M72,Globular Cluster, Aquarius

Continuing a series of photograph's of the Messier Objects

en:NASA, en:STScI, en:WikiSky

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

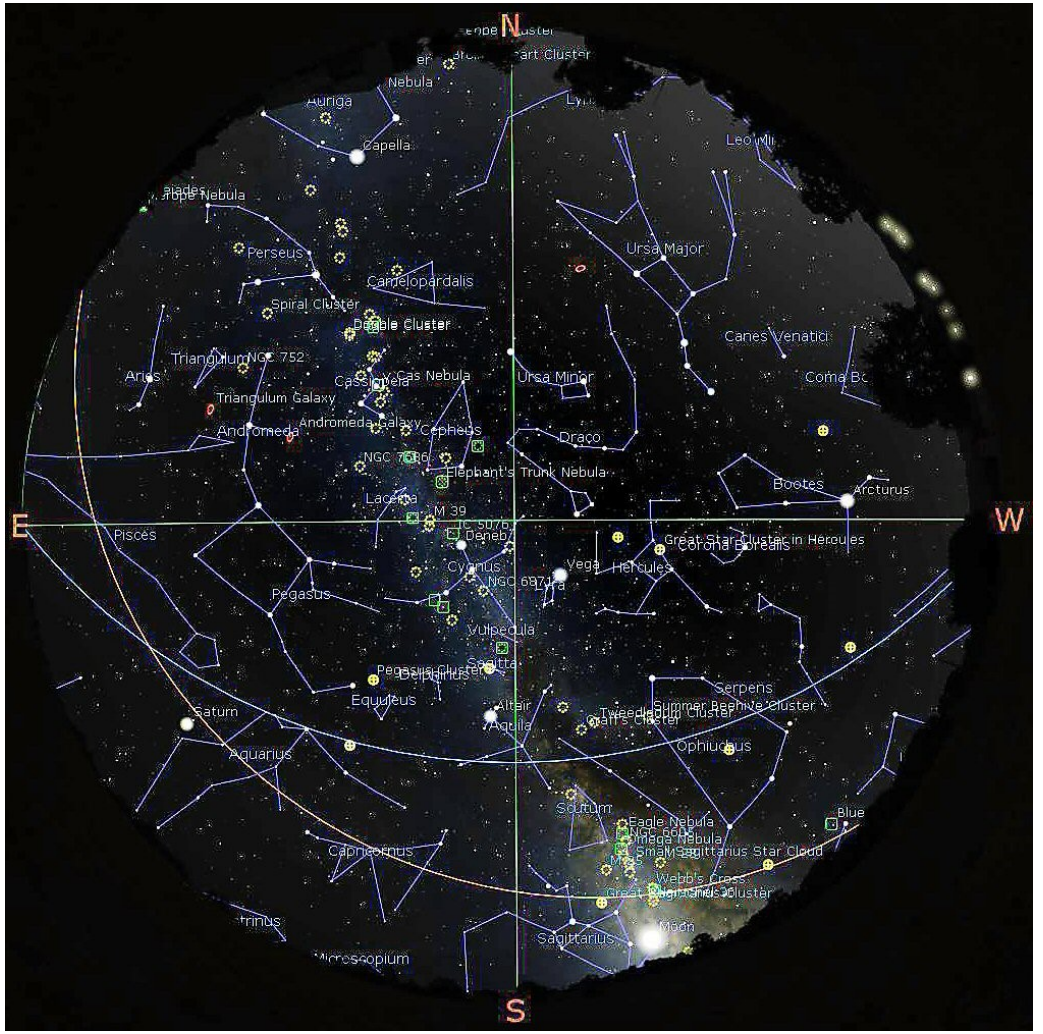
Honorary President :	-	Chair:	Chris Longthorn
Treasurer:	Dennis Osborne	Secretary:	Richard Heath
Speakers Secretary:	Roland Clarke	Membership Secretary:	Dave Hopkinson
Webmaster :	David Riley	Sky Notes:	Chris Longthorn

E-Mail: rugby-astro@hotmail.co.uk

Rugby & District Astronomical Society

Monthly Sky Notes

No. 176, August 2024, by Chris Longthorn



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

Sky Events for August 2024

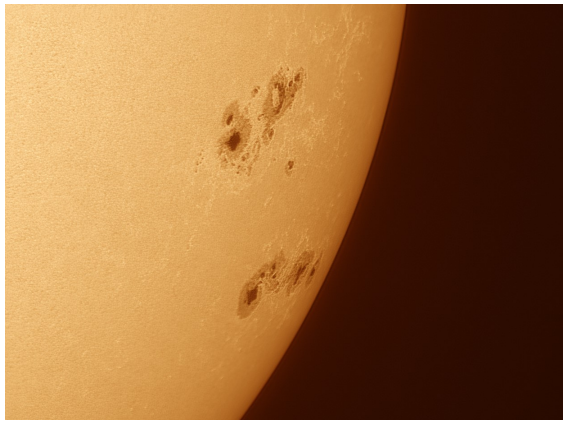
04 11:13 NEW MOON
05 22:04 Venus 1.7°S of Moon
12 14:00 Perseid Meteor Shower
12 15:19 FIRST QUARTER MOON
14 15:00 Mars 0.3°N of Jupiter
18 19:30 R&DAS Monthly Meeting
19 02:00 Mercury at Inferior Conjunction
19 18:26 FULL MOON
21 02:54 Saturn 0.4°S of Moon: Occn.
26 02:54 Pleiades 0.1°S of Moon
26 09:26 LAST QUARTER MOON

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

July Image of the Month

I've deliberately included two images this month so that you get a good comparison between filtered and white light solar images.

Both images were taken on 22nd June at approximately the same time. The one on the left is by Pete Larkin, using a H-Alpha filter which gives a fantastic view of the Suns chromosphere. I took the image on the right with a home made full aperture white light filter that uses Baader Solar Film, the telescope is a 60mm F/4 guidescope, this image shows the Suns photosphere. Here's a close up of the large group at bottom right.



The Sun, 22nd June 2024

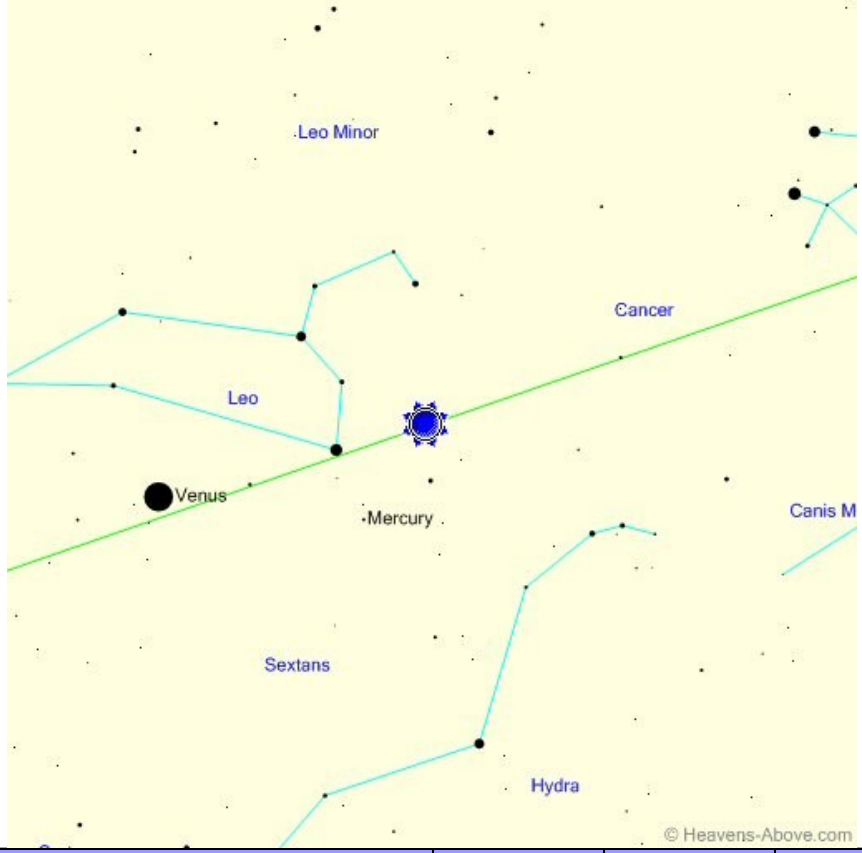
Object of the Month for August

The Lagoon Nebula (catalogued as Messier 8, NGC 6523, Sharpless 25, RCW 146, and Gum 72) is a giant interstellar cloud in the constellation Sagittarius. It is classified as an emission nebula. The Lagoon Nebula was discovered by Giovanni Hodierna before 1654 and is one of only two star-forming nebulae faintly visible to the eye from mid-northern latitudes. Seen with binoculars, it appears as a distinct cloud-like patch with a definite core. Within the nebula is the open cluster NGC 6530.

The Trifid Nebula (catalogued as M20 and as NGC 6514) is an H II region in the north-west of Sagittarius in a star-forming region in the Milky Way's Scutum–Centaurus Arm. It was discovered by Charles Messier on June 5, 1764. Its name means 'three-lobe'. The object is an unusual combination of an open cluster of stars, an emission nebula (the relatively dense, reddish-pink portion), a reflection nebula (the mainly blue portion), and a dark nebula (the apparent 'gaps' in the former that cause the trifurcated appearance, also designated Barnard 85). Viewed through a small telescope, the Trifid Nebula is a bright and peculiar object, and is thus a perennial favourite of amateur astronomers.

M8, The Lagoon Nebula and M20, the Trifid Nebula

The Sun, mid-August



Event	Time	Altitude	Azimuth
Minimum altitude:	01:10	-23.7°	0°
Astronomical twilight begins:	03:20	-18.0°	33°
Nautical twilight begins:	04:21	-12.0°	47°
Civil twilight begins:	05:10	-6.0°	58°
Sunrise:	05:49	-0.8°	66°
Maximum altitude:	13:09	51.4°	180°
Sunset:	20:29	-0.8°	294°
Civil twilight ends:	21:07	-6.0°	302°
Nautical twilight ends:	21:57	-12.0°	312°
Astronomical twilight ends:	22:56	-18.0°	326°

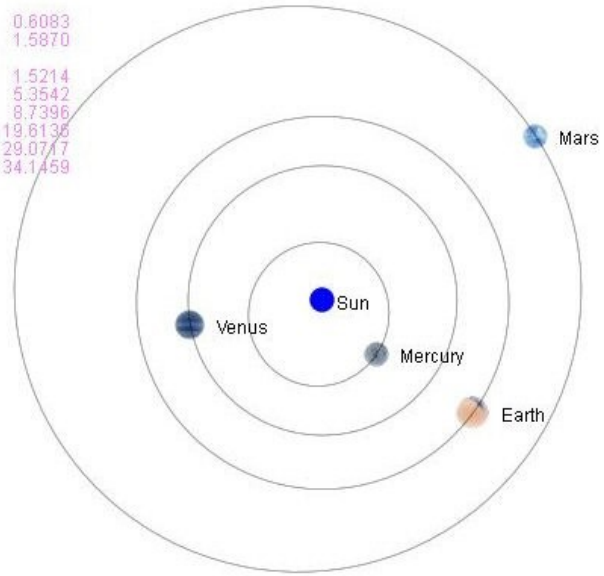
All data courtesy of Heavens-Above (www.heavens-above.com)

The Planets, mid August, 2024

Inner Solar System

2024-08-15 (BST) 23h00m

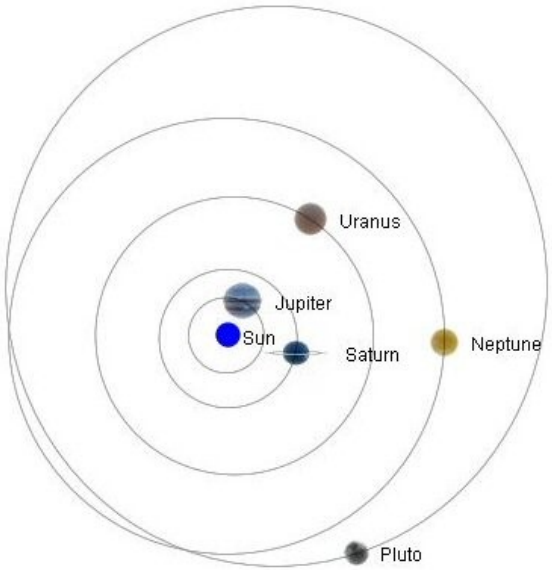
	Sun	Earth
Mercury	0.4170	0.6083
Venus	0.7208	1.5870
Earth	1.0126	
Mars	1.4454	1.5214
Jupiter	5.0400	5.3542
Saturn	9.6718	8.7396
Uranus	19.5764	19.6136
Neptune	29.8979	29.0717
Pluto	35.0772	34.1459



Outer Solar System

2024-08-15 (BST) 23h00m

	Sun	Earth
Mercury	0.4170	0.6083
Venus	0.7208	1.5870
Earth	1.0126	
Mars	1.4454	1.5214
Jupiter	5.0400	5.3542
Saturn	9.6718	8.7396
Uranus	19.5764	19.6136
Neptune	29.8979	29.0717
Pluto	35.0772	34.1459



	Venus	Mars	Jupiter	Saturn	Uranus	Neptune
Right ascension	9h 57m 35.0s	10h 59m 16.2s	5h 4m 21.6s	5h 1m 46.1s	23h 16m 56.2s	3h 38m 15.1s
Declination	7° 20' 57"	7° 59' 36"	22° 27' 4"	22° 3' 48"	-6° 57' 55"	19° 10' 54"
Range (AU)	0.608	1.587	1.521	5.354	8.74	19.614
Elongation from Sun	7.5°	19.8°	66.1°	66.7°	155.7°	86.4°
Brightness	4.1	-3.8	0.8	-2	0.7	5.7
Equatorial Diameter	11.06"	10.52"	6.16"	36.82"	19.02"	3.59"
Phase Angle	161.6°	28.4°	39.8°	10.6°	2.5°	3.0°
Constellation	Leo	Leo	Taurus	Taurus	Aquarius	Taurus
Meridian transit	13:26	14:25	08:31	08:30	02:46	07:07
Rises	06:51	07:41	00:22	00:24	21:20	23:17
Sets	20:03	21:07	16:40	16:35	08:09	14:53
Altitude	-22.9°	-15.5°	-8.4°	-8.5°	14.2°	-2.1°
Azimuth	320.9°	306.7°	34.6°	35.3°	122.2°	54.1°