M80, Globular Cluster, Scorpius

Continuing a series of photograph's of the Messier Objects

By NASA, The Hubble Heritage Team, STScI, AURA - Great Images in NASA Description, Public Domain, https://

Rugby & District Astronomical Society **www.rugbyastro.org.uk**

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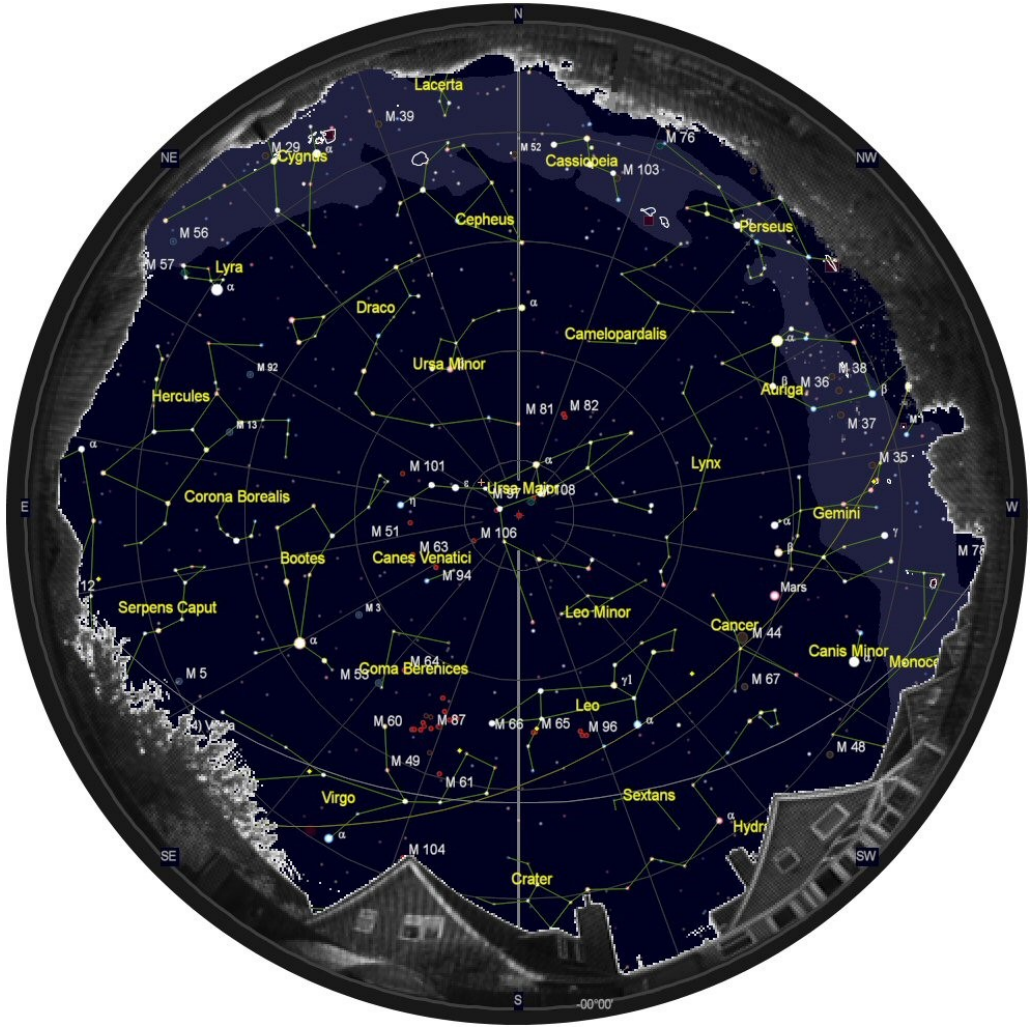
Rugby & District Astronomical Society

Monthly Sky Notes

No. 184, April 2025, by Chris Longthorn



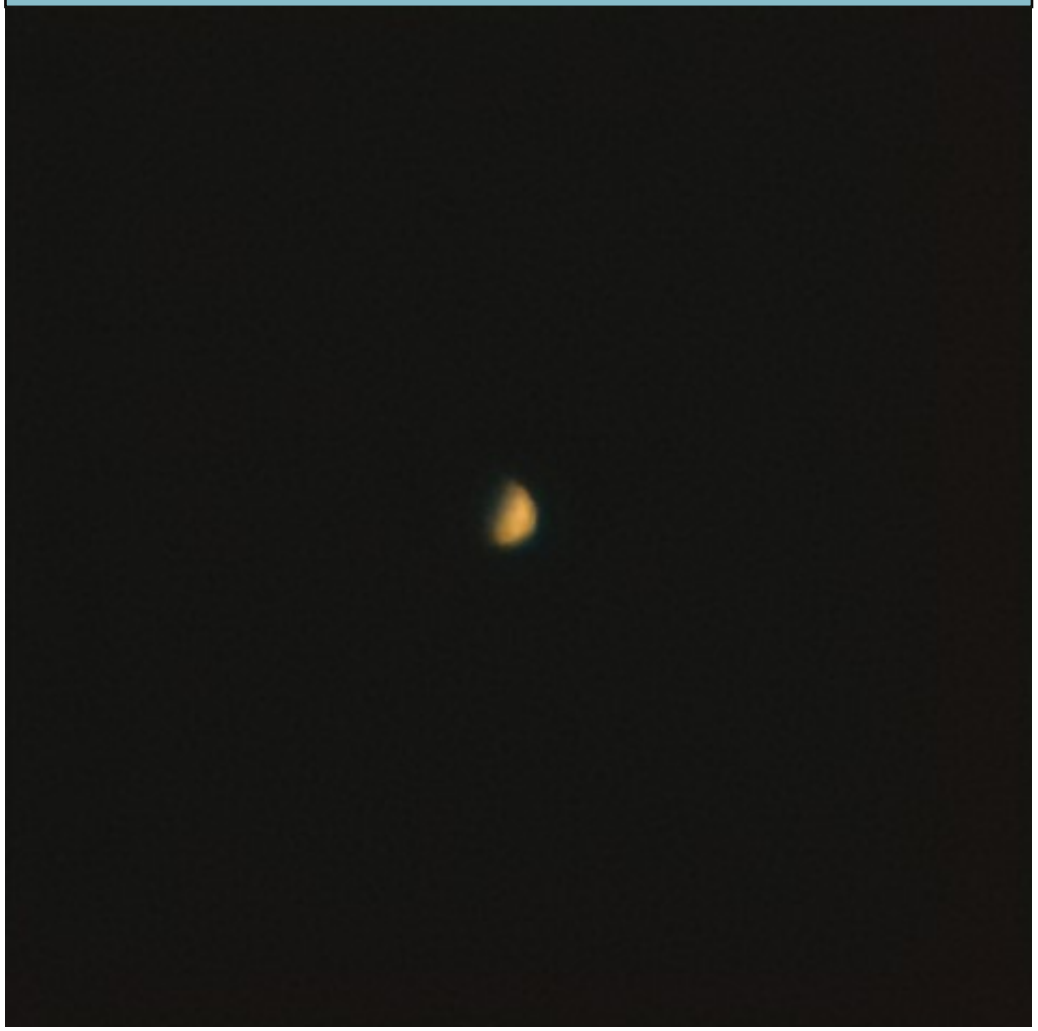
The night sky at 23:00 U.T.C., April 15th, 2025

Sky Events for April 2025

01 20:28 Pleiades 0.6°S of Moon
05 02:15 FIRST QUARTER MOON
05 19:04 Mars 2.2°S of Moon
10 12:00 Mercury 2.1°N of Saturn
13 00:22 FULL MOON
21 01:36 LAST QUARTER MOON
21 19:00 Mercury at Greatest Elong: 27.4°W
22 13:00 Lyrid Meteor Shower
25 01:21 Venus 2.4°N of Moon
25 04:15 Saturn 2.3°S of Moon
26 01:05 Mercury 4.4°S of Moon
26 04:24 ISS, -3, 38°, SSE
27 19:30 R&DAS Monthly Meeting
27 19:31 NEW MOON
28 04:21 ISS, -3.6, 59°, SSE
28 19:00 Venus 3.7°N of Saturn
29 03:31 ISS, -3.4, 46°, SSE
29 06:35 Pleiades 0.5°S of Moon
30 04:17 ISS, -3.8, 77°, S

Sky Events Calendar by AstroPixels.com with edits by author.
ISS Data courtesy of Heavens-Above (www.heavens-above.com

March Image of the Month



I managed to image Mercury for the first time ever on the 4th March, but the image scale was very low because I imaged at prime focus. On the 5th I added a 2x teleconverter into the image train and got this much better result. Just before greatest elongation west (8th March) the magnitude was probably about –0.6 and the apparent diameter at about 6.8 arcsec (very small).

Mercury, 5th March

Object of the Month for April

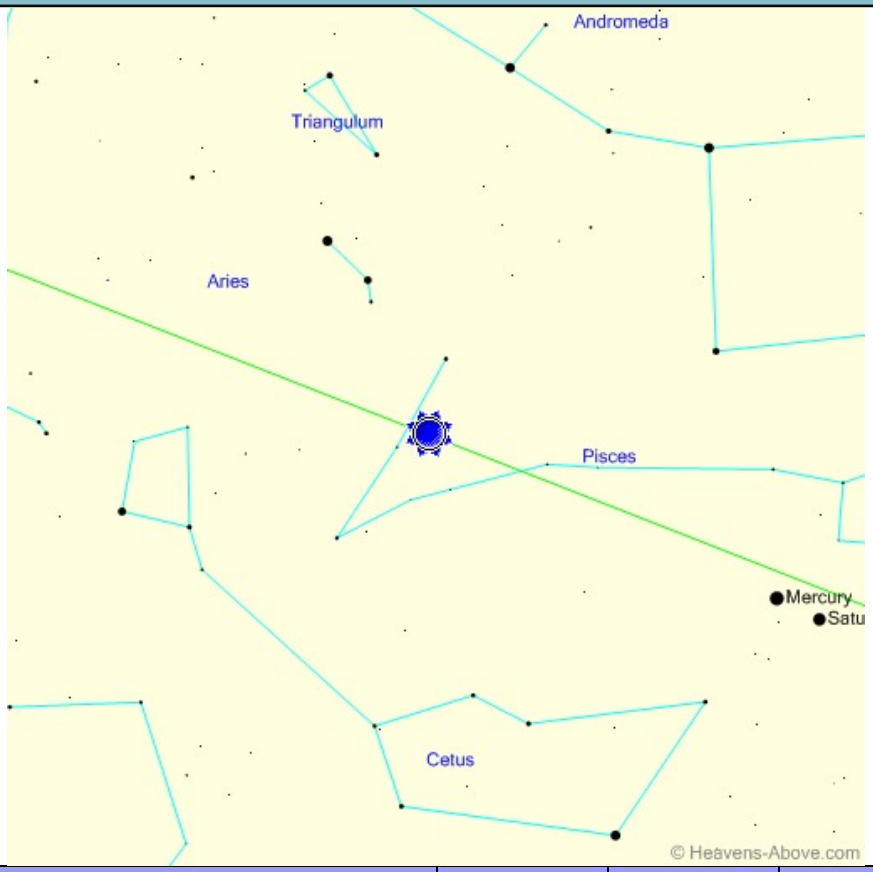
M95 & M96: A close galaxy pairing in Leo

M96 (left)is a spiral galaxy (morphology class SAB(rs)ab) with, in common with the vast majority of spiral galaxies, an elusive structure through a small telescope. It appears as circular diffuse patch of light through an 80mm (~three-inch) telescope at 40x power, while a 150mm (six-inch) reveals its core to be much brighter than the surrounding halo.

M95 (right) sports a central bar (class SB(r)b) and is a superb-looking galaxy in deep amateur images. It's appears diffuse than its companion through a small telescope, while an 80mm aperture can show a three-arcminute-wide glow, a tad larger than M96 offers. A 250-300mm (ten- to twelve-inch) telescope can reveal hints of M95's bar under good conditions.

They are remarkably similar in size and brightness, with Messier 96 (NGC 3368) being marginally the brighter than Messier 95 (NGC 3351), shining half a magnitude brighter at magnitude +9.2. M95 is slightly larger, with an apparent diameter of 7.4' x 5.1' as opposed to M96's 7.1' x 5.1'.

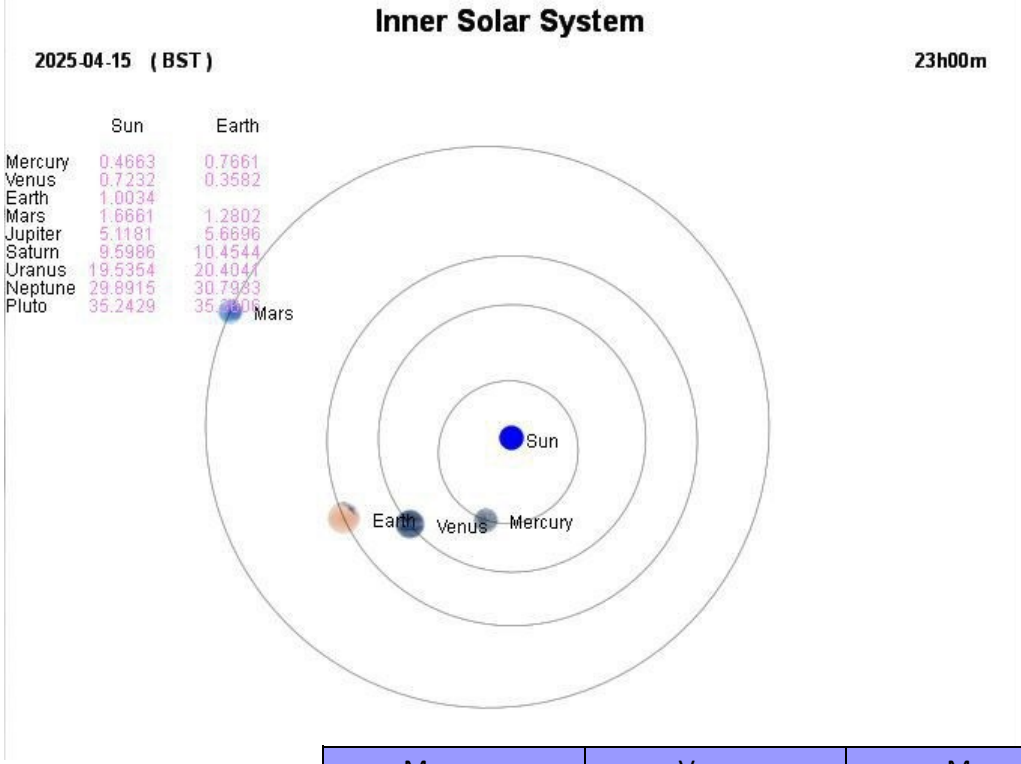
The Sun, mid-April

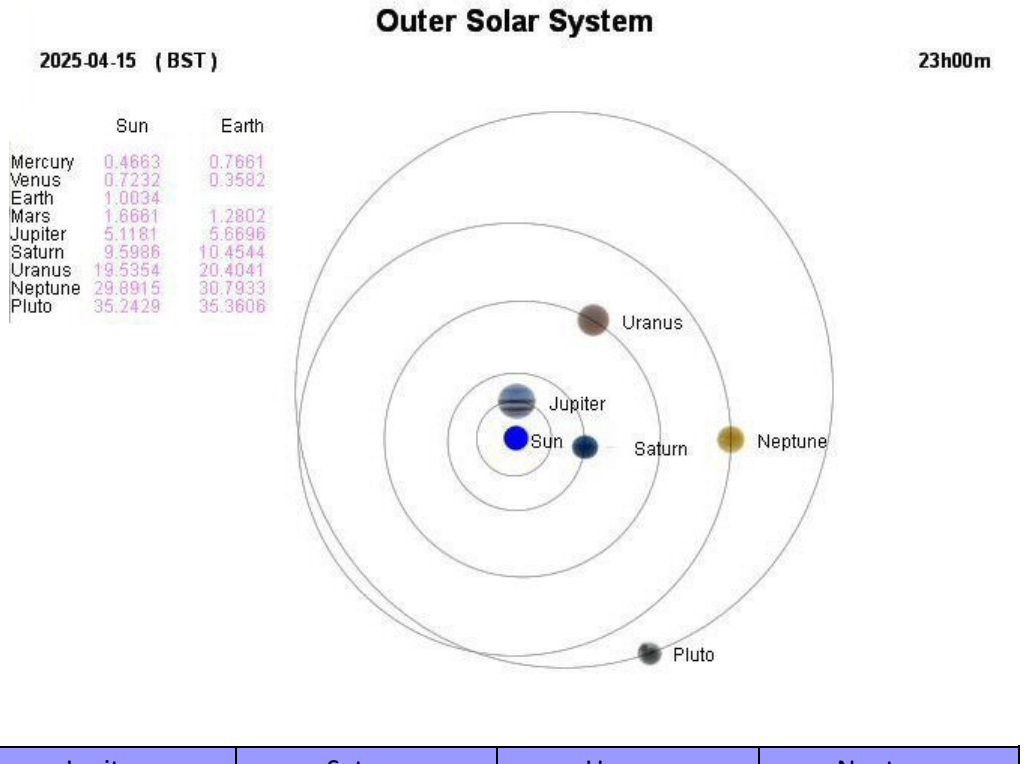


Event	Time	Altitude	Azimuth
Minimum altitude:	01:05	-27.9°	360°
Astronomical twilight begins:	03:55	-18.0°	44°
Nautical twilight begins:	04:46	-12.0°	56°
Civil twilight begins:	05:31	-6.0°	65°
Sunrise:	06:07	-0.8°	73°
Maximum altitude:	13:05	47.6°	180°
Sunset:	20:04	-0.8°	288°
Civil twilight ends:	20:40	-6.0°	295°
Nautical twilight ends:	21:26	-12.0°	305°
Astronomical twilight ends:	22:18	-18.0°	316°

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

The Planets, mid April, 2025





	Mercury	Venus	Mars	Jupiter	Saturn	Uranus	Neptune
Right ascension	0h 0m 41.5s	23h 33m 13.0s	8h 5m 26.4s	5h 8m 31.8s	23h 48m 0.1s	3h 31m 24.8s	0h 2m 56.1s
Declination	-1° 51' 48"	1° 28' 42"	22° 40' 25"	22° 38' 13"	-3° 26' 22"	18° 50' 9"	-1° 3' 57"
Range (AU)	0.766	0.358	1.28	5.67	10.454	20.404	30.793
Elongation from Sun	26.5°	31.6°	92.9°	52.3°	30.0°	29.3°	25.6°
Brightness	0.8	-4.4	0.7	-1.9	1.2	5.8	8
Equatorial Diameter	8.78"	46.59"	7.32"	34.77"	15.90"	3.45"	2.22"
Phase Angle	106.5°	133.3°	37.0°	8.9°	3.0°	1.4°	0.8°
Constellation	Pisces	Pisces	Cancer	Taurus	Aquarius	Taurus	Pisces
Meridian transit	11:29	11:03	19:34	16:37	11:18	15:01	11:33
Rises	05:40	04:55	11:23	08:28	05:36	07:17	05:39
Sets	17:19	17:10	03:47	00:50	16:59	22:44	17:26
Altitude	-39.2°	-36.2°	40.9°	14.3°	-41.0°	-2.0°	-38.3°
Azimuth	350.8°	359.7°	253.3°	288.7°	354.7°	305.0°	350.2°