

SWAOG MESSIER MARATHON

3/21/2015

Location: Plano, Il. (Silver Springs State Park - lng:88.54, lat:41.63)

Observation Start: 20:21 Astronomy Darkness Begins 20:43 Sunset 19:04

Observation End: 5:49 Astronomy Darkness Ends 5:20 Sunrise 6:54

There are 111 objects listed. M52 appears twice(seq. 9 and 75)as evening or morning object.

Moonset 21:00 - phase 04% waxing. All times are CDT.

Seen	Seq	M#	NGC#	Con	Object	RA	Dec	Mag	Size	Observe	Alt	Az	
1	2	3											
___	___	___	1	M74	628 Psc	Spiral Galaxy	01 36.7	+15 47	9.4	10.2x9.5	20:21	16	277
___	___	___	2	M77	1068 Cet	Cetus A Galaxy	02 42.7	-00 01	8.9	7x6	20:22	17	254
___	___	___	3*	M31	224 And	Andromeda Galaxy	00 42.7	+41 16	3.4	178x63	20:31	21	307
___	___	___	4*	M32	221 And	Elliptical Galaxy	00 42.7	+40 52	8.1	8x6	20:31	20	307
___	___	___	5*	M110	205 And	Elliptical Galaxy	00 40.4	+41 41	8.5	17x10	20:31	21	308
___	___	___	6	M33	598 Tri	Triangulum Galaxy	01 33.9	+30 39	5.7	73x45	20:32	22	292
___	___	___	7	M79	1904 Lep	Globular Cluster	05 24.5	-24 33	7.7	8.7	20:33	19	208
___	___	___	8	M76	650 Per	Little Dumbbell N.	01 42.4	+51 34	10.1	2.7x1.8	20:34	34	311
___	___	___	9	M52	7654 Cas	Open Cluster	23 24.2	+61 35	7.3	13.0	20:36	24	333
___	___	___	10	M103	581 Cas	Mini Dipper Clus.	01 33.2	+60 42	7.4	6.0	20:39	36	323
___	___	___	11	M34	1039 Per	Open Cluster	02 42.0	+42 47	5.5	35.0	20:42	39	297
___	___	___	12	M45	1432 Tau	Pleiades Cluster	03 47.0	+24 07	1.6	110.0	20:45	41	268
___	___	___	13*	M42	1976 Ori	Orion Nebula	05 35.4	-05 27	4.0	85x60	20:48	36	218
___	___	___	14*	M43	1982 Ori	De Mairan's Neb.	05 35.6	-05 16	9.0	20x15	20:51	35	218
___	___	___	15	M78	2068 Ori	Diffuse Nebula	05 46.7	+00 03	8.3	8x6	20:54	41	219
___	___	___	16	M41	2287 CMa	Open Cluster	06 46.0	-20 44	4.6	38.0	20:57	26	195
___	___	___	17	M93	2447 Pup	Open Cluster	07 44.6	-23 52	6.0	22.0	21:00	24	180
___	___	___	18*	M47	2422 Pup	Open Cluster	07 36.6	-14 30	5.2	30.0	21:03	34	184
___	___	___	19*	M46	2437 Pup	Open Cluster	07 41.8	-14 49	6.0	27.0	21:06	33	183
___	___	___	20	M50	2323 Mon	Open Cluster	07 03.2	-08 20	6.3	16.0	21:09	39	197
___	___	___	21	M48	2548 Hya	Open Cluster	08 13.8	-05 48	5.5	54.0	21:12	42	175
___	___	___	22	M35	2168 Gem	Open Cluster	06 08.9	+24 20	5.3	28.0	21:15	61	242
___	___	___	23	M1	1952 Tau	Crab Nebula	05 34.5	+22 01	8.4	6x4	21:18	53	250
___	___	___	24	M37	2099 Aur	Open Cluster	05 52.4	+32 33	6.2	24.0	21:21	62	262
___	___	___	25	M36	1960 Aur	Open Cluster	05 36.1	+34 08	6.3	12.0	21:24	59	267
___	___	___	26	M38	1912 Aur	Open Cluster	05 28.4	+35 50	7.4	21.0	21:27	58	274
___	___	___	27	M44	2632 Cnc	Beehive Cluster	08 40.1	+19 59	3.7	95.0	21:30	68	165
___	___	___	28	M67	2682 Cnc	Open Cluster	08 50.4	+11 49	6.1	30.0	21:33	59	165
___	___	___	29	M81*	3031 UMa	Bode's Galaxy	09 55.6	+69 04	6.9	21x10	21:36	60	16
___	___	___	30	M82*	3034 UMa	Cigar Galaxy	09 55.8	+69 41	8.4	9x4	21:39	60	15
___	___	___	31*	M108	3556 UMa	Spiral Galaxy	11 11.5	+55 40	10.0	8x1	21:42	60	48
___	___	___	32*	M97	3587 UMa	Owl Nebula	11 14.8	+55 01	9.9	3.4x3.3	21:45	60	49
___	___	___	33	M109	3992 UMa	Spiral Galaxy	11 57.6	+53 23	9.8	7x4	21:48	55	53
___	___	___	34	M40	Win4 UMa	Double Star	12 22.4	+58 05	8.4	0.8	21:51	52	45
___	___	___	35	M106	4258 CVn	Spiral Galaxy	12 19.0	+47 18	8.4	19x8	21:54	51	63
___	___	___	36	M94	4736 CVn	Spiral Galaxy	12 50.9	+41 07	8.2	7x3	21:57	45	69
___	___	___	37	M63	5055 CVn	Sunflower Galaxy	13 15.8	+42 02	8.6	10x6	23:30	57	74
___	___	___	38	M51	5194 CVn	Whirlpool Galaxy	13 29.9	+47 12	8.4	11x7	23:33	56	64
___	___	___	39	M101	5457 UMa	Pinwheel Galaxy	14 03.2	+54 21	7.9	22.0	23:36	52	51
___	___	___	40	M102	5866 Dra	Spindle Galaxy	15 06.5	+55 46	9.9	5.2x2.3	23:39	44	47
___	___	___	41	M3	5272 CVn	Globular Cluster	13 42.2	+28 23	6.2	16.2	23:42	49	93
___	___	___	42*	M95	3351 Leo	Spiral Galaxy	10 44.0	+11 42	9.7	4.4x3.3	23:45	60	174
___	___	___	43*	M96	3368 Leo	Spiral Galaxy	10 46.8	+11 49	9.2	6x4	23:48	60	174
___	___	___	44*	M105	3379 Leo	Elliptical Galaxy	10 47.8	+12 35	9.3	2.0	23:51	61	175
___	___	___	45	M65*	3623 Leo	Leo Triplet Galaxy	11 18.9	+13 05	9.3	8x1.5	23:54	60	161
___	___	___	46	M66*	3627 Leo	Leo Triplet Galaxy	11 20.2	+12 59	8.9	8x2.5	23:57	60	162
___	___	___	47*	M98	4192 Com	Spiral Galaxy	12 13.8	+14 54	10.1	9.5x3.2	1:00	63	166
___	___	___	48*	M99	4254 Com	Spiral Galaxy	12 18.8	+14 25	9.9	5.4x4.8	1:03	62	165
___	___	___	49*	M100	4321 Com	Spiral Galaxy	12 22.9	+15 49	9.3	7x6	1:06	63	164
___	___	___	50	M84*	4374 Vir	Lenticular Galaxy	12 25.1	+12 53	9.1	5.0	1:09	61	166
___	___	___	51	M86*	4406 Vir	Lenticular Galaxy	12 26.2	+12 57	8.9	7.5x5.5	1:12	61	166
___	___	___	52*	M88	4501 Com	Spiral Galaxy	12 32.0	+14 25	9.6	7x4	1:15	62	165
___	___	___	53*	M91	4548 Com	Spiral Galaxy	12 35.4	+14 30	10.2	5.4x4.4	1:18	62	164
___	___	___	54	M87	4486 Vir	Virgo A Galaxy	12 30.8	+12 24	8.6	7.0	1:21	60	169

Seen	Seq	M#	NGC#	Con	Object	RA	Dec	Mag	Size	Observe	Alt	Az	
1	2	3											
___	___	___	55*M90	4569	Vir	Spiral Galaxy	12 36.8	+13 10	9.5	9.5x4.5	1:24	61	167
___	___	___	56*M89	4552	Vir	Elliptical Galaxy	12 35.7	+12 33	9.8	4.0	1:27	60	169
___	___	___	57*M58	4579	Vir	Spiral Galaxy	12 37.7	+11 49	9.7	5.5x4.5	1:30	60	170
___	___	___	58*M59	4621	Vir	Elliptical Galaxy	12 42.0	+11 39	9.6	5x3.5	1:33	60	169
___	___	___	59*M60	4649	Vir	Elliptical Galaxy	12 43.7	+11 33	8.8	7x6	1:36	60	170
___	___	___	60 M49	4472	Vir	Elliptical Galaxy	12 29.8	+08 00	8.4	9x7.5	1:39	56	178
___	___	___	61 M61	4303	Vir	Spiral Galaxy	12 21.9	+04 28	9.7	6x5.5	1:42	53	183
___	___	___	62 M104	4594	Vir	Sombrero Galaxy	12 40.0	-11 37	8.0	9x4	1:45	37	178
___	___	___	63 M68	4590	Hya	Globular Cluster	12 39.5	-26 45	7.8	12.0	1:48	22	179
___	___	___	64 M83	5236	Hya	Sthrn Pinwheel Gal	13 37.0	-29 52	7.6	11x10	1:51	17	167
___	___	___	65 M85	4382	Com	Lenticular Galaxy	12 25.4	+18 11	9.1	7.1x5.2	1:54	66	189
___	___	___	66 M64	4826	Com	Blackeye Galaxy	12 56.7	+21 41	8.5	9.3x5.4	1:57	70	172
___	___	___	67 M53	5024	Com	Globular Cluster	13 12.9	+18 10	7.6	12.6	2:00	66	165
___	___	___	68 M13	6205	Her	Hercules Cluster	16 41.7	+36 28	5.8	16.6	2:03	46	77
___	___	___	69 M92	6341	Her	Globular Cluster	17 17.1	+43 08	6.4	11.2	2:06	43	65
___	___	___	70 M5	5904	Ser	Globular Cluster	15 18.6	+02 05	5.6	17.4	2:09	39	131
___	___	___	71 M57	6720	Lyr	Ring Nebula	18 53.6	+33 02	8.8	1.4x1.0	5:00	53	88
___	___	___	72 M56	6779	Lyr	Globular Cluster	19 16.6	+30 11	8.3	7.1	5:01	47	88
___	___	___	73 M29	6913	Cyg	Open Cluster	20 23.9	+38 32	7.1	7.0	5:02	39	69
___	___	___	74 M39	7092	Cyg	Open Cluster	21 32.2	+48 26	4.6	32.0	5:03	33	52
___	___	___	75 M52	7654	Cas	Open Cluster	23 24.2	+61 35	7.3	13.0	5:04	26	29
___	___	___	76 M71	6838	Sge	Globular Cluster	19 53.8	+18 47	8.2	7.2	5:05	34	95
___	___	___	77 M27	6853	Vul	Dumbbell Nebula	19 59.6	+22 43	7.4	8.0x5.7	5:06	36	90
___	___	___	78 M12	6218	Oph	Globular Cluster	16 47.2	-01 57	6.7	14.5	5:07	45	161
___	___	___	79 M10	6254	Oph	Globular Cluster	16 57.1	-04 06	6.6	15.1	5:08	42	159
___	___	___	80 M14	6402	Oph	Globular Cluster	17 37.6	-03 15	7.6	11.7	5:09	40	147
___	___	___	81 M107	6171	Oph	Globular Cluster	16 32.5	-13 03	7.9	10.0	5:10	35	170
___	___	___	82 M80	6093	Sco	Globular Cluster	16 17.0	-22 59	7.3	8.9	5:11	25	175
___	___	___	83 M4	6121	Sco	Globular Cluster	16 23.6	-26 32	5.6	26.3	5:12	22	174
___	___	___	84 M19	6273	Oph	Globular Cluster	17 02.6	-26 16	6.8	13.5	5:13	21	165
___	___	___	85 M62	6266	Oph	Globular Cluster	17 01.2	-30 07	6.5	14.1	5:14	17	167
___	___	___	86 M6	6405	Sco	Butterfly Cluster	17 40.1	-32 13	5.3	25.0	5:15	13	159
___	___	___	87 M7	6475	Sco	Ptolemy's Cluster	17 53.9	-34 49	4.1	80.0	5:16	10	157
___	___	___	88 M9	6333	Oph	Globular Cluster	17 19.2	-18 31	7.7	9.3	5:17	27	160
___	___	___	89 M23	6494	Sgr	Open Cluster	17 56.8	-19 01	6.9	27.0	5:18	24	151
___	___	___	90*M21	6531	Sgr	Open Cluster	18 04.6	-22 30	6.5	13.0	5:19	20	151
___	___	___	91*M20	6514	Sgr	Trifid Nebula	18 02.6	-23 02	9.0	28.0	5:20	20	152
___	___	___	92 M8	6523	Sgr	Lagoon Nebula	18 03.8	-24 23	6.0	90x40	5:21	19	152
___	___	___	93 M16	6611	Ser	Eagle Nebula	18 18.8	-13 47	6.4	7.0	5:22	27	144
___	___	___	94*M17	6618	Sgr	Omega/Swan Nebula	18 20.8	-16 11	7.0	11.0	5:23	25	145
___	___	___	95*M18	6613	Sgr	Open Cluster	18 19.9	-17 08	7.5	9.0	5:24	24	146
___	___	___	96 M24	6603	Sgr	Sgr. Star Cloud	18 16.9	-18 29	4.6	90.0	5:25	23	148
___	___	___	97 M25	I4725	Sgr	Open Cluster	18 31.6	-19 15	6.5	40.0	5:26	21	145
___	___	___	98 M28	6626	Sgr	Globular Cluster	18 24.5	-24 52	6.8	11.2	5:27	17	149
___	___	___	99 M22	6656	Sgr	Globular Cluster	18 36.4	-23 54	5.1	24.0	5:28	17	147
___	___	___	100 M11	6705	Sct	Wild Duck Cluster	18 51.1	-06 16	6.3	14.0	5:29	31	134
___	___	___	101 M26	6694	Sct	Open Cluster	18 45.2	-09 24	8.0	15.0	5:30	29	138
___	___	___	102 M15	7078	Peg	Globular Cluster	21 30.0	+12 10	6.2	12.3	5:31	17	89
___	___	___	103 M2	7089	Aqr	Globular Cluster	21 33.5	-00 49	6.5	12.9	5:32	8	98
___	___	___	104 M69	6637	Sgr	Globular Cluster	18 31.4	-32 21	7.6	7.1	5:32	10	152
___	___	___	105 M70	6681	Sgr	Globular Cluster	18 43.2	-32 18	7.9	7.8	5:32	9	150
___	___	___	106 M54	6715	Sgr	Globular Cluster	18 55.1	-30 29	7.6	9.1	5:33	10	147
___	___	___	107 M75	6864	Sgr	Globular Cluster	20 06.1	-21 55	8.5	6.0	5:34	10	132
___	___	___	108*M72	6981	Aqr	Globular Cluster	20 53.5	-12 32	9.3	5.9	5:34	10	117
___	___	___	109*M73	6994	Aqr	Group of 4 Stars	20 58.9	-12 38	9.0	2.8	5:34	9	116
___	___	___	110 M55	6809	Sgr	Globular Cluster	19 40.0	-30 58	6.3	19.0	5:49	6	142
-----	___	___	111 M30	7099	Cap	Globular Cluster	21 40.4	-23 11	7.2	11.0	----	--	---

Viewing Equipment

ra: right ascension in hours minutes.decimal seconds 1 _____
dec: declination in degrees minutes 2 _____
size: angular in arc minutes * objects within 1 degree 3 _____