

M82, Irregular Galaxy. Ursa Major

Continuing a series of photograph's of the Messier Objects



By NASA, ESA, and The Hubble Heritage Team (STScI/AURA) - <http://www.spacetelescope.org/images/heic0604a/> ([cdn.spacetelescope.org/archives/images/screen/heic0604a.jpg direct link])http://hubblesite.org/gallery/album/entire_collection/pr2006014a/, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=797295>

Rugby & District Astronomical Society

www.rugbyastro.org.uk

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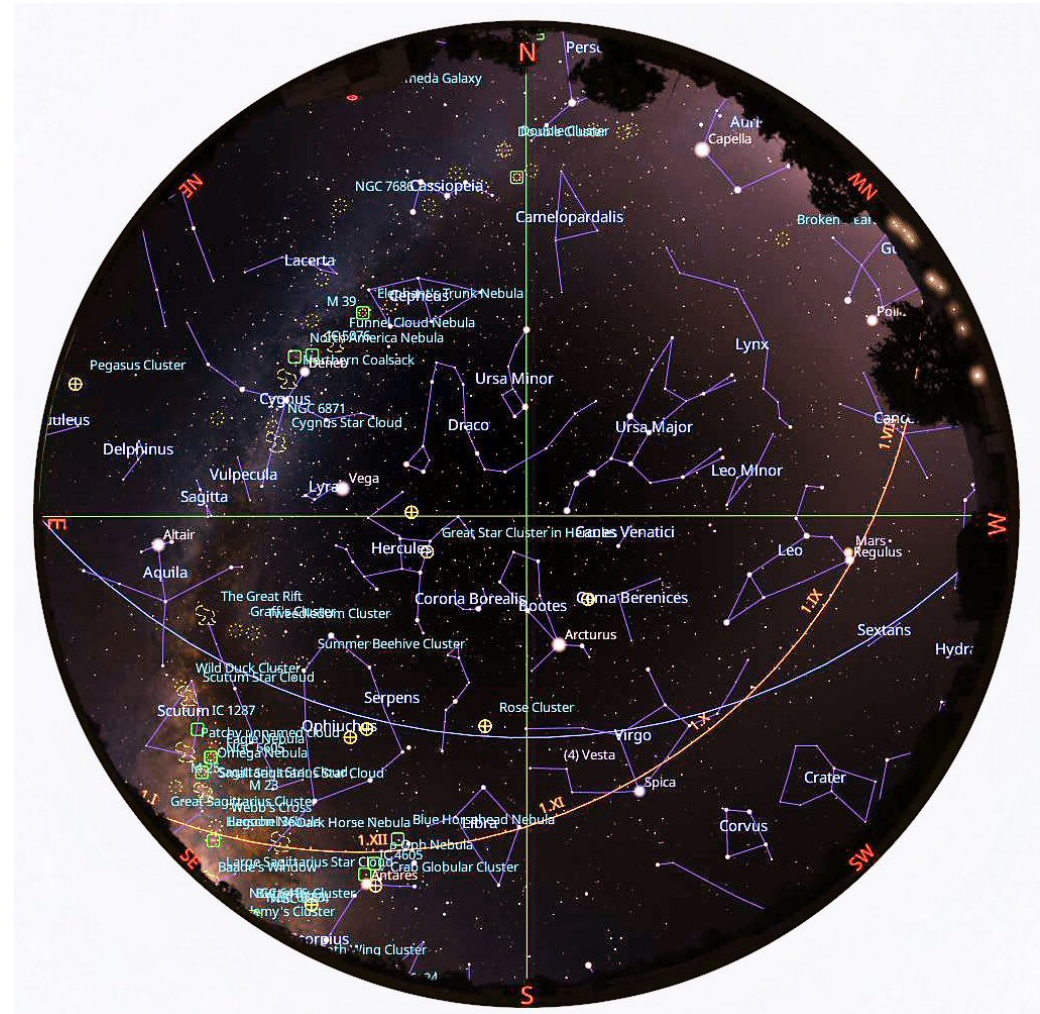
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Rugby & District Astronomical Society

Monthly Sky Notes

No. 186, June 2025, by Chris Longthorn

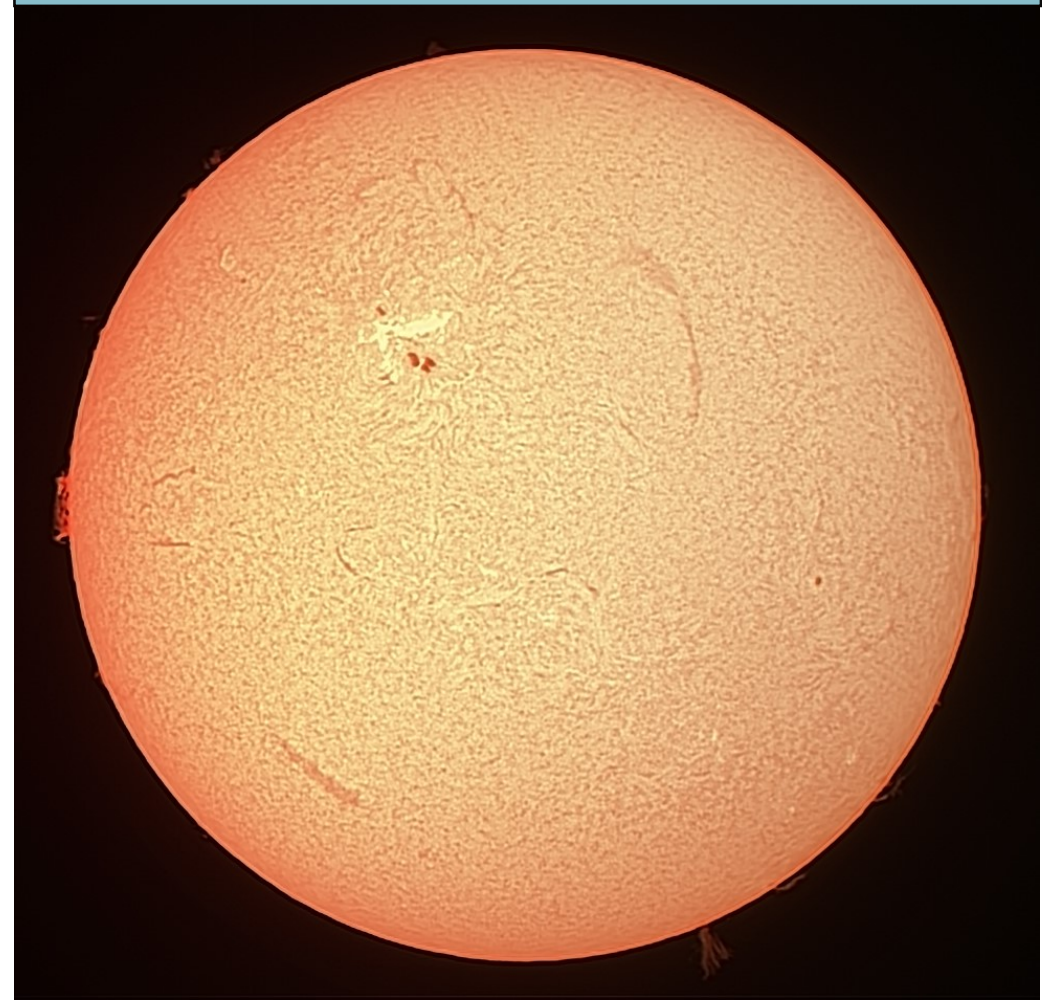


The night sky at 23:00 U.T.C., June 15th, 2025

Sky Events for June 2025

01 02:00 Venus at Greatest Elong: 45.9°W
01 09:49 Mars 1.4°S of Moon
03 03:41 FIRST QUARTER MOON
11 07:44 FULL MOON
18 19:19 LAST QUARTER MOON
19 03:47 Saturn 3.4°S of Moon
21 02:42 Summer Solstice
22 17:51 Saturn 2.8°S of Moon
22 19:30 R&DAS Monthly Meeting
23 02:59 Pleiades 0.6°S of Moon
23 23:52 Venus 4.0°S of Moon
24 15:00 Jupiter in Conjunction with Sun
25 10:31 NEW MOON
27 02:45 ISS, -1.8, 16°, SE
27 06:02 Mercury 2.9°S of Moon
28 01:57 ISS, -1.4, 11°, SE
28 03:32 ISS, -3.1, 40°, SSE
29 02:44 ISS, -2.7, 29°, SSE
30 01:05 Mars 0.2°S of Moon: Occn.
30 01:55 ISS, -2.3, 21°, SSE
30 03:32 ISS, -3.7, 62°, SSE
30 04:00 Mercury at Superior Conjunction

May Image of the Month



Taken on 3rd May at 9:32 in the morning. Taken with a Lunt LS50Ha solar telescope (50 mm aperture) using a ZWO ASI224 MC colour camera, piggybacked onto a StellaLyra 200mm Classical Cassegrain telescope. 2000 frame video using SharpCap, with 500 best frames stacked and processed with wavelets using AstroSurface. Post processed in Photoshop (mainly noise reduction).

Object of the Month for June



Credit Line and Copyright Adam Block/Mount Lemmon SkyCenter/University of Arizona - <http://www.caelumobservatory.com/gallery/m3.shtml>

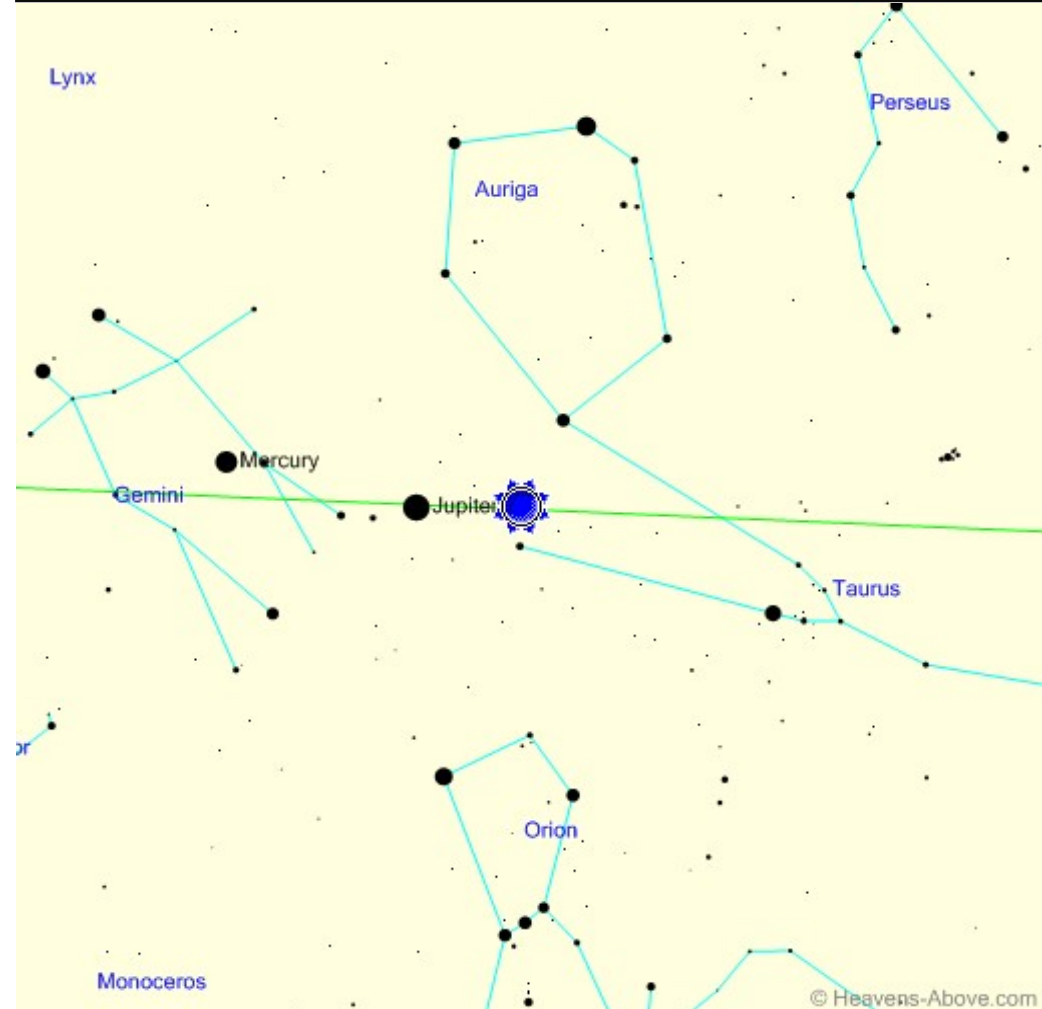
Messier 3 (M3; also NGC 5272) is a globular cluster of stars in the northern constellation of Canes Venatici.

It was discovered on May 3, 1764, and was the first Messier object to be discovered by Charles Messier himself. Messier originally mistook the object for a nebula without stars. This mistake was corrected after the stars were resolved by William Herschel around 1784. Since then, it has become one of the best-studied globular clusters. Identification of the cluster's unusually large variable star population was begun in 1913 by American astronomer Solon Irving Bailey and new variable members continue to be identified up through 2004.

This cluster is one of the largest and brightest, and is made up of around 500,000 stars. It is estimated to be 11.4 billion years old. It is centered at 32,600 light-years (10.0 kpc) away from Earth.

Messier 3, Globular Cluster in Canes Venatici

The Sun, mid-June



Event	Time	Altitude	Azimuth
Minimum altitude:	01:06	-14.3°	0°
Nautical twilight begins:	02:32	-12.0°	20°
Civil twilight begins:	03:53	-6.0°	38°
Sunrise:	04:43	-0.8°	48°
Maximum altitude:	13:06	61.0°	180°
Sunset:	21:29	-0.8°	312°
Civil twilight ends:	22:19	-6.0°	322°
Nautical twilight ends:	23:40	-12.0°	340°

All data courtesy of Heavens-Above (www.heavens-above.com)

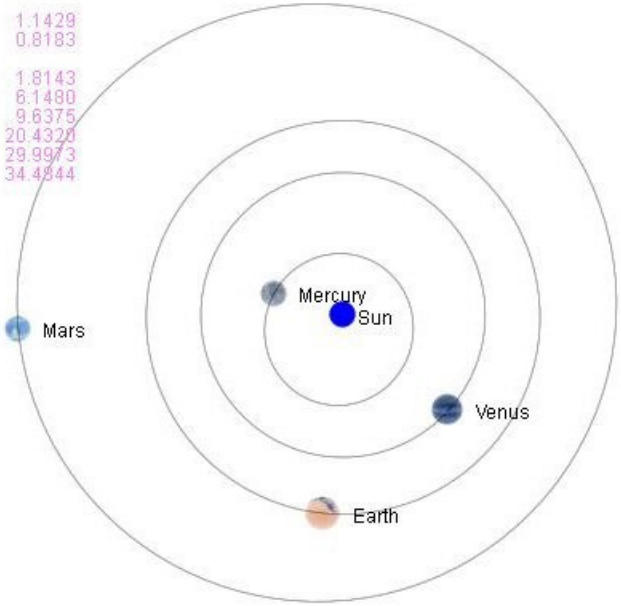
The Planets, mid June, 2025

Inner Solar System

2025-06-15 (BST)

23h00m

	Sun	Earth
Mercury	0.3655	1.1429
Venus	0.7282	0.8183
Earth	1.0158	
Mars	1.6484	1.8143
Jupiter	5.1397	6.1480
Saturn	9.5799	9.6375
Uranus	19.5249	20.4320
Neptune	29.8899	29.9973
Pluto	35.2846	34.4844

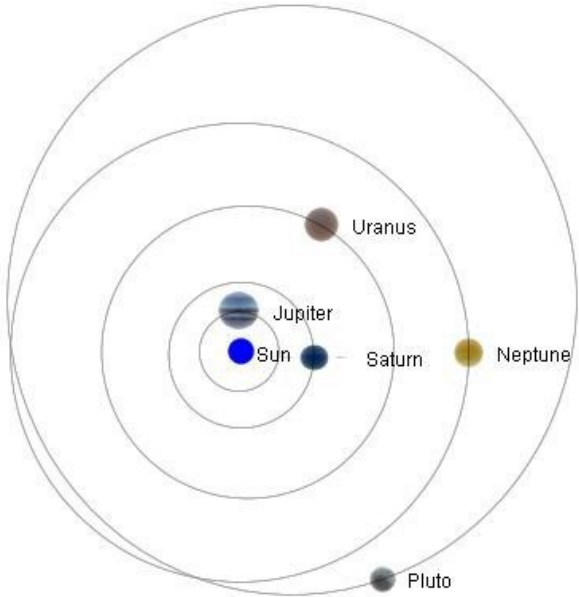


Outer Solar System

2025-06-15 (BST)

23h00m

	Sun	Earth
Mercury	0.3655	1.1429
Venus	0.7282	0.8183
Earth	1.0158	
Mars	1.6484	1.8143
Jupiter	5.1397	6.1480
Saturn	9.5799	9.6375
Uranus	19.5249	20.4320
Neptune	29.8899	29.9973
Pluto	35.2846	34.4844



	Mercury	Venus	Mars	Jupiter	Saturn	Uranus	Neptune
Right ascension	6h 56m 49.2s	2h 31m 58.3s	10h 5m 40.4s	6h 4m 27.2s	0h 6m 58.8s	3h 45m 36.3s	0h 8m 24.2s
Declination	24° 49' 30"	12° 9' 27"	13° 1' 30"	23° 16' 42"	-1° 36' 29"	19° 38' 15"	-0° 31' 6"
Range (AU)	1.143	0.818	1.814	6.148	9.637	20.432	29.997
Elongation from Sun	18.3°	45.2°	64.2°	6.3°	83.7°	26.1°	83.0°
Brightness	-0.5	-4.1	1.4	-1.7	1.1	5.8	7.9
Equatorial Diameter	5.89"	20.39"	5.16"	32.07"	17.24"	3.45"	2.28"
Phase Angle	60.8°	81.9°	33.7°	1.3°	6.1°	1.3°	1.9°
Constellation	Gemini	Aries	Leo	Gemini	Pisces	Taurus	Pisces
Meridian transit	14:23	10:00	17:33	13:33	07:37	11:15	07:38
Rises	05:53	02:56	10:24	05:18	01:46	03:26	01:42
Sets	22:52	17:04	00:46	21:48	13:28	19:04	13:35
Altitude	-0.9°	-24.2°	15.3°	-7.4°	-23.8°	-18.0°	-23.0°
Azimuth	315.1°	16.3°	271.6°	325.3°	58.6°	356.8°	57.7°