



OASI News

The newsletter of the Orwell Astronomical Society (Ipswich).
Registered charity 271313.



The 27m high gnomon of the great sundial at Jantar Mantar observatory, Jaipur, India. Visited by OASI member Neil Short in November 2025.

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Chairman's Message

Dear Members,

It was great to see so many members attending the recent talk presented by renowned astro photographer, Nik Szymanek. Nik will be returning next year to present another talk, *Wonders of the Sky*.

This Summer, Suffolk Archives will be hosting an exhibition at the Hold in Ipswich, *The Moon: Our Nearest Neighbour*. Orwell Astronomical Society have been asked to support this. This will probably be along the lines of a daytime solar observing event and an evening lunar observing event, when conditions are favourable. As ever, I would be extremely grateful if as many members as possible could support these events.

I hope to see you at one of our meetings in the coming month.

Clear skies!

Andy Gibbs,
Chairman.

Observatory Maintenance

Orwell Park School has agreed to access by members of OASI during the Easter holiday, 26 March – 21 April, to undertake maintenance work at the Observatory. Jobs currently on the list are:

1. Check/unblock drains.
2. Check the LH window in the Belvedere that was restored last year: another coat of paint may be needed.
3. The upper dome shutter roller mechanism needs lubricating.
4. A section of missing cladding around the upper dome closing rope needs replacing to prevent water ingress into the Equatorial Room.
5. Near the bottom left-hand side of the dome shutter door is a failed section of copper sheeting that needs replacing.
6. Clean/polish the transit scope.
7. Refill the oil wicks in the Dome.
8. General cleaning and tidying.

If you are aware of any other jobs that require attention, or if you can assist with any of the work, please talk to any member of the committee.

Committee & Trustees

Chairman	Andy Gibbs	Set overall agenda for OASI, chair committee meetings, press and publicity.
Secretary	Roy Gooding	Outreach meetings (jointly with Chairman), observatory decoration.
Treasurer	Paul Whiting	Finance, supervision of applications for grants. Visits by outside groups, observatory tours, public appreciation of astronomy, outreach activities.
Committee	James Appleton Robin Carpenter Martin Cook Adam Honeybell Matt Leeks Peter Richards Mike Whybray Paul Whiting Andy Willshere	Committee meeting minutes, web site. OASI@Newbourne deputy coordinator. Membership, Tomline refractor maintenance & user testing. Newsletter. Safety & security. Lecture meetings. Astronomy workshops, Child Protection Officer, Orwell Park School astronomy. OASI@Newbourne coordinator. Librarian.
Trustees	Neil Morley David Payne Bill Barton	

Contact Details

Website: www.oasi.org.uk
Events: www.oasi.org.uk/Events/Events.php
Email queries: info@oasi.org.uk
Members-only message board: groups.io/g/OASI
Orwell Park Observatory (meeting nights only): tel. 07960 083714
Facebook: www.facebook.com/groups/445056098989371
YouTube: www.youtube.com/@orwellastronomical425
WhatsApp: email Andy Gibbs to be added to the OASI WhatsApp group.

OASI News

Edited this month by James Appleton.

News, pictures, observing reports, notices of events and articles of general interest are always welcome for the Newsletter! Please send material to news@oasi.org.uk. The closing date for material is the 15th day of the month.

The Newsletter archive is at www.oasi.org.uk/NL/NL_archive.php.

Authors: please note that the Newsletter is publicly available!

Events

Date, Time & Location	Contact	Event
Mon 01 Apr 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Mon 06 Apr 2026 19:30 Newbourne Village Hall	Paul Whiting, FRAS treasurer@oasi.org.uk	Newbourne meeting - beginners and new members welcome! 19:30 Doors open.
Wed 08 Apr 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Wed 15 Apr 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Mon 20 Apr 2026 20:00 Zoom	Paul Whiting, FRAS treasurer@oasi.org.uk	Pre-recorded talk: <i>At the Limits of Astrophysics</i> by Katy Clough. (Zoom login details are provided by email to members.)
Wed 22 Apr 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Fri 24 Apr 2026 19:45 St Augustine's Church, The Lantern Room (church annex)	Pete Richards lectures@oasi.org.uk	Lecture Meeting. Chris Mead, Chair & Secretary of DASH Astro , <i>Astronomy in Uzbekistan</i> . There is parking at the front of the church and additional spaces just across Bucklesham Road at the Saint Augustine's Community Hub. Poster .
Mon 27 Apr 2026 19:30 Newbourne Village Hall	Paul Whiting, FRAS newbourne@oasi.org.uk	Newbourne meeting - beginners and new members welcome! 19:30 Doors open. 19:45 <i>Sky Notes</i> by Bill Barton, FRAS.
Wed 29 Apr 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Mon 04 May 2026 19:30 Newbourne Village Hall	Paul Whiting, FRAS newbourne@oasi.org.uk	Newbourne meeting - beginners and new members welcome! 19:30 Doors open.
Wed 06 May 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Wed 13 May 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Mon 18 May 2026 20:00 Zoom	Paul Whiting, FRAS treasurer@oasi.org.uk	Pre-recorded talk: <i>The Physics of Black Holes</i> by Chris Impey. (Zoom login details are provided by email to members.)
Wed 20 May 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.

Date, Time & Location	Contact	Event
Mon 25 May 2026 19:30 Newbourne Village Hall	Paul Whiting, FRAS newbourne@oasi.org.uk	Newbourne meeting - beginners and new members welcome! 19:30 Doors open. 19:45 <i>Sky Notes</i> by Bill Barton, FRAS.
Wed 27 May 2026 20:00 Orwell Park Observatory	Martin Cook membership@oasi.org.uk	General observing for members of OASI.
Fri 29 May 2026 20:00 Zoom	Andy Gibbs chairman@oasi.org.uk	Committee meeting via Zoom. All members are invited to attend.

The latest list of events is available online: <https://www.oasi.org.uk/Events/Events.php>.

OASI events are free for members to attend. All members are welcome at all events.

OASI Meet and Greet 2026

A new policy from Matthew Leeks, OASI Morale Officer.

Year on year, OASI keeps growing with new members. This is fantastic news for the society!

I find it's always very enjoyable meeting other members at workshops and public events and meeting the regular attendees at the Monday and Wednesday evenings.

But I feel we need to reach out to those members who cannot attend these events and find out how they think the Society is going and if we can do more for them and for the membership at large.

So it's been agreed that a meet and greet policy for 2026 would be a great way of catching up with more members. We will pick some members at random and come round on a Wednesday evening for a friendly catch up and of course a lovely cuppa and perhaps look up and see what is in the sky.

So I look forward to meeting some old and new members in 2026!

P.S. I like my tea white, one sugar, strong...

OASI Email Group

OASI runs an email group to enable easy communications between members. The group is hosted by groups.io. To join the group, simply send an email to OASI+subscribe@groups.io. Membership of the group is available only to members of OASI.

Members with Google email addresses of the form a.n.other@gmail.com may experience difficulties sending emails to the group. If this is the case, try instead registering as a.n.other@googlemail.com. Although the domains gmail.com and googlemail.com are (generally) interchangeable, it seems that groups.io will only work reliably with the latter. In case of difficulties, contact Membership Secretary, Martin Cook, membership@oasi.org.uk.

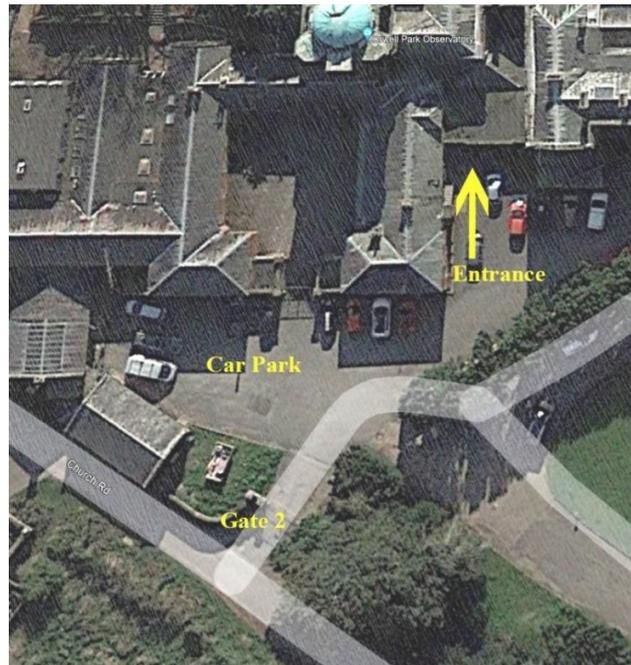
OASI @ Orwell Park

We hold meetings at Orwell Park Observatory every Wednesday evening from 8pm.

Access is via the second gate on Church Road, Nacton. (What3Words: [tour.fuse.banks.](https://www.what3words.com/tour/fuse/banks))

Access requires the combination code or a key fob to open the gate and a key fob to open the door to the observatory. Regular attendees will be provided with a key fob – ask any committee member for details. If you do not have a key fob, ring the observatory number and someone will let you in.

Attendees must follow the below route. Please keep noise to a minimum to avoid disturbing pupils and staff at Orwell Park School.



- Enter through the gate south (towards the River Orwell) of the main gate of the school. The combination code or a key fob is required to open the gate.
- Park as indicated on the above map.
- Enter the school through the double black doors as indicated on the map. A key fob is required to open the door.
- Continue straight through the next two sets of double doors.
- Turn left at the end of the short corridor then turn immediately right.
- Pass through the single door and follow the stairs immediately on the left to the observatory.

OASI @ Newbourne

Meetings at Newbourne are held in the Village Hall, Mill Lane, IP12 4NP (What3Words: scars.atlas.printing.)

Visitors are welcome. Anyone visiting more than twice will be asked to become a member of OASI.

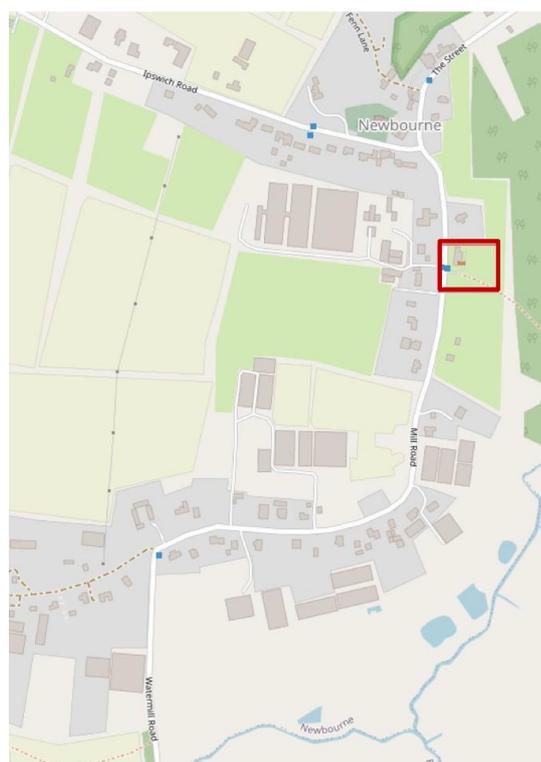
Newbourne dates for 2026		
April	06#	27(S)
May	04#	25(S, A)
June	08	22(S)
July	13	27(S, A)
August	10	24(S)
September	14	28(S, A)
October	12	26(S)
November	09	23(S, A)
December	14(Q)	

A = Astro News by Paul Whiting.

S = Sky Notes by Bill Barton

We open for Newbourne meetings at 7:30pm.

Newbourne Meetings are generally held on the 2nd and 4th Mondays of each month. # indicates a deviation from the usual monthly pattern.



Outreach Events

The below outreach events are in the diary for later in the year. Assistance will be appreciated from as many members as possible! Note that enthusiasm is more important than expertise! Contact the organisers if you can assist or to ask for more information.

Date	Event	Organiser	Status
Saturday 06 June (will postpone to 27 June if weather is bad)	Solar observing at Christchurch Mansion	Roy Gooding	Provisional
Sunday 21 June	Solar observing at Kirton Playing Field, Wireless Revival	Paul Whiting	Confirmed
Saturday 08 August	Solar observing outside Suffolk University*	Andy Gibbs	Provisional
Monday 31 August	Solar observing at Bawdsey Radar Museum	Paul Whiting	Confirmed
Friday 18 September	Lunar observing at Newbourne Village Hall*	Andy Gibbs	Confirmed

Events marked * are in conjunction with *The Hold* as part of the exhibition *The Moon: Our Nearest Neighbour*.

Lecture by Nik Szymanek, 20 March 2026

Chairman Andy Gibbs introduces Nik Szymanek, speaker at OASI's second lecture of the current season, on 20 March 2026. Nik provided a fascinating overview of the capabilities of the latest software tools for processing astro-images.



Photo by Martin Cook, 20 March 2026.

Nik is an accomplished presenter on astro-imaging and much in demand. Nevertheless, Pete Richards, OASI lecture coordinator managed to secure another lecture by Nik, one year hence, on 19 March 2027, on the topic *Wonders of the Sky*. Further details to be publicised later.

Our next lecture is on 24 April 2026 by Chris Mead, Chair & Secretary of DASH Astro, on *Astronomy in Uzbekistan*.

Ipswich Museum's "Discovery Day", 18 February 2026

Neil Morley

Roy Gooding and I manned an OASI Stand at Ipswich Museums "Discovery Day" at Christchurch Mansion on Wednesday 18 February. The event took place between 10am and 3pm and had the special theme "love our planet". The aim was to connect all age groups (especially youngsters) with experts from local organisations specialising in natural history, geology, archaeology and astronomy, and to provide opportunities to learn more about our planet and its conservation.

Roy and I were due to meet Paul Whiting before the event to collect additional equipment including the OASI muon detector, gravity simulator and signage. Paul arrived at the Bolton Lane car park at 9am. Unfortunately, at this time, Roy and I were inside the mansion liaising with museum staff and setting up the stand and Paul was unable to contact us. The trackway beyond the Bolton Lane entrance to the reserved car parking next to the mansion was blocked by a bollard and no helpful museum staff were nearby, so he was unable to come looking for us. He had another commitment in Woodbridge later that day and needed to get away quickly, so we missed him, and had to make do without the additional equipment.

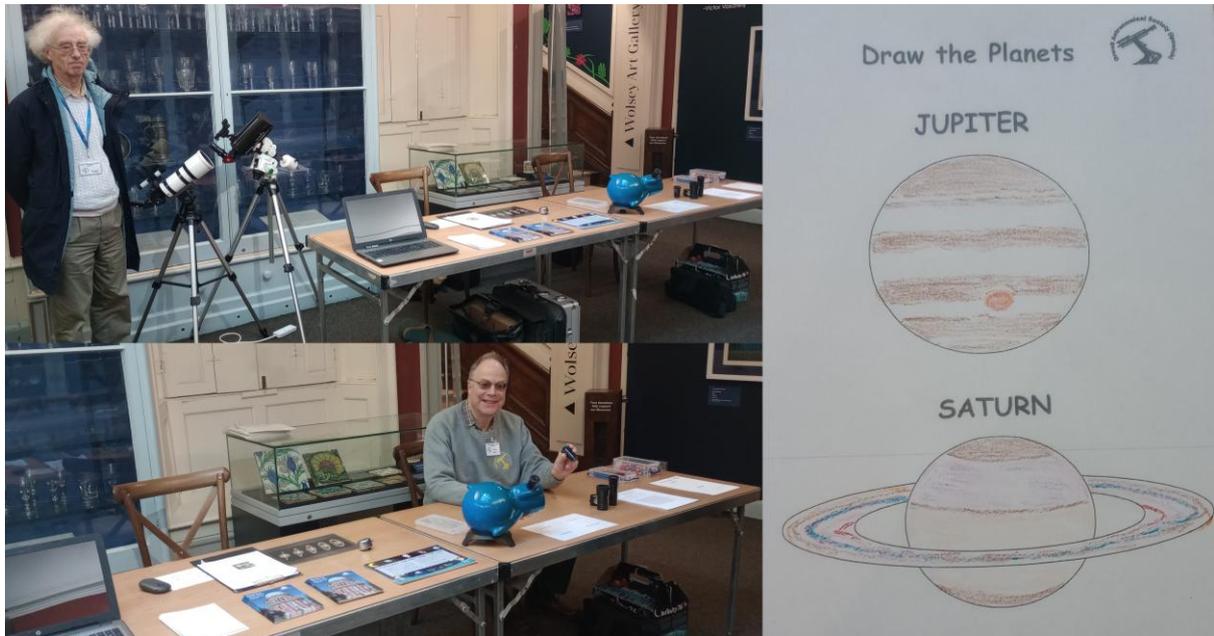
Roy and I had been directed to the Plates Gallery where two tables had been reserved for OASI. We shared the space with an archaeological team from Suffolk County Council, GeoSuffolk (local Geological Society), and a local insect group. Further stands were distributed around the ground floor area of the mansion, particularly in the reception hall next to the main entrance.

The OASI stand included the following:

1. Roy's laptop, displaying a range of astronomical objects and related applications.
2. OASI promotional materials, handed out throughout the day to interested visitors.
3. Planet colouring sheets, which proved especially popular with youngsters. The added bonus was that the youngsters got to take them home. I was constantly amazed by the creative abilities some kids could display in response to the cue "Imagine this is a planet in a faraway solar system: what could it look like?"
4. An optics test bench. The concept was simple, match the optics to the following words on a laminated sheet: a) I make things smaller (negative Barlow lens), b) I make things larger (positive lens), c) I make things weird (erecting eyepiece suffering from kaleidoscopic effects due to internal reflections), and most popular, especially with youngsters d), I see around corners (90 degree prism).
5. The "Cosmic Penguin", a blue SkyWatcher Infinity 76mm reflector, was pointed to the face of a grandfather clock in the adjacent Clocks Gallery. Several kids successfully repositioned it to alternative locations including a closeup view of the windows in the Plates Gallery ceiling!
6. Two further small telescopes, a 90mm Maksutov and 80mm Refractor were set up as static exhibits behind the tables.

Throughout the day Roy and I were kept busy with a constant stream of visitors showing a lot of interest. We were extremely grateful when Pete and Nicky Richards turned up unexpectedly around lunchtime and kindly provided cover. Staff at the mansion reported over 700 visitors that day, and thanked us for making the event a memorable success.

We are always on the lookout for volunteers to support outreach events such as the “Discovery Day”. If you'd like to get involved in supporting outreach events, please get in touch with any member of the committee!



Roy and Neil on duty, and a completed planet colouring sheet.

The Night Sky in April 2026

Event times are civil time. Data for Sun, Moon, planets and ISS are from <https://heavens-above.com> for the location of Orwell Park Observatory, 52.0096°N, 1.2305°E. Data for meteor showers are from the *BAA Handbook* for 2026.

Object	Date	Rise	Set	Mag.
Sun ☉	1	06:30	19:29	
	30	05:28	20:19	
Moon ☾	1	06:06	19:10	
	30	04:36	19:27	
Mercury ☿	1	05:58	16:39	0.5
	30	05:16	18:38	-0.7
Venus ♀	1	07:14	21:18	-3.8
	30	06:36	22:52	-3.8
Mars ♂	1	06:12	17:34	1.2
	30	04:54	17:48	1.2
Jupiter ♃	1	11:12	03:36	-2.1
	30	09:34	01:52	-1.9
Saturn ♄	1	06:39	19:38	0.9
	30	04:51	17:04	0.9
Uranus ♅	1	08:13	23:48	5.8
	30	06:23	22:02	5.8
Neptune ♆	1	06:28	18:22	8.0
	30	04:36	16:33	7.9

Meteor showers

Shower	Visibility	Maximum ZHR (*)	Prospects for the UK
April Lyrids	14-30 April	15 on the evening of 22 April	Favourable
Eta Aquarids	19 Apr – 28 May	50 during 06-07 May	Poor

* ZHR (zenithal hourly rate) is the number of meteors an observer would see in an hour of peak activity if the radiant was at the zenith, assuming perfect conditions.

Visible passes of the ISS

Date	Brightness	Start			Highest point			End		
	(mag)	Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
19-Apr	-1.2	05:11:03	10°	S	05:12:57	14°	SE	05:14:51	10°	ESE
22-Apr	-1.8	04:23:58	12°	S	04:26:11	20°	SE	04:28:43	10°	E
23-Apr	-1.5	03:37:55	14°	SSE	03:38:33	14°	SE	03:40:24	10°	ESE
24-Apr	-2.8	04:24:42	16°	SW	04:26:57	36°	SSE	04:30:06	10°	E
25-Apr	-2.5	03:38:30	25°	S	03:39:11	27°	SSE	03:42:05	10°	E
26-Apr	-1.7	02:52:14	18°	SE	02:52:14	18°	SE	02:53:55	10°	E
26-Apr	-3.6	04:25:09	15°	WSW	04:27:46	61°	SSE	04:31:06	10°	E
27-Apr	-3.4	03:38:49	34°	SSW	03:39:51	47°	SSE	03:43:07	10°	E
28-Apr	-2.7	02:52:26	34°	SE	02:52:26	34°	SE	02:55:04	10°	E
28-Apr	-3.8	04:25:21	11°	W	04:28:32	81°	S	04:31:55	10°	E
29-Apr	-1.4	02:06:01	16°	E	02:06:01	16°	E	02:06:57	10°	E
29-Apr	-3.8	03:38:55	28°	WSW	03:40:32	72°	SSE	03:43:53	10°	E
30-Apr	-3.8	02:52:27	60°	SSE	02:52:30	60°	SSE	02:55:50	10°	E
30-Apr	-3.8	04:25:51	10°	W	04:29:13	85°	S	04:32:36	10°	E

A visit to Jaipur, India and the Jantar Mantar Observatory

Neil Short, with another edition of *Short's World*.

Something a little different this time... I'm in Jaipur, northern India and visiting the Jantar Mantar astronomical observatory. Jaipur, a city some 260km SW of the capital Delhi, is the largest in Rajasthan with a population of around 4.5 million. Known as the Rose City because of the rose/terracotta colouring of many of its buildings, it was founded by the Maharaja Sawai Jai Singh, and it is he who constructed this Observatory in the period 1716 to 1728AD.



Scenes from around Jaipur: Palace of the Winds, rickshaws and elephants

Background and context

First, a few words about what astronomy meant to the Hindu people and its link to the field of astrology. In Hindu beliefs, all living creatures (vegetable as well as “living”) are formed of five elements (Tatva's), namely fire, air, water, earth and sky and their actions are governed by the movement of heavenly bodies. Many Hindus believe that key decisions (when/who to marry, when to change jobs etc...) in life are governed by the analysis of key astronomical data linked to e.g. time and place of birth. In India, engagement with astrological “wise men” before taking significant decisions in life is common. Ancient observatories in India were constructed to measure accurately the passage of objects through space. Position/location and time were all, there was no attempt to understand what the objects were.

Jantar Mantar means “Calculation Instrument” and the objects of interest for the observatory were Mercury, Venus, Mars, Jupiter and Saturn (the known planets in 1716AD, together with the Moon and Sun.

The Observatory

The Observatory contains 19 separate astronomical instruments. The instruments were constructed for the purpose of measuring time, tracking the location of major stars as the Earth orbits around the Sun, ascertaining the declinations of planets, and determining the altitudes of celestial bodies.

The significant quality of the surviving instruments owes much to a major restoration activity carried out in 1901. One specific issue here. In the 1901 restoration, the “time scales” of all the instruments were converted from ancient units, ghatikas, palas and vipalas for example, to “modern” hours, minutes and seconds. Google the ancient units for more information, e.g. [Wikipedia](#).

The structure of most instruments is similar, as follows. A gnomon (creates a shadow) is angled at an appropriate degree, e.g. the latitude of the host site or the position of zodiac signs above the ecliptic. The shadow of the gnomon falls across a graduated quadrant, calibrated in time. The large size of the instruments improves the dimension of the graduations, hence improving accuracy of measurement. On some of the instruments, nighttime observations of objects can be made through alignment from the object to the scale, using pointers and thread.

Below is a brief overview of some of the instruments to provide a “feel” of the place and highlight the technology involved. Further details are available via the web.

1. Vrihat Samrat Yantra

The largest instrument, the “Great King of Instruments”, stands some 27m in height (at top of gnomon) with 44m wide calibrated quadrants. These dimensions, in theory, offer an accuracy of 2 seconds. This, however, is unlikely to be achieved because of the “softness” of the edge of the Sun’s shadow.



The quadrant scale of the Vrihat Samrat Yantra. See also the image on the front cover of the *Newsletter*.

2. Jai Prakash Yantra

This instrument comprises two hemispherical bowls containing marble slabs with maps of inverted images of the sky. With a metal ring, held by wire centrally over each bowl, casting a shadow of the Sun into each bowl, the observer can identify the month of the zodiac, and measure azimuth and

declinations. For night-time measurements, the observer sits within the dish and aligns the celestial body with the hole in the ring.



One of the bowls of the Jai Prakash Yantra.

3. The Rashivalyas Yantra

This instrument is formed from 12 separate units, one for each sign of the zodiac. Although the units look similar to the other sun-dial-type instruments, they are technically quite different. The gnomon and quadrants are aligned with the pole and plane of the ecliptic when the first point of the zodiac constellation crosses the meridian (the line of longitude at the host location).



One of the instruments of the Rashivalyas Yantra.

4. The Ram Yantra

There are two Ram Yantra on site; both provide the same function, measurement of the altitude and azimuth of celestial bodies. Each consists of a central rod, within a spread of 12 vertical and 12 horizontal slabs. Three hundred and sixty vertical lines represent the azimuth circles, 90 horizontal lines, the altitude circles. During the day, the position of the Sun is estimated by noting where the shadow of the gnomon rod falls; at night, the observer sights the object of interest at the tip of the gnomon and then uses a sighting rod to indicate its azimuth and altitude.



The Ram Yantra.

In summary: the site is fantastic (as indeed is Jaipur) and well worth a visit!

MoM – z14 (“Mirage or Miracle”)

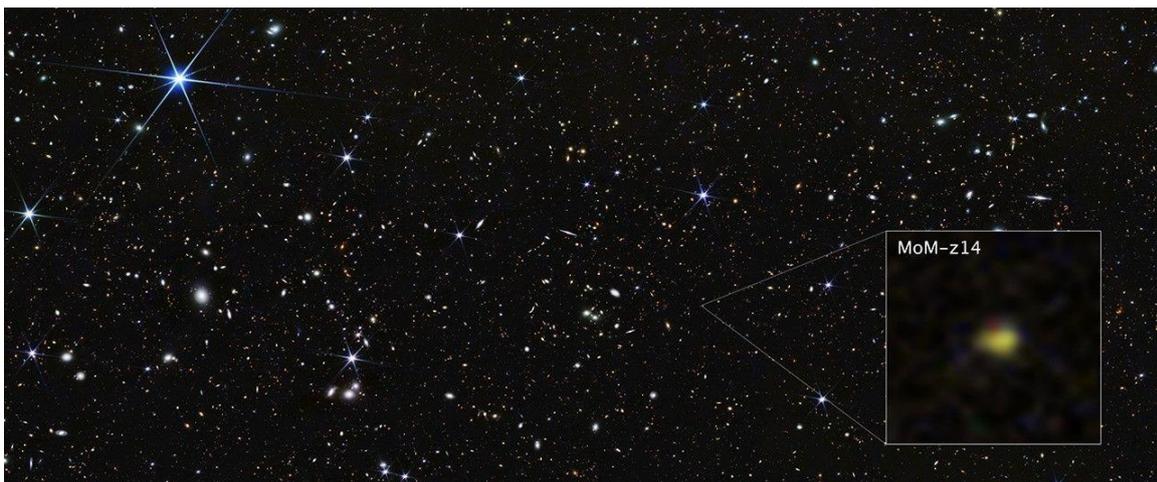
By Andy Willshere

The James Webb Space Telescope (JWST), has once again enhanced our knowledge of the early universe. In May 2025, the discovery of a galaxy named MoM-z14 was announced with results published in the Open journal of Astrophysics and sent to all major science centres throughout the world. The galaxy was spectroscopically confirmed and is thought to have existed a mere 280 million years after the Big Bang. The name of the galaxy relates to its redshift, and makes it one of the furthest galaxies yet encountered. Taking all of the data into account, it will increase our understanding about galaxy formation.

MoM-z14 was located as part of the “Mirage or Miracle” survey, which aimed to utilize the JWST Near Infrared Spectrogramme (NIRSpec) schedule. This survey had a primary focus of determining whether the light arriving from some high red-shift galaxies, seen earlier by JWST, was authentic. MoM-z14 was selected because of its redshift of $z > 10$. It is a compact galaxy and has a radius of approximately 300 light years, and comprises about 10^8 solar masses.

On April 16th, 2025, JWST’s NIRSpec apparatus surveyed MoM-z14 for 4 hours 24 minutes in prism mode. This provides a wider spectral range (0.6 – 5.3 μm) at lower resolution. It showed that z14 has a cosmological redshift of 14.44, which means that it has been travelling through the universe for approximately 13.5 billion years. Similarly to some other galaxies that the James Webb has discovered in the early universe. MoM-z14 is more compact, brighter and has a greater chemical enrichment than would be expected of galaxies this far from Earth. MoM-z14 is to be found in the constellation Sextans with a Right Ascension of 10h00m22.40 s and a declination of +02° 16’ 23.19”.

The MoM survey contains data sets from several major JWST programs, which cover the COSMOS field. The initial identification of the galaxy was by JWST NIRCам and Survey Fields. The camera is capable of high resolution and multi-band photography in the near-Infrared across 0.9 – 5 μm . These datasets are readily available via the DAWN JWST Archive.



Picture credit: [COSMOS Field MoM-z14 Galaxy \(NIRCам Image\) - NASA Science](#).

Scientific thirst for information to evaluate stars and galaxies as far back in time as possible energises the hunt for discoveries and data. The fact that MoM-z14 exists at such an exceptionally distant point of the universe, with its size, luminosity and chemical composition all question pre-JWST paradigms. It may mean that there was much more activity in the early universe than we thought possible. By

investigating the galactic properties which include the rapid growth of stellar mass and ionization of intergalactic medium, a new model of galaxy formation may be developed.

References:

[NASA Webb Pushes Boundaries of Observable Universe Closer to Big Bang - NASA Science](#)

[COSMOS Field MoM-z14 Galaxy \(NIRCam pullout image\) | ESA/Webb](#)

[MoM-z14 - Wikipedia](#)

Members Observations

Andy Gibbs

M51 imaged on 17 March 2026 using a Seestar S50 telescope.



M101 imaged on 17 March 2026 using a Seestar S50 telescope.



Jupiter and Galilean satellite Io imaged on 05 March 2026. Equipment: ZWO ASI178MC camera, Meade 200 mm LX200ACF telescope and 2.5x Barlow lens. Software: Sharpcap, Autostakkert!, Registax and Affinity Photo 2.



Martin Cook

Martin wins the prize this month for most astro-images submitted for publication! All his images were captured using the OASI Seestar S50 telescope in EQ mode (avoiding image rotation). The exposures were stacked and processed using the built in AI de-noise software, with Photoshop used to make final adjustments to brightness and contrast.

M31, the Andromeda Galaxy, together with its two satellite galaxies M32 and M110. Imaging details: 19 December 2025, 19:10-21:04 UT, *mosaic* mode (covers a larger area of sky by moving the scope around), 226 minutes of 20 second images stacked.



M99, a spiral galaxy in the constellation Coma Berenices. Imaging details: 17 March 2026, 20:46–21:05 UT, 16 minutes of 20 second images stacked.



M58, a barred spiral galaxy in the constellation Virgo. Imaging details: 17 March 2026, 21:07–21:27 UT, 16 minutes of 20 second images stacked.



M61, a spiral galaxy in the constellation Virgo. Imaging details: 17 March 2026, 21:28–21:59 UT, 26 minutes of 20 second images stacked.



M98, a spiral galaxy in the constellation Coma Berenices. Imaging details: 19 March 2026, 20:22–20:57 UT, 30 minutes of 20 second images stacked.



M63, a spiral galaxy in the constellation Canes Venatici. Imaging details: 19 March 2026, 20:58–21:59, 54 minutes of 20 second images stacked.



M86, an elliptical galaxy in the constellation Virgo. It is part of the Markarian Chain, a string of galaxies in a curved line. Imaging details: 21 March 2026, 20:28 – 21:46, 67 minutes of 20 second images stacked.



M88, a spiral galaxy in the constellation Coma Berenices. Imaging details: 21 March 2026, 19:37–20:25 UT, 41 minutes of 20 second images stacked.



NGC 2237, the *Rosette Nebula*, and open cluster NGC 2244 in the constellation Monoceros. Imaging details: 18 March 2026, 19:31-22:26 UT, 103 minutes of 20 s exposures stacked.



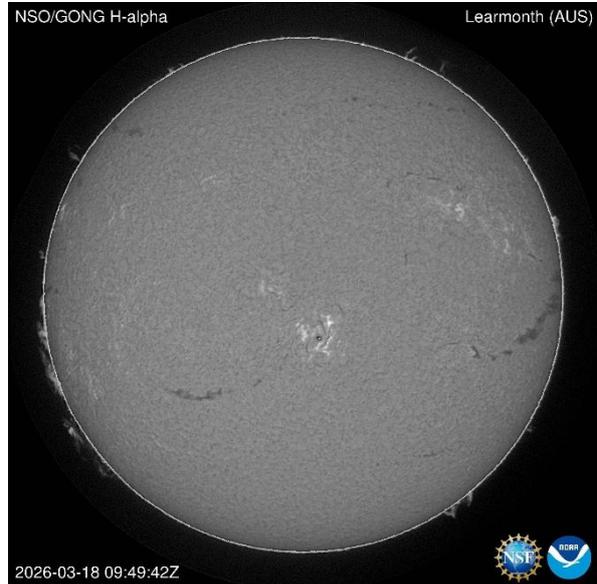
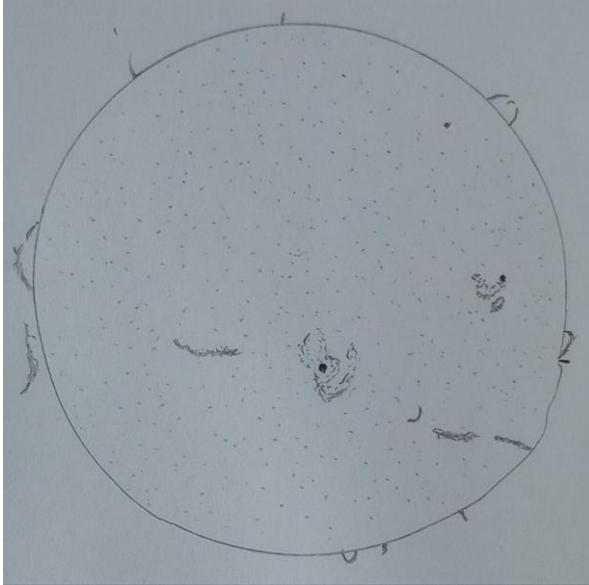
Neil Morley

NGC7789 imaged on 08 April 2025. The object is also known as *Caroline's Rose*, *Caroline's Haystack* or the *White Rose Cluster*. It is an open cluster in Cassiopeia and was discovered by Caroline Herschel in 1783. Her brother, William, included it in his catalogue as H VI.30. Through the eyepiece, the loops of stars and dark lanes resemble the swirling patterns of rose petals. Source of information: Wikipedia.

The image was taken by the OASI SeeStar S50 Smart Telescope. It is a 1-minute exposure comprising 6 x 10 second frames that have been stacked and internally processed within the unit with added AI noise reduction.



Images of the solar disk on 17 March 2026. LHS: a quick sketch, drawn between 10:55 and 11:05 UT, at the eyepiece of an LS35 H α refractor using a 20 mm Plössl eyepiece providing a magnification of 20x. For comparison purposes, RHS is an image taken on the same day by NASA's GONG (Global Oscillation Network Group).



Steve McElvanney

Two images of spiral galaxy M106 in Canes Venatici provide a demonstration of the benefits of long exposure times. The upper image is formed from 39x180s frames captured on 11 March (featured in the March *Newsletter*). The lower image adds an additional 165 frames, recorded on 14 and 17 March 2026, to the stack, giving 204x180 s exposures in total. Both images processed using Pixinsight and RC Astro plugins. Note the many galaxies around M106.



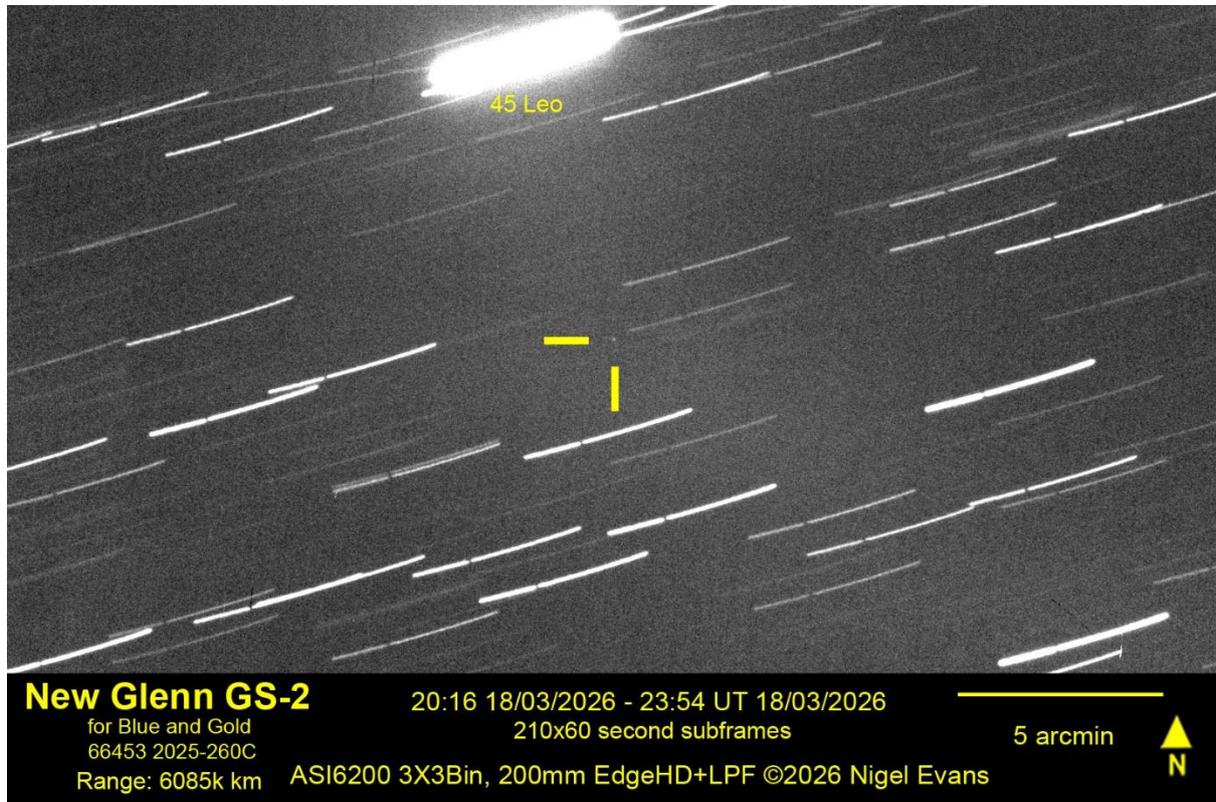
Stack of 39x180s exposures.



Stack of 204x180s exposures.

Nigel Evans

The upper stage of the New Glenn launch vehicle on 18 March 2026, at a distance of just over 6 million kilometres and barely detectable at magnitude *circa* 20!



The rocket, constructed by Blue Origin, the company founded by Amazon billionaire Jeff Bezos, was launched on 13 November 2025 to put a pair of small craft, named *Blue* and *Gold*, en route to Mars in NASA's ESCAPE mission.

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