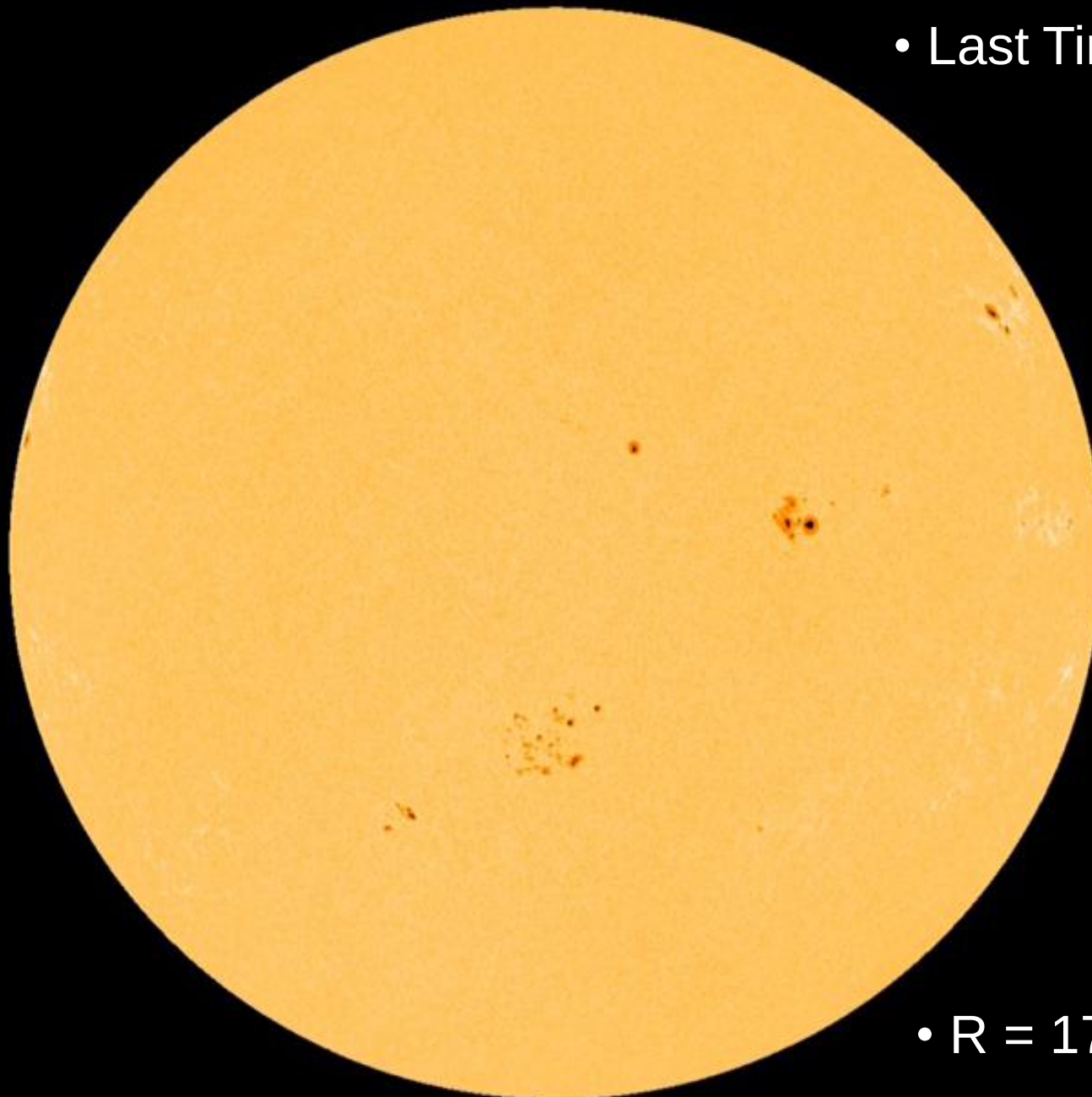


What's Up?

2023 October 23 to November 27

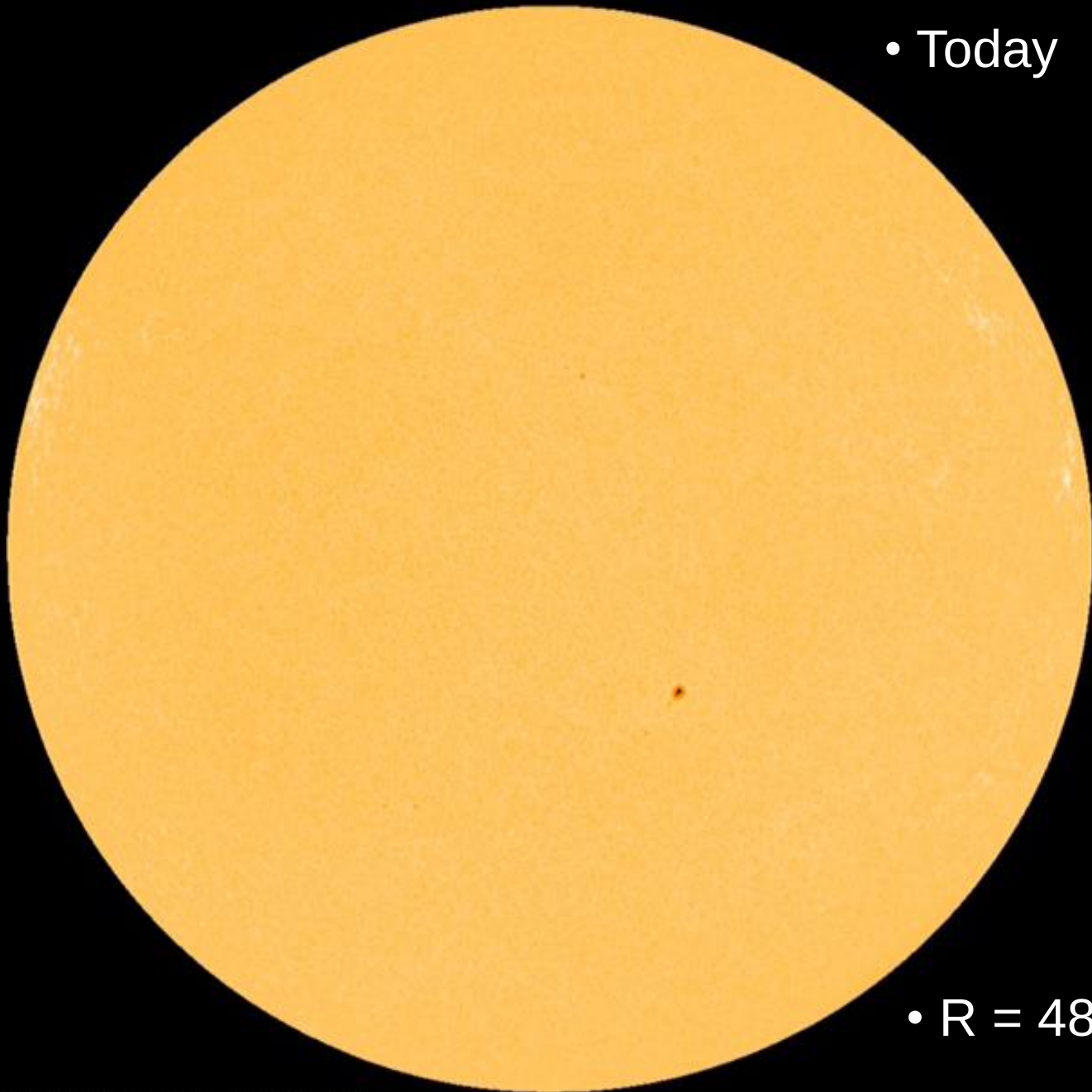
Bill Barton, FRAS

• Last Time



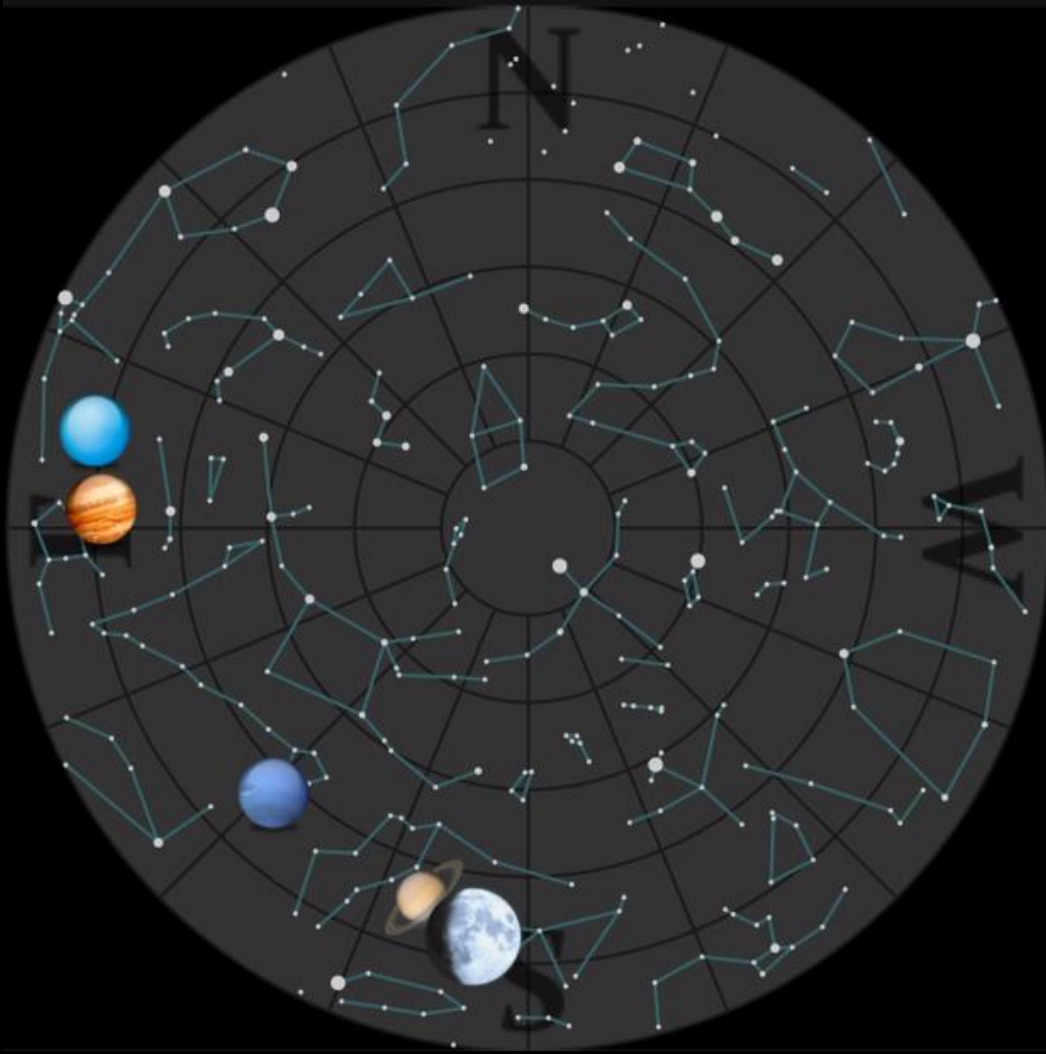
• $R = 172$

• Today

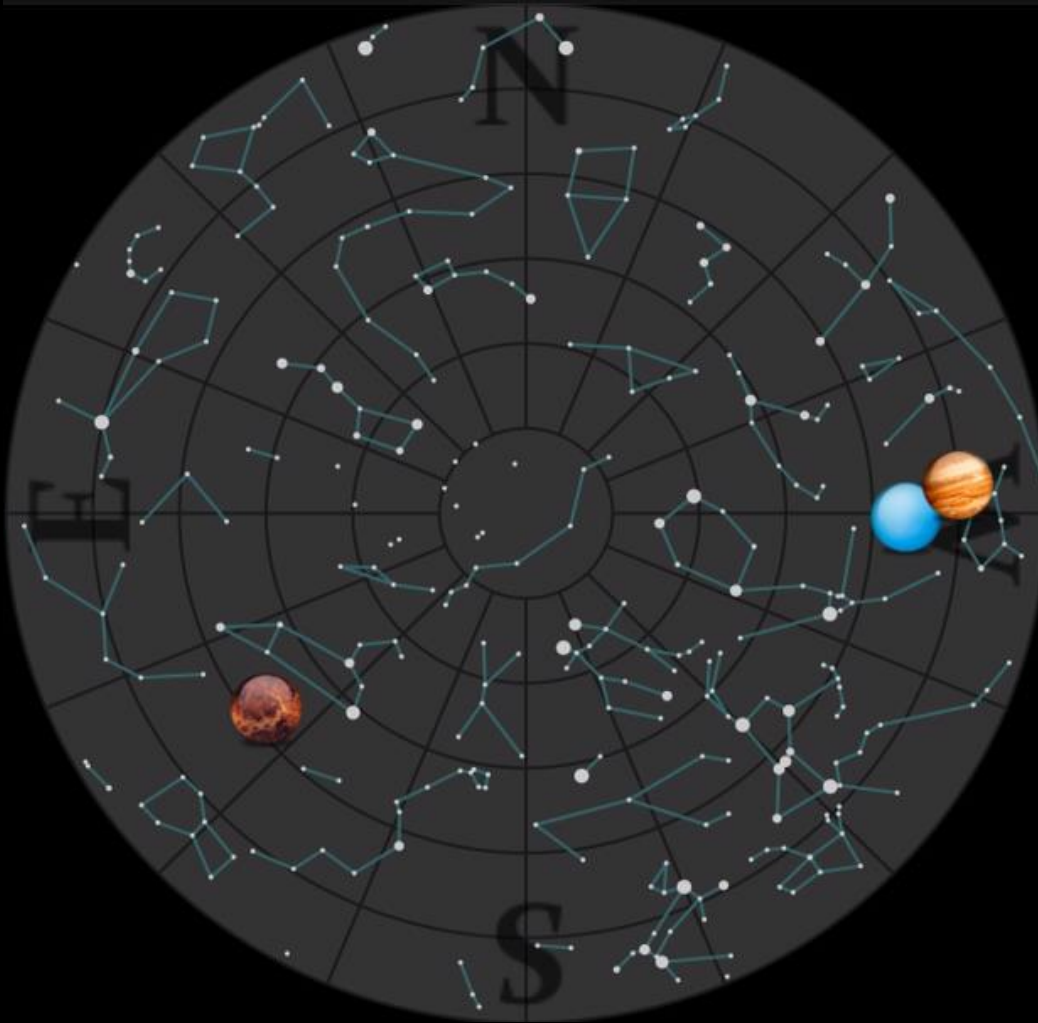


• $R = 48$

- The Sky 20:00
Tonight



- The Sky 07:00
Tomorrow



Inner Solar System

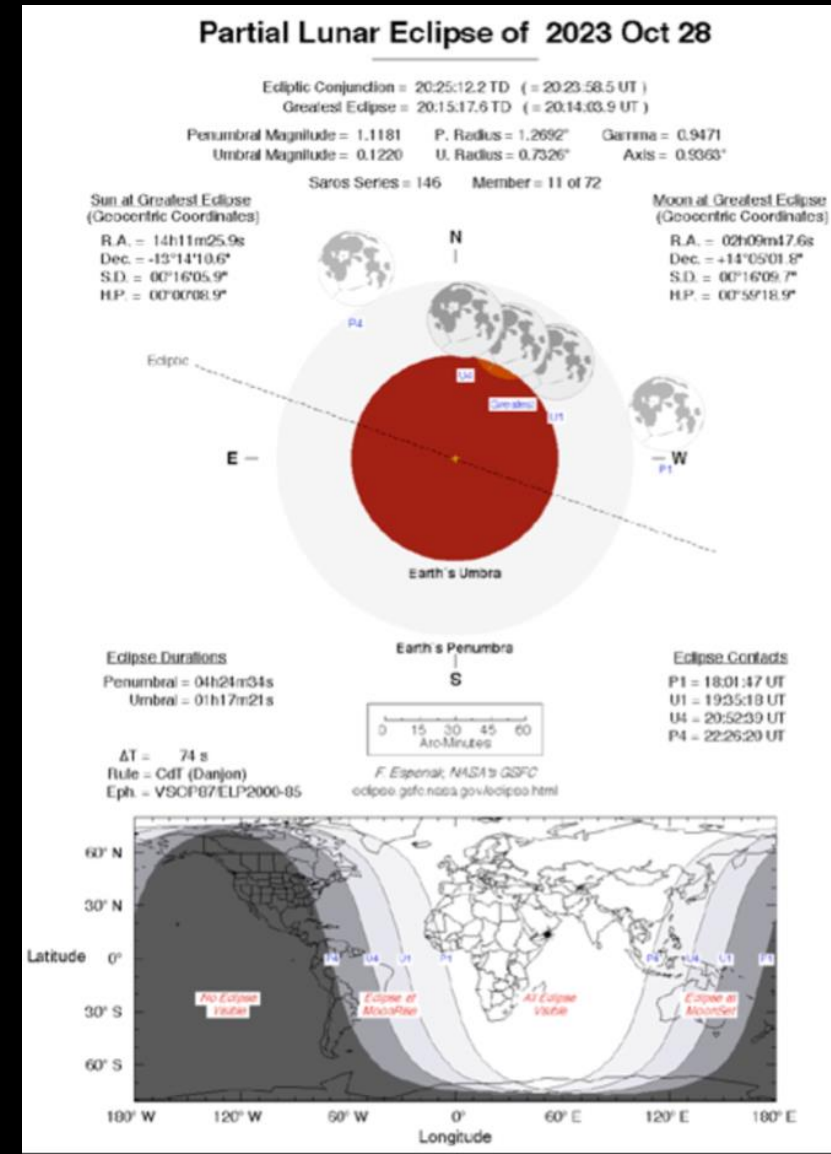
- Sun
 - Declination decreasing, equinox Sept. 23, solstice Dec. 22
 - Last sunspot min., Apr. 2020, next max., Jul. 2025 ($R \approx 115?$)
- Mercury
 - Superior conjunction (farside of Sun) Oct. 20
 - In evening sky, greatest elongation Dec. 04 (21°) currently 2° , mag -1.4, decreasing (+5 to -2)
 - Inferior conjunction (between us and Sun) Dec. 22
 - Today, rise 07:40, transit 12:45, set 17:45
 - “good observing opportunity” early December
- Venus
 - In morning sky, greatest elongation Oct. 23 (today, 46°)
 - today, rise 03:05, transit 09:45, set 16:20

Earth

- Time
 - 00:00UT $\approx$ 02:00ST today
 - Today, sunrise 07:30, transit 12:40, sunset 17:45
 - End of period, sunrise 07:30, transit 11:40, sunset 15:50
 - BST ends 01:00, Oct. 29
- Moon
 - ☾ Full, 28 (Hunter's)
 - ☾ Last Quarter, Nov. 05
 - ☾ New, 13
 - ☾ First Quarter, 20
- Meteors
 - Orionids, Oct. 02-Nov. 07, peak Oct. 21/22, ZHR 20+

Lunar Eclipse

- Slight partial
- Saturday, Oct. 28
- 20:35 - 21:53 BST
- All eclipse visible from the UK
- Moon
rise 17:20 (sunset 17:35)
transit 00:40 (29th)



Occultations

- Moon
 - Thursday, Nov. 09, Venus,
 - Disappearance bright limb, cusp angle -29° S, 09:47.2
 - Reappearance dark limb, cusp angle $+60^\circ$ S, 10:47.7
 - Azimuth $\approx$ S 15° W. Altitude $\approx 35^\circ$
 - solar elongation 45° , phase 0.59
 - Venus transit, 08:45
 - last quarter moon, Nov. 05
 - new moon, Nov. 13
- Is Venus visible in daylight with the unaided eye?

Conjunctions

- Mars - Mercury
 - Oct. 29, 18:00, 0.36°

Outer Solar System

- Mars
 - Conjunction Nov. 18. Opposition 2025 Jan. 16. Today, rise 08:15, transit 13:05, set 18:00
- Jupiter
 - Opposition Nov. 03. Conjunction 2024 May 18, Today, rise 18:10, transit 01:30, set 08:50
- Saturn
 - Conjunction 2024 Feb. 28. Opposition 2024 Sept. 08. Today, rise 16:00, transit 20:55, set 01:50
- Uranus
 - Opposition Nov. 13. Conjunction 2024 May 13. Today, rise 18:25, transit 02:05, set 09:50
- Neptune
 - Conjunction 2024 March 17. Opposition 2024 Sept. 20. Today, rise 16:40, transit 22:30, set 04:20

OASI Events

- St Augustine's Community Hub,
 - Friday, Nov. 10, 8:00pm, Lecture Meeting
 - Nick James, 'The Optical Tracking of Spacecraft'
 - something to drink? please bring your own mug.

Local Societies Events

- DASH (Darsham Village Hall, 7:00pm, Sundays)
 - 29, Paul Whiting, 'So who's this STEVE then?'
 - Nov. 12, observing meeting
 - Nov. 17-18, Outreach Event, Coastguard Cottages, Dunwich
 - Nov. 26, Paul Webb, 'How to Start Visual Observing the Night Sky'
- LYRA (Parkhill Hotel, Oulton, 7:30pm, Tuesdays)
 - TBA
- AAA (Whepstead Village Hall, 7:30pm, Wednesdays)
 - 25, Equipment Evening
 - Nov. 07, visit to Breckland
 - Nov. 22 'The Carrington Event'

National Events I

- British Astronomical Association
 - Wednesday Oct. 25, 17:00-20:00, AGM, Institute of Physics, 37 Caledonian Rd., London (+live stream?)
 - Wednesday Nov. 22, 20:00, Historical Section Webinar, Nick Lomb, 'Australian Eclipses 1857 & 1871'
 - Friday Nov. 24, 19:30, Solar Section Webinar, no set agenda
 - Saturday Dec. 09, 14:00-18:00, Christmas Meeting, Institute of Physics, 37 Caledonian Rd., London (booking required to attend in person or live stream) with drinks reception after

National Events II

- Society for Popular Astronomy
 - Saturday Oct. 28, 14:00-17:30, Wolverhampton Science Park, WV10 9RU
 - Lucie Green, 'The Sun and the Solar Orbiter Mission'
 - Robin Scagell, 'Skynotes'
 - Richard Goodrich, 'Halley's Comet' (at aphelion in December)