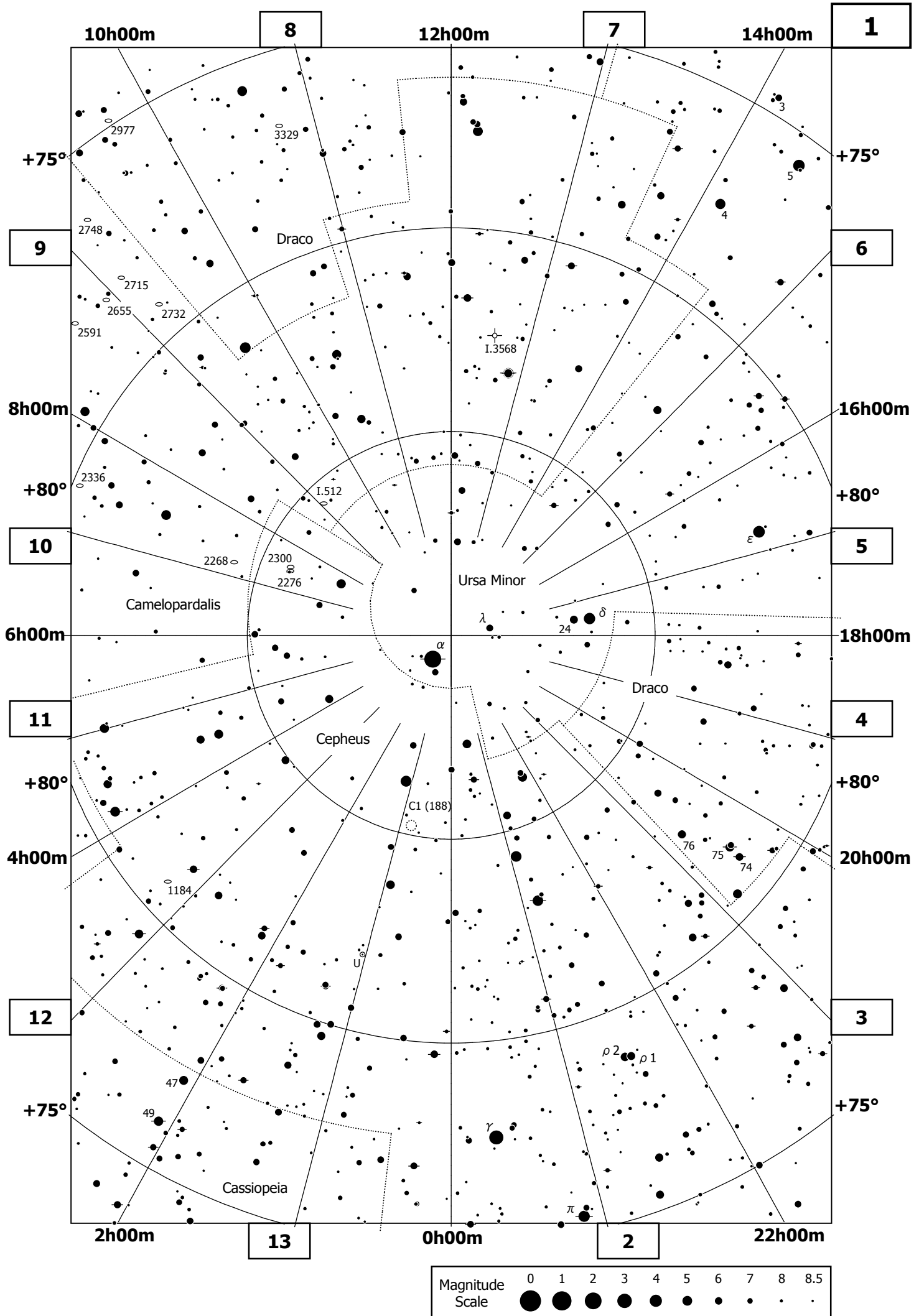
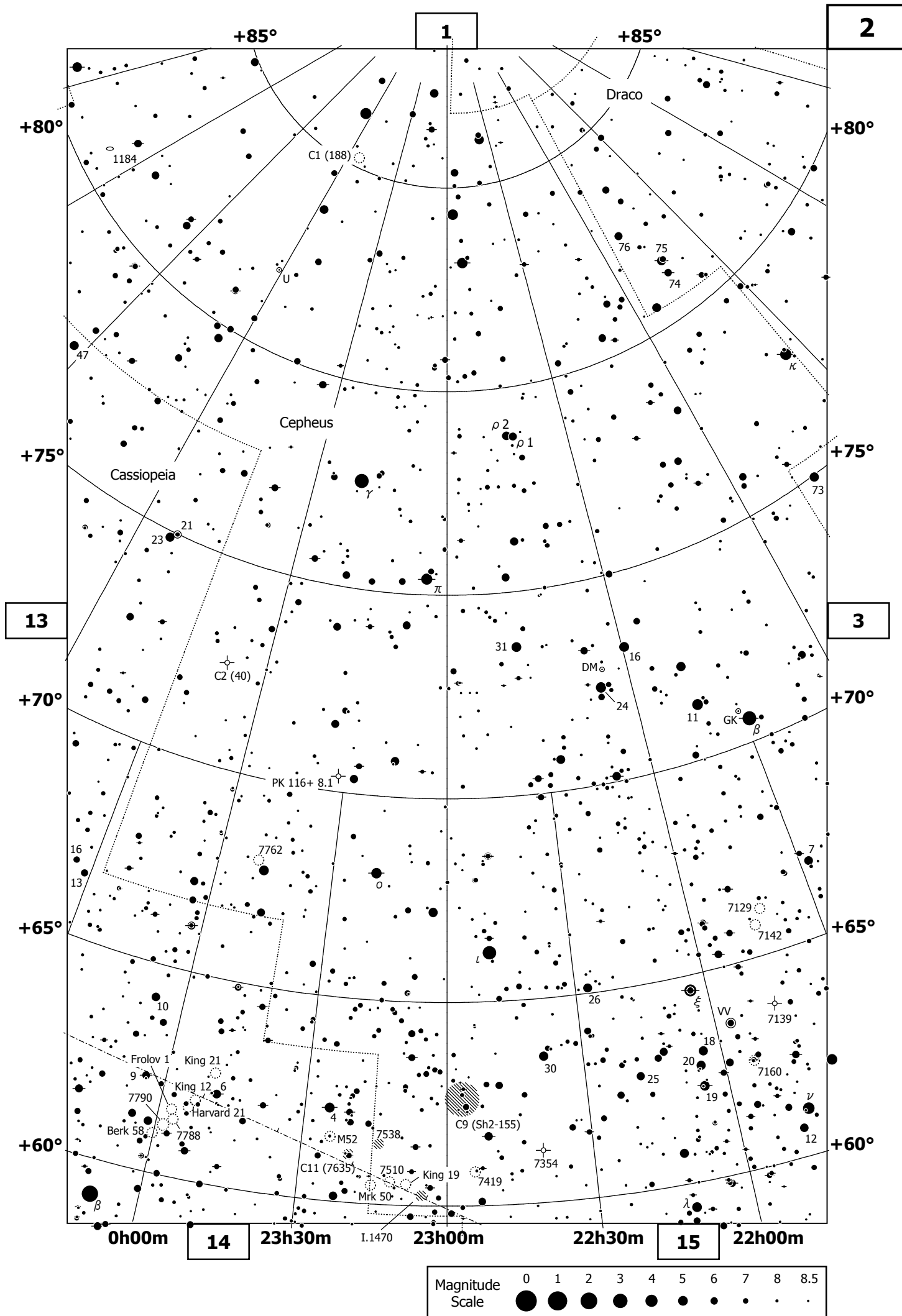
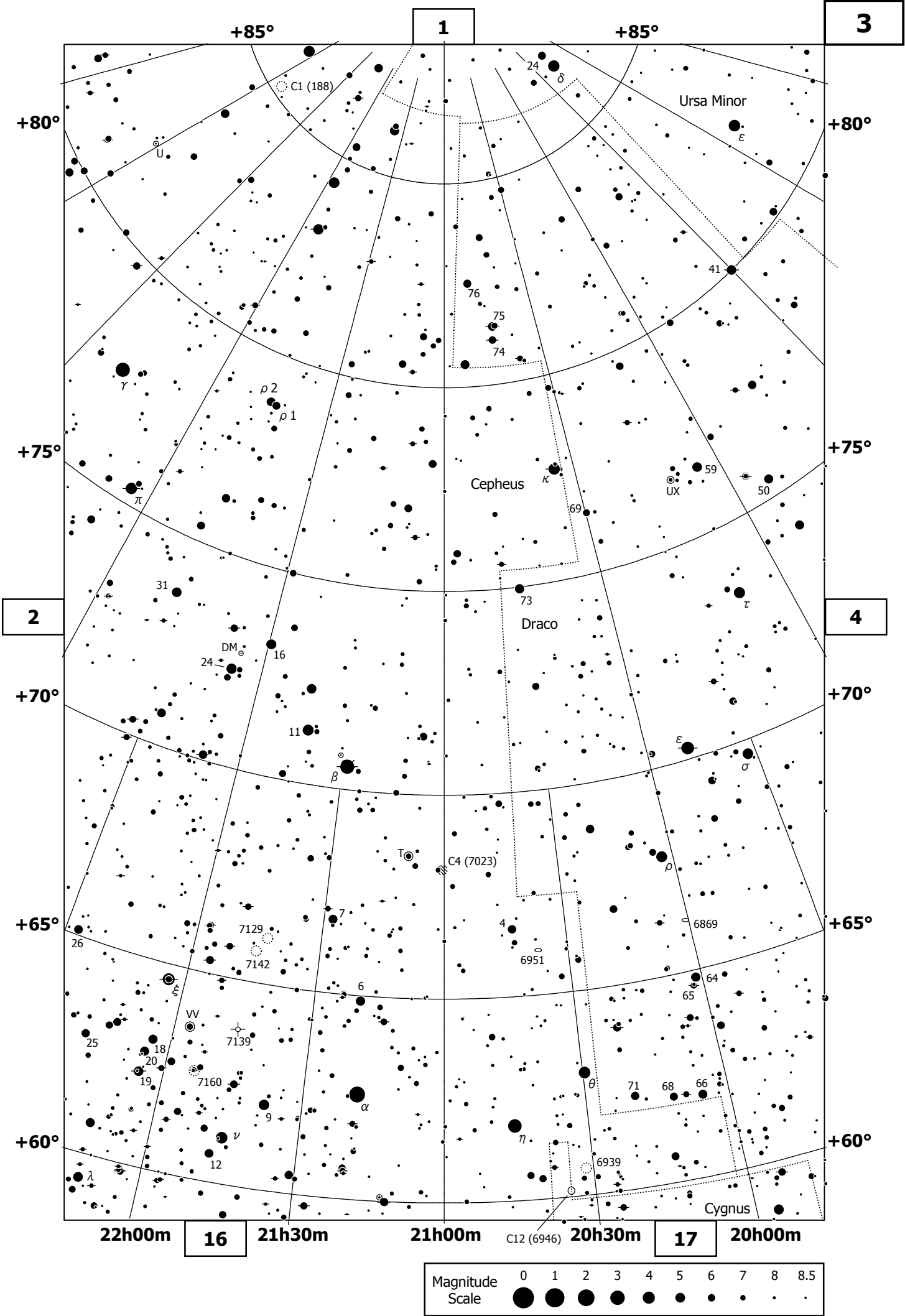
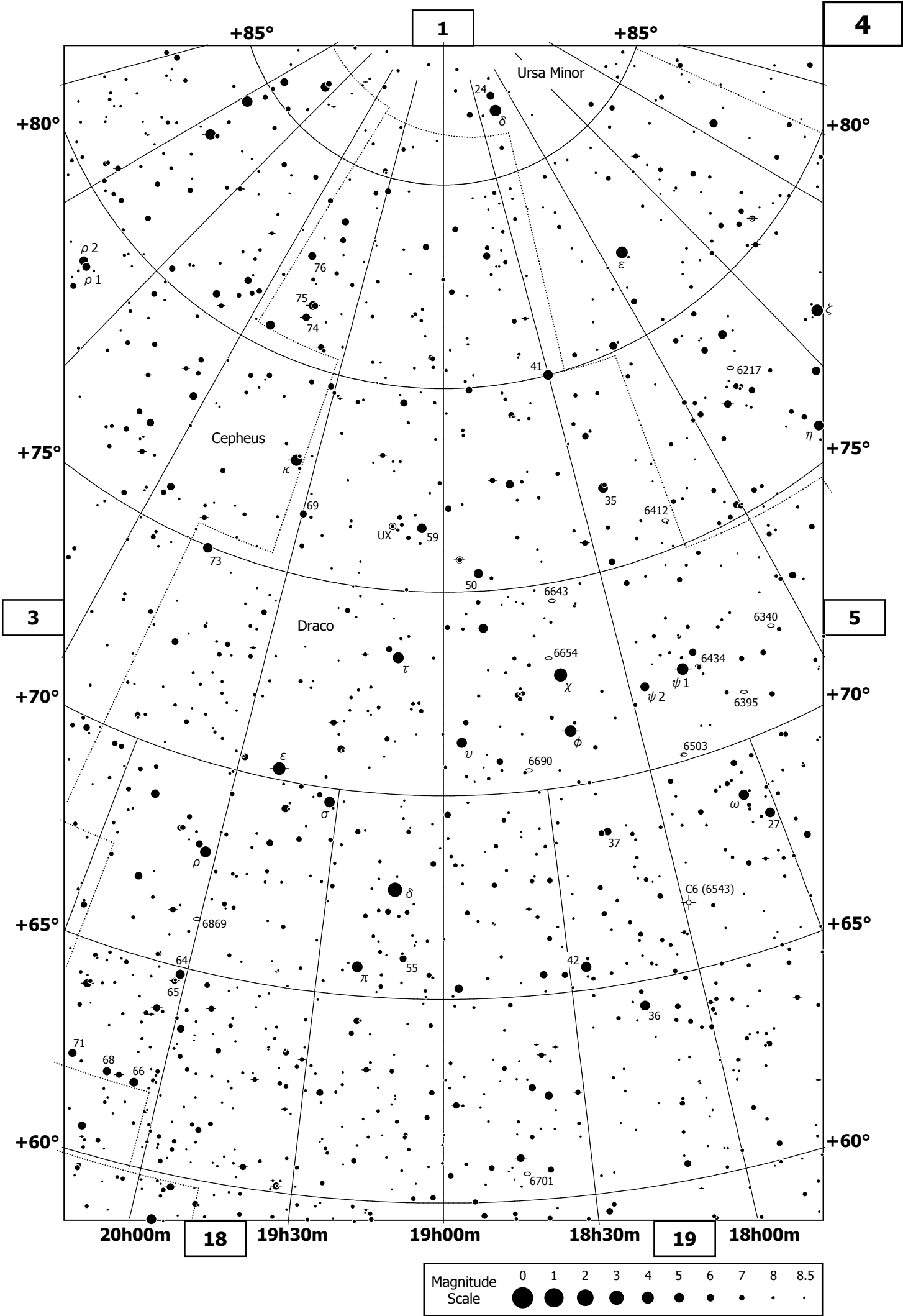
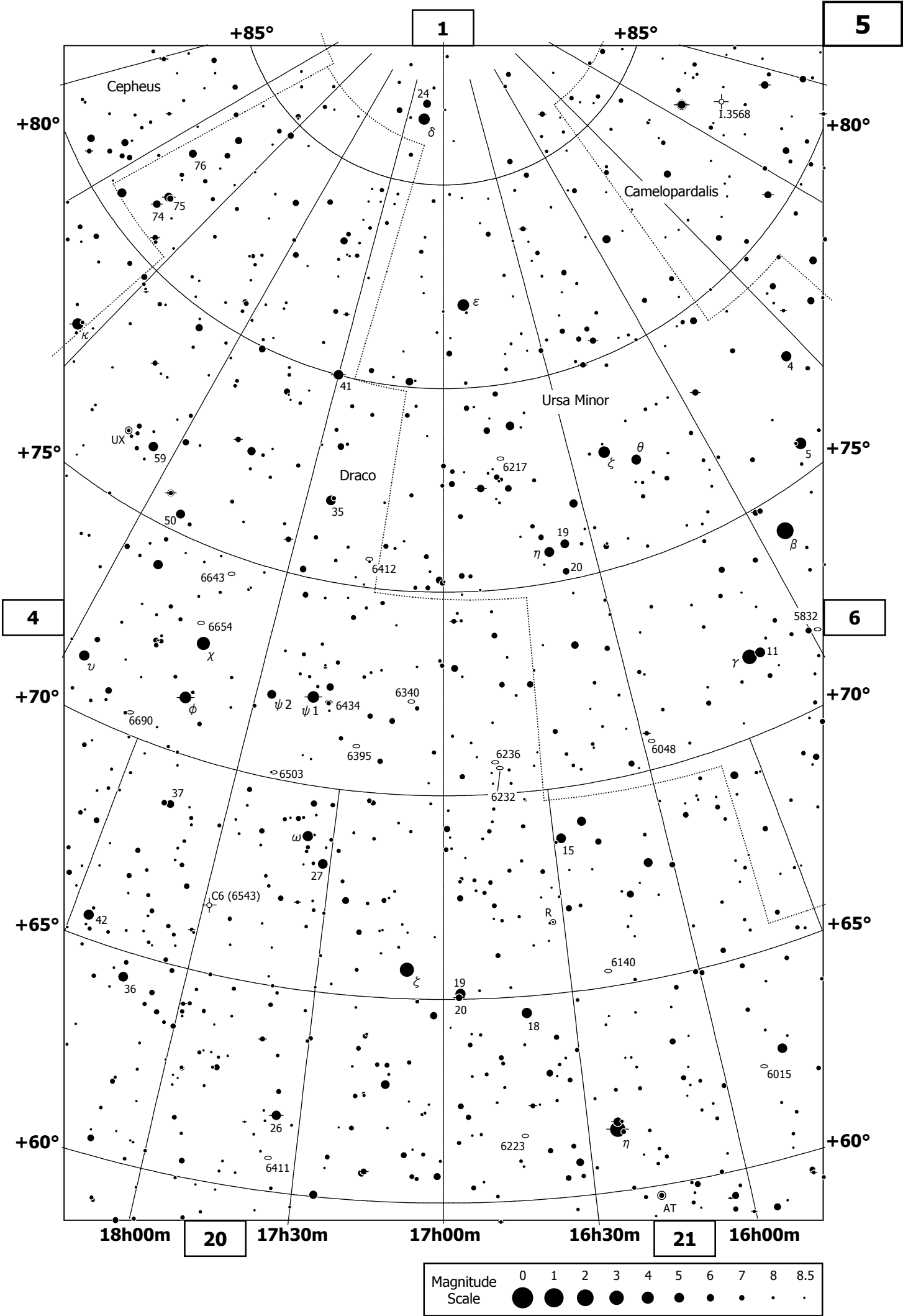


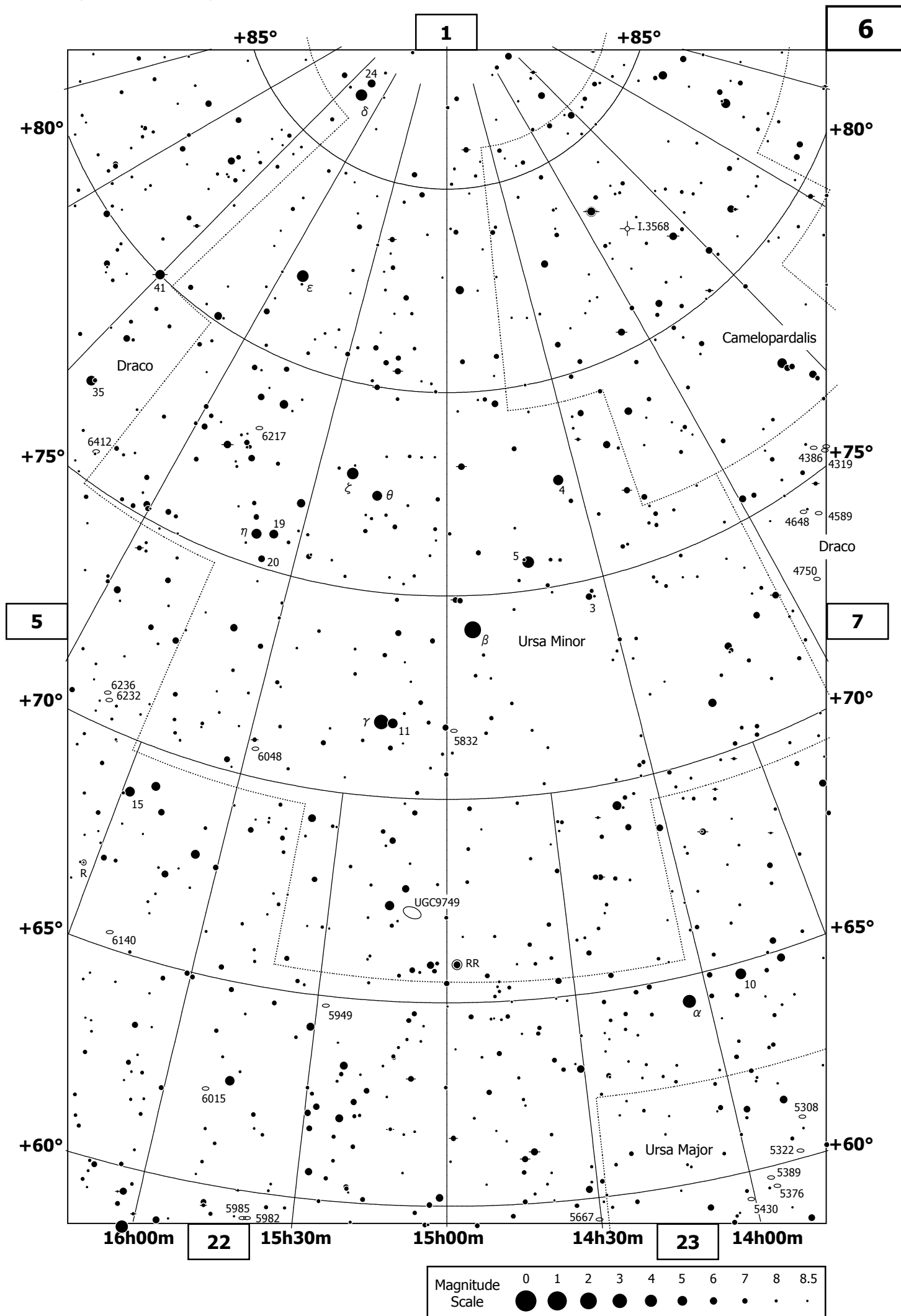


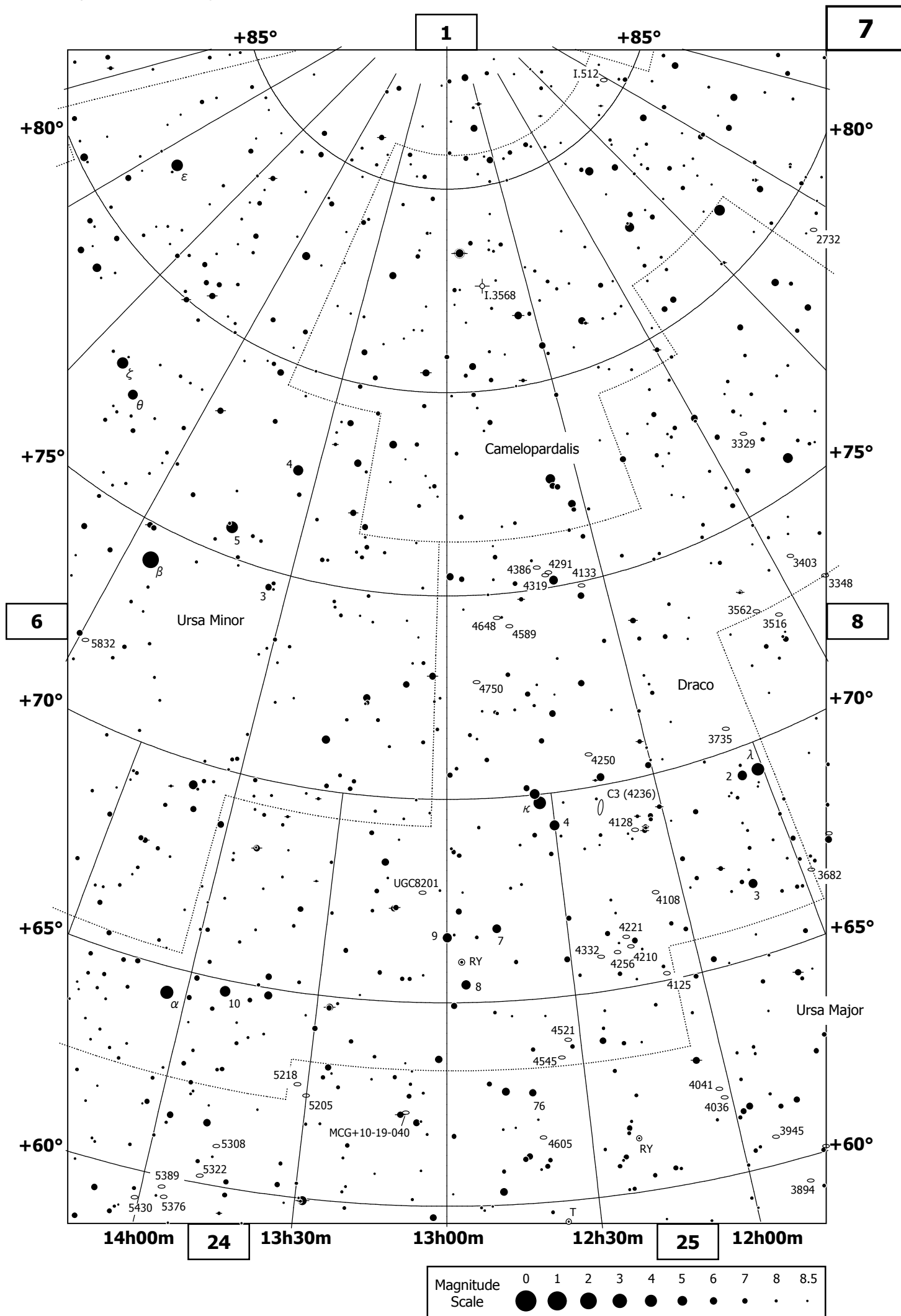


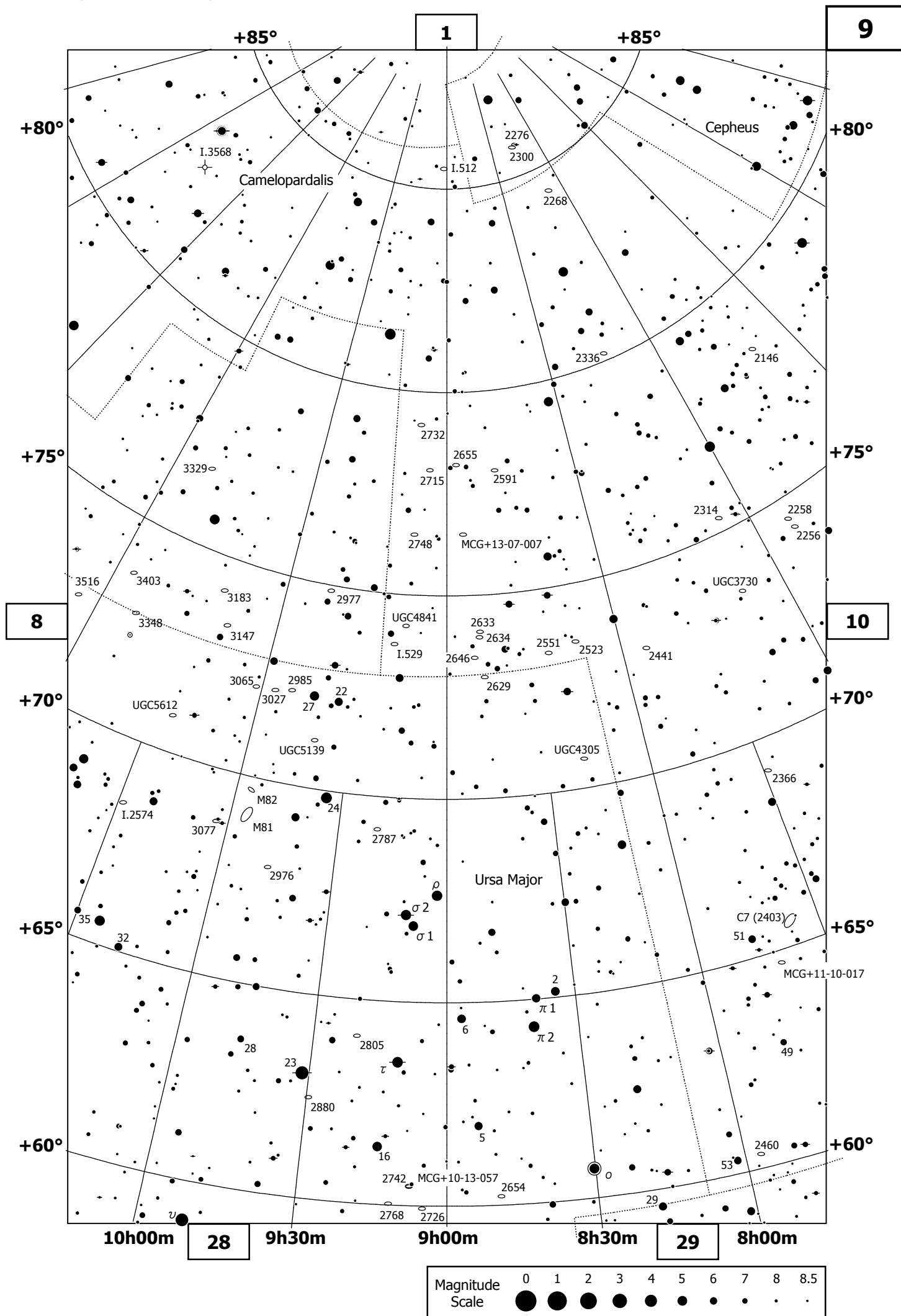


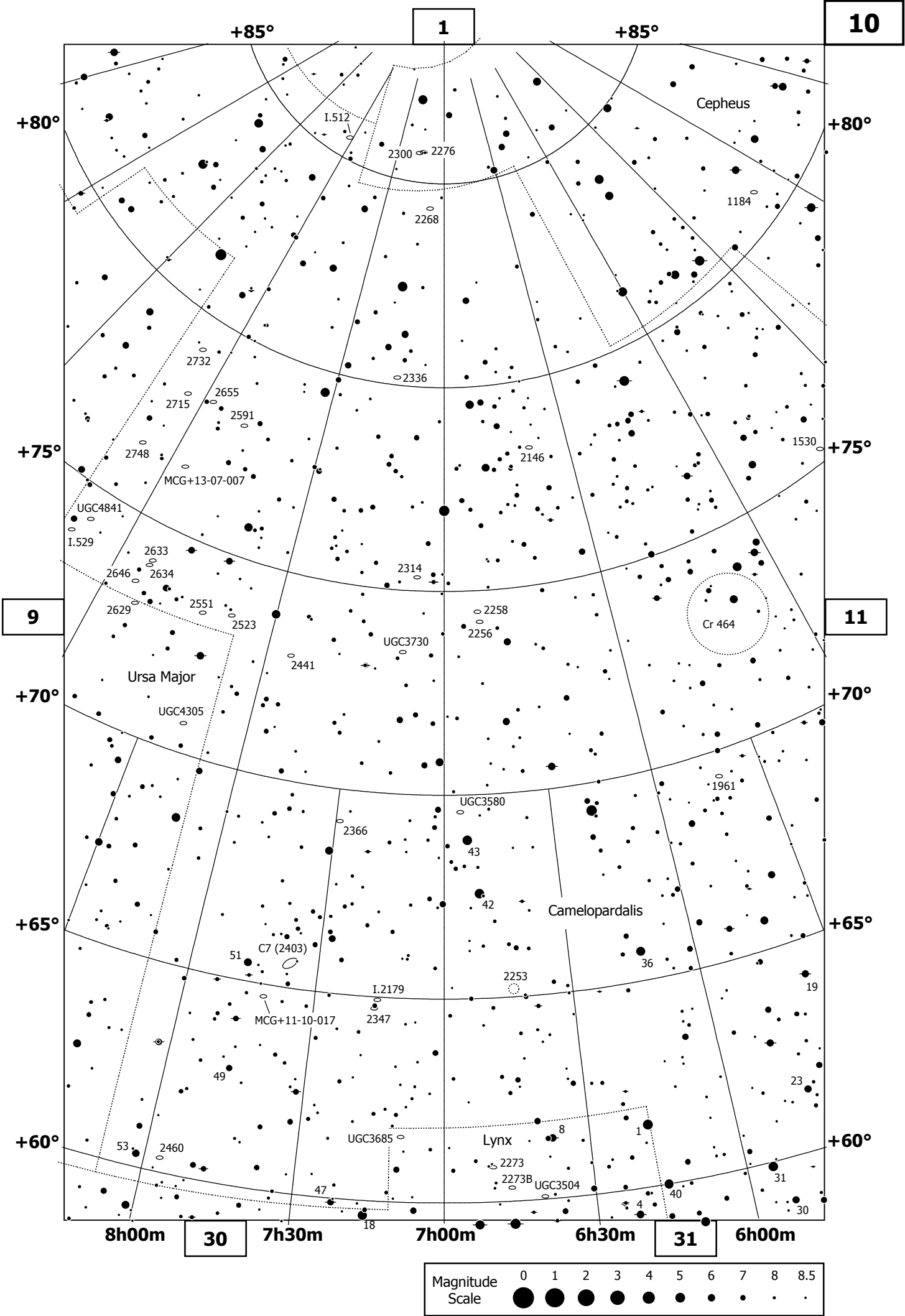


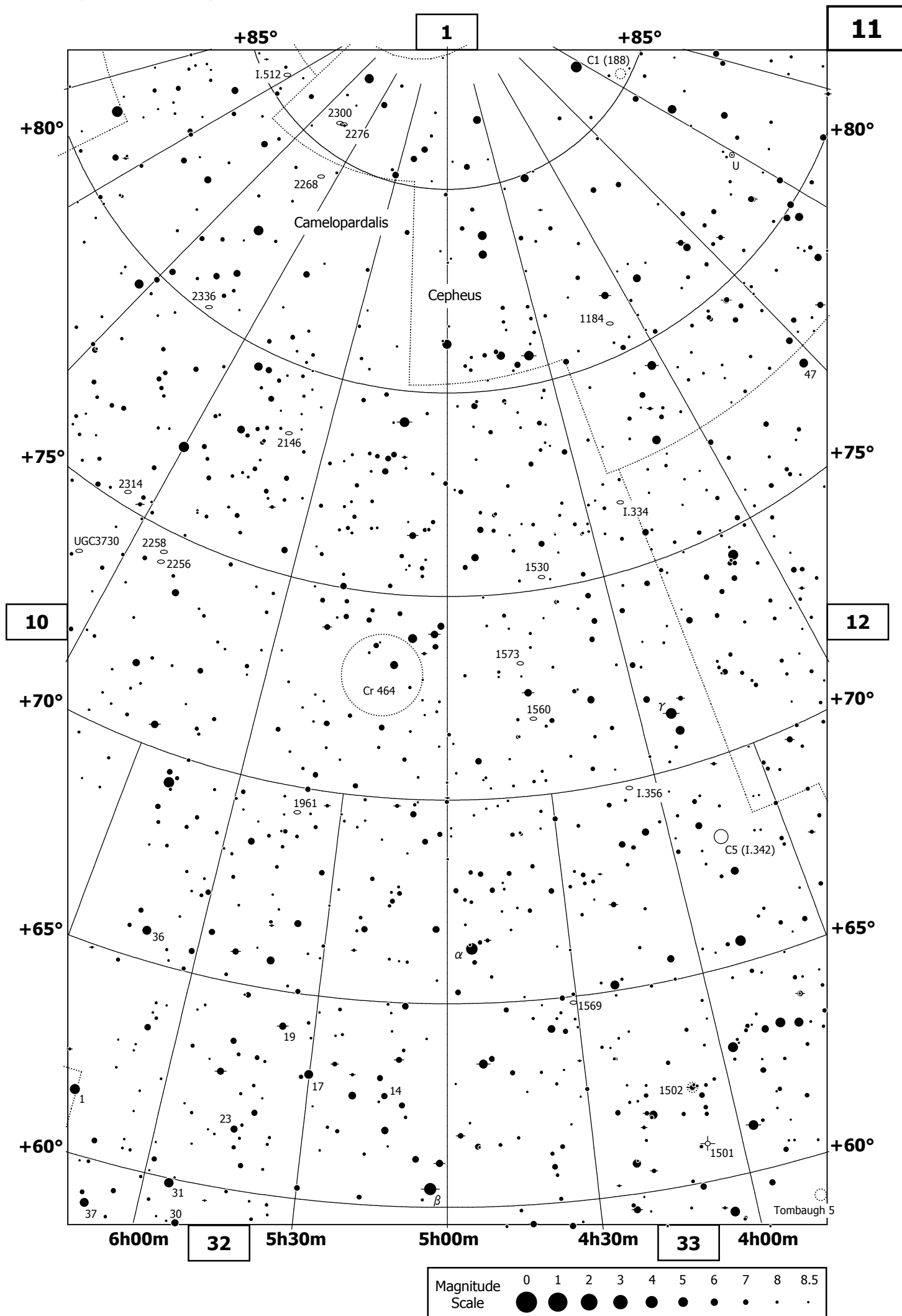


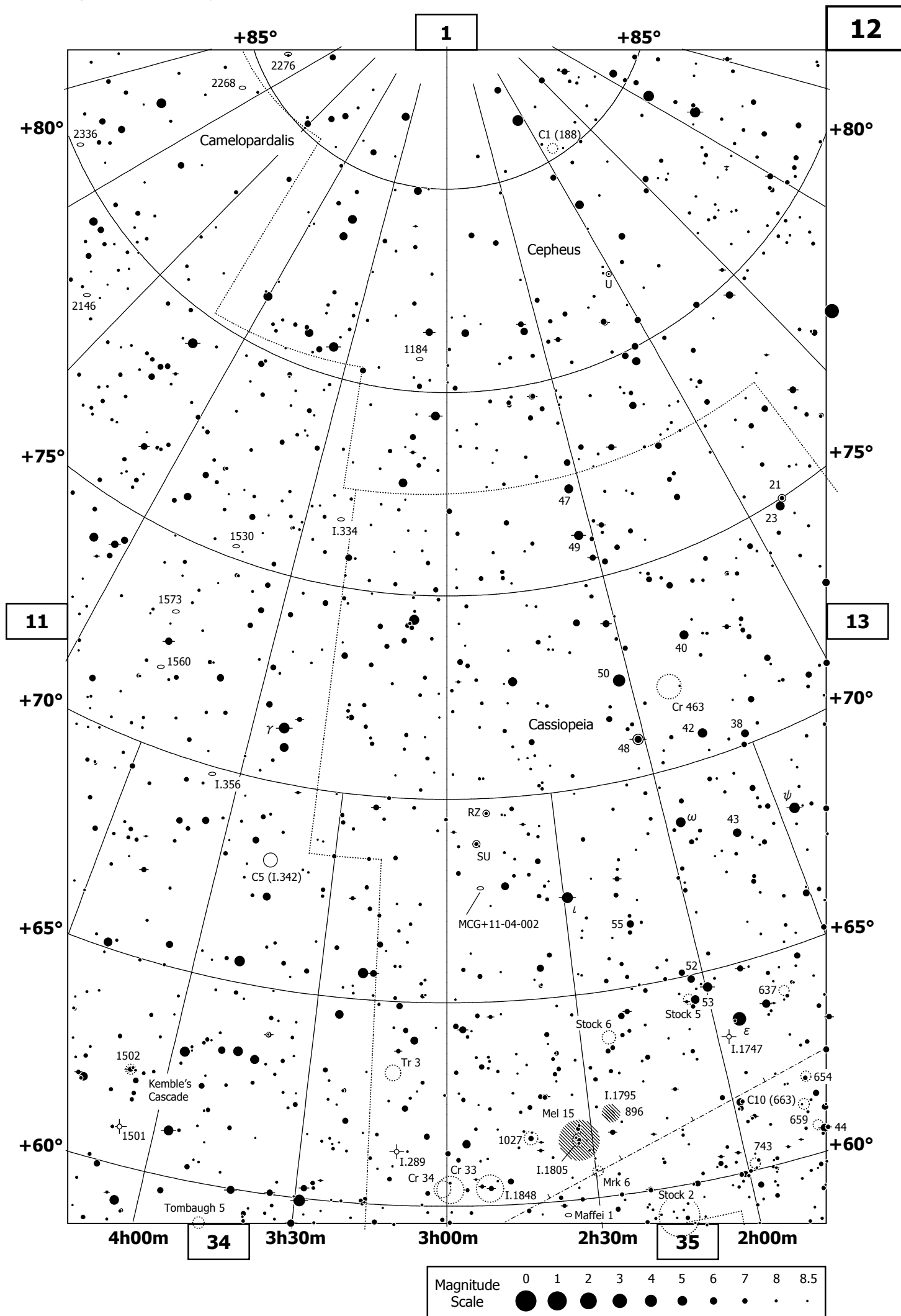


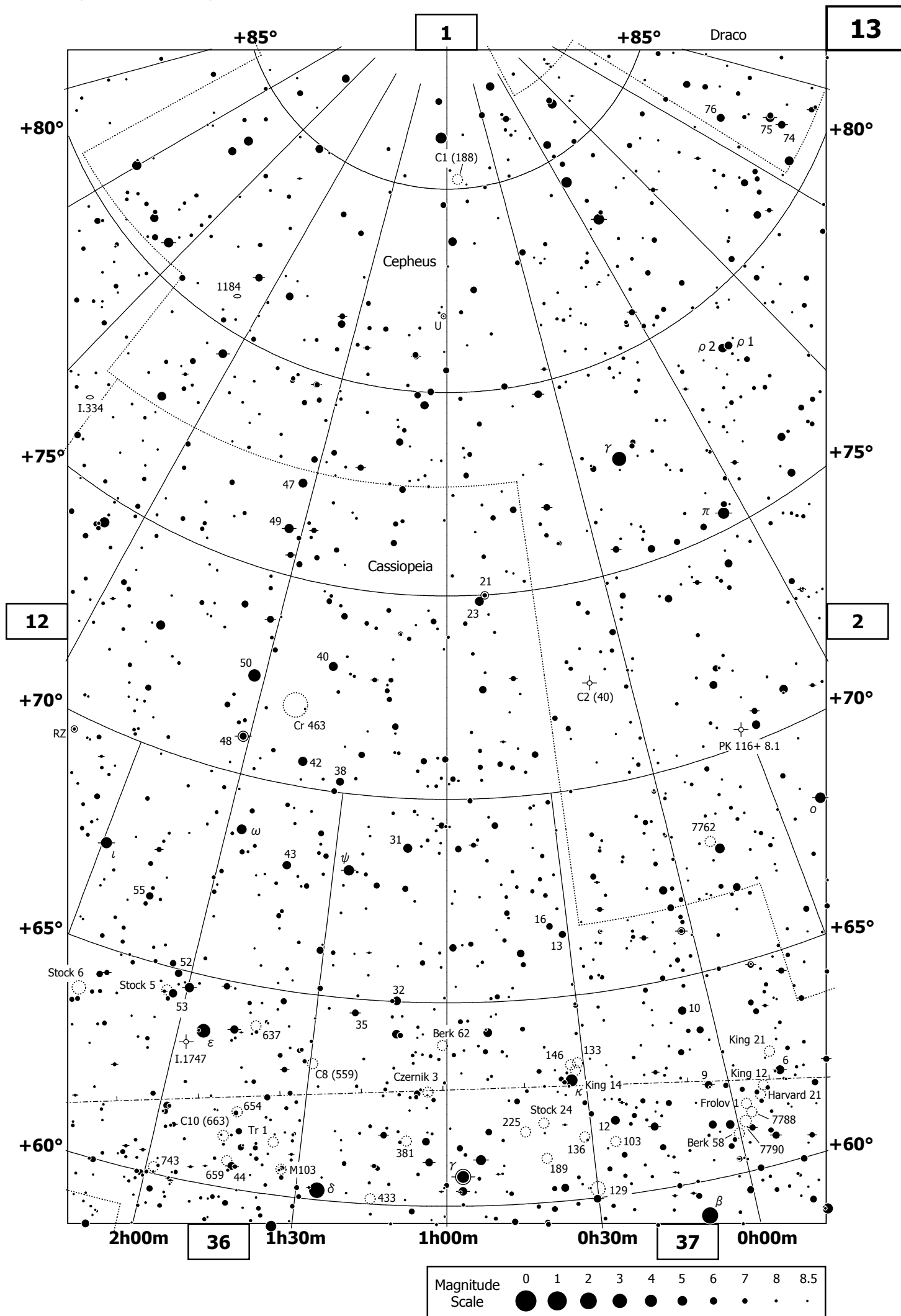


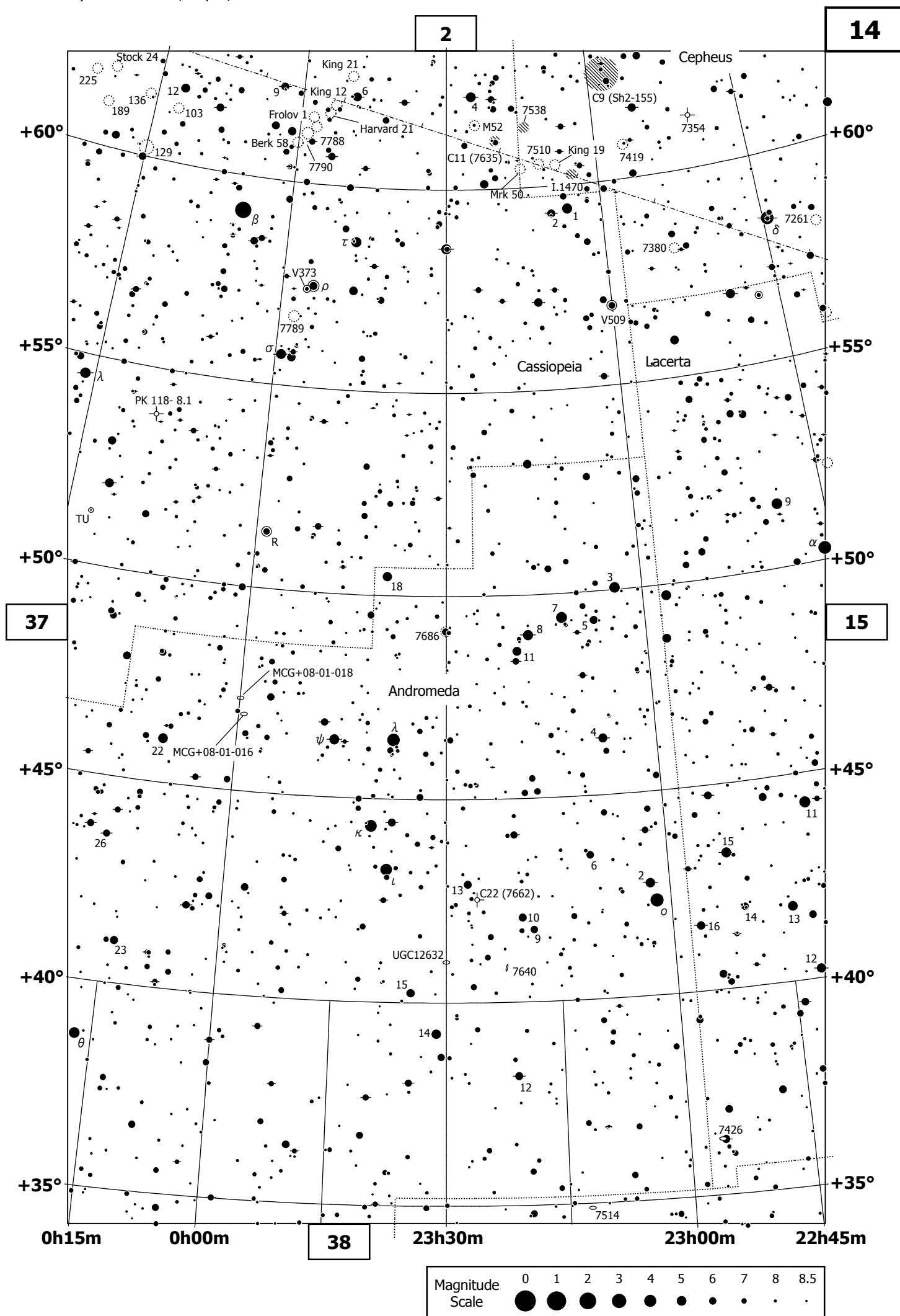


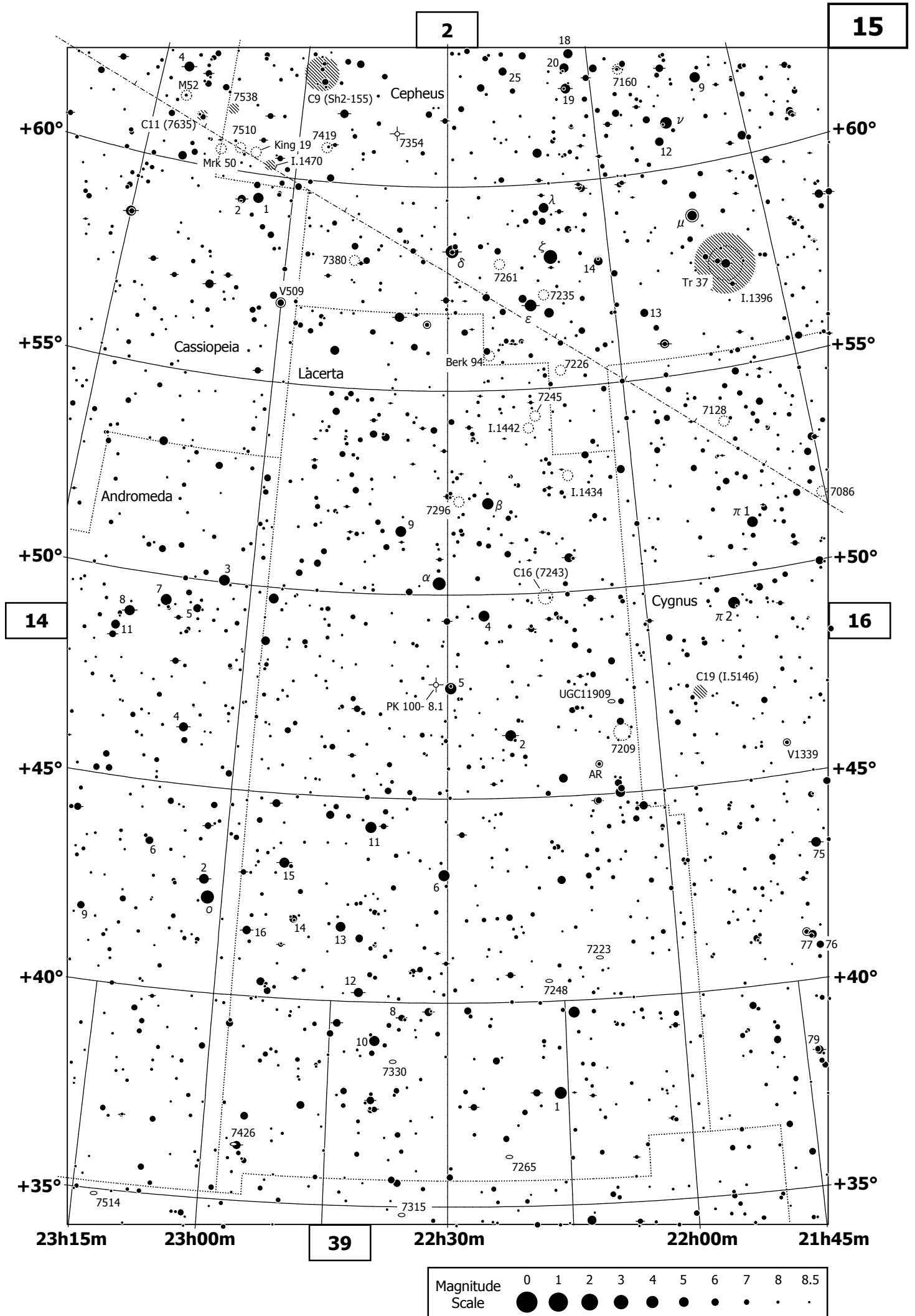


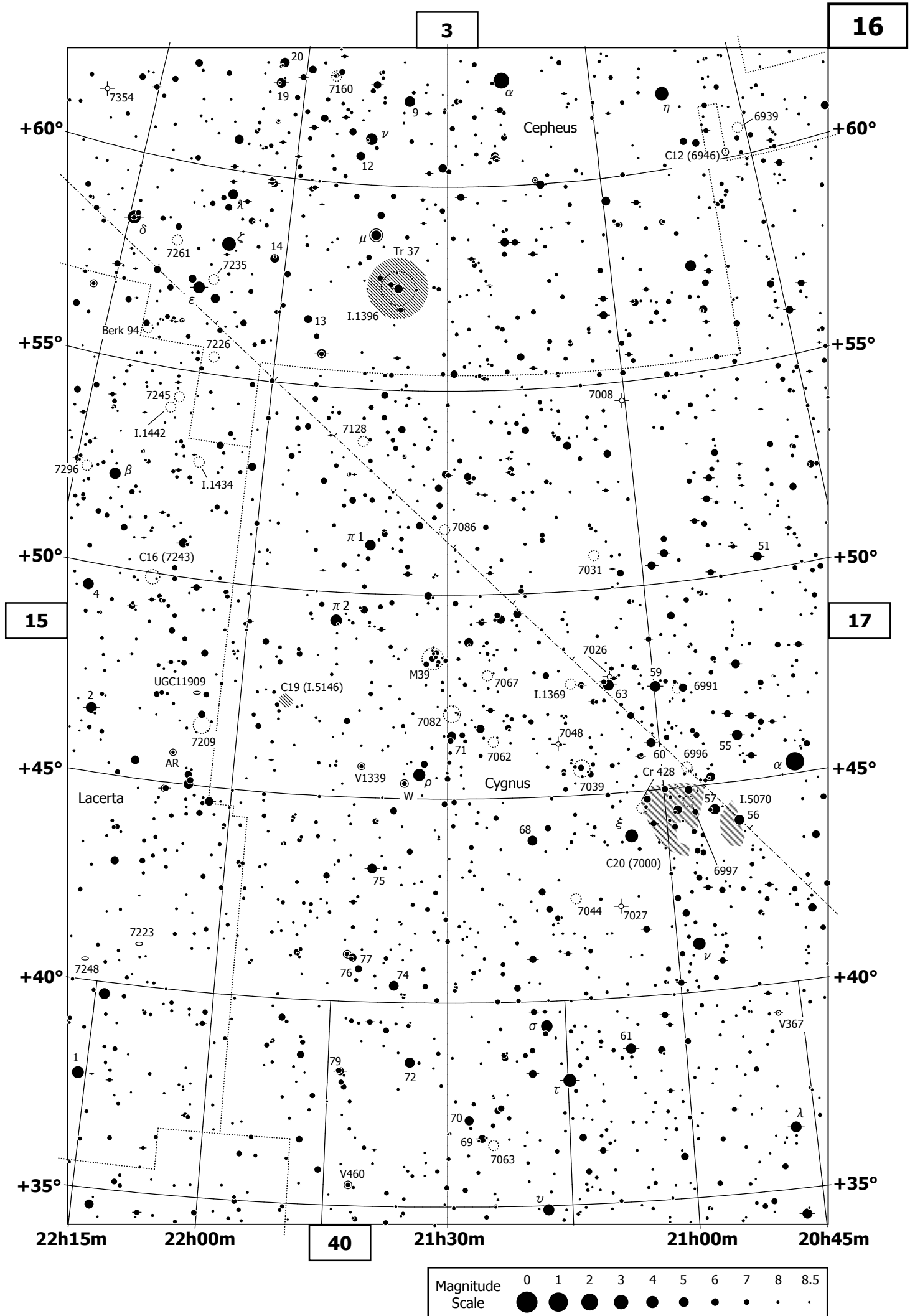


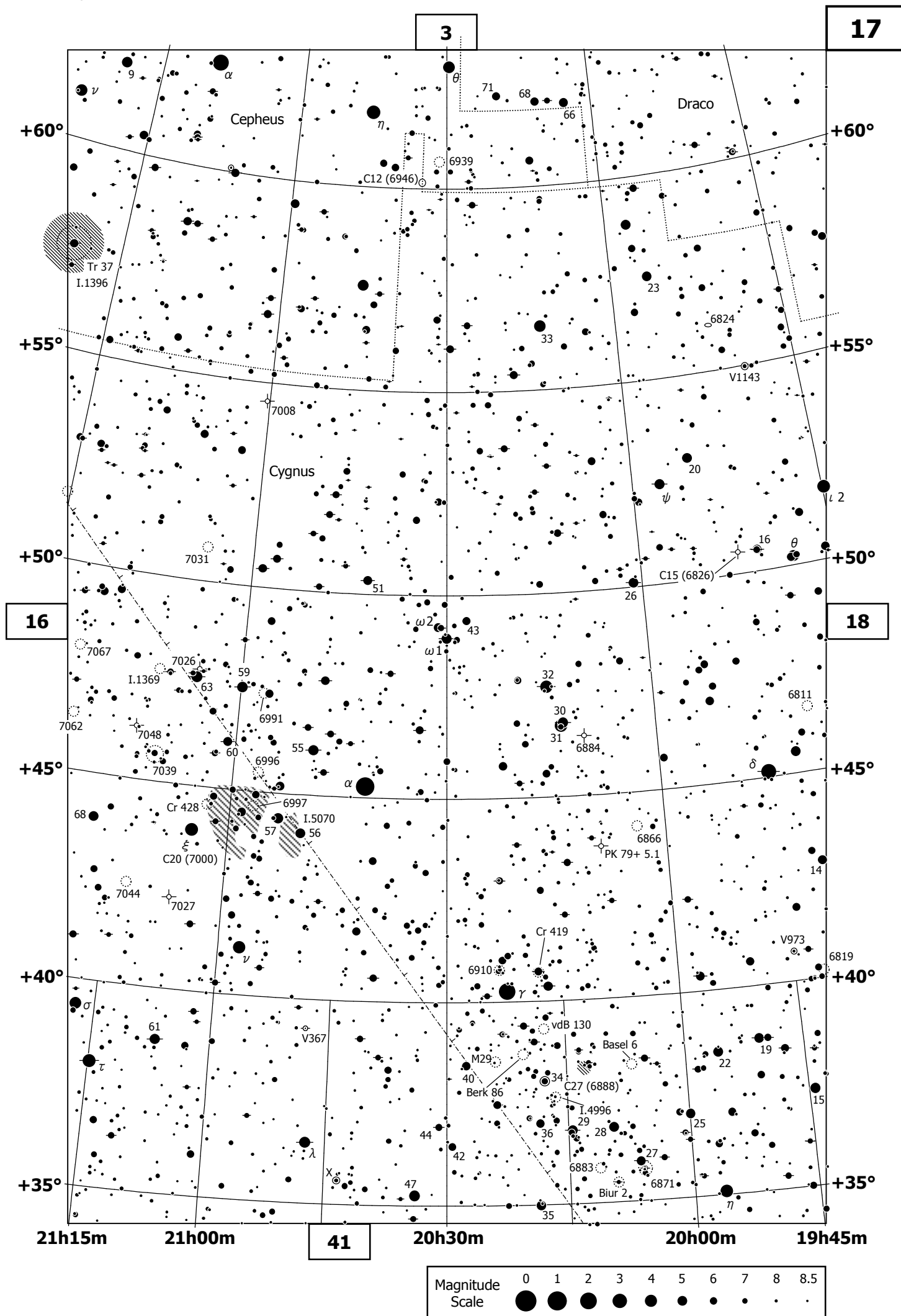


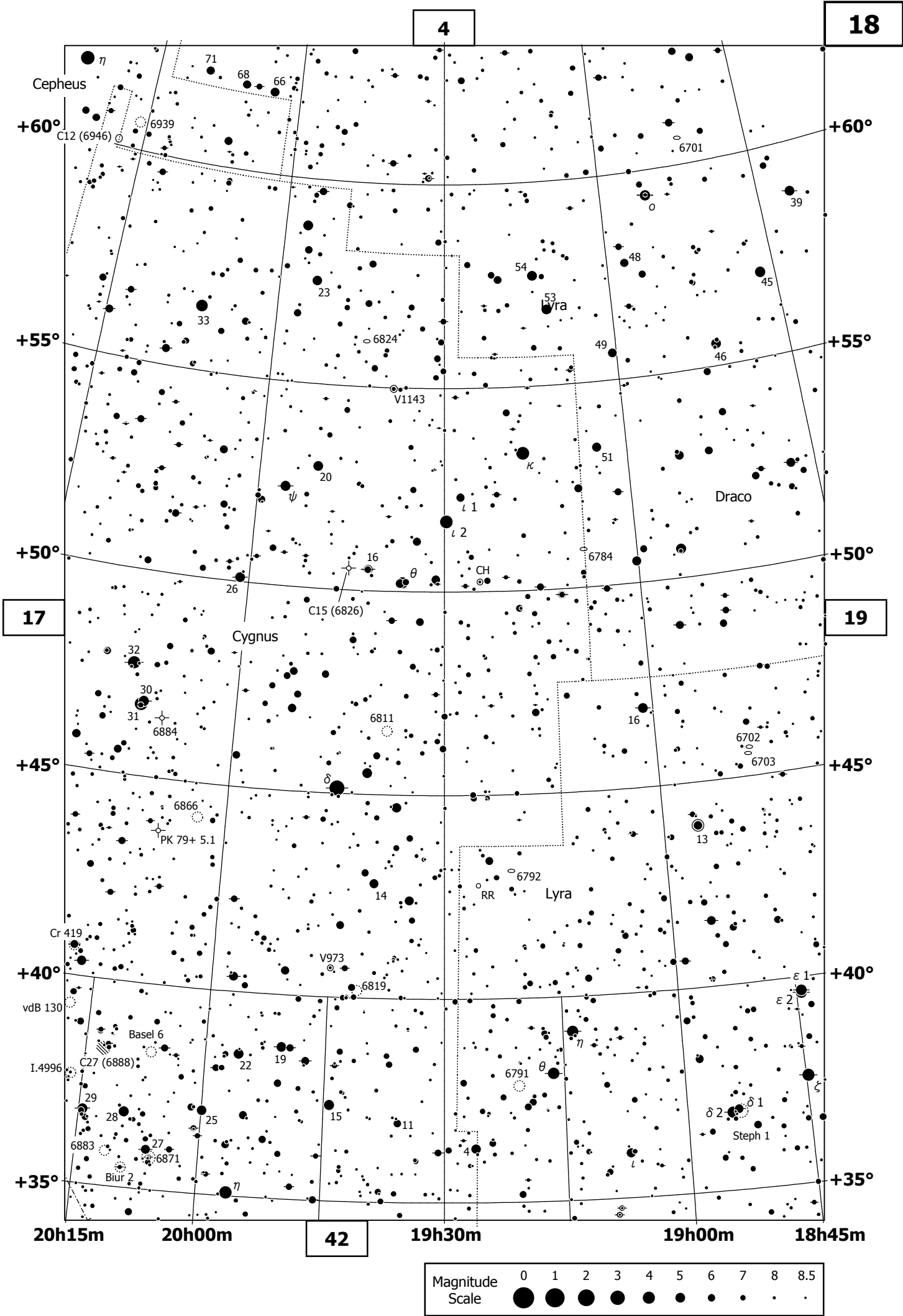


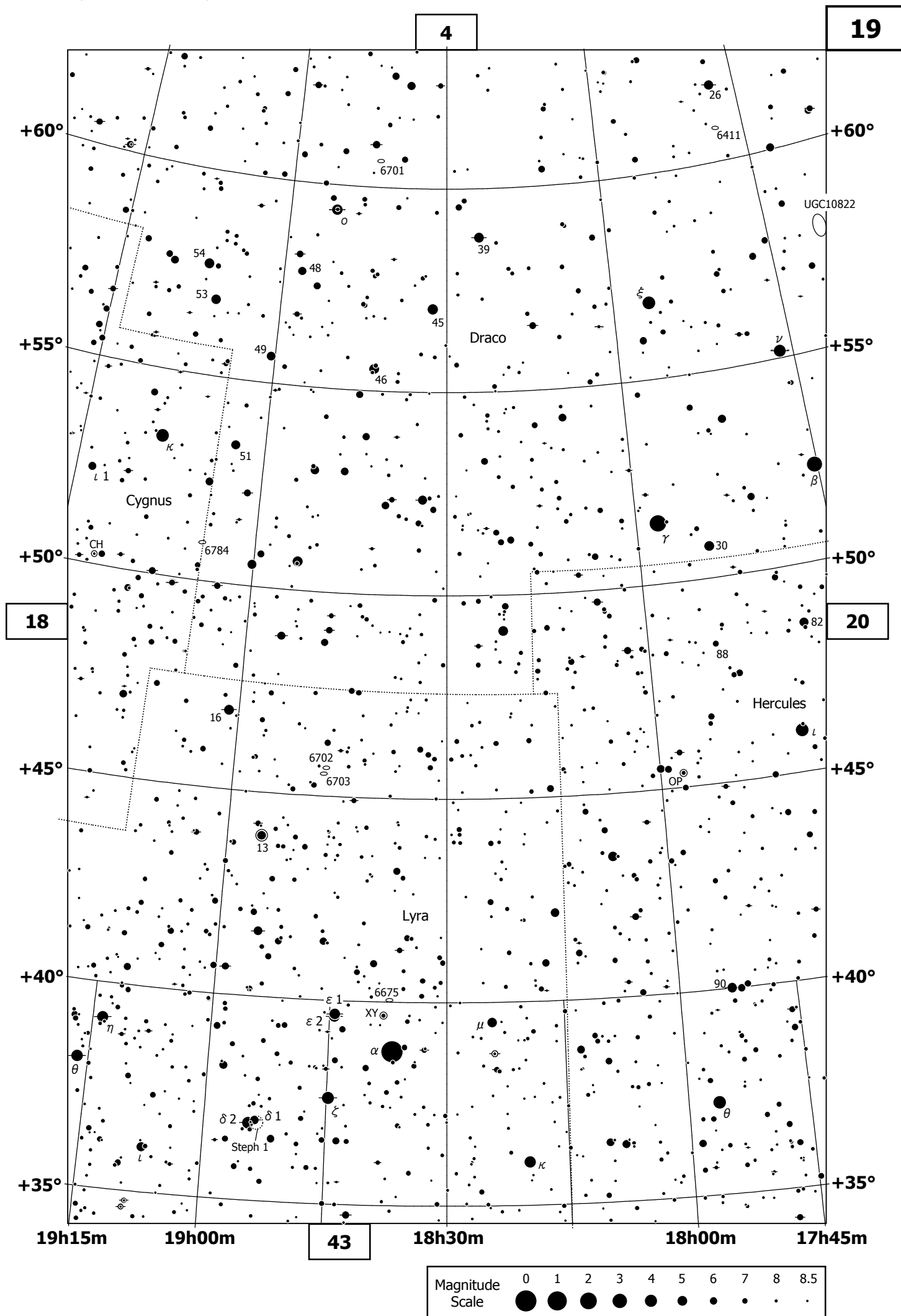


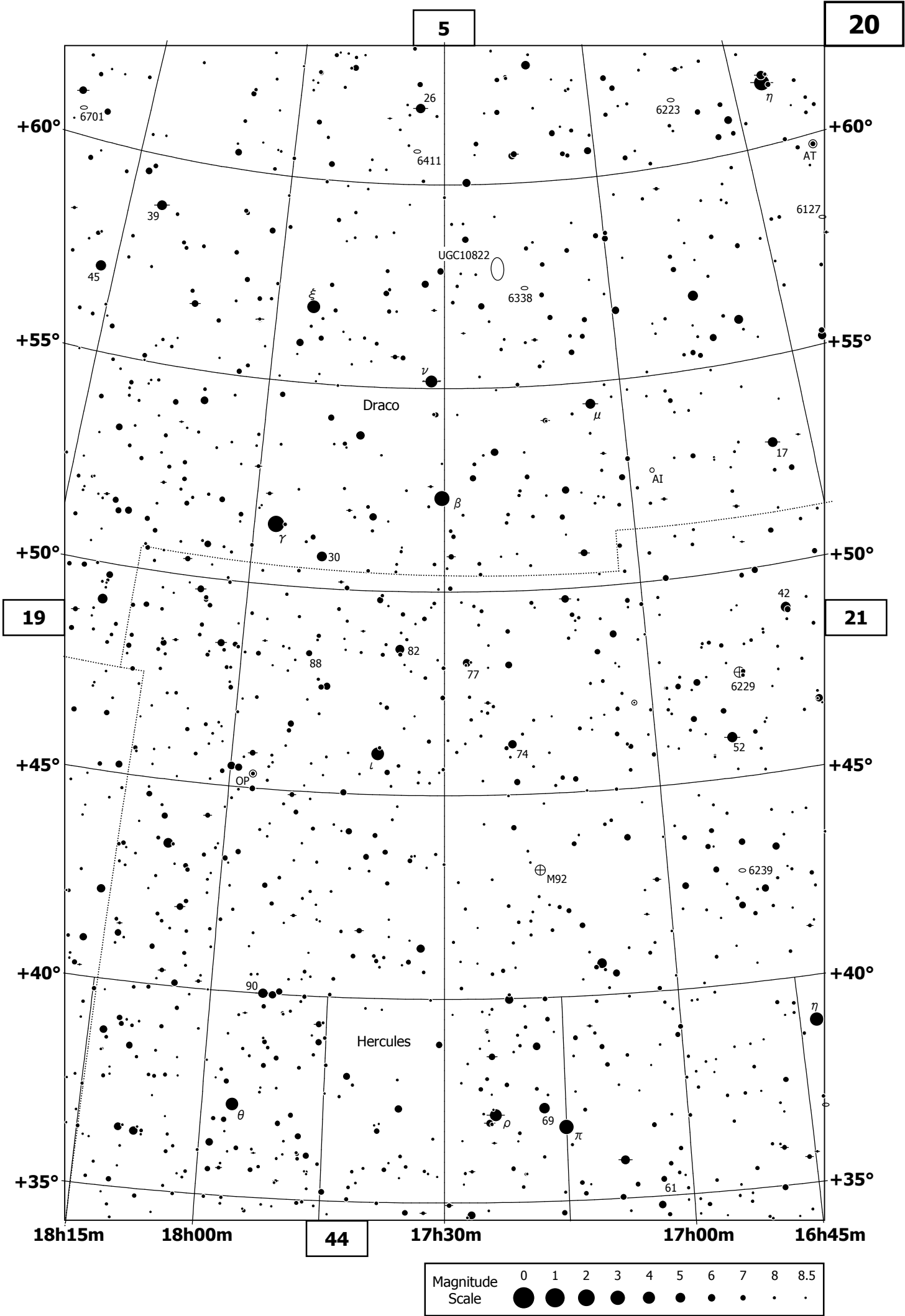


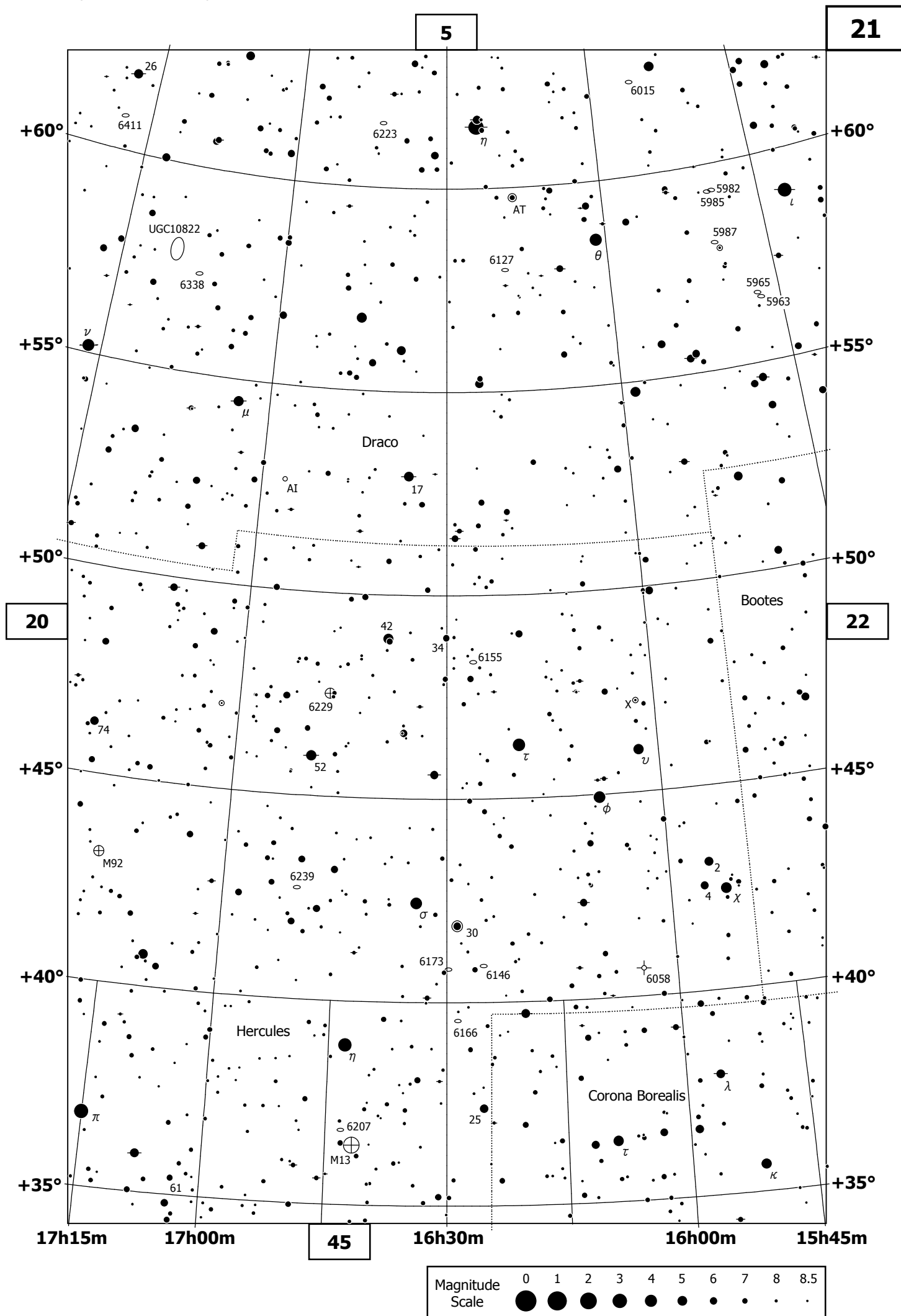


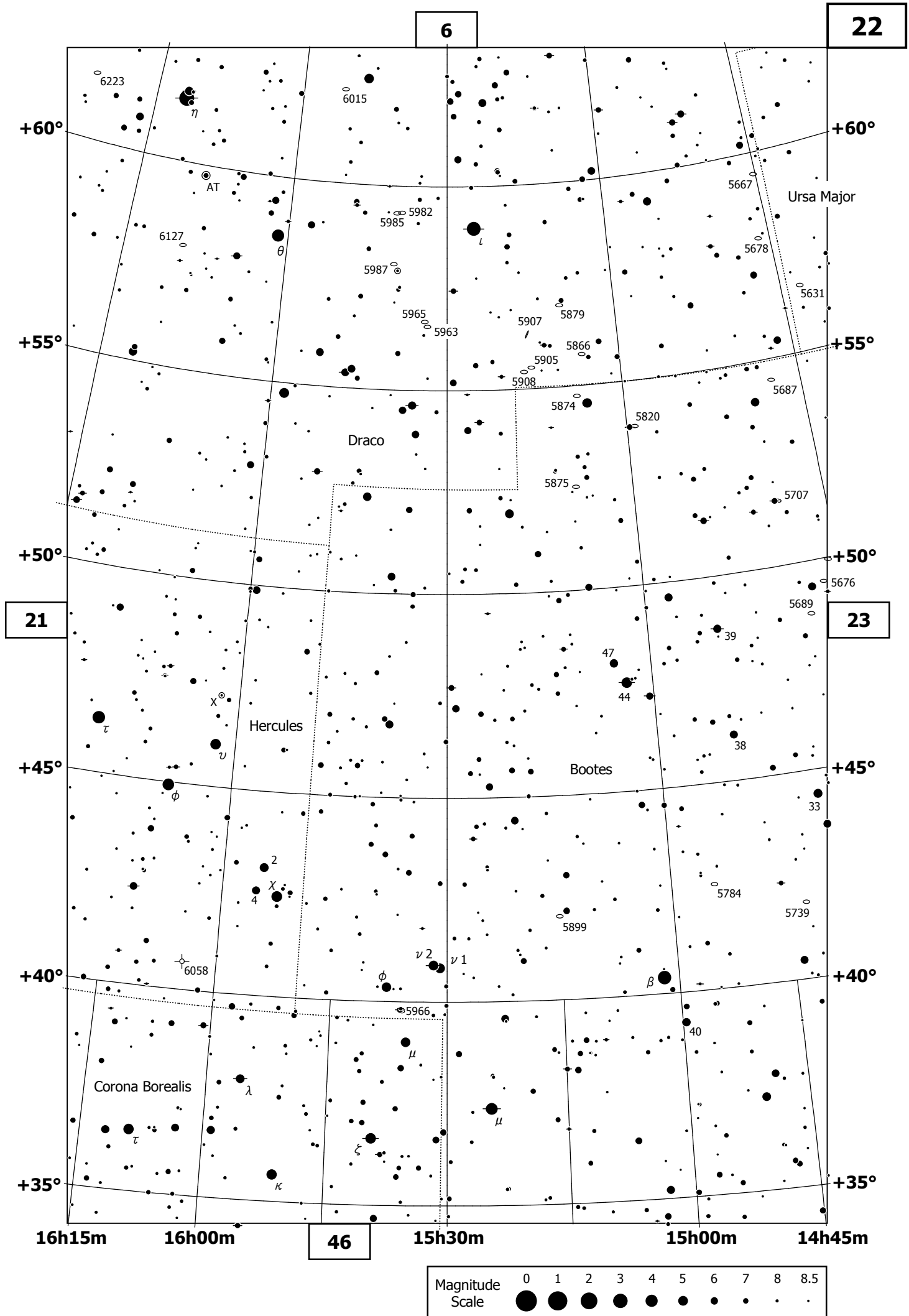


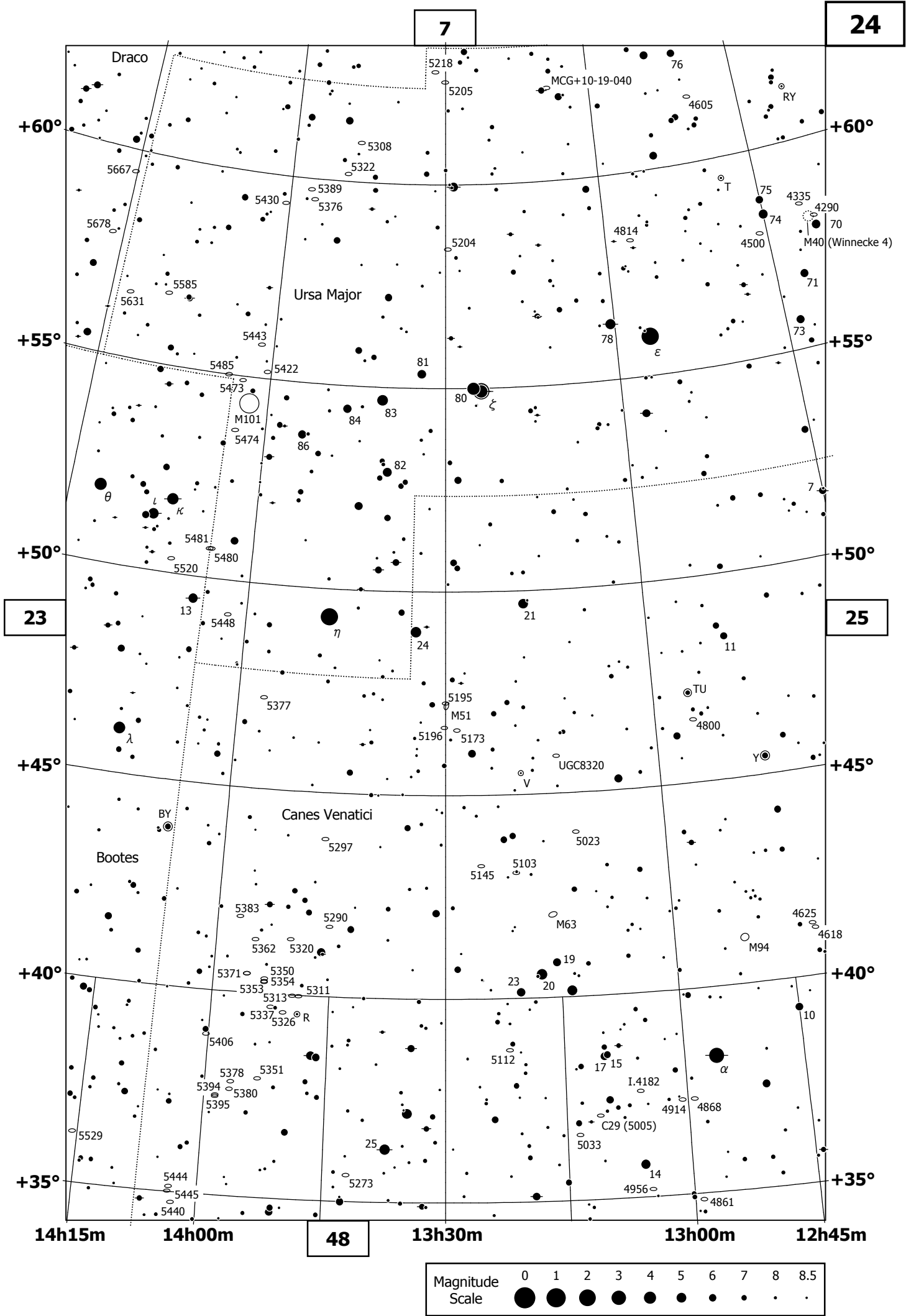


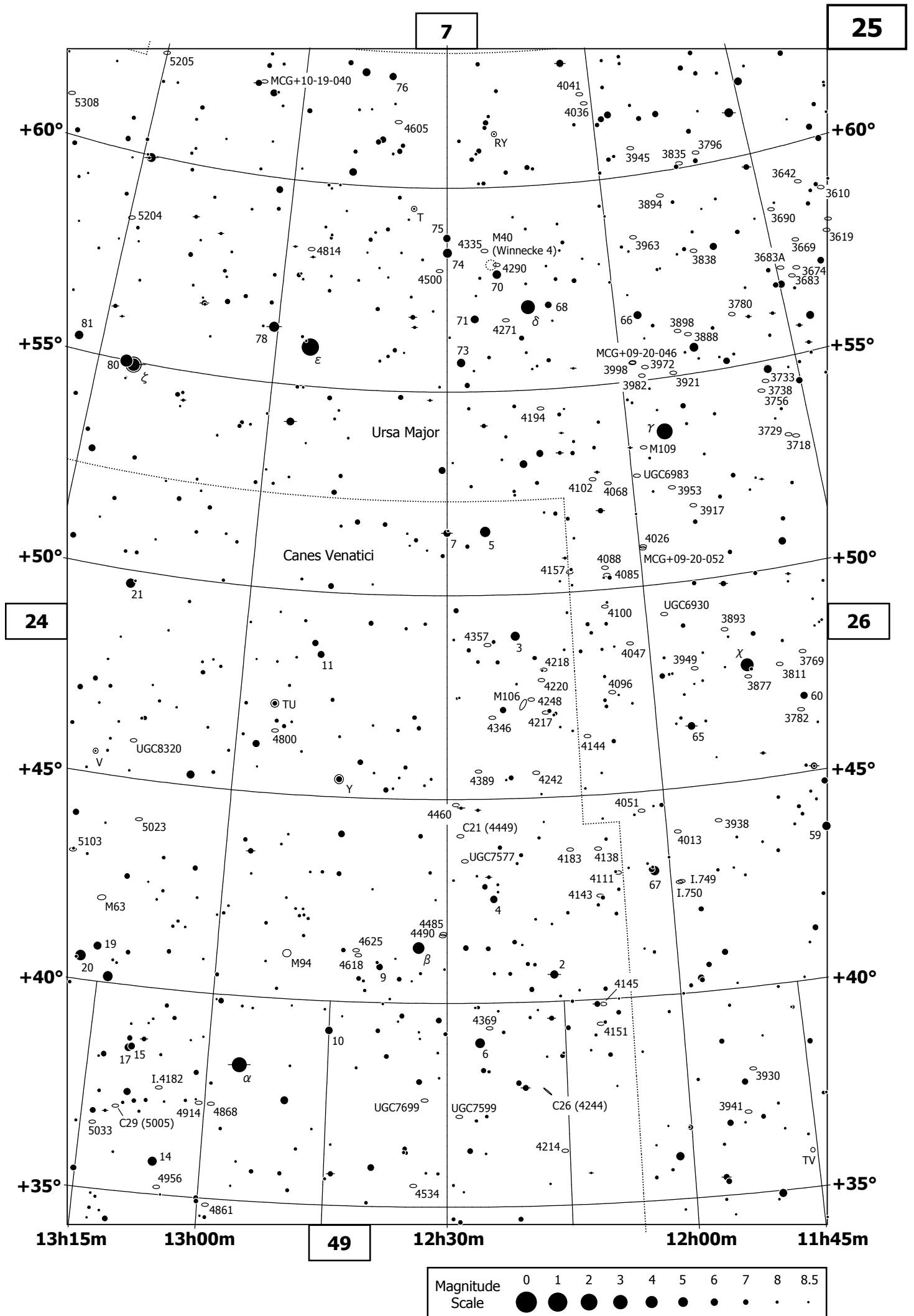


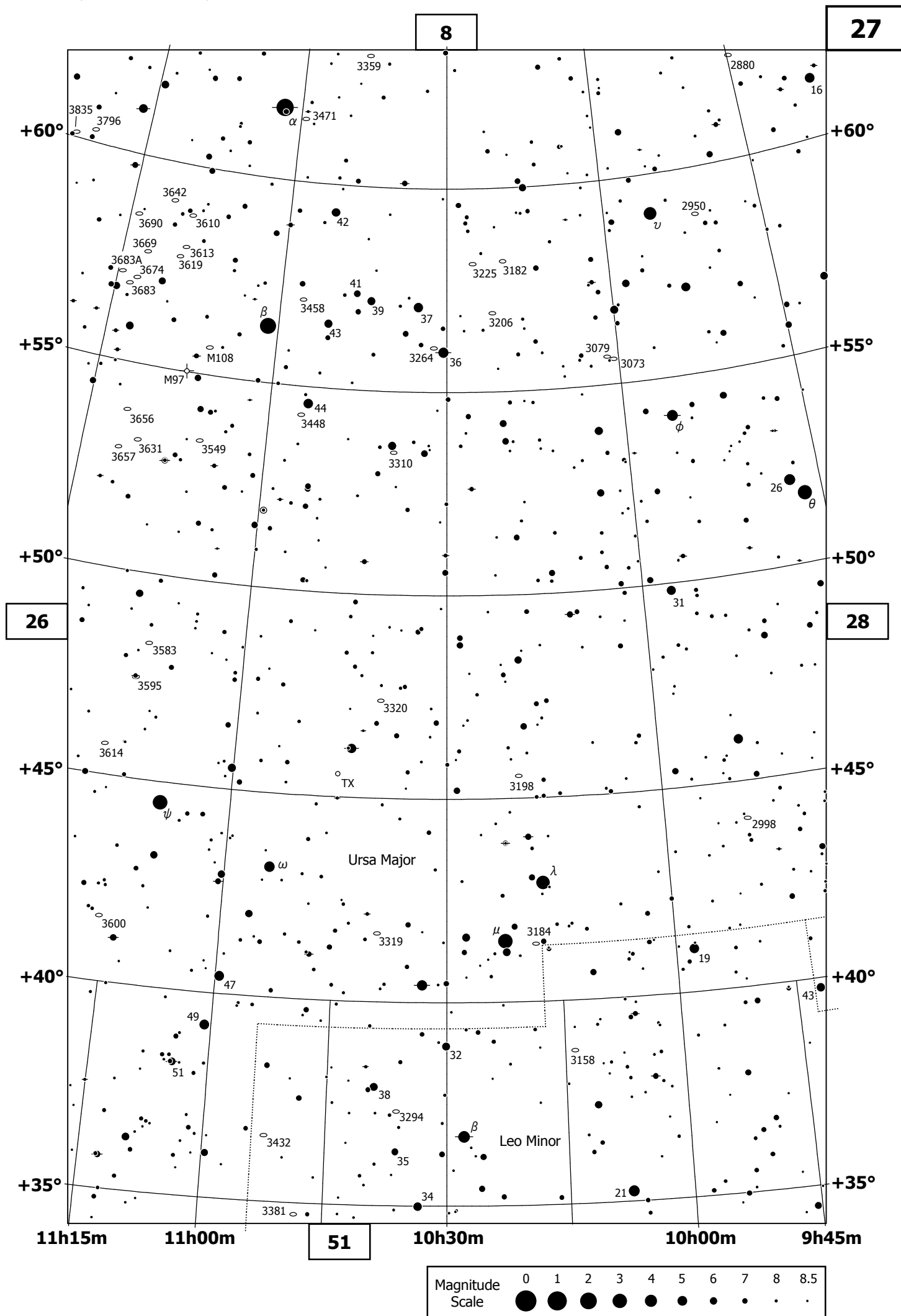


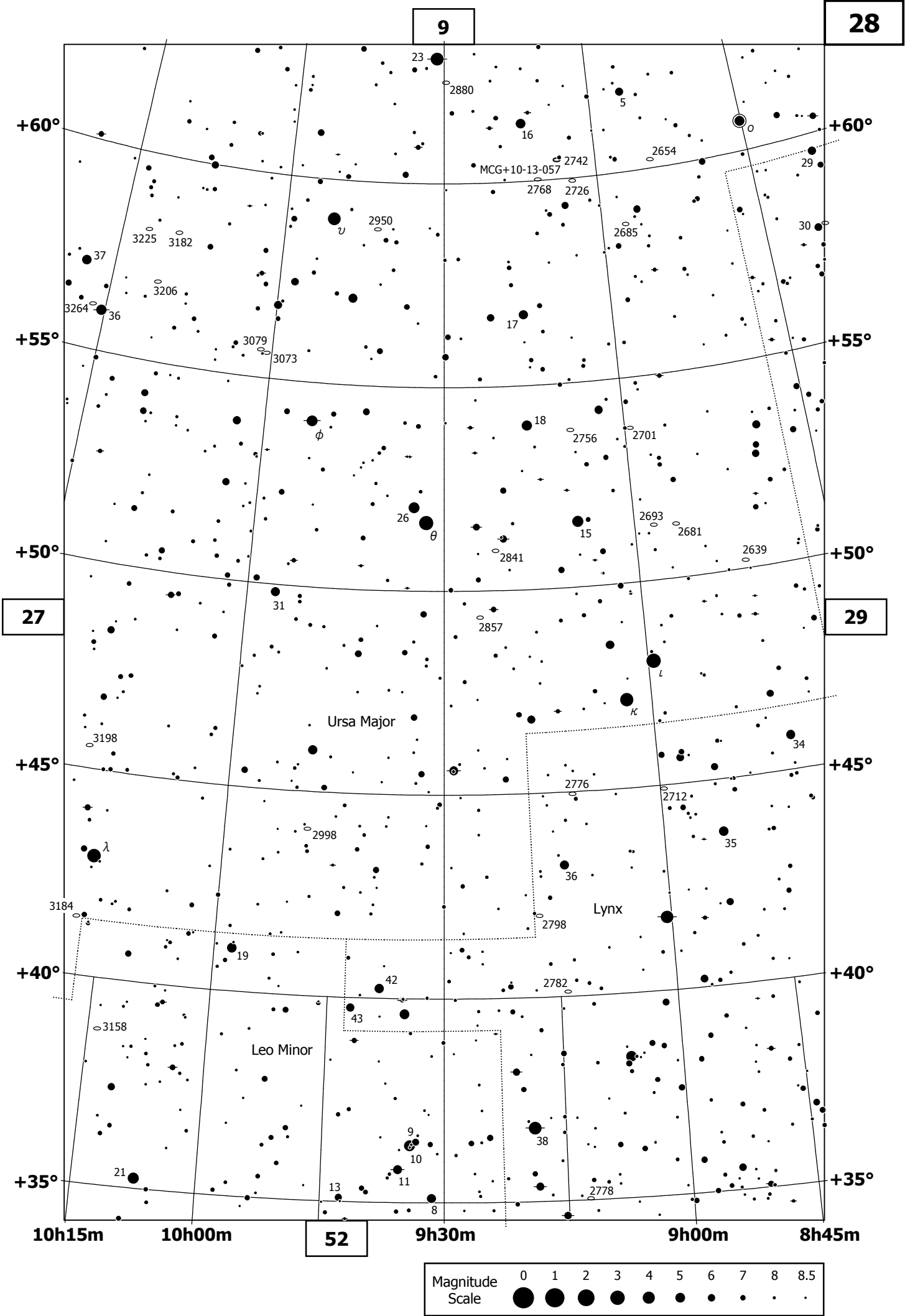


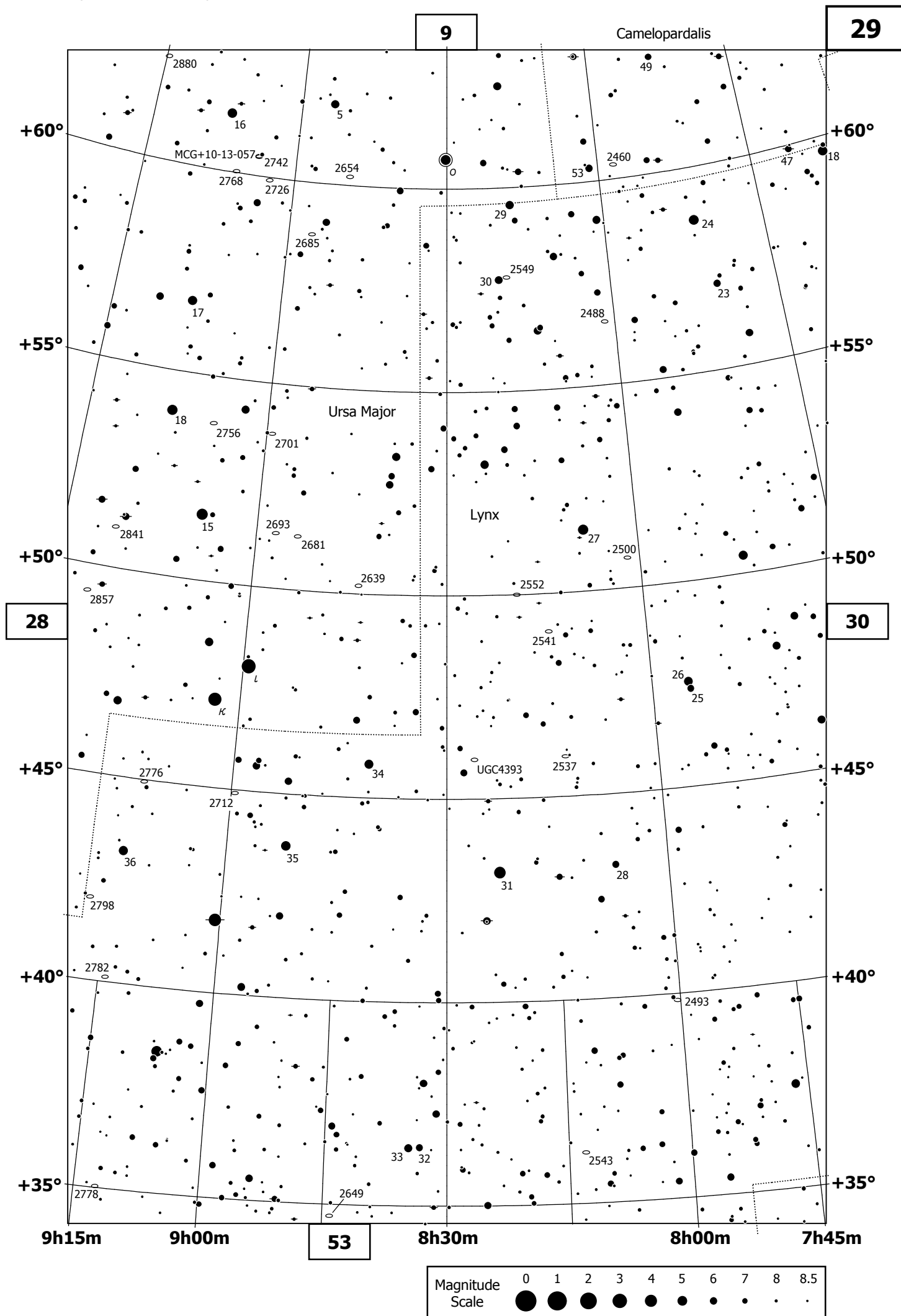


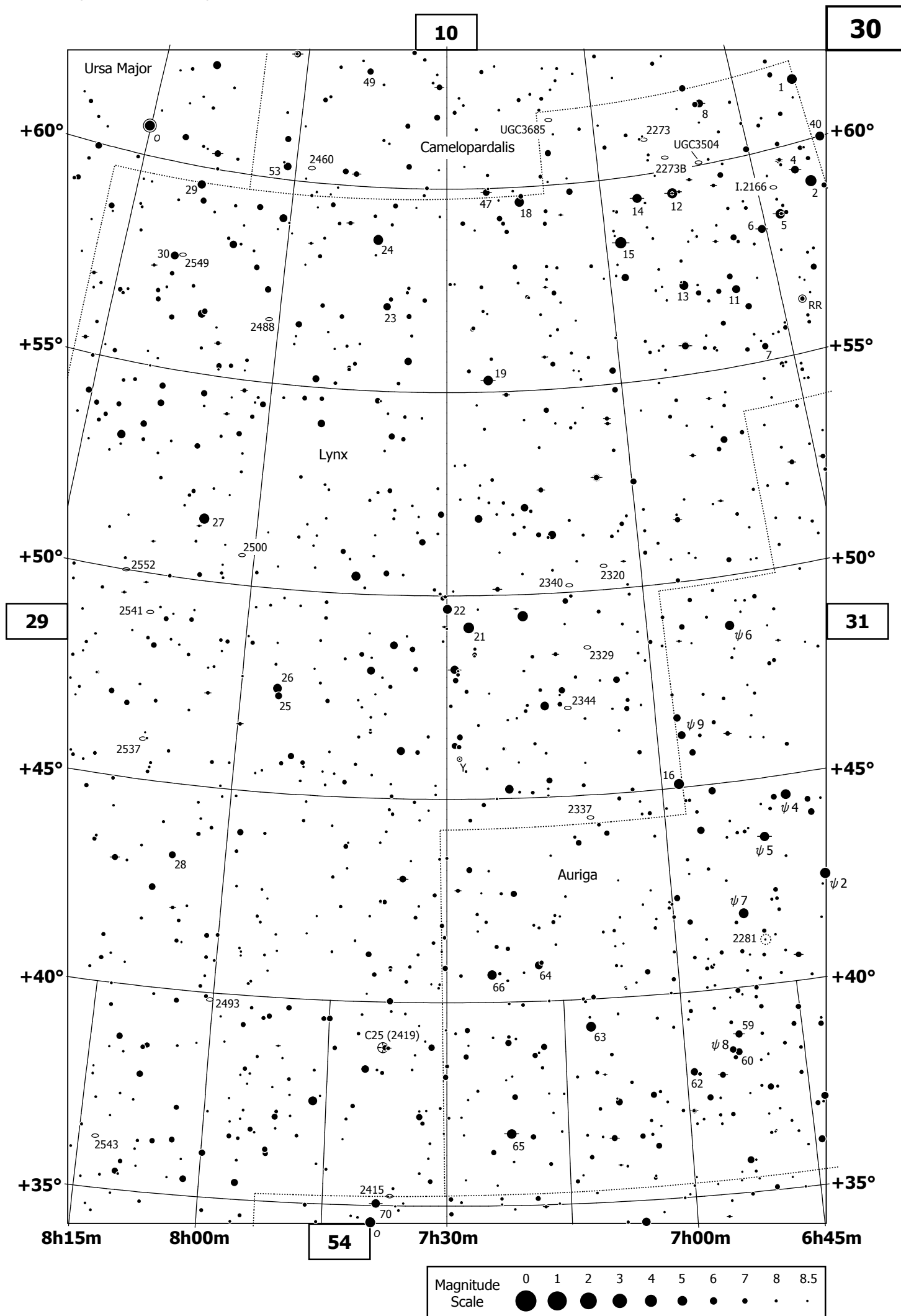


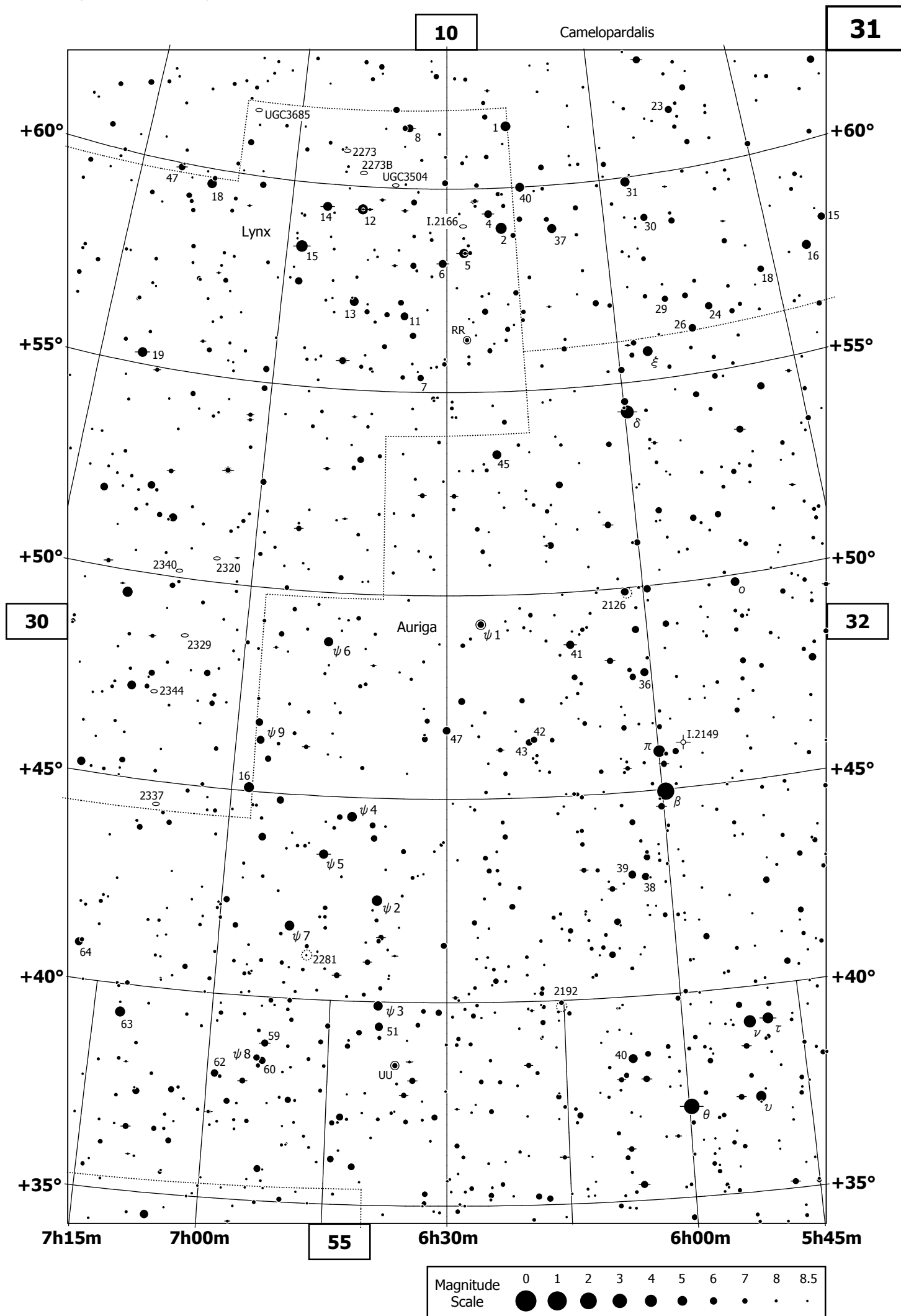


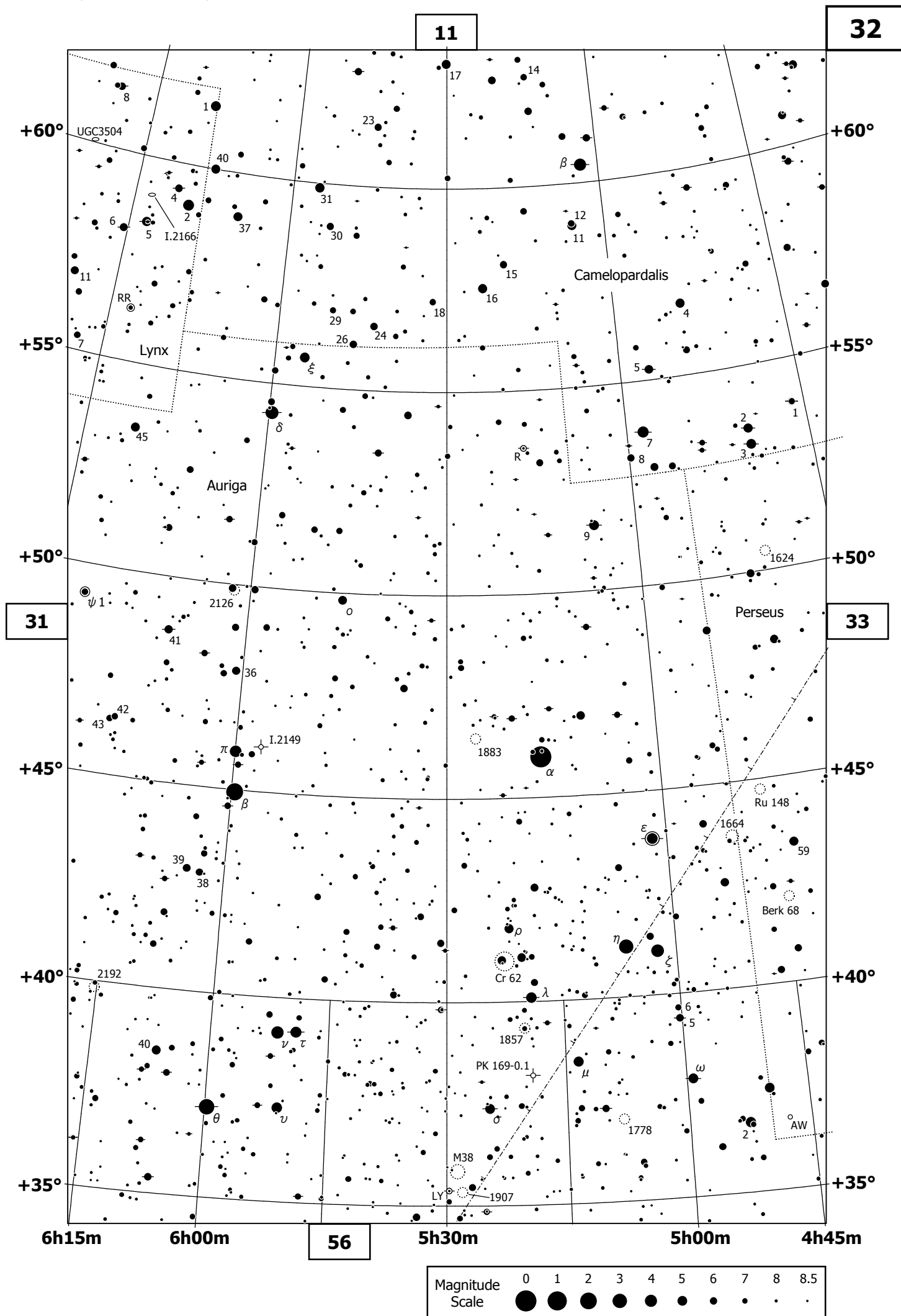


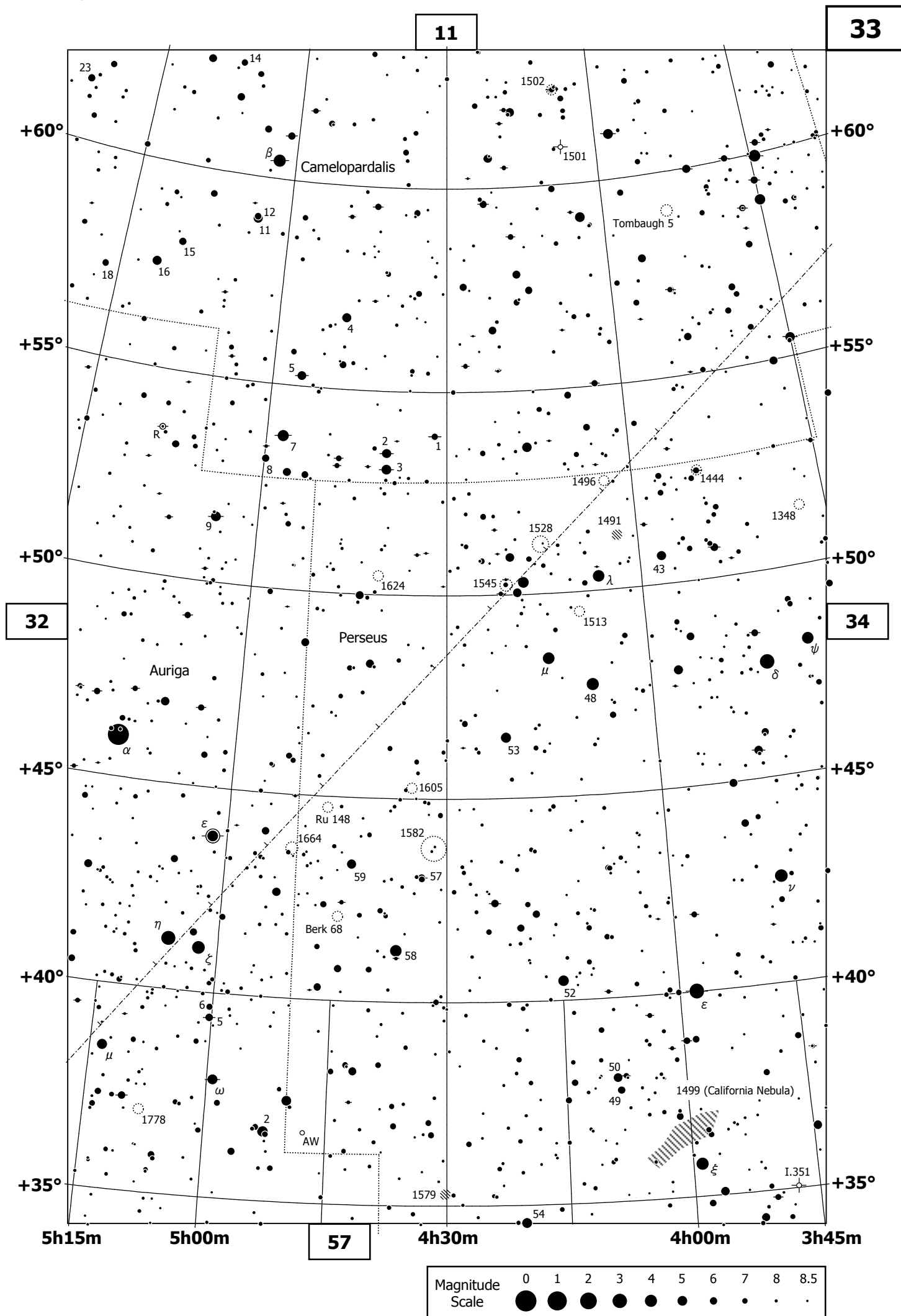


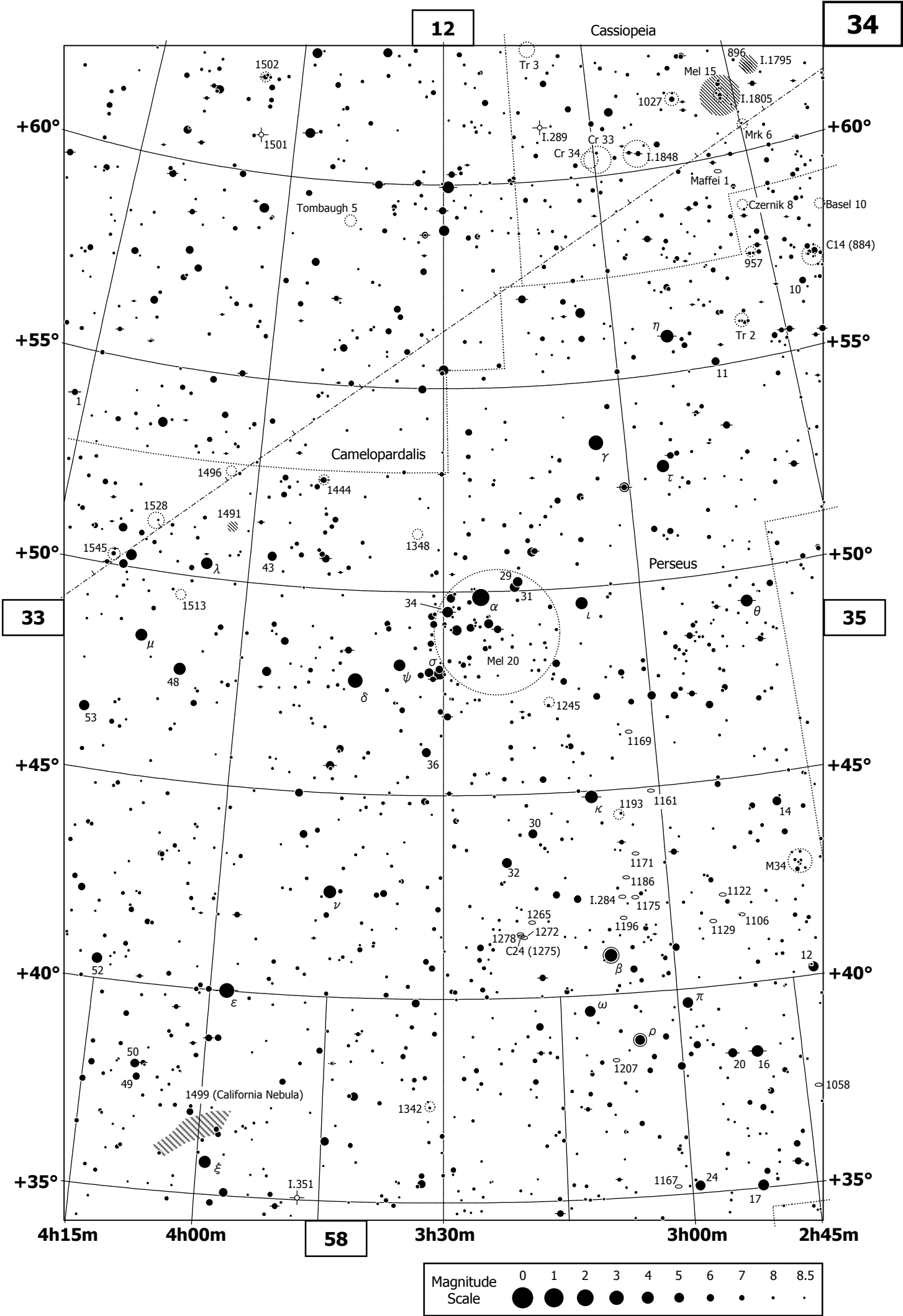


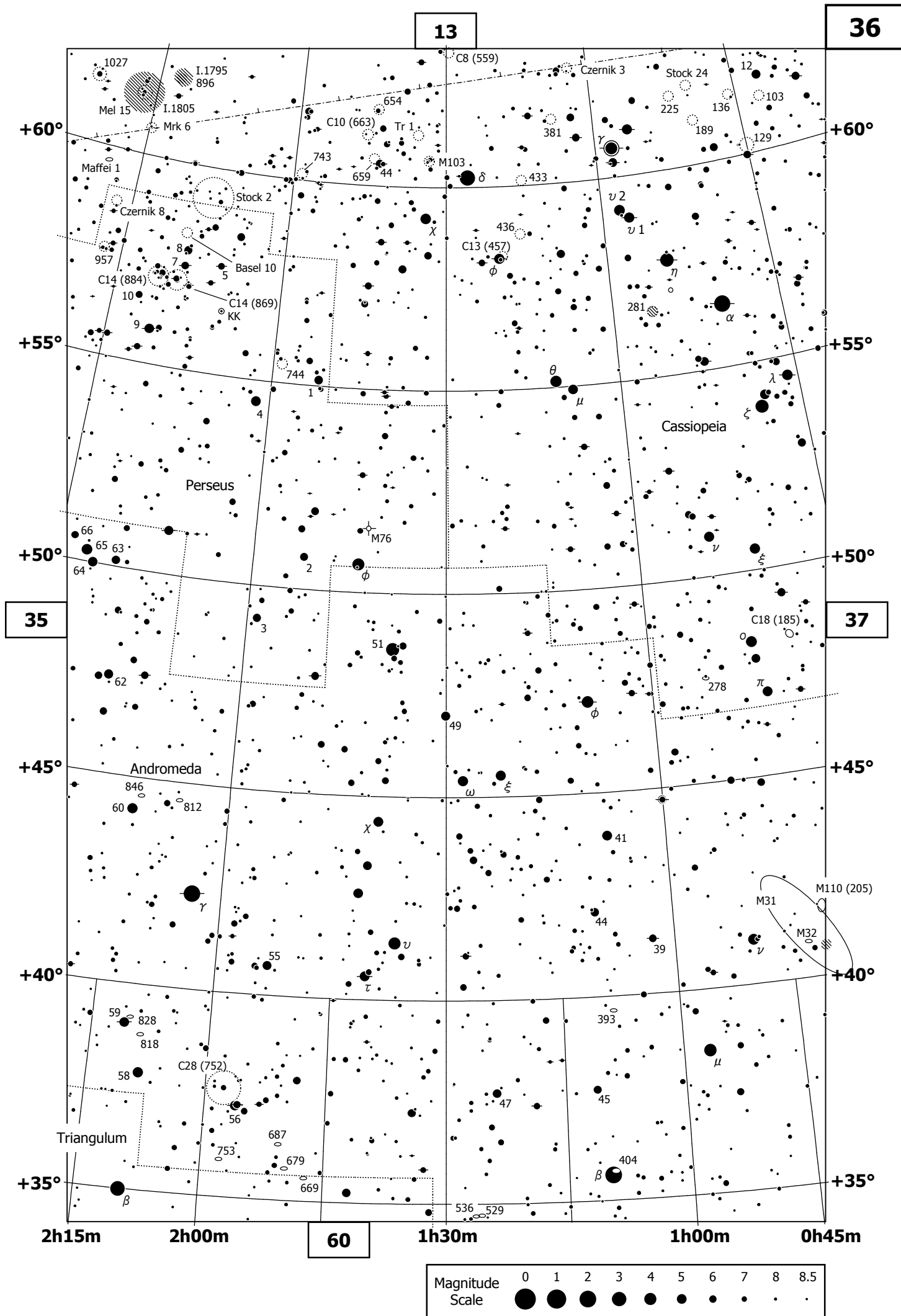


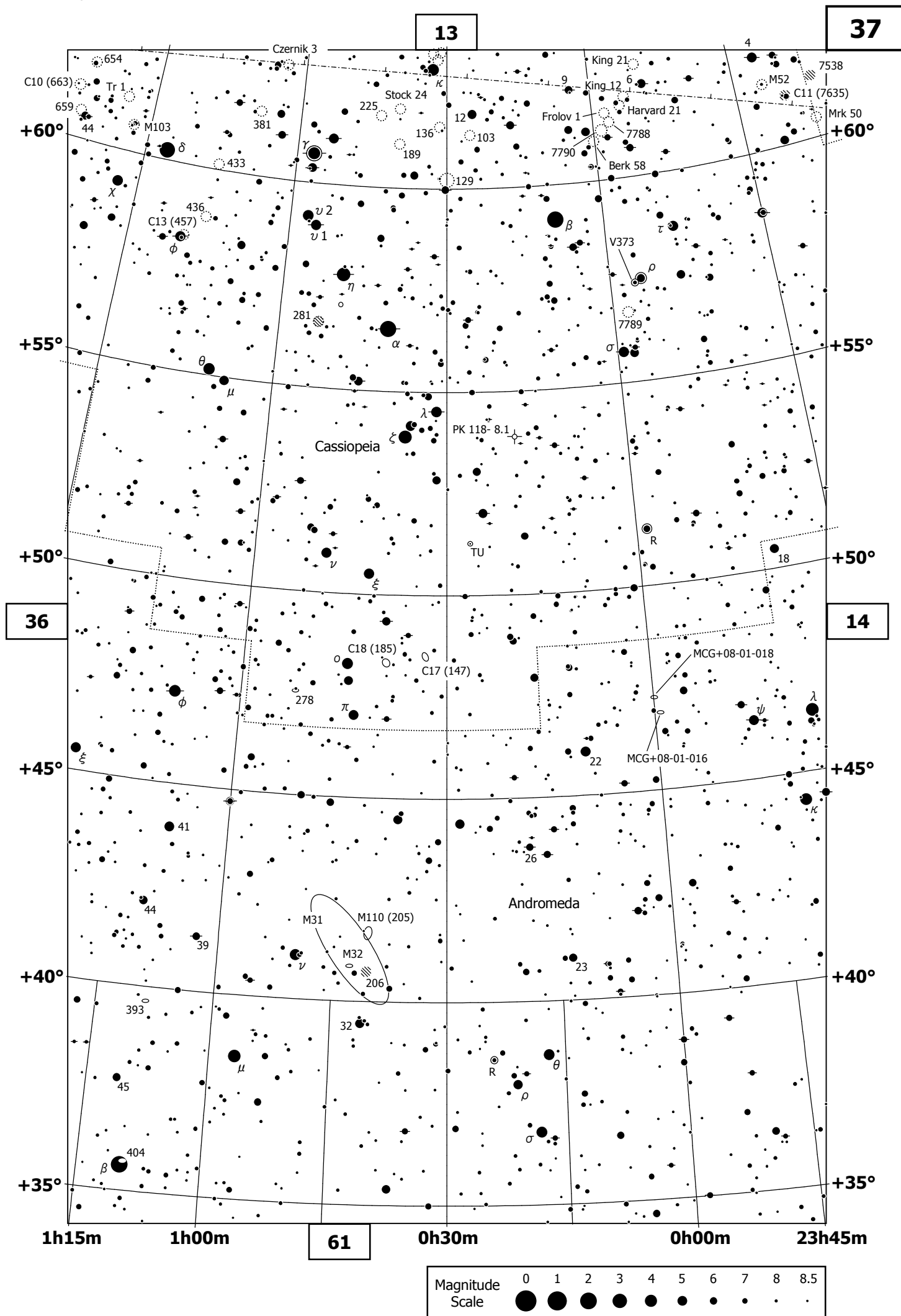


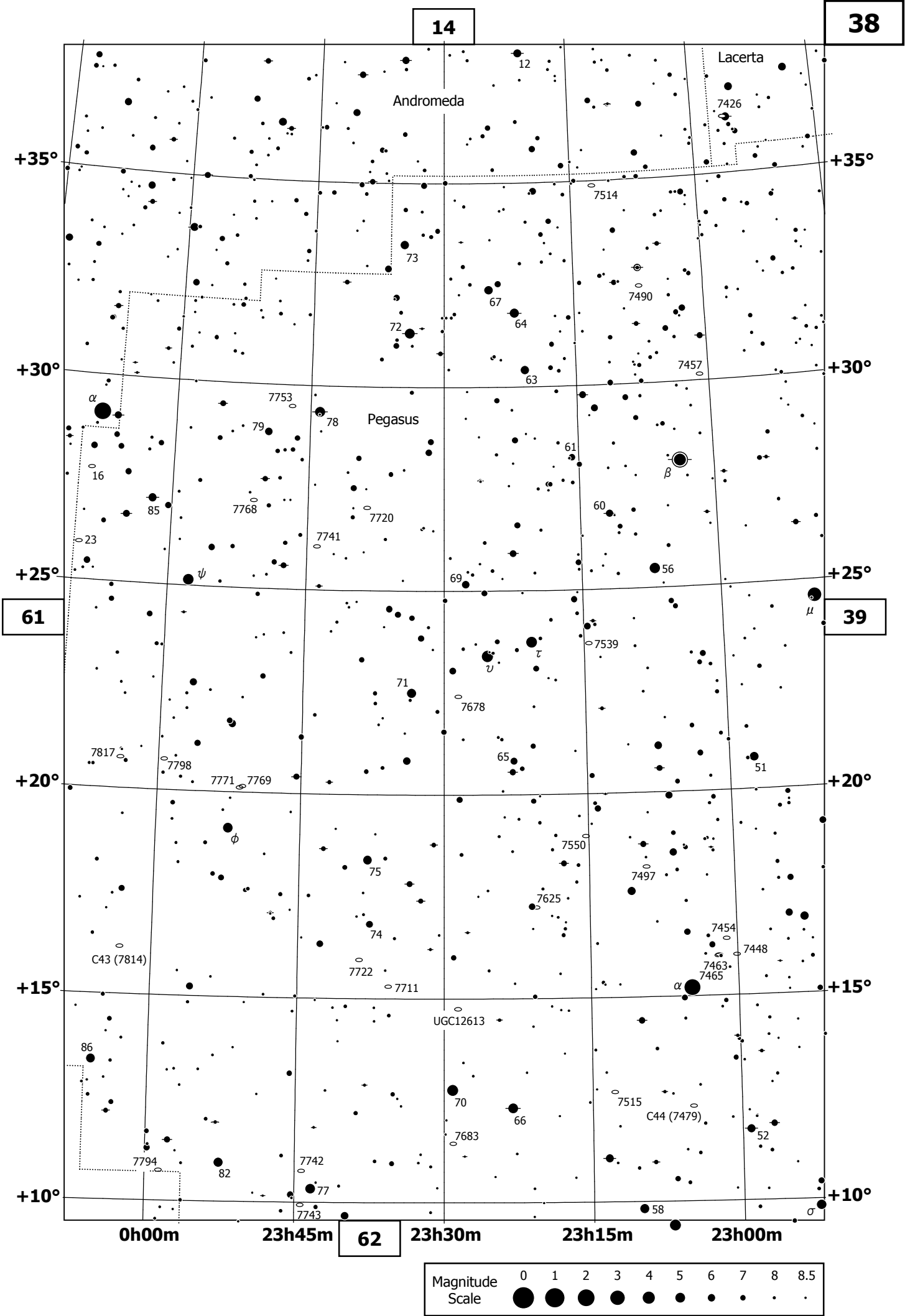


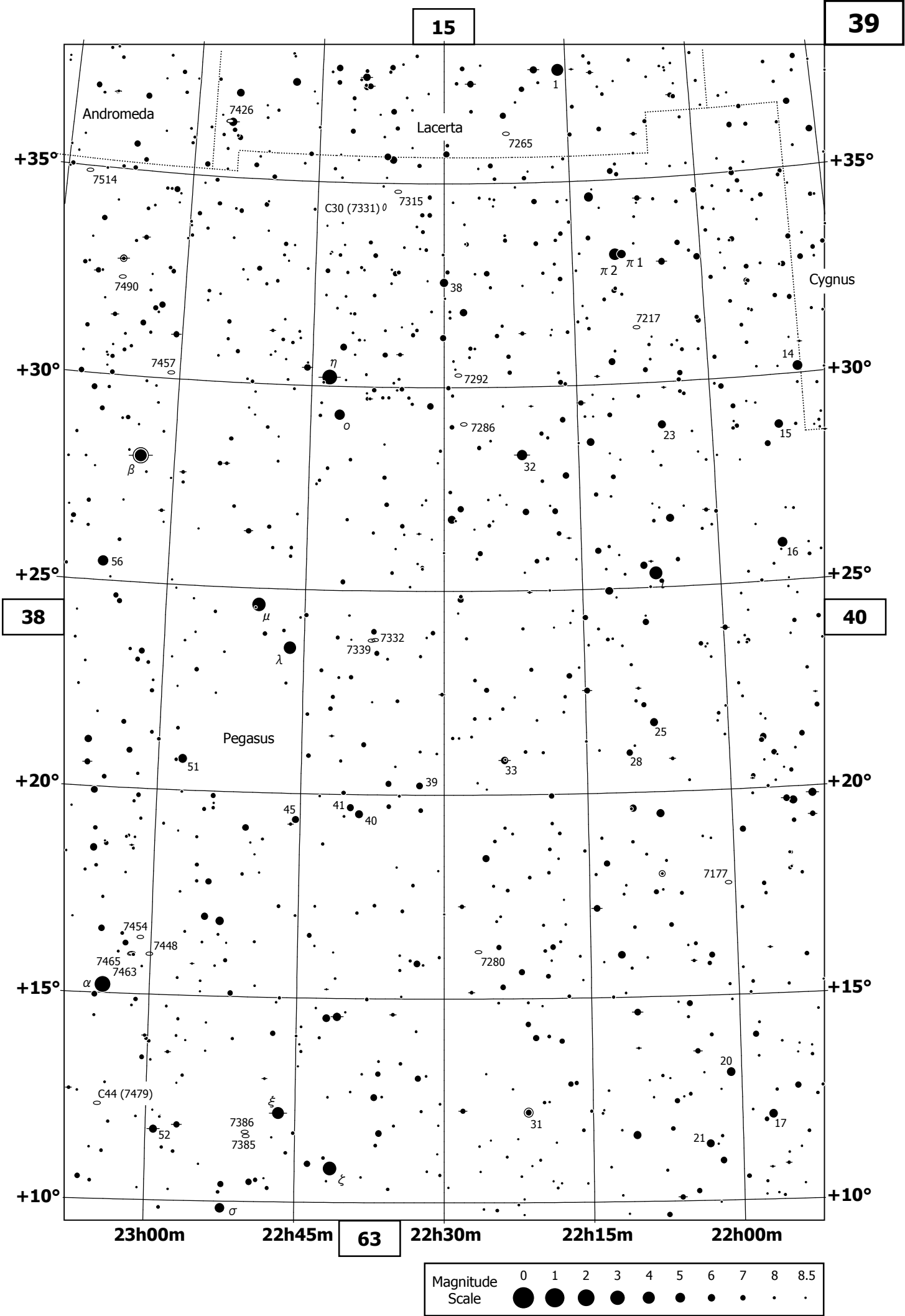


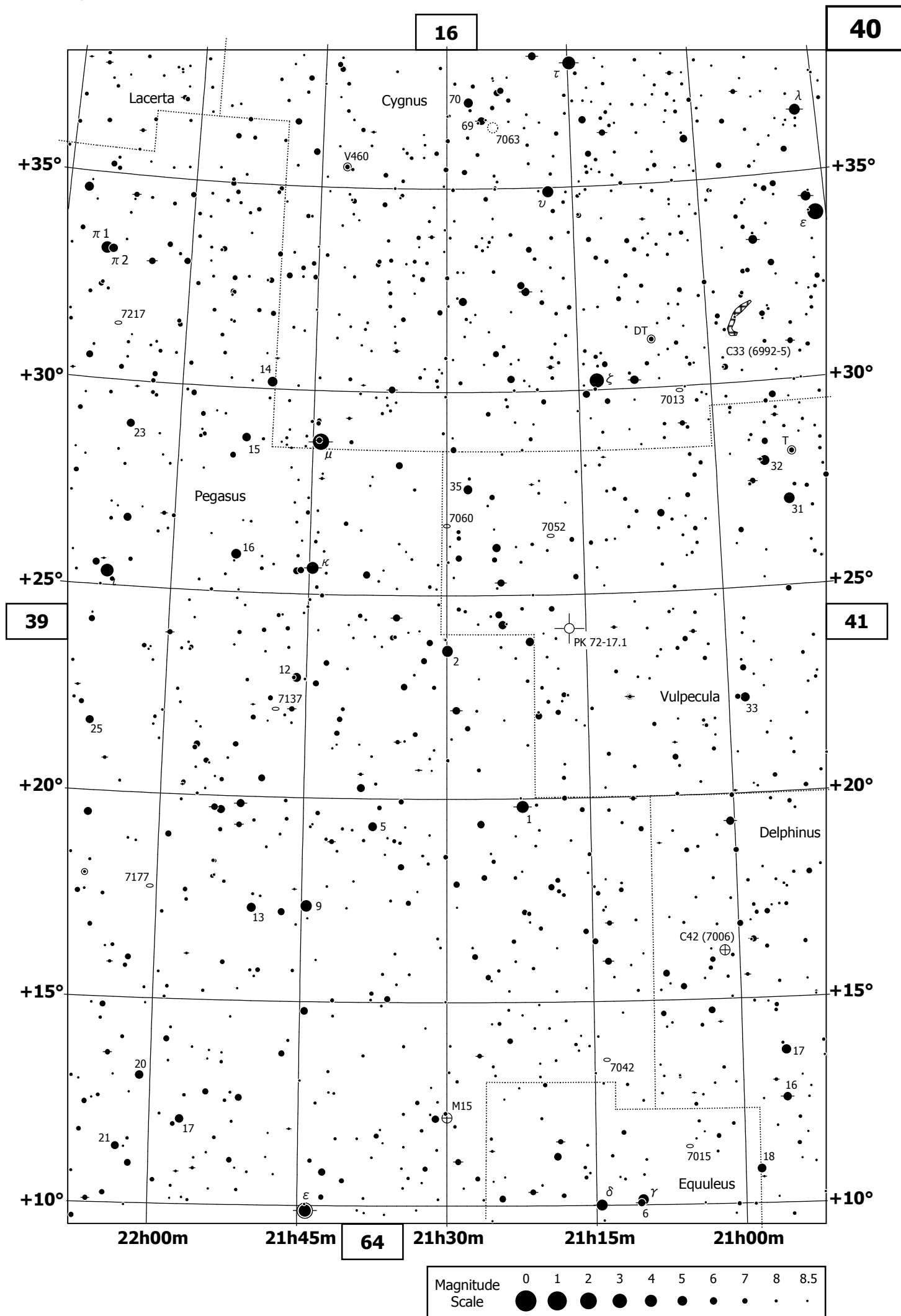


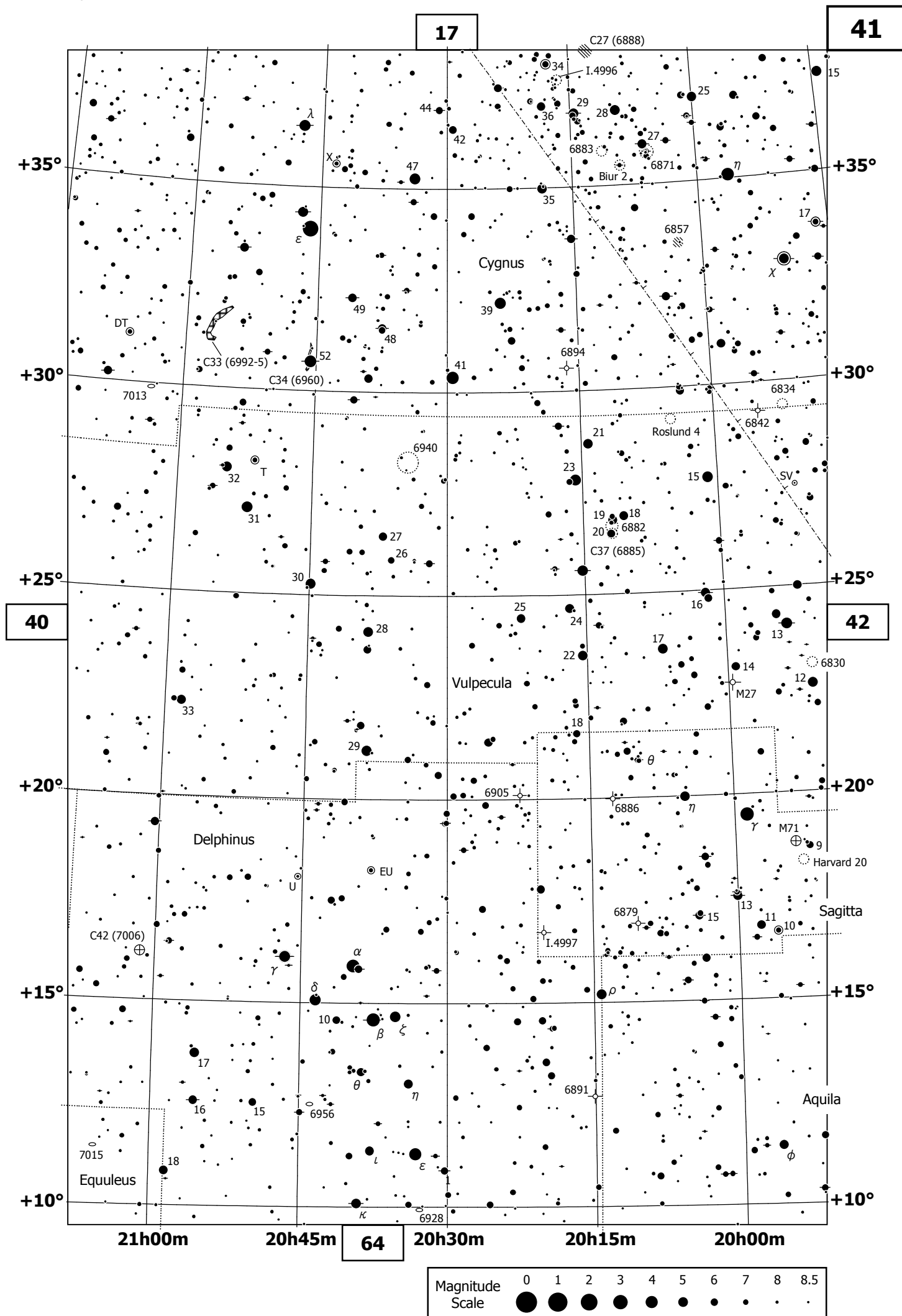


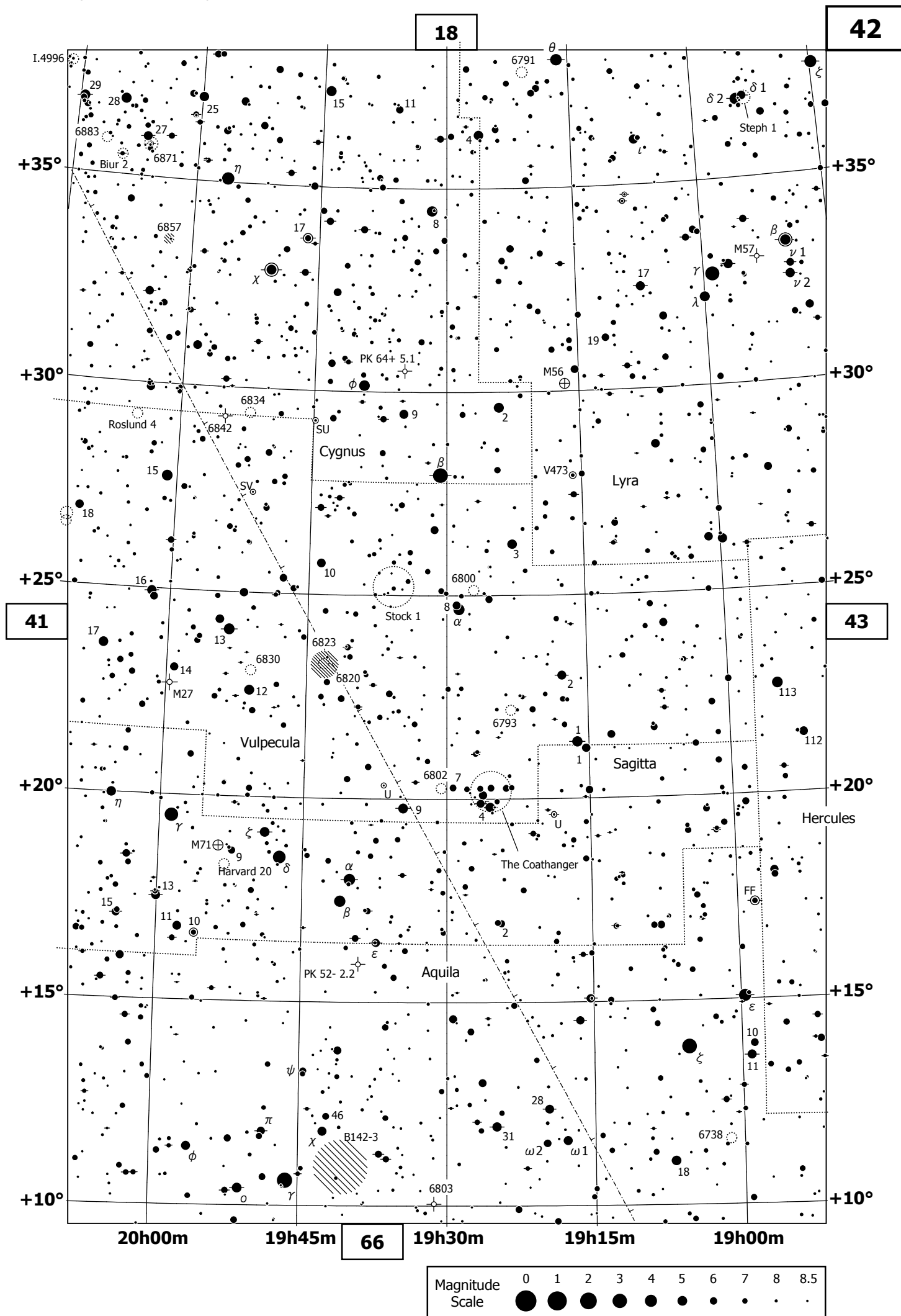


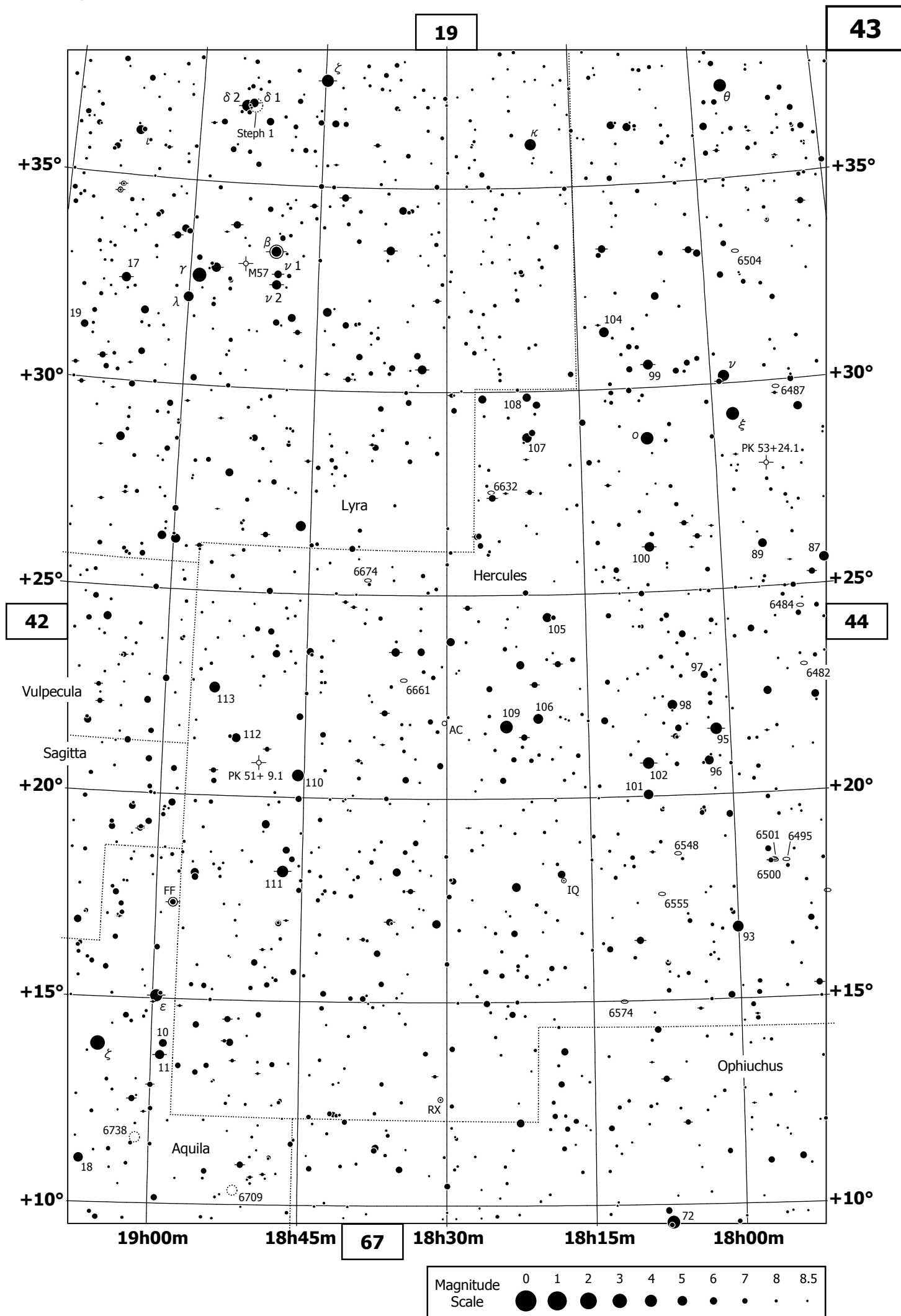


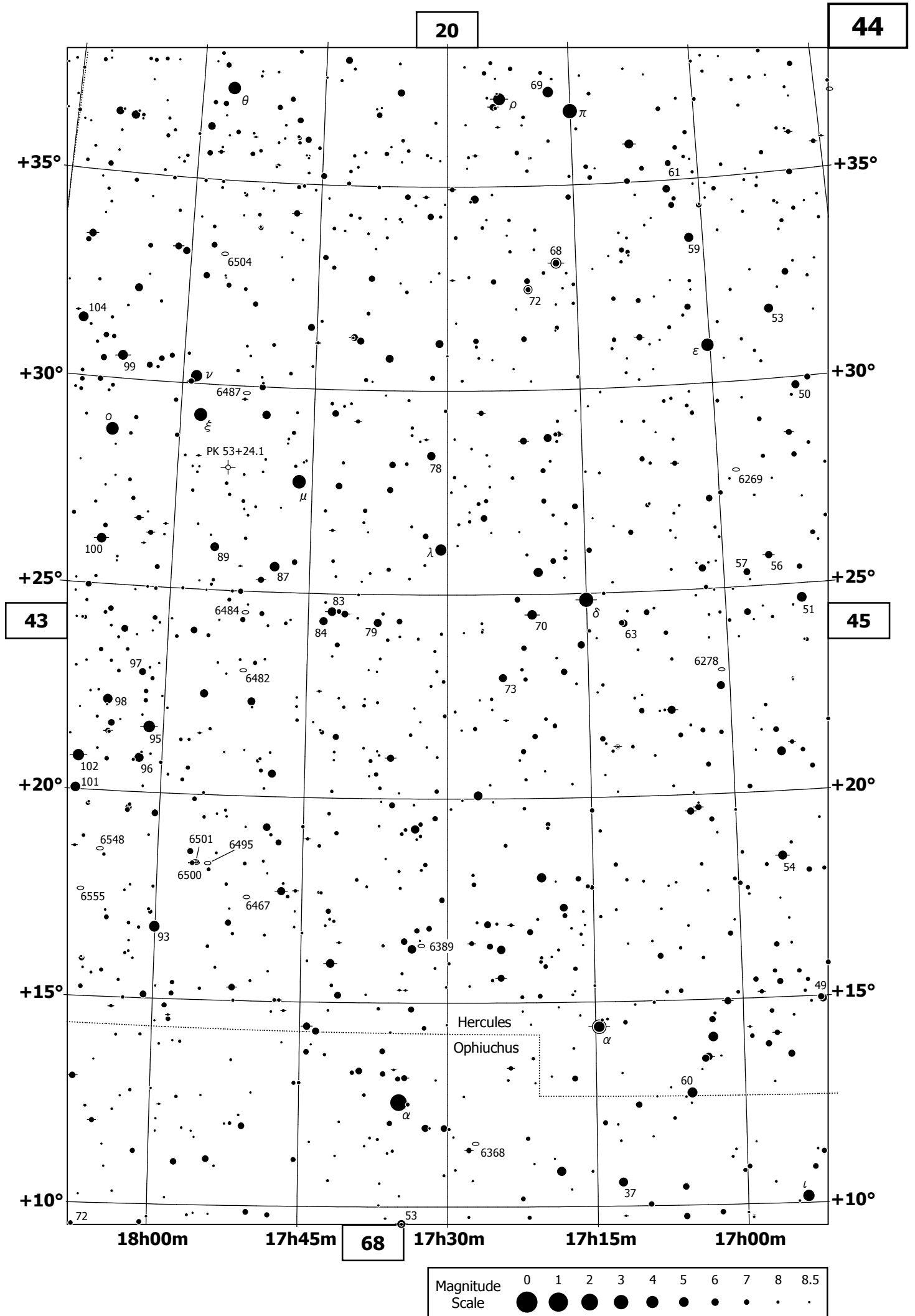


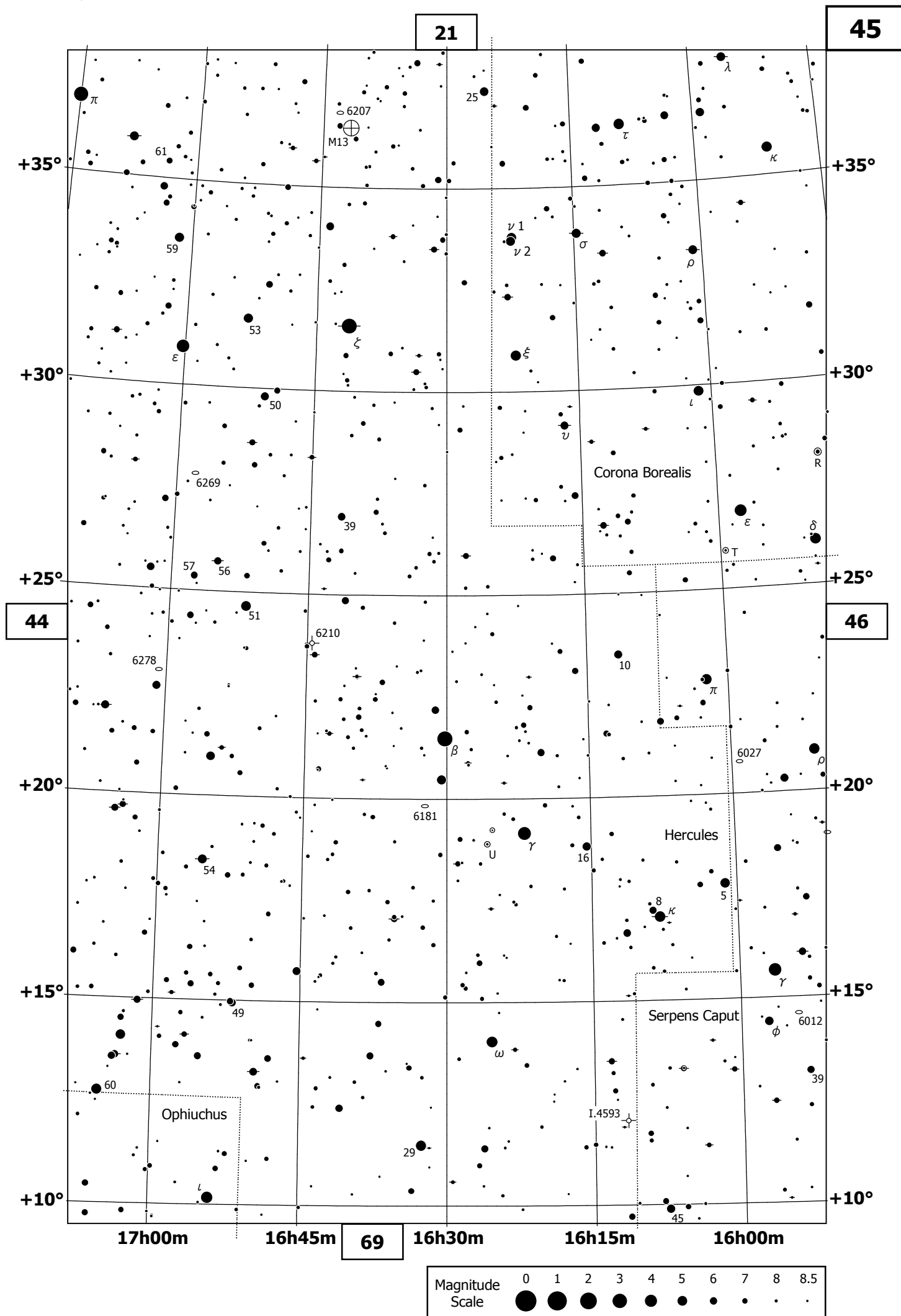


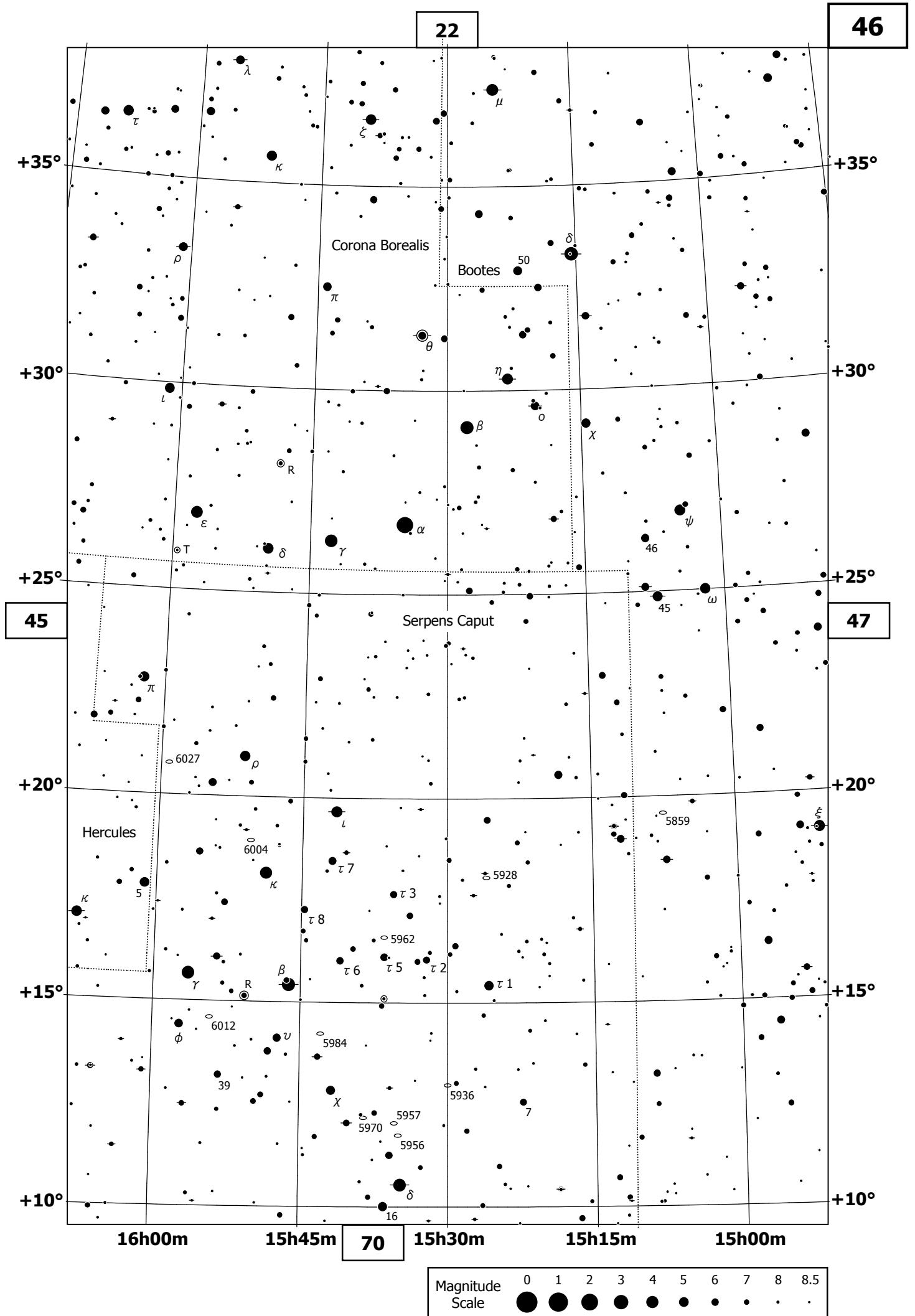


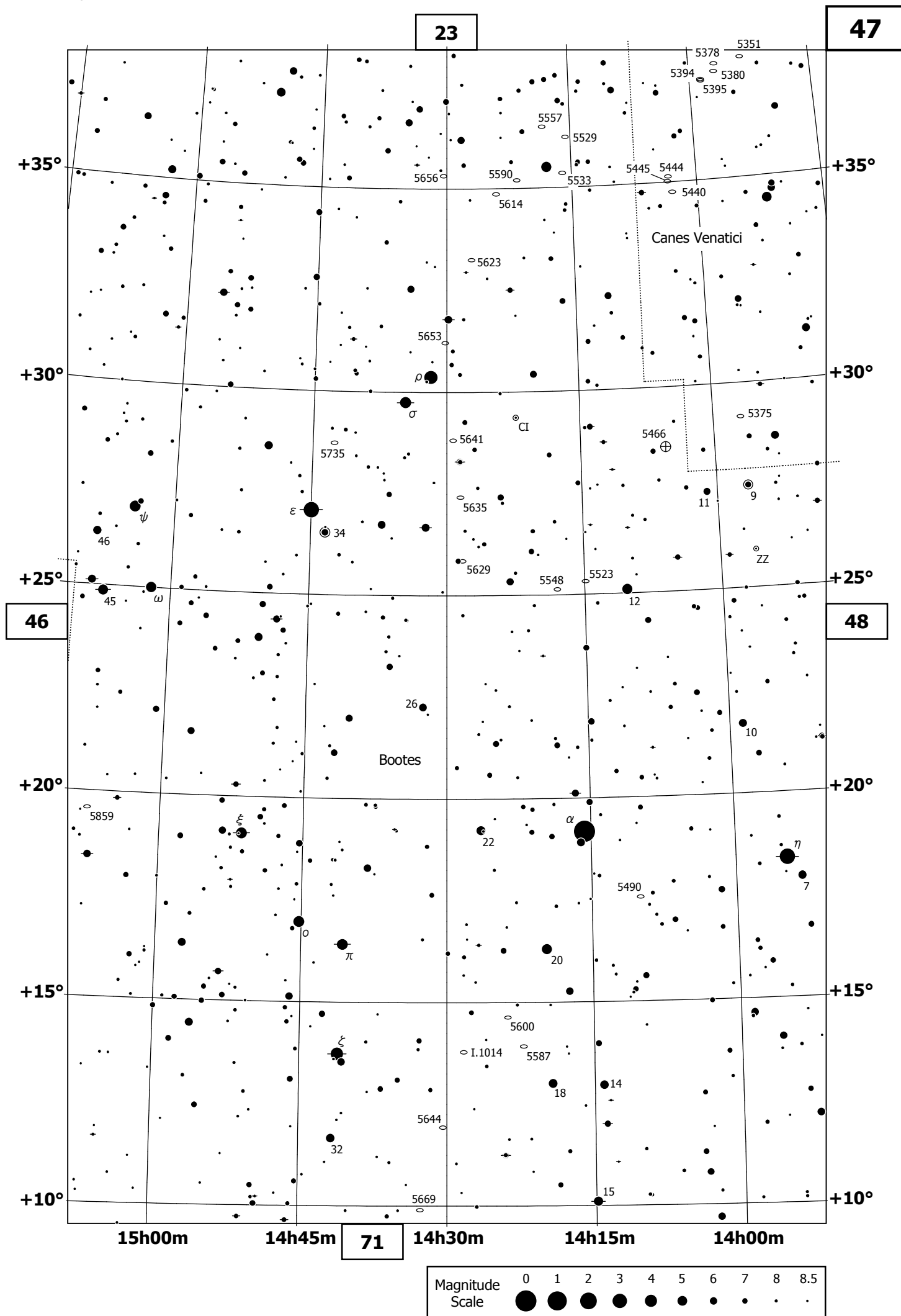


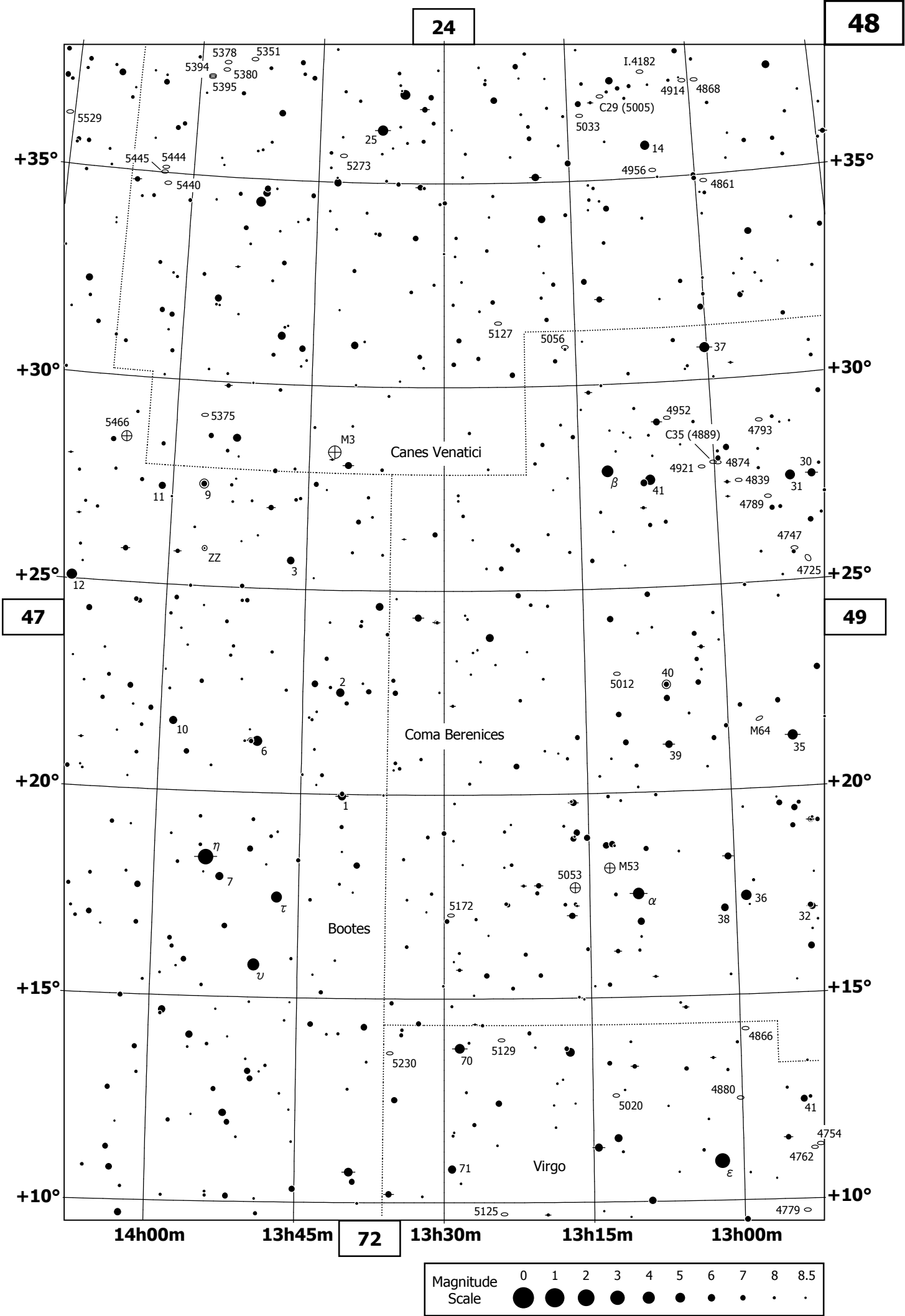


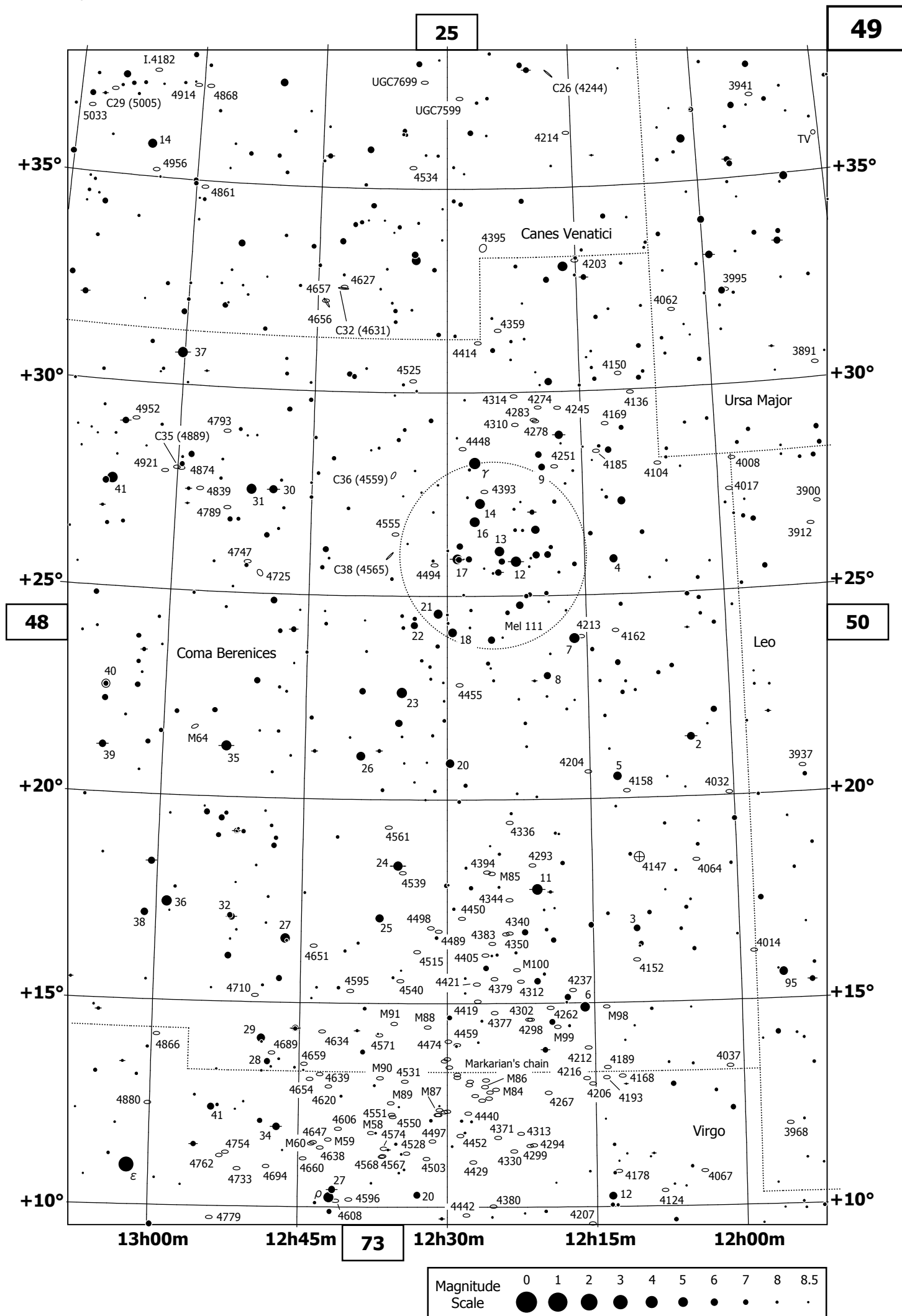


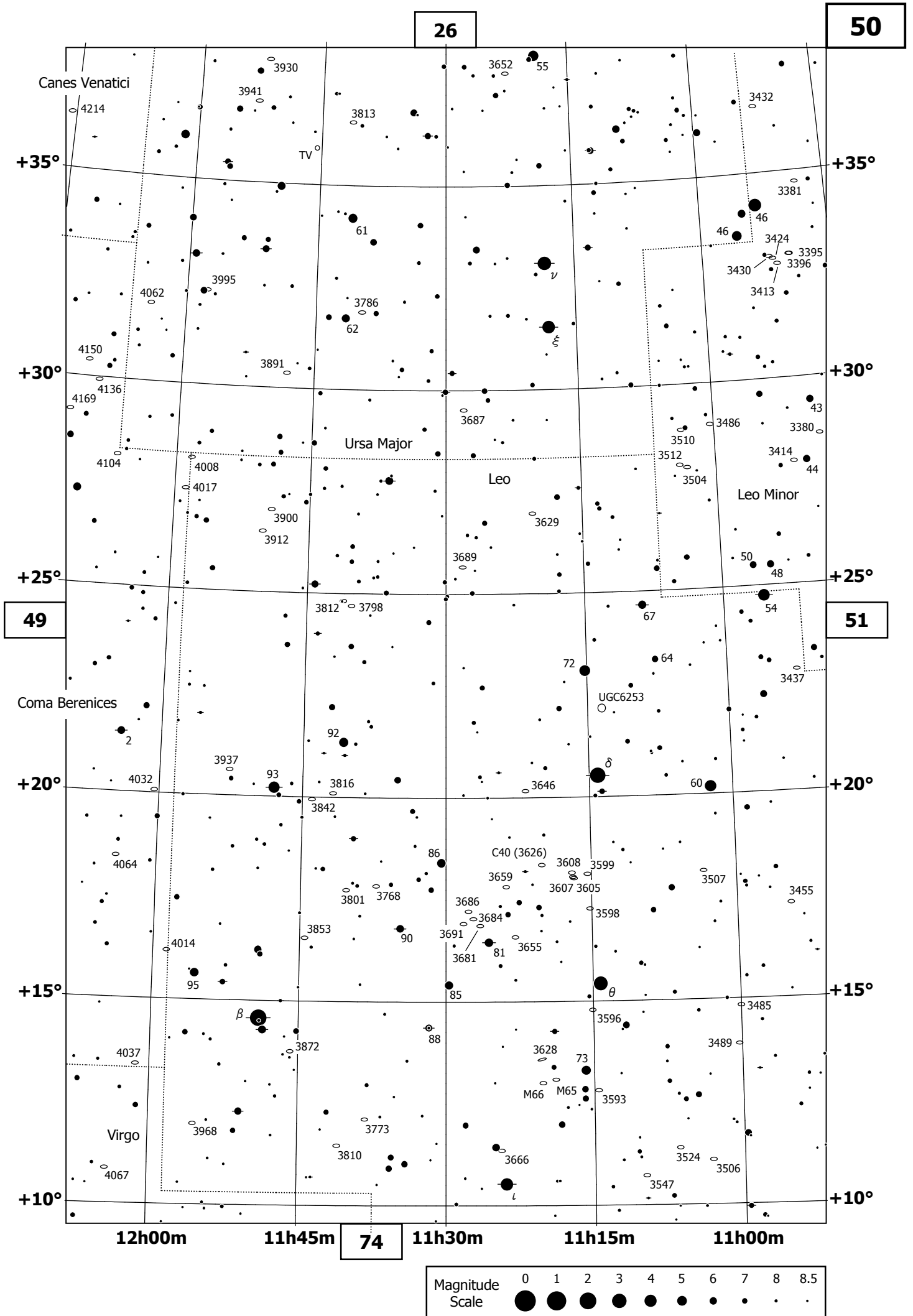


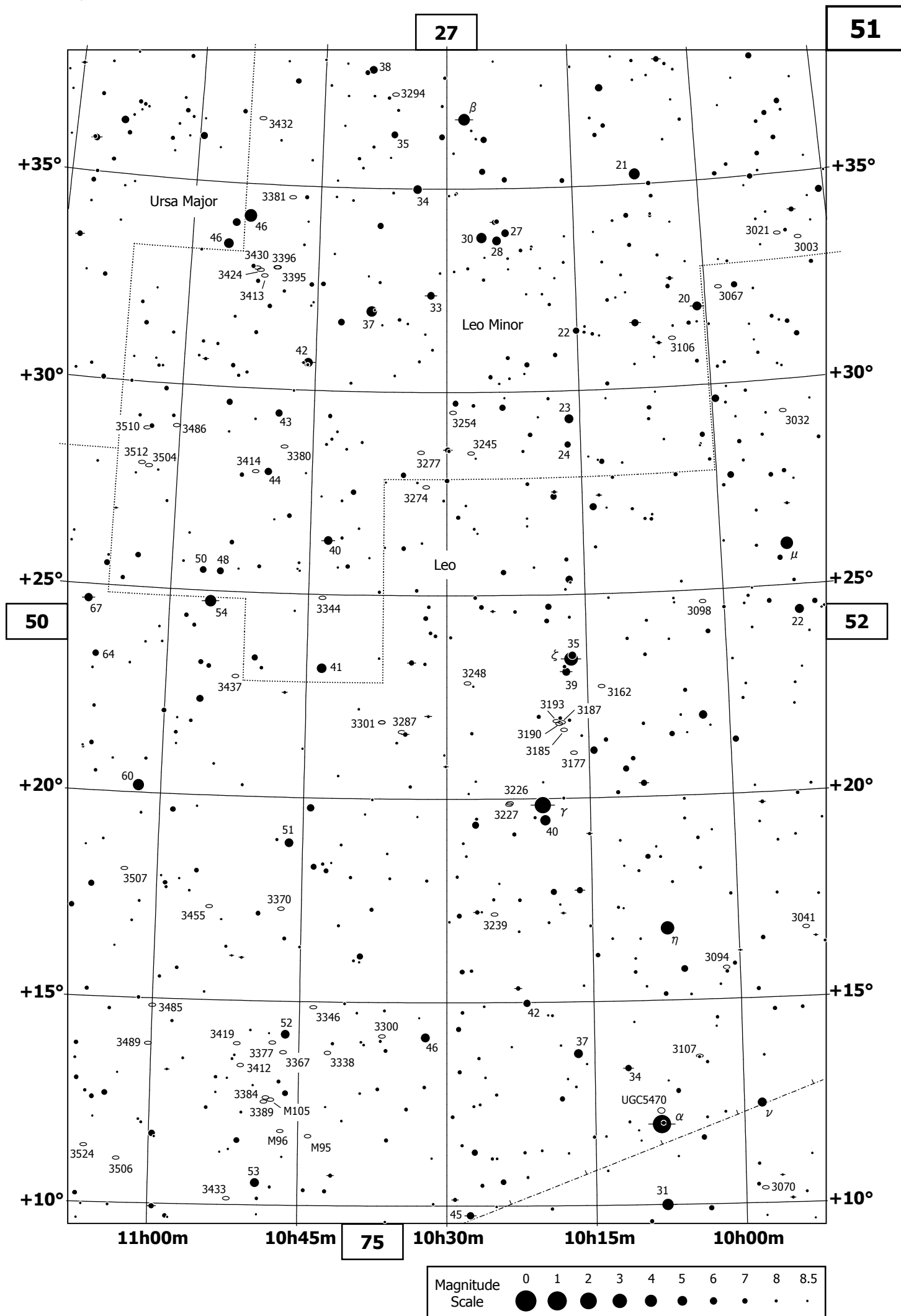


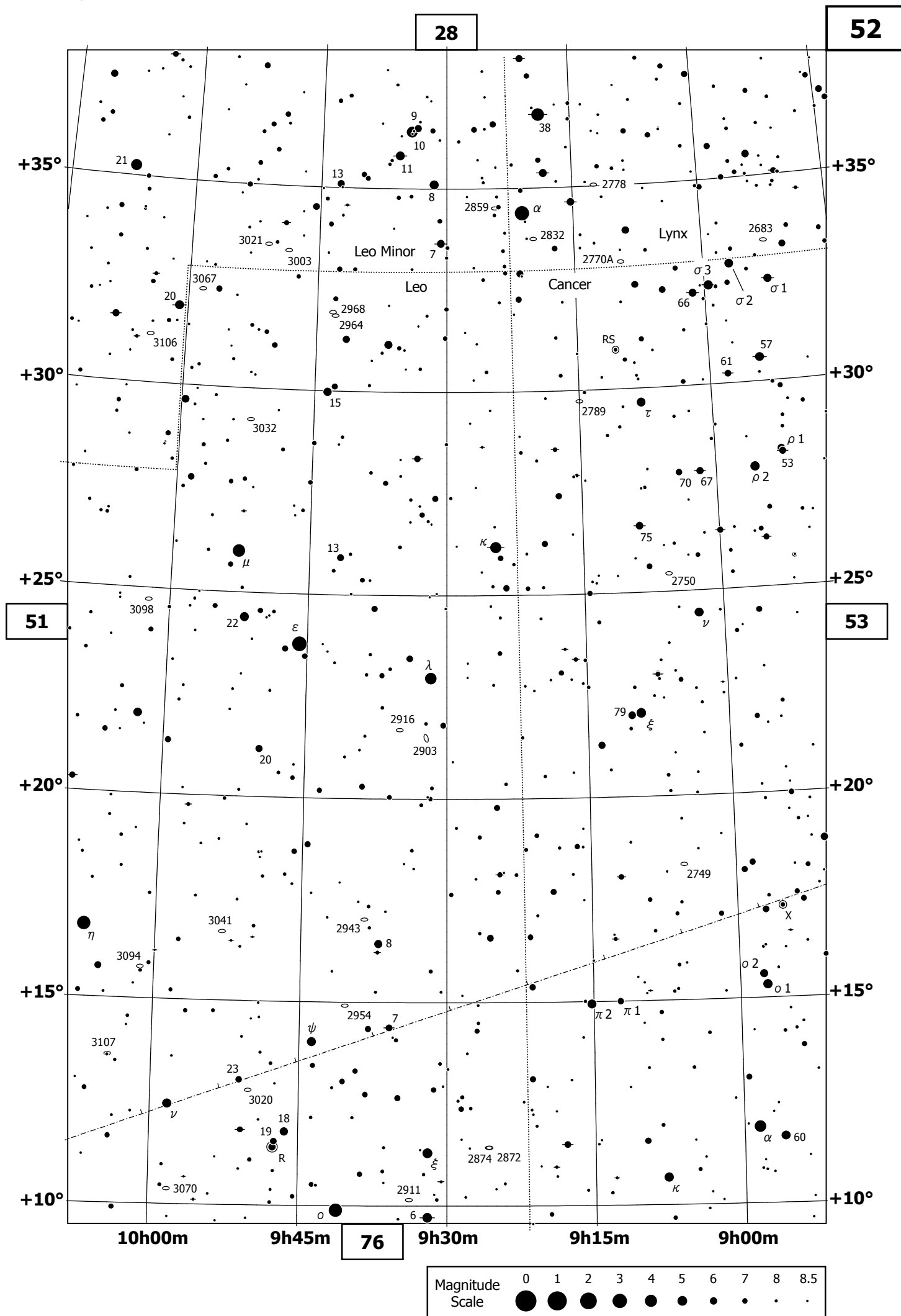


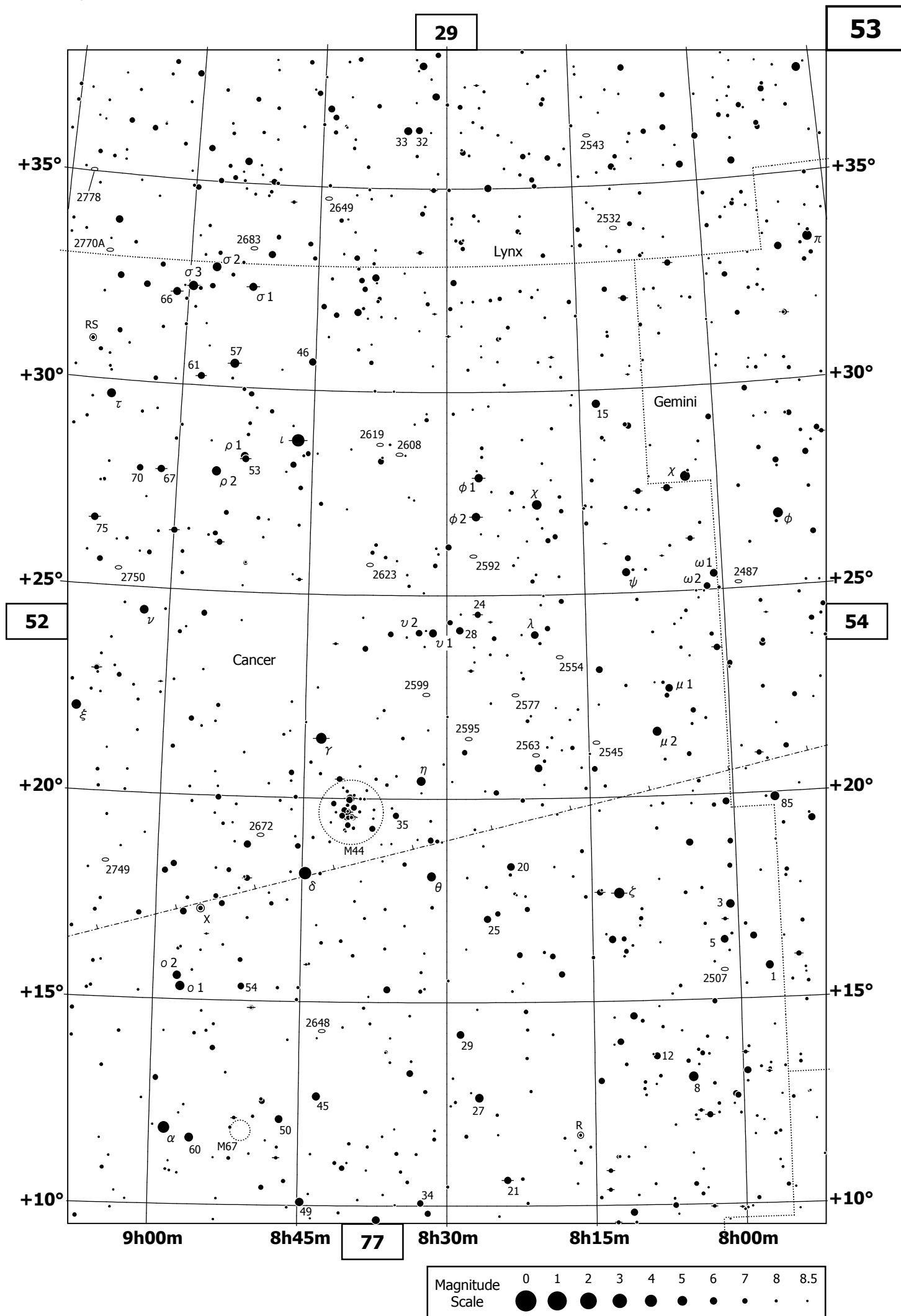


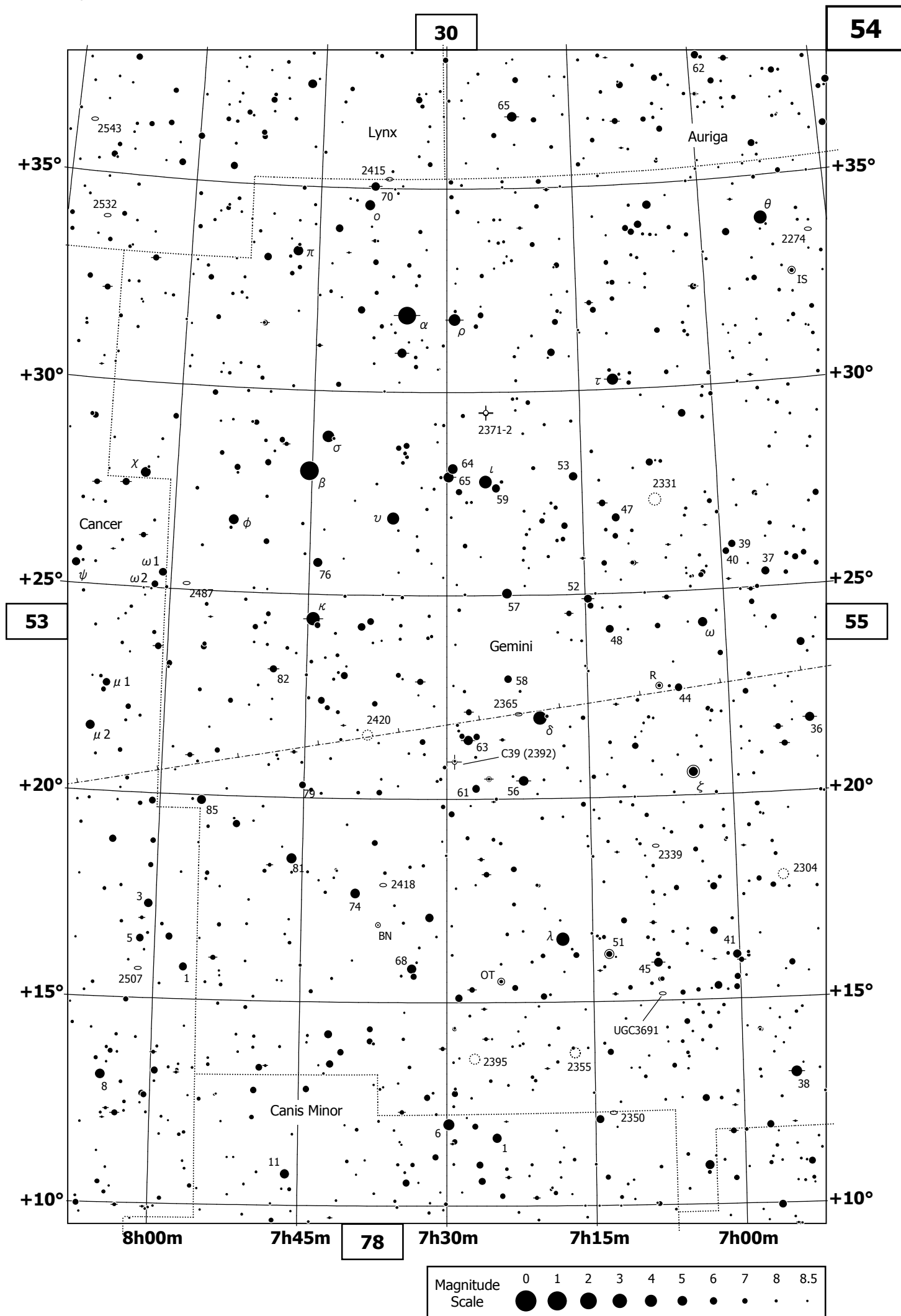


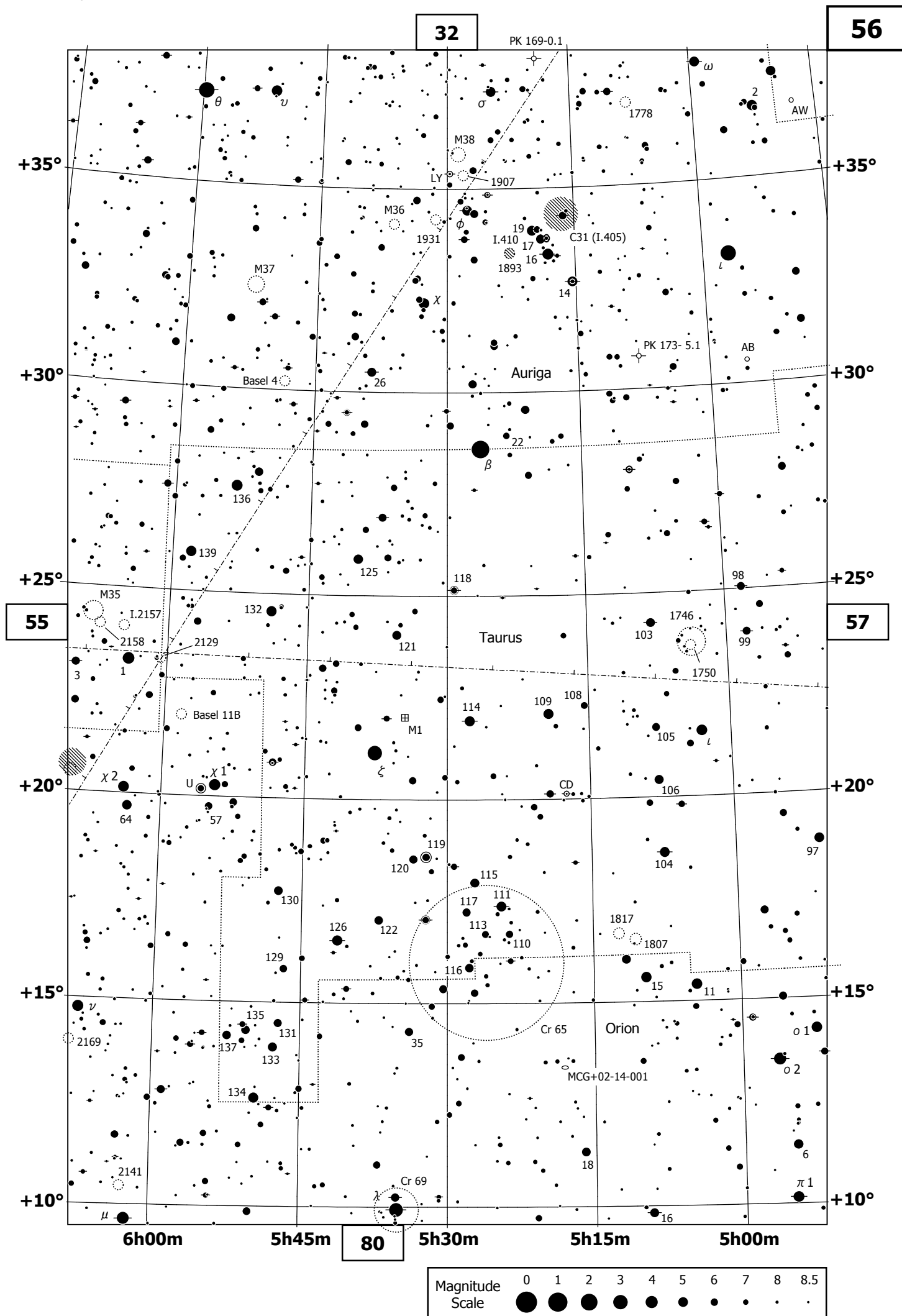


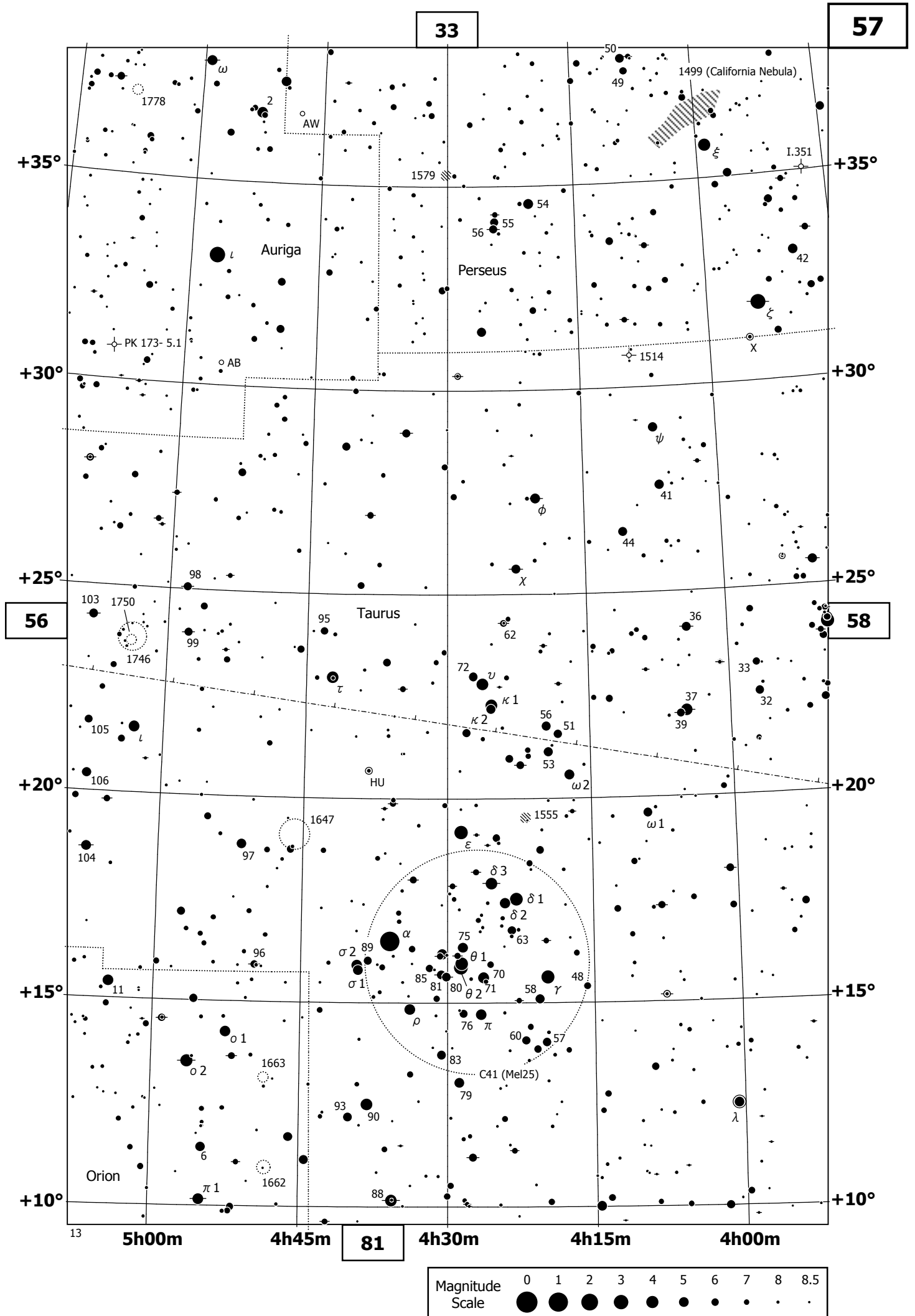


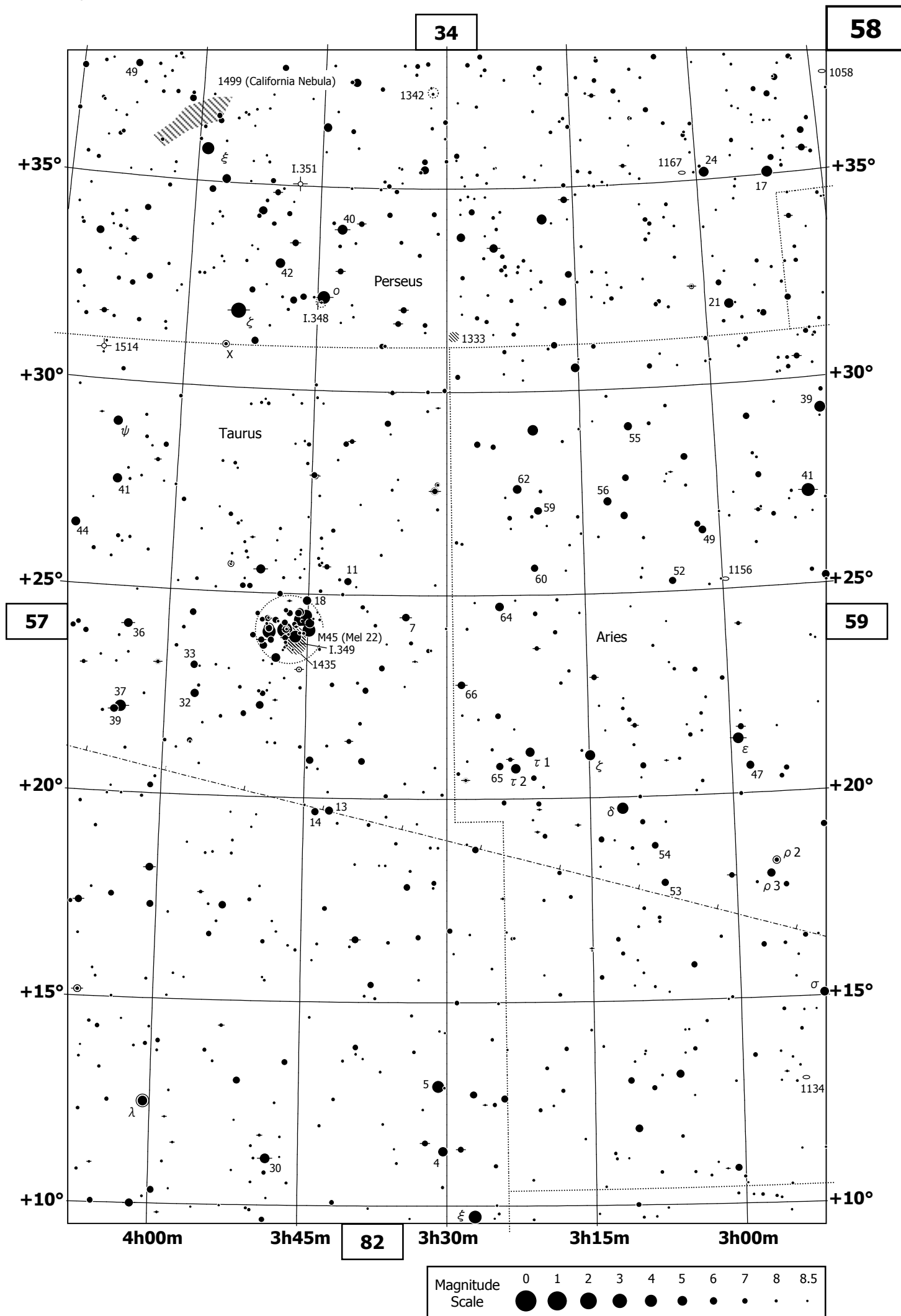


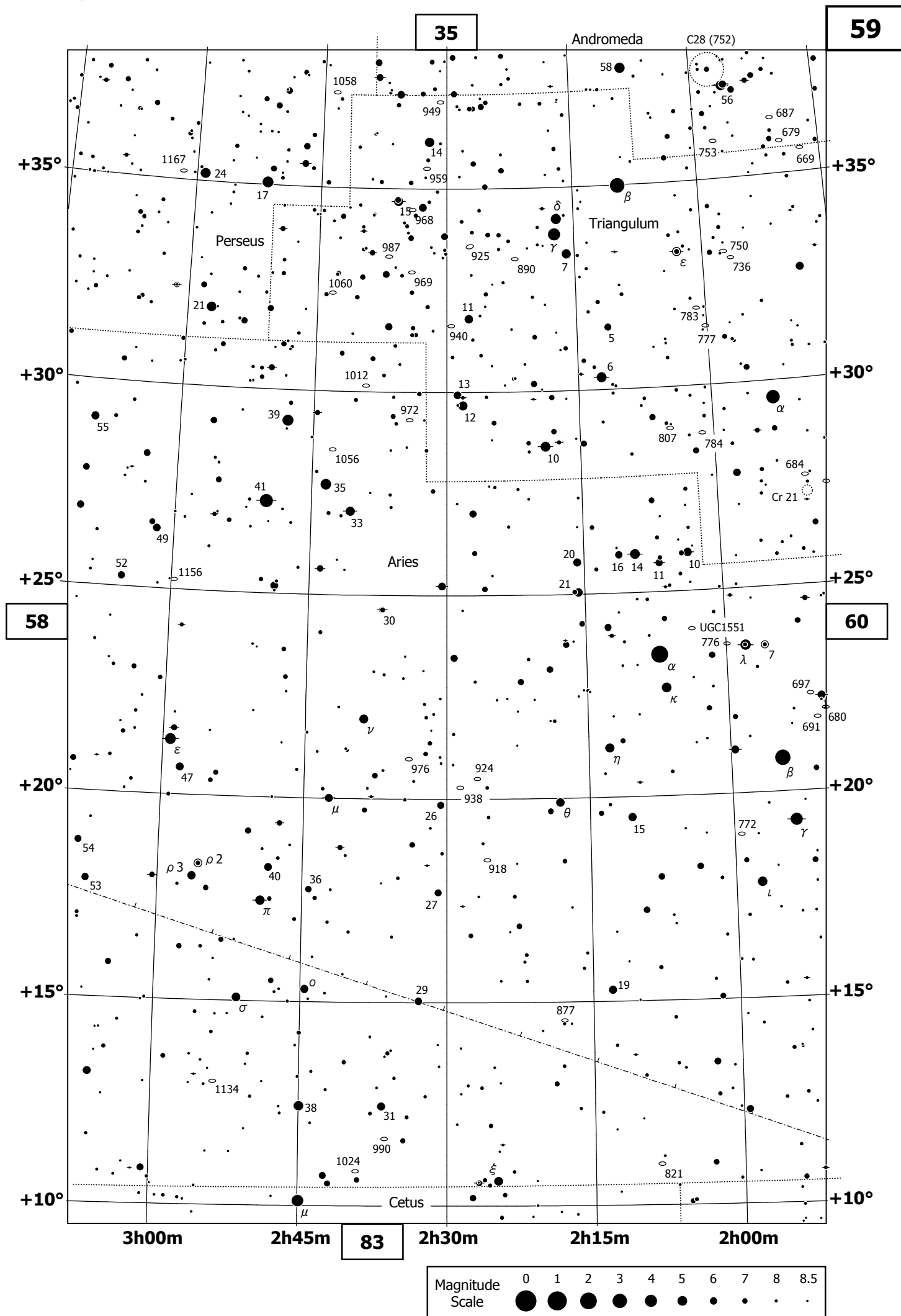


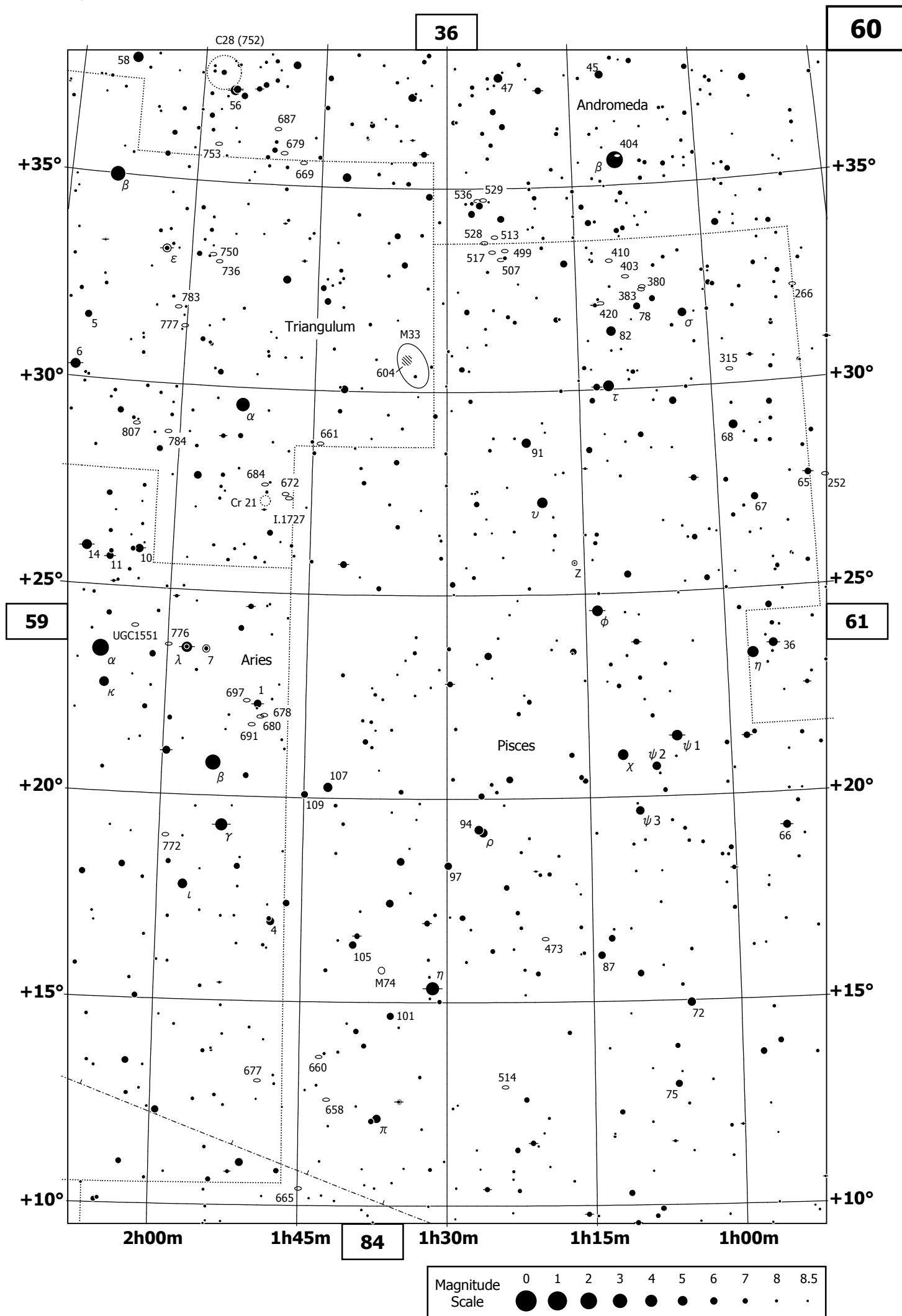


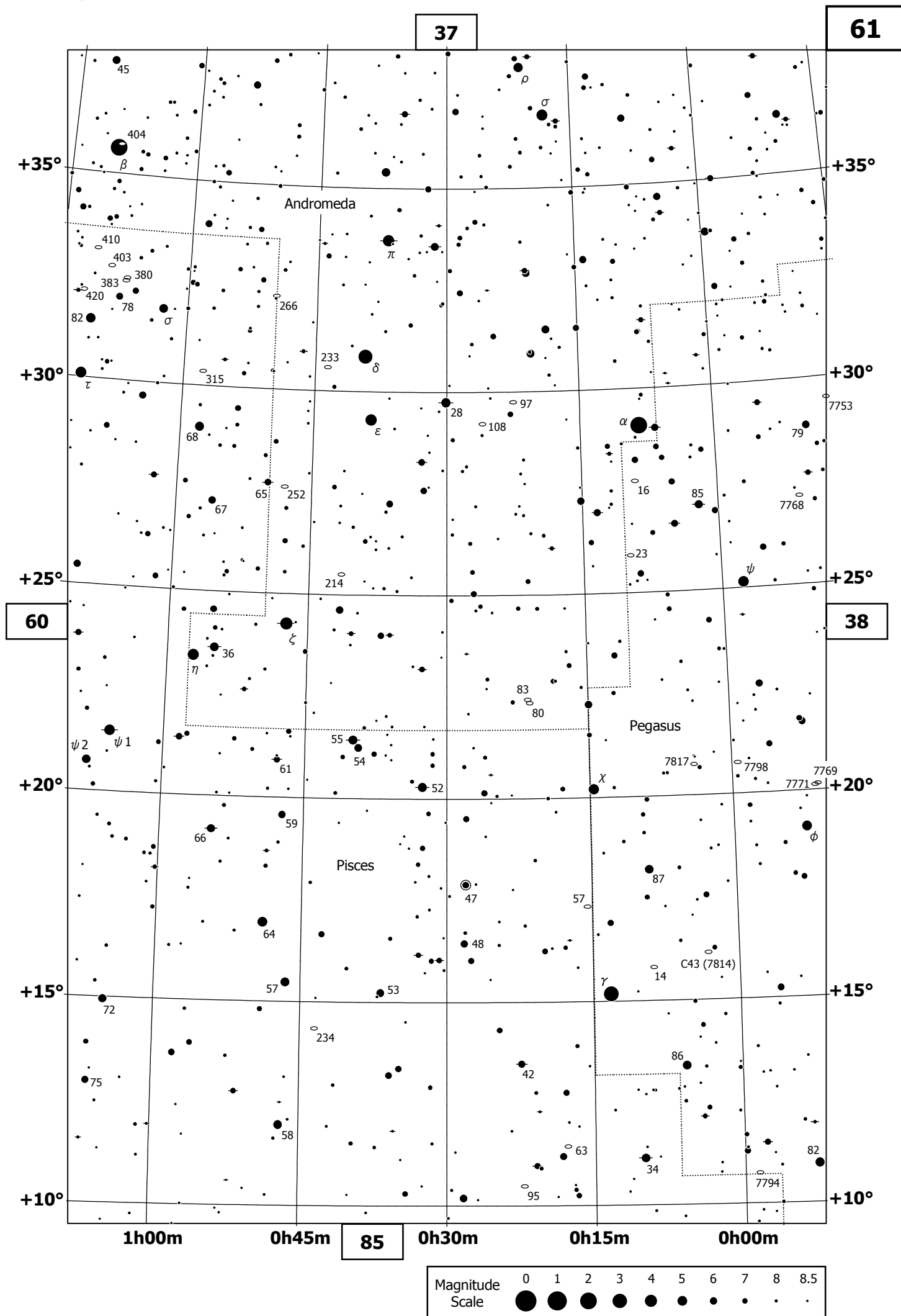


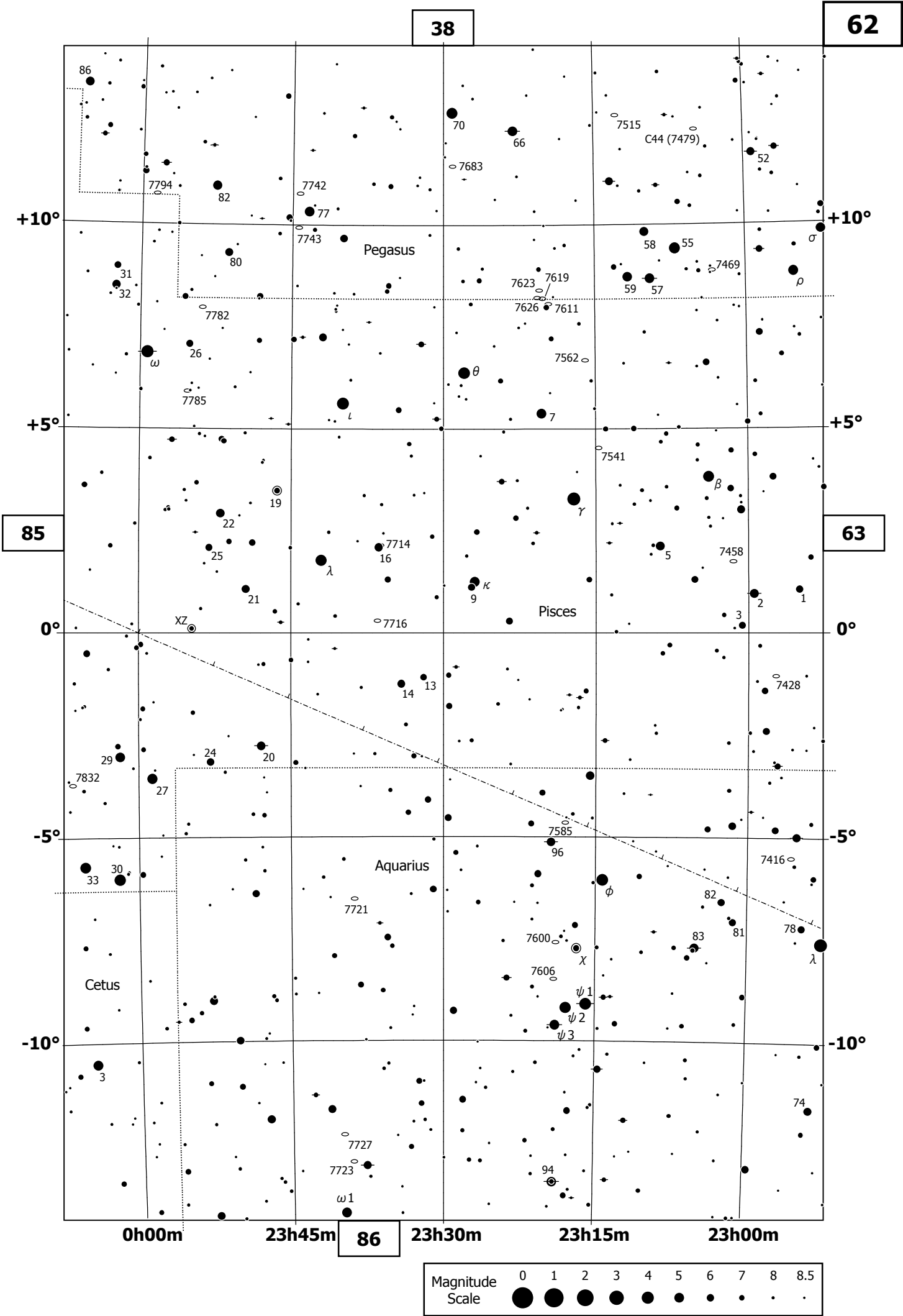


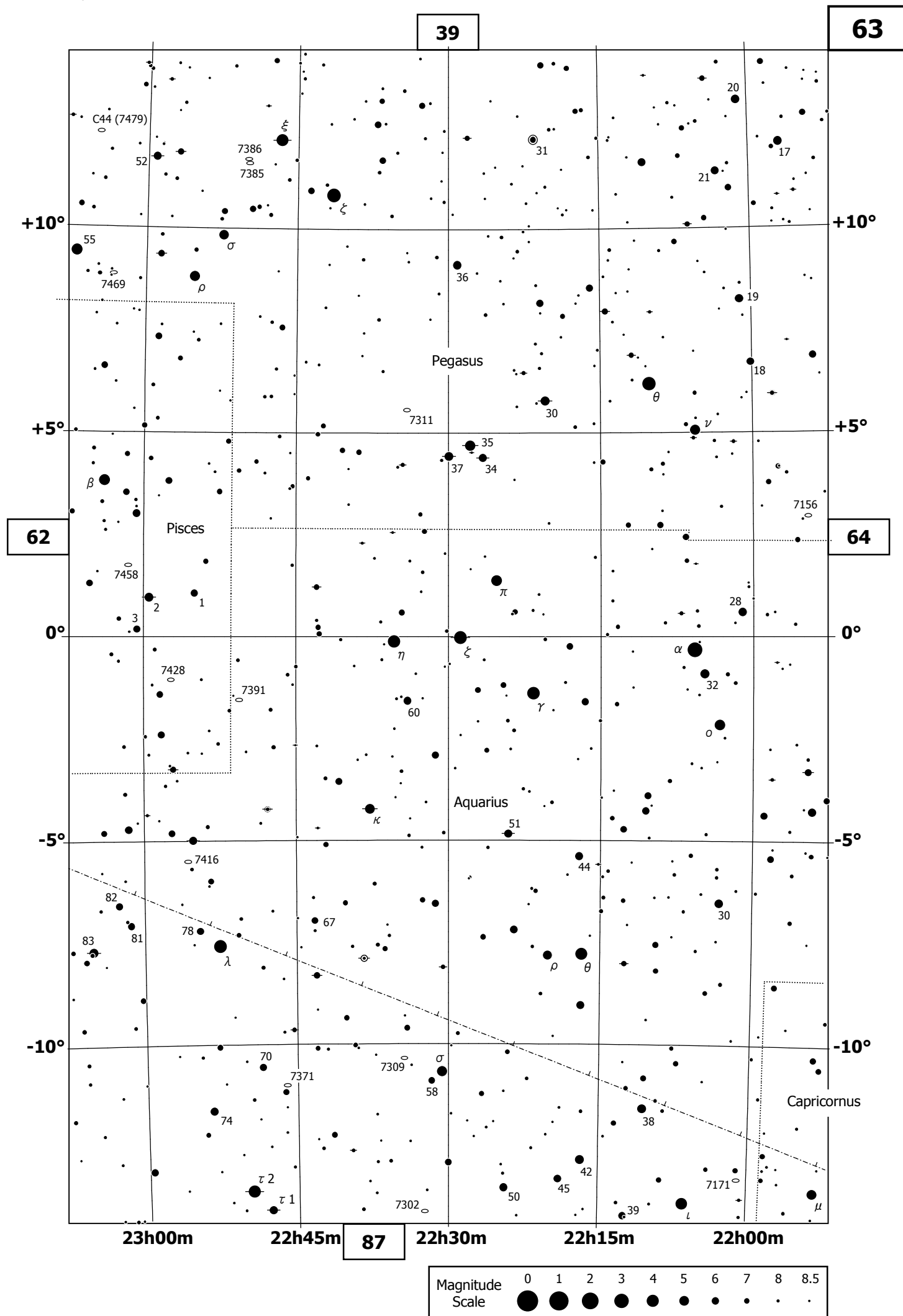


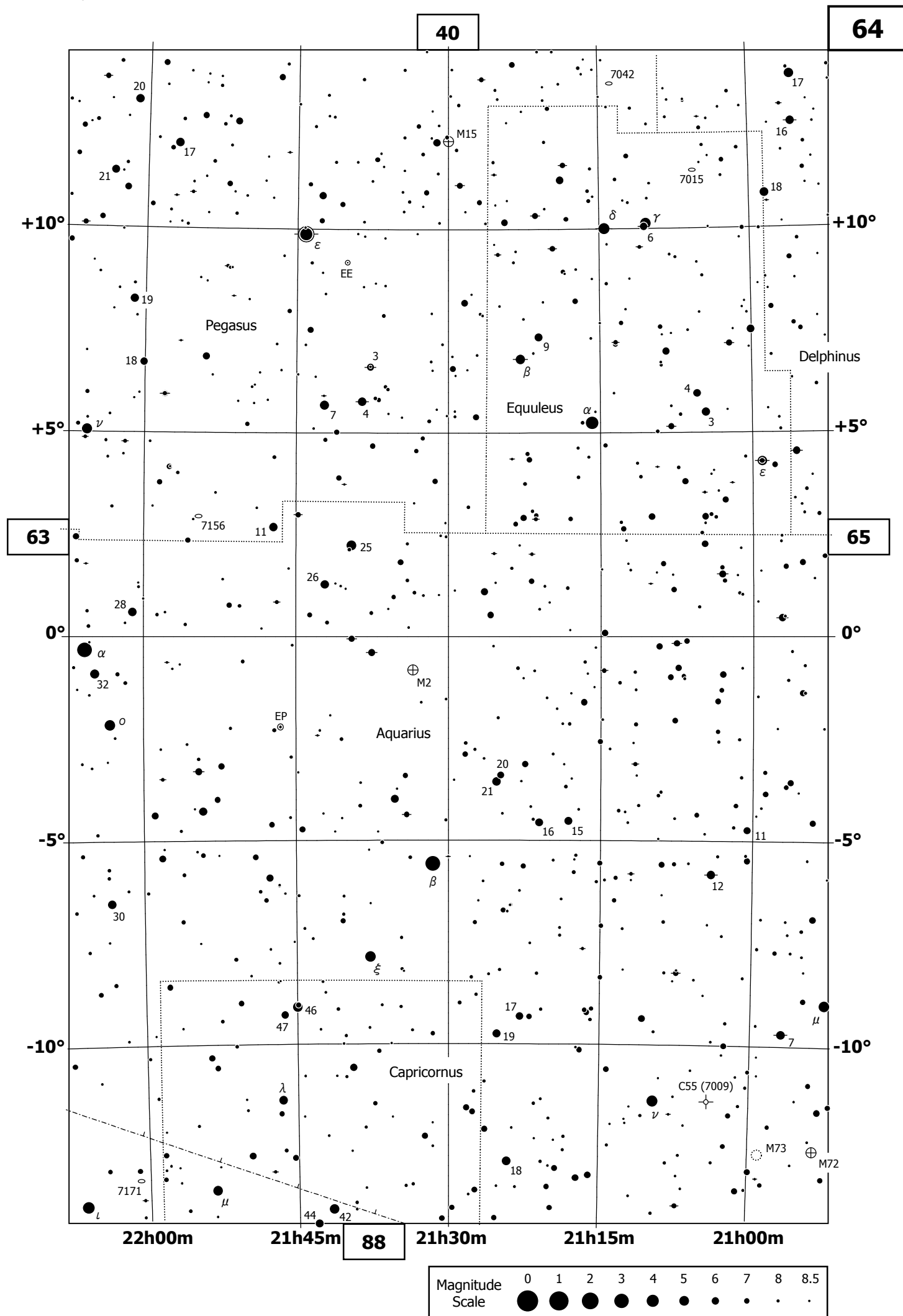


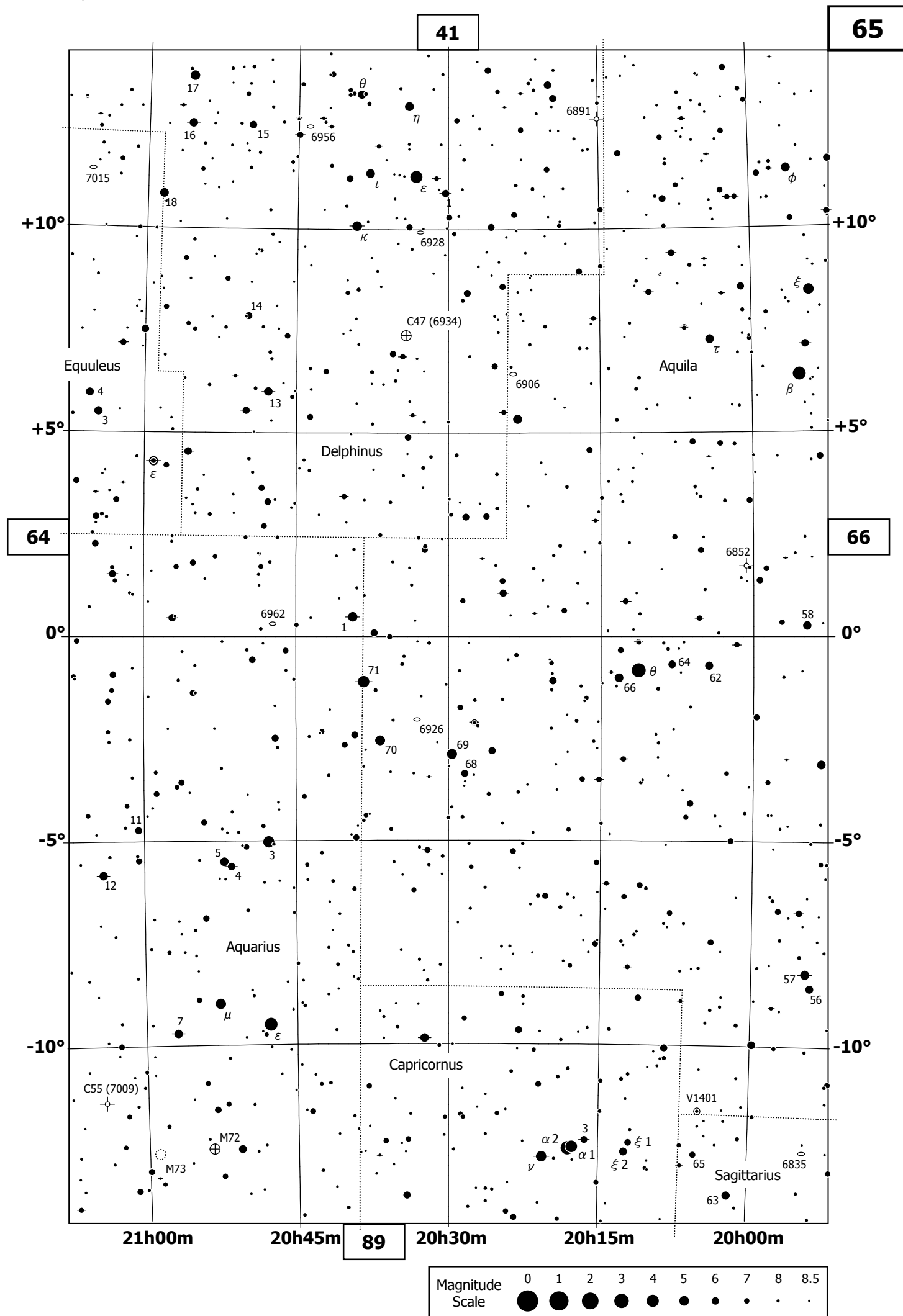


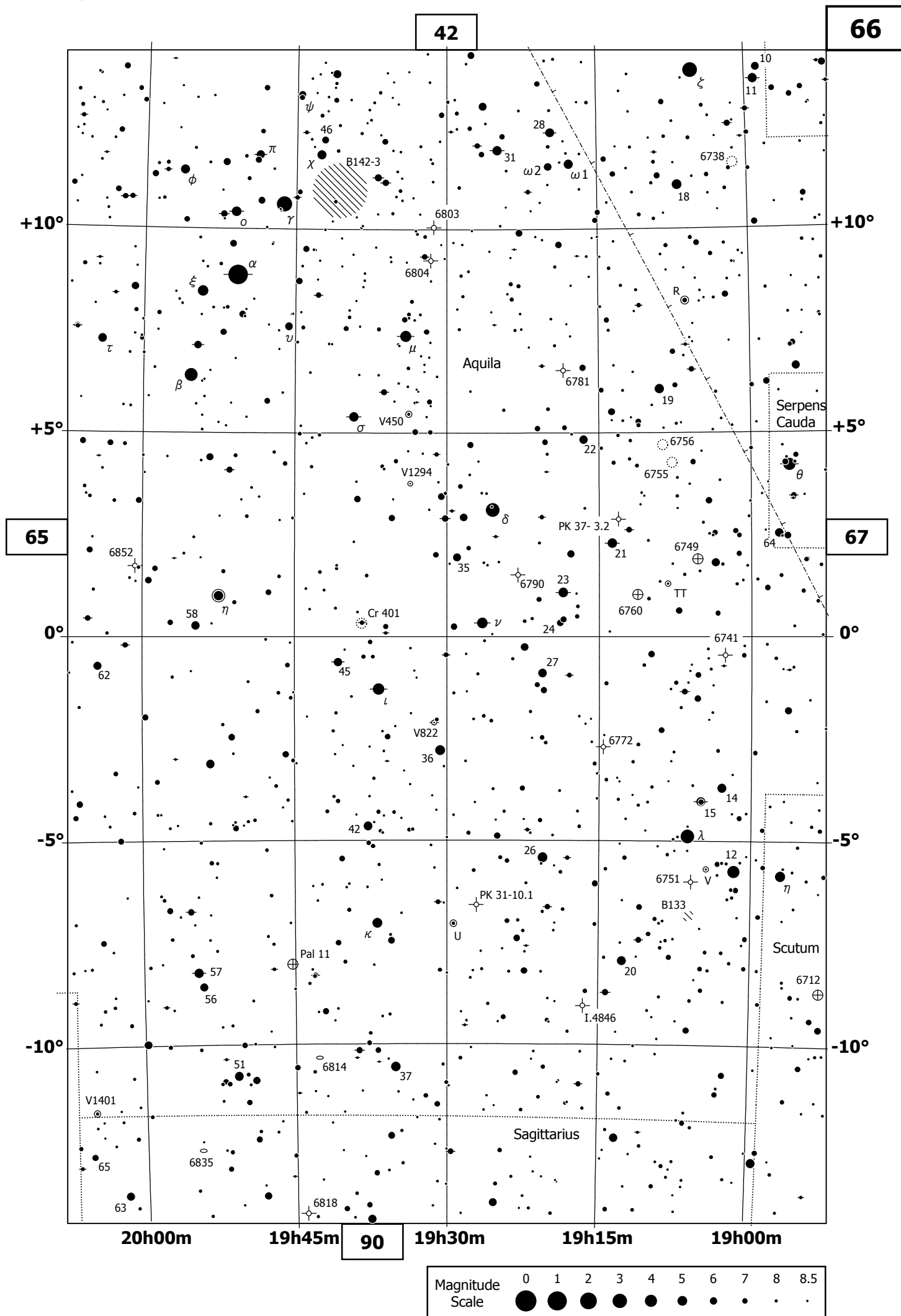


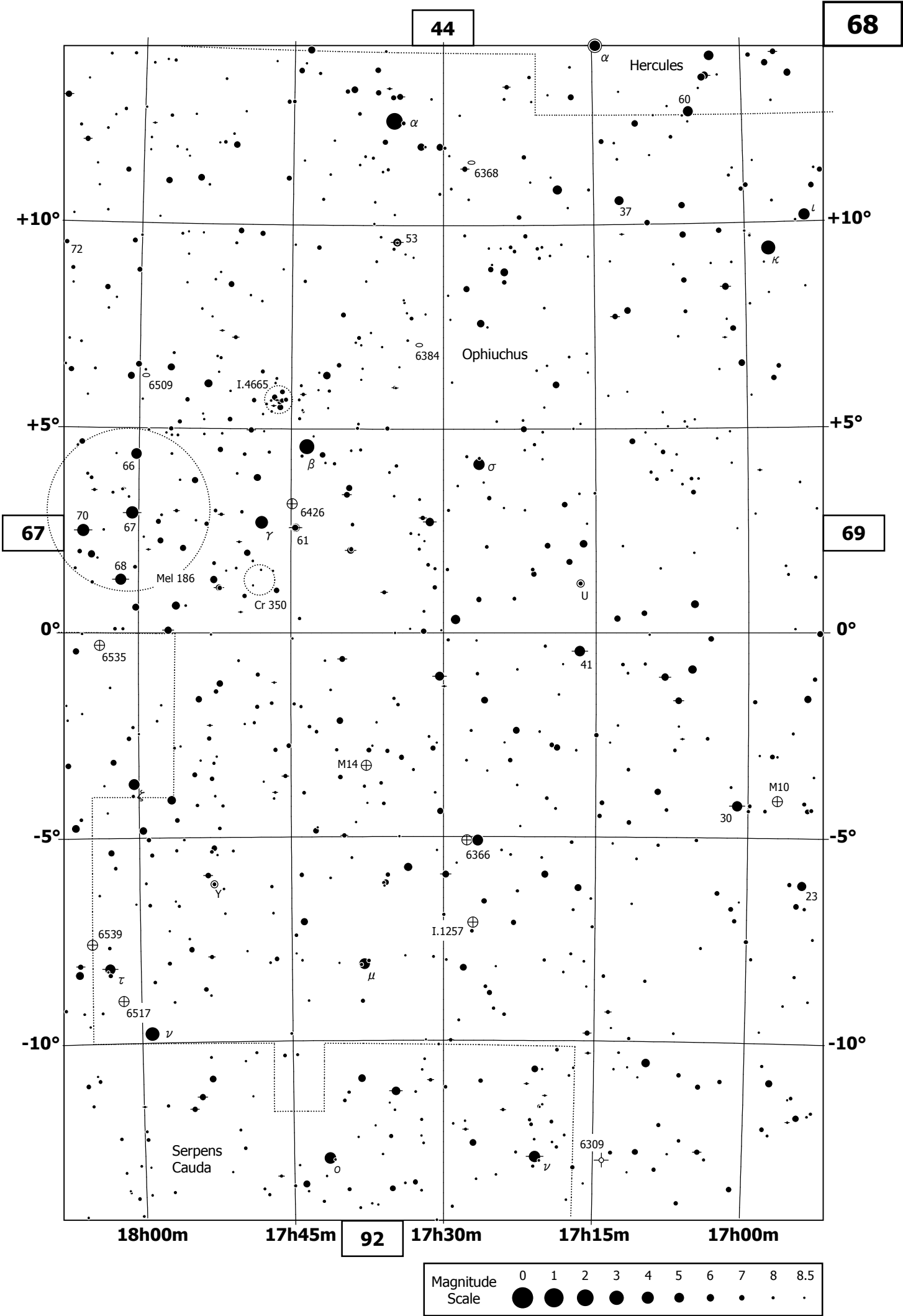


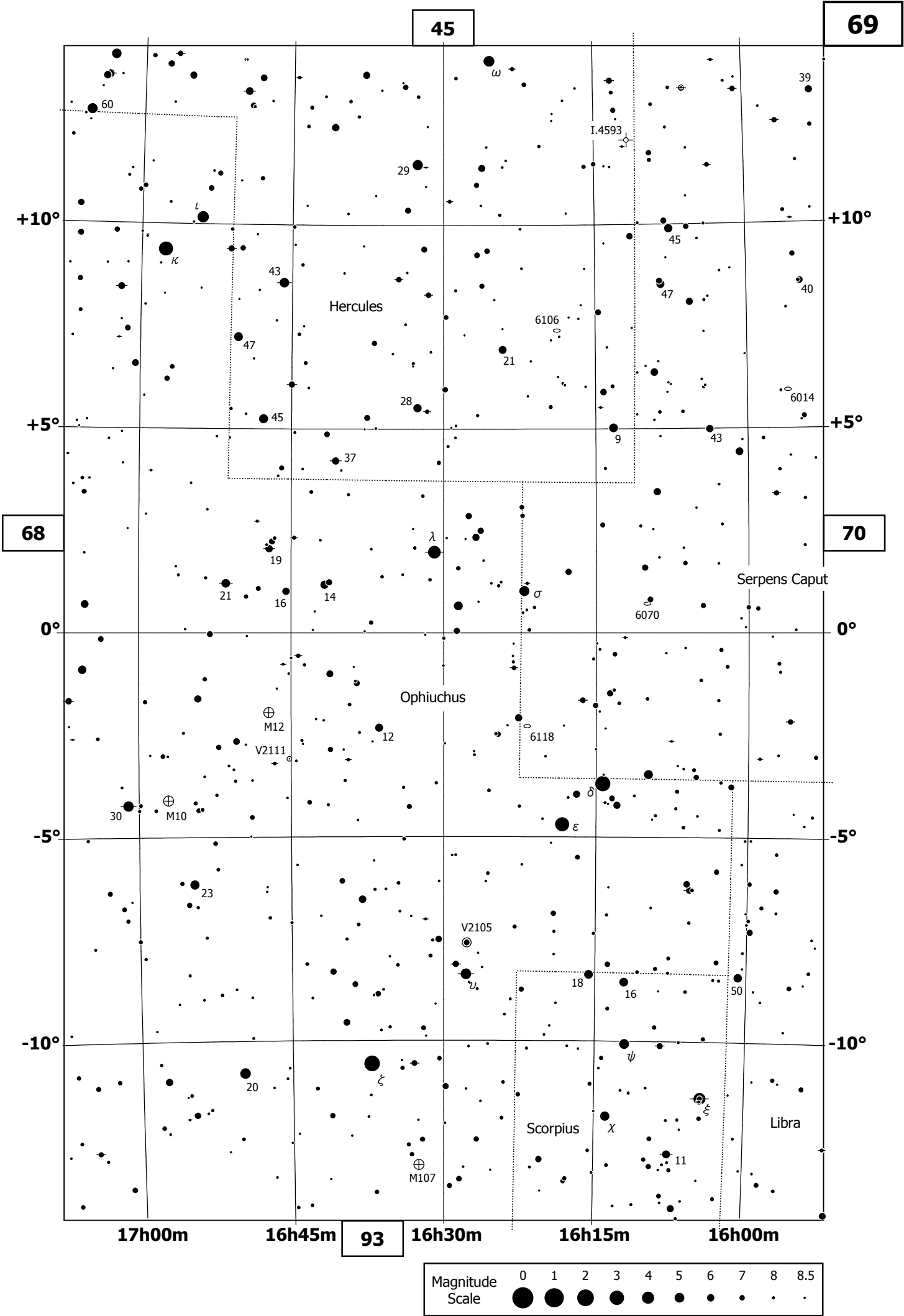


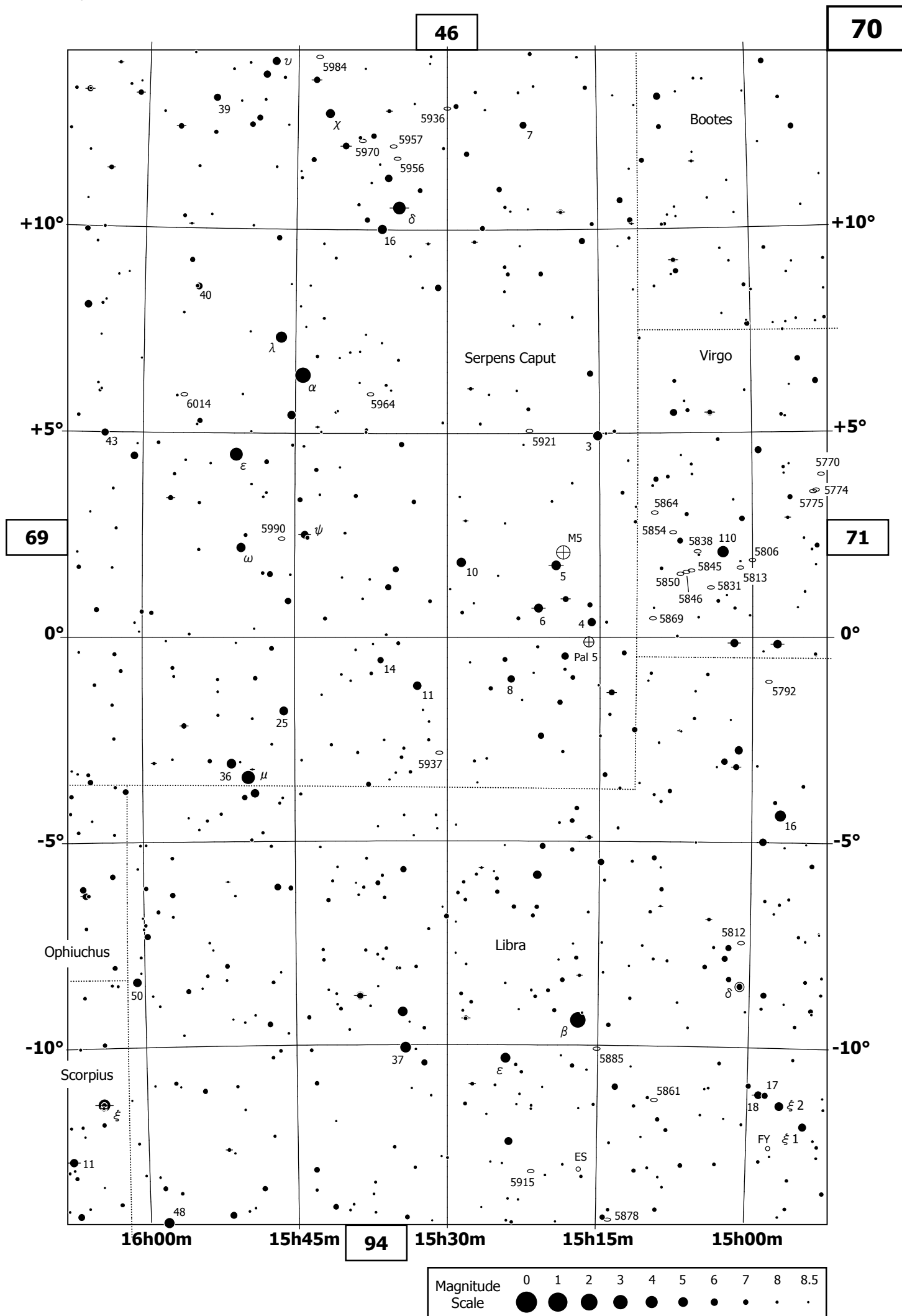


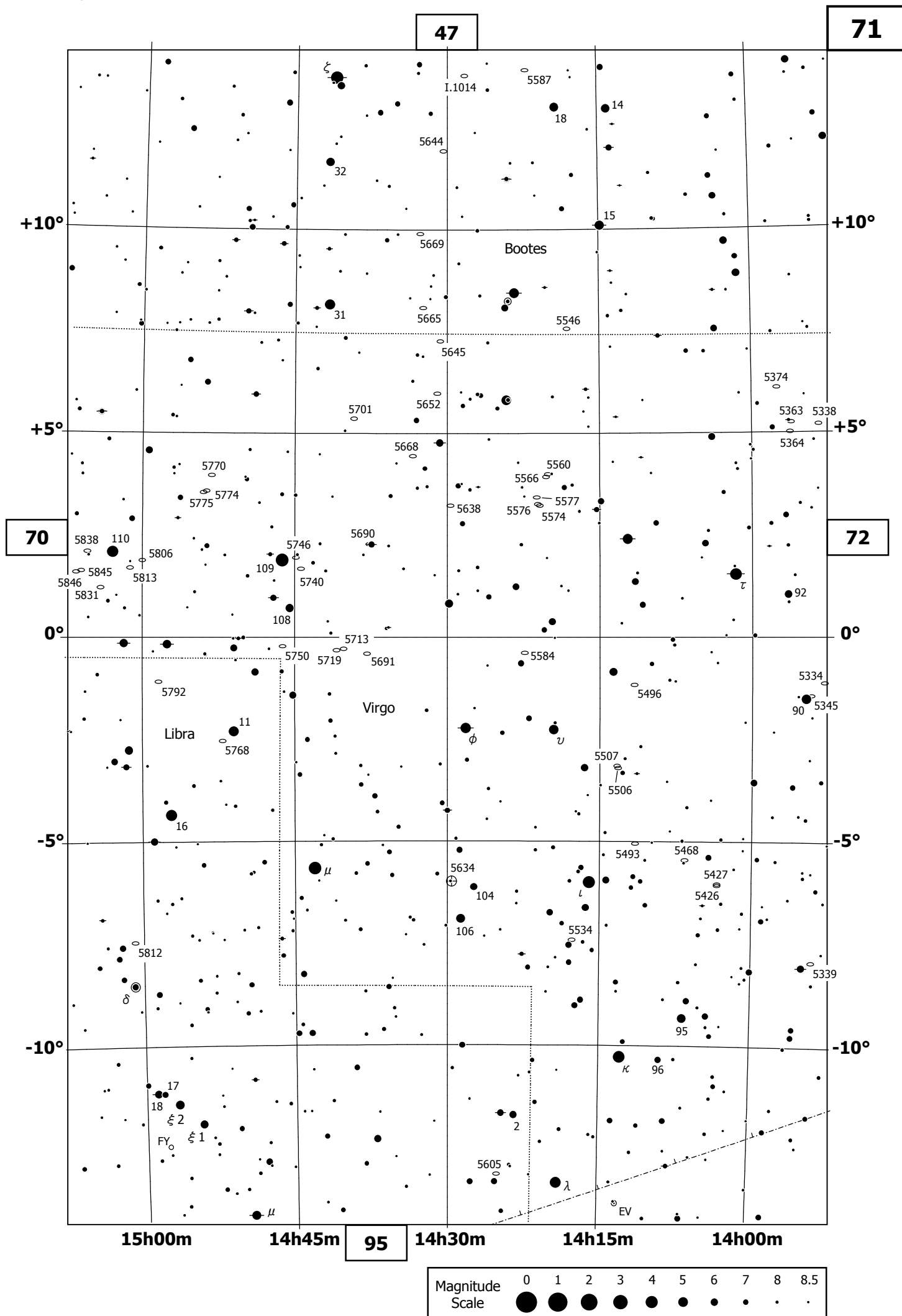


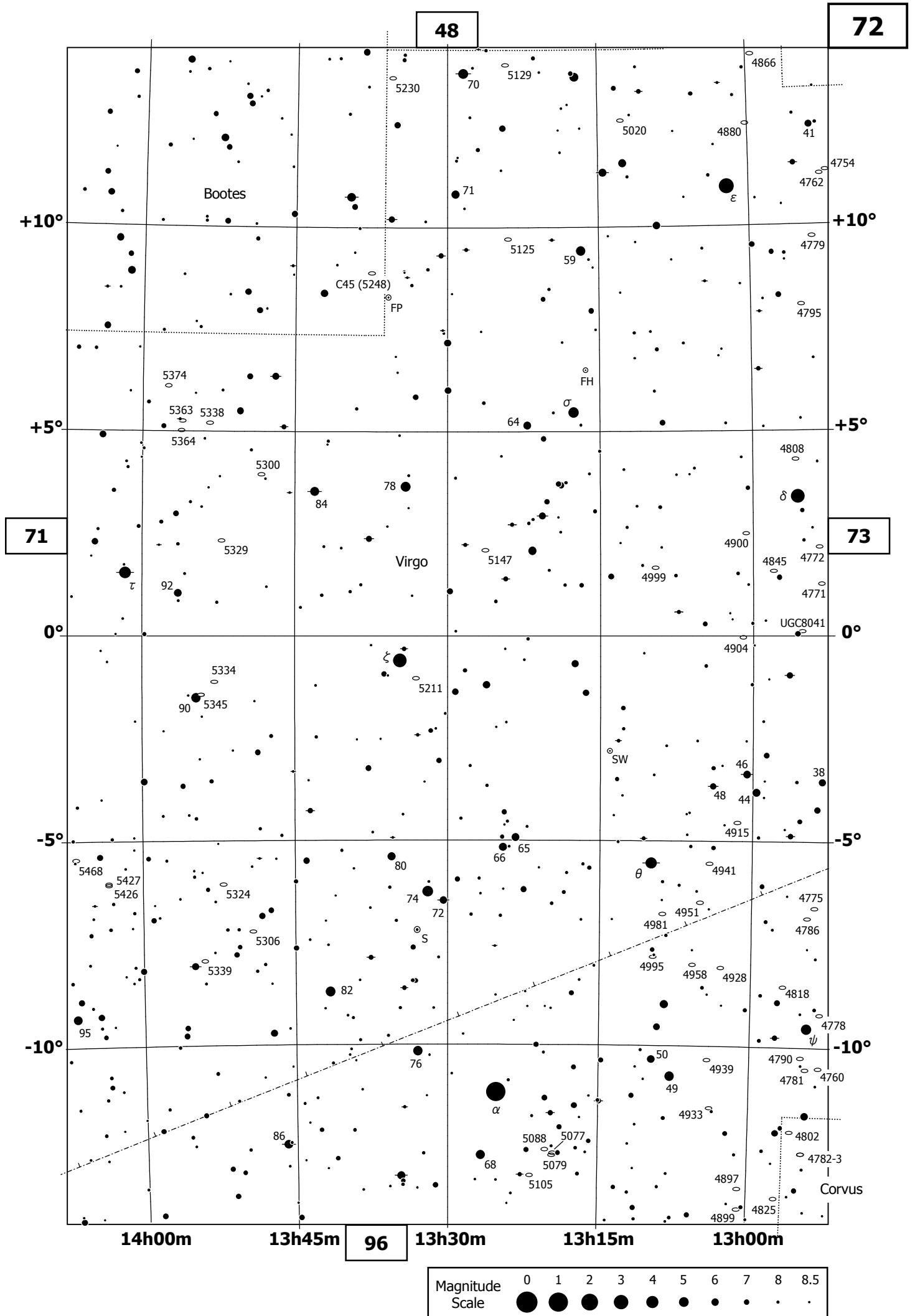


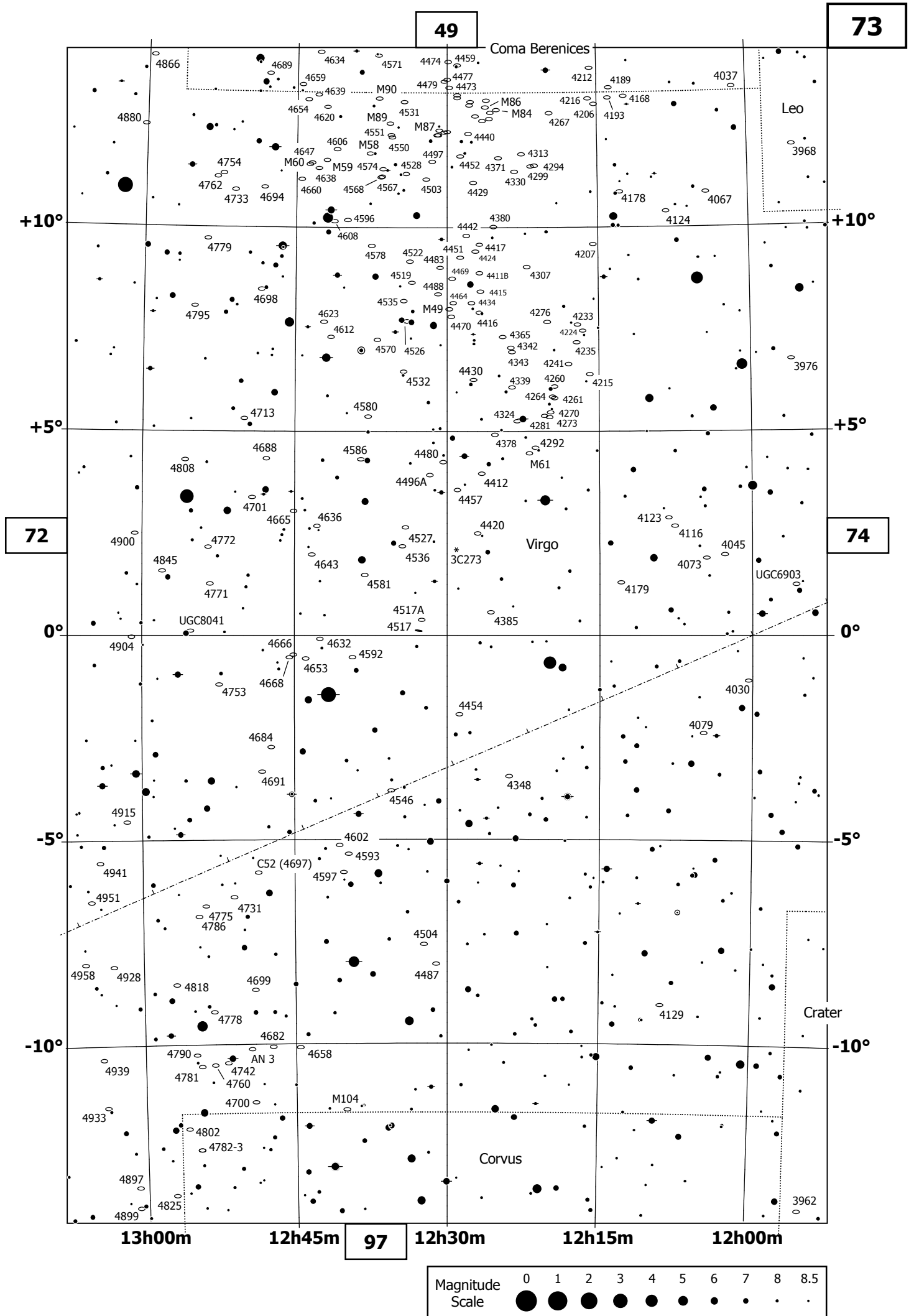


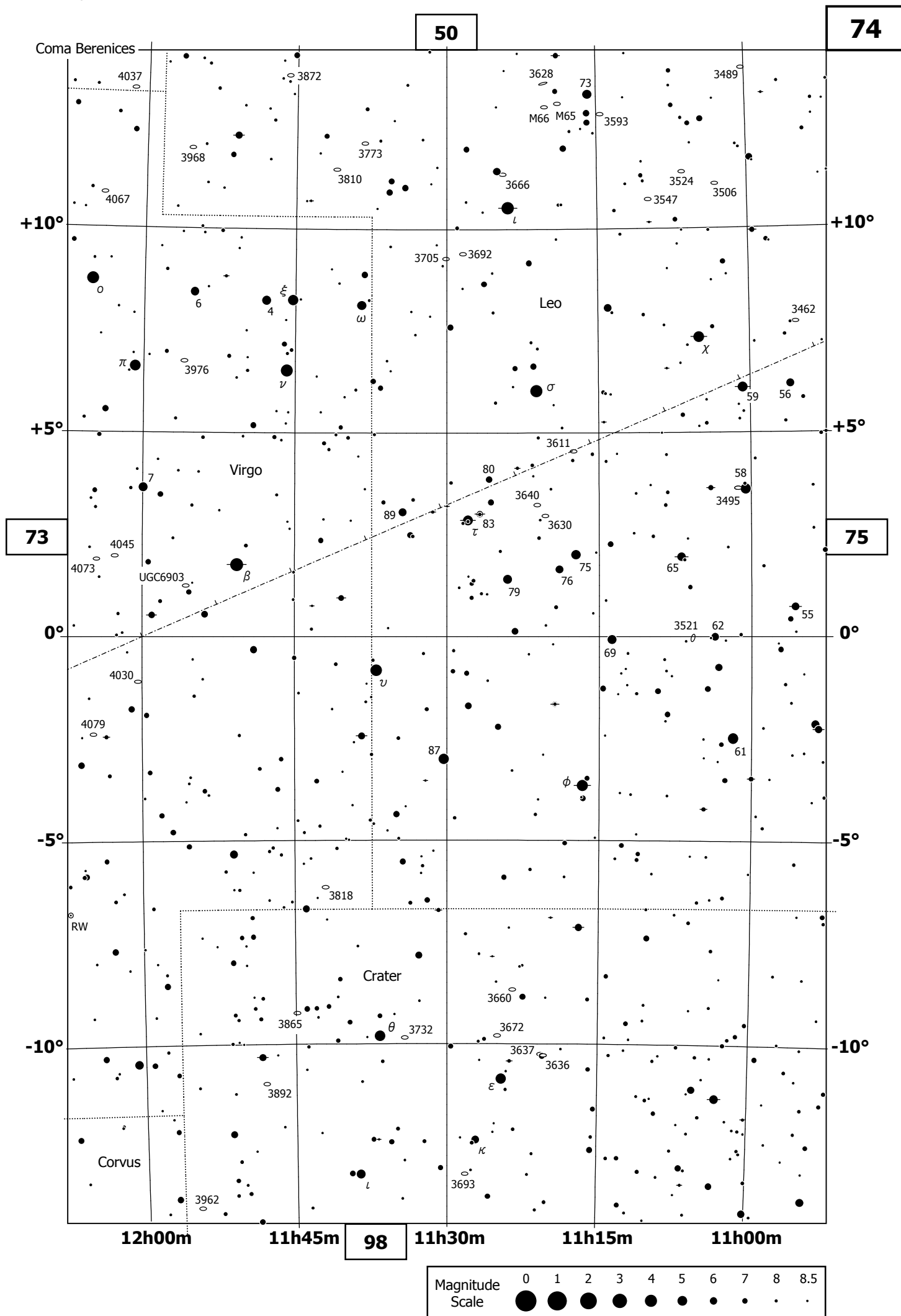


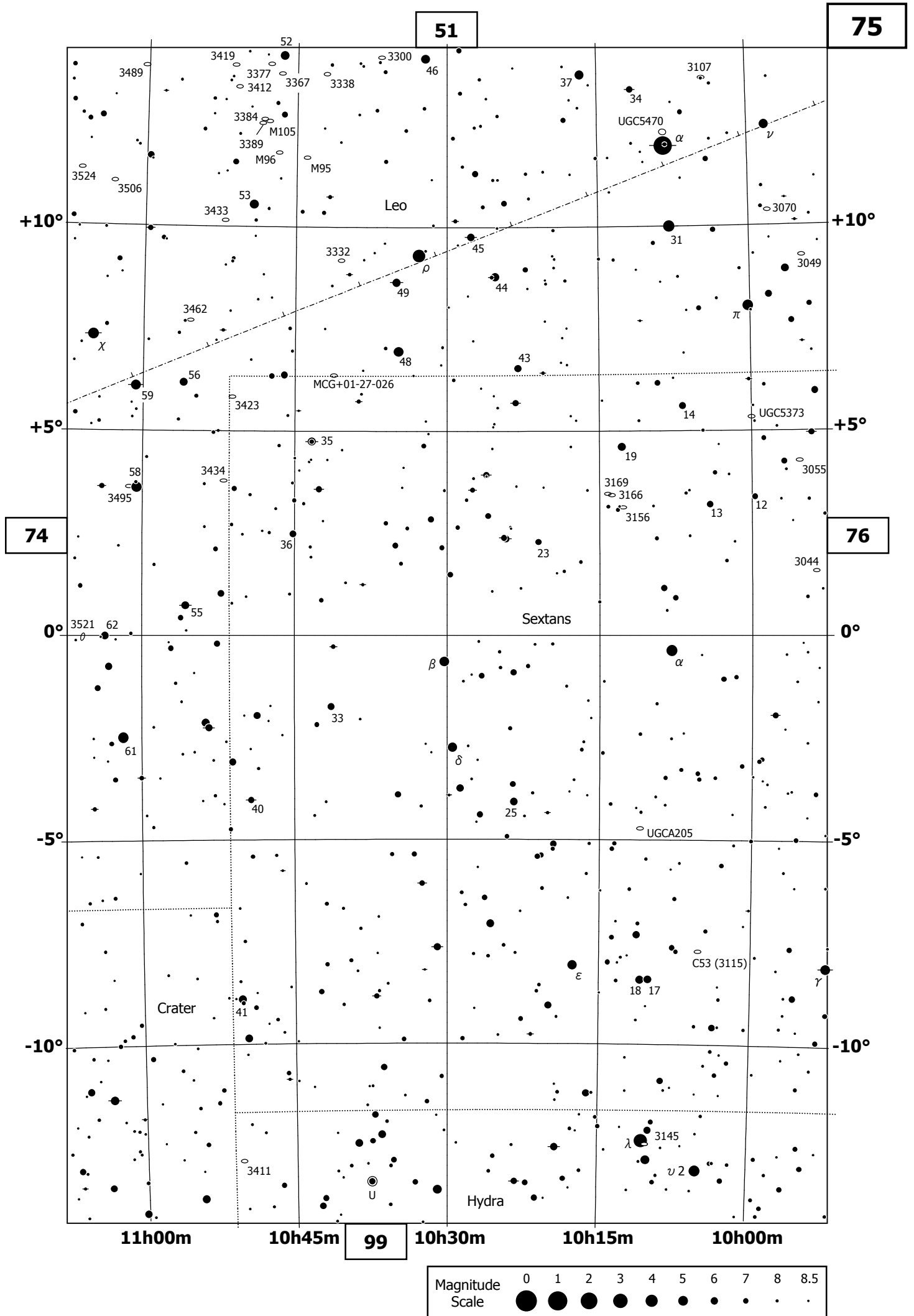


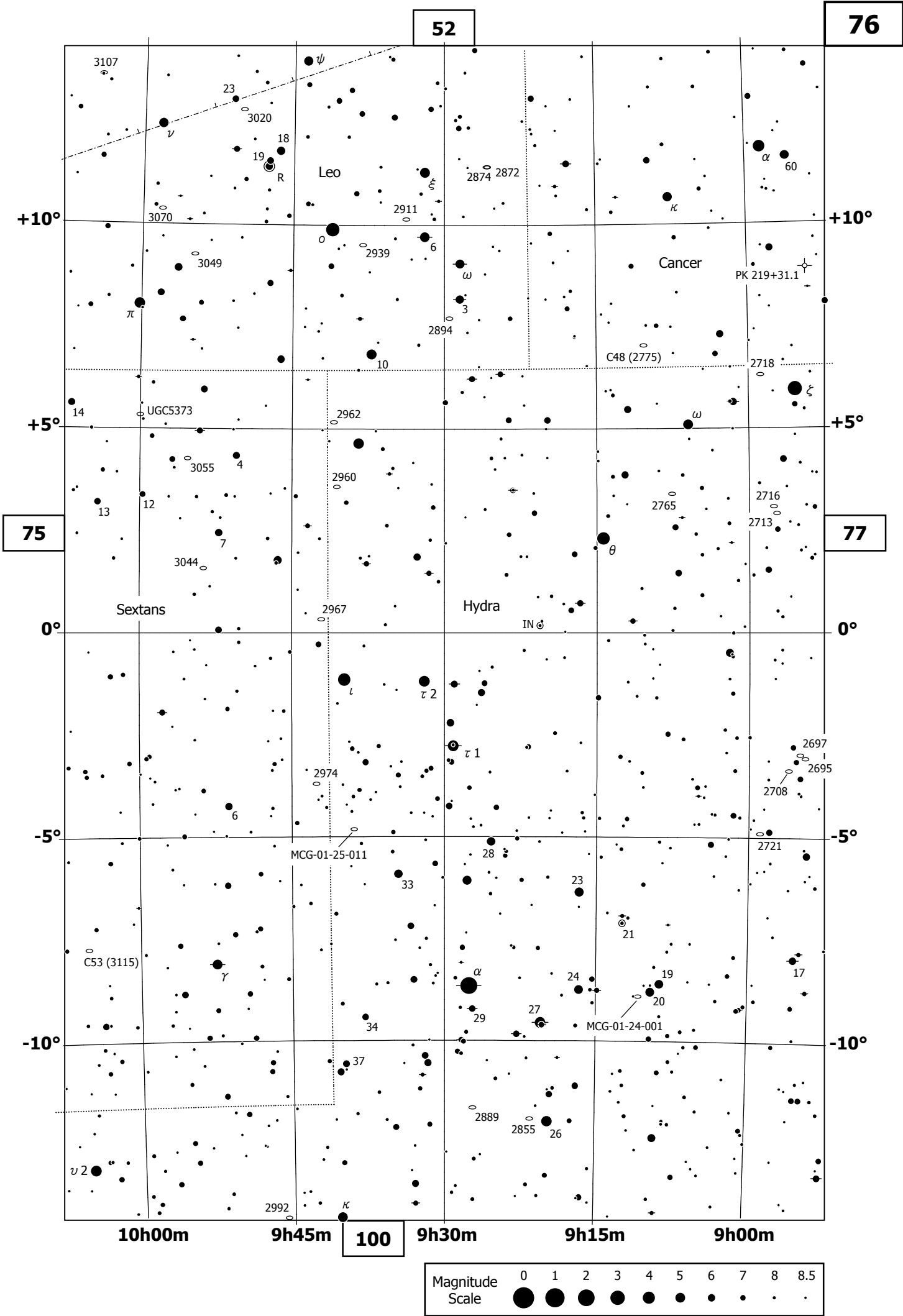


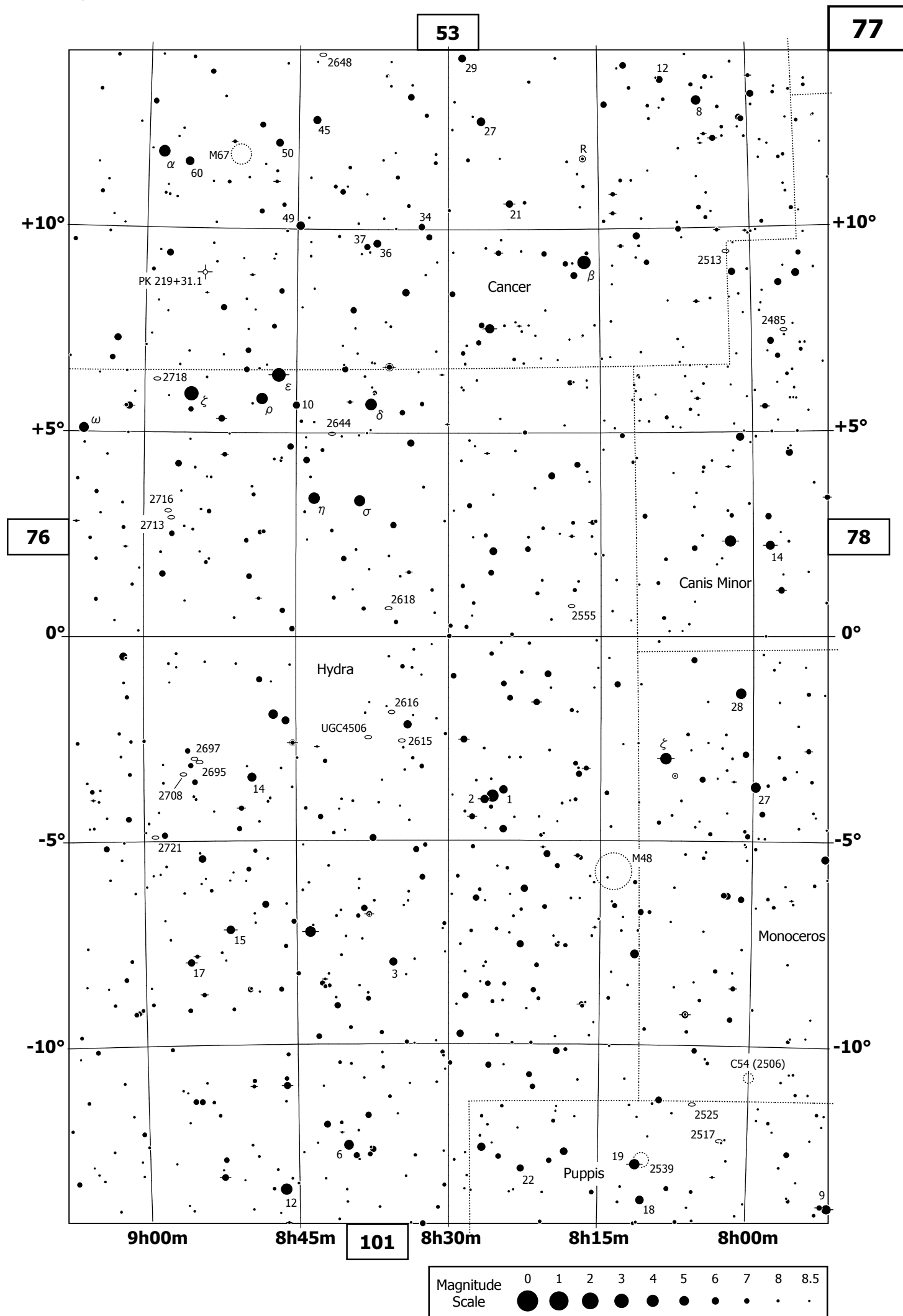


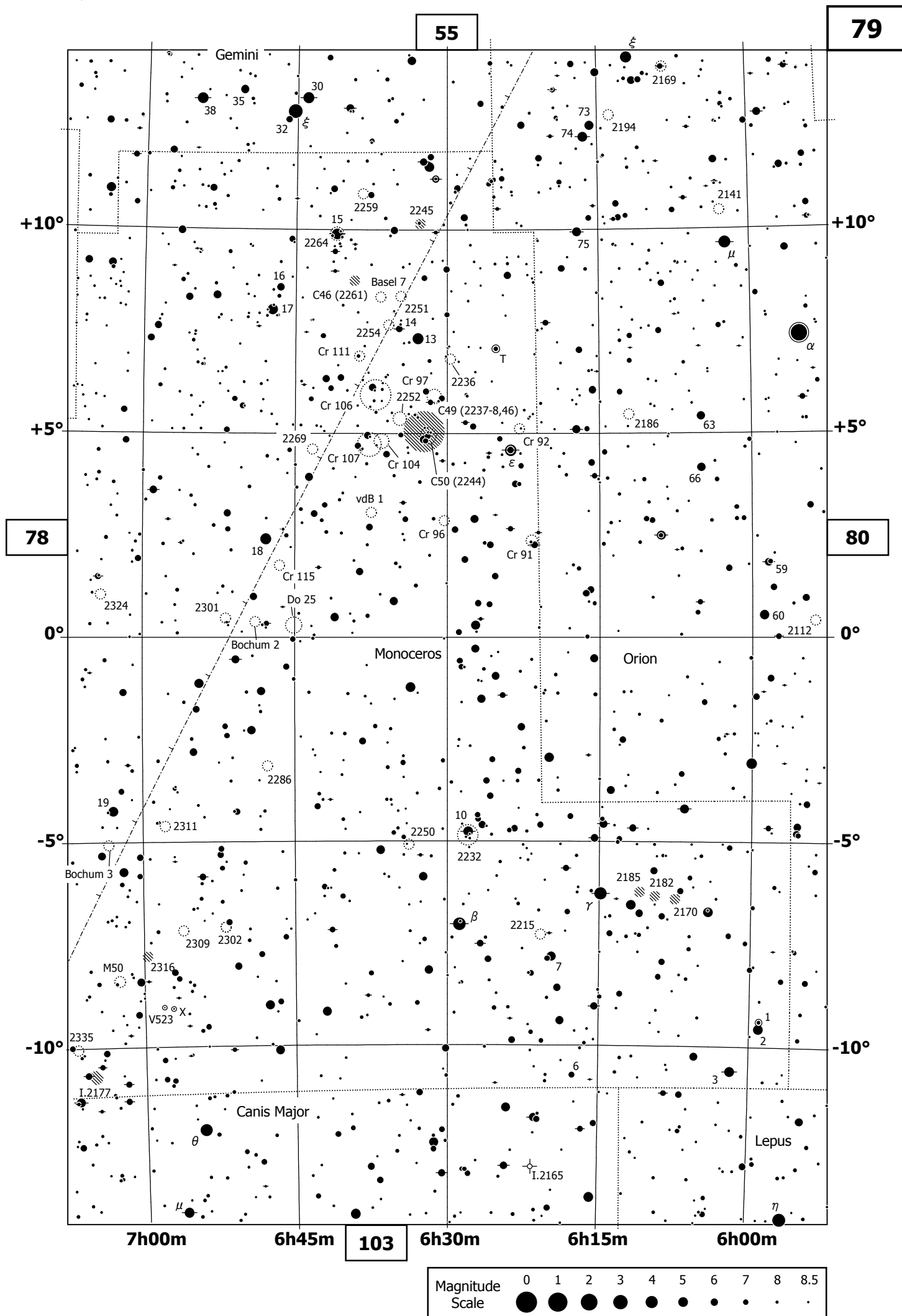


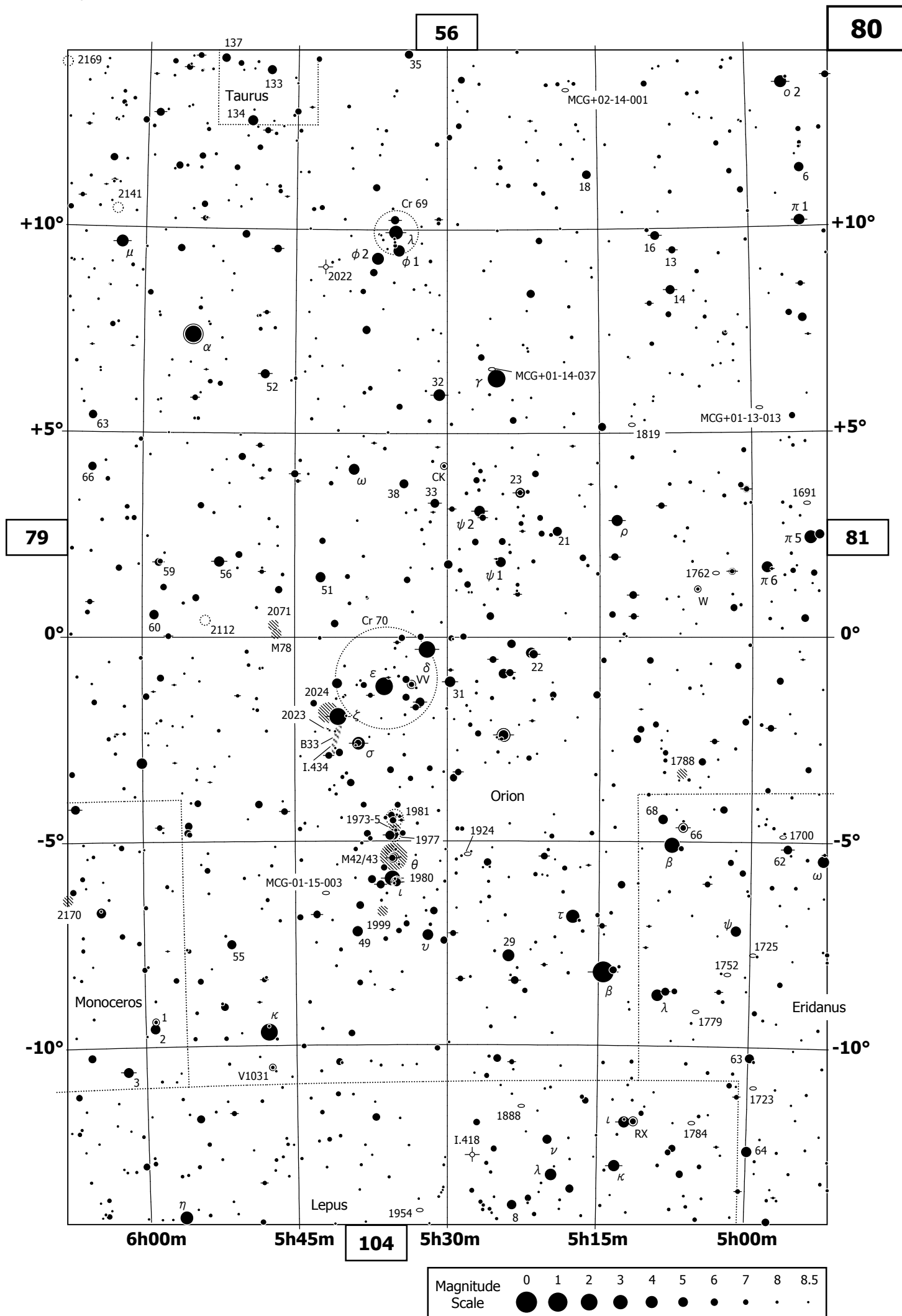


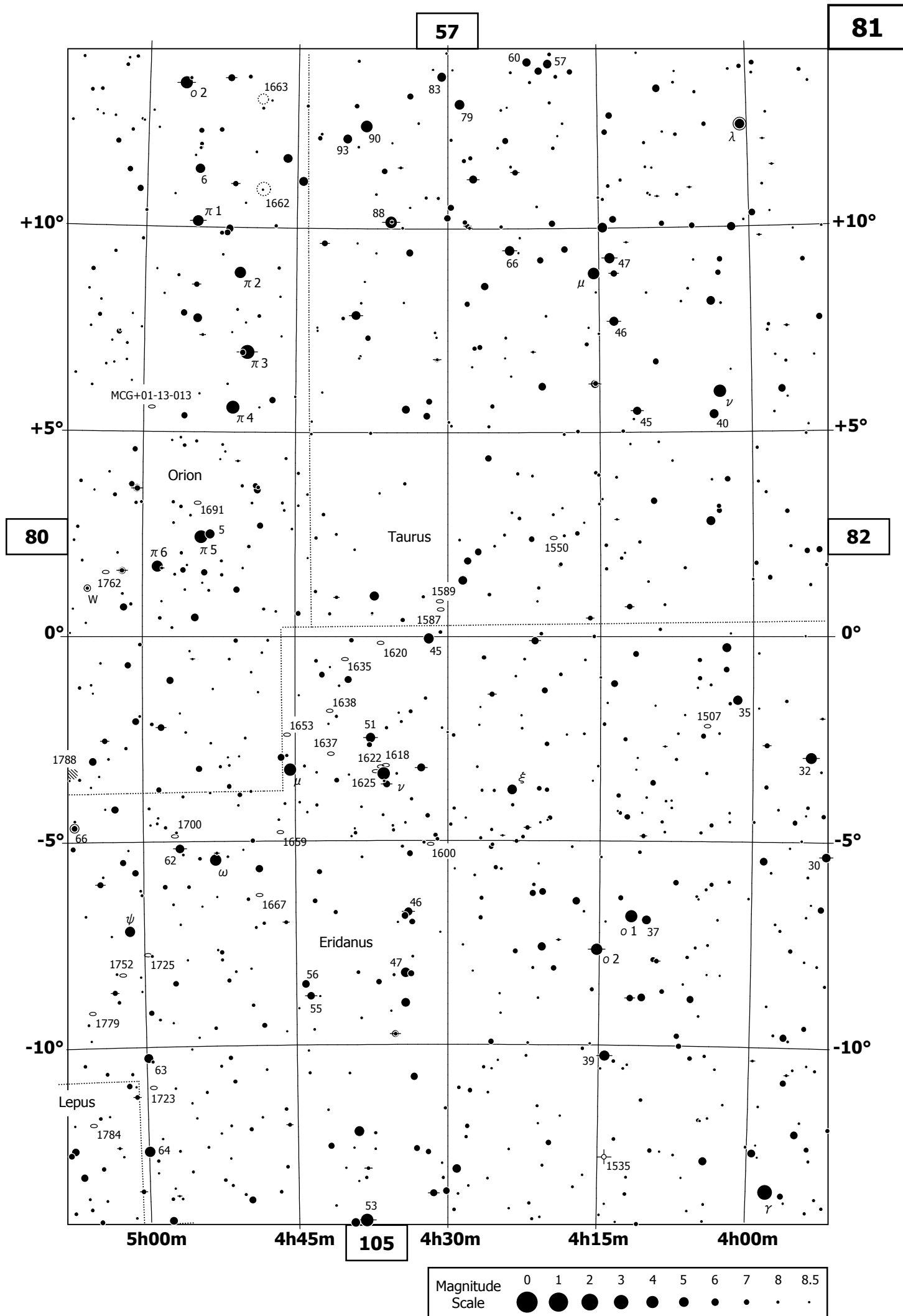


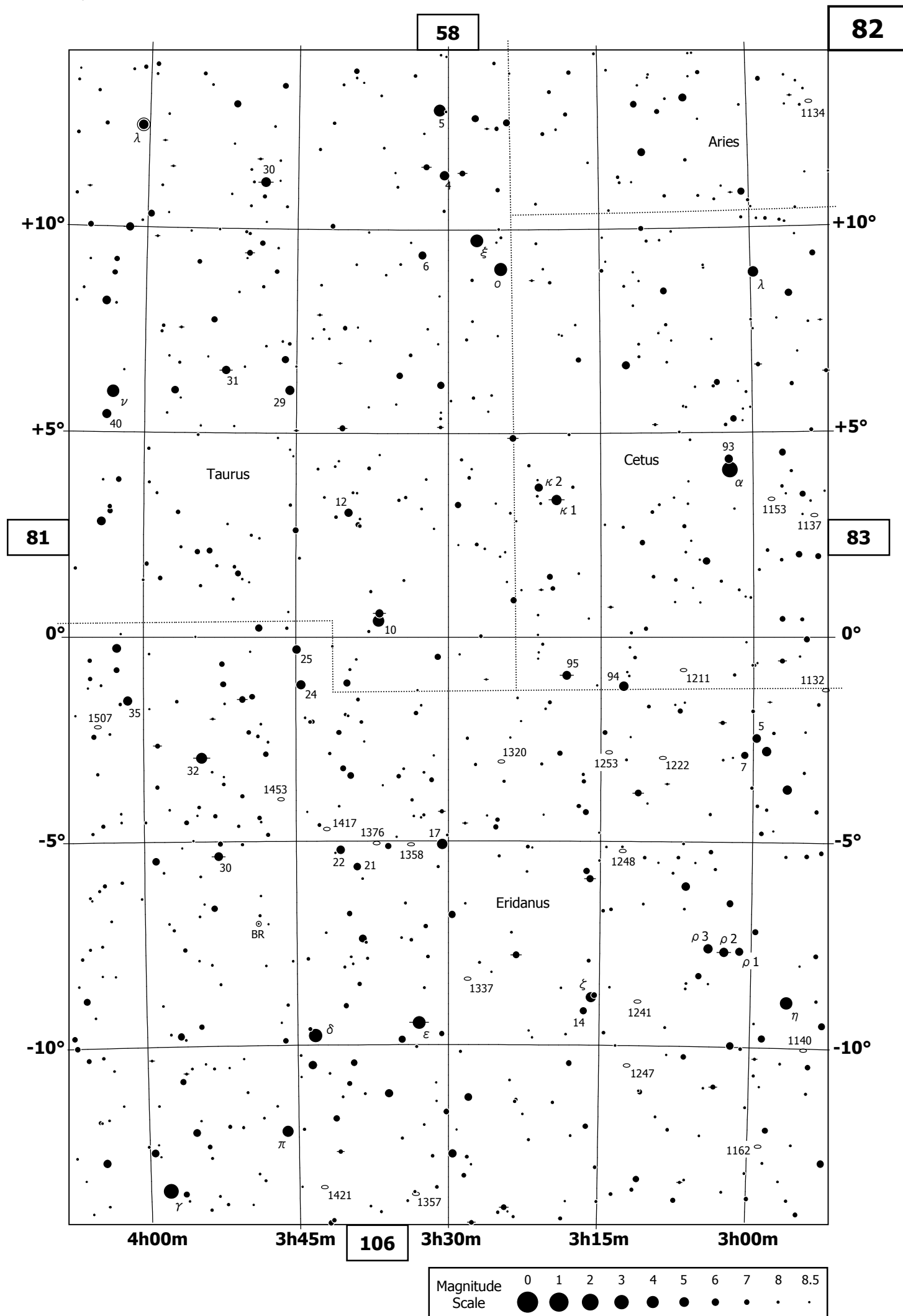


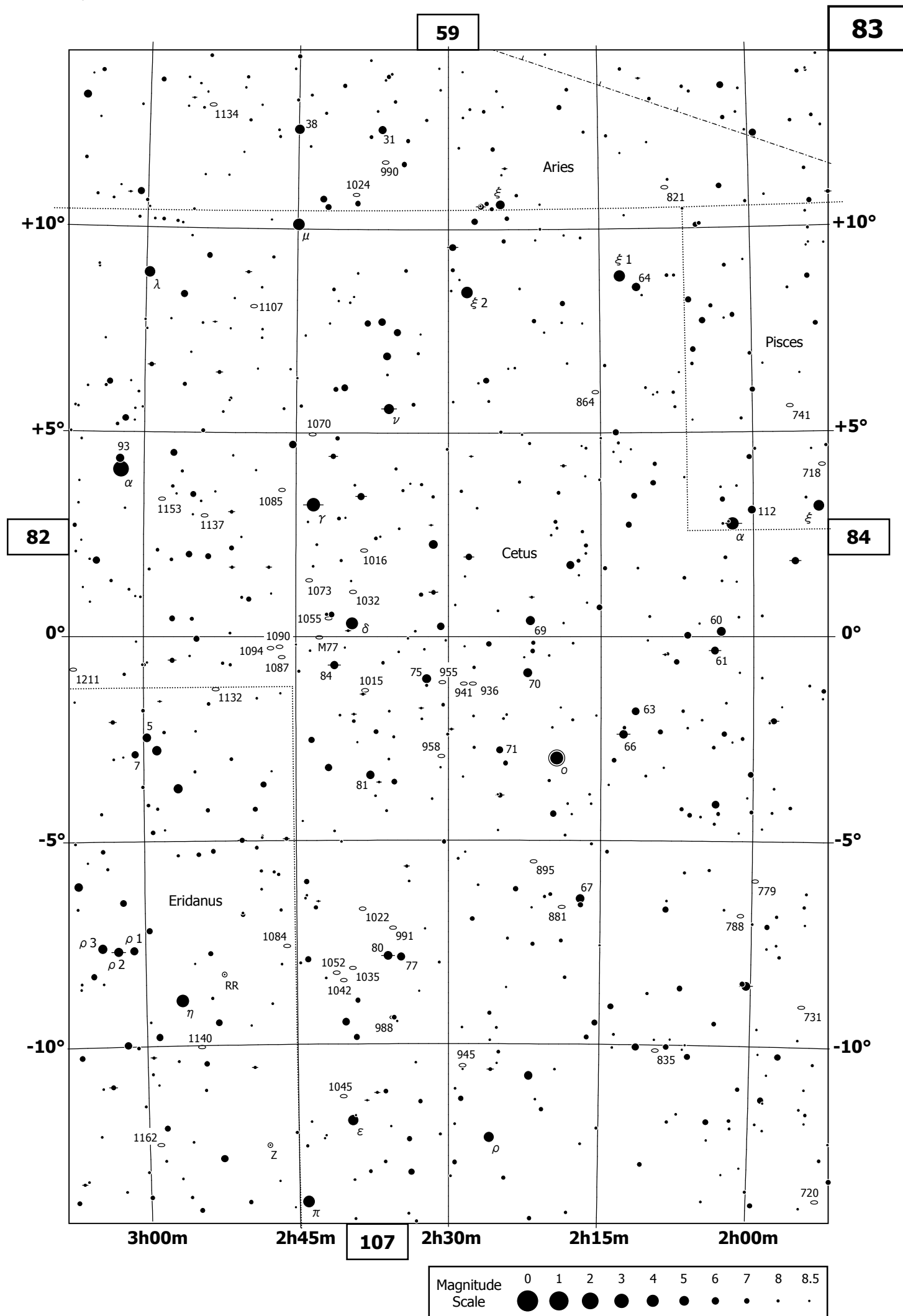


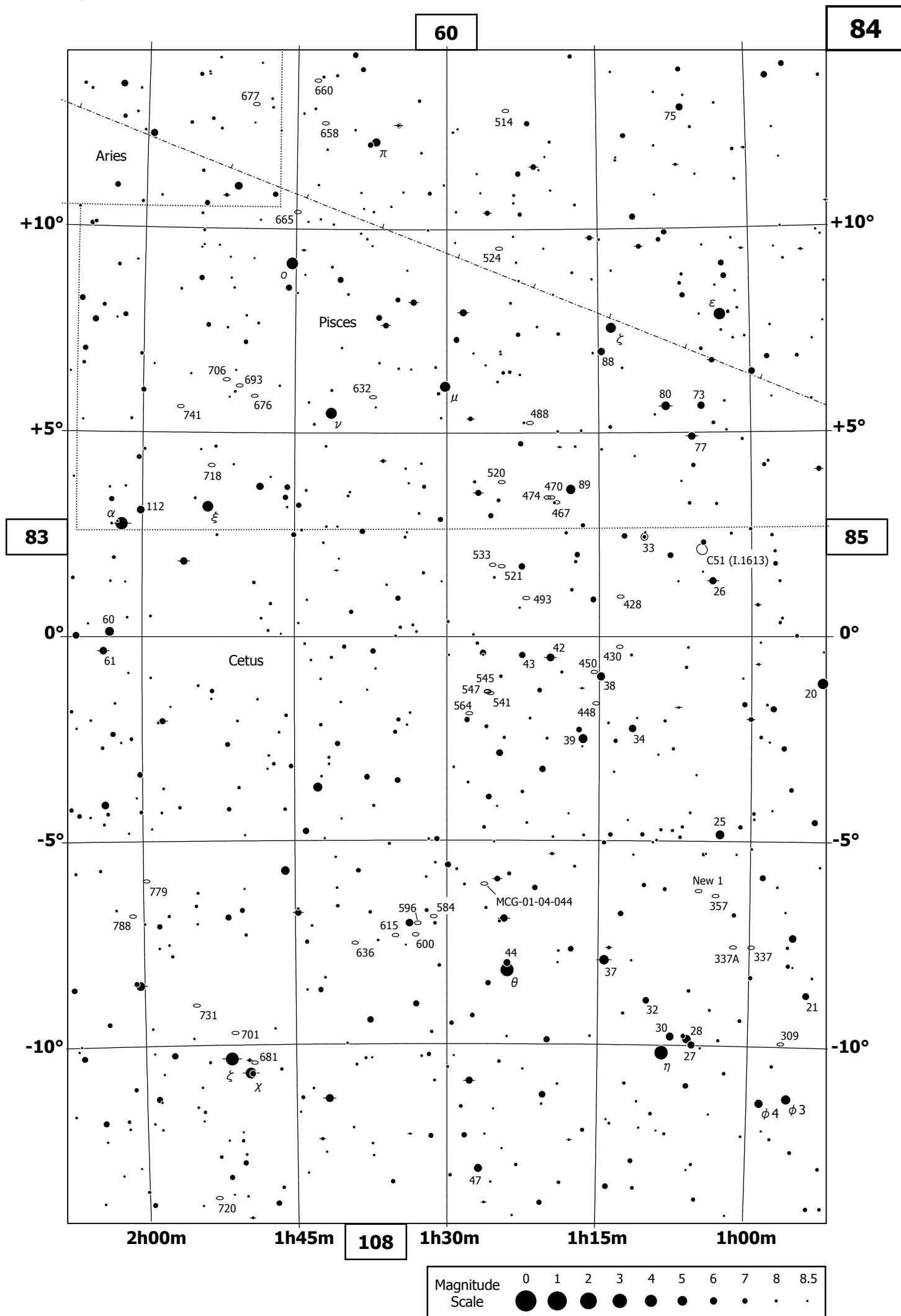


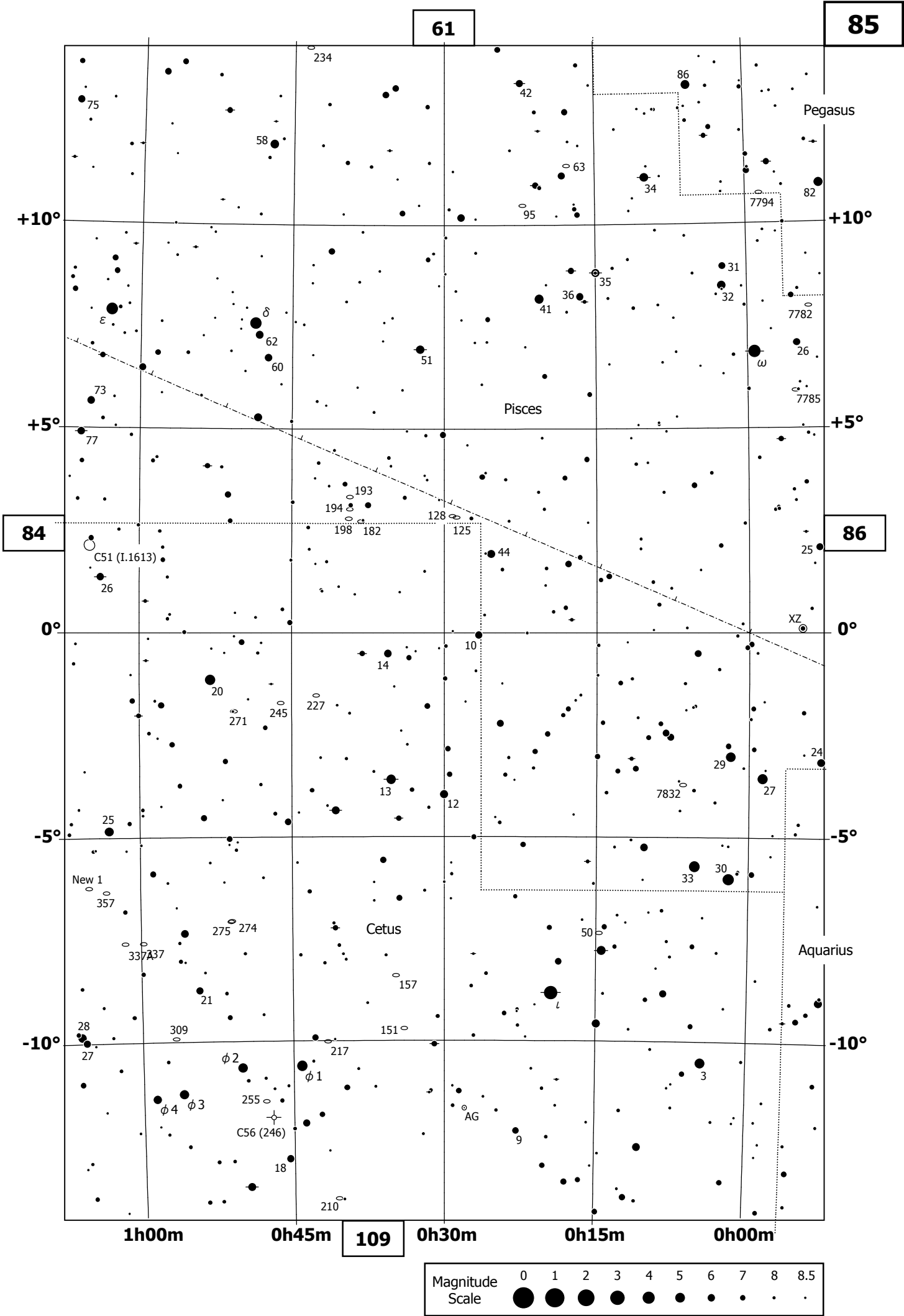


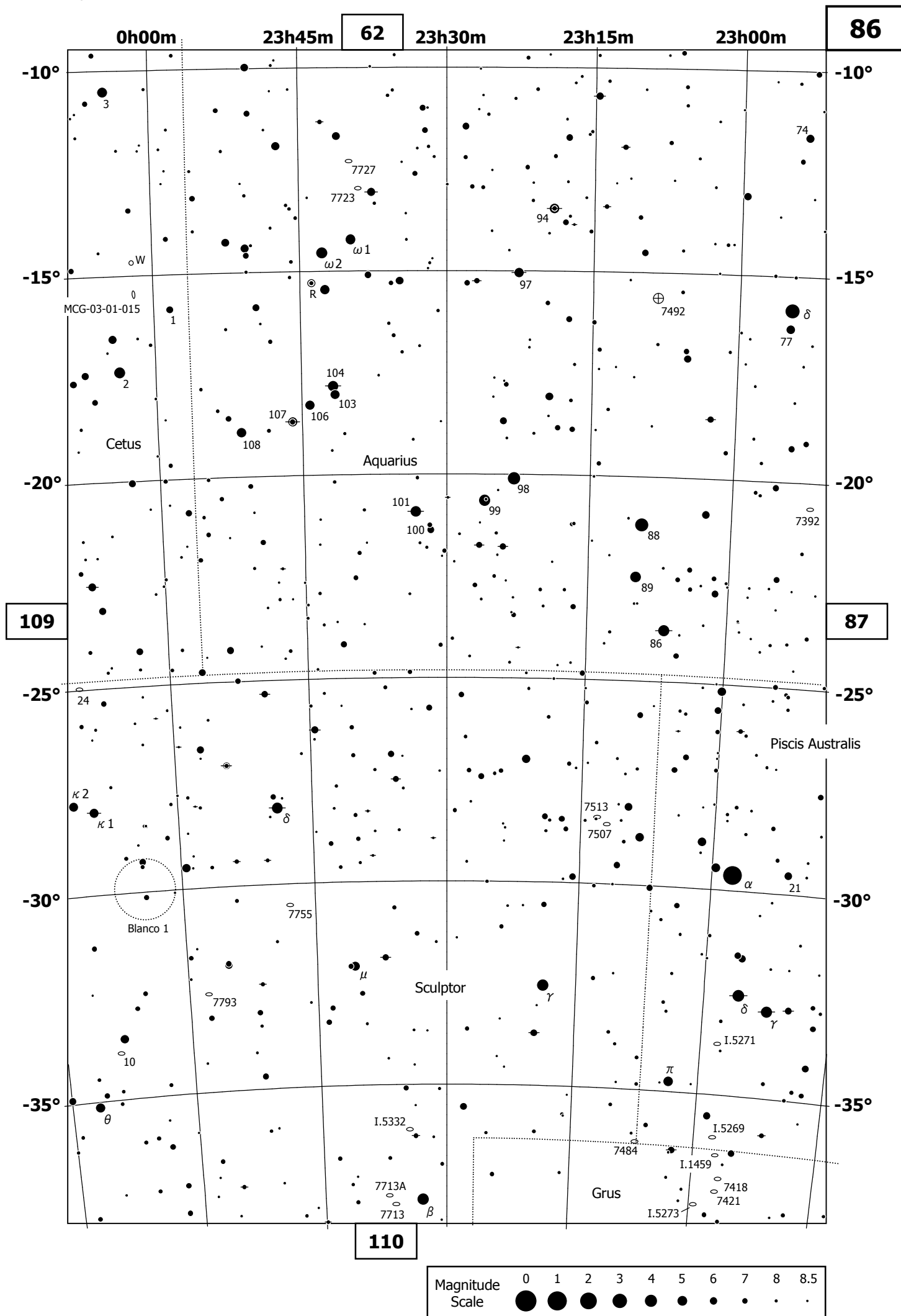


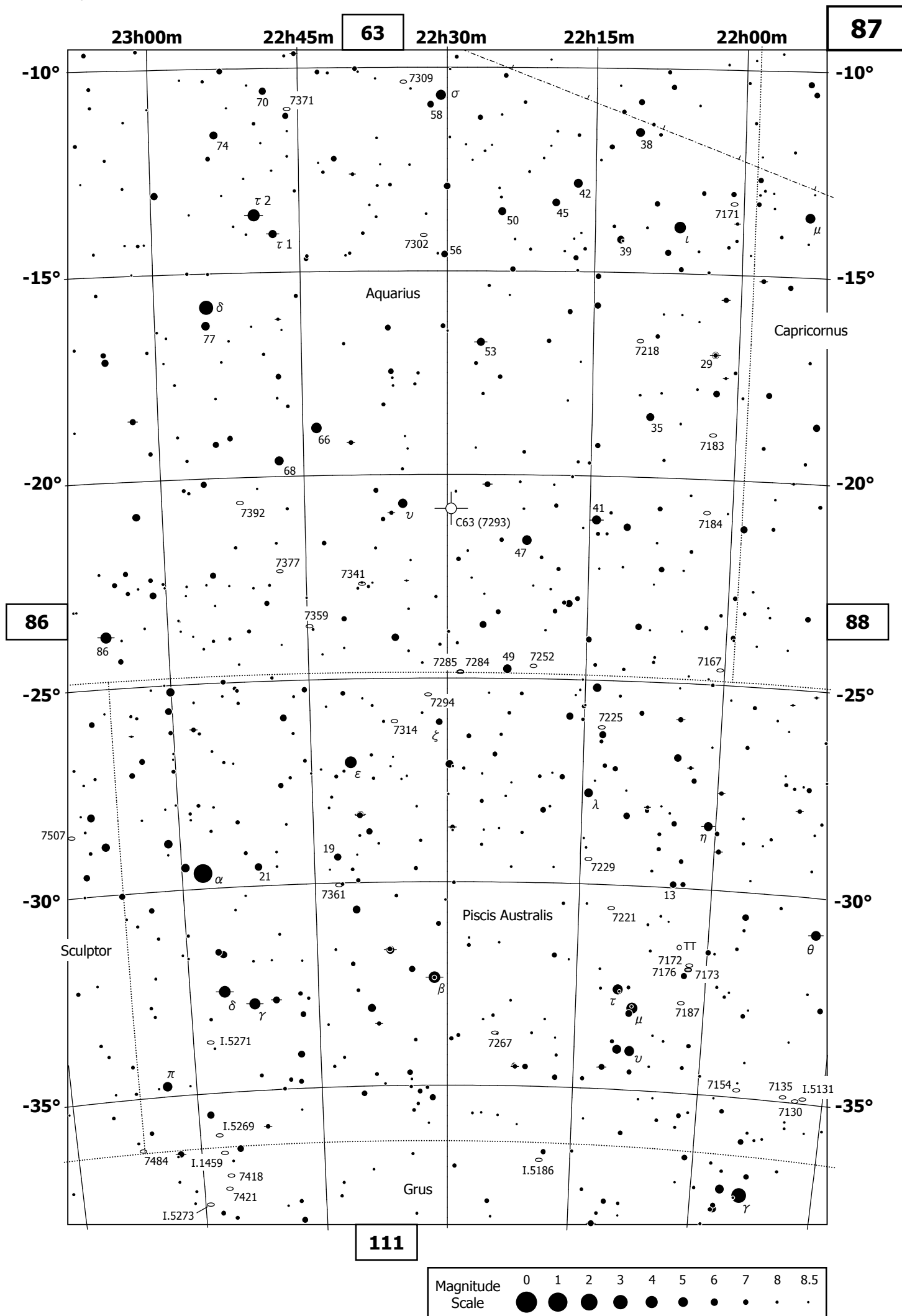


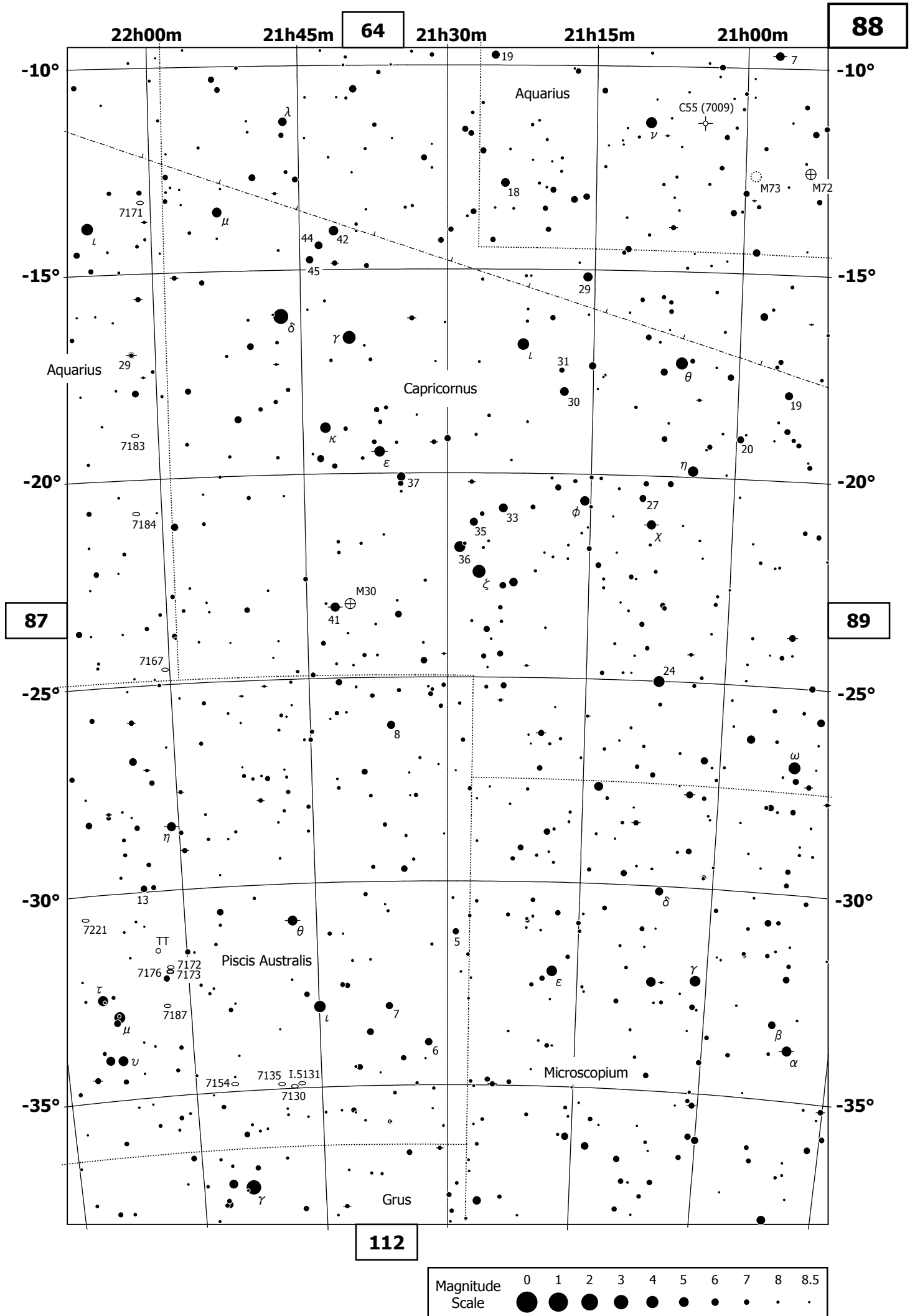


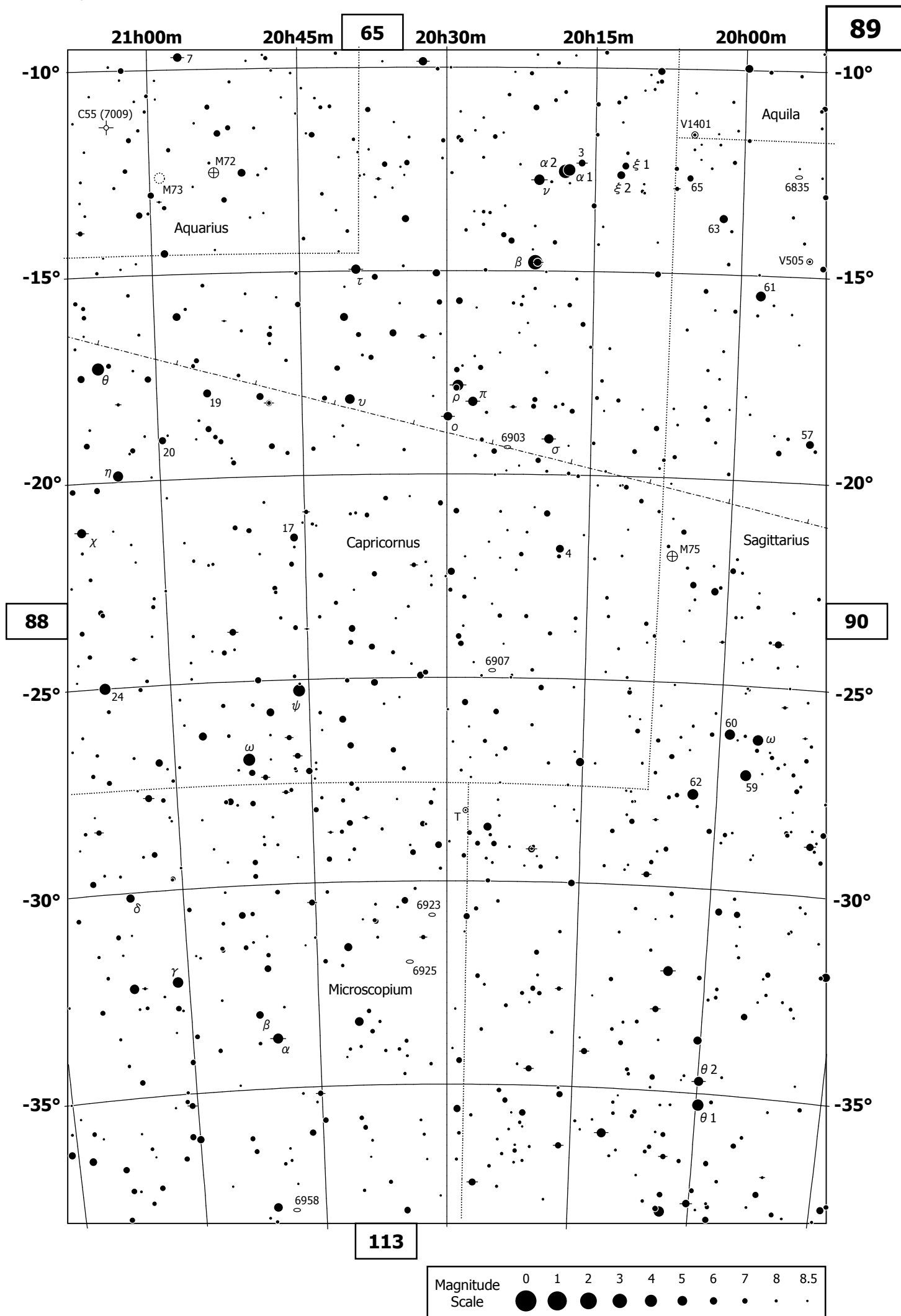


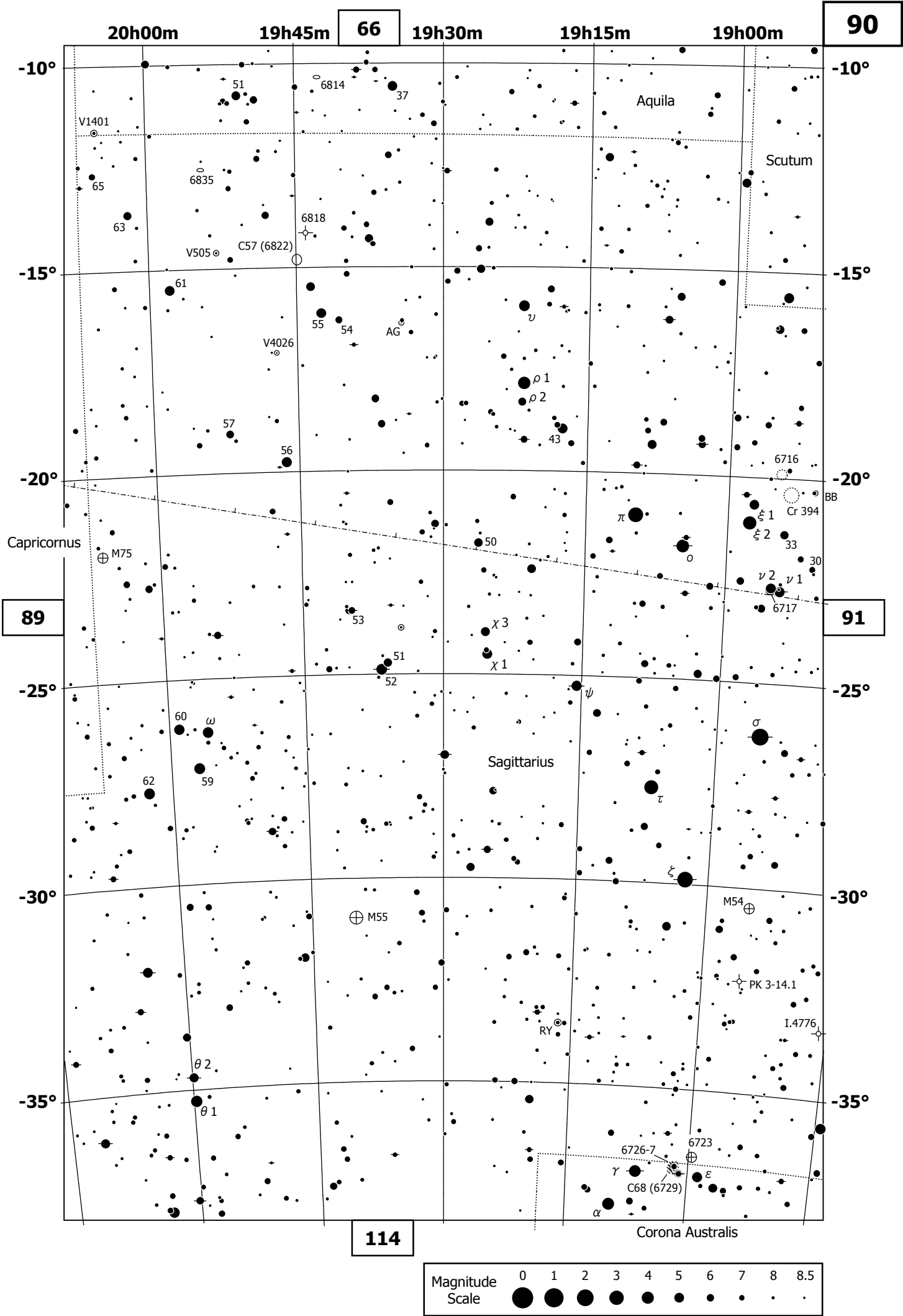


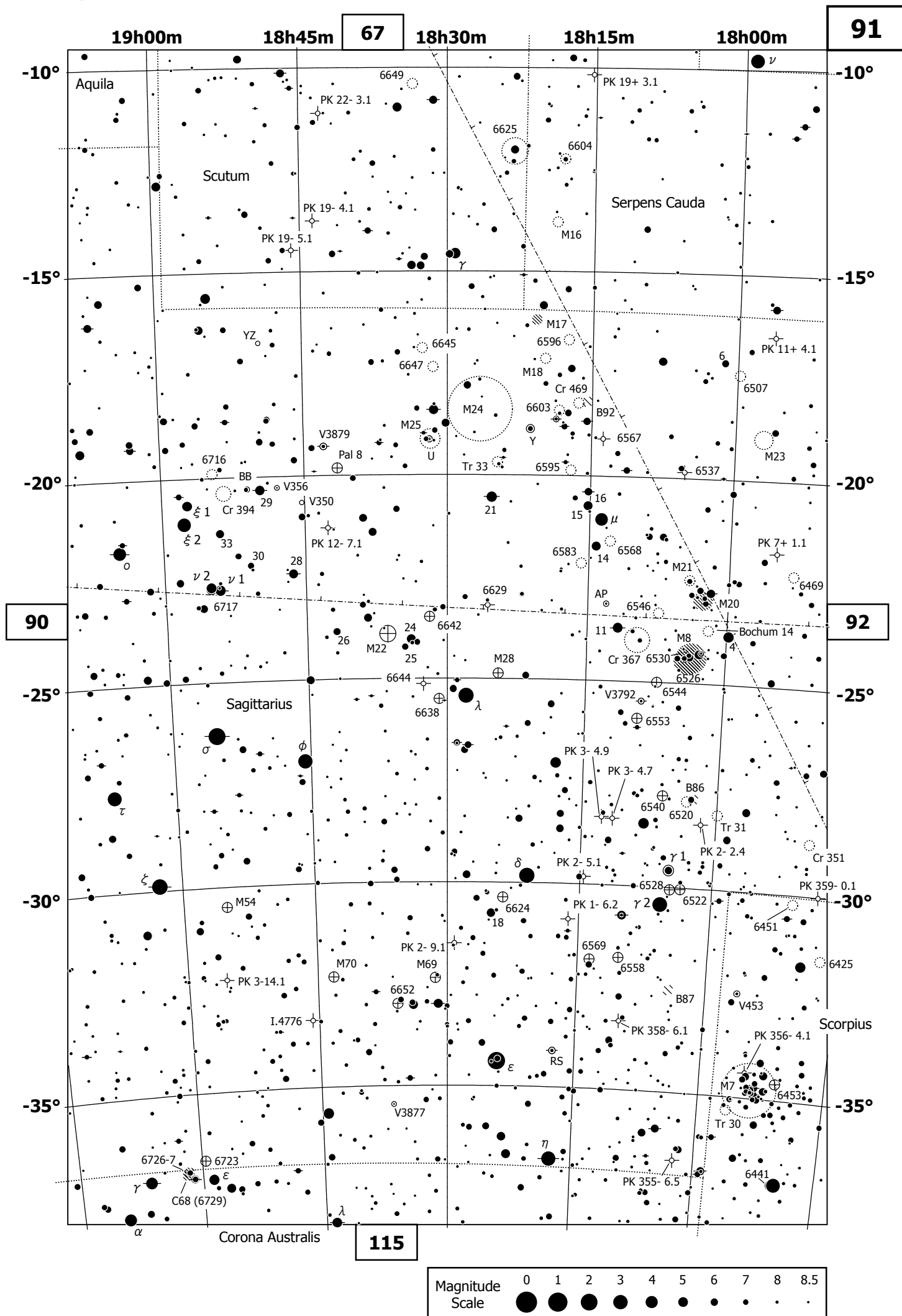


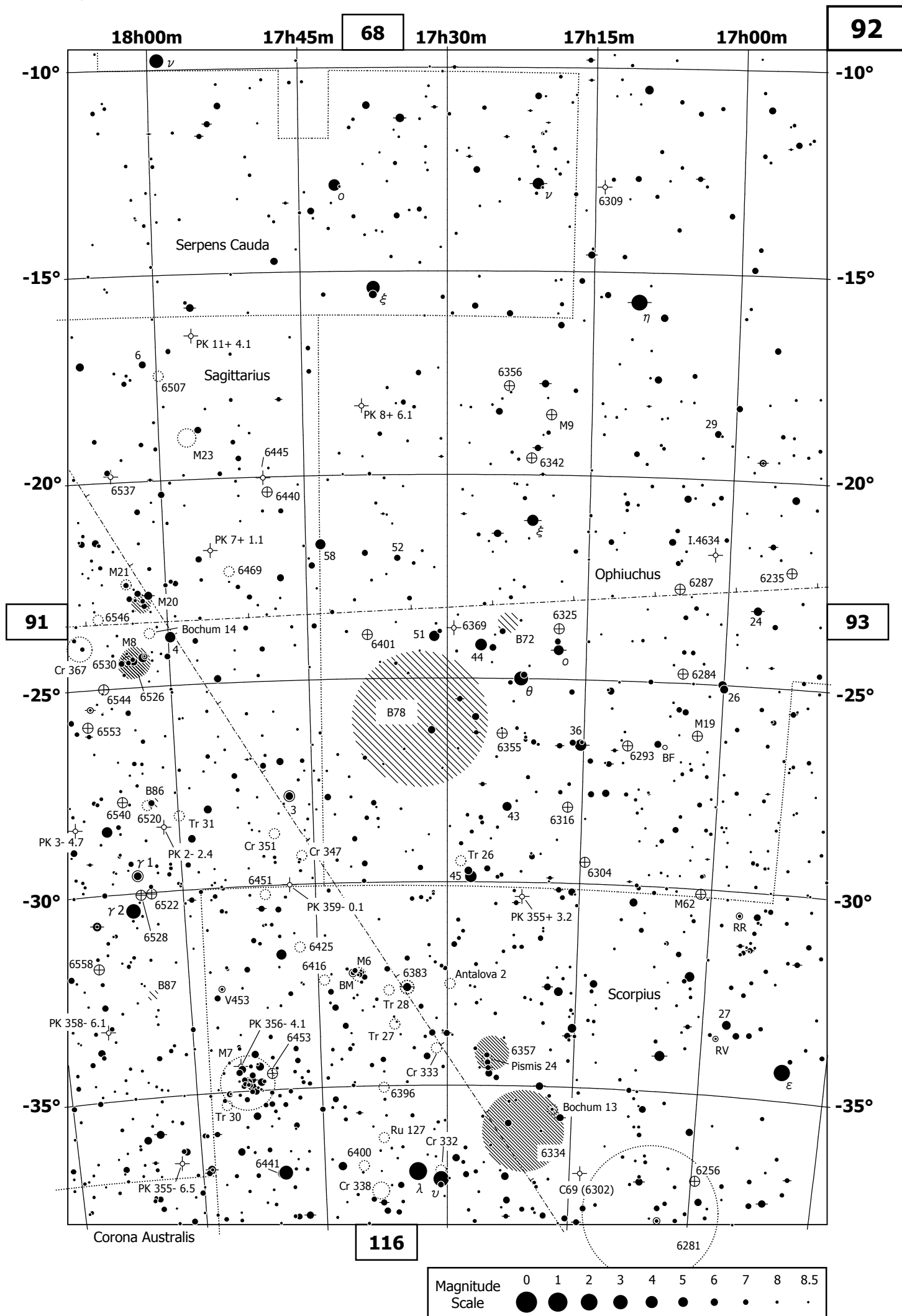


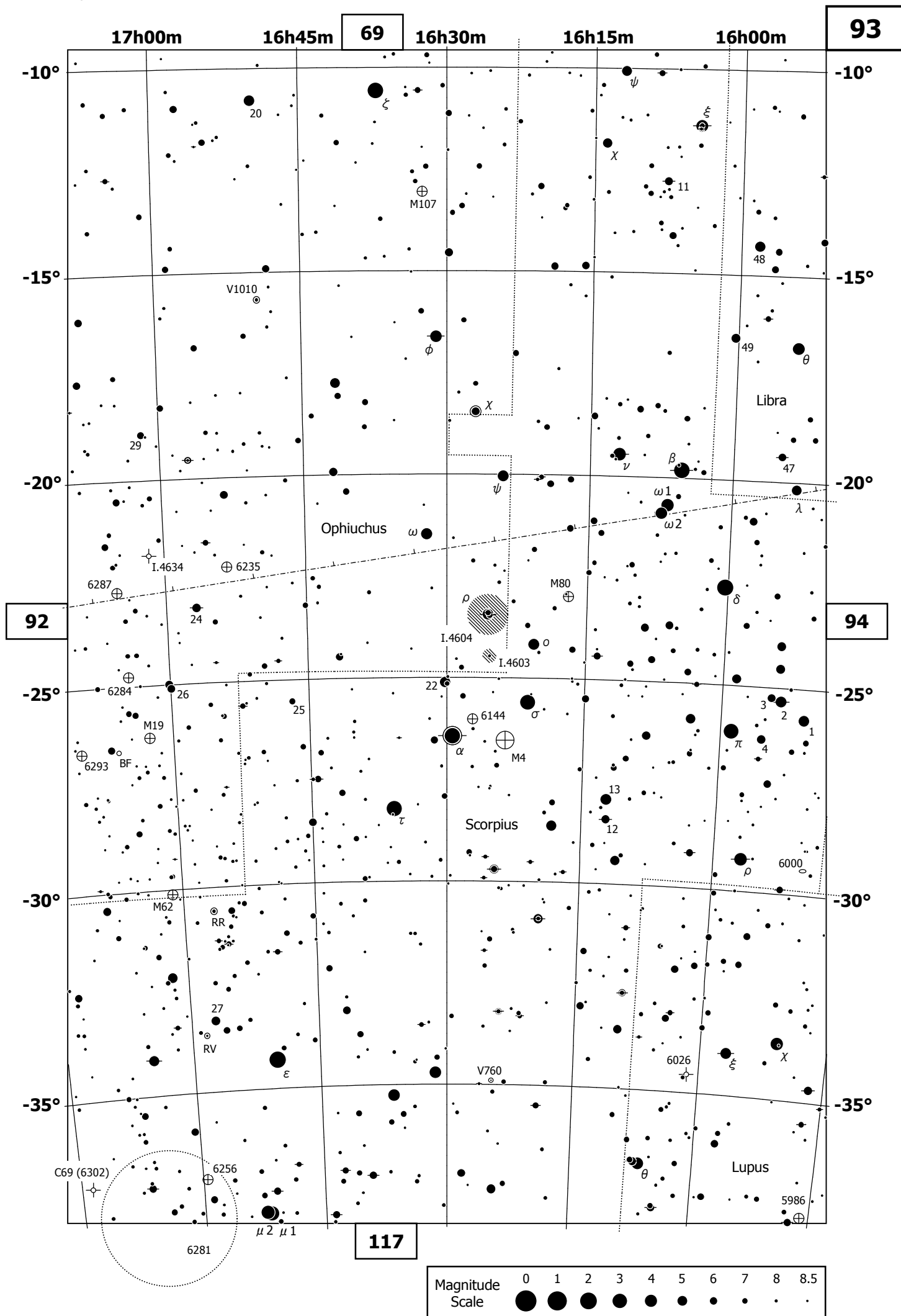


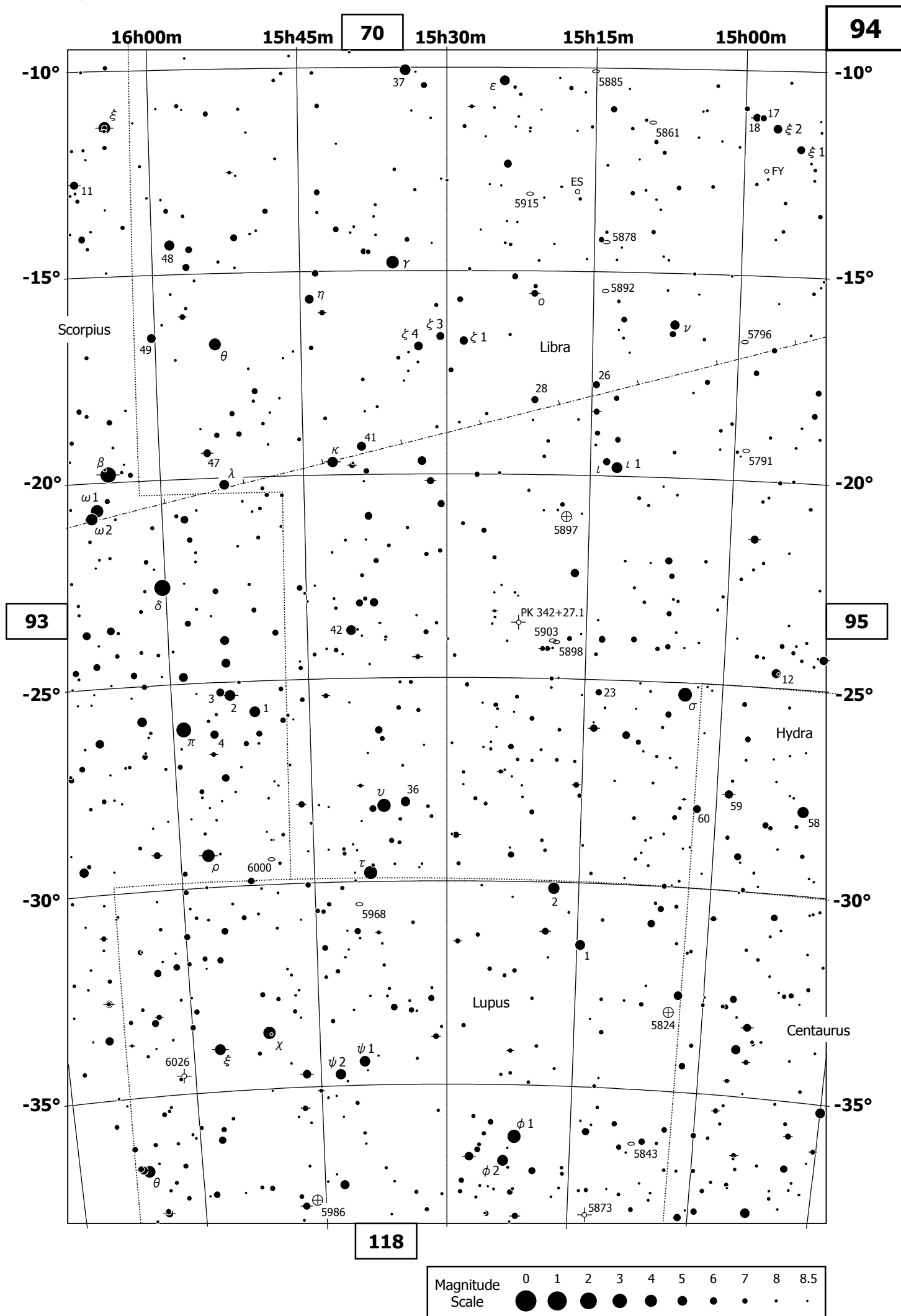


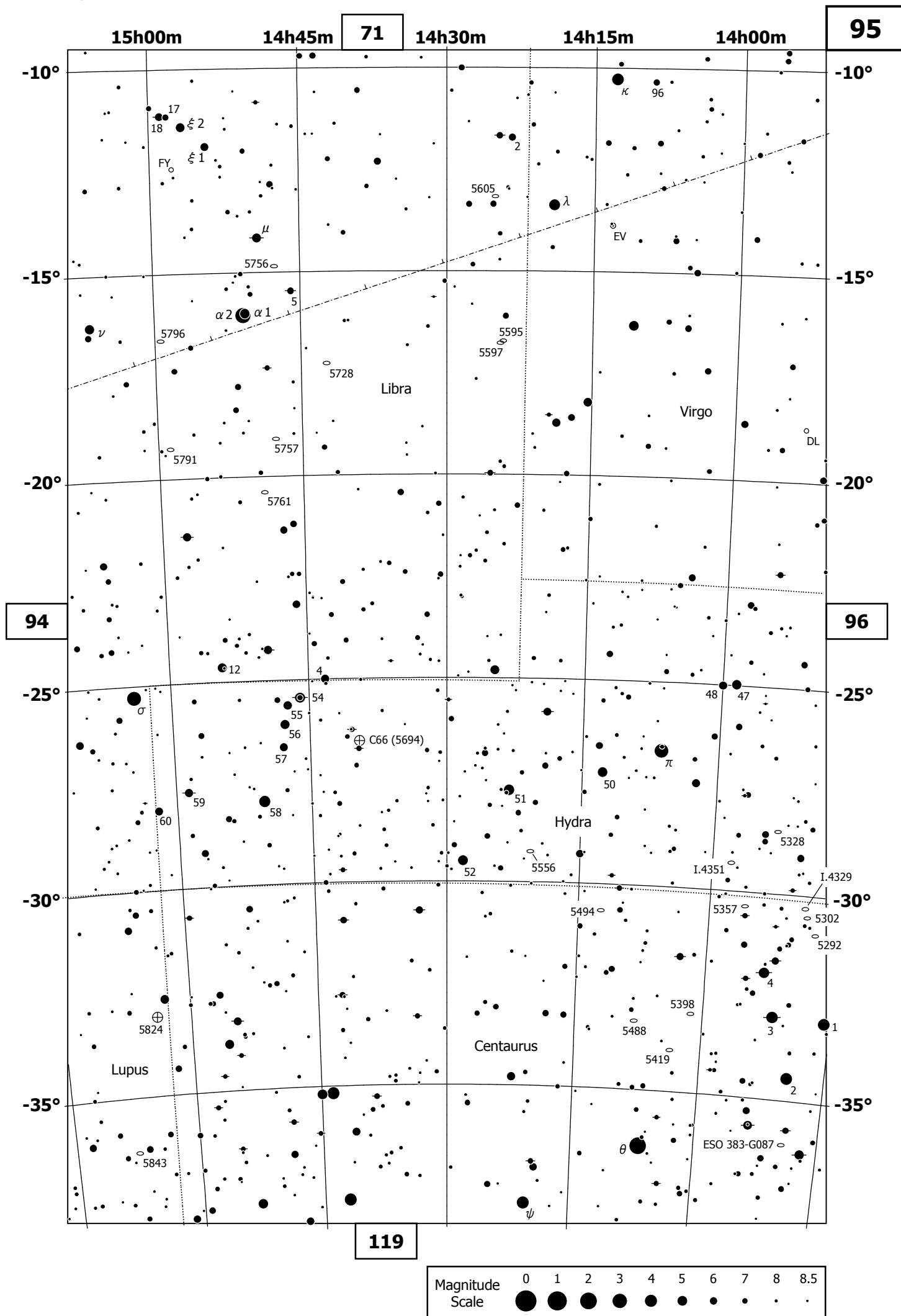


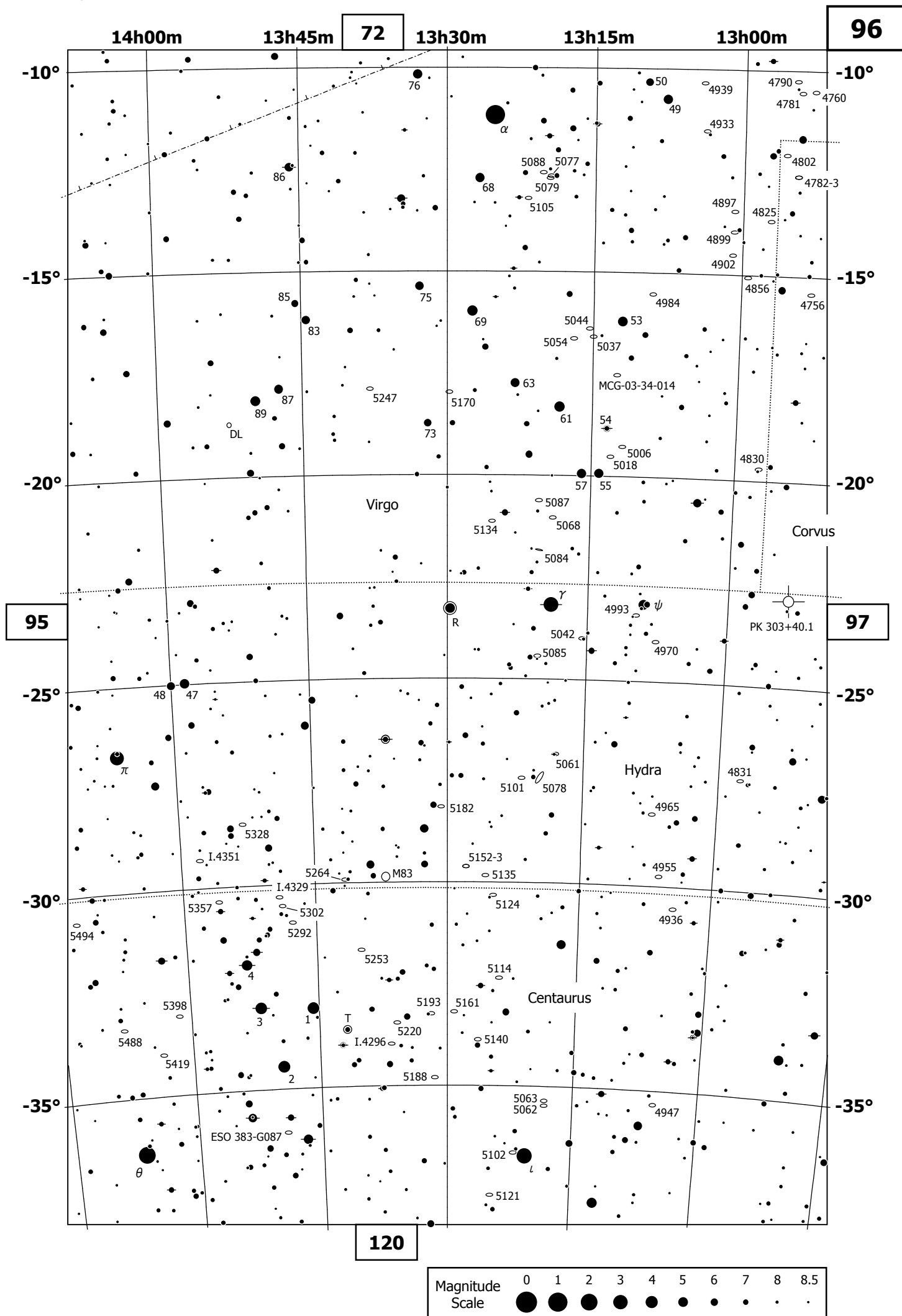


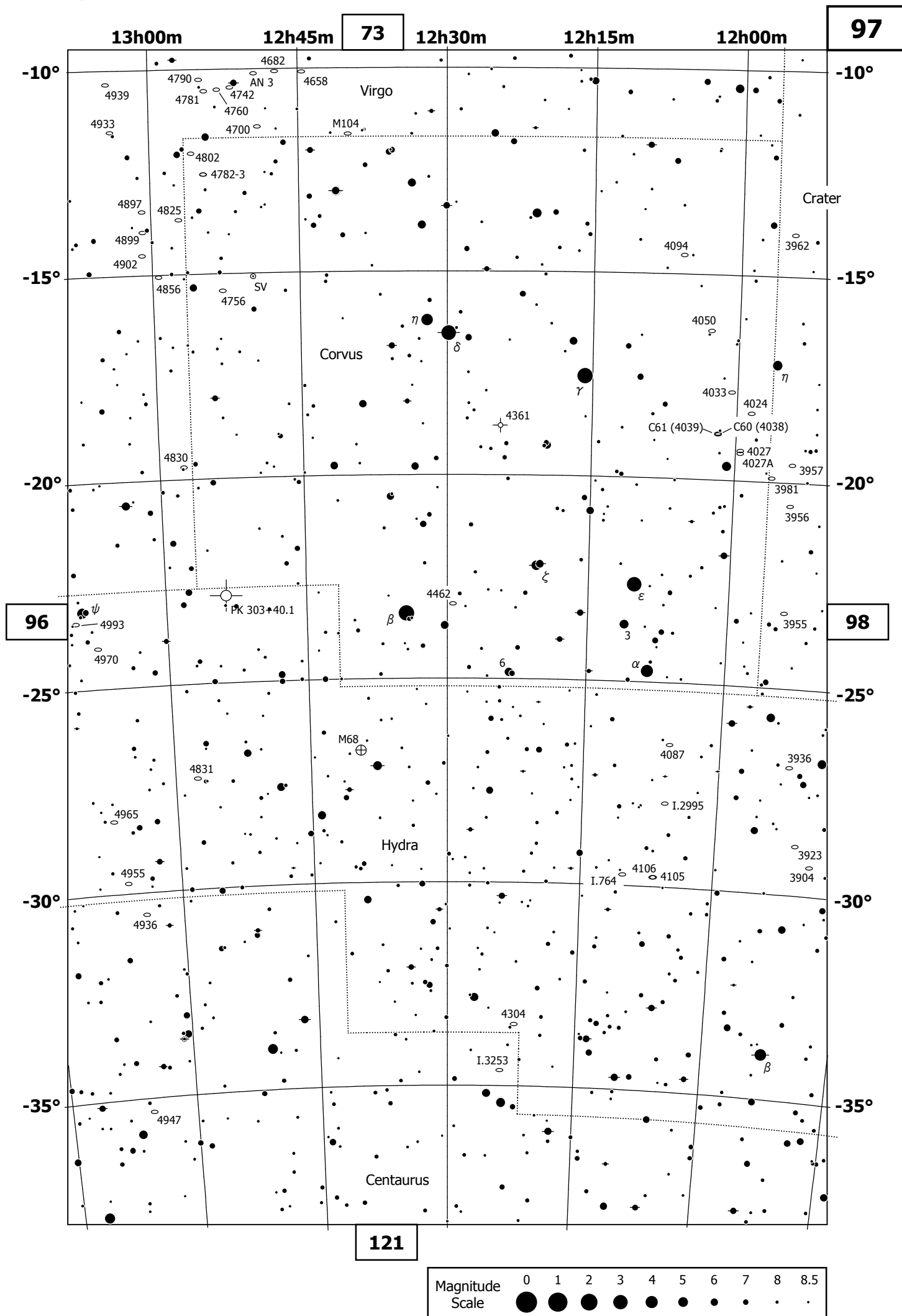


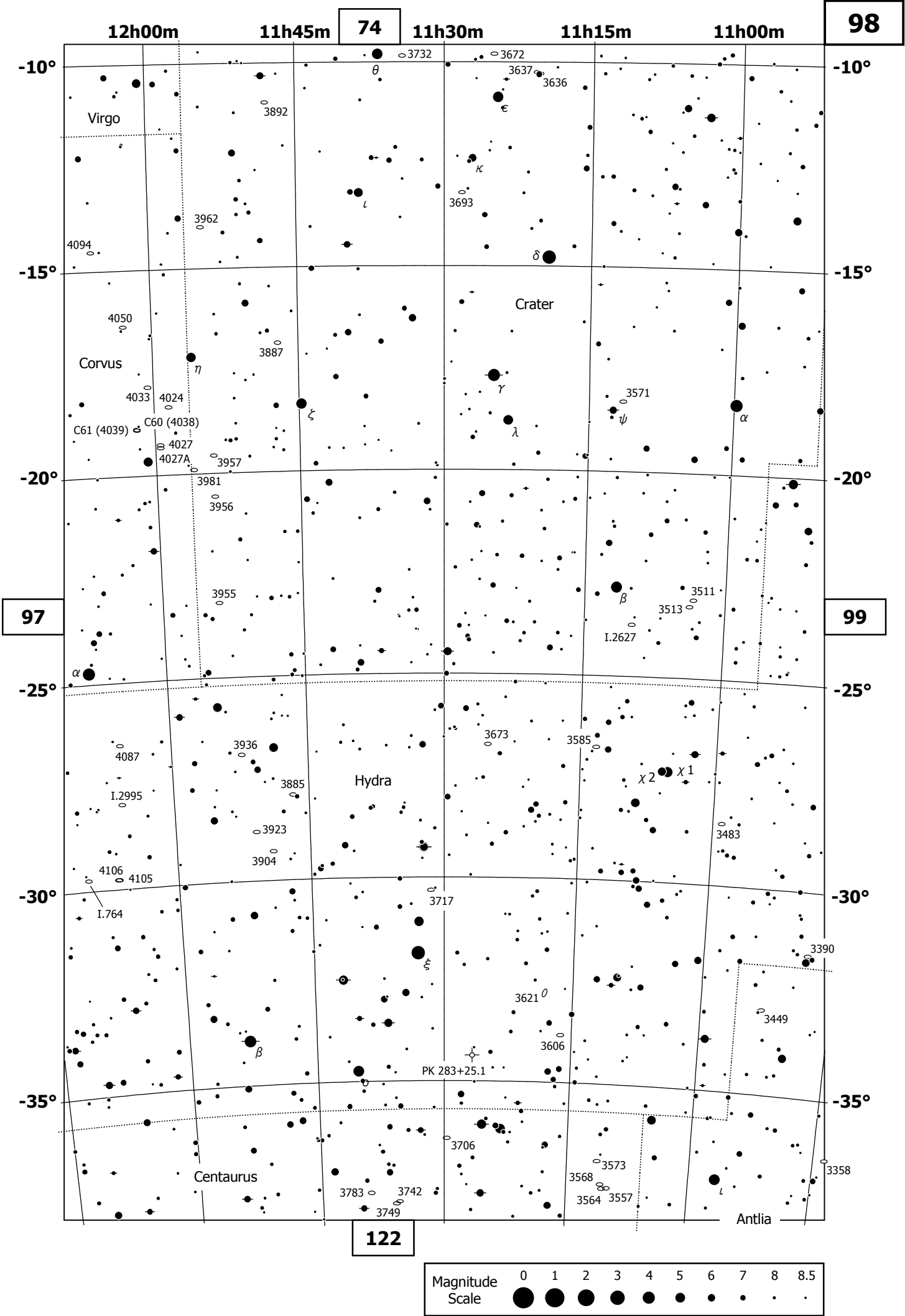


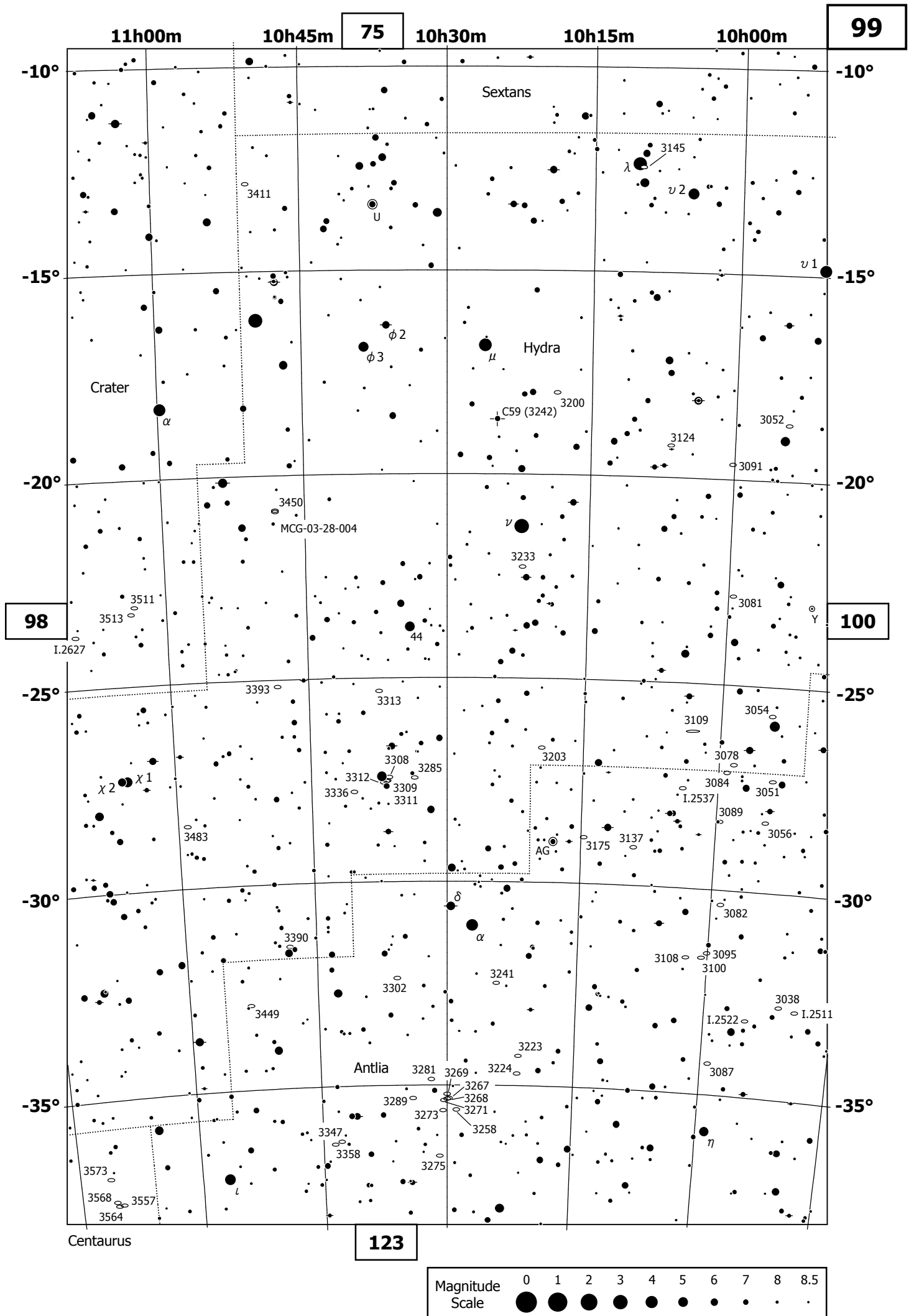


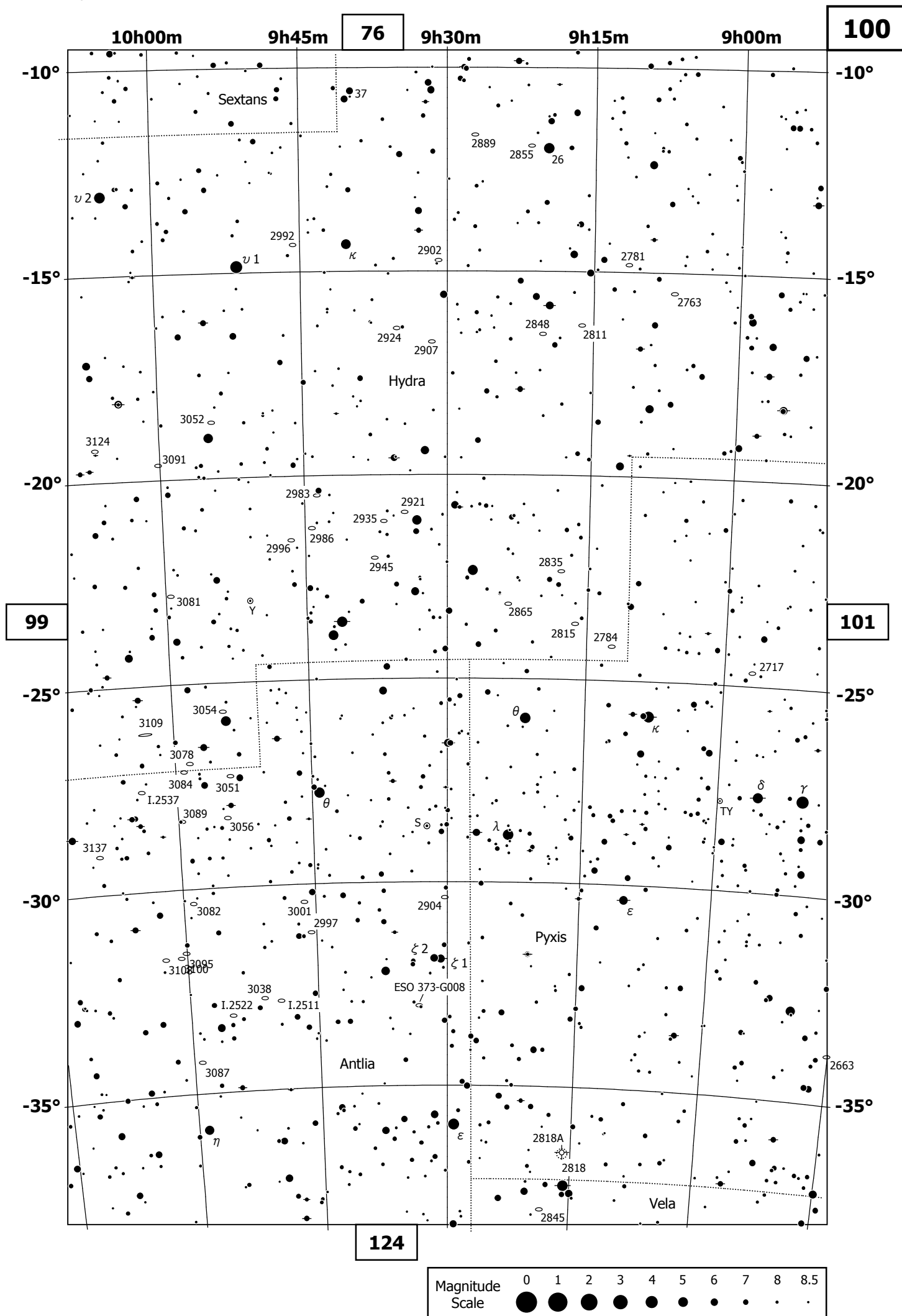


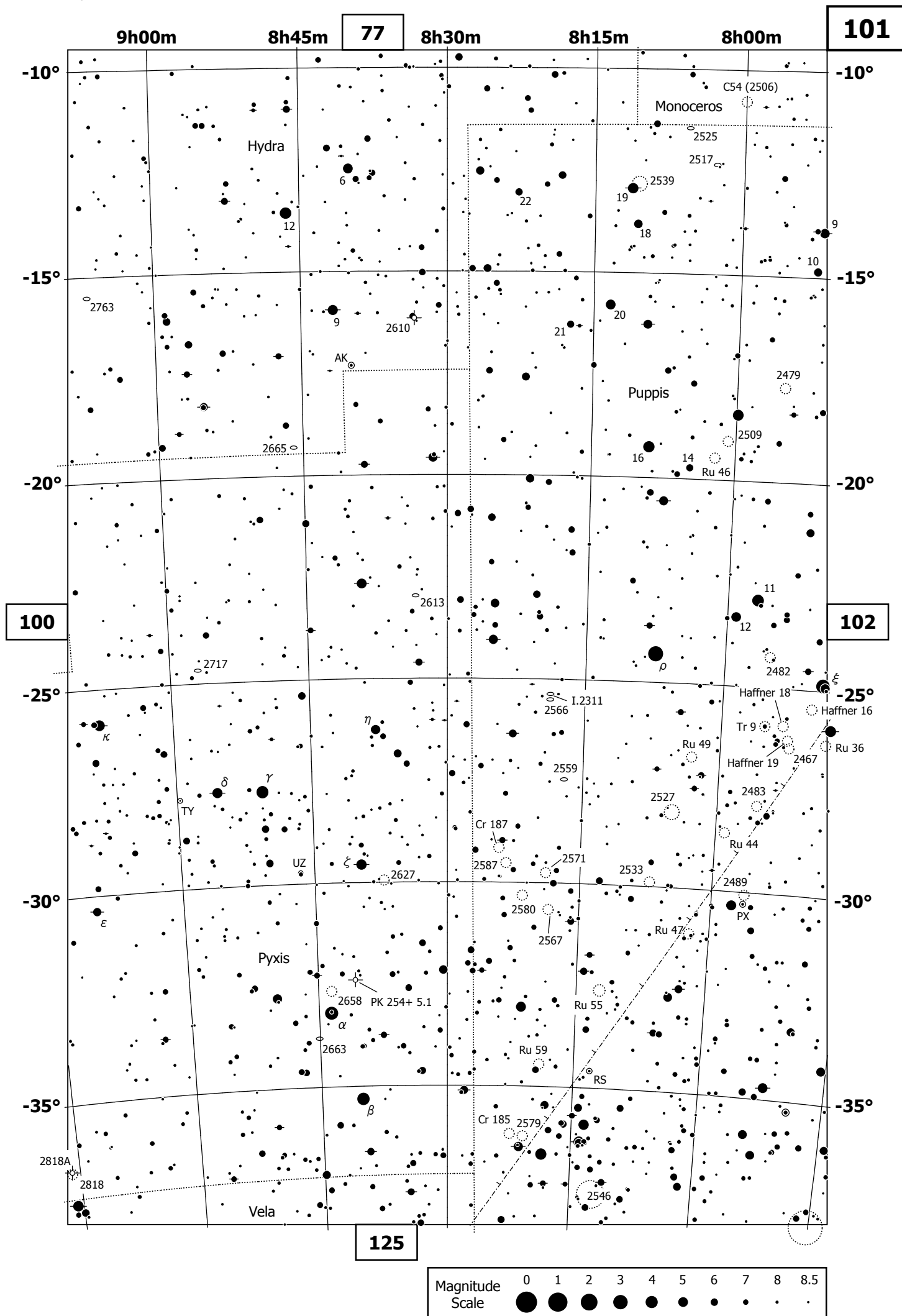


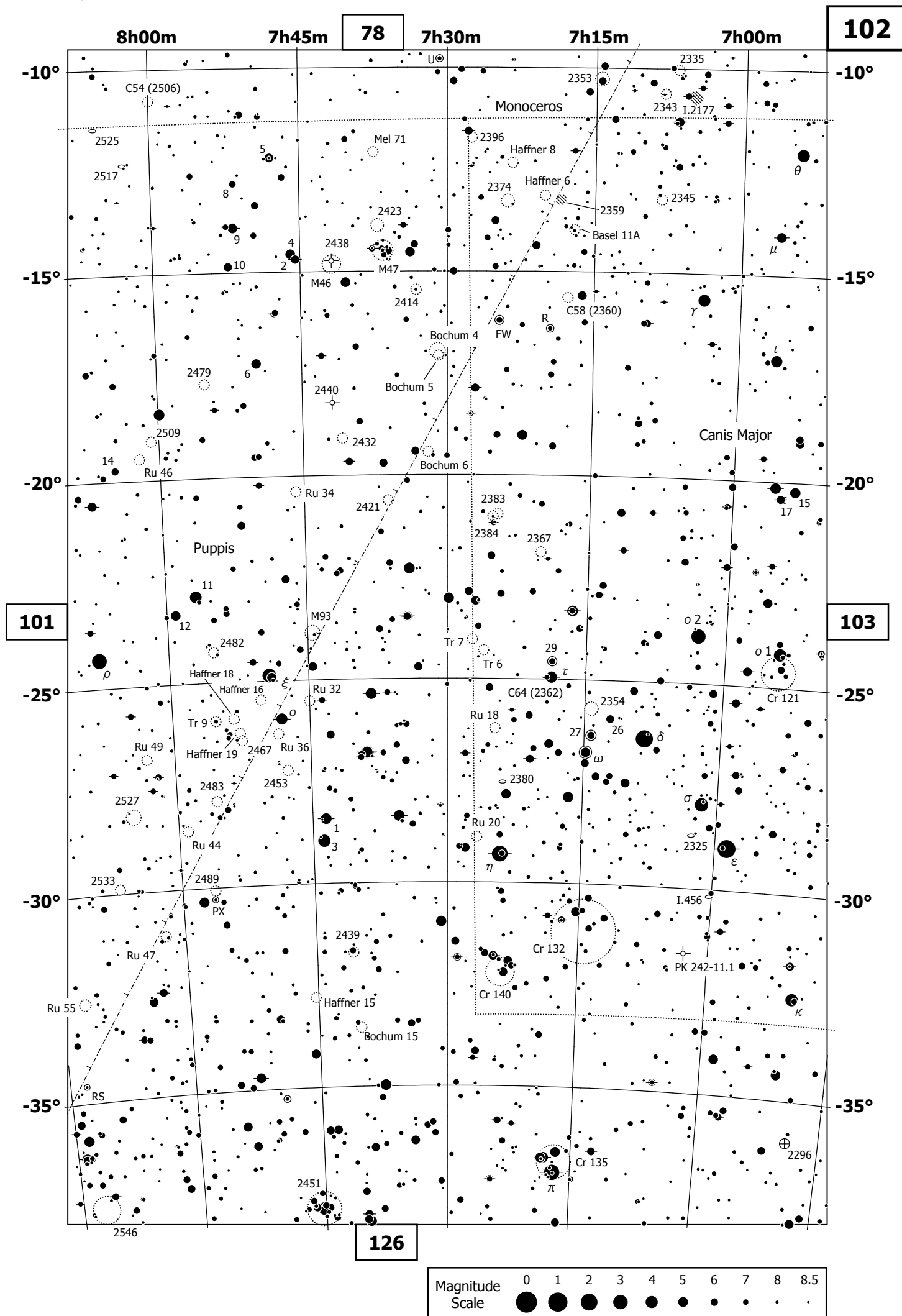


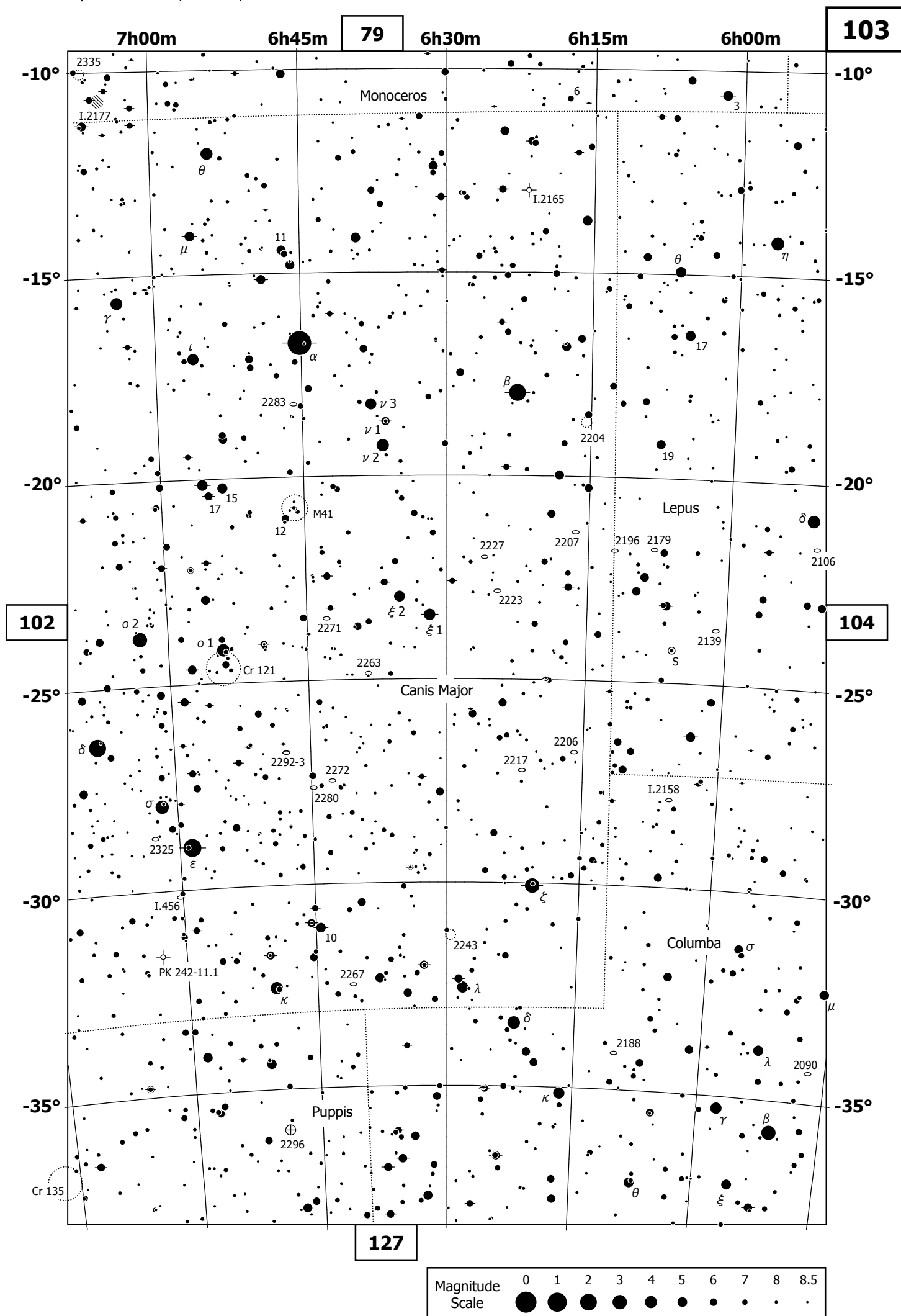


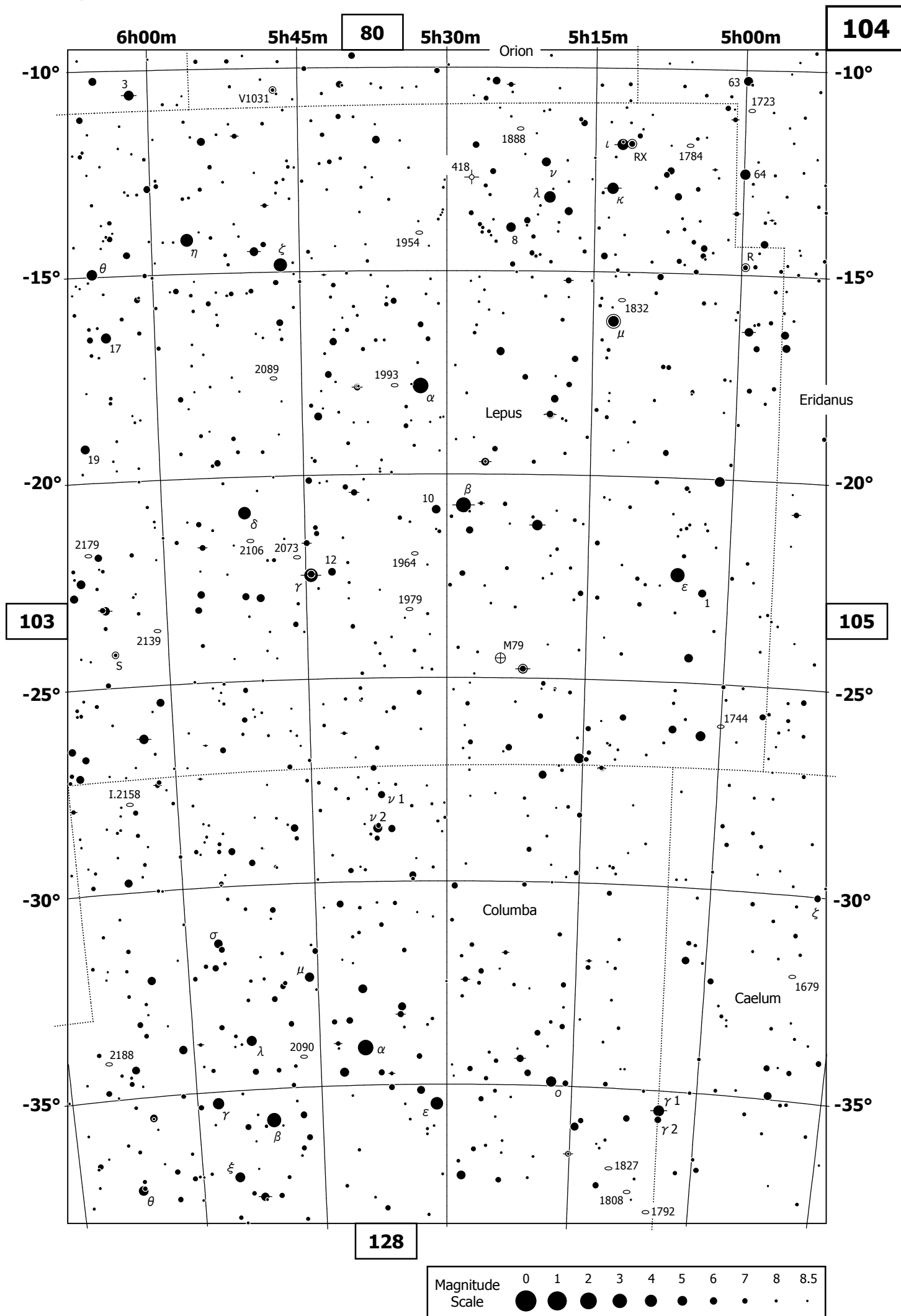


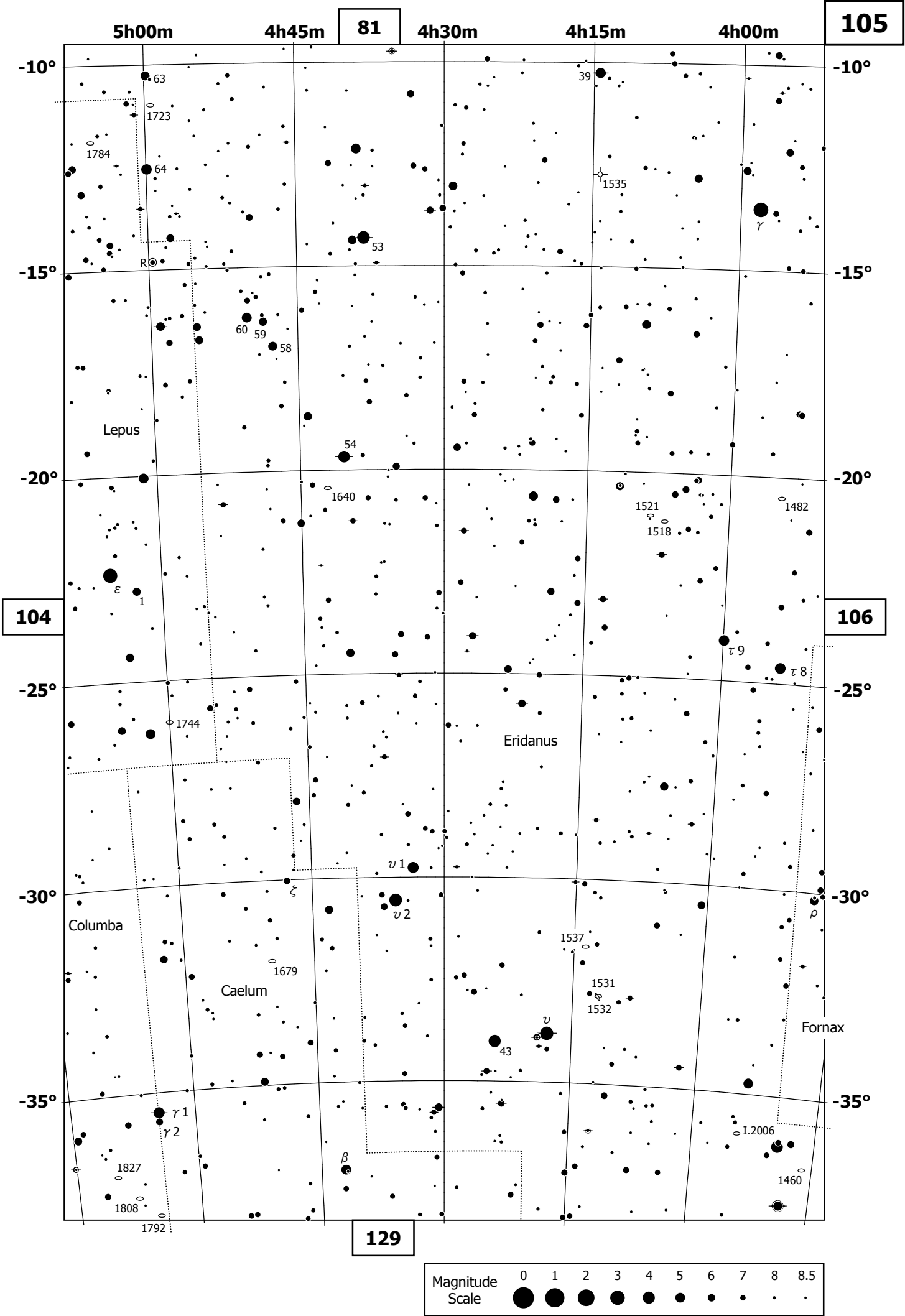


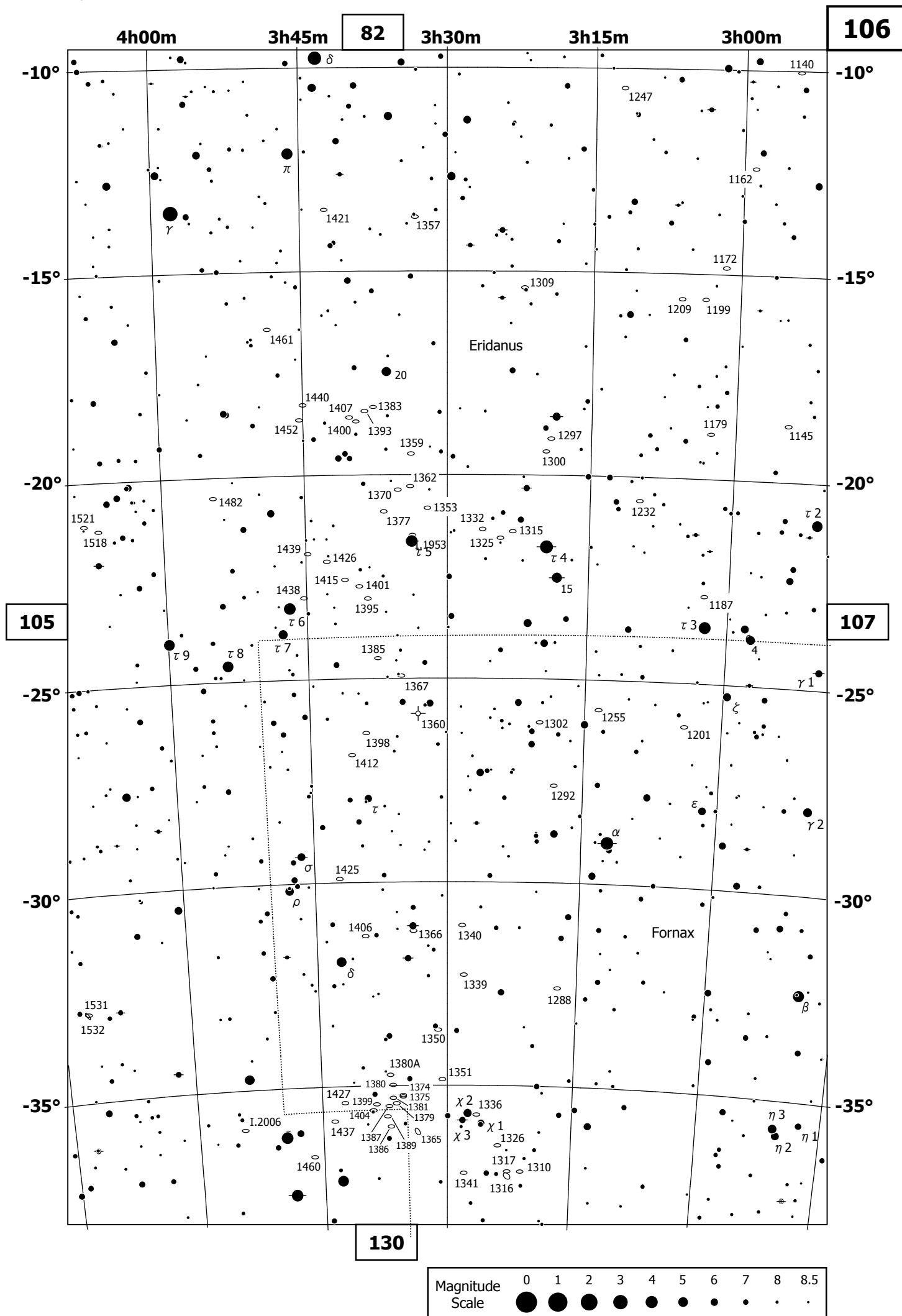


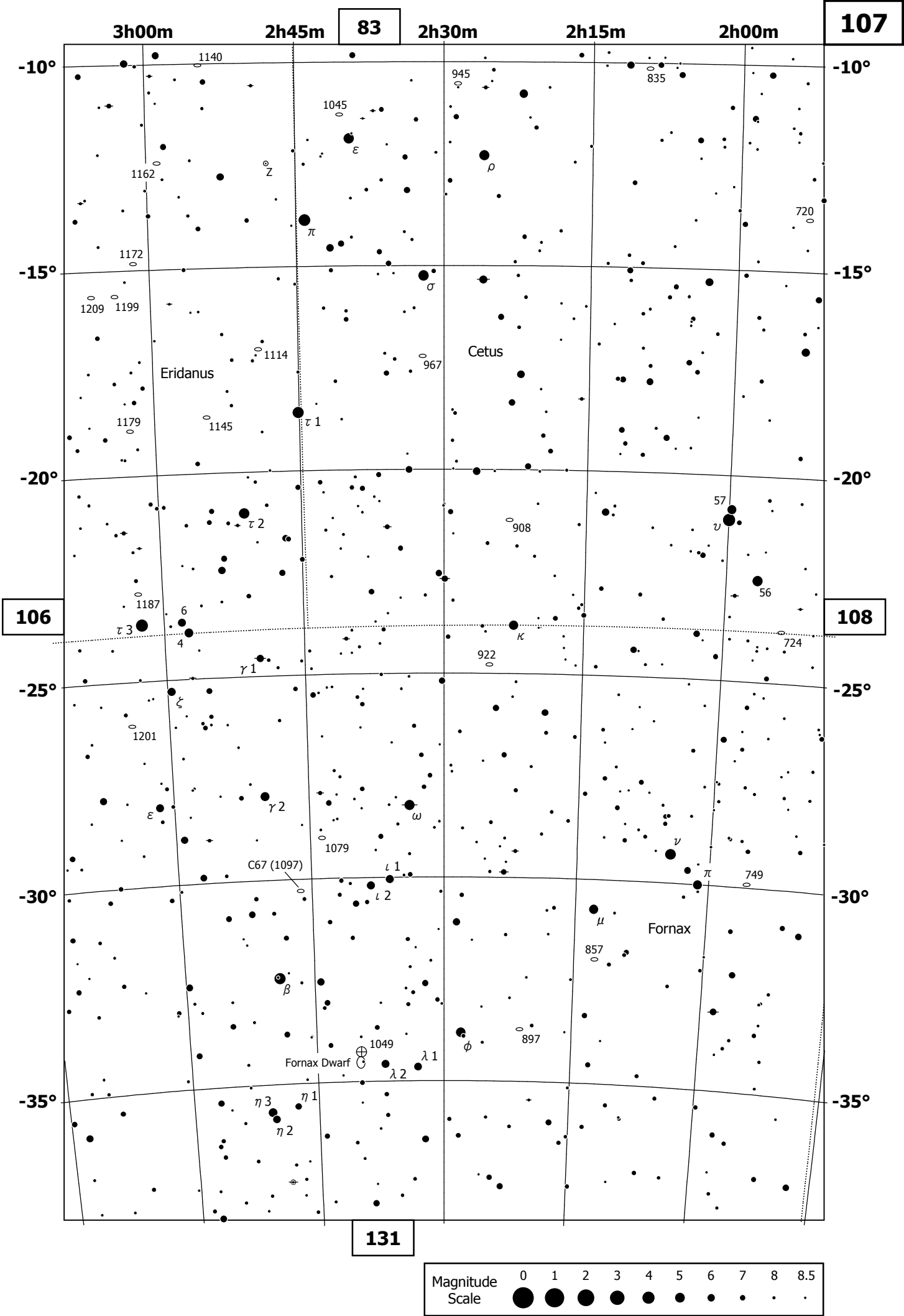


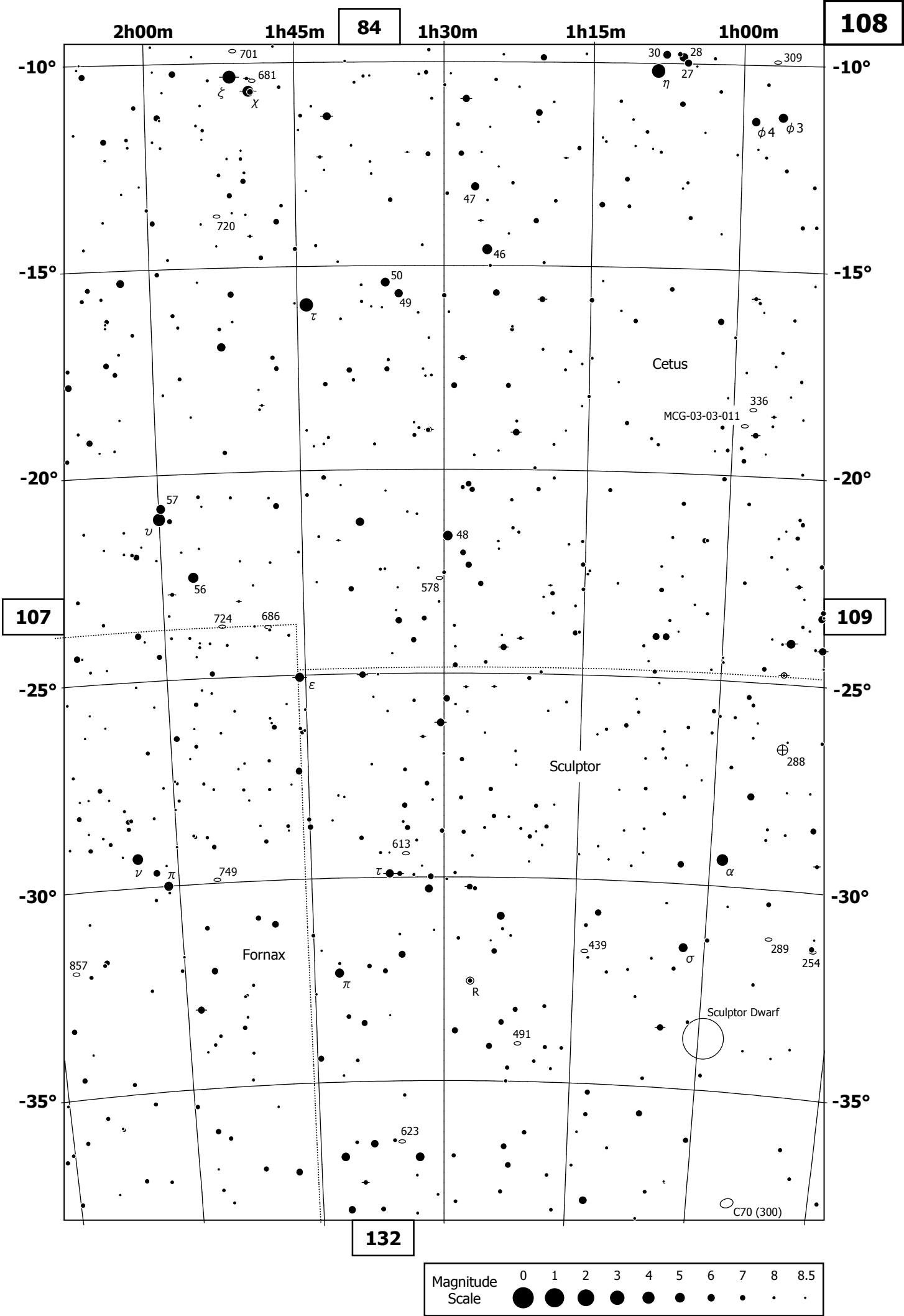


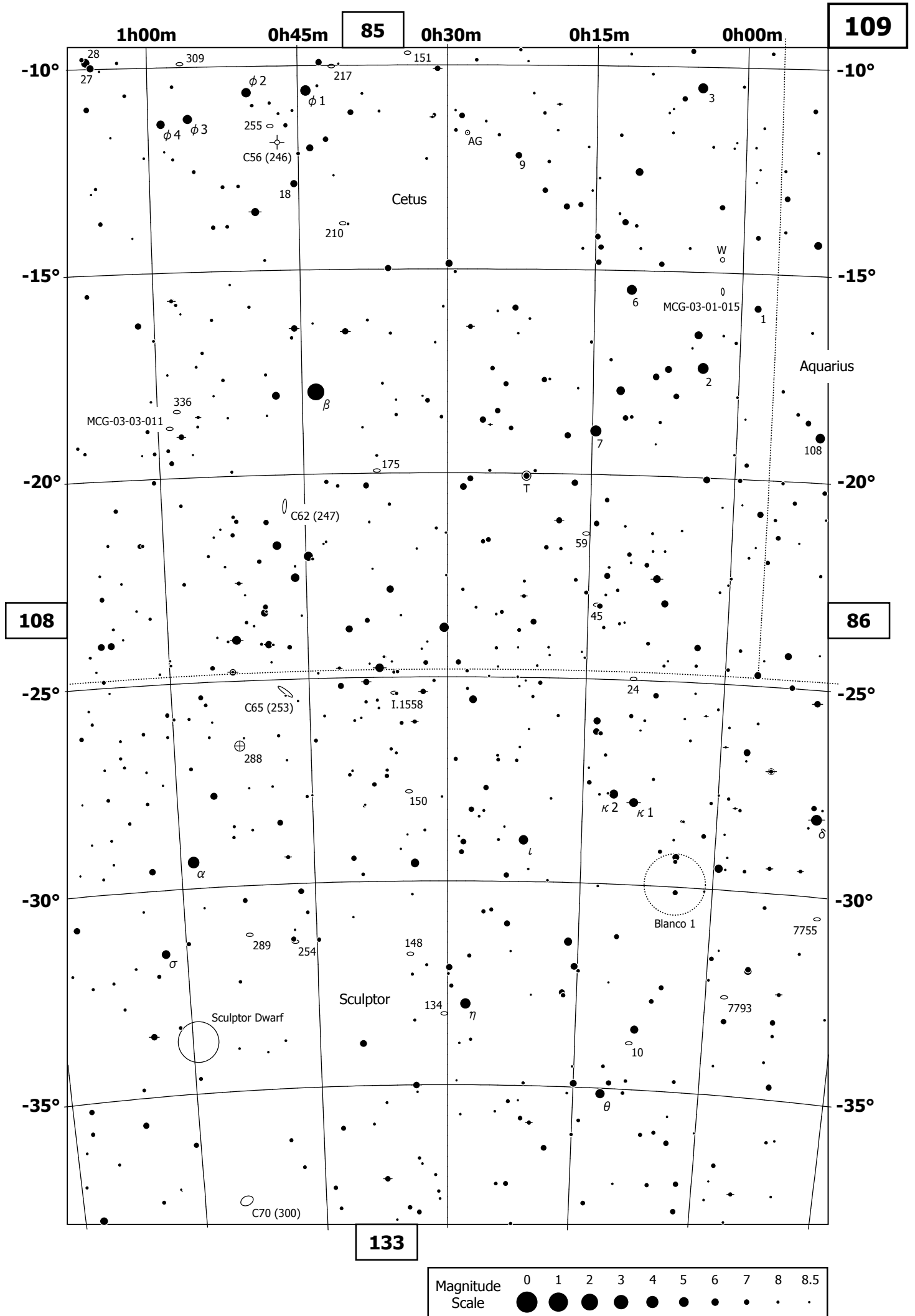












Deep Sky Object List in Chart No.1

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 1		x			NGC 188	OPNCL	CEP	00 47.5	+85 14	8.1	14.0 m			II 2 r	Cl,vL,R,150-200 st 10...18
						NGC 2268	GALXY	CAM	07 14.3	+84 23	11.5	3.3 m	2 m	63	SBbc	pF,pL,IE
			x			NGC 2276	GALXY	CEP	07 27.2	+85 45	11.4	2.8 m	2.7 m	20	SBc Ring	pL,F,lbM
			x			NGC 2300	GALXY	CEP	07 32.3	+85 43	11	3.5 m	2.4 m	80	E1	pB,pL,IE,bM
						IC 512	GALXY	CAM	09 03.8	+85 30	12.2	2.9 m	2.3 m	175	Sc	F,S,R,gbM

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Based on SAC Database, v7.2

Deep Sky Object List in Chart No.2

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 9					Sh2-155	BRTNB	CEP	22 56.8	+62 37	99.9	50 m	30 m		E	
						PK 116+ 8.1	PLNNB	CEP	23 31.9	+70 23	12.2	42 s	36 s		3	
					x	NGC 7762	OPNCL	CEP	23 49.8	+68 02	10	11.0 m			II 2 p	Cl,pRi,pC,*11...15
						King 21	OPNCL	CAS	23 49.9	+62 43	9.8	2.5 m			III 3 m	13"-pF,pS; 17* at 135X

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Deep Sky Object List in Chart No.3

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 7142	OPNCL	CEP	21 45.2	+65 46	9.3	4.3 m			II 2 r	Cl,cL,cRi,pC,*11..14
				x		NGC 7160	OPNCL	CEP	21 53.7	+62 36	6.1	7.0 m			II 3 p	Cl,P,vIC
						NGC 6869	GALXY	DRA	20 00.7	+66 14	12	1.6 m	1.3 m		SO	pB,pS,R
			x			NGC 6951	GALXY	CEP	20 37.2	+66 06	10.6	3.9 m	3.5 m	170	SBbc	pB,pL,IE
	C 4		x		x	NGC 7023	CL+NB	CEP	21 00.5	+68 10	7.1	5.0 m			E+*	*7 in eF,eL,neby
		x			x	NGC 7129	CL+NB	CEP	21 43.0	+66 07	11.5	2.7 m			IV 2 p n:b	!,cF,pL,gbM***
					x	NGC 7139	PLNNB	CEP	21 46.1	+63 48	13.5	86 s	70 s		3b	vF,cS,R,r

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Deep Sky Object List in Chart No.4

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x			NGC 6643	GALXY	DRA	18 19.8	+74 34	11.1	3.7 m	1.8 m	38	Sc	pB,pL,E50,2st p
						NGC 6654	GALXY	DRA	18 24.1	+73 11	12	2.6 m	2.1 m	10	SBO-a Ring	*12,13 in np B,pL neby
						NGC 6690	GALXY	DRA	18 34.8	+70 31	12.5	4 m	1.3 m	171	SBcd	pF,L,R,bet 2*

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Deep Sky Object List in Chart No.5

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6217	GALXY	UMI	16 32.6	+78 12	11.2	3.3 m	3.2 m		SBbc Ring	B,cL,IE,sIBM
	C 6	x	x	x		NGC 6543	PLNNB	DRA	17 58.6	+66 38	8.3	22 s	16 s		3a(2)	vB,pS,sbMvSN
						NGC 6140	GALXY	DRA	16 21.0	+65 23	11.3	6.3 m	4.6 m	95	SBc/P	cF,pL,iR
						NGC 6232	GALXY	DRA	16 43.3	+70 38	12.5	1.6 m	1.6 m		SBa	pF,pL,IE
						NGC 6236	GALXY	DRA	16 44.6	+70 47	11.9	2.9 m	1.6 m	15	SBc	F,pL
					x	NGC 6340	GALXY	DRA	17 10.4	+72 18	11	3 m	2.8 m	120	Sa	cF,pL,R,vgmbM
						NGC 6395	GALXY	DRA	17 26.5	+71 06	12.3	2.4 m	0.7 m	15	Scp	vF,pL,IE,D*n
						NGC 6412	GALXY	DRA	17 29.6	+75 42	11.8	2.5 m	2.4 m	0	SBc	cL,R,vgbM,rr
						NGC 6434	GALXY	DRA	17 36.8	+72 05	12.4	2.3 m	1 m	100	SBbc	vF,vS,R,stellar,*8s
		x				NGC 6503	GALXY	DRA	17 49.5	+70 09	10.2	7 m	2.5 m	123	Sc	pF,L,mE,*9f4'

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Deep Sky Object List in Chart No.6

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5832	GALXY	UMI	14 57.8	+71 41	12.1	3.6 m	2.2 m	45	SBb	pB,cL,iR,bp,r
						UGC 9749	GALXY	UMI	15 08.8	+67 12	10.9	27.3 m	16.0 m	70	dE6	13"-vF,L,E 1.5X1 at 60X; low surface brghtnss
						NGC 5949	GALXY	DRA	15 28.0	+64 46	12	2.2 m	1 m	147	Sbc	F,S,IE45,vglbM
					x	NGC 6015	GALXY	DRA	15 51.4	+62 18	11.1	5.4 m	2.1 m	28	Sc	B,mE
						NGC 6048	GALXY	UMI	15 57.5	+70 41	12.3	2.2 m	1.7 m	140	E2	F,R,bM

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Deep Sky Object List in Chart No.7 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 4041	GALXY	UMA	12 02.2	+62 08	11.3	2.7 m	2.6 m		Sbc	B,cL,R,g,psvmbMrN,vB cent w comp struct
						NGC 4108	GALXY	DRA	12 06.7	+67 10	12.3	1.7 m	1.4 m	105	Sc	B,S,R,gbM,f of 3
						NGC 4125	GALXY	DRA	12 08.1	+65 10	9.7	6 m	5.1 m	95	Elliptical	pB,pL,cE,mbM
						NGC 4128	GALXY	DRA	12 08.5	+68 46	12	2.4 m	0.9 m	58	SO	cB,IE,bM,svBN,spindle shape
					x	NGC 4133	GALXY	DRA	12 08.8	+74 54	12.3	1.8 m	1.3 m	125	SBb	pB,cL,R,gmbM
						NGC 4210	GALXY	DRA	12 15.3	+65 59	12.5	2 m	1.6 m	105	SBb	pF,pS,R,vgbM,sBN in narrow B bar
						NGC 4221	GALXY	DRA	12 16.0	+66 14	12.3	2 m	1.4 m	25	SBO-a	pB,S,R,psbM,vsvBN on B bar
	C 3		x		x	NGC 4236	GALXY	DRA	12 16.7	+69 28	9.6	22.6 m	6.9 m	162	SBd	vF,eL,mE160,vgbM
					x	NGC 4250	GALXY	DRA	12 17.4	+70 48	11.8	2.3 m	1.9 m	168	SBO-a	pB,S,R,pgbM,vsvBN
					x	NGC 4256	GALXY	DRA	12 18.7	+65 54	11.9	4.1 m	0.7 m	42	Sb	pB,L,cE38,bMBN,sBN in B bulge
					x	NGC 4291	GALXY	DRA	12 20.3	+75 22	11.5	2 m	1.7 m	110	Elliptical	pB,vS,R,lbM,3*f
					x	NGC 4319	GALXY	DRA	12 21.7	+75 19	11.9	2.8 m	2.1 m	160	SBab	pB,pS,vIE,sbM,vsvBN in bar
						NGC 4332	GALXY	DRA	12 22.8	+65 51	12.2	2.1 m	1.5 m	130	SBa	pF,S,vIE,vgbM,B bar,2 F smooth arms
						NGC 4386	GALXY	DRA	12 24.5	+75 32	11.7	2.6 m	1.6 m	135	SBO	pB,cL,IE,psmbM
						NGC 4521	GALXY	DRA	12 32.8	+63 56	12.2	2.5 m	0.6 m	167	Sa	pB,S,pmE,pgbM,*10 p 12sec
			x			IC 3568	PLNNB	CAM	12 33.1	+82 34	11.6	18 s			2(2a)	planetary or neb *9.5,*13 p 15"

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Deep Sky Object List in Chart No.7 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 4545	GALXY	DRA	12 34.6	+63 31	12.3	2.5 m	1.5 m	8	SBc	F,L,iR,vgbM,S* nf
						NGC 4589	GALXY	DRA	12 37.4	+74 11	10.7	3.4 m	2.8 m	90	Elliptical	cB,L,IE,pgmbM
						NGC 4648	GALXY	DRA	12 41.7	+74 25	12	1.8 m	1.2 m	70	Ellip Ring	pB,cS,R,gbM,**p,vBN
						NGC 4750	GALXY	DRA	12 50.1	+72 52	11.2	2.1 m	1.9 m		Sap	pB,L,R,vg,vsbM,vsvBN
						UGC 8201	GALXY	DRA	13 06.3	+67 42	12.5	3.2 m	2.2 m		Ir+	
						MCG +10-19-040	GALXY	UMA	13 08.7	+62 17	12	0.5 m	0.4 m			Inner Regions Very Black-- MCG
						NGC 5205	GALXY	UMA	13 30.1	+62 31	12.2	3.1 m	1.8 m	10	Sb	vF,pS,R,bet 2 vf *
						NGC 5218	GALXY	UMA	13 32.2	+62 46	12.3	1.8 m	1.3 m	100	SBb/P	pB,pL,R,gbM

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Deep Sky Object List in Chart No.8

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 3077	GALXY	UMA	10 03.3	+68 44	9.9	5.2 m	4.7 m	45	Sd	cB,cL,mbM,R w ray
			x	x		NGC 3147	GALXY	DRA	10 16.9	+73 24	10.6	4.3 m	3.7 m	155	Sbc	vB,L,R,vgsvmbM
					x	NGC 3065	GALXY	UMA	10 01.9	+72 10	12.5	1.8 m	1.8 m		SO	pF,vS,R,bM,*11 nr
						NGC 3183	GALXY	DRA	10 21.8	+74 11	11.9	2.3 m	1.4 m	170	SBbc	F,pL,E,lbM
						UGC 5612	GALXY	UMA	10 24.0	+70 53	12.1	3.4 m	2.3 m	165	SB+	
			x			IC 2574	GALXY	UMA	10 28.7	+68 28	13	9.0 m	4.0 m		lr	
						NGC 3259	GALXY	UMA	10 32.6	+65 02	12.1	2.2 m	1.1 m	20	SBbc	F,S,R,gbM
						NGC 3266	GALXY	UMA	10 33.3	+64 45	12.4	1.4 m	1.2 m	105	SBO	cF,vS,R,psmbM *
						NGC 3329	GALXY	DRA	10 44.7	+76 49	12.2	1.9 m	1.1 m	140	Sb	pB,S,IE,psmbM
			x		x	NGC 3359	GALXY	UMA	10 46.6	+63 13	10.6	7.5 m	4.2 m	170	SBc	pB,L,E 0,glbM
						NGC 3348	GALXY	UMA	10 47.2	+72 50	11.1	2 m	2 m		Elliptical	B,S,iIE,psbM,*11 282,21"
						NGC 3394	GALXY	UMA	10 50.7	+65 44	12.4	1.9 m	1.4 m	35	Sc Ring	cF,S,IE,vgbM
						NGC 3403	GALXY	DRA	10 53.9	+73 41	12.2	3 m	1.3 m	73	Sbc	pF,L,iE,vgbM
					x	NGC 3516	GALXY	UMA	11 06.8	+72 34	11.7	1.9 m	1.4 m	45	SBO Ring	pB,vS,iR,psmbM *
						NGC 3562	GALXY	DRA	11 13.0	+72 53	12.2	1.7 m	1.3 m	165	Elliptical	pF,pS,IE,gbM,*15,22,70"
					x	NGC 3622	GALXY	UMA	11 20.2	+67 14	13.2	1.2 m	0.5 m	7	S pec	pB,S,R,gbM
					x	NGC 3668	GALXY	UMA	11 25.5	+63 27	12.3	1.7 m	1.3 m	135	Sbc	F,pS,iR,gbM,*9 np
					x	NGC 3682	GALXY	DRA	11 27.7	+66 35	12.5	1.7 m	1.1 m	95	Sa	cB,S,iR,spmbMN
						NGC 3735	GALXY	DRA	11 36.0	+70 32	11.8	4 m	0.8 m	131	Sc	pB,L,mE 130,mbM

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Deep Sky Object List in Chart No.9 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 82			!!*	x		NGC 3034	GALXY	UMA	09 55.9	+69 41	8.4	10.5 m	5.1 m	65	Sd	vB,vL,vmE(ray)
		x		x		NGC 2655	GALXY	CAM	08 55.6	+78 13	10.1	4.9 m	4.1 m	85	SBO-a	vB,cL,IE 90,gsymbM,diff
				x		NGC 2787	GALXY	UMA	09 19.3	+69 12	10.8	3.1 m	1.8 m	117	SBO-a	B,pL,IE 90 deg,mbM,r,vS* sf inv
			x	x		NGC 2976	GALXY	UMA	09 47.2	+67 55	10.2	6.2 m	3.1 m	143	Scp	B,vL,mE152,st inv
				x		NGC 2985	GALXY	UMA	09 50.4	+72 17	10.4	4.6 m	3.4 m	175	Sb	vB,cL,R,psmbM,* inv f
M 81			!!*			NGC 3031	GALXY	UMA	09 55.6	+69 04	6.9	24.9 m	11.5 m	157	Sb	! eB,eL,E 156,gsymbM,BN
			x			NGC 2523	GALXY	CAM	08 15.0	+73 35	11.9	2.9 m	1.8 m	57	SBab	pB,pL,IE,lbM,* nr,Theta shape
						UGC 4305	GALXY	UMA	08 18.9	+70 43	11.1	7.6 m	6.2 m	15	Ir+	
						NGC 2551	GALXY	CAM	08 24.8	+73 25	12.1	1.6 m	1 m	55	Sa	vF,S,F*in centre
						NGC 2591	GALXY	CAM	08 37.4	+78 02	12.3	3 m	0.6 m	32	Sc	F,S,E,lbM
						NGC 2629	GALXY	UMA	08 47.3	+72 59	12.3	2.3 m	1.8 m	105	SO	vF,S,stellar
						NGC 2633	GALXY	CAM	08 48.1	+74 06	12.2	2.3 m	1.5 m	175	SBb/P	F,S,IE
						NGC 2634	GALXY	CAM	08 48.4	+73 58	12	2 m	2 m		E1	F,S,IE
						NGC 2646	GALXY	CAM	08 50.4	+73 28	12.1	1.5 m	1.5 m		SBO	vF,S,2 F* 2'.5 sf
						MCG +13-07-007	GALXY	CAM	08 53.2	+76 30	12	0.9 m	0.4 m			Inner Regions Very Black-- MCG
						NGC 2715	GALXY	CAM	09 08.1	+78 05	11.2	4.8 m	1.6 m	22	SBc	pB,L,E
						NGC 2732	GALXY	CAM	09 13.4	+79 11	11.9	2.1 m	0.9 m	67	SO	pB,S,E 45 deg,*13 nf,lenticular
						NGC 2748	GALXY	CAM	09 13.7	+76 29	11.7	3.1 m	1.1 m	38	Sbc	pB,pL,E,vglbM

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Deep Sky Object List in Chart No.9 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						UGC 4841	GALXY	CAM	09 14.8	+74 14	12.4	2.8 m	2.3 m	150	S(B)d	
						IC 529	GALXY	CAM	09 18.5	+73 46	11.9	3.7 m	1.7 m	145	Sc	pF,pL,E
					x	NGC 2805	GALXY	UMA	09 20.3	+64 06	11	6.3 m	4.5 m	125	SBcd Ring	vF,L,R,mbM
					x	NGC 2880	GALXY	UMA	09 29.6	+62 29	11.5	2.4 m	1.5 m	140	E3	B,cS,R,mbM,am st,in field of 23 Ursa Majoris
						UGC 5139	GALXY	UMA	09 40.5	+71 11	12.5	3.5 m	3.0 m		Ir+	
						NGC 2977	GALXY	DRA	09 43.8	+74 52	12.5	1.8 m	0.8 m	145	Sb	cB,pL,iF
						NGC 3027	GALXY	UMA	09 55.7	+72 12	11.8	4.2 m	1.8 m	130	SBcd	vF,vL,IE,r

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Deep Sky Object List in Chart No.10

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 7	x	x	x		NGC 2403	GALXY	CAM	07 36.8	+65 36	8.5	23.4 m	11.8 m	127	SBc	!! cB,eL,vmE,vgmbMN
						NGC 2146	GALXY	CAM	06 18.6	+78 21	10.6	5.7 m	3.3 m	56	SBab/P	pB,2'l,Ie
					x	NGC 2253	OPNCL	CAM	06 43.7	+65 12	13.1p	1.4 m	1.1 m	135	1	vF,* eS
						NGC 2256	GALXY	CAM	06 47.2	+74 14	12.5	2.3 m	2 m		SBO	F,R,*9.5 3' sf
						NGC 2258	GALXY	CAM	06 47.8	+74 29	11.9	2.3 m	1.5 m	150	SO	F,2* 10-11 f
						UGC 3580	GALXY	CAM	06 55.5	+69 35	11.8	4.6 m	2.2 m	3	Sa	
						NGC 2314	GALXY	CAM	07 10.5	+75 20	12.2	1.7 m	1.4 m	25	E1p	vF,S,R
						UGC 3730	GALXY	CAM	07 14.3	+73 29	12.5	2.7 m	1.0 m	165	Ring	
						IC 2179	GALXY	CAM	07 15.5	+64 56	12.4	1.7 m	1.7 m		E1	*13 IN vF,vS Neb
					x	NGC 2347	GALXY	CAM	07 16.1	+64 43	12.4	1.8 m	1.3 m	175	Sb	vF,S,R,lbM
						NGC 2336	GALXY	CAM	07 27.1	+80 11	10.4	6.8 m	3.7 m	178	SBbc Ring	pB,pL,R,2*11 nr
			x		x	NGC 2366	GALXY	CAM	07 28.9	+69 13	11.1	7.8 m	2.6 m	25	lr	vF,pL,mbM,vS*inv,curved tails
						MCG +11-10-017	GALXY	CAM	07 41.7	+64 42	12					
						NGC 2441	GALXY	CAM	07 51.9	+73 01	12.2	2 m	1.8 m		SBb Ring	vF,pS

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Deep Sky Object List in Chart No.11

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 1502	OPNCL	CAM	04 07.8	+62 20	6.9	8 m			II 3 p	Cl,pRi,cC,iF
				x		NGC 1961	GALXY	CAM	05 42.1	+69 23	11	4.5 m	3.1 m	85	SBbc	cF,pL,iF,mbM,er,* inv
						IC 356	GALXY	CAM	04 07.8	+69 49	10.5	4.5 m	3.5 m	90	Sbp	pF,pL,BM,* 8.5 4' north
						NGC 1530	GALXY	CAM	04 23.4	+75 18	11.4	4.4 m	2.5 m	0	SBb	pB,L
						NGC 1569	GALXY	CAM	04 30.8	+64 51	11	3.7 m	1.8 m	120	Irp	pB,S,IE,BNM,*9.5n1'
						NGC 1560	GALXY	CAM	04 32.8	+71 53	11.4	9.8 m	1.5 m	23	Scd	vF,L,E,*9.3 sp
						NGC 1573	GALXY	CAM	04 35.1	+73 16	11.7	1.9 m	1.3 m	35	E3	vF,S,*9.5f
						Cr 464	OPNCL	CAM	05 22.0	+73 00	4.2	120 m			IV 3 p	

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Deep Sky Object List in Chart No.12

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Stock 5	OPNCL	CAS	02 04.5	+64 26	7	15.0 m			IV 2 p	13"-B,pL,nRi,nC at 100X; 17*; just naked eye
						Stock 6	OPNCL	CAS	02 23.7	+63 52	10	20.0 m			IV 2 p	
					x	NGC 896	BRTNB	CAS	02 25.5	+62 01	99.9	27 m	13 m		E	eF,pL,iF
						MCG +11-04-002	GALXY	CAS	02 51.3	+67 48	12	1.5 m	0.8 m			Inner Regions Completely Black--MCG
						Tr 3	OPNCL	CAS	03 11.8	+63 15	7	23.0 m			III 3 p	L,nC
					x	NGC 1184	GALXY	CEP	03 16.8	+80 48	12.4	2.8 m	0.6 m	165	Sa	F,pL,mE
						IC 334	GALXY	CAM	03 45.3	+76 38	12.3	3.7 m	3.3 m	80	Pec	pB,S,*13 mag invl sf
	C 5		x			IC 342	GALXY	CAM	03 46.8	+68 06	12	20.9 m	20.4 m		SBc	F,vL,R,vsBN
						Kemble's Cascade	ASTER	CAM	03 56.0	+63 00						

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Deep Sky Object List in Chart No.13

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 2	x	x	x		NGC 40	PLNNB	CEP	00 13.0	+72 31	10.7	60 s	40 s		3b(3)	F,vS,R,vsmB,M,L*cont f
	C 8			x		NGC 559	OPNCL	CAS	01 29.5	+63 19	9.5	4.4 m			II 2 m	Cl,B,pL,pRi
				x		NGC 637	OPNCL	CAS	01 43.1	+64 02	8.2	3.5 m			I 3 p	Cl,pS,B & vF stars
						NGC 133	OPNCL	CAS	00 31.3	+63 21	9.4	7.0 m			IV 1 p	Cl,pL,st 10...,D * inv
						King 14	OPNCL	CAS	00 31.9	+63 10	8.5	7.0 m			III 2 p	13"-pB,pL,E; 20* nice dark lanes invl at 100X
						NGC 146	OPNCL	CAS	00 32.9	+63 19	9.1	7.0 m			IV 3 p	Cl,pL,lC,st 11-12,D*
						Berk 62	OPNCL	CAS	01 01.0	+63 57	9.3	10.0 m			III 2 p	
						Czernik 3	OPNCL	CAS	01 04.1	+62 48	9.9	3.0 m			III 2p :b	
						Cr 463	OPNCL	CAS	01 48.4	+71 57	5.7	36.0 m			III 2 p	13"-B,vL,nC, 44* at 60X
						IC 1747	PLNNB	CAS	01 57.6	+63 19	12	13 s			3b	Stellar

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Deep Sky Object List in Chart No.14 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 7510	OPNCL	CEP	23 11.5	+60 34	7.9	4.0 m			II 2 m n	Cl,pRi,pC,fan-sh,*pB
	C 22	x	*	x		NGC 7662	PLNNB	AND	23 25.9	+42 32	8.6	17 s	14 s		4(3)	!!! Planetary or annular neb,vB,pS,R,blue
				x		NGC 7686	OPNCL	AND	23 30.1	+49 08	5.6	15.0 m			IV 1 p	Cl,P,lC,st 7...11
		x	x	x		NGC 7789	OPNCL	CAS	23 57.4	+56 43	6.7	16 m			II 1 r	Cl,vL,vRi,vmC,st 11...18
				x		NGC 7790	OPNCL	CAS	23 58.4	+61 13	8.5	17 m			III 2 p	Cl,pRi,pC
M 52			x			NGC 7654	OPNCL	CAS	23 24.2	+61 35	6.9	13.0 m			I 2 r	L,Ri,mCM,*9..13
						IC 1470	BRTNB	CEP	23 05.2	+60 15	99.9	15 m	1 m		E	vF,vS,*N on n edge
						King 19	OPNCL	CEP	23 08.3	+60 31	9.2	7.0 m			II 2 m	13"-pF,pS,nC; 12* at 165X
						NGC 7538	BRTNB	CEP	23 14.1	+61 29	99.9	8 m	7 m		E	vF,L,2pB* inv
						Mrk 50	OPNCL	CEP	23 15.3	+60 28	8.5	5.0 m			I 2 p n	
	C 11		x		x	NGC 7635	BRTNB	CAS	23 20.2	+61 11	11.0p	15 m	8 m		E	vF,*8 inv l excentric
					x	NGC 7640	GALXY	AND	23 22.1	+40 51	11.3	10 m	1.9 m	167	SBbc	cF,L,mE164,vlbM,r
						UGC 12632	GALXY	AND	23 30.0	+41 00	12.1	4.9 m	3.9 m		S	
						King 12	OPNCL	CAS	23 53.0	+61 58	10	2.0 m			I 2 p	13"-pB,S,sE; 15* at 135X; D* invol
						Harvard 21	OPNCL	CAS	23 54.1	+61 46	9	4.0 m			IV 2 p	pRi,C
						NGC 7788	OPNCL	CAS	23 56.7	+61 24	9.4	9.0 m			I 2 p	Cl,S,pRi,vC,st 10,13..
						Frolov 1	OPNCL	CAS	23 57.4	+61 38	9.2					

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Deep Sky Object List in Chart No.14 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						MCG +08-01-016	GALXY	AND	23 59.2	+46 53	12	1.0 m	0.8 m			Inner Regions Completely Black--MCG
						MCG +08-01-018	GALXY	AND	23 59.9	+47 16	12	0.4 m	0.3 m			Inner Regions Very Black--MCG

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Deep Sky Object List in Chart No.15

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x		x		NGC 7209	OPNCL	LAC	22 05.1	+46 29	7.7	25.0 m			III 1 p	Cl,L,cRi,pC,st9...12
	C 16	x	x	x		NGC 7243	OPNCL	LAC	22 15.1	+49 54	6.4	21.0 m			IV 2 p	Cl,L,P,IC,st vL
				x		NGC 7296	OPNCL	LAC	22 28.2	+52 17	9.7	4.0 m			III 2 p	Cl,iR,IC,st vS
				x		NGC 7380	OPNCL	CEP	22 47.3	+58 08	7.2	12.0 m			III 3 p n	Cl,pL,pRi,IC,*9...13
						UGC 11909	GALXY	LAC	22 06.3	+47 15	12.3	3.0 m	0.7 m	3	S pec	
						NGC 7223	GALXY	LAC	22 10.2	+41 01	12.2	1.7 m	1.2 m	110	SBc	eF,pS,IE,r,am 3st
						IC 1434	OPNCL	LAC	22 10.5	+52 50	9	8.0 m			II 1 p?	fine cl,6 branches,st 12-15 mag
						NGC 7226	OPNCL	CEP	22 10.5	+55 25	9.6	1.8 m			I 1 p	pB,L,in cluster
			S			NGC 7235	OPNCL	CEP	22 12.6	+57 17	7.7	4.0 m			III 2 p	Cl,pC,has a ruby *10
					x	NGC 7245	OPNCL	LAC	22 15.3	+54 20	9.2	5.0 m			II 1 p	Cl,C,st eS
						IC 1442	OPNCL	LAC	22 16.5	+54 03	9.1	5 m			II 2 m	Cl of neb stars
						NGC 7248	GALXY	LAC	22 16.9	+40 30	12.4	1.8 m	0.9 m	133	SO	vF,vS,mbM
						NGC 7261	OPNCL	CEP	22 20.4	+58 05	8.4	6.0 m			III 1 p	Cl,L,pRi,IC
						Berk 94	OPNCL	CEP	22 22.7	+55 51	8.7	4.0 m			I 1 p n	
						PK 100- 8.1	PLNNB	LAC	22 31.7	+47 48	11.9				1	
						NGC 7330	GALXY	LAC	22 36.9	+38 33	12.2	1.8 m	1.7 m		Elliptical	pB,S,IE,bM
					x	NGC 7354	PLNNB	CEP	22 40.3	+61 17	12.9	22 s	18 s		4(3b)	B,S,R,pgvIbM
					x	NGC 7419	OPNCL	CEP	22 54.3	+60 50	13	2.0 m			II 3 r	Cl,pRi,cC

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Deep Sky Object List in Chart No.16

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 7008	PLNNB	CYG	21 00.5	+54 33	12	86 s	69 s		3	cB,L,E45,r,** att
	C 20	x	!*	x		NGC 7000	BRTNB	CYG	21 01.8	+44 12	4	120 m	30 m		E	F,eeL,dif nebosity
				x		NGC 7044	OPNCL	CYG	21 12.9	+42 29	12	6 m			II 2 R	Cl,vF,pL,vRi,vC,st 15...18
				x		NGC 7062	OPNCL	CYG	21 23.5	+46 23	8.3	7.0 m			III 1 p	Cl,pS,pRi,pC,st13...
			x	x		NGC 7086	OPNCL	CYG	21 30.5	+51 36	8.4	9.0 m			II 2 m	Cl,cL,vRi,pC,*11...16
				x		NGC 7128	OPNCL	CYG	21 44.0	+53 43	9.7	3.1 m			II 3 m	Cl,S,pRi,has a ruby *9.5
M 39			x			NGC 7092	OPNCL	CYG	21 32.2	+48 26	4.6	32 m			III 2 p	Cl,vL,P,vIC,*7...10
						Cr 428	OPNCL	CYG	21 03.2	+44 35	8.7	14.0 m			III 2 p n	
			x			NGC 7026	PLNNB	CYG	21 06.3	+47 51	12	25 s	9 s		3a	pB,biN
		x	x			NGC 7027	PLNNB	CYG	21 07.0	+42 14	9.6	18 s	11 s		3a	eB,S
			S		x	NGC 7031	OPNCL	CYG	21 07.3	+50 50	9.1	5.0 m			IV 1 p	Cl of triple st,IC
						NGC 7039	OPNCL	CYG	21 11.2	+45 39	7.6	25.0 m			III 2 p	Cl,vL,pRi,E,st 10...
						IC 1369	OPNCL	CYG	21 12.1	+47 44	8.8	4.0 m			I 1 m	S,F,stars 13 mag
			x			NGC 7048	PLNNB	CYG	21 14.3	+46 17	11	60 s	50 s		3b	pF,pL,dif,iR,vlbM
					x	NGC 7067	OPNCL	CYG	21 24.2	+48 01	9.7	3.0 m			II 2 p	Cl,P,(neb)
					x	NGC 7082	OPNCL	CYG	21 29.4	+47 05	7.2	25.0 m			IV 2 p	Cl,L,cRi,IC,st10..13
						Tr 37	OPNCL	CEP	21 39.0	+57 30	5.1	50.0 m			II 3 m	
						IC 1396	CL+NB	CEP	21 39.1	+57 30	3.5	89 m			II 3 m n	F,eL neby,incl Struve 2816
	C 19					IC 5146	CL+NB	CYG	21 53.4	+47 16	10	20 m	10 m		IV 2 p n	F,L,iR,*9.5 m invl,br + drk masses invl

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Deep Sky Object List in Chart No.17

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 6866	OPNCL	CYG	20 03.9	+44 10	7.6	7.0 m			II 2 m	Cl,L,vRi,cC
			S	x		NGC 6910	OPNCL	CYG	20 23.2	+40 47	7.4	8 m			I 2 p n	Cl,pB,pS,P,pC,*20.12
		x	x	x		NGC 6939	OPNCL	CEP	20 31.5	+60 40	7.8	8.0 m			I 1 m	Cl,pL,eRi,pCM,*11..16
	C 12	x	!*	x		NGC 6946	GALXY	CEP	20 34.9	+60 09	8.8	11.2 m	9.8 m		SBc	vF,vL,vg,vsbM,rr
M 29			x			NGC 6913	OPNCL	CYG	20 23.9	+38 32	6.6	7.0 m			III 3 p n	Cl,P,IC,st L&S
						Basel 6	OPNCL	CYG	20 06.8	+38 21	7.7	14.0 m				13"-pB,pL,arrowhead shape, 22* at 100X
						PK 79+ 5.1	PLNNB	CYG	20 09.0	+43 44	12.3	23 s	21 s		4(2)	
			x			NGC 6884	PLNNB	CYG	20 10.4	+46 28	12.6	5.6 s	5.0 s		2b	stellar
	C 27		*		x	NGC 6888	BRTNB	CYG	20 12.8	+38 19	10.0p	20 m	10 m		E	F,vL,vmE,** att
						IC 4996	OPNCL	CYG	20 16.5	+37 38	7.3	6.0 m			I 3 p n	Cl,st 8...13
						vdB 130	OPNCL	CYG	20 17.7	+39 19	9.3	6 m				
						Cr 419	OPNCL	CYG	20 18.1	+40 43	5.4	4.5 m			IV 2 p	13"-pB,pL,nRi,sC, 16* mags 11..13 at 100X
						Berk 86	OPNCL	CYG	20 20.4	+38 42	7.9	8.0 m			I 3 p n	13"-pF,pS,nRi,nC 19* mags 10..13 at 135X
						IC 5070	BRTNB	CYG	20 50.8	+44 21	8	60 m	50 m		E	F,dif
						NGC 6996	OPNCL	CYG	20 56.5	+45 29	10	7.0 m			III 2 p n	Cl,P,IC
					x	NGC 6991	OPNCL	CYG	20 56.6	+47 25	99.9	5 m				Cl,L,P,vIC
			x		x	NGC 6997	OPNCL	CYG	20 56.8	+44 39	10.0p	7 m				Cl,P,IC,st L

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Deep Sky Object List in Chart No.18

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 15	x	x	x		NGC 6826	PLNNB	CYG	19 44.8	+50 32	8.8	27 s	24 s		3a(2)	Planetary,B,pL,R,*11m
						NGC 6764	GALXY	CYG	19 08.3	+50 56	11.9	2.2 m	1.2 m	62	SBbc	pF,pL,mE,sev vF * inv
			x			NGC 6791	OPNCL	LYR	19 20.7	+37 51	9.5	16 m			II 3 r	vF,L,vRi,*F
						NGC 6792	GALXY	LYR	19 21.0	+43 08	12.1	2.2 m	1.3 m	25	SBb	F,E26,glbM,*9.5 sf
			x			NGC 6811	OPNCL	CYG	19 38.2	+46 34	6.8	13.0 m			IV 3 p	Cl,L,pRi,lC,st11..14
		x	x			NGC 6819	OPNCL	CYG	19 41.3	+40 11	7.3	5.0 m			I 1 r	Cl,vL,vRi,*11...15
					x	NGC 6824	GALXY	CYG	19 43.7	+56 07	12.2	1.9 m	1.4 m	60	Sab	pB,iF,bM

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Deep Sky Object List in Chart No.19

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 6675	GALXY	LYR	18 37.4	+40 03	12.4	1.8 m	1.3 m	130	Sbc	vF,E,45"
						NGC 6701	GALXY	DRA	18 43.2	+60 39	12.1	1.5 m	1.3 m	25	SBa	pB,pS,mE,F* close f
						NGC 6702	GALXY	LYR	18 47.0	+45 42	12.2	1.9 m	1.5 m	65	E3	pF,S,IE
						NGC 6703	GALXY	LYR	18 47.3	+45 33	11.3	2.7 m	2.5 m		SO	B,S,R,mbM

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Deep Sky Object List in Chart No.20

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 92			!			NGC 6341	GLOCL	HER	17 17.1	+43 08	6.5	11.2 m			IV	vB,vL,eCM,st 12...
						NGC 6338	GALXY	DRA	17 15.4	+57 25	12.3	1.5 m	1 m	15	SO	F,S,R,vglbM
						UGC 10822	GALXY	DRA	17 20.2	+57 55	9.9	33.5 m	18.9 m		dE3	13"-vF,L,pmE at 60X
						NGC 6411	GALXY	DRA	17 35.5	+60 49	11.9	2.3 m	1.8 m	70	Elliptical	vS,gbM

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Deep Sky Object List in Chart No.21

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 6229	GLOCL	HER	16 47.0	+47 32	9.4	3.8 m			IV	vB,L,R,disc,r
					x	NGC 6058	PLNNB	HER	16 04.4	+40 41	13	25 s	20 s		3(2)	pF,vS,R,stellar
						NGC 6127	GALXY	DRA	16 19.2	+57 59	12	1.4 m	1.4 m		Elliptical	pF,vS,R
						NGC 6146	GALXY	HER	16 25.2	+40 54	12.5	1.3 m	1 m	75	Elliptical	cF,vS,R,bM
					x	NGC 6155	GALXY	HER	16 26.1	+48 22	12.2	1.3 m	0.9 m	145	Sc	F,pS,iF,gbM
					x	NGC 6166	GALXY	HER	16 28.6	+39 33	11.8	2.2 m	1.7 m	35	E2p	pF,S,vIE,vgmbM
						NGC 6173	GALXY	HER	16 29.8	+40 49	12.1	1.9 m	1.4 m	140	E3	cF,vS,R,bM
						NGC 6223	GALXY	DRA	16 43.1	+61 35	11.9	3.5 m	2.6 m	88	E-SO	F,S,R,mbM
					x	NGC 6239	GALXY	HER	16 50.1	+42 44	12.4	2.4 m	1.1 m	118	SBb	vF,E,bi-N,np sf

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Deep Sky Object List in Chart No.22

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 5866	GALXY	DRA	15 06.5	+55 46	9.9	6.5 m	3.1 m	128	Sa	vB,cL,pME146,gbM
		x	x	x		NGC 5907	GALXY	DRA	15 15.9	+56 20	10.3	11.8 m	1.3 m	155	Sc	cB,vL,vmE155,vgBMN
				x		NGC 5982	GALXY	DRA	15 38.7	+59 21	11.1	3 m	2.1 m	110	E3p	cB,S,R,psbM,r
						NGC 5874	GALXY	BOO	15 07.9	+54 45	12.4	2.3 m	1.6 m	53	SBbc	vF,pL,R,in tri of 3B*
						NGC 5875	GALXY	BOO	15 09.2	+52 32	12.4	2.3 m	1.2 m	145	Sb	pB,pL,IE
					x	NGC 5879	GALXY	DRA	15 09.8	+57 00	11.6	3.9 m	1.4 m	8	Sbc	cB,S,E,mbMRN,r
					x	NGC 5899	GALXY	BOO	15 15.1	+42 03	11.7	3.3 m	1.4 m	18	SBc	cB,pL,pmE,smbMN
			x			NGC 5905	GALXY	DRA	15 15.4	+55 31	11.7	3.8 m	2.3 m	135	SBb	pF,pS,iR
			x			NGC 5908	GALXY	DRA	15 16.7	+55 25	11.8	3.3 m	1.4 m	154	Sb	pF,pS,R
						NGC 5963	GALXY	DRA	15 33.5	+56 34	12.5	3.3 m	2.6 m	55	Sc	pF,pS,iF
						NGC 5965	GALXY	DRA	15 34.0	+56 41	11.7	4.7 m	0.7 m	53	Sb	cF,cL,IE
						NGC 5966	GALXY	BOO	15 35.9	+39 46	12.2	1.8 m	1.1 m	90	Elliptical	vF,S,R,gbM,2st 8'f
			x		x	NGC 5985	GALXY	DRA	15 39.6	+59 20	11.1	5.4 m	2.7 m	13	SBb Ring	pB,cL,IE,r
						NGC 5987	GALXY	DRA	15 39.9	+58 05	11.7	4.2 m	1.3 m	165	Sb	pF,cS

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Deep Sky Object List in Chart No.23 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 5473	GALXY	UMA	14 04.7	+54 54	11.4	2.2 m	1.7 m	160	E2	pB,S,R,gbM
			x	x		NGC 5474	GALXY	UMA	14 05.0	+53 40	10.8	5 m	4.5 m		Sc	pB,L,bM,P w M101
				x		NGC 5631	GALXY	UMA	14 26.6	+56 35	11.5	2 m	2 m		SO	B,S,R,psbMN
				x		NGC 5676	GALXY	BOO	14 32.8	+49 27	11.2	3.9 m	1.8 m	47	Sbc	B,L,E45,pgbM,r
				x		NGC 5689	GALXY	BOO	14 35.5	+48 44	11.9	3.3 m	1 m	85	SBO-a	cB,pL,E87,psmbM
M101			!			NGC 5457	GALXY	UMA	14 03.2	+54 21	7.9	28.5 m	28.3 m		SBc	pB,vL,iR,g,vsmbM,BSN
						NGC 5406	GALXY	CVN	14 00.3	+38 55	12.3	1.9 m	1.4 m	120	SBbc	F,pS,R,lbM
						NGC 5422	GALXY	UMA	14 00.7	+55 10	11.8	3.5 m	0.6 m	152	Sa	pB,S,pmE45,vsmbMN
					x	NGC 5430	GALXY	UMA	14 00.8	+59 20	11.9	2.3 m	1.3 m	0	SBb	pB,S,IE,mbM
					x	NGC 5443	GALXY	UMA	14 02.2	+55 49	12.3	2.7 m	1 m	34	SBb	pF,L,E
					x	NGC 5447	GX+DN	UMA	14 02.5	+54 17	99.9				Pec	pB,S,R,gmbM,conn M101
					x	NGC 5448	GALXY	UMA	14 02.8	+49 10	11	3.8 m	2 m	115	SBa	pB,cL,vmE90,smbMN
					x	NGC 5462	GX+DN	UMA	14 03.9	+54 22	99.9				Pec	pB,pL,iR,gbM,conn M101
					x	NGC 5480	GALXY	UMA	14 06.4	+50 43	12.1	1.6 m	1 m	5	Sc	F,pS,vgbM,np of 2
					x	NGC 5481	GALXY	UMA	14 06.7	+50 43	12.3	1.4 m	1.1 m	115	E-SO	F,vS,smbM,stell,sf of 2
					x	NGC 5485	GALXY	UMA	14 07.2	+55 00	11.4	2.8 m	2.1 m	170	SO	cB,R,vgbM,f of 2
					x	NGC 5520	GALXY	BOO	14 12.4	+50 21	12.4	2 m	1.1 m	66	Sb	F,S,IE,stellar
			x		x	NGC 5585	GALXY	UMA	14 19.8	+56 44	10.7	5.8 m	3.6 m	30	SBcd	pF,L,iR,vgmbM,r
					x	NGC 5582	GALXY	BOO	14 20.7	+39 42	11.6	2.8 m	1.7 m	25	Elliptical	pB,pS,R,bMFN,* sp

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Deep Sky Object List in Chart No.23 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5633	GALXY	BOO	14 27.5	+46 09	12.4	2.1 m	1.1 m	10	Sb	cB,pS,R,pglbM
					x	NGC 5660	GALXY	BOO	14 29.8	+49 37	11.9	2.7 m	2.6 m	90	SBc	pB,L,iR,vgbM
						NGC 5667	GALXY	DRA	14 30.4	+59 28	12.5	1.7 m	1.1 m	168	SBc	pB,pS,E0
						NGC 5673	GALXY	BOO	14 31.5	+49 57	12.1	2.4 m	0.6 m	136	SBc	F,S,cE,*15 np
						NGC 5678	GALXY	DRA	14 32.1	+57 55	11.3	3.3 m	1.4 m	5	SBb	B,L,IE0,vgmbM
					x	NGC 5687	GALXY	BOO	14 34.9	+54 29	11.8	2.5 m	1.9 m	105	Sa	pF,S,iF,resolved,*10 f
						NGC 5707	GALXY	BOO	14 37.5	+51 34	12.5	2.5 m	0.5 m	35	Sab	B,pS,R
						NGC 5739	GALXY	BOO	14 42.5	+41 51	12.1	1.9 m	1.8 m		SBO-a	pB,S,R,smbM,r,* nr
						NGC 5784	GALXY	BOO	14 54.3	+42 33	12.4	1.9 m	1.8 m		SO	pB,S,R,smbM,stellar
						NGC 5820	GALXY	BOO	14 58.7	+53 53	12.4	2.2 m	2 m		SO	B,E90,sbM,B D*f8',brightest of 3

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Deep Sky Object List in Chart No.24 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 29	x	x	x		NGC 5005	GALXY	CVN	13 10.9	+37 03	9.8	5.8 m	2.9 m	65	SBbc	vB,vL,vmE66,vsbMN
			*	x		NGC 5195	GALXY	CVN	13 30.0	+47 16	9.6	5.9 m	4.6 m	79	SBO-a	B,pS,lE,vgbM,inv M51
			x	x		NGC 5322	GALXY	UMA	13 49.2	+60 11	10.2	6 m	4.1 m	95	E2	vB,pL,iR,psmbM
M 51			!!!*			NGC 5194	GALXY	CVN	13 29.9	+47 12	8.4	10.8 m	6.6 m	163	Sbc	!!!,Great spiral nebula
M 63			*			NGC 5055	GALXY	CVN	13 15.8	+42 02	8.6	12.6 m	7.5 m	105	Sbc	vB,L,pME120,vsmbM,BN
					x	NGC 4914	GALXY	CVN	13 00.7	+37 19	11.6	3.5 m	2.1 m	155	Elliptical	pB,cS,R,smbM,*17 np
						IC 4182	GALXY	CVN	13 05.8	+37 36	12.5	6 m	5.5 m		Sm	cF,vS,R,bM
					x	NGC 5023	GALXY	CVN	13 12.2	+44 02	12.3	5.8 m	0.8 m	28	Sc	pF,L,mE20,vlbM
						UGC 8320	GALXY	CVN	13 14.4	+45 55	12.4	3.8 m	1.5 m	150	Ir+	
					x	NGC 5103	GALXY	CVN	13 20.5	+43 05	12.6	1.4 m	1 m	143	Pec	pB,cS,E
						NGC 5112	GALXY	CVN	13 21.9	+38 44	12.1	4 m	2.9 m	130	SBc	F,L,iR,vglbM
						NGC 5145	GALXY	CVN	13 25.2	+43 16	12.3	2 m	1.8 m	90	Sb	pB,vS,vIE,glbM
						NGC 5173	GALXY	CVN	13 28.4	+46 36	12.1	1 m	1 m		E0	F,vS,R,stellar
					x	NGC 5204	GALXY	UMA	13 29.6	+58 25	11.3	5 m	3 m	5	Sm	pB,cL,iR,gmbM,r
						NGC 5198	GALXY	CVN	13 30.2	+46 40	11.8	2 m	1.7 m		E2	pF,pS,R,mbM
						NGC 5290	GALXY	CVN	13 45.3	+41 43	12.5	3.7 m	1 m	95	Sbc	cB,pL,E90,bMN
						NGC 5297	GALXY	CVN	13 46.4	+43 52	11.8	5.7 m	1 m	148	SBc	cB,L,pME142,gbM
					x	NGC 5308	GALXY	UMA	13 47.0	+60 58	11.4	3.7 m	0.7 m	60	SO	B,pL,mE57,psbM,BN
						NGC 5311	GALXY	CVN	13 48.9	+39 59	12.3	2.6 m	2.3 m	110	Sa	cF,cS,R,sbM,p of 2

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Deep Sky Object List in Chart No.24 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5313	GALXY	CVN	13 49.7	+39 59	12	1.7 m	1 m	40	Sb	pB,pS,vIE,glbM,f of 2
						NGC 5320	GALXY	CVN	13 50.3	+41 22	12.1	3.6 m	1.7 m	18	SBc	cF,pL,R,gbM
						NGC 5326	GALXY	CVN	13 50.8	+39 34	11.9	2.2 m	1.2 m	137	Sab	cF,S,vIE,sbM
						NGC 5337	GALXY	CVN	13 52.4	+39 41	12.5	1.7 m	0.8 m	20	S pec	vF,S,iR,*7p
			x			NGC 5353	GALXY	CVN	13 53.4	+40 17	11	2.8 m	1.9 m	145	SO	pB,S,R,2nd of 4
			x			NGC 5354	GALXY	CVN	13 53.4	+40 18	11.4	2.2 m	2 m		SO	pF,S,R,3rd of 4
			x			NGC 5350	GALXY	CVN	13 53.4	+40 22	11.3	3.2 m	2.6 m	40	SBbc	cF,pL,bM,*7p,1st of 4
						NGC 5351	GALXY	CVN	13 53.5	+37 55	12.1	2.9 m	1.6 m	100	SBb Ring	cF,L,IE90,vgbM
						NGC 5362	GALXY	CVN	13 54.9	+41 19	12.3	2.2 m	1 m	88	Sb	pB,pL,E
						NGC 5376	GALXY	UMA	13 55.3	+59 30	12.1	2.1 m	1.3 m	70	SBab	cB,pL,vIE,vgmbM
			x		x	NGC 5371	GALXY	CVN	13 55.7	+40 28	10.6	4.2 m	3.4 m	8	SBbc	pB,L,R,bMFN
						NGC 5389	GALXY	UMA	13 56.1	+59 44	12	3.6 m	1 m	3	SBO-a	pB,pL,E,mbMN
			x			NGC 5377	GALXY	CVN	13 56.3	+47 14	11.3	3.5 m	2 m	20	SBa	B,L,mE42,smbMN
						NGC 5378	GALXY	CVN	13 56.8	+37 48	12.5	2.7 m	2.2 m	90	SBa	pB,IE,vglbM
						NGC 5380	GALXY	CVN	13 56.9	+37 37	12.3	1.9 m	1.9 m		Sa	F,cS,R,smbM
			x		x	NGC 5383	GALXY	CVN	13 57.1	+41 51	11.4	2.6 m	2.2 m	85	SBb	cB,cL,R,gbM
			x			NGC 5395	GALXY	CVN	13 58.6	+37 25	11.4	2.7 m	1.3 m	167	Sbc	cF,cL,E15,lbM,sf of 2
			x			NGC 5394	GALXY	CVN	13 58.6	+37 27	13	1.7 m	0.8 m	0	SBb/P	cF,S,np of 2

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Deep Sky Object List in Chart No.25 (1/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M106			*	x		NGC 4258	GALXY	CVN	12 19.0	+47 18	8.4	17.4 m	6.6 m	150	SBbc	l,vB,vL,vmE0,sbMBN
			x	x		NGC 4036	GALXY	UMA	12 01.5	+61 54	10.7	4 m	1.8 m	85	E6	vB,vL,E,vBN
			x	x		NGC 4051	GALXY	UMA	12 03.2	+44 32	10.2	5.3 m	4.4 m	135	SBbc	B,vL,E,vgvsmbM*11,vseBN or *
			x	x		NGC 4085	GALXY	UMA	12 05.4	+50 21	12.4	2.5 m	0.8 m	78	SBc	B,pL,pmE78,vsbM
		x	x	x		NGC 4088	GALXY	UMA	12 05.6	+50 32	10.6	5.6 m	2.1 m	43	SBbc	B,cL,E55,lbM
				x		NGC 4102	GALXY	UMA	12 06.4	+52 43	11.2	3.1 m	1.7 m	38	SBb Ring	B,pS,R,bM,BN,*12 sp
		x	x	x		NGC 4111	GALXY	CVN	12 07.0	+43 04	10.7	4.6 m	1 m	150	Sa	vB,pS,mE151,vsvBN
				x		NGC 4143	GALXY	CVN	12 09.6	+42 32	10.6	2.9 m	1.9 m	144	SBO	cB,R,vg,vsbMN
				x		NGC 4151	GALXY	CVN	12 10.5	+39 24	10.8	6.8 m	5.3 m	50	SBab Ring	vB,S,R,vsmbMBN,p of 2
				x		NGC 4346	GALXY	CVN	12 23.5	+47 00	11.1	3.2 m	1.3 m	99	SBO	vF,S,mE100,vsmbMBN
	C 21	x	*	x		NGC 4449	GALXY	CVN	12 28.2	+44 06	9.6	6.2 m	4.9 m	45	Ir	vB,cL,mE,D or bifid,rrr,*F,B center w N or *
			x	x		NGC 4485	GALXY	CVN	12 30.5	+41 42	11.9	2.4 m	1.8 m	15	Ir	B,pS,iR,np of 2
		x	x	x		NGC 4490	GALXY	CVN	12 30.6	+41 39	9.8	6.4 m	3.2 m	125	SBcd	vB,vL,mE130,r,sf of 2
			x	x		NGC 4618	GALXY	CVN	12 41.6	+41 09	10.8	4.2 m	3.4 m	25	SB	B,L,E,mbM,curved branch n
				x		NGC 4800	GALXY	CVN	12 54.6	+46 32	11.5	1.6 m	1.2 m	25	Sb	pB,cS,R,psbM,*14 p,vBN
M 40			x			Winnecke 4	2STAR	UMA	12 21.9	+58 06	9					Neb D*
M 94			*			NGC 4736	GALXY	CVN	12 50.9	+41 07	8.2	12.3 m	10.8 m	105	Sb Ring	vB,L,iR,vsvmbM,BN,r

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Deep Sky Object List in Chart No.25 (2/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ' '')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 4047	GALXY	UMA	12 02.8	+48 38	12.2	1.2 m	1 m	105	Sbc	pB,pS,R,vsvBN
						Cr 285	OPNCL	UMA	12 03.0	+58 00	0.4	1400 m				
						NGC 4068	GALXY	UMA	12 04.0	+52 35	12.5	3.2 m	1.7 m	30	Ir	pF,S,stellar
			x		x	NGC 4096	GALXY	UMA	12 06.0	+47 29	10.9	6.5 m	1.8 m	20	SBc	pB,vL,mE32,sBN or bar
			x		x	NGC 4100	GALXY	UMA	12 06.1	+49 35	11.2	5.4 m	1.7 m	167	Sbc	pB,vL,vmE161,vgvlbM,vsBN
					x	NGC 4138	GALXY	CVN	12 09.5	+43 41	11.3	2.9 m	1.8 m	150	Sa	B,pL,IE,vgbM,* np
						NGC 4145	GALXY	CVN	12 10.0	+39 53	11.3	5.9 m	4.1 m	100	SBcd	B,vL,vglbM
					x	NGC 4144	GALXY	UMA	12 10.0	+46 27	11.6	6.1 m	1.5 m	104	SBc	pF,cL,vmE109,vgbM,BM no BN
					x	NGC 4157	GALXY	UMA	12 11.1	+50 29	11.4	6.7 m	1.2 m	66	SBb	pF,cL,vmE60
						NGC 4183	GALXY	CVN	12 13.3	+43 42	12.3	5.3 m	0.7 m	166	Sc	vF,cL,mE170,B center,no def. N
						NGC 4194	GALXY	UMA	12 14.2	+54 32	12.5	1.8 m	1.1 m	170	Ir Bar	pB,vS,vsbM *12
					x	NGC 4217	GALXY	CVN	12 15.8	+47 05	11.2	4.8 m	1.5 m	50	Sb	pF,L,mE45,**n,p of 2
						NGC 4218	GALXY	CVN	12 15.8	+48 08	12.5	0.9 m	0.5 m	142	Sa	vF,vS
					x	NGC 4220	GALXY	CVN	12 16.2	+47 53	11.4	3.9 m	1.5 m	141	Sa	cB,pL,pmE134,psbM,sBN
	C 26	x	x		x	NGC 4244	GALXY	CVN	12 17.5	+37 48	10.4	15.9 m	1.8 m	48	Sc	pB,vL,eE43,vgbM,vsBN or *?
						NGC 4242	GALXY	CVN	12 17.5	+45 37	10.8	5.2 m	4 m	25	SBd	vF,cL,iR,vgbM,r
					x	NGC 4248	GALXY	CVN	12 17.8	+47 25	12.5	2.9 m	1.2 m	108	SBb	vF,S,pmE,psbM
					x	NGC 4271	GALXY	UMA	12 19.5	+56 44	12.6	1.5 m	1.3 m	55	E-SO	pB,pL,iF

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Deep Sky Object List in Chart No.25 (3/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 4290	GALXY	UMA	12 20.8	+58 06	11.8	2.2 m	1.6 m	90	SBab Ring	pB,L,R,gmbM
						NGC 4335	GALXY	UMA	12 23.0	+58 27	12.4	1.9 m	1.5 m	145	Elliptical	pB,S,E,gbM
						NGC 4357	GALXY	CVN	12 24.0	+48 47	12.4	3.7 m	1.3 m	77	Sbc	F,pS,gbM,=4381?
					x	NGC 4369	GALXY	CVN	12 24.6	+39 23	11.7	2.4 m	2.4 m		Sa	cB,S,R,mbMN,r
						NGC 4389	GALXY	CVN	12 25.6	+45 41	11.7	2.6 m	1.3 m	105	SB/P	pB,pL,iE,vglbM,sB narrow bar
						UGC 7577	GALXY	CVN	12 27.6	+43 29	12.3	3.9 m	2.5 m	130	Ir+	
						UGC 7599	GALXY	CVN	12 28.5	+37 13	12.3	4.3 m	2.4 m	130	Sm	
						NGC 4460	GALXY	CVN	12 28.8	+44 52	11.3	4.2 m	1.3 m	40	SBO-a	B,pL,E123,psbM
						NGC 4500	GALXY	UMA	12 31.4	+57 58	12.5	1.6 m	1.1 m	130	SBa	B,cS,E,pgbM,*9 f 50"
						UGC 7699	GALXY	CVN	12 32.8	+37 37	12.5	3.8 m	1.0 m	32	SBc	
		x	x		x	NGC 4605	GALXY	UMA	12 40.0	+61 36	10.3	5.9 m	2.4 m	125	SBc/P	B,L,vmE118,glbM
						NGC 4625	GALXY	CVN	12 41.9	+41 16	12.4	2.3 m	1.9 m	160	SB pec	pF,S,R
						NGC 4814	GALXY	UMA	12 55.4	+58 21	12	3.3 m	2.4 m	135	SB/P	B,pS,vIE,vgbM
						NGC 4868	GALXY	CVN	12 59.2	+37 19	12.2	1.5 m	1.4 m		Sab	pB,S,R,mbM

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Deep Sky Object List in Chart No.26 (1/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M108			*	x		NGC 3556	GALXY	UMA	11 11.5	+55 40	10	8.6 m	2.4 m	80	SBc	cB,vL,vmE 79,pBM
M109			*	x		NGC 3992	GALXY	UMA	11 57.6	+53 22	9.8	7.5 m	4.4 m	68	SBbc	cB,vL,pmE,sbM,BN
			x	x		NGC 3610	GALXY	UMA	11 18.4	+58 47	10.8	2.5 m	2.5 m		Elliptical	vB,pS,IE 90,vsvmbMSN
			x	x		NGC 3613	GALXY	UMA	11 18.6	+58 00	10.9	3.6 m	2 m	102	Elliptical	vB,cL,mE 305,smbMN
				x		NGC 3619	GALXY	UMA	11 19.4	+57 45	11.5	3.5 m	2.4 m	25	Sa	cB,cL,R,vgmbM
			x	x		NGC 3631	GALXY	UMA	11 21.0	+53 10	10.4	5 m	4.8 m		Sc	pB,L,R,svmbMrN
				x		NGC 3665	GALXY	UMA	11 24.7	+38 46	10.8	3.5 m	3 m	30	SO	cB,cL,iR,pgmbM
		x	x	x		NGC 3675	GALXY	UMA	11 26.1	+43 35	10.2	6.2 m	3.6 m	178	Sb	vB,cL,vmE 0,vsmbMN,many st p
			x	x		NGC 3726	GALXY	UMA	11 33.3	+47 02	10.4	6 m	4.1 m	10	SBc Ring	pB,vL,IE 0,vsmbM *15,*11 n
				x		NGC 3729	GALXY	UMA	11 33.8	+53 08	11.4	2.9 m	1.9 m	15	SB/P	pB,pL,IE 0,gbM,*12 nr
		x		x		NGC 3877	GALXY	UMA	11 46.1	+47 30	11	5.3 m	1.2 m	35	Sc	B,L,mE 37
			x	x		NGC 3893	GALXY	UMA	11 48.6	+48 43	10.5	4.5 m	2.4 m	165	SBc	B,pL,R,mbM
				x		NGC 3898	GALXY	UMA	11 49.3	+56 05	10.7	3.8 m	2.6 m	107	Sab	B,pL,IE,svmbM
				x		NGC 3938	GALXY	UMA	11 52.8	+44 07	10.4	5.1 m	5 m		Sc	B,vL,R,bM,pBN,er
				x		NGC 3945	GALXY	UMA	11 53.2	+60 40	10.9	6.4 m	4.2 m	15	SBO-a Ring	B,pL,R,gmbM,r,*12 sp
				x		NGC 3949	GALXY	UMA	11 53.7	+47 52	11.1	2.9 m	1.7 m	120	Sbc	cB,pL,pmE,vgbM
				x		NGC 3953	GALXY	UMA	11 53.8	+52 19	10.1	6.9 m	3.6 m	13	SBbc	cB,L,E 0,vsbM,fine spiral
				x		NGC 3982	GALXY	UMA	11 56.5	+55 07	11	2.3 m	2 m		SBb	B,pL,R,g,sbM,disc

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Deep Sky Object List in Chart No.26 (2/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 3998	GALXY	UMA	11 57.9	+55 27	10.7	2.7 m	2.3 m	140	SO	cB,pS,R,vg,smbM
		x	x	x		NGC 4026	GALXY	UMA	11 59.4	+50 58	10.8	4.7 m	1.2 m	178	SO	vB,cL,mE176,vsvmbM,BN
M 97			*			NGC 3587	PLNNB	UMA	11 14.8	+55 01	11	202 s	196 s		3a	!! vB,vL,R,vvg,vsbM
						NGC 3549	GALXY	UMA	11 10.9	+53 23	12.1	3.1 m	1 m	38	Sc	cB,cL,cE 160
					x	NGC 3583	GALXY	UMA	11 14.2	+48 19	11.1	2.5 m	1.5 m	125	SBb	pB,pL,R,vgmbM
						NGC 3595	GALXY	UMA	11 15.4	+47 27	12.1	1.6 m	0.7 m	176	E-SO	vF,vS,vIE,stellar,cB* n
						NGC 3600	GALXY	UMA	11 15.9	+41 35	11.7	4.1 m	0.8 m	3	Sa	pF,S,IE 0,vgbM
						NGC 3614	GALXY	UMA	11 18.4	+45 45	11.6	4.8 m	2.9 m	80	Sc	F,pL,IE 90,glbM,r
					x	NGC 3642	GALXY	UMA	11 22.3	+59 04	11.2	5.5 m	4.7 m	105	Sbc	pB,pL,R,vgbM
					x	NGC 3652	GALXY	UMA	11 22.7	+37 46	12.2	2 m	0.7 m	150	SBc/P	pF,cL,IE,vgbM
						NGC 3656	GALXY	UMA	11 23.6	+53 51	12.5	1.5 m	1.5 m		Elliptical	pB,S,R,vgbM,*12 p
						NGC 3657	GALXY	UMA	11 23.9	+52 55	12.4	1.7 m	1.7 m		SBc/P	cF,vS,R,stellar
						NGC 3658	GALXY	UMA	11 24.0	+38 34	12.2	1.8 m	1.7 m		SO	F,S,R,svmbMN = *14
					x	NGC 3669	GALXY	UMA	11 25.4	+57 43	12.4	2 m	0.5 m	153	SBcd	vF,pL,pmE 135,er
						NGC 3677	GALXY	UMA	11 26.3	+46 58	12.3	1.6 m	1.3 m	130	Sa	eF,S,R,vsbM *,2 st 11 nf
						NGC 3674	GALXY	UMA	11 26.4	+57 03	12.2	1.7 m	0.6 m	33	SO	pF,iF
					x	NGC 3683	GALXY	UMA	11 27.5	+56 53	12.4	1.8 m	0.7 m	128	SBc	cB,pL,E
						NGC 3690	GALXY	UMA	11 28.5	+58 34	11.5	2 m	1 m	130	Sp?	pB,pS,vIE 80,pgbM,S st sf nr
						NGC 3683A	GALXY	UMA	11 29.2	+57 08	11.9	2.4 m	1.7 m	75	SBc	

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Deep Sky Object List in Chart No.26 (3/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x			NGC 3718	GALXY	UMA	11 32.6	+53 04	10.8	8.2 m	3.5 m	15	SBap	pB,vL,R,vglbM
						NGC 3733	GALXY	UMA	11 35.0	+54 51	12.4	4.9 m	2.2 m	170	SBc	eF,S,iR,*6 sf
						NGC 3738	GALXY	UMA	11 35.8	+54 31	11.7	2.6 m	2.2 m	155	lr	pB,pL,bM
					x	NGC 3756	GALXY	UMA	11 36.8	+54 18	11.5	4.2 m	2.1 m	177	SBbc	pF,L,mE N-S
						NGC 3769	GALXY	UMA	11 37.7	+47 54	11.8	2.9 m	1 m	152	SBb	pB,S,pmE
						NGC 3782	GALXY	UMA	11 39.3	+46 31	12.4	1.6 m	1.1 m	0	SBcd	F,S,att to *15,another * inv
						NGC 3780	GALXY	UMA	11 39.4	+56 16	11.5	3 m	2.4 m	90	Sc	pF,L,vIE,vgbM,r
						NGC 3796	GALXY	UMA	11 40.5	+60 18	12.5	1.3 m	0.9 m	127	S pec	F,cS,R,mbM
						NGC 3811	GALXY	UMA	11 41.3	+47 41	12.3	2.2 m	1.7 m	160	SBc/P	F,S,vIE,glbM
						NGC 3835	GALXY	UMA	11 44.1	+60 07	12.4	1.8 m	0.7 m	60	Sab	pB,E,gbM,sf 5'
						NGC 3838	GALXY	UMA	11 44.2	+57 57	12.3	1.4 m	0.6 m	141	Sa	pB,cS,E,psbM *12
						NGC 3888	GALXY	UMA	11 47.6	+55 58	12.1	1.8 m	1.4 m	120	SBc	pB,S,iE,pgbM
						NGC 3894	GALXY	UMA	11 48.8	+59 25	11.6	2 m	1.4 m	20	E3	B,pL,iR,pgmbM,p of 2
						NGC 3917	GALXY	UMA	11 50.8	+51 49	11.8	5 m	1.1 m	77	Sc	F,L,vmE,vgbM
						NGC 3921	GALXY	UMA	11 51.1	+55 05	12.4	2.1 m	1.3 m	20	Sa	pF,S,R,pspmbM
						NGC 3930	GALXY	UMA	11 51.8	+38 01	12.4	3 m	2.3 m	30	SBc	eF,cL,iF,glbM,*7 (Grb 1830) f
						NGC 3963	GALXY	UMA	11 55.0	+58 30	11.9	2.7 m	2.4 m		SBbc Ring	pF,cL,R,vgsbM
						NGC 3972	GALXY	UMA	11 55.8	+55 19	12.3	3.7 m	1 m	120	SBbc	pB,E

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Deep Sky Object List in Chart No.26 (4/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						UGC 6930	GALXY	UMA	11 57.3	+49 16	12.1	4.4 m	2.8 m		S(B)d	
						MCG +09-20-046	GALXY	UMA	11 57.8	+55 28	11.8	1.5 m	1.2 m			Inner Regions Completely Black--MCG
					x	NGC 4013	GALXY	UMA	11 58.5	+43 57	11.2	4.8 m	1 m	66	Sb	B,cL,mE62,vsvmbM*10
						IC 749	GALXY	UMA	11 58.6	+42 44	12.4	2.3 m	2 m	150	SBc Ring	pB,L,E,IbM
						IC 750	GALXY	UMA	11 58.9	+42 43	11.9	2.6 m	1.2 m	43	Sab	pB,L,IE,bM
						UGC 6983	GALXY	UMA	11 59.2	+52 42	12.4	4.2 m	3.2 m	85	SBc	
						MCG +09-20-052	GALXY	UMA	11 59.5	+50 55	11.7	2.5 m	0.7 m			Inner Regions Completely Black--MCG

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Deep Sky Object List in Chart No.27

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x		x		NGC 3079	GALXY	UMA	10 02.0	+55 41	10.9	8.1 m	1.3 m	165	SBc	vB,L,mE 135,long streak
		x	x	x		NGC 3184	GALXY	UMA	10 18.3	+41 25	9.8	7.6 m	7.4 m	135	SBc	pB,vL,R,vgbM
			x	x		NGC 3198	GALXY	UMA	10 19.9	+45 33	10.3	8.1 m	3 m	35	SBc Ring	pB,vL,mE 45,vgbM
				x		NGC 3294	GALXY	LMI	10 36.3	+37 19	11.8	3.4 m	1.8 m	122	Sc	cB,L,mE 135,glbM
			x	x		NGC 3310	GALXY	UMA	10 38.8	+53 30	10.8	2.8 m	2.6 m		SBbc/P	cB,pL,R,vg,vsmbMN 15"
					x	NGC 3073	GALXY	UMA	10 00.9	+55 37	13.4	1.2 m	1.1 m		SBO	vF,S,vglbM
					x	NGC 3158	GALXY	LMI	10 13.8	+38 46	11.9	2.3 m	2.2 m		E2	cB,cS,R,psbM,r
						NGC 3182	GALXY	UMA	10 19.6	+58 12	12.1	2.1 m	1.7 m	155	Sa	cB,cL,iR,vgbM
						NGC 3206	GALXY	UMA	10 21.8	+56 56	11.9	2.9 m	1.9 m	0	SBc	pB,cL,E,vglbM
					x	NGC 3225	GALXY	UMA	10 25.2	+58 09	12.6	2 m	1 m	155	Sc	cF,pL,lE,vgbM
						NGC 3264	GALXY	UMA	10 32.3	+56 05	12	2.9 m	1.2 m	177	SB	eF,bet 2 S st
			x		x	NGC 3319	GALXY	UMA	10 39.2	+41 41	11.1	6.1 m	3.4 m	37	SBc	cF,L,mE
						NGC 3320	GALXY	UMA	10 39.6	+47 24	12.3	2.2 m	1 m	20	SBc	F,pS,mE,*10 nf
						NGC 3448	GALXY	UMA	10 54.6	+54 18	12.1	5.6 m	1.7 m	65	Sa	B,pL,mE 67,gbM
						NGC 3458	GALXY	UMA	10 56.0	+57 07	12.2	1.4 m	0.8 m	5	SBO	vB,vS,R,stellar
						NGC 3471	GALXY	UMA	10 59.1	+61 32	12.5	1.7 m	0.8 m	14	Sa	vF,S,R,bM

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Deep Sky Object List in Chart No.28

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2742	GALXY	UMA	09 07.6	+60 29	11.4	3 m	1.5 m	87	Sc	cB,cL,E 90 deg,er
				x		NGC 2768	GALXY	UMA	09 11.6	+60 02	9.9	8.2 m	5.3 m	95	E5	cB,cL,IE,psbM,LBN
			x	x		NGC 2782	GALXY	LYN	09 14.1	+40 07	11.6	3.7 m	2.4 m	40	SBa	cB,R,mbMBN
		x	x	x		NGC 2841	GALXY	UMA	09 22.0	+50 59	9.2	7.7 m	3.6 m	147	Sb	vB,L,vmE151,vsmbM = *10
				x		NGC 2950	GALXY	UMA	09 42.6	+58 51	10.9	2.7 m	1.8 m	145	SBO Ring	B,pS,R,vgyvmbMN
						NGC 2726	GALXY	UMA	09 04.9	+59 56	12.5	1.6 m	0.5 m	87	Sa	cF,pS,iR,er
						MCG +10-13-057	GALXY	UMA	09 07.6	+60 28	12.1	1.3 m	0.9 m			Inner Regions Very Black-- MCG
						NGC 2816	GALXY	UMA	09 07.6	+60 29	12.1	3 m	1.5 m	87	Sc	F,pmE
					x	NGC 2756	GALXY	UMA	09 09.0	+53 51	12.4	1.7 m	1.2 m	0	Sb	pB,pS,E,vgbM
						NGC 2776	GALXY	LYN	09 12.2	+44 57	11.6	2.8 m	2.5 m		SBc	pB,L,R,vgbM,r
						NGC 2798	GALXY	LYN	09 17.4	+42 00	12.3	2.8 m	0.9 m	160	SBap	pB,S,stellar
						NGC 2857	GALXY	UMA	09 24.6	+49 21	12.3	2.2 m	2 m		Sc	vF,pL,4 st p
						NGC 2998	GALXY	UMA	09 48.7	+44 05	12.5	2.7 m	1.2 m	53	SBc	pF,pL,E51,bMN,r

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Deep Sky Object List in Chart No.29

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 2681	GALXY	UMA	08 53.5	+51 19	10.3	3.7 m	3.7 m		SBO-a	vB,vL,vg,vsmbM *10
					x	NGC 2493	GALXY	LYN	08 00.4	+39 50	12	1.9 m	1.9 m		SBO	cB,S,R,sbM
						NGC 2488	GALXY	LYN	08 01.8	+56 33	12.4	1.4 m	0.8 m	100	E-SO	vF,vS,R,glbM
					x	NGC 2500	GALXY	LYN	08 01.9	+50 44	11.6	2.9 m	2.7 m		SBcd	F,L,R,vgbM,r,am st
						NGC 2537	GALXY	LYN	08 13.2	+45 59	11.7	3.1 m	2.7 m	0	SBp	pB,pL,R,rrr,st 20
					x	NGC 2541	GALXY	LYN	08 14.7	+49 04	11.8	6.3 m	2.9 m	165	SBc	F,L,E,vgbM
						NGC 2549	GALXY	LYN	08 19.0	+57 48	11.2	3.8 m	1.2 m	177	SO	pB,S,mE0,psmbM
						NGC 2552	GALXY	LYN	08 19.3	+50 00	12.1	3.6 m	2.1 m	45	lr	eF,cL,lE45
						UGC 4393	GALXY	LYN	08 26.1	+45 58	12.4	2.5 m	1.8 m	45	SB	
					x	NGC 2639	GALXY	UMA	08 43.6	+50 12	11.6	1.8 m	1.4 m	140	Sa	cB,S,E130,psmbM
						NGC 2654	GALXY	UMA	08 49.2	+60 13	11.8	4.2 m	0.8 m	63	SBab	pF,S,F* in M,F* close sp
						NGC 2685	GALXY	UMA	08 55.6	+58 44	11.3	4.6 m	2.1 m	38	SBO-a	pF,R,F* in centre
						NGC 2693	GALXY	UMA	08 57.0	+51 21	11.9	3 m	2.1 m	160	Ep	pB,lE,psmbM
						NGC 2701	GALXY	UMA	08 59.1	+53 46	12.3	2.2 m	1.6 m	23	SBc	pB,fan-shaped,*11 att
						NGC 2712	GALXY	LYN	08 59.5	+44 55	12.1	2.8 m	1.5 m	178	SBb	pB,L,E,vgbM *18

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Deep Sky Object List in Chart No.30

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 25		x	x		NGC 2419	GLOCL	LYN	07 38.1	+38 53	10.4	6.2 m			II	pB,pL,IE 90deg,vgbM,*7-8 267deg,4' dist
						NGC 2320	GALXY	LYN	07 05.7	+50 35	11.9	1.4 m	0.8 m	140	Elliptical	pB,S,iR,gbM,*8 sp
						UGC 3685	GALXY	LYN	07 09.0	+61 36	12	4.0 m	4.0 m		SBb	
						NGC 2329	GALXY	LYN	07 09.1	+48 37	12.4	1.3 m	1.1 m	175	SO	vF,vS,stellar
						NGC 2337	GALXY	LYN	07 10.2	+44 27	12.4	2.3 m	1.7 m	120	Ir	eF,S,E
						NGC 2340	GALXY	LYN	07 11.2	+50 10	11.7	1.8 m	1.2 m	80	Elliptical	pF,S,R,glbM,r
						NGC 2344	GALXY	LYN	07 12.5	+47 10	12	1.7 m	1.7 m		SBbc	pB,pS,R,lbM
						NGC 2460	GALXY	CAM	07 56.9	+60 21	11.8	2.2 m	1.7 m	40	Sab	F,S,R,S* in centre

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Deep Sky Object List in Chart No.31

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2126	OPNCL	AUR	06 02.5	+49 52	10.2	6.0 m			II 1 p	Cl,not Ri,*7 north
			x	x		NGC 2281	OPNCL	AUR	06 48.3	+41 05	5.4	15.0 m			I 3 p	Cl,pRi,vIC,st pL
					x	NGC 2192	OPNCL	AUR	06 15.3	+39 51	10.9	6.0 m			III 1 p	Cl,cL,C,iF,st vS
						IC 2166	GALXY	LYN	06 26.9	+59 05	12.4	3 m	2.1 m	115	SBbc	Neb;F*p1',D*f3'
						UGC 3504	GALXY	LYN	06 40.1	+60 04	12.3	3.1 m	2.7 m	135	S(B)c	
						NGC 2273B	GALXY	LYN	06 46.5	+60 20	12.5	2.7 m	1.5 m	55	SBd	
						NGC 2273	GALXY	LYN	06 50.1	+60 51	11.7	3.2 m	2.4 m	50	SBa	F,S,iR,r?

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Deep Sky Object List in Chart No.32

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 1857	OPNCL	AUR	05 20.1	+39 21	7	6 m			II 2 m	Cl,pRi,pC,st7...
						NGC 1724	OPNCL	AUR	05 03.5	+49 30	10.0p					Cl,vS,(st+ neb)
					x	NGC 1778	OPNCL	AUR	05 08.1	+37 01	7.7	7 m			III 2 p	Cl,pC,IRi,iF,st L
						PK 169-0.1	PLNNB	AUR	05 19.2	+38 11	12	32 s				
						Cr 62	OPNCL	AUR	05 22.5	+41 00	4.2	28.0 m			IV 3 p	
					x	NGC 1883	OPNCL	AUR	05 25.9	+46 29	12	2.5 m			II 1 p	Cl,vF,pRi,pC,iF
						IC 2149	PLNNB	AUR	05 56.4	+46 06	10	12 s	6 s		3b(2)	S,vB

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Deep Sky Object List in Chart No.33

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 1501	PLNNB	CAM	04 07.0	+60 55	12	56 s	48 s		3	pB,pS,vIE,1'Diam
			x	x		NGC 1513	OPNCL	PER	04 09.9	+49 31	8.4	9.0 m			II 1 m	Cl,L,vRi,pC,st vL
			x	x		NGC 1528	OPNCL	PER	04 15.3	+51 13	6.4	24.0 m			II 2 m	Cl,B,vRi,cC
				x		NGC 1545	OPNCL	PER	04 20.9	+50 15	6.2	18.0 m			II 2 p	Cl,pRi,IC,st L
				x		NGC 1664	OPNCL	AUR	04 51.1	+43 41	7.6	18 m			III 1 p	Cl,IRi,IC,pL
		x	x		x	NGC 1491	BRTNB	PER	04 03.2	+51 19	99.9	6 m	9 m		E	vB,S,iF,bM,r,* inv
						NGC 1496	OPNCL	PER	04 04.5	+52 40	9.6	6.0 m			II 1 p	Cl,segment of a ring
					x	NGC 1582	OPNCL	PER	04 31.8	+43 47	7	37.0 m			IV 2 p	Cl,vL,pRi,IC,st L
					x	NGC 1605	OPNCL	PER	04 34.9	+45 16	10.7	5.0 m			III 1 m	Cl,vF,pS,C,st eS
			x		x	NGC 1624	CL+NB	PER	04 40.6	+50 28	11.8	1.9 m			II 1 p n:b	F,cL,iF,6or7*+ neb
						Berk 68	OPNCL	PER	04 44.5	+42 04	9.8	12.0 m			IV 2 p	
						Ru 148	OPNCL	PER	04 46.5	+44 44	9.5	3.0 m			IV 2 p	13"-pF,pS,nC,nRi at 100X; 2* 10m and 12* 12m

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Deep Sky Object List in Chart No.34 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 1245	OPNCL	PER	03 14.7	+47 14	8.4	10 m			III 1 r	Cl,pL,Ri,C,iR,*12..15
				x		NGC 1342	OPNCL	PER	03 31.7	+37 22	6.7	14.0 m			III 3 p	Cl,vL,ab60*
				x		NGC 1444	OPNCL	PER	03 49.4	+52 40	6.6	4.0 m			IV 1 p	Cl of ab 30*12...14
						Cr 34	OPNCL	CAS	03 00.9	+60 25	6.8	25.0 m			I 3 p	
					x	NGC 1161	GALXY	PER	03 01.2	+44 54	11	2.8 m	2 m	23	SO	F,pS,iE,sbM
					x	NGC 1169	GALXY	PER	03 03.6	+46 23	11.3	4.6 m	2.7 m	28	SBab	pF,pS,iF,sbM
						NGC 1171	GALXY	PER	03 04.0	+43 24	12.3	2.7 m	1.1 m	147	Sc	vF,pL,iF
					x	NGC 1175	GALXY	PER	03 04.5	+42 20	12.9	1.9 m	0.7 m	153	Sa	F,cL,E
						NGC 1186	GALXY	PER	03 05.5	+42 50	11.4	3.2 m	1.2 m	122	SBbc	F*W,neb appendages
					x	NGC 1193	OPNCL	PER	03 05.9	+44 23	12.6	1.5 m			II 3 m	F,cL,er
						NGC 1198	GALXY	PER	03 06.2	+41 51	12.5	1.9 m	1.1 m	120	E-SO	neb *11
						IC 284	GALXY	PER	03 06.2	+42 22	11.5	4.1 m	2.1 m	13	Sd	eeF,pL,iE,D * np,between 2 *
					x	NGC 1207	GALXY	PER	03 08.3	+38 23	12.6	2.3 m	1.6 m	123	Sb Ring	cF,vS,R,psb in npp end
						IC 289	PLNNB	CAS	03 10.3	+61 19	12	45 s	30 s		4(2)	pB,pL,R,bet 2 vF stars
						NGC 1265	GALXY	PER	03 18.3	+41 51	12.1	1.8 m	1.6 m	165	SO	vF,vS,mbM
						NGC 1272	GALXY	PER	03 19.4	+41 29	11.8	2.2 m	2 m		SO	F,S,R
	C 24					NGC 1275	GALXY	PER	03 19.8	+41 31	11.9	2.3 m	1.6 m	110	SO	F,S
						NGC 1278	GALXY	PER	03 19.9	+41 34	12.4	1.4 m	1.1 m	90	E2p	pB,pS,R,bM
			!!!!*			Me1 20	OPNCL	PER	03 22.0	+49 00	1.2	185 m			III 3 m	10X50-vB,vvL,scattered; 39*

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Deep Sky Object List in Chart No.34 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 1348	OPNCL	PER	03 34.1	+51 25	99.9	5 m			II 2 p	Cl,I,Ri,st L
						Tombaugh 5	OPNCL	CAM	03 47.8	+59 03	8.4	17.0 m			III 2 m	

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Deep Sky Object List in Chart No.35 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 14	x	!!!!	x		NGC 869	OPNCL	PER	02 19.1	+57 08	5.3	30 m			I 3 r	Cl,vvL,vRi,*7...14
	C 14	x	!!!!	x		NGC 884	OPNCL	PER	02 22.5	+57 09	6.1	30 m			I 3 r	Cl,vL,vRi,ruby*M
	C 23	x	*	x		NGC 891	GALXY	AND	02 22.6	+42 21	9.9	13.1 m	2.8 m	22	Sb	B,vL,vmE22
		x	x	x		NGC 1023	GALXY	PER	02 40.4	+39 04	9.4	8.1 m	3.4 m	87	E7p	vB,vL,vmE,vvmbM
				x		NGC 1027	OPNCL	CAS	02 42.6	+61 36	6.7	20.0 m			III 2 p n	Cl,L,scatt stars, one 10th mag
M 34			!			NGC 1039	OPNCL	PER	02 42.1	+42 47	5.2	35.0 m			II 3 m	Cl,B,vL,IC,sC st9...
						NGC 812	GALXY	AND	02 06.9	+44 34	11.2	3 m	1.3 m	160	Sbc	eF,pL,E45,bM
						NGC 818	GALXY	AND	02 08.7	+38 47	12.5	2.9 m	1.2 m	113	SBbc	pB,cL,IE,mbM
						NGC 828	GALXY	AND	02 10.2	+39 11	12.3	2.9 m	2.2 m	145	Sap	pB,S,iR,D* f 15"
						NGC 846	GALXY	AND	02 12.2	+44 34	12.1	1.9 m	1.7 m	140	SBab	eF,vS,R,gbM
						Stock 2	OPNCL	CAS	02 15.0	+59 16	4.4	60.0 m			III 1 m	13"-vB,vL,nC,vRi at 60X; 88*, nice chains
						Basel 10	OPNCL	PER	02 18.8	+58 19	9.9					
						NGC 910	GALXY	AND	02 25.4	+41 49	12.2	2 m	2 m		SO	vF,pS,stellar
						IC 1795	BRTNB	CAS	02 25.8	+61 59	99.9	12 m	12 m		E	vL,F
						Mrk 6	OPNCL	CAS	02 29.6	+60 39	7.1	4.5 m			IV 2 p	13"-9 pB* and 6 pF* in Small grp at 100X
						NGC 949	GALXY	TRI	02 30.8	+37 08	11.8	2.7 m	1.7 m	145	Sb	cB,L,E,vgbM
						NGC 956	OPNCL	AND	02 32.5	+44 36	8.9	8.0 m			IV 1 p	Cl,pRi,*9...15

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Deep Sky Object List in Chart No.35 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Mel 15	OPNCL	CAS	02 32.6	+61 27	6.6	21.0 m			III 3 p n	13"-B,pL,pRi,pC; 20* at 135X; some neby to S
			x			IC 1805	CL+NB	CAS	02 32.7	+61 27	6.5	60 m	60 m		III 3 p n	Cl,C,eL neby extends following
						Czernik 8	OPNCL	PER	02 33.0	+58 44	9.7	7.0 m			II 3 m	
						NGC 957	OPNCL	PER	02 33.3	+57 34	7.6	11.0 m			III 2 p	Cl,pL,pRi,*13...15
						NGC 982	GALXY	AND	02 35.4	+40 52	12.5	1.5 m	0.6 m	132	Sa	F,S,nf of 2
						Maffei 1	GALXY	CAS	02 36.3	+59 39	11.4	5 m	3 m			vF,pS
						IC 239	GALXY	AND	02 36.5	+38 58	11.1	4.6 m	4.2 m		SBa	vF spiral,F stellar nucleus
						Tr 2	OPNCL	PER	02 37.3	+55 59	5.9	20.0 m			III 2 p	13"-pB,pL,pRi,sC at 100X; 20*; BI-Gold D* inv
					x	NGC 1003	GALXY	PER	02 39.3	+40 52	11.4	5.7 m	2.2 m	97	Sc	pF,L,E90,mbM,r
					x	NGC 1058	GALXY	PER	02 43.5	+37 20	11.2	3.2 m	3.1 m		Sc	pF,cL,R,glbM
						NGC 1106	GALXY	PER	02 50.7	+41 40	12.3	1.8 m	1.8 m		SO	vF,vS,vF * att s
						IC 1848	CL+NB	CAS	02 51.4	+60 25	6.5	40 m	10 m		IV 3 p n	Cl,star following,in F neby
						NGC 1122	GALXY	PER	02 52.9	+42 12	12.1	1.8 m	1.3 m	40	SBb	vF,pS,R,* nr n
						NGC 1129	GALXY	PER	02 54.5	+41 35	12.5	4 m	3.1 m	90	Elliptical	cF,pS,iR,vglbM,D or F*,sp
						Cr 33	OPNCL	CAS	02 59.3	+60 24	5.9	40.0 m				

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Deep Sky Object List in Chart No.36

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 76			!*	x		NGC 651	PLNNB	PER	01 42.3	+51 35	11	163 s	107 s		3(6)	vB,f of Dneb
				x		NGC 381	OPNCL	CAS	01 08.4	+61 35	9.3	6.0 m			III 2 p	Cl,pC
				x		NGC 436	OPNCL	CAS	01 16.0	+58 49	8.8	6.0 m			I 3 m	Cl,S,iF,pC
	C 13	x	x	x		NGC 457	OPNCL	CAS	01 19.5	+58 17	6.4	13.0 m			I 3 r	Cl,B,L,pRi,*7,8,10
				x		NGC 654	OPNCL	CAS	01 44.0	+61 53	6.5	5.0 m			II 3 m	Cl,iF,Ri,1*6.7m
				x		NGC 659	OPNCL	CAS	01 44.4	+60 40	7.9	5.0 m			III 1 p	Cl,IRi,st B
	C 10	x	x	x		NGC 663	OPNCL	CAS	01 46.0	+61 15	7.1	16 m			III 2 m	Cl,B,L,eRi,st pL
	C 28		x	x		NGC 752	OPNCL	AND	01 57.7	+37 40	5.7	50 m			III 1 m	Cl,vvL,Ri,*L & S,C
M 76			!*			NGC 650	PLNNB	PER	01 42.3	+51 35	11	163 s	107 s		3(6)	vB,p of Dneb
M103			x			NGC 581	OPNCL	CAS	01 33.4	+60 39	7.4	6.0 m			III 2 p	Cl,pL,B,R,Ri,*10..11
						NGC 393	GALXY	AND	01 08.6	+39 39	12.5	1.7 m	1.4 m	20	E-SO	F,vS,vIE,gbM,4 S st nr
						NGC 433	OPNCL	CAS	01 15.2	+60 08	9	2.5 m			III 2 p	Cl,S,IC
						Tr 1	OPNCL	CAS	01 35.7	+61 17	8.1	4.5 m			I 3 p	S,pC
						NGC 744	OPNCL	PER	01 58.5	+55 28	7.9	11.0 m			IV 2 p	Cl,pL,pRi,iF,*11..13
						NGC 743	OPNCL	CAS	01 58.5	+60 10	9.5	5.0 m			II 1 p	Cl,not Ri,D*

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Deep Sky Object List in Chart No.37

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M110			*	x		NGC 205	GALXY	AND	00 40.4	+41 41	8.1	19.5 m	11.5 m	170	E6	vB,vL,mE 165 degrees,vgvmbM
				x		NGC 129	OPNCL	CAS	00 30.0	+60 13	6.5	21.0 m			IV 2 p	Cl,vL,pRi,IC,st 9...13
				x		NGC 136	OPNCL	CAS	00 31.5	+61 31	11.5p	1.2 m			II 2 p	vF,S,eC
	C 18	x	x	x		NGC 185	GALXY	CAS	00 39.0	+48 20	9.2	12.5 m	10.4 m	35	dE0	pB,vL,iR,vgmbM,r
			S	x		NGC 225	OPNCL	CAS	00 43.6	+61 46	7	12.0 m			III 1 p n	Cl,L,IC,st 9...10
			x	x		NGC 278	GALXY	CAS	00 52.1	+47 33	10.8	2.4 m	2.4 m		SBb	cB,pL,R,2 st 10 nr
M 31			!!!!*			NGC 224	GALXY	AND	00 42.7	+41 16	3.4	189.1 m	61.7 m	35	Sb	!!!eeB,eL,vmE
M 32			*			NGC 221	GALXY	AND	00 42.7	+40 52	8.1	8.5 m	6.5 m	170	E2	vvB,L,R,psmbMN
						Berk 58	OPNCL	CAS	00 00.2	+60 58	9.7	8.0 m			IV 2 p	
						PK 118- 8.1	PLNNB	CAS	00 18.7	+53 53	12.5	5 s				
						NGC 103	OPNCL	CAS	00 25.3	+61 19	9.8	5.0 m			II 2 p	Cl,pS,pC,st 11...18
	C 17		x			NGC 147	GALXY	CAS	00 33.2	+48 30	9.5	13.5 m	8.2 m	25	dE4	vF,vL,iR,gsmbM,*1.1
						NGC 189	OPNCL	CAS	00 39.6	+61 05	8.8	3.7 m			III 2 p	Cl,pL,R,st 11...15
						Stock 24	OPNCL	CAS	00 39.7	+61 57	8.8	4.0 m			IV 2 P	
					x	NGC 206	G+C+N	AND	00 40.5	+40 44	99.9				Pec	vF,vL,mE 0 degrees
		x	x			NGC 281	CL+NB	CAS	00 53.0	+56 37	7.4	4.0 m			E+*	F,vL,dif,S triple * on np edge

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Deep Sky Object List in Chart No.38 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 7448	GALXY	PEG	23 00.1	+15 59	11.7	2.6 m	1.2 m	170	Sbc	pB,L,E173,vgbM,*11 f 2.5'
	C 44		x	x		NGC 7479	GALXY	PEG	23 04.9	+12 19	10.9	4 m	3.1 m	25	SBbc	pB,cL,mE12,bet 2 st
					x	NGC 7457	GALXY	PEG	23 01.0	+30 09	11.2	4 m	2.3 m	130	E-SO	cB,cL,IE,gmbM,r,2 S st n
						NGC 7454	GALXY	PEG	23 01.1	+16 23	11.8	2.2 m	1.6 m	150	Elliptical	F,cS,IE,lbM,*11 p 1'
					x	NGC 7463	GALXY	PEG	23 01.9	+15 59	13.2	3 m	0.6 m	90	SBb/P	vF,S,IE,p of 2
					x	NGC 7465	GALXY	PEG	23 02.0	+15 58	12.6	1.2 m	0.8 m	165	SBO	vF,vS,f of 2
						NGC 7490	GALXY	PEG	23 07.4	+32 23	12.3	2.7 m	2.6 m		Sbc	vF,vS,iR,lbM
						NGC 7497	GALXY	PEG	23 09.1	+18 11	12.2	4.4 m	1.7 m	48	SBc	vF,L,pmE,lbM
						NGC 7514	GALXY	PEG	23 12.4	+34 53	12.5	1.4 m	0.9 m	132	Sbc	eF,pL,iR
						NGC 7515	GALXY	PEG	23 12.8	+12 41	12.4	1.7 m	1.6 m	15	Sc	F,cS,R,vglbM,r
						NGC 7539	GALXY	PEG	23 14.5	+23 41	12.5	1.5 m	1.2 m	165	SO	F,S,R,psbM
						NGC 7550	GALXY	PEG	23 15.3	+18 58	12.2	1.4 m	1.2 m		E-SO	cF,S,R
						NGC 7625	GALXY	PEG	23 20.5	+17 14	12.1	1.6 m	1.6 m		Sa	pB,cS,R,smbM
						NGC 7678	GALXY	PEG	23 28.5	+22 25	11.8	2.5 m	1.7 m	5	SBc	vF,pL,vIE,lbM,am 4 st
						UGC 12613	GALXY	PEG	23 28.6	+14 45	12	4.6 m	3.0 m	120	Ir+	
						NGC 7711	GALXY	PEG	23 35.7	+15 18	12.1	2.6 m	1.3 m	95	SO	F,S,R,psbM,stellar
						NGC 7720	GALXY	PEG	23 38.5	+27 02	12.4	1.6 m	1.3 m	10	Elliptical	F,S,IE,bM,am st
						NGC 7722	GALXY	PEG	23 38.7	+15 57	12.4	2.1 m	1.8 m	150	Sa	pB,pL,R,mbM

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Deep Sky Object List in Chart No.38 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 7741	GALXY	PEG	23 43.9	+26 04	11.3	4.5 m	2.9 m	170	SBc	cF,cL,iR,D* 10-12 np 2'
						NGC 7753	GALXY	PEG	23 47.1	+29 29	12	2.9 m	1.9 m	50	SBbc	cF,cL,vIE,vglbM,r
						NGC 7768	GALXY	PEG	23 51.0	+27 09	12.3	1.6 m	1.3 m	60	Elliptical	vF,S,E,* inv,*p,vnr
						NGC 7769	GALXY	PEG	23 51.1	+20 09	12	1.6 m	1.6 m		Sb	pF,pS,R,mbM
						NGC 7771	GALXY	PEG	23 51.4	+20 07	12.3	2.4 m	1.1 m	68	SBa	pB,pL,E84,bM,n of 2
						NGC 7798	GALXY	PEG	23 59.4	+20 45	12.4	1.4 m	1.3 m		Sc	pF,S,R,sbM,*10 sp

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Deep Sky Object List in Chart No.39

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 7217	GALXY	PEG	22 07.9	+31 22	10.1	4 m	3.4 m	95	Sb	B,pL,gbM,er
	C 30	x	*	x		NGC 7331	GALXY	PEG	22 37.1	+34 25	9.5	10.2 m	4.2 m	171	SBc	B,pL,pmE163,smbM
					x	NGC 7177	GALXY	PEG	22 00.7	+17 44	11.2	3.2 m	2.1 m	90	SBb	pB,pS,R,bMN,r,* sp
						NGC 7265	GALXY	LAC	22 22.5	+36 13	12.2	2.4 m	1.9 m	170	E-SO	F,vS,R,mbM
						NGC 7280	GALXY	PEG	22 26.5	+16 09	12.1	2.1 m	1.5 m	78	SBO-a	F,cS,R,gbM S*,3st n,nf
						NGC 7286	GALXY	PEG	22 27.8	+29 06	12.5	1.6 m	0.7 m	98	Sa	vF,S,R,am st
						NGC 7292	GALXY	PEG	22 28.4	+30 18	12.5	2.1 m	1.6 m	125	Ir Bar	eF,S,oval,F* inv
						NGC 7315	GALXY	PEG	22 35.5	+34 48	12.5	1.6 m	1.6 m		SO	vF,eS,R,bM
					x	NGC 7332	GALXY	PEG	22 37.4	+23 48	11.1	3.8 m	1.1 m	155	SO	cB,S,mE156,smbMN,p of 2
						NGC 7339	GALXY	PEG	22 37.8	+23 47	12.2	2.8 m	0.7 m	93	SBbc	F,pS,mE89,vglbM,f of 2
						NGC 7426	GALXY	LAC	22 56.1	+36 22	12.3	1.7 m	1.4 m	72	Elliptical	vF,cS,R,stellar,D* p

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Deep Sky Object List in Chart No.40

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 42		x	x		NGC 7006	GLOCL	DEL	21 01.5	+16 11	10.6	2.8 m			I	B,pL,R,gbM
M 15			!!*			NGC 7078	GLOCL	PEG	21 30.0	+12 10	6.4	12.3 m			IV	!,vB,vL,iR,vsmbM,rrr,st vS
						NGC 7013	GALXY	CYG	21 03.6	+29 54	11.3	4.5 m	1.4 m	157	Sa	pB,cS,R,psbM,pB* np
					x	NGC 7042	GALXY	PEG	21 13.8	+13 34	12	2 m	1.8 m	140	Sb	vF,S,R
						PK 72-17.1	PLNNB	VUL	21 16.8	+24 10	12.2	871 s	791 s		2	13"-vF,L,irR,nBM at 100X; UHC filter helps
						NGC 7052	GALXY	VUL	21 18.6	+26 27	12.4	2.5 m	1.5 m	64	Elliptical	F,S,vIE,r
						NGC 7063	OPNCL	CYG	21 24.4	+36 30	7	8.0 m			III 2 p	Cl,P,st10...
						NGC 7080	GALXY	VUL	21 30.0	+26 43	12.3	1.8 m	1.7 m		SBb	vF,S,vIE
						NGC 7137	GALXY	PEG	21 48.2	+22 10	12.4	1.6 m	1.4 m		SBc	F,pS,R,vglbM,r

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Deep Sky Object List in Chart No.41

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 37			x		NGC 6885	OPNCL	VUL	20 11.9	+26 29	8.1	7.0 m			III 2 p	Cl,vB,vL,Ri,IC,*6..11
				x		NGC 6882	ASTER	VUL	20 11.9	+26 40	8.1	18.0 m			II 2 p	Cl,P,IC
				x		NGC 6905	PLNNB	DEL	20 22.4	+20 06	12	44 s	38 s		3(3)	B,pS,R,4S* nr
		x	x	x		NGC 6940	OPNCL	VUL	20 34.4	+28 17	6.3	31 m			III 2 m	Cl,vB,vL,vRi,cC
					x	NGC 6857	BRTNB	CYG	20 02.8	+33 31	11.4	0.8 m			E	F,am Milky Way st
						Roslund 4	OPNCL	VUL	20 04.9	+29 13	10				IV 2 p n	
						NGC 6871	OPNCL	CYG	20 05.9	+35 47	5.2	20.0 m			IV 3 p n	Cl,st L&S,D* inv
						Biur 2	OPNCL	CYG	20 09.2	+35 29	6.3	13.0 m			III 2 p	13"-pF,pL,sC,nvRi, 22* mags 11..13 at 100X
						NGC 6879	PLNNB	SGE	20 10.4	+16 55	11	4.7 s	4.1 s		2a	stellar=10m
						NGC 6883	OPNCL	CYG	20 11.3	+35 51	8	15.0 m			I 3 p n	Cl,pRi,** inv
						NGC 6886	PLNNB	SGE	20 12.7	+19 59	12.5	4 s			2(3)	stellar=10m
			x			NGC 6891	PLNNB	DEL	20 15.1	+12 42	10.5	15.5 s	7 s		2a(2b)	stellar=9.5m
					x	NGC 6894	PLNNB	CYG	20 16.4	+30 34	14.4	44 s	39 s		4(2)	ring neb,F,S,vvIE
						IC 4997	PLNNB	SGE	20 20.1	+16 44	11.3	2.0 s	1.4 s		1	Stellar
						NGC 6956	GALXY	DEL	20 43.9	+12 31	12.3	2 m	1.9 m		SBb	vF,S,stell,** att
	C 34	x	!!*		x	NGC 6960	SNREM	CYG	20 45.7	+30 43	7	210 m	160 m			pB,cL,eIF,Kappa Cyg invl
	C 33	x	!!*		x	NGC 6992	SNREM	CYG	20 56.4	+31 43	7	60 m	8 m		R	eF,eL,eE,eIF,Bifid
						NGC 6995	SNREM	CYG	20 57.1	+31 13	7	12 m			R	F,eL,neb&st in groups

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Deep Sky Object List in Chart No.42

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6802	OPNCL	VUL	19 30.6	+20 16	8.8	3.2 m			III 1 m	Cl,L,vC,E0,st14...18
			S	x		NGC 6823	OPNCL	VUL	19 43.2	+23 18	7.1	12.0 m			I 3 p n	Cl,cRi,E,st11...12
				x		NGC 6830	OPNCL	VUL	19 51.0	+23 06	7.9	12.0 m			II 2 p	Cl,L,pRi,pC,*11...12
			x	x		NGC 6834	OPNCL	CYG	19 52.2	+29 24	7.8	5.0 m			II 2 m	Cl,P,IC,*11...12
M 27			!!*			NGC 6853	PLNNB	VUL	19 59.6	+22 43	7.3	480 s	340 s		3(2)	!!vB,vL,bi-N,IE,Dumbbell Neb
M 56			x			NGC 6779	GLOCL	LYR	19 16.6	+30 11	8.3	5 m			X	B,L,iR,gvmCM,rrr
M 71			x			NGC 6838	GLOCL	SGE	19 53.8	+18 47	8.3	6.1 m				Cl,vL,vRi,pmC,*11...16
					x	NGC 6793	OPNCL	VUL	19 23.2	+22 11	99.9	6 m			IV 2 p	Cl,P,IC
						Col 399	OPNCL	VUL	19 25.4	+20 11	3.6	60 m				
					x	NGC 6800	OPNCL	VUL	19 27.1	+25 08	99.9	5 m			III 2 p	Cl,vL,pRi,vIC,st10..
						PK 64+ 5.1	PLNNB	CYG	19 34.8	+30 31	9.6	5 s			4	vF,S
						Stock 1	OPNCL	VUL	19 35.8	+25 13	5.3	60.0 m			IV 2 p	13"-B,vL,nC at 60X; 28*
						PK 52- 2.2	PLNNB	AQL	19 39.1	+15 56	11.8	3 s			4	13"-pF,vS,R,BM at 165X, averted viz helps
			x			NGC 6820	CL+NB	VUL	19 43.1	+23 17	15	40 m	30 m		E	F,L,Irr
						Harvard 20	OPNCL	SGE	19 53.1	+18 20	7.7	7.0 m			III 2 p	pL,IC,* 11...
			x			NGC 6842	PLNNB	VUL	19 55.0	+29 17	13.1	52.8 s	48 s		3b	F,pL,vIE

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Deep Sky Object List in Chart No.43

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 57			!!*			NGC 6720	PLNNB	LYR	18 53.6	+33 02	9.4	86 s	62 s		4(3)	Ring neb,B,pL,cE
					x	NGC 6548	GALXY	HER	18 06.0	+18 35	11.7	2.9 m	2.8 m		SBO	cF,S,IE,r
						NGC 6555	GALXY	HER	18 07.8	+17 36	12.4	2.1 m	1.7 m	110	SBc	F,L,R,vglbM
						NGC 6574	GALXY	HER	18 11.9	+14 59	12	1.5 m	1.1 m	160	SBbc	pB,S,R
						NGC 6632	GALXY	HER	18 25.1	+27 32	12.1	3 m	1.4 m	155	Sbc	F,S,R,gbM
						NGC 6661	GALXY	HER	18 34.6	+22 55	12.1	1.8 m	1.1 m	145	Sa	F,vS,R,gbM
						NGC 6674	GALXY	HER	18 38.6	+25 22	12.2	4.2 m	2.1 m	143	SBb	F,pS,iR,bM
						PK 51+ 9.1	PLNNB	HER	18 49.8	+20 50	11.6	3 s				
						Steph 1	OPNCL	LYR	18 53.5	+36 55	3.8	20.0 m			III 3 p	13"-B,pL,nRi,nC at 100X; 15* and Delta LYR

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Deep Sky Object List in Chart No.44

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 6278	GALXY	HER	17 00.8	+23 01	12.4	2.1 m	1.2 m	130	SO	vF,stellar
						NGC 6389	GALXY	HER	17 32.7	+16 24	12.1	2.8 m	1.9 m	130	Sbc	F,S,iF,eR
						NGC 6467	GALXY	HER	17 50.7	+17 32	12.5	2.6 m	1.7 m	77	S pec	vF,vS,IE
						NGC 6482	GALXY	HER	17 51.8	+23 04	11.4	2.1 m	1.8 m	70	E3p	vF,S,R,vsvmbM,vSRN
						NGC 6484	GALXY	HER	17 51.8	+24 29	12.3	1.9 m	1.8 m		Sb	eF,vS,R,mbM
						NGC 6487	GALXY	HER	17 52.7	+29 50	11.9	1.9 m	1.7 m		Elliptical	F,S,R,gbM
						PK 53+24.1	PLNNB	HER	17 54.4	+28 00	12	5.2 s	4.1 s		2	
						NGC 6495	GALXY	HER	17 54.8	+18 20	12.2	2 m	1.8 m		Elliptical	F,S,R
						NGC 6500	GALXY	HER	17 56.0	+18 20	12.1	2.2 m	1.6 m	50	Sab	vF,vS,sp of 2
						NGC 6501	GALXY	HER	17 56.1	+18 22	12	1.8 m	1.6 m		Sa	vF,vS,nf of 2
						NGC 6504	GALXY	HER	17 56.1	+33 12	12.5	2.2 m	0.5 m	94	S pec	F,vmE,sbM

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Deep Sky Object List in Chart No.45

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 6207	GALXY	HER	16 43.1	+36 50	11.6	3 m	1.2 m	15	Sc	pB,pL,E45,vgmbM
M 13			!!!*			NGC 6205	GLOCL	HER	16 41.7	+36 28	5.9	23.2 m			V	!!eB,vRi,vgeCM,*11...
						IC 4593	PLNNB	HER	16 11.7	+12 04	11	12.5 s	10 s		2(2)	S,F,Stellar
					x	NGC 6181	GALXY	HER	16 32.3	+19 50	11.9	2.5 m	1.1 m	175	SBc	pB,pL,vIE,pgmbM
		x	x			NGC 6210	PLNNB	HER	16 44.5	+23 48	9.7	20 s	13 s		2(3b)	vB,vS,R,disc
						NGC 6269	GALXY	HER	16 58.0	+27 51	12.2	2 m	1.6 m	80	Elliptical	F,S,R

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Deep Sky Object List in Chart No.46

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5859	GALXY	BOO	15 07.6	+19 35	12.4	3 m	0.8 m	136	SBbc	pF,pS,E,f of Dneb
						NGC 5928	GALXY	SER	15 26.0	+18 04	12.2	2.2 m	1.6 m	105	SO	pB,cS,R,psbM,*7n
						NGC 5936	GALXY	SER	15 30.0	+12 59	12.5	1.3 m	1.3 m		SBb Ring	F,pL,iR,vgbM,r
						NGC 5957	GALXY	SER	15 35.4	+12 03	11.7	3.1 m	3 m		SBb	pB,pL,com,lbM
			x			NGC 5962	GALXY	SER	15 36.5	+16 36	11.3	3 m	2.2 m	110	Sc	pF,pL,ilE,gbM
					x	NGC 5970	GALXY	SER	15 38.5	+12 11	11.5	3 m	2 m	88	SBc	pF,pL,R,rr
						NGC 5984	GALXY	SER	15 42.9	+14 14	12.5	2.9 m	0.7 m	144	SBcd	pB,S,E135,bM
						NGC 6004	GALXY	SER	15 50.4	+18 56	12.3	1.8 m	1.7 m	105	SBc	vF,pL,IE,lbM
						NGC 6012	GALXY	SER	15 54.2	+14 36	12	2.1 m	1.5 m	168	SBab	F,bet 2B st
			x			NGC 6027	GALXY	SER	15 59.2	+20 46	14.3	1.9 m	1 m		Sp	eF,vF*inv,2vF st nr

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Deep Sky Object List in Chart No.47 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 5466	GLOCL	BOO	14 05.5	+28 32	9.1	9.2 m			XII	Cl,L,vRi,vmC,st 11...
				x		NGC 5557	GALXY	BOO	14 18.4	+36 30	11	2.4 m	1.9 m	105	E1	cB,S,R,vsbM*
					x	NGC 5440	GALXY	CVN	14 03.0	+34 45	12.3	3.1 m	1.2 m	50	Sa	pF,cS,IE,bM,*11 sp
					x	NGC 5444	GALXY	CVN	14 03.4	+35 08	11.9	2.5 m	2 m	90	E1	pB,pL,IE,vsmbM
					x	NGC 5445	GALXY	CVN	14 03.5	+35 01	13	1.5 m	0.7 m	27	SO	F,*13p
					x	NGC 5490	GALXY	BOO	14 10.0	+17 33	12.1	2.5 m	2.3 m	5	E2	cF,cS,R,sbMF**
					x	NGC 5523	GALXY	BOO	14 14.9	+25 19	12.1	4.7 m	1.3 m	99	Sc	F,pL,pmE90,*10 np
					x	NGC 5529	GALXY	BOO	14 15.6	+36 14	11.9	6 m	0.7 m	115	Sc	cF,pL,vmE110,vgvmBM
					x	NGC 5533	GALXY	BOO	14 16.1	+35 21	11.8	3.1 m	1.9 m	30	Sab	pB,R,vsmbM,2or3*inv
					x	NGC 5548	GALXY	BOO	14 18.0	+25 08	12.6	1.5 m	1.2 m	110	Sa Ring	cF,pS,R,vsmbM*
					x	NGC 5590	GALXY	BOO	14 21.6	+35 12	12.3	1.8 m	1.8 m		SO	cF,S,R,bM*,sf of 2
						NGC 5587	GALXY	BOO	14 22.2	+13 55	12.5	2.6 m	0.8 m	162	Sa	F,cS,vIE,*8 sf
					x	NGC 5600	GALXY	BOO	14 23.8	+14 38	12.1	1.5 m	1.5 m		Sc	pB,pS,gbM
			x			NGC 5614	GALXY	BOO	14 24.1	+34 52	11.7	2.4 m	2 m	160	Sab	pB,S,R,smbM
						NGC 5623	GALXY	BOO	14 27.1	+33 15	12.5	1.6 m	1.1 m	17	Elliptical	cF,S,R,vsmbM,r
						IC 1014	GALXY	BOO	14 28.3	+13 47	12.5	2.7 m	2 m	90	SBd	F,pL,R,gbM
						NGC 5629	GALXY	BOO	14 28.3	+25 51	12.1	1.8 m	1.8 m		SO	pF,S,R,gbM
						NGC 5635	GALXY	BOO	14 28.5	+27 25	12.5	2.3 m	1.1 m	65	Sb	F,S,E,sbM

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Deep Sky Object List in Chart No.47 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5641	GALXY	BOO	14 29.3	+28 49	12.2	2.4 m	1.3 m	158	SBab	pB,pS,IE,mbM,r?
						NGC 5653	GALXY	BOO	14 30.2	+31 13	12.2	1.7 m	1.3 m	125	Sb Ring	pF,pS,R,bM
						NGC 5656	GALXY	BOO	14 30.4	+35 19	11.8	1.9 m	1.5 m	50	Sab	pF,pL,R,mbM,r
						NGC 5735	GALXY	BOO	14 42.6	+28 44	12.3	2.4 m	1.9 m	40	SBbc Ring	vF,L,iR,lbM

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Deep Sky Object List in Chart No.48

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 5033	GALXY	CVN	13 13.5	+36 36	10.2	9.8 m	3.6 m	170	Sc	vB,pL,E167,smbM,vBN
				x		NGC 5273	GALXY	CVN	13 42.1	+35 39	11.6	2.7 m	2.2 m	10	SO	cB,pL,R,g,psmbM
M 3			!			NGC 5272	GLOCL	CVN	13 42.2	+28 23	6.4	18.6 m			VI	!!eB,vL,vsmbM,st 11..
M 53			x			NGC 5024	GLOCL	COM	13 12.9	+18 10	7.7	14.4 m			V	!B,vC,iR,vvmbM,st 12...
	C 35		x			NGC 4889	GALXY	COM	13 00.1	+27 59	11.5	2.8 m	2 m	80	Elliptical	pB,pmE,bM,*7 n
						NGC 4884	GALXY	COM	13 00.1	+27 59	12.5	2.8 m	2 m	80	Elliptical	chief one of mult neb,=4889?
					x	NGC 4880	GALXY	VIR	13 00.2	+12 29	11.4	3.1 m	2.5 m	165	SBO-a	cF,pL,R,vglbM,r
						NGC 4921	GALXY	COM	13 01.4	+27 53	12.2	2.4 m	2.1 m	165	SBab	F,pL,3 of 4
						NGC 4952	GALXY	COM	13 05.0	+29 07	12.4	1.3 m	0.8 m	23	Elliptical	F,S,R,psbM *11
					x	NGC 4956	GALXY	CVN	13 05.0	+35 11	12.4	1.5 m	1.5 m		SO	pB,cS,R,smbM
					x	NGC 5012	GALXY	COM	13 11.6	+22 55	12.2	2.9 m	1.7 m	10	SBc Ring	pF,cL,E17,bi-N,*9 f
					x	NGC 5020	GALXY	VIR	13 12.7	+12 36	11.7	3.1 m	2.7 m	85	SBbc Ring	cF,cL,vIE,lbM
					x	NGC 5056	GALXY	COM	13 16.2	+30 57	13.1	1.8 m	1 m	0	Sc	cF,cS,R,sp of 2
			x		x	NGC 5053	GLOCL	COM	13 16.5	+17 42	9.8	8.9 m			XI	Cl,vF,pL,iR,vgbM,st 15
						NGC 5127	GALXY	CVN	13 23.8	+31 34	11.9	2.3 m	1.7 m	75	E2p	pB,pL,R,gmbM,**p
					x	NGC 5129	GALXY	VIR	13 24.2	+13 59	12.1	1.7 m	1.4 m	10	Elliptical	pB,vS,R,gmbM,**f
						NGC 5172	GALXY	COM	13 29.3	+17 03	11.9	3.4 m	1.8 m	103	SBbc	F,pL,R,gbM
						NGC 5230	GALXY	VIR	13 35.5	+13 40	12.1	2.1 m	1.9 m		SBc	F,L,E,vgbM,3rd of 3
						NGC 5375	GALXY	CVN	13 56.9	+29 10	11.5	3.3 m	2.8 m	80	SBab	pB,pL,R,lbM

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Deep Sky Object List in Chart No.49 (1/7)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 91			x	x		NGC 4548	GALXY	COM	12 35.4	+14 30	10.1	5.2 m	4.2 m	150	SBb	B,L,IE,lbM
			x	x		NGC 4147	GLOCL	COM	12 10.1	+18 33	10.3	4.0 m			VI	vB,pL,R,gbM,rrr
				x		NGC 4150	GALXY	COM	12 10.6	+30 24	11.6	2.3 m	1.6 m	147	SO	B,S,R,pgmbM,vsvBN
				x		NGC 4203	GALXY	COM	12 15.1	+33 12	10.9	3.5 m	3.2 m	10	E-SO Bar	vB,S,R,psmbM
		x	x	x		NGC 4214	GALXY	CVN	12 15.6	+36 20	9.8	8.4 m	7.2 m	155	Ir	cB,cL,iE,biN,=NGC 4208
		x	x	x		NGC 4216	GALXY	VIR	12 15.9	+13 09	10	7.8 m	1.8 m	19	SBb	vB,vL,vmE17,sbMN
				x		NGC 4245	GALXY	COM	12 17.6	+29 36	11.4	3.3 m	2.4 m	165	SBO-a Ring	cB,pL,vIE,smbM,r,vsvBN
			x	x		NGC 4251	GALXY	COM	12 18.1	+28 10	10.7	3.6 m	2.5 m	100	SBO Ring	vB,S,E,vsmbMN,*6-7 f 90"
		x	x	x		NGC 4274	GALXY	COM	12 19.8	+29 37	10.4	6.8 m	2.4 m	102	SBab Ring	vB,vL,E90,mbMN
				x		NGC 4278	GALXY	COM	12 20.1	+29 17	10.2	4 m	3.9 m		Elliptical	vB,pL,R,mbM,r,1 of 3
			x	x		NGC 4293	GALXY	COM	12 21.2	+18 23	10.4	5.5 m	2.9 m	72	SBO-a	F,vL,E,lbM,r,vsBN
				x		NGC 4314	GALXY	COM	12 22.5	+29 54	10.6	3.9 m	3.7 m		SBa	cB,L,E150,sbM,* np,eBN w spir struct
			x	x		NGC 4350	GALXY	COM	12 24.0	+16 42	11	2.9 m	1.6 m	28	SO	cB,vS,mE,vsbM
			x	x		NGC 4394	GALXY	COM	12 25.9	+18 13	10.9	3.4 m	3.2 m	160	SBab	pB,IE,bM
		x	x	x		NGC 4414	GALXY	COM	12 26.5	+31 13	10.1	3.6 m	2 m	155	Sc	vB,L,E,g,vsmbM*,B diff N in B bulge
				x		NGC 4419	GALXY	COM	12 26.9	+15 03	11.2	3.3 m	1.2 m	133	SBa	B,pmE135,sbM
			*	x		NGC 4435	GALXY	VIR	12 27.7	+13 05	10.8	3 m	2.2 m	13	SBO	vB,cL,R,np of 2
		x	*	x		NGC 4438	GALXY	VIR	12 27.8	+13 00	10.2	8.5 m	3 m	27	Sa	B,cL,vIE,r,sf of 2

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Deep Sky Object List in Chart No.49 (2/7)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 4448	GALXY	COM	12 28.3	+28 37	11.1	3.6 m	1.3 m	94	SBab Ring	B,L,E90,sbM
			x	x		NGC 4450	GALXY	COM	12 28.5	+17 05	10.1	5.4 m	4.1 m	175	Sab	B,L,R,gvmbM*,r,B* sp
			*	x		NGC 4459	GALXY	COM	12 29.0	+13 59	10.4	4 m	3.1 m	110	Sa	pB,pL,iR,bM,r,*8 sf 2'
			*	x		NGC 4473	GALXY	COM	12 29.8	+13 26	10.2	4.2 m	2.6 m	100	Elliptical	pB
			*	x		NGC 4477	GALXY	COM	12 30.0	+13 38	10.4	3.7 m	3.3 m	15	SBO	pB,cL
			*	x		NGC 4478	GALXY	VIR	12 30.3	+12 20	11.4	1.8 m	1.5 m	140	E1	pB,S,R,psbM,2 of 3
		x	x	x		NGC 4494	GALXY	COM	12 31.4	+25 46	9.8	4.5 m	4.3 m		Elliptical	vB,pL,R,vsmbMN
				x		NGC 4550	GALXY	VIR	12 35.5	+12 13	11.7	3.3 m	0.9 m	178	SBO	pB,S,vIE,sp of 2
	C 36	x	x	x		NGC 4559	GALXY	COM	12 36.0	+27 58	10	11 m	4.9 m	150	SBc	vB,vL,mE150,gbM,3 * f
	C 38	x	!!!*	x		NGC 4565	GALXY	COM	12 36.3	+25 59	9.6	14.9 m	2 m	136	Sb	!!B,eL,eE135,vsbMN = *10-11
	C 32	x	x	x		NGC 4631	GALXY	CVN	12 42.1	+32 32	9.2	15.2 m	2.8 m	86	SBcd	vB,vL,eE70,bMN,* att n
			x	x		NGC 4654	GALXY	VIR	12 43.9	+13 08	10.5	5 m	3.1 m	128	SBc Ring	F,vL,pmE(D?),3 * nr
		x	!	x		NGC 4656	GALXY	CVN	12 44.0	+32 10	10.5	15.3 m	2.4 m	33	SB	pB,L,vmE34,sp of 2
			x	x		NGC 4689	GALXY	COM	12 47.8	+13 46	10.9	4.7 m	4 m	160	Sbc	pB,vL,E,vglbM,r
		x	x	x		NGC 4725	GALXY	COM	12 50.4	+25 30	9.4	10.4 m	7.2 m	35	SBab Ring	vB,vL,E,vg,vsmbM,eBN
				x		NGC 4866	GALXY	VIR	12 59.5	+14 10	11.2	6.4 m	1.5 m	87	Sa	B,pL,mE90,sbMN,S* inv
M 64			!*			NGC 4826	GALXY	COM	12 56.7	+21 41	8.5	10.3 m	5 m	115	Sab	!vB,vL,vmE120,bM,SBN
M 84			*			NGC 4374	GALXY	VIR	12 25.1	+12 53	9.1	6.7 m	6 m	135	E1	vB,pL,R,psbM
M 85			x			NGC 4382	GALXY	COM	12 25.4	+18 11	9.1	7.4 m	5.9 m	5	Sa	vB,pL,R,bM,* np
M 86			*			NGC 4406	GALXY	VIR	12 26.2	+12 57	8.9	9.8 m	6.3 m	130	E3	vB,L,R,gbMN

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Deep Sky Object List in Chart No.49 (3/7)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 87			!*			NGC 4486	GALXY	VIR	12 30.8	+12 23	8.6	8.7 m	6.6 m	170	E1p	vB,vL,R,mbM,3 of 3
M 88			x			NGC 4501	GALXY	COM	12 32.0	+14 25	9.6	6.8 m	3.7 m	140	Sbc	B,vL,vmE
M 89			x			NGC 4552	GALXY	VIR	12 35.7	+12 33	9.8	5.3 m	4.8 m		EO	pB,pS,R,gmbM
M 90			*			NGC 4569	GALXY	VIR	12 36.8	+13 10	9.5	9.9 m	4.4 m	23	SBab	pL,bMN
M 98			x			NGC 4192	GALXY	COM	12 13.8	+14 54	10.1	9.4 m	2.3 m	155	SBb	B,vL,vmE152,vsvmbM
M 99			*			NGC 4254	GALXY	COM	12 18.8	+14 25	9.9	5.3 m	4.6 m	40	Sc	!,B,L,R,gbM,r,3 branch spiral
M100			*			NGC 4321	GALXY	COM	12 22.9	+15 49	9.4	7.5 m	6.1 m	30	SBbc	pF,vL,R,vg,psbMrN,spiral-Rosse
						NGC 4032	GALXY	COM	12 00.5	+20 04	12.3	1.9 m	1.8 m		lr	pF,pL,R,gbM,*12 nf
						NGC 4037	GALXY	COM	12 01.4	+13 24	11.9	2.4 m	2.2 m		SBb	eF,pL,R,r
					x	NGC 4062	GALXY	UMA	12 04.1	+31 54	11.1	4 m	1.8 m	100	SBc	pB,vL,mE97,vgbM,vsBN
						NGC 4064	GALXY	COM	12 04.2	+18 27	11.4	4.6 m	1.7 m	150	SBa	B,E,gbM
						NGC 4104	GALXY	COM	12 06.6	+28 10	12.1	2.6 m	1.6 m	35	SBO	pB,pS,IE,bM
					x	NGC 4136	GALXY	COM	12 09.3	+29 56	11	3.9 m	3.6 m		SBc Ring	F,vL,vgmbM
						NGC 4153	GLOCL	COM	12 10.1	+18 33	10.3	4.1 m			VI	B,pL,E,bM
					x	NGC 4152	GALXY	COM	12 10.6	+16 02	12.2	2.3 m	1.9 m	115	SBc	pB,pL,R,pgmbM,r
						NGC 4158	GALXY	COM	12 11.2	+20 11	12.1	2 m	1.8 m		Sb	F,pS,IE,bM,pB* sf,vBN
						NGC 4162	GALXY	COM	12 11.9	+24 07	12.2	2.3 m	1.4 m	174	Sbc	B,L,IE,bM,vBN w * att. @ 0.2'
					x	NGC 4168	GALXY	VIR	12 12.3	+13 12	11.2	2.8 m	2.2 m		Elliptical	pB,pL,iF,psbM,r,* inv
					x	NGC 4169	GALXY	COM	12 12.3	+29 11	12.2	1.8 m	0.9 m	153	SO	F,S,1st of 4

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Deep Sky Object List in Chart No.49 (4/7)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 4185	GALXY	COM	12 13.4	+28 31	12.1	2.6 m	2 m	165	SBbc Ring	cF,L,R,gbM
					x	NGC 4189	GALXY	COM	12 13.8	+13 25	11.7	2.5 m	1.7 m	85	SBc	F,L,IE,vglbM,r
						NGC 4193	GALXY	VIR	12 13.9	+13 10	12.3	2.2 m	1.1 m	93	SBbc	vF,pL,E,vgbM
						NGC 4204	GALXY	COM	12 15.2	+20 40	12.4	3.6 m	2.9 m	130	SBd	vF,cL,iR,vgbM
						NGC 4206	GALXY	VIR	12 15.3	+13 01	12.1	6.4 m	1.1 m	0	Sbc	F,vmE
						NGC 4213	GALXY	COM	12 15.6	+23 59	12.5	1.7 m	1.7 m		Elliptical	cF,vS,R
					x	NGC 4212	GALXY	COM	12 15.7	+13 54	11.2	3.2 m	2 m	75	Sc	B,L,E107,g,sbM,r
					x	NGC 4237	GALXY	COM	12 17.2	+15 19	11.6	2.1 m	1.4 m	108	SBbc Ring	pB,pL,IE,vgbM,r
						NGC 4262	GALXY	COM	12 19.5	+14 53	11.6	1.8 m	1.6 m		E-SO Bar	B,S,R,r
					x	NGC 4267	GALXY	VIR	12 19.8	+12 48	10.9	3 m	2.8 m		E-SO Bar	pB,vS,R,vsmBM
						NGC 4283	GALXY	COM	12 20.3	+29 19	12.1	1.4 m	1.4 m		Elliptical	B,S,R,bM,2 of 3,svB center
			x		x	NGC 4298	GALXY	COM	12 21.5	+14 36	11.3	3.2 m	1.9 m	140	Sc	F,L,E,vgbM,p of 2
			x		x	NGC 4302	GALXY	COM	12 21.7	+14 36	11.6	5.3 m	1 m	178	Sc	L,vmE177,f of 2
					x	NGC 4310	GALXY	COM	12 22.4	+29 12	12.2	2.4 m	1.3 m	128	SBO-a Ring	F,cL,IE,n of 2
					x	NGC 4312	GALXY	COM	12 22.5	+15 32	11.7	4.6 m	1.1 m	170	Sab	pB,cL,E,gbM
					x	NGC 4336	GALXY	COM	12 23.5	+19 26	12.5	2 m	0.9 m	162	SBO-a	vF,pL,iR,biN?
			x		x	NGC 4340	GALXY	COM	12 23.6	+16 43	11.2	3.1 m	2.3 m	102	SBO-a Ring	pB,S,R,psbM
						NGC 4344	GALXY	COM	12 23.6	+17 32	12.3	1.4 m	1.4 m		SBO	vF,pS,R,vglbM,tri 2*
					x	NGC 4359	GALXY	COM	12 24.2	+31 31	12.7	3.5 m	0.8 m	108	SBc	cF,pmE90,vlbM

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Me1 111	OPNCL	COM	12 25.0	+26 00	1.8	275 m			II 3 p	10X50-eB,eL,nRi,nC; 32* in arrowhead shape
						NGC 4377	GALXY	COM	12 25.2	+14 46	11.9	1.7 m	1.3 m	177	E-SO	B,S,R,smbM
					x	NGC 4379	GALXY	COM	12 25.2	+15 36	11.7	2 m	1.6 m	105	E-SO	pS,R,psbMN
						NGC 4383	GALXY	COM	12 25.4	+16 28	12.1	2 m	1 m	28	Sa	eS,stellar or neb,*11-12
			*			NGC 4387	GALXY	VIR	12 25.7	+12 49	12.1	1.7 m	1.1 m	140	Elliptical	pF,vS,R,*13 np 90",np of 2
		x	*			NGC 4388	GALXY	VIR	12 25.8	+12 40	11	5.6 m	1.5 m	92	Sb	vF,E,sf of 2
			x		x	NGC 4395	GALXY	CVN	12 25.8	+33 33	10.2	12.3 m	10 m	147	SB Ring	eF,vL,np of Dneb
						NGC 4393	GALXY	COM	12 25.9	+27 34	12.1	3.2 m	3 m		SBcd	vF,vL,iF,B* p
			*			NGC 4402	GALXY	VIR	12 26.1	+13 07	11.8	3.6 m	1.1 m	90	Sb	F,L,mE90
						NGC 4405	GALXY	COM	12 26.1	+16 11	12	1.6 m	1.1 m	20	Sa	pF,S,R,vsbM,r
			*			NGC 4413	GALXY	VIR	12 26.5	+12 37	12.3	2.3 m	1.4 m	60	SBab Ring	cF,S,gbM,2* n,np
						NGC 4421	GALXY	COM	12 27.0	+15 28	11.6	2.7 m	2 m	20	SBO-a	pB,pL,pgbM,B* np
			*			NGC 4425	GALXY	VIR	12 27.2	+12 44	11.8	2.8 m	1 m	27	SBO-a	pF,S,R,bM
						NGC 4440	GALXY	VIR	12 27.9	+12 18	11.7	1.8 m	1.6 m		SBa	B,pS,R,bM,r
						NGC 4455	GALXY	COM	12 28.7	+22 49	12.3	2.6 m	0.8 m	16	SBcd	F,L,E,gbM,2 B* nf
			*			NGC 4461	GALXY	VIR	12 29.0	+13 11	11.2	3.4 m	1.4 m	9	SBO-a	pF,S,R,bM,f of 2
			*			NGC 4458	GALXY	VIR	12 29.0	+13 15	12.1	1.6 m	1.5 m		Elliptical	pB,S,R,bM,p of 2
						NGC 4474	GALXY	COM	12 29.9	+14 04	11.5	2.4 m	1.6 m	80	SO	pF,R,r
			*			NGC 4476	GALXY	VIR	12 30.0	+12 21	12.2	1.8 m	1.3 m	25	E4	F,S,R,bM,1 of 3

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Deep Sky Object List in Chart No.49 (6/7)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			*			NGC 4479	GALXY	COM	12 30.3	+13 35	12.4	1.6 m	1.3 m		SBO	pB,pL
						MCG +02-32-110	GALXY	VIR	12 30.9	+12 16	11.2					Inner Regions Completely Black--MCG
						NGC 4489	GALXY	COM	12 30.9	+16 46	12	1.7 m	1.6 m		Elliptical	pF,cS,R,gbM
						NGC 4486A	GALXY	VIR	12 31.0	+12 16	11.2	0.8 m	0.7 m	170	Elliptical	
						NGC 4498	GALXY	COM	12 31.7	+16 51	12.2	3 m	1.6 m	133	SBc	vF,pL,E,biN?
						NGC 4515	GALXY	COM	12 33.1	+16 16	12.3	1.4 m	1.1 m		E-SO	F,vS,bM*
						NGC 4525	GALXY	COM	12 33.9	+30 17	12.2	2.6 m	1.3 m	53	SBc	F,pL,iR,bM
						NGC 4534	GALXY	CVN	12 34.1	+35 31	12.3	2.6 m	2.1 m	125	Sd	cF,L,IE,vglbM,r
						NGC 4531	GALXY	VIR	12 34.3	+13 05	11.4	3.1 m	2 m	155	SBO-a	F,pL,R,vgbM
						NGC 4539	GALXY	COM	12 34.6	+18 12	12	3.3 m	1.4 m	95	SBa	pB,pmE
						NGC 4540	GALXY	COM	12 34.8	+15 33	11.7	2.1 m	1.8 m	40	SBc	F,pS,bM,r,BM no def N
						NGC 4551	GALXY	VIR	12 35.6	+12 16	12	1.8 m	1.4 m	70	Elliptical	pB,S,R,bM,nf of 2
						NGC 4555	GALXY	COM	12 35.7	+26 31	12.1	1.4 m	1.1 m	125	Elliptical	B,pS,iR,vsmbM*12
						NGC 4561	GALXY	COM	12 36.1	+19 19	12.5	1.5 m	1.3 m	30	SBcd	pB,pL,vIE,lbM,r
					x	NGC 4571	GALXY	COM	12 36.9	+14 13	11.3	3.7 m	3.4 m	55	Sc	vF,L,E,vgbM,*9 nf nr
						NGC 4595	GALXY	COM	12 39.9	+15 18	12.1	1.7 m	1.1 m	110	SBb	pF,pL,R,gbM
						NGC 4620	GALXY	VIR	12 42.0	+12 57	12.2	1.8 m	1.5 m		SO	vF,S,R,vgbM
						NGC 4627	GALXY	CVN	12 42.0	+32 34	12.4	2.2 m	1.7 m	10	Elliptical	F,S,R,np of 2,BM no BN
						NGC 4634	GALXY	COM	12 42.7	+14 18	12.4	2.5 m	0.6 m	156	SBc	vF,L,mE135,vgbM

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x		x	NGC 4639	GALXY	VIR	12 42.9	+13 15	11.5	2.9 m	2 m	123	SBbc Ring	pB,S,E,R,*12 sf 1'
			x			NGC 4651	GALXY	COM	12 43.7	+16 24	10.8	4 m	2.7 m	80	Scp	cB,L,E90,gbM,r
						NGC 4657	GALXY	CVN	12 44.1	+32 13	10.6	1.1 m	0.7 m	90	lr	pF,L,E90,nf of 2
						NGC 4659	GALXY	COM	12 44.5	+13 30	12.1	1.8 m	1.3 m	173	Sa	F,cS,R,bM,r
			x			NGC 4710	GALXY	COM	12 49.6	+15 10	11	4.9 m	1.6 m	27	Sa	cB,pL,vmE28,sbMN
			x			NGC 4747	GALXY	COM	12 51.8	+25 46	12.4	3.3 m	1.3 m	30	SBcd	F,pL,IE
						NGC 4789	GALXY	COM	12 54.3	+27 04	12.1	1.9 m	1.5 m	0	SO	F,R,*9 att 1' n
						NGC 4793	GALXY	COM	12 54.7	+28 56	11.6	2.9 m	1.5 m	50	SBc	pB,pS,IE,*8 nf 1'
						NGC 4839	GALXY	COM	12 57.4	+27 30	12.1	4 m	1.9 m	65	Elliptical	F,pL,R
						NGC 4861	GALXY	CVN	12 59.0	+34 51	12.3	3.3 m	1.9 m	15	SB	vF,pL,vmE30,bet 2 st
			x			NGC 4874	GALXY	COM	12 59.6	+27 58	11.7	2.4 m	2.4 m		Elliptical	F,4869 & 4872 p

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Deep Sky Object List in Chart No.50 (1/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 3489	GALXY	LEO	11 00.3	+13 54	10.3	3.6 m	2.2 m	70	SBO-a	vB,pL,IE 80,smbMN
			x	x		NGC 3486	GALXY	LMI	11 00.4	+28 59	10.5	6.8 m	4.8 m	80	SBc	cB,cL,R,gmbM
			x	x		NGC 3504	GALXY	LMI	11 03.2	+27 58	11	2.7 m	2.5 m		SBab Ring	B,L,E,mbMN,rr,p of 2
				x		NGC 3593	GALXY	LEO	11 14.6	+12 49	10.9	4.9 m	2.1 m	92	Sa	B,cL,E 90,psmbM
		x		x		NGC 3607	GALXY	LEO	11 16.9	+18 03	9.9	4.6 m	4 m	120	E-SO	vB,L,R,vmbM,2nd of 3
				x		NGC 3608	GALXY	LEO	11 17.0	+18 09	10.8	3.5 m	3 m	75	Elliptical	B,pL,R,psbM,3rd of 3
	C 40			x		NGC 3626	GALXY	LEO	11 20.1	+18 21	11	3.2 m	2.4 m	157	Sa	B,S,vIE,sbM
		x	*	x		NGC 3628	GALXY	LEO	11 20.3	+13 35	9.5	13.1 m	3.1 m	104	Sb	pB,vL,vmE 102
				x		NGC 3655	GALXY	LEO	11 22.9	+16 35	11.6	1.5 m	1 m	30	Sc	pB,pS,iR,bM,r
				x		NGC 3686	GALXY	LEO	11 27.7	+17 13	11.3	3.1 m	2.4 m	15	SBbc	pB,L,vIE,vgbM,r
				x		NGC 3813	GALXY	UMA	11 41.3	+36 33	11.6	2 m	1 m	87	Sb	cB,pL,pmE 83,bM
				x		NGC 3900	GALXY	LEO	11 49.2	+27 01	11.4	3.5 m	1.8 m	2	Sa Ring	B,pL,vIE 0,bMN
				x		NGC 3912	GALXY	LEO	11 50.1	+26 29	12.4	1.5 m	0.9 m	5	SBb	F,pL,R,pgbM
		x		x		NGC 3941	GALXY	UMA	11 52.9	+36 59	10.3	3.5 m	2.5 m	10	SBO	vB,pL,R,smbM *9
M 65			!*			NGC 3623	GALXY	LEO	11 18.9	+13 05	9.3	9 m	2.3 m	174	SBa	B,vL,mE 165,gbMBN
M 66			!*			NGC 3627	GALXY	LEO	11 20.2	+13 00	8.9	9.1 m	4.1 m	173	SBb	B,vL,mE 150,mbM,2 st np
						NGC 3485	GALXY	LEO	11 00.0	+14 50	11.8	2.4 m	2.2 m		SBbc	F,L,R,glbM,r
					x	NGC 3507	GALXY	LEO	11 03.4	+18 08	10.9	3.4 m	2.9 m	110	SBb	cF,pL,R,sbMS *,*9 att 25
						NGC 3510	GALXY	LMI	11 03.7	+28 53	12.2	4.1 m	0.8 m	163	SB	F,L,cE,*7,310,8'
						NGC 3512	GALXY	LMI	11 04.0	+28 02	12.3	1.5 m	1.5 m		SBc	F,pS,R,pgbM,f of 2

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Deep Sky Object List in Chart No.50 (2/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						UGC 6253	GALXY	LEO	11 13.5	+22 10	12	12 m	11 m		dE0	
					x	NGC 3596	GALXY	LEO	11 15.1	+14 47	11.3	4.1 m	4.1 m		SBc	pF,L,R,glbM
						NGC 3598	GALXY	LEO	11 15.2	+17 16	12.3	1.8 m	1.3 m	35	E-SO	F,vS,stell,* n
					x	NGC 3599	GALXY	LEO	11 15.4	+18 07	11.9	2.5 m	2.5 m		SO	B,pS,R,pgmbM
					x	NGC 3605	GALXY	LEO	11 16.8	+18 01	12.3	1.4 m	0.9 m	17	Elliptical	F,S,R,sp of 3
						NGC 3629	GALXY	LEO	11 20.5	+26 58	12.1	2 m	1.5 m	30	SBc	cF,L,R,vgvlbM
					x	NGC 3646	GALXY	LEO	11 21.7	+20 10	11.1	3.9 m	2.2 m	50	Sc	cF,cL,IE,gbM,sp of 2
					x	NGC 3659	GALXY	LEO	11 23.8	+17 49	12.3	2.3 m	1.3 m	60	SB	cF,S,IE,r
					x	NGC 3681	GALXY	LEO	11 26.5	+16 52	11.2	3 m	2.2 m	170	SBbc	B,pS,R,bM
						NGC 3684	GALXY	LEO	11 27.2	+17 02	11.4	3.4 m	2.2 m	130	Sbc	pB,pL,E,vgbM
						NGC 3687	GALXY	UMA	11 28.0	+29 31	12	1.9 m	1.9 m		SBbc Ring	pB,pS,R,lbM,r
						NGC 3691	GALXY	LEO	11 28.2	+16 55	11.8	1.4 m	1 m	15	SB/P	F,pS,IE,r
					x	NGC 3689	GALXY	LEO	11 28.2	+25 40	12.3	1.7 m	1.1 m	97	SBc	pB,pL,IE,bM
						NGC 3768	GALXY	LEO	11 37.2	+17 50	12.4	1.8 m	1.2 m	155	SO	vF,eS,stellar
						NGC 3773	GALXY	LEO	11 38.2	+12 07	12	1.2 m	1 m	165	SO	cF,cS,R,psbM
						NGC 3786	GALXY	UMA	11 39.7	+31 54	12.3	2.1 m	1.1 m	77	SBap	pB,pL,E 57,gbM,p of 2
						NGC 3798	GALXY	LEO	11 40.2	+24 42	12.1	2.5 m	1.8 m	60	SBO	F,cS,IE,stellar,r
						NGC 3801	GALXY	LEO	11 40.3	+17 44	12	2.8 m	1.7 m	120	SO	pF,pL,R,bM,r,2nd of 3
						NGC 3812	GALXY	LEO	11 41.1	+24 49	12.4	1.7 m	1.6 m		Elliptical	cF,vS,R,1st of 3,*6 sf 3'
						NGC 3816	GALXY	LEO	11 41.8	+20 06	12.5	1.9 m	1.1 m	70	SO	F,S,bM

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 3842	GALXY	LEO	11 44.0	+19 57	11.8	1.4 m	1 m	5	Elliptical	F,S,R,vglbM,3rd of 5
						NGC 3853	GALXY	LEO	11 44.5	+16 33	12.4	1.6 m	1 m	140	Elliptical	S,R,bM
						NGC 3872	GALXY	LEO	11 45.8	+13 46	11.7	2.3 m	1.7 m	25	Elliptical	B,S,R,smbM *
						NGC 3891	GALXY	UMA	11 48.1	+30 22	12.4	2 m	1.7 m	70	Sbc	pB,S,bM
						NGC 3937	GALXY	LEO	11 52.7	+20 38	12.5	1.8 m	1.6 m	15	E-SO	vF,cS,R
						NGC 3995	GALXY	UMA	11 57.7	+32 18	12.4	2.6 m	0.9 m	33	SB	F,pL,iR,bM,3rd of 3
						NGC 4008	GALXY	LEO	11 58.3	+28 12	12	2.4 m	1.3 m	167	Elliptical	pB,pS,E,psbM,* inv n
						NGC 4014	GALXY	COM	11 58.6	+16 11	12.3	2.2 m	1.3 m	120	Sa	pB,pS,R,psbM
						NGC 4017	GALXY	COM	11 58.8	+27 27	12.2	1.8 m	1.4 m	15	SBbc	F,L,E,gbfM

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Deep Sky Object List in Chart No.51 (1/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M105			*	x		NGC 3379	GALXY	LEO	10 47.8	+12 35	9.3	5.3 m	4.8 m	60	E1	vB,cL,R,psbM,r
			x	x		NGC 3190	GALXY	LEO	10 18.1	+21 50	11.1	4 m	1.5 m	125	Sa	B,pS,E,psbMN
			x	x		NGC 3193	GALXY	LEO	10 18.4	+21 54	10.9	2.9 m	2.8 m		E0	B,S,vIE,pslbM,*9.5,354,80"
				x		NGC 3226	GALXY	LEO	10 23.4	+19 54	11.4	2.5 m	2.2 m	15	Elliptical	pB,cL,R,D
				x		NGC 3227	GALXY	LEO	10 23.5	+19 52	10.3	6.6 m	5 m	155	SBa	pB,cL,R,D
				x		NGC 3245	GALXY	LMI	10 27.3	+28 30	10.8	3.5 m	2.4 m	177	SO	vB,pL,E 0,smbMEN
				x		NGC 3277	GALXY	LMI	10 32.9	+28 31	11.7	2.1 m	1.8 m		Sab	cB,cS,R,pgmbM
		x	x	x		NGC 3344	GALXY	LMI	10 43.5	+24 55	9.9	7.1 m	6.8 m		SBbc Ring	cB,L,gbM,* inv,2 st f
				x		NGC 3377	GALXY	LEO	10 47.7	+13 59	10.4	4.3 m	2.6 m	35	Elliptical	vB,cL,IE,svmbMBN
		x	*	x		NGC 3384	GALXY	LEO	10 48.3	+12 38	9.9	5.4 m	2.7 m	53	E7	vB,L,R,psmbM,2nd of 3
			x	x		NGC 3395	GALXY	LMI	10 49.8	+32 59	12.1	1.7 m	0.9 m	50	SBc	cB,pS,iIE,1st of 2
				x		NGC 3412	GALXY	LEO	10 50.9	+13 25	10.5	3.7 m	2.2 m	155	SBO	B,S,IE 135,smbMN
				x		NGC 3414	GALXY	LMI	10 51.3	+27 58	11	3.6 m	3.1 m	25	SBO	B,pL,R,mbM
		x		x		NGC 3432	GALXY	LMI	10 52.5	+36 37	11.3	6.6 m	1.6 m	38	SB	pB,pL,vmE 40,** close sp
						NGC 3094	GALXY	LEO	10 01.4	+15 46	12.3	2 m	1.4 m	75	SBa	F,bM,*9 30" sf
						NGC 3098	GALXY	LEO	10 02.3	+24 43	12	2.2 m	0.6 m	90	Sa	pB,S,E 85,psbMN
						NGC 3106	GALXY	LMI	10 04.1	+31 11	12.4	1.8 m	1.8 m		SO Ring	F,S,R,sbM
					x	NGC 3107	GALXY	LEO	10 04.4	+13 37	13.4	0.7 m	0.6 m	140	Sbc	pF,pL,iR,*8 148,112"
						UGC 5470	GALXY	LEO	10 08.4	+12 18	10.2	10.7 m	8.3 m	80	dE3	
					x	NGC 3162	GALXY	LEO	10 13.5	+22 44	11.6	3.1 m	2.7 m	30	SBbc Ring	pF,cL,R,vglbM,r,S* inv

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Deep Sky Object List in Chart No.51 (2/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 3177	GALXY	LEO	10 16.6	+21 07	12.4	1.5 m	1.2 m	135	Sbc	cF,S,R,psbM
			x			NGC 3185	GALXY	LEO	10 17.6	+21 41	12.2	2.1 m	1.4 m	130	SBbc	pF,pL,gmbM
			x			NGC 3187	GALXY	LEO	10 17.8	+21 52	13.4	2.9 m	1.2 m	115	SBc/P	vF,E
						NGC 3239	GALXY	LEO	10 25.1	+17 10	11.3	4.5 m	2.4 m	80	Ir Bar	vF,*9 inv nr M
						NGC 3248	GALXY	LEO	10 27.8	+22 51	12.4	2.5 m	1.1 m	135	SO	pB,S,R,psbM
					x	NGC 3254	GALXY	LMI	10 29.3	+29 30	11.7	4.8 m	1.5 m	46	Sbc	cB,L,mE 45,psmbMN
					x	NGC 3274	GALXY	LEO	10 32.3	+27 40	12.8	2 m	1.1 m	100	SBcd	F,pL,R,glbM,D* f
						NGC 3287	GALXY	LEO	10 34.8	+21 39	12.3	2 m	0.9 m	20	SBcd	F,pL,D* p 24",s 4'
						NGC 3300	GALXY	LEO	10 36.6	+14 10	12.1	1.7 m	0.9 m	173	SBO	cF,cS,R,pmbM,r,am B st
					x	NGC 3301	GALXY	LEO	10 36.9	+21 53	11.4	3.3 m	1 m	52	SBO-a	cB,S,IE 53,psbM,r
					x	NGC 3338	GALXY	LEO	10 42.1	+13 45	11.1	5.7 m	3.4 m	100	Sc	F,cL,E,vgbM,*7 p 10"
						NGC 3346	GALXY	LEO	10 43.6	+14 52	11.7	2.7 m	2.6 m		SBc	cF,vL,R,vglbM,er
						NGC 3367	GALXY	LEO	10 46.6	+13 45	11.5	2.5 m	2.4 m		SBc	pB,cL,iR,vglbM,r,1st of 3
						NGC 3370	GALXY	LEO	10 47.1	+17 16	11.6	2.9 m	1.7 m	148	Sc	cB,pL,vIE,gbM,r
						NGC 3380	GALXY	LMI	10 48.2	+28 36	12.5	1.6 m	1.4 m		SBa	pB,pS,R,sbM
						NGC 3381	GALXY	LMI	10 48.4	+34 43	11.7	2 m	1.8 m		SB/P	pF,cL,iR,vglbM
			*			NGC 3389	GALXY	LEO	10 48.5	+12 32	11.9	2.9 m	1.3 m	112	Sc	F,L,E pf,vglbM,3rd of 3
			x			NGC 3396	GALXY	LMI	10 49.9	+32 59	12.1	2.9 m	1.2 m	100	SB	pB,pS,iIE,2nd of 2
						NGC 3419	GALXY	LEO	10 51.3	+13 57	12.5	0.8 m	0.7 m	115	SBO-a	F,vS,R,alm stell,S* vnr
						NGC 3413	GALXY	LMI	10 51.3	+32 46	12.1	1.8 m	0.8 m	178	SO	F,S

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Deep Sky Object List in Chart No.51 (3/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 3424	GALXY	LMI	10 51.8	+32 54	12.4	2.7 m	0.8 m	112	SBb	pF,pL,IE,sp of 3
					x	NGC 3430	GALXY	LMI	10 52.2	+32 57	11.6	4.1 m	2.2 m	30	SBc	pB,L,iE,gbM,2nd of 3
						NGC 3437	GALXY	LEO	10 52.6	+22 56	12.1	2.6 m	0.8 m	122	SBc	pB,pL,iE 120,gbM
						NGC 3455	GALXY	LEO	10 54.5	+17 17	12	2.7 m	1.7 m	80	SBb	pF,S,E,gbM,r,sf of 2

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Deep Sky Object List in Chart No.52

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2859	GALXY	LMI	09 24.3	+34 31	10.9	4 m	3.6 m	85	SBO-a Ring	vB,pL,R,smbM
		x	*	x		NGC 2903	GALXY	LEO	09 32.2	+21 30	9	12 m	5.6 m	17	SBbc	cB,vL,E,gmbM,r,sp of 2
				x		NGC 2964	GALXY	LEO	09 42.9	+31 51	11.3	3 m	1.7 m	97	SBbc Ring	B,vL,IE,vgbM,sp of 3
						NGC 2749	GALXY	CNC	09 05.4	+18 19	11.8	1.8 m	1.7 m		E2	pF,S,R,bMN=*15
						NGC 2750	GALXY	CNC	09 05.8	+25 26	11.9	2.2 m	1.9 m	80	Sc	vF,cL,R,bMN,2 c * p
						NGC 2770A	GALXY	LYN	09 09.6	+33 07	12.2	3.7 m	1.1 m	148	Sc	F,L,mE150,r,2* n
						NGC 2778	GALXY	LYN	09 12.4	+35 02	12.4	1.4 m	1 m	40	E	pB,S,R,psmbM
						NGC 2789	GALXY	CNC	09 15.0	+29 44	12.2	2 m	2 m		SBO-a	pF,S,R,gbM
						NGC 2832	GALXY	LYN	09 19.8	+33 45	11.9	3 m	2 m	160	E4	cB,cL,E,3rd of 3
						NGC 2916	GALXY	LEO	09 35.0	+21 42	12.1	2.5 m	1.7 m	20	Sb	F,S,vIE
						NGC 2943	GALXY	LEO	09 38.5	+17 02	12.4	2.2 m	1.2 m	130	Elliptical	F,S,iR,bM,f of 2
						NGC 2954	GALXY	LEO	09 40.4	+14 55	12.4	1.7 m	1.1 m	160	Elliptical	vF,S,R,n of 2
						NGC 2968	GALXY	LEO	09 43.2	+31 56	11.7	2.1 m	1.6 m	45	Sa	pB,pL,IE,vglbM,2nd of 3
						NGC 3003	GALXY	LMI	09 48.6	+33 25	11.9	5.7 m	1.4 m	79	SBbc	!,cB,L,vmE90
						NGC 3020	GALXY	LEO	09 50.1	+12 49	11.9	3 m	1.6 m	105	SBc	eF,pS,IE 0,r
						NGC 3021	GALXY	LMI	09 51.0	+33 33	12.1	1.5 m	0.9 m	110	Sbc	pB,pS,vIE,mbM,*10 sp
						NGC 3032	GALXY	LEO	09 52.1	+29 14	12.5	2.4 m	2.3 m	95	SBO Ring	F,S,sbM *12,bet 2 B st
						NGC 3041	GALXY	LEO	09 53.1	+16 41	11.5	3.7 m	2.4 m	95	SBc	F,L,R,vglbM,rr,2 B st sp
					x	NGC 3067	GALXY	LEO	09 58.4	+32 22	12.1	2.4 m	0.9 m	105	SBab	pB,pL,E 106,gbM,*9 4' E

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Deep Sky Object List in Chart No.53

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 2683	GALXY	LYN	08 52.7	+33 25	9.8	8.8 m	2.5 m	44	Sb	vB,vL,vmE39,gmbM
M 44			!!			NGC 2632	OPNCL	CNC	08 40.0	+19 40	3.1	95 m			II 2 m	!!Praesepe
						NGC 2507	GALXY	CNC	08 01.6	+15 43	12.2	2.5 m	2.5 m		Sa	pB,pL,iR,vgbM,er,* 232deg,80"
						NGC 2532	GALXY	LYN	08 10.3	+33 57	12.4	2.1 m	1.7 m	10	SBc	pB,pL,R,vglbM,r,2* nf
						NGC 2543	GALXY	LYN	08 13.0	+36 15	11.9	2.3 m	1.2 m	45	SBb	F,pL,iR,vgbM,D* nr
						NGC 2545	GALXY	CNC	08 14.2	+21 21	12.4	2.2 m	1.2 m	170	SBab Ring	F,S,IE45,*8 np 4'
						NGC 2554	GALXY	CNC	08 17.9	+23 28	12	3.2 m	2.4 m	170	Sa	F,S,R,mbM,r
						NGC 2563	GALXY	CNC	08 20.6	+21 04	12.2	2 m	1.7 m	80	SO	cF,S,R,bM
						NGC 2577	GALXY	CNC	08 22.7	+22 33	12.4	1.8 m	1.1 m	105	SO	F,S,iF,r
						NGC 2592	GALXY	CNC	08 27.1	+25 58	12.3	1.7 m	1.4 m	45	Elliptical	pF,S,R,vsbM *
						NGC 2595	GALXY	CNC	08 27.7	+21 29	12.3	3.1 m	2.7 m	45	SBc	vF,pL,iF,R,D* sp 2'
						NGC 2599	GALXY	CNC	08 32.2	+22 34	12.2	1.9 m	1.7 m		Sa	vF,S,stellar
						NGC 2608	GALXY	CNC	08 35.3	+28 28	12.3	2.2 m	1.4 m	60	SBb Ring	F,vIE,mbM,r
						NGC 2619	GALXY	CNC	08 37.5	+28 42	12.4	2.3 m	1.4 m	35	SBbc	F,pS,R,bM,r
			x			NGC 2623	GALXY	CNC	08 38.4	+25 45	13.4	2.4 m	0.7 m	60	Sb	vF,vS,R,bM,r
						NGC 2648	GALXY	CNC	08 42.7	+14 17	11.8	3.2 m	1.1 m	148	Sa	F,S,vIE135,psbM
						NGC 2649	GALXY	LYN	08 44.1	+34 43	12.3	1.5 m	1.4 m		SBbc	F,L,R,r
						NGC 2672	GALXY	CNC	08 49.4	+19 04	11.7	2.5 m	2.4 m		E1	pB,pL,iR,mbM

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Deep Sky Object List in Chart No.54

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2355	OPNCL	GEM	07 17.0	+13 45	9.7	9.0 m			II 2 p	Cl,pS,pRi,mC,*15..16
				x		NGC 2371	PLNNB	GEM	07 25.6	+29 29	13	74 s	54 s		3a+6	B,S,R,bMN,p of Dneb
				x		NGC 2372	PLNNB	GEM	07 25.6	+29 30	13	74 s	54 s		3a(4)	pB,S,R,bMN,f of Dneb
				x		NGC 2395	OPNCL	GEM	07 27.2	+13 37	8	12.0 m			III 1 p	Cl,pRi,C
	C 39	x	!	x		NGC 2392	PLNNB	GEM	07 29.2	+20 55	8.6	47 s	43 s		3b(3b)	B,S,R,*9M,*8 nf 100"
				x		NGC 2420	OPNCL	GEM	07 38.4	+21 34	8.3	10.0 m			I 2 r	Cl,cL,Ri,C,st 11...18
					x	NGC 2331	OPNCL	GEM	07 07.0	+27 16	8.5	18.0 m			IV 1 p	Cl,L,vIC,S Cl inv
						UGC 3691	GALXY	GEM	07 08.0	+15 10	11.9	2.2 m	1.1 m	65	Sc	
					x	NGC 2339	GALXY	GEM	07 08.3	+18 47	11.8	2.7 m	2 m	175	SBbc Ring	pB,pL,R,glbM
						NGC 2350	GALXY	CMI	07 13.2	+12 16	12.3	1.4 m	0.7 m	110	Sa	eF,eS,iR
						NGC 2355	OPNCL	GEM	07 17.0	+13 45	9.7	9 m			II 2 p	Cl,pS,pRi,mC,*15..16
						NGC 2365	GALXY	GEM	07 22.4	+22 05	12.4	2.4 m	1.3 m	170	SBa	vF,pS,R,psbM
						NGC 2418	GALXY	GEM	07 36.6	+17 53	12.2	1.8 m	1.8 m		Elliptical	vF,eS,bM
					x	NGC 2415	GALXY	LYN	07 36.9	+35 14	12.4	0.9 m	0.9 m		Ir	pB,cS,R,vgyIbM,r,almost circular
						NGC 2487	GALXY	GEM	07 58.3	+25 09	12.5	2.7 m	2.1 m	115	SBb	vF,S,gbM

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Deep Sky Object List in Chart No.55

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			S	x		NGC 2129	OPNCL	GEM	06 00.7	+23 19	6.7	7.0 m			III 3 p	Cl,pL,40 or 50* 8...15
		x	x	x		NGC 2158	OPNCL	GEM	06 07.4	+24 06	8.6	5.0 m			II 3 r	Cl,pS,mC,vRi,irr triangle * eS
				x		NGC 2169	OPNCL	ORI	06 08.4	+13 58	5.9	7.0 m			I 3 p n	Cl,S,IRi,pmC,** (ADS 4728)
		x		x		NGC 2194	OPNCL	ORI	06 13.8	+12 48	8.5	10.0 m			III 1 r	Cl,L,Ri,gvmCM
				x		NGC 2266	OPNCL	GEM	06 43.3	+26 58	9.5	7.0 m			II 2 m	Cl,pS,eC,Ri,st 11..15
				x		NGC 2304	OPNCL	GEM	06 55.2	+17 59	10	5.0 m			II 1 p	Cl,pL,Ri,mC,st vS
M 35			!			NGC 2168	OPNCL	GEM	06 08.2	+24 22	5.1	28.0 m			III 2 m	Cl,vL,eRi,pC,st9...16
						IC 2157	OPNCL	GEM	06 04.8	+24 04	8.4	7.0 m			III 2 p	Cl,S,about 20 F stars
			x			NGC 2174	BRTNB	ORI	06 09.4	+20 40	99.9	40 m	30 m		E	eF,bet 3 vF *
						NGC 2175	CL+NB	ORI	06 09.6	+20 29	6.8	18.0 m			IV 3 p n	*8 in neb
			x			IC 443	SNREM	GEM	06 17.8	+22 49	12.0p	50 m	40 m	170		F,narrow curved
						Cr 89	OPNCL	GEM	06 18.0	+23 38	5.7	35.0 m			IV 2 p n	
						Bochum 1	OPNCL	GEM	06 25.5	+19 46	7.9					
						PK 194+ 2.1	PLNNB	GEM	06 26.0	+17 47	12.4	12 s	10 s		3b(2)	vS,B
					x	NGC 2274	GALXY	GEM	06 47.3	+33 34	12.1	2.4 m	2.4 m		Elliptical	F,S,bM

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Deep Sky Object List in Chart No.56

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 1817	OPNCL	TAU	05 12.4	+16 41	7.7	16 m			III 1 m	Cl,L,Ri,IC,st11...14
		x		x		NGC 1907	OPNCL	AUR	05 28.1	+35 20	8.2	7.0 m			II 1 m n	Cl,pRi,pC,R,st9...12
		x		x		NGC 1931	CL+NB	AUR	05 31.4	+34 15	10.1	3 m	3 m		I 3 p n:b	vB,L,R,B***in M
M 1			!*			NGC 1952	SNREM	TAU	05 34.5	+22 01	8.4	8 m	4 m			vB,vL,E135,vglbM,r
M 36			x			NGC 1960	OPNCL	AUR	05 36.3	+34 08	6	12 m			II 3 m	Cl,B,vL,vRi,IC,*9..11
M 37			!			NGC 2099	OPNCL	AUR	05 52.3	+32 33	5.6	24.0 m			II 1 r	!!Cl,Ri,pCM,st L & S
M 38			x			NGC 1912	OPNCL	AUR	05 28.7	+35 51	6.4	21 m			III 2 m	Cl,B,vL,vRi,iF,st L & S
			x			NGC 1746	OPNCL	TAU	05 03.8	+23 46	6.1	42 m			III 1 p	Cl,P
					x	NGC 1750	OPNCL	TAU	05 03.9	+23 41	99.9					Cl,st L,vc sc
						PK 173- 5.1	PLNNB	AUR	05 08.1	+30 48	12	132 s			3	13"-pF,pL,R,nBM at 165X, 3* invol
			x			NGC 1807	OPNCL	TAU	05 10.7	+16 32	7	17 m			II 2 p	Cl,pRi,st L & S
	C 31		x			IC 405	BRTNB	AUR	05 16.5	+34 21	10.0p	50 m	30 m		E	* 6.7 w pB,vL neb
						MCG +02-14-001	GALXY	ORI	05 18.1	+13 25	12	1 m	1 m			Inner Regions Completely Black--MCG
			x			IC 410	BRTNB	AUR	05 22.7	+33 25	7.5	11 m			E	Dif,many st inv
			x			NGC 1893	OPNCL	AUR	05 22.7	+33 25	7.5	11 m			II 2 m n	Cl,L,Ri,IC
						Cr 65	OPNCL	ORI	05 26.0	+16 00	3	220 m			II 3 p	
						Basel 4	OPNCL	AUR	05 48.5	+30 13	9.1	8.0 m			II 1 p	
						Basel 11B	OPNCL	ORI	05 58.2	+21 58	8.9	10.0 m			II 2 m	

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Deep Sky Object List in Chart No.57

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			S	x		NGC 1647	OPNCL	TAU	04 45.9	+19 06	6.4	45 m			II 2 m	Cl,vL,st L,sC
			x			NGC 1499	BRTNB	PER	04 03.2	+36 22	5	160 m	40 m		E	vF,vL,mE ns,dif
			x		x	NGC 1514	PLNNB	TAU	04 09.3	+30 47	10.8	120 s	90 s		3(2)	*9 in neb 3'Diam
			x			NGC 1555	BRTNB	TAU	04 21.9	+19 32	99.9	0.5 m			R	vF,S,variable,!!!
	C 41					Mel 25	OPNCL	TAU	04 27.0	+16 00	0.5	330 m			II 3 m	vvB,vvL,irr
			x		x	NGC 1579	BRTNB	PER	04 30.2	+35 17	99.9	3 m	3 m		R	pB,vL,iR,mbM,*8 2' nf
					x	NGC 1663	OPNCL	ORI	04 48.6	+13 09	99.9				IV 2 p	Cl,iRi,st L&S

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Deep Sky Object List in Chart No.58

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 45			!!!!*			Mel 22	CL+NB	TAU	03 47.0	+24 07	1.2	100 m			I 3 r n	vvB,vL,brilliant naked eye cluster,neb inv
						NGC 1167	GALXY	PER	03 01.7	+35 12	12.4	2.8 m	2.4 m	70	SO	vF,pL,R,spmbM
						NGC 1333	BRTNB	PER	03 29.2	+31 22	99.9	9 m	7 m		R	F,L,*10 nf
			*			NGC 1435	BRTNB	TAU	03 46.2	+23 46	99.9	30 m	30 m		R	vF,vL,diff,(Merope in Pleiades)
						IC 349	BRTNB	TAU	03 46.3	+23 56	99.9	30 m			R	eF,vS,E 165 deg,dist 36" from Merope
						IC 351	PLNNB	PER	03 47.6	+35 03	12.4	8 s	6 s		2a	plan neb=* 10 mag, 9 mag * p

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Deep Sky Object List in Chart No.59 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 777	GALXY	TRI	02 00.2	+31 26	11.4	2.8 m	2.2 m	155	E1/E2	pB,pL,R,glbM
						NGC 783	GALXY	TRI	02 01.1	+31 53	12.1	1.6 m	1.4 m	35	Sc	eF,S,iR,vF st att
						NGC 784	GALXY	TRI	02 01.3	+28 50	11.7	6.6 m	1.6 m	0	SBd	vF,L,E,Double
						UGC 1551	GALXY	ARI	02 03.6	+24 04	12.5	2.8 m	2.3 m	135	SBdm	
						NGC 807	GALXY	TRI	02 04.9	+28 59	12.5	1.8 m	1.3 m	145	Elliptical	vF,vS,iR,bet 2* n&sp
						NGC 877	GALXY	ARI	02 18.0	+14 33	11.9	2.4 m	1.9 m	140	SBbc	pF,pL,IE,pgbM,*9 4' sf
					x	NGC 890	GALXY	TRI	02 22.0	+33 16	11.2	2.9 m	2.3 m	0	E4	B,S,R,bM,3F* sp
						NGC 918	GALXY	ARI	02 25.8	+18 30	12.2	3.5 m	2 m	158	SBc	pF,L,R,*10 sf 3'
						NGC 924	GALXY	ARI	02 26.8	+20 30	12.4	2.3 m	1.3 m	53	SO	eF,vS,iR
			x		x	NGC 925	GALXY	TRI	02 27.3	+33 35	10.1	10.9 m	6.2 m	102	SBcd	cF,cL,E,vgbM,2*13 np
						NGC 938	GALXY	ARI	02 28.6	+20 17	12.4	1.6 m	1.2 m	100	Elliptical	pB,S,R,lbM,*11 sf
						NGC 940	GALXY	TRI	02 29.5	+31 38	12.4	1.2 m	0.9 m	10	SO	F,S,R,bM
						NGC 959	GALXY	TRI	02 32.4	+35 30	12.4	2.3 m	1.4 m	65	Sd	eF,pL,IE,lbM
						NGC 976	GALXY	ARI	02 34.0	+20 59	12.4	1.6 m	1.3 m		Sbc	vF,vS,4F* nr
						NGC 969	GALXY	TRI	02 34.1	+32 57	12.3	1.7 m	1 m	10	SO	S,R,psbM,1st of 5
						NGC 968	GALXY	TRI	02 34.1	+34 29	12.2	3.6 m	1.9 m	60	Elliptical	pF,pS,R,bM
			x			NGC 972	GALXY	ARI	02 34.2	+29 19	11.4	3.3 m	1.6 m	152	Sab	pB,cL,IE,gmbM,3*s
						NGC 987	GALXY	TRI	02 36.8	+33 20	12.4	1.3 m	1.1 m	30	SBO-a	F,S,vIE,bM,r,2*14 np
					x	NGC 1012	GALXY	ARI	02 39.2	+30 09	12	2.5 m	1.1 m	24	Sa	F,pS,iR,bM,st inv
						NGC 1056	GALXY	ARI	02 42.8	+28 34	12.4	2.4 m	1.1 m	160	Sa	F,S,R,psbM

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Deep Sky Object List in Chart No.59 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 1060	GALXY	TRI	02 43.3	+32 25	11.8	2.3 m	1.7 m	75	E-SO	F,pL,R,lBM,*F46s,3's
						NGC 1134	GALXY	ARI	02 53.7	+13 01	12.1	2.5 m	0.9 m	148	Sb	F,S,iR,r
			x		x	NGC 1156	GALXY	ARI	02 59.7	+25 14	11.7	3.3 m	2.8 m	25	Ir+	pB,cL,pmE0,bet 2*

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Deep Sky Object List in Chart No.60 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 33			!!*	x		NGC 598	GALXY	TRI	01 33.9	+30 39	5.7	68.7 m	41.6 m	23	Sc	eB,eL,R,vgbMN
			x	x		NGC 404	GALXY	AND	01 09.4	+35 43	10.3	4.3 m	3.9 m		E0	pB,cL,R,gbM
		x		x		NGC 772	GALXY	ARI	01 59.3	+19 00	10.3	7.5 m	4.3 m	130	Sb	B,cL,R,gbM,r
M 74			*			NGC 628	GALXY	PSC	01 36.7	+15 47	9.4	10 m	9.4 m	25	Sc	F,vL,R,vg,psmbM,rr
						NGC 380	GALXY	PSC	01 07.3	+32 29	12.5	1.3 m	1.1 m		E2	pF,S,R,sbM
						NGC 383	GALXY	PSC	01 07.4	+32 25	12.4	2 m	1.7 m	30	SO	pF,pL,R,gbM,nf Dneb
						NGC 403	GALXY	PSC	01 09.2	+32 45	12.5	1.8 m	0.6 m	86	Sa	vF,pS,cE,* 11 s 85"
					x	NGC 410	GALXY	PSC	01 11.0	+33 09	11.5	2.3 m	1.8 m	30	SB0	pB,pL,nf of 2
						NGC 420	GALXY	PSC	01 12.2	+32 07	12.1	2 m	2 m		SO	F,pS,R,bM
						NGC 473	GALXY	PSC	01 19.9	+16 33	12.5	1.9 m	1.2 m	153	SBO-a	eF,S
					x	NGC 499	GALXY	PSC	01 23.2	+33 28	12.1	1.7 m	1.3 m	82	E-SO	pB,pL,R,3rd of 3
						NGC 507	GALXY	PSC	01 23.7	+33 15	11.2	4 m	4 m		E-SO	vF,pL,R,bM,s of 2
					x	NGC 514	GALXY	PSC	01 24.1	+12 55	11.6	3.7 m	3 m	110	SBc	F,L,IE,vglbM,**F
					x	NGC 513	GALXY	AND	01 24.4	+33 48	12.9	0.7 m	0.3 m	75	Sc	F,S,stellar
						NGC 517	GALXY	PSC	01 24.7	+33 26	12.4	2 m	1 m	20	SO	pF,R,stellar,sf of 2
						NGC 528	GALXY	AND	01 25.6	+33 40	12.5	1.7 m	1.1 m	55	SO	F,pL,R,lbM
						NGC 529	GALXY	AND	01 25.7	+34 43	12.1	2.4 m	2.1 m	160	E-SO	pB,vS,sbM,p of 2
						NGC 536	GALXY	AND	01 26.4	+34 42	12.4	3 m	1.1 m	62	SBb	pB,pL,gbM,f of 2
			*		x	NGC 604	GX+DN	TRI	01 34.6	+30 47	99.9	2 m			Pec	B,vS,R,vvIBM
						NGC 658	GALXY	PSC	01 42.2	+12 36	12.5	3 m	1.6 m	20	Sb	pF,pS,mE,mbM

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Deep Sky Object List in Chart No.60 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 660	GALXY	PSC	01 43.0	+13 39	11.2	8 m	2.9 m	170	SBap	pB,pL,E,bM,r
						NGC 661	GALXY	TRI	01 44.2	+28 42	12.2	1.6 m	1.3 m	60	SO	F,S,R,bM,r
						NGC 669	GALXY	TRI	01 47.3	+35 34	12.3	3.1 m	0.6 m	36	Sab	pF,pL,mE,gbM
						IC 1727	GALXY	TRI	01 47.5	+27 20	11.5	7.1 m	2.8 m	150	SBm	F,L,st inv,NGC 672 nf
			x		x	NGC 672	GALXY	TRI	01 47.9	+27 26	10.9	7.5 m	2.6 m	65	SBc	F,pL,mE80
						NGC 677	GALXY	ARI	01 49.2	+13 03	12.2	2 m	2 m		Elliptical	eeF,S,R,nf of 2
						NGC 678	GALXY	ARI	01 49.4	+22 00	12.2	4.1 m	0.8 m	78	SBb	pB,S,iR,mbM,p of 2
						NGC 679	GALXY	AND	01 49.7	+35 47	12.3	2.1 m	2.1 m		SO	F,stellar
						NGC 680	GALXY	ARI	01 49.8	+21 58	11.9	1.8 m	1.6 m		SOp	pB,S,iR,mbM,f of 2
						Cr 21	OPNCL	TRI	01 50.1	+27 15	8.2	6.0 m			IV 2 p	
						NGC 684	GALXY	TRI	01 50.2	+27 39	12.4	3.4 m	0.7 m	90	Sb	F,E,*13f100"
						NGC 687	GALXY	AND	01 50.6	+36 22	12.3	1.4 m	1.4 m		SO	vF,stellar
						NGC 691	GALXY	ARI	01 50.7	+21 46	11.4	3.4 m	2.5 m	95	Sbc	F,cL,vglbM
						NGC 697	GALXY	ARI	01 51.3	+22 21	12	4.4 m	1.4 m	105	SBbc	F,cL,E,mbM
						NGC 736	GALXY	TRI	01 56.7	+33 03	12.1	1.7 m	1.6 m		SO	pB,R,bM
						NGC 750	GALXY	TRI	01 57.5	+33 13	11.9	1.6 m	1.3 m	175	E1	cB,pL,R,P w 751,25", pos 173 deg
						NGC 753	GALXY	AND	01 57.7	+35 55	12.3	2.5 m	2 m	125	SBbc	pB,pL,R,gmbM
						NGC 776	GALXY	ARI	01 59.9	+23 39	12.4	1.7 m	1.7 m		SBb	F,pL

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Deep Sky Object List in Chart No.61

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 43		x	x	x	NGC 7814	GALXY	PEG	00 03.2	+16 09	10.6	4.7 m	2.4 m	135	Sab	cB,cL,E,vgbM
						NGC 7817	GALXY	PEG	00 04.0	+20 45	11.8	3.5 m	1 m	45	Sbc	pF,cL,mE approx 45 deg,lbM
						NGC 14	GALXY	PEG	00 08.8	+15 49	12.1	2.8 m	2.1 m	25	Irp+	vF,pS,R,glbM
						NGC 16	GALXY	PEG	00 09.1	+27 44	12	1.8 m	1 m	16	E3	pB,S,R,bM
					x	NGC 23	GALXY	PEG	00 09.9	+25 55	12	2.5 m	1.6 m	8	SBa	3 S st + neb
						NGC 57	GALXY	PSC	00 15.5	+17 20	11.6	2.2 m	1.9 m	40	Elliptical	F,S,R,sbM
						NGC 80	GALXY	AND	00 21.2	+22 21	12.1	2.2 m	2 m		E-SO	F,S,R,psbM
						NGC 83	GALXY	AND	00 21.4	+22 26	12.5	1.3 m	1.2 m		E0	E,biN,3 B st nr
						NGC 97	GALXY	AND	00 22.5	+29 45	12.3	1.5 m	1.3 m		Elliptical	F,vS,R,gbM
						NGC 108	GALXY	AND	00 26.0	+29 13	12.1	2 m	1.6 m	75	SBO-a	pF,pL,R,pslbM
					x	NGC 214	GALXY	AND	00 41.5	+25 30	12.3	1.9 m	1.5 m	35	SBc	pF,pS,gvlbM,R
						NGC 234	GALXY	PSC	00 43.5	+14 21	12.5	1.6 m	1.6 m		SBc	F,pS,ilE,bM
						NGC 233	GALXY	AND	00 43.6	+30 35	12.4	1.7 m	1.6 m		Elliptical	F,vS,R,lbM
						NGC 252	GALXY	AND	00 48.0	+27 37	12.4	1.4 m	1 m	80	Sa Ring	pB,S,R,pmbM,r,** p
						NGC 266	GALXY	PSC	00 49.8	+32 17	11.6	2.9 m	2.9 m		SBab	pB,pS,IE,psbM,r,* 8 sf 4'
					x	NGC 315	GALXY	PSC	00 57.8	+30 21	11.2	3 m	2.5 m	40	E-SO	pB,pL,R,gbM,* 9 nf 3'

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Deep Sky Object List in Chart No.62

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 7606	GALXY	AQR	23 19.1	-08 29	10.8	4.2 m	2.3 m	145	Sbc	pF,cL,pmE0
						NGC 7458	GALXY	PSC	23 01.5	+01 45	12.5	1.4 m	1.2 m	15	Elliptical	cF,cS,psbM
						NGC 7469	GALXY	PEG	23 03.3	+08 52	12.3	1.4 m	1 m	125	SBa	vF,vS,vsmbM *12
					x	NGC 7541	GALXY	PSC	23 14.7	+04 32	11.7	3.5 m	1.2 m	102	SBc	B,L,mE97,mbM,nf of 2
					x	NGC 7562	GALXY	PSC	23 16.0	+06 41	11.6	2.2 m	1.7 m	83	Elliptical	cB,pS,iR,psbM
						NGC 7585	GALXY	AQR	23 18.0	-04 39	11.4	3.1 m	2.7 m	60	Sa	pB,pS,iR,gbM
					x	NGC 7600	GALXY	AQR	23 18.9	-07 35	11.9	3.1 m	1.6 m	111	E-SO	cF,S,R,psmbM
						NGC 7611	GALXY	PSC	23 19.6	+08 04	12.5	1.5 m	0.7 m	139	SBO-a	F,S,R,triangle w 2 st 19 n
			x		x	NGC 7619	GALXY	PEG	23 20.2	+08 12	11.1	2.8 m	2.5 m	30	Elliptical	cB,pS,R,psbM
					x	NGC 7623	GALXY	PEG	23 20.5	+08 24	12.9	1.3 m	0.9 m	175	SO	F,vS,R,psbM
			x		x	NGC 7626	GALXY	PEG	23 20.7	+08 13	11.1	3 m	2.7 m		E2	cB,pS,R,psbM
						NGC 7683	GALXY	PSC	23 29.1	+11 27	12.5	1.9 m	0.9 m	140	SO	F,*13 n
						NGC 7714	GALXY	PSC	23 36.2	+02 09	12.5	1.9 m	1.4 m	4	SBb/P	pB,S,R,psbM,*12 sp,*6 sf
						NGC 7716	GALXY	PSC	23 36.5	+00 18	12.1	2.2 m	1.8 m	35	SBb	F,pL,IE,gbM,*10 s
						NGC 7721	GALXY	AQR	23 38.8	-06 31	11.6	3.1 m	1.2 m	165	Sc	pF,cL,E12,vgbM
					x	NGC 7742	GALXY	PEG	23 44.3	+10 46	11.6	1.8 m	1.7 m		Sb	cB,cS,gmbM,*12 f 72"
						NGC 7743	GALXY	PEG	23 44.4	+09 56	11.5	2.8 m	2.4 m	80	SBO-a	pF,S,R,*14 sf
						NGC 7782	GALXY	PSC	23 53.9	+07 58	12.2	2.2 m	1.3 m	175	Sb	pF,pL,IE,glbM,4th of 4
					x	NGC 7785	GALXY	PSC	23 55.3	+05 55	11.6	2 m	1.3 m	143	Elliptical	pB,pS,iR,psbM,r,* 8 p 4'.5
						NGC 7794	GALXY	PEG	23 58.6	+10 44	12.5	1.5 m	1.4 m		Sbc	vF,pS,iR

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Deep Sky Object List in Chart No.63

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 7311	GALXY	PEG	22 34.1	+05 34	12.5	1.6 m	0.8 m	10	Sab	pF,S,R,psbM,r
						NGC 7309	GALXY	AQR	22 34.4	-10 21	12.5	2 m	2 m		SBc	vF,pL,R,glbM,r
						NGC 7371	GALXY	AQR	22 46.1	-11 00	11.5	1.7 m	1.7 m		SBO-a	vF,pL,R,lbM
						NGC 7385	GALXY	PEG	22 49.9	+11 36	12	1.3 m	1.1 m		Elliptical	cF,S,R,glbM,*11 np
						NGC 7386	GALXY	PEG	22 50.0	+11 42	12.3	1.8 m	1.5 m	150	SO	cF,S,R,pgbM,f of 2
						NGC 7391	GALXY	AQR	22 50.6	-01 33	12	1.7 m	1.5 m	70	Elliptical	cF,cS,R,sbM *13,*np
						NGC 7416	GALXY	AQR	22 55.7	-05 30	12.4	3.2 m	0.7 m	115	SBb	F,pL,pmE,vgbM
						NGC 7428	GALXY	PSC	22 57.3	-01 03	12.5	2.4 m	1.4 m	160	SBa	F,vS,R,bM

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Deep Sky Object List in Chart No.64

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 55	x	x	x		NGC 7009	PLNNB	AQR	21 04.2	-11 22	8.3	28 s	23 s		4(6)	!!! vB,S,elliptic
M 2			*			NGC 7089	GLOCL	AQR	21 33.5	-00 49	6.5	11.7 m			II	!!B,vL,gpmbM,rrr,st eS
						NGC 7015	GALXY	EQU	21 05.6	+11 25	12.5	1.8 m	1.6 m		Sbc	vF,pS,glbM
					x	NGC 7156	GALXY	PEG	21 54.6	+02 57	12.5	1.7 m	1.4 m	105	SBc	F,pL,R,bM,r

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Deep Sky Object List in Chart No.65

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 47		x	x		NGC 6934	GLOCL	DEL	20 34.2	+07 24	8.9	2 m			VIII	B,L,R,rrr,*16...
						NGC 6852	PLNNB	AQL	20 00.7	+01 44	11.4p	28 s			4	F neb,am st
						NGC 6906	GALXY	AQL	20 23.6	+06 27	12.3	1.6 m	0.8 m	36	SBbc	pF,pL,R
						NGC 6928	GALXY	DEL	20 32.8	+09 56	12.2	2.1 m	0.6 m	106	SBab	pB,pL,mE
						NGC 6926	GALXY	AQL	20 33.1	-02 02	12.4	2 m	1.4 m	0	SBc/P	vF,pL,E176,p of 2
						NGC 6962	GALXY	AQR	20 47.3	+00 19	12.1	2.9 m	2.2 m	75	SBab	cF,S,R,bM

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Deep Sky Object List in Chart No.66

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6755	OPNCL	AQL	19 07.8	+04 16	7.5	15.0 m			IV 2 m	Cl,vL,vRi,pC,*12...14
				x		NGC 6756	OPNCL	AQL	19 08.7	+04 42	10.6	4.0 m			I 2 m	Cl,S,Ri,IC,*11...12
		x	x	x		NGC 6781	PLNNB	AQL	19 18.5	+06 32	11.8	111 s	109 s		3b(3)	F,L,R,vsbM disc
						NGC 6738	OPNCL	AQL	19 01.4	+11 36	8.3	15.0 m			IV 2 p	Cl,P,IC
						NGC 6741	PLNNB	AQL	19 02.6	-00 27	12	9 s	7 s		4	Planetary,stellar
						NGC 6749	GLOCL	AQL	19 05.3	+01 54	11.1	6.3 m				L,IC,st L&S
						NGC 6751	PLNNB	AQL	19 05.9	-06 00	12	20 s			3	pB,S
			x			B133	DRKNB	AQL	19 06.1	-06 50	79.9	10 m	3 m		6 Co G	Seen in 11X80 finder, No * in 13", DARK SPOT!
						NGC 6760	GLOCL	AQL	19 11.2	+01 02	9.1	2.4 m			IX	pB,pL,vglbM (Auw. 44)
						PK 37- 3.2	PLNNB	AQL	19 13.1	+02 53	12.4	188 s	174 s		4	
					x	NGC 6772	PLNNB	AQL	19 14.6	-02 42	14	75 s	55 s		3b(2)	vF,L,R,vvIBM,r
						IC 4846	PLNNB	AQL	19 16.5	-09 03	12	2 s			2	stellar
						NGC 6790	PLNNB	AQL	19 23.0	+01 31	11.4	2 s			2	B,eS,stell=9.5m
						PK 31-10.1	PLNNB	AQL	19 27.1	-06 35	12.4	6.0 s	5.1 s		2	
						NGC 6803	PLNNB	AQL	19 31.3	+10 03	11	4 s			2a	stellar
					x	NGC 6804	PLNNB	AQL	19 31.6	+09 14	12.4	63 s	50 s		4(2)	cB,S,iR,rrr
						Cr 401	OPNCL	AQL	19 38.4	+00 20	7	1.0 m			IV 2 m	
			x			B142-3	DRKNB	AQL	19 40.7	+10 57	79.9	80 m	50 m		6 lr	! L,Irr,2 extensions W
			x		x	NGC 6814	GALXY	AQL	19 42.7	-10 20	11.2	3.5 m	3.5 m		SBbc Ring	pF,pL,R,bM,r
						Pal 11	GLOCL	AQL	19 45.3	-08 02	11.9	3.2 m			XI	

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6517	GLOCL	OPH	18 01.8	-08 58	10.3	1 m			IV	pB,pL,R,rr
		x		x		NGC 6633	OPNCL	OPH	18 27.3	+06 31	4.6	27.0 m			III 2 m	Cl,IC,st L
			x	x		NGC 6664	OPNCL	SCT	18 36.6	-07 49	7.8	16 m			III 2 m	Cl,L,pRi,vIC
		x	x	x		NGC 6712	GLOCL	SCT	18 53.1	-08 42	8.2	4.3 m			IX	pB,vL,irr,rrr
M 11			!!*			NGC 6705	OPNCL	SCT	18 51.1	-06 16	5.8	14.0 m			I 2 r	!!Cl,vB,L,iR,Ri,*9..
M 26			x			NGC 6694	OPNCL	SCT	18 45.2	-09 24	8	15.0 m			I 1 m	Cl,cL,pRi,pC,st12..15
						Mel 186	OPNCL	OPH	18 01.0	+03 00	3	240 m			IV 3 m	
						NGC 6535	GLOCL	SER	18 03.8	-00 18	10.6	1.3 m			XI	pF,vS,vS neb *p
						NGC 6539	GLOCL	SER	18 04.8	-07 35	9.6	2.5 m			X	vS,F
						IC 1276	GLOCL	SER	18 10.8	-07 13	10.3	7.1 m			XII	eeF,vL,v difficult,D* close p
		x				NGC 6572	PLNNB	OPH	18 12.1	+06 51	8	15 s	12 s		2a	vB,vS,R,I hazy
						PK 19+ 3.1	PLNNB	SER	18 15.3	-10 10	12.5	4.3 s	3.5 s			
						PK 32+ 7.2	PLNNB	SER	18 24.7	+02 30	12.2					
			x			NGC 6649	OPNCL	SCT	18 33.5	-10 24	8.9	6.0 m			II 2 m	Cl,P,IC,pS,*9,10,12
			x			IC 4756	OPNCL	SER	18 39.0	+05 27	4.6	39 m			III 2 m	vvL,scattered group of 80 * mags 7....
						Tr 34	OPNCL	SCT	18 39.8	-08 29	8.6	8.0 m			II 2 m	
						NGC 6683	OPNCL	SCT	18 42.2	-06 17	9.4	11.0 m			I 2 p n	Cl,vRi,vIC,in Milky Way
						Tr 35	OPNCL	SCT	18 42.9	-04 08	9.2	9.0 m			II 2 p	

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Deep Sky Object List in Chart No.67 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						PK 22- 3.1	PLNNB	SCT	18 43.0	-11 07	12.4	7.0 s	5.8 s		2	
						PK 23- 2.1	PLNNB	SCT	18 43.4	-09 05	12.4	4.8 s	4.3 s		2	
						Basel 1	OPNCL	SCT	18 48.2	-05 51	8.9	9.0 m			I 2 m	13"-pF,pS,nC 12* and hazy background at 100X
						MCG +01-48-001	GALXY	SER	18 49.0	+05 26	11	0.7 m	0.5 m			Inner Regions Completely Black--MCG
						NGC 6704	OPNCL	SCT	18 50.9	-05 12	9.2	6.0 m			I 3 m	CI,B,60st13
			x			NGC 6709	OPNCL	AQL	18 51.5	+10 21	6.7	13.0 m			III 2 m	CI,pRi,IC,iF

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Deep Sky Object List in Chart No.68

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6426	GLOCL	OPH	17 44.9	+03 10	11.2	3.2 m			IX	vF,cL,E,vlbM
M 14			x			NGC 6402	GLOCL	OPH	17 37.6	-03 15	7.6	6.7 m			VIII	B,vL,R,eRi,vgmbM
						NGC 6368	GALXY	OPH	17 27.2	+11 33	12.3	3.8 m	1 m	42	Sb	F,S,E
						NGC 6366	GLOCL	OPH	17 27.7	-05 05	10	5.8 m			XI	F,L,vlbM
			x			NGC 6384	GALXY	OPH	17 32.4	+07 04	10.4	5.8 m	3.8 m	30	SBbc	pB,S,vIE
						IC 4665	OPNCL	OPH	17 46.3	+05 43	4.2	41.0 m			III 2 p	vvL sparse group,about 20 * mags 7....
						Cr 350	OPNCL	OPH	17 48.1	+01 18	6.1	45.0 m			IV 2 p	13"-B,L,scattered 32* at 60X
						NGC 6509	GALXY	OPH	17 59.4	+06 17	12.5	1.6 m	1.2 m	105	SBcd	vF,pL,irrR,lbM

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Deep Sky Object List in Chart No.69

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6118	GALXY	SER	16 21.8	-02 17	11.7	4.7 m	1.9 m	58	Sc	vF,cL,cE45,r
M 10			x			NGC 6254	GLOCL	OPH	16 57.1	-04 06	6.6	12.2 m			VII	B,vL,R,gvmBM,rrr
M 12			x			NGC 6218	GLOCL	OPH	16 47.2	-01 57	6.6	14.5 m			IX	vB,vL,iR,gmbM
					x	NGC 6070	GALXY	SER	16 10.0	+00 43	11.8	3.6 m	1.8 m	62	Sc	F,L,pmE,vgbM,r
					x	NGC 6106	GALXY	HER	16 18.8	+07 25	12.2	2.4 m	1.3 m	140	Sc	F,pL,lE,vgbM,r

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Deep Sky Object List in Chart No.70 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 5846	GALXY	VIR	15 06.5	+01 36	10	4 m	3.7 m		E0	vB,pL,R,psbMN,F* inv S,n of 2
M 5			!			NGC 5904	GLOCL	SER	15 18.6	+02 05	5.8	19.9 m			V	!! ,vB,L,eCM,eRi
					x	NGC 5806	GALXY	VIR	15 00.0	+01 53	11.7	3.2 m	1.6 m	170	SBb	cB,cL,E165,sbMN
					x	NGC 5812	GALXY	LIB	15 00.9	-07 27	11.2	2.3 m	2 m	130	E1	cB,S,R,svmbM
					x	NGC 5813	GALXY	VIR	15 01.2	+01 42	10.5	4 m	2.8 m	145	E1	B,pS,R,psmbM
					x	NGC 5831	GALXY	VIR	15 04.1	+01 13	11.5	2.1 m	1.9 m	55	Ep	pB,S,mbM
					x	NGC 5838	GALXY	VIR	15 05.4	+02 06	10.9	3.7 m	1.6 m	43	Sa	pB,pS
						NGC 5845	GALXY	VIR	15 06.0	+01 38	12.5	0.7 m	0.5 m	150	E3	vF,R
			x		x	NGC 5850	GALXY	VIR	15 07.1	+01 33	10.8	4.5 m	3.9 m	140	SBab	cF,S,IE,psbM
					x	NGC 5854	GALXY	VIR	15 07.8	+02 34	11.9	2.7 m	0.8 m	55	SBO-a	pB,S,vIE,lbM,am st
					x	NGC 5861	GALXY	LIB	15 09.3	-11 19	11.6	3 m	1.7 m	150	SBc Ring	F,L,E,r
					x	NGC 5864	GALXY	VIR	15 09.6	+03 03	11.8	2.5 m	0.9 m	68	SBO	pF,cS,ilE,gbM,*14f
						NGC 5869	GALXY	VIR	15 09.8	+00 28	11.9	2.3 m	1.6 m	125	SO	pF,S,E,psbM
						NGC 5885	GALXY	LIB	15 15.1	-10 05	11.8	3.9 m	3.1 m	65	SB Ring	F,cL,R,vgbM
						Pal 5	GLOCL	SER	15 16.1	-00 07	11.8	6.9 m			XII	13"-eF,pL,nBM at 100X; low surface brightness

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Deep Sky Object List in Chart No.70 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5921	GALXY	SER	15 21.9	+05 04	10.8	4.8 m	4 m	130	SBbc	cB,cL,iR,vsbM*12,am *
						NGC 5937	GALXY	SER	15 30.8	-02 50	12.3	1.9 m	1.1 m	20	Sb	pB,pS,R,vgbM,3st f
						NGC 5956	GALXY	SER	15 35.0	+11 45	12.3	1.6 m	1.6 m		Sc	F,S,R,*16 close f
						NGC 5964	GALXY	SER	15 37.6	+05 58	12	4.1 m	3.3 m	145	SBcd	eF,vL,R,vgbM,r
						NGC 5990	GALXY	SER	15 46.3	+02 25	12.4	1.6 m	0.9 m	115	Sa	vF,vS,R,gbM
						NGC 6014	GALXY	SER	15 56.0	+05 56	12.2	1.7 m	1.6 m		SO	pB,pL,E

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Deep Sky Object List in Chart No.71 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 5566	GALXY	VIR	14 20.3	+03 56	10.6	6.6 m	2.3 m	35	SBab Ring	B,pL,R,psbM,r,*f1.5'
				x		NGC 5576	GALXY	VIR	14 21.1	+03 16	11	3 m	2.3 m	95	E2	B,S,R,vsmbM,brightest of 3
				x		NGC 5634	GLOCL	VIR	14 29.6	-05 59	11	4.9 m			IV	vB,cL,R,gbM,rrr,st 19...,*8 sf
		x	x	x		NGC 5746	GALXY	VIR	14 44.9	+01 57	10.3	6.9 m	1.2 m	170	SBb	B,L,vmE170,bM,BN
			x			NGC 5427	GALXY	VIR	14 03.4	-06 02	11.4	2.9 m	2.2 m	170	SBc	pF,cL,R,nf of 2
			x		x	NGC 5426	GALXY	VIR	14 03.4	-06 04	12.1	3 m	1.7 m	170	Sc	pF,cL,R,gmbM,sp of 2
						NGC 5468	GALXY	VIR	14 06.6	-05 27	12.5	2.4 m	2.3 m	105	SBc	F,L,R,vgbM,*9 sf 4'
					x	NGC 5493	GALXY	VIR	14 11.5	-05 03	11.4	1.7 m	1.5 m	124	SO	pB,vS,R,psmbM*,*18 invl
						NGC 5496	GALXY	VIR	14 11.6	-01 10	12.1	4.7 m	0.9 m	172	SBcd	pB,vL,E ns
					x	NGC 5506	GALXY	VIR	14 13.2	-03 12	11.9	2.7 m	0.8 m	91	Sap	pB,L,E20,lbM
					x	NGC 5507	GALXY	VIR	14 13.3	-03 09	12.5	1.6 m	0.9 m	62	SBO	cF,S,R,stellar
						NGC 5534	GALXY	VIR	14 17.7	-07 25	12.3	1.4 m	1 m	55	SBab	pF,st inv,*12 np
						NGC 5546	GALXY	BOO	14 18.2	+07 34	12.3	1.3 m	1.1 m	10	Elliptical	pB,cS,gbM
					x	NGC 5560	GALXY	VIR	14 20.1	+04 00	12.4	3.6 m	0.9 m	115	SBb/P	pF,cL,E,gbM
						NGC 5574	GALXY	VIR	14 20.9	+03 14	12.4	1.5 m	1.1 m	63	SB0	pF,pS,lE,p of 2
						NGC 5577	GALXY	VIR	14 21.2	+03 26	12.3	3.2 m	0.9 m	56	Sbc Ring	pF,pL,vmE53
						NGC 5584	GALXY	VIR	14 22.4	-00 23	11.4	3.4 m	2.7 m	140	SBc	F,L,mE,dif,glbM
					x	NGC 5638	GALXY	VIR	14 29.7	+03 14	11.2	2.3 m	2.1 m	150	E1	cB,pL,R,sf of 2
						NGC 5644	GALXY	BOO	14 30.4	+11 56	12.5	1.5 m	1.5 m		SO	pB,pS,R,gmbM
						NGC 5645	GALXY	VIR	14 30.7	+07 16	12.5	2.6 m	1.6 m	80	SBcd	cF,pL,iR,gbM

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Deep Sky Object List in Chart No.71 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5652	GALXY	VIR	14 31.0	+05 59	12.5	2 m	1.4 m	117	Sbc	pB,pL,vIE,bM
						NGC 5665	GALXY	BOO	14 32.4	+08 05	12	2.1 m	1.3 m	145	SBc	pB,pL,R,gbM,r
						NGC 5669	GALXY	BOO	14 32.7	+09 54	11.3	4.2 m	3.4 m	50	SBc	F,L,R,lbM,r
					x	NGC 5668	GALXY	VIR	14 33.4	+04 27	11.5	3.2 m	3 m		Scd Ring	F,pS,vIE,*14 inv
						NGC 5690	GALXY	VIR	14 37.7	+02 17	11.8	3.4 m	1 m	143	Sc Ring	vF,mE138,F* att sf
						NGC 5691	GALXY	VIR	14 37.9	-00 24	12.3	2 m	1.7 m	110	SBap	pB,pS,IE,gbM
						NGC 5701	GALXY	VIR	14 39.2	+05 22	10.9	4.7 m	4.6 m		SBO-a Ring	cB,pS,R,mbM,*11p15"
						NGC 5713	GALXY	VIR	14 40.2	-00 17	11.2	2.9 m	2.5 m	10	SBbc	cB,pL,R,psmbM,r
						NGC 5719	GALXY	VIR	14 40.9	-00 19	12.2	3.2 m	1.2 m	107	SBab/P	pF,S,IE,bM
			x			NGC 5740	GALXY	VIR	14 44.4	+01 41	11.9	2.8 m	1.5 m	160	SBb Ring	pB,L,iR,gbM,r
					x	NGC 5750	GALXY	VIR	14 46.2	-00 13	11.6	3.2 m	1.5 m	65	SBO-a Ring	pF,pS,vIE,r
						NGC 5768	GALXY	LIB	14 52.1	-02 32	12.5	1.8 m	1.4 m	60	Scp	F,R,bMFN,S*s
						NGC 5770	GALXY	VIR	14 53.2	+03 58	12.3	1.7 m	1.3 m	120	SBO	cF,S,vIE,bM,bi-N
						NGC 5774	GALXY	VIR	14 53.7	+03 35	12.1	3 m	2.3 m	145	SBcd	pF,pL,R,np of 2
					x	NGC 5775	GALXY	VIR	14 54.0	+03 33	11.4	4 m	1.1 m	146	SBc	F,pS,vmE148,gvlbM
						NGC 5792	GALXY	LIB	14 58.4	-01 05	11.3	6.8 m	1.7 m	84	SBb	pB,pL,R,mbM,*8-9 np 1'

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Deep Sky Object List in Chart No.72 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 4900	GALXY	VIR	13 00.7	+02 30	11.4	2.2 m	2.2 m		SBc	cB,cE,*10 att pos135
				x		NGC 4958	GALXY	VIR	13 05.8	-08 01	10.7	3.9 m	1.4 m	15	SBO	vB,pS,E,bMBN
				x		NGC 4995	GALXY	VIR	13 09.7	-07 50	11.1	2.4 m	1.7 m	92	SBb	pB,pL,R,vgpmbM,*8 np
	C 45		x	x		NGC 5248	GALXY	BOO	13 37.5	+08 53	10.3	5.9 m	4.5 m	110	SBbc	B,L,E150,psbMRN
			x	x		NGC 5363	GALXY	VIR	13 56.1	+05 15	10.1	4.6 m	3.1 m	135	Sa	B,pL,R,psbM,*8 nf
			x	x		NGC 5364	GALXY	VIR	13 56.2	+05 01	10.5	6.1 m	4.2 m	30	SBc/P	cF,L,R,gbM
					x	NGC 4904	GALXY	VIR	13 01.0	-00 02	12	2.2 m	1.5 m	25	SBc	pB,pS,R,bM,B narrow bar
					x	NGC 4915	GALXY	VIR	13 01.5	-04 33	12.1	1.6 m	1.3 m	55	Elliptical	pB,S,R,bM
					x	NGC 4928	GALXY	VIR	13 03.0	-08 05	12.5	1.1 m	0.9 m	125	Sbc	F,pS,vIE,glbM
						NGC 4933A	GALXY	VIR	13 03.9	-11 30	11.7	2 m	1.1 m	45	Sa	pB,pL,iR
					x	NGC 4941	GALXY	VIR	13 04.2	-05 33	11.1	3.5 m	1.9 m	15	SBab	pF,L,E,gbMBN,r
					x	NGC 4939	GALXY	VIR	13 04.2	-10 20	11.3	5.1 m	2.3 m	5	Sbc	pB,L,R,gmbM
						NGC 4951	GALXY	VIR	13 05.1	-06 30	11.9	3.3 m	1.2 m	90	SBc	F,pL,IE,r
					x	NGC 4981	GALXY	VIR	13 08.8	-06 47	11.3	2.8 m	1.9 m	150	SBbc Ring	B,pL,R,*10 sf 1'
					x	NGC 4999	GALXY	VIR	13 09.6	+01 40	11.8	2.3 m	1.9 m	35	SBb	cF,pL,R,lbM,er
						NGC 5125	GALXY	VIR	13 24.0	+09 43	12.4	1.7 m	1.3 m	170	Sb	pF,S,R,gbM
						NGC 5147	GALXY	VIR	13 26.3	+02 06	11.8	1.9 m	1.6 m	120	SBd	pB,pL,vIE,vsmbM*12
						NGC 5211	GALXY	VIR	13 33.1	-01 02	12.3	2.1 m	1.6 m	30	SBab	pB,S,R,psmbM
						NGC 5300	GALXY	VIR	13 48.3	+03 57	11.4	3.8 m	2.4 m	150	SBc Ring	vF,vL,IE,vgbM
						NGC 5306	GALXY	VIR	13 49.2	-07 13	12.1	1.4 m	1.1 m	135	SO	vF,vS,R,r

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Deep Sky Object List in Chart No.72 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5324	GALXY	VIR	13 52.1	-06 04	11.7	2.3 m	2.1 m	170	Sc	cF,L,iR,bM
						NGC 5329	GALXY	VIR	13 52.2	+02 20	12.4	1.3 m	1.3 m		Elliptical	F,vS,R,psbM
						NGC 5334	GALXY	VIR	13 52.9	-01 07	11.3	4.1 m	3.3 m	15	SBc	cF,vL,R,lbM,r
						NGC 5338	GALXY	VIR	13 53.4	+05 12	12.4	2.5 m	1.4 m	97	SBO	vF,E,pF,4'f D*
						NGC 5339	GALXY	VIR	13 54.0	-07 56	12	1.9 m	1.7 m	125	SBa	vF,pS,R
						NGC 5345	GALXY	VIR	13 54.2	-01 26	12.4	1.6 m	1.6 m		Sa	F,S,R,bM
						NGC 5374	GALXY	VIR	13 57.5	+06 06	12.5	1.6 m	1.5 m		SBbc	cF,pL,R,vgbM,*11 np

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Deep Sky Object List in Chart No.73 (1/8)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 61			x	x		NGC 4303	GALXY	VIR	12 21.9	+04 28	9.6	6.5 m	5.9 m		SBbc Ring	vB,vL,vsbM*,biN
M104			!!*	x		NGC 4594	GALXY	VIR	12 40.0	-11 37	8	8.6 m	4.2 m	89	Sab	!vB,vL,eE92,vsmbMN
			x	x		NGC 4030	GALXY	VIR	12 00.4	-01 06	10.6	4.2 m	3.2 m	27	Sbc	cB,L,vIE,psmbM,B* nr
				x		NGC 4179	GALXY	VIR	12 12.9	+01 18	11	4.2 m	1.3 m	143	SO	pB,pS,pmE135,bMN
			x	x		NGC 4261	GALXY	VIR	12 19.4	+05 49	10.4	3.8 m	3.5 m	160	E2	pB,pS,R,gbM
			x	x		NGC 4273	GALXY	VIR	12 19.9	+05 21	11.9	2.3 m	1.5 m	10	SBc	pB,L,E,gbM
			x	x		NGC 4281	GALXY	VIR	12 20.4	+05 23	11.3	3 m	1.6 m	88	Sa	B,vL,R,pgbM
			x	x		NGC 4365	GALXY	VIR	12 24.5	+07 19	9.6	6.5 m	4.9 m	40	Elliptical	cB,pL,vIE,gl,smbM
				x		NGC 4371	GALXY	VIR	12 24.9	+11 42	10.8	4 m	2.3 m	95	SBO-a Ring	B,pS,R,gbM
				x		NGC 4429	GALXY	VIR	12 27.4	+11 06	10	5.8 m	2.8 m	99	Sa	B,L,cE,psbM,*10 nf
				x		NGC 4442	GALXY	VIR	12 28.1	+09 48	10.4	4.5 m	1.8 m	87	SBO	vB,pL,R,smbM
		x	x	x		NGC 4526	GALXY	VIR	12 34.0	+07 42	9.7	7 m	2.5 m	113	SBO	vB,vL,mE120,psmbM
			x	x		NGC 4527	GALXY	VIR	12 34.1	+02 39	10.5	5.9 m	2.3 m	67	SBbc	pB,L,pmE69,mbM,vseBN or *
		x	x	x		NGC 4535	GALXY	VIR	12 34.3	+08 12	10	6.9 m	5.4 m	0	SBc	pF,vL,r,vseBN or *
			x	x		NGC 4536	GALXY	VIR	12 34.4	+02 11	10.6	7.1 m	3.1 m	130	SBbc	B,vL,mE110,sbM,er
				x		NGC 4546	GALXY	VIR	12 35.5	-03 48	10.3	3.3 m	1.6 m	80	E-SO Bar	vB,cL,pmE78,vsmbMN
				x		NGC 4570	GALXY	VIR	12 36.9	+07 15	10.9	3.7 m	1.2 m	159	SO	cB,pS,mE0,sbM
				x		NGC 4596	GALXY	VIR	12 39.9	+10 11	10.4	4 m	3.4 m	135	SBO-a	B,pS,R,gmbM,r,3 * f
			x	x		NGC 4636	GALXY	VIR	12 42.8	+02 41	9.5	5.9 m	4.6 m	150	Elliptical	B,L,iR,vgvmbM,r
			x	x		NGC 4643	GALXY	VIR	12 43.3	+01 59	10.8	3.1 m	2.5 m	130	SBO-a	cB,pS,lE,mbM

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Deep Sky Object List in Chart No.73 (2/8)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 4660	GALXY	VIR	12 44.5	+11 11	11.2	2.1 m	1.7 m	100	E5	vB,S,vsmbMN
				x		NGC 4665	GALXY	VIR	12 45.1	+03 03	10.5	3.5 m	3.5 m		SBO-a	B,pL,iR,mbM,*10 sp
			x	x		NGC 4666	GALXY	VIR	12 45.1	-00 28	10.7	4.5 m	1.4 m	42	SBc	B,vL,mE45,psbM
				x		NGC 4698	GALXY	VIR	12 48.4	+08 29	10.6	4 m	2.9 m	170	Sab	cB,pL,iR,bM,r
	C 52		x	x		NGC 4697	GALXY	VIR	12 48.6	-05 48	9.2	6.2 m	4.5 m	70	Elliptical	vB,L,IE45,smbMN
		x	x	x		NGC 4699	GALXY	VIR	12 49.0	-08 40	9.5	3.8 m	2.8 m	45	SBb	vB,R,vmbMrN,r
			x	x		NGC 4754	GALXY	VIR	12 52.3	+11 19	10.6	4.4 m	2.4 m	23	SBO	B,pL,R,psbM,p of 2
			x	x		NGC 4753	GALXY	VIR	12 52.4	-01 12	9.9	5.1 m	2.6 m	80	SO	cB,L,vIE,vglbM
		x	x	x		NGC 4762	GALXY	VIR	12 52.9	+11 14	10.3	8.6 m	2 m	32	SBO	pB,vmE31,3 B * s,f of 2
			x	x		NGC 4781	GALXY	VIR	12 54.4	-10 32	11.1	3.4 m	1.4 m	120	SBcd	cB,vL,mE
			x	x		NGC 4845	GALXY	VIR	12 58.0	+01 35	11.2	4.9 m	1.3 m	89	Sab	pF,pL,pmE,vgbM,* nf
M 49			x			NGC 4472	GALXY	VIR	12 29.8	+08 00	8.4	9.8 m	8.2 m	155	E4	vB,L,R,mbM,r
M 58			x			NGC 4579	GALXY	VIR	12 37.7	+11 49	9.7	6 m	4.8 m	95	SBb	B,L,iR,vmbM
M 59			x			NGC 4621	GALXY	VIR	12 42.0	+11 39	9.6	5.3 m	4 m	165	E3	B,pL,IE,vsmbM,2 * p
M 60			x			NGC 4649	GALXY	VIR	12 43.7	+11 33	8.8	7.6 m	6.2 m	105	E1	vB,pL,R,f of Dneb
					x	NGC 4045	GALXY	VIR	12 02.7	+01 59	12	3.1 m	1.9 m	95	Sba Ring	pF,L,R,sbM,* sf
						NGC 4067	GALXY	VIR	12 04.2	+10 51	12.5	1.3 m	0.9 m	35	Sb	F,pS,R,gbM
					x	NGC 4073	GALXY	VIR	12 04.5	+01 54	11.4	3.2 m	2.3 m	105	E1	F,pS,R,pgbM,np of 2
						NGC 4079	GALXY	VIR	12 04.8	-02 23	12.4	2.3 m	1.6 m	125	Sbc	F,L,R,*10 n 1'
			x			NGC 4116	GALXY	VIR	12 07.6	+02 41	12	3.8 m	2.3 m	155	SBc	vF,E(hook shape),sp of 2

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x			NGC 4123	GALXY	VIR	12 08.2	+02 53	11.4	4.3 m	3.2 m	135	SBb	cF,vL,E90,bMN
					x	NGC 4124	GALXY	VIR	12 08.2	+10 23	11.4	3.9 m	1.8 m	114	Sa	pB,pL,mE118,bM,r
						NGC 4119	GALXY	VIR	12 08.2	+10 23	12.2	3.9 m	1.8 m	114	Sa	IE
						NGC 4129	GALXY	VIR	12 08.9	-09 02	12.5	2.3 m	0.6 m	93	SBab	F,pL,pmE95,vglbM
						NGC 4178	GALXY	VIR	12 12.8	+10 52	11.4	5 m	1.7 m	30	SBcd	vF,vL,E45,*7f
						NGC 4207	GALXY	VIR	12 15.5	+09 35	12.5	1.6 m	0.8 m	124	Scd	pF,pS,IE,*14 np
						NGC 4215	GALXY	VIR	12 15.9	+06 24	12.1	1.8 m	0.7 m	174	Sa	B,pS,E,sbM*11
					x	NGC 4224	GALXY	VIR	12 16.6	+07 28	11.8	2.5 m	1 m	57	Sa	pB,pS,IE,gbM,r
					x	NGC 4233	GALXY	VIR	12 17.1	+07 37	11.9	2.4 m	1.1 m	174	SBO	pF,R,vsbMSN
					x	NGC 4235	GALXY	VIR	12 17.2	+07 11	11.6	3.9 m	0.9 m	48	Sa	pB,pL,pmE,bM,p of 2
					x	NGC 4241	GALXY	VIR	12 18.0	+06 39	11.9	1.7 m	1.4 m		SBc	vF,L,vgbM,*7S
			x		x	NGC 4260	GALXY	VIR	12 19.4	+06 06	11.8	2.4 m	1.2 m	58	SBab	pB,E,psbM
					x	NGC 4264	GALXY	VIR	12 19.6	+05 51	12.8	0.9 m	0.7 m	130	SBO-a	F,pS,R,gbM
					x	NGC 4270	GALXY	VIR	12 19.8	+05 28	12.2	2 m	0.9 m	110	SO	pB,S,E
						NGC 4276	GALXY	VIR	12 20.1	+07 41	12.4	1.6 m	1.4 m		SBc	pF,pL
						NGC 4292	GALXY	VIR	12 21.3	+04 36	12.2	1.6 m	1.2 m	7	SBO	F,S,R,vglbM,*9 np 72"
			x		x	NGC 4294	GALXY	VIR	12 21.3	+11 31	12.1	3.2 m	1.2 m	155	SBc	F,L,mE135,biN,p of 2
			x		x	NGC 4299	GALXY	VIR	12 21.7	+11 30	12.5	1.7 m	1.6 m	26	SBd	F,L,IE,vgbM,f of 2
						NGC 4307	GALXY	VIR	12 22.1	+09 02	12	3.5 m	0.8 m	24	Sb	pF,L,mE,3 knots
					x	NGC 4313	GALXY	VIR	12 22.6	+11 48	11.6	3.8 m	0.9 m	143	Sab	vF,L,E135

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Deep Sky Object List in Chart No.73 (4/8)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 4324	GALXY	VIR	12 23.1	+05 15	11.6	2.9 m	1.2 m	53	Sa Ring	pB,R or IE,bM
						NGC 4330	GALXY	VIR	12 23.3	+11 22	12.4	4.5 m	0.9 m	59	Sc	vF,L,mE
					x	NGC 4339	GALXY	VIR	12 23.6	+06 05	11.4	2.3 m	2.1 m		Elliptical	B,pL,R,bM,3 of 3
					x	NGC 4343	GALXY	VIR	12 23.6	+06 57	12.1	2.3 m	0.7 m	133	Sb	pF,S,E,D?
						NGC 4342	GALXY	VIR	12 23.7	+07 03	12.5	1.2 m	0.6 m	168	SO	eF,vS,IE
						NGC 4348	GALXY	VIR	12 23.9	-03 27	12.5	3.2 m	0.7 m	40	Sbc	F,pL,E70,vlbM
						NGC 4378	GALXY	VIR	12 25.3	+04 55	11.7	2.5 m	2.3 m	167	Sa	B,S,*8,9 sf 3'
						NGC 4380	GALXY	VIR	12 25.4	+10 01	11.7	3.2 m	1.8 m	153	Sab	vF,pL,R,lbM
						NGC 4385	GALXY	VIR	12 25.7	+00 34	12.5	2.1 m	1.3 m	82	SBO-a	vF,vS,alm stell,vsvBN
						NGC 4412	GALXY	VIR	12 26.6	+03 58	12.4	1.4 m	1.2 m		SB/P	F,pL,R,gbM,r
						NGC 4415	GALXY	VIR	12 26.7	+08 26	12.1	1.4 m	1.2 m		Sa	eF,pS
						NGC 4416	GALXY	VIR	12 26.8	+07 55	12.4	1.7 m	1.5 m	84	SBc	vF,L,R,*7 sp 5'
						NGC 4411B	GALXY	VIR	12 26.8	+08 53	12.3	2.5 m	2.5 m		SBd	
			x			NGC 4417	GALXY	VIR	12 26.8	+09 35	11.1	3.3 m	1.4 m	49	SBO	F,pL,E,lbP
						NGC 4420	GALXY	VIR	12 27.0	+02 30	12.1	2 m	1 m	8	SBbc	F,pL,IE,r,=4409?
			x			NGC 4424	GALXY	VIR	12 27.2	+09 25	11.7	3.5 m	1.7 m	95	SBa	F,pL,iR,bM
						NGC 4430	GALXY	VIR	12 27.4	+06 16	12	2.3 m	2 m	80	SBb/P	cF,L,R,gbM
						NGC 4434	GALXY	VIR	12 27.6	+08 09	12.1	1.4 m	1.4 m		Elliptical	pF,vS
						NGC 4451	GALXY	VIR	12 28.7	+09 16	12.5	1.5 m	0.9 m	162	Sb	pB,pS,R,bM,*13 s
						NGC 4452	GALXY	VIR	12 28.7	+11 45	12	2.7 m	0.6 m	32	SO	pB,S,vmE

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Deep Sky Object List in Chart No.73 (5/8)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 4454	GALXY	VIR	12 28.8	-01 56	11.9	1.9 m	1.6 m	100	SBO-a Ring	F,L,R,gbM,er,vsBN,broad weak bar
						NGC 4457	GALXY	VIR	12 29.0	+03 34	10.9	2.6 m	2.3 m		SBO-a Ring	cB,pS,R,smbMN,vBN
			x			3C 273	QUASR	VIR	12 29.1	+02 06	12					17.5"-pF,stellar,looks like D*
						NGC 4464	GALXY	VIR	12 29.4	+08 09	12.5	0.9 m	0.7 m		Sab	F,vS,R,pgbM(=4665)
						NGC 4469	GALXY	VIR	12 29.5	+08 45	11.2	3.4 m	1.2 m	89	SBO-a	pF,pL,mE,bM,r
						NGC 4470	GALXY	VIR	12 29.6	+07 49	12.1	1.3 m	0.9 m	0	Sa	F,pL,iR,bM
						NGC 4480	GALXY	VIR	12 30.4	+04 15	12.4	2.2 m	1.1 m	175	SBc	pF,pS,E,bs
						NGC 4483	GALXY	VIR	12 30.7	+09 01	12.2	1.6 m	0.8 m	65	SBO-a	pB,pS,R,bM
						NGC 4488	GALXY	VIR	12 30.9	+08 22	12.2	3.8 m	1.5 m	5	SBO-a	vF,vS,IE
					x	NGC 4487	GALXY	VIR	12 31.1	-08 03	10.9	4 m	2.8 m	100	SBc	F,vL,er
						NGC 4497	GALXY	VIR	12 31.5	+11 37	12.5	1.9 m	0.8 m	65	SBO-a	vF or pF
						NGC 4496A	GALXY	VIR	12 31.7	+03 56	11.4	3.9 m	3.1 m	70	SBc	F,cL,biN or Dneb
						NGC 4505	GALXY	VIR	12 31.7	+03 56	11.9	3.9 m	3.1 m	70	SBc	vF,cL,r,f of 2,=4496?
						NGC 4503	GALXY	VIR	12 32.1	+11 11	11.1	3.5 m	1.7 m	12	SBO	pB,S,R,gbM
						NGC 4504	GALXY	VIR	12 32.3	-07 34	11.2	4.3 m	2.8 m	30	SBc	pB,cL,iE,gvlbM,er
						NGC 4517A	GALXY	VIR	12 32.5	+00 23	12.5	4 m	2.6 m	30	SBd	vF narrow bar
			x			NGC 4517	GALXY	VIR	12 32.8	+00 07	10.4	10.2 m	1.7 m	83	Sc	cB,vL,vmE89,pB*in cont
					x	NGC 4519	GALXY	VIR	12 33.5	+08 39	11.8	2.9 m	2.3 m	145	SBcd Ring	F,pL,R,bM,r
						NGC 4522	GALXY	VIR	12 33.7	+09 10	12.3	3.6 m	1 m	33	SBc	eF,pL,IE,vlbM
						NGC 4528	GALXY	VIR	12 34.1	+11 19	12.1	1.6 m	1 m	5	SBO	pF,cS,R,bM,*9 f 30sec

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						NGC 4532	GALXY	VIR	12 34.3	+06 28	11.9	2.7 m	1.2 m	160	Ir?	pB,pL,pmE,vgbM,r
			x			NGC 4564	GALXY	VIR	12 36.4	+11 26	11.1	3.2 m	1.8 m	47	E6	pB,S,IE,psbM
		x	!			NGC 4567	GALXY	VIR	12 36.5	+11 15	11.3	3.1 m	2.2 m	85	Sbc	vF,L,np of Dneb
			x			NGC 4568	GALXY	VIR	12 36.6	+11 14	10.8	4.6 m	2.2 m	23	Sbc	vF,L,sf of Dneb
						NGC 4578	GALXY	VIR	12 37.5	+09 33	11.5	3.1 m	2.3 m	35	SO	pF,pS,R,sbMN,* np
						NGC 4580	GALXY	VIR	12 37.8	+05 22	11.8	2.1 m	1.5 m	165	SBab Ring	pB,L,vgbM,vsBN
						NGC 4581	GALXY	VIR	12 38.1	+01 29	12.5	1.9 m	1.1 m	173	Elliptical	F,S,bM,stell N
					x	NGC 4586	GALXY	VIR	12 38.5	+04 19	11.7	3.8 m	1.2 m	115	Sa Ring	pB,L,E,psbM,sBN
						NGC 4592	GALXY	VIR	12 39.3	-00 32	11.7	6.8 m	1.7 m	97	Sd	F,L,E90,vgbM,BM no BN
						NGC 4593	GALXY	VIR	12 39.7	-05 21	10.9	3.7 m	2.6 m	125	SBab	pB,cL,E,sbMN=*,vBN in smooth bar
						NGC 4597	GALXY	VIR	12 40.2	-05 48	12.1	3.8 m	1.6 m	135	SBc	F,vL,bM
						NGC 4602	GALXY	VIR	12 40.6	-05 08	11.5	3 m	1 m	99	SBbc	F,L,E,vglbM
						NGC 4606	GALXY	VIR	12 41.0	+11 55	11.8	3.3 m	1.7 m	33	SBa	vF,pS,E,2 or 3 vS * inv
					x	NGC 4608	GALXY	VIR	12 41.2	+10 09	11	3.3 m	2.9 m	120	SBO	pB,pL,R,psbM,r,* np 1'
					x	NGC 4612	GALXY	VIR	12 41.5	+07 19	10.9	2.7 m	2 m	145	SBO Ring	pB,S,R,psmbM
						NGC 4623	GALXY	VIR	12 42.2	+07 41	12.2	2.2 m	0.7 m	176	SBO-a	cF,pL,E,pslbM
						NGC 4632	GALXY	VIR	12 42.5	-00 05	11.7	3 m	1.2 m	63	Sc	pB,L,E45,BM no def BN
			x			NGC 4638	GALXY	VIR	12 42.8	+11 27	11.2	2.4 m	1.7 m	125	E5	F,R,gbM,vB cent
			x		x	NGC 4647	GALXY	VIR	12 43.5	+11 35	11.3	2.9 m	2.3 m	125	SBc Ring	pF,pL,IE115,np of Dneb
						NGC 4653	GALXY	VIR	12 43.9	-00 34	12.2	3.4 m	3 m	30	SBc	vF,pL

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						NGC 4658	GALXY	VIR	12 44.6	-10 05	12.5	2.1 m	0.9 m	0	SBbc	vF,L,E,*16 att,*9 p
						NGC 4624	GALXY	VIR	12 45.1	+03 03	11.2	3.5 m	3.5 m		SBO-a	B,E,=4636
						NGC 4664	GALXY	VIR	12 45.1	+03 03	11.2	3.5 m	3.5 m		SBO-a	pB,2 S * in M,S* p,=4665
			x			NGC 4668	GALXY	VIR	12 45.5	-00 32	13.1	1.4 m	0.8 m	5	SBcd	vF,S,iF
						NGC 4684	GALXY	VIR	12 47.3	-02 44	11.4	2.8 m	1.1 m	23	SBO-a	B,pL,pmE25
						NGC 4682	GALXY	VIR	12 47.3	-10 04	12.1	2.5 m	1.2 m	85	SBc	cF,L,E45,gvlbM
						NGC 4688	GALXY	VIR	12 47.8	+04 20	11.9	3.5 m	3.1 m		SBc	eF,pL,*9-10 p 10s
						NGC 4694	GALXY	VIR	12 48.2	+10 59	11.4	3.3 m	1.6 m	140	SBO	pF,S,vIE,vBN
					x	NGC 4691	GALXY	VIR	12 48.2	-03 20	11.1	2.7 m	2.5 m	15	SBO-a	pB,pL,E90,mbM
						NGC 4700	GALXY	VIR	12 49.1	-11 25	11.9	3 m	0.5 m	50	SBc	F,L,mE40,vlbM,B* p
						NGC 4701	GALXY	VIR	12 49.2	+03 23	12.4	3.1 m	2.6 m	45	Sc	F,S,vsBN,complex B cent.
						AN 3	GALXY	VIR	12 49.4	-10 07	11.6	2.5 m	2.0 m		Sc?	F,S,IE,spiral pattern ill-defined
						NGC 4713	GALXY	VIR	12 50.0	+05 19	11.7	2.9 m	1.8 m	100	SBcd	pB,L,vIE,glbM
						NGC 4731	GALXY	VIR	12 51.0	-06 24	11.5	6.3 m	2.6 m	85	SBc/P	vF,pL,E
						NGC 4733	GALXY	VIR	12 51.1	+10 55	11.9	1.5 m	1.5 m		Elliptical	cF,pL,IE,r,*12 p
			x		x	NGC 4742	GALXY	VIR	12 51.8	-10 27	11.3	2.3 m	1.3 m	75	E3	pB,vS,vbMN=*11,*10 sf
						NGC 4778	GALXY	VIR	12 53.1	-09 12	12.5	1.7 m	1.1 m	100	Sa	vF,S,R,vlbM,f of Dneb
			x			NGC 4760	GALXY	VIR	12 53.1	-10 30	11.4	2 m	1.8 m	10	Elliptical	pB,R
						NGC 4771	GALXY	VIR	12 53.3	+01 16	12.3	3.8 m	0.9 m	133	Scd	F,pL,mE,*9 p 90deg
						NGC 4772	GALXY	VIR	12 53.5	+02 10	11	3.1 m	1.8 m	147	Sa	pF,pS,R,mbM

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Deep Sky Object List in Chart No.73 (8/8)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 4779	GALXY	VIR	12 53.8	+09 43	12.4	2.1 m	1.8 m	70	SBbc	vF,pL,R,r
						NGC 4775	GALXY	VIR	12 53.8	-06 37	11.1	2.2 m	2.1 m		Scd	F,cL,R,vglbM,r
						NGC 4786	GALXY	VIR	12 54.5	-06 52	11.7	1.6 m	1.3 m	175	E2	pB,pS,mbM,r
			x			NGC 4790	GALXY	VIR	12 54.9	-10 15	12.1	1.5 m	0.9 m	85	SBc	pF,pS,iR
						NGC 4795	GALXY	VIR	12 55.0	+08 04	12.1	1.6 m	1.5 m	115	SBO-a	pB,pL,R,bM,r
						UGC 8041	GALXY	VIR	12 55.2	+00 07	12	3.2 m	2.1 m	165	SBd	F,pS,E, spiral pattern faint and indistinct
						NGC 4808	GALXY	VIR	12 55.8	+04 18	11.7	2.4 m	1 m	127	Sc	pB,cL,E135,vsBN
						NGC 4818	GALXY	VIR	12 56.8	-08 32	11.1	3.4 m	1.3 m	177	SBab	pB,L,pmE0,gbM

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Deep Sky Object List in Chart No.74 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 3521	GALXY	LEO	11 05.8	-00 02	9	11.2 m	5.4 m	163	SBbc	cB,cL,mE 140,vsmbMN
				x		NGC 3640	GALXY	LEO	11 21.1	+03 14	10.4	4.5 m	4 m	100	Elliptical	B,pL,R,psbM
				x		NGC 3810	GALXY	LEO	11 41.0	+11 28	10.8	4.1 m	2.7 m	15	Sc	B,L,vIE
						NGC 3495	GALXY	LEO	11 01.3	+03 38	11.8	4.9 m	1.1 m	20	Scd	vF,pL,mE
						NGC 3506	GALXY	LEO	11 03.2	+11 05	12.5	1.1 m	1 m		Sc	vF,cS,R,vglbM
					x	NGC 3524	GALXY	LEO	11 06.5	+11 23	12.8	1.6 m	0.5 m	14	Sa	F,S,IE,psbM,2 st np in line
					x	NGC 3547	GALXY	LEO	11 09.9	+10 43	12.8	2 m	0.9 m	7	Sb	F,S,IE,vlbM
					x	NGC 3611	GALXY	LEO	11 17.5	+04 33	12.1	2 m	1.6 m		Sa	pF,cS,iR,psmbM,*10 np 3'
						NGC 3630	GALXY	LEO	11 20.3	+02 58	11.9	2 m	0.8 m	37	Sa	pB,S,R,smbMN
					x	NGC 3636	GALXY	CRT	11 20.4	-10 17	12.4	1.7 m	1.7 m		Elliptical	F,vS,R,lbM,*7 f,p of 2
					x	NGC 3637	GALXY	CRT	11 20.7	-10 15	12.7	1.8 m	1.7 m		SBO Ring	F,vS,R,psbM,*7 p,f of 2
						NGC 3660	GALXY	CRT	11 23.5	-08 40	12.5	2.8 m	2.3 m	115	SBbc	F,pL,iR,vgbM
					x	NGC 3666	GALXY	LEO	11 24.4	+11 21	12	4.6 m	1.3 m	100	SBc	F,E 90,*6 f 34",5' n
			x		x	NGC 3672	GALXY	CRT	11 25.0	-09 48	11.4	4 m	1.8 m	8	Sc	pB,L,E 0,gbM
						NGC 3692	GALXY	LEO	11 28.4	+09 24	12.1	3.1 m	0.7 m	95	Sb	F,mE,r
					x	NGC 3705	GALXY	LEO	11 30.1	+09 17	11.1	4.6 m	1.9 m	122	SBab	pF,pL,R,vsmbM,r
					x	NGC 3732	GALXY	CRT	11 34.2	-09 51	12.5	1.4 m	1.2 m	85	SBO-a	F,S,R,psbM,*14 sp 225
						NGC 3818	GALXY	VIR	11 42.0	-06 09	11.7	2 m	1.2 m	103	Elliptical	F,pS,R,psbM
						NGC 3865	GALXY	CRT	11 44.9	-09 14	12	2.1 m	1.5 m	135	SBb	F,pL,dif
					x	NGC 3892	GALXY	CRT	11 48.0	-10 58	11.5	3.1 m	2.3 m	95	SBO-a	pB,pL,R,gbM,r

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Deep Sky Object List in Chart No.74 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 3968	GALXY	LEO	11 55.5	+11 58	11.8	2.7 m	1.9 m	10	SBbc	pB,L,iR,bM,*10,65,3'
						UGC 6903	GALXY	VIR	11 55.7	+01 15	12.3	2.5 m	2.2 m	150	S(B)c	
						NGC 3976	GALXY	VIR	11 56.0	+06 45	11.5	3.4 m	1.1 m	53	SBb	B,pL,cE 30,vsmbMN

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Deep Sky Object List in Chart No.75

	C 53	x	x	x		NGC 3115	GALXY	SEX	10 05.2	-07 43	8.9	7.3 m	3.4 m	43	E6	vB,L,vmE 46,vgsmbMEN
			x	x		NGC 3166	GALXY	SEX	10 13.8	+03 26	10.4	4.8 m	1.9 m	87	SBO-a	B,pS,R,psmbM,2nd of 3
			x	x		NGC 3169	GALXY	SEX	10 14.2	+03 28	10.2	4.2 m	2.9 m	45	Sa	B,pL,vIE,pgmbM,*11,78,80",3rd of 3
M 95			x			NGC 3351	GALXY	LEO	10 44.0	+11 42	9.7	7.3 m	4.4 m	13	SBb	B,L,R,pgmbMN
M 96			*			NGC 3368	GALXY	LEO	10 46.8	+11 49	9.3	7.8 m	5.2 m	5	SBab Ring	vB,vL,IE,vsymbM,r
						UGC 5373	GALXY	SEX	10 00.0	+05 20	11.3	5.1 m	3.5 m	110	Ir+	13"-F,pL,E 2X1,nmBM at 100X
						UGCA 205	GALXY	SEX	10 11.0	-04 43	11.5	5.9 m	4.9 m		Ir	
					x	NGC 3156	GALXY	SEX	10 12.7	+03 08	12.3	1.9 m	1.2 m	47	SO	F,cS,R,psbM,*9-10 sf 2'
						NGC 3332	GALXY	LEO	10 40.5	+09 11	12.3	1.4 m	1.4 m		E-SO	vF,S,IE 130
						MCG +01-27-026	GALXY	LEO	10 41.2	+06 22	12.5	0.2 m	0.2 m			Inner Regions Completely Black--MCG
			x			NGC 3423	GALXY	SEX	10 51.2	+05 50	11.1	3.9 m	3.3 m	10	Sc	F,vL,R,vgbM,rr
						NGC 3434	GALXY	LEO	10 52.0	+03 47	12.1	2.1 m	1.9 m	5	Sb	F,pS,R,vglbM
						NGC 3433	GALXY	LEO	10 52.1	+10 09	11.6	3.7 m	3.3 m	50	Sc	vF,vL,R,vgbM
						NGC 3462	GALXY	LEO	10 55.4	+07 42	12.2	1.7 m	1.2 m	60	SO	vF,vS,vIE,psbM

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Deep Sky Object List in Chart No.76

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 48			x		NGC 2775	GALXY	CNC	09 10.3	+07 02	10.1	4.5 m	3.6 m	155	Sab	cB,cL,R,vgvsmBM,r
				x		NGC 2974	GALXY	SEX	09 42.6	-03 42	10.9	3.4 m	2.1 m	42	Sa	B,cS,iR,bM,*9 sp 43"
					x	NGC 2765	GALXY	HYA	09 07.6	+03 24	12.1	2.1 m	1.1 m	107	SO	vF,pL,E,gbM,er
						MCG -01-24-001	GALXY	HYA	09 10.8	-08 54	11.3	4.3 m	1.0 m			Inner Regions Very Black--MCG
					x	NGC 2855	GALXY	HYA	09 21.5	-11 55	11.6	2.4 m	1.9 m	130	Sa	pB,pL,R,gmbMN
						NGC 2872	GALXY	LEO	09 25.7	+11 26	11.9	1.8 m	1.7 m	22	E2	pF,pS,R,bM
						NGC 2874	GALXY	LEO	09 25.8	+11 26	12.5	2.2 m	0.7 m	43	SBbc	vF,pL,mE
					x	NGC 2889	GALXY	HYA	09 27.2	-11 39	11.7	2.3 m	1.9 m	65	SBc Ring	pF,pS,vIE,vglbM,r
						NGC 2894	GALXY	LEO	09 29.5	+07 43	12.4	1.9 m	1 m	27	Sa	vF,E,er,2 or 3* inv
						NGC 2911	GALXY	LEO	09 33.8	+10 09	11.5	4 m	3.1 m	140	SO	F,pL,R,gbM,p of 2
						NGC 2939	GALXY	LEO	09 38.1	+09 31	12.4	2.5 m	0.9 m	154	Sbc	vF,S,vIE,bM,triangle st nf
						MCG -01-25-011	GALXY	HYA	09 38.9	-04 49	11	2 m	1.5 m			Inner Regions Completely Black--MCG
						NGC 2960	GALXY	HYA	09 40.6	+03 35	12.4	1.8 m	1.2 m	40	Sa	vF,R,gbM
						NGC 2962	GALXY	HYA	09 40.9	+05 10	11.9	2.6 m	2 m	3	SBO-a Ring	F,vS,vIE,psbM
						NGC 2967	GALXY	SEX	09 42.1	+00 20	11.6	2.8 m	2.8 m		Sc	pF,pL,R,vglbM
						NGC 3044	GALXY	SEX	09 53.7	+01 35	11.9	4.7 m	0.7 m	13	SBc	vF,vL,vmE 122
						NGC 3049	GALXY	LEO	09 54.8	+09 16	12.1	2.2 m	1.5 m	25	SBab Ring	vF,vS,F* vnr
						NGC 3055	GALXY	SEX	09 55.3	+04 16	12.1	2.1 m	1.3 m	63	SBc	F,pL,vIE,vgbM,rr,*7 f 92
						NGC 3070	GALXY	LEO	09 58.1	+10 22	12.3	1.5 m	1.5 m		Elliptical	pB,pS,R,gmbMN,am 3 st

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Deep Sky Object List in Chart No.77

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 48			x	x		NGC 2548	OPNCL	HYA	08 13.7	-05 45	5.8	54 m			I 2 m	Cl,vL,pRi,pmC,* 9..13
	C 54			x		NGC 2506	OPNCL	MON	08 00.0	-10 46	7.6	7.0 m			I 2 r	Cl,pL,vRi,C,*11...20
M 67			*			NGC 2682	OPNCL	CNC	08 50.8	+11 49	6.9	30 m			II 2 m	! Cl,vB,vL,eRi,IC,*10...15
						NGC 2513	GALXY	CNC	08 02.4	+09 25	11.6	2.5 m	2 m	170	Elliptical	F,S,R,psmbM,r
					x	NGC 2525	GALXY	PUP	08 05.6	-11 26	11.6	3 m	2 m	75	SBc/P	cF,pL,R,vgvlbM,am st
						NGC 2555	GALXY	HYA	08 17.9	+00 45	12.2	1.9 m	1.4 m	115	SBab	vF,cS,iF,3 S * inv?
						NGC 2615	GALXY	HYA	08 34.6	-02 33	12.5	1.9 m	1.1 m	40	SBb	F,pS,IE,lbM,F* inv r
						NGC 2616	GALXY	HYA	08 35.6	-01 51	12.5	1.5 m	1.3 m	145	SO	vF,S,R,* nr nf
						NGC 2618	GALXY	HYA	08 35.9	+00 42	12.1	2.5 m	2 m	140	Sab	eF,pL,iF
						UGC 4506	GALXY	HYA	08 37.9	-02 28	11.7	1.8 m	1.1 m	140	Pec	
						NGC 2644	GALXY	HYA	08 41.5	+04 59	12.3	2.1 m	0.8 m	14	Sc	vF,pL,irr oval,sev S points
						PK 219+31.1	PLNNB	CNC	08 54.2	+08 55	12.2	16.8 m	15.6 m		3a	
						NGC 2695	GALXY	HYA	08 54.5	-03 04	11.9	1.7 m	1.2 m	175	SO	pF,cS,R
						NGC 2697	GALXY	HYA	08 55.0	-02 59	12.3	1.8 m	1.1 m	120	Sa	vF,vS,R
						NGC 2708	GALXY	HYA	08 56.1	-03 22	12	2.7 m	1.4 m	20	Sb	pF,pS,E,2* nr
						NGC 2713	GALXY	HYA	08 57.3	+02 55	11.8	3.3 m	1.3 m	107	SBab	pB,iR,mbM
						NGC 2716	GALXY	HYA	08 57.6	+03 05	11.8	1.6 m	1.2 m	30	SBO-a	F,S,R,mbM
						NGC 2718	GALXY	HYA	08 58.8	+06 18	11.8	2.1 m	2.1 m		SBab	F,pL,E,am 3*
						NGC 2721	GALXY	HYA	08 58.9	-04 54	12.5	2.4 m	1.6 m	160	Sbc Ring	cF,pL,R,vgbM

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Deep Sky Object List in Chart No.78

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2324	OPNCL	MON	07 04.1	+01 03	8.4	8.0 m			II 2 r	Cl,L,Ri,cC,st 12...16
				x		NGC 2335	OPNCL	MON	07 06.8	-10 02	7.2	12.0 m			III 3 m n	Cl,L,IC
				x		NGC 2343	OPNCL	MON	07 08.1	-10 37	6.7	7.0 m			III 3 p n	Cl,cL,P,IC
				x		NGC 2353	OPNCL	MON	07 14.5	-10 16	7.1	20.0 m			II 2 p	Cl,L,IC,one vB*
M 50			x			NGC 2323	OPNCL	MON	07 02.5	-08 23	5.9	16 m			II 3 m	Cl,vL,Ri,pC
						Bochum 3	OPNCL	MON	07 03.4	-05 04	9.9					
						IC 2177	BRTNB	MON	07 05.1	-10 42	99.9	20 m	20 m		E	pB,eL,iR,v dif
			x		x	NGC 2346	PLNNB	MON	07 09.4	-00 48	12.5	60 s	50 s		3b(6)	*10 att w S,vF,neb
					x	NGC 2396	OPNCL	PUP	07 27.5	-11 43	7.4	10.0 m			III 3 p	Cl,vL,vIC
						NGC 2485	GALXY	CMI	07 56.8	+07 29	12.2	1.6 m	1.6 m		Sa	neb *12

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Deep Sky Object List in Chart No.79 (1/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2185	BRTNB	MON	06 11.0	-06 14	99.9	2 m	2 m		R	*11 and 4 S* in vF,L neb
				x		NGC 2186	OPNCL	ORI	06 12.1	+05 28	8.7	4.0 m			II 2 p	Cl,pL,pRi,pC,st L and S
				x		NGC 2215	OPNCL	MON	06 20.8	-07 17	8.4	11.0 m			II 2 p	Cl,cL,pRi,pC,st11.15
				x		NGC 2232	OPNCL	MON	06 28.0	-04 51	3.9	30 m			IV 3 p	B* (10 MON) + Cl
	C 50	x	!	x		NGC 2244	CL+NB	MON	06 31.9	+04 57	4.8	24.0 m			II 3 r n:b	Cl,beautiful,st sc (12 MON)
				x		NGC 2251	OPNCL	MON	06 34.6	+08 22	7.3	10.0 m			IV 2 p	Cl,vL,E,Ri,IC
			x	x		NGC 2264	CL+NB	MON	06 41.0	+09 54	3.9	20.0 m			III 3 m n:	eL neb,3 deg diam,densest 12' sp 15 MON
				x		NGC 2286	OPNCL	MON	06 47.7	-03 09	7.5	15.0 m			IV 3 m	Cl,L,C,ab 100* 9...15
				x		NGC 2301	OPNCL	MON	06 51.8	+00 28	6	12.0 m			I 3 m	Cl,Ri,L,iF,st L & S
				x		NGC 2311	OPNCL	MON	06 57.8	-04 37	9.6	7.0 m			III 2 p	Cl,IC,not Ri
						NGC 2141	OPNCL	ORI	06 02.9	+10 27	9.4	10.0 m			II 3 r	F,pS,dif
					x	NGC 2170	BRTNB	MON	06 07.5	-06 24	99.9	2 m	2 m		R	*9 in vF,pL,neb,E 170 deg
					x	NGC 2182	BRTNB	MON	06 09.5	-06 20	99.9	3 m	2 m		R	pB**,L* neb,E 90 deg
						Cr 91	OPNCL	MON	06 21.7	+02 22	6.4	17.0 m			IV 2 p	
						Cr 92	OPNCL	MON	06 22.9	+05 07	8.5	11.0 m				
					x	NGC 2236	OPNCL	MON	06 29.7	+06 50	8.5	7.0 m			III 2 p	Cl,pRi,pC,*10,12...15
						Cr 96	OPNCL	MON	06 30.3	+02 52	7.3	8.0 m			IV 2 p	

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Deep Sky Object List in Chart No.79 (2/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 49		x			NGC 2237	CL+NB	MON	06 30.9	+05 03	5.5	80 m	60 m		E	pB,vvL,dif,part of eL nebs ring ar 2239
						Cr 97	OPNCL	MON	06 31.3	+05 55	5.4	21.0 m			IV 3 p	
						NGC 2239	OPNCL	MON	06 31.9	+04 57	4.8	24 m			II 3 p n	*8 in L,P,B Cl
					x	NGC 2245	BRTNB	MON	06 32.7	+10 09	99.9	2 m	2 m		R	pL,com,mbN sf alm *,*7-8 nf
						NGC 2250	OPNCL	MON	06 33.8	-05 05	8.9	8.0 m			IV 2 p	Cl,pRi,IC,iF,*8,12...14
					x	NGC 2252	OPNCL	MON	06 34.7	+05 22	7.7	20.0 m			IV 2 p n	Cl,vL,pRi,IC,st S
					x	NGC 2254	OPNCL	MON	06 35.8	+07 40	9.1	4.0 m			I 2 p	Cl,S,pC,iF,*11...13
						Cr 104	OPNCL	MON	06 36.5	+04 49	9.6	22.0 m			IV 1 p n	
						Basel 7	OPNCL	MON	06 36.6	+08 21	8.5					
						Cr 106	OPNCL	MON	06 37.1	+05 57	4.6	45.0 m			III 3 p	
						vdB 1	OPNCL	MON	06 37.5	+03 04	9.5	5.0 m			III 1p :b	
						Cr 107	OPNCL	MON	06 37.7	+04 44	5.1	35.0 m			IV 3 p	
					x	NGC 2259	OPNCL	MON	06 38.4	+10 53	10.8	4.5 m			II 2 p n	Cl,cRi,eC,iF,st eS
						Cr 111	OPNCL	MON	06 38.7	+06 54	7	3.2 m				
	C 46	x	!*		x	NGC 2261	BRTNB	MON	06 39.2	+08 45	99.9	2 m	1 m		E+R	B,vmE 330 deg,N com=*11
					x	NGC 2269	OPNCL	MON	06 43.3	+04 37	10	4.0 m			II 2 p	Cl,vmC,not Ri,st vS
						Do 25	OPNCL	MON	06 45.1	+00 18	7.6	24.0 m			IV 2 p n	
						Cr 115	OPNCL	MON	06 46.5	+01 46	9.1	7.0 m			III 2 p	

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Deep Sky Object List in Chart No.79 (3/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Bochum 2	OPNCL	MON	06 48.9	+00 23	9.7					
					x	NGC 2302	OPNCL	MON	06 51.9	-07 05	8.9	2.5 m			II 2 p	Cl,L,P,IC
					x	NGC 2309	OPNCL	MON	06 56.1	-07 10	10.5	3.0 m			II 2 m	Cl,pL,pRi,mC,st13
					x	NGC 2316	BRTNB	MON	06 59.7	-07 47	99.9	4.0 m			R	pF,S,R,r,S st inv

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Deep Sky Object List in Chart No.80 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x		x		NGC 1788	BRTNB	ORI	05 06.9	-03 20	99.9	2 m	2 m		R	B,cL,R,bM,***,* 10 inv in the neby
				x		NGC 1980	CL+NB	ORI	05 35.4	-05 55	2.5	14 m	14 m		III 3 m n:	vF,vvL,44 Ori invl
			x	x		NGC 1999	BRTNB	ORI	05 36.4	-06 43	99.9	2 m	2 m		E+R	*10,11 inv in neb
		x	!*	x		NGC 2024	BRTNB	ORI	05 41.7	-01 51	99.9	30 m	30 m		E	! irr,B,vvL,black sp incl
		x		x		NGC 2022	PLNNB	ORI	05 42.1	+09 05	12.8	28 s	27 s		4(2)	pB,vS,vIE
M 42			!!!!*			NGC 1976	CL+NB	ORI	05 35.3	-05 23	4	90 m	60 m		E+R	!!!,Theta Orionis and the great nebula M42
M 43			!!*			NGC 1982	BRTNB	ORI	05 35.5	-05 16	9	20 m	15 m		E	!,vB,vL,R w tail,mbM*8
M 78			!*			NGC 2068	BRTNB	ORI	05 46.8	+00 05	8	8 m	6 m		E	B,L,wisp,gmbN,3* inv,r
						NGC 1752	GALXY	ERI	05 02.2	-08 14	12.4	2.6 m	0.8 m	70	SBc	F,pL,pmE,2 or 3 * 11 nf
					x	NGC 1762	GALXY	ORI	05 03.6	+01 34	12.6	1.7 m	1.1 m	175	Sc	vF,vS
					x	NGC 1779	GALXY	ERI	05 05.3	-09 09	12.1	2.5 m	1.4 m	105	SBO-a	pB,S,R,gpmB
						NGC 1784	GALXY	LEP	05 05.5	-11 52	11.7	4.1 m	2.6 m	105	SBc	pB,pL,vIE,vgbM,am st
						NGC 1819	GALXY	ORI	05 11.8	+05 12	12.4	1.7 m	1.2 m	120	SBO	vF,S,R
						NGC 1888	GALXY	LEP	05 22.6	-11 30	11.9	3.2 m	1.2 m	145	SB/P	pB,pL,R,r
						MCG +01-14-037	GALXY	ORI	05 25.6	+06 35	12	0.8 m	0.8 m			Inner Regions Very Black--MCG
						NGC 1924	GALXY	ORI	05 28.0	-05 19	12.5	1.6 m	1.2 m	130	SBbc Ring	vF,pL,iR,st nr

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Deep Sky Object List in Chart No.80 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Cr 69	OPNCL	ORI	05 35.1	+09 56	2.8	65 m			II 3 p n	
		x				NGC 1973	BRTNB	ORI	05 35.1	-04 44	7	5 m	5 m		E	*8,9 inv in neb
						NGC 1981	OPNCL	ORI	05 35.2	-04 26	4.2	25.0 m			III 2 p n	Cl,vB,IRi,st L,sc
						NGC 1975	BRTNB	ORI	05 35.3	-04 41	7	10 m	5 m		E	B** inv in neb
			x		x	NGC 1977	CL+NB	ORI	05 35.3	-04 51	7	20 m	10 m		E+R	42 Orionis neb
						Cr 70	OPNCL	ORI	05 36.0	-01 00	0.4	150 m			II 3 m n	
					x	NGC 1990	BRTNB	ORI	05 36.2	-01 12	99.9	50 m	10 m		E+R	eL,E,Epsilon orionis inv p,!
			*			B 33	DRKNB	ORI	05 40.9	-02 28	79.9	6 m	4 m		4 Ir	
			*			IC 434	BRTNB	ORI	05 41.0	-02 27	11.0p	90 m	30 m		E	eF,vvL,vmE;1 deg long incl Zeta Ori
			*		x	NGC 2023	BRTNB	ORI	05 41.6	-02 16	99.9	10 m	8 m		E+R	B* in M of L,IE neb
						MCG -01-15-003	GALXY	ORI	05 42.0	-06 16	12	1.0 m	1.0 m			Inner Regions Completely Black--MCG
			*		x	NGC 2071	BRTNB	ORI	05 47.1	+00 18	8	7 m	5 m		R	D*(10 & 14m) w vF,L chev
					x	NGC 2112	OPNCL	ORI	05 53.8	+00 25	9.1	11.0 m			II 3 m n	Cl,pL,IRi,pC,st S
			x			Barn. Loop	BRTNB	ORI	05 55.0	-01 30	6.0p	840 m	60 m			

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Deep Sky Object List in Chart No.81 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 1507	GALXY	ERI	04 04.5	-02 11	12.3	3.6 m	1 m	11	SBp	vF,pL,mE,vIbM,er
						NGC 1550	GALXY	TAU	04 19.6	+02 25	12	2.2 m	1.9 m	30	Elliptical	vF,S,R,*13 nr
					x	NGC 1587	GALXY	TAU	04 30.7	+00 40	11.7	1.7 m	1.4 m	144	E1p	F,pS,R,r,p of Dneb
						NGC 1589	GALXY	TAU	04 30.8	+00 52	11.8	3.2 m	1 m	160	Sab	F,pL,IE132,*42,80"
					x	NGC 1600	GALXY	ERI	04 31.7	-05 05	10.9	3.1 m	2.2 m	10	E2	pB,pL,R,gmbM
					x	NGC 1618	GALXY	ERI	04 36.1	-03 09	12.7	2.4 m	0.8 m	30	SBb	F,S,iF,lBm,2* sf
						NGC 1620	GALXY	ERI	04 36.6	-00 09	12.3	2.9 m	1 m	25	Sc	vF,pL,mE140,B** nf
						NGC 1622	GALXY	ERI	04 36.6	-03 11	12.5	3.7 m	0.7 m	35	SBab	vF,S,*20p5*,1618p
						NGC 1625	GALXY	ERI	04 37.1	-03 18	12.3	2.1 m	0.5 m	130	SBb	vF,E141,sbM,F* att np
						NGC 1635	GALXY	ERI	04 40.1	-00 33	12.4	1.4 m	1.3 m	5	SBO-a Ring	F,S,R,bM,*11 nf 12S
			x		x	NGC 1637	GALXY	ERI	04 41.5	-02 52	10.8	3.9 m	3.3 m	15	SBc	cB,L,R,vgbM
						NGC 1638	GALXY	ERI	04 41.6	-01 49	12	2.3 m	1.6 m	70	SBO	F,pL,IE
						NGC 1653	GALXY	ERI	04 45.8	-02 24	12	1.5 m	1.5 m		E0	F,cS,R,lBm
						NGC 1659	GALXY	ERI	04 46.5	-04 47	12.5	1.5 m	1.1 m	40	Sbc	pF,pS,iE90,bM
					x	NGC 1662	OPNCL	ORI	04 48.4	+10 57	6.4	20.0 m			I 2 p	Cl OF L&S sc st
						NGC 1667	GALXY	ERI	04 48.6	-06 19	12.1	1.8 m	1.4 m	20	SBc	pF,pS,R,(r)
						NGC 1691	GALXY	ORI	04 54.6	+03 16	12	1.7 m	1.6 m	85	SBO-a Ring	F,S,*11 inv
					x	NGC 1700	GALXY	ERI	04 56.9	-04 52	11.2	3 m	1.8 m	85	E1	cB,S,mbM*
						MCG +01-13-013	GALXY	ORI	04 59.2	+05 36	12	0.4 m	0.4 m			Inner Regions Very Black-- MCG

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Deep Sky Object List in Chart No.81 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 1723	GALXY	ERI	04 59.4	-10 59	12	3.3 m	2 m	40	SB Ring	F,bet 2*9,10n&s,3rd*f
						NGC 1726	GALXY	ERI	04 59.7	-07 45	11.7	2.1 m	1.5 m	0	SO	F,R,*13,s

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Deep Sky Object List in Chart No.82

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 1211	GALXY	CET	03 06.9	-00 48	12.3	2.1 m	1.9 m	30	SBO-a	pB,vS,R,mbMN=*9,10
						NGC 1222	GALXY	ERI	03 08.9	-02 57	12.5	0.8 m	0.6 m	170	E-SO	vF*in pF,S,R neb
						NGC 1241	GALXY	ERI	03 11.2	-08 55	12	3.2 m	2.1 m	145	SBb	F,pL,R,vglbM,*9n
						NGC 1247	GALXY	ERI	03 12.2	-10 29	12.5	3.4 m	0.5 m	69	Sbc	F,pL,E80
						NGC 1248	GALXY	ERI	03 12.8	-05 14	12.5	1.2 m	1 m	100	SO	cF,S,IE,bM,*9 n 5'
						NGC 1253	GALXY	ERI	03 14.2	-02 49	11.7	5.3 m	2.3 m	82	SBc	*12 w neb f,90"long
						NGC 1320	GALXY	ERI	03 24.8	-03 03	12.4	1.9 m	0.7 m	135	Sa	F,S,R,bM
						NGC 1337	GALXY	ERI	03 28.1	-08 23	11.9	5.7 m	1.5 m	145	SBc	eF,vL,mE ns
						NGC 1358	GALXY	ERI	03 33.7	-05 05	12.1	2.5 m	2.1 m	15	SBO-a	vF,S,bet 2*
						NGC 1376	GALXY	ERI	03 37.1	-05 03	12.1	2.1 m	1.9 m	95	Sc	eF,pL,iR,bM,r
						NGC 1417	GALXY	ERI	03 42.0	-04 42	12.1	2.7 m	1.6 m	0	SBb	pF,pL,IE,lbM,* sf
						NGC 1453	GALXY	ERI	03 46.5	-03 58	11.5	2.3 m	2.3 m		E2	pB,S,R,*17 m

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Deep Sky Object List in Chart No.83 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 936	GALXY	CET	02 27.6	-01 09	10.1	4.3 m	3.8 m	135	SBO-a	vB,vL,R,mbMN,p of 2
				x		NGC 1022	GALXY	CET	02 38.5	-06 41	11.3	2.6 m	2.5 m		SBa	cB,pL,R,mbM,*11 nf 2'
				x		NGC 1052	GALXY	CET	02 41.1	-08 15	10.5	2.8 m	2 m	120	Elliptical	B,pL,R,mbM*12
			x	x		NGC 1055	GALXY	CET	02 41.8	+00 27	10.6	7.6 m	3 m	105	SBb	pF,cL,IE80,bM,*11n1'
			x	x		NGC 1084	GALXY	ERI	02 46.0	-07 35	10.7	3.5 m	2.1 m	115	Sc	vB,pL,E,gpmBM
M 77			*			NGC 1068	GALXY	CET	02 42.7	-00 01	8.9	7.3 m	6.3 m	70	Sbp	vB,pL,iR,sbMrrN
						NGC 788	GALXY	CET	02 01.1	-06 49	12.1	2.2 m	1.5 m	100	Sa	pF,pS,R,bM
					x	NGC 821	GALXY	ARI	02 08.4	+11 00	10.7	2.4 m	1.7 m	25	E2	pB,vS,vIE,svmbM,* np
						NGC 835	GALXY	CET	02 09.4	-10 08	12.1	1.3 m	1.1 m	80	SBab/P	F,S,R,2nd of 4
						NGC 864	GALXY	CET	02 15.5	+06 00	10.9	4.7 m	3.2 m	20	SBc	eF,cL,R,gbM
						NGC 881	GALXY	CET	02 18.8	-06 38	12.4	2.3 m	1.5 m	135	Sc Ring	F,pS,E,bM,2or3* nr
						NGC 895	GALXY	CET	02 21.6	-05 31	11.7	3.6 m	2.6 m	65	Sc	F,vL,iR,gbM,Dneb w 894
			x			NGC 941	GALXY	CET	02 28.5	-01 09	12.4	2.7 m	1.8 m	170	SBc	vF,cL,R,f of 2
						NGC 945	GALXY	CET	02 28.6	-10 32	12.1	2.3 m	2.2 m		SBc	vF,L,iR,glbM
						NGC 955	GALXY	CET	02 30.6	-01 07	12	2.9 m	0.9 m	19	Sab	pB,S,E,psbM
						NGC 958	GALXY	CET	02 30.7	-02 56	12.1	2.9 m	0.9 m	7	SBbc	pF,iIE,bM
					x	NGC 991	GALXY	CET	02 35.5	-07 09	11.7	3 m	2.7 m	60	SB Ring	vF,cL,iF,vlbM
						NGC 988	GALXY	CET	02 35.5	-09 21	11	4.6 m	2.5 m	112	SBc	neb *7.5m
						NGC 990	GALXY	ARI	02 36.3	+11 39	12.4	1.8 m	1.5 m		Elliptical	F,S,R,psbM
						NGC 1015	GALXY	CET	02 38.2	-01 19	12.1	2.6 m	2.6 m		SBa	vF,S

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Deep Sky Object List in Chart No.83 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 1016	GALXY	CET	02 38.3	+02 07	11.6	2.3 m	2.3 m		EO	F,S,R,psbM
						NGC 1024	GALXY	ARI	02 39.2	+10 51	12.1	3.9 m	1.5 m	155	Sab	pF,S,IE,bM,*11 nf 1'
					x	NGC 1032	GALXY	CET	02 39.4	+01 06	11.6	3.4 m	1.1 m	68	Sa	pB,S,vIE,bM,3*trapezoid
					x	NGC 1035	GALXY	CET	02 39.5	-08 08	12.2	2.2 m	0.6 m	143	Sc	pF,L,mE,r,*17 att sf
						NGC 1042	GALXY	CET	02 40.4	-08 26	11	4.9 m	4 m	15	SBc	F,L,R,np of 2
					x	NGC 1045	GALXY	CET	02 40.5	-11 17	13	2.3 m	1.2 m	55	E-SO	F,S,R,bM
					x	NGC 1070	GALXY	CET	02 43.4	+04 58	11.9	2.3 m	1.9 m	175	Sb	pF,S,iR,gbM
			x		x	NGC 1073	GALXY	CET	02 43.7	+01 23	11	4.9 m	4.3 m	15	SBc	vF,L,lbM,er
						NGC 1085	GALXY	CET	02 46.4	+03 36	12.3	2.4 m	1.7 m	15	Sbc	F,S,R,lbM,bet 2*
			x		x	NGC 1087	GALXY	CET	02 46.4	-00 30	10.9	3.9 m	2.3 m	5	SBc Ring	pB,cL,IE,mbM
			x		x	NGC 1090	GALXY	CET	02 46.6	-00 15	11.8	3.9 m	1.8 m	102	SBbc	vF,pL,iR,bM
						NGC 1094	GALXY	CET	02 47.5	-00 17	12.5	1.3 m	1 m	85	SBab	vF,S,R,2S * p
						NGC 1107	GALXY	CET	02 49.3	+08 06	12.2	1.8 m	1.5 m	140	SO	F,vS,R
						NGC 1132	GALXY	ERI	02 52.9	-01 17	12.3	2.5 m	1.3 m	140	Elliptical	eF,pL,gbM,*8f
						NGC 1137	GALXY	CET	02 54.0	+02 58	12.4	2.2 m	1.3 m	20	Sb	vF,pS,R,lbM
						NGC 1140	GALXY	ERI	02 54.6	-10 02	12.5	1.8 m	1 m	6	Sm	pB,S,R,stellar
						NGC 1153	GALXY	CET	02 58.2	+03 22	12.4	1.3 m	1.3 m		Sa	F,vS,iIE,sbM,er

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Deep Sky Object List in Chart No.84 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 488	GALXY	PSC	01 21.8	+05 15	10.3	5.4 m	3.9 m	15	Sb Ring	pB,L,R,svmbM,*8F10'
				x		NGC 524	GALXY	PSC	01 24.8	+09 32	10.3	3.2 m	3.2 m		Sa	vB,pL,mbM,4S* nr
				x		NGC 584	GALXY	CET	01 31.3	-06 52	10.5	3.3 m	1.9 m	120	E4	vB,pL,R,mbM,p of 2
				x		NGC 596	GALXY	CET	01 32.9	-07 02	10.9	2.8 m	2.1 m	40	E2	pB,R,bM,r,*6f12'
			x	x		NGC 615	GALXY	CET	01 35.1	-07 20	11.6	3.4 m	1.4 m	155	Sb	pB,pL,ilE,gbM,*8 np 10
			x	x		NGC 779	GALXY	CET	01 59.7	-05 58	11.2	4.1 m	1.2 m	20	SBb	cB,L,mE162,mbM
						NGC 337A	GALXY	CET	01 01.6	-07 35	12.2	6.1 m	4.6 m	10	SBd	
					x	NGC 357	GALXY	CET	01 03.4	-06 20	12	2.5 m	1.7 m	20	SBO-a	F,S,iR,sbM,* 14 nf 20"
	C 51		x			IC 1613	GALXY	CET	01 04.9	+02 08	9.2	16.6 m	14.9 m	50	Ir	F,eL
						New 1	GALXY	CET	01 05.1	-06 13	11.8	3.5 m	3.5 m		S	F,R, outer arms dim
			x		x	NGC 428	GALXY	CET	01 12.9	+00 59	11.5	4 m	2.9 m	120	Scp	F,L,R,bM,er
						NGC 430	GALXY	CET	01 13.0	-00 15	12.5	1.3 m	1.1 m	155	Elliptical	F,vS,R,vsbM*
						NGC 448	GALXY	CET	01 15.3	-01 38	12.1	1.6 m	0.8 m	116	E-SO	pB,vS,lE
						NGC 450	GALXY	CET	01 15.5	-00 52	11.5	3 m	2.4 m	72	SBc	vF,L
						NGC 467	GALXY	PSC	01 19.2	+03 18	11.9	2 m	2 m		SO	pB,pL,R,gbM
						NGC 470	GALXY	PSC	01 19.7	+03 25	11.8	2.9 m	1.7 m	155	Sb Ring	pB,L,iR
						NGC 474	GALXY	PSC	01 20.1	+03 25	11.5	6.1 m	5 m	75	SO Ring	pB,S,smbM, f of 2
						NGC 493	GALXY	CET	01 22.2	+00 57	12.5	3.4 m	1.1 m	58	SBc	vF,L,mE60,lbM
						NGC 521	GALXY	CET	01 24.6	+01 44	11.7	3.3 m	3 m	20	SBbc	F,pL,R,gbM
			x			NGC 520	GALXY	PSC	01 24.6	+03 48	11.4	3.7 m	1.5 m	130	Sa	F,cL,E 137 deg

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Deep Sky Object List in Chart No.84 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 533	GALXY	CET	01 25.5	+01 46	11.4	3.9 m	2.7 m	50	E2	pB,pL,R,gbM
						NGC 541	GALXY	CET	01 25.7	-01 23	12.1	1.8 m	1.7 m	135	SO	F,S,R,bM
						NGC 545	GALXY	CET	01 26.0	-01 20	12.2	2.6 m	1.6 m	55	SO	stellar,p of Dneb
						NGC 547	GALXY	CET	01 26.0	-01 21	12.2	1.9 m	1.8 m	85	Elliptical	stellar,f of Dneb
						MCG -01-04-044	GALXY	CET	01 26.3	-06 04	12.5	1.5 m	0.4 m			Inner Regions Very Black-- MCG
						NGC 564	GALXY	CET	01 27.8	-01 53	12.5	1.3 m	1.1 m	145	E2	vF,vS,iF,f of 2
						NGC 600	GALXY	CET	01 33.1	-07 19	12.4	3.7 m	3.6 m	85	SBcd Ring	eeF
						NGC 632	GALXY	PSC	01 37.3	+05 53	12.3	1.5 m	1.2 m	170	SO	pB,S,R,psbM
					x	NGC 636	GALXY	CET	01 39.1	-07 31	11.5	2.8 m	2 m	40	E1	pB,vS,R,mbM,r
					x	NGC 665	GALXY	PSC	01 44.9	+10 25	12.1	2.4 m	1.6 m	125	SO	F,S,IE,bM,r
						NGC 676	GALXY	PSC	01 49.0	+05 54	10.5	4.2 m	1.6 m	172	Sa	vF,E161,sbM*9
			x			NGC 681	GALXY	CET	01 49.2	-10 26	12	2.7 m	1.8 m	68	SBab	pF,cL,R,glbM,S*p90"
						NGC 693	GALXY	PSC	01 50.5	+06 09	12.4	2.2 m	1.1 m	106	Sa	pF,S,E90,vglbM,*10 nf
						NGC 701	GALXY	CET	01 51.1	-09 42	12.2	2.6 m	1.4 m	40	SBc	F,pL,E,vglbM,r
					x	NGC 706	GALXY	PSC	01 51.8	+06 18	12.5	1.9 m	1.5 m		Sc	F,S,bM,*13n1'
					x	NGC 718	GALXY	PSC	01 53.2	+04 12	11.7	2.3 m	2.2 m	45	SBa	pB,S,iR,psmbM
						NGC 731	GALXY	CET	01 54.9	-09 01	12.1	1.7 m	1.7 m		EO	eF,stellar
					x	NGC 741	GALXY	PSC	01 56.3	+05 38	11.1	3 m	3 m		E1	pF,S,R,p of 2

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Deep Sky Object List in Chart No.85

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 157	GALXY	CET	00 34.8	-08 24	10.4	4.1 m	2.7 m	40	SBbc	pB,L,E,bet 2 cB st
	C 56	x	*	x		NGC 246	PLNNB	CET	00 47.1	-11 52	8.5	240 s	210 s		3b	
					x	NGC 7832	GALXY	PSC	00 06.5	-03 43	13.3p	1.9 m	1 m	25	Elliptical	vF,vS,R,vgpsmbM,2 st 9 sf
						NGC 63	GALXY	PSC	00 17.8	+11 27	11.6	1.7 m	1.2 m	108	S pec	pF,S,R,sbM
						NGC 95	GALXY	PSC	00 22.2	+10 29	12.5	2.1 m	0.9 m	90	SBc Ring	F,pL,R,gbM
					x	NGC 125	GALXY	PSC	00 28.8	+02 50	12.1	1.8 m	1.6 m	85	Sa Ring	vF,S,bM,D * sp
			x			NGC 128	GALXY	PSC	00 29.2	+02 52	11.8	2.8 m	0.9 m	1	SO Pec	pB,pS,IE 2 degrees,bM
					x	NGC 151	GALXY	CET	00 34.0	-09 42	11.6	3.8 m	1.6 m	75	SBbc	pF,pL,IE 90 degrees,vglbM
						NGC 182	GALXY	PSC	00 38.2	+02 44	12.4	1.9 m	1.6 m	75	SBa	vF,S,iR,vgbM
						NGC 194	GALXY	PSC	00 39.3	+03 02	12.2	1.6 m	1.4 m	30	E1	pB,S,R,vgbM
						NGC 193	GALXY	PSC	00 39.3	+03 20	12.2	1.4 m	1.2 m	55	S(B)0	F,L,p of 2,* 15 close sp
					x	NGC 198	GALXY	PSC	00 39.4	+02 48	13.1	1.1 m	1.1 m		Sc	F,S,vgbM
					x	NGC 217	GALXY	CET	00 41.6	-10 01	13.5p	2.7 m	0.6 m	110	Sa	F,S,IE 90 degrees,glbM
						NGC 227	GALXY	CET	00 42.6	-01 32	12.1	1.5 m	1.2 m	155	E2	F,pL,lbM
						NGC 245	GALXY	CET	00 46.1	-01 43	12.2	1.3 m	1.1 m	145	Sb	F,pS,iF,er
			x			NGC 255	GALXY	CET	00 47.8	-11 28	11.9	3.1 m	2.7 m	15	SBbc	F,pS,R,gbM
						NGC 271	GALXY	CET	00 50.7	-01 55	12	2.2 m	1.7 m	130	SBab	pF,S,IE,psbM,* 8 f 5 sec.
						NGC 274	GALXY	CET	00 51.0	-07 03	11.8	1.9 m	1.4 m	25	E1	pB,pS,smbM,np of 2
						NGC 275	GALXY	CET	00 51.1	-07 04	12.5	1.5 m	1.2 m	140	Sbp	vF,S,R,sf of 2
			x			NGC 309	GALXY	CET	00 56.7	-09 55	11.9	3 m	2.4 m	175	SBc Ring	pB,pL,* 12.13 n
			x		x	NGC 337	GALXY	CET	00 59.8	-07 35	11.6	3 m	1.8 m	140	SBcd	pF,L,E,glbM,* 10 f 21 sec

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Deep Sky Object List in Chart No.86

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 7727	GALXY	AQR	23 39.9	-12 18	10.6	4.7 m	4.1 m	35	SBap	pB,pL,iR,mbM
				x		NGC 7723	GALXY	AQR	23 39.0	-12 58	11.2	3.5 m	2.2 m	35	SBb	cB,cL,E,gmbM,r
			x			NGC 7793	GALXY	SCL	23 57.8	-32 36	9.1	9.6 m	6.4 m	98	Scd	Like a comet (1850)
						NGC 7755	GALXY	SCL	23 47.9	-30 31	11.9	3.8 m	2.8 m	20	SBc	B,cL,R,psmbM
						IC 5332	GALXY	SCL	23 34.5	-36 06	10.5	8.4 m	7.6 m		SBcd	eF,vL,bM,bet 2 *,D* p 45 deg
						NGC 7513	GALXY	SCL	23 13.2	-28 22	11.4	3.2 m	2.1 m	108	SBb/P	vF,pL,E,gbM
					x	NGC 7507	GALXY	SCL	23 12.1	-28 32	10.4	2.8 m	2.7 m		Elliptical	pB,cS,R,psvmbM,*10 np
						NGC 7492	GLOCL	AQR	23 08.4	-15 37	11.5	4.3 m			XII	eF,L,bet 2D st
						NGC 7484	GALXY	SCL	23 07.1	-36 16	11.8	1.8 m	1.7 m		Elliptical	pB,S,R,lbM,*8-9 att s

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Deep Sky Object List in Chart No.87 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						IC 5271	GALXY	PSA	22 58.0	-33 45	11.6	2.6 m	0.9 m	138	Sb	pF,pS,mE 145 deg,cbM
						IC 5269	GALXY	PSA	22 57.7	-36 02	12.2	1.7 m	0.8 m	51	SBO	vF,pS,mE,spindle shaped
						IC 1459	GALXY	GRU	22 57.2	-36 28	10	5.1 m	3.7 m	40	E3	F,pS,com,N=12 m
					x	NGC 7392	GALXY	AQR	22 51.8	-20 37	11.9	2.2 m	1.4 m	123	SBbc	pB,pS,IE120,mbM
					x	NGC 7377	GALXY	AQR	22 47.8	-22 19	11.1	4.1 m	3.4 m	101	SBO-a	pB,S,vIE,vgmbM,*12p
						NGC 7359	GALXY	AQR	22 44.8	-23 41	12.5	2.4 m	0.6 m	55	SO	pF,vS,pmE,bMN
						NGC 7361	GALXY	PSA	22 42.3	-30 03	12.3	3.9 m	1 m	4	Sc	F,pL,vmE0,vglbM
						NGC 7341	GALXY	AQR	22 39.1	-22 40	12.4	2.4 m	1 m	94	SBab Ring	pF,pS,E,lbM
						NGC 7314	GALXY	PSA	22 35.8	-26 03	11	4.6 m	2 m	3	SBbc	cF,L,mE0,vlbM
						NGC 7302	GALXY	AQR	22 32.4	-14 07	12.3	2.1 m	1.2 m	97	E-SO	F,pS,R,vsbMSN
						NGC 7294	GALXY	PSA	22 32.1	-25 24	12.5	2 m	1.2 m	47	SBO	vF,vS,R
	C 63	x	!!*			NGC 7293	PLNNB	AQR	22 29.6	-20 50	6.3	960 s	720 s		4(3)	!,pF,vL,E or biN
						NGC 7285	GALXY	AQR	22 28.6	-24 50	11.9	2.4 m	1.5 m	10	SBa	neb * 1' dist from NGC 7284
						NGC 7284	GALXY	AQR	22 28.6	-24 51	11.9	2.3 m	1.6 m	133	SBO	cF,cS,IE,r,D* inv
						NGC 7267	GALXY	PSA	22 24.4	-33 42	12.2	1.6 m	1.4 m	6	SBa	cB,pS,vIE,glbM,B*** sp
						NGC 7252	GALXY	AQR	22 20.7	-24 41	12.1	2.1 m	1.7 m		SBO	F,S,R,er
						IC 5186	GALXY	GRU	22 18.8	-36 48	11.9	1.8 m	1.2 m	112	SBb	eeF,S,R,F * nr preceeding
						NGC 7229	GALXY	PSA	22 14.1	-29 23	12.5	1.8 m	1.5 m		SBc	F,pL,R,vglbM
						NGC 7225	GALXY	PSA	22 13.1	-26 09	12.2	2 m	1 m	147	Sa Ring	pF,S,IE,bM
						NGC 7221	GALXY	PSA	22 11.3	-30 34	12.1	2 m	1.6 m	10	SBbc	F,S,R,gbM,r,2 vS st nr

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 7218	GALXY	AQR	22 10.2	-16 40	12	2.6 m	1.1 m	20	SBc	pB,IE,r
					x	NGC 7184	GALXY	AQR	22 02.7	-20 49	10.9	5.9 m	1.3 m	62	SBc Ring	pB,pL,mE64,bet 3*,er
						NGC 7187	GALXY	PSA	22 02.7	-32 48	12.5	1.3 m	1.2 m		Sa Ring	pF,pS,R,lbM
						NGC 7183	GALXY	AQR	22 02.4	-18 55	11.9	3.8 m	1.1 m	77	Sa	vF,pL,E90,lbM
						NGC 7173	GALXY	PSA	22 02.1	-31 58	12	1.9 m	1.4 m	143	Elliptical	cB,cS,R,sbM*,2nd of 4
						NGC 7176	GALXY	PSA	22 02.1	-31 59	11.3	2.1 m	1.7 m		Elliptical	B,pL,R,f of Dneb,4th of 4
						NGC 7172	GALXY	PSA	22 02.0	-31 52	11.9	2.4 m	1.3 m	100	Sa	pB,pL,IE,gbM,1st of 4
					x	NGC 7171	GALXY	AQR	22 01.0	-13 16	12.2	2.3 m	1.3 m	120	SBb	vF,cL,E124,vgbM
						NGC 7167	GALXY	AQR	22 00.5	-24 38	12.5	1.7 m	1.3 m	135	SBc	F,pS,R,vglbM,*10 f

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Deep Sky Object List in Chart No.88

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 30			x			NGC 7099	GLOCL	CAP	21 40.4	-23 11	7.5	8.9 m			V	!,B,L,IE,gpmBM,st 12...16
						NGC 7154	GALXY	PSA	21 55.4	-34 49	12.4	2.2 m	1.8 m	102	SB	B,pL,iR,glbM,r
						NGC 7135	GALXY	PSA	21 49.8	-34 53	11.7	2.9 m	2 m	47	E-SO	pB,pL,R,vgbM,*14 att p
						NGC 7130	GALXY	PSA	21 48.3	-34 57	12.1	1.6 m	1.5 m		Sa	pB,S,R,glbM
						IC 5131	GALXY	PSA	21 47.4	-34 53	12.3	1.5 m	1.4 m		E-SO Bar	vF,vS,R

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Deep Sky Object List in Chart No.89

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 72			x			NGC 6981	GLOCL	AQR	20 53.5	-12 32	9.4	5.9 m			IX	pB,pL,R,gmCM,rrr
M 73			x			NGC 6994	OPNCL	AQR	20 59.0	-12 38	8.9	2.8 m			IV 1 p :b	Cl,eP,vIC,No neb
M 75			x			NGC 6864	GLOCL	SGR	20 06.1	-21 55	8.6	6.0 m			I	B,pL,R,vmbMBN,rr
						NGC 6925	GALXY	MIC	20 34.3	-31 59	11.3	4.4 m	1.1 m	5	Sbc	cB,L,mE6,pslbM
						NGC 6923	GALXY	MIC	20 31.7	-30 50	11.9	2.6 m	1.3 m	78	SBb Ring	pF,cS,R,gbM,bet 2st
			x		x	NGC 6907	GALXY	CAP	20 25.1	-24 49	11.2	3.4 m	2.6 m	46	SBbc	cF,cL,vIE,vglbM,3st p
						NGC 6903	GALXY	CAP	20 23.7	-19 20	11.9	2.6 m	2.4 m		E-SO Bar	Cl,E,bM*17,*10 att N

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Deep Sky Object List in Chart No.90

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 6818	PLNNB	SGR	19 44.0	-14 09	10	22 s	15 s		4	B,vS,R
M 55			x			NGC 6809	GLOCL	SGR	19 40.0	-30 58	7	19.0 m			XI	pB,L,R,vRi,vgbM
						NGC 6835	GALXY	SGR	19 54.5	-12 34	12.5	2.4 m	0.7 m	70	SBa	F,pL,mE
	C 57		x			NGC 6822	GALXY	SGR	19 44.9	-14 48	8.8	15.4 m	14.2 m	5	Ir+	vF,L,E,Dif
	C 68		x			NGC 6729	BRTNB	CRA	19 01.9	-36 57	99.9	1.3 m			E+R	Var*(11...) w neb
			x			NGC 6726 -7	BRTNB	CRA	19 01.7	-36 53	99.9	2 m	2 m		E	*6,7 in F,pL neb

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Deep Sky Object List in Chart No.91 (1/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 20			!!!*	x		NGC 6514	CL+NB	SGR	18 02.7	-22 58	6.3	28.0 m			E+*	vB,vL,Trifid,D* inv
			x	x		NGC 6645	OPNCL	SGR	18 32.6	-16 53	8.5	10.0 m			III 1 m	Cl,pL,vRi,pC,st11..15
			x	x		NGC 6642	GLOCL	SGR	18 31.9	-23 29	8.8	0.8 m			IV	pB,pL,iR,gpmBM
			x	x		NGC 6638	GLOCL	SGR	18 30.9	-25 30	9.2	2.2 m			VI	B,S,R,rr
			x	x		NGC 6629	PLNNB	SGR	18 25.7	-23 12	10.5	16 s	14 s		2a	pB,eeS,R
			x	x		NGC 6624	GLOCL	SGR	18 23.7	-30 22	8.3	5.9 m			VI	vB,pL,R,rrr,st16..
				x		NGC 6583	OPNCL	SGR	18 15.8	-22 08	10	2.8 m			II 1 m	Cl,pRi,pC,cE,st13...
			x	x		NGC 6569	GLOCL	SGR	18 13.6	-31 50	8.7	5.8 m			VIII	cB,L,R,rrr,*15..
				x		NGC 6568	OPNCL	SGR	18 12.8	-21 35	8.6	13.0 m			III 1 m	Cl,vL,IC
				x		NGC 6553	GLOCL	SGR	18 09.3	-25 54	8.3	3.2 m			XI	F,L,IE,vglbM,rr
				x		NGC 6544	GLOCL	SGR	18 07.3	-25 00	8.3	8.4 m			IX	cF,pL,iR,r
				x		NGC 6540	GLOCL	SGR	18 06.1	-27 46	14.6	0.8 m			XI	pF,S,IE,er or Cl
				x		NGC 6528	GLOCL	SGR	18 04.8	-30 03	9.5	3.7 m			V	pF,cS,R,gbM,rrr
				x		NGC 6522	GLOCL	SGR	18 03.6	-30 02	8.6	5.6 m			VI	B,pL,R,gvmBM,rrr
		x	x	x		NGC 6520	OPNCL	SGR	18 03.4	-27 53	7.6	6.0 m			I 2 m n	Cl,pS,Ri,IC,st9...13
M 8			!!!*			NGC 6523	CL+NB	SGR	18 03.7	-24 23	5	45 m	30 m		E	!!!,vB,eL,eIF,w L Cl
M 16			*			NGC 6611	CL+NB	SER	18 18.8	-13 47	6	7 m			II 3 m n:a	L,B,scattered Cl,neb invl
M 17			!!!*			NGC 6618	CL+NB	SGR	18 20.8	-16 11	6	11.0 m			III 3 m n:	!!!,B,eL,eIF,2 hooked
M 18			x			NGC 6613	OPNCL	SGR	18 19.9	-17 08	6.9	9.0 m			II 3 p n	Cl,P,vIC
M 21			x			NGC 6531	OPNCL	SGR	18 04.2	-22 29	5.9	13.0 m			I 3 m	Cl,pRi,IC,st9...12

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 22			!!			NGC 6656	GLOCL	SGR	18 36.4	-23 54	5.1	24.0 m			VII	vB,vL,R,vRi,vmC
M 24			!			IC 4715	OPNCL	SGR	18 26.6	-18 23	3.1	95 m	35 m			eeL cloud of st and neb
M 25			x			IC 4725	OPNCL	SGR	18 31.8	-19 07	4.6	29 m			I 2 p	Cl,pC
M 28			x			NGC 6626	GLOCL	SGR	18 24.5	-24 52	6.9	15 m			IV	vB,L,R,geCM,rrr
M 54			x			NGC 6715	GLOCL	SGR	18 55.1	-30 29	7.7	9.1 m			III	vB,L,R,g,smbM
M 69			x			NGC 6637	GLOCL	SGR	18 31.4	-32 21	7.7	7.1 m			V	B,L,R,rrr,*14..16
M 70			x			NGC 6681	GLOCL	SGR	18 43.2	-32 18	8.1	7.8 m			V	B,pL,R,gbM
			x			NGC 6723	GLOCL	SGR	18 59.6	-36 38	7.3	11.0 m			VII	vL,vIE,vgbM,rrr
						PK 3-14.1	PLNNB	SGR	18 55.6	-32 16	10.9	4 s			2	
					x	NGC 6717	GLOCL	SGR	18 55.1	-22 42	9.3	3.9 m			VIII	F,S,rr,Cl+neb
						Pal 9	GLOCL	SGR	18 55.1	-22 42	9.2	3.9 m				
						NGC 6716	OPNCL	SGR	18 54.6	-19 54	7.5	7.0 m			IV 1 p	Cl,pRi,st9...13
						Cr 394	OPNCL	SGR	18 53.5	-20 23	6.3	22.0 m			IV 2 m	
						PK 19- 5.1	PLNNB	SCT	18 45.9	-14 28	12.5	< 5 s			1	
						IC 4776	PLNNB	SGR	18 45.8	-33 21	12.5	8 s	6 s		2a	vS,F
						PK 19- 4.1	PLNNB	SCT	18 43.7	-13 45	12.3				1	
						PK 12- 7.1	PLNNB	SGR	18 42.6	-21 17	12	< 10 s				
						Pal 8	GLOCL	SGR	18 41.5	-19 49	11.2	4.7 m			X	
			x			NGC 6652	GLOCL	SGR	18 35.8	-32 59	8.9	3.5 m			VI	B,S,IE,rrr,st15
						NGC 6644	PLNNB	SGR	18 32.6	-25 08	12.2	3 s			2	Planetary,stellar

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 6647	OPNCL	SGR	18 31.5	-17 21	8					Cl,L,Ri,IC,st vS
						PK 2- 9.1	PLNNB	SGR	18 29.2	-31 30	11.9	< 5 s				
						Tr 33	OPNCL	SGR	18 24.8	-19 41	7.8	7.0 m			II 3 p	
						NGC 6625	OPNCL	SCT	18 23.2	-12 03	9	39 m				Cl,IC,IRi,st11...12
						NGC 6605	OPNCL	SER	18 18.4	-14 57	6					Cl,IRi,IC,st10...12
			x			NGC 6603	OPNCL	SGR	18 18.4	-18 24	11.1	5.0 m			I 1 r n	Cl,vRi,vmC,R
					x	NGC 6604	OPNCL	SER	18 18.1	-12 14	6.5	2.0 m			I 3 p n	Cl,IRi,IC
					x	NGC 6596	OPNCL	SGR	18 17.5	-16 40	99.9	10 m			III 2 m n	Cl,IC
						NGC 6595	OPNCL	SGR	18 17.1	-19 52	7	11.0 m				F,pL,cE,** inv
						Cr 469	OPNCL	SGR	18 16.4	-18 13	9.1	5.0 m			II 2 p	
						PK 1- 6.2	PLNNB	SGR	18 16.2	-30 52	11.8	< 5 s			1	
			x			B 92	DRKNB	SGR	18 15.5	-18 11	79.9	12 m	6 m		6 E G	13"-L,very prominent Dark neb at 60X
						PK 2- 5.1	PLNNB	SGR	18 14.6	-29 49	11.5	< 10 s				
						NGC 6567	PLNNB	SGR	18 13.8	-19 05	11.5	11 s	7 s		2a(3)	stell,11m,in a Cl
						PK 3- 4.9	PLNNB	SGR	18 12.8	-28 20	12	< 10 s			1	
						PK 3- 4.7	PLNNB	SGR	18 11.6	-28 22	11	12 s				
						NGC 6558	GLOCL	SGR	18 10.3	-31 46	9.3	3.7 m				pB,pL,R,glbM,rrr
						PK 358- 6.1	PLNNB	SGR	18 09.9	-33 19	12	< 10 s				
						Cr 367	OPNCL	SGR	18 09.6	-23 59	6.4	37.0 m			IV 3 p n	

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 6546	OPNCL	SGR	18 07.4	-23 18	8	13.0 m			III 2 m	Cl,vL,vRi
						NGC 6537	PLNNB	SGR	18 05.2	-19 51	12	5 s			2a(6)	B,S,stellar
			*			NGC 6530	OPNCL	SGR	18 04.5	-24 21	4.6	15.0 m			II 2 m n	Cl,B,L,pRi,f M8
			x			B 87	DRKNB	SGR	18 04.3	-32 30	79.9	12 m			4 C G	
					x	NGC 6526	BRTNB	SGR	18 04.1	-24 27	99.9	40 m			E+*	F,L,cE
			x			B 86	DRKNB	SGR	18 02.7	-27 50	79.9	4 m			5 Ir G	very distinct Dneb
						PK 355- 6.5	PLNNB	SGR	18 02.5	-36 39	11.7	< 5 s				
						Bochum 14	OPNCL	SGR	18 02.0	-23 42	9.3					
						PK 2- 2.4	PLNNB	SGR	18 01.7	-28 26	12.4	2 s			1	

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 6451	OPNCL	SCO	17 50.7	-30 13	8.2	8.0 m			II 1 p n	Cl,pL,pRi,bifid,st12
		x		x		NGC 6445	PLNNB	SGR	17 49.3	-20 01	13	35 s	30 s		3b(3)	pB,pS,R,gbM,r,*15 np
				x		NGC 6440	GLOCL	SGR	17 48.9	-20 22	9.7	1.7 m			V	pB,pL,R,bM
				x		NGC 6401	GLOCL	OPH	17 38.6	-23 55	9.5	1 m			IX	pB,pL,R,*12F inv
		x		x		NGC 6369	PLNNB	OPH	17 29.3	-23 46	11	30 s	29 s		4(2)	Annular,pB,S,R
				x		NGC 6355	GLOCL	OPH	17 24.0	-26 21	9.6	6.1 m				cF,L,R,gbM,rrr
				x		NGC 6356	GLOCL	OPH	17 23.6	-17 49	8.4	3.5 m			II	vB,cL,vgvmBM,rrr
				x		NGC 6342	GLOCL	OPH	17 21.2	-19 35	9.9	3.0 m			IV	cB,pS,lE,eR
				x		NGC 6316	GLOCL	OPH	17 16.6	-28 08	9	4.9 m			III	cB,pS,R,gvmBM
				x		NGC 6304	GLOCL	OPH	17 14.5	-29 28	8.4	3.8 m			VI	B,cL,R,lB,M,rrr
				x		NGC 6293	GLOCL	OPH	17 10.2	-26 35	8.2	3.5 m			IV	vB,L,R,psbM,st16
				x		NGC 6287	GLOCL	OPH	17 05.2	-22 42	9.2	2.7 m			VII	cB,L,R,gpmCM,rrr
				x		NGC 6284	GLOCL	OPH	17 04.5	-24 46	9	2.7 m			IX	B,L,R,CM,st16...
M 6			x			NGC 6405	OPNCL	SCO	17 40.3	-32 15	4.2	20 m			III 2 p	Cl,L,iR,IC,st7,10...
M 7			!			NGC 6475	OPNCL	SCO	17 53.9	-34 48	3.3	80.0 m			II 2 r	Cl,vB,pRi,IC,*7...12
M 9			x			NGC 6333	GLOCL	OPH	17 19.2	-18 31	7.9	5.5 m			VIII	B,L,R,eCM,rrr
M 19			x			NGC 6273	GLOCL	OPH	17 02.6	-26 16	7.2	5.3 m			VIII	vB,L,R,vCM,rrr
M 23			S!			NGC 6494	OPNCL	SGR	17 57.1	-18 59	5.5	27.0 m			III 1 m	Cl,B,vL,pRi,IC,*10..
M 62			x			NGC 6266	GLOCL	OPH	17 01.2	-30 07	6.6	14.1 m			IV	vB,L,gmbM,rrr
						Tr 31	OPNCL	SGR	17 59.9	-28 11	9.8	8.0 m			III 1 p	

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					x	NGC 6507	OPNCL	SGR	17 59.8	-17 27	9.6	7.0 m			IV 2 p	Cl,pS,iRi,IC
						Tr 30	OPNCL	SCO	17 56.5	-35 19	8.8	10.0 m			III 2 p	F,pL,Irr
						PK 11+ 4.1	PLNNB	SGR	17 56.3	-16 30	12	8.0 s	7.3 s		2	
						PK 7+ 1.1	PLNNB	SGR	17 55.1	-21 45	11	6.6 s			2	
						PK 356- 4.1	PLNNB	SCO	17 54.6	-34 23	12.2	3 s	2 s			13"-pB,vS,IE,central * seen at 220X
						NGC 6469	OPNCL	SGR	17 53.2	-22 17	8.2	12.0 m			III 2 p	Cl,pRi,in Milky Way
						NGC 6453	GLOCL	SCO	17 50.9	-34 36	9.9	3.5 m			IV	Cl,iR,pmbM,r
						Cr 351	OPNCL	SGR	17 49.4	-28 44	9.3	9.0 m			IV 2 p	
						PK 359- 0.1	PLNNB	SGR	17 47.9	-30 00	11.8	19 s	12 s		2?(6)	
						NGC 6425	OPNCL	SCO	17 47.0	-31 32	7.2	10 m			I 1 p	Cl,pS,iRi,IC,*10..12
						Cr 347	OPNCL	SGR	17 46.4	-29 18	8.8	4.0 m			III 2 p n	
						NGC 6416	OPNCL	SCO	17 44.3	-32 22	5.7	14 m			IV 1 p	Cl,vL,Ri,IC
						NGC 6400	OPNCL	SCO	17 40.2	-36 57	8.8	12 m			II 2 m	Cl,pL,pRi,iR,*9...10
						PK 8+ 6.1	PLNNB	OPH	17 38.9	-18 18	11	< 10 s				
						Ru 127	OPNCL	SCO	17 37.7	-36 16	8.8	8.0 m			IV 2 p	
						NGC 6396	OPNCL	SCO	17 37.6	-35 02	8.5	3.0 m			II 3 p	Cl,pL,iRi,IC
						Tr 28	OPNCL	SCO	17 36.8	-32 39	7.7	8.0 m			II 2 p n	
						Tr 27	OPNCL	SCO	17 36.2	-33 29	6.7	7.0 m			I 2 p	
						NGC 6383	OPNCL	SCO	17 34.7	-32 35	5.5	20 m			IV 3 p n	Cl,st13,*6,7 in mag

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			x			B 78	DRKNB	OPH	17 33.0	-26 00	79.9	200 m			6 lr	
						Cr 333	OPNCL	SCO	17 31.3	-34 05	9.8	5.0 m			III 2 p	
						Antalova 2	OPNCL	SCO	17 29.7	-32 30	8.8					
						Tr 26	OPNCL	OPH	17 28.5	-29 29	9.5	7.0 m			III 2 p	13"-pB,L,nC,sRi at 100X; 32*
						Pismis 24	OPNCL	SCO	17 25.3	-34 21	9.6	4.0 m			IV 2 p n	
			x			NGC 6357	BRTNB	SCO	17 24.7	-34 12	99.9	50 m	40 m		E+*	F,L,E,vglbM,D* inv
			x			B 72	DRKNB	OPH	17 23.5	-23 38	79.9	30 m			6 S G	13"-pL,pDark,thin winding Dneb at 100X
						PK 355+ 3.2	PLNNB	SCO	17 21.5	-30 21	10	< 10 s				
			x			NGC 6334	BRTNB	SCO	17 20.8	-36 06	99.9	120 m	110 m		E	cF,vL,ICF,vglBf,*8inv
						NGC 6325	GLOCL	OPH	17 18.0	-23 46	10.7	1.6 m			IV	pF,L,R,rr
						Bochum 13	OPNCL	SCO	17 17.3	-35 33	7.2					
						NGC 6309	PLNNB	OPH	17 14.1	-12 55	11.6	20 s	10 s		3b(6)	B,S,bet 2*v nr
						IC 4634	PLNNB	OPH	17 01.6	-21 50	12	20 s	10 s		2a(3)	eS,B

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Deep Sky Object List in Chart No.93

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M107			x	x		NGC 6171	GLOCL	OPH	16 32.5	-13 03	8.1	3.3 m			X	L,vRi,vmC,R,rrr
				x		NGC 6235	GLOCL	OPH	16 53.4	-22 11	10.2	1.9 m			X	pB,cL,iR,rrr,*14..16
			x	x		NGC 6144	GLOCL	SCO	16 27.2	-26 01	9.1	6.2 m			XI	Cl,cL,mC,gbM,rrr
M 4			!*			NGC 6121	GLOCL	SCO	16 23.6	-26 32	5.9	26.3 m			IX	Cl,8 or 10 B* in line,rrr
M 80			x			NGC 6093	GLOCL	SCO	16 17.0	-22 59	7.2	5.1 m			II	vB,L,vmbM,rrr,st 14...
						Cr 302	OPNCL	SCO	16 26.0	-26 00	1	500 m			III 3 p	
						IC 4604	BRTNB	OPH	16 25.6	-23 27	99.9	60 m	25 m		E+*	Rho Ophiuchi in eL,vF,lrr neby
						IC 4603	BRTNB	OPH	16 25.4	-24 28	99.9	20 m	5 m		E+*	eF,vL,dif,st inv
						NGC 6026	PLNNB	LUP	16 01.4	-34 33	12.5	54 s	36 s		4	F,S,R,gpmB,tri* np

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Deep Sky Object List in Chart No.94

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 5897	GLOCL	LIB	15 17.4	-21 01	8.6	8.7 m			XI	pF,L,viR,vgbM,rrr
						NGC 6000	GALXY	SCO	15 49.8	-29 23	12.2	1.9 m	1.6 m	154	SBbc	vF,S,R,sbM
						NGC 5968	GALXY	LUP	15 40.0	-30 33	12.2	2.1 m	1.9 m		SBab	vF,L,R,gbM,r
						PK 342+27.1	PLNNB	LIB	15 22.3	-23 38	11.6	7 s			2	13"-pB,vS,R,nBM at 220X
						NGC 5915	GALXY	LIB	15 21.6	-13 06	12.3	1.6 m	1.1 m	35	SBab	B,S,R,glbM,p of 2
						NGC 5903	GALXY	LIB	15 18.6	-24 04	11.2	3.2 m	2.3 m	168	E1	cF,S,R,gpmBM
						NGC 5898	GALXY	LIB	15 18.2	-24 06	11.4	2.6 m	2.3 m		E1p	F,S,R,gbM
					x	NGC 5878	GALXY	LIB	15 13.8	-14 16	11.5	3.2 m	1.4 m	90	Sb	pB,pL,pmE0,psmbM
						NGC 5892	GALXY	LIB	15 13.8	-15 28	11.7	3.6 m	2.9 m	105	SBcd	eF,L,gbM
						NGC 5843	GALXY	LUP	15 07.5	-36 20	12.3	1.9 m	1.1 m	70	SBb	vF,S,IE,vlbM,r
			x			NGC 5824	GLOCL	LUP	15 04.0	-33 04	9	6.2 m			I	pB,S,Stell Nuc

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 66			x		NGC 5694	GLOCL	HYA	14 39.6	-26 32	10.2	3.6 m			VII	cB,cS,R,psbM,r,* 9.5 sp
						NGC 5796	GALXY	LIB	14 59.4	-16 37	11.6	2.8 m	1.8 m	95	E0	F,pS*in centre
					x	NGC 5791	GALXY	LIB	14 58.8	-19 16	11.7	2.5 m	1.3 m	163	Sa	pF,S,R,stellar
						NGC 5761	GALXY	LIB	14 49.1	-20 23	12.4	1.3 m	1 m	75	SO	vF,S,R,glbMN
						NGC 5757	GALXY	LIB	14 47.8	-19 05	11.9	2.1 m	1.7 m	160	SBb	vF,S,iR,lbM
					x	NGC 5756	GALXY	LIB	14 47.6	-14 51	12.3	2.3 m	0.9 m	62	SBbc	pB,pL,pmE,gpmB
					x	NGC 5728	GALXY	LIB	14 42.4	-17 15	11.4	3.2 m	1.9 m	20	SBab	pF,pL,pmE45,mbM,*10s
					x	NGC 5605	GALXY	LIB	14 25.1	-13 10	12.3	1.5 m	1.3 m		SBc	vF,pL,R,vgbM
					x	NGC 5597	GALXY	LIB	14 24.5	-16 46	12	2.1 m	1.9 m	60	SBc Ring	vF,L,vIE,vglbM,f of 2
					x	NGC 5595	GALXY	LIB	14 24.2	-16 43	12	2.4 m	1.3 m	125	SBc	F,pL,R,vgbM,p of 2
						NGC 5556	GALXY	HYA	14 20.6	-29 15	11.8	4.1 m	3.3 m	148	SBcd	eF,L,s* inv
						NGC 5494	GALXY	CEN	14 12.4	-30 39	11.9	2.3 m	2.1 m		Sc	pB,L,R,gbM,rr
						NGC 5488	GALXY	CEN	14 08.0	-33 19	11.9	3.4 m	1 m	22	SBbc	F,R,*8s nr
						NGC 5419	GALXY	CEN	14 03.6	-33 59	10.9	4.1 m	3.3 m		E4	pB,pL,R,gpmB
						NGC 5398	GALXY	CEN	14 01.4	-33 04	12.3	2.8 m	1.7 m	172	SBdmp	pB,pL,R,vgbM

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 5054	GALXY	VIR	13 17.0	-16 38	10.9	5.1 m	2.8 m	155	Sbc	F,pS,iR
M 83			!!*			NGC 5236	GALXY	HYA	13 37.0	-29 52	7.5	13.1 m	12.2 m		SBc	vB,vL,E55,esBMN,spir
						IC 4351	GALXY	HYA	13 57.9	-29 19	11.7	5.9 m	0.9 m	17	Sb	L,F,SN,vmE,edge on spiral
						NGC 5357	GALXY	CEN	13 56.0	-30 21	12	1.6 m	1.4 m	23	E0	pF,S,R,glbM,bet 2*10
						NGC 5328	GALXY	HYA	13 52.9	-28 29	11.6	1.8 m	1.2 m	87	E2	pB,S,R,slBM
						ESO 383-G087	GALXY	CEN	13 49.3	-36 04	10.5	4.5 m	3.6 m		SB	
						IC 4329	GALXY	CEN	13 49.1	-30 18	11.3	3.2 m	1.9 m	63	E7	pF,cS,bM,E
						NGC 5302	GALXY	CEN	13 48.8	-30 31	12.1	1.7 m	1 m	153	SBO-a	F,S,R,gbM
						NGC 5292	GALXY	CEN	13 47.7	-30 56	11.9	1.8 m	1.6 m	55	Sab	pF,S,R,2st nr
						NGC 5264	GALXY	HYA	13 41.6	-29 55	12	2.6 m	1.5 m	65	Ir+	vF,pL,R,vlbM
			x			NGC 5253	GALXY	CEN	13 39.9	-31 39	10.4	4.6 m	1.7 m	45	S pec	B,pL,E45,psmbM
						NGC 5247	GALXY	VIR	13 38.0	-17 53	10	5.4 m	4.9 m	20	SBbc	cF,vL,vg,psmbM,LN
						IC 4296	GALXY	CEN	13 36.6	-33 58	10.6	3.4 m	3.3 m		Elliptical	pF,pS,R
						NGC 5220	GALXY	CEN	13 35.9	-33 27	12.2	2.4 m	0.7 m	97	Sa	vF,S,R,*10f
						NGC 5193	GALXY	CEN	13 31.9	-33 14	11.6	1.9 m	1.8 m		E2	pB,S,R,g,psbM
						NGC 5188	GALXY	CEN	13 31.5	-34 48	12.1	3 m	1.1 m	104	SBbc/P	F,pL,vIE,vglbM
						NGC 5182	GALXY	HYA	13 30.7	-28 09	12.4	1.9 m	1.3 m	5	SBbc	vF,pL,vIE,*7 nf 10'
						NGC 5170	GALXY	VIR	13 29.8	-17 58	11.1	8.2 m	1 m	127	Sc	cF,L,mE129,pgbM
						NGC 5161	GALXY	CEN	13 29.2	-33 11	11.2	5.6 m	2.3 m	77	Sc	pF,L,vmE,pgbM,rr

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 5153	GALXY	HYA	13 27.9	-29 37	11.8	2 m	1.4 m	175	Elliptical	pF,S,f pF Dneb
						NGC 5152	GALXY	HYA	13 27.9	-29 37	12.5	2.1 m	0.7 m	117	SBb	vF,S,R,p of D neb
						NGC 5140	GALXY	CEN	13 26.4	-33 52	11.8	2.1 m	1.7 m	52	SB0	vF,S,R,glbM
						NGC 5135	GALXY	HYA	13 25.7	-29 50	12.1	2.4 m	2.3 m		SBab	pB,S,E
					x	NGC 5134	GALXY	VIR	13 25.3	-21 08	11.3	2.9 m	2 m	155	SBb Ring	F,pS,IE,vgbM
						NGC 5124	GALXY	CEN	13 24.8	-30 19	12.1	2.2 m	0.7 m	9	Elliptical	vF,S,vIE
						NGC 5114	GALXY	CEN	13 24.0	-32 21	12.4	1.8 m	1 m	80	E-SO Bar	F,IE,psbM,f of 2
			x			NGC 5102	GALXY	CEN	13 22.0	-36 38	9.6	8.6 m	2.7 m	48	E-SO	vB,pS,R,svmbM
						NGC 5105	GALXY	VIR	13 21.8	-13 12	11.8	2 m	1.5 m	140	SBc	eF,pS,IE
						NGC 5101	GALXY	HYA	13 21.8	-27 26	10.6	5.7 m	4.7 m		SBO-a Ring	cB,pS,IE,psbM*
					x	NGC 5087	GALXY	VIR	13 20.4	-20 37	11.4	2.5 m	1.9 m	10	E4	cF,vS,iF
						NGC 5088	GALXY	VIR	13 20.3	-12 34	12.4	2.7 m	0.7 m	178	Sbc	pB,pS,r,E,bM
					x	NGC 5084	GALXY	VIR	13 20.3	-21 50	10.5	10.6 m	1.8 m	80	SO	cB,cS,vIE90
						NGC 5085	GALXY	HYA	13 20.3	-24 26	11.3	3.5 m	3 m	38	Sc	F,L,R,vglbM
					x	NGC 5078	GALXY	HYA	13 19.8	-27 25	11	19.5 m	5.8 m	148	Sa	pB,pS,cE,psbM,*7 8' f
						NGC 5079	GALXY	VIR	13 19.6	-12 42	12	1.5 m	0.8 m	35	SBbc/P	cF,pS,vIE,3rd of 3
					x	NGC 5077	GALXY	VIR	13 19.5	-12 39	11.4	1.9 m	1.6 m	10	E3	pB,S,vIE,sbM,2nd of 3
					x	NGC 5068	GALXY	VIR	13 18.9	-21 02	10	7.3 m	6.4 m	110	SBc	F,L,iR,bM
						NGC 5063	GALXY	CEN	13 18.4	-35 21	12.4	2.3 m	1.8 m		Sa Ring	eF,vS,R,* nr
						NGC 5062	GALXY	CEN	13 18.4	-35 28	12.2	2.3 m	0.7 m	130	SO	eF,vS,E,r

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					x	NGC 5061	GALXY	HYA	13 18.1	-26 50	10.4	3.5 m	2.9 m		E2	vB,S,R,vsmbM,*1Of
						NGC 5042	GALXY	HYA	13 15.5	-23 59	11.8	4.2 m	2.2 m	22	SBc	F,L,R,vgvlbM,*9p
					x	NGC 5044	GALXY	VIR	13 15.4	-16 23	10.8	2.6 m	2.6 m		E0	pB,pL,R,bM
					x	NGC 5037	GALXY	VIR	13 15.0	-16 35	12.2	2 m	0.6 m	43	Sa	cF,pS,vIE,bM
					x	NGC 5018	GALXY	VIR	13 13.0	-19 31	10.8	3.4 m	2.6 m	112	Elliptical	cB,S,R,mbMpBN
						MCG -03-34-014	GALXY	VIR	13 12.5	-17 31	12	2.5 m	0.8 m		Sc pec	Inner Regions Completely Black--MCG
						NGC 5006	GALXY	VIR	13 11.8	-19 16	12.3	2 m	1.7 m	170	SBO-a Ring	F* close p
						NGC 4993	GALXY	HYA	13 09.8	-23 23	12.3	1.3 m	1.1 m		E-SO Bar	vF,vS
					x	NGC 4984	GALXY	VIR	13 09.0	-15 31	11.3	3 m	2.3 m	15	SBO-a	B,pL,R,psmbM
						NGC 4970	GALXY	HYA	13 07.6	-24 01	12.2	1.8 m	1 m	137	SO	vF,pL,iF
						NGC 4965	GALXY	HYA	13 07.2	-28 14	12.1	2.4 m	2 m		SBcd	vF,vL,cE,vgbM
						NGC 4955	GALXY	HYA	13 06.1	-29 45	12.2	1.9 m	1.3 m	10	Elliptical	F,cS,R,gbM
						NGC 4947	GALXY	CEN	13 05.3	-35 20	11.8	2.4 m	1.2 m	10	SBab	F,pL,R,vglbM
						NGC 4936	GALXY	CEN	13 04.3	-30 32	10.8	3.2 m	2.6 m		Elliptical	pB,S,R,bM,* f 6sec
			x		x	NGC 4902	GALXY	VIR	13 01.0	-14 31	10.9	2.9 m	2.6 m	70	SBb	pB,pL,iR,st nr
						NGC 4897	GALXY	VIR	13 00.9	-13 27	11.8	2.7 m	2.3 m	150	SBbc	F
						NGC 4899	GALXY	VIR	13 00.9	-13 57	11.9	2.3 m	1.3 m	15	SBc	pF,eL

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Deep Sky Object List in Chart No.97 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 4856	GALXY	VIR	12 59.4	-15 03	10.5	3.9 m	1.4 m	37	SBO-a	B,R,psmbM,*13 np
		x	x	x		NGC 4361	PLNNB	CRV	12 24.5	-18 47	10.9	80 s			3a(2)	vB,L,R,vsmbMN,r
	C 60		!*	x		NGC 4038	GALXY	CRV	12 01.9	-18 52	10.3	3.4 m	2 m	80	Sp	pB,cL,R,vgbM
M 68			x			NGC 4590	GLOCL	HYA	12 39.5	-26 45	8.2	9.8 m			X	L,eRi,vC,iR,rrr,st 13...
						NGC 4831	GALXY	HYA	12 57.6	-27 18	12.4	1.7 m	0.9 m	3	E-SO Bar	F,S,R,gbM
						NGC 4830	GALXY	VIR	12 57.5	-19 42	12.1	1.8 m	1.2 m	157	E-SO Bar	F,L,* inv,*8 5' sf
						NGC 4825	GALXY	VIR	12 57.2	-13 40	11.7	2 m	1.1 m	135	E-SO	pB,iF,bM
						NGC 4802	GALXY	CRV	12 55.8	-12 03	12	2.4 m	1.6 m	20	SO	vF,S,*10 att
			x			NGC 4783	GALXY	CRV	12 54.6	-12 34	11.5	2.3 m	1.3 m	105	EO	pF,pS,R,mbM,f of Dneb
			x			NGC 4782	GALXY	CRV	12 54.6	-12 34	11.7	2.3 m	1.3 m	155	EO	pF,pS,R,mbM,p of Dneb
						PK 303+40.1	PLNNB	HYA	12 53.6	-22 52	12	938 s	636 s		3a	
						NGC 4756	GALXY	CRV	12 52.9	-15 25	12.4	1.7 m	1.3 m	50	E-SO	vF,pS,r
						NGC 4462	GALXY	CRV	12 29.4	-23 10	11.9	3.1 m	1.1 m	124	SBab Ring	pB,pS,E130,sbM
						IC 3253	GALXY	CEN	12 23.8	-34 37	11.9	2.7 m	1.1 m	23	Sc	eF,vL,mE 20 degrees, lbM
						NGC 4304	GALXY	HYA	12 22.2	-33 29	11.6	2.6 m	2.5 m		SBbc	vF,vL,R,vgvlbM,r
						IC 764	GALXY	HYA	12 10.2	-29 44	12.2	4.8 m	1.4 m	177	SBc	eF,pL,Ens,lbN
			x			NGC 4106	GALXY	HYA	12 06.8	-29 46	11.4	2.3 m	1.7 m	77	SBO-a	pF,pS,R,pgbM,f of 2
			x		x	NGC 4105	GALXY	HYA	12 06.7	-29 46	10.6	2.8 m	2.1 m	151	Elliptical	pF,pS,R,psbM,r,p of 2
						NGC 4094	GALXY	CRV	12 05.9	-14 32	11.8	4.1 m	1.5 m	63	SBc	eF,L,pmE,vgbM,2*11 nr
						IC 2995	GALXY	HYA	12 05.8	-27 57	12.2	3 m	0.8 m	117	SBc	vF,L,cE

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Deep Sky Object List in Chart No.97 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 4087	GALXY	HYA	12 05.6	-26 31	12.1	2.1 m	1.7 m		E-SO	pB,S,R,bM
						NGC 4050	GALXY	CRV	12 02.9	-16 22	12.2	3 m	2 m	95	SBab	F,cL,iR,lbM
	C 61		!*		x	NGC 4039	GALXY	CRV	12 01.9	-18 53	10.6	3.3 m	1.7 m	130	SB	pF,pL
						NGC 4033	GALXY	CRV	12 00.6	-17 51	11.7	2.4 m	1.2 m	47	Elliptical	pB,S,IE,bM

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Deep Sky Object List in Chart No.98 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 4027A	GALXY	CRV	11 59.5	-19 20	15	0.9 m	0.6 m	159	lr	
				x		NGC 3962	GALXY	CRT	11 54.7	-13 59	10.7	3.4 m	2.8 m	15	Elliptical	cB,pL,iR,gmbM,tri 2 st
			x	x		NGC 3621	GALXY	HYA	11 18.3	-32 49	9.7	12.4 m	5.7 m	159	SBcd	cB,vL,E 160,am 4 st
			x			NGC 4027	GALXY	CRV	11 59.5	-19 16	11.1	3.3 m	2.4 m	167	SBd	pF,pL,R,rr,st16
					x	NGC 4024	GALXY	CRV	11 58.5	-18 21	11.7	1.9 m	1.6 m	125	E-SO Bar	F,vS,iF,bM
						NGC 3981	GALXY	CRT	11 56.1	-19 54	11.3	5.3 m	2.5 m	15	SBbc	vF,pL,iF
						NGC 3957	GALXY	CRT	11 54.0	-19 34	11.8	2.9 m	0.7 m	173	Sa	F,S,E,r
						NGC 3956	GALXY	CRT	11 54.0	-20 34	12.1	3.3 m	1 m	58	SBc	cF,pL,pmE 57
						NGC 3955	GALXY	CRT	11 54.0	-23 10	11.9	3.1 m	1 m	165	Sa	cF,S,E 170,lbs
						NGC 3936	GALXY	HYA	11 52.3	-26 54	12	3.9 m	0.7 m	63	SBbc	vF,cL,vmE 59
						NGC 3923	GALXY	HYA	11 51.0	-28 48	9.8	6.6 m	4.5 m	50	Elliptical	B,pL,IE,gmbM,r,vS* sp inv
						NGC 3904	GALXY	HYA	11 49.2	-29 17	10.9	2.7 m	2 m	8	Elliptical	pB,S,R,mbM
			x		x	NGC 3887	GALXY	CRT	11 47.1	-16 51	10.6	3.5 m	2.7 m	20	SBbc	pB,L,iR,vgpmbM
						NGC 3885	GALXY	HYA	11 46.8	-27 55	11.9	2.7 m	1 m	123	SBO-a	cF,vS,vIE,bM,vF * sf
						NGC 3717	GALXY	HYA	11 31.5	-30 19	11.2	6.2 m	1 m	33	Sb	pB,S,mE,*13 att
						NGC 3706	GALXY	CEN	11 29.7	-36 24	11.3	3.1 m	1.8 m	78	E-SO	pB,cS,R,psmbM
					x	NGC 3693	GALXY	CRT	11 28.2	-13 12	13	3.4 m	0.7 m	85	Sb	cF,S,E,gbM
						PK 283+25.1	PLNNB	HYA	11 26.7	-34 22	12.1	188 s	174 s			
						NGC 3673	GALXY	HYA	11 25.2	-26 44	11.5	3.7 m	2.4 m	70	SBb	F,vL,gvlbM,*7 s 6'
						NGC 3606	GALXY	HYA	11 16.3	-33 50	12.4	1.5 m	1.4 m		Elliptical	eF,S,R,gbM

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Deep Sky Object List in Chart No.98 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
					x	NGC 3585	GALXY	HYA	11 13.3	-26 45	9.9	5.2 m	3.1 m	107	Elliptical	B,pL,E,vsmbMN,2 B st tri
						NGC 3571	GALXY	CRT	11 11.5	-18 17	12.1	3 m	0.9 m	94	SBa	pF,pL,iF,bM
						NGC 3573	GALXY	CEN	11 11.3	-36 53	12.3	3.6 m	1 m	4	Sa	eF,S,R,glbM,3 st 11 f
						IC 2627	GALXY	CRT	11 09.9	-23 44	12	2.6 m	2.1 m		SBbc	eF,L,R,stell N
			x		x	NGC 3513	GALXY	CRT	11 03.8	-23 15	11.5	2.9 m	2.4 m	75	SBb	vF,vL,mE
			x		x	NGC 3511	GALXY	CRT	11 03.4	-23 05	11	6 m	2.1 m	76	SBc	vF,vL,mE

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Deep Sky Object List in Chart No.99 (1/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
	C 59	x	x	x		NGC 3242	PLNNB	HYA	10 24.8	-18 39	8.6	40 s	35 s		4(3b)	! vB,IE 147,45" d,blue
						NGC 3483	GALXY	HYA	10 59.0	-28 29	12.1	1.8 m	1.2 m	105	Sa	pF,S,R,bM,am st
						NGC 3449	GALXY	ANT	10 52.9	-32 56	12.2	3.3 m	1 m	148	SBab	F,S,R,*6-7 sf
						NGC 3411	GALXY	HYA	10 50.4	-12 51	11.9	2.1 m	2.1 m		Elliptical	F,S,R,lbM
						NGC 3393	GALXY	HYA	10 48.4	-25 10	12.2	2.2 m	2 m		SBa	F,S,R,psbM,2st 10f
						NGC 3450	GALXY	HYA	10 48.1	-20 51	11.9	2.6 m	2.3 m	140	SBb	vF,L,R,vglbM,r
						MCG -03-28-004	GALXY	HYA	10 48.1	-20 53	12	0.3 m	0.3 m			Inner Regions Very Black-- MCG
						NGC 3390	GALXY	HYA	10 48.1	-31 32	11.9	3.5 m	0.6 m	177	Sb	F,S,pmE 0
						NGC 3358	GALXY	ANT	10 43.6	-36 25	11.4	3.2 m	1.8 m	141	SBO-a	cF,vS,vIE,vS* att,3rd of 3
						NGC 3347	GALXY	ANT	10 42.8	-36 21	11.3	3.4 m	2.1 m	173	SBb	pF,S,mE 0,vsvmbM,1st of 3
						NGC 3336	GALXY	HYA	10 40.3	-27 47	12.3	2 m	1.6 m	123	SBc	vF,pL,IE,glbM
						NGC 3313	GALXY	HYA	10 37.4	-25 19	11.4	3.9 m	3.2 m	55	SBab Ring	eF,pS,iR,gbMN,*15 s 3"
						NGC 3312	GALXY	HYA	10 37.0	-27 34	11.9	3.3 m	1.2 m	175	Sb Ring	cF,E,gbM,7th of 9
						NGC 3311	GALXY	HYA	10 36.7	-27 32	11.6	3.7 m	3 m		E2	B,L,R,f of Dneb,6th of 9
						NGC 3309	GALXY	HYA	10 36.6	-27 31	11.6	2.4 m	2.1 m		Elliptical	B,L,R,p of Dneb,5th of 9
						NGC 3308	GALXY	HYA	10 36.4	-27 26	11.9	1.7 m	1.3 m	32	E-SO Bar	F,S,R,4th of 9
						NGC 3302	GALXY	ANT	10 35.8	-32 22	12.5	1.6 m	1.2 m	118	SO	eF,S,R
						NGC 3289	GALXY	ANT	10 34.1	-35 19	12.5	2.2 m	0.6 m	153	SBO-a	eF,vS,R

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Deep Sky Object List in Chart No.99 (2/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 3285	GALXY	HYA	10 33.6	-27 27	12	2.7 m	1.5 m	108	SBa	pB,S,IE,gbM,1st of 9
						NGC 3281	GALXY	ANT	10 31.9	-34 51	11.7	3.2 m	1.6 m	140	Sab Ring	eF,pL,E,glbM
						NGC 3275	GALXY	ANT	10 30.9	-36 44	11.8	2.8 m	2.1 m		SBab	F,L,vIE,pslbM
						NGC 3273	GALXY	ANT	10 30.5	-35 37	12.5	1.6 m	0.7 m	97	SBO	vF,vS,R,pslbM,4th of 4
						NGC 3271	GALXY	ANT	10 30.4	-35 22	11.8	2.8 m	1.4 m	106	SBO	pF,S,E,pmbM,4th of 4
						NGC 3269	GALXY	ANT	10 30.0	-35 13	12.2	2.4 m	1.1 m	8	SBO-a Ring	F,S,R,bM,3rd of 4
						NGC 3268	GALXY	ANT	10 30.0	-35 20	11.4	4 m	2.8 m	71	Elliptical	F,S,R,2nd of 4
						NGC 3267	GALXY	ANT	10 29.8	-35 19	12.5	1.7 m	1 m	148	SBO	eF,vS,R,1st of 4
						NGC 3258	GALXY	ANT	10 28.9	-35 36	11.5	3.3 m	2.7 m	75	Elliptical	cF,S,R,pslbM,2nd of 4
						NGC 3241	GALXY	ANT	10 24.3	-32 29	12.2	2.4 m	1.6 m	123	SBab	F,pmE,glbM,*11 np
						NGC 3233	GALXY	HYA	10 22.0	-22 16	12.5	1.8 m	0.9 m	140	SBO-a Ring	eF,pL,iF,stell N
						NGC 3224	GALXY	ANT	10 21.7	-34 42	12	1.9 m	1.5 m	133	Elliptical	vF,pS,R,vgmbM
						NGC 3223	GALXY	ANT	10 21.6	-34 16	11	4.1 m	2.7 m	135	Sb	pB,vL,vIE,pslbMN
						NGC 3203	GALXY	HYA	10 19.6	-26 42	12.1	2.8 m	0.6 m	58	Sa	pB,S,cE,gbM
						NGC 3200	GALXY	HYA	10 18.6	-17 59	12	4.2 m	1.3 m	169	SBbc	pB,E 160,bMN
						NGC 3175	GALXY	ANT	10 14.7	-28 52	11.2	5.1 m	1.3 m	56	SBab	cB,L,mE 51,vglbM
			x		x	NGC 3145	GALXY	HYA	10 10.2	-12 26	11.7	3 m	1.6 m	20	SBbc	F,pL,mE,vgslbM,lamba Hya np 8'
						NGC 3137	GALXY	ANT	10 09.1	-29 04	11.5	6.2 m	2.2 m	1	SBc	vF,S,IE

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Deep Sky Object List in Chart No.99 (3/3)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 3124	GALXY	HYA	10 06.7	-19 13	12.1	2.9 m	2.5 m	165	SBbc	F,pL,R,lBM,D* s
						IC 2537	GALXY	ANT	10 03.9	-27 34	12.1	2.5 m	1.7 m	26	SBc	eF,L,cE
			x			NGC 3109	GALXY	HYA	10 03.1	-26 10	9.9	19.7 m	3.4 m	93	Ir	cF,vL,vmE 82,lBM
						NGC 3108	GALXY	ANT	10 02.5	-31 41	11.8	2.5 m	1.8 m	110	Sa	F,S,R,glBM
						NGC 3100	GALXY	ANT	10 00.7	-31 40	11.1	3.2 m	1.7 m	154	SBO	pB,pS,R,gpmBM
						NGC 3091	GALXY	HYA	10 00.2	-19 38	11.1	3 m	1.9 m	149	E2	pB,pS,iR,bM,p of 2
						NGC 3095	GALXY	ANT	10 00.1	-31 33	11.7	3.6 m	2 m	126	SBc	F,L,E,vglBM

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Deep Sky Object List in Chart No.100 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2811	GALXY	HYA	09 16.2	-16 19	11.3	2.2 m	0.7 m	20	SBa	pB,pS,E,psmbM
						NGC 3089	GALXY	ANT	09 59.6	-28 20	12.4	1.8 m	1 m	139	SBb Ring	pF,pS,R,vS st inv
						NGC 3081	GALXY	HYA	09 59.5	-22 50	12	2.2 m	1.8 m	158	SBO-a Ring	vF,cS,lbM,tri S st np
						NGC 3084	GALXY	ANT	09 59.1	-27 08	12.3	1.7 m	1.2 m	2	SBab Ring	vF,S,R,*13 att sf
						NGC 3087	GALXY	ANT	09 59.1	-34 14	11.6	2.5 m	2.2 m		E0	pB,S,R,pmbM,bet 2 st
						NGC 3082	GALXY	ANT	09 58.9	-30 21	12.5	1.8 m	0.7 m	26	E-SO	vF,S,R,D* att
					x	NGC 3078	GALXY	HYA	09 58.4	-26 56	11.1	2.7 m	2.3 m	177	E3	pB,S,R,mbM
						IC 2522	GALXY	ANT	09 55.1	-33 08	11.9	2.8 m	1.9 m	0	SBc	vF,cL,R
						NGC 3052	GALXY	HYA	09 54.5	-18 38	12.2	2.1 m	1.3 m	102	SBc Ring	F,pL,R,glbM,nf of 2
						NGC 3054	GALXY	HYA	09 54.5	-25 42	11.8	3.8 m	2.4 m	118	SBb	pB,L,irr oblong
						NGC 3056	GALXY	ANT	09 54.5	-28 18	11.7	2.1 m	1.3 m	16	SBO-a	pB,S,R,vgmbM,*11 att S
						NGC 3051	GALXY	ANT	09 54.0	-27 17	11.8	2.1 m	1.9 m	20	E-SO Bar	pF,S,R,gbM,nf of 2
						NGC 3038	GALXY	ANT	09 51.3	-32 45	11.6	2.5 m	1.4 m	130	Sb	pB,pS,R
						IC 2511	GALXY	ANT	09 49.4	-32 50	12.1	2.9 m	0.6 m	38	SBab	pB,pS,eE,*7 np, np of 2
						NGC 2996	GALXY	HYA	09 46.5	-21 34	12.5	1.5 m	1.3 m	115	Sa	vF,S,*9 f 1'
						NGC 3001	GALXY	ANT	09 46.3	-30 26	11.9	2.9 m	2 m	6	SBbc Ring	F,S,R,*12 att nf
						NGC 2992	GALXY	HYA	09 45.7	-14 20	12.2	3.7 m	0.9 m	15	Sa	cF,S,R,bM,stellar,p of 2
			x			NGC 2997	GALXY	ANT	09 45.6	-31 11	9.4	9.2 m	6.6 m	110	SBc	! vF,vL,vgvsbMN 4",19s.5 d
					x	NGC 2986	GALXY	HYA	09 44.3	-21 17	10.8	3.5 m	3 m	105	E1	pB,pS,iR,mbM
						NGC 2983	GALXY	HYA	09 43.7	-20 29	11.8	2.5 m	1.4 m	95	SBO-a	F,pS,R,bM,r,stellar

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Deep Sky Object List in Chart No.100 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 2945	GALXY	HYA	09 37.7	-22 02	12.2	1.6 m	1.2 m	168	E-SO	F,S,R,glbM,2 or 3 S st nr
						NGC 2935	GALXY	HYA	09 36.7	-21 08	11.4	3.7 m	2.8 m	175	SBab	pB,pS,vIE,gmbM
						NGC 2924	GALXY	HYA	09 35.2	-16 24	12	1.3 m	1.2 m	150	E0	pB,S,R
						NGC 2921	GALXY	HYA	09 34.5	-20 55	12	2.9 m	1.1 m	83	SB Ring	vF,pS,IE,vglbM,f of 2
						ESO 373-G008	GALXY	ANT	09 33.3	-33 02	12	5.8 m	0.9 m	89	Sc	
						NGC 2907	GALXY	HYA	09 31.6	-16 44	11.6	2 m	1.2 m	115	Sab	pF,S,IE,mb sf
						NGC 2902	GALXY	HYA	09 30.9	-14 44	12.2	1.6 m	1.3 m	35	SO	vF,vS,stellar
						NGC 2904	GALXY	ANT	09 30.3	-30 23	12.4	1.5 m	1 m	90	E-SO Bar	F,S,IE,psbM
						NGC 2865	GALXY	HYA	09 23.5	-23 10	11.7	2.5 m	1.8 m	160	E4	B,S,R,gbM
						NGC 2848	GALXY	HYA	09 20.2	-16 32	11.8	2.5 m	1.5 m	30	SBc	vF,cL,E 45 deg,glbM,*11 nf 3'
						NGC 2835	GALXY	HYA	09 17.9	-22 21	10.5	6.3 m	4.2 m	8	SBc	F,*10 inv f,bet 2 st 9
						NGC 2815	GALXY	HYA	09 16.3	-23 38	11.9	3.5 m	1.1 m	10	SBb	F,S,IE,gbM
						NGC 2818A	PLNNB	PYX	09 16.0	-36 36	11.9	36 s	36 s		3b	!pB,pL,R,vglbM,in L Cl
			x			NGC 2818	OPNCL	PYX	09 16.0	-36 38	8.2	0.6 m			II 2 m n	
					x	NGC 2784	GALXY	HYA	09 12.3	-24 10	10.2	5.7 m	2.5 m	73	SO	B,L,mE 64 deg,gmbM
					x	NGC 2781	GALXY	HYA	09 11.5	-14 49	11.6	3.1 m	1.8 m	75	SBO-a Ring	B,S,vIE,psmbM
						NGC 2763	GALXY	HYA	09 06.8	-15 30	12	2.3 m	2 m	120	SBc	vF,pS,bM,S* 30" n

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Deep Sky Object List in Chart No.101 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 2627	OPNCL	PYX	08 37.2	-29 57	8.4	11.0 m			III 2 m	Cl,cL,pRi,pC,*11..13
			x	x		NGC 2613	GALXY	PYX	08 33.4	-22 58	10.3	7.1 m	1.6 m	113	Sb	cB,L,vmE 110 deg
				x		NGC 2571	OPNCL	PUP	08 18.9	-29 45	7	13.0 m			IV 1 p	Cl,vL,cRi,IC,st9
				x		NGC 2567	OPNCL	PUP	08 18.5	-30 39	7.4	10.0 m			III 2 m	Cl,pL,pRi,IC,iR,*11.
		x		x		NGC 2539	OPNCL	PUP	08 10.6	-12 49	6.5	22.0 m			II 1 m	Cl,vL,Ri,IC,*11...13
				x		NGC 2527	OPNCL	PUP	08 05.0	-28 09	6.5	22.0 m			III 1 p	Cl,vL,pRi,IC,*10..15
				x		NGC 2509	OPNCL	PUP	08 00.8	-19 03	9.3	8.0 m			II 1 p	Cl,B,pRi,IC,st S
						NGC 2717	GALXY	PYX	08 57.0	-24 40	12.3	2.1 m	1.5 m	10	E-SO Bar	pF,S,R,vgpmbM
						NGC 2665	GALXY	HYA	08 46.0	-19 18	12.2	2 m	1.5 m	144	SBa	F,S,R,gbMN
						NGC 2663	GALXY	PYX	08 45.1	-33 48	10.9	3.5 m	2.4 m	110	Elliptical	pF,pS,IE
						NGC 2658	OPNCL	PYX	08 43.5	-32 39	9.2	10 m			I 2 r :b	Cl,pS,lRi,IC,iF,st12-13
						PK 254+ 5.1	PLNNB	PYX	08 40.7	-32 23	11	11 s	6 s		2a	
					x	NGC 2610	PLNNB	HYA	08 33.4	-16 09	13	50 s	47 s		4(2)	F,S,att to *13,*7 nf
						Cr 187	OPNCL	PUP	08 24.2	-29 09	9.6	7.0 m			III 1 p	
						NGC 2587	OPNCL	PUP	08 23.4	-29 31	9.2	9.0 m			II 1 p	Cl,pmCM,iF,st9...13
						Cr 185	OPNCL	PUP	08 22.5	-36 10	7.8	9.0 m			III 2 p	13"-pF,pS,nC,nRi 18* at 135X
						NGC 2580	OPNCL	PUP	08 21.5	-30 19	9.7	8.0 m			II 2 m	Cl,cL,pRi,pC,R,st12
						Ru 59	OPNCL	PUP	08 19.1	-34 27	9	5.0 m			III 1 p	

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Deep Sky Object List in Chart No.101 (2/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						IC 2311	GALXY	PUP	08 18.8	-25 22	11.5	2.1 m	1.9 m		E0	pB,vS,R,lbM,6'n of NGC 2566
						NGC 2566	GALXY	PUP	08 18.8	-25 30	11	3.4 m	2.3 m	110	SBab	vF,cL,eR,vS neg or neb *11 w *12 close
						NGC 2559	GALXY	PUP	08 17.1	-27 27	10.9	3.7 m	1.7 m	6	SBbc	F,pL,gmbM,am 60*
						Ru 55	OPNCL	PUP	08 12.3	-32 36	7.8	17.0 m			IV 2 p	
						NGC 2533	OPNCL	PUP	08 07.1	-29 53	7.6	3.5 m			III 1 p	Cl,pL,Ri,C,*9,13..14
						Ru 49	OPNCL	PUP	08 03.1	-26 47	9.6	2.5 m			II 3 p	
						NGC 2517	GALXY	PUP	08 02.8	-12 19	11.8	1.4 m	1 m	70	SBO	F,vS,R,bet 3* 13-14
						Ru 47	OPNCL	PUP	08 02.3	-31 06	9.6	5.0 m			I 1 p	
						Ru 46	OPNCL	PUP	08 02.1	-19 28	9.1	2.0 m			II 3 p	

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
M 47			S	x		NGC 2422	OPNCL	PUP	07 36.6	-14 29	4.4	30 m			III 2 m	Cl,B,vL,pRi,st L & S
				x		NGC 2489	OPNCL	PUP	07 56.3	-30 04	7.9	8.0 m			II 2 m	Cl,pL,cRi,pC,* 11...13
				x		NGC 2482	OPNCL	PUP	07 55.2	-24 15	7.3	12.0 m			III 1 m	Cl,L,cRi,vIC
				x		NGC 2479	OPNCL	PUP	07 55.1	-17 42	9.6	7.0 m			III 1 m	Cl,pL,pRi,pC,st S
		x		x		NGC 2440	PLNNB	PUP	07 41.9	-18 13	11.5	54 s	20 s		5(3)	cB,not v well def
		x	*	x		NGC 2438	PLNNB	PUP	07 41.8	-14 44	11	65 s			4(2)	pB,pS,vIE,r,3s.75 d
				x		NGC 2423	OPNCL	PUP	07 37.1	-13 52	6.7	19.0 m			IV 2 m	Cl,vL,Ri,pC,st vS
			x	x		NGC 2421	OPNCL	PUP	07 36.2	-20 37	8.3	10.0 m			I 2 m	Cl,L,cRi,*11...13
	C 64		x	x		NGC 2362	OPNCL	CMA	07 18.7	-24 57	4.1	8.0 m			I 3 p n	Cl,pL,Ri,(30 CMA)
	C 58		x	x		NGC 2360	OPNCL	CMA	07 17.7	-15 38	7.2	13.0 m			II 2 m	Cl,vL,Ri,pC,st9...12
				x		NGC 2354	OPNCL	CMA	07 14.3	-25 42	6.5	20.0 m			III 2 m	Cl,cRi,IC
M 46			!*			NGC 2437	OPNCL	PUP	07 41.8	-14 49	6.1	27.0 m			III 2 m	!,Cl,vB,vRi,vL
M 93			x			NGC 2447	OPNCL	PUP	07 44.5	-23 51	6.2	22.0 m			IV 1 p	Cl,L,pRi,IC,st8...13
						Ru 44	OPNCL	PUP	07 59.0	-28 35	7.2	5.0 m			III 1 p	13"-B,L,Ri at 100X; 52* ; seen in 11X80 findr
						NGC 2483	OPNCL	PUP	07 55.6	-27 53	7.6	10.0 m				Cl,L,IC
						Tr 9	OPNCL	PUP	07 55.3	-25 56	8.7	6.0 m			II 2 p	13"-pB,pL,nRi,nC at 100X; 22* mags 11...13

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Haffner 18	OPNCL	PUP	07 53.3	-25 54	9.3	1.0 m			I 2pn:b	
						Haffner 19	OPNCL	PUP	07 52.7	-26 15	9.4	1.8 m			I 3 p n	
					x	NGC 2467	CL+NB	PUP	07 52.5	-26 26	7.1	15.0 m			I 3 m n:b	pB,vL,R,er,*8m
						Haffner 16	OPNCL	PUP	07 50.3	-25 27	10	1.1 m			I 1 p	13"-pB,S,pRi,vC; 19* mags 11... at 165X
						Ru 36	OPNCL	PUP	07 48.5	-26 18	9.6	4.0 m			I 1 p	
						NGC 2453	OPNCL	PUP	07 47.6	-27 12	8.3	5.0 m			I 2 p	Cl,S,pRi,pC
						Ru 34	OPNCL	PUP	07 45.9	-20 23	9.5	4.0 m			III 2 p	
						Haffner 15	OPNCL	PUP	07 45.3	-32 47	9.4	3.5 m			II 3 p	13"-pB,pS,vC,nRi at 165X
						Ru 32	OPNCL	PUP	07 45.0	-25 31	8.4	6.0 m			III 2 p n	13"-pB,pL,nRi,nC at 135X; 21* mags 11...
					x	NGC 2432	OPNCL	PUP	07 40.9	-19 05	10.2	8.0 m			II 1 p	Cl,pL,pC,E 0 deg,st L & S
						NGC 2439	OPNCL	PUP	07 40.8	-31 42	6.9	10.0 m			II 3 m	Cl,B,pRi,pL,IC,* 9,12...14
						Bochum 15	OPNCL	PUP	07 40.1	-33 33	6.3					13"-F,pS,nRi,C; 6* at 165X
						Mel 71	OPNCL	PUP	07 37.5	-12 04	7.1	9.0 m			II 1 m	13"-B,pL,mC,mBM; 48* mags 10..14 at 100X
					x	NGC 2414	OPNCL	PUP	07 33.2	-15 27	7.9	4.0 m			I 3 m	Cl,P,IC,st9...
						Bochum 6	OPNCL	PUP	07 32.0	-19 26	9.9					13"-pF,pS; 15* mags 11... at 135X

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Bochum 4	OPNCL	PUP	07 31.0	-16 57	7.3	23 m				13"-pB,pL,sC; 22* at 135X
						Bochum 5	OPNCL	PUP	07 30.9	-17 04	7	11 m				13"-pF,pS,nRi,nC; 7* 135X; aster in horseshoe
						Tr 7	OPNCL	PUP	07 27.3	-24 02	7.9	5.0 m			II 3 p n	13"-pF,pS,nRi,sC at 100X; 17*
						Ru 20	OPNCL	CMA	07 26.7	-28 53	9.5	10.0 m			III 2 m	
						Tr 6	OPNCL	CMA	07 26.1	-24 18	10	6.0 m			III 2 p	13"-pF,pL,sRi,sC at 100X; 16* and fuzzy back
						NGC 2384	OPNCL	CMA	07 25.2	-21 01	7.4	2.5 m			IV 3 p	Cl,IC,bifid,**
						Ru 18	OPNCL	CMA	07 24.8	-26 13	9.4	4.0 m			III 2 p	
			x			NGC 2383	OPNCL	CMA	07 24.7	-20 57	8.4	6.0 m			I 3 m	Cl,pS,pmC,st12
					x	NGC 2374	OPNCL	CMA	07 23.9	-13 16	8	19.0 m			II 3 p	Cl,vL,pRi,IC,st L
						NGC 2380	GALXY	CMA	07 23.9	-27 32	11.2	2.1 m	2 m		SBO	pF,pS,R,vsmbM,am st
						Cr 140	OPNCL	CMA	07 23.9	-32 12	3.5	42.0 m			III 3 p	10X50-vB,vL,irR, 18*
						Haffner 8	OPNCL	CMA	07 23.4	-12 20	9.1	4.2 m			IV 3 m	
						Haffner 6	OPNCL	CMA	07 20.1	-13 08	9.2	4.0 m			IV 3 p n	
					x	NGC 2367	OPNCL	CMA	07 20.1	-21 53	7.9	3.5 m			IV 3 p	Cl,S,P,IC
		x	x		x	NGC 2359	BRTNB	CMA	07 18.5	-13 14	99.9	10 m	5 m		E	!! ,vF,vvL,viF
						Basel 11A	OPNCL	CMA	07 17.1	-13 58	8.2	9.0 m				
						Cr 135	OPNCL	PUP	07 17.0	-36 50	2.1	50.0 m			IV 2 p	13"-vB,vvL,nC,scattered 38* at 60X

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Deep Sky Object List in Chart No.102 (4/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						Cr 132	OPNCL	CMA	07 14.4	-31 10	3.6	95 m			III 3 p	
						NGC 2345	OPNCL	CMA	07 08.3	-13 12	7.7	12.0 m			I 3 m	Cl,pL,pRi,gbM,*10.14
						PK 242-11.1	PLNNB	CMA	07 02.8	-31 35	12.2	14 s	9 s		?(6)	
						NGC 2325	GALXY	CMA	07 02.7	-28 42	11.4	3.5 m	2.1 m	6	E4	pB,pL,IE,gbM
						IC 456	GALXY	CMA	07 00.3	-30 10	11.9	2.1 m	1.3 m	110	SBO	vF,pS,R,B st nf and np

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Deep Sky Object List in Chart No.103 (1/2)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 2204	OPNCL	CMA	06 15.5	-18 40	8.6	13.0 m			III 3 m	Cl,L,pRi,IC
M 41			!			NGC 2287	OPNCL	CMA	06 46.0	-20 45	4.5	38.0 m			II 3 m	Cl,vL,B,IC,st 8...
						Cr 121	OPNCL	CMA	06 54.2	-24 38	2.6	50.0 m			III 3 p	
						NGC 2298	GLOCL	PUP	06 49.0	-36 00	9.4	6.8 m			VI	B,pL,iR,gbM,rr
						NGC 2292	GALXY	CMA	06 47.7	-26 45	10.8	4 m	3.5 m	1	SBO	eF,R,gbM,P w 2293,am st
						NGC 2293	GALXY	CMA	06 47.7	-26 45	11.2	4 m	3.2 m	125	SBO-a	pB,R,gbM,P w 2292,am st
					x	NGC 2283	GALXY	CMA	06 45.9	-18 13	12.2	3.6 m	2.7 m	2	SBc	3 or 4S* + neb
						NGC 2280	GALXY	CMA	06 44.8	-27 38	10.3	6.6 m	3.2 m	163	Sc	pF,pL,IE,gbM
						NGC 2271	GALXY	CMA	06 42.9	-23 29	12.2	2.1 m	1.4 m	71	E-SO Bar	pF,S,R,gbM,am st
						NGC 2272	GALXY	CMA	06 42.7	-27 28	11.7	2.4 m	1.6 m	123	SO	pF,pS,vIE,bM,r
						NGC 2267	GALXY	CMA	06 40.9	-32 29	12.2	1.7 m	1.3 m	36	SBO	two neb close together
						NGC 2263	GALXY	CMA	06 38.5	-24 51	12.1	2.7 m	1.6 m	143	SBab Ring	pF,IE,bet 2 vS*,pslbM
						NGC 2243	OPNCL	CMA	06 29.6	-31 17	9.4	5.0 m			I 2 r	pB,cL,R,vglbM
						NGC 2227	GALXY	CMA	06 26.0	-22 00	12.5	2.1 m	1.2 m	19	SBc	eF,R,** p 270 deg,9O"
						NGC 2223	GALXY	CMA	06 24.6	-22 50	11.6	3 m	2.6 m	175	SBab	F,pL,R,vglbM,2st inv
			x			IC 2165	PLNNB	CMA	06 21.7	-12 59	12.5	9 s	7 s		3b	vS
						NGC 2217	GALXY	CMA	06 21.7	-27 14	10.7	4.7 m	4.3 m	10	SBO-a Ring	vB,S,R,psmbM,r
			x			NGC 2207	GALXY	CMA	06 16.4	-21 22	10.8	4.2 m	2.6 m	141	SBbc Ring	pB,pL,mE87,pslbMRN,biN,ring surrounding

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 2206	GALXY	CMA	06 16.0	-26 46	12.2	2.4 m	1.3 m	138	SBbc	F,pS,vIE,pslbM
					x	NGC 2196	GALXY	LEP	06 12.2	-21 48	11	2.8 m	2.2 m	35	Sa	pF,pS,vIE,pmbM,st nr
						NGC 2188	GALXY	COL	06 10.2	-34 06	11.7	4.7 m	1.2 m	175	SBp	pF,pL,vmE,gvlbM
						NGC 2179	GALXY	LEP	06 08.0	-21 45	12.3	2 m	1.4 m	170	SBO-a	F,pS,bet 2 *,glbM
						IC 2158	GALXY	COL	06 05.3	-27 51	12	1.7 m	1.3 m	90	SBab	vF,pS,lE,brush, * att nf
					x	NGC 2139	GALXY	LEP	06 01.1	-23 40	11.6	2.9 m	2 m	140	SBc	F,S; = IC 2154

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Deep Sky Object List in Chart No.104

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 1964	GALXY	LEP	05 33.4	-21 57	10.8	5.5 m	2.1 m	32	SBb	F,L,R,vsvmbM,*12,3 st inv
M 79			x			NGC 1904	GLOCL	LEP	05 24.2	-24 31	8.4	7.8 m			V	pL,eRi,eC,rrr
						NGC 2106	GALXY	LEP	05 50.8	-21 34	12.1	2.7 m	1.4 m	100	SBO	vF,S,vIE,gbM
						NGC 2089	GALXY	LEP	05 47.9	-17 36	11.9	1.9 m	1.2 m	39	E-SO Bar	vF,eS,stellar
						NGC 2090	GALXY	COL	05 47.0	-34 15	11.2	5 m	2.5 m	13	Sc	B,pL,iR,bgM,stellar N,cE 10 deg
						NGC 2073	GALXY	LEP	05 45.9	-22 00	12.4	1.5 m	1.4 m		E-SO	eF,vS,R,gbM
						NGC 1993	GALXY	LEP	05 35.4	-17 49	12.4	1.5 m	1.4 m		E-SO	eF,vS,stellar
						NGC 1979	GALXY	LEP	05 34.0	-23 19	11.8	2.2 m	1.8 m		E-SO	vF,vS,stellar
						NGC 1954	GALXY	LEP	05 32.8	-14 04	11.8	4.2 m	2 m	155	Sbc	vF,S,R,smbM
						IC 418	PLNNB	LEP	05 27.5	-12 42	10.7	14 s	11 s		4	vS,B
			x		x	NGC 1832	GALXY	LEP	05 12.1	-15 41	11.3	2.3 m	1.5 m	10	SBbc Ring	pB,iR,mbM,C* nf 1'
						NGC 1827	GALXY	COL	05 10.1	-36 58	12.5	3 m	0.7 m	120	SBc	vF,vmE,long ray,*11 inv
						NGC 1744	GALXY	LEP	05 00.0	-26 01	11.1	9.3 m	4.3 m	168	SBcd	F,vL,vmE,vgvlbM

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Deep Sky Object List in Chart No.105

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
		x	x	x		NGC 1535	PLNNB	ERI	04 14.3	-12 44	10.4	20 s	17 s		4(2c)	vB,S,R,pS,vsbM,r
						NGC 1679	GALXY	CAE	04 49.9	-31 58	11.5	2.7 m	2 m	150	SBp	vB,L,iR,4*1nv
						NGC 1640	GALXY	ERI	04 42.2	-20 26	11.7	2.7 m	2.3 m	45	SBab	vF,pS,E40,gbM
						NGC 1537	GALXY	ERI	04 13.7	-31 39	10.6	3.9 m	2.6 m	98	E4	vB,pS,lE,psvmbM
			x			NGC 1532	GALXY	ERI	04 12.1	-32 52	9.9	11.6 m	3.4 m	33	SBb	B,vL,vmE32,psmbM
			x			NGC 1531	GALXY	ERI	04 12.0	-32 51	12.2	1.2 m	0.9 m	122	E6	pB,pL,R,bM,np of 2
						NGC 1521	GALXY	ERI	04 08.3	-21 03	11.4	2.7 m	1.6 m	10	E3	pB,R,bM
						NGC 1518	GALXY	ERI	04 06.8	-21 11	11.8	2.9 m	1.4 m	35	SBd	B,L,pmE,gbM,*8 sp

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Deep Sky Object List in Chart No.106 (1/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 1407	GALXY	ERI	03 40.2	-18 35	9.7	4.9 m	4.5 m	35	EO	vB,L,R,symbMN
						NGC 1482	GALXY	ERI	03 54.6	-20 30	12.1	2.4 m	1.4 m	103	Sa	F,S,vIE,2*10 nr,f of 2
						IC 2006	GALXY	ERI	03 54.5	-35 58	11.3	1.9 m	1.6 m		Ellip Ring	pB,S,R,* nr nf,D* sp
						NGC 1461	GALXY	ERI	03 48.5	-16 24	11.8	3 m	0.9 m	155	SO	pB,S,IE,mbMN
						NGC 1460	GALXY	ERI	03 46.2	-36 42	12.5	1.7 m	1.4 m		SBO	F,S,R,* att
						NGC 1452	GALXY	ERI	03 45.4	-18 38	11.8	2.3 m	1.5 m	113	SBO-a Ring	F,R,lbM,hazy *
						NGC 1438	GALXY	ERI	03 45.3	-23 00	12.4	2 m	0.9 m	69	SBO-a	eF,mE,N,*10 f1'
						NGC 1440	GALXY	ERI	03 45.0	-18 16	11.5	2.2 m	1.6 m	28	SBO	pB,pS,R,smbM*13
						NGC 1439	GALXY	ERI	03 44.8	-21 55	11.4	2.4 m	2.2 m		E1	F,pS,gpmBM
			x			NGC 1437	GALXY	ERI	03 43.6	-35 51	11.7	3.1 m	2 m	150	SBab	F,vL,R,glbM
						NGC 1426	GALXY	ERI	03 42.8	-22 07	11.4	2.6 m	1.6 m	111	E2	pF,S,IE,bM
					x	NGC 1421	GALXY	ERI	03 42.5	-13 29	11.4	3.4 m	0.8 m	179	SBbc	F,cL,mE 0,r
			x			NGC 1427	GALXY	FOR	03 42.3	-35 24	10.9	3.8 m	2.6 m	76	E3	pF,S,R,psmbM
						NGC 1425	GALXY	FOR	03 42.2	-29 54	10.6	5.8 m	2.5 m	129	Sb	F,pL,iR,gbM
						NGC 1415	GALXY	ERI	03 40.9	-22 34	11.9	3.6 m	1.7 m	148	Sa	pB,S,IE,pglbM,* sf
						NGC 1412	GALXY	FOR	03 40.5	-26 52	12.5	1.8 m	0.7 m	131	SBO	F,S,E,gbM,* sf 2'
			x		x	NGC 1400	GALXY	ERI	03 39.5	-18 41	11	2.5 m	2.1 m	40	E1	cB,pS,R,psmbM
						NGC 1401	GALXY	ERI	03 39.4	-22 44	12.3	2.4 m	0.6 m	130	SBO	vF,vS,R
						NGC 1406	GALXY	FOR	03 39.4	-31 19	11.8	3.9 m	0.7 m	15	SBbc	F,cL,vmE,vglbM,*7 np
			x			NGC 1398	GALXY	FOR	03 38.9	-26 20	9.7	7.2 m	5.2 m	100	SBab	cB,cL,R,vmbM

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Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x			NGC 1404	GALXY	FOR	03 38.9	-35 36	10	3.9 m	3.3 m		E1	vB,pL,R,psmbM
						NGC 1393	GALXY	ERI	03 38.6	-18 26	12	2 m	1.2 m	170	SBO	F,S,R,glbM
			x			NGC 1395	GALXY	ERI	03 38.5	-23 02	9.6	5.6 m	4.6 m		E3	B,pS,E,psmbM
			x			NGC 1399	GALXY	FOR	03 38.5	-35 27	9.6	6.6 m	6.1 m		E1p	vB,pL,psbM,rr
						NGC 1383	GALXY	ERI	03 37.7	-18 20	12.5	1.9 m	0.8 m	91	SBO	pF,S,R,psmbM
						NGC 1385	GALXY	FOR	03 37.5	-24 30	10.9	3.6 m	2.2 m	165	SBc	pB,pS,R,gpmB
			x			NGC 1389	GALXY	ERI	03 37.2	-35 45	11.5	2.5 m	1.5 m	30	E4	F
			x			NGC 1387	GALXY	FOR	03 37.0	-35 30	10.7	3.2 m	3.1 m		SO	vB,pL,R,gmbM
						NGC 1380A	GALXY	FOR	03 36.8	-34 44	12.4	2.4 m	0.7 m	179	SO	
			x			NGC 1386	GALXY	ERI	03 36.8	-36 00	11.2	3.4 m	1.3 m	25	Sa	F
						NGC 1377	GALXY	ERI	03 36.7	-20 54	12.4	1.8 m	0.9 m	92	SO	F,S,R,gbM
			x			NGC 1380	GALXY	FOR	03 36.5	-34 59	9.9	4.8 m	2.9 m	7	SBO	vB,L,R,psbM
			x			NGC 1381	GALXY	FOR	03 36.5	-35 18	11.5	2.6 m	0.8 m	139	SO	F
			x			NGC 1379	GALXY	FOR	03 36.1	-35 26	10.9	2.4 m	2.3 m		E0	B,pL,R,gpmB
			x			NGC 1374	GALXY	FOR	03 35.3	-35 14	11.1	2.7 m	2.4 m		E0	vB,pL,IE,gmbM,2nd of 3
						NGC 1375	GALXY	FOR	03 35.3	-35 16	12.4	2.3 m	0.9 m	91	SBO	B,S,IE,pmbM,3rd of 3
						NGC 1370	GALXY	ERI	03 35.2	-20 22	12.4	1.5 m	1 m	50	Elliptical	vF,S,R,bet 2*14
						NGC 1371	GALXY	FOR	03 35.0	-24 56	10.7	5.9 m	3.8 m	135	SBa	pB,pL,vIE,psbM
						NGC 1362	GALXY	ERI	03 33.9	-20 17	12.5	1.2 m	1.1 m		SO	vF,S,R
						NGC 1366	GALXY	FOR	03 33.9	-31 12	12	2.1 m	0.9 m	2	SO	vF,S,iF,lbM

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Deep Sky Object List in Chart No.106 (3/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 1359	GALXY	ERI	03 33.8	-19 29	12.2	2.5 m	1.5 m	139	SB/P	F,L,R,vglbM
						IC 1953	GALXY	ERI	03 33.7	-21 29	11.7	2.9 m	2.1 m	121	SBc	vF,cL, spiral or annular
			*			NGC 1365	GALXY	FOR	03 33.6	-36 08	9.6	11 m	6.2 m	32	SBb	!! ,vB,vL,mE,BN
						NGC 1357	GALXY	ERI	03 33.3	-13 40	11.5	3.1 m	2 m	85	Sab Ring	pF,pL,R,lbM,*9 nf
			x			NGC 1360	PLNNB	FOR	03 33.2	-25 52	9.4	360 s	270 s		3	*8in B,L neb,E ns
					x	NGC 1353	GALXY	ERI	03 32.1	-20 49	11.4	3.4 m	1.4 m	138	SBb	pB,cL,lE,mbM
			x			NGC 1350	GALXY	FOR	03 31.1	-33 38	10.3	5.4 m	2.9 m	170	SBab	B,L,mE,vmbMRN
			x			NGC 1351	GALXY	FOR	03 30.6	-34 51	11.6	3.4 m	2 m	140	SO	pB,pS,R,psbM
						NGC 1344	GALXY	FOR	03 28.3	-31 04	10.4	6.1 m	3.8 m	165	E3	cB,pL,iR,vgbM
						NGC 1339	GALXY	FOR	03 28.1	-32 17	11.6	1.8 m	1.3 m	172	E2	cB,pS,R,psbM,D* p
						NGC 1336	GALXY	FOR	03 26.5	-35 43	12.3	2.1 m	1.5 m	22	E-SO	vF,S,vlE,gbM
					x	NGC 1332	GALXY	ERI	03 26.3	-21 20	10.3	4 m	1.5 m	148	E7	vB,S,E114,smbMN
					x	NGC 1325	GALXY	ERI	03 24.4	-21 33	11.5	4.8 m	1.6 m	56	SBbc	F,mE239,com,*9.5 att
			x			NGC 1326	GALXY	FOR	03 23.9	-36 28	10.5	4.3 m	2.9 m	77	SBO-a Ring	pS,vsvmbMN
						NGC 1315	GALXY	ERI	03 23.1	-21 23	12.4	1.6 m	1.4 m		SBO-a	pB,S,R,gbM
						NGC 1309	GALXY	ERI	03 22.1	-15 24	11.5	2.3 m	2.2 m	45	Sbc	cB,cL,iR,gbM,*8 sp 4'
						NGC 1302	GALXY	FOR	03 19.9	-26 04	10.7	4.1 m	3.7 m		SBO-a Ring	S,R,psvmbM,*9 np 1'
			x			NGC 1300	GALXY	ERI	03 19.7	-19 25	10.4	5.9 m	4.1 m	106	SBbc	cB,vL,vmE,psvmbM
						NGC 1297	GALXY	ERI	03 19.2	-19 06	11.8	2.3 m	1.9 m	3	E2	F,pS
						NGC 1292	GALXY	FOR	03 18.2	-27 37	12.1	3 m	1.4 m	7	Sc	F,pS,lE,vgbM,SD* nr

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Deep Sky Object List in Chart No.106 (4/4)

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
						NGC 1288	GALXY	FOR	03 17.2	-32 35	12.1	2.3 m	1.9 m		SBc	vF,L,r,vglbM,cE ns
						NGC 1255	GALXY	FOR	03 13.5	-25 44	10.9	4.2 m	2.7 m	117	SBbc	F,pL,F* close p
		x	x			NGC 1232	GALXY	ERI	03 09.8	-20 35	9.9	7.1 m	6.3 m	108	Sc	pB,cL,R,gbM,r
					x	NGC 1209	GALXY	ERI	03 06.0	-15 37	11.4	2.2 m	1.1 m	80	E5	B,S,cE,psbM
						NGC 1201	GALXY	FOR	03 04.1	-26 04	10.7	3.3 m	1.9 m	7	Sa	cB,pS,vIE,r,S* nr
					x	NGC 1199	GALXY	ERI	03 03.6	-15 37	11.4	2.3 m	1.7 m	48	E2	cB,pS,iR,smbM
						NGC 1179	GALXY	ERI	03 02.6	-18 54	12	4.7 m	3.8 m	35	Sp	eF,pS,gbM,*12f1'
			x		x	NGC 1187	GALXY	ERI	03 02.6	-22 52	10.8	5.6 m	3.8 m	130	SBc	pF,cL,pmE,gbM*16,r
					x	NGC 1172	GALXY	ERI	03 01.6	-14 50	11.9	2.3 m	1.7 m	25	E1	pF,pL,R,psbM

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Deep Sky Object List in Chart No.107

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 908	GALXY	CET	02 23.1	-21 14	10.2	6.1 m	2.7 m	75	SBc	cB,vL,E
					x	NGC 1162	GALXY	ERI	02 58.9	-12 24	13	1.4 m	1.4 m		Elliptical	F,R,glbM,stellar
						NGC 1145	GALXY	ERI	02 54.6	-18 38	12.5	3.2 m	0.5 m	60	Sc	F,pL,pmE,2 * st f
					x	NGC 1114	GALXY	ERI	02 49.1	-17 00	13	1.8 m	0.8 m	8	Sc	pF,pL,pmE,glbM
	C 67		x			NGC 1097	GALXY	FOR	02 46.3	-30 17	9.5	9.4 m	6.6 m	130	SBb	vB,L,vmE151,vbMN
						NGC 1079	GALXY	FOR	02 43.7	-29 00	11.5	3.4 m	2.2 m	87	SBO-a Ring	B,pL,pmE,sbM
			x			Fornax Dwarf	GALXY	FOR	02 39.9	-34 32	8.1	17 m	12 m		E4	vF,vvL,R,Low Surface Brightness
			x			NGC 1049	GX+GC	FOR	02 39.8	-34 16	12.6p	1.2 m	1.2 m			vS,F
						NGC 967	GALXY	CET	02 32.2	-17 13	12.5	1.6 m	1 m	33	E-SO	F,S,iR,gbM
						NGC 922	GALXY	FOR	02 25.1	-24 47	12.1	2 m	1.6 m		SBc Ring	cF,pL,R,gpmB
						NGC 897	GALXY	FOR	02 21.1	-33 43	11.8	2.1 m	1.3 m	17	Sa	pB,S,R,psbM,*10 f 35"
						NGC 857	GALXY	FOR	02 12.6	-31 57	12.4	1.5 m	1.3 m		SO	cB,S,E,psmbM

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Deep Sky Object List in Chart No.108

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
				x		NGC 720	GALXY	CET	01 53.0	-13 44	10.2	4.4 m	2.2 m	135	E4	cB,pL,lE,psmbM
			x	x		NGC 613	GALXY	SCL	01 34.3	-29 25	10.1	5.2 m	4.3 m	120	SBbc	vB,vL,vmE118,sbM,* nf
						NGC 749	GALXY	FOR	01 55.7	-29 55	12.5	1.9 m	1.4 m	111	SBO-a	pB,S,E,bM
						NGC 723	GALXY	CET	01 53.8	-23 45	12.4	1.5 m	1.3 m		Sbc	pF,vS,R,vgbM
						NGC 686	GALXY	FOR	01 48.9	-23 48	12.4	1.7 m	1.4 m		E-SO	vF,vS,R,gbM,er,2* nr
						NGC 623	GALXY	SCL	01 35.1	-36 29	12.5	2 m	1.5 m	94	Elliptical	F,S,R,f of 2
						NGC 578	GALXY	CET	01 30.5	-22 40	10.9	4.8 m	3 m	110	SBc	B,L,pmE,gpmB
						NGC 491	GALXY	SCL	01 21.3	-34 04	12.5	1.4 m	1 m	93	SBb	B,S,vIE,bM,vS * nr
						NGC 439	GALXY	SCL	01 13.8	-31 45	11.5	2.5 m	1.5 m	156	E3	pB,S,R,gbM

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Deep Sky Object List in Chart No.109

Messier	Caldwell	Best NGC	Clark	Herschel 400	Herschel-II	Object	Type	Con.	R.A. (h m)	Dec. (° ')	Mag.	Size max	Size min	P.A. (°)	Class	NGC Description
			x	x		NGC 288	GLOCL	SCL	00 52.8	-26 35	8.1	13.8 m			X	B,L,IE,st 12...16
	C 65	x	!!*	x		NGC 253	GALXY	SCL	00 47.6	-25 18	7.2	26.4 m	6 m	52	SBc	!!vvB,vvL,vmE 54 degrees,gbM
	C 62		x	x		NGC 247	GALXY	CET	00 47.1	-20 46	9.1	21 m	5.6 m	174	SBcd	F,eL,vmE 172 degrees
			x			Sculptor Dwarf	GALXY	SCL	00 59.4	-33 44	8.8	60 m			DwEI	
						MCG -03-03-011	GALXY	CET	00 58.8	-18 47	12.5	3.0 m	1.4 m	22		Inner Regions Very Black-- MCG
						NGC 336	GALXY	CET	00 58.0	-18 23	12	0.7 m	0.2 m	22	S pec	vF,vS,R,sbM
						NGC 289	GALXY	SCL	00 52.7	-31 12	11	5.4 m	3.8 m	130	SBbc	vB,L,pmE,gbM,* 11 np
						NGC 254	GALXY	SCL	00 47.5	-31 25	11.7	2.6 m	1.7 m	137	SBO-a Ring	vB,pS,IE,smbM,* 8 nf 5'
						NGC 210	GALXY	CET	00 40.6	-13 52	10.9	4.6 m	3.2 m	160	SBb	B,pS,R,psbM,r,* 11 p 2'
			x		x	NGC 175	GALXY	CET	00 37.4	-19 56	12.2	2.1 m	1.9 m		SBab	pB,pL,E,gbM,r
						IC 1558	GALXY	SCL	00 35.8	-25 23	12.2	3.3 m	2.4 m	150	SB	E 160, * n, perhaps spiral
			x			NGC 150	GALXY	SCL	00 34.3	-27 48	11.4	3.9 m	1.9 m	118	SBb	pF,pS,R
						NGC 148	GALXY	SCL	00 34.3	-31 47	12.2	2 m	0.8 m	90	Sa	vB,S,IE 90 degrees,smbM*11
			x			NGC 134	GALXY	SCL	00 30.4	-33 15	10.4	8.4 m	1.8 m	50	SBbc	vB,L,vmE 47 degrees,psbM,f of 2,*10 np 45"
						NGC 59	GALXY	CET	00 15.4	-21 27	12.4	2.6 m	1.3 m	127	E-SO	vF,pS,iR,gbM
			x			NGC 45	GALXY	CET	00 14.1	-23 11	10.6	7.6 m	5.4 m	142	SBd	eF,L,vgvIbM,L*cont f
					x	NGC 24	GALXY	SCL	00 09.9	-24 58	11.6	6.1 m	1.4 m	46	Sc	vF,cL,mE,gbm
						NGC 10	GALXY	SCL	00 08.6	-33 52	12.5	2.4 m	1.2 m	25	SBbc	F,cL,vIE,glbM
						Blanco 1	OPNCL	SCL	00 04.3	-29 56	4.5	90 m			III 2 m	
						MCG -03-01-015	GALXY	CET	00 02.0	-15 27	10.6	11 m	4 m	4		

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