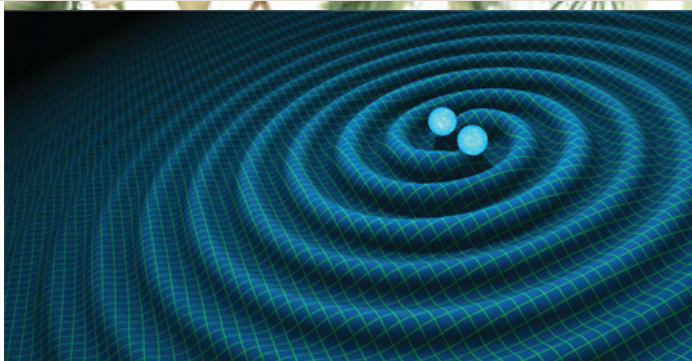


## SKYWATCHER NEWSLETTER



## LATEST NEWS

What may be a groundbreaking discovery was released recently in Science... It's a long shot, but scientists may have spotted exotic primordial black holes formed just after the Big Bang. The hints come from the Laser Interferometer Gravitational-Wave Observatory (LIGO) and its European counterpart, Virgo, which sense the tiny ripples in space itself created when massive objects such as black holes whirl together and merge. On 12 November, LIGO and Virgo issued an automated alert for a merger in which at least one object was too light to be an ordinary black hole or neutron star formed in the collapse of a star.

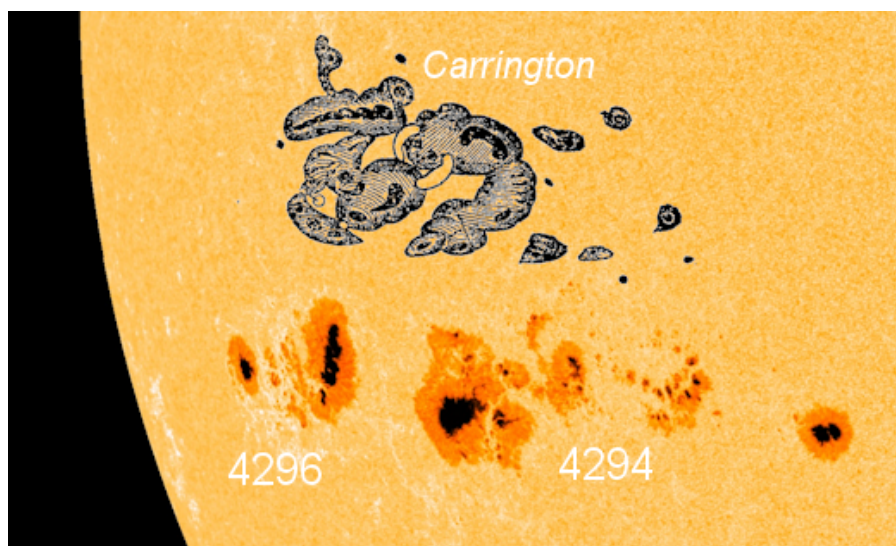
<https://tinyurl.com/mt7cpfhc>



Spaceweather.com

2 December 2025

Until next month Happy Holidays to All of the WAC and Best wishes for 2026! ~SLK



**EVEN CARRINGTON WOULD BE IMPRESSED:** On Sept. 1, 1859, English astronomer Richard Carrington sketched the most famous sunspot in history. While Carrington was watching an image of the sun projected on a screen, the sunspot produced a blinding X45-class solar flare, followed two days later by a planet-wide geomagnetic storm. We call it the "Carrington Event."

How does today's giant sunspot compare to Carrington's? Here is the answer:

The image shows Carrington's drawing of the 1859 sunspot inserted to scale on a Dec. 2, 2025, image of sunspot complex 4294-4296. They're about the same size. The surface area of Carrington's sunspot was ~2300 millionths of the solar disk. The surface area of 4294-4296 is 2080 millionths, about 90% as large.

To be clear, 4294-4296 is actually two sunspots. Their close proximity makes them appear as a single behemoth--an unfair advantage vs. Carrington. Even so, strong explosions are likely. The crowding of the two sunspots' magnetic canopies raises the odds of reconnection and an X-flare of their own. Any explosions today will be geoeffective.



## LOCAL EVENTS

13 Dec 2025 - FA - Geminid Meteor Shower - Knowlton Observatory

13 Dec - NLO - Public Observatory Tour: Geminid Meteors

16 Dec - NLO - Public Observatory Tour: Geminid Meteors

8 Jan - SAS - SAS meeting and talk by Mary McIntyre - Women in astronomy (part 2)

21 Jan - FA - Astronomers' Tools, Choosing the right telescope - David Arditti

22 Jan - SAS meeting and talk by Philip Wallace

19 Feb - SAS - Paul Howat - Photographing the Milky Way

25 Feb - FA - Torn Protoplanetary Discs - when planet formation gets messy - Alison Gray

MORE TO COME IN 2026!

VISIT OUR WEBSITE FOR THE LATEST CLUB INFORMATION

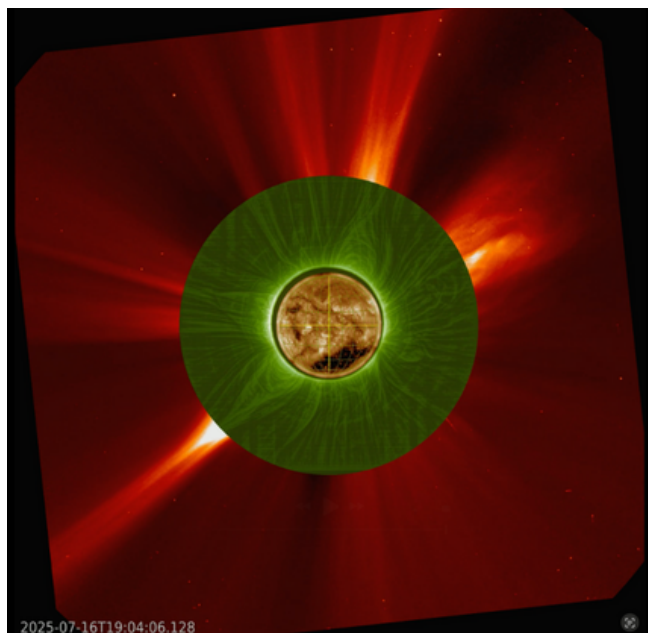
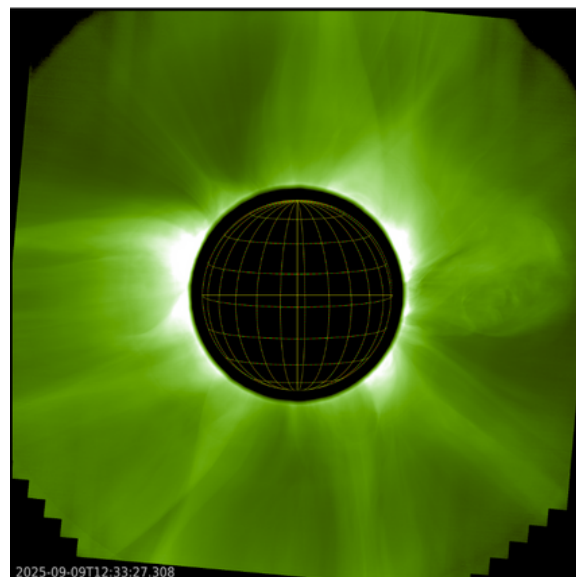
WWW.WEYMOUTHASTRONOMY.CO.UK



Proba-3 is 1 year in space!

December 5, 2024 - exactly 1 year ago, the duo satellite Proba-3 left Earth to head to space. The telescope ASPIICS, whose task is to make perfect total solar eclipses from space, was onboard. The launch went flawless.

December 5, 2025 - exactly 1 year later, ASPIICS has already delivered a wealth of amazing pictures of the solar atmosphere close to its surface, a treasure box for solar scientists. A peek in the treasure box: This is a white-light image of the solar corona taken by ASPIICS on September 9, 2025. The corona has a shape typical for a maximum solar activity cycle, with streamers visible all around the solar limb. A Coronal Mass Ejection is seen propagating towards the west (right in the image).



This is the Sun and the solar atmosphere on July 16, 2025. The green images are more detailed compared to the red images. A Coronal Mass Ejection is seen propagating towards the west (right in the image). The middle EUV image is taken by SDO/AIA. The green white-light image is taken by ASPIICS, the red white-light image is from SOHO/LASCO. All images show the Sun and the solar atmosphere on July 16, 2025.

The movie: [https://stce.be/movies/JHV\\_2025-10-01\\_23.40.02.mp4](https://stce.be/movies/JHV_2025-10-01_23.40.02.mp4)

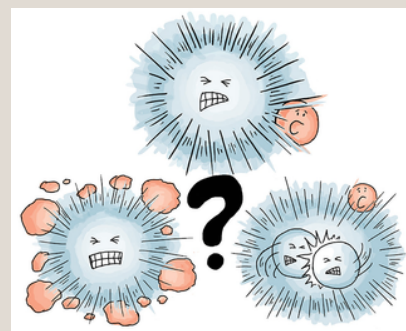


### NASA Recorded Lightning Crackling on Mars For The First Time

Zzzzap!

ScienceAlert / Nov 28

<https://www.sciencealert.com/nasa-recorded-lightning-crackling-on-mars-for-the-first-time>



### WAC Upcoming Events

9 JAN - MEMBERS 10MIN TALKS

13 FEB - WHY ARE THERE NO GREEN STARS - PAUL MONEY

13 MAR - TOURING THE UNIVERSE FROM A BACK GARDEN - CHRIS LEE

10 APR - TRANSIT OF VENUS FROM HORROCKS IN 1639 TO 2012 - GRAHAM MCLOUGHLIN

MORE TO COME IN 2026!





## ASTRO- NEWS

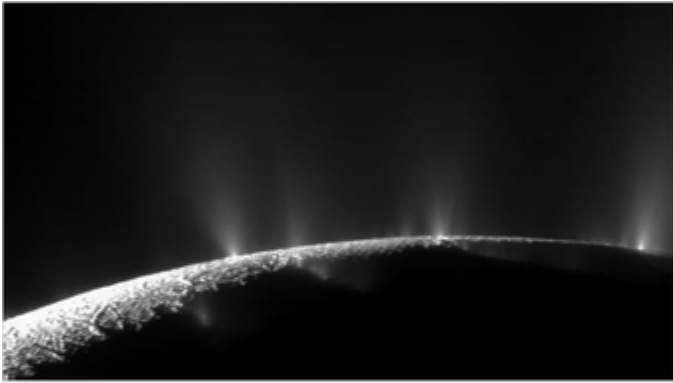


### Webb Telescope Spies Io's Volcanic Activity and Sulfurous Atmosphere

New James Webb Space Telescope images reveal cooling lava, volcanic sulfur monoxide gas, and sulfur gas emissions created by interactions between plasma and the moon's atmosphere.

— Eos / Nov 4

<https://tinyurl.com/ycx2nz2b>

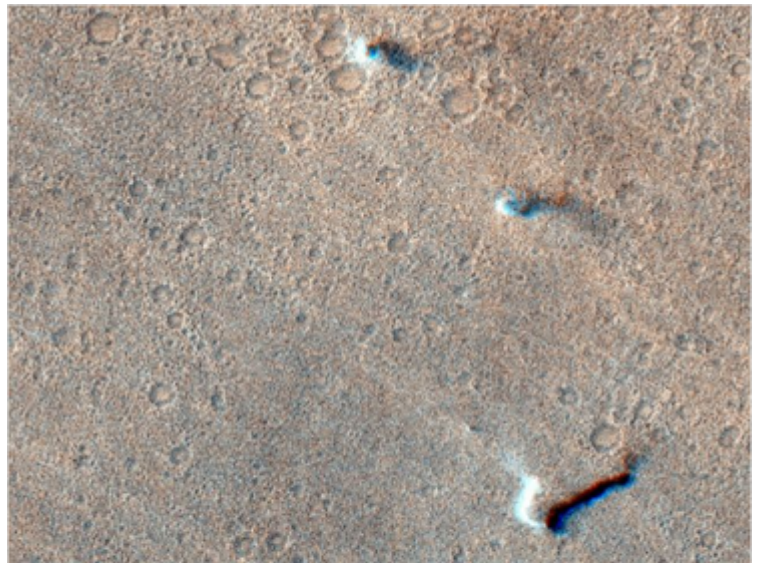


### Speedy Flyby Adds New Organics to Enceladus's "Primordial Soup"

A new analysis of old Cassini data has also verified past detections of complex organics in Saturn's E ring, strengthening the chemical ties between the ring and its progenitor.

— Eos / Nov 12

<https://tinyurl.com/3uf4985t>

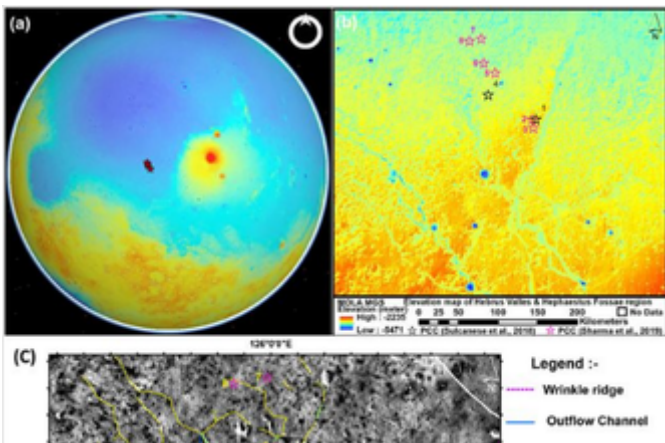


### Martian Dust Devils Reveal Dynamic Surface Winds

A new wind map covering the whole of Mars includes some of the fastest winds ever detected on the Red Planet.

— Eos / Oct 28

<https://tinyurl.com/yhjvxvpz>

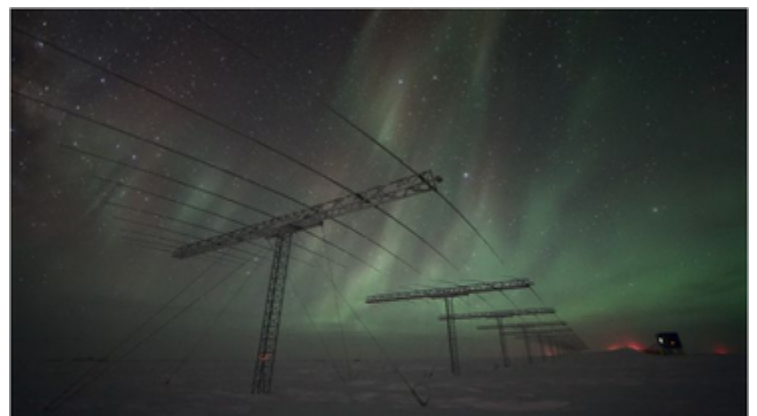


### Scientists discover caves carved by water on Mars that may have once harbored life

If there is, or ever has been, life on Mars, the chances are it would exist in caves protected from the severe dust storms, extreme temperatures, and high radiation present on its surface. One pla...

phys.org / Nov 12

<https://phys.org/news/2025-11-scientists-caves-mars-harbored-life.html>



### A Weak Spot in Earth's Magnetic Field Is Going from Bad to Worse

This could be bad news for satellites and spacefarers.

— Eos / Nov 10

<https://tinyurl.com/5852k68z>



## WAC Members Corner



Since you may be finalising your Wish List for the holidays, I hope it might be of interest to show the difference in field of view from two of the popular SmartScopes on the market, the ZWO SeeStar s30 and s50. As with all telescopes, the choice depends on what you want to use it for as your primary target object type. Many thanks to **Sara** for sharing her superb images of the Moon and M45 to use as a comparison of the two lens diameters. The software is universal but incorporates a mosaic mode for use on the s50 to enable wider field of view by stitching together multiple framing. This has not been used in the examples shown here. If you are thinking of using a Smartscope for eclipses, the s30 will enable capture of the corona with its wider FOV whereas the s50 enables good white light images of sunspots with its higher resolution. They are both great little portable scopes that are a joy to use and really embrace 'grab and go' technology! If you get one under the tree, please share your photos! ~ SLK





