

Walsall Astronomical Society

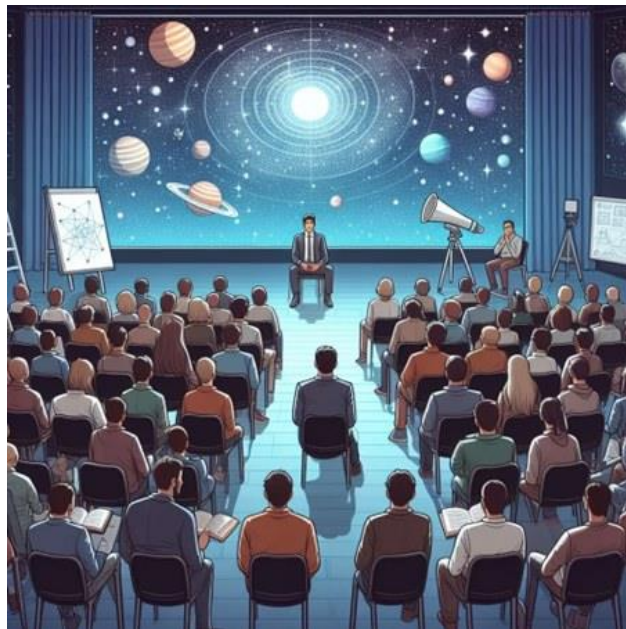


June 2026

What's Up Monthly Publication



What's on this month



June brings with it the shortest nights of the year with the Summer Solstice occurring on the 21st of this month, we will gradually see the dark return to the nights! One to keep an eye on is the star T Corona Borealis, which is a recurrent novae that happens every 80 years, it could happen any day! (we've been waiting since last year!)

June is the prime month in the UK for spotting "night-shining" clouds. These rare, electric-blue clouds form at the edge of space (82km high) and reflect sunlight long after the sun has set at ground level. Look toward the northern horizon between 11 p.m. and 1 a.m. for their characteristic wispy, silvery patterns.

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

Thursday 4th June: External Lecture - Dr Warren Skidmore -Deputy Director of NASA IRTF - 'Defending the Planet and Exploring the Universe'



Thursday 11th June: General Club Meeting, for discussion and support - Observing with telescopes if clear

Thursday 18th June: General Club Meeting, for discussion and support - Observing with telescopes if clear

Thursday 25th June: What's Up presentation on what to look out for in June
List of Lovell Lecture Series 2025 [HERE](#) for those interested.

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](#)



 Seestair S50 

01°W,52°N/2026-05-25 22:47

Moon

1 - Moon - Dave Timmins



2 - Elephant Trunk Nebula - Pete Biddell



3 - M51 - Keith Thompson



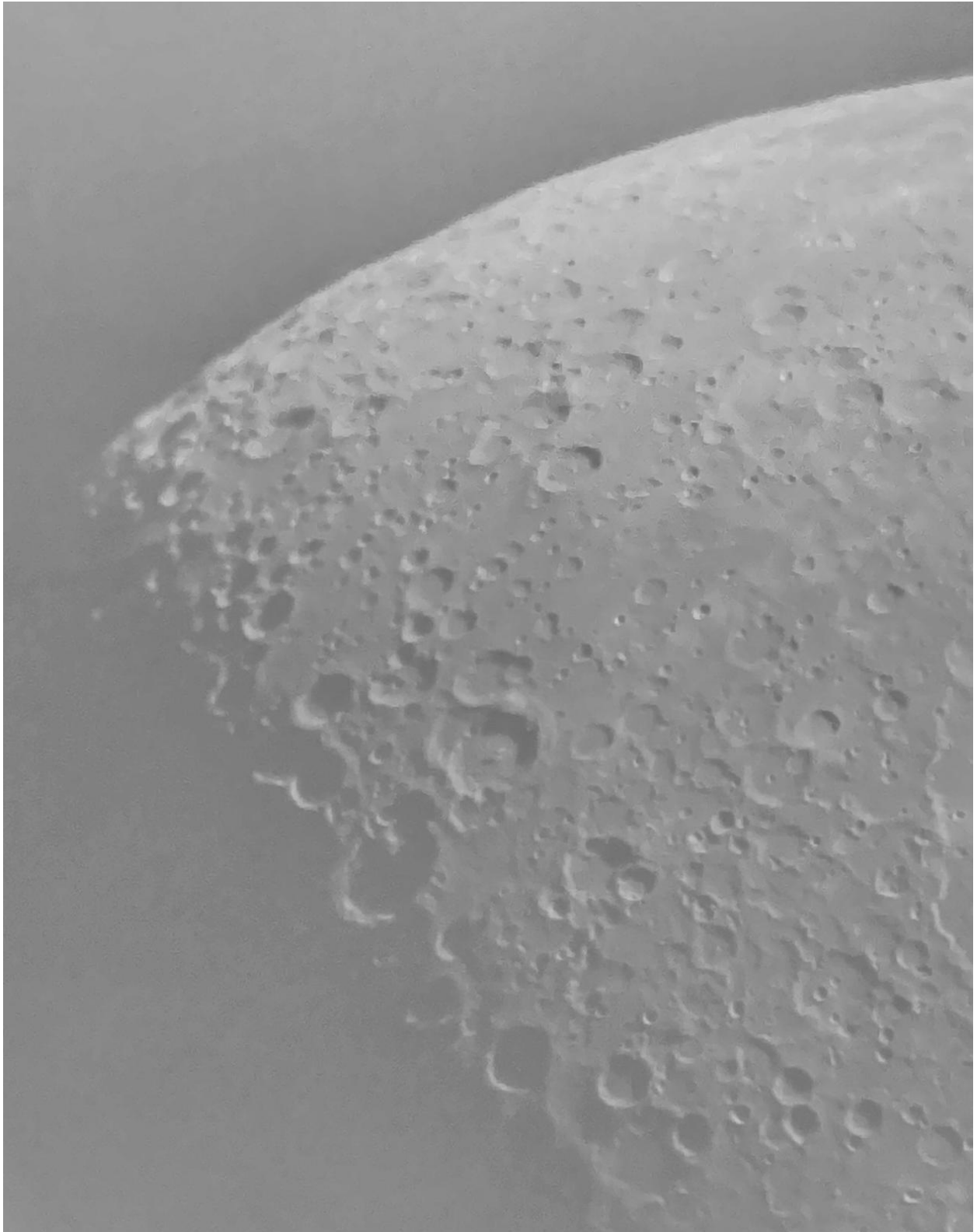
 Seestar S50 

M 81

Alain DeNoise/01°W,52°N/2026-05-29 01:57

46min

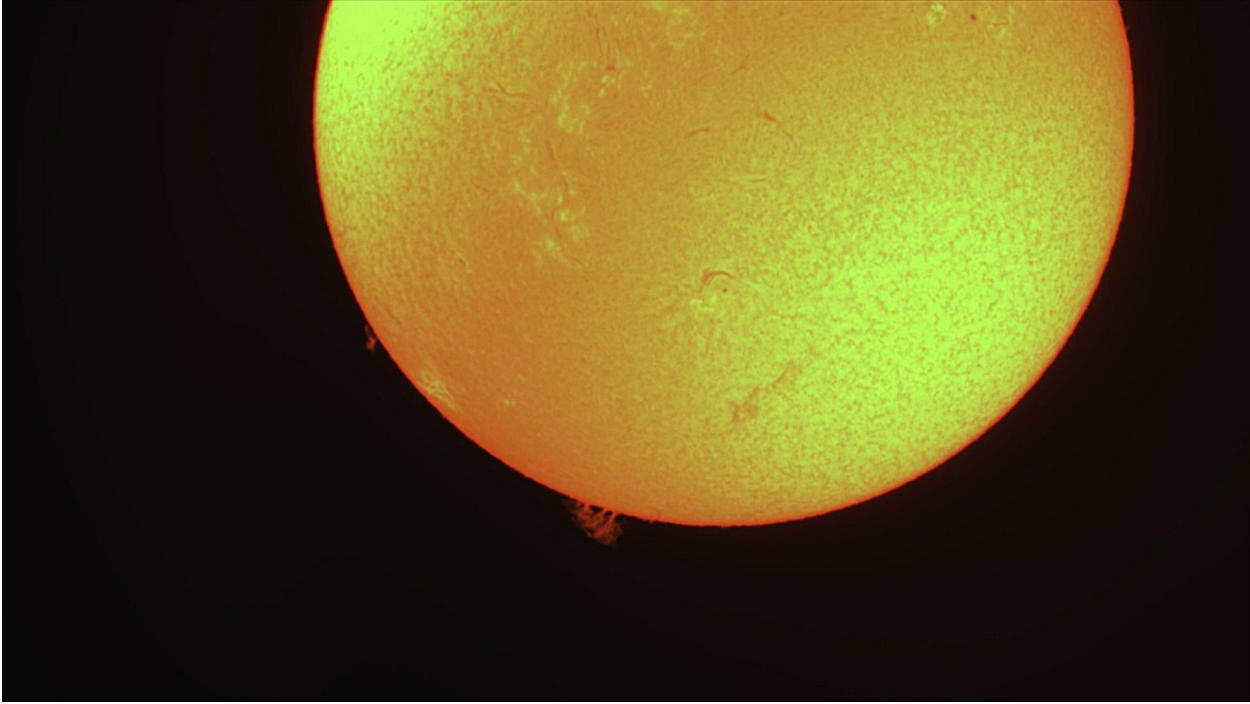
4 - M81 + M82 - Tony Jakeman



5 - Moon (Maurolycus area) - Bill Law

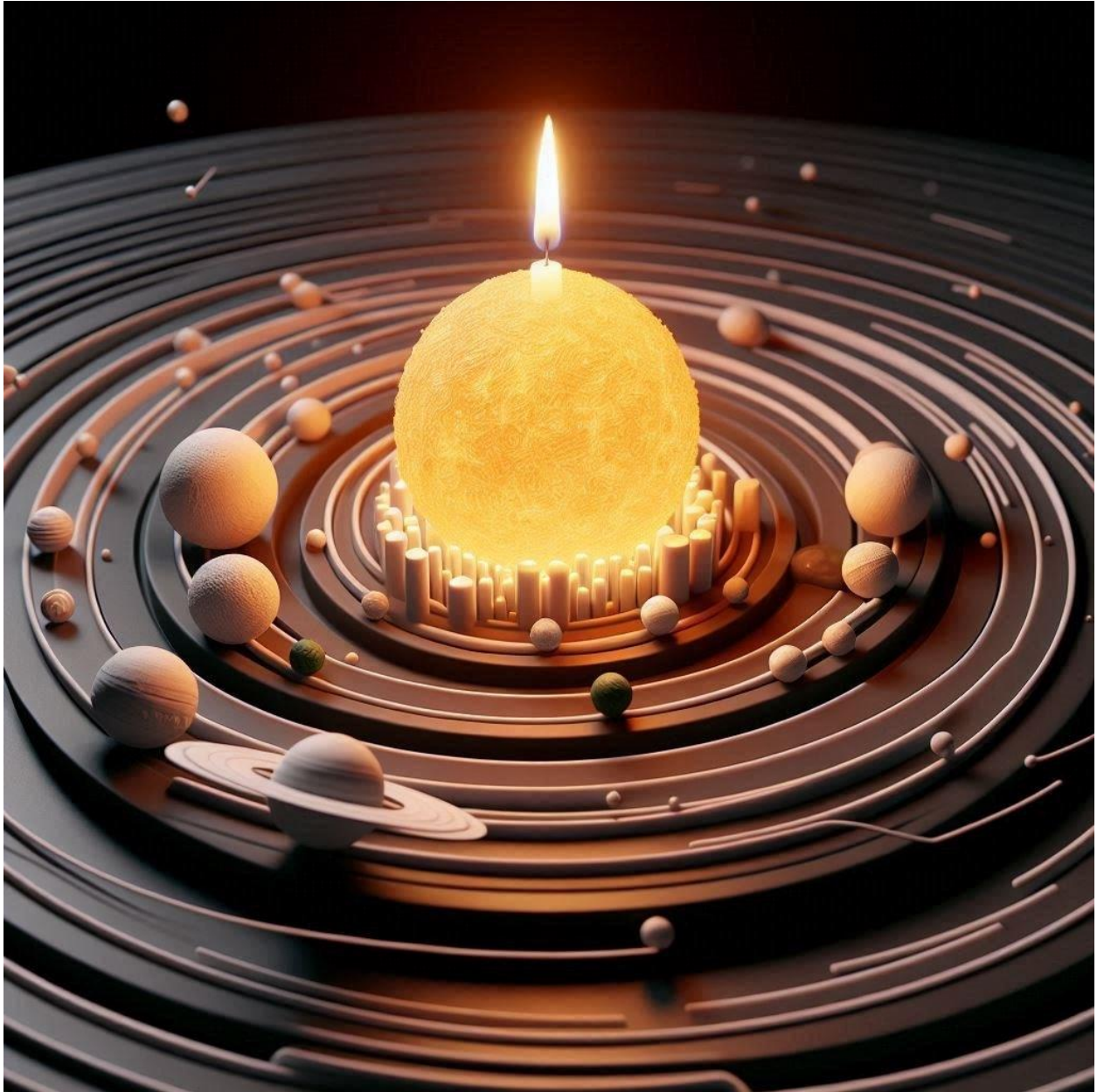


6 - North America Nebula - Pete Biddell



7 - Sun - David Kyte

Anniversaries - June



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

- **June 3, 1769 – Transit of Venus:** Observed by Captain James Cook's voyage to Tahiti.
- **June 10, 2003 – Launch of Spirit Rover to Mars:** NASA's Spirit rover launched as part of the Mars Exploration Rover mission. It landed on Mars in January 2004 and exceeded its planned 90-day mission by several years.

- **June 13, 1983 - Pioneer 10 crosses orbit of Neptune:** The Pioneer 10 probe crosses the orbit of Neptune
- **June 14, 1963 – First mammal in space:** Albert II, a rhesus monkey, was launched into space by the United States onboard a V-2 rocket.
- **June 20, 1978 – Venus Pioneer 1 launched:** The Venus Pioneer probe was a mission to orbit Venus and monitor and analyse its atmosphere.
- **June 16, 1963 – Valentina Tereshkova becomes the first woman in space:** Aboard Vostok 6, the Soviet cosmonaut made history, orbiting the Earth 48 times over nearly three days.
- **June 22, 1675 – Royal Observatory Greenwich founded:** King Charles II established the Royal Observatory, with John Flamsteed as the first Astronomer Royal.
- **June 24, 1975 – Moon tremor caused by Taurid meteors:** The Lunar Seismic Network, left on the Moon by Apollo astronauts, detected a significant series of lunar impacts from Taurid meteors.
- **June 30, 1908 – Tunguska Event:** A massive explosion in Siberia believed to be caused by the airburst of a meteoroid or comet fragment. It's the largest impact event in recorded history.

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

The Moon



🌑 Last Quarter - 7th June

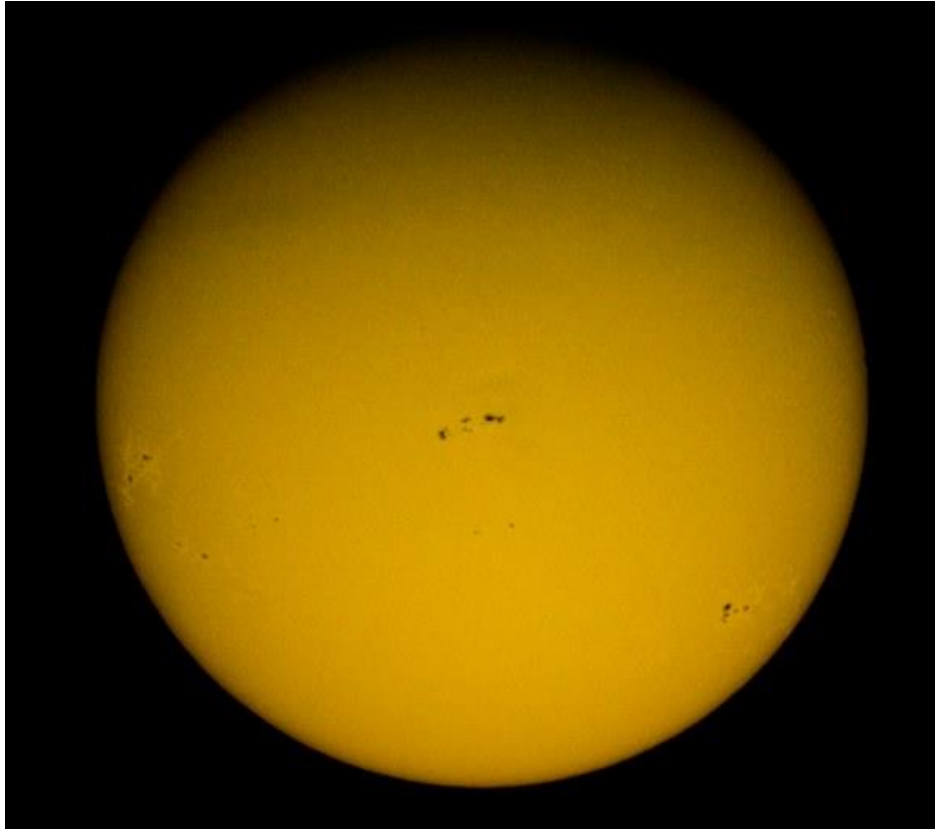
🌒 New Moon - 15th June

🌓 1st Quarter - 22nd June

🌕 Full Moon - 29th June

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

The Sun

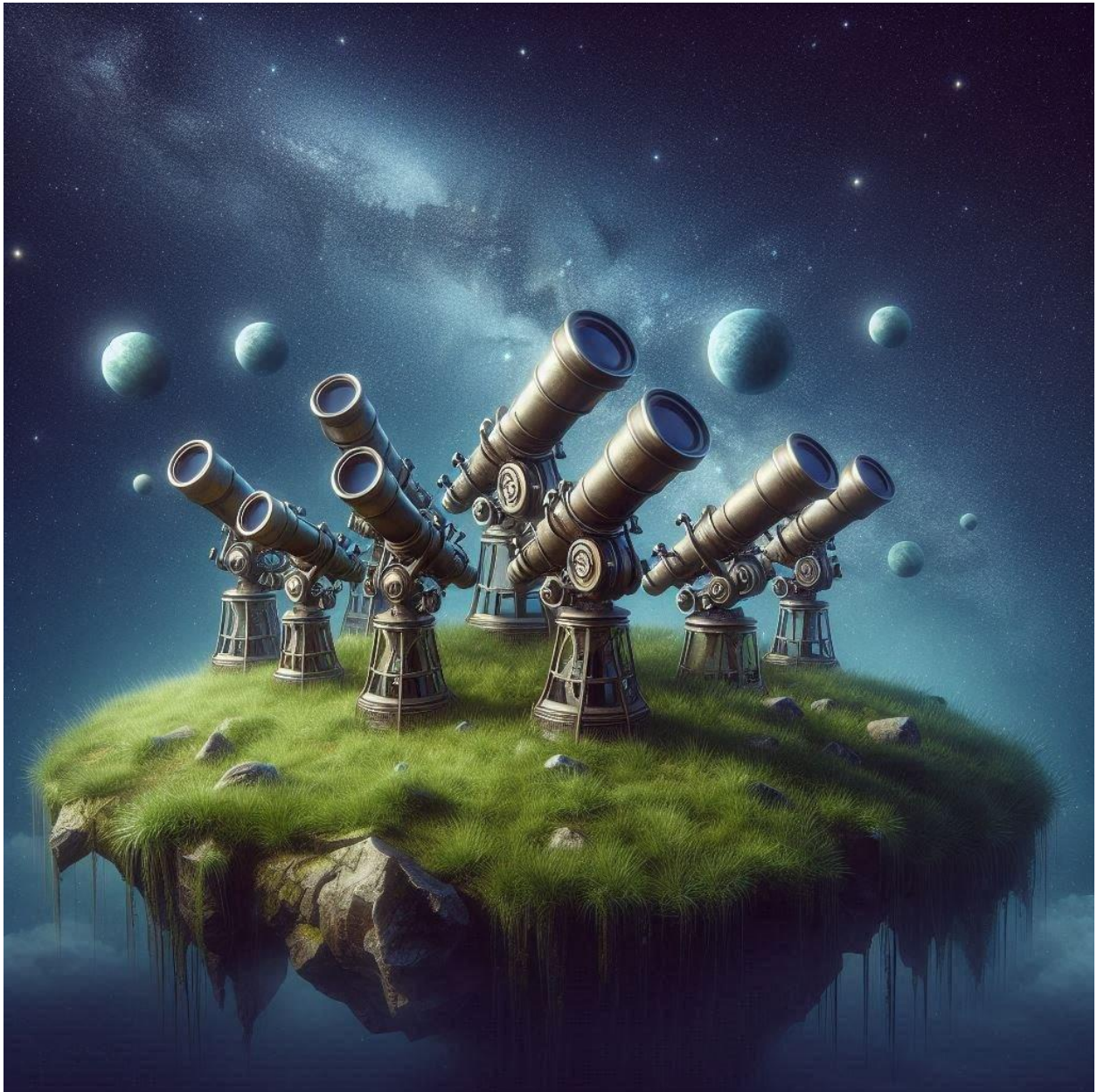


Aurora - Solar activity in June 2026 is forecast to be high as we reside near the peak of **Solar Cycle 25**. Expect frequent sunspots and a high probability of M-class and X-class solar flares. This level of activity increases the likelihood of geomagnetic storms, which can trigger aurora borealis sightings even in the southern parts of the UK.

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

Always use the correct solar filters when viewing the Sun, if you have any doubt please contact us or talk to one of the club commitee members.

The Planets



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

Mercury

Visible very low in the north-west late in the month just after sunset.

Venus

Lost in the Sun's glare for most of the month, though very close to Jupiter early on.

Mars

Visible low in the east before dawn; rises around 2:30 a.m.

Jupiter

Very bright in the early morning sky (north-east) in Taurus; rises around 3:30 a.m.

Saturn

Visible in the early hours (rises ~1:00 a.m.) in the constellation Aquarius.

Uranus

Too close to the Sun for observation this month.

Neptune

Visible with a telescope in the early morning (rises ~1:30 a.m.) in Pisces.

Comets, Meteors & Asteroids



Meteor Showers

Arietids: Peak activity on June 10. While primarily a daytime shower, UK observers can see "Earthgrazing" meteors low in the east just before dawn (3–4 a.m.).

June Bootids: Peaking around June 27, this shower is unpredictable but can sometimes produce bright, slow-moving meteors. The radiant is high in the sky for UK viewers.

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

Asteroids

Ceres: The largest object in the asteroid belt is located in Sagittarius. It rises around 11:50 p.m. and is visible at a relatively bright magnitude of **7.6**, reachable with binoculars.

2026 HM6: While it made a close approach in May, this Near-Earth Object remains in Cygnus but has faded significantly to a very dim magnitude of **21.0**, requiring professional-grade equipment.

Comets

10P/Tempel: This periodic comet is expected to be visible from the UK in June 2026 with a telescope, reaching a magnitude of approximately 8. It is best observed in the early morning hours.

34D/Gale: Predicted to be visible from the UK starting in May/June, this comet may reach magnitude 10, requiring a medium telescope and dark skies for a clear view.

88P/Howell: Currently visible through July from the UK, this comet shines at magnitude 9, making it a viable target for amateur astronomers with decent optical equipment during the short June nights.

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 June 2025, the UK night skies will start becoming brighter for longer, meaning dark sky targets will not be visible until much later in the evening, and will disappear earlier as the sun rises. Galaxies will be harder to image due to the brighter night, however bright Nebula's are ideal due to the need for specialised filters cutting out visible light.

- **North**

- The Heart Nebula (IC 1805) - A large, bright emission nebula in the constellation, Cassiopeia.
- The Soul Nebula (IC 1848) - A large, bright emission nebula in the constellation, Cassiopeia.
- 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**

- Cygnus Loop - Made up of the Eastern Veil (NGC 6992) and the Western Veil (NGC 6960) - It is a supernova remnant made up of ionised gas and dust.
- Sadr Region or Gamma Cygni Nebula (IC 1318) - A large diffuse emission nebula surrounding the star, Sadr, at the center of the Cygnus cross. Nebula's included in this region include, The Crescent Nebula (NGC 6888).
- North America Nebula (NGC 7000) - A bright emission nebula, located in Cygnus, near the star Deneb.
- Ring Nebula (M57): A planetary nebula, which is the remains of a sun-like star.

- **South**

- Eagle Nebula (M16) - A star forming region in the constellation of Serpens. Well-known for containing the 'Pillars of Creation'.
- Lagoon Nebula (M8) - A large star forming area in Sagittarius, made up of clouds of gas and dust.
- Hercules Cluster (M13): A globular cluster made up of over 100,000 stars.

- **West**

- Leo Triplet (M65, M66 and NGC3628): A group of interacting spiral galaxies, which should be visible through a moderate telescope.
- Whirlpool Galaxy (M51): A great example of a 'grand design' spiral galaxy, with symmetrical arms laced with stars, gas and dust.

- Markarian's Chain (M84, M86 and more) - A group of galaxies that when viewed appear in a curved line.
- M3 Globular Cluster : A cluster made up of around 500,00 stars.

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. **Coma Berenices cluster** – An open cluster, which a nice double star that appears orange and blue.

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. **M5** – located in Serpens

Planets and the Moon

1. **Saturn** – Appearing as a bright object in the early hours, but will be close to the Moon on the 27th.
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

There has been a lot of research out this month this is a selection have a good read 🧐

Sun

Is the sun's magnetic field stronger than we think

[Our Sun's magnetic field is twice as strong as we thought. We may need to rethink our space weather forecasts | BBC Sky at Night Magazine](#)

Solar hammer heads

https://apple.news/AEYPSu_noQASyhb7JPXMN-g

[The solar wind's secret hammerheads and what they tell us about heat in space](#)

Huge radio emission

[NASA Missions Track Record-Breaking Radio Burst from Sun](#)

Double reconnection causes solar flare collapse

[Astronomers uncover why some solar eruptions die](#)

Earth

Why keeping the circulation going is important

https://apple.news/AXDM_x5TGQYWh0pxlyE7jOQ

Antarctic stardust

<https://apple.news/AmQ9rxRucTqmkeIBoGJw2MA>

Magnetic field changes

[ESA - Insights into Earth's molten outer core from space](#)

Newly found impact crater has signatures of how earth gain some oxygen

[Extra-terrestrial material found at an asteroid crater on Earth. Discovery could reveal how our planet got its oxygen | BBC Sky at Night Magazine](#)

Boy it was hot

[ESA - Hot surfaces during Europe's heatwave 'seen' by Sentinel-3](#)

Moon

Lunar poles rusty ?

[The Moon is rusting and it's all Earth's fault | BBC Sky at Night Magazine](#)

Moon base alpha

<https://apple.news/ARg5ZWajDQoyXV72g9Etmkg>

Musk not got base contract

<https://apple.news/Ap0EWpNoAQ52uivGvbB-kqA>

Planetary

A TNO with an atmosphere

[Astronomers Find Atmosphere Around a Pluto-like World - Sky & Telescope](#)

Moving on other planets

[ESA - Moving like an inchworm – a smarter robot for planetary exploration](#)

Jovian jets

[The deep atmosphere of Jupiter | Nature Communications](#)

NASA has a useful 3d mapping tool for Jupiter

[Jupiter](#)

Watching earths gravity waves

[NASA's AWE instrument completes mission to study Earth's effect on space weather](#)

Psyche and Mars

[NASA's Psyche Mission Aces Mars Flyby, Targets Metal-Rich Asteroid - NASA](#)

Zwan wolf effect seen on Mars

[NASA's MAVEN Makes 1st Discovery of Atmospheric Effect at Mars - NASA Science](#)

Mercury's polar ice

<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2025JE009399>

Water plumes and juice

<https://apple.news/AxWbOeAMOSGSBn1N3yUVhhQ>

<https://arxiv.org/abs/2604.20324>

Asteroids

Bio mining

https://apple.news/AIshJMJ_aSKignjb5EclXTQ

Meteor double boom

https://apple.news/AOclUshCNSF2ulp9_0Mvwlg

Comets

Meteor from iss

[ESA - A Lyrid meteor from orbit](#)

Exoplanet

Tess spots 6000 planet transits

[NASA's Planet-Hunting TESS Reveals Dazzling Night Sky - NASA Science](#)

Astro biology

Are we missing alien life

[Extraterrestrial life may be slipping past space missions, astrobiologists warn](#)

Milky Way

Open clusters can form in multiples and orbit each other

[Just Like Stars, Open Clusters Can Form Binary Pairs - Universe Today](#)

Galaxies

Radio galaxies and wings

<https://arxiv.org/abs/2604.22347>

Forming supermassive black holes in globular clusters

[How do the biggest black holes in the universe form? Ripples in spacetime provide a clue | Space](#)

Little red dots X-rays and black holes

[Astronomers Spot Possible Missing Link to Webb's Little Red Dots - Sky & Telescope](#)

Early galaxy clusters have galaxy members whose shape is influenced by material density

[Just 1.2 billion years after the Big Bang, galaxies were already shaped by where they lived](#)

Cosmology

Largest ever universe simulation

<https://arxiv.org/abs/2604.24324>

<https://apple.news/Avg5nxYB-RoKYKXt94B-9yQ>

Extreme nuclear transient big bangs for your buck

[The Universe's biggest explosions since the Big Bang – and we just discovered them | BBC Sky at Night Magazine](#)

Fermi finds new gamma ray signatures

[NASA's Fermi Glimpses Power Source of Supercharged Supernovae - NASA Science](#)

https://apple.news/AGL_AI0jOTZaSKaGuLVJW0g

Finding the BC^+ meson

https://apple.news/A2o9lw5kQQM6WkQnA_vfNTA

<https://arxiv.org/abs/2605.16228>

Little red dots are bare black holes

["Little red dot" in early Universe is a naked supermassive black hole - Ars Technica](#)

[A direct black-hole mass measurement in a little red dot at high redshift | Nature](#)

[NASA's Webb Reveals Black Hole That Formed Before Its Galaxy - NASA Science](#)

Telescopes

Quantum interferometry

<https://apple.news/Aw9JtTRaOTduN0gH2hF5jlg>

Questar cease operations

[Questar Ceases Operations - Sky & Telescope](#)

Observing

NASA needs help with citizen science

[Shock Detectives - NASA Science](#)

Student archives ballon flight that captures cosmic rays

[BA \(Hons\) Photography student... – AUB – Arts University Bournemouth](#)

Still waiting for T Cr

[Waiting for the Blaze Star - Sky & Telescope](#)

Observations of the milky way

<https://apple.news/AYk-ulPToSae36WkRKbaM9A>

Hubble helps Roman

[Hubble Survey Sets Up Roman's Future Look Near Milky Way's Center - NASA Science](#)

Solar imaging

https://apple.news/A8JI7SvbaR_aw4IqfoLR91g

New age of gravitational wave astronomy

https://apple.news/AsOtQ_LbZS0GRDptRTY60Rg

Space flight

Space rider on its way to certification

[Europe's 1st reusable spacecraft 'Space Rider' clears key hurdles on the road to launch | Space](#)

How to keep voyager's going

[How long can the Voyager probes keep exploring interstellar space? NASA gearing up for 'Big Bang' maneuver to boost dwindling power levels | Space](#)

Smile to see earth's polar interactions with solar stream

[ESA - Smile's journey from launch to orbit](#)

[ESA - Smile lifts off on quest to reveal Earth's invisible shield against the solar wind](#)

Starship even bigger

[Once again, SpaceX has set a new record for the tallest rocket ever built - Ars Technica](#)

Multimedia

[Small Steps, Giant Leaps: Episode 173: Soft Skills for Tough Missions - NASA](#)

Black holes

[NASA Visualization Rounds Up the Best-Known Black Hole Systems - NASA](#)

How to make a really good paper plane

https://apple.news/Aq6n_O8asT9mF4Jevi3hIIA

Artemis 3 crew to be announced in June

[NASA will reveal the Artemis 3 astronauts on June 9 | Space](#)

Thoughts on a moon base

[Artemis moon base will cover 'hundreds of square miles' with hopping drones and new lunar rovers, NASA says | Space](#)

.....May be delayed

[Blue Origin rocket explosion could damage Nasa's Moon timetable - BBC News](#)

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*
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