

TAAS200 Number	NGC, IC,...	NAME	TYPE	CONST.	RA 2000 hrs min	DEC 2000 deg min	Magnitude	Diameter	GC Conc or Class	# Stars	Minimum Aperture	Herschel 400	DESCRIPTION
1	40		pn	CEP	0 13	n72 32	10.7	38 x 35			4 inch	Y	Consists of magn. 11.5 star set in a thick ring. Nice in a 10 inch or larger scope.
2	55		eg	SCL	0 14.9	s39 11	8.2	32' x 6.5'	SB		7x50mm		WOW! Huge, bright, mottled, cigar shaped edge-on; Brter towards one end. (8 in.)
3	129		oc	CAS	0 29.9	n60 14	6.5	21'		35	2.4 in, 15X	Y	Well resolved, bright, coarse oc; 3 brter stars nearly form an equilateral triangle.
4	134		eg	SCL	0 30.3	s33 15	10.1	8.1' x 2.6	SBa		4 inch		In large scopes, like a smaller NGC-4565. Beautiful. Egn NGC-131 lies v. nearby.
5	185		eg	CAS	0 39	n48 20	9.2	11' x 10'	dE3		4 in, 20X	Y	Lg., LSB egn w/ brter center. Nrby NGC-147 is lger, v. fnt. (Members of Local Grp.)
6	188		oc	CEP	0 44	n85 20	8.1	14'		550	3 in, 12X		A large, round, rich, LSB oc of 12th magn. and fainter stars. 5 billion years old!
7	225		oc	CAS	0 43.4	n61 47	7	12'		76	2.4 in, 15X	Y	Loose and roughly triangle shaped oc. One side is a crooked line of brighter stars.
8	246	The Skull Nebula	pn	CET	0 47	s11 53	8	4.6' x 4.1			4 inch	Y	Skull, or wolf head appearance. Fantastic!!! +3 field stars. Use O III filter.
9	247		eg	CET	0 47.1	s20 46	8.8	20' x 7.4'	Sc		3 in, 12X	Y	Wow! Large, club shaped egn; Has broad hub; much detail and structure seen.
10	253	The Silver Dollar Galaxy	eg	SCL	0 47.6	s25 17	7.1	25' x 7.4'	Sc		7x50mm	Y	WOW! Huge, bright., w/ lots of detail and mottling; small nucleus. Impressive!
11	281		gn + oc	CAS	0 52.8	n56 37	8	35' x 30'			2.4 in, 10X		Large, best in O III filter.
12	288		gc	SCL	0 52.8	s26 35	8.1	14'	X		2.4 in, 15X	Y	Very fine, large, easily resolved gc; has a somewhat unsymmetrical shape. (8 in.)
13	300		eg	SCL	0 54.9	s37 41	8.7	20' x 15'	Sd		2.4 in, 10X		Large oval haze. Member of the Sculptor gal. grp: incl's NGC-55, 247, 253, 7793.
14	404		eg	AND	1 9.4	n35 43	10.1	4.4' x 4.2	S0?		3 in, 20X	Y	Small, bright egn. Very pretty field includes beta Andromedae.
15	457	The Owl Cluster	oc	CAS	1 19.1	n58 20	6.4	13'		204	2.4 in, 12X	Y	WOW! The Owl, ET, B-52, or Monster cluster. Best non Messier oc in CAS!
16	613		eg	SCL	1 34.3	s29 25	10	5.8' x 4.6	SBbc		3 in, 20X	Y	Bright, elongated egn contains a starlike nucleus. Very nice in a 10 inch scope.
17	663		oc	CAS	1 46	n61 15	7.1	16'		108	2.4 in, 12X	Y	Very fine, large, bright oc. Has star voids throughout. Easy in 2 inch finders.
18	672		eg	TRI	1 47.9	n27 26	10.8	6.6' x 2.7	SBcd		3 in, 20X		An oval egn w/ a blobby center. Nrby egn IC-1727 is big, v. fnt, & elongated. (10 in.)
19	752		oc	AND	1 57.8	n37 41	5.7	45'		77	7x50mm	Y	Pretty in finders. Look for golf club hitting NGC-752 as ball!
20	772		eg	ARI	1 59.3	n19 1	10.3	7.1' x 4.5	Sb		4 inch	Y	Bright egn shows much structure and v. small nucleus as seen in large scopes.
21	869&884	The Double Cluster	oc + oc	PER	2 20.7	n57 8		30' x 30'		350 + 300	7x50mm	Y	WOW! Two large, rich, naked eye oc's that nearly touch. Magnificent!
22	891	The Andromeda Edge-On	eg	AND	2 22.6	n42 21	10	13' x 2.8'	SBb?		4 in, 25X	Y	Exquisite, perfect edge-on shows dust lane in v. lg. scopes. Beautiful in a 30 inch!
23	908		eg	CET	2 23.1	s21 14	10.2	5.5' x 2.8	Sc		3 in, 20X	Y	V. nice, brt, lg., oval egn has a grainy texture. 3 nearby fnter egn seen. (10 in.)
24	925		eg	TRI	2 27.3	n33 35	10	9.8' x 6.0	SBd		2.4 in, 15X		Wow! Lg., brt, egn w/ v. grainy texture. Central bar + arms? seen w/ a 10 in. scope.
25	1023	The Perseus Lenticular	eg	PER	2 40.4	n39 4	9.2	8.7' x 2.3	SB0		4 inch	Y	Sm, HSB egn; lens shaped w/ elongated core. Lies in a rich field.
26	1055	The Cetus Edge-On	eg	CET	2 41.8	n00 26	10.6	7.6' x 3.0	SBb		6 in, 40X	Y	Nearly edge-on spiral; One side of hub is cut off by dust. Exquisite! (10 in.)
27	1097		eg	FOR	2 46.3	s30 17	9.3	9.3' x 6.6	SBb		2.4 in, 20x		One of the best barred spirals. Beautiful! Large scopes show arms. (17.5 in.)
28	1232		eg	ERI	3 9.8	s20 35	9.9	7.8' x 6.9	Sc		3 in, 20X		A large, round smudge w/ central hub. (10 in.) Many arms seen in v. large scopes.
29	1245		oc	PER	3 14.7	n47 15	8.4	10'		156	2.4 in, 15X	Y	Wow! A lg., rich oc of sm. stars. Like a tangle of starry wool w/ many sm. dark gaps.
30	1291		eg	ERI	3 17.3	s41 8	8.5	10.5'	SBa		2 in, 15X		V. brt egn! Intense oval core is set in a v. lg., hazy-filmy disc. (10 in.) Impressive!
31	1300	Eridanus Barred Spiral	eg	ERI	3 19.7	s19 25	10.4	6.5' x 4.3	SBbc		4 inch		One of the best examples of a barred spiral. Bright central bar seen in 17.5 inch.
32	1316	Radio Galaxy Fornax A	eg	FOR	3 22.7	s37 12	8.8	7.5' x 5.5	SB0p		2.4 in, 15X		Oval egn w/ intense center and tapered edges. (10 in.) Seen in 50mm finders.
33	1360		pn	FOR	3 33.3	s25 51	9.4	9' x 5'			4 in, 20X	Y	Relatively lg., brt, strange looking pn w/ central star is involved w/ several fld stars.
34	1365	The Fornax Barred Spiral	eg	FOR	3 33.6	s36 8	9.5	9.8' x 5.5	SBb		4 in, 20X		Bar and arms seen in 12 in. scopes. Magnificent, w/ much detail seen in a 30 inch!
35	1501		pn	CAM	4 7	n60 55	11	56 x 48			5 in, 30x	Y	Bright, round, even disc; tiny central star seen in 10 in. scope. Beautiful.
36	1502	Part of Kemble's Cascade	oc	CAM	4 7.7	n62 20	5.7	8'		63	2.4 in, 12X	Y	Br, fine oc; lies within a remarkable star chain called Kemble's Cascade. Use LP.
37	1528		oc	PER	4 15.4	n51 14	6.4	40'		165	10x50mm	Y	Beautiful bright rich oc; slightly oval, resolved in 10 in. Nebular patch in finders.
38	1535		pn	ERI	4 14.2	s12 44	9.6	48 x 42			3 in, 20X	Y	Br blue-green inner ring + central star set in a fainter outer disc. (10 in.) Beautiful!
39	Hyades		oc	TAU	4 25	n18 0	0.5	35 degrees		380	naked eye		Huge, sprawling oc, has many multiple stars. See Burnham's Celest. Hdbk, Vol. III.
40	1647		oc	TAU	4 46	n19 4	6.4	45'		117	10x50mm	Y	Lg., rich oc of 8th magn. & fnter stars w/ many brt doubles in center. Nice in finders.
41	1664		oc	AUR	4 51.1	n43 42	7.6	18'		101	2.4 in, 12X	Y	An oc of equal stars; irregular, round, and patchy. Looks like a kite with a tail.
42	1851		gc	COL	5 14.1	s40 3	7.3	11'	II		10x50mm		Wow! A rich pile of fnt stars that rise to a very intense core. (10 in.) Beautiful!
43	1893		oc + gn	AUR	5 22.7	n33 24	7.5	11'		270	2.4 in, 12X		Irregular shaped oc is associated w/ gn IC-410. Try O III filter for nebula.
44	1907		oc	AUR	5 28	n35 19	8.2	7'		113	3 in, 20X	Y	Wow! A sm., rich, oc on the S edge of oc M-38. Well resolved in 10 in. V. nice field.
45	1973-5-7		gn + oc	ORI	5 35.5	s04 52	4.2	40' x 25		35	10x50mm	Y	Nice refl. gn complex! Lg., w/ dark lanes; assoc. w/ a poor oc that incl's 42 & 45 Ori.
46	2024	The Flame Nebula	gn	ORI	5 41.9	s01 51		30' x 30'			3 in, 20X	Y	Ghostly gn w/ dark rifts is just E of zeta Ori. Place zeta just out of field to see best.
47	2129		oc	GEM	6 1	n23 18	6.7	7'		73	2.4 in, 15X	Y	Small oc of 8th-15th magn. stars developed around a bright double. Pretty group.
48	2158		oc	GEM	6 7.5	n24 6	8.6	5'		973	4 inch	Y	Rich, smooth oc of v. fnt stars. Beautiful, w/ M-35 in field.
49	2169		oc	ORI	6 8.4	n13 57	5.9	7'		25	2.4 in, 15X	Y	Unique, coarse oc! Squarish, the brter stars form the letters I-SIGMA. V. pretty.
50	2175		gn	ORI	6 9.8	n20 19		20'			10x50mm		Lg., brt, round H II gn is centered on an 8th magn. star. Lovely w/ v. LP + O III filter!
51	2194		oc	ORI	6 13.8	n12 48	8.5	8'		194	3 in, 20X	Y	Round, rich oc of very fnt stars. Looks like a bug's face w/ two large, black eyes.

52	2237-44	The Rosette Nebula	gn + oc	MON	6	32.4	n04	52	4.8	90' x 90'		46	7x50mm	Y	Huge, frnt H II wreath (2237) surrounds a brt, poor oc (2244). Use vLP + or - O III filter.
53	2251		oc	MON	6	34.7	n08	22	7.3	7'		92	12x50mm	Y	Oc w/ extreme bent wedge or triangle shape. Seems to have 2 sections. Weird.
54	2261	Hubble's Variable Nebula	gn	MON	6	39.2	n08	44		1.5'			2.4 in, 20X	Y	Small, variably brt, comet shaped H II nebula. An 11th magn. star is the nucleus.
55	2264	Christmas Tree Cluster	gn + oc	MON	6	41.1	n09	53	3.9	20'		222	7x50mm	Y	Wow! A spruce tree shaped oc + assoc. gn! Is nearby Cone nebula visible?
56	2266		oc	GEM	6	43.2	n26	58	9.1	7'			2.4 in, 15X	Y	Small, rich oc of faint stars, well defined. Like a small M-11. Very nice.
57	2281	The Broken Heart Cluster	oc	AUR	6	49.3	n41	4	5.4	15'		119	2.4 in, 12X	Y	Lg., coarse oc of equal brt clumps of stars. (10 in.) Somewhat triangular. V. pretty!
58	2301		oc	MON	6	51.8	n00	28	6	12'		75	2.4 in, 12X	Y	Nice! A large, coarse oc w/ a curious Tau or wedge shape. Bright!
59	2335		oc	MON	7	6.6	s10	5	7.2	12'		57	2.4 in, 15X	Y	Nice resolved oc with curious rhombus shaped asterism in center. (10 in.)
60	2355		oc	GEM	7	16.9	n13	47	9.7	9'		40	3 in, 20X	Y	Nice triangular shaped group with one bright star in corner. Quite pretty.
61	2359	Head & Shoulders Nebula	gn	CMA	7	18.6	s13	12		10' x 5'			6 inch	Y	Thick V shape with attached H II bubble illuminated by a 10.4 magn. star. V. Nice!
62	2360		oc	CMA	7	17.8	s15	37	7.2	13'		91		Y	Nice oc. A rich, bright swarm of bright stars that form lines and boxes. Lovely.
63	2362	The Tau CMA Cluster	oc	CMA	7	18.8	s24	57	4.1	8'		69	3 in, 30X	Y	Triangular shaped swarm of sm. stars w/ Tau CMA near center. V. young oc.
64	2392	Clown Nebula or Eskimo	pn	GEM	7	29.2	n20	55	9.2	47 x 43			2.4 in, 20X	Y	WOW! Brt inner ring + central star set in patchy outer disc rich bl-grm color. (10 in.)
65	2403		eg	CAM	7	36.9	n65	36	8.4	17.8' x 11	Scd		2.4 in, 15X	Y	Wow! Brt oval egn w/ mottled to grainy core; v. curious. (10 in.) Lies in a rich fld.
66	2419	The Intergalactic Tramp	gc	LYN	7	38.1	n38	53	10.3	4.1'	II		3 in, 20X	Y	Med. lg., pretty fnt gc. No hint of resolution even in a 30 inch. Most distant gc known.
67	2420		oc	GEM	7	38.5	n21	34	8.3	10'		304	2.4 in, 15X	Y	Like the Beehive, but smaller. A substrate of v. fnt stars gives it a nebulous look.
68	2421		oc	PUP	7	36.3	s20	37	8.3	8'		28	2.4 in, 15X	Y	Nice oc. Rich, well defined, and somewhat spruce tree shaped. (8 in.)
69	2423		oc	PUP	7	37.1	s13	52	6.7	12'		86	10x50mm	Y	Lg., irr. oc is 3/4 deg. N of M-47. Loose, w/ star clumps & doubles. Easy in finder.
70	2438		pn	PUP	7	41.8	s14	44	11	73 x 68			3 in, 40X	Y	Lies in N side of M-46. Smoky gray, uneven disc or annular w/ central star in 16 in.
71	2440		pn	PUP	7	41.9	s18	13	9.4	74 x 42			2.4 in, 25X	Y	Fine pn has v. brt inner core set in a larger, outer nebula. (10 in.)
72	2467		gn + oc	PUP	7	52.5	s26	24		5'		50	10x50mm	Y	Wow! Lg., round, bright, somewhat annular gn w/ brt star on edge. Like a pn. (10 in.)
73	2477		oc	PUP	7	52.3	s38	33	5.8	20'		1911	7x50mm	Y	Wow! Large, round, very rich cloud of faint stars! Wonderful!
74	2506		oc	MON	8	0.2	s10	47	7.6	10'		807	2.4 in, 12X	Y	Rich, irregular oc of fnt stars. Substrate of v. fnt stars gives object a nebulous look.
75	2527		oc	PUP	8	5.3	s28	10	6.5	16'		45	2.4 in, 15X	Y	Lg., round oc. Nice in 10x50mm binoc's. Somewhat gear shaped. Pretty.
76	2539		oc	PUP	8	10.7	s12	50	6.5	15'		59	2.4 in, 15X	Y	Lg., rich, distinct oc w/ Eiffel Tower shape, or flower blossom w/ 4 petals. V. nice.
77	2567		oc	PUP	8	18.6	s30	38	7.4	11'		117	2.4 in, 15X	Y	Unique, oblong, graded oc has brightest stars off to one end! Large and rich.
78	2627		oc	PYX	8	37.3	s29	57	8.4	9'		60	3 in, 20X	Y	Lovely rich, oval, tightly packed pod of smoothly arranged faint stars. (8 in.)
79	2683		eg	LYN	8	52.7	n33	25	9.7	9.3' x 2.5	Sb		2.4 in, 25X	Y	Beautiful, nearly edge-on has a bright oval core. Large and bright in a 20 inch.
80	2841		eg	UMA	9	22	n50	58	9.3	8.1' x 3.8	Sb		2.4 in, 25X	Y	Large, fine egn. Very condensed, bright nucleus set in a mottled oval haze (17.5 in.)
81	2903		eg	LEO	9	32.2	n21	30	8.9	13.0' x 6.	SBbc		2.4 in, 15X	Y	Wow! Large, oval egn with bright, mottled core. Finder object.
82	2976		eg	UMA	9	47.3	n67	55	10.1	4.9' x 2.5	Scp		3 in, 20X	Y	Wow! Lg., brt., oval; shimmers. Fairly HSB. No core. Looks like a sm. M-1. (10 in.)
83	2997		eg	ANT	9	45.6	s31	11	10.6	8.1' x 6.5	Sc		4 inch	Y	Oval, HSB egn, w/ diffuse central condensation. No spiral structure seen in 13 in.
84	3077		eg	UMA	10	3.3	n68	44	9.8	4.6' x 3.6	l0p		3 in, 20X	Y	Nice! Fairly large and bright egn; rises to a broad, bright core. (10 in.)
85	3079		eg	UMA	10	2	n55	41	10.6	7.6' x 1.7	SBc		4 inch	Y	Wow! Beautiful edge-on! Fairly bright, double wedged, slightly bowed. (17.5 in.)
86	3115	The Spindle	eg	SEX	10	5.2	s07	43	9.1	8.3' x 3.2	S0		3 in, 25X	Y	Spindle shaped; has HSB elongated core. (10 in.) Very pretty.
87	3132	The Eight Burst Nebula	pn	VEL	10	7	s40	26	8.2	47			3 in, 30X	Y	Bright, blue green incomplete ring surrounds a bright central star. Nice.
88	3184		eg	UMA	10	18.3	n41	25	9.7	6.9' x 6.8	Scd		3 in, 20X	Y	Very nice, large! Mottling surrounds a dim core. Spiral structure detected. (17.5 in.)
89	3190		eg	LEO	10	18.1	n21	50	11	4.6' x 1.8	Sa		4 inch	Y	Brtst of a sm. grp of 4 egn: incl. NGC-3193, 3185, 3187. A 5th, v. fnt egn lies to south.
90	3198		eg	UMA	10	19.9	n45	33	10.4	8.3' x 3.7	SBc		3 in, 20X	Y	Nice egn; lg., mottled, highly oval to almost rectangular; no nucleus seen. (10 in.)
91	3201		gc	VEL	10	17.6	s46	25	6.7	18.2	X		10x50mm	Y	Large, broadly condensed gc is well resolved in 8 in and larger. Brt! Very nice!
92	3242	The Ghost of Jupiter	pn	HYA	10	24.8	s18	38	7.8	45 x 36			10x50mm	Y	WOW! Very brt., bl-grm oval inner ring + central star is set in fnter, outer disc. Lovely!
93	3310		eg	UMA	10	38.7	n53	30	10.1	1.5' x 0.8	Sb pec.		2.4 in, 20X	Y	V. curious egn: brt, rnd, HSB, bluish core w/ fnt halo. Like a pn. Lies nr a brt red star.
94	3344		eg	LMI	10	43.5	n24	55	9.9	6.9' x 6.5	Sbc		3 in, 20X	Y	Nice face-on! Brter core is set in a disc that tapers off; 2 fnt. stars involved. (17.5 in.)
95	3432		eg	LMI	10	52.5	n36	37	11.3	6' x 0.8'	SB		4 inch	Y	Beautiful egn! A streak of nebulosity; uniform along length. 3 fld stars at edges.
96	3521		eg	LEO	11	5.8	s00	2	8.9	9.5' x 5.0	Sbc		2.4 in, 15X	Y	Wow! Lg. & brt! An oval egn with a sm., intense nucleus & tapered edges. (10 in.)
97	3621		eg	HYA	11	18.3	s32	49	10	5' x 2'	Sd		3 in, 20X	Y	Wow! Lg., oval, mottled & textured nebula; brt, but no core or nucleus. (10 in.)
98	3628	The Wobbly Edge-On Galaxy	eg	LEO	11	20.3	n13	36	9.5	14.8' x 3.	Sb		2.4 in, 15X	Y	Beautiful edge-on! Bisecting dust belt seen in lg. scopes. Lies 30' NE of M65/66.
99	3631		eg	UMA	11	21	n53	10	10.4	4.6' x 4.1	Sc		3 in, 20X	Y	Beautiful face-on egn consists of a sm. bright hub set in a large, hazy disc. (10 in.)
100	3726		eg	UMA	11	33.3	n47	2	10.4	6.0' x 4.5	Sc		3 in, 20X	Y	Large, mottled, oval, uniform disc contains a tiny nucleus. Bright! V. Nice!
101	3953		eg	UMA	11	53.8	n52	20	10.1	6.6' x 3.6	SBbc		3 in, 20X	Y	Lg., pretty brt, oval egn, brter towards center which contains a small nucleus. Nice!
102	4030		eg	VIR	12	0.4	s01	6	11.1	4.3' x 3.2	Sbc		4 in, 25X	Y	Round, sm., brt egn has a broadly condensed center. Nice! + 2 fld stars. (10 in.)
103	4038-9	The Antennae	eg	CRV	12	1.9	s18	52	10.6	7.6' x 4.9	SB + S		3 in, 25X	Y	WOW! Curious small, brt, kidney shaped interacting pair has much detail in 20 in.
104	4088		eg	UMA	12	5.6	n50	33	10.5	5.8' x 2.5	Sbc		3 in, 25X	Y	Nice, with relatively bright nucleus. (17.5 in.)
105	4111		eg	CVN	12	7.1	n43	4	10.8	4.8' x 1.1	S0		4 inch	Y	Sm., brt, needle-like egn is brter in middle & has star like nucleus. (10 in.) V. pretty!
106	4151	The CVn Variable Galaxy	eg	CVN	12	10.5	n39	24	10.4	5.9' x 4.4	SBab		4 in, 40X	Y	Wow! Consists of a brt, bluish stellar nucleus set in a filmy haze. A Seyfert galaxy.

107	4214		eg	CVN	12	15.6	n36	20	9.8	7.9' x 6.3	I	2.4 in, 15X	Y	Large and bright- great for small scopes! Has bright elongated core. Nice!
108	4216		eg	VIR	12	15.9	n13	9	10	8.3' x 2.2	Sb	3 in, 20X	Y	WOW! Lg. edge-on has brt oval core! Spindle egn's NGC-4206, 4222 are nearby!
109	4244	The CVn Edge-On Galaxy	eg	CVN	12	17.5	n37	49	10.2	16.2' x 2.	Scd	3 in, 20X	Y	Wow! Edge-on seen as a uniform pencil of light, no core. (10 in.) Very impressive!
110	4274		eg	COM	12	19.8	n29	37	10.3	6.9' x 2.8	SBab	3 in, 20X	Y	Oval egn has sm. hub. Bright egn's NGC-4278, 4245, 4314 are nearby: be careful!!!
111	4293		eg	COM	12	21.2	n18	23	11.2	6.0' x 3.0	SB0/a	4 inch	Y	Large egn. Unevenly bright in large (>12 in) scopes. Very nice.
112	4361		pn	CRV	12	24.5	s18	48	10.9	1.9' x 1.9		4 inch	Y	Diffuse pn has tapered edges and fairly bright central star. Nice! (10 in.)
113	4414		eg	COM	12	26.4	n31	13	10.3	3.6' x 2.2	Sc?	3 in, 20x	Y	Wow! Oval egn has a sm. bright nucleus, sharp edges & much structure. (10 in.)
114	Mel111	Coma Berenices	oc	COM	12	25	n25	0	1.8	275'		273 naked eye		Large, naked eye oc of 4th magn stars and fainter.
115	4435-38	The Eyes	eg	VIR	12	27.8	n13	3		c. 10 x 4	SB0 + S0/a	4 inch	Y	Two closeby egn look like eyes. NGC-4435: brt core; NGC-4438: more elongate.
116	4449	The Box Galaxy	eg	CVN	12	28.2	n44	6	9.4	5.1' x 3.7	I	2.4 in, 15X	Y	Exquisite irr. egn! Brt, lg., has a grainy, arrowhead shaped core. Strange! (10 in.)
117	4490		eg	CVN	12	30.6	n41	40	9.8	5.9' x 3.1	SBd	3 in, 20X	Y	Lg., brt, oval egn has sm. distinct hub. Fnter NGC-4485 is 3' away: interacting pair.
118	IC3568		pn	CAM	12	32.9	n82	33	9.5	40 x 35		3 in, 20X		Fine, bl-grn pn consists of brt inner disc + fnt star in outer, fnter nebula. Use Hi X.
119	4526		eg	VIR	12	34	n07	42	9.6	7.2' x 2.3	S0	3 in, 20X	Y	Small, oval but bright egn has outer haze. (10 in.) In same LP field as NGC-4535.
120	4527		eg	VIR	12	34.1	n02	39	10.4	6.3' x 2.3	Sbc	3 in, 25X	Y	Elongated, fairly lg. & brt; has a sm., brter hub. Similar to nearby NGC-4536. (10 in.)
121	4535		eg	VIR	12	34.3	n08	12	10	6.8' x 5.0	Sc	3 in, 25X	Y	Nice egn! Large, grainy, oval patch contains a tiny nucleus. Bar seen in 17.5 in.
122	4536		eg	VIR	12	34.5	n02	11	10.4	7.4' x 3.5	Sbc	3 in, 25X	Y	?Cutoff oval, uniform disc has a tiny brt nucleus. V nice w/ NGC-4527 in same LP fld!
123	4559		eg	COM	12	36	n27	58	9.8	10.5' x 4.	Scd	3 in, 20X	Y	Nice! Lg., brt egn! Shows mottling in lg. scopes. +3 fld stars. Just NE of Mel 111.
124	4565	The Coma Edge-On Galaxy	eg	COM	12	36.3	n25	59	9.6	16.2' x 2.	Sb?	3 in, 20X	Y	WOW! The best edge-on! Hub seen bisected in lg. scopes. Exquisitely beautiful!
125	4567-8	The Siamese Twins	eg	VIR	12	36.6	n11	14	10.3	5' x 3'	Sbc + Sbc	3 in, 25X	Y	Interacting egn! -67 is an oval hazy nebula in contact w/ larger, more oval -68. Nice!
126	4605		eg	UMA	12	40	n61	37	9.6	5.5' x 2.3	Sc pec	2.4 in, 20X		Br., elongated egn has distinctly mottled core w/o nucleus. Very nice!
127	4631	The Humpback Whale Galaxy	eg	CVN	12	42.1	n32	32	9.3	15.1' x 3.	SBd	12x50mm	Y	WOW! Cigar-like edge-on is v. lg., brt, & mottled. Sm. companion also seen. (8 in.)
128	4656	The Hockey Stick Galaxy	eg	CVN	12	44	n32	10	10.4	13.8' x 3.	SB	3 in, 20X	Y	Long, thin, peculiar egn has a very curious bend. Exquisitely weird and beautiful!
129	4666		eg	VIR	12	45.1	s00	28	10.8	4.5' x 1.5	Sc	4 in, 25X	Y	Very nice edge-on w/ moderately faint, sm., nucleus seen. (10 in.)
130	4697		eg	VIR	12	48.6	s05	48	9.3	6.0' x 3.8	E6	3 in, 20X		Bright, oval egn has a strong core that contains a small nucleus. Very nice.
131	4699		eg	VIR	12	49	s08	40	9.6	3.5' x 2.7	Sb	3 in, 20X	Y	Nice! Lg., slightly oval egn evenly rises to an intense, starlike core. (8 in.) Bright!
132	4725		eg	COM	12	50.4	n25	30	9.2	11.0' x 7.	Sab	3 in, 20X	Y	Wow! A lg., brt, oval egn w/ a sm., fuzzy hub. NGC-4712, 4747 are fnt companions.
133	4754		eg	VIR	12	52.3	n11	19	10.5	4.7' x 2.6	SB0	4 inch	Y	Sm., brt, round egn (Mutt), forms exquisitely differing pair w/ NGC-4762 (Jeff)!
134	4762		eg	VIR	12	52.9	n11	14	10.2	8.7' x 1.6	SB0	3 in, 20X	Y	Beautiful needle-like edge-on egn has a sm. core. The companion of NGC-4754.
135	4866		eg	VIR	12	59.5	n14	10	11.2	6.5' x 1.5	S0	4 inch	Y	Sm., brt, narrow egn has sm. central hub. Photos show perpendicular dust lane.
136	5005		eg	CVN	13	10.9	n37	3	9.8	5.4' x 2.7	Sbc	2.4 in, 15X	Y	Lovely lg., brt, oval egn has much brter oval hub that contains a tiny nucleus. (10 in.)
137	5033		eg	CVN	13	13.4	n36	36	10.1	10.5' x 5.	Sc	3 in, 20X	Y	Lg., oval egn w/ a fnt, indistinct, star-like core. (10 in.) Fnter than nearby NGC-5005.
138	5128	Radio Galaxy Centaurus A	eg	CEN	13	25.5	s43	1	7	18.2' x 14	S0p	10x50mm		Wow! Large, bright, round egn has wide, mottled dust lane. (16 in.) Beautiful!
139	5139	Omega Centauri	gc	CEN	13	26.8	s47	29	3.6	40'	VIII	naked eye		WOW! Awesome! Best gc in sky! V. lg., v. rich, slight oval outline, easily resolved!
140	5248		eg	BOO	13	37.5	n08	53	10.2	6.5' x 4.9	Sbc	3 in, 25X	Y	Nice! Pretty bright, lg., oval egn w/ sm. nucleus. Spiral arms seen w/ 17.5 inch.
141	5566		eg	VIR	14	20.3	n03	56	10.5	6.5' x 2.4	SBab	4 inch	Y	Oval, hazy disc w/ a sm., brt core. V. fnt companion NGC-5560 lies 5' to the NW.
142	5634		gc	VIR	14	29.6	s05	59	9.4	5'	IV	3 in, 25X	Y	A sm., not too condensed gc in a very beautiful field! Resolved w/ a 30 in. scope!
143	5746		eg	VIR	14	44.9	n01	57	10.5	7.9' x 1.7	Sb?	4 inch?	Y	Lovely edge-on spiral! Oval hub. Dust lane not seen in 17.5 in. Needs a black sky.
144	5897		gc	LIB	15	17.4	s21	1	8.6	13'	XI	2.4 in, 15X	Y	Large, unconcentrated gc. Resolved to core in 10 in. Impressive!
145	5907	The Draco Edge-On Galaxy	eg	DRA	15	15.9	n56	19	10.4	12.3' x 1.	Sc	4 inch	Y	WOW! Huge needle-like egn! Slightly brter in middle. (20 in.) Needs a black sky.
146	5986		gc	LUP	15	46.1	s37	47	7.1	10'	VII	10x50mm		V. fine, rich, large & bright gc. Shows good resolution in 8 in. scopes and larger.
147	6124		oc	SCO	16	25.6	s40	40	5.8	29'		100 7x50mm		Wow! Beautiful, large cloud of fnt stars! Bright & partly resolved in binoculars.
148	6144		gc	SCO	16	27.3	s26	2	9	9'	XI	4 in, 40X	Y	Fairly lg. but fnt gc; not condensed. V. nice field w/ Antares 1/2 deg. to the SE.
149	6210		pn	HER	16	44.5	n23	49	8.8	14		3 in, 30X		V. fine pn! Brt, blue green, fairly sm., oval disc shows fnt central star in 10 in. & HiX.
150	6231		oc	SCO	16	54	s41	48	2.6	15'		93 7x50mm		A tight, rich group of O & B type stars. Easily resolved. Many star patterns seen.
151	6302	The Bug Nebula	?gn	SCO	17	13.7	s37	6		83 x 24		3 in, 30X		A small, remarkable, HSB, H II nebula. Strange! Nature uncertain.
152	6356		gc	OPH	17	23.6	s17	49	8.4	7'	II	10x50mm	Y	V. fine gc; like M-9, but smaller, richer, and more condensed (compare w/ M-9).
153	6388		gc	SCO	17	36.3	s44	44	6.8	9'	III	10x50mm		Lg., brt gc has a broad, intense core! V. rich. A heap of stardust in 10 in., 180X!
154	6441		gc	SCO	17	50.2	s37	3	7.2	8'	III	2.4 in, 25X		Sm., brt, highly concentrated gc. Nearly hidden behind 4th magn. g Sco. Nice fld.
155	6445		pn	SGR	17	49.2	s20	1	10	3.1' x 1'		3 in, 20X		Fine, brt, oval pn is like a sm. M-27. Much detail in 12 in. Gc NGC-6440 in same fld.
156	6503		eg	DRA	17	49.4	n70	9	10.2	6.2' x 2.3	Scd	3 in, 20X		Bright, elongated egn has a bright, mottled, off center core, but no nucleus. (12 in.)
157	6520		oc	SGR	18	3.4	s27	54	7.6	5'		60 2.4 in, 20X	Y	Small, bright oc lies in the Sgr star cloud adjacent to dark nebula B86.
158	6522		gc	SGR	18	3.6	s30	2	8.4	5.6'	VI	2.4 in, 20X		Sm., brt, gc. In same LP fld w/ fnter gc NGC-6528. Both lie in Baade's Window.
159	B86		dn	SGR	18	2.7	s27	50		4' x 3'		3 in?		WOW! Sm., irr. dn looks like a hole in the Milky Way! NGC-6520 lies just to east.
160	6541		gc	CRA	18	8	s43	42	6.6	13'	III	7x50mm		Wow! Lg., brt, rich gc has a sharply brter core. Some resolution w/ 6 in. Beautiful fld.
161	6543	The Cat's Eye Planetary	pn	DRA	17	58.6	n66	38	8.8	18		2.4 in, 30X		V. bright, small, bl-grn pn is shaped like a cat's eye pupil! (10 in.) Use HiX.

162	6553		gc	SGR	18	9.3	s25	54	8.2	8'	XI		3 in, 15X	Y	Fairly lg., diffuse gc has an irregular oval or fan shape. No resolution in a 10 in.
163	B92		dn	SGR	18	15.5	s18	11		15'			3 in?		Sm. elongated dark hole; lies on the NW edge of the M-24 star cloud. Amazing!
164	6572	The Emerald	pn	OPH	18	12.1	n06	51	9	8'			2.4 in, 40X		Remarkable pn! Small, v. brt, intense green disk has sm. blue star in center. (10 in.)
165	6624		gc	SGR	18	23.7	s30	22	8.3	6'	VI		2.4 in, 15X		Small, fairly bright gc has strong core. Stands out well against rich Milky Way.
166	6633		oc	OPH	18	27.7	n06	34	4.6	27'		159	7x50mm		Wow! Lg., rich oc has irr. wedge shape & brt stars. Easily resolved in sm. scopes.
167	6645		oc	SGR	18	32.6	s16	54	8.5	10'		40	2.4 in, 15X	Y	Nice! Large, brt, rich, compressed oc of faint stars. Has several star poor holes.
168	6652		gc	SGR	18	35.8	s32	59	8.8	3.5'	VI		2.4 in, 15X		Nice gc w/ unique football shape. Has an intense core, well resolved in a 10 in.
169	IC4756		oc	SER	18	39	n05	27	4.6	40'		466	7x50mm		V. fine, large, naked eye oc of 7th magn. & fnter stars. Impressive in binoculars.
170	6723		gc	SGR	18	59.6	s36	38	6.9	11'	VII		7x50mm		Beautiful lg., brt, rich gc is broadly condensed. Some resolution in 6 in. scope.
171	6726-7		gn	CRA	19	1.9	s36	57		8' x 8'			4 inch		A reflection nebulae complex lit by variables R, T, & TY CRA w/ associated dn!
172	6781	Ghost of the Moon Nebula	pn	AQL	19	18.4	n06	33	10.5	1.9' x 1.8			3 in, 20X	Y	Lg., diffuse, circular pn has fnter center & N edge. V. ghostly! Try UHC or O III filter.
173	Col 399	The Coathanger	oc	VUL	19	25.4	n20	11	3.6	60'		10	7x50mm		A curious coathanger shaped asterism or v. poor oc! Large: use binoculars.
174	6802		oc	VUL	19	30.6	n20	16	8.8	5'		201	3 in, 20X	Y	Nice oc. A rich, elongated cloud of faint stars. Lies near Col 399.
175	6818		pn	SGR	19	44	s14	9	9.3	22 x 15			3 in, 20x	Y	Beautiful pn! Bright, bluish colored, circular, seems dark in center. (8 in.)
176	6822	Barnard's Galaxy	eg	SGR	19	44.9	s14	48	9.3	10' x 9.5'	I		10x50mm	Y	Large, elongated, LSB egn is member of Local Grp. Impressive in large scopes!
177	6826	The Blinking Planetary	pn	CYG	19	44.8	n50	31	8.8	27 x 24			2.4 in, 15X	Y	WOW! Brt bl-grn disk seen w/ averted vision; central star w/ direct vision: blinks!!!
178	6888	The Crescent Nebula	?pn	CYG	20	12	n38	21		20' x 10'			4 inch		Wow! A lg., fnt, narrow, incomplete egg-shaped ring set in a rich fld! Try O III filter.
179	6934		gc	DEL	20	34.2	n07	24	8.7	6'	XIII		2.4 in, 15X	Y	Fine gc. Med. large, fairly bright, well condensed. Well resolved in 10 in.
180	6939		oc	CEP	20	31.4	n60	38	7.8	8'		301	2.4 in, 15X	Y	Rich, fine oc of fnt stars w/ NGC-6946 in same LP fld! Triangular w/ dark area within.
181	6940		oc	VUL	20	34.6	n28	18	6.3	25'		170	10x50mm	Y	Lovely oc. Lg., rich, football shaped, well resolved. Has lots of oval star patterns!
182	6946		eg	CYG	20	34.8	n60	9	8.8	11' x 10'	Scd		2.4 in, 15X	Y	Wow! Lg., diffuse, oval shaped egn w/ sm. fuzzy hub. Spiral arms easy in 10 inch.
183	6960-92	The Veil Nebula	snr	CYG	20	45.7	n30	43		see Tirion			10x50mm		WOW! Exquisite snr w/ lots of detail, esp. w/ O III filter. Eastern arc (-6992) is brt.
184	7000	The North America Nebula	gn	CYG	20	58.8	n44	20		100' x 60'			7x50mm		Huge, fairly fnt H II nebula: use naked eye or v. LP fld! O III filter really helps here.
185	7008		pn	CYG	21	0.6	n54	33	10	98 x 75			4 in, 50X		Exquisite pn rich in detail! Seen as an incomplete, patchy, oval ring in lg. scopes.
186	7009	The Saturn Nebula	pn	AQR	21	4.2	s11	22	8	44 x 23			2.4 in, 15X	Y	WOW! Sm. intense bl-grn oval pn shows Saturn features in lg. scopes! Beautiful!
187	7129		gn + oc	CEP	21	41.3	n66	6		7' x 7'		10	4 inch		Bright gn surrounds a small sparse oc of fairly bright stars. (10 in.) Very pretty.
188	IC5146	The Cocoon Nebula	gn + oc	CYG	21	53.4	n47	16		10' x 10'		110	4 inch		Circular, hazy gn lies at the end of a large, riftlike dn. Use v. LP + wide fld, & scan.
189	7209		oc	LAC	22	5.2	n46	30	7.7	25'		98	2.4 in, 15X	Y	Nice oc seen best in 12x50 mm finder. Large, brt, smooth aggregate of faint stars.
190	7243		oc	LAC	22	15.3	n49	53	6.4	21'		38	10x50mm	Y	Lacerta's best oc. Big, bright, splashy; has a wide double star at center. (10 in.)
191	7293	The Helix Nebula	pn	AQR	22	29.6	s20	48	7.3	12' x 10'			10x50mm		WOW! Huge, LSB pn; round disc in 10x50mm; donut shape revealed in lg. scopes.
192	7331		eg	PEG	22	37.1	n34	25	9.5	11' x 4'	Sbc		2.4 in, 15X	Y	Beautiful egn. Mottled oval disc has brt core + nucleus & resembles a small M-31.
193	7380		oc + gn	CEP	22	47	n58	6	7.2	12'		125	10x50mm	Y	Large, bright, fairly rich triangular shaped oc of large and small stars. V. nice.
194	7479	The Pegasus Barred Spiral	eg	PEG	23	4.9	n12	19	11	4.1' x 3.2	SBc		4 inch	Y	Famous backwards S galaxy shows shape in very lg. scopes. Has bright core.
195	7510	The Arrowhead Cluster	oc	CEP	23	11.5	n60	34	7.9	4.0'		75	2.4 in, 15x	Y	Nice oc! Sm., rich, w/ flared arrowhead shape. Brtest stars are at the tip. Lovely.
196	7606		eg	AQR	23	19.1	s08	29	10.8	5.8' x 2.6	Sb		3 in, 25X	Y	Very nice egn, large, bright, highly oval w/ small, dim nucleus. (10 in.)
197	7662	The Blue Snowball Nebula	pn	AND	23	25.9	n42	33	8.3	32 x 28			2.4 in, 15X	Y	Brt bl-grn pn has very brt inner ring set in a larger, fnter disc. (20 in.) Very beautiful.
198	7789		oc	CAS	23	57	n56	44	6.7	16'		583	10x50mm	Y	Large, very rich, round oc seems to be full of snakes! Easy in finder.
199	7793		eg	SCL	23	57.8	s32	35	9.1	9.1' x 6.6	Sd		3 in, 20X		Large, diffuse oval patch w/ dim nucleus. V. similar to a diffuse, periodic comet!
200	7814		eg	PEG	0	3.3	n16	9	10.5	6.3' x 2.6	Sab		3 in, 25X		Perfect edge-on egn has bright core. Dust lane seen only in v. lg. scopes (20 in.?).