What's Up?

2026 November 23 to 2027 January 25

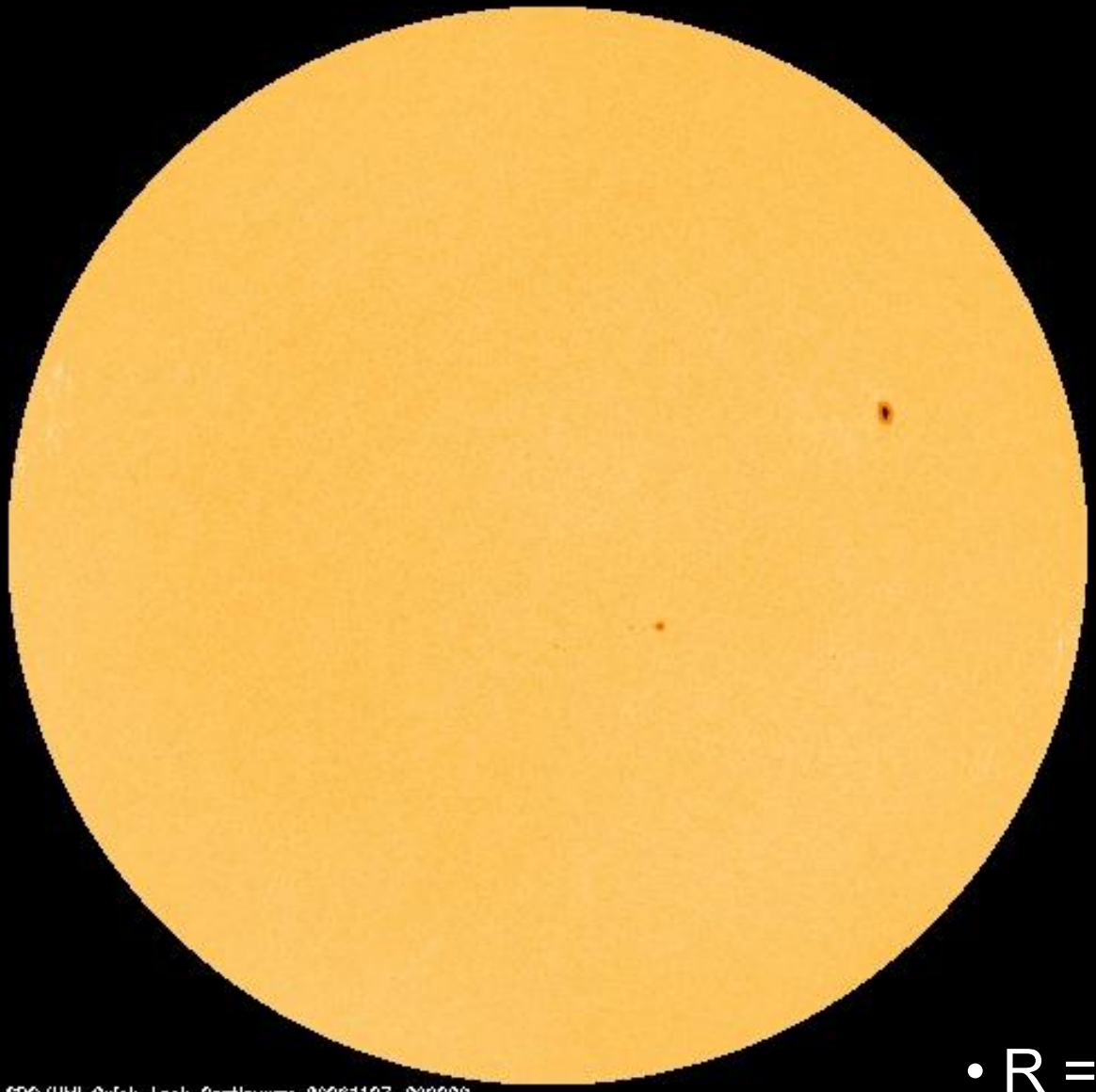
Bill Barton, FRAS



- Last Time

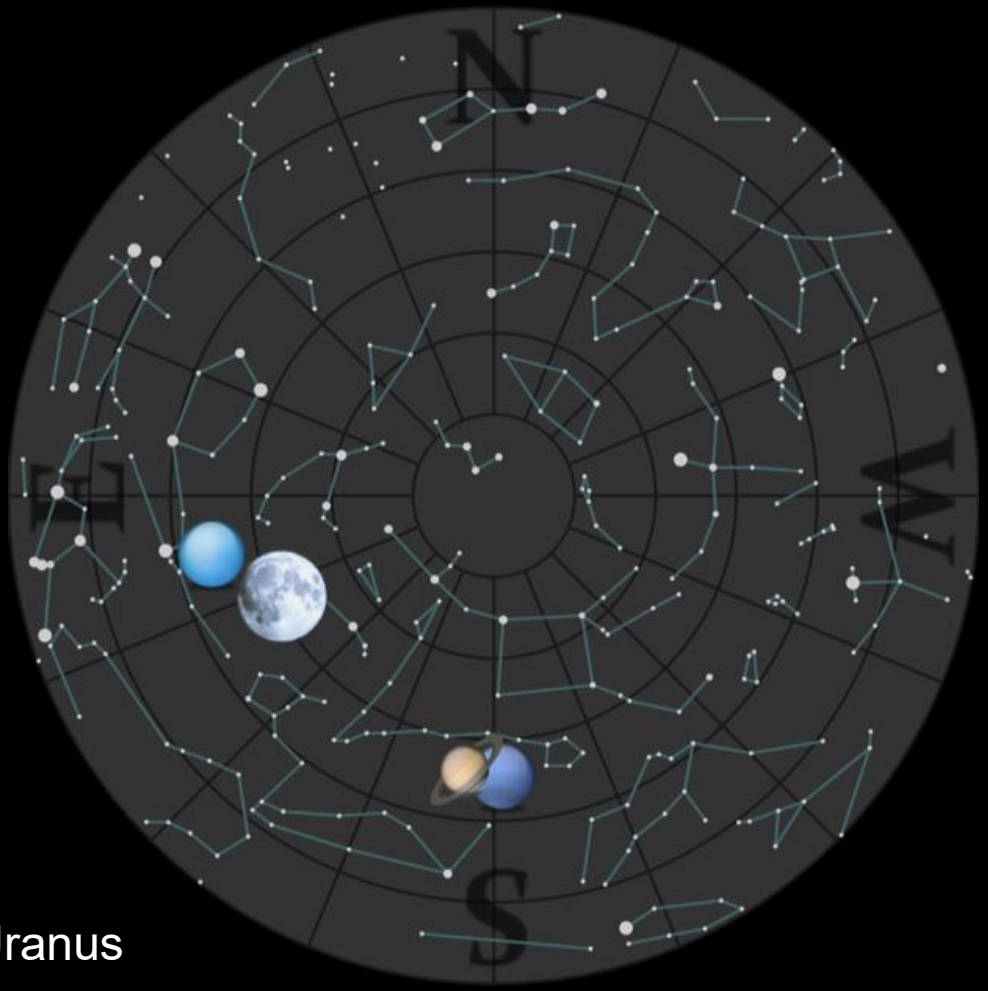
- R = 67

- Today



- R = 39

- The Sky 20:00 Tonight

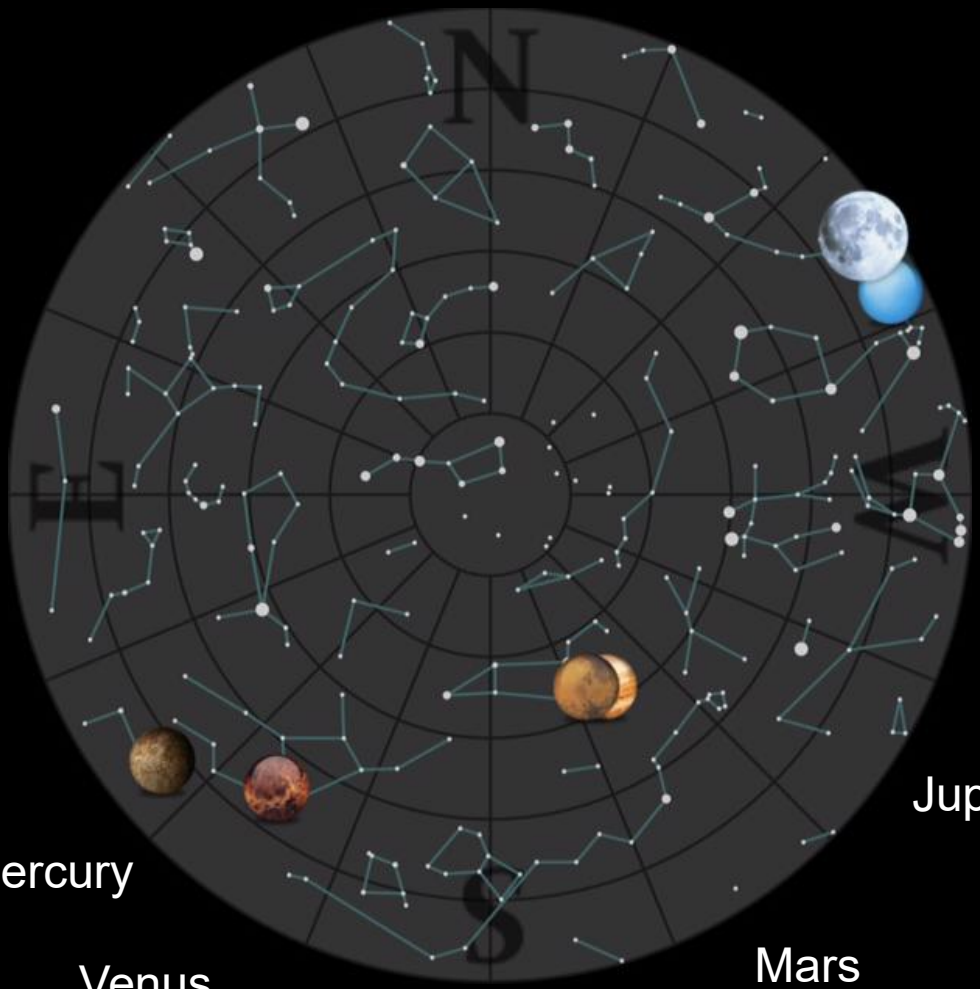


Uranus

Saturn

Neptune

- The Sky 07:00 Tomorrow



Uranus

Jupiter

Mercury

Venus

Mars

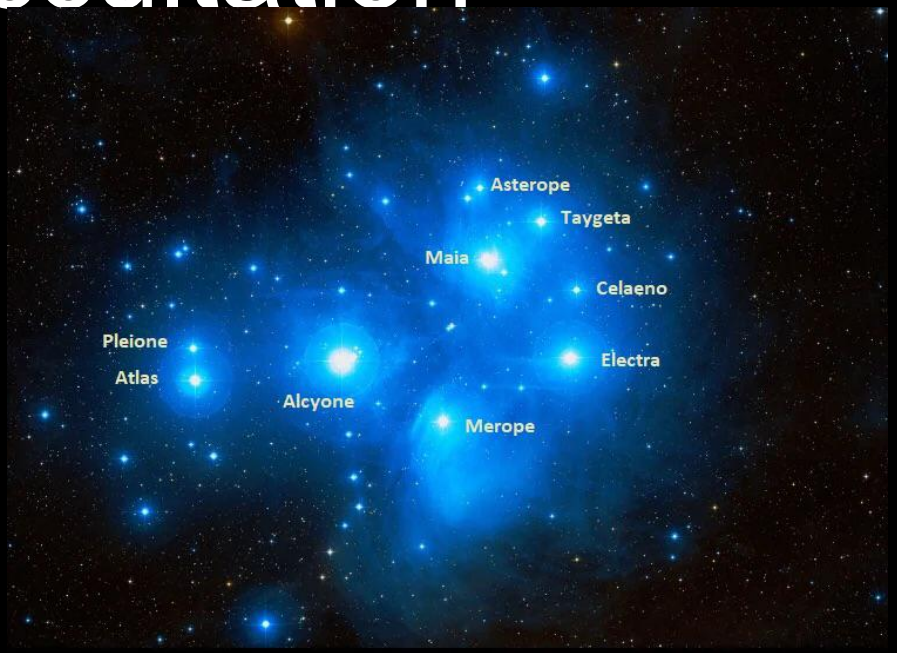
Inner Solar System

- Sun
  - Declination decreasing, solstice December 21
  - Last sunspot max., 2024 October, next min., 2030?
- Mercury
  - In morning sky, greatest elongation November 21 (20°), current elongation 19°, phase 0.7. “good observing” late November. Superior conjunction January 01
  - Today, rise 05:30, transit 10:25, set 15:15
- Venus
  - In morning sky, greatest elongation January 03 (47°), current phase 0.2, elongation 35°
  - Today, rise 04:00, transit 09:15, set 14:30

Earth

- Time
  - 00:00UT ≈ 02:20ST today
  - Today, sunrise 06:40, transit 11:40, sunset 16:40
  - End of period, sunrise 07:35, transit 11:40, sunset 15:50
- Moon
  - 🌕 Full, 24 (tomorrow, Frost Moon)
  - 🌗 Last Quarter, December 01
  - 🌑 New, 09
  - 🌓 First Quarter, 17
  - 🌕 Full, 24 Christmas Eve (Long Night Moon)
- Meteors
  - Geminids, December 04-17, peak 13, ZHR (max) 100+

Pleiades Occultation



- Monday, December 21
  - Moon rise, 18:20
  - Moon phase, 1st quarter 17

- Stars occulted
  - Celaeno (16 Tau), disappearance 22:22
  - 18 Tau, disappearance 22:40
  - Taygeta (19 Tau), disappearance 22:15
  - Maia (20 Tau), disappearance 22:47, recovery 23:19
  - Asterope (21 Tau), disappearance 22:36

Outer Solar System

- Mars
  - Opposition February 19, 2027. Today, rise 23:10, transit 06:50, set 14:30
- Jupiter
  - Opposition February 11, 2027. Today, rise 00:00, transit 07:20, set 14:40
- Saturn
  - Opposition October 04. Today, rise 16:00, transit 22:00, set 04:20
- Uranus
  - Opposition November 25. Today, rise 17:40, transit 01:45, set 09:45
- Neptune
  - Opposition September 26. Today, rise 15:40, transit 21:40, set 03:40

OASI Events

- Committee Meeting
  - Friday 27 November, from 20:00, on Zoom
- Christmas Meal
  - Wednesday 9 December, from 19:30, Newbourne Fox
    - Orwell Park Observatory shut
- Next Newbourne Monday 14th December
    - Christmas Quiz
- Recorded Presentation
  - Monday 21 December, from 20:00, on Zoom
    - ‘Einstein’s Aftermath’, Prof Chris Clarkson

Local Societies Events

- DASH (Darsham Village Hall, 7:00pm, Sundays)
  - December 06, observing evening
  - January 10, observing evening
  - January 24, ‘Hunting Dark Nebulæ’, Adrian Orr

- SAS (Cavendish Memorial Hall, 7:30pm, Tuesdays)
  - December 01, ‘The Star of Bethlehem - What Did the Wise Men Actually See?’, Jonathan Clough

- BSEAA (Whepstead Village Hall, 7:30pm, Wednesdays)
  - December 09, ‘The Hubble Telescope’, Andrew Green

National Events

- British Astronomical Association
  - Saturday January 23, 14:00-18:00
    - IoP, London (plus youtube)
    - Sunspot observing & Saturn, Uranus, Neptune

- Society for Popular Astronomy
  - Saturday January 30, 14:00-17:00
    - UCL
    - A history of the universe in 60 million galaxies

- Adult tickets £10:00
- BAA, SPA, & OAS(I) £7.50
- incl refresments, but not lunch

Kesgrave War Memorial Conference Centre



2027 Lookahead

- Mars
  - (Aphelic) Opposition, February 19, 13.8” dia (max 25.1”)
  - Occults TYC 1414-00703-1, 03:15, March 12
- Jupiter
  - Io eclipses Ganymede, 02:09, January 11
  - Ganymede occults Io, 22:17 (BST), May 30
- Solar Eclipses
  - Annular, February 06, not visible from UK
  - Total, August 02, 50% from UK
- Lunar Eclipses
  - only penumbral

And Finally...

- Voyager 1
  - launched 5 September 1977
  - on 18 November reached one light day distance (ca. 16 billion miles)
  - after travelling 49 years, 2 months, 13 days (17,971 days)
  - velocity ca. 38,000mph (10 miles per second)

- Voyager 2
  - launched 20 August 1977
  - will pass the same milestone in November 2035
  - velocity ca. 34,000mph (9.5 miles per second)