

Walsall Astronomical Society



October 2026

What's Up Monthly Publication



What's on this month



As autumn firmly takes hold across the UK, observers can look forward to a dramatic expansion in nighttime dark hours. With the end of British Summer Time later this month, dark, crisp nights arrive much earlier, giving us extended windows for observing deep-sky targets long before midnight. October typically brings crisper atmospheric transparency following late-summer haze, though cooler ground temperatures mean damp conditions and dew management become key considerations for equipment. The evening sky carries a unmistakable seasonal shift, with summer's familiar constellations slipping toward the western horizon while rich autumn fields of stars, open clusters, and distant galaxies rise prominently in the east. It is a fantastic time of year to get outside, wrap up warm, and enjoy the beauty of dark autumn skies.

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

Thursday 1st October: Club Member Presentation - Ian and Ellie - Talk called "Our visit to PL"

Thursday 8th October: General Club Meeting, for discussion and support - Observing with telescopes if clear

Friday 11th - Sunday 13th October: Star Camp Weekend

Thursday 15th October: General Club Meeting, for discussion and support - Observing with telescopes if clear

Thursday 22nd October: General Club Meeting, for discussion and support - Observing with telescopes if clear

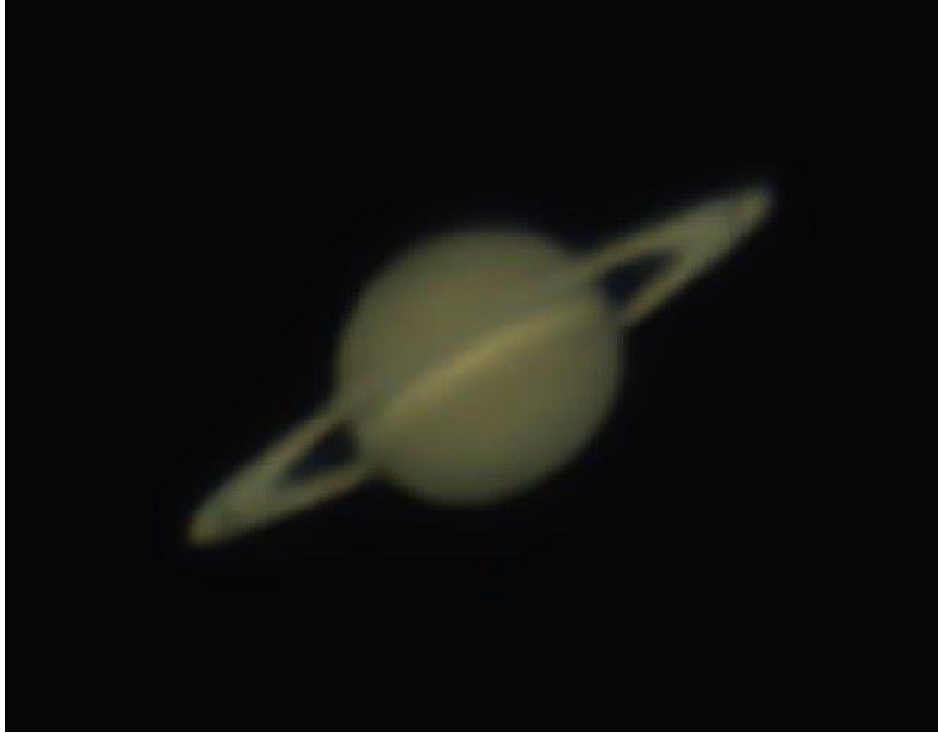
Thursday 29th October: What's Up for November

List of Lovell Lecture Series 2026 [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](#)



1 - Saturn - Mike Lewis



2 - The Lion Nebula - Peter Biddell



Seestar S50

2 minute video

Lunar

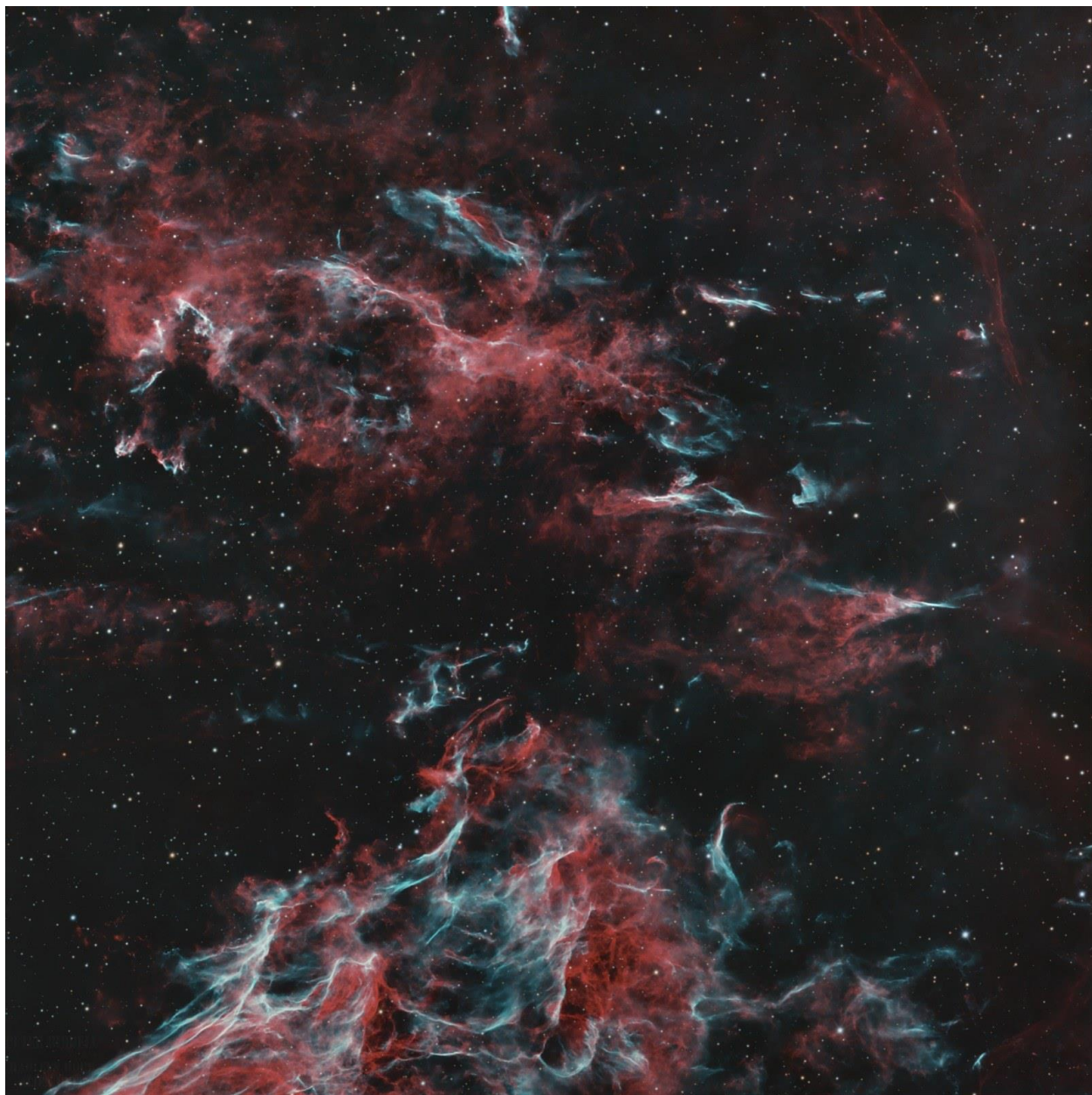


Alain DeNoise/stacked/01°W,52°N/2026-09-05 04:18

3 - Moon - Tony Jakeman



4 - North America Nebula - Mike Lewis



5 - Pickering Triangle in the Veil Nebula - Peter Biddell



6 - Horsehead Nebula - Peter Biddell



7 - Bubble Nebula - David Kyte



8 - North American Nebula - David Kyte



9 - Flaming Star Nebula - Peter Biddell



Seestair S50



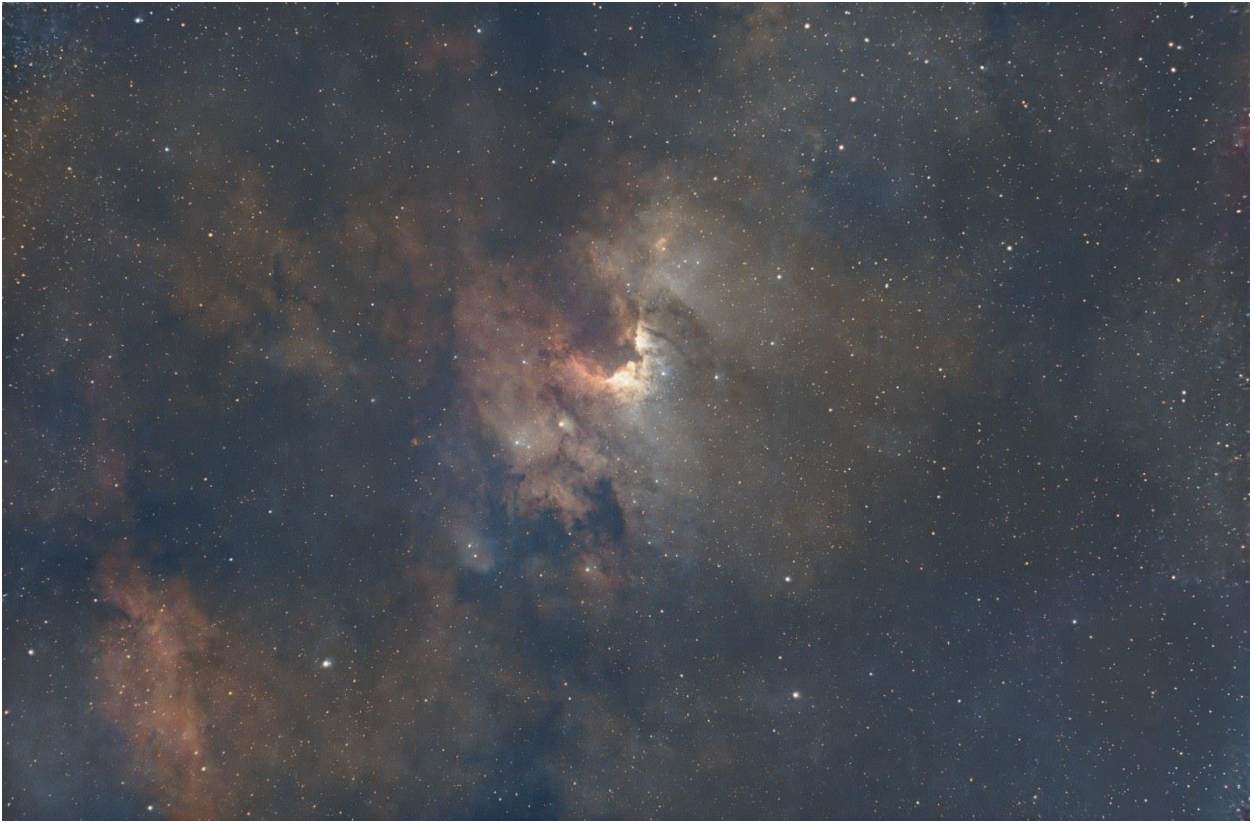
NGC 6992



Alain DeNoise/03°W,53°N/2026-09-26 22:15

36min

10 - The Veil Nebula - Tony Jakeman



11 - The Cave Nebula - Keith Thompson



12 - Triangulum Galaxy - M33 - Luke Beardsley

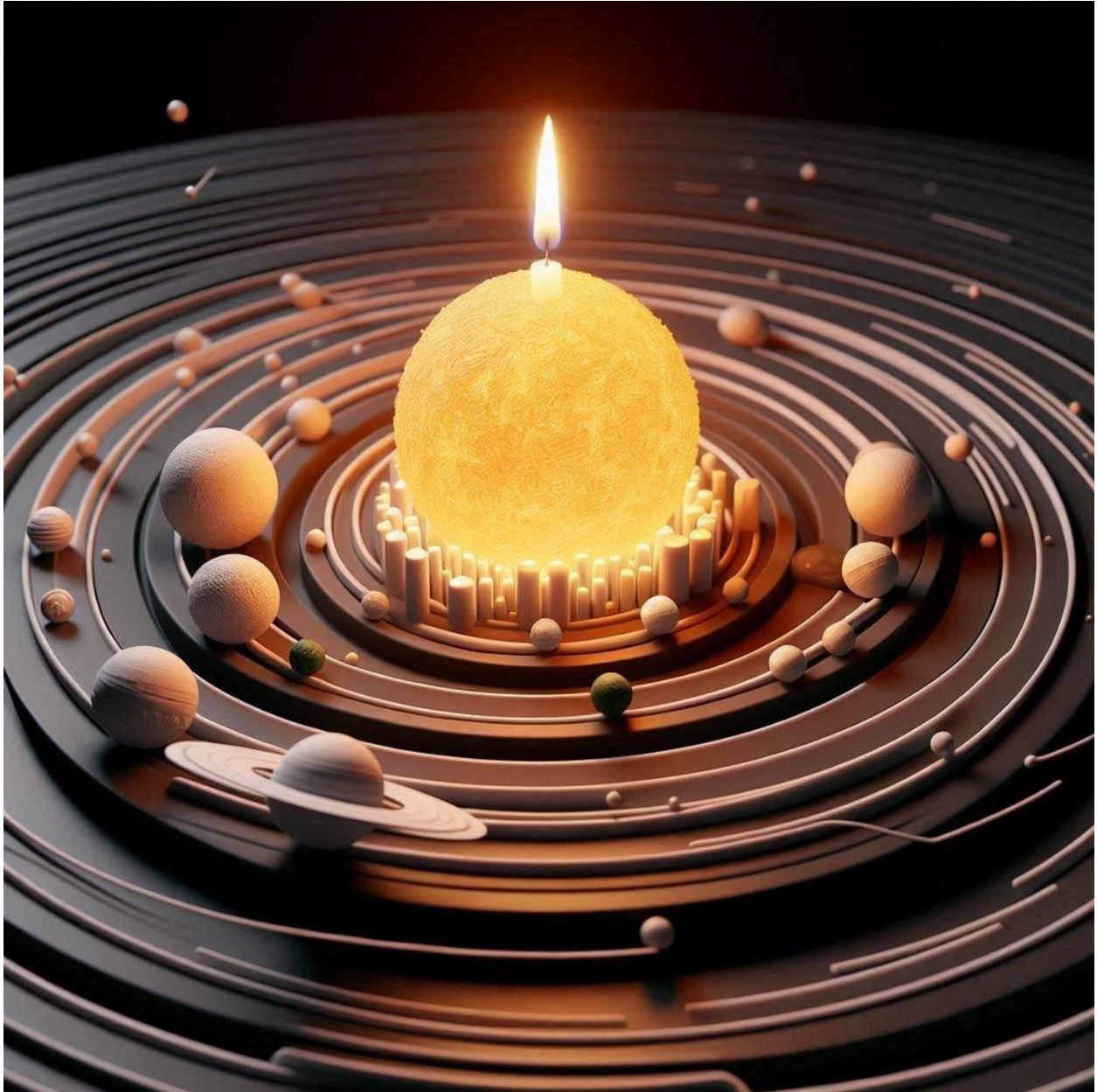
Royal Astronomical Society Astrophotography Competition - RAStroPhoto

For those budding astrophotographers in the club, the Royal Astronomical Society is running an astrophotography competition to celebrate 200 years of *Monthly Notices* from the RAS. With 5 different categories to submit photos for including Our Solar System, Deep Sky, Our Galaxy, Earth & Space, and Observing Astronomers. With some great prizes on offer from First Light Optics, it's a great opportunity to get your images seen!

Submissions close on the 15th January 2027 so if you are interested please have a link at the link below:

<https://www.rastrophoto.ras.ac.uk/>

Anniversaries - October



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

- **October 1, 1958 - NASA becomes operational** : NASA officially opens for business, being operational and taking over civil aerospace and aviation research from NACA.
- **October 5, 1957 – Sputnik 1 is Launched:** The Soviet Union launched the Earth's first artificial satellite, shocking the United States who believed they would be the first to accomplish this.

- **October 7, 1959 – First ever images of the Dark side of the Moon:** The Soviet probe Luna 3 returned the first every images of the far side of the Moon, revealing terrain that had never been seen before.
- **October 11, 1968 – Apollo 7 is launched:** The first crewed mission of the Apollo program, which tested functionality of the Command Module in Low-earth orbit
- **October 13, 1773 – Discovery of the Whirlpool Galaxy:** Charles Messier discovers M51 The Whirlpool Galaxy while compiling his catalogue of deep-sky objects.
- **October 15, 1997 – Cassini-Huygens is Launched:** Launched for a 20 year mission, focusing on exploring Saturn and it's moons.
- **October 24, 1946 – First pictures of Earth from Space:** Grainy black and white images were taken of Earth from space, with a camera mounted on a German V2 rocket, launched from New Mexico.

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

The Moon



🌖 Last Quarter - 3rd October

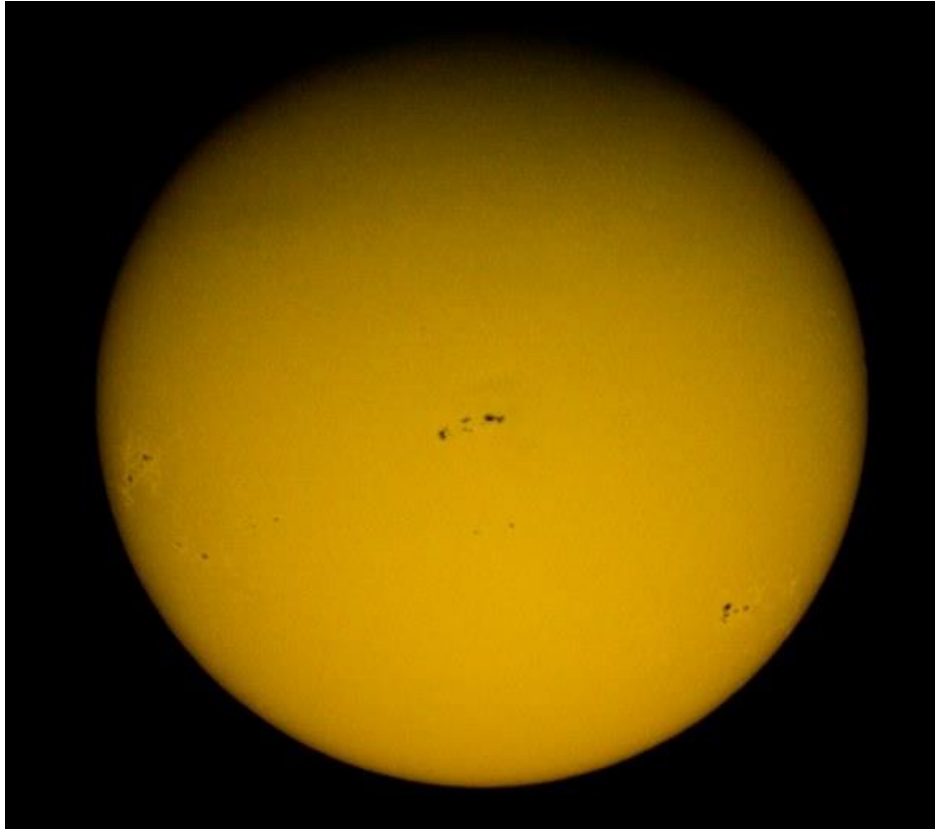
🌑 New Moon - 10th October

🌒 1st Quarter - 18th October

🌕 Full Moon - Hunter's Moon - 26th September

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

The Sun



Aurora - Solar activity in October 2026 is forecast to be moderate to 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. Active sunspot regions will be prominent across the solar disk, making for high sunspot counts suitable for solar filter imaging. This level of activity increases the likelihood of geomagnetic storms, which can trigger aurora borealis sightings even in the southern parts of the UK.

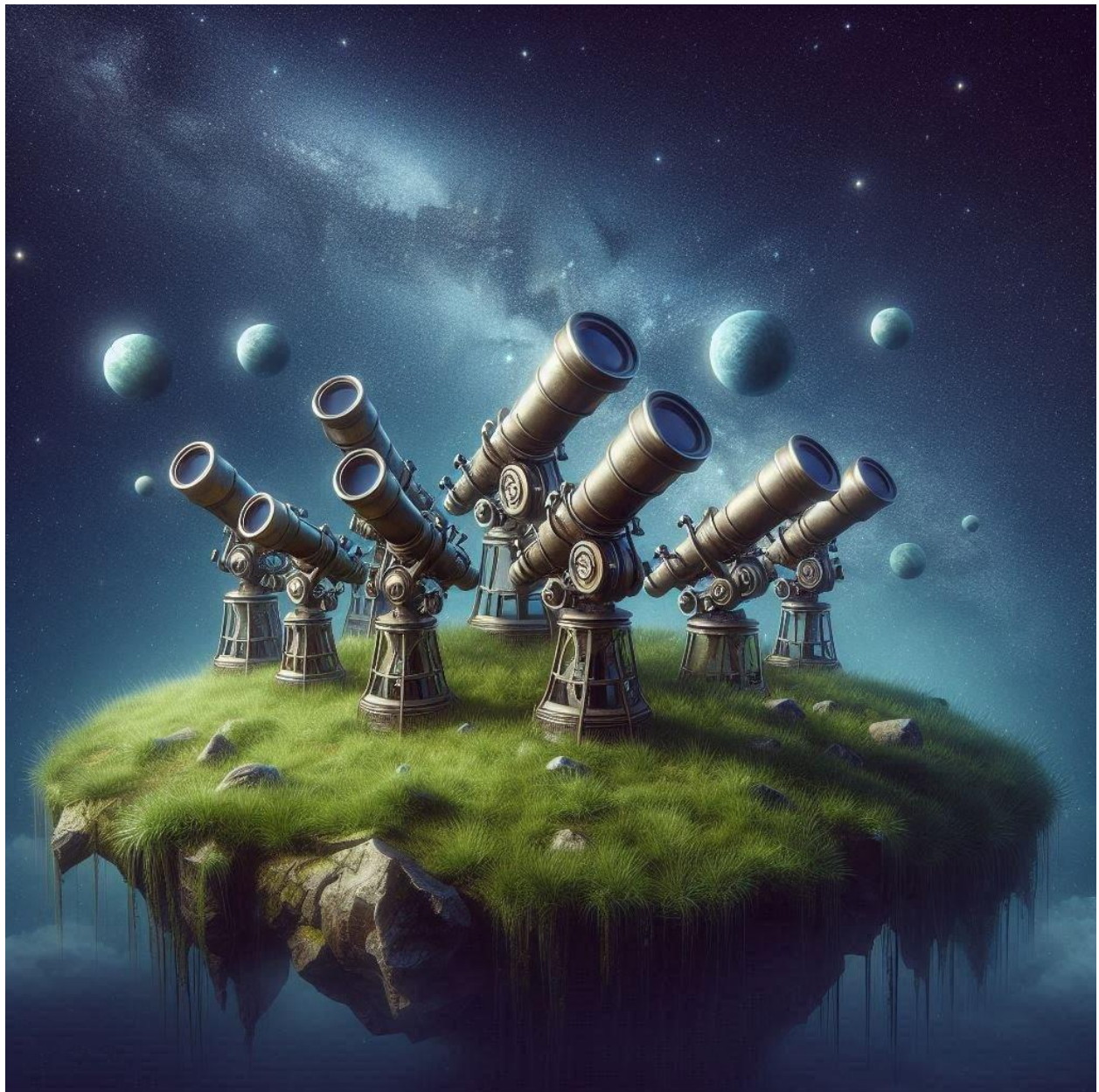
Aurora Watch UK is a great phone app, that can alert you when the auroral activity is increasing, Always use the correct solar filters when viewing the Sun, if you have any doubt please contact us or talk to one of the club committee members.

What to Watch For

- **Sunspots:** High-resolution solar filters or solar scopes reveal increasingly active sunspot groups.

- **Flares & CMEs:** Use solar telescopes or online observatories to track M- and X-class flares.
- **Aurora Potential:** Monitor auroral alerts (Kp index ≥ 5) following any CME hits—northern UK may catch rare Northern Lights.
- **Radio Effects:** Amateur radio operators might experience shortwave disruptions during geomagnetic or flare events.

The Planets



Here's a summary of the positions and visibility of the planets in October 2026 as seen from the UK:

CAUTION - This time of the year some of the planets are close to the sun. Looking at the sun through any none specialist equipment is very dangerous.

Mercury

- **Position:** Low in the bright morning/evening horizon glare in Virgo.
- **Magnitude:** ~ -0.6
- **Visibility:** **None** due to proximity to the Sun.

Venus

- **Position:** Low in the southwestern evening sky during twilight in Libra/Scorpius.
- **Magnitude:** ~ -4.5
- **Visibility:** **Part of the month** (visible low after sunset during the early part of October).

Mars

- **Position:** Rises after midnight, visible high in the eastern morning sky in Cancer/Gemini.
- **Magnitude:** ~ +0.5
- **Visibility:** Whole month

Jupiter

- **Position:** Prominent object rising in the late evening, high south-east by early morning in Leo.
- **Magnitude:** ~ -2.1
- **Visibility:** Whole month.

Saturn

- **Position:** Well placed across the southern sky throughout the evening in Aquarius/Pisces..

- **Magnitude:** ~ +0.6
- **Visibility:** Whole month

Uranus

- **Position:** High in the night sky between Taurus and Aries.
- **Magnitude:** ~ +5.6
- **Visibility:** Whole month (requires binoculars or telescope)

Neptune

- **Position:** High in the night sky between Taurus and Aries.
- **Magnitude:** ~ +7.8
- **Visibility:** Whole month (requires telescope)

Comets, Meteors & Asteroids



Meteor Showers

October offers excellent opportunities for **meteor shower observing**, including:

- **Draconids** - 6th - 10th October, peaking on the 8th, however there will be a full moon on the 7th so will be difficult to see. Associated with Comet 21/P Giacobini-Zimmer.
- **Orionids** - 2nd October - 7th November, peaking on the 22nd October. Rate per hour of 20, and these will be fast meteors with fine trains. Associated with Comet Halley.

Asteroids

No bright asteroids visible with the naked eye this month

Binocular/Telescope level Asteroids

- **1 Ceres** - Visible in Sagittarius in the early evening magnitude +8.7, which will require binoculars or telescope to see
- **4 Vesta** - Visible in Cetus magnitude +7.8 so should be visible with binoculars

Comets

In **October 2026**, there is one comets visible with binoculars and telescopes

- **C/2023 A3 (Tsuchinshan-ATLAS)** - Which will be visible before midnight, in the western sky, with a magnitude expected ~+6.5 - +8.0 so will require binoculars or telescope to be visible

Deep Sky Targets



For Telescopes & Astrophotography

October is with bringing shorter days and better levels of astronomical darkness (as can be seen [HERE](#)).

Constellations

- **Pegasus:** Prominent in the eastern sky, anchored by the Great Square.

- **Andromeda:** High in the east, housing our nearest major spiral neighbour.
- **Cassiopeia:** Distinctive 'W' shape rising high in the northern sky.

Galaxies

- **Andromeda Galaxy (M31):** Massive spiral galaxy easily located in Andromeda.
- **Triangulum Galaxy (M33):** Face-on spiral galaxy in Triangulum, ideal for wide-field imaging.

Deep Sky Nebula

- **North America Nebula (NGC 7000):** Large emission nebula in Cygnus resembling the North American continent.
- **Heart Nebula (IC 1805):** An expansive emission nebula in Cassiopeia displaying glowing hydrogen gas.
- **Soul Nebula (IC 1848):** Companion emission region to the Heart Nebula, popular dual-panel narrowband imaging target.

Sharpless (SH) catalogue items

- **Sharpless 2-157 (Lobster Claw Nebula):** Striking emission structure on the Cassiopeia/Cepheus border.
- **Sharpless 2-129 (Flying Bat Nebula):** Large, faint emission nebula in Cepheus hosting the OIII squid structure.

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.

- **Double Cluster (NGC 869 & NGC 884):** Stunning side-by-side open star clusters in Perseus.
- **Pleiades (M45):** Famous open cluster in Taurus rising in the east during late evening.

- **Coathanger Cluster (Collinder 399):** Fun asterism in Vulpecula shaped like a coat hanger, perfect for field glasses.

The Moon

Ideal for exploring craters, mare, and mountains at any phase.

Bills Bulletin



Sun

The sun could make a super flare

[The Sun Is Physically Capable of Producing a "Superflare" According To A New Study - Universe Today](#)

Micro vibration in the corona found

[High-frequency magnetohydrodynamic waves with substantial energy in the solar polar corona | National Science Review | Oxford Academic](#)

<https://sendy.universetoday.com/l/YH9ymnU1ShzDli10b76myA/ZoSdvbciaLsBP2DVHBnbgQ/6Bv4dwPVJCo3xS153Lk38q>

Earth

Massive flood captured

[ESA - Nepal flash flood imaged by satellites](#)

[Satellite images before Nepal disaster showed warning signs | Nature](#)

Water water everywhere but where did it come from internally or externally or both ?

[Icy Exocomets Around a Distant Star Help Explain Earth's Water - Universe Today](#)

[Potential sublimating exocomets around the young star PDS 70 | Nature Communications](#)

Moon

How did the moon form? It could have been very quickly if we look at the elastic strength of hot rock. We don't need an accretion disk

[Scientists Are Still Trying To Understand How the Moon Formed - Universe Today](#)

Lunar impact ejects boulders 120 km and we watched it

<https://apple.news/Alvd8LQABQFug6xh1MctIFQ>

[NASA craft finds a huge new crater on the moon | AP News](#)

More on the new crater

[NASA's Moon Orbiter Spots New, 'Once-in-Century' Moon Crater - NASA Science](#)

[A new 222-m diameter lunar crater | Science Advances](#)

[New lunar crater reveals extensive distal regolith modification | Science Advances](#)

<https://sendy.universetoday.com/l/YH9ymnU1ShzDIi10b76myA/CUqBosEhVVflzIEHUzUQcw/6Bv4dwPVJCo3xS153Lk38q>

Planetary

Mars has a crust thicker in the south but how

[Scientists discover massive underground 'thermal anomaly' on Mars | Space](#)

Mars had water

Dry Martian Meteorite Reveals Early Water in Mars's Crust - Universe Today

Saturn's South Pole had an odd shape

Astronomers discover mysterious 10-sided cloud structure at Saturn's south pole | Space

NASA's Hubble Tracks New Decagon Encircling Saturn's South Pole - NASA Science

Did Venus have a moon

<https://apple.news/AYYTlRPVaQKeIL7juxh7EbQ>

<https://arxiv.org/abs/2608.25036>

Making Phobos maps for a sample return mission

A New Surface Atlas of Phobos Will Help JAXA's MMX Mission Collect its Samples - Universe Today

[The dynamical surface of Phobos: A morphodynamic atlas - ScienceDirect](#)

Asteroids

Trans neptunium objects are found in two populations cold that were formed at the edge of the solar system and are still there,hot which formed between Neptune and Uranus. They should have different colours and spectra but they don't

[NASA's Hubble, Webb Find Far-out Solar System Objects 'Remember' Past - NASA Science](#)

Observations via occultation have shown asteroids rings change shape with time

With the right kit you can contribute

[Webb Telescope Discovers Surprising Changes in an Asteroid's Rings - Sky & Telescope](#)

Comets

13 more info

[3I/ATLAS Has An Extreme Taste For Heavy Water - Universe Today](#)

Exoplanet

Youngest yet found

[*Scientists find youngest exoplanet on record — a 'newborn' named Elias | Space*](#)

[*Newfound 'Baby' Planet Smashes Record for Youngest Known World - NASA Science*](#)

Astro biology

Life needs a solvent to allow protein and peptide formation and folding to produce the functional enzymes we need for life. Some can function and develop in sulphuric acid

We could have a chance for life in Venus clouds

[*Peptides adopt stable omega-loop structures in concentrated sulfuric acid | PNAS*](#)

Milky Way

Orbiting stars create laser output

[White Dwarf-Red Dwarf Binaries Power Cosmic Lasers - Universe Today](#)

Our own blazer

[Astronomers discover the 1st black hole powered 'microquasar' in the Milky Way | Space](#)

Dead star feeding

[X-ray spacecraft watches extreme dead star feeding on the wind of a hypergiant \(video\) | Space](#)

Galaxies

How do galaxies evolve? A question which is complex. Bared spirals show development of nuclear stellar discs and nuclear stellar clusters at the same time and the bar works as a conveyor which moves material towards the central black hole

[New Simulations Show How Galactic Centers Grow Together - Universe Today](#)

<https://arxiv.org/pdf/2606.05157>

High UV low X-ray emission from galaxies could be a missing link for interstellar ionisation but more importantly how to predict a type 1a supernova

[NASA's Chandra Unveils Mysterious X-Ray Objects - NASA Science](#)

Cosmology

Wimps may have been found

[Scientists may have detected the 1st direct evidence of dark matter | Space](#)

What's the fuss with dark matter

[We've spent billions searching for dark matter and still haven't found it. Why are scientists obsessed with finding something they can't see? | BBC Sky at Night Magazine](#)

What could dark matter be

[What could dark matter be? Five key theories | BBC Sky at Night Magazine](#)

Difference between dark matter and dark energy

[Dark matter vs dark energy | BBC Sky at Night Magazine](#)

*Gravitational wave detectors in the future need to be bigger to detect 10 hz and 5 hz frequencies
allowing the last orbits until*

Merger to to be studied

[Next-Gen Gravitational Wave Detectors Could Spot the First Black Holes - Universe Today](#)

Muse on gravitational waves

[Do gravitational waves show evidence of wave-particle duality? - Big Think](#)

Have we proved string theory

<https://apple.news/A4SjcaxfwQReRfQ9uRiOHrQ>

[Strings from Almost Nothing | Phys. Rev. Lett.](#)

Wandering black holes could record their journey

Rogue black holes could wander the cosmos sharing the histories of their home galaxies | Space

Telescopes

S50 pro review

<https://apple.news/AgsrFD1QLSampz8DPi3TqIw>

We may get a far side radio telescope soon than thought

<https://youtu.be/OVcy19Iculg?is=AlcEUrQJCpLWq861>

Observing

Want to observe southern objects

Try this

[*Astrophotography with professional telescopes / Telescope Live*](#)

Follow Neptune

[*Following Neptune Through Opposition 2026 - Universe Today*](#)

Space flight

Roman flies

[*Liftoff! NASA's Roman Space Telescope soars to the stars on a SpaceX Falcon Heavy rocket in spectacular launch \(video\) / Space*](#)

[*Lift-off! NASA launches Roman Space Telescope to tackle dark-energy mysteries / Nature*](#)

Dragonfly

[NASA's Dragonfly Gets Wired Up While Titan Landing Area Is Named - NASA Science](#)

Servicing geostationary satellites is a problem ESA want to solve

[ESA - ESA supports development of European spacecraft for servicing geostationary satellites](#)

Multimedia

Esa podcast lunar dust

[ESA - Discovery and Preparation podcast: protecting astronauts from lunar dust](#)

Schedules, links and contacts



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- *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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