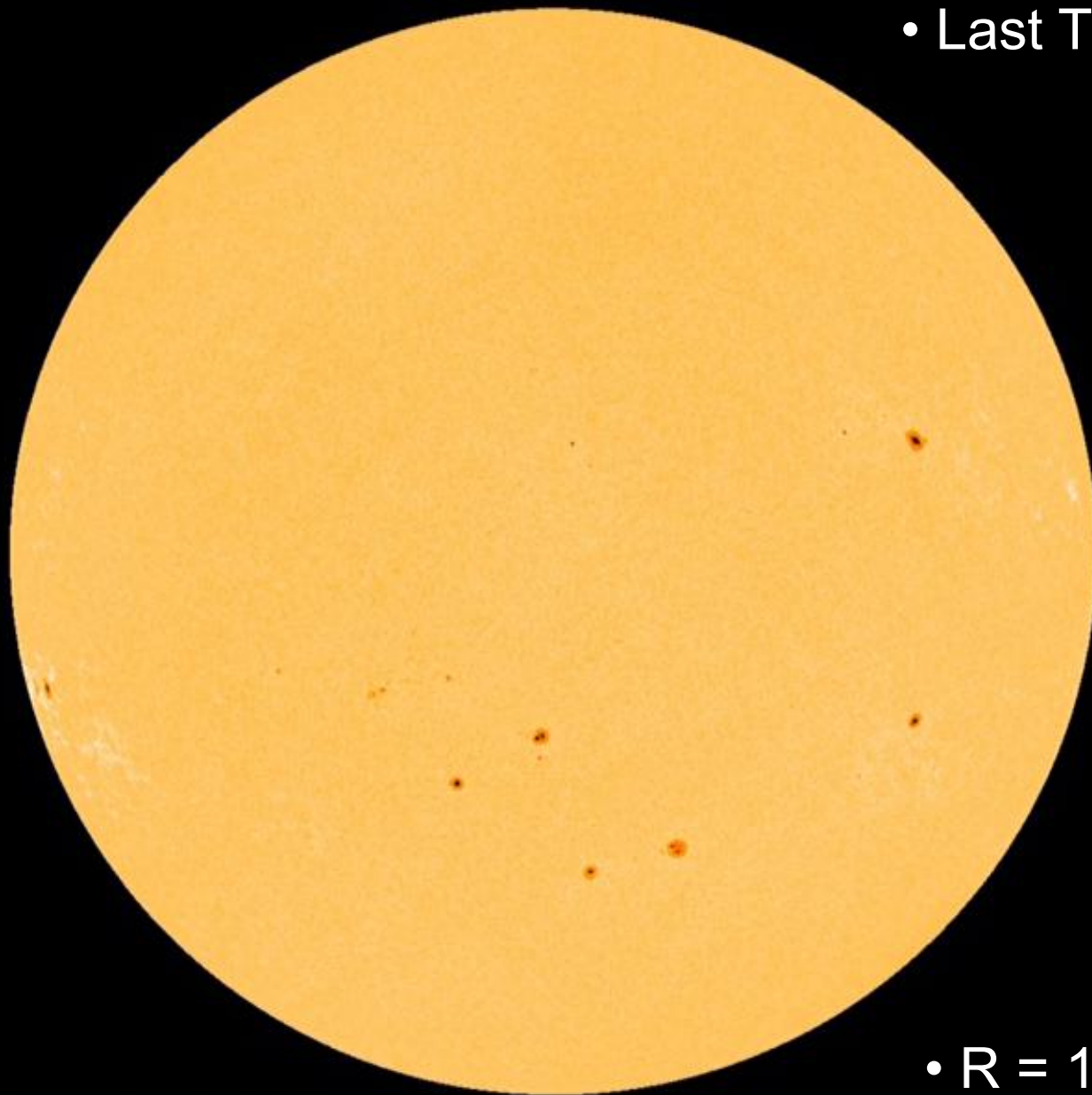


What's Up?

2025 August 25 to September 22

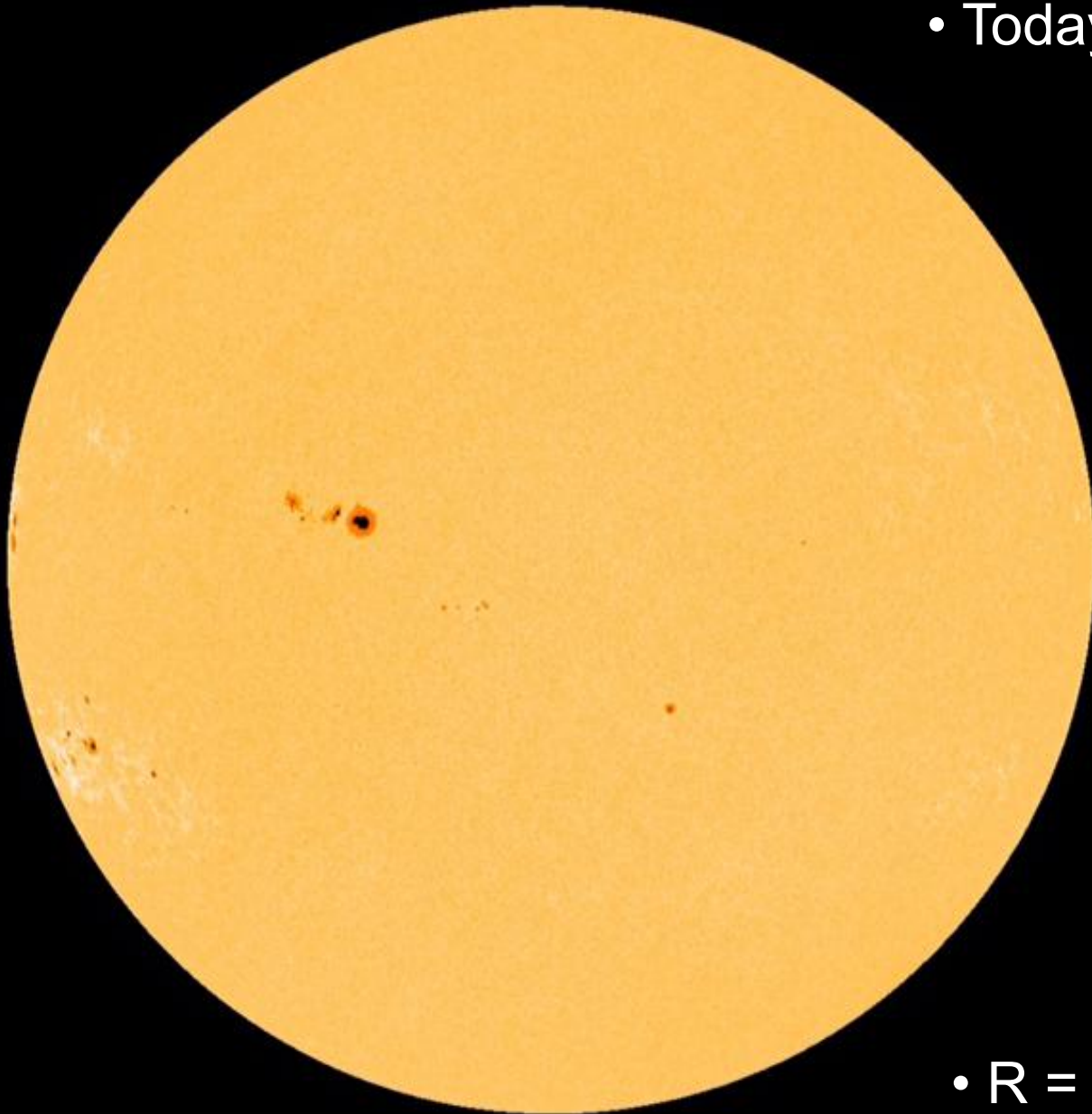
Bill Barton, FRAS

• Last Time



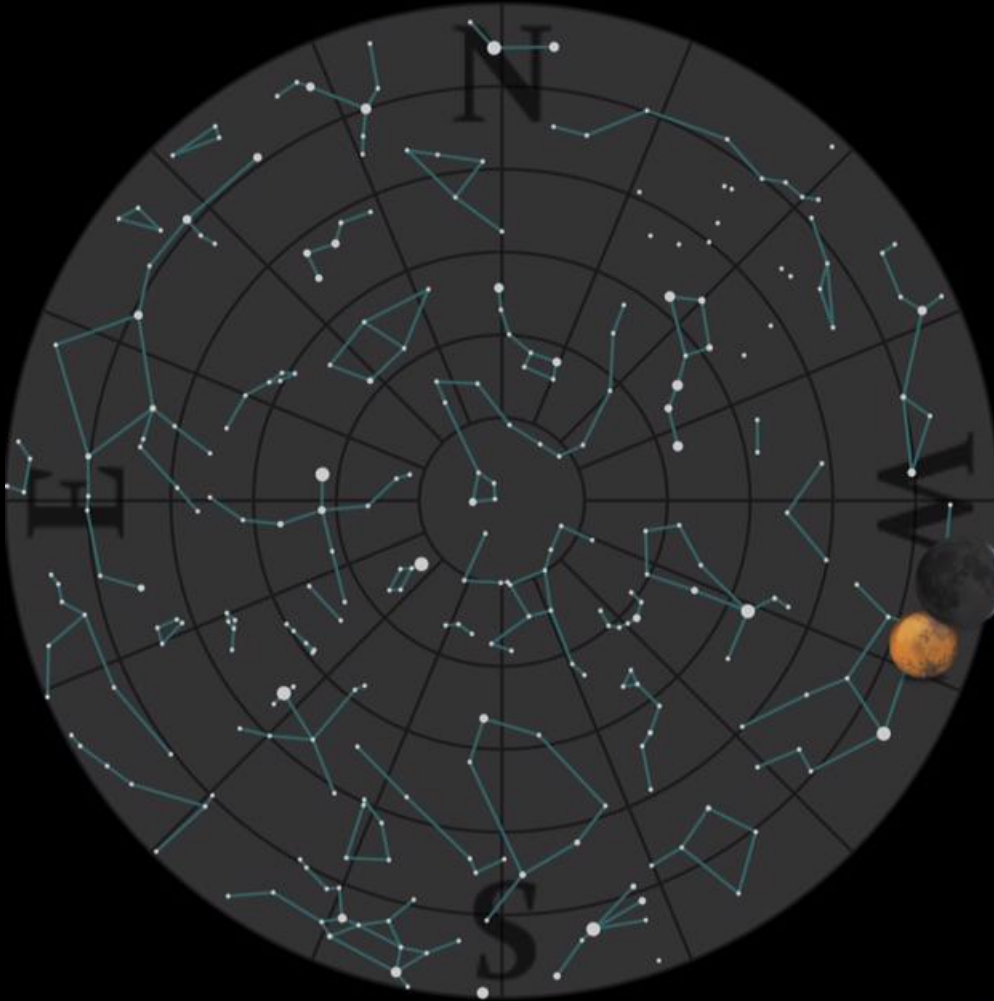
• $R = 126$

- Today

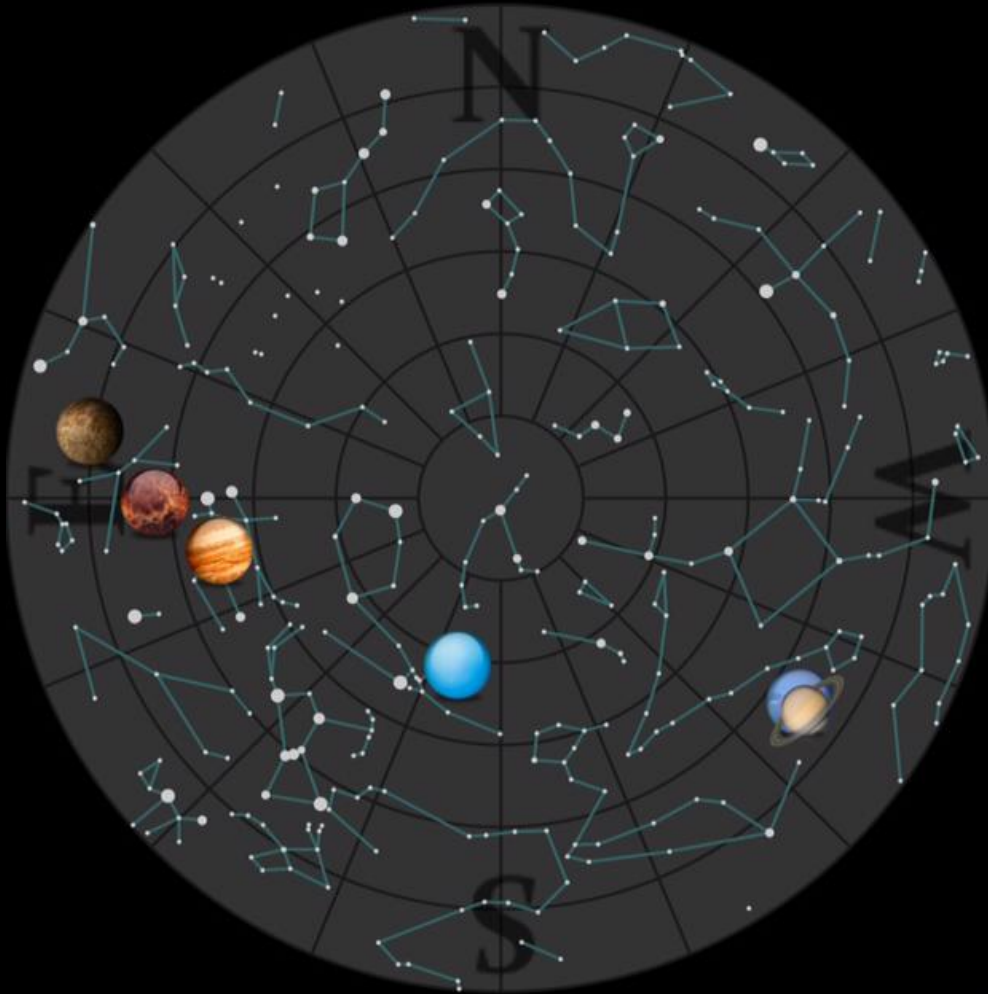


- $R = 102$

- The Sky 20:00
Tonight







- The Sky 06:00
Tomorrow



Inner Solar System

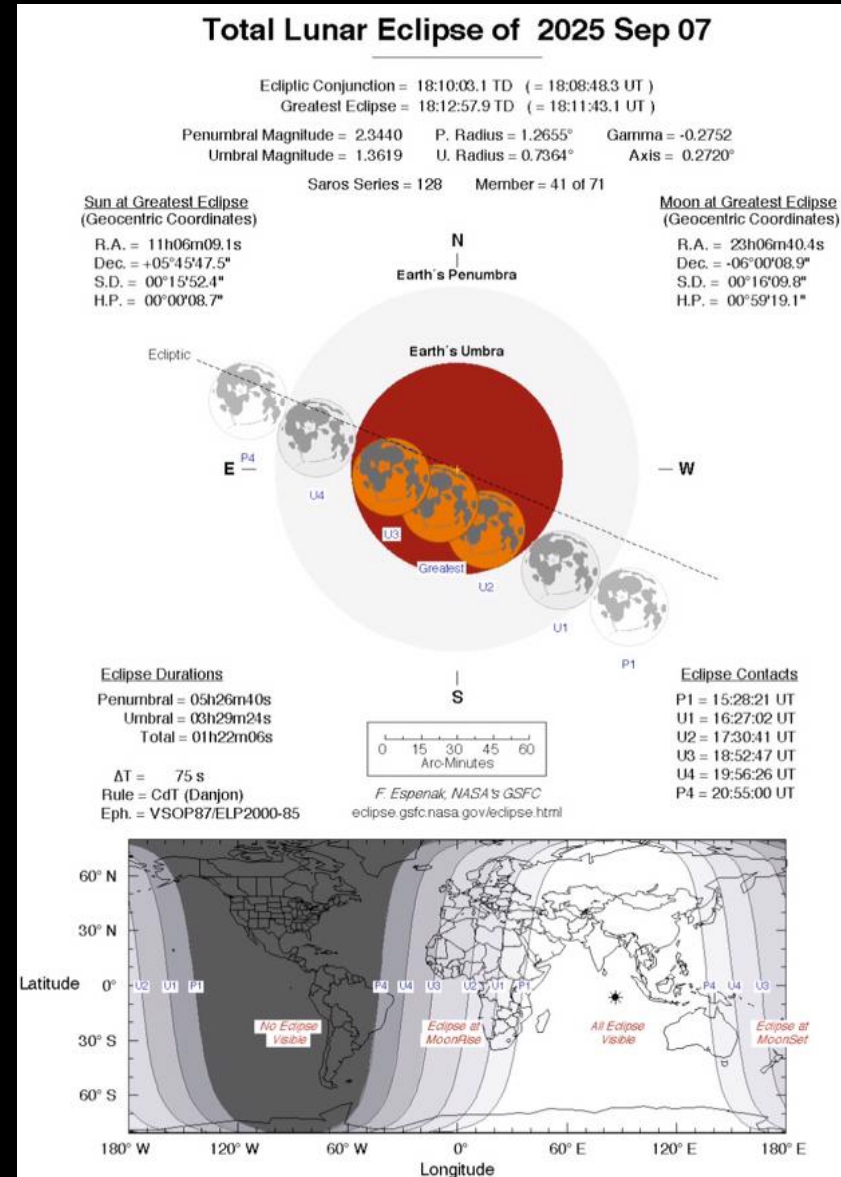
- Sun
 - Declination decreasing, Equinox September 22
 - Last sunspot min., Apr. 2020, max., now?
- Mercury
 - In the morning sky, greatest elongation August 19 (19°), currently 17° , mag -1.0
 - Superior conjunction September 13
 - 'Good observing opportunity'
 - Today, rise 04:10, transit 11:50, set 19:25
- Venus
 - In the morning sky, greatest elongation May 31, (46°) currently 32° , mag -4?
 - Superior conjunction January 06, 2026
 - today, rise 02:45, transit 10:45, set 18:40

Earth

- Time
 - 00:00UT \approx 22:20ST today
 - Today, sunrise 05:50, transit 12:55, sunset 20:00
 - End of period, sunrise 06:40, transit 12:45, sunset 18:55
- Moon
 -  First Quarter, August 31, & September 29
 -  **Full**, September 07 ('Harvest' Moon?)
 -  Last Quarter, September 14
 -  **New**, September 21
- Meteors
 - None of note this period

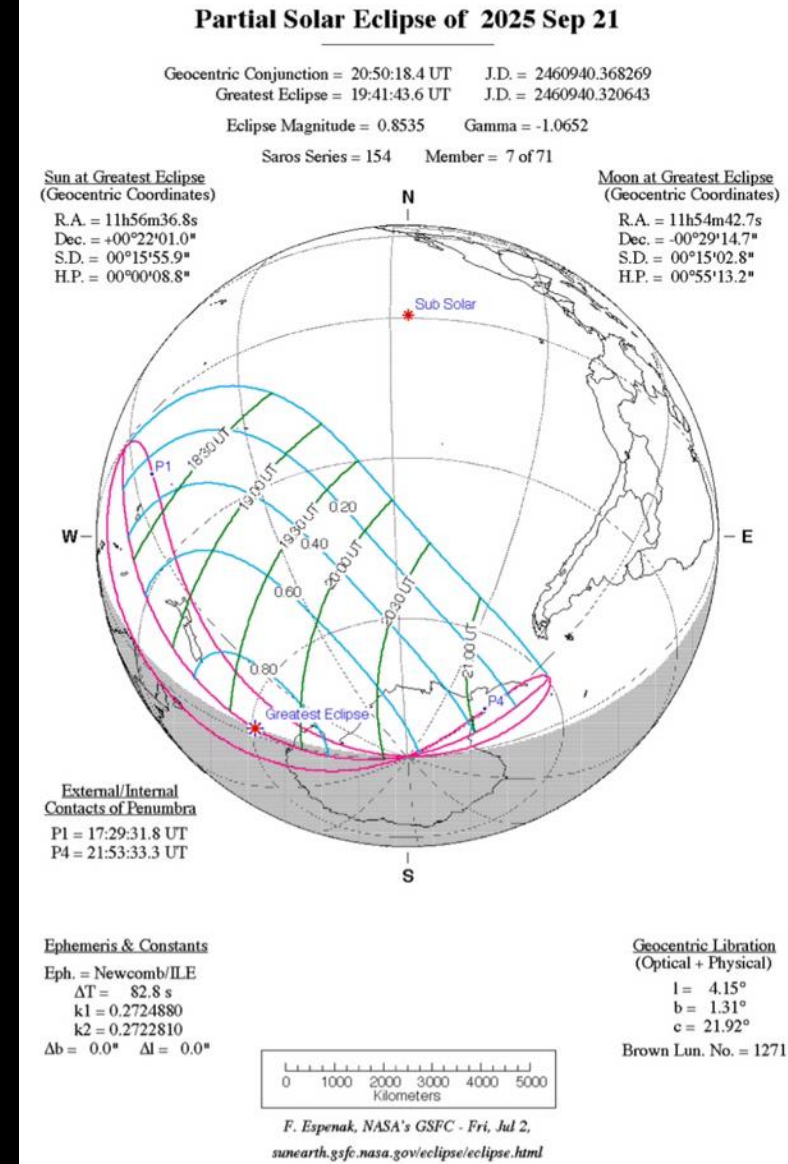
Lunar Eclipse

- Sunday, September 07
 - Eclipse start, 17:30
 - Moonrise, 19:20
 - Eclipse end, 20:55



Solar Eclipse

- Not visible from the UK



Lunar Occultations

- Friday, September 12
 - η Tauri, mag 2.9, disappearance bright limb 22:06, recovery 22:54
 - 27 Tauri, mag 3.6, disappearance bright limb 22:55, recovery 23:08

Outer Solar System

- Mars
 - Conjunction January 09, 2026. Today, rise 09:35, transit 15:15, set 21:00
- Jupiter
 - Conjunction June 24, opposition January 10, 2026. Today, rise 01:30, transit 09:50, set 18:00
- Saturn
 - Opposition September 21. Today, rise 20:50, transit 02:40, set 08:30
- Uranus
 - Opposition November 21. Today, rise 22:40, transit 06:30, set 14:30
- Neptune
 - Opposition September 23. Today, rise 20:40, transit 02:40, set 08:40

OASI Events

- Sunday September 14, from 20:00
 - Committee Meeting on Zoom
- Monday September 15, from 20:00
 - 'Imaging Black Holes with the Event Horizon Telescope' pre-recorded Zoom talk by Ziri Younsi
- Friday/Saturday September TBA
 - Curry Night, Jaipur Restaurant, Penshurst Road

Local Societies Events

- DASH (Darsham Village Hall, 7:00pm, Sundays)
 - September 20-21, Henham Steam Rally
 - September 21, observing meeting
- SAS (Cavendish Memorial Hall, 7:30pm, Tuesdays)
 - September 02, The Achievements of the Hubble Space Telescope, Andrew Green
- AAA (Whepstead Village Hall, 7:30pm, Wednesdays)
 - September 03, TBC, Matt Bothwell
 - September 17, Cosmic Rays, Paul Fellows
- DAG (Diss)
 - Informal on FaceBook & WhatsApp

Interstellar Comet

- 3I/ATLAS
 - C/2025 N1 (ATLAS)
 - Discovered, 1 July 2025, 4.5AU, +18 mag
 - Size, 0.2 to 3½ miles diameter
- Perihelion, 29 October 2025, 1.4AU
- Perigee, 19 December 2025, 1.8AU
- best 'seen' September? magnitude +11.5?
- Previous objects
 - 1I ('Oumuamua), 2017, &
 - 2I (Borisov), 2019

Lunar Occultation of Venus I

- September 14, last quarter Moon
 - Friday September 19
 - Moon 27° ahead of the Sun, phase 0.08. Venus phase 0.88, 11.5" dia
- Moon rise, 03:35
- Sun rise, 06:30
- Moon transit, 11:05
- Sun transit, 12:50
- Disappearance (bright limb) 12:55
- Reappearance (dark limb) 14:13
- Moon set, 18:16
- Sun set, 19:00
- New Moon, September 21 (& solar eclipse)

Lunar Occultation of Venus II

- Five occurrences since Millennium
 - 2004 May 21 (see OASI News 387 p.7)
 - 2007 June 18
 - 2008 December 01
 - 2023 November 09
 - 2025 September 19
- Can you see Venus during the day without optical aid?