



14th October 2026

Tonight: Year 5 - Meeting No 35

- The sky tonight
- Recent news, sightings and Members' Matter
- "Very Large Telescopes in South Africa" – Prof Phil Charles
- Forward look



The sky tonight (20:45): stellarium-web.org



The sky tonight (20:45): stellarium-web.org

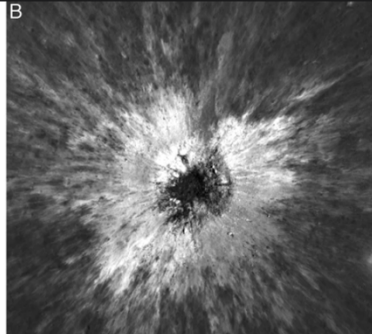


The sky early tomorrow (06:00): stellarium-web.org



In the news...

NASA spacecraft discovers a huge new crater on the moon



This combination of photos made by NASA's Lunar Reconnaissance Orbiter shows the same area on the moon's near side. Credit: NASA/Johnson Space Center/Intuitive Machines via AP. License: [this photo](#)

BY MARCIA DUNN

Updated 7:03 PM BST, September 16, 2026

[Leer en español](#)

New NASA Images Reveal Crater Left Behind by SpaceX Rocket Impact on the Moon

The fresh impact crater measures at 60 feet wide and 10 feet deep.

BY PASSANT RABIE PUBLISHED AUGUST 19, 2026, 4:45 PM ET

Scientists have discovered a crater on the moon that's bigger than the Roman Colosseum, the result of a powerful impact two years ago that initially went undetected.

The steep-sided hole — about 222 meters across and up to 43 meters deep — is the solar system's biggest known impact crater carved out in recent times.

NASA's Lunar Reconnaissance Orbiter spotted the crater on the moon's near side in May 2024 soon after it was formed by an incoming fragment of an asteroid or comet. The moon strike escaped real-time detection by telescopes on Earth and in space.

LRO's wide-angle images were not identified until August 2025. The spacecraft gathered more detailed pictures last fall, followed by confirmation of the discovery early this year.

Why does Venus have no moon? Its spin would destroy one if it had

Scientists from California say the planet's "tidal bulges", caused by its slow spin, would have pulled any moon orbiting Venus towards the point of no return



Venus is often described as Earth's "evil twin"



Kaya Burgess, Science Correspondent

Thursday September 17 2026, 6.34pm, The Times

Astronomers have long puzzled over why it has no moon.

The Earth spins relatively rapidly, completing a full rotation once every 24 hours, but the moon takes 27.3 days to orbit the Earth.

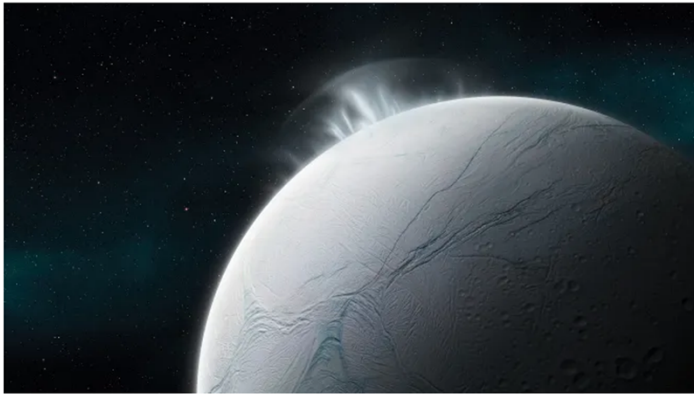
The moon creates "tidal bulges" in the Earth's oceans, with these bulges exerting a small extra gravitational tug on the moon as the Earth spins, pulling the moon forward and speeding it up slightly in its orbit.

Venus has a very slow spin, one rotation every 243 Earth days. A Venusian day is longer than a Venusian year, as it takes just 225 Earth days to complete an orbit of the sun.

If Venus had a moon, this slow spin would have the opposite effect. Any tidal bulge on Venus would constantly lag behind the moon's orbit, acting as a "brake" to slow the moon down with its gravitational tugs.

Icy moon around Saturn could hold first signs of alien life

Microscopic organisms can not only survive but grow and adapt in the 'soda ocean' conditions on Enceladus, scientists have found



Enceladus, Saturn's sixth-largest moon, has plumes of water, like giant geysers, spurting out into space from its south pole

TOBIAS ROETSCH/ALL ABOUT SPACE/FUTURE PUBLISHING VIA GETTY IMAGES



Kaya Burgess, Science Correspondent

Sunday September 27 2026, 5.00pm, The Times

Could life really survive in the deep, dark, oxygen-starved oceans that lie beneath the icy crust of a moon in orbit around Saturn, far off in the outer reaches of the solar system? Tantalising new evidence suggests that it could.

The finding adds to excitement around Enceladus as one of the most likely sites to find the first signs of extraterrestrial life, providing a boost to the agencies planning missions to investigate the icy moon for evidence of alien microbes.

Scientists in Berlin have recreated in their laboratory the conditions found in the oceans of Enceladus and found that microscopic organisms can not only survive there but can also grow and adapt.

SpaceX launches giant Starship rocket on first flight to orbit

The 403ft vehicle blasted off from Texas in a mission that the company's founder, Elon Musk, hopes will pave the way for human passengers



Jacqui Goddard, Miami

Monday September 28 2026, 4.24pm, The Times

SpaceX Starship

Height: 171ft

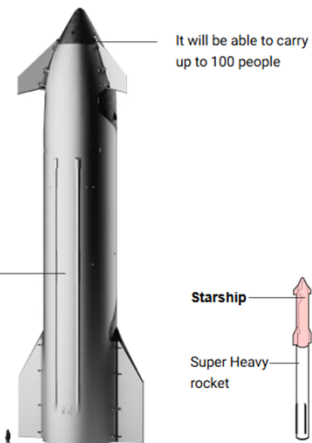
Diameter: 29.5ft

Propellant capacity: 1,600 tonnes

Payload capacity: 100+ tonnes

It will transport satellites, large space telescopes and significant amounts of cargo into space

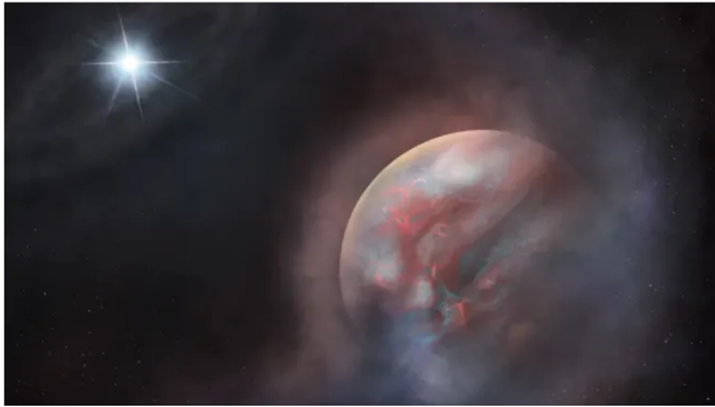
It will be able to carry up to 100 people



Graphic by The Times and The Sunday Times. Source: SpaceX

'Phoenix planet' reborn from its star's ashes is discovered

The rare discovery around a white dwarf raises intriguing possibilities for the future of our own solar system, according to scientists



The white dwarf known as HS 0209+0832 lies about 270 light years from Earth

ILLUSTRATION BY SNEHALATA SAHU/UNIVERSITY OF WARWICK



Kaya Burgess, Science Correspondent

Tuesday October 06 2026, 7.50am, The Times

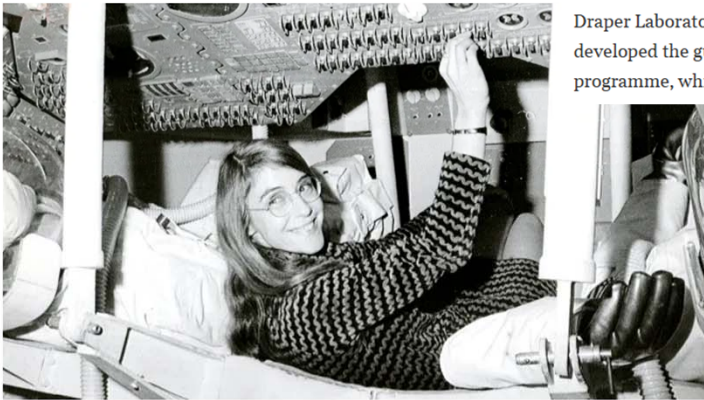
A "phoenix" planet born from the ashes of a dead star has been discovered by astronomers led by University of Warwick.

Never before has such a world been spotted in orbit around a white dwarf, which is the dim, collapsed core left behind when a burnt-out star comes to the end of its life and ejects its outer layers.

Observations suggest it is a "second-generation" planet, meaning it was "assembled from the leftovers of the star's death rather than surviving from its original planetary system", researchers said.

Margaret Hamilton obituary: Apollo missions software engineer

Mathematician whose code saved the Apollo 11 moon landing and who coined the term for her profession dies aged 90



Margaret Hamilton inside a spacecraft simulator

NASA

Thursday October 08 2026, 8.30am, The Times

Hamilton led a division of the instrumentation laboratory (now known as the Draper Laboratory) at the Massachusetts Institute of Technology (MIT). It developed the guidance, navigation and control systems for the Apollo programme, which ran from 1961 to 1972.

Hamilton was credited with popularising the term software engineering. "It was out of desperation I came up with the term, to say: 'Hey, we're engineering too'. It was an ongoing joke for a long time. Then one day in a meeting, one of the most respected hardware gurus explained to everyone that he agreed with me. It was a memorable moment."

The Apollo Guidance Computer weighed 32kg but had only 72 kilobytes of read-only memory and 32 kilobits of random-access memory. Modern smartphones have millions of times more capacity and power.



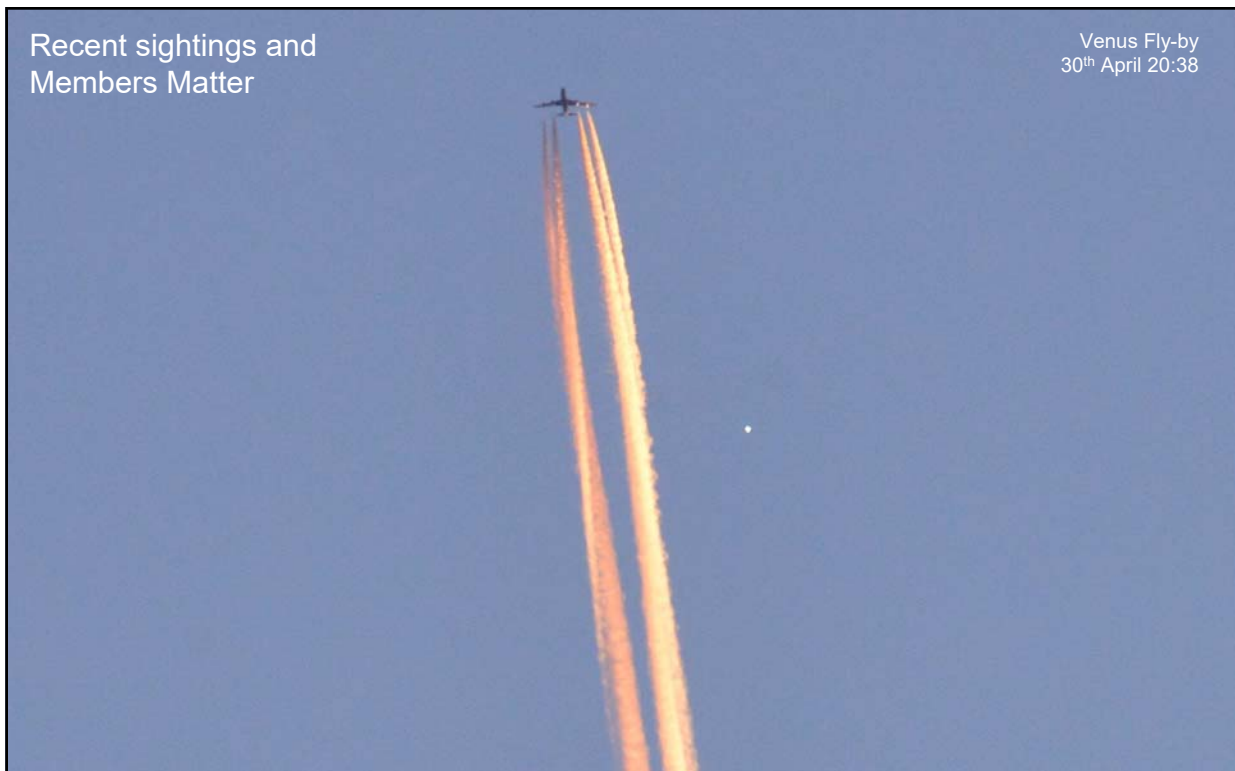
Hamilton with the team's printed code in 1969...

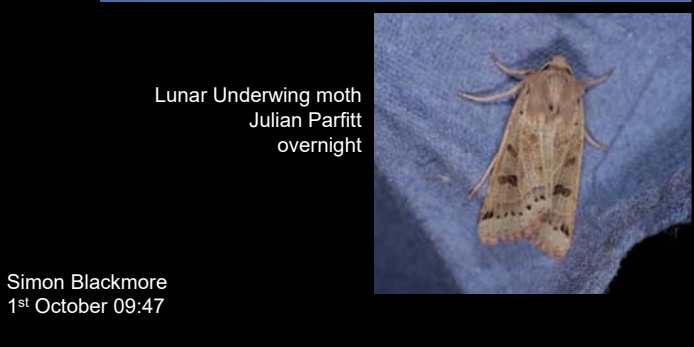
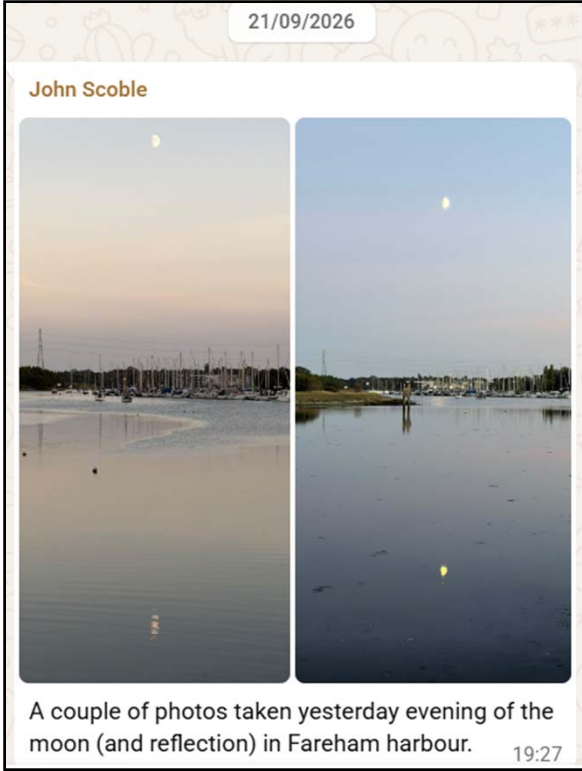
...and immortalised as a Lego figure in 2017

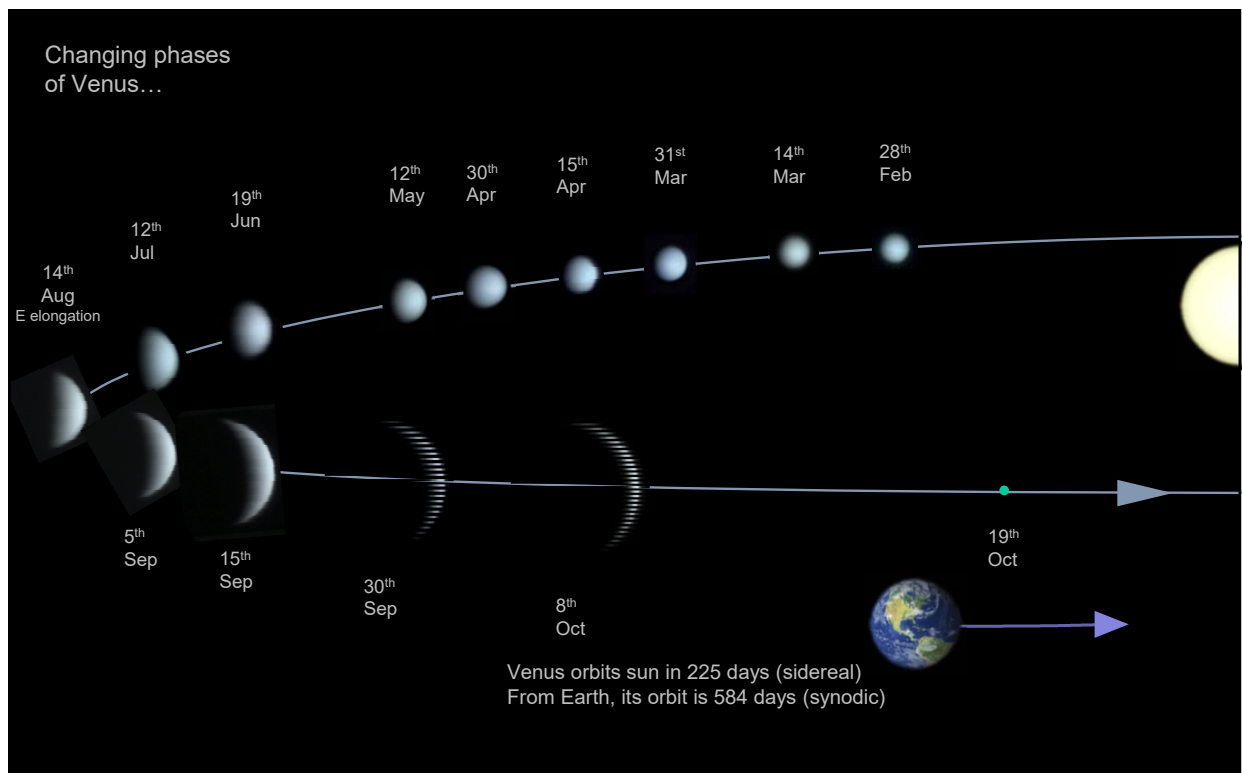
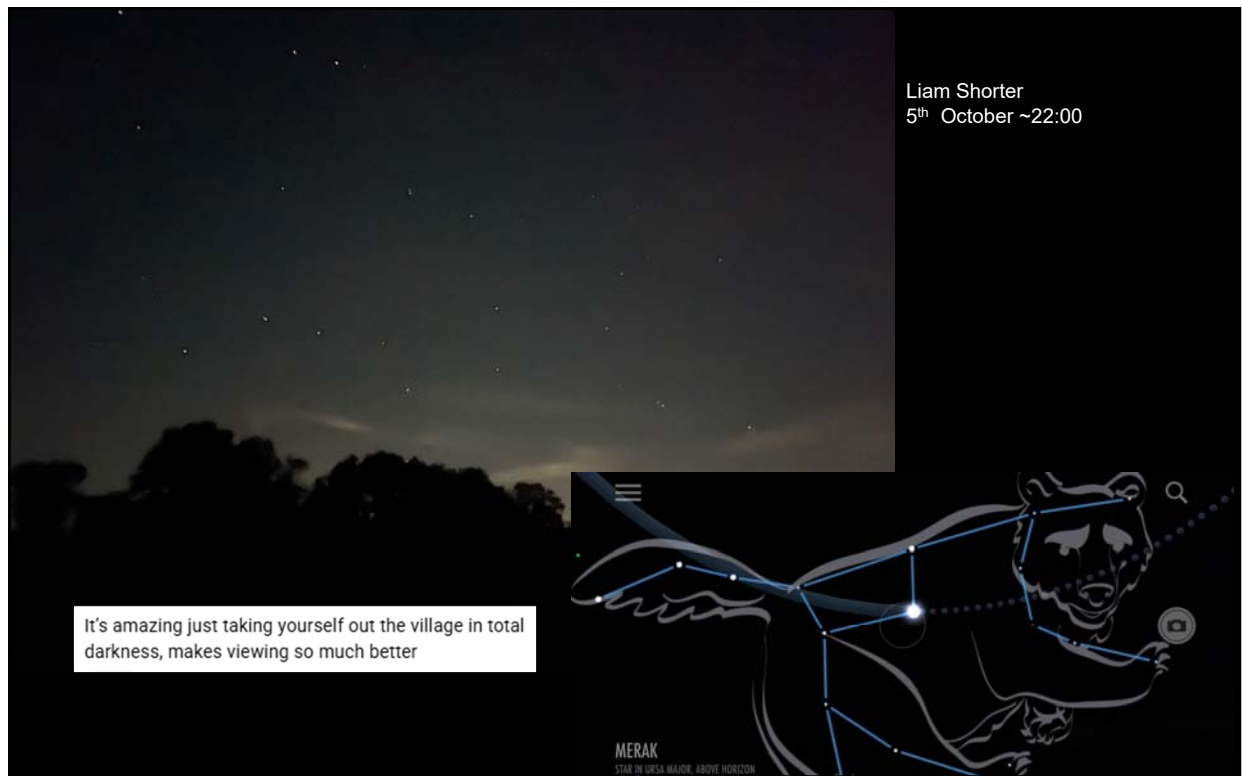


Recent sightings and
Members Matter

Venus Fly-by
30th April 20:38







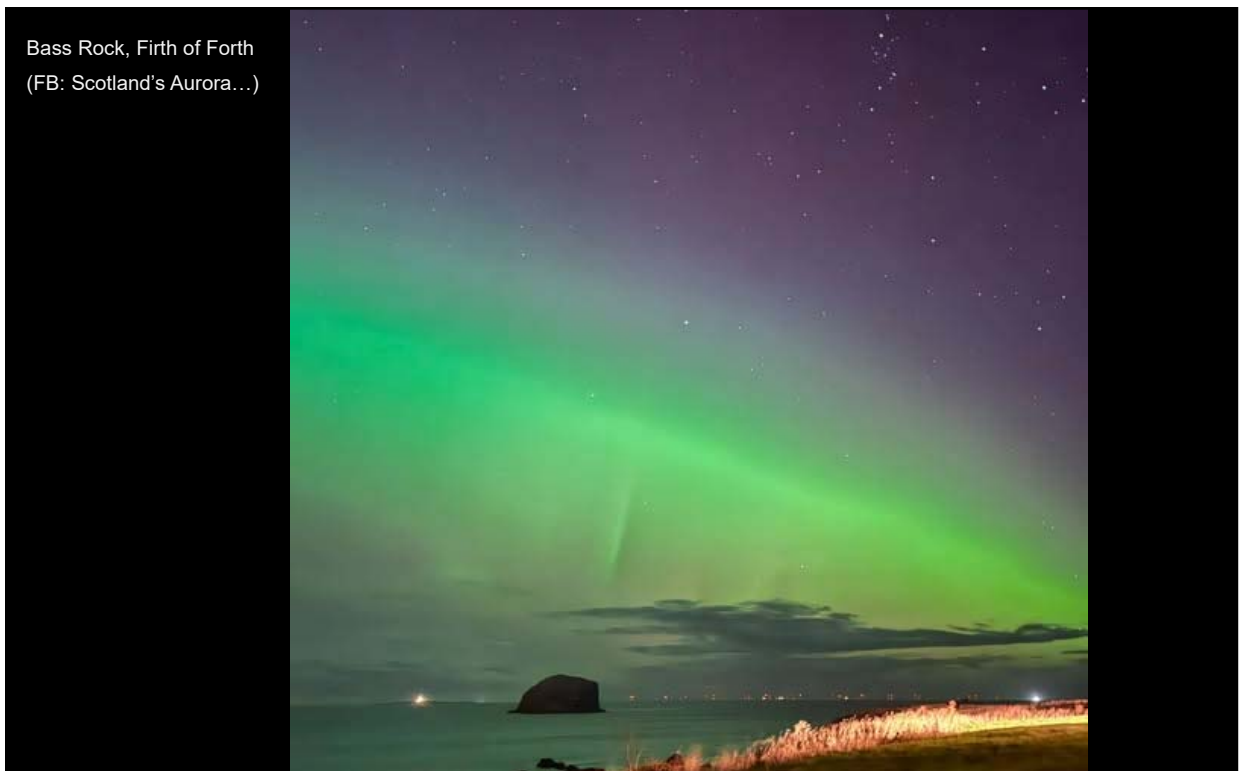


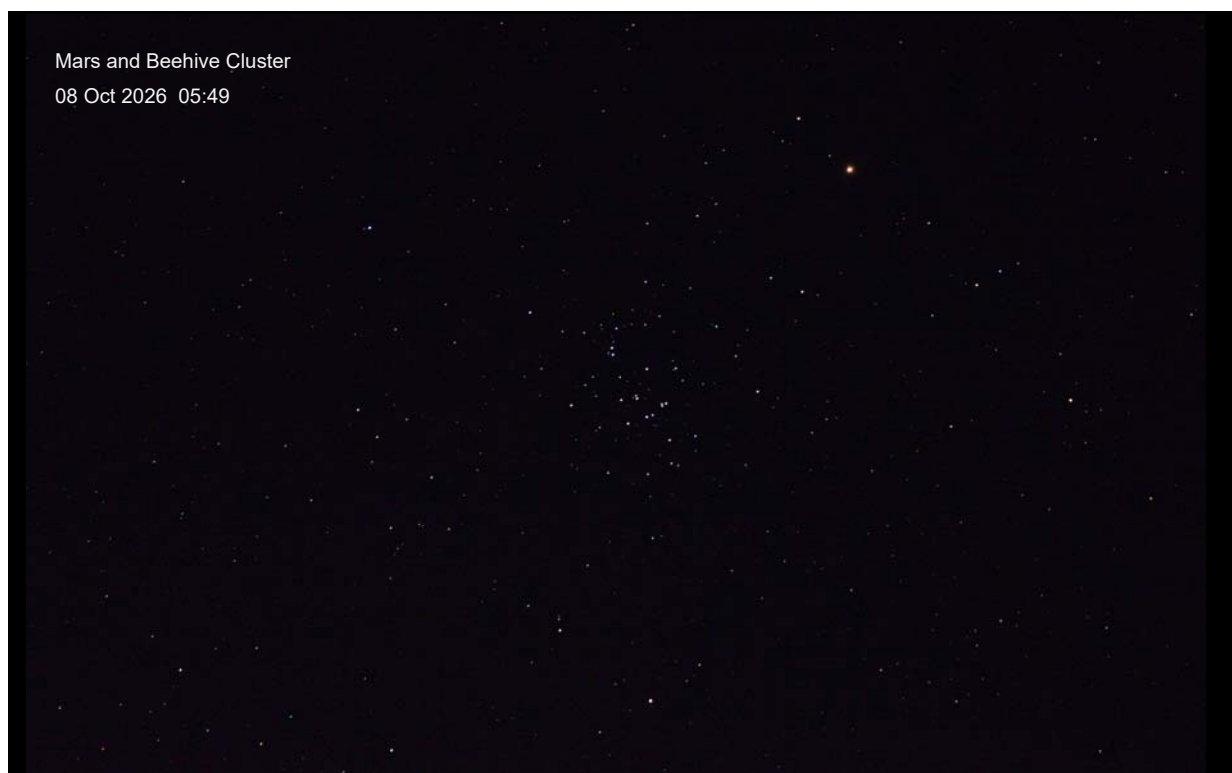
Alison Lawrie
Anson Field
10th October ~20:15

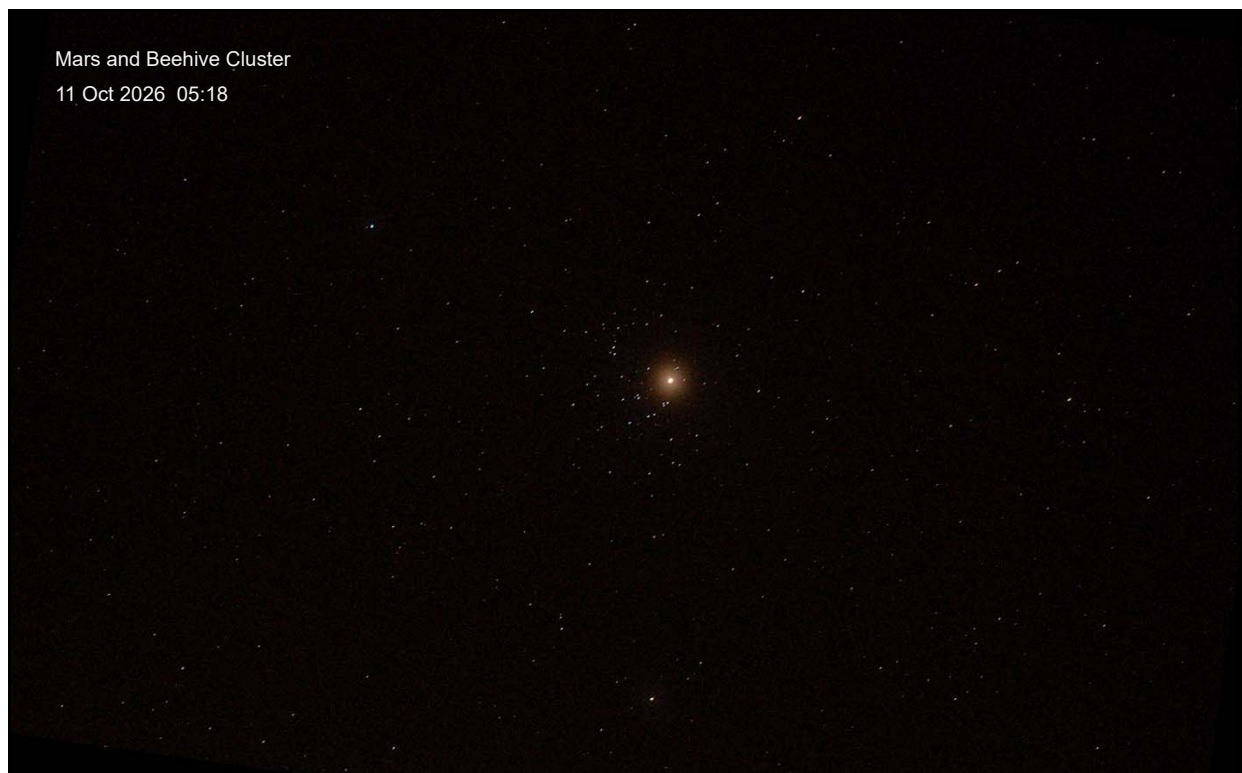


Ray Dredge
Anson Field
10th October ~8pm









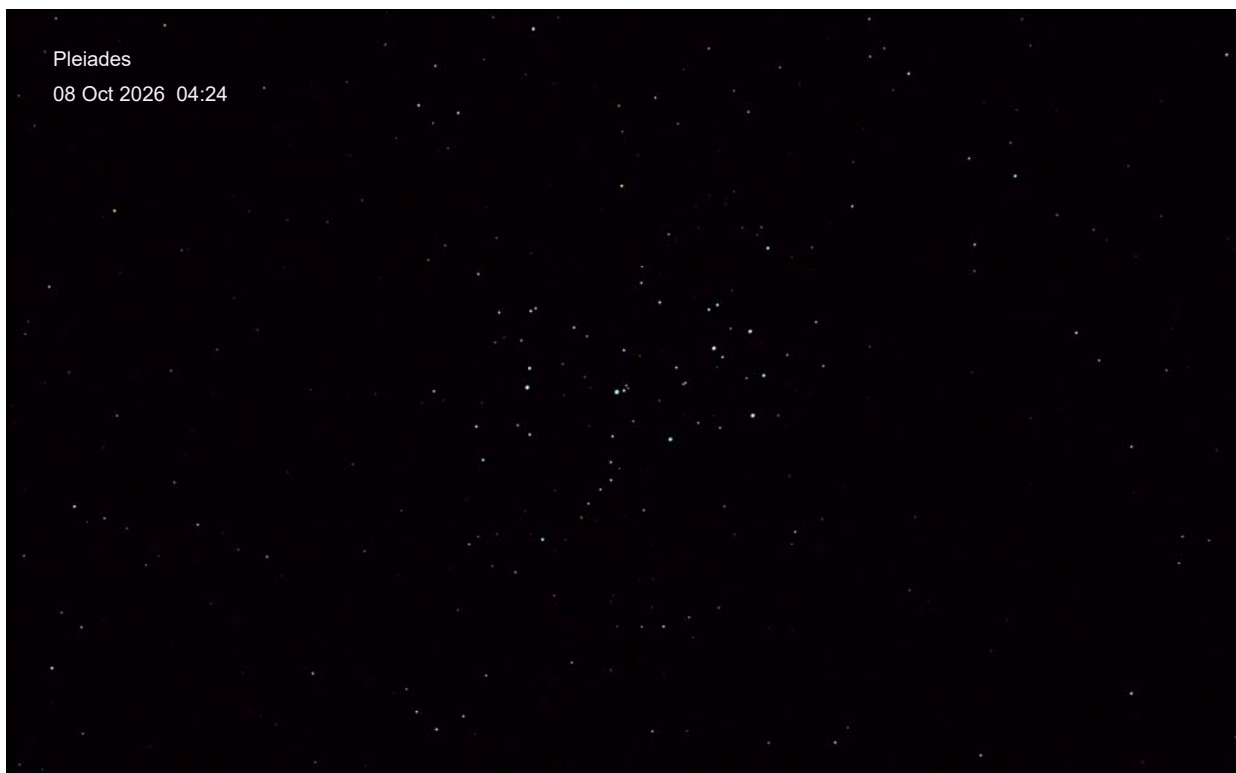
Mars and Beehive Cluster

14 Oct 2026 04:43



Pleiades

08 Oct 2026 04:24



Tonight's Feature

"Very Large Telescopes in South Africa" – Prof Phil Charles



Looking forward...

What to see in the coming month

October

- 21st : Peak or Orionid meteor shower
- 24th : Moon near Saturn (from about 19:00)
- 27-28th: Moon occults (moves in front of) the Pleiades (23:00-03:00)

Planets visible: (Me), (V), Ma, J, S, U, N Moon: New: 10th Full: 26th

November

- 1st : waning Moon rises near the Beehive cluster (23:00)...
- 2nd : ...Beehive, Moon, Mars, Jupiter, Regulus alignment (01:00)
- 7th : Thin waning crescent Moon near Venus, Spica (06:00)
- 15/16th : Moon and Mars about 1° apart (midnight)
- 17th : Peak of Leonid meteor shower

Planets visible: Me, V, Ma, J, S, U, N Moon: New: 9th Full: 24th

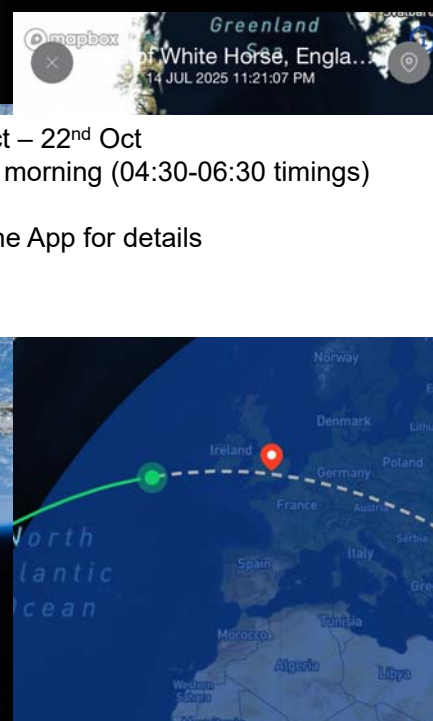


ISS visible from Marcham

From SpotTheStation NASA App

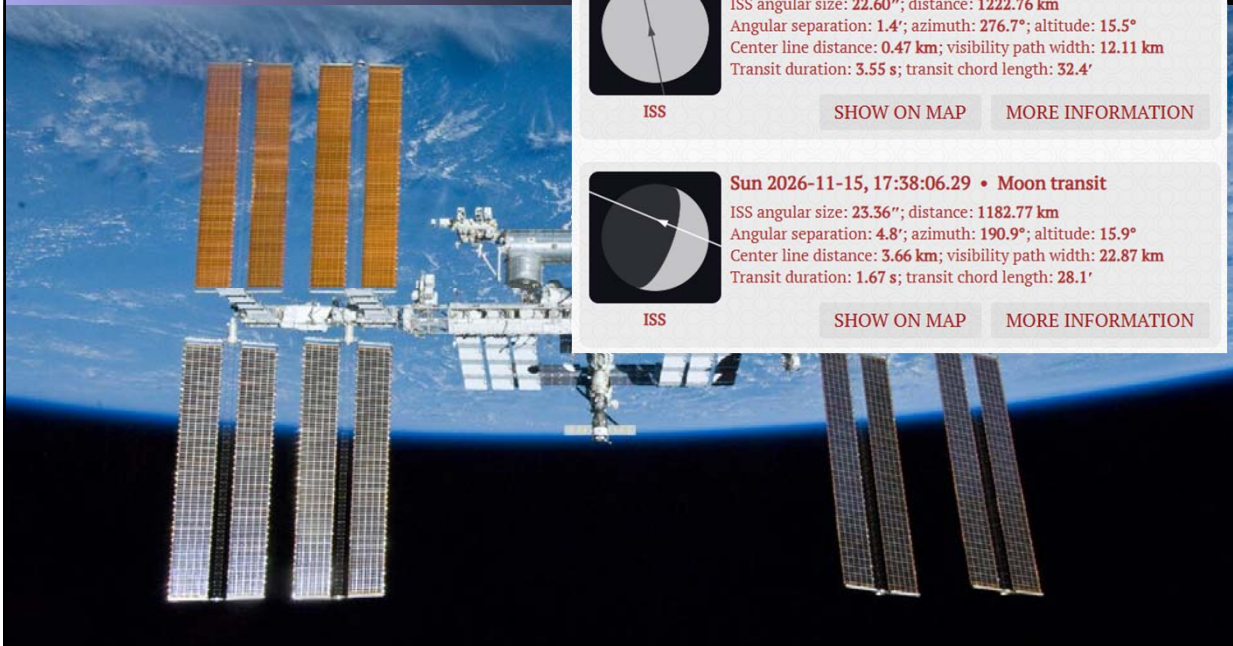


16th Oct – 22nd Oct
– early morning (04:30-06:30 timings)
- see the App for details



ISS transits visible from Marcham

transit-finder.com





Mon 2026-10-26, 05:24:23.89 • Moon transit
ISS angular size: 22.60"; distance: 1222.76 km
Angular separation: 1.4"; azimuth: 276.7°; altitude: 15.5°
Center line distance: 0.47 km; visibility path width: 12.11 km
Transit duration: 3.55 s; transit chord length: 32.4'

ISS

[SHOW ON MAP](#) [MORE INFORMATION](#)



Sun 2026-11-15, 17:38:06.29 • Moon transit
ISS angular size: 23.36"; distance: 1182.77 km
Angular separation: 4.8"; azimuth: 190.9°; altitude: 15.9°
Center line distance: 3.66 km; visibility path width: 22.87 km
Transit duration: 1.67 s; transit chord length: 28.1'

ISS

[SHOW ON MAP](#) [MORE INFORMATION](#)

Future meetings...

- 18th Nov : "What are we really from?" - Kevin Langley
- 16th Dec : "Astrochef" – details currently under wraps!
- 13th Jan: "Astrophotography in our light-polluted skies" – Dr Patrick Tan

(Note this date for January meeting)

Wednesdays at 7:30pm



Marcham Star Gazers
– 24 members (14% up on last month!)

- Sharing images with other group members
- Alerts: what's happening now
- Notify last-minute telescope sessions

Marcham Star Gazers
WhatsApp group

