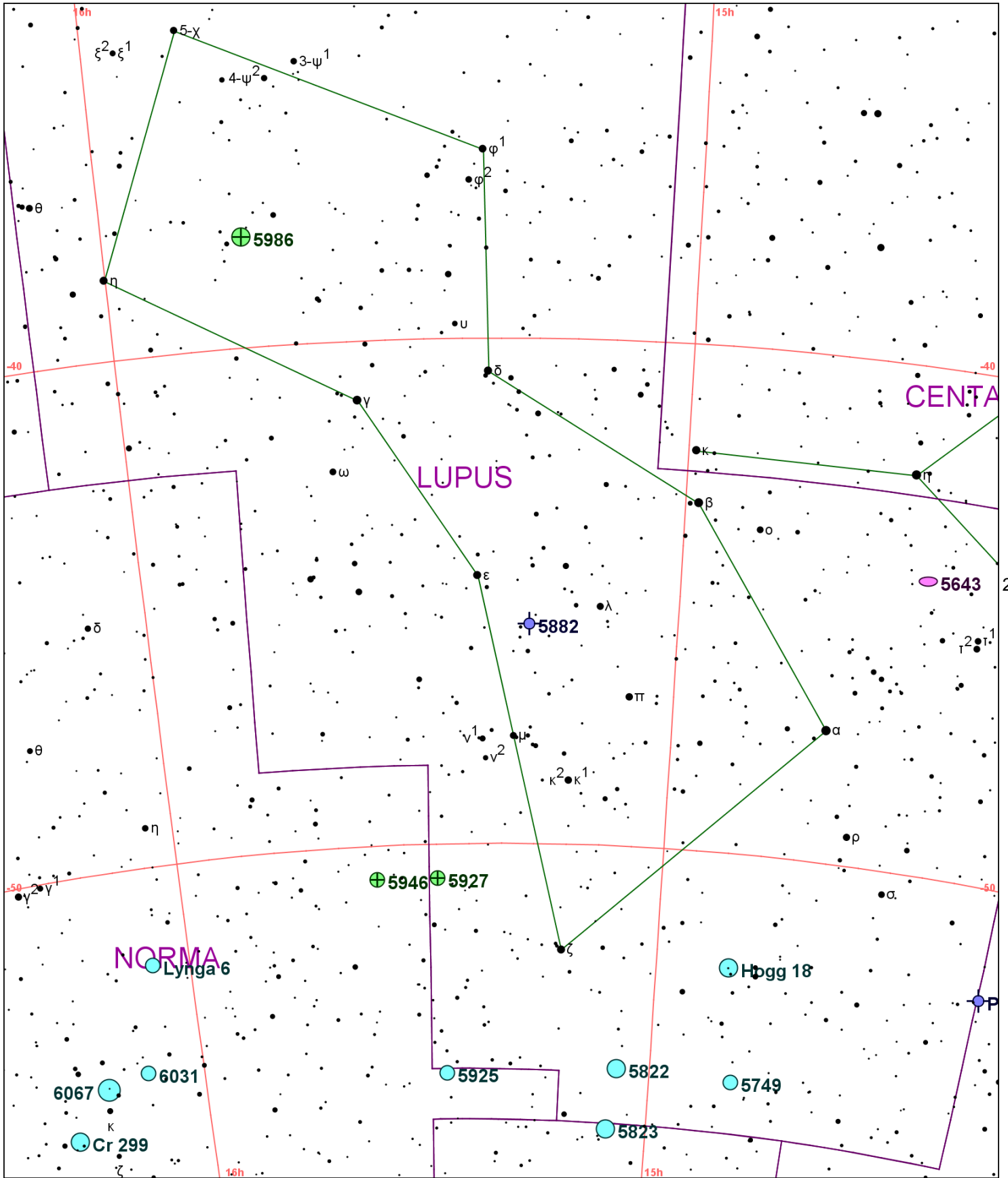


203

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Chart 225

Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
Cr 299		NOR	6.9	OC	20.0m	16h 18.4m	-55° 07.0'						
Hogg 18		LUP	8.0	OC	3.0m	14h 50.7m	-52° 15.0'					15	
Lynga 6		NOR	9.5	OC	5.0m	16h 04.8m	-51° 55.0'						
NGC 5643		LUP	10.0	GAL	4.7m x 4.2m	14h 32.7m	-44° 11.0'						
pB,L,R,vglbM,st inv													
NGC 5749		LUP	8.8	OC	10m	14h 48.9m	-54° 30.0'					30	
Cl,pL,pRi,IC,*10..11													
NGC 5822		LUP	6.5	OC	40.0m	15h 04.4m	-54° 24.0'				O	150	B
Cl,vL,Ri,IC,st9...12													
NGC 5823		CIR	7.9	OC	10.0m	15h 05.5m	-55° 36.0'	C88				100	B
Cl,cL,Ri,ICM,*13..14													
NGC 5882		LUP	10.5	PN	7s	15h 16.8m	-45° 39.0'				O		
vS,R,quite sharp													
NGC 5925		NOR	8.4	OC	20m	15h 27.4m	-54° 32.0'					120	B
Cl,vL,vRi,IC,*11..14													
NGC 5927		LUP	8.3	GC	12.0m	15h 28.0m	-50° 40.0'						
cB,L,R,vgbM,rrr,st 15													
NGC 5946		NOR	9.6	GC	7.1m	15h 35.5m	-50° 40.0'						
cB,pL,R,vglbM,rrr,st 16													
NGC 5986		LUP	7.1	GC	9.8m	15h 46.1m	-37° 47.0'				O		
!,vB,L,R,vgbM,st 13...15													
NGC 6031		NOR	8.5	OC	2.0m	16h 07.6m	-54° 01.0'					20	
Cl,S,mC,st11...14 - In Nor OB1?													
NGC 6067		NOR	5.6	OC	13.0m	16h 13.2m	-54° 13.0'	C89			O	100	B
Cl,vB,vL,vRi,IC,*10... - Fine field													
PK 316+ 8.1		CEN	10.1	PN	12s	14h 18.2m	-52° 11.0'						

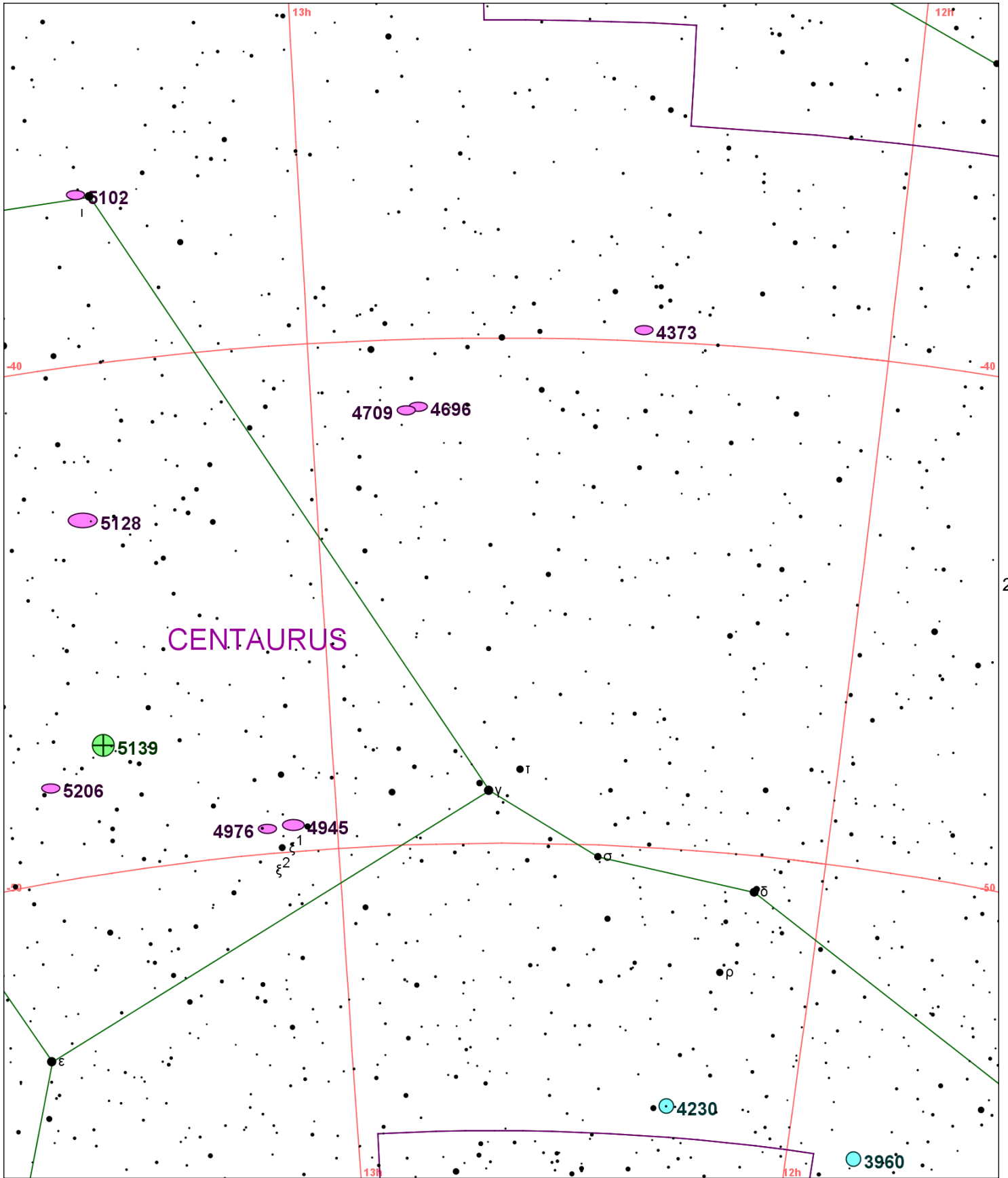
Chart 226

Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
ESO 383-G087		CEN	10.5	GAL	4.5m x 3.6m	13h 49.3m	-36° 04.0'						
Hogg 18		LUP	8.0	OC	3.0m	14h 50.7m	-52° 15.0'					15	
IC 4296		CEN	10.6	GAL	3.4m x 3.3m	13h 36.6m	-33° 58.0'						
					pF,pS,R								
IC 4406		LUP	11.0	PN	100s x 37s	14h 22.4m	-44° 09.0'				O		
					E 80 deg - Annular;N2-- Stellar ?;pB diffused disk 20"--Hartung								
NGC 4945		CEN	8.6	GAL	19.8m x 4m	13h 05.4m	-49° 28.0'	C83			O		
					B,vL,vmE39 - Nearly edge-on								
NGC 4976		CEN	10.0	GAL	5.1m x 2.6m	13h 08.6m	-49° 30.0'						
					B,pL,R,gmbM								
NGC 5102		CEN	9.6	GAL	8.6m x 2.7m	13h 22.0m	-36° 38.0'						
					vB,pS,R,svmbM - 17' nf lota CEN								
NGC 5128		CEN	6.8	GAL	27.6m x 20.5m	13h 25.5m	-43° 01.0'	C77		S17	O		B
					!!vB,vL,vmE122,bifid - Dark central band;radio source								
NGC 5139		CEN	3.7	GC	36.3m	13h 26.8m	-47° 29.0'	C80		S18	O		B
					!!!eL,B,eRi,vvC - Stars mags 11....;finest globular;magnificent object								
NGC 5206		CEN	10.6	GAL	3.8m x 3.3m	13h 33.7m	-48° 09.0'						
					F,pL,R,vgbM								
NGC 5286		CEN	7.6	GC	9.1m	13h 46.4m	-51° 22.0'	C84			O		B
					vB,pL,R,rrr,st 15								
NGC 5419		CEN	10.9	GAL	4.1m x 3.3m	14h 03.6m	-33° 59.0'						
					pB,pL,R,gpmbM								
NGC 5460		CEN	5.6	OC	25.0m	14h 07.5m	-48° 21.0'				O	40	B
					Cl,vL,vIC,st8...								
NGC 5643		LUP	10.0	GAL	4.7m x 4.2m	14h 32.7m	-44° 11.0'						
					pB,L,R,vglbM,st inv								
NGC 5749		LUP	8.8	OC	10m	14h 48.9m	-54° 30.0'					30	
					Cl,pL,pRi,IC,*10..11								
NGC 5822		LUP	6.5	OC	40.0m	15h 04.4m	-54° 24.0'				O	150	B
					Cl,vL,Ri,IC,st9...12								
NGC 5823		CIR	7.9	OC	10.0m	15h 05.5m	-55° 36.0'	C88				100	B
					Cl,cL,Ri,ICM,*13..14								
PK 316+ 8.1		CEN	10.1	PN	12s	14h 18.2m	-52° 11.0'						

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CENTAURUS

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Chart 227													
Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
NGC 3960		CEN	8.3	OC	7.0m	11h 50.6m	-55° 41.0'					45	
					Cl,pL,pRi,gpmbM,st 13								
NGC 4230		CEN	9.4	OC	6.0m	12h 17.3m	-55° 05.0'					15	
					Cl,F,pL,iF,* 13...15								
NGC 4373		CEN	10.9	GAL	3.6m x 2.6m	12h 25.3m	-39° 46.0'						
					pB,S,R,pgvmbM								
NGC 4696		CEN	10.4	GAL	4.7m x 3.3m	12h 48.8m	-41° 19.0'						
					pB,L,R,gbM,r								
NGC 4709		CEN	10.9	GAL	2.3m x 2m	12h 50.1m	-41° 23.0'						
					pB,cS,R,gbM								
NGC 4945		CEN	8.6	GAL	19.8m x 4m	13h 05.4m	-49° 28.0'	C83			O		
					B,vL,vmE39 - Nearly edge-on								
NGC 4976		CEN	10.0	GAL	5.1m x 2.6m	13h 08.6m	-49° 30.0'						
					B,pL,R,gmbM								
NGC 5102		CEN	9.6	GAL	8.6m x 2.7m	13h 22.0m	-36° 38.0'						
					vB,pS,R,svmbM - 17' nf Iota CEN								
NGC 5128		CEN	6.8	GAL	27.6m x 20.5m	13h 25.5m	-43° 01.0'	C77		S17	O		B
					!!vB,vL,vmE122,bifid - Dark central band;radio source								
NGC 5139		CEN	3.7	GC	36.3m	13h 26.8m	-47° 29.0'	C80		S18	O		B
					!!!eL,B,eRi,vvC - Stars mags 11...;finest globular;magnificent object								
NGC 5206		CEN	10.6	GAL	3.8m x 3.3m	13h 33.7m	-48° 09.0'						
					F,pL,R,vgbM								

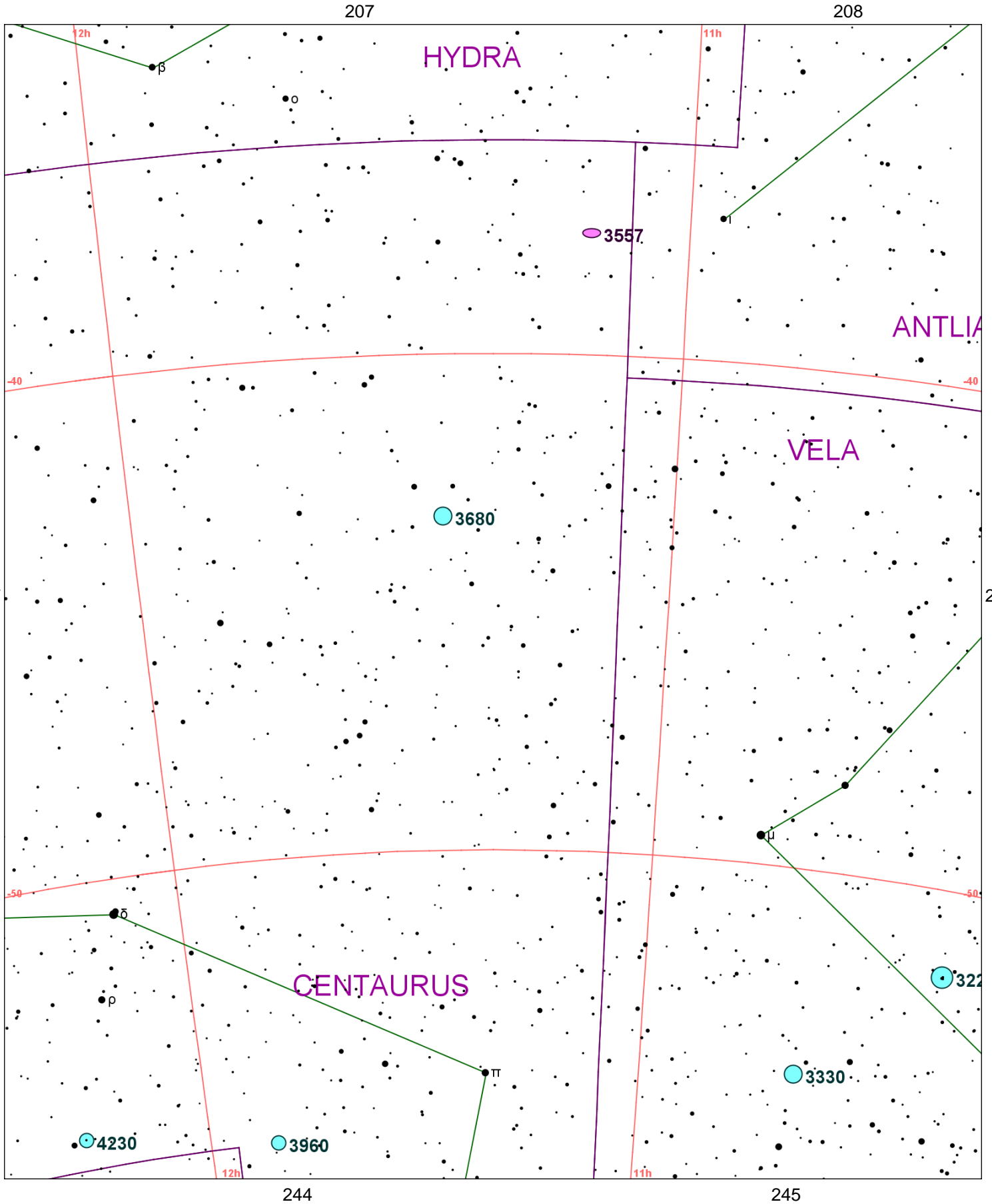


Chart 228

Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
NGC 3228		VEL	6.0	OC	5m	10h 21.4m	-51° 43.0'					15	B
					Cl,9 L and a few S st - 25* mags 9...								
NGC 3330		VEL	7.4	OC	7.0m	10h 38.8m	-54° 07.0'					30	
					Cl,P,st 9...								
NGC 3557		CEN	10.4	GAL	4m x 3m	11h 10.0m	-37° 32.0'						
					B,S,R,pgmbM,1st of 3								
NGC 3680		CEN	7.6	OC	6m	11h 25.6m	-43° 15.0'					30	
					Cl,cL,pRi,IC,*10..14								
NGC 3960		CEN	8.3	OC	7.0m	11h 50.6m	-55° 41.0'					45	
					Cl,pL,pRi,gpmbM,st 13								
NGC 4230		CEN	9.4	OC	6.0m	12h 17.3m	-55° 05.0'					15	
					Cl,F,pL,iF,* 13...15								

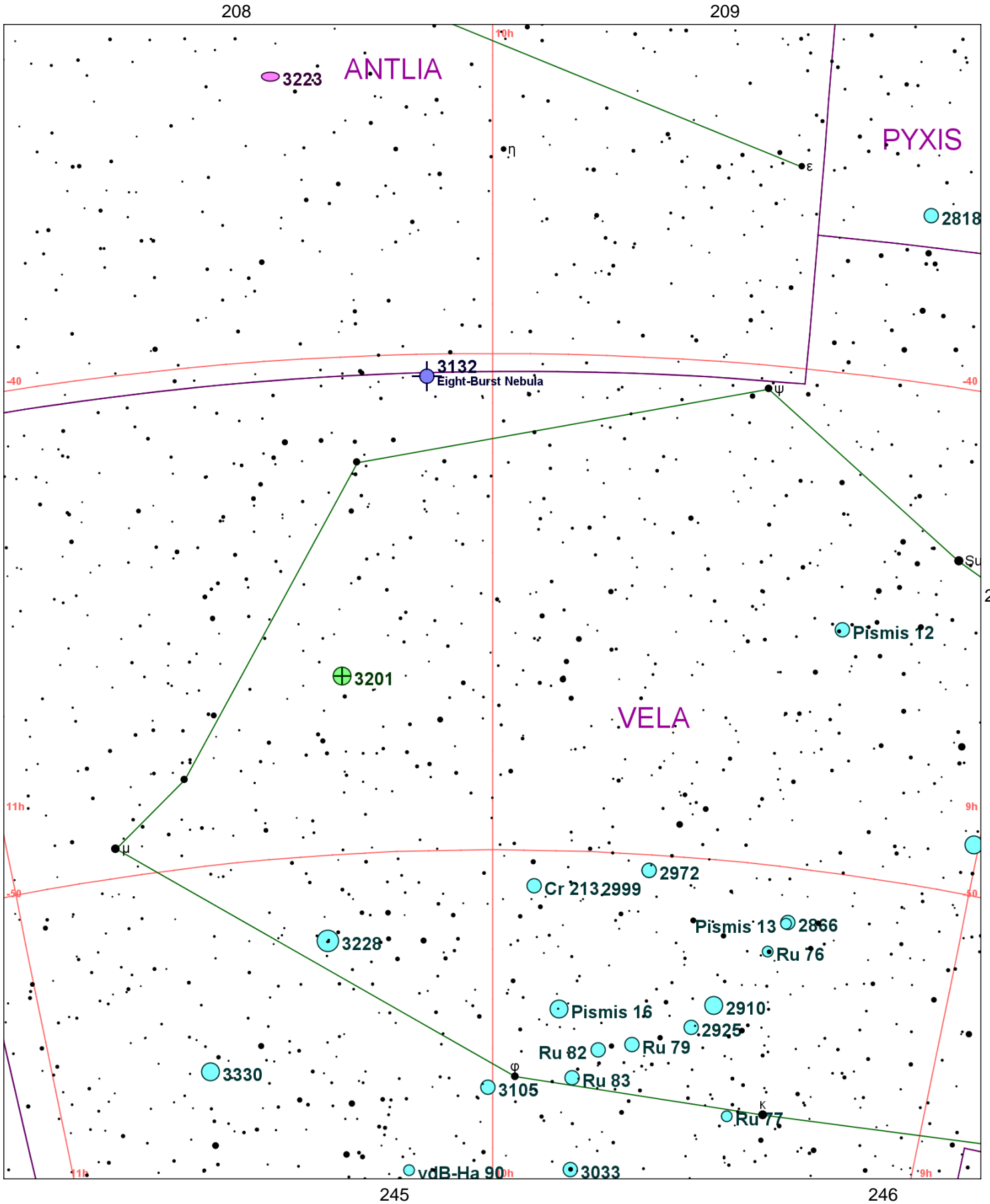


Chart 229

Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
Cr 213		VEL	9.2	OC	17.0m	9h 54.7m	-50° 43.0'						
Mrk 18		VEL	7.8	OC	2.0m	9h 00.6m	-48° 59.0'					30	
NGC 2818		PYX	8.2	OC	0.6m	9h 16.0m	-36° 38.0'				O	40	B
					30 F* mags 12...								
NGC 2866		VEL	10.0	OC	1.5m	9h 22.1m	-51° 06.0'						
					Cl,IC								
NGC 2910		VEL	7.2	OC	5.0m	9h 30.5m	-52° 55.0'					30	B
					Cl,cL,pRi,pC,*10..14								
NGC 2925		VEL	8.3	OC	12.0m	9h 33.2m	-53° 24.0'					40	B
					Cl,pRi,pC,D* taken								
NGC 2972		VEL	9.9	OC	4.0m	9h 40.2m	-50° 19.0'					25	
					Cl,S,IRi,pC,st 13								
NGC 2999		VEL	9.0	OC	5m	9h 40.2m	-50° 19.0'						
					Cl,S,IRi,iF,st12..15								
NGC 3033		VEL	8.8	OC	12m	9h 48.7m	-56° 25.0'					50	
					Cl,pL,pRi,iF,*11..12								
NGC 3105		VEL	9.7	OC	2.0m	10h 00.7m	-54° 47.0'					20	
					Cl,C,IE,st 13...16								
NGC 3132		VEL	8.2	PN	84s x 53s	10h 07.0m	-40° 26.0'	C74			O		
					Eight-Burst Nebula								
NGC 3201		VEL	6.8	GC	18.2m	10h 17.6m	-46° 25.0'	C79			O		B
					vL,iR,iCM,st 13...16 - * mags 13...; loose structured globular								
NGC 3223		ANT	11.0	GAL	4.1m x 2.7m	10h 21.6m	-34° 16.0'						
					pB,vL,vIE,pslbMN								
NGC 3228		VEL	6.0	OC	5m	10h 21.4m	-51° 43.0'					15	B
					Cl,9 L and a few S st - 25* mags 9...								
NGC 3330		VEL	7.4	OC	7.0m	10h 38.8m	-54° 07.0'					30	
					Cl,P,st 9...								
Pismis 12		VEL	9.7	OC	4.5m	9h 19.9m	-45° 08.0'					20	
Pismis 13		VEL	10.2	OC	2.0m	9h 22.3m	-51° 08.0'					30	
Pismis 16		VEL	8.0	OC	1.5m	9h 51.1m	-53° 11.0'					12	
Ru 76		VEL	10.8	OC	6.0m	9h 24.2m	-51° 44.0'					20	
Ru 77		VEL	10.4	OC	2.0m	9h 27.1m	-55° 07.0'					35	
Ru 79		VEL	9.2	OC	11.0m	9h 41.0m	-53° 50.0'					20	
Ru 82		VEL	8.1	OC	3.6m	9h 45.6m	-53° 59.0'					20	
Ru 83		VEL	9.8	OC	3.4m	9h 49.0m	-54° 34.0'					30	
vdB-Ha 90		VEL	10.3	OC	4.0m	10h 12.1m	-56° 25.0'					8	

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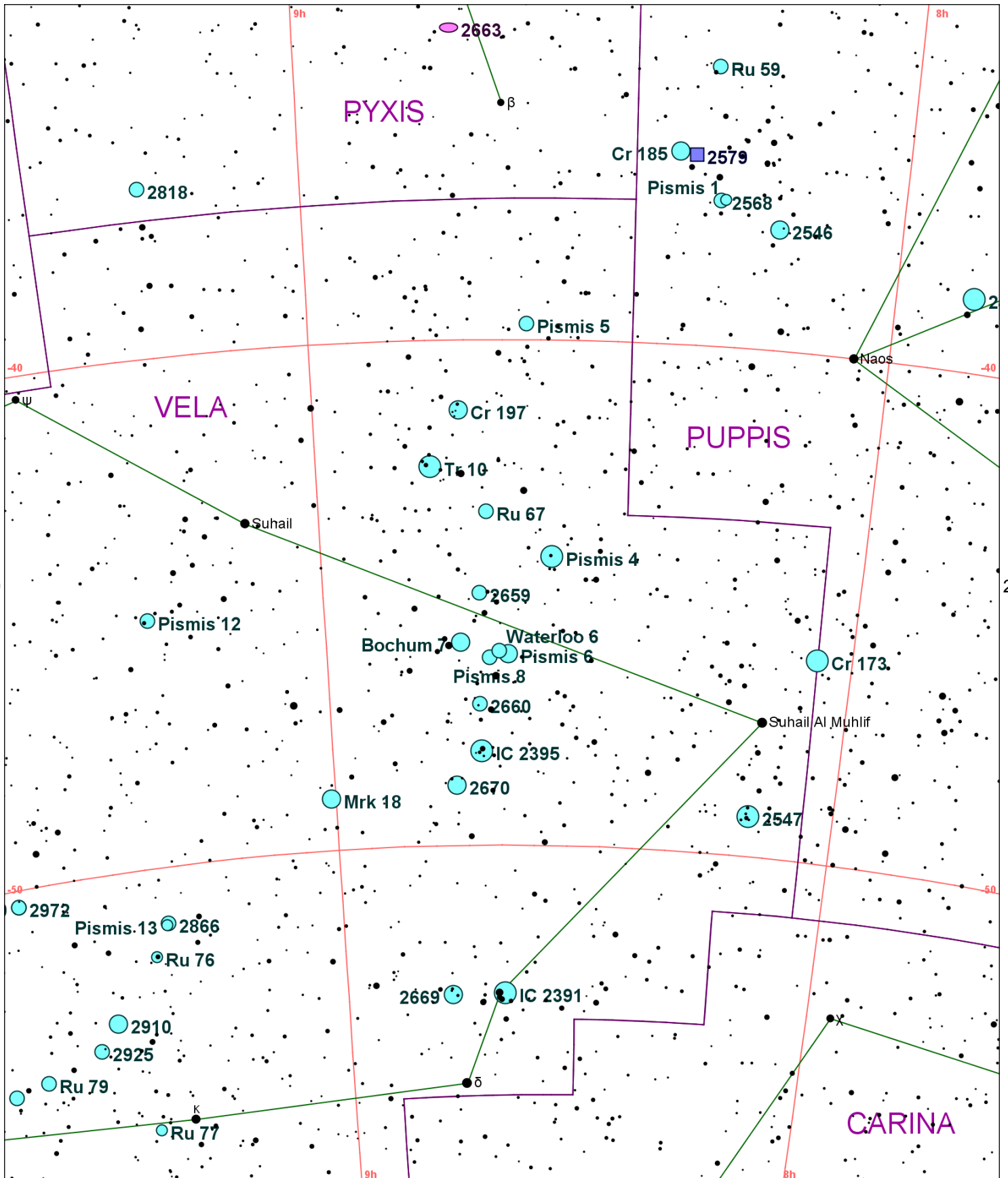
R.A. 8h 40' Decl. -45.0°

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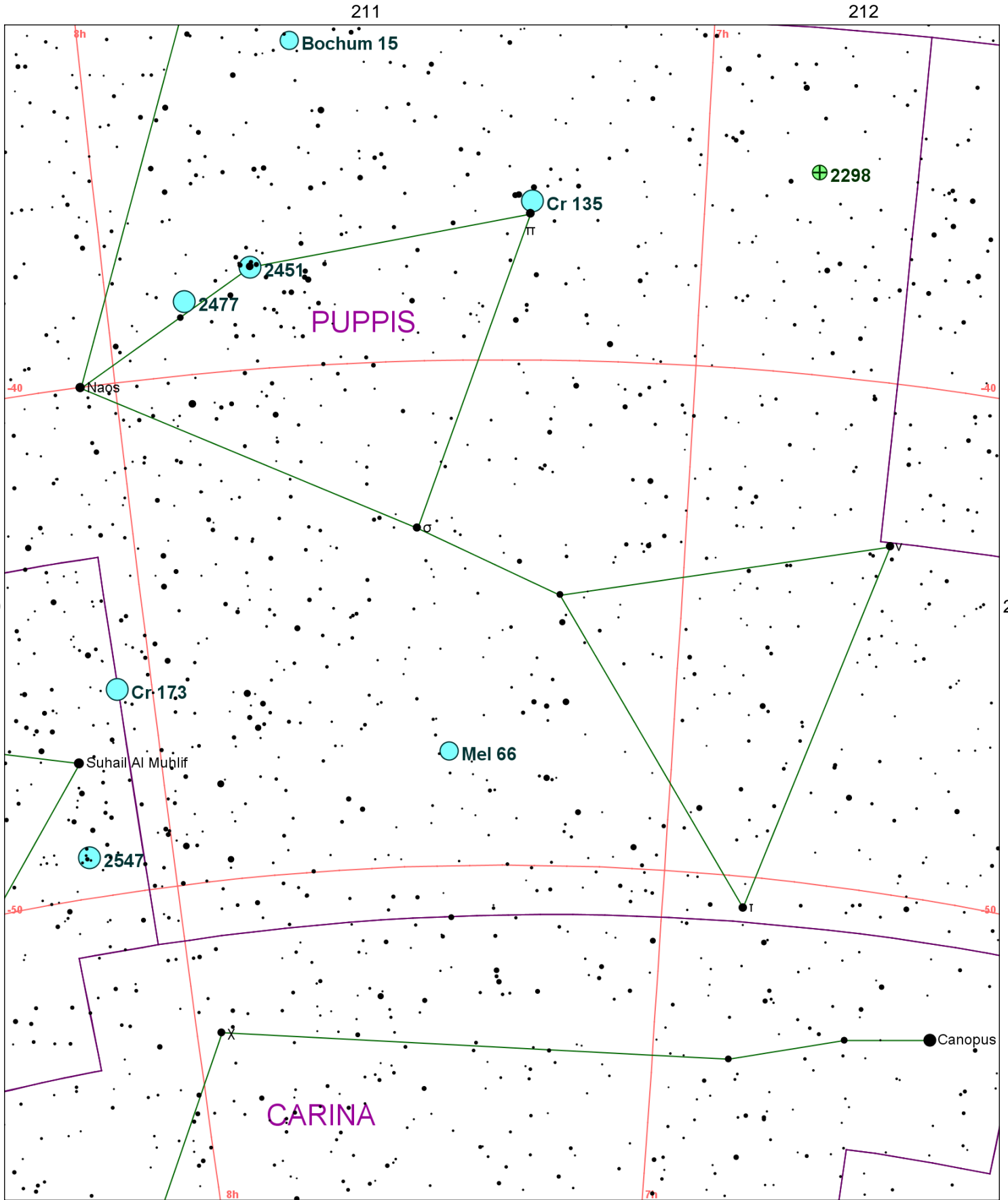
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Deep Sky Surfing

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Chart 230													
Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
Bochum 7		VEL	6.8	OC		8h 44.8m	-45° 59.0'					9	
Cr 173		PUP	0.6	OC	370m	8h 04.0m	-45° 60.0'						
Cr 185		PUP	7.8	OC	9.0m	8h 22.5m	-36° 10.0'					35	
13"-pF,pS,nC,nRi 18" at 135X													
Cr 197		VEL	6.7	OC	17.0m	8h 44.7m	-41° 22.0'					40	
IC 2391		VEL	2.5	OC	60m	8h 39.6m	-52° 55.0'	C85			O	30	B
vL,B - Scattered group of 10 * incl Omicron Velorum													
IC 2395		VEL	4.6	OC	17m	8h 42.5m	-48° 08.0'				O	40	B
about 16 stars mags 9... - Cluster NGC 2670 in field 30' south													
Mrk 18		VEL	7.8	OC	2.0m	9h 00.6m	-48° 59.0'					30	
NGC 2477		PUP	5.8	OC	27.0m	7h 52.2m	-38° 32.0'	C71			O	200	B
!,Cl,B,Ri,L,IC,*12 - 300 * to 12 mag;Shapley--richest of OPNCL													
NGC 2546		PUP	6.3	OC	41.0m	8h 12.3m	-37° 36.0'				O	40	B
Cl,B,L,IC,IE,*9...12													
NGC 2547		VEL	4.7	OC	20.0m	8h 10.2m	-49° 12.0'					80	B
Cl,B,L,IC,st7...16													
NGC 2568		PUP	10.0	OC		8h 18.3m	-37° 06.0'						
vF,pL,F* inv													
NGC 2579		PUP	7.5	DN	10.0m	8h 20.9m	-36° 13.0'					20	
D* in pS neb,am 70*													
NGC 2659		VEL	8.6	OC	14m	8h 42.6m	-45° 00.0'					80	B
Cl,L,Ri,pmE,st11...14 - In Vel OB1													
NGC 2660		VEL	8.8	OC	4.0m	8h 42.6m	-47° 12.0'					70	
Cl,pS,mC,iR,gbM,*13...15													
NGC 2663		PYX	10.9	GAL	3.5m x 2.4m	8h 45.1m	-33° 48.0'						
pF,pS,IE													
NGC 2669		VEL	6.1	OC	20m	8h 46.4m	-52° 57.0'					40	
Cl,L,P,IC,*10...13													
NGC 2670		VEL	7.8	OC	6m	8h 45.5m	-48° 48.0'					30	B
Cl,pL,P,IC,st13...													
NGC 2818		PYX	8.2	OC	0.6m	9h 16.0m	-36° 38.0'				O	40	B
30 F* mags 12...													
NGC 2866		VEL	10.0	OC	1.5m	9h 22.1m	-51° 06.0'						
Cl,IC													
NGC 2910		VEL	7.2	OC	5.0m	9h 30.5m	-52° 55.0'					30	B
Cl,cL,pRi,pC,*10..14													
NGC 2925		VEL	8.3	OC	12.0m	9h 33.2m	-53° 24.0'					40	B
Cl,pRi,pC,D* taken													
NGC 2972		VEL	9.9	OC	4.0m	9h 40.2m	-50° 19.0'					25	
Cl,S,IRi,pC,st 13													
NGC 2999		VEL	9.0	OC	5m	9h 40.2m	-50° 19.0'						
Cl,S,IRi,iF,st12..15													
Pismis 1		PUP	10.7	OC	4.6m	8h 17.8m	-37° 05.0'					30	
Pismis 4		VEL	5.9	OC	18.0m	8h 34.5m	-44° 16.0'					45	
Pismis 5		VEL	9.9	OC	2.0m	8h 37.5m	-39° 40.0'					10	
Pismis 6		VEL	7.0	OC	1.5m	8h 39.3m	-46° 13.0'					15	
Pismis 8		VEL	9.5	OC	2.0m	8h 41.5m	-46° 17.0'					25	
Pismis 12		VEL	9.7	OC	4.5m	9h 19.9m	-45° 08.0'					20	
Pismis 13		VEL	10.2	OC	2.0m	9h 22.3m	-51° 08.0'					30	
Ru 59		PUP	9.0	OC	5.0m	8h 19.1m	-34° 27.0'					20	
Ru 67		VEL	9.1	OC	6.0m	8h 41.8m	-43° 23.0'					35	
Ru 76		VEL	10.8	OC	6.0m	9h 24.2m	-51° 44.0'					20	
Ru 77		VEL	10.4	OC	2.0m	9h 27.1m	-55° 07.0'					35	
Ru 79		VEL	9.2	OC	11.0m	9h 41.0m	-53° 50.0'					20	
Ru 82		VEL	8.1	OC	3.6m	9h 45.6m	-53° 59.0'					20	
Tr 10		VEL	4.6	OC	15.0m	8h 47.8m	-42° 29.0'					40	
Waterloo 6		VEL	8.4	OC	2.2m	8h 40.4m	-46° 09.0'						



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Chart 231													
Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
Bochum 15		PUP	6.3	OC		7h 40.1m	-33° 33.0'					12	
					13"-F,pS,nRi,C; 6* at 165X								
Cr 135		PUP	2.1	OC	50.0m	7h 17.0m	-36° 50.0'						
					13"-vB,vvL,nC,scattered 38* at 60X								
Cr 173		PUP	0.6	OC	370m	8h 04.0m	-45° 60.0'						
Mel 66		PUP	7.8	OC	10.0m	7h 26.3m	-47° 44.0'					200	
					13"-pB,L,pRi,irR; 27* mags 10... at 100X								
NGC 2298		PUP	9.4	GC	6.8m	6h 49.0m	-36° 00.0'						
					B,pL,iR,gbM,rr - Stars eF								
NGC 2451		PUP	2.8	OC	50m	7h 45.3m	-37° 58.0'				O	40	B
					Cl,vvL,vIC,one *4.5								
NGC 2477		PUP	5.8	OC	27.0m	7h 52.2m	-38° 32.0'	C71			O	200	B
					!,Cl,B,Ri,L,IC,*12 - 300 * to 12 mag;Shapley--richest of OPNCL								
NGC 2547		VEL	4.7	OC	20.0m	8h 10.2m	-49° 12.0'					80	B
					Cl,B,L,IC,st7...16								

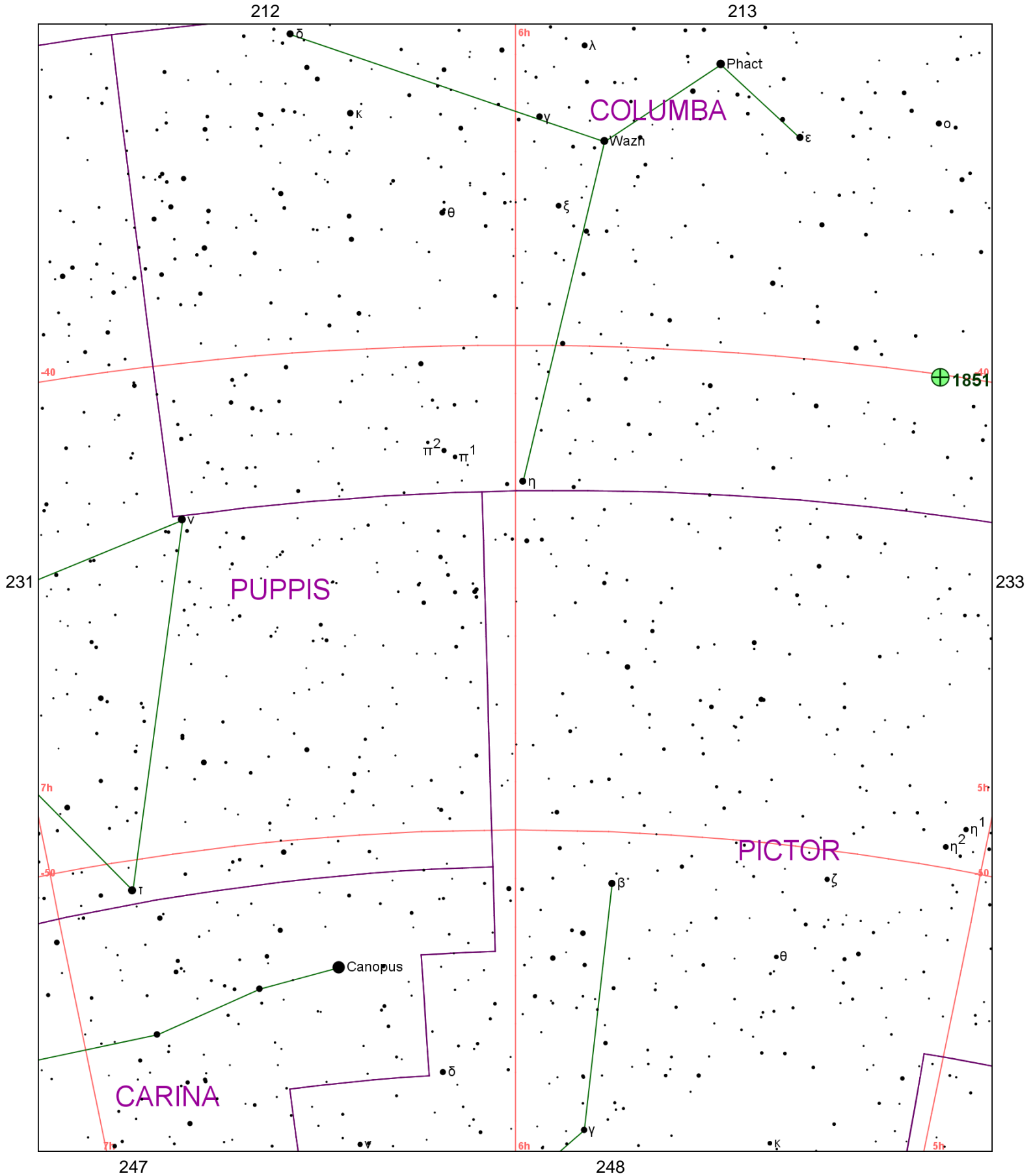


Chart 232

Name	M	Const.	Mag.	Type	Size	R.A.	Decl.	C	R	S	O	# Stars	B
Common					Notes								
NGC 1851		COL	7.3	GC	11m	5h 14.1m	-40° 03.0'	C73			O		B
					!vB,vL,R,vsvvbM,rrr - X-ray source;vRi w F*								