

### Trips / Events

Ideas for trips and events always welcome!

[events@weymouthastronomy.co.uk](mailto:events@weymouthastronomy.co.uk)

- ◆ 19 Oct NLO—Astro Updates by David
- ◆ 16 Oct NLO—Who is Messier by Kerry
- ◆ 2 Nov NLO—Solar Physics Observatory by Allan J
- ◆ 6 Nov WAS—Solar Image Editing by Sheri Lynn Karl
- ◆ 21 Nov CADAS—Astrophotography old and new with Pete Adshead and Bob Mizon
- ◆ 4 Dec WAS—Pole Stars of Other Planets by Bob Mizon
- ◆ 19 Dec CADAS—Christmas Social and Members Short Talks

Programmes for many local Societies will be available in the near future. Check their websites for more details.

If you are interested in giving a talk or workshop, let the organisers know. They like to offer new titles in their programme line-up.

### WAC Upcoming Events:

- 9 Nov—Sheri Karl - Gravity Waves
- 14 Dec—Christmas Quiz / Social Evening

The 2019 programme is being finalised with dates and speakers to be available soon.

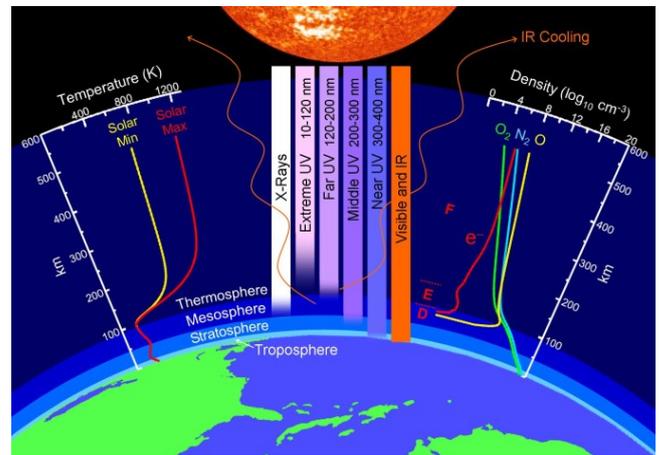
More to come!!

### WAC News—

This month an interesting article came out regarding the cooling effect of the solar minimum. The article points out that “The thermosphere always cools off during Solar Minimum. It’s one of the most important ways the solar cycle affects our planet,” explains Mlynczak, who is the associate principal investigator for SABER.

When the thermosphere cools, it shrinks, literally decreasing the radius of Earth’s atmosphere. This shrinkage decreases aerodynamic drag on satellites in low-Earth orbit, extending their lifetimes. That’s the good news. The bad news is, it also delays the natural decay of space junk, resulting in a more cluttered environment around Earth. Apparently the effect of the deep solar minimum we are experiencing is giving an indication that ‘As 2018 comes to an end, the Thermosphere Climate Index is on the verge of setting a Space Age record for Cold.

Check out the full article for more information: <https://spaceweatherarchive.com/2018/09/27/the-chill-of-solar-minimum/> Until next month! ~SK



### Observe the Moon

by Jane Houston Jones and Jessica Stoller-Conrad

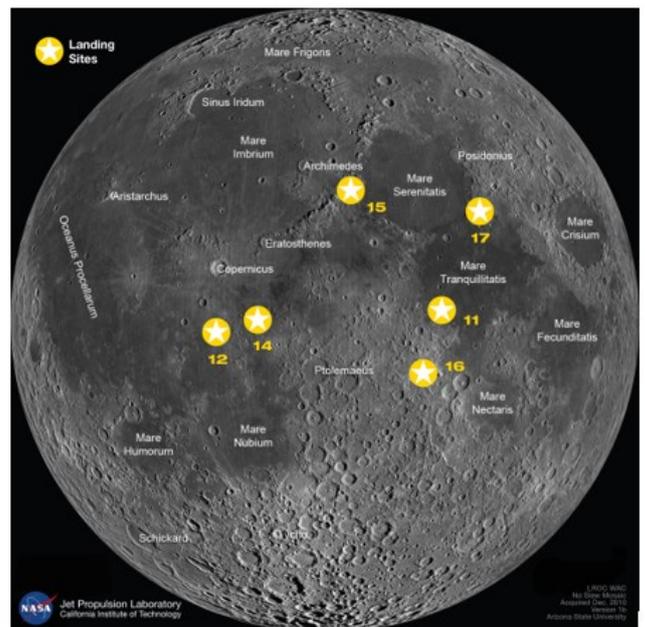
This year’s International Observe the Moon Night is on Oct. 20. Look for astronomy clubs and science centers in your area inviting you to view the Moon at their star parties that evening!

On Oct. 20, the 11-day-old waxing gibbous Moon will rise in the late afternoon and set before dawn. Sunlight will reveal most of the lunar surface and the Moon will be visible all night long. You can observe the Moon’s features whether you’re observing with the unaided eye, through binoculars or through a telescope.

Here are a few of the Moon’s features you might spot on the evening of October 20:

Sinus Iridum—Latin for “Bay of Rainbows”—is the little half circle visible on the western side of the Moon near the lunar terminator—the line between light and dark. Another feature, the Jura Mountains, ring the Moon’s western edge. You can see them catch the morning Sun.

Just south of the Sinus Iridum you can see a large, flat plain called the Mare Imbrium. This feature is called a mare—Latin for “sea”—because early astronomers mistook it for a sea on Moon’s surface. Because the Moon will be approaching full, the large craters Copernicus and Tycho will



Caption: This image shows some of the features you might see if you closely observe the Moon. The stars represent the six Apollo landing sites on the Moon. Credit: NASA/GSFC/Arizona State University (modified by NASA/JPL-Caltech)



## Perseids (more!)

also take center stage. Copernicus is 58 miles (93 kilometers) across. Although its impact crater rays—seen as lines leading out from the crater—will be much more visible at Full Moon, you will still be able to see them on October 20. Tycho, on the other hand, lies in a field of craters near the southern edge of the visible surface of the Moon. At 53 miles (85 kilometers) across, it's a little smaller than Copernicus. However, its massive ray system spans more than 932 miles (1500 kilometers)! And if you're very observant on the 20<sup>th</sup>, you'll be able to check off all six of the Apollo lunar landing site locations, too!

In addition to the Moon, we'll be able to observe two meteor showers this month: the Orionids and the Southern Taurids. Although both will have low rates of meteors, they'll be visible in the same part of the sky. The Orionids peak on Oct. 21, but they are active from Oct. 16 to Oct. 30. Start looking at about 10 p.m. and you can continue to look until 5 a.m. With the bright moonlight you may see only five to 10 swift and faint Orionids per hour. If you see a slow, bright meteor, that's from the Taurid meteor shower. The Taurids radiate from the nearby constellation Taurus, the Bull. Taurids are active from Sept. 10 through Nov. 20, so you may see both a slow Taurid and a fast Orionid piercing your sky this month. You'll be lucky to see five Taurids per hour on the peak night of Oct. 10.

## WAC Open Evening Friday 14th September *by Chris Bowden*



What a great night we had at the WAC open evening last month! Ennio brought a couple of scopes (including an excellent home made one) and we put the lights off in the car park to view the Moon, Jupiter, Saturn & Mars as well as some double stars and even M31 too!

There were good short talks by James on "the Maunder Minimum" and from John on "Conjunctions" and there were Stellarium, Sundial and Planisphere workshops as well as the CFDS and Geoff Trim promoting his latest book. John finished the evening off by telling us what to look out for in the sky over the coming month or so.

Having helped out with getting people familiar with how to align a scope and being able to get a "wow" or two from those viewing Saturn's rings, Jupiter's moons and the lunar craters for the first time, I left encouraged that WAC has a good future if it continues to put on evenings such as these.



I recently went to Sidmouth Astro Fair and couldn't resist a bargain of purchasing a high quality small scope for taking on my eclipse travels; a 60mm doublet refractor known as an Altair EDF 60. I've been trying it out at each clear night since and am impressed with the sharpness and clarity of this wide field scope.

Here's a few of the imaging results which I feel bodes well for bagging that image of the solar corona on coming eclipse trips! I look forward to being able to return to WAC in the future to show you some of these results!



Best wishes - and see you at WAC from time to time when we visit from Wales, Chris