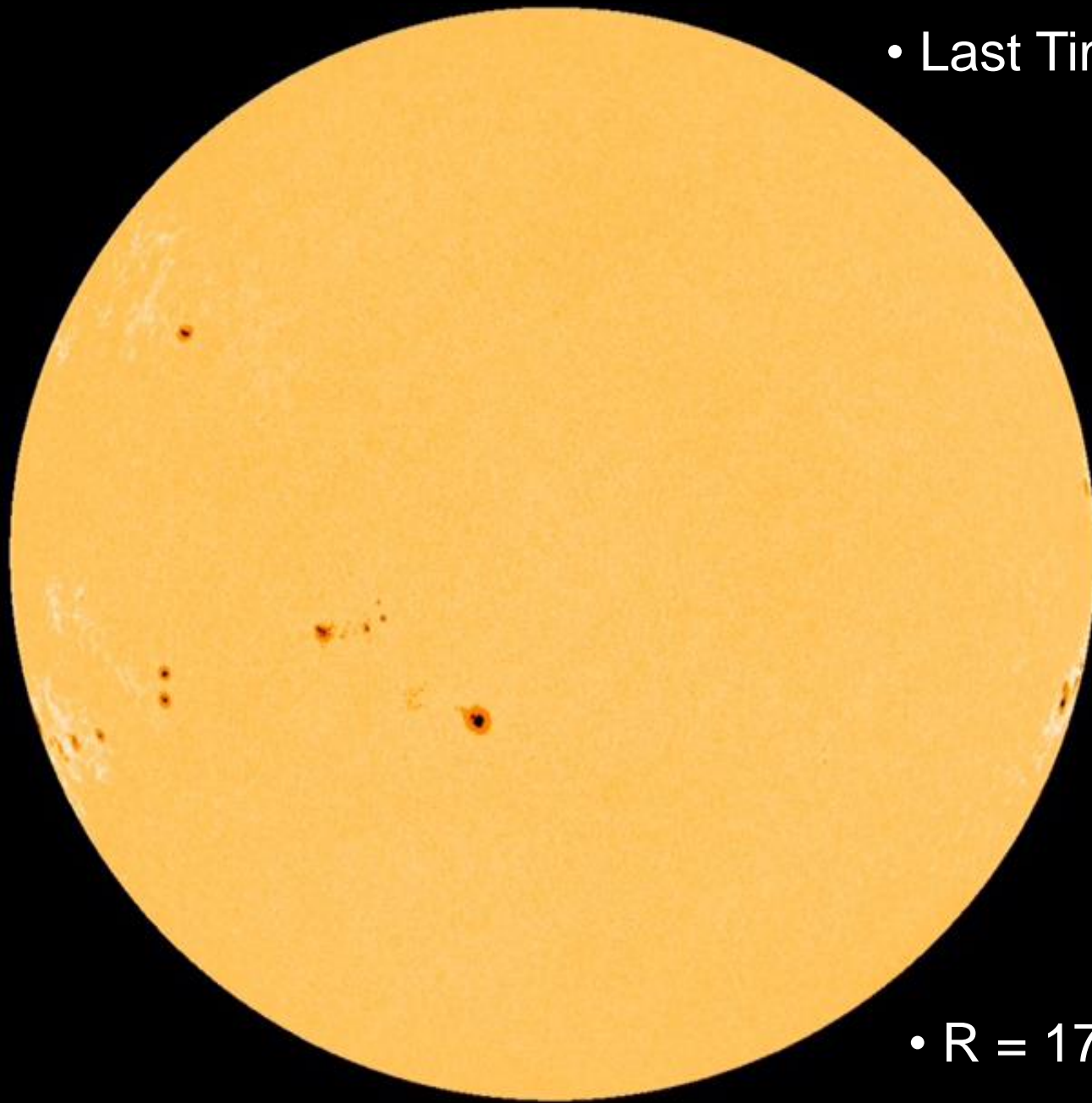


What's Up?

2024 July 22 to August 26

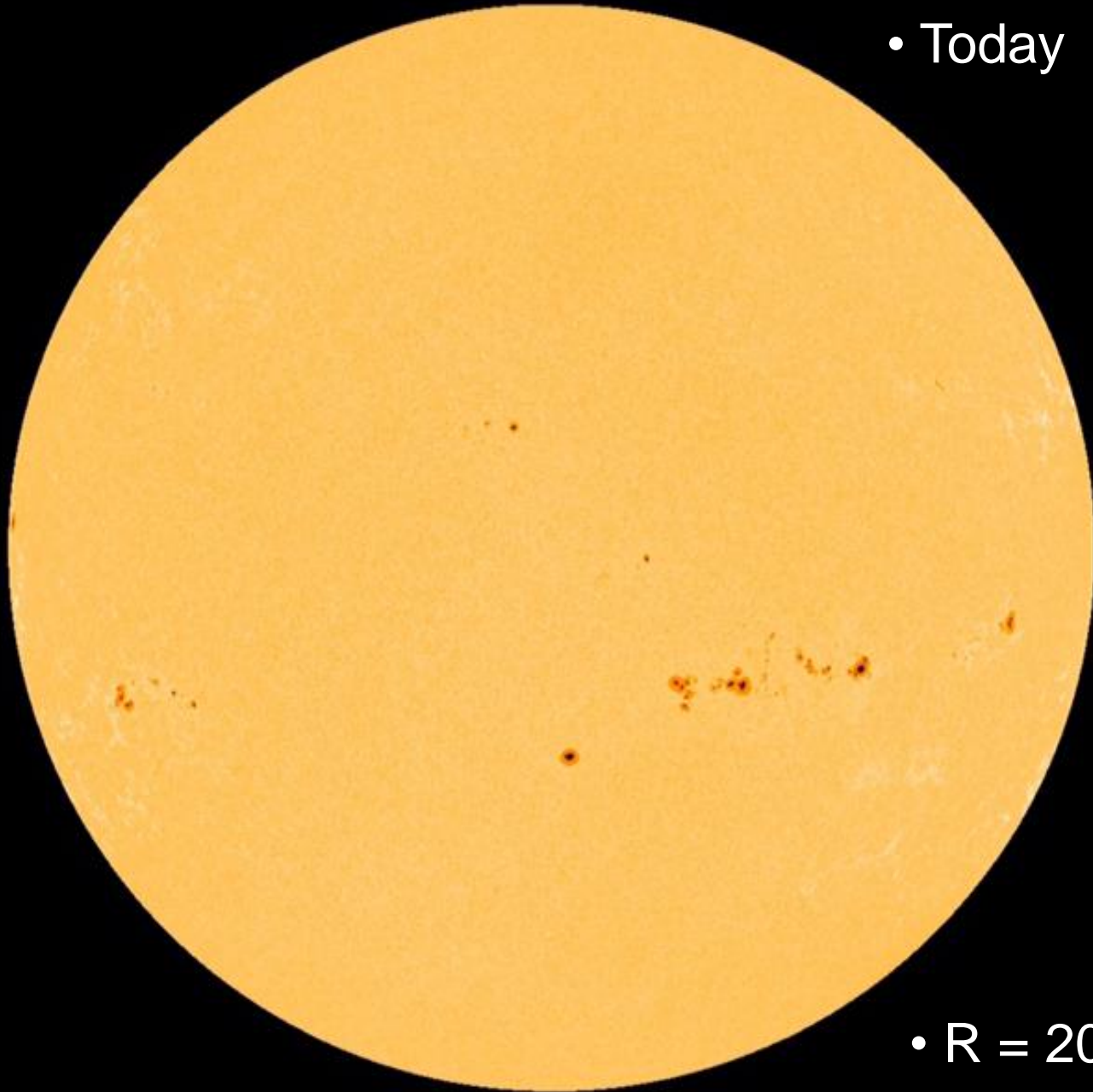
Bill Barton, FRAS

• Last Time



• R = 176

• Today

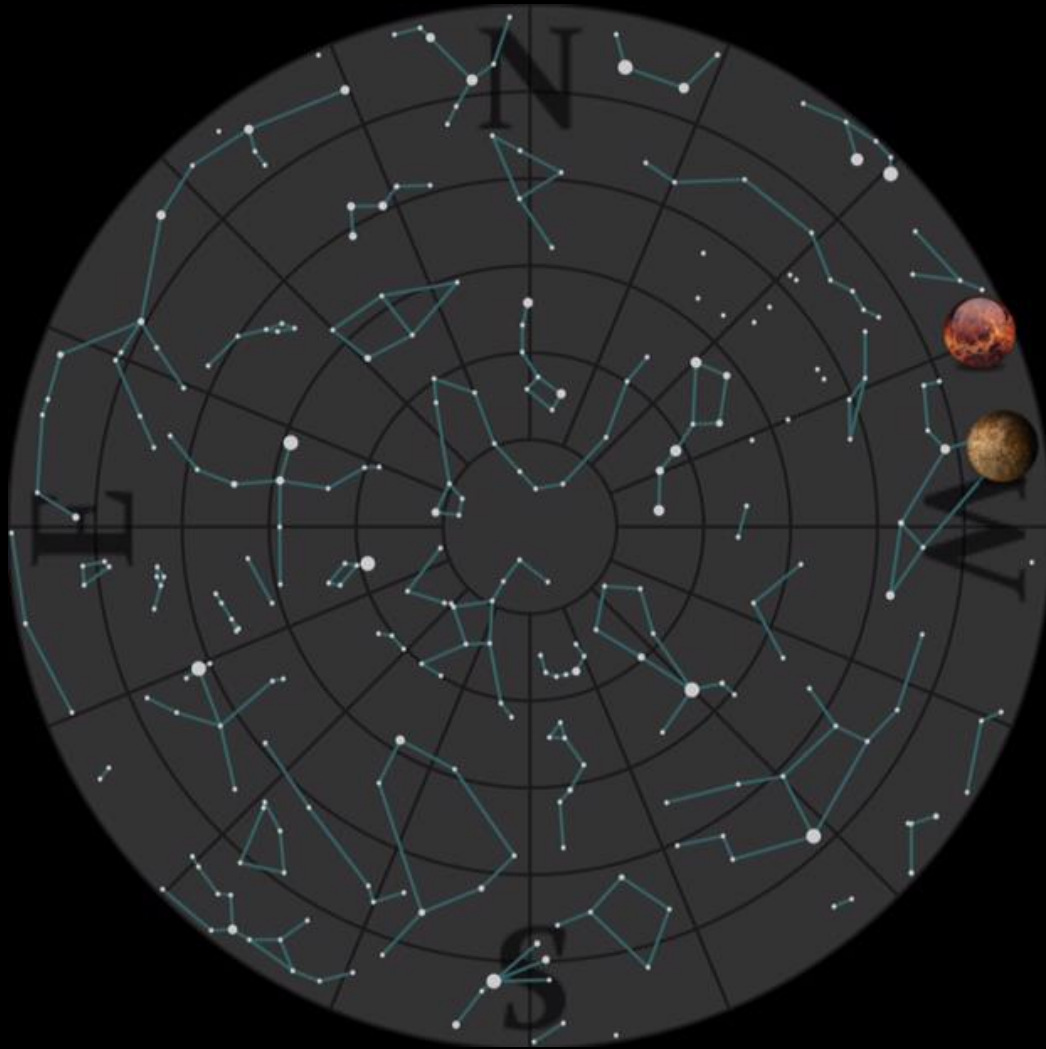


• $R = 200$

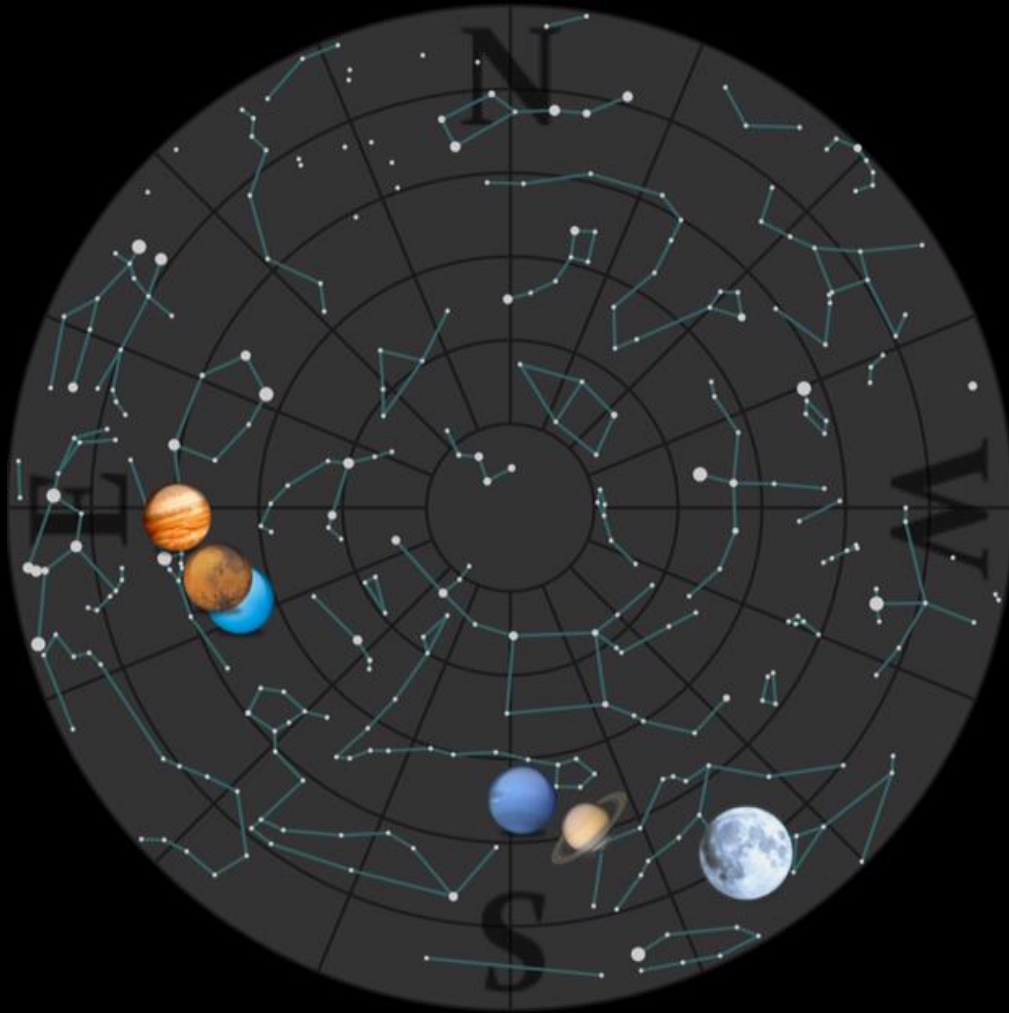
Solar Cycles

Cycle No.	Start	Peak	Value	End
19	Apr 1954	Mar 1958	285	Oct 1964
20	Oct 1964	Nov 1968	157	Mar 1976
21	Mar 1976	Dec 1979	234	Sep 1986
22	Sep 1986	Nov 1989	213	Aug 1996
23	Aug 1996	Nov 2001	180	Dec 2008
24	Dec 2008	Apr 2014	82	Dec 2019
25	Dec 2019	Now?	250?	2030?
26	first evidence?			

- The Sky 21:00 Tonight







- The Sky 05:00
Tomorrow



Inner Solar System

- Sun
 - Declination decreasing, equinox September 22
 - Last sunspot min., Apr. 2020, next max., now? or 2025?
- Mercury
 - In the evening sky, greatest elongation today, July 22 (27°), currently 27° , mag +0.3
 - Inferior conjunction Aug. 19
 - Today, rise 07:40, transit 14:45, set 21:50
- Venus
 - Also in the evening sky, superior conjunction was on June 04, and greatest elongation January 04, 2025, currently 13°
 - today, rise 06:10, transit 13:50, set 21:40

Earth

- Time
 - 00:00UT \approx 20:00ST today
 - Today, sunrise 05:00, transit 13:00, sunset 21:00
 - End of period, sunrise 05:55, transit 12:55, sunset 19:55
- Moon
 -  Last Quarter, 28
 -  New, August 04
 -  First Quarter, 12
 -  Full, 19 (Sturgeon or Grain Moon)
- Meteors
 - Perseids, July 17-August 24, maximum, Aug 12, ZHR = 80+
 - Aug 12 Moonset, 22:40

Occultation

- Moon - Saturn
 - Wednesday, August 21,
 - Moon transit 02:10 (BST)
 - disappearance (bright limb) 04:29 (BST)
 - civil twilight start 05:10 (BST)
 - reappearance (dark limb) 05:21 (BST)
 - Sunrise 05:45 (BST)
 - Moonset 07:50 (BST)

Outer Solar System

- Mars
 - Conjunction 2023 November 18. Opposition 2025 January 16. Today, rise 00:50, transit 08:45, set 16:35
- Jupiter
 - Conjunction May 18. Opposition December 07. Today, rise 01:30, transit 09:35, set 17:40
- Saturn
 - Conjunction February 28. Opposition September 08. Today, rise 22:40, transit 04:15, set 09:40
- Uranus
 - Conjunction May 13. Opposition November 17. Today, rise 00:40, transit 08:30, set 16:15
- Neptune
 - Conjunction March 17. Opposition September 21. Today, rise 22:50, transit 04:50, set 10:50

Outer Outer Solar System

- Pluto
 - Opposition, July 23 (tomorrow)

OASI Events

- Orwell Park Observatory
 - No access, Wednesdays July 31, August 7, & August 21
- Zoom Meeting
 - Thursday August 15, from 8:00pm
- Bawdsey Radar Museum
 - Sunday August 25, solar observing, 11:00-16:00

Local Societies Events

- DASH (Darsham Village Hall, 7:00pm, Sundays)
 - Saturday Aug 10, solar observing session, Darsham Village Fete
 - Sunday Aug 11, solar observing session, Dunwich Heath
- LYRA (Parkhill Hotel, Oulton, 7:30pm, Tuesdays)
 - No information
- AAA (Whepstead Village Hall, 7:30pm, Wednesdays)
 - July 31, Andrew Green, Cambridge, 'Impacts, Terrestrial and Extra-Terrestrial'
 - August 14, solar observing equipment & techniques, and Christiaan Huygens
- DAG (Diss)
 - Informal on FaceBook

National Society Event

- SPA Meeting
 - Saturday July 27, 2:00pm-5:30pm, Gustave Tuck Lecture Theatre, UCL, Gower St., London, WC1 6BT
 - Emma Chapman, 'Tuning into Primordial Stars ~ Seeing First Light with Radio Telescopes and JWST'
 - Robin Scagell, 'Skynotes'
 - Mark McIntyre, 'Meteor Observing with CCTV Cameras and a Raspberry Pi'