

Binocular Messier Observing List

Evening of 2022 Mar 5 at ColumbusTX

Sunset 18:30, Twilight ends 19:48, Twilight begins 05:28, Sunrise 06:45, Moon rise 09:12, Moon set 21:38

Completely dark from 21:38 to 05:28. Waxing Crescent Moon. All times local (GMT-6).

Weather: 17.8C, humidity 80%, good seeing.

Listing all classes at any quality (difficulty ignored).

Listing double stars ignoring splittability.

Cls	Log	Status	Primary ID	Alternate ID	Con	Mag	SBr	PSA	Ang. Size	Begin	Best	End	X	Difficulty	Priority	Best Difficulty	Brief
Gal	Y	Not Obs.	M 74	NGC 628	Psc	9.7	22.8	4	10.0' x 9.3'	19:40	19:44	20:00	2.3	very challenging		difficult	01
Gal	Y	Obsvd.	M 77	NGC 1068	Cet	9.7	21.7	6	6.2' x 5.6'	19:40	19:45	20:00	1.9	challenging		apparent	02
Gal	Y	Obsvd.	Andromeda Galaxy	M 31	And	4.3	22.7	3	3.0° x 1.2°	19:35	19:43	20:15	2.4	difficult		apparent	03
Gal	Y	Obsvd.	M 110	NGC 205	And	8.9	22.5	3	16.2' x 9.5'	19:35	19:43	20:05	2.4	very challenging		difficult	04
Gal	Y	Obsvd.	M 32	NGC 221	And	8.9	21.0	3	7.8' x 4.9'	19:30	19:42	20:10	2.4	difficult		apparent	05
Gal	Y	Obsvd.	Triangulum Galaxy	Triangulum Pinwheel	Tri	6.4	22.9	2	61.7' x 36.3'	19:35	19:45	20:20	1.9	challenging		apparent	06
Neb	Y	Obsvd.	M 78	NGC 2068	Ori	8.0	22.9	14	8.0'	19:50	19:57	20:15	1.2	very challenging		very challenging	07
Open	Y	Obsvd.	M 52	NGC 7654	Cas	6.8		71	15.0'	19:30	19:42	20:15	2.8	challenging	High	apparent	08
Open	Y	Obsvd.	M 103	NGC 581	Cas	6.6		1	5.0'	19:35	19:44	20:15	1.7	easy	High	easy	09
PNe	Y	Not Obs.	Little Dumbbell	Barbell	Per	10.1	18.1	2	2.7'	19:35	19:47	20:35	1.7	very challenging		difficult	10
Open	Y	Obsvd.	M 34	NGC 1039	Per	4.9		2	35.0'	19:35	19:47	20:40	1.4	apparent		easy	11
Open	Y	Obsvd.	Pleiades	M 45	Tau	1.2		15	120.0'	19:25	19:46	21:45	1.2	obvious		obvious	12
Neb	Y	Obsvd.	Crab Nebula	M 1	Tau	8.4	22.2	14	4.0'	19:45	19:57	20:55	1.0	very challenging		very challenging	13
Neb	Y	Obsvd.	Orion Nebula	M 42	Ori	4.0	20.8	16	40.0' x 20.0'	19:30	19:53	21:55	1.2	apparent		apparent	14
Neb	Y	Obsvd.	M 43	NGC 1982	Ori	9.0	22.6	16	7.0' x 6.0'	19:40	19:55	21:15	1.2	very challenging		very challenging	15
Glob	Y	Not Obs.	M 79	NGC 1904	Lep	7.7		16	9.6'	19:35	19:50	21:15	1.8	difficult		difficult	16
Open	Y	Obsvd.	M 41	NGC 2287	CMa	4.2		27	39.0'	19:35	20:19	22:25	1.6	easy		easy	17
Open	Y	Obsvd.	M 50	NGC 2323	Mon	6.0		27	14.0'	19:30	20:37	23:30	1.3	easy		easy	18
Open	Y	Obsvd.	M 93	NGC 2447	Pup	5.8		26	10.0'	19:40	21:17	23:15	1.7	easy		easy	19
Open	Y	Obsvd.	M 47	NGC 2422	Pup	4.4		26	25.0'	19:30	21:09	23:50	1.4	easy		easy	20
Open	Y	Obsvd.	M 46	NGC 2437	Pup	5.9		26	20.0'	19:35	21:14	23:35	1.4	apparent		apparent	21
Open	Y	Obsvd.	M 35	NGC 2168	Gem	5.2		25	25.0'	19:25	19:59	23:45	1.0	easy		easy	22
Open	Y	Obsvd.	M 38	NGC 1912	Aur	5.9		12	20.0'	19:30	19:54	23:10	1.0	easy		easy	23
Open	Y	Obsvd.	M 36	NGC 1960	Aur	6.3		12	10.0'	19:25	19:54	23:35	1.0	easy		easy	24
Open	Y	Obsvd.	M 37	NGC 2099	Aur	5.9		12	14.0'	19:25	19:56	23:45	1.0	easy		easy	25
Open	Y	Obsvd.	M 48	NGC 2548	Hya	5.3		26	30.0'	19:35	21:46	00:40	1.2	apparent		easy	26
Open	Y	Obsvd.	Beehive	M 44	Cnc	3.4		24	70.0'	19:30	22:13	02:10	1.0	easy		easy	27
Open	Y	Obsvd.	M 67	NGC 2682	Cnc	6.0		24	25.0'	19:35	22:24	01:50	1.1	apparent		apparent	28
Gal	Y	Obsvd.	M 96	NGC 3368	Leo	10.1	22.4	34	8.3' x 5.5'	21:35	00:19	03:10	1.1	difficult		difficult	29
Gal	Y	Obsvd.	M 105	NGC 3379	Leo	10.2	21.6	34	4.9' x 4.3'	21:15	00:20	03:30	1.0	apparent		apparent	30
Gal	Y	Obsvd.	M 95	NGC 3351	Leo	10.6	22.5	34	7.2' x 4.5'	21:45	00:16	02:50	1.1	challenging		challenging	31
Gal	Y	Obsvd.	M 65	NGC 3623	Leo	10.1	21.2	34	7.6' x 2.0'	22:00	00:51	03:45	1.0	difficult		difficult	32

Cls	Log	Status	Primary ID	Alternate ID	Con	Mag	SBr	PSA	Ang. Size	Begin	Best	End	X	Difficulty	Priority	Best Difficulty	Brief
Gal	Y	Obsvd.	M 66	NGC 3627	Leo	9.7	22.0	34	10.2' x 4.6'	22:00	00:52	03:50	1.0	difficult		difficult	33
Gal	Y	Obsvd.	Bode's Galaxy	M 81	UMa	7.8	21.9	31	21.4' x 11.2'	19:45	23:28	03:35	1.3	apparent		apparent	34
Gal	Y	Obsvd.	Cigar Galaxy	M 82	UMa	9.0	21.5	31	11.0' x 5.1'	19:45	23:29	03:25	1.3	apparent		apparent	35
PNe	Y	Obsvd.	Owl Nebula	M 97	UMa	9.7	21.0	32	3.4'	21:15	00:47	04:25	1.1	difficult		difficult	36
Gal	Y	Not Obs.	M 108	NGC 3556	UMa	10.7	20.9	32	4.0' x 1.7'	21:15	00:44	04:20	1.1	difficult		difficult	37
Gal	Y	Not Obs.	M 109	NGC 3992	UMa	10.5	22.8	32	8.1' x 5.6'	22:30	01:29	04:35	1.1	challenging		challenging	38
Doub	Y	Obsvd.	M 40	HD 238107	UMa	9.6		43	stellar	22:15	01:54	05:35	1.1	apparent		apparent	39
Gal	Y	Obsvd.	M 106	NGC 4258	CVn	9.1	22.5	43	17.0' x 7.2'	22:25	01:51	05:25	1.0	difficult		difficult	40
Gal	Y	Obsvd.	M 94	NGC 4736	CVn	8.7	21.1	43	7.8' x 6.8'	22:10	02:22	05:45	1.0	apparent		apparent	41
Gal	Y	Obsvd.	Sunflower Galaxy	M 63	CVn	9.3	22.2	43	11.7' x 7.1'	23:10	02:47	05:45	1.0	apparent		apparent	42
Gal	Y	Obsvd.	Whirlpool Galaxy	M 51	CVn	8.7	22.4	43	13.8' x 11.7'	23:10	03:01	05:45	1.0	apparent		apparent	43
Gal	Y	Not Obs.	Pinwheel Galaxy	M 101	UMa	8.4	23.4	42	24.0' x 22.9'	00:05	03:34	05:45	1.1	difficult		difficult	44
Gal	Y	Not Obs.	M 102	NGC 5866	Dra	10.7	21.9	53	6.3' x 2.8'	01:10	04:37	05:45	1.1	challenging		challenging	45
Glob	Y	Obsvd.	M 53	NGC 5024	Com	7.7		45	13.0'	23:35	02:44	05:40	1.0	difficult		difficult	46
Gal	Y	Obsvd.	Black Eye Galaxy	M 64	Com	9.3	21.8	45	10.5' x 5.4'	23:05	02:28	05:40	1.0	apparent		apparent	47
Glob	Y	Obsvd.	M 3	NGC 5272	CVn	6.3		44	18.0'	23:25	03:14	05:50	1.0	apparent		apparent	48
Gal	Y	Obsvd.	M 60	NGC 4649	Vir	9.8	21.8	45	6.8' x 5.4'	23:10	02:15	05:25	1.1	apparent		apparent	49
Gal	Y	Obsvd.	M 59	NGC 4621	Vir	10.7	21.8	45	4.6' x 3.2'	23:25	02:14	05:05	1.1	difficult		difficult	50
Gal	Y	Obsvd.	M 58	NGC 4579	Vir	10.5	21.8	45	5.0' x 3.8'	23:20	02:09	05:05	1.1	difficult		difficult	51
Gal	Y	Obsvd.	M 89	NGC 4552	Vir	10.7	23.4	45	8.1' x 7.9'	23:50	02:07	04:30	1.0	very challenging		very challenging	52
Gal	Y	Obsvd.	M 90	NGC 4569	Vir	10.1	22.1	45	9.1' x 3.8'	23:25	02:08	05:00	1.0	difficult		difficult	53
Gal	Y	Obsvd.	M 87	NGC 4486	Vir	9.6	21.9	45	7.1' x 6.6'	22:55	02:02	05:15	1.0	apparent		apparent	54
Gal	Y	Obsvd.	M 84	NGC 4374	Vir	10.1	22.4	45	7.4' x 6.5'	23:05	01:57	04:50	1.0	difficult		difficult	55
Gal	Y	Obsvd.	M 86	NGC 4406	Vir	9.8	22.9	45	11.5' x 8.3'	23:20	01:58	04:45	1.0	challenging		challenging	56
Gal	Y	Obsvd.	M 88	NGC 4501	Com	10.2	22.3	45	8.7' x 4.4'	23:20	02:04	04:50	1.0	challenging		difficult	57
Gal	Y	Obsvd.	M 91	NGC 4548	Com	10.9	22.5	45	5.5' x 4.5'	23:30	02:07	04:45	1.0	challenging		challenging	58
Gal	Y	Obsvd.	M 100	NGC 4321	Com	10.0	22.0	45	6.2' x 5.6'	22:50	01:55	05:05	1.0	apparent		apparent	59
Gal	Y	Obsvd.	St. Katherine's Wheel	Coma Pinwheel	Com	10.4	22.0	45	5.0' x 4.7'	22:55	01:50	04:55	1.0	difficult		difficult	60
Gal	Y	Obsvd.	M 98	NGC 4192	Com	10.9	22.7	45	11.0' x 2.6'	23:50	01:45	03:45	1.0	very challenging		very challenging	61
Gal	Y	Obsvd.	M 85	NGC 4382	Com	10.0	22.1	45	6.9' x 5.4'	22:50	01:57	05:05	1.0	difficult		difficult	62
Gal	Y	Obsvd.	M 49	NGC 4472	Vir	9.3	22.3	45	10.2' x 8.3'	23:10	02:01	05:00	1.1	apparent		apparent	63
Gal	Y	Obsvd.	M 61	NGC 4303	Vir	10.2	22.5	45	6.9' x 6.6'	23:20	01:54	04:30	1.1	difficult		difficult	64
Gal	Y	Obsvd.	Sombrero Galaxy	M 104	Vir	9.1	21.3	47	8.5' x 4.9'	23:50	02:12	04:35	1.3	apparent		apparent	65
Glob	Y	Obsvd.	M 68	NGC 4590	Hya	7.3		47	11.0'	00:55	02:11	03:30	1.8	difficult		difficult	66
Gal	Y	Obsvd.	M 83	NGC 5236	Hya	7.8	21.6	46	13.5' x 13.2'	01:50	03:09	04:35	2.0	apparent		apparent	67
Glob	Y	Obsvd.	M 5	NGC 5904	Ser	5.7		55	23.0'	01:40	04:50	05:50	1.1	apparent		apparent	68
Glob	Y	Obsvd.	Hercules Globular	Keystone Cluster	Her	5.8		52	20.0'	02:05	05:27	05:50	1.0	apparent		apparent	69
Glob	Y	Obsvd.	M 92	NGC 6341	Her	6.5		52	14.0'	02:35	05:23	05:50	1.1	apparent		apparent	70
Glob	Y	Obsvd.	M 10	NGC 6254	Oph	6.6		56	20.0'	03:45	05:28	05:45	1.2	apparent		apparent	71
Glob	Y	Obsvd.	M 12	NGC 6218	Oph	6.1		56	16.0'	03:15	05:30	05:50	1.2	apparent		apparent	72
Glob	Y	Obsvd.	M 107	NGC 6171	Oph	7.8		56	13.0'	03:55	05:32	05:45	1.4	challenging		challenging	73
Glob	Y	Obsvd.	M 80	NGC 6093	Sco	7.3		57	10.0'	03:55	05:35	05:45	1.6	apparent		apparent	74
Glob	Y	Obsvd.	M 4	NGC 6121	Sco	5.4		57	36.0'	04:15	05:36	05:45	1.8	difficult		difficult	75
Glob	Y	Obsvd.	M 9	NGC 6333	Oph	7.8		56	12.0'	04:50	05:26	05:40	1.6	challenging		challenging	76
Glob	Y	Obsvd.	M 14	NGC 6402	Oph	7.6		56	11.0'	04:25	05:26	05:45	1.3	difficult		apparent	77

Cls	Log	Status	Primary ID	Alternate ID	Con	Mag	SBr	PSA	Ang. Size	Begin	Best	End	X	Difficulty	Priority	Best Difficulty	Brief
PNe	Y	Obsvd.	Ring Nebula	M 57	Lyr	9.4	18.8	63	1.4'	04:20	05:28	05:45	1.3	apparent		apparent	78
Glob	Y	Obsvd.	M 56	NGC 6779	Lyr	8.4		63	8.8'	05:25	05:27	05:35	1.4	challenging		difficult	79
Open	Y	Obsvd.	Cooling Tower	M 29	Cyg	7.3		62	10.0'	04:40	05:30	05:50	1.7	apparent		apparent	80
Open	Y	Obsvd.	M 39	NGC 7092	Cyg	4.9		73	29.0'	05:15	05:33	05:45	2.2	apparent		easy	81
PNe	Y	Obsvd.	Dumbbell	M 27	Vul	7.3	18.4	64	8.0'	04:45	05:30	05:50	1.7	apparent		apparent	82
Glob	Y	Obsvd.	M 71	NGC 6838	Sge	8.4		64	4.0'	04:50	05:30	05:50	1.7	apparent		apparent	83
Open	Y	Obsvd.	Wild Duck Cluster	M 11	Sct	5.2		67	32.0'	05:25	05:31	05:40	1.7	apparent		apparent	84
Open	Y	Obsvd.	M 26	NGC 6694	Sct	8.1		67	7.0'	04:45	05:31	05:50	1.8	apparent		apparent	85
Open	Y	Obsvd.	Star Queen	M 16	Ser	6.8		67	6.0'	05:00	05:32	05:45	1.7	easy		easy	86
Neb	Y	Obsvd.	Eagle Nebula	M 16	Ser	6.0	22.2	67	9.0' x 4.0'	-	-	-	1.4	undetectable		undetectable	86
Open	Y	Obsvd.	M 17	NGC 6618	Sgr	6.2		67	25.0'	04:40	05:30	05:50	1.8	apparent		apparent	87
Neb	Y	Obsvd.	Omega Nebula	Swan	Sgr	6.0	23.1	67	11.0'	-	-	-	1.4	undetectable		undetectable	87
Open	Y	Obsvd.	M 18	NGC 6613	Sgr	8.4		67	5.0'	04:40	05:31	05:50	1.9	apparent		apparent	88
Open	Y	Not Obs.	NGC 6603	Collinder 374	Sgr	9.0		67	6.0'	05:00	05:30	05:45	1.9	challenging		difficult	89
Open	Y	Obsvd.	Sagittarius Star Clou	M 24	Sgr	3.4		67	78.0'	05:25	05:31	05:40	1.9	apparent		apparent	89
Open	Y	Obsvd.	M 25	IC 4725	Sgr	4.5		67	29.0'	04:40	05:33	05:55	2.0	easy		easy	90
Open	Y	Obsvd.	M 23	NGC 6494	Sgr	5.3		56	29.0'	05:10	05:30	05:45	1.8	apparent		apparent	91
Glob	Y	Obsvd.	M 19	NGC 6273	Oph	6.8		56	17.0'	04:55	05:33	05:40	1.9	difficult		difficult	92
Glob	Y	Obsvd.	M 62	NGC 6266	Oph	6.4		58	15.0'	05:05	05:34	05:40	2.1	difficult		difficult	93
Open	Y	Obsvd.	M 7	NGC 6475	Sco	2.5		58	80.0'	05:05	05:35	05:50	2.8	apparent		easy	94
Open	Y	Obsvd.	Butterfly Cluster	M 6	Sco	4.5		58	20.0'	04:35	05:34	05:55	2.4	easy		easy	95
Neb	Y	Obsvd.	Lagoon Nebula	M 8	Sgr	5.0	20.3	67	17.0' x 15.0'	04:40	05:31	05:50	2.1	apparent		apparent	96
Open	Y	Obsvd.	M 20	NGC 6514	Sgr	5.2		67	28.0'	05:30	05:31	05:35	2.0	apparent		apparent	97
Neb	Y	Obsvd.	Trifid Nebula	M 20	Sgr	6.3	22.3	67	16.0' x 9.0'	05:30	05:29	05:35	2.0	undetectable		very challenging	97
Open	Y	Obsvd.	M 21	NGC 6531	Sgr	5.9		67	14.0'	05:25	05:32	05:40	2.0	apparent		easy	98
Glob	Y	Obsvd.	M 22	NGC 6656	Sgr	5.2		67	32.0'	05:20	05:32	05:45	2.4	difficult		apparent	99
Glob	Y	Obsvd.	M 28	NGC 6626	Sgr	6.9		67	13.8'	05:20	05:32	05:45	2.3	challenging		difficult	=100
Glob	Y	Obsvd.	M 69	NGC 6637	Sgr	7.7		69	9.8'	05:20	05:34	05:45	3.1	very challenging		challenging	=101
Glob	Y	Obsvd.	M 70	NGC 6681	Sgr	7.8		69	8.0'	05:25	05:36	05:45	3.3	very challenging		challenging	=102
Glob	Y	Obsvd.	M 54	NGC 6715	Sgr	7.7		69	12.0'	-	-	-	2.0	undetectable		very challenging	=103
Glob	Y	Obsvd.	M 55	NGC 6809	Sgr	6.3		68	19.0'	-	-	-	2.0	undetectable		difficult	=104
Glob	Y	Obsvd.	M 75	NGC 6864	Sgr	8.6		66	6.8'	-	-	-	1.6	undetectable		challenging	=105
Glob	Y	Obsvd.	M 15	NGC 7078	Peg	6.3		75	18.0'	05:35	05:38	05:40	4.1	undetectable		apparent	=106
Glob	Y	Obsvd.	M 72	NGC 6981	Aqr	9.2		66	6.6'	-	-	-	1.3	undetectable		challenging	=107
Open	Y	Obsvd.	M 73	NGC 6994	Aqr	10.4		66	9.0'	-	-	-	1.3	undetectable		undetectable	=108
Glob	Y	Obsvd.	M 2	NGC 7089	Aqr	6.6		77	16.0'	-	-	-	1.2	undetectable		apparent	=109
Glob	Y	Obsvd.	M 30	NGC 7099	Cap	6.9		77	12.0'	-	-	-	1.6	undetectable		apparent	=110