6)	0.7	2.5

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-31 12097		339.3	+19.1		11.1	F4 I	-6 :		
-44 11039	150038	339.8	+ 1.4		7.3	M0 I	-5 :		
-44 11020	149812	339.8	+ 1.7		7.8	M0 I	-5 :		
-50 11403	159178	340.4	- 9.8		9.7	A2 Ib	-5.0		
KQ Sco	328953	340.4	- 0.7		9.8	(cep	28.7)	0.96	2.6
-45 11123	153258	341.3	- 1.9		6.5	K2 I	-6 :		
-44 11323		341.4	- 1.5		9.7	M2 I	-5 :		
-44 11324		342.0	- 1.0		9.4	M2 I	-5 :		
RR Tel		342.2	- 32.2	-62	6 v				
-23 12290		343.0	+26.8		12.2	F6 I	-6 :		
IW Ara		343.2	- 6.6		14	(cep	11.15)		
V 636 Sco	156979	343.5	- 5.2	+ 1	6.63	(cep	6.80)	0.38	0.64
V 567 Sco		343.7	+ 2.4		10.9	(cep	34.05)	1.4	3 :
-40 10989	322422	345.0	+ 1.6		9.79	A1 Iab	-6.6	0.26	
-47 11874		344.4	-10.9		10.5	A3 Ib	-4.8		
HR 6513	158476	344.0	- 6.8		6	F8 I	-6 :		
-46 11866		344.7	- 9.9		11.1	A0 Iab	-6.6		
V 507 Sco		344.8	- 4.7		14	(cep	11.8c)		
-41 11321		345.5	- 1.0		9.9	M2 I	-5 :		
BL Tel	177300	345.5	-23.2	+92	7 v	F + M			
-41 11303		345.7	- 0.6		9.0	M3 I			
-33 11164		346.1	+11.0		12.8	A0 Ia	-7.1		
-33 11203		346.5	+10.3		11.9	A0 Ib	-5.2		
MR Ara		346.5	-10.4		12	(cep	19.8)		
-43 11917	160150	346.7	- 6.9		10.0	F2 Iab	-6.6		
-46 12180	166247	346.8	-13.2		9.7	G2 I	-6 :		
theta Sco	159532	347.1	-6.0	+ 1	1.86	F0 Ib	-4.7	0.24	0.14
HR 6392	155603	347.4	- 0.6	-6 :	6.61	G5 Ia	-8.0	1.2	1.5
-44 12115		347.4	- 8.7		11.1	F3 Ib	-4.6		
-39 11228	155737	347.6	- 0.6		8.5	M3 I	-5 :		
-39 11357	156808	348.4	- 1.6		9.1	A5 Ib :			
-44 12372		348.4	-12.0		11.1	A5 Iab	-6.9		
-23 12603		348.8	+21.9		11.6	G0 I	-6 :		
-38 11775		349.0	- 1.0		9.4	M0 I	-5 :		
-43 12213		349.0	-10.3		11.1	F6 I	-6 :		
V 553 Sco		349.2	- 7.8		16	(cep	2.44)		
V 516 Sco		349.3	- 3.6		15	(cep	15.7)		
-25 11396	145128	349.7	+19.0		9.3	K I			
-24 12572		349.7	+19.1		11.2	F3 I			
V 470 Sco		349.8	+ 0.3		11.5	(cep	16.3)	1.3	3 :
V 555 Sco		349.9	- 8.0		15	(cep	15.6)		
V 533 Sco		350.0	- 5.4		15	(cep	15.5)		
-45 12618		350.1	-16.5		11.5	A2 Ib	-5.0		
-37 11502		350.1	- 0.5		9.5	M1 Ib	-5 :		
RV Sco	153004	350.4	+ 5.7	-18	7.07	(cep	6.06)	0.4	0.76
V 532 Sco		350.5	- 5.1		16	(cep	24.1)		
ι^1 Sco	161471	350.6	- 6.1	-28	2.99	F2 Ia	-8.4	0.26	1.3
CQ Sco		350.7	- 6.6		14	(cep	30.4)		
V 549 Sco		350.7	- 6.8		15	(cep	16.5)		
ι^2 Sco	161912	350.9	- 6.5	-18	4.80	A3 Iab	-6.8	0.23	1.5
-34 11575	155666	351.5	+ 2.3		8.2	M0 I	-5 :		
-37 11669		351.6	- 2.2		10.0	B6 I	-6 :		
-38 12283	V383 Sco	353.0	- 6.1		11 v	F0 Ia	-8.5		
-40 12194		351.9	-10.1		11.1	F2 Ia	-8.4		
α Sco	148478	352.0	+15.1	- 3	1 v	M1 Ib	-4.9	0.17	0.15

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
-33 12025		353.3	+ 1.0		10.4	A2 Ib	-5.0		
-36 11791	160530	353.4	- 3.1		8.7	M1 I	-5 :		
-43 13066		353.9	-20.3		11.1	F2 I	-6 :		
V 381 Sco		354.3	- 3.8		12 v	M5 Ia	-7.0		
-34 11858	159683	354.2	- 1.5		8.5	M2 I	-5 :		
-34 11794		354.2	- 0.8		10	M3 I	-5 :		
-35 11852	160810	354.3	- 2.9		7.3	M0 I	-5 :		
V 482 Sco	158443	354.4	+ 0.2	+11	7.92	(cep	4.53)	0.40	0.96
-33 12159	158774	354.4	- 0.2		8.5	M2 I	-5 :		
-32 12739	157793	354.8	+ 1.4		8.8	A1 Ib	-5 :		
V 446 Sco		355.0	- 6.0		14	(cep	28.6)		
V2284 Sco		355.2	- 7.5		14	(cep	1.95)		
-33 12361	160529	355.7	- 1.7	-34	6.67	A2 Ia-0	-8.5	1.22	2.0
-31 14165		355.9	+ 1.0		8.7	M2 I	-5 :		
RY Sco	162102	356.5	- 3.4	-18	8.00	(cep	20.3)	0.92	1.5
-24 12878		356.7	+12.4		12.3	A3 Ib	-5.0		
V 717 Sco		357.1	- 4.8		12.0	(cep	20.18)	1.5	3 :
BF Oph	154365	357.1	+ 8.6	-31	7.38	(cep	4.07)	0.31	0.80
WS 4771		358.7	- 7.6		11.0	B8 Ib	-5.6		
V 500 Sco	316354	359.0	- 1.4	-14	8.77	(cep	9.32)	0.62	1.6
GK Sgr		359.5	- 8.1		14	(cep	14.87)		
V1821 Sgr		359.6	- 5.9		15	(cep	9.53)		
		359.6	- 6.1		15	(cep	22.57)		
-29 14092		359.8	- 1.6		9.3	M3 I	-5 :		

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Отделение астрономии
Северозападного университета,
г. Эванстон,
Иллинойс, США

Astronomical department,
Northwestern University,
Evanston, Illinoys, USA