

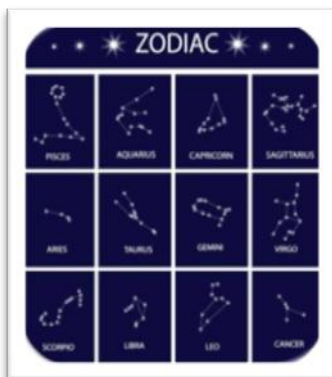
Issue: June 2016



>>> **Ayrshire Astronomical Society Newsletter**

Inside this Issue:

Meeting	Cover
News & Events	Pg 2-4
President Word	Pg 5
Alex Space	Pg 5
Isabelle's Solar Corner	Pg 6+7
AAS Library	Pg 8



Don't miss

Mars opposition End of May/beginning of June



Next Meeting:

26th September

Equipment and Beginners Night

practicals and short talks for getting started

June Night Sky

1st – 8th - June: Mars Opposition

5th June - Mercury at Greatest Western Elongation

The planet Mercury reaches greatest western elongation of 24.2 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the morning sky. Look for the planet low in the eastern sky just before sunrise.

Night from the 15th to the 16th June: Lyrid Meteor Shower

The June Lyrid meteor shower reaches its peak on the night of the 15th/16th with a rate at the zenith of ~8 meteors per hour. This is not many and, as full Moon on the 20th is approaching, it may be hard to spot one. The radiant is very close to the star Vega.

20th June: Full Moon

During the month:

Find M13 cluster

There is a very nice object to spot with binoculars in the eastern sky well after dark this month. Two thirds of the way up the right hand side of the 4 stars that make up the "keystone" in the constellation Hercules is M13, the best globular cluster visible in the northern sky.

News :

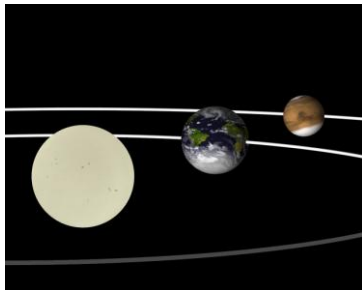
Mars Opposition

You can't miss Mars in the night sky just now. Even without any binoculars or telescope, you cannot miss the beautiful red shining planet making its way across the night sky from east to west. On Monday evening, 30th of May, Mars was just short of 47 million miles (75 million km) away from Earth – the closest the pair have been since October 2005.

During an opposition, Mars and the sun are on opposite sides of Earth.

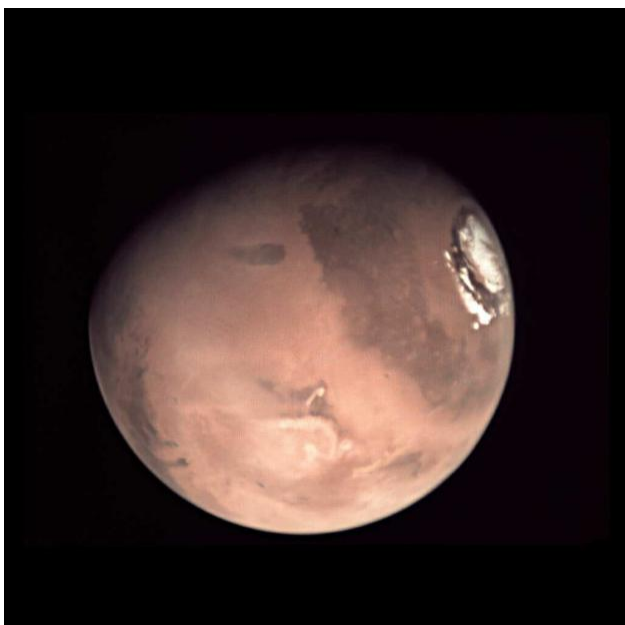
If you haven't seen Mars yet, there is still time to do so!

If you have managed to take some images, please send them in so we can publish them in the next newsletter. solar@ayrastros.com



There are a lot of images of Mars on Internet taken by amateur astronomers. This one is from Egidio Concas from Italy.

Dobson 12". Canon 60D. Tele Vue Powermate 2,5x. Video made with Magic Lantern at 40fps. ISO 100, Rolling Shutter 1/80. 3 minutes = 7000 frames. Stacked the best 900



Here is an image taken of Mars Express, ESA's (European Space Agency) deep space probe orbiting the Red Planet. The camera it carries produces low-resolution photos and was initially only used to image the separation of the Beagle lander in 2003 and switched off afterwards.

In 2007 it was re-commissioned as the 'Mars Webcam' and has since provided a wealth images including whole-planet views and of the Mars crescent and limb not otherwise obtainable.

If you are using Twitter, new images are automatically published @esamarswebcam

Events:

AGM Meeting 23rd May

There was a good turn out of members attending the AGM meeting. Thank you for participating.

The changes to the Constitution as proposed (See April Newsletter) have been accepted unanimously.

The following members have been elected / re-elected

Graham Longbottom (President)

Angela Gribben (Secretary)

Roger Harman (Vice President)

Alex Baillie (Librarian)

Derrick Oldfield (Treasurer)

Robin Scott (Ordinary Member)

Nick Martin (Instruments Officer)

William Harding (Ordinary Member)

Isabelle Morris (Newsletter Editor)

John Sharp (Ordinary Member)

Karen Smith (Ordinary Member)

After the administrative part, we enjoyed a delicious buffet prepared and organised by William Harding and Roger Harman, and then watched "The Martian" to end this year's AGM. Thank you Willy and Roger for organising the food!

A society like the AAS cannot grow without members, so thank you to everyone who is supporting the AAS by being a member and hopefully joining in on as many events as possible.

In particular, a 'Thank you' to Derrick for looking after the finances of the Society, and to Alex and John volunteering and helping at all events throughout the year.

A big Thank you though, goes to Graham Longbottom for his continuous efforts and time invested to the Society as President and for taking on the task for another year. We are looking forward to more exciting events, news, talks and outreaches and generally the good banter.

Here are the next meetings in 2016:

26th September 2016

24th October 2016

28th November 2016

December: Christmas Meal TBC



British Astronomical Association
Weekend Meeting
Friday 9th – Sunday 11th September
2016



*Dalhousie Building, Dundee University, Old Hawkhill,
Dundee DD1 5EN*

Stars: Theory, Physics and Effects

The Dundee Astronomical Society is our host for this weekend. We are pleased to be joining them as part of their 60th Anniversary Celebrations

Meeting programme to include

Friday Evening (19:00 – 21:30) –

Denis Buczynski- "More Than Just a Hobby"& Nick James – Eclipses

Saturday (10:00 until 18:00)

Prof Andrew Cameron St Andrews - "Discovery and Characterisation of Extrasolar Planets"

Dr Alexander L MacKinnon, Glasgow – Space Weather

Prof. Clare Parnel, St Andrews - "Solar Magnetic Skeletons"

Professor Colin McInnes, Glasgow - Setting Sail for Orbit: Physics, Technology & Mission Applications of Solar Sail Spacecraft

Dr Dave Gavine, BAA - Aurora in History

BAA section report - Aurora and Noctilucent Clouds from the UK

Sunday Morning Visit (10:00 - 13:00) is to Dundee Mills Observatory

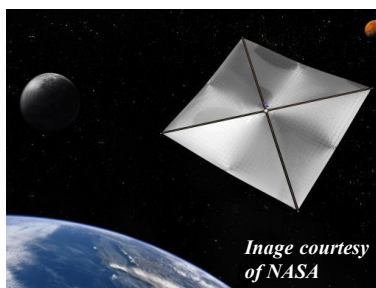


Image courtesy of NASA

BAA Members, Host AS, BAA Affiliated Societies & under 16's **£2.80** per person, per session for refreshments.

Non-BAA Members, **£3.50** per person, per session.

Please Note Lunch is not included as there are shops, cafes and pubs close by.

Return Coach Journey to Mills Observatory **£10.00** per person

For directions to venue, local information and to book on line go to www.britastro.org/dundee2016



Image Courtesy of Alan Tough

THE BOOKING FORM AND DIRECTIONS ARE ATTACHED TO THE EMAIL THE NEWSLETTER WAS SENT OUT.

Presidents' Word

Well for a change it doesn't seem that there is that much to talk about for this edition, except to hope that you all enjoyed the new style AGM, I certainly did. Perhaps we should make it a standard format, well at least the buffet. What do you think?

Not much planned in the way of outreach this summer, at the moment we have an invitation from The Princes Trust to help out in a schools day on the 9th June to be held 10 until 21:30 at Stewarton Leisure Centre, and Nick and I are doing a talk each for the Doon Valley Museum as part of their exhibition season but really they are Autumn /Winter events.

It seems like the summer Celebrate Ayrshire Event down at Culzean is not taking place or at least we haven't been invited – pretty much the same thing! So, a free summer in that respect.

The way the summer has been going so far we might be able to arrange some solar observing events and perhaps even a BBQ – anyone interested in the latter? It would be a “bring your own food type of event” rather than all provided but we could just do it as a social event or add a bit of solar if the weather is suitable. Watch the website and Facebook on that one but do let us have some feedback.

So that's me for this month, hope you all enjoy the break, I certainly have some travels planned. Oh yes, we are still looking for speakers for next year so suggestions for people to approach or volunteers to Angela please.

Alex's Space

Poet of the stars

No, not Robert Burns but the 19th century poet *Alfred Lord Tennyson*. He was interested in Astronomy since his childhood. As a young lad he knew enough about Astronomy to write the following “*The rays of many a rolling central star, / Aye flashing earthwards, have not reach'd us yet.*” He also wrote about the moon being an active place where there were “*monstrous rocks from craggy snouts disploding globes of roaring fire*”.

When Tennyson became Poet Laureate, this made him very popular, and to escape from the pressure that came with it, he moved to the Isle of Wight. He bought a house on the west of the Island – as advised by an Astronomer friend – as it was free from artificial light. It made it an ideal spot for his hobby. He capitalised on his new situation by having a wooden platform on the roof of his house. Observing meteors was one of his main interest and one night he invited one of his friends, a fellow poet William Allingham, up to the viewing platform to observe a meteor shower. While up there, Tennyson slipped and fell 10 feet through the hatchway to the ground. Fortunately, he was not hurt. Yes, us astronomers are a tough lot! A reference to meteors is to be found in Tennyson's poem “*The Princess*” - “*Now slides the silent meteor on, and leaves a shining furrow*”.

Tennyson acquired a large telescope and was able to observe the Nebulae in Lyra and Cassiopeia and some double stars.

In “*Memoir*” by Hallam Tennyson, one of Alfred's sons, he wrote of his father's knowledge of Astronomy that surprised more than one of the great astronomers of the day. Among his astronomical interests was the use of the spectroscope to analyse the spectra of stars. He was also very keen to share his enthusiasm with others, not

least his two sons and his wife Emily. He once got the boys out of the bed in the middle of the night to see the splendour of Donati's comet. It is only to hope that the boys shared the same enthusiasm at that time of day!

For anyone interested in further reading, a book by his wife Emily is worth considering. It is not in the AAS library – it is available from the Isle of Wight Country Press.



Lord Tennyson 1809 - 1892

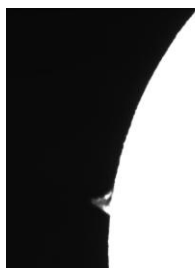


Farringford House on the Isle of Wight

Isabelles' Solar Corner



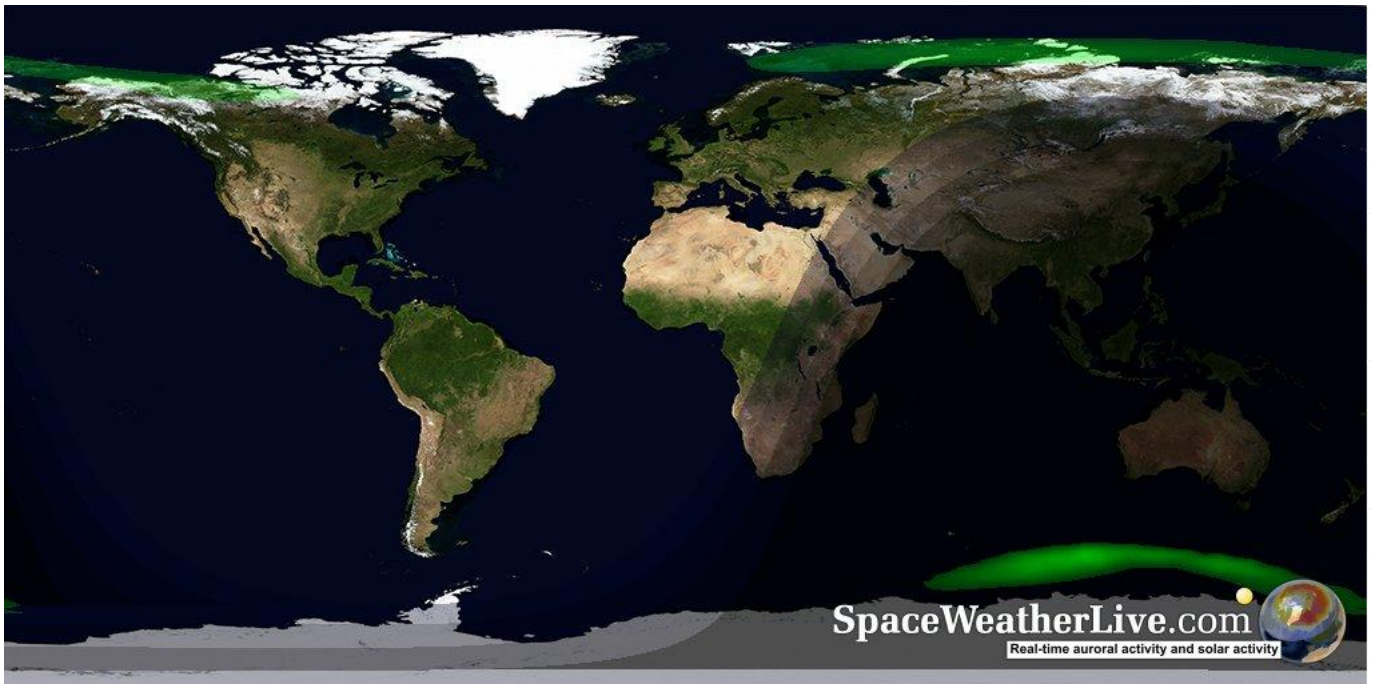
The activity on the sun's surface is low just now. There are a couple of small sunspots visible, and some long winding filaments. However, there were some rather nice, large prominences visible at the limb of the sun.



(Still iamges – unprocessed taken by Isabelle Morris)

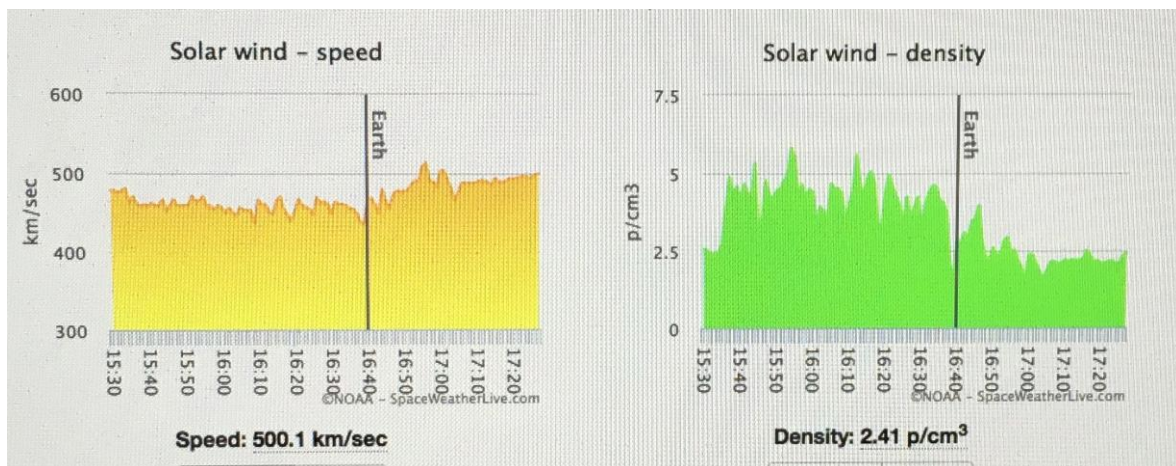
Spaceweather.com is a great way of keeping track with what is happening on the sun's surface and the effect it has on Earth. But not everybody is using Internet. So, here is what has been published on the **7th June 2016**.

The latest Aurora map valid for 30 minutes until it gets updated again.



Real-time auroral activity

Below you will find the latest solar wind and interplanetary magnetic field data covering the past two hours as measured by the ACE (Advanced Composition Explorer) spacecraft. These parameters are the first parameters used to predict auroral activity. The redder the plots get, the better it is for auroral activity! With the current speed, it will take the solar wind **50 minutes** to propagate from ACE to Earth.



AAS Library

Open for business!

THE LIBRARY IS A RESOURCE FOR MEMBERS -PLEASE SUPPORT IT AND MAKE USE OF IT

The Library list is also available on the website under "links" and can be downloaded



The library is now full up - if you would like to obtain a list or borrow an item

– contact Alex at the next meeting or give him a call on 01563 520887.

Unfortunately Alex does not have email, however messages via library@ayrastros.com will reach him the old fashioned way after a short delay but please contact him directly if at all possible.

And finally..... 😊

