

M65, A member of the Leo Triplet (Leo)

Continuing a series of photograph's of the Messier Objects.



M65 Galaxy from the Mount Lemmon SkyCenter Schulman Telescope courtesy Adam Block.jpg

Rugby & District Astronomical Society

www.rugbyastro.org.uk

Honorary President:	-	Chair:	Chris Longthorn
Treasurer:	Dennis Osborne	Membership Secretary:	Dave Hopkinson
Webmaster:	David Riley	Secretary:	Richard Heath
Speakers Secretary:	Roland Clarke	Sky Notes	Chris Longthorn

Email rugby-Astro@hotmail.co.uk

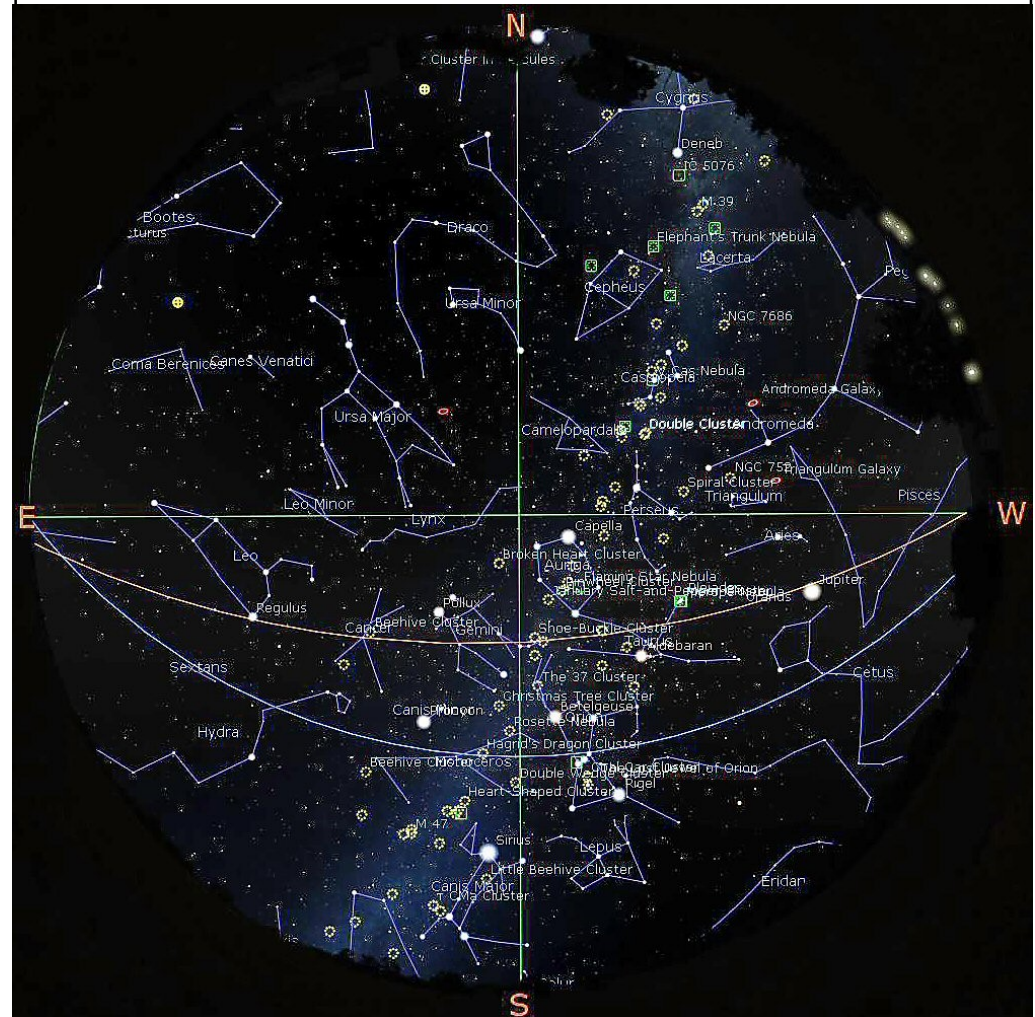
© R&DAS 2024

Rugby & District Astronomical Society

Sky Notes

by Chris Longthorn

January 2024, no 169



The night sky at 23:00 U.T.C., January 15th 2024

Sky Events for January 2024

03 01:00 Earth at Perihelion: 0.98330 AU
04 03:30 LAST QUARTER MOON
04 09:00 Quadrantid Meteor Shower
10 08:31 Mars 4.2°N of Moon
11 11:57 NEW MOON
12 14:00 Mercury at Greatest Elong: 23.5°W
12 19:00 Observing at Barby
13 19:00 Observing at Barby
14 09:31 Saturn 2.1°N of Moon
18 03:53 FIRST QUARTER MOON
18 20:40 Jupiter 2.8°S of Moon
20 13:25 Pleiades 0.9°N of Moon
21 18:12 ISS, -3.4, 51°, SSE
21 19:30 R&DAS Monthly Meeting
22 18:58 ISS, -3.3, 60°, WSW
23 18:10 ISS, -3.7, 72°, S
24 17:20 ISS, -3.4, 60°, SSE
24 18:56 ISS, -3.6, 70°, WSW
25 17:54 FULL MOON
25 18:07 ISS, -3.8, 81°, S
26 17:18 ISS, -3.7, 77°, S
26 18:54 ISS, -3.6, 62°, SSW
27 16:00 Mercury 0.2°N of Mars
27 18:05 ISS, -3.7, 73°, S
29 18:02 ISS, -3.1, 53°, SSW

December Image of the Month

NGC1499, California Nebula

Taken by the society using iTelescope.net T80 at the November 19th meeting.

Details :-

1 x 120 second sub-exposures with the Red Filter

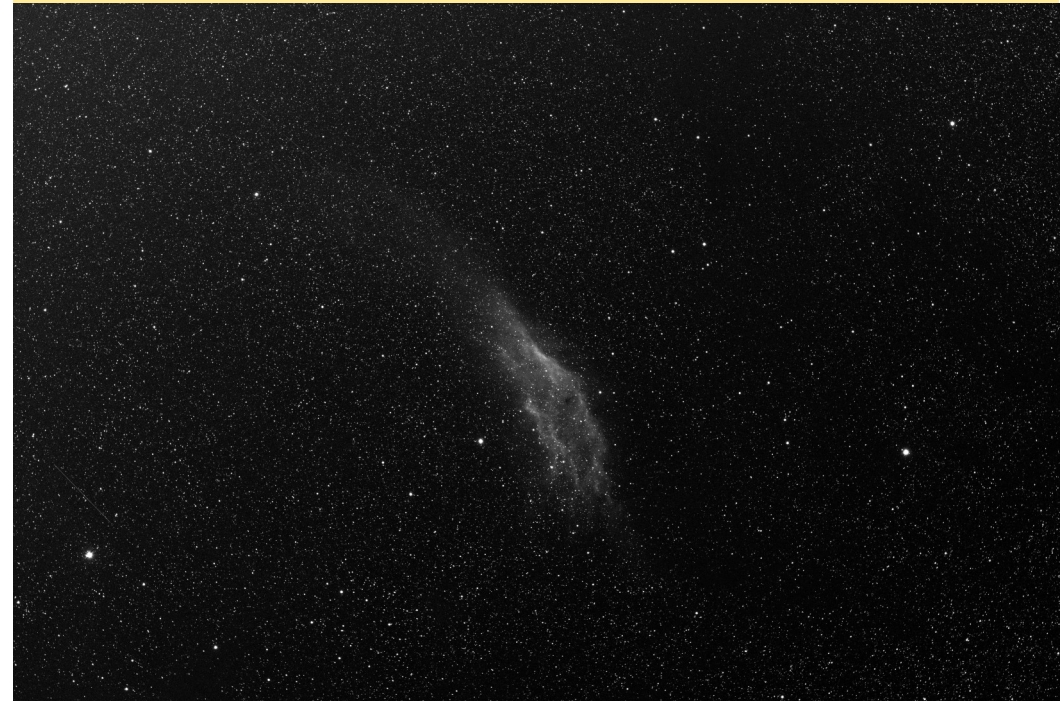
No stacking (it's just one individual image).

No Processing.

Observatory: E-Eye Fragenal de la Sierra, Spain

Telescope: T80 135 mm f/2.0 Samyang Lens + ZWO ASI 2600 CMOS camera.

That's all we had time for!



Object of the Month for January



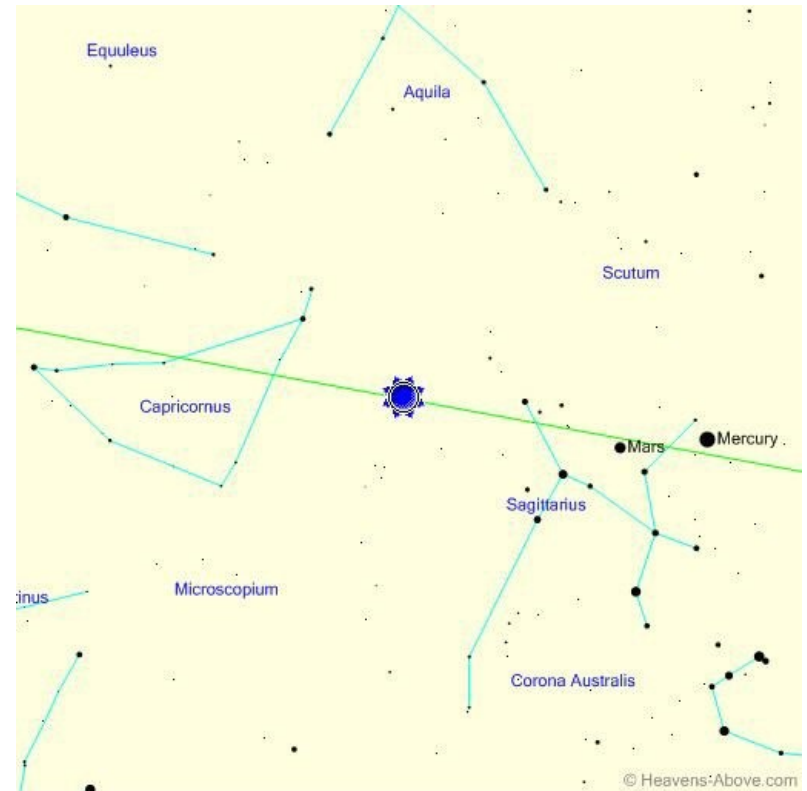
The Hyades & Pleiades Clusters in Taurus

The Hyades, also known as Caldwell 41, Collinder 50, or Melotte 25) is the nearest open cluster and one of the best-studied star clusters. Located about 153 light-years (47 parsecs) away from the Sun, it consists of a roughly spherical group of hundreds of stars sharing the same age, place of origin, chemical characteristics, and motion through space. From the perspective of observers on Earth, the Hyades Cluster appears in the constellation Taurus, where its brightest stars form a "V" shape along with the still-brighter Aldebaran. However, Aldebaran is unrelated to the Hyades, as it is located much closer to Earth and merely happens to lie along the same line of sight.

The Pleiades, also known as the Seven Sisters, Messier 45, and other names by different cultures, is an asterism and an open star cluster containing middle-aged, hot B-type stars in the north-west of the constellation Taurus. At a distance of about 444 light years, it is among the nearest star clusters to Earth. It is the nearest Messier object to Earth, and is the most obvious cluster to the naked eye in the night sky. The cluster is dominated by hot blue luminous stars that have formed within the last 100 million years

From Wikipedia

The Sun, mid January



Event	Time	Altitude	Azimuth
Minimum altitude:	00:14	-58.9°	360°
Astronomical twilight begins:	06:05	-18.0°	102°
Nautical twilight begins:	06:46	-12.0°	109°
Civil twilight begins:	07:29	-6.0°	117°
Sunrise:	08:08	-0.8°	125°
Maximum altitude:	12:15	16.5°	180°
Sunset:	16:21	-0.8°	235°
Civil twilight ends:	17:00	-6.0°	243°
Nautical twilight ends:	17:43	-12.0°	251°
Astronomical twilight ends:	18:24	-18.0°	259°

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

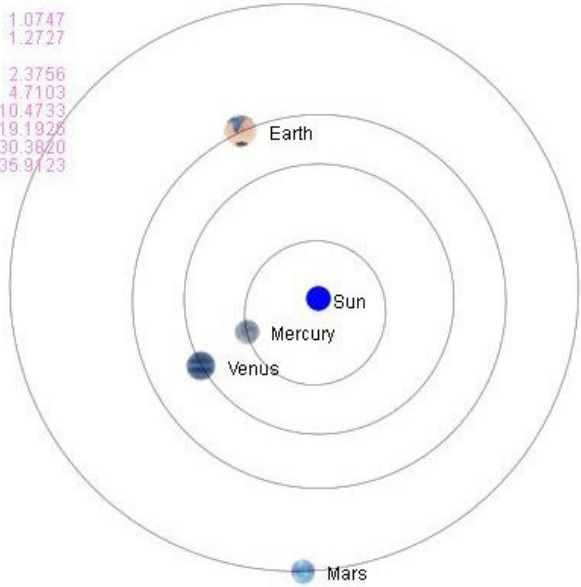
The Planets, mid January

Inner Solar System

23h00m

2024-01-15 (UTC)

	Sun	Earth
Mercury	0.4242	1.0747
Venus	0.7223	1.2727
Earth	0.9837	
Mars	1.4620	2.3756
Jupiter	4.9878	4.7103
Saturn	9.7336	10.4733
Uranus	19.6110	19.1926
Neptune	29.9034	30.3820
Pluto	34.9330	35.9123

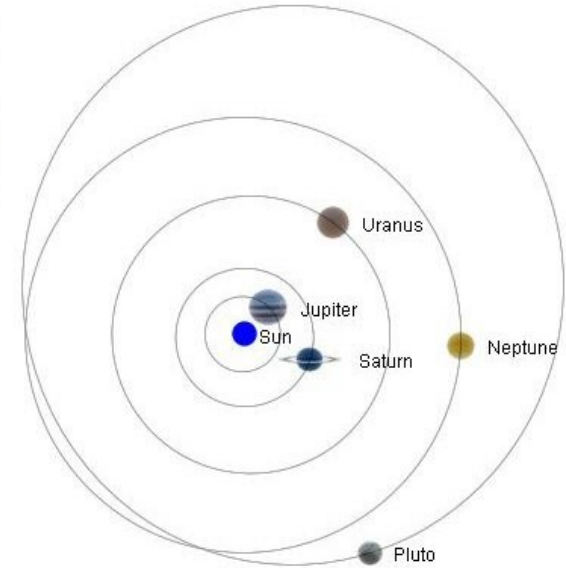


Outer Solar System

23h00m

2024-01-15 (UTC)

	Sun	Earth
Mercury	0.4242	1.0747
Venus	0.7223	1.2727
Earth	0.9837	
Mars	1.4620	2.3756
Jupiter	4.9878	4.7103
Saturn	9.7336	10.4733
Uranus	19.6110	19.1926
Neptune	29.9034	30.3820
Pluto	34.9330	35.9123



	Mercury	Venus	Mars	Jupiter	Saturn	Uranus	Neptune
Right ascension	18h 7m 28.8s	17h 19m 21.7s	18h 35m 41.0s	2h 15m 0.4s	22h 27m 18.8s	3h 5m 45.2s	23h 43m 40.5s
Declination	-22° 20' 50"	-21° 42' 34"	-23° 52' 39"	12° 21' 56"	-11° 25' 12"	17° 7' 33"	-3° 6' 24"
Range (AU)	1.075	1.273	2.376	4.71	10.473	19.193	30.382
Elongation from Sun	23.3°	34.4°	16.8°	100.7°	39.4°	113.9°	60.1°
Brightness	-0.2	-3.9	1.4	-2.3	1	5.7	7.9
Equatorial Diameter	6.26"	13.11"	3.94"	41.85"	15.87"	3.67"	2.25"
Constellation	Sagittarius	Ophiuchus	Sagittarius	Aries	Aquarius	Aries	Pisces
Meridian transit	10:32:00	09:44:00	11:02:00	18:41:00	14:54:00	19:32:00	16:10:00
Rises	06:41:00	05:48:00	07:22:00	11:36:00	09:56:00	11:59:00	10:27:00
Sets	14:24:00	13:40:00	14:41:00	01:50:00	19:52:00	03:09:00	21:53:00
Altitude	-59.5°	-56.1°	-61.5°	25.0°	-28.2°	36.2°	-10.2°
Azimuth	12.4°	32.4°	359.4°	257.4°	289.1°	249.4°	278.2°