M78, reflection nebula, Orion

Continuing a series of photograph's of the Messier Objects

By ESO/Igor Chekalin - http://www.eso.org/public/images/eso1105a/, CC BY 4.0, https://commons.wikimedia.org/w/index.php?curid=13365630

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

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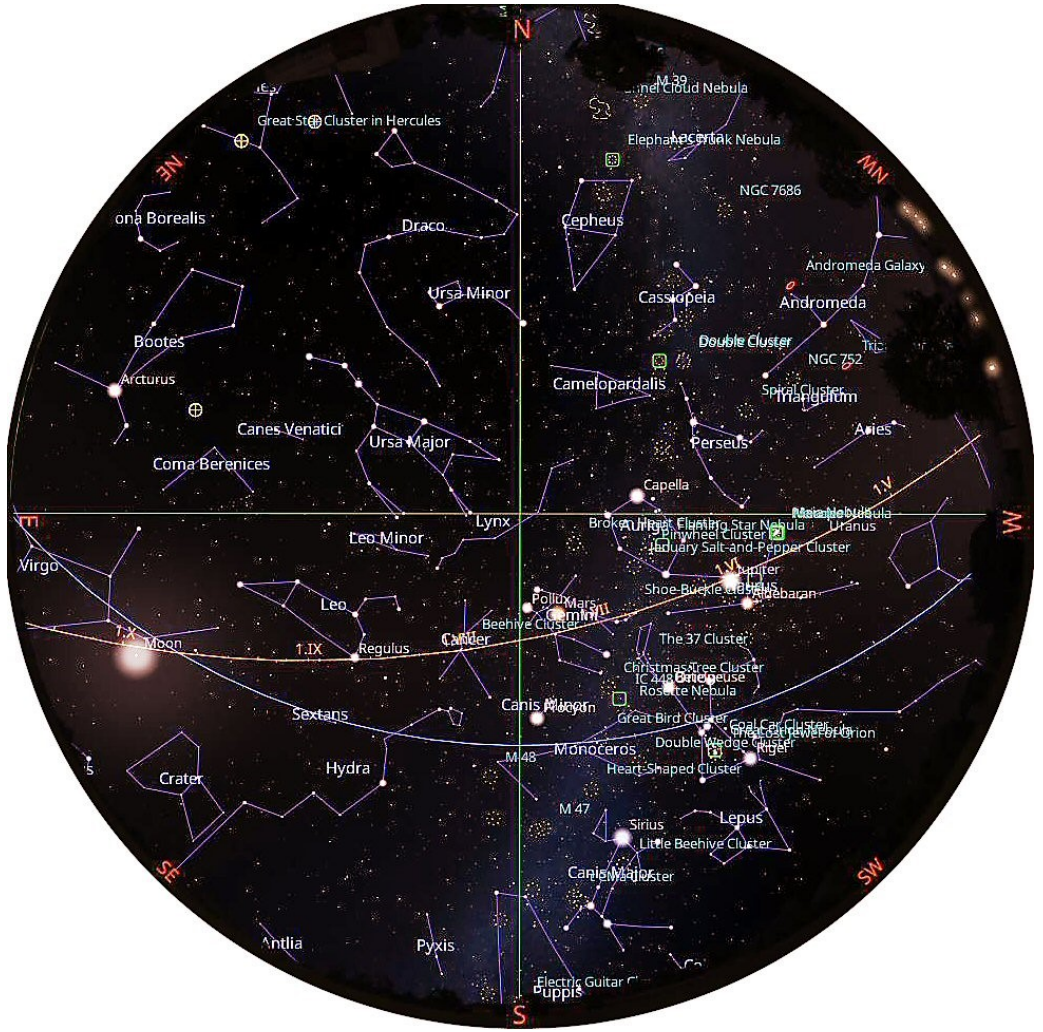
Rugby & District Astronomical Society

Monthly Sky Notes

No. 182, February 2025, by Chris Longthorn



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

Sky Events for Feb 2025

01 04:46 Saturn 1.1°S of Moon: Occn.
01 20:27 Venus 2.3°N of Moon
05 08:02 FIRST QUARTER MOON
06 06:43 Pleiades 0.5°S of Moon
09 12:00 Mercury at Superior Conjunction
09 19:36 Mars 0.8°S of Moon: Occn.
12 13:53 FULL MOON
19 06:08 ISS, -3.3, 56°, SSE
20 05:18 ISS, -3, 43°, SSE
20 17:33 LAST QUARTER MOON
21 06:05 ISS, -3.7, 75°, S
21 19:30 Observing At Barby
22 05:15 ISS, -3.6, 65°, SSE
22 19:30 Observing At Barby
23 06:02 ISS, -3.8, 81°, S
23 19:30 R&DAS Monthly Meeting
24 05:12 ISS, -3.9, 79°, S
25 05:59 ISS, -3.7, 71°, S
26 05:09 ISS, -3.9, 79°, S
28 00:45 NEW MOON
28 19:30 Observing At Barby

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

January Image of the Month

Sent to me on the 4th January, an image of the close approach of the Crescent moon and Venus.

Taken with a Canon 6d and 200mm lens from Peter's back garden.

This is a super shot as it shows the Earthshine very well.

Moon and Venus, by Pete Larkin

Object of the Month for February

By Siderevs nuncivs - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=151485345

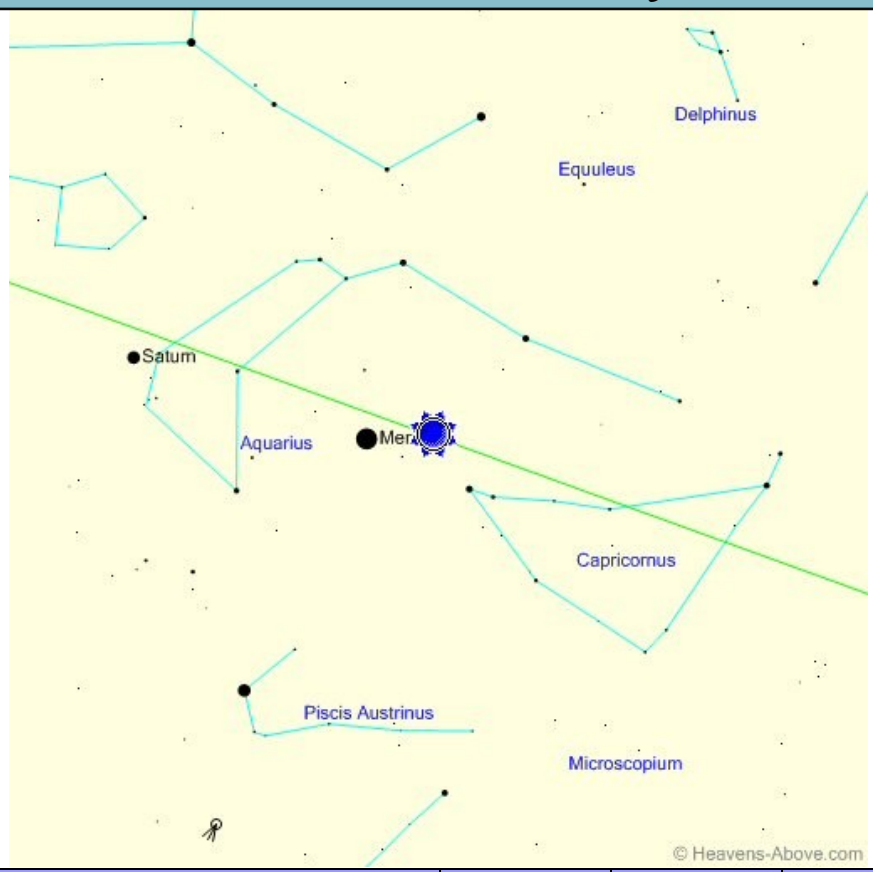
The Rosette Nebula (also known as Caldwell 49) is an H II region located near one end of a giant molecular cloud in the Monoceros region of the Milky Way Galaxy. The open cluster NGC 2244 (Caldwell 50) is closely associated with the nebulosity, the stars of the cluster having been formed from the nebula's matter.

The complex has the following New General Catalogue (NGC) designations:
NGC 2237 – Part of the nebulous region (Also used to denote whole nebula)
NGC 2238 – Part of the nebulous region
NGC 2239 – Part of the nebulous region (Discovered by John Herschel)
NGC 2244 – The open cluster within the nebula (Discovered by John Flamsteed in 1690)[citation needed]
NGC 2246 – Part of the nebulous region

The cluster and nebula lie at a distance of 5,000 light-years from Earth and measure roughly 130 light years in diameter.

The Rosette Nebula

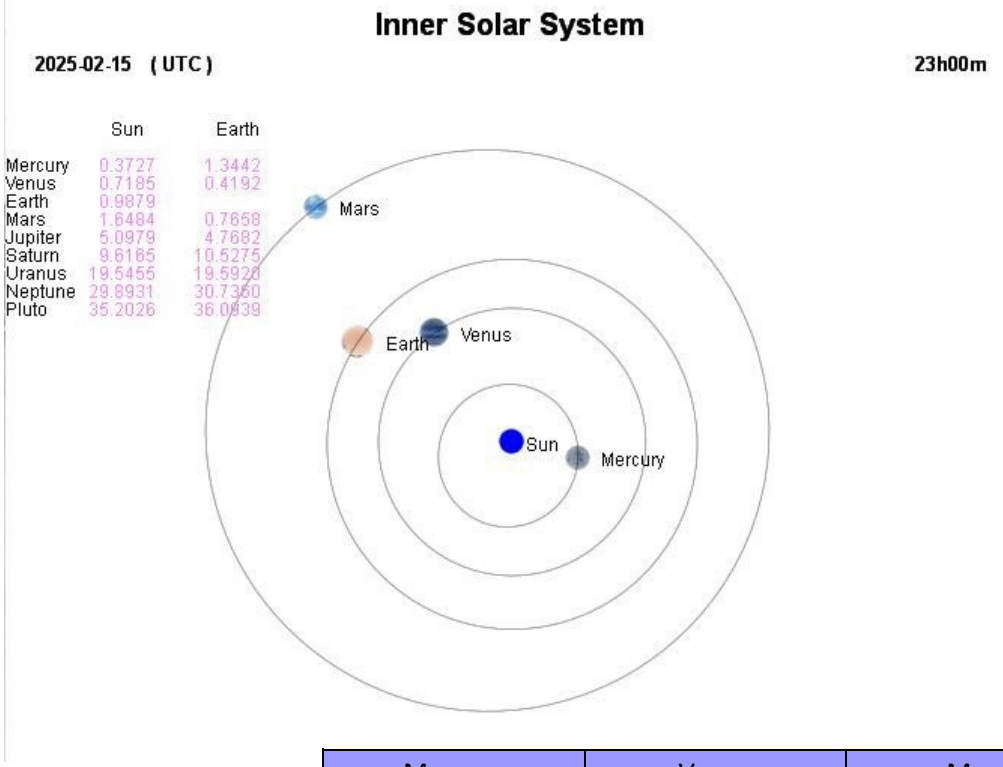
The Sun, mid-February

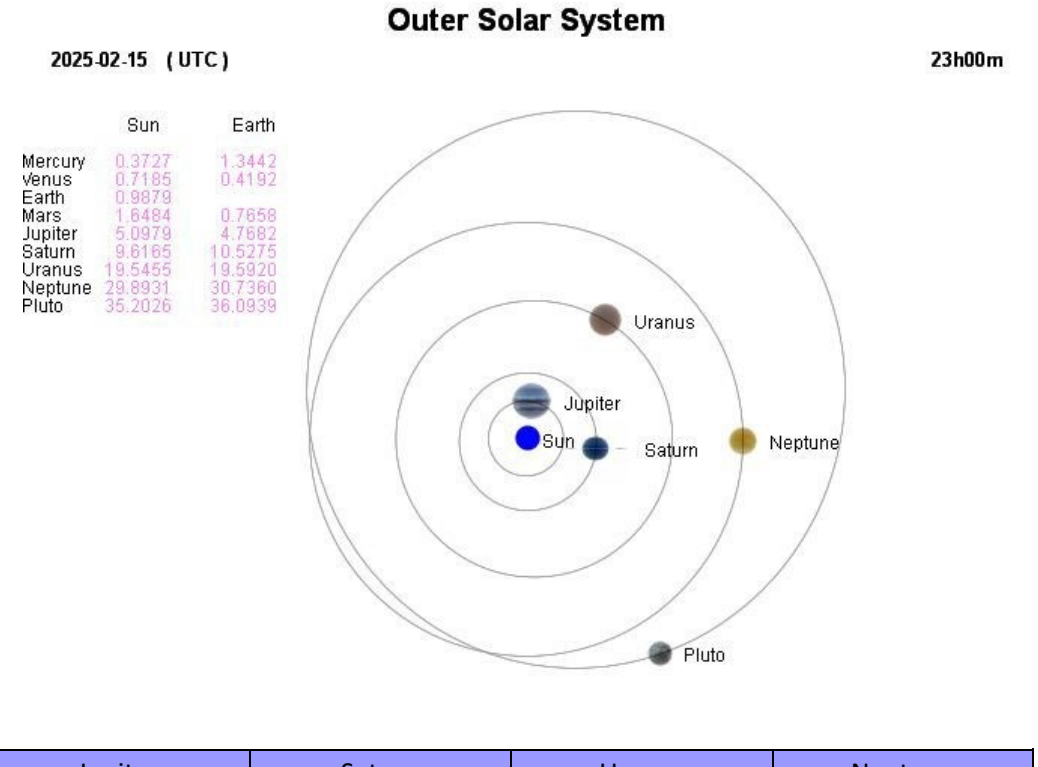


Event	Time	Altitude	Azimuth
Minimum altitude:	00:19	-50.3°	360°
Astronomical twilight begins:	05:26	-18.0°	87°
Nautical twilight begins:	06:06	-12.0°	95°
Civil twilight begins:	06:45	-6.0°	103°
Sunrise:	07:21	-0.8°	110°
Maximum altitude:	12:20	25.2°	180°
Sunset:	17:19	-0.8°	251°
Civil twilight ends:	17:54	-6.0°	257°
Nautical twilight ends:	18:34	-12.0°	265°
Astronomical twilight ends:	19:13	-18.0°	273°

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

The Planets, mid February, 2025





	Mercury	Venus	Mars	Jupiter	Saturn	Uranus	Neptune
Right ascension	22h 19m 43.7s	0h 18m 15.1s	7h 16m 16.1s	4h 38m 37.4s	23h 21m 43.9s	3h 22m 46.6s	23h 54m 59.8s
Declination	-12° 14' 47"	6° 44' 51"	26° 14' 25"	21° 40' 31"	-6° 12' 4"	18° 17' 52"	-1° 55' 15"
Range (AU)	1.344	0.419	0.766	4.768	10.528	19.592	30.736
Elongation from Sun	5.4°	39.9°	139.8°	104.0°	21.7°	85.9°	30.9°
Brightness	-1.4	-4.5	-0.6	-2.3	1.2	5.7	7.9
Equatorial Diameter	5.01"	39.81"	12.23"	41.35"	15.79"	3.60"	2.22"
Phase Angle	14.6°	118.1°	22.8°	10.8°	2.2°	2.9°	1.0°
Constellation	Aquarius	Pisces	Gemini	Taurus	Aquarius	Aries	Pisces
Meridian transit	12:40	14:40	21:37	19:00	13:43	17:44	14:17
Rises	07:46	08:06	13:00	10:57	08:17	10:04	08:28
Sets	17:33	21:14	06:19	03:06	19:10	01:28	20:06
Altitude	-45.1°	-15.0°	59.5°	35.0°	-33.2°	20.9°	-25.4°
Azimuth	324.1°	303.0°	219.0°	260.2°	309.5°	273.1°	303.6°