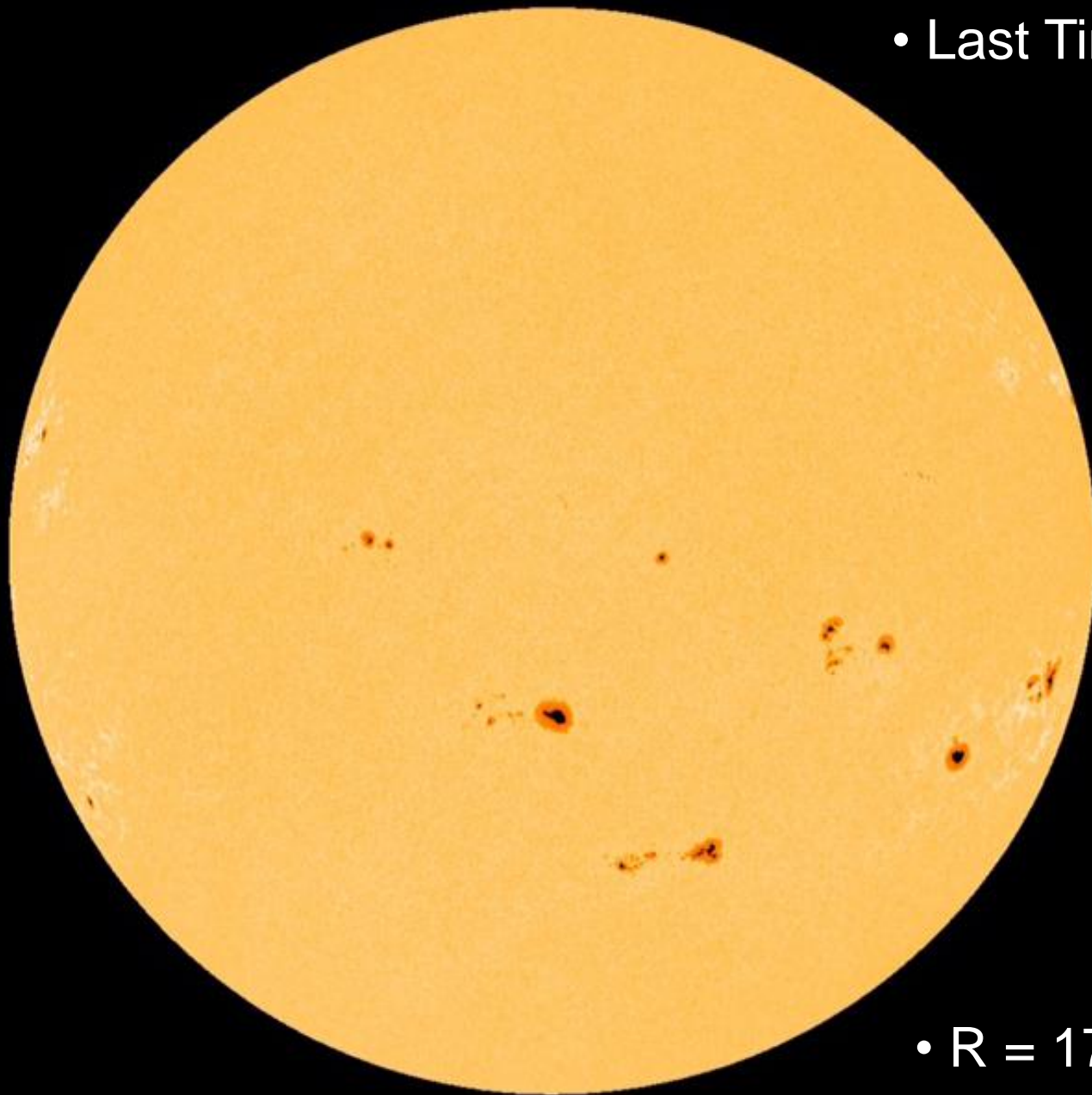


What's Up?

2024 September 23 to October 28

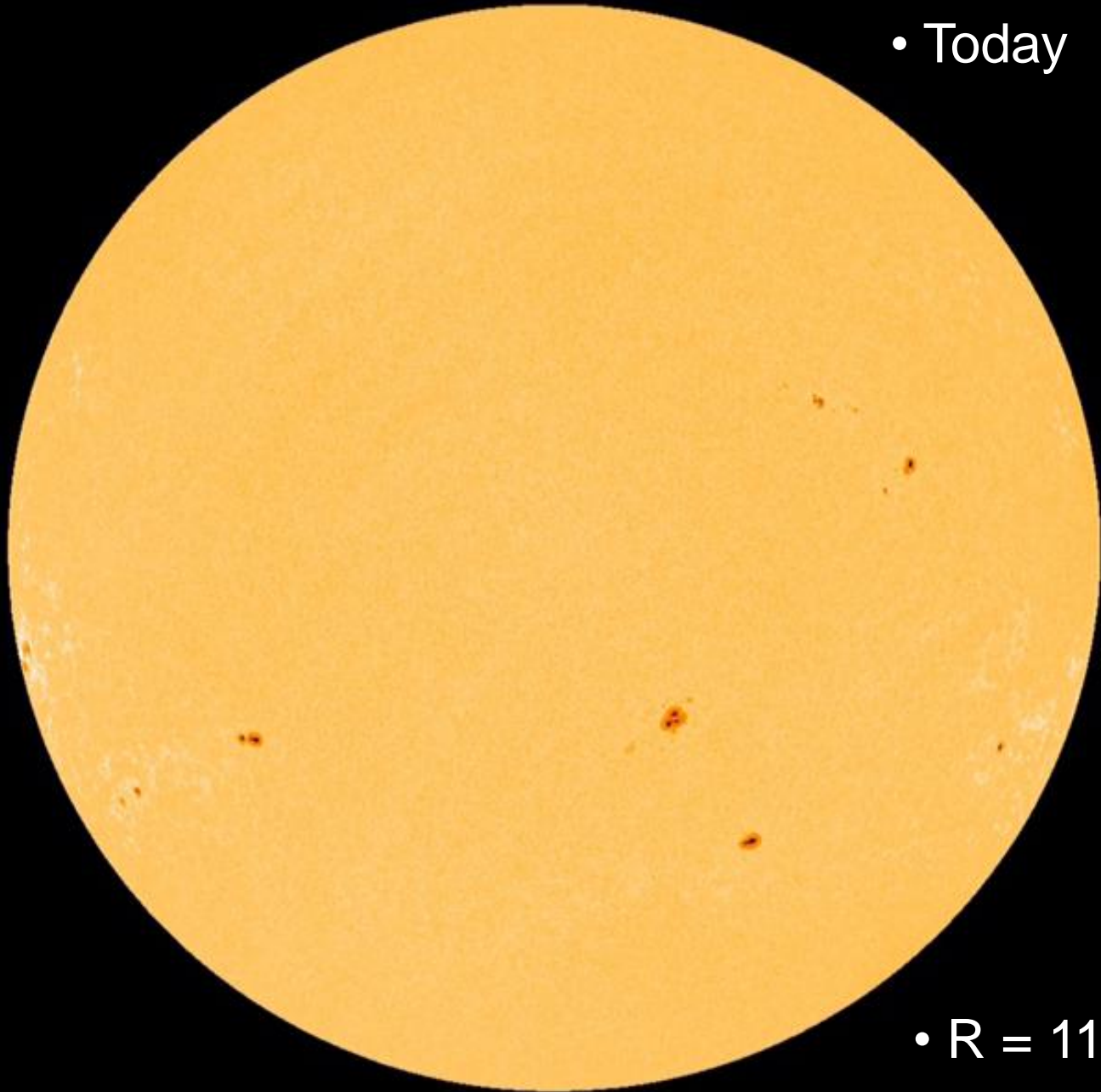
Bill Barton, FRAS

• Last Time



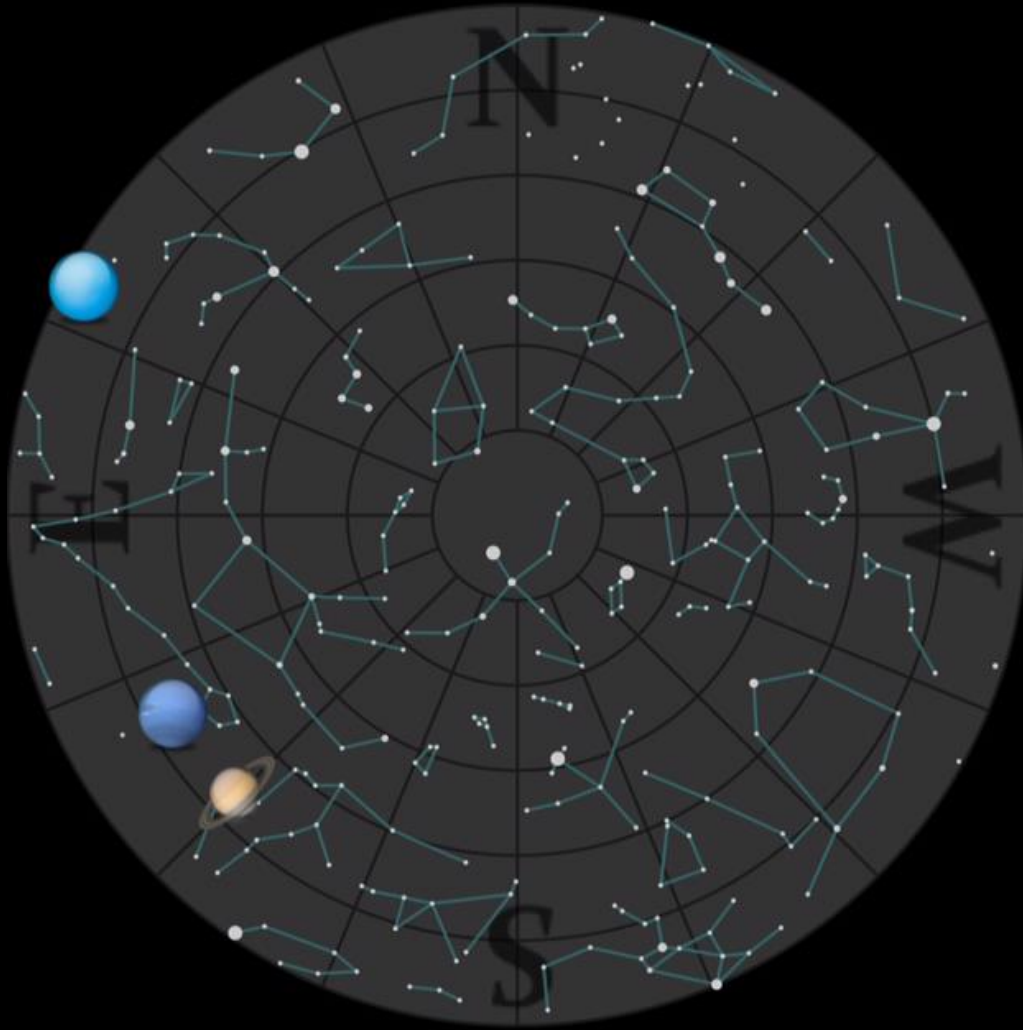
• R = 172

• Today

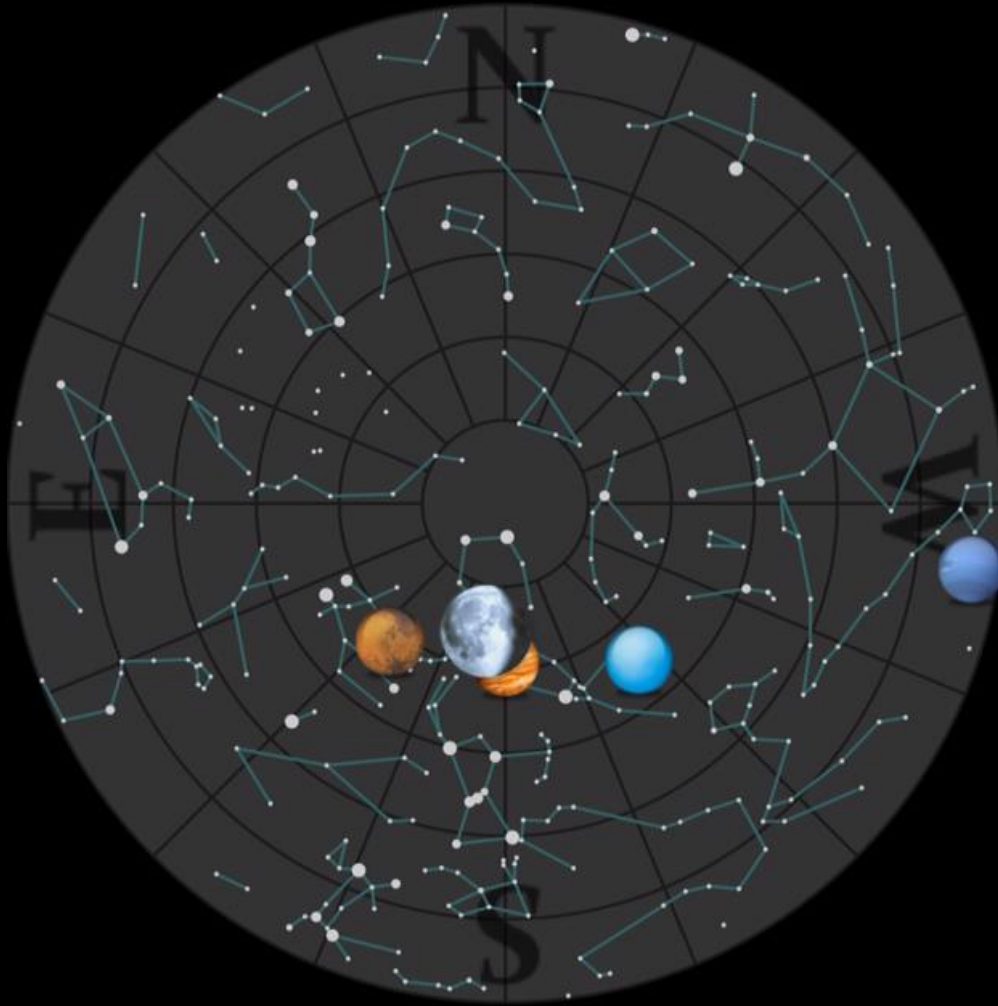


• R = 114

- The Sky 21:00 Tonight







- The Sky 06:00
Tomorrow



Inner Solar System

- Sun
 - Declination decreasing, solstice December 21, perihelion January 04, 2025
 - Last sunspot min., Apr. 2020, next max., now? or 2025?
- Mercury
 - In the morning sky, greatest elongation was on September 05 (18°), currently 6°
 - Superior conjunction will be on September 30
 - Then in evening sky with greatest elongation on Nov. 16 (23°)
 - Today, rise 06:00, transit 12:25, set 18:50
- Venus
 - In the evening sky, greatest elongation January 10, 2025 (47°) currently 30° , followed by inferior conjunction March 23, 2025
 - today, rise 09:30, transit 14:35, set 19:35

Earth

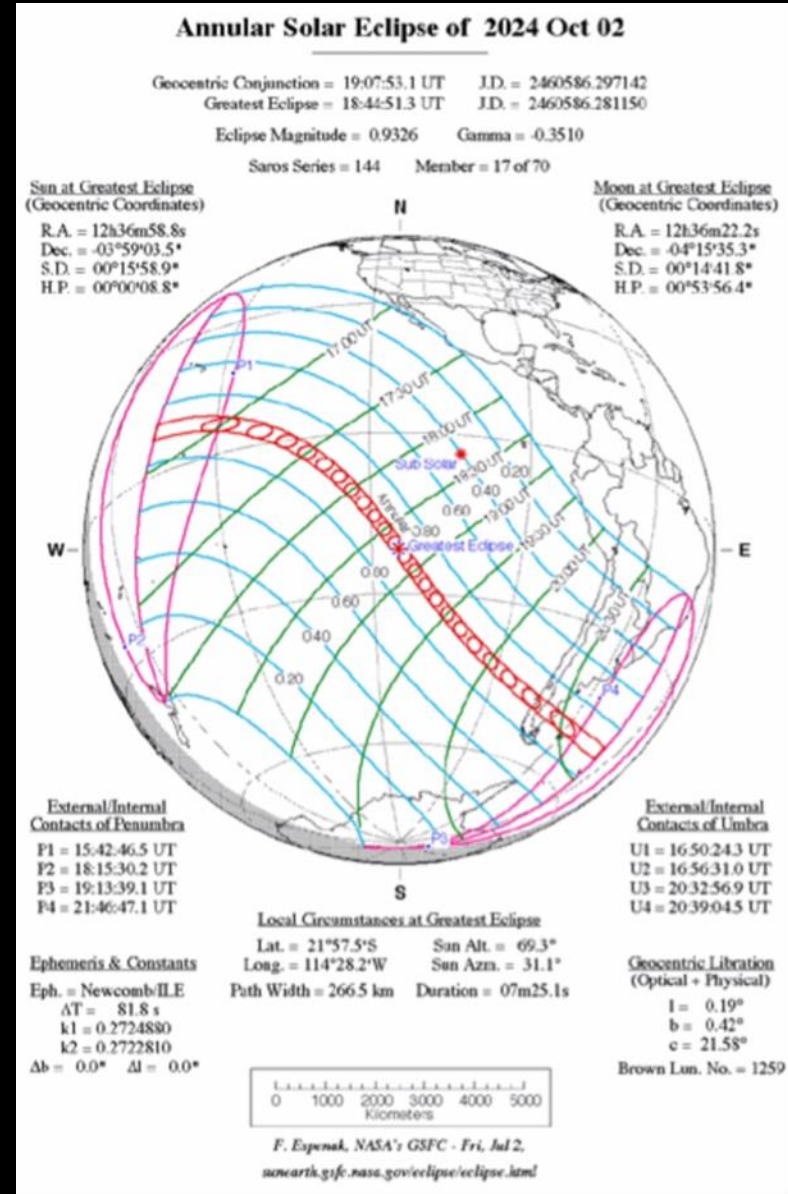
- Time
 - 00:00UT \approx 00:10ST today
 - Today, sunrise 06:40, transit 12:45, sunset 18:50
 - End of period, sunrise 06:40, transit 11:40, sunset 16:30
 - BST ends 01:00 October 27
- Moon
 -  Last Quarter, 24 (tomorrow)
 -  New, October 02
 -  First Quarter, 10
 -  Full, 17 (Hunter's Moon)
- Meteors
 - Orionids, October 02-November 07, peak October 20-21, ZHR = 20+

Mini Moon

- 2024PT₅ 11m (36ft) diameter Arjuna asteroid
- Discovered, ATLAS South Africa, August 7
- Orbital semi major axis, 1.012AU
- Current velocity (relative to Earth) $\approx 4\frac{1}{2}$ mph
- Absolute magnitude (1AU (93 x 10⁶ miles) distance), +27.6
 - Maximum apparent magnitude ca.+17?
- September 29 - November 25
- Minimum Earth distance $\approx 2.4LD$ ($\approx 240 \times 10^3$ miles)

Eclipse

- Wednesday, October 02
 - Annular Solar
 - not visible from UK
- Following eclipses
 - 2025, March 14 (Lunar) & 29 (Solar)



Outer Solar System

- Mars
 - Conjunction 2023 November 18. Opposition 2025 January 16. Today, rise 23:10, transit 07:30, set 15:50
- Jupiter
 - Opposition December 07. Conjunction June 24, 2025. Today, rise 21:50, transit 06:00, set 14:10
- Saturn
 - Opposition September 08. Conjunction March 12, 2025. Ring plane crossing March 23, 2025. Today, rise 18:30, transit 23:45, set 05:00
- Uranus
 - Opposition November 17. Conjunction May 17, 2025. Today, rise 20:30, transit 04:20, set 12:00
- Neptune
 - Opposition September 21. Conjunction March 19, 2025. Today, rise 18:45, transit 00:30, set 06:30

Comet

- C/2023 A3 (Tsuchinshan-ATLAS)
 - Perihelion, Sept. 27 (0.39au)
 - Perigee, Oct. 12 (0.47au, 184 LD), mag. -0.2?

OASI Event

- Zoom Meeting
 - Thursday October 17, from 8:00pm
- Lecture Meeting
 - Friday October 04, 'Where are the Sun's Sisters?'

CANCELLED

Local Societies Events

- DASH (Darsham Village Hall, 7:00pm, Sundays)
 - October 6, observing meeting
 - October 20, lecture meeting, 'Where Are The Sun's Sisters', Paul Fellows
- LYRA (Parkhill Hotel, Oulton, 7:30pm, Tuesdays)
 - No information
- AAA (Whepstead Village Hall, 7:30pm, Wednesdays)
 - September 25, Jodrell Bank
 - October 09, AGM & Quiz
- DAG (Diss)
 - Informal on FaceBook & WhatsApp

National Society Event

- SPA Meeting
 - Saturday October 26, 2:00pm-5:30pm, Gustave Tuck Lecture Theatre, UCL, Gower St., London, WC1E 6BT
 - Prof Lucie Green, 'Seeing Total Solar Eclipses from Space'
 - Robin Scagell, 'Skynotes'
 - Martin Hardaker, 'Observational Astronomy is not Dead'