Federation of Astronomical Societies



Editor: Michael Bryce Newsletter

No 145: August 2025

fedastro.org.uk

Note: The FAS Council Reserves the Right to publish articles, events and reports submitted to the FAS Newsletter. Any content published in the FAS Newsletter from a Member of an FAS Society does not necessarily reflect the opinions or values of the said Society or that of the FAS.



President

Clare Lauwerys

president@fedastro.org.uk

Treasurer

Pat McEvoy 77 Binsteed Road **Portsmouth** PO2 7PJ

treasurer@fedastro.org.uk 07729 696832

Secretary John Stapleton

secretary@fedastro.org.uk

Carolian AS & Bromsgrove AS 49 Cortland Way Stourport-on-Severn Worcestershire **DY13 8NZ**

newsletter@fedastro.org.uk 07821 896304

President's Spot:

Clare Lauwerys



Thank you to everyone who has been in touch to say how much they enjoyed the Convention. Jerry, who really did all the heavy lifting for it, is already planning next year's extravaganza. As ever, the main hurdle is finding a venue which will be generous with its hire fees. The kindness offered to us by the Institute of Astronomy meant we only had to pay a modest cleaning fee which in turn meant we were able to keep the ticket prices very low.

All the tickets for the Convention were sold before we got to the date when they were due to go on sale to the general public – I described my promotion tactics as both relentless and shameless! – and from the wait list we set up we probably could have sold 25% more tickets if we'd had a bigger venue. So if you have the ear of someone in charge of a large meeting space, please let Jerry know. While he's already eyeing up a potential venue for 2026, it's always good to have options!

There is still time to get your nomination in for the Graham Bryant Memorial Award. Full details are on the website https://fedastro.org. uk/fas/graham-bryant-memorial-award/ but in brief we are looking to celebrate an individual who has made a real difference in the world of amateur astronomy. It might sound a bit cheesy (note my previous comment about being shameless) but tell us who your stars are! If you have already sent in your nomination but not had confirmation it's been received, please contact me at president@fedastro.org.uk.



In case you missed it, I recently sent on information from Robin Scagell (West of London AS and Society for Popular Astronomy) regarding fake awards and conventions. Can I just say that as I started to type this sentence I wasn't deliberately going for something that joined my first two topics together but here we are. Isn't the subconscious a marvelous thing! Anyway, if you get an email from an organisation you have never heard of,

or in Robin's case an invitation to address a conference on neurosurgery, then please do let us know if you think other groups might need a heads up.

Interestingly, I did have a couple of groups get in touch to check if emails from Dwarf Labs were legit. While the FAS hadn't received the email, I had received one at my own society. And it was a real offer for a collaboration to try out a Dwarf 3, so we just need some decent weather and dark nights to really use it. It's already come out to a couple of solar events and so far I love it. I'm also a big fan of solar events at a) you can see who you are speaking too and b) there tends to be ice cream on offer!



Image Above: The Dwarf 3 caught the eye of some visitors from a galaxy far far away when NEAS visited the Museum of Power

Image Courtesy Clare Lauwerys

Finally, I want to drop the idea of regional groups into your heads. These can take many shapes but I don't know of many. SAGAS (Southern Area Group Astronomical Societies) meet up quite regularly as far as I can see and have a formal structure. In Essex we have an annual meeting of all the Essex societies where each society provides a speaker. Some of the Essex groups are close and have special arrangements for members attending other groups meetings. Rumour has it there are some other groups - Midlands and Yorkshire have been mentioned. If that's you, let me know. But regional groups, however they run are surely a great thing and it would amazing if there were more.

Clare

Editors Comment: here in the West Midlands we did have many years ago (1990's I think) a Local Group of Societies called WeMFAS: Wolverhampton AS, Walsall AS, Birmingham AS and Heart of England AS I think. But we didn't get together often. It only lasted a few years. The problem as always is coordination and finding people to coordinate.

100 Hours Under One Sky Stargazing Together This October Smon Holbeche, Bath Astronomers

Winter is coming... and what better way to fill people's darker evenings than with a spot of stargazing?

Mark your diaries: Thursday 2nd to Sunday 5th October 2025, for 100 Hours Under One Sky—a UK-wide celebration of the night sky that's perfect for stargazers of all backgrounds, from seasoned observers to absolute beginners.

Last year, we at Bath Astronomers joined in for the first time—and what a treat it was! Hosted by the UK National Outreach Coordinator Team from the International Astronomical Union (IAU)'s Office for Astronomy Outreach, this initiative was created by the wonderfully enthusiastic partnership of Gemma, James, Jenny, and Neill. Their goal? To get as many people from different backgrounds as possible looking up, learning, and sharing the wonders of the cosmos.

So, what's it all about?

The idea is simple but powerful: connect people across the country through easy, family-friendly stargazing challenges. Whether you're in your garden, a local park, or joining your local astronomical society at an outreach event, you can take part. All you need is a mobile phone and a sense of curiosity—no telescopes or binoculars required!

Using a clever and easy-to-use web app (no download needed), participants work through four observational challenges designed for naked-eye viewing. These include spotting constellations or bright stars—things visible even in light-polluted skies, though the app helpfully encourages folks to find a darker spot for the best views.

And yes—there are virtual badges! As you complete challenges, you pin your success to an interactive UK map. In 2024, we watched that map go from a light dusting to a full-on galaxy of glowing badges—stretching from the Orkneys to Cornwall. The sense of connection was truly inspiring.

What did Bath Astronomers do?

We held three chilly but cheerful outreach evenings during the event, inviting the public to join us in exploring the October sky. The 100 Hours Under One Sky app added a fun and engaging layer to the evenings, with visitors of all ages using it to track their progress and learn as they looked.

The digital promotional materials provided by the UK Coordinators team (including posters and social media graphics) helped spread the word ahead of time, and we saw fantastic engagement on

platforms like Instagram and Facebook. Even those who were "just along for the ride", reluctantly trailing after a keen partner or parent—found themselves pulled in and participating. We're delighted to say that several visitors have since joined the society, hungry for more cosmic knowledge.

What's coming up in 2025?

We don't yet know the exact challenges for this October—but that's part of the fun. They'll be revealed closer to the time, and we can't wait to share them with you and get our community involved once again.

How can you join in?

To find out more or to contact the brilliant organisers, visit: https://100hours.online/contact

Or scan the QR code below to jump straight into the stargazing fun. Let's light up the map again this October—together, Under One Sky.

Simon Holbeche Bath Astronomers https://bathastronomers.org.uk





Readers' Images

Ian Parker, Peterborough AS

Thank you for the email which our Peterborough AS Chairman, Andy Yates, kindly forwarded on to the members, and also for the Newsletters which I always find very interesting. It spurred me to submit a few of the Deep Sky Object images I have taken with my setup from my backyard here in Peterborough during the first half of 2025, for your consideration for inclusion in the next newsletter perhaps.

The setup I used for capture of the images is:

- Telescope APM LZOS 100 F8 Apochromat Refractor, with APM 0.75x Reducer / Flattener
- Camera ATIK Horizon II Mono cooled CMOS camera, 4/3 Micro sensor
- Mount Skywatcher HEQ-5 Pro equatorial
- Auto Focus Primalucelab Sesto Senso 2
- Xagyl 7 x 36mm Electronic Filter Wheel, with Antlia L, R, G, B broadband filters, plus Ha, OIII, SII 3nm Narrowband filters (all 36mm unmounted)
- Guiding using Altair 80mm F4 guidescope, plus ZWO ASI 224MC guide camera
- Controlled using onboard Mele Quieter 4C mini PC, running Windows 11, remotely accessed using Chrome Remote Desktop.
- Wanderer Astro Ultimate PowerBox v2 for USB and DC power control

Capture Software - Nighttime Imaging 'N Astronomy (NINA - image capture, equipment control), PHD2 (Guiding control), EQMOD (Mount control), Stellarium (Planetarium app), ASTAP (Plate Solving), ASCOM (Equipment integration), PS Align Pro (polar alignment).

I am not currently fortunate enough to have a permanent observatory set up, so the rig is set up on a tripod at the beginning of each evening. Polar alignment is achieved using the polarscope in the HEQ-5 mount, backed up by the Polar Drift alignment method available in PHD2. Typical data capture involved 20 x 1 minute subs for each channel. Using LRGB for the broadband targets such as the galaxies, and the narrowband filters for the nebulae. It is also possible to merge Hydrogen Alpha data into an LRGB image using PixInsight, and this brings out nicely Ha activity in those starforming regions in the spiral arms of M101, especially. This is a work-inprogress for me currently. The skies here are classed as Bortle 5 mostly.

Processing carried out using PixInsight for image calibration and registration, stacking, channel combination, deconvolution (RC Astro BlurXterminator) and Noise Reduction (RC Astro NoiseXterminator), with Intensity (stretch) adjustment using the Screen Transfer Function in PixInsight.

One of the things that fascinates me in astronomy is how equipment and software readily available to amateurs is perfectly capable of revealing much of the mind-blowing drama of the Cosmos, even from a lightpolluted suburban garden in the East of England. For example, these images encompass the entire stellar lifecycle - in the majestic spiral arms of the Pinwheel Galaxy (M101) we see clusters of bright, hot young stars

being born of the interstellar dust and gas on an unimaginably vast scale. M101 is a huge galaxy, around twice the size of our own Milky Way Galaxy. Closer to home, the vast star-forming nurseries of the Eagle and Rosette Nebulae hint at the titanic gravitational processes driving collapse of the gas and dust, and finally igniting nuclear fusion, thus creating new stars in our own galaxy. The "Pillars of Creation" captured so beautifully in the famous Hubble Space Telescope image can be clearly seen at the centre of the image of M16 the Eagle Nebula. At the other end of stars' lifetimes, we also see the aftermath of the cataclysmic death throes of a giant star in the supernova remnant M1 the Crab Nebula, and a less violent but still awesome explosion long ago that has left the Ring Nebula M57.

> Ian Parker Peterborough AS

www.peterborough-as.co.uk



Image Above: M104 Sombrero Galaxy 2025-03-24

Image Below: M65 M66 2025-03-24





Image Above: M16 Eagle Nebula 2025-05-15

Image Below: M81 M82 2025-03-18



Image Above: M101 Pinwheel Galaxy 2025-04-25



Image Below: NGC 2239 & 2244 Rosette Nebula 2025-04-11



Image Below: M57 Ring Nebula 2025-06-21



Page 5

Readers' Images

Marc Charron, Galloway Forest AS

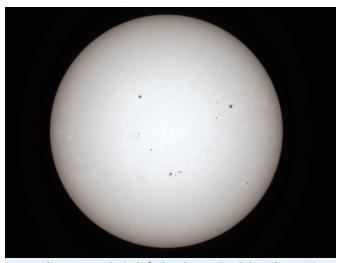


Image Above: Sun on the 2nd of July. Taken in white light with Borg 90FL F5.6 refractor at prime focus, Baader AstroSolar Safety film.

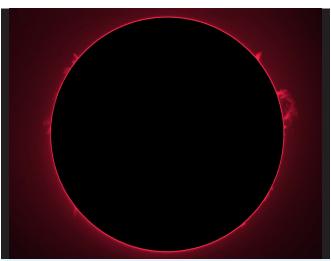


Image Above: Sun taken with PST, solar disk blacked out. Processed in Affinity Photo.

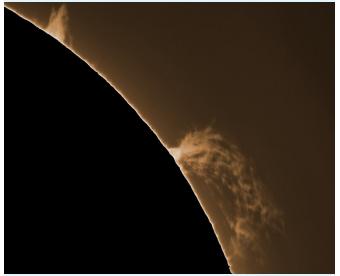


Image Above: Taken with Borg 90FL with Quark Chromosphere with 0.5x reducer, 178M camera, colour added later.



Image Above: Again taken with Borg 90FL with Quark Chromosphere with 0.5x reducer, 178M camera, colour added later.



Image Above: Noctilucent clouds on the 29th of June, panel made from 6 images taken with Nikon Z7ii with 85mm lens.

Image Left: The Moon taken with Borg 90FL with Televise 2.5x PowerMate, composite of three stacked panels.

Image Above and on page 6 by Marc Charron
Astronomical Society of Edinburgh
https://www.astronomyedinburgh.org

Readers' Images

Grainge Jennings Wolverhampton AS



Image Above: The Mineral Moon by Grainge Jennings. Seestar S50.

Grainge Jennings Wolverhampton Astronomical Society www.wolvas.org.uk



Space Oddities!

Explore the Universe with Space Oddities!
What do *you* want to know about the Universe?

Whatever it is, whether about the solar system, stars, black holes, galaxies or anything else, you can discover it with us! We create videos on a wide range of subjects, designed to tell you the facts in a way that everybody can understand. We also livestream weekly, where you can meet the team behind Space Oddities - an international group of astronomy educators from the UK, Spain, the US and Canada - and watch our presentations and discussions on anything related to astronomy, astrophysics, cosmology and the exploration of space, as well as the very latest space news. We also cover major space launches and other events live.

Every Tuesday at 8 pm on YouTube

Our passion is to tell *everybody* about their Universe and its wonders!

Come and explore the Universe with us!

If it's happening in space... it's happening on Space Oddities!

Our YouTube Channel is at https://www.youtube.com/@SpaceOdditiesLive

Our Web site is at: http://spaceoddities.space

Readers' Images

Bill McSorley, West Yorkshire Astronomical Society





Image Above: Messier 81 and 82, with NGC3077 in Ursa Major

Messier 81 and 82, with NGC3077, imaged over six nights from my back garden.

Messier 81 (also known as NGC 3031 or Bode's Galaxy) is a grand design spiral galaxy about 12 million light-years away, with a diameter of 90,000 light years, and an active galactic nucleus which harbours a supermassive black hole.

Messier 82 (also known as NGC 3034 or Cigar Galaxy) is a starburst galaxy approximately 12 million light-years away. A member of the M81 Group, it is about five times more luminous than the Milky Way and has a centre one hundred times more luminous. The starburst activity is thought to have been triggered by interaction with neighbouring galaxy M81.

NGC 3077 is a small disrupted elliptical galaxy, also a member of the M81 Group. Despite looking much like an elliptical galaxy, it is peculiar for two reasons. First, it shows wispy edges and scattered dust clouds that are probably a result of gravitational interaction with its larger neighbours, similar to the galaxy M82. Second, this galaxy has an active nucleus. This caused Carl Seyfert in 1943 to include it in his list of galaxies, which are now called Seyfert Galaxies. However, NGC 3077, though an emission line galaxy, is today no longer classified as a Seyfert galaxy.

Imaged with a ZWO ASI183mm-Pro camera through a SharpStar 94EDPH Refractor.

This image comprises 2760x 20 sec Lum, 100x 40 each Red, Green and Blue and 35x600sec Ha (giving over 25hrs total exposure) plus Darks, Flats and DarkFlats.

Processed in PixInsight and finished in Photoshop.

Image Above: Simeis 147 - The Spaghetti Nebula in Auriga/Taurus

Simeis 147 (Sharpless 240, Sh2-240), also known as the Spaghetti Nebula, a supernova remnant in the Milky Way, straddling the border between the constellations Auriga and Taurus.

The nebulous area has an almost spherical shell and a filamentary structure. The remnant has an apparent diameter of approximately 3 degrees (around 6x the size of the full moon), at an estimated distance of approximately 3000 lightyears and an age of approximately 40,000 years. At that distance, it spans roughly 160 lightyears across.

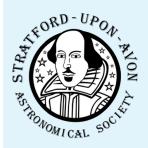
It is believed that a stellar explosion left behind a rapidly spinning neutron star known as pulsar PSR J0538+2817 in the nebula core, emitting a strong radio signal.

Imaged over the course of four nights in November/December 2023, with an additional two nights in January 2025.

93x600sec Ha, 40x600sec Sii and 51x600sec Oiii (just under 31 hrs of exposure).

Processed in PixInsight and finished in Photoshop.

Bill McSorley West Yorkshire Astronomical Society https://www.wyas.org.uk



Stratford-Upon-Avon Astronomical Society

The Stratford-upon-Avon Astronomical Society meets every first and third Tuesday at 8pm (doors open at 7.30pm) at Alderminster Village Hall. Everyone is welcome, especially beginners and those wanting to learn more. The first Tuesday is a club night, in August that will be on 5th August and the speaker on the third Tuesday 19th August 2025 will be Dr Ingrid Pelisoli, from Warwick University, with a talk called "Fantastic Binaries and how to find them". Please note that the speakers usually start quite promptly at 8pm.

The Perseid meteor shower

On the evening of 12th/13th August you are likely to see lots of astronomers looking up at the night sky. The Perseids is a favourite meteor shower with astronomers, (one reason being that it's usually the warmest one to observe).

The shower is caused by Earth's orbit crossing the orbit of the comet Swift Tuttle. The comet leaves a trail of debris behind it, which then collides, at speed, and interacts with the Earth's atmosphere, which causes meteors, (which are also called shooting stars) to streak across the night sky.

The Perseids can be anytime between mid-July and the end of August, but there is a noticeable rise in meteors between 17th July and 24th August. At its peak, on the 12th and 13th August, more than 100 meteors per hour occur (or around 1½ meteors per minute), so don't expect it to be like a firework display, and you won't see them all! They will appear close to the constellation of Perseus, shooting away from it across the night sky. It is an amazing sight, sometimes leaving a trail across the sky.

Unfortunately, this year the Moon will be almost full, so it won't be great viewing conditions. The best time to view is after 1.00 am, due to Earth's angle compared to the comets trail.

To view the shower, it's best to get a garden lounger, point it so you can view the northern horizon, and watch that area of the sky. (You will need a clear (ish) sky). Also have a blanket to keep you warm, as it will cool down.

If you feel inclined, you can keep a record of where and when you see of the meteors, and also the direction (Astronomical groups, would love to have information like that, to precisely record the meteor shower). Also, a flask of tea or coffee, or some other drink of your choice, wouldn't go

Last year, I found myself up on national radio, describing mine and my wife's meteor date night.

Adrian Wakeham

Club nights offer more information on what to look out for each month If it is clear we do some observing just outside the Village Hall, so please join us. There is no charge initially to come along and find out more, but if you do want to become a member then the fee is just £15 a year and it's free if you are in full time education. For more details go to the website http://www.astro.org.uk or contact the Chair, John Waller john.waller@astro.org.uk or on 07703 192188

Happy Observing!

Helios - Sculpture of the Sun by Luke Jerram

Created by artist Luke Jerram, Helios is a seven-metre spherical sculpture of the Sun. Combining solar imagery, light and a soundscape made from NASA recordings, it reveals the sun's intricate surface in stunning detail.

Helios will be at National Trust's Coventry Charthouse from the 31 July - 3 August and the 7 - 10 August 2025. The sculpture will be suspended in the walled gardens.

The famous sculpture is by Luke Jerram. The seven-metre sculpture combines solar imagery, light and sound to highlight the sun's intricate details.

The sculpture will also be on display at the following venues:

Basildon Park (National Trust), Berkshire, UK, 15 – 18; 22 – 25 August

Clandon Park (National Trust), Surrey, UK, 12 – 14 September

National Trust https://www.nationaltrust.org.uk



The Astronomical Society of Edinburgh at 100

Mark Phillips (ASE Secretary)



The ASE is alive and definitely kicking in our 101st year of life!

In October 2024, we proudly celebrated the 100th anniversary of the Astronomical Society of Edinburgh (ASE). Since its founding on 15 October 1924, the ASE has played a significant role in the city's scientific and cultural life. To mark this centenary milestone, we held a very special event - exactly 100 years to the day - in the grand and prestigious surroundings of the Royal Society of Edinburgh, just a short distance from where our very first meeting took place.

A hundred members and guests gathered for an evening of celebration, complete with food, wine, and inspiring talks. The highlight of the night was a keynote address by our distinguished guest speaker, Professor Chris Lintott - a familiar and well-respected figure in the world of astronomy.

As President at the time, I had the privilege of organising and hosting the event, and it really was something special. Everything ran smoothly, the talks were outstanding, and there was a real sense of excitement and pride in how vibrant and healthy our Society is today. It was also good to welcome back some old friends, including some of our more remote members from various locations around the world.

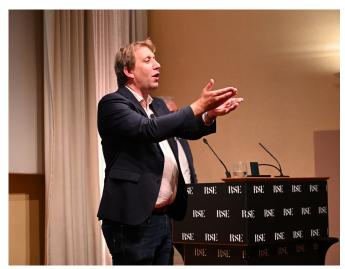
A key moment of the evening was the presentation of our highest honour, the Lorimer Medal, awarded to Professor Chris Lintott. He became the 14th recipient of the medal, which was first awarded in 1937 to one of the most renowned astronomers, Sir James Jeans. The Lorimer Medal recognises exceptional contributions to the public promotion of astronomy - and Chris is without doubt a most deserving recipient.

The medal itself has a special heritage. It was established through a legacy from John Henry Lorimer, a celebrated Scottish artist and former Vice President of our Society. In 1937, he bequeathed a substantial portion of his estate to us - a gift that continues to support our work to this day, including helping to fund the Centenary celebration. We are also proud custodians of two of his paintings and a bronze bust, all usually on display at his family home, Kellie Castle in Fife. For this occasion, the bust made a rare appearance, lending Lorimer's presence to the presentation of the medal named in his honour.

But before we even got to the Centenary itself, we had given ourselves a very special birthday present: a remote telescope in Spain, known as ASERO (ASE Remote Observatory). And, true to hobbit tradition, we gave out some gifts as well—meteor cameras to Scottish secondary schools, part of our contribution to the Global Meteor Network outreach project.

From 1938 to 2008, the ASE was based at the historic City Observatory on Calton Hill, made possible in large part thanks to the support of the Lorimer





legacy. Sadly, we were forced to leave in 2008 due to the deteriorating condition of the buildings, along with ongoing issues of theft and vandalism. It was a difficult moment and marked a significant turning point in the Society's story.

Today, our talks take place in central Edinburgh at Augustine United Church on George IV Bridge, more accessible venue for our members and the public. While we no longer occupy Calton Hill, we still occasionally gain access to the 6-inch Cooke telescope, with occasional public solar observing sessions and assisting the current tenants, Collective Gallery, with tours of the historic dome and telescope.

But I'm delighted to say that astronomy in Edinburgh, and especially within the ASE, is thriving like never before. Our membership is at a record high, with over 200 members and growing every month. More people than ever are actively involved and we've become a year-round Society. Astronomy isn't just something we talk about once a month anymore, it's a daily part of our lives, with members engaging, sharing, and collaborating 365 days a year.

We now run ten active projects, including operating our remote telescope in Spain on every clear night. Members select targets, process data, and contribute to real astronomical research. We also stay connected through several WhatsApp groups dedicated to different aspects of astronomy, providing a real sense of community.

We hold two meetings each month: one hybrid and one fully online, both free and open to the public as always. We also run a monthly virtual Imaging & Observing Group meeting for members, which has really grown into something special. It's a space where people share their experiences, give advice, show their latest images, and we all learn together.

We are very fortunate to have two excellent Honoray Presidents: Prof. Andy Lawrence, Regius Professor of Astronomy at the University of Edinburgh, and Prof. Catherine Heymans, Astronomer Royal for Scotland. These are not just names on our website but people we actually work with and our

biggest supporters. One of the projects we collaborate on with them is the Scottish Youth Telescope Network: aimed at getting telescopes into every outdoor centre in Scotland so that primary school children get a chance to see the wonders of the night sky when visiting them. Very exciting!

Edinburgh is not known for its clear or dark skies, and with our departure from the City Observatory on Calton Hill, we decided not to battle the Scottish weather. Instead, we decided to install a remote telescope in Spain, hosted at Trevinca Skies. Supported by generous donations and the Lorimer legacy, this facility, which we call ASERO, has been a remarkable success over the past two years, allowing our members to carry out high-quality observing and imaging under dark, clear skies.

Our remote setup consists of a high-quality 0.3m Newtonian reflector with a monochrome camera and nine filters, side-by-side with a wide-field apochromatic refractor equipped with a colour camera, on a quality mount. This configuration has enabled us to pursue a wide range of projects, including deep-sky imaging, comet photometry, variable star monitoring, exoplanet transits, lunar imaging, and asteroid observations. We're now in the process of expanding the system further with the addition of a dedicated planetary telescope.

Astronomy in Edinburgh is healthy, and the ASE seems to be stronger than ever. Our Society is thriving and we're excited for what lies ahead. Here's to the next 100 years!

Here's a video I created as an intro to our Centenary event: https://www.youtube.com/watch?v=MnYker8057w&ab_channel=AstronomicalSocietyofEdinburgh

Mark Phillips (Secretary)
Astronomical Society of Edinburgh
https://www.astronomyedinburgh.org



Astro-Tourism in the World's Darkest Skies

Martin Griffiths – Brecon Beacons Observatory Rodrigo Ruiz Mardones – Far Out Trails

I was recently privileged to visit Chile on an astronomical tour to experience some of the darkest skies on Earth, explore the volcanic scenery of the high desert and visit the greatest collection of ground based optical and radio telescopes in addition to observing the wonders of the southern skies.

Chile is an incredible country with some of the most diverse scenery in the world. From the Pacific coast to the high Andes Mountains, from the Altiplano and the Atacama desert, to the vineyard filled valleys that give some of the world's best wines, there is something for everyone. But that is just daytime; at night, the world's darkest skies fill the dry and tranquil air above the desert and mountains and renders Chile an astrophotographer's dream. The southern Milky Way, Eta Carina, Omega Centauri, Centaurus A and the Sagittarius star clouds high above with the sting of the Scorpion plus the tangle of stars of Centaurus and the old





Image Left: NGC 3372 Eta Carina Nebula. Seestar S50

Image Above: Lambda Centauri nebulae. Seestar S50.

Image Right: Omega Centauri. Seestar S50

constellation of Argo Navis, now broken into Puppis, Carina and Vela. There is so much to enchant the observer!

The southern skies are a delight to behold, especially to those visitors from northern latitudes. Chile extends from 35 degrees to 71 degrees south and experiences the driest climate in the world. Usually, the country basks in 320 days of glorious sunshine and is a Mecca for the world's largest observatories such as the VLA at Cerro Paranal, The ESO's La Silla and Las Campanas observatories, Cerro Tololo and of course the Vera Rubin

Telescope and Gemini South. It is the location of the world's largest radio telescope, ALMA (Atacama Large Millimetre Array), and soon to be the largest ground-based telescope, the ESO's Extremely Large Telescope, not far from Cerro Paranal. If one takes in a guided tour, then several of these large observatories are open to the public.

For those with more modest equipment, Chile offers a wide range of amateurfriendly observatories known for their clear skies and passionate local teams. Among them are the IOCrux Observatory and Space OBS in San Pedro de Atacama; the El Pangue Observatory, and the Omega Astronomy Centre in the Elqui Valley. Another option is Astro Camping Viento Sur, located near the Fray Jorge Biosphere Reserve in the Coquimbo Region. This area holds a Starlight certification, recognising its exceptional conditions for astronomical observation. These centres often feature well-maintained telescopes, expert



volunteers, and immersive stargazing experiences for beginners and advanced astrophotographers alike. Chile's dry air, minimal light pollution and stable skies make it one of the most privileged destinations for photographing the southern night sky.

For those seeking a deeper, more curated astronomical journey, Far Out Trails Chile stands out as a boutique Destination Management Company (DMC) led by Rodrigo Ruiz Mardones, who has over a decade of experience designing tailor-made astrotourism experiences across Chile and beyond. The company specialises in facilitating privileged access to professional and amateur observatories and connects travellers with a trusted national network of expert guides, astronomers, and astrophotographers.

In northern Chile, travellers can collaborate with renowned figures such as Alexis Jaldin, a leading astrophotographer, or Elke Schulz, a respected astrotourism guide with years of experience interpreting the skies of the Elqui Valley. Also in the region, Jorge Retamales, a guide at La Silla Observatory, offers valuable insight into the area's scientific facilities and celestial conditions. These collaborations allow Far Out Trails to provide meaningful, detail-oriented programs tailored to a wide range of traveller profiles.



Image Above: Large Magellanic Cloud. Seestar \$50

The experiences they design are as diverse as the cosmos itself: from guided stargazing sessions in certified dark-sky areas to custom programs for landscape astrophotography in the Atacama Desert or targeted expeditions to capture deep space objects exclusive to the southern hemisphere. Every

Image Below: Large Magellanic Cloud. Canon 6D



Page 13

journey is a unique opportunity to connect with the night sky in one of the most extraordinary astronomical destinations on Earth.

Astrophotographers often travel with their own gear, and many airline-friendly setups like the Seestar 50, the Dwarf or compact equatorial mounts can be brought as hand luggage without issue. During my trip, I had no trouble flying with my Seestar, Star Adventurer, DSLR, and tripod.

So, what is it like? I honestly cannot describe how wonderful the skies are, as superlatives cannot do it justice. Our familiar constellations are upside down whilst new vista's open to the south with familiar and unfamiliar groups arrive throughout the night. The constellations of Lupus, Carina, Vela, Centaurus and the southern Cross all parade across the sky whilst by early morning in March-April Sagittarius and Scorpius are directly overhead, and so many of their deep sky objects are accessible with binoculars. The Milky Way is a glittering arc all night, easily visible in the clear air and remain an arc across the sky between the months of March to November. The Magellanic clouds wheel around the southern pole with the Tarantula nebula clearly visible as a knot amongst the stars. Omega Centauri and 47 Tucana are naked eye objects as is Eta Carina and wonderful clusters such as the Wishing Well (NGC 3532), kappa Crucis (Jewel Box) and the dark blot of the coal sack are highlights.

What I have drawn attention to in this article are the pristine night skies. However, they are only half the picture. The Atacama desert and the Altiplano are incredibly dry, no rainfall has come down here for hundreds of years in some parts, yet the salt flats and occasional lakes are filled with wildlife; from lizards, flamingos, condors, chinchillas, Ñandúes (Rhea), Guanacos and Vicuñas. The volcanic landscapes and the high mountains snow-capped all year round are remarkable and breathtaking, the people are open and friendly, the wine is wonderful and local drink, Pisco Sour, is worth tasting (especially the Rica-Rica Sour version in San Pedro de Atacama). For those of us from the UK, the desert is unreal; endless and without a scrap of

vegetation for hundreds of miles. It is a landscape fit for the planet Mars, which is why so many rovers have been tested here.

Sprinkled throughout this article are some photographs I took on my trip in March/April 2025. Portable telescopes such as the Dwarf or Seestar make the most of the wonderful clarity of the night skies. Only a few minutes exposure are necessary to capture some beautiful images. Exposures on my Canon 6D with a 14mm lens were no more than 30 seconds despite having the Star Adventurer.

I hope that I have whetted your appetite for the potential of Chile and its dark skies. The magazine New Scientist present an adventure as part of their discovery tours series (using Far Out Trails). Alternatively, if you wish to contact Far Out Trails and arrange your own a visit to this beautiful country, then please use the contact below.

Rodrigo Ruiz Mardones rodrigo@farouttrails.com info@farouttrails.com www.farouttrails.com

Martin Griffiths BSc MSc FRAS FHEA Director, Brecon Beacons Observatory Astronomer, Dark Sky Wales http://martgrif.wix.com/astronomer



Image Above: The Southern Cross and Coal Sack taken with an 80mm lens and Canon 6D camera

Image Below: The Milky Way and observers taken at San Pedro de Atacama with my Canon 6D



Image below: The Milky Way and Large Magellanic Cloud with a 16inch telescope in the frame. Canon 6D 50mm.



Editors Comment: I visited Peru and Chile on a tour headed by Pete Lawrence (Sky at Night) in 2019 for the total eclipse of the Sun. Absolutely amazing landscapes and skyscapes. Well worth a visit to experience the night sky at its best.



Hertford Astronomy Group

Programme 2025 / 2026

Speaker Date Subject

* Special Event Sat, September 6 **Publicity Display, Welwyn Garden City**

September 10 Roger O'Brien **Messier the Comet Hunter**

Greg Smye-Rumsby The History of Longitude at Greenwich October 8

Garry Hunt November 12 A Lifetime in Space

Sat, November 29 * Special Event My Telescope Doesn't Work Hosted by Wheathampstead U3A

From the University of Hertfordshire December 10 **Student lectures**

January 14 **Marina Galand Aurorae Around the Solar System**

Simon Foster February 11 **Our Living Sun**

March 11 **Jerry Stone** Nell, Esther & Aunt Effie:

The centenary of liquid-fuelled rockets

Sheridan Williams Fascinating Astronomical Facts April 8

May 13 **Lewis Dartnell** A Scientist Goes to the Movies

Plus - Annual General Meeting

June 10 **Louise Devoy** Royal Observatory, Greenwich:

A history through objects

Sat, June 27 * Special Event **Welwyn Festival Fun Day**

Wheathampstead Village Day Sat, July 11 * Special Event

Wed, August 12 * Special Event **Public Solar Eclipse Watch**

Special Public Events will take place during the year.

These will include public observing events, and advice and assistance regarding telescopes.

See the website in due course for details

All events are subject to amendment.

www.hertsastro.org.uk







Images: Steve Heliczer

Birmingham Astronomical Society

Birmingham Astronomical Society 75th Anniversary Lecture Chris Lintot

Birmingham Astronomical Society is pleased to Announce a special lecture to help us celebrate our 75th Year as an Astronomical Society

It is our great fortune to invite you to a special on line event, a Zoom lecture: "Our Accidental Universe " by Chris Lintott.

"Our Accidental Universe"

Exploring a cosmos as vast as ours is bound to result in a few surprises. In this talk, Chris Lintott (BBC Sky at Night/University of Oxford) explains how astronomers stumble across their discoveries. From the rich diversity of worlds in our Solar System to the edge of the observable universe, he will explain what we know about the cosmos is usually the result of happenstance. Along the way, we get a whistle-stop tour of cutting edge science and encounter sometimes profound, sometimes amusing but always thought-provoking stories from astronomy's past.

Tuesday 26 August 2025

Via Zoom

Buy tickets at £3.00 each to receive the Zoom link by email

https://www.tickettailor.com/events/birminghamastronomicalsociety/1716801

Birmingham Astronomical Society

https://www.birmingham-astronomy.co.uk

Space Oddities Live! https://www.youtube.com/@SpaceOdditiesLive

Join us for Mars Month this September. Every Tuesday at 8 pm we will celebrate the astronomical history and exploration of the planet Mars, from ancient cultures to the latest and future rovers. Any maybe human exploration. With discussions, presentations, and Special Guests.

2, 9, 16, 23, 30 September Click on the link below to view our channel.

Space Oddities Live!

https://www.youtube.com/@SpaceOdditiesLive

Mid-Kent Astronomical Society



The Mid-Kent Astronomical Society displays each year at the Kent County Show at Detling near Maidstone.

We were present again this year 4th, 5th and 6th July where members of the public were invited to view our stand and to do some Solar Observing.

We stress the importance of staying safe when viewing the sun and issued a Sun information sheet which carried instructions not to look directly at the sun etc etc.

Friday 4th July was a lovely sunny day and Sunday 6th allowed observing for a few hours before the rain set in. Saturday unfortunately e=was cloudy all day.

Below are some photos of our display inside the tent which features a Moon Phase model, augmented reality cards, solar system model and our societies meteor collection amongst other things.

We had two monitors. One showing members astro photos on a continuous loop whilst the other showed our link-up to the UK Meteor Radar Network.

Solar observing was extremely popular and we had 2 White Light and 2 Ha telescopes available for viewing.

A few images from the event are shown on the next page. The lady in pink is our Caroline Beevis who has constructed 'constellation cones' which always prove popular.

Dave Merrall

https://www.midkentastro.org.uk

Forthcoming Meetings

All regular meetings are open to members and visitors, held on the second and last Friday of each month, except August and at Christmas, when there are no meetings. Unless otherwise stated, meetings normally open at 7:40pm for an 8pm start, finishing around 10pm.

12 September

Ryan French: Space Hazards

26 September

Simon Dawes: High Resolution Solar Observation and Imaging
Simon will explain how to observe the Sun safely and then how to optimise your own solar imaging
set-up to get the best out of it.

10 October

Speaker & Topic TBC

24 October

Family Space Night

Regular Meetings take place at: Bredhurst Village Hall, Hurstwood Road, Bredhurst, Gillingham, Kent ME7 3JZ

Mid-Kent Astronomical Society













Page 19

Attention Astrophotographers

Introducing Picastro – The Ultimate social media platform only for astronomers and astrophotographers

Picastro is a dedicated social platform built by an astrophotographer, for astrophotographers and space enthusiasts—whether you're just starting out or a seasoned expert.

Designed to provide a safe, secure, and community-driven space, Picastro lets you showcase your astronomical images, connect with like-minded individuals, and elevate your astrophotography journey—all within a beautifully intuitive and easy-to-use app for iOS and Android, available on mobile and tablet.

With four subscription plans to choose from—and an upcoming option tailored for those who love astrophotography but don't take images themselves—Picastro ensures there's a place for everyone in the cosmic community.

How Picastro Works

Capture & Upload – Easily upload high-resolution astrophotography images directly from your device, with advanced image protection to keep your work secure.

Engage with the Community – Like, share, and comment on breathtaking space images while connecting with astrophotographers from around the world.

Find Your Astro Circle – Leading Light© and StarCamps© help you discover and connect with experts, enthusiasts, and local groups based on your interests, location, and experience level.

Build Your Astro Portfolio – Curate your best work in stunning personal galleries, creating a professional showcase of your astrophotography.

Discover Images Easily – Use Picastro's dynamic image search to explore thousands of space images with precision.

Ad-Free & Spam-Free – Picastro's subscription-based model eliminates fake accounts, bots, and intrusive ads—ensuring a pure, focused astrophotography experience.

Access Remote Observatories – Picastro is expanding to welcome remote and private observatories, giving users access to professional-grade astronomical images from across the globe.

Share & Learn – The StarCard® feature allows users to document their image acquisition details, making it easier to exchange knowledge and techniques.

Private Gallery Sharing – A secure way to share your incredible images with friends and family who don't use the app but love seeing your work.

Plate Solving (Coming 2025) – A simple yet powerful tool for image and object recognition, making astrophotography even more accessible.

Interactive Astro Games – Fun and engaging games designed to bring astronomy to life (Coming late 2025)

BEKAH (Launching Late 2025) – Your personal Al astrophotography assistant, helping both beginners and experts navigate the cosmos with ease.

More Than Just an App—An Ecosystem for Astrophotographers across the globe.

Picastro is more than a platform; it's a community-driven ecosystem built by an astrophotographer, for astrophotographers. Whether you're capturing your first star trails or mastering deep-sky imaging, Picastro redefines how you connect with the cosmos.

Download now on the App Store and Google Play, or visit <u>picastroapp.com</u> to learn more!







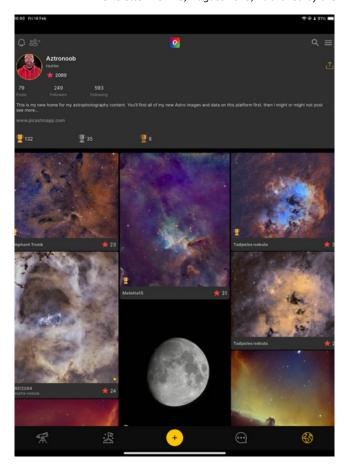


Screen shots of the Picastro App are reproduced overleaf:

Tom McCorie Founder m: 07963 745 630

w: www.picastroapp.com tw: @aztronoob

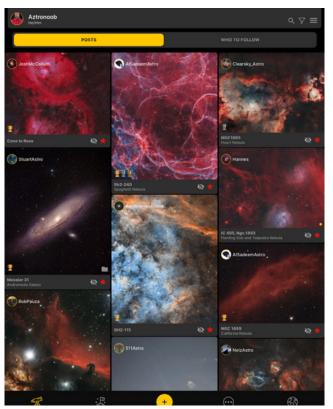
ig: instagram.com/picastroapp ig: instagram.com/aztronoob

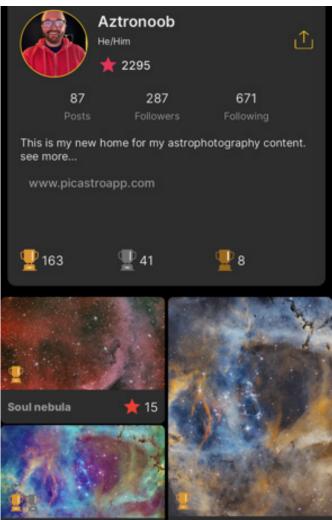






pıcastro





Page 21



Scarborough & Ryedale Astronomical Society Annual 'StarFest' Star Party



28 August – 1 September 2025 Adderstone Field, Dalby Forest, North Yorkshire

Scarborough & Ryedale Astronomical Society's (SARAS) annual "StarFest" star camp returns for 4 nights of stargazing and astrophotography in the wonderful surroundings of our "Milky Way" class Dark Sky Discovery Site of Dalby Forest within the North Yorkshire Moors National Park Dark Sky Reserve.

The large field at Adderstone is well drained & we can accommodate caravans, motor homes and tents.





As for previous years, we are able to accommodate early arrivals for those who have a long way to travel, and for those who wish to take advantage of an extra night on the Thursday (28 August).

Aside from the dark skies, we will have a range of talks, our annual bottle rocket building competition and of course the Astro Pub Quiz on the Sunday evening.

REGISTRATIONS CLOSE SUNDAY 24 AUGUST 2025

https://www.scarbastro.co.uk/saras/starfest/starfest-2025/