MAS Mini-Messier Marathon Observing List for Sept.23 2022

Name_____

Beginner (seen less than 30 Messier objects in 1 night) Experienced (circle one)

Equipment used:

Star Hop | Goto | DSC

Sunset 07:09p, Twilight ends 08:44p, Twilight begins 05:24a, Sunrise 06:59a, Moon rise 05:23a, Moon set 06:40p

Completely dark from 08:44p to 05:23a. Waning Crescent Moon. All times local (GMT-5).

List is organized by “Begin” Times. Not all Messier Objects may be visible due to Horizon issues. Feel free to jump around as appropriate

Primary ID	Con	RA 2000	Dec	Mag	Begin	Best	End	Time Obs	Notes
M 4	Sco	16h23m36.0s	-26°31'30"	5.4	08:20p	08:25p	08:35p		
M 6	Sco	17h40m20.0s	-32°15'12"	4.5	08:15p	08:27p	08:55p		
M 7	Sco	17h53m51.0s	-34°47'36"	2.5	08:15p	08:27p	08:55p		
M 62	Oph	17h01m13.0s	-30°06'48"	6.4	08:20p	08:28p	08:40p		
M 80	Sco	16h17m02.0s	-22°58'30"	7.3	08:25p	08:29p	08:40p		
M 64	Com	12h56m43.8s	+21°40'55"	9.3	08:25p	08:30p	08:40p		
M 19	Oph	17h02m38.0s	-26°16'06"	6.8	08:25p	08:32p	08:50p		
M 54	Sgr	18h55m03.0s	-30°28'42"	7.7	08:25p	08:36p	09:30p		
M 5	Ser	15h18m34.0s	+02°05'00"	5.7	08:20p	08:37p	09:10p		
M 107	Oph	16h32m32.0s	-13°03'12"	7.8	08:25p	08:37p	09:05p		
M 21	Sgr	18h04m13.0s	-22°29'24"	5.9	08:25p	08:37p	09:05p		
M 8	Sgr	18h04m02.0s	-24°23'14"	5	08:35p	08:37p	08:50p		
M 69	Sgr	18h31m23.0s	-32°20'54"	7.7	08:25p	08:37p	09:10p		
M 94	CVn	12h50m53.0s	+41°07'12"	8.7	08:20p	08:38p	09:25p		
M 25	Sgr	18h31m47.0s	-19°07'00"	4.5	08:20p	08:38p	10:00p		
M 20	Sgr	18h02m42.0s	-22°58'20"	5.2	08:30p	08:38p	09:00p		
M 70	Sgr	18h43m13.0s	-32°17'30"	7.8	08:25p	08:38p	09:15p		
M 3	CVn	13h42m11.0s	+28°22'42"	6.3	08:25p	08:39p	09:15p		
M 9	Oph	17h19m12.0s	-18°31'00"	7.8	08:25p	08:39p	09:15p		
M 23	Sgr	17h57m04.0s	-18°59'06"	5.3	08:25p	08:39p	09:20p		
M 106	CVn	12h18m57.6s	+47°18'14"	9.1	08:25p	08:40p	09:20p		
M 12	Oph	16h47m14.0s	-01°56'48"	6.1	08:25p	08:40p	09:30p		
M 16	Ser	18h18m48.0s	-13°48'24"	6.8	08:15p	08:40p	10:20p		
M 20	Sgr	18h02m22.0s	-22°59'12"	6.3	08:30p	08:40p	09:20p		
M 28	Sgr	18h24m33.0s	-24°52'12"	6.9	08:30p	08:40p	09:00p		
M 55	Sgr	19h40m00.0s	-30°57'42"	6.3	08:25p	08:41p	10:20p		
M 63	CVn	13h15m49.3s	+42°01'45"	9.3	08:25p	08:41p	09:30p		
M 18	Sgr	18h19m58.0s	-17°06'06"	8.4	08:25p	08:41p	09:50p		
M 10	Oph	16h57m09.0s	-04°06'00"	6.6	08:30p	08:42p	09:20p		
M 22	Sgr	18h36m24.0s	-23°54'12"	5.2	08:30p	08:42p	09:20p		
M 17	Sgr	18h20m47.0s	-16°10'18"	6.2	08:25p	08:43p	09:50p		
M 51	CVn	13h29m52.7s	+47°11'43"	8.7	08:25p	08:44p	09:55p		
M 14	Oph	17h37m36.0s	-03°14'48"	7.6	08:25p	08:45p	10:00p		
M 13	Her	16h41m41.0s	+36°27'36"	5.8	08:20p	08:46p	11:40p		
M 26	Sct	18h45m18.0s	-09°23'00"	8.1	08:20p	08:46p	10:50p		
M 16	Ser	18h18m48.4s	-13°49'10"	6	08:30p	08:46p	09:30p		
M 17	Sgr	18h20m48.0s	-16°11'00"	6	08:35p	08:46p	09:15p		
M 101	UMa	14h03m12.6s	+54°20'57"	8.4	08:35p	08:47p	09:30p		
M 102	Dra	15h06m29.6s	+55°45'48"	10.7	08:25p	08:48p	10:50p		
M 11	Sct	18h51m05.0s	-06°16'12"	5.2	08:15p	08:48p	11:15p		
M 92	Her	17h17m07.0s	+43°08'12"	6.5	08:40p	08:49p	09:25p		
M 57	Lyr	18h53m35.1s	+33°01'45"	9.4	08:25p	08:50p	10:55p		
M 56	Lyr	19h16m36.0s	+30°11'06"	8.4	08:35p	08:57p	10:30p		
M 71	Sge	19h53m46.0s	+18°46'42"	8.4	08:30p	09:03p	11:00p		
M 27	Vul	19h59m36.3s	+22°43'16"	7.3	08:30p	09:06p	11:20p		
M 75	Sgr	20h06m05.0s	-21°55'18"	8.6	08:30p	09:07p	10:55p		
M 29	Cyg	20h23m57.0s	+38°30'30"	7.3	08:30p	09:25p	12:25a		
M 72	Aqr	20h53m28.0s	-12°32'12"	9.2	08:30p	09:54p	12:15a		
M 73	Aqr	20h58m55.0s	-12°38'00"	10.4	08:40p	10:00p	11:45p		
M 15	Peg	21h29m58.0s	+12°10'00"	6.3	09:05p	10:31p	12:00a		
M 39	Cyg	21h31m48.0s	+48°26'00"	4.9	08:30p	10:32p	02:00a		
M 2	Aqr	21h33m27.0s	-00°49'24"	6.6	08:20p	10:34p	02:10a		
M 30	Cap	21h40m22.0s	-23°10'42"	6.9	09:05p	10:41p	12:25a		
M 52	Cas	23h24m48.0s	+61°35'36"	6.8	09:15p	12:25a	03:40a		
M 110	And	00h40m22.1s	+41°41'07"	8.9	11:15p	01:41a	04:10a		
M 31	And	00h42m44.4s	+41°16'08"	4.3	11:00p	01:43a	04:30a		

M 32	And	00h42m41.8s	+40°51'55"	8.9	10:50p	01:43a	04:40a		
M 33	Tri	01h33m50.9s	+30°39'36"	6.4	12:30a	02:34a	04:40a		
M 103	Cas	01h33m23.0s	+60°39'00"	6.6	10:45p	02:34a	05:40a		
M 74	Psc	01h36m41.8s	+15°47'00"	9.7	01:45a	02:37a	03:35a		
M 76	Per	01h42m19.7s	+51°34'35"	10.1	12:10a	02:43a	05:15a		
M 34	Per	02h42m05.0s	+42°45'42"	4.9	12:40a	03:42a	05:40a		
M 77	Cet	02h42m40.7s	-00°00'48"	9.7	12:15a	03:43a	05:50a		
M 45	Tau	03h47m00.0s	+24°07'00"	1.2	02:15a	04:47a	05:50a		
M 1	Tau	05h34m30.0s	+22°01'00"	8.4	02:40a	05:15a	05:45a		
M 38	Aur	05h28m40.0s	+35°50'54"	5.9	03:45a	05:17a	05:45a		
M 78	Ori	05h46m48.0s	+00°05'00"	8	04:20a	05:18a	05:40a		
M 82	UMa	09h55m52.3s	+69°40'47"	9	01:20a	05:19a	05:50a		
M 81	UMa	09h55m33.1s	+69°03'56"	7.8	01:35a	05:19a	05:50a		
M 36	Aur	05h36m18.0s	+34°08'24"	6.3	03:45a	05:19a	05:45a		
M 43	Ori	05h35m30.0s	-05°16'00"	9	04:20a	05:19a	05:40a		
M 37	Aur	05h52m18.0s	+32°33'12"	5.9	04:10a	05:20a	05:40a		
M 35	Gem	06h09m00.0s	+24°21'00"	5.2	04:50a	05:21a	05:40a		
M 42	Ori	05h35m18.0s	-05°23'00"	4	03:20a	05:21a	05:55a		
M 97	UMa	11h14m47.7s	+55°01'08"	9.7	04:05a	05:24a	05:50a		
M 108	UMa	11h11m30.9s	+55°40'27"	10.7	05:05a	05:25a	05:40a		
M 109	UMa	11h57m35.9s	+53°22'28"	10.5	08:30p	05:25a	09:25p		
M 79	Lep	05h24m11.0s	-24°31'30"	7.7	04:20a	05:26a	05:50a		
M 44	Cnc	08h40m24.0s	+19°40'00"	3.4	04:35a	05:28a	05:50a		
M 67	Cnc	08h51m29.0s	+11°49'44"	6	04:45a	05:29a	05:50a		
M 50	Mon	07h02m42.0s	-08°23'00"	6	04:50a	05:29a	05:50a		
M 48	Hya	08h13m43.0s	-05°45'00"	5.3	05:00a	05:32a	05:55a		
M 41	CMa	06h46m01.0s	-20°45'24"	4.2	04:45a	05:32a	06:00a		
M 46	Pup	07h41m46.0s	-14°48'36"	5.9	05:05a	05:34a	05:55a		
M 47	Pup	07h36m35.0s	-14°29'00"	4.4	04:55a	05:35a	06:00a		
M 93	Pup	07h44m30.0s	-23°51'24"	5.8	05:25a	05:43a	06:00a		