

7000 DSO List (sorted by constellation - magnitude) - from SAC 7.7 database

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
M 31	NGC 224	Galaxy	AND	3.4	13.5	189'	00 42.7	+41 16	60	Sb			Andromeda Galaxy ;Local Group;nearest spiral
NGC 7686	OCL 251	Opn CL	AND	5.6	-	15'	23 30.1	+49 08	88	IV 1 p	20	6.2	H VIII 69;12* mags 8...13
NGC 752	OCL 363	Opn CL	AND	5.7	-	50'	01 57.7	+37 40	92	III 1 m	60	9	H VII 32;Best in RFT or binocs;lr scattered cl 70* m 8...
M 32	NGC 221	Galaxy	AND	8.1	12.4	8.5'	00 42.7	+40 52	60	E2			Companion to M31 ; Member of Local Group
M 110	NGC 205	Galaxy	AND	8.1	14	19.5'	00 40.4	+41 41	60	SA0			M31 Companion ;UGC 426; Member Local Group
NGC 272	OCL 312	Opn CL	AND	8.5	-		00 51.4	+35 49	90	IV 1 p	8	9	
NGC 7662	PK 106-17.1	Pln Neb	AND	8.6	5.6	17"	23 25.9	+42 32	88	4(3)		14	Blue Snowball Nebula ;H IV 18;Barnard-cent * variable?
NGC 956	OCL 377	Opn CL	AND	8.9	-	8'	02 32.5	+44 36	62	IV 1 p	30	9	
NGC 891	UGC 1831	Galaxy	AND	9.9	13.6	13.1'	02 22.6	+42 21	62	Sb			NGC 1023 group;Lord Rosse drawing shows dark lane
NGC 404	UGC 718	Galaxy	AND	10.3	12.8	4.3'	01 09.4	+35 43	91	E0			Mirach's ghost H II 224;UGC 718;Beta AND sf 6'
IC 239	UGC 2080	Galaxy	AND	11.1	14.2	4.6'	02 36.5	+38 58	93	SBa			In NGC 1023 group;vsBN in smooth bar;low surface br
NGC 812	UGC 1598	Galaxy	AND	11.2	12.8	3'	02 06.9	+44 34	62	Sbc			Peculiar
NGC 7640	UGC 12554	Galaxy	AND	11.3	14.5	10'	23 22.1	+40 51	88	SBbc			H II 600;nearly edge on spiral
MCG +08-01		Galaxy	AND	12	-	1.0'	23 59.2	+46 53	59				Face On
MCG +08-01		Galaxy	AND	12	-	0.4'	23 59.9	+47 16	59				Mostly Face On
NGC 80	UGC 203	Galaxy	AND	12.1	13.2	2.2'	00 21.2	+22 21	126	E-SO			Brightest in group
NGC 108	UGC 246	Galaxy	AND	12.1	13.3	2'	00 26.0	+29 13	90	SBO-a			H III 148
NGC 529	UGC 955	Galaxy	AND	12.1	13.8	2.4'	01 25.7	+34 43	91	E-SO			
NGC 846	NGC 847	Galaxy	AND	12.1	13.3	1.9'	02 12.2	+44 34	62	SBab			
UGC 12632	PGC 71596	Galaxy	AND	12.1	15.1	4.9'	23 30.0	+41 00	88	Sm			
NGC 910	UGC 1875	Galaxy	AND	12.2	13.7	2'	02 25.4	+41 49	62	SO			H III 571
NGC 97	UGC 216	Galaxy	AND	12.3	13	1.5'	00 22.5	+29 45	90	Elliptical			Compact
NGC 214	UGC 438	Galaxy	AND	12.3	13.1	1.9'	00 41.5	+25 30	126	SBc			H II 209;UGC 438
NGC 679	UGC 1283	Galaxy	AND	12.3	13.8	2.1'	01 49.7	+35 47	92	SO			H III 175
NGC 687	UGC 1298	Galaxy	AND	12.3	12.9	1.4'	01 50.6	+36 22	92	SO			H III 561
NGC 753	UGC 1437	Galaxy	AND	12.3	13.9	2.5'	01 57.7	+35 55	92	SBbc			P w NGC 759
NGC 828	UGC 1655	Galaxy	AND	12.3	14.1	2.9'	02 10.2	+39 11	62	Sap			H II 605;Peculiar
NGC 233	UGC 464	Galaxy	AND	12.4	13.4	1.7'	00 43.6	+30 35	90	Elliptical			H III 149
NGC 252	UGC 491	Galaxy	AND	12.4	12.8	1.4'	00 48.0	+27 37	126	Sa Ring			H II 609;Brightest in group;UGC 491
NGC 536	UGC 1013	Galaxy	AND	12.4	13.4	3'	01 26.4	+34 42	91	SBb			H III 171;UGC 1013
NGC 83	UGC 206	Galaxy	AND	12.5	13.4	1.3'	00 21.4	+22 26	126	E0			NGC 80 group
NGC 393	UGC 707	Galaxy	AND	12.5	13.4	1.7'	01 08.6	+39 39	60	E-SO			H I 54
NGC 528	UGC 988	Galaxy	AND	12.5	13.1	1.7'	01 25.6	+33 40	91	SO			
NGC 818	UGC 1633	Galaxy	AND	12.5	13.8	2.9'	02 08.7	+38 47	92	SBbc			H II 604
NGC 982	UGC 2066	Galaxy	AND	12.5	12.2	1.5'	02 35.4	+40 52	62	Sa			H III 573
NGC 43	UGC 120	Galaxy	AND	12.6	13.4	1.6'	00 13.0	+30 55	89	SBO			
NGC 160	UGC 356	Galaxy	AND	12.6	14.3	2.9'	00 36.1	+23 57	126	Sa Ring			H III 476;UGC 356
NGC 425	UGC 758	Galaxy	AND	12.6	12.4	1'	01 13.0	+38 46	91	S pec			
NGC 797	UGC 1541	Galaxy	AND	12.6	13.3	1.6'	02 03.5	+38 07	92	SBa			H III 566;double nebula
NGC 841	UGC 1676	Galaxy	AND	12.6	13.1	1.8'	02 11.3	+37 30	92	SBab			
NGC 21	NGC 29	Galaxy	AND	12.7	12.6	1.5'	00 10.8	+33 21	89	SBbc			
NGC 29	NGC 21	Galaxy	AND	12.7	12.9	1.5'	00 10.8	+33 21	89	SBbc			H II 853;UGC 100
NGC 183	UGC 387	Galaxy	AND	12.7	14.1	2.1'	00 38.5	+29 31	90	Elliptical			
NGC 523	NGC 537	Galaxy	AND	12.7	13.2	2.5'	01 25.3	+34 01	91	Sbc			H III 170?;Peculiar;UGC 979
NGC 551	UGC 1034	Galaxy	AND	12.7	12.9	1.8'	01 27.7	+37 11	91	SBbc			H III 560
NGC 708	UGC 1348	Galaxy	AND	12.7	14.9	3'	01 52.8	+36 09	92	E2			H III 565;Brightest in group which incl NGC 703-4-5
NGC 759	UGC 1440	Galaxy	AND	12.7	13.6	1.8'	01 57.8	+36 21	92	EO			P w NGC 753
NGC 911	UGC 1878	Galaxy	AND	12.7	13.2	1.7'	02 25.7	+41 57	62	Elliptical			
NGC 206		C+N+G	AND	12.8	-	1.8'	00 40.5	+40 44	60	Pec			A star cloud in the south end of Andromeda Galaxy
NGC 712	UGC 1352	Galaxy	AND	12.8	12.9	1.3'	01 53.1	+36 49	92	SO			
NGC 7831	IC 1530	Galaxy	AND	12.8	12.3	1.5'	00 07.3	+32 37	89	Sb			
IC 65	UGC 625	Galaxy	AND	12.8	14.3	3.9'	01 00.9	+47 41	60	SBbc			
NGC 68	UGC 170	Galaxy	AND	12.9	14.2	1.2'	00 18.3	+30 04	89	E-SO			H V 16;In compact group
NGC 431	UGC 776	Galaxy	AND	12.9	12.9	1.4'	01 14.1	+33 42	91	SBO			
NGC 513	UGC 953	Galaxy	AND	12.9	11.1	0.7'	01 24.4	+33 48	91	Sc			H III 169;UGC 953
NGC 561	UGC 1048	Galaxy	AND	12.9	13.7	1.6'	01 28.3	+34 18	91	SBa			
NGC 590	UGC 1109	Galaxy	AND	12.9	14.1	2.6'	01 33.7	+44 56	61	SBO-a			sff of 2
NGC 591	UGC 1111	Galaxy	AND	12.9	13	1.3'	01 33.5	+35 40	91	SBO-a			
NGC 605	UGC 1128	Galaxy	AND	12.9	13.8	2.2'	01 35.0	+41 15	61	SO			
NGC 662	UGC 1220	Galaxy	AND	12.9	11.8	0.8'	01 44.6	+37 42	92	Sc			Peculiar
NGC 898	UGC 1842	Galaxy	AND	12.9	12.7	1.8'	02 23.3	+41 57	62	Sab			H III 570
NGC 906	UGC 1868	Galaxy	AND	12.9	13.9	1.8'	02 25.3	+42 05	62	SBab			
NGC 6	NGC 20	Galaxy	AND	13	-		00 09.5	+33 19	89	E-SO			

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NGC 20	NGC 6	Galaxy	AND	13	13.8	1.7'	00 09.5	+33 19	89	E-SO			comp@ 3.8' PA122 0.5x0.2;B * 0.3' n
NGC 76	UGC 185	Galaxy	AND	13	12.7	1'	00 19.6	+29 56	89	Compac			compact;complex nucl region
NGC 304	UGC 573	Galaxy	AND	13	12.6	1.1'	00 56.1	+24 08	127	S pec			eruptive ?;sff of 2
NGC 477	UGC 886	Galaxy	AND	13	13.9	2.2'	01 21.3	+40 29	61	SBc			H III 577;2 main arms split into several secondary arms
NGC 746	UGC 1438	Galaxy	AND	13	13.9	1.9'	01 57.9	+44 55	61	Ir			
NGC 914	UGC 1887	Galaxy	AND	13	13.7	1.8'	02 26.1	+42 09	62	Sc			
NGC 980	UGC 2063	Galaxy	AND	13	13.4	1.7'	02 35.3	+40 56	62	SO			H III 572
NGC 996	UGC 2123	Galaxy	AND	13	13.8	1.4'	02 38.7	+41 39	62	Elliptical			
NGC 7618	UGC 12516	Galaxy	AND	13	13.2	1.2'	23 19.8	+42 51	88	Elliptical			
Abell 262		Gal CL	AND	13	-	100.8	01 52.7	+36 09	92	0 1 III			Includes 708, 753;rather loose and irregular; 40 galaxies
Abell 347		Gal CL	AND	13	-	56'	02 25.1	+41 52	62	0 1 II-III			0.5 degrees south preceding NGC 891; 32 galaxies
NGC 51	UGC 138	Galaxy	AND	13.1	13.2	1.7'	00 14.6	+48 15	59	S0 Pec			brightest in group of 6 including NGC 49 and NGC 48
NGC 262	UGC 499;M	Galaxy	AND	13.1	13.1	1.4'	00 48.8	+31 57	90	Sa			
NGC 573	UGC 1078	Galaxy	AND	13.1	10.9	0.4'	01 30.8	+41 15	61	Pec			Peculiar
NGC 668	UGC 1238	Galaxy	AND	13.1	13.8	1.8'	01 46.4	+36 28	92	Sb			
NGC 714	UGC 1358	Galaxy	AND	13.1	12.3	1.5'	01 53.5	+36 13	92	Sa			
NGC 801	UGC 1550	Galaxy	AND	13.1	13.8	3.1'	02 03.7	+38 16	92	Sc			P w NGC 797
NGC 834	UGC 1672	Galaxy	AND	13.1	12.3	1.1'	02 11.0	+37 40	92	Sbc			H III 567
NGC 847	NGC 846	Galaxy	AND	13.1	-	1.9'	02 12.2	+44 34	62	SBab			
UGC 2034	PGC 9759	Galaxy	AND	13.1	15.1	3.1'	02 33.7	+40 32	62	Ir+			
NGC 13	UGC 77	Galaxy	AND	13.2	13.5	2.3'	00 08.8	+33 26	89	Sab			H III 866;UGC 77
NGC 71	UGC 173;V	Galaxy	AND	13.2	13.4	1.5'	00 18.4	+30 04	89	S0 Pec			In compact group
NGC 140	UGC 311	Galaxy	AND	13.2	13.8	1.5'	00 31.3	+30 47	90	SBc Ring			
NGC 169	UGC 365;A	Galaxy	AND	13.2	-	1.8'	00 36.9	+23 59	126	Sb			Contact P w IC 1559
NGC 280	UGC 534	Galaxy	AND	13.2	13.8	1.7'	00 52.5	+24 21	127	SB Ring			H III 477;distorted;asym ecc nucl region;UGC 534
NGC 512	UGC 944	Galaxy	AND	13.2	12.4	1.6'	01 24.0	+33 54	91	Sab			
NGC 946	UGC 1979	Galaxy	AND	13.2	13.5	1.5'	02 30.6	+42 14	62	SO			Compact
AND I	PGC 2666	Galaxy	AND	13.2	-	4.0'	00 45.7	+38 03	90	E3			Andromeda Dwarf ;Member Local Group
UGC 12588	MCG +07-48	Galaxy	AND	13.2	14.2	1.9'	23 24.7	+41 20	88	Sdm			
NGC 5	UGC 62	Galaxy	AND	13.3	13.2	1.2'	00 07.8	+35 22	89	Elliptical			compact
NGC 93	UGC 209	Galaxy	AND	13.3	12.9	1.4'	00 22.1	+22 25	126	Sb			Part of NGC 80 group
NGC 226	UGC 459	Galaxy	AND	13.3	13	0.9'	00 42.9	+32 35	90	Pec			
NGC 562	UGC 1049	Galaxy	AND	13.3	13.4	1.3'	01 28.5	+48 23	61	Sc			
NGC 703	UGC 1346	Galaxy	AND	13.3	13.2	1.2'	01 52.7	+36 10	92	SO			H III 562;NGC 708 group
NGC 909	UGC 1872	Galaxy	AND	13.3	13	0.9'	02 25.4	+42 02	62	Elliptical			
NGC 27	UGC 96	Galaxy	AND	13.4	12.8	1.2'	00 10.5	+29 00	89	Sb			
NGC 653	UGC 1193	Galaxy	AND	13.4	12.1	1.5'	01 42.4	+35 38	92	Sab			
NGC 995	UGC 2118	Galaxy	AND	13.4	14	1.7'	02 38.5	+41 32	62	SO			
NGC 7707	UGC 12683	Galaxy	AND	13.4	13.6	1.3'	23 34.9	+44 18	88	E-SO			H III 579
UGC 1385	Mrk 2	Galaxy	AND	13.4	12.3	0.8'	01 54.9	+36 55	92	SBa			brightest of 3
NGC 39	UGC 114	Galaxy	AND	13.5	13.6	1.1'	00 12.3	+31 04	89	Sc			H III 861
NGC 70	UGC 174;I	Galaxy	AND	13.5	13.9	1.6'	00 18.4	+30 05	89	Sbc			In compact group w NGC 68 and 71
NGC 72	UGC 176;V	Galaxy	AND	13.5	13.3	1.1'	00 18.5	+30 02	89	SBab			In compact group
NGC 112	UGC 255	Galaxy	AND	13.5	12.7	1'	00 26.8	+31 42	90	Sc			
NGC 260	UGC 497	Galaxy	AND	13.5	13.2	0.8'	00 48.6	+27 41	127	Scp			NGC 252 group
NGC 537	NGC 523	Galaxy	AND	13.5	-	2.5'	01 25.3	+34 01	91	Sbc			H III 170
NGC 721	UGC 1376	Galaxy	AND	13.5	13.9	1.7'	01 54.8	+39 23	61	SBbc			
NGC 732	UGC 1406	Galaxy	AND	13.5	13.8	1.4'	01 56.5	+36 48	92	SO			
NGC 845	UGC 1695	Galaxy	AND	13.5	12.9	1.7'	02 12.3	+37 29	92	Sb			H III 604
NGC 999	IC 240	Galaxy	AND	13.5	13.1	0.9'	02 38.8	+41 40	62	SBa			
NGC 7440	UGC 12276	Galaxy	AND	13.5	13.9	1.4'	22 58.5	+35 48	123	SBa			
NGC 48	UGC 133	Galaxy	AND	13.6	13.7	1.6'	00 14.0	+48 14	59	SBbc			
NGC 243	MCG 5-2-	Galaxy	AND	13.6	12.5	0.9'	00 46.0	+29 58	90	S pec			
NGC 705	UGC 1345	Galaxy	AND	13.6	12.3	1.2'	01 52.7	+36 09	92	Sa			H III 564;NGC 708 group
NGC 11	UGC 73	Galaxy	AND	13.7	12.5	1.5'	00 08.7	+37 27	89	Sa			
NGC 49	UGC 136	Galaxy	AND	13.7	13.7	1.1'	00 14.4	+48 15	59	SO			NGC 51 group;in group of 6;NGC 51 the brightest
NGC 91		Star	AND	13.7	14		00 21.9	+22 22	126				Distorted;NGC 80 group
NGC 109	UGC 251	Galaxy	AND	13.7	13.8	1.1'	00 26.2	+21 48	126	SBa			f or 2
NGC 149	UGC 332	Galaxy	AND	13.7	13.5	1.2'	00 33.8	+30 43	90	SO			Compact
NGC 228	UGC 458	Galaxy	AND	13.7	13.8	1.2'	00 42.9	+23 30	126	SBab Ri			2nd of 3
NGC 710	UGC 1349	Galaxy	AND	13.7	14	1.3'	01 52.9	+36 03	92	Sc			
NGC 923	UGC 1915	Galaxy	AND	13.7	12.6	0.8'	02 27.6	+41 59	62	Sb			2nd of 3
NGC 7836	UGC 65	Galaxy	AND	13.7	12.7	0.9'	00 08.0	+33 04	89	Ir			
NGC 389	UGC 703	Galaxy	AND	13.8	13	1.3'	01 08.5	+39 42	60	Sa			

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NGC 531	UGC 1012	Galaxy	AND	13.8	13.6	1.8'	01 26.3	+34 45	91	SBO-a			
NGC 933	UGC 1956	Galaxy	AND	13.8	13.8	1.3'	02 29.3	+45 55	62	S			IC 1799 group
NGC 317B	NGC 317-2	Galaxy	AND	13.9	-	1.1'	00 57.7	+43 47	60	SBbc			
NGC 717	UGC 1363	Galaxy	AND	13.9	12.5	1.3'	01 53.9	+36 14	92	Sa			
NGC 920	UGC 1920	Galaxy	AND	13.9	14.3	1.5'	02 27.9	+45 57	62	SBab			IC 1799 group
PK 107-13.1	VY 2-3	Pln Neb	AND	13.9	7.8	4.6"	23 23.0	+46 54	88	2		14.7	
NGC 82		Star	AND	14	-		00 21.3	+22 28	126				
NGC 218	UGC 440	Galaxy	AND	14	14.1	1.1'	00 41.7	+36 22	90	S pec			
NGC 620	UGC 1150	Galaxy	AND	14	-	1'	01 37.0	+42 19	61	Compac			peculiar
NGC 704	UGC 1343	Galaxy	AND	14	-	0.6'	01 52.6	+36 08	92	S pec			H III 563;Double system;Symbiotic
NGC 7449	UGC 12292	Galaxy	AND	14	13.7	1'	22 59.6	+39 09	88	Elliptical			UGC 12292;Core mag=15.7
Av-Hunter 1		Opn CL	AND	-	-	47'	23 37.8	+48 34	59	IV 2pn:b	16	8.6	Includes variable star BM And
NGC 2997	ESO 434-35	Galaxy	ANT	9.4	13.7	9.2'	09 45.6	-31 11	365	SBc			H V 50
NGC 3223	IC 2571	Galaxy	ANT	11	13.3	4.1'	10 21.6	-34 16	366	Sb			
NGC 3100	NGC 3103	Galaxy	ANT	11.1	12.8	3.2'	10 00.7	-31 40	365	SBO			
NGC 3250	ESO 317-26	Galaxy	ANT	11.1	13	2.7'	10 26.5	-39 57	399	Elliptical			
NGC 3175	ESO 436-3	Galaxy	ANT	11.2	13.2	5.1'	10 14.7	-28 52	365	SBab			
NGC 3347	ESO 376-13	Galaxy	ANT	11.3	13.3	3.4'	10 42.8	-36 21	366	SBb			
NGC 3268	ESO 375-45	Galaxy	ANT	11.4	13.8	4'	10 30.0	-35 20	366	Elliptical			
NGC 3358	ESO 376-17	Galaxy	ANT	11.4	13.3	3.2'	10 43.6	-36 25	366	SBO-a			
NGC 3137	ESO 435-47	Galaxy	ANT	11.5	14.2	6.2'	10 09.1	-29 04	365	SBc			
NGC 3258	ESO 375-37	Galaxy	ANT	11.5	13.6	3.3'	10 28.9	-35 36	366	Elliptical			
NGC 3038	ESO 374- 2	Galaxy	ANT	11.6	12.7	2.5'	09 51.3	-32 45	365	Sb			
NGC 3087	ESO 374-15	Galaxy	ANT	11.6	13.3	2.5'	09 59.1	-34 14	365	E0			
NGC 3056	ESO 435- 7	Galaxy	ANT	11.7	12.3	2.1'	09 54.5	-28 18	365	SBO-a			
NGC 3095	ESO 435-26	Galaxy	ANT	11.7	13.7	3.6'	10 00.1	-31 33	365	SBc			
NGC 3281	ESO 375-55	Galaxy	ANT	11.7	13.4	3.2'	10 31.9	-34 51	366	Sab Ring			
NGC 3051	ESO 499-16	Galaxy	ANT	11.8	13.2	2.1'	09 54.0	-27 17	324	E-SO Ba			
NGC 3108	ESO 435-32	Galaxy	ANT	11.8	13.3	2.5'	10 02.5	-31 41	365	Sa			
NGC 3271	IC 2585	Galaxy	ANT	11.8	13.5	2.8'	10 30.4	-35 22	366	SBO			
NGC 3275	ESO 375-50	Galaxy	ANT	11.8	13.6	2.8'	10 30.9	-36 44	366	SBab			
NGC 3001	ESO 434-38	Galaxy	ANT	11.9	13.7	2.9'	09 46.3	-30 26	365	SBbc Ring			
IC 2522	ESO 374-10	Galaxy	ANT	11.9	13.6	2.8'	09 55.1	-33 08	365	SBc			
NGC 3224	ESO 375-13	Galaxy	ANT	12	13.2	1.9'	10 21.7	-34 42	366	Elliptical			
ESO 373-GC		Galaxy	ANT	12	13.6	5.8'	09 33.3	-33 02	364	Sc			
NGC 3103	NGC 3100	Galaxy	ANT	12.1	-	3.2'	10 00.7	-31 40	365	SBO			
IC 2511	IC 2512	Galaxy	ANT	12.1	12.5	2.9'	09 49.4	-32 50	365	SBab			
IC 2537	ESO 499-39	Galaxy	ANT	12.1	13.6	2.5'	10 03.9	-27 34	324	SBc			
NGC 3241	ESO 436-16	Galaxy	ANT	12.2	13.4	2.4'	10 24.3	-32 29	366	SBab			
NGC 3269	ESO 375-44	Galaxy	ANT	12.2	13.2	2.4'	10 30.0	-35 13	366	SBO-a Ring			
NGC 3449	ESO 376-25	Galaxy	ANT	12.2	13.3	3.3'	10 52.9	-32 56	366	SBab			
NGC 3084	IC 2528	Galaxy	ANT	12.3	12.9	1.7'	09 59.1	-27 08	324	SBab Ring			
NGC 3244	ESO 317-24	Galaxy	ANT	12.3	13.4	2.1'	10 25.5	-39 50	399	Sc			
NGC 3278	ESO 317-43	Galaxy	ANT	12.3	12.4	1.3'	10 31.6	-39 57	399	Sc			
NGC 2904	ESO 434- 6	Galaxy	ANT	12.4	12.6	1.5'	09 30.3	-30 23	364	E-SO Ba			
NGC 3089	ESO 435-24	Galaxy	ANT	12.4	12.9	1.8'	09 59.6	-28 20	365	SBb Ring			
NGC 3082	ESO 435-18	Galaxy	ANT	12.5	12.5	1.8'	09 58.9	-30 21	365	E-SO			
NGC 3250E	ESO 317-34	Galaxy	ANT	12.5	13.5	2.1'	10 29.0	-40 05	399	SBc			
NGC 3267	ESO 375-42	Galaxy	ANT	12.5	13.1	1.7'	10 29.8	-35 19	366	SBO			
NGC 3273	ESO 375-49	Galaxy	ANT	12.5	12.6	1.6'	10 30.5	-35 37	366	SBO			
NGC 3289	ESO 375-65	Galaxy	ANT	12.5	12.6	2.2'	10 34.1	-35 19	366	SBO-a			
NGC 3302	ESO 437- 7	Galaxy	ANT	12.5	13.1	1.6'	10 35.8	-32 22	366	SO			
NGC 3260	ESO 375-40	Galaxy	ANT	12.6	12.8	1.2'	10 29.1	-35 36	366	Elliptical			
NGC 3113	ESO 435-35	Galaxy	ANT	12.7	14.1	3.3'	10 04.4	-28 27	365	SBcd			
NGC 3120	ESO 374-29	Galaxy	ANT	12.8	13.5	1.8'	10 05.4	-34 13	365	SBbc			
NGC 3173	ESO 500-16	Galaxy	ANT	12.8	14.1	2.1'	10 14.6	-27 42	324	Sc			
NGC 3347A	ESO 376- 4	Galaxy	ANT	12.8	13	2'	10 40.3	-36 25	366	SBc			
NGC 3378	ESO 318-12	Galaxy	ANT	12.8	13.4	1.5'	10 46.7	-40 01	399	SBbc			
NGC 3125	ESO 435-41	Galaxy	ANT	13	12.8	1.1'	10 06.6	-29 56	365	E5			
NGC 3249	ESO 375-24	Galaxy	ANT	13.1	13.8	1.6'	10 26.4	-34 58	366	SBc			
NGC 3257	ESO 375-36	Galaxy	ANT	13.1	12.9	1'	10 28.8	-35 40	366	E-SO Ba			
NGC 3157	IC 2555	Galaxy	ANT	13.2	13.3	2.5'	10 11.7	-31 39	365	SBc			
NGC 3258A	ESO 375-32	Galaxy	ANT	13.2	12.4	1.1'	10 28.3	-35 27	366	SBO-a			
NGC 3258D	ESO 375-58	Galaxy	ANT	13.2	13.4	1.6'	10 31.9	-35 25	366	SBb			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3333	ESO 376- 2	Galaxy	ANT	13.2	12.7	2.1'	10 39.8	-36 02	366	SBbc			
NGC 3347B	ESO 376-10	Galaxy	ANT	13.2	14	3.2'	10 42.0	-36 56	366	SBcd			
NGC 3354	ESO 376-14	Galaxy	ANT	13.2	12.4	0.8'	10 43.0	-36 22	366	S pec			
NGC 3250C	ESO 317-28	Galaxy	ANT	13.3	13.2	1.7'	10 27.7	-40 00	399	Sab			
NGC 3250D	ESO 317-31	Galaxy	ANT	13.3	12.4	1.7'	10 28.0	-39 49	399	SO			
NGC 3281C	ESO 375-63	Galaxy	ANT	13.3	12.2	1.4'	10 33.0	-34 53	366	SO			
NGC 3276	ESO 317-40	Galaxy	ANT	13.4	12.7	1'	10 31.2	-39 57	399	SO			
NGC 3258C	ESO 375-53	Galaxy	ANT	13.7	13.6	1.1'	10 31.4	-35 13	366	SB Ring			
NGC 3281D	ESO 375-68	Galaxy	ANT	14	13.7	2'	10 34.3	-34 24	366	SBcd			
PK 248+ 8.1	He2- 10	Galaxy	ANT	-	-	0.2'	09 36.2	-26 24	323				Not a PLNNB;dwarf GALXY w emission lines
NGC 6709	OCL 100	Opn CL	AQL	6.7	-	13'	18 51.5	+10 21	205	III 2 m	40	9.1	
Cr 401		Opn CL	AQL	7	-	1'	19 38.4	+00 21	252	IV 2 m			
NGC 6755	OCL 96	Opn CL	AQL	7.5	-	15'	19 07.8	+04 16	251	IV 2 m	100	10.2	H VII 19
NGC 6738	OCL 101	Opn CL	AQL	8.3	-	15'	19 01.4	+11 36	206	IV 2 p			
NGC 6760	GCL 109	Glob CL	AQL	9.1	-	2.4'	19 11.2	+01 02	251	IX			
Pal 11		Glob CL	AQL	9.8	-	10'	19 45.3	-08 01	297	XI			
NGC 6756	OCL 99	Opn CL	AQL	10.6	-	4'	19 08.7	+04 42	251	I 2 m	40	13	H VII 62
NGC 6803	PK 46-4.1	Pln Neb	AQL	11	6.4	4"	19 31.3	+10 03	207	2a		14	
NGC 6814	MCG - 2-50-	Galaxy	AQL	11.2	13.4	3.5'	19 42.7	-10 20	297	SBbc Ri			H III 744
NGC 6790	PK 37-6.1	Pln Neb	AQL	11.4	5.9	2"	19 23.0	+01 31	251	2		16.1	Nearly stellar
NGC 6852	PK 42-14.1	Pln Neb	AQL	11.4	11.2	28"	20 00.7	+01 44	253	4		17.9	
NGC 6781	PK 41-2.1	Pln Neb	AQL	11.8	12.8	111"	19 18.5	+06 32	206	3b(3)		16.9	H III 743;PK41-2.1;opposite dark lane from Altair
NGC 6724		Opn CL	AQL	12	-	6.2'	18 56.8	+10 26	206				
NGC 6741	PK 33-2.1	Pln Neb	AQL	12	7	9"	19 02.6	-00 27	251	4		14.7	Phantom Streak Nebula
NGC 6751	PK 29-5.1	Pln Neb	AQL	12	9.2	20"	19 05.9	-06 00	296	3		13	Annular
NGC 6837	OCL 108	Opn CL	AQL	12	-	6'	19 53.5	+11 41	207	IV 1p :b			H VIII 18
IC 4846	PK 27-9.1	Pln Neb	AQL	12	4.5	2"	19 16.5	-09 03	296	2		13.7	
IC 5006		Star	AQL	12	-		20 23.7	+06 28	208				
PK 36- 1.1	Sh2- 71	Pln Neb	AQL	12.2	-	2.6'	19 02.0	+02 09	251	3b(3)		13.8	
NGC 6906	UGC 11548	Galaxy	AQL	12.3	12.4	1.6'	20 23.6	+06 27	208	SBbc			
NGC 6749	GCL 107	Glob CL	AQL	12.4	-	6.3'	19 05.3	+01 54	251				Globular absorbed by 7 mags;
NGC 6804	PK 45-4.1	Pln Neb	AQL	12.4	11	63"	19 31.6	+09 14	207	4(2)		14.2	PK45-4.1;Herschel misclassified this as open cl
NGC 6926	UGC 11588	Galaxy	AQL	12.4	13.3	2'	20 33.1	-02 02	254	SBc/P			H III 142;Distorted;UGC 11588
PK 31-10.1	M3-34	Pln Neb	AQL	12.4	-	6"	19 27.1	-06 35	296	2		16.3	
PK 52- 2.2	Merrill 1-1	Pln Neb	AQL	12.6	7.7	8.0"	19 39.1	+15 56	207	4		14.1	Stellar
PK 45- 2.1	VY 2-2	Pln Neb	AQL	12.7	9.6	14.0"	19 24.4	+09 54	206	1		14.6	
PK 52- 4.1	M1-74	Pln Neb	AQL	12.9	-	9"	19 42.3	+15 09	207	1			Very difficult
PK 32- 2.1	M1-66	Pln Neb	AQL	13	9.4	10.0"	18 58.4	-01 04	251	1			
NGC 6821	MCG - 1-50-	Galaxy	AQL	13.1	13.1	1.3'	19 44.4	-06 50	297	SBcd			
NGC 6915	IRAS20251-	Galaxy	AQL	13.1	-	1.5'	20 27.8	-03 05	253	Sab			
NGC 6778	PK 34-6.1	Pln Neb	AQL	13.3	9.1	19"	19 18.4	-01 36	251	3(3)		14.8	
NGC 6785	PK 34-6.1	Pln Neb	AQL	13.3	-	25"	19 18.4	-01 36	251	3(3)			
PK 26-11.1	Nassau 2	Pln Neb	AQL	13.3	-	16.0"	19 18.7	-11 06	296			14	
NGC 6929	MCG 0-52-	Galaxy	AQL	13.4	12.6	0.8'	20 33.4	-02 02	254	Sa			
NGC 6922	UGC 11574	Galaxy	AQL	13.5	13.7	1.3'	20 29.9	-02 12	253	Sc			
NGC 6941	MCG - 1-52-	Galaxy	AQL	13.5	-	2'	20 36.4	-04 37	254	Sb			
PK 38- 3.3	K2-11	Pln Neb	AQL	13.6	-	13"	19 14.3	+03 35	251	3b		19.4	
NGC 6901	IC 1316	Galaxy	AQL	13.7	13.4	1.1'	20 22.4	+06 26	208	SBab			IC5000=IC1316
PK 51- 3.1	M1-73	Pln Neb	AQL	13.7	8.5	5.4"	19 41.2	+14 57	207	2		14.5	
NGC 6807	PK 42-6.1	Pln Neb	AQL	13.8	4.8	2"	19 34.6	+05 41	207	2		13.9	
NGC 6772	PK 33-6.1	Pln Neb	AQL	14	-	75"	19 14.6	-02 42	251	3b(2)		18.1	H IV 14;PK33-6.1
NGC 6900	MCG 0-52-	Galaxy	AQL	14	-	1'	20 21.6	-02 34	253	Sb			
PK 38- 3.2	M1-69	Pln Neb	AQL	14	-	5"	19 13.9	+03 38	251	1			
Berk 43		Opn CL	AQL	-	-	5'	19 15.5	+11 17	206	II 1m:b	40	15	
Berk 45		Opn CL	AQL	-	-	4'	19 19.1	+15 43	206	II 1p :b	20	15	
Berk 79		Opn CL	AQL	-	-	10'	18 44.9	-01 09	250	II 1r :b	60	15	
Berk 80		Opn CL	AQL	-	-	4'	18 54.3	-01 13	250	II 1p :b	20	15	
Berk 81		Opn CL	AQL	-	-	7'	19 01.7	-00 27	251	II 2r :b	80	15	
Berk 82		Opn CL	AQL	-	-	4'	19 11.3	+13 07	206	III 1p :b	20	14	
Czernik 39		Opn CL	AQL	-	-	6'	19 07.6	+04 18	251	III 2m :b			
Do 35		Opn CL	AQL	-	-	7'	19 25.4	+11 40	206	IV 2p :b	10		
King 25		Opn CL	AQL	-	-	5'	19 24.5	+13 42	206	III 2m :b	40		
King 26		Opn CL	AQL	-	-	1'	19 29.0	+14 52	207	II 1p :b	15		
Sh2- 72		Brn Neb	AQL	-	-	25'	19 03.8	+02 19	251	E			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
B127;129-30	LDN 544	Drk Neb	AQL	--	--	20'	19 01.6	-05 26	251	5 Ir			LDN 544;549;542; Curved;lying north of 12 Aql
B132;328	LDN 567	Drk Neb	AQL	--	--	16'	19 04.1	-04 28	251	6 Ir			40' north preceding Lamba AQL
B133	LDN 531	Drk Neb	AQL	--	--	10'	19 06.1	-06 50	296	6 Co G			Cometary; On Scutum star cloud
B134	LDN 543	Drk Neb	AQL	--	--	6'	19 06.9	-06 14	296	6 C G			1.4 deg south of Lamba Aql
B135-6	LDN 581	Drk Neb	AQL	--	--	50'	19 07.4	-03 55	251	6 Ir			Dusty spots; 1 deg north following Lamba Aql
B137-8	LDN 618;62	Drk Neb	AQL	--	--	180'	19 15.6	+00 13	251	3 Ir			Long;curved lane on Scutum star cloud
B139	LDN 619	Drk Neb	AQL	--	--	10'	19 18.1	-01 28	251	5 E G			At south tip of B137-8; magnitude 10 star on SE edge
B142-3	LDN 688;694	Drk Neb	AQL	--	--	80'	19 40.7	+10 57	207	6 Ir			Barnard's famous E; Narrow lanes
B334;336-7	LDN 701;702	Drk Neb	AQL	--	--	40'	19 36.8	+12 27	207	4 Ir			2 deg north preceding B142-3
B335	LDN 663	Drk Neb	AQL	--	--	4'	19 36.9	+07 34	207	6 E G			3.5 deg preceding and 1.2 deg south of Altair
LDN 582		Drk Neb	AQL	--	--	60'	18 52.6	-01 56	250	5 Ir			N of Scutum star cloud; elongated E and W.
LDN 617		Drk Neb	AQL	--	--	180'	18 57.5	+01 04	251	5 Ir			Irregular shape; elongated E and W
LDN 673		Drk Neb	AQL	--	--	55'	19 20.9	+11 16	206	6 Ir			8 degrees north preceding Altair;filamentary
LDN 684		Drk Neb	AQL	--	--	50'	19 21.8	+12 26	206	5 Ir			Lies north of dark neb LDN 673
NGC 7293	PK 36-57.1	Pln Neb	AQR	6.3	13.6	960"	22 29.6	-20 50	347	4(3)		13.5	Helix Nebula ;low surf brightness
M 2	NGC 7089	Glob CL	AQR	6.5	11	11.7"	21 33.5	-00 49	255	II			Lord Rosse-Dark area near core;* mags 13...
NGC 7009	PK 37-34.1	Pln Neb	AQR	8.3	6.2	28"	21 04.2	-11 22	300	4(6)		12.9	Saturn Nebula ;H IV 1;bright blue-green disk
M 72	NGC 6981	Glob CL	AQR	9.2	12	5.9'	20 53.5	-12 32	299	IX			3 deg WSW of NGC 7009
M 73	NGC 6994	Opn CL	AQR	9.7	-	2.8'	20 59.0	-12 38	299	IV 1 p :b4	10		4 or 5 10th mag stars; Messier saw neb but there is no.
NGC 7727	MCG - 2-60-	Galaxy	AQR	10.6	13.5	4.7'	23 39.9	-12 18	304	SBap			H I 111;Faint outer arms ext to 5'
NGC 7606	MCG - 2-59-	Galaxy	AQR	10.8	13.3	4.2'	23 19.1	-08 29	304	Sbc			H I 104
NGC 7184	ESO 601- 9	Galaxy	AQR	10.9	13.1	5.9'	22 02.7	-20 49	346	SBc Ring			H II 1;With Saturn-like inner ring
NGC 7377	ESO 534-26	Galaxy	AQR	11.1	13.1	4.1'	22 47.8	-22 19	348	SBO-a			H II 598
NGC 7492	GCL 125	Glob CL	AQR	11.2	-	4.3'	23 08.4	-15 37	303	XII			H III 558
NGC 7723	MCG - 2-60-	Galaxy	AQR	11.2	13.3	3.5'	23 39.0	-12 58	304	SBb			H I 110
NGC 7585	MCG - 1-59-	Galaxy	AQR	11.4	13	3.1'	23 18.0	-04 39	259	Sa			H II 236
NGC 7371	MCG - 2-58-	Galaxy	AQR	11.5	12.9	1.7'	22 46.1	-11 00	303	SBO-a			H II 477;Faint outer ring
NGC 7721	MCG - 1-60-	Galaxy	AQR	11.6	13.2	3.1'	23 38.8	-06 31	304	Sc			H II 432
NGC 7183	ESO 601- 8	Galaxy	AQR	11.9	13.4	3.8'	22 02.4	-18 55	346	Sa			H II 595
NGC 7284	ESO 533-31	Galaxy	AQR	11.9	13.1	2.3'	22 28.6	-24 51	347	SBO			H II 469
NGC 7285	ESO 533-32	Galaxy	AQR	11.9	13.1	2.4'	22 28.6	-24 50	347	SBa			
NGC 7392	ESO 603-22	Galaxy	AQR	11.9	12.8	2.2'	22 51.8	-20 37	348	SBbc			H II 702
NGC 7600	MCG - 1-59-	Galaxy	AQR	11.9	12.9	3.1'	23 18.9	-07 35	304	E-SO			H II 431
NGC 7218	MCG - 3-56-	Galaxy	AQR	12	13	2.6'	22 10.2	-16 40	302	SBc			H II 897;Central mass appears triple
NGC 7391	UGC 12211	Galaxy	AQR	12	13	1.7'	22 50.6	-01 33	258	Elliptical			H II 443
NGC 6962	UGC 11628	Galaxy	AQR	12.1	14	2.9'	20 47.3	+00 19	254	SBab			H II 426;P w NGC 6964 at 2' PA 135;brst in group
NGC 7252	ESO 533-15	Galaxy	AQR	12.1	13.2	2.1'	22 20.7	-24 41	347	SBO			H III 458;F extension on west side
NGC 7171	MCG - 2-56-	Galaxy	AQR	12.2	13.6	2.3'	22 01.0	-13 16	301	SBb			H III 692
NGC 7302	IC 5228	Galaxy	AQR	12.3	12.9	2.1'	22 32.4	-14 07	302	E-SO			H IV 31
NGC 7341	ESO 534-11	Galaxy	AQR	12.4	13.1	2.4'	22 39.1	-22 40	347	SBab Ri			
NGC 7416	MCG - 1-58-	Galaxy	AQR	12.4	13.3	3.2'	22 55.7	-05 30	258	SBb			
NGC 7167	ESO 532- 9	Galaxy	AQR	12.5	13.2	1.7'	22 00.5	-24 38	346	SBc			
NGC 7309	MCG - 2-57-	Galaxy	AQR	12.5	13.7	2'	22 34.4	-10 21	302	SBc			H II 476;3 arm spiral
NGC 7359	ESO 534-22	Galaxy	AQR	12.5	12.7	2.4'	22 44.8	-23 41	348	SO			
NGC 7180	ESO 601- 6	Galaxy	AQR	12.6	12.7	1.5'	22 02.3	-20 33	346	SO			H III 693
NGC 7185	ESO 601-10	Galaxy	AQR	12.6	13.8	2.3'	22 02.9	-20 28	346	E-SO Ba			
NGC 7247	ESO 533- 8	Galaxy	AQR	12.6	12.7	1.4'	22 17.7	-23 44	347	SBb			
NGC 7364	UGC 12174	Galaxy	AQR	12.6	13.1	1.8'	22 44.4	-00 10	258	Sa			H II 442;UGC 12174
NGC 7443	MCG - 2-58-	Galaxy	AQR	12.6	12.2	1.4'	23 00.1	-12 49	303	Sa			H II 450
NGC 7081	UGC 11759	Galaxy	AQR	12.7	13.2	1.3'	21 31.4	+02 29	255	Sb			H III 859;UGC 11759
NGC 7444	MCG - 2-58-	Galaxy	AQR	12.8	12.8	1.7'	23 00.1	-12 50	303	SO			H II 451
NGC 7001	UGC 11663	Galaxy	AQR	12.9	13.3	1.4'	21 01.1	-00 12	254	Sab			
NGC 7300	MCG - 2-57-	Galaxy	AQR	12.9	13.5	2.1'	22 31.0	-14 00	302	SBb			
NGC 7365	ESO 603-10	Galaxy	AQR	12.9	13.2	1.5'	22 45.2	-19 57	348	E-SO			
NGC 7576	MCG - 1-59-	Galaxy	AQR	12.9	12.9	1.3'	23 17.4	-04 44	259	Sa			H II 454
NGC 7736	ESO 606- 5	Galaxy	AQR	12.9	13.8	1.6'	23 42.4	-19 27	349	SO			
NGC 6964	UGC 11629	Galaxy	AQR	13	13.8	1.7'	20 47.4	+00 18	254	E4p			H II 427
NGC 7251	MCG - 3-57-	Galaxy	AQR	13	-	1.9'	22 20.5	-15 46	302	Sa			H III 933
NGC 7351	MCG - 1-57-	Galaxy	AQR	13	-	1.7'	22 41.4	-04 27	258	SO			
NGC 7378	MCG - 2-58-	Galaxy	AQR	13	-	1.5'	22 47.8	-11 49	303	Sab Ring			
NGC 7450	MCG - 2-58-	Galaxy	AQR	13	-	1.8'	23 00.8	-12 55	303	Sa			
NGC 7665	MCG - 2-59-	Galaxy	AQR	13	-	0.8'	23 27.2	-09 23	304	Sm			H III 438
NGC 7709	MCG - 3-60-	Galaxy	AQR	13	-	2.3'	23 35.5	-16 42	304	SBO			
NGC 7717	MCG - 3-60-	Galaxy	AQR	13	-	1.4'	23 37.7	-15 07	304	SBO-a			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 7724	MCG - 2-60-	Galaxy	AQR	13	-	1.5'	23 39.1	-12 13	304	Sb			
NGC 6967	UGC 11630	Galaxy	AQR	13.1	12.6	0.9'	20 47.6	+00 25	254	Sa			
NGC 7065A	MCG - 1-54-	Galaxy	AQR	13.1	13.7	1.5'	21 27.0	-07 01	300	SBc			
NGC 7077	UGC 11755	Galaxy	AQR	13.1	12.5	0.8'	21 30.0	+02 25	255	Elliptical			
NGC 7256	NGC 7254	Galaxy	AQR	13.1	12.8	1.3'	22 22.6	-21 44	347	SBb			
NGC 6977	MCG - 1-53-	Galaxy	AQR	13.2	13.2	1.3'	20 52.5	-05 45	299	SBb			
NGC 7188	ESO 601-11	Galaxy	AQR	13.2	13.3	1.6'	22 03.5	-20 19	346	SBbc			
NGC 7301	ESO 602-23	Galaxy	AQR	13.2	12.4	1'	22 30.6	-17 34	347	SBab			
NGC 6978	MCG - 1-53-	Galaxy	AQR	13.3	13.1	1.5'	20 52.6	-05 43	299	Sb			
NGC 7198	MCG 0-56-	Galaxy	AQR	13.3	13.6	1.5'	22 05.2	-00 39	256	SO			
NGC 7656	ESO 605- 5	Galaxy	AQR	13.3	13.5	1.2'	23 24.5	-19 04	349	SO			
NGC 7047	UGC 11712	Galaxy	AQR	13.4	12.9	1.2'	21 16.5	-00 50	255	Sb Ring			
NGC 7069	UGC 11747	Galaxy	AQR	13.4	13.4	1.3'	21 28.1	-01 39	255	E-SO			
NGC 6945	MCG - 1-52-	Galaxy	AQR	13.5	-	1.6'	20 39.0	-04 58	254	E-SO			
NGC 7189	UGC 11882	Galaxy	AQR	13.5	12.9	1'	22 03.3	+00 34	256	SBb			
NGC 7220	ESO 532-28	Galaxy	AQR	13.5	12.8	0.9'	22 11.5	-22 57	347	SBO			
NGC 6959	ZWG 374. 13	Galaxy	AQR	13.7	11.8	0.6'	20 47.1	+00 26	254	SO			
NGC 6961	ZWG 374. 14	Galaxy	AQR	13.7	12.3	0.6'	20 47.2	+00 22	254	Elliptical			
NGC 7257	NGC 7260	Galaxy	AQR	13.7	-	1.9'	22 22.6	-04 07	257	SBbc			
NGC 7298	MCG - 2-57-	Galaxy	AQR	13.7	14	1.3'	22 30.8	-14 11	302	Sc			
NGC 7108	NGC 7111	Galaxy	AQR	13.8	-	1.4'	21 41.9	-06 43	301	Elliptical			
NGC 7222	UGC 11934	Galaxy	AQR	13.8	14	1.2'	22 10.9	+02 06	257	SBab			p of 2
NGC 7215	ZWG 377. 3	Galaxy	AQR	13.9	12.7	1.1'	22 08.6	+00 31	257	SO			
NGC 7254	NGC 7256	Galaxy	AQR	13.9	-	1.3'	22 22.6	-21 44	347	SBb			
NGC 7310	ESO 533-49	Galaxy	AQR	13.9	13.3	0.9'	22 34.6	-22 29	347	SBbc Ri			
MCG -02-53	Aquarius Dw	Galaxy	AQR	13.9	14.8	2.2'	20 46.8	-12 51	299	IBm			Member of Local Group , aquarius dwarf
NGC 6965	UGC 11630	Galaxy	AQR	14	13	0.7'	20 47.3	+00 29	254	SO			P w NGC 6963 at 5.5' PA 323
NGC 6968	MCG - 2-53-	Galaxy	AQR	14	-	1.5'	20 48.5	-08 22	299	E-SO			
NGC 6976	NGC 6975	Galaxy	AQR	14	14.2	1.3'	20 52.4	-05 46	299	Sbc			
NGC 7010	IC 5082	Galaxy	AQR	14	-	1.9'	21 04.7	-12 20	300	Elliptical			
NGC 7051	MCG - 2-54-	Galaxy	AQR	14	-	1.4'	21 19.9	-08 47	300	Sa			
NGC 7121	MCG - 1-55-	Galaxy	AQR	14	-	1.1'	21 44.9	-03 37	256	Sbc			
NGC 7165	MCG - 3-56-	Galaxy	AQR	14	-	0.9'	21 59.4	-16 31	301	Sab Ring			H III 930
NGC 7181	ZWG 377. 14	Galaxy	AQR	14	13.4	1'	22 01.7	-01 58	256	SO			
NGC 7230	MCG - 3-56-	Galaxy	AQR	14	-	0.9'	22 14.2	-17 05	347	SBbc			H III 931
NGC 7260	NGC 7257	Galaxy	AQR	14	-	1.9'	22 22.6	-04 07	257	SBbc			
NGC 7269	MCG - 2-57-	Galaxy	AQR	14	-	1'	22 25.8	-13 10	302	Sb			
NGC 7308	IC 1448	Galaxy	AQR	14	-	1.2'	22 34.5	-12 56	302	E-SO			
NGC 7344	MCG - 1-57-	Galaxy	AQR	14	-	1.5'	22 39.6	-04 10	257	Sab			
NGC 7393	MCG - 1-58-	Galaxy	AQR	14	-	2'	22 51.6	-05 33	303	SBc/P			H II 453
NGC 7399	MCG - 2-58-	Galaxy	AQR	14	-	0.9'	22 52.7	-09 16	303	Sa			
NGC 7573	ESO 604- 8	Galaxy	AQR	14	-	1.3'	23 16.4	-22 09	349	SBc			
NGC 7592	MCG - 1-59-	Galaxy	AQR	14	-	1.1'	23 18.4	-04 25	259	Sa			H III 186;colliding pair
NGC 7759	MCG - 3-60-	Galaxy	AQR	14	-	1.3'	23 48.9	-16 32	260	SBO			
NGC 7761	IC 5361	Galaxy	AQR	14	-	1.2'	23 51.5	-13 23	260	SO			
Ced 211		Brn Neb	AQR	-	-	2'	23 43.8	-15 17	304	E			Neb excited by companion to Mira variable R Aqr
NGC 6193	OCL 975	Opn CL	ARA	5.2	-	15'	16 41.3	-48 46	407	II 3 p n	14	5.7	In Ara OB1;30* mags 6...
NGC 6397	Lac III-11	Glob CL	ARA	5.3	-	25.7'	17 40.7	-53 40	434	IX		10	Poss nearest glob
NGC 6250	OCL 991	Opn CL	ARA	5.9	-	10'	16 57.9	-45 56	407	IV 3 p	60	7.6	
Hogg 22		Opn CL	ARA	6.7	-	1.5'	16 46.7	-47 05	407	IV3p	8	7.3	
IC 4651	OCL 987	Opn CL	ARA	6.9	-	10'	17 24.8	-49 56	408	II 3 m	80	8.9	Not much condensation--Hartung;70 * mags 10..14
NGC 6208	OCL 964	Opn CL	ARA	7.2	-	18'	16 49.5	-53 44	433	II 1 m	60	10	
NGC 6200	OCL 978	Opn CL	ARA	7.4	-	12'	16 44.1	-47 28	407	III 2 m	40	9.2	In Ara OB2
NGC 6352	Dunlop 417	Glob CL	ARA	7.8	-	7.1'	17 25.5	-48 25	408	XI		12	globular ESO 228-SC003
NGC 6204	OCL 982	Opn CL	ARA	8.2	-	5'	16 46.2	-47 01	407	I 2 p	45	9.8	In Ara OB2
Cr 307		Opn CL	ARA	9.2	-	6'	16 35.3	-50 58	433	III 2 p		11.1	
NGC 6221	ESO 138- 3	Galaxy	ARA	9.9	12.1	3.9'	16 52.8	-59 13	433	SBc			
NGC 6253	OCL 972	Opn CL	ARA	10.2	-	4'	16 59.1	-52 43	433	I 3 m	30	13	
NGC 6215	ESO 137-46	Galaxy	ARA	11.5	12.8	2.2'	16 51.1	-59 00	433	Sc			
PK 342-14.1	Shapley 3	Pln Neb	ARA	11.9	12.4	36"	18 07.4	-51 03	434			13.2	
NGC 6326	PK 338-8.1	Pln Neb	ARA	12	7.7	15"	17 20.8	-51 45	433	3b		13.5	
IC 1266	PK 345-8.1	Pln Neb	ARA	12.3	-	13"	17 45.6	-46 05	408	4		11.1	Also Thackeray 1
IC 4642	PK 334-9.1	Pln Neb	ARA	12.4	9.6	15"	17 11.8	-55 24	433	4		13.6	
PK 336- 6.1	Peimbert 14	Pln Neb	ARA	12.6	-	8"	17 06.3	-52 30	433			16.5	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
PK 342- 6.1	Cannon 1-4	Pln Neb	ARA	12.9	8.5	10"	17 27.9	-46 56	408			16.2	
NGC 6305	ESO 138-19	Galaxy	ARA	13.2	-	1.8'	17 18.0	-59 10	433	E-S0 B			
PK 336- 5.1	He2-186	Pln Neb	ARA	13.3	-	3"	16 59.6	-51 42	433			16.6	
NGC 6215A	ESO 138- 4	Galaxy	ARA	13.4	13	1.5'	16 52.8	-58 57	433	Sb			
NGC 6188	ESO 226-EN	Brn Neb	ARA	-	-	20'	16 40.1	-48 40	407	E+R			NGC 6193 and triple* h 4876 invl
Harvard 13		Opn CL	ARA	-	-	14'	17 03.9	-48 07	433	IV 1 p	15	13	
Hogg 20		Opn CL	ARA	-	-	4'	16 44.4	-47 33	407	III 1p :a			
Hogg 21		Opn CL	ARA	-	-	4'	16 45.6	-47 44	407		12		
Lynga 11		Opn CL	ARA	-	-	4'	16 38.1	-46 19	407	III 2p :b	15		
Lynga 12		Opn CL	ARA	-	-	5'	16 46.0	-50 46	407	III 2m :b	35		
Ru 120		Opn CL	ARA	-	-	3.4'	16 35.2	-48 17	407	II 3p :a	11	12	
Ru 121		Opn CL	ARA	-	-	8'	16 41.8	-46 09	407	IV 1m:b	35	13	
vdBH 81		Brn Neb	ARA	-	-	6'	17 04.0	-51 05	433	R			
NGC 772	UGC 1466	Galaxy	ARI	10.3	13.9	7.5'	01 59.3	+19 00	129	Sb			H I 112;Several tightly coiled arms br on NW side
NGC 821	UGC 1631	Galaxy	ARI	10.7	12.2	2.4'	02 08.4	+11 00	174	E2			H I 152;UGC 1631
NGC 691	UGC 1305	Galaxy	ARI	11.4	13.7	3.4'	01 50.7	+21 46	128	Sbc			H II 617;NGC 697 group;rare;smoother than usual Sc
NGC 972	UGC 2045	Galaxy	ARI	11.4	13.2	3.3'	02 34.2	+29 19	93	Sab			H II 211;coarse spiral pattern w irregular dust lanes
NGC 1156	UGC 2455	Galaxy	ARI	11.7	13.9	3.3'	02 59.7	+25 14	131	Ir+			H II 619;rrr dwarf w traces of spiral struct;bar-like core
NGC 680	UGC 1286	Galaxy	ARI	11.9	13.1	1.8'	01 49.8	+21 58	128	SOp			H II 229;UGC 1286
NGC 877	UGC 1768	Galaxy	ARI	11.9	13.4	2.4'	02 18.0	+14 33	174	SBbc			H II 246;Brightest in group of NGC 870;871;876;877
NGC 697	NGC 674	Galaxy	ARI	12	13.9	4.4'	01 51.3	+22 21	128	SBbc			H III 179;brightest in group
NGC 1012	UGC 2141	Galaxy	ARI	12	12.9	2.5'	02 39.2	+30 09	93	Sa			high surf brtns;fragmts of spiral arms;lge nucleus
NGC 1024	UGC 2142	Galaxy	ARI	12.1	13.8	3.9'	02 39.2	+10 51	175	Sab			brtst in grp;thin circ arms;* se superimp on wisp
NGC 1134	UGC 2365	Galaxy	ARI	12.1	12.8	2.5'	02 53.7	+13 01	175	Sb			;material eject from nucl;splash appearance on w side
NGC 677	UGC 1275	Galaxy	ARI	12.2	13.7	2'	01 49.2	+13 03	173	Elliptical			comp@ 2.9' PA324 0.7'x0.5'
NGC 678	UGC 1280	Galaxy	ARI	12.2	13.4	4.1'	01 49.4	+22 00	128	SBb			H II 228;In NGC 697 group;UGC 1280
NGC 918	UGC 1888	Galaxy	ARI	12.2	14.2	3.5'	02 25.8	+18 30	130	SBc			
NGC 776	UGC 1471	Galaxy	ARI	12.4	13.4	1.7'	01 59.9	+23 39	129	SBb			
NGC 924	UGC 1912	Galaxy	ARI	12.4	13.4	2.3'	02 26.8	+20 30	130	SO			H III 474;sp of 2;NGC 932 group
NGC 938	UGC 1947	Galaxy	ARI	12.4	13.1	1.6'	02 28.6	+20 17	130	Elliptical			NGC 932 group
NGC 976	UGC 2042	Galaxy	ARI	12.4	12.9	1.6'	02 34.0	+20 59	130	Sbc			
NGC 990	UGC 2089	Galaxy	ARI	12.4	13.5	1.8'	02 36.3	+11 39	175	Elliptical			H III 557
NGC 1056	UGC 2183	Galaxy	ARI	12.4	13.3	2.4'	02 42.8	+28 34	93	Sa			H III 584;v lge nucl bulge;strong abs along edge
NGC 673	UGC 1259	Galaxy	ARI	12.6	13.8	2.1'	01 48.4	+11 31	173	Sc			H II 589;2 B Main arms;UGC 1259
NGC 803	UGC 1554	Galaxy	ARI	12.6	13.9	3'	02 03.7	+16 02	174	Sc			H III 208;UGC 1554
NGC 992	UGC 2103	Galaxy	ARI	12.6	11.9	0.9'	02 37.4	+21 06	130	Sc			
NGC 794	IC 191;H III	Galaxy	ARI	12.7	13	1.3'	02 02.5	+18 22	129	E-SO			UGC 1528
NGC 674	NGC 697	Galaxy	ARI	12.8	-	4.4'	01 51.3	+22 21	128	SBbc			
NGC 695	UGC 1315	Galaxy	ARI	12.8	12.1	0.5'	01 51.2	+22 35	128	SO			H II 618;Peculiar;NGC 697 group;UGC 1315
NGC 765	UGC 1455	Galaxy	ARI	12.8	14.9	2.7'	01 58.8	+24 54	129	SBbc Rii			low surface br outside of 2.3'
NGC 820	UGC 1629	Galaxy	ARI	12.8	12.7	1.4'	02 08.4	+14 21	174	Sb			
NGC 984	UGC 2059	Galaxy	ARI	12.8	14.6	3'	02 34.7	+23 25	130	Sa			
NGC 716	IC 1743	Galaxy	ARI	12.9	13.1	1.8'	01 53.0	+12 42	174	SBa			
NGC 770	UGC 1463	Galaxy	ARI	12.9	12.9	1.1'	01 59.2	+18 57	129	E3			
NGC 935	UGC 1937	Galaxy	ARI	12.9	13.4	1.7'	02 28.2	+19 36	130	Sc			P w IC 1801;contact
NGC 962	UGC 2013	Galaxy	ARI	12.9	-	1.7'	02 32.7	+28 04	93	Elliptical			
UGC 2082	MCG +04-07	Galaxy	ARI	12.9	14.5	6.2'	02 36.3	+25 26	130	Sc			
NGC 774	UGC 1469	Galaxy	ARI	13	13.5	1.5'	01 59.6	+14 00	174	SO			H III 214
NGC 781	UGC 1482	Galaxy	ARI	13	12.2	1.5'	02 00.1	+12 39	174	Sb			H III 215
NGC 711	UGC 1342	Galaxy	ARI	13.1	13.2	1.6'	01 52.5	+17 31	129	SO			
NGC 792	UGC 1517	Galaxy	ARI	13.1	13.6	1.7'	02 02.3	+15 43	174	SO			
NGC 1029	UGC 2149	Galaxy	ARI	13.1	12.3	1.4'	02 39.6	+10 48	175	Sa			In NGC 1024 group
IC 163	UGC 1276	Galaxy	ARI	13.1	13.4	1.8'	01 49.3	+20 43	128	SBd			
NGC 671	UGC 1247	Galaxy	ARI	13.2	12.7	1.5'	01 47.0	+13 07	173	S pec			
NGC 719	IC 1744	Galaxy	ARI	13.2	13.6	1.4'	01 53.6	+19 50	129	SO			
NGC 817	UGC 1611	Galaxy	ARI	13.2	11.5	0.7'	02 07.6	+17 12	129	Pec			very high surface br
NGC 1030	UGC 2153	Galaxy	ARI	13.2	13.1	1.6'	02 39.8	+18 01	130	Sbc			H III 581;wedge-shaped;possible edge-on spiral
NGC 1036	IC 1828	Galaxy	ARI	13.2	13.5	1.5'	02 40.5	+19 18	130	Pec			H III 475;asymmetric;B prob complex center region
NGC 786	UGC 1506	Galaxy	ARI	13.3	12.2	0.7'	02 01.4	+15 39	174	S pec			
NGC 722	UGC 1379	Galaxy	ARI	13.4	13.1	1.7'	01 54.8	+20 42	129	Sbc			
NGC 927	UGC 1908	Galaxy	ARI	13.4	13.7	1.2'	02 26.6	+12 09	175	SBc			f of 2;3 B arms
NGC 932	NGC 930	Galaxy	ARI	13.4	-	1.9'	02 27.9	+20 20	130	Sa Ring			H II 489
NGC 683	UGC 1288	Galaxy	ARI	13.5	13.3	1'	01 49.8	+11 42	173	S pec			spp of 2
UGC 1551	PGC 7841	Galaxy	ARI	13.5	14.4	2.8'	02 03.6	+24 04	129	SBdm			faint comp 3.1' PA 155

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 871	UGC 1759	Galaxy	ARI	13.6	12.8	1.1'	02 17.2	+14 33	174	SBc			NGC 877 group;P w NGC 870
NGC 882	UGC 1789	Galaxy	ARI	13.6	13.1	1.2'	02 19.7	+15 49	174	SO			
NGC 904	UGC 1852	Galaxy	ARI	13.6	13.6	1.2'	02 24.1	+27 21	130	Elliptical			sf of 2
NGC 1054	MCG 3-7-	Galaxy	ARI	13.6	12.4	0.9'	02 42.3	+18 13	130	Sbc			
NGC 694	UGC 1310	Galaxy	ARI	13.7	16	0.6'	01 51.0	+22 00	128	SO			peculiar;NGC 697 group
NGC 900	UGC 1843	Galaxy	ARI	13.7	13.4	1.1'	02 23.5	+26 31	129	SO			
UGC 1546	PGC 7826	Galaxy	ARI	13.7	13.8	1.1'	02 03.4	+18 38	129	Sc			
NGC 1109	IC 1846	Galaxy	ARI	13.8	13.8	1.1'	02 47.7	+13 15	175	Elliptical			CGCG lists IC1852 Mg 14.9 nearby
NGC 928	MCG 4-6-	Galaxy	ARI	13.9	12.2	0.7'	02 27.7	+27 13	130	S			
UGC 1547	PGC 7825	Galaxy	ARI	13.9	15.5	2'	02 03.4	+22 02	129	Ir+			
NGC 1166	UGC 2471	Galaxy	ARI	14	14.1	1.2'	03 00.6	+11 51	176	Sab			P w NGC 1168
UGC 1561	PGC 7871	Galaxy	ARI	14	13.8	1.4'	02 04.1	+24 12	129	Ir+			very mottled
DoDz 1		Opn CL	ARI	-	-	12'	02 47.4	+17 15	130	III 2 p	8	11.5	
Latysev 1		Opn CL	ARI	-	-	330'	02 53.2	+27 28	130		5	6.7	
vdB 16	LBN 746	Brn Neb	ARI	-	-	11'	03 28.3	+29 47	94	R			
B202	LDN 1451	Drk Neb	ARI	--	--	33'	03 25.6	+30 17	94	4 Ir			Elongated NW and SE
B203	LDN 1448	Drk Neb	ARI	--	--	10'	03 25.8	+30 47	94	4 Ir			Elongated E and W
B204	LDN 1455	Drk Neb	ARI	--	--	14'	03 28.5	+30 11	94	5 Ir			Irregular
B206	LDN 1450	Drk Neb	ARI	--	--	5'	03 29.1	+30 11	94	5 Ir			Very small area
Cr 62		Opn CL	AUR	4.2	-	28'	05 22.5	+41 00	66	IV 3 p			
NGC 2281	OCL 446	Opn CL	AUR	5.4	-	15'	06 48.3	+41 05	68	I 3 p	30	7.3	H VIII 71
M 37	NGC 2099	Opn CL	AUR	5.6	11	24'	05 52.3	+32 33	98	II 1 r	150	9.2	Total population 500*;dark area near center
M 36	NGC 1960	Opn CL	AUR	6	12	12'	05 36.3	+34 08	97	II 3 m	60	8.9	in Aur OB1;incl Struve 737 10.7"sep
M 38	NGC 1912	Opn CL	AUR	6.4	12	21'	05 28.7	+35 51	97	III 2 m	100	9.5	in Aur OB1;Burnham-shaped like Greek letter Pi
NGC 1857	Cr 61	Opn CL	AUR	7	-	6'	05 20.1	+39 21	66	II 2 m	40	7.4	H VII 33
NGC 1893	IC 410	Opn CL	AUR	7.5	-	11'	05 22.7	+33 25	97	II 2 m n	60	9.3	in Aur OB2;20* mags 9...12;neby IC 410 invl (see ic410)
IC 410	NGC 1893	Brn Neb	AUR	7.5	-	11'	05 22.7	+33 25	97	E			Incl cluster NGC 1893
NGC 1664	OCL 411	Opn CL	AUR	7.6	-	18'	04 51.1	+43 41	65	III 1 p		10.6	H VIII 59;40* mags 11...
NGC 1778	OCL 429	Opn CL	AUR	7.7	-	7'	05 08.1	+37 01	97	III 2 p	25	10.1	H VIII 61
NGC 1907	OCL 434	Opn CL	AUR	8.2	-	7'	05 28.1	+35 20	97	II 1 m n	30	11.3	H VII 39
Basel 4		Opn CL	AUR	9.1	-	8'	05 48.9	+30 11	98	II 1 p	15	12.2	
NGC 1724	OCL 405	Opn CL	AUR	10	-		05 03.5	+49 30	65				
NGC 1798	OCL 410	Opn CL	AUR	10	-	5'	05 11.7	+47 42	65	I 1 m :b		13	
IC 405	LBN 795	Brn Neb	AUR	10	-	50'	05 16.5	+34 21	97	E			Flaming Star nebula ;variable AE Aur in center
NGC 1931	OCL 441	CL+Neb	AUR	10.1	-	3'	05 31.4	+34 15	97	I 3 p n:b		11.5	H I 261;Contains triple ADS 4112
NGC 2126	OCL 418	Opn CL	AUR	10.2	-	6'	06 02.5	+49 52	67	II 1 p	40	13	H VIII 68;Scattered 20 * mags 11..14
IC 2149	PK 166+10.1	Pln Neb	AUR	10.6	-	12"	05 56.4	+46 06	66	3b(2)		11.3	
NGC 2192	OCL 437	Opn CL	AUR	10.9	-	6'	06 15.3	+39 51	67	III 1 p	45	14	H VII 57;25* mags 12...
King 8		Opn CL	AUR	11.2	-	8'	05 49.3	+33 38	98	I 3 m	30	13.5	
Berk 19		Opn CL	AUR	11.4	-	7'	05 24.1	+29 34	97	IV 2 p	40	14.7	
NGC 1883	OCL 417	Opn CL	AUR	12	-	2.5'	05 25.9	+46 29	66	II 1 p	30	14	H VII 34
PK 169-0.1	IC 2120	Pln Neb	AUR	12	-	60.0"	05 18.2	+37 34	97			16.2	
NGC 1985	PK 176+0.1	Brn Neb	AUR	12.5	-	0.7'	05 37.8	+31 59	97	R		13.5	H III 865;Incorrect ID as PK176+0.1
NGC 2303	UGC 3603	Galaxy	AUR	12.6	13.5	1.5'	06 56.3	+45 30	68	Elliptical			
NGC 2208	UGC 3452	Galaxy	AUR	12.8	13.3	1.6'	06 22.6	+51 55	41	SO			
Pal 2		Glob CL	AUR	13	-	2.2'	04 46.1	+31 23	96	IX			
PK 173- 5.1	K2- 1;SS 38	Pln Neb	AUR	13.7	15.5	2.2'	05 08.1	+30 48	97	3		18.8	May be emission nebula
Berk 17		Opn CL	AUR	14	-	14'	05 20.6	+30 35	97	III 1 r	100	16	
Berk 18		Opn CL	AUR	14	-	12'	05 22.2	+45 28	66	II 1 r	300	16	
NGC 2013		Opn CL	AUR	-	-		05 44.0	+55 48	41				
NGC 2165		Opn CL	AUR	-	-	6'	06 11.1	+51 41	41				
NGC 2240		Opn CL	AUR	-	-		06 33.2	+35 15	99				H VIII 49
IC 417	LBN 804	Brn Neb	AUR	-	-	13'	05 28.1	+34 25	97	E+*			
Berk 14		Opn CL	AUR	-	-	9'	04 59.7	+43 29	65	III 1m:b	30	16	
Berk 15		Opn CL	AUR	-	-	5'	05 02.1	+44 31	65	I 2m :b	35	15	
Berk 69		Opn CL	AUR	-	-	5'	05 24.4	+32 36	97	II 2m :b	30	14	
Berk 70		Opn CL	AUR	-	-	12'	05 25.7	+41 54	66	IV 3 m	40	15	
Berk 71		Opn CL	AUR	-	-	5'	05 41.2	+31 26	98	II 1m:b	30	15	
Czernik 19		Opn CL	AUR	-	-	18'	04 57.0	+28 47	96	III 2 m	50		
Czernik 20		Opn CL	AUR	-	-	36'	05 20.5	+39 33	66	II 2 r	30		
Czernik 21		Opn CL	AUR	-	-	9'	05 27.4	+36 00	97	IV 1 mn:	40		
Czernik 23		Opn CL	AUR	-	-	5'	05 50.1	+28 54	98	III 1p :a			
Do 15		Opn CL	AUR	-	-	18'	05 04.6	+34 50	97	IV 1 p			
Do 16		Opn CL	AUR	-	-	12'	05 14.6	+32 43	97	III 2 p n	10		

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Do 18		Opn CL	AUR	-	-	12'	05 24.1	+33 23	97	IV 2 p n	15		
Do 20		Opn CL	AUR	-	-	5'	05 28.6	+33 41	97	IV 1 p	10		
King 17		Opn CL	AUR	-	-	1.5'	05 08.5	+39 05	65	II 2 m :b	25	14	
King 22	Berk 18	Opn CL	AUR	-	-	14'	05 22.2	+45 28	66	III 3 r	300	15	
Mel 31		Opn CL	AUR	-	-	135'	05 18.2	+33 22	97		35	4.5	Center star 16 Aur; some nebulosity involved
Sh2-223		SN Rem	AUR	-	-	70'	05 16.6	+42 04	66				
Sh2-224	LBN 769	SN Rem	AUR	-	-	31'	05 26.9	+42 58	66	E			
Sh2-231	LBN 808	Brn Neb	AUR	-	-	10'	05 39.4	+35 56	97	E			
Sh2-232	LBN 805	Brn Neb	AUR	-	-	37'	05 42.5	+36 10	97	E			PLNNB PK 175+0.1 involved
Sh2-235		Brn Neb	AUR	-	-	7.8'	05 41.1	+35 52	98	E			
Sh2-241	LBN 824	Brn Neb	AUR	-	-	2'	06 04.1	+30 15	98	E+R			
Stock 8		Opn CL	AUR	-	-	5'	05 28.1	+34 25	97	I 2 p n	40	9	In nebula IC 417
Stock 10		Opn CL	AUR	-	-	25'	05 39.0	+37 52	97	IV 3 p	15		
vdB 31	LBN 798	Brn Neb	AUR	-	-	9'	04 55.8	+30 34	96	R			
B 26-8	LDN 1517	Drk Neb	AUR	--	--	20'	04 55.2	+30 35	96	6 lr			Several small clouds adjacent to AB Aur
B 29	LDN 1523	Drk Neb	AUR	--	--	10'	05 06.2	+31 44	97	6 C			1.2 deg south and 2 deg following Z Aur
B 34		Drk Neb	AUR	--	--	20'	05 43.5	+32 39	98	4 C G			2 deg preceding cluster M 37
NGC 5856		Star	BOO	6	-		15 07.3	+18 27	153				H IV 71
NGC 5466	GCL 27	Glob CL	BOO	9.1	-	9.2'	14 05.5	+28 32	110	XII			H VI 9
NGC 5248	UGC 8616	Galaxy	BOO	10.3	13.8	5.9'	13 37.5	+08 53	196	SBbc			H I 34;eBN in vB lens w many dk lanes
NGC 5557	UGC 9161	Galaxy	BOO	11	12.6	2.4'	14 18.4	+36 30	110	E1			H I 99;BN:no struct
NGC 5676	UGC 9366	Galaxy	BOO	11.2	13.2	3.9'	14 32.8	+49 27	77	Sbc			H I 189;N 5660 at 30' IC 1029 at 26';Many B knotty filam
NGC 5669	UGC 9353	Galaxy	BOO	11.3	13.8	4.2'	14 32.7	+09 54	197	SBc			H II 79;short bright bar
NGC 5582	UGC 9188	Galaxy	BOO	11.6	13.3	2.8'	14 20.7	+39 42	77	Elliptical			H II 754
NGC 5614	UGC 9226	Galaxy	BOO	11.7	13.3	2.4'	14 24.1	+34 52	111	Sab			NGC 5614 superimp;P w NGC 5613 at 2' PA 351;disturb
NGC 5899	UGC 9789	Galaxy	BOO	11.7	13	3.3'	15 15.1	+42 03	78	SBc			H II 650;svBN;sev knotty branch arms;strong asym
NGC 5533	UGC 9133	Galaxy	BOO	11.8	13.6	3.1'	14 16.1	+35 21	110	Sab			H II 418;vBN weak irreg out arms
NGC 5656	UGC 9332	Galaxy	BOO	11.8	12.8	1.9'	14 30.4	+35 19	111	Sab			H II 421
NGC 5687	UGC 9395	Galaxy	BOO	11.8	13.1	2.5'	14 34.9	+54 29	50	Sa			H II 808;B diff N;eF envel
NGC 5529	UGC 9127	Galaxy	BOO	11.9	13.5	6'	14 15.6	+36 14	110	Sc			H III 414;dwarf irreg;v poor res.;almost exactly edgewise
NGC 5660	UGC 9325	Galaxy	BOO	11.9	13.9	2.7'	14 29.8	+49 37	77	SBc			H II 695;lr;l;P w NGC 5676 at 30.5'
NGC 5689	UGC 9399	Galaxy	BOO	11.9	13	3.3'	14 35.5	+48 44	77	SBO-a			H I 188;diff Nucl in B bulge w strong dk lane on one side
NGC 5665	UGC 9352	Galaxy	BOO	12	12.8	2.1'	14 32.4	+08 05	197	SBc			H II 27;Arp 49;peculiar br cond in arms
NGC 5490	NGC 5490A	Galaxy	BOO	12.1	13.8	2.5'	14 10.0	+17 33	152	E2			H III 32;Brightest in group;sev 15m comps within 10'
NGC 5523	UGC 9119	Galaxy	BOO	12.1	13.8	4.7'	14 14.9	+25 19	152	Sc			H III 134;BM;no def N;many filam knotty arms
NGC 5600	UGC 9220	Galaxy	BOO	12.1	12.7	1.5'	14 23.8	+14 38	197	Sc			H II 177;vB core or N;asym outer arms
NGC 5629	UGC 9281	Galaxy	BOO	12.1	13.2	1.8'	14 28.3	+25 51	152	SO			Brightest in group, incl IC 1018 and IC 1019 both 15 mag
NGC 5673	UGC 9347	Galaxy	BOO	12.1	12.4	2.4'	14 31.5	+49 57	77	SBc			H II 696;P w IC 1029 at 9.7' PA 290 2.8'X0.5' 14mag
NGC 5739	UGC 9486	Galaxy	BOO	12.1	13.6	1.9'	14 42.5	+41 51	77	SBO-a			H I 171;slightly asym;main body 1.5'X1.4'
NGC 5641	UGC 9300	Galaxy	BOO	12.2	13.3	2.4'	14 29.3	+28 49	111	SBab			
NGC 5653	UGC 9318	Galaxy	BOO	12.2	12.9	1.7'	14 30.2	+31 13	111	Sb Ring			H II 330;vBN;B knotty arms
NGC 5966	UGC 9923	Galaxy	BOO	12.2	12.9	1.8'	15 35.9	+39 46	78	Elliptical			H III 634;IC 4563 at 4' nf spir m=15.1
NGC 5546	UGC 9148	Galaxy	BOO	12.3	12.6	1.3'	14 18.2	+07 34	197	Elliptical			H III 551;NGC 5543 at 3.5'
NGC 5590	NGC 5580	Galaxy	BOO	12.3	13.5	1.8'	14 21.6	+35 12	111	SO			H III 417;P w NGC 5589
NGC 5735	UGC 9481	Galaxy	BOO	12.3	13.8	2.4'	14 42.6	+28 44	111	SBbc Rii			H III 133
NGC 5520	UGC 9097	Galaxy	BOO	12.4	13.1	2'	14 12.4	+50 21	49	Sb			H III 676
NGC 5633	UGC 9271	Galaxy	BOO	12.4	13.3	2.1'	14 27.5	+46 09	77	Sb			H I 185;neutral Sb
NGC 5784	UGC 9592	Galaxy	BOO	12.4	13.6	1.9'	14 54.3	+42 33	78	SO			UGC 9585 at 4.4';PA274 -- UGC 9585 m=16 : 1.1'X0.5'
NGC 5820	UGC 9642	Galaxy	BOO	12.4	12.9	2.2'	14 58.7	+53 53	50	SO			H II 756;Asym env;F streamer off SE end;D* Sh 191 8' E
NGC 5859	UGC 9728	Galaxy	BOO	12.4	13.4	3'	15 07.6	+19 35	153	SBbc			H II 752;P w NGC 5857 at 2 '
NGC 5874	UGC 9736	Galaxy	BOO	12.4	13.7	2.3'	15 07.9	+54 45	50	SBbc			
NGC 5875	UGC 9745	Galaxy	BOO	12.4	13.5	2.3'	15 09.2	+52 32	50	Sb			H II 755;comp 3.1';PA190;0.3'X0.2';F;dif
NGC 5587	UGC 9202	Galaxy	BOO	12.5	13.2	2.6'	14 22.2	+13 55	197	Sa			H III 110
NGC 5623	UGC 9260	Galaxy	BOO	12.5	13.1	1.6'	14 27.1	+33 15	111	Elliptical			H II 329
NGC 5635	UGC 9283	Galaxy	BOO	12.5	13.4	2.3'	14 28.5	+27 25	152	Sb			H III 132
NGC 5644	UGC 9321	Galaxy	BOO	12.5	13.2	1.5'	14 30.4	+11 56	197	SO			P w NGC 5647 at 4.1';Brightest in cluster
NGC 5707	UGC 9428	Galaxy	BOO	12.5	12.6	2.5'	14 37.5	+51 34	50	Sab			comp 1.5' PA 26
IC 1014	UGC 9275	Galaxy	BOO	12.5	14.2	2.7'	14 28.3	+13 47	197	SBd			
NGC 5513	UGC 9099	Galaxy	BOO	12.6	13.3	1.9'	14 13.1	+20 25	152	SO			H II 877
NGC 5548	UGC 9149	Galaxy	BOO	12.6	13.1	1.5'	14 18.0	+25 08	152	Sa Ring			H II 194;Seyfert;slightly asym;eBN;F spir patt in lens
NGC 5611	UGC 9227	Galaxy	BOO	12.6	12.3	1.3'	14 24.1	+33 03	111	SO			comp at 3' pa 10
NGC 5642	UGC 9301	Galaxy	BOO	12.6	13.6	1.8'	14 29.2	+30 02	111	Elliptical			H III 126;f of 2
IC 4562	UGC 9928	Galaxy	BOO	12.6	13	1.2'	15 36.0	+43 30	78	Elliptical			
NGC 5454	UGC 8997	Galaxy	BOO	12.7	13.6	1.8'	14 04.8	+14 23	196	SO			P w UGC 8996 15.5mag 1.7'x0.2'

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5514	UGC 9102	Galaxy	BOO	12.7	13.6	1.4'	14 13.6	+07 40	197	Sab			Double contact system is distorted w plumes
NGC 5602	UGC 9210	Galaxy	BOO	12.7	12.6	1.5'	14 22.3	+50 30	49	Sa			H II 694
NGC 5675	UGC 9357	Galaxy	BOO	12.7	13.6	2.8'	14 32.7	+36 18	111	SBb			H II 422
NGC 5684	UGC 9402	Galaxy	BOO	12.7	13.3	1.5'	14 35.8	+36 33	111	SO			H III 421;sev faint comp in field;all 15 mag and fainter
NGC 5762	UGC 9535	Galaxy	BOO	12.7	13.3	1.5'	14 48.7	+12 27	198	S pec			B main body;comp 3.2';*RA in UGC disagrees w CGCG
NGC 5876	UGC 9747	Galaxy	BOO	12.7	13.7	2.4'	15 09.5	+54 30	50	SBab			
UGC 8614	PGC 48122	Galaxy	BOO	12.7	14.5	3.4'	13 37.4	+07 39	196	Ir+			
NGC 5239	UGC 8589	Galaxy	BOO	12.8	13.9	1.8'	13 36.4	+07 22	196	SBbc			H III 101;dif irr annex n;disrupted spir arm?
NGC 5423	UGC 8952	Galaxy	BOO	12.8	13.1	1.5'	14 02.8	+09 20	196	E-SO			NGC 5431 at 4.8' PA 75;sev comps <15mag near
NGC 5492	UGC 9065	Galaxy	BOO	12.8	13.2	2.4'	14 10.6	+19 37	152	SB/P			H II 876;asym spindle;spir
NGC 5525	UGC 9124	Galaxy	BOO	12.8	13	1.5'	14 15.7	+14 17	197	SO			strong absorption along edge
NGC 5541	UGC 9139	Galaxy	BOO	12.8	11.8	0.8'	14 16.5	+39 35	77	S pec			H III 732;sev galaxies near
NGC 5666	UGC 9360	Galaxy	BOO	12.8	12.4	0.9'	14 33.2	+10 31	197	Compac			
NGC 5695	UGC 9421	Galaxy	BOO	12.8	13.2	1.5'	14 37.4	+36 34	111	SBa			H II 423
NGC 5772	UGC 9566	Galaxy	BOO	12.8	13.8	2.1'	14 51.6	+40 36	78	Sb			vBN 0.5'X0.35';poor res
NGC 5783	NGC 5785	Galaxy	BOO	12.8	14.4	2.9'	14 53.5	+52 05	50	SBc			
NGC 5797	UGC 9619	Galaxy	BOO	12.8	12.3	1.1'	14 56.4	+49 42	78	Sa			H III 678
NGC 5945	UGC 9871	Galaxy	BOO	12.8	14.2	2.1'	15 29.7	+42 55	78	SBab			
UGC 9858	PGC 55104	Galaxy	BOO	12.8	14	4.4'	15 26.6	+40 34	78	S(B)b+			
NGC 5249	UGC 8618	Galaxy	BOO	12.9	13.4	1.6'	13 37.6	+15 58	196	SO			H III 72
NGC 5332	UGC 8773	Galaxy	BOO	12.9	12.6	0.9'	13 52.1	+16 58	196	E-SO			
NGC 5456	UGC 9004	Galaxy	BOO	12.9	12.9	1.2'	14 05.0	+11 52	196	SO			
NGC 5482	UGC 9038	Galaxy	BOO	12.9	12.9	1.2'	14 08.5	+08 56	197	SO			H III 59
NGC 5515	UGC 9096	Galaxy	BOO	12.9	12.6	1.3'	14 12.6	+39 19	77	Sab			H III 685
NGC 5627	UGC 9280	Galaxy	BOO	12.9	13.4	1.7'	14 28.6	+11 23	197	SO			brightest in subgroup
NGC 5654	UGC 9319	Galaxy	BOO	12.9	13.3	1.5'	14 30.0	+36 22	111	SBO-a			H III 420;Peculiar double nucleus
UGC 9240	PGC 51472	Galaxy	BOO	12.9	14.1	1.8'	14 24.7	+44 30	77	Ir+			
NGC 5417	UGC 8943	Galaxy	BOO	13	12.7	1.5'	14 02.2	+08 02	196	Sa			H III 11
NGC 5490A	NGC 5490	Galaxy	BOO	13	-	2.5'	14 10.0	+17 33	152	Elliptical			
NGC 5598	UGC 9209	Galaxy	BOO	13	13.4	1.6'	14 22.5	+40 19	77	SO			H III 733;5603 group
NGC 5696	UGC 9415	Galaxy	BOO	13	14.1	2'	14 37.0	+41 50	77	Sbc			H II 648
NGC 5698	UGC 9419	Galaxy	BOO	13	13.5	1.8'	14 37.2	+38 27	111	SBb			H II 700
NGC 5710	UGC 9440	Galaxy	BOO	13	13.3	1.2'	14 39.3	+20 03	152	Elliptical			H III 895;P w NGC 5711 at 3.5' PA 155
NGC 5827	UGC 9662	Galaxy	BOO	13	12.8	1.1'	15 01.9	+25 58	153	S pec			disturbed;sm F cond at np edge;disturbing comp?
NGC 5929	UGC 9851	Galaxy	BOO	13	-	0.9'	15 26.1	+41 40	78	Sab pec			conn. P w NGC 5930 @ 0'5. Faint I syst. at 5' nf
NGC 5930	UGC 9852	Galaxy	BOO	13	-	1.8'	15 26.1	+41 41	78	SBb/P			H II 651;conn w NGC 5929
UGC 9169	PGC 51207	Galaxy	BOO	13	14.3	3.9'	14 19.8	+09 22	197	Ir+			
UGC 9291	PGC 51713	Galaxy	BOO	13	14.3	2.8'	14 28.6	+39 00	77	Sd			
NGC 5293	UGC 8710	Galaxy	BOO	13.1	14.1	1.8'	13 46.9	+16 16	196	Sc			vsBN;2 main filam arms w some knots and branch.
NGC 5424	UGC 8956	Galaxy	BOO	13.1	13.7	1.6'	14 02.9	+09 25	196	SO			
NGC 5459	UGC 9005	Galaxy	BOO	13.1	13.1	1.1'	14 05.0	+13 08	196	SO			
NGC 5508	UGC 9094	Galaxy	BOO	13.1	14.1	2'	14 12.5	+24 38	152	SO			H I 255
NGC 5519	NGC 5570	Galaxy	BOO	13.1	13.4	1.6'	14 14.3	+07 31	197	Sa			P w NGC 5514
NGC 5550	UGC 9154	Galaxy	BOO	13.1	12.8	1.2'	14 18.5	+12 53	197	Sb Ring			
NGC 5624	UGC 9256	Galaxy	BOO	13.1	12.8	1.1'	14 26.6	+51 35	49	S pec			Peculiar?
NGC 5630	UGC 9270	Galaxy	BOO	13.1	13.4	2.2'	14 27.6	+41 15	77	Sd			H II 674
NGC 5648	NGC 5649	Galaxy	BOO	13.1	12.7	1.1'	14 30.5	+14 01	197	Sbc			P w NGC 5649 at 5.5'
NGC 5731	UGC 9460	Galaxy	BOO	13.1	12.4	1.6'	14 40.2	+42 47	77	Sbc			H III 658
NGC 5787	UGC 9599	Galaxy	BOO	13.1	12.8	0.9'	14 55.3	+42 30	78	Compac			sharply delineated neutral ellip. disc compact;ellip.halo.
NGC 5798	UGC 9628	Galaxy	BOO	13.1	13.3	1.4'	14 57.6	+29 58	111	Ir Bar			H III 131;P w NGC 5789
NGC 5804	UGC 9627	Galaxy	BOO	13.1	13.3	1.2'	14 57.1	+49 40	78	SBb			NGC 5797 at 7.1';sev small faint comps w in 10'
NGC 5857	UGC 9724	Galaxy	BOO	13.1	12.6	1.2'	15 07.5	+19 36	153	SBb			P w NGC 5859;many S galxys near;vsvBN in B lens
NGC 5893	UGC 9774	Galaxy	BOO	13.1	13.4	1.2'	15 13.6	+41 58	78	SBb			H II 678;NGC 5895-6 at 4'3.vF bridge;total m=15.5
NGC 5923	UGC 9823	Galaxy	BOO	13.1	14.2	1.8'	15 21.2	+41 44	78	SBbc			
NGC 5993	UGC 10007	Galaxy	BOO	13.1	13	1.2'	15 44.5	+41 07	79	SBb			H III 636;P w NGC 5992
UGC 8839	PGC 49497	Galaxy	BOO	13.1	15.5	4.0'	13 55.4	+17 47	151	Ir-			
NGC 5505	UGC 9092	Galaxy	BOO	13.2	12.8	1'	14 12.5	+13 18	197	SBa			
NGC 5544	UGC 9142	Galaxy	BOO	13.2	-	0.9'	14 17.0	+36 34	110	SBO-a			H II 419;P w NGC 5545;disturbed;Arp 199
NGC 5610	UGC 9230	Galaxy	BOO	13.2	13.4	2'	14 24.4	+24 37	152	SBab			H III 136
NGC 5622	UGC 9248	Galaxy	BOO	13.2	13.6	1.7'	14 26.2	+48 34	77	Sb			H III 677
NGC 5649	NGC 5648	Galaxy	BOO	13.2	13.1	1.1'	14 30.5	+14 01	197	Sbc			H III 645
NGC 5751	UGC 9498	Galaxy	BOO	13.2	13.2	1.5'	14 43.8	+53 24	50	Sc			H II 809
NGC 5918	UGC 9817	Galaxy	BOO	13.2	13.5	1.9'	15 19.4	+45 53	78	Sc			3 patches in disc may be superimp **
NGC 5943	UGC 9870	Galaxy	BOO	13.2	13.7	1.3'	15 29.7	+42 47	78	SO			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5409	UGC 8938	Galaxy	BOO	13.3	13.8	1.7'	14 01.8	+09 29	196	SBb			
NGC 5411	UGC 8940	Galaxy	BOO	13.3	13.3	1.4'	14 02.0	+08 56	196	E-SO			sf of 2
NGC 5416	UGC 8944	Galaxy	BOO	13.3	13.3	1.4'	14 02.2	+09 26	196	Sc			H III 56;chaotic spir pattern
NGC 5500	UGC 9070	Galaxy	BOO	13.3	13.1	1'	14 10.3	+48 33	77	Elliptical			H III 674
NGC 5532A	NGC 5532	Galaxy	BOO	13.3	-	1.6'	14 16.9	+10 48	197	SO			P w NGC 5531 at 5.2';S0 w S comp superimp ssf center
NGC 5589	NGC 5588	Galaxy	BOO	13.3	13.3	1.1'	14 21.4	+35 16	111	SBa			H III 416;P w NGC 5590 at 4.8'
NGC 5628	UGC 9278	Galaxy	BOO	13.3	13.1	1.1'	14 28.4	+17 55	152	Elliptical			
NGC 5657	UGC 9335	Galaxy	BOO	13.3	13.5	1.8'	14 30.7	+29 11	111	SBb			
NGC 5685	UGC 9403	Galaxy	BOO	13.3	13.6	1.2'	14 36.3	+29 54	111	Elliptical			
NGC 5702	UGC 9434	Galaxy	BOO	13.3	13.1	1.1'	14 38.9	+20 30	152	SO			H III 894;comp 5.4' PA 254 0.6'X0.3'
NGC 5760	UGC 9531	Galaxy	BOO	13.3	13.2	1.5'	14 47.7	+18 30	153	Sa			H III 885;IC 4507 at 2.8' PA 183 0.8'X0.4' m=15.7
NGC 5405	UGC 8928	Galaxy	BOO	13.4	12.8	0.8'	14 01.2	+07 42	196	Sc			
NGC 5418	UGC 8944	Galaxy	BOO	13.4	12.7	1.1'	14 02.3	+07 41	196	SBbc			only bar vis on PA prints
NGC 5583	UGC 9196	Galaxy	BOO	13.4	12.4	0.8'	14 21.7	+13 14	197	S			vB main body
NGC 5596	UGC 9208	Galaxy	BOO	13.4	13.1	1.1'	14 22.5	+37 07	111	SO			H III 418
NGC 5608	UGC 9219	Galaxy	BOO	13.4	14.6	2.6'	14 23.3	+41 47	77	lrp+			H II 673;hints of spir pattern?;ecc nucl
NGC 5708	NGC 5704	Galaxy	BOO	13.4	13.2	1.6'	14 38.3	+40 27	77	Sd			B patches;prob. v late spir
NGC 5714	UGC 9431	Galaxy	BOO	13.4	13.5	3.2'	14 38.2	+46 38	77	Sc			H III 675;NGC 5717 at 4.8' nf 0.9'X0.5' m=15.4
NGC 5720	UGC 9439	Galaxy	BOO	13.4	14.4	2.1'	14 38.6	+50 49	50	Sb			
NGC 5794	UGC 9610	Galaxy	BOO	13.4	13.2	1'	14 55.9	+49 44	78	S			B core in vF halo;no S0;comp 4.8';PA185;5797 at 5.3'
NGC 5829	IC 4526	Galaxy	BOO	13.4	14.4	1.7'	15 02.7	+23 20	153	Sc			sf of 2;interacting w comp at 1.4' PA 320 .5X0.4
NGC 5888	UGC 9771	Galaxy	BOO	13.4	13.3	1.3'	15 13.1	+41 16	78	SBbc			H III 659;NGC 5886 at 4.6' sp m=15.1
UGC 8995	PGC 50194	Galaxy	BOO	13.4	14.2	2.3'	14 04.9	+08 49	196	S(B)dm			
NGC 5499	UGC 9074	Galaxy	BOO	13.5	12.7	0.9'	14 10.8	+35 55	110	Sa			
NGC 5522	UGC 9116	Galaxy	BOO	13.5	13	1.8'	14 14.8	+15 09	197	Sb			H III 644
NGC 5536	UGC 9136	Galaxy	BOO	13.5	13.1	0.9'	14 16.4	+39 30	77	SBa			one-armed spiral w massive bar;P w NGC 5541 at 5.5'
NGC 5562	UGC 9174	Galaxy	BOO	13.5	12.6	0.7'	14 20.2	+10 16	197	S			
NGC 5672	UGC 9354	Galaxy	BOO	13.5	12.6	0.8'	14 32.6	+31 40	111	Sb			H III 310;appears acircular;dif in blue;v red
NGC 5693	UGC 9406	Galaxy	BOO	13.5	14.4	1.8'	14 36.2	+48 35	77	SBcd Rii			one main knotty arm;strong asym; NGC 5689 at 11'
NGC 5732	UGC 9467	Galaxy	BOO	13.5	13.3	1.4'	14 40.6	+38 38	111	Sbc			H III 686
NGC 5737	UGC 9488	Galaxy	BOO	13.5	13.4	1.3'	14 43.2	+18 53	153	SBb			H III 896
NGC 5758	UGC 9524	Galaxy	BOO	13.5	13.1	1.1'	14 47.0	+13 40	198	E-SO			comp 15mag;npp of 2
NGC 5773	UGC 9571	Galaxy	BOO	13.5	13	0.8'	14 52.5	+29 48	111	Sa			H III 130;Main body 0.4'X0.4';P w NGC 5771
NGC 5852	MCG 2-38-	Galaxy	BOO	13.5	12.9	1.1'	15 06.9	+12 51	198	S			H III 887
UGC 9242	MCG +07-30	Galaxy	BOO	13.5	13.8	5'	14 25.3	+39 32	77	Sc			many knots
NGC 5498	UGC 9075	Galaxy	BOO	13.6	13.3	1'	14 11.1	+25 42	152	E-SO			
NGC 5579	UGC 9180	Galaxy	BOO	13.6	14.5	1.9'	14 20.4	+35 11	111	Sc			Arp 69;asym 3-armed spir;one arm broken;
NGC 5709	NGC 5703	Galaxy	BOO	13.6	13.1	1.6'	14 38.8	+30 27	111	SBa			NGC 5706 at 2.1' PA 311 0.4'X0.3' m=15.7;* superimp
NGC 5771	MCG 5-35-	Galaxy	BOO	13.6	12.8	0.8'	14 52.2	+29 51	111	Elliptical			H III 129
NGC 5785	NGC 5783	Galaxy	BOO	13.6	-	2.9'	14 53.5	+52 05	50	SBc			
NGC 5790	UGC 9624	Galaxy	BOO	13.6	13.2	0.9'	14 57.6	+08 17	198	Sa Ring			
NGC 5677	UGC 9378	Galaxy	BOO	13.7	13	0.9'	14 34.2	+25 28	152	Sbc			H III 283;slightly asym;high surf brightn.
NGC 5697	IC 4471	Galaxy	BOO	13.7	12.5	0.9'	14 36.5	+41 41	77	Sb			B wedge-shaped main body in asym disc
NGC 5727	UGC 9465	Galaxy	BOO	13.7	14.6	2.3'	14 40.4	+33 59	111	Sd			
NGC 5789	UGC 9615	Galaxy	BOO	13.7	13.1	0.9'	14 56.6	+30 14	111	SBd			v patchy spir;B cond on sf edge; 5798 at 21' PA139
NGC 5818	UGC 9643	Galaxy	BOO	13.7	13.6	1.2'	14 59.0	+49 49	78	SO			
NGC 5947	UGC 9877	Galaxy	BOO	13.7	13.9	1.2'	15 30.6	+42 43	78	SBbc			prob member of clust
NGC 5950	UGC 9884	Galaxy	BOO	13.7	13.8	1.5'	15 31.5	+40 26	78	Sb			
NGC 5992	UGC 10003	Galaxy	BOO	13.7	13	0.9'	15 44.4	+41 05	79	Sab			H III 635;P w NGC 5993
NGC 5251	MCG 5-32-	Galaxy	BOO	13.8	12.9	0.7'	13 37.4	+27 25	151	Sa			H III 369
NGC 5414	UGC 8942	Galaxy	BOO	13.8	-	1'	14 02.1	+09 56	196	Pec			Br of 3;vB main body w asym env streamer southeast
NGC 5431	MCG 2-36-	Galaxy	BOO	13.8	12.7	0.8'	14 03.1	+09 22	196	S pec			
NGC 5517	UGC 9100	Galaxy	BOO	13.8	13.4	1'	14 12.9	+35 43	110	Sa			
NGC 5616	UGC 9231	Galaxy	BOO	13.8	13.6	2.1'	14 24.3	+36 28	111	SBbc			H III 419;2 or 3 conds in n part;asym
NGC 5637	UGC 9293	Galaxy	BOO	13.8	12.7	0.9'	14 29.0	+23 11	152	Scd			H II 357;slightly asym;high surf brightn
NGC 5778	NGC 5825	Galaxy	BOO	13.8	13.8	1.2'	14 54.5	+18 39	153	Elliptical			
NGC 5795	UGC 9617	Galaxy	BOO	13.8	12.7	1.6'	14 56.3	+49 24	78	Sc			
NGC 5934	UGC 9862	Galaxy	BOO	13.8	11.9	0.7'	15 28.2	+42 56	78	S pec			interact;comp @ 4.7';PA 354;m=15.7
NGC 5436	UGC 8971	Galaxy	BOO	13.9	12.9	1.1'	14 03.7	+09 34	196	Sa			NGC 5437 at 3.4' PA 154
NGC 5490C	MCG 3-36-	Galaxy	BOO	13.9	13.6	1.1'	14 10.1	+17 37	152	Sbc			At 5' nf NGC 5490;7' s of IC 983
NGC 5504A	NGC 5504	Galaxy	BOO	13.9	-	1.3'	14 12.3	+15 50	197	SBbc			Brightest in group
NGC 5659	UGC 9342	Galaxy	BOO	13.9	13.4	1.6'	14 31.1	+25 21	152	Sb			
NGC 5704	NGC 5708	Galaxy	BOO	13.9	-	1.6'	14 38.3	+40 27	77	Sd			H II 649
NGC 5711	UGC 9445	Galaxy	BOO	13.9	13.1	1'	14 39.4	+19 59	152	SBa			P w NGC 5710

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5463A	NGC 5463	Galaxy	BOO	14	-	1.2'	14 06.2	+09 21	196	S pec			
NGC 5545	UGC 9143	Galaxy	BOO	14	-	1'	14 17.1	+36 34	110	Sbc			B cent lens (or bar);2 main B arms;in front of N 5544
NGC 5559	UGC 9166	Galaxy	BOO	14	13.3	1.4'	14 19.2	+24 48	152	SBb			H III 347
NGC 5603A	NGC 5603	Galaxy	BOO	14	-	1.1'	14 23.0	+40 23	77	SO			H III 734;Brightest in group;P w UGC 9216
NGC 5655	UGC 9333	Galaxy	BOO	14	-	1.1'	14 30.9	+13 58	197	Sc			
NGC 5780	MCG 5-35-	Galaxy	BOO	14	12.7	0.9'	14 54.4	+28 56	111	Sab			
NGC 5851	UGC 9714	Galaxy	BOO	14	12.6	1'	15 06.9	+12 51	198	Sc			H III 886;In triple group w NGC 5852(brightest)
NGC 5875A	UGC 9741	Galaxy	BOO	14	-	0.6'	15 08.6	+52 18	50	S pec			
NGC 5900	UGC 9790	Galaxy	BOO	14	13.7	1.4'	15 15.1	+42 13	78	Sb			nGC 5899 at 9' NGC 5901(=Ho 702b) at 1' may be a *
NGC 1679	ESO 422- 1	Galaxy	CAE	11.5	13.2	2.7'	04 49.9	-31 58	357	SBp			
NGC 1571	NGC 1570	Galaxy	CAE	12.3	13.5	2'	04 22.1	-43 38	391	Elliptical			
NGC 1572	ESO 303-14	Galaxy	CAE	12.4	13.5	2.4'	04 22.7	-40 36	391	SBa			
NGC 1567	ESO 202-10	Galaxy	CAE	12.5	-	1.4'	04 21.1	-48 15	391	E			
NGC 1616	ESO 251-10	Galaxy	CAE	12.6	13	1.8'	04 32.7	-43 43	392	Sbc			
NGC 1668	ESO 251-30	Galaxy	CAE	12.7	13	1.6'	04 46.1	-44 44	392	E-SO Ba			
NGC 1701	ESO 422-11	Galaxy	CAE	12.8	12.8	1.2'	04 55.9	-29 53	357	Sb			
NGC 1759	ESO 305- 1	Galaxy	CAE	13.1	13.6	1.4'	05 00.8	-38 40	358	Elliptical			
NGC 1570	NGC 1571	Galaxy	CAE	13.2	-	2'	04 22.1	-43 38	391	E			
NGC 1585	ESO 303-18	Galaxy	CAE	13.5	13.1	1.2'	04 27.6	-42 10	392	Sc			
NGC 1658	ESO 304-16	Galaxy	CAE	13.5	13	1.5'	04 44.0	-41 28	392	Sbc			
NGC 1595	ESO 202-25	Galaxy	CAE	13.7	-	1.3'	04 28.4	-47 49	392	E			
NGC 1598	ESO 202-26	Galaxy	CAE	13.8	-	1.4'	04 28.6	-47 47	392	SBc			
NGC 1660	ESO 304-18	Galaxy	CAE	13.9	13.1	1'	04 44.2	-41 30	392	Sa			
NGC 1687	ESO 361-13	Galaxy	CAE	13.9	13.3	1.3'	04 51.4	-33 56	357	SBab			
Cr 464		Opn CL	CAM	4.2	-	120'	05 12.6	+73 58	6	IV 3 p	50		
Kemble 1		Aster	CAM	5	-	180'	03 57.5	+63 04	18		20	5	Kemble's Cascade ; 3 deg chain of stars
NGC 1502	OCL 383	Opn CL	CAM	6.9	-	8'	04 07.8	+62 20	18	II 3 p	45	6.9	Incl Stv 484 5"sep PA 130 & Struve 485 18" 6" 11"mul*
Tombaugh 5		Opn CL	CAM	8.4	-	17'	03 47.7	+59 05	39	III 2 m	60	11.6	
NGC 2403	UGC 3918	Galaxy	CAM	8.5	14.4	23.4'	07 36.8	+65 36	21	SBc			in M81 group;many well res irreg arms;broad bar
NGC 2655	UGC 4637	Galaxy	CAM	10.1	13.2	4.9'	08 55.6	+78 13	7	SBO-a			large nucleus w asym dk matter;faint outer whirls
NGC 2336	UGC 3809	Galaxy	CAM	10.4	13.9	6.8'	07 27.1	+80 11	7	SBbc Rim			weak bar;many weak filam arms w knots; P w IC 467
IC 356	UGC 2953	Galaxy	CAM	10.5	13.6	4.5'	04 07.8	+69 49	18	Sbp			
NGC 2146	3C120	Galaxy	CAM	10.6	13.7	5.7'	06 18.6	+78 21	6	SBab/P			broad spiral arms;2 main smooth arms;1 w dark lane
NGC 1569	UGC 3056	Galaxy	CAM	11	12.9	3.7'	04 30.8	+64 51	19	lrp			H II 768;dk markings;well rrr;l trace of spiral structure
NGC 1961	IC 2133	Galaxy	CAM	11	13.7	4.5'	05 42.1	+69 23	20	SBbc			H III 747;hexagonal;2 branch arms w some knots
NGC 2366	UGC 3851	Galaxy	CAM	11.1	14.6	7.8'	07 28.9	+69 13	21	lr			H III 748;P w NGC 2363
NGC 2715	UGC 4759	Galaxy	CAM	11.2	13.4	4.8'	09 08.1	+78 05	7	SBc			several filamentary knotty arms;sharp outline
NGC 1530	IC 381	Galaxy	CAM	11.4	13.9	4.4'	04 23.4	+75 18	5	SBb			compact core;surroundg spiral patt;broad bar;filam
NGC 1560	IC 2062	Galaxy	CAM	11.4	14.3	9.8'	04 32.8	+71 53	19	Scd			BM;no def N;F part resolved arms;low surf brtness
NGC 2268	UGC 3653	Galaxy	CAM	11.5	13.4	3.3'	07 14.3	+84 23	7	SBbc			weak bar;many filamentary arms;poor res
IC 3568	PK 123+34.1	Pln Neb	CAM	11.6	6.7	18"	12 33.1	+82 34	9	2(2a)		12.9	
NGC 1573	UGC 3077?	Galaxy	CAM	11.7	12.7	1.9'	04 35.1	+73 16	5	E3		15.5	brtst of 4;spiral
NGC 2748	UGC 4825	Galaxy	CAM	11.7	12.9	3.1'	09 13.7	+76 29	8	Sbc			vB center w sN;sev knotty arms w dk lanes
IC 361	OCL 393	Opn CL	CAM	11.7	13.9	6'	04 18.8	+58 15	39	II 1 r	60	14.6	
NGC 2460	UGC 4097	Galaxy	CAM	11.8	13.3	2.2'	07 56.9	+60 21	43	Sab			vBN;spir struct in lens;vF smooth arms surrounding
UGC 3580	PGC 19867	Galaxy	CAM	11.8	13.6	3.4'	06 55.5	+69 35	21	Sa			
NGC 2258	UGC 3523	Galaxy	CAM	11.9	13.1	2.3'	06 47.8	+74 29	6	SO			
NGC 2523	UGC 4271	Galaxy	CAM	11.9	13.6	2.9'	08 15.0	+73 35	7	SBab			bright diff Nuc on bar;several filam arms w knots
NGC 2732	UGC 4818	Galaxy	CAM	11.9	12.4	2.1'	09 13.4	+79 11	8	SO			peculiar;disturbed?
NGC 1501	PK 144+6.1	Pln Neb	CAM	12	11.6	56"	04 07.0	+60 55	39	3		14.4	H IV 53;PK144+6.1
NGC 2634	UGC 4581	Galaxy	CAM	12	13.1	2'	08 48.4	+73 58	7	E1			disturbed; Pw NGC 2634A at 1.9' sf
IC 342	UGC 2847	Galaxy	CAM	12	14.9	20.9'	03 46.8	+68 06	18	SBc			Local Group Member
Berk 10		Opn CL	CAM	12	-	12'	03 39.6	+66 31	18	II 3 p	50	14	
MCG +13-07		Galaxy	CAM	12	-	0.9'	08 53.2	+76 30	7				Appr. 50/50 Face & Edge On
NGC 2551	UGC 4362	Galaxy	CAM	12.1	12.6	1.6'	08 24.8	+73 25	7	Sa			B diff N in lens;trace F whirls or dk lanes
NGC 2646	UGC 4604	Galaxy	CAM	12.1	12.5	1.5'	08 50.4	+73 28	7	SBO			bright nucleus on faint bar; also identified as IC 520
NGC 2314	UGC 3677	Galaxy	CAM	12.2	13.2	1.7'	07 10.5	+75 20	7	E1p			
NGC 2441	UGC 4036	Galaxy	CAM	12.2	13.4	2'	07 51.9	+73 01	7	SBb Rim			
NGC 2633	UGC 4574	Galaxy	CAM	12.2	13.5	2.3'	08 48.1	+74 06	7	SBb/P			bright bar w dk lanes;2 main arms; Br in grp w N 2634
NGC 2591	UGC 4472	Galaxy	CAM	12.3	12.8	3'	08 37.4	+78 02	7	Sc			patchy;probably late Sc
IC 334	UGC 2824	Galaxy	CAM	12.3	12.9	3.7'	03 45.3	+76 38	5	Pec			
NGC 2347	UGC 3759	Galaxy	CAM	12.4	13.2	1.8'	07 16.1	+64 43	21	Sb			H III 746;traces faint roundness
IC 2179	UGC 3750	Galaxy	CAM	12.4	12.6	1.7'	07 15.5	+64 56	21	E1			P w NGC 2347 at 13' south foll
UGC 4841	MCG +12-09	Galaxy	CAM	12.4	14.3	2.8'	09 14.8	+74 14	8	S(B)d			Ho III

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2256	UGC 3519	Galaxy	CAM	12.5	14	2.3'	06 47.2	+74 14	6	SBO			
UGC 3730	PGC 20460	Galaxy	CAM	12.5	14.4	2.7'	07 14.3	+73 29	7	Ring			Chaotic; UGC 3705 at 9' 14.4mag 1.5'X1.4'
NGC 1485	UGC 2933	Galaxy	CAM	12.6	12.9	2.1'	04 05.1	+71 00	18	Sb			
NGC 2128	UGC 3392	Galaxy	CAM	12.6	13.1	1.5'	06 04.6	+57 38	41	E-SO			
NGC 4127	UGC 7122	Galaxy	CAM	12.6	13.7	2.5'	12 08.4	+76 48	9	Sc			H I 279
NGC 1469	UGC 2909	Galaxy	CAM	12.7	13.1	1.9'	04 00.5	+68 35	18	SO			
NGC 2550A	UGC 4397	Galaxy	CAM	12.7	13.5	1.6'	08 28.7	+73 45	7	Sc			slightly asym patchy arms
UGC 4238	MCG +13-06	Galaxy	CAM	12.7	13.9	2.4'	08 11.5	+76 26	7	SBd			
NGC 2550	UGC 4359	Galaxy	CAM	12.8	11.6	1'	08 24.6	+74 01	7	SB/P			peculiar?
NGC 2146A	UGC 3439	Galaxy	CAM	12.9	14.1	3'	06 23.9	+78 32	6	SBc			
NGC 2523C	UGC 4290	Galaxy	CAM	12.9	13.1	1.5'	08 17.7	+73 19	7	E5			
NGC 2544	UGC 4327	Galaxy	CAM	12.9	12.5	1.1'	08 21.7	+73 59	7	SBa			
PK 118+ 2.1	Sh1-118	Brn Neb	CAM	12.9	-	120"	00 07.6	+64 58	15				Typical spectrum of HII region
UGC 2855	PGC 13880	Galaxy	CAM	12.9	15	4.4'	03 48.4	+70 08	18	S(B)c			P w UGC 2866 at 10' south foll
NGC 2253	UGC 3511	Opn CL	CAM	13.1	-	1.4'	06 43.7	+65 12	21	1			H VII 54;Mis-identified as galaxy in CGCG
UGC 4013	Mkn 10	Galaxy	CAM	13.3	13.8	2'	07 47.5	+60 56	43	Sb			Seyfert;vF companion on east side
UGC 3697	PGC 20348	Galaxy	CAM	13.5	12.2	3.5'	07 11.4	+71 50	21	Sbp			Integral sign galaxy ;disturbed
UGC 3826	PGC 20927	Galaxy	CAM	13.5	15.9	3.5'	07 24.5	+61 42	21	S(B)d			
NGC 2634A	UGC 4585	Galaxy	CAM	13.6	13	1.8'	08 48.6	+73 56	7	SBbc			disturbed;poor resolution;dimmer for bright part only
UGC 3975	PGC 21698	Galaxy	CAM	13.6	14.1	1.4'	07 44.8	+72 48	7	SBdm			
NGC 3901	UGC 6675	Galaxy	CAM	13.7	13.9	1.8'	11 42.8	+77 22	9	Sc			H III 970
PK 147+ 4.1	M2- 2	Pln Neb	CAM	13.7	9	6.0"	04 13.3	+56 57	39	3			
NGC 2523A	UGC 4166	Galaxy	CAM	13.8	13.3	1'	08 04.1	+74 03	7	SBc			disturbed?
NGC 2636	UGC 4583	Galaxy	CAM	13.8	12.8	0.3'	08 48.4	+73 40	7	EO			compact;disc w v high surf br
NGC 2523B	UGC 4259	Galaxy	CAM	13.9	13.4	2'	08 12.9	+73 34	7	Sb			exact minor replica of NGC 5746
NGC 2336A	UGC 4066	Galaxy	CAM	14	-	1.7'	07 56.3	+78 01	7	Sc			diffuse arms;chain of bright patches in one
NGC 2760	MCG+13-07-	Galaxy	CAM	14	-	0.5'	09 24.2	+76 32	8				
NGC 1708		Opn CL	CAM	-	-	20'	05 03.4	+52 50	40		10	10	
NGC 2404		Neb+Gx	CAM	-	-		07 37.1	+65 37	21	E+*			An HII region within the Gx NGC 2403 on the NE side
Berk 13		Opn CL	CAM	-	-	7'	04 55.8	+52 49	40	III 1p :b		15	
Czernik 14		Opn CL	CAM	-	-	6'	03 17.0	+58 36	38	III 1p :b	15		
Czernik 17		Opn CL	CAM	-	-	5'	03 52.3	+61 58	18	IV 1p :b	15		
King 6		Opn CL	CAM	-	-	7'	03 28.0	+56 27	38	IV 2 p	35	10	
PK 151+ 2.1	SH2-208	Brn Neb	CAM	-	-	4.0'	04 19.8	+53 06	39	E		13.9	Not a PLNNB;H II region Sh 2-207
Sh2-205		Brn Neb	CAM	-	-	80'	03 53.2	+53 04	39	E			
Stock 23		Opn CL	CAM	-	-	15'	03 16.2	+60 06	38	III 3 p n	25	7.6	
vdB 14	LBN 681	Brn Neb	CAM	-	-	46'	03 30.3	+59 34	38	R			
vdB 15	LBN 684	Brn Neb	CAM	-	-	40'	03 29.5	+58 54	39	R			
B 8;9;11;13	LDN 1392	Drk Neb	CAM	--	--	150'	04 19.0	+55 03	39	5 lr			Grouping of LDN 1392;1395;1399;1402;
B 12	LDN 1407	Drk Neb	CAM	--	--	24'	04 30.0	+54 17	39	5 lr			Lies south following B9 complex
M 30	NGC 7099	Glob CL	CAP	6.9	11	8.9'	21 40.4	-23 11	346	V			Wm. Herschel saw very elliptical shape
NGC 6907	ESO 528- 3	Galaxy	CAP	11.2	13.4	3.4'	20 25.1	-24 49	343	SBbc			H III 141;S shaped spiral
Pal 12		Glob CL	CAP	11.7	-	2.9'	21 46.5	-21 15	346	XII			
NGC 6903	ESO 596-29	Galaxy	CAP	11.9	13.8	2.6'	20 23.7	-19 20	343	E-SO Ba			
NGC 6924	ESO 528-16	Galaxy	CAP	12.8	14.1	2'	20 33.3	-25 29	344	E-SO			
NGC 6936	ESO 528-22	Galaxy	CAP	12.8	13.4	1.8'	20 35.9	-25 17	344	E-SO			
NGC 6912	ESO 596-38	Galaxy	CAP	13.1	13.5	1.4'	20 26.9	-18 37	343	SBc			
NGC 6986	ESO 598- 7	Galaxy	CAP	13.6	12.9	1'	20 56.5	-18 34	344	E-SO			
NGC 7030	ESO 598-28	Galaxy	CAP	13.7	13.1	0.9'	21 11.2	-20 29	345	SBab			
NGC 6993	ESO 529-11	Galaxy	CAP	13.8	-	1.2'	20 53.9	-25 28	344	Sc			
NGC 6898	MCG - 2-52-	Galaxy	CAP	14	-	1.2'	20 21.1	-12 22	298	Sa			
NGC 6931	MCG - 2-52-	Galaxy	CAP	14	-	1'	20 33.7	-11 22	299	Sb			
NGC 7018	ESO 529-27	Galaxy	CAP	14	-	1.3'	21 07.4	-25 26	345	Elliptical			
NGC 7073	MCG - 2-54-	Galaxy	CAP	14	-	0.9'	21 29.4	-11 29	300	Sbc			
NGC 7131	MCG - 2-55-	Galaxy	CAP	14	-	1.7'	21 47.6	-13 11	301	SO			
NGC 3372	Dunlop 309	Brn Neb	CAR	3	-	120'	10 45.1	-59 52	427	E			Keyhole Nebula & nova-like var Eta Car ; drk lanes
NGC 3532	OCL 839	Opn CL	CAR	3	-	50'	11 05.2	-58 44	427	II 1 m	150	7.1	Fine object
IC 2581	Cr 222	Opn CL	CAR	4.3	-	8'	10 27.4	-57 38	426	I 3 m n	25	4.6	In Car OB1?;beaut fld;central* CPD 3256 many pairs--H
NGC 3293	OCL 816	Opn CL	CAR	4.7	-	40'	10 35.8	-58 13	427	I 3 r n		6.5	In Car OB1
Fein 1		Opn CL	CAR	4.7	-		11 06.0	-59 48	427	IV 2 p	40	6.6	
Tr 16	Cr 233	Opn CL	CAR	5	-	10'	10 45.1	-59 43	427		90	6.2	Nu Car Cl;Mag includes Nu Car
Tr 14	Cr 230	Opn CL	CAR	5.5	-	5'	10 43.9	-59 33	427		44	7	
Bochum 10		Opn CL	CAR	6.2	-	20'	10 42.2	-59 09	427	II 3 mn	40	8.6	
NGC 3324	IC 2599	CL+Neb	CAR	6.7	-	16'	10 37.3	-58 40	427	I 3 r n		8.2	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Cr 232		Opn CL	CAR	6.8	-	4'	10 44.6	-59 34	427				
Stock 13		Opn CL	CAR	7	-	3'	11 13.1	-58 55	427	I 2 p n	15	8.5	In Carina OB3
Tr 15	Cr 231	Opn CL	CAR	7	-	15'	10 44.4	-59 21	427	III 2 pn	39	8.4	
Cr 234		Opn CL	CAR	7.5	-	4'	10 45.3	-59 45	427				
NGC 3247	OCL 809	Opn CL	CAR	7.6	-	7'	10 25.9	-57 56	426	II 2 p n	20	10	
Tr 17	Cr 235	Opn CL	CAR	8.4	-	5'	10 56.4	-59 13	427	II 2 p	30	10.3	
Pismis 17		Opn CL	CAR	9.4	-	0.6'	11 01.1	-59 49	427	III 2 p		10.4	
Tr 19	Cr 243	Opn CL	CAR	9.6	-	10'	11 14.3	-57 35	427	III 3 m	40		
NGC 2867	PK 278-5.1	Pln Neb	CAR	9.7	6.5	12"	09 21.4	-58 19	425	4		16	
Hogg 9		Opn CL	CAR	10.6	-	1.5'	10 58.4	-59 03	427	II 1 p	10	11.5	
PK 278- 6.1	He2- 26	Pln Neb	CAR	11.9	-	10"	09 19.6	-59 12	425			16.7	
PK 264-12.1	He2- 5	Pln Neb	CAR	12.3	5.8	3.0"	07 47.4	-51 16	424			14.7	
NGC 2191	ESO 160-14	Galaxy	CAR	12.4	-	1.7'	06 08.4	-52 31	422	SBO			
PK 288+ 0.1	Hoffleit 38	Pln Neb	CAR	12.4	-	30"	10 54.6	-59 10	427	4			Ring shape
NGC 2640	ESO 165- 2	Galaxy	CAR	12.7	-	2.2'	08 37.4	-55 07	425	E-S0 B			
NGC 2502	ESO 209- 8	Galaxy	CAR	13.2	-	2.1'	07 55.9	-52 18	424	SBO			
PK 279- 3.1	He2- 36	Pln Neb	CAR	13.3	11.2	25"	09 43.5	-57 17	426			11.5	
NGC 2714	ESO 125- 7	Galaxy	CAR	14	-	0.9'	08 53.5	-59 13	425	E			
NGC 3199	ESO 127-EN	Brt Neb	CAR	-	-	22'	10 17.4	-57 55	426	E			partial ring
NGC 3503	OCL 833	Brt Neb	CAR	-	-	3'	11 01.3	-59 51	427	E+*			
Gum 32	RCW 52	Brt Neb	CAR	-	-	7.3'	10 46.3	-58 39	427	E			Crescent shape; several * invl
RCW 47		Brt Neb	CAR	-	-	25'	10 05.2	-58 57	426	E			Irregular shape; very rich field; nova shell on W border
RCW 50		Brt Neb	CAR	-	-	12'	10 27.4	-57 09	426	E			Oval shape; very rich field
Ru 86		Opn CL	CAR	-	-	12'	10 01.5	-59 31	426	III 2 m		12	
Ru 90		Opn CL	CAR	-	-	9'	10 31.0	-58 27	427	IV 2 p	15	12	
Ru 91		Opn CL	CAR	-	-	1.7'	10 47.7	-57 28	427	II 2 p	15	10	
NGC 771	50 CAS	Star	CAS	4	-		02 03.4	+72 25	17				
Stock 2		Opn CL	CAS	4.4	-	60'	02 14.7	+59 29	37	III 1 m	166	8.2	2 deg north of Double Cluster ; easy in binocs
Cr 463		Opn CL	CAS	5.7	-	36'	01 45.7	+71 49	17	III 2 p	40	8.5	
Cr 33		Opn CL	CAS	5.9	-	40.0'	02 59.3	+60 24	38			25	
NGC 457	OCL 321	Opn CL	CAS	6.4	-	13'	01 19.5	+58 17	36	I 3 r	80	8.6	H VII 42;Phi Cas is not a member; ET Cluster
NGC 129	OCL 294	Opn CL	CAS	6.5	-	21'	00 30.0	+60 13	35	IV 2 p	35	8.6	H VIII 79;Contains DL Cas
NGC 654	OCL 330	Opn CL	CAS	6.5	-	5'	01 44.0	+61 53	16	II 3 m	60	7.4	H VII 46;In Cas OB8?;50* mags 11..14
IC 1805	Mel 15	CL+Neb	CAS	6.5	-	60'	02 32.7	+61 27	17	III 3 p n	40	7.9	Cluster is Mel 15 & Cr 26;neby eF;Irr loop 90' diam
IC 1848	OCL 364	CL+Neb	CAS	6.5	-	40'	02 51.4	+60 25	38	IV 3 p n	10	7.1	Neby descr: eL;vF;90' X 45'
Mel 15	Cr 26	Opn CL	CAS	6.6	-	21.0'	02 32.6	+61 27	17	III 3 p n	40		19* in scattered oval w compress center;
NGC 1027	OCL 357	Opn CL	CAS	6.7	-	20'	02 42.6	+61 36	17	III 2 p n	40	9.3	H VIII 66;Scattered group 12*
NGC 7789	OCL 269	Opn CL	CAS	6.7	-	16'	23 57.4	+56 43	35	II 1 r	300	10.7	H VI 30;1000 members from 11 to 18 mag
Cr 34		Opn CL	CAS	6.8	-	25'	02 59.4	+60 34	38	I 3 p		7.9	
M 52	NGC 7654	Opn CL	CAS	6.9	12	13'	23 24.2	+61 35	15	I 2 r	200	8.2	Messier saw neby there is none
NGC 225	OCL 305	Opn CL	CAS	7	-	12'	00 43.6	+61 46	16	III 1 p n	15	9.3	H VIII 78;W shaped
Stock 5		Opn CL	CAS	7	-	15'	02 04.5	+64 23	17	IV 2 p	25	7	53 Cas is star on west side
Tr 3	Cr 36;Harvar	Opn CL	CAS	7	-	23'	03 11.9	+63 11	18	III 3 p	30		
NGC 663	OCL 333	Opn CL	CAS	7.1	-	16'	01 46.0	+61 15	16	III 2 m	80	8.4	H VI 31;In Cas OB8;incl Struve 151 152 & 153
Mrk 6		Opn CL	CAS	7.1	-	4.5'	02 29.6	+60 39	37	IV 2 p	6	8.4	About 12 *
M 103	NGC 581	Opn CL	CAS	7.4	11	6'	01 33.4	+60 39	37	III 2 p	40	10.6	In Cas OB8;incl Struve 131 6-9m 14"
NGC 281	IC 11	CL+Neb	CAS	7.4	-	4'	00 53.0	+56 37	36	E+*		9	
NGC 659	OCL 332	Opn CL	CAS	7.9	-	5'	01 44.4	+60 40	37	III 1 p	40	10.4	H VIII 65;30* mags 12...
Tr 1	Cr 15	Opn CL	CAS	8.1	-	4.5'	01 35.7	+61 17	16	I 3 p	20	9.6	2 10 mag * and haze of unresolved stars
NGC 637	OCL 329	Opn CL	CAS	8.2	-	3.5'	01 43.1	+64 02	16	I 3 p	20	10	H VII 49
NGC 7790	OCL 276	Opn CL	CAS	8.5	-	17'	23 58.4	+61 13	15	III 2 p	40	10.9	H VII 56;Contains CE Cas
King 14		Opn CL	CAS	8.5	-	7'	00 31.9	+63 10	15	III 2 p	20	11.3	Rich cl in rich field;29 * in 10' X 6'
NGC 189	OCL 301	Opn CL	CAS	8.8	-	3.7'	00 39.6	+61 05	16	III 2 p	15	10.9	
NGC 436	OCL 320	Opn CL	CAS	8.8	-	6'	01 16.0	+58 49	36	I 3 m	30	11.1	H VII 45
Stock 24	Berk 3	Opn CL	CAS	8.8	-	4'	00 39.7	+61 57	16	IV 2 P	20	11.1	Superb at high power in 10" scope
NGC 433	OCL 319	Opn CL	CAS	9	-	2.5'	01 15.2	+60 08	36	III 2 p	15	9	
Harvard 21		Opn CL	CAS	9	-	4'	23 54.3	+61 44	15	IV 2 p	6		20 F*
NGC 146	OCL 299	Opn CL	CAS	9.1	-	7'	00 32.9	+63 19	15	IV 3 p	20	11.6	
NGC 185	UGC 396	Galaxy	CAS	9.2	14.3	12.5'	00 39.0	+48 20	60	dE0			H II 707;Dwarf elliptical; Member Local Group
Frolov 1		Opn CL	CAS	9.2	-		23 57.4	+61 38	15		26	10.6	
NGC 381	OCL 317	Opn CL	CAS	9.3	-	6'	01 08.4	+61 35	16	III 2 p	50	10	H VIII 64;In Cas OB1?
Berk 62		Opn CL	CAS	9.3	-	10'	01 01.2	+63 57	16	III 2 p	50	10.9	
NGC 133	OCL 296	Opn CL	CAS	9.4	-	7'	00 31.3	+63 21	15	IV 1 p	5		
NGC 7788	OCL 275	Opn CL	CAS	9.4	-	9'	23 56.7	+61 24	15	I 2 p	20		In Cas OB5?

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NGC 147	UGC 326;D	Galaxy	CAS	9.5	14.5	13.5'	00 33.2	+48 30	60	dE4			Dwarf E1;P w NGC 185 at 58';low surface br; Local Grp
NGC 559	OCL 322	Opn CL	CAS	9.5	-	4.4'	01 29.5	+63 19	16	II 2 m	60	10.6	H VII 48
NGC 743	OCL 343	Opn CL	CAS	9.5	-	5'	01 58.5	+60 10	37	II 1 p	12	10	
Berk 58		Opn CL	CAS	9.7	-	8'	00 00.2	+60 58	35	IV 2 p	30	15	
NGC 103	OCL 291	Opn CL	CAS	9.8	-	5'	00 25.3	+61 19	15	II 2 p	30	12.3	In Cas OB4
King 21		Opn CL	CAS	9.8	-	2.5'	23 49.9	+62 43	15	III 3 m	20	10	
Czernik 3	OCL 315	Opn CL	CAS	9.9	-	3'	01 03.1	+62 48	16	III 2p :b	8		
King 12		Opn CL	CAS	10	-	2'	23 53.0	+61 58	15	I 2 p	15	10	27 stars from 10...16 mag
Berk 65		Opn CL	CAS	10.2	-	5'	02 39.0	+60 24	38	I 2 p	20	10.8	
King 16		Opn CL	CAS	10.3	-	3'	00 43.7	+64 11	16	II 3 p	35	12.5	compact and small
Czernik 13		Opn CL	CAS	10.4	-	6'	02 44.7	+62 20	17	II 2 p	10	12.8	
King 4		Opn CL	CAS	10.5	-	3'	02 35.0	+59 01	38	III 1 p	20	12.9	
Berk 4		Opn CL	CAS	10.6	-	5'	00 45.2	+64 24	16	I 2 p	25	12.6	
NGC 278	UGC 528	Galaxy	CAS	10.8	12.2	2.4'	00 52.1	+47 33	60	SBb			Lg B nucl;sev knotty massive arms;B part sharp edge;
NGC 609	OCL 325	Opn CL	CAS	11	-	3'	01 36.4	+64 32	16	II 3 r	77	14.4	
NGC 7635	LBN 549	Brt Neb	CAS	11	-	15'	23 20.2	+61 11	34	E			Bubble Nebula ;H IV 52;L neb ring
Maffei 1		Galaxy	CAS	11.4	10	5'	02 36.3	+59 39	38				Very obscured infrared source
NGC 136	OCL 295	Opn CL	CAS	11.5	-	1.2'	00 31.5	+61 31	15	II 2 p	20	13	H VI 35;30 F*
IC 166	OCL 334	Opn CL	CAS	11.7	-	7'	01 52.5	+61 51	17	III 1 r	120	11.7	
NGC 366	OCL 316	Opn CL	CAS	12	-	3'	01 06.4	+62 14	16	II 3 p	30	10	
NGC 7795		Opn CL	CAS	12	-	10'	23 58.7	+60 01	35				
IC 289	PK 138+2.1	Pln Neb	CAS	12	12.3	45"	03 10.3	+61 19	18	4(2)		16.8	
IC 1747	PK 130+1.1	Pln Neb	CAS	12	8.7	13"	01 57.6	+63 19	17	3b		15.8	
PK 118- 8.1	VY 1-1	Pln Neb	CAS	12.5	-	5"	00 18.7	+53 53	35			14.1	
NGC 1343	UGC 2792	Galaxy	CAS	12.7	14.1	2.6'	03 37.8	+72 34	5	SB/P			heavy ringshaped nucleus;B blue neutral ring core
IC 10	UGC 192	Galaxy	CAS	13.3	14	6.4'	00 20.4	+59 18	35	Ir+			Mem. of Local Group;very obscured;several H II regions
PK 119- 6.1	Hu 1-1	Pln Neb	CAS	13.3	6.9	5"	00 28.2	+55 57	35	2		19.1	
PK 111- 2.1	Hubble 12	Pln Neb	CAS	14	2.9	1.0"	23 26.9	+58 11	58			13.8	11 mag * 75" north following
NGC 110	OCL 300	Opn CL	CAS	-	-	19'	00 27.4	+71 24	15	IV 1 p	100	9.7	
NGC 657	OCL 337	Opn CL	CAS	-	-	7'	01 43.8	+55 53	37		40	7.1	
NGC 886	Stock 6	Opn CL	CAS	-	-	8'	02 23.5	+63 47	17	II 2p	20	11	
NGC 896	SG 1 4	Brt Neb	CAS	-	-	27'	02 25.5	+62 01	17	E			H III 695
IC 59	LBN 620	Brt Neb	CAS	-	-	10'	00 57.5	+61 09	16	E			Neb patch 30' N of Gamma Cas
IC 63	LBN 623	Brt Neb	CAS	-	-	10'	00 59.5	+60 55	36	E			Fan-shaped neby 20' north foll Gamma Cas
IC 1795	LBN 645	Brt Neb	CAS	-	-	12'	02 25.8	+61 59	17	E			Brightest portion of IC 1805;vast neby incl Mel 15
IC 1871	LBN 675	Brt Neb	CAS	-	-	4.0'	03 03.2	+60 28	38	E			
Berk 1		Opn CL	CAS	-	-	5'	00 09.7	+60 29	35	III 1p :b	10		
Berk 2		Opn CL	CAS	-	-	4'	00 25.2	+60 24	35	I 1m :b	30	15	
Berk 5		Opn CL	CAS	-	-	3'	01 47.7	+62 56	17	IV 1p :b	15	17	
Berk 6		Opn CL	CAS	-	-	5'	01 51.2	+61 04	17	II 2p :b	20	14	
Berk 7		Opn CL	CAS	-	-	4'	01 55.0	+62 22	17	II 2p :b	18	14	
Berk 8		Opn CL	CAS	-	-	7'	02 02.0	+75 30	4	II 2m :b	40	14	
Berk 60		Opn CL	CAS	-	-	4'	00 17.6	+60 57	35	III 1p :b	20	14	
Berk 61		Opn CL	CAS	-	-	4'	00 48.2	+67 12	16	II 1p :b	15	14	
Berk 63		Opn CL	CAS	-	-	4'	02 19.5	+63 43	17	III 1p :b	12	15	
Berk 64		Opn CL	CAS	-	-	4'	02 21.7	+65 54	17	II 1m :b	30	14	
Berk 66		Opn CL	CAS	-	-	6'	03 04.1	+58 46	38	I 3m :b	30	16	
Berk 102		Opn CL	CAS	-	-	5'	23 38.7	+56 39	35	II 1p :a		18	
Berk 103		Opn CL	CAS	-	-	4'	23 45.2	+59 19	35	II 1p :b	20	15	
Berk 104		Opn CL	CAS	-	-	4'	00 03.4	+63 36	15	II 1p :b	15	16	
Czernik 1		Opn CL	CAS	-	-	9'	00 07.8	+61 29	15	I 2p :b		12	
Czernik 2		Opn CL	CAS	-	-	10'	00 43.6	+60 12	36	IV 2m :b	30		
Czernik 4		Opn CL	CAS	-	-	3'	01 35.6	+61 29	16	IV 2p :b	10		
Czernik 5		Opn CL	CAS	-	-	7'	01 55.7	+61 21	17	III 1p :b	10		
Czernik 6		Opn CL	CAS	-	-	3'	02 02.0	+62 51	17	II 2p :b	12		
Czernik 7		Opn CL	CAS	-	-	5'	02 03.0	+62 15	17	II 1p :b	20		
Czernik 9		Opn CL	CAS	-	-	5'	02 33.6	+59 53	38	III 2p :b	12		
Czernik 10		Opn CL	CAS	-	-	3'	02 34.0	+60 11	38	IV 1p :b	15		
Czernik 11		Opn CL	CAS	-	-	7'	02 36.6	+59 39	38	I 2pn :b	20		Superimposed on faint galaxy Maffei 1
Czernik 43		Opn CL	CAS	-	-	14'	23 25.8	+61 19	15	III 1 r	15		
Czernik 44		Opn CL	CAS	-	-	5'	23 33.5	+61 58	15	II 2p :b	20		
Czernik 45		Opn CL	CAS	-	-	3'	23 55.8	+64 37	15	II 2p :b	8		
Do 12		Opn CL	CAS	-	-	18'	00 40.8	+60 51	36				
Do 13		Opn CL	CAS	-	-	12'	00 50.0	+64 08	16	III 1 p	30		

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Do 46		Opn CL	CAS	-	-	12'	23 21.9	+55 46	58	IV 1 p			
King 1		Opn CL	CAS	-	-	7'	00 21.9	+64 23	15	II 2r :b	100	13	
King 2		Opn CL	CAS	-	-	5'	00 50.9	+58 11	36	II 2m :b	40	17	
King 13		Opn CL	CAS	-	-	7'	00 10.2	+61 11	15	II 2m :b	30	12	
King 15		Opn CL	CAS	-	-	1.5'	00 33.1	+61 52	15	IV 2p :b	12	18	
King 20		Opn CL	CAS	-	-	4'	23 33.2	+58 29	35	II 2p :b	20	13	
PK 121- 2.1		Brn Neb	CAS	-	-	39"	00 38.7	+60 17	36	2b		18	Not a PLNNB;reflection nebula
Sh2-157		Brn Neb	CAS	-	-	60'	23 16.1	+60 02	58	E			Incl brighter area Sh2-157a
Sh2-188	LBN 633	Brn Neb	CAS	-	-	10'	01 30.6	+58 23	37	E			Crescent shaped with SE side brighter
Stock 3		Opn CL	CAS	-	-	2'	01 12.0	+62 16	16	IV 1 p	8	11	
Stock 11		Opn CL	CAS	-	-	10'	23 30.9	+55 45	35	IV 2 p		8	
Stock 12		Opn CL	CAS	-	-	20'	23 36.4	+52 33	35	IV 2 p	9	8	
Stock 17		Opn CL	CAS	-	-	1'	23 43.7	+62 10	15	I 3p :a		8.5	
Stock 18		Opn CL	CAS	-	-	5'	00 01.6	+64 37	15	IV 2p :a			
Stock 19		Opn CL	CAS	-	-	3'	00 04.4	+56 05	35	II 2 p	6	8	
Stock 20		Opn CL	CAS	-	-	1'	00 25.2	+62 39	15	II 2p :a		13	
Stock 21		Opn CL	CAS	-	-	5'	00 30.5	+57 56	36	IV 2p :b	10	12	
Tombaugh 4		Opn CL	CAS	-	-	2.5'	02 29.2	+61 47	17	II 1 mn:b	40	16	
vdB 1	LBN 578	Brn Neb	CAS	-	-	5'	00 10.6	+58 46	227	R			
vdB 8	LBN 643	Brn Neb	CAS	-	-	3.6'	02 51.5	+67 49	17	R			
NGC 5139	Omeg Cen	Glob CL	CEN	3.9	-	36.3'	13 26.8	-47 29	403	VIII			Stars maqs 11....finest globular:magnificent object
NGC 5662	OCL 928	Opn CL	CEN	5.5	-	29'	14 35.6	-56 37	431	II 3 m	70	7	
NGC 5460	OCL 925	Opn CL	CEN	5.6	-	25'	14 07.5	-48 21	404	II 3 m	40	8	
NGC 5128	Dunlop 482	Galaxy	CEN	6.8	13.5	27.6'	13 25.5	-43 01	403	SO			Centaurus A , Dark central band;radio source
NGC 5286	Dunlop 388	Glob CL	CEN	7.4	-	9.1'	13 46.4	-51 22	430	V			close to a bright star
Ru 108		Opn CL	CEN	7.5	-	12'	13 32.2	-58 29	430	III 2 p	15	8.5	
NGC 3680	OCL 823	Opn CL	CEN	7.6	-	6'	11 25.6	-43 15	400	I 2 p	30	10.1	
NGC 5138	OCL 902	Opn CL	CEN	7.6	-	8'	13 27.3	-59 02	429	II 2 p	40	10.3	
NGC 5606	OCL 922	Opn CL	CEN	7.7	-	3'	14 27.8	-59 38	430	I 1 p	15	7.9	
NGC 3960	Mel 108	Opn CL	CEN	8.3	-	7'	11 50.6	-55 41	428	I 2 m	45	11.5	
NGC 3918	PK 294+4.1	Pin Neb	CEN	8.4	5.7	12"	11 50.3	-57 11	428	2b		15.5	Blue Planetary
NGC 4945	Dunlop 411	Galaxy	CEN	8.6	13.1	19.8'	13 05.4	-49 28	402	SBc			Nearly edge-on
NGC 4852	Dunlop 311	Opn CL	CEN	8.9	-	11'	13 00.1	-59 37	429	II 2 p	60		
NGC 4230	OCL 874	Opn CL	CEN	9.4	-	6'	12 17.3	-55 05	428	IV 2 p	15		
NGC 5102	ESO 382-50	Galaxy	CEN	9.6	13	8.6'	13 22.0	-36 38	370	E-SO			17' nf Iota CEN
NGC 4976	ESO 219-29	Galaxy	CEN	10	13.1	5.1'	13 08.6	-49 30	402	Elliptical			
NGC 5284	ESO 133-74	Opn CL	CEN	10	-	30'	13 47.4	-59 09	430				
NGC 3557	ESO 377-16	Galaxy	CEN	10.4	13.1	4'	11 10.0	-37 32	367	Elliptical			
NGC 4696	ESO 322-91	Galaxy	CEN	10.4	13.3	4.7'	12 48.8	-41 19	402	Elliptical			
NGC 5253	ESO 445- 4	Galaxy	CEN	10.4	12.8	4.6'	13 39.9	-31 39	370	S pec			H II 638;SN in 1895 & 1975
NGC 5206	ESO 220-18	Galaxy	CEN	10.6	13.2	3.8'	13 33.7	-48 09	403	E-SO Ba			
NGC 4936	ESO 443-47	Galaxy	CEN	10.8	12.8	3.2'	13 04.3	-30 32	370	Elliptical			
NGC 4373	ESO 322- 6	Galaxy	CEN	10.9	13.1	3.6'	12 25.3	-39 46	402	E-SO Ba			
NGC 4709	ESO 323- 3	Galaxy	CEN	10.9	12.6	2.3'	12 50.1	-41 23	402	Elliptical			
NGC 5419	ESO 384-39	Galaxy	CEN	10.9	13.7	4.1'	14 03.6	-33 59	371	E4			
Ru 106		Glob CL	CEN	10.9	-	2'	12 38.7	-51 09	402			14.8	Skiff: Nice globular cluster!
NGC 4930	ESO 323-74	Galaxy	CEN	11.1	14	4.4'	13 04.1	-41 25	402	SBbc Rin			
NGC 5266	ESO 220-33	Galaxy	CEN	11.1	13	3.3'	13 43.0	-48 10	403	E-SO			
NGC 5161	ESO 383- 4	Galaxy	CEN	11.2	13.8	5.6'	13 29.2	-33 11	370	Sc			
NGC 5483	ESO 271-19	Galaxy	CEN	11.2	13.8	3.9'	14 10.4	-43 20	404	SBc			
NGC 3706	ESO 378- 6	Galaxy	CEN	11.3	13.1	3.1'	11 29.7	-36 24	367	E-SO			
NGC 5011	ESO 269-65	Galaxy	CEN	11.4	13.1	2.5'	13 12.9	-43 06	403	E1			
NGC 5365	ESO 271- 8	Galaxy	CEN	11.4	13.1	3'	13 57.8	-43 56	403	SBO Rin			
PK 290+ 7.1	Fleming 1	Pin Neb	CEN	11.4	8.7	30"	11 28.6	-52 56	427	3(4)			
NGC 4767	ESO 323-36	Galaxy	CEN	11.5	12.7	2.6'	12 53.9	-39 43	402	Elliptical			
NGC 5026	ESO 269-73	Galaxy	CEN	11.5	13.4	3.3'	13 14.2	-42 58	403	SBa			
NGC 5121	ESO 382-57	Galaxy	CEN	11.5	12.5	1.9'	13 24.8	-37 41	370	Sa			
NGC 4373A	ESO 322- 8	Galaxy	CEN	11.6	12.3	2.6'	12 25.6	-39 19	402	SO			
NGC 4603	ESO 322-52	Galaxy	CEN	11.6	13.7	2.3'	12 40.9	-40 59	402	SBc			S shaped spiral
NGC 4650	ESO 322-67	Galaxy	CEN	11.6	13.9	3.2'	12 44.3	-40 44	402	SBO-a			
NGC 4835	ESO 269-19	Galaxy	CEN	11.6	12.8	4.3'	12 58.1	-46 16	402	SBbc			
NGC 5090	ESO 270- 2	Galaxy	CEN	11.6	13.7	2.7'	13 21.2	-43 42	403	E2			
NGC 5193	ESO 383-15	Galaxy	CEN	11.6	12.8	1.9'	13 31.9	-33 14	370	E2			
NGC 3783	ESO 378-14	Galaxy	CEN	11.7	12.9	1.9'	11 39.0	-37 44	367	SBa			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5156	ESO 220-13	Galaxy	CEN	11.7	13.2	2.5'	13 28.7	-48 55	403	SBab			
NGC 4645	ESO 322-66	Galaxy	CEN	11.8	12.9	2.2'	12 44.2	-41 45	402	Elliptical			
NGC 4751	ESO 323-29	Galaxy	CEN	11.8	13	3'	12 52.8	-42 40	402	E-SO			
NGC 4947	IC 3974	Galaxy	CEN	11.8	12.9	2.4'	13 05.3	-35 20	370	SBab			
NGC 5140	ESO 382-65	Galaxy	CEN	11.8	13	2.1'	13 26.4	-33 52	370	SBO			
NGC 4219	ESO 267-37	Galaxy	CEN	11.9	13.5	4.2'	12 16.5	-43 19	401	Sbc			
NGC 5292	ESO 445-31	Galaxy	CEN	11.9	12.9	1.8'	13 47.7	-30 56	371	Sab			
NGC 5333	ESO 221-17	Galaxy	CEN	11.9	-	1.9'	13 54.4	-48 31	403	SBO			
NGC 5488	IC 4375	Galaxy	CEN	11.9	13.1	3.4'	14 08.0	-33 19	371	SBbc			
NGC 5494	ESO 446-25	Galaxy	CEN	11.9	13.3	2.3'	14 12.4	-30 39	371	Sc			
IC 3253	ESO 380-24	Galaxy	CEN	11.9	13	2.7'	12 23.8	-34 37	369	Sc			
NGC 4112	ESO 321- 6	Galaxy	CEN	12	12.3	1.6'	12 07.2	-40 13	401	SBb			
NGC 5266A	ESO 220-30	Galaxy	CEN	12	14	3.1'	13 40.6	-48 21	403	SBc			
NGC 5357	ESO 445-78	Galaxy	CEN	12	12.8	1.6'	13 56.0	-30 21	371	E0			
NGC 5381	OCL 915	Opn CL	CEN	12	-	14'	14 00.7	-59 35	430	II 2 p	50		
NGC 5516	ESO 221-34	Galaxy	CEN	12	12.7	1.8'	14 15.9	-48 07	404	E-SO			
NGC 5786	ESO 327-37	Galaxy	CEN	12	-	2.3'	14 58.9	-42 01	405	SBbc			
NGC 3564	ESO 377-18	Galaxy	CEN	12.1	12.3	1.7'	11 10.6	-37 33	367	SO			
NGC 3742	ESO 320- 6	Galaxy	CEN	12.1	13.4	2.4'	11 35.5	-37 57	367	SBab Rii			
NGC 4507	ESO 322-29	Galaxy	CEN	12.1	12.8	1.6'	12 35.6	-39 55	402	SBab Rii			
NGC 4645B	ESO 322-60	Galaxy	CEN	12.1	12.3	1.9'	12 43.5	-41 22	402	SBO			
NGC 5064	ESO 220- 2	Galaxy	CEN	12.1	13.1	2.4'	13 19.0	-47 55	403	Sb			
NGC 5124	IC 4233	Galaxy	CEN	12.1	12.6	2.2'	13 24.8	-30 19	370	Elliptical			
NGC 5188	MCG - 6-30-	Galaxy	CEN	12.1	13.3	3'	13 31.5	-34 48	370	SBbc/P			
NGC 5302	ESO 445-43	Galaxy	CEN	12.1	12.6	1.7'	13 48.8	-30 31	371	SBO-a			
NGC 5307	PK 312+10.1	Pln Neb	CEN	12.1	7.8	15"	13 51.1	-51 12	430	3		14.7	
NGC 4553	ESO 322-30	Galaxy	CEN	12.2	12.9	2.4'	12 36.1	-39 26	402	SBO-a Rii			
NGC 4622	ESO 322-57	Galaxy	CEN	12.2	13.2	1.7'	12 42.6	-40 45	402	Sa			
NGC 4645A	ESO 322-59	Galaxy	CEN	12.2	13	2.8'	12 43.1	-41 22	402	SBO			
NGC 4832	ESO 323-51	Galaxy	CEN	12.2	13	1.8'	12 57.8	-39 46	402	SO			
NGC 5062	ESO 382-35	Galaxy	CEN	12.2	12.6	2.3'	13 18.4	-35 28	370	SO			
NGC 5220	ESO 383-36	Galaxy	CEN	12.2	12.6	2.4'	13 35.9	-33 27	370	Sa			
NGC 5408	PK 317+19.1	Pln Neb	CEN	12.2	-	114"	14 03.4	-41 23	404	V			
NGC 5489	ESO 271-21	Galaxy	CEN	12.2	12.5	1.5'	14 12.0	-46 05	404	Sa			
NGC 3568	ESO 377-20	Galaxy	CEN	12.3	12.9	2.5'	11 10.8	-37 27	367	SBc			
NGC 3573	ESO 377-22	Galaxy	CEN	12.3	13.5	3.6'	11 11.3	-36 53	367	Sa			
NGC 3749	ESO 320- 8	Galaxy	CEN	12.3	13.2	3.2'	11 35.9	-38 00	367	Sa			
NGC 4444	ESO 268-10	Galaxy	CEN	12.3	14	2.5'	12 28.6	-43 16	402	SBbc Rii			
NGC 4729	ESO 323-16	Galaxy	CEN	12.3	13.1	1.5'	12 51.8	-41 08	402	Elliptical			Herschel's position was approximate only
NGC 5398	ESO 384-32	Galaxy	CEN	12.3	13.8	2.8'	14 01.4	-33 04	371	SBdmp			
NGC 4679	ESO 322-82	Galaxy	CEN	12.4	13.2	1.6'	12 47.5	-39 34	402	SBc			
NGC 4785	ESO 219- 4	Galaxy	CEN	12.4	12.9	2'	12 53.5	-48 45	402	Sb			
NGC 4946	ESO 269-45	Galaxy	CEN	12.4	13.1	1.6'	13 05.5	-43 36	402	Elliptical			
NGC 5063	ESO 382-36	Galaxy	CEN	12.4	13.8	2.3'	13 18.4	-35 21	370	Sa Ring			
NGC 5114	ESO 444-24	Galaxy	CEN	12.4	12.9	1.8'	13 24.0	-32 21	370	E-SO Ba			
NGC 4945A	ESO 219-28	Galaxy	CEN	12.5	13.7	2.5'	13 06.6	-49 42	402	SB			
NGC 5237	ESO 270-22	Galaxy	CEN	12.5	13.6	2'	13 37.6	-42 51	403	Elliptical			
NGC 5244	NGC 5219	Galaxy	CEN	12.5	12.3	1.7'	13 38.7	-45 51	403	Sb			
NGC 3557B	ESO 377-15	Galaxy	CEN	12.6	12.8	2'	11 09.5	-37 21	367	Elliptical			
NGC 4575	ESO 322-36	Galaxy	CEN	12.6	13.4	2'	12 37.9	-40 32	402	SBbc			
NGC 4681	ESO 268-40	Galaxy	CEN	12.6	13	1.4'	12 47.5	-43 20	402	Sab			
NGC 4744	ESO 323-22	Galaxy	CEN	12.6	13.3	2.1'	12 52.3	-41 04	402	SBO-a			
NGC 4909	ESO 269-35	Galaxy	CEN	12.6	13.8	1.9'	13 02.0	-42 46	402	Sa Ring			
NGC 5304	ESO 445-52	Galaxy	CEN	12.6	13	1.5'	13 50.0	-30 35	371	E4			
NGC 4683	ESO 322-83	Galaxy	CEN	12.7	12.8	1.3'	12 47.7	-41 32	402	E-SO Ba			
NGC 4696B	ESO 322-81	Galaxy	CEN	12.7	12.5	1.2'	12 47.4	-41 14	402	E-SO			
NGC 5397	ESO 384-31	Galaxy	CEN	12.7	13	1.4'	14 01.2	-33 57	371	E-SO Ba			
NGC 3903	ESO 378-24	Galaxy	CEN	12.8	12.7	1.1'	11 49.1	-37 31	368	SBc			
NGC 4677	ESO 322-78	Galaxy	CEN	12.8	12.9	1.6'	12 47.0	-41 35	402	SBO-a			
NGC 4988	ESO 269-55	Galaxy	CEN	12.8	12.5	1.7'	13 09.9	-43 06	402	Sa			
NGC 5082	ESO 269-89	Galaxy	CEN	12.8	13.2	1.5'	13 20.7	-43 42	403	SBO Rii			
NGC 5365A	ESO 271- 6	Galaxy	CEN	12.8	12.9	2.6'	13 56.7	-44 01	403	SBb			
PK 292+ 4.1	PB 8	Pln Neb	CEN	12.8	7.6	5"	11 33.4	-57 06	428			13.6	
NGC 3533	NGC 3557A	Galaxy	CEN	12.9	13.4	2.8'	11 07.1	-37 10	367	Sab			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4650A	ESO 322-69	Galaxy	CEN	12.9	13	1.6'	12 44.8	-40 43	402	Sa			
NGC 4706	ESO 323- 1	Galaxy	CEN	12.9	12.5	1.3'	12 49.9	-41 17	402	SBO			
NGC 4730	ESO 323-17	Galaxy	CEN	12.9	12.9	1.2'	12 52.0	-41 09	402	E-SO			
NGC 5215	ESO 383-29	Galaxy	CEN	12.9	12.8	1.2'	13 35.1	-33 29	370	SO			Double galaxy with 5215A; 0.7' 14.2 mag 30 "to west
NGC 4573	ESO 268-26	Galaxy	CEN	13	14.6	2.5'	12 37.7	-43 37	402	SBO-a R			
NGC 4574	ESO 380-49	Galaxy	CEN	13	13.6	1.8'	12 37.7	-35 31	369	SBc			
NGC 4696D	ESO 322-88	Galaxy	CEN	13	12.2	1.6'	12 48.4	-41 43	402	SBO			
NGC 4743	ESO 323-21	Galaxy	CEN	13	12.4	1.4'	12 52.3	-41 23	402	SO			
NGC 4811	ESO 323-47	Galaxy	CEN	13	13.1	1.3'	12 56.9	-41 48	402	SBO-a			
NGC 4903	ESO 443-30	Galaxy	CEN	13	13.6	1.6'	13 01.4	-30 56	370	SBc			
NGC 5090A	ESO 269-84	Galaxy	CEN	13	12.9	1.7'	13 19.3	-43 39	403	SO			
NGC 5234	ESO 220-24	Galaxy	CEN	13	12.9	1.3'	13 37.5	-49 50	403	SBO-a R			
NGC 4603C	ESO 322-49	Galaxy	CEN	13.1	12.6	1.7'	12 40.7	-40 46	402	SO			
NGC 4767B	ESO 323-41	Galaxy	CEN	13.1	13.3	1.3'	12 54.7	-39 51	402	SBc			
NGC 4812	ESO 323-48	Galaxy	CEN	13.1	12.1	1.2'	12 56.9	-41 49	402	SO			
NGC 4940	ESO 269-42	Galaxy	CEN	13.1	13.2	1.2'	13 05.0	-47 14	402	Sa			
NGC 4953	ESO 382- 8	Galaxy	CEN	13.1	12.9	1.2'	13 06.2	-37 35	370	Sa			
NGC 5091	ESO 270- 4	Galaxy	CEN	13.1	12.7	1.8'	13 21.3	-43 43	403	Sb			
NGC 5126	ESO 444-28	Galaxy	CEN	13.1	12.3	1.4'	13 24.9	-30 20	370	Sa			
NGC 5298	ESO 445-39	Galaxy	CEN	13.1	12.9	1.4'	13 48.6	-30 26	371	SBb			
NGC 4499	ESO 322-22	Galaxy	CEN	13.2	14	1.8'	12 32.1	-39 59	402	SBbc			
NGC 4603D	ESO 322-55	Galaxy	CEN	13.2	13.6	1.5'	12 42.1	-40 49	402	SBcd			
NGC 4672	ESO 322-73	Galaxy	CEN	13.2	13.2	2.2'	12 46.3	-41 42	402	Sa			
NGC 4905	ESO 443-31	Galaxy	CEN	13.2	13.8	1.4'	13 01.5	-30 52	370	SBO-a			
NGC 5090B	ESO 269-88	Galaxy	CEN	13.2	13.6	1.9'	13 20.3	-43 52	403	SBb			
NGC 5365B	ESO 271- 9	Galaxy	CEN	13.2	12.4	1.6'	13 58.7	-43 58	403	Sab			
NGC 3882	ESO 170-11	Galaxy	CEN	13.3	-	2.3'	11 46.1	-56 23	428	SBbc			
NGC 4835A	ESO 269-15	Galaxy	CEN	13.3	13.2	2.5'	12 57.2	-46 23	402	Sc			
NGC 5219	NGC 5244	Galaxy	CEN	13.3	-	1.7'	13 38.7	-45 51	403	Sb			2m30s;3' Error in NGC position
NGC 4616	ESO 322-56	Galaxy	CEN	13.4	13.1	0.9'	12 42.3	-40 39	402	Elliptical			
NGC 4601	ESO 322-50	Galaxy	CEN	13.5	13.3	1.7'	12 40.8	-40 54	402	SBO-a			
NGC 4603A	ESO 322-44	Galaxy	CEN	13.5	13.6	1.9'	12 39.6	-40 44	402	SBc			
NGC 4622A	ESO 322-64	Galaxy	CEN	13.5	12.1	0.6'	12 43.8	-40 43	402	E-SO Ba			
NGC 4661	NGC 4650B	Galaxy	CEN	13.5	12.7	1.2'	12 45.2	-40 50	402	E-SO			
NGC 4696E	ESO 322-90	Galaxy	CEN	13.5	13.7	1.5'	12 48.4	-40 56	402	SBO			
PK 311+ 2.1	He2-102	Pln Neb	CEN	13.5	-	9"	13 58.2	-58 55	430			17.2	
NGC 5011A	ESO 269-63	Galaxy	CEN	13.6	13.8	1.6'	13 12.2	-43 19	403	SB Ring			
NGC 4219A	ESO 267-38	Galaxy	CEN	13.7	13.2	1.3'	12 18.0	-43 32	401	SBc			
NGC 4696A	ESO 322-77	Galaxy	CEN	13.7	13.2	1.3'	12 46.9	-41 30	402	SBb			
PK 316+ 8.1	He2-108	Pln Neb	CEN	13.7	10.1	12"	14 18.2	-52 11	430			12.7	
NGC 3557A	NGC 3533	Galaxy	CEN	13.8	-	2.8'	11 07.1	-37 10	367	Sab			
NGC 4696C	ESO 322-87	Galaxy	CEN	13.8	13.2	1.8'	12 48.0	-40 49	402	Sb			
NGC 4622B	ESO 322-64	Galaxy	CEN	13.9	13.5	1.1'	12 43.8	-40 43	402	SO			
NGC 4950	ESO 269-47	Galaxy	CEN	13.9	13.3	0.8'	13 05.6	-43 30	402	SBO			
NGC 3699	PK 292+1.1	Pln Neb	CEN	14	10.4	67"	11 28.0	-59 57	427				S neby w few F*
NGC 5193A	ESO 383-14	Galaxy	CEN	14	-	1.3'	13 31.8	-33 14	370	SO			
NGC 3909	ESO 217-SC	Opn CL	CEN	-	-	20'	11 50.1	-48 14	401				Coarse cluster of 10-14 *
NGC 5367	ESO 325-N*	Brn Neb	CEN	-	-	4'	13 57.7	-39 59	403	R			Double neb incl IC 4347
RCW 59		Brn Neb	CEN	-	-	180'	11 37.0	-57 00	428	E			
Ru 111		Opn CL	CEN	-	-	8'	14 36.8	-59 56	431	III 1m:b	40	13	
Ru 167		Opn CL	CEN	-	-	14'	14 18.2	-58 58	430	IV 2 p	40	11	
Be 146		Drk Neb	CEN	--	--	20'	13 57.6	-40 00	403	5 lr			Adjacent to bright nebula NGC 5367
IC 1396	OCL 222	CL+Neb	CEP	3.5	-	89'	21 39.1	+57 30	57	II 3 m n	50	3.8	In Cep OB2;Neb is 165'X135';cluster is Tr 37
Tr 37	Cr 439	Opn CL	CEP	5.1	-	50'	21 39.0	+57 30	57	II 3 m	30	7.8	In IC 1396 nebula
NGC 7160	OCL 236	Opn CL	CEP	6.1	-	7'	21 53.7	+62 36	33	II 3 p	12	7	H VIII 67;In Cep OB2
NGC 7023	OCL 235	CL+Neb	CEP	7.1	-	5'	21 00.5	+68 10	33	E+*			H IV 74;Complex structure w Br and dark filaments
NGC 7748		Star	CEP	7.1	-		23 44.9	+69 45	15				
NGC 7380	OCL 244	Opn CL	CEP	7.2	-	12'	22 47.3	+58 08	58	III 3 p n	40	8.6	H VIII 77; In Cep OB1
NGC 7235	OCL 229	Opn CL	CEP	7.7	-	4'	22 12.6	+57 17	57	III 2 p	30	8.8	
NGC 6939	OCL 217	Opn CL	CEP	7.8	-	8'	20 31.5	+60 40	56	I 1 m	80	11.9	H VI 42;Gal N6946 38' SE
NGC 7510	OCL 256	Opn CL	CEP	7.9	-	4'	23 11.5	+60 34	58	II 2 m n	60	9.7	H VII 44;L region of F neby to SE
NGC 188	OCL 309	Opn CL	CEP	8.1	-	14'	00 47.5	+85 14	1	II 2 r	20	12.1	
NGC 7261	OCL 237	Opn CL	CEP	8.4	-	6'	22 20.4	+58 05	57	III 1 p	30	9.6	
Mrk 50		Opn CL	CEP	8.5	-	5.0'	23 15.3	+60 28	58	I 2 p n	5	9.8	With binary HD 219460;very compressed 13 * in 3'

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Berk 94		Opn CL	CEP	8.7	-	4'	22 22.9	+55 53	57	I 1 p n	10	9.6	
NGC 6946	UGC 11597	Galaxy	CEP	8.8	13.8	11.2'	20 34.9	+60 09	56	SBc			H IV 76;One of nearest spirals
King 19		Opn CL	CEP	9.2	-	7'	23 08.3	+60 31	58	II 2 m	25	10.4	
NGC 7142	OCL 241	Opn CL	CEP	9.3	-	4.3'	21 45.2	+65 46	33	II 2 r	100	12.1	H VII 66
NGC 7226	OCL 226	Opn CL	CEP	9.6	-	1.8'	22 10.5	+55 25	57	I 1 p	25	10.8	
NGC 7762	OCL 280	Opn CL	CEP	10	-	11'	23 49.8	+68 02	15	II 2 p	40	11	H VII 55
NGC 6951	NGC 6952	Galaxy	CEP	10.6	13.3	3.9'	20 37.2	+66 06	32	SBbc			
NGC 40	PK 120+9.1	Pln Neb	CEP	10.7	7.3	60"	00 13.0	+72 31	3	3b(3)		11.5	H IV 58;PK120+9.1;Lord Rosse saw spiral structure
NGC 2300	UGC 3798	Galaxy	CEP	11	12.8	3.5'	07 32.3	+85 43	1	E1			Pair with NGC 2276 at 6' and IC 1455 at 10'; vsBN
Berk 59		Opn CL	CEP	11	-	10'	00 02.2	+67 25	15	III 2 p n	40	11	
NGC 2276	UGC 3740	Galaxy	CEP	11.4	13.5	2.8'	07 27.2	+85 45	1	SBc Ring			weak bar;many knotty filam arms;P w NGC 2300
NGC 7129	OCL 240	CL+Neb	CEP	11.5	-	2.7'	21 43.0	+66 07	33	IV 2 p n:	10	11.5	H IV 75;Sev F * invl
NGC 6952	NGC 6951	Galaxy	CEP	11.8	-	3.9'	20 37.2	+66 06	32	SBbc			
NGC 7234	Cr 447	Opn CL	CEP	12	-	4'	22 12.4	+57 16	57	II 3 m			H VIII 63; From Historial NGC
NGC 7352		Opn CL	CEP	12	-		22 39.8	+57 24	58				
NGC 1184	UGC 2583	Galaxy	CEP	12.4	12.9	2.8'	03 16.8	+80 48	5	Sa			H II 704
NGC 7354	PK 107+2.1	Pln Neb	CEP	12.9	10.1	22"	22 40.3	+61 17	34	4(3b)		16.5	H II 705
NGC 7419	OCL 250	Opn CL	CEP	13	-	2'	22 54.3	+60 50	58	II 3 r	40	10	H VII 43
NGC 1544	UGC 3160	Galaxy	CEP	13.2	13.1	1.3'	05 02.6	+86 13	1	S pec			
PK 101- 8.1	Abell 75	Pln Neb	CEP	13.2	-	67"	21 26.4	+62 53	33	3b		17.2	
UGC 11557	MCG +10-29	Galaxy	CEP	13.2	14.5	2.1'	20 24.0	+60 12	55	S(B)dm			
NGC 6949	UGC 11600	Galaxy	CEP	13.5	13.9	1.4'	20 35.1	+64 48	32	S Ring			
NGC 7139	PK 104+7.1	Pln Neb	CEP	13.5	13.9	86"	21 46.1	+63 48	33	3b		18.1	H III 696
PK 103+ 0.1	M2-51	Pln Neb	CEP	13.5	-	72.0"	22 16.1	+57 29	57	2(3)		20.4	
Pal 1		Opn CL	CEP	13.6	-	2.8'	03 33.3	+79 35	5			16.3	Palomar 1 is open cluster-Ortolani&Rosino 1985
Cr 427		Opn CL	CEP	13.8	-	4'	21 00.6	+68 10	33	IV 1pn:b	6		
PK 103+ 0.2	M2-52	Pln Neb	CEP	14	10.9	13"	22 20.5	+57 36	57	3			
UGC 12221	PGC 69841	Galaxy	CEP	14	14.4	2.3'	22 49.9	+82 54	14	Sd			
NGC 7281	OCL 238	Opn CL	CEP	-	-	12'	22 24.7	+57 50	57	IV 2 p	20		Small scattered group w 3 *10m in short row
NGC 7429	OCL 249	Opn CL	CEP	-	-	14'	22 55.9	+59 59	58	III 2 p	15	11	
NGC 7538	LBN 542	Brn Neb	CEP	-	-	8'	23 14.1	+61 29	34	E			H II 706;Filamentary struct in neby
NGC 7822	LBN 589	Brn Neb	CEP	-	-	20'	00 02.2	+67 25	15	E			Portion of 2 deg arc;whole area nebulous
IC 1470	CED 208	Brn Neb	CEP	-	-	15'	23 05.2	+60 15	58	E			12 mag star w 70" X 45" neby
Berk 92		Opn CL	CEP	-	-	4'	21 24.8	+57 32	56	III 1p :b	15	15	
Berk 93		Opn CL	CEP	-	-	4'	21 55.5	+63 56	33	IV 1p :b	120	16	
Berk 95		Opn CL	CEP	-	-	5'	22 28.3	+59 08	57	II 2p :b	15	15	
Berk 97		Opn CL	CEP	-	-	6'	22 39.5	+59 01	58	III 1 p	12	11	
Berk 99		Opn CL	CEP	-	-	6'	23 21.3	+71 47	34	III 2r :b	60	14	
Berk 100		Opn CL	CEP	-	-	4'	23 26.0	+63 47	15	IV 2p :b	100	16	
Berk 101		Opn CL	CEP	-	-	4'	23 32.8	+64 12	15	III 2p :b	10	16	
Ced 214	Sh2-171	Brn Neb	CEP	-	-	50'	00 03.7	+67 13	15	E+R			
Cr 471		Opn CL	CEP	-	-	130'	22 07.1	+72 00	33	III 2 p			
Czernik 42		Opn CL	CEP	-	-	3'	22 39.6	+59 55	58	III 1p :b	15		
King 10		Opn CL	CEP	-	-	3'	22 54.9	+59 10	58	II 3 m	40	11	
King 11		Opn CL	CEP	-	-	3.5'	23 47.6	+68 38	15	I 2m :b	50	17	
King 18		Opn CL	CEP	-	-	4'	22 52.1	+58 19	58	II 2p :b	20	12	
Sh2-132	LBN 470	Brn Neb	CEP	-	-	40'	22 19.3	+56 06	57	E			NE section has highest surface brightness
Sh2-155	LBN 529	Brn Neb	CEP	-	-	15'	22 56.9	+62 37	34	E			Cave nebula ; crescent shaped with northern brighter
vdB 140	Ced 191	Brn Neb	CEP	-	-	12'	21 17.4	+58 37	56	R			
vdB 143	Ced 194	Brn Neb	CEP	-	-	8'	21 37.0	+68 11	33	R			
B148-9	LDN 1076	Drk Neb	CEP	--	--	3'	20 49.1	+59 32	56	5 C			Two small clouds south of B150
B150	LDN 1082	Drk Neb	CEP	--	--	60'	20 50.6	+60 18	56	5 lr			Curved filament 1.6 deg south of Eta Cep
B152		Drk Neb	CEP	--	--	15'	21 14.5	+61 45	33	5 lr			Double cloud 1 deg south preceding Alpha Cep
B160	LDN 1088	Drk Neb	CEP	--	--	30'	21 38.0	+56 14	57	4 lr			Lies south of BRTNB IC 1396
B161	LDN 1103	Drk Neb	CEP	--	--	13'	21 40.3	+57 49	57	6 Co G			In north part of BRTNB IC 1396
B162	LDN 1095	Drk Neb	CEP	--	--	13'	21 41.1	+56 19	57	4 lr			Curved strip following B160
B163	LDN 1106	Drk Neb	CEP	--	--	4'	21 42.2	+56 42	57	4 lr G			In a part of bright nebula IC 1396
B169-71	LDN 1151;11	Drk Neb	CEP	--	--	80'	21 58.9	+58 45	57	5 lr			Narrow curved lanes 3 deg north following IC 1396
B173-4	LDN 1166;11	Drk Neb	CEP	--	--	40'	22 07.4	+59 10	57	6 lr			Patchy lane north following B169
B365	LDN 1090	Drk Neb	CEP	--	--	22'	21 34.9	+56 43	57	4 S			Lies south preceding bright nebula IC 1396
B367	LDN 1113	Drk Neb	CEP	--	--	3'	21 44.4	+57 12	57	5 lr G			In preceding part of bright nebula IC 1396
M 77	NGC 1068	Galaxy	CET	8.9	12.8	7.3'	02 42.7	-00 01	220	Sbp			Seyfert;brtst in NGC 1068 grp
NGC 247	ESO 540-22	Galaxy	CET	9.1	14.4	21'	00 47.1	-20 46	306	SBcd			H V 20
IC 1613	UGC 668	Galaxy	CET	9.2	15	16.6'	01 04.9	+02 08	217	lr			Member of Local Group

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 936	UGC 1929	Galaxy	CET	10.1	13.2	4.3'	02 27.6	-01 09	220	SBO-a			H IV 23;Thick central bar;P w NGC 941 12' foll
NGC 720	MCG - 2- 5-	Galaxy	CET	10.2	12.8	4.4'	01 53.0	-13 44	264	E4			H I 105
NGC 908	ESO 545-11	Galaxy	CET	10.2	13	6.1'	02 23.1	-21 14	309	SBc			H I 153
NGC 157	MCG - 2- 2-	Galaxy	CET	10.4	12.9	4.1'	00 34.8	-08 24	261	SBbc			H II 3
NGC 246	PK 118-74.1	Plan Neb	CET	10.4	13.5	240"	00 47.1	-11 52	261	3b	11.9		H V 25;PK118-74.1;Galaxy NGC 255 15' NNE
NGC 584	IC 1712;H I 1	Galaxy	CET	10.5	12.9	3.3'	01 31.3	-06 52	263	E4			
NGC 1052	MCG - 1- 7-	Galaxy	CET	10.5	12.5	2.8'	02 41.1	-08 15	265	Elliptical			H I 63
NGC 45	A 4	Galaxy	CET	10.6	14.7	7.6'	00 14.1	-23 11	305	SBd			Loose struct;Spiral pattern dim
NGC 1055	UGC 2173	Galaxy	CET	10.6	13.7	7.6'	02 41.8	+00 27	220	SBb			H I 1= II 6;Nearly edge-on spiral w equatorial dust lane
MCG -03-01	UGCA 444;W	Galaxy	CET	10.6	14.6	11'	00 01.9	-15 27	260				Appr. 50/50 Face & Edge On; Local Group; Low Surf Br
NGC 210	MCG - 2- 2-	Galaxy	CET	10.9	13.8	4.6'	00 40.6	-13 52	261	SBb			H II 452;F outer arms form encircling ring
NGC 578	ESO 476-15	Galaxy	CET	10.9	13.7	4.8'	01 30.5	-22 40	308	SBc			
NGC 596	MCG - 1- 5-	Galaxy	CET	10.9	13	2.8'	01 32.9	-07 02	263	E2			H II 4
NGC 864	UGC 1736	Galaxy	CET	10.9	13.8	4.7'	02 15.5	+06 00	174	SBc			H III 457;* 12m sf nucl 35"
NGC 1087	UGC 2245	Galaxy	CET	10.9	13.1	3.9'	02 46.4	-00 30	220	SBc Ring			In NGC1068 grp;P w NGC1090 @15' and NGC1094,20'
NGC 988	MCG - 2- 7-	Galaxy	CET	11	13.4	4.6'	02 35.5	-09 21	265	SBc			
NGC 1042	MCG - 2- 7-	Galaxy	CET	11	13.9	4.9'	02 40.4	-08 26	265	SBc			Spiral arms well defined
NGC 1073	UGC 2210	Galaxy	CET	11	14.2	4.9'	02 43.7	+01 23	220	SBc			H III 455;NGC 1068 group
NGC 779	MCG - 1- 6-	Galaxy	CET	11.2	12.7	4.1'	01 59.7	-05 58	264	SBb			H I 101;nearly edge-on spiral
NGC 1022	MCG - 1- 7-	Galaxy	CET	11.3	12.9	2.6'	02 38.5	-06 41	265	SBa			H I 102
NGC 533	UGC 992	Galaxy	CET	11.4	13.8	3.9'	01 25.5	+01 46	218	E2			H II 462;many S galaxies near;10 w in 5' :UGC 992
NGC 428	UGC 763	Galaxy	CET	11.5	14.1	4'	01 12.9	+00 59	217	Scp			H II 622;patchy central region;UGC 763
NGC 450	UGC 806	Galaxy	CET	11.5	13.5	3'	01 15.5	-00 52	217	SBc			H III 440;UGC 807 Superimposed
NGC 636	MCG - 1- 5-	Galaxy	CET	11.5	13.4	2.8'	01 39.1	-07 31	263	E1			H II 283
NGC 151	NGC 153	Galaxy	CET	11.6	13.4	3.8'	00 34.0	-09 42	261	SBbc			H II 478
NGC 153	NGC 151	Galaxy	CET	11.6	-	3.8'	00 34.0	-09 42	261	SBbc			
NGC 337	MCG - 1- 3-	Galaxy	CET	11.6	13.3	3'	00 59.8	-07 35	262	SBcd			H II 433;Coarse spiral pattern
NGC 615	MCG - 1- 5-	Galaxy	CET	11.6	13.3	3.4'	01 35.1	-07 20	263	Sb			H II 282
NGC 1016	UGC 2128	Galaxy	CET	11.6	13.5	2.3'	02 38.3	+02 07	220	EO			in dense part of cluster
NGC 1032	UGC 2147	Galaxy	CET	11.6	12.9	3.4'	02 39.4	+01 06	220	Sa			H II 5;late Sa;comp 4.3';PA313;.6X0.3
NGC 521	UGC 962	Galaxy	CET	11.7	14	3.3'	01 24.6	+01 44	218	SBbc			H II 461;UGC 962;delicate multiple arms
NGC 895	MCG - 1- 7-	Galaxy	CET	11.7	14	3.6'	02 21.6	-05 31	264	Sc			H II 438;NGC 894 is part of NGC 895
NGC 991	MCG - 1- 7-	Galaxy	CET	11.7	13.5	3'	02 35.5	-07 09	265	SB Ring			H III 434
NGC 274	MCG - 1- 3-	Galaxy	CET	11.8	12.6	1.9'	00 51.0	-07 03	262	E1			H III 429;V V 81;Arp 140
NGC 1090	UGC 2247	Galaxy	CET	11.8	13.8	3.9'	02 46.6	-00 15	220	SBbc			H II 465;NGC 1068 grp
New 1	MCG -01-03-	Galaxy	CET	11.8	14.4	4.5'	01 05.1	-06 13	262	S			
NGC 255	MCG - 2- 3-	Galaxy	CET	11.9	13.9	3.1'	00 47.8	-11 28	261	SBbc			H II 472
NGC 309	MCG - 2- 3-	Galaxy	CET	11.9	14	3'	00 56.7	-09 55	262	SBc Ring			Fine spiral
NGC 1070	UGC 2200	Galaxy	CET	11.9	13.4	2.3'	02 43.4	+04 58	220	Sb			H II 273;UGC 2200
NGC 271	UGC 519	Galaxy	CET	12	13.3	2.2'	00 50.7	-01 55	217	SBab			H II 446;UGC 519
NGC 336	ESO 541- 2	Galaxy	CET	12	-	0.7'	00 58.0	-18 23	307	S pec			
NGC 357	MCG - 1- 3-	Galaxy	CET	12	13.4	2.5'	01 03.4	-06 20	262	SBO-a			H II 434
NGC 681	MCG - 2- 5-	Galaxy	CET	12	13.4	2.7'	01 49.2	-10 26	263	SBab			H II 481;Thin equat dust lane;resembles M 104
NGC 955	UGC 1986	Galaxy	CET	12	12.6	2.9'	02 30.6	-01 07	220	Sab			H II 278;Poss edge-on S0 lens shape
NGC 227	UGC 456	Galaxy	CET	12.1	12.8	1.5'	00 42.6	-01 32	216	E2			H II 444;UGC 456
NGC 448	UGC 801	Galaxy	CET	12.1	12.2	1.6'	01 15.3	-01 38	217	E-SO			H II 531
NGC 541	UGC 1004	Galaxy	CET	12.1	13.2	1.8'	01 25.7	-01 23	218	SO			
NGC 731	NGC 757	Galaxy	CET	12.1	13.1	1.7'	01 54.9	-09 01	264	EO			H III 266
NGC 788	MCG - 1- 6-	Galaxy	CET	12.1	13	2.2'	02 01.1	-06 49	264	Sa			H II 435
NGC 835	MCG - 2- 6-	Galaxy	CET	12.1	12.3	1.3'	02 09.4	-10 08	264	SBab/P			H II 483;Contact P w NGC 833
NGC 945	MCG - 2- 7-	Galaxy	CET	12.1	13.6	2.3'	02 28.6	-10 32	265	SBc			H II 487
NGC 958	MCG - 1- 7-	Galaxy	CET	12.1	13.1	2.9'	02 30.7	-02 56	220	SBbc			H II 237;Nearly edge-on spiral
NGC 1015	UGC 2124	Galaxy	CET	12.1	14	2.6'	02 38.2	-01 19	220	SBa			
NGC 175	NGC 171	Galaxy	CET	12.2	13.5	2.1'	00 37.4	-19 56	306	SBab			Theta structure
NGC 245	UGC 476	Galaxy	CET	12.2	12.6	1.3'	00 46.1	-01 43	216	Sb			H II 445;Peculiar;UGC 476;Mrk 555
NGC 337A	MCG - 1- 3-	Galaxy	CET	12.2	15.6	6.1'	01 01.6	-07 35	262	SBd			
NGC 545	UGC 1007	Galaxy	CET	12.2	13.5	2.6'	01 26.0	-01 20	218	SO			H II 448;double system in common halo;3C40;
NGC 547	UGC 1009	Galaxy	CET	12.2	12.7	1.9'	01 26.0	-01 21	218	Elliptical			H II 449;double system (NGC 545) in common halo;
NGC 701	MCG - 2- 5-	Galaxy	CET	12.2	13.2	2.6'	01 51.1	-09 42	263	SBc			H I 62
NGC 1035	MCG - 1- 7-	Galaxy	CET	12.2	12.6	2.2'	02 39.5	-08 08	265	Sc			H II 284;Nearly edge-on spiral
NGC 1107	UGC 2307	Galaxy	CET	12.2	13.2	1.8'	02 49.3	+08 06	175	SO			dbl syst;comp at 3.7';PA137;early spiral
NGC 1085	UGC 2241	Galaxy	CET	12.3	14.1	2.4'	02 46.4	+03 36	220	Sbc			
NGC 1211	UGC 2545	Galaxy	CET	12.3	13.6	2.1'	03 06.9	-00 48	221	SBO-a			v smooth transp disc;no spiral pattern
NGC 50	MCG - 1- 1-	Galaxy	CET	12.4	-	2.4'	00 14.7	-07 21	260	E-SO			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 59	ESO 539- 4	Galaxy	CET	12.4	13.6	2.6'	00 15.4	-21 27	305	E-SO			
NGC 600	MCG - 1- 5-	Galaxy	CET	12.4	14.6	3.7'	01 33.1	-07 19	263	SBcd Ring			H III 432
NGC 723	NGC 724	Galaxy	CET	12.4	13	1.5'	01 53.8	-23 45	309	Sbc			
NGC 881	MCG - 1- 6-	Galaxy	CET	12.4	13.6	2.3'	02 18.8	-06 38	264	Sc Ring			H II 436
NGC 941	UGC 1954	Galaxy	CET	12.4	14	2.7'	02 28.5	-01 09	220	SBc			H III 261;P w NGC 936
NGC 1137	UGC 2374	Galaxy	CET	12.4	13.4	2.2'	02 54.0	+02 58	220	Sb			
NGC 1153	UGC 2439	Galaxy	CET	12.4	12.7	1.3'	02 58.2	+03 22	221	Sa			prob v early spiral;* super at 0.25 sp ctr;UGC 2446 ,8.8'
NGC 275	VV 81;Arp 14	Galaxy	CET	12.5	12.9	1.5'	00 51.1	-07 04	262	Sbp			
NGC 430	UGC 765	Galaxy	CET	12.5	12.9	1.3'	01 13.0	-00 15	217	Elliptical			H II 447;Brightest of 3
NGC 493	UGC 914	Galaxy	CET	12.5	13.7	3.4'	01 22.2	+00 57	218	SBc			H III 594;SN 1971;v patchy chaotic spir pattern
NGC 564	UGC 1044	Galaxy	CET	12.5	13.1	1.3'	01 27.8	-01 53	218	E2			H III 442
NGC 967	ESO 545-31	Galaxy	CET	12.5	12.9	1.6'	02 32.2	-17 13	310	E-SO			
NGC 1094	UGC 2262	Galaxy	CET	12.5	12.6	1.3'	02 47.5	-00 17	220	SBab			H III 462;NGC 1068 grp;s of 2
MCG -03-03		Galaxy	CET	12.5	13.9	3'	00 58.8	-18 47	307				Mostly Face On
NGC 132	UGC 301	Galaxy	CET	12.6	13.6	1.9'	00 30.2	+02 06	216	SBbc			H II 855;UGC 301
NGC 178	IC 39	Galaxy	CET	12.6	13.2	2.1'	00 39.1	-14 10	261	SB/P			
NGC 192	UGC 401	Galaxy	CET	12.6	13.1	1.9'	00 39.2	+00 52	216	SBa			H III 872;Brightest of 4;UGC 401
NGC 352	MCG - 1- 3-	Galaxy	CET	12.6	13.3	2.4'	01 02.2	-04 15	217	SBbc			H III 191
NGC 748	MCG - 1- 6-	Galaxy	CET	12.6	13.5	2.3'	01 56.4	-04 28	219	Sb Ring			H III 193
NGC 755	NGC 763	Galaxy	CET	12.6	13.9	3.3'	01 56.4	-09 04	264	SBb			H III 265
NGC 899	ESO 545- 7	Galaxy	CET	12.6	13.4	1.8'	02 21.9	-20 49	309	Ir			
NGC 907	ESO 545-10	Galaxy	CET	12.6	12.6	1.9'	02 23.0	-20 43	309	SBd			H III 224
NGC 947	ESO 545-21	Galaxy	CET	12.6	13.3	2.1'	02 28.6	-19 03	310	SBc			
NGC 1026	UGC 2145	Galaxy	CET	12.6	13.8	2'	02 39.3	+06 33	175	SO			comp in the env at .45;PA160;.15X0.15
NGC 145	Arp 19	Galaxy	CET	12.7	13.5	1.8'	00 31.8	-05 09	216	SBd			
NGC 163	MCG - 2- 2-	Galaxy	CET	12.7	13.4	1.6'	00 36.0	-10 07	261	E0			H III 954
NGC 279	UGC 532	Galaxy	CET	12.7	13.3	1.6'	00 52.1	-02 13	217	Sa			H III 439;UGC 532;Mrk 558
NGC 550	UGC 1021	Galaxy	CET	12.7	12.5	1.4'	01 26.7	+02 01	218	Sa			H II 463;UGC 1021
NGC 827	UGC 1640	Galaxy	CET	12.7	13.2	2.3'	02 08.9	+07 58	174	Sbc			H III 227
NGC 833	MCG - 2- 6-	Galaxy	CET	12.7	12.6	1.5'	02 09.3	-10 08	264	Sap			H II 482
NGC 842	MCG - 1- 6-	Galaxy	CET	12.7	12.6	1.1'	02 09.8	-07 46	264	SO			
NGC 1004	UGC 2112	Galaxy	CET	12.7	13.2	1.4'	02 37.7	+01 59	220	Elliptical			Dense part of clstr;comp 3.9';PA83;.5X0.12;4.9';PA67
NGC 1218	3C78	Galaxy	CET	12.7	12.9	1.3'	03 08.4	+04 07	221	Sa			
NGC 307	UGC 584	Galaxy	CET	12.8	12.8	1.6'	00 56.5	-01 46	217	SO			
NGC 570	UGC 1061	Galaxy	CET	12.8	13.3	1.6'	01 29.0	-00 57	218	SBa			
NGC 171	NGC 175	Galaxy	CET	12.9	-	2.1'	00 37.4	-19 56	306	SBab			H III 223?
NGC 201	UGC 419	Galaxy	CET	12.9	13.8	1.8'	00 39.6	+00 52	216	SBc			H III 873;NGC 192 group;UGC 419
NGC 209	ESO 540- 8	Galaxy	CET	12.9	13.3	1.3'	00 39.1	-18 37	306	E-SO			
NGC 270	MCG - 2- 3-	Galaxy	CET	12.9	-	1.8'	00 50.5	-08 39	262	Sa			H III 955
NGC 273	MCG - 1- 3-	Galaxy	CET	12.9	13.2	2.1'	00 50.8	-06 53	262	SO			H III 430
NGC 426	UGC 760	Galaxy	CET	12.9	13.2	1.4'	01 12.8	-00 17	217	Elliptical			H III 592;NGC 430 group
NGC 577	NGC 580	Galaxy	CET	12.9	13.8	1.9'	01 30.7	-02 00	218	SBa			
NGC 622	UGC 1143	Galaxy	CET	12.9	13.7	1.8'	01 36.0	+00 40	218	SBbc			H III 454;UGC 1143
NGC 838	MCG - 2- 6-	Galaxy	CET	12.9	12.8	1.2'	02 09.6	-10 09	264	SO			H II 484
NGC 850	UGC 1679	Galaxy	CET	12.9	12.9	1.2'	02 11.2	-01 29	219	Sa			H III 259
NGC 863	NGC 866	Galaxy	CET	12.9	12.9	1.1'	02 14.6	-00 46	219	Sa			H III 260
NGC 875	NGC 867	Galaxy	CET	12.9	13	1.2'	02 17.1	+01 15	219	Sa			P w IC 218
NGC 1144	NGC 1142	Galaxy	CET	12.9	12.5	0.9'	02 55.2	-00 11	220	Ring			
NGC 1194	UGC 2514	Galaxy	CET	12.9	13.3	1.8'	03 03.8	-01 06	221	Sa			strong abs p side;dif streamer (vis in red) to comp
NGC 124	UGC 271	Galaxy	CET	13	13	1.4'	00 27.9	-01 49	216	Sc			
NGC 173	UGC 369	Galaxy	CET	13	15.1	3.2'	00 37.2	+01 57	216	Sc			H III 871;UGC 369
NGC 237	UGC 461	Galaxy	CET	13	13.3	1.6'	00 43.5	-00 08	216	SBc			
NGC 341A	NGC 341	Galaxy	CET	13	-	1.2'	01 00.8	-09 11	262	SB Ring			
NGC 497	UGC 915;A	Galaxy	CET	13	13.5	2.1'	01 22.4	-00 53	218	SBbc			split arms
NGC 530	IC 1696; UG	Galaxy	CET	13	12.3	1.5'	01 24.7	-01 35	218	Sa			
NGC 560	UGC 1036	Galaxy	CET	13	12.9	1.9'	01 27.4	-01 55	218	SO			H III 441;UGC 1036
NGC 599	MCG - 2- 5-	Galaxy	CET	13	-	1.4'	01 32.9	-12 11	263	E-SO			H II 473
NGC 682	MCG - 3- 5-	Galaxy	CET	13	-	1.4'	01 49.1	-14 59	263	E-SO			H II 501
NGC 757	NGC 731	Galaxy	CET	13	-	1.7'	01 54.9	-09 01	264	Elliptical			
NGC 787	MCG - 2- 6-	Galaxy	CET	13	-	2.5'	02 00.8	-09 00	264	Sb			
NGC 799	UGC 1527	Galaxy	CET	13	14.2	2'	02 02.2	-00 06	219	SBa			
NGC 848	MCG - 2- 6-	Galaxy	CET	13	13.3	1.5'	02 10.3	-10 19	264	SBab			
NGC 853	MCG - 2- 6-	Galaxy	CET	13	-	1.6'	02 11.7	-09 18	264	Sm			H II 486
NGC 873	MCG - 2- 6-	Galaxy	CET	13	-	1.6'	02 16.5	-11 21	264	Sc			H II 474

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 883	MCG - 1- 6-	Galaxy	CET	13	-	1.7'	02 19.1	-06 47	264	E-SO			H II 437
NGC 887	MCG - 3- 7-	Galaxy	CET	13	-	2'	02 19.5	-16 04	264	SB Ring			H III 486
NGC 977	MCG - 2- 7-	Galaxy	CET	13	-	2'	02 33.1	-10 46	265	Sa			H III 472
NGC 1045	MCG - 2- 7-	Galaxy	CET	13	-	2.3'	02 40.5	-11 17	265	E-SO			H II 488
NGC 1051	NGC 961	Galaxy	CET	13	-	2.1'	02 41.0	-06 56	265	Sm			
NGC 1076	MCG - 3- 8-	Galaxy	CET	13	-	2'	02 43.5	-14 45	265	Sa			
NGC 1101	UGC 2278	Galaxy	CET	13	13.2	1.3'	02 48.2	+04 35	220	SO			
NGC 1219	UGC 2556	Galaxy	CET	13	13.2	1.2'	03 08.5	+02 06	221	Sc			
NGC 165	MCG - 2- 2-	Galaxy	CET	13.1	13.7	1.6'	00 36.5	-10 06	261	SBbc			
NGC 268	MCG - 1- 3-	Galaxy	CET	13.1	13.6	1.6'	00 50.2	-05 12	217	SBbc			H III 463
NGC 364	UGC 666	Galaxy	CET	13.1	13.6	1.4'	01 04.7	-00 48	217	SO			
NGC 543	MCG 0- 4-1	Galaxy	CET	13.1	10.9	0.6'	01 25.8	-01 18	218	E6			
NGC 585	UGC 1092	Galaxy	CET	13.1	13	2.2'	01 31.7	-00 56	218	Sa			nucl bulge 0.50'X0.35'
NGC 702	MCG - 1- 5-	Galaxy	CET	13.1	13.6	1.5'	01 51.3	-04 03	218	SBbc/P			H III 192;probable interacting system
NGC 763	NGC 755	Galaxy	CET	13.1	-	3.3'	01 56.4	-09 04	264	SBb			
NGC 839	MCG - 2- 6-	Galaxy	CET	13.1	13	1.4'	02 09.7	-10 11	264	SO			H II 485
NGC 934	UGC 1926	Galaxy	CET	13.1	13.2	1.3'	02 27.5	-00 15	220	E-SO			
NGC 975	UGC 2030	Galaxy	CET	13.1	12.7	1.1'	02 33.4	+09 36	175	Sa			Brightest of group
NGC 177	ESO 474- 6	Galaxy	CET	13.2	13.2	2.2'	00 37.6	-22 33	306	Sab Ring			
NGC 216	ESO 540-15	Galaxy	CET	13.2	13.5	2'	00 41.5	-21 03	306	SO			H III 244
NGC 223	IC 44	Galaxy	CET	13.2	13.1	1.3'	00 42.3	+00 51	216	SOa/Pec			Peculiar
NGC 351	UGC 639	Galaxy	CET	13.2	13.1	1.5'	01 02.0	-01 56	217	SBO-a			
NGC 586	MCG - 1- 5-	Galaxy	CET	13.2	13.2	1.7'	01 31.6	-06 54	263	Sa			
NGC 768	UGC 1457	Galaxy	CET	13.2	13.4	1.7'	01 58.7	+00 32	219	Sbc			sp of 2;disturbed
NGC 825	UGC 1636	Galaxy	CET	13.2	13.7	2.2'	02 08.5	+06 19	174	Sa			
NGC 856	NGC 859	Galaxy	CET	13.2	13.3	1.3'	02 13.6	-00 43	219	Sa			
NGC 1044	MCG 1- 7- 2	Galaxy	CET	13.2	11.8	0.5'	02 41.1	+08 44	175	SOp			H III 228;dbl system
UGC 439	MCG +00-02	Galaxy	CET	13.2	13.2	1.1'	00 41.4	-01 43	216	Sa			
UGC 2302	PGC 10670	Galaxy	CET	13.2	16.6	4.8'	02 49.2	+02 08	220	(R)SB(rs			
NGC 179	ESO 540- 7	Galaxy	CET	13.3	12.8	0.9'	00 37.8	-17 51	306	E-SO			
NGC 187	MCG - 3- 2-	Galaxy	CET	13.3	-	1.3'	00 39.5	-14 39	261	Sc			
NGC 259	MCG - 1- 3-	Galaxy	CET	13.3	-	2.9'	00 48.1	-02 47	217	Sbc			H II 703=H II 621
NGC 329	MCG - 1- 3-	Galaxy	CET	13.3	13.1	1.5'	00 58.0	-05 04	217	Sb			
NGC 359	UGC 662	Galaxy	CET	13.3	13.6	1.5'	01 04.3	-00 46	217	E-SO			
NGC 563	NGC 539	Galaxy	CET	13.3	13.1	1.6'	01 25.4	-18 10	308	SBc			
NGC 836	ESO 544-17	Galaxy	CET	13.3	13.4	1.2'	02 10.4	-22 03	309	Sa			
NGC 926	UGC 1901	Galaxy	CET	13.3	13.7	1.8'	02 26.1	-00 20	220	SBbc			
NGC 966	ESO 545-30	Galaxy	CET	13.3	13.1	1'	02 31.8	-19 53	310	E-SO			
NGC 1095	UGC 2264	Galaxy	CET	13.3	13.2	1.3'	02 47.6	+04 38	220	SBc			
NGC 66	ESO 473-10	Galaxy	CET	13.4	13	1.2'	00 19.1	-22 56	306	SB Ring			
NGC 120	UGC 267	Galaxy	CET	13.4	13.3	1.5'	00 27.5	-01 31	216	SBO			
NGC 172	ESO 474- 5	Galaxy	CET	13.4	12.9	2'	00 37.2	-22 35	306	SBbc			
NGC 277	MCG - 2- 3-	Galaxy	CET	13.4	-	1.4'	00 51.3	-08 36	262	E-SO			
NGC 327	MCG - 1- 3-	Galaxy	CET	13.4	13.3	1.5'	00 57.9	-05 08	217	Sbc			
NGC 391	UGC 693	Galaxy	CET	13.4	12.8	0.9'	01 07.4	+00 56	217	Elliptical			
NGC 429	UGC 762	Galaxy	CET	13.4	12.3	1.4'	01 13.0	-00 21	217	SO			H III 593;NGC 430 group
NGC 442	UGC 789	Galaxy	CET	13.4	12.5	1'	01 14.6	-01 01	217	Sa			
NGC 840	UGC 1664	Galaxy	CET	13.4	13.9	1.8'	02 10.3	+07 51	174	SBb			
NGC 961	NGC 1051	Galaxy	CET	13.4	-	2.1'	02 41.0	-06 56	265	Sm			
NGC 985	MCG - 2- 7-	Galaxy	CET	13.4	13.1	1'	02 34.6	-08 47	265	Ring			
NGC 1038	UGC 2158	Galaxy	CET	13.4	12.4	1.2'	02 40.1	+01 31	220	Sa			
NGC 1072	IC 1837	Galaxy	CET	13.4	12.9	1.5'	02 43.5	+00 18	220	SBab Ri			
NGC 1280	UGC 2652	Galaxy	CET	13.4	12.9	0.9'	03 18.0	-00 10	221	SBc			asym;thin vB arms;almost circular
UGC 2275	PGC 10588	Galaxy	CET	13.4	16.6	5.8'	02 48.0	+03 53	220	Sm			
NGC 113	MCG - 1- 2-	Galaxy	CET	13.5	-	1.4'	00 26.9	-02 30	216	E-SO			
NGC 155	MCG - 2- 2-	Galaxy	CET	13.5	-	1.7'	00 34.7	-10 46	261	SO			
NGC 217	MCG - 2- 2-	Galaxy	CET	13.5	-	2.7'	00 41.6	-10 01	261	Sa			H II 480
NGC 232	ESO 474-15	Galaxy	CET	13.5	13	0.9'	00 42.8	-23 34	306	SBa			
NGC 298	MCG - 1- 3-	Galaxy	CET	13.5	-	1.7'	00 55.0	-07 20	262	Sc			
NGC 320	ESO 541- 3	Galaxy	CET	13.5	12.4	0.8'	00 58.8	-20 50	307	SBO-a R			
NGC 345	MCG - 1- 3-	Galaxy	CET	13.5	-	1.2'	01 01.4	-06 53	262	Sa			
NGC 349	MCG - 1- 3-	Galaxy	CET	13.5	-	1.2'	01 01.8	-06 48	262	E-SO			
NGC 356	MCG - 1- 3-	Galaxy	CET	13.5	-	1.5'	01 03.1	-06 59	262	Sbc			
NGC 539	NGC 563	Galaxy	CET	13.5	14.1	1.6'	01 25.4	-18 10	308	SBc			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 557	IC 1703	Galaxy	CET	13.5	13.5	1.4'	01 26.4	-01 38	218	SBO-a			
NGC 565	UGC 1052	Galaxy	CET	13.5	12.6	1.3'	01 28.2	-01 18	218	Sa			
NGC 762	MCG - 1- 6-	Galaxy	CET	13.5	-	1.4'	01 57.0	-05 24	219	SBa			H III 464
NGC 790	MCG - 1- 6-	Galaxy	CET	13.5	-	1.4'	02 01.4	-05 22	219	SO			H III 433
NGC 808	ESO 478- 1	Galaxy	CET	13.5	13	1.2'	02 03.9	-23 19	309	SBbc Ring			
NGC 851	UGC 1680	Galaxy	CET	13.5	12.9	1'	02 11.2	+03 47	219	Sa			
NGC 1019	UGC 2132	Galaxy	CET	13.5	13.3	1'	02 38.5	+01 54	220	SBbc			in dense part of cluster
NGC 1080	MCG - 1- 8-	Galaxy	CET	13.5	13.3	1.1'	02 45.2	-04 43	220	SBc			
NGC 7808	MCG - 2- 1-	Galaxy	CET	13.5	13.9	1.3'	00 03.5	-10 45	260	SO			
UGC 2119	PGC 9973	Galaxy	CET	13.5	13.7	2'	02 37.9	-01 51	220	SBb			
NGC 73	MCG - 3- 1-	Galaxy	CET	13.6	-	1.7'	00 18.6	-15 19	261	Sbc			
NGC 167	ESO 473-29	Galaxy	CET	13.6	13.1	1'	00 35.4	-23 23	306	SBc			
NGC 353	UGC 641	Galaxy	CET	13.6	12.9	1.3'	01 02.4	-01 57	217	SBab			
NGC 993	NGC 994	Galaxy	CET	13.6	13.1	0.9'	02 36.8	+02 03	220	E-SO			
NGC 1006	NGC 1010	Galaxy	CET	13.6	-	0.9'	02 37.6	-11 02	265	Sc			
NGC 1008	UGC 2114	Galaxy	CET	13.6	12.8	0.8'	02 37.9	+02 05	220	Elliptical			in dense part of cluster
NGC 1104	UGC 2287	Galaxy	CET	13.6	13.4	1.2'	02 48.6	-00 16	220	SBO-a			
NGC 114	UGC 259	Galaxy	CET	13.7	13	0.8'	00 27.0	-01 47	216	SBO			
NGC 144	ESO 473-23	Galaxy	CET	13.7	13	0.8'	00 31.3	-22 39	306	Sc			
NGC 244	MCG - 3- 3-	Galaxy	CET	13.7	-	1.2'	00 45.8	-15 36	261	SO Pec			H III 485;A10
NGC 341	NGC 341A	Galaxy	CET	13.7	-	1.2'	01 00.8	-09 11	262	SB Ring			
NGC 538	UGC 991	Galaxy	CET	13.7	12.8	1'	01 25.4	-01 33	218	Sab			in dense part of cluster
NGC 548	UGC 1010	Galaxy	CET	13.7	13.2	0.9'	01 26.0	-01 14	218	Elliptical			
NGC 800	UGC 1526	Galaxy	CET	13.7	13.4	1'	02 02.2	-00 08	219	Sc			
NGC 858	ESO 478-13	Galaxy	CET	13.7	13.9	1.3'	02 12.5	-22 28	309	SBc			
NGC 878	ESO 478-22	Galaxy	CET	13.7	12.4	0.8'	02 17.9	-23 23	309	Sa			
NGC 17	NGC 34	Galaxy	CET	13.8	-	2.1'	00 11.1	-12 07	260	S			
NGC 34	NGC 17	Galaxy	CET	13.8	-	2.1'	00 11.1	-12 07	260	S			
NGC 47	NGC 58	Galaxy	CET	13.8	-	2.3'	00 14.5	-07 10	260	SBbc			
NGC 58	NGC 47	Galaxy	CET	13.8	-	2.3'	00 14.5	-07 10	260	SBbc			
NGC 142	ESO 473-21	Galaxy	CET	13.8	13.1	1.1'	00 31.1	-22 37	306	SBb			
NGC 168	ESO 474- 4	Galaxy	CET	13.8	12.3	1.2'	00 36.6	-22 36	306	Sa			
NGC 369	ESO 541-17	Galaxy	CET	13.8	13.3	1'	01 05.1	-17 46	307	SBb			
NGC 535	UGC 997	Galaxy	CET	13.8	12.4	1'	01 25.5	-01 25	218	Sa			in dense part of cluster
NGC 872	ESO 544-32	Galaxy	CET	13.8	13.8	1.5'	02 15.4	-17 47	309	Sc			
NGC 1046	MCG 1- 7-	Galaxy	CET	13.8	-	0.4'	02 41.2	+08 43	175	E-SO			H III 229
NGC 1142	NGC 1144	Galaxy	CET	13.8	-	0.9'	02 55.2	-00 11	220	Elliptical			
NGC 580	NGC 577	Galaxy	CET	13.9	-	1.9'	01 30.7	-02 00	218	SBa			
NGC 866	NGC 863	Galaxy	CET	13.9	-	1.1'	02 14.6	-00 46	219	Sa			
NGC 868	UGC 1748	Galaxy	CET	13.9	14.1	1.3'	02 16.0	-00 43	219	E-SO			
NGC 885	NGC 863	Galaxy	CET	13.9	-	1.1'	02 14.6	-00 46	219	Sa			
NGC 7828	MCG - 2- 1-	Galaxy	CET	13.9	12.7	1'	00 06.5	-13 25	260	Sc Ring			
NGC 7829	MCG - 2- 1-	Galaxy	CET	13.9	12.9	0.7'	00 06.5	-13 25	260	Sa Ring			
Abell 400		Gal CL	CET	13.9	-	56'	02 57.6	+06 02	176	1 II-III			17 Gal/Deg; 58 galaxies
NGC 35	MCG - 2- 1-	Galaxy	CET	14	-	0.7'	00 11.2	-12 01	260	Sb			
NGC 64	MCG - 1- 1-	Galaxy	CET	14	-	1.6'	00 17.5	-06 50	261	SBbc			
NGC 102	MCG - 2- 2-	Galaxy	CET	14	-	1'	00 24.6	-13 57	261	SBO-a			
NGC 118	UGC 264	Galaxy	CET	14	12.8	0.7'	00 27.3	-01 47	216	Compac			Compact
NGC 154	MCG - 2- 2-	Galaxy	CET	14	-	1.1'	00 34.3	-12 39	261	Elliptical			H III 467
NGC 196	UGC 405	Galaxy	CET	14	-	1.3'	00 39.3	+00 55	216	SBO			H II 860;NGC 192 group;contact P w NGC 197
NGC 235A	ESO 474-16	Galaxy	CET	14	-	1.3'	00 42.9	-23 33	306	SO			
NGC 263	MCG - 2- 3-	Galaxy	CET	14	-	0.7'	00 48.8	-13 06	262	Sbc			
NGC 308		Star	CET	14	-		00 56.6	-01 47	217				
NGC 340	MCG - 1- 3-	Galaxy	CET	14	-	0.9'	01 00.6	-06 52	262	Sb			
NGC 343		Star	CET	14	-		00 58.4	-23 14	307				
NGC 481	MCG - 2- 4-	Galaxy	CET	14	-	1.7'	01 21.2	-09 13	263	E-SO			
NGC 487	MCG - 3- 4-	Galaxy	CET	14	-	1.1'	01 21.9	-16 22	263	Sa			
NGC 567	MCG - 2- 4-	Galaxy	CET	14	-	1'	01 27.0	-10 16	263	SO			
NGC 589	MCG - 2- 5-	Galaxy	CET	14	-	1.1'	01 32.7	-12 03	263	Sa			
NGC 593	MCG - 2- 5-	Galaxy	CET	14	-	1.2'	01 32.3	-12 21	263	SO			
NGC 594	MCG - 3- 5-	Galaxy	CET	14	-	1.4'	01 33.0	-16 32	263	Sbc			
NGC 624	MCG - 2- 5-	Galaxy	CET	14	-	1.5'	01 35.9	-10 00	263	Sb			H III 471
NGC 647	MCG - 2- 5-	Galaxy	CET	14	-	1.5'	01 39.9	-09 15	263	SO			
NGC 648	IC 146	Galaxy	CET	14	-	1.1'	01 38.7	-17 50	308	E-SO			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 655	MCG - 2- 5-	Galaxy	CET	14	-	1.4'	01 41.9	-13 05	263	SO			
NGC 699	MCG - 2- 5-	Galaxy	CET	14	-	1.6'	01 50.7	-12 02	263	Sbc			
NGC 707	MCG - 2- 5-	Galaxy	CET	14	-	1.3'	01 51.5	-08 30	263	E-SO			
NGC 725	MCG - 3- 5-	Galaxy	CET	14	-	0.8'	01 52.6	-16 31	264	Sc			
NGC 726	MCG - 2- 6-	Galaxy	CET	14	-	1.2'	01 55.5	-10 48	264	Sd			
NGC 767	MCG - 2- 6-	Galaxy	CET	14	-	1.1'	01 58.8	-09 35	264	Sb			
NGC 773	MCG - 2- 6-	Galaxy	CET	14	-	1.4'	01 58.9	-11 31	264	Sa			H III 468
NGC 806	MCG - 2- 6-	Galaxy	CET	14	-	1.2'	02 03.5	-09 56	264	Sc			
NGC 809	MCG - 2- 6-	Galaxy	CET	14	-	1.5'	02 04.3	-08 44	264	SO			
NGC 811	MCG - 2- 6-	Galaxy	CET	14	-	1.1'	02 04.6	-10 07	264	Scd			
NGC 829	MCG - 1- 6-	Galaxy	CET	14	-	1.1'	02 08.7	-07 47	264	Sc			
NGC 830	MCG - 1- 6-	Galaxy	CET	14	-	1.4'	02 09.0	-07 46	264	E-SO			
NGC 837	ESO 478-10	Galaxy	CET	14	12.8	0.9'	02 10.3	-22 26	309	Sb			
NGC 867	NGC 875	Galaxy	CET	14	-	1.2'	02 17.1	+01 15	219	Sa			H III 2
NGC 902	MCG - 3- 7-	Galaxy	CET	14	-	0.6'	02 22.4	-16 41	264	SBbc			
NGC 921	MCG - 3- 7-	Galaxy	CET	14	-	1.4'	02 26.6	-15 51	265	Sc			
NGC 942	MCG - 2- 7-	Galaxy	CET	14	-	2.8'	02 29.2	-10 50	265	Sa			Northern most of a P w NGC 942;RC2 indents switched
NGC 943	MCG - 2- 7-	Galaxy	CET	14	-	2.8'	02 29.2	-10 50	265	SO p			P w NGC 943
NGC 944	IC 228	Galaxy	CET	14	-	1.1'	02 26.7	-14 31	265	Sa			
NGC 948	MCG - 2- 7-	Galaxy	CET	14	-	1.4'	02 28.8	-10 31	265	SBc			
NGC 950	MCG - 2- 7-	Galaxy	CET	14	-	1.3'	02 29.2	-11 02	265	Sb			
NGC 960	MCG - 2- 7-	Galaxy	CET	14	-	1.2'	02 31.7	-09 18	265	Sb			
NGC 981	MCG - 2- 7-	Galaxy	CET	14	-	1'	02 33.0	-10 58	265	Sc			
NGC 1010	NGC 1006	Galaxy	CET	14	-	0.9'	02 37.6	-11 02	265	Sc			
NGC 1013	MCG - 2- 7-	Galaxy	CET	14	-	0.8'	02 37.8	-11 30	265	Sa			
NGC 1017	MCG - 2- 7-	Galaxy	CET	14	-	0.7'	02 37.8	-11 01	265	Ir			
NGC 1033	MCG - 2- 7-	Galaxy	CET	14	-	1.2'	02 40.3	-08 47	265	Sc			
NGC 1034	MCG - 3- 7-	Galaxy	CET	14	-	0.9'	02 38.2	-15 49	265	Ir			
NGC 1041	MCG - 1- 7-	Galaxy	CET	14	-	1.7'	02 40.4	-05 26	220	E-SO			
NGC 1048B	NGC 1048	Galaxy	CET	14	-	1'	02 40.6	-08 32	265	SBO-a			
NGC 1063	MCG - 1- 7-	Galaxy	CET	14	-	1.4'	02 42.2	-05 34	265	SBbc			
NGC 1064	MCG - 2- 7-	Galaxy	CET	14	-	1.1'	02 42.4	-09 22	265	Sc Ring			
NGC 1065	IC 254	Galaxy	CET	14	-	0.8'	02 42.1	-15 06	265	E-SO			
NGC 1074	MCG - 3- 8-	Galaxy	CET	14	-	2'	02 43.6	-16 18	265	Sab			
NGC 1143	NGC 1141	Galaxy	CET	14	-	0.9'	02 55.2	-00 11	220	Elliptical			
NGC 1149	MCG 0- 8-	Galaxy	CET	14	12.4	0.6'	02 57.4	-00 19	221	E-SO			
NGC 7821	MCG - 3- 1-	Galaxy	CET	14	-	1.4'	00 05.3	-16 29	260	Sc			
UGC 711	MCG +00-04	Galaxy	CET	14	-	3.9'	01 08.7	+01 39	217	Sc			
UGC 1072	PGC 5574	Galaxy	CET	14	-	1.2'	01 29.8	-01 15	218	SO			vF companion on west side
NGC 894		Galaxy	CET	-	-		02 21.6	-05 31	264	E+*			
Pismis 20		Opn CL	CIR	7.8	-	4.5'	15 15.4	-59 04	431	I 3 p	12	8.2	
NGC 5823	OCL 936	Opn CL	CIR	7.9	-	10'	15 05.5	-55 36	431	III 2 m	100	9.7	
NGC 5715	OCL 929	Opn CL	CIR	9.8	-	6'	14 43.5	-57 35	431	II 2 m	30	11	
Lynga 3		Opn CL	CIR	-	-	5'	15 16.8	-58 23	431	III 1p :a		16	
Pismis 21		Opn CL	CIR	-	-	2'	15 16.9	-59 40	431	I 3p :a		13	
Cr 121		Opn CL	CMA	2.6	-	50'	06 56.3	-24 44	318	III 3 p	20	3.8	
Cr 140		Opn CL	CMA	3.5	-	60'	07 24.5	-31 51	361	III 3 p	76	5.4	The Tuft in the tail of the dog;visible naked eye
Cr 132		Opn CL	CMA	3.6	-	80'	07 15.4	-30 41	361	III 3 p	25	5.3	
NGC 2362	OCL 633	Opn CL	CMA	4.1	-	8'	07 18.7	-24 57	319	I 3 p n	60	4.4	H VII 17;40 * to 13 mag surround Tau Cma;sev pairs
M 41	NGC 2287	Opn CL	CMA	4.5	12	38'	06 46.0	-20 45	318	II 3 m	80	6.9	150 members to 13 mag;orange * near center
NGC 2354	OCL 639	Opn CL	CMA	6.5	-	20'	07 14.3	-25 42	319	III 2 m	100	9.1	H VII 16
NGC 2360	OCL 589	Opn CL	CMA	7.2	-	13'	07 17.7	-15 38	274	II 2 m	80	10.4	H VII 12
NGC 2384	OCL 618	Opn CL	CMA	7.4	-	2.5'	07 25.2	-21 01	319	IV 3 p	15	8.6	Near cluster NGC 2383
NGC 2345	OCL 575	Opn CL	CMA	7.7	-	12'	07 08.3	-13 12	273	I 3 m	70	9.9	
NGC 2367	OCL 621	Opn CL	CMA	7.9	-	3.5'	07 20.1	-21 53	319	IV 3 p	30	9.4	H VIII 28
NGC 2374	OCL 585	Opn CL	CMA	8	-	19'	07 23.9	-13 16	274	II 3 p	25	10.7	H VIII 35
Basel 11A		Opn CL	CMA	8.2	-	9.0'	07 17.1	-13 58	274	II 3 m	30	8.2	
NGC 2383	OCL 616	Opn CL	CMA	8.4	-	6'	07 24.7	-20 57	319	I 3 m	40	9.8	Near cluster NGC 2384
NGC 2204	OCL 572	Opn CL	CMA	8.6	-	13'	06 15.5	-18 40	317	III 3 m	80	12.2	H VII 13;About 20 F *
Haffner 8		Opn CL	CMA	9.1	-	4.2'	07 23.4	-12 18	274	IV 3 m	30	11.1	
Haffner 6		Opn CL	CMA	9.2	-	4'	07 20.1	-13 09	274	IV 3 p n	60	11.1	
NGC 2243	OCL 644	Opn CL	CMA	9.4	-	5'	06 29.6	-31 17	360	I 2 r	100	11.8	
Ru 18		Opn CL	CMA	9.4	-	4'	07 24.7	-26 11	319	III 2 p	40	11	
Ru 20		Opn CL	CMA	9.5	-	10'	07 26.7	-28 50	361	III 2 m	30	11.6	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Tr 6	Cr 145	Opn CL	CMA	10	-	6'	07 26.4	-24 13	319	III 2 p		14	
NGC 2280	ESO 427- 2	Galaxy	CMA	10.3	13.4	6.6'	06 44.8	-27 38	318	Sc			
Tombaugh 1	OCL 603	Opn CL	CMA	10.5	-	5'	07 00.5	-20 34	318	III 1m:b	45	14	
IC 2165	PK 221-12.1	Pln Neb	CMA	10.6	6.5	9"	06 21.7	-12 59	272	3b		15.1	Nearly stellar
NGC 2217	ESO 489-42	Galaxy	CMA	10.7	13.8	4.7'	06 21.7	-27 14	317	SBO-a R			
NGC 2207	ESO 556- 8	Galaxy	CMA	10.8	13.4	4.2'	06 16.4	-21 22	317	SBbc Rii			Double galaxy or interacting pair
NGC 2292	ESO 490-48	Galaxy	CMA	10.8	13.6	4'	06 47.7	-26 45	318	SBO			
VY CMA		Brn Neb	CMA	10.8	-	0.2'	07 23.0	-25 46	319	R		7.5	Discovered w/ 7"
NGC 2293	ESO 490-49	Galaxy	CMA	11.2	13.9	4'	06 47.7	-26 45	318	SBO-a			
NGC 2380	NGC 2382	Galaxy	CMA	11.2	12.6	2.1'	07 23.9	-27 32	319	SBO			
NGC 2325	ESO 427-28	Galaxy	CMA	11.4	13.4	3.5'	07 02.7	-28 42	361	E4			
NGC 2223	ESO 489-49	Galaxy	CMA	11.6	13.8	3'	06 24.6	-22 50	317	SBab			
NGC 2272	ESO 490-33	Galaxy	CMA	11.7	13.1	2.4'	06 42.7	-27 28	318	SO			
NGC 2263	ESO 490-19	Galaxy	CMA	12.1	13.4	2.7"	06 38.5	-24 51	317	SBab Rii			
NGC 2206	ESO 489-26	Galaxy	CMA	12.2	13.3	2.4'	06 16.0	-26 46	317	SBbc			
NGC 2267	ESO 426-29	Galaxy	CMA	12.2	12.9	1.7"	06 40.9	-32 29	360	SBO			
NGC 2271	ESO 490-34	Galaxy	CMA	12.2	13.2	2.1'	06 42.9	-23 29	318	E-SO Ba			
NGC 2283	ESO 557-13	Galaxy	CMA	12.2	14.6	3.6'	06 45.9	-18 13	318	SBc			H III 271
PK 242-11.1	M3- 1	Pln Neb	CMA	12.2	8.3	30.0"	07 02.8	-31 35	361	?(6)		15.5	
NGC 2382	NGC 2380	Galaxy	CMA	12.3	-	2.1'	07 23.9	-27 32	319	SBO			
NGC 2227	ESO 556-23	Galaxy	CMA	12.5	13.3	2.1'	06 26.0	-22 00	317	SBc			
PK 232- 1.1	M1-13	Pln Neb	CMA	12.6	9	42.0"	07 21.2	-18 08	319				
NGC 2211	ESO 556-13	Galaxy	CMA	12.7	12.5	1.4'	06 18.5	-18 32	317	SBO			
NGC 2295	ESO 490-47	Galaxy	CMA	12.7	12.8	2.1'	06 47.4	-26 44	318	Sab			
NGC 2216	ESO 556-17	Galaxy	CMA	12.8	13.1	1.4'	06 21.5	-22 05	317	SBab			
NGC 2296	IC 452	Brn Neb	CMA	13	-	0.6'	06 48.7	-16 54	273	R			Near Sirius; probably a nebula
PK 226- 3.1	PB 1	Pln Neb	CMA	13.3	9.4	10"	07 02.7	-13 42	273			16.2	
NGC 2212	ESO 556-14	Galaxy	CMA	13.4	13.5	1.5'	06 18.6	-18 31	317	SBO-a			
PK 235- 1.1	M1-14	Pln Neb	CMA	13.4	-	13"	07 27.9	-20 13	319			14.1	
PK 229- 2.1	K1-10	Pln Neb	CMA	13.5	-	86"	07 12.5	-16 06	274	3b		21	
NGC 2327	CED 89B	Brn Neb	CMA	-	-	20'	07 04.1	-11 19	273	E			H IV 25
NGC 2358		Opn CL	CMA	-	-	8'	07 16.9	-17 07	319				H VIII 45
NGC 2359	LBN 1041	Brn Neb	CMA	-	-	10'	07 18.5	-13 14	274	E		11	Duck Neb ;curved filam;cent* Wolf Rayet;UHC helps
NGC 2361		Brn Neb	CMA	-	-		07 18.4	-13 13	274	E			knot in 2359
Auner 1		Opn CL	CMA	-	-	2.5'	07 04.3	-19 45	318	III 2m :b	30		
Berk 25		Opn CL	CMA	-	-	6'	06 41.2	-16 29	273	I 2m :b	40	16	
Berk 36		Opn CL	CMA	-	-	5'	07 16.3	-13 12	274	III 1m:b	40	17	
Berk 75		Opn CL	CMA	-	-	4'	06 50.0	-23 59	318	II 2p :b	25	16	
Ced 90	Sh2-297	Brn Neb	CMA	-	-	10'	07 05.2	-12 20	273	E+R			
Haffner 4		Opn CL	CMA	-	-	2.4'	07 06.1	-15 00	273	III 1m:b	30	14	
Haffner 7		Opn CL	CMA	-	-	2.9'	07 22.9	-29 29	361	I 2m :b	40	14	
Haffner 9		Opn CL	CMA	-	-	2.1'	07 24.9	-16 59	274	I 1m:b	35	14	
Haffner 23		Opn CL	CMA	-	-	11'	07 09.4	-16 57	273	III 2 m	40	13	
MCG -05-18	PK 241- 7.1	Galaxy	CMA	-	-	0.1'	07 16.5	-29 19	361				Not a PLNNB;Seyfert GALXY
Ru 1		Opn CL	CMA	-	-	11'	06 36.4	-14 09	272	III 1 p	15	11	
Ru 2		Opn CL	CMA	-	-	7'	06 41.0	-29 33	360	IV 3 p	10	12	
Ru 3		Opn CL	CMA	-	-	2.8'	06 42.1	-29 27	360	II 1 p	15	11	
Ru 5		Opn CL	CMA	-	-	2'	06 55.4	-18 44	318	IV 1p :b	10	13	
Ru 6		Opn CL	CMA	-	-	2'	06 56.1	-13 15	273	III 1p :b	10		
Ru 7		Opn CL	CMA	-	-	4'	06 57.8	-13 13	273	II 2m :b	30	14	
Ru 8		Opn CL	CMA	-	-	4'	07 01.7	-13 33	273	IV 1p :b	10	12	
Ru 10		Opn CL	CMA	-	-	4.5'	07 06.5	-20 07	318	III 1p :b	40	12	
Ru 11		Opn CL	CMA	-	-	2.9'	07 07.4	-20 48	318	III 2 p	20	11	
Ru 12		Opn CL	CMA	-	-	5'	07 07.2	-28 09	318	IV 1p :b	20	14	
Ru 13		Opn CL	CMA	-	-	4.2'	07 07.9	-25 52	318	IV 2p :b	15	13	
Ru 14		Opn CL	CMA	-	-	2.3'	07 15.0	-31 21	361	IV 1p :b	10	13	
Ru 15		Opn CL	CMA	-	-	1.7'	07 19.6	-19 38	319	II 1p :b	20	12	
Ru 16		Opn CL	CMA	-	-	11'	07 23.2	-19 27	319	IV 2 p	15	13	
Ru 17		Opn CL	CMA	-	-	5'	07 23.6	-23 11	319	II 1p :b	15	12	
Ru 19		Opn CL	CMA	-	-	8'	07 25.6	-21 30	319	IV 1p :b	20	13	
Ru 150		Opn CL	CMA	-	-	2.5'	07 05.9	-28 25	318	II 2p :b	12	13	
Sh2-301	Gum 5;RCW	Brn Neb	CMA	-	-	8'	07 09.8	-18 30	318	E			
Tombaugh 2	OCL 605	Opn CL	CMA	-	-	3'	07 03.1	-20 49	318	I 1m:b	50	16	
vdB 96	Ced 96	Brn Neb	CMA	-	-	10'	07 19.9	-24 02	319	R			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2485	UGC 4112	Galaxy	CMI	12.2	13	1.6'	07 56.8	+07 29	185	Sa			double
NGC 2350	UGC 3747	Galaxy	CMI	12.3	12.1	1.4'	07 13.2	+12 16	184	Sa			
NGC 2538	UGC 4266	Galaxy	CMI	12.6	13.1	1.5'	08 11.4	+03 38	230	SBa			
NGC 2470	UGC 4091	Galaxy	CMI	12.7	12.7	2'	07 54.3	+04 28	230	Sab			
NGC 2508	UGC 4174	Galaxy	CMI	12.7	13.2	1.4'	08 02.0	+08 33	185	Elliptical			H III 7
UGC 3912	PGC 21303	Galaxy	CMI	12.8	13.4	1.8'	07 34.2	+04 32	229	Ir+			
NGC 2496	UGC 4127	Galaxy	CMI	12.9	13.5	1.4'	07 58.6	+08 02	185	Elliptical			
UGC 3946	PGC 21450	Galaxy	CMI	13.1	12.9	1.3'	07 38.0	+03 18	229	Ir+			vF companion north preced
NGC 2416	UGC 3925	Galaxy	CMI	13.4	12.9	1'	07 35.7	+11 37	184	Sc			brightest in group;asymmetrical spiral
NGC 2510	UGC 4178	Galaxy	CMI	13.4	12.9	1'	08 02.2	+09 29	185	SO			NGC 2513
PK 217+14.	Abell 24	Pln Neb	CMI	13.6	17.8	6.0'	07 51.7	+03 00	230	4(3)		17.5	
NGC 2504	UGC 4152	Galaxy	CMI	13.9	11.9	0.5'	07 59.9	+05 36	185	Pec			peculiar
NGC 2394		Opn CL	CMI	-	-		07 28.6	+07 05	184				H VIII 44
NGC 2459		Opn CL	CMI	-	-	1.5'	07 52.0	+09 33	185				H III 479
Berk 35		Opn CL	CMI	-	-	7'	07 10.0	+02 44	228	IV 1p :b	20	16	
Berk 78		Opn CL	CMI	-	-	7'	07 23.6	+05 22	229	II 1p :b	12	16	
Do 26		Opn CL	CMI	-	-	24'	07 30.1	+11 57	184	IV 1 p			
King 23	Czernik 28	Opn CL	CMI	-	-	4'	07 21.8	-00 59	229	III 2p :b	20		Skiff: sparse cluster
M 44	NGC 2632	Opn CL	CNC	3.1	13	95'	08 40.0	+19 40	141	II 2 m	50	6.3	Beehive Cluster ;200 memb to 14 mag
M 67	NGC 2682	Opn CL	CNC	6.9	13	30'	08 50.8	+11 49	187	II 2 m	200	9.7	500 memb to 16 mag;Mallas-dark spot near center
NGC 2775	UGC 4820	Galaxy	CNC	10.1	12.9	4.5'	09 10.3	+07 02	187	Sab			N in B smooth lens;many knotty arms form dk lane
NGC 2513	UGC 4184	Galaxy	CNC	11.6	13.4	2.5'	08 02.4	+09 25	185	Elliptical			H III 512;brightest in group
NGC 2672	UGC 4619	Galaxy	CNC	11.7	14	2.5'	08 49.4	+19 04	142	E1			in halo of NGC 2673;contact;has curved plume
NGC 2648	UGC 4541	Galaxy	CNC	11.8	13.1	3.2'	08 42.7	+14 17	186	Sa			spiral;abs lanes in comp;diff arms extend beyond comp
NGC 2749	UGC 4763	Galaxy	CNC	11.8	12.8	1.8'	09 05.4	+18 19	142	E2			brightest in group
NGC 2750	UGC 4769	Galaxy	CNC	11.9	13.3	2.2'	09 05.8	+25 26	142	Sc			slightly asym;distorted arm at p side bright r outw
NGC 2554	UGC 4312	Galaxy	CNC	12	14	3.2'	08 17.9	+23 28	141	Sa			H II 303;very faint slightly asym disc w spiral arcs
NGC 2507	UGC 4172	Galaxy	CNC	12.2	13.7	2.5'	08 01.6	+15 43	185	Sa			H II 554;peculiar;brightest in group;faint outer whirls
NGC 2563	UGC 4347	Galaxy	CNC	12.2	13.3	2'	08 20.6	+21 04	141	SO			H II 634;dense part of cl
NGC 2599	UGC 4458	Galaxy	CNC	12.2	13.3	1.9'	08 32.2	+22 34	141	Sa			H III 234
NGC 2789	UGC 4875	Galaxy	CNC	12.2	13.5	2'	09 15.0	+29 44	103	SBO-a			brightest in group
PK 219+31.	Abell 31	Pln Neb	CNC	12.2	-	16.8'	08 54.2	+08 55	187	3a		15.5	
NGC 2592	UGC 4411	Galaxy	CNC	12.3	13.2	1.7'	08 27.1	+25 58	141	Elliptical			brightest of 3;in triple group w 2594 and NGC 2481
NGC 2595	UGC 4422	Galaxy	CNC	12.3	14.3	3.1'	08 27.7	+21 29	141	SBc			slightly asym spiral pattern;barred w prominent nucl
NGC 2608	UGC 4484	Galaxy	CNC	12.3	13.4	2.2'	08 35.3	+28 28	102	SBb Ring			2 asym arms vhigh surf brightn;2* superimposed on bar
NGC 2545	UGC 4287	Galaxy	CNC	12.4	13.1	2.2'	08 14.2	+21 21	140	SBab Ring			one-arm spiral from inr loop;F smooth bar;F out arms
NGC 2577	UGC 4367	Galaxy	CNC	12.4	13	1.8'	08 22.7	+22 33	141	SO			H II 259
NGC 2619	UGC 4503	Galaxy	CNC	12.4	13.5	2.3'	08 37.5	+28 42	102	SBbc			H II 319;many very thin arms
NGC 2565	UGC 4334	Galaxy	CNC	12.6	13	1.9'	08 19.8	+22 02	141	SBbc			sff of 2
NGC 2575	UGC 4368	Galaxy	CNC	12.7	14.2	2.3'	08 22.8	+24 18	141	Sc			
NGC 2535	UGC 4264	Galaxy	CNC	12.8	13.8	2.5'	08 11.2	+25 12	140	Scp			2 long v open arms;2536 is comp at tip of 1 arm;bridge
NGC 2661	UGC 4584	Galaxy	CNC	12.8	13.4	1.4'	08 46.0	+12 37	186	Sc			patchy;asym broken arms;no disturbing obj visible
NGC 2720	UGC 4710	Galaxy	CNC	12.8	13	1.2'	08 59.1	+11 09	187	Sc			
NGC 2795	UGC 4887	Galaxy	CNC	12.8	13.2	1.4'	09 16.1	+17 38	142	Elliptical			a large nr of small galaxies in vicinity; NGC 2749 group
NGC 2819	UGC 4924	Galaxy	CNC	12.8	13.4	1.4'	09 18.2	+16 12	187	Elliptical			
NGC 2558	UGC 4331	Galaxy	CNC	12.9	13.7	1.8'	08 19.2	+20 31	141	Sab			H III 606
NGC 2562	UGC 4345	Galaxy	CNC	12.9	12.3	1'	08 20.4	+21 08	141	Sa			H III 607;dense part of cl
NGC 2764	UGC 4794	Galaxy	CNC	12.9	13.1	1.5'	09 08.3	+21 27	142	SO			H III 236
NGC 2804	UGC 4901	Galaxy	CNC	12.9	14.4	2.2'	09 16.8	+20 12	142	SO			NGC 2809 group
NGC 2582	IC 2359	Galaxy	CNC	13	13.3	1.2'	08 25.2	+20 20	141	SBab			H III 753;s-shaped;almost circular arms IC 2359
NGC 2657	UGC 4573	Galaxy	CNC	13	13.5	1.3'	08 45.3	+09 39	186	Scd Ring			
NGC 2730	UGC 4743	Galaxy	CNC	13	13.6	1.7'	09 02.3	+16 50	187	SBc Irr			disturbed;chaotic patchy spirals ;S blue cond p part
NGC 2738	UGC 4752	Galaxy	CNC	13	12.7	1.4'	09 04.0	+21 58	142	Sc			brightest in group;spiral
NGC 2809	UGC 4910	Galaxy	CNC	13	13.3	1.3'	09 17.1	+20 04	142	SO			brightest in group;6 galaxies inside 3.7';double system
NGC 2512	UGC 4191	Galaxy	CNC	13.1	13.2	1.4'	08 03.1	+23 23	140	SBb			H III 605
NGC 2794	UGC 4885	Galaxy	CNC	13.1	13.4	1.2'	09 16.0	+17 35	142	SB/P			amorphous v diff outside;bridge to comp?;brightest
NGC 2557	UGC 4330	Galaxy	CNC	13.2	13.3	1.2'	08 19.2	+21 26	141	SBO			IC 2293 at 5.5;117 (m=15.2)
UGC 4559	PGC 24530	Galaxy	CNC	13.2	13.5	3'	08 44.2	+30 07	102	Sb+			
NGC 2560	UGC 4337	Galaxy	CNC	13.3	12.4	1.4'	08 19.9	+20 59	141	Sa			dense part of cl
NGC 2581	UGC 4388	Galaxy	CNC	13.3	13	1.1'	08 24.5	+18 36	141	SB Ring			
NGC 2628	UGC 4519	Galaxy	CNC	13.3	13.4	1.1'	08 40.4	+23 32	141	Sc Ring			H III 235
NGC 2735	UGC 4744	Galaxy	CNC	13.3	12.4	1.2'	09 02.6	+25 56	142	SBb/P			bright core;bridge;disturbed by companion (N2375A)
NGC 2777	UGC 4823	Galaxy	CNC	13.3	12.4	0.7'	09 10.7	+07 12	187	Sab			
NGC 2824	UGC 4933	Galaxy	CNC	13.3	12.6	0.9'	09 19.0	+26 16	142	SO			

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NGC 2514	UGC 4189	Galaxy	CNC	13.4	13.8	1.3'	08 02.8	+15 48	185	SBbc			NGC 2507 group
NGC 2620	UGC 4501	Galaxy	CNC	13.4	13.3	2'	08 37.5	+24 57	141	S pec			very diffuse dwarf;NGC 2621 at 3.8 nf (m=15.5)
NGC 2623	UGC 4509	Galaxy	CNC	13.4	13.8	2.4'	08 38.4	+25 45	141	Sb			triple; contact;2 long curved streamers (or arms)
NGC 2725	UGC 4732	Galaxy	CNC	13.4	12.3	0.7'	09 01.1	+11 06	187	Pec			peculiar
NGC 2540	UGC 4275	Galaxy	CNC	13.5	13.5	1.3'	08 12.8	+26 22	140	SBc			
NGC 2596	UGC 4419	Galaxy	CNC	13.5	13.1	1.5'	08 27.4	+17 17	141	Sb			
NGC 2604A	NGC 2604	Galaxy	CNC	13.5	-	2.1'	08 33.4	+29 32	102	SBc			H III 292;irregular;sev vF objects near
NGC 2731	UGC 4741	Galaxy	CNC	13.5	12.4	0.8'	09 02.1	+08 18	187	Sc			several filamentary knotty arms;sharp outline
NGC 2744	UGC 4757	Galaxy	CNC	13.5	13.9	1.6'	09 04.7	+18 28	142	SBb/P			double;bright complex center;2 main smooth arms
NGC 2813	UGC 4916	Galaxy	CNC	13.5	13.8	1.3'	09 17.8	+19 54	142	SO			sf of 2;NGC 2809 group
NGC 2530	UGC 4237	Galaxy	CNC	13.6	13.8	1.4'	08 07.9	+17 49	140	SBcd			H III 752
NGC 2598	UGC 4443	Galaxy	CNC	13.6	12.7	1'	08 30.0	+21 29	141	SBa			
NGC 2607	UGC 4473	Galaxy	CNC	13.6	13.2	0.9'	08 33.9	+26 58	141	Sc			bright core in R diff disc;extreme diff outer disc
NGC 2711	UGC 4688	Galaxy	CNC	13.6	12.9	0.9'	08 57.4	+17 17	142	SBbc			
NGC 2728	UGC 4738	Galaxy	CNC	13.6	13.4	1.1'	09 01.7	+11 05	187	Sb			
NGC 2766	UGC 4801	Galaxy	CNC	13.6	13.1	1.4'	09 08.8	+29 52	103	SBab Rii			
NGC 2503	UGC 4158	Galaxy	CNC	13.7	13.6	1.1'	08 00.6	+22 24	140	SBbc Rii			
NGC 2526	UGC 4231	Galaxy	CNC	13.7	12.6	0.9'	08 07.0	+08 00	185	Sab			
NGC 2743	UGC 4760	Galaxy	CNC	13.7	13.5	1.1'	09 04.9	+25 00	142	Sd			H III 608
NGC 2752	UGC 4772	Galaxy	CNC	13.7	13.4	1.8'	09 05.7	+18 20	142	SBb			triple grp w NGC 2749 @ 5.4';PA252;and NGC 2744 @
NGC 2786	UGC 4861	Galaxy	CNC	13.7	-	0.9'	09 13.6	+12 26	187	Sa Rina			
NGC 2522	UGC 4218	Galaxy	CNC	13.8	12.4	1'	08 06.2	+17 42	140	Sa			brightest in group;1st in chain of 5 galaxies
NGC 2553	MCG 4-20-	Galaxy	CNC	13.8	13.1	0.9'	08 17.6	+20 54	141	S			
NGC 2572	UGC 4355	Galaxy	CNC	13.8	13.1	1.3'	08 21.4	+19 09	141	Sa			
NGC 2593	UGC 4408	Galaxy	CNC	13.9	12.9	0.9'	08 26.8	+17 22	141	Sa			
NGC 2622	MCG 4-21-	Galaxy	CNC	14	12.7	0.8'	08 38.2	+24 54	141	Sb			
NGC 2773	UGC 4815	Galaxy	CNC	14	12.3	0.7'	09 09.7	+07 10	187	S pec			
NGC 2783A	NGC 2783	Galaxy	CNC	14	-	2.2'	09 13.7	+30 00	103	Elliptical			H III 295;NGC 2778 group
NGC 2801	UGC 4899	Galaxy	CNC	14	14	1.1'	09 16.7	+19 56	142	Sc			several companions;NGC 2809 group
NGC 2664		Opn CL	CNC	-	-	5'	08 47.1	+12 36	186				
NGC 2678		Opn CL	CNC	-	-	10'	08 50.0	+11 20	187				H VIII 10
NGC 1851	Dunlop 508	Glob CL	COL	7.1	-	11'	05 14.1	-40 03	393	II			X-ray source;vRi w F*
NGC 1808	ESO 305- 8	Galaxy	COL	9.9	13.3	6.3'	05 07.7	-37 31	358	SBa			F outer arms , close to ngc1792
NGC 1792	ESO 305- 6	Galaxy	COL	10.2	12.9	5.6'	05 05.2	-37 59	358	SBbc			close to ngc 1808
NGC 2090	ESO 363-23	Galaxy	COL	11.2	13.7	5'	05 47.0	-34 15	359	Sc			
NGC 2188	ESO 364-37	Galaxy	COL	11.7	13.2	4.7'	06 10.2	-34 06	359	SBp			
IC 2158	ESO 425- 7	Galaxy	COL	12	12.7	1.7'	06 05.3	-27 51	316	SBab			
NGC 1827	ESO 362- 6	Galaxy	COL	12.5	13.1	3'	05 10.1	-36 58	358	SBc			
NGC 1800	ESO 422-30	Galaxy	COL	12.6	13.3	2'	05 06.4	-31 57	358	E6			
NGC 1812	ESO 422-39	Galaxy	COL	12.7	12.7	1.2'	05 08.9	-29 15	358	Sa			
NGC 1879	ESO 423- 6	Galaxy	COL	12.8	14.2	2.5'	05 19.8	-32 09	358	SBp			
NGC 2049	ESO 424-11	Galaxy	COL	12.8	13.3	2'	05 43.3	-30 05	359	Sa			
NGC 1989	ESO 423-21	Galaxy	COL	13.1	13.5	1.4'	05 34.4	-30 48	358	E-SO			
NGC 2255	ESO 365-31	Galaxy	COL	13.4	13.4	1.5'	06 34.0	-34 49	360	SBc			
NGC 1811	ESO 422-37	Galaxy	COL	13.5	13	1.7'	05 08.7	-29 17	358	Sa			
NGC 1992	ESO 423-23	Galaxy	COL	13.6	13.1	1.1'	05 34.5	-30 54	358	Sa			
NGC 1963	ESO 363-SC	Opn CL	COL	-	-	120'	05 32.3	-36 24	358				
Mel 111	Cr 256	Opn CL	COM	1.8	-	275'	12 25.1	+26 07	148	II 3 p	80	4.3	Coma Berenices star cluster
M 53	NGC 5024	Glob CL	COM	7.7	12	14.4'	13 12.9	+18 10	150	V			1 deg NE of Alpha Comae Berenices
M 64	NGC 4826	Galaxy	COM	8.5	12.7	10.3'	12 56.7	+21 41	149	Sab			Blackeye Galaxy ;dark marking near center
M 85	NGC 4382	Galaxy	COM	9.1	12.9	7.4'	12 25.4	+18 11	148	Sa			SN 1960r;P w NGC 4394 @ 7.8' foll
M 100	NGC 4321	Galaxy	COM	9.4	13.4	7.5'	12 22.9	+15 49	193	SBbc			SN 1901-14-59;NGC 4322 @ 5.2';NGC 4328 @ 6.1'
NGC 4725	UGC 7989	Galaxy	COM	9.4	14	10.4'	12 50.4	+25 30	149	SBab Rii			H I 84;P w NGC 4712 @ 12 '
M 88	NGC 4501	Galaxy	COM	9.6	13	6.8'	12 32.0	+14 25	193	Sbc			comp @ 6.9';mult arm spiral
NGC 4565	UGC 7772	Galaxy	COM	9.6	13.3	14.9'	12 36.3	+25 59	149	Sb			Needle ;NGC 4562 @ 13.4';classic edge-on galaxy
NGC 4494	UGC 7662	Galaxy	COM	9.8	12.9	4.5'	12 31.4	+25 46	148	Elliptical			H I 83
NGC 5053	GCL 23	Glob CL	COM	9.8	-	8.9'	13 16.5	+17 42	150	XI			H VI 7;Low surf brightness;1 deg sf M 53
M 99	NGC 4254	Galaxy	COM	9.9	13.2	5.3'	12 18.8	+14 25	193	Sc			SN 1967h;Norton-diff for small scope
NGC 4559	UGC 7766	Galaxy	COM	10	14	11'	12 36.0	+27 58	149	SBc			H I 92;SN 1941a;multi arm spiral
M 91	NGC 4548	Galaxy	COM	10.1	13.4	5.2'	12 35.4	+14 30	194	SBb			NGC 4571 @ 27 ' ;H II 120;F outer arms in S patrn
M 98	NGC 4192	Galaxy	COM	10.1	13.6	9.4'	12 13.8	+14 54	193	SBb			6 Comae Berenices is 30' east
NGC 4414	UGC 7539	Galaxy	COM	10.1	12.1	3.6'	12 26.5	+31 13	108	Sc			H I 77
NGC 4450	UGC 7594	Galaxy	COM	10.1	13.2	5.4'	12 28.5	+17 05	148	Sab			H II 56
NGC 4278	UGC 7386	Galaxy	COM	10.2	13.1	4'	12 20.1	+29 17	108	Elliptical			Triple chain w NGC 4283 @ 3.6';NGC 4286 @ 8.8'

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4473	UGC 7631	Galaxy	COM	10.2	12.8	4.2'	12 29.8	+13 26	193	Elliptical			Markarian's chain
NGC 4147	NGC 4153	Glob CL	COM	10.3	-	4'	12 10.1	+18 33	148	VI			H I 19;Stars F
NGC 4153	NGC 4147	Glob CL	COM	10.3	-	4.1'	12 10.1	+18 33	148	VI			H I 11;equals NGC 4147; best possible ID
NGC 4274	UGC 7377	Galaxy	COM	10.4	13.3	6.8'	12 19.8	+29 37	107	SBab Rin			H I 75;Saturn-like inner ring w F outer halo
NGC 4293	UGC 7405	Galaxy	COM	10.4	13.1	5.5'	12 21.2	+18 23	148	SBO-a			H V 5;Spiral pattern dim;heavy dust lanes
NGC 4459	UGC 7614	Galaxy	COM	10.4	12.7	4'	12 29.0	+13 59	193	Sa			H I 161;comp @ 2.2';NGC 4468 @ 8.5';NGC 4474 @ 13
NGC 4477	UGC 7638	Galaxy	COM	10.4	13.1	3.7'	12 30.0	+13 38	193	SBO			Markarian's chain ;NGC 4479 @5.3'
NGC 4314	UGC 7443	Galaxy	COM	10.6	13.4	3.9'	12 22.5	+29 54	108	SBa			H I 76
NGC 4251	UGC 7338	Galaxy	COM	10.7	12.4	3.6'	12 18.1	+28 10	107	SBO Rin			H I 89;lens shape
NGC 4651	UGC 7901	Galaxy	COM	10.8	13.2	4'	12 43.7	+16 24	194	Scp			H II 12
NGC 4203	UGC 7256	Galaxy	COM	10.9	13.3	3.5'	12 15.1	+33 12	107	E-SO Ba			H I 175
NGC 4394	UGC 7523	Galaxy	COM	10.9	13.4	3.4'	12 25.9	+18 13	148	SBab			H II 55;P w NGC 4382 @ 7.8'
NGC 4689	UGC 7965	Galaxy	COM	10.9	13.7	4.7'	12 47.8	+13 46	194	Sbc			H II 128
NGC 4136	UGC 7134	Galaxy	COM	11	13.8	3.9'	12 09.3	+29 56	107	SBc Ring			H II 321
NGC 4350	UGC 7473	Galaxy	COM	11	12.5	2.9'	12 24.0	+16 42	193	SO			H II 86;NGC 4340 @ 5.6';lenticular
NGC 4710	UGC 7980	Galaxy	COM	11	12.8	4.9'	12 49.6	+15 10	194	Sa			H II 95;equatorial dust lane
NGC 4448	UGC 7591	Galaxy	COM	11.1	12.8	3.6'	12 28.3	+28 37	108	SBab Rin			H I 91
NGC 4212	NGC 4208	Galaxy	COM	11.2	13	3.2'	12 15.7	+13 54	193	Sc			H II 108
NGC 4340	UGC 7467	Galaxy	COM	11.2	13.5	3.1'	12 23.6	+16 43	193	SBO-a R			H II 85;Theta struct;NGC 4350 @ 5.7';comp @ 2.3'
NGC 4419	UGC 7551	Galaxy	COM	11.2	12.4	3.3'	12 26.9	+15 03	193	SBa			H II 113
NGC 4298	UGC 7412	Galaxy	COM	11.3	13.1	3.2'	12 21.5	+14 36	193	Sc			H II 111
NGC 4571	IC 3588	Galaxy	COM	11.3	13.8	3.7'	12 36.9	+14 13	194	Sc			comp @ 4.6';NGC 4548 @ 27 ' ;H III 602
NGC 4064	UGC 7054	Galaxy	COM	11.4	13.5	4.6'	12 04.2	+18 27	148	SBa			
NGC 4245	UGC 7328	Galaxy	COM	11.4	13.3	3.3'	12 17.6	+29 36	107	SBO-a R			H I 74
NGC 4474	UGC 7634	Galaxy	COM	11.5	12.7	2.4'	12 29.9	+14 04	193	SO			H II 117;spindle shaped
NGC 4889	NGC 4884	Galaxy	COM	11.5	13.3	2.8'	13 00.1	+27 59	149	Elliptical			B in Coma cluster ;NGC 4872 @ 0.8' sp; 4886 @ 1.1' ng
NGC 4150	UGC 7165	Galaxy	COM	11.6	13	2.3'	12 10.6	+30 24	107	SO			H I 73
NGC 4237	UGC 7315	Galaxy	COM	11.6	12.6	2.1'	12 17.2	+15 19	193	SBbc Rin			H II 11
NGC 4262	UGC 7365	Galaxy	COM	11.6	12.7	1.8'	12 19.5	+14 53	193	E-SO Ba			H II 110
NGC 4302	UGC 7418	Galaxy	COM	11.6	13.3	5.3'	12 21.7	+14 36	193	Sc			H II 112;Nearly edge-on spiral w equatorial dust lane
NGC 4421	UGC 7554	Galaxy	COM	11.6	13.3	2.7'	12 27.0	+15 28	193	SBO-a			H II 89
NGC 4793	UGC 8033	Galaxy	COM	11.6	13	2.9'	12 54.7	+28 56	108	SBc			H I 93
NGC 4189	IC 3050	Galaxy	COM	11.7	13.1	2.5'	12 13.8	+13 25	193	SBc			H II 106
NGC 4312	UGC 7442	Galaxy	COM	11.7	13.3	4.6'	12 22.5	+15 32	193	Sab			H II 628
NGC 4379	UGC 7502	Galaxy	COM	11.7	12.8	2'	12 25.2	+15 36	193	E-SO			H II 87
NGC 4540	UGC 7742	Galaxy	COM	11.7	12.8	2.1'	12 34.8	+15 33	194	SBc			H II 94;IC 3528 (Ho 421b) @ 1.5' nf;comp @ 4.3'
NGC 4874	UGC 8103	Galaxy	COM	11.7	13.1	2.4'	12 59.6	+27 58	149	Elliptical			NGC 4889 @ 7.2';2nd Brightest in Coma cluster
NGC 4208	NGC 4212	Galaxy	COM	11.8	-	3.2'	12 15.7	+13 54	193	Sc			H II 107
NGC 4037	UGC 7002	Galaxy	COM	11.9	13.5	2.4'	12 01.4	+13 24	193	SBb			H III 77
NGC 4377	UGC 7501	Galaxy	COM	11.9	12.7	1.7'	12 25.2	+14 46	193	E-SO			H I 12
NGC 5172	UGC 8477	Galaxy	COM	11.9	13.7	3.4'	13 29.3	+17 03	150	SBbc			spir;sBN;main knotty arms;poor res
NGC 4405	IC 788	Galaxy	COM	12	12.6	1.6'	12 26.1	+16 11	193	Sa			H II 88
NGC 4489	UGC 7655	Galaxy	COM	12	13	1.7'	12 30.9	+16 46	193	Elliptical			H II 91;P w NGC 4498 @ 12.6'
NGC 4539	UGC 7735	Galaxy	COM	12	13.5	3.3'	12 34.6	+18 12	149	SBa			
NGC 4104	UGC 7099	Galaxy	COM	12.1	13.4	2.6'	12 06.6	+28 10	107	SBO			H II 370
NGC 4158	UGC 7182	Galaxy	COM	12.1	13.2	2'	12 11.2	+20 11	148	Sb			H II 405
NGC 4185	UGC 7225	Galaxy	COM	12.1	13.7	2.6'	12 13.4	+28 31	107	SBbc Rin			H II 373
NGC 4283	UGC 7390	Galaxy	COM	12.1	12.9	1.4'	12 20.3	+29 19	108	Elliptical			Triple chain w NGC 4278 @ 3.6';NGC 4286 @ 5.2'
NGC 4383	UGC 7507	Galaxy	COM	12.1	12.7	2'	12 25.4	+16 28	193	Sa			comp @ 2.6'
NGC 4393	UGC 7521	Galaxy	COM	12.1	14.4	3.2'	12 25.9	+27 34	148	SBcd			H III 361
NGC 4555	IC 3454	Galaxy	COM	12.1	13.3	1.4'	12 35.7	+26 31	149	Elliptical			H II 343
NGC 4595	UGC 7826	Galaxy	COM	12.1	12.7	1.7'	12 39.9	+15 18	194	SBb			H II 632
NGC 4659	UGC 7915	Galaxy	COM	12.1	12.8	1.8'	12 44.5	+13 30	194	Sa			H II 127
NGC 4789	UGC 8028	Galaxy	COM	12.1	13.1	1.9'	12 54.3	+27 04	149	SO			H II 345;P w NGC 4789A @ 5 ' ;NGC 4787 @ 3 ' '
NGC 4839	UGC 8070	Galaxy	COM	12.1	14.3	4'	12 57.4	+27 30	149	Elliptical			H II 386;NGC 4842 @ 2.6';comp. superimposed @ 0.4'
NGC 4017	UGC 6967	Galaxy	COM	12.2	13	1.8'	11 58.8	+27 27	147	SBbc			H II 369;UGC 6967;Arp 305b
NGC 4152	UGC 7169	Galaxy	COM	12.2	13.5	2.3'	12 10.6	+16 02	193	SBc			H II 83
NGC 4162	UGC 7193	Galaxy	COM	12.2	13.4	2.3'	12 11.9	+24 07	148	Sbc			H II 353
NGC 4169	UGC 7202	Galaxy	COM	12.2	12.6	1.8'	12 12.3	+29 11	107	SO			H III 358;Brightest in group
NGC 4310	NGC 4338	Galaxy	COM	12.2	13.2	2.4'	12 22.4	+29 12	108	SBO-a R			H II 378
NGC 4498	UGC 7669	Galaxy	COM	12.2	13.7	3'	12 31.7	+16 51	193	SBc			H III 69;P w NGC 4489 @ 12.6';comp @ 4.5'
NGC 4525	UGC 7714	Galaxy	COM	12.2	13.4	2.6'	12 33.9	+30 17	108	SBc			H II 325
NGC 4921	UGC 8134	Galaxy	COM	12.2	13.9	2.4'	13 01.4	+27 53	149	SBab			H II 393;SN 1959b
NGC 5012	UGC 8270	Galaxy	COM	12.2	13.7	2.9'	13 11.6	+22 55	150	SBc Ring			H I 85;P w UGC 8290

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4014	NGC 4028	Galaxy	COM	12.3	13.3	2.2'	11 58.6	+16 11	192	Sa			
NGC 4032	UGC 6995	Galaxy	COM	12.3	13.4	1.9'	12 00.5	+20 04	148	Ir			H II 404
NGC 4344	UGC 7468	Galaxy	COM	12.3	13.3	1.4'	12 23.6	+17 32	148	SBO			H III 31;Ho 390b @ 1.7' is a *
NGC 4455	UGC 7603	Galaxy	COM	12.3	13	2.6'	12 28.7	+22 49	148	SBcd			H II 355;Nearly edge-on spiral
NGC 4515	UGC 7701	Galaxy	COM	12.3	12.6	1.4'	12 33.1	+16 16	194	E-SO			H II 93
NGC 4204	UGC 7261	Galaxy	COM	12.4	14.8	3.6'	12 15.2	+20 40	148	SBd			H III 397
NGC 4479	UGC 7646	Galaxy	COM	12.4	13.1	1.6'	12 30.3	+13 35	193	SBO			H II 116
NGC 4634	UGC 7875	Galaxy	COM	12.4	12.8	2.5'	12 42.7	+14 18	194	SBc			H III 603;NGC 4633 @ 3.5'
NGC 4747	UGC 8005	Galaxy	COM	12.4	13.7	3.3'	12 51.8	+25 46	149	SBcd			H II 344;P w NGC 4725 @ 24 ',filam to NE
NGC 4952	NGC 4962	Galaxy	COM	12.4	13.1	1.3'	13 05.0	+29 07	109	Elliptical			H II 396
NGC 4213	UGC 7276	Galaxy	COM	12.5	13.7	1.7'	12 15.6	+23 59	148	Elliptical			H II 354;Brightest in cluster
NGC 4336	IC 3254	Galaxy	COM	12.5	13	2'	12 23.5	+19 26	148	SBO-a			H II 406
NGC 4561	IC 3569	Galaxy	COM	12.5	13	1.5'	12 36.1	+19 19	149	SBcd			H II 407
NGC 4884	NGC 4889	Galaxy	COM	12.5	-	2.8'	13 00.1	+27 59	149	Elliptical			see 4889
NGC 4065	NGC 4057	Galaxy	COM	12.6	12.7	1.1'	12 04.1	+20 14	148	Elliptical			H III 395;Brightest in cluster;Very compact
NGC 4396	Ho 400a	Galaxy	COM	12.6	13.7	3.3'	12 26.0	+15 40	193	Scd			Ho 400b @ 6.2' is a dble *
NGC 4635	UGC 7876	Galaxy	COM	12.6	13.6	1.9'	12 42.6	+19 57	149	SBcd			
NGC 4685	UGC 7954	Galaxy	COM	12.6	12.9	1.6'	12 47.2	+19 28	149	E-SO			H III 398
NGC 4692	IC 823	Galaxy	COM	12.6	13.1	1.1'	12 47.9	+27 13	149	Ellip Rin			H II 381
NGC 4841B	NGC 4841-2	Galaxy	COM	12.6	13.9	1.3'	12 57.6	+28 29	108	E pec			separation from NGC 4841A is 0.7'
NGC 5217	UGC 8546	Galaxy	COM	12.6	13.4	1.5'	13 34.1	+17 51	150	Elliptical			brightest in group w at least 6 galaxies
NGC 4146	UGC 7163	Galaxy	COM	12.7	13.2	1.4'	12 10.3	+26 26	148	SBab			H III 327;SN 1963d
NGC 4359	UGC 7483	Galaxy	COM	12.7	13.7	3.5'	12 24.2	+31 31	108	SBc			H III 648
NGC 4506	UGC 7682	Galaxy	COM	12.7	13.2	1.6'	12 32.2	+13 25	194	SBa			H II 631
NGC 4670	UGC 7930	Galaxy	COM	12.7	13	1.4'	12 45.3	+27 08	149	SBO-a			H III 328;P w NGC 4673 @ 5.6'
NGC 5116	UGC 8410	Galaxy	COM	12.7	13	2'	13 22.9	+26 59	150	SBc			H III 368;vsBN v narrow bar 2 main filam branch arms
IC 3476	UGC 7695	Galaxy	COM	12.7	14	2.2'	12 32.7	+14 03	194	Ir+			
NGC 4134	UGC 7130	Galaxy	COM	12.8	13.3	2.2'	12 09.2	+29 11	107	Sb			H II 371;Brightest in group
NGC 4196	UGC 7245	Galaxy	COM	12.8	12.8	1.2'	12 14.5	+28 25	107	SO			H II 374
NGC 4239	UGC 7316	Galaxy	COM	12.8	13.6	1.8'	12 17.2	+16 32	193	Elliptical			
NGC 4375	UGC 7496	Galaxy	COM	12.8	13.2	1.4'	12 25.0	+28 33	108	SBab/P			H II 379
NGC 4468	UGC 7628	Galaxy	COM	12.8	13.1	1.4'	12 29.5	+14 03	193	E-SO			H II 630;NGC 4474 @ 5.6'
NGC 4516	UGC 7703	Galaxy	COM	12.8	13.1	1.8'	12 33.1	+14 34	194	SBab			H III 78
NGC 4712	UGC 7977;H	Galaxy	COM	12.8	13.7	2.3'	12 49.6	+25 28	149	Sbc			NGC 4725 @ 12 '
NGC 4816	UGC 8057	Galaxy	COM	12.8	13.1	1.3'	12 56.2	+27 45	149	E-SO			
NGC 4841A	NGC 4841-1	Galaxy	COM	12.8	13.8	1.7'	12 57.5	+28 29	108	Elliptical			H II 387;separation from NGC 4841B is 0.7'
NGC 4911	UGC 8128	Galaxy	COM	12.8	13.3	1.5'	13 00.9	+27 47	149	SBbc			H II 392
NGC 5016	UGC 8279	Galaxy	COM	12.8	13.5	1.7'	13 12.1	+24 06	150	SBbc			sBN;weak bar;sev knotty filam arms w many branches
NGC 5158	UGC 8459	Galaxy	COM	12.8	13.1	1.3'	13 27.8	+17 47	150	SBab			
NGC 4066	UGC 7051	Galaxy	COM	12.9	13.3	1.2'	12 04.2	+20 21	148	Elliptical			NGC 4060 @ 2 ';NGC 4065 @ 6.9';NGC 4070 @ 3.8'
NGC 4673	UGC 7933	Galaxy	COM	12.9	12.7	1'	12 45.6	+27 04	149	Elliptical			H III 329;P w NGC 4670 @ 5.6'
NGC 4827	UGC 8065	Galaxy	COM	12.9	13.4	1.4'	12 56.7	+27 11	149	E-SO Ba			H II 384
NGC 4849	IC 3935;UGC	Galaxy	COM	12.9	13.6	1.9'	12 58.2	+26 24	149	SO			P w IC 838 (=Ho 495b) @ 1.9'
NGC 4944	UGC 8167	Galaxy	COM	12.9	12.7	1.5'	13 03.8	+28 11	109	Sab			H II 395;comp. @ 1.1'
NGC 4022	UGC 6975	Galaxy	COM	13	13.3	1.2'	11 59.0	+25 13	147	SO			NGC 4005 group
NGC 4173	UGC 7204	Galaxy	COM	13	14.2	5'	12 12.4	+29 12	107	Scd			H II 372; UGC 7204
NGC 4328	MCG 3-32-	Galaxy	COM	13	13.5	1.4'	12 23.3	+15 49	193	E-SO			H II 84
NGC 4926	UGC 8142	Galaxy	COM	13	13.1	1.1'	13 01.9	+27 37	149	E-SO			NGC 4926A is 3.4' nf
NGC 4935	UGC 8159	Galaxy	COM	13	13.1	1.2'	13 03.4	+14 23	194	SBb			Similar to NGC 210
NGC 4957	UGC 8178	Galaxy	COM	13	13.2	1.2'	13 05.2	+27 34	150	Elliptical			H II 397;P w NGC 4961 @ 12.5'
NGC 5057	UGC 8342	Galaxy	COM	13	13.5	1.3'	13 16.5	+31 02	109	SO Ring			H III 307
NGC 5081	UGC 8366	Galaxy	COM	13	13.5	2.2'	13 19.1	+28 30	109	SBb			Comp superimp at 0.9'
NGC 5089	UGC 8371	Galaxy	COM	13	13.3	1.7'	13 19.7	+30 15	109	SBc			H II 327;Peculiar;dif irr outer disc;prob twisted plane
NGC 5180	UGC 8479	Galaxy	COM	13	13.2	1.4'	13 29.4	+16 50	195	SO			H III 71;vB core in F ext halo;double system
IC 3881	UGC 8036	Galaxy	COM	13	14.1	0.2'	12 54.9	+19 07	149	SBc			
NGC 4061	NGC 4055	Galaxy	COM	13.1	13.2	1.2'	12 04.0	+20 14	148	Elliptical			H III 394;Compact;p w NGC 4065 @ 1 '
NGC 4070	NGC 4059	Galaxy	COM	13.1	13.1	1'	12 04.2	+20 25	148	Elliptical			H III 391
NGC 4131	UGC 7126	Galaxy	COM	13.1	12.9	1.4'	12 08.8	+29 18	107	SBO-a			H III 356;NGC 4134 group
NGC 4166	UGC 7198	Galaxy	COM	13.1	13.2	1.2'	12 12.2	+17 45	148	SBO			
NGC 4253	UGC 7344	Galaxy	COM	13.1	12.7	0.9'	12 18.4	+29 49	107	SBa			H III 702
NGC 4272	UGC 7378	Galaxy	COM	13.1	13	1'	12 19.8	+30 20	107	Elliptical			H III 299
NGC 4275	UGC 7382	Galaxy	COM	13.1	12.3	0.8'	12 19.9	+27 37	148	Sb			H II 376
NGC 4286	IC 3181	Galaxy	COM	13.1	13.4	1.5'	12 20.7	+29 21	108	Sa			3 Chain w NGC 4278 @ 8.8';NGC 4283 @ 5.2';H III 300
NGC 4495	UGC 7663	Galaxy	COM	13.1	13.1	1.4'	12 31.4	+29 08	108	Sab			H III 301

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4556	UGC 7765	Galaxy	COM	13.1	13.3	1.2'	12 35.8	+26 55	149	Elliptical			H II 380
NGC 4615	UGC 7852	Galaxy	COM	13.1	13.2	1.6'	12 41.6	+26 04	149	Sc Ring			Brightest in group;NGC 4613 @ 2.1';NGC 4614 @ 2.4'
NGC 4633	IC 3688;UGC	Galaxy	COM	13.1	13.6	2'	12 42.6	+14 21	194	SBd			NGC 4634 @ 3.5'
NGC 4715	UGC 7986	Galaxy	COM	13.1	14.2	1.8'	12 50.0	+27 49	149	Sa			
NGC 4758	UGC 8014	Galaxy	COM	13.1	13.8	3'	12 52.7	+15 51	194	SB/P			H III 70
NGC 4978	UGC 8212	Galaxy	COM	13.1	13.2	1.5'	13 07.8	+18 25	150	Sa			
NGC 5056	UGC 8337	Galaxy	COM	13.1	13.6	1.8'	13 16.2	+30 57	109	Sc			H III 306;Brightest in cluster;NGC 5057 @ 6 ' ;PA35
NGC 4092	UGC 7087	Galaxy	COM	13.2	13.1	1'	12 05.8	+20 29	148	Sab			NGC 4093 @ 2.6'
NGC 4175	UGC 7211	Galaxy	COM	13.2	12.6	1.8'	12 12.5	+29 10	107	Sbc			H III 360;NGC 4169 group
NGC 4514	UGC 7693	Galaxy	COM	13.2	13.3	1.2'	12 32.7	+29 43	108	Sbc			H III 302
NGC 4798	NGC 4797	Galaxy	COM	13.2	13.1	1'	12 54.9	+27 25	149	E-SO Ri			H II 382
NGC 4819	UGC 8060	Galaxy	COM	13.2	13.1	0.9'	12 56.5	+26 59	149	SBa			H II 346;P w NGC 4821 @ 1.8'
NGC 4895	UGC 8113	Galaxy	COM	13.2	13.2	1.8'	13 00.3	+28 12	109	SO			
NGC 5000	UGC 8241	Galaxy	COM	13.2	14	1.7'	13 09.8	+28 54	109	SBbc			M 51 case?;vF cond at tip of spir arm at 0.9;165;or *?
NGC 5052	UGC 8330	Galaxy	COM	13.2	13.3	1.3'	13 15.6	+29 41	109	SBO-a R			
NGC 5190	UGC 8500	Galaxy	COM	13.2	12.8	1'	13 30.6	+18 08	150	SBb			
IC 4051	UGC 8129	Galaxy	COM	13.2	13	1'	13 00.9	+28 00	109	E0			Member of Coma group of galaxies
NGC 4016	UGC 6954;A	Galaxy	COM	13.3	13.4	1.5'	11 58.5	+27 32	147	SBd			
NGC 4028	NGC 4014	Galaxy	COM	13.3	-	2.2'	11 58.6	+16 11	192	Sa			H III 3
NGC 4040	UGC 7013	Galaxy	COM	13.3	14.3	1.9'	12 02.1	+17 49	148	Elliptical			
NGC 4049	UGC 7027	Galaxy	COM	13.3	12.5	0.9'	12 02.9	+18 45	148	Sd			H III 390
NGC 4155	UGC 7172	Galaxy	COM	13.3	13.4	1.1'	12 10.8	+19 02	148	Elliptical			Brightest in group
NGC 4174	UGC 7206	Galaxy	COM	13.3	11.7	0.8'	12 12.4	+29 09	107	Sa			H III 359;NGC 4169 group
NGC 4222	IC 3087	Galaxy	COM	13.3	13.6	3.1'	12 16.4	+13 18	193	Scd			H II 109
NGC 4614	UGC 7851	Galaxy	COM	13.3	12.9	0.9'	12 41.5	+26 03	149	SBO-a			NGC 4615 group;NGC 4615 @ 2.4';NGC 4613 @ 2.8'
NGC 4966	UGC 8194	Galaxy	COM	13.3	12.4	1'	13 06.3	+29 04	109	SBab Ri			H III 304
NGC 5092	UGC 8376	Galaxy	COM	13.3	13.3	1'	13 19.9	+23 00	150	Elliptical			
NGC 4076	UGC 7061	Galaxy	COM	13.4	12.9	0.9'	12 04.5	+20 12	148	Sab			H III 396;NGC 4065 @ 6.5'
NGC 4126	UGC 7123	Galaxy	COM	13.4	13.1	1.1'	12 08.6	+16 09	193	SO			H III 68
NGC 4308	UGC 7426	Galaxy	COM	13.4	12.8	0.8'	12 21.9	+30 04	108	Elliptical			
NGC 4738	UGC 7999	Galaxy	COM	13.4	12.8	2.1'	12 51.1	+28 47	108	Sc			
NGC 4929	MCG 5-31-	Galaxy	COM	13.4	13.5	1'	13 02.7	+28 03	109	Elliptical			
NGC 4971	MCG 5-31-	Galaxy	COM	13.4	13.4	1'	13 06.9	+28 33	109	SBO Rin			
NGC 5041	UGC 8319	Galaxy	COM	13.4	14.2	1.7'	13 14.5	+30 42	109	Sc			
UGC 7321	PGC 39432	Galaxy	COM	13.4	14.8	5.3'	12 17.5	+22 32	148	Sd			
NGC 4095	MCG 4-29-	Galaxy	COM	13.5	-	0.5'	12 05.9	+20 34	148	Elliptical			H III 382
NGC 4101	UGC 7093	Galaxy	COM	13.5	13.1	1'	12 06.2	+25 33	148	Sa			H III 326
NGC 4562	NGC 4565A	Galaxy	COM	13.5	14.1	2.4'	12 35.6	+25 51	149	SBcd			
NGC 4728	NGC 4728A	Galaxy	COM	13.5	13.9	0.8'	12 50.5	+27 26	149	Elliptical			
NGC 4860	MCG 5-31-	Galaxy	COM	13.5	14.1	0.9'	12 59.1	+28 07	108	Elliptical			
NGC 4898	MCG 5-31-	Galaxy	COM	13.5	-	0.4'	13 00.3	+27 57	149	Ep			near 4889
NGC 4931	UGC 8154	Galaxy	COM	13.5	13.4	1.6'	13 03.0	+28 02	109	SO			
Abell 1656	Coma I	Gal CL	COM	13.5	-	224'	12 59.8	+27 59	149	2 1 II			Dense GALCL;72 brighter than 15m in 2deg; 106 galaxies
NGC 4023	UGC 6977	Galaxy	COM	13.6	12.9	0.9'	11 59.1	+24 59	147	S pec			NGC 4005 group
NGC 4048	UGC 7023	Galaxy	COM	13.6	12.1	0.6'	12 02.8	+18 01	148	S pec			Brightest in quadruple system
NGC 4086	UGC 7076	Galaxy	COM	13.6	13.4	1'	12 05.5	+20 15	148	SO			NGC 4090 @ 3.8'
NGC 4089	MCG 4-29-	Galaxy	COM	13.6	13	0.5'	12 05.6	+20 33	148	Elliptical			
NGC 4295	MCG 5-29-	Galaxy	COM	13.6	-	0.6'	12 21.2	+28 10	108	SO			
NGC 4475	UGC 7632	Galaxy	COM	13.6	14	1.7'	12 29.8	+27 15	148	SBbc Ri			H III 362
NGC 4789A	UGC 8024	Galaxy	COM	13.6	15.5	3.1'	12 54.1	+27 09	149	Ir Bar			P w NGC 4789 @ 5 '
NGC 4853	UGC 8092;I	Galaxy	COM	13.6	13	0.8'	12 58.6	+27 36	149	E-SO Ri			
NGC 4859	UGC 8097	Galaxy	COM	13.6	13.4	1.3'	12 59.0	+26 49	149	Sa			
NGC 4864	MCG 5-31-	Galaxy	COM	13.6	11.8	0.6'	12 59.2	+27 59	149	Elliptical			
NGC 4881	UGC 8106	Galaxy	COM	13.6	13.5	0.9'	13 00.0	+28 15	108	Elliptical			
NGC 4907	MCG 5-31-	Galaxy	COM	13.6	13.5	1.1'	13 00.8	+28 09	109	SBb			
NGC 4908	MCG 5-31-	Galaxy	COM	13.6	13.6	0.9'	13 00.9	+28 03	109	Elliptical			
NGC 4961	NGC 4960	Galaxy	COM	13.6	14.1	1.6'	13 05.8	+27 44	150	Sbc			H II 398;P w NGC 4957 @ 12.5'
NGC 4962	NGC 4952	Galaxy	COM	13.6	-	1.3'	13 05.0	+29 07	109	Elliptical			H III 303
NGC 5032A	NGC 5032	Galaxy	COM	13.6	-	2.1'	13 13.5	+27 48	150	SBb			H III 367
NGC 5065	UGC 8356	Galaxy	COM	13.6	13.4	1.3'	13 17.5	+31 06	109	SBcd			H III 308
IC 783	UGC 7415	Galaxy	COM	13.6	13.9	1.3'	12 21.6	+15 45	193	SBO-a			
IC 3061	UGC 7255	Galaxy	COM	13.6	13.4	2.2'	12 15.1	+14 02	193	Sbc			Mem Virgo group;P w NCC 4212
NGC 4057	NGC 4065	Galaxy	COM	13.7	-	1.1'	12 04.1	+20 14	148	Elliptical			
NGC 4110	UGC 7102	Galaxy	COM	13.7	13.5	1.3'	12 07.1	+18 32	148	SBb			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4170		Star	COM	13.7	-		12 12.2	+29 10	107				NGC 4169 group
NGC 4840	MCG 5-31-	Galaxy	COM	13.7	12.9	0.7'	12 57.5	+27 37	149	Elliptical			H II 385
NGC 4848	UGC 8082	Galaxy	COM	13.7	13.3	1.6'	12 58.1	+28 15	108	SBc			
NGC 4865	UGC 8100	Galaxy	COM	13.7	12.8	0.9'	12 59.3	+28 05	108	Elliptical			
NGC 4923	MCG 5-31-	Galaxy	COM	13.7	13.1	0.8'	13 01.5	+27 51	149	E-SO Ba			H II 394
NGC 4927	MCG 5-31-	Galaxy	COM	13.7	-	0.6'	13 02.0	+28 00	109	E-SO Ba			H III 364
NGC 5004A	UGC 8260	Galaxy	COM	13.7	13.6	1.4'	13 11.0	+29 38	109	SO Ring			H III 305;late spiral;brightest of 3;UGC 8260
UGC 8290	PGC 45884	Galaxy	COM	13.7	14.1	1.5'	13 12.6	+22 50	150	Sm pec			P w NGC 5012
NGC 4018	UGC 6966	Galaxy	COM	13.8	13	1.7'	11 58.7	+25 19	147	Sab			
NGC 4080	UGC 7068	Galaxy	COM	13.8	13.1	1.2'	12 04.9	+27 00	148	Ir			H III 355
NGC 4186	UGC 7223;H	Galaxy	COM	13.8	13.5	1'	12 14.1	+14 44	193	Sab			
NGC 4408	ZWG 158.10	Galaxy	COM	13.8	-	0.4'	12 26.3	+27 52	148	Elliptical			
NGC 4869	MCG 5-31-	Galaxy	COM	13.8	13.1	0.7'	12 59.4	+27 55	149	Elliptical			H II 388
NGC 4960	NGC 4961	Galaxy	COM	13.8	-	1.6"	13 05.8	+27 44	150	SBc			
NGC 4979	IC 4198	Galaxy	COM	13.8	13.4	1'	13 07.7	+24 49	150	SB/P			P w 4202 @ 13 ' ;H III 346
NGC 4090	IC 2997;UGC	Galaxy	COM	13.9	13.2	1.2'	12 05.5	+20 18	148	Sab			
NGC 4132	MCG 5-29-	Galaxy	COM	13.9	12.6	1.1'	12 09.0	+29 15	107	Sa			H III 357
NGC 4322	NGC 4323	Star	COM	13.9	13.6		12 22.7	+15 54	193				NGC 4321 @ 5.2' , near M100
NGC 4446	UGC 7586	Galaxy	COM	13.9	13.7	1.1'	12 28.1	+13 55	193	Sc			NGC 4447 @ 1.6';one arm bridges to NGC 4447
NGC 4447	MCG 2-32-	Galaxy	COM	13.9	13.2	0.9'	12 28.2	+13 54	193	SBO Rin			NGC 4446 @ 1.6';one arm bridges to NGC 4446
NGC 4502	UGC 7677	Galaxy	COM	13.9	13.2	1.1'	12 32.1	+16 41	194	SBc			H II 92
NGC 4854	MCG 5-31-	Galaxy	COM	13.9	-	1.2'	12 58.8	+27 40	149	SBO			
NGC 4886	NGC 4882	Galaxy	COM	13.9	14	0.7'	13 00.1	+27 59	149	Elliptical			near 4889
NGC 4892	UGC 8108	Galaxy	COM	13.9	12.7	1.3'	13 00.1	+26 54	149	SO			H II 390
NGC 4896	UGC 8117	Galaxy	COM	13.9	13.2	1'	13 00.5	+28 21	109	SO Pec			
NGC 4983	MCG 5-31-	Galaxy	COM	13.9	13.5	1.1'	13 08.5	+28 19	109	SBO-a			H III 365
IC 3365	UGC 7563	Galaxy	COM	13.9	14.5	2.1'	12 27.2	+15 54	193	Ir+			Member of Virgo group of galaxies
UGC 8507	PGC 47506	Galaxy	COM	13.9	-	1.4'	13 31.0	+19 27	150	Pec			cigar-shaped w faint envl
NGC 4019	IC 755	Galaxy	COM	14	-	2.4'	12 01.2	+14 06	193	SBb			
NGC 4585	MCG 5-30-	Galaxy	COM	14	12.5	0.7'	12 38.2	+28 56	108	SBb			
NGC 6541	Dunlop 473	Glob CL	CRA	6.3	-	13.1'	18 08.0	-43 42	409	III			Stars mags 13...
PK 352- 7.1	Fleming 3;V	Pln Neb	CRA	11.4	4.3	2"	18 00.2	-38 50	377	1		14.3	Stellar point in rich field foundw prism--Hartung
IC 1297	PK 358-21.1	Pln Neb	CRA	11.5	5.9	8"	19 17.4	-39 37	410			12.9	Ring shape
NGC 6768	ESO 337-18	Galaxy	CRA	13.2	-	1.7'	19 16.5	-40 13	410	Elliptical			
NGC 6726	ESO 396-N1	Brt Neb	CRA	-	-	2'	19 01.7	-36 53	379	E			Complex neb region w var* TY & R CrA invl
NGC 6727	ESO 396-N1	Brt Neb	CRA	-	-	80'	19 01.7	-36 53	379	R			P w NGC 6726-9
NGC 6729	ESO 396-N*	Brt Neb	CRA	-	-	25'	19 01.9	-36 57	379	E+R			P w NGC 6726-7
IC 4812	ESO 396-*N	Brt Neb	CRA	-	-	20'	19 01.1	-37 04	379	E+*			
Be 157		Drk Neb	CRA	--	--	110'	19 02.9	-37 08	379	6 Ir			Lies south following bright nebulae NGC 6726-7
NGC 5958	UGC 9909	Galaxy	CRB	12.6	12.5	1'	15 34.8	+28 39	112	Sc			H II 399;Peculiar?
NGC 6109	UGC 10316	Galaxy	CRB	12.7	12.7	1'	16 17.7	+35 00	113	SO			
NGC 6086	UGC 10270	Galaxy	CRB	12.8	13.5	1.7'	16 12.6	+29 29	113	E2			P w NGC 6085
NGC 6085	UGC 10269	Galaxy	CRB	13	13.6	1.5'	16 12.6	+29 22	113	Sa			P w NGC 6086
NGC 6092		2 Stars	CRB	13.2	-		16 14.1	+28 08	113				
NGC 6104	UGC 10309	Galaxy	CRB	13.2	12.5	0.8'	16 16.5	+35 42	113	Sba Ring			H III 688;Peculiar ring shape;p of 2;UGC 10309
NGC 6077	UGC 10254	Galaxy	CRB	13.3	13.5	1.2'	16 11.2	+26 55	155	Elliptical			
NGC 6038	UGC 10149	Galaxy	CRB	13.5	13.6	1.1'	16 02.7	+37 22	113	Sc			H III 622
NGC 6126	UGC 10353	Galaxy	CRB	13.6	13.1	0.8'	16 21.5	+36 23	114	SO			
Abell 2162		Gal CL	CRB	13.7	-	56'	16 12.5	+29 32	113	0 1 II-III			8 Gal/Deg; 37 galaxies
NGC 6102	UGC 10300	Galaxy	CRB	13.8	13.6	1.2'	16 15.6	+28 10	113	Sc			
NGC 6103	UGC 10302	Galaxy	CRB	13.8	12.5	0.7'	16 15.7	+31 58	113	Sbc			H III 888
NGC 6107	UGC 10311	Galaxy	CRB	13.8	13.2	0.9'	16 17.3	+34 54	113	Elliptical			P w NGC 6105 at 3' PA 238;sev other galaxies near
NGC 6120	UGC 10343	Galaxy	CRB	13.8	12.2	0.6'	16 19.8	+37 46	113	Sd			H III 623;Peculiar;P w NGC 6119;UGC 10343
NGC 6142	UGC 10366	Galaxy	CRB	13.8	13.6	2'	16 23.4	+37 15	114	Sb			H III 892
NGC 6112	MCG 6-36-	Galaxy	CRB	13.9	12.4	0.5'	16 18.0	+35 07	113	Elliptical			
NGC 6131A	NGC 6131	Galaxy	CRB	14	-	1'	16 21.9	+38 56	114	SBc			
NGC 6137A	NGC 6137	Galaxy	CRB	14	-	1.9'	16 23.1	+37 55	114	Elliptical			H III 624;sf of 2;sev 15..16 mag galxs in 20';UGC 10364
NGC 3887	MCG - 3-30-	Galaxy	CRT	10.6	12.8	3.5'	11 47.1	-16 51	282	SBbc			H I 120
NGC 3962	MCG - 2-30-	Galaxy	CRT	10.7	12.6	3.4'	11 54.7	-13 59	282	Elliptical			H I 67
NGC 3511	ESO 502-13	Galaxy	CRT	11	13.5	6'	11 03.4	-23 05	326	SBc			H V 39
NGC 3981	ESO 572-20	Galaxy	CRT	11.3	13.9	5.3'	11 56.1	-19 54	327	SBbc			H III 274;Nearly edge-on spiral
NGC 3672	MCG - 2-29-	Galaxy	CRT	11.4	13.5	4'	11 25.0	-09 48	281	Sc			H I 131;Multi arm spiral
NGC 3513	ESO 502-14	Galaxy	CRT	11.5	13.4	2.9'	11 03.8	-23 15	326	SBb			H V 40;S shaped spiral
NGC 3892	MCG - 2-30-	Galaxy	CRT	11.5	13.4	3.1'	11 48.0	-10 58	282	SBO-a			H II 553

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3957	IC 2965	Galaxy	CRT	11.8	12.5	2.9'	11 54.0	-19 34	327	Sa			H II 294;edge-on lenticular
NGC 3955	ESO 504-26	Galaxy	CRT	11.9	12.9	3.1'	11 54.0	-23 10	327	Sa			H II 623
NGC 3865	NGC 3854	Galaxy	CRT	12	13.1	2.1'	11 44.9	-09 14	282	SBb			
IC 2627	ESO 502-21	Galaxy	CRT	12	13.9	2.6'	11 09.9	-23 44	326	SBbc			
NGC 3571	NGC 3544	Galaxy	CRT	12.1	13.2	3'	11 11.5	-18 17	326	SBa			H II 819
NGC 3956	ESO 572-13	Galaxy	CRT	12.1	13.3	3.3'	11 54.0	-20 34	327	SBc			H III 290;Nearly edge-on spiral
NGC 3636	MCG - 2-29-	Galaxy	CRT	12.4	13	1.7'	11 20.4	-10 17	281	Elliptical			H II 550
NGC 3660	MCG - 1-29-	Galaxy	CRT	12.5	-	2.8'	11 23.5	-08 40	281	SBbc			H II 635
NGC 3732	MCG - 2-30-	Galaxy	CRT	12.5	12.8	1.4'	11 34.2	-09 51	282	SBO-a			H II 552
NGC 3497	NGC 3525	Galaxy	CRT	12.6	-	2.6'	11 07.3	-19 28	326	SO			H III 824
NGC 3525	NGC 3497	Galaxy	CRT	12.6	-	2.6'	11 07.3	-19 28	326	SO			
NGC 3597	ESO 503- 3	Galaxy	CRT	12.6	13.6	1.8'	11 14.7	-23 44	326	Sa			
NGC 3771		Galaxy	CRT	12.6	13.2	1.4'	11 39.1	-09 21	282	Elliptical			
NGC 3637	MCG - 2-29-	Galaxy	CRT	12.7	13.6	1.8'	11 20.7	-10 15	281	SBO Ring			H II 551
NGC 3905	MCG - 1-30-	Galaxy	CRT	12.8	13.7	1.9'	11 49.1	-09 44	282	SBbc			
NGC 3456	MCG - 3-28-	Galaxy	CRT	13	-	1.7'	10 54.1	-16 02	280	SBbc			H IV 29
NGC 3479	NGC 3502	Galaxy	CRT	13	-	1.8'	10 58.9	-14 58	281	SBbc			
NGC 3514	ESO 570- 1	Galaxy	CRT	13	-	1.1'	11 04.0	-18 47	326	SBc			
NGC 3528	NGC 3497	Galaxy	CRT	13	-	2.6'	11 07.3	-19 28	326	SO			NGC 3528 = NGC 3525 = NGC 3497 = IC 2624
NGC 3663	MCG - 2-29-	Galaxy	CRT	13	-	2'	11 24.0	-12 18	281	Sbc			
NGC 3667A	NGC 3667	Galaxy	CRT	13	-	1.5'	11 24.3	-13 51	281	Sab Ring			H III 531
NGC 3693	MCG - 2-29-	Galaxy	CRT	13	-	3.4'	11 28.2	-13 12	282	Sb			H III 532
NGC 3715	MCG - 2-29-	Galaxy	CRT	13	-	1.4'	11 31.5	-14 14	282	Sbc			H II 562
NGC 3763	IC 714	Galaxy	CRT	13	-	1.2'	11 36.5	-09 51	282	SB Ring			
NGC 3836	MCG - 3-30-	Galaxy	CRT	13	-	1.4'	11 43.5	-16 48	282	Sb			
NGC 3854	NGC 3865	Galaxy	CRT	13	-	2.1'	11 44.9	-09 14	282	SBb			
NGC 3969	ESO 572-17	Galaxy	CRT	13	13	1.4'	11 55.2	-18 56	327	SBO-a R			
NGC 3544	NGC 3571	Galaxy	CRT	13.1	-	3'	11 11.5	-18 17	326	SBa			
NGC 3431	MCG - 3-28-	Galaxy	CRT	14	-	1.3'	10 51.3	-17 01	325	Sb			
NGC 3459	MCG - 3-28-	Galaxy	CRT	14	-	1.6'	10 54.7	-17 03	325	Sab			
NGC 3469	MCG - 2-28-	Galaxy	CRT	14	-	1.7'	10 57.0	-14 18	281	SBab Ring			
NGC 3481	MCG - 1-28-	Galaxy	CRT	14	-	0.9'	10 59.4	-07 33	281	Pec			
NGC 3502	NGC 3479	Galaxy	CRT	14	-	1.8'	10 58.9	-14 58	281	SBbc			
NGC 3505	NGC 3508	Galaxy	CRT	14	-	1.1'	11 03.0	-16 17	281	Sb			
NGC 3508	NGC 3505	Galaxy	CRT	14	-	1.1'	11 03.0	-16 17	281	Sb			H II 507
NGC 3529	IC 2625	Galaxy	CRT	14	-	1'	11 07.3	-19 33	326	SBb			
NGC 3537		Galaxy	CRT	14	-	1.2'	11 08.4	-10 15	281	Sab			
NGC 3546	MCG - 2-29-	Galaxy	CRT	14	-	1.3'	11 09.8	-13 23	281	E-SO			
NGC 3591	MCG - 2-29-	Galaxy	CRT	14	-	1.3'	11 14.1	-14 05	281	Sa			H III 529
NGC 3661	IC 689	Galaxy	CRT	14	-	1.6'	11 23.6	-13 50	281	Sa			H III 530
NGC 3704	NGC 3707	Galaxy	CRT	14	-	1.6'	11 30.1	-11 33	282	Elliptical			
NGC 3723	MCG - 2-30-	Galaxy	CRT	14	-	1'	11 32.5	-09 58	282	E-SO			
NGC 3730	MCG - 1-30-	Galaxy	CRT	14	-	1'	11 34.3	-09 35	282	Elliptical			
NGC 3734	MCG - 2-30-	Galaxy	CRT	14	-	1.3'	11 34.7	-14 05	282	Sbc			H III 935
NGC 3777	MCG - 2-30-	Galaxy	CRT	14	-	1.1'	11 36.1	-12 34	282	Sab			
NGC 3779	IC 717	Galaxy	CRT	14	-	1.9'	11 38.8	-10 35	282	Scd			
NGC 3823	MCG - 2-30-	Galaxy	CRT	14	-	1.5'	11 42.3	-13 52	282	Elliptical			
NGC 3831	MCG - 2-30-	Galaxy	CRT	14	-	2.7'	11 43.3	-12 53	282	Sa Ring			
NGC 3858	NGC 3866	Galaxy	CRT	14	-	1.4'	11 45.2	-09 19	282	Sa			
NGC 3866	NGC 3858	Galaxy	CRT	14	-	1.4'	11 45.2	-09 19	282	Sa			
NGC 3942	MCG - 2-30-	Galaxy	CRT	14	-	1.5'	11 51.5	-11 26	282	Sc			
NGC 3959	MCG - 1-30-	Galaxy	CRT	14	-	1.1'	11 54.6	-07 45	282	SBa			
NGC 3970	MCG - 2-30-	Galaxy	CRT	14	-	1.2'	11 55.5	-12 04	282	SO			
NGC 3974	MCG - 2-31-	Galaxy	CRT	14	-	1.2'	11 55.7	-12 02	282	SBO-a R			
NGC 4337	OCL 878	Opn CL	CRU	8.9	-	3.5'	12 24.1	-58 07	428	II 3 p		10.5	
Hogg 14		Opn CL	CRU	9.5	-	3'	12 28.6	-59 48	428	II 3 p	11	10.5	
Ru 165		Opn CL	CRU	-	-	22'	12 28.5	-56 26	428	IV 1 p	35	7	
Stock 15		Opn CL	CRU	-	-	12'	12 10.5	-59 30	428	IV 1 p		10	
NGC 4038	ESO 572-47	Galaxy	CRV	10.3	13.1	3.4'	12 01.9	-18 52	328	Sp			Antennae H IV 28;Ringtail Galaxy;two filaments
NGC 4039	ESO 572-48	Galaxy	CRV	10.6	12.1	3.3'	12 01.9	-18 53	328	SB			Antennae H II 282
NGC 4361	ESO 573-PN	Pln Neb	CRV	10.9	11.1	80"	12 24.5	-18 47	328	3a(2)		13.3	H I 65;PK294+43.1
NGC 4027	ESO 572-37	Galaxy	CRV	11.1	13.2	3.3'	11 59.5	-19 16	327	SBd			H II 296
NGC 4783	3C278;H I 13	Galaxy	CRV	11.5	12.8	2.3'	12 54.6	-12 34	284	EO			P w NGC 4782 @ 0.7'
NGC 4024	ESO 572-31	Galaxy	CRV	11.7	12.7	1.9'	11 58.5	-18 21	327	E-SO Ba			H II 295

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4033	ESO 572-42	Galaxy	CRV	11.7	12.8	2.4'	12 00.6	-17 51	328	Elliptical			H II 508
NGC 4782	MCG - 2-33-	Galaxy	CRV	11.7	12.9	2.3'	12 54.6	-12 34	284	EO			H I 135;Contact P w NGC 4783
NGC 4094	MCG - 2-31-	Galaxy	CRV	11.8	13.7	4.1'	12 05.9	-14 32	283	SBc			
NGC 4462	ESO 506-13	Galaxy	CRV	11.9	13.2	3.1'	12 29.4	-23 10	328	SBab Ri			H III 764
NGC 4802	NGC 4804	Galaxy	CRV	12	-	2.4'	12 55.8	-12 03	284	SO			
NGC 4050	MCG - 3-31-	Galaxy	CRV	12.2	14.1	3'	12 02.9	-16 22	283	SBab			H II 509
NGC 4756	MCG - 2-33-	Galaxy	CRV	12.4	13.1	1.7'	12 52.9	-15 25	284	E-SO			H III 281
NGC 4265	NGC 4263	Galaxy	CRV	12.6	-	1.2'	12 19.7	-12 14	283	Sb			
NGC 4763	MCG - 3-33-	Galaxy	CRV	12.6	12.9	1.6'	12 53.5	-17 00	284	SBa			H III 489
NGC 4804	NGC 4802	Galaxy	CRV	12.6	-	2.4'	12 55.8	-12 03	284	SO			H IV 40
NGC 4114	MCG - 2-31-	Galaxy	CRV	13	-	1.8'	12 07.2	-14 11	283	SBa			H III 533
NGC 4177	MCG - 2-31-	Galaxy	CRV	13	-	1.7'	12 12.7	-14 01	283	Sc			H III 534
NGC 4722	IC 3833	Galaxy	CRV	13	-	1.8'	12 51.5	-13 20	284	Sa			
NGC 4727	MCG - 2-33-	Galaxy	CRV	13	-	1.6'	12 51.0	-14 20	284	SBbc			H II 298
NGC 4035	MCG - 3-31-	Galaxy	CRV	14	-	1.1'	12 00.5	-15 57	283	SBbc			H III 279
NGC 4188	MCG - 2-31-	Galaxy	CRV	14	-	0.7'	12 14.1	-12 35	283	Sb			
NGC 4225	MCG - 2-31-	Galaxy	CRV	14	-	0.7'	12 16.6	-12 20	283	Sa			
NGC 4263	NGC 4265	Galaxy	CRV	14	-	1.2'	12 19.7	-12 14	283	Sb			H III 535
NGC 4329	MCG - 2-32-	Galaxy	CRV	14	-	1.1'	12 23.3	-12 34	283	Elliptical			
NGC 4524	MCG - 2-32-	Galaxy	CRV	14	-	1.3'	12 33.9	-12 02	284	Sbc			
NGC 4714	MCG - 2-33-	Galaxy	CRV	14	-	1.6'	12 50.3	-13 20	284	E-SO			H III 536
NGC 4726	IC 3834	Galaxy	CRV	14	-	0.7'	12 50.8	-14 16	284	SO			
NGC 4794	MCG - 2-33-	Galaxy	CRV	14	-	1.7'	12 55.2	-12 37	284	SBa			H II 538
NGC 4530		Star	CVN	4.3	-		12 33.8	+41 21	75				
M 3	NGC 5272	Glob CL	CVN	6.3	11	18.6'	13 42.2	+28 23	110	VI			Lord Rosse-sev dark marks within 5' of center
M 94	NGC 4736	Galaxy	CVN	8.2	13.1	12.3'	12 50.9	+41 07	75	Sb Ring			
M 51	NGC 5194	Galaxy	CVN	8.4	12.9	10.8'	13 29.9	+47 12	76	Sbc			Whirlpool Gal ;interacting pair;classic spiral
M 106	NGC 4258	Galaxy	CVN	8.4	13.6	17.4'	12 19.0	+47 18	74	SBbc			H V 43
M 63	NGC 5055	Galaxy	CVN	8.6	13.3	12.6'	13 15.8	+42 02	76	Sbc			Sunflower , vsvB stell. N in B inner lens;many filam
NGC 4631	UGC 7865	Galaxy	CVN	9.2	13.1	15.2'	12 42.1	+32 32	108	SBcd			H V 42;P w NGC 4627 @ 2.5'
M 51	NGC 5195	Galaxy	CVN	9.6	12.9	5.9'	13 30.0	+47 16	76	SBO-a			H I 186;Interacting P w M 51 ;peculiar
NGC 4449	UGC 7592	Galaxy	CVN	9.6	13	6.2'	12 28.2	+44 06	75	Ir			H I 213
NGC 4214	NGC 4228	Galaxy	CVN	9.8	14	8.4'	12 15.6	+36 20	107	Ir			H I 95
NGC 4490	UGC 7651	Galaxy	CVN	9.8	12.9	6.4'	12 30.6	+41 39	75	SBcd			H I 198;disrupted;P w NGC 4485 @ 3.5'
NGC 5005	UGC 8256	Galaxy	CVN	9.8	12.7	5.8'	13 10.9	+37 03	109	SBbc			H I 96;P w NGC 5033;eBN in B lens;sev knotty arms
NGC 4228	NGC 4214	Galaxy	CVN	10.2	-	8.4'	12 15.6	+36 20	107	Ir			
NGC 4395	UGC 7524	Galaxy	CVN	10.2	15.4	12.3'	12 25.8	+33 33	108	SB Ring			H V 29 , several NGC nebulae inside
NGC 5033	UGC 8307	Galaxy	CVN	10.2	14.4	9.8'	13 13.5	+36 36	109	Sc			P w NGC 5005;svBN in B bulge w spir patt of dk lanes
NGC 4244	UGC 7322	Galaxy	CVN	10.4	14	15.9'	12 17.5	+37 48	107	Sc			H V 41
NGC 4656	UGC 7907	Galaxy	CVN	10.5	14.5	15.3'	12 44.0	+32 10	108	SB			H I 176;NGC 4657 superimposed
NGC 4143	UGC 7142	Galaxy	CVN	10.6	11.8	2.9'	12 09.6	+42 32	74	SBO			H IV 54
NGC 4657		Galaxy	CVN	10.6	-	1.1'	12 44.1	+32 13	108	Ir			H I 177;superimposed on NGC 4656
NGC 5371	NGC 5390	Galaxy	CVN	10.6	13.4	4.2'	13 55.7	+40 28	76	SBbc			vsB diff N;weak bar;sev knotty filam reg arms
NGC 4111	UGC 7103	Galaxy	CVN	10.7	12.2	4.6'	12 07.0	+43 04	74	Sa			H I 195;NGC 4109 @ 4.8';UGC 7103;Ho 333a
NGC 4151	UGC 7166	Galaxy	CVN	10.8	14.2	6.8'	12 10.5	+39 24	74	SBab Ri			P w NGC 4145;NGC 4156 @ 5.2';Ho 345c @ 8.8'
NGC 4242	UGC 7323	Galaxy	CVN	10.8	13.9	5.2'	12 17.5	+45 37	74	SBd			H III 725
NGC 4618	IC 3667	Galaxy	CVN	10.8	13.5	4.2'	12 41.6	+41 09	75	SB			H I 178;P w NGC 4625 @ 8.3'
NGC 5353	UGC 8813	Galaxy	CVN	11	11.8	2.8'	13 53.4	+40 17	76	SO			P w NGC 5354 at 1.3' n;vsBN;lens: diamond shaped
NGC 4346	UGC 7463	Galaxy	CVN	11.1	12.6	3.2'	12 23.5	+47 00	74	SBO			H I 210
NGC 4217	UGC 7282	Galaxy	CVN	11.2	13.3	4.8'	12 15.8	+47 05	74	Sb			H II 748
NGC 4138	UGC 7139	Galaxy	CVN	11.3	12.8	2.9'	12 09.5	+43 41	74	Sa			H I 196
NGC 4145	UGC 7154	Galaxy	CVN	11.3	14.6	5.9'	12 10.0	+39 53	74	SBcd			H I 169;NGC 4151 @ 29';Ho 342b @ 13';UGC 7154
NGC 4460	UGC 7611	Galaxy	CVN	11.3	12.8	4.2'	12 28.8	+44 52	75	SBO-a			H I 212
NGC 5350	UGC 8810	Galaxy	CVN	11.3	13.3	3.2'	13 53.4	+40 22	76	SBbc			H II 713;NGC 5353 at 5';vsvBN in B bar;2 knotty arms
NGC 5377	UGC 8863	Galaxy	CVN	11.3	13.4	3.5'	13 56.3	+47 14	76	SBa			H I 187
NGC 5390	NGC 5371	Galaxy	CVN	11.3	-	4.2'	13 55.7	+40 28	76	SBbc			
NGC 4220	UGC 7290	Galaxy	CVN	11.4	13.1	3.9'	12 16.2	+47 53	74	Sa			H I 209;p w NGC 4218 @ 15'
NGC 5354	UGC 8814	Galaxy	CVN	11.4	11.9	2.2'	13 53.4	+40 18	76	SO			H II 715;similar to N 1316;P w NGC 5353 contact
NGC 5383	UGC 8875	Galaxy	CVN	11.4	13.6	2.6'	13 57.1	+41 51	76	SBb			eBN w complex str;weak bar & lens w dk lanes;2 arms
NGC 5395	UGC 8900	Galaxy	CVN	11.4	12.9	2.7'	13 58.6	+37 25	110	Sbc			H I 190;spir galax w lg high surf brightn comps on arms
NGC 4800	UGC 8035	Galaxy	CVN	11.5	12	1.6'	12 54.6	+46 32	75	Sb			H I 211
NGC 5375	NGC 5396	Galaxy	CVN	11.5	13.7	3.3'	13 56.9	+29 10	110	SBab			
NGC 4914	UGC 8125	Galaxy	CVN	11.6	13.6	3.5'	13 00.7	+37 19	109	Elliptical			H II 645;P w NGC 4868
NGC 5273	UGC 8675	Galaxy	CVN	11.6	13.6	2.7'	13 42.1	+35 39	110	SO			H I 98;P w NGC 5276;diff Nuc w 2 weak dark patches

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4369	UGC 7489	Galaxy	CVN	11.7	13.1	2.4'	12 24.6	+39 23	75	Sa			H I 166
NGC 4389	UGC 7514	Galaxy	CVN	11.7	12.9	2.6'	12 25.6	+45 41	75	SB/P			H II 749;Peculiar
NGC 5198	UGC 8499	Galaxy	CVN	11.8	13.2	2'	13 30.2	+46 40	76	E2			H II 689;red E w compact core;vB vS diff N;in lens
NGC 5297	UGC 8709	Galaxy	CVN	11.8	13.8	5.7'	13 46.4	+43 52	76	SBc			H I 180;P w NGC 5296 at 1'6;vsBN;B lens w knotty arms
NGC 4485	UGC 7648	Galaxy	CVN	11.9	13.2	2.4'	12 30.5	+41 42	75	Ir			H I 197;disrupted;P w NGC 4490 @ 3.5'
NGC 5127	UGC 8419	Galaxy	CVN	11.9	13.9	2.3'	13 23.8	+31 34	109	E2p			H II 328;S cond in halo;spiral;2nd brightest in cluster
NGC 5326	UGC 8764	Galaxy	CVN	11.9	12.7	2.2'	13 50.8	+39 34	76	Sab			H II 712
NGC 5444	UGC 8974	Galaxy	CVN	11.9	13.6	2.5'	14 03.4	+35 08	110	E1			H II 417;P w NGC 5445 at 6.6';Brightest in group
NGC 5313	UGC 8744	Galaxy	CVN	12	12.7	1.7'	13 49.7	+39 59	76	Sb			H II 711
NGC 5112	UGC 8403	Galaxy	CVN	12.1	14.6	4'	13 21.9	+38 44	109	SBc			H II 646;P w NGC 5107 at 13'
NGC 5173	UGC 8468	Galaxy	CVN	12.1	13.3	1'	13 28.4	+46 36	76	E0			H III 672;P w NGC 5173 at 5'5
NGC 5320	UGC 8749	Galaxy	CVN	12.1	13.9	3.6'	13 50.3	+41 22	76	SBc			H II 669
NGC 5351	UGC 8809	Galaxy	CVN	12.1	13.6	2.9'	13 53.5	+37 55	110	SBb Ring			H II 697;P w NGC 5349;sBN w knotty arms
NGC 4868	UGC 8099	Galaxy	CVN	12.2	13	1.5'	12 59.2	+37 19	108	Sab			H II 644;P w NGC 4914 @ 18.6'
NGC 4183	UGC 7222	Galaxy	CVN	12.3	13.7	5.3'	12 13.3	+43 42	74	Sc			H III 697;SN 1968u
NGC 4534	UGC 7723	Galaxy	CVN	12.3	14	2.6'	12 34.1	+35 31	108	Sd			H II 410
NGC 4861	IC 3961	Galaxy	CVN	12.3	14.1	3.3'	12 59.0	+34 51	108	SB			N 4861 is B emission path SW of IC 3961;Comb m=13
NGC 5023	UGC 8286	Galaxy	CVN	12.3	13.9	5.8'	13 12.2	+44 02	76	Sc			H II 664
NGC 5145	UGC 8439	Galaxy	CVN	12.3	13.6	2'	13 25.2	+43 16	76	Sb			H II 667;extensive F outer disc
NGC 5311	UGC 8735	Galaxy	CVN	12.3	14.1	2.6'	13 48.9	+39 59	76	Sa			H II 710
NGC 5362	UGC 8835	Galaxy	CVN	12.3	13.1	2.2'	13 54.9	+41 19	76	Sb			H II 671;short streamer s or superimp comp?
NGC 5380	UGC 8870	Galaxy	CVN	12.3	13.3	1.9'	13 56.9	+37 37	110	Sa			H II 698;P w NGC 5378 at 11'
NGC 5406	UGC 8925	Galaxy	CVN	12.3	13.3	1.9'	14 00.3	+38 55	110	SBbc			H II 699
NGC 5440	UGC 8963	Galaxy	CVN	12.3	13.6	3.1'	14 03.0	+34 45	110	Sa			H II 416;NGC 5444 Group;Comp 5' PA 154
UGC 7577	MCG +07-26	Galaxy	CVN	12.3	14.7	3.9'	12 27.6	+43 29	75	Ir+			P w UGC 7608
UGC 7599	PGC 41020	Galaxy	CVN	12.3	14.7	1.8'	12 28.5	+37 13	108	Sm			
NGC 4357	NGC 4381	Galaxy	CVN	12.4	13.9	3.7'	12 24.0	+48 47	74	Sbc			
NGC 4625	IC 3675	Galaxy	CVN	12.4	13.8	2.3'	12 41.9	+41 16	75	SB pec			P w NGC 4618 @ 8.3';H II 660
NGC 4627	UGC 7860	Galaxy	CVN	12.4	14.1	2.2'	12 42.0	+32 34	108	Elliptical			H II 659;P w NGC 4631 @ 2.5'
NGC 4956	UGC 8177	Galaxy	CVN	12.4	13.1	1.5'	13 05.0	+35 11	109	SO			H II 413
UGC 8320	MCG +08-24	Galaxy	CVN	12.4	14	3.8'	13 14.4	+45 55	76	Ir+			
NGC 4218	UGC 7283	Galaxy	CVN	12.5	12.1	0.9'	12 15.8	+48 08	74	Sa			H III 718
NGC 4248	UGC 7335	Galaxy	CVN	12.5	13.7	2.9'	12 17.8	+47 25	74	SBb			H II 742
NGC 5290	UGC 8700	Galaxy	CVN	12.5	13.6	3.7'	13 45.3	+41 43	76	Sbc			B bulge part hidden by dk lane & asym abs Poss edgewi
NGC 5337	UGC 8789	Galaxy	CVN	12.5	12.7	1.7'	13 52.4	+39 41	76	S pec			H III 698
NGC 5378	UGC 8869	Galaxy	CVN	12.5	14.2	2.7'	13 56.8	+37 48	110	SBa			P w NGC 5380 at 11'
IC 4182	UGC 8188	Galaxy	CVN	12.5	16.1	6'	13 05.8	+37 36	109	Sm			Dwarf spiral
UGC 7699	MCG +06-28	Galaxy	CVN	12.5	13.8	3.8'	12 32.8	+37 37	108	SBc			
NGC 5103	UGC 8388	Galaxy	CVN	12.6	12.8	1.4'	13 20.5	+43 05	76	Pec			acicular? main body w arc-shaped filaments;poss rings
NGC 5347	UGC 8805	Galaxy	CVN	12.6	13.4	1.6'	13 53.3	+33 29	110	SBbc			H II 424
UGC 7690	MCG +07-26	Galaxy	CVN	12.6	13.6	2'	12 32.4	+42 42	75	Ir+			
UGC 7698	PGC 41636	Galaxy	CVN	12.6	16.1	6.5'	12 32.9	+31 32	108	Ir+			Low Surface Brightness
NGC 4227	UGC 7296	Galaxy	CVN	12.7	12.9	1.5'	12 16.6	+33 31	107	SBO-a			H II 518;P w NGC 4229
NGC 4619	UGC 7856	Galaxy	CVN	12.7	13.1	1.3'	12 41.7	+35 04	108	SBb/P			H II 411
NGC 4662	UGC 7917	Galaxy	CVN	12.7	13.8	1.9'	12 44.4	+37 07	108	SBbc			H II 643
NGC 5301	UGC 8711	Galaxy	CVN	12.7	13.9	4'	13 46.4	+46 06	76	SBc			B bulge part obs by dk lane;vSN or no def N; 2 arms
NGC 5123	UGC 8415	Galaxy	CVN	12.8	13.1	1.3'	13 23.2	+43 05	76	Sc			H II 666
NGC 5141	UGC 8433	Galaxy	CVN	12.8	13	1.3'	13 24.9	+36 23	109	SO			H III 402;P w NGC 5142 at 2.3'
NGC 5336	UGC 8785	Galaxy	CVN	12.8	13.3	1.4'	13 52.2	+43 15	76	Sc			H II 670
NGC 5396	NGC 5375	Galaxy	CVN	12.8	-	3.3'	13 56.9	+29 10	110	SBab			H III 125
NGC 4288	UGC 7399	Galaxy	CVN	12.9	14.1	2.2'	12 20.6	+46 18	74	SBcd			H III 726;P w Ho 371b @ 2.2'
NGC 4707	UGC 7971	Galaxy	CVN	12.9	14.4	2.2'	12 48.4	+51 10	48	Sm			H III 815
NGC 5014	UGC 8271	Galaxy	CVN	12.9	12.7	1.6'	13 11.5	+36 17	109	Sa			H II 414
NGC 5149	UGC 8444	Galaxy	CVN	12.9	13.1	1.6'	13 26.2	+35 56	109	SBbc Ring			H III 404;P w NGC 5154 at 6.1'
NGC 5303A	NGC 5303	Galaxy	CVN	12.9	-	0.9'	13 47.8	+38 18	110	Sc			H III 681;hints of 2 short jets or streamers on sf side
NGC 4117	UGC 7112	Galaxy	CVN	13	13.4	2.5'	12 07.8	+43 08	74	SO			H III 708
NGC 5223	UGC 8553	Galaxy	CVN	13	13.7	1.5'	13 34.4	+34 41	109	E1			Brightest in subgroup in CGCG;NGC 5228 at 5.7'
NGC 5289	UGC 8699	Galaxy	CVN	13	13.1	1.6'	13 45.1	+41 30	76	SBab			H II 668;B centr req surrounded by a B ring
NGC 5352	UGC 8812	Galaxy	CVN	13	13.1	1.2'	13 53.6	+36 08	110	E-SO			H II 415
NGC 5394	UGC 8898	Galaxy	CVN	13	13.4	1.7'	13 58.6	+37 27	110	SBb/P			H I 191;P w NGC 5395 contact pair;distorted;eBN or *
NGC 5410	UGC 8931	Galaxy	CVN	13	13.1	1.5'	14 00.9	+40 59	77	SB Ring			asym;ecc bar;blue patches along edge;P w UGC 8932
NGC 5445	UGC 8976	Galaxy	CVN	13	12.9	1.5'	14 03.5	+35 01	110	SO			H III 413;NGC 5444 Group
NGC 5029	UGC 8293	Galaxy	CVN	13.1	13.8	1.7'	13 12.6	+47 04	76	Elliptical			
NGC 5240	UGC 8587	Galaxy	CVN	13.1	14.1	1.9'	13 35.9	+35 35	109	SBc			H III 409

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5243	UGC 8592	Galaxy	CVN	13.1	12.5	1.5'	13 36.3	+38 21	109	Sbc			H III 620
NGC 5355	UGC 8819	Galaxy	CVN	13.1	12.8	1.2'	13 53.8	+40 20	76	SO			H III 699 near 5654
NGC 5407	UGC 8930	Galaxy	CVN	13.1	13.4	1.4'	14 00.8	+39 09	77	Elliptical			H III 684
UGC 7408	PGC 39918	Galaxy	CVN	13.1	14.2	2.3'	12 21.3	+45 49	74	Ir+			
UGC 8303	Holmberg VII	Galaxy	CVN	13.1	14.6	2.5'	13 13.3	+36 13	109	Ir+			MCG +06-29-061
NGC 4156	UGC 7173	Galaxy	CVN	13.2	13.5	1.3'	12 10.8	+39 28	74	SBb			H II 642;P w NGC 4151 @ 5.2';Ho 345c @ 7'
NGC 4229	UGC 7299	Galaxy	CVN	13.2	13	1.1'	12 16.6	+33 34	107	Sa			H II 519;P w NGC 4227
NGC 4381	NGC 4357	Galaxy	CVN	13.2	-	3.7'	12 24.0	+48 47	74	Sbc			H II 743
NGC 4617	UGC 7847	Galaxy	CVN	13.2	13.6	2.9'	12 41.1	+50 24	48	Sb			H II 744
NGC 4687	UGC 7958	Galaxy	CVN	13.2	12.9	0.7'	12 47.4	+35 21	108	Elliptical			
NGC 4719	UGC 7987	Galaxy	CVN	13.2	13.6	1.4'	12 50.1	+33 10	108	SBb			H III 424
NGC 4963	UGC 8190	Galaxy	CVN	13.2	12.7	0.8'	13 05.9	+41 43	75	S			H II 663
NGC 4986	UGC 8221	Galaxy	CVN	13.2	13.6	1.7'	13 08.4	+35 12	109	SBb			H III 401
NGC 5107	UGC 8396	Galaxy	CVN	13.2	12.9	1.7'	13 21.4	+38 32	109	SBcd			H III 619;P w NGC 5112 at 13'
NGC 5117	UGC 8411	Galaxy	CVN	13.2	13.9	2.2'	13 22.9	+28 19	109	SBc			
NGC 5282	UGC 8687	Galaxy	CVN	13.2	13.6	1.4'	13 43.4	+30 04	110	Ellip Rin			B core;dif asym env ext eastw
NGC 5341	UGC 8792	Galaxy	CVN	13.2	12.6	1.3'	13 52.5	+37 49	110	SBd			
NGC 4148	UGC 7158	Galaxy	CVN	13.3	13.6	1.5'	12 10.1	+35 53	107	Sa			
NGC 4190	UGC 7232	Galaxy	CVN	13.3	14.2	1.7'	12 13.7	+36 38	107	Ir			H II 409
NGC 4231	UGC 7304	Galaxy	CVN	13.3	13.4	1.2'	12 16.8	+47 27	74	Sa			H III 719;P w NGC 4232
NGC 5142	UGC 8435	Galaxy	CVN	13.3	12.6	1'	13 25.0	+36 24	109	SO			H III 403;NGC 5143 at 2.3' n;pec?
NGC 5157	UGC 8455	Galaxy	CVN	13.3	13.3	1.3'	13 27.3	+32 02	109	SBa			H III 651;hints of eF outer disc
NGC 5228	UGC 8556	Galaxy	CVN	13.3	13.1	1'	13 34.6	+34 47	109	E-SO			H III 408;NGC 5223 Group
NGC 5263	UGC 8648	Galaxy	CVN	13.3	12.6	1.6'	13 39.9	+28 24	109	Sc			H III 370;Small faint comp 3' in PA 120
IC 4213	UGC 8280	Galaxy	CVN	13.3	13.3	2.5'	13 12.2	+35 40	109	Sc			
UGC 7608	PGC 41063	Galaxy	CVN	13.3	15.8	3.5'	12 28.7	+43 13	75	Ir+			
NGC 4711	IC 3804	Galaxy	CVN	13.4	13.5	1.3'	12 48.8	+35 20	108	SBb			H II 412
NGC 4987	UGC 8216	Galaxy	CVN	13.4	13.2	1.2'	13 08.0	+51 56	48	Elliptical			H II 815
NGC 5021	UGC 8284	Galaxy	CVN	13.4	13.4	1.5'	13 12.1	+46 12	76	SBb			
NGC 5025	UGC 8292	Galaxy	CVN	13.4	13.5	2'	13 12.7	+31 48	109	Sb			H III 649
NGC 5187	MCG 5-32-	Galaxy	CVN	13.4	13.2	1.3'	13 29.8	+31 08	109	Sb Ring			H III 652
NGC 5238	UGC 8565	Galaxy	CVN	13.4	14.2	1.5'	13 34.7	+51 37	49	Sd			pair of blue post-eruptive Sc's w compact nuclei
IC 3687	UGC 7866	Galaxy	CVN	13.4	15.8	3.4'	12 42.3	+38 30	108	Ir+			Dwarf irr;bright cond. on south side of nuc 0.6'
UGC 8733	PGC 48989	Galaxy	CVN	13.4	14.6	2.5'	13 48.6	+43 24	76	SBcd			disturbed?
NGC 4187B		Galaxy	CVN	13.5	-	0.3'	12 13.5	+50 45	47	Compac			
NGC 4226	UGC 7297	Galaxy	CVN	13.5	13	1'	12 16.4	+47 02	74	Sap			Disturbed?;NGC 4226 @ 7.3'
NGC 4509	UGC 7704	Galaxy	CVN	13.5	12.7	0.8'	12 33.1	+32 06	108	Sab pec			sf of 2
NGC 4846	UGC 8079	Galaxy	CVN	13.5	13	1.3'	12 57.8	+36 22	108	SBbc			
NGC 5131	UGC 8422	Galaxy	CVN	13.5	13	2.1'	13 24.0	+30 59	109	Sa			
NGC 5169	UGC 8465	Galaxy	CVN	13.5	14.2	2.1'	13 28.2	+46 40	76	SBbc			P w NGC 5173 at 5'
NGC 5225	UGC 8540	Galaxy	CVN	13.5	12.4	0.7'	13 33.3	+51 29	49	S			H III 822
NGC 5267	UGC 8655	Galaxy	CVN	13.5	13	1.4'	13 40.7	+38 48	110	SBb			
NGC 5318	UGC 8751	Galaxy	CVN	13.5	-	1.5'	13 50.6	+33 42	110	SBO			H III 423;NGC 5321 4.7' sf;Brightest in group
NGC 4232	UGC 7303	Galaxy	CVN	13.6	13.5	1.3'	12 16.8	+47 26	74	SBbc/P			H III 720;P w NGC 4231 @ 1.1';disturbed
NGC 4932	UGC 8150	Galaxy	CVN	13.6	14.2	1.5'	13 02.6	+50 26	48	Sc			H III 818
NGC 5214	UGC 8531	Galaxy	CVN	13.6	13.5	0.8'	13 32.8	+41 52	76	Sc			H III 656;nf of 2
NGC 5280	MCG 5-32-	Galaxy	CVN	13.6	13	0.8'	13 42.9	+29 52	110	Elliptical			
NGC 5305	UGC 8729	Galaxy	CVN	13.6	14	1.5'	13 47.9	+37 50	110	SBb			H III 621;P w UGC 8724
NGC 5358	UGC 8826	Galaxy	CVN	13.6	12.3	1.1'	13 54.0	+40 17	76	Sa			
NGC 5403	UGC 8919	Galaxy	CVN	13.6	14.5	3.1'	13 59.8	+38 11	110	SBb			H III 683;strong slightly asym abs feature;sp of 2
NGC 5433	UGC 8954	Galaxy	CVN	13.6	12.9	1.6'	14 02.6	+32 31	110	Sd			H III 653;3rd of 3
UGC 7257	PGC 39150	Galaxy	CVN	13.6	13.7	1.7'	12 15.0	+35 57	107	Sm			south following of 2 w 0.6' sep
NGC 4704	UGC 7972	Galaxy	CVN	13.7	13.6	1'	12 48.8	+41 55	75	SBbc/P			H II 662
NGC 4741	UGC 8000	Galaxy	CVN	13.7	13.5	1.4'	12 51.0	+47 40	75	Sc			H III 721
NGC 4985	UGC 8218	Galaxy	CVN	13.7	14	1.3'	13 08.2	+41 41	75	SO			H III 654
NGC 5093	UGC 8373	Galaxy	CVN	13.7	13.5	1.4'	13 19.6	+40 23	76	Sa			H III 633
NGC 5229	UGC 8550	Galaxy	CVN	13.7	14.2	3.3'	13 34.0	+47 55	76	SBcd			
NGC 5401	UGC 8916	Galaxy	CVN	13.7	12.8	1.5'	13 59.7	+36 14	110	Sa			H III 412
UGC 7125	PGC 38567	Galaxy	CVN	13.7	14.9	4.7'	12 08.7	+36 48	107	Sm			
NGC 4917	UGC 8130	Galaxy	CVN	13.8	14.1	1.5'	13 00.9	+47 13	75	SBb			
NGC 5154	UGC 8447	Galaxy	CVN	13.8	14.2	1.3'	13 26.5	+36 01	109	Sc			H III 405
NGC 5276	UGC 8680	Galaxy	CVN	13.8	12.9	0.9'	13 42.4	+35 37	110	SBb			P w NGC 5273 at 3';vB bar or lens
NGC 5346	UGC 8804	Galaxy	CVN	13.8	14.2	2'	13 53.0	+39 35	76	Sc			
NGC 5361	MCG 7-29-	Galaxy	CVN	13.8	12.6	0.8'	13 54.6	+38 27	110	S pec			H III 682

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5399	UGC 8912	Galaxy	CVN	13.8	12.6	1.2'	13 59.5	+34 46	110	Sbc			H III 411
UGC 7639	PGC 41239	Galaxy	CVN	13.8	15.1	3.2'	12 29.9	+47 31	75	Ir+			
UGC 8323	Mrk 450	Galaxy	CVN	13.8	13.3	1'	13 14.8	+34 53	150	Ir+			
UGC 8597	PGC 48012	Galaxy	CVN	13.8	14.3	1.9'	13 36.3	+46 13	76	SB+			
NGC 4109	MCG 7-25-	Galaxy	CVN	13.9	13.7	0.7'	12 06.9	+43 00	74	Sa			near 4111
NGC 4135	MCG 7-25-	Galaxy	CVN	13.9	13.2	0.7'	12 09.1	+44 00	74	SBbc			
NGC 5002	UGC 8254	Galaxy	CVN	13.9	14.3	1.7'	13 10.6	+36 38	109	SB			compact
NGC 5233	UGC 8568	Galaxy	CVN	13.9	13	1.1'	13 35.2	+34 41	109	Sab			H III 425;NGC 5223 Group
UGC 8246	MCG +06-29	Galaxy	CVN	13.9	14.6	3.3'	13 10.0	+34 11	109	SBc			
NGC 4163	NGC 4167	Galaxy	CVN	14	15.1	1.9'	12 12.2	+36 10	107	Ir			H III 399
NGC 4167	NGC 4163	Galaxy	CVN	14	-	1.9'	12 12.2	+36 10	107	Ir			
NGC 5074	MCG 5-31-	Galaxy	CVN	14	13.4	0.7'	13 18.4	+31 28	109	Sb			H III 309
NGC 5271	MCG 5-32-	Galaxy	CVN	14	13.3	0.9'	13 41.7	+30 07	110	Sba Ring			
UGC 8313	PGC 45992	Galaxy	CVN	14	13.6	2.4'	13 13.8	+42 12	76	SB(s)c			
NGC 4399	MCG 6-27-	Neb+Gx	CVN	-	-		12 25.7	+33 31	108	E+			An HII region within the GALXY NGC 4395 on the SW side
NGC 4400	MCG 6-27-	Neb+Gx	CVN	-	-		12 25.9	+33 31	108	E+			An HII region within the GALXY NGC 4395 on the SE side
NGC 4401	MCG 6-27-	Neb+Gx	CVN	-	-		12 26.0	+33 32	108	E+			An HII region within the GALXY NGC 4395 on the SE side
NGC 7000	LBN 373	Brt Neb	CYG	4	-	120'	21 01.8	+44 12	85	E			North America nebula ;CI NGC 6997 invl
M 39	NGC 7092	Opn CL	CYG	4.6	11	32'	21 32.2	+48 26	86	III 2 p	30	6.8	Large but loose cluster
NGC 6871	OCL 148	Opn CL	CYG	5.2	-	20'	20 05.9	+35 47	119	IV 3 p n	15	6.8	In Cyg OB3?
Cr 419		Opn CL	CYG	5.4	-	4.5'	20 18.1	+40 44	84	IV 2 p			Compact but not rich:N of Struve 2666:14 * to 13 mag
Biur 2		Opn CL	CYG	6.3	-	13'	20 09.2	+35 29	119	III 2 p	10	7.9	
M 29	NGC 6913	Opn CL	CYG	6.6	11	7'	20 23.9	+38 32	120	III 3 p n	50	8.6	About 20 stars mags 8...
NGC 6811	OCL 185	Opn CL	CYG	6.8	-	13'	19 38.2	+46 34	84	IV 3 p	70	9.9	
NGC 6960	LBN 191	SN Rem	CYG	7	-	210'	20 45.7	+30 43	120				Veil Nebula western part;* 52 CYG invl
NGC 6992	CED 182B	SN Rem	CYG	7	-	60'	20 56.4	+31 43	120	R			Veil Nebula eastern part
NGC 6995	CED 182C	SN Rem	CYG	7	-	12'	20 57.1	+31 13	120	R			part of veil
NGC 7063	OCL 192	Opn CL	CYG	7	-	8'	21 24.4	+36 30	121	III 2 p	12	8.9	
NGC 7082	OCL 209	Opn CL	CYG	7.2	-	25'	21 29.4	+47 05	86	IV 2 p		9.9	H VII 52
NGC 6819	OCL 155	Opn CL	CYG	7.3	-	5'	19 41.3	+40 11	84	I 1 r		11.5	150 stars mags 11-16
IC 4996	Cr 418	Opn CL	CYG	7.3	-	6'	20 16.5	+37 38	119	I 3 p n	15	8.5	
NGC 6910	OCL 181	Opn CL	CYG	7.4	-	8'	20 23.2	+40 47	84	I 2 p n	50	9.6	H VIII 56;In Gamma Cyg nebula and Cyg OB9
NGC 6866	OCL 183	Opn CL	CYG	7.6	-	7'	20 03.9	+44 10	84	II 2 m	80	10.7	H VII 59;50* mags 10...
NGC 7039	OCL 203	Opn CL	CYG	7.6	-	25'	21 11.2	+45 39	85	III 2 p	50	11.3	
Basel 6		Opn CL	CYG	7.7	-	14.0'	20 06.8	+38 21	119		40	10.2	
NGC 6834	OCL 134	Opn CL	CYG	7.8	-	5'	19 52.2	+29 24	119	II 2 m	50	9.6	H VIII 16
Berk 86		Opn CL	CYG	7.9	-	8'	20 20.4	+38 42	120	I 3 p n	30	9.5	
NGC 6883	OCL 148	Opn CL	CYG	8	-	15'	20 11.3	+35 51	119	I 3 p n	30		
IC 5067	IC 5070; LBN	Brt Neb	CYG	8	-	60'	20 50.8	+44 21	85	E			Pelican Nebula ;w IC 5067;56 Cyg invl
NGC 7062	OCL 205	Opn CL	CYG	8.3	-	7'	21 23.5	+46 23	86	III 1 p	30	10.1	H VII 51
NGC 7086	OCL 214	Opn CL	CYG	8.4	-	9'	21 30.5	+51 36	57	II 2 m	50	10.2	H VI 32
Cr 428		Opn CL	CYG	8.7	-	14'	21 03.2	+44 35	85	III 2 p n	20		
NGC 6826	PK 83+12.1	Pln Neb	CYG	8.8	6.9	27"	19 44.8	+50 32	55	3a(2)		10.7	Blinking Planetary ;H IV 73;PK83+12.1
IC 1369	Cr 432	Opn CL	CYG	8.8	-	4'	21 12.1	+47 44	86	I 1 m	40	12.1	Barnard saw nebulousity-there is none
NGC 7031	OCL 210	Opn CL	CYG	9.1	-	5'	21 07.3	+50 50	56	IV 1 p	50	11.3	H VIII 74
NGC 7027	PK 84-3.1	Pln Neb	CYG	9.6	-	18"	21 07.0	+42 14	85	3a		16.5	bizarre spectrum
PK 64+ 5.1	BD+30 3639	Pln Neb	CYG	9.6	6.9	35.0"	19 34.8	+30 31	118	4		12.5	Campbell's hydrogen star ;
NGC 7067	OCL 208	Opn CL	CYG	9.7	-	3'	21 24.2	+48 01	86	II 2 p	20	11.2	H VII 50
NGC 7128	OCL 218	Opn CL	CYG	9.7	-	3.1'	21 44.0	+53 43	57	II 3 m	35	11.5	H VII 40
NGC 6888	LBN 203	Brt Neb	CYG	10	-	20'	20 12.8	+38 19	119	E			Crescent Neb ;Wolf-Rayet * invl
NGC 6996		Opn CL	CYG	10	-	7'	20 56.5	+45 29	85	III 2 p n	40		
NGC 6997	OCL 197	Opn CL	CYG	10	-	7'	20 56.8	+44 39	85				Scattered CI in west part of North America Neb
IC 5146	OCL 213	CL+Neb	CYG	10	-	20'	21 53.4	+47 16	86	IV 2 p n	20	9.6	Cocoon neb ;at end of dark streamer B168
Cr 421		Opn CL	CYG	10.1	-	6'	20 23.3	+41 42	84	III 1 p n	22		
NGC 7048	PK 88-1.1	Pln Neb	CYG	11	12.2	60"	21 14.3	+46 17	86	3b		18	
NGC 7013	UGC 11670	Galaxy	CYG	11.3	13.1	4.5'	21 03.6	+29 54	121	Sa			H II 203
NGC 6857	Sh2-100	Brt Neb	CYG	11.4	-	0.8'	20 02.8	+33 31	119	E		14.3	oval; not planetary; Sharpless 2-100 is brightcore
M1-92		Brt Neb	CYG	11.7	-	20.0"	19 36.3	+29 33	118	R			Footprint Neb ;looks like Dbl*;30" East of * of eq.m
NGC 6764	UGC 11407	Galaxy	CYG	11.9	12.9	2.2'	19 08.3	+50 56	54	SBbc			
NGC 6895		Opn CL	CYG	12	-	20'	20 16.5	+50 14	55				H VIII 83
NGC 7008	PK 93+5.2	Pln Neb	CYG	12	11.8	86"	21 00.5	+54 33	56	3		13.9	H I 192
NGC 7026	PK 89+0.1	Pln Neb	CYG	12	8.5	25"	21 06.3	+47 51	85	3a		14	double at high power
NGC 7044	OCL 198	Opn CL	CYG	12	-	6'	21 12.9	+42 29	86	II 2 R		15	H VI 24
NGC 6824	UGC 11470	Galaxy	CYG	12.2	12.8	1.9'	19 43.7	+56 07	55	Sab			H II 878

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 6766	PK 82+7.1	Pln Neb	CYG	12.6	-	5.6"	20 10.4	+46 28	55	2b			
NGC 6884	PK 82+7.1	Pln Neb	CYG	12.6	6	5.6"	20 10.4	+46 28	84	2b		16.7	
PK 86- 8.1	Hu 1-2	Pln Neb	CYG	12.7	-	32.0"	21 33.1	+39 38	86	2		17.3	Egg timer shape in 100" scope
IC 1311	OCL 173	CL+Neb	CYG	13.1	-	5'	20 10.3	+41 13	84	II 3 r n	60	17	Neb Descr=60'x20' emission neb in sev parts
NGC 6798	IC 1300	Galaxy	CYG	13.2	13.5	1.6'	19 24.1	+53 37	54	SO			
PK 93+ 2.1	M1-79	Pln Neb	CYG	13.2	-	38"	21 37.0	+48 56	86	4		14.4	
NGC 7116	UGC 11796	Galaxy	CYG	13.3	12.4	1.1'	21 42.7	+28 57	122	Sbc			
IC 5117	PK 89-5.1	Pln Neb	CYG	13.3	3	2"	21 32.5	+44 36	86	2		16.7	
NGC 6916	UGC 11554	Galaxy	CYG	13.5	14.1	1.8'	20 23.6	+58 21	55	SBbc			
PK 80- 6.1	IV Zw 67;CR	Pln Neb	CYG	13.5	-	1.0'	21 02.3	+36 42	121			12.3	Egg Nebula;protoplanetary?;bipolar; light polarized
NGC 6833	PK 82+11.1	Pln Neb	CYG	13.8	4.7	2"	19 49.8	+48 58	84	2		15.1	
UGC 11465	PGC 63529	Galaxy	CYG	13.8	13	1.3'	19 41.7	+50 38	55	S(B)0			
NGC 6801	UGC 11443	Galaxy	CYG	13.9	13.7	1.3'	19 27.6	+54 22	54	Sc			
NGC 6847	LBN 151	CL+Neb	CYG	-	-		19 56.7	+30 13	119				H II 202; maybe Sh2-97
NGC 6914	LBN 274	Brn Neb	CYG	-	-	3'	20 24.8	+42 29	85	R			
NGC 6974	SG 3.202	SN Rem	CYG	-	-		20 51.1	+31 50	120				part of Veil
NGC 6979		Brn Neb	CYG	-	-	3'	20 51.0	+32 08	120	E			H II 206;Portion of Veil Neb between two arcs
NGC 6991	OCL 201	Opn CL	CYG	-	-	5'	20 56.6	+47 25	85	III 3 p n			H VIII 76
NGC 7127	OCL 219	Opn CL	CYG	-	-	2.8'	21 43.9	+54 37	57	IV 2 p	12		
IC 1310	Berk 50	CL+Neb	CYG	-	-	15'	20 10.1	+34 58	119	II 1 p n	12	14	Brian Skiff ID of Be 50=IC 1310
IC 1340		SN Rem	CYG	-	-	25'	20 56.2	+31 04	120	E			Veil nebula , see 6960
IC 5068	LBN 328	Brn Neb	CYG	-	-	40'	20 50.8	+42 31	85	E			
IC 5076	LBN 394	Brn Neb	CYG	-	-	7'	20 55.9	+47 25	85	E			surr *6m
Bark 1		Opn CL	CYG	-	-	20'	20 53.7	+46 02	85	III 2 m	12		
Bark 2		Opn CL	CYG	-	-	5'	21 43.6	+51 04	57	III 1 p :b	21	10	
Basel 12		Opn CL	CYG	-	-	7'	21 10.6	+46 14	85	III 2 p :b	20		
Basel 13		Opn CL	CYG	-	-	10'	21 13.2	+46 34	86				
Basel 14		Opn CL	CYG	-	-	12.0'	21 21.2	+44 48	86	II 3pn:b	15		
Basel 15		Opn CL	CYG	-	-	6'	21 16.0	+48 50	86				
Berk 49		Opn CL	CYG	-	-	4'	19 59.5	+34 39	119	I 1 p :b	20	16	
Berk 51		Opn CL	CYG	-	-	4'	20 12.0	+34 25	119	I 1pn:b	20	15	
Berk 53		Opn CL	CYG	-	-	12'	20 56.0	+51 05	56	II 3 p	40	16	
Berk 54		Opn CL	CYG	-	-	5'	21 03.0	+40 26	85	I 2m :b	30	17	
Berk 55		Opn CL	CYG	-	-	5'	21 16.9	+51 46	56	III 1m:b	30	14	
Berk 56		Opn CL	CYG	-	-	7'	21 17.6	+41 50	86	II 1m:b	40	16	
Berk 84		Opn CL	CYG	-	-	4'	20 04.8	+33 54	119	II 1pn:b	20	16	
Berk 85		Opn CL	CYG	-	-	7'	20 18.8	+37 45	119	III 1m:b	40	15	
Berk 87		Opn CL	CYG	-	-	12'	20 21.7	+37 24	120	IV 2 p	30	13	
Berk 88		Opn CL	CYG	-	-	3'	20 21.3	+48 09	84	IV 1 p :b	12	15	
Berk 89		Opn CL	CYG	-	-	5'	20 24.5	+46 02	85	III 1 p :b	15	15	
Berk 90		Opn CL	CYG	-	-	5'	20 35.3	+46 51	85	II 1pn:b	20	14	
Berk 91		Opn CL	CYG	-	-	5'	21 11.0	+48 32	85	II 1 p :b	20	16	
Biur 1		Opn CL	CYG	-	-	15'	20 07.5	+35 41	119	IV 3 p n	15		
Ced 174	LBN 183	Brn Neb	CYG	-	-	15'	20 02.8	+37 01	119	E			
Do 2		Opn CL	CYG	-	-	10'	20 10.0	+41 22	84	IV 1pn:b	15		
Do 3		Opn CL	CYG	-	-	15'	20 15.5	+36 49	119	III 2 p n	40		
Do 4		Opn CL	CYG	-	-	6'	20 17.8	+36 45	119	IV 1pn:b	20		
Do 5		Opn CL	CYG	-	-	6'	20 20.8	+39 22	84	III 3mn:b	30		
Do 6		Opn CL	CYG	-	-	10'	20 20.7	+41 22	84	IV 2pn:b	12		
Do 8		Opn CL	CYG	-	-	5'	20 24.4	+42 16	85	I 2pn:b	20		
Do 9		Opn CL	CYG	-	-	7'	20 25.6	+41 54	85	IV 2pn:b	8		
Do 11		Opn CL	CYG	-	-	7'	20 26.4	+41 27	85	IV 3pn:b	15		
Do 36		Opn CL	CYG	-	-	14'	20 02.5	+42 06	84	IV 1 p			
Do 39		Opn CL	CYG	-	-	13'	20 16.4	+37 55	119	III 1 m n	40		
Do 40		Opn CL	CYG	-	-	12'	20 18.2	+37 50	119	III 2 p n	12		
Do 41		Opn CL	CYG	-	-	11'	20 19.3	+37 44	119	IV 1 p			
Do 42		Opn CL	CYG	-	-	11'	20 19.7	+38 08	119	IV 2 p n	20		
Do 43		Opn CL	CYG	-	-	20'	20 21.7	+39 57	84	IV 2 p			
Do 44		Opn CL	CYG	-	-	12'	20 29.7	+41 43	85	IV 2 p n	15		
Do 45		Opn CL	CYG	-	-	18'	21 09.0	+37 36	121	III 2 m n	35		
Do 47		Opn CL	CYG	-	-	5'	20 41.8	+36 37	120	III 2 p :b	15		
DoDz 10		Opn CL	CYG	-	-	20'	20 05.6	+40 40	84	IV 1 p n	12	7.1	
DoDz 11		Opn CL	CYG	-	-	13'	20 51.0	+35 55	120	IV 1 p	12		
PK 70+ 1.1	K3-50	Brn Neb	CYG	-	-		20 01.7	+33 32	119				Not a PLNNB;compact H II region in Sh 2-100

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Roslund 5		Opn CL	CYG	-	-	45'	20 10.0	+33 46	119	IV 3 p n	15		
Roslund 6		Opn CL	CYG	-	-	24'	20 28.8	+39 20	85	IV 3mn:t	30		
Roslund 7		Opn CL	CYG	-	-	20'	20 52.1	+37 54	120	IV 2p :a			
Ru 172		Opn CL	CYG	-	-	4'	20 11.6	+35 36	119	III 2pn:b	20	12	
Ru 173		Opn CL	CYG	-	-	50'	20 41.8	+35 33	120	III 3 p	20	8	Large loose cl;34 * in 20'
Ru 174		Opn CL	CYG	-	-	5'	20 43.5	+37 02	120	IV 1p :b	10	14	
Ru 175		Opn CL	CYG	-	-	9'	20 45.4	+35 31	120	III 2 p	30	11	Not rich;27 * at 120X in 10" scope
Sh2- 91		SN Rem	CYG	-	-	120'	19 35.6	+29 37	118				Long; thin filament
Sh2-101		Brt Neb	CYG	-	-	16'	20 00.0	+35 17	119	E			Near dark neb B144; appears as bright edge to dark lane
Sh2-104		Brt Neb	CYG	-	-	7'	20 17.8	+36 46	119	E			
Sh2-112		Brt Neb	CYG	-	-	15'	20 33.9	+45 39	85	E			
Sh2-115		Brt Neb	CYG	-	-	30'	20 34.5	+46 48	85	E			
vdB 128		Brt Neb	CYG	-	-	8'	20 04.5	+32 14	119	R			
vdB 133	LBN 218	Brt Neb	CYG	-	-	10'	20 31.0	+36 57	120	R			
vdB 145		Brt Neb	CYG	-	-	9'	21 43.7	+48 55	86	R			
B144	LDN 857	Drk Neb	CYG	--	--	30'	19 59.0	+35 00	119	1 lr			Fish on the platter ;preceding cluster NGC 6883
B145	LDN 865	Drk Neb	CYG	--	--	35'	20 02.8	+37 40	119	4 G			Triangular;north of B144
B146	LDN 860	Drk Neb	CYG	--	--	1'	20 03.5	+36 02	119	6 lr			Very small; In B144 adjacent to BD +35 3930
B157	LDN 1075	Drk Neb	CYG	--	--	4'	21 33.7	+54 40	57	4 C G			8' preceding 8th-mag. star BD +54 2576
B164	LDN 1070	Drk Neb	CYG	--	--	12'	21 46.5	+51 04	57	5 K G			0.8 deg following Pi 1 Cyg
B168	LDN 1055	Drk Neb	CYG	--	--	100'	21 53.2	+47 12	86	5 lr			Narrow E-W lane; Cocoon nebula at f end
B343	LDN 880	Drk Neb	CYG	--	--	10'	20 13.5	+40 16	84	5 lr G			1.7 deg preceeding Gamma Cyg
B346	LDN 906	Drk Neb	CYG	--	--	10'	20 26.7	+43 45	85	6 K			In patchy area 2.8 deg preced and 1.5 deg S of Deneb
B347	LDN 889	Drk Neb	CYG	--	--	10'	20 28.4	+39 55	85	5 lr			Narrow streak 1.2 deg foll and 20' south of Gam Cyg
B348	LDN 906	Drk Neb	CYG	--	--	240'	20 36.8	+42 01	86	3 lr			Northern Coalsack ; dark nebula north of Deneb
B350		Drk Neb	CYG	--	--	3'	20 49.1	+45 53	85	6 C			14' south of Cyg
B352		Drk Neb	CYG	--	--	20'	20 57.1	+45 22	85	5 lr			Lies north of North America nebula
B361	LDN 970	Drk Neb	CYG	--	--	17'	21 12.9	+47 22	86	4 C G			Has faint preceding extension
B362	LDN 1017	Drk Neb	CYG	--	--	15'	21 24.0	+50 10	56	5 E G			Adjacent to 9th mag star
B364	LDN 1074	Drk Neb	CYG	--	--	40'	21 33.6	+54 33	57	5 lr			Narrow lanes of B157
LDN 889		Drk Neb	CYG	--	--	90'	20 24.8	+40 10	85	4 lr			Wide lane in IC 1318 following Gamma Cyg
LDN 896		Drk Neb	CYG	--	--		20 40.0	+42 00	85	3 lr			Northern Coalsack area ; betw. IC5068 and B348
LDN 935		Drk Neb	CYG	--	--	150'	20 56.8	+43 52	85	4 lr			Wide lane between North America & Pelican neb
Le Gentil 3	N. Coal Sack	Drk Neb	CYG	--	--	720'	21 00.0	+51 00	85				Funnel Cloud nebula ; Very large
NGC 6934	GCL 117	Glob CL	DEL	8.9	-	7'	20 34.2	+07 24	209	VIII			H I 103;*10m 2' west
NGC 6891	PK 54-12.1	Pln Neb	DEL	10.5	7.4	15.5"	20 15.1	+12 42	208	2a(2b)		12.3	
NGC 7006	GCL 119	Glob CL	DEL	10.6	-	2.8'	21 01.5	+16 11	209	I			H I 52;Stars eF;very remote globular
NGC 6905	PK 61-9.1;H	Pln Neb	DEL	12	10	44"	20 22.4	+20 06	163	3(3)		14	Blue Flash Nebula
NGC 6928	IC 1326	Galaxy	DEL	12.2	12.3	2.1'	20 32.8	+09 56	209	SBab			Brightest in group;P w NGC 6930 at 4'
NGC 6956	UGC 11619	Galaxy	DEL	12.3	13.6	2'	20 43.9	+12 31	209	SBb			H III 219;Brightest of 3;UGC 11619
NGC 6930	IC 1326	Galaxy	DEL	12.8	12.1	1.2'	20 33.0	+09 52	209	SBab			
NGC 7025	UGC 11681	Galaxy	DEL	12.8	13.6	1.9'	21 07.8	+16 20	210	Sa			
NGC 7003	UGC 11662	Galaxy	DEL	13	12.7	1.1'	21 00.7	+17 48	164	Sbc			
NGC 6954	UGC 11618	Galaxy	DEL	13.2	12.6	1'	20 44.1	+03 13	254	Sa			
NGC 6972	UGC 11640	Galaxy	DEL	13.3	12.4	1.1'	20 50.0	+09 54	209	Sa			
NGC 6955	UGC 11621	Galaxy	DEL	13.6	14.1	1.4'	20 44.3	+02 36	254	Sbc			
NGC 6971	UGC 11637	Galaxy	DEL	13.7	13.5	1.1'	20 49.4	+06 00	209	Sb			
NGC 6944	MCG 1-52-	Galaxy	DEL	13.8	13.6	1.2'	20 38.4	+07 00	209	SO			
NGC 6969	UGC 11633	Galaxy	DEL	14	12.8	1.1'	20 48.5	+07 44	209	Sa			
NGC 1553	ESO 157-17	Galaxy	DOR	9.4	12	5'	04 16.2	-55 47	420	SO			
NGC 1566	ESO 157-20	Galaxy	DOR	9.7	13.9	8.2'	04 20.0	-54 56	420	SBbc			
NGC 1672	ESO 118-43	Galaxy	DOR	9.7	13.4	6.7'	04 45.7	-59 15	421	SBb			
NGC 1549	ESO 157-16	Galaxy	DOR	9.8	13	4.4'	04 15.8	-55 36	420	EO			P w NGC 1553
NGC 1617	ESO 157-41	Galaxy	DOR	10.4	12.7	4.8'	04 31.7	-54 36	421	SBa			
NGC 1533	ESO 157-3	Galaxy	DOR	10.7	12.6	2.5'	04 09.9	-56 07	420	SBO			
NGC 1546	ESO 157-12	Galaxy	DOR	10.9	12.5	3.2'	04 14.6	-56 04	420	Sa			
NGC 1515	ESO 156-36	Galaxy	DOR	11.2	13	5.1'	04 04.0	-54 06	420	SBbc			
NGC 1596	ESO 157-31	Galaxy	DOR	11.2	12.4	3.7'	04 27.6	-55 02	420	SO			
NGC 1703	ESO 119-19	Galaxy	DOR	11.3	13.4	2.9'	04 52.9	-59 45	421	SBb			
NGC 1688	ESO 119- 6	Galaxy	DOR	12	13.4	2.4'	04 48.4	-59 48	421	Sbc			
NGC 1824	ESO 119-36	Galaxy	DOR	12.6	13.5	3.2'	05 06.9	-59 44	421	SBp			
NGC 1581	ESO 157-26	Galaxy	DOR	12.9	13	1.8'	04 24.7	-54 57	420	E-SO Ri			
NGC 1602	ESO 157-32	Galaxy	DOR	13	13.6	1.9'	04 27.9	-55 03	420	lr Bar			
NGC 1556	ESO 202- 4	Galaxy	DOR	13.1	12.8	1.7'	04 17.7	-50 10	420	Sab			Apparently misplotted

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1578	ESO 202-14	Galaxy	DOR	13.1	13.3	1.2'	04 23.8	-51 36	420	Sa			
NGC 1506	ESO 156-27	Galaxy	DOR	13.5	13.4	1.2'	04 00.4	-52 34	420	E-SO			
NGC 1522	ESO 156-38	Galaxy	DOR	13.6	13.4	1.2'	04 06.1	-52 40	420	SO			
NGC 1853	ESO 158-22	Galaxy	DOR	13.6	-	2'	05 12.3	-57 24	421	SBcd			
NGC 1500	ESO 201-13	Galaxy	DOR	13.8	13.8	1.1'	03 58.2	-52 20	420	Elliptical			
Kemble 2		Aster	DRA	7	-	30'	18 35.0	+72 23	12		17	7	Fr. Lucian Kemble's "Mini-Cassiopeia" asterism
NGC 6543	PK 96+29.1	Pln Neb	DRA	8.3	5	22"	17 58.6	+66 38	30	3a(2)		11.3	Cat's Eye Nebula ;H IV 37;PK96+29.1
NGC 4236	UGC 7306	Galaxy	DRA	9.6	15	22.6'	12 16.7	+69 28	25	SBd			H V 51;P w Ho 357b @ 9';L;F spiral structure
NGC 4125	UGC 7118	Galaxy	DRA	9.7	12.9	6'	12 08.1	+65 10	25	Elliptical			
M 102	NGC 5866	Galaxy	DRA	9.9	12.2	6.5'	15 06.5	+55 46	50	Sa			vBN w dk lane and ansae;NGC 5867 small E neb;
UGC 10822	Draco Dwarf	Galaxy	DRA	9.9	17.2	33.5'	17 20.2	+57 55	52	dE3			Member of Local Group;dwarf elliptical
NGC 6503	UGC 11012	Galaxy	DRA	10.2	13.1	7'	17 49.5	+70 09	30	Sc			
NGC 5907	NGC 5906	Galaxy	DRA	10.3	13.3	11.8'	15 15.9	+56 20	50	Sc			vs bulge nearly hidden by strong dk lane; SN 1940a
NGC 3147	UGC 5532	Galaxy	DRA	10.6	13.3	4.3'	10 16.9	+73 24	8	Sbc			H I 79;vBN;many filam. narrow arms in lens
NGC 4589	UGC 7797	Galaxy	DRA	10.7	13	3.4'	12 37.4	+74 11	9	Elliptical			H I 273;P w NGC 4572 @ 7.5';NGC 4648 @ 22'
NGC 6340	UGC 10762	Galaxy	DRA	11	13.3	3'	17 10.4	+72 18	29	Sa			H II 767;Brightest of 3;IC 1254 at 7' PA 320;UGC 10762
NGC 5982	UGC 9961	Galaxy	DRA	11.1	12.9	3'	15 38.7	+59 21	51	E3p			H II 764;vBN;NGC 5985 at 6.2';PA290
NGC 5985	UGC 9969	Galaxy	DRA	11.1	14	5.4'	15 39.6	+59 20	51	SBb Ring			H II 766;Brightest of 3
NGC 6015	UGC 10075	Galaxy	DRA	11.1	13.6	5.4'	15 51.4	+62 18	28	Sc			H III 739;Was descr= vF;pL;R;vgbM until update 2;5;89
NGC 6643	UGC 11218	Galaxy	DRA	11.1	13.1	3.7'	18 19.8	+74 34	12	Sc			multi arm spiral
NGC 4750	UGC 7994	Galaxy	DRA	11.2	12.5	2.1'	12 50.1	+72 52	9	Sap			H IV 78;Dark ring surrounds nucl
NGC 5678	UGC 9358	Galaxy	DRA	11.3	13	3.3'	14 32.1	+57 55	50	SBb			H I 237;complex patt of dark lanes smooth outer arms;
NGC 6140	UGC 10359	Galaxy	DRA	11.3	14.8	6.3'	16 21.0	+65 23	29	SBc/P			H III 740
NGC 4291	UGC 7397	Galaxy	DRA	11.5	12.7	2'	12 20.3	+75 22	9	Elliptical			H I 275;P w NGC 4319
NGC 5879	UGC 9753	Galaxy	DRA	11.6	13.3	3.9'	15 09.8	+57 00	50	Sbc			H II 757;vsBN;many filam knotty arms;poor res
NGC 4386	UGC 7491	Galaxy	DRA	11.7	12.9	2.6'	12 24.5	+75 32	9	SBO			H I 277
NGC 5905	UGC 9797	Galaxy	DRA	11.7	14.1	3.8'	15 15.4	+55 31	50	SBb			H II 758;P w NGC 5908 at 13'
NGC 5965	UGC 9914	Galaxy	DRA	11.7	13	4.7'	15 34.0	+56 41	51	Sb			H II 762;P w NGC 5963
NGC 5987	UGC 9971	Galaxy	DRA	11.7	13.4	4.2'	15 39.9	+58 05	51	Sb			H II 765
NGC 3735	UGC 6567	Galaxy	DRA	11.8	13	4'	11 36.0	+70 32	25	Sc			H I 287;nearly edge-on
NGC 4250	UGC 7329	Galaxy	DRA	11.8	13.6	2.3'	12 17.4	+70 48	25	SBO-a			H I 264
NGC 5908	UGC 9805	Galaxy	DRA	11.8	13.2	3.3'	15 16.7	+55 25	50	Sb			vsBN in B bulge;strong dk lane;P w NGC 5905
NGC 6412	UGC 10897	Galaxy	DRA	11.8	13.4	2.5'	17 29.6	+75 42	12	SBc			H VI 41;Arp 38;UGC 10897
NGC 3183	NGC 3218	Galaxy	DRA	11.9	13	2.3'	10 21.8	+74 11	8	SBbc			H I 283
NGC 4256	UGC 7351	Galaxy	DRA	11.9	13.1	4.1'	12 18.7	+65 54	25	Sb			H II 846;edge-on spindle
NGC 4319	UGC 7429	Galaxy	DRA	11.9	13.8	2.8'	12 21.7	+75 19	9	SBab			H I 276;NGC 4291 @ 7.4'
NGC 6223	UGC 10527	Galaxy	DRA	11.9	14.1	3.5'	16 43.1	+61 35	29	E-SO			
NGC 6236	UGC 10546	Galaxy	DRA	11.9	13.5	2.9'	16 44.6	+70 47	29	SBc			
NGC 6411	UGC 10916	Galaxy	DRA	11.9	13.4	2.3'	17 35.5	+60 49	53	Elliptical			
NGC 4128	UGC 7120	Galaxy	DRA	12	12.7	2.4'	12 08.5	+68 46	25	SO			H I 263;Ho 337b @ 2';UGC 7120
NGC 4648	UGC 7868	Galaxy	DRA	12	13.4	1.8'	12 41.7	+74 25	9	Ellip Ring			H I 274;P w NGC 4589 @ 22'
NGC 5949	UGC 9866	Galaxy	DRA	12	12.8	2.2'	15 28.0	+64 46	28	Sbc			H II 906;vsBN;many B knotty arms
NGC 6127	NGC 6125	Galaxy	DRA	12	12.7	1.4'	16 19.2	+57 59	51	Elliptical			
NGC 6654	UGC 11238	Galaxy	DRA	12	13.7	2.6'	18 24.1	+73 11	12	SBO-a R			
NGC 6869	UGC 11506	Galaxy	DRA	12	12.7	1.6'	20 00.7	+66 14	32	SO			
NGC 6701	UGC 11348	Galaxy	DRA	12.1	12.7	1.5'	18 43.2	+60 39	54	SBa			
NGC 3329	NGC 3397	Galaxy	DRA	12.2	12.6	1.9'	10 44.7	+76 49	8	Sb			brightest in a subgroup of 12 or more galaxies
NGC 3403	UGC 5997	Galaxy	DRA	12.2	13.4	3'	10 53.9	+73 41	8	Sbc			H II 335
NGC 3562	UGC 6242	Galaxy	DRA	12.2	-	1.7'	11 13.0	+72 53	9	Elliptical			H II 337;comp at 4.9';PA67;0.7'X0.15'
NGC 4332	UGC 7453	Galaxy	DRA	12.2	13.3	2.1'	12 22.8	+65 51	25	SBa			H II 847
NGC 4521	NGC 4512	Galaxy	DRA	12.2	12.4	2.5'	12 32.8	+63 56	25	Sa			H II 849;P w NGC 4512
NGC 4108	UGC 7101	Galaxy	DRA	12.3	13.1	1.7'	12 06.7	+67 10	25	Sc			w NGC 4108A;B
NGC 4133	UGC 7127	Galaxy	DRA	12.3	13.1	1.8'	12 08.8	+74 54	9	SBb			H I 278
NGC 4221	UGC 7288	Galaxy	DRA	12.3	13.7	2'	12 16.0	+66 14	25	SBO-a			
NGC 4545	UGC 7747	Galaxy	DRA	12.3	13.6	2.5'	12 34.6	+63 31	25	SBc			H II 850
NGC 6338	UGC 10784	Galaxy	DRA	12.3	12.7	1.5'	17 15.4	+57 25	52	SO			H II 812;Brightest in group;UGC 10784
NGC 6395	UGC 10876	Galaxy	DRA	12.3	12.8	2.4'	17 26.5	+71 06	30	Scp			
NGC 6434	UGC 10934	Galaxy	DRA	12.4	13.2	2.3'	17 36.8	+72 05	30	SBbc			H III 741
NGC 2977	UGC 5175	Galaxy	DRA	12.5	12.8	1.8'	09 43.8	+74 52	8	Sb			H I 282;low surface br
NGC 3682	UGC 6459	Galaxy	DRA	12.5	13	1.7'	11 27.7	+66 35	25	Sa			H I 262
NGC 4210	UGC 7264	Galaxy	DRA	12.5	13.6	2'	12 15.3	+65 59	25	SBb			H III 850;NGC 4221 @ 15.6'
NGC 5667	UGC 9344	Galaxy	DRA	12.5	13	1.7'	14 30.4	+59 28	50	SBc			H II 807
NGC 5963	UGC 9906	Galaxy	DRA	12.5	14.7	3.3'	15 33.5	+56 34	51	Sc			H II 761;vB main body 0.7X0.45;NGC 5965 at 9.1'
NGC 6232	UGC 10537	Galaxy	DRA	12.5	13.4	1.6'	16 43.3	+70 38	29	SBa			

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NGC 6690	NGC 6689	Galaxy	DRA	12.5	14	4'	18 34.8	+70 31	30	SBcd			
UGC 8201	PGC 45372	Galaxy	DRA	12.5	15.1	3.4'	13 06.3	+67 42	26	Ir+			
NGC 3218	NGC 3183	Galaxy	DRA	12.6	-	2.3'	10 21.8	+74 11	8	SBbc			
NGC 6095	UGC 10265	Galaxy	DRA	12.6	13.6	1.8'	16 11.2	+61 16	28	E-SO			
NGC 6190	UGC 10443	Galaxy	DRA	12.6	13.1	1.4'	16 32.1	+58 26	52	Sc			
NGC 6211	UGC 10516	Galaxy	DRA	12.6	13.3	1.6'	16 41.5	+57 47	52	SBO			Brightest in chain of 4 incl NGC 6213 at 2' nf
NGC 6359	UGC 10804	Galaxy	DRA	12.6	12.6	1.3'	17 17.9	+61 47	29	E-SO			
NGC 6667	NGC 6668	Galaxy	DRA	12.6	13.5	2.4'	18 30.7	+67 59	30	SBab/P			
NGC 6796	UGC 11432	Galaxy	DRA	12.6	12.3	1.9'	19 21.5	+61 09	31	Sbc			
NGC 4391	UGC 7511	Galaxy	DRA	12.7	12.9	1.1'	12 25.3	+64 56	25	E-SO			H III 852
NGC 4441	UGC 7572	Galaxy	DRA	12.7	14.8	3.2'	12 27.3	+64 48	25	SBO-a			H II 848
NGC 6079	IC 1200	Galaxy	DRA	12.7	13.1	1.4'	16 04.5	+69 40	28	Elliptical			H III 884;P w IC 1201 at 7' PA 126
NGC 6189	NGC 6191	Galaxy	DRA	12.7	13.1	1.9'	16 31.7	+59 38	52	Sbc			
UGC 7490	PGC 40367	Galaxy	DRA	12.7	15.1	3.3'	12 24.3	+70 20	25	SAm			
NGC 3061	UGC 5319	Galaxy	DRA	12.8	13.6	1.7'	09 56.2	+75 52	8	Sbc			H II 903?
NGC 6508	UGC 11023	Galaxy	DRA	12.8	13.3	1.3'	17 49.8	+72 01	30	Elliptical			
NGC 6786	UGC 11414	Galaxy	DRA	12.8	12.6	1.1'	19 10.9	+73 25	13	SBbc			P w UGC 11415 at 1.2' PA 42
NGC 3155	NGC 3194	Galaxy	DRA	12.9	13.1	1.4'	10 17.7	+74 21	8	S pec			H III 965
NGC 3523	UGC 6105	Galaxy	DRA	12.9	13.6	1.5'	11 03.1	+75 07	8	Sbc			H II 904;brightest of 3
NGC 3752	UGC 6515	Galaxy	DRA	12.9	12.9	1.7'	11 32.5	+74 38	9	Sab			H II 905
NGC 4205	UGC 7258	Galaxy	DRA	12.9	12.7	1.7'	12 14.9	+63 47	25	S pec			
NGC 5894	UGC 9768	Galaxy	DRA	12.9	13	3'	15 11.7	+59 48	50	SBm			H II 763
NGC 6307	UGC 10727	Galaxy	DRA	12.9	13.1	1.3'	17 07.7	+60 45	52	SBO-a R			
NGC 6370	UGC 10836	Galaxy	DRA	12.9	13.6	1.4'	17 23.4	+56 58	52	Elliptical			
NGC 6381	UGC 10871	Galaxy	DRA	12.9	13.1	1.3'	17 27.3	+60 01	52	Sc			sev comps
NGC 6521	UGC 11061	Galaxy	DRA	12.9	13.7	1.6'	17 55.8	+62 37	30	Elliptical			Brightest in dense part of cluster;4 gals in 8'
NGC 6654A	UGC 11332	Galaxy	DRA	12.9	13.5	2.7'	18 39.4	+73 35	12	SBd pec			
NGC 6691	UGC 11318	Galaxy	DRA	12.9	13.7	1.6'	18 39.2	+55 38	54	SBbc			
NGC 6711	UGC 11361	Galaxy	DRA	12.9	13.4	1.3'	18 49.0	+47 39	83	SBbc/P			
NGC 6757	UGC 11401	Galaxy	DRA	12.9	13.1	1.4'	19 05.1	+55 43	54	SBO-a R			
NGC 3057	UGC 5404	Galaxy	DRA	13	14	2.2'	10 05.7	+80 17	8	SBd			H III 978
NGC 3215	UGC 5659	Galaxy	DRA	13	13	1.1'	10 28.7	+79 49	8	Sbc			H III 981;P w NGC 3212;distorted
NGC 3397	NGC 3329	Galaxy	DRA	13	-	1.9'	10 44.7	+76 49	8	Sb			H I 284
NGC 4510	UGC 7679	Galaxy	DRA	13	13.3	1.5'	12 31.8	+64 14	25	Elliptical			
NGC 4513	UGC 7683	Galaxy	DRA	13	13.1	1.4'	12 32.0	+66 20	25	SO			
NGC 5981	UGC 9948	Galaxy	DRA	13	13.1	2.7'	15 37.9	+59 23	51	Sbc			In triple group w N 5982;N 5985;5976;m=15.7
NGC 6125	NGC 6127	Galaxy	DRA	13	-	1.4'	16 19.2	+57 59	51	Elliptical			H II 810
NGC 6128	NGC 6125	Galaxy	DRA	13	-	1.4'	16 19.2	+57 59	51	Elliptical			
NGC 6515	UGC 11071	Galaxy	DRA	13	13.5	1.6'	17 57.4	+50 44	53	Elliptical			
NGC 6689	NGC 6690	Galaxy	DRA	13	-	4'	18 34.8	+70 31	30	SBcd			
IC 1291	UGC 11283	Galaxy	DRA	13	13.9	1.8'	18 33.9	+49 17	82	SBdm pe			Br of 3;S-shaped;very patchy
NGC 3212	UGC 5643	Galaxy	DRA	13.1	13.5	1.5'	10 28.3	+79 49	8	SBb			H III 980;P w NGC 3215;distorted
NGC 3879	UGC 6752	Galaxy	DRA	13.1	13.2	2.7'	11 46.8	+69 23	25	Sd			H II 881
NGC 3890	NGC 3939	Galaxy	DRA	13.1	12.8	0.9'	11 49.3	+74 18	9	Sc			H III 940
NGC 5989	UGC 9985	Galaxy	DRA	13.1	12.7	0.9'	15 41.5	+59 45	51	Sc			H III 738
NGC 6143	UGC 10358	Galaxy	DRA	13.1	12.9	1'	16 21.7	+55 05	51	SBbc			H II 811
NGC 6248	UGC 10564	Galaxy	DRA	13.1	14.4	3.1'	16 46.4	+70 21	29	SBcd			
NGC 6310	UGC 10730	Galaxy	DRA	13.1	12.8	1.9'	17 08.0	+60 59	52	Sb			
NGC 6361	UGC 10815	Galaxy	DRA	13.1	13.3	2.2'	17 18.7	+60 36	52	Sb			nf of 2
NGC 6385	UGC 10877	Galaxy	DRA	13.1	13.5	1.3'	17 28.0	+57 31	52	SBa			P w NGC 6387 3' nf
NGC 6651	UGC 11236	Galaxy	DRA	13.1	13.1	1.6'	18 24.3	+71 36	30	Sbc			
NGC 5283	UGC 8672	Galaxy	DRA	13.2	13.1	1.1'	13 41.1	+67 40	26	SO			Seyfert
NGC 5413	UGC 8901	Galaxy	DRA	13.2	13.3	1.1'	13 57.9	+64 55	27	Elliptical			
UGC 6711	PGC 36542	Galaxy	DRA	13.2	11.9	0.7'	11 44.5	+69 44	25	Pec			
NGC 5777	UGC 9568	Galaxy	DRA	13.3	13.5	3.1'	14 51.3	+58 59	50	Sb			H III 806;P w UGC 9570 at 2.8' PA 125
NGC 6191	NGC 6189	Galaxy	DRA	13.3	-	1.9'	16 31.7	+59 38	52	Sbc			
NGC 6286	UGC 10647	Galaxy	DRA	13.3	13.6	1.3'	16 58.5	+58 56	52	SB/P			P w NGC 6285
NGC 6478	UGC 10998	Galaxy	DRA	13.3	13.5	1.8'	17 48.6	+51 09	53	Sc			
NGC 6542	UGC 11092	Galaxy	DRA	13.3	12.3	1.3'	17 59.7	+61 22	30	Sa			
NGC 6789	UGC 11425	Galaxy	DRA	13.3	13.3	1.3'	19 16.7	+63 58	31	Ir			
NGC 6831	UGC 11483	Galaxy	DRA	13.3	14	1.5'	19 48.0	+59 54	55	SO			Brightest in group of 4
UGC 9837	MCG +10-22	Galaxy	DRA	13.3	14.4	2'	15 23.8	+58 03	50	S(B)c			
NGC 3144	NGC 3174	Galaxy	DRA	13.4	13.1	1.2'	10 15.5	+74 13	8	SBap			H III 964
NGC 3343	UGC 5863	Galaxy	DRA	13.4	13.6	1.3'	10 46.2	+73 21	8	Elliptical			H III 317

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4159	UGC 7174	Galaxy	DRA	13.4	12.8	1.3'	12 10.9	+76 08	9	Sbc			H III 941
NGC 4693	UGC 7962	Galaxy	DRA	13.4	13.4	2.4'	12 47.2	+71 11	26	Scd			H III 906
NGC 6246A	UGC 10584	Galaxy	DRA	13.4	14.9	2.2'	16 50.2	+55 23	52	SBc/P			
NGC 6258	UGC 10595	Galaxy	DRA	13.4	12.9	0.9'	16 52.5	+60 31	52	Elliptical			
NGC 6536	UGC 11077	Galaxy	DRA	13.4	13.5	1.2'	17 57.3	+64 56	30	SBb			
NGC 6742	PK 78+18.1	Pln Neb	DRA	13.4	-	31"	18 59.3	+48 28	83			19.4	H III 742
NGC 6762	NGC 6763	Galaxy	DRA	13.4	12.5	1.5'	19 05.6	+63 56	31	Sa			
NGC 2938	UGC 5115	Galaxy	DRA	13.5	14	1.8'	09 38.4	+76 19	8	SBc			H III 963?
NGC 2963	UGC 5222	Galaxy	DRA	13.5	13	1.2'	09 47.8	+72 58	8	SBab			H III 315;P w NGC 2957
NGC 3197	UGC 5500	Galaxy	DRA	13.5	13.6	1.3'	10 14.5	+77 49	8	Sbc			H III 966
NGC 3252	UGC 5732	Galaxy	DRA	13.5	13.6	1.9'	10 34.4	+73 46	8	Scp			H III 316;comps 4';PA266;0.2'X0.15';5 '';PA285;0.6'x0.4'
NGC 3465	UGC 6056	Galaxy	DRA	13.5	13.6	1.2'	10 59.5	+75 11	8	Sab			NGC 3523 group
NGC 3961	UGC 6885	Galaxy	DRA	13.5	13.9	1.3'	11 55.0	+69 20	25	SBa			H III 905
NGC 4034	UGC 7006	Galaxy	DRA	13.5	14.1	1.7'	12 01.5	+69 19	25	Sc			H III 903
NGC 4120	UGC 7121	Galaxy	DRA	13.5	13.1	1.7'	12 08.5	+69 33	25	Scp			H III 904
NGC 4121	MCG 11-15	Galaxy	DRA	13.5	13.3	0.4'	12 07.9	+65 07	25	Elliptical			
NGC 4363	ZWG 352.3	Galaxy	DRA	13.5	14.1	1.5'	12 23.5	+74 57	9	Sb			H III 938
NGC 4749	UGC 8006	Galaxy	DRA	13.5	12.9	1.7'	12 51.2	+71 38	26	Sb			H III 907
NGC 6130	UGC 10347	Galaxy	DRA	13.5	13	1'	16 19.6	+57 37	51	SBbc			
NGC 6182	UGC 10424	Galaxy	DRA	13.5	13.4	1.7'	16 29.6	+55 31	51	Sa			H III 813
NGC 6244	UGC 10568	Galaxy	DRA	13.5	12.7	1.6'	16 48.1	+62 12	29	SBa			NGC 6238 at 6'
NGC 6247	UGC 10572	Galaxy	DRA	13.5	-	1'	16 48.3	+62 59	29	Pec			
NGC 6285	MCG 10-24	Galaxy	DRA	13.5	13.3	1.2'	16 58.4	+58 57	52	Sa			
NGC 6290	UGC 10665	Galaxy	DRA	13.5	13.4	1.1'	17 00.9	+58 58	52	SBa			Brightest of 3
NGC 6292	UGC 10684	Galaxy	DRA	13.5	13.6	1.6'	17 03.1	+61 03	29	Sbc			
NGC 6454	MCG 9-29	Galaxy	DRA	13.5	13.1	1'	17 44.9	+55 42	53	S			
NGC 6497	NGC 6498	Galaxy	DRA	13.5	13.3	1.4'	17 51.3	+59 28	53	SBb			
NGC 6621	UGC 11175	Galaxy	DRA	13.5	-	1.3'	18 12.9	+68 22	30	SB/P			Double system w loop and bridge
NGC 6622	UGC 11175	Galaxy	DRA	13.5	-	0.9'	18 13.0	+68 21	30	SBc			P w NGC 6621
NGC 6677	UGC 11288	Galaxy	DRA	13.5	-	0.9'	18 33.6	+67 07	30	Sbc			Double system w NGC 6679
NGC 6679	MCG 11-22	Galaxy	DRA	13.5	-	0.2'	18 33.5	+67 09	30	Sc			
NGC 6750	UGC 11389	Galaxy	DRA	13.5	-	1'	19 00.6	+59 10	54	Sc			
NGC 4238	UGC 7308	Galaxy	DRA	13.6	13.3	1.8'	12 16.9	+63 25	25	Scd			H III 851
NGC 6198	UGC 10467	Galaxy	DRA	13.6	13.2	1'	16 35.5	+57 29	52	Elliptical			
NGC 6206	IC 1227	Galaxy	DRA	13.6	12.7	0.7'	16 40.1	+58 37	52	SO			
NGC 6246	UGC 10580	Galaxy	DRA	13.6	13.4	1.5'	16 49.9	+55 33	52	SBb			
NGC 6297	UGC 10690	Galaxy	DRA	13.6	12.3	0.7'	17 03.6	+62 02	29	SO			
NGC 6373	UGC 10850	Galaxy	DRA	13.6	13.8	1.3'	17 24.1	+59 00	52	SBc			
NGC 6491	UGC 11008	Galaxy	DRA	13.6	13	1.2'	17 50.0	+61 32	30	Sab			P w NGC 6493 at 3'
NGC 6552	UGC 11096	Galaxy	DRA	13.6	13.1	1'	18 00.1	+66 37	30	SBbc Rii			
IC 1065	UGC 9553	Galaxy	DRA	13.6	13.2	1'	14 49.4	+63 16	27	SBO			
NGC 4108B	UGC 7106	Galaxy	DRA	13.7	14	1.3'	12 07.2	+67 14	25	SBd pec			w NGC 4108;4108A
NGC 6303	UGC 10711	Galaxy	DRA	13.7	13.8	1.3'	17 05.0	+68 50	29	Elliptical			
NGC 6306	UGC 10724	Galaxy	DRA	13.7	12.3	1'	17 07.6	+60 44	52	SBab/P			P w NGC 6307 at 2' nf
NGC 6399	UGC 10896	Galaxy	DRA	13.7	13.1	1.1'	17 31.8	+59 37	53	Sa			
NGC 6479	UGC 10996	Galaxy	DRA	13.7	13.4	1'	17 48.4	+54 09	53	Sc			
UGC 6456	PGC 35286	Galaxy	DRA	13.7	13.8	1.4'	11 28.0	+78 59	9	Pec			Eruptive
NGC 3194	NGC 3155	Galaxy	DRA	13.8	-	1.4'	10 17.7	+74 21	8	S pec			
NGC 4108A	UGC 7088	Galaxy	DRA	13.8	13.4	1.4'	12 05.8	+67 15	25	SBbc			w NGC 4108;4108B
NGC 4512	NGC 4521	Galaxy	DRA	13.8	14.8	2.5'	12 32.8	+63 56	25	Sa			P w NGC 4521 @ 4.1' nf
NGC 4857	UGC 8077	Galaxy	DRA	13.8	13.5	1.3'	12 57.3	+70 12	26	SBb			H III 908
NGC 5971	UGC 9929	Galaxy	DRA	13.8	13.6	1.6'	15 35.6	+56 28	51	Sa			NGC 5969 at 6.4' p 0.5'X0.3'
NGC 6123	UGC 10333	Galaxy	DRA	13.8	12	0.8'	16 17.3	+61 56	29	Sa			
NGC 6390	UGC 10881	Galaxy	DRA	13.8	12.9	1.6'	17 28.5	+60 06	52	Sbc			Sev faint galaxies within 10'
NGC 6449	UGC 10965	Galaxy	DRA	13.8	13.5	1'	17 43.8	+56 48	53	Sc			
NGC 6668	NGC 6667	Galaxy	DRA	13.8	-	2.4'	18 30.7	+67 59	30	SBab/P			
NGC 6678	NGC 6667	Galaxy	DRA	13.8	-	2.4'	18 30.7	+67 59	30	SBab/P			H VI 15
NGC 5870	NGC 5826	Galaxy	DRA	13.9	13.9	1.2'	15 06.6	+55 29	50	SO			
NGC 6462	MCG 10-25	Galaxy	DRA	13.9	11.8	0.4'	17 44.8	+61 55	30	Elliptical			
NGC 6512	MCG 10-25	Galaxy	DRA	13.9	-	0.5'	17 54.8	+62 39	30	E-SO			
NGC 6532	UGC 11085	Galaxy	DRA	13.9	14.2	1.8'	17 59.2	+56 14	53	Sc			
NGC 6787	UGC 11424	Galaxy	DRA	13.9	13.9	1.2'	19 16.2	+60 25	54	SBb			
UGC 7941	PGC 43052	Galaxy	DRA	13.9	-	2.9'	12 46.1	+64 34	26	Sd			
UGC 10736	PGC 59668	Galaxy	DRA	13.9	14.9	3.1'	17 08.1	+69 28	29	S(B)dm			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2908	UGC 5152	Galaxy	DRA	14	-	0.8'	09 43.5	+79 42	8	S pec			H III 977
NGC 6088A	MCG 10-23	Galaxy	DRA	14	-	0.4'	16 10.7	+57 28	51	Sbc			H III 812;Double system
NGC 6090	UGC 10267	Galaxy	DRA	14	-	0.6'	16 11.7	+52 27	51	Sab			In chain of galaxies
NGC 6111	MCG 11-20	Galaxy	DRA	14	-	0.7'	16 14.4	+63 16	29	Elliptical			
NGC 6226	UGC 10532	Galaxy	DRA	14	-	0.8'	16 43.4	+61 59	29	S pec			
NGC 6376	UGC 10855	Galaxy	DRA	14	-	0.5'	17 25.3	+58 49	52	Sc			Multiple system diff to determine sep
NGC 6377	UGC 10855	Galaxy	DRA	14	-	0.7'	17 25.4	+58 49	52	Sbc			In group of 3
NGC 6436	UGC 10951	Galaxy	DRA	14	13.9	1.4'	17 41.2	+60 27	53	Sc			
NGC 6538	UGC 11062	Galaxy	DRA	14	-	1'	17 54.3	+73 25	12	S pec			
NGC 6598	UGC 11139	Galaxy	DRA	14	-	1.5'	18 08.9	+69 04	30	S			
NGC 6636	UGC 11221	Galaxy	DRA	14	-	2.1'	18 22.0	+66 38	30	Sc			Disrupted contact pair
NGC 6687	UGC 11309	Galaxy	DRA	14	14.4	1.3'	18 37.4	+59 39	54	Scd			
NGC 5906		Galaxy	DRA	-	-		15 15.9	+56 20	50	E+*			Part of NGC 5907
NGC 7015	UGC 11674	Galaxy	EQU	12.5	13.6	1.8'	21 05.6	+11 25	210	Sbc			
NGC 7046	UGC 11708	Galaxy	EQU	13.1	13.9	1.9'	21 14.9	+02 50	255	SBc			H III 858
NGC 1291	NGC 1269	Galaxy	ERI	8.5	13.1	9.7"	03 17.3	-41 06	390	SBO-a R			comp 2;2';PA138;UGC 2666
NGC 1269	NGC 1291	Galaxy	ERI	9.4	-	9.7"	03 17.3	-41 06	390	SBO-a R			
NGC 1535	PK 206-40.1	Pln Neb	ERI	9.4	7.2	20"	04 14.3	-12 44	268	4(2c)		12.1	H IV 26;PK206-40.1
NGC 1395	ESO 482-19	Galaxy	ERI	9.6	13.1	5.6'	03 38.5	-23 02	312	E3			H I 58
NGC 1407	ESO 548-67	Galaxy	ERI	9.7	12.9	4.9'	03 40.2	-18 35	312	EO			H I 107
NGC 1232	ESO 547-14	Galaxy	ERI	9.9	13.9	7.1'	03 09.8	-20 35	311	Sc			H II 258;Excellent face-on spiral
NGC 1532	ESO 359-27	Galaxy	ERI	9.9	13.8	11.6"	04 12.1	-32 52	356	SBb			NGC 1531 np 2';Nearly edge-on
NGC 1332	ESO 548-18	Galaxy	ERI	10.3	12.2	4'	03 26.3	-21 20	311	E7			H I 60
NGC 1300	ESO 547-31	Galaxy	ERI	10.4	13.8	5.9'	03 19.7	-19 25	311	SBbc			
NGC 1537	ESO 420-12	Galaxy	ERI	10.6	12.9	3.9'	04 13.7	-31 39	356	E4			
NGC 1084	MCG - 1- 8-	Galaxy	ERI	10.7	12.5	3.5'	02 46.0	-07 35	265	Sc			H I 64
NGC 1187	ESO 480-23	Galaxy	ERI	10.8	14	5.6'	03 02.6	-22 52	311	SBc			H III 245;Multi arm spiral
NGC 1637	MCG 0-12-	Galaxy	ERI	10.8	13.4	3.9'	04 41.5	-02 52	224	SBc			H I 122;Strong asymm vF but rrr outer arms
NGC 1600	MCG - 1-12-	Galaxy	ERI	10.9	12.4	3.1'	04 31.7	-05 05	223	E2			RC1;brst in grp;P w NGC 1601 at 1'6;NGC 1603 at 2'5
NGC 685	ESO 152-24	Galaxy	ERI	11	13.6	3.6'	01 47.7	-52 46	418	SBc			
NGC 1400	ESO 548-62	Galaxy	ERI	11	12.5	2.5'	03 39.5	-18 41	312	E1			H II 593;P w NGC 1407 nf
NGC 1386	ESO 358-35	Galaxy	ERI	11.2	12.7	3.4'	03 36.8	-36 00	355	Sa			Fornax Galaxy Cluster member
NGC 1700	MCG - 1-13-	Galaxy	ERI	11.2	13.3	3'	04 56.9	-04 52	224	E1			H IV 32;P w NGC 1699 at 6'6;smooth
NGC 1199	MCG - 3- 8-	Galaxy	ERI	11.4	13	2.3'	03 03.6	-15 37	266	E2			H II 503;Brightest in small group
NGC 1209	MCG - 3- 8-	Galaxy	ERI	11.4	12.5	2.2'	03 06.0	-15 37	266	E5			H II 504
NGC 1353	ESO 548-31	Galaxy	ERI	11.4	13	3.4'	03 32.1	-20 49	312	SBb			H III 246
NGC 1421	MCG - 2-10-	Galaxy	ERI	11.4	12.5	3.4'	03 42.5	-13 29	267	SBbc			H II 291;Nearly edge-on
NGC 1426	ESO 549- 1	Galaxy	ERI	11.4	13	2.6'	03 42.8	-22 07	312	E2			H III 248
NGC 1439	ESO 549- 9	Galaxy	ERI	11.4	13.3	2.4'	03 44.8	-21 55	312	E1			H III 249
NGC 1521	ESO 550-11	Galaxy	ERI	11.4	13.1	2.7'	04 08.3	-21 03	313	E3			
NGC 1309	MCG - 3- 9-	Galaxy	ERI	11.5	13	2.3'	03 22.1	-15 24	266	Sbc			H I 106
NGC 1325	ESO 548- 7	Galaxy	ERI	11.5	13.6	4.8'	03 24.4	-21 33	311	SBbc			H IV 77
NGC 1357	MCG - 2-10-	Galaxy	ERI	11.5	13.2	3.1'	03 33.3	-13 40	267	Sab Ring			H II 290
NGC 1389	ESO 358-38	Galaxy	ERI	11.5	12.6	2.5'	03 37.2	-35 45	355	E4			Fornax Galaxy Cluster member
NGC 1440	NGC 1442	Galaxy	ERI	11.5	12.8	2.2'	03 45.0	-18 16	312	SBO			H II 458
NGC 1453	MCG - 1-10-	Galaxy	ERI	11.5	13.2	2.3'	03 46.5	-03 58	222	E2			H I 155
NGC 1253	MCG - 1- 9-	Galaxy	ERI	11.7	14.3	5.3'	03 14.2	-02 49	221	SBc			H IV 17
NGC 1437	NGC 1436	Galaxy	ERI	11.7	13.4	3.1'	03 43.6	-35 51	356	SBab			Fornax Galaxy Cluster member
NGC 1640	ESO 551-27	Galaxy	ERI	11.7	13.3	2.7'	04 42.2	-20 26	314	SBab			
NGC 1726	MCG - 1-13-	Galaxy	ERI	11.7	12.1	2.1'	04 59.7	-07 45	269	SO			
NGC 1297	ESO 547-30	Galaxy	ERI	11.8	13.2	2.3'	03 19.2	-19 06	311	E2			
NGC 1436	NGC 1437	Galaxy	ERI	11.8	-	3.1'	03 43.6	-35 51	356	SBab			
NGC 1452	NGC 1455	Galaxy	ERI	11.8	12.9	2.3'	03 45.4	-18 38	312	SBO-a R			H II 459;= NGC 1455
NGC 1461	MCG - 3-10-	Galaxy	ERI	11.8	12.8	3'	03 48.5	-16 24	267	SO			H II 460;Lens-shaped
NGC 1518	ESO 550- 7	Galaxy	ERI	11.8	13.2	2.9'	04 06.8	-21 11	313	SBd			
NGC 782	ESO 114-15	Galaxy	ERI	11.9	13.4	2.4'	01 57.7	-57 47	418	SBb			
NGC 1172	MCG - 3- 8-	Galaxy	ERI	11.9	13.3	2.3'	03 01.6	-14 50	266	E1			H II 502
NGC 1337	MCG - 2- 9-	Galaxy	ERI	11.9	14.1	5.7"	03 28.1	-08 23	267	SBc			Nearly edge-on
NGC 1415	IC 1983	Galaxy	ERI	11.9	13.7	3.6"	03 40.9	-22 34	312	Sa			H II 267;IC 1983
NGC 1487	ESO 249-31	Galaxy	ERI	11.9	13.9	3.3'	03 55.8	-42 22	391	Sm			Double galaxy or collision system
NGC 1179	ESO 547- 1	Galaxy	ERI	12	15	4.7"	03 02.6	-18 54	311	Sp			
NGC 1241	MCG - 2- 9-	Galaxy	ERI	12	13.5	3.2'	03 11.2	-08 55	266	SBb			H II 286
NGC 1393	ESO 548-58	Galaxy	ERI	12	12.9	2'	03 38.6	-18 26	312	SBO			H III 451
NGC 1638	UGC 3133	Galaxy	ERI	12	13.1	2.3'	04 41.6	-01 49	224	SBO			H II 525;comp 2.6';PA50

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1653	UGC 3153	Galaxy	ERI	12	12.8	1.5'	04 45.8	-02 24	224	E0			H II 526
NGC 1723	MCG - 2-13-	Galaxy	ERI	12	-	3.3'	04 59.4	-10 59	269	SB Ring			
NGC 1358	MCG - 1-10-	Galaxy	ERI	12.1	13.8	2.5'	03 33.7	-05 05	222	SBO-a			H III 446
NGC 1376	MCG - 1-10-	Galaxy	ERI	12.1	13.3	2.1'	03 37.1	-05 03	222	Sc			H II 288
NGC 1417	MCG - 1-10-	Galaxy	ERI	12.1	13.6	2.7'	03 42.0	-04 42	222	SBb			H II 455;Bar;comp w NGC 1418;B arms w knots
NGC 1482	ESO 549-33	Galaxy	ERI	12.1	13.3	2.4'	03 54.6	-20 30	312	Sa			H III 962
NGC 1667	NGC 1689	Galaxy	ERI	12.1	12.9	1.8'	04 48.6	-06 19	269	SBc			
NGC 1779	MCG - 2-13-	Galaxy	ERI	12.1	13.1	2.5'	05 05.3	-09 09	270	SBO-a			H III 500
NGC 1359	ESO 548-39	Galaxy	ERI	12.2	13.6	2.5'	03 33.8	-19 29	312	SB/P			
NGC 1531	ESO 359-26	Galaxy	ERI	12.2	12.3	1.2'	04 12.0	-32 51	356	E6			P w NGC 1532
NGC 1132	UGC 2359	Galaxy	ERI	12.3	13.6	2.5'	02 52.9	-01 17	220	Elliptical			dbl system
NGC 1401	ESO 482-26	Galaxy	ERI	12.3	12.6	2.4'	03 39.4	-22 44	312	SBO			H III 247
NGC 1507	UGC 2947	Galaxy	ERI	12.3	13.4	3.6'	04 04.5	-02 11	223	SBp			H II 279
NGC 1620	UGC 3103	Galaxy	ERI	12.3	13.3	2.9'	04 36.6	-00 09	224	Sc			H II 514
NGC 1625	MCG - 1-12-	Galaxy	ERI	12.3	12.2	2.1'	04 37.1	-03 18	224	SBb			Two other dim edge-on galaxies in field of Nu Eri
NGC 1315	ESO 548- 3	Galaxy	ERI	12.4	13.2	1.6'	03 23.1	-21 23	311	SBO-a			
NGC 1320	MCG - 1- 9-	Galaxy	ERI	12.4	12.5	1.9'	03 24.8	-03 03	221	Sa			H III 197
NGC 1370	ESO 548-48	Galaxy	ERI	12.4	12.8	1.5'	03 35.2	-20 22	312	Elliptical			H III 559
NGC 1377	ESO 548-51	Galaxy	ERI	12.4	12.7	1.8'	03 36.7	-20 54	312	SO			H III 961
NGC 1438	ESO 482-41	Galaxy	ERI	12.4	12.9	2'	03 45.3	-23 00	312	SBO-a			
NGC 1635	UGC 3126	Galaxy	ERI	12.4	12.9	1.4'	04 40.1	-00 33	224	SBO-a R			H II 515
NGC 1752	MCG - 1-13-	Galaxy	ERI	12.4	13.1	2.6'	05 02.2	-08 14	269	SBc			
NGC 1140	MCG - 2- 8-	Galaxy	ERI	12.5	12.8	1.8'	02 54.6	-10 02	265	Sm			H II 470
NGC 1145	ESO 546-29	Galaxy	ERI	12.5	12.9	3.2'	02 54.6	-18 38	310	Sc			
NGC 1222	MCG - 1- 9-	Galaxy	ERI	12.5	12.3	0.8'	03 08.9	-02 57	221	E-SO			
NGC 1247	MCG - 2- 9-	Galaxy	ERI	12.5	12.9	3.4'	03 12.2	-10 29	266	Sbc			H II 900
NGC 1248	MCG - 1- 9-	Galaxy	ERI	12.5	12.5	1.2'	03 12.8	-05 14	221	SO			H III 443;Br lanes w traces of dark matter
NGC 1362	ESO 548-41	Galaxy	ERI	12.5	12.7	1.2'	03 33.9	-20 17	312	SO			H III 960
NGC 1383	ESO 548-53	Galaxy	ERI	12.5	12.9	1.9'	03 37.7	-18 20	312	SBO			
NGC 1460	ESO 358-62	Galaxy	ERI	12.5	13.3	1.7'	03 46.2	-36 42	356	SBO			
NGC 1622	Ho 77a	Galaxy	ERI	12.5	13.4	3.7'	04 36.6	-03 11	224	SBab			Near NGC 1618;NGC 1625
NGC 1659	MCG - 1-13-	Galaxy	ERI	12.5	13	1.5'	04 46.5	-04 47	224	Sbc			H III 589;Knotty filamentary arms;strong asym vF
NGC 1098	ESO 546-14	Galaxy	ERI	12.6	13.4	1.7'	02 44.9	-17 40	310	E-SO			
NGC 1125	MCG - 3- 8-	Galaxy	ERI	12.6	13	1.8'	02 51.7	-16 39	265	SBO-a			H III 450
NGC 1289	IC 314	Galaxy	ERI	12.6	13.2	1.8'	03 18.8	-01 58	221	SO			
NGC 1329	ESO 548-15	Galaxy	ERI	12.6	13	1.4'	03 26.0	-17 36	311	Sa			
NGC 1419	ESO 301-23	Galaxy	ERI	12.6	12.8	1.1'	03 40.7	-37 31	356	Elliptical			
NGC 1442	NGC 1440	Galaxy	ERI	12.6	-	2.2'	03 45.0	-18 16	312	SBO			H II 594
NGC 1458	MCG 03-10-	Galaxy	ERI	12.6	-	3.3'	03 45.0	-18 14	312	Sb			
NGC 1524	NGC 1516	Galaxy	ERI	12.6	-	1.4'	04 08.1	-08 50	268	SBbc			
NGC 1666	MCG - 1-13-	Galaxy	ERI	12.6	13	1.4'	04 48.5	-06 34	269	SBO-a			
NGC 1403	ESO 482-25	Galaxy	ERI	12.7	13	1.3'	03 39.2	-22 23	312	E-SO Ba			
NGC 1618	MCG - 1-12-	Galaxy	ERI	12.7	13.3	2.4'	04 36.1	-03 09	224	SBb			H II 524;In NGC 1618-1625 grp;P w NGC 1622 at 7'8
NGC 954	ESO 299- 4	Galaxy	ERI	12.8	13	1.6'	02 28.9	-41 24	389	SBc			
NGC 979	ESO 246-23	Galaxy	ERI	12.8	12.8	1.2'	02 31.6	-44 31	389	SBO Rin			
NGC 1394	ESO 548-60	Galaxy	ERI	12.8	12.1	1.3'	03 39.1	-18 18	312	SO			
NGC 1455	NGC 1452	Galaxy	ERI	12.8	-	2.3'	03 45.4	-18 38	312	SBO-a R			
NGC 1591	ESO 484-25	Galaxy	ERI	12.8	12.6	1.2'	04 29.5	-26 43	313	SBab			
NGC 1689	NGC 1667	Galaxy	ERI	12.8	-	1.8'	04 48.6	-06 19	269	SBc			
NGC 1103	MCG - 2- 8-	Galaxy	ERI	12.9	12.9	2.2'	02 48.1	-13 58	265	SBb			
NGC 1121	UGC 2332	Galaxy	ERI	12.9	11.5	0.9'	02 50.7	-01 44	220	SO			
NGC 1319	ESO 548- 6	Galaxy	ERI	12.9	12.6	1.3'	03 23.9	-21 32	311	SO			
NGC 1416	ESO 482-34	Galaxy	ERI	12.9	13.5	1.4'	03 41.0	-22 43	312	E1			
NGC 1427A	ESO 358-49	Galaxy	ERI	12.9	14.1	2.3'	03 40.1	-35 38	356	Ir Bar			
NGC 1441	MCG - 1-10-	Galaxy	ERI	12.9	12.8	1.7'	03 45.7	-04 06	222	SBb			poorly resolved;in NGC 1441-53 grp;P w NGC 1449
NGC 1484	ESO 359- 6	Galaxy	ERI	12.9	13.1	2.5'	03 54.3	-36 58	356	Sb			
NGC 1519	ESO 550- 9	Galaxy	ERI	12.9	13	2.1'	04 08.1	-17 12	313	SBb			
NGC 1552	UGC 3015	Galaxy	ERI	12.9	13.7	1.8'	04 20.3	-00 42	223	Sa			H III 490;comp 5.4';PA129;spiral
NGC 1614	MCG - 1-12-	Galaxy	ERI	12.9	13.2	1.3'	04 34.0	-08 35	269	SB/P			
NGC 939	ESO 246-11	Galaxy	ERI	13	13.2	1.2'	02 26.4	-44 27	389	Elliptical			
NGC 1081	MCG - 3- 8-	Galaxy	ERI	13	-	1.6'	02 45.1	-15 35	265	Sb			
NGC 1100	ESO 546-18	Galaxy	ERI	13	13.1	1.7'	02 45.6	-17 41	310	SBa			
NGC 1114	MCG - 3- 8-	Galaxy	ERI	13	-	1.8'	02 49.1	-17 00	265	Sc			H III 449
NGC 1162	MCG - 2- 8-	Galaxy	ERI	13	-	1.4'	02 58.9	-12 24	266	Elliptical			H III 469

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1200	MCG - 2- 8-	Galaxy	ERI	13	-	2.9'	03 03.9	-12 00	266	E-SO			H II 475
NGC 1338	MCG - 2- 9-	Galaxy	ERI	13	-	1.4'	03 28.9	-12 09	267	Sb			
NGC 1347	ESO 548-27	Galaxy	ERI	13	13.6	1.5'	03 29.7	-22 17	312	SBc			
NGC 1575	NGC 1577	Galaxy	ERI	13	-	1.5'	04 26.3	-10 06	268	SB/P			
NGC 1627	MCG - 1-12-	Galaxy	ERI	13	-	1.6'	04 37.6	-04 53	224	Sc			
NGC 1632	IC 386	Galaxy	ERI	13	-	1'	04 40.0	-09 27	269	Sa			
NGC 1692	ESO 552-21	Galaxy	ERI	13	13.4	1.3'	04 55.4	-20 34	314	SO			
NGC 1720	MCG - 1-13-	Galaxy	ERI	13	-	1.7'	04 59.3	-07 52	269	SBab			
NGC 1721	MCG - 2-13-	Galaxy	ERI	13	-	2.2'	04 59.3	-11 07	269	SO			
NGC 1725	MCG - 2-13-	Galaxy	ERI	13	-	1.9'	04 59.4	-11 08	269	E-SO			
NGC 1728	MCG - 2-13-	Galaxy	ERI	13	-	2'	04 59.5	-11 07	269	Sa			
NGC 1099	ESO 546-15	Galaxy	ERI	13.1	13	1.9'	02 45.3	-17 43	310	SBb			
NGC 1228	ESO 480-32	Galaxy	ERI	13.2	13.3	1.6'	03 08.2	-22 55	311	SBO-a			
NGC 1422	ESO 548-77	Galaxy	ERI	13.2	13.2	2.3'	03 41.5	-21 41	312	SBab			
NGC 1586	UGC 3062	Galaxy	ERI	13.2	13.5	1.7'	04 30.6	-00 18	223	Sbc			ssp of 2;comp 1.2';PA20;spiral
NGC 745	ESO 152-32	Galaxy	ERI	13.3	-	1.3'	01 54.1	-56 42	418	Sa			
NGC 1258	ESO 547-24	Galaxy	ERI	13.3	13.4	1.3'	03 14.1	-21 47	311	SBc			
NGC 1305	UGC 2697	Galaxy	ERI	13.3	13.5	1.5'	03 21.4	-02 19	221	E2			
NGC 1352	ESO 548-30	Galaxy	ERI	13.3	12.9	1'	03 31.5	-19 17	312	SBO			
NGC 1355	MCG - 1-10-	Galaxy	ERI	13.3	12.5	1.5'	03 33.4	-05 00	222	SO			poss edgewise S;P w NGC 1358 at 6'8
NGC 1391	ESO 548-59	Galaxy	ERI	13.3	12.6	1.2'	03 38.9	-18 21	312	SBO			
NGC 1451	NGC 1446	Galaxy	ERI	13.3	11.9	0.8'	03 46.1	-04 04	222	SO			
NGC 852	ESO 153-26	Galaxy	ERI	13.4	13.6	1.3'	02 08.9	-56 44	418	SBbc			
NGC 1092	ESO 546-17	Galaxy	ERI	13.4	13.1	0.9'	02 45.5	-17 33	310	Elliptical			
NGC 1301	ESO 547-32	Galaxy	ERI	13.4	13.2	2.2'	03 20.6	-18 43	311	SBbc			
NGC 1331	IC 324	Galaxy	ERI	13.4	13.2	0.9'	03 26.5	-21 21	311	E2			H III 959;IC 324
NGC 1481	ESO 549-32	Galaxy	ERI	13.4	12.9	1'	03 54.5	-20 26	312	E-SO			
NGC 1492	ESO 359-12	Galaxy	ERI	13.4	12.8	0.9'	03 58.2	-35 27	356	Sa			
NGC 1631	ESO 551-21	Galaxy	ERI	13.4	13.5	1.5'	04 38.4	-20 39	314	SBO-a			
NGC 1654	UGC 3154	Galaxy	ERI	13.4	12.6	0.8'	04 45.8	-02 05	224	Sa			
NGC 1325A	ESO 548-10	Galaxy	ERI	13.5	-	2.1'	03 24.8	-21 20	311	SBb			
NGC 1449	MCG - 1-10-	Galaxy	ERI	13.5	12.2	0.8'	03 46.1	-04 08	222	SO			
NGC 1577	NGC 1575	Galaxy	ERI	13.5	-	1.5'	04 26.3	-10 06	268	SB/P			
NGC 1681	MCG - 1-13-	Galaxy	ERI	13.5	-	1.3'	04 51.8	-05 48	269	Sb			
NGC 1256	ESO 547-23	Galaxy	ERI	13.6	12.7	1.1'	03 14.0	-21 59	311	E-SO Ba			
NGC 1402	ESO 548-61	Galaxy	ERI	13.6	12.6	0.8'	03 39.5	-18 32	312	SBO			
NGC 1418	MCG - 1-10-	Galaxy	ERI	13.6	13.6	1'	03 42.3	-04 44	222	SBb			H II 456;P w NGC 1417 main arms;v poor resolved
NGC 1547	ESO 550-G0	Galaxy	ERI	13.6	13.1	1.3'	04 17.2	-17 51	313	SBbc			
NGC 1242	MCG - 2- 9-	Galaxy	ERI	13.7	13.3	1.2'	03 11.3	-08 54	266	SBc			H III 591
NGC 1390	ESO 548-54	Galaxy	ERI	13.7	13.3	1.4'	03 37.9	-19 00	312	SBa			
NGC 1592	ESO 421-G0	Galaxy	ERI	13.7	13.4	1.4'	04 29.7	-27 25	313	S			
NGC 1599	MCG - 1-12-	Galaxy	ERI	13.7	13.1	0.9'	04 31.6	-04 35	223	Sc			
NGC 1163	MCG - 3- 8-	Galaxy	ERI	13.8	13.3	2.2'	03 00.4	-17 09	311	SBbc			
NGC 1345	ESO 548-26	Galaxy	ERI	13.8	14.2	1.5'	03 29.5	-17 47	312	SBc			
NGC 1396	FCC 202	Galaxy	ERI	13.8	13.5	1'	03 38.1	-35 26	355	SAB0			
NGC 1414	ESO 548-71	Galaxy	ERI	13.8	12.8	1.5'	03 41.0	-21 43	312	SBbc			
NGC 1424	NGC 1429	Galaxy	ERI	13.8	13.7	1.6'	03 43.2	-04 44	222	SBb			3 main arms;some knots
NGC 1437B	ESO 358-61	Galaxy	ERI	13.8	-	2.6'	03 45.9	-36 22	356	Sc			
NGC 1489	ESO 549-42	Galaxy	ERI	13.8	13.4	1.4'	03 57.6	-19 13	312	SBb			
NGC 1584	ESO 551- 6	Galaxy	ERI	13.8	13.1	0.8'	04 28.2	-17 31	313	E-SO			
NGC 1601	MCG - 1-12-	Galaxy	ERI	13.8	11.9	0.6'	04 31.7	-05 04	223	SO			
NGC 1603	MCG - 1-12-	Galaxy	ERI	13.8	12.7	0.8'	04 31.8	-05 06	223	E-SO			
NGC 1657	UGC 3156	Galaxy	ERI	13.8	13.6	1.2'	04 46.1	-02 05	224	SBbc			
NGC 1189	MCG - 3- 8-	Galaxy	ERI	13.9	14.8	1.7'	03 03.4	-15 37	266	SBcd			
NGC 1363	IRAS03324-	Galaxy	ERI	13.9	-	0.9'	03 34.8	-09 51	267	Sbc			
NGC 1083	MCG - 3- 8-	Galaxy	ERI	14	-	1.6'	02 45.7	-15 21	265	Sb			
NGC 1089	MCG - 3- 8-	Galaxy	ERI	14	-	0.9'	02 46.2	-15 04	265	Elliptical			
NGC 1102	ESO 546-19	Galaxy	ERI	14	-	0.8'	02 47.2	-22 13	310	SBb			
NGC 1110	MCG -01-08-	Galaxy	ERI	14	-	2.9'	02 49.2	-07 50	265	Sm			
NGC 1118	MCG - 2- 8-	Galaxy	ERI	14	-	2.2'	02 50.0	-12 10	265	SO			
NGC 1120	MCG -03-08-	Galaxy	ERI	14	-	1.3'	02 49.1	-14 28	265	E-SO			
NGC 1154	MCG - 2- 8-	Galaxy	ERI	14	-	1'	02 58.1	-10 22	266	Sc			
NGC 1155	MCG - 2- 8-	Galaxy	ERI	14	-	1'	02 58.2	-10 21	266	SO			
NGC 1195	MCG - 2- 8-	Galaxy	ERI	14	-	0.5'	03 03.5	-12 02	266	E-SO			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1196	MCG - 2- 8-	Galaxy	ERI	14	-	1.4'	03 03.6	-12 05	266	SO			
NGC 1208	MCG - 2- 8-	Galaxy	ERI	14	-	1.9'	03 06.2	-09 32	266	Sa			H II 285
NGC 1214	MCG - 2- 8-	Galaxy	ERI	14	12.8	1.3'	03 06.9	-09 33	266	Sa			
NGC 1229	ESO 480-33	Galaxy	ERI	14	14.1	1.4'	03 08.2	-22 58	311	SB/P			
NGC 1238	MCG - 2- 9-	Galaxy	ERI	14	-	1.6'	03 10.9	-10 45	266	Elliptical			
NGC 1266	MCG - 1- 9-	Galaxy	ERI	14	-	1.6'	03 16.0	-02 26	221	SO			H III 194
NGC 1284	MCG - 2- 9-	Galaxy	ERI	14	-	1.7'	03 17.8	-10 17	266	SO			H III 956
NGC 1285	MCG - 1- 9-	Galaxy	ERI	14	-	1.5'	03 17.9	-07 18	266	SB Ring			
NGC 1296	MCG - 2- 9-	Galaxy	ERI	14	-	1.1'	03 18.8	-13 04	266	Sab			
NGC 1298	UGC 2683	Galaxy	ERI	14	14.7	1.5'	03 20.2	-02 07	221	E1			UGC 2687,2.7';UGC 2460 at .9';PA10; sev sF obj in vic
NGC 1299	MCG - 1- 9-	Galaxy	ERI	14	-	1.2'	03 20.2	-06 16	266	Sb			H II 287
NGC 1321	MCG - 1- 9-	Galaxy	ERI	14	-	0.9'	03 24.8	-03 01	221	Sa			H III 196
NGC 1324	MCG - 1- 9-	Galaxy	ERI	14	-	2.1'	03 25.0	-05 45	266	Sb			H III 445
NGC 1354	MCG - 3-10-	Galaxy	ERI	14	-	2.3'	03 32.5	-15 13	267	Sa			H III 487
NGC 1437A	ESO 358-54	Galaxy	ERI	14	-	1.8'	03 43.0	-36 16	356	SBd			
NGC 1594	IC 2075	Galaxy	ERI	14	-	1.8'	04 30.9	-05 48	268	SBbc			
NGC 1626	NGC 1621	Galaxy	ERI	14	-	1.4'	04 36.4	-04 59	224	E			
NGC 1628	MCG - 1-12-	Galaxy	ERI	14	-	1.9'	04 37.6	-04 43	224	Sb			
NGC 1636	MCG - 1-12-	Galaxy	ERI	14	-	1.2'	04 40.7	-08 37	269	Sab			H II 522
NGC 1643	MCG - 1-13-	Galaxy	ERI	14	-	1.2'	04 43.7	-05 19	224	Sbc			H III 588
NGC 1645	MCG - 1-13-	Galaxy	ERI	14	-	2.4'	04 44.1	-05 28	224	Sa Ring			
NGC 1650	MCG - 3-13-	Galaxy	ERI	14	-	2.3'	04 45.2	-15 52	269	Elliptical			
NGC 1656	MCG - 1-13-	Galaxy	ERI	14	-	1.5'	04 45.9	-05 08	224	Sa			
NGC 1665	MCG - 1-13-	Galaxy	ERI	14	-	1.8'	04 48.3	-05 26	224	SO			H II 457
NGC 1686	MCG - 3-13-	Galaxy	ERI	14	-	1.7'	04 52.9	-15 21	269	Sbc			
NGC 1909	IC 2118	Brn Neb	ERI	-	-	180'	05 04.5	-07 16	270	R			Witchhead nebula ; Rigel may be illuminator
NGC 1316	ESO 357-22	Galaxy	FOR	8.5	13.4	11.2'	03 22.7	-37 13	355	SBO			Fornax Galaxy Cluster member
mcg06-07-0	Fornax Dw.	Galaxy	FOR	8.9	13.9	17'	02 39.9	-34 32	354	E4			Invl GLOCL NGC 1049;Local Grp; Fornax Dwarf
NGC 1360	PK 220-53.1	Pln Neb	FOR	9.4	13.7	360"	03 33.2	-25 52	312	3		11.3	
NGC 1097	ESO 416-20	Galaxy	FOR	9.5	13.8	9.4'	02 46.3	-30 17	354	SBb			H V 48
NGC 1365	ESO 358-17	Galaxy	FOR	9.6	14.1	11'	03 33.6	-36 08	355	SBb			Best example of barred spiral; Fornax Gal Cl member
NGC 1399	ESO 358-45	Galaxy	FOR	9.6	13.7	6.6'	03 38.5	-35 27	355	E1p			Fornax Galaxy Cluster member
NGC 1398	ESO 482-22	Galaxy	FOR	9.7	13.5	7.2'	03 38.9	-26 20	312	SBab			
NGC 1380	ESO 358-28	Galaxy	FOR	9.9	12.4	4.8'	03 36.5	-34 59	355	SBO			Fornax Galaxy Cluster member
NGC 1404	ESO 358-46	Galaxy	FOR	10	12.5	3.9'	03 38.9	-35 36	355	E1			Fornax Galaxy Cluster member
NGC 1350	ESO 358-13	Galaxy	FOR	10.3	13.1	5.4'	03 31.1	-33 38	355	SBab			Fornax Galaxy Cluster member
NGC 1344	NGC 1340	Galaxy	FOR	10.4	13.7	6.1'	03 28.3	-31 04	355	E3			H I 257
NGC 1326	ESO 357-26	Galaxy	FOR	10.5	13	4.3'	03 23.9	-36 28	355	SBO-a R			Fornax Galaxy Cluster member
NGC 1425	ESO 419- 4	Galaxy	FOR	10.6	13.4	5.8'	03 42.2	-29 54	356	Sb			H II 852
NGC 1201	ESO 480-28	Galaxy	FOR	10.7	12.8	3.3'	03 04.1	-26 04	311	Sa			H I 109
NGC 1302	ESO 481-20	Galaxy	FOR	10.7	13.5	4.1'	03 19.9	-26 04	311	SBO-a R			
NGC 1371	NGC 1367	Galaxy	FOR	10.7	13.9	5.9'	03 35.0	-24 56	312	SBa			H II 262
NGC 1387	ESO 358-36	Galaxy	FOR	10.7	12.8	3.2'	03 37.0	-35 30	355	SO			Fornax Galaxy Cluster member
NGC 986	ESO 299- 7	Galaxy	FOR	10.9	13.4	4'	02 33.6	-39 03	389	SBab			
NGC 1255	ESO 481-13	Galaxy	FOR	10.9	13.4	4.2'	03 13.5	-25 44	311	SBbc			
NGC 1379	ESO 358-27	Galaxy	FOR	10.9	12.8	2.4'	03 36.1	-35 26	355	E0			Fornax Galaxy Cluster member
NGC 1385	ESO 482-16	Galaxy	FOR	10.9	12.9	3.6'	03 37.5	-24 30	312	SBc			H II 263
NGC 1427	ESO 358-52	Galaxy	FOR	10.9	13.2	3.8'	03 42.3	-35 24	356	E3			Fornax Galaxy Cluster member
NGC 1317	NGC 1318	Galaxy	FOR	11	12.9	2.8'	03 22.7	-37 06	355	SBa			Fornax Galaxy Cluster member
NGC 1374	ESO 358-23	Galaxy	FOR	11.1	12.9	2.7'	03 35.3	-35 14	355	E0			Fornax Galaxy Cluster member
NGC 1340	NGC 1344	Galaxy	FOR	11.4	-	6.1'	03 28.3	-31 04	355	Elliptical			
NGC 1079	ESO 416-13	Galaxy	FOR	11.5	13.5	3.4'	02 43.7	-29 00	354	SBO-a R			
NGC 1381	ESO 358-29	Galaxy	FOR	11.5	12.1	2.6'	03 36.5	-35 18	355	SO			Fornax Galaxy Cluster member
NGC 1339	ESO 418- 4	Galaxy	FOR	11.6	12.6	1.8'	03 28.1	-32 17	355	E2			
NGC 1351	ESO 358-12	Galaxy	FOR	11.6	13.1	3.4'	03 30.6	-34 51	355	SO			Fornax Galaxy Cluster member
NGC 1367	NGC 1371	Galaxy	FOR	11.6	-	5.9'	03 35.0	-24 56	312	SBa			
NGC 897	ESO 355- 7	Galaxy	FOR	11.8	12.8	2.1'	02 21.1	-33 43	354	Sa			
NGC 1406	ESO 418-15	Galaxy	FOR	11.8	12.8	3.9'	03 39.4	-31 19	355	SBbc			
NGC 1318	NGC 1317	Galaxy	FOR	12	-	2.8'	03 22.7	-37 06	355	SBa			
NGC 1366	ESO 418-10	Galaxy	FOR	12	12.6	2.1'	03 33.9	-31 12	355	SO			H III 857
NGC 922	ESO 478-28	Galaxy	FOR	12.1	13.2	2'	02 25.1	-24 47	310	SBc Ring			H III 239
NGC 1288	ESO 357-13	Galaxy	FOR	12.1	13.6	2.3'	03 17.2	-32 35	355	SBc			
NGC 1292	ESO 418- 1	Galaxy	FOR	12.1	13.5	3'	03 18.2	-27 37	311	Sc			
NGC 1310	ESO 357-19	Galaxy	FOR	12.1	13.1	1.9'	03 21.1	-37 06	355	SBc			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1336	ESO 358- 2	Galaxy	FOR	12.3	13.4	2.1'	03 26.5	-35 43	355	E-SO			
NGC 1341	ESO 358- 8	Galaxy	FOR	12.3	12.9	1.6'	03 28.0	-37 09	355	SBab			Fornax Galaxy Cluster member
NGC 686	ESO 477- 6	Galaxy	FOR	12.4	13.2	1.7'	01 48.9	-23 48	308	E-SO			H III 459
NGC 857	ESO 415- 6	Galaxy	FOR	12.4	13	1.5'	02 12.6	-31 57	353	SO			
NGC 1217	ESO 300-10	Galaxy	FOR	12.4	13.2	1.8'	03 06.1	-39 02	390	Sa			
NGC 1375	ESO 358-24	Galaxy	FOR	12.4	13	2.3'	03 35.3	-35 16	355	SBO			
NGC 1380A	ESO 358-33	Galaxy	FOR	12.4	12.8	2.4'	03 36.8	-34 44	355	SO			
NGC 749	ESO 414-11	Galaxy	FOR	12.5	13.5	1.9'	01 55.7	-29 55	353	SBO-a			
NGC 1412	ESO 482-G0	Galaxy	FOR	12.5	12.8	1.8'	03 40.5	-26 52	312	SBO			
NGC 823	IC 1782	Galaxy	FOR	12.6	13.4	1.7'	02 07.3	-25 27	309	E-SO			
NGC 964	IC 1814	Galaxy	FOR	12.6	12.5	2.1'	02 31.1	-36 02	354	Sab			
NGC 1049	ESO 356-SC	Glo+Gx	FOR	12.6	-	1.2'	02 39.8	-34 16	354				Invl in Fornax System
NGC 1210	ESO 480-31	Galaxy	FOR	12.6	13.9	1.9'	03 06.8	-25 43	311	SBO			
NGC 775	ESO 477-18	Galaxy	FOR	12.7	13.3	1.7'	01 58.5	-26 18	309	SB Ring			
NGC 1165	ESO 417- 8	Galaxy	FOR	12.7	13.5	2.5'	02 58.8	-32 06	354	SBa			
NGC 1369	ESO 358-G0	Galaxy	FOR	12.7	13.4	1.5'	03 36.8	-36 15	355	SBO-a			
NGC 1428	ESO 358-53	Galaxy	FOR	12.7	12.9	1.6'	03 42.4	-35 09	356	SO			
NGC 1306	ESO 481-23	Galaxy	FOR	12.8	12.6	1.1'	03 21.1	-25 31	311	Sb			
NGC 1459	ESO 482-43	Galaxy	FOR	12.8	13.4	1.7'	03 47.0	-25 31	312	SBbc			
NGC 1382	NGC 1380B	Galaxy	FOR	12.9	13.5	1.5'	03 37.2	-35 12	355	E-SO Ba			near 1380
NGC 1380B	NGC 1382	Galaxy	FOR	13	-	1.5'	03 37.2	-35 12	355	E-SO B			
NGC 854	ESO 354-47	Galaxy	FOR	13.1	13.1	1.8'	02 11.5	-35 50	353	SBc			
NGC 696	ESO 353-50	Galaxy	FOR	13.3	13.3	1.7'	01 49.5	-34 54	353	SBO-a			
NGC 724	NGC 723	Galaxy	FOR	13.3	-	1.5'	01 53.8	-23 45	309	Sbc			
NGC 824	ESO 354-37	Galaxy	FOR	13.3	13.8	1.4'	02 06.9	-36 27	353	SBbc Ri			
NGC 1316C	ESO 357-27	Galaxy	FOR	13.3	13.1	1.3'	03 25.0	-37 01	355	SO			
NGC 1326A	ESO 357-28	Galaxy	FOR	13.3	14.4	1.9'	03 25.1	-36 22	355	SBp			
NGC 1326B	ESO 357-29	Galaxy	FOR	13.3	14.6	3.6'	03 25.3	-36 23	355	SBd			
NGC 1373	ESO 358-21	Galaxy	FOR	13.3	13.2	1.2'	03 35.0	-35 10	355	Elliptical			
NGC 1351A	ESO 358- 9	Galaxy	FOR	13.4	13.6	2.6'	03 28.8	-35 11	355	SBbc			
NGC 689	ESO 414- 5	Galaxy	FOR	13.6	13	1'	01 49.9	-27 28	308	Sab			
NGC 1097A	ESO 416-19	Galaxy	FOR	13.6	12.5	0.8'	02 46.2	-30 14	354	E5			
NGC 1124	ESO 480- 7	Galaxy	FOR	13.8	13.4	1'	02 51.6	-25 42	310	Sa Ring			
NGC 698	ESO 353-51	Galaxy	FOR	13.9	13.4	0.9'	01 49.7	-34 50	353	SBab Ri			
NGC 986A	MCG - 7- 6-	Galaxy	FOR	14	14.1	1.8'	02 32.7	-39 18	389	Ir Bar			
M 35	NGC 2168	Opn CL	GEM	5.1	12	28'	06 08.9	+24 21	137	III 2 m	200	8.2	Lord Rosse counted 300*;Orange * invl;NGC 2158 30' S
Cr 89		Opn CL	GEM	5.7	-	35'	06 18.0	+23 38	137	IV 2 p n	15		
NGC 2129	OCL 467	Opn CL	GEM	6.7	-	7'	06 00.7	+23 19	136	III 3 p	40	7.4	H VIII 26
Bochum 1		Opn CL	GEM	7.9	-	26.0'	06 25.5	+19 46	137		8	8.4	
NGC 2395	OCL 502	Opn CL	GEM	8	-	12'	07 27.2	+13 37	184	III 1 p	30	10	H VIII 11
NGC 2420	OCL 488	Opn CL	GEM	8.3	-	10'	07 38.4	+21 34	139	I 2 r	100	11.1	H VI 1
IC 2157	Cr 80	Opn CL	GEM	8.4	-	7'	06 04.8	+24 04	136	III 2 p	20	11.1	
NGC 2331	OCL 475	Opn CL	GEM	8.5	-	18'	07 07.0	+27 16	138	IV 1 p	30	9	H VIII 40
NGC 2158	OCL 468	Opn CL	GEM	8.6	-	5'	06 07.4	+24 06	136	II 3 r		12.4	H VI 17;150 F* on edge of M 35
NGC 2392	PK 197+17.1	Pln Neb	GEM	8.6	6.8	47"	07 29.2	+20 55	139	3b(3b)		10.6	Clown Face or Eskimo Nebula ;1;sev shells
NGC 2266	OCL 471	Opn CL	GEM	9.5	-	7'	06 43.3	+26 58	138	II 2 m	50	11	H VI 21
NGC 2355	NGC 2356	Opn CL	GEM	9.7	-	9'	07 17.0	+13 45	184	II 2 p	40	13	H VI 6
NGC 2356	NGC 2355	Opn CL	GEM	9.7	-	9'	07 17.0	+13 45	184				H VII 6
NGC 2304	OCL 484	Opn CL	GEM	10	-	5'	06 55.2	+17 59	138	II 1 p	30		H VI 2
NGC 2371	NGC 2372	Pln Neb	GEM	11.2	10.5	74"	07 25.6	+29 29	100	3a+6		14.9	faint double-lobed planetary;use filter;PK189+19.1
NGC 2372	NGC 2371	Pln Neb	GEM	11.2	10.5	74"	07 25.6	+29 30	100	3a(4)		14.8	faint double-lobed planetary;use filter;PK189+19.1
PK 205+14.	Abell 21	Pln Neb	GEM	11.3	16.4	10'	07 29.0	+13 15	184			16.1	Medusa nebula ;large and low surface brightness
NGC 2339	UGC 3693	Galaxy	GEM	11.8	13.5	2.7'	07 08.3	+18 47	138	SBbc Ri			B nucleus in weak compl bar w dk.lanes;F knotty arms
UGC 3691	PGC 20214	Galaxy	GEM	11.9	12.7	2.2'	07 08.0	+15 10	183	Sc			several blue patches along edge
IC 443	LBN 844	SN Rem	GEM	12	-	50'	06 17.8	+22 49	137				vF;vL;arc 25'x5';filamentary structure
NGC 2274	UGC 3541	Galaxy	GEM	12.1	13.2	2.4'	06 47.3	+33 34	99	Elliptical			H II 615;brightest of 4;disturbed
NGC 2418	UGC 3931	Galaxy	GEM	12.2	13.4	1.8'	07 36.6	+17 53	139	Elliptical			slightly asym envelope;sev. v.faint companions
NGC 2365	UGC 3821	Galaxy	GEM	12.4	13.4	2.4'	07 22.4	+22 05	139	SBa			hnf of 2
PK 194+ 2.1	J 900	Pln Neb	GEM	12.4	7.7	12"	06 26.0	+17 47	137	3b(2)		17.8	nearly stellar
NGC 2487	UGC 4126	Galaxy	GEM	12.5	14.2	2.7'	07 58.3	+25 09	140	SBb			P w NGC 2486
NGC 2342	UGC 3709	Galaxy	GEM	12.6	13	1.4'	07 09.3	+20 38	138	Sc			distorted
NGC 2492	UGC 4138	Galaxy	GEM	12.7	12.6	1'	07 59.5	+27 02	140	E-SO			compact
NGC 2435	UGC 3996	Galaxy	GEM	12.8	12.8	2.2'	07 44.2	+31 39	101	Sa			H II 616
NGC 2389	UGC 3872	Galaxy	GEM	12.9	13.9	2'	07 29.1	+33 52	100	SBc			H III 901;brightest in group;many knotty filam arms

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2481	UGC 4118	Galaxy	GEM	12.9	12.4	1.4'	07 57.2	+23 46	140	Sa			H II 302;distorted
NGC 2410	UGC 3917	Galaxy	GEM	13	13.4	2.4'	07 35.0	+32 49	100	SBb			
PK 189+ 7.1	M1- 7	Pln Neb	GEM	13	9.3	38"	06 37.4	+24 01	137	2		19.6	9 mag * 40" NW
NGC 2275	UGC 3542	Galaxy	GEM	13.1	13.1	1.3'	06 47.3	+33 36	99	Sab			H II 614;distorted
UGC 3974	PCG 21600	Galaxy	GEM	13.1	16.4	3.1'	07 41.9	+16 48	184	Ir-			
NGC 2289	UGC 3560	Galaxy	GEM	13.2	12.7	1.1'	06 50.9	+33 29	99	SO			H III 898;compact;birghtest in NGC 2289-2290 group
NGC 2290	UGC 3562	Galaxy	GEM	13.2	13	1.2'	06 50.9	+33 26	99	Sa			H III 897?;NGC 2289-2290 group
NGC 2291	ZWG 175. 2	Galaxy	GEM	13.2	13.1	1'	06 51.0	+33 32	99	SO			H III 897?;compact IC 2173
NGC 2341	UGC 3708	Galaxy	GEM	13.2	12.6	0.8'	07 09.2	+20 36	138	Sc			peculiar
NGC 2333	UGC 3689	Galaxy	GEM	13.3	12.7	1'	07 08.4	+35 10	100	Sa			H III 899
NGC 2357	UGC 3782	Galaxy	GEM	13.3	13.7	3.6'	07 17.7	+23 21	139	Sc			smaller companion
NGC 2486	UGC 4123	Galaxy	GEM	13.3	13.6	1.7'	07 57.9	+25 10	140	Sa			P w NGC 2487
NGC 2407	UGC 3896	Galaxy	GEM	13.4	13.4	1.1'	07 31.9	+18 20	139	E-SO			brightest in group
NGC 2449	UGC 4026	Galaxy	GEM	13.4	13.1	1.3'	07 47.3	+26 56	140	Sab			
NGC 2498	UGC 4142	Galaxy	GEM	13.4	13.1	1.1'	07 59.6	+24 59	140	SBa			very bright bar;singular loop westw
NGC 2379	UGC 3857	Galaxy	GEM	13.5	12.8	0.8'	07 27.4	+33 49	100	SO			very compact;NGC 2389 group
NGC 2370	UGC 3835	Galaxy	GEM	13.6	12.5	0.8'	07 25.0	+23 47	139	SBc			
NGC 2375	UGC 3854	Galaxy	GEM	13.6	13.8	1.3'	07 27.2	+33 50	100	SBb			NGC 2389 group
NGC 2373	UGC 3848	Galaxy	GEM	13.7	12.2	0.6'	07 26.6	+33 49	100	Sbc			
NGC 2388	UGC 3870	Galaxy	GEM	13.7	12.9	1'	07 28.9	+33 49	100	S			H III 900;NGC 2389 group
NGC 2480	UGC 4116	Galaxy	GEM	13.7	13.4	1.3'	07 57.2	+23 47	140	SBcd			distorted
NGC 2294	MCG 6-15-	Galaxy	GEM	13.8	13.8	0.8'	06 51.2	+33 32	99	E6			
UGC 3587	PGC 19813	Galaxy	GEM	13.8	13.4	2.8'	06 53.8	+19 18	138	S			
NGC 2393	UGC 3884	Galaxy	GEM	14	13.8	1.2'	07 30.1	+34 02	100	Sc			NGC 2389 group
IC 444	LBN 840	Brn Neb	GEM	-	-	8'	06 19.4	+23 17	137	E			7th mag star (12 GEM) w faint neby;diam 4'
Berk 23		Opn CL	GEM	-	-	4'	06 33.3	+20 32	137	III 1m:b	25	15	
Berk 29		Opn CL	GEM	-	-	4'	06 53.1	+16 55	183	I 1p :b	20	15	
Sh2-247	LBN 843	Brn Neb	GEM	-	-	10'	06 08.5	+21 37	137	E			
IC 1459	IC 5265	Galaxy	GRU	10	13.2	5.1'	22 57.2	-36 28	384	E3			
NGC 7213	ESO 288-43	Galaxy	GRU	10.1	12.3	3.7'	22 09.3	-47 10	414	Sa			16' SE from Alpha Gru
NGC 7410	ESO 346-12	Galaxy	GRU	10.3	12.5	5.5'	22 55.0	-39 40	415	SBa			Nearly edge-on
NGC 7424	ESO 346-19	Galaxy	GRU	10.5	15.1	10'	22 57.3	-41 04	415	SBc			face on
IC 5267	ESO 290-G0	Galaxy	GRU	10.5	13.7	5.4'	22 57.2	-43 24	415	Sa(s)			Brightest in group
NGC 7552	IC 5294	Galaxy	GRU	10.6	12.8	3.4'	23 16.2	-42 35	415	SBab			
NGC 7582	ESO 291-16	Galaxy	GRU	10.6	13	5'	23 18.4	-42 22	415	SBab			Group w NGC 7590 & 7599
IC 5201	ESO 289-GC	Galaxy	GRU	10.6	14.3	7.8'	22 21.0	-46 02	414	SBc			
NGC 7144	ESO 237-11	Galaxy	GRU	10.8	13.6	3.7'	21 52.7	-48 15	413	Elliptical			
NGC 7418	ESO 406-25	Galaxy	GRU	10.9	13.2	3.8'	22 56.6	-37 02	384	SBc			
IC 5148	PK 2-52.1	Pln Neb	GRU	11	14.4	120"	21 59.6	-39 23	413	4		16.2	Also IC 5149 and IC 5150;called IC 5150 in Hartung
NGC 7145	ESO 237-13	Galaxy	GRU	11.1	13.1	2.5'	21 53.3	-47 53	413	Elliptical			
NGC 7496	ESO 291- 1	Galaxy	GRU	11.1	13.5	3.3'	23 09.8	-43 26	415	SBb			
NGC 7531	ESO 291-10	Galaxy	GRU	11.3	13.4	4.5'	23 14.8	-43 36	415	Sbc			
NGC 7412	ESO 290-24	Galaxy	GRU	11.4	13.8	3.8'	22 55.8	-42 39	415	SBb			
IC 5273	ESO 346-G0	Galaxy	GRU	11.4	13	2.6'	22 59.4	-37 42	384	SBc			Asymmetrical
NGC 7590	ESO 347-33	Galaxy	GRU	11.5	12.5	2.6'	23 18.9	-42 14	415	Sbc			near 7582
NGC 7599	IC 5308	Galaxy	GRU	11.5	13.3	4.4'	23 19.3	-42 16	415	SBc			near 7582
IC 5181	ESO 289-G0	Galaxy	GRU	11.5	12.2	2.5'	22 13.4	-46 01	414	SA0			Brightest in group with NGC 7232;A, B and 7233
NGC 7079	ESO 287-36	Galaxy	GRU	11.6	12.6	2'	21 32.6	-44 04	413	SBO			
NGC 7097	ESO 287-48	Galaxy	GRU	11.7	12.7	1.8'	21 40.2	-42 32	413	Elliptical			
NGC 7462	ESO 346-28	Galaxy	GRU	11.7	12.8	4.3'	23 02.8	-40 50	415	SBbc			
NGC 7456	ESO 346-26	Galaxy	GRU	11.8	14.1	5.1'	23 02.2	-39 34	415	Sc			
NGC 7166	ESO 288-27	Galaxy	GRU	11.9	12.6	2.4'	22 00.5	-43 23	414	E-SO			
NGC 7421	ESO 346-17	Galaxy	GRU	11.9	13.2	2'	22 56.9	-37 21	384	SBab			
IC 5186	ESO 405-G0	Galaxy	GRU	11.9	12.6	1.8'	22 18.8	-36 48	383	SBb			
IC 5240	ESO 290-G0	Galaxy	GRU	11.9	13.6	2.8'	22 41.9	-44 46	414	SBa			
NGC 7232	ESO 289- 7	Galaxy	GRU	12	12.7	2.6'	22 15.6	-45 51	414	SBa			P w NGC 7233 @2'
NGC 7632	IC 5313	Galaxy	GRU	12.1	12.9	2.4'	23 22.0	-42 29	415	SBO Rin			
NGC 7070	ESO 287-28	Galaxy	GRU	12.3	13.7	2.4'	21 30.4	-43 05	413	SBc			
NGC 7070A	ESO 287-34	Galaxy	GRU	12.3	13.3	2.1'	21 31.8	-42 51	413	Sa			
NGC 7368	ESO 345-49	Galaxy	GRU	12.4	12.7	2.9'	22 45.5	-39 21	414	SBb			
NGC 7233	ESO 289- 8	Galaxy	GRU	12.5	13.2	1.7'	22 15.8	-45 51	414	SBO-a			
NGC 7118	ESO 236-45	Galaxy	GRU	12.6	13	1.4'	21 46.2	-48 21	413	E-SO			
NGC 7162A	ESO 288-28	Galaxy	GRU	12.6	14.4	2.6'	22 00.6	-43 09	414	SB			
NGC 7307	ESO 345-26	Galaxy	GRU	12.6	13.7	3.4'	22 33.9	-40 56	414	SBc/P			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 7476	ESO 290-45	Galaxy	GRU	12.6	12.8	1.4'	23 05.2	-43 06	415	SBab			
NGC 7075	ESO 343- 4	Galaxy	GRU	12.7	12.7	1.2'	21 31.5	-38 37	382	Elliptical			
NGC 7162	ESO 288-26	Galaxy	GRU	12.7	13.7	2.8'	21 59.6	-43 18	413	Sc			
NGC 7107	ESO 287-52	Galaxy	GRU	12.8	13.8	2.1'	21 42.4	-44 48	413	SBd			
NGC 7117	ESO 236-40	Galaxy	GRU	12.8	12.9	1.4'	21 45.8	-48 25	413	E-SO			
NGC 7404	IC 5260	Galaxy	GRU	12.8	12.9	1.5'	22 54.3	-39 19	415	E-SO Ba			
NGC 7091	IC 5114	Galaxy	GRU	12.9	14.1	2.1'	21 34.1	-36 39	382	SBd			
NGC 7119A	NGC 7119-1	Galaxy	GRU	12.9	12.6	1.2'	21 46.3	-46 31	413	SBbc			
NGC 7087	ESO 343- 8	Galaxy	GRU	13	12.5	1.1'	21 34.6	-40 49	413	Sab			
NGC 7119B	NGC 7119-2	Galaxy	GRU	13	10.9	1.1'	21 46.2	-46 31	413	Sc			
NGC 7232A	ESO 289- 3	Galaxy	GRU	13	12.7	2.1'	22 13.7	-45 54	414	SBab			
NGC 7545	ESO 347- 4	Galaxy	GRU	13	12.6	1.1'	23 15.5	-38 32	385	SB Ring			
NGC 7418A	ESO 406-27	Galaxy	GRU	13.2	15.1	3.5'	22 56.7	-36 46	384	Scd			
NGC 7249	ESO 190- 1	Galaxy	GRU	13.4	13.1	1.1'	22 20.5	-55 08	438	SO			
NGC 7322	NGC 7334	Galaxy	GRU	13.5	12.6	0.9'	22 37.9	-37 14	384	Sa			
NGC 7232B	ESO 289- 9	Galaxy	GRU	13.6	14.5	1.6'	22 15.9	-45 47	414	SB			
NGC 7382	ESO 406-15	Galaxy	GRU	13.6	12.5	1.2'	22 50.4	-36 51	384	Sa			
NGC 7400	ESO 290-22	Galaxy	GRU	13.6	-	2.7'	22 54.3	-45 21	415	Sbc			
NGC 7072	ESO 287-31	Galaxy	GRU	13.7	12.9	0.9'	21 30.6	-43 09	413	SBcd			
NGC 7297	ESO 345-18	Galaxy	GRU	13.7	12.8	0.9'	22 31.2	-37 50	384	Sbc			
NGC 7072A	ESO 287-29	Galaxy	GRU	13.9	12.9	0.8'	21 30.4	-43 12	413	SBc			
NGC 7412A	ESO 290-28	Galaxy	GRU	13.9	14.3	3.8'	22 57.1	-42 48	415	SBd			
NGC 7299	ESO 345-19	Galaxy	GRU	14	13	0.7'	22 31.6	-37 49	384	SBc			
M 13	NGC 6205	Glob CL	HER	5.8	12	23.2'	16 41.7	+36 28	114	V			Hercules cluster;Messier said nebula, no stars
M 92	NGC 6341	Glob CL	HER	6.5	11	11.2'	17 17.1	+43 08	81	IV			Lord Rosse saw spiral structure
DoDz 8		Opn CL	HER	6.8	-	13'	17 26.2	+24 12	158	IV 2 p	6	8.2	
NGC 6229	GCL 47	Glob CL	HER	9.4	-	3.8'	16 47.0	+47 32	80	IV			H IV 50;Wm.
NGC 6210	PK 43+37.1	Pln Neb	HER	9.7	5.9	20"	16 44.5	+23 48	156	2(3b)		12.5	
IC 4593	PK 25+40.1	Pln Neb	HER	11	7.4	12.5"	16 11.7	+12 04	200	2(2)		11.1	Central star is variable mags 10.2 to 11.1
NGC 6482	UGC 11009	Galaxy	HER	11.4	12.8	2.1'	17 51.8	+23 04	158	E3p			
NGC 6207	UGC 10521	Galaxy	HER	11.6	12.9	3'	16 43.1	+36 50	114	Sc			H II 701;No def nucl;B * nr center;30' NE from M 13
PK 51+ 9.1	Hu 2-1	Pln Neb	HER	11.6	4.6	3"	18 49.8	+20 50	160			13.3	Stellar
NGC 6548	NGC 6550	Galaxy	HER	11.7	13.9	2.9'	18 06.0	+18 35	159	SBO			H III 555;P w NGC 6549
NGC 6166	UGC 10409	Galaxy	HER	11.8	12.9	2.2'	16 28.6	+39 33	80	E2p			H II 875;Center of cluster;many vF galaxies near
NGC 6181	UGC 10439	Galaxy	HER	11.9	12.8	2.5'	16 32.3	+19 50	156	SBc			H II 753;UGC 10439
NGC 6487	UGC 11022	Galaxy	HER	11.9	13.1	1.9'	17 52.7	+29 50	116	Elliptical			P w NGC 6486 at 2' PA 229;sev UGC galaxys in field
NGC 6501	UGC 11049	Galaxy	HER	12	13.3	1.8'	17 56.1	+18 22	159	Sa			H III 958
NGC 6574	NGC 6610	Galaxy	HER	12	12.3	1.5'	18 11.9	+14 59	204	SBbc			
PK 53+24.1	VY 1-2	Pln Neb	HER	12	6.7	5.2"	17 54.4	+28 00	116	2		17.6	
NGC 6173	UGC 10421	Galaxy	HER	12.1	13.2	1.9'	16 29.8	+40 49	80	E3			H III 640
NGC 6389	UGC 10893	Galaxy	HER	12.1	13.7	2.8'	17 32.7	+16 24	203	Sbc			H II 901;UGC 10893
NGC 6500	UGC 11048	Galaxy	HER	12.1	13.4	2.2'	17 56.0	+18 20	159	Sab			H III 957;P w NGC 6501 at 3' PA 26
NGC 6632	UGC 11226	Galaxy	HER	12.1	13.6	3'	18 25.1	+27 32	160	Sbc			
NGC 6661	NGC 6660	Galaxy	HER	12.1	12.6	1.8'	18 34.6	+22 55	160	Sa			P w NGC 6658 at 9'
NGC 6106	UGC 10328	Galaxy	HER	12.2	13.4	2.4'	16 18.8	+07 25	201	Sc			H II 151;UGC 10328
NGC 6155	UGC 10385	Galaxy	HER	12.2	12.3	1.3'	16 26.1	+48 22	80	Sc			H II 690
NGC 6269	UGC 10629	Galaxy	HER	12.2	13.4	2'	16 58.0	+27 51	157	Elliptical			a large number of vF;vS galaxies in vicinity
NGC 6495	UGC 11034	Galaxy	HER	12.2	13.6	2'	17 54.8	+18 20	159	Elliptical			P w NGC 6490 and UGC 11037 at 6'
NGC 6674	UGC 11308	Galaxy	HER	12.2	14.4	4.2'	18 38.6	+25 22	160	SBb			
NGC 6484	UGC 11010	Galaxy	HER	12.3	13.5	1.9'	17 51.8	+24 29	158	Sb			Brightest of 3
NGC 6239	UGC 10577	Galaxy	HER	12.4	13.5	2.4'	16 50.1	+42 44	80	SBb			H III 727;bright bar;UGC 10577
NGC 6278	UGC 10656	Galaxy	HER	12.4	13.3	2.1'	17 00.8	+23 01	157	SO			H III 124;P w NGC 6276 & 6277;UGC 10656
NGC 6555	UGC 11121	Galaxy	HER	12.4	13.5	2.1'	18 07.8	+17 36	159	SBc			H II 902
NGC 6146	UGC 10379	Galaxy	HER	12.5	12.7	1.3'	16 25.2	+40 54	80	Elliptical			H III 638;Sev comps incl NGC 6145 @ 4' PA 335
NGC 6467	NGC 6468	Galaxy	HER	12.5	13.9	2.6'	17 50.7	+17 32	158	S pec			
NGC 6504	UGC 11053	Galaxy	HER	12.5	12.4	2.2'	17 56.1	+33 12	116	S pec			
NGC 6442	UGC 10978	Galaxy	HER	12.6	13.8	1.8'	17 46.9	+20 46	158	Elliptical			P w UGC 10979 at 7' PA 33 15mag 1'X1'
NGC 6577	UGC 11148	Galaxy	HER	12.6	13.4	1.5'	18 12.0	+21 28	159	Elliptical			Several galaxies within 15'
NGC 6599	NGC 6600	Galaxy	HER	12.6	13	1.3'	18 15.7	+24 55	159	SO			
NGC 6154	UGC 10382	Galaxy	HER	12.7	14.1	2.1'	16 25.5	+49 50	80	SBa			H III 680
NGC 6255	UGC 10606	Galaxy	HER	12.7	14.4	3.6'	16 54.8	+36 30	114	SBc			H III 689;UGC 10606
NGC 6339	UGC 10790	Galaxy	HER	12.7	14.3	2.9'	17 17.1	+40 51	81	SBcd			
NGC 6408	UGC 10930	Galaxy	HER	12.7	13.4	1.6'	17 38.8	+18 53	158	SBa			
NGC 6447	UGC 10975	Galaxy	HER	12.7	13	1.6'	17 46.3	+35 34	116	SBbc			P w NGC 6446 at 2' p;BM w slender arms

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 6550	NGC 6548	Galaxy	HER	12.7	-	2.9'	18 06.0	+18 35	159	SBO			
NGC 6575	UGC 11138	Galaxy	HER	12.7	13.6	1.8'	18 11.0	+31 07	116	Elliptical			P w IC 1277
NGC 6697	UGC 11349	Galaxy	HER	12.7	12.9	1.2'	18 45.2	+25 31	160	Elliptical			
UGC 11124	MCG +06-40	Galaxy	HER	12.7	14.5	2.7'	18 07.5	+35 33	116	SBc			
NGC 6030	UGC 10139	Galaxy	HER	12.8	12.5	1.2'	16 01.9	+17 57	155	SO			sev comps w in 10'
NGC 6329	UGC 10771	Galaxy	HER	12.8	14.1	1.8'	17 14.3	+43 41	81	Elliptical			Sev galaxys near
NGC 6524	UGC 11079	Galaxy	HER	12.8	13	1.4'	17 59.2	+45 53	81	E-SO			
NGC 6585	UGC 11159	Galaxy	HER	12.8	12.4	1.9'	18 12.4	+39 38	82	SBc			
NGC 6610	NGC 6574	Galaxy	HER	12.8	-	1.5'	18 11.9	+14 59	204	SBbc			
NGC 6186	UGC 10448	Galaxy	HER	12.9	13.4	1.5'	16 34.4	+21 32	156	SBa			
NGC 6196	IC 4615	Galaxy	HER	12.9	13.7	1.3'	16 37.9	+36 04	114	E-SO			In a group
NGC 6314	UGC 10752	Galaxy	HER	12.9	12.8	1.6'	17 12.6	+23 16	157	Sa			Brightest of 3
NGC 6364	UGC 10835	Galaxy	HER	12.9	13.4	1.5'	17 24.5	+29 23	115	SO			
NGC 6372	UGC 10861	Galaxy	HER	12.9	13.5	1.7'	17 27.5	+26 28	158	Sc			H III 137;sf of 2;UGC 10861
NGC 6379	IC 4636	Galaxy	HER	12.9	12.9	1.1'	17 30.6	+16 17	203	Sc			In NGC 6375 Group
NGC 6485	UGC 11014	Galaxy	HER	12.9	13.6	1.5'	17 51.9	+31 28	116	Sbc			
NGC 6587	UGC 11166	Galaxy	HER	12.9	13.2	2'	18 13.8	+18 50	159	E-SO			
NGC 6628	UGC 11211	Galaxy	HER	12.9	13.7	1.9'	18 22.4	+23 29	159	SO			
NGC 6658	UGC 11274	Galaxy	HER	12.9	12.4	1.6'	18 33.9	+22 53	160	Sa			P w NGC 6661 at 9'
NGC 6052	NGC 6064-1	Galaxy	HER	13	12.4	0.8'	16 05.2	+20 32	155	Pec			H III 140;Double system
NGC 6058	PK 64+48.1	Pln Neb	HER	13	10.8	25"	16 04.4	+40 41	79	3(2)		13.9	H III 637;PK64+48.1
NGC 6195	UGC 10469	Galaxy	HER	13	13.4	1.5'	16 36.5	+39 02	80	Sb			H III 893
NGC 6619	UGC 11200	Galaxy	HER	13	13.3	1.2'	18 18.9	+23 39	159	Elliptical			
Abell 2199		Gal CL	HER	13	-	89.6'	16 28.6	+39 31	80	2 1 I			Centered on NGC 6166; 88 galaxies
NGC 6060	UGC 10196	Galaxy	HER	13.1	13.8	2'	16 05.9	+21 29	155	SBbc			
NGC 6081	IC 1202	Galaxy	HER	13.1	13	1.8'	16 12.9	+09 52	200	SO			
NGC 6267	UGC 10628	Galaxy	HER	13.1	13.2	1.3'	16 58.1	+22 59	157	SBc			H III 123
NGC 6417	UGC 10945	Galaxy	HER	13.1	13.6	1.4'	17 41.8	+23 40	158	SBb			Distorted arm in sf part
NGC 6429	UGC 10960	Galaxy	HER	13.1	13.3	1.8'	17 44.1	+25 21	158	SBa			
NGC 6460	UGC 10997	Galaxy	HER	13.1	13.8	1.9'	17 49.5	+20 46	158	Sc			P w NGC 6458
NGC 6160	UGC 10400	Galaxy	HER	13.2	14.3	1.8'	16 27.7	+40 56	80	E2			H II 652
NGC 6315	MCG 4-40-	Galaxy	HER	13.2	12.9	1'	17 12.8	+23 13	157	SBc			
NGC 6350	UGC 10800	Galaxy	HER	13.2	13	1'	17 18.7	+41 42	81	SO			P w NGC 6348 at 5' sp
NGC 6660	NGC 6661	Galaxy	HER	13.2	-	1.8'	18 34.6	+22 55	160	Sa			
UGC 10806	PGC 60052	Galaxy	HER	13.2	13.8	2.5'	17 18.9	+49 52	81	SB(s)dm			
NGC 6185	UGC 10444	Galaxy	HER	13.3	13.3	1.2'	16 33.3	+35 21	114	Sa			
NGC 6233	UGC 10573	Galaxy	HER	13.3	13.5	1.4'	16 50.3	+23 35	157	SO			
NGC 6363	UGC 10827	Galaxy	HER	13.3	13.2	1.1'	17 22.7	+41 06	81	Elliptical			
NGC 6427	NGC 6431	Galaxy	HER	13.3	13.2	1.6'	17 43.6	+25 30	158	E-SO			P w NGC 6429 at 10' PA 325
NGC 6433	UGC 10962	Galaxy	HER	13.3	13.2	2'	17 43.9	+36 48	116	Sb			15 mag comp at 4' following
NGC 6513	UGC 11078	Galaxy	HER	13.3	13.3	1.2'	17 59.6	+24 53	159	SBO			
NGC 6627	UGC 11212	Galaxy	HER	13.3	13.5	1.3'	18 22.6	+15 42	204	SBb			
NGC 6641	UGC 11250	Galaxy	HER	13.3	12.6	0.9'	18 29.0	+22 54	160	S			
NGC 6301	IC 4643;H IV	Galaxy	HER	13.4	14.5	2.3'	17 08.5	+42 20	80	Sc			
NGC 6308	UGC 10747	Galaxy	HER	13.4	13.6	1.1'	17 12.0	+23 23	157	SBc			disturbed;In NGC 6314 group
NGC 6321	UGC 10768	Galaxy	HER	13.4	13.4	1.1'	17 14.4	+20 19	157	SBbc			
NGC 6458	UGC 10994	Galaxy	HER	13.4	13.4	1.3'	17 49.2	+20 48	158	SO			P w NGC 6460 at 5' PA 118
NGC 6527	UGC 11094	Galaxy	HER	13.4	13.7	1.4'	18 01.8	+19 44	159	Sa			
NGC 6028	NGC 6046	Galaxy	HER	13.5	13.8	1.3'	16 01.5	+19 22	155	Sa Ring			
NGC 6032	UGC 10148	Galaxy	HER	13.5	13.4	1.6'	16 03.0	+20 57	155	SBb			P w NGC 6035 6' PA 127
NGC 6034	MCG 3-41-	Galaxy	HER	13.5	13.4	1'	16 03.5	+17 12	155	Elliptical			
NGC 6035	UGC 10154	Galaxy	HER	13.5	13.1	0.9'	16 03.4	+20 53	155	SBc			
NGC 6047	MCG 3-41-	Galaxy	HER	13.5	13.4	1.1'	16 05.2	+17 44	155	EO			
NGC 6073	UGC 10235	Galaxy	HER	13.5	13.2	1.3'	16 10.2	+16 42	200	Sc			H III 74
NGC 6149	UGC 10391	Galaxy	HER	13.5	13.2	1.1'	16 27.4	+19 36	156	SO			
NGC 6224	UGC 10555	Galaxy	HER	13.5	13.1	0.9'	16 48.3	+06 19	202	E-SO			P w NGC 6225 at 5' PA 173
NGC 6283	UGC 10652	Galaxy	HER	13.5	-	1.1'	16 59.4	+49 55	80	S Ring			H III 728
NGC 6311	UGC 10741	Galaxy	HER	13.5	13.7	1.1'	17 10.7	+41 39	80	Elliptical			Triple interacting system
NGC 6490	UGC 11033	Galaxy	HER	13.5	13.1	1'	17 54.5	+18 23	159	E-SO			P w NGC 6495 at 6' PA 121
NGC 6013	UGC 10080	Galaxy	HER	13.6	13.5	1.4'	15 52.9	+40 39	79	SBb			
NGC 6061	UGC 10199	Galaxy	HER	13.6	13.3	1'	16 06.3	+18 15	155	SO			
NGC 6062	UGC 10202	Galaxy	HER	13.6	13.5	1.2'	16 06.4	+19 47	155	SBbc			mf of 2
NGC 6132	UGC 10363	Galaxy	HER	13.6	13.1	1.5'	16 23.6	+11 47	201	Sab			
NGC 6162	UGC 10353	Galaxy	HER	13.6	13	0.9'	16 28.4	+32 51	114	SO			Brightest of 3

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 6177	UGC 10428	Galaxy	HER	13.6	14.2	1.7'	16 30.6	+35 03	114	SBb			H III 890;P w NGC 6179 at 3' PA 31
NGC 6279	UGC 10645	Galaxy	HER	13.6	13.6	1.1'	16 59.0	+47 14	80	SBO			
NGC 6332	UGC 10773	Galaxy	HER	13.6	13.3	1.2'	17 15.0	+43 40	81	Sa			
NGC 6336	UGC 10786	Galaxy	HER	13.6	12.9	0.9'	17 16.3	+43 49	81	SBa			
NGC 6547	UGC 11110	Galaxy	HER	13.6	12.6	1.3'	18 05.2	+25 14	159	Sa			
NGC 6560	UGC 11117	Galaxy	HER	13.6	13.4	1.2'	18 05.2	+46 53	82	SBbc			
PK 52+ 7.1	K4-10	Pln Neb	HER	13.6	-	30.0"	18 59.1	+20 37	161				Stellar
UGC 10200	PGC 57098	Galaxy	HER	13.6	-	0.7'	16 05.7	+41 21	79	Pec			North of 2;disturbed?;very diffuse
UGC 11152	PGC 61558	Galaxy	HER	13.6	14.4	2.5'	18 12.5	+18 36	159	SBdm			south preced of 2
NGC 6041	UGC 10170	Galaxy	HER	13.7	-	1.3'	16 04.6	+17 43	155	SBO			IC 1170 superimposed
NGC 6055	UGC 10191	Galaxy	HER	13.7	13	1'	16 05.5	+18 10	155	SBO-a R			P w NGC 6057 at 2' PA 82
NGC 6158	MCG 7-34-	Galaxy	HER	13.7	-	1.1'	16 27.7	+39 23	80	E-SO			H II 647
NGC 6263	UGC 10618	Galaxy	HER	13.7	13.4	0.9'	16 56.7	+27 49	157	Elliptical			vF comp at 0.7' PA 343 0.2'X0.15'
NGC 6347	IC 1253	Galaxy	HER	13.7	13.3	1.2'	17 19.9	+16 40	202	SBb			
NGC 6549	UGC 11114	Galaxy	HER	13.7	13	1.4'	18 05.8	+18 32	159	Sbc			P w NGC 6548 at 4' PA 38
PK 47+42.1	Abell 39	Pln Neb	HER	13.7	-	2.9'	16 27.5	+27 54	156	2c		15.7	
NGC 6225	UGC 10556	Galaxy	HER	13.8	12.9	0.9'	16 48.4	+06 13	202	E-SO			P w NGC 6224;several vF galaxys in field
NGC 6443	UGC 10967	Galaxy	HER	13.8	13.2	1.2'	17 44.6	+48 07	81	Sab			
NGC 6600	NGC 6599	Galaxy	HER	13.8	-	1.3'	18 15.7	+24 55	159	SO			
NGC 6616	UGC 11192	Galaxy	HER	13.8	13.5	1.4'	18 17.7	+22 14	159	Sab			
Abell 2147		Gal CL	HER	13.8	-	39.2'	16 02.2	+15 53	200	1 1 III			15 Gal/Deg; 52 galaxies
Abell 2151	Her. Gx. Cl	Gal CL	HER	13.8	-	56'	16 05.1	+17 43	155	2 1 III			Her. Gal. Cl. 20 galaxies 14 to 15 mag; 87 galaxies
Abell 2152		Gal CL	HER	13.8	-	37'	16 05.3	+16 27	200	1 1 III			15 Gal/Deg; 60 galaxies
NGC 6042	NGC 6039	Galaxy	HER	13.9	13.3	0.8'	16 04.7	+17 42	155	E-SO			
NGC 6045	UGC 10177	Galaxy	HER	13.9	12.8	1.3'	16 05.1	+17 45	155	SBc			P w NGC 6047 at 2' PA 173
NGC 6056	IC 1176	Galaxy	HER	13.9	12.9	0.9'	16 05.5	+17 58	155	SBO-a			
NGC 6084	UGC 10291	Galaxy	HER	13.9	13.1	1'	16 14.3	+17 45	155	Sab			
NGC 6228	UGC 10558	Galaxy	HER	13.9	13.3	1.1'	16 48.0	+26 13	156	Sb Ring			Peculiar disturbed by comp nf
NGC 6313	UGC 10742	Galaxy	HER	13.9	13.1	1.3'	17 10.3	+48 20	80	Sab			
NGC 6320	UGC 10761	Galaxy	HER	13.9	13.8	1.2'	17 12.9	+40 16	81	Sbc			
NGC 6323	UGC 10764	Galaxy	HER	13.9	12.8	1.1'	17 13.3	+43 47	81	Sab			
PK 43+11.1	M3-27	Pln Neb	HER	13.9	-	1.0"	18 27.8	+14 29	205	1		15.5	
NGC 6150A	NGC 6150	Galaxy	HER	14	-	1'	16 25.8	+40 29	80	Elliptical			H III 639
NGC 6261	UGC 10617	Galaxy	HER	14	13.1	1.2'	16 56.5	+27 59	157	Sa			
NGC 6271	MCG 5-40-	Galaxy	HER	14	13.5	0.8'	16 58.8	+27 58	157	S			Very compact
NGC 6330	UGC 10776	Galaxy	HER	14	13.6	1.5'	17 15.7	+29 24	115	SBb			
NGC 6579	UGC 11153	Galaxy	HER	14	-	0.4'	18 12.5	+21 25	159	S			Triple system
NGC 6580	UGC 11153	Galaxy	HER	14	-	1.3'	18 12.6	+21 26	159	Elliptical			
Abell 2197		Gal CL	HER	14	-	89.6'	16 27.7	+40 55	80	1 1 III			Centered on E-W chain of 6146 6160 and 6173; 73 gala
NGC 6174		Galaxy	HER	-	-	0.4'	16 29.5	+40 52	80				
DoDz 5		Opn CL	HER	-	-	27'	16 27.4	+38 04	114	III 1 p			
DoDz 6		Opn CL	HER	-	-	17'	16 45.5	+38 21	114	IV 2 p	5	8.8	
DoDz 7		Opn CL	HER	-	-	20'	17 11.4	+15 29	202	III 1 p	6		
DoDz 9		Opn CL	HER	-	-	34'	18 08.8	+31 32	116	III 2 p	15		
NGC 1261	GCL 5	Glob CL	HOR	8.4	-	6.9'	03 12.3	-55 13	419	II			
NGC 1433	ESO 249-14	Galaxy	HOR	9.9	13.7	6.1'	03 42.0	-47 13	391	SBa			
NGC 1512	ESO 250- 4	Galaxy	HOR	10.3	14.4	9.7'	04 03.9	-43 21	391	SBa			lenticular
NGC 1448	NGC 1457	Galaxy	HOR	10.7	13.3	7.5'	03 44.5	-44 39	391	Sc			Nearly edge-on
NGC 1527	ESO 201-20	Galaxy	HOR	10.8	12.4	3.9'	04 08.4	-47 54	391	SO			
NGC 1411	IC 1943	Galaxy	HOR	11.3	12.6	2.2'	03 38.7	-44 06	391	SO			
NGC 1493	ESO 249-33	Galaxy	HOR	11.3	13.7	3.6'	03 57.5	-46 13	391	SBc			
NGC 1457	NGC 1448	Galaxy	HOR	11.4	-	7.5'	03 44.5	-44 39	391	Sc			
IC 1954	ESO 200-36	Galaxy	HOR	11.6	13.2	3'	03 31.5	-51 54	420	SBb			
NGC 1494	ESO 201-12	Galaxy	HOR	11.7	13.5	3.3'	03 57.7	-48 55	391	SBcd			
NGC 1249	ESO 155- 6	Galaxy	HOR	11.8	14.3	4.7'	03 10.0	-53 20	419	SBc			
IC 2035	ESO 250- 7	Galaxy	HOR	11.8	11.7	1.2'	04 09.0	-45 31	391	SBO			
IC 2000	ESO 201-G0	Galaxy	HOR	11.9	13	4.1'	03 49.1	-48 52	391	SBc			
NGC 1558	ESO 250-17	Galaxy	HOR	12.5	13.3	2.5'	04 20.3	-45 02	391	SBbc			
IC 1933	ESO 155-25	Galaxy	HOR	12.5	13.4	2.2'	03 25.7	-52 47	419	SBc			
NGC 1495	ESO 249-34	Galaxy	HOR	12.6	13	3'	03 58.4	-44 28	391	Sc			
NGC 1483	ESO 201- 7	Galaxy	HOR	12.7	13.4	1.6'	03 52.8	-47 29	391	SBbc			
NGC 1136	ESO 154-19	Galaxy	HOR	13	13.4	1.4'	02 50.9	-54 59	419	SBa			
NGC 1311	ESO 200- 7	Galaxy	HOR	13	13.8	3'	03 20.1	-52 11	419	SBp			
NGC 1356	ESO 200-31	Galaxy	HOR	13	13.3	1.4'	03 30.7	-50 19	420	SBbc			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1510	ESO 250- 3	Galaxy	HOR	13	12.8	3.2'	04 03.5	-43 24	391	SO			
NGC 1476	ESO 249-24	Galaxy	HOR	13.1	12.6	1.4'	03 52.1	-44 32	391	Sa			
NGC 1031	ESO 154- 5	Galaxy	HOR	13.4	-	1.9'	02 36.6	-54 52	419	SBa			
NGC 1096	ESO 115-28	Galaxy	HOR	13.6	-	1.9'	02 43.8	-59 55	419	SBbc Ring			
NGC 1025	ESO 154- 4	Galaxy	HOR	13.9	-	0.9'	02 36.3	-54 52	419	SBb			
M 48	NGC 2548	Opn CL	HYA	5.8	13	54'	08 13.7	-05 45	275	I 2 m	80	8.2	Messier wrong position by 4 deg in dec;50* 9-13mag;
M 68	NGC 4590	Glob CL	HYA	7.3	13	9.8'	12 39.5	-26 45	329	X			
M 83	NGC 5236	Galaxy	HYA	7.5	12.8	13.1'	13 37.0	-29 52	370	SBc			Fast SupNova producer-4 in 50 yrs
NGC 3242	PK 261+32.1	Pln Neb	HYA	8.6	5.4	40"	10 24.8	-18 39	325	4(3b)		12.3	Ghost of Jupiter ; H IV 27
NGC 3621	ESO 377-37	Galaxy	HYA	9.7	14.4	12.4'	11 18.3	-32 49	367	SBcd			H I 241
NGC 3923	ESO 440-17	Galaxy	HYA	9.8	13.2	6.6'	11 51.0	-28 48	368	Elliptical			H I 259
NGC 3109	ESO 499-36	Galaxy	HYA	9.9	14.4	19.7'	10 03.1	-26 10	324	Ir			
NGC 3585	ESO 502-25	Galaxy	HYA	9.9	12.6	5.2'	11 13.3	-26 45	326	Elliptical			H II 269
NGC 2784	ESO 497-23	Galaxy	HYA	10.2	12.8	5.7'	09 12.3	-24 10	322	SO			H I 59
NGC 5694	GCL 29	Glob CL	HYA	10.2	-	3.6"	14 39.6	-26 32	332	VII			H II 196;Rich w eF stars;distant globular
NGC 5061	ESO 508-38	Galaxy	HYA	10.4	12.9	3.5'	13 18.1	-26 50	330	E2			H I 138
NGC 2835	ESO 564-35	Galaxy	HYA	10.5	14	6.3'	09 17.9	-22 21	322	SBc			Fine multi arm spiral
NGC 4105	ESO 440-54	Galaxy	HYA	10.6	12.5	2.8'	12 06.7	-29 46	368	Elliptical			H II 865;Interacting P w NGC 4106
NGC 5101	ESO 508-58	Galaxy	HYA	10.6	13.9	5.7'	13 21.8	-27 26	330	SBO-a R			H II 567
NGC 2986	ESO 566- 5	Galaxy	HYA	10.8	13.1	3.5'	09 44.3	-21 17	323	E1			H II 311
NGC 3904	ESO 440-13	Galaxy	HYA	10.9	12.6	2.7'	11 49.2	-29 17	368	Elliptical			H II 864
NGC 5078	ESO 508-48	Galaxy	HYA	11	13	19.5'	13 19.8	-27 25	330	Sa			H II 566;Dust lane;Nearly edge-on
MCG -01-25		Galaxy	HYA	11	-	2'	09 38.9	-04 49	233				Mostly Edge On
NGC 3078	ESO 499-27	Galaxy	HYA	11.1	12.9	2.7'	09 58.4	-26 56	324	E3			H II 268
NGC 3091	ESO 566-41	Galaxy	HYA	11.1	13	3'	10 00.2	-19 38	324	E2			H II 293;Brightest memb of small group
NGC 3717	ESO 439-15	Galaxy	HYA	11.2	13.1	6.2'	11 31.5	-30 19	367	Sb			Nearly edge-on
NGC 2811	MCG - 3-24-	Galaxy	HYA	11.3	12	2.2'	09 16.2	-16 19	277	SBa			H II 502
NGC 5085	ESO 508-50	Galaxy	HYA	11.3	13.6	3.5'	13 20.3	-24 26	330	Sc			H II 780
MCG -01-24		Galaxy	HYA	11.3	12.7	4.3'	09 10.8	-08 54	277				Mostly Edge On
NGC 2935	ESO 565-23	Galaxy	HYA	11.4	13.8	3.7'	09 36.7	-21 08	323	SBab			H II 556
NGC 3313	ESO 501-50	Galaxy	HYA	11.4	14	3.9'	10 37.4	-25 19	325	SBab Ring			
NGC 4106	ESO 440-56	Galaxy	HYA	11.4	12.1	2.3'	12 06.8	-29 46	368	SBO-a			H II 866
NGC 3673	ESO 503-16	Galaxy	HYA	11.5	13.7	3.7'	11 25.2	-26 44	326	SBb			
NGC 2781	MCG - 2-24-	Galaxy	HYA	11.6	13.1	3.1'	09 11.5	-14 49	277	SBO-a R			H I 66
NGC 2855	MCG - 2-24-	Galaxy	HYA	11.6	13.3	2.4'	09 21.5	-11 55	278	Sa			H I 132
NGC 2907	MCG - 3-25-	Galaxy	HYA	11.6	12.3	2'	09 31.6	-16 44	278	Sab			H II 506;Equatorial dust band;Nearly edge-on
NGC 3309	ESO 501-36	Galaxy	HYA	11.6	12.8	2.4'	10 36.6	-27 31	325	Elliptical			
NGC 3311	ESO 501-38	Galaxy	HYA	11.6	14.1	3.7'	10 36.7	-27 32	325	E2			
NGC 4304	ESO 380-20	Galaxy	HYA	11.6	13.5	2.6'	12 22.2	-33 29	369	SBbc			
NGC 5328	ESO 445-67	Galaxy	HYA	11.6	12.5	1.8'	13 52.9	-28 29	371	E2			H III 923
NGC 2865	ESO 498- 1	Galaxy	HYA	11.7	13.3	2.5'	09 23.5	-23 10	323	E4			
NGC 2889	MCG - 2-24-	Galaxy	HYA	11.7	13.1	2.3'	09 27.2	-11 39	278	SBc Ring			H II 555
NGC 3145	MCG - 2-26-	Galaxy	HYA	11.7	13.3	3'	10 10.2	-12 26	279	SBbc			H III 518
IC 4351	ESO 445-84	Galaxy	HYA	11.7	13.4	5.9'	13 57.9	-29 19	371	Sb			
NGC 2713	UGC 4691	Galaxy	HYA	11.8	13.4	3.3'	08 57.3	+02 55	232	SBab			B N in strng bar w dk lanes;2 main fil arms w knots
NGC 2716	UGC 4692	Galaxy	HYA	11.8	12	1.6'	08 57.6	+03 05	232	SBO-a			close to cluster of faint galaxies
NGC 2718	UGC 4707	Galaxy	HYA	11.8	13.3	2.1'	08 58.8	+06 18	187	SBab			H II 557
NGC 2848	MCG - 3-24-	Galaxy	HYA	11.8	13.3	2.5'	09 20.2	-16 32	278	SBc			H III 488;NGC 2851 is 5' ENE
NGC 2983	ESO 566- 3	Galaxy	HYA	11.8	13.1	2.5'	09 43.7	-20 29	323	SBO-a			H III 289
NGC 3054	ESO 499-18	Galaxy	HYA	11.8	14	3.8'	09 54.5	-25 42	324	SBb			
NGC 5042	ESO 508-31	Galaxy	HYA	11.8	14.1	4.2'	13 15.5	-23 59	330	SBc			
NGC 5153	ESO 444-45	Galaxy	HYA	11.8	13	2'	13 27.9	-29 37	370	Elliptical			
NGC 5556	ESO 446-50	Galaxy	HYA	11.8	14.4	4.1'	14 20.6	-29 15	372	SBcd			
NGC 2695	MCG 0-23-	Galaxy	HYA	11.9	12.5	1.7'	08 54.5	-03 04	232	SO			H II 280
NGC 2815	ESO 497-32	Galaxy	HYA	11.9	13.2	3.5'	09 16.3	-23 38	322	SBb			H III 242
NGC 2962	UGC 5167	Galaxy	HYA	11.9	13.6	2.6'	09 40.9	+05 10	233	SBO-a R			B diff nucleus in bright lens;slightly brighter at rim
NGC 3308	ESO 501-34	Galaxy	HYA	11.9	12.6	1.7'	10 36.4	-27 26	325	E-SO Ba			
NGC 3312	IC 629	Galaxy	HYA	11.9	13.3	3.3'	10 37.0	-27 34	325	Sb Ring			
NGC 3390	ESO 437-62	Galaxy	HYA	11.9	12.5	3.5'	10 48.1	-31 32	366	Sb			Nearly edge-on
NGC 3402	NGC 3411	Galaxy	HYA	11.9	-	2.1'	10 50.4	-12 51	280	Elliptical			
NGC 3411	NGC 3402	Galaxy	HYA	11.9	13.5	2.1'	10 50.4	-12 51	280	Elliptical			H III 522
NGC 3450	ESO 569- 6	Galaxy	HYA	11.9	13.6	2.6'	10 48.1	-20 51	325	SBb			
NGC 3885	ESO 440- 7	Galaxy	HYA	11.9	12.6	2.7'	11 46.8	-27 55	327	SBO-a			H III 828
NGC 2708	NGC 2727	Galaxy	HYA	12	13.2	2.7'	08 56.1	-03 22	232	Sb			H II 281

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2763	MCG - 2-23-	Galaxy	HYA	12	13.5	2.3'	09 06.8	-15 30	277	SBc			H III 275
NGC 2921	ESO 565-17	Galaxy	HYA	12	13	2.9'	09 34.5	-20 55	323	SB Ring			H III 597
NGC 2924	MCG - 3-25-	Galaxy	HYA	12	12.6	1.3'	09 35.2	-16 24	278	E0			
NGC 3081	IC 2529;H III	Galaxy	HYA	12	13.1	2.2'	09 59.5	-22 50	324	SBO-a R			
NGC 3200	ESO 567-45	Galaxy	HYA	12	13.7	4.2'	10 18.6	-17 59	324	SBbc			Nearly edge-on
NGC 3285	ESO 501-15	Galaxy	HYA	12	13.4	2.7'	10 33.6	-27 27	325	SBa			
NGC 3936	ESO 504-20	Galaxy	HYA	12	12.8	3.9'	11 52.3	-26 54	327	SBbc			Nearly edge-on
NGC 5264	ESO 445-12	Galaxy	HYA	12	13.3	2.6'	13 41.6	-29 55	371	Ir+			
MCG -03-28		Galaxy	HYA	12	-	0.3'	10 48.1	-20 53	325				Face On
PK 303+40.	Abell 35	Pln Neb	HYA	12	18.9	12.8'	12 53.6	-22 52	329	3a		9.6	cent* variable LW Hya
NGC 2618	UGC 4492	Galaxy	HYA	12.1	13.6	2.5'	08 35.9	+00 42	231	Sab			H III 257;very diffuse outside
NGC 2765	UGC 4791	Galaxy	HYA	12.1	12.9	2.1'	09 07.6	+03 24	232	SO			H II 520
NGC 3124	ESO 567-17	Galaxy	HYA	12.1	14.2	2.9'	10 06.7	-19 13	324	SBbc			Fine face-on spiral;D* South-607 4' to south
NGC 3203	ESO 500-24	Galaxy	HYA	12.1	12.6	2.8'	10 19.6	-26 42	324	Sa			Lens shaped
NGC 3483	ESO 438- 1	Galaxy	HYA	12.1	12.8	1.8'	10 59.0	-28 29	366	Sa			
NGC 4087	ESO 505-10	Galaxy	HYA	12.1	13.4	2.1'	12 05.6	-26 31	328	E-SO			H III 754
NGC 4965	ESO 443-70	Galaxy	HYA	12.1	13.8	2.4'	13 07.2	-28 14	370	SBcd			
NGC 5135	ESO 444-32	Galaxy	HYA	12.1	13.6	2.4'	13 25.7	-29 50	370	SBab			
PK 283+25.	K1-22	Pln Neb	HYA	12.1	-	3.0'	11 26.7	-34 22	367			17.4	
NGC 2555	UGC 4319	Galaxy	HYA	12.2	13.1	1.9'	08 17.9	+00 45	231	SBab			H III 256
NGC 2665	ESO 563-19	Galaxy	HYA	12.2	13.3	2'	08 46.0	-19 18	321	SBa			
NGC 2902	MCG - 2-24-	Galaxy	HYA	12.2	12.6	1.6'	09 30.9	-14 44	278	SO			H III 276;IC 543
NGC 2945	ESO 565-28	Galaxy	HYA	12.2	12.8	1.6'	09 37.7	-22 02	323	E-SO			
NGC 2992	MCG - 2-25-	Galaxy	HYA	12.2	13.5	3.7'	09 45.7	-14 20	278	Sa			H III 277;Long streamer extends 2' N
NGC 3052	ESO 566-26	Galaxy	HYA	12.2	13.1	2.1'	09 54.5	-18 38	324	SBc Ring			H III 272
NGC 3393	ESO 501-100	Galaxy	HYA	12.2	13.6	2.2'	10 48.4	-25 10	325	SBa			
NGC 4955	ESO 443-62	Galaxy	HYA	12.2	13.1	1.9'	13 06.1	-29 45	370	Elliptical			
NGC 4970	IC 4196	Galaxy	HYA	12.2	12.8	1.8'	13 07.6	-24 01	330	SO			H III 765
IC 764	UA 273	Galaxy	HYA	12.2	14.1	4.8'	12 10.2	-29 44	368	SBc			
IC 2995	ESO 440-50	Galaxy	HYA	12.2	13.3	3'	12 05.8	-27 57	328	SBc			
NGC 2644	UGC 4533	Galaxy	HYA	12.3	12.8	2.1'	08 41.5	+04 59	231	Sc			strongly asym.;spiral arcs north;filaments south
NGC 2697	MCG 0-23-	Galaxy	HYA	12.3	12.9	1.8'	08 55.0	-02 59	232	Sa			
NGC 3336	ESO 437-36	Galaxy	HYA	12.3	13.4	2'	10 40.3	-27 47	325	SBc			
NGC 4993	NGC 4994	Galaxy	HYA	12.3	12.6	1.3'	13 09.8	-23 23	330	E-SO Ba			H III 766
NGC 2960	UGC 5159	Galaxy	HYA	12.4	13.1	1.8'	09 40.6	+03 35	233	Sa			
NGC 3606	ESO 377-32	Galaxy	HYA	12.4	13.1	1.5'	11 16.3	-33 50	367	Elliptical			
NGC 4831	ESO 507-55	Galaxy	HYA	12.4	12.6	1.7'	12 57.6	-27 18	329	E-SO Ba			
NGC 5182	ESO 444-62	Galaxy	HYA	12.4	13.2	1.9'	13 30.7	-28 09	370	SBbc			
NGC 2615	UGC 4481	Galaxy	HYA	12.5	13.1	1.9'	08 34.6	-02 33	231	SBb			
NGC 2616	UGC 4489	Galaxy	HYA	12.5	13.2	1.5'	08 35.6	-01 51	231	SO			compact;brightest of 3
NGC 2721	MCG - 1-23-	Galaxy	HYA	12.5	-	2.4'	08 58.9	-04 54	232	Sbc Ring			H II 529
NGC 2996	ESO 566-12	Galaxy	HYA	12.5	13.2	1.5'	09 46.5	-21 34	323	Sa			
NGC 3233	ESO 568- 1	Galaxy	HYA	12.5	12.8	1.8'	10 22.0	-22 16	324	SBO-a R			
NGC 5152	ESO 444-44	Galaxy	HYA	12.5	12.6	2.1'	13 27.9	-29 37	370	SBb			
NGC 2642	MCG - 1-22-	Galaxy	HYA	12.6	13.9	2'	08 40.7	-04 07	231	SBbc Ring			B nucleus in weak bar;4 or 5 knotty filam arms;
NGC 2698	MCG 0-23-	Galaxy	HYA	12.6	12.3	1.5'	08 55.6	-03 11	232	Sa			
NGC 2699	MCG 0-23-	Galaxy	HYA	12.6	12.6	1.1'	08 55.8	-03 08	232	Elliptical			
NGC 2858	UGC 4989	Galaxy	HYA	12.6	12.9	1.7'	09 22.9	+03 09	233	Sa			
NGC 2993	MCG - 2-25-	Galaxy	HYA	12.6	12.7	1.8'	09 45.8	-14 22	278	Sa			H III 278
NGC 3316	ESO 501-54	Galaxy	HYA	12.6	12.8	1.4'	10 37.6	-27 36	325	SBO			
NGC 3464	ESO 569-22	Galaxy	HYA	12.6	14	2.5'	10 54.7	-21 04	325	SBc			Red * V HYA is 43' WSW
NGC 4980	ESO 443-75	Galaxy	HYA	12.6	12.7	1.6'	13 09.2	-28 39	370	SBa			
NGC 5150	ESO 444-43	Galaxy	HYA	12.6	12.7	1.3'	13 27.6	-29 34	370	SBbc			
NGC 2861	UGC 4999	Galaxy	HYA	12.7	13.4	1.5'	09 23.6	+02 08	233	SBbc			hnp of 2;interaction?
NGC 3028	ESO 566-16	Galaxy	HYA	12.7	12.8	1.3'	09 49.9	-19 11	323	Sb			
NGC 3072	ESO 566-33	Galaxy	HYA	12.7	12.7	1.9'	09 57.4	-19 21	324	Sa			H III 273
NGC 3208	ESO 500-25	Galaxy	HYA	12.7	13.7	1.8'	10 19.7	-25 49	324	SBc			
NGC 3383	ESO 501-97	Galaxy	HYA	12.7	13.1	1.4'	10 47.3	-24 26	325	SBbc			
NGC 4806	ESO 443-12	Galaxy	HYA	12.7	12.7	1.2'	12 56.2	-29 30	369	SB Ring			
NGC 5048	ESO 443-87	Galaxy	HYA	12.7	12.8	1.5'	13 16.1	-28 25	370	E-SO			
Abell 1060	Hydra I	Gal CL	HYA	12.7	-	168'	10 36.8	-27 32	325	1 0 II			5 Gal/Deg; 50 galaxies
NGC 2727	NGC 2708	Galaxy	HYA	12.8	-	2.7'	08 56.1	-03 22	232	Sb			
NGC 3171	ESO 567-31	Galaxy	HYA	12.8	13.3	1.6'	10 15.6	-20 39	324	E-SO			
NGC 3305	ESO 501-30	Galaxy	HYA	12.8	13	1.1'	10 36.2	-27 10	325	Elliptical			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3617	ESO 503-12	Galaxy	HYA	12.8	13.6	2.8'	11 17.8	-26 08	326	Elliptical			
NGC 4968	ESO 508- 6	Galaxy	HYA	12.8	13.1	1.9'	13 07.1	-23 41	330	SBO			
NGC 5495	ESO 511-10	Galaxy	HYA	12.8	13.2	1.5'	14 12.4	-27 07	332	SBc			
NGC 5592	ESO 446-58	Galaxy	HYA	12.8	12.8	1.5'	14 23.9	-28 41	372	SBbc			H III 924
NGC 3025	ESO 566-15	Galaxy	HYA	12.9	13.4	1.5'	09 49.5	-21 45	323	SO			
NGC 3463	ESO 502- 2	Galaxy	HYA	12.9	12.8	1.5'	10 55.2	-26 08	325	Sb			
NGC 5260	ESO 509-92	Galaxy	HYA	12.9	13.6	1.6'	13 40.3	-23 52	331	SBbc			
MCG -02-24	Hydra A	Galaxy	HYA	12.9	12.1	0.7'	09 18.1	-12 06	277	SA0			3C218
NGC 2610	PK 239+13.1	Pln Neb	HYA	13	12.1	50"	08 33.4	-16 09	276	4(2)		15.9	H IV 35;PK239+13.1
NGC 2612	MCG - 2-22-	Galaxy	HYA	13	-	2.8'	08 33.8	-13 10	276	E-SO			
NGC 2706	UGC 4680	Galaxy	HYA	13	12.9	1.8'	08 56.2	-02 34	232	SBc			
NGC 2817	MCG - 1-24-	Galaxy	HYA	13	-	2'	09 17.2	-04 45	232	SBc			
NGC 2863	NGC 2869	Galaxy	HYA	13	-	1'	09 23.6	-10 26	278	Sm			H III 520
NGC 2884	MCG - 2-24-	Galaxy	HYA	13	-	2.1'	09 26.4	-11 33	278	Sa			
NGC 2900	UGC 5065	Galaxy	HYA	13	13.8	1.7'	09 30.3	+04 09	233	SBc			filaments from the bar;appears too red to be SBc
NGC 2920	ESO 565-15	Galaxy	HYA	13	12.1	0.9'	09 34.2	-20 52	323	Sa			
NGC 2989	ESO 566- 9	Galaxy	HYA	13	13.4	1.7'	09 45.4	-18 23	323	Sbc			
NGC 3085	ESO 566-38	Galaxy	HYA	13	11.9	1.2'	09 59.5	-19 30	324	SO			
NGC 3178	MCG - 3-26-	Galaxy	HYA	13	-	1.4'	10 16.2	-15 48	279	Sc			
NGC 3282	ESO 568-16	Galaxy	HYA	13	13	1.9'	10 32.4	-22 18	325	SBO Ring			
NGC 3335	ESO 501-71	Galaxy	HYA	13	12.9	1.1'	10 39.6	-23 55	325	SBO-a			
NGC 3355		Galaxy	HYA	13	-	3.2'	10 42.6	-23 56	325	Sb			
NGC 3453	ESO 569-17	Galaxy	HYA	13	12.4	1.1'	10 53.7	-21 48	325	SBb			
NGC 5464	ESO 446-11	Galaxy	HYA	13	12.9	1.3'	14 07.1	-30 01	371	Ir+			
NGC 5626	ESO 447- 8	Galaxy	HYA	13	12.9	1.2'	14 29.8	-29 45	372	Sa			
NGC 2561	UGC 4336	Galaxy	HYA	13.1	12.5	1.1'	08 19.6	+04 39	231	SBc			brightest in group;short massive arms;thick bar
NGC 2590	IC 507	Galaxy	HYA	13.1	13.4	2.2'	08 25.0	-00 36	231	Sbc			
NGC 2690	UGC 4647	Galaxy	HYA	13.1	12.9	1.9'	08 52.6	-02 36	232	Sab			
NGC 2936	UGC 5130	Galaxy	HYA	13.1	13.3	1.3'	09 37.7	+02 46	233	Ring			multiple system;strongly distorted
NGC 3037	ESO 499-10	Galaxy	HYA	13.1	13.3	1.3'	09 51.4	-27 01	323	SBp			
NGC 3076	ESO 566-34	Galaxy	HYA	13.1	12.8	1'	09 57.6	-18 11	324	Sab			
NGC 3146	ESO 567-23	Galaxy	HYA	13.1	12.8	1'	10 11.2	-20 52	324	SBb			
NGC 3285B	ESO 501-18	Galaxy	HYA	13.1	13.5	1.5'	10 34.6	-27 39	325	SBb			
NGC 5393	ESO 445-87	Galaxy	HYA	13.1	12.4	0.9'	14 00.5	-28 53	371	Sa			
NGC 2723	UGC 4723	Galaxy	HYA	13.2	12.9	0.9'	09 00.2	+03 11	232	SO			
NGC 2758	ESO 564-20	Galaxy	HYA	13.2	12.8	1.9'	09 05.5	-19 03	322	Sc			
NGC 2947	IC 547	Galaxy	HYA	13.2	-	1.5'	09 36.1	-12 26	278	Sbc Ring			
NGC 3240	ESO 568- 3	Galaxy	HYA	13.2	13.1	1.1'	10 24.5	-21 48	325	Sc			
NGC 3331	ESO 501-72	Galaxy	HYA	13.2	13.2	1.2'	10 40.2	-23 49	325	SBc			
NGC 5051	ESO 444- 1	Galaxy	HYA	13.2	12.9	1.4'	13 16.3	-28 17	370	SBbc			
NGC 4456	ESO 441-30	Galaxy	HYA	13.3	12.8	1.2'	12 27.9	-30 06	369	Sbc			
NGC 4994	NGC 4993	Galaxy	HYA	13.3	-	1.3'	13 09.8	-23 23	330	E-S0 B			near 4889
NGC 2583	MCG - 1-22-	Galaxy	HYA	13.4	12.9	0.8'	08 23.1	-05 00	231	E1			
NGC 2722	NGC 2733	Galaxy	HYA	13.4	-	2.1'	08 58.8	-03 43	232	SBc			H III 264
NGC 2729	UGC 4737	Galaxy	HYA	13.4	12.3	0.8'	09 01.5	+03 43	232	SO			
NGC 2733	NGC 2722	Galaxy	HYA	13.4	-	2.1'	08 58.8	-03 43	232	Sbc			
NGC 2898	MCG 0-24-	Galaxy	HYA	13.4	13.1	1'	09 29.8	+02 04	233	Sa			
NGC 3096	ESO 566-42	Galaxy	HYA	13.4	13	1'	10 00.6	-19 40	324	SBO			
NGC 3315	ESO 501-G0	Galaxy	HYA	13.4	13.3	1.1'	10 37.3	-27 12	325	E-SO			
PK 238+34.	Abell 33	Pln Neb	HYA	13.4	-	4.5'	09 39.1	-02 48	233	2b		15.5	
NGC 2869	NGC 2863	Galaxy	HYA	13.5	-	1'	09 23.6	-10 26	278	Sm			
NGC 2709	MCG 0-23-	Galaxy	HYA	13.6	12.8	0.8'	08 56.2	-03 15	232	SO			
NGC 2917	UGC 5098	Galaxy	HYA	13.6	12.6	1.3'	09 34.5	-02 30	233	Sa			
NGC 3369	ESO 501-95	Galaxy	HYA	13.6	13.6	1.4'	10 46.7	-25 15	325	E-SO			
NGC 2937	UGC 5131	Galaxy	HYA	13.7	14.1	2'	09 37.8	+02 45	233	Ring			
NGC 5330	ESO 445-68	Galaxy	HYA	13.8	11.6	0.5'	13 53.0	-28 28	371	Elliptical			
NGC 3285A	ESO 501- 8	Galaxy	HYA	13.9	13.7	1.2'	10 32.8	-27 31	325	SBc			
UGC 4797	PGC 25679	Galaxy	HYA	13.9	15.1	2.5'	09 08.1	+05 56	187	S			
NGC 2574	MCG - 1-22-	Galaxy	HYA	14	-	2.3'	08 20.8	-08 55	276	Sab			
NGC 2881	MCG - 2-24-	Galaxy	HYA	14	-	1.1'	09 25.9	-12 00	278	S			
NGC 3045	ESO 566-22	Galaxy	HYA	14	-	1.4'	09 53.3	-18 39	324	Sb			
NGC 3127	MCG - 3-26-	Galaxy	HYA	14	-	1.2'	10 06.4	-16 08	279	Sb			
NGC 3128	MCG - 3-26-	Galaxy	HYA	14	-	1.6'	10 06.0	-16 07	279	Sb			
NGC 3140	MCG - 3-26-	Galaxy	HYA	14	13	0.9'	10 09.5	-16 38	279	Sc			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3290	MCG - 3-27-	Galaxy	HYA	14	-	1'	10 35.3	-17 17	325	SBbc/P			
NGC 3314	ESO 501-46	Galaxy	HYA	14	-	1.5'	10 37.2	-27 41	325	SBap			
NGC 3321	NGC 3322	Galaxy	HYA	14	-	2.5'	10 38.8	-11 39	280	Sc			
NGC 3404	IC 2609	Galaxy	HYA	14	-	2.1'	10 50.3	-12 07	280	SBab			
NGC 3420	MCG - 3-28-	Galaxy	HYA	14	-	1.3'	10 50.2	-17 15	325	SBa			
NGC 3421	IC 652	Galaxy	HYA	14	-	1.8'	10 51.0	-12 27	280	Sa Ring			
NGC 2847		Neb+Gx	HYA	-	-	0.4'	09 20.1	-16 31	278	E+*			An HII region within the GALXY NGC 2848 on the N
IC 5152	ESO 237-27	Galaxy	IND	10.6	13.5	5.5'	22 02.7	-51 18	438	Ir			Member of Local Group
NGC 7049	ESO 236- 1	Galaxy	IND	10.7	13.3	4.5'	21 19.0	-48 34	413	SO			
NGC 7090	ESO 188-12	Galaxy	IND	10.7	13	7.3'	21 36.5	-54 33	438	SBc			
NGC 7205	ESO 146- 9	Galaxy	IND	10.9	13.1	4'	22 08.6	-57 27	438	Sbc			
NGC 7041	ESO 235-82	Galaxy	IND	11.2	12.9	3.6'	21 16.5	-48 22	413	E-SO			
NGC 7029	ESO 235-72	Galaxy	IND	11.5	12.9	2.5'	21 11.9	-49 17	412	Elliptical			
NGC 7141	NGC 7140	Galaxy	IND	11.5	14.1	4.1'	21 52.3	-55 34	438	SBbc			
NGC 7196	ESO 237-36	Galaxy	IND	11.5	13.1	2.5'	22 05.9	-50 07	438	Elliptical			
NGC 6942	ESO 186-73	Galaxy	IND	11.8	12.9	2.1'	20 40.6	-54 18	437	SBO-a			
NGC 7038	ESO 286-79	Galaxy	IND	11.9	13.5	3.1'	21 15.1	-47 13	413	SBc			
NGC 7168	ESO 237-26	Galaxy	IND	11.9	13.1	1.9'	22 02.1	-51 45	438	Elliptical			
IC 5063	ESO 187-23	Galaxy	IND	11.9	12.9	2.4'	20 52.0	-57 04	437	SA0			
NGC 6935	ESO 234-59	Galaxy	IND	12	13.2	2.1'	20 38.3	-52 07	437	SBa			
NGC 7007	ESO 187-48	Galaxy	IND	12	12.7	2'	21 05.5	-52 33	437	E-SO			
NGC 7155	IC 5143	Galaxy	IND	12.2	13.5	2.3'	21 56.2	-49 31	413	SBO			
NGC 7124	ESO 237- 2	Galaxy	IND	12.3	13.6	2.8'	21 48.1	-50 34	438	SBbc			
NGC 6987	ESO 235-21	Galaxy	IND	12.4	13	1.4'	20 58.2	-48 38	412	Elliptical			
NGC 7002	ESO 235-43	Galaxy	IND	12.4	13	1.5'	21 03.8	-49 02	412	Elliptical			
NGC 7014	ESO 286-57	Galaxy	IND	12.4	13.4	1.7'	21 07.9	-47 11	412	Elliptical			
NGC 7064	ESO 188- 9	Galaxy	IND	12.5	13.3	3.8'	21 29.1	-52 46	437	SBc			
NGC 7140	NGC 7141	Galaxy	IND	12.5	-	4.1'	21 52.3	-55 34	438	SBbc			N2 reports DEC one degree north
NGC 6970	ESO 235- 8	Galaxy	IND	12.6	12.6	1.4'	20 52.2	-48 47	412	SBa			
NGC 6984	ESO 235-20	Galaxy	IND	12.7	13.4	1.8'	20 57.9	-51 52	437	SBc			
NGC 7151	ESO 237-15	Galaxy	IND	12.8	14	2.9'	21 55.1	-50 40	438	SBc			
NGC 6937	ESO 234-60	Galaxy	IND	12.9	14.4	2.1'	20 38.8	-52 09	437	SBab			
NGC 7200	ESO 237-37	Galaxy	IND	12.9	13.5	1.6'	22 07.2	-50 00	414	Elliptical			
NGC 7022	ESO 235-65	Galaxy	IND	13	13.4	1.5'	21 09.6	-49 18	412	SBO			
ESO 287-13	PGC 66669	Galaxy	IND	13.1	13.4	3.7'	21 23.2	-45 46	412	SAbc			
NGC 6918	ESO 234-40	Galaxy	IND	13.5	13	0.9'	20 30.8	-47 28	412	SBO-a			
NGC 6982	ESO 235-19	Galaxy	IND	13.7	13.1	1'	20 57.3	-51 52	437	SBa			
NGC 6948	ESO 187- 9	Galaxy	IND	13.8	-	2.2'	20 43.5	-53 21	437	Sa			
NGC 7004	ESO 235-46	Galaxy	IND	13.8	13.4	1.3'	21 04.0	-49 07	412	SBO-a			
NGC 7106	ESO 188-17	Galaxy	IND	13.9	-	1.7'	21 42.6	-52 42	438	SBc			
NGC 6990	ESO 187-43	Galaxy	IND	14	-	1.2'	21 00.0	-55 34	437	Sa			
NGC 7205A	ESO 146- 7	Galaxy	IND	14	13.9	1.2'	22 07.5	-57 28	438	SBcd			
NGC 7243	OCL 221	Opn CL	LAC	6.4	-	21'	22 15.1	+49 54	87	IV 2 p	40	8.5	H VIII 75;Incl Struve 2890 D*
NGC 7209	OCL 215	Opn CL	LAC	7.7	-	25'	22 05.1	+46 29	87	III 1 p	25	9	H VII 53
IC 1434	Cr 445	Opn CL	LAC	9	-	8'	22 10.5	+52 50	57	II 1 p?	40	12	
IC 1442	OCL 224	Opn CL	LAC	9.1	-	5'	22 16.5	+54 03	57	II 2 m	20	11.4	
NGC 7245	OCL 225	Opn CL	LAC	9.2	-	5'	22 15.3	+54 20	57	II 1 p		12.8	H VI 29;50 vF stars
NGC 7296	OCL 228	Opn CL	LAC	9.7	-	4'	22 28.2	+52 17	57	III 2 p	20	10	H VII 41
PK 100- 8.1	Merrill 2-2	Pln Neb	LAC	11.9	6.1	5.0"	22 31.7	+47 48	87	1		16.1	Stellar
NGC 7223	UGC 11931	Galaxy	LAC	12.2	12.8	1.7'	22 10.2	+41 01	87	SBc			H III 862;UGC 11931 asym spir w 3 main arms
NGC 7265	UGC 12004	Galaxy	LAC	12.2	13.7	2.4'	22 22.5	+36 13	123	E-SO			
NGC 7330	UGC 12111	Galaxy	LAC	12.2	13.4	1.8'	22 36.9	+38 33	123	Elliptical			
NGC 7426	UGC 12256	Galaxy	LAC	12.3	13.3	1.7'	22 56.1	+36 22	123	Elliptical			H III 576;UGC 12256
UGC 11909	PGC 68029	Galaxy	LAC	12.3	12.9	3'	22 06.3	+47 15	87	S pec			
NGC 7248	UGC 11972	Galaxy	LAC	12.4	12.7	1.8'	22 16.9	+40 30	87	SO			H III 863;UGC 11972;sev smaller galaxies near
NGC 7250	UGC 11980	Galaxy	LAC	12.6	12.8	1.7'	22 18.3	+40 34	87	Sd			H III 864;Disturbed?;UGC 11980
IC 5217	PK 100-5.1	Pln Neb	LAC	12.6	6.6	7.5"	22 23.9	+50 58	57	2		14.6	
NGC 7197	UGC 11887	Galaxy	LAC	12.8	12.9	1.6'	22 03.0	+41 04	87	Sa			H II 599
NGC 7274	UGC 12026	Galaxy	LAC	12.8	13.7	1.5'	22 24.2	+36 08	123	Elliptical			brightest of 3
NGC 7231	UGC 11951	Galaxy	LAC	13	13.1	1.9'	22 12.5	+45 20	87	SBa			H II 606
NGC 7379	UGC 12187	Galaxy	LAC	13.4	13.2	1.1'	22 47.5	+40 14	87	SBa			
NGC 7227	UGC 11942	Galaxy	LAC	13.5	13.1	1.3'	22 11.5	+38 43	122	SO			
NGC 7228	UGC 11945	Galaxy	LAC	13.5	13.9	1.3'	22 11.8	+38 42	122	SBa			
NGC 7282	UGC 12034	Galaxy	LAC	13.7	14.6	2.5'	22 25.9	+40 19	87	SBb Ring			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 7264	UGC 12001	Galaxy	LAC	13.8	13.3	2.2'	22 22.2	+36 23	123	Sb			Core .15'X0.15' mag=15.7
NGC 7395	UGC 12216	Galaxy	LAC	13.8	14	1.2'	22 51.0	+37 05	123	SO			Double nucleus?
Berk 96		Opn CL	LAC	-	-	2'	22 29.8	+55 24	57	I 2p :b	15	13	
Berk 98		Opn CL	LAC	-	-	6'	22 42.6	+52 24	58	III 2m :b	50	15	
King 9		Opn CL	LAC	-	-	2.5'	22 15.5	+54 25	57	I 1m :b	40	18	
M 66	NGC 3627	Galaxy	LEO	8.9	12.7	9.1'	11 20.2	+13 00	191	SBb			Leo's triplet ;M 65 & NGC 3628 in field
NGC 2903	UGC 5079	Galaxy	LEO	9	13.6	12'	09 32.2	+21 30	143	SBbc			H I 56;short B nucleus bar;fine multi arm spiral
NGC 3521	UGC 6150	Galaxy	LEO	9	13.2	11.2'	11 05.8	-00 02	236	SBbc			H I 13
M 65	NGC 3623	Galaxy	LEO	9.3	12.8	9'	11 18.9	+13 05	191	SBa			M66 subgroup, Leo's Triplet
M 96	NGC 3368	Galaxy	LEO	9.3	13.1	7.8'	10 46.8	+11 49	190	SBab Ri			comp @ 3.8';PA 205
M 105	NGC 3379	Galaxy	LEO	9.3	12.8	5.3'	10 47.8	+12 35	190	E1			P w NGC 3384 @ 7.2';NGC 3389 @ 10 '';Leo Group
NGC 3628	UGC 6350	Galaxy	LEO	9.5	13.4	13.1'	11 20.3	+13 35	191	Sb			H V 8;Leo group;disturbed
M 95	NGC 3351	Galaxy	LEO	9.7	13.5	7.3'	10 44.0	+11 42	190	SBb			Leo group
NGC 3384	NGC 3371	Galaxy	LEO	9.9	12.6	5.4'	10 48.3	+12 38	190	E7			Leo group;near M105 w NGC 3379 and NGC 3389
NGC 3607	UGC 6297	Galaxy	LEO	9.9	12.5	4.6'	11 16.9	+18 03	146	E-SO			H II 50;brightest in group;P w NGC 3608 at 6.2';PA10
UGC 5470	Leo I	Galaxy	LEO	10.2	14.8	10.7'	10 08.4	+12 18	189	dE3			dwarf elliptical in Local Group;0.3' N of Regulus
NGC 3227	UGC 5620	Galaxy	LEO	10.3	13.4	6.6'	10 23.5	+19 52	144	SBa			P w NGC 3226:vF env surr system;50' E of Gam Leo
NGC 3489	UGC 6082	Galaxy	LEO	10.3	12.3	3.6'	11 00.3	+13 54	191	SBO-a			H II 101;Leo group
NGC 3377	UGC 5899	Galaxy	LEO	10.4	13.4	4.3'	10 47.7	+13 59	190	Elliptical			H II 99;Leo group
NGC 3640	UGC 6368	Galaxy	LEO	10.4	13.2	4.5'	11 21.1	+03 14	236	Elliptical			H II 33;P w NGC 3641 at 2.5';PA170
NGC 3412	UGC 5952	Galaxy	LEO	10.5	12.6	3.7'	10 50.9	+13 25	190	SBO			H I 27;Leo group
NGC 3608	UGC 6299	Galaxy	LEO	10.8	13	3.5'	11 17.0	+18 09	146	Elliptical			H II 51;NGC 3607 group;comp 5.9';PA251;0.8'X0.3'
NGC 3810	UGC 6644	Galaxy	LEO	10.8	13.4	4.1'	11 41.0	+11 28	192	Sc			H I 21
NGC 3193	UGC 5562	Galaxy	LEO	10.9	13.1	2.9'	10 18.4	+21 54	144	E0			H II 45;NGC 3189-90 group;vB center in smooth nebula
NGC 3371	NGC 3384	Galaxy	LEO	10.9	-	5.4'	10 48.3	+12 38	190	E-SO Ba			near M 105
NGC 3507	UGC 6123	Galaxy	LEO	10.9	13.3	3.4'	11 03.4	+18 08	146	SBb			H IV 7;P w NGC 3501
NGC 3593	UGC 6272	Galaxy	LEO	10.9	13.3	4.9'	11 14.6	+12 49	191	Sa			H I 29;in NGC 3607 group;BN w L bulge and dk lane
NGC 3626	NGC 3632	Galaxy	LEO	11	12.6	3.2'	11 20.1	+18 21	146	Sa			Indense part of clust;nearest comp 2' PA73 .5'X0.4'
NGC 3190	UGC 5559	Galaxy	LEO	11.1	13.1	4'	10 18.1	+21 50	144	Sa			H II 44;bright in grp;disturbed edge-on spiral;P w 3187
NGC 3338	UGC 5826	Galaxy	LEO	11.1	14.2	5.7'	10 42.1	+13 45	190	Sc			H II 77;Leo group
NGC 3646	UGC 6376	Galaxy	LEO	11.1	13.3	3.9'	11 21.7	+20 10	146	Sc			H III 15;P w NGC 3649
NGC 3705	UGC 6498	Galaxy	LEO	11.1	13.4	4.6'	11 30.1	+09 17	192	SBab			H II 13
NGC 3681	UGC 6445	Galaxy	LEO	11.2	12.8	3'	11 26.5	+16 52	191	SBbc			H II 159;NGC 3684 at 14;44
NGC 2964	UGC 5183	Galaxy	LEO	11.3	12.8	3'	09 42.9	+31 51	104	SBbc Ri			H I 114;v faint bar;2 mn. knotty arms; Mrk 404 in disc
NGC 3239	UGC 5637	Galaxy	LEO	11.3	14.2	4.5'	10 25.1	+17 10	145	Ir Bar			H IV 10;strongly peculiar;UGC 5637
NGC 3596	UGC 6277	Galaxy	LEO	11.3	14.1	4.1'	11 15.1	+14 47	191	SBc			H II 102;Leo group;UGC 6277
NGC 3686	UGC 6460	Galaxy	LEO	11.3	13.4	3.1'	11 27.7	+17 13	146	SBbc			H II 160=H III 28
NGC 3226	UGC 5617	Galaxy	LEO	11.4	13.8	2.5'	10 23.4	+19 54	144	Elliptical			H II 28;P w NGC 3227 at 2.3' sf;UGC 5617
NGC 3301	NGC 3760	Galaxy	LEO	11.4	12.7	3.3'	10 36.9	+21 53	145	SBO-a			H II 46;P w NGC 3287 at 33' PA245;Nearly edge-on
NGC 3684	UGC 6453	Galaxy	LEO	11.4	13.3	3.4'	11 27.2	+17 02	146	Sbc			NGC 3686 at 14';PA 33
NGC 3900	UGC 6786	Galaxy	LEO	11.4	13	3.5'	11 49.2	+27 01	147	Sa Ring			H I 82
NGC 2911	UGC 5092	Galaxy	LEO	11.5	14.2	4'	09 33.8	+10 09	188	SO			brightest in group;diffuse nebula w dk lane on one side
NGC 3041	UGC 5303	Galaxy	LEO	11.5	13.8	3.7'	09 53.1	+16 41	189	SBc			H II 98;sBN;sev F knotty arms;poor res
NGC 3367	UGC 5880	Galaxy	LEO	11.5	13.2	2.5'	10 46.6	+13 45	190	SBc			H II 78
NGC 3162	NGC 3575	Galaxy	LEO	11.6	13.7	3.1'	10 13.5	+22 44	144	SBbc Ri			H II 43;svBN: 0.5'X0.3';2 main knotty arms
NGC 3370	UGC 5887	Galaxy	LEO	11.6	13.3	2.9'	10 47.1	+17 16	145	Sc			H II 81
NGC 3433	UGC 5981	Galaxy	LEO	11.6	14.1	3.7'	10 52.1	+10 09	190	Sc			H III 20;UGC 5981
NGC 3655	UGC 6396	Galaxy	LEO	11.6	12	1.5'	11 22.9	+16 35	191	Sc			H I 5
NGC 2968	UGC 5190	Galaxy	LEO	11.7	13	2.1'	09 43.2	+31 56	104	Sa			H II 491;diffuse; Mrk 405 east 5.1 min , near 2964
NGC 3346	UGC 5842	Galaxy	LEO	11.7	13.7	2.7'	10 43.6	+14 52	190	SBc			H V 7
NGC 3872	UGC 6738	Galaxy	LEO	11.7	12.6	2.3'	11 45.8	+13 46	192	Elliptical			P w UGC 6758 at 19 '';PA101;comp PA 259;0.2'X0.2'
NGC 3373	NGC 3389	Galaxy	LEO	11.8	-	2.9'	10 48.5	+12 32	190	Sc			near M 105
NGC 3485	UGC 6077	Galaxy	LEO	11.8	13.3	2.4'	11 00.0	+14 50	191	SBbc			H II 100;UGC 6077
NGC 3495	UGC 6098	Galaxy	LEO	11.8	13.6	4.9'	11 01.3	+03 38	236	Scd			H III 498;Nearly edge-on
NGC 3632	NGC 3626	Galaxy	LEO	11.8	-	3.2'	11 20.1	+18 21	146	Sa			see 3626
NGC 3691	UGC 6464	Galaxy	LEO	11.8	12	1.4'	11 28.2	+16 55	192	SB/P			H II 54;NGC 3681 at 19.2';PA352
NGC 3842	UGC 6704	Galaxy	LEO	11.8	12.2	1.4'	11 44.0	+19 57	147	Elliptical			H III 377;brightest in cluster Abell 1367
NGC 3968	UGC 6895	Galaxy	LEO	11.8	13.4	2.7'	11 55.5	+11 58	192	SBbc			H II 162;NGC 3973 at 2.6';PA48;0.4'X0.2'
NGC 2872	UGC 5018	Galaxy	LEO	11.9	13.3	1.8'	09 25.7	+11 26	188	E2			H II 57=II 546
NGC 3020	UGC 5271	Galaxy	LEO	11.9	13.5	3'	09 50.1	+12 49	188	SBc			H III 51;brightest in group
NGC 3389	NGC 3373	Galaxy	LEO	11.9	13.2	2.9'	10 48.5	+12 32	190	Sc			H II 41;Leo group;SN 1967c
NGC 3599	UGC 6281	Galaxy	LEO	11.9	13.7	2.5'	11 15.4	+18 07	146	SO			H II 49;NGC 3607 group
NGC 3630	NGC 3645	Galaxy	LEO	11.9	14.6	2'	11 20.3	+02 58	236	Sa			NGC 3640 group;comp 2.6';PA135;0.3'X0.15'
NGC 3098	UGC 5397	Galaxy	LEO	12	12.2	2.2'	10 02.3	+24 43	144	Sa			sBN;B lens

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3455	UGC 6028	Galaxy	LEO	12	13.3	2.7'	10 54.5	+17 17	145	SBb			H II 82;P w NGC 3454;Nearly edge-on
NGC 3666	UGC 6420	Galaxy	LEO	12	13.6	4.6'	11 24.4	+11 21	191	SBc			H I 20;UGC 6420;Nearly edge-on
NGC 3773	UGC 6605	Galaxy	LEO	12	12.1	1.2'	11 38.2	+12 07	192	SO			H III 81
NGC 3801	UGC 6635	Galaxy	LEO	12	14.1	2.8'	11 40.3	+17 44	147	SO			H II 161
NGC 4008	UGC 6953	Galaxy	LEO	12	13.3	2.4'	11 58.3	+28 12	107	Elliptical			H II 368
UGC 6253	Leo II	Galaxy	LEO	12	17.3	12'	11 13.5	+22 10	146	dE0			Memb Local Group;Dwarf elliptical
NGC 2916	UGC 5103	Galaxy	LEO	12.1	13.4	2.5'	09 35.0	+21 42	143	Sb			asym;radial filaments n;term on patchy arc;spir centr
NGC 3049	UGC 5325	Galaxy	LEO	12.1	13.2	2.2'	09 54.8	+09 16	189	SBab Rir			
NGC 3067	UGC 5351	Galaxy	LEO	12.1	12.8	2.4'	09 58.4	+32 22	104	SBab			H II 492;B complx bar or lens w B knots & dk lanes
NGC 3300	UGC 5766	Galaxy	LEO	12.1	12.7	1.7'	10 36.6	+14 10	190	SBO			H III 55
NGC 3434	UGC 5980	Galaxy	LEO	12.1	13.4	2.1'	10 52.0	+03 47	235	Sb			H III 497
NGC 3437	UGC 5995	Galaxy	LEO	12.1	12.7	2.6'	10 52.6	+22 56	145	SBc			H II 47
NGC 3611	NGC 3604	Galaxy	LEO	12.1	13.4	2'	11 17.5	+04 33	236	Sa			H II 521;comp 3.1' 348;UGC 6305
NGC 3629	UGC 6352	Galaxy	LEO	12.1	13.4	2'	11 20.5	+26 58	146	SBc			H II 338
NGC 3692	UGC 6474	Galaxy	LEO	12.1	12.9	3.1'	11 28.4	+09 24	192	Sb			H II 152
NGC 3798	UGC 6632	Galaxy	LEO	12.1	13.6	2.5'	11 40.2	+24 42	147	SBO			tri grp w NGC 3812 at 14.2';PA58;NGC 3815 at 20.3'
NGC 3185	UGC 5554	Galaxy	LEO	12.2	13.4	2.1'	10 17.6	+21 41	144	SBbc			NGC 3189-90 group
NGC 3462	UGC 6034	Galaxy	LEO	12.2	12.9	1.7'	10 55.4	+07 42	190	SO			H II 16;plume;comp 2.8';PA255;0.25'X0.2'
NGC 3575	NGC 3162	Galaxy	LEO	12.2	-	3.1'	10 13.5	+22 44	144	SBbc Rir			
NGC 3070	UGC 5350	Galaxy	LEO	12.3	13.1	1.5'	09 58.1	+10 22	189	Elliptical			H II 59;comp 4.2';PA88;0.6'X0.3';IC 580 at 5.1';PA330
NGC 3094	UGC 5390	Galaxy	LEO	12.3	13.3	2'	10 01.4	+15 46	189	SBa			
NGC 3287	UGC 5742	Galaxy	LEO	12.3	12.9	2'	10 34.8	+21 39	145	SBcd			P w NGC 3301
NGC 3332	NGC 3342	Galaxy	LEO	12.3	13	1.4'	10 40.5	+09 11	190	E-SO			H I 272?
NGC 3598	UGC 6278	Galaxy	LEO	12.3	13.1	1.8'	11 15.2	+17 16	146	E-SO			P w NGC 3592
NGC 3605	UGC 6295	Galaxy	LEO	12.3	12.8	1.4'	11 16.8	+18 01	146	Elliptical			H III 27;NGC 3607 nf
NGC 3659	UGC 6405	Galaxy	LEO	12.3	13	2.3'	11 23.8	+17 49	146	SB			H II 53
NGC 3689	UGC 6467	Galaxy	LEO	12.3	12.9	1.7'	11 28.2	+25 40	147	SBc			H II 339;comp at 4.7';PA347;0.4'X0.1'
NGC 3760	NGC 3301	Galaxy	LEO	12.3	-	3.3'	10 36.9	+21 53	145	SBO-a			
NGC 2894	UGC 5056	Galaxy	LEO	12.4	12.9	1.9'	09 29.5	+07 43	188	Sa			H III 8;diffuse
NGC 2939	UGC 5134	Galaxy	LEO	12.4	13.1	2.5'	09 38.1	+09 31	188	Sbc			H III 4;brightest of 3
NGC 2943	UGC 5136	Galaxy	LEO	12.4	13.5	2.2'	09 38.5	+17 02	143	Elliptical			brightest in group;several comps
NGC 2954	UGC 5155	Galaxy	LEO	12.4	13.1	1.7'	09 40.4	+14 55	188	Elliptical			
NGC 3177	UGC 5544	Galaxy	LEO	12.4	12.8	1.5'	10 16.6	+21 07	144	Sbc			H III 25;NGC 3189-90 group
NGC 3248	UGC 5669	Galaxy	LEO	12.4	13.4	2.5'	10 27.8	+22 51	145	SO			H II 347
NGC 3768	UGC 6589	Galaxy	LEO	12.4	13.1	1.8'	11 37.2	+17 50	147	SO			H III 29
NGC 3812	UGC 6648	Galaxy	LEO	12.4	13.4	1.7'	11 41.1	+24 49	147	Elliptical			H III 320;NGC 3815 at 6.7';PA100
NGC 3853	UGC 6712	Galaxy	LEO	12.4	13	1.6'	11 44.5	+16 33	192	Elliptical			nff of 2;comp 1.3';PA252;0.4'X0.3'
NGC 3912	NGC 3899	Galaxy	LEO	12.4	12.6	1.5'	11 50.1	+26 29	147	SBb			H II 342
NGC 2874	UGC 5021	Galaxy	LEO	12.5	13	2.2'	09 25.8	+11 26	188	SBbc			disturbed;possibly not interacting;largest of triplet
NGC 3032	UGC 5292	Galaxy	LEO	12.5	13.8	2.4'	09 52.1	+29 14	104	SBO Rir			svBN in sh stubby bar
NGC 3342	NGC 3332	Galaxy	LEO	12.5	-	1.4'	10 40.5	+09 11	190	E-SO			H III 5
NGC 3419	UGC 5964	Galaxy	LEO	12.5	12.6	0.8'	10 51.3	+13 57	190	SBO-a			NGC 3419A at 4.7';PA6
NGC 3506	UGC 6120	Galaxy	LEO	12.5	12.6	1.1'	11 03.2	+11 05	191	Sc			H III 22;P w UGC 6122 at 5.3';PA 62
NGC 3816	UGC 6656	Galaxy	LEO	12.5	13.2	1.9'	11 41.8	+20 06	147	SO			
NGC 3937	IC 2968;UGC 6656	Galaxy	LEO	12.5	13.5	1.8'	11 52.7	+20 38	147	E-SO			H III 389;IC 2958 at 2.8';PA262;0.9'X0.45'
NGC 2882	UGC 5030	Galaxy	LEO	12.6	12.6	1.5'	09 26.6	+07 57	188	S pec			
NGC 2918	UGC 5112	Galaxy	LEO	12.6	12.9	1.4'	09 35.7	+31 42	103	Elliptical			H III 298
NGC 2991	UGC 5233	Galaxy	LEO	12.6	13	1.4'	09 46.8	+22 01	143	SO			Contact P w NGC 2988;sev alm stel objects in vicinity
NGC 3121	NGC 3119	Galaxy	LEO	12.6	13.5	1.7'	10 06.9	+14 22	189	Elliptical			P w UGC 5436 II companion superimposed
NGC 3153	UGC 5505	Galaxy	LEO	12.6	13.3	2.1'	10 12.8	+12 40	189	Sc			H III 53;comp at 5.3';PA96;0.9'X0.5';maq 15.5
NGC 3352	UGC 5851	Galaxy	LEO	12.6	13.1	1.6'	10 44.2	+22 22	145	SO			
NGC 3357	UGC 5206	Galaxy	LEO	12.6	13.4	1.3'	10 44.3	+14 05	190	Elliptical			
NGC 3447	UGC 6006	Galaxy	LEO	12.6	14.7	3.8'	10 53.4	+16 46	190	SBdp			P w UGC 6007 at 1.7';PA65;comp 1.7';PA150;0.3'X0.3'
NGC 3457	NGC 3460	Galaxy	LEO	12.6	12.3	0.9'	10 54.8	+17 37	145	Compac			
NGC 3460	NGC 3457	Galaxy	LEO	12.6	-	0.9'	10 54.8	+17 37	145	Compac			
NGC 3805	UGC 6642	Galaxy	LEO	12.6	13	1.4'	11 40.7	+20 21	147	E-SO			H III 375
NGC 3883	UGC 6754	Galaxy	LEO	12.6	14.6	2.8'	11 46.8	+20 41	147	Sb			H III 372
NGC 3884	UGC 6746	Galaxy	LEO	12.6	13.6	2.1'	11 46.2	+20 23	147	Sa Rir			H III 388;comp 3.4';PA348;0.5'X0.2'
UGC 5364	Leo III	Galaxy	LEO	12.6	15.4	4.9'	09 59.4	+30 45	104	Ir+			Local Group dwarf irregular
UGC 5522	PGC 29835	Galaxy	LEO	12.6	14.3	3'	10 13.9	+07 01	189	Sc			
NGC 2906	UGC 5081	Galaxy	LEO	12.7	12.8	1.4'	09 32.1	+08 27	188	Sc			H II 495
NGC 3053	UGC 5329	Galaxy	LEO	12.7	13.1	1.8'	09 55.6	+16 26	189	SBa			H III 600;UGC 5332 at 3.8';PA108;mag17;1.2'X0.3'
NGC 3209	UGC 5584	Galaxy	LEO	12.7	13.1	1.3'	10 20.6	+25 30	144	Elliptical			brightest in group
NGC 3509	UGC 6134	Galaxy	LEO	12.7	13.4	1.4'	11 04.4	+04 50	236	SBbc			H II 598;large luminous system;strongly peculiar

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3559	NGC 3560	Galaxy	LEO	12.7	12.7	1.3'	11 10.8	+12 01	191	S pec			H III 79;spiral-type obj w complex str
NGC 3800	UGC 6634	Galaxy	LEO	12.7	12.8	2'	11 40.2	+15 21	192	SBb/P			H II 103;P w NGC 3799
NGC 3862	UGC 6723	Galaxy	LEO	12.7	13.5	1.5'	11 45.1	+19 36	147	Elliptical			H III 385
NGC 2862	UGC 5010	Galaxy	LEO	12.8	13	2.5'	09 24.9	+26 46	143	SBbc			
NGC 3222	UGC 5610	Galaxy	LEO	12.8	13	1.2'	10 22.6	+19 53	144	SBO			quadruple group;indiv mag approx 16.5
NGC 3230	UGC 5624	Galaxy	LEO	12.8	13.7	2.3'	10 23.7	+12 34	189	SO			
NGC 3274	UGC 5721	Galaxy	LEO	12.8	13.5	2'	10 32.3	+27 40	145	SBcd			H II 358;comp 1.5';PA305;0.3'X0.2'
NGC 3299	UGC 5761	Galaxy	LEO	12.8	14.1	1.9'	10 36.4	+12 42	190	SBd			H III 54;NGC 3306 group;UGC 5761
NGC 3362	UGC 5857	Galaxy	LEO	12.8	13.1	1.4'	10 44.9	+06 36	190	Sc			P w NGC 3356
NGC 3399	MCG 3-28-	Galaxy	LEO	12.8	13.8	1.7'	10 49.5	+16 13	190	SO			
NGC 3524	UGC 6158	Galaxy	LEO	12.8	12.4	1.6'	11 06.5	+11 23	191	Sa			H III 23;sf of 2
NGC 3547	UGC 6209	Galaxy	LEO	12.8	13.3	2'	11 09.9	+10 43	191	Sb			H II 42
NGC 3555	ZWG 125.3	Galaxy	LEO	12.8	14	0.4'	11 09.8	+21 49	146	SO			
NGC 3604	NGC 3611	Galaxy	LEO	12.8	-	2'	11 17.5	+04 33	236	Sa			H II 626
NGC 3615	UGC 6313	Galaxy	LEO	12.8	13.1	1.4'	11 18.1	+23 24	146	Elliptical			H III 333;P w NGC 3618
NGC 3664	UGC 6419	Galaxy	LEO	12.8	14.1	2'	11 24.4	+03 20	236	SB/P			strongly asym
NGC 3869	UGC 6737	Galaxy	LEO	12.8	12.6	1.9'	11 45.8	+10 49	192	Sa			
NGC 3902	UGC 6790	Galaxy	LEO	12.8	13.5	1.6'	11 49.3	+26 07	147	SBbc			H III 321
NGC 3910	UGC 6800	Galaxy	LEO	12.8	13.4	1.6'	11 50.0	+21 20	147	E-SO			comps 1.8';PA181;0.35'X0.2';5.1';PA96;0.5'X0.5'
NGC 3940	UGC 6852	Galaxy	LEO	12.8	13.9	1.7'	11 52.8	+20 59	147	Elliptical			H III 380
NGC 2919	UGC 5102	Galaxy	LEO	12.9	12.8	1.6'	09 34.8	+10 17	188	SBbc			NGC 2911 aroup;bright nucleus in weak bar
NGC 2927	UGC 5122	Galaxy	LEO	12.9	13.6	1.9'	09 37.3	+23 35	143	SBb			small blue cond in spiral arm sp center
NGC 2948	UGC 5141	Galaxy	LEO	12.9	13	1.4'	09 39.0	+06 57	188	SBbc			H III 519
NGC 3016	UGC 5266	Galaxy	LEO	12.9	12.9	1.2'	09 49.8	+12 42	188	Sb			NGC 3020 group
NGC 3391	UGC 5920	Galaxy	LEO	12.9	12.3	1'	10 48.9	+14 13	190	Sc			
NGC 3501	UGC 6116	Galaxy	LEO	12.9	13.5	3.9'	11 02.8	+17 59	146	Sc			P w NGC 3507 at 12.7';PA45
NGC 3662	UGC 6408	Galaxy	LEO	12.9	13	1.3'	11 23.8	-01 06	236	SBb/P			H IV 4;triple system
NGC 3701	UGC 6493	Galaxy	LEO	12.9	13.4	1.9'	11 29.5	+24 06	147	Sbc			H II 349
NGC 3720	UGC 6523	Galaxy	LEO	12.9	12.6	1'	11 32.4	+00 48	237	Sa			P w NGC 3719
NGC 3821	UGC 6663	Galaxy	LEO	12.9	13.4	1.4'	11 42.2	+20 19	147	SBO-a R			H III 376;comp 3.1';PA275;0.8'X0.7'
NGC 3873	UGC 6735	Galaxy	LEO	12.9	13.5	1.5'	11 45.8	+19 46	147	Elliptical			comp 1.2';PA259;0.2'X0.2'
NGC 3944	UGC 6859	Galaxy	LEO	12.9	13.3	1.4'	11 53.1	+26 12	147	E-SO			H III 322
NGC 3987	UGC 6928	Galaxy	LEO	12.9	12.7	2.2'	11 57.3	+25 12	147	Sb			NGC 3993 at 4.6';PA55;NGC 3989 at 2.6';PA30
UGC 6670	PGC 36355	Galaxy	LEO	12.9	13.8	4.2'	11 42.4	+18 19	147	Ir+			compact core
UGC 6725	PGC 36609	Galaxy	LEO	12.9	13.5	1.8'	11 45.1	+20 26	147	S0			
NGC 3026	UGC 5279	Galaxy	LEO	13	13.7	2.7'	09 50.9	+28 33	104	Ir			
NGC 3060	UGC 5338	Galaxy	LEO	13	13.1	2.2'	09 56.3	+16 50	189	Sb			H III 601;P w UGC 5343 at 6.4';PA101;mag 15.5;1.2'X0.5'
NGC 3131	UGC 5471	Galaxy	LEO	13	13.4	2.4'	10 08.6	+18 14	144	SBb			comp 1.5';PA152;0.25'X0 5'
NGC 3719	UGC 6521	Galaxy	LEO	13	13.8	1.7'	11 32.2	+00 49	237	Sbc Ring			P w NGC 3720 at 2.2';PA115
NGC 3728	UGC 6536	Galaxy	LEO	13	14.1	2'	11 33.3	+24 27	147	Sb			H II 351
NGC 3815	UGC 6654	Galaxy	LEO	13	13.3	1.7'	11 41.7	+24 48	147	Sab			H III 339
NGC 3832	UGC 6693	Galaxy	LEO	13	14.1	1.9'	11 43.5	+22 43	147	SBc			H III 340;the ring is open on f side
NGC 2913	UGC 5095	Galaxy	LEO	13.1	12.7	1.1'	09 34.0	+09 29	188	Sc			
NGC 2914	UGC 5096	Galaxy	LEO	13.1	12.6	0.9'	09 34.0	+10 07	188	SBab			NGC 2911 group;2 main reg arms;poor resolution
NGC 2994	UGC 5239	Galaxy	LEO	13.1	13.2	1.3'	09 47.3	+22 05	143	SO			P w NGC 2988;2891
NGC 3024	UGC 5275	Galaxy	LEO	13.1	12.9	2'	09 50.5	+12 46	188	Sc			H III 52;NGC 3020 group
NGC 3221	UGC 5601	Galaxy	LEO	13.1	13.8	3.1'	10 22.3	+21 34	144	SBc			SN 1961 I
NGC 3270	UGC 5711	Galaxy	LEO	13.1	13.9	3.1'	10 31.5	+24 52	145	SBb Ring			H III 331;comp 2.6';PA121;0.25'X0.12'
NGC 3425	NGC 3388	Galaxy	LEO	13.1	13	1'	10 51.4	+08 34	190	SO			H III 108;nfn of 2
NGC 3426	UGC 5975	Galaxy	LEO	13.1	12.8	1.1'	10 51.7	+18 29	145	S			
NGC 3428	NGC 3429	Galaxy	LEO	13.1	13.1	1.5'	10 51.5	+09 17	190	SBb			
NGC 3443	UGC 6000	Galaxy	LEO	13.1	14.4	2.8'	10 53.0	+17 34	145	Scd			
NGC 3475	UGC 6058	Galaxy	LEO	13.1	13.6	1.7'	10 58.4	+24 14	146	Sa			H III 332;brightest in group
NGC 3492	UGC 6094	Galaxy	LEO	13.1	12.8	1.1'	11 01.0	+10 30	191	Elliptical			double system;brightest in group
NGC 3522	UGC 6159	Galaxy	LEO	13.1	13	1.2'	11 06.7	+20 05	146	Elliptical			comp 2.1';PA255;0.4'X0.1'
NGC 3609	UGC 6310	Galaxy	LEO	13.1	13.1	1.2'	11 17.8	+26 37	146	SBab Ring			P w NGC 3612 at 5.4';PA274
NGC 3710	UGC 6504	Galaxy	LEO	13.1	12.8	1'	11 31.1	+22 46	147	Elliptical			H II 350
NGC 3886	UGC 6760	Galaxy	LEO	13.1	13	1.2'	11 47.1	+19 50	147	E-SO			
NGC 3920	UGC 6803	Galaxy	LEO	13.1	12.9	1'	11 49.4	+24 56	147	SBbc			P w NGC 3911
NGC 3947	UGC 6863	Galaxy	LEO	13.1	13.6	1.4'	11 53.3	+20 45	147	SBb			comp 1.6';PA232;0.35'X0.15';comp 3 ' ;PA250;0.7'X0.4'
NGC 4005	NGC 4007	Galaxy	LEO	13.1	12.8	1.2'	11 58.2	+25 07	147	S pec			
NGC 2893	UGC 5060	Galaxy	LEO	13.2	13.2	1.1'	09 30.3	+29 32	103	SBO-a R			H III 297;brightest in group
NGC 2958	UGC 5160	Galaxy	LEO	13.2	12.8	1'	09 40.7	+11 53	188	SBbc			
NGC 3427	UGC 5966	Galaxy	LEO	13.2	12.5	1.1'	10 51.4	+08 18	190	Sa			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3429	NGC 3428	Galaxy	LEO	13.2	-	1.5'	10 51.5	+09 17	190	SBb			
NGC 3491	UGC 6088	Galaxy	LEO	13.2	13	0.9'	11 00.6	+12 10	191	E-SO			H III 21
NGC 3526	NGC 3531	Galaxy	LEO	13.2	12.8	1.9'	11 06.9	+07 10	191	Sc			
NGC 3641	UGC 6370	Galaxy	LEO	13.2	13.3	0.8'	11 21.1	+03 12	236	Elliptical			
NGC 3651	UGC 6388	Galaxy	LEO	13.2	13.4	1.1'	11 22.4	+24 18	146	Elliptical			brightest in group;comp 0.4'X0.2' superimp s center
NGC 3713	UGC 6511	Galaxy	LEO	13.2	13.1	1.2'	11 31.7	+28 09	106	E-SO			H II 367
NGC 3867	UGC 6731	Galaxy	LEO	13.2	12.9	1.5'	11 45.5	+19 24	147	S Ring			
NGC 3011	UGC 5259	Galaxy	LEO	13.3	12.8	0.9'	09 49.7	+32 13	104	SO Ring			
NGC 3251	IC 2579	Galaxy	LEO	13.3	12.9	2'	10 29.3	+26 06	145	SBc			comp @ 2.1';PA140;0.55'X0.15'
NGC 3356	UGC 5852	Galaxy	LEO	13.3	13.5	1.7'	10 44.2	+06 46	190	Sbc			H III 107;P w NGC 3362
NGC 3363	UGC 5866	Galaxy	LEO	13.3	13.3	1.3'	10 45.2	+22 05	145	Sc			comp @ 2.4';PA230;0.8'X0.7';v dif
NGC 3438	UGC 5988	Galaxy	LEO	13.3	12.7	0.8'	10 52.4	+10 33	190	S pec			n of 2
NGC 3567	UGC 6230	Galaxy	LEO	13.3	12.8	0.9'	11 11.3	+05 50	191	SO			H III 89;np of 2;contact
NGC 3802	UGC 6636	Galaxy	LEO	13.3	11.9	1.1'	11 40.3	+17 46	147	Sc			H III 30
NGC 3817	UGC 6657	Galaxy	LEO	13.3	13.1	1'	11 41.9	+10 18	192	SBO-a			comp superimp at 0.35';PA252;0.1'X0.1'
NGC 3827	UGC 6673	Galaxy	LEO	13.3	12.7	0.9'	11 42.6	+18 51	147	Sm			
NGC 3837	UGC 6701	Galaxy	LEO	13.3	12.2	0.6'	11 43.9	+19 54	147	Elliptical			NGC 3842 at 3.6:21
NGC 3919	UGC 6810	Galaxy	LEO	13.3	13.1	0.9'	11 50.7	+20 01	147	Elliptical			
NGC 3943	MCG 4-28-	Galaxy	LEO	13.3	13.3	1.1'	11 52.9	+20 29	147	S			
NGC 3988	MCG 5-28-	Galaxy	LEO	13.3	-	0.9'	11 57.4	+27 53	147	Elliptical			
NGC 4003	NGC 4007	Galaxy	LEO	13.3	13.4	1.5'	11 58.0	+23 07	147	SBO			UGC 6948;H III 345
UGC 6112	PGC 33333	Galaxy	LEO	13.3	13.9	2.3'	11 02.5	+16 44	191	Sd			P w UGC 6104
NGC 2926	UGC 5125	Galaxy	LEO	13.4	12.8	0.8'	09 37.5	+32 50	103	SBb			peculiar
NGC 2984	IC 556	Galaxy	LEO	13.4	12.6	0.7'	09 43.7	+11 04	188	SO			H III 34;IC 556
NGC 3080	UGC 5372	Galaxy	LEO	13.4	12.9	0.9'	09 59.9	+13 03	189	Sa			H III 934;P w IC 585 mag 14.8;1 'X1 '
NGC 3107	UGC 5425	Galaxy	LEO	13.4	12.4	0.7'	10 04.4	+13 37	189	Sbc			H II 898;UGC 5425
NGC 3130	UGC 5468	Galaxy	LEO	13.4	12.6	1'	10 08.2	+09 59	189	Sa			nearby GC 13911 at 4.6';mag 4.58
NGC 3187	UGC 5556	Galaxy	LEO	13.4	14.7	2.9'	10 17.8	+21 52	144	SBc/P			NGC 3189-90 group;distorted
NGC 3216	UGC 5593	Galaxy	LEO	13.4	13.6	1.3'	10 21.7	+23 55	144	Elliptical			H III 330;brightest in group;UGC 5593
NGC 3279	IC 622	Galaxy	LEO	13.4	13.2	2.9'	10 34.7	+11 12	190	Scd			
NGC 3467	UGC 6045	Galaxy	LEO	13.4	13	0.9'	10 56.7	+09 46	191	SO			brightest in group;NGC 3466 at 7 ' ;PA267
NGC 3767	UGC 6590	Galaxy	LEO	13.4	13.1	1'	11 37.3	+16 53	192	SBO			comp 1.3';PA178;0.5'X0.1'
NGC 3808	UGC 6643	Galaxy	LEO	13.4	13.7	1.6'	11 40.7	+22 26	147	SBc/P			H III 338;double system;distorted;twisted bridge
NGC 3826	NGC 3830	Galaxy	LEO	13.4	12.9	0.9'	11 42.5	+26 29	147	Elliptical			H II 341
NGC 3834	MCG 3-30-	Galaxy	LEO	13.4	13.6	1.4'	11 43.6	+19 05	147	S			
NGC 3899	NGC 3912	Galaxy	LEO	13.4	-	1.5'	11 50.1	+26 29	147	SBb			see 3912
NGC 3996	UGC 6941	Galaxy	LEO	13.4	12.8	0.9'	11 57.8	+14 18	192	Sc			
NGC 3997	UGC 6942	Galaxy	LEO	13.4	13.3	1.6'	11 57.8	+25 16	147	SBb/P			multiple sys w NGC 3987;3989;3993
UGC 5425	NGC 3107	Galaxy	LEO	13.4	12.4	0.7'	10 04.4	+13 37	189	Sbc			
UGC 6345	PGC 34696	Galaxy	LEO	13.4	15.3	3.8'	11 20.2	+02 32	236	Ir+			NGC 3640 group
NGC 2940	MCG 2-25-	Galaxy	LEO	13.5	12.9	0.9'	09 38.1	+09 37	188	SO			
NGC 3204	UGC 5580	Galaxy	LEO	13.5	13.6	1.3'	10 20.2	+27 49	144	SBb			comps @ 2.8';PA122;0.3'X0.2';4.2';PA161;0.35'X0.15'
NGC 3213	UGC 5590	Galaxy	LEO	13.5	13.3	1'	10 21.3	+19 39	144	Sbc			
NGC 3306	UGC 5774	Galaxy	LEO	13.5	12.9	1.4'	10 37.2	+12 39	190	SB			brightest in group
NGC 3441	UGC 5993	Galaxy	LEO	13.5	12	0.7'	10 52.5	+07 13	190	Sc			
NGC 3454	UGC 6026	Galaxy	LEO	13.5	13.2	1.8'	10 54.5	+17 21	145	SBc			P w NGC 3455 at 3.7';PA175
NGC 3518	NGC 3110	Galaxy	LEO	13.5	-	1.6'	10 04.0	-06 29	279	Sb			
NGC 3535	UGC 6189	Galaxy	LEO	13.5	12.6	1.1'	11 08.6	+04 50	236	Sa			H III 111
NGC 3570	UGC 6240	Galaxy	LEO	13.5	13.4	1'	11 12.1	+27 35	146	SO			
NGC 3670	UGC 6427	Galaxy	LEO	13.5	13	1.1'	11 24.8	+23 57	146	SBO-a			H III 337
NGC 3716	UGC 6513	Galaxy	LEO	13.5	12.6	0.7'	11 31.7	+03 29	237	SO			
NGC 3772	UGC 6598	Galaxy	LEO	13.5	13	1.1'	11 37.8	+22 41	147	SBa			H II 352
NGC 3934	UGC 6841	Galaxy	LEO	13.5	13.4	1.1'	11 52.2	+16 51	192	Sb			NGC 3933 at 3.5';PA224;comp 1.7';PA356;0.4'X0.4'
NGC 2970	MCG 5-23-	Galaxy	LEO	13.6	12.4	0.4'	09 43.5	+31 59	104	E1			
NGC 2981	UGC 5208	Galaxy	LEO	13.6	13.7	1.2'	09 44.9	+31 06	104	SBbc Ri			
NGC 3075	UGC 5360	Galaxy	LEO	13.6	13.4	1.2'	09 58.9	+14 25	189	Sc			comp 3.5';PA242;0.3'x0.1';v dif
NGC 3253	UGC 5674	Galaxy	LEO	13.6	13.8	1.2'	10 28.5	+12 42	190	SBbc			comp 2.1';PA 229;0.6'X0.1'
NGC 3377A	UGC 5889	Galaxy	LEO	13.6	15.2	2'	10 47.4	+14 04	190	SB			dwarf spiral
NGC 3466	UGC 6042	Galaxy	LEO	13.6	13.1	1'	10 56.3	+09 45	191	SBab			NGC 3467 group
NGC 3473	UGC 6052	Galaxy	LEO	13.6	13.6	1.1'	10 58.1	+17 07	146	SBb			H III 67;P w NGC 3474
NGC 3618	UGC 6327	Galaxy	LEO	13.6	13.1	0.9'	11 18.5	+23 28	146	Sb Ring			H III 334;P w NGC 3615
NGC 3633	UGC 6351	Galaxy	LEO	13.6	12.6	1.1'	11 20.4	+03 35	236	Sab			NGC 3640 group
NGC 3639	UGC 6374	Galaxy	LEO	13.6	12.3	0.6'	11 21.6	+18 27	146	S pec			
NGC 3653	MCG 4-27-	Galaxy	LEO	13.6	12.8	0.9'	11 22.5	+24 17	146	E-SO			H III 336

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3678	UGC 6443	Galaxy	LEO	13.6	12.9	0.8'	11 26.3	+27 52	146	Sbc			
NGC 3753	UGC 6602	Galaxy	LEO	13.6	13.2	1.7'	11 37.9	+21 59	147	Sab			
NGC 3806	UGC 6641	Galaxy	LEO	13.6	14.1	1.4'	11 40.8	+17 48	147	SBb			NGC 3801 at 8.1';PA240
NGC 3839	UGC 6700	Galaxy	LEO	13.6	12.7	1'	11 43.9	+10 47	192	Sd			
NGC 3841	MCG 3-30-	Galaxy	LEO	13.6	12.6	0.7'	11 44.0	+19 58	147	S			
NGC 3933	UGC 6839	Galaxy	LEO	13.6	13	1.1'	11 52.0	+16 49	192	S pec			brightest in group
NGC 3951	UGC 6867	Galaxy	LEO	13.6	12.9	1.1'	11 53.7	+23 23	147	S pec			H III 342;brightest in group
NGC 3954	UGC 6866	Galaxy	LEO	13.6	12.5	0.7'	11 53.7	+20 53	147	Compac			H III 381;red;compact
UGC 6697	PGC 36466	Galaxy	LEO	13.6	12.9	1.9'	11 43.8	+19 57	147	Sm			
UGC 6719	PGC 36574	Galaxy	LEO	13.6	13.4	1.3'	11 44.7	+20 07	147	Sc			
NGC 2929	UGC 5126	Galaxy	LEO	13.7	12.6	1.2'	09 37.5	+23 10	143	Sc			brightest in group w N2930 (m=14.5) N2931(m=15)
NGC 3560	NGC 3559	Galaxy	LEO	13.7	-	1.3'	11 10.8	+12 01	191	Spec			
NGC 3592	UGC 6267	Galaxy	LEO	13.7	13.6	1.8'	11 14.5	+17 16	146	Sc			P w NGC 3598 at 10.4';PA 90
NGC 3644	IC 684	Galaxy	LEO	13.7	13.6	1.5'	11 21.5	+02 49	236	Sa			
NGC 3649	UGC 6386	Galaxy	LEO	13.7	13.1	1.4'	11 22.2	+20 12	146	SBa			H III 16;P w NGC 3646
NGC 3781	MCG 5-28-	Galaxy	LEO	13.7	-	0.5'	11 39.1	+26 22	147	SO			
NGC 3993	UGC 6935	Galaxy	LEO	13.7	13.4	1.6'	11 57.6	+25 14	147	Sb			3997 at 2.9';PA53;mult sys w NGC 3987;3989;3997
UGC 6104	PGC 33276	Galaxy	LEO	13.7	13.1	1.5'	11 01.8	+16 36	191	Sbc			
NGC 3476	NGC 3480	Galaxy	LEO	13.8	-	0.5'	10 58.1	+09 17	191	Elliptical			
NGC 3490	MCG 2-28-	Galaxy	LEO	13.8	-	0.5'	10 59.9	+09 22	191	Elliptical			
NGC 3531	NGC 3526	Galaxy	LEO	13.8	-	1.9'	11 06.9	+07 10	191	Sc			
NGC 3601	UGC 6282	Galaxy	LEO	13.8	12.1	0.5'	11 15.6	+05 07	236	Sab			comps 3.8';PA107;0.5'X0.4';4.4';PA85;0.45'X0.1'
NGC 3819	MCG 2-30-	Galaxy	LEO	13.8	13	0.8'	11 42.1	+10 21	192	Elliptical			
NGC 3840	UGC 6702	Galaxy	LEO	13.8	13.5	1.1'	11 44.0	+20 05	147	Sa			
NGC 3911	UGC 6803	Galaxy	LEO	13.8	13.6	1'	11 50.1	+24 55	147	SBbc			H III 341;P w NGC 3920 at 9.9';PA97
NGC 2946	UGC 5143	Galaxy	LEO	13.9	12.9	1.2'	09 39.0	+17 02	143	SB/P			
NGC 3474	MCG 3-28-	Galaxy	LEO	13.9	13	0.8'	10 58.1	+17 06	146	S			
NGC 3624	MCG 1-29-	Galaxy	LEO	13.9	12.9	0.9'	11 18.8	+07 31	191	SBb			
NGC 3650	UGC 6391	Galaxy	LEO	13.9	13	1.6'	11 22.6	+20 42	146	Sb			comps 1.9';PA137;0.4'X0.2';3.8';PA52;0.9'X0.1'
NGC 3750	MCG 4-28-	Galaxy	LEO	13.9	13.1	0.8'	11 37.9	+21 58	147	E-SO			
NGC 3751	UGC 6601	Galaxy	LEO	13.9	12.7	0.8'	11 37.9	+21 56	147	E-SO			
NGC 3790	UGC 6624	Galaxy	LEO	13.9	12.6	1.1'	11 39.8	+17 43	147	Sa			H III 109;NGC 3801 group
NGC 3799	UGC 6630	Galaxy	LEO	13.9	12.8	0.7'	11 40.2	+15 20	192	SBb/P			P w NGC 3800 at 1.4' nf
NGC 3844	UGC 6705	Galaxy	LEO	13.9	12.4	1.2'	11 44.0	+20 02	147	Sa			
NGC 3875	UGC 6739	Galaxy	LEO	13.9	12.3	1'	11 45.8	+19 46	147	Sa			H III 387;P w NGC 3873
NGC 3964	MCG 5-28-	Galaxy	LEO	13.9	13.2	0.9'	11 54.9	+28 16	107	SO			
NGC 4007	NGC 4005	Galaxy	LEO	13.9	-	1.2'	11 58.2	+25 07	147	S pec			H III 325
Mrk 408	CGCG 182-0	Galaxy	LEO	13.9	-		09 48.1	+32 53	104				Very compact
UGC 6171	PGC 33660	Galaxy	LEO	13.9	14.2	2.2'	11 07.2	+18 34	146	Irp+			
NGC 2944	UGC 5144	Galaxy	LEO	14	13	1'	09 39.3	+32 19	103	Sc			double ;blue w 2 compact knots;contact;disrupted
NGC 3580	MCG 1-29-	Galaxy	LEO	14	12.4	0.9'	11 13.3	+03 39	236	SO			
NGC 3765	MCG 4-28-	Galaxy	LEO	14	13.1	0.8'	11 37.1	+24 06	147	Sc			
NGC 3845	MCG 3-30-	Galaxy	LEO	14	12.5	0.8'	11 44.1	+20 00	147	Sb			
NGC 3861A	UGC 6724	Galaxy	LEO	14	-	2.3'	11 45.1	+19 58	147	Sb Ring			npp of 2;contact
NGC 3929	UGC 6832	Galaxy	LEO	14	12.2	0.6'	11 51.7	+21 00	147	Elliptical			
NGC 3983	UGC 6914	Galaxy	LEO	14	12.8	1.1'	11 56.4	+23 52	147	Sa			H III 343;comp 4.7';PA122;0.8'X0.15'
NGC 4002	MCG 4-28-	Galaxy	LEO	14	12.6	0.8'	11 58.0	+23 12	147	Sab			H III 344
NGC 4004A	NGC 4004	Galaxy	LEO	14	-	1.8'	11 58.1	+27 53	147	Ir			H III 354;UGC 6950
Abell 1367		Gal CL	LEO	14	-	100.8"	11 44.5	+19 50	147	2 I II-III			More GALXYS >14 mag than any GALCL; 117 galaxies
UGC 5588	PGC 30263	Galaxy	LEO	14	12	0.4'	10 20.9	+25 22	144	Pec			In NGC 3209 group;high surface brightness
NGC 2875		Neb+Gx	LEO	-	-	0.5'	09 25.8	+11 26	188	E+*			An HII region within the GALXY 2874 on the NE side
NGC 2905		Neb+Gx	LEO	-	-	13.3"	09 32.2	+21 31	143	E+*			H I 57; NE arm of NGC 2903
NGC 3189	NGC 3190	Neb+Gx	LEO	-	-		10 18.1	+21 50	144	E+*			HII region within the 3190 on the W edge of the Nucleus
M 79	NGC 1904	Glob CL	LEP	7.7	12	7.8'	05 24.2	-24 31	315	V			Stars vF
IC 418	PK 215-24.1	Pln Neb	LEP	10.7	5.8	14"	05 27.5	-12 42	270	4		10.2	11 mag star in nebulous disk
NGC 1964	ESO 554-10	Galaxy	LEP	10.8	13.4	5.5'	05 33.4	-21 57	315	SBb			H IV 21
NGC 2196	ESO 556- 4	Galaxy	LEP	11	12.8	2.8'	06 12.2	-21 48	317	Sa			H II 265
NGC 1744	ESO 486- 5	Galaxy	LEP	11.1	14.9	9.3'	05 00.0	-26 01	314	SBcd			
NGC 1832	MCG - 3-14-	Galaxy	LEP	11.3	12.8	2.3'	05 12.1	-15 41	270	SBbc Rii			H II 292
NGC 2139	IC 2154	Galaxy	LEP	11.6	13.3	2.9'	06 01.1	-23 40	316	SBc			H II 264;IC 2154
NGC 1784	MCG - 2-13-	Galaxy	LEP	11.7	14	4.1'	05 05.5	-11 52	270	SBc			
NGC 1954	MCG - 2-15-	Galaxy	LEP	11.8	14.1	4.2'	05 32.8	-14 04	270	Sbc			H III 590
NGC 1979	ESO 487-24	Galaxy	LEP	11.8	13.2	2.2'	05 34.0	-23 19	315	E-SO			H III 240;IC 2137
NGC 1888	MCG - 2-14-	Galaxy	LEP	11.9	12.7	3.2'	05 22.6	-11 30	270	SB/P			H II 289

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2089	ESO 554-36	Galaxy	LEP	11.9	12.6	1.9'	05 47.9	-17 36	316	E-SO Ba			H III 270
NGC 2106	ESO 555- 3	Galaxy	LEP	12.1	13.4	2.7'	05 50.8	-21 34	316	SBO			
NGC 2179	ESO 555-38	Galaxy	LEP	12.3	12.9	2'	06 08.0	-21 45	316	SBO-a			
NGC 1993	ESO 554-14	Galaxy	LEP	12.4	13.1	1.5'	05 35.4	-17 49	315	E-SO			H III 269
NGC 2073	ESO 554-31	Galaxy	LEP	12.4	13.1	1.5'	05 45.9	-22 00	316	E-SO			H III 241
NGC 2124	ESO 555-16	Galaxy	LEP	12.6	13.4	2.7'	05 57.9	-20 05	316	Sb			H III 225
NGC 1794	NGC 1781	Galaxy	LEP	12.7	12.9	1.3'	05 07.9	-18 11	315	SBO			
NGC 1886	ESO 487- 2	Galaxy	LEP	12.8	13	3.1'	05 21.8	-23 49	315	Sbc			
NGC 1738	ESO 552-49	Galaxy	LEP	12.9	12.6	1.3'	05 01.8	-18 09	314	SBbc			
NGC 1730	IC 2113	Galaxy	LEP	13	-	2.3'	04 59.5	-15 49	269	SB Ring			
NGC 2076	MCG - 3-15-	Galaxy	LEP	13	14	2.2'	05 46.8	-16 47	271	Sa			H III 267
NGC 1716	ESO 552-34	Galaxy	LEP	13.2	13.6	1.4'	04 58.2	-20 22	314	SBbc			
PK 215-30.1	Abell 7	Pln Neb	LEP	13.2	-	12.7'	05 03.2	-15 36	269	3a		15.6	
NGC 1739	ESO 552-50	Galaxy	LEP	13.5	13.3	1.4'	05 01.8	-18 10	314	Sbc			
NGC 1780	ESO 553- 1	Galaxy	LEP	13.7	12.8	0.9'	05 06.3	-19 28	315	SBO			
NGC 1781	NGC 1794	Galaxy	LEP	13.7	-	1.3'	05 07.9	-18 11	315	SBO			H III 268
Abell 548		Gal CL	LEP	13.7	-	56'	05 47.1	-25 38	316	1 1 III			14 Gal/Deq; 79 galaxies
NGC 1710	IC 2108	Galaxy	LEP	14	-	1.3'	04 57.3	-15 17	269	E-SO			
NGC 1821	MCG - 3-14-	Galaxy	LEP	14	-	1.2'	05 11.8	-15 08	270	lr			
NGC 1889	MCG - 2-14-	Galaxy	LEP	14	-	0.6'	05 22.6	-11 30	270	E0			
NGC 1906	MCG - 3-14-	Galaxy	LEP	14	-	0.9'	05 24.8	-15 57	270	Scd			
NGC 5897	GCL 33	Glob CL	LIB	8.4	-	8.7'	15 17.4	-21 01	334	XI			H VI 19
NGC 5812	MCG - 1-38-	Galaxy	LIB	11.2	12.6	2.3'	15 00.9	-07 27	288	E1			H I 71
NGC 5903	ESO 514- 4	Galaxy	LIB	11.2	13.1	3.2'	15 18.6	-24 04	334	E1			H III 139
NGC 5792	UGC 9631	Galaxy	LIB	11.3	13.8	6.8'	14 58.4	-01 05	243	SBb			H II 683;vsBN in broad diff bar w strong dk lane
NGC 5728	MCG - 3-37-	Galaxy	LIB	11.4	13.1	3.2'	14 42.4	-17 15	333	SBab			H I 184
NGC 5898	ESO 514- 2	Galaxy	LIB	11.4	13	2.6'	15 18.2	-24 06	334	E1p			H III 138
NGC 5878	MCG - 2-39-	Galaxy	LIB	11.5	13.1	3.2'	15 13.8	-14 16	289	Sb			H III 736
NGC 5796	NGC 5816	Galaxy	LIB	11.6	13.2	2.8'	14 59.4	-16 37	288	E0			
NGC 5861	MCG - 2-39-	Galaxy	LIB	11.6	13.2	3'	15 09.3	-11 19	288	SBc Ring			H II 192
PK 342+27.1	Merrill 2-1	Pln Neb	LIB	11.6	6.7	16"	15 22.3	-23 38	334	2		18.4	same as PK342+17.1
NGC 5791	ESO 581- 7	Galaxy	LIB	11.7	13	2.5'	14 58.8	-19 16	333	Sa			H III 691
NGC 5892	F703	Galaxy	LIB	11.7	14	3.6'	15 13.8	-15 28	289	SBcd			Same position as Fath 703 in Burnham's F;S;R;bM 12.8
NGC 5885	MCG - 2-39-	Galaxy	LIB	11.8	14.2	3.9'	15 15.1	-10 05	289	SB Ring			H III 116
NGC 5757	ESO 580-33	Galaxy	LIB	11.9	13	2.1'	14 47.8	-19 05	333	SBb			H III 690
NGC 5595	MCG - 3-37-	Galaxy	LIB	12	13	2.4'	14 24.2	-16 43	287	SBc			H III 121
NGC 5597	MCG - 3-37-	Galaxy	LIB	12	13.2	2.1'	14 24.5	-16 46	287	SBc Ring			H III 122
NGC 5605	MCG - 2-37-	Galaxy	LIB	12.3	13	1.5'	14 25.1	-13 10	287	SBc			H III 120
NGC 5756	MCG - 2-38-	Galaxy	LIB	12.3	12.9	2.3'	14 47.6	-14 51	288	SBbc			
NGC 5915	MCG - 2-39-	Galaxy	LIB	12.3	13	1.6'	15 21.6	-13 06	289	SBab			
NGC 5761	ESO 580-39	Galaxy	LIB	12.4	12.5	1.3'	14 49.1	-20 23	333	SO			GALXY @ 14 48.4 -20 10 fits descr but 14 47.7 -20 16 b
NGC 5768	UGC 9564	Galaxy	LIB	12.5	13.4	1.8'	14 52.1	-02 32	243	Scp			H III 373;sBN;sev knotty branch arms;poor res
NGC 5734	ESO 580-16	Galaxy	LIB	12.7	13	1.5'	14 45.2	-20 52	333	SO			
NGC 5726	ESO 580-G0	Galaxy	LIB	12.8	13.1	1.3'	14 42.9	-18 27	333	SO pec			
NGC 5863	ESO 581-22	Galaxy	LIB	12.8	13.3	1.4'	15 10.8	-18 26	333	SB Ring			
NGC 5716	MCG - 3-37-	Galaxy	LIB	13	-	1.9'	14 41.1	-17 29	333	SBc			H III 671
NGC 5729	MCG - 1-37-	Galaxy	LIB	13	-	2.6'	14 42.1	-09 01	288	Sb			H III 508
NGC 5743	ESO 580-17	Galaxy	LIB	13	12.4	1.4'	14 45.2	-20 55	333	Sb			
NGC 5793	MCG - 3-38-	Galaxy	LIB	13.2	13	1.7'	14 59.4	-16 42	288	Sb			
NGC 5810	ESO 581-18	Galaxy	LIB	13.2	13	1.2'	15 02.7	-17 52	333	SBb			
NGC 5766	ESO 580-50	Galaxy	LIB	13.4	12.9	1.1'	14 53.2	-21 24	333	SBbc			
NGC 5742	MCG - 2-38-	Galaxy	LIB	14	-	1.3'	14 45.6	-11 49	288	SO			
NGC 5745	MCG - 2-38-	Galaxy	LIB	14	-	1.7'	14 45.0	-13 57	288	Sa			
NGC 5781	MCG - 3-38-	Galaxy	LIB	14	-	1.4'	14 56.7	-17 15	333	SBb			
NGC 5809	MCG - 2-38-	Galaxy	LIB	14	-	1.4'	15 00.9	-14 10	288	Sa			
NGC 5815	MCG - 3-38-	Galaxy	LIB	14	-	0.8'	15 00.5	-16 50	288	Sb			
NGC 5858	MCG - 2-39-	Galaxy	LIB	14	-	2'	15 08.8	-11 13	288	E6			
NGC 5872	MCG - 2-39-	Galaxy	LIB	14	-	1.5'	15 10.9	-11 29	288	SO			
NGC 5890	MCG - 3-39-	Galaxy	LIB	14	-	1.6'	15 17.9	-17 35	334	Sa			
NGC 5891	MCG - 2-39-	Galaxy	LIB	14	-	0.8'	15 16.2	-11 30	289	Sbc			
NGC 5916	MCG - 2-39-	Galaxy	LIB	14	-	2.3'	15 21.6	-13 10	289	SBap			
NGC 5959	MCG - 3-40-	Galaxy	LIB	14	-	2'	15 37.4	-16 36	289	Elliptical			
NGC 5978	MCG - 2-40-	Galaxy	LIB	14	-	0.8'	15 42.5	-13 14	289	Sa			
NGC 5995	MCG - 2-40-	Galaxy	LIB	14	-	0.9'	15 48.4	-13 45	290	Sa			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
LDN 134		Drk Neb	LIB	--	--	22'	15 53.6	-04 39	245	5 E G			Not listed in U2000 second edition
NGC 3344	UGC 5840	Galaxy	LMI	9.9	13.9	7.1'	10 43.5	+24 55	145	SBbc Rii			H I 81
NGC 3486	UGC 6079	Galaxy	LMI	10.5	14.3	6.8'	11 00.4	+28 59	106	SBc			H I 87
NGC 3245	UGC 5663	Galaxy	LMI	10.8	12.6	3.5'	10 27.3	+28 30	105	SO			H I 86
NGC 2859	UGC 5001	Galaxy	LMI	10.9	13.8	4'	09 24.3	+34 31	103	SBO-a R			H I 137;bright nucleus in diff. bar w diff. blobs
NGC 3414	UGC 5959	Galaxy	LMI	11	13.3	3.6'	10 51.3	+27 58	145	SBO			H II 362;P w NGC 3418 at 8.2';UGC 5959
NGC 3504	UGC 6118	Galaxy	LMI	11	12.8	2.7'	11 03.2	+27 58	146	SBab Rii			P w NGC 3512 at 12 ' ;PA72;comp 4 ' ;PA55;0.4'X0.1'
NGC 3432	UGC 5986	Galaxy	LMI	11.3	13.6	6.6'	10 52.5	+36 37	105	SB			H I 172;P w UGC 5983;mag 17;1.2'X1 '
NGC 3430	UGC 5982	Galaxy	LMI	11.6	13.8	4.1'	10 52.2	+32 57	105	SBc			NGC 3395 group;H I 118
NGC 3254	UGC 5685	Galaxy	LMI	11.7	13.8	4.8'	10 29.3	+29 30	105	Sbc			H I 72
NGC 3277	UGC 5731	Galaxy	LMI	11.7	12.9	2.1'	10 32.9	+28 31	105	Sab			H II 359
NGC 3381	UGC 5909	Galaxy	LMI	11.7	13	2'	10 48.4	+34 43	105	SB/P			H II 565
NGC 3294	UGC 5753	Galaxy	LMI	11.8	13.7	3.4'	10 36.3	+37 19	105	Sc			H I 164
NGC 3003	UGC 5251	Galaxy	LMI	11.9	14	5.7'	09 48.6	+33 25	104	SBbc			H V 26;BM;no def N;dk mark & knots;filam arms
NGC 3158	UGC 5511	Galaxy	LMI	11.9	13.3	2.3'	10 13.8	+38 46	104	E2			H II 639;brightest in group;sev galaxies in vic;UGC 5511
NGC 3021	UGC 5280	Galaxy	LMI	12.1	12.3	1.5'	09 51.0	+33 33	104	Sbc			vsvBN;many filam B knotty arms;NGC 3003 at 30 spp
NGC 3395	UGC 5931	Galaxy	LMI	12.1	12.9	1.7'	10 49.8	+32 59	105	SBc			H I 116;P w NGC 3396;contact disrupted;brightest of 7
NGC 3396	UGC 5935	Galaxy	LMI	12.1	13.4	2.9'	10 49.9	+32 59	105	SB			H I 117;P w NGC 3395
NGC 3413	UGC 5960	Galaxy	LMI	12.1	12.7	1.8'	10 51.3	+32 46	105	SO			H II 493;NGC 3395 group
NGC 3510	UGC 6126	Galaxy	LMI	12.2	13.3	4.1'	11 03.7	+28 53	106	SB			H II 365
NGC 3512	UGC 6128	Galaxy	LMI	12.3	13.1	1.5'	11 04.0	+28 02	106	SBc			H II 366;P w NGC 3504
NGC 3106	UGC 5419	Galaxy	LMI	12.4	13.5	1.8'	10 04.1	+31 11	104	SO Ring			H II 320;comp at 5.6' f;0.2'X0.2';compact;mag 15.7
NGC 3424	UGC 5972	Galaxy	LMI	12.4	13.1	2.7'	10 51.8	+32 54	105	SBb			H II 494;NGC 3395 group
NGC 3380	UGC 5906	Galaxy	LMI	12.5	13.2	1.6'	10 48.2	+28 36	105	SBa			H II 360;massive spiral arms;UGC 5906
NGC 2942	UGC 5140	Galaxy	LMI	12.6	13.9	2.3'	09 39.1	+34 00	103	Sc			bright nucl.;2 main branch arms;faint;poor resolution
NGC 3074	UGC 5366	Galaxy	LMI	12.7	14.2	2.3'	09 59.7	+35 24	104	Sc			H III 542;SN 1965n;comp 4.7';PA122;0.5'X0.2'
NGC 3126	UGC 5466	Galaxy	LMI	12.8	13.1	2.8'	10 08.3	+31 52	104	Sb			
NGC 3334	UGC 5817	Galaxy	LMI	12.8	12.8	1.1'	10 41.5	+37 19	105	SO			H II 641
NGC 2955	UGC 5166	Galaxy	LMI	12.9	13.2	1.5'	09 41.3	+35 53	104	Sb			H III 541;many filam. knotty arms in bright part
NGC 3265	UGC 5705	Galaxy	LMI	12.9	13.1	0.9'	10 31.1	+28 48	105	Elliptical			H III 349;UGC 5705
NGC 3451	UGC 6023	Galaxy	LMI	13	13.2	1.7'	10 54.4	+27 14	145	SBcd			H II 364
NGC 3104	UGC 5414	Galaxy	LMI	13.1	15.1	3.3'	10 04.0	+40 45	72	Ir			H IV 48;irr
NGC 3400	UGC 5949	Galaxy	LMI	13.2	13.2	1.1'	10 50.8	+28 28	105	SBa			H II 361
NGC 3418	UGC 5963	Galaxy	LMI	13.2	13.5	1.1'	10 51.4	+28 07	105	SBO-a			H II 363
NGC 3163	UGC 5517	Galaxy	LMI	13.3	14	1'	10 14.1	+38 39	104	SO			H II 640;NGC 3158 group;UGC 5517
NGC 3235	NGC 3234	Galaxy	LMI	13.3	13.3	1.2'	10 25.0	+28 01	105	E-SO Ba			IC 2572 at 4.7';PA 23
NGC 3323	UGC 5800	Galaxy	LMI	13.3	12.9	1.3'	10 39.7	+25 19	145	SB/P			peculiar
NGC 2965	UGC 5191	Galaxy	LMI	13.4	13.4	1.2'	09 43.3	+36 15	104	SO			H III 751;brightest in group
NGC 3304	UGC 5777	Galaxy	LMI	13.4	13.2	1.4'	10 37.6	+37 27	105	SBa			H III 615
NGC 3327	UGC 5803	Galaxy	LMI	13.4	13.1	1.1'	10 40.0	+24 05	145	Sb Ring			H II 348
NGC 3442	UGC 6001	Galaxy	LMI	13.4	11.9	0.6'	10 53.1	+33 55	105	Sa			peculiar
NGC 3012	UGC 5262	Galaxy	LMI	13.5	13.6	1.1'	09 49.9	+34 43	104	Elliptical			compact
NGC 3118	UGC 5452	Galaxy	LMI	13.5	13.3	2.5'	10 07.2	+33 02	104	Sbc			
NGC 3161	MCG 7-21-	Galaxy	LMI	13.5	14.8	0.4'	10 14.0	+38 39	104	Elliptical			
UGC 5829	PGC 31923	Galaxy	LMI	13.5	15.4	4.6'	10 42.6	+34 27	105	Ir+			
NGC 3159	MCG 7-21-	Galaxy	LMI	13.6	15.2	1'	10 13.9	+38 39	104	E2p			
UGC 5349	MCG +06-22	Galaxy	LMI	13.7	14.4	2.5'	09 58.1	+37 18	104	Sm			
NGC 3151	MCG 7-21-	Galaxy	LMI	13.8	13.5	0.8'	10 13.5	+38 37	104	SO			
NGC 3245A	UGC 5662	Galaxy	LMI	13.9	13.9	3.5'	10 27.0	+28 38	105	SBb			
NGC 3515	UGC 6139	Galaxy	LMI	13.9	13.4	0.9'	11 04.6	+28 14	106	Sbc			
NGC 2971	UGC 5197	Galaxy	LMI	14	13.7	1.1'	09 43.8	+36 11	104	SBb			NGC 2965 group
UGC 5393	PGC 29036	Galaxy	LMI	14	14.7	2.3'	10 01.7	+33 08	104	SBm			
NGC 5822	OCL 937	Opn CL	LUP	6.5	-	40'	15 04.4	-54 24	431	II 1 r	150	10	
NGC 5986	Dunlop 552	Glob CL	LUP	7.6	-	9.8'	15 46.1	-37 47	374	VII			
NGC 5927	GCL 35	Glob CL	LUP	8	-	12'	15 28.0	-50 40	431	VIII			
Hogg 18		Opn CL	LUP	8	-	3'	14 50.7	-52 15	431	III 2 p	15	8.8	
NGC 5749	OCL 930	Opn CL	LUP	8.8	-	10'	14 48.9	-54 30	431	IV 1 p	30		
NGC 5824	NGC 5834	Glob CL	LUP	9.1	-	6.2'	15 04.0	-33 04	373	I			
NGC 5834	ESO 387-SC	Glob CL	LUP	9.1	-	6.2'	15 04.0	-33 04	373	I			same name for 5824
NGC 5643	ESO 272-16	Galaxy	LUP	10	13	4.7'	14 32.7	-44 11	404	SBc			
NGC 5882	PK 327+10.1	Pln Neb	LUP	10.5	6.3	7"	15 16.8	-45 39	405			13.4	
IC 4406	PK 319+15.1	Pln Neb	LUP	11	9.1	46"	14 22.4	-44 09	404	4(3)		17.4	Annular;N2-- Stellar ?;pB diffused disk 20"--Hartung
NGC 5530	ESO 272- 3	Galaxy	LUP	11.1	13.2	4.2'	14 18.5	-43 23	404	SBbc			
IC 4444	IC 4441	Galaxy	LUP	11.4	12.2	1.7'	14 31.6	-43 25	404	SBbc			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5688	ESO 272-22	Galaxy	LUP	11.9	14.1	3.8'	14 39.6	-45 01	404	SBc			
NGC 5670	ESO 272-19	Galaxy	LUP	12	12.6	2.3'	14 35.6	-45 58	404	SO			
NGC 5873	PK 331+16.1	Pln Neb	LUP	12	6.5	3"	15 12.8	-38 08	373	2		15.5	
NGC 5968	ESO 450- 5	Galaxy	LUP	12.2	13.6	2.1'	15 40.0	-30 33	373	SBab			
NGC 5843	ESO 387- 4	Galaxy	LUP	12.3	13	1.9'	15 07.5	-36 20	373	SBb			
NGC 6026	PK 341+13.1	Pln Neb	LUP	12.5	12.3	54"	16 01.4	-34 33	374	4		13.3	Ring shape
NGC 5764	OCL 934	Opn CL	LUP	12.6	-	2'	14 53.5	-52 40	431	II 2 p	12		
PK 327+13.	He2-118	Pln Neb	LUP	12.7	7.3	5"	15 06.2	-43 01	405				18.7
PK 319+ 6.1	He2-112	Pln Neb	LUP	13.2	10.2	15.0"	14 40.5	-52 35	431				18.1
NGC 5593	OCL 926	Opn CL	LUP	-	-	8'	14 25.7	-54 48	430	III 1 p	15	7.8	
NGC 5800	ESO 223-SC	Opn CL	LUP	-	-		15 01.8	-51 55	431				
B228		Drk Neb	LUP	--	--	240'	15 45.5	-34 24	374	6 Ir			Contains small bright reflection nebula
NGC 2683	UGC 4641	Galaxy	LYN	9.8	12.9	8.8'	08 52.7	+33 25	102	Sb			peanut-shaped bulge;many filam; arm w dk lanes 1 side
NGC 2419	GCL 12	Glob CL	LYN	10.4	-	6.2'	07 38.1	+38 53	100	II			H I 218;Most distant globular;Brightest * 17 mag
NGC 2549	UGC 4313	Galaxy	LYN	11.2	12.8	3.8'	08 19.0	+57 48	43	SO			B elongated w traces of bright tips;F outer envel
NGC 2500	UGC 4165	Galaxy	LYN	11.6	13.7	2.9'	08 01.9	+50 44	43	SBcd			bright nucleus in bar;many well resolved clumpy arms
NGC 2776	UGC 4838	Galaxy	LYN	11.6	13.8	2.8'	09 12.2	+44 57	71	SBc			bright nucleus;2 main knotty arms;similar to M101
NGC 2782	UGC 4862	Galaxy	LYN	11.6	13.9	3.7'	09 14.1	+40 07	71	SBa			broad bar w strong dk. lane;asym smooth arms dk lane
NGC 2273	UGC 3546	Galaxy	LYN	11.7	13.8	3.2'	06 50.1	+60 51	42	SBa			pseudo round; high surface brightness
NGC 2340	UGC 3720	Galaxy	LYN	11.7	12.6	1.8'	07 11.2	+50 10	42	Elliptical			H II 736
NGC 2537	UGC 4274	Galaxy	LYN	11.7	12.6	3.1'	08 13.2	+45 59	69	SBp			spiral;bright partly resolved bar w strong asym arm
NGC 2541	UGC 4284	Galaxy	LYN	11.8	14.9	6.3'	08 14.7	+49 04	69	SBc			H III 710
NGC 2320	UGC 3659	Galaxy	LYN	11.9	12.1	1.4'	07 05.7	+50 35	42	Elliptical			H II 861
NGC 2543	IC 2232	Galaxy	LYN	11.9	13	2.3'	08 13.0	+36 15	101	SBb			H II 719;broad bar w dark matter;UGC 4273
NGC 2832	UGC 4942	Galaxy	LYN	11.9	13.5	3'	09 19.8	+33 45	103	E4			comp east is compact;2831 superimposed;lens shape
NGC 2344	UGC 3734	Galaxy	LYN	12	13	1.7'	07 12.5	+47 10	68	SBbc			
NGC 2493	UGC 4150	Galaxy	LYN	12	13.3	1.9'	08 00.4	+39 50	69	SBO			H III 750
UGC 3685	PGC 20250	Galaxy	LYN	12	14.3	3.3'	07 09.0	+61 36	21	SBb			
NGC 2552	UGC 4325	Galaxy	LYN	12.1	14.2	3.6'	08 19.3	+50 00	43	Ir			H III 711;highly res;irreg spiral struct;v low surf brightnes
NGC 2712	UGC 4708	Galaxy	LYN	12.1	13.6	2.8'	08 59.5	+44 55	70	SBb			bright nucl;smooth narrow bar;sev knotty branch arms
NGC 2770A	UGC 4806	Galaxy	LYN	12.2	13.7	3.7'	09 09.6	+33 07	103	Sc			H II 490;2 nuclei in common envelope
NGC 2649	UGC 4555	Galaxy	LYN	12.3	13.1	1.5'	08 44.1	+34 43	102	SBbc			H II 727
NGC 2798	UGC 4905	Galaxy	LYN	12.3	13.2	2.8'	09 17.4	+42 00	71	SBap			bright bar;2 smooth faint arms;knots;Nearly edge-on
UGC 3504	MCG +10-10	Galaxy	LYN	12.3	14.1	3.1'	06 40.1	+60 04	42	S(B)c			
NGC 2329	UGC 3695	Galaxy	LYN	12.4	12.7	1.3'	07 09.1	+48 37	68	SO			H II 735= III 875
NGC 2337	UGC 3711	Galaxy	LYN	12.4	13.7	2.3'	07 10.2	+44 27	68	Ir			
NGC 2415	UGC 3930	Galaxy	LYN	12.4	12	0.9'	07 36.9	+35 14	100	Ir			H II 821;peculiar;high surface brightness;irreg fringes
NGC 2488	UGC 4161	Galaxy	LYN	12.4	12.4	1.4'	08 01.8	+56 33	43	E-SO			H III 837
NGC 2532	UGC 4256	Galaxy	LYN	12.4	13.8	2.1'	08 10.3	+33 57	101	SBc			H II 726;sev br knotty arms;high surf br
NGC 2778	UGC 4840	Galaxy	LYN	12.4	12.8	1.4'	09 12.4	+35 02	103	E			H II 564;brightest in group
IC 2166	UGC 3463	Galaxy	LYN	12.4	14.3	3'	06 26.9	+59 05	41	SBbc			
UGC 4393	MCG +08-16	Galaxy	LYN	12.4	13.6	2.5'	08 26.1	+45 58	70	SB			
NGC 2273B	UGC 3530	Galaxy	LYN	12.5	13.9	2.7'	06 46.5	+60 20	42	SBd			asym. v broad knotty arms;diff. broad vF arm north
NGC 2424	UGC 3959	Galaxy	LYN	12.6	13.3	3.6'	07 40.7	+39 14	69	SBb			bright nucleus in narrow bar;dark lane on one side
NGC 2476	UGC 4106	Galaxy	LYN	12.6	12.8	1.4'	07 56.8	+39 56	69	Elliptical			
NGC 2528	UGC 4227	Galaxy	LYN	12.6	13.4	1.5'	08 07.4	+39 12	69	Sb Ring			
IC 2233	UGC 4278	Galaxy	LYN	12.6	13.3	4.6'	08 14.0	+45 44	69	SBcd			
UGC 3574	MCG +10-10	Galaxy	LYN	12.6	15.3	4.2'	06 53.1	+57 11	42	Sc			P w UGC 3569 6' preced
NGC 2469	UGC 4111	Galaxy	LYN	12.7	12.4	1'	07 58.1	+56 41	43	SB/P			H III 836
NGC 2524	UGC 4234	Galaxy	LYN	12.7	12.9	1.4'	08 08.2	+39 09	69	Sa			
NGC 2332	UGC 3699	Galaxy	LYN	12.8	13.2	1.5'	07 09.6	+50 11	42	SO			H II 862
NGC 2521	UGC 4235	Galaxy	LYN	12.8	12.6	1.2'	08 08.8	+57 46	43	SO p			disturbed
NGC 2638	UGC 4534	Galaxy	LYN	12.8	12.6	1.7'	08 42.4	+37 13	102	Sa			
NGC 2446	UGC 4027	Galaxy	LYN	12.9	13.5	1.9'	07 48.7	+54 37	43	Sb			
NGC 2534	UGC 4268	Galaxy	LYN	12.9	13.5	1.4'	08 12.9	+55 40	43	E1p			H III 840;peculiar;vB complex center region;multiple?
NGC 2844	UGC 4971	Galaxy	LYN	12.9	13	1.7'	09 21.8	+40 09	71	Sa			H III 628;brightest in NGC2852 group;bright nucl
NGC 2518	UGC 4221	Galaxy	LYN	13	13.1	1.2'	08 07.3	+51 08	43	E-SO			spiral
NGC 2759	UGC 4795	Galaxy	LYN	13	12.6	1'	09 08.6	+37 37	103	E-SO			H III 647;brightest in group
NGC 2326	UGC 3681	Galaxy	LYN	13.1	14.3	1.8'	07 08.2	+50 41	42	SBb			H II 734
NGC 2426	UGC 3977	Galaxy	LYN	13.1	13.3	1.1'	07 43.3	+52 19	43	Elliptical			H II 822
NGC 2456	UGC 4073	Galaxy	LYN	13.1	13	1.1'	07 54.2	+55 30	43	Elliptical			
NGC 2475	PK 164+31.1	Galaxy	LYN	13.1	12.5	0.8'	07 58.0	+52 52	43	E1			double system w 2474;contact
NGC 2484	UGC 4125	Galaxy	LYN	13.1	12.6	0.9'	07 58.5	+37 47	101	SO			
NGC 2497	UGC 4168	Galaxy	LYN	13.1	13.6	1.4'	08 02.2	+56 57	43	E-SO			H III 838;compact

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2691	UGC 4664	Galaxy	LYN	13.1	13	1.2'	08 54.8	+39 32	70	Sa			H II 658;compact
NGC 2746	UGC 4770	Galaxy	LYN	13.1	13.9	1.6'	09 06.0	+35 23	103	SBa			medium compact;several faint objects in vicinity
NGC 2755	UGC 4789	Galaxy	LYN	13.1	13	1.2'	09 08.0	+41 42	70	Sb			H III 626;compact
NGC 2793	UGC 4894	Galaxy	LYN	13.1	13.3	1.2'	09 16.8	+34 26	103	SBp			bright knotty bar;blue patchy spiral arc on n edge
NGC 2308	UGC 3618	Galaxy	LYN	13.2	13.9	1.8'	06 58.6	+45 13	68	Sab			
NGC 2444	UGC 4016	Galaxy	LYN	13.2	13	1.2'	07 46.9	+39 02	69	SO			double;elong. w distorted envelope;knotty plume
NGC 2505	UGC 4193	Galaxy	LYN	13.2	12.6	1.2'	08 04.1	+53 33	43	SBa			H III 839
NGC 2852	UGC 4986	Galaxy	LYN	13.2	12.6	1.4'	09 23.2	+40 10	71	SBa			H III 629;compact;NGC 2844 group
NGC 2273A	UGC 3504	Galaxy	LYN	13.3	-	2.7'	06 40.1	+60 05	42	Sc			
NGC 2445	UGC 4017	Galaxy	LYN	13.3	13.6	1.4'	07 46.9	+39 01	69	Ring			double system;see NGC 2444
NGC 2780	UGC 4843	Galaxy	LYN	13.3	12.6	0.9'	09 12.7	+34 56	103	SB/P			massive very tightly wound arms;NGC 2778 group
NGC 2853	UGC 4987	Galaxy	LYN	13.3	13.6	1.8'	09 23.3	+40 12	71	SBO-a			H III 630;NGC 2844 group
NGC 2431	NGC 2436	Galaxy	LYN	13.4	13	0.9'	07 45.2	+53 05	43	SBa			H III 829
NGC 2704	IC 2424	Galaxy	LYN	13.4	13.3	1'	08 56.8	+39 23	70	SBab Rii			H III 625;IC 2424
NGC 2474	UGC 4114	Galaxy	LYN	13.5	-	0.6'	07 58.0	+52 51	43	EO			H III 830;double system w 2475;contact
NGC 2719	UGC 4718	Galaxy	LYN	13.5	-	1.1'	09 00.3	+35 44	103	lrp			high surf brightn;core+loop;diffuse bridge to comp
NGC 2719A	MCG 6-20-	Galaxy	LYN	13.5	-	0.4'	09 00.3	+35 43	103	lrp			
UGC 4260	PGC 22955	Galaxy	LYN	13.5	14.3	1.7'	08 11.2	+46 28	69	lr-			
NGC 2315	UGC 3633	Galaxy	LYN	13.6	12.6	1.3'	07 02.6	+50 35	42	Sa			double system
NGC 2321	UGC 3663	Galaxy	LYN	13.6	13.9	1.4'	07 06.0	+50 45	42	SBa			
NGC 2724	UGC 4726	Galaxy	LYN	13.6	14.6	1.8'	09 01.0	+35 46	103	SBc			
NGC 2826	UGC 4939	Galaxy	LYN	13.6	12.6	1.6'	09 19.4	+33 37	103	Sa			
NGC 2860	UGC 5007	Galaxy	LYN	13.7	13.4	1.5'	09 24.9	+41 04	71	SBa			
UGC 4787	PGC 25644	Galaxy	LYN	13.7	13.6	2.3'	09 07.5	+33 16	103	Sdm			
NGC 2322	UGC 3662	Galaxy	LYN	13.8	12.8	1.1'	07 06.0	+50 31	42	SBa			H III 874
NGC 2668	UGC 4616	Galaxy	LYN	13.8	13.4	1.2'	08 49.4	+36 43	102	SBab			
NGC 2799	UGC 4909	Galaxy	LYN	13.8	13.6	1.9'	09 17.5	+42 00	71	SBp			bright center and bar;2 main smooth arms edgewise
NGC 2840	UGC 4960	Galaxy	LYN	13.8	13.6	1'	09 20.9	+35 22	103	SBbc			H III 827
Abell 569		Gal CL	LYN	13.8	-	25.8'	07 09.2	+48 38	68	0 1 II			9 Gal/Deg; brightest is NGC 2329; 36 galaxies
Abell 779		Gal CL	LYN	13.8	-	50.4'	09 19.9	+33 46	103	0 1 I-II			9 Gal/Deg; NGC 2832 group; 32 galaxies
UGC 4543	PGC 24493	Galaxy	LYN	13.8	15.6	3.6'	08 43.3	+45 44	70	Sdm			
UGC 3973	Mkn 79	Galaxy	LYN	13.9	11	1.4'	07 42.5	+49 49	69	SBb			Seyfert
NGC 2330	IC 457	Galaxy	LYN	14	-	0.4'	07 09.5	+50 09	42	Elliptical			
NGC 2429A	NGC 2429	Galaxy	LYN	14	-	1.5'	07 43.8	+52 21	43	Sbc			distorted early spiral interacting w comp at 0.8
NGC 2462	MCG 10-12-	Galaxy	LYN	14	-	0.4'	07 56.5	+56 41	43	S			
PK 164+31.	PNG 164.8+	Pln Neb	LYN	14	-	6.3'	07 57.8	+53 25	43	4		16.8	confused with NGC 2474; see Sky+Tel Apr 81 pg. 368
Steph 1		Opn CL	LYR	3.8	-	20.0'	18 54.5	+36 54	117	IV 3 p	15	4.3	Delta Lyrae cluster
M 56	NGC 6779	Glob CL	LYR	8.3	12	5'	19 16.6	+30 11	118	X			Stars 11...
M 57	NGC 6720	Pln Neb	LYR	9.4	9.3	86"	18 53.6	+33 02	117	4(3)		15.8	Ring Nebula ;central* var 14 to 16 mag;PK63+13.1
NGC 6791	OCL 142	Opn CL	LYR	9.5	-	16'	19 20.7	+37 51	118	II 3 r	300	13	very rich
NGC 6703	UGC 11356	Galaxy	LYR	11.3	13.1	2.7'	18 47.3	+45 33	82	SO			
NGC 6792	UGC 11429	Galaxy	LYR	12.1	13.1	2.2'	19 21.0	+43 08	83	SBb			P w UGC 11430 at 12' PA 11
NGC 6702	UGC 11354	Galaxy	LYR	12.2	13.1	1.9'	18 47.0	+45 42	82	E3			P w NGC 6703 at 10' PA 159
NGC 6675	UGC 11305	Galaxy	LYR	12.4	13.1	1.8'	18 37.4	+40 03	82	Sbc			
NGC 6646	UGC 11258	Galaxy	LYR	12.6	12.7	1.2'	18 29.6	+39 52	82	Sa			H II 907
NGC 6688	UGC 11324	Galaxy	LYR	12.6	13.6	1.7'	18 40.7	+36 17	117	Sa			Brightest in group
NGC 6765	PK 62+9.1	Pln Neb	LYR	12.9	12.2	38"	19 11.1	+30 33	118	5		16	
NGC 6700	UGC 11351	Galaxy	LYR	13.1	13.4	1.4'	18 46.1	+32 17	117	SBc			
NGC 6710	UGC 11364	Galaxy	LYR	13.1	13.6	1.7'	18 50.6	+26 50	160	Sa			
PK 64+15.1	M1-64	Pln Neb	LYR	13.3	-	24.0"	18 50.0	+35 15	117	4			13"-F; S; IE; cent* seen occasionally at 220X
NGC 6685	UGC 11317	Galaxy	LYR	13.4	13.3	1.1'	18 40.0	+39 59	82	E-SO			
NGC 6640	UGC 11247	Galaxy	LYR	13.5	13.2	1.1'	18 28.1	+34 18	117	Sc			
NGC 6695	UGC 11340	Galaxy	LYR	13.5	13.1	1.1'	18 42.7	+40 22	82	SBb			
NGC 6745	UGC 11391	Galaxy	LYR	13.5	-	1.3'	19 01.7	+40 45	83	S pec			Triple system disrupted w bridges
NGC 6662	UGC 11280	Galaxy	LYR	13.7	13.3	1.6'	18 34.2	+32 04	117	SBab			
NGC 6663	UGC 11276	Galaxy	LYR	13.9	13.7	1'	18 33.6	+40 03	82	Sc			
NGC 6657	UGC 11271	Galaxy	LYR	14	-	0.7'	18 33.0	+34 04	117	SBc			
NGC 6671	UGC 11299	Galaxy	LYR	14	-	1.5'	18 37.4	+26 25	160	S pec			
NGC 6713	UGC 11365	Galaxy	LYR	14	-	0.4'	18 50.7	+33 58	117	SO			
NGC 6925	ESO 463- 4	Galaxy	MIC	11.3	13	4.4'	20 34.3	-31 59	381	Sbc			
NGC 6958	ESO 341-15	Galaxy	MIC	11.4	12.7	2.1'	20 48.7	-38 00	381	E1			
NGC 6923	ESO 462-29	Galaxy	MIC	11.9	13.1	2.6'	20 31.7	-30 50	381	SBb Ring			
NGC 7057	ESO 287-17	Galaxy	MIC	12.6	12.8	1.4'	21 25.0	-42 28	413	E-SO			
NGC 7060	ESO 287-22	Galaxy	MIC	12.9	13.2	1.7'	21 25.9	-42 25	413	SBa			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 6919	ESO 285-27	Galaxy	MIC	13	13.6	1.6'	20 31.6	-44 13	412	SBc			
NGC 6983	ESO 286-14	Galaxy	MIC	13.3	12.4	0.8'	20 56.7	-43 59	412	Sab			
NGC 7012	ESO 286-51	Galaxy	MIC	13.7	-	2.4'	21 06.8	-44 49	412	Elliptical			
NGC 6947	ESO 401- 3	Galaxy	MIC	14	-	1.6'	20 41.3	-32 29	381	SBb			
NGC 6999	ESO 464-15	Galaxy	MIC	14	13.4	0.9'	21 02.0	-28 04	382	SO			
NGC 2232	OCL 545	Opn CL	MON	3.9	-	30'	06 28.0	-04 51	227	IV 3 p	20	5	H VIII 25
NGC 2264	OCL 495	CL+Neb	MON	3.9	-	20'	06 41.0	+09 54	183	III 3 m n:	40	5	Christmas Tree Cluster; Near Cone nebula
Cr 106		Opn CL	MON	4.6	-	45'	06 37.1	+05 57	182	III 3 p	20		
NGC 2239	NGC 2244	Opn CL	MON	4.8	-	24'	06 31.9	+04 57	227	II 3 p n	40		
NGC 2244	NGC 2239	CL+Neb	MON	4.8	-	24'	06 31.9	+04 57	227	II 3 r n:b	100	5.8	H VII 2;In Rosette nebula
NGC 2142		Star	MON	5	-		06 01.8	-10 36	271				
Cr 107		Opn CL	MON	5.1	-	35'	06 37.7	+04 44	227	IV 3 p	15	7.1	
Cr 97		Opn CL	MON	5.4	-	21'	06 31.0	+05 50	182	IV 3 p	15		
NGC 2237	OCL 511	CL+Neb	MON	5.5	-	80'	06 30.9	+05 03	227	E			Rosette nebula
M 50	NGC 2323	Opn CL	MON	5.9	12	16'	07 02.5	-08 23	273	II 3 m	80	7.8	About 100 stars mags 9...14
NGC 2238	LBN 948	Brt Neb	MON	6	-	80'	06 30.7	+05 01	227	E			Rosette nebula
NGC 2301	OCL 540	Opn CL	MON	6	-	12'	06 51.8	+00 28	228	I 3 m	80	8	H VI 27;60* 8...:blue&gold D* near center
Cr 91		Opn CL	MON	6.4	-	17'	06 21.5	+02 20	227	IV 2 p	20		
NGC 2167		Star	MON	6.6	-		06 07.0	-06 12	271				H IV 44
NGC 2343	OCL 565	Opn CL	MON	6.7	-	7'	07 08.1	-10 37	273	III 3 p n	20	8.4	H VIII 33
Cr 111		Opn CL	MON	7	-	3.2'	06 38.7	+06 54	182				
NGC 2353	OCL 567	Opn CL	MON	7.1	-	20'	07 14.5	-10 16	274	II 2 p	30	9.2	H VIII 34;In CMa OB1
NGC 2335	OCL 562	Opn CL	MON	7.2	-	12'	07 06.8	-10 02	273	III 3 m n	35	9.5	H VIII 32;In CMa OB1
NGC 2251	OCL 499	Opn CL	MON	7.3	-	10'	06 34.6	+08 22	182	IV 2 p	30	9.1	H VIII 3
Cr 96		Opn CL	MON	7.3	-	8'	06 30.3	+02 52	227	IV 2 p	15	8.8	
NGC 2286	OCL 548	Opn CL	MON	7.5	-	15'	06 47.7	-03 09	228	IV 3 m	50	9.7	H VIII 31
NGC 2506	OCL 593	Opn CL	MON	7.6	-	7'	08 00.0	-10 46	275	I 2 r	150	10.8	H VI 37
Do 25		Opn CL	MON	7.6	-	24'	06 45.0	+00 18	228	IV 2 m n	50	8.9	
NGC 2252	OCL 514	Opn CL	MON	7.7	-	20'	06 34.7	+05 22	227	IV 2 p n	30	9	H VIII 50
NGC 2215	OCL 550	Opn CL	MON	8.4	-	11'	06 20.8	-07 17	272	II 2 p	40	10.5	H VII 20
NGC 2324	OCL 542	Opn CL	MON	8.4	-	8'	07 04.1	+01 03	228	II 2 r	70	10.4	H VII 38
NGC 2236	OCL 501	Opn CL	MON	8.5	-	7'	06 29.7	+06 50	182	III 2 p	50	11	H VII 5
Basel 7		Opn CL	MON	8.5	-	5'	06 36.3	+08 21	182	IV 1 p	15	10.4	
Cr 92		Opn CL	MON	8.5	-	11'	06 22.9	+05 07	227				
NGC 2250	OCL 547	Opn CL	MON	8.9	-	8'	06 33.8	-05 05	227	IV 2 p	10	12	
NGC 2299	NGC 2302	Opn CL	MON	8.9	-	2.5'	06 51.9	-07 05	273				
NGC 2302	NGC 2302	Opn CL	MON	8.9	-	2.5'	06 51.9	-07 05	273	II 2 p	30	10.2	H VIII 39
NGC 2254	OCL 500	Opn CL	MON	9.1	-	4'	06 35.8	+07 40	182	I 2 p	50	11.9	H VII 22
Cr 115		Opn CL	MON	9.1	-	7'	06 46.5	+01 47	228	III 2 p	50		
NGC 2311	OCL 553	Opn CL	MON	9.6	-	7'	06 57.8	-04 37	228	III 2 p	50	12	H VIII 60
Cr 104		Opn CL	MON	9.6	-	22'	06 36.5	+04 49	227	IV 1 p n	15		Archinal: a 20 min long 'integral sign' chain of stars
Bochum 2		Opn CL	MON	9.7	-	1.5'	06 48.9	+00 23	228	I 1 p	10	10.9	
Bochum 3		Opn CL	MON	9.9	-	4'	07 03.5	-05 00	228	IV 1 p	25	11.2	
NGC 2269	OCL 524	Opn CL	MON	10	-	4'	06 43.3	+04 37	228	II 2 p	12	11.6	H VI 3
Cr 465		Opn CL	MON	10.1	-	9'	07 07.0	-10 32	273	IV 2 p			
Mel 72	Cr 467	Opn CL	MON	10.1	-	9'	07 38.5	-10 42	274	III 1 m	40	10	Rich w many faint *
Biur 10	Berk 28	Opn CL	MON	10.4	-	4'	06 52.2	+02 56	228	I 3 p	20	10.7	
NGC 2309	OCL 557	Opn CL	MON	10.5	-	3'	06 56.1	-07 10	273	II 2 m	40	13	H VI 18
Cr 110		Opn CL	MON	10.5	-	12.0'	06 38.7	+02 03	227	IV 1 r	70	11	
NGC 2259	OCL 492	Opn CL	MON	10.8	-	4.5'	06 38.4	+10 53	182	II 2 p n	25	14	H VI 28
Tr 5	Cr 105	Opn CL	MON	10.9	-	8'	06 36.5	+09 29	182	II 3 r n	150	17	One member is variable V 493 Mon--a red carbon star
Cr 466		Opn CL	MON	11.1	-	4'	07 07.0	-10 43	273	III 2 p n	25	11	Difficult to locate;nebulous haze w 7 * < 11 mag
NGC 2262	OCL 531	Opn CL	MON	11.3	-	3.5'	06 39.6	+01 09	227	I 2 p	35		H VII 37
NGC 2368	OCL 571	Opn CL	MON	11.8	-	5'	07 21.1	-10 22	274	IV 2 p	15		
NGC 2346	PK 215+3.1	Pln Neb	MON	12.5	11.5	60"	07 09.4	-00 48	228	3b(6)		11.3	H IV 65;PK215+3.1; cent* V651 Mon a variable star
PK 204+ 4.1	K2- 2	Pln Neb	MON	12.5	-	6.2'	06 52.6	+09 58	183	3		15	
NGC 2377	UGCA 132	Galaxy	MON	12.7	13.4	1.7'	07 24.9	-09 40	274	Sc			
NGC 2494	IC 487	Galaxy	MON	13.1	12.4	0.9'	07 59.1	-00 38	230	SBO-a			
PK 223- 2.1	K1- 8	Brt Neb	MON	13.1	-	79"	07 03.4	-10 34	273	2		16.8	Not a PLNNB;typical H II spectrum
UGC 3964	PGC 21535	Galaxy	MON	13.1	13.6	1.7'	07 40.3	-01 35	229	S(B)dm			
PK 212+ 4.1	M1- 9	Pln Neb	MON	13.5	9.9	12.0"	07 05.3	+02 47	228	1		15.6	
PK 226+ 5.1	M1-16	Pln Neb	MON	13.9	6.8	3"	07 37.3	-09 39	274	?(4)		16.9	
NGC 2225		Opn CL	MON	14	-	1.5'	06 26.6	-09 38	272	1		14	small scattered cluster;compressed core;40 stars
NGC 2226		Opn CL	MON	14	-	1.5'	06 26.6	-09 39	272	1			compressed core of NGC 2225

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2149	VdB 66	Brn Neb	MON	-	-	2'	06 03.5	-09 44	271	R			
NGC 2170	LBN 994	Brn Neb	MON	-	-	2'	06 07.5	-06 24	271	R			H IV 19
NGC 2182	LBN 998	Brn Neb	MON	-	-	3'	06 09.5	-06 20	272	R			H IV 38
NGC 2183	LBN 996	Brn Neb	MON	-	-	2'	06 10.8	-06 13	272	R			
NGC 2185	LBN 997	Brn Neb	MON	-	-	2'	06 11.0	-06 14	272	R			H IV 20
NGC 2219		Opn CL	MON	-	-	8'	06 23.7	-04 41	227				
NGC 2245	LBN 904	Brn Neb	MON	-	-	2'	06 32.7	+10 09	182	R			H IV 3
NGC 2246	LBN 948	Brn Neb	MON	-	-	80'	06 32.6	+05 08	227	E			Rosette nebula
NGC 2247	LBN 901	Brn Neb	MON	-	-	2'	06 33.1	+10 19	182	R			
NGC 2260		Opn CL	MON	-	-	20'	06 38.1	-01 28	227		50	8	H VIII 48
NGC 2261	LBN 920	Brn Neb	MON	-	-	2'	06 39.2	+08 45	182	E+R			Hubble's variable nebula (fan-shape);R Mon invl
NGC 2270		Opn CL	MON	-	-		06 44.0	+03 29	228				H VII 36
NGC 2282	IC 2172	Brn Neb	MON	-	-	3'	06 46.9	+01 19	228	E			
NGC 2306		Opn CL	MON	-	-		06 54.5	-07 12	273				H VIII 51
NGC 2313	LDN 1653	Brn Neb	MON	-	-		06 58.0	-07 57	273	E			diffuse nebula
NGC 2316	NGC 2317	Brn Neb	MON	-	-	4'	06 59.7	-07 47	273	R			H II 304
NGC 2317	NGC 2316	Brn Neb	MON	-	-	4'	06 59.7	-07 46	273	R			
NGC 2349		Opn CL	MON	-	-		07 10.8	-08 36	273				H VII 27
NGC 2364		Opn CL	MON	-	-		07 20.8	-07 33	274				
IC 446	IC 2167	Brn Neb	MON	-	-	25'	06 31.1	+10 27	182	R+*			
IC 448	LBN 930	Brn Neb	MON	-	-	15'	06 32.8	+07 23	182	R			
IC 466	CED 92	Brn Neb	MON	-	-	1'	07 08.6	-04 19	228	E			
IC 2169	IC 447	Brn Neb	MON	-	-	25'	06 31.0	+09 54	182	R			
IC 2177	Gum 2;Sh2-2	Brn Neb	MON	-	-	20'	07 05.1	-10 42	273	E			Streamer incl bright patches 2337 & Gum 1;Eagle nebu
Basel 8		Opn CL	MON	-	-	30'	06 34.2	+08 05	182	IV 3mn:t	50		
Berk 24		Opn CL	MON	-	-	6'	06 37.8	-00 53	227	III 1p :b	25	17	
Berk 37		Opn CL	MON	-	-	7'	07 20.3	-01 00	229	III 1p :b	25	15	
Berk 39		Opn CL	MON	-	-	12'	07 46.7	-04 41	230	II 3 r	120	16	
Berk 73		Opn CL	MON	-	-	3'	06 22.1	-06 19	272	I 1p :b	15	16	
Berk 76		Opn CL	MON	-	-	6'	07 06.7	-11 44	273	IV 1m :b	40	16	
Berk 77		Opn CL	MON	-	-	6'	07 21.5	-03 14	229	I 2m :b	30	13	
Biur 7		Opn CL	MON	-	-	5'	06 57.6	+08 17	183	II 1m :b	30	14	
Biur 8	Berk 32	Opn CL	MON	-	-	6'	06 58.1	+06 26	183	II 2 r	70	14	
Biur 9		Opn CL	MON	-	-	4'	06 57.8	+03 14	228	II 2m :b	30	15	
Biur 11		Opn CL	MON	-	-	3'	06 51.4	+05 46	183	III 1p :b	25	15	
Biur 12	Berk 26	Opn CL	MON	-	-	4'	06 51.3	+05 44	183	III 1m :b	30	17	
Biur 13		Opn CL	MON	-	-	5'	07 00.3	-00 14	228	IV 1p :b	20	17	
Cr 95		Opn CL	MON	-	-	19'	06 30.8	+09 56	182	IV 2 p n	10		
Czernik 26		Opn CL	MON	-	-	5'	06 31.5	-04 11	227	III 1m :b	35		
Czernik 27		Opn CL	MON	-	-	5'	07 03.3	+06 25	183	III 1p :b	15		
Czernik 30		Opn CL	MON	-	-	3'	07 31.2	-09 57	274	III 1p :b	20		
Do 22		Opn CL	MON	-	-	8'	08 31.7	+04 39	227	IV 1 p	10		
Do 23		Opn CL	MON	-	-	12'	06 43.1	+00 00	228	IV 2 p	20		
Do 24		Opn CL	MON	-	-	18'	06 44.8	+01 45	228	IV 2 m	40		
Gum 1	Sh2-292	Brn Neb	MON	-	-	19'	07 04.5	-10 28	273	E+R			
Haffner 3		Opn CL	MON	-	-	2.7'	07 04.1	-06 07	273	III 2p :b	20	14	
Ru 4		Opn CL	MON	-	-	5'	06 49.0	-10 31	273	III 2m :b	40	14	
Sh2-282	LBN 978	Brn Neb	MON	-	-	40'	06 38.0	+01 29	227	E			
Sh2-294	LBN 1032	Brn Neb	MON	-	-	8'	07 16.6	-09 26	274	E			
vdB 80	LBN 1015	Brn Neb	MON	-	-	5.8'	06 30.9	-09 39	272	R	6		
B 37-9	LDN 1605;16	Drk Neb	MON	--	--	180'	06 32.8	+10 38	182	5 lr			Near bright nebulae NGC 2245;47
NGC 6087	OCL 948	Opn CL	NOR	5.4	-	12'	16 18.8	-57 56	432	I 2 p	40	7.9	Var* S Nor invl
NGC 6067	OCL 953	Opn CL	NOR	5.6	-	13'	16 13.2	-54 13	432	I 2 r	100	8.3	Fine field
NGC 6169	OCL 984	Opn CL	NOR	6.6	-	12'	16 34.1	-44 03	407		40		Mu Nor cluster. In Ara OB1
NGC 6167	Harvard 11	Opn CL	NOR	6.7	-	8'	16 34.6	-49 46	407	II 3 m		7.4	
Cr 299	Harvard 10	Opn CL	NOR	6.9	-	25'	16 19.9	-54 58	432	III 3 m	30		
NGC 6134	OCL 968	Opn CL	NOR	7.2	-	7'	16 27.8	-49 09	407	II 3 m		9.3	
Cr 292		Opn CL	NOR	7.9	-	16'	15 50.7	-57 40	432	III 2 m	50		
NGC 6152	OCL 961	Opn CL	NOR	8.1	-	25'	16 32.8	-52 39	433	II 2 m	70	11	
NGC 5925	OCL 938	Opn CL	NOR	8.4	-	20'	15 27.4	-54 32	431	III 1 m	120		
NGC 5946	IC 4550	Glob CL	NOR	8.4	-	7.1'	15 35.5	-50 40	432	IX			
NGC 6031	OCL 951	Opn CL	NOR	8.5	-	2'	16 07.6	-54 01	432	I 2 p	20	10.9	In Nor OB1?
Ru 119		Opn CL	NOR	8.8	-	8'	16 28.3	-51 31	432	II 1 p	13	10.9	
NGC 5999	OCL 946	Opn CL	NOR	9	-	3'	15 52.1	-56 28	432	I 3 m	40	12	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Lynga 6		Opn CL	NOR	9.5	-	5'	16 04.8	-51 57	432		60	10.7	
NGC 6005	OCL 945	Opn CL	NOR	10.7	-	3'	15 55.8	-57 26	432	I 2 p	35	11.8	
NGC 6115	Ru 118	Opn CL	NOR	11	-	3'	16 24.4	-51 57	432	I 2 p	20	10.9	
Tr 23	Cr 295	Opn CL	NOR	11.2	-	5'	16 00.8	-53 31	432	II 2 p	40		
Lynga 4		Opn CL	NOR	11.4	-	3'	15 33.3	-55 13	432	IV 2 p	30	12.5	
PK 329- 2.2	Menzel 2;V V	Pln Neb	NOR	11.9	9.9	25"	16 14.5	-54 57	432	4(3)		18.3	Easy grey round lies in dense field--Hartung
PK 331- 5.1	He2-172	Pln Neb	NOR	11.9	-	5"	16 38.0	-55 42	433			12.6	
PK 326- 6.1	He2-151	Pln Neb	NOR	12.2	-	3"	16 15.7	-59 54	432			13	
PK 325- 4.1	He2-141	Pln Neb	NOR	12.4	10.3	16"	15 59.1	-58 24	432			13.6	
PK 322- 2.1	Menzel 1	Pln Neb	NOR	12.5	10.2	50"	15 34.2	-59 09	432	4(6)			
PK 330+ 4.1	Cannon 1-1	Pln Neb	NOR	12.9	-	1.0"	15 51.3	-48 45	406	1		11.1	
PK 332- 4.1	He2- 170	Pln Neb	NOR	13.5	-	5"	16 35.4	-53 50	433			16.4	
PK 329+ 2.1	Shapley 1	Pln Neb	NOR	13.6	-	76"	15 51.7	-51 31	432	4		13.9	Fine annular shape
PK 331- 3.2	He2-165	Pln Neb	NOR	13.7	-	54"	16 30.0	-54 10	432				
PK 332- 3.1	He2-164	Pln Neb	NOR	13.7	-	16"	16 29.9	-53 23	432				
PK 333+ 1.1	He2-152	Pln Neb	NOR	13.7	-	13"	16 15.3	-49 14	406				
PK 331- 1.1	Menzel 3	Pln Neb	NOR	13.8	-	25.0"	16 17.2	-51 59	432	6		17.6	
PK 327- 7.1	He2-163	Pln Neb	NOR	13.9	-	22"	16 29.6	-59 09	432				
PK 330- 3.1	He2-159	Pln Neb	NOR	13.9	-	16"	16 24.3	-54 36	432				
NGC 6164	PK 336-0.1	Brt Neb	NOR	-	-	60"	16 33.7	-48 05	407	3b		6.8	np condensation in PK 336-0.1 an emission nebula
NGC 6165	PK 336-0.1	Brt Neb	NOR	-	-	60"	16 34.1	-48 09	407	3b		6.8	sf condensation in PK 336-0.1 an emission nebula
Harvard 9		Opn CL	NOR	-	-	3'	15 34.2	-52 44	432	IV 2p :a			
Hogg 19		Opn CL	NOR	-	-	4'	16 28.9	-49 07	407	IV 2p :a			
Lynga 5		Opn CL	NOR	-	-	5'	15 42.0	-56 39	432	III 1p :b	20		
Lynga 7		Opn CL	NOR	-	-	2.2'	16 11.0	-55 18	432	II 2p :a		16	
Lynga 8		Opn CL	NOR	-	-	1'	16 22.9	-50 11	432	III 2m :a			
Lynga 9		Opn CL	NOR	-	-	5'	16 20.7	-48 31	406	III 1m:a			
Moffat 1		Opn CL	NOR	-	-	8'	16 02.4	-54 08	432	IV 2p :b	20		
Pismis 22		Opn CL	NOR	-	-	4'	16 14.1	-51 53	432	I 2p :a	30	7.7	
Pismis 23		Opn CL	NOR	-	-	1'	16 24.0	-47 19	406	III 2m :a		15	
RCW 102		Brt Neb	NOR	-	-	12'	16 17.8	-51 55	432	E			Oval shape; elongated NE and SE; very rich field
RCW 103		SN Rem	NOR	-	-	5'	16 17.1	-51 07	432				Broken ring shape; very rich field
RCW 104		Brt Neb	NOR	-	-	20'	16 24.0	-51 31	432	E			
RCW 106		Brt Neb	NOR	-	-	35'	16 20.8	-50 55	432	E			
Ru 113	Cr 36	Opn CL	NOR	-	-	45'	15 57.2	-59 28	432	III 1 m	20	9	
Ru 114		Opn CL	NOR	-	-	8'	16 06.6	-55 52	432	IV 1m:b	50	12	
Ru 115		Opn CL	NOR	-	-	5'	16 12.9	-52 23	432	III 1p :a		13	
Ru 116		Opn CL	NOR	-	-	5'	16 23.4	-52 00	432	II 2 p		9	
Ru 117		Opn CL	NOR	-	-	1.7'	16 23.5	-51 52	432	III 1p :a		12	
Ru 176		Opn CL	NOR	-	-		16 14.9	-51 20	432				Stellar arc or broken ring--Archinal
Mel 186	Cr 359	Opn CL	OPH	3	-	240'	18 01.1	+02 54	249	IV 3 m			Bull of Poniatowski; at end of 'offramp' of Milky Way
IC 4665	OCL 85	Opn CL	OPH	4.2	-	41'	17 46.3	+05 43	203	III 2 p	30	6.9	Incl Struve 2212 8.5+9 ;3.1"sep;340 deg PA
NGC 6633	OCL 90	Opn CL	OPH	4.6	-	27'	18 27.3	+06 31	205	III 2 m	30	7.6	H VIII 72
M 12	NGC 6218	Glob CL	OPH	6.1	12	14.5'	16 47.2	-01 57	246	IX			Somewhat loose structure
Cr 350		Opn CL	OPH	6.1	-	45'	17 48.1	+01 18	248	IV 2 p	20		
M 62	NGC 6266	Glob CL	OPH	6.4	11	14.1'	17 01.2	-30 07	376	IV			Asymmetrical
M 10	NGC 6254	Glob CL	OPH	6.6	12	12.2'	16 57.1	-04 06	247	VII			Lord Rosse reported dark lane in cluster
M 19	NGC 6273	Glob CL	OPH	6.8	11	5.3'	17 02.6	-26 16	337	VIII			One of the most oblate globulars
NGC 6401	GCL 73	Glob CL	OPH	7.4	-	1'	17 38.6	-23 55	338	IX			H I 44
M 14	NGC 6402	Glob CL	OPH	7.6	12	6.7'	17 37.6	-03 15	248	VIII			Many vF stars 14...
M 107	NGC 6171	Glob CL	OPH	7.8	12	3.3'	16 32.5	-13 03	291	X			H VI 40
M 9	NGC 6333	Glob CL	OPH	7.9	11	5.5'	17 19.2	-18 31	337	VIII			Dark neb B64 prominent to west
NGC 6572	PK 34+11.1	Pln Neb	OPH	8	4.3	15"	18 12.1	+06 51	204	2a		12	
NGC 6316	GCL 57	Glob CL	OPH	8.1	-	4.9'	17 16.6	-28 08	376	III			H I 45
NGC 6293	GCL 55	Glob CL	OPH	8.2	-	3.5'	17 10.2	-26 35	337	IV			H VI 12
NGC 6356	GCL 62	Glob CL	OPH	8.2	-	3.5'	17 23.6	-17 49	338	II			H I 48
NGC 6304	GCL 56	Glob CL	OPH	8.4	-	3.8'	17 14.5	-29 28	376	VI			H I 147
NGC 6355	GCL 63	Glob CL	OPH	8.6	-	6.1'	17 24.0	-26 21	338				H I 46
NGC 6235	GCL 48	Glob CL	OPH	8.9	-	1.9'	16 53.4	-22 11	337	X			H II 584
NGC 6284	GCL 53	Glob CL	OPH	9	-	2.7'	17 04.5	-24 46	337	IX			H VI 11
NGC 6287	GCL 54	Glob CL	OPH	9.2	-	2.7'	17 05.2	-22 42	337	VII			H II 195
NGC 6342	GCL 61	Glob CL	OPH	9.5	-	3'	17 21.2	-19 35	338	IV			H I 149
NGC 6366	GCL 65	Glob CL	OPH	9.5	-	5.8'	17 27.7	-05 05	248	XI			
Tr 26	Cr 331	Opn CL	OPH	9.5	-	7'	17 28.5	-29 30	376	III 2 p	40		

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 6325	GCL 58	Glob CL	OPH	10.2	-	1.6'	17 18.0	-23 46	337	IV			
NGC 6517	GCL 81	Glob CL	OPH	10.3	-	1'	18 01.8	-08 58	294	IV			H II 199
NGC 6384	UGC 10891	Galaxy	OPH	10.4	13.8	5.8'	17 32.4	+07 04	203	SBbc			sBN in faint bar
NGC 6426	GCL 76	Glob CL	OPH	10.9	-	3.2'	17 44.9	+03 10	248	IX			H II 587
NGC 6369	PK 2+5.1;H	Pln Neb	OPH	11	10.5	30"	17 29.3	-23 46	338	4(2)		15.1	Little Ghost Nebula
PK 8+ 6.1	He2-260	Pln Neb	OPH	11	-	10"	17 38.9	-18 18	338			14.2	
NGC 6309	PK 9+14.1	Pln Neb	OPH	11.6	8.6	20"	17 14.1	-12 55	292	3b(6)		16.3	Box Nebula
Pal 6		Glob CL	OPH	11.6	-	1.2'	17 43.7	-26 13	338	XI			
IC 4634	PK 0+12.1	Pln Neb	OPH	12	6.6	20"	17 01.6	-21 50	337	2a(3)		17	Pale blue disk 10" across--Hartung
NGC 6368	UGC 10856	Galaxy	OPH	12.3	13.6	3.8'	17 27.2	+11 33	203	Sb			
PK 38+12.1	Cannon 3-1	Pln Neb	OPH	12.4	7.9	7"	18 17.6	+10 09	204	2		12.5	Doubtful PLNNB
NGC 6509	UGC 11075	Galaxy	OPH	12.5	13	1.6'	17 59.4	+06 17	204	SBcd			
IC 1257	OCL 51	Glob CL	OPH	12.5	-	1'	17 27.1	-07 06	293	V			Identified as distant globular cluster in 1996
HP 1		Glob CL	OPH	12.5	-	1.2'	17 31.1	-29 59	376				
NGC 6570	UGC 11137	Galaxy	OPH	12.7	13.3	1.9'	18 11.1	+14 06	204	SBm			
UGC 10862	PGC 60346	Galaxy	OPH	12.7	14.7	2.7'	17 28.2	+07 26	203	SB(rs)c			
NGC 6172	UGC 10352	Galaxy	OPH	12.8	12.8	1'	16 22.2	-01 31	246	Elliptical			
NGC 6240	IC 4625	Galaxy	OPH	12.9	13.7	2.1'	16 53.0	+02 24	247	lrp			Strongly peculiar w loop and plume
NGC 6615	UGC 11196	Galaxy	OPH	13.1	12.7	0.9'	18 18.6	+13 16	204	SBO-a			
PK 3+ 2.1	Hubble 4	Pln Neb	OPH	13.1	-	6.6"	17 41.9	-24 42	338	3b		17	
PK 358+ 5.2	He2-216	Pln Neb	OPH	13.1	-	3"	17 22.4	-27 09	338			17.2	
PK 10+18.2	M2- 9	Pln Neb	OPH	13.2	-	50"	17 05.7	-10 09	292	?(6)		15.6	Butterfly Nebula
UGC 11141	PGC 61534	Galaxy	OPH	13.2	14.4	2.8'	18 11.8	+12 05	204	Sdm			
PK 7+ 7.1	M1-22	Pln Neb	OPH	13.3	-	9.3"	17 35.2	-18 34	338	4		21	
UGC 11074	PGC 61214	Galaxy	OPH	13.3	14.2	2.3'	17 59.1	+07 09	204	Sd			
NGC 6296	UGC 10719	Galaxy	OPH	13.4	12.9	0.9'	17 08.7	+03 54	247	SBbc			P w IC 1242
NGC 6378	UGC 10884	Galaxy	OPH	13.4	13.4	1.3'	17 30.7	+06 17	203	Sbc			
PK 6+ 8.1	M1-20	Pln Neb	OPH	13.4	-	7.0"	17 29.0	-19 16	338	1		17.1	
PK 18+20.1	Nassau 1	Pln Neb	OPH	13.4	-	5.0"	17 12.9	-03 16	247			16.6	Stellar
PK 358+ 3.1	M3-10	Pln Neb	OPH	13.6	-	3.5"	17 28.7	-28 27	376	2			same as PK358+ 3.3
NGC 6220	UGC 10541	Galaxy	OPH	13.7	13.9	1.7'	16 47.2	-00 17	246	Sab			
UGC 11093	PGC 61300	Galaxy	OPH	13.7	13.4	3.1'	18 01.9	+06 58	204	Scd			
PK 3+ 3.1	ESO 520-14	Pln Neb	OPH	14	-	3.5"	17 40.1	-24 26	338	2		21	
PK 4+ 4.1	M1-25	Pln Neb	OPH	14	-	4.7"	17 38.5	-22 09	338	2		17.9	
PK 358+ 4.1	M3- 8	Pln Neb	OPH	14	-	5.6"	17 24.9	-28 06	376	2			
NGC 6525		Opn CL	OPH	-	-	10'	18 02.1	+11 02	204				
IC 4603	LBN 1109	Brn Neb	OPH	-	-	20'	16 25.4	-24 28	336	E+*			
IC 4604	LBN 1112	Brn Neb	OPH	-	-	60'	16 25.6	-23 27	336	E+*			Photographically 140' X 70'
Do 27		Opn CL	OPH	-	-	24'	16 36.5	-08 57	291	IV 2 p n	15		
vdB 111	LBN 88	Brn Neb	OPH	-	-	12'	17 19.0	+06 05	202	R			
B 42	LDN 1696	Drk Neb	OPH	--	--	20'	16 25.5	-23 26	336	6 lr			Great Nebula of Rho OPH
B 43	LDN 1752	Drk Neb	OPH	--	--	120'	16 30.3	-19 47	336	4 lr			Large dark region; bulbous with two lobes
B 44	LDN 1712	Drk Neb	OPH	--	--	280'	16 40.5	-24 04	336	5 lr			Dark lane E from Rho OPH region
B 45	LDN 1744	Drk Neb	OPH	--	--	120'	16 46.5	-21 36	337	5 lr			Rather definite; 2 degrees long
B 46	LDN 1775	Drk Neb	OPH	--	--	12'	16 57.2	-22 44	337	6 lr G			30' north of 24 Oph; String of small stars in middle
B 47	LDN 1792	Drk Neb	OPH	--	--	15'	16 59.7	-22 39	337	5 lr			Connected with B51 by two sharp lanes
B 51	LDN 0015	Drk Neb	OPH	--	--	20'	17 04.8	-22 16	337	6 lr			Definite
B 57	LDN 11	Drk Neb	OPH	--	--	5'	17 08.3	-23 40	337	6 E G			In patchy region following B44
B 59	LDN 1746	Drk Neb	OPH	--	--	60'	17 11.4	-27 30	338	5 lr			Sink hole; broken lane from B 78
B 60;246	LDN 17	Drk Neb	OPH	--	--	30'	17 11.8	-22 27	337	3 lr			In patchy region following B44
B 61	LDN 0111	Drk Neb	OPH	--	--	10'	17 15.2	-20 29	337	6 lr			1 deg south preceding B63
B 62	LDN 100	Drk Neb	OPH	--	--	19'	17 16.2	-20 53	337	6 lr			30' south preceding B63
B 63	LDN 99	Drk Neb	OPH	--	--	100'	17 16.5	-21 29	337	3 lr G			3 deg north-north foll Theta Oph;w a globule at end
B 64	LDN 173	Drk Neb	OPH	--	--	20'	17 17.2	-18 29	337	6 Co			Cometary; 30' preceding globular cluster M9
B 65-67	LDN 1772-3;	Drk Neb	OPH	--	--	12'	17 19.6	-26 42	338	6 lr			Pipe nebula (stem); 2 deg south of Theta Oph;
B 67a	LDN 102	Drk Neb	OPH	--	--	13'	17 22.5	-21 53	338	6 lr G			3 deg north of Theta Oph
B 68	LDN 57	Drk Neb	OPH	--	--	4'	17 22.6	-23 47	338	6 K G			20' southwest preceding B72
B 69	LDN 55	Drk Neb	OPH	--	--	4'	17 22.9	-23 55	338	6 lr			15' south following B68
B 70	LDN 54	Drk Neb	OPH	--	--	4'	17 23.5	-24 02	338	4 C?			20' south following B68
B 72	LDN 66	Drk Neb	OPH	--	--	4'	17 23.5	-23 38	338	6 S G			The Snake;1.5 deg nrf Theta Oph
B 74	LDN 081	Drk Neb	OPH	--	--	15'	17 25.2	-24 12	338	5 lr			15' preceding 44 Oph
B 75;261-2	LDN 0112;85	Drk Neb	OPH	--	--	110'	17 25.3	-22 28	338	5 lr			Two arcs 1 deg north following B72
B 77;269	LDN 69	Drk Neb	OPH	--	--	100'	17 28.0	-23 22	338	3 lr			Faint extension of bowl of Pipe nebula
B 78	LDN 42	Drk Neb	OPH	--	--	200'	17 33.0	-25 36	338	5 lr			2.5 deg south ;Bowl of Pipe nebula

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B 79;276	LDN 216; 21	Drk Neb	OPH	--	--	50'	17 39.5	-19 47	338	6 lr			B79 is narrow;straight north preceding extension
B244	LDN 1736	Drk Neb	OPH	--	--	20'	17 10.1	-28 24	376	5 lr			Lies south of tip of Pipe nebula
B256	LDN 1749	Drk Neb	OPH	--	--	50'	17 22.3	-28 51	376	5 lr			1.5 deg south of stem of Pipe nebula ;Curved
B259	LDN 177	Drk Neb	OPH	--	--	30'	17 22.0	-19 19	338	4 lr			50' south following globular cluster M9
B268;270	LDN 178;18	Drk Neb	OPH	--	--	120'	17 32.0	-20 32	338	5 lr			Irregular dark shape; round in NE part of B268
Cr 70		Opn CL	ORI	0.4	-	150'	05 36.0	-01 00	225	II 3 m n	100	1.7	Orion's belt stars
NGC 1980	OCL 529	CL+Neb	ORI	2.5	-	14'	05 35.4	-05 55	270	III 3 m n:			H V 31
Cr 69		Opn CL	ORI	2.8	-	65'	05 35.1	+09 56	180	II 3 p n	20		Lambda Ori cluster
Cr 65		Opn CL	ORI	3	-	220'	05 26.1	+16 42	180	II 3 p		14.7	Centered on 113 Tau; large group
M 42	NGC 1976	CL+Neb	ORI	4	11	90'	05 35.3	-05 23	225	E+R			Orion neb Trapezium* 6.7-7.7m;>50 var* invl
NGC 1981	OCL 525	Opn CL	ORI	4.2	-	25'	05 35.2	-04 26	225	III 2 p n	20	6.3	In Ori OB1;incl D* Struve 750
Sh2-264		Brt Neb	ORI	5	-	70'	05 36.3	+10 00	180	E			Seems to apply to entire Lambda Ori neb
NGC 2169	OCL 481	Opn CL	ORI	5.9	-	7'	06 08.4	+13 58	182	I 3 p n	30	6.9	H VIII 24;In nebula Ced 78
NGC 1662	OCL 470	Opn CL	ORI	6.4	-	20'	04 48.4	+10 57	179	I 2 p	35	8.3	H VII 1
NGC 2175	OCL 476	CL+Neb	ORI	6.8	-	18'	06 09.6	+20 29	137	IV 3 p n	60	7.6	In Gem OB1?
M 43	NGC 1982	Brt Neb	ORI	7	13	20'	05 35.5	-05 16	225	E			H III 1 ?;detached part of Orion Nebula
NGC 1973	CED 55B	Brt Neb	ORI	7	-	5'	05 35.1	-04 44	225	E			
NGC 1975	CED 55C	Brt Neb	ORI	7	-	10'	05 35.3	-04 41	225	E			
NGC 1977	OCL 525	CL+Neb	ORI	7	-	20'	05 35.3	-04 51	225	E+R			H V 30
Sh2-276		Brt Neb	ORI	7	12	600'	05 54.4	-01 00	226	E			Part of Barnard's Loop ;faint
M 78	NGC 2068	Brt Neb	ORI	8	12	8'	05 46.8	+00 05	226	E			Comet shaped;2 10mag * invl; 53" sep
NGC 2071	LBN 938	Brt Neb	ORI	8	-	7'	05 47.1	+00 18	226	R			H IV 36
NGC 2194	OCL 495	Opn CL	ORI	8.5	-	10'	06 13.8	+12 48	182	III 1 r	80	12.1	H VI 5;faint;rich;look for 2169 nearby
NGC 2186	OCL 498	Opn CL	ORI	8.7	-	4'	06 12.1	+05 28	227	II 2 p	30	9.8	H VII 25
Basel 11B		Opn CL	ORI	8.9	-	9.0'	05 58.2	+21 58	136	II 2 m	12	8.9	
NGC 2112	OCL 509	Opn CL	ORI	9.1	-	11'	05 53.8	+00 25	226	II 3 m n	50	10	H VII 24
NGC 2141	OCL 487	Opn CL	ORI	9.4	-	10'	06 02.9	+10 27	181	II 3 r	10	13.3	
IC 434	LBN 954	Brt Neb	ORI	11	-	90'	05 41.0	-02 27	226	E			Contains Horsehead neb (B33)
Berk 21		Opn CL	ORI	11.1	-	3.5'	05 51.7	+21 49	136	II 3 m	40	14.8	
NGC 2022	PK 196-10.1	Pln Neb	ORI	11.7	9.2	28"	05 42.1	+09 05	181	4(2)		15.8	small;faint and distinct w annular form;PK196-10.1
NGC 1691	UGC 3201	Galaxy	ORI	12	12.9	1.7'	04 54.6	+03 16	224	SBO-a R			
NGC 1819	UGC 3265	Galaxy	ORI	12.4	13	1.7'	05 11.8	+05 12	225	SBO			
NGC 1924	MCG - 1-14-	Galaxy	ORI	12.5	13.1	1.6'	05 28.0	-05 19	225	SBbc Rii			H III 447
NGC 1762	UGC 3238	Galaxy	ORI	12.6	13.1	1.7'	05 03.6	+01 34	224	Sc			H III 453
NGC 1670	MCG 0-13-	Galaxy	ORI	12.7	13.4	2.1'	04 49.7	-02 46	224	SO			H III 501
NGC 1713	UGC 3222	Galaxy	ORI	12.7	13.3	1.4'	04 58.9	-00 29	224	Elliptical			H II 516
PK 190-17.1	J 320	Pln Neb	ORI	12.9	6.9	26.0"	05 05.6	+10 42	180	2(4)		14.4	
NGC 1684	MCG - 1-13-	Galaxy	ORI	13	-	2.9'	04 52.5	-03 06	224	Elliptical			H II 528
NGC 1729	MCG - 1-13-	Galaxy	ORI	13	-	1.7'	05 00.3	-03 21	224	Sc			H III 503
NGC 1843	MCG - 2-14-	Galaxy	ORI	13	-	2.1'	05 14.1	-10 38	270	Sc			
NGC 1661	UGC 3166	Galaxy	ORI	13.2	13.3	1.4'	04 47.1	-02 03	224	Sbc			
NGC 1678	MCG 0-13-	Galaxy	ORI	13.2	12.8	1.1'	04 51.6	-02 37	224	SO			H III 502
NGC 1719	UGC 3226	Galaxy	ORI	13.6	12.3	1.1'	04 59.6	-00 16	224	Sa			
NGC 1875	MCG 1-14-	Galaxy	ORI	13.6	13.1	1.5'	05 21.8	+06 41	180	SO			
PK 198- 6.1	Abell 12	Pln Neb	ORI	13.9	11.3	37"	06 02.4	+09 39	181			19.7	On NW edge OF Mu Ori;star makes ID difficult
NGC 1682	MCG - 1-13-	Galaxy	ORI	14	-	0.8'	04 52.3	-03 06	224	E-SO			H II 527
NGC 2110	MCG - 1-15-	Galaxy	ORI	14	-	1.7'	05 52.2	-07 27	271	E-SO			H III 448;III 510
NGC 1663	OCL 461	Opn CL	ORI	-	-		04 49.6	+13 09	179	IV 2 p	30		H VIII 7
NGC 1788	LBN 916	Brt Neb	ORI	-	-	5'	05 06.9	-03 20	225	R			H V 32; possible reflection nebula
NGC 1990	LBN 940	Brt Neb	ORI	-	-	50'	05 36.2	-01 12	226	E+R			H V 34
NGC 1999	LBN 979	Brt Neb	ORI	-	-	2'	05 36.4	-06 43	271	E+R			H IV 33
NGC 2023	LBN 953	Brt Neb	ORI	-	-	10'	05 41.6	-02 16	226	E+R			H IV 24
NGC 2024	CED 55P	Brt Neb	ORI	-	-	30'	05 41.7	-01 51	226	E			Tank Track Neb; flame , masked by Zeta Ori
NGC 2064	LBN 1627	Brt Neb	ORI	-	-	10'	05 46.3	+00 00	226	R			
NGC 2067	DG 79	Brt Neb	ORI	-	-	8'	05 46.4	+00 06	226	E			part of M78
NGC 2143		Opn CL	ORI	-	-	11'	06 03.1	+05 43	181		12	10	
NGC 2163	Ced 62	Brt Neb	ORI	-	-	3'	06 07.8	+18 39	136	R			Two symmetrical fans extending N-S
NGC 2174	CED 67A	Brt Neb	ORI	-	-	40'	06 09.4	+20 40	137	E			w IC 2159 sf; contains cluster
NGC 2175S	Lund 1182	Opn CL	ORI	-	-	21'	06 10.9	+20 36	137		20		
NGC 2180		Opn CL	ORI	-	-		06 09.6	+04 43	227				H VIII 6
NGC 2202		Opn CL	ORI	-	-		06 16.8	+06 00	182				
IC 423	LBN 913	Brt Neb	ORI	-	-	2'	05 33.4	-00 37	225	E			
IC 426	LBN 921	Brt Neb	ORI	-	-	10'	05 36.5	-00 18	226	E			
IC 430	CED 55K	Brt Neb	ORI	-	-	11'	05 38.5	-07 05	271	E			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
IC 431	LBN 944	Brn Neb	ORI	-	-	8'	05 40.2	-01 28	226	E			
IC 432	LBN 946	Brn Neb	ORI	-	-	10'	05 40.9	-01 30	226	E			
IC 435	CED 55Q	Brn Neb	ORI	-	-	5'	05 43.0	-02 19	226	R			
IC 2162	Sh2-256	Brn Neb	ORI	-	-	4'	06 12.9	+17 59	137	E			With E-W extensions
Berk 20		Opn CL	ORI	-	-	3'	05 33.6	+00 11	225	II 2p :b	20	15	
Berk 22		Opn CL	ORI	-	-	2'	05 58.5	+07 45	181	I 2p :b	20	15	
Berk 72		Opn CL	ORI	-	-	5'	05 50.2	+22 15	136	II 1p :b	15	15	
Ced 59	LBN 879	Brn Neb	ORI	-	-	3'	05 45.3	+09 04	181	E+R			In dark neb B35
Ced 62		Brn Neb	ORI	-	-	2.0'	06 07.8	+18 40	137	bipolar		13	Two symmetrical fans extending N-S
Czernik 24		Opn CL	ORI	-	-	5'	05 55.5	+20 52	136	III 1m:b	35		
Czernik 25		Opn CL	ORI	-	-	6'	06 13.7	+06 57	182	III 1p :b	20		
Do 17		Opn CL	ORI	-	-	12'	05 22.4	+07 07	180	IV 2 p			Only 5 pB *
Do 19		Opn CL	ORI	-	-	24'	05 23.7	+08 10	180	IV 1 p			
Do 21	Cr 458	Opn CL	ORI	-	-	12'	05 27.4	+07 04	180	IV 2 p			Skiff: not seen in 0.2 degree field
DoDz 2		Opn CL	ORI	-	-	12'	05 23.2	+11 27	180	III 2p	12		
PK 195- 0.1	Sh2-266	Brn Neb	ORI	-	-	80"	06 18.9	+15 17	182	3		11.5	Not a PLNNB;H II region w Balmer line emission
PK 196- 1.1	Sh2-267	Brn Neb	ORI	-	-	350"	06 15.8	+14 16	182	3			Not a PLNNB;IRAS confirms HII region
PK 197- 2.1	Sh2-271	Brn Neb	ORI	-	-	2.0'	06 15.2	+12 22	182	3b		14	Not a PLNNB;IRAS confirms HII region
Sh2-261	LBN 863	Brn Neb	ORI	-	-	30'	06 08.6	+15 47	182	E			Lower's nebula
Sh2-263	LBN 866	Brn Neb	ORI	-	-	20'	05 21.4	+08 25	180	E+R		5.7	Brightst part of Lambda Ori neb
vdB 37	LBN 850	Brn Neb	ORI	-	-	12'	05 18.1	+13 26	180	R			
vdB 38	Ced 44	Brn Neb	ORI	-	-	20'	05 21.4	+08 25	180	R			
vdB 49	LBN 894	Brn Neb	ORI	-	-	6'	05 39.2	+04 07	226	R			
B 30	LDN 1577	Drk Neb	ORI	--	--	67'	05 30.2	+12 46	180	5 lr			Large dark area with few stars
B 31-2	LDN 1582;15	Drk Neb	ORI	--	--	80'	05 29.8	+12 46	180	5 lr			3 deg north preceding Lamba Ori
B 33	LDN 1630	Drk Neb	ORI	--	--	6'	05 40.9	-02 28	226	4 lr			Horsehead nebula ;part of dark following cloud
B 35	LDN 1594	Drk Neb	ORI	--	--	20'	05 45.5	+09 03	181	5 E			Near FU ORI and bright nebula Ced 59
B 36	LDN 1599	Drk Neb	ORI	--	--	120'	05 45.7	+07 31	181	4 lr			Narrow south preceding-north following lane
B225	LDN 1583	Drk Neb	ORI	--	--	35'	05 29.0	+11 36	180	5 lr			South end of extension running S from B30
LDN 1616		Drk Neb	ORI	--	--	10'	05 06.5	-03 26	225	5 lr			Near bright nebula NGC 1788
LDN 1622		Drk Neb	ORI	--	--	15'	05 54.6	+02 00	226	6 lr G			Near reflection nebula vdB 62
LDN 1641		Drk Neb	ORI	--	--	300'	05 33.0	-06 00	270	5 lr			Orion nebula region
NGC 6752	Dunlop 295	Glob CL	PAV	5.4	-	20.4'	19 10.9	-59 59	435	VI			Fine cluster
NGC 6753	ESO 184-22	Galaxy	PAV	11.1	12.8	2.4'	19 11.4	-57 03	435	Sb			
NGC 6810	ESO 142-35	Galaxy	PAV	11.4	12.4	3.1'	19 43.6	-58 39	436	Sab			
IC 4721	ESO 140-G0	Galaxy	PAV	11.6	13.7	5.6'	18 34.4	-58 30	435	SBc			Interacting with IC 4720?
NGC 6782	ESO 142- 1	Galaxy	PAV	11.8	12.9	2.2'	19 24.0	-59 55	435	Sba Ring			
NGC 6699	ESO 183-21	Galaxy	PAV	12	12.7	1.5'	18 52.0	-57 19	435	SBbc			
NGC 6721	ESO 141-19	Galaxy	PAV	12	12.9	1.6'	19 00.8	-57 46	435	E0			
M 15	NGC 7078	Glob CL	PEG	6.4	11	12.3'	21 30.0	+12 10	210	IV			Stars mags 13...
NGC 7331	UGC 12113	Galaxy	PEG	9.5	13.3	10.2'	22 37.1	+34 25	123	SBc			Brightest in group of F obj;sev dark lanes
NGC 7217	UGC 11914	Galaxy	PEG	10.1	12.7	4'	22 07.9	+31 22	122	Sb			H II 207;vB diff Nuc .35'X0.27';many knotty arms
NGC 7814	UGC 8	Galaxy	PEG	10.6	13.2	4.7'	00 03.2	+16 09	170	Sab			H II 240;Equatorial dust lane;Nearly edge-on
NGC 7479	UGC 12343	Galaxy	PEG	10.9	13.4	4'	23 04.9	+12 19	213	SBbc			H I 55;excellent barred spiral
NGC 7332	UGC 12115	Galaxy	PEG	11.1	12.6	3.8'	22 37.4	+23 48	167	SO			H II 233;UGC 12115;vB cent. bulge .7'X0.4';lenticular
NGC 7619	UGC 12523	Galaxy	PEG	11.1	12.9	2.8'	23 20.2	+08 12	214	Elliptical			H II 439;UGC 12523
NGC 7626	UGC 12531	Galaxy	PEG	11.1	13.1	3'	23 20.7	+08 13	214	E2			H II 440;P w NGC 7619;Br members of small group
NGC 7177	UGC 11872	Galaxy	PEG	11.2	13	3.2'	22 00.7	+17 44	166	SBb			H II 247
NGC 7457	UGC 12306	Galaxy	PEG	11.2	13.6	4'	23 01.0	+30 09	124	E-SO			H II 212
NGC 7741	UGC 12754	Galaxy	PEG	11.3	13.9	4.5'	23 43.9	+26 04	169	SBc			UGC 12754;B narrow bar .8'X0.2';S shape w thick bar
NGC 7743	UGC 12759	Galaxy	PEG	11.5	13.6	2.8'	23 44.4	+09 56	170	SBO-a			H II 256;P w NGC 7742
NGC 7742	UGC 12760	Galaxy	PEG	11.6	12.7	1.8'	23 44.3	+10 46	170	Sb			H II 255;P w NGC 7743
NGC 7448	UGC 12294	Galaxy	PEG	11.7	12.9	2.6'	23 00.1	+15 59	213	Sbc			H II 251;Brightest in group;UGC 12294;Arp 13
NGC 7454	UGC 12305	Galaxy	PEG	11.8	13.2	2.2'	23 01.1	+16 23	213	Elliptical			H II 249;NGC 7448 group;UGC 12305
NGC 7678	UGC 12614	Galaxy	PEG	11.8	13.1	2.5'	23 28.5	+22 25	169	SBc			H II 226;UGC 12614;Arp 28;slightly asym;1big arm
NGC 7817	UGC 19	Galaxy	PEG	11.8	12.9	3.5'	00 04.0	+20 45	125	Sbc			H II 227
NGC 16	UGC 80	Galaxy	PEG	12	12.4	1.8'	00 09.1	+27 44	125	E3			H IV 15;comp@ 3.3';PA 347;0.4x0.3;vF interacting pair
NGC 23	UGC 89	Galaxy	PEG	12	13	2.5'	00 09.9	+25 55	125	SBa			H III 147;UGC 89
NGC 7036		Opn CL	PEG	12	-	8'	21 10.2	+15 23	210				
NGC 7042	UGC 11702	Galaxy	PEG	12	13.2	2'	21 13.8	+13 34	210	Sb			H III 209;UGC 11702
NGC 7084		Opn CL	PEG	12	-	20'	21 32.5	+17 31	165				
NGC 7385	UGC 12207	Galaxy	PEG	12	12.8	1.3'	22 49.9	+11 36	213	Elliptical			H III 216;Brightest in cluster;UGC 12207
NGC 7753	UGC 12780	Galaxy	PEG	12	14	2.9'	23 47.1	+29 29	89	SBbc			H II 213;connected w NGC 7752
NGC 7769	UGC 12808	Galaxy	PEG	12	12.9	1.6'	23 51.1	+20 09	125	Sb			H II 230;Size 2.5'x2.1' in red light;UGC 12808

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
UGC 12613	Pegasus Dw	Galaxy	PEG	12	-	4.6'	23 28.6	+14 45	214	Ir+			dwarf Member Local Group , pegasus dwarf
NGC 14	UGC 75	Galaxy	PEG	12.1	13.9	2.8'	00 08.8	+15 49	170	Ir+			H II 591;UGC 75;Arp 235
NGC 7280	UGC 12035	Galaxy	PEG	12.1	13.3	2.1'	22 26.5	+16 09	212	SBO-a			H II 248;spp of 2;UGC 12035
NGC 7625	UGC 12529	Galaxy	PEG	12.1	12.8	1.6'	23 20.5	+17 14	169	Sa			H II 250;UGC 12529;V V 280;Arp 212;III Zw 102
NGC 7711	UGC 12691	Galaxy	PEG	12.1	13.3	2.6'	23 35.7	+15 18	214	SO			H II 244;UGC 12691
NGC 7339	UGC 12122	Galaxy	PEG	12.2	13	2.8'	22 37.8	+23 47	167	SBbc			H II 234;B cent. bulge w knots .7'X0.25'
NGC 7497	UGC 12392	Galaxy	PEG	12.2	14	4.4'	23 09.1	+18 11	168	SBc			
NGC 7550	UGC 12456	Galaxy	PEG	12.2	12.6	1.4'	23 15.3	+18 58	169	E-SO			H III 181;Brightest in group;Arp 99;UGC 12456
NGC 7386	UGC 12209	Galaxy	PEG	12.3	12.8	1.8'	22 50.0	+11 42	213	SO			H III 217
NGC 7469	UGC 12332	Galaxy	PEG	12.3	12.7	1.4'	23 03.3	+08 52	213	SBa			H III 230;Seyfert;UGC 12332
NGC 7490	UGC 12379	Galaxy	PEG	12.3	14.3	2.7'	23 07.4	+32 23	124	Sbc			
NGC 7768	UGC 12806	Galaxy	PEG	12.3	13.1	1.6'	23 51.0	+27 09	125	Elliptical			
NGC 7771	UGC 12815	Galaxy	PEG	12.3	13.1	2.4'	23 51.4	+20 07	125	SBa			H II 231;disturbed;NGC 7769 group;UGC 12815
NGC 7137	UGC 11815	Galaxy	PEG	12.4	13.1	1.6'	21 48.2	+22 10	166	SBc			H II 261
NGC 7515	UGC 12418	Galaxy	PEG	12.4	13.4	1.7'	23 12.8	+12 41	214	Sc			H III 220
NGC 7720	UGC 12716	Galaxy	PEG	12.4	13.1	1.6'	23 38.5	+27 02	169	Elliptical			H III 146;3C465;E + comp symbiotic
NGC 7722	UGC 12718	Galaxy	PEG	12.4	13.2	2.1'	23 38.7	+15 57	214	Sa			
NGC 7798	UGC 12884	Galaxy	PEG	12.4	12.8	1.4'	23 59.4	+20 45	125	Sc			H II 232
NGC 7156	UGC 11843	Galaxy	PEG	12.5	13.3	1.7'	21 54.6	+02 57	256	SBc			H III 452
NGC 7286	UGC 12043	Galaxy	PEG	12.5	12.5	1.6'	22 27.8	+29 06	123	Sa			
NGC 7292	UGC 12048	Galaxy	PEG	12.5	13.8	2.1'	22 28.4	+30 18	123	Ir Bar			irregular
NGC 7311	UGC 12080	Galaxy	PEG	12.5	12.6	1.6'	22 34.1	+05 34	212	Sab			H II 428;UGC 12080
NGC 7315	UGC 12097	Galaxy	PEG	12.5	13.4	1.6'	22 35.5	+34 48	123	SO			
NGC 7514	UGC 12415	Galaxy	PEG	12.5	12.6	1.4'	23 12.4	+34 53	124	Sbc			
NGC 7539	UGC 12443	Galaxy	PEG	12.5	13	1.5'	23 14.5	+23 41	169	SO			
NGC 7794	UGC 12872	Galaxy	PEG	12.5	13.1	1.5'	23 58.6	+10 44	170	Sbc			H III 466;Peculiar;UGC 12872
NGC 7241	UGC 11968	Galaxy	PEG	12.6	13.8	3.4'	22 15.8	+19 14	167	SBbc/P			II Zw 174;edge-on spiral
NGC 7303	UGC 12065	Galaxy	PEG	12.6	13.1	1.5'	22 31.6	+30 57	123	Sbc			Stronly asym barred spiral
NGC 7320	UGC 12101	Galaxy	PEG	12.6	13.5	2.3'	22 36.1	+33 57	123	Scd			Brighest in Stephan's Quintet
NGC 7465	UGC 12317	Galaxy	PEG	12.6	12.4	1.2'	23 02.0	+15 58	213	SBO			H III 211;NGC 7448 group;UGC 12317
NGC 7512	UGC 12414	Galaxy	PEG	12.6	13.7	1.8'	23 12.3	+31 08	124	Elliptical			spp of 2
NGC 7634	UGC 12542	Galaxy	PEG	12.6	12.5	1.2'	23 21.7	+08 53	214	SBO			H II 441;Brightest of 3
NGC 7680	UGC 12616	Galaxy	PEG	12.6	13.8	1.8'	23 28.6	+32 25	124	E-SO			H III 860;UGC 12616
NGC 7800	UGC 12885	Galaxy	PEG	12.6	13.9	2.3'	23 59.6	+14 48	170	Ir			H II 10;UGC 12885
NGC 26	UGC 94	Galaxy	PEG	12.7	13.6	2.1'	00 10.4	+25 50	125	Sab Ring			
NGC 7362	UGC 12171	Galaxy	PEG	12.7	12.5	1.1'	22 43.8	+08 42	213	Elliptical			Compact
NGC 7628	UGC 12534	Galaxy	PEG	12.7	12.7	1.1'	23 20.9	+25 54	169	Elliptical			
NGC 7653	IC 1488	Galaxy	PEG	12.7	13.5	1.6'	23 24.8	+15 17	214	Sb			UGC 12586
NGC 7660	UGC 12594	Galaxy	PEG	12.7	13.1	1.4'	23 25.8	+27 02	169	Elliptical			
NGC 7664	UGC 12598	Galaxy	PEG	12.7	14	2.6'	23 26.7	+25 05	169	Sc			
NGC 7712	UGC 12694	Galaxy	PEG	12.7	12.1	0.9'	23 35.9	+23 37	169	S pec			peculiar
NGC 7563	UGC 12465	Galaxy	PEG	12.8	13.3	1.9'	23 15.9	+13 12	214	SBa			H III 222;UGC 12465
NGC 7612	UGC 12512	Galaxy	PEG	12.8	12.9	1.6'	23 19.7	+08 35	214	SO			
NGC 7671	UGC 12602	Galaxy	PEG	12.8	12.8	1.4'	23 27.3	+12 28	214	SO			H III 226;UGC 12602
NGC 7673	UGC 12607	Galaxy	PEG	12.8	13.1	1.3'	23 27.7	+23 35	169	Scp			compact
NGC 1	UGC 57	Galaxy	PEG	12.9	13.5	1.7'	00 07.3	+27 43	125	Sb			
NGC 7056	UGC 11734	Galaxy	PEG	12.9	12.7	1'	21 22.1	+18 40	165	SBbc			
NGC 7321	UGC 12103	Galaxy	PEG	12.9	13.4	1.6'	22 36.5	+21 37	167	SBb			H III 237;UGC 12103
NGC 7323	UGC 12108	Galaxy	PEG	12.9	13.3	1.4'	22 36.9	+19 09	167	Sb Ring			p of 2;disturbed
NGC 7623	UGC 12526	Galaxy	PEG	12.9	12.8	1.3'	23 20.5	+08 24	214	SO			H III 435;UGC 12526
NGC 7691	UGC 12654	Galaxy	PEG	12.9	14	2.1'	23 32.4	+15 51	214	SBbc Ring			H III 213
NGC 7053	UGC 11727	Galaxy	PEG	13	13.5	1.4'	21 21.1	+23 05	165	Compac			II Zw 124
NGC 7316	UGC 12098	Galaxy	PEG	13	12.8	1.1'	22 35.9	+20 19	167	Sc			H III 180
NGC 7543	UGC 12450	Galaxy	PEG	13	12.9	1.1'	23 14.6	+28 20	124	Sbc			
NGC 7549	UGC 12457	Galaxy	PEG	13	13.7	2.8'	23 15.3	+19 02	169	SBc/P			NGC 7550 group;distorted
NGC 7594	IC 5307	Galaxy	PEG	13	11	1.4'	23 18.2	+10 18	214	Sb			
NGC 7610	UGC 12511	Galaxy	PEG	13	14.5	2.5'	23 19.7	+10 11	214	SBc Ring			Disturbed?
NGC 7648	IC 1486	Galaxy	PEG	13	13.4	1.6'	23 23.9	+09 40	214	SO			H III 218;UGC 12575
NGC 7810	UGC 12919	Galaxy	PEG	13	13	1.2'	00 02.3	+12 58	170	SO			H III 984;UGC 12919
NGC 7149	UGC 11835	Galaxy	PEG	13.1	13.4	1.3'	21 52.2	+03 18	256	Elliptical			
NGC 7194	UGC 11888	Galaxy	PEG	13.1	13.1	1.1'	22 03.5	+12 38	211	Elliptical			Brightest in group
NGC 7291	UGC 12047	Galaxy	PEG	13.1	14.2	1.8'	22 28.5	+16 47	212	SO			
NGC 7318B	NGC 7318-2	Galaxy	PEG	13.1	13.9	1.6'	22 36.0	+33 58	123	SBbc			Stephan's Quintet ;B is distorted colliding w A
NGC 7319	UGC 12102	Galaxy	PEG	13.1	13.8	1.4'	22 36.1	+33 59	123	SBbc			Stephan's Quintet ;distorted

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 7328	UGC 12118	Galaxy	PEG	13.1	13.4	2'	22 37.5	+10 32	212	Sab			
NGC 7407	UGC 12230	Galaxy	PEG	13.1	13.7	2'	22 53.4	+32 08	123	Sc			Inner spiral structure
NGC 7485	UGC 12360	Galaxy	PEG	13.1	12.7	1.2'	23 06.1	+34 06	124	SO			
NGC 7495	UGC 12391	Galaxy	PEG	13.1	14.1	1.8'	23 09.0	+12 03	213	Sc			
NGC 7620	UGC 12520	Galaxy	PEG	13.1	13.2	1.2'	23 20.1	+24 13	169	Sc			
NGC 7624	UGC 12527	Galaxy	PEG	13.1	12.6	1'	23 20.4	+27 19	169	SBc			S-shaped arms w high surface brightnes
NGC 7631	UGC 12539	Galaxy	PEG	13.1	13.2	1.7'	23 21.4	+08 13	214	Sb			
NGC 7728	UGC 12727	Galaxy	PEG	13.1	12.9	1'	23 40.0	+27 08	169	Elliptical			
NGC 7774	UGC 12819	Galaxy	PEG	13.1	13.6	1.3'	23 52.2	+11 28	170	Elliptical			
NGC 7786	UGC 12842	Galaxy	PEG	13.1	11.6	0.6'	23 55.4	+21 35	125	S			
NGC 7803	UGC 12906	Galaxy	PEG	13.1	12.4	1'	00 01.3	+13 07	170	Sa			Brightest in chain of 6
UGC 12178	PGC 69650	Galaxy	PEG	13.1	14.7	3.4'	22 45.1	+06 26	213	S(B)dm			
NGC 7224	UGC 11940	Galaxy	PEG	13.2	13.8	1.6'	22 11.6	+25 52	167	Elliptical			
NGC 7463	UGC 12316	Galaxy	PEG	13.2	13.8	3'	23 01.9	+15 59	213	SBb/P			H III 210;Distorted;NGC 7448 group;UGC 12316
NGC 7570	UGC 12473	Galaxy	PEG	13.2	13.4	1.6'	23 16.7	+13 29	214	SBa			H III 238;UGC 12473
NGC 7643	UGC 12563	Galaxy	PEG	13.2	13.1	1.4'	23 22.8	+11 59	214	S pec			brightest of 3
NGC 7674	UGC 12608	Galaxy	PEG	13.2	13.2	1.1'	23 27.9	+08 47	214	SBbc			
NGC 7677	UGC 12610	Galaxy	PEG	13.2	13.6	1.6'	23 28.1	+23 32	169	SBbc			
NGC 52	UGC 140	Galaxy	PEG	13.3	13.1	2.2'	00 14.7	+18 35	125	Sc			H III 183;nf of 2;disturbed;UGC 122 superimp 0.9' sf ctr
NGC 7206	UGC 11904	Galaxy	PEG	13.3	13.7	1.3'	22 05.7	+16 47	211	SO			Compact;Brightest of 3
NGC 7290	UGC 12045	Galaxy	PEG	13.3	13.6	1.6'	22 28.4	+17 09	167	Sbc			
NGC 7437	UGC 12270	Galaxy	PEG	13.3	14.4	1.8'	22 58.2	+14 18	213	Scd			
NGC 7442	UGC 12286	Galaxy	PEG	13.3	13.4	1'	22 59.4	+15 33	213	Sc			
NGC 7461	UGC 12314	Galaxy	PEG	13.3	12.7	0.9'	23 01.8	+15 35	213	SBO			
NGC 7464	UGC 12315	Galaxy	PEG	13.3	12.7	0.5'	23 01.9	+15 58	213	Elliptical			NGC 7448 group
NGC 7500	UGC 12399	Galaxy	PEG	13.3	14.1	2.1'	23 10.5	+11 01	213	SO			
NGC 7516	UGC 12420	Galaxy	PEG	13.3	13.2	1.1'	23 12.9	+20 15	169	SO			
NGC 7527	UGC 12428	Galaxy	PEG	13.3	13.5	1.3'	23 13.7	+24 54	169	Elliptical			
NGC 7548	UGC 12455	Galaxy	PEG	13.3	13.1	1.1'	23 15.2	+25 17	169	SBO			
NGC 7578A	NGC 7578-1	Galaxy	PEG	13.3	14	1.5'	23 17.2	+18 42	169	SO			H III 182;double system
NGC 7698	UGC 12668	Galaxy	PEG	13.3	13.1	1'	23 34.0	+24 57	169	SO			
NGC 7775	UGC 12821	Galaxy	PEG	13.3	12.8	0.9'	23 52.4	+28 46	89	SBc			disturbed?;chaotic spiral
NGC 7777	UGC 12829	Galaxy	PEG	13.3	13.1	1.2'	23 53.2	+28 17	89	SO			
NGC 7805	UGC 12908	Galaxy	PEG	13.3	13.2	1.2'	00 01.4	+31 26	89	SBO			H III 855;contact w NGC 7806
UGC 12732	PGC 72087	Galaxy	PEG	13.3	15.5	3'	23 40.6	+26 14	169	Sm			
UGC 12843	MCG +03-60	Galaxy	PEG	13.3	14.5	3'	23 55.6	+17 56	125	S(B)dm			* superimposed 0.4' north foll center
NGC 7094	PK 66-28.1	Pln Neb	PEG	13.4	14.7	99"	21 36.9	+12 47	211	4		13.6	
NGC 7312	UGC 12083	Galaxy	PEG	13.4	13.4	1.5'	22 34.6	+05 49	212	SBb			
NGC 7318A	NGC 7318-1	Galaxy	PEG	13.4	13	1.2'	22 35.9	+33 58	123	Elliptical			Stephan's Quintet ;A projects onto arm of B
NGC 7335	UGC 12116	Galaxy	PEG	13.4	12.9	1.3'	22 37.3	+34 27	123	Sa			H III 166;Brightest of 4;UGC 12116; near 7331
NGC 7372	MCG 2-58-	Galaxy	PEG	13.4	13	1'	22 45.8	+11 08	213	Sbc			
NGC 7411	UGC 12241	Galaxy	PEG	13.4	13.2	1'	22 54.6	+20 14	168	Elliptical			Compact;4th in chain of 6
NGC 7432	UGC 12268	Galaxy	PEG	13.4	14.1	1.6'	22 58.0	+13 08	213	Elliptical			H III 465;Companion superimposed?;UGC 12268
NGC 7489	UGC 12378	Galaxy	PEG	13.4	14.1	2.1'	23 07.5	+23 00	168	Scd			
NGC 7536	UGC 12437	Galaxy	PEG	13.4	13.6	1.9'	23 14.2	+13 26	214	SBbc Rii			
NGC 7703	UGC 12676	Galaxy	PEG	13.4	13.3	2.2'	23 34.8	+16 05	214	SO			
NGC 7760	UGC 12794	Galaxy	PEG	13.4	13.3	1'	23 49.2	+30 59	89	Elliptical			H III 854;Red plate size 1.5'x1.5';very compact
NGC 7773	UGC 12820	Galaxy	PEG	13.4	13.7	1.2'	23 52.2	+31 17	89	SBbc			H II 851
UGC 12074	PGC 69126	Galaxy	PEG	13.4	11.7	0.6'	22 33.1	+08 05	212	Pec			compact w loops
NGC 7147	MCG 0-55-	Galaxy	PEG	13.5	13.2	1'	21 52.0	+03 04	256	SBO-a			
NGC 7343	UGC 12129	Galaxy	PEG	13.5	13.3	1'	22 38.6	+34 04	123	SBbc			
NGC 7568	UGC 12469	Galaxy	PEG	13.5	12.6	0.9'	23 16.4	+24 30	169	S pec			
NGC 7729	UGC 12730	Galaxy	PEG	13.5	13.5	1.8'	23 40.6	+29 11	89	SBa			
NGC 7767	IC 1511	Galaxy	PEG	13.5	11.6	1'	23 50.9	+27 05	125	Sa			UGC 12805
NGC 7806	UGC 12911	Galaxy	PEG	13.5	13.2	1.1'	00 01.5	+31 26	89	SB/P			H III 856;disturbed PA20;contact w NGC 7805
NGC 7819	UGC 26	Galaxy	PEG	13.5	14	1.5'	00 04.4	+31 28	89	SBb			
NGC 9	UGC 78	Galaxy	PEG	13.6	13.3	1.1'	00 08.9	+23 49	125	Sbp			Peculiar;disturbed;B main body 0.45x0.25
NGC 22	UGC 80	Galaxy	PEG	13.6	14.3	1.7'	00 09.8	+27 50	125	Sb			comp@ 3.3' PA 347 0.4X0.25
NGC 41	MCG 4-1-	Galaxy	PEG	13.6	12.6	0.8'	00 12.8	+22 01	125	Sc			
NGC 7236	3C442	Galaxy	PEG	13.6	12.6	1.1'	22 14.8	+13 51	212	E-SO			Triple system;plumes;w NGC 7237
NGC 7317	MCG 6-49-	Galaxy	PEG	13.6	13.8	0.7'	22 35.9	+33 57	123	Elliptical			stephan's quintet
NGC 7347	UGC 12136	Galaxy	PEG	13.6	12.7	1.5'	22 39.9	+11 02	212	Sc			
NGC 7360	UGC 12167	Galaxy	PEG	13.6	12	0.7'	22 43.6	+04 09	258	S			
NGC 7369	MCG 6-49-	Galaxy	PEG	13.6	13.2	0.9'	22 44.2	+34 21	123	Sc Ring			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 7373	ZWG 379. 4	Galaxy	PEG	13.6	12.8	1.3'	22 46.3	+03 13	258	SO			
NGC 7466	IC 5281	Galaxy	PEG	13.6	13.1	1.5'	23 02.1	+27 03	168	Sb			
NGC 7593	UGC 12483	Galaxy	PEG	13.6	12.9	1'	23 17.9	+11 21	214	Sbc			Peculiar
NGC 7647	UGC 12576	Galaxy	PEG	13.6	14	1.4'	23 24.0	+16 47	214	Elliptical			H III 473;UGC 12576
NGC 7735	UGC 12744	Galaxy	PEG	13.6	13.7	1.3'	23 42.3	+26 14	169	Elliptical			
NGC 7747	UGC 12272	Galaxy	PEG	13.6	13.2	1.5'	23 45.5	+27 22	125	SBb			
NGC 7043	UGC 11704	Galaxy	PEG	13.7	13.4	1'	21 14.1	+13 38	210	SBa			
NGC 7340	MCG 6-49-	Galaxy	PEG	13.7	12.9	0.9'	22 37.7	+34 25	123	Elliptical			
NGC 7383	MCG 2-58-	Galaxy	PEG	13.7	12.9	0.8'	22 49.6	+11 33	213	SBO			
NGC 7468	UGC 12329	Galaxy	PEG	13.7	13	0.9'	23 03.0	+16 36	213	Elliptical			H III 202;Peculiar;two jets;UGC 12329
NGC 7473	UGC 12335	Galaxy	PEG	13.7	12.9	1.1'	23 04.0	+30 10	124	SBO			
NGC 7535	UGC 12438	Galaxy	PEG	13.7	14.4	1.5'	23 14.2	+13 35	214	Scd			
NGC 7547	UGC 12453	Galaxy	PEG	13.7	12.8	1.1'	23 15.1	+18 58	169	SBap			NGC 7550 group;Arp 99
NGC 7580	UGC 12481	Galaxy	PEG	13.7	12.8	0.8'	23 17.6	+14 00	214	S pec			
NGC 7681	UGC 12620	Galaxy	PEG	13.7	12.9	1.8'	23 28.9	+17 19	169	SO			H II 242
NGC 15	UGC 82	Galaxy	PEG	13.8	13.1	1'	00 09.0	+21 37	125	Sa			
NGC 42	UGC 118	Galaxy	PEG	13.8	13.1	1.1'	00 12.9	+22 06	125	E-SO			p of 2;P w comp at 1 ' ;PA 77;0.9x0.8;dwarf
NGC 7034	UGC 11687	Galaxy	PEG	13.8	13.5	1'	21 09.6	+15 09	210	Elliptical			
NGC 7066	UGC 11741	Galaxy	PEG	13.8	13.6	0.9'	21 26.2	+14 11	210	Sb			Companion superimposed
NGC 7190	UGC 11885	Galaxy	PEG	13.8	12.8	0.9'	22 03.1	+11 12	211	Sa			
NGC 7212	UGC 1212	Galaxy	PEG	13.8	13.3	1.2'	22 07.0	+10 14	211	Sb			Companion superimposed;distorted
NGC 7244	MCG 3-56-	Galaxy	PEG	13.8	12	0.7'	22 16.4	+16 28	212	Sc			
NGC 7348	UGC 12142	Galaxy	PEG	13.8	13.4	1.1'	22 40.6	+11 54	213	SBc			
NGC 7363	MCG 6-49-	Galaxy	PEG	13.8	13.8	0.9'	22 43.3	+34 00	123	SBcd			
NGC 7367	UGC 12175	Galaxy	PEG	13.8	13.1	1.6'	22 44.6	+03 39	258	Sab			
NGC 7389	MCG 2-58-	Galaxy	PEG	13.8	13.6	1.1'	22 50.3	+11 34	213	S pec			
NGC 7511	UGC 12412	Galaxy	PEG	13.8	13.1	1.1'	23 12.4	+13 44	214	S pec			
NGC 7737	UGC 12745	Galaxy	PEG	13.8	12.7	0.9'	23 42.8	+27 03	169	Sa			
NGC 7770	UGC 12813	Galaxy	PEG	13.8	13.1	0.8'	23 51.4	+20 06	125	Sa			disturbed;NGC 7769 group
Abell 2634		Gal CL	PEG	13.8	-	22.4'	23 38.3	+27 01	169	1 1 II			15 Gal/Deg; 52 galaxies
Abell 2666		Gal CL	PEG	13.8	-	78.4'	23 50.9	+27 08	125	0 1 I			9 Gal/Deg; NGC 7768 group; 34 galaxies
Pal 13		Glob CL	PEG	13.8	-	0.7'	23 06.7	+12 46	213	XII			
NGC 7270	UGC 12019	Galaxy	PEG	13.9	13.1	0.9'	22 23.8	+32 24	123	Sc			1 of 2 brightest in group of 6 or more galaxies
NGC 7342	UGC 12126	Galaxy	PEG	13.9	14.4	1.4'	22 38.2	+35 30	123	SBa			UGC 12127 group
NGC 7420	MCG 5-54-	Galaxy	PEG	13.9	12.9	0.8'	22 55.5	+29 48	123	Sc			
NGC 7587	UGC 12484	Galaxy	PEG	13.9	12.7	1.2'	23 18.0	+09 41	214	SBab			n of 2
NGC 7597	MCG 3-59-	Galaxy	PEG	13.9	13.5	0.9'	23 18.5	+18 41	169	SO			compact
NGC 7641	NGC 7627	Galaxy	PEG	13.9	13.6	1.7'	23 22.5	+11 54	214	Sa			NGC 7643 group
NGC 7672	MCG 2-59-	Galaxy	PEG	13.9	13.9	0.8'	23 27.5	+12 23	214	Sb			
UGC 12710	PGC 71932	Galaxy	PEG	13.9	13.9	1.3'	23 37.5	+18 00	169	lrp+			very chaotic
UGC 12856	PGC 72977	Galaxy	PEG	13.9	-	1.6'	23 56.8	+16 50	170	lr+			disturbed w many knots
NGC 7357	UGC 12162	Galaxy	PEG	14	13.8	1.5'	22 42.4	+30 10	123	Sb			
NGC 7387	MCG 2-58-	Galaxy	PEG	14	12.5	0.7'	22 50.3	+11 38	213	SO			
NGC 7433	MCG 4-54-	Galaxy	PEG	14	-	0.7'	22 57.9	+26 10	168	S pec			Double system w NGC 7436A;B
NGC 7436A	NGC 7436	Galaxy	PEG	14	-	2'	22 58.0	+26 09	168	Elliptical			H III 243
NGC 7439	UGC 12273	Galaxy	PEG	14	13.2	1'	22 58.2	+29 14	123	SBO			
NGC 7451	UGC 12299	Galaxy	PEG	14	13.1	1'	23 00.7	+08 28	213	SBbc			
NGC 7578B	NGC 7578-2	Galaxy	PEG	14	14.1	0.8'	23 17.2	+18 42	169	Elliptical			Double system
NGC 7579	MCG 1-59-	Galaxy	PEG	14	-	0.5'	23 17.6	+09 26	214	Compac			compact
NGC 7601	UGC 12487	Galaxy	PEG	14	13.9	1.1'	23 18.8	+09 14	214	SBbc			
NGC 7649	UGC 12579	Galaxy	PEG	14	14.1	1.3'	23 24.3	+14 39	214	Elliptical			
NGC 7659	UGC 12595	Galaxy	PEG	14	12.5	0.8'	23 25.9	+14 13	214	Sa			H III 212
NGC 7718	UGC 12712	Galaxy	PEG	14	13.2	0.9'	23 38.1	+25 43	169	S pec			sf of 2
UGC 12350	PGC 70433	Galaxy	PEG	14	14.6	2.6'	23 05.3	+16 51	213	Sm			pair in contact total size 3'X2'
UGC 12682	PGC 71801	Galaxy	PEG	14	14.3	1.4'	23 34.9	+18 14	169	lrp+			
NGC 7772	OCL 230	Opn CL	PEG	-	-	2'	23 51.8	+16 15	170	III 1 p			
Mel 20	Cr 39	Opn CL	PER	1.2	-	185'	03 24.3	+49 52	63	III 3 m	50	2.9	Alpha Per moving cluster (Mag w/o Alpha Per)
NGC 1499	LBN 756	Brt Neb	PER	5	-	160'	04 03.2	+36 22	95	E			California Nebula;0.6 deg from Xi Per
M 34	NGC 1039	Opn CL	PER	5.2	-	35'	02 42.1	+42 47	62	II 3 m	100	7.3	At least 80 true members;sev D * incl h1123 & O Stv 44
NGC 869	OCL 350	Opn CL	PER	5.3	-	30'	02 19.1	+57 08	37	I 3 r	200	6.6	h Per; H VI 33;Double Cluster w NGC 884
Tr 2	Cr 29	Opn CL	PER	5.9	-	20'	02 36.9	+55 55	38	III 2 p	20	7.4	Moderately rich about 30 * to 11 mag some faint * to south
NGC 884	OCL 353	Opn CL	PER	6.1	-	30'	02 22.5	+57 09	37	I 3 r	150	8.1	H VI 34;chi Per;Double Cluster w NGC 869
NGC 1545	OCL 399	Opn CL	PER	6.2	-	18'	04 20.9	+50 15	39	II 2 p	20	7.1	H VIII 85
NGC 1528	OCL 397	Opn CL	PER	6.4	-	24'	04 15.3	+51 13	39	II 2 m	40	8.8	H VII 61;80 * mag 8...;1 deg NNW from b1 PER

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1444	OCL 394	Opn CL	PER	6.6	-	4'	03 49.4	+52 40	39	IV 1 p	37	6.8	H VIII 80;In Cam OB1?
NGC 1342	OCL 401	Opn CL	PER	6.7	-	14'	03 31.7	+37 22	94	III 3 p	40	8.8	H VIII 88
NGC 1582	OCL 407	Opn CL	PER	7	-	37'	04 31.8	+43 47	65	IV 2 p	20	9	H VIII 70
IC 348	IC 1985	CL+Neb	PER	7.3	-	10'	03 44.6	+32 10	95	IV 2 p n	20	8.5	With faint neby;surrounds Omicron Persei;near B4
NGC 957	OCL 362	Opn CL	PER	7.6	-	11'	02 33.3	+57 34	38	III 2 p	30	9.5	Incl D* B1314 and J. Herschel 2143;Barns-diamond dus
NGC 744	OCL 345	Opn CL	PER	7.9	-	11'	01 58.5	+55 28	37	IV 2 p	20	10.4	
NGC 1245	OCL 389	Opn CL	PER	8.4	-	10'	03 14.7	+47 14	63	III 1 r	200	11.2	H VI 25
NGC 1513	OCL 398	Opn CL	PER	8.4	-	9'	04 09.9	+49 31	64	II 1 m	50	11.2	H VII 60
NGC 1023	UGC 2154	Galaxy	PER	9.4	12.8	8.1'	02 40.4	+39 04	62	E7p			brst in grp;more neb 10' E;lens shp F tuft on E tip
Ru 148		Opn CL	PER	9.5	-	3'	04 46.5	+44 43	65	IV 2 p	15	9.9	
NGC 1496	OCL 396	Opn CL	PER	9.6	-	6'	04 04.5	+52 40	39	II 1 p	10	12	
Czernik 8		Opn CL	PER	9.7	-	7'	02 33.0	+58 46	38	II 3 m	10	9.9	
Berk 68		Opn CL	PER	9.8	-	12'	04 44.5	+42 04	65	IV 2 p	60	13.7	
Basel 10		Opn CL	PER	9.9	-	2'	02 19.5	+58 19	37	II 1 p	12	10.2	
M 76	NGC 650	Pln Neb	PER	10.1	10.4	163"	01 42.3	+51 35	37	3(6)		17.6	Little Dumbbell or Cork Nebula;PK130-10.1
NGC 651	M 76	Pln Neb	PER	10.1	10.4	163"	01 42.3	+51 35	37	3(6)		17.6	Little Dumbbell or Cork Nebula;faintest M obj
Berk 11		Opn CL	PER	10.4	-	6'	04 20.5	+44 55	64	II 3 m	35	11.8	
NGC 1605	OCL 406	Opn CL	PER	10.7	-	5'	04 34.9	+45 16	65	III 1 m	40	12.5	H VI 26
NGC 1161	UGC 2474	Galaxy	PER	11	12.8	2.8'	03 01.2	+44 54	63	SO			H II 239;P w NGC1160 at 3.5';PA357
NGC 1058	UGC 2193	Galaxy	PER	11.2	13.4	3.2'	02 43.5	+37 20	93	Sc			NGC1023 grp;patchy main body;mult arm pattern
NGC 1169	UGC 2503	Galaxy	PER	11.3	13.8	4.6'	03 03.6	+46 23	63	SBab			H II 620
NGC 1003	UGC 2137	Galaxy	PER	11.4	13.8	5.7'	02 39.3	+40 52	62	Sc			main body 4'x1.4' patchy;ill-def'd arms SBc UGC2137
NGC 1186	NGC 1174	Galaxy	PER	11.4	12.7	3.2'	03 05.5	+42 50	63	SBbc			H IV 43
NGC 1220	OCL 380	Opn CL	PER	11.8	-	1.6'	03 11.7	+53 21	38	II 2 p	15	13	
NGC 1272	UGC 2662	Galaxy	PER	11.8	13.2	2.2'	03 19.4	+41 29	63	SO			in Perseus Cl
NGC 1624	OCL 403	CL+Neb	PER	11.8	-	1.9'	04 40.6	+50 28	40	II 1 p n:b	12	11.8	H V 49
NGC 1275	3C84;UGC 2	Galaxy	PER	11.9	13.1	2.3'	03 19.8	+41 31	63	SO			Seyfert;brst in Perseus Cl ;center in dense galxy cl
IC 351	PK 159-15.1	Pln Neb	PER	11.9	7.3	8"	03 47.6	+35 03	95	2a		15	
NGC 1122	NGC 1123	Galaxy	PER	12.1	12.9	1.8'	02 52.9	+42 12	63	SBb			
NGC 1265	UGC 2651	Galaxy	PER	12.1	13.2	1.8'	03 18.3	+41 51	63	SO			Perseus Cl ;comps 2.7';PA246;4.2';PA308
NGC 1106	UGC 2322	Galaxy	PER	12.3	13.4	1.8'	02 50.7	+41 40	63	SO			comps@ 1.7';PA349;3.7';PA29
NGC 1171	UGC 2510	Galaxy	PER	12.3	13.4	2.7'	03 04.0	+43 24	63	Sc			comp 3.8';PA21;3.8';PA344
NGC 1167	UGC 2487	Galaxy	PER	12.4	14.3	2.8'	03 01.7	+35 12	94	SO			H III 178
NGC 1278	IC 1907	Galaxy	PER	12.4	13.2	1.4'	03 19.9	+41 34	63	E2p			Persus Cl ;sf of 2;disturbed. Comp: NGC 1275,1277
NGC 1129	UGC 2373	Galaxy	PER	12.5	15.2	4'	02 54.5	+41 35	63	Elliptical			H II 602;v ext env;large # of objects in vicinity
NGC 1174	NGC 1186	Galaxy	PER	12.5	-	3.2'	03 05.5	+42 50	63	SBbc			
NGC 1198	IC 282	Galaxy	PER	12.5	13.2	1.9'	03 06.2	+41 51	63	E-SO			
NGC 1050	UGC 2178	Galaxy	PER	12.6	12.9	1.4'	02 42.6	+34 46	93	SBa			
NGC 1193	OCL 390	Opn CL	PER	12.6	-	1.5'	03 05.9	+44 23	63	II 3 m	40	14	H II 608
NGC 1207	UGC 2548	Galaxy	PER	12.6	13.9	2.3'	03 08.3	+38 23	94	Sb Ring			H III 578
IC 2003	PK 161-14.1	Pln Neb	PER	12.6	7.4	10.8"	03 56.4	+33 53	95	2		15.3	
NGC 1086	UGC 2258	Galaxy	PER	12.8	13.2	1.5'	02 47.9	+41 15	62	Sc			B prob cplx nucl .35X0.35;dif asym ext;2 knotty arms
NGC 1138	UGC 2408	Galaxy	PER	12.8	12.6	1.1'	02 56.6	+43 03	63	SBO			H III 580
NGC 1160	UGC 2475	Galaxy	PER	12.8	13.3	1.9'	03 01.2	+44 57	63	SBc Ring			H III 199;several short patchy arms;P w NGC 1161
NGC 1250	UGC 2613	Galaxy	PER	12.8	13.3	2.1'	03 15.4	+41 21	63	SO			comp 4.5';PA296;v diff;several eF companions
NGC 1053	NGC 1040-1	Galaxy	PER	12.9	13	1.7'	02 43.2	+41 30	62	SO			brst in grp;comp .8';PA354;UGC2194 @ 6.2';PA155
NGC 1175	UGC 2515	Galaxy	PER	12.9	12.9	1.9'	03 04.5	+42 20	63	Sa			H II 607;sp of 2;BN in center;Saturn-like
NGC 1226	UGC 2575	Galaxy	PER	12.9	14.3	2.1'	03 11.1	+35 23	94	Elliptical			brst in subgroup
NGC 1282	UGC 2675	Galaxy	PER	12.9	13.4	1.4'	03 20.2	+41 22	63	E1			P w N1283; Perseus Cl ;2 smlr gal are comp to this Pr
NGC 1123	NGC 1122	Galaxy	PER	13	-	1.8'	02 52.9	+42 12	63	SBb			H II 601
NGC 1130	MCG 7-7-	Galaxy	PER	13	-	0.4'	02 54.4	+41 36	63	Compac			compact
Abell 426	Perseus I	Gal CL	PER	13	-	190.4"	03 19.7	+41 30	63	2 0 II-III			Centered on 1275; 88 galaxies
NGC 1164	UGC 2490	Galaxy	PER	13.1	13.3	1.3'	03 02.0	+42 35	63	SBab Ring			comp 3.8';PA332;.4X0.3;peculiar
NGC 1270	UGC 2660	Galaxy	PER	13.1	13.7	0.9'	03 19.0	+41 28	63	E2			Perseus Cl
NGC 1334	UGC 2694	Galaxy	PER	13.1	13.1	1.5'	03 30.0	+41 50	63	SBc			disrupted spiral;red main body;spir arc f side
NGC 1233	NGC 1235	Galaxy	PER	13.2	13.2	1.8'	03 12.6	+39 19	63	Sb			B center region;e dif outside
NGC 1235	NGC 1233	Galaxy	PER	13.2	-	1.8'	03 12.6	+39 19	63	Sb			
NGC 1273	MCG 7-7-	Galaxy	PER	13.2	13.2	0.9'	03 19.4	+41 32	63	SO			
NGC 1294	UGC 2694	Galaxy	PER	13.2	13.5	1.5'	03 21.7	+41 22	63	SO			H III 575;ssf of 2
NGC 1260	UGC 2634	Galaxy	PER	13.3	12.6	1.1'	03 17.5	+41 24	63	Sa			Perseus Cl ;5 comp inside 5 ' ;may be interacting
NGC 1281	MCG 7-7-	Galaxy	PER	13.3	12.9	0.4'	03 20.1	+41 38	63	E5			
NGC 1268	UGC 2658	Galaxy	PER	13.4	12.7	0.9'	03 18.8	+41 29	63	Sb			Perseus Cl in a cond around NGC 1275 (see N1267)
NGC 1293	MCG 7-7-	Galaxy	PER	13.4	13.5	0.9'	03 21.6	+41 24	63	E0			H III 574
UGC 2259	PGC 10586	Galaxy	PER	13.4	14.9	2.8'	02 47.9	+37 32	93	SBdm			south of 2

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 1277	MCG 7-7-6	Galaxy	PER	13.5	12.3	0.8'	03 19.9	+41 34	63	Sa			in Perseus Cl
NGC 1283	UGC 2676	Galaxy	PER	13.6	12.6	0.7'	03 20.3	+41 24	63	E1			compact
PK 147- 2.1	M1- 4	Pln Neb	PER	13.6	7.7	4"	03 41.7	+52 17	39			16.7	
NGC 1224	UGC 2578	Galaxy	PER	13.7	14.1	1.4'	03 11.2	+41 22	63	SO			comp 1.5";PA0
NGC 1257	ZWG 540 7	2 Stars	PER	13.7	-	-	03 17.0	+41 32	63				
NGC 1465	UGC 2891	Galaxy	PER	13.7	13.3	1.7'	03 53.5	+32 30	95	Sa			brightest of 3
NGC 1023A		Galaxy	PER	13.8	-	1.3'	02 40.6	+39 04	62	Ir B			
NGC 1335	UGC 2762	Galaxy	PER	13.8	13.2	1.1'	03 30.3	+41 34	63	E-SO			
NGC 1040	NGC 1053-1	Galaxy	PER	13.9	-	1.7'	02 43.2	+41 30	62	SO			
UGC 2463	PGC 11371	Galaxy	PER	13.9	15.1	2.3'	03 00.6	+40 15	63	SABm			
NGC 1077B	NGC 1077-2	Galaxy	PER	14	-	0.5'	02 46.0	+40 06	62	SBb			
NGC 1159	UGC 2467	Galaxy	PER	14	-	0.5'	03 00.8	+43 10	63	SO			
NGC 1333	LBN 741	Brt Neb	PER	-	-	9'	03 29.2	+31 22	94	R		9.5	Bright neb with many dark neb in area incl B205
NGC 1348	OCL 391	Opn CL	PER	-	-	5'	03 34.1	+51 25	39	II 2 p	30	8.5	H VIII 84
NGC 1491	LBN 704	Brt Neb	PER	-	-	6'	04 03.2	+51 19	39	E			H I 258
NGC 1579	LBN 766	Brt Neb	PER	-	-	3'	04 30.2	+35 17	96	R			H I 217;Dark lane invl
Berk 9		Opn CL	PER	-	-	5'	03 32.7	+52 39	39	II 1 p :b	20	15	
Berk 12		Opn CL	PER	-	-	6'	04 44.4	+42 41	65	II 1 m :b	30	16	
Berk 67		Opn CL	PER	-	-	7'	04 37.8	+50 46	40	III 1 m :b	30	15	
Czernik 12		Opn CL	PER	-	-	3'	02 39.4	+54 55	38	III 1 p :b	15		
Czernik 15		Opn CL	PER	-	-	3'	03 23.2	+52 13	38	IV 2 p :b	10		
Czernik 16		Opn CL	PER	-	-	9'	03 31.0	+52 36	39	IV 2 p :b	12		
King 5		Opn CL	PER	-	-	7'	03 14.0	+52 42	38	I 2 m :b	40	13	
King 7		Opn CL	PER	-	-	5'	03 59.2	+51 47	39	I 2 r :b	80	16	
PK 149- 1.1	Kr 2-1	Brt Neb	PER	-	-	84"	03 51.6	+51 29	39	2		17.8	Not a PLNNB;reflection nebula
Stock 4		Opn CL	PER	-	-	20'	01 52.8	+57 04	37	III 1 p	15	11	
vdB 24		Brt Neb	PER	-	-	9'	03 49.6	+38 59	95	R			
B 1	LDN 1472	Drk Neb	PER	--	--	30'	03 32.9	+31 10	94	5 Ir			Patchy region preceding NGC 1333; elongated EW
B 2	LDN 1472	Drk Neb	PER	--	--	20'	03 33.5	+32 19	94	4 Ir			Indefinite; elongated SE and NW
B 3	LDN 1470	Drk Neb	PER	--	--	20'	03 40.0	+31 59	95	5 Ir			Lies south preceding O Per; dark space in neb; large
B 4	LDN 1470	Drk Neb	PER	--	--	30'	03 44.0	+31 48	95	5 Ir			Very large; indefinite
B 5	LDN 1471	Drk Neb	PER	--	--	60'	03 48.0	+32 53	95	5 E G			1 deg north following O Per
B205	LDN 1450	Drk Neb	PER	--	--	15'	03 28.0	+31 06	94	5 Ir			Two dark strips; N and S. Near NGC1333
NGC 625	ESO 297- 5	Galaxy	PHE	11.1	13.6	6.4'	01 35.1	-41 26	388	Sa/S			
NGC 7689	ESO 192- 7	Galaxy	PHE	11.5	13.2	2.8'	23 33.3	-54 06	416	SBc			
NGC 7796	ESO 149- 7	Galaxy	PHE	11.5	12.9	2.2'	23 59.0	-55 28	416	Elliptical			
NGC 7744	IC 5348	Galaxy	PHE	11.9	13.2	2.2'	23 45.0	-42 55	386	E-SO Ba			
NGC 641	ESO 244-42	Galaxy	PHE	12.1	12.7	1.4'	01 38.7	-42 32	388	E-SO			
NGC 7702	ESO 192- 9	Galaxy	PHE	12.2	13.1	2.1'	23 35.5	-56 01	416	SBO-a R			lenticular w outer ring
NGC 7764	ESO 293- 4	Galaxy	PHE	12.2	13.1	2'	23 50.9	-40 44	386	SB			
NGC 7690	ESO 240- 6	Galaxy	PHE	12.4	12.9	2.1'	23 33.0	-51 42	416	Sb			
NGC 862	ESO 298-20	Galaxy	PHE	12.8	12.4	0.9'	02 13.0	-42 02	389	Elliptical			
NGC 324	ESO 295-25	Galaxy	PHE	12.9	12.3	1.4'	00 57.2	-40 58	387	Sa			
NGC 893	ESO 298-29	Galaxy	PHE	12.9	13.1	1.4'	02 20.0	-41 24	389	Sc			
NGC 25	ESO 149-19	Galaxy	PHE	13	13	1.4'	00 10.0	-57 01	416	E-SO Ba			
NGC 92	ESO 194-12	Galaxy	PHE	13.1	13.6	1.9'	00 21.5	-48 38	386	Sa			
NGC 119	ESO 150- 8	Galaxy	PHE	13.1	13	1'	00 27.0	-56 59	416	E-SO			
NGC 215	ESO 150-19	Galaxy	PHE	13.1	12.9	1.1'	00 40.8	-56 13	417	E-SO			
NGC 454	ESO 151-36	Galaxy	PHE	13.1	-	1.7'	01 14.4	-55 24	417	S pec			
NGC 692	ESO 197- 3	Galaxy	PHE	13.1	-	2.1'	01 48.7	-48 39	388	SBbc			
NGC 822	ESO 298- 9	Galaxy	PHE	13.1	12.8	1.1'	02 06.7	-41 09	389	Elliptical			
NGC 238	ESO 194-31	Galaxy	PHE	13.2	-	2'	00 43.4	-50 11	417	SB Ring			
NGC 319	ESO 243-13	Galaxy	PHE	13.3	13	1'	00 57.0	-43 50	387	SB Ring			
NGC 322	ESO 243-15	Galaxy	PHE	13.3	12.7	1.1'	00 57.2	-43 44	387	SO			Galaxy w interacting comp@ 0.2'
NGC 889	ESO 298-27	Galaxy	PHE	13.3	13.2	1'	02 19.1	-41 45	389	Elliptical			
NGC 98	ESO 242- 5	Galaxy	PHE	13.4	-	1.6'	00 22.8	-45 16	386	SBbc			
NGC 212	ESO 150-18	Galaxy	PHE	13.4	13.6	1.3'	00 40.2	-56 09	417	E-SO			
NGC 312	ESO 151- 6	Galaxy	PHE	13.4	-	1.4'	00 56.3	-52 47	417	E			
NGC 89	ESO 194-11	Galaxy	PHE	13.5	13	1.2'	00 21.4	-48 40	386	SBO-a			
NGC 28	AM 0007-57	Galaxy	PHE	13.6	13.1	0.6'	00 10.4	-56 59	416	Pec			
NGC 323	ESO 151- 9	Galaxy	PHE	13.6	-	1'	00 56.7	-52 59	417	E			
NGC 368	ESO 243-23	Galaxy	PHE	13.6	12.7	0.7'	01 04.4	-43 17	387	SBO-a			
NGC 37	ESO 149-22	Galaxy	PHE	13.7	13.2	1.1'	00 11.4	-56 57	416	SBO			
NGC 482	ESO 296-13	Galaxy	PHE	13.7	13.7	2.2'	01 20.3	-40 58	388	Sab			Edge-on w 3 companions

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 159	ESO 150-11	Galaxy	PHE	13.8	13.1	1.4'	00 34.6	-55 47	417	SBO-a			
NGC 644	ESO 244-43	Galaxy	PHE	14	13.6	1.3'	01 38.9	-42 35	388	SBc			
NGC 1705	ESO 158-13	Galaxy	PIC	12.4	13.3	1.9'	04 54.2	-53 22	421	SOp			
NGC 1930	ESO 253- 4	Galaxy	PIC	12.4	13.1	1.9'	05 25.9	-46 44	393	SBO			
NGC 2104	ESO 205- 2	Galaxy	PIC	13.2	-	2'	05 47.1	-51 33	422	SBp			
NGC 1803	ESO 203-18	Galaxy	PIC	13.4	-	1.3'	05 05.4	-49 34	422	SBbc			
NGC 2101	ESO 205- 1	Galaxy	PIC	13.7	-	2'	05 46.4	-52 05	422	Ir B			
NGC 2008	ESO 204-20	Galaxy	PIC	13.8	13.8	1.4'	05 35.1	-50 58	422	Sc			
NGC 2148	ESO 120-24	Galaxy	PIC	13.8	13.5	1.1'	05 58.8	-59 08	422	Sb			
NGC 2007	ESO 204-19	Galaxy	PIC	13.9	13.8	1.7'	05 35.0	-50 55	422	Sc			
NGC 2221	ESO 121-24	Galaxy	PIC	13.9	-	2'	06 20.3	-57 35	422	Sa			
NGC 7314	ESO 533-53	Galaxy	PSA	11	13.3	4.6'	22 35.8	-26 03	347	SBbc			
NGC 7176	ESO 466-41	Galaxy	PSA	11.3	11.1	2.1'	22 02.1	-31 59	383	Elliptical			
IC 5271	ESO 406-34	Galaxy	PSA	11.6	12.3	2.6'	22 58.0	-33 45	384	Sb			
NGC 7135	ESO 403-35	Galaxy	PSA	11.7	13.5	2.9'	21 49.8	-34 53	383	E-SO			
NGC 7172	ESO 466-38	Galaxy	PSA	11.9	13.1	2.4'	22 02.0	-31 52	383	Sa			Equatorial dust band;Nearly edge-on
NGC 7173	NGC 7174	Galaxy	PSA	12	12.1	1.9'	22 02.1	-31 58	383	Elliptical			
NGC 7130	IC 5135	Galaxy	PSA	12.1	12.7	1.6'	21 48.3	-34 57	383	Sa			
NGC 7221	ESO 467-18	Galaxy	PSA	12.1	13.3	2'	22 11.3	-30 34	383	SBbc			
NGC 7225	ESO 532-33	Galaxy	PSA	12.2	12.8	2'	22 13.1	-26 09	347	Sa Ring			
NGC 7267	ESO 405-18	Galaxy	PSA	12.2	12.9	1.6'	22 24.4	-33 42	384	SBa			
IC 5269	ESO 406-32	Galaxy	PSA	12.2	12.5	1.7'	22 57.7	-36 02	384	SBO			np of 2
NGC 7361	IC 5237	Galaxy	PSA	12.3	13.5	3.9'	22 42.3	-30 03	384	Sc			Nearly edge-on
NGC 7154	ESO 404- 8	Galaxy	PSA	12.4	13.6	2.2'	21 55.4	-34 49	383	SB			
NGC 7187	ESO 404-24	Galaxy	PSA	12.5	13	1.3'	22 02.7	-32 48	383	Sa Ring			
NGC 7229	ESO 467-24	Galaxy	PSA	12.5	13.5	1.8'	22 14.1	-29 23	383	SBc			
NGC 7294	ESO 533-44	Galaxy	PSA	12.5	13.3	2'	22 32.1	-25 24	347	SBO			
NGC 7203	ESO 467- 7	Galaxy	PSA	12.6	12.8	1.6'	22 06.7	-31 10	383	SBO-a			
NGC 7214	ESO 467-12	Galaxy	PSA	12.7	13.8	2.7'	22 09.1	-27 49	347	SBc/P			
NGC 7306	ESO 468-11	Galaxy	PSA	12.7	12.7	1.7'	22 33.3	-27 15	347	Sb Ring			
NGC 7201	ESO 467- 4	Galaxy	PSA	12.8	12.4	1.6'	22 06.5	-31 16	383	Sab			
NGC 7208	ESO 467-10	Galaxy	PSA	12.8	11.9	0.9'	22 08.4	-29 03	383	SBO			
NGC 7258	ESO 467-49	Galaxy	PSA	13.1	12.9	1.4'	22 23.0	-28 21	384	Sb			
NGC 7259	ESO 467-50	Galaxy	PSA	13.1	13	1.1'	22 23.1	-28 57	384	Sb			
NGC 7289	ESO 405-23	Galaxy	PSA	13.2	13.5	1.3'	22 29.3	-35 28	384	SO			
NGC 7174	ESO 466-40	Galaxy	PSA	13.3	14.3	2.6'	22 02.1	-32 00	383	Sab			
NGC 7277	ESO 467-59	Galaxy	PSA	13.3	13.1	1.5'	22 26.2	-31 09	384	Sb Ring			
NGC 7109	ESO 403-15	Galaxy	PSA	13.4	12.9	0.8'	21 42.0	-34 27	383	Elliptical			
NGC 7110	ESO 403-16	Galaxy	PSA	13.4	13	1.3'	21 42.2	-34 10	383	SBb			
NGC 7153	ESO 466-16	Galaxy	PSA	13.4	12.7	1.9'	21 54.6	-29 04	383	Sb			
NGC 7163	ESO 466-30	Galaxy	PSA	13.4	14	1.9'	21 59.3	-31 53	383	SBab			
NGC 7204	ESO 467- 8	Galaxy	PSA	13.5	12.7	1.3'	22 06.9	-31 03	383	Sa			
NGC 7152	ESO 466-13	Galaxy	PSA	13.6	13.1	1.2'	21 54.0	-29 17	383	SBb			
NGC 7262	ESO 405-17	Galaxy	PSA	13.8	12.9	0.7'	22 23.5	-32 22	384	SO			
NGC 7279	ESO 405-21	Galaxy	PSA	13.8	13.5	1.2'	22 27.2	-35 08	384	SBc			
NGC 7115	ESO 531-25	Galaxy	PSA	14	-	1.7'	21 43.7	-25 21	346	Sb			
NGC 7178	ESO 404-22	Galaxy	PSA	14	13.2	1.1'	22 02.4	-35 47	383	SBb			
M 74	NGC 628	Galaxy	PSC	9.4	14.2	10'	01 36.7	+15 47	173	Sc			Fine face on spiral
NGC 488	UGC 907	Galaxy	PSC	10.3	13.4	5.4'	01 21.8	+05 15	218	Sb Ring			delicate spiral pattern
NGC 524	UGC 968	Galaxy	PSC	10.3	12.3	3.2'	01 24.8	+09 32	173	Sa			H I 151
NGC 676	UGC 1270	Galaxy	PSC	10.5	-	4.2'	01 49.0	+05 54	173	Sa			H IV 42;Brightest in chain including NGC 693;NGC 706
NGC 741	IC 1741	Galaxy	PSC	11.1	13.5	3'	01 56.3	+05 38	174	E1			H II 271;Brightest in group;UGC 1413
NGC 315	UGC 597	Galaxy	PSC	11.2	13.2	3'	00 57.8	+30 21	90	E-SO			H II 210;UGC 597
NGC 507	UGC 938	Galaxy	PSC	11.2	13.5	4'	01 23.7	+33 15	91	E-SO			H III 159;UGC 938
NGC 660	UGC 1201	Galaxy	PSC	11.2	14.6	8'	01 43.0	+13 39	173	SBap			H II 253;UGC 1201
NGC 520	UGC 966	Galaxy	PSC	11.4	13.6	3.7'	01 24.6	+03 48	218	Sa			H III 253;Strongly Peculiar; M82 type galaxy;UGC 966
NGC 410	UGC 735	Galaxy	PSC	11.5	12.7	2.3'	01 11.0	+33 09	91	SBO			H II 220;UGC 735
NGC 474	UGC 864	Galaxy	PSC	11.5	15.5	6.1'	01 20.1	+03 25	218	SO Ring			H III 251;NGC 470 group;disturbed;UGC 864;Arp 227
NGC 57	UGC 145	Galaxy	PSC	11.6	13.2	2.2'	00 15.5	+17 20	125	Elliptical			H II 241=H II 243
NGC 63	UGC 167	Galaxy	PSC	11.6	12.2	1.7'	00 17.8	+11 27	171	S pec			
NGC 266	UGC 508	Galaxy	PSC	11.6	13.8	2.9'	00 49.8	+32 17	90	SBab			H III 153;UGC 508
NGC 514	UGC 947	Galaxy	PSC	11.6	13.9	3.7'	01 24.1	+12 55	173	SBc			H II 252
NGC 7562	UGC 12464	Galaxy	PSC	11.6	12.9	2.2'	23 16.0	+06 41	214	Elliptical			H II 467;UGC 12464
NGC 7785	UGC 12841	Galaxy	PSC	11.6	12.9	2'	23 55.3	+05 55	170	Elliptical			H II 468

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 718	UGC 1356	Galaxy	PSC	11.7	13.3	2.3'	01 53.2	+04 12	219	SBa			H II 270;2 smooth arms;UGC 1356
NGC 7541	UGC 12447	Galaxy	PSC	11.7	13.1	3.5'	23 14.7	+04 32	259	SBc			H II 430
NGC 128	UGC 292	Galaxy	PSC	11.8	12.7	2.8'	00 29.2	+02 52	216	SO Pec			H II 854;Br group w NGC 127;130;;rect. central mass
NGC 470	UGC 858	Galaxy	PSC	11.8	13.4	2.9'	01 19.7	+03 25	217	Sb Ring			H III 250;Brightest of 3;UGC 858
NGC 467	UGC 848	Galaxy	PSC	11.9	12.9	2'	01 19.2	+03 18	217	SO			H I 108;NGC 470 group;1st of 3;UGC 848
NGC 125	UGC 286	Galaxy	PSC	12.1	13	1.8'	00 28.8	+02 50	216	Sa Ring			H III 869;NGC 128 Group;UGC 268
NGC 420	UGC 752	Galaxy	PSC	12.1	13.5	2'	01 12.2	+32 07	91	SO			H III 154
NGC 499	IC 1686	Galaxy	PSC	12.1	12.8	1.7'	01 23.2	+33 28	91	E-SO			H III 158;IC 1686; UGC 926
NGC 665	UGC 1223	Galaxy	PSC	12.1	13.5	2.4'	01 44.9	+10 25	173	SO			H II 588;Brightest in group;UGC 1223
NGC 7716	UGC 12702	Galaxy	PSC	12.1	13.4	2.2'	23 36.5	+00 18	259	SBb			
NGC 193	UGC 408	Galaxy	PSC	12.2	12.7	1.4'	00 39.3	+03 20	216	S(B)0			H III 595;Compact;In NGC 182 group;UGC 408
NGC 194	UGC 407	Galaxy	PSC	12.2	13	1.6'	00 39.3	+03 02	216	E1			H II 856;Compact;In NGC 182 group;UGC 407
NGC 7782	UGC 12834	Galaxy	PSC	12.2	13.3	2.2'	23 53.9	+07 58	170	Sb			H III 233;Brightest of 3
NGC 632	UGC 1157	Galaxy	PSC	12.3	12.8	1.5'	01 37.3	+05 53	173	SO			
NGC 182	UGC 382	Galaxy	PSC	12.4	13.6	1.9'	00 38.2	+02 44	216	SBa			H III 870;Brightest in group;UGC 382
NGC 383	UGC 689	Galaxy	PSC	12.4	13.1	2'	01 07.4	+32 25	91	SO			Brightest in group;8 galaxies in chain
NGC 517	UGC 960	Galaxy	PSC	12.4	13	2'	01 24.7	+33 26	91	SO			H III 168;UGC 960
NGC 693	UGC 1304	Galaxy	PSC	12.4	13.1	2.2'	01 50.5	+06 09	173	Sa			H II 859;NGC 676 group
NGC 7581	MCG+01-59	Galaxy	PSC	12.4	-	3.5'	23 14.8	+04 32	259	Sc			B narrow bar .55'X0.5'
NGC 95	UGC 214	Galaxy	PSC	12.5	13.2	2.1'	00 22.2	+10 29	171	SBc Ring			H II 257;asym uneven arms;UGC 214;Arp 65
NGC 234	UGC 463	Galaxy	PSC	12.5	13.4	1.6'	00 43.5	+14 21	171	SBc			H II 245
NGC 380	UGC 682	Galaxy	PSC	12.5	13.1	1.3'	01 07.3	+32 29	91	E2			H II 216;NGC 383 group;UGC 682;Arp 331
NGC 403	UGC 715	Galaxy	PSC	12.5	12.6	1.8'	01 09.2	+32 45	91	Sa			
NGC 473	UGC 859	Galaxy	PSC	12.5	13.1	1.9'	01 19.9	+16 33	172	SBO-a			
NGC 658	UGC 1196	Galaxy	PSC	12.5	14	3'	01 42.2	+12 36	173	Sb			
NGC 706	UGC 1334	Galaxy	PSC	12.5	13.4	1.9'	01 51.8	+06 18	173	Sc			H II 596;NGC 676 group
NGC 7428	UGC 12262	Galaxy	PSC	12.5	13.6	2.4'	22 57.3	-01 03	258	SBa			
NGC 7458	UGC 12309	Galaxy	PSC	12.5	13.1	1.4'	23 01.5	+01 45	258	Elliptical			H II 590;p of 2;UGC 12309
NGC 7611	UGC 12509	Galaxy	PSC	12.5	12.3	1.5'	23 19.6	+08 04	214	SBO-a			
NGC 7683	UGC 12623	Galaxy	PSC	12.5	13.1	1.9'	23 29.1	+11 27	214	SO			
NGC 7714	UGC 12699	Galaxy	PSC	12.5	13.4	1.9'	23 36.2	+02 09	259	SBb/P			bridge;disturbed
NGC 200	UGC 420	Galaxy	PSC	12.6	13.1	1.7'	00 39.6	+02 53	216	SBbc			H II 858;In NGC 182 group;UGC 420
NGC 257	UGC 493	Galaxy	PSC	12.6	13.4	1.9'	00 48.0	+08 18	171	Sc			H II 863;UGC 493
NGC 295	UGC 562	Galaxy	PSC	12.6	13.2	2.2'	00 55.1	+31 33	90	SBb			
NGC 452	UGC 820	Galaxy	PSC	12.6	13.2	2.5'	01 16.3	+31 02	91	SBab			
NGC 455	UGC 815;A	Galaxy	PSC	12.6	13.4	2'	01 16.0	+05 11	217	Pec			Peculiar
NGC 489	UGC 908	Galaxy	PSC	12.6	11.9	1.7'	01 21.9	+09 12	173	S pec			
NGC 645	UGC 1177	Galaxy	PSC	12.6	13.7	2.6'	01 40.1	+05 44	173	SBb			2 massive smooth arms;rare
NGC 392	UGC 700	Galaxy	PSC	12.7	12.7	1.2'	01 08.4	+33 08	91	E-SO			H II 218;Brightest of 3;UGC 700
NGC 766	UGC 1458	Galaxy	PSC	12.7	14.2	2'	01 58.7	+08 21	174	Elliptical			Brightest of 4
NGC 7757	UGC 12788	Galaxy	PSC	12.7	14.2	2.4'	23 48.8	+04 10	215	Sc			
NGC 7778	UGC 12827	Galaxy	PSC	12.7	12.7	1'	23 53.3	+07 52	170	Elliptical			H III 231;NGC 7782 group
NGC 7779	UGC 12831	Galaxy	PSC	12.7	13.1	1.4'	23 53.4	+07 53	170	Sa			H III 232;NGC 7782 group
NGC 137	UGC 309	Galaxy	PSC	12.8	13.2	1.3'	00 31.0	+10 12	171	SO			H II 471
NGC 338	UGC 624	Galaxy	PSC	12.8	12.8	1.8'	01 00.6	+30 40	91	Sab			
NGC 437	UGC 788	Galaxy	PSC	12.8	13	1.3'	01 14.4	+05 56	172	Sa			
NGC 502	UGC 922	Galaxy	PSC	12.8	12.9	1.1'	01 22.9	+09 03	173	SO			
NGC 575	IC 1710	Galaxy	PSC	12.8	13.7	1.7'	01 30.8	+21 26	128	SBc			
NGC 664	UGC 1210	Galaxy	PSC	12.8	13.4	1.5'	01 43.8	+04 13	218	Sb			Brightest of 3
NGC 7499	UGC 12397	Galaxy	PSC	12.8	12.4	1.2'	23 10.4	+07 35	213	SO			
NGC 7751	UGC 12778	Galaxy	PSC	12.8	12.6	1'	23 47.0	+06 52	170	S			H III 437;UGC 12778;core .45'X0.40'
NGC 7816	UGC 16	Galaxy	PSC	12.8	13.7	1.7'	00 03.8	+07 29	170	Sbc			H III 436
NGC 180	UGC 380	Galaxy	PSC	12.9	14.4	2.4'	00 38.0	+08 38	171	SBbc			H III 876;2 thin inner arms;mult arms in outer disk
NGC 204	UGC 423	Galaxy	PSC	12.9	13.1	1.2'	00 39.7	+03 18	216	SO			Compact;In NGC 182 group
NGC 379	UGC 683	Galaxy	PSC	12.9	12.8	1.4'	01 07.3	+32 31	91	SO			H II 215;UGC 683;Arp 331
NGC 494	UGC 919	Galaxy	PSC	12.9	13.2	2'	01 22.9	+33 10	91	Sab			
NGC 495	UGC 920	Galaxy	PSC	12.9	12.9	1.2'	01 22.9	+33 28	91	SBO-a			H III 156;in triple sub-group;UGC 920
NGC 522	UGC 970	Galaxy	PSC	12.9	13	2.8'	01 24.8	+10 00	173	Sbc			
NGC 532	UGC 982	Galaxy	PSC	12.9	13.5	2.3'	01 25.3	+09 16	173	Sab			H III 556;UGC 982
NGC 7396	UGC 12220	Galaxy	PSC	12.9	13.5	1.9'	22 52.4	+01 06	258	Sa			Brightest in group
NGC 7506	UGC 12406	Galaxy	PSC	12.9	13.5	1.7'	23 11.7	-02 10	258	Sa			H III 184
NGC 7679	UGC 12618	Galaxy	PSC	12.9	13	1.2'	23 28.8	+03 31	259	SBO			disturbed
NGC 7750	UGC 12777	Galaxy	PSC	12.9	13	1.6'	23 46.6	+03 48	215	SBc/P			H III 427
NGC 7820	UGC 28	Galaxy	PSC	12.9	12.4	1.3'	00 04.5	+05 12	215	Sa			Brightest in group

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 311	UGC 592	Galaxy	PSC	13	13.1	1.5'	00 57.5	+30 17	90	SO			
NGC 385	UGC 687;A	Galaxy	PSC	13	12.9	1.1'	01 07.5	+32 19	91	E-SO			In NGC 383 group
NGC 443	IC 1653	Galaxy	PSC	13	12.3	0.8'	01 15.1	+33 23	91	S			UGC 796
NGC 485	UGC 895	Galaxy	PSC	13	12.9	1.8'	01 21.5	+07 01	173	S pec			
NGC 504	UGC 935	Galaxy	PSC	13	12.6	1.7'	01 23.5	+33 12	91	SO			in very dense part of the cluster
NGC 515	UGC 956	Galaxy	PSC	13	13.4	1.4'	01 24.6	+33 28	91	SO			H III 167
NGC 7460	UGC 12312	Galaxy	PSC	13	13.3	1.5'	23 01.7	+02 16	258	SB/P			Companion superimposed;disturbed;3-armed gal
NGC 7483	UGC 12353	Galaxy	PSC	13	13.5	1.6'	23 05.8	+03 33	258	SBa			
NGC 7591	UGC 12486	Galaxy	PSC	13	13.3	1.9'	23 18.3	+06 35	214	SBbc			
NGC 12	UGC 74	Galaxy	PSC	13.1	14	1.6'	00 08.7	+04 37	215	SBbc			H III 868;UGC 74
NGC 36	UGC 106	Galaxy	PSC	13.1	14.2	2.2'	00 11.4	+06 23	170	SBb			H III 456;p of 2;interaction;bridge? to comp 1 ' PA 83
NGC 198	UGC 414	Galaxy	PSC	13.1	13.4	1.1'	00 39.4	+02 48	216	Sc			H II 857;NGC 182 group;Several tightly wound arms;
NGC 384	UGC 686;A	Galaxy	PSC	13.1	13.1	1.1'	01 07.4	+32 18	91	E3			In NGC 383 group
NGC 483	UGC 906	Galaxy	PSC	13.1	12.3	0.7'	01 21.9	+33 31	91	S			
NGC 508	UGC 939	Galaxy	PSC	13.1	13.6	1.3'	01 23.7	+33 17	91	EO			H III 160
NGC 516	UGC 946	Galaxy	PSC	13.1	12.7	1.4'	01 24.1	+09 33	173	SBO-a			
NGC 791	UGC 1511	Galaxy	PSC	13.1	14.1	1.6'	02 01.7	+08 30	174	Elliptical			Brightest of 3
NGC 7682	UGC 12622	Galaxy	PSC	13.1	13.3	1.2'	23 29.1	+03 32	259	SBab			disturbed
NGC 7746	UGC 12768	Galaxy	PSC	13.1	13.4	1.4'	23 45.3	-01 41	215	SO			
NGC 75	UGC 182	Galaxy	PSC	13.2	13.9	1.5'	00 19.4	+06 27	171	SO			
NGC 105	UGC 241	Galaxy	PSC	13.2	12.8	1.1'	00 25.3	+12 53	171	Sab			s of 2;compact
NGC 251	UGC 490	Galaxy	PSC	13.2	14.7	2.4'	00 47.9	+19 36	126	Sc			H III 204;amorph disc;UGC 490
NGC 326	UGC 601;4	Galaxy	PSC	13.2	14	1.5'	00 58.4	+26 52	127	E4p			
NGC 382	UGC 688;A	Galaxy	PSC	13.2	12.3	0.9'	01 07.4	+32 24	91	E0			
NGC 525	UGC 972	Galaxy	PSC	13.2	13.1	1.5'	01 24.9	+09 42	173	SO			
NGC 7503	MCG 1-59-	Galaxy	PSC	13.2	13.4	0.8'	23 10.7	+07 34	213	Elliptical			
NGC 7537	UGC 12442	Galaxy	PSC	13.2	13.3	2.1'	23 14.6	+04 30	259	Sbc			H II 429;UGC 12442
NGC 7603	UGC 12493	Galaxy	PSC	13.2	13.6	1.6'	23 18.9	+00 15	259	SB/P			Seyfert;np of 2;bridge
NGC 7685	UGC 12638	Galaxy	PSC	13.2	14.1	1.9'	23 30.6	+03 54	259	SBc			H III 426
NGC 7706	UGC 12686	Galaxy	PSC	13.2	13.2	1.2'	23 35.2	+04 58	259	SO			
NGC 7824	UGC 34	Galaxy	PSC	13.2	13.7	1.6'	00 05.1	+06 55	170	Sab			
UGC 1195	MCG -02-05-	Galaxy	PSC	13.2	-	3'	01 42.4	+13 58	173	Irp+			distorted
NGC 3	UGC 58	Galaxy	PSC	13.3	12.8	1.1'	00 07.3	+08 18	170	SO			comp @ 4.8';PA 24;0.6'x0.2'
NGC 100	UGC 231	Galaxy	PSC	13.3	14.6	5.7'	00 24.0	+16 29	171	Sc			
NGC 213	UGC 436	Galaxy	PSC	13.3	14.1	1.7'	00 41.2	+16 28	171	SBa			H III 200;UGC 436
NGC 471	UGC 861	Galaxy	PSC	13.3	12.8	1'	01 20.0	+14 47	172	SO			Brightest in multiple system
NGC 496	UGC 927	Galaxy	PSC	13.3	13.5	1.6'	01 23.2	+33 32	91	Sbc			H III 157
NGC 518	UGC 952	Galaxy	PSC	13.3	13.1	1.6'	01 24.3	+09 20	173	Sab			
NGC 631	UGC 1153	Galaxy	PSC	13.3	14.3	1.7'	01 36.8	+05 50	173	Elliptical			
NGC 7832	IC 5386	Galaxy	PSC	13.3	-	1.9'	00 06.5	-03 43	215	Elliptical			H III 190;IC 5386
NGC 186	UGC 390	Galaxy	PSC	13.4	13.4	1.4'	00 38.4	+03 10	216	SBO-a			In NGC 182 group
NGC 354	UGC 645;M	Galaxy	PSC	13.4	12.1	0.8'	01 03.3	+22 21	127	SB/P			Peculiar
NGC 374	UGC 680	Galaxy	PSC	13.4	12.5	1.1'	01 07.1	+32 48	91	Sa			
NGC 407	UGC 730	Galaxy	PSC	13.4	12.9	1.8'	01 10.6	+33 07	91	Sa			H II 219;UGC 730
NGC 509	UGC 932	Galaxy	PSC	13.4	13.2	1.3'	01 23.4	+09 26	173	SBO-a			
NGC 606	UGC 1126	Galaxy	PSC	13.4	13.9	1.4'	01 34.8	+21 25	128	SBc			angular
NGC 656	UGC 1194	Galaxy	PSC	13.4	12.2	1.5'	01 42.5	+26 09	128	SBO			
NGC 7422	UGC 12254	Galaxy	PSC	13.4	12.9	1'	22 56.2	+03 56	258	Sb			Complex;disturbed
NGC 7501	MCG 1-59-	Galaxy	PSC	13.4	13.4	0.5'	23 10.5	+07 35	213	Elliptical			
NGC 7518	UGC 12422	Galaxy	PSC	13.4	13.7	1.4'	23 13.2	+06 19	214	Sa			
NGC 7687	MCG 0-59-	Galaxy	PSC	13.4	13.6	1.3'	23 30.9	+03 33	259	SO			compact
NGC 7693	MCG 0-60-	Galaxy	PSC	13.4	13.3	1.2'	23 33.2	-01 18	259	Sa			
NGC 7704	UGC 12684	Galaxy	PSC	13.4	13.2	1.1'	23 35.0	+04 54	259	E-SO			
UGC 191	D2	Galaxy	PSC	13.4	14	3'	00 20.1	+10 53	171	S			
NGC 38	MCG - 1- 1-	Galaxy	PSC	13.5	-	1.4'	00 11.8	-05 35	260	Sa			
NGC 78B	NGC 78-2	Galaxy	PSC	13.5	12.3	0.7'	00 20.5	+00 50	216	SO			Compact
NGC 236	UGC 462	Galaxy	PSC	13.5	13.5	1.2'	00 43.5	+02 57	216	Sc			brightest of 3
NGC 240	UGC 473	Galaxy	PSC	13.5	13.3	1'	00 45.0	+06 07	171	Sa Ring			eF outer disk
NGC 566	UGC 1058	Galaxy	PSC	13.5	12.9	1.6'	01 29.0	+32 20	91	SO			
NGC 7731	UGC 12737	Galaxy	PSC	13.5	13.9	1.4'	23 41.5	+03 44	259	SBa			
NGC 7802	UGC 12902	Galaxy	PSC	13.5	12.9	1.1'	00 01.0	+06 14	170	SO			
IC 156	UGC 1231	Galaxy	PSC	13.5	13.9	1.5'	01 45.5	+10 33	173	S pec			
AND II	PGC 4601	Galaxy	PSC	13.5	-	2.0'	01 16.4	+33 25	91	dE2			Andromeda Dwarf;Member Local Group
NGC 99	UGC 230	Galaxy	PSC	13.6	14.1	1.4'	00 24.0	+15 46	171	Scp			Disturbed

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 138	UGC 308	Galaxy	PSC	13.6	13.1	1.3'	00 31.0	+05 10	216	Sa			brightest in sub-group
NGC 199	UGC 415	Galaxy	PSC	13.6	13.4	1.2'	00 39.6	+03 08	216	SO			In NGC 182 group
NGC 250	UGC 487	Galaxy	PSC	13.6	13.1	1.1'	00 47.3	+07 55	171	Sa			
NGC 399	UGC 712	Galaxy	PSC	13.6	12.9	0.9'	01 09.0	+32 38	91	SBa			
NGC 569	UGC 1063	Galaxy	PSC	13.6	12.7	1'	01 29.1	+11 08	173	Sbc			disrupted
NGC 571	UGC 1069	Galaxy	PSC	13.6	14	1.3'	01 29.9	+32 30	91	S pec			
NGC 652	UGC 1184	Galaxy	PSC	13.6	12.8	1'	01 40.7	+07 59	173	S pec			
NGC 7398	UGC 12225	Galaxy	PSC	13.6	13.5	1.2'	22 52.8	+01 12	258	Sa			
NGC 7482	NGC 7472	Galaxy	PSC	13.6	12.1	0.6'	23 05.6	+03 04	258	Elliptical			
NGC 7684	UGC 12637	Galaxy	PSC	13.6	12.9	1.5'	23 30.5	+00 05	259	Sa			
NGC 78A	NGC 78-1	Galaxy	PSC	13.7	13.3	1.1'	00 20.4	+00 50	216	SBO-a			compact
NGC 511	UGC 936	Galaxy	PSC	13.7	14.1	1.2'	01 23.5	+11 17	173	Elliptical			
NGC 7583	NGC 7605	Galaxy	PSC	13.7	12.6	0.7'	23 17.9	+07 23	214	S			
NGC 7642	UGC 12560	Galaxy	PSC	13.7	12.1	0.6'	23 22.9	+01 27	259	Sa			np of 2
NGC 7797	UGC 12877	Galaxy	PSC	13.7	13.4	1'	23 59.0	+03 38	215	Sbc			H III 867;UGC 12877
NGC 505	UGC 924	Galaxy	PSC	13.8	13.1	0.9'	01 23.0	+09 28	173	SO			
NGC 638	UGC 1170	Galaxy	PSC	13.8	12.7	0.8'	01 39.6	+07 14	173	Sb			
NGC 7488	MCG 0-59-	Galaxy	PSC	13.8	12.3	0.6'	23 07.8	+00 56	258	E-SO			compact
NGC 7617	MCG 1-59-	Galaxy	PSC	13.8	13.2	0.9'	23 20.1	+08 10	214	SO			
NGC 7629	MCG 0-59-	Galaxy	PSC	13.8	13.4	1'	23 21.3	+01 24	259	SO			
NGC 7732	UGC 12738	Galaxy	PSC	13.8	13.8	2'	23 41.6	+03 43	259	Scd			disturbed
NGC 451	IC 1661	Galaxy	PSC	13.9	12.5	0.7'	01 16.2	+33 04	91	Sc			
NGC 479	UGC 893	Galaxy	PSC	13.9	13.7	1.1'	01 21.3	+03 52	218	Sbc Ring			
NGC 7521	MCG 0-59-	Galaxy	PSC	13.9	12.3	0.6'	23 13.6	-01 44	259	SO			
NGC 7780	UGC 12833	Galaxy	PSC	13.9	13	0.9'	23 53.5	+08 07	170	SBab			sf of 2
NGC 7781	MCG 1-60-	Galaxy	PSC	13.9	11.9	0.8'	23 53.8	+07 52	170	S			
NGC 7827	UGC 38	Galaxy	PSC	13.9	13.9	1.2'	00 05.5	+05 13	215	SBO			interaction?
Abell 194		Gal CL	PSC	13.9	-	56'	01 25.5	-01 30	218	0 1 II			Includes 541 and Minkowski's object ; 37 galaxies
UGC 1102	Arp 306A	Galaxy	PSC	13.9	-	1.4'	01 32.6	+04 35	218	Pec			DbI sys w UGC 1105 in south part of disk;Symbiotic pr
NGC 203	NGC 211	Galaxy	PSC	14	12.3	0.9'	00 39.7	+03 27	216	SO			
NGC 447	IC 1556	Galaxy	PSC	14	15.5	2.2'	01 15.6	+33 04	91	SBO-a			
NGC 472	UGC 870	Galaxy	PSC	14	-	1.3'	01 20.5	+32 42	91	Sa			very compact
NGC 7556	MCG - 1-59-	Galaxy	PSC	14	-	2.5'	23 15.7	-02 23	259	E-SO			H II 235
NGC 7667	UGC 12578	Galaxy	PSC	14	14.5	1.6'	23 24.4	-00 07	259	Sm			
NGC 7694	MCG - 1-60-	Galaxy	PSC	14	-	1.6'	23 33.3	-02 42	259	lr			H III 187
NGC 7701	MCG - 1-60-	Galaxy	PSC	14	-	1.2'	23 34.5	-02 51	259	Sb			H III 188
NGC 7756		Galaxy	PSC	14	-	0.5'	23 48.7	+04 11	215	S			
NGC 7818	UGC 21	Galaxy	PSC	14	13.9	1'	00 04.2	+07 23	170	Sc			
Cr 173		Opn CL	PUP	0.6	-	370'	08 03.6	-46 16	396	IV 2 p		13	
Cr 135		Opn CL	PUP	2.1	-	50'	07 17.4	-36 50	361	IV 2 p	77	2.7	
NGC 2451	OCL 716	Opn CL	PUP	2.8	-	50'	07 45.3	-37 58	362	II 2 p	40	3.6	includes naked eye red star c Pup; not a true cluster
M 47	NGC 2422	Opn CL	PUP	4.4	11	30'	07 36.6	-14 29	274	III 2 m	30	5.7	H VIII 38;Messier gave poor position;Stv 1121,1120 invl
NGC 2478	NGC 2422	Opn CL	PUP	4.4	-	30'	07 36.6	-14 29	274				Equals 2422 (M 47)
NGC 2542		Star	PUP	4.7	-		08 11.3	-12 56	275				
NGC 2477	OCL 720	Opn CL	PUP	5.8	-	27'	07 52.2	-38 32	362	I 2 r :b	200	12	300 * to 12 mag;Shapley--richest of OPNCL
M 46	NGC 2437	Opn CL	PUP	6.1	13	27'	07 41.8	-14 49	274	III 2 m	100	8.7	PLNNB NGC 2438 on N edge;150 * 10-13 mag
M 93	NGC 2447	Opn CL	PUP	6.2	12	22'	07 44.5	-23 51	320	IV 1 p	80	8.2	63 members to 13 mag;wedge shaped center
NGC 2546	OCL 726	Opn CL	PUP	6.3	-	41'	08 12.3	-37 36	362	III 2 m	40	8.2	
Bochum 15		Opn CL	PUP	6.3	-	3'	07 40.2	-33 33	362	IV 2 pn	12	7.7	
NGC 2520	NGC 2527	Opn CL	PUP	6.5	-	22'	08 05.0	-28 09	362				
NGC 2527	NGC 2520	Opn CL	PUP	6.5	-	22'	08 05.0	-28 09	362	III 1 p	40	8.6	H VIII 30
NGC 2539	OCL 611	Opn CL	PUP	6.5	-	22'	08 10.6	-12 49	275	II 1 m	50	9.1	Rich cluster;near M46 and M47;D* 19 Pup in field
NGC 2423	OCL 592	Opn CL	PUP	6.7	-	19'	07 37.1	-13 52	274	IV 2 m	40	9	H VII 28
NGC 2439	OCL 688	Opn CL	PUP	6.9	-	10'	07 40.8	-31 42	362	II 3 m	80	8.9	
NGC 2571	OCL 701	Opn CL	PUP	7	-	13'	08 18.9	-29 45	362	IV 1 p	30	8.8	H VI 39
Bochum 5		Opn CL	PUP	7	-	11.0'	07 32.1	-16 57	319	I 2 pn	12	7.8	
NGC 2467	OCL 668	CL+Neb	PUP	7.1	-	15'	07 52.5	-26 26	320	I 3 m n:b	50		Scattered stars 8..12 w vF haze of neb;in PUP OB1
Mel 71	Cr 155	Opn CL	PUP	7.1	-	9'	07 37.5	-12 04	274	II 1 m	80	10.2	Very compressed w central condensation
Ru 44		Opn CL	PUP	7.2	-	5'	07 59.0	-28 35	362	III 1 p	40	9.4	About 100 O or B * of 12 mag and less
NGC 2482	OCL 653	Opn CL	PUP	7.3	-	12'	07 55.2	-24 15	320	III 1 m	40	10	H VII 10
Bochum 4		Opn CL	PUP	7.3	-	23'	07 31.0	-16 57	274		30	8	
NGC 2396	OCL 579	Opn CL	PUP	7.4	-	10'	07 27.5	-11 43	274	III 3 p	30	10	H VIII 36
NGC 2567	OCL 708	Opn CL	PUP	7.4	-	10'	08 18.5	-30 39	362	III 2 m	40	10.1	H VII 64
NGC 2579	OCL 724	CL+Neb	PUP	7.5	-	10'	08 20.9	-36 13	363	IV 2 p :b	20	9.5	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 2483	ESO 430-SC	Opn CL	PUP	7.6	-	10'	07 55.6	-27 53	320		30	9.3	
NGC 2533	OCL 695	Opn CL	PUP	7.6	-	3.5'	08 07.1	-29 53	362	III 1 p	60	9	
Cr 185		Opn CL	PUP	7.8	-	9'	08 23.3	-36 20	363	III 2 p	35	10.1	
Mel 66	Cr 147	Opn CL	PUP	7.8	-	10'	07 26.3	-47 41	395	II 2 m	200	11.4	
Ru 55		Opn CL	PUP	7.8	-	17'	08 12.3	-32 34	362	IV 2 p	12	8.6	
NGC 2414	OCL 598	Opn CL	PUP	7.9	-	4'	07 33.2	-15 27	274	I 3 m	35	8.2	H VIII 37
NGC 2489	OCL 690	Opn CL	PUP	7.9	-	8'	07 56.3	-30 04	362	II 2 m	45	11.1	H VII 23
Tr 7	Cr 146	Opn CL	PUP	7.9	-	5'	07 27.3	-24 00	319	II 3 p n	30	9.1	
NGC 2409		Opn CL	PUP	8	-	2.5'	07 31.6	-17 11	319				
NGC 2421	OCL 626	Opn CL	PUP	8.3	-	10'	07 36.2	-20 37	319	I 2 m	70	10.4	H VII 67
NGC 2453	OCL 670	Opn CL	PUP	8.3	-	5'	07 47.6	-27 12	320	I 2 p	30	9.5	
Ru 32		Opn CL	PUP	8.4	-	6'	07 45.0	-25 31	320	III 2 p n	30	9.6	
Tr 9	Cr 168;Harva	Opn CL	PUP	8.7	-	6'	07 55.7	-25 53	320	II 2 p	20	10.1	40 * in clumpy groups
Ru 59		Opn CL	PUP	9	-	5'	08 19.4	-34 29	362	III 1 p	20	10.2	
Ru 46		Opn CL	PUP	9.1	-	2'	08 02.1	-19 28	320	II 3 p	15	9.4	
NGC 2587	OCL 706	Opn CL	PUP	9.2	-	9'	08 23.4	-29 31	363	II 1 p	40		
NGC 2509	OCL 630	Opn CL	PUP	9.3	-	8'	08 00.8	-19 03	320	II 1 p	70		H VIII 1
Haffner 18		Opn CL	PUP	9.3	-	1'	07 52.7	-26 23	320	I 2pn:b	25	11	
NGC 2298	GCL 11	Glob CL	PUP	9.4	-	6.8'	06 49.0	-36 00	360	VI			Stars eF
Haffner 15		Opn CL	PUP	9.4	-	3.5'	07 45.5	-32 51	362	II 3 p	35	12	
Haffner 19		Opn CL	PUP	9.4	-	1.8'	07 52.7	-26 17	320	I 3 p n	30	10.8	
Ru 34		Opn CL	PUP	9.5	-	4'	07 45.9	-20 23	320	III 2 p	35	11.2	
NGC 2479	OCL 623	Opn CL	PUP	9.6	-	7'	07 55.1	-17 42	320	III 1 m	45		H VII 58
Cr 187		Opn CL	PUP	9.6	-	7'	08 24.2	-29 10	363	III 1 p	20		
Ru 36		Opn CL	PUP	9.6	-	4'	07 48.5	-26 18	320	IV 1 m	30	10.3	
Ru 47		Opn CL	PUP	9.6	-	5'	08 02.3	-31 06	362	I 1 p	20	10.9	
Ru 49		Opn CL	PUP	9.6	-	2.5'	08 03.3	-26 47	320	II 3 p	10	10.1	
NGC 2580	OCL 709	Opn CL	PUP	9.7	-	8'	08 21.5	-30 19	363	II 2 m	50		
Bochum 6		Opn CL	PUP	9.9	-	10'	07 31.8	-19 27	319	I 3 mn	40	10.6	
NGC 2568	OCL 727	Opn CL	PUP	10	-	2.0'	08 18.3	-37 06	362				
Haffner 16		Opn CL	PUP	10	-	1.1'	07 50.3	-25 27	320	I 1 p	30	11.6	
NGC 2432	OCL 620	Opn CL	PUP	10.2	-	8'	07 40.9	-19 05	319	II 1 p	50		H VI 36
NGC 2455	OCL 636	Opn CL	PUP	10.2	-	8'	07 49.0	-21 18	320	III 2 p	50	12	
Czernik 29		Opn CL	PUP	10.3	-	8'	07 28.3	-15 24	274	IV 2 p	40	12.2	
Haffner 21		Opn CL	PUP	10.3	-	1.1'	08 01.2	-27 13	320	II 1 p	20	12.1	Most of cluster 15 mag and less
Pismis 1		Opn CL	PUP	10.7	-	4.6'	08 17.8	-37 05	362	I 3 p	30	12.8	
NGC 2559	ESO 494-41	Galaxy	PUP	10.9	12.8	3.7"	08 17.1	-27 27	321	SBbc			
NGC 2438	PK 231+4.2	Pln Neb	PUP	11	11.7	65"	07 41.8	-14 44	274	4(2)		17.5	H IV 39;PK231+4.2 , inside M46
NGC 2566	ESO 495- 3	Galaxy	PUP	11	13.1	3.4'	08 18.8	-25 30	321	SBab			
Haffner 20		Opn CL	PUP	11	-	1.8'	07 56.3	-30 22	362	II 3 p	20	13.1	
NGC 2427	ESO 208-27	Galaxy	PUP	11.5	14	4.9'	07 36.5	-47 38	396	SBd			
NGC 2440	PK 234+2.1	Pln Neb	PUP	11.5	6.4	54"	07 41.9	-18 13	319	5(3)		17.5	almost starlike;irregular at high power;PK234+2.1
Haffner 10		Opn CL	PUP	11.5	-	1.6'	07 28.6	-15 23	274	III 2 p	40	12.7	
NGC 2525	MCG - 2-21-	Galaxy	PUP	11.6	13.3	3'	08 05.6	-11 26	275	SBc/P			H III 877
NGC 2310	ESO 309- 7	Galaxy	PUP	11.8	13	4.3'	06 53.9	-40 52	395	SO			lenticular
NGC 2517	MCG - 2-21-	Galaxy	PUP	11.8	12.1	1.4'	08 02.8	-12 19	275	SBO			
NGC 2588	OCL 715	Opn CL	PUP	11.8	-	2'	08 23.2	-32 59	363	II 1 p	20		
PK 241+ 2.1	M3- 4	Pln Neb	PUP	11.8	8.7	20.0"	07 55.2	-23 38	320	4		15.7	
NGC 2401	OCL 508	Opn CL	PUP	12.6	-	2'	07 29.4	-13 58	274	II 3 p	20		H VII 65
NGC 2452	PK 243-1.1	Pln Neb	PUP	12.6	9.4	22"	07 47.4	-27 20	320	4(3)		17.5	
NGC 2578	MCG - 2-22-	Galaxy	PUP	12.6	13.4	2.2'	08 21.4	-13 19	276	SBO-a			H III 902
NGC 2328	ESO 309-16	Galaxy	PUP	12.8	13.4	1.6'	07 02.6	-42 04	395	E-SO Ba			
PK 248- 8.1	M4- 2	Pln Neb	PUP	13	8	8"	07 28.9	-35 45	361	2		17	
PK 249- 5.1	Abell 23	Pln Neb	PUP	13.1	-	54"	07 43.3	-34 45	362				
NGC 2201	ESO 254-40	Galaxy	PUP	13.4	13.6	1.4'	06 13.5	-43 42	394	SBb			
NGC 2564	ESO 562- 1	Galaxy	PUP	13.5	-	1.2'	08 18.5	-21 49	321	E-SO			
PK 228+ 5.1	M1-17	Pln Neb	PUP	13.5	7	3"	07 40.4	-11 33	274			18.5	
NGC 2501	MCG - 2-21-	Galaxy	PUP	14	-	1.4'	07 58.5	-14 21	275	SO			
PK 234- 0.1	M1-15	Pln Neb	PUP	14	-	1"	07 31.8	-19 27	319				Stellar
NGC 2413		Opn CL	PUP	-	-	10'	07 33.3	-13 06	274				H VIII 52
NGC 2425	OCL 599	Opn CL	PUP	-	-	3.3'	07 38.3	-14 53	274	III 2 p	30	14	H VIII 87
NGC 2428		Opn CL	PUP	-	-	6'	07 39.4	-16 32	274				H VIII 47
NGC 2448	ESO 493-**8	Opn CL	PUP	-	-	5'	07 44.6	-24 40	320				
Czernik 31		Opn CL	PUP	-	-	9'	07 37.0	-20 32	319	III 2m :b	40		

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Czernik 32		Opn CL	PUP	-	-	3'	07 50.5	-29 51	362	II 1m:b	30		
Haffner 11		Opn CL	PUP	-	-	4.4'	07 35.4	-27 42	319	II 2m :b	35	16	
Haffner 13		Opn CL	PUP	-	-	15'	07 40.5	-30 05	362	II 3 p	15	8	
Haffner 14		Opn CL	PUP	-	-	3.8'	07 45.5	-27 52	320	III 1m:b		14	
Haffner 17		Opn CL	PUP	-	-	1.6'	07 51.6	-31 49	362	I 2p :b	20	15	
Haffner 22		Opn CL	PUP	-	-	4.8'	08 12.7	-27 52	320	II 1m:b	30	15	
Haffner 25		Opn CL	PUP	-	-	1'	07 49.0	-26 57	320	III 1p :b	20	14	
Haffner 26		Opn CL	PUP	-	-	6'	08 15.4	-30 49	362	III 2p :b	20	14	
Pismis 2		Opn CL	PUP	-	-	4.3'	08 17.9	-41 40	396	II 1r :b	100	15	
Ru 22		Opn CL	PUP	-	-	2.8'	07 29.3	-29 11	361	IV 1p :b	15	12	
Ru 23		Opn CL	PUP	-	-	3'	07 30.7	-23 22	319	III 1p :b	20	13	
Ru 24		Opn CL	PUP	-	-	2'	07 31.9	-12 47	274	III 1 p	15	11	
Ru 25		Opn CL	PUP	-	-	0.7'	07 36.8	-23 23	319	III 1p :b	10	14	
Ru 26		Opn CL	PUP	-	-	10'	07 37.2	-15 41	274	III 1p :b	20	12	
Ru 27		Opn CL	PUP	-	-	18'	07 37.6	-26 30	319	II 2 m	30	12	
Ru 28		Opn CL	PUP	-	-	4'	07 39.6	-29 18	362	IV 1p :b	20	14	
Ru 30		Opn CL	PUP	-	-	6.5'	07 42.2	-31 28	362	II 2 p	30	11	
Ru 31		Opn CL	PUP	-	-	2'	07 42.0	-35 35	362	I 3 p	15	11	
Ru 33		Opn CL	PUP	-	-	6'	07 45.8	-21 57	320	IV 1p :b	20	13	
Ru 35		Opn CL	PUP	-	-	0.8'	07 46.2	-31 17	362	II 1p :b	10	14	
Ru 37		Opn CL	PUP	-	-	0.8'	07 49.8	-17 15	275	II 2m :b	30	14	
Ru 38		Opn CL	PUP	-	-	6'	07 50.5	-20 11	320	III 2p :b	15	13	
Ru 39		Opn CL	PUP	-	-	1.5'	07 52.3	-22 27	320	III 1p :b	15	14	
Ru 40		Opn CL	PUP	-	-	3.5'	07 33.5	-20 31	319	IV 1p :b	10	13	
Ru 41		Opn CL	PUP	-	-	1.1'	07 53.8	-26 58	320	IV 1p :b	20	14	
Ru 42		Opn CL	PUP	-	-	1.5'	07 57.7	-25 55	320	III 2p :b	20	14	
Ru 45		Opn CL	PUP	-	-	11'	07 59.6	-16 17	275	IV 2 p	35	13	
Ru 48		Opn CL	PUP	-	-	2'	08 02.7	-30 03	362	III 1p :b	20	12	
Ru 50		Opn CL	PUP	-	-	3.5'	08 03.4	-30 52	362	II 2m :b	30	12	
Ru 51		Opn CL	PUP	-	-	4.5'	08 03.6	-30 37	362	IV 1m:b	30	14	
Ru 52		Opn CL	PUP	-	-	2.5'	08 05.0	-31 56	362	III 1p :b	15	13	
Ru 53		Opn CL	PUP	-	-	18'	08 10.8	-27 00	320	IV 2 p	40	10	
Ru 54		Opn CL	PUP	-	-	2.5'	08 11.4	-31 57	362	III 2p :b	20	15	
Ru 56		Opn CL	PUP	-	-	42'	08 12.6	-40 28	396	IV 2 p	40	9	
Ru 57		Opn CL	PUP	-	-	5'	08 14.8	-26 58	320	IV 2m :b	30	12	
Ru 58		Opn CL	PUP	-	-	10'	08 14.9	-31 56	362	IV 1m:b	30	12	
Ru 61		Opn CL	PUP	-	-	2.5'	08 25.3	-34 09	363	II 1p :b	25	14	
Ru 151		Opn CL	PUP	-	-	15'	07 41.1	-16 17	274	IV 3 m	30	12	
Ru 152		Opn CL	PUP	-	-	1.7'	07 54.5	-38 14	362	II 1m:b	35	16	
Ru 153		Opn CL	PUP	-	-	2.8'	08 00.3	-30 14	362	IV 2pe:a		14	
Ru 154		Opn CL	PUP	-	-	0.6'	08 01.7	-44 25	396	III 2p :b	20	13	
Ru 155		Opn CL	PUP	-	-	2'	08 05.0	-31 46	362	IV 1p :b	10	13	
Sh2-302	Gum 6;RCW	Brn Neb	PUP	-	-	20'	07 31.6	-16 58	274	E			Cluster Bochum 5 invl
Sh2-307	Gum 7;RCW	Brn Neb	PUP	-	-	4'	07 35.5	-18 46	319	E			
Sh2-311	LBN 1067	Brn Neb	PUP	-	-	16'	07 52.4	-26 25	320	E			Involved in cluster NGC 2467; dark lane near middle
vdB 97		Brn Neb	PUP	-	-	10'	07 32.2	-17 03	274	R			
vdB 98	Ced 101	Brn Neb	PUP	-	-	10'	07 36.6	-25 18	319	R			
Be 135		Drk Neb	PUP	--	--	13'	07 19.0	-44 35	395	6 E			Contains small reflection nebula
NGC 2818	PK 261+8.1	Opn CL	PYX	8.2	-	0.6'	09 16.0	-36 38	364	II 2 m n	40	11.3	30 F* mags 12...
NGC 2627	OCL 714	Opn CL	PYX	8.4	-	11'	08 37.2	-29 57	363	III 2 m	60	11	H VII 63
NGC 2658	OCL 723	Opn CL	PYX	9.2	-	10'	08 43.5	-32 39	363	I 2 r :b	80	12	
NGC 2613	ESO 495-18	Galaxy	PYX	10.3	12.9	7.1'	08 33.4	-22 58	321	Sb			1.2 deg W from D* Burnham 208;Nearly edge-on
Cr 196		Opn CL	PYX	10.5	-	5'	08 45.1	-31 38	363	IV 3 p	12		
NGC 2663	ESO 371-14	Galaxy	PYX	10.9	13.1	3.5'	08 45.1	-33 48	363	Elliptical			
PK 254+ 5.1	M3- 6	Pln Neb	PYX	11	6.5	19.0"	08 40.7	-32 23	363	2a		13.9	
NGC 2635	OCL 728	Opn CL	PYX	11.2	-	3'	08 38.4	-34 46	363	I 3 p	15	12.4	
NGC 2818A	PK 261+8.1	Pln Neb	PYX	11.9	11.1	36"	09 16.0	-36 36	364	3b		16.1	double neb shaped like barbell on W side of cluster
NGC 2717	ESO 496-21	Galaxy	PYX	12.3	13.5	2.1'	08 57.0	-24 40	322	E-SO Ba			
NGC 2888	ESO 434- 2	Galaxy	PYX	12.6	13	1.5'	09 26.3	-28 02	364	E2			
NGC 2891	ESO 498- 8	Galaxy	PYX	12.6	13.3	1.5'	09 26.9	-24 47	323	E-SO			
NGC 2821	ESO 497-34	Galaxy	PYX	13	12.8	2'	09 16.8	-26 49	322	Sbc			
NGC 2772	ESO 497-14	Galaxy	PYX	13.4	13.6	1.5'	09 07.7	-23 37	322	Sb			
Ru 62		Opn CL	PYX	-	-	7'	08 32.5	-19 39	321	IV 2 p	20	11	
Ru 66		Opn CL	PYX	-	-	2'	08 40.5	-38 05	363	II 1p :b	20	15	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Ru 68		Opn CL	PYX	-	-	10'	08 44.5	-35 55	363	III 1r :b	80	14	
Ru 72		Opn CL	PYX	-	-	1.4'	08 52.1	-37 36	363	IV 1p :b	10	13	
Ru 74		Opn CL	PYX	-	-	2.2'	09 21.3	-37 07	364	III 1p :b	20	13	
Ru 157		Opn CL	PYX	-	-	17'	08 29.9	-19 06	321	IV 2 p	30	11	
Ru 158		Opn CL	PYX	-	-	2.5'	08 52.4	-37 34	363	III 2p :b	10	12	
Sh2-312		Brt Neb	PYX	-	-	720'	09 00.0	-26 00	322	E			
NGC 1574	ESO 157-22	Galaxy	RET	10.4	12.9	4'	04 22.0	-56 59	420	SO			
NGC 1543	ESO 118-10	Galaxy	RET	10.5	13.2	4.7'	04 12.7	-57 44	420	SBO Ring			
NGC 1536	ESO 157- 5	Galaxy	RET	12.5	13.5	2.1'	04 11.0	-56 29	420	SBc			
NGC 1463	ESO 117- 9	Galaxy	RET	13.5	13.9	1.3'	03 46.3	-59 49	420	Sa Ring			
Blanco 1		Opn CL	SCL	4.5	-	89.0'	00 04.3	-29 56	350	IV 3 m	30	8	Zeta Sculptoris cluster
NGC 253	ESO 474-29	Galaxy	SCL	7.2	12.7	26.4'	00 47.6	-25 18	306	SBc			sculptor galaxy , arms more defined by dust
NGC 55	Dunlop 507	Galaxy	SCL	7.9	13.4	31.2'	00 14.9	-39 11	386	SBp			Sculptor Galaxy Group
NGC 288	ESO 474-SC	Glob CL	SCL	8.1	-	13.8'	00 52.8	-26 35	307	X			H VI 20;loose structured globular
NGC 300	ESO 295-20	Galaxy	SCL	8.1	14.3	19.3'	00 54.9	-37 41	351	Scd			Large S-shaped;loose structured spiral
NGC 7793	ESO 349-12	Galaxy	SCL	9.1	13.4	9.6'	23 57.8	-32 36	350	Scd			
NGC 613	ESO 413-11	Galaxy	SCL	10.1	13.3	5.2'	01 34.3	-29 25	352	SBbc			H I 281
NGC 134	ESO 350-23	Galaxy	SCL	10.4	13.3	8.4'	00 30.4	-33 15	351	SBbc			Nearly edge-on
NGC 7507	ESO 469-19	Galaxy	SCL	10.4	12.5	2.8'	23 12.1	-28 32	385	Elliptical			H II 2
IC 5332	ESO 408- 9	Galaxy	SCL	10.5	14.5	8.4'	23 34.5	-36 06	385	SBcd			
IC 5332	ESO 408- 9	Galaxy	SCL	10.5	14.5	8.4'	23 34.5	-36 06	385	SBcd			
MCG -06-03	Sculptor Dw	Galaxy	SCL	10.5	17.1	40'	00 59.9	-33 43	351	E			ESO 351-G030; sculptor dwarf ;large and dim
NGC 289	ESO 411-25	Galaxy	SCL	11	14	5.4'	00 52.7	-31 12	351	SBbc			
NGC 7713	ESO 347-28	Galaxy	SCL	11.2	13.3	4.5'	23 36.3	-37 56	385	SBcd			
NGC 150	A 7	Galaxy	SCL	11.4	13.4	3.9'	00 34.3	-27 48	306	SBb			
NGC 7513	ESO 469-22	Galaxy	SCL	11.4	13.3	3.2'	23 13.2	-28 22	385	SBb/P			
NGC 439	ESO 412-18	Galaxy	SCL	11.5	12.8	2.5'	01 13.8	-31 45	352	E3			
NGC 24	ESO 472-16	Galaxy	SCL	11.6	13.7	6.1'	00 09.9	-24 58	305	Sc			H III 461;A2;Nearly edge-on
NGC 254	ESO 411-15	Galaxy	SCL	11.7	13	2.6'	00 47.5	-31 25	351	SBO-a R			vF outer arms
NGC 7484	ESO 407- 6	Galaxy	SCL	11.8	12.9	1.8'	23 07.1	-36 16	385	Elliptical			
NGC 7755	ESO 471-20	Galaxy	SCL	11.9	14.3	3.8'	23 47.9	-30 31	350	SBc			
NGC 148	ESO 410-20	Galaxy	SCL	12.2	12.6	2'	00 34.3	-31 47	351	Sa			Spindle shape
IC 1558	MCG -04-03	Galaxy	SCL	12.2	14.4	3.3'	00 35.8	-25 23	306	SB			
NGC 10	ESO 349-32	Galaxy	SCL	12.5	13.5	2.4'	00 08.6	-33 52	350	SBbc			
NGC 491	ESO 352-53	Galaxy	SCL	12.5	12.8	1.4'	01 21.3	-34 04	352	SBb			
NGC 623	ESO 353-23	Galaxy	SCL	12.5	13.6	2'	01 35.1	-36 29	352	Elliptical			
NGC 630	ESO 297- 9	Galaxy	SCL	12.5	13.3	1.6'	01 35.6	-39 22	388	E-SO			Wide triple
NGC 7713A	ESO 347-30	Galaxy	SCL	12.5	13.4	1.6'	23 37.1	-37 43	385	SBc			
NGC 418	ESO 412- 9	Galaxy	SCL	12.6	13.8	2'	01 10.6	-30 13	352	SBc			
NGC 568	IC 1709	Galaxy	SCL	12.6	13.7	2.2'	01 27.9	-35 43	352	E-SO			
NGC 441	ESO 412-19	Galaxy	SCL	12.7	13.1	1.4'	01 13.9	-31 47	352	SBO-a			
NGC 626	ESO 297- 6	Galaxy	SCL	12.7	13.9	1.9'	01 35.2	-39 09	388	SBc			
NGC 633	ESO 297-11	Galaxy	SCL	12.7	12.9	1.4'	01 36.4	-37 19	352	SBb			
NGC 101	ESO 350-14	Galaxy	SCL	12.8	14.3	2.1'	00 23.9	-32 32	351	SBc			
NGC 174	ESO 411- 1	Galaxy	SCL	12.8	12.4	1.4'	00 37.0	-29 29	351	SBO-a			
NGC 424	ESO 296- 4	Galaxy	SCL	12.8	13.1	1.8'	01 11.5	-38 05	352	SBO-a R			
NGC 438	ESO 296- 7	Galaxy	SCL	12.8	13.1	1.4'	01 13.6	-37 54	352	SBb			
NGC 7749	ESO 471- 9	Galaxy	SCL	12.8	13.3	1.6'	23 45.8	-29 31	350	SO			
NGC 115	ESO 350-17	Galaxy	SCL	12.9	13.4	1.9'	00 26.8	-33 41	351	SBbc			
NGC 612	ESO 353-15	Galaxy	SCL	12.9	13.1	1.5'	01 34.0	-36 30	352	Sa			
NGC 642	ESO 413-14	Galaxy	SCL	12.9	13.6	2'	01 39.1	-29 55	352	SBc			
NGC 409	ESO 352-12	Galaxy	SCL	13	13.3	1.3'	01 09.6	-35 48	352	Elliptical			
NGC 527	ESO 352-68	Galaxy	SCL	13	12.6	1.6'	01 24.0	-35 07	352	SBO-a			
NGC 378	ESO 412- 5	Galaxy	SCL	13.1	13.5	1.5'	01 06.2	-30 11	352	SB Ring			
NGC 597	ESO 353-11	Galaxy	SCL	13.1	13.6	1.4'	01 32.2	-33 30	352	SBbc			
NGC 7645	ESO 470- 3	Galaxy	SCL	13.1	13.6	1.5'	23 23.8	-29 23	385	SBc			
NGC 7812	ESO 349-21	Galaxy	SCL	13.1	12.7	1.1'	00 02.9	-34 14	350	Sb			
NGC 131	ESO 350-21	Galaxy	SCL	13.2	13.1	1.8'	00 29.6	-33 16	351	SBb			
NGC 314	ESO 411-32	Galaxy	SCL	13.2	12.7	0.9'	00 56.9	-31 58	351	SBO-a R			
NGC 574	ESO 353- 6	Galaxy	SCL	13.3	13	1.1'	01 29.1	-35 36	352	SBb			
NGC 264	ESO 295- 6	Galaxy	SCL	13.4	12	1.1'	00 48.3	-38 14	351	SO			
NGC 423	ESO 412-11	Galaxy	SCL	13.4	12.1	1'	01 11.4	-29 14	352	Sa			
NGC 461	ESO 352-33	Galaxy	SCL	13.4	13.3	1.2'	01 17.3	-33 51	352	SBc			
NGC 534	ESO 296-21	Galaxy	SCL	13.4	13.3	1'	01 24.7	-38 08	352	SBO			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 544	ESO 296-24	Galaxy	SCL	13.4	13.3	1.2'	01 25.2	-38 06	352	E-SO Ba			
NGC 365	ESO 352- 1	Galaxy	SCL	13.5	12.8	1'	01 04.3	-35 07	352	SBbc			
NGC 415	ESO 352-14	Galaxy	SCL	13.5	13.5	1.5'	01 10.1	-35 29	352	SBb			
NGC 549		Galaxy	SCL	13.5	13.3	0.5'	01 25.1	-38 00	352	Compac			
NGC 619	ESO 353-21	Galaxy	SCL	13.5	13.8	1.5'	01 34.9	-36 29	352	SBb			
NGC 546	ESO 296-25	Galaxy	SCL	13.6	13.2	1.4'	01 25.2	-38 04	352	SBb			
NGC 7636	ESO 470- 2	Galaxy	SCL	13.7	12.8	0.9'	23 22.6	-29 17	385	SO			
NGC 334	ESO 351-26	Galaxy	SCL	13.8	13.3	1.2'	00 58.8	-35 07	351	SBb			
NGC 491A	ESO 352-46	Galaxy	SCL	13.8	14.3	1.9'	01 20.1	-33 54	352	SBd			
NGC 7	ESO 409-22	Galaxy	SCL	13.9	14	2.2'	00 08.3	-29 55	350	SBc			
NGC 526B	ESO 352-66	Galaxy	SCL	14	-	0.8'	01 23.9	-35 04	352	SO			
Cr 302		Opn CL	SCO	1	-	500'	16 26.0	-26 13	336	III 3 p			Antares moving cluster
NGC 6231	Dunlop 520	Opn CL	SCO	2.6	-	15'	16 54.2	-41 49	407	I 3 r n	93	4.7	Table of Scorpius
M 7	NGC 6475	Opn CL	SCO	3.3	12	80'	17 53.9	-34 48	377	II 2 r	80	5.6	80 members to 10th mag; Ptolemy's cluster
Cr 316		Opn CL	SCO	3.4	-	105'	16 55.5	-40 50	407	I 2 m		14	
M 6	NGC 6405	Opn CL	SCO	4.2	10	20'	17 40.3	-32 15	377	III 2 p	80	6.2	Butterfly cluster;51 members to 10.5 mag incl var* BM
NGC 6227	ESO 332-**5	Opn CL	SCO	5	-	18'	16 51.6	-41 13	407				Includes a 5th mag star
M 4	NGC 6121	Glob CL	SCO	5.4	12	26.3'	16 23.6	-26 32	336	IX			Look for central bar structure
NGC 6281	OCL 1003	Opn CL	SCO	5.4	-	200'	17 04.7	-37 59	376	II 2 p n		7.9	
NGC 6383	NGC 6374	Opn CL	SCO	5.5	-	20'	17 34.7	-32 35	376	IV 3 p n	40	10.2	
NGC 6416	OCL 1031	Opn CL	SCO	5.7	-	14'	17 44.3	-32 22	377	IV 1 p	40	8.4	
NGC 6124	Dunlop 514	Opn CL	SCO	5.8	-	29'	16 25.3	-40 39	407	II 3 m	100	8.7	
NGC 6322	OCL 1000	Opn CL	SCO	6	-	10'	17 18.4	-42 56	408	I 2 p	30	7.5	
NGC 6242	OCL 1001	Opn CL	SCO	6.4	-	9'	16 55.6	-39 28	407	I 3 m		7.3	
Tr 27	Cr 336	Opn CL	SCO	6.7	-	7'	17 36.2	-33 29	376	I 2 p	35	8.4	Extinction varies from 3 to 8 mags across face of cluster
NGC 6388	GCL 70	Glob CL	SCO	6.8	-	8.7'	17 36.3	-44 44	408	III			
NGC 6178	OCL 980	Opn CL	SCO	7.2	-	4'	16 35.8	-45 39	407	I 3 p	12	8.4	
NGC 6425	OCL 1033	Opn CL	SCO	7.2	-	10'	17 47.0	-31 32	377	I 1 p	35	10.1	
Bochum 13		Opn CL	SCO	7.2	-	15'	17 17.3	-35 33	376	III 3 m	35	8	
M 80	NGC 6093	Glob CL	SCO	7.3	11	5.1'	16 17.0	-22 59	336	II			Extremely rich and compressed
NGC 6441	GCL 78	Glob CL	SCO	7.4	-	7.8'	17 50.2	-37 03	377	III			
Tr 29	Cr 343	Opn CL	SCO	7.5	-	9'	17 41.6	-40 07	408	II 3 p	30		
Tr 28	Cr 337	Opn CL	SCO	7.7	-	8'	17 36.9	-32 28	376	II 2 p n	30	9.8	
NGC 6259	OCL 996	Opn CL	SCO	8	-	10'	17 00.8	-44 39	407	III 2 m	120	11.6	
Cr 338		Opn CL	SCO	8	-	25.0'	17 38.2	-37 34	376	III 2 p	40		
NGC 6249	OCL 994	Opn CL	SCO	8.2	-	6'	16 57.7	-44 49	407	II 1 p	30	9.8	
NGC 6451	OCL 1035	Opn CL	SCO	8.2	-	8'	17 50.7	-30 13	377	II 1 p n	80	12	Tom Thumb cluster H VI 13;Dark lane down center;
NGC 6192	OCL 988	Opn CL	SCO	8.5	-	9'	16 40.4	-43 22	407	I 2 p	60	11	
NGC 6396	OCL 1018	Opn CL	SCO	8.5	-	3'	17 37.6	-35 02	376	II 3 p	30	9.8	
PK 357- 4.3	He2-313	Pln Neb	SCO	8.5	-	2"	17 58.2	-33 48	377	I		15.4	magnitude value is infrared region
NGC 6496	GCL 80	Glob CL	SCO	8.6	-	6.9'	17 59.0	-44 16	408	XII			
Tr 24	Harvard 12	Opn CL	SCO	8.6	-	60'	16 57.0	-40 38	407	IV 2 p n	200	7.7	200 * in rich Milky field;nebula IC 4628 invl
NGC 6400	OCL 1014	Opn CL	SCO	8.8	-	12'	17 40.2	-36 57	377	II 2 m	60	9	
Antalova 2		Opn CL	SCO	8.8	-	3'	17 29.7	-32 30	376	IV 1 p	8	9.7	
Ru 127		Opn CL	SCO	8.8	-	8'	17 37.8	-36 18	376	IV 2 p	20	10.4	
Tr 30	Harvard 18	Opn CL	SCO	8.8	-	10'	17 56.5	-35 19	377	III 2 p	20		In field of M 7
Cr 332		Opn CL	SCO	8.9	-	2'	17 30.8	-37 05	376	IV 1 p	12		
NGC 6374	NGC 6383	Opn CL	SCO	9	-	20'	17 34.7	-32 35	376	IV 1 p		10.2	
NGC 6144	GCL 42	Glob CL	SCO	9.1	-	6.2'	16 27.2	-26 01	336	XI			H VI 10
NGC 6139	GCL 43	Glob CL	SCO	9.2	-	5.5'	16 27.7	-38 51	375	II			
NGC 6268	OCL 1002	Opn CL	SCO	9.5	-	6'	17 02.2	-39 44	407	II 2 p			
Pismis 24		Opn CL	SCO	9.6	-	4'	17 24.7	-34 12	376	IV 2 p n	15	10.4	
Lynga 14		Opn CL	SCO	9.7	-	2'	16 55.0	-45 15	407		15	11.2	
Cr 333		Opn CL	SCO	9.8	-	8'	17 31.3	-34 05	376	III 2 p	30		
NGC 6222	NGC 6216	Opn CL	SCO	10	-	4'	16 49.4	-44 44	407				
NGC 6216	NGC 6222	Opn CL	SCO	10.1	-	4'	16 49.4	-44 44	407	II 2 p	40	12	
NGC 6453	GCL 79	Glob CL	SCO	10.2	-	3.5'	17 50.9	-34 36	377	IV			on edge on M7
NGC 6404	OCL 1024	Opn CL	SCO	10.6	-	5'	17 39.6	-33 15	376	III 3 m	50		
Cr 345		Opn CL	SCO	10.9	-	6'	17 44.6	-33 52	377		30	9.4	
NGC 6256	Pal 15	Glob CL	SCO	11.3	-	2.5'	16 59.5	-37 07	375				
NGC 6153	PK 341+5.1	Pln Neb	SCO	11.5	8.7	25"	16 31.5	-40 15	407	4		15.6	
NGC 6380	Ton 1	Glob CL	SCO	11.5	-	3.9'	17 34.5	-39 04	408				Brightest * 16m;8.5m * on South edge;much absorption
Tr 25		Opn CL	SCO	11.7	-	5'	17 24.5	-39 01	376	II 1m:b	40		
NGC 6318	OCL 1004	Opn CL	SCO	11.8	-	4'	17 16.2	-39 26	408	III 2 p		12	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
PK 345- 4.1	Cannon 1-3	Pln Neb	SCO	11.9	6.5	5"	17 26.3	-44 12	408	1		14.3	
NGC 6415	ESO 393-218	Opn CL	SCO	12	-		17 44.3	-35 04	377				
NGC 6437	ESO 393-228	Opn CL	SCO	12	-		17 48.4	-35 22	377				Type is Milky Way Star Cloud in HNGC
NGC 6480	ESO 456-213	CL+Neb	SCO	12	-	5'	17 54.4	-30 27	377	E+*			
PK 342- 4.1	He2-207	Pln Neb	SCO	12	13.4	40"	17 19.5	-45 53	408				
PK 353- 4.1	Haro 1-36	Pln Neb	SCO	12	-	10"	17 49.8	-37 02	377			16.8	
NGC 6000	ESO 450-20	Galaxy	SCO	12.2	13.3	1.9'	15 49.8	-29 23	374	SBbc			
Ton 2		Glob CL	SCO	12.2	-	3.4'	17 36.6	-39 04	408				
NGC 6337	PK 349-1.1	Pln Neb	SCO	12.3	11.6	38"	17 22.3	-38 29	376	4		14.8	
IC 4599	PK 321+5.1	Pln Neb	SCO	12.3	-	16"	16 19.4	-42 16	406			16.3	
PK 346- 6.1	He2-257	Pln Neb	SCO	12.6	-	5"	17 39.3	-44 10	408				
PK 355- 3.3	He2-228	Pln Neb	SCO	12.7	-	2"	17 49.2	-34 23	377			15.4	
NGC 6302	PK 349+1.1	Pln Neb	SCO	12.8	9	72"	17 13.7	-37 06	376	6		16.6	Bug or Bipolar Nebula ;flattened figure 8 shape
IC 4663	PK 346-8.1	Pln Neb	SCO	13	8.8	14"	17 45.5	-44 54	408	4		14	
PK 342- 2.1	He2-198	Pln Neb	SCO	13	-	25"	17 06.4	-44 13	407	4			
PK 347+ 5.1	Haro 1-2	Pln Neb	SCO	13	-	1"	16 48.9	-35 47	375				
PK 349- 4.1	Longmore 16	Pln Neb	SCO	13	-	83"	17 35.7	-40 12	408			16.8	
PK 356- 4.2	Haro 1-41	Pln Neb	SCO	13	-	10"	17 57.3	-34 10	377	2		16.2	
PK 351+ 4.1	M1-19	Pln Neb	SCO	13.2	9.8	10"	17 03.8	-33 30	376	1		16.9	Stellar
PK 345- 1.1	He2-300	Pln Neb	SCO	13.4	-	8.5"	17 10.5	-41 53	407	2			
PK 349+ 4.1	M2-4	Pln Neb	SCO	13.4	-	5"	17 01.1	-34 50	376	1		17	
IC 4637	PK 345+0.1	Pln Neb	SCO	13.5	9.2	21"	17 05.2	-40 53	407	3		12.7	
PK 359- 1.1	M1-29	Pln Neb	SCO	13.5	9.1	9.3"	17 50.3	-30 35	377	4(2)			
PK 353+ 6.2	M2- 6	Pln Neb	SCO	13.7	9.4	8"	17 04.3	-30 53	376	1		16.4	
PK 351- 6.1	Haro 1-37	Pln Neb	SCO	13.8	-	9.9"	17 50.7	-39 18	408	2			
PK 358- 0.2	M1-26	Pln Neb	SCO	13.8	7.9	9.0"	17 46.0	-30 12	377	2		12.1	
PK 356- 4.1	Cannon 2-1	Pln Neb	SCO	13.9	-	3"	17 54.6	-34 23	377			14	On north side of M7 star cluster
Ter 6		Glob CL	SCO	13.9	-	1.2'	17 50.7	-31 17	377				
NGC 6072	PK 342+0.1	Pln Neb	SCO	14	11.7	50"	16 13.0	-36 14	374	3a		17.5	
NGC 6421	ESO 393-228	Opn CL	SCO	14	-	1'	17 45.7	-33 42	377				
PK 343+11.1	Haro 1- 1	Pln Neb	SCO	14	-	2.5"	16 13.5	-34 36	374	2		17.3	
PK 350- 3.1	Haro 1-26	Pln Neb	SCO	14	-	23"	17 36.5	-39 22	408	4			
PK 350+ 4.1	Haro 2- 1	Pln Neb	SCO	14	-	5.6"	17 04.6	-33 59	376	2		12.9	
PK 355- 4.1	Hoffleit 2-1	Pln Neb	SCO	14	-	11"	17 51.2	-34 55	377	3			
PK 357- 3.2	M2-16	Pln Neb	SCO	14	-	6.2"	17 52.6	-32 46	377	2			
NGC 6334	ESO 392-EN	Brt Neb	SCO	-	-	120'	17 20.8	-36 06	376	E			Bear's Claw nebula
NGC 6357	ESO 392-SC	Brt Neb	SCO	-	-	50'	17 24.7	-34 12	376	E+*			
NGC 6444	Ru 132	Opn CL	SCO	-	-	12'	17 49.6	-34 49	377	IV 1 p		11	
IC 4592	LBN 1113	Brt Neb	SCO	-	-	60'	16 12.0	-19 28	335	E+*			
IC 4601	ESO 585-*N	Brt Neb	SCO	-	-	20'	16 20.3	-20 05	336	E+*			
IC 4605	LBN 1110	Brt Neb	SCO	-	-	30'	16 30.2	-25 07	336	E+*			Surrounds 22 Sco;irregular shape
IC 4628	ESO 332-EN	Brt Neb	SCO	-	-	90'	16 57.0	-40 27	407	E			
Antalova 1		Opn CL	SCO	-	-	12.0'	17 28.9	-31 33	376	IV 2pn:b	20	7	
Harvard 16		Opn CL	SCO	-	-	15'	17 31.0	-36 48	376	IV 2 p	70	8.5	20 * mags 10...;in field of Lambda Sco
Hav-Moffat 1		Opn CL	SCO	-	-	6'	17 19.0	-38 49	376	III 2p :b	20		
Lynga 13		Opn CL	SCO	-	-	7'	16 50.0	-43 26	407	III 1m:b	30		
PK 345- 0.1	Haro 2- 3	Brt Neb	SCO	-	-		17 09.5	-41 36	407				Not a PLNNB;compact H II region RCW 117
PK 348- 0.1	Haro 2- 6	Brt Neb	SCO	-	-		17 18.4	-39 19	408				Not a PLNNB;compact H II region RCW 121
RCW 126		Brt Neb	SCO	-	-	16'	17 16.9	-36 21	376	E			Faint and diffuse
Ru 123	Harvard 14	Opn CL	SCO	-	-	9'	17 23.4	-37 56	376	II 3 p	50	10	About 40 * mags 15...
Ru 126		Opn CL	SCO	-	-	6'	17 35.0	-34 19	376	IV 2p :b	20	13	
Ru 128		Opn CL	SCO	-	-	3.4'	17 44.3	-34 53	377	IV 1m:b		13	
Sh2- 1	LBN 1093	Brt Neb	SCO	-	-	150'	15 55.7	-25 40	335	E+R			Neb brightest south of Pi Sco
Sh2- 3	Gum 58;RCW	Brt Neb	SCO	-	-	7.3'	17 12.3	-38 29	376	E			
Sh2- 5	Gum 59;RCW	Brt Neb	SCO	-	-	32'	17 24.9	-38 12	376	E			
Sh2- 9		Brt Neb	SCO	-	-	35'	16 20.2	-25 22	336	E+R			
Sh2- 13	Gum 68;RCW	Brt Neb	SCO	-	-	40'	17 29.0	-31 31	376	E			
vdB 107	Ced 132	Brt Neb	SCO	-	-	85'	16 29.2	-26 27	336	R			Antares involved;not IC 4606?
B 40	LDN 1721	Drk Neb	SCO	--	--	15'	16 14.7	-18 58	335	3 E			Diffused dark spot; small star in it;
B 41	LDN 1717	Drk Neb	SCO	--	--	40'	16 22.3	-19 38	336	3 E			Diffused dark spot near Psi SCO.
B 44a	SL 18	Drk Neb	SCO	--	--	5'	16 44.8	-40 23	407	5 lr			2.4 degrees preceding bright nebula IC 4628
B 48	SL 20	Drk Neb	SCO	--	--	40'	17 01.0	-40 47	407	5 lr			1 deg south following bright nebula IC 4628
B 50	SL 30	Drk Neb	SCO	--	--	15'	17 03.0	-34 24	376	6 lr			30' south preceding star CoD -33 degrees 11706
B 53	SL 32	Drk Neb	SCO	--	--	30'	17 06.1	-33 15	376	4 lr			Curved

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
B 55	LDN 1682	Drk Neb	SCO	--	--	16'	17 07.5	-32 00	337	5 lr			Irregular
B 56	LDN 1685	Drk Neb	SCO	--	--	3'	17 08.7	-32 06	376	5 IR			Small
B 58	SL 23	Drk Neb	SCO	--	--	30'	17 11.2	-40 25	407	6 lr			2.7 deg following bright nebula IC 4628; darker core
B231	SL 24	Drk Neb	SCO	--	--	50'	16 37.5	-35 12	375	6 lr			Dusky
B233	SL 25	Drk Neb	SCO	--	--	55'	16 44.1	-35 21	375	5 lr			1 deg following B231
B235	SL 15	Drk Neb	SCO	--	--	7'	16 46.6	-44 30	407	6 E			Elongated NE and SW;Darkest at SW end
B252	LDN 1698	Drk Neb	SCO	--	--	20'	17 15.2	-32 13	376	5 lr			Triangular; eastern side diffuse
B257		Drk Neb	SCO	--	--	10'	17 22.0	-35 35	376	5 lr			Faint reflection nebula at edge
B263	SL 22	Drk Neb	SCO	--	--	30'	17 26.3	-42 38	408	5 lr			Very slightly elongated
B283		Drk Neb	SCO	--	--	90'	17 51.3	-33 53	377	5 lr			1 deg north-north preceding cluster M7
B287		Drk Neb	SCO	--	--	25'	17 54.4	-35 12	377	5 lr			30' south-south following cluster M7
Be 149		Drk Neb	SCO	--	--	60'	16 09.4	-39 08	406	6 lr			Contains faint reflection nebula
LDN 1710		Drk Neb	SCO	--	--	60'	17 20.7	-31 57	376	5 lr			1 degree following B252
M 11	NGC 6705	Opn CL	SCT	5.8	9	14'	18 51.1	-06 16	295	I 2 r	500	8	500 stars to 14th mag; Wild duck cluster
NGC 6664	OCL 68	Opn CL	SCT	7.8	-	16'	18 36.6	-07 49	295	III 2 m	50	10.1	H VIII 12;Contains Cepheid variable EV Sct
M 26	NGC 6694	Opn CL	SCT	8	12	15'	18 45.2	-09 24	295	I 1 m	30	10.3	Finderscope will show why Messier included it;70 *,14 m
NGC 6712	GCL 103	Glob CL	SCT	8.2	-	4.3'	18 53.1	-08 42	295	IX			H I 47
Tr 34	Cr 387	Opn CL	SCT	8.6	-	8'	18 39.8	-08 29	295	II 2 m	40	11.2	
NGC 6649	OCL 66	Opn CL	SCT	8.9	-	6'	18 33.5	-10 24	295	II 2 m	50	11.6	With Cepheid V367 Sct & D* Struve 2325
Basel 1	Apriamasvili	Opn CL	SCT	8.9	-	9'	18 48.1	-05 51	295	I 2 m	15	12.6	
NGC 6625	OCL 58	Opn CL	SCT	9	-	39'	18 23.2	-12 03	294		30		
NGC 6704	OCL 82	Opn CL	SCT	9.2	-	6'	18 50.9	-05 12	250	I 3 m	30	12.2	
Tr 35	Cr 398	Opn CL	SCT	9.2	-	9'	18 42.9	-04 14	250	II 2 p	35	11.4	
NGC 6683	OCL 74	Opn CL	SCT	9.4	-	11'	18 42.2	-06 17	295	I 2 p n	20	11.7	Rich Milky Way field prob not true cluster
NGC 6631	OCL 59	Opn CL	SCT	11.7	-	5'	18 27.2	-12 02	295	II 2 m	30		
PK 19- 5.1	M1-61	Pln Neb	SCT	12.5	-	2.0"	18 45.9	-14 28	295	1		17.1	
IC 1295	PK 25-4.2	Pln Neb	SCT	12.7	13.4	102"	18 54.6	-08 50	295	3b(2)		15	Often mislabeled IC 1298
PK 20- 0.1	Abell 45	Pln Neb	SCT	12.9	-	4.8'	18 30.3	-11 37	295	3b		21.1	
PK 23- 2.1	M1-59	Pln Neb	SCT	13.3	7.7	4.8"	18 43.4	-09 05	295	2			Virtually Stellar
PK 27- 3.2	VY 1-4	Pln Neb	SCT	13.4	-	15.0"	18 54.0	-06 26	295	1		15.6	
PK 22- 2.1	M1-57	Pln Neb	SCT	13.5	9.3	9.3"	18 40.4	-10 40	295	2		16.3	
PK 22- 3.1	M1-58	Pln Neb	SCT	13.9	9.1	7"	18 43.0	-11 07	295	2			13"-vF; S; R; nBM; difficult
PK 26- 2.1	Perek 1-16	Pln Neb	SCT	14	9.7	7.8"	18 47.6	-06 54	295	2b		15.5	
NGC 6682		Opn CL	SCT	-	-	18'	18 39.6	-04 47	250				
IC 1287	LBN 76	Brn Neb	SCT	-	-	20'	18 31.6	-10 50	295	E		6	Dbl * Struve 2325 illum neby--Hartung
Do 28		Opn CL	SCT	-	-	12'	18 25.4	-14 39	295	IV 2 p	20		Involved in nebula Sh2-50
Do 29		Opn CL	SCT	-	-	18'	18 31.4	-06 38	295				
Do 30		Opn CL	SCT	-	-	18'	18 32.9	-06 02	295				
Do 32		Opn CL	SCT	-	-	12'	18 40.4	-04 06	250	I 2 p	40		
PK 26+ 0.1	VV 1-8	Brn Neb	SCT	-	-	120"	18 33.3	-04 58	250	3			Not a PLNNB;H II region;part of Sh2-61
Ru 141		Opn CL	SCT	-	-	7'	18 31.3	-12 19	295	III 2 m	20	12	
Ru 142		Opn CL	SCT	-	-	4'	18 32.2	-12 14	295	IV 1p :b	15	13	
Ru 143		Opn CL	SCT	-	-	5'	18 32.7	-12 08	295	IV 1m :b	30	14	
Ru 144		Opn CL	SCT	-	-	5'	18 32.5	-11 25	295	IV 1p :b	10	12	
Ru 170		Opn CL	SCT	-	-	2.5'	18 25.2	-10 01	295	IV 1m :b		13	
Ru 171		Opn CL	SCT	-	-	6'	18 32.6	-16 02	295	III 1r :b	15	14	
Sh2- 53		Brn Neb	SCT	-	-	15'	18 25.2	-13 14	295	E			
Sh2- 55	LBN 74	Brn Neb	SCT	-	-	5'	18 32.2	-11 46	295	E			
B 95	LDN 406	Drk Neb	SCT	--	--	30'	18 25.6	-11 45	295	5 C G			2.6 deg north following bright nebula M16
B 97	LDN 435	Drk Neb	SCT	--	--	50'	18 26.4	-10 18	295	4 lr			1 deg north preceding cluster NGC 6649
B100-1	LDN 443	Drk Neb	SCT	--	--	40'	18 32.7	-09 08	295	5 lr g			1.4 deg north of cluster NGC 6649 and curved
B103	LDN 497	Drk Neb	SCT	--	--	4'	18 39.2	-06 40	295	6 lr			On north preceding side of Scutum star cloud
B104	LDN 532	Drk Neb	SCT	--	--	16'	18 47.3	-04 32	250	5 Co			Carot shaped; 20' north of Beta Sct;L-shaped
B108	LDN 534	Drk Neb	SCT	--	--	3'	18 49.6	-06 19	295	3 lr			Not black; very small; 0.5 deg preceding cluster M11
B110	LDN 530	Drk Neb	SCT	--	--	9'	18 50.2	-04 46	250	6 lr G			Part of B111
B111;119a	LDN 534	Drk Neb	SCT	--	--	120'	18 51.0	-05 00	250	3 lr			Two crescent-shaped areas north of M11
B112		Drk Neb	SCT	--	--	20'	18 51.2	-06 40	295	4 lr			Lies south of M11
B113	LDN 548	Drk Neb	SCT	--	--	11'	18 51.4	-04 19	250	5 lr G			Part of B111
B114-7	LDN 514	Drk Neb	SCT	--	--	50'	18 53.2	-07 06	295	6 lr			LDN 514;518;512;509; Chain of dark neb near m11
B118	LDN 509	Drk Neb	SCT	--	--	2'	18 53.9	-07 27	295	6 C G			Blacker than B 117; Definite; Member of group
B312	LDN 379	Drk Neb	SCT	--	--	100'	18 30.9	-15 08	295	4 E			following Omega nebula w sharp n boundary
B314	LDN 445	Drk Neb	SCT	--	--	35'	18 37.7	-09 37	295	5 lr			1 degree north following cluster NGC 6649
B318		Drk Neb	SCT	--	--	90'	18 49.7	-06 24	295	2 lr			Narrow preceding-following lane just south of M11
IC 4756	Cr 386	Opn CL	SER	4.6	-	39'	18 39.0	+05 27	250	III 2 m	80	8.7	Naked eye from dark site

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
M 5	NGC 5904	Glob CL	SER	5.7	11	19.9'	15 18.6	+02 05	244	V			st mags 11...;superb cluster
M 16	NGC 6611	CL+Neb	SER	6	12	7'	18 18.8	-13 47	294	II 3 m n	60	11	Star Queen or Eagle Nebula ;stars mags 8...
NGC 6605	OCL 47	Opn CL	SER	6	-		18 18.4	-14 57	294				H VIII 47;No cluster
NGC 6604	OCL 56	Opn CL	SER	6.5	-	2'	18 18.1	-12 14	294	I 3 p n	30	7.5	H VIII 15;In Ser OB2?
NGC 6539	GCL 85	Glob CL	SER	8.9	-	2.5'	18 04.8	-07 35	294	X			In heavily obscured area
NGC 6535	GCL 83	Glob CL	SER	9.3	-	1.3'	18 03.8	-00 18	249	XI			
IC 1276	Pal 7	Glob CL	SER	10.3	-	7.1'	18 10.8	-07 13	294	XII			
NGC 5921	UGC 9824	Galaxy	SER	10.8	13.9	4.8'	15 21.9	+05 04	244	SBbc			H I 148;eBN in B bar
NGC 5962	UGC 9926	Galaxy	SER	11.3	13.2	3'	15 36.5	+16 36	199	Sc			H II 96;svBN w B arcs;knotty B;many filam
NGC 5970	UGC 9943	Galaxy	SER	11.5	13.3	3'	15 38.5	+12 11	199	SBc			H II 76;vsBN in vB bar
NGC 5957	UGC 9915	Galaxy	SER	11.7	13.7	3.1'	15 35.4	+12 03	199	SBb			Weak
NGC 6118	UGC 10350	Galaxy	SER	11.7	13.9	4.7'	16 21.8	-02 17	246	Sc			H II 402;Low surface brightness
NGC 6070	UGC 10230	Galaxy	SER	11.8	13.7	3.6'	16 10.0	+00 43	245	Sc			H III 553;vF background of 6 galaxys
Pal 5		Glob CL	SER	11.8	-	8.0'	15 16.1	-00 07	244	XII			
NGC 5964	IC 4551	Galaxy	SER	12	14.7	4.1'	15 37.6	+05 58	199	SBcd			narrow bar w low surf brightness arms
NGC 6012	UGC 10083	Galaxy	SER	12	13.1	2.1'	15 54.2	+14 36	200	SBab			H II 657
NGC 5928	UGC 9847	Galaxy	SER	12.2	13.5	2.2'	15 26.0	+18 04	154	SO			H II 874;P w UGC 9841
NGC 6014	IC 4586	Galaxy	SER	12.2	13.2	1.7'	15 56.0	+05 56	200	SO			
Tr 32	Harvard 19	Opn CL	SER	12.2	-	4'	18 17.2	-13 21	294	I 2m :b	50	11.8	
NGC 5937	MCG 0-40-	Galaxy	SER	12.3	12.9	1.9'	15 30.8	-02 50	244	Sb			H II 401
NGC 5956	UGC 9908	Galaxy	SER	12.3	13.2	1.6'	15 35.0	+11 45	199	Sc			
NGC 6004	UGC 10056	Galaxy	SER	12.3	13.4	1.8'	15 50.4	+18 56	155	SBc			sev F gals near
NGC 5990	UGC 10024	Galaxy	SER	12.4	12.6	1.6'	15 46.3	+02 25	245	Sa			H II 425;v late spir;m = 15.7
NGC 5936	UGC 9867	Galaxy	SER	12.5	13	1.3'	15 30.0	+12 59	199	SBb Ring			H II 130;Bright bar w star superimp
NGC 5984	UGC 9987	Galaxy	SER	12.5	13.2	2.9'	15 42.9	+14 14	199	SBcd			H II 656;P w UGC 9991;bright narrow bar
NGC 5980	UGC 9974	Galaxy	SER	12.6	12.7	1.9'	15 41.5	+15 47	199	Sc			H II 655;P w IC 1133
NGC 6010	UGC 10081	Galaxy	SER	12.6	12.4	2'	15 54.3	+00 33	245	Sa			H II 583
IC 1158	UGC 10133	Galaxy	SER	12.6	14	2.5'	16 01.6	+01 42	245	SBc			
NGC 5951	UGC 9895	Galaxy	SER	12.7	13.7	3.6'	15 33.7	+15 00	199	SBc			H II 654;=Ho 713a. (Ho 713b at 1'5 ia a *)
NGC 6020	IC 1148	Galaxy	SER	12.7	13.1	1.4'	15 57.1	+22 24	155	E3			
NGC 5996	UGC 10033	Galaxy	SER	12.8	13.1	1.7'	15 47.0	+17 53	155	Sc			H II 97
PK 13+32.1	Shane 1	Pln Neb	SER	12.8	-	6.0"	16 21.1	+00 17	246			14.7	Stellar
NGC 6008	NGC 6008A	Galaxy	SER	13	13.6	1.4'	15 52.9	+21 06	155	SBb			Disturbed ?;np of 2
NGC 6100	UGC 10307	Galaxy	SER	13	13.7	1.8'	16 16.9	+00 50	246	Sa			
UGC 10041	PGC 56111	Galaxy	SER	13	14.6	3.0'	15 49.0	+05 11	245	S(B)dm			
NGC 6017	UGC 10098	Galaxy	SER	13.1	12.3	0.8'	15 57.3	+06 00	200	S			
NGC 6021	UGC 10102	Galaxy	SER	13.1	13.1	1.4'	15 57.5	+15 57	200	E5			H III 73;P w NGC 6018
NGC 6023	UGC 10106	Galaxy	SER	13.1	13.4	1.4'	15 57.8	+16 19	200	E3			Brightest in group
NGC 6051	IC 4588	Galaxy	SER	13.1	13.2	1.3'	16 04.9	+23 56	155	E4			sev comps
NGC 6063	UGC 10210	Galaxy	SER	13.1	13.3	1.7'	16 07.2	+07 59	200	Sc			
NGC 5913	UGC 9818	Galaxy	SER	13.2	13.3	1.6'	15 20.9	-02 35	244	SB Ring			broad complex bar;smooth disc outside;no spir arms
NGC 5994	UGC 10033;	Galaxy	SER	13.2	-	0.4'	15 46.9	+17 52	155	SBbc			Spiral distorted;P w NGC 5996
NGC 6007	UGC 10079	Galaxy	SER	13.2	13.8	1.7'	15 53.4	+11 58	200	Sc Ring			P w NGC 6006 at 6'
UGC 9977	PGC 55821	Galaxy	SER	13.2	13.7	3.9'	15 42.0	+00 42	244	Sc			
NGC 5953	UGC 9903	Galaxy	SER	13.3	-	2'	15 34.5	+15 12	199	Sa			H II 178;P w NGC 5954 at 8';distorted contact pair
UGC 10290	PGC 57590	Galaxy	SER	13.3	14.4	1.8'	16 14.5	+00 49	245	Sm			
NGC 5887	UGC 9779	Galaxy	SER	13.4	13.4	1.2'	15 14.7	+01 09	244	Sa			UGC 9782 at 3.8' PA 50;comp 5 ' PA 239 0.5X0.1
NGC 5940	UGC 9876	Galaxy	SER	13.4	12.8	0.8'	15 31.3	+07 27	199	SBab			
NGC 5977	UGC 9967	Galaxy	SER	13.4	13.6	1.2'	15 40.6	+17 08	154	SBO			comp 4 ' PA 82 0.6X0.35 early spir
NGC 5983	UGC 9983	Galaxy	SER	13.4	13.4	1'	15 42.8	+08 14	199	Elliptical			
NGC 6003	UGC 10048	Galaxy	SER	13.4	13	0.9'	15 49.4	+19 02	155	SO			
NGC 6018	UGC 10101	Galaxy	SER	13.4	13.3	1.4'	15 57.5	+15 52	200	Sa			H III 646;P w NGC 6021;UGC 10101
NGC 6027E	UGC 10116	Galaxy	SER	13.4	12.1	0.8'	15 59.2	+20 46	155	SO			
NGC 6036	UGC 10163	Galaxy	SER	13.4	12.3	1.1'	16 04.5	+03 52	245	Sa			P w NGC 6037 at 3' PA 183
NGC 5926	MCG 2-39-	Galaxy	SER	13.5	13	0.9'	15 23.4	+12 43	199	S pec			
UGC 9912	PGC 55506	Galaxy	SER	13.5	14.5	1.7'	15 35.1	+16 33	199	SBdm			
UGC 10020	PGC 55973	Galaxy	SER	13.5	14.4	2.3'	15 45.8	+20 35	155	Sd			Faint * near nucleus
NGC 5910	MCG 4-36-	Galaxy	SER	13.6	13.1	0.6'	15 19.4	+20 54	154	E-SO			H II 400;Triple system
NGC 5920	UGC 9822	Galaxy	SER	13.6	13.4	1.1'	15 21.9	+07 43	199	SO			
NGC 5972	UGC 9946	Galaxy	SER	13.6	13.1	1'	15 38.9	+17 02	154	Sa			
NGC 5954	UGC 9904	Galaxy	SER	13.7	-	1.1'	15 34.6	+15 12	199	SBc/P			H II 179;P w NGC 5953;F extenson from comp
NGC 6033	UGC 10159	Galaxy	SER	13.7	13.6	1.1'	16 04.5	-02 07	245	Sbc			
PK 13+ 4.1	M1-33	Pln Neb	SER	13.7	-	5"	17 59.0	-15 32	294	2		18.6	
NGC 5988	UGC 9998	Galaxy	SER	13.8	13.9	1.2'	15 44.6	+10 18	200	SBc Ring			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
UGC 9941	PGC 55660	Galaxy	SER	13.8	14.6	1.3'	15 38.4	+12 57	199	Ir+			
NGC 6027A	UGC 10116	Galaxy	SER	13.9	12.5	0.7'	15 59.2	+20 45	155	Sa			
NGC 6008A	NGC 6008	Galaxy	SER	14	-	1.4'	15 52.9	+21 06	155	SBb			mp of 2
NGC 6037	MCG 1-41-	Galaxy	SER	14	12.9	0.7'	16 04.5	+03 49	245	Sab			
NGC 6080	UGC 10268	Galaxy	SER	14	-	1.2'	16 13.0	+02 11	245	Sab			
UGC 9799	PGC 54526	Galaxy	SER	14	13.5	2.1'	15 16.7	+07 01	199	E5			Brightest in cluster
Archinal 1		Opn CL	SER	-	-	1.5'	18 54.7	+05 33	250	II 2 p	24	13.4	Includes 4 GSC stars; near IC 4756
Czernik 38		Opn CL	SER	-	-	14'	18 49.7	+04 58	250	II 3 r	80		
Do 33		Opn CL	SER	-	-	6'	18 40.7	-04 23	250	III 2m :b	30		
Ru 135		Opn CL	SER	-	-	11'	17 58.0	-11 39	294	I 1 p	20		
Sh2- 46	Gum 80;RCW	Brt Neb	SER	-	-	30'	18 06.1	-14 11	294	E			
Sh2- 64	LBN 90	Brt Neb	SER	-	-	20'	18 31.6	-02 05	250	E			
vdB 123	LBN 96	Brt Neb	SER	-	-	10'	18 30.4	+01 14	250	R			
LDN 557		Drk Neb	SER	--	--	60'	18 38.6	-01 47	250	6 Ir			Irregular shape; N of Scutum star cloud
LDN 564		Drk Neb	SER	--	--	45'	18 37.6	-01 12	250	5 Ir			Not listed in U2000 second edition
NGC 3115	MCG - 1-26-	Galaxy	SEX	8.9	11.9	7.3'	10 05.2	-07 43	279	E6			Spindle Galaxy H I 163;
NGC 3169	UGC 5525	Galaxy	SEX	10.2	12.8	4.2'	10 14.2	+03 28	234	Sa			H I 4:eF corona vis to approx 8X6;P w NGC 3166
NGC 3166	UGC 5516	Galaxy	SEX	10.4	12.9	4.8'	10 13.8	+03 26	234	SBO-a			H I 3;brightest in group
NGC 2974	MCG 0-25-	Galaxy	SEX	10.9	13	3.4'	09 42.6	-03 42	233	Sa			H I 61;bright nucleus;10m * @ 0.7'
NGC 3423	UGC 5962	Galaxy	SEX	11.1	13.7	3.9'	10 51.2	+05 50	190	Sc			H IV 6= II 131;fine face on spiral
UGC 5373	Sextans B d	Galaxy	SEX	11.3	14.3	5.1'	10 00.0	+05 20	234	Ir+			dwarf irregular , sextans B dwarf
UGCA 205	Sextans A	Galaxy	SEX	11.5	15	5.9'	10 11.0	-04 43	234	Ir			MCG -01-26-030
NGC 2967	UGC 5180	Galaxy	SEX	11.6	13.8	2.8'	09 42.1	+00 20	233	Sc			B center part;2 main part. res.; arms w some branches
NGC 2652	MCG +00-25	Galaxy	SEX	11.9	-	3.4'	09 42.5	-03 42	231	E 4			see 2974
NGC 3044	UGC 5311	Galaxy	SEX	11.9	13.1	4.7'	09 53.7	+01 35	234	SBc			H III 254;Nearly edge-on
NGC 3055	UGC 5328	Galaxy	SEX	12.1	13	2.1'	09 55.3	+04 16	234	SBc			vsvBN in sh narrow bar;2 main knotty arms w m branch
NGC 3156	UGC 5503	Galaxy	SEX	12.3	13	1.9'	10 12.7	+03 08	234	SO			H III 255;NGC 3166 group
NGC 2966	UGC 5181	Galaxy	SEX	12.6	13.1	2.2'	09 42.2	+04 40	233	SBbc			2 v broad ill defined arms;3 or 4 stellar obj superimp
NGC 3090	MCG 0-26-	Galaxy	SEX	12.6	13.5	1.7'	10 00.5	-02 58	234	Elliptical			
NGC 3243	UGC 5652	Galaxy	SEX	12.6	13	1.4'	10 26.4	-02 37	235	SO			
NGC 3365	UGC 5878	Galaxy	SEX	12.6	13.8	4.5'	10 46.2	+01 49	235	Sc			
NGC 3375	MCG - 2-28-	Galaxy	SEX	12.6	13.1	1.6'	10 47.0	-09 57	280	SO			
NGC 3385	UGC 5908	Galaxy	SEX	12.6	12.8	1.5'	10 48.2	+04 56	235	SO			P w NGC 3386 at 4.3';PA0;0.8'X0.7'
NGC 2990	UGC 5229	Galaxy	SEX	12.7	12.4	1.1'	09 46.3	+05 43	188	Sc			H II 624;bright nucleus;2 main arms;poor resolution
NGC 3246	UGC 5661	Galaxy	SEX	12.7	13.8	2.4'	10 26.7	+03 52	235	SBd			
NGC 3325	UGC 5795	Galaxy	SEX	12.7	13	1.2'	10 39.3	-00 12	235	Elliptical			brightest of 3
NGC 3361	MCG - 2-28-	Galaxy	SEX	12.8	13.6	2.1'	10 44.5	-11 13	280	SBc			
NGC 2987	UGC 5220	Galaxy	SEX	12.9	12.9	1.5'	09 45.7	+04 56	233	Sab			
NGC 3042	UGC 5307	Galaxy	SEX	12.9	12.6	1.2'	09 53.3	+00 42	234	SO			comp 1.4';PA2;0.3'X0.2'
NGC 2969	MCG - 1-25-	Galaxy	SEX	13	-	1.4'	09 41.9	-08 36	278	Sc			H III 527
NGC 2980	MCG - 1-25-	Galaxy	SEX	13	13.2	1.6'	09 43.2	-09 37	278	SBbc			H III 528
NGC 3340	NGC 3339	Galaxy	SEX	13	12.7	1'	10 42.3	-00 23	235	Sbc			
NGC 3017	MCG 0-25-	Galaxy	SEX	13.1	13	1'	09 49.1	-02 49	233	Elliptical			
UGC 5249	PGC 28148	Galaxy	SEX	13.2	13.7	2.4'	09 47.8	+02 37	233	SBc			
UGC 5708	PGC 31037	Galaxy	SEX	13.2	13.9	3.4'	10 31.2	+04 29	235	S(B)d			
NGC 3018	UGC 5265	Galaxy	SEX	13.3	12.9	1.2'	09 49.7	+00 37	233	Sb			distorted;bridge?
NGC 3092	MCG 0-26-	Galaxy	SEX	13.3	12.9	1.3'	10 00.8	-03 01	234	Sa			
NGC 3117	UGC 5445	Galaxy	SEX	13.3	13	0.9'	10 06.2	+02 55	234	Elliptical			
NGC 3039	UGC 5297	Galaxy	SEX	13.4	13	1.2'	09 52.5	+02 09	234	SBbc			comp 2 ' ;PA323;0.3'X 0.15'
NGC 2978	MCG - 1-25-	Galaxy	SEX	13.5	-	1.1'	09 43.3	-09 45	278	Sbc			
NGC 3023	UGC 5269	Galaxy	SEX	13.5	-	3'	09 49.9	+00 37	233	SBc/P			distorted;bridge?
NGC 3035	MCG - 1-25-	Galaxy	SEX	13.5	-	1.7'	09 51.9	-06 49	278	SBbc Ri			
NGC 3110	NGC 3122	Galaxy	SEX	13.5	-	1.6'	10 04.0	-06 29	279	Sb			
NGC 3122	NGC 3110	Galaxy	SEX	13.5	-	1.6'	10 04.0	-06 29	279	Sb			H II 305
NGC 3050	NGC 2979	Galaxy	SEX	13.6	-	1.5'	09 43.1	-10 23	278	Sa			
NGC 3339	NGC 3340	Star	SEX	13.6	-		10 42.2	-00 22	235				* 2.1 WNW of NGC 3340
NGC 3083	MCG 0-26-	Galaxy	SEX	13.7	12.4	1.1'	09 59.8	-02 53	234	Sa			
NGC 3326	UGC 5799	Galaxy	SEX	13.7	12.4	0.6'	10 39.5	+05 06	235	Sa			
NGC 3360	MCG - 2-28-	Galaxy	SEX	13.7	13.6	1.2'	10 44.3	-11 15	280	Sc			
UGC 5238	PGC 28087	Galaxy	SEX	13.7	14.2	2.5'	09 46.9	+00 30	233	S(B)d			
NGC 3376	UGC 5891	Galaxy	SEX	13.8	12.4	0.8'	10 47.4	+06 03	190	S pec			
NGC 3015	UGC 5261	Galaxy	SEX	13.9	12	0.5'	09 49.4	+01 09	233	SO			brightest of 3
NGC 3086	MCG 0-26-	Galaxy	SEX	13.9	12.8	1.2'	10 00.2	-02 59	234	Sb			
NGC 3165	UGC 5512	Galaxy	SEX	13.9	14	1.3'	10 13.5	+03 22	234	Sdm			irr;NGC 3166 group;NGC 3166 at 4.6' PA50

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Pal 3		Glob CL	SEX	13.9	-	1.6'	10 05.5	+00 04	234	XII			
NGC 2979	NGC 3050	Galaxy	SEX	14	-	1.5'	09 43.1	-10 23	278	Sa			H III 521
NGC 3014	MCG - 1-25-	Galaxy	SEX	14	-	1'	09 49.1	-04 45	233	Sbc			
NGC 3022	MCG - 1-25-	Galaxy	SEX	14	-	1.6'	09 49.7	-05 10	233	SO			
NGC 3029	MCG - 1-25-	Galaxy	SEX	14	14.2	1.5'	09 48.9	-08 03	278	Sc			
NGC 3142	MCG - 1-26-	Galaxy	SEX	14	-	1'	10 10.1	-08 29	279	SO			
Harvard 20		Opn CL	SGE	7.7	-	7'	19 53.1	+18 21	162	III 2 p	28	8.9	40 faint * in 12';has two centers
M 71	NGC 6838	Glob CL	SGE	8.3	12	6.1'	19 53.8	+18 47	162				Arrowhead shape; stars have few metals
NGC 6879	PK 57-8.1	Pln Neb	SGE	11	7.3	4.7"	20 10.4	+16 55	208	2a		15	
IC 4997	PK 58-10.1	Pln Neb	SGE	11.3	2.9	2"	20 20.1	+16 44	208	1		13.7	Small;bright PLNNB--Hartung
NGC 6886	PK 60-7.2	Pln Neb	SGE	12.5	6.2	4"	20 12.7	+19 59	163	2(3)		16.5	
Pal 10		Glob CL	SGE	13.2	-	4.0'	19 18.0	+18 34	161	XII			
Berk 44		Opn CL	SGE	-	-	2'	19 17.3	+19 33	161	III 1m:b	30	16	
Berk 47		Opn CL	SGE	-	-	5'	19 28.5	+17 22	162	II 2p :b	20	16	
Roslund 1		Opn CL	SGE	-	-	3'	19 45.1	+17 35	162	IV 1p :b		15	
Roslund 3		Opn CL	SGE	-	-	5'	19 58.7	+20 31	162	IV 1p :b		20	
Sh2- 82		Brt Neb	SGE	-	-	7'	19 30.3	+18 16	162	E+R			Large and irregularly round
Sh2- 84		Brt Neb	SGE	-	-	15'	19 49.0	+18 24	162	E			V shaped neby; rich field of stars
M 24	IC 4715	Opn CL	SGR	3.1	4.3	95'	18 26.6	-18 23	339				Small Sagittarius Star Cloud ; dark neb , 6603 invl
M 8	NGC 6530	Opn CL	SGR	4.6	-	15'	18 04.5	-24 21	339	II 2 m n		6.9	In Lagoon nebula M8;25* mags 7...
M 25	IC 4725	Opn CL	SGR	4.6	12	29'	18 31.8	-19 07	340	I 2 p	30	6.7	Contains U Sqr:Stars mags 6...10
M 8	NGC 6523	CL+Neb	SGR	5	13	45'	18 03.7	-24 23	339	E			Lagoon Nebula ;CI NGC 6530 invl;dark lane crosses ne
M 22	NGC 6656	Glob CL	SGR	5.2	11	24'	18 36.4	-23 54	340	VII			Stars mags 11...;one of finest globs
M 23	NGC 6494	Opn CL	SGR	5.5	13	27'	17 57.1	-18 59	339	III 1 m	150	9.2	100 members to 13th mag
M 21	NGC 6531	Opn CL	SGR	5.9	11	13'	18 04.2	-22 29	339	I 3 m	70	7.3	In Sqr OB1;36 members to 12th mag
M 17	NGC 6618	CL+Neb	SGR	6	13	11'	18 20.8	-16 11	294	III 3 m n:	40	9.3	Omega nebula ; Swan Nebula ;many F outer loops;use f
M 20	NGC 6514	CL+Neb	SGR	6.3	13	28'	18 02.7	-22 58	339	E+*	67	6	Trifid nebula ;sev dark lanes;H IV 41 & V 10;D* HN 40 in
M 55	NGC 6809	Glob CL	SGR	6.3	13	19'	19 40.0	-30 58	379	XI			* mags 15...
Cr 394		Opn CL	SGR	6.3	-	22'	18 52.3	-20 12	340	IV 2 m	50	6.9	
Cr 367		Opn CL	SGR	6.4	-	37'	18 09.8	-23 50	339	IV 3 p n	30		
NGC 6723	Dunlop 573	Glob CL	SGR	6.8	-	11'	18 59.6	-36 38	378	VII			
M 18	NGC 6613	Opn CL	SGR	6.9	12	9'	18 19.9	-17 08	339	II 3 p n	20	8.6	12 * mag 9-10; 1 deg S of M17
M 28	NGC 6626	Glob CL	SGR	6.9	11	15'	18 24.5	-24 52	340	IV			45' NW from Lambda Sgr;* mags 14...
NGC 6595	IC 4700	Opn CL	SGR	7	-	11'	18 17.1	-19 52	339			30	
NGC 6544	GCL 87	Glob CL	SGR	7.5	-	8.4'	18 07.3	-25 00	339	IX			H II 197
NGC 6716	OCL 46	Opn CL	SGR	7.5	-	7'	18 54.6	-19 54	340	IV 1 p	20	8.3	
NGC 6520	OCL 10	Opn CL	SGR	7.6	-	6'	18 03.4	-27 53	339	I 2 m n	60	9	H VII 7;Dark neb B86 on W edge
NGC 6624	GCL 93	Glob CL	SGR	7.6	-	5.9'	18 23.7	-30 22	378	VI			H I 50
M 54	NGC 6715	Glob CL	SGR	7.7	11	9.1'	18 55.1	-30 29	378	III			* mags 15...
M 69	NGC 6637	Glob CL	SGR	7.7	11	7.1'	18 31.4	-32 21	378	V			
M 70	NGC 6681	Glob CL	SGR	7.8	11	7.8'	18 43.2	-32 18	378	V			Curved arc of stars to NE;* mags 14...
Tr 33	Cr 378	Opn CL	SGR	7.8	-	7'	18 24.6	-19 44	340	II 3 p	20	9.7	
NGC 6546	OCL 24	Opn CL	SGR	8	-	13'	18 07.4	-23 18	339	III 2 m	150	10.6	
NGC 6647	OCL 45	Opn CL	SGR	8	-		18 31.5	-17 21	340				H VIII 14
NGC 6469	OCL 21	Opn CL	SGR	8.2	-	12'	17 53.2	-22 17	339	III 2 p	50		
NGC 6553	GCL 88	Glob CL	SGR	8.3	-	3.2'	18 09.3	-25 54	339	XI			H IV 12;* mags 20...
NGC 6569	GCL 91	Glob CL	SGR	8.4	-	5.8'	18 13.6	-31 50	377	VIII			H II 201;D* Burnham 1353 in field
NGC 6717	Pal 9	Glob CL	SGR	8.4	-	3.9'	18 55.1	-22 42	340	VIII			H III 143
NGC 6645	OCL 48	Opn CL	SGR	8.5	-	10'	18 32.0	-16 53	295	III 1 m	40	12	H VI 23
NGC 6652	GCL 98	Glob CL	SGR	8.5	-	3.5'	18 35.8	-32 59	378	VI			
M 75	NGC 6864	Glob CL	SGR	8.6	11	6'	20 06.1	-21 55	343	I			* mags 17...
NGC 6558	GCL 89	Glob CL	SGR	8.6	-	3.7'	18 10.3	-31 46	377				
NGC 6568	OCL 28	Opn CL	SGR	8.6	-	13'	18 12.8	-21 35	339	III 1 m	50		H VII 30
NGC 6642	GCL 97	Glob CL	SGR	8.8	-	0.8'	18 31.9	-23 29	340	IV			H II 205;* mags 15....
NGC 6822	IC 4895	Galaxy	SGR	8.8	14.5	15.4'	19 44.9	-14 48	297	Ir+			Barnard's Galaxy ;IC 1308 =HII req; in Local Group
Cr 347		Opn CL	SGR	8.8	-	10'	17 46.3	-29 20	377	III 2 p n	40	10.6	In nebula Sh2-16
Cr 469		Opn CL	SGR	9.1	-	5'	18 16.5	-18 19	339	IV 1 p	51	11.2	
NGC 6638	GCL 95	Glob CL	SGR	9.2	-	2.2'	18 30.9	-25 30	340	VI			H I 51
NGC 6440	GCL 77	Glob CL	SGR	9.3	-	1.7'	17 48.9	-20 22	338	V			H I 150;* eF
Bochum 14		Opn CL	SGR	9.3	-	2'	18 02.0	-23 42	339	III 1 pn	11	10.3	
Cr 351		Opn CL	SGR	9.3	-	9'	17 49.9	-28 46	377	IV 2 p	30		
PK 2- 3.5	He2-344	Pln Neb	SGR	9.3	-	3.3"	18 06.1	-28 41	377			14.4	magnitude value is infrared region
NGC 6528	GCL 84	Glob CL	SGR	9.5	-	3.7'	18 04.8	-30 03	377	V			H II 200;* mags 16...;Gamma Sgr in field
NGC 6507	OCL 32	Opn CL	SGR	9.6	-	7'	17 59.8	-17 27	339	IV 2 p	35	12	H VIII 53

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Tr 31	Cr 357	Opn CL	SGR	9.8	-	8'	17 59.9	-28 11	377	III 1 p	25		
NGC 6522	GCL 82	Glob CL	SGR	9.9	-	5.6'	18 03.6	-30 02	377	VI			H I 49
ESO 456-SC	Djorgovski 2	Glob CL	SGR	9.9	14.9	9.9'	18 01.8	-27 50	378				Near B86 and NGC 6520
NGC 6583	OCL 27	Opn CL	SGR	10	-	2.8'	18 15.8	-22 08	339	II 1 m	35		H VII 31
NGC 6818	PK 25-17.1	Pln Neb	SGR	10	7	22"	19 44.0	-14 09	297	4		15	Little Gem Nebula;PK25-17.1
NGC 6629	PK 9-5.1;H II	Pln Neb	SGR	10.5	8.2	16"	18 25.7	-23 12	340	2a		12.9	
NGC 6902	IC 4948	Galaxy	SGR	10.9	14.1	6.1'	20 24.5	-43 39	412	SBa			
Pal 8		Glob CL	SGR	10.9	-	5.2'	18 41.5	-19 49	340	X			
PK 3-14.1	Hubble 7	Pln Neb	SGR	10.9	6.1	4"	18 55.6	-32 16	378	2		13.9	
PK 3- 4.7	ESO 456-69	Pln Neb	SGR	11	-	12"	18 11.6	-28 22	377			13.2	
NGC 6603		Opn CL	SGR	11.1	-	5'	18 18.4	-18 24	339	I 1 r n	100	14	Within star cloud Messier 24
NGC 6567	PK 11-0.2	Pln Neb	SGR	11.5	6.4	11"	18 13.8	-19 05	339	2a(3)		15	
PK 2- 5.1		Pln Neb	SGR	11.5	-	10"	18 14.6	-29 49	377				
PK 355- 6.5	M3-21	Pln Neb	SGR	11.7	6.3	5"	18 02.5	-36 39	377			13.5	
PK 1- 6.2	SwSt 1	Pln Neb	SGR	11.8	6.5	5"	18 16.2	-30 52	377	1			
NGC 6476		Opn CL	SGR	12	-	20.0'	17 54.0	-29 09	377				
NGC 6537	PK 10+0.1	Pln Neb	SGR	12	8	5"	18 05.2	-19 51	339	2a(6)		19.5	
NGC 6554	ESO 590-70	Opn CL	SGR	12	-	20'	18 09.0	-18 26	339				
PK 12- 7.1		Pln Neb	SGR	12	-	10"	18 42.6	-21 17	340				
PK 358- 6.1		Pln Neb	SGR	12	-	10"	18 09.9	-33 19	377				
NGC 6849	ESO 339-32	Galaxy	SGR	12.1	12.8	1.9'	20 06.3	-40 12	411	E-SO Ba			
NGC 6644	PK 8-7.2	Pln Neb	SGR	12.2	3.9	3"	18 32.6	-25 08	340	2		15.9	
NGC 6890	ESO 284-54	Galaxy	SGR	12.3	12.8	1.6'	20 18.3	-44 48	411	SBb			
PK 2- 2.4	M2-23	Pln Neb	SGR	12.4	8.2	9.0"	18 01.7	-28 26	377	1		16.7	
PK 359- 7.1	M2-32	Pln Neb	SGR	12.4	8.5	10"	18 14.9	-32 37	377	1		15.7	
NGC 6835	MCG - 2-50-	Galaxy	SGR	12.5	12.6	2.4'	19 54.5	-12 34	297	SBa			
IC 4776	PK 2-13.1	Pln Neb	SGR	12.5	6.4	8"	18 45.8	-33 21	378	2a		16	
PK 16- 4.1	M1-54	Pln Neb	SGR	12.5	-	13.0"	18 36.2	-17 00	295	3			
NGC 6841	ESO 461-23	Galaxy	SGR	12.6	13.4	1.5'	19 57.8	-31 49	380	Elliptical			
IC 4946	New 5	Galaxy	SGR	12.6	12.4	2.4'	20 23.9	-44 00	411	SAB			
PK 2- 9.1	Cannon 1-5	Pln Neb	SGR	12.6	7.2	7.0"	18 29.2	-31 30	378			15.2	
NGC 6878	ESO 284-31	Galaxy	SGR	12.7	13.3	1.6'	20 13.9	-44 32	411	SBb			
PK 2- 6.2	He2-380	Pln Neb	SGR	12.8	-	7"	18 16.3	-30 08	377	1		14.7	
NGC 6794	ESO 338- 5	Galaxy	SGR	12.9	13.7	1.7'	19 28.1	-38 55	379	Sb Ring			
NGC 6836	MCG - 2-50-	Galaxy	SGR	12.9	13.5	1.7'	19 54.7	-12 41	297	SBm			
NGC 6439	PK 11+5.1	Pln Neb	SGR	13	7.3	6.1"	17 48.3	-16 28	293	2a		18	
NGC 6445	PK 8+3.1;H	Pln Neb	SGR	13	9.6	35"	17 49.3	-20 01	338	3b(3)		19	Little Gem , crescent nebula
NGC 6563	PK 358-7.1	Pln Neb	SGR	13	10.3	54"	18 12.0	-33 52	377	3a		18	
NGC 6565	PK 3-4.5	Pln Neb	SGR	13	8.1	10"	18 11.9	-28 11	377	4		19.5	
IC 4673	PK 3-2.3	Pln Neb	SGR	13	9.9	18"	18 03.3	-27 06	339	4		14.6	
PK 3- 6.1	M2-36	Pln Neb	SGR	13	7.5	8.8"	18 17.7	-29 08	377	2		15.7	
PK 14- 4.1	M1-50	Pln Neb	SGR	13	-	5.8"	18 33.4	-18 17	340	2			
NGC 6578	PK 10-1.1	Pln Neb	SGR	13.1	8.4	8.5"	18 16.3	-20 27	339	2a		15.7	
PK 2- 6.1	M2-33	Pln Neb	SGR	13.1	8	6.0"	18 15.1	-30 16	377	2		14.4	
PK 3- 4.8	M2-30	Pln Neb	SGR	13.1	-	9.0"	18 12.6	-27 58	339	1		17.1	
PK 4-11.1	M3-29	Pln Neb	SGR	13.1	8.8	8.4"	18 39.5	-30 41	378	2		15.5	
PK 7- 6.2	VY 2-1	Pln Neb	SGR	13.1	8.2	7"	18 28.0	-26 07	340	1		16.6	
PK 7+ 1.1	Hubble 6	Pln Neb	SGR	13.1	7.7	6.6"	17 55.1	-21 45	339	2		14.7	
PK 11- 5.1	M1-47	Pln Neb	SGR	13.1	-	4.8"	18 29.2	-21 47	340	2		15.3	
PK 19-19.1	K2- 7	Pln Neb	SGR	13.1	-	2.3'	19 40.5	-20 27	342	3b		19.3	
NGC 6806	ESO 338-15	Galaxy	SGR	13.2	13.5	1.6'	19 37.1	-42 18	411	SBc			
NGC 6878A	ESO 284-29	Galaxy	SGR	13.2	13.5	1.8'	20 13.6	-44 49	411	SBb			
PK 6- 3.3	M2-31	Pln Neb	SGR	13.2	-	5"	18 13.3	-25 30	339	1			
PK 12- 9.1	M1-62	Pln Neb	SGR	13.2	-	3.7"	18 50.5	-22 35	340	2		17.4	
NGC 6805	ESO 338-14	Galaxy	SGR	13.3	13.3	1.1'	19 36.8	-37 33	379	Elliptical			
IC 4732	PK 10-6.1	Pln Neb	SGR	13.3	6.2	3.6"	18 33.9	-22 39	340	1		16.6	
PK 2- 4.2	M1-42	Pln Neb	SGR	13.3	-	9"	18 11.1	-28 59	377	4		17.4	
NGC 6816	ESO 460-30	Galaxy	SGR	13.4	14.1	1.7'	19 44.0	-28 24	380	E-SO			
Cr 468		Opn CL	SGR	13.4	-	1.5'	18 06.6	-27 28	339	IV 1p :b	8	11.1	
PK 3-17.1	Hubble 8	Pln Neb	SGR	13.4	7.4	5.0"	19 05.6	-33 12	379	2		15.7	
PK 6- 4.1	Perek 2-13	Pln Neb	SGR	13.4	8.7	6.9"	18 18.2	-25 38	339			17.3	
PK 9-21.1	K1- 5	Galaxy	SGR	13.5	-	0.2'	19 32.4	-29 24	379	3(6)			Not a PLNNB;has spectrum of galaxy
PK 16- 4.2	M1-56	Pln Neb	SGR	13.5	9.5	10"	18 37.8	-17 05	340	1		16.2	
NGC 6902B	ESO 285- 5	Galaxy	SGR	13.6	14.2	1.5'	20 23.1	-43 52	411	SB Ring			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Arp 2		Glob CL	SGR	13.6	15.1	2.3'	19 28.8	-30 21	379			15.5	
PK 0- 2.4	M2-21	Pln Neb	SGR	13.6	8.9	7.0"	17 58.1	-29 45	377	1		14.7	
PK 6+ 2.5	M1-31	Pln Neb	SGR	13.6	-	7.0"	17 52.7	-22 22	339	1		19	
PK 9- 9.1	M3-32	Pln Neb	SGR	13.6	-	6.6"	18 44.7	-25 20	340	2		17.1	
PK 359- 0.1	Hubble 5	Pln Neb	SGR	13.6	-	19"	17 47.9	-30 00	377	2(6)		18.6	
PK 0- 4.2	ESO 456-54	Pln Neb	SGR	13.8	10.2	11.0"	18 07.1	-30 34	377	2			
PK 4- 5.1	M3-26	Pln Neb	SGR	13.8	9.6	9.0"	18 16.2	-27 15	339	4		17.2	
NGC 6902A	ESO 285- 4	Galaxy	SGR	13.9	14.1	1.3'	20 23.0	-44 16	411	SBm			
PK 13- 7.1	Peimbert 21	Pln Neb	SGR	13.9	10.7	14.9"	18 45.6	-20 35	340	?(3)		18.4	
PK 15- 4.1	M1-53	Pln Neb	SGR	13.9	-	6.6"	18 35.8	-17 36	340	2		14.3	
Ter 5		Glob CL	SGR	13.9	-	2.1'	17 48.1	-24 47	338				
NGC 6620	PK 5-6.1	Pln Neb	SGR	14	8.3	5.3"	18 22.9	-26 49	339	2b		16	
PK 1- 6.1		Pln Neb	SGR	14	-	10"	18 15.4	-30 32	377			12.5	
PK 8- 4.2	M2-42	Pln Neb	SGR	14	-	4.7"	18 22.6	-24 10	339	2		18.2	
PK 9- 4.1	Haro 1-67	Pln Neb	SGR	14	-	6.3"	18 25.1	-22 35	340	2			
PK 9-10.1	M3-33	Pln Neb	SGR	14	8.1	5.9"	18 48.2	-25 29	340	2		15.9	
NGC 6506	OCL 16	Opn CL	SGR	-	-	4'	17 59.9	-24 41	339	IV 1 p			
NGC 6526	ESO 521-*N	Brn Neb	SGR	-	-	40'	18 04.1	-24 27	339	E+*			H V 9
NGC 6533		CL+Neb	SGR	-	-	90'	18 04.1	-24 24	339	E+*			
NGC 6559	LBN 29	Brn Neb	SGR	-	-	5'	18 10.0	-24 07	339	E			connected w IC 4681
NGC 6589	IC 1283;IC 4	Brn Neb	SGR	-	-	15'	18 16.9	-19 47	339	E			
NGC 6590	LBN 43	Brn Neb	SGR	-	-	4'	18 17.0	-19 44	339	R			
NGC 6596	OCL 41	Opn CL	SGR	-	-	10'	18 17.5	-16 40	294	III 2 m n	30		H VIII 55
NGC 6774	Ru 147	Opn CL	SGR	-	-	25'	19 16.3	-16 16	296	III 2 m	20	9	
IC 1274	IC 1275	Brn Neb	SGR	-	-	20'	18 10.1	-23 42	339	E+*			
IC 1275	IC 1274	Brn Neb	SGR	-	-	20'	18 10.1	-23 42	339	E+*			
IC 1284	Gum 78;RCV	Brn Neb	SGR	-	-	17'	18 17.7	-19 40	339	E+*			
IC 4684	IC 4681	Brn Neb	SGR	-	-	3'	18 09.1	-23 26	339	E+*			
IC 4685	OCL 22	Brn Neb	SGR	-	-	10'	18 09.3	-23 59	339	E+*			
IC 4701	Gum 79;RCV	Brn Neb	SGR	-	-	60'	18 16.0	-16 44	294	E			
Basel 5		Opn CL	SGR	-	-	9.0'	17 52.5	-30 06	377	III 2mn:b	30		
Czernik 37		Opn CL	SGR	-	-	3'	17 53.3	-27 22	339	II 1m:b	35		
Markarian 38		Opn CL	SGR	-	-	2'	18 15.3	-18 59	339	I 1p :a			
Ru 130		Opn CL	SGR	-	-	3.9'	17 47.5	-30 06	377	II 1p :b	20	14	
Ru 131		Opn CL	SGR	-	-	10'	17 49.1	-29 13	377	III 1 p	15	11	
Ru 133		Opn CL	SGR	-	-	5'	17 52.5	-28 41	339	IV 2p :b	20	12	
Ru 134		Opn CL	SGR	-	-	5'	17 52.8	-29 33	377	II 1 mn:b	30	12	
Ru 136		Opn CL	SGR	-	-	2.2'	17 59.3	-24 41	339	IV 1m:b	40	13	
Ru 137		Opn CL	SGR	-	-	3'	18 00.0	-25 10	339	IV 2m :b	30	13	
Ru 138		Opn CL	SGR	-	-	4'	18 00.0	-24 40	339	IV 1p :b	20	13	
Ru 139		Opn CL	SGR	-	-	10'	18 01.2	-23 32	339	III 2rn:b	80	12	
Ru 140		Opn CL	SGR	-	-	3.5'	18 21.8	-33 15	378	III 2 p	15	11	
Ru 145		Opn CL	SGR	-	-	35'	18 50.3	-18 12	340	III 1 m		10	
Ru 168		Opn CL	SGR	-	-	3.4'	17 52.8	-28 27	339	IV 1p :b	20	12	
Sh2- 16	Gum 70	Brn Neb	SGR	-	-	14'	17 46.6	-29 18	377	E			
B 83a	LDN 233	Drk Neb	SGR	--	--	4'	17 45.3	-20 00	338	6 E? G			On star cloud 1.7 deg north and 30'
B 84	LDN 235	Drk Neb	SGR	--	--	30'	17 46.5	-20 11	338	6 lr			Looped figure; 1.5 deg north;40' following 58 Oph
B 84a	LDN 302	Drk Neb	SGR	--	--	16'	17 57.5	-17 40	339	5 C			Round; 1.5 deg north of cluster M23 ;w faint ext to S
B 85		Drk Neb	SGR	--	--		18 02.6	-23 02	339				Dark regions in Trifid nebula ; M 20
B 86	LDN 93	Drk Neb	SGR	--	--	4'	18 02.7	-27 50	339	5 lr G			Ink Spot Neb ,On Sgr star cloud preceding 6520;
B 87	LDN 1771	Drk Neb	SGR	--	--	12'	18 04.3	-32 30	377	4 C G			Parrot's Head ;4.5 deg south of cluster NGC 6520
B 88-9;286		Drk Neb	SGR	--	--	2'	18 03.8	-24 23	339				Dark regions in Lagoon nebula
B 90	LDN 227	Drk Neb	SGR	--	--	3'	18 10.2	-28 19	377	5 lr G			1.5 deg following;20' south of cluster NGC 6520
B 91		Drk Neb	SGR	--	--	5'	18 10.0	-23 39	339	5 K			Adjacent to bright nebulae IC 1274-5
B 92	LDN 323	Drk Neb	SGR	--	--	15'	18 15.5	-18 14	339	6 E G			Black spot ; On edge of Small Sag Star Cloud
B 93	LDN 327	Drk Neb	SGR	--	--	12'	18 16.9	-18 04	339	4 Co G			Cometary; 30' following B92
B303	LDN 210	Drk Neb	SGR	--	--	1'	18 09.2	-24 07	339	5 S			In bright nebula IC 4685
Mel 25	Hyades	Opn CL	TAU	0.5	-	330'	04 27.0	+16 00	178	II 3 m	40	3.4	Taurus moving cluster ;Aldebaran not a member
M 45	Mel 22	CL+Neb	TAU	1.2	11	100'	03 47.0	+24 07	132	I 3 r n	100	2.9	Pleiades ;nebys NGC 1432 and 1435 involved
NGC 1746	OCL 452	Opn CL	TAU	6.1	-	42'	05 03.8	+23 46	134	III 1 p	20	8	
NGC 1647	OCL 457	Opn CL	TAU	6.4	-	45'	04 45.9	+19 06	134	II 2 m	200	8.6	H VIII 8
NGC 2045		Star	TAU	6.6	-		05 45.0	+12 53	181				
NGC 1807	OCL 462	Opn CL	TAU	7	-	17'	05 10.7	+16 32	180	II 2 p	20	8.6	15 * mag 8-9
NGC 1817	OCL 463	Opn CL	TAU	7.7	-	16'	05 12.4	+16 41	180	III 1 m	60	11.2	H VII 4;50 * mags 10 to 14

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
M 1	NGC 1952	SN Rem	TAU	8.4	11	8'	05 34.5	+22 01	135				Crab Nebula; filaments;pulsar 16m;3C144
NGC 1514	PK 165-15.1	Pln Neb	TAU	10.8	12.6	120"	04 09.3	+30 47	95	3(2)		9.5	H IV 69;PK165-15.1
vdB 20	IC 349	Brn Neb	TAU	11.6	-	70.0'	03 46.0	+24 10	132	R			Electra nebulosity
NGC 1587	UGC 3063	Galaxy	TAU	11.7	12.7	1.7'	04 30.7	+00 40	223	E1p			H II 8
NGC 1589	UGC 3065	Galaxy	TAU	11.8	12.9	3.2'	04 30.8	+00 52	223	Sab			P w NGC 1587-8 @ 12.2';P w UGC 3072 @ 6 ' ;PA103
vdB 23		Brn Neb	TAU	11.9	-	27'	03 47.5	+24 06	132	R			Alcyone nebulosity
NGC 1550	NGC 1551	Galaxy	TAU	12	13.5	2.2'	04 19.6	+02 25	223	Elliptical			hnp of 2;one of which is IC 366 at 3.2';PA162
NGC 1642	UGC 3140	Galaxy	TAU	12.6	13.6	1.8'	04 42.9	+00 37	224	Sc			UGC 3141 at 8.4';PA24;superimposed comp;bridge
NGC 1588	UGC 3064	Galaxy	TAU	12.9	12.9	1.4'	04 30.7	+00 40	223	E1p			H II 9;compact;disturbed;P w N1587 at 1 ' ;PA257
NGC 1349	UGC 2774	Galaxy	TAU	13	12.2	0.7'	03 31.5	+04 23	222	SO			
NGC 1497	UGC 2929	Galaxy	TAU	13.1	13.8	1.8'	04 02.1	+23 08	133	SO			brightest of 4
NGC 1551	NGC 1550	Galaxy	TAU	13.1	-	2.2'	04 19.6	+02 25	223	E			H II 464
NGC 1517	UGC 2970	Galaxy	TAU	13.4	13.3	1.1'	04 09.2	+08 39	178	Sc			
NGC 1608	NGC 1593	Galaxy	TAU	13.4	13.3	1.6'	04 32.1	+00 34	224	SO			
NGC 1541	UGC 3001	Galaxy	TAU	13.5	12.9	1.3'	04 17.0	+00 50	223	Sa			
NGC 1633	UGC 3125	Galaxy	TAU	13.5	13.1	1'	04 40.2	+07 21	179	SBab			H III 952;P w N1634
NGC 1615	UGC 3096	Galaxy	TAU	13.6	13.3	1.2'	04 36.0	+19 57	134	SO			
NGC 1590	UGC 3071	Galaxy	TAU	13.7	13	0.9'	04 31.2	+07 38	178	S pec			twisted blue post-eruptive gal w several knots & jets
NGC 1542	UGC 3003	Galaxy	TAU	13.9	13.2	1.3'	04 17.2	+04 47	223	Sab			
PK 171-25.1	Baade 1	Pln Neb	TAU	13.9	14.8	48.0"	03 53.5	+19 28	132	4		17.1	
PK 193- 9.1	Haro 3-75	Pln Neb	TAU	13.9	11.9	24"	05 40.7	+12 21	181			14.2	
NGC 1409	UGC 2821	Galaxy	TAU	14	-	1'	03 41.2	-01 18	222	SBO			Dbl sys;distorted;post-eruptive pair: red;patchy;halo
NGC 1410	UGC 2821	Galaxy	TAU	14	-	0.8'	03 41.2	-01 18	222	E1p			blue ellipse;mp=15.4
NGC 1431	UGC 2845	Galaxy	TAU	14	13.6	1'	03 44.7	+02 50	222	SO			comp 3.2' PA338
NGC 1474	IC 2002	Galaxy	TAU	14	-	1.1'	03 54.5	+10 42	177	SBa			
NGC 1432	LBN 772	Brn Neb	TAU	-	-	60'	03 45.8	+24 22	132	R			
NGC 1435	CED 19l	Brn Neb	TAU	-	-	30'	03 46.2	+23 46	132	R		4.2	Tempel's nebula; fan-shaped
NGC 1555	DG 31	Brn Neb	TAU	-	-	0.5'	04 21.9	+19 32	133	R			Hind's Variable Neb,associated with star T Tauri
NGC 1750		Opn CL	TAU	-	-		05 03.9	+23 41	134			8	H VIII 43;Part of NGC 1746
NGC 1758	OCL 453	Opn CL	TAU	-	-	39'	05 04.7	+23 47	135	IV 1 p			H VII 21
NGC 1802		Opn CL	TAU	-	-	20'	05 10.2	+24 08	135		25	9.2	H VIII 41
NGC 2026		Opn CL	TAU	-	-	7'	05 43.0	+20 08	136				H VIII 28
IC 349	vdB 22	Brn Neb	TAU	-	-	30'	03 46.3	+23 56	132	R			Very small neb south foll Merope
IC 353	LBN 774	Brn Neb	TAU	-	-	180'	03 53.0	+25 30	132	E			
IC 360	LBN 786	Brn Neb	TAU	-	-	180'	04 09.0	+26 08	133	E			
IC 1995	LBN 774	Brn Neb	TAU	-	-	2'	03 50.3	+25 35	132	E			
IC 2087	LBN 813	Brn Neb	TAU	-	-	4'	04 40.0	+25 45	134	E			In dark neb B22
Ced 19c		Brn Neb	TAU	-	-	16'	03 44.8	+24 17	132	R			
Ced 19e		Brn Neb	TAU	-	-	21'	03 45.2	+24 28	132	R			
Ced 19h		Brn Neb	TAU	-	-	15'	03 45.9	+24 33	132	R			
Ced 19o		Brn Neb	TAU	-	-	11'	03 49.2	+24 03	132	R			
Ced 19p		Brn Neb	TAU	-	-	10'	03 49.2	+24 08	132	R			
Ced 33	LBN 788	Brn Neb	TAU	-	-	5'	04 27.1	+26 06	133	R			
Ced 34	LBN 814	Brn Neb	TAU	-	-	12.5'	04 27.2	+23 00	133	R			
Czernik 18		Opn CL	TAU	-	-	10'	04 27.8	+30 57	96	IV 1p :b		15	
Do 14		Opn CL	TAU	-	-	12'	04 06.6	+27 34	133	IV 2 p		18	
DoDz 3		Opn CL	TAU	-	-	15'	05 33.7	+26 31	135	IV 2 p		10	
DoDz 4		Opn CL	TAU	-	-	28'	05 35.9	+25 57	135	IV 1 p		15	
Sh2-240	Simeis 147	SN Rem	TAU	-	-	200'	05 39.1	+28 00	97	E			Huge oval cloud w filaments;prob supernova remnant
vdB 26	LBN 828	Brn Neb	TAU	-	-	11'	04 13.6	+10 13	178	R			
vdB 29	LBN 792	Brn Neb	TAU	-	-	10'	04 48.2	+29 46	96	R			
B 7	LDN 1495	Drk Neb	TAU	--	--	600'	04 17.5	+28 34	134	6 lr			Narrow lanes E-W;Area contains B22-24 and B208-220
Be 84		Drk Neb	TAU	--	--	20'	04 22.1	+19 30	133	4 lr			Associated w nebula NGC 1554-5
LDN 1543		Drk Neb	TAU	--	--	35'	04 27.4	+18 52	133	6 lr			Near bright nebula Sh2-239
NGC 6584	Dunlop 376	Glob CL	TEL	7.9	-	7.9'	18 18.6	-52 13	434	VIII			
NGC 6868	ESO 233-39	Galaxy	TEL	10.6	13.1	3.6'	20 09.9	-48 23	411	E2			
NGC 6861	IC 4949	Galaxy	TEL	11.1	12.8	3'	20 07.3	-48 22	411	E-SO Ba			
IC 4889	IC 4891	Galaxy	TEL	11.1	12.8	2.7'	19 45.3	-54 21	436	E5			
NGC 6758	ESO 184-37	Galaxy	TEL	11.6	13.1	2.3'	19 13.9	-56 19	435	E1			
NGC 6909	ESO 285-12	Galaxy	TEL	11.7	12.6	2.2'	20 27.6	-47 02	412	E6			
NGC 6851	ESO 233-21	Galaxy	TEL	11.8	13	2'	20 03.6	-48 17	411	E4			
NGC 6893	ESO 234- 6	Galaxy	TEL	11.8	13.3	2.6'	20 20.8	-48 14	411	SBO Rin			
IC 4699	PK 348-13.1	Pln Neb	TEL	12	7.2	13"	18 18.5	-45 59	409	2		15.1	
NGC 6754	ESO 231-25	Galaxy	TEL	12.1	12.6	1.8'	19 11.4	-50 39	435	SBb			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 6875	ESO 284-28	Galaxy	TEL	12.1	13.1	2.4'	20 13.2	-46 10	411	E6			
NGC 6887	ESO 186-27	Galaxy	TEL	12.1	13.5	3.2'	20 17.3	-52 48	436	Sbc			
NGC 6725	ESO 183-36	Galaxy	TEL	12.2	12.1	2.2'	19 01.9	-53 52	435	SO			
NGC 6854	ESO 185-61	Galaxy	TEL	12.2	13.2	2'	20 05.6	-54 23	436	E2			
NGC 6870	ESO 233-41	Galaxy	TEL	12.3	13.4	2.6'	20 10.2	-48 17	411	Sab			
NGC 6861D	ESO 233-34	Galaxy	TEL	12.4	12.9	2.1'	20 08.3	-48 13	411	E-SO			
NGC 6848	ESO 185-52	Galaxy	TEL	12.5	-	2.4'	20 02.8	-56 05	436	Sa			
NGC 6850	ESO 185-56	Galaxy	TEL	12.5	13.3	2.1'	20 03.5	-54 51	436	SBO-a			
NGC 6707	ESO 183-25	Galaxy	TEL	12.6	13.2	2.1'	18 55.4	-53 49	435	SBc			
NGC 6780	ESO 184-62	Galaxy	TEL	12.6	13.7	1.9'	19 22.8	-55 47	435	SBc			
NGC 6708	ESO 183-27	Galaxy	TEL	12.7	12.5	1.2'	18 55.6	-53 43	435	Sb			
NGC 6855	ESO 185-63	Galaxy	TEL	12.8	13.3	1.5'	20 06.8	-56 23	436	SBO-a			
NGC 6788	ESO 184-67	Galaxy	TEL	12.9	-	2.9'	19 26.8	-54 57	435	Sab			
NGC 6799	ESO 184-78	Galaxy	TEL	13	-	1.6'	19 32.3	-55 55	436	Elliptical			
NGC 6867	ESO 186- 6	Galaxy	TEL	13.1	13.3	2'	20 10.5	-54 47	436	SBbc			
NGC 6875A	ESO 284-24	Galaxy	TEL	13.1	13.2	2.7'	20 11.9	-46 09	411	SBbc			
NGC 6761	ESO 231-28	Galaxy	TEL	13.4	14	1.6'	19 15.1	-50 39	435	SBab			
NGC 6899	ESO 234-22	Galaxy	TEL	13.4	-	1.7'	20 24.4	-50 26	436	SBbc			
NGC 6862	ESO 186- 2	Galaxy	TEL	13.5	-	1.6'	20 08.9	-56 24	436	SBbc			
NGC 6812	ESO 185-15	Galaxy	TEL	13.6	-	1.6'	19 45.4	-55 21	436	SO			
NGC 6889	ESO 186-29	Galaxy	TEL	13.7	-	1.7'	20 18.9	-53 57	436	SBbc			
NGC 6845	NGC 6845A	Galaxy	TEL	13.8	-	2.3'	20 01.0	-47 04	411	SBb			
NGC 6845A	NGC 6845	Galaxy	TEL	13.8	-	2.3'	20 01.0	-47 04	411	SBb			
NGC 6851B	ESO 233-23	Galaxy	TEL	14	13.5	1.1'	20 05.7	-47 59	411	SBcd			
NGC 6861C	ESO 233-31	Galaxy	TEL	14	13.4	1.2'	20 06.7	-48 39	411	SO			
M 33	NGC 598	Galaxy	TRI	5.7	14.2	68.7'	01 33.9	+30 39	91	Sc			Pinwheel Galaxy ;Local Group;H V 17
Cr 21		Opn CL	TRI	8.2	-	6'	01 50.1	+27 05	128	III 3 p	20		group of 15 *
NGC 925	UGC 1913	Galaxy	TRI	10.1	14.4	10.9'	02 27.3	+33 35	93	SBcd			H III 177;NGC 1023 group;coarse spiral
NGC 672	UGC 1256	Galaxy	TRI	10.9	13.9	7.5'	01 47.9	+27 26	128	SBc			H I 157;Brightest in group;coarse spiral . P w IC1727
NGC 890	UGC 1823	Galaxy	TRI	11.2	12.7	2.9'	02 22.0	+33 16	93	E4			H II 225;UGC 1823
NGC 777	UGC 1476	Galaxy	TRI	11.4	13.2	2.8'	02 00.2	+31 26	92	E1/E2			H II 223;P w NGC 778
IC 1727	UGC 1249	Galaxy	TRI	11.5	14.7	7.1'	01 47.5	+27 20	128	SBm			P w NGC 672;Low surf br;distortedby NGC 672
NGC 784	UGC 1501	Galaxy	TRI	11.7	14.1	6.6'	02 01.3	+28 50	92	SBd			
NGC 949	UGC 1983	Galaxy	TRI	11.8	12.9	2.7'	02 30.8	+37 08	93	Sb			H I 154;UGC 1983
NGC 1060	UGC 2191	Galaxy	TRI	11.8	13.2	2.3'	02 43.3	+32 25	93	E-SO	15.7		Lies in position given as NGC 1062;very diffuse
NGC 750	UGC 1430	Galaxy	TRI	11.9	12.7	1.6'	01 57.5	+33 13	92	E1			H II 222;Contact P w NGC 751;compact cores;bridge
NGC 736	UGC 1414	Galaxy	TRI	12.1	13	1.7'	01 56.7	+33 03	92	SO			H II 221?;P w NGC 740
NGC 783	UGC 1497	Galaxy	TRI	12.1	12.9	1.6'	02 01.1	+31 53	92	Sc			
NGC 661	UGC 1215	Galaxy	TRI	12.2	13.2	1.6'	01 44.2	+28 42	92	SO			H II 610
NGC 968	UGC 2040	Galaxy	TRI	12.2	14.2	3.6'	02 34.1	+34 29	93	Elliptical			npp of 2;possible SN 1856
NGC 669	UGC 1248	Galaxy	TRI	12.3	12.8	3.1'	01 47.3	+35 34	92	Sab			
NGC 969	UGC 2039	Galaxy	TRI	12.3	13.2	1.7'	02 34.1	+32 57	93	SO			P w NGC 974
NGC 684	IC 165	Galaxy	TRI	12.4	12.9	3.4'	01 50.2	+27 39	128	Sb			NGC 672 group
NGC 940	UGC 1964	Galaxy	TRI	12.4	12.4	1.2'	02 29.5	+31 38	93	SO			
NGC 959	UGC 2002	Galaxy	TRI	12.4	13.6	2.3'	02 32.4	+35 30	93	Sd			v patchy
NGC 987	UGC 2093	Galaxy	TRI	12.4	12.7	1.3'	02 36.8	+33 20	93	SBO-a			H III 161
NGC 807	UGC 1571	Galaxy	TRI	12.5	13.4	1.8'	02 04.9	+28 59	92	Elliptical			H III 151
NGC 855	UGC 1718	Galaxy	TRI	12.6	13.6	2.6'	02 14.1	+27 53	129	Elliptical			H II 613;UGC 1718
UGC 1281	PGC 6699	Galaxy	TRI	12.6	-	4.5'	01 49.6	+32 35	92	Sdm			
NGC 614	NGC 627	Galaxy	TRI	12.7	13.3	1.4'	01 35.9	+33 41	91	SO			H III 174;UGC 1140
NGC 621	UGC 1147	Galaxy	TRI	12.7	13.9	1.9'	01 36.8	+35 31	91	SBO			
NGC 670	UGC 1250	Galaxy	TRI	12.7	13.3	2.1'	01 47.4	+27 53	128	SO			H II 611
NGC 688	UGC 1302	Galaxy	TRI	12.7	13.9	2.4'	01 50.7	+35 17	92	SBb			
NGC 974	UGC 2049	Galaxy	TRI	12.7	14.2	3'	02 34.4	+32 57	93	Sb			P w NGC 969
NGC 587	IC 1713	Galaxy	TRI	12.8	13.3	2.2'	01 32.6	+35 21	91	SBb			
NGC 769	UGC 1467	Galaxy	TRI	12.8	11.6	0.8'	01 59.6	+30 55	92	Sc			n of 2
NGC 931	UGC 1935	Galaxy	TRI	12.8	13.9	3.9'	02 28.2	+31 19	93	Sbc			
NGC 973	UGC 2048	Galaxy	TRI	12.8	13.4	3.7'	02 34.3	+32 30	93	Sb			strongly asym spindle
NGC 634	UGC 1164	Galaxy	TRI	13	13.1	2.1'	01 38.3	+35 22	91	Sa			
NGC 865	UGC 1747	Galaxy	TRI	13.1	12.4	1.5'	02 16.3	+28 36	92	S pec			
NGC 1002	NGC 983	Galaxy	TRI	13.1	13.1	1.2'	02 38.9	+34 37	93	SBb			comps@ 2.2';PA247;.3X0.3;2.5';PA279;.8X0.5
NGC 1093	UGC 2274	Galaxy	TRI	13.1	13.7	1.8'	02 48.3	+34 25	93	Sab			
NGC 582	UGC 1094	Galaxy	TRI	13.2	13.3	2.2'	01 32.0	+33 29	91	SBb			
NGC 608	NGC 618	Galaxy	TRI	13.2	12.2	0.8'	01 35.5	+33 39	91	Sab			

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NGC 778	UGC 1480	Galaxy	TRI	13.2	12.5	1.1'	02 00.3	+31 19	92	SO			P w NGC 777
NGC 579	UGC 1089	Galaxy	TRI	13.3	13.3	1.1'	01 31.8	+33 37	91	Sc			disturbed
NGC 735	UGC 1411	Galaxy	TRI	13.3	13.6	1.8'	01 56.6	+34 11	92	Sb			H III 176
NGC 1066	UGC 2203	Galaxy	TRI	13.3	14.3	1.7'	02 43.8	+32 29	93	Elliptical			H III 163;Compact;UGC 2201 @ 2.2';NGC 1067 @ 1.8'
NGC 666	UGC 1236	Galaxy	TRI	13.4	12.2	0.7'	01 46.1	+34 22	92	S pec			
NGC 789	UGC 1520	Galaxy	TRI	13.4	11.7	0.6'	02 02.4	+32 04	92	Sd			Peculiar
NGC 819	UGC 1632	Galaxy	TRI	13.4	11.7	0.6'	02 08.6	+29 14	92	S pec			Peculiar
NGC 761	UGC 1439	Galaxy	TRI	13.5	13.1	1.4'	01 57.8	+33 23	92	SBab			
NGC 798	UGC 1539	Galaxy	TRI	13.5	13	1.2'	02 03.3	+32 05	92	Elliptical			
NGC 805	UGC 1566	Galaxy	TRI	13.5	13.2	1.1'	02 04.5	+28 49	92	SBO			
NGC 953	UGC 1991	Galaxy	TRI	13.5	-	1.5'	02 31.2	+29 35	93	Elliptical			
UGC 2105	Mrk 1050	Galaxy	TRI	13.5	13.2	1.5'	02 37.7	+34 26	93	SBa			Supernova 1938A here
NGC 627	NGC 614	Galaxy	TRI	13.7	-	1.4'	01 35.9	+33 41	91	SO			
NGC 1067	UGC 2204	Galaxy	TRI	13.7	13.6	1.1'	02 43.8	+32 31	93	Sc			S-shaped;well def arms;UGC2201 at 1.6';comp 2.3'
NGC 861	UGC 1737	Galaxy	TRI	13.8	13.4	1.5'	02 15.9	+35 55	92	Sb			
NGC 739	MCG 5-5-	Galaxy	TRI	13.9	12.3	0.5'	01 56.9	+33 16	92	Sa			
UGC 2023	PGC 9726	Galaxy	TRI	13.9	15.2	2.0'	02 33.3	+33 30	93	Im			
NGC 740	UGC 1421	Galaxy	TRI	14	13.3	1.4'	01 56.9	+33 01	92	SBb			H II 221?;P w NGC 736
NGC 751	UGC 1431	Galaxy	TRI	14	-	1.8'	01 57.6	+33 12	92	EO			
NGC 785	IC 1776	Galaxy	TRI	14	-	1.5'	02 01.7	+31 50	92	E-SO			
NGC 978A	NGC 978	Galaxy	TRI	14	-	2'	02 34.8	+32 51	93	E-SO			np of 2;contact
NGC 983	NGC 1002	Galaxy	TRI	14	-	1.2'	02 38.9	+34 37	93	SBb			
NGC 1061	MCG 5-7-	Galaxy	TRI	14	13.2	0.9'	02 43.3	+32 28	93	Sd			Peculiar?
NGC 588		Neb+Gx	TRI	-	-	0.7'	01 32.8	+30 39	91	E+*			Part of NGC 598 = M33
NGC 592		Neb+Gx	TRI	-	-	0.3'	01 33.2	+30 39	91	E+*			Part of NGC 598 = M33
NGC 595		Neb+Gx	TRI	-	-	0.5'	01 33.6	+30 42	91	E+*			Part of NGC 598 = M33
NGC 604		Neb+Gx	TRI	-	-	2'	01 34.6	+30 47	91	E+*			Emission neb in arm of M 33 ;largest H II reg. known
NGC 434	ESO 113-23	Galaxy	TUC	12	12.9	2.2'	01 12.2	-58 15	417	SBab			
NGC 484	ESO 113-36	Galaxy	TUC	12.2	-	1.9'	01 19.6	-58 32	417	E-SO			
NGC 7676	ESO 148-16	Galaxy	TUC	12.5	12.8	1.6'	23 29.0	-59 43	439	E-SO			
NGC 7650	ESO 148-10	Galaxy	TUC	12.7	13	1.4'	23 25.3	-57 48	439	SBc			
NGC 440	ESO 113-25	Galaxy	TUC	13.2	12.8	1.2'	01 12.8	-58 17	417	Sbc			
NGC 466	ESO 113-34	Galaxy	TUC	13.6	-	1.7'	01 17.2	-58 55	417	Sa			
NGC 7652	ESO 148-11	Galaxy	TUC	13.6	13.2	1.2'	23 25.6	-57 53	439	Sa			
Cr 285		Opn CL	UMA	0.4	-	1400'	12 03.0	+58 00	47			2	UMa moving cluster
M 81	NGC 3031	Galaxy	UMA	6.9	13.2	24.9'	09 55.6	+69 04	23	Sb			brightest in group;fine spiral
M 101	NGC 5457	Galaxy	UMA	7.9	14.9	28.5'	14 03.2	+54 21	49	SBc			P w NGC 5474;SN 1909;spir galax w one heavy arm;
M 82	NGC 3034	Galaxy	UMA	8.4	12.5	10.5'	09 55.9	+69 41	23	Sd			M81 group;eruptive;H IV 79
M 40	Winnecke 4	2 Stars	UMA	9	-		12 21.9	+58 06	47				D* 9 & 9.3 mag 50" sep; No nebulae
NGC 2841	UGC 4966	Galaxy	UMA	9.2	12.7	7.7'	09 22.0	+50 59	44	Sb			H I 205;fine spiral w symmetrical whorls
M 109	NGC 3992	Galaxy	UMA	9.8	13.6	7.5'	11 57.6	+53 22	47	SBbc			H IV 61;theta struc barred sp;Gamma UMa 40' NW
NGC 3184	UGC 5557	Galaxy	UMA	9.8	13.9	7.6'	10 18.3	+41 25	72	SBc			svBN;smooth lens w spiral pattern of dark markings
NGC 2768	UGC 4821	Galaxy	UMA	9.9	13.7	8.2'	09 11.6	+60 02	44	E5			vsvB center; smooth neb in lens and external envelope
NGC 3077	UGC 5398	Galaxy	UMA	9.9	13.1	5.2'	10 03.3	+68 44	23	Sd			m81 group;dust streamers tending to radial direction
M 108	NGC 3556	Galaxy	UMA	10	13.1	8.6'	11 11.5	+55 40	46	SBc			H V 46; M 97 is 48' SE;nearly edge-on
NGC 3953	UGC 6870	Galaxy	UMA	10.1	13.4	6.9'	11 53.8	+52 19	47	SBbc			H V 45;comps 3.9';PA190;0.3'X0.1';4.6';PA156;0.4'X0.4'
NGC 2976	UGC 5221	Galaxy	UMA	10.2	13	6.2'	09 47.2	+67 55	23	Scp			B main body;chaotic inner w many dk lane;F outer disc
NGC 3675	UGC 6439	Galaxy	UMA	10.2	13.2	6.2'	11 26.1	+43 35	73	Sb			H I 194;in field of 56 UMa
NGC 4051	UGC 7030	Galaxy	UMA	10.2	13.3	5.3'	12 03.2	+44 32	74	SBbc			H IV 56;thick spiral arms
NGC 5322	UGC 8745	Galaxy	UMA	10.2	13.6	6'	13 49.2	+60 11	49	E2			H I 256;B diff. N;smooth neb
NGC 2681	UGC 4645	Galaxy	UMA	10.3	12.8	3.7'	08 53.5	+51 19	44	SBO-a			H I 242;Compact center and distinct spiral arms
NGC 3198	UGC 5572	Galaxy	UMA	10.3	13.8	8.1'	10 19.9	+45 33	72	SBc Ring			H I 199;svBN in bar partly obscured on one side
NGC 3941	UGC 6857	Galaxy	UMA	10.3	12.5	3.5'	11 52.9	+36 59	107	SBO			H I 173
NGC 4605	UGC 7831	Galaxy	UMA	10.3	12.9	5.9'	12 40.0	+61 36	26	SBc/P			H I 254
NGC 2985	UGC 5253	Galaxy	UMA	10.4	13.3	4.6'	09 50.4	+72 17	23	Sb			diff BN;many poor res knotty arms; P w NGC 3027
NGC 3631	UGC 6360	Galaxy	UMA	10.4	13.7	5'	11 21.0	+53 10	46	Sc			H I 226;SN 1964a;UGC 6360;Arp 27
NGC 3726	UGC 6537	Galaxy	UMA	10.4	13.8	6'	11 33.3	+47 02	73	SBc Ring			H II 730;well defined spiral pattern
NGC 3938	UGC 6856	Galaxy	UMA	10.4	13.8	5.1'	11 52.8	+44 07	74	Sc			H I 203;Fine face on spiral
NGC 3893	UGC 6778	Galaxy	UMA	10.5	13	4.5'	11 48.6	+48 43	74	SBc			H II 738;P w NGC 3896 at 3.9';PA125
NGC 3359	UGC 5873	Galaxy	UMA	10.6	14.2	7.5'	10 46.6	+63 13	24	SBc			H V 52
NGC 4088	UGC 7081	Galaxy	UMA	10.6	13.2	5.6'	12 05.6	+50 32	47	SBbc			P w 4085 11' to south;distorted spir arms;UGC 7081
NGC 3898	UGC 6787	Galaxy	UMA	10.7	13.2	3.8'	11 49.3	+56 05	47	Sab			H I 228;comp 5 ' ;PA60;0.7'X0.12';NGC 3888 15' south
NGC 3998	UGC 6946	Galaxy	UMA	10.7	12.5	2.7'	11 57.9	+55 27	47	SO			H I 229;comp 4.7';PA145;0.3'X0.3'
NGC 4036	UGC 7005	Galaxy	UMA	10.7	12.7	4'	12 01.5	+61 54	25	E6			H I 253;NGC 4041 @ 15';spindle shape

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5585	UGC 9179	Galaxy	UMA	10.7	13.9	5.8'	14 19.8	+56 44	49	SBcd			H I 235;M 101 group
NGC 2787	UGC 4914	Galaxy	UMA	10.8	12.6	3.1'	09 19.3	+69 12	23	SBO-a			H I 216;B nucl in B inner lens;strong narrow bar w blobs
NGC 3310	UGC 5786	Galaxy	UMA	10.8	12.8	2.8'	10 38.8	+53 30	46	SBbc/P			H IV 60;UGC 5786
NGC 3610	UGC 6319	Galaxy	UMA	10.8	12.8	2.5'	11 18.4	+58 47	46	Elliptical			H I 270;comp 3.7';PA232;0.25'X0.25'
NGC 3665	UGC 6426	Galaxy	UMA	10.8	12.4	3.5'	11 24.7	+38 46	106	SO			H I 219;P w NGC 3658
NGC 3718	UGC 6524	Galaxy	UMA	10.8	14.4	8.2'	11 32.6	+53 04	47	SBap			P w NGC 3729 at 11.5'ENE;cent dust lane sprl arms
NGC 4026	UGC 6985	Galaxy	UMA	10.8	12.7	4.7'	11 59.4	+50 58	47	SO			H I 223;edge on lens shape
NGC 5474	UGC 9013	Galaxy	UMA	10.8	13.9	5'	14 05.0	+53 40	49	Sc			low surf. bright;smooth part res cent w vsFN;asym
IC 2574	UGC 5666	Galaxy	UMA	10.8	15.5	10.8'	10 28.4	+68 25	24	SAB			Coddington Galaxy
NGC 2950	UGC 5176	Galaxy	UMA	10.9	12.5	2.7'	09 42.6	+58 51	45	SBO Rin			H IV 68
NGC 3079	UGC 5387	Galaxy	UMA	10.9	13.4	8.1'	10 02.0	+55 41	45	SBc			H V 47;brightest of 3;comp 6.5 nf;0.9'X0.4';mag 14.6
NGC 3613	UGC 6323	Galaxy	UMA	10.9	13	3.6'	11 18.6	+58 00	46	Elliptical			H I 271;P w NGC 3619 at 15.7' PA158
NGC 3945	UGC 6860	Galaxy	UMA	10.9	13.9	6.4'	11 53.2	+60 40	47	SBO-a R			H I 251
NGC 4096	UGC 7090	Galaxy	UMA	10.9	13.4	6.5'	12 06.0	+47 29	74	SBc			H I 207;nearly edge on
M 97	NGC 3587	Pln Neb	UMA	11	12.1	202"	11 14.8	+55 01	46	3a		14	Owl Nebula ;PK148+57.1
NGC 2805	UGC 4936	Galaxy	UMA	11	14.6	6.3'	09 20.3	+64 06	23	SBcd Rin			slightly asym;many irreg res vF knotty arms;multi sys
NGC 3877	UGC 6745	Galaxy	UMA	11	13	5.3'	11 46.1	+47 30	74	Sc			H I 201;edge on spiral;16' south from Chi UMA
NGC 3982	UGC 6918	Galaxy	UMA	11	12.5	2.3'	11 56.5	+55 07	47	SBb			H IV 62
NGC 5448	UGC 8969	Galaxy	UMA	11	13	3.8'	14 02.8	+49 10	77	SBa			H II 691;vBN w F bar
NGC 3319	UGC 5789	Galaxy	UMA	11.1	14.2	6.1'	10 39.2	+41 41	72	SBc			flattened central region elong NE-SW coarse spiral
NGC 3348	UGC 5875	Galaxy	UMA	11.1	12.7	2'	10 47.2	+72 50	8	Elliptical			H I 80;comp 2.6';PA115;0.6'X0.4';UGC 5875
NGC 3583	UGC 6263	Galaxy	UMA	11.1	12.7	2.5'	11 14.2	+48 19	73	SBb			H II 728;P w NGC 3577
NGC 3949	UGC 6869	Galaxy	UMA	11.1	12.6	2.9'	11 53.7	+47 52	74	Sbc			H I 202;comp 4.4';PA273;0.3'X0.1'
NGC 4062	UGC 7045	Galaxy	UMA	11.1	13.1	4'	12 04.1	+31 54	107	SBc			H I 174
UGC 4305	Holmberg II	Galaxy	UMA	11.1	14.8	7.6'	08 19.2	+70 43	22	Ir+			dwarf irregular
NGC 3642	UGC 6385	Galaxy	UMA	11.2	14.5	5.5'	11 22.3	+59 04	46	Sbc			H I 245
NGC 4013	UGC 6963	Galaxy	UMA	11.2	12.9	4.8'	11 58.5	+43 57	74	Sb			H II 733;edge on
NGC 4100	UGC 7095	Galaxy	UMA	11.2	13.5	5.4'	12 06.1	+49 35	74	Sbc			H III 717;nearly edge on spiral
NGC 4102	UGC 7096	Galaxy	UMA	11.2	12.8	3.1'	12 06.4	+52 43	47	SBb Rin			H I 225
NGC 2685	UGC 4666	Galaxy	UMA	11.3	13.7	4.6'	08 55.6	+58 44	44	SBO-a			appears cigar-shaped;w equatorial rings;dk lanes
NGC 4041	UGC 7014	Galaxy	UMA	11.3	13.2	2.7'	12 02.2	+62 08	25	Sbc			H I 252
NGC 5204	UGC 8490	Galaxy	UMA	11.3	14.1	5'	13 29.6	+58 25	48	Sm			H IV 63;M 101 group;no def N;BM;highly res irreg arms
NGC 2742	NGC 2816	Galaxy	UMA	11.4	13	3'	09 07.6	+60 29	44	Sc			H I 249;bright nucleus;several filamentary knotty arms
NGC 3729	UGC 6547	Galaxy	UMA	11.4	13.1	2.9'	11 33.8	+53 08	47	SB/P			H I 222;in field w NGC 3718
NGC 4157	UGC 7183	Galaxy	UMA	11.4	13.6	6.7'	12 11.1	+50 29	47	SBb			H I 208;SN 1937a;1955a;edge on narrow streak
NGC 5308	UGC 8722	Galaxy	UMA	11.4	12.3	3.7'	13 47.0	+60 58	49	SO			H I 255;slightly asym;vBN;diamond-shaped
NGC 5473	UGC 9011	Galaxy	UMA	11.4	12.8	2.2'	14 04.7	+54 54	49	E2			H I 231;svBN;sh. bar;F lens;in field of M 101
NGC 5485	UGC 9033	Galaxy	UMA	11.4	12.9	2.8'	14 07.2	+55 00	49	SO			P w NGC 5484 at 3'9;NGC 5486 at 6';sBN in B lens
NGC 2880	UGC 5051	Galaxy	UMA	11.5	12.4	2.4'	09 29.6	+62 29	23	E3			very compact;bright nucleus in bar near minor axis
NGC 3619	UGC 6330	Galaxy	UMA	11.5	13.4	3.5'	11 19.4	+57 45	46	Sa			H I 244;P w NGC 3613 @ 15'
NGC 3690	UGC 6472	Galaxy	UMA	11.5	12.6	2'	11 28.5	+58 34	46	Sp?			H I 247;double system;collision w IC 694
NGC 3756	UGC 6579	Galaxy	UMA	11.5	13.7	4.2'	11 36.8	+54 18	47	SBbc			H II 784;NGC 3738 in field
NGC 3780	UGC 6615	Galaxy	UMA	11.5	13.5	3'	11 39.4	+56 16	47	Sc			H I 227;P w NGC 3804 at 13.2';PA108
NGC 5631	UGC 9261	Galaxy	UMA	11.5	12.5	2'	14 26.6	+56 35	49	SO			vB diff N w F dk crescent on one side;
NGC 2639	UGC 4544	Galaxy	UMA	11.6	12.3	1.8'	08 43.6	+50 12	44	Sa			H I 204;v faint thin spiral arm;partly obscure on one side
NGC 3614	UGC 6318	Galaxy	UMA	11.6	14.1	4.8'	11 18.4	+45 45	73	Sc			H II 729;comp at 2.6';PA220;0.9'X0.7' dwarf;dif;patchy
NGC 3813	UGC 6651	Galaxy	UMA	11.6	12.5	2'	11 41.3	+36 33	107	Sb			H I 94
NGC 3894	UGC 6779	Galaxy	UMA	11.6	13.4	2'	11 48.8	+59 25	47	E3			H I 248;P w N3895 at 2 ' ;PA60;comp 3.5';PA284;0.8'X0.
NGC 4144	UGC 7151	Galaxy	UMA	11.6	13.7	6.1'	12 10.0	+46 27	74	SBc			H II 747
NGC 3516	UGC 6153	Galaxy	UMA	11.7	12.5	1.9'	11 06.8	+72 34	8	SBO Rin			H II 336;Seyfert
NGC 3600	UGC 6283	Galaxy	UMA	11.7	12.9	4.1'	11 15.9	+41 35	73	Sa			comp 1.8;305;0.3'X0.15';F;comp 2.7;288;0.4'X0.2'
NGC 3738	UGC 6565	Galaxy	UMA	11.7	13.3	2.6'	11 35.8	+54 31	47	Ir			H II 783;UGC 6565;Arp 234;NGC 3756 15' SE
MCG +09-20		Galaxy	UMA	11.7	-	2.5'	11 59.5	+50 55	47				Edge On
NGC 2654	UGC 4605	Galaxy	UMA	11.8	12.9	4.2'	08 49.2	+60 13	44	SBab			
NGC 3027	UGC 5316	Galaxy	UMA	11.8	13.9	4.2'	09 55.7	+72 12	23	SBcd			H V 23;P w NGC 2985 @ 2.7' PA296;UGC 5316
NGC 3769	UGC 6595	Galaxy	UMA	11.8	12.8	2.9'	11 37.7	+47 54	74	SBb			H II 731;np of 2;P w NGC 3769A;nearly edge on
NGC 3917	UGC 6815	Galaxy	UMA	11.8	13.7	5'	11 50.8	+51 49	47	Sc			comp 4.9';PA204;0.3'X0.3';nearly edge on streak
NGC 4290	UGC 7402	Galaxy	UMA	11.8	13.1	2.2'	12 20.8	+58 06	47	SBab Rin			H II 805;in field of 70 UMA
NGC 5422	UGC 8935	Galaxy	UMA	11.8	12.8	3.5'	14 00.7	+55 10	49	Sa			H I 230;svBN w B lens;listed as N 5423 prob misprint
MCG +09-20		Galaxy	UMA	11.8	-	1.5'	11 57.8	+55 28	47				Face On
NGC 2693	UGC 4674	Galaxy	UMA	11.9	13.6	3'	08 57.0	+51 21	44	Ep			H II 823;very compact
NGC 3206	UGC 5589	Galaxy	UMA	11.9	13.6	2.9'	10 21.8	+56 56	45	SBc			H I 266;disturbed;UGC 5589
NGC 3683A	UGC 6484	Galaxy	UMA	11.9	13.3	2.4'	11 29.2	+57 08	46	SBc			P w NGC 3683 at 20'
NGC 3963	UGC 6884	Galaxy	UMA	11.9	13.9	2.7'	11 55.0	+58 30	47	SBbc Rin			H IV 67;beautiful obj w 2 sym arms;in field w Z UMA

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5430	UGC 8937	Galaxy	UMA	11.9	12.8	2.3'	14 00.8	+59 20	49	SBb			H II 827;svBN in B lens w B rim;*superp 22" from N
IC 750	UGC 6973	Galaxy	UMA	11.9	13	2.6'	11 58.9	+42 43	74	Sab			P w IC 749;very red obj
IC 750	UGC 6973	Galaxy	UMA	11.9	13	2.6'	11 58.9	+42 43	74	Sab			P w IC 749;very red obj
NGC 3264	UGC 5719	Galaxy	UMA	12	13.2	2.9'	10 32.3	+56 05	46	SB			
NGC 3687	UGC 6463	Galaxy	UMA	12	13.3	1.9'	11 28.0	+29 31	106	SBbc Ring			comp superimp on the disc at 0.8";PA93;0.1'X0.1'
NGC 4814	UGC 8051	Galaxy	UMA	12	14	3.3'	12 55.4	+58 21	48	SB/P			H I 243
NGC 5389	UGC 8866	Galaxy	UMA	12	13.1	3.6'	13 56.1	+59 44	49	SBO-a			P w NGC 5379;vBN w strong dk lane on one side
MCG +10-19		Galaxy	UMA	12	-	0.5'	13 08.7	+62 17	26				Mostly Face On
NGC 2816	NGC 2742	Galaxy	UMA	12.1	-	3'	09 07.6	+60 29	44	Sc			see 2742
NGC 3182	UGC 5568	Galaxy	UMA	12.1	13.1	2.1'	10 19.6	+58 12	45	Sa			H I 265
NGC 3259	UGC 5717	Galaxy	UMA	12.1	13	2.2'	10 32.6	+65 02	24	SBbc			H II 870;comp 1.2";PA198;0.3'X0.15";UGC 5717
NGC 3448	UGC 6024	Galaxy	UMA	12.1	14.4	5.6'	10 54.6	+54 18	46	Sa			P w UGC 6016;bridge;UGC 6024;Arp 205; near 44 UMA
NGC 3549	UGC 6215	Galaxy	UMA	12.1	13.4	3.1'	11 10.9	+53 23	46	Sc			H I 220;nearly edge on flattened oval
NGC 3595	UGC 6280	Galaxy	UMA	12.1	12.1	1.6"	11 15.4	+47 27	73	E-SO			H III 706
NGC 3888	UGC 6765	Galaxy	UMA	12.1	12.9	1.8"	11 47.6	+55 58	47	SBc			H II 785;comp 3.7";PA30;0.5'X0.4'
NGC 5376	UGC 8852	Galaxy	UMA	12.1	13.1	2.1'	13 55.3	+59 30	49	SBab			H I 238;svBN;weak bar
NGC 5480	UGC 9026	Galaxy	UMA	12.1	12.7	1.6"	14 06.4	+50 43	49	Sc			P w NGC 5481 at 3.2;svBN;sev filam branch;arms poor
MCG +10-19		Galaxy	UMA	12.1	-	1.3'	09 07.6	+60 28	44				Appr. 50/50 Face & Edge On
UGC 5612	PGC 30484	Galaxy	UMA	12.1	14.2	3.4'	10 24.0	+70 53	24	SB+			vF comp west
UGC 6930	MCG +08-22	Galaxy	UMA	12.1	14.6	4.4'	11 57.3	+49 16	74	S(B)d			
NGC 3458	UGC 6037	Galaxy	UMA	12.2	12.3	1.4'	10 56.0	+57 07	46	SBO			H I 268;NGC 3445 group
NGC 3652	UGC 6392	Galaxy	UMA	12.2	12.4	2'	11 22.7	+37 46	106	SBc/P			H II 775
NGC 3658	UGC 6409	Galaxy	UMA	12.2	13	1.8"	11 24.0	+38 34	106	SO			H IV 59;P w NGC 3665
NGC 3674	UGC 6444	Galaxy	UMA	12.2	12.4	1.7'	11 26.4	+57 03	46	SO			H II 886
NGC 4047	UGC 7025	Galaxy	UMA	12.2	12.8	1.2'	12 02.8	+48 38	74	Sbc			H II 741
NGC 5205	UGC 8501	Galaxy	UMA	12.2	13.9	3.1'	13 30.1	+62 31	26	Sb			NGC 5218 group
NGC 2629	UGC 4569	Galaxy	UMA	12.3	13.2	2.3'	08 47.3	+72 59	7	SO			H III 982
NGC 2701	UGC 4695	Galaxy	UMA	12.3	13.5	2.2'	08 59.1	+53 46	44	SBc			bright center;weak bar w dk lanes;knotty spiral arms
NGC 2857	UGC 5000	Galaxy	UMA	12.3	13.7	2.2'	09 24.6	+49 21	71	Sc			Arp's spiral w low surf brightness;2 very long thin arms
NGC 3320	UGC 5794	Galaxy	UMA	12.3	13	2.2'	10 39.6	+47 24	72	SBc			H II 745;UGC 5794
NGC 3668	UGC 6430	Galaxy	UMA	12.3	13.1	1.7'	11 25.5	+63 27	25	Sbc			H II 845
NGC 3677	UGC 6441	Galaxy	UMA	12.3	13.4	1.6'	11 26.3	+46 58	73	Sa			sp of 2
NGC 3786	UGC 6621	Galaxy	UMA	12.3	13.3	2.1'	11 39.7	+31 54	106	SBap			P w NGC 3788 at 1.5'
NGC 3811	UGC 6650	Galaxy	UMA	12.3	13.5	2.2'	11 41.3	+47 41	74	SBc/P			H II 737;SN 1969c
NGC 3838	UGC 6707	Galaxy	UMA	12.3	12.2	1.4'	11 44.2	+57 57	47	Sa			H II 831
NGC 3972	UGC 6904	Galaxy	UMA	12.3	13.7	3.7'	11 55.8	+55 19	47	SBbc			H II 789;NGC 3977 at 5.3";PA37
NGC 5218	UGC 8529	Galaxy	UMA	12.3	13.1	1.8"	13 32.2	+62 46	26	SBb/P			H II 842;Long bridge;plume Seyfert;P w NGC 5216
NGC 5443	UGC 8958	Galaxy	UMA	12.3	13.2	2.7"	14 02.2	+55 49	49	SBb			H II 799
NGC 5481	UGC 9029	Galaxy	UMA	12.3	13.3	1.4'	14 06.7	+50 43	49	E-SO			H II 693;P w NGC 5480
NGC 2756	UGC 4796	Galaxy	UMA	12.4	13	1.7"	09 09.0	+53 51	44	Sb			H II 828
NGC 3266	UGC 5725	Galaxy	UMA	12.4	13.1	1.4'	10 33.3	+64 45	24	SBO			H II 871
NGC 3394	UGC 5937	Galaxy	UMA	12.4	13.3	1.9'	10 50.7	+65 44	24	Sc Ring			H II 872;sp of 2
NGC 3657	UGC 6406	Galaxy	UMA	12.4	13.1	1.7'	11 23.9	+52 55	46	SBc/P			H III 768
NGC 3669	UGC 6431	Galaxy	UMA	12.4	12.5	2'	11 25.4	+57 43	46	SBcd			H II 829
NGC 3683	UGC 6458	Galaxy	UMA	12.4	12.6	1.8"	11 27.5	+56 53	46	SBc			H I 246
NGC 3733	UGC 6554	Galaxy	UMA	12.4	14.8	4.9'	11 35.0	+54 51	47	SBc			tri chain w NGC 3738 at 20.9' and NGC 3756 at 16.4'
NGC 3782	UGC 6618	Galaxy	UMA	12.4	12.9	1.6"	11 39.3	+46 31	74	SBcd			H II 732;asymmetric spiral
NGC 3835	UGC 6703	Galaxy	UMA	12.4	12.7	1.8"	11 44.1	+60 07	47	Sab			
NGC 3891	UGC 6772	Galaxy	UMA	12.4	13.6	2'	11 48.1	+30 22	107	Sbc			H II 723
NGC 3921	UGC 6823	Galaxy	UMA	12.4	13.4	2.1'	11 51.1	+55 05	47	Sa			H II 788;vB core 0.45'X0.35";UGC 6823
NGC 3930	UGC 6833	Galaxy	UMA	12.4	14.4	3'	11 51.8	+38 01	107	SBc			H III 616;comp 3.3";PA75;0.6'X0.4'
NGC 3995	UGC 6944	Galaxy	UMA	12.4	13.4	2.6'	11 57.7	+32 18	107	SB			multiple sys w NGC 3991;3994
NGC 4085	UGC 7075	Galaxy	UMA	12.4	13.1	2.5'	12 05.4	+50 21	47	SBc			H I 224;P w NGC 4088;UGC 7075;Ho 326b
NGC 4335	UGC 7455	Galaxy	UMA	12.4	13.5	1.9'	12 23.0	+58 27	47	Elliptical			H II 806;SN 1955e
IC 749	UGC 6962	Galaxy	UMA	12.4	13.8	2.3'	11 58.6	+42 44	74	SBc Ring			P w IC 750;3.3' distant
IC 749	UGC 6962	Galaxy	UMA	12.4	13.8	2.3'	11 58.6	+42 44	74	SBc Ring			P w IC 750;3.3' distant
UGC 6983	PGC 37735	Galaxy	UMA	12.4	14.6	3.4'	11 59.2	+52 42	47	SB(rs)cd			
NGC 2726	UGC 4750	Galaxy	UMA	12.5	12.2	1.6"	09 04.9	+59 56	44	Sa			H II 834
NGC 2998	UGC 5250	Galaxy	UMA	12.5	13.9	2.7"	09 48.7	+44 05	71	SBc			br in NGC 2998-3010 group;many filam knotty arms
NGC 3065	UGC 5375	Galaxy	UMA	12.5	13.5	1.8"	10 01.9	+72 10	23	SO			P w 3066 2.9' SSE;svBN w inner B center;huge halo
NGC 3471	UGC 6064	Galaxy	UMA	12.5	12.8	1.7"	10 59.1	+61 32	24	Sa			H III 972;sp of 2;comp 2.4";PA55;0.8'X0.2'
NGC 3656	UGC 6403	Galaxy	UMA	12.5	13.4	1.5"	11 23.6	+53 51	46	Elliptical			H II 782;B main body 0.6'X0.5'
NGC 3796	UGC 6638	Galaxy	UMA	12.5	12.6	1.3'	11 40.5	+60 18	47	S pec			
NGC 4068	UGC 7047	Galaxy	UMA	12.5	14.3	3.2'	12 04.0	+52 35	47	Ir			H II 781

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4194	UGC 7241	Galaxy	UMA	12.5	13.1	1.8'	12 14.2	+54 32	47	Ir Bar			H II 867
NGC 4500	UGC 7667	Galaxy	UMA	12.5	12.9	1.6'	12 31.4	+57 58	48	SBa			H I 234
UGC 5139	Holmberg I	Galaxy	UMA	12.5	14.9	3.5'	09 40.5	+71 11	23	Ir+			Dwarf in M81 group
NGC 3043	UGC 5327	Galaxy	UMA	12.6	12.5	1.7'	09 56.2	+59 18	45	Sb			H II 835
NGC 3225	UGC 5631	Galaxy	UMA	12.6	13.3	2.1'	10 25.2	+58 09	45	Sc			H II 882
NGC 3415	UGC 5969	Galaxy	UMA	12.6	13.6	2.1'	10 51.7	+43 43	73	Sa			H II 718
NGC 3445	UGC 6021	Galaxy	UMA	12.6	13.4	1.6'	10 54.6	+56 59	46	Sc			H I 267;Brightest in group;NGC 3458 14' NE
NGC 3648	UGC 6389	Galaxy	UMA	12.6	12.5	1.3'	11 22.5	+39 53	73	SO			
NGC 3757	UGC 6584	Galaxy	UMA	12.6	12.7	1.1'	11 37.0	+58 25	47	SO			H III 843
NGC 3762	UGC 6591	Galaxy	UMA	12.6	12.4	1.8'	11 37.4	+61 46	25	Sa			H II 837
NGC 3788	UGC 6623	Galaxy	UMA	12.6	12.8	1.8'	11 39.7	+31 56	106	SBab/P			P w NGC 3786
NGC 3913	IC 740	Galaxy	UMA	12.6	14.5	2.5'	11 50.6	+55 21	47	Scd Rin			H II 786
NGC 3928	UGC 6834	Galaxy	UMA	12.6	13.3	1.4'	11 51.8	+48 41	74	Elliptical			H II 740;NGC 3932 sf 5'5 is a star
NGC 3985	UGC 6921	Galaxy	UMA	12.6	12.6	1'	11 56.7	+48 20	74	SB			H III 707
NGC 3986	NGC 3966	Galaxy	UMA	12.6	13.3	2.8'	11 56.7	+32 01	107	Sa			P w IC 2978 at 4.8';NGC 3995 group
NGC 3990	UGC 6938	Galaxy	UMA	12.6	12.6	1.4'	11 57.6	+55 27	47	E-SO			H II 791;P w NGC 3998 at 2.9';PA96
NGC 4010	UGC 6964	Galaxy	UMA	12.6	13.7	4.2'	11 58.6	+47 16	74	SBcd			
NGC 4271	UGC 7375	Galaxy	UMA	12.6	13.1	1.5'	12 19.5	+56 44	47	E-SO			H II 804
NGC 4686	UGC 7946	Galaxy	UMA	12.6	12.6	2'	12 46.7	+54 32	48	Sa			H II 795;Brightest in group
NGC 5216	UGC 8528	Galaxy	UMA	12.6	14	1'	13 32.1	+62 42	26	E0p			Arch plume ; bridge to N 5218; Keenan's system
NGC 5475	UGC 9016	Galaxy	UMA	12.6	12.5	1.9'	14 05.2	+55 45	49	Sa			H II 800
UGC 5459	MCG +09-17	Galaxy	UMA	12.6	13.8	4.2'	10 08.1	+53 05	45	Sc			
UGC 6591	NGC 3762	Galaxy	UMA	12.6	12.4	1.9'	11 37.4	+61 46	106	Sdm			
UGC 6917	MCG +09-20	Galaxy	UMA	12.6	14.6	3.5'	11 56.5	+50 25	47	SBm			
NGC 2771	UGC 4817	Galaxy	UMA	12.7	14.1	2.3'	09 10.7	+50 23	44	SBab			P w NGC 2769;2769 group
NGC 3654	UGC 6407	Galaxy	UMA	12.7	12.3	1.2'	11 24.2	+69 25	25	S pec			H II 880
NGC 3809	UGC 6649	Galaxy	UMA	12.7	12.4	1'	11 41.3	+59 53	47	SO			
NGC 3971	NGC 3984	Galaxy	UMA	12.7	13.1	1.4'	11 55.6	+30 00	107	SO			H II 724;P w UGC 6905
NGC 3978	UGC 6910	Galaxy	UMA	12.7	13.5	1.7'	11 56.2	+60 31	47	SBbc			comp 2 ' ;PA292;0.6'x0.25';comp 3.8';PA22;0.5'X0.12'
NGC 3994	UGC 6936	Galaxy	UMA	12.7	12	0.9'	11 57.6	+32 17	107	Scp			P w NGC 3995 at 2 ' ;PA242
NGC 4020	UGC 6971	Galaxy	UMA	12.7	13.3	1.9'	11 58.9	+30 25	107	SBcd			H II 725
UGC 6628	MCG +08-21	Galaxy	UMA	12.7	14.8	3.4'	11 40.1	+45 55	74	Sm			
NGC 2800	UGC 4920	Galaxy	UMA	12.8	13.1	1.4'	09 18.6	+52 31	44	Elliptical			H III 832
NGC 2820	UGC 4961	Galaxy	UMA	12.8	13.4	4.1'	09 21.8	+64 15	23	SBc/P			v flat cent bulge w dk lanes;knotty out arms;w 2820
NGC 2959	UGC 5202	Galaxy	UMA	12.8	13.2	1.3'	09 45.1	+68 36	23	SBb/P			P w NGC 2961
NGC 3353	UGC 5860	Galaxy	UMA	12.8	12.9	1.4'	10 45.4	+55 58	46	Sb			H III 842;Har0 3;UGC 5860
NGC 3364	UGC 5890	Galaxy	UMA	12.8	13.5	1.5'	10 48.5	+72 25	24	SBbc			H III 318
NGC 3755	UGC 6577	Galaxy	UMA	12.8	14.3	3.4'	11 36.6	+36 25	106	SBc/P			
NGC 3922	NGC 3924	Galaxy	UMA	12.8	12.9	1.7'	11 51.2	+50 09	47	Sa			H III 716;comp 4.7';PA60;0.4'X0.2'
NGC 5109	NGC 5113	Galaxy	UMA	12.8	12.4	1.7'	13 20.9	+57 39	48	Sbc			H II 826;NGC 5113 at 5' nf
IC 875	UGC 8355	Galaxy	UMA	12.8	13	1.2'	13 17.1	+57 32	48	SO			
UGC 6534	PGC 35675	Galaxy	UMA	12.8	13.1	3'	11 33.2	+63 17	25	Sd			
NGC 2614	UGC 4523	Galaxy	UMA	12.9	14.5	2.4'	08 42.8	+72 59	7	Sc			
NGC 2684	UGC 4662	Galaxy	UMA	12.9	12.4	0.9'	08 54.9	+49 10	70	Sc			peculiar;group of small galaxies;bright center;asymdisc
NGC 2710	UGC 4705	Galaxy	UMA	12.9	13.4	2'	08 59.8	+55 42	44	SBb			H III 841
NGC 3066	UGC 5379	Galaxy	UMA	12.9	12.9	1.1'	10 02.2	+72 08	23	SBb/P			P w NGC 3065;disturbed;asym main body 0.8'X0.6'
NGC 3238	UGC 5649	Galaxy	UMA	12.9	13.4	1.3'	10 26.7	+57 14	45	SO			H II 883;UGC 5649
NGC 3478	UGC 6069	Galaxy	UMA	12.9	13.9	2.6'	10 59.5	+46 07	73	SBbc			H III 705;comp 2 ' ;PA195;UGC 6069
NGC 3488	UGC 6096	Galaxy	UMA	12.9	13.6	1.8'	11 01.4	+57 41	46	SBc			H I 269;Lord Rosse says cB in 72 inch
NGC 3694	UGC 6480	Galaxy	UMA	12.9	11.8	0.7'	11 28.9	+35 25	106	Elliptical			comp 4.8';PA56;0.3'X0.1'
NGC 3737	UGC 6563	Galaxy	UMA	12.9	12.8	1.1'	11 35.6	+54 57	47	SBO			H III 772
NGC 3770	UGC 6600	Galaxy	UMA	12.9	12.4	1'	11 38.0	+59 37	47	SBa			H II 838
NGC 3804	NGC 3794	Galaxy	UMA	12.9	14	2.2'	11 40.9	+56 12	47	SBc			P w NGC 3780 at 13.5';H II 830
NGC 3896	UGC 6781	Galaxy	UMA	12.9	13.1	1.5'	11 48.9	+48 40	74	SBO-a			H II 739
NGC 3897	UGC 6784	Galaxy	UMA	12.9	14.2	1.9'	11 49.0	+35 01	107	SBbc			H II 408;comp 1.8';PA34;0.2'X0.15';UGC 6784
NGC 3906	UGC 6797	Galaxy	UMA	12.9	14	1.8'	11 49.7	+48 26	74	SBcd			H III 715
NGC 4081	UGC 7062	Galaxy	UMA	12.9	12.6	1.5'	12 04.6	+64 26	25	Sa			
NGC 4161	UGC 7191	Galaxy	UMA	12.9	12.5	1.1'	12 11.5	+57 44	47	Sc			H II 803
NGC 5379	UGC 8860	Galaxy	UMA	12.9	13.5	2.1'	13 55.6	+59 45	49	SBO-a			H I 239;P w NGC 5389 at 4.1' f vsBN
UGC 5460	PGC 29469	Galaxy	UMA	12.9	14.5	2.5'	10 08.1	+51 50	45	SBd			vF companion 6' east
UGC 6446	MCG +09-19	Galaxy	UMA	12.9	15.1	4'	11 26.6	+53 44	46	Sd			
NGC 2769	UGC 4816	Galaxy	UMA	13	12.5	1.8'	09 10.5	+50 26	44	Sa			brightest in NGC 2769 group
NGC 2854	UGC 4995	Galaxy	UMA	13	12.9	1.6'	09 24.0	+49 12	71	SBb			H III 714;Arp class=double galaxy;brightest of 3
NGC 2870	UGC 5034	Galaxy	UMA	13	13.4	2.5'	09 27.9	+57 23	44	SBbc			H III 846

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3111	UGC 5441	Galaxy	UMA	13	12.5	0.9'	10 06.1	+47 16	72	E-SO			comp 2.1';PA20;0.4'X0.2';dif
NGC 3220	IC 604	Galaxy	UMA	13	12.9	1.3'	10 23.7	+57 02	45	Sb			H III 911
NGC 3237	UGC 5640	Galaxy	UMA	13	13.4	1.3'	10 25.7	+39 39	72	SO Ring			H III 631;comp 2.2';PA316;0.35'X 0.25';UGC 5640
NGC 3468	UGC 6048	Galaxy	UMA	13	13.4	1.6'	10 57.5	+40 57	73	SO			H III 632;nff of 2;comp 1.9';PA243;0.4'X0.2'
NGC 3725	UGC 6542	Galaxy	UMA	13	13	1.2'	11 33.7	+61 53	25	SBc			H II 836
NGC 3870	UGC 6742	Galaxy	UMA	13	12.8	1'	11 45.9	+50 12	47	SO			H III 833
NGC 3958	UGC 6880	Galaxy	UMA	13	12.8	1.3'	11 54.6	+58 22	47	SBa			P w NGC 3963 @ 8.3';PA3;comp 0.4';PA95;0.1'X0.1'
NGC 4384	UGC 7506	Galaxy	UMA	13	13.2	1.3'	12 25.2	+54 30	47	Sap			
NGC 5250	UGC 8594	Galaxy	UMA	13	12.7	1'	13 36.1	+51 14	49	SO			H II 817
NGC 5368	UGC 8834	Galaxy	UMA	13	12.4	0.9'	13 54.5	+54 20	49	SBab			H III 786
UGC 4499	PGC 24242	Galaxy	UMA	13	14.6	2.6'	08 37.6	+51 39	44	S(B)dm			Mrk 94 superimposed 0.7' south foll
UGC 5953	Mrk 155	Galaxy	UMA	13	11.1	0.6'	10 51.3	+44 34	73	Pec			
NGC 2676	UGC 4627	Galaxy	UMA	13.1	13.3	1.2'	08 51.6	+47 33	70	SO			vB core;e diff disc or corona;compact
NGC 2856	UGC 4997	Galaxy	UMA	13.1	12.3	1.1'	09 24.3	+49 15	71	Sbc			narrow tail leads away from nucleus;2854 group
NGC 2892	UGC 5073	Galaxy	UMA	13.1	13.7	1.4'	09 32.9	+67 37	23	SO p			brightest in group;compact? (*) superimposed at 0.3
NGC 3179	UGC 5555	Galaxy	UMA	13.1	13	1.8'	10 18.0	+41 07	72	SO			
NGC 3625	UGC 6348	Galaxy	UMA	13.1	13.2	2'	11 20.5	+57 47	46	SBb			H II 885;UGC 6348
NGC 3795	UGC 6629	Galaxy	UMA	13.1	13.1	2.1'	11 40.1	+58 37	47	Sbc			H III 844
NGC 3895	UGC 6785	Galaxy	UMA	13.1	13.2	1.1'	11 49.1	+59 26	47	SBa			H II 832;P w NGC 3894 at 2 '
NGC 3991	UGC 6933	Galaxy	UMA	13.1	12.4	1.3'	11 57.5	+32 20	107	Ir Bar			NGC 3994 at 3.8'
NGC 4566	UGC 7769	Galaxy	UMA	13.1	13	1.3'	12 36.0	+54 13	48	Sbc			H III 880
NGC 5201	UGC 8480	Galaxy	UMA	13.1	13.5	1.7'	13 29.3	+53 05	48	S Ring			complex spir pattern in centr reg;2 asym outer arms
NGC 5370	UGC 8832	Galaxy	UMA	13.1	13.3	1.1'	13 54.2	+60 41	49	SBO Rin			H II 843
UGC 6520	Mrk 175	Galaxy	UMA	13.1	12.9	1.6'	11 32.5	+62 30	25	SB			north preced of 2
UGC 6616	PGC 36137	Galaxy	UMA	13.1	14.7	2.3'	11 39.4	+58 16	47	Sd			
UGC 6817	PGC 37050	Galaxy	UMA	13.1	14.9	4.1'	11 50.8	+38 52	107	Ir+			
UGC 8658	PGC 48392	Galaxy	UMA	13.1	14.8	2.8'	13 40.7	+54 20	49	SAB(rs)c			
NGC 2742A	UGC 4803	Galaxy	UMA	13.2	13.1	1.6'	09 10.0	+62 15	23	SBb/P			
NGC 3202	UGC 5581	Galaxy	UMA	13.2	13.1	1.2'	10 20.5	+43 01	72	SBa			tri grp w NGC3205@ 4.4';PA132;NGC3207;PA112
NGC 3205	UGC 5585	Galaxy	UMA	13.2	13.5	1.4'	10 20.8	+42 58	72	Pec			H II 721;peculiar;NGC 3202 group
NGC 3207	UGC 5587	Galaxy	UMA	13.2	13.1	1.3'	10 21.0	+42 59	72	Pec			H II 722;peculiar;NGC 3202 group
NGC 3435	UGC 6025	Galaxy	UMA	13.2	13.9	1.8'	10 54.8	+61 17	24	Sb			H II 887;B main body;F disc;alm dissolved arms
NGC 3440	UGC 6009	Galaxy	UMA	13.2	13.1	2.1'	10 53.8	+57 07	46	SBb			H III 914;NGC 3445 group
NGC 3470	UGC 6060	Galaxy	UMA	13.2	13.7	1.5'	10 58.7	+59 31	46	Sab Ring			H II 888;n of 2;UGC 6060
NGC 3622	UGC 6339	Galaxy	UMA	13.2	12.4	1.2'	11 20.2	+67 14	24	S pec			H II 879
NGC 3935	UGC 6843	Galaxy	UMA	13.2	12.4	1.1'	11 52.4	+32 24	107	Sb			
NGC 4149	NGC 4154	Galaxy	UMA	13.2	11.9	1.3'	12 10.5	+58 18	47	S pec			H II 802
NGC 4172	UGC 7205	Galaxy	UMA	13.2	13.5	1.3'	12 12.2	+56 11	47	S pec			H II 792
NGC 4669	UGC 7925	Galaxy	UMA	13.2	12.3	1.5'	12 44.8	+54 53	48	Sb			NGC 4686 group
NGC 4964	UGC 8184	Galaxy	UMA	13.2	12.5	1.1'	13 05.4	+56 19	48	SO			H III 779
NGC 5256	UGC 8632	Galaxy	UMA	13.2	13.3	1.2'	13 38.3	+48 17	76	Sab			post-eruptive pair of compacts;w ext plumes;jets;halo
NGC 5372	UGC 8843	Galaxy	UMA	13.2	11.5	0.6'	13 54.8	+58 40	49	Pec			H III 809;Peculiar
UGC 5688	PGC 30983	Galaxy	UMA	13.2	15.3	3.6'	10 30.4	+70 04	24	S(B)+			Part of chain of faint gals w knots
UGC 6029	Mrk 157	Galaxy	UMA	13.2	12.9	0.9'	10 55.0	+49 44	73	Pec			UGC 6013 group
UGC 6162	MCG +09-18	Galaxy	UMA	13.2	14.3	2.5'	11 06.8	+51 12	46	Sc			Mislabeled on U2000 as UGC 6163
UGC 7020	Mrk 195	Galaxy	UMA	13.2	14.6	2.1'	12 02.6	+41 03	25	SA			
NGC 2650	UGC 4603	Galaxy	UMA	13.3	13.8	1.6'	08 50.0	+70 18	22	SBb			H II 908
NGC 2675	UGC 4629	Galaxy	UMA	13.3	13.8	1.5'	08 52.1	+53 37	44	Elliptical			
NGC 2692	UGC 4675	Galaxy	UMA	13.3	12.7	1.3'	08 57.0	+52 04	44	SBab			H III 831
NGC 3102	UGC 5418	Galaxy	UMA	13.3	12.6	0.9'	10 04.5	+60 06	45	E-SO			H III 916
NGC 3191	NGC 3192	Galaxy	UMA	13.3	12.4	0.8'	10 19.1	+46 27	72	SBbc/P			massive;v tightly wound arms;comp at 1.3';PA268
NGC 3540	NGC 3548	Galaxy	UMA	13.3	13.7	1.4'	11 09.3	+36 01	106	SBO			
NGC 3550	UGC 6214	Galaxy	UMA	13.3	13.2	1'	11 10.6	+28 46	106	E-SO			H III 351;peculiar;double nucleus
NGC 3569	UGC 6238	Galaxy	UMA	13.3	13.3	1.1'	11 12.1	+35 27	106	SO			comp 1.9';PA248;0.25'X0.15';B lens
NGC 3759	UGC 6581	Galaxy	UMA	13.3	13.3	1'	11 36.9	+54 49	47	SBO			P w IC 2943
NGC 3846A	UGC 6706	Galaxy	UMA	13.3	14.3	1.9'	11 44.2	+55 02	47	Ir Bar			
NGC 3847	NGC 3856	Galaxy	UMA	13.3	13.5	1.1'	11 44.2	+33 31	107	Elliptical			
NGC 3850	UGC 6733	Galaxy	UMA	13.3	14.1	2.1'	11 45.6	+55 53	47	Sbc			H III 776
NGC 4142	UGC 7140	Galaxy	UMA	13.3	14.2	2.2'	12 09.5	+53 06	47	SBcd			H III 814
NGC 4973	IC 847	Galaxy	UMA	13.3	-	0.5'	13 05.5	+53 41	48	Elliptical			H III 781
NGC 4977	UGC 8196	Galaxy	UMA	13.3	14.1	1.5'	13 06.1	+55 39	48	Sb			H III 780
NGC 5007	UGC 8240	Galaxy	UMA	13.3	12.4	0.9'	13 09.2	+62 10	26	E-SO			H III 848;In group w UGC 8214;8234 and 8237
NGC 5486	UGC 9036	Galaxy	UMA	13.3	14	1.5'	14 07.4	+55 06	49	Sm			H II 801;P w NGC 5485 at 6'
IC 758	UGC 7056	Galaxy	UMA	13.3	14.6	1.9'	12 04.2	+62 30	25	Sbc			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
UGC 6955	PGC 37689	Galaxy	UMA	13.3	15.9	5.3'	11 58.4	+38 04	107	Ir+			
NGC 3073	UGC 5374	Galaxy	UMA	13.4	13.7	1.2'	10 00.9	+55 37	45	SBO			H III 853;NGC 3079 group
NGC 3135	UGC 5486	Galaxy	UMA	13.4	12.5	0.9'	10 10.9	+45 57	72	Sbc			
NGC 3168	UGC 5536	Galaxy	UMA	13.4	13.3	1'	10 16.4	+60 14	45	Elliptical			compact;brightest in triple group
NGC 3408	UGC 5977	Galaxy	UMA	13.4	13.1	0.8'	10 52.2	+58 26	46	Sc			H III 913
NGC 3577	UGC 6257	Galaxy	UMA	13.4	14	1.4'	11 13.7	+48 16	73	SBa			P w NGC 3583 at 5.1';PA57;comp 2.8';PA322;0.6'X0.5'
NGC 3931	NGC 3917A	Galaxy	UMA	13.4	13.3	1.1'	11 51.2	+52 00	47	E-SO			H III 769;comp 3.8';PA140;0.45'X0.35'
NGC 3977	NGC 3980	Galaxy	UMA	13.4	14.3	1.5'	11 56.1	+55 23	47	Sab			H II 790
NGC 4097	UGC 7092	Galaxy	UMA	13.4	13.1	1.2'	12 06.0	+36 52	107	SO			H III 400
NGC 4646	UGC 7892	Galaxy	UMA	13.4	11.4	0.6'	12 42.9	+54 51	48	SO			NGC 4686 group
NGC 4695	UGC 7966	Galaxy	UMA	13.4	12.9	1.1'	12 47.5	+54 22	48	SBbc			H II 796;NGC 4686 group
UGC 4922	PGC 26304	Galaxy	UMA	13.4	14.9	3.9'	09 18.6	+47 52	71	Sm			
UGC 5707	MCG +07-22	Galaxy	UMA	13.4	14.8	2.5'	10 31.3	+43 08	72	S(B)c			
UGC 8837	Holmberg IV	Galaxy	UMA	13.4	15.1	4'	13 54.8	+53 54	49	Ir+			In M101 group;MCG +09-23-017
NGC 2810A	NGC 2810	Galaxy	UMA	13.5	-	1.7'	09 22.1	+71 51	23	E0			H III 749
NGC 3009	UGC 5264	Galaxy	UMA	13.5	12.7	0.8'	09 50.2	+44 18	71	Sc			NGC 2998 at 20 sp
NGC 3984	NGC 3971	Galaxy	UMA	13.5	13.7	1.4'	11 55.6	+30 00	107	SO			
NGC 4284	UGC 7393	Galaxy	UMA	13.5	14.5	2.5'	12 20.2	+58 06	47	Sbc			H III 798;P w NGC 4290
NGC 5342	UGC 8776	Galaxy	UMA	13.5	12.5	1.1'	13 51.4	+59 52	49	SO			H III 849
UGC 4749	PGC 25473	Galaxy	UMA	13.5	12.6	0.9'	09 04.5	+51 37	44	S			
UGC 6161	PGC 33625	Galaxy	UMA	13.5	14.6	2.6'	11 06.8	+43 44	73	SBdm			vF companion 3' east
UGC 6667	PGC 36343	Galaxy	UMA	13.5	13.8	3.4'	11 42.4	+51 36	47	Sc			
NGC 2641	UGC 4577	Galaxy	UMA	13.6	13.9	1.3'	08 48.0	+72 54	7	SO			H III 983;compact
NGC 3164	UGC 5527	Galaxy	UMA	13.6	12.8	0.9'	10 15.2	+56 40	45	S pec			comp at 4.3';PA176;0.6'X0.3'
NGC 3286	NGC 3284	Galaxy	UMA	13.6	12.5	1.4'	10 36.4	+58 37	46	Elliptical			H III 917
NGC 3407	UGC 5978	Galaxy	UMA	13.6	13.5	1.4'	10 52.3	+61 23	24	E-SO			H III 919
NGC 3499	UGC 6115	Galaxy	UMA	13.6	12.9	0.7'	11 03.2	+56 13	46	Sa			H III 793
NGC 3558	MCG 5-27-	Galaxy	UMA	13.6	13.1	0.9'	11 10.9	+28 33	106	Elliptical			compact
NGC 3759A	UGC 6582	Galaxy	UMA	13.6	13.7	1.2'	11 37.0	+55 10	47	SBc/P			n of 2
NGC 3824	UGC 6676	Galaxy	UMA	13.6	13.3	1.3'	11 42.7	+52 47	47	Sa			H III 774;P w NGC 3829
NGC 4025	UGC 6982	Galaxy	UMA	13.6	15	2.8'	11 59.2	+37 48	107	SBc			H III 617
NGC 4198	UGC 7246	Galaxy	UMA	13.6	12.9	1'	12 14.4	+56 01	47	Sa			H II 793
NGC 5163	UGC 8453	Galaxy	UMA	13.6	13.4	1.1'	13 26.9	+52 45	48	Elliptical			H III 821
NGC 5278	UGC 8677	Galaxy	UMA	13.6	-	0.8'	13 41.7	+55 40	49	SB/P			pair of blue dbl intercon Sc's w cross-jets;Arp 239
NGC 5425	UGC 8933	Galaxy	UMA	13.6	13.5	1.9'	14 00.8	+48 27	77	Scd			
UGC 8058	Mrk 231	Galaxy	UMA	13.6	13.7	1.7'	12 56.2	+56 52	48	Sc pec			Compact core fine streamers
NGC 2814	UGC 4952	Galaxy	UMA	13.7	12.5	1.1'	09 21.2	+64 15	23	Sb			H II 868;NGC 2805 group
NGC 3188	UGC 5569	Galaxy	UMA	13.7	13.3	0.9'	10 19.7	+57 25	45	SBab			H III 910;nff of 2;comp 0.7';PA246;0.45'X0.3'
NGC 3374	UGC 5901	Galaxy	UMA	13.7	13.7	1.3'	10 48.0	+43 11	72	SBc			nff of 2;comp at 2.3';PA197;0.35'x 0.18';mag 15.6
NGC 3392	MCG 11-13-	Galaxy	UMA	13.7	12.8	0.8'	10 51.0	+65 47	24	Elliptical			H III 881
NGC 3406	UGC 5970	Galaxy	UMA	13.7	-	0.9'	10 51.7	+51 01	46	E-SO			double system
NGC 3527	UGC 6170	Galaxy	UMA	13.7	13.5	1'	11 07.3	+28 32	106	SBa			H III 350;P w UGC 6166
NGC 3536	UGC 6191	Galaxy	UMA	13.7	13.5	1.1'	11 08.9	+28 29	106	SBO-a R			
NGC 3594	UGC 6286	Galaxy	UMA	13.7	14.1	1.3'	11 16.2	+55 42	46	SBO			H III 770;comp 2.2';PA219;0.45'X0.4'
NGC 4141	UGC 7147	Galaxy	UMA	13.7	13.7	1.3'	12 09.8	+58 51	47	SBc			H III 795
NGC 5164	UGC 8458	Galaxy	UMA	13.7	13.4	1'	13 27.2	+55 29	48	SBb			H III 784;comp at 4' PA 281
NGC 5402	UGC 8903	Galaxy	UMA	13.7	12.6	1.3'	13 58.3	+59 49	49	S pec			H III 810
UGC 4687	PGC 25227	Galaxy	UMA	13.7	12.4	0.8'	08 58.9	+66 28	22	Pec			vF companion south
UGC 6399	PGC 34971	Galaxy	UMA	13.7	14.4	3.3'	11 23.4	+50 55	46	Sm			
NGC 2656	MCG 9-15-	Galaxy	UMA	13.8	14.2	1.3'	08 47.9	+53 53	44	SOp			double system in halo
NGC 2767	UGC 4813	Galaxy	UMA	13.8	11.6	0.4'	09 10.2	+50 24	44	S			NGC 2769 group
NGC 3517	UGC 6144	Galaxy	UMA	13.8	-	0.7'	11 05.6	+56 31	46	Sab			H II 884;s of 2;contact
NGC 3530	UGC 6188	Galaxy	UMA	13.8	11.7	0.7'	11 08.7	+57 14	46	S			H III 915
NGC 3589	UGC 6275	Galaxy	UMA	13.8	13.8	1.5'	11 15.2	+60 42	46	SBcd R			H III 921
NGC 3880	MCG 6-26-	Galaxy	UMA	13.8	12.7	0.7'	11 46.4	+33 10	107	Elliptical			
Abell 1228		Gal CL	UMA	13.8	-	50.4'	11 21.5	+34 20	106	1 1 II-III			15 Gal/Deg; drawing in Webb Hnbk 5; 50 galaxies
UGC 5028	PGC 26849	Galaxy	UMA	13.8	12.4	0.7'	09 27.8	+68 25	23	SBdm pe			P w UGC 5029 sep 70" E-W
UGC 8146	MCG +10-19	Galaxy	UMA	13.8	13.9	3.7'	13 02.1	+58 42	48	Sc			
NGC 2740	MCG 9-15-	Galaxy	UMA	13.9	13.3	1'	09 06.1	+51 44	44	Sab Ring			
NGC 3214	MCG 10-15-	Galaxy	UMA	13.9	13.9	0.7'	10 23.1	+57 02	45	Sa			
NGC 3712	UGC 6511	Galaxy	UMA	13.9	13.8	1.7'	11 31.2	+28 34	106	SB/P			
NGC 3846	UGC 6710	Galaxy	UMA	13.9	13.5	1'	11 44.5	+55 39	47	Sbc			
NGC 3916	UGC 6819	Galaxy	UMA	13.9	13.3	1.5'	11 50.9	+55 09	47	Sb			H II 787;P w NGC 3921 at 4.5';PA151
NGC 4644	NGC 4644A	Galaxy	UMA	13.9	13.5	1.6'	12 42.7	+55 09	48	SBb/P			H II 794;NGC 4686 group

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4732	UGC 7988	Galaxy	UMA	13.9	13.5	1.2'	12 50.1	+52 51	48	Elliptical			H II 814
IC 691	UGC 6447	Galaxy	UMA	13.9	12.4	0.6'	11 26.7	+59 09	46	Pec			compact w jet
Abell 1314		Gal CL	UMA	13.9	-	28'	11 34.8	+49 03	73	0 1 III			10 Gal/Deg; 44 galaxies
UGC 5998	Mrk 156	Galaxy	UMA	13.9	12.5	0.9'	10 53.2	+50 17	46	Pec			Disrupted pair?
UGC 6840	PGC 37164	Galaxy	UMA	13.9	13.8	2.3'	11 52.1	+52 06	47	SB(rs)m			
UGC 7089	PGC 38356	Galaxy	UMA	13.9	14.6	3.4'	12 05.9	+43 08	74	Sm			
UGC 8508	MCG +09-22	Galaxy	UMA	13.9	14.3	1.4'	13 30.8	+54 55	49	Ir+			
NGC 2909		2 Stars	UMA	14	-		09 37.0	+65 56	23				
NGC 3288	UGC 5752	Galaxy	UMA	14	13.8	0.9'	10 36.4	+58 33	46	SBbc			H III 918;P w NGC 3286;UGC 5752
NGC 3700	UGC 6494	Galaxy	UMA	14	13.6	1'	11 29.6	+35 31	106	SBab			comp 1.5';PA70;0.35'X0.12'
NGC 3741	UGC 6572	Galaxy	UMA	14	14.8	2'	11 36.1	+45 17	74	Ir			
NGC 3795B	UGC 6604	Galaxy	UMA	14	-	1'	11 38.1	+58 45	47	E-SO			
NGC 3829	UGC 6690	Galaxy	UMA	14	13.5	1'	11 43.5	+52 43	47	SBb			H III 775;P w NGC 3824 at 7.6';PA304
NGC 3835A	UGC 6762	Galaxy	UMA	14	-	1'	11 47.4	+60 18	47	Sb			
NGC 5216A	UGC 8571	Galaxy	UMA	14	-	1.2'	13 34.7	+62 00	26	S			
NGC 5477	UGC 9018	Galaxy	UMA	14	14.7	1.6'	14 05.6	+54 28	49	Sm			H III 790
Abell 1185	Arp 105	Gal CL	UMA	14	-	28'	11 10.6	+28 46	106	1 2 II			Incl 3550 and Ambartsumian's Knot ; 52 galaxies
UGC 6637	Mrk 1507	Galaxy	UMA	14	12.4	0.8'	11 40.4	+28 23	107	Pec			
NGC 3180		Neb+Gx	UMA	-	-		10 18.2	+41 27	72	E+*			An HII region within the GALXY NGC 3184 on the NW side
NGC 3181		Neb+Gx	UMA	-	-		10 18.2	+41 25	72	E+*			An HII region within the GALXY NGC 3184 on the W side
NGC 3231		Opn CL	UMA	-	-	4'	10 27.0	+66 49	24				
NGC 5447		Neb+Gx	UMA	-	-		14 02.5	+54 17	49	E+*			H III 787;knot on the arm of NGC 5457 = M 101
NGC 5449		Neb+Gx	UMA	-	-		14 02.5	+54 20	49	E+*			knot on the arm of NGC 5457 = M 101
NGC 5450		Neb+Gx	UMA	-	-		14 02.5	+54 16	49	E+*			knot on the arm of NGC 5457 = M 101
NGC 5451		Neb+Gx	UMA	-	-		14 02.6	+54 22	49	E+*			knot on the arm of NGC 5457 = M 101
NGC 5453		Neb+Gx	UMA	-	-		14 02.9	+54 18	49	E+*			knot on the arm of NGC 5457 = M 101
NGC 5455		Neb+Gx	UMA	-	-		14 03.0	+54 14	49	E+*			knot on the arm of NGC 5457 = M 101
NGC 5458		Neb+Gx	UMA	-	-		14 03.2	+54 18	49	E+*			knot on the arm of NGC 5457 = M 101
NGC 5461		Neb+Gx	UMA	-	-		14 03.7	+54 19	49	E+*			H III 788;knot on the arm of NGC 5457 = M 101
NGC 5462		Neb+Gx	UMA	-	-		14 03.9	+54 22	49	E+*			H III 789;knot on the arm of NGC 5457 = M 101
UGC 9749	Ursa Minor	Galaxy	UMI	10.9	17.8	27.3'	15 08.8	+67 12	28	dE6			Member Local Group, Ursa minor dwarf
NGC 6217	UGC 10470	Galaxy	UMI	11.2	13.2	3.3'	16 32.6	+78 12	11	SBbc Rim			H I 280;Narrow filaments;Arp 185;UGC 10470
NGC 5832	UGC 9649	Galaxy	UMI	12.1	14.2	3.6'	14 57.8	+71 41	27	SBb			H II 332;unusual obj;bar and spir pattern very blue
NGC 6048	UGC 10124	Galaxy	UMI	12.3	13.7	2.2'	15 57.5	+70 41	28	E2			H II 873;np of 2;UGC 10124
NGC 6251	UGC 10501	Galaxy	UMI	12.6	13.7	1.8'	16 32.5	+82 32	11	Elliptical			H III 974;P w NGC 6252 at 2.4' PA 10
NGC 6068	UGC 10126	Galaxy	UMI	12.8	12.4	1'	15 55.4	+79 00	11	SBbc			H III 973;nf of 2;distorted;UGC 10126
NGC 6324	UGC 10725	Galaxy	UMI	12.8	11.9	1'	17 05.4	+75 24	11	Sbc			Bright main body w one arm on p side;UGC 10725
NGC 5939	UGC 9854	Galaxy	UMI	13	11.9	0.9'	15 24.8	+68 44	28	Sbc			comp at 8.2' PA 225 0.5X0.3 m=15.5
NGC 5144A	UGC 8420	Galaxy	UMI	13.1	13	1.2'	13 22.9	+70 31	26	Scp			blue post-eruptive distorted spir w conds and jets
NGC 5034	UGC 8295	Galaxy	UMI	13.2	12.6	0.9'	13 12.3	+70 39	26	Sc			H III 909
NGC 6094	UGC 10228	Galaxy	UMI	13.2	14.1	1.8'	16 06.6	+72 30	11	SO			H III 314
NGC 5452	UGC 8867	Galaxy	UMI	13.3	14.3	2'	13 54.4	+78 13	10	SBcd			H III 947
NGC 5671	UGC 9297	Galaxy	UMI	13.3	13.9	1.7'	14 27.7	+69 42	27	SBb			H III 882;2 unequal arms;bent in opposite directions?
NGC 5412	UGC 8905	Galaxy	UMI	13.4	13.5	1.2'	13 57.2	+73 37	10	E-SO			sev faint comp in field
NGC 5607	UGC 9189	Galaxy	UMI	13.4	12.9	0.9'	14 19.4	+71 35	27	S pec			H II 331;Peculiar
NGC 5323	UGC 8719	Galaxy	UMI	13.5	12.8	1.4'	13 45.6	+76 50	10	Sab			H II 899;compact; sev F galaxies nearby
NGC 5819	NGC 5808	Galaxy	UMI	13.5	13.2	0.9'	14 54.0	+73 08	10	SBbc			H III 311;comp 3.2';PA130;0.6X0.3;UGC 9609
NGC 6011	UGC 10047	Galaxy	UMI	13.5	13.8	2'	15 46.5	+72 10	28	Sb			H III 313
NGC 5314	MCG 12-13	Galaxy	UMI	13.7	-	1'	13 46.2	+70 20	26	S			
NGC 5909	UGC 9778	Galaxy	UMI	13.7	12.9	1.1'	15 11.5	+75 23	11	Sbc			H III 943;Error in CGCG 5909=5912;* superimp
NGC 5912	MCG 13-11	Galaxy	UMI	13.7	-	1.2'	15 11.7	+75 23	11	E-SO			H III 944;Error in CGCG; MCG +13-11-011
UGC 10054	PGC 55887	Galaxy	UMI	13.7	14.7	2.5'	15 44.0	+81 50	11	SBdm			south foll of 2;may be disturbed by vF companion
NGC 5262	UGC 8606	Galaxy	UMI	13.8	13.5	1.2'	13 35.6	+75 02	10	E-SO			P w UGC 8595
NGC 5836	UGC 9664	Galaxy	UMI	13.9	13.9	1.2'	14 59.5	+73 54	10	SBb Rim			H III 312;VII Zw 576
NGC 6068A	MCG 13-11	Galaxy	UMI	14	11.8	0.9'	15 54.8	+78 59	11	SO			p @ 2'
NGC 6071	MCG 12-15	Galaxy	UMI	14	13.6	0.8'	16 02.1	+70 25	28	E-SO			H III 883
IC 2391	Cr 191	Opn CL	VEL	2.5	-	60'	08 39.6	-52 55	425	II 3 p	30	3.6	Scattered group of 10 * incl Omicron Velorum
IC 2395	Cr 192	Opn CL	VEL	4.6	-	17'	08 42.5	-48 08	397	II 3 p	40	5.5	Cluster NGC 2670 in field 30' south
Tr 10	Cr 203	Opn CL	VEL	4.6	-	15'	08 47.8	-42 29	397	II 2 p	40	6.4	
NGC 2547	OCL 753	Opn CL	VEL	4.7	-	20'	08 10.2	-49 12	396	II 2 p n	80	6.5	
Pismis 4		Opn CL	VEL	5.9	-	18'	08 34.6	-44 22	397	IV 1 p n	45	7.3	
NGC 3228	OCL 800	Opn CL	VEL	6	-	5'	10 21.4	-51 43	426	I 1 p	15	7.9	25* mags 9...
NGC 2669	OCL 768	Opn CL	VEL	6.1	-	20'	08 46.4	-52 57	425	II 3 p	40	7.6	
Cr 197		Opn CL	VEL	6.7	-	17'	08 44.7	-41 17	397	IV 2 p n	40	7.3	

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 3201	Dunlop 445	Glob CL	VEL	6.8	-	18.2'	10 17.6	-46 25	399	X			* mags 13...; loose structured globular
Bochum 7		Opn CL	VEL	6.8	-	20'	08 44.8	-45 58	397	IV 3 p	9	7.6	
NGC 2645	Pismis 6	Opn CL	VEL	7.1	-	1.5'	08 39.1	-46 14	397	II 2 p	15	8.9	
NGC 2910	OCL 781	Opn CL	VEL	7.2	-	5'	09 30.5	-52 55	426	I 2 p	30	9.3	
NGC 3330	OCL 806	Opn CL	VEL	7.4	-	7'	10 38.8	-54 07	427	II 2 p	30	8.8	
IC 2488	Cr 208	Opn CL	VEL	7.4	-	15'	09 27.4	-56 57	425	II 2 m	70	10	
NGC 2670	OCL 764	Opn CL	VEL	7.8	-	6'	08 45.5	-48 48	397	II 2 p	30	9.3	
Cr 205		Opn CL	VEL	7.8	-	2'	09 00.6	-48 59	397	I 3 m	30	9.3	
Mrk 18		Opn CL	VEL	7.8	-	2.0'	09 00.6	-48 59	397		30	9.3	
Pismis 16		Opn CL	VEL	8	-	1.5'	09 51.3	-53 11	426	I 3 p	12	8.7	
Ru 82		Opn CL	VEL	8.1	-	3.6'	09 45.6	-53 59	426	II 3 p	20	10.8	
NGC 3132	PK 272+12.1	Pln Neb	VEL	8.2	8.2	84"	10 07.0	-40 26	399	4(2)		15.8	Eight-Burst Nebula ; actual central star is 15.8 mag
NGC 2925	OCL 783	Opn CL	VEL	8.3	-	12'	09 33.2	-53 24	426	III 1 p	40		
Waterloo 6		Opn CL	VEL	8.4	-	2.2'	08 40.4	-46 09	397	II 3 p	8	9.2	
NGC 2659	OCL 752	Opn CL	VEL	8.6	-	14'	08 42.6	-45 00	397	III 3 m	80	9.7	In Vel OB1
NGC 2660	OCL 759	Opn CL	VEL	8.8	-	4'	08 42.6	-47 12	397	I 3 m	70	11.7	
NGC 3033	OCL 796	Opn CL	VEL	8.8	-	12'	09 48.7	-56 25	426	II 3 p	50	10.6	
NGC 2999	NGC 2972	Opn CL	VEL	9	-	5'	09 40.2	-50 19	426				
Ru 67		Opn CL	VEL	9.1	-	6'	08 41.8	-43 23	397	IV 3 p	35	10.7	
Cr 213		Opn CL	VEL	9.2	-	17'	09 55.0	-50 57	426	IV 2 p	21	8.7	
Ru 79		Opn CL	VEL	9.2	-	11'	09 41.0	-53 50	426	III 3 p	20	11.5	
Pismis 8		Opn CL	VEL	9.5	-	2'	08 41.6	-46 17	397	II 3 p	25	10.5	
NGC 3105	OCL 798	Opn CL	VEL	9.7	-	2'	10 00.7	-54 47	426	I 3 p	20	12.4	
Pismis 12		Opn CL	VEL	9.7	-	4.5'	09 19.9	-45 08	398	III 2 p	20	11.6	
Ru 83		Opn CL	VEL	9.8	-	3.4'	09 49.3	-54 36	426	I 3 p	30	11.3	
NGC 2972	NGC 2999	Opn CL	VEL	9.9	-	4'	09 40.2	-50 19	426	I 1 p	25	11.4	
Pismis 5		Opn CL	VEL	9.9	-	2'	08 37.6	-39 34	397	III 2 p n	10	10.4	
NGC 2866	OCL 774	Opn CL	VEL	10	-	1.5'	09 22.1	-51 06	425				
Pismis 13		Opn CL	VEL	10.2	-	2'	09 22.1	-51 06	425	II 2 p	30	12.1	Included in NGC 2866
Ru 77		Opn CL	VEL	10.4	-	2'	09 27.1	-55 07	425	II 3 p	35	12.5	
Ru 76		Opn CL	VEL	10.8	-	6'	09 24.3	-51 40	425	III 2 p	20	12.5	
NGC 3261	ESO 263-40	Galaxy	VEL	11.2	13.6	3.5'	10 29.0	-44 39	399	SBbc			
NGC 3366	IC 2592	Galaxy	VEL	11.3	12.1	2.2'	10 35.1	-43 42	399	SBb			
NGC 3256	ESO 263-38	Galaxy	VEL	11.5	13.6	4.5'	10 27.9	-43 54	399	Sb			
NGC 2671	OCL 745	Opn CL	VEL	11.6	-	4'	08 46.2	-41 53	397	I 3 p	40		
NGC 3318	ESO 317-52	Galaxy	VEL	11.6	12.6	2.3'	10 37.3	-41 38	399	SBbc			
NGC 2845	ESO 314-10	Galaxy	VEL	11.7	12.3	2'	09 18.6	-38 01	364	Sa			
NGC 3263	ESO 263-43	Galaxy	VEL	11.9	13.9	6.2'	10 29.2	-44 07	399	SBc			
NGC 2899	PK 277-3.1	Pln Neb	VEL	12.2	13.1	2'	09 27.1	-56 06	425			15.9	
PK 264- 8.1	He2- 7	Pln Neb	VEL	12.4	11.2	45.0"	08 11.5	-48 43	396	2		16.9	
NGC 2849	Cr 207	Opn CL	VEL	12.5	-	3'	09 19.4	-40 31	398	I 1 m	40		
NGC 3250B	ESO 317-29	Galaxy	VEL	12.7	12.9	2.2'	10 27.7	-40 26	399	SBa			
NGC 3256C	ESO 263-41	Galaxy	VEL	12.7	13.2	1.7'	10 29.1	-43 51	399	SBcd			
PK 283+ 2.1	Mayall 60	Pln Neb	VEL	12.7	8.2	8"	10 31.6	-55 20	427			17.2	
PK 286+ 2.1	He2- 55	Pln Neb	VEL	12.7	-	18"	10 48.8	-56 03	427				
PK 275- 4.1	PB 4	Pln Neb	VEL	12.9	8.9	14"	09 14.9	-54 53	425			16.1	
NGC 3256B	ESO 263-39	Galaxy	VEL	13.1	12.9	1.9'	10 29.0	-44 24	399	SBbc			
NGC 3262	ESO 263-42	Galaxy	VEL	13.2	13.1	1.2'	10 29.1	-44 10	399	SBO			
NGC 3318B	ESO 317-53	Galaxy	VEL	13.2	13.6	1.5'	10 37.6	-41 28	399	SBc			
PK 275- 2.2	He2- 29	Pln Neb	VEL	13.3	-	14.0"	09 24.8	-54 36	425				
NGC 2792	PK 265+4.1	Pln Neb	VEL	13.5	8.5	13"	09 12.4	-42 26	398	4		16.9	
NGC 3482	ESO 264-56	Galaxy	VEL	13.5	-	1.9'	10 58.6	-46 35	400	SBa			
PK 275- 4.2	He2- 21	Pln Neb	VEL	13.5	6.5	2.0"	09 13.9	-55 28	425				
PK 263- 5.1	PB 2	Pln Neb	VEL	13.6	6.7	3.0"	08 20.8	-46 22	396				
PK 269- 3.1	PB 3	Pln Neb	VEL	13.6	8.8	7"	08 54.1	-50 32	425			13.6	Bipolar
PK 274+ 2.2	He2- 35	Pln Neb	VEL	13.7	-	5"	09 41.6	-49 58	398			16.2	
PK 259+ 0.1	He2- 11	Pln Neb	VEL	13.8	-	75.0"	08 37.1	-39 26	397			18.9	Diffuse neb?
PK 278+ 5.1	He2- 43	Pln Neb	VEL	13.9	-	15"	10 13.3	-50 20	426			17.6	
PK 274+ 3.1	He2- 37	Pln Neb	VEL	14	-	23.0"	09 47.5	-48 58	398				
PK 285+ 1.1	Peimbert 1-1	Pln Neb	VEL	14	7.5	3.0"	10 38.6	-56 47	427				
NGC 2626	ESO 313-N*	Brt Neb	VEL	-	-	5'	08 35.5	-40 40	397	E+R			
NGC 2736	RCW 37	Brt Neb	VEL	-	-	30'	09 00.4	-45 54	397	E			luminous filamentary nebula
NGC 2982	OCL 770	Opn CL	VEL	-	-	12'	09 42.0	-44 02	398				
NGC 3446	ESO 264-SC	Opn CL	VEL	-	-	7'	10 52.1	-45 08	400				small cluster of 10 to 15 stars

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
Gum 12		SN Rem	VEL	-	-	264'	08 30.0	-44 00	397	E			Vela Supernova Remnant ; pulsar PSR 0833 -45
Gum 15	RCW 32	Brn Neb	VEL	-	-	20'	08 44.8	-41 17	397	E			Brighter knot in Gum nebula (Vela SNR)
Gum 23	RCW 38	Brn Neb	VEL	-	-	20'	08 59.7	-47 27	397	E			Part of Gum neb (Vela SNR)
Gum 35	RCW 40	Brn Neb	VEL	-	-	7'	09 02.4	-48 42	397	E			
Hogg 2		Opn CL	VEL	-	-	5'	09 51.5	-56 17	426	IV 2p :b	20		Difficult on POSS plate
Hogg 3		Opn CL	VEL	-	-	4'	09 57.7	-54 41	426	IV 2p :b	10		
Hogg 4		Opn CL	VEL	-	-	4'	09 57.9	-54 37	426				
Pismis 3		Opn CL	VEL	-	-	6'	08 31.4	-38 39	363	II 1m:b	20	13	
Pismis 7		Opn CL	VEL	-	-	2.5'	08 41.1	-38 42	363	II 1m:b	35	13	
Pismis 10		Opn CL	VEL	-	-	2.5'	09 02.6	-43 38	397			10	
Pismis 11	vdB-Ha 60	Opn CL	VEL	-	-	2'	09 16.0	-50 01	398	I 2p :b	20	12	
Pismis 14		Opn CL	VEL	-	-	1.5'	09 29.3	-52 42	425	II 2p :b	12	14	
Pismis 15		Opn CL	VEL	-	-	4.5'	09 34.8	-48 02	398	II 1m:b	35	14	
Ru 60		Opn CL	VEL	-	-	6'	08 24.5	-47 13	397	II 1m:b	30	13	
Ru 63		Opn CL	VEL	-	-	5'	08 32.7	-48 18	397	II 1p :b	20	13	
Ru 64		Opn CL	VEL	-	-	67'	08 37.4	-40 05	397	II 3 p	80	9	
Ru 65		Opn CL	VEL	-	-	11'	08 39.4	-44 03	397	IV 1 p	20	13	
Ru 69		Opn CL	VEL	-	-	2.2'	08 44.8	-47 36	397	IV 1pn:b	10	14	
Ru 70		Opn CL	VEL	-	-	5'	08 49.1	-46 49	397	IV 2p :a		13	
Ru 71		Opn CL	VEL	-	-	7'	08 49.5	-46 47	397	III 2 p	30	11	
Ru 73		Opn CL	VEL	-	-	3.6'	09 01.2	-50 55	397	IV 1p :b	25	14	
Ru 75		Opn CL	VEL	-	-	4'	09 21.9	-56 19	425	II 1p :b	20	12	
Ru 78		Opn CL	VEL	-	-	3'	09 29.1	-53 42	425	II 2m :b	30	15	
Ru 80		Opn CL	VEL	-	-	12'	09 42.3	-44 02	398	III 1 p		13	
Ru 81		Opn CL	VEL	-	-	5'	09 45.2	-44 06	398	IV 3p :a		12	
Ru 85		Opn CL	VEL	-	-	1.7'	10 01.5	-55 07	426	III 1m:b	40	15	
Ru 87		Opn CL	VEL	-	-	2.2'	10 15.5	-50 43	426	II 3 p	20	11	
Ru 160		Opn CL	VEL	-	-	1.7'	09 55.5	-47 01	398	I 3p :a		14	
M 104	NGC 4594	Galaxy	VIR	8	11.6	8.6'	12 40.0	-11 37	284	Sab			Sombrero Galaxy ; H I 43;dark equatorial lane;
M 49	NGC 4472	Galaxy	VIR	8.4	13.2	9.8'	12 29.8	+08 00	193	E4			NGC 4467 @ 4.2';NGC 4470 @ 10.5';NGC 4465 @ 5.8'
M 87	NGC 4486	Galaxy	VIR	8.6	13	8.7'	12 30.8	+12 23	193	E1p			B in Virgo cluster ;NGC 4486A @ 7.5' ssf;
M 60	NGC 4649	Galaxy	VIR	8.8	12.9	7.6'	12 43.7	+11 33	194	E1			NGC 4647 @ 2.5'
M 86	NGC 4406	Galaxy	VIR	8.9	13.2	9.8'	12 26.2	+12 57	193	E3			Markarian's chain ;
M 84	NGC 4374	Galaxy	VIR	9.1	13	6.7'	12 25.1	+12 53	193	E1			Markarian's chain ;center of Virgo cluster
NGC 4697	MCG - 1-33-	Galaxy	VIR	9.2	13.1	6.2'	12 48.6	-05 48	284	Elliptical			H I 39
M 90	NGC 4569	Galaxy	VIR	9.5	13.4	9.9'	12 36.8	+13 10	194	SBab			IC 3583 @ 6 ';vseBN in B diff bar w much dark matter
NGC 4636	NGC 4624?	Galaxy	VIR	9.5	13.1	5.9'	12 42.8	+02 41	239	Elliptical			H II 38
NGC 4699	MCG - 1-33-	Galaxy	VIR	9.5	11.9	3.8'	12 49.0	-08 40	284	SBb			H I 129
NGC 5634	GCL 28	Glob CL	VIR	9.5	-	4.9'	14 29.6	-05 59	287	IV			H I 70;11 mag star on E edge
M 59	NGC 4621	Galaxy	VIR	9.6	12.9	5.3'	12 42.0	+11 39	194	E3			B diff N;smooth arms
M 61	NGC 4303	Galaxy	VIR	9.6	13.4	6.5'	12 21.9	+04 28	238	SBbc Rii			SN 1926;1961;1964;NGC 4301 @ 10 ';H I 139;L face-on
NGC 4365	UGC 7488	Galaxy	VIR	9.6	13.4	6.5'	12 24.5	+07 19	193	Elliptical			H I 30;NGC 4370 @ 10 '
M 58	NGC 4579	Galaxy	VIR	9.7	13.1	6'	12 37.7	+11 49	194	SBb			fine compact spiral
NGC 4526	NGC 4560	Galaxy	VIR	9.7	12.7	7'	12 34.0	+07 42	194	SBO			H I 31;lenticular;between two 7th mag stars
M 89	NGC 4552	Galaxy	VIR	9.8	13.2	5.3'	12 35.7	+12 33	194	EO			
NGC 4753	UGC 8009	Galaxy	VIR	9.9	12.9	5.1'	12 52.4	-01 12	239	SO			H I 16;SN 1965i
NGC 4216	UGC 7284	Galaxy	VIR	10	12.8	7.8'	12 15.9	+13 09	193	SBb			H I 35;UGC 7284;edge on streak;two other in field
NGC 4429	UGC 7568	Galaxy	VIR	10	12.8	5.8'	12 27.4	+11 06	193	Sa			H II 65;oval w large outer ring
NGC 4535	UGC 7727	Galaxy	VIR	10	13.7	6.9'	12 34.3	+08 12	194	SBc			H II 500;Ho 420b @ 5 ';S-shaped spiral
NGC 5068	ESO 576-29	Galaxy	VIR	10	14	7.3'	13 18.9	-21 02	330	SBc			H II 312;Coarse spiral;NGC 5087 in field
NGC 5247	ESO 577-14	Galaxy	VIR	10	13.4	5.4'	13 38.0	-17 53	331	SBbc			H II 297;Fine S-shaped double arm spiral
NGC 5846	UGC 9706	Galaxy	VIR	10	13	4'	15 06.5	+01 36	243	E0			Brightest in group; NGC 5846A at 1';NGC 5850 near
NGC 5363	UGC 8847	Galaxy	VIR	10.1	12.5	4.6'	13 56.1	+05 15	241	Sa			H I 6;P w NGC 5364 at 14.5' 2 B dif N in contact
NGC 4438	UGC 7574	Galaxy	VIR	10.2	13.6	8.5'	12 27.8	+13 00	193	Sa			Markarian's chain ;NGC 4435 @ 4.4';long filaments
NGC 4546	MCG - 1-32-	Galaxy	VIR	10.3	11.9	3.3'	12 35.5	-03 48	239	E-SO Ba			H I 160
NGC 4762	UGC 8016	Galaxy	VIR	10.3	13	8.6'	12 52.9	+11 14	194	SBO			H II 75;NGC 4754 @ 10.5';thick streak w tufts at ends
NGC 5746	UGC 9499	Galaxy	VIR	10.3	12.6	6.9'	14 44.9	+01 57	243	SBb			H I 126;vsBN in B cent.bulge;NGC 5740 at 18';edge on
NGC 4261	UGC 7360	Galaxy	VIR	10.4	13.3	3.8'	12 19.4	+05 49	193	E2			NGC 4264 @ 3.4';NGC 4257 @ 7.1';UGC 7360;3C270
NGC 4442	UGC 7583	Galaxy	VIR	10.4	12.6	4.5'	12 28.1	+09 48	193	SBO			H II 156
NGC 4517	NGC 4437	Galaxy	VIR	10.4	13.3	10.2'	12 32.8	+00 07	239	Sc			4517A @ 17 ';long narrow streak w dust patches
NGC 4596	UGC 7828	Galaxy	VIR	10.4	13	4'	12 39.9	+10 11	194	SBO-a			H I 24;NGC 4608 @ 19 ';disc w projecting ansae
NGC 4527	UGC 7721	Galaxy	VIR	10.5	13.1	5.9'	12 34.1	+02 39	239	SBbc			H II 37;SN 1915a;NGC 4536 @ 29
NGC 4654	IC 3708	Galaxy	VIR	10.5	13.2	5'	12 43.9	+13 08	194	SBc Ring			H II 126
NGC 4665	NGC 4624	Galaxy	VIR	10.5	13.1	3.5'	12 45.1	+03 03	239	SBO-a			H I 142 , same as 4624, 4664

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4856	MCG - 2-33-	Galaxy	VIR	10.5	12.1	3.9'	12 59.4	-15 03	284	SBO-a			H I 68
NGC 5084	ESO 576-33	Galaxy	VIR	10.5	13.4	10.6'	13 20.3	-21 50	330	SO			H II 313
NGC 5364	NGC 5317	Galaxy	VIR	10.5	14.1	6.1'	13 56.2	+05 01	241	SBc/P			H II 534;sBN in smooth cent w dk matter
NGC 5813	UGC 9655	Galaxy	VIR	10.5	13.2	4'	15 01.2	+01 42	243	E1			In NGC 5846 group;P w NGC 5814 at 5';NGC 8506, 21'
NGC 4030	UGC 6993	Galaxy	VIR	10.6	13.2	4.2'	12 00.4	-01 06	238	Sbc			H I 121;fine nearly face on spiral
NGC 4536	UGC 7732	Galaxy	VIR	10.6	13.9	7.1'	12 34.4	+02 11	239	SBbc			NGC 4533 @ 8.2';high tilt spiral w long curvd arms
NGC 4560	NGC 4526	Galaxy	VIR	10.6	-	7'	12 34.0	+07 42	194	SBO			H I 119 , see 4526
NGC 4698	UGC 7970	Galaxy	VIR	10.6	12.9	4'	12 48.4	+08 29	194	Sab			H I 8
NGC 4754	UGC 8010	Galaxy	VIR	10.6	13.1	4.4'	12 52.3	+11 19	194	SBO			H I 25;P w NGC 4762 11' to NW
NGC 5566	UGC 9175	Galaxy	VIR	10.6	13.3	6.6'	14 20.3	+03 56	242	SBab R			H I 144;double galaxy
NGC 4666	UGC 7926	Galaxy	VIR	10.7	12.5	4.5'	12 45.1	-00 28	239	SBc			H I 15;NGC 4668 @ 7.3';NGC 4653 @ 20 ' ;edge on
NGC 4958	MCG - 1-33-	Galaxy	VIR	10.7	12.3	3.9'	13 05.8	-08 01	285	SBO			H I 130;Lenticular
NGC 4371	UGC 7493	Galaxy	VIR	10.8	13.1	4'	12 24.9	+11 42	193	SBO-a R			H I 22
NGC 4435	UGC 7575	Galaxy	VIR	10.8	12.5	3'	12 27.7	+13 05	193	SBO			Markarian's chain ;NGC 4438 @ 4.3' SSE
NGC 4568	UGC 7776	Galaxy	VIR	10.8	13.1	4.6'	12 36.6	+11 14	194	Sbc			Siamese Twins ;;NGC 4567 @ 1.2';overlaps 4567;
NGC 4643	UGC 7895	Galaxy	VIR	10.8	12.7	3.1'	12 43.3	+01 59	239	SBO-a			H I 10;Saturn-like central mass w projecting ansae
NGC 5018	ESO 576-10	Galaxy	VIR	10.8	13	3.4'	13 13.0	-19 31	330	Elliptical			H II 746
NGC 5044	MCG - 3-34-	Galaxy	VIR	10.8	13.2	2.6'	13 15.4	-16 23	285	E0			H II 511;NGC 5037 and two other F galaxies in field
NGC 5850	UGC 9715	Galaxy	VIR	10.8	13.6	4.5'	15 07.1	+01 33	243	SBab			H II 543;In NGC 5846 group;vBN w bar
NGC 4267	UGC 7373	Galaxy	VIR	10.9	13.3	3'	12 19.8	+12 48	193	E-SO Ba			H II 166
NGC 4457	UGC 7609	Galaxy	VIR	10.9	12.7	2.6'	12 29.0	+03 34	238	SBO-a R			H II 35
NGC 4487	MCG - 1-32-	Galaxy	VIR	10.9	13.4	4'	12 31.1	-08 03	283	SBc			H II 776;Coarse structured spiral
NGC 4570	UGC 7785	Galaxy	VIR	10.9	12.4	3.7'	12 36.9	+07 15	194	SO			H I 32;lens shaped;in field of R VIR
NGC 4593	MCG - 1-32-	Galaxy	VIR	10.9	13.4	3.7'	12 39.7	-05 21	239	SBab			Extended central mass w extensive outer arms;4602 nr
NGC 4612	UGC 7850	Galaxy	VIR	10.9	12.5	2.7'	12 41.5	+07 19	194	SBO Rin			H II 148
NGC 4902	MCG - 2-33-	Galaxy	VIR	10.9	13.1	2.9'	13 01.0	-14 31	284	SBb			H I 69;Theta shaped center;triskelion arm pattern
NGC 5054	MCG - 3-34-	Galaxy	VIR	10.9	13.7	5.1'	13 17.0	-16 38	285	Sbc			H II 513;Three branch spiral
NGC 5701	UGC 9436	Galaxy	VIR	10.9	13.8	4.7'	14 39.2	+05 22	242	SBO-a R			H II 575;Several vF;vS comps in field
NGC 5838	UGC 9692	Galaxy	VIR	10.9	12.8	3.7'	15 05.4	+02 06	243	Sa			H II 542;In NGC 5846 grp;P w NGC 5848 at 18'
NGC 4179	UGC 7214	Galaxy	VIR	11	12.5	4.2'	12 12.9	+01 18	238	SO			H I 9;edge on spindle shape
NGC 4388	UGC 7520	Galaxy	VIR	11	13	5.6'	12 25.8	+12 40	193	Sb			H II 168;edge on lens shape;16' SE from M 84
NGC 4608	UGC 7842	Galaxy	VIR	11	13.2	3.3'	12 41.2	+10 09	194	SBO			H II 69;NGC 4596 @ 19 '
NGC 4772	UGC 8021	Galaxy	VIR	11	12.8	3.1'	12 53.5	+02 10	239	Sa			H II 24
NGC 5576	UGC 9183	Galaxy	VIR	11	13.2	3'	14 21.1	+03 16	242	E2			triple group w NGC 5574 at 2.9' and NGC 5577 at 10.3'
NGC 4417	NGC 4437	Galaxy	VIR	11.1	12.6	3.3'	12 26.8	+09 35	193	SBO			comp @ 2.8';H II 155;edge on lens shape
NGC 4503	UGC 7680	Galaxy	VIR	11.1	12.9	3.5'	12 32.1	+11 11	194	SBO			H II 66
NGC 4564	UGC 7773	Galaxy	VIR	11.1	12.9	3.2'	12 36.4	+11 26	194	E6			H II 68;11' N from NGC 4567-8
NGC 4691	MCG 0-33-	Galaxy	VIR	11.1	12.9	2.7'	12 48.2	-03 20	239	SBO-a			H II 182
NGC 4775	MCG - 1-33-	Galaxy	VIR	11.1	12.5	2.2'	12 53.8	-06 37	284	Scd			H II 186;Compact face on spiral
NGC 4781	MCG - 2-33-	Galaxy	VIR	11.1	12.8	3.4'	12 54.4	-10 32	284	SBcd			H I 134;Coarse spiral
NGC 4818	MCG - 1-33-	Galaxy	VIR	11.1	13	3.4'	12 56.8	-08 32	284	SBab			H II 549
NGC 4941	MCG - 1-33-	Galaxy	VIR	11.1	13	3.5'	13 04.2	-05 33	285	SBab			H I 40
NGC 4995	MCG - 1-34-	Galaxy	VIR	11.1	12.5	2.4'	13 09.7	-07 50	285	SBb			H I 42;Dense spiral
NGC 5170	MCG - 3-34-	Galaxy	VIR	11.1	13.3	8.2'	13 29.8	-17 58	330	Sc			H V 22;Edge on spiral w some dark lanes
NGC 4168	UGC 7203	Galaxy	VIR	11.2	13.2	2.8'	12 12.3	+13 12	193	Elliptical			H II 105
NGC 4437	NGC 4517	Galaxy	VIR	11.2	-	10.2'	12 32.8	+00 07	239	Sc			NGC Copying error , see 4517
NGC 4461	UGC 7613	Galaxy	VIR	11.2	12.8	3.4'	12 29.0	+13 11	193	SBO-a			Markarian's chain ;NGC 4458 @ 3.7' , near m84
NGC 4469	UGC 7622	Galaxy	VIR	11.2	12.8	3.4'	12 29.5	+08 45	193	SBO-a			H II 157;edge on w box shaped central section
NGC 4486A	UGC 7658	Galaxy	VIR	11.2	-	0.8'	12 31.0	+12 16	193	Elliptical			NGC 4486 @ 7.5'
NGC 4504	MCG - 1-32-	Galaxy	VIR	11.2	13.7	4.3'	12 32.3	-07 34	284	SBc			H II 771
NGC 4624	NGC 4664	Galaxy	VIR	11.2	-	3.5'	12 45.1	+03 03	239	SBO-a			see 4665
NGC 4638	NGC 4667	Galaxy	VIR	11.2	12.3	2.4'	12 42.8	+11 27	194	E5			H II 70;NGC 4637 @ 1.5' sf;stubby lens shape
NGC 4660	UGC 7914	Galaxy	VIR	11.2	12.6	2.1'	12 44.5	+11 11	194	E5			H II 71;comp 5.5';25' SSE from M60
NGC 4664	NGC 4624	Galaxy	VIR	11.2	-	3.5'	12 45.1	+03 03	239	SBO-a			H II 39 , see 4665
NGC 4845	UGC 8078	Galaxy	VIR	11.2	13.1	4.9'	12 58.0	+01 35	239	Sab			H II 536;edge on w dust lane
NGC 4866	UGC 8102	Galaxy	VIR	11.2	13.4	6.4'	12 59.5	+14 10	194	Sa			H I 162;UGC 8091 @ 11.8';lens shaped
NGC 5317	NGC 5364	Galaxy	VIR	11.2	-	6.1'	13 56.2	+05 01	241	SBc/P			see 5364
NGC 5638	UGC 9308	Galaxy	VIR	11.2	13.2	2.3'	14 29.7	+03 14	242	E1			UGC 9308;P w NGC 5636 at 2';Brightest in cluster
NGC 5713	UGC 9451	Galaxy	VIR	11.2	13.1	2.9'	14 40.2	-00 17	243	SBbc			H I 182;NGC 5713 group;NGC 5719 at 11.5' interact?
MCG +02-32		Galaxy	VIR	11.2	-		12 30.9	+12 16	193				Face On
NGC 4281	UGC 7389	Galaxy	VIR	11.3	12.8	3'	12 20.4	+05 23	238	Sa			H II 573
NGC 4567	UGC 7777	Galaxy	VIR	11.3	13.1	3.1'	12 36.5	+11 15	194	Sbc			Siamese Twins H IV 8;NGC 4568 @ 1.2
NGC 4647	UGC 7896	Galaxy	VIR	11.3	13.2	2.9'	12 43.5	+11 35	194	SBc Ring			H III 144;NGC 4649 @ 2.5'
NGC 4742	MCG - 2-33-	Galaxy	VIR	11.3	12.8	2.3'	12 51.8	-10 27	284	E3			H I 133;Group w NGC 4760 & 4781

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4939	MCG - 2-33-	Galaxy	VIR	11.3	14.1	5.1'	13 04.2	-10 20	285	Sbc			H II 561;Well defined spiral
NGC 4981	MCG - 1-34-	Galaxy	VIR	11.3	13	2.8'	13 08.8	-06 47	285	SBbc Ring			H II 189
NGC 4984	MCG - 2-34-	Galaxy	VIR	11.3	13.1	3'	13 09.0	-15 31	285	SBO-a			H II 301
NGC 5134	ESO 576-52	Galaxy	VIR	11.3	12.8	2.9'	13 25.3	-21 08	330	SBb Ring			H II 314;Oval w hazy arm pattern
NGC 5334	IC 4338	Galaxy	VIR	11.3	13.9	4.1'	13 52.9	-01 07	241	SBc			Low surf bright;H III 665
NGC 4073	UGC 7060	Galaxy	VIR	11.4	13.4	3.2'	12 04.5	+01 54	238	E1			comp superimposed;field of 6 small galaxies 5' south
NGC 4123	UGC 7116	Galaxy	VIR	11.4	14.1	4.3'	12 08.2	+02 53	238	SBb			H V 4;NGC 4116 @ 14'
NGC 4124	NGC 4119	Galaxy	VIR	11.4	13.2	3.9'	12 08.2	+10 23	193	Sa			H I 33
NGC 4178	IC 3042;UGC	Galaxy	VIR	11.4	13.7	5'	12 12.8	+10 52	193	SBcd			SN 1963i;nearly edge on
NGC 4339	UGC 7461	Galaxy	VIR	11.4	13.2	2.3'	12 23.6	+06 05	193	Elliptical			Brightest of 3;NGC 4333 @ 4';NGC 4326 @ 5.7'
NGC 4478	UGC 7645	Galaxy	VIR	11.4	12.7	1.8'	12 30.3	+12 20	193	E1			H II 124;NGC 4476 @ 4.5';NGC 4486 @ 8.6'
NGC 4496A	NGC 4496	Galaxy	VIR	11.4	14	3.9'	12 31.7	+03 56	238	SBc			H II 36
NGC 4531	UGC 7729	Galaxy	VIR	11.4	13.3	3.1'	12 34.3	+13 05	194	SBO-a			H II 175
NGC 4684	UGC 7951	Galaxy	VIR	11.4	12.4	2.8'	12 47.3	-02 44	239	SBO-a			H II 181;vB elongated foreshortened nucleus
NGC 4694	UGC 7969	Galaxy	VIR	11.4	13	3.3'	12 48.2	+10 59	194	SBO			H II 72
NGC 4760	MCG - 2-33-	Galaxy	VIR	11.4	12.8	2'	12 53.1	-10 30	284	Elliptical			
NGC 4880	UGC 8109	Galaxy	VIR	11.4	13.5	3.1'	13 00.2	+12 29	194	SBO-a			H III 83;Ho 497b @ 1.7' is a *
NGC 4900	UGC 8116	Galaxy	VIR	11.4	12.9	2.2'	13 00.7	+02 30	239	SBc			H I 143
NGC 5077	MCG - 2-34-	Galaxy	VIR	11.4	12.5	1.9'	13 19.5	-12 39	285	E3			H II 193;NGC 5088 and two other F galaxies in field
NGC 5087	ESO 576-35	Galaxy	VIR	11.4	12.8	2.5'	13 20.4	-20 37	330	E4			H III 724
NGC 5300	UGC 8727	Galaxy	VIR	11.4	13.8	3.8'	13 48.3	+03 57	241	SBc Ring			H II 533;face on spiral
NGC 5427	MCG - 1-36-	Galaxy	VIR	11.4	13.3	2.9'	14 03.4	-06 02	286	SBc			H II 310;Face on spiral;P w NGC 5426 @ 2.8' south
NGC 5493	MCG - 1-36-	Galaxy	VIR	11.4	12.1	1.7'	14 11.5	-05 03	242	SO			vB diff N in B diamond-shaped lens;F nearly circular
NGC 5584	UGC 9201	Galaxy	VIR	11.4	13.5	3.4'	14 22.4	-00 23	242	SBc			sh. B bar in lens;sev. part. res. branch filam arms
NGC 5775	UGC 9579	Galaxy	VIR	11.4	12.8	4'	14 54.0	+03 33	243	SBc			IC1070 @ 4';0.7X0.25;m=15.4;strong dk lane;edge on
NGC 3976	UGC 6906	Galaxy	VIR	11.5	13	3.4'	11 56.0	+06 45	192	SBb			H II 132;P w F anon at 4.8';nearly edge on spiral
NGC 4578	UGC 7793	Galaxy	VIR	11.5	13.7	3.1'	12 37.5	+09 33	194	SO			H II 15;Ho 429b @ 3.5'
NGC 4602	MCG - 1-32-	Galaxy	VIR	11.5	12.9	3'	12 40.6	-05 08	239	SBbc			H II 184;IC 804 @ 10'
NGC 4639	UGC 7884	Galaxy	VIR	11.5	13.2	2.9'	12 42.9	+13 15	194	SBbc Ring			H II 125;comp 2.9';NGC 4654 @ 17.5'
NGC 4731	MCG - 1-33-	Galaxy	VIR	11.5	14.6	6.3'	12 51.0	-06 24	284	SBc/P			H I 41;Open structured spiral
NGC 5668	UGC 9363	Galaxy	VIR	11.5	13.9	3.2'	14 33.4	+04 27	242	Scd Ring			vs not vB N;BM;many part.res.irreg.branch.arms.
NGC 5831	UGC 9678	Galaxy	VIR	11.5	12.9	2.1'	15 04.1	+01 13	243	Ep			H II 540
NGC 4235	IC 3098	Galaxy	VIR	11.6	13	3.9'	12 17.2	+07 11	193	Sa			H II 17;nearly edge on
NGC 4313	UGC 7445	Galaxy	VIR	11.6	13	3.8'	12 22.6	+11 48	193	Sab			H II 63;spindle shaped edge on
NGC 4324	Ho 388a	Galaxy	VIR	11.6	12.8	2.9'	12 23.1	+05 15	238	Sa Ring			Ho 388b @ 1.1' is a *
NGC 5750	UGC 9512	Galaxy	VIR	11.6	13.2	3.2'	14 46.2	-00 13	243	SBO-a Ring			H I 183;seBN in diff inner lens;broad diff bar w dk lane
New 3	MCG -02-33-	Galaxy	VIR	11.6	14.2	2.5'	12 49.4	-10 07	284	Sc?			Marked; but not labeled; on Uranometria 2000
NGC 3818	MCG - 1-30-	Galaxy	VIR	11.7	12.7	2'	11 42.0	-06 09	282	Elliptical			H III 284
NGC 4378	UGC 7497	Galaxy	VIR	11.7	13.8	2.5'	12 25.3	+04 55	238	Sa			H I 123;possibly 49' south of NGC 4376
NGC 4380	UGC 7503	Galaxy	VIR	11.7	13.6	3.2'	12 25.4	+10 01	193	Sab			spiral pattern amorphous
NGC 4424	UGC 7561	Galaxy	VIR	11.7	13.6	3.5'	12 27.2	+09 25	193	SBa			SN 1895a;comp @ 0.6';NGC 4417 11' NW
NGC 4440	UGC 7581	Galaxy	VIR	11.7	12.7	1.8'	12 27.9	+12 18	193	SBa			H II 173;Brightest of 3;NGC 4436 @ 3.6';NGC 4431 @ 6'
NGC 4550	UGC 7757	Galaxy	VIR	11.7	12.8	3.3'	12 35.5	+12 13	194	SBO			H I 36;NGC 4551 @ 3'
NGC 4586	UGC 7804	Galaxy	VIR	11.7	13.3	3.8'	12 38.5	+04 19	239	Sa Ring			H I 125
NGC 4592	UGC 7819	Galaxy	VIR	11.7	13.9	6.8'	12 39.3	-00 32	239	Sd			H II 31
NGC 4632	UGC 7870	Galaxy	VIR	11.7	12.9	3'	12 42.5	-00 05	239	Sc			H I 14
NGC 4713	UGC 7985	Galaxy	VIR	11.7	13.2	2.9'	12 50.0	+05 19	239	SBcd			H I 140
NGC 4786	MCG - 1-33-	Galaxy	VIR	11.7	12.4	1.6'	12 54.5	-06 52	284	E2			H II 187;NGC 4775 18' to SE
NGC 4808	UGC 8054	Galaxy	VIR	11.7	12.8	2.4'	12 55.8	+04 18	239	Sc			H I 141
NGC 4825	MCG - 2-33-	Galaxy	VIR	11.7	12.5	2'	12 57.2	-13 40	284	E-SO			H II 563
NGC 4933A	NGC 4933	Galaxy	VIR	11.7	12.3	2'	13 03.9	-11 30	284	Sa			H II 191
NGC 5020	UGC 8289	Galaxy	VIR	11.7	13.9	3.1'	13 12.7	+12 36	195	SBbc Ring			H II 129
NGC 5324	MCG - 1-35-	Galaxy	VIR	11.7	13.3	2.3'	13 52.1	-06 04	286	Sc			H II 307
NGC 5806	UGC 9645	Galaxy	VIR	11.7	13.3	3.2'	15 00.0	+01 53	243	SBb			n NGC 5846 group;eBN in B lens;NGC 5813 21' SE
NGC 4224	UGC 7292	Galaxy	VIR	11.8	12.7	2.5'	12 16.6	+07 28	193	Sa			edge on w equatorial dust lane; 4233 & 4235 nearby
NGC 4260	UGC 7361	Galaxy	VIR	11.8	13	2.4'	12 19.4	+06 06	193	SBab			H II 138
NGC 4402	Ho 403d	Galaxy	VIR	11.8	13.2	3.6'	12 26.1	+13 07	193	Sb			NGC 4406 @ 10';edge on w dust lane;10 N from M 86
NGC 4425	UGC 7562	Galaxy	VIR	11.8	12.9	2.8'	12 27.2	+12 44	193	SBO-a			H II 170;lens shaped;19' SE from M86
NGC 4519	UGC 7709	Galaxy	VIR	11.8	13.9	2.9'	12 33.5	+08 39	194	SBcd Ring			H II 158
NGC 4580	UGC 7794	Galaxy	VIR	11.8	13	2.1'	12 37.8	+05 22	239	SBab Ring			H I 124
NGC 4606	UGC 7839	Galaxy	VIR	11.8	13.5	3.3'	12 41.0	+11 55	194	SBa			H III 43;NGC 4607 @ 4'
NGC 4897	MCG - 2-33-	Galaxy	VIR	11.8	13.6	2.7'	13 00.9	-13 27	284	SBbc			
NGC 4999	UGC 8236	Galaxy	VIR	11.8	13.4	2.3'	13 09.6	+01 40	240	SBb			H II 537
NGC 5105	MCG - 2-34-	Galaxy	VIR	11.8	12.8	2'	13 21.8	-13 12	285	SBc			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5147	UGC 8443	Galaxy	VIR	11.8	12.9	1.9'	13 26.3	+02 06	240	SBd			H II 25;Diff bar;no N;b * super
NGC 5690	UGC 9416	Galaxy	VIR	11.8	13	3.4'	14 37.7	+02 17	242	Sc Ring			H II 582;BM no def N;sev arms w dk lanes;vB*at3'
NGC 5864	UGC 9740	Galaxy	VIR	11.8	12.6	2.5'	15 09.6	+03 03	243	SBO			H II 585;in NGC 5846 group sB diff N in B lens;w blobs;p
NGC 4233	UGC 7311	Galaxy	VIR	11.9	12.8	2.4'	12 17.1	+07 37	193	SBO			H II 496;faint extensions N-S
NGC 4241	IC 3102	Galaxy	VIR	11.9	13.1	1.7'	12 18.0	+06 39	193	SBc			H III 480
NGC 4273	UGC 7380	Galaxy	VIR	11.9	13.1	2.3'	12 19.9	+05 21	238	SBc			H II 569;SN 1936a;NGC 4277 @ 2 '
NGC 4454	UGC 7606	Galaxy	VIR	11.9	13	1.9'	12 28.8	-01 56	238	SBO-a F			H II 180;comp @ 2 '
NGC 4505	NGC 4496	Galaxy	VIR	11.9	-	3.9'	12 31.7	+03 56	238	SBc			
NGC 4532	UGC 7726	Galaxy	VIR	11.9	13	2.7'	12 34.3	+06 28	194	Ir?			H II 147;tadpole shaped br portion to north
NGC 4688	UGC 7961	Galaxy	VIR	11.9	14.1	3.5'	12 47.8	+04 20	239	SBc			H III 543;Ho 462a @ 6.8'
NGC 4700	MCG - 2-33-	Galaxy	VIR	11.9	12.4	3'	12 49.1	-11 25	284	SBc			H III 524;edge on spiral
NGC 4733	UGC 7997	Galaxy	VIR	11.9	12.2	1.5'	12 51.1	+10 55	194	Elliptical			H II 73;Ho 473b @ 0.9' is a *
NGC 4899	MCG - 2-33-	Galaxy	VIR	11.9	13.2	2.3'	13 00.9	-13 57	284	SBc			H II 300
NGC 4951	MCG - 1-33-	Galaxy	VIR	11.9	13.2	3.3'	13 05.1	-06 30	285	SBc			H II 188;Nearly edge on
NGC 5506	MCG 0-36-	Galaxy	VIR	11.9	12.7	2.7'	14 13.2	-03 12	242	Sap			H II 687;P w NGC 5507 at 4'
NGC 5740	UGC 9493	Galaxy	VIR	11.9	13.3	2.8'	14 44.4	+01 41	243	SBb Ring			H II 538;P w NGC 5746 at 18.4' PA 26;vBN;weak bar
NGC 5854	UGC 9726	Galaxy	VIR	11.9	12.6	2.7'	15 07.8	+02 34	243	SBO-a			H II 544;in NGC 5846 group
NGC 5869	UGC 9742	Galaxy	VIR	11.9	13.2	2.3'	15 09.8	+00 28	243	SO			H II 545
NGC 4045	NGC 4046	Galaxy	VIR	12	13.6	3.1'	12 02.7	+01 59	238	Sba Ring			H II 276;Ho 320b @ 1.6';UGC 7021;faint outer arms
NGC 4116	UGC 7111	Galaxy	VIR	12	14.1	3.8'	12 07.6	+02 41	238	SBc			NGC 4123 @ 14 ' ;flattened bar shape
NGC 4307	Ho 380a	Galaxy	VIR	12	12.9	3.5'	12 22.1	+09 02	193	Sb			spindle shaped edge on
NGC 4430	UGC 7566	Galaxy	VIR	12	13.5	2.3'	12 27.4	+06 16	193	SBb/P			H II 146;NGC 4432 @ 2.4'
NGC 4452	UGC 7601	Galaxy	VIR	12	12.4	2.7'	12 28.7	+11 45	193	SO			H I 23;cigar shaped edge on
NGC 4551	UGC 7759	Galaxy	VIR	12	13.1	1.8'	12 35.6	+12 16	194	Elliptical			H I 37;NGC 4550 @ 3 '
NGC 4904	UGC 8121	Galaxy	VIR	12	13.1	2.2'	13 01.0	-00 02	239	SBc			H II 517
NGC 5079	MCG - 2-34-	Galaxy	VIR	12	-	1.5'	13 19.6	-12 42	285	SBbc/P			H III 118
NGC 5339	MCG - 1-35-	Galaxy	VIR	12	-	1.9'	13 54.0	-07 56	286	SBa			
MCG -03-34		Galaxy	VIR	12	-	2.5'	13 12.5	-17 31	330	Sc pec			Appr. 50/50 Face & Edge On
UGC 8041	New 4	Galaxy	VIR	12	13.8	3.2'	12 55.2	+00 07	239	SBd			
NGC 4206	IC 3064	Galaxy	VIR	12.1	14.1	6.4'	12 15.3	+13 01	193	Sbc			H II 165;Member Virgo Group
NGC 4215	UGC 7281	Galaxy	VIR	12.1	12.2	1.8'	12 15.9	+06 24	193	Sa			H II 135;edge on lens shape
NGC 4294	UGC 7407	Galaxy	VIR	12.1	13.4	3.2'	12 21.3	+11 31	193	SBc			H II 61;NGC 4299 6' east
NGC 4343	UGC 7465	Galaxy	VIR	12.1	12.6	2.3'	12 23.6	+06 57	193	Sb			H III 94;based on UGC and Zwicky
NGC 4387	UGC 7517	Galaxy	VIR	12.1	12.8	1.7'	12 25.7	+12 49	193	Elliptical			H II 167;NGC 4374 @ 10.5'
NGC 4415	UGC 7540	Galaxy	VIR	12.1	12.5	1.4'	12 26.7	+08 26	193	Sa			H III 482
NGC 4420	NGC 4409	Galaxy	VIR	12.1	12.7	2'	12 27.0	+02 30	238	SBbc			H II 23
NGC 4434	UGC 7571	Galaxy	VIR	12.1	12.9	1.4'	12 27.6	+08 09	193	Elliptical			H II 497
NGC 4458	UGC 7610	Galaxy	VIR	12.1	13.2	1.6'	12 29.0	+13 15	193	Elliptical			Markarian's chain;NGC 4461 @ 3.7' , near M84
NGC 4470	NGC 4610	Galaxy	VIR	12.1	12.2	1.3'	12 29.6	+07 49	193	Sa			H II 18
NGC 4528	UGC 7722	Galaxy	VIR	12.1	12.5	1.6'	12 34.1	+11 19	194	SBO			H II 67
NGC 4597	MCG - 1-32-	Galaxy	VIR	12.1	14.1	3.8'	12 40.2	-05 48	284	SBc			H II 636;Reversed Z structure
NGC 4667	NGC 4638	Galaxy	VIR	12.1	-	2.4'	12 42.8	+11 27	194	E-SO			
NGC 4682	MCG - 2-33-	Galaxy	VIR	12.1	13.3	2.5'	12 47.3	-10 04	284	SBc			H III 523
NGC 4790	MCG - 2-33-	Galaxy	VIR	12.1	12.6	1.5'	12 54.9	-10 15	284	SBc			H II 560
NGC 4795	UGC 8037	Galaxy	VIR	12.1	13.1	1.6'	12 55.0	+08 04	194	SBO-a			H II 21;NGC 4796 superimposed;NGC 4791 @ 4.8'
NGC 4830	ESO 575-37	Galaxy	VIR	12.1	12.8	1.8'	12 57.5	-19 42	329	E-SO Ba			
NGC 4910	UGC 8078	Galaxy	VIR	12.1	-	5'	12 58.0	+01 35	239	Sb			H V 3 , see 4845
NGC 4915	MCG - 1-33-	Galaxy	VIR	12.1	12.9	1.6'	13 01.5	-04 33	239	Elliptical			H IV 47;NGC 4918 @ 6.3'
NGC 5129	UGC 8423	Galaxy	VIR	12.1	13	1.7'	13 24.2	+13 59	195	Elliptical			H II 653;double syst;total m=15.6;brightest in cluster
NGC 5230	UGC 8573	Galaxy	VIR	12.1	13.5	2.1'	13 35.5	+13 40	195	SBc			brst in group;disturbed by 5222 @ 9.5';well def spiral
NGC 5306	MCG - 1-35-	Galaxy	VIR	12.1	12.4	1.4'	13 49.2	-07 13	286	SO			H II 306
NGC 5426	MCG - 1-36-	Galaxy	VIR	12.1	13.6	3'	14 03.4	-06 04	286	Sc			H II 309;P w NGC 5427
NGC 5496	UGC 9079	Galaxy	VIR	12.1	13.5	4.7'	14 11.6	-01 10	242	SBcd			edge on w streaky dust lanes
NGC 5774	UGC 9576	Galaxy	VIR	12.1	14.2	3'	14 53.7	+03 35	243	SBcd			P w NGC 5775 at 4.5' PA 123
NGC 4119	NGC 4124	Galaxy	VIR	12.2	-	3.9'	12 08.2	+10 23	193	Sa			H II 14
NGC 4270	UGC 7376	Galaxy	VIR	12.2	12.7	2'	12 19.8	+05 28	238	SO			H II 568;in group w NGC 4273 & 4281
NGC 4292	UGC 7404;	Galaxy	VIR	12.2	12.8	1.6'	12 21.3	+04 36	238	SBO			comp (Ho 375b;?NGC 4292A?) @ 2.2'
NGC 4476	UGC 7637	Galaxy	VIR	12.2	12.8	1.8'	12 30.0	+12 21	193	E4			H II 123;NGC 4478 @ 4.5'
NGC 4483	UGC 7649	Galaxy	VIR	12.2	12.4	1.6'	12 30.7	+09 01	193	SBO-a			
NGC 4488	UGC 7653	Galaxy	VIR	12.2	13.9	3.8'	12 30.9	+08 22	193	SBO-a			H III 484
NGC 4620	UGC 7859	Galaxy	VIR	12.2	13.2	1.8'	12 42.0	+12 57	194	SO			
NGC 4623	UGC 7862	Galaxy	VIR	12.2	12.6	2.2'	12 42.2	+07 41	194	SBO-a			H II 149
NGC 4653	UGC 7900	Galaxy	VIR	12.2	14.4	3.4'	12 43.9	-00 34	239	SBc			H III 662;NGC 4642 @ 9.6';NGC 4666 @ 20 '
NGC 5037	MCG - 3-34-	Galaxy	VIR	12.2	12.6	2'	13 15.0	-16 35	285	Sa			H II 510;Nearly edge on;13' SSW of NGC 5044

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5719	UGC 9462	Galaxy	VIR	12.2	13.5	3.2'	14 40.9	-00 19	243	SBab/P			vBN in bar strong dk lanes on lens and on near side
NGC 4193	IC 3051	Galaxy	VIR	12.3	13	2.2'	12 13.9	+13 10	193	SBbc			H II 163
NGC 4411B	NGC 4411-2	Galaxy	VIR	12.3	14.2	2.5'	12 26.8	+08 53	193	SBd			NGC 4411A @ 4.3'
NGC 4413	NGC 4407	Galaxy	VIR	12.3	13.5	2.3'	12 26.5	+12 37	193	SBab Ri			H II 169;12' ESE from NGC 4388
NGC 4522	UGC 7711	Galaxy	VIR	12.3	13.6	3.6'	12 33.7	+09 10	194	SBc			edge on spiral
NGC 4771	UGC 8020	Galaxy	VIR	12.3	13.4	3.8'	12 53.3	+01 16	239	Scd			H II 535;edge on
NGC 5006	ESO 576- 6	Galaxy	VIR	12.3	13.5	2'	13 11.8	-19 16	330	SBO-a F			
NGC 5211	UGC 8530	Galaxy	VIR	12.3	13.4	2.1'	13 33.1	-01 02	240	SBab			similar to NGC 210
NGC 5534	MCG - 1-36-	Galaxy	VIR	12.3	12.4	1.4'	14 17.7	-07 25	287	SBab			
NGC 5577	UGC 9187	Galaxy	VIR	12.3	13.4	3.2'	14 21.2	+03 26	242	Sbc Ring			sBN;v fine arms;NGC 5576 group
NGC 5691	UGC 9420	Galaxy	VIR	12.3	13.2	2'	14 37.9	-00 24	242	SBap			vB bar or core;one smooth;massive outer whorls;
NGC 5770	UGC 9575	Galaxy	VIR	12.3	12.9	1.7'	14 53.2	+03 58	243	SBO			H II 576;comp 2 ' ;PA178;0.9'X0.5';v dif;dwarf
UGC 6903	PGC 37444	Galaxy	VIR	12.3	14.1	2.5'	11 55.7	+01 15	237	S(B)c			
NGC 4079	UGC 7067	Galaxy	VIR	12.4	13.6	2.3'	12 04.8	-02 23	238	Sbc			
NGC 4276	UGC 7385	Galaxy	VIR	12.4	13.2	1.6'	12 20.1	+07 41	193	SBc			
NGC 4330	UGC 7456	Galaxy	VIR	12.4	13.7	4.5'	12 23.3	+11 22	193	Sc			
NGC 4412	UGC 7536	Galaxy	VIR	12.4	12.8	1.4'	12 26.6	+03 58	238	SB/P			H II 34
NGC 4416	UGC 7541	Galaxy	VIR	12.4	13.3	1.7'	12 26.8	+07 55	193	SBc			
NGC 4480	UGC 7647	Galaxy	VIR	12.4	13.4	2.2'	12 30.4	+04 15	238	SBc			
NGC 4701	UGC 7975	Galaxy	VIR	12.4	14.2	3.1'	12 49.2	+03 23	239	Sc			H II 578
NGC 4779	UGC 8022	Galaxy	VIR	12.4	13.7	2.1'	12 53.8	+09 43	194	SBbc			H III 106
NGC 5088	MCG - 2-34-	Galaxy	VIR	12.4	13	2.7'	13 20.3	-12 34	285	Sbc			13' ENE from NGC 5077
NGC 5125	UGC 8421	Galaxy	VIR	12.4	13.1	1.7'	13 24.0	+09 43	195	Sb			np of 2
NGC 5329	UGC 8771	Galaxy	VIR	12.4	13	1.3'	13 52.2	+02 20	241	Elliptical			H III 549;vB core;several vF comps within 10'
NGC 5338	UGC 8800	Galaxy	VIR	12.4	13.6	2.5'	13 53.4	+05 12	241	SBO			v lq grp of S F galaxies nr mbrs of CGCG cl
NGC 5345	UGC 8820	Galaxy	VIR	12.4	13.2	1.6'	13 54.2	-01 26	241	Sa			H II 686
NGC 5560	UGC 9172	Galaxy	VIR	12.4	13.2	3.6'	14 20.1	+04 00	242	SBb/P			bar: extens of arms;distort by 5566
NGC 5574	UGC 9181	Galaxy	VIR	12.4	12.7	1.5'	14 20.9	+03 14	242	SBO			H I 145;svBN;diff lens w less flatten envel , near 5576
NGC 4067	UGC 7048	Galaxy	VIR	12.5	12.8	1.3'	12 04.2	+10 51	193	Sb			H III 37
NGC 4129	NGC 4130	Galaxy	VIR	12.5	12.7	2.3'	12 08.9	-09 02	283	SBab			H II 548;Nearly edge on barred spiral
NGC 4207	UGC 7268	Galaxy	VIR	12.5	12.6	1.6'	12 15.5	+09 35	193	Scd			
NGC 4299	UGC 7414	Galaxy	VIR	12.5	13.5	1.7'	12 21.7	+11 30	193	SBd			H II 62
NGC 4342	IC 3256	Galaxy	VIR	12.5	12.1	1.2'	12 23.7	+07 03	193	SO			H III 96;edge on lenticular;4 F galaxies north
NGC 4348	MCG 0-32-	Galaxy	VIR	12.5	13.3	3.2'	12 23.9	-03 27	238	Sbc			H II 625;Spindle shaped edge on
NGC 4385	UGC 7515	Galaxy	VIR	12.5	13.6	2.1'	12 25.7	+00 34	238	SBO-a			SS VIR in field
NGC 4451	UGC 7600	Galaxy	VIR	12.5	12.7	1.5'	12 28.7	+09 16	193	Sb			
NGC 4464	UGC 7619	Galaxy	VIR	12.5	12.2	0.9'	12 29.4	+08 09	193	Sab			H III 483
NGC 4497	IC 3452	Galaxy	VIR	12.5	13	1.9'	12 31.5	+11 37	193	SBO-a			H III 42
NGC 4517A	R 80; UGC 7	Galaxy	VIR	12.5	14.9	4'	12 32.5	+00 23	239	SBd			NGC 4517 @ 17 ' ; given as R 80 in Burnham's
NGC 4581	UGC 7801	Galaxy	VIR	12.5	13.3	1.9'	12 38.1	+01 29	239	Elliptical			
NGC 4658	MCG - 2-33-	Galaxy	VIR	12.5	13	2.1'	12 44.6	-10 05	284	SBbc			H II 558
NGC 4778	NGC 4759-2	Galaxy	VIR	12.5	-	1.7'	12 53.1	-09 12	284	Sa			
NGC 4928	MCG - 1-33-	Galaxy	VIR	12.5	12.6	1.1'	13 03.0	-08 05	284	Sbc			H II 190
NGC 5374	UGC 8874	Galaxy	VIR	12.5	13.3	1.6'	13 57.5	+06 06	196	SBbc			H II 889
NGC 5468	MCG - 1-36-	Galaxy	VIR	12.5	14.4	2.4'	14 06.6	-05 27	241	SBc			H III 286;svB elong N or bar;* nr = NGC 5467
NGC 5507	MCG 0-36-	Galaxy	VIR	12.5	12.8	1.6'	14 13.3	-03 09	242	SBO			H IV 49;P w NGC 5506 at 4'
NGC 5645	UGC 9328	Galaxy	VIR	12.5	13.8	2.6'	14 30.7	+07 16	197	SBcd			H II 150;B bar: sev. knotty arms w some branch.;asym.
NGC 5652	NGC 5650	Galaxy	VIR	12.5	13.4	2'	14 31.0	+05 59	197	Sbc			H II 891
NGC 5845	UGC 9700	Galaxy	VIR	12.5	11.5	0.7'	15 06.0	+01 38	243	E3			H III 511;NGC 5846 group
NGC 4006	IC 2983	Galaxy	VIR	12.6	13.3	1.6'	11 58.1	-02 07	237	Elliptical			
NGC 4180	NGC 4182	Galaxy	VIR	12.6	12.4	1.5'	12 13.1	+07 02	193	Sab			H II 133
NGC 4305	UGC 7432;H	Galaxy	VIR	12.6	13.5	2.2'	12 22.1	+12 44	193	Sa			
NGC 4306	Ho 381b	Galaxy	VIR	12.6	13.3	1.6'	12 22.1	+12 47	193	SBO			
NGC 4351	NGC 4354	Galaxy	VIR	12.6	13.6	2'	12 24.0	+12 12	193	SBab/P			
NGC 4352	UGC 7475	Galaxy	VIR	12.6	13.2	2'	12 24.1	+11 13	193	SO			H II 64
NGC 4370	UGC 7492	Galaxy	VIR	12.6	12.5	1.3'	12 24.9	+07 27	193	Sa			H II 144;NGC 4365 @ 10 '
NGC 4390	IC 3319-20	Galaxy	VIR	12.6	13.3	1.6'	12 25.8	+10 28	193	SBbc			H III 39
NGC 4428	MCG - 1-32-	Galaxy	VIR	12.6	13	1.7'	12 27.5	-08 10	283	Sbc			Compact spiral;P w NGC 4433 @ 7'
NGC 4491	UGC 7657	Galaxy	VIR	12.6	12.8	1.6'	12 31.0	+11 29	193	SBa			H III 41;IC 3446 @ 6.4'
NGC 4492	IC 3438	Galaxy	VIR	12.6	13.5	1.7'	12 31.0	+08 05	193	Sa			H II 499
NGC 4599	UGC 7833	Galaxy	VIR	12.6	12.8	1.7'	12 40.4	+01 12	239	Sa			H III 509
NGC 4630	UGC 7871	Galaxy	VIR	12.6	13.4	1.7'	12 42.5	+03 57	239	lr			H II 532
NGC 4746	UGC 8007	Galaxy	VIR	12.6	14	4'	12 51.9	+12 05	194	Sb			
NGC 4891		Star	VIR	12.6	-		13 00.8	-13 26	284				Star 2' np NGC 4897

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4996	UGC 8235	Galaxy	VIR	12.6	13.5	1.8'	13 09.5	+00 51	240	SBO-a			
NGC 5017	MCG - 3-34-	Galaxy	VIR	12.6	13.4	1.8'	13 12.9	-16 46	285	E2			H III 669
NGC 5184	UGC 8487	Galaxy	VIR	12.6	13.3	2'	13 30.2	-01 40	240	Sbc Ring			H II 680;P w NGC 5183
NGC 5327	UGC 8768	Galaxy	VIR	12.6	13.6	1.9'	13 52.1	-02 12	241	SBb			H II 685;Brightest in group;both comps are 15 mag
NGC 5356	UGC 8831	Galaxy	VIR	12.6	13.5	2.9'	13 55.0	+05 20	241	SBbc			H III 506
NGC 5382	UGC 8885	Galaxy	VIR	12.6	13	1.5'	13 58.2	+06 15	196	SO			H III 546;P w NGC 5386 at 5.2';sev comps nr
IC 769	UGC 7209	Galaxy	VIR	12.6	14.1	2.5'	12 12.5	+12 07	193	SBbc Ring			Member of Virgo group of galaxies
IC 1048	UGC 9483	Galaxy	VIR	12.6	13	2.2'	14 43.0	+04 53	243	S pec			
NGC 4234	Ho 358a	Galaxy	VIR	12.7	13.1	1.2'	12 17.2	+03 41	238	Ir			Ho 358b @ 1.9' is a *
NGC 4246	IC 3113	Galaxy	VIR	12.7	13.8	2.3'	12 18.0	+07 11	193	Sc			H III 91
NGC 4296	UGC 7409	Galaxy	VIR	12.7	12.7	1.4'	12 21.5	+06 39	193	SBO			H III 92
NGC 4309	Ho 382a	Galaxy	VIR	12.7	13.3	1.8'	12 22.2	+07 09	193	SBO-a			
NGC 4407	NGC 4413	Galaxy	VIR	12.7	-	2.3'	12 26.5	+12 37	193	SBab Ring			
NGC 4411A	NGC 4411-1	Galaxy	VIR	12.7	14.1	2'	12 26.5	+08 52	193	SBd			NGC 4411B @ 4.3
NGC 4433	MCG - 1-32-	Galaxy	VIR	12.7	13.4	2.2'	12 27.6	-08 17	283	SBbc			
NGC 4482	IC 3427	Galaxy	VIR	12.7	13.2	1.7'	12 30.2	+10 47	193	Elliptical			H III 40
NGC 4598	UGC 7829	Galaxy	VIR	12.7	13.1	1.4'	12 40.2	+08 23	194	SBO			H III 105
NGC 4600	UGC 7832	Galaxy	VIR	12.7	12.6	1.2'	12 40.4	+03 07	239	SO			H II 577
NGC 5183	UGC 8485	Galaxy	VIR	12.7	13	1.9'	13 30.1	-01 43	240	Sb			H II 679;P w NGC 5184 at 3.7'
NGC 5636	UGC 9304	Galaxy	VIR	12.7	13.7	1.6'	14 29.7	+03 16	242	SBO-a Ring			H II 580;NGC 5638 group;vsBN;F bar
NGC 5705	UGC 9447	Galaxy	VIR	12.7	14.3	3'	14 39.8	-00 43	242	SBcd			NGC 5713 at 26.5' PA 12
NGC 5839	UGC 9693	Galaxy	VIR	12.7	13	1.3'	15 05.5	+01 38	243	SO			H II 541;NGC 5846 group
NGC 3876	UGC 6730	Galaxy	VIR	12.8	12.4	1.1'	11 45.4	+09 10	192	Sab			H III 103;comp at 3.5';PA138
NGC 4046	NGC 4045	Galaxy	VIR	12.8	-	3.1'	12 02.7	+01 59	238	Sba Ring			
NGC 4191	UGC 7233	Galaxy	VIR	12.8	12.6	1.2'	12 13.8	+07 12	193	SO			
NGC 4197	UGC 7247	Galaxy	VIR	12.8	13.4	3.4'	12 14.6	+05 48	193	Sc			H II 134
NGC 4255	UGC 7348	Galaxy	VIR	12.8	12.3	1.3'	12 18.9	+04 47	238	SO			
NGC 4264	UGC 7364	Galaxy	VIR	12.8	12.4	0.9'	12 19.6	+05 51	193	SBO-a			H II 140;NGC 4261 @ 3.4'
NGC 4268	UGC 7371	Galaxy	VIR	12.8	12.6	1.4'	12 19.8	+05 17	238	SBO-a			near 4273
NGC 4409	NGC 4420	Galaxy	VIR	12.8	-	2'	12 27.0	+02 30	238	SBbc			H III 17
NGC 4410A	NGC 4410-1	Galaxy	VIR	12.8	12.7	0.5'	12 26.5	+09 01	193	Sab pec			Double system w NGC 4410B @ 0.3';contact
NGC 4445	IC 793	Galaxy	VIR	12.8	12.9	2.6'	12 28.3	+09 26	193	Sab			
NGC 4607	Ho 436b	Galaxy	VIR	12.8	13.4	2.9'	12 41.2	+11 53	194	SBb			NGC 4606 @ 4 '
NGC 4888	NGC 4879	Galaxy	VIR	12.8	-	1.1'	13 00.6	-06 05	284	S pec			H II 778
NGC 5035	MCG - 3-34-	Galaxy	VIR	12.8	13.2	1.4'	13 14.8	-16 30	285	SBO-a Ring			
NGC 5171	UGC 8476	Galaxy	VIR	12.8	12.5	1.1'	13 29.4	+11 44	195	E-SO			in a dense part of the cl
NGC 5335	UGC 8791	Galaxy	VIR	12.8	13.9	2.1'	13 52.9	+02 49	241	SBb			
NGC 5604	MCG 0-37-	Galaxy	VIR	12.8	13.3	1.9'	14 24.7	-03 13	242	Sa			H III 668
IC 3583	UGC 7784	Galaxy	VIR	12.8	13.6	2.2'	12 36.7	+13 16	194	Ir+			P w NGC 4569
NGC 3863	UGC 6722	Galaxy	VIR	12.9	13.3	2.8'	11 45.1	+08 28	192	Sbc			
NGC 4269	UGC 7372;	Galaxy	VIR	12.9	12.7	1.3'	12 19.8	+06 01	193	Sa			
NGC 4300	UGC 7413	Galaxy	VIR	12.9	12.7	1.5'	12 21.7	+05 23	238	Sa Ring			H II 572
NGC 4316	UGC 7447	Galaxy	VIR	12.9	13	2.5'	12 22.7	+09 20	193	Sc			
NGC 4431	UGC 7569	Galaxy	VIR	12.9	13.5	1.7'	12 27.5	+12 17	193	SO			NGC 4440 group;NGC 4436 @ 3.8';NGC 4440 @ 6.4'
NGC 4584	UGC 7803	Galaxy	VIR	12.9	13.1	1.4'	12 38.3	+13 07	194	SBa			
NGC 4642	UGC 7893	Galaxy	VIR	12.9	12.9	1.9'	12 43.3	-00 39	239	Sbc			H III 494;NGC 4653 @ 9.6'
NGC 4690	UGC 7964	Galaxy	VIR	12.9	12.7	1.2'	12 47.9	-01 39	239	E-SO			H III 664
NGC 5022	MCG - 3-34-	Galaxy	VIR	12.9	12.6	2.5'	13 13.5	-19 33	330	Sb			
NGC 5132	UGC 8428	Galaxy	VIR	12.9	13.1	1.3'	13 24.5	+14 06	195	SBO-a			
NGC 5210	UGC 8523	Galaxy	VIR	12.9	13.3	1.3'	13 32.8	+07 10	195	Sa			H III 99;sharp edge
NGC 5257	UGC 8641	Galaxy	VIR	12.9	13.3	1.6'	13 39.9	+00 50	241	SBb/P			H II 895;P w NGC 5258;disrupted bridge
NGC 5258	UGC 8645	Galaxy	VIR	12.9	13.4	1.5'	13 40.0	+00 50	241	SBb			galaxies w appearance of fission;adj loops;B lens
NGC 5400	MCG 0-36-	Galaxy	VIR	12.9	13.2	1.5'	14 00.6	-02 51	241	E-SO			H III 667
NGC 5549	UGC 9156	Galaxy	VIR	12.9	13	1.6'	14 18.6	+07 23	197	SO			H III 552
NGC 5692	UGC 9427	Galaxy	VIR	12.9	12	0.9'	14 38.3	+03 25	242	Pec			
NGC 5718	UGC 9459	Galaxy	VIR	12.9	13.3	1.5'	14 40.7	+03 28	243	E-SO			H III 550;P w IC 1042 contact pair
IC 3322	UGC 7513	Galaxy	VIR	12.9	13.2	2.3'	12 25.9	+07 33	193	SBc			Member of Virgo group of galaxies
UGC 7557	PGC 40807	Galaxy	VIR	12.9	15.1	3.1'	12 27.2	+07 15	193	Sm			Member of Virgo group of galaxies
UGC 7911	PGC 42910	Galaxy	VIR	12.9	14.4	2.4'	12 44.5	+00 29	239	SBm			
NGC 3825	NGC 3852	Galaxy	VIR	13	13.2	1.3'	11 42.4	+10 16	192	SBa			H II 154
NGC 4044	UGC 7018	Galaxy	VIR	13	13.2	1.2'	12 02.5	-00 13	238	Elliptical			H III 491
NGC 4200	UGC 7251	Galaxy	VIR	13	13.2	1.5'	12 14.7	+12 11	193	SO			H II 164
NGC 4223	IC 3102	Galaxy	VIR	13	-	2.5'	12 17.4	+06 41	193	Sa			H II 137
NGC 4303A	NGC 4301	Galaxy	VIR	13	13.6	1.6'	12 22.5	+04 34	238	SBc			

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 4334	UGC 7458	Galaxy	VIR	13	13.8	2.2'	12 23.4	+07 28	193	SBab			
NGC 4354	NGC 4351	Galaxy	VIR	13	-	2'	12 24.0	+12 12	193	SBab/P			
NGC 4436	UGC 7573	Galaxy	VIR	13	13	1.5'	12 27.7	+12 19	193	SO			H II 172;NGC 4440 @ 3.3';NGC 4431 @ 3.5'
NGC 4541	UGC 7749	Galaxy	VIR	13	13	1.6'	12 35.2	-00 13	239	SBbc			H III 493
NGC 4544	UGC 7756	Galaxy	VIR	13	13.1	2'	12 35.6	+03 02	239	SBO-a			
NGC 4577	UGC 7821	Galaxy	VIR	13	-	1.8'	12 39.2	+06 00	194				H III 13
NGC 4591	UGC 7821	Galaxy	VIR	13	13.1	1.6'	12 39.2	+06 01	194	Sab			H III 504
NGC 4680	MCG - 2-33-	Galaxy	VIR	13	-	1.5'	12 46.9	-11 38	284	S			
NGC 4765	UGC 8018	Galaxy	VIR	13	12.8	1.1'	12 53.2	+04 28	239	Sa			H III 544
NGC 4776	NGC 4759-1	Galaxy	VIR	13	-	1.9'	12 53.1	-09 12	284	SO			
NGC 4836	MCG - 2-33-	Galaxy	VIR	13	-	1.4'	12 57.6	-12 45	284	Scd			
NGC 4838	MCG - 2-33-	Galaxy	VIR	13	-	1.7'	12 57.9	-13 04	284	SB Ring			
NGC 4843	MCG 0-33-	Galaxy	VIR	13	12.8	2.1'	12 58.0	-03 37	239	Sa			H III 613
NGC 4877	MCG - 2-33-	Galaxy	VIR	13	-	2.2'	13 00.4	-15 17	284	Sab			H II 299
NGC 4997	MCG - 3-34-	Galaxy	VIR	13	-	1.4'	13 09.9	-16 31	285	E-SO			
NGC 5015	MCG - 1-34-	Galaxy	VIR	13	-	1.9'	13 12.4	-04 20	240	SB Ring			H II 637
NGC 5047	MCG - 3-34-	Galaxy	VIR	13	-	2.7'	13 15.8	-16 31	285	SO			H III 670
NGC 5049	MCG - 3-34-	Galaxy	VIR	13	13	1.8'	13 16.0	-16 24	285	SO			H II 512
NGC 5073	MCG - 2-34-	Galaxy	VIR	13	-	3.4'	13 19.3	-14 51	285	SBc			H III 282
NGC 5076	MCG - 2-34-	Galaxy	VIR	13	-	1.3'	13 19.5	-12 44	285	Sa			H III 117
NGC 5111	NGC 5110	Galaxy	VIR	13	-	2'	13 22.9	-12 58	285	E-SO			H III 119
NGC 5209	UGC 8522	Galaxy	VIR	13	13.3	1.2'	13 32.7	+07 20	195	Elliptical			H III 10;compact;NGC 5210 at 9.7'
NGC 5221	UGC 8559	Galaxy	VIR	13	13.6	2.4'	13 34.9	+13 50	195	Sb Ring			broad streamers from s side;prob distort by 5222 ,5.4'
NGC 5232	MCG - 1-35-	Galaxy	VIR	13	-	1.5'	13 36.1	-08 30	286	Sa			
NGC 5252	UGC 8622	Galaxy	VIR	13	13.1	1.4'	13 38.3	+04 33	241	SO			H III 505;15mag comp at 7' PA 126
NGC 5254	MCG - 2-35-	Galaxy	VIR	13	-	2.9'	13 39.6	-11 30	286	Sc			
NGC 5420	MCG - 2-36-	Galaxy	VIR	13	-	1.4'	14 04.0	-14 37	286	Sb			
NGC 5674	UGC 9369	Galaxy	VIR	13	13	1.1'	14 33.9	+05 27	242	SBc Ring			H II 893
3C 273	PGC 41121	Quasar	VIR	13	-		12 29.1	+02 03	238				Brightest quasar ; ~2 billion light years, variable
PK 318+41.	Abell 36	Pln Neb	VIR	13	15.7	6.0'	13 40.6	-19 53	331	3b(3a)		11.5	
UGC 6780	PGC 36887	Galaxy	VIR	13	14.1	3.4'	11 48.9	-02 02	237	Sd pec			
NGC 3822	NGC 3848	Galaxy	VIR	13.1	13.1	1.4'	11 42.2	+10 17	192	SO			H II 153;NGC 3825 at 3.2;105
NGC 3952	IC 2972	Galaxy	VIR	13.1	13.1	1.6'	11 53.7	-04 00	237	Sm			H III 612
NGC 4058	UGC 7036	Galaxy	VIR	13.1	12.6	1.2'	12 03.8	+03 33	238	Sa			
NGC 4077	NGC 4140	Galaxy	VIR	13.1	13.1	1.2'	12 04.6	+01 47	238	SO			H III 258
NGC 4130	NGC 4129	Galaxy	VIR	13.1	-	2.3'	12 08.9	-09 02	283	SBab			
NGC 4418	NGC 4355	Galaxy	VIR	13.1	13	1.5'	12 26.9	-00 53	238	Sa			H III 492
NGC 4610	NGC 4470	Galaxy	VIR	13.1	-	1.3'	12 29.6	+07 49	193	Sa			H II 19
NGC 4668	UGC 7931	Galaxy	VIR	13.1	13.1	1.4'	12 45.5	-00 32	239	SBcd			H III 663;NGC 4666 @ 7.3'
NGC 5208	UGC 8519	Galaxy	VIR	13.1	12.9	1.7'	13 32.5	+07 19	195	SO			H III 9;early spir;NGC 5209 at 3.7'
NGC 5227	UGC 8566	Galaxy	VIR	13.1	14	1.8'	13 35.4	+01 25	240	SBb			H III 928
NGC 5348	UGC 8821	Galaxy	VIR	13.1	13.6	3.5'	13 54.2	+05 14	241	SBbc			
NGC 5384	UGC 8886	Galaxy	VIR	13.1	13.1	1.5'	13 58.2	+06 31	196	SO			
IC 719	UGC 6633	Galaxy	VIR	13.1	12.2	1.3'	11 40.3	+09 01	192	SO			
IC 719	UGC 6633	Galaxy	VIR	13.1	12.2	1.3'	11 40.3	+09 01	192	SO			
IC 3115	UGC 7333	Galaxy	VIR	13.1	13.9	1.7'	12 18.0	+06 39	193	SBc			P w NGC 4241
IC 3475	UGC 7692	Galaxy	VIR	13.1	14.2	1.7'	12 32.7	+12 46	194	Elliptical			Member of Virgo group of galaxies
UGC 7943	PGC 43106	Galaxy	VIR	13.1	14.5	2.5'	12 46.7	+05 58	194	Scd			
NGC 3914	UGC 6809	Galaxy	VIR	13.2	12.6	1.1'	11 50.5	+06 34	192	SBb			H III 90
NGC 4078	NGC 4107	Galaxy	VIR	13.2	12.4	1.3'	12 04.8	+10 36	193	SO			NGC 4082 @ 6.6';NGC 4082 @ 7.4';IC 2991 @ 6.7'
NGC 4341	IC 3260	Galaxy	VIR	13.2	13	1.7'	12 23.9	+07 06	193	SBO			based on UGC and Zwicky;H III 95
NGC 4641	UGC 7889	Galaxy	VIR	13.2	13.3	1.2'	12 43.1	+12 03	194	SO			
NGC 5207	UGC 8518	Galaxy	VIR	13.2	13.6	1.7'	13 32.2	+13 53	195	Sb			H III 643
NGC 5386	UGC 8890	Galaxy	VIR	13.2	12.1	1'	13 58.4	+06 20	196	Sa			H III 547;P w NGC 5382
NGC 5569	UGC 9176	Galaxy	VIR	13.2	14	1.7'	14 20.5	+03 59	242	SBc			vsN in B sh bar;F poor;res. arms. Near 5566
NGC 4318	UGC 7446	Galaxy	VIR	13.3	12.1	0.7'	12 22.7	+08 12	193	Elliptical			
NGC 4325	NGC 4368	Galaxy	VIR	13.3	12.6	1'	12 23.1	+10 37	193	Elliptical			
NGC 4326	UGC 7454	Galaxy	VIR	13.3	13.7	1.4'	12 23.2	+06 04	193	SBab			H II 141;NGC 4339 group;NGC 4339 @ 5.7'
NGC 4356	IC 3273	Galaxy	VIR	13.3	13.6	2.8'	12 24.2	+08 32	193	Sc			H III 481
NGC 4496B	NGC 4505	Galaxy	VIR	13.3	-	0.6'	12 31.7	+03 56	238	lr			H II 36
NGC 4799	UGC 8043	Galaxy	VIR	13.3	12.9	1.3'	12 55.3	+02 54	239	Sc			H III 548
NGC 5060	UGC 8351	Galaxy	VIR	13.3	13.1	1.1'	13 17.3	+06 02	195	SBb			
NGC 5185	UGC 8488	Galaxy	VIR	13.3	13.4	1.8'	13 30.0	+13 25	195	Sb			H III 642;P w NGC 5181 at 8.4'PA 216
NGC 5360	UGC 8838	Galaxy	VIR	13.3	13.8	1.6'	13 55.6	+04 59	241	SBO-a			P w NGC 5364 at 8'

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5575	NGC 5578	Galaxy	VIR	13.3	12.9	0.9'	14 21.0	+06 12	197	SO			
NGC 5661	UGC 9346	Galaxy	VIR	13.3	13	1.5'	14 32.0	+06 15	197	SBb			H II 892;nf of 2;UGC 9345 at 6.5' 15.4 mag
IC 775	UGC 7350	Galaxy	VIR	13.3	13.2	1.2'	12 18.9	+12 55	193	SB0 pec			
IC 3268	UGC 7477	Galaxy	VIR	13.3	12.8	0.9'	12 24.1	+06 36	193	Sc			
IC 3499	UGC 7712	Galaxy	VIR	13.3	12.7	1.4'	12 33.8	+11 00	194	Sa			Member of Virgo group of galaxies
UGC 7239	PGC 39067	Galaxy	VIR	13.3	14.6	2.2'	12 14.2	+07 46	193	Ir+			
Wild's triplet		Galaxy	VIR	13.3	-	3'	11 46.6	-03 52	237				A 13.4 m; B 12.9 m and C 13.5 m, wild's triplet
NGC 4012	UGC 6960	Galaxy	VIR	13.4	13.4	1.9'	11 58.5	+10 01	192	Sb			
NGC 4277	MCG 1-32-	Galaxy	VIR	13.4	13.1	1.1'	12 20.1	+05 20	238	SBO-a			H II 571 , near 4273
NGC 4376	UGC 7498	Galaxy	VIR	13.4	13.4	1.4'	12 25.3	+05 44	193	Ir			H II 530;possibly 49' north of NGC 4378
NGC 4486B	I Zw 38	Galaxy	VIR	13.4	12.2	0.6'	12 30.5	+12 29	193	Elliptical			NGC 4486 @ 7.3'
NGC 4948A	MCG - 1-33-	Galaxy	VIR	13.4	13.9	1.5'	13 05.1	-08 10	285	SBd			
NGC 4992	UGC 8232	Galaxy	VIR	13.4	13.1	1.2'	13 09.1	+11 38	195	Sa			
NGC 5027	UGC 8297	Galaxy	VIR	13.4	13.6	1.2'	13 13.3	+06 04	195	SBb			
NGC 5231	UGC 8574	Galaxy	VIR	13.4	13.3	1.1'	13 35.8	+03 00	240	SBa			alm stell
NGC 5392	MCG 0-36-	Galaxy	VIR	13.4	13.3	1.2'	13 59.4	-03 13	241	Sa			H III 666
NGC 5470	UGC 9020	Galaxy	VIR	13.4	13.2	2.5'	14 06.5	+06 02	196	Sb			
NGC 5618	UGC 9250	Galaxy	VIR	13.4	13.9	1.6'	14 27.2	-02 16	242	SBc			H III 763
NGC 5868	NGC 5865	Galaxy	VIR	13.4	13.4	1.1'	15 09.8	+00 32	243	E-SO			
IC 3267	UGC 7474	Galaxy	VIR	13.4	13.7	1.2'	12 24.1	+07 02	193	Sc			Possible member of Virgo group of galaxies
NGC 3833	UGC 6692	Galaxy	VIR	13.5	13.4	1.4'	11 43.5	+10 10	192	Sc			H III 102
NGC 3843	UGC 6699	Galaxy	VIR	13.5	12.2	0.9'	11 43.9	+07 56	192	Sa			
NGC 4029	UGC 6990	Galaxy	VIR	13.5	13.2	1.2'	12 00.1	+08 11	193	SBb			comp @ 0.9'
NGC 4075	MCG 0-31-	Galaxy	VIR	13.5	12.9	1.2'	12 04.6	+02 04	238	Sa			
NGC 4165	IC 3035;UGC	Galaxy	VIR	13.5	13.5	1.2'	12 12.2	+13 15	193	SBab Rii			
NGC 4182	NGC 4180	Galaxy	VIR	13.5	-	1.5'	12 13.1	+07 02	193	Sab			
NGC 4247	Ho 359c	Galaxy	VIR	13.5	13.3	0.8'	12 18.0	+07 16	193	SBab/P			
NGC 4423	UGC 7556	Galaxy	VIR	13.5	13.2	2.3'	12 27.2	+05 53	193	Sd			H III 145
NGC 4466	Ho 412a	Galaxy	VIR	13.5	12.8	1.1'	12 29.5	+07 42	193	Sab			Ho 412b @ 2.1' is a *
NGC 4576	UGC 7792	Galaxy	VIR	13.5	13.2	1.2'	12 37.6	+04 22	239	SBbc			
NGC 4587	UGC 7805	Galaxy	VIR	13.5	12.7	1.1'	12 38.6	+02 39	239	SO			
NGC 4734	UGC 7998	Galaxy	VIR	13.5	13.2	1'	12 51.2	+04 51	239	Sc			
NGC 4796	NPM1G +08	Galaxy	VIR	13.5	-	0.4'	12 55.1	+08 04	194	Compac			NGC 4791 @ 4.8'
NGC 5019	UGC 8288	Galaxy	VIR	13.5	12.7	0.8'	13 12.7	+04 44	240	SB/P			H III 545;Many blue patches along the arms
NGC 5270	UGC 8673	Galaxy	VIR	13.5	13.3	1.1'	13 42.2	+04 16	241	SBb			pec;double system?
NGC 5501	MCG 0-36-	Galaxy	VIR	13.5	13.2	1.1'	14 12.3	+01 16	242	Sa			
NGC 5650	NGC 5652	Galaxy	VIR	13.5	-	2'	14 31.0	+05 59	197	SBc			
NGC 5865	NGC 5868	Galaxy	VIR	13.5	-	1.1'	15 09.8	+00 32	243	E-SO			H II 684;P w NGC 5868 at 3.6' PA 0
IC 3259	UGC 7469	Galaxy	VIR	13.5	13.8	1.7'	12 23.8	+07 11	193	SBd			Low surface brightness
IC 3576	UGC 7781	Galaxy	VIR	13.5	15	2.3'	12 36.6	+06 37	194	S			Member of Virgo group of galaxies
UGC 7332	PGC 39474	Galaxy	VIR	13.5	14.6	2.3'	12 18.0	+00 26	238	Ir+			
UGC 8153	PGC 45071	Galaxy	VIR	13.5	14.4	1.6'	13 03.1	+04 00	239	Sd			
UGC 9057	PGC 50587	Galaxy	VIR	13.5	14	3'	14 10.2	-02 34	242	SBdm			
NGC 4043	UGC 7015	Galaxy	VIR	13.6	12.2	0.6'	12 02.4	+04 20	238	SO			
NGC 4202	UGC 7337	Galaxy	VIR	13.6	13.2	1.2'	12 18.1	-01 04	238	Sbc			
NGC 4259	UGC 7359	Galaxy	VIR	13.6	12.7	1.1'	12 19.4	+05 23	238	SO			
NGC 4301	NGC 4303A	Galaxy	VIR	13.6	13.2	1.6'	12 22.5	+04 34	238	SBc			NGC 4303 @ 10 '
NGC 4333	MCG 1-32-	Galaxy	VIR	13.6	12.9	0.8'	12 23.4	+06 02	193	SBab			H II 142
NGC 4353	IC 3266	Galaxy	VIR	13.6	13.2	0.9'	12 24.0	+07 47	193	Ir Bar			
NGC 5115	UGC 8408	Galaxy	VIR	13.6	13.4	1.4'	13 23.0	+13 57	195	SBc			
NGC 5246	UGC 8612	Galaxy	VIR	13.6	13.3	1'	13 37.5	+04 06	241	SBb			
NGC 5478	UGC 9034	Galaxy	VIR	13.6	13.2	1.1'	14 08.1	-01 42	242	SBbc			H III 762
NGC 5599	UGC 9218	Galaxy	VIR	13.6	13.1	1.4'	14 23.8	+06 35	197	Sb			H III 927
NGC 5725	UGC 9466	Galaxy	VIR	13.6	13.3	1.2'	14 41.0	+02 11	243	SBcd			
UGC 8385	PGC 46563	Galaxy	VIR	13.6	14.6	2.5'	13 20.7	+09 47	195	S(B)+			
NGC 3852	NGC 3825	Galaxy	VIR	13.7	-	1.3'	11 42.4	+10 16	192	SBa			H III 36
NGC 4139	MCG +00-31	Galaxy	VIR	13.7	12.8	1'	12 04.6	+01 48	238	SO			
NGC 4243	NGC 4240	Galaxy	VIR	13.7	-	1.2'	12 17.4	-09 57	283	Elliptical			
NGC 4266	UGC 7368	Galaxy	VIR	13.7	13.3	1.8'	12 19.7	+05 32	193	SBa			
NGC 4809	Ho 486a	Galaxy	VIR	13.7	14.1	1.7'	12 54.8	+02 39	239	Ir			north comp NGC 4810 @ 0.8'
NGC 4810	UGC 8034;H	Galaxy	VIR	13.7	14	1.4'	12 54.9	+02 38	239	Ir			south comp. NGC 4809 @ 0.8'
NGC 5050	UGC 8329	Galaxy	VIR	13.7	12.7	1.1'	13 15.7	+02 53	240	Sa			
NGC 5095	UGC 8381	Galaxy	VIR	13.7	12.8	1.2'	13 20.6	-02 17	240	Sa			
NGC 5104	UGC 8391	Galaxy	VIR	13.7	12.7	1.2'	13 21.4	+00 21	240	Sa			

7000 DSO List (sorted by constellation - magnitude)

NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5118	IC 4236	Galaxy	VIR	13.7	13	0.8'	13 23.5	+06 24	195	SBc			H III 925
NGC 5174	NGC 5162	Galaxy	VIR	13.7	-	3.2'	13 29.4	+11 00	195	Sc			H III 45;CGCG 'dbl nebula' is incorrect;* superimp
NGC 5175		Star	VIR	13.7	-		13 29.4	+11 00	195				
NGC 5213	UGC 8552	Galaxy	VIR	13.7	13.2	0.9'	13 34.7	+04 08	240	SBb			streamer or disturbed arm southeastw from n part
NGC 5366	MCG 0-36-	Galaxy	VIR	13.7	12.6	0.7'	13 56.4	-00 15	241	Sa			
NGC 5521	UGC 9122	Galaxy	VIR	13.7	12.3	0.6'	14 15.4	+04 24	242	S pec			
NGC 5680	ZWG 19. 68	Galaxy	VIR	13.7	13.3	0.9'	14 35.7	-00 01	242	E-SO			
UGC 8053	PGC 44089	Galaxy	VIR	13.7	14.2	1.7'	12 55.8	+04 01	239	S(B)dm			
UGC 9380	PGC 52092	Galaxy	VIR	13.7	14.3	1.9'	14 34.6	+04 16	242	Ir+			
NGC 4320	UGC 7452	Galaxy	VIR	13.8	13.1	1'	12 23.0	+10 33	193	Sb			NGC 4325 @ 4.9'
NGC 4467	Ho 413c	Galaxy	VIR	13.8	13.9	0.4'	12 29.5	+08 00	193	Elliptical			NGC 4472 @ 4.2'
NGC 4533	UGC 7725	Galaxy	VIR	13.8	13.5	2.1'	12 34.4	+02 19	239	Scd			NGC 4536 @ 8.2'
NGC 4761	MCG - 1-33-	Galaxy	VIR	13.8	11.6	0.8'	12 53.2	-09 12	284	Elliptical			
NGC 5178	UGC 8478	Galaxy	VIR	13.8	12.9	0.9'	13 29.5	+11 37	195	Sa Ring			
NGC 5814	MCG 0-38-	Galaxy	VIR	13.8	12.8	0.9'	15 01.4	+01 38	243	Sab			
NGC 5846A	MCG 0-38-	Galaxy	VIR	13.8	-	0.5'	15 06.5	+01 36	243	E2			
NGC 5848	NGC 5841	Galaxy	VIR	13.8	12.7	1.1'	15 06.6	+02 00	243	Sa			
IC 776	UGC 7352	Galaxy	VIR	13.8	14.4	1.8'	12 19.0	+08 51	193	SBd			Virgo grp memb;P w IC 3134 vF;vS;E
NGC 4282	MCG 1-32-	Galaxy	VIR	13.9	12.7	0.8'	12 20.4	+05 34	193	Sa			
NGC 4289	UGC 7403	Galaxy	VIR	13.9	14.1	3.9'	12 21.0	+03 43	238	Sc			
NGC 4360A	NGC 4360	Galaxy	VIR	13.9	-	1.5'	12 24.4	+09 18	193	Elliptical			
NGC 4410B	NGC 4410-2	Galaxy	VIR	13.9	12.2	0.5'	12 26.5	+09 01	193	Sbc			Double system w NGC 4410A @ 0.3';contact
NGC 4520	IC 799	Galaxy	VIR	13.9	-	1.4'	12 33.8	-07 23	284	E-SO			H II 757
NGC 5285	ZWG 17. 65	Galaxy	VIR	13.9	13.2	0.8'	13 44.4	+02 07	241	Elliptical			
NGC 5387	UGC 8891	Galaxy	VIR	13.9	13.1	1.6'	13 58.4	+06 04	196	Sbc			
NGC 5491A	UGC 9072	Galaxy	VIR	13.9	-	1.4'	14 11.0	+06 22	197	Sb			H II 890;s of 2;contact pr;UGC 9072
NGC 5738	MCG 0-38-	Galaxy	VIR	13.9	12.4	1'	14 43.9	+01 36	243	SO			
NGC 4201	MCG - 2-31-	Galaxy	VIR	14	-	0.9'	12 14.7	-11 35	283	SO			
NGC 4240	NGC 4243	Galaxy	VIR	14	-	1.2'	12 17.4	-09 57	283	Elliptical			
NGC 4252	UGC 7343	Galaxy	VIR	14	13.3	1.3'	12 18.5	+05 34	193	Sb			
NGC 4257	MCG 1-31-	Galaxy	VIR	14	13	1'	12 19.1	+05 44	193	Sab			
NGC 4279	MCG - 2-32-	Galaxy	VIR	14	-	1.1'	12 20.4	-11 40	283	Sa			
NGC 4285	MCG - 2-32-	Galaxy	VIR	14	-	0.9'	12 20.7	-11 39	283	Sa			
NGC 4403	MCG - 1-32-	Galaxy	VIR	14	-	1.9'	12 26.2	-07 41	283	Sab			H III 755
NGC 4404	MCG - 1-32-	Galaxy	VIR	14	-	1.2'	12 26.3	-07 41	283	E-SO			H III 756
NGC 4432	UGC 7570	Galaxy	VIR	14	13.4	0.9'	12 27.6	+06 14	193	SBbc			P w NGC 4430
NGC 4484	MCG - 2-32-	Galaxy	VIR	14	-	1.6'	12 28.9	-11 39	283	Sc			
NGC 4626	MCG - 1-32-	Galaxy	VIR	14	-	1.4'	12 42.4	-07 03	284	Sbc			H II 772
NGC 4628	MCG - 1-32-	Galaxy	VIR	14	-	1.7'	12 42.4	-06 58	284	Sb			H II 773
NGC 4629	UGC 7869	Galaxy	VIR	14	-	1.4'	12 42.5	-01 21	239	S			
NGC 4663	IC 811	Galaxy	VIR	14	-	1.1'	12 44.8	-10 12	284	SBO			
NGC 4705	MCG - 1-33-	Galaxy	VIR	14	-	3.1'	12 49.4	-05 12	239	SBbc			H III 610
NGC 4708	MCG - 2-33-	Galaxy	VIR	14	-	1.2'	12 49.7	-11 06	284	SBab Ri			H III 722
NGC 4739	MCG - 1-33-	Galaxy	VIR	14	-	1.4'	12 51.6	-08 25	284	Elliptical			H III 515
NGC 4770	MCG - 1-33-	Galaxy	VIR	14	-	1.5'	12 53.5	-09 33	284	Sa			H III 525
NGC 4780	MCG - 1-33-	Galaxy	VIR	14	-	1.8'	12 54.1	-08 37	284	SBc			
NGC 4822	MCG - 2-33-	Galaxy	VIR	14	-	1.2'	12 57.1	-10 46	284	E-SO			
NGC 4855	MCG - 2-33-	Galaxy	VIR	14	-	1.7'	12 59.3	-13 14	284	E-SO			
NGC 4887	MCG - 2-33-	Galaxy	VIR	14	-	1.1'	13 00.7	-14 40	284	Sa			
NGC 4890	MCG - 1-33-	Galaxy	VIR	14	-	0.9'	13 00.6	-04 36	239	Sm			H III 614
NGC 4920	MCG - 2-33-	Galaxy	VIR	14	-	1'	13 02.1	-11 23	284	Ir Bar			
NGC 4924	MCG - 2-33-	Galaxy	VIR	14	-	1.3'	13 02.2	-14 58	284	SBO-a			
NGC 4925	MCG - 1-33-	Galaxy	VIR	14	-	1'	13 02.1	-07 43	284	SO			H II 779
NGC 4942	IC 4136	Galaxy	VIR	14	-	1.7'	13 04.3	-07 39	285	SBcd			H III 761
NGC 4948	IC 4156	Galaxy	VIR	14	-	2'	13 04.9	-07 57	285	SBd			
NGC 4989	MCG - 1-34-	Galaxy	VIR	14	-	1.6'	13 09.3	-05 24	240	SO			H II 185
NGC 5010	MCG - 3-34-	Galaxy	VIR	14	-	1.3'	13 12.4	-15 48	285	Sa			
NGC 5028	MCG - 2-34-	Galaxy	VIR	14	-	1.6'	13 13.8	-13 03	285	E6			
NGC 5030	MCG - 3-34-	Galaxy	VIR	14	-	1.7'	13 13.9	-16 30	285	SBO-a			
NGC 5031	MCG - 3-34-	Galaxy	VIR	14	-	1.7'	13 14.1	-16 07	285	Sa			
NGC 5038	MCG - 3-34-	Galaxy	VIR	14	-	1.5'	13 15.0	-15 57	285	SO			
NGC 5066	NGC 5069	Galaxy	VIR	14	-	0.7'	13 18.5	-10 14	285	Sa			
NGC 5072	NGC 5070	Galaxy	VIR	14	-	1'	13 19.2	-12 32	285	E-SO			
NGC 5094	MCG - 2-34-	Galaxy	VIR	14	-	1.1'	13 20.8	-14 05	285	S			H III 539

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NAME	OTHER	TYPE	CON	MAG	S.B.	SIZE	RA	DEC	U2K	Class	ns	bs	SAC NOTES
NGC 5119	MCG - 2-34-	Galaxy	VIR	14	-	1.3'	13 24.0	-12 17	285	S pec			
NGC 5122	MCG - 2-34-	Galaxy	VIR	14	-	0.9'	13 24.2	-10 39	285	S pec			
NGC 5130	MCG - 2-34-	Galaxy	VIR	14	-	0.9'	13 24.5	-10 13	285	S			
NGC 5146	MCG - 2-34-	Galaxy	VIR	14	-	1.9'	13 26.6	-12 19	285	E-SO			H III 115
NGC 5196	ZWG 17. 2	Galaxy	VIR	14	13.1	0.8'	13 31.3	-01 37	240	E-SO			
NGC 5203	MCG - 1-35-	Galaxy	VIR	14	-	1.8'	13 32.2	-08 47	285	E-SO			H III 507
NGC 5343	MCG - 1-35-	Galaxy	VIR	14	-	1.5'	13 54.2	-07 35	286	E-SO			H II 308
NGC 5476	MCG - 1-36-	Galaxy	VIR	14	-	1.5'	14 08.1	-06 06	287	Sd			H III 287
NGC 5510	ESO 579- 3	Galaxy	VIR	14	-	1.4'	14 13.6	-17 59	332	Ir Bar			
NGC 5619A	NGC 5619	Galaxy	VIR	14	-	2.2'	14 27.3	+04 48	242	Sb			
NGC 5733	MCG 0-38-	Galaxy	VIR	14	13	1'	14 42.8	-00 21	243	Sc			
NGC 5811	MCG 0-38-	Galaxy	VIR	14	13.5	1'	15 00.5	+01 37	243	SBm			In NGC 5846 group. B bar: 0.3'X0.8';F asym loop
UGC 7739	Holmberg VII	Galaxy	VIR	14	14.3	1.3'	12 34.7	+06 18	194	Ir-			
UGC 9310	PGC 51809	Galaxy	VIR	14	14	2.3'	14 30.0	+03 13	242	SBdm			
Cr 399		Opn CL	VUL	3.6	-	60'	19 26.2	+20 06	161	III 3 m	40	5.2	Brocchi's cluster;The Coathanger Cl;
Stock 1		Opn CL	VUL	5.3	-	60'	19 35.8	+25 11	162	III 2 m	40	7	47 * in 40' field
NGC 6940	OCL 141	Opn CL	VUL	6.3	-	31'	20 34.4	+28 17	120	III 2 m	60	9.3	H VII 8;100 * mags 9...
NGC 6823	OCL 124	Opn CL	VUL	7.1	-	12'	19 43.2	+23 18	162	I 3 p n	30	8.8	H VII 18;In Vul OB1 w nebula NGC 6820;30 * mags 11..
M 27	NGC 6853	Pln Neb	VUL	7.3	11.2	480"	19 59.6	+22 43	162	3(2)		14.1	dumbbell neb. PK60-3.1;Lord Rosse drew 18* invl
NGC 6830	OCL 125	Opn CL	VUL	7.9	-	12'	19 51.0	+23 06	162	II 2 p	20	9.9	H VII 9
NGC 6882		Aster	VUL	8.1	-	18'	20 11.9	+26 40	163	II 2 p		9.9	H VIII 22;Near cluster NGC 6885
NGC 6885	OCL 152	Opn CL	VUL	8.1	-	7'	20 11.9	+26 29	163	III 2 p	30	6	H VIII 20;With 20 Vul
NGC 6802	OCL 114	Opn CL	VUL	8.8	-	3.2'	19 30.6	+20 16	162	III 1 m	50	12.9	H VI 14;Bar shaped elong N-S
Roslund 4		Opn CL	VUL	10	-	6'	20 04.9	+29 13	119	IV 2 p n	30	11.6	In nebula IC 4954-5
PK 72-17.1	Abell 74	Pln Neb	VUL	12.2	-	13.8'	21 16.8	+24 10	165	2		17.1	
NGC 7080	UGC 11756	Galaxy	VUL	12.3	13.4	1.8'	21 30.0	+26 43	165	SBb			
NGC 7052	UGC 11718	Galaxy	VUL	12.4	13.8	2.5'	21 18.6	+26 27	165	Elliptical			H III 145
NGC 6842	PK 65+0.1	Pln Neb	VUL	13.1	13.4	52.8"	19 55.0	+29 17	119	3b		14.5	
NGC 6921	UGC 11570	Galaxy	VUL	13.4	11.4	0.9'	20 28.5	+25 43	163	Sa			sp of 2
PK 66- 5.1	Peimbert 24	Pln Neb	VUL	13.6	-	5"	20 19.6	+27 00	163				
PK 55- 0.1	M1-71	Pln Neb	VUL	13.9	-	4.7"	19 36.5	+19 42	162				
UGC 11651	PGC 65775	Galaxy	VUL	13.9	14.8	3.4'	20 57.3	+25 58	164	Sdm			
NGC 6793	OCL 115	Opn CL	VUL	-	-	6'	19 23.2	+22 11	161	IV 2 p			H VIII 81
NGC 6800	OCL 123	Opn CL	VUL	-	-	5'	19 27.1	+25 08	161	III 2 p	20	10	H VIII 21;30' NW from Alpha Vul
NGC 6813	SG 3.148	Brn Neb	VUL	-	-	3'	19 40.4	+27 18	162	E			
NGC 6827	Berk 48	Opn CL	VUL	-	-	2'	19 48.9	+21 13	162				
IC 4954	IC 4955;Ced	Brn Neb	VUL	-	-	10'	20 04.8	+29 15	119	E			3 Bright components;Roslund 4 open cluster invl
Berk 52		Opn CL	VUL	-	-	4'	20 14.5	+28 57	119	I 1 m :b	40	18	
Berk 83		Opn CL	VUL	-	-	4'	20 01.4	+28 39	119	II 1 p :b	20	17	
Czernik 41		Opn CL	VUL	-	-	9'	19 51.0	+25 18	162	III 2 m :b	30		
Roslund 2		Opn CL	VUL	-	-	15.0'	19 45.4	+23 56	162	IV 2 p :b	20	7.1	
Sh2- 88	LBN 149	Brn Neb	VUL	-	-	18'	19 46.0	+25 20	162	E			Has two small brighter knots w in large faint neby
Sh2- 90	LBN 144	Brn Neb	VUL	-	-	5'	19 49.3	+26 51	162	E			
vdB 126	Ced 16	Brn Neb	VUL	-	-	7'	19 26.2	+22 45	161	R			