

Messier Plus Marathon Object List

by Wally Brown & Bob Buckner with additional objects by Mike Roos

Object Data - Saguaro Astronomy Club

Score is most numbered objects in a single night. Tiebreaker is count of un-numbered objects

Observer Name _____

Date _____

Address _____

Marathon Objects _____ Tiebreaker Objects _____

SEQ	OBJECT	TYPE	CON	R.A.	DEC.	RISE	TRANSIT	SET	MAG	SIZE	NOTES	TIME
	M 53	GLOCL	COM	1312.9	+1810	7:21	14:17	21:12	7.7	13.0'	NGC 5024, !B,vC,iR,vvmbM,st 12..	
1	M 3	GLOCL	CVN	1342.2	+2822	7:11	14:46	22:20	6.3	18.0'	NGC 5272, !!,eB,vL,vsmbM,st 11..., Lord Rosse-sev dark marks within 5' of center	
2	M 5	GLOCL	SER	1518.5	+0205	10:17	16:22	22:27	5.7	23.0'	NGC 5904, !!,vB,L,eCM,eRi, st mags 11...;superb cluster	
	M 94	GALXY	CVN	1250.9	+4107	5:12	13:55	22:37	8.1	14.4'x12.1'	NGC 4736, vB,L,iR,vsmbM,BN,r	
	M 4	GLOCL	SCO	1623.6	-2631	12:56	17:27	21:58	5.4	36.0'	NGC 6121, Cl,8 or 10 B* in line,rrr, Look for central bar structure	
	M 80	GLOCL	SCO	1617.0	-2258	12:36	17:21	22:06	7.3	10.0'	NGC 6093, st 14..., Extremely rich and compressed	
	M 62	GLOCL	OPH	1701.2	-3006	13:49	18:05	22:21	6.4	15.0'	NGC 6266, vB,L,gmbM,rrr, Asymmetrical	
	M 19	GLOCL	OPH	1702.6	-2615	13:34	18:06	22:38	6.8	17.0'	NGC 6273, vB,L,R,vCM,rrr, One of the most oblate GC	
3	M 107	GLOCL	OPH	1632.5	-1303	12:17	17:36	22:55	7.8	13.0'	NGC 6171, L,vRi,vmC,R,rrr, H VI 40	
	M 106	GALXY	CVN	1218.9	+4718	3:46	13:23	22:59	8.3	18.6'x7.2'	NGC 4258, !,vB,vL,vmE0,sbMBN, H V 43	
	M 63	GALXY	CVN	1315.8	+4201	5:31	14:19	23:08	8.5	12.6'x7.2'	NGC 5055, BN, vsvB stell. N in B inner lens;many filam	
	M 51	GALXY	CVN	1329.9	+4711	4:58	14:34	0:09	8.1	11.2'x6.9'	NGC 5194, !!!,Great spiral nebula, Whirlpool Gal;interacting pair;classic spiral	
	NGC 5195	GALXY	CVN	1330.0	+4715		14:34		9.6	5.9'x4.6'	H I 186;Interacting P w M 51;peculiar	
4	M 12	GLOCL	OPH	1647.2	-0156	11:58	17:51	23:44	6.1	16.0'	NGC 6218, vB,vL,iR,gmbM, Somewhat loose structure	
											NGC 6254, B,vL,R,gvmBM,rrr, Lord Rosse reported dark lane in cluster	
5	M 10	GLOCL	OPH	1657.1	-0405	12:14	18:01	23:47	6.6	20.0'		
6	M 9	GLOCL	OPH	1719.2	-1830	13:22	18:23	23:24	7.8	12.0'	NGC 6333, vB,L,R,eCM,rrr, neb B64 prominent to west	
7	M 6	OPNCL	SCO	1740.2	-3215	14:38	18:44	22:50	4.2	33.0'	NGC 6405, st7,10..., Butterfly cluster; incl var* BM Sco	
											NGC 6475, Cl,vB,pRi,IC,*7...12, 80 members to 10th mag;Fine naked eye cluster	
8	M 7	OPNCL	SCO	1753.7	-3446	15:04	18:57	22:51	3.3	75.0'		
9	M 22	GLOCL	SGR	1836.4	-2354	14:59	19:40	0:21	5.2	32.0'	NGC 6656, vB,vL,R,vRi,vmC, Stars mags 11..	
10	M 28	GLOCL	SGR	1824.5	-2452	14:50	19:28	0:06	6.9	13.8'	NGC 6626, 45' NW from Lambda Sgr;* mags 14...	
11	M 69	GLOCL	SGR	1831.3	-3220	15:29	19:35	23:41	7.6	7.1'	NGC 6637, NGC 6634, B,L,R,rrr,*14..16	
12	M 70	GLOCL	SGR	1843.2	-3217	15:41	19:47	23:53	7.8	8.0'	NGC 6681, Curved arc of stars to NE;* m14...	
13	M 54	GLOCL	SGR	1855.0	-3028	15:44	19:59	0:13	7.7	12.0'	NGC 6715, vB,L,R,g,smbM, * mags 15...	
14	M 55	GLOCL	SGR	1939.9	-3057	16:31	20:44	0:56	6.3	19.0'	NGC 6809, pB,L,R,vRi,vgbM, * mags 15...	
											NGC 6523, !!!,vB,eL,eIF,w L Cl, Lagoon Nebula;Cl NGC 6530 invl;dark lane crosses neb	
15	M 8	BRNEB	SGR	1803.8	-2422	14:28	19:07	23:47	5.0	45.0'x30.0'		
											NGC 6514, vB,vL,Trifid,D* inv, Trifid nebula;sev dark lanes;H IV 41 & V 10;D* HN 40 invl	
16	M 20	BRNEB	SGR	1802.3	-2301	14:21	19:06	23:51	6.3	20.0'x20.0'		
17	M 21	OPNCL	SGR	1804.2	-2229	14:21	19:08	23:55	5.9	16.0'	NGC 6531, Cl,pRi,IC,st9...12,	

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SEQ	OBJECT	TYPE	CON	R.A.	DEC.	RISE	TRANSIT	SET	MAG	SIZE	NOTES	TIME
18	M 25	OPNCL	SGR	1831.7	-1906	14:37	19:35	0:34	4.6	26.0'	IC 4725, Cl,pC, Contains U Sgr;Stars mags 6...10	
19	M 24	OPNCL	SGR	1816.7	-1839	14:20	19:20	0:21	3.1	95.0'x35.0'		
20	M 23	OPNCL	SGR	1757.0	-1900	14:01	19:01	0:00	5.5	25.0'	NGC 6494, Cl,B,vL,pRi,IC,*100 m 10..13	
21	M 18	OPNCL	SGR	1819.9	-1706	14:18	19:24	0:29	6.9	7.0'	NGC 6613, Cl,P,vIC, 12 * mag 9-10; 1 deg S of M17	
22	M 17	BRNEB	SGR	1820.8	-1610	14:16	19:24	0:33	6.0	20.0'x15.0'	NGC 6618, !!!,B,eL,eIF,2 hooked, Omega nebula;Swan Nebula;many F outer loops;use filter	
23	M 16	OPNCL	SER	1818.8	-1347	14:06	19:22	0:39	6.0	8.0'	NGC 6611, L,B,scattered Cl,neb invl, In Ser OB1;Star Queen or Eagle Nebula;stars mags 8...	
24	M 14	GLOCL	OPH	1737.6	-0314	12:52	18:41	0:30	7.6	11.0'	NGC 6402, B,vL,R,eRi,vgmbM, Many vF stars 14...	
25	M 11	OPNCL	SCT	1851.1	-0615	14:15	19:55	1:35	5.8	11.0'	NGC 6705, !!Cl,vB,L,iR,Ri,*9..., 500 stars to 14th mag;Wild duck cluster	
26	M 26	OPNCL	SCT	1845.3	-0922	14:18	19:49	1:19	8.0	10.0'	NGC 6694, Cl,cL,pRi,pC,70 * to 14 m	
27	NGC 6712	GLOCL	SCT	1853.0	-0842	14:24	19:57	1:29	8.1	9.8'	pB,vL,irr,rrr, H I 47	
28	M 75	GLOCL	SGR	2006.0	-2155	16:21	21:10	1:59	8.6	6.8'	NGC 6864, B,pL,R,vmbMBN,rr, * mags 17...	
29	NGC 6818	PLNEB	SGR	1943.9	-1409	15:32	20:48	2:03	9.3	46"	PK 25-17.1, B,vS,R, H IV 51;Little Gem Nebula	
30	M 101	GALXY	UMA	1403.2	+5420		15:07		7.5	28.8'x26.9'	NGC 5457, pB,vL,iR,g,vsmbM,BSN, P w NGC 5474;SN 1909;spir galax w one heavy arm;B knot E	
31	NGC 5907	GALXY	DRA	1515.9	+5619		16:20		10.4	12.6'x1.4'	cB,vL,vmE155,vgBMN, H II 759;vs bulge nearly hidden by strong dk lane; SN 1940a	
32	M 102	GALXY	DRA	1506.5	+5545		16:10		9.9	6.5'x3.1'	NGC 5866, vB,cL,pME146,gbM, vBN w dk lane and ansae;NGC 5867 small E neb;H I 215	
33	NGC 6503	GALXY	DRA	1749.4	+7008		18:53		10.2	7.0'x2.5'	pF,L,mE,*9f4'	
34	NGC 6543	PLNEB	DRA	1758.5	+6638		19:02		8.1	20"	vB,pS,sbMvSN, H IV 37;Cat's Eye Nebula	
35	M 13	GLOCL	HER	1641.7	+3627	9:32	17:45	1:59	5.8	20.0'	NGC 6205, !!eB,vRi,vgeCM,*11..., Hercules cluster	
36	NGC 6207	GALXY	HER	1643.0	+3649	9:31	17:47	2:02	11.4	3.0'x1.2'	H II 701;No def nucleus;B * nr center;30' NE from M 13	
37	NGC 6229	GLOCL	HER	1646.9	+4731	8:12	17:51	3:29	9.4	4.5'	vB,L,R,disc,r, H IV 50	
38	M 92	GLOCL	HER	1717.1	+4308	9:23	18:21	3:18	6.5	14.0'	NGC 6341, vB,vL,eCM,st 12..	
39	M 57	PLNEB	LYR	1853.5	+3301	12:02	19:57	3:53	8.8	3.0'x2.4'	NGC 6720, PK 63+13.1, Ring neb,B,pL,cE, Ring Nebula;central* var 14 to 16 mag	
40	M 56	GLOCL	LYR	1916.6	+3011	12:38	20:20	4:03	8.4	8.8'	NGC 6779, B,L,iR,gvmCM,rrr, Stars 11...	
41	NGC 6826	PLNEB	CYG	1944.8	+5031	10:27	20:48	7:10	8.8	36"	B,pL,R,*11m, H IV 73;Blinking Planetary	
42	M 39	OPNCL	CYG	2131.9	+4825	12:46	22:36	8:25	4.6	31.0'	NGC 7092, Cl,vL,P,vIC,*7...10, Large loose cluster	
43	M 29	OPNCL	CYG	2023.9	+3830	13:02	21:28	5:53	6.6	10.0'	NGC 6913, Cl,P,IC,st L&S, About 20 stars mags 8...	
44	NGC 6960	SNREM	CYG	2045.7	+3043	14:05	21:49	5:34	7.0	70.0'x6.0'	H V 15;Veil Nebula western part;* 52 CYG invl	
45	NGC 6940	OPNCL	VUL	2034.4	+2816	14:04	21:38	5:12	6.3	25.0'	Cl,vB,vL,vRi,cC, H VII 8;100 * mags 9...	
46	M 27	PLNEB	VUL	1959.6	+2243	13:51	21:03	4:15	7.4	6.7'	NGC 6853, PK 60+3.1, !!vB,vL,bi-N,IE,Dumbbell Neb	
47	Cr 399	OPNCL	VUL	1925.4	+2011	13:26	20:29	3:32	3.6	140.0'x50.0'	vL,B incl 4,5,7 Vulp, Brocchi's cluster;The Coathanger Cl;easy naked eye	
48	M 71	GLOCL	SGE	1953.7	+1846	13:59	20:57	3:55	8.4	7.2'	NGC 6838, Cl,vL,vRi,pmC,*11...16, Arrowhead shape	
49	NGC 6934	GLOCL	DEL	2034.2	+0724	15:17	21:38	3:59	8.9	7.1'	B,L,R,rrr,*16..., H I 103;*10m 2' west	
50	M 15	GLOCL	PEG	2129.9	+1210	15:57	22:34	5:10	6.3	18.0'	NGC 7078, !,vB,vL,iR,vsmbM,rrr,st vS, Stars mags 13...	
51	M 2	GLOCL	AQR	2133.4	-0049	16:41	22:37	4:34	6.6	16.0'	NGC 7089, !!B,vL,gpmbM,rrr,st eS, Lord Rosse-Dark area near core;* mags 13...	
52	NGC 7293	PLNEB	AQR	2229.6	-2050	18:41	23:33	4:26	7.3	17.6'	!,pF,vL,E or biN, Helical Nebula;low surf brightness	
53	M 72	GLOCL	AQR	2053.4	-1232	16:36	21:57	3:18	9.2	6.6'	NGC 6981, pB,pL,R,gmCM,rrr, 3 deg WSW of NGC 7009	
	M 73	OPNCL	AQR	2058.9	-1238	16:42	22:03	3:23	8.9	1.4'	NGC 6994, Cl,eP,vIC,No neb, 4 or 5 10th mag stars	
54	NGC 7009	PLNEB	AQR	2104.1	-1121	16:43	22:08	3:32	8.0	35"	vB,S, Saturn Nebula;H IV 1;blue-green disk	
55	M 30	GLOCL	CAP	2140.3	-2310	18:00	22:44	3:28	6.9	12.0'	NGC 7099, !,B,L,IE,gpmbM,st 12...16, elliptical shape	

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SEQ	OBJECT	TYPE	CON	R.A.	DEC.	RISE	TRANSIT	SET	MAG	SIZE	NOTES	TIME
56	NGC 40	PLNEB	CEP	0013.0	+7231		1:17		12.3	1.2'	PK 120+9.1, F,vS,R,vsmbM,L*cont f, H IV 58	
57	M 103	OPNCL	CAS	0133.4	+6039		2:37		7.4	6.0'	NGC 581, 40* m10..11; incl Struve 131 6-9m 14"	
58	NGC 663	OPNCL	CAS	0146.3	+6113		2:50		7.1	15.0'	H VI 31;In Cas OB8;incl Struve 151,152,153	
59	NGC 185	GALXY	CAS	0039.0	+4820	15:54	1:43	11:31	9.3	8.0'x7.0'	pB,vL,iR,vgmbM,r, H II 707;Dwarf elliptical;NGC 396	
60	NGC 7789	OPNCL	CAS	2357.4	+5642		1:01		6.7	25.0'	Cl,vL,vRi,vmC,st 11...18, H VI 30; 1000* m11..18	
61	M 52	OPNCL	CAS	2324.8	+6136		0:28		6.9	16.0'	NGC 7654, L,Ri,mCM,*9..13	
62	NGC 6939	OPNCL	CEP	2031.5	+6039		21:35		7.8	10.0'	Cl,pL,eRi,pCM,*11..16, H VI 42;Gal N6946 38' SE	
63	NGC 7331	GALXY	PEG	2237.1	+3425	15:38	23:41	7:43	9.5	10.2'x4.2'	H I 53;Brightest in group of F obj;sev dark lanes	
64	NGC 7662	PLNEB	AND	2325.9	+4232	15:37	0:30	9:22	8.3	37"	Blue Snowball Nebula;H IV 18;Barnard-cent * variable? NGC 224, !!eeB,eL,vmE, Local Group;Andromeda	
65	M 31	GALXY	AND	0042.7	+4116	17:03	1:46	10:30	3.5	189.1'x61.7'	Galaxy;nearest spiral	
66	M 32	GALXY	AND	0042.7	+4052	17:06	1:46	10:27	8.1	8.5'x6.5'	NGC 221, vvB,L,R,psmbMN; Comp to M31	
67	M 110	GALXY	AND	0040.4	+4141	16:58	1:44	10:30	7.9	19.5'x11.5'	NGC 205, vB,vL,mE 165 degrees, M31 Companion;H V 18	
68	M 33	GALXY	TRI	0133.9	+3039	18:53	2:38	10:22	5.5	68.7'x41.6'	NGC 598, eB,eL,R, Local Group;Pinwheel Galaxy;H V 17	
69	M 74	GALXY	PSC	0136.7	+1546	19:52	2:40	9:28	9.1	10.5'x9.5'	NGC 628, F,vL,R,vg,psmbM,rr, Fine face on spiral	
70	M 77	GALXY	CET	0242.7	-0000	21:47	3:46	9:45	8.9	7.1'x6.0'	NGC 1068, vB,pL,iR,sbMrrN, Seyfert	
71	NGC 936	GALXY	CET	0227.6	-0109	21:36	3:31	9:27	10.2	4.7'x4.1'	p of 2, H IV 23;Thick central bar;P w NGC 941 12' foll	
72	NGC 253	GALXY	SCL	0047.5	-2517	21:15	1:51	6:27	7.3	29.0'x6.8'	!!vvB,vvL,vmE 54 degrees,gbM, H V 1;Sandage-arms are more defined by dust than *	
73	M 45	OPNCL	TAU	0347.0	+2406	21:33	4:51	12:08	1.2	100.0'	MEL 22, vvB,vL,brilliant naked eye cluster,neb inv, Pleiades;nebys NGC 1432 and 1435 involved	
74	M 34	OPNCL	PER	0242.1	+4245	18:51	3:46	12:40	5.2	25.0'	NGC 1039, Cl,B,vL,IC,sC st9..., At least 80 true members;sev D* incl h1123 & O Struve 44	
75	NGC 891	GALXY	AND	0222.6	+4220	18:35	3:26	12:18	10.1	11.7'x1.6'	B,vL,vmE22, H V 19;Lord Rosse drawing shows dark lane	
76	NGC 1023	GALXY	PER	0240.4	+3903	19:15	3:44	12:13	9.5	7.4'x2.5'	H I 156;brtst in grp;more neb 10' E;lens shp F tuft on E tip	
77	M 76	PLNEB	PER	0142.3	+5134	16:03	2:46	13:29	10.1	3.1'	NGC 650-1, vB,p of Dneb, Little Dumbbell or Cork Nebula	
78	NGC 869	OPNCL	PER	0219.1	+5708		3:23		5.3	18.0'	h Per, *7...14, H VI 33; Double Cluster w NGC 884	
79	NGC 884	OPNCL	PER	0222.5	+5708		3:26		6.1	18.0'	Chi Per, Cl,vL,vRi,ruby*M, H VI 34;chi Per;in Per OB1;Double Cluster w NGC 869	
80	NGC 1501	PLNEB	CAM	0407.0	+6055		5:11		11.5	52"	PK 144+6.1, pB,pS,vIE,1'Diam, H IV 53;PK144+6.1	
81	M 38	OPNCL	AUR	0528.7	+3551	22:22	6:32	14:42	6.4	15.0'	NGC 1912, shaped like Greek letter Pi	
82	NGC 1907	OPNCL	AUR	0528.1	+3519	22:25	6:32	14:39	8.2	5.0'	Cl,pRi,pC,R,st9...12, H VII 39, 30*	
83	M 36	OPNCL	AUR	0536.3	+3408	22:39	6:40	14:41	6.0	10.0'	NGC 1960, Cl,B,vL,vRi,IC,60 *m9..11	
84	M 37	OPNCL	AUR	0552.3	+3233	23:03	6:56	14:49	5.6	15.0'	NGC 2099, !!Cl,Ri,pCM,st L & S, Total population 500*;dark area near center	
85	M 35	OPNCL	GEM	0609.0	+2420	23:54	7:13	14:31	5.1	25.0'	NGC 2168, Cl,vL,eRi,pC,st9...16, Lord Rosse counted 300*;Orange * invl;NGC 2158 30' SW	
86	NGC 2158	OPNCL	GEM	0607.4	+2405	23:54	7:11	14:28	8.6	5.0'	H VI 17;150 F* on edge of M 35	
87	M 1	SNREM	TAU	0534.5	+2200	23:29	6:38	13:48	8.4	6.0'x4.0'	NGC 1952, vB,vL,E135,vglbM,r, Crab Nebula;Rosse saw filaments;cent pulsar 16 mag;3C144	
88	NGC 2371	PLNEB	GEM	0725.6	+2929	0:50	8:29	16:08	11.2	1.0'	NGC 2372, B,S,R,bMN,p of Dneb, H II 316;faint double- lobed planetary	

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89	NGC 2372	PLNEB	GEM	0725.6	+2929	0:50	8:29	16:08	11.2	1.0'	NGC 2372, B,S,R,bMN,p of Dneb, H II 316;faint double-lobed planetary	
90	NGC 2392	PLNEB	GEM	0729.5	+2003	1:31	8:33	15:36	9.2	49"x27"	*9M,*8 nf 100", H IV 45;Clown Face or Eskimo Nebula	
	NGC 1360	PLNEB	FOR	0333.2	-2552	0:03	4:37	9:11	9.4	6.4'		
91	M 78	BRNEB	ORI	0546.8	+0004	0:51	6:50	12:50	8.0	8.0'x6.0'	NGC 2068, B,L,wisp,gmbN,3* inv,r, Comet shaped;2 10mag * invl, 53" sep	
92	NGC 2024	BRNEB	ORI	0541.7	-0150	0:52	6:45	12:39		30.0'x30.0'	! irr,B,vvL,black sp incl, H V 28;Tank Track Neb;bright but masked by glow of Zeta Ori	
93	NGC 1973	BRNEB	ORI	0535.1	-0444	0:54	6:39	12:24	7.0	5.0'x5.0'	CED 55B, *8,9 inv in neb	
94	M 42	BRNEB	ORI	0535.3	-0523	0:56	6:39	12:22	4.0	65.0'x60.0'	NGC 1976, !!!,Theta Orionis and the great nebula M42, Trapezium* 6.7-7.7m;>50 var* invl;M 43 to NE	
95	M 43	BRNEB	ORI	0535.5	-0516	0:56	6:39	12:22	9.0	20.0'x15.0'	NGC 1982, !,vB,vL,R w tail,mbM*8, H III 1 ?;part of Orion Nebula	
96	M 79	GLOCL	LEP	0524.2	-2431	1:49	6:28	11:07	7.7	9.6'	NGC 1904, pL,eRi,eC,rrr, Stars vF	
97	NGC 1535	PLNEB	ERI	0414.3	-1244	23:58	5:18	10:38	9.6	51"	PK 206-40.1, vB,S,R,pS,vsbM,r, H IV 26	
98	M 81	GALXY	UMA	0955.6	+6903		10:59		7.0	24.9'x11.5'	NGC 3031, brightest in group;fine spiral	
99	M 82	GALXY	UMA	0955.9	+6940		11:00		8.6	11.2'x4.3'	NGC 3034, vB,vL,vmE(ray), M81 group;eruptive;H IV 79	
100	NGC 2403	GALXY	CAM	0736.9	+6535		8:41		8.2	23.4'x11.8'	!! cB,eL,vmE,vgmbMN, H V 44;in M81 group;many well res irreg arms;broad bar	
101	M 108	GALXY	UMA	1111.5	+5540		12:15		9.9	8.6'x2.4'	NGC 3556, H V 46;M 97 is 48' SE;nearly edge-on	
102	M 97	PLNEB	UMA	1114.8	+5500		12:18		9.9	2.8'	NGC 3587, PK 148+57.1, !! vB,vL,R,vvg,vsbM, Owl Nebula	
	M 40	2STAR	UMA	1221.9	+5805		13:26		9.0		Neb D*, D* 9.0 & 9.3 mag 50" sep;No neby	
	M 109	GALXY	UMA	1157.6	+5322		13:01		9.8	7.5'x4.4'	NGC 3992, cB,vL,pmE,sbM,BN, H IV 61;theta struc barred sp;Gamma UMa 40' NW	
103	M 44	OPNCL	CNC	0840.0	+1940	2:43	9:44	16:45	3.1	70.0'	NGC 2632, !!Praesepe, Beehive;200 memb to 14 mag	
104	M 67	OPNCL	CNC	0851.4	+1148	3:20	9:55	16:30	6.9	25.0'	NGC 2682, ! CI,vB,vL,eRi,IC,*10...15, 500 memb to 16 mag;Mallas-dark spot near center	
105	M 48	OPNCL	HYA	0813.7	-0545	3:36	9:17	14:59	5.8	30.0'	NGC 2548, CI,vL,pRi,pmC, 50* m9-13;H VI 22	
106	M 50	OPNCL	MON	0702.8	-0823	2:33	8:06	13:40	5.9	15.0'	NGC 2323, CI,vL,Ri,pC, About 100 stars mags 9...14	
107	M 47	OPNCL	PUP	0736.6	-1428	3:26	8:40	13:55	4.4	25.0'	NGC 2478, NGC 2422, CI,B,vL,pRi,st L & S, H VIII 38;Struve 1121 & 1120 invl	
108	M 46	OPNCL	PUP	0741.8	-1448	3:32	8:45	13:59	6.1	20.0'	NGC 2422, NGC 2478, !,CI,vB,vRi,vL, PLNNB NGC 2438 on N edge;150 * 10-13 mag	
	NGC 2438	PLNEB	PUP	0741.9	-1444	3:32	8:46	13:59	10.8	1.3'	PK 231+4.2, pB,pS,vIE,r,3s.75 d, H IV 39	
109	M 41	OPNCL	CMA	0646.0	-2045	2:57	7:50	12:43	4.5	39.0'	NGC 2287, CI,vL,B,IC,st 8..., 150 members to 13 mag;orange * near center	
110	M 93	OPNCL	PUP	0744.5	-2351	4:07	8:48	13:30	6.2	10.0'	NGC 2447, st8...13, 63 members to 13 mag;wedge shaped center	
	M 95	GALXY	LEO	1044.0	+1142	5:13	11:48	18:22	9.8	7.4'x5.0'	NGC 3351, B,L,R,pgmbMN, Leo group	
	M 96	GALXY	LEO	1046.8	+1149	5:15	11:50	18:25	9.3	7.8'x5.2'	NGC 3368, vB,vL,IE,vsbM,r, comp @ 3.8';PA 205	
	M 105	GALXY	LEO	1047.8	+1234	5:14	11:51	18:29	9.5	5.3'x4.8'	NGC 3379,P w NGC 3384 @ 7.2';NGC 3389 @ 10.0'	
	M 65	GALXY	LEO	1118.9	+1305	5:43	12:23	19:02	9.2	9.8'x2.9'	NGC 3623, B,vL,mE 165,gbMBN, M66 subgroup	
	M 66	GALXY	LEO	1120.2	+1259	5:45	12:24	19:03	8.9	9.1'x4.1'	NGC 3627, B,vL,mE 150,mbM,2 st np, brightest in group;M 65 & NGC 3628 in field	