

marathon.txt

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 \* Messier Marathon List with Data \*  
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The Messier Marathon is generally held during late March / early April when the Sun lies in a part of the zodiac devoid of Messier objects. In these dates it is theoretical possible to see all the objects that Charles Messier listed. One obvious problem is that the Moon is going to interfere with the night in question. The Moon is in a favourable position once every three years.

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 The Messier Marathon Search Sequence  
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Compiled using work of Don Machholz "Messier Marathon Observer's Guide". Depending on geographic location, it may be impossible to find them all, and may be better to slightly modify this list. In case of doubt consult Don Machholz's book. This list should be good for northern latitudes 20 to 40.

No.	M#	NGC#	Con	Type	ra	dec	B	d
1.	M77	1068	Cet	5	02 40.1	-00 14	8.9	30000
2.	M74	628	Psc	5	01 24.0	+15 32	10.2	20000
3.	M33	598	Tri	5	01 31.1	+30 24	6.7	2300
4.	M31	224	And	5	00 40.0	+41 00	4.8	2200
5.	M32	221	And	6	00 40.0	+40 36	8.7	2200
6.	M110	205	And	6	00 37.6	+41 25	9.4	2200
7.	M52	7654	Cas	1	23 22.0	+61 20	7.3	7
8.	M103	581	Cas	1	01 29.9	+60 27	7.4	8
9.	M76	650	Per	3	01 38.8	+51 19	10.2	3.4
10.	M34	1039	Per	1	02 38.8	+42 34	5.5	1.4
11.	M45	-	Tau	1	03 43.9	+23 58	1.6	0.4
12.	M79	1904	Lep	2	05 22.2	-24 34	8.4	54
13.	M42	1976	ori	4	05 32.9	-05 25	4.0	1.6
14.	M43	1982	Ori	4	05 33.1	-05 18	9.1	1.6
15.	M78	2068	Ori	4	05 44.2	+00 02	10.3	1.6
16.	M1	1952	Tau	9	05 31.5	+21 59	8.2	6
17.	M35	2168	Gem	1	06 05.7	+24 20	5.3	2.8
18.	M37	2099	Aur	1	05 49.0	+32 33	6.2	4.6
19.	M36	1960	Aur	1	05 32.0	+34 07	6.3	4.1
20.	M38	1922	Aur	1	05 25.3	+35 48	7.4	4.2
21.	M41	2287	CMa	1	06 44.9	-20 42	4.6	2.4
22.	M93	2447	Pup	1	07 42.4	-23 45	6.0	4.5
23.	M47	2422	Pup	1	07 34.3	-14 22	4.5	1.6
24.	M46	2437	Pup	1	07 39.6	-14 42	6.0	5.4
25.	M50	2323	Mon	1	07 00.5	-08 16	6.3	3
26.	M48	2548	Hya	1	08 11.2	-05 38	5.3	1.5
27.	M44	2632	Cnc	1	08 37.5	+19 52	3.7	0.5
28.	M67	2628	Cnc	1	08 48.3	+12 00	6.1	2.25
29.	M95	3351	Leo	5	10 41.3	+11 58	10.4	25000
30.	M96	3368	Leo	5	10 44.2	+12 05	9.1	25000

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31.	M105	3379	Leo	6	10	45.2	+12	51	9.2	25000
32.	M65	3623	Leo	5	11	16.3	+13	23	9.3	35000
33.	M66	3627	Leo	5	11	17.6	+13	17	8.2	35000
34.	M81	3031	UMa	5	09	51.5	+69	18	7.9	7000
35.	M82	3034	UMa	7	09	51.9	+69	56	8.8	7000
36.	M97	3587	UMa	3	11	2.0	+55	18	12.0	2.6
37.	M108	3556	UMa	5	11	08.7	+55	57	10.7	25000
38.	M109	3992	UMa	5	11	55.0	+53	39	10.8	25000
39.	M40	-	UMa	8	12	20.0	+58	22	9.1	?
40.	M106	4258	CVn	5	12	16.5	+47	35	8.6	25000
41.	M94	4736	CVn	5	12	48.6	+41	23	7.9	14500
42.	M63	5055	CVn	5	13	13.5	+42	17	9.5	14500
43.	M51	5194	CVn	5	13	27.8	+47	27	8.1	15000
44.	M101	5457	UMa	5	14	01.4	+54	35	9.6	15000
45.	M102?	5866	Dra	5	15	06.5	+55	45	10.0	40000
46.	M53	5024	Com	2	13	10.5	+18	26	7.6	60
47.	M64	4826	Com	5	12	54.3	+21	57	8.8	12000
48.	M3	5272	CVn	2	13	39.9	+28	38	6.3	30
49.	M98	4192	Com	5	12	11.3	+15	11	11.7	70000
50.	M99	4254	Com	5	12	16.3	+14	42	10.1	70000
51.	M100	4321	Com	5	12	20.4	+16	06	10.6	70000
52.	M85	4382	Com	6	12	22.8	+18	28	9.3	70000
53.	M84	4374	Vir	6	12	22.6	+13	10	9.3	70000
54.	M86	4406	Vir	6	12	23.7	+13	13	9.7	70000
55.	M87	4486	Vir	6	12	28.3	+12	40	9.2	70000
56.	M89	4552	Vir	6	12	33.1	+12	50	9.5	70000
57.	M90	4569	Vir	5	12	34.3	+13	26	10.0	70000
58.	M88	4501	Com	5	12	29.5	+14	42	10.2	70000
59.	M91	4548	Com	5	12	32.9	+14	46	9.5	70000
60.	M58	4579	Vir	5	12	35.1	+12	05	9.2	70000
61.	M59	4621	Vir	6	12	39.5	+11	55	9.6	70000
62.	M60	4649	Vir	6	12	41.1	+11	49	8.9	70000
63.	M49	4472	Vir	6	12	27.3	+08	16	8.5	70000
64.	M61	4303	Vir	5	12	19.4	+04	45	10.1	70000
65.	M104	4594	Vir	5	12	37.3	-11	21	8.7	50000
66.	M68	4590	Hya	2	12	36.8	-26	29	8.0	40
67.	M83	5236	Hya	5	13	34.3	-29	37	10.1	8000
68.	M5	5904	Ser	2	15	16.0	+02	16	6.2	30
69.	M13	6205	Her	2	16	39.9	+36	33	5.7	25
70.	M92	6341	Her	2	17	17.1	+43	08	6.5	36
71.	M57	6720	Lyr	3	18	51.7	+32	58	9.3	4.1
72.	M56	6779	Lyr	2	19	14.6	+30	05	8.2	40
73.	M29	6913	Cyg	1	20	22.2	+38	21	7.1	7.2
74.	M39	7092	Cyg	1	21	30.4	+48	13	5.2	0.825
75.	M27	6853	Vul	3	19	57.4	+22	35	7.6	1.25
76.	M71	6838	Sge	2	19	51.4	+18	39	9.0	8.5
77.	M107	6171	Oph	2	16	29.7	-12	57	9.2	10
78.	M12	6218	Oph	2	16	44.6	-01	52	6.6	16
79.	M10	6254	Oph	2	16	54.5	-04	02	6.7	16
80.	M14	6402	Oph	2	17	35.0	-03	13	7.7	23
81.	M9	6333	Oph	2	17	16.2	-18	28	7.3	25
82.	M4	6121	Sco	2	16	20.6	-26	24	6.4	10

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83.	M80	6093	Sco	2	16	14.1	-22 52	7.7	36
84.	M19	6273	Oph	2	16	59.5	-26 11	6.6	20
85.	M62	6266	Oph	2	16	58.1	-30 03	6.6	26
86.	M6	6405	Sco	1	17	36.8	-32 11	5.3	2
87.	M7	6475	Sco	1	17	50.7	-34 48	4.1	1
88.	M11	6705	Sct	1	18	48.4	-06 20	6.3	6
89.	M26	6694	Sct	1	18	42.5	-09 27	9.3	5
90.	M16	6611	Ser	1	18	16.0	-13 48	6.4	7
91.	M17	6618	Sgr	4	18	18.0	-16 12	7.5	5
92.	M18	6613	Sgr	1	18	17.0	-17 09	7.5	6
93.	M24	>6603	Sgr	1	18	15.5	-18 27	4.6	10
94.	M25	I4725	Sgr	1	18	28.8	-19 17	6.5	2
95.	M23	6494	Sgr	1	17	54.0	-19 01	6.9	4.5
96.	M21	6531	Sgr	1	18	01.8	-22 30	6.5	3
97.	M20	6514	Sgr	4	17	58.9	-23 02	9.0	2.2
98.	M8	6523	Sgr	4	18	01.6	-24 20	6.0	6.5
99.	M28	6626	Sgr	2	18	21.5	-24 54	7.3	15
100.	M22	6656	Sgr	2	18	33.3	-23 58	5.9	10
101.	M69	6637	Sgr	2	18	28.1	-32 23	8.9	25
102.	M70	6681	Sgr	2	18	40.0	-32 21	9.6	65
103.	M54	6715	Sgr	2	18	52.0	-30 32	8.0	50
104.	M55	6809	Sgr	2	19	36.9	-31 03	5.0	20
105.	M75	6864	Sgr	2	20	03.2	-22 04	8.0	100
106.	M15	7078	Peg	2	21	27.6	+11 57	6.0	40
107.	M2	7089	Aqr	2	21	30.9	-01 03	6.3	50
108.	M72	6981	Aqr	2	20	50.7	-12 44	9.8	60
109.	M73	6994	Aqr	8	20	56.7	-12 50	9.0	?
110.	M30	7099	Cap	2	21	37.5	-23 25	8.4	40

Key:

Type:

1=Open Cluster, 2=Globular Cluster, 3=Planetary Nebula, 4=Diffuse Nebula,  
5=Spiral Galaxy, 6=Elliptical Galaxy, 7=Irregular Galaxy,  
8=Multiple Star System, 9=SNR

ra = right ascension in hours minutes.decimal seconds

dec = declination in degrees minutes

B = apparent visual magnitude

d = distance in kilo-light-years

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My Messier Marathon

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Date: \_\_\_\_ . \_\_\_\_ 19\_\_ Observer: \_\_\_\_\_

Location: \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Time Zone: \_\_\_\_\_

Instruments used: \_\_\_\_\_

General Comments: \_\_\_\_\_

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 The Object List:  
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No.	M#	NGC#	Con	Type	Your#	Time	Comments
1.	M77	1068	Cet	G S	_____	__:__	_____
2.	M74	628	Psc	G S	_____	__:__	_____
3.	M33	598	Tri	G S	_____	__:__	_____
4.	M31	224	And	G S	_____	__:__	_____
5.	M32	221	And	G E	_____	__:__	_____
6.	M110	205	And	G E	_____	__:__	_____
7.	M52	7654	Cas	OC1	_____	__:__	_____
8.	M103	581	Cas	OC1	_____	__:__	_____
9.	M76	650	Per	Pl	_____	__:__	_____
10.	M34	1039	Per	OC1	_____	__:__	_____
11.	M45	-	Tau	OC1	_____	__:__	_____
12.	M79	1904	Lep	Gl	_____	__:__	_____
13.	M42	1976	ori	DN	_____	__:__	_____
14.	M43	1982	Ori	DN	_____	__:__	_____
15.	M78	2068	Ori	DN	_____	__:__	_____
16.	M1	1952	Tau	SNR	_____	__:__	_____
17.	M35	2168	Gem	OC1	_____	__:__	_____
18.	M37	2099	Aur	OC1	_____	__:__	_____
19.	M36	1960	Aur	OC1	_____	__:__	_____
20.	M38	1922	Aur	OC1	_____	__:__	_____
21.	M41	2287	CMa	OC1	_____	__:__	_____

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22.	M93	2447	Pup	OC1	_____	__:	_____
23.	M47	2422	Pup	OC1	_____	__:	_____
24.	M46	2437	Pup	OC1	_____	__:	_____
25.	M50	2323	Mon	OC1	_____	__:	_____
26.	M48	2548	Hya	OC1	_____	__:	_____
27.	M44	2632	Cnc	OC1	_____	__:	_____
28.	M67	2628	Cnc	OC1	_____	__:	_____
29.	M95	3351	Leo	G S	_____	__:	_____
30.	M96	3368	Leo	G S	_____	__:	_____
31.	M105	3379	Leo	G E	_____	__:	_____
32.	M65	3623	Leo	G S	_____	__:	_____
33.	M66	3627	Leo	G S	_____	__:	_____
34.	M81	3031	UMa	G S	_____	__:	_____
35.	M82	3034	UMa	G Ir	_____	__:	_____
36.	M97	3587	UMa	P1	_____	__:	_____
37.	M108	3556	UMa	G S	_____	__:	_____
38.	M109	3992	UMa	G S	_____	__:	_____
39.	M40	-	UMa	2St	_____	__:	_____
40.	M106	4258	CVn	G S	_____	__:	_____
41.	M94	4736	CVn	G S	_____	__:	_____
42.	M63	5055	CVn	G S	_____	__:	_____
43.	M51	5194	CVn	G S	_____	__:	_____
44.	M101	5457	UMa	G S	_____	__:	_____
45.	M102?	5866	Dra	GS0	_____	__:	_____
46.	M53	5024	Com	G1	_____	__:	_____
47.	M64	4826	Com	G S	_____	__:	_____

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48.	M3	5272	CVn	G1	_____	__:	_____
49.	M98	4192	Com	G S	_____	__:	_____
50.	M99	4254	Com	G S	_____	__:	_____
51.	M100	4321	Com	G S	_____	__:	_____
52.	M85	4382	Com	GS0	_____	__:	_____
53.	M84	4374	Vir	GS0	_____	__:	_____
54.	M86	4406	Vir	GS0	_____	__:	_____
55.	M87	4486	Vir	G E	_____	__:	_____
56.	M89	4552	Vir	G E	_____	__:	_____
57.	M90	4569	Vir	G S	_____	__:	_____
58.	M88	4501	Com	G S	_____	__:	_____
59.	M91	4548	Com	G S	_____	__:	_____
60.	M58	4579	Vir	G S	_____	__:	_____
61.	M59	4621	Vir	G E	_____	__:	_____
62.	M60	4649	Vir	G E	_____	__:	_____
63.	M49	4472	Vir	G E	_____	__:	_____
64.	M61	4303	Vir	G S	_____	__:	_____
65.	M104	4594	Vir	G S	_____	__:	_____
66.	M68	4590	Hya	G1	_____	__:	_____
67.	M83	5236	Hya	G S	_____	__:	_____
68.	M5	5904	Ser	G1	_____	__:	_____
69.	M13	6205	Her	G1	_____	__:	_____
70.	M92	6341	Her	G1	_____	__:	_____
71.	M57	6720	Lyr	P1	_____	__:	_____
72.	M56	6779	Lyr	G1	_____	__:	_____
73.	M29	6913	Cyg	OC1	_____	__:	_____

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74.	M39	7092	Cyg	OC1	_____	__:	_____
75.	M27	6853	Vul	P1	_____	__:	_____
76.	M71	6838	Sge	G1	_____	__:	_____
77.	M107	6171	Oph	G1	_____	__:	_____
78.	M12	6218	Oph	G1	_____	__:	_____
79.	M10	6254	Oph	G1	_____	__:	_____
80.	M14	6402	Oph	G1	_____	__:	_____
81.	M9	6333	Oph	G1	_____	__:	_____
82.	M4	6121	Sco	G1	_____	__:	_____
83.	M80	6093	Sco	G1	_____	__:	_____
84.	M19	6273	Oph	G1	_____	__:	_____
85.	M62	6266	Oph	G1	_____	__:	_____
86.	M6	6405	Sco	OC1	_____	__:	_____
87.	M7	6475	Sco	OC1	_____	__:	_____
88.	M11	6705	Sct	OC1	_____	__:	_____
89.	M26	6694	Sct	OC1	_____	__:	_____
90.	M16	6611	Ser	OC1	_____	__:	_____
91.	M17	6618	Sgr	DN	_____	__:	_____
92.	M18	6613	Sgr	OC1	_____	__:	_____
93.	M24	>6603	Sgr	OC1	_____	__:	_____
94.	M25	I4725	Sgr	OC1	_____	__:	_____
95.	M23	6494	Sgr	OC1	_____	__:	_____
96.	M21	6531	Sgr	OC1	_____	__:	_____
97.	M20	6514	Sgr	DN	_____	__:	_____
98.	M8	6523	Sgr	DN	_____	__:	_____
99.	M28	6626	Sgr	G1	_____	__:	_____

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100.	M22	6656	Sgr	G1	_____	__:	_____
101.	M69	6637	Sgr	G1	_____	__:	_____
102.	M70	6681	Sgr	G1	_____	__:	_____
103.	M54	6715	Sgr	G1	_____	__:	_____
104.	M55	6809	Sgr	G1	_____	__:	_____
105.	M75	6864	Sgr	G1	_____	__:	_____
106.	M15	7078	Peg	G1	_____	__:	_____
107.	M2	7089	Aqr	G1	_____	__:	_____
108.	M72	6981	Aqr	G1	_____	__:	_____
109.	M73	6994	Aqr	4St	_____	__:	_____
110.	M30	7099	Cap	G1	_____	__:	_____

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*   Score: _____ of 110  !!   *
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Key:

No. : Don Machholz' sequence number  
M# : Messier number  
NGC# : NGC (or IC) number  
Con : Constellation (abbreviated)  
Type : Object Type (see below)  
Your# : Your actual sequence number  
Time : Your observing time (in your time zone)  
Comments: Any important observing circumstances/results etc.

Types:

OC1=Open Cluster, G1=Globular Cluster, Pl=Planetary Nebula,  
DN=Diffuse Nebula, G S=Spiral Galaxy, G E=Elliptical Galaxy,  
GIr=Irregular Galaxy, GS0=Lenticular (S0) Galaxy, SNR=SNR,  
2St=Binary Star, 4St=4 Star System