

CATALOGUE OF ECLIPSING AND SPECTROSCOPIC BINARY STARS IN THE REGIONS OF OPEN CLUSTERS

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Studies of binary stars in open clusters of different age are closely associated with the problem of stellar evolution. Membership of binary stars to a cluster gives additional information of substantial importance for classification of their evolution. It is worth mentioning the possibility for the evaluation of binaries parallaxes if their membership is established by some other criteria.

From evolutionary view-point it is very important to compare members of a given cluster-binaries to single stars, which have practically the same age.

Recently the correlation of frequency of binaries with different parameters of the clusters also attracts the attention of many authors.

All these reasons underline the necessity to find out binary stars, possible members of open star clusters and join together the data about them.

Kholopov [16, 17] studies the presence of variable stars in open clusters. His list contains 47 eclipsing variables situated in the regions surrounding open clusters within the range of 2 radii.

Sahade and Dávila [28] published a list of 483 eclipsing binaries within 3 radii of open clusters.

Since then the number of known binaries arose considerably. It was also established that many members of open clusters are spectroscopic binaries.

Therefore we prepared this Catalogue of Eclipsing and Spectroscopic Binary Stars in the Regions of Open Clusters. It can be used for making programmes for observations and for determination of proper motions, radial velocities and spectroscopic classification as well as for different statistical purposes.

Description of the catalogue. Column 1: The first line contains OCl number of the cluster according to the Catalogue of Star Clusters and Association (Alter et al, 1970) and old designation of cluster. The second line gives the IAU numbers, according to Resolution 1 taken by Commission 37 at the XVIIth General Assembly of IAU in Montreal. In the third line diameters of the clusters in minutes of arc and their types after Trumpler's classification are given. For unification Trumpler's diameters are given in all cases when such determination is available. For other clusters the values of Collinder or other authors are used. Only for Pleades, Hyades and Coma Berenices diameters of the nucleus and that of corona, according to Kholopov [17] are given.

Column 2: Eclipsing and spectroscopic binaries in the region of 5 radii around the cluster are listed. For the nearby clusters with diameters more than 240 — OCl 84, 392, 474, 741, 1011 — covering an enormous area of the sky, the region is limited to 3 cluster radii. For the above mentioned clusters: Pleades, Hyades and Coma Berenices, the variables in the nucleus and in corona are noticed.

As a rule for spectroscopic binaries HD or BD numbers are given. If the star is at the same time a variable one, under the numbers its designation is given, according to the General Catalogue of Variable Stars (GCVS) [19] or Catalogue of Suspected Variables (CSV) [48]. Numbers in brackets represent Harvard's designation of variables.

If the binaries are situated in overlapping regions of two or more clusters, they are quoted for all clusters.

Column 3: The spectroscopic binaries — SB and type of variability are denoted according to GCVS.

If there are indications in the literature of the variability of the star, but the type of variability is unknown and it is not designated in GCVS or CSV an indication «var» is applied.

Column 4: The distance of the star from the center in radius of the cluster units. In the case of Pleades, Hyades and Coma Berenices indices I and II are designating nucleus and corona of the cluster, respectively.

Column 5: The maximum brightness of the eclipsing binaries or the magnitude of the spectroscopic binaries.

Column 6: The brightness of the eclipsing binaries in minimum.

In both Columns, 5 and 6, photographic magnitudes are given unless there is a special notice.

Column 7: The period of the binary in days with an accuracy of two decimal places of a day.

Column 8: Spectroscopic data according to the Catalogue of Spectroscopic Binaries [7], GCVS or publications in the current literature.

Column 9: Information on the membership of the cluster. The symbols used are as follows: m — member, pr — probable member, p — possible member, nm — not member.

Numbers after the symbol are indicating the source of information according to the numbers in the list of references.

For clusters and stars denoted by asterisk there are additional remarks at the end of the Catalogue.

Acknowledgments. It is a pleasure to authors to express their gratitude to Mrs Lidia Malinova for her qualified and careful work in typing and preparing of Catalogue for print.

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
1	2	3	4	5	6	7	8	9
9 Tr 31	V786 Sgr	4.0	EA	11 ^m 4	13 ^m 0	155.90		p 28
C1756-281 4'5 III4p	V789 Sgr	0.8	EA	12.3	13.0	2.55		
18 NGC6523	WY Sgr	3.8	EA	10.2	11.1	4.67	B9	p 28 p 28
C1800-243 45	AU Sgr	3.9	EA?	13.6	14.7			
	AW Sgr	4.8	EA?	14.2	15.3			
	V783 Sgr	4.3	EA	13.0	13.9	2.36		
	HD165814	4.5	EB SB	6.43	6.88V	2.25	B8	
	V3792 Sgr							
22 Cr 367	AU Sgr	5.0	EA?	13.6	14.7			
C1806-240 37.5 IV3p	AW Sgr	3.1	EA?	14.2	15.3			
	HD165814	4.8	EB SB	6.43	6.88V	2.25	B8	
	V3792 Sgr							
23 NGC6514	WY Sgr	1.6	EA	10.2	11.1	4.67	B9	p 28 p 28
C1759-230	AU Sgr	2.6	EA?	13.6	14.7			
23	V792 Sgr	1.2	EB			3.93		
26 NGC6531	AU Sgr	4.6	EA?	13.6	14.7			
C1801-225 12 I3m								
28 NGC6568	HD166937	4.7	EA SB	3.79	3.92V	180.45	B8Iap	
C1809-216	μ Sgr							
15 III4m	V3794 Sgr	2.5	EA	12.0	12.7	0.95		
32 NGC6507	WX Sgr	0.9	EA	9.6	11.3	2.13	A1	
C1756-174 7 IV2p								

Gluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
42 Cr 394 C1850-204 22.5 IV2m	V1023 Sgr	2.7	EA	12 ^m 9	13 ^m 8	0.79		p 28
43 Blanco C0001-302 90 III2m	HD224113 AL Scl	3.6	EA SB	6.1	6.3	2.44	B5IV	
	SZ Scl	3.7	EW	12.98	13.7	0.32		
	UU Scl	4.5	E	14.86	16.4	3.45		
	TU Scl	3.8	E	13.89	14.5	1.16		
44 NGC6618 C1817-162 22.5 III2p	V1963 Sgr	2.6	EA?	12.3	13.8	2.42/n		
52 Rupr. 145 C1847-181 31.5 III1m	V1026 Sgr	1.8	EW	12.8	13.4	0.39		
	V1032 Sgr	4.0	EB	14.7	15.2	0.68		
	V1034 Sgr	4.2	EA	14.4	15.0	14.05		
59 NGC6631 C1824-120 4.5 II2m	EQ Sct	1.3	EB	11.7	12.6	1.32	B	
65 Rupr. 147 C1913-163 35 III2m	HD181615 v Sgr	4.7	EB SB	4.34	4.44	137.94	B8p+F2p	
	V1114 Sgr	3.7	EA	14.4	14.8	2.78		
68 NGC6664 C1834-082 20 III2m	EX Sct	4.7	EA	13.1	13.6	1.58		
72 NGC6712 C1250-087 2 I3r	LZ Sct	3.3	E	15.3	16.2			
73 Dol 30 C1832-068 18	HD170547	4.8	SB	6.27V		503.4	G5	
74 NGC6683 C1839-063 3 I4p	XY Sct	3.7	EW	13.8	14.5	0.78		
	XZ Sct	1.4	EA	13.7	14.9	2.00		
	EY Sct	0.6	EA	11.9	12.7	1.17		p 28
75 Cr 350 C1745-013 45 IV3p	V2056 Oph	4.5	EA	13.5	14.2	2.13		
76 NGC6705 C1848-063 12.5 I2r	BS Sct	2.4	EA	11.00	12.40	3.82	A0III	pr 19
77 Basel 1 C1845-059 8 I2m	V370 Sct	2.4	EA	15.3	18.5	4.12		
82 NGC6704 C1848-052 5 I3m	FN Sct	0.5	EA	13.1	15.2	4.17		p 28
84 Mel 186 C1758+029 250 IV3m	HD164165	2.5	SB	8.77V		5.88	B9V	
	HD164261	2.5	SB?	8.26V		8.23	B9Shell	
	HD164426	2.3	SB	9.10V			A0V	
	HD164480	2.4	SB	7.66V		10.53	B5V	
	HD164481	2.2	SB?	9.10V			A0V	
	HD164573	2.3	SB	6.88V		18.92	B4V	
	HD164660	2.4	SB	7.76V		10.79	B8V	
	HD164940	2.3	SB?	9.26V		41.78	A1V	
	HD163611	1.2	EW SB	7.60	8.09	0.41	F4V+F4V	
	V566 Oph							
	HD165341	0.6	SB	4.02			K0V+K5V	
	RV Oph	3	EA	9.42	11.44	3.69	A0	p 28
	V378 Oph	1.8	EB	13.8	15.8	70.8		
	V391 Oph	1.0	EA	11.5	14.5	2.90	A1	
	V423 Oph	1.3	EA	11	12	1.2		

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	V487 Oph	0.5	EA	12 ^m 8	14 ^m 1	3.14		
	V496 Oph	1.1	E	15.3	15.7	2.58		
	V506 Oph	3	EB	11.2	12.0	1.06	A—F	
	V509 Oph	0.3	EA	12.6	13.8	1.22		
	V511 Oph	0.9	EA	13.4	15.2	1.07		
	V557 Oph	2.8	EB	15.1	16.1	1.20		
	V566 Oph	1.1	EW	7.60	8.09	0.41	F4V	
	V572 Oph	0.5	EA	15.4	16.6	2.43		
	V573 Oph	0.7	EA	13.1	16.1	4.35		
	V586 Oph	3	EA	13.3	15.8	2.43		
	V831 Oph	3.0	E	13.8	14.9			
	V839 Oph	3	EW	9.4	9.99	0.41	G0	
	V868 Oph	2.1	EB?	12.9	(13.8	0.44		p 28
	V878 Oph	2.2	EW	15.8	16.5	0.44		
	V916 Oph	2.7	EA	11.4	13.3	3.11		
	V938 Oph	1.0	EW	14.5	15.5	0.44		p 28
	V940 Oph	2.5	EB	14.8	15.8	0.43		
	V941 Oph	2.5	EA	16.0	(16.6	1.20		
	V943 Oph	2.3	EW	15.9	16.6	0.49		
	V945 Oph	0.6	EW	14.6	15.1	0.32		p 28
	V947 Oph	1.4	EW	14.1	14.5	0.37		p 28
	V954 Oph	1.2	EW	14.3	14.9	0.23		p 28
	V960 Oph	2.0	EW	15.8	16.4	0.31		
	V963 Oph	2.6	EW	14.6	15.1	0.26		p 28
	V969 Oph	2.3	EW	13.5	13.9	0.59		p 28
	V983 Oph	0.6	EA	10.5	11.3		A0	p 28
	V987 Oph	1.7	EA	14.4	14.9			p 28
	V1071 Oph	3.0	EA	15	16			
	V1076 Oph	2.0	EA	16	17.5			
	V1080 Oph	1.8	EA	16	18			
	V1091 Oph	1.0	EA	15	16			
	V1102 Oph	2.4	EA	16	17			
	V2035 Oph	0.4	E	15.5	16.5			
	V2036 Oph	1.9	EA	14.5	16			
	V2037 Oph	1.3	EA	15	15.5			
	V2056 Oph	3.0	EA	13.5	14.2	2.13		
	DG Ser	2.7	EA	15.7	17.0	6.46		p 28
85* IC4665	HD161165	1.6	SB	8.77V		5.88	B9V	m 2
C1743+057	HD161184	1.4	SB	7.98V			B8V	m 2
50 III2p	HD161261	1.2	SB?	8.26V		8.23	B9 Shell	m 2
	HD161370	0.8	SB?	9.39V			A2V	m 2
	HD161426	0.5	SB	9.10V			A0V	m 2
	HD161480	0.4	SB	7.66V		10.53	B5V	m 2
	HD161481	0.7	SB?	9.10V			A0V	m 2
	HD161572	0.1	SB	7.59V			B6V	m 2
	HD161573	0.5	SB	6.88V		18.92	B4V	m 2
	HD161603	0.1	SB	7.34V		43.5	B5V	m 2
	HD161621	0.1	SB?	8.83V			A2V	m 2
	HD161660	1.0	SB	7.76V		10.79	B8	m 2
	HD161677	0.3	SB	7.12V			B6V	m 2
	HD161698	0.5	SB	8.23V			B8V	m 2
	HD161733	0.5	SB	7.99V			B6V	m 2
	HD161734	0.8	SB	8.88V			B9V	m 2
	HD161940	1.8	SB?	9.26V		41.78	A1V	m 2
	HD162028	1.5	SB	7.50V		8.01	B6V	m 2
	V378 Oph	2.3	EB	13.8	15.8	70.8		
	V557 Oph	2.4	EB	15.1	16.1	1.2		
	V1071 Oph	3.6	EA	15	16			
	V1076 Oph	3.4	EA	16	17.5			
94 IC4756	+07° 3832	4.3	EA SB	10.2	12.3	261.93	F3Ib+K5Ib	
	RZ Oph							
C1836+054	V681 Oph	4.7	EA	14.6	15.6	9.96		
50 III2m	V1117 Oph	4.8	EA	15	16			
	BU Ser	0.9	EA	13.9	15.5	1.84		
	EY Ser	4.9	EA	14.5	(17.5			

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Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
100 NGC6709 C1849+102 12 III2m	V479 Aql	4.3	EA	13 ^m 2	14 ^m 6	0.83		
101 NGC6738 C1859+115 15.5 IV2p	V888 Aql	0.4	EA	13.2	14.9			p 28
113 Cr 399	HD181182 U Sge	3.3	EA SB	6.51	9.13	3.38	B8.5IV—V+ +G3III—IV	m 28
C1923+200 60 III2p	NO Vul	4.4	EW	13.4	14.2	0.37		
	NP Vul	4.6	EA	14.3	15.5	1.91		
116 Harv 20 C1950+182 7 III2p	GS Sgr	4.7	EA	16.0	(18.0	1.55		
119 Dol—Dzim 7 C1806+315 34 III2p	V1117 Oph	4.8	EA	15.0	16.0			
127 Stock 1 C1933+251 60 IV2p	AF Vul	4.9	EA?	14.8	16.2	0.95		
	FM Vul	4.2	EB	12.8	13.7	0.78	A3	
	FN Vul	4.1	EB	13.9	14.5	11.68		
	FO Vul	2.8	EA	13.6	15.0	2.84		
	FP Vul	4.4	EB	15.4	16.7	1.10		
	FQ Vul	2.1	EA	12.3	12.9	6.26		
	FR Vul	3.1	EA	10.3	11.0	0.94	A2	
	FS Vul	3.9	EA	15.1	16.2	11.69		
	FU Vul	4.9	EA	15.1	16.3	3.85		
	FW Vul	4.6	EA	12.7	13.4	4.53		
	GI Vul	4.2	EB	13.5	14.6	0.48		
	IW Vul	2.9	EA	12.9	13.3	2.14		
129 Dol—Dzim 6 C1643+383 17 IV2p	7493	3.4	E?	10.9	11.5			
132 NGC6885 C2009+263 22 III2p	HD191747 DR Vul	2.9 2.6	SB EA	5.51V 8.6	9.1	9.32 2.25	A3III B8	
136 Iskud 1 C1846+368 110	HD173648 101763	1.1	SB	4.35		4.30	Am	
137 Steph 1 C1851+368 20 III3p	HD175426 101781	0.4	SB	5.75		88.35	B2.5V	
141 NGC6940 C2032+281 26 III2m	BB Vul	3.8	E	12.6	13.2			p 28
142 NGC6791 C1919+377 13 II3r	HD181470 UZ Lyr V404 Lyr	4.8 1.1 4.9	SB EA EB	6.16 9.8 12.2	11.0 13.0	10.39 1.89 0.73	A0III A0V	
148 NGC6871 C2004+356 25 IV3p	HD190918* V1676 Cyg HD190919 HD191201	0.1 0.4 1.0	SB SB SB	6.79V 7.33V 7.26V		85.0 8.33	O9.5+WR B1Ib B0III+ +B0III	m 8
	HD190967 V448 Cyg	2.0	EB SB	8.04	8.75V	6.52V	O9.5V+ +B1Ib—II	m 8
	HD227696 V453 Cyg	0.7	EA SB	8.3	8.73V	3.88	B0.5IV+ +B0.5IV	m 8
	V447 Cyg	0.5	EA	13.1	14.5	2.20	A3+F5	p 28
	V491 Cyg	4.7	EA	14.7	15.4	3.43		
	V824 Cyg	3.9	EB	14.0	14.9	0.64		
	V1037 Cyg	3.8	EA	14.7	17.3	2.71		

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149 Biur 1	V1302 Cyg	5.0	EA	13 ^m 1	13 ^m 6	2.62	B5II : n	
	V1362 Cyg	3.7	E?	8.0	8.16	7		
	HD191201	0.6	SB	7.26V		8.33		
C2005+355 15 III2p	V447 Cyg	3.0	EA	13.1	14.5	2.20	B0III+ WB0III A3+F5	
	V1037 Cyg	4.0	EA	14.7	17.3	2.71		
150 Biur 2 C2007+353 13 III2p	V491 Cyg	2.9	EA	14.7	15.4	3.43		
	V1037 Cyg	2.3	EA	14.7	17.3	2.71		
152 NGC6883 C2009+357 11.5 I3p	V491 Cyg	3.0	EA	14.7	15.4	3.43		
156 Dol 3 C2013+366 15 III2p	HD228766	4.3	SB	9.14V		10.74	WN7+OB B0	
	KV Cyg	1.3	EB	11.5	16.0	2.84		
	V454 Cyg	4.5	EB	11.9	13.9	2.32		
158 IC4996 C2014+374 6 I3p	V454 Cyg	3.3	EB	11.9	13.2	2.32		
159 Dol 39 C2014+377 13 III1m	V454 Cyg	3.5	EB	11.9	13.2	2.32		
160 Berk 85 C2016+375 8 IV2m	HD193516 (201537)	1.7	SB	8.61V		4.01	B0.7IV	
164 Dol 42 C2017+379 11 IV2p	HD193611	2.2	EA SB	8.9	9.3	2.88	B0V+BOV	
	V478 Cyg HD193516 (201537)	3.9	SB	8.61V		4.01		
165 Rupr 173 C2039+353 40 III3p	HD196628 GO Syg	4.7	EB SB	8.09V	8.66	0.72	B9.5V	
	V374 Cyg	3.7	EA	13.1	14.2	4.25		
	V1205 Cyg	2.9	EA	17	18			
	V1206 Cyg	3.6	EA	18	19	30.03		
	V1207 Cyg	3.8	EA	17.5	19			
	V1211 Cyg	3.6	EA	14	15			
166 Dol—Dzim 10 C2004+403 20 IV1p	V692 Cyg	4.4	EA	14.8	16.3	2.77		
	V694 Cyg	4.4	EA	14.7	16.1	2.36		
	V1036 Cyg	2.9	E	11.6	13.3			
	V1311 Cyg	5.0	E	16.3	17.0	0.89		
167 Berk 86 C2018+385 8 I3p	HD193576 V444 Cyg	2.9	EA SB	8.3	8.6	4.21	B1+WN5	
170 Dol 38 C2004+410 18 III2p	HD227457 WW Cyg V1036 Cyg	3.6	EA SB	10.02V	13.27V	3.31	G8IV	
171 Dol 5 C2018+392 7 IV2p	V1320 Cyg	3.5	EA	15.9	(18.5)	40.9		
	V1312 Cyg	4.1	EA	16.0	17.2	2.66		
173 IC1311 C2008+410 6 II3r	V1312 Cyg	4.5	EA	16.0	17.2	2.66		
174 Dol 2 C2008+412 10 IV2p	V1312 Cyg	4.5	EA	16.0	17.2	2.66		

Cluster OCl Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
	XX Lac	1.9	EA	14 ^m 6	15 ^m 6			
	KY Lac	4.4	EA	12.8	13.6	15.43	A—F	
222 IC1396	HD206267	0.0	SB	5.62V		3.71	06.5V+09	
C2137+572	SU Cep	2.1	EB	10.0	11.0	0.90	B8	
60 II3m	AI Cep	2.3	EB	9.2	10.0	4.23	B0.5pV:	
223 IC1434	V338 Lac	1.0	EA	12.4	13.1	76.97/n	A0:	
C2208+525								
7 II1p								
225 NGC7245	KP Lac	1.7	E	13.8	14.4			
C2213+540								
4 II1p								
228 NGC7296	AG Lac	4.8	EB	13.6	15.0	0.75		
C2226+520								
4 III2p								
236 NGC7160	EM Cep	0.2	EB	7.02V	7.45V	0.81	B0.5+B1Ve	
C2152+623								
10 II3p								
244 NGC7380	Und 1	0.3	E SB	8.58V		2.11	O6+O5.5	m 30
C2245+578	HD215835							
9 III3pN	DH Cep							
	Und 2	0.1	SB?	11.16			B0.5	m 7
	Und 3	0.4	SB	10.67V			B1V	m 30
	Und 4	0.6	SB	10.28V			O9.5	m 30
	Und 5	1.1	SB?	10.32V			A—F	m 30
	Und 6	0.6	SB	10.68V			B1V	nm 30
	Und 7	0.8	SB?	10.58V			O8.5	m 30
	Und 8	0.8	E? SB				B6Vne	m 30
	Und 9	1.2	SB	10.20V			B8	nm 30
	Und 10	1.6	SB?	10.35V			B	m 30
	+57° 2611	5	SB	9.64V		2.67	B0III	
260 NGC7654	V399 Cas	4.9	EB	14.0	14.3	0.66		
C2322+613								
13 I2r								
261 Czernik 43	V399 Cas	3.7	EB	14.0	14.3	0.66		
C2323+610								
14 III1r								
269 NGC7789	HD224151	4.3	SB	6.0	6.1	13.42	B0.5II	
	V373 Cas							
C2354+564	HD223969	1.9	SB	7.5		740.2	K.5	
19 II1r	ES Cas	3.5	EA	14.7	16.2	2.11		
	QU Cas	4.8	EA	15.1	16.4	0.97		
	V374 Cas	4.0	EA	11.8	12.7	1.04	A	
	V444 Cas	2.9	EA	15.8	17.1	2.22		
	p Cas	5	E?	4.1	6.2		F8p+K5p	
275 NGC7788	QX Cas	3.5	EA	10.45	10.93	6.00	B1V	
C2354+611								
11 I2p								
276 NGC7790	QX Cas	1.4	EA	10.45	10.93	6.00	B1V	m 28
C2355+609								
4.5 III2p								
277 Berk 58	QX Cas	4.2	EA	10.45	10.93	6.00	B1V	
C2357+606								
8 IV2p								
291 NGC103	№ 16Hardorp	0	EB	14.2	14.8	1.11		p 11
C0022+610								
4 II2p								
303 Dol 12	NZ Cas	4.8	EA	13.2	13.7	2.77		
C0037+605								
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Продолжение

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
304 Czernik2 C0040+598 10 III1r	NZ Cas	0.4	EA	13 ^m 2	13 ^m 7	2.77		
309 NGC188 C0039+850 14 II2r	EP Cep EQ Cep ER Cep ES Cep	1.4 0.8 1.4 1.3	EW EW EW EW	16.6 16.5 15.7 15.8	17.1V 17.4V 16.4V 16.2V	0.29 0.31 0.29 0.34		m 19 m 19 m 19 m 19
317 NGC381 C0105+613 7 III2p	OX Cas	2.3	EA	9.90	10.35	2.49	B1V	p 28
324 Cr 463	HD12111 102366	4.9	SB	4.7			A4V	
C0144+717 36.5 III2p	AH Cas	4.8	EA	13.2	14.3	1.40		
342 Stock 4 C0149+568 20 III1p	HS Per V424 Cas	1.0 5.0	EA EA	13.0 15.1	15.9 16.5			p 28
348 Stock 2 C0211+590 60 III1m	HD11860 DN Cas GI Cas GK Cas V518 Cas V529 Cas CM Per CO Per CR Per CS Per DK Per KX Per KXPer LL Per V355 Per V382 Per	4.3 3.8 4.5 4.2 1.1 4.7 4.8 4.0 3.0 1.5 3.4 2.4 2.4 3.6 3.1 4.5	SB EA EA EA E E? EA EA EA EA EB EA EA EA E? E	6.65 9.88 14.8 12.9 10.82 8.44 12.5 14.8 12.4 13.4 12.3 16 14.6 17 9.05 14.0	10.31V 17.0 13.7 11.1V 8.86V 13.4 16.0 12.9 15.1 13.3 17 15.4 19.5 9.09V 15.8	7.44 2.31 4.68 2.30 3± ≥0.5 38.64 1.82 22.68 24.25 0.90 0.71	A0V O8V B3 B5V B3IV	p 28 p 28 p 28
350 NGC869 C0215+569 30 I3r	DK Per KY Per LL Per LM Per NZ Per V355 Per	4.2 3.8 2.3 4.3 4.2 2.9	EB E EA EA EA E?	12.3 16.5 17 16 11.7 9.05	13.3 17.5 19.5 18.5 12.1 9.09V	0.90 0.71	F2 B3IV	
352 IC1805 C0228+612 20 III3p	V529 Cas	4.1	E?	8.44	8.86V	≥0.5	B5V	
353 NGC884	HD14871 DM Per	4.4	EA SB	7.71	8.48	2.73	B6V	
C0218+568 30 I3r	DK Per LL Per LM Per LP Per	3.6 4.1 3.4 4.9	EB EA EA EA	12.3 17 16 16	13.3 19.5 18.5 17	0.90		
363 NGC752 C0154+374 45 III1m	DS And	1.1	EB	10.8	11.4	1.01	F3	m 28
364 IC1848 C0247+602 22 IV3p	GR Cas V497 Cas V498 Cas	3.0 1.1 0.8	EA E? E	13.7 15.5 15.8	14.3 17.0 (17.0)			
365 Tr 2 C0233+557 18 III2p	DX Per DZ Per	3.1 1.7	EA EB	15.2 14.4	1.62 15.0	2.91 0.76		p 28
368 Cr 33 C0255+602	GR Cas LV Cas	4.3 5.0	EA EA	13.7 15.5	14.3 16.4	1.05		

Cluster QCl Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
40 IV3p	LX Cas	0.6	E?	14 ^m 8	15 ^m 7			p 28
	LY Cas	3.9	E	14.9	16.4			p 28
	V497 Cas	3.7	E?	15.5	17.0			
	V498 Cas	3.3	E	15.8	(17.0)			
	V507 Cas	2.0	E	15.4	(17.0)			
369 Cr 34 C0257+602 25 I3p	HD18337	4.2	SB	7.68V		6.64	A4V	
	LX Cas	0.3	E?	14.8	15.7			
	V507 Cas	1.9	E	15.4	(17.0)			
372 Cr 464	HD35311	3.8	EA SB	8.2	8.81	3.43	B8V+B9	
	AS Cam							
C0516+732 120 IV3p	XZ Cam	2.6	EA	11.4	14.4	11.01	A0	
375 Stock 23	HD19820	4.4	EA SB	7.39	7.54	3.37	O9IV+O9IV	
	CC Cas							
C0312+598 15 III3p								
383 NGC1502	HD25639	0.1	EB SB	6.99	7.23	2.70	09.5V	m 28
	SZ Cam							
C0403+622 8 II3p								
392 Mel 20 C0318+482 240 III3m	RT Per	1.0	EA	10.46	11.74V	0.85	F2V	
	AY Per	1.5	EA	9.8	10.6	11.78	A0	
	BE Per	1.4	E	14.5	15.3			p 28
	BP Per	0.8	EB	11.7	12.0	1.98		p 28
	IM Per	2.0	E	12.0	12.7	2.25		
	LU Per	2.4	EA	15	16.5			
	LX Per	0.8	EA	8.20	9.2	8.04	G5IV +G5IV	
	MN Per	2.2	EA	16	(17			
	MO Per	2.2	EA	15	17			
	QT Per	1.5	EW	14.2	15.1	0.85		
397 NGC1528 C0411+511 22 II2m	HS Per	3.0	EA	13.0	15.9			
399 NGC1545 C0417+501 15 II2p	HY Per	4.7	EA	14.2	14.7			
	NU Per	1.9	EA	16	17			
	V343 Per	2.7	E	16	17			
	b Per	5	E SB	4.59	4.65V	1.52	A2V	
407 NGC1582 C0428+437 37.5 IV2p	FX Per	1.9	EA	14.1	15.6	5.21		p 28
	II Per	2.3	EB	13.7	14.2	0.48		p 28
	KR Per	3.2	EA	10.4	11.1	0.996	OB	
409 IC 348	HD23180	2	E SB	3.82V	3.85	4.42	B1III+B1	m 28
	o Per							
C0341+321 IV2pn								
411 NGC1664	HD30353	4.2	SB	7.60	7.85	360.47	Ape	
	KS Per							
C0447+436 13 III1p								
421 Pleades C0344+239 132 (420) 13r	HD22637	II	SB	7.27V		4.67		m 26
	HD22805	II	SB			20.49	A2IV	m 1
	HD23157	I	SB?	7.90V			A9V	m 1
	HD23194	I	SB?	8.06V			A5V	m 1
	HD23302	I	SB	3.70V		100.46	B6III	m 1
	HD23324	I	SB	5.64V			B8V	m 1
	HD23338	I	SB	4.30V		1313	B6V	m 1
	(033924)	I						
	HD23361	I	SB?	8.04V			A3V	m 26
	HD23387	I	SB?	7.18V			A1V	m 1
	HD23408	I	SB?	4.0			B7III	m 1
	400311							
	HD23410		SB	8.10		7.15	A0V	m 1

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Cluster OCl Old name New number D Clasrif.	Star	r	Type	Max	Min	P	Sp	Notes
	6048							
	HD23489	I	SB?	7 ^m 0			A2V	m 1
	HD23512	I	SB?	8.11V			A0V	m 1
	HD23629	I	SB?	6.29V			A0V	m 1
	HD23631	I	SB	7.26V		7 ^m 34	A2V	
	HD23642	I	SB	6.81V		2.46	A0V+A5	m 1
	HD23733	I	SB?	8.27V			A9V	m 1
	HD23753	I	SB?	5.44V			B8V	m 26
	HD23763	I	SB?	6.94V			A1V	m 1
	HD23850	II	SB	3.62V		1254.68	B8III	m 1
	100333							
	HD23863	I	SB?	8.12V			A7V	m 1
	HD23964	I	SB	6.75V		16.72	B9.5V	m 1
	HD24118	II	SB	6.86V		8.22	A1+dG	
	HD24769	II	SB	5.97V		1.59	B9.5IV	nm 26
	AH Tau	I	EW	11.25	11 ^m 92V	0.33	G1p	
	CU Tau	II	EW	11.5	11.92V	0.41	G0	nm 19
	EQ Tau	II	EW	10.5	11.03	0.21	G1	
423 CR 62	HD34759	3.3	SB	5.22V		35.5	B5V	
C0519+409 30 IV3p								
425 Dol 14 C0403+273 12 IV2p	HD25823	4.7	SB	5.19V		7.23	A0p	
428 NGC1857 C0516+393 9 II2m	IR Aur	5.0	EA	17	(17.5)			
430 Dol 15 C0501+347 18 IV1p	II Aur	4.0	EB?	14.7	16.2	0.92		
433 NGC1912 C0525+358 18 III2m	HD35921 LY Aur	3.3	EB SB	6.66	7.35V	4.00	O9.5III+ +O9.5	
435 Dol 16 C0511+326 12 III2pN	HD33959 KW Aur	1.6	δSct? SB	4.94	5.10V	3.79	A9V	
438 IC 410 C0519+334 6 I2p	NW Aur	1.5	EW?	14.4	15.0	0.13		
439 NGC1893 C0519+333 15 II2m	NW Aur	0.9	EW?	14.4	15.0	0.13		
456 Hyades C0424+157 4° (10°) II3m	HD23466 +16° 516 V471 Tau	II II	SB E SB	5.34V 9.40V	9.71V	2.41 0.52	B3V K2V+Wd	m 7
	HD24418	II	SB	6.86		8.22	A1+dG	
	HD24769	II	SB	5.97V		1.59	B9.5IV	
	HD25204	II	EA SB	3.5	4.0	3.95	B3V+A4IV	
	λ Tau							
	HD27130	I	SB	8.34V		5.61	G8V	m 7
	HD27149	I	SB	7.54V		75.65	G4V+G8V	m 7
	HD27176	II	SB	5.65V		4035	A8V+G0	m 24
	HD27295	II	SB	5.35V		4.45	B9Vp	
	HD27483	I	SB	6.15V		3.06	F6V+F6V	
	HD27628	I	δSct SB	5.72V		2.14	Am	
	V775 Tau							
	HD27691	I	SB	6.99V		4.00	F8IV	
	HD27697	I	SB	3.76V		529.8	K0III	m 7
	102443							
	HD27749	I	SB	5.63V		8.42	Am	

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Cluster OGI Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
	HD28052	I	δSct SB	4 ^m 49V		5200	F0V	
	V777 Tau	I	SB	4.04			K0	m 15
	HD28307	I	SB	3.41V		140.73	A7III	m 7
	HD28319	I	SB	4.65V		488.5	F0V	
	HD28910	I	EW SB	10.1	10 ^m 65V	0.42	A7V+A7V	
	RZ Tau							
	HD29365	II	EA SB	5.92	6.7	2.06	B8V	
	HU Tau							
	HD29376	II	SB	6.89		2.2	B3V+B5	
	HD29479	I	SB	5.07V		251.2	Am	
	HD29763	II	SB	4.28		2.96	B3V	
	HD30455	II	SB	6.79V		45.45	G2V	
	(044218)							
	HD32990	II	SB	5.50V		58.31	B2V	
	+24° 692	II	SB	9.67V			K+K	m 32
	TY Tau	I	EA	11.5	12	1.08	K0	
	AH Tau	II	EW	11.25	11.92V	0.33	G1p	
	CU Tau	II	EW	11.5	11.92V	0.41	G0	
	EQ Tau	II	EW	10.5	11.03V	0.34	G1	
	GR Tau	II	EA	10.3	10.9	0.47	A9	
	GW Tau	II	EB	11.2	11.9	0.64	A3	
	HU Tau	II	EA	6.0	6.8	2.06	B9	
	V592 Tau	II	E	14.2	(16.0)	20.88		
	FK Ori	II	EA	12	14	1.95	A2	
	V648 Ori	II	EA	11.5	12.3	1.63	A0	
457 NGC1647	HD30455	2.4	SB	6.79V		45.45	G2V	
C0443+189								
35 II2m								
458 Czernik 23	HK Aur	4.7	E?	14.1	15.4			
C0546+289								
6 III1p								
459 Dol—Dzim 3	AL Tau	3.7	EA	13.0	13.9	0.93		
C0530+264								
15 IV2p								
460 Dol—Dzim 4	HD37438	3.8	SB	5.15V		27.86	B2V	
C0532+259	AL Tau	2.0	SEA	13.0	13.9	0.93		
28 IV1p								
466 NGC2168	WW Gem	4.6	EB	9.9	10.5	1.24	B6	
C0605+243	BT Gem	4.9	EA	13.9	15.3	1.24		
29 III2m	HN Gem	2.6	EA	15	16			
	HO Gem	1.9	EA	16	17			
	HP Gem	3.4	EA	16	18			
	HR Gem	3.6	EA	11.4	12.5	1.07		
	LQ Gem	3.9	E	13	13.5			
467 NGC2129	HD250371	3.2	EA SB	9.53V	11.73	2.87	B6V+F0IV	
	RW Gem							
C0558+233								
7 III3p								
473 Cr 89	HD42995	4.4	E SB	3.27	3.9	2983	M3III	
	η Gem							
C0615+236	WW Gem	4.5	EB	9.9	10.5	1.24	B6	
35 IV2p	BT Gem	4.9	EA	13.9	15.3	1.24		
	LT Gem	0.5	E	8.96	9.1V	1.07	BIV	
474 Cr 65	HD34335	2.2	EA SB	7.0	7.6	3.44	F7V+F5IV	m 28
	CD Tau							
C0523+160	QS Ori	3.0	EA	10.5	11.5	2.38	A0	
240 II3p	V449 Ori	2.4	EW	14.9	16.5	0.44	K—Me	
	V504 Ori	2.4	EB	15.0	15.9	2.57		
	V517 Ori	3	EA	12.9	13.4			
	DT Tau	0.3	EA	15.0	16.4	1.88		
	HY Tau	2.7	EA	12.4	13.6	3.02		

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Cluster OC1 Old name New number D Classif.	Star	<i>r</i>	Type	Max	Min	<i>P</i>	Sp	Notes
476 NGC2175 C0606+203 15 IV3pN	V417 Tau	1.6	EA	14 ^m 5	15 ^m			
	V418 Tau	1.9	EA	15.5	16.5			
	V419 Tau	2.3	EA	16	18			
	V420 Tau	3.0	EA	15.5	(17.5)			
	V668 Ori	4.2	EA	14.5	15.2	2.04		
479 Cr 69 C0532+099 47.5 II3p	HD36822	1.1	SB	4.41		8.4	B0IV	
	OS Ori	2.9	EA	10.5	11.5	2.38	A0	
	V449 Ori	4.4	EW?	14.9	16.5	0.44	K—Me	
	V887 Ori	2.7	EA	16	17			
491 Cr 95 C0627+099 17 IV2pN	VX Mon	4.5	EA	12.8	14.3	1.63		
	V480 Mon	1.9	E	14.2	15.6			
495 NGC2264 C0638+099 30 IV3pN	IS Mon	4.2	EA	11.5	12.9	4.05		
503 Cr 70 C0533—011	HD35411 η Ori	1.9	EB SB	3.14	3.35	7.98	BIV	m 28
190 II3m	HD35588 100485	1.8	SB	6.15V		2.89	B3V	
	HD36486 δ Ori	0.8	EA? SB	1.94	2.13	5.73	O0.5II	m 28
	HD36695	0.4	EB SB	5.14	5.51	1.48	BIV+B5V	
	VV Ori							
	HD36954	0.2	SB	6.97		4.62	B3V	
	HD37021	2.7	EA SB	7.95	8.52V	6.47	B2V+A5:	
	BM Ori							
	HD37756	0.8	SB	4.93V		27.15	B3III	
	HD38099	1.3	SB	6.30V		143.04	K4III	
	EW Ori	3.2	EA	10.4	11.2	6.94	G0	m 28
	FH Ori	3.9	EA	10.5	11.5	2.15	A1	
	FL Ori	4.5	EA	11.4	14.6	1.55	A2	
	FO Ori	3.2	EA	9.6	10.4	18.8	A3	
	FZ Ori	2.5	EW?	10.0	11.0	1.59	G0	
	GG Ori	1.2	EA	10.8	11.3	6.63	A2	
	IU Ori	2.9	E?	9.6	11.1		K2III	
	PX Ori	2.2	EW?	12.8	13.8			
	QT Ori	4.7	EA	13.0	14.8	2.31		
	V530 Ori	4.8	EA	10.6	11.3	6.11	G0	
V536 Ori	3.8	EA	10.4	11.0	3.16	A2		
ψ Ori	3.0	EII	4.31	4.34	2.53	B2IV		
506 Cr 97 C0628+059 21.5 IV3p	HD45910 Ахмон	1.0	SB	6.59	6.87V	232.5	B2IIIpe+ +gK0	
DR Mon	2.6	EA	14.1	15.0	3.38			
507 NGC2632 C0837+201	HD73619 (083419)	0.4	SB	7.54V		12.91	Am+Am	m 7
90 II2m	+24° 1959 RU Cnc	4.8	EA SB	9.9	11.5	10.17	dF9+dG9	
	+19° 2068 TX Cnc	1.3	EW SB	10.45	10.78	0.38	F0V	m 7
	S Cnc	1.7	EA	8.45	11.1	9.48	B9V+G8IV	
	RY Cnc	0.2	EA	12.5	15.3	1.09		nm 16
510 Cr 106 C0634+060	HD47129 V640 Mon	0.5	SB	6.05V		14.40	O8e	
45 III3p	HD45910 AX Mon	4.3	SB	6.59	6.87V	232.5	B2IIIpe+ +gK0	
	BZ Mon	2.7	EA	12.1	15.4	3.45		p 28
	CC Mon	2.8	EA	13.7	14.4	1.40		
	DQ Mon	4.5	EA	12.5	14.7			
	DR Mon	2.8	EA	14.1	15.0	3.38		p 28

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
511 NGC2237 C0627+050 60 II3p	HD47129	4.1	SB	6 ^m 05V		14.40	O8e	p 28
	HD45910	4.7	SB	6.59	6 ^m 87V	232.5	B2IIpe+ +gK0	
	AX Mon							
	TV Mon	1.0	EA	12.0	13.9	4.18		
	BZ Mon	3.7	EA	12.1	15.4	3.45		
	DQ Mon	3.9	EA	12.5	14.7			
	DR Mon	2.5	EA	14.1	15.0	3.38		
	V538 Mon	3.2	EA?	14	15.5			
V578 Mon	0.9	E	8.54V	?	2.42	B0V		
512 NGC2239 C0628+049 16 II3p	V578 Mon	2.1	E	8.54V	?	4.51	B2	
515 NGC2244 C0629+049 27 II3p	HD45910	5.0	SB	6.59	6.87V	232.5	B2IIpe +gK0	
	AX Mon							
	TV Mon	4.7	EA	12.0	13.9	4.18		
517 Cr 104 C0633+048 16 IV1p	V578 Mon	0.4	E	8.54V	?	4.51	B2	
	BZ Mon	2.4	EA	12.1	15.4	3.45		
518 Cr 107 C0635+047 35 IV3p	HD47129	1.4	SB	6.05V		14.40	O8C	
	BZ Mon	0.8	EA	12.1	15.4	3.45		
	V396 Mon	4.0	E	12.6	13.6	0.40		
	V496 Mon	4.9	EB	12.5	13.3	0.66		
	V499 Mon	4.2	EA	11.2	11.8			
525 NGC1981 C0532-044 25 III2p	HD37017	0.3	SB	6.54V	18.65	18.65	B1.5V	
	V1046 Ori							
	HD37021	4.6	EA SB	8.0	8.7	6.47	B3V+A	
	BM Ori							
528 Trapezium C0532-054 50	HD37041	3.9	SB	5.07V		20.97	O9.5V	
	100598							
	HD36412	2.6	EA SB	9.9	10.8	16.79	dA7	
	EY Ori							
	HD37000	1.3	SB	7.49V		30.28	B5V	
	100574							
	HD37017	2.0	SB	6.54V		18.65	B1.5V	
	V1046 Ori							
	HD37021	0.0	EA SB	8.0	8.7	6.47	B3V+A	m 28
	BM Ori							
529 NGC1980 C0532-059 50	HD37041	0.1	SB	5.07V		20.97	O9.5V	
	100574							
	HD37043	1.3	SB	2.76V		29.14	O9III+ +O9III	
	HD37507	3.9	SB	4.79V		445.74	A4IV K2III	pr 28
	IU Ori	0.8	E?	9.6	11.1			
	PX Ori	2.1	EW?	12.8	13.8			
	HD36412	3.3	EA SB	9.9	10.8	16.79	dA7	
	EY Ori							
	HD37000	0.1	SB	7.49V		30.28	B5V	
	100574							
530 Cr 110 C0635+020 12 III4m	HD37017	3.4	SB	6.54V		18.65	B1.5V	
	V1046 Ori							
	HD37021	1.3	EA SB	8.0	8.7	6.47	B3V+A	
	BM Ori							
	HD37041	1.2	SB	5.07V		20.97	O9.5V	
	100574							
	HD37043	0.1	SB	2.76V		29.14	O9III+ +O9III	
	HD37507	3.0	SB	4.79V		445.74	A4IV K2III	
IU Ori	3.4	E?	9.6	11.1				
PX Ori	3.4	EW?	12.8	13.8				
530 Cr 110 C0635+020 12 III4m	V395 Mon	4.7	EA	12.7	13.8	3.37		
	V498 Mon	3.4	EA	10.3	10.6	1.24		

Cluster OGI Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
533 Dol 24 C0641+016 18 III1p	V507 Mon	4.8	EA	13 ^m 7	14 ^m 3	1.08		
537 Dol 25 C0642+003 24 IV2p	DD Mon GU Mon V560 Mon	3.1 0.5 2.2	EB EW EA	11.5 11.84 13.9	11.8 12.4 14.7	0.57 0.90 2.07	B5	
538 Dol 23 C0640+000 12 IV2p	GU Mon	4.6	EW	11.84	12.4	0.90		
540 NGC2301 C0649+005 15 I3m	GV Mon MS Mon	4.2 5.0	EA EA	14.2 14.2	(15.6 15.5	5.02 78.0		
549 NGC2682 C0847+120 18 II2m	AG Cnc AH Cnc	2.3 2.0	E? EW	14.2 13.22	14.8 13.74V	0.31 0.36	F5—F7	pr 31
554 NGC2302 C0649-070 2.5 II2p	EH Mon	4.0	EA	14.1	16.3	3.63		
558 Mel 111 Com Ber C1222+263 240 (660) II3p	HD105981 CC Com HD107700 121726 HD108642 HD108651 HD108722 +24° 2475 RZ Com HD110326 RW Com AQ Com CM Com DG Com	II II I I I I II II I II II II II II	SB EW SB SB SB SB EW SB SB EW E E	5.66V 11.31 4.83V 6.52V 6.65V 5.47V 10.42 6.97 11.0 15.2 13.0 14.3	12.17 11.78 68.29 17.95 11.13V 2.70 11.6 15.7 13.60 15.5	0.22 396.49 11.78 68.29 17.95 0.34 2.70 0.24 0.28 3.60 0.99	K2V F8 : p A2m Am F5IV G2Vn Am G2+G2	nm 7 m 28 pr 19 pr 7
559 NGC2323 C0700-082 16 II3m	BB Mon EW Mon	4.4 3.7	EA EB	9.9 13.8	10.4 14.2	0.73 1.24	A0	
567 NGC2353 C0712-102 20 II2p	FP Mon	2.1	EA	13.3	16.3	2.10		
575 NGC2345 C0706-130 11 123	—12° 1805	0.2	SB?	9.94V			K3II+B5IV	m 25
596 NGC2422 C0734-143 30 III2m	—14° 2010 —14 2014 —14 2016 —14 2018 —14 2022 HD60414 KQ Pup GI Pup	0.4 0.4 0.4 0.7 0.1 2.6 4.8	SB? SB? SB? SB? SB? SB EA	9.11V 9.19V 7.01V 8.75V 7.76V 4.88V 13.6	5.17V 15.2	9752	A0V B9V B5IV B9V B5V M2epI+B	m 10 m 10 m 10 m 10 m 10
597 NGC2287 C0644-206 26 II3m	HD48965 HD48983 HD48984 HD49025 HD49069 HD49106 HD49150 HD49184 —20° 1540	2.0 1.3 2.1 1.6 1.5 1.1 0.9 0.7 1.7	SB? SB? SB? SB SB? SB SB SB	10.1 8.6B 9.1 8.7 9.0 10.1 9.1 9.8 9.17V			B9 : V B9.5V: B9V : n B8.5p+B9: B9V B9V+B9 B8.5 : V+ +B9 B9.5 : V+ +B9.5 B8.5p+ +B9 : V:	m 21 m 21 m 21 m 21 m 21 m 21 m 21 m 21 m 21

Продолжение

Cluster Old name OCI New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
	-20 1542	1.6	SB	9 ^m 00V				
	-20 1558	1.1	SB?	9.37V				B9 : V : + +B9-A0 m 21
	-20 1559	1.0	SB	9.58V				B9.5V: m 21 B9 : V+ +B9.5 m 21
601 NGC2437	EL Pup	1.4	EA	14.8	15 ^m 5	1.3		p 28
C0739-447	GI Pup	1.0	EA	13.6	15.2			p 28
27 III2m	GK Pup	1.8	EA	13.6	15.4	3.08		p 28
	MS Pup	3.7	E?	15	16			
606 Rupr 151	MR Pup	3.6	EA	15	(17)			
C0739-161								
15 IV3m								
619 Cr 121	BG CMa	2.7	EA	13.7	14.6	1.74		
C0652-245	EZ CMa	1.7	E?	6.77	6.95V	1.01	WN5	m 19
50 III3p								
633 NGC2362	HD57061	0.6	SB	3.90	3.96V	154.90	O9III	
	6576							
C0716-248								
7 I3p								
639 NGC2354	VW CMa	2.8	EB	9.0	9.2	0.72		
C0712-256	AG CMa	3.3	EA	13.9	15.0	2.67		
20 III2m	BG CMa	3.0	EA	13.7	14.6	1.74		
	BN CMa	4.9	EA	14.8	15.8	0.63		
649 NGC2447	BU Pup	3.8	EA	13.7	15.1	1.71		
C0742-237	EO Pup	4.8	EA	13.4	14.1	98.35		
18 IV1p								
653 NGC2482	BT Pup	1.8	EW	13.9	14.6	0.80		
C0752-241								
11 III1m								
654 Rupr 27	EH Pup	3.3	EA	14.1	14.5	45.89		
C0735-264								
18 II2m								
668 NGC2467	HT Pup	3.8	EA	16.5	17			
C0750-263	KX Pup	1.3	EA	11.6	12.0	2.15		
12 I2p	KY Pup	3.8	E	10.6	11.1	0.85		
671 Cr 132	FF CMa	3.7	EB	6.9	7.2	1.21	B3	
C0712-310	CI Pup	1.5	EA	11.3	12.6	1.66		
77.5 III3p								
685 NGC2527	IN Pup	4.6	EA	15	(16.5)			
C0803-280								
15 III1p								
723 NGC2658	TX Pyx	4.8	EA	9.5	9.9	1.12	A3	
C0841-324								
9 II2m								
730 Rupr 56	HD69142	0.8	SB	4.43		930	K0	
C0810-403	AU Pup	4.5	EB	8.50	9.40V	1.13	A0	
42 IV2p	BI Pup	4.4	EA	12.6	(14.4)	4.82		
	BK Pup	1.7	EA	10.4	10.7	1.50		
733 Pismis 2	AU Pup	4.5	EB	8.50V	9.40V	1.13	A0	
C0816-414								
4.3								
740 Rupr 64	AS Vel	3.7	EA	8.8	9.4	1.56	A3	
C0835-399	BR Vel	3.1	EA	12.1	13.0	7.72		
67 II3p	BU Vel	5.0	EW	10.49	11.07V	0.52		
	EL Vel	2.3	EA	11.0	11.6	2.76		
	FX Vel	4.1	EB	9.2	10.4	1.05		
	NO Pup	4.2	EA	6.7	7.14V	1.26	B9V:	

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
741 Cr 173 C0802-461 370 IV2p	HD59717	2.1	SB	3 ^m 24V		257.8	K5III+G5V	
	HD64440	2.0	SB	3.71V		2660	G5III	
	HD65818	1.0	EB SB	4.74	52 ^m 5	1.45	BIVp+B2	
	V Pup							
	HD68273	0.5	SB	1.82V		78.5	WC7+O7	
	HD69142	2.0	SB	4.43V		930	K0	
	-47° 4047	1.6	EA SB	8.60	8.93V	96.12	K0III+B8V	
	AL Vel							
	HD72754	1.9	SB	6.9V		33.73	B8I : pe	
	RR Pup	1.8	EA	9.7	11.0	6.43	A?	
	SW Pup	1.4	EA	9.3	10.4	2.75	F0	
	AE Pup	1.2	EA	13.2	14.3	5.97		
	AF Pup	1.2	EW	13.3	13.5	0.38		
	AU Pup	1.7	EB	8.50	9.40V	1.13	A0	p 28
	BH Pup	1.4	EA	8.4	9.1	1.92	B9	
	BI Pup	1.5	EA	12.6	(14.4	4.82		
	BK Pup	2.1	EA	10.4	10.7	1.50		
	GX Pup	1.2	EA	13.4	14.0	0.61		p 28
	HI Pup	2.1	EW	10.7	11.0	0.43		
	KV Pup	1.2	EA	9.3	10.1	3.67	A0	
	MQ Pup	3.2	EB	8	8.9	1.50	B9	
	MW Pup	0.6	EA	8.8	9.2	2.40	A0	
	NO Pup	2.7	EA	6.7	7.14	1.26	B9V:	
	AK Vel	0.2	EA	13.0	13.4	0.64		
	AO Vel	0.9	EA	9.6	10.0	1.58	B9	p 28
	AT Vel	0.4	EA	12.1	12.6	11.80		p 28
	AU Vel	0.5	EA	11.9	13.6	5.67		
	AV Vel	0.5	EA	11.9	14.6	3.88		
	AW Vel	0.7	EA	11.5	12.2	1.99		
	AY Vel	1.2	EB	9.1	9.8	1.6	B9	
	AZ Vel	1.2	EA	12.7	13.6	0.78		
	BC Vel	2.3	EB	11.8	12.3	1.17	F ^o	p 28
	BD Vel	2.5	EA	12.0	13.0	13.23		
	BM Vel	1.0	EA	12.9	(14.9	2.71		
	BO Vel	0.7	EW	13.8	14.2	0.33		
	BP Vel	0.8	EW	12.9	13.8	0.26		p 28
	BR Vel	2.4	EA	12.1	13.0	7.72		p 28
	BT Vel	1.9	EW	14.0	15.1	0.30		
	BU Vel	2.3	EW	10.49	11.07V	0.52		
	BV Vel	2.4	EA	12.5	13.4	4.23		
	EL Vel	2.5	EA	11.0	11.6	2.76		
	EO Vel	2.2	EA	11.1	11.7	5.33	A0	
	EQ Vel	2.3	EA	11.0	12.2	1.08	B7	
	FY Vel	1.9	EB?	6.84	7.06V	33.72	B2Ibpe	
747 Tr 10								
C0846-423	HD75759	2.4	SB	5.98	13.0	33.31	B0V	
30 II2p	BD Vel	3.3	EA	12.0	15.0	13.23		
750 Rupr 65	BX Vel	0.7	EA	13.2	11.7	1.34		
C0837-438	EO Vel	3.2	EA	11.1		5.33	A0	
11 IV1p								
752 NGC2659					12.3			
C0840-447	BC Vel	3.9	EB	11.8	13.4	1.17	F8	
11 III3m	BV Vel	4.2	EA	12.5	12.2	4.23		m 28
	EQ Vel	2.7	EA	11.0		1.08	B7	
753 NGC2547					10.0			
C0809-491	AO Vel	4.0	EA	9.6	(14.9	1.58	B9	
17 II2p	BM Vel	2.4	EA	12.9		2.71		
767 IC 2391								
C0838-528	HD73722	1.6	SB	8.92V			F4	nm 27
45 II3p	HD74146	0.1	SB	5.23V			B5V	m 27
	HD74169	0.5	SB	7.26V			A0IV : p	nm 27
	HD74196	0.1	SB	5.59V			B5V	m 27
	HD74275	0.7	SB	7.31V			A0V	m 27
	HD74340	0.5	SB?	9.86V			F6V	nm 27
	HD74517	0.9	SB	8.62V			A3V	m 27
	HD74560	0.9	SB	4.88V			B3V	
	HY Vel							

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes.
	HD74665	2.1	SB	8 ^m 14V			A3m	m 27
	HD74678	1.1	SB	7.70V			A1V	m 27
	HD74762	1.8	SB	7.77V			A5V	nm 27
	HD74955	1.8	SB	7.59V			A1V	m 27
	HD75029	2.9	SB	9.32V			A7.5	nm 27
	HD75105	2.2	SB	7.55V			B8Vp	nm 27
	HD75202	2.5	SB?	7.73V			A5V	m 27
	FT Vel	4.6	EB	10.1	11 ^m 2	1.06		
776 NGC2516	HD65949	0.7	SB	8.4		> 20	B9IVp	m 3
C0957-607	HD65987	0.6	SB?	8.2		~ 9	B9.5IVp	m 3
50 13r	V356 Car							
	HD66137	0.4	SB?			~ 3	B9V	m 3
	HD66259	0.7	SB	8.6		> 6	B9.5IV	m 3
	HD66656	0.8	SB	8.3		6.3	A0V	m 3
	-60° 947	0.8	SB?	7.8		> 20	B8V	m 3
	-60 969	0.3	SB	8		6.3	B9.5V	m 3
	-60 979	0.2	SB	8.3		6.0	B8.5V	m 3
	-60 990	0.7	SB	7.8		~ 13	B9V	m 3
783 NGC2925	FH Vel	4.7	EA	11.6	12.0	1.46		
C0932-532								
16 III1p								
785 Cr 213	FQ Vel	4.9	EA	12.7	14.0	3.58		
C0952-504								
17 IV2p								
802 NGC3114	DN Car	3.7	EA	13	14.3	1.45		
C1001-598	HM Car	4.1	EA	12	13	10.97		
37 II3r	HN Car	4.2	EA	11.9	12.5	1.39		
	IV Car	3.8	EA	11.3	14.1	2.74		
	OV Car	3.9	EA	13.3	14.9	1.28		
809 NGC3247	HD90707	4.4	EB SB	8.53	8.93V	5.56	B4III+B	
	V348 Car							
C1024-576								
8 112p								
810 Rupr 161	ST Car	4.7	EB	9.1	10.28	0.90	A0+F6	
C1007-609	DN Car	1.9	EA	13	14.3	1.45		
33 III2p	EU Car	4.6	EA	14	15.4	2.52		
	HL Car	3.0	EA	11	14	18.22		
	HM Car	0.8	EA	12	13	10.97		
	HN Car	1.0	EA	11.9	12.5	1.39		
	OV Car	2.5	EA	13.3	14.9	1.28		
811 IC2581	HD90707	4.6	EB SB	8.55	8.93V	5.56	B4III+B	p 19
	V348 Car							
C1025-573	HT Car	2.1	EB	13.8	14.3	0.66		
10 I3m								
819 NGC3324	DT Car	1.4	EA	14.5	14.9	4.29		
C1035-583	KU Car	1.8	EA	11.1	11.6	5.92		p 28
5 I3rN								
825 Tr 15	HD93403	4.7	SB	7.26V		15.09	O5f+O7.5	
C1042-591								
3.5								
828 Cr 228	HD93205	1.7	SB	7.75V		6.08	O3V+O8	
1041-597	HD93403	2.3	SB	7.26V		15.09	O5f+O7.5	
22.5	BL Car	1.5	EA	14.5	15.2	3.35		
	DV Car	2.6	EA	10.0	10.3	0.84	B8	
	DW Car	0.2	EA	9.6	10.2	1.33	cB5	
	HX Car	0.9	EA	14.4	15.2	3.24		
	HZ Car	2.1	EA	14.6	16:	38.36		
	QZ Car	1.0	EB	6.22	6.49V	6.00	O9.51b:	
829 Tr 16	HD93205	3.2	SB	7.75V		6.08	O3V+O8	p 7
C1043-594	HD93403	3.8	SB	7.26V		15.09	O3f+O7.5	
10	BL Car	1.6	EA	14.5	15.2	3.35		p 28

Продолжение

Cluster OGI Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
830 Cr 234 C1043-594 4	HX Car	2.9	EA	14 ^m 4	15 ^m 2	3.24	O9.5Ib O3V+O8	
	HZ Car	3.9	EA	14.6	16:	38.36		
	QZ Car	3.5	EB	6.22	6.49V	6.00		
	HD93205	1.6	EA	7.75V		6.08		
835 Cr 236 C1055-607 11 III2p	BL Car	3.3	EA	14.5	15.2	3.35		
	CD Car	0.2	EA	12	12.9	2.97		p 28
838 IC2602 C1044-641 65 II3m	IN Car	2.4	EA	14.7	15.3	1.68		p 28
	SS Car	4.0	EA	12.3	13.0	3.30	A+A	p 28
	BS Car	2.8	EW	14.7	15.3	0.29		
	DD Car	4.9	EA	13.2	14.1	1.44		
	DU Car	1.1	EA	13.5	14.6	4.97		
	DX Car	3.7	EA	10.6	10.8	10.47		
	EL Car	3.4	EA	13.5	14.5	3.47		
	EX Car	3.9	EA	10.0	11.5	1.40	G0	
	EZ Car	3.7	EA	9.6	10.0	1.19	B8	
FV Car	4.5	EA	12.9	15.8	2.11			
839 NGC3532 C1104-584 55 II4m	CI Car	4.3	EA	11.8	12.9	2.82	A2	p 28
	CU Car	3.1	EA	13.8	15.1	4.10		
	CX Car	2.5	EA	10.0	10.8	3.35	A	
	CZ Car	3.9	EA	12.6	13.6	2.28		
	DE Car	4.6	EA	11.2	13.8	3.71	A	
	DK Car	5.0	EA	11.6	12.7	11.34		
	DL Car	3.4	EA	12.8	14.4	4.82		
	DM Car	3.5	EA	13.1	15.1	5.32		
	DZ Car	2.8	EA	13	13.7	2.39		
	EF Car	3.6	EA	13	13.6	6.58		
	EG Car	2.4	EA	13.5	14.1	6.91		
	EK Car	2.1	EA	14	14.4	1.75		
	EN Car	4.8	EA	10.58	10.9	1.53	B	
	GG Car	4.8	EB	9.1	9.5	62.09	Be	
	GL Car	4.9	EA	9.73	10.33	2.42	B3	
	GU Car	3.14	EA	11.1	12.2	3.49	A2	
	GV Car	0.3	EA	8.9	9.4	4.29	A0	
	HH Car	4.2	EA	10.8	11.6	3.23	B	
	HI Car	4.1	EA	10.6	11.5	2.23	B8	
	IQ Car	1.6	EA	13.8	15.4	14.29		
IR Car	2.3	EW	12.2	12.6	0.35			
V338 Car	2.1	EA	9.3	9.8	74.64	B9		
AR Cen	4.9	EA	12.5	14.1	8.97			
AS Cen	3.9	EW	13	13.2	0.31			
843 Tr 19 C1112-573 13 III3m	AS Cen	4.5	EW	13	13.2	0.31		
	EH Car	1.9	EA	12.5	(15	13.37		
844 Rupr 93 C1102-611 4 III2p	CI Car	1.8	EA	11.8	12.9	2.82	A2	m 28
	CZ Car	4.5	EA	12.6	13.6	2.28		
	DG Car	4.6	EA	11.3	13.3	34.72		
	DK Car	3.5	EA	11.6	12.7	11.33		
	EK Car	4.4	EA	14	14.4	1.75		
	EM Car	4.0	EA	8.73	9.0	3.41	B0+O5V	
	EN Car	2.1	EA	10.58	10.9	1.53	B	
	GL Car	2.7	EA	9.73	10.33	2.42	B3	
	IR Car	3.2	EW	12.2	12.6	0.35		
848 Cr 240 C1109-600 25 III1p	EM Car	4.3	EA	8.73	9.0	3.41	B0+O5V	pr 28
	EN Car	1.0	EA	10.58	10.9	1.53	B	
851 Hogg 12 C1110-604 3 I3p	EN Car	1.6	EA	10.58	10.9	1.53	B	pr 28

Продолжение

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
860 NGC3766 C1133-613 12 IIp	BF Cen	1.5	EA	8 ^m 5	9 ^m 4	3.69	B7	m 28
	IX Cen	2.3	EA	12.6	13.8	9.09		
862 IC2944 C1134-627 27.5 IIIp	BG Cen	4.4	E	11.8	12.6	0.73	B5	m 20 p 28
	BH Cen	2.1	EB	10.4	11.1	0.79		
	IY Cen	0.8	EA	12.0	12.5	20.46		
	KL Cen	4.8	EA	12.3	13.6	5.30	B1.5V	m 19 pr 28
	LW Cen	1.5	EB	9.3	9.6	1.00		
	V346 Cen	4.0	EA	8.3	8.7	6.32	B4	
	V384 Cen	4.0	EA	11.8	12.4	12.64		
	V387 Cen	3.7	EA	12.9	13.7	12.77		
	V688 Cen	3.1	EB	12.5	13.0	0.95		
V690 Cen	4.4	EA	14.6	15.4	1.18			
864 IC2948 C1136-632 15 I2p	BG Cen	4.3	E	11.8	12.6	0.73	B5	
	BH Cen	0.9	EB	10.4	11.1	0.79		
	IY Cen	3.5	EA	12.0	12.5	20.46	B1.5V	
	LW Cen	1.8	EB	9.3	9.6	1.00		
870 NGC4052 C1159-629 10 IIIp	HD104671	3.5	SB	4.32V		24.48	Ap	
	TW Cru	3.6	EW	12.4	12.9	0.39		
871 NGC4103 C1204-609 9 I3m	AI Cru	1.0	EA	9.2	9.95	1.42	B2IVe	p 28
876 Rupr 103 C1213-581 2.7 IV2p	SZ Cru	4.7	EA	10.9	11.6	1.97		
877 Rupr 102 C1210-623 5 I2p	UV Cru	1.4	EA	13.0	14.0	16.12		
882 NGC4349 C1221-616 17 I2m	TT Cru	2.4	EA	10.1	11.0	2.95		
	BD Cru	4.6	EA	12.1	13.3	1.98		
902 NGC5138 C1324-587 8 II2p	OP Cen	3.9	EW	13.1	13.8	0.46		
907 Rupr 108 C1328-582 8 III2p	EO Cen	1.0	EA	11.0	13.1	9.43		
913 NGC5316 C1350-616 11 III1p	V619 Cen	0.6	E	12.5	14	16.45		p 28
915 NGC5381 C1351-593 11.5 II2p	QR Cen	1.3	E	13.1	13.7	1.14		
917 Rupr 167 C1414-587 33.5 IV2p	RR Cen	4.0	EW	7.46	8.1	0.61	F5	
	BD Cen	4.9	EA	10.2	11.4	1.20		
	V628 Cen	4.0	E	12.9	13.4	3.74		
	V631 Cen	3.9	E	13.7	14.4	1.05		
	V632 Cen	2.7	E	14.9	15.5	2.89		
	V634 Cen	2.9	E	14.8	(16: 3.21			
	V635 Cen	4.6	EB	13.5	14.2	1.35		
V639 Cen	1.4	E	12.8	13.3	5.31			
918 Mel 227 C2004-794 60 II2p	BL Oct	4.4	EA	13.2	14.1	3.90		
925 NGC5460 C1404-480 35 II3m	V673 Cen	3.0	EB	10.3	10.5	0.93		

Cluster Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
937 NGC5822 C1501-541 40 IIIr	W Cir	4.8	E	13 ^m 8	16 ^m 5			
940 Rupr 113 C1553-593 33 III1m	SW Nor AG Nor BG Nor BH Nor	4.0 2.6 2.7 4.8	EA EA E EW	10.5 12.4 15.5 12.7	12.0 13.4 16.3 13.2	29.63 1.29 0.49 2.29		
948 NGC6087 C1614-577 18 I2p	TZ Nor CV Nor CX Nor DO Nor LY Nor MR Nor MY Nor	2.7 3.9 4.5 2.2 3.2 1.4 3.3	EA E EB EA E E EA	12.0 13.6 14.7 14.6 13.5 14 16	12.7 14.3 15.8 15.5 14 14.5 (17	4.23 19.62 0.62 2.03		p 28
952 Cr 299 C1614-550 21 III2p	UV Nor MX Nor	4.3 4.2	EA E	13.4 14	13.7 15	0.87		
953 NGC6067 C1609-540 16 I2r	HN Nor	5.0	EA	13.2	14.4	5.30		
954 H10 C1615-548 30 II2p	UU Nor UV Nor GV Nor MX Nor	5.0 3.0 4.0 2.0	EA EA EA E	11.6 13.4 10.9 14	14.3 13.7 11.8 15	3.15 0.87 2.97		
958 Rupr 116 C1619-518 5 II2p	HQ Nor	3.4	EA	12.6	13.5	90.90		
959 Rupr 117 C1619-517 1.7 III1p	HQ Nor	1.9	EA	12.6	13.5	90.90		
961 NGC6152 C1628-525 20 II2m	UZ Nor VV Nor VZ Nor	4.2 2.7 3.6	EA EA EW	11.2 12.1 13.8	13.4 12.3 14.3	3.20 1.10 0.54		p 28 pr 28
963 Rupr 119 C1624-514 7.5 IIIp	HX Nor	3.5	EA	12.3	12.9	33.75		
997 NGC6231 C1650-417 16 I3p	-41° 7733 HD152218 (164641) HD152219 (164661) HD152234 (164741) HD152248 7520 HD152249 (164741) -41° 7742 HD152270 -41° 11042 -41 7706 -41 11037 HD326331 (164741) V573 Sco	1.2 0.6 0.7 0.2 0.2 0.5 0.6 0.5 0.6 0.6 0.4 0.6 2.8	SB SB SB SB E? SB SB SB SB SB SB SB EA	7.86V 7.64V 7.67V 5.46V 6.1 6.49V 8.37V 6.64V 9.5 9.2 9.5 8.0 13.7	6.2 6.2	5.64 5.40 4.16 5.97 2.45 8.89	O8V O9IV O9.5IV B0Iab O7Ib+O6sf O9Iabp B1V WC7 O9IV B1 : V+V: O9III O7 : III : g	m 22 m 22 m 22 m 22 m 22 m 22 m 22 m 22 m 22 m 22 m 22
998 Cr 316 C1652-407 67.5 IV2p	HD151890 -41° 7733 HD152218 (164641) HD152219 (164661)	3.6 1.8 1.7 1.5	SB SB SB SB	3.03 7.86V 7.64V 7.67V	14.0	1.45 5.64 5.40 4.16	B1.5V+B O8V O9IV O9.5IV	

Cluster OCI Old name New number D Classif.	Star	<i>r</i>	Type	Max	Min	<i>P</i>	Sp	Notes
	HD152234 (164741)	1.8	SB	5 ^m 46V				B0Iab
	HD152248 7520	1.8	E? SB	6.1	6 ^m 2	5.97		O7Ib+O6sf
	HD152249 (164741)	1.9	SB	6.49V				O9Iabp
	HD152270 -41° 7742	1.8	SB	6.64V		8.89		WC7
	-41 11042	1.6	SB	8.37V		2.45		B1V
	-41 7706	1.8	SB	9.5				O9IV
	-41 11037	1.9	SB	9.2				B1 : V
	HD326331	1.9	SB	9.5				+B1 : V:
	V565 Sco	2.0	EA	8.0				O9III
	V566 Sco	2.0	EA	10.6	11.0	6.29		O7 : III : f
	V568 Sco	4.6	EA	12.6	13.7	6.91		B3
	V569 Sco	3.7	EA	14.5	16.0	1.43		
	V571 Sco	3.7	EA	10.7	11.5	1.05		
	V573 Sco	4.7	EA	12.4	13.3	2.10		
	V573 Sco	1.2	EA	13.7	14.0	3.05		
	V585 Sco	3.2	EA	14.6	15.6	1.98		
	V586 Sco	1.1	EA	12.4	12.8	0.96		
	V588 Sco	1.0	EA	14.0	(16.5	3.11		
	V589 Sco	0.8	EA	12.8	13.8	2.61		
	V590 Sco	3.0	EA	10.6	11.2	2.47		
	V592 Sco	3.8	EB	12.8	13.8	0.78		
	V594 Sco	2.3	EA	10.6	11.6	3.63		F0
	V610 Sco	4.8	E	12.7	14.1			
999 Tr 24 C1653-405	-41° 7733	2.6	SB	7.86V		5.64		O8V
	HD152218 (164641)	2.4	SB	7.64V		5.40		O9IV
60 IV2pN	HD152219 (164661)	2.9	SB	7.67V		4.16		O9.5IV
	HD152234 (164741)	2.6	SB	5.46V				B0Iab
	HD152248 7520	2.6	E? SB	6.1	6.2	5.97		O7Ib+O6sf
	HD152249 (164741)	2.6	SB	6.49V				O9Iabp
	-41° 7742	2.4	SB	8.37V		2.45		B1V
	HD152270	2.6	SB	6.64V		8.89		WC7
	HD152667	0.4	EB SB	6.07	6.69V	7.85		B0Iae
	V861 Sco							
	-41° 11042	2.5	SB	9.5				O9IV
	-41 7706	2.7	SB	9.2				B1 : V :
	-41 11037	2.6	SB	9.5				: B : V:
	HD226331	2.5	SB	8.0				O9III
	-41° 7742	2.4	SB	8.37		2.45		O7 : III : f
	V565 Sco	2.9	EA	10.6	11.0	6.29		B1V
	V568 Sco	4.2	EA	14.5	16.0	1.43		B3
	V569 Sco	4.7	EA	10.7	11.5	1.05		
	V573 Sco	1.9	EA	13.7	14.0	3.05		
	V585 Sco	3.2	EA	14.6	15.6	1.98		
	V586 Sco	1.3	EA	12.4	12.8	0.96		
	V588 Sco	0.5	EA	14.0	16.5	3.11		
	V589 Sco	0.7	EA	12.8	13.8	2.61		
	V590 Sco	3.5	EA	10.6	11.2	2.47		B5
	V592 Sco	4.4	EB	12.8	13.8	0.78		
	V594 Sco	2.5	EA	10.6	11.6	3.63		F0
	V599 Sco	4.6	EA	13.7	14.2	2.48		
	V603 Sco	3.7	EA	13.2	13.8	26.31		
	V604 Sco	3.7	EA	12.1	12.4	1.54		F8
	V610 Sco	4.0	E	12.7	14.1			
1006 Rupr 125 C1726-404 14 II3p	V513 Sco	2.3	E	2 ^m 9	14 ^m 5	1.27		

m 22

p 28
p 28

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
1009 Tr 29 C1738-400 14 II3p	V525 Sco	4.2	EA	13 ^m 8	16 ^m 4	7.51		
	V530 Sco	3.8	E	13.8	16.1	3.04		
1011 Cr 302 C1623-261 510 III3p	HD141556	1.9	SB	3.94V		15.26	B9IV	
	HD143018	1.4	SB	2.89V		1.56	BIV+BIV	
	HD143333	2.6	SB	5.46V		3100	F8V	
	HD144217	1.9	SB	2.63V		6.83	B0.5V	
	101548							
	HD145502	1.8	SB	4.01V		5.92	B2IV-V	
	HD147165	0.3	βC SB	2.94	3.06	0.25	B1III	
	σ Sco							
	HD151676	2.8	EB SB	6.2	7.0	0.66	A5V	
	V1010 Oph							
	HD151890	2.9	EB SB	3.0	3.28	1.44	B1.5Vp+B7	
	μ ¹ Sco							
	HD152912	1.7	EA SB	10.0	12.5	4.40	A0	
	UU Oph							
	HD153919	2.8	SB	6.56V		3.41	O6f	
	SS Lib	2.8	EA	10.4	11.3	1.44	A5	p 28
	BW Lib	3	E	13.4	14.7	0.93		
	EI Lib	2.8	EA	9.5	10.5	1.99	A2	p 28
	CY Oph	2.3	E	10.8	11.7	24.5		p 28
	ET Oph	2.1	E?	12.2	13.4			p 28
	FG Oph	2.0	E?	12.3	13.5			
	FW Oph	2.0	E?	12.3	13.6			p 28
	GW Oph	2.1	E?	13.6	14.5			p 28
	LL Oph	1.6	E	13.6	15.6			p 28
	MX Oph	1.9	E	13.7	14.7			p 28
	OR Oph	2.0	E	13.4	14.2			p 28
	QR Oph	2.0	E	13.6	15.0			p 28
	V448 Oph	2.8	EA	12.2	13.8	6.09		
	V1001 Oph	2.6	EA	14.4	16.1			
	V1159 Oph	2.2	E	18.1	20.0			
	V1175 Oph	2.0	E	18.8	20.4			
	V1194 Oph	2.1	E	17.6	20.3			
	V1208 Oph	2.1	E?	15.6	16.4			
	V1226 Oph	2.2	E	14.8	15.4			
	V1232 Oph	2.7	E	16.4	17.0			
	V1233 Oph	2.3	E	16.8	19.1			
	V1237 Oph	2.6	E	16.5	17.4	3.43		
	V1305 Oph	2.3	E	17.2	17.9	0.37		
	V1378 Oph	3.0	E	17.3	19.0			
	V1381 Oph	3.4	E	14.0	15.5	2.78		
	V1399 Oph	2.4	E?	17.1	18.2			
	V1417 Oph	2.6	E	15.7	18.0	1.68		
	V1448 Oph	2.7	E	17.8	19.2			
V1453 Oph	2.9	E	17.4	20.4	4.18			
V1465 Oph	2.6	E	16.7	18.5				
V1510 Oph	2.6	E	17.0	18.7	25.90			
V1539 Oph	2.7	E	15.6	18.8	2.53			
V1578 Oph	2.8	E	16.4	19.8	2.15			
V1596 Oph	2.6	E	17.9	19.1	2.99			
V1648 Oph	2.8	E	18.6	20.4				
V1700 Oph	2.8	E	17.0	18.2	1.13			
V1729 Oph	3.0	E	17.1	18.2	0.90			
V1756 Oph	3.0	E	16.6	17.3	3.29			
V1761 Oph	2.9	E	18.5	19.9				
AB Sco	1.1	EB?	12.5	13.0	10.64			
AL Sco	2.0	EA	11.2	13.5	1.53	F?	p 28	
BS Sco	2.0	EA	11.5	13.2	7.62	F8		
FT Sco	3	EA	13.8	(16.5	9.59		p 28	
FU Sco	2.8	EA	12.0	12.8	11.27		p 28	
FV Sco	3.0	EA	7 ^m 9	8 ^m 6	5.73	B9		
TM Sco	2.2	E	13.3	16.5			p 28	
V457 Sco	3	EA	10.6	11.4	2.01			
V458 Sco	2.4	EA	12.5	13.6	0.80		p 28	
V460 Sco	2.8	EA	13.4	16.0	4.01		p 28	

Продолжение

Cluster OC1 Old name New number D Classif.	Star	r	Type	Max	Min	P	Sp	Notes
	V462 Sco	2.9	E	11 ^{m7}	12 ^{m5}			p 28
	V463 Sco	2.8	E	12.6	13.4			p 28
	V472 Sco	3	EA	12.2	12.6	208.75	K3III	m 28
	V474 Sco	3.0	EB	10.3	11.0	1.62	B3-5	
	V475 Sco	3.0	E?	12.2	13.2			p 28
	V476 Sco	3.0	E	12.7	13.4			p 28
	V562 Sco	2.9	EA	11.6	12.1	1.05		
	V575 Sco	2.9	E	12.3	12.9	0.66		p 28
	V591 Sco	2.8	EA	11.7	12.4	0.78		p 28
	V593 Sco	2.7	EA	13.7	16.0	17.50		p 28
	V607 Sco	3.0	EA	10.2	10.8	4.52	B8	
	V611 Sco	3.0	EA	13.5	14.2	3.90		
	V718 Sco	2.7	EA	9	10.4		A2	p 28
	V756 Sco	1.4	EA	10.5	11.1	10.78		
	V760 Sco	2.0	EA	7.3	7.7	1.73	B8	
	V761 Sco	2.5	EA	12.5	14			
	V776 Sco	3.0	E	17.1	18.2			
	V784 Sco	2.9	E	13.1	13.8	1.53		
	V867 Sco	0.8	EA	12.3	14.5	3.33		
	V877 Sco	0.4	EB	12.5	13.3	4.59		
1013 Cr 338 C1734-375 25 III2p	V385 Sco	0.7	E	10.9	11.7	2.34	B9	
1026 NGC6383	HD159176	0.5	SB	5.68V		3.37	O7V+O7V	m 7
	101659							
C1734-325 5.5 IV3p	V486 Sco	1.1	E?	13.2	14.4			p 28
	V701 Sco	2.1	EB	8.2	8.67	0.76	B5	m 20
	V702 Sco	2.7	EA	12.0	13.6			m 28
1028 NGC6475 C1750-348 50 II2r	HD162515	0.9	SB	6.51V		6.68	B9.5V	m 13
	HD162588	0.6	SB	7.19V		6.14	A0Vp	m 13
	HD162630	0.4	SB	7.56V		9.50	B9V	m 13
	HD162656	0.2	SB	8.20V		5.45	B9.5V	m 13
	HD162679	0.1	E SB	6.13V	6.35V	3.05	B9V	m 7
	V906 Sco							
	HD162724	0.2	SB	5.96V		2.78	B9V+B9V	m 7
	HD162780	0.3	SB	6.89V		6.62	B8V	m 13
	HD320861	0.3	SB	9.46V		6.05	A1V	m 7
	V381 Sco	4.1	EA	12.3	16.0	6545	A5Ia	
	V393 Sco	2.6	EA	7.7	8.6	7.71	B9	
	V403 Sco	4.1	EA	13.5	14.2	1.04		
	V412 Sco	3.3	EW	13.8	14.8	0.42		p 28
	V437 Sco	4.0	EA	13.7	14.6	4.88		
	V451 Sco	2.8	E	12.0	12.4			
	V497 Sco	4.5	EA	13.5	15.5	1.29		
	V705 Sco	2.9	EA	14.0	15.0	3.46		
	V738 Sco	3.0	EA	13.3	13.9	2.39		
	V740 Sco	1.5	EA	14.2	(14.8)	3.12		
	V833 Sco	4.1	EB	11.0	11.6	1.19		
	V843 Sco	4.8	EA	10.4	11.0	0.98		
	V574 Sgr	4.8	EA	14.3	14.9	5.01		
	V1721 Sgr	4.2	EA	10.4	10.6	1.79		
1030 NGC6405 C1736-321 26 III2p	V493 Sco	2.5	E	13.0	13.4			
	V496 Sco	3.0	EA	11.1	12.3	2.19	F5	
1031 NGC6416 C1741-323 22 IV1p	V496 Sco	1.5	EA	11.1	12.3	2.19	F5	

Remarks:

Ocl 85=IC 4665.

According to Abt and Levy [3] all but one of 19 brightest stars of this cluster are found to be spectroscopic binaries which gives 95% frequency of SB. Crampton et al. [9] confirmed the variability of the velocities for 13 of this stars and obtained the SB frequency of 50%.

Ocl 148=NGC 6871.

HD 190918. Fraquelli [12] reanalyzed the radial velocities of this Wolf-Rayet binary and found that its period is 112.7 days rather than 85 days.

OCI 215=IC 5146.

CN Lac. Sahade and Dávila [28] are considering the star as a certain member of the open cluster IC 5146. In GCVS is noted that CN Lac is in the region of the cluster but it is not a member.

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