

Number 125 – September 2017



Picture of the Month - September 2017

Solar Eclipse by Phil Randall

<http://www.sherwood-observatory.org.uk/>

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Promoting and advancing public education in the science of astronomy

MSAS was founded in 1970 to foster interest in astronomy in Ashfield and surrounding district

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Welcome and Introduction

Welcome to the September edition of Event Horizon.

We began our event season last month with our Solar Day which proved very popular and we will continue the theme with further off site visits at Sutton on Trent, Pleasley and Duffield. As we grow our society and reach more people at a wider range of venues we rely heavily on volunteers to help maintain and build our reputation.

Please give some thought to volunteering to help with any of the many events planned for this season. All are listed on our website and a volunteer list will appear in the lecture room nearer the time of each event. If you can help in any way please contact Michael Lowe at the usual address at the end of this newsletter, we cannot run these events without your help.

Several of our members travelled to the USA in August to see the solar eclipse and we have photographs and details from a few in the Picture of the Month section.

Thank you, Chris.

Fact of the Month - Michael Lowe

I am reading a book about the Roman Conquest of Britain and the building of Hadrian's Wall. It mentions that "the planets of our solar system are mostly named after gods venerated in Britannia and some have aspects of their ancient attributes."

Mercury is the smallest planet and is named after the wing-footed messenger of the gods.

Venus is seen as the Earth's sister planet and is named after the goddess of love and beauty.

Mars is the red, or angry planet, and is named after the god of war, the soldiers' god.

Jupiter is the largest planet in the solar system, and is named after the king of the gods.

Saturn is almost as big and is named after the father of Jupiter and the god of agriculture.

Uranus was a late discovery (William Herschel March 13 1781), and is named after a Graeco-Roman god of the sky.

Neptune has the strongest winds and is named after the god of rivers and, later, of the sea.

Newsletter contacts: Chris Hook & Matt Greenwood- newsletter@sherwood-observatory.org.uk

Society News and Information

Planetarium Project

We have chosen a professional fundraiser based in Long Eaton. A meeting is being set up to establish the best way forward and hopefully planning permission can be organised with the funding bodies and then our architect. We will of course keep everyone up to date. In the mean time we have moved our vulnerable equipment from the crowded event and storage shed, allowing some breathing space. Thank you to Sparky and his small band of helpers for organising this.

Security

Following a meeting with our local Crime Prevention Officer (who was impressed with our security), he suggested we may wish to include a protective shield in front of the main observatory entrance. This was agreed and is being fitted by Sparky and Craig. Once in place the roller frame will be secured with locking bolts. Keys will be issued (with a covering deposit required) to all present and future members who have passed their entry and exit procedure test. The keys are in addition to the swipe card currently issued.

BBQ

A huge thank you to Sparky who arranged and provided food for the Society BBQ last month. The undecided weather forced a decision to hold the event in the lecture room instead of the OCRA but this worked well and the food, burgers, hot dogs, jacket potatoes and salad was served up by Nigel and Ron Peet who was very proud of his mushy peas! Unfortunately no one thought to take any photos!

Peter Jenkins

I have already personally congratulated Peter on being able to get his head through our observatory door, if I had achieved half of his recent accomplishments I would still have been dishing out cigars!

Peter had his first review printed in the September issue of Sky At Night magazine, after being approached by Paul Money to 'test drive' a very expensive imaging camera, his report was published and can be seen on page 98.

Peter then had his image of NGC 7822 published in Sky and Telescope in their September edition. This is his first picture published by an American astronomy magazine so, as you can imagine, he was really pleased.

Then Peter was informed that his picture of The Heart Nebula was being posted at none other than N.A.S.A's Astronomical picture of the day!

There was a minor problem, as Peter explains:

There was a delay in posting my pic to APOD due to NASA wanting to use some pics of the eclipse (and the hurricane in Texas - they used yesterday). Pleased to say it's been used today.

APOD: 2017 August 27 - The Heart Nebula <https://apod.nasa.gov/apod/ap170827.html>

A truly amazing 'triple' accomplishment, huge congratulations Peter.

Michael Knowles

Congratulations also to Michael who had an article included in the same Sky at Night Magazine, this time about the Homeric eclipse, published on page 24.

Also a different larger version will be published at the end of the month at the website: <http://www.skyandtelescope.com/observing/stargazers-corner/>

Michael was also interviewed by the Nottingham Post upon his return from viewing the eclipse in North America.

<http://www.nottinghampost.com/news/local-news/solar-eclipse-chase-nottinghamshire-man-411506>

Well done Michael.

Dave Collins trip to Birr Castle

As many members are aware, our founder member Dave Collins is organising a private trip to Ireland and will visit Birr Castle. He has asked that the following information be distributed in EH. Any members wishing to join Dave and his team, please contact him or complete your details on the appropriate list in the lecture room:

Currently there are nine members on the list. Departure on the 9th July 2018 with 2 nights at Dooly's Hotel in Birr. I've been in contact with the hotel and they have kindly reserved 17 rooms for our party. Confirmation of the number and names of visitors will be passed to them in early January and to secure the bookings they have my credit card number.

Each person will be billed individually at the hotel. Flight and coach bookings will be done separately once the party has been finalised. I do ask all travelling members to wear their MSAS badge on day 2 when visiting Birr Castle.

Radio Astronomy & Meteor Watch - Nigel 'Sparky' Cunnington

More developments are under way with the 12 GHz radio dish. It's a warm welcome to Nigel Johnson and Steve Binns onto the team helping to develop this. With the Solar Day and various outreach festivals that we are attending this month, I hope to have an in-depth report in the next edition of the EH.

As we move into September we now have a quiet month for meteor showers, but what about August? The 12th of August was the peak of the Perseids shower. The skies were clear with the Moon not rising till late.

A group of us were up at the observatory for the shower, we started counting from 9.30 till we wrapped up at 11.45pm. The first hour 16 meteors were spotted; the second hour the same number 16 were also spotted and the final 15 minutes 3 were seen. This made a total for the evening of 35 meteors. Unfortunately we did not make a note of whether or not the meteors were Perseids or sporadic ones so we can't differentiate the numbers.

The Brams radar detection was also set up in the lecture room just in case the weather turned on us. Fortunately it didn't, but we noted before observing the detection rate was a lot higher than normal, this is to be expected.

One of the things I was interested in was to try to capture a meteor on a photograph. I have only dabbled in astrophotography in the past, but it was good going on the Photoshop course ran at the observatory by Peter Jenkins earlier in the year that wet my appetite! I set my tripod up with my Canon camera attached, I removed the batteries out of it and replaced it with a mains fed supply so it wouldn't run out of power.

I attached a thing called a Time-lapse Intervalometer which works by opening the shutter on the camera for a certain period (in my case 10 seconds) then closed it, wait 2 seconds, then repeating it again, and again, and again. Many thanks to Matt Greenwood for helping me set this and my camera up on the night. After some what over 860 photos later, I got 1 faint Perseids meteor, not a prize winner but it is my first! And here it is:-



If any of you observed the shower elsewhere, I'd love to hear about your experiences. Feel free to drop me a line at my new observatory email, radio@sherwood-observatory.org.uk

Another thing we noticed was the amount of satellites going overhead. We must have seen more of them than meteors that night. The night could have been renamed "Satellite watch" (now there's a thing)! All in all a good night was had by all.

The next major shower is the Orionids peaking the night of Saturday 21st October. More about that one in next months edition of the EH.

Best Regards, Sparky.

Easyfundraising

Please keep buying items via the easyfundraising website, not forgetting of course to search the net with the easysearch tool.

To join our cause please go to easyfundraising and follow the links.

Our cause is <https://www.easyfundraising.org.uk/causes/sherwoodobserv/>

Our search address is : sherwoodobserv.easysearch.org.uk

A percentage of everything bought via the website goes towards our planetarium fund, there are hundreds of online shops such as Argos, Amazon and Boots. There's even a click and collect scheme at many retailers, there are also insurance comparison sites. Please help us raise free money by remembering to buy via easyfundraising whenever possible.

Society Meetings

Last month saw our annual society BBQ. This month Martin Braddock will be making a presentation.

September 26th - The Rise, Fall and Resurgence of Artificial Gravity - Martin Braddock,
MSAS

Members Astronomy Meetings

Diary for the upcoming month:

Members Astronomy Meeting Diary

Date	Presenter	Subject
September		
6th	Angus Wright	APOD
13th	Membership	Telescope Training Session
20th	Steve Wallace	Planetarium Project Update
27th		

Public Events*Solar Day*

We received the following report of our second solar day from Ron Peet:-
Photos courtesy of Ron and Chris Hook.

It was a fine dry day for the MSAS Solar Day, there was broken cloud so we were able to show our visitors the sun through a range of telescopes all fitted with the necessary solar filters.

Helping out were: Michael Lowe, Ron Peet, Bernard (talk), Gary Woodward (pad), Steve Lawman (pad), Matt Ceney-Pratt (new member; assisted Sparky), Steve Wallace (education boards and planetarium survey sheets), Scott (pad), Sparky (radio), Mike Helanor (pad), Chris Hook (pad), Vic (bungee master) Hill (set up), Jackie Rowlands (refreshments), Jim Rowlands (pad), Matt Greenwood (pad), Peter Jenkins (merchandise and also served the odd refreshment), Val (night school enquiries), Andy Butterworth, Mat Eacott, David Branston, general helping out.

We had 52 adults and 17 children visit, 23 of the visitors were from the golf club, and 3 neighbours, plus one councillor. In total £54.90p was taken from merchandise and refreshments.

Many thanks to our members that helped on the day.



Upcoming Events

As previously stated we are again attending many external events in addition to our own open evenings. Michael Lowe has sent this most recent list:

We have several events in the near future -

10 Sept - Pleasley

23 Sept - Duffield Festival

30 Sept - Open Evening

Michael has placed "sign up" lists on the noticeboard for members to put their name on the relevant list and if you know how to operate the solar scope please indicate that on the list.

He has also left a number of open evening posters in the lecture room and asked if members could take some for distribution.

Help with transporting telescopes and the marquee to the off site events would be appreciated and members attending will be welcome to take their own scopes along.

Michael can be contacted at events@sherwood-observatory.org.uk if you have any questions about what you would need to do as a volunteer.

New members are especially welcome to come and see what we do and help out doing whatever they can.

Our own open evening events are also just around the corner and will also require considerable help, dates for your diary are as follows:

30 Sept, 28 Oct, 25 Nov, 2017, 27 Jan, 24 Feb, 24 Mar 2018.

If you have added your name but cannot attend please contact Michael Lowe as soon as possible in order for him to make alternative arrangements. We really cannot hold these events without your help.

Thank you

Picture of the Month

A few of our members visited America last month and took pictures of the total eclipse. As such it was hard to pick a winner and that task fell to stand in judge Matt Greenwood.

The winning image was Phil Randall's totality image which showed nice prominences from the limb of the Sun. This was taken in Togwotee in Wyoming.

At time of publication we believe all members who travelled saw the eclipse.

Chris Dakin saw the eclipse from Utah and sent in the following images:



Mike Paling sent in the following montage and information.

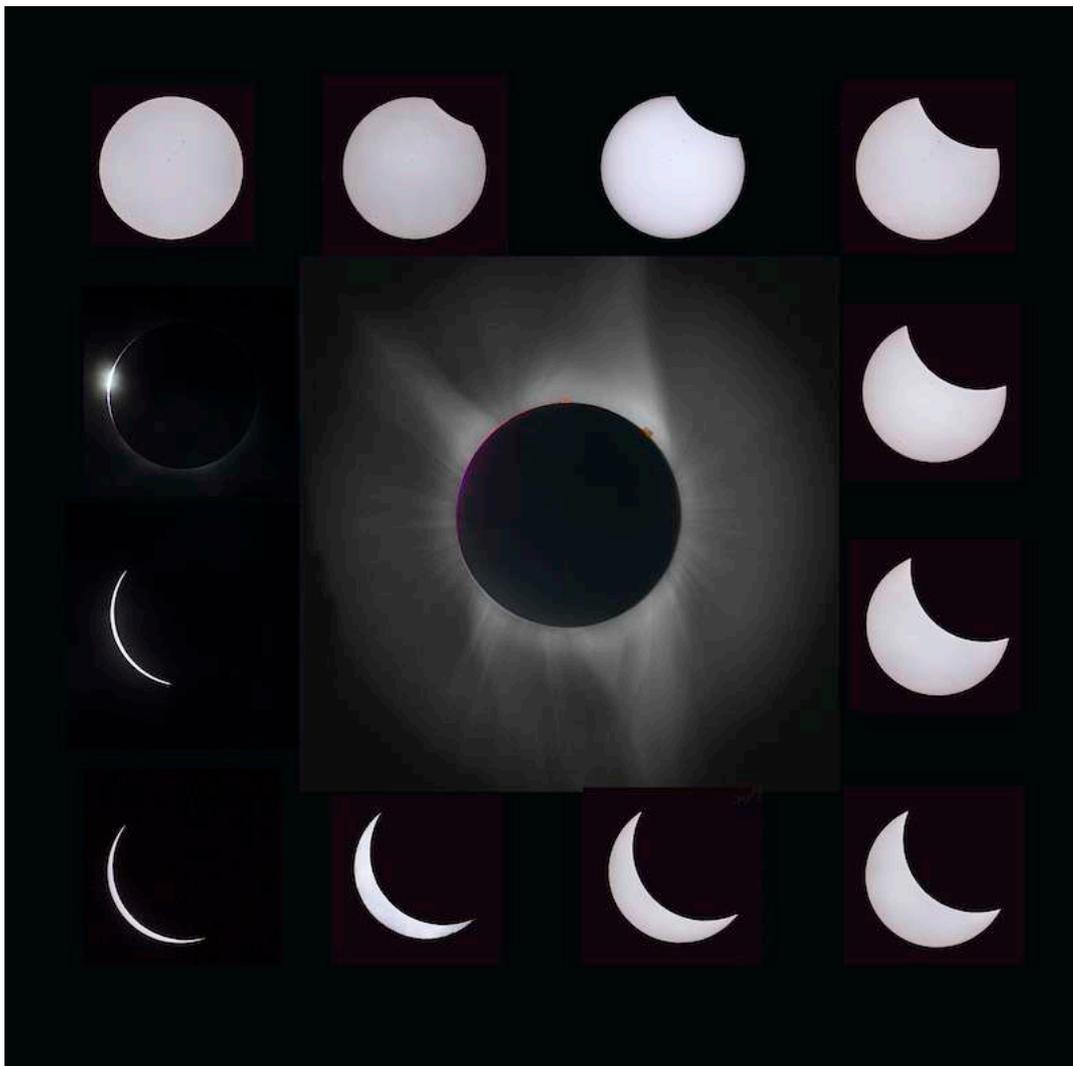
I went to Nebraska, USA , to see the recent eclipse. I lugged approx 10kg of equipment with me and managed to get some pikkies of the eclipse despite us having some high cloud cover on the actual day ... all of the days either side were totally clear! I arrived back home a couple of days ago. After some serious software manipulation I have put together a montage of the eclipse which I am submitting for the EH newsletter.

The images were taken with my Canon 5D MkIII camera using my 100-400mm Canon lens and a 1.4x extender on a Fornax Light Track II mount. The sequence of images taken as the moon passed in front of the sun were single shots taken at 1/1000 sec at f8 but the final image, during totality, was produced by stacking 11 separate images to produce a single image to bring out the full extent of the chromosphere and prominences.

Despite having to battle the high cloud cover I was happy with my results ... managing to get some sun spots and prominences along the way :-)

It was am amazing experiance and well worth all of the effort to get there and back!

Regards, Mike Paling.



Another set of pictures this time from Martin Braddock and taken from Gaithersburg near Washington.



Staying with the Sun, the following image of sunspots is from Ron Peet:



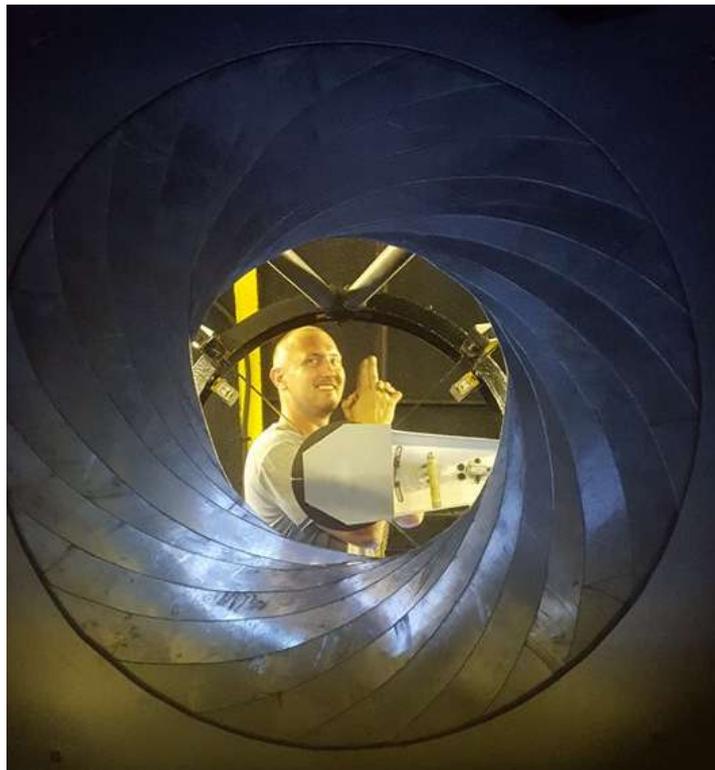
Other images from Phil Randall of the dark night sky in the USA:



Another image from Martin Braddock, this time of a Circumhorizontal arc (also called a fire rainbow), over Peasenhall in Suffolk.



Lastly a different type of image, this time of our Observatory Director Craig Bradford doing his best 007 impression through the telescope iris. Image taken by Hayley McCallion.



Correspondence

Mr Allen has a pair of Praktica binoculars for sale. He says they are 20-120x80 in mint condition. He is selling because he is now not mobile enough to use them. Would like about £90.00. Anyone interested please contact Chris Hook and he will pass on contact details.

Contact Details

Chairman, Chris Hook - chair@sherwood-observatory.org.uk

Vice Chairman, I.T Specialist & Website Administrator,

Chris Dakin - vicechair@sherwood-observatory.org.uk

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Nigel Cunnington - radio@sherwood-observatory.org.uk

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Treasurer, Phil Randall - treasurer@sherwood-observatory.org.uk

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Newsletter Editors, Chris Hook & Matt Greenwood - newsletter@sherwood-observatory.org.uk

Internet Links

www.sherwood-observatory.org.uk - The homepage of the society.

www.twitter.com/sherwoodobs - The society Twitter stream.

<http://www.facebook.com/pages/Mansfield-and-Sutton-Astronomical-Society-at-Sherwood-Observatory/141550702600701?fref=ts> - The society Facebook page.

http://en.wikipedia.org/wiki/Sherwood_Observatory - Our entry on Wikipedia.

We hope you have enjoyed this edition of the newsletter, don't forget if you would like to comment on anything or submit an article yourself for inclusion in the newsletter or come across a website of interest you would like to share then don't hesitate to contact the editors.