

Seasonal Change

Spring

Leo, Virgo, Coma Berenices, Cancer, Ursa Major, Canes Venatici, Hydra, Draco, Serpens

Summer

Sagittarius, Scorpius, Hercules, Lyra, Cygnus, Ophiuchus, Scutum, Sagitta, Vulpecula

Fall

Aquarius, Andromeda, Capricornus, Pegasus, Perseus, Cetus, Cassiopeia, Triangulum, Pisces

Winter

Orion, Taurus, Canis Major, Auriga, Gemini, Lepus, Monoceros, Puppis, Hydra

Circumpolar

Ursa Major, Ursa Minor, Draco, Cassiopeia, Cepheus



Rick Stankiewicz - M8

Charles Messier

- Born in Badonviller, France 1730
- A bright comet in 1744 inspired him when he was 14
- At 21 he moved to Paris and began working at the Marine Observatory
- Recovered Halley's Comet on the night of January 21, 1759
- In Messier's time detailed star charts that mark the positions of galaxies, nebulae and star clusters did not exist
- When he began his search for comets he would frequently come across what he called "embarrassing objects"
- So as to not get fooled by these objects again, he began compiling a list on August 28, 1758, carefully recording the exact right ascension and declination along with detailed observation notes
- Messier died April 12, 1817



Messier Catalogue

- 110 objects
- 3 asterisms
- ➤ 26 open clusters
- 29 globular clusters
- 4 planetary nebulae
- > 7 diffuse nebulae
- 25 spiral galaxies
- 3 barred spiral galaxies
- ➤ 11 elliptical galaxies
- 1 irregular galaxy
- 1 supernova remnant



Asterisms

Spring

M40

Summer

M24

Fall



Open Clusters

Spring

M44, M67

Summer

M6, M7, M11, M16, M18, M21, M23, M25, M26, M29, M39

Fall

M34, M52, M103

Winter

M35, M36, M37, M38, M41, M45, M46, M47, M48, M50, M93



Brian Colville – M45

Globular Clusters

Spring

M3, M5, M53, M68

Summer

M4, M9, M10, M12, M13, M14, M19, M22, M28, M54, M55, M56, M62, M69, M70, M71, M75, M80, M92, M107

Fall

M2, M15, M30, M72

Winter



Planetary Nebulae

Spring

M97

Summer

M27, M57

Fall



Brian Colville – M27

Diffuse Nebulae

Summer M8, M16, M17, M20

Winter M42, M43, M78



Rodger Forsyth – M42/43

Galaxies

Spring

M49, M51, M58, M59, M60, M61, M63, M64, M65, M66, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M94, M95, M96, M98, M99, M100, M101, M102, M104, M105, M106, M108, M109

Fall

M31, M32, M33, M74, M77, M110



Supernova Remnants

Winter



PAA Messier Certificates

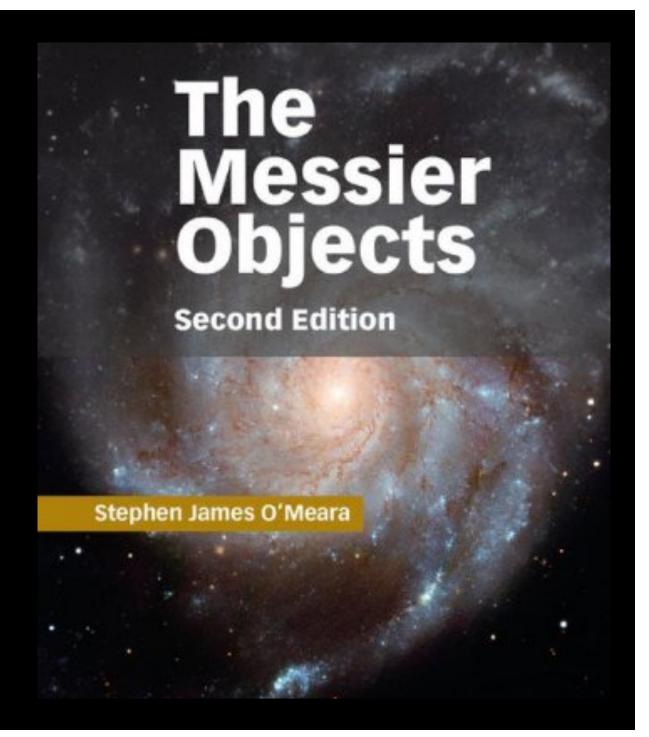
Four different levels

- > 30+ Messier Objects observed
- ➤ 60+ Messier Objects observed
- ➤ 90+ Messier Objects observed
- > All 110 Messier Objects observed
- Certificates differentiated by acquisition method
- Printable resource:
 http://www.star-shine.ch/astro/
 messiercharts/messierTelrad.htm



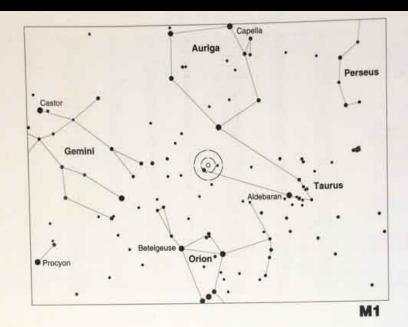
Books

- The Messier Objects
 - ISBN: 978-1-107-01837-2
 - \$56.95 (Amazon.ca)



Books

- Messier object finder charts
- Two volume set
- Spiral bound & laminated
- https://www.sky-spot.com
- \$39.99 USD



M1

NGC Description: Very bright, very large, extended along position angle 135, very gradually brightening a little toward the middle, mottled.

The Crab Nebula's history is better known than that of any other planetary nebula, for it is the remnant of the supernova of 1054 AD. MI appears in small telescopes as an elongated smudge, but in apertures of 16 inches or greater the filamentary detail begins to appear.

M1 has been intensely studied by professional astronomers. It is the sight of the discovery of the first visual pulsar.

NGC	TYPE	MAG.	DISTANCE	SIZE	DIAMETER		
1952	Di	8	6,300 l.y.	6' x 4'	11 l.y.		

Sky & Telescope's Messier Card

- Laminated
- Double sided
- \$6.95 USD
- https://shopatsky.com/products/ messier-card



													_
Dec.	Mag.	Size (')	Notes	M	NGC/IC	Туре	Con.	R.	.A.	Dec.	Mag.	Size (')	Notes
+22° 01′	8	6 × 4	Crab Nebula	59	4621	EG	Vir	12h	42.0 ^m	+11° 39′	9.8	5 × 3	
-00° 49′	6.5	13		60	4649	EG	Vir	12 ^h	43.7 ^m	+11° 33′	8.8	7×6	
+28° 23'	6.4	16		61	4303	SG	Vir	12h	21.9 ^m	+04° 28′	9.7	6×5	
-26° 32′	5.9	26		62	6266	GC	Oph	17 ^h	01.2 ^m	-30° 07′	6.6	14	
+02° 05′	5.8	17		63	5055	SG	CVn	13 ^h	15.8 ^m	+42° 02′	8.6	12 × 8	Sunflower Galaxy
-32° 13′	4.2	15	Butterfly Cluster	64	4826	SG	Com	12 ^h	56.7 ^m	+21° 41′	8.5	9 × 5	Black-Eye Galaxy
-34° 49′	3.3	80		65	3623	SG	Leo	11 ^h	18.9 ^m	+13° 05′	9.3	10 × 3	
-24° 23′	6	90 × 40	Lagoon Nebula	66	3627	SG	Leo	11 ^h	20.2 ^m	+12° 59′	9.0	9 × 4	
-18° 31′ -04° 06′	6.6	9 15		67 68	2682 4590	OC GC	Cnc	08 ^h	51.4 ^m 39.5 ^m	+11° 49′ -26° 45′	6.9 8.2	30 12	
-04° 06° -06° 16′	5.8	14	Wild Duck Cluster	69	6637	GC	Sgr	18 ^h	31.4 ^m	-32° 21′	7.7	7	
-01° 57′	6.6	14	Wild Duck Cluster	70	6681	GC	Sgr	18 ^h	43.2 ^m	-32° 18′	8.1	8	
+36° 28′	5.9	17	Hercules Cluster	71	6838	GC	Sge	19 ^h	53.8 ^m	+18° 47'	8.3	7	
-03° 15′	7.6	12	Tiordalos oldator	72	6981	GC	Agr	20 ^h	53.5 ^m	-12° 32′	9.4	6	
+12° 10′	6.4	12		73	6994	AS	Agr	20 ^h	58.9 ^m	-12° 38′	9.3	1	(four stars)
-13° 47′	6.0	7	Eagle Nebula	74	628	SG	Psc	01 ^h	36.7m	+15° 47'	9.2	10 × 9	,
-16° 11'	7	46×37	Omega Nebula	75	6864	GC	Sgr	20 ^h	06.1m	-21° 55′	8.6	6	
-17° 08'	6.9	9		76	650-1	PN	Per	01 ^h	42.4m	+51° 34'	11	2 × 1	Little Dumbbell
-26° 16'	7.2	14		77	1068	SG	Cet	02h	42.7m	-00° 01'	8.8	7×6	
-23° 02'	8	29×27	Trifid Nebula	78	2068	BN	Ori	05 ^h	46.7 ^m	+00° 03'	8	8×6	
-22° 30′	5.9	13		79	1904	GC	Lep	05 ^h	24.5 ^m	-24° 33′	8.0	9	
-23° 54′	5.1	24		80	6093	GC	Sco	16 ^h	17.0 ^m	-22° 59′	7.2	9	
-19° 01′	5.5	27		81	3031	SG	UMa	09 ^h	55.6 ^m	+69° 04′	6.8	26×14	
-18° 29′	4	90		82	3034	IG	UMa	09 ^h	55.8 ^m	+69° 41′	8.4	11 × 5	
-19° 15′	4.6	32		83	5236	SG	Hya	13 ^h	37.0 ^m	-29° 52′	8	11 × 10	
-09° 24′	8.0	15		84	4374	EG	Vir	12h	25.1 ^m	+12° 53′	9.3	5 × 4	
+22° 43′	8	8 × 4	Dumbbell Nebula	85	4382	EG	Com	12h	25.4 ^m	+18° 11′	9.2	7 × 5	
-24° 52′	7	11		86	4406	EG	Vir Vir	12 ^h	26.2 ^m 30.8 ^m	+12° 57′ +12° 24′	9.2	7 × 5	
+38° 32′ -23° 11′	6.6 7.5	7		87 88	4486 4501	EG SG	Com	12 ^h	30.8 ^m	+12° 24' +14° 25'	9.5	7×4	
+41° 16′	3.4	180 × 60	Andromeda Galaxy	89	4552	EG	Vir	12h	35.7 ^m	+14° 23′	9.8	4	
+41° 10° 52′	8.2	8 × 6	Andronneda dalaxy	90	4569	SG	Vir	12h	36.8 ^m	+13° 10′	9.5	9×5	
+30° 39′	5.7	60 × 40	Pinwheel Galaxy	91	4548	SG	Com	12h	35.4 ^m	+14° 30′	10.2	5 × 4	
+42° 45′	5.2	35	1 illwilder dalaxy	92	6341	GC	Her	17h	17.1 ^m	+43° 08′	6.5	11	
+24° 20′	5.1	28		93	2447	OC	Pup	07 ^h	44.6m	-23° 52′	6	22	
+34° 08′	6.0	12		94	4736	SG	CVn	12h	50.9m	+41° 07′	8.1	11 × 9	
+32° 33′	5.6	24		95	3351	SG	Leo	10 ^h	44.0 ^m	+11° 42′	9.7	7×5	
+35° 50'	6.4	21		96	3368	SG	Leo	10 ^h	46.8m	+11° 49'	9.2	7×5	
+48° 26'	4.6	32		97	3587	PN	UMa	11 ^h	14.8 ^m	+55° 01'	11	3	Owl Nebula
+58° 05′	9.1	1	(double star)	98	4192	SG	Com	12 ^h	13.8 ^m	+14° 54′	10.1	9×3	
-20° 44′	4.5	38		99	4254	SG	Com	12 ^h	18.8 ^m	+14° 25′	9.8	5	
-05° 27′	4	66×60	Orion Nebula	100	4321	SG	Com	12 ^h	22.9 ^m	+15° 49′	9.4	7×6	
-05° 16′	9	20×15		101	5457	SG	UMa	14 ^h	03.2 ^m	+54° 21′	7.7	27×26	
+19° 46′	3.1	95	Beehive Cluster	102	(duplica				00 0m		_		
+24° 07′	1.2	110	Pleiades	103	581	00	Cas	01 ^h	33.2 ^m	+60° 42′	7	6	Combiner Orley
-14° 49′	6.1	27		104	4594	SG	Vir	12h	40.0 ^m	-11° 37′	8.3	9 × 4	Sombrero Galaxy
-14° 30′	4.4	30		105	3379	EG	Leo	10 ^h	47.8 ^m	+12° 35′	9.3	5 × 4	
-05° 48′	5.8	54		106 107	4258 6171	SG	CVn Oph	12 ^h 16 ^h	19.0 ^m 32.5 ^m	+47° 18′ -13° 03′	8.3	18 × 8	
+08° 00′ -08° 23′	8.4	9×7		107	3556	SG	UMa	10"	32.5 ^m	+55° 40′	10.0	8 × 2	
+47° 12′	5.9 8.1	16 11 × 8	Whirlpool Galaxy	109	3992	SG	UMa	11h	57.6 ^m	+53° 23′	9.8	8 × 5	
+47° 12° +61° 35′	6.9	13	willipool dalaxy	110	205	EG?	And	00h	40.4 ^m	+33° 23° +41° 41′	8.0	17 × 10	
+01° 35° +18° 10′	7.7	13		110	200	Lui	Ailu	00	10.4	171 71	0.0	17 × 10	
-30° 29′	7.7	9		P.N	N = bright	nehul	a	O	C = oper	cluster		FG - e	lliptical galaxy
-30° 58′	7.0	19			v = brigin V = planet					ular cluster			piral galaxy
+30° 11′	8.2	7			C = Milky				S = giou S = astei				regular galaxy
+33° 02′	9	1	Ring Nebula								ss con		bjects require a
+11° 49′	9.8	5×4	,										s is very useful.





Notes for Messier Ma March equinox, the St all the Messier object: setting in the early eve ing sequence: M31, M objects will not be visib M72, M73, and M75. W rest of the objects can as they cross the sky.

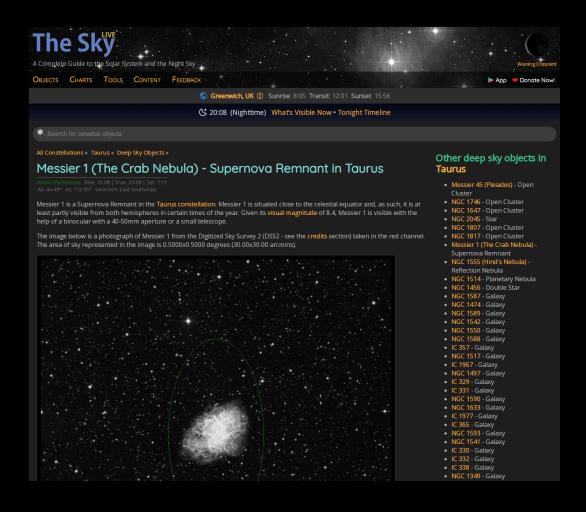


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Solar System Series The Sun February 7, 2025