



OASI News

The newsletter of Orwell Astronomical Society (Ipswich)



[1Noctilucent Clouds - Andy Gibbs](#)

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

Open Weekend- Friday and Saturday 25th/26th October

Dear Members,

Orwell Astronomical Society are making plans to hold our Open Weekend at Orwell Park Observatory in October.

Our last event in 2022 attracted record numbers of visitors, which was pleasing to see, but this caused considerable problems with overcrowding and long queues, and on the Friday evening in particular, we were in danger of being overwhelmed.

In order to avoid a repeat this year, we aim to limit the number of visitors. But the scale of the event we can provide is wholly dependent on the number of members who volunteer to help out. I would like to thank all members who have offered to help out so far, but we do need more help to safely run the event.

On the 25th and 26th October, we are aiming to be open to the public between, 19:00 and 22:00, so if you are able to help out, we would need volunteers at the Observatory from 18:00 to 23:00, to assist with setting-up and clearing away.

The roles required are:

- Tomline Refractor operating.
- Telescopes on the sports field. (You can bring your own or use one of the Societies instruments).
- Meeting and Greeting.
- Car Parking.

The Open Weekend is OASI's most important outreach event of the year, as public engagement of the Observatory and astronomy is one of the key objectives listed in the constitution of our Society.

If you are able to help out in any way on either or both days, please let myself or any other Committee know. You do not need to be an expert on the Observatory or astronomy and training can be provided, if necessary.

Thank you,

Andy Gibbs,

Chairman.

Committee 2024

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	Committee meeting minutes, Web site
	Martin Cook	Membership, Tomline refractor maintenance & user testing
	Matt Leeks	Safety & security
	Peter Richards	Lecture meetings
	John Wainwright	Equipment curator
	Mike Whybray	Astronomy Workshops, Child protection officer, Orwell Park School Astronomy Club
	Andy Willshere	Librarian
	Adam Honeybell	Newsletter
	Paul Whiting	OASI @ Newbourne

Committee Meeting

The next Committee Meeting will be on Friday 20th September at 8:00pm via Zoom. All members welcome.

New members

No new members this month

[oasi.org.uk](https://www.oasi.org.uk)

Society Contact details

Website: <https://www.oasi.org.uk>

Events: <https://www.oasi.org.uk/Events/Events.php>

Email queries: info@oasi.org.uk

Submissions for Newsletter: news@oasi.org.uk

Members-only message board: <https://groups.io/g/OASI>

Observatory (meeting nights only): ☎ 07960 083714

Social Media

For other astronomy news and astro pictures try our socials:

Facebook: <https://www.facebook.com/groups/445056098989371>

YouTube: <https://www.youtube.com/@orwellastronomical425>

Articles for OASI News

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

Please send tables as separate files in one of these formats (Excel, .csv, OpenOffice)

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."

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 (i.e. 15th July).

The Newsletter archive is at www.oasi.org.uk/NL/NL_form.shtml

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

Reproducing articles from OASI News

If you plan to reproduce an article exactly as per OASI News then please contact the Editor – otherwise, as a matter of courtesy, please seek permission from and credit the original source/author. You may not reproduce articles for profit or other commercial purpose.

Tomline Refractor Telescope Operating Manual



The Tomline Refractor Operating Manual, recommended reading for all users of the instrument, has been revised, updated, and extended. The latest version is available from the website and the groups.IO file store [https://oasi.org.uk/OPO/Tomline Refractor Operating Manual v6.pdf](https://oasi.org.uk/OPO/Tomline_Refractor_Operating_Manual_v6.pdf)

and

[OASI/Files/Tomline_Refractor_Operating_Manual_v6.pdf](https://groups.io/attachment/?l=OASI&f=Tomline_Refractor_Operating_Manual_v6.pdf).

Meetings and events

We have regular meetings on the 2nd and 4th Monday of the month (usually) at **Newbourne Village Hall**, and every Wednesday at **Orwell Park**. Night sky observing will usually take place when the skies are clear.

Date, Time & Location	Contact	Event
Weekly, every Wednesday, from 20:00 Orwell Park Observatory, Nacton	Martin Cook Roy Gooding	Observatory open (not 31 st July and 7 th August the Orwell Park Observatory will be closed)
Thursday 18 th July 20:00 Zoom	Paul Whiting	Monthly Zoom Meeting
Saturday 20 th July 13:00-20:00 Newbourne Village Hall	Peter Richards	Summer picnic, open to all members of OASI and their guests. Poster with further details.
Monday 22 th July 19:30 Newbourne Village Hall	Paul Whiting	Newbourne meeting - beginners and new members welcome! Sky Notes by Bill Barton, FRAS.
Wednesday 31 st July 19:00 Newbourne Village Hall	Paul Whiting	Newbourne meeting - beginners and new members welcome! NB: Orwell Park Observatory will be closed this evening.
Wednesday 7 st August 19:00 Newbourne Village Hall	Paul Whiting	Newbourne meeting - beginners and new members welcome! NB: Orwell Park Observatory will be closed this evening.

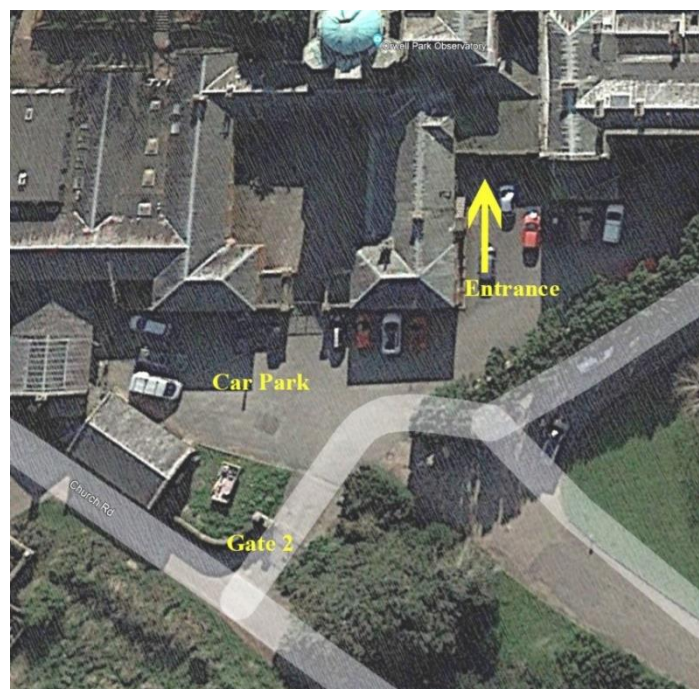
OASI @ Orwell Park

There are regular meetings every Wednesday evening from 8pm. Access is controlled by a gate and a fob. The entrance is gate 2 is on Church Road, What3Words is [tour.fuse.banks](#)

Access into the School Grounds and Observatory Tower

The route is as follows:

- Enter through gate 2 (gate 1 being the main gate) and park inside as per the attached map.
- Enter the school through the double black doors as indicated on the map. A key fob will be 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 immediately right.
- Pass through the single door and on your left you will find the staircase leading to the observatory.
- On no account must you deviate from this route.



When leaving the observatory use the same route but in reverse. Please keep noise to a minimum as there are staff quarters nearby.

OASI @ Newbourne

newbourne@oasi.org.uk

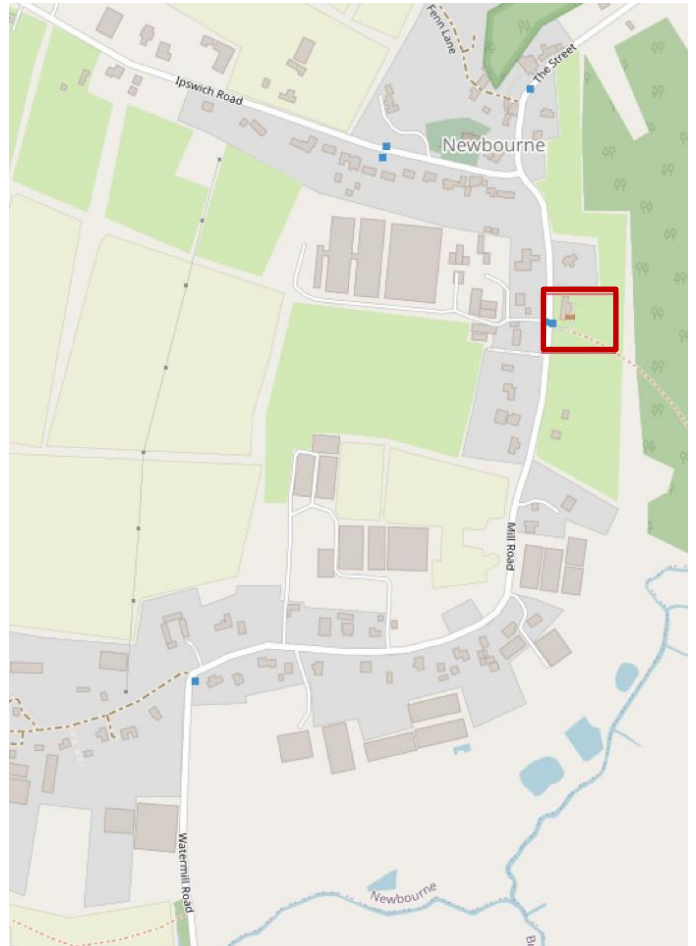
We meet at Newbourne Village Hall, Mill Lane, IP12 4NP on the 2nd and 4th Mondays from 19:30.

What3Words [scars.atlas.printing](https://www.what3words.com/scars.atlas.printing)

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 2024		
July	08	22 (A/S)
August	12	26 (S)
September	09	23 (A/S)
October	14	28 (S)
November	11	25 (A/S)
December	09 (Q)	



We open up for all meetings at 7:30pm.

Astro News (A) / Star Guide (S) at 7:45pm followed by any Talks (T), Workshops (W) and occasional Quiz (Q).

indicates a change to the normal monthly pattern.

Forthcoming Outreach Programmes 2024

All members are welcome to come along and help out at these events – you don't need to be an expert in the subject. Just respond to the email call for help prior to the event.

Please note that not all events are open to the public.

<i>Friday 26th – Sunday 28th July</i>	<i>Latitude (to be invited)</i>
<i>Sunday Aug 25th</i>	<i>Solar Party at Bawdsey Radar Museum, Bawdsey Setup 10:00</i>
<i>Fri 25th & Sat 26th October</i>	<i>Observatory Open Evenings (TBC)</i>

OASI and BAA Events

For the latest event details, please check our website and social media.

BAA news & webinars

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

Saturday 21st September 2024 BAA Autumn Meeting

Venue: Rutherford Appleton Laboratory

Wednesday 30th October 2024 17:30-20:00 BAA Meeting & AGM

Venue: INSTITUTE OF PHYSICS, 37 Caledonian Road, London, N1 9BU

The BAA Radio Astronomy Section

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

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Answer to June maths question.

By Andy Willshere

5292312167

8412924389

9613129791

7292719683

67626?757?

What numbers replace the question marks?

From the first number, the first three numbers 529 are obtained by 232 . The numbers to the right of 23 are obtained by $233 = 12167$.

With the second number, $292 = 841$ and $293 = 24389$.

With the last line $262 = 676$ and $263 = 17576$. The answer is 1 and 6.

Here is a quick question for July.

X = 13821

Q = 4903

N = 2731

F = ?

Think of Caesar again.

Christchurch Park Solar Event 8th June 2024



On 8th June 2024 OASI hosted another solar event outside Christchurch Mansion. The cloud cover made observations difficult for much of the day, but the clouds did part for some brief spells. Also, Paul Whiting set up a projector inside the museum with various images of the sun at different wavelengths and gave a brief talk about what information they provide. The sunspots that caused the recent aurora were also in evidence.



2 Solar disk with sunspots. Paul Whiting with SeeStar

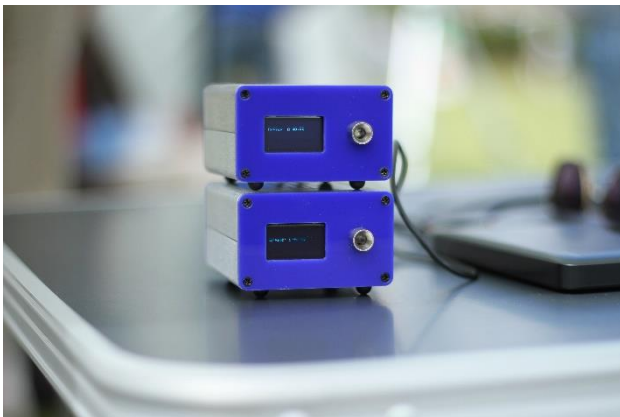


Mendlesham Summer Fayre 22nd June 2024

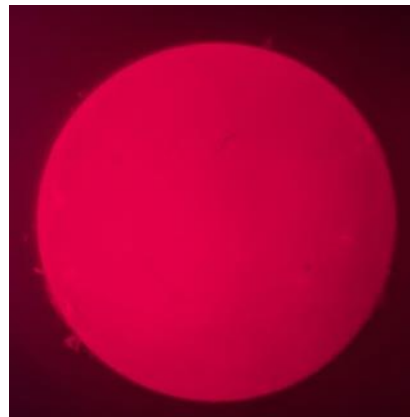
On 22nd June OASI attended the Mendlesham Summer Fayre to provide views of the sun using our solar scopes. Unfortunately, the sun had other ideas and spent most the day veiled in cloud. However, there were a few brief spells between the rain showers and some observations were possible. We had white light and Hydrogen Alpha, as well as the See Star. Paul also brought along the Muon detectors. Muons are produced via interaction between cosmic rays and the atmosphere. Each time one is detected, the light on the front panel will blink.



3Neil and Andy setting up the solar scopes



4Muon detectors





Muon detectors. The lower detector blinks as it detects a muon. The screen is raster scanned so taking a single photo in daylight results in the image breaking up. So I took a movie and maximum-stacked 1 seconds worth of frames to render the screen and the LED blinking.

The Night Sky in July

All event times are for the location of Orwell Park Observatory 52.0096°N, 1.2305°E. Times are **GMT** unless otherwise stated.

Sun, Moon and planets

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

July 2024

Object	Date	Rise	Set	Mag.	Notes
Sun ☉	1	03:40	20:18		
	31	04:16	19:46		
Moon ☾	1	00:08	15:52		Apogee 12 July 2024 08:12 First quarter 13 July 2024 22:49 Full moon 21 July 2024 10:17
	31	-	17:45		Perigee 24 July 2024 05:41 Last quarter 28 July 2024 02:52 New moon 04 August 2024 11:13
Mercury ☿	1	05:07	21:24	-0.5	
	31	06:52	20:10	1	
Venus ♀	1	04:16	20:44	-3.8	
	31	05:43	20:23	-3.8	
Mars ♂	1	00:47	15:35	1	
	31	23:40	15:34	0.9	
Jupiter ♃	1	01:44	17:37	-1.9	
	31	00:06	16:10	-2	
Saturn ♄	1	23:08	10:07	1.1	
	31	21:09	08:04	0.9	
Uranus ♅	1	01:05	16:31	5.8	
	31	23:07	14:39	5.8	
Neptune ♆	1	23:20	11:09	7.9	
	31	21:22	09:09	7.8	

Occultations during July 2024

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 July 2024

Shower	Normal limits	Maximum	ZHR at Max	Notes
Alpha Capricornids	3 July-15 Aug	30 July	5	Yellow slow fireballs
Delta Aquariids	12 July-23 Aug	30 July	25	Steady stream of meteors over several days but a low rate per hour

See also <https://www.rmg.co.uk/stories/topics/meteor-shower-guide>

For radio observation, use reflections from Graves Radar on 143.049MHz 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/.

Comets

Source : <https://heavens-above.com/Comets.aspx> on 07/06/24.

Comet	Brightness	Date of last reported observation	Angular separation from Sun	Constellation
13P Olbers	6.9	2024-Jul-15	35°	Leo Minor
12P Pons-Brooks	8.7	2024-Jul-16	66°	Vela
C/2023 A3 Tsuchinshan-ATLAS	10.4	2024-Jul-16	51°	Leo
C/2023 V4 Camarasa-Duszanowicz	11.7	2024-Jul-09	47°	Ursa Major
154P Brewington	13	2024-Jul-16	40°	Auriga
C/2021 S3 PANSTARRS	13.1	2024-Jul-14	96°	Draco
C/2023 S3 Lemmon	13.3	2024-Jun-27	69°	Coma Berenices
C/2021 G2 Atlas	13.9	2024-Jul-12	78°	Corvus
C/2020 V2 ZTF	14	2024-Jul-16	118°	Tucana
C/2023 C2 ATLAS	14	2024-Jul-13	120°	Triangulum Australe
479P Elenin	14.6	2024-Jul-09	104°	Hydra
C/2024 G3 ATLAS	15	2024-Jul-12	103°	Musca
C/2014 UN271 Bernardinelli-Bernstein	15.3	2024-Jun-19	95°	Reticulum
146P Shoemaker-LINEAR	15.3	2024-Jul-17	72°	Eridanus
130P McNaught-Hughes	15.4	2024-Jul-17	85°	Pisces
299P Catalina-PANSTARRS	15.5	2024-Jul-13	119°	Libra
C/2022 L2 ATLAS	16	2024-Jul-11	52°	Hydra

Visible ISS passes >30° max altitude for July 2024

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

Times are **GMT**.

Predictions are approximate (07/06/24) due to craft adjustments. Check the day before.

Date	Brightness (mag)	Start			Highest point			End		
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
04-Aug	-0.3	20:17:10	10°	NW	20:17:21	11°	NW	20:17:21	11°	NW
05-Aug	-3.6	19:28:07	10°	NNW	19:31:02	61°	N	19:31:02	61°	N
06-Aug	-2.5	18:39:39	10°	N	18:42:27	26°	NE	18:44:46	13°	ESE
07-Aug	-1.5	19:27:22	10°	WNW	19:29:57	21°	SW	19:31:26	16°	SSW
08-Aug	-3.1	18:37:44	10°	NW	18:40:57	53°	SW	18:44:10	10°	SSE
10-Aug	-2.2	05:24:21	10°	SSW	05:27:26	33°	SE	05:30:30	10°	ENE
10-Aug	-0.8	18:38:11	10°	WSW	18:39:20	11°	SW	18:40:29	10°	SSW
11-Aug	-1	04:36:27	10°	SSE	04:38:20	15°	SE	04:40:17	10°	E
12-Aug	-3.2	05:23:01	14°	WSW	05:25:41	41°	NW	05:28:51	10°	NNE
13-Aug	-3.6	04:36:39	70°	ESE	04:36:39	70°	ESE	04:39:51	10°	NE
14-Aug	-0.2	03:50:11	10°	ENE	03:50:11	10°	ENE	03:50:13	10°	ENE
15-Aug	-1.3	04:36:31	14°	N	04:36:31	14°	N	04:37:12	10°	N

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>

Members Observations

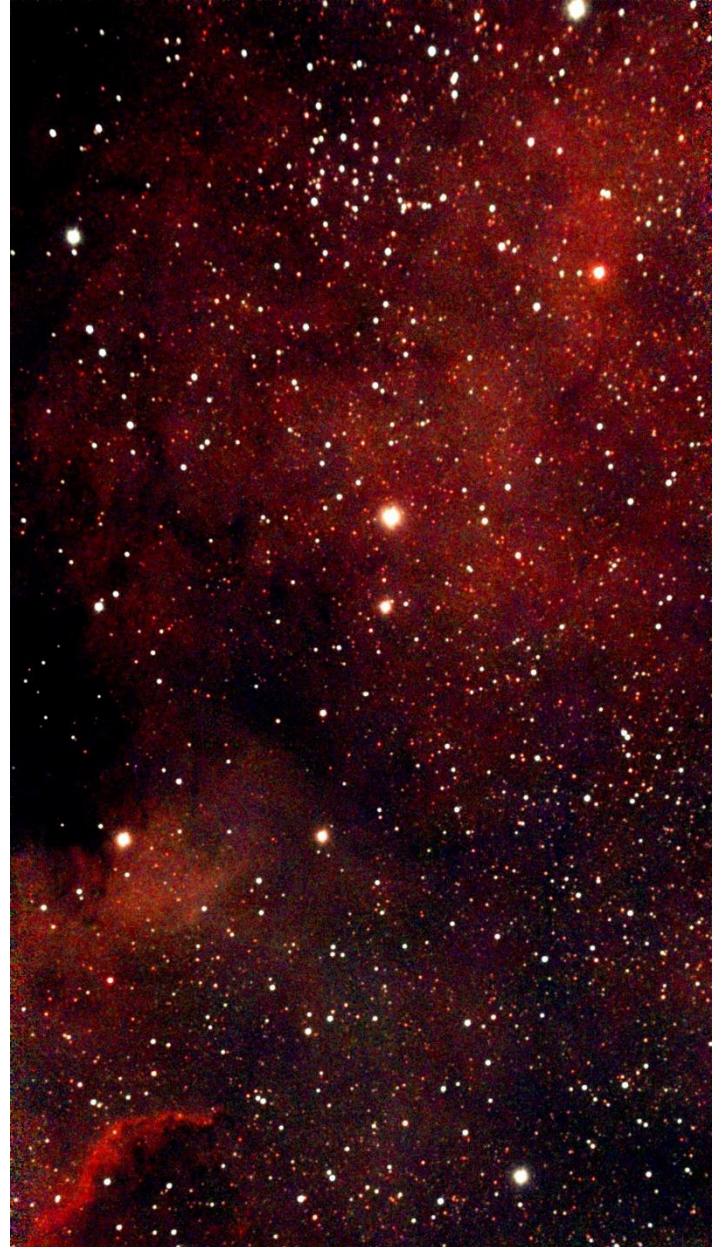
Paul Whiting

Using the "SeeStar"

All taken from Felixstowe back garden (shows light pollution filter works!) Approx. times below.

NGC7000 – 25/6/24 22:00-23:20 UT 61 minutes of stacked 10s frames

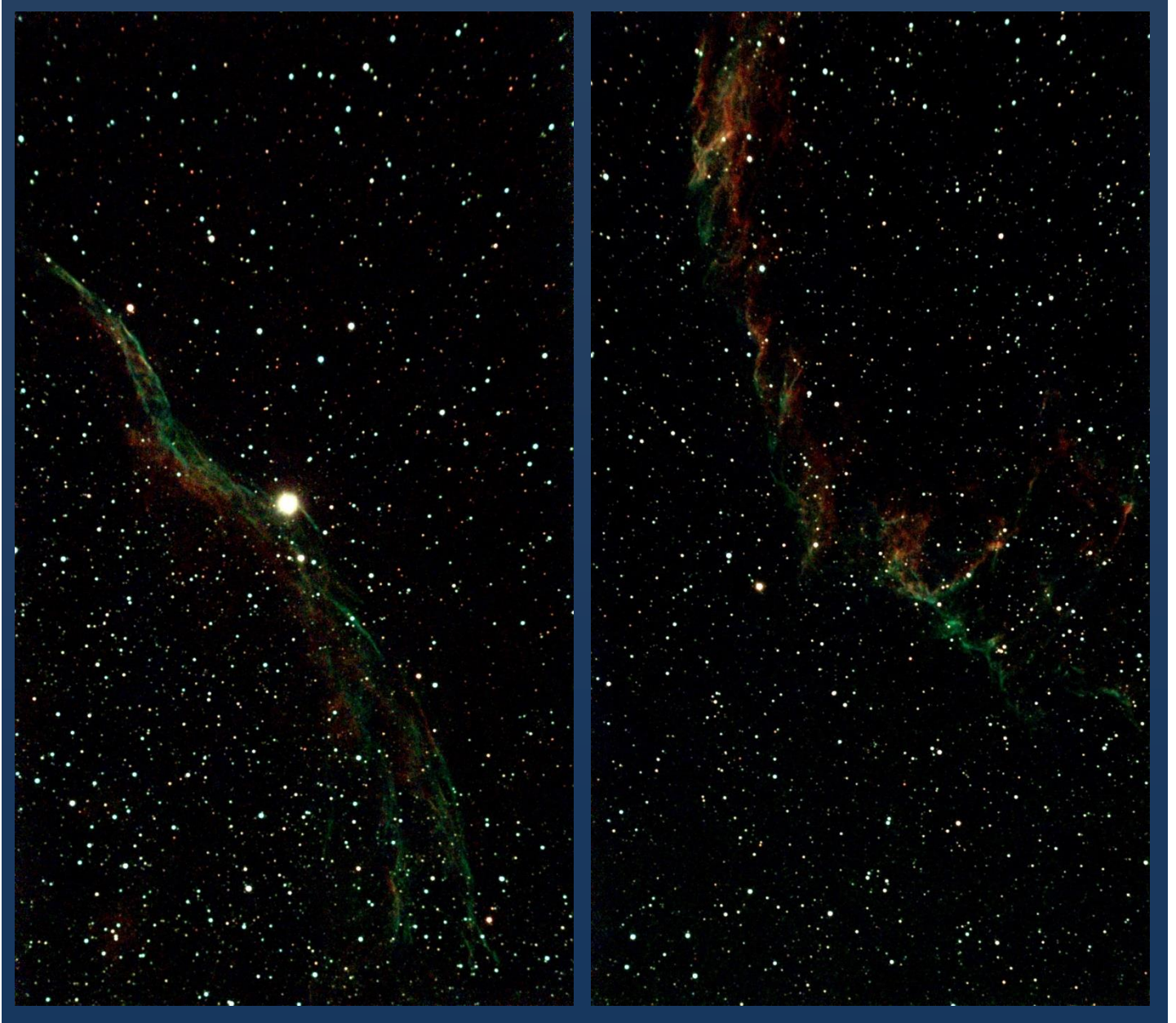
NGC7000 image has been processed a bit to bring out the nebulosity.



5 NGC7000

NGC6960 – 25/6/24 23:30-00:30 UT 30 minutes of stacked 10s frames

NGC6995 – 26/6/24 22:00-23:45 UT 60 minutes of stacked 10s frames



7 NGC6960

7 NGC6995

Andy Gibbs

Noctilucent Clouds

I was just going to bed last night around 23:00 BST when I noticed a Noctilucent Cloud display from a window at the rear of my house. So I hastily grabbed my iPhone SE 3rd generation, to take a few images. This is the first display that I have witnessed this year.

