

# Walsall Astronomical Society



April 2026

## What's Up Monthly Publication



## What's on this month



April should be a rewarding month for stargazing, with a mix of bright planets and a reliable meteor shower adding interest to the spring night sky. Early in the month, Mercury reaches its best morning visibility, while the standout event later on is the Lyrid meteor shower, active from 16–25 April and peaking on the night of 22 April into the morning of 23 April.

Don't forget to send us any images you have taken or post them on the Facebook Group!

**Thursday 2nd April:** External Lecture - Vera C Rubin Observatory: We're delighted to welcome Dr Clare Higgs from the NSF-DOE Vera C. Rubin Observatory for our next society talk.

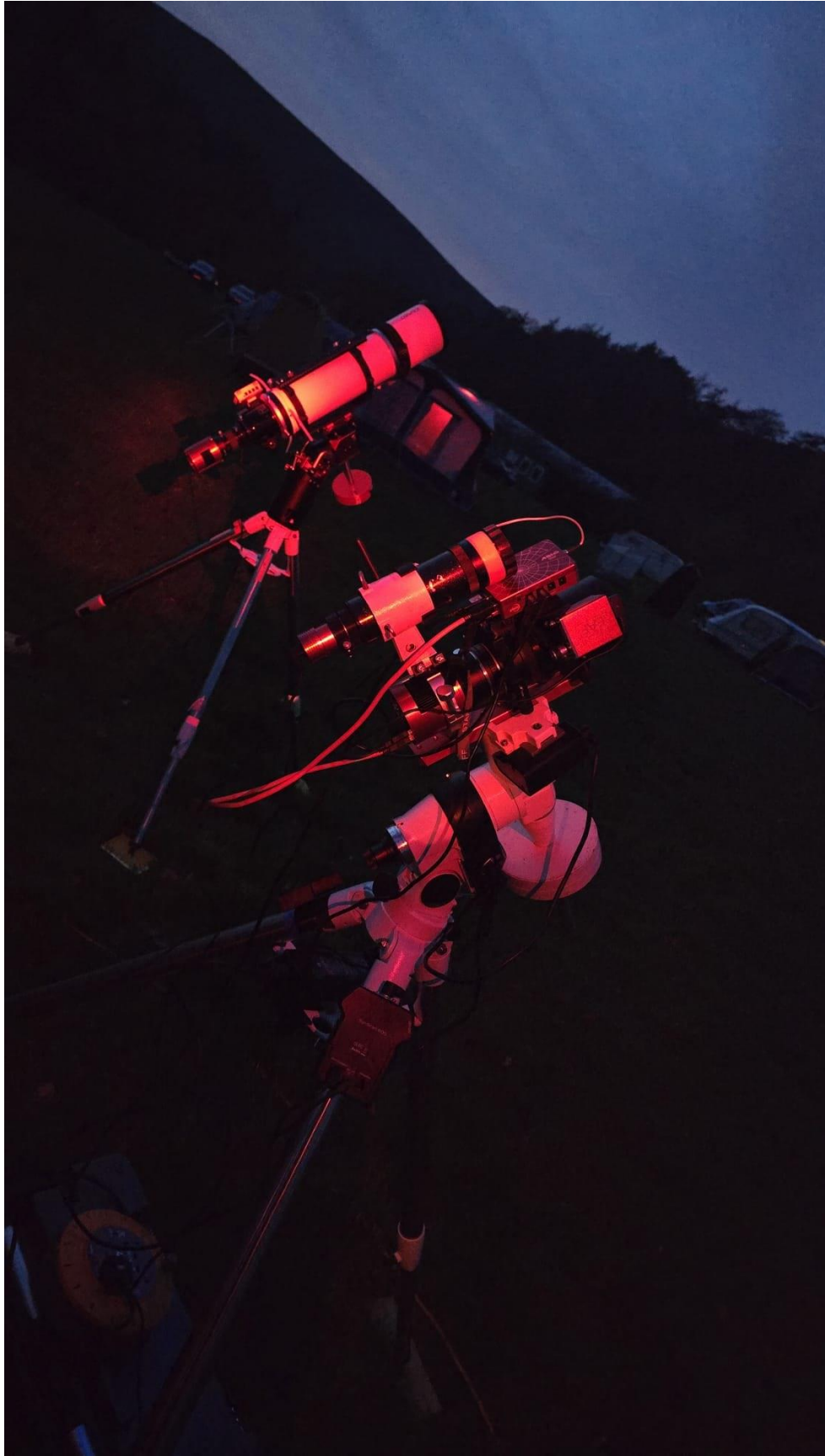
**Thursday 9th April:** General Club Meeting, for discussion and support - Telescopes if clear - If dry spring clean of container

**Friday 16th April:** General Club Meeting, for discussion and support - Telescopes if clear - If dry spring clean of container

**Friday 23rd April:** General Club Meeting, for discussion and support - Telescopes if clear - If dry spring clean of container

**Thursday 30th April:** What's Up presentation on what to look out for in May  
List of Lovell Lecture Series 2026 [HERE](#) for those interested.

Last minute as weather was clear - March Observing Weekend - joined WolvAS at Brow Farm.



A few members of the club joined the Wolverhampton Astronomical Society at their recent observing weekend in Ratlinghope, Shrewsbury on a Bortle 4 site. We were graced with 2 nights of clear skies, although one with high level mist, but didn't stop setting up the scopes and capturing some images. If you are interested in joining us on the next one, or on observing weekends run by our club, please email us or let a committee member know at the club!

Some of the processed images captured from this weekend.



*1 - Set Up*



*2 - M81 Bode Galaxy - Star Camp - Mike Lewis*



*3 - Flame and Horsehead - Star Camp - Mike Lewis*



4 - M51 - Whirlpool Galaxy - Star Camp - Mike Lewis



5 - Markarians Chain - Star Camp - Mike Lewis



6 - IC443 - Jellyfish nebula - Star Camp - Mike Lewis

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*More data to process..... Will share more.....*

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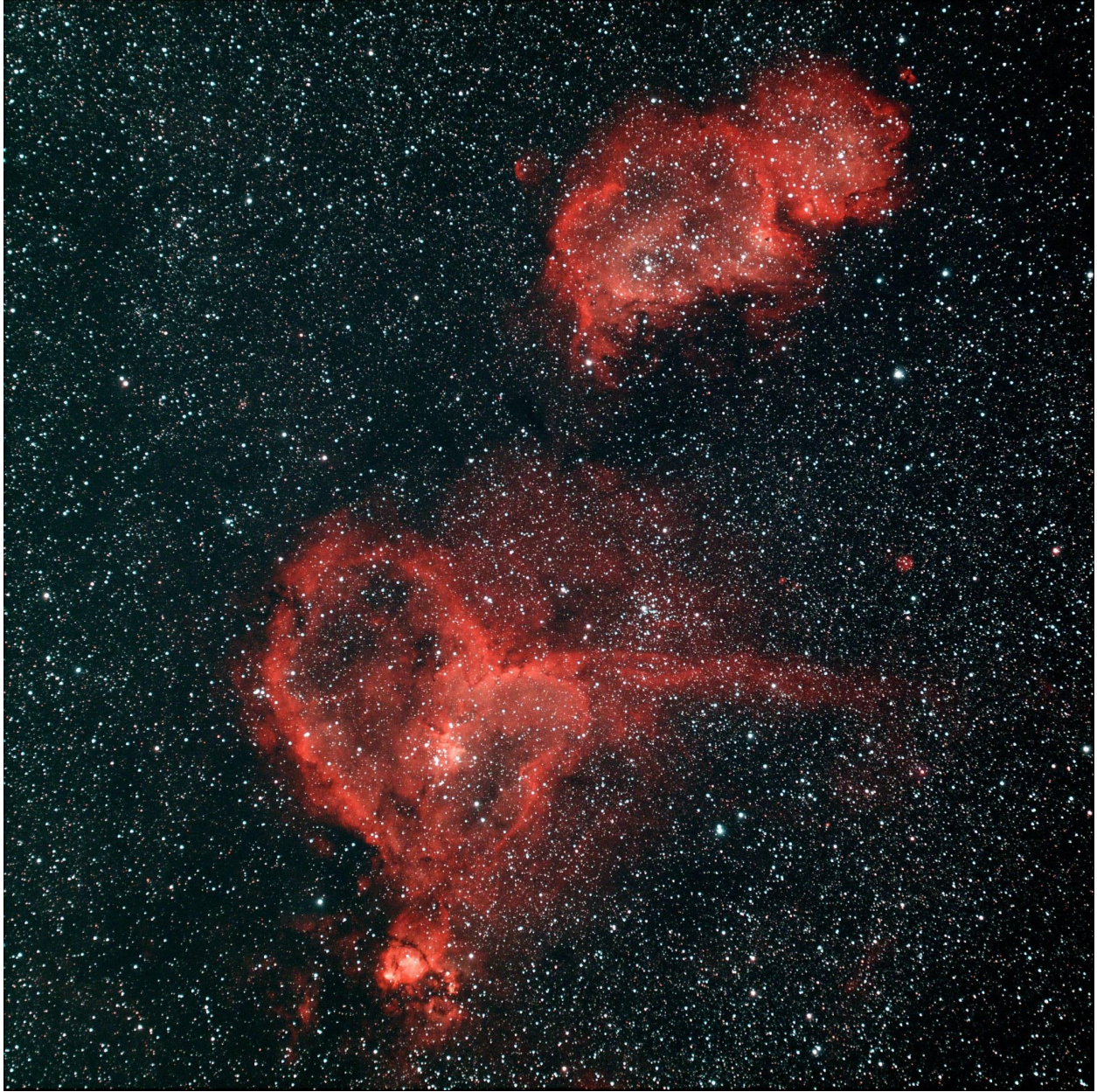
## Members Gallery



This section is to display some of the images that our own club members have taken during the previous month. Please feel free to submit any images via email, or post on the Facebook Group [Here](#)



*7 - Monkey Head Nebula - Peter Biddell*





*8 - Heart and Soul Nebulas - Tom Gormley*



*9 - Flame, Horsehead and Orion Nebulas - Tom Gormley*

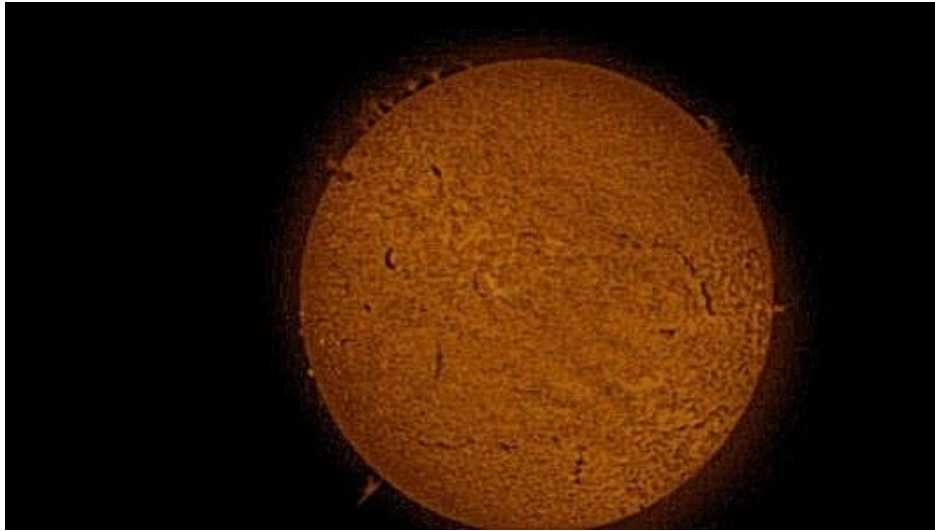


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82min

120°E,31°N/2026-03-18 22:51

*10 - M51 - Whirlpool Galaxy - Mark Phillips*

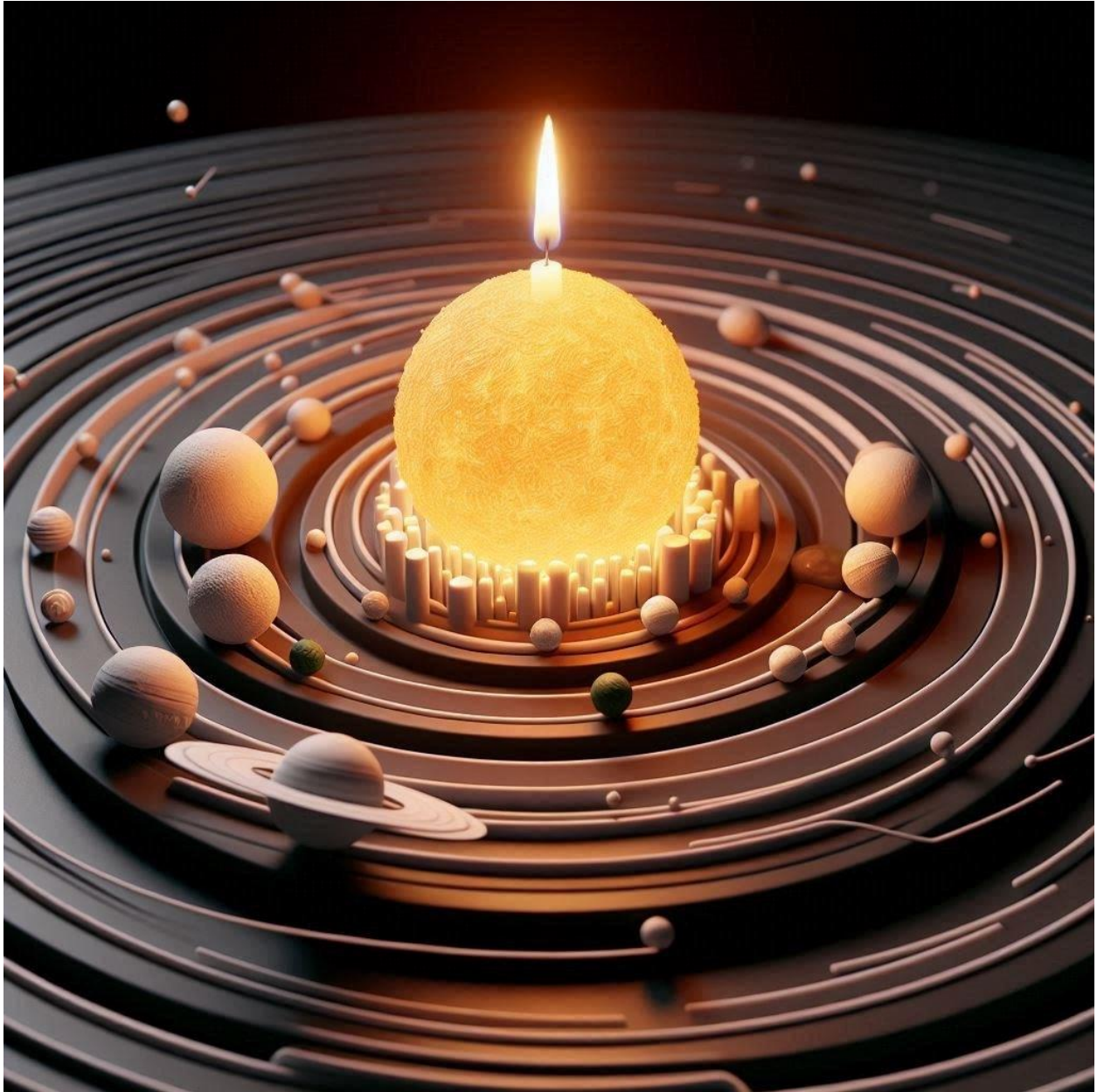


*11 - Sun - Keith Thompson*



*12 - M81 - Bode's Galaxy - Keith Thompson*

## Anniversaries April



Here are some significant astronomy anniversaries that occurred in April throughout history:

- **April 7, 2001 – Mars Odyssey Orbiter is launched:** Odyssey was the first spacecraft to make a map of the elements and minerals that make up the surface of Mars.
- **April 10, 2019 – First image of a Black-hole was released:** The Event Horizon Telescope team revealed an image of the supermassive blackhole at the centre of the galaxy M87.

- **April 11, 1970 - Apollo 13 is launched:** What was planned to be the 3rd landing on the Moon, an oxygen tank explosion forced the astronauts to return to Earth.
- **April 12, 1961 – Yuri Gagarin is the first person in space:** Aboard Vostok 1, Gagarin becomes the first man to orbit the Earth in space.
- **April 18, 1955 – Albert Einstein passes away:** One of the greatest physicists and contributors to modern astrophysics.
- **April 21, 1972 – Apollo 16 mission lands on the Moon:** What will be the second to last moon landing, the crew of Apollo 16 land on the Moon in the Lunar Module.
- **April 24, 1990 – The Hubble Space Telescope is launched:** Launched from the Space Shuttle Discovery, Hubble was and still is one of the most important Space telescopes we have.

These anniversaries highlight key discoveries, milestones, and events that shaped the field of astronomy and space exploration.

## The Moon

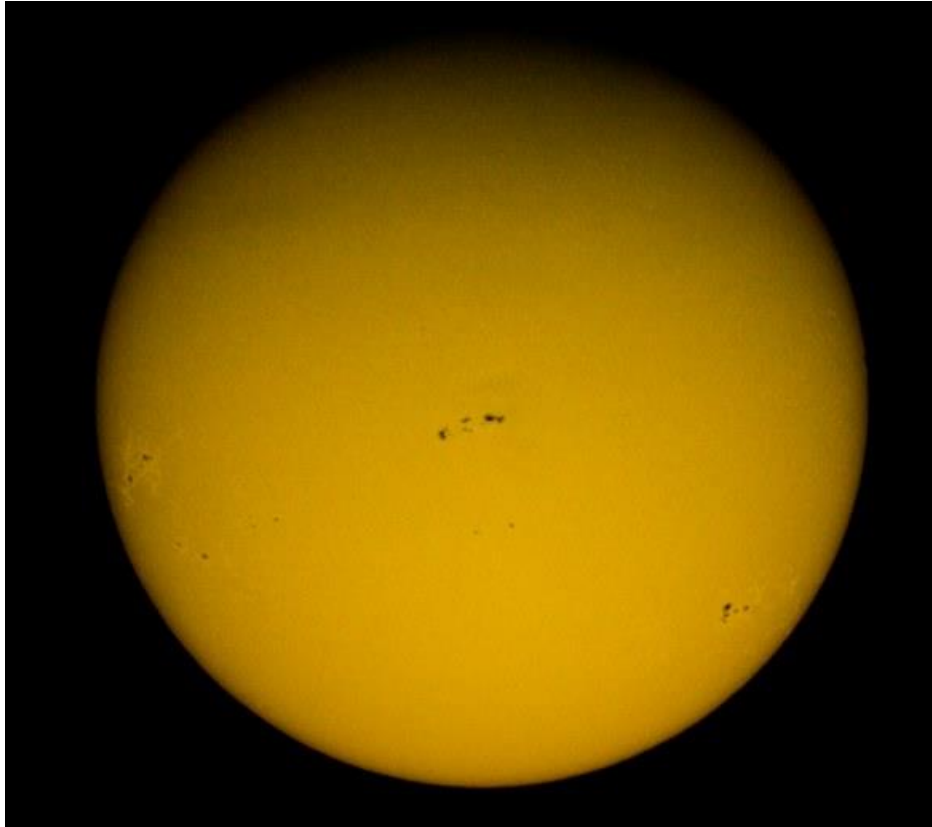


- Full moon : 2nd April
- Last Quarter : 10th April
- New Moon : 17th April (Friday...potential last minute star camp if weather looking OK?)
- First Quarter : 24th April

Full Moon Phase Calendar details ([Here](#))

The Moon will occult the Pleiades on Tuesday 1st April, starting around 21:00

## The Sun

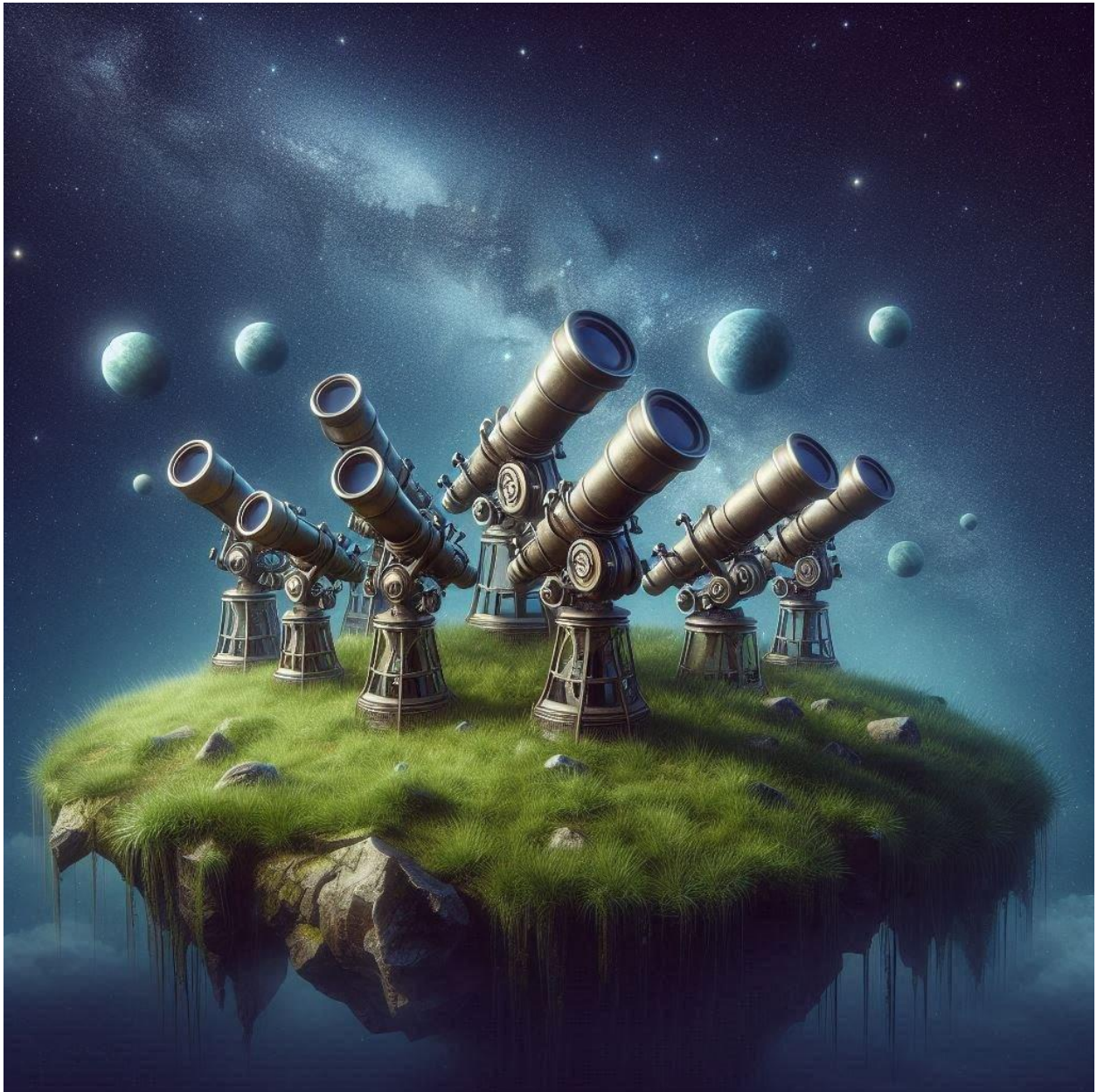


Scientists analysed data from March indicating that while the Sun is moving into a declining phase of Cycle 25, activity remains surprisingly high. Several X-class flares were recorded last month, causing minor radio blackouts and vibrant auroras at high latitudes.

**Aurora** - The Sun still is in the declining phase of the solar maximum, however is still active with flares so Aurora are still possible to occur. Always use the correct solar filters when viewing the Sun.

Aurora Watch UK is a great phone app, that can alert you when the auroral activity is increasing

## The Planets



Here's a summary of the positions and visibility of the planets in April 2025 as seen from the UK:

### **Mercury**

Mercury will be low to the horizon in the predawn sky, with greatest elongation on the 3rd.

### **Venus**

Venus is visible as an evening object, setting about 2 hours after sunset. A bright object in the western sky.

**Mars**

Mars will be difficult to observe this month

**Jupiter**

Jupiter is visible this month in the evening after sunset, but is declining and will disappear as the evening twilight gets longer.

**Saturn**

Unfortunately, not visible this month as it will be lost in the glare of the Sun.

**Uranus**

Uranus is best seen with binoculars or a telescope, it should be observable after sunset but will become more difficult to see as the month progresses

**Neptune**

Unfortunately, not visible this month as it will be lost in the glare of the Sun.

## Comets, Meteors & Asteroids



### Meteor Showers

**Lyrid Meteor Shower** - Associated with long-period Comet C/1861 G1 Thatcher, it is the oldest recorded meteor shower that is still visible today. With a estimated peak of around 18 meteors per hour, these will be bright fast meteors that may have trains. The shower is active between the 16th-25th April, peaking on the night of the 22nd. Meteors radiating from the constellation of Lyra which will rise in the East around midnight.

**Eta Aquarids Shower** - With meteors radiating from the Aquarius constellation, this shower is associated with Comet Halley. The shower is active between the 19th April to the 28th May, with the peak on the night of the 5th May. The peak will see an estimated 40 meteors per hour.

Sporadic meteors are also visible at any time, usually best seen after midnight from dark sky locations.

### Asteroids

No visible asteroids this month

### Comets

**C/2026 A1 (MAPS)** is the main one to watch in early April. It reaches perihelion on 4 April and perigee on 6 April, it could become bright enough for naked-eye viewing if it survives its close pass by the Sun, but sungrazing comets can brighten dramatically or break up entirely.

**C/2025 R3 (PANSTARRS)** is the other promising one later in the month. It reaches perihelion on 19 April and perigee on 26 April. Some current sky guides describe it as a potentially good binocular target, and possibly brighter, but is not guaranteed.

For optimal viewing, observers should focus on times when the Moon is not interfering and look in areas with minimal light pollution. Binoculars or telescopes are recommended for a better view of the comet's tail and coma, as naked-eye visibility might still be challenging depending on the comet's final brightness

## Deep Sky Targets



### For Telescopes

In March 2025, the UK night skies will showcase several prominent deep-sky objects visible during the winter months. Here's a list of noteworthy objects:

- **North**
  - The Cocoon Nebula (C19) - An emission/reflection nebula in the constellation of Cygnus

- The Wizard Nebula (SH2-142) - An Open Cluster of stars surrounded by emission nebula of Hydrogen and Oxygen

- Bodes Galaxy (M81): A bright spiral galaxy in close proximity to M82.

- Cigar Galaxy (M82): A spiral galaxy, with a massive emission of gas and dust caused by newly forming stars.

- **East**

- Whirlpool Galaxy (M51): A great example of a 'grand design' spiral galaxy, with symmetrical arms laced with stars, gas and dust.

- Hercules Cluster (M13):

- Ring Nebula (M57):

- **South**

- Markarian's Chain (M84, M86 and more) - A group of galaxies that when viewed appear in a curved line.

- Black Eye Galaxy (M64): A Spiral galaxy named for the dark band of dust that sweeps across the bright nucleus.

- M3 Globular Cluster : A cluster made up of around 500,00 stars.

- **West**

- Horsehead Nebula (Barnard 33): A dark nebula best viewed with larger telescopes and specialized filters.

- Leo Triplet (M65, M66 and NGC3628): A group of interacting spiral galaxies, which should be visible through a moderate telescope.

- The Golden Eye or King Cobra Cluster (M67) - An Open Star Cluster

- Leo Triplet (M65, M66 and NGC3628): A group of interacting spiral galaxies, which should be visible through a moderate telescope.

These objects span various types, from galaxies to nebulae and star clusters, providing excellent opportunities for stargazing and astrophotography. Use a star map or astronomy app to locate them easily.

### For Binoculars

With 7x50 wide angle binoculars sweep the milky-Way from Cassiopeia through Perseus and Auriga to Procyon. Enjoy the Hyades and Pleiades at the same time.

### Bright Star Clusters

1. **The Pleiades (M45)** – A stunning open star cluster in Taurus.
2. **The Hyades** – A nearby V-shaped cluster in Taurus surrounding Aldebaran.

### Nebulae and Galaxies

1. **Whirlpool Galaxy (M51)** - A spiral galaxy that will appear as a faint fuzzy patch

### Globular Clusters

1. **Hercules Globular Cluster (M13)** – A dense, bright star cluster visible in summer.
2. **M92** – Another impressive globular cluster in Hercules, slightly dimmer but rewarding.

### Planets and the Moon

1. **Jupiter and its Moons** – Binoculars reveal Jupiter's four largest moons.
2. **The Moon** – Ideal for exploring craters, mare, and mountains at any phase.

Switching to the Caldwell catalogue:

**C13** The Owl Cluster in Cassiopeia is not difficult for binoculars or small telescopes. (Draw a line from epsilon CAS through delta for about half the distance to find chi CAS which is in the middle of this open cluster also known as NGC457).

**C14** We all know as NGC 869 & 884 the double cluster or sword handle in Perseus,

## Bills Bulletin



Hi guys

This month we will be looking at a whole series's of articles from Earth to deep cosmos.I have found them of interest so i hope they will bring something to you also.i hope you enjoy

ps remember Artemis

### **Sun**

How to predict solar flare activity

[Predicting the Sun's Most Violent Outbursts - Universe Today](#)

Some sunspots are so active they last multiple solar rotations how are they tracked

[The Sun's Long-Lived Active Regions Are Massive Flare Factories—But We Don't Know Why - Universe Today](#)

How does the solar corona get so hot. Braided magnetic fields could do it and they have been seen

[Astronomers See Braided Magnetic Fields Above a Sunspot - AAS Nova](#)

## **Earth**

Looking at the earth's geo sphere

[NASA's Carruthers Geocorona Observatory Begins Primary Science Mission - NASA Science](#)

Earth cooling and passage through dense super nova created clouds on our trip around the galaxy cause collapse of the heliosphere to less than 1 au. Here the atmosphere interacts with an increase of cosmic rays and strips out ozone causing cooling. The effect matches geological markers

[Increased and varied radiation during the Sun's encounters with cold clouds in the last 10 million years | Scientific Reports](#)

Emission from burning Amazon

[ESA - Amazon wildfire emissions up to three times higher than estimated](#)

## **Moon**

China will look to land on a volcanic lunar plane

[China's 1st moon astronauts could land in Rimae Bode, a 'geological museum' on the lunar near side | Space](#)

Maintaining fitness on the moon

<https://royalsocietypublishing.org/rsos/article/11/5/231906/92760/Horizontal-running-inside-circular-walls-of-Moon>

Lunar magnetism an explanation of magnetic regions

[A 60-Year Old Mystery About the Moon's Magnetosphere Is Finally Solved - Universe Today](#)

No lunar space station but a base instead

[NASA kills lunar space station to focus on ambitious Moon base - Ars Technica](#)

## **Planetary**

Solar storm hits Mars

<https://apple.news/A3KYxACcnQiexskJHLGdo-A>

Getting to Mars at solar max is best

[ESA - The radiation paradox: why solar maximum is the safest time to travel to Mars](#)

James Webb and Saturn

<https://apple.news/AZmVwn9akS-e2IW3hib7Vfg>

Jupiter and it's superpowers

[Jupiter's Lightning Could Be Almost Unbelievably Powerful - Universe Today](#)

Triton tipped Neptune over

[\[2603.19035\] Neptune's obliquity was likely engendered by Triton's tidal evolution](#)

## **Asteroids**

There won't be an asteroid impact on the moon the orbit has been refined

[New NASA Asteroid Observations Eliminate Chance of 2032 Lunar Impact - NASA Science](#)

Impacts on asteroids cause fan shaped deposits if velocity is low

<https://apple.news/Ao3f2IUtSSSSV9ZP0CvCGrg>

Moving an asteroid

<https://www.science.org/doi/10.1126/sciadv.aea4259>

<https://apple.news/AyuMlOoScTn28AjkhTbZlMq>

Sunlight spins up asteroids so they can share dust with their moons

[Scientists Find the First Direct Evidence of Binary Asteroids Sharing Material - Universe Today](#)

A history of Dinkinesh

[Details on Dinkinesh and Its Surprise Satellite from the Lucy Mission - AAS Nova](#)

## **Comets**

Could we have a bright comet coming

[Newly discovered comet could be visible in daytime skies this April | Space](#)

Juice and a photo

[ESA - A rare encounter: How Juice came to observe 31/ATLAS](#)

Hera on the way to didymos

[Like 'accelerating from stationary to supersonic flight': Europe's Hera probe boosts speed, stays on course for November asteroid rendezvous | Space](#)

## **Exoplanet**

Brown dwarfs and gas giant planets may form in similar ways but the way to tell which is which is the spin rate

<https://arxiv.org/abs/2601.05976>

An analogue of our solar system

<https://iopscience.iop.org/article/10.3847/2041-8213/ae4b3b>

## **Astro biology**

DNA and rna building blocks found on asteroids

[A complete set of canonical nucleobases in the carbonaceous asteroid \(162173\) Ryugu | Nature Astronomy](#)

[Ryugu asteroid sample contains all five key components of DNA and RNA: the building blocks of all living things | Space](#)

Going to Mars this is how much you need to excise when there

[How Will Martian Gravity Affect Skeletal Muscle? - Universe Today](#)

## **Milky Way**

Using RR Lyra stars to plot early galaxy

[RR Lyrae variables as beacons to investigate the early formation of the Milky Way — English](#)

Cats eye

[A star dies in the Cat's Eye photo of the day for March 10, 2026 | Space](#)

The sun may have started life at the galaxy centre and was flung out. This may have kicked started the conditions for life to form

[https://www.aanda.org/articles/aa/full\\_html/2026/03/aa58913-26/aa58913-26.html](https://www.aanda.org/articles/aa/full_html/2026/03/aa58913-26/aa58913-26.html)

Touching brown dwarfs merger scenario

[This Pair Of Brown Dwarfs Can't Get Enough Of Each Other - Universe Today](#)

Watching the crab with Hubble

[Watching 25 Years of Expansion in the Crab Nebula With the Hubble - Universe Today](#)

Solving the gamma Cassiopeia riddle

[ESA - XRISM solves famous star's 50-year mystery](#)

## **Galaxies**

A brief look at the SMC

[Disrupted Dwarf Galaxy: Investigating the History of the Small Magellanic Cloud - AAS Nova](#)

## **Cosmology**

Ripples in space time

<https://apple.news/AiTz0n-ouStqRzFiLU6aBCA>

A defective universe (four part series)

[Is the Universe Defective? Part 1: The Good Old Days - Universe Today](#)

[Is the Universe Defective? Part 2: The Persistence of Memory - Universe Today](#)

[Is the Universe Defective? Part 3: The Great Vanishing Act - Universe Today](#)

[Is the Universe Defective? Part 4: Hiding in Plain Darkness - Universe Today](#)

## **Telescopes**

Interferometry using quantum entanglement

<https://phys.org/news/2026-03-quantum-entanglement-route-higher-resolution.html>

An interesting lens system

[ESA - The tiny lens antenna with big potential](#)

Rubin initial data

[Rubin Alert Leads to First Follow-Up Observations and Detection of Four Supernovae - Universe Today](#)

## **Observing**

See a bright conjunction

[https://apple.news/AKXCugAo-R5WQdd8X\\_YAxWA](https://apple.news/AKXCugAo-R5WQdd8X_YAxWA)

## **Space flight**

European space plane compared to starship

[Comparison of SpaceX's Starship with winged heavy-lift launcher options for Europe | CEAS Space Journal | Springer Nature Link](#)

<https://sendy.universetoday.com/l/YH9ymnU1ShzDli10b76myA/4rJE892nrOH1ag6i2eCQXYeA/ZkXcM51XGtBis1ZXTBEIoA>

Upper stage for Artemis

<https://apple.news/AH47sQljeT1WnW5k-TTvTBQ>

Moon base ?

[Beyond Artemis 2: NASA pursuing a 'more achievable' path back to the moon | Space](#)

Can we bring an asteroid to earth

[A private space company has a radical new plan to bag an asteroid - Ars Technica](#)

Inside Artemis mission

[https://youtu.be/4mA0OdK4R5A?si=tWei6x\\_y5R1K\\_q5Q](https://youtu.be/4mA0OdK4R5A?si=tWei6x_y5R1K_q5Q)

NASA Artemis feed

[Artemis - NASA](#)

[Artemis 2 moon mission latest news: NASA prepares for April 1 launch of lunar astronauts | Space](#)

[NASA Sets Coverage for Artemis II Moon Mission - NASA](#)

[Artemis II Multimedia: Crew Photos, Videos and Mission Highlights](#)

[NASA's Artemis II Mission Launch Tickets, Wednesday, Apr 1 at 11:24pm GMT+1 to Thursday, Apr 2 | Eventbrite](#)

Spacecraft tracker

[NASA: Artemis II](#)

## **Podcast**

[Small Steps, Giant Leaps: Episode 169: Designing the Roadmap to Mars - NASA](#)

## Schedules, links and contacts



- [TV - BBC Sky at night \(Here\)](#)
- [Upcoming Space Launches \(Here\)](#)
- [Moon Phases \(Here\)](#)
- [Dark Sky Calendar \(Here\)](#)

- *Clear Outside - Astronomy weather forecast ([Here](#))*
    - *Cloud radar map ([Here](#))*
    - *Beginners guide ([Here](#))*
  - *Walsall Astronomy Facebook Group ([Here](#))*
    - *Walsall Astronomy Website ([Here](#))*
    - *Contact: [Info@walsallastro.com](mailto:Info@walsallastro.com)*
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