



OASI News

The newsletter of Orwell Astronomical Society (Ipswich)



Full Solar Disc - 10th August 2022 - 07:06:44 UTC - North Essex, UK

Lunt 60mm DS THa /B1200CPT & ZWO ASI174mm

Sun in Ha on 10 August 2022

Photo by John Hughes

Trustees:

Mr Roy Adams Mr Neil Morley Mr David Payne

Honorary President:

Dr Allan Chapman D.Phil MA FRAS

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Society Notices

Dear Members,

We use a Zoom Pro account for online meetings. If you would like to join in, please email Paul Whiting, treasurer@oasi.org.uk

I would like to wish everybody clear skies, stay safe and I hope to see you soon.

Andy Gibbs, Chairman

Society Contact details

Email queries: info@oasi.org.uk

Facebook: Orwell Astronomical

Twitter: @OASIPswich

YouTube:
<https://www.youtube.com/channel/UCHgxe3QAeRVWf7vkjKkCI2Q>

Members-only message board

<https://groups.io/g/OASI>

Observatory (meeting nights only)
07960 083714

**Please send material for the OASI
web site and newsletter
e.g. observations, notices of events,
general interest articles, to
news@oasi.org.uk**

The CLOSING date is the 15th day of the month

Access into the School Grounds and Observatory Tower

Please use the third gate into the school grounds by the gym.

Areas out of Bounds

Access to the Observatory is only via the black door at the foot of the Observatory tower, which leads to the staircase and thence to the spiral staircase up to the Observatory. If the black door is locked, please phone the observatory mobile during meeting hours. Kindly check/amend the number shown on your 2021 membership card.

Please do NOT explore other routes. When in doubt, ask or call the Observatory mobile.

Remember this is a school and straying into the main part of the school where the pupils reside would cause the society big problems and could see us losing the use of the observatory. Any member found to be anywhere other than the approved access route or the observatory area will face serious sanctions up to and including expulsion from OASI.

Please note that access time for all observatory member nights is after 20:15

Articles for OASI News

News, pictures and articles for this newsletter are always welcome. Details above.

Please submit your articles in any of the following formats:–

Text: txt, rtf, rtf, doc, docx, odt, Pages, pdf
Spreadsheets: xls, xlsx, OpenOffice/LibreOffice, Numbers
Images: tiff, png, jpg
Please send tables as separate files in one of the above formats.

If you don't feel up to writing a major article, perhaps you might write a short note for OASI News along the lines of "This month I have mostly been observing/constructing/mending/reading/etc.?"

Newsletter archive www.oasi.org.uk/NL/NL_form.shtml

Authors, please note that your articles will be publicly available worldwide!

Reproducing articles from OASI News

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Committee 2022

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 FRAS	Finance, Supervision of applications for grants. Visits by outside groups, Observatory tours, Public appreciation of astronomy, Outreach activities.
Committee	James Appleton	Committee meeting minutes, Web site
	Martin Cook	Membership, Tomline refractor maintenance & user testing
	Matt Leeks	Safety & security
	Peter Richards	Lecture meetings, Email distribution lists
	John Wainwright	Equipment curator
	Mike Whybray	Astronomy Workshops, Child protection officer, Orwell Park School Astronomy Club.
	Andy Wilshere	Librarian
	Avtar Nagra	OASI @ Newbourne
Assistants	Martin Richmond-Hardy	Newsletter, OASI @ Newbourne

Committee Meeting

The next Committee Meeting will be on Friday 2 September at 8:00pm via Zoom. All members welcome.

Welcome to new members

George Fox David Strong Alex Dale Stuart Dedman (returning)

OASI and BAA Events

Please note that the listed events may change depending on the progress of the pandemic. For the latest event details, please see www.oasi.org.uk/Events/Events.php

There's a Google Calendar on the OASI web site with the latest dates (and corrections!). If you want to easily add OASI Events to your own computer/phone/tablet calendar application click this button on the website Events page (bottom right of the calendar) or use this address to access this calendar from other calendar applications.



<https://calendar.google.com/calendar/ical/ljhs9db7lncki4sojo7092vfv%40group.calendar.google.com/public/basic.ics>

For other astronomy news and astro pictures try our

Twitter feed <https://twitter.com/OASlpswich>

Facebook page <https://www.facebook.com/pages/Orwell-Astronomical/158256464287623>

Date, Time & Location	Contact	Event
Weekly, every Wednesday, from 20:15	Martin Cook, Roy Gooding	Observatory open
Friday 2 Sept 20:00 Zoom	Martin Cook membership@oasi.org.uk	OASI Committee meeting via Zoom
Friday 9 Sept 20:00 Zoom	Martin Cook membership@oasi.org.uk	Zoom Talk (Recorded) "Observing the Satellites of the Giant Planets" with Mike Foulkes
Monday 12 Sept 19:30 Newbourne Village Hall	Martin R-H newbourne@oasi.org.uk	OASI at Newbourne
Thursday 15 Sept 20:00 Zoom	Martin Cook membership@oasi.org.uk	3rd Thursday Zoom meeting
Monday 26 Sept 19:30 Newbourne Village Hall	Martin R-H newbourne@oasi.org.uk	OASI at Newbourne Sky Notes
Tue 11 Oct 2022 20:15 Orwell Park Observatory	Paul Whiting, FRAS treasurer@oasi.org.uk	Public access event. Observatory tour. \ Booking essential.
Tue 8 Nov 20:15 Orwell Park Observatory	Paul Whiting, FRAS treasurer@oasi.org.uk	Public access event. Observatory tour. \ Booking essential.
Tue 6 December 5 Orwell Park Observatory	Paul Whiting, FRAS treasurer@oasi.org.uk	Public access event. Observatory tour. \ Booking essential.

Meetings via Zoom

To join, please first contact Paul Whiting, treasurer@oasi.org.uk – OASI members only. Be sure to install/update to the latest version of Zoom – there's no need to set up an account. Go to <https://zoom.us/join> and enter the meeting ID or personal link name. You will have received a link from the meeting organiser.

As well as for some lectures & talks, we meet via Zoom on the 3rd Thursday of every month at 8pm.

OASI @ Newbourne

Martin Richmond-Hardy
newbourne@oasi.org.uk

We meet at Newbourne Village Hall, Mill Lane, IP12 4NP on the 2nd and 4th Mondays from 19:30.

Visitors are welcome but we do ask you to join the Society after two visits.

<http://www.oasi.org.uk/OASI/Membership.php>

Newbourne dates for 2022

September	12	26 (A)
October	10	24 (A)
November	14	28 (A)
December	12	

We open up for all meetings at 7:30pm. Astro News/Star Guide (A) at 7:45pm followed by any Talks (T), Workshops (W) and the occasional Quiz (Q).

Stargazer's Guide

On the last meeting each month, at 19:45, Bill Barton FRAS will give a short presentation of what can be viewed in the following 4 weeks plus a reminder of OASI events. These will be available on our website.

Paul Whiting FRAS will give occasional Astro News briefings.

Astronomy Workshops/Informal talks

Contact Mike Whybray Monday meetings start at 7:30pm. Workshops / Talks start at 8pm

If you are a new OASI member, or haven't been to one of these informal workshops before, they are a mixture of events of different characters including beginners talks, interactive workshops, films, etc., suitable for all.

Do you have a subject you could workshop/talk? You could do a short one, or share the effort with a partner. Drop Mike Whybray a line! workshops@oasi.org.uk

Lectures – via Zoom

Contact: Peter Richards lectures@oasi.org.uk

The start time for all talks will be 8pm and, as usual, the talks will usually be held on a Friday evening. All meetings are currently via Zoom. Contact Paul Whiting if you can't find the details.



Athaneum Astro Society

www.3a.org.uk/index.htm

Meetings (<http://www.3a.org.uk/programme.htm>) at Wkepstead Community Centre, Bury Road, Wkepstead, Bury St Edmunds, IP29 4TA <http://www.3a.org.uk/contact.htm> .

LYRA Lowestoft & Yarmouth Regional Astronomers

For events please see <http://www.lyra-astro.co.uk/events/>

DASH Astro

Darsham And Surrounding Hamlets <http://dash-astro.co.uk>

Meetings are normally held at New Darsham Village Hall and all DASH Astro observing sessions will take place at Westleton Common. ASOG observing sessions and locations may be arranged at the time of observation. Unless stated all group meetings will take place from 7:30 pm. on Sundays.

Meetings <https://www.dash-astro.co.uk/Events>

Kelling Heath Autumn Star Party

Tuesday Sept 20th – Tuesday Sept 27th

<https://gostargazing.co.uk/events/kelling-heath-star-party-autumn-2022/>

<https://las-skycamp.org/>

BAA news & webinars

For full details of all meetings or cancellations, please go to <https://britastro.org/meetings/2022>.

The BAA Radio Astronomy Section

BAA Radio Astronomy Section have been enjoying talks, seminars and tutorials via Zoom and are available on the BAA YouTube channel. <https://www.youtube.com/user/britishastronomical/playlists>

BAA RA Section Autumn programme 2022		
Sep. 2nd. 19:30 BST (18:30 UTC)	Dr Helen Russell School of Physics & Astronomy Nottingham University	'An X-ray view of the Universe
Oct. 7th. 19:30 BST (18:30 UTC)	Dr Samuel Lander Theoretical astrophysicist. Univ. East Anglia. The main focus of research is neutron stars: the collapsed remnants of a normal star's core following a supernova.	All about Magnetars A magnetar is a type of neutron star with a particularly strong magnetic field. This field powers a range of outburst activity, from X-ray and gamma-ray bursts and flares, to the recently discovered fast radio bursts. This talk will survey the observations and give a picture of how a magnetar releases all this energy.

BAA RA Section Autumn programme 2022		
<p>Nov. 4st. 19:30 GMT (19:30 UTC)</p>	<p>Prof. John Richer The Cavendish Laboratory Cambridge Univ.</p> <p>John Richer is an astrophysicist with expertise in the field of star formation, with a particular interest in radio and submillimetre observations of young stars and protostellar systems.</p>	<p>'On ALMA' Atacama Large Millimetre/submillimetre Array</p> <p>ALMA is a submillimetre interferometer at the Chajnantor site in the Atacama Desert at 5100 metres above sea level.</p> <p>The principle research areas are millimetre and submillimetre imaging and spectroscopic observations of star-forming regions in our own Galaxy, in nearby galaxies, and in the very distant universe. These observations provide an unobscured view of the cold universe.</p>
<p>Dec. 2st. 19:30 GMT (19:30 UTC)</p>	<p>Dr. Emma Chapman Guest star: JWST Royal Society Dorothy Hodgkin fellow based at the University of Nottingham.</p>	<p>Christmas Lecture 'Exploring the Dark Ages of the Universe by Radio'</p> <p>The first stars ever! 400 million years after the big bang. This era has never been observed and constitutes over a billion-year gap in our knowledge.</p>

Astronomy Anagram

from the library.

Each answer is a single word. Take the first letter of each answer, giving you when finished 6 letters. Unscramble these letters to form the name of emission stars. For help with the final word the following clue may be used:

“pre-main sequence sources of intermediate-mass (canonically defined as $2 M_{\odot} \lesssim M \lesssim 10 M_{\odot}$, spectral type B, A, and F)”

- Question 1: A non-spherical moon originally known as Jupiter VII.
- Question 2: A sensitive instrument for measuring radiant energy by the increase in the resistance of an electrical conductor.
- Question 3: In spectroscopy it is a physical constant relating to atomic spectra.
- Question 4: The theoretical boundary where the Sun's solar wind is stopped by the interstellar medium.
- Question 5: Third largest natural satellite of Saturn.
- Question 6: Long-term variations and cyclic components of solar activity . Typical cycle length of about 88 years.

The Night Sky in September 2022

Martin RH

All event times (BST) are for the location of Orwell Park Observatory 52.0096°N, 1.2305°E.

Times are BST unless otherwise stated.

Sun, Moon and planets

Sources:

<http://heavens-above.com/PlanetSummary.asp> <http://heavens-above.com/moon.aspx>

Object	Date	Rise	Set	Mag.	Notes
Sun	1	06:07	19:42		Autumn Equinox Sept 23, 02:03
	30	06:54	18:35		
Moon	1	12:00	21:33		First Quarter 03 Sept 19:08 Perigee 07 Sept 19:19 Full Moon 10 Sept 10:59
	30	12:38	20:24		Last Quarter 17 Sept 22:52 Apogee 19 Sept 15:44 New Moon 25 Sept 22:55
Mercury	1	08:52	20:01	0.5	Inferior conjunction 23 Sept
	30	05:49	18:05	1.9	
Venus	1	04:47	19:19	-3.8	Perihelion 4 Sept
	30	06:20	18:29	-3.8	
Mars	1	22:39	14:24	-0.1	
	30	21:25	13:40	-0.6	
Jupiter	1	20:32	08:46	-2.7	Opposition 26 Sept
	30	18:32	06:31	-2.8	
Saturn	1	19:10	04:21	0.3	
	30	17:13	02:17	0.5	
Uranus	1	21:44	12:50	5.7	
	30	19:49	10:53	5.7	
Neptune	1	20:09	07:36	7.8	
	30	18:14	05:38	7.8	

Occultations during September 2022

https://iota-es.de/moon/grazing_descrx101.html and <http://www.lunar-occultations.com/iota/bstar/bstar.htm>

Observers are encouraged to download and install the [Occult](#) software program [Windows only] to generate predictions for their own particular site coordinates.

Meteor showers during September 2022

Source: BAA Handbook 2021 p26-27 and <https://in-the-sky.org/newsindex.php?feed=meteors>

Shower	Normal limits	Maximum	Max RA/Dec.°	ZHR at Max	Notes
α-Aurigids	Aug 28 – Sep 5	Aug 31	06:04 (091°) +39°	5	Short-lived outbursts in activity in 1994 and 2007. Very favourable.
September ε-Perseids	Sep 5 –21	Sep 10	03:16 (049°) +40°	5	Stronger than usual display seen in 2015. Unfavourable

For radio observation, use reflections from Graves radar on 143.050MHz or the Brams transmitter in Belgium on 49.97MHz and UK GB3MBA on 50.408MHz <https://www.ukmeteorbeacon.org/Home>

See also https://www.popastro.com/main_spa1/meteor/radio-meteor-observing-2020/.

Visible ISS passes ≥15° max altitude

Source: <http://heavens-above.com/PassSummary.aspx?satid=25544>

Times are BST. Predictions are approximate (27 August) due to craft adjustments. Check the day before.

Date	Bright-ness (mag)	Start			Highest point			End		
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
01 Sep	-1.1	02:56:32	15°	E	02:56:32	15°	E	02:57:18	10°	E
01 Sep	-3.8	04:29:26	30°	WSW	04:30:55	70°	SSE	04:34:15	10°	E
02 Sep	-3.4	03:42:57	53°	SE	03:42:57	53°	SE	03:45:54	10°	E
02 Sep	-3.8	05:15:53	10°	W	05:19:16	86°	S	05:22:38	10°	E
03 Sep	-1.3	02:56:28	18°	E	02:56:28	18°	E	02:57:29	10°	E
03 Sep	-3.9	04:29:22	30°	W	04:30:53	85°	S	04:34:16	10°	E
04 Sep	-3.6	03:42:54	65°	ESE	03:42:54	65°	ESE	03:45:53	10°	E
04 Sep	-3.8	05:15:52	10°	W	05:19:14	74°	SSW	05:22:35	10°	ESE
05 Sep	-1.3	02:56:29	18°	E	02:56:29	18°	E	02:57:30	10°	E
05 Sep	-3.9	04:29:23	31°	W	04:30:52	83°	S	04:34:13	10°	E
06 Sep	-3.3	03:43:02	58°	E	03:43:02	58°	E	03:45:50	10°	E
06 Sep	-3.5	05:15:57	11°	W	05:19:06	49°	SSW	05:22:22	10°	SE
07 Sep	-1	02:56:46	15°	E	02:56:46	15°	E	02:57:25	10°	E
07 Sep	-3.8	04:29:41	38°	W	04:30:45	63°	SSW	04:34:04	10°	ESE
08 Sep	-2.6	03:43:33	36°	ESE	03:43:33	36°	ESE	03:45:43	10°	ESE
08 Sep	-2.7	05:16:30	14°	W	05:18:50	28°	SSW	05:21:45	10°	SSE
09 Sep	-3.2	04:30:33	38°	SSW	04:30:33	38°	SSW	04:33:39	10°	SE
10 Sep	-2	05:17:47	15°	SW	05:18:21	15°	SW	05:20:22	10°	S
15 Sep	-1.6	21:11:57	10°	SSW	21:12:52	16°	SSW	21:12:52	16°	SSW

Date	Bright-ness (mag)	Start			Highest point			End		
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
16 Sep	-2.3	20:23:59	10°	SSW	20:26:34	21°	SE	20:26:53	20°	SE
17 Sep	-2.9	21:11:09	10°	SW	21:13:36	39°	SSW	21:13:36	39°	SSW
18 Sep	-3.1	20:22:51	10°	SW	20:25:59	37°	SSE	20:27:15	26°	ESE
18 Sep	-1.2	21:59:10	10°	W	22:00:09	18°	W	22:00:09	18°	W
19 Sep	-2.6	19:34:40	10°	SSW	19:37:34	27°	SSE	19:40:29	10°	E
19 Sep	-3.6	21:10:39	10°	WSW	21:13:39	64°	SW	21:13:39	64°	SW
20 Sep	-3.7	20:22:10	10°	WSW	20:25:30	61°	SSE	20:27:03	28°	E
20 Sep	-1.3	21:58:49	10°	W	21:59:56	19°	W	21:59:56	19°	W
21 Sep	-3.3	19:33:45	10°	SW	19:37:00	47°	SSE	19:40:15	10°	E
21 Sep	-3.6	21:10:15	10°	W	21:13:16	69°	WSW	21:13:16	69°	WSW
22 Sep	-3.8	20:21:42	10°	W	20:25:04	81°	S	20:26:32	31°	E
22 Sep	-1.1	21:58:25	10°	W	21:59:25	18°	W	21:59:25	18°	W
23 Sep	-3.7	19:33:08	10°	WSW	19:36:30	72°	SSE	19:39:46	11°	E
23 Sep	-3.3	21:09:50	10°	W	21:12:39	59°	W	21:12:39	59°	W
24 Sep	-3.8	20:21:15	10°	W	20:24:38	86°	S	20:25:52	36°	E
24 Sep	-0.9	21:58:00	10°	W	21:58:45	15°	W	21:58:45	15°	W
25 Sep	-3.8	19:32:39	10°	W	19:36:02	86°	S	19:39:04	12°	E
25 Sep	-2.8	21:09:23	10°	W	21:11:57	44°	WSW	21:11:57	44°	WSW
26 Sep	-3.8	20:20:47	10°	W	20:24:09	72°	SSW	20:25:09	41°	ESE
27 Sep	-3.8	19:32:10	10°	W	19:35:32	82°	S	19:38:21	14°	E
27 Sep	-2.2	21:08:57	10°	W	21:11:14	30°	WSW	21:11:14	30°	WSW
28 Sep	-3.2	20:20:17	10°	W	20:23:33	48°	SSW	20:24:28	36°	SSE
29 Sep	-3.5	19:31:38	10°	W	19:34:58	62°	SSW	19:37:43	14°	ESE
29 Sep	-1.5	21:08:44	10°	W	21:10:36	19°	SW	21:10:36	19°	SW
30 Sep	-2.2	20:19:52	10°	W	20:22:48	28°	SSW	20:23:54	23°	S

Starlink passes

<https://heavens-above.com/AllPassesFromLaunch.aspx>

For a dynamic 3-D display, see <https://heavens-above.com/StarLink.aspx>

Astronomy on the radio

Bill Barton's Radio Broadcast

ICRFM (Ipswich Community Radio) 105.7 MHz at about 08:25 in the morning of the first Wednesday of each month. I aim to cover what there is to see in the sky and then a little bit on something topical. ICRFM is also available to listen to over the Internet and there is a listen again option on their website.

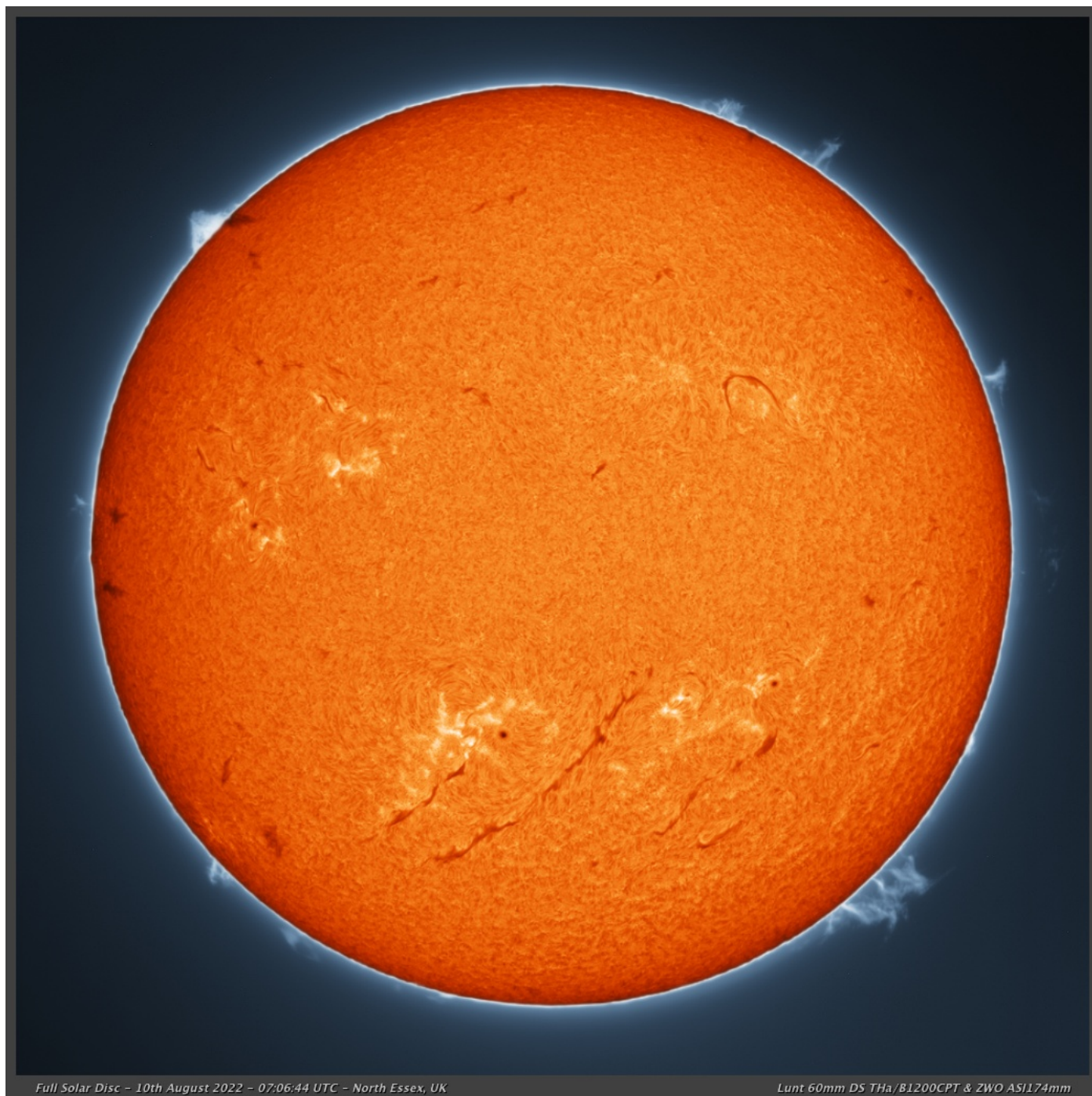
<http://www.icrfm.com>

Solar imaging

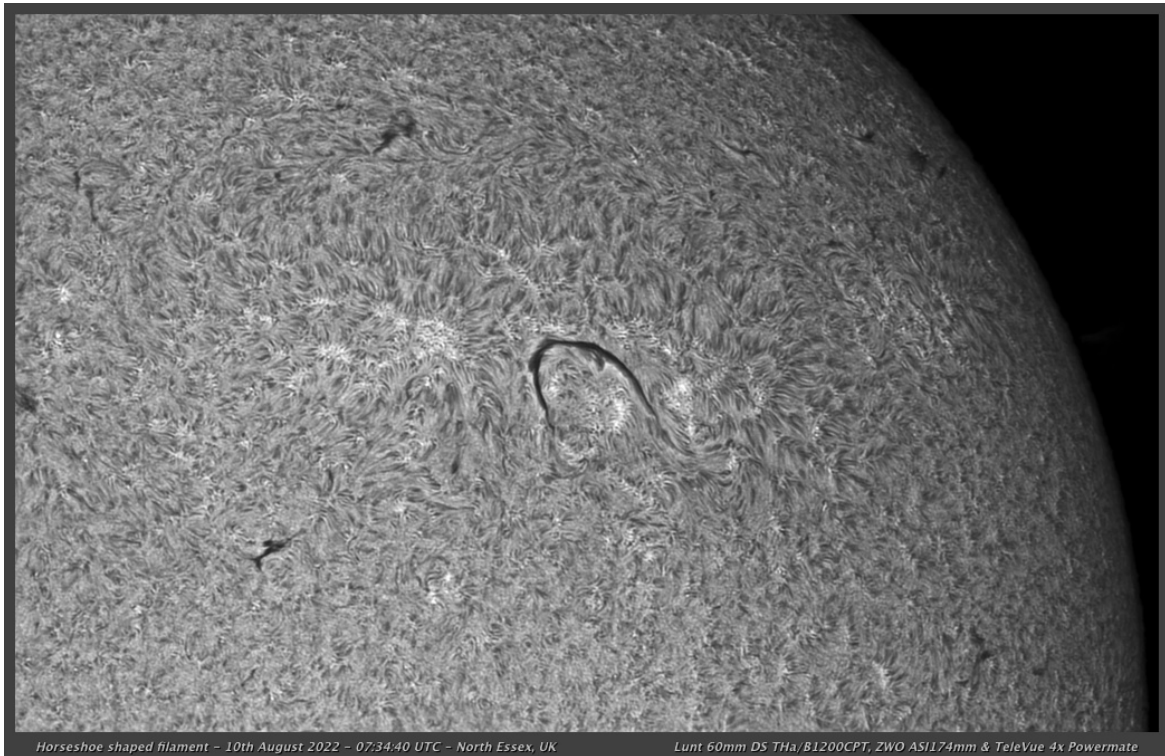
John Hughes

10 August

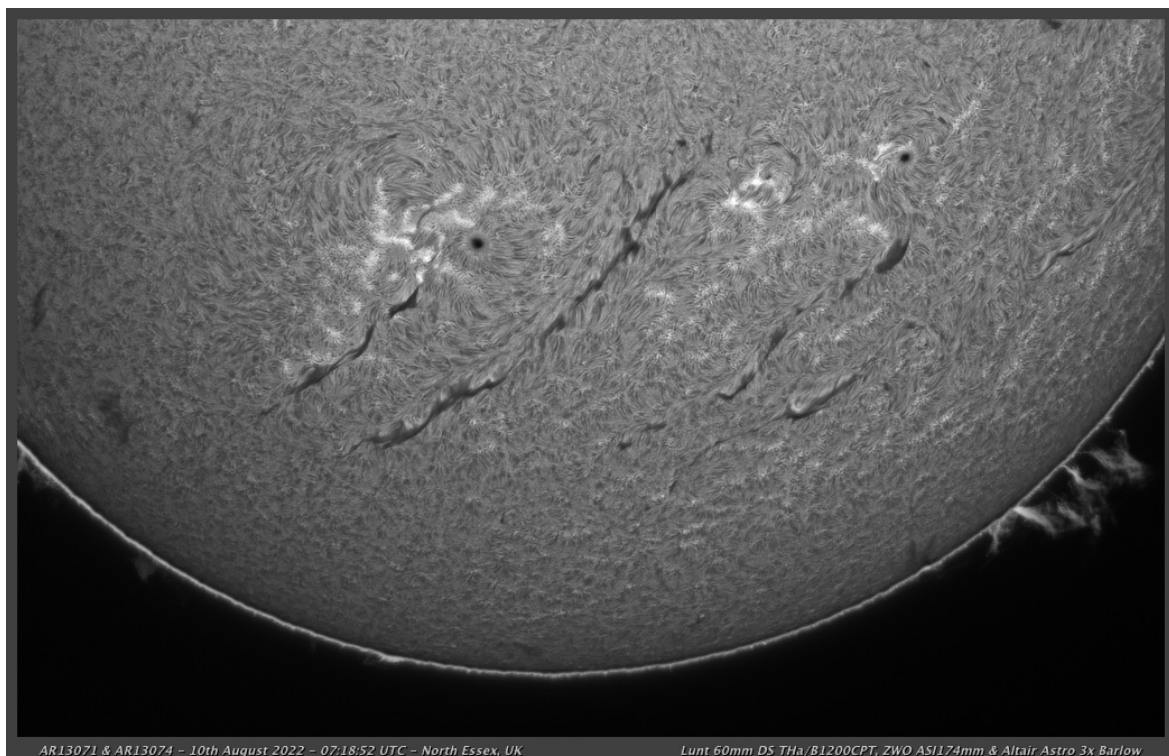
Below are a selection of images taken on 10 August. Some nice prominences in the North West but only some small AR's visible today. The Sun is quiet by recent standards but still some interesting areas of activity on show. Equipment is detailed in each image, the prominence and time lapsed whilst not labelled were captured using the Lunt 60mm scope, ASI174mm camera and TeleVue 4x Powermate.



- 1. First up is the solar disc. Nothing too dramatic on the chromosphere, however, there are some nice proms and filaproms on view.**

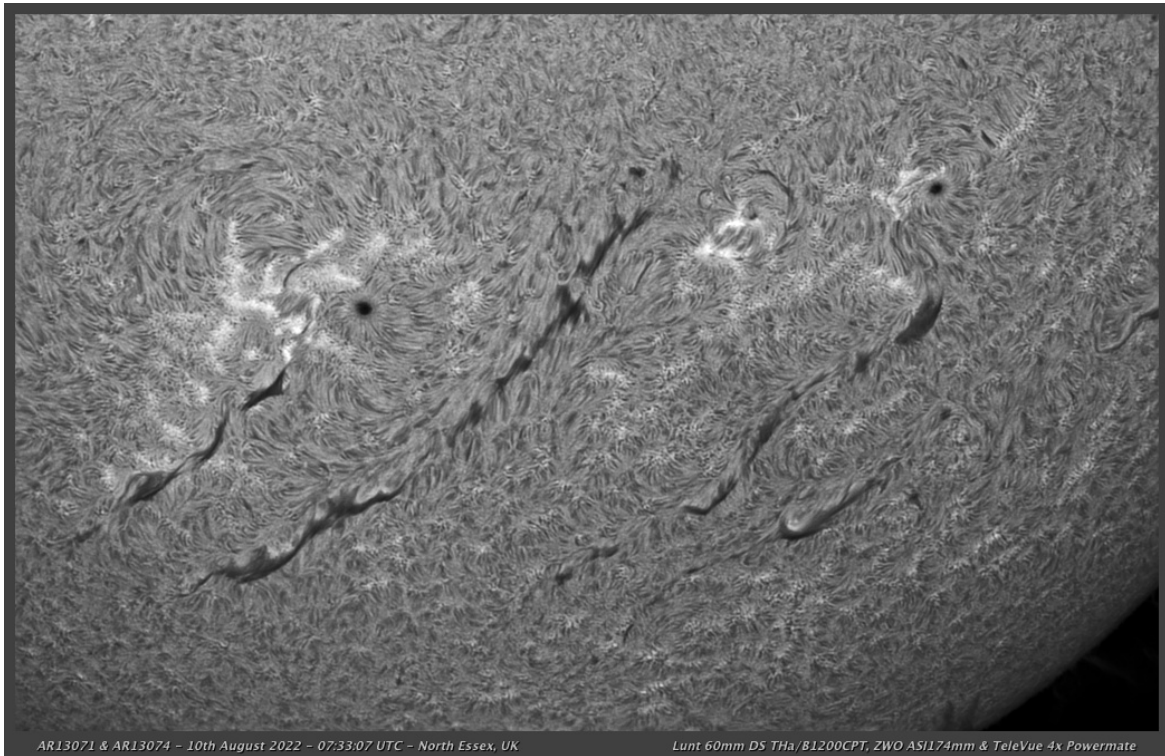


2. Next is a nice horseshoe shaped prominence (I probably wouldn't have given this a second glance had the surface been more active but it was nice change of pace to capture something like this).

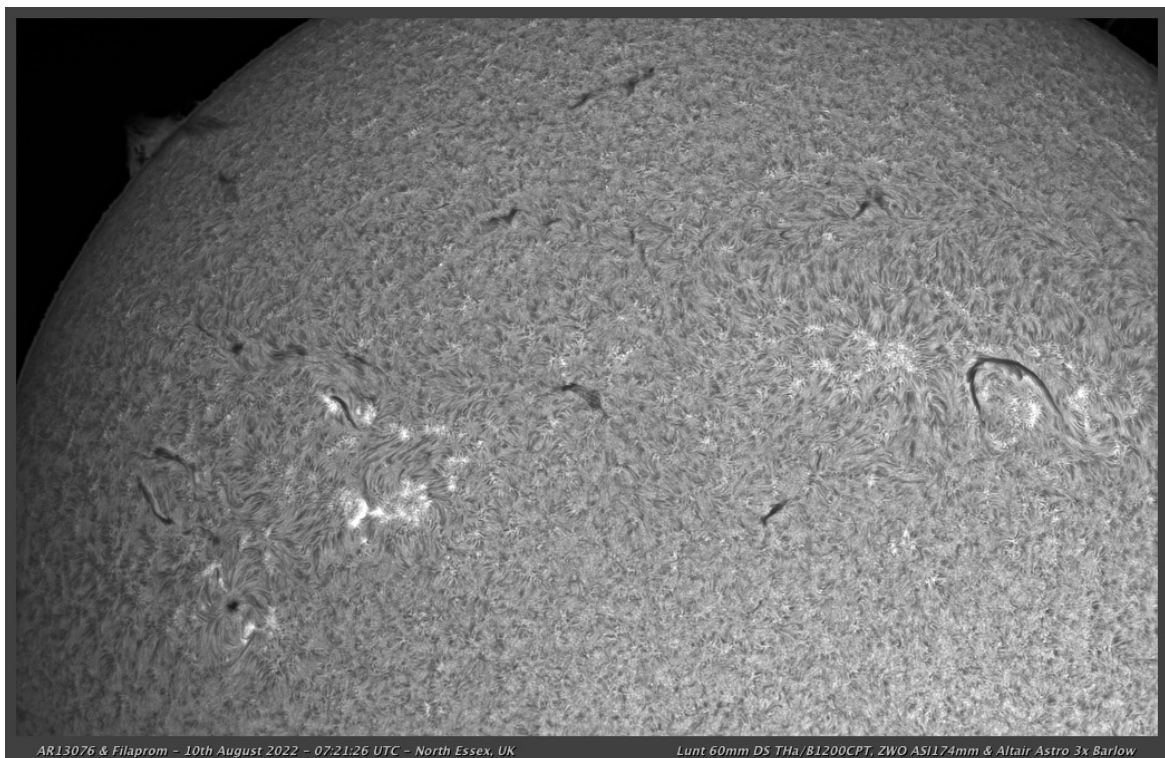


3. More filaments in the Southern Hemisphere which reminded me of tiger stripes. First glimpse of the prominence on the South West limb too. AR13071 is visible to the West (right) located S13W36. This is a single sunspot spot region classified HSX and reducing in size. This region has not produced a single flare yet. To the far left (S18E01) we have AR13074. Like AR13071 this is a single spot as well as being classified the same (HSX) but slightly larger in area. This region got active on 8th August producing two small B class

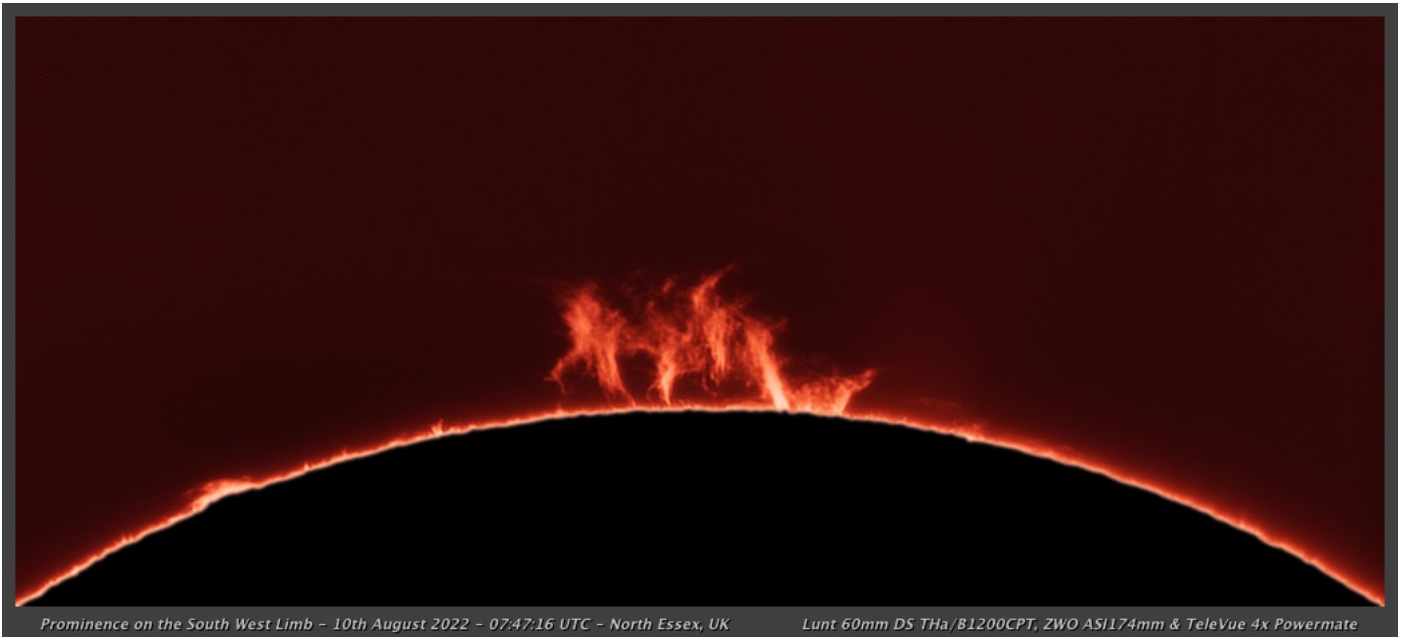
flares. Between the two is AR13077. Classified CSO this is located S13W24 and is growing in size and sunspots, having increased from 4 to 6 spots overnight. This region has yet to produce any flares.



4. Same image as above but at higher magnification.



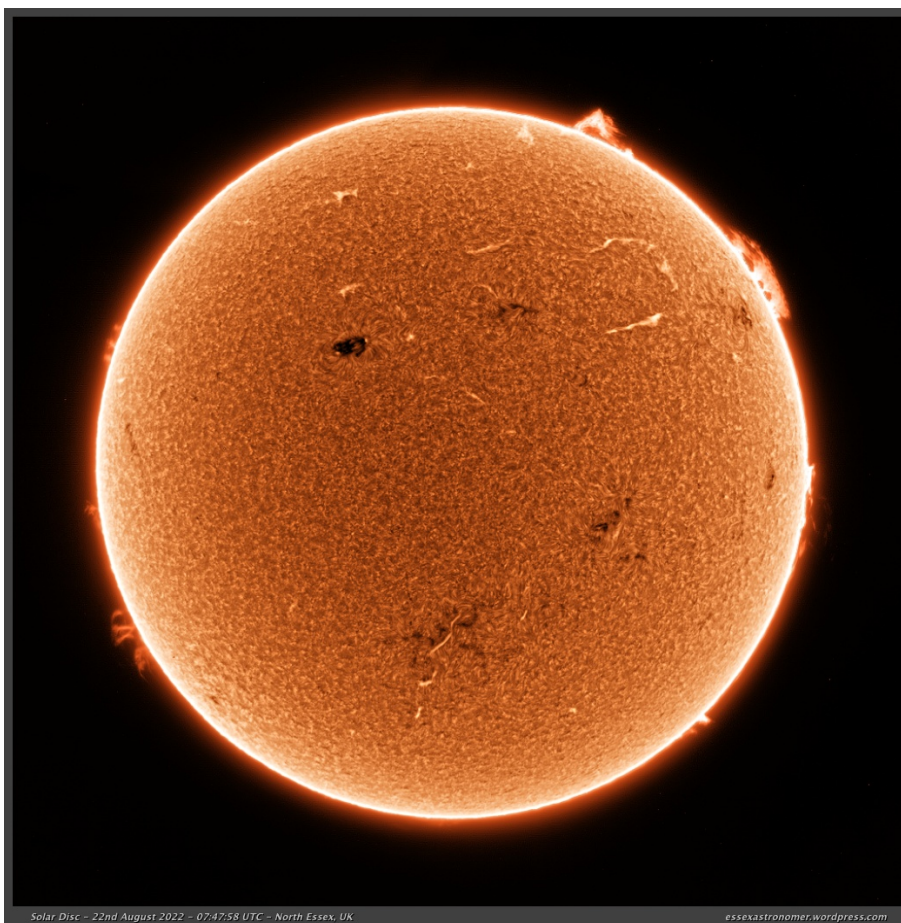
5. Heading up North we have AR13075 and AR13076. The former has no major features whereas AR13076 has a single spot. By far the largest active region visible on the solar disc it too is classified HSX and is located N12E20. It has produced a single B class flare earlier this morning. Visible on the limb is a small prominence and filaprom.



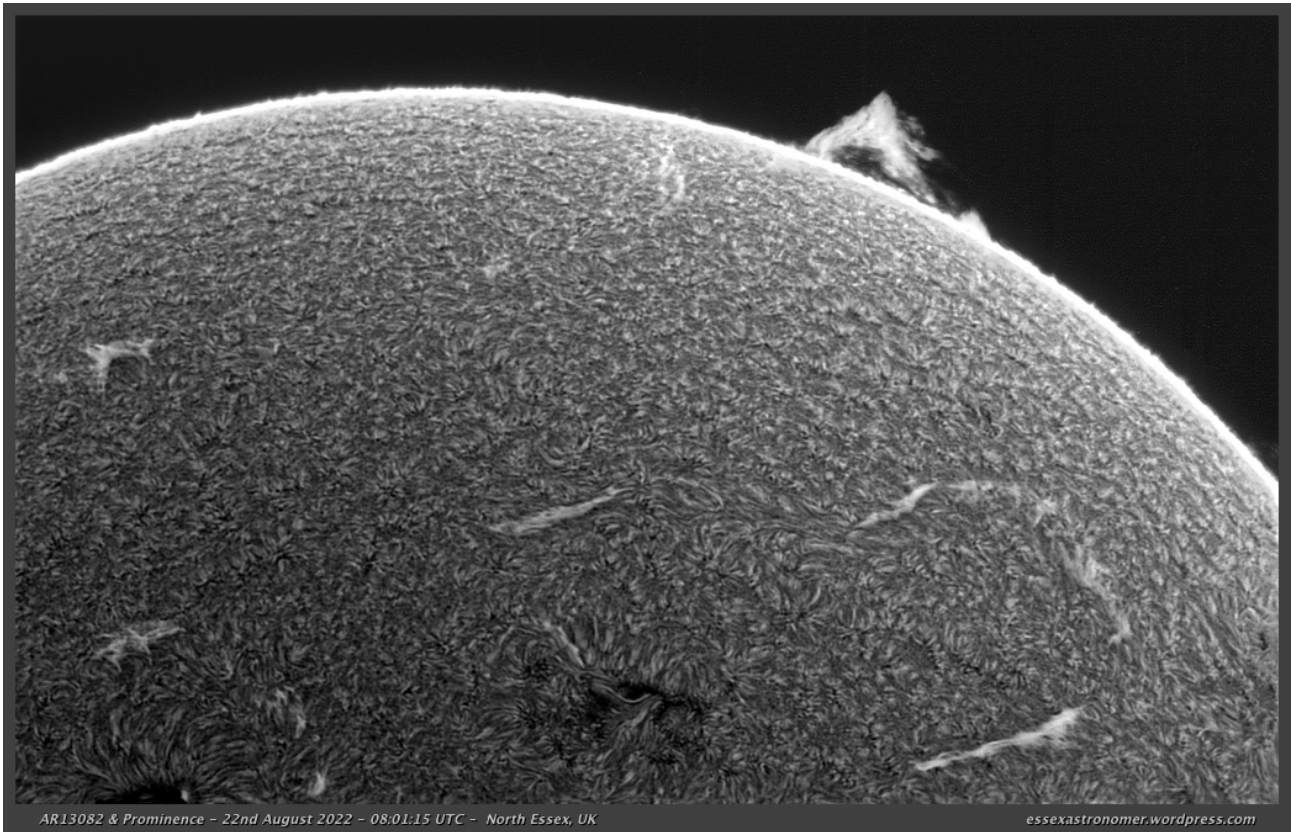
6. Lastly we have the large prominence on the South West limb.

22 August

Here are a few images from 22nd August which I managed to capture before the clouds rolled in. Some nice prominences in the North West but only some small AR's visible today.



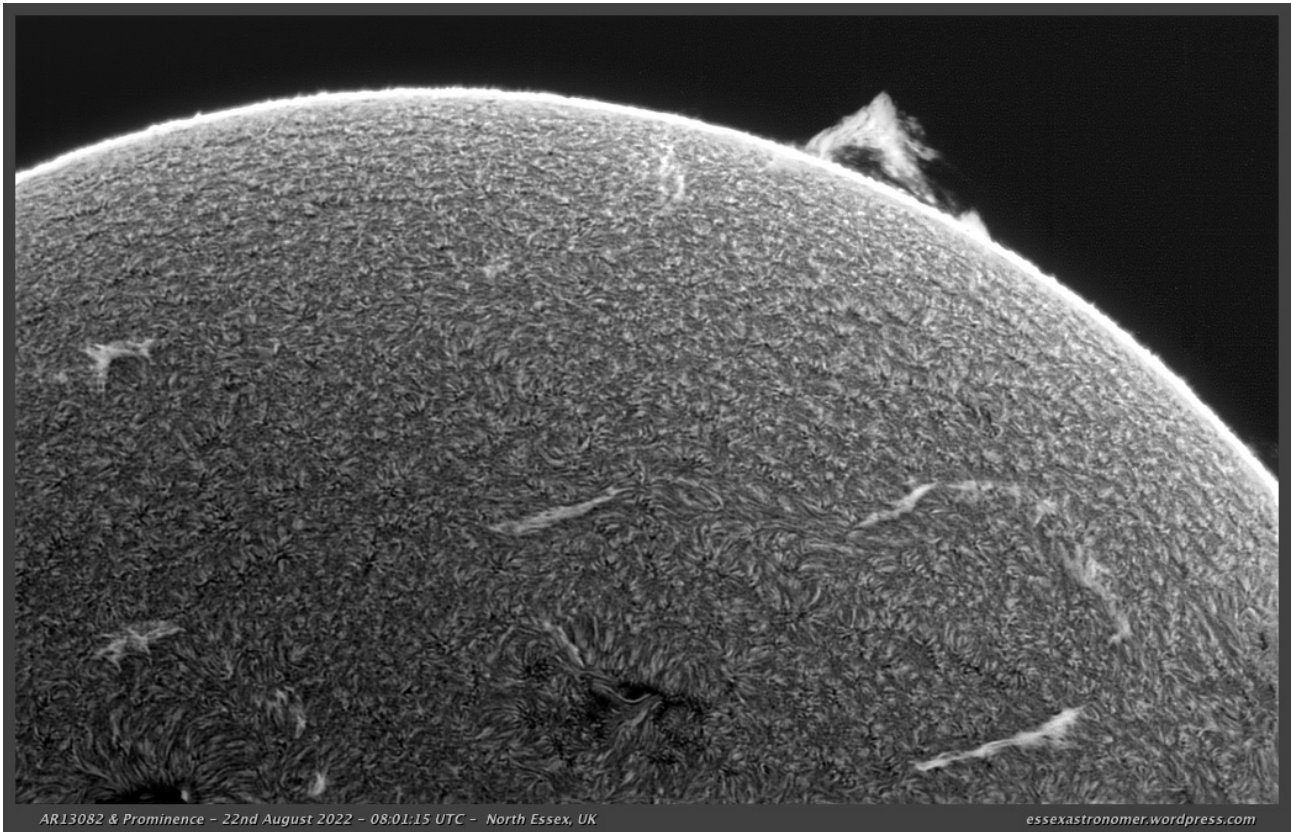
Solar Disc showing the relative positions of the prominences and AR 13081, AR13082 and AR13085.



The two largest prominences located in the north west of the solar disc along with AR13081 approaching the western limb.



AR13085 clearing showing the magnetic field lines between the two sunspots.



AR13082 located centre-bottom of the image and the pyramid prominences on the northern limb.

All the solar images were captured with the Lunt 60mm DSTHa/ BI200CPT, ZWO ASI174mm camera and SkyWatcher EQ6R Pro mount. For images 2, 3 and 4 I introduced a TeleVue 4x Powermate into the image train.

CEERS Epoch 1: Color Images Release

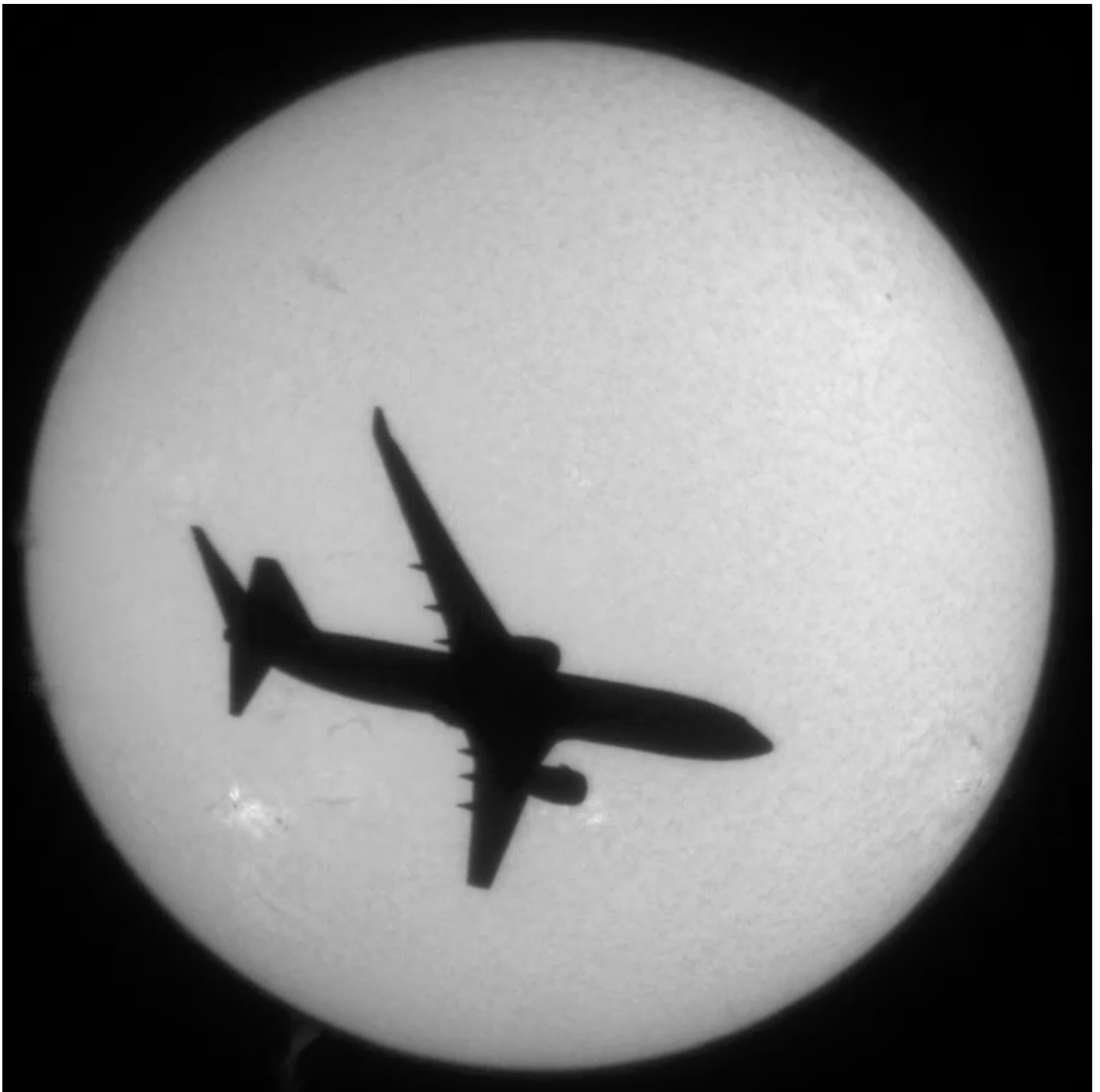
The Cosmic Evolution Early Release Science Survey

Source: <https://ceers.github.io/ceers-first-images-release>

"JWST has taken the first epoch of observations for our CEERS Survey and it is currently the largest image taken by the telescope to date! These data include NIRCam and MIRI imaging, covering near-infrared to mid-infrared wavelengths in the EGS field - a small patch of sky near the handle of the Big Dipper. We have produced a color image mosaic of all of our Epoch 1 data, which we share below, with several highlights and additional information. Epoch 1 covers less than half of our total survey area on the sky and already the images have led to new discoveries and an unexpected, but not unwelcome, abundance of never-before-seen galaxies. We hope you enjoy exploring these images as much as we have enjoyed studying them, and be sure to open the high-resolution ones to zoom in - the sheer number of galaxies we have captured so far is awe-inspiring!"

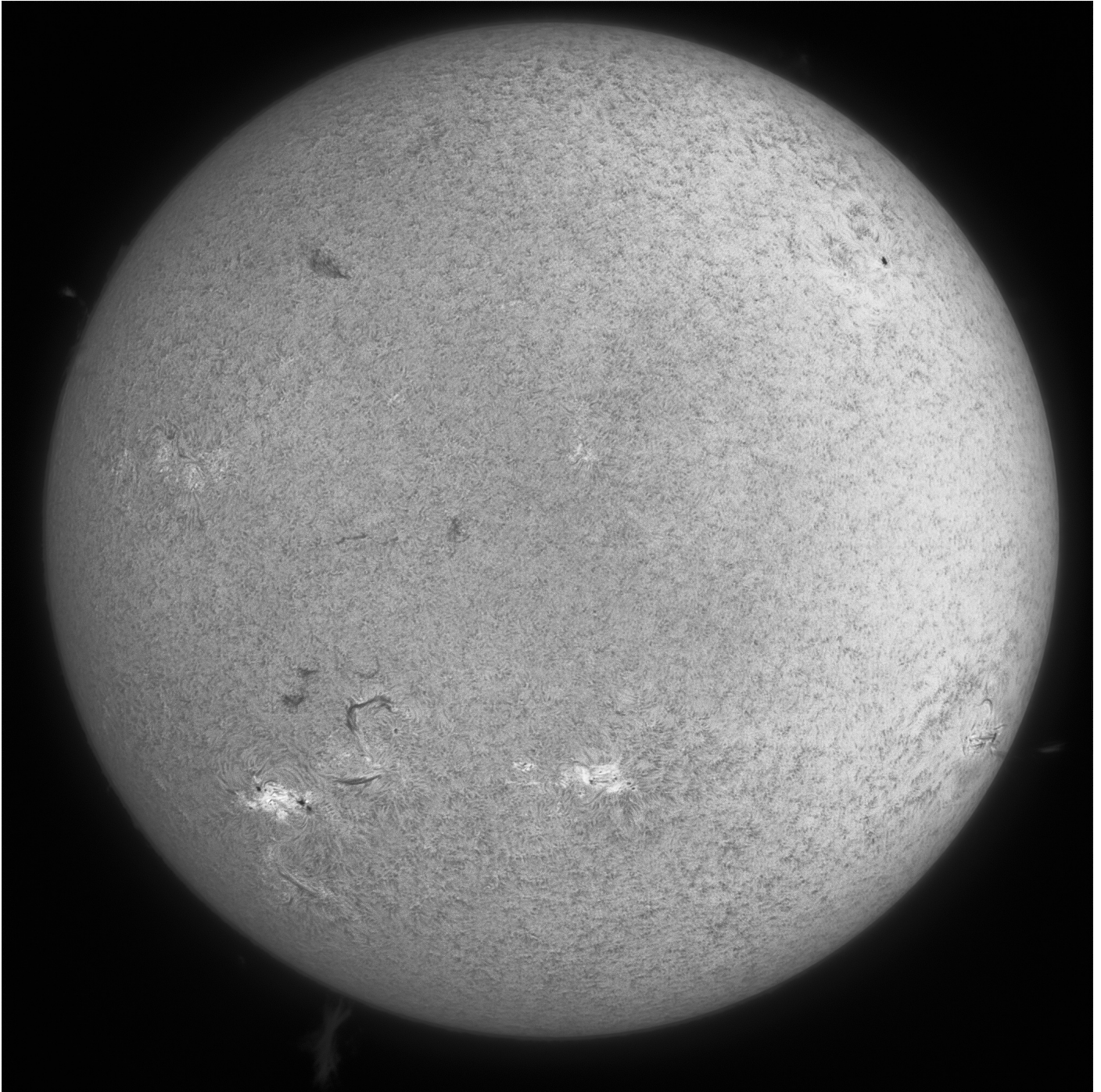
Never plane sailing taking photos of the sun

Martin Cook 27/8/2022



Video here

<https://www.facebook.com/groups/445056098989371/permalink/2203830919778538/>



Full image of the sun with large prom at 7'oclock.



Close up of the prom using a 2.5X Barlow. Camera rotated to obtain a smaller field of view on the sensor.

Equipment

Lunt LS60THa/BI200 telescope and Zwo 178MM camera.

NGC7635

John Hughes

I first took a picture of this nebula nearly 3 years ago but was never happy with it as the back focus was out slightly and I didn't really capture that much nebulosity. So, on a rare set of consecutive clear nights I decided to revisit NGC 7635.

Over the nights of the 11th, 12th and 13th August I set out to retake the image with new data and acquitted the following;

H α - 53 exposures

O3 - 57 exposures

S2 - 49 exposures

Exposure time was 300 s, gain 139 and offset 30. Total exposure time 13 hours and 15 minutes.

Equipment

William Optics Z103 refractor

ZWO ASI1600mm Pro Cooled camera

SkyWatcher EQ6R Pro mount.

Chroma 3nm filters per above



NGC 7635, Bubble Nebula - 11th, 12th & 13th August 2022 - North Essex, UK

essexastronomer.wordpress.com

NGC7635

Solar Day at Bawdsey Radar Museum

We had a good turnout by the membership for this event on Sunday 28 August, plus lots of visitors.



Setting-up



Visitors arrive

Pictures by Martin Richmond-Hardy



Inside [the](#) tent – displays and radio astronomy

Pictures by [Pete Richards](#)



Chairman Andy finds a 4-legged astronomer
Photo by Bill Barton



Giant solar flare captured with a phone at the eyepiece of the Lunt Ha scope

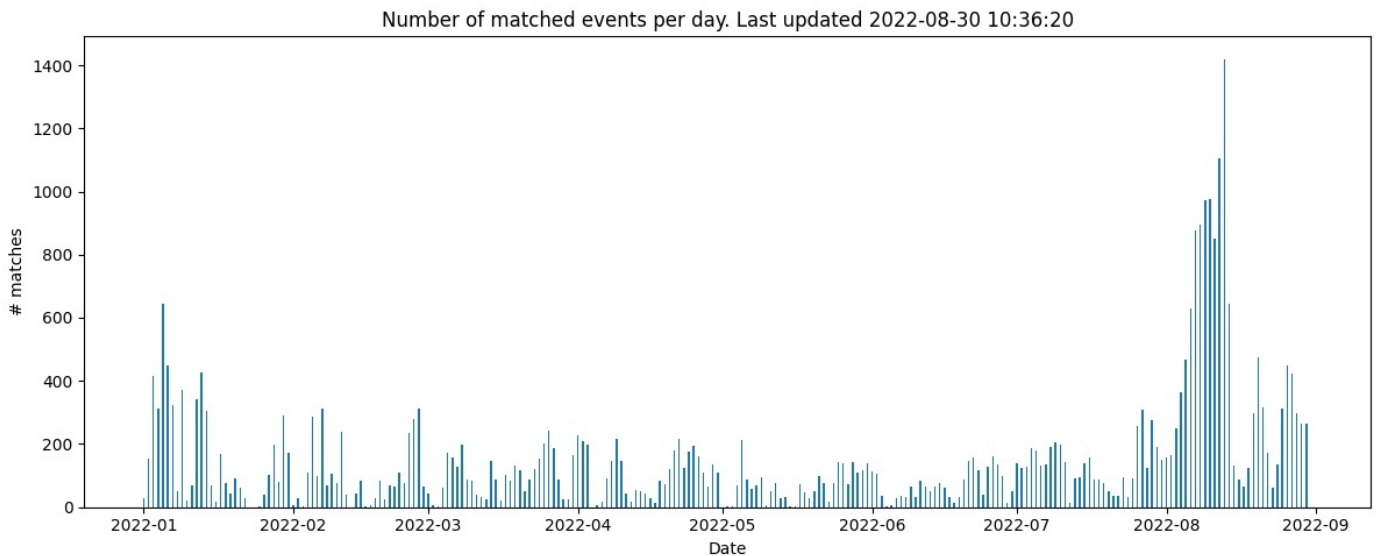
by visiting AAA member, David Nayler

Meteor Report for August

Martin Richmond-Hardy

The graph below shows activity year to date and the table summarises UKMON's entire dataset. You can also see an excellent map of all detections at <https://tammojan.github.io/meteormap/>, courtesy of Tammo Jan. Use your mouse to drag the map around.

Note: the data here are released by UKMON under the CC BY 4.0 license, so if you are using the data whether for scientific or other purposes, you must reference this web site <https://archive.ukmeteornetwork.co.uk/index.html> and UKMON in your work.



Station report for Kirton for August 2022

Last updated: 2022-08-29 09:30:23

During this period, 2416 single station detections were collected by the UK0056 camera in Kirton. including 1843 sporadics. 721 of the detections matched with other UKMON stations. Orbit and trajectory solutions were calculated for these matches. The brightest ten confirmed matches are shown below.

DateTime	Magnitude	Shower
20220802_232136.430_UK	-6.77	PER
20220808_015832.801_UK	-4.82	PER
20220808_015218.306_UK	-4.64	PER
20220803_015529.918_UK	-3.77	PER
20220809_015122.862_UK	-3.58	PER
20220811_010015.260_UK	-3.45	PER
20220808_022829.823_UK	-3.34	spo
20220808_233833.753_UK	-3.24	Spo
20220811_023054.610_UK	-2.87	PER
20220808_224828.459_UK	-2.83	PER

The latest meteor news can be found here <https://www.meteornews.net/category/news/>