Journal

of the

Nottingham Astronomical Society

November 2023



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Thursday, November 2nd

Nottingham Emmanuel School Gresham Park Road, West Bridgford, Nottingham, NG2 7YF

7:45pm (doors open at 7:15pm)

This evening we welcome

Dr Emma Chapman of the University of Nottingham

who will be speaking on

Stars and Sensationalism:

Searching for the First Stars in the James Webb Space Telescope Era

Orion by Morning Light



An image taken by John Dignan on 15 October at 5.24 am in Barrow upon Soar with a Canon EOS 90D and a Samyang 14mm f2.8 lens: 0.6 of a second at ISO 6400

Chairman's Message, November 2023

Dear Members,

Welcome as we start approaching Winter, the nights are longer, familiar constellations are returning and the flooding has done no favours to our observatory tracks!! We're still hoping for progress on this, maybe within the next few weeks, so fingers crossed. I hope you all enjoyed the madness of comets, which was a little bit different to our usual topics, but I like to think variation is nice. Next meeting is about the very first stars and our attempt to detect them with Emma Chapman, one of the staff at Nottingham. She does a lot of outreach, has written books, as well as researching early universe stuff. We also have speakers lined up (after some hiccups!) for December and the early part of the new year.

The Plumtree meeting was also fantastic with Jeremy Shears visiting us, and telling us about the possible eruption of a variable star.

In December at the Plumtree meeting we will have our AGM, and hopefully a bit of a party atmosphere as it is close to Christmas.

Best wishes and clear skies,

Julian, NAS Chair

Deep Sky and Solar System images taken on a particularly clear night by Marcus Stone





M15 on the western edge of Pegasus using a Canon 60Da at the prime focus of a 300mm aperture Newtonian telescope. 150 seconds exposure at ISO 800, on October 13th

Jupiter taken on 13th October through 300 mm reflector using a Philips webcam with a 2x barlow lens. 346 stacked frames in Registax, sharpened and digitally enhanced in Photoshop

Sky Notes November 2023

Compiled by Roy Gretton

All times given below are in Universal Time

PHASES OF THE MOON

Phase	Date
Last Quarter	November 5 th
New Moon	November 13 th
First Quarter	November 20 th
Full Moon	November 27 th

This month the Moon is closest to Earth on the 21st, and furthest on the 6th.

THE PLANETS

Mercury will be an evening object throughout November, but always setting before 5pm will never be particularly easy to observe.

Venus continues to be prominent in the morning sky, rising about 4 hours before the Sun, and fading slightly from magnitude -4.5 to -4.2 as it recedes from Earth.

Mars is unobservable this month as it passes through conjunction with the Sun on November 18th.

Jupiter is King of the evening sky, at opposition to the Sun on November 3rd, and visible thoughout the night, shining at magnitude -2.9.



Looking SSW at 10pm on November 13th, the night of the New Moon Three planets in view

Phenomena of Jupiter's satellites

The **reappearance** of Jovian satellites **from eclipse** is the easiest type of phenomenon to observe with a small telescope (say, 50mm aperture). As for most of the month we will viewing Jupiter after opposition, satellites will reappear from eclipse on the east side of the planet (viewed from Earth). Next in ease of observation (with instruments of 100mm aperture and above) are **shadow transits**. In this case, look for a dark spot crossing Jupiter's disk. Lists of eclipse reappearances and shadow transits visible in the evenings this month are given below. In the case of reappearances, start looking **several minutes ahead** of the stated time, because this refers to the moment when Jupiter's shadow bisects the satellite.

November	Reappearance from eclipse of
5 th	Europa 21:52
7^{th}	Io 21:55
14 th	Io 23:50
16 th	Io 18:18
23 rd	Io 20:13
28 th	Ganymede 17:38
30 th	Europa 19:06
30 th	Io 22:08

November	Shadow transit of
6 th	Io begins 22:26
8 th	Io ends 19:05
10 th	Ganymede 18:02 to 19:44
14 th	Europa 17:08 to 19:28
15 th	Io 18:50 to 21:00
17 th	Ganymede 22:04 to 23:45
21 st	Europa 19:44 to 22:03
22 nd	Io 20:45 to 22:55
24 th	Io ends 17:24
28 th	Europa begins 22:20
29 th	Io begins 22:41

Saturn, shining at magnitude +0.8 in the constellation of Aquarius, will be setting at midnight in early November, and at 10pm as the month ends. On November 1st it will be due south at 7:30pm, so this will be a convenient time to take a look at this ringed planet.

Uranus, shining at magnitude 5.6 a few degrees northeast of Jupiter in the constellation of Aries, will be due south shortly before midnight in mid-November. Opposition occurs on the 13th.

Neptune, magnitude 7.8, now 3 degrees south of the celestial equator in the constellation of Pisces, will be due south at 8 pm in mid-November.

METEORS

The famous **Leonids**, though not expected to be prolific this year, put in a very favourable appearance, with peak activity expected in the early morning of November 18th, when the 5 day-old Moon will have long set.

DIARY DATES 2023-2024

Monthly Meetings of the Nottingham Astronomical Society

1. Meetings at
Nottingham Emmanuel School
Gresham Park Road,
West Bridgford,
Nottingham, NG2 7YF

Held on the **FIRST Thursday** of each month (unless otherwise stated) except **August**

Doors open at 7:15pm for 7:45pm start.

These events are normally centred around a talk by a visiting speaker, except Quiz Nights, etc, when NAS members provide the activities.

Normally we have a **Helpdesk** open at each meeting.

Date	Topic	Speaker
November 2 nd	Stars and Sensationalism: Searching for the First Stars in the James Webb Space Telescope Era	Dr Emma Chapman University of Nottingham
December 7 th	(TBA)	Peter Jenkins
January 4 th	Interstellar Interlopers	Phil Sutton
February 1 st	(TBA)	(TBA)
March 7 th	(TBA)	Nial Tanvir

2. Social and Practical Astronomy Meetings at the Burnside Memorial Hall, Plumtree

Church Hill, Plumtree, Nottingham, NG12 5ND Held on the **THIRD Thursday** of each month from **7:30pm**

These meetings are of a more informal nature, providing opportunity for members and guests to share their hobby over a cup of tea or coffee, as well as listening to a short talk or discussion

The next meeting will be on November 16th

Social and Practical Astronomy, Plumtree, November 2023

The October Plumtree meeting saw my friend Professor Jeremy Shears come and talk. Jeremy is past president of the British Astronomical Association and the director of the BAA's Variable Star Section. Jeremy gave us a fascinating talk on past eruptions and the next eruption of recurrent nova, T Coronae Borealis. If you missed the talk you can read about the nova on the BAA's website here.

Chris made Jeremy his favourite cake, coffee cake and he was astounded his name appeared on the top. Thank you, Chris. It was an amazing cake!

Hopefully the November Plumtree will be part two of the filters talk, but as usual I've been so busy I haven't put my mind to that yet.

James Dawson Observatory Director observatory@nottinghamastro.org.uk





Orionid Meteor

by Mark Fairfax

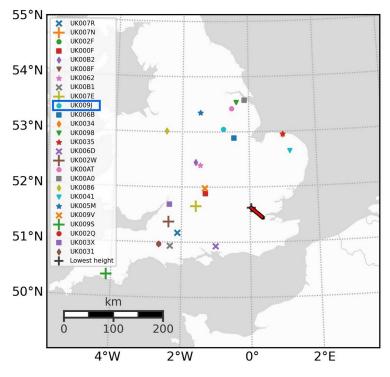
(Credit UK Meteor Observation Network)

Orionid meteor shower - a medium shower with peak around 21st/22nd October and expected ZHR of 20.

I managed to capture a bright Orionid meteor on my UK Meteor Network camera set-up on 22nd Oct 03:07 BST.

(visual magnitude -2.7; Vg 66.54km/s & mass 0.15g)

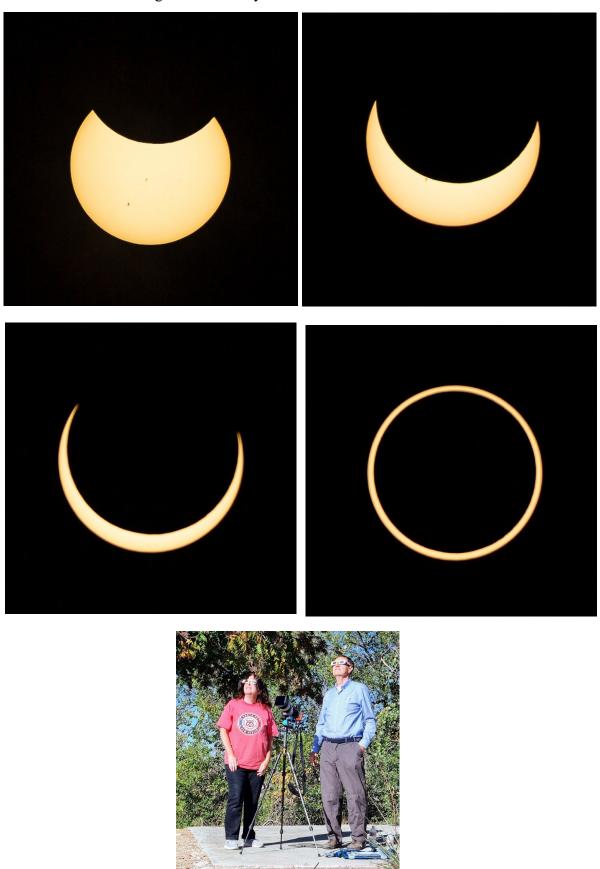




My UKMON station ID is UK009J and the bold red line on the UK map is the passage of the meteor.

The Annular Eclipse of the Sun, October 14th

Jack and Sue Worsnop travelled to Albuquerque, New Mexico, to observe this event and have sent these fine images from the day.



Jack and Sue subsequently visited the Very Large Array radio observatory on the Plains of San Agustin in central New Mexico





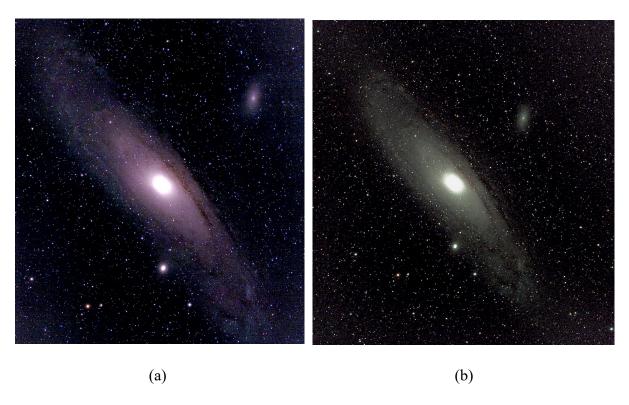


An image of the Sun acquired by Richard Field using Seestar S50 on 22nd October



Images of M31 taken with Two Robotic Instruments

On the nights of the 13th and 14th of October, Richard Field imaged the galaxy M31 in Andromeda with (a) Stellina and no filter, and (b) Vespera using a ZWO Duo Narrowband filter.



Richard's Three Robotic Telescopes Stellina, Seestar and Vespera



Advertisements

FOR SALE

Meade ETX90 Maksutov-Cassegrain telescope

with

Deluxe field tripod Carrying case 4 Super Plossl eyepieces (all 1.25-inch) Erect image roof prism 2x apochromatic Barlow lens (1.25-inch)





£600 or near offer

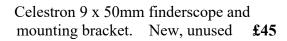
Contact Mrs Clayton

01949 860022



FOR SALE

Celestron dovetail bar to fit C11 telescope. New, unused £15







Achromatic object glass 50mm diameter focal length approx 40 cm

£5



British army brass telescope by Broadhurst Clarkson 42mm aperture, with leather sling £10



Contact Roy Gretton, 07483868162 journal@nottinghamastro.org.uk

Telescope looking for a good home

We've been contacted by someone who lives near Langar who no longer wants this telescope. It is a 114mm reflector with GOTO mount. It needs a new battery pack, but these can be made or sourced quite easily. It comes with two eye pieces. The gentleman is happy to exchange the telescope for a couple bottles of wine or some such exchange. He just wants it to go to a good home and get used.

If you are interested in this, please contact Alan:

Alan Dodson <u>alandodson2@gmail.com</u>





The Nottingham Astronomical Society: E - SERVICES

Whether or not you are a NAS member, you can keep up to date with details of the Society's meetings and other events by visiting the NAS website: www.nottinghamastro.org.uk

NAS on Facebook

You are welcome to connect with other members and friends of the NAS on Facebook by going to: http://www.facebook.com/nas.org.uk

NAS on Twitter

The Society has a Twitter account at https://twitter.com/NottinghamAstro

NAS Journal e-mailing list

To register for your monthly e-mailed link to the NAS Journal, and a copy of our SkyNotes, just e-mail secretary@nottinghamastro.org.uk

You don't have to be a Society member to take advantage of this service. If you happen to change your email address, please remember to inform the Society by emailing us at treasurer@nottinghamastro.org.uk

Nottingham Astronomical Society

Affiliated to the British Astronomical Association Member of the Federation of Astronomical Societies Supporters of the Commission for Dark Skies

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Meetings

Our formal meetings, often with an illustrated talk by a guest speaker, **normally** are held on the first Thursday of each month (except in August) at:

Nottingham Emmanuel School Gresham Park Road, West Bridgford, Nottingham, NG2 7YF

Doors open 7:15pm

Meetings start 7:45pm

Meetings end 9:15 pm

These meetings are open to the public, and visitors are welcome to attend, subject to a charge of £3 per meeting for adults.

Annual subscriptions 2023

Full £30

Joint rate for partners

living at the same address £45 Under-18s and full-time students £5

Subscriptions become due on 1st January. Half-price subscription is charged if joining after 30th June (minimum subscription £5).

Please make cheques payable to: Nottingham Astronomical Society.

If you would like more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary <u>secretary@nottinghamastro.org.uk</u> or speak to any NAS committee member at one of the regular monthly meetings.

The Nottingham Astronomical Society

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