SIDC Space Weather Briefing

06 July 2026-12 July 2026

Senthamizh Pavai Valliappan

& the SIDC forecaster team

Royal Observatory *of* Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2026-07-06 00:00 to 2026-07-12 23:59

Active regions	12 NOAA Active Regions: SIDC Sunspot Groups 886, 860 (NOAA AR 4478, 4479), SIDC Sunspot Groups 906 – 915 (NOAA AR 4481 – 4488) / complex magnetic type beta-gamma, beta-gamma-delta
Flares	# C-class flare> 30 # M-class flare: 8 # X-class flare: 0
Coronal Holes	3 CH- & 1 CH+
CMEs	3 CMEs

Proton flux	Below 10 pfu threshold level
Electron flux	Exceeded 1000 pfu threshold level

Solar wind and geomagnetic conditions

ICMEs	None
Solar wind conditions	|B|: 1.37 - 13.36 nT// Bz: -9.0 nT to 9.53 nT// Speed: 332.2 - 682.1 km/s
Geomagnetic conditions	max KBel: 4.0, max Kp(NOAA): 4.67, Minor Storm conditions

All Quiet Alert: Off

Solar Activity

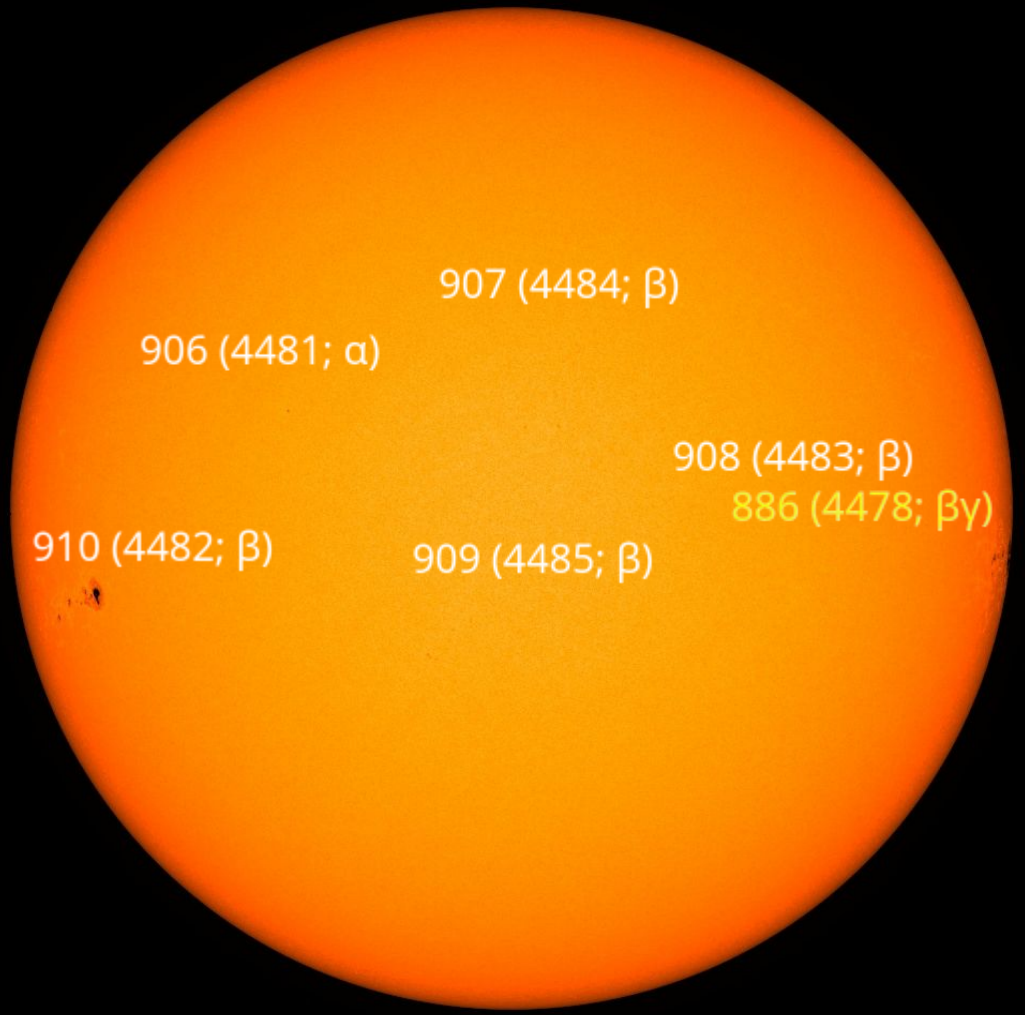


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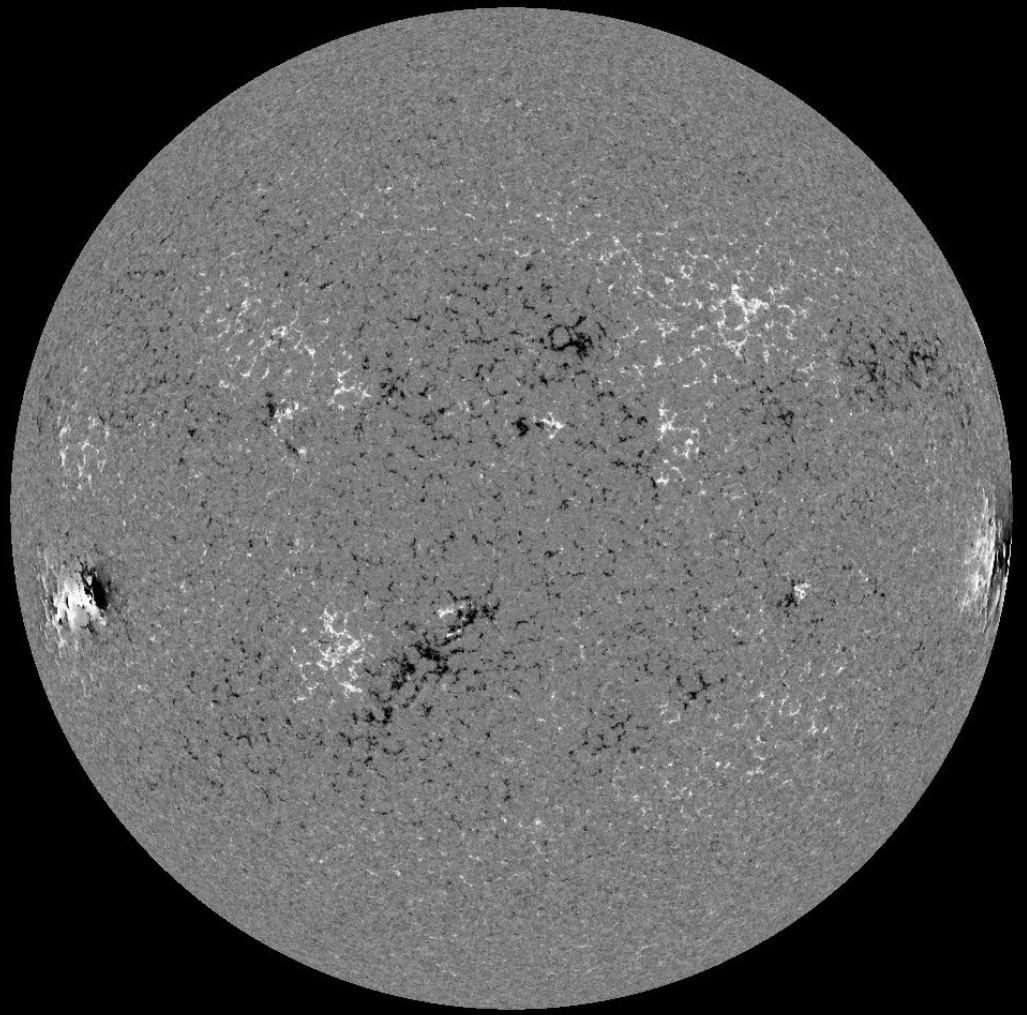
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Solar active regions

SDO/HMI White Light 2026-07-06

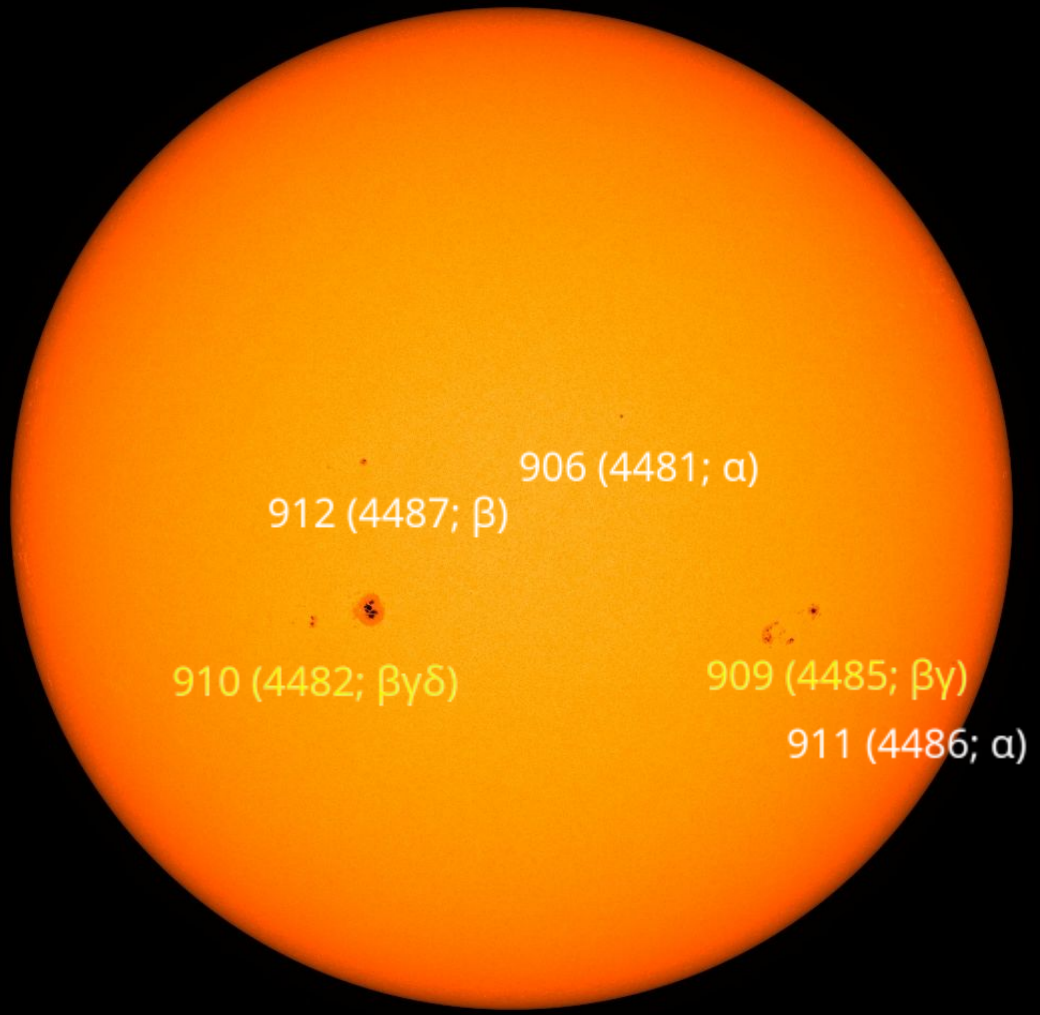


SDO/HMI Magnetogram 2026-07-06

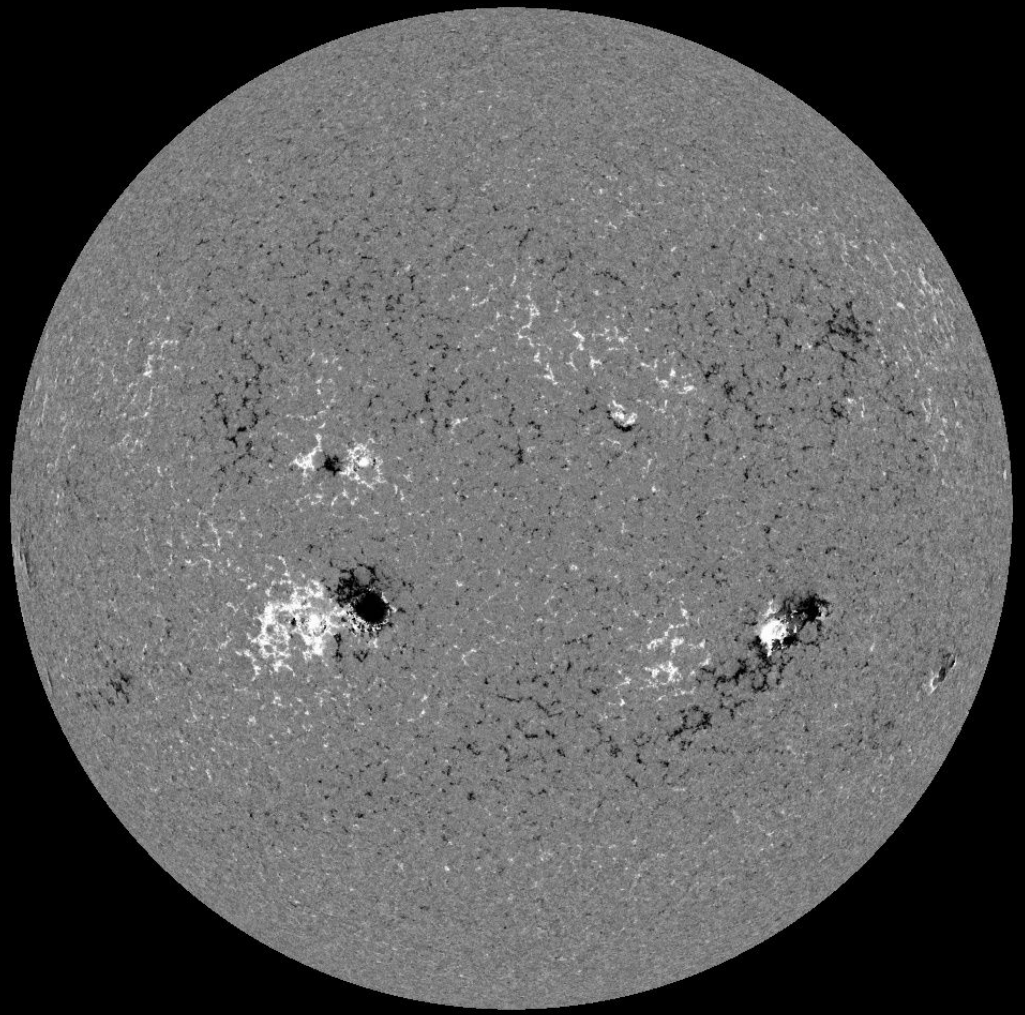


Solar active regions

SDO/HMI White Light 2026-07-09

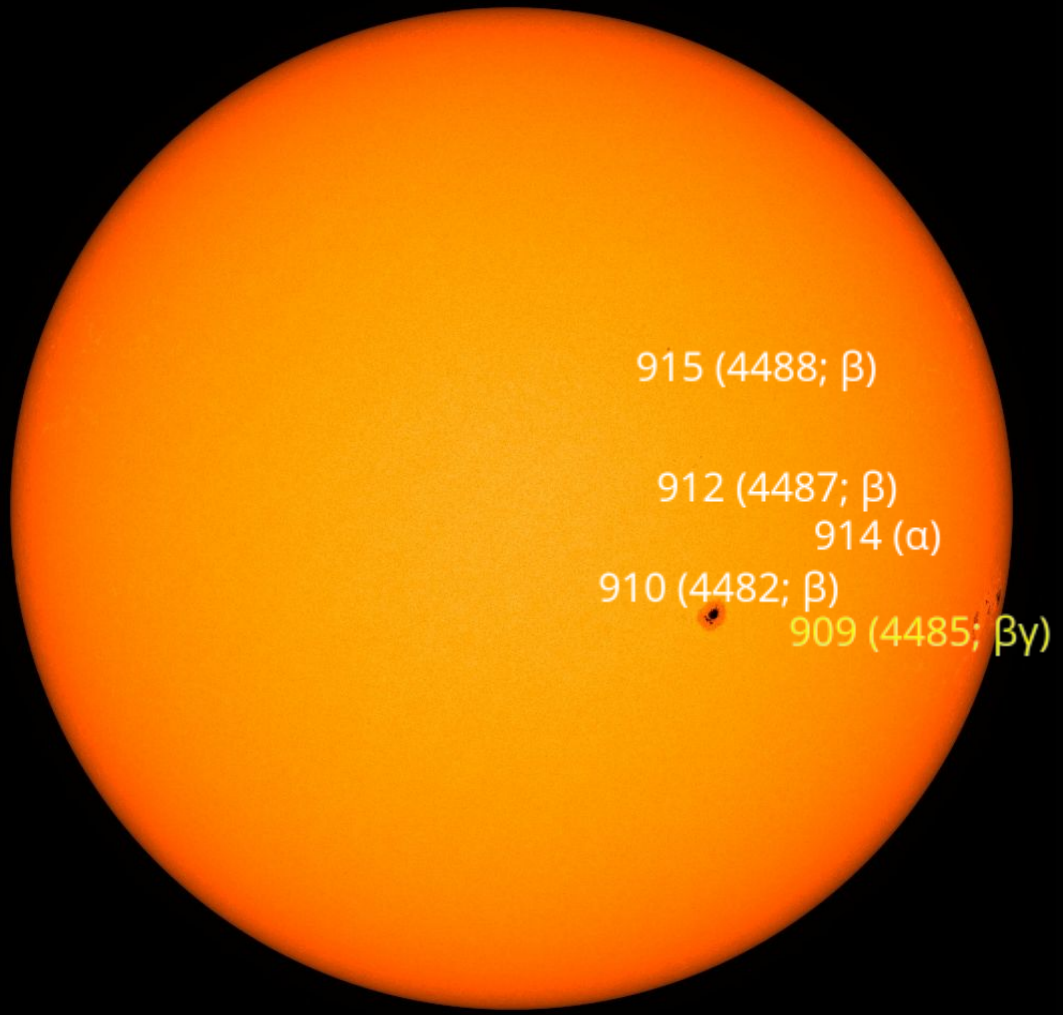


SDO/HMI Magnetogram 2026-07-09

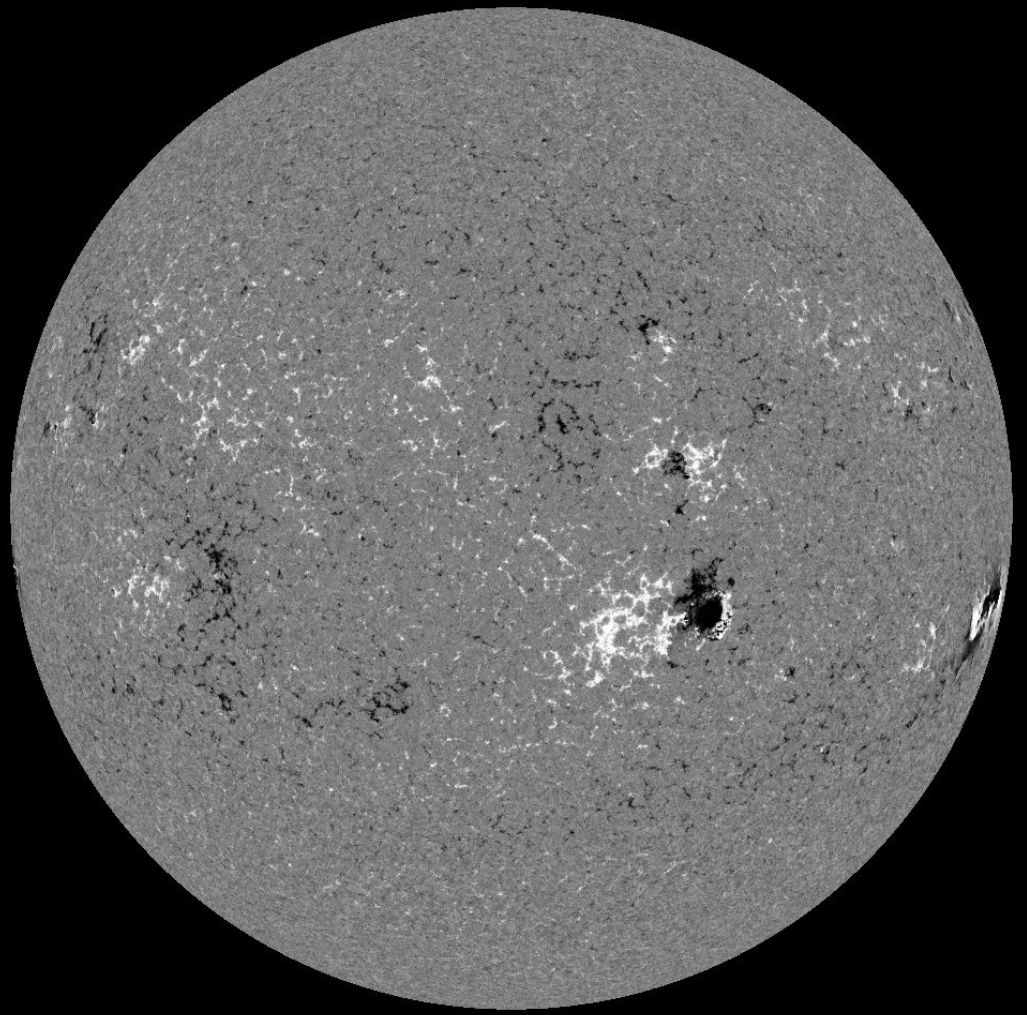


Solar active regions

SDO/HMI White Light 2026-07-12

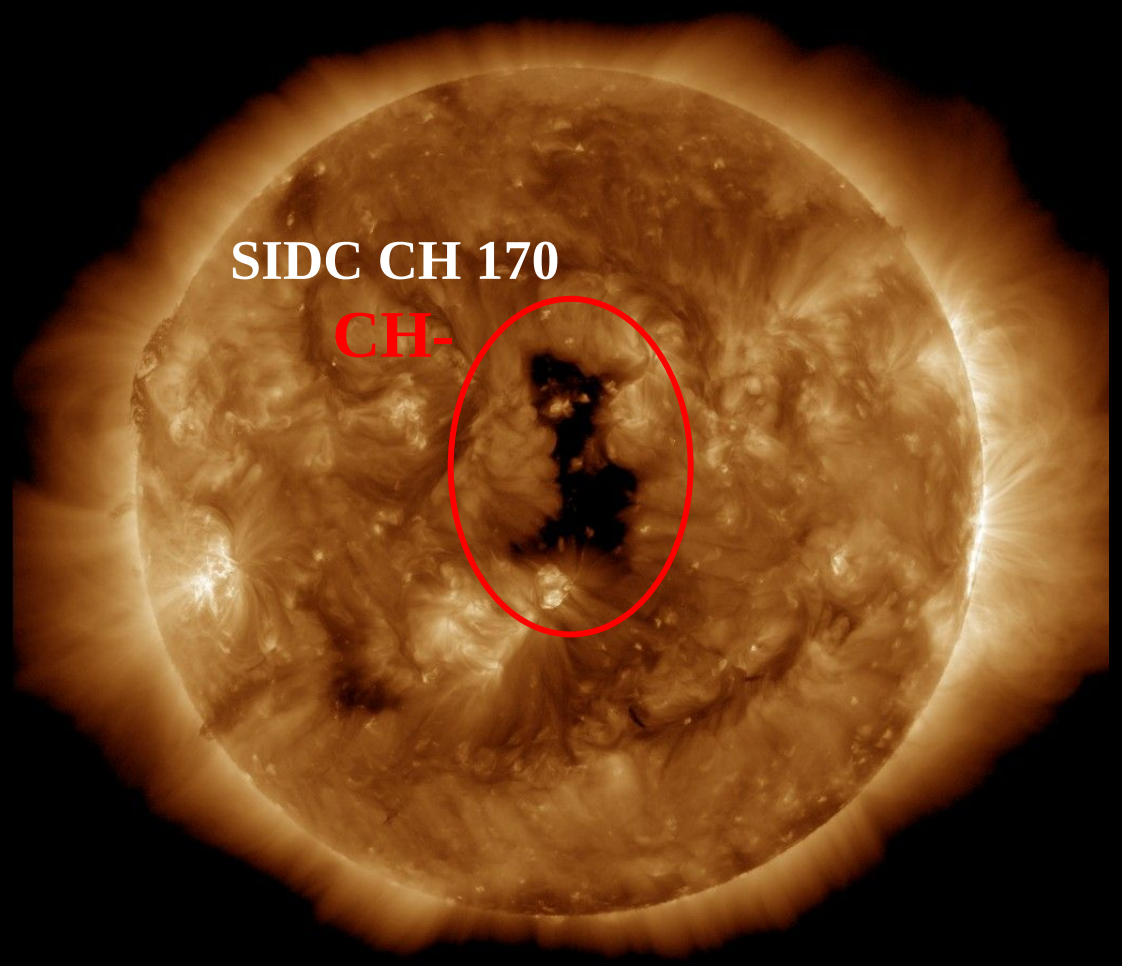


SDO/HMI Magnetogram 2026-07-12

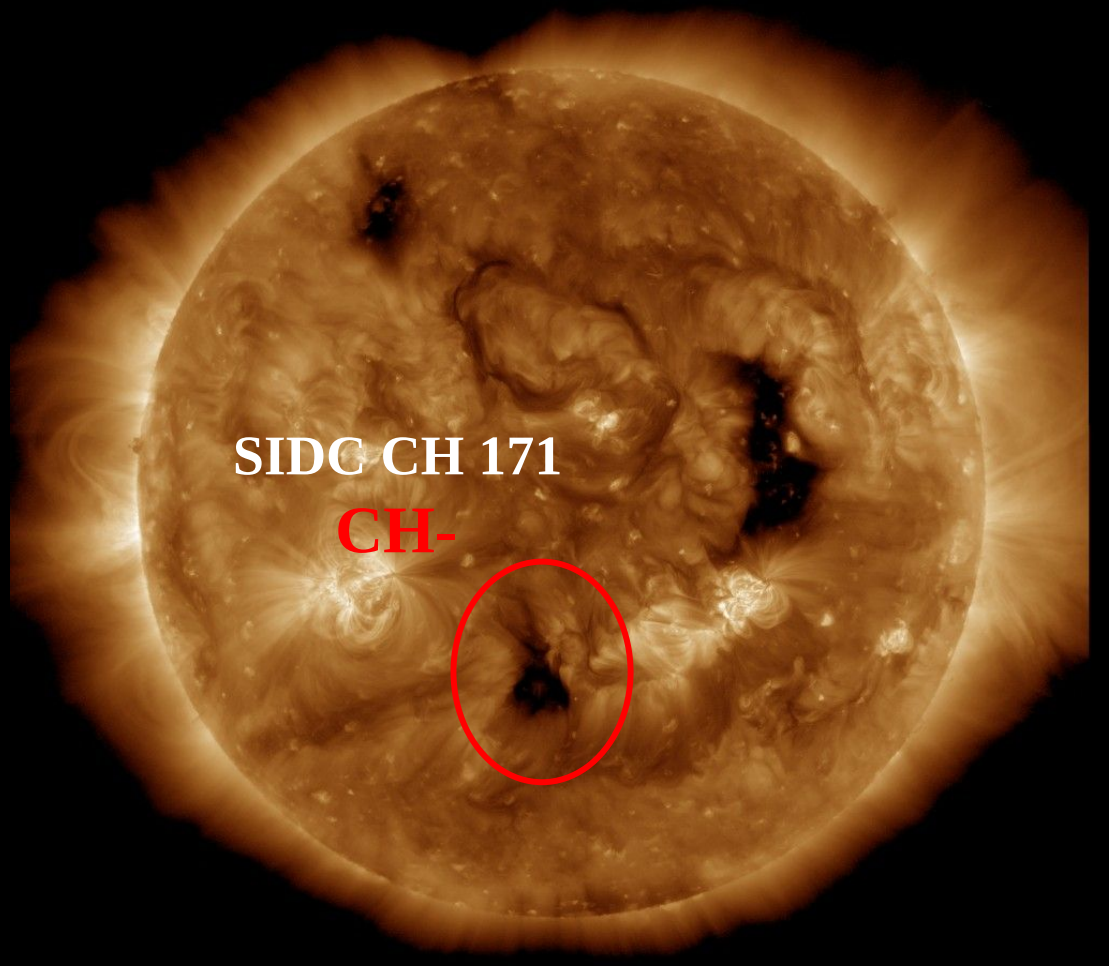


Coronal holes

SDO/AIA 19.3 nm 2026-07-06

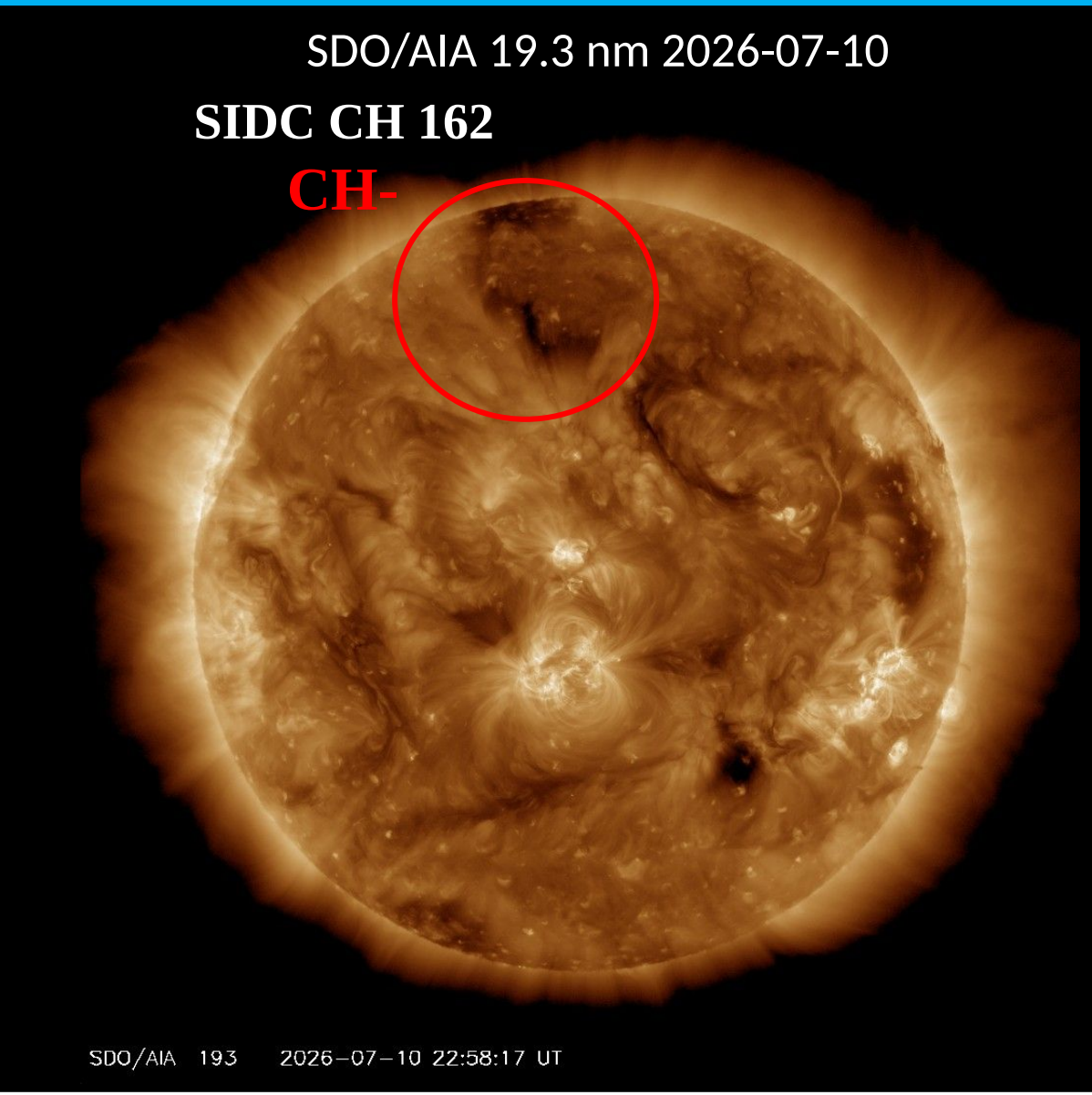


SDO/AIA 19.3 nm 2026-07-08

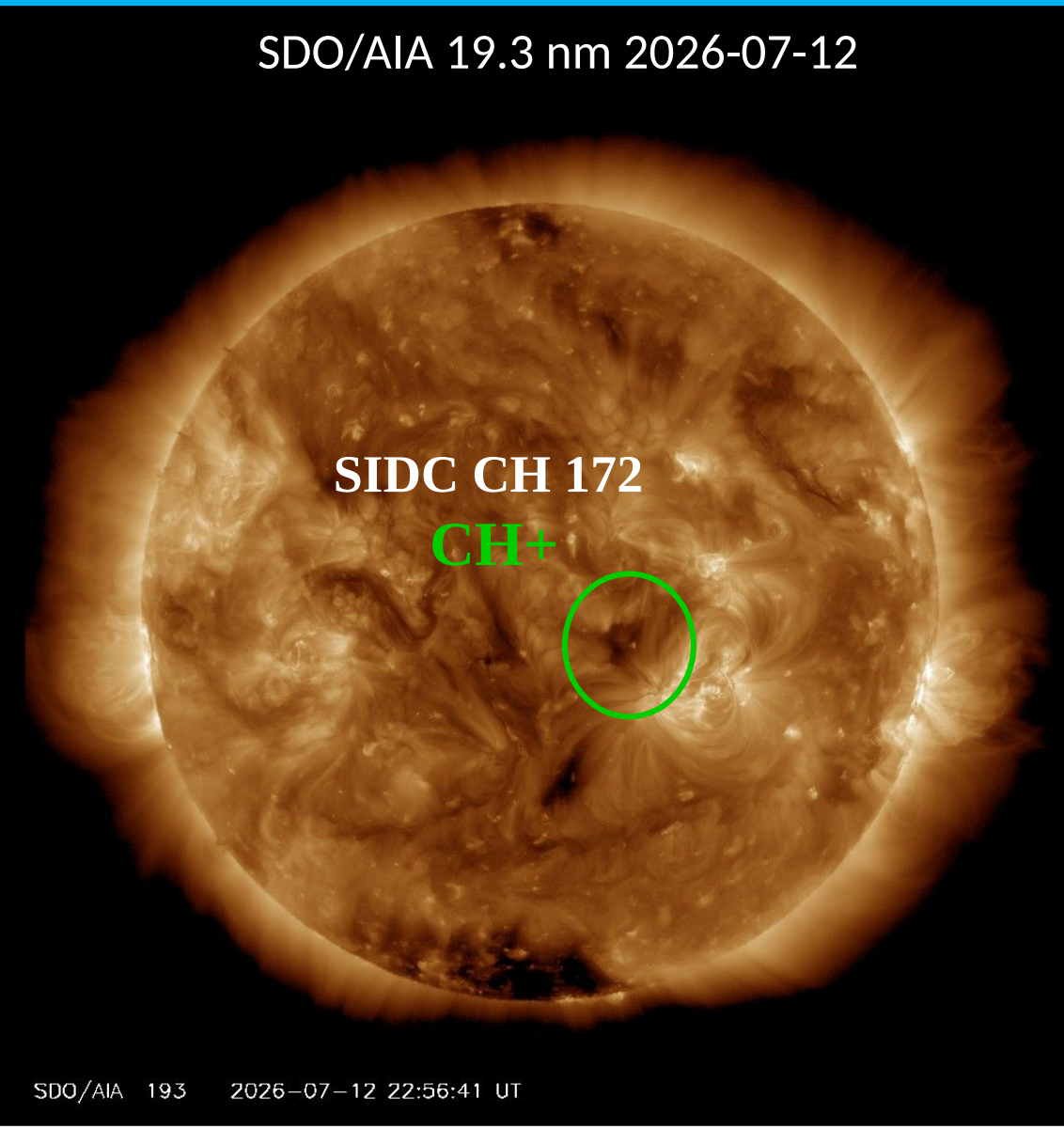


Coronal holes

SDO/AIA 19.3 nm 2026-07-10

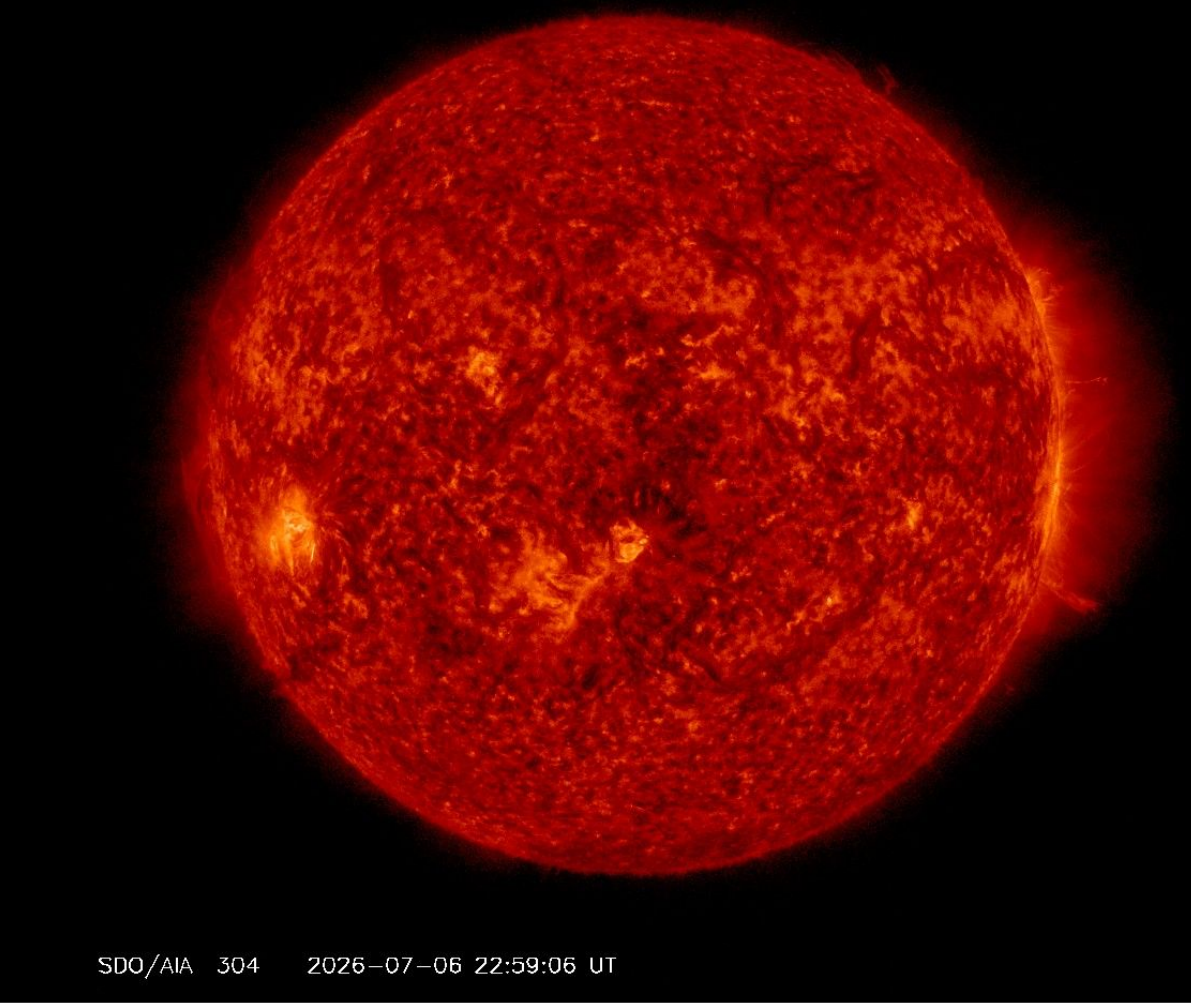


SDO/AIA 19.3 nm 2026-07-12

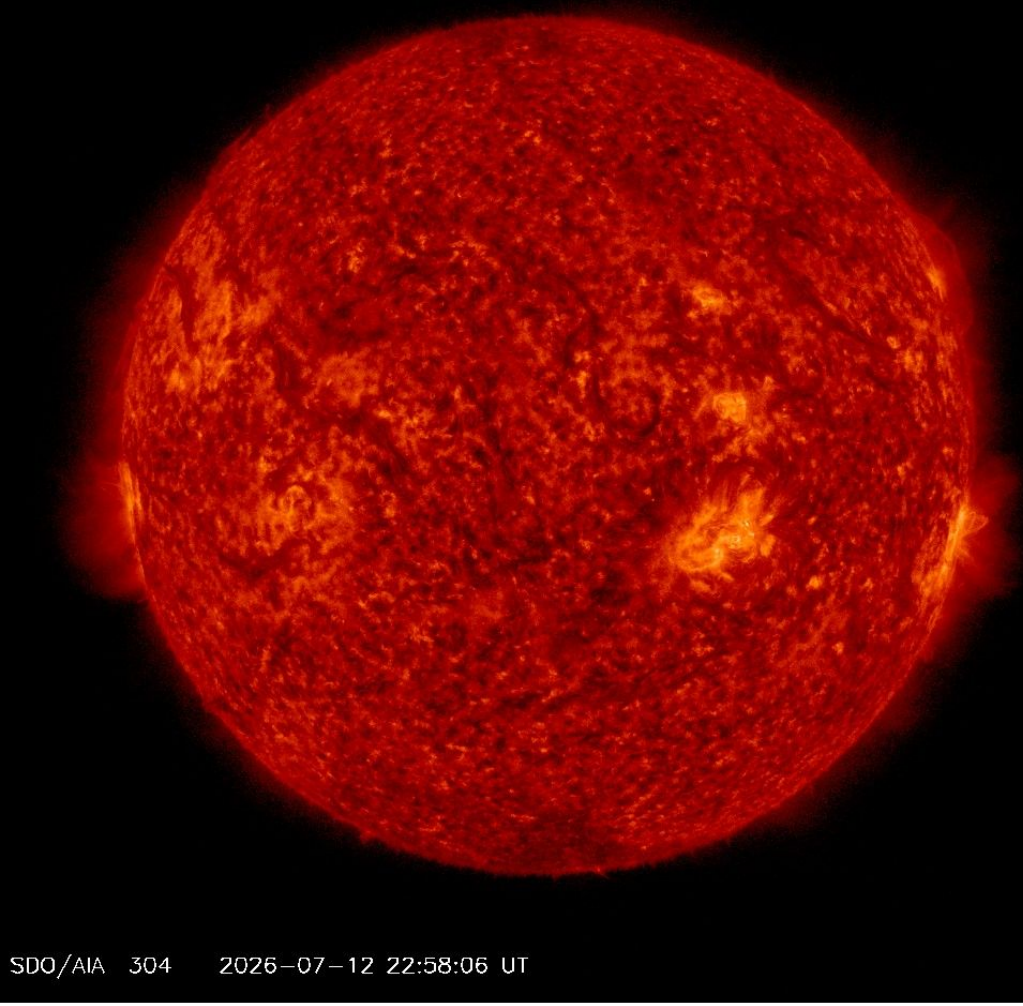


Filaments

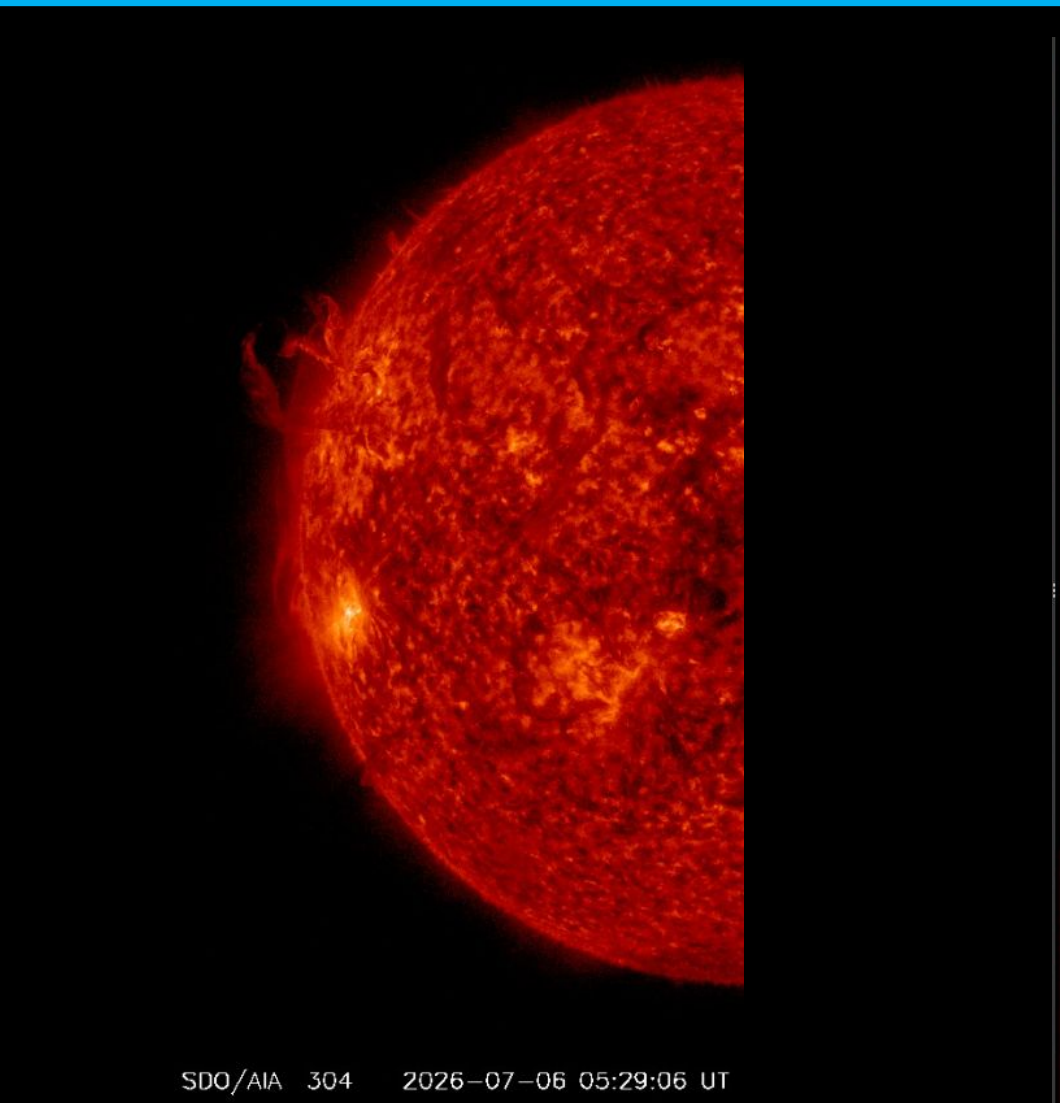
SDO/AIA 30.4 nm 2026-07-06

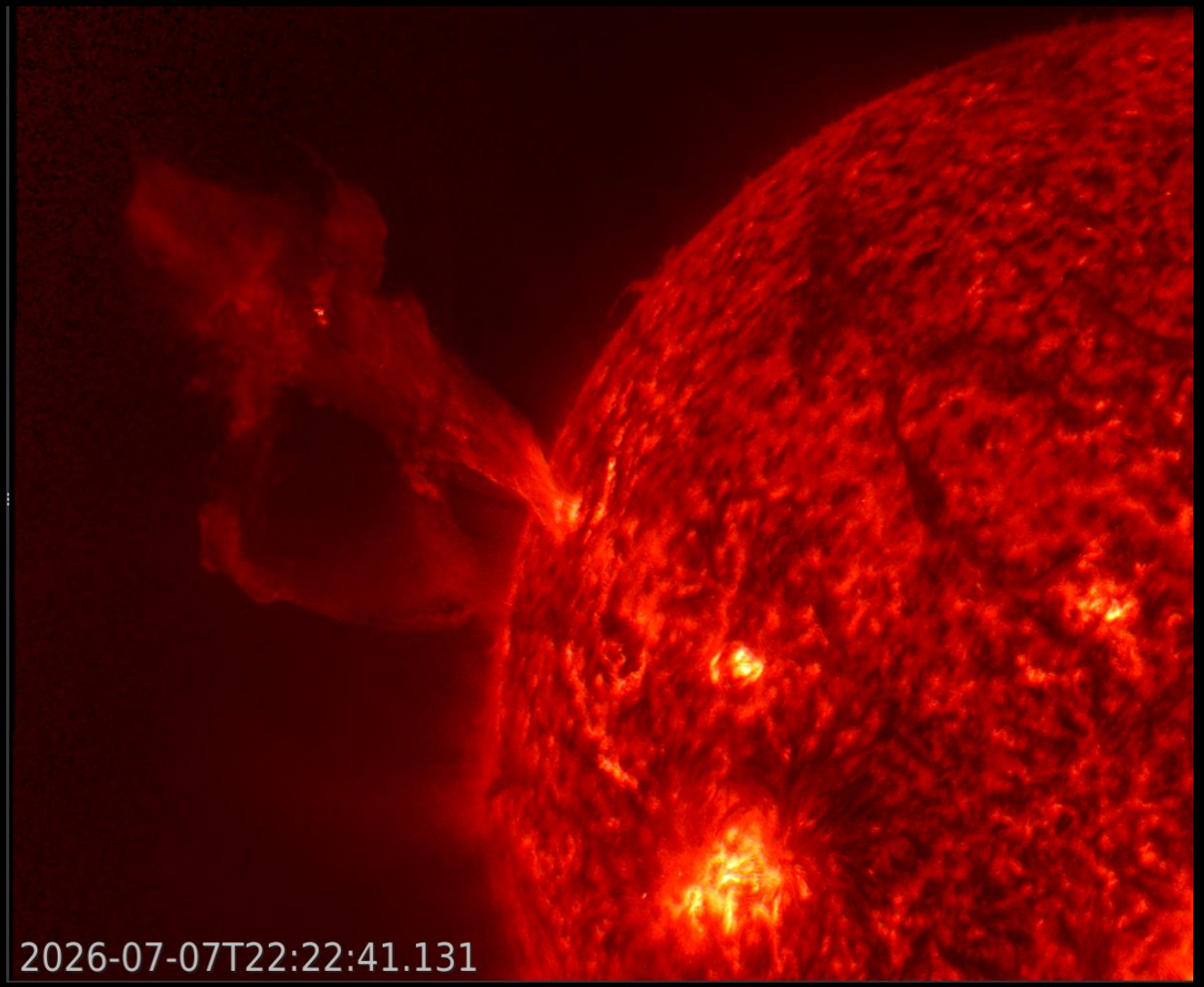


SDO/AIA 30.4 nm 2026-07-12



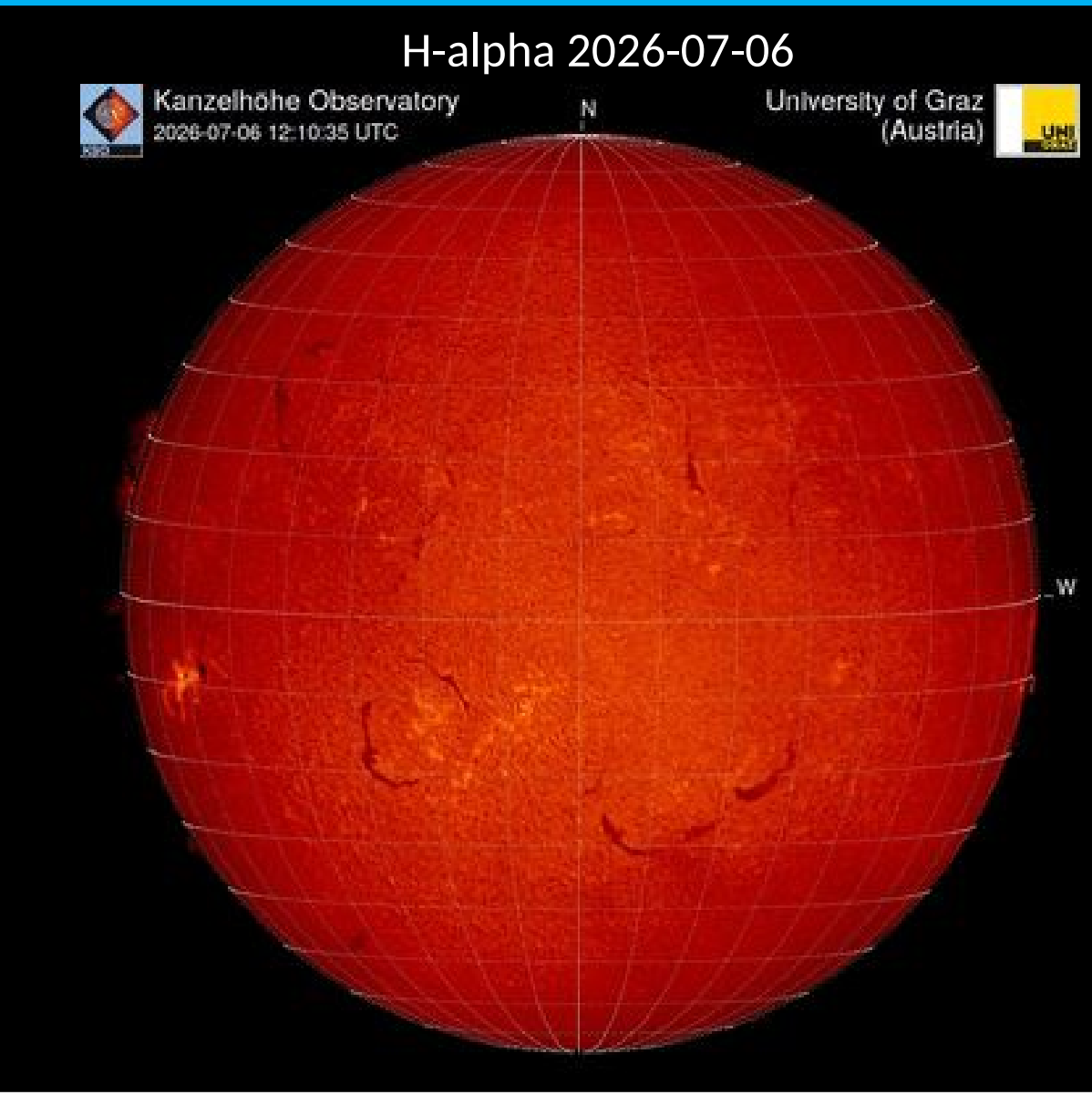
Filaments



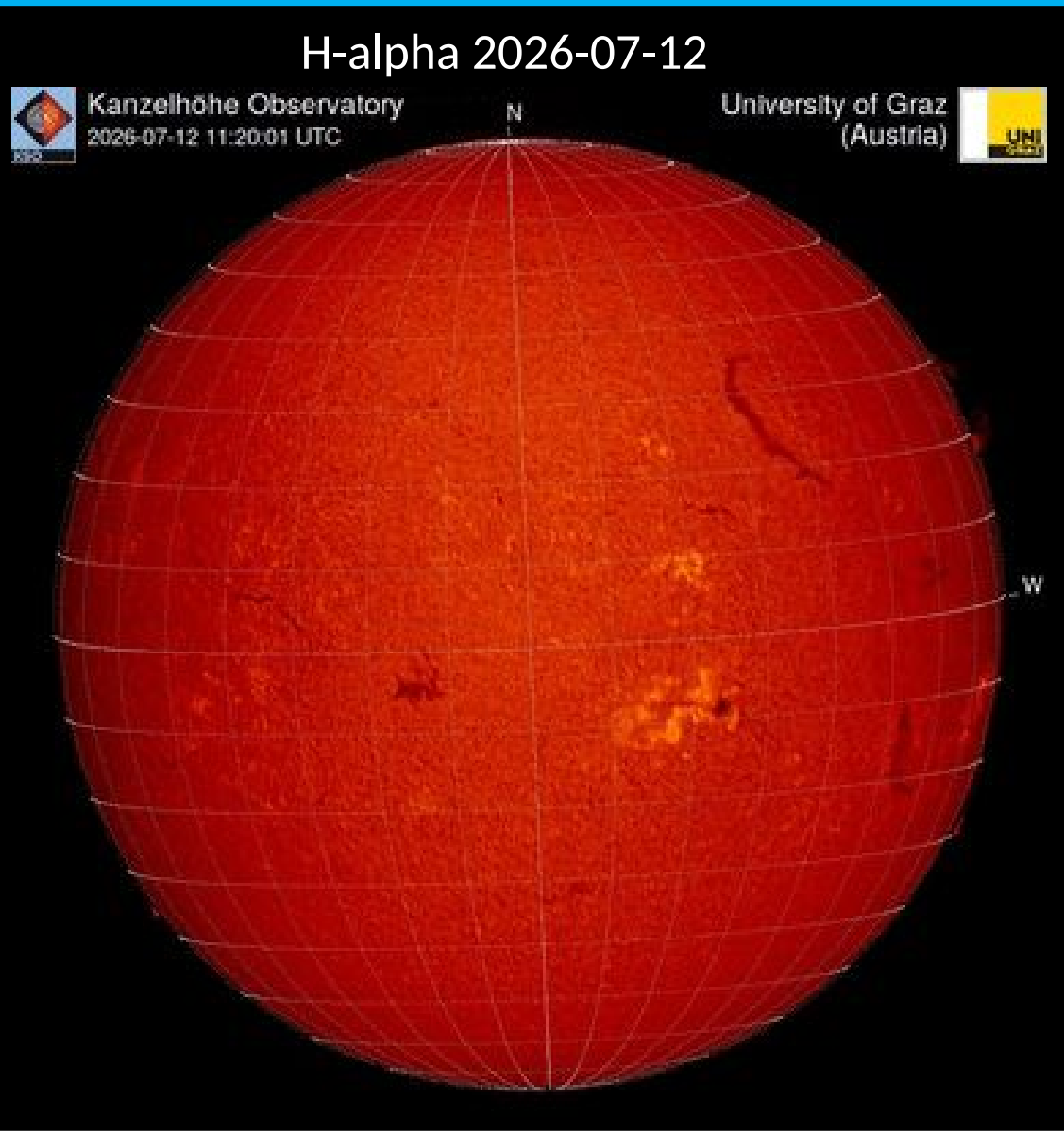


Filaments & Filament eruptions

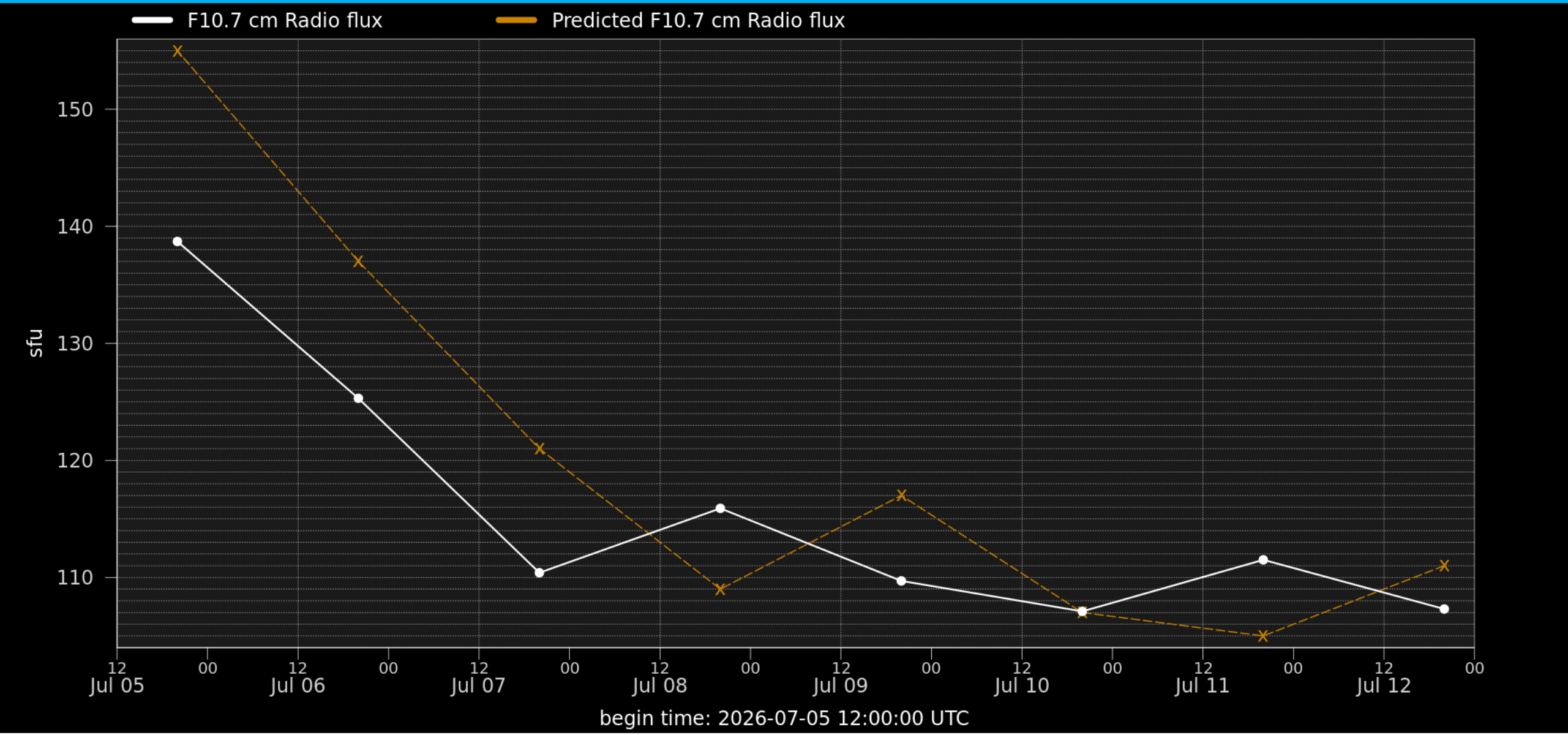
H-alpha 2026-07-06



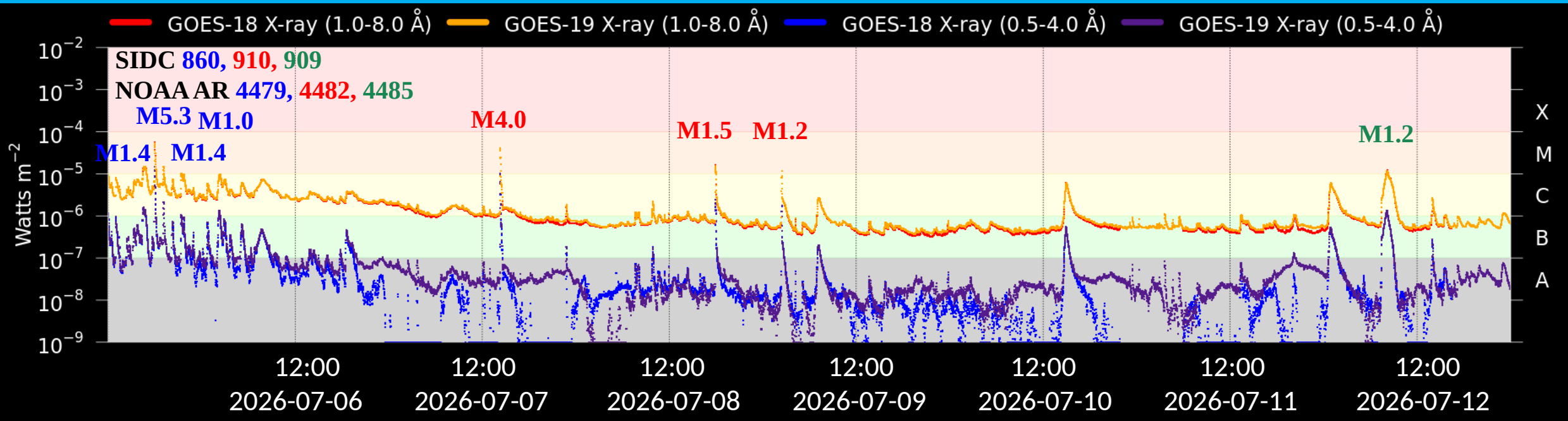
H-alpha 2026-07-12



Solar F10.7cm radio flux



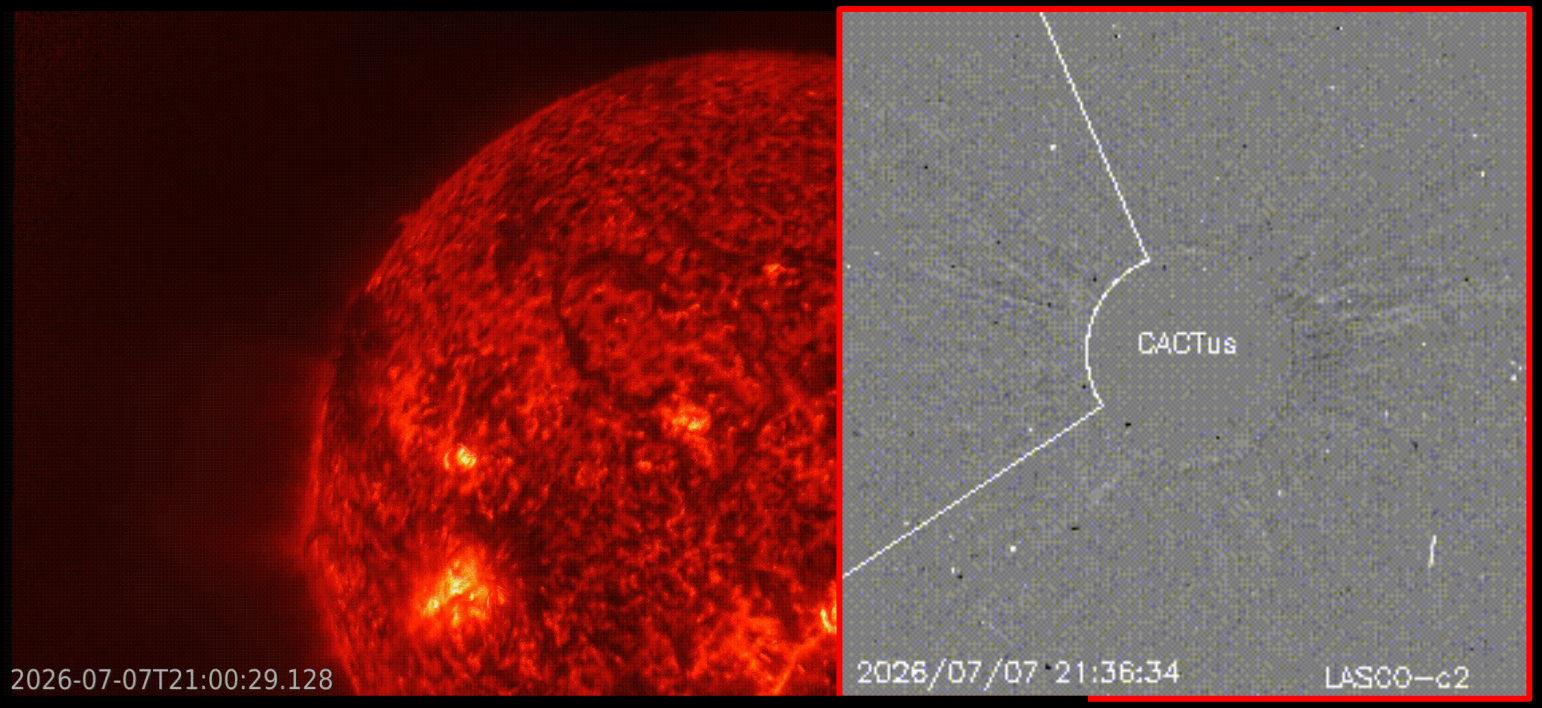
Flaring activity



Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2026-07-05	2026-07-06	2026-07-07	2026-07-08	2026-07-09	2026-07-10	2026-07-11	2026-07-12
Probability (%)	99|98|36	96|61|07	96|51|07	90|65|10	90|65|10	85|55|07	90|51|05	90|70|15
Observed (#)	08|04|00	01|00|00	04|01|00	01|02|00	00|00|00	02|00|00	01|00|00	02|01|00

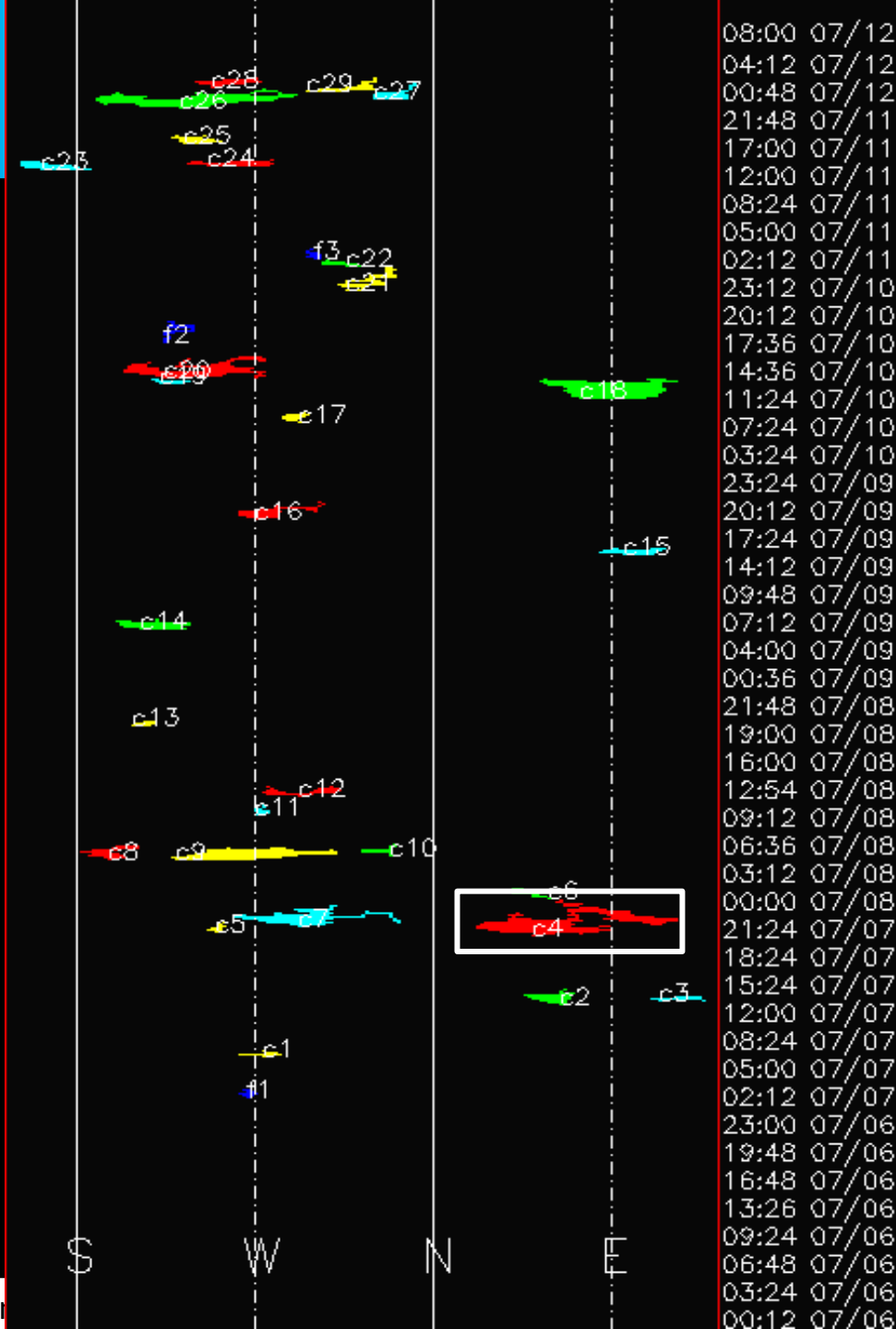
Coronal Mass Ejections



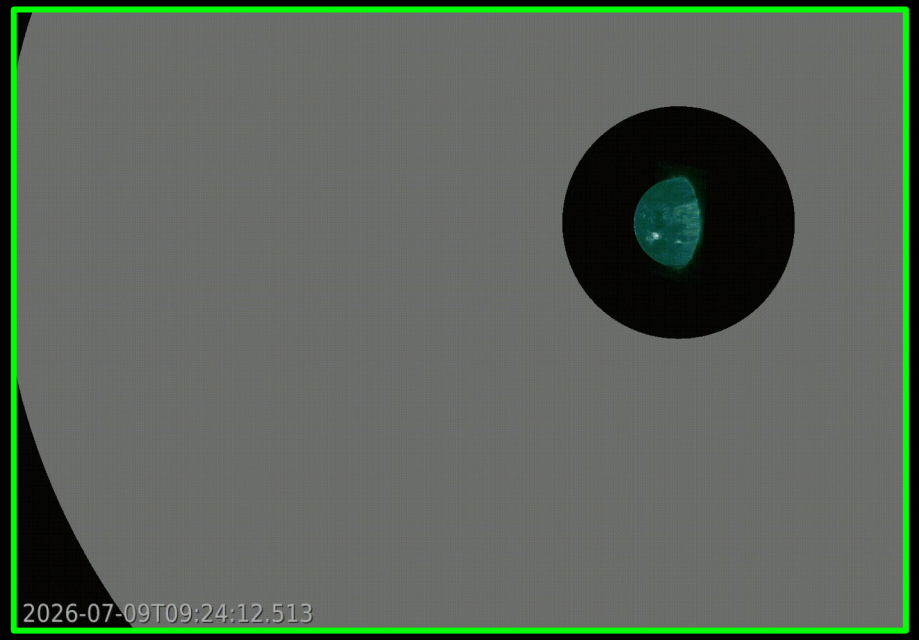
CME:
Observation: 22:12 UTC on Jul 07
Associated with a filament eruption on the NE limb.
Speed = 800 km/s, Ang. width = ~115 deg

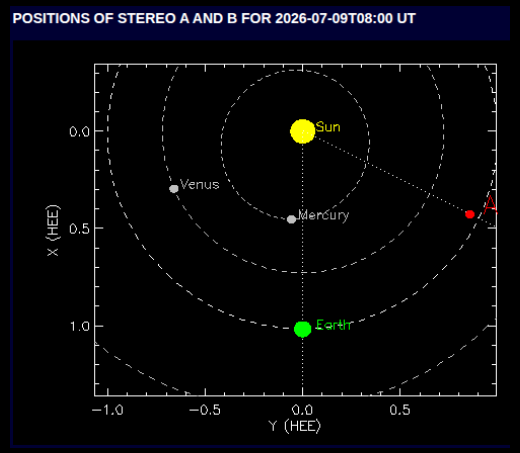
Prediction: Glancing blow on Jul 11T12:00

Observation: Didn't arrive to Earth



Coronal Mass Ejections

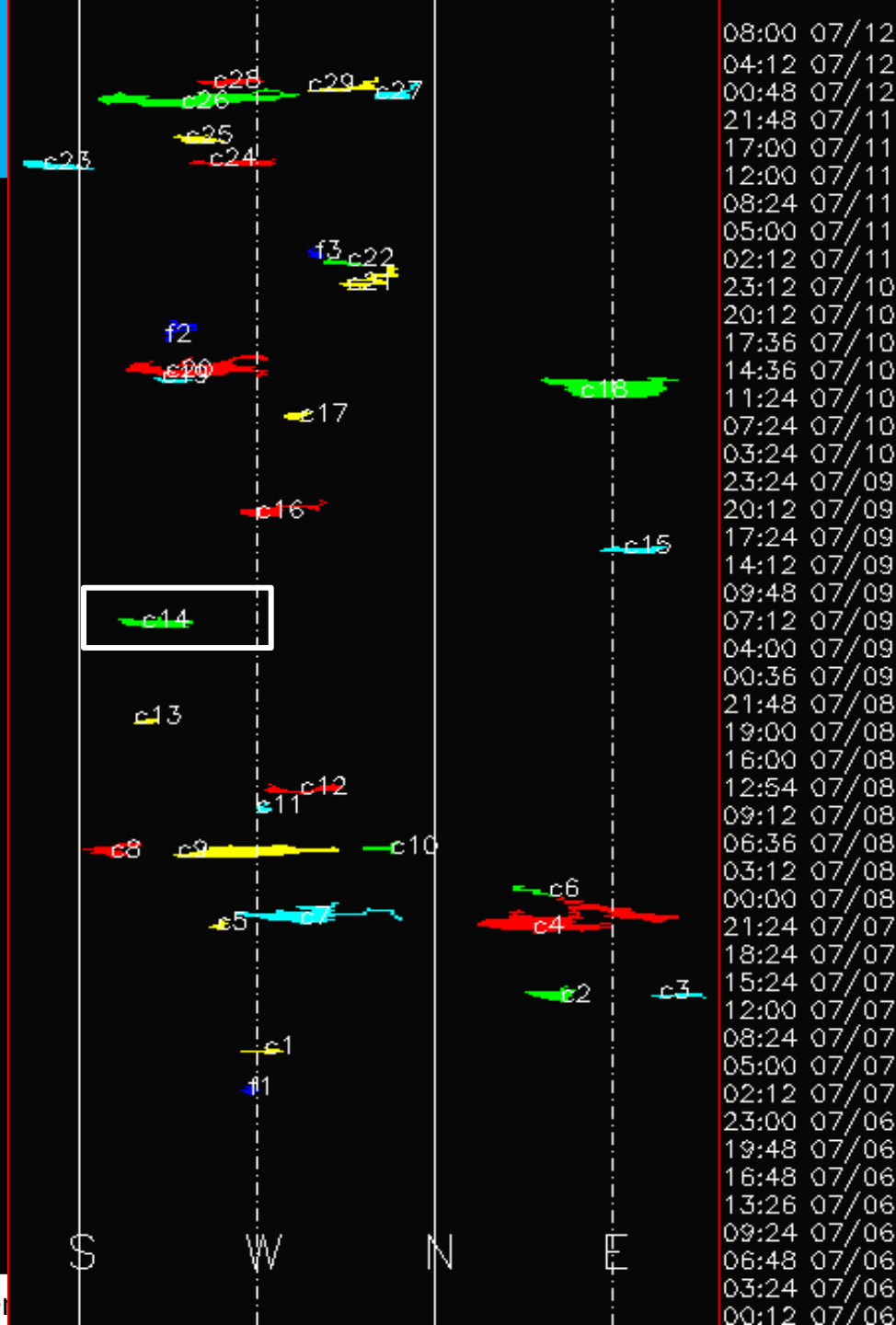




CME:
Observation: 07:53 UTC on Jul 09 on STEREO-A/COR2 image
Associated to a C2.7 flare (S13 W27, SIDC flare 8178) produced by SIDC Sunspot Group 909 (NOAA Active Region 4485) on Jul 09 (peak time 07:13)
Speed = 750 km/s, Ang. width = ~60 deg

Prediction: Glancing blow on Jul 12T03:00

Observation: Didn't arrive to Earth

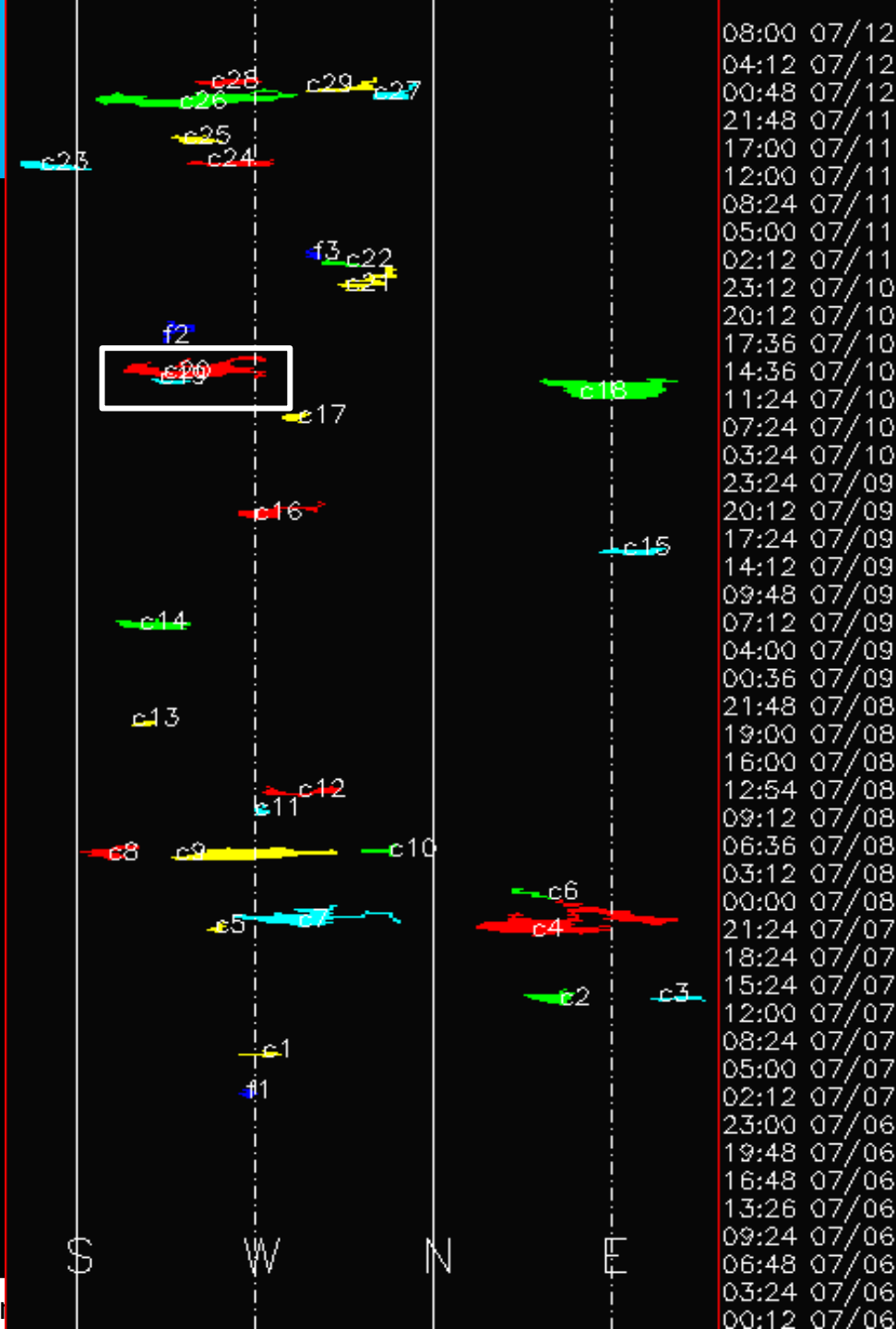


Coronal Mass Ejections

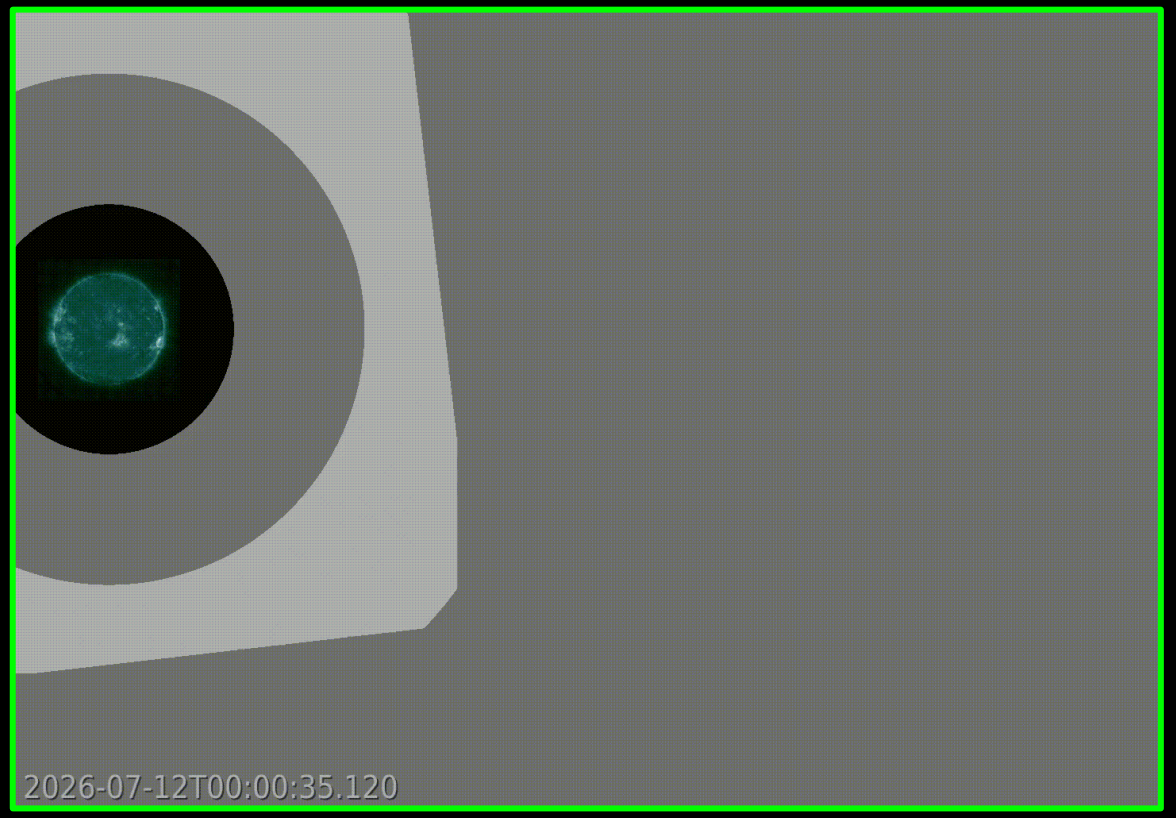


CME:
Observation: 15:36 UTC on Jul 10
Associated to C6.0 flare (SIDC Flare 8182, S15 W46) peaking on Jul 10 at 14:59 UTC, produced by SIDC Sunspot Group 909 (NOAA Active Region 4485).
Speed = 650 km/s, Ang. width = ~90 deg

Prediction: Glancing blow on Jul 14T04:00

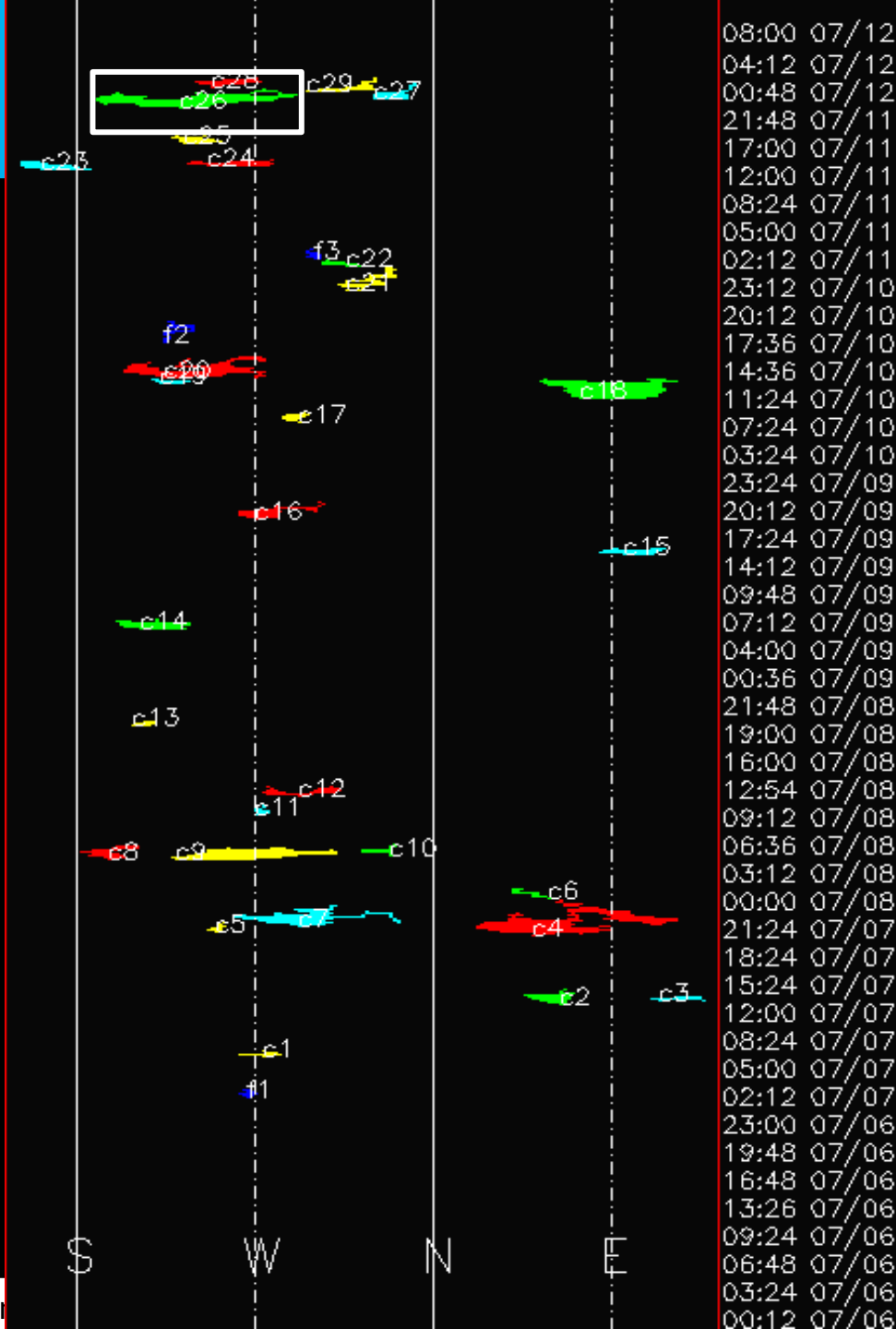


Coronal Mass Ejections



CME:
Observation: 01:08 UTC on Jul 12
Associated to C5.9 flare (SIDC Flare 8192, S15 W66) peaking on Jul 12 at 00:57 produced by SIDC Sunspot Group 909 (NOAA Active Region 4485).
Associated type IV radio burst was observed.
Speed = 460 km/s, Ang. width = ~115 deg

Prediction: Expected to miss Earth



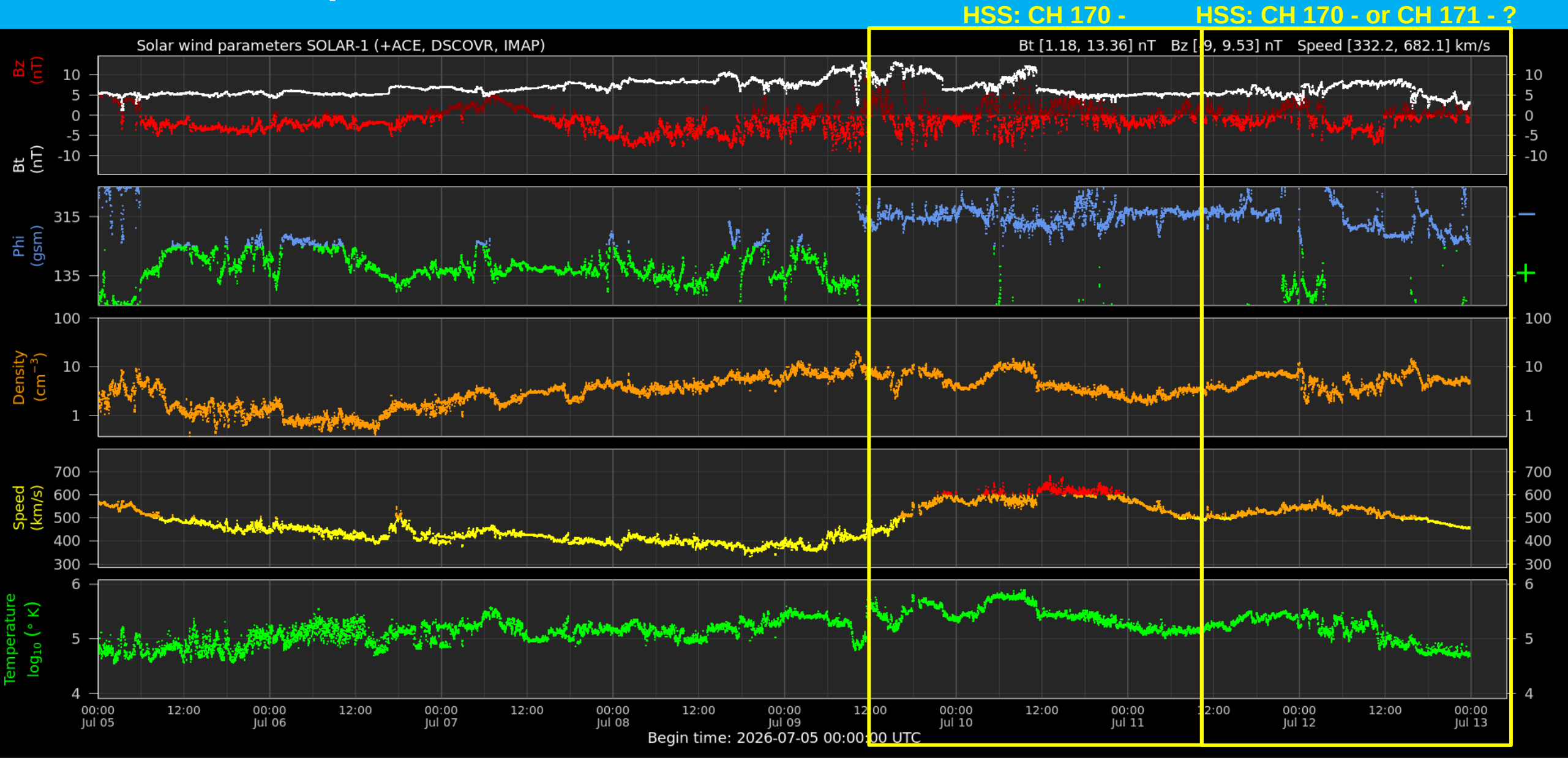
Solar Wind and

Geomagnetic Activity

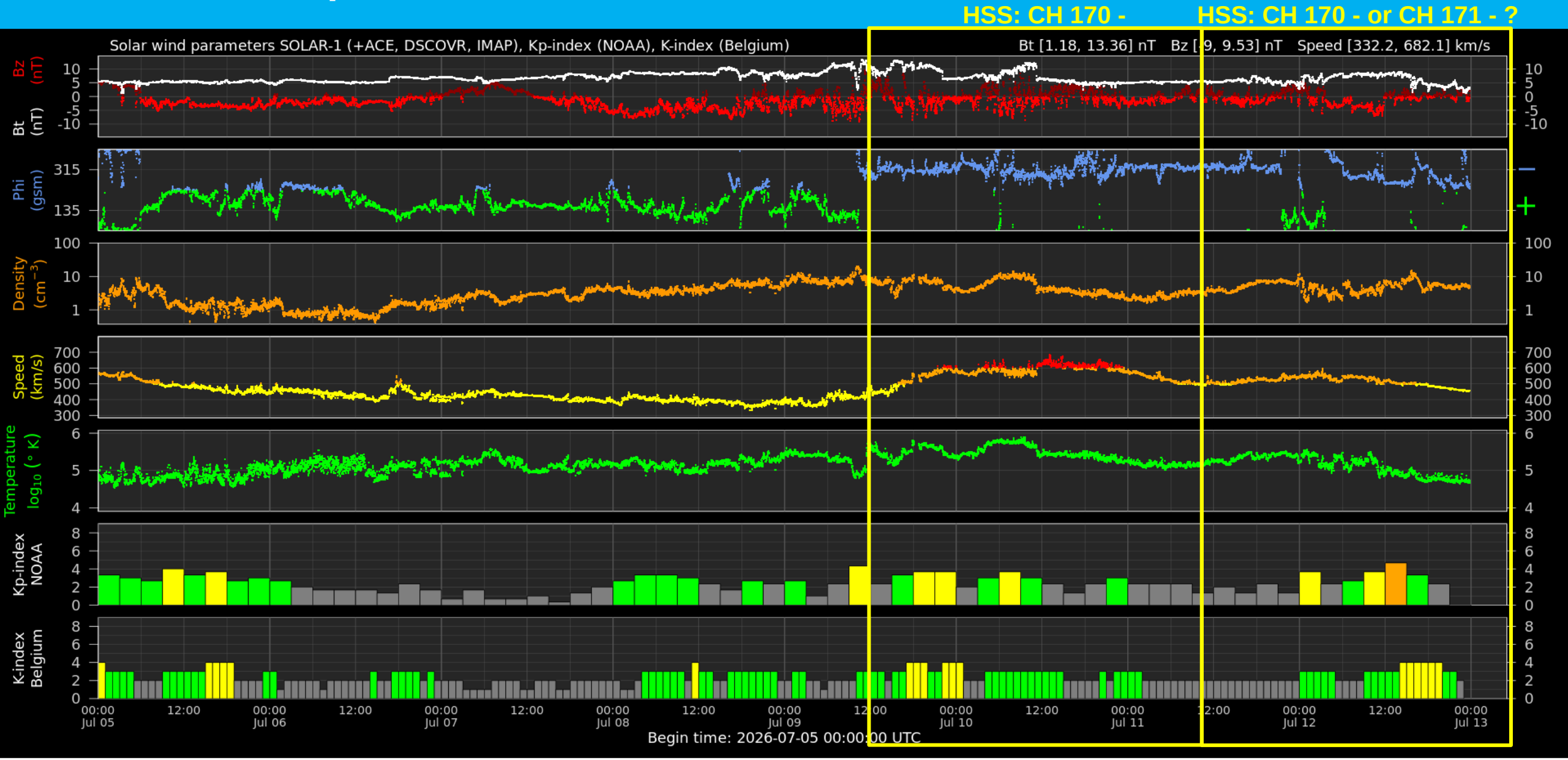
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Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



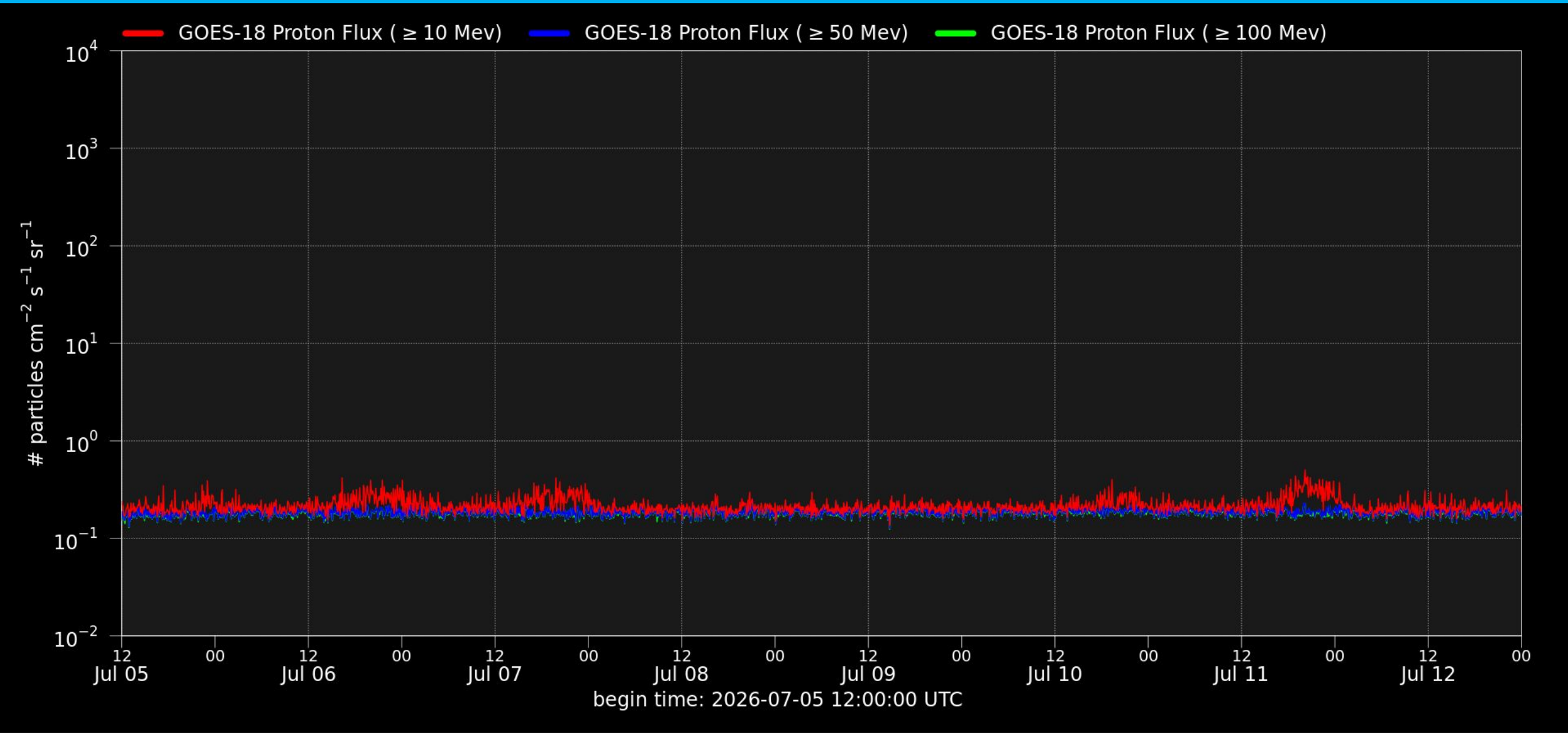
Energetic Particles



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Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

www.spaceweather.gc.ca/forecast-prevision/space-spatiale/sffl-en.php

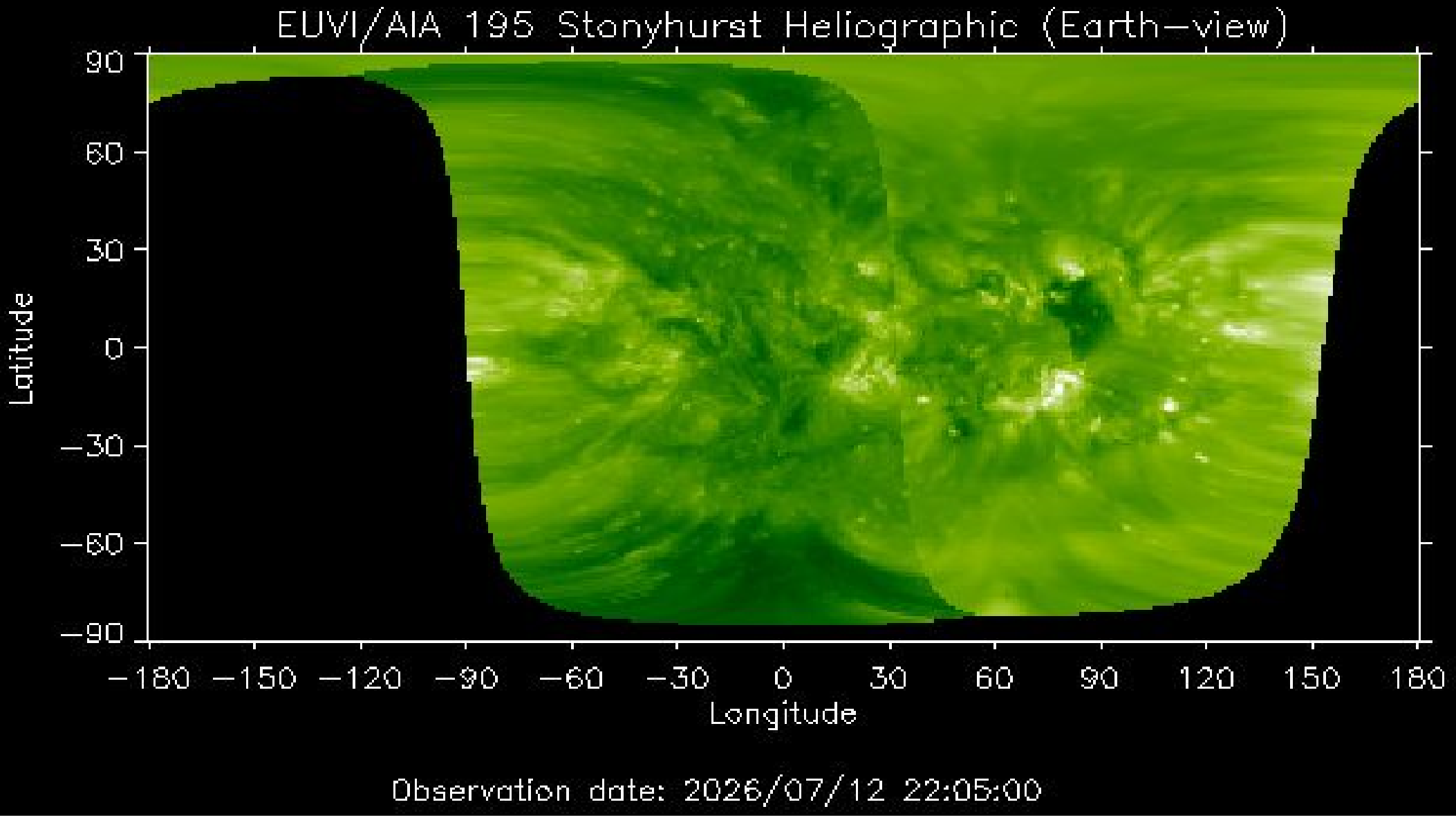


Outlook

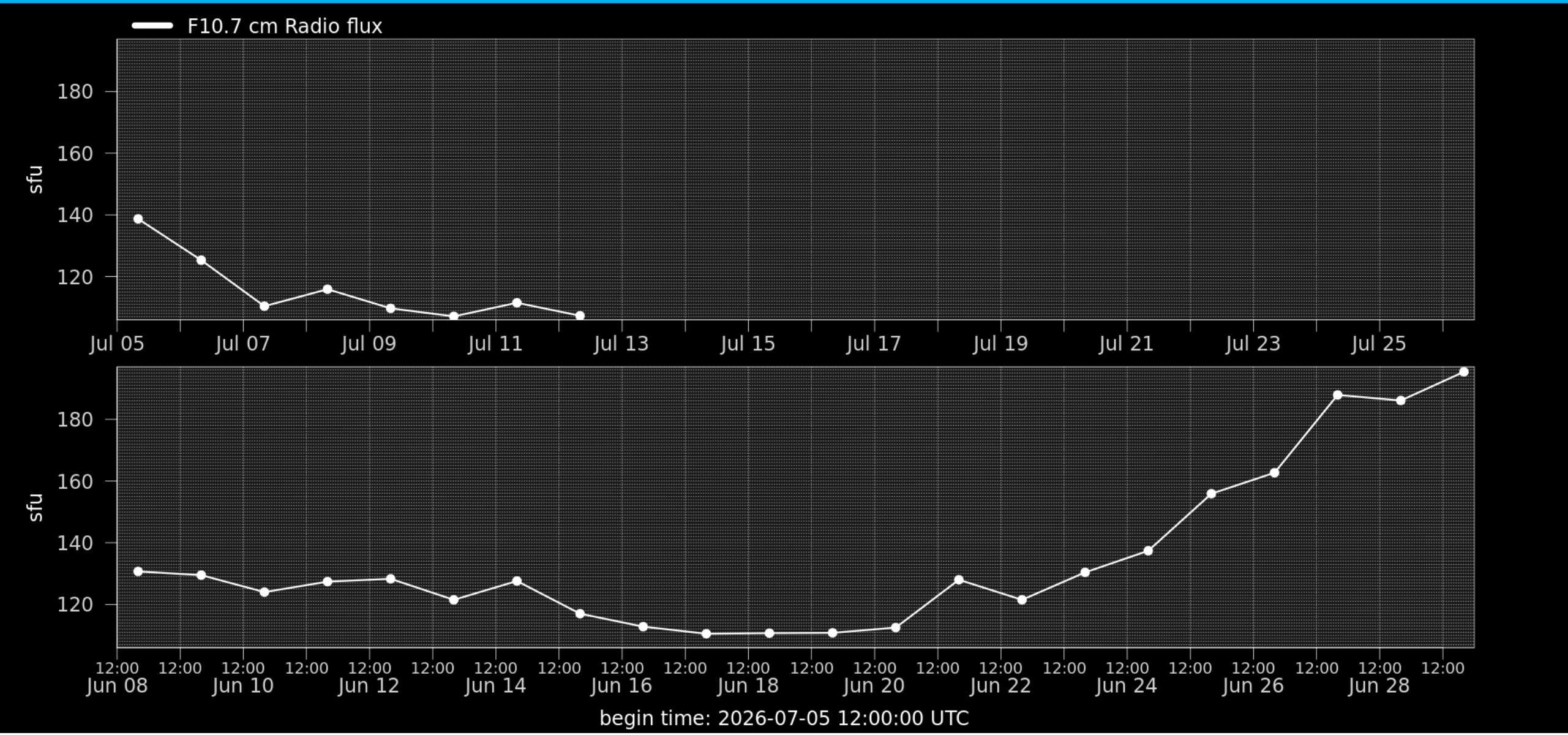
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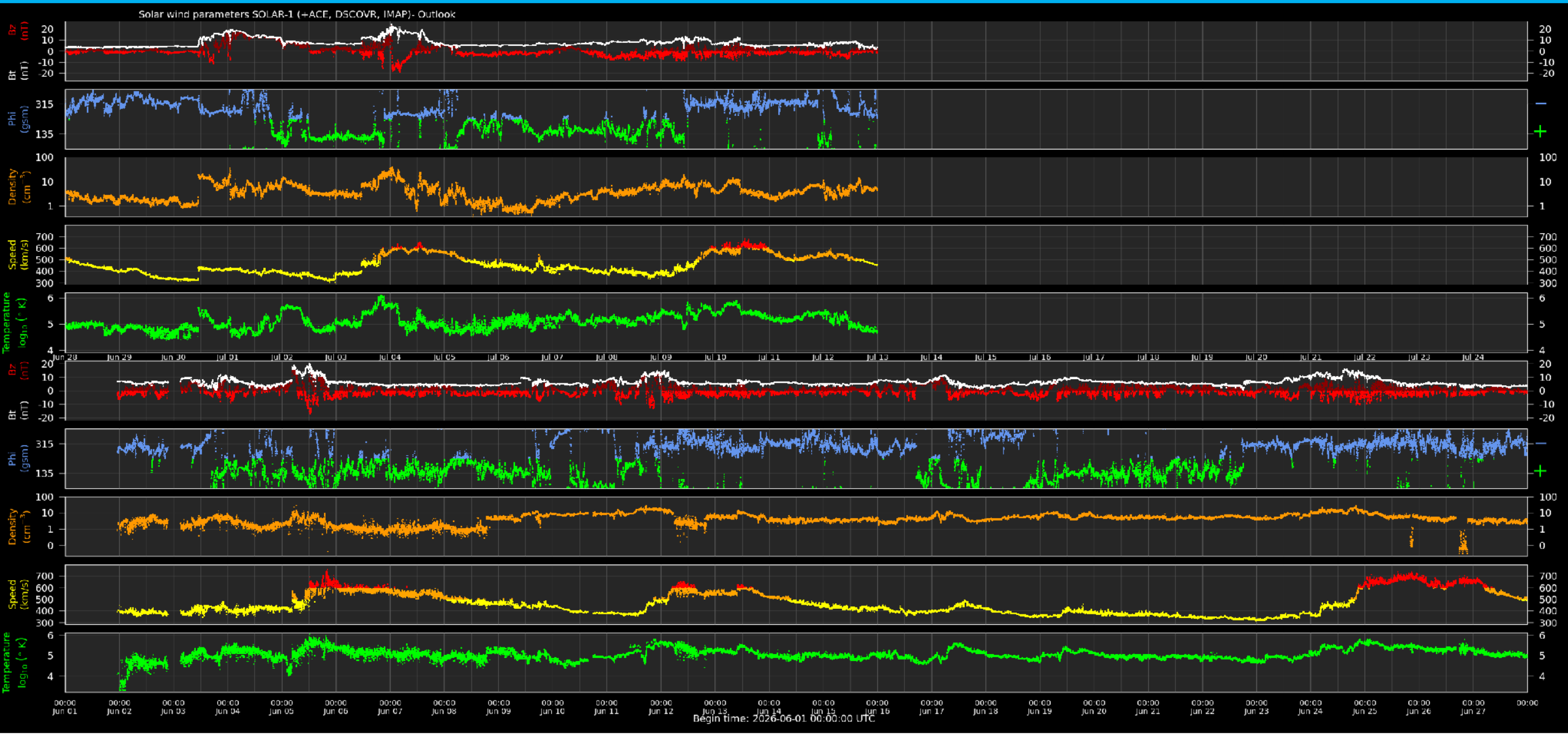
Outlook: Solar activity



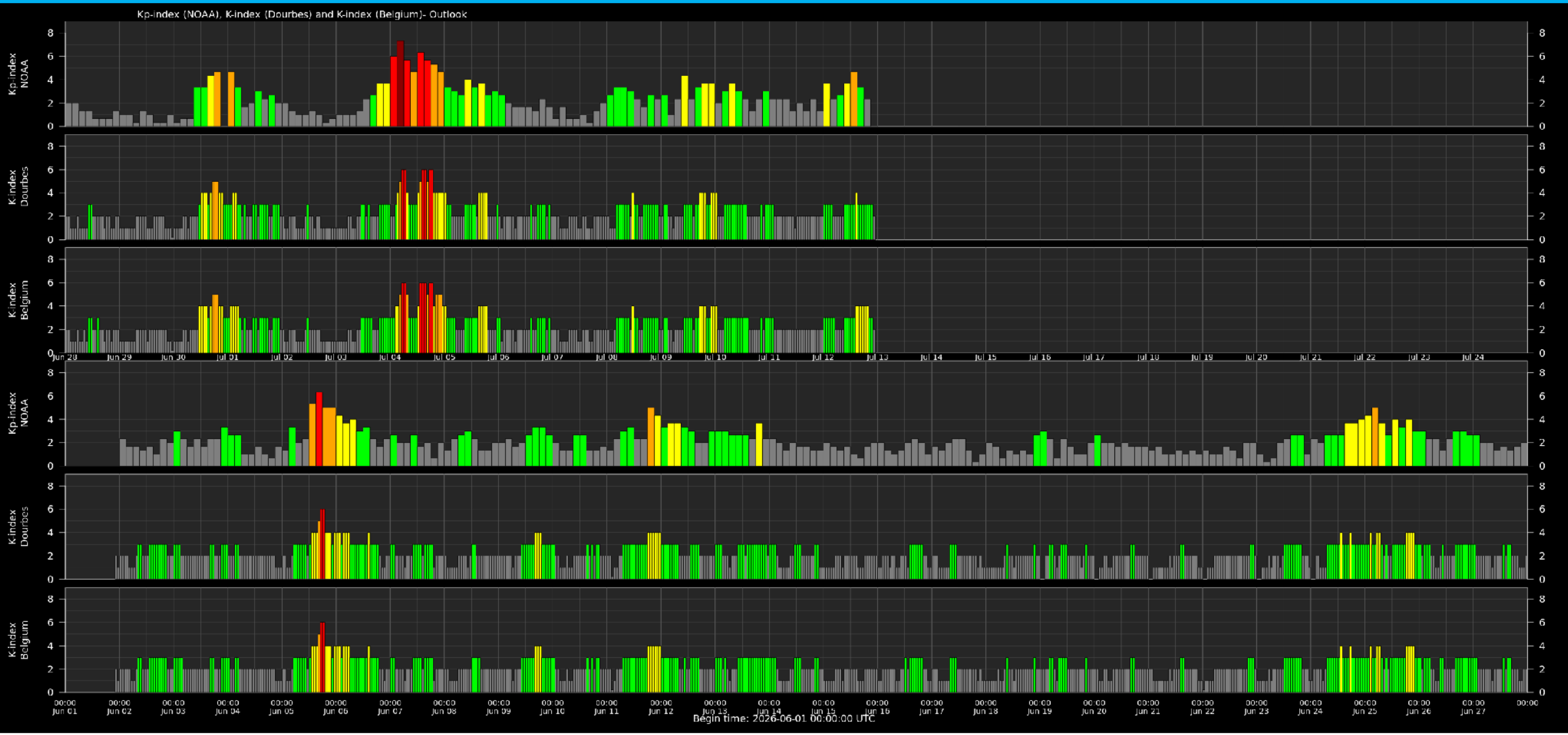
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pecasus related events

Several advisories for HF-COM/PSD

SIDC Space Weather Briefing

See you at our next briefing!

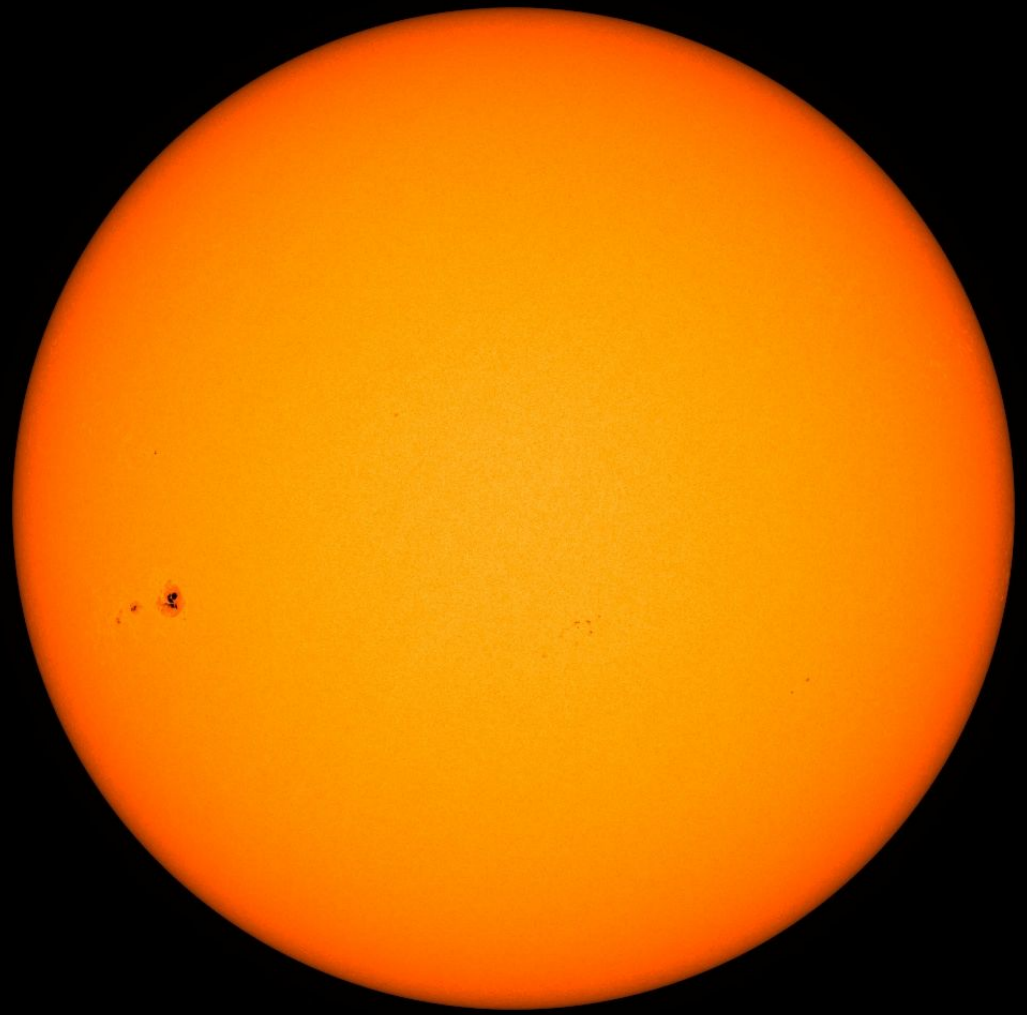
Or visit us at www.sidc.be

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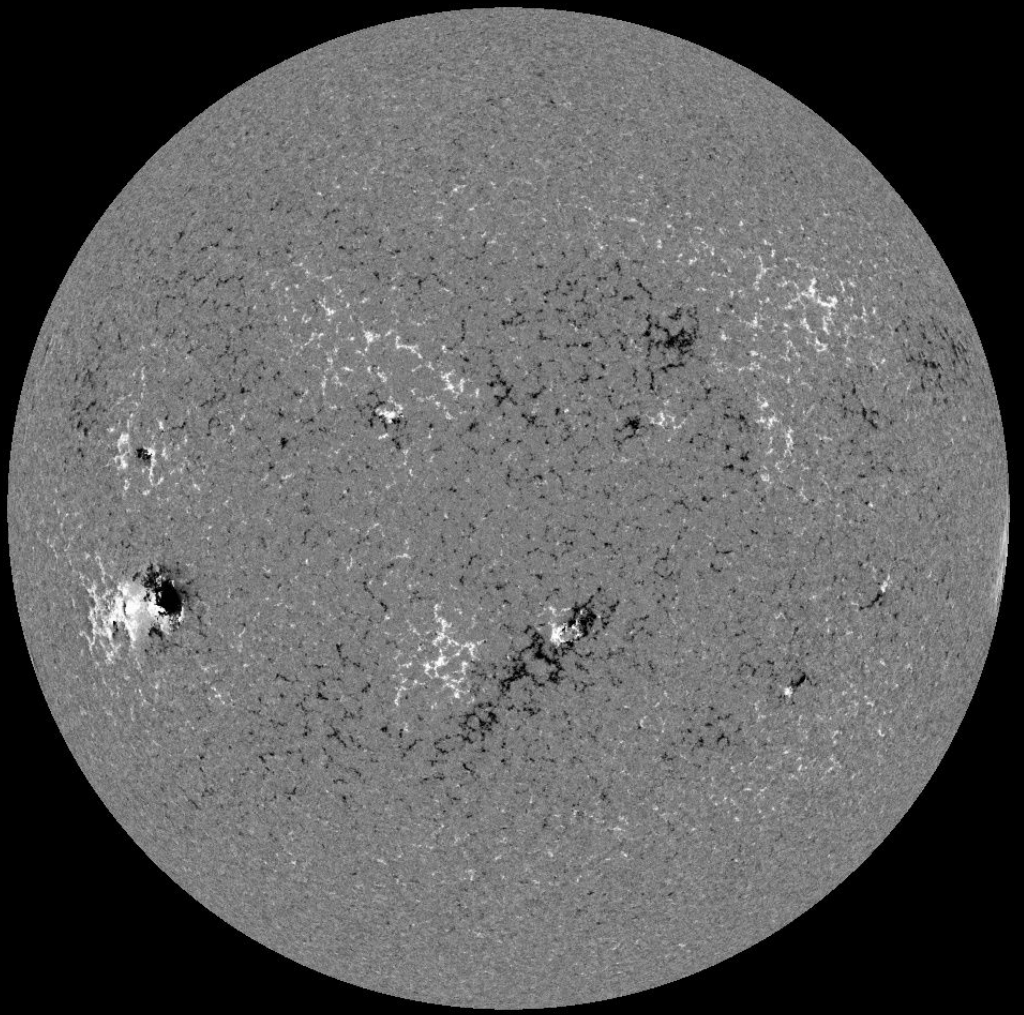
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Solar active regions

SDO/HMI White Light 2026-07-07

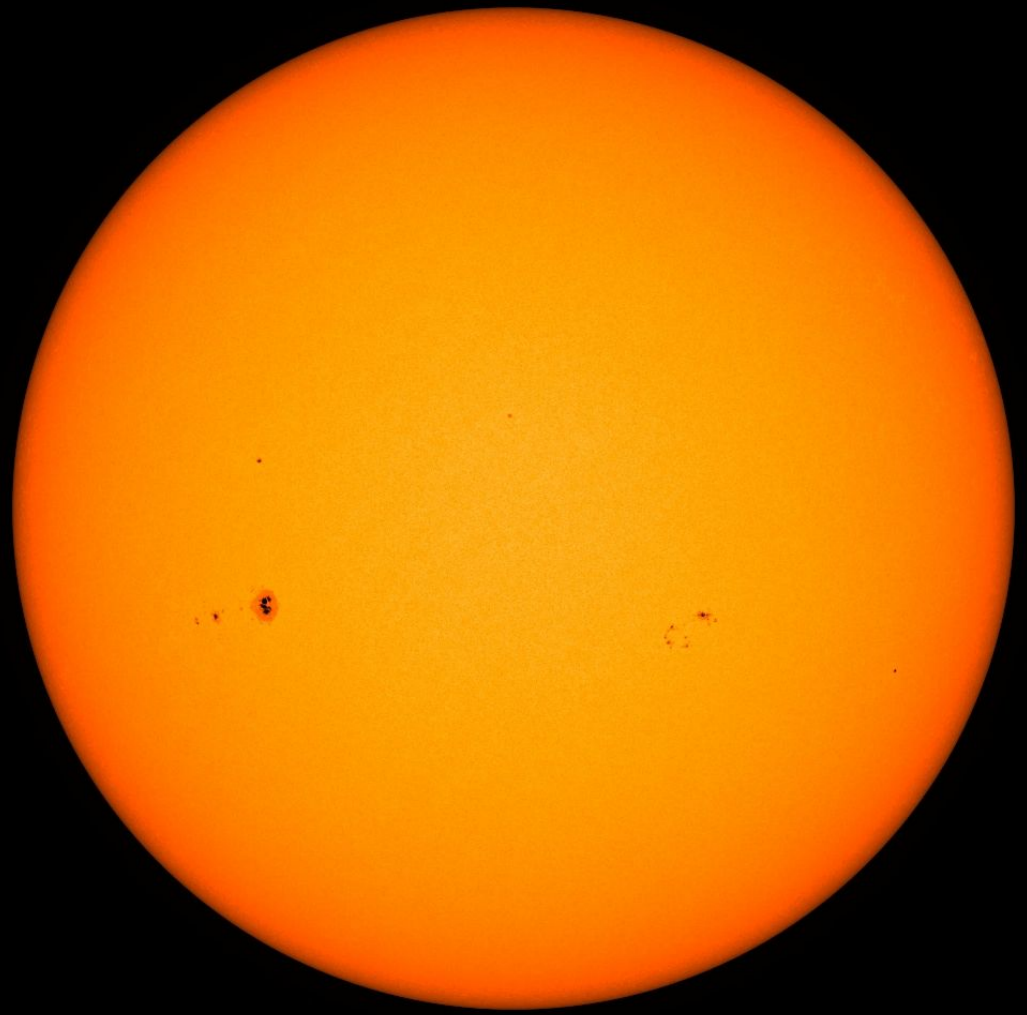


SDO/HMI Magnetogram 2026-07-07

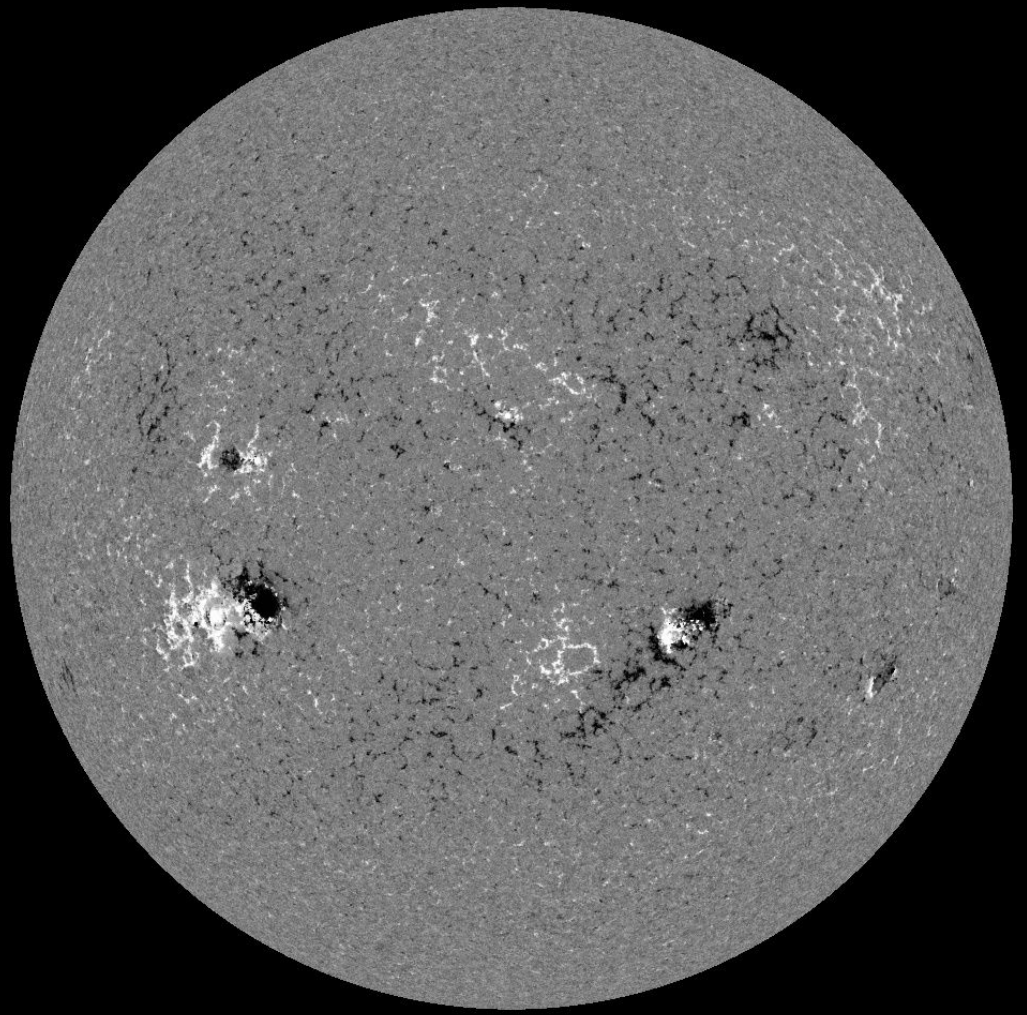


Solar active regions

SDO/HMI White Light 2026-07-08

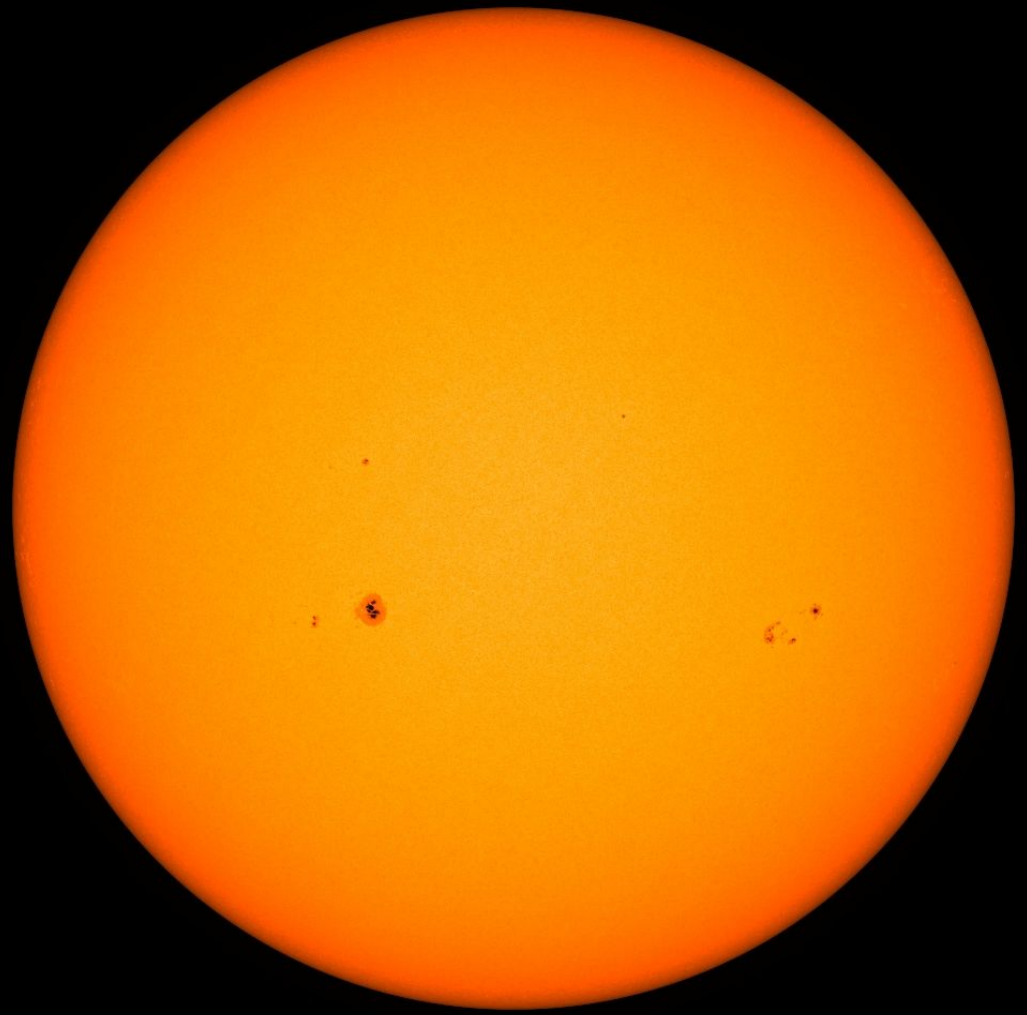


SDO/HMI Magnetogram 2026-07-08

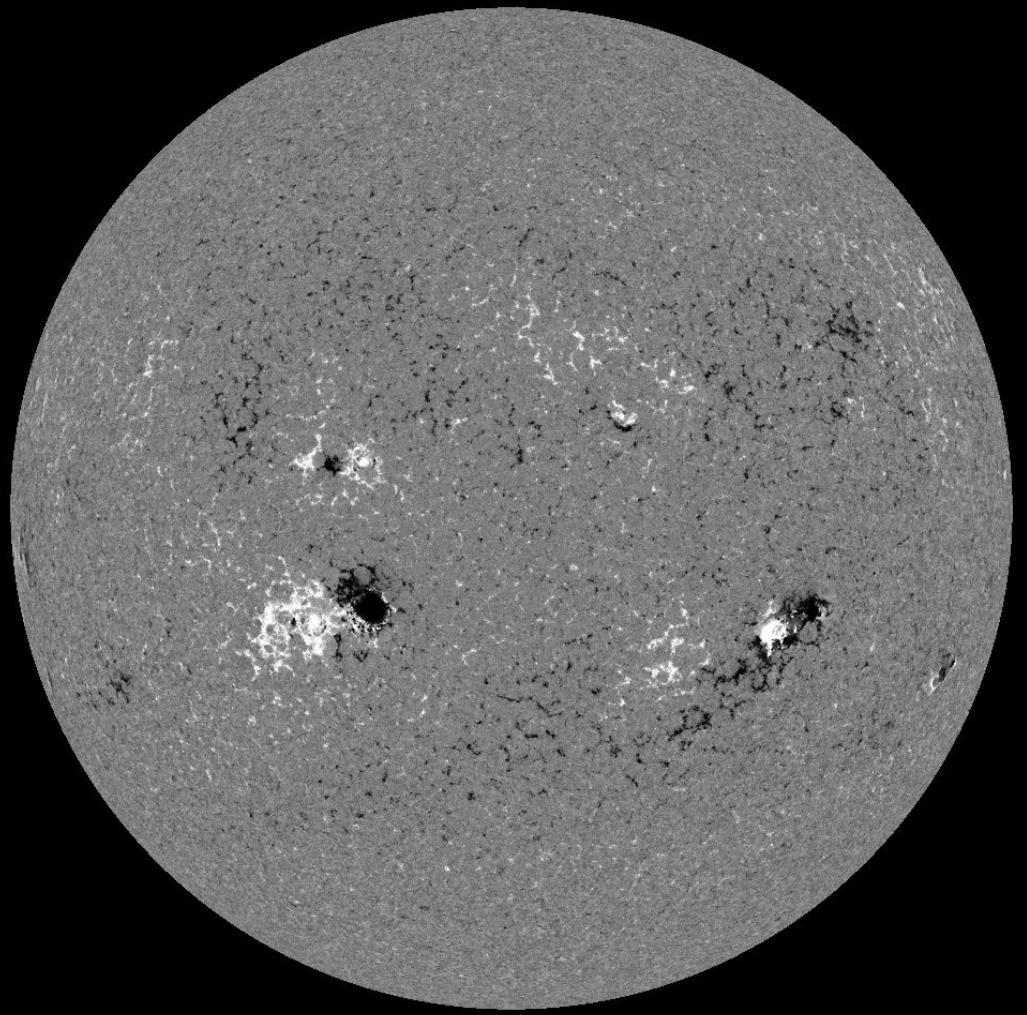


Solar active regions

SDO/HMI White Light 2026-07-09

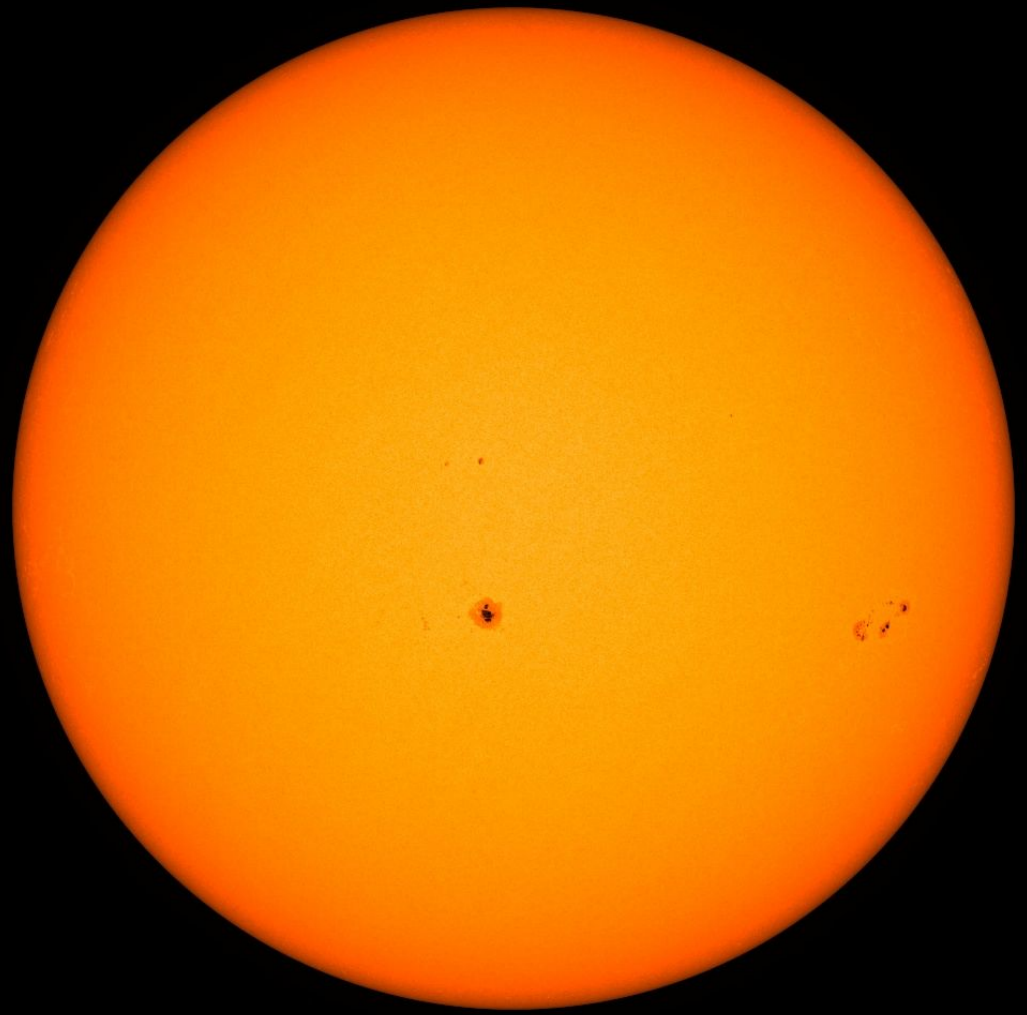


SDO/HMI Magnetogram 2026-07-09

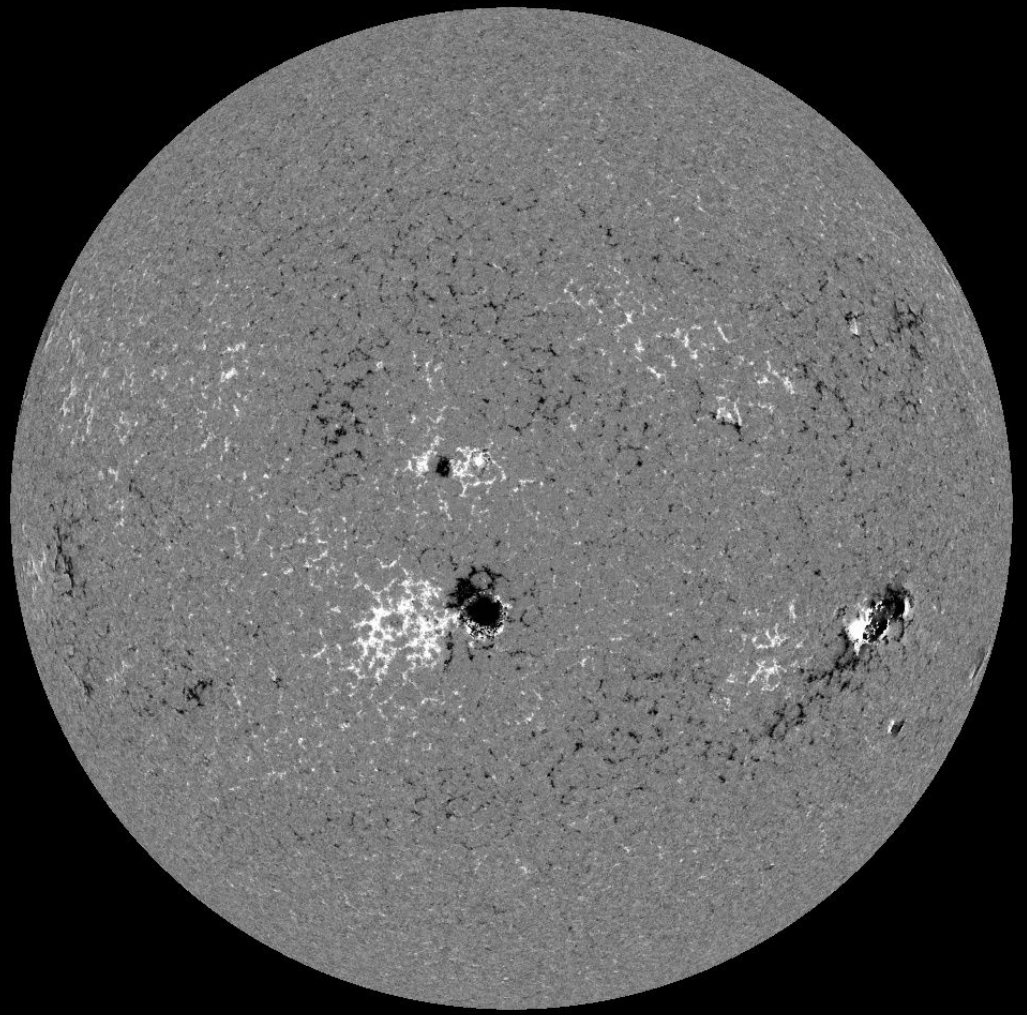


Solar active regions

SDO/HMI White Light 2026-07-10

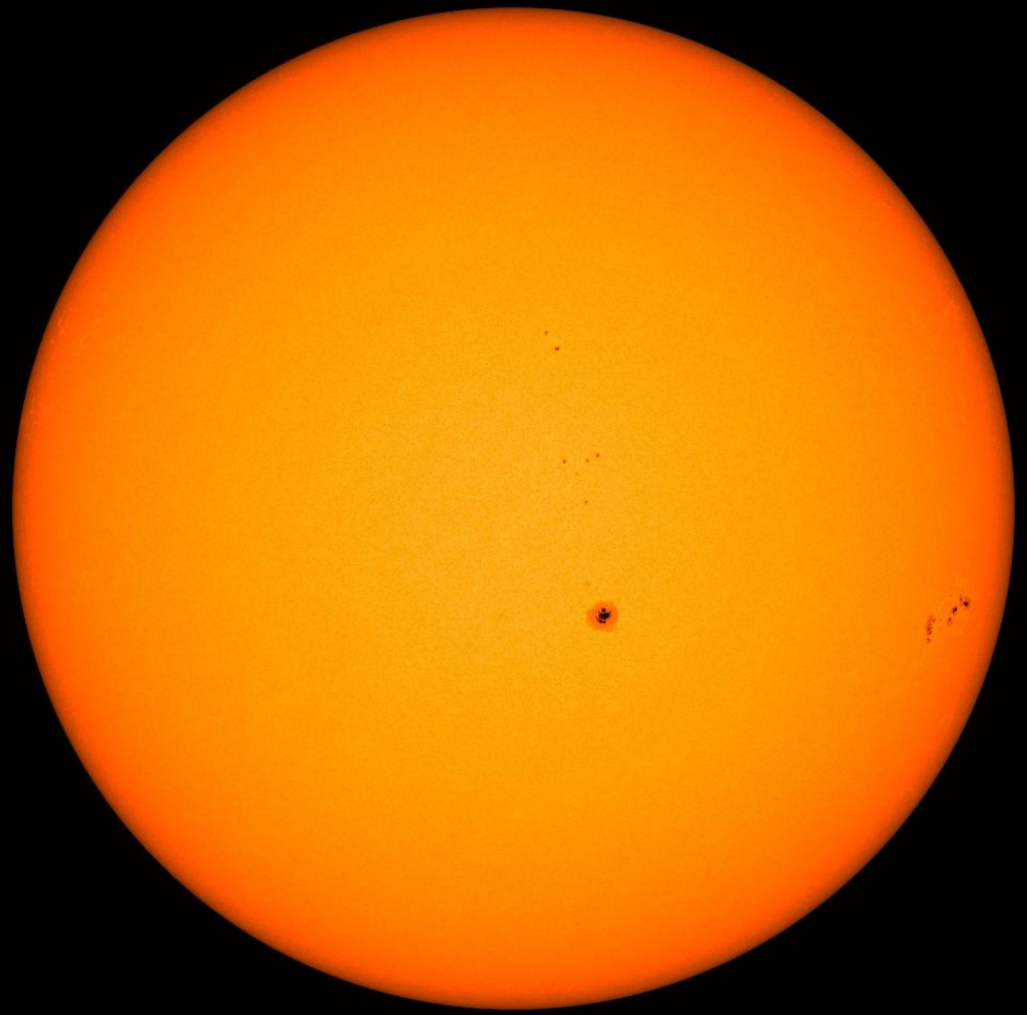


SDO/HMI Magnetogram 2026-07-10

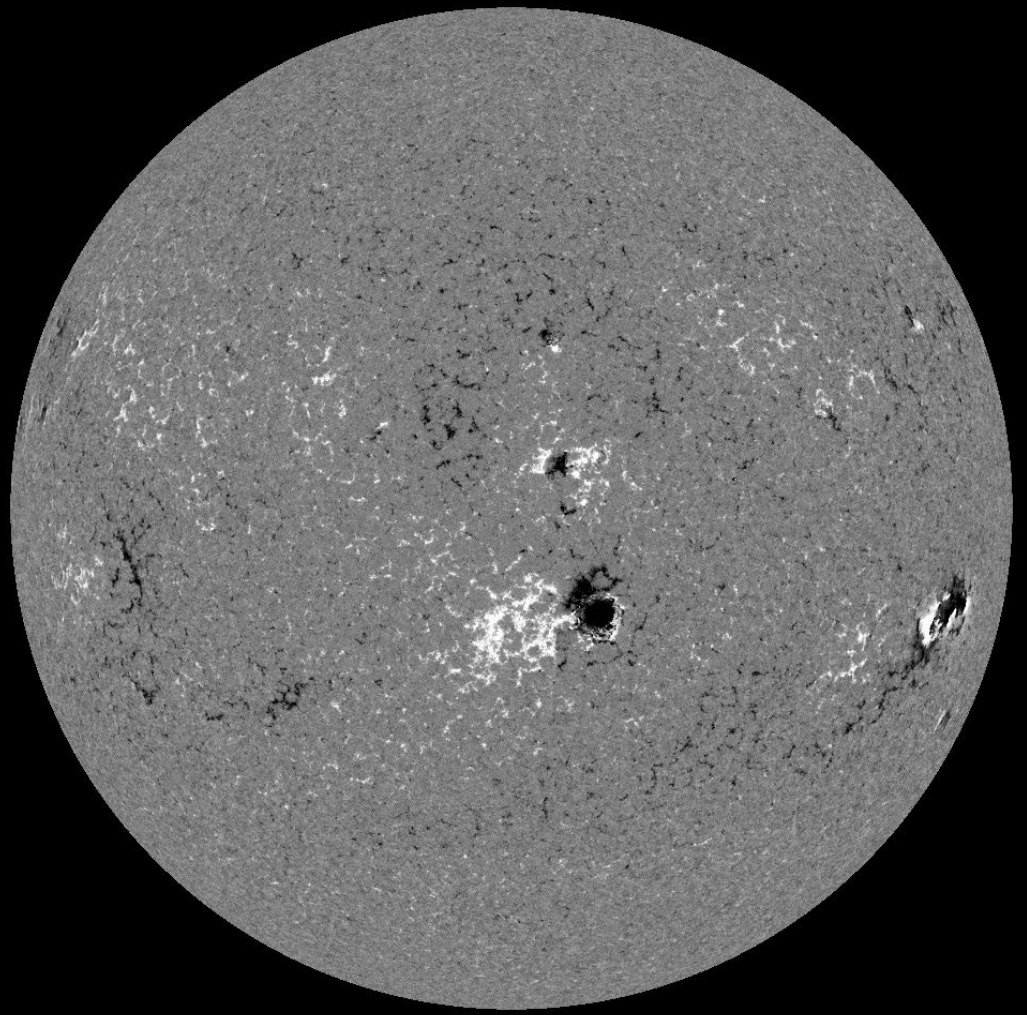


Solar active regions

SDO/HMI White Light 2026-07-11

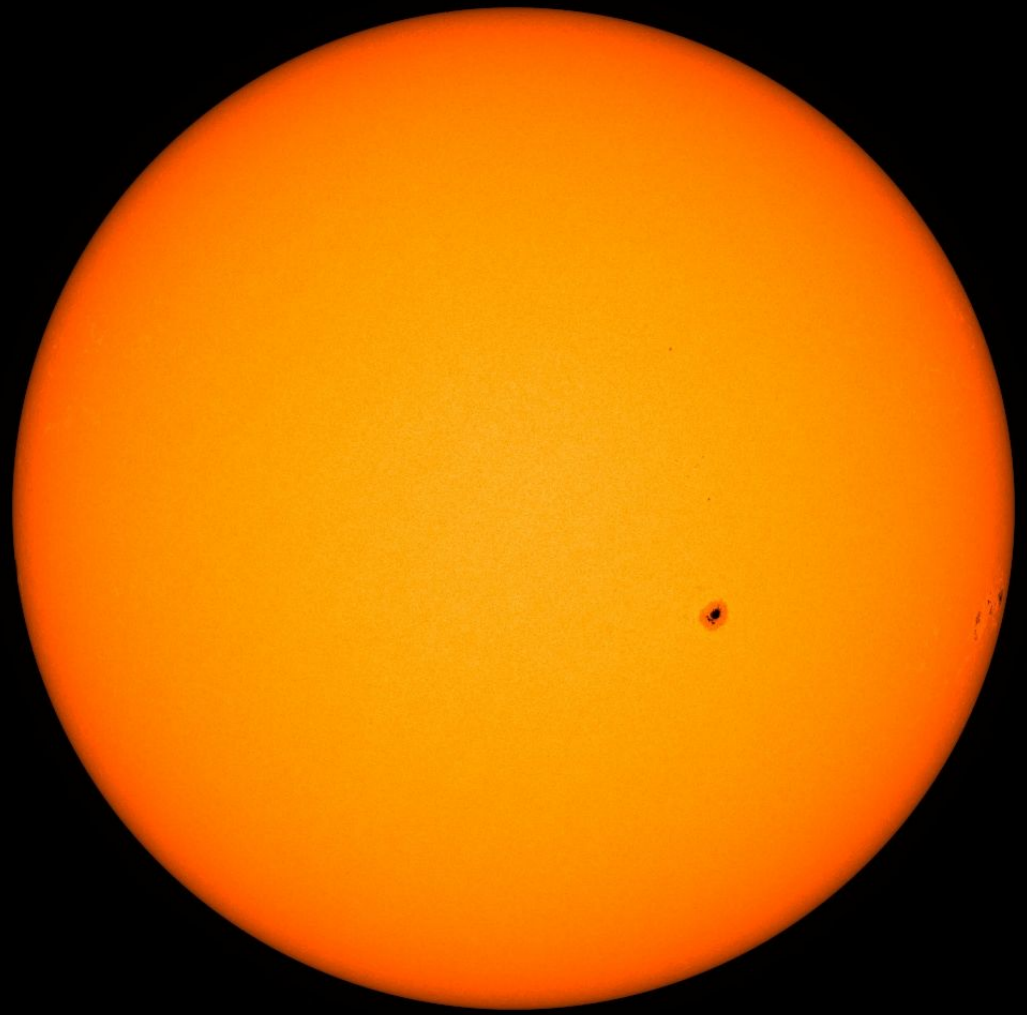


SDO/HMI Magnetogram 2026-07-11

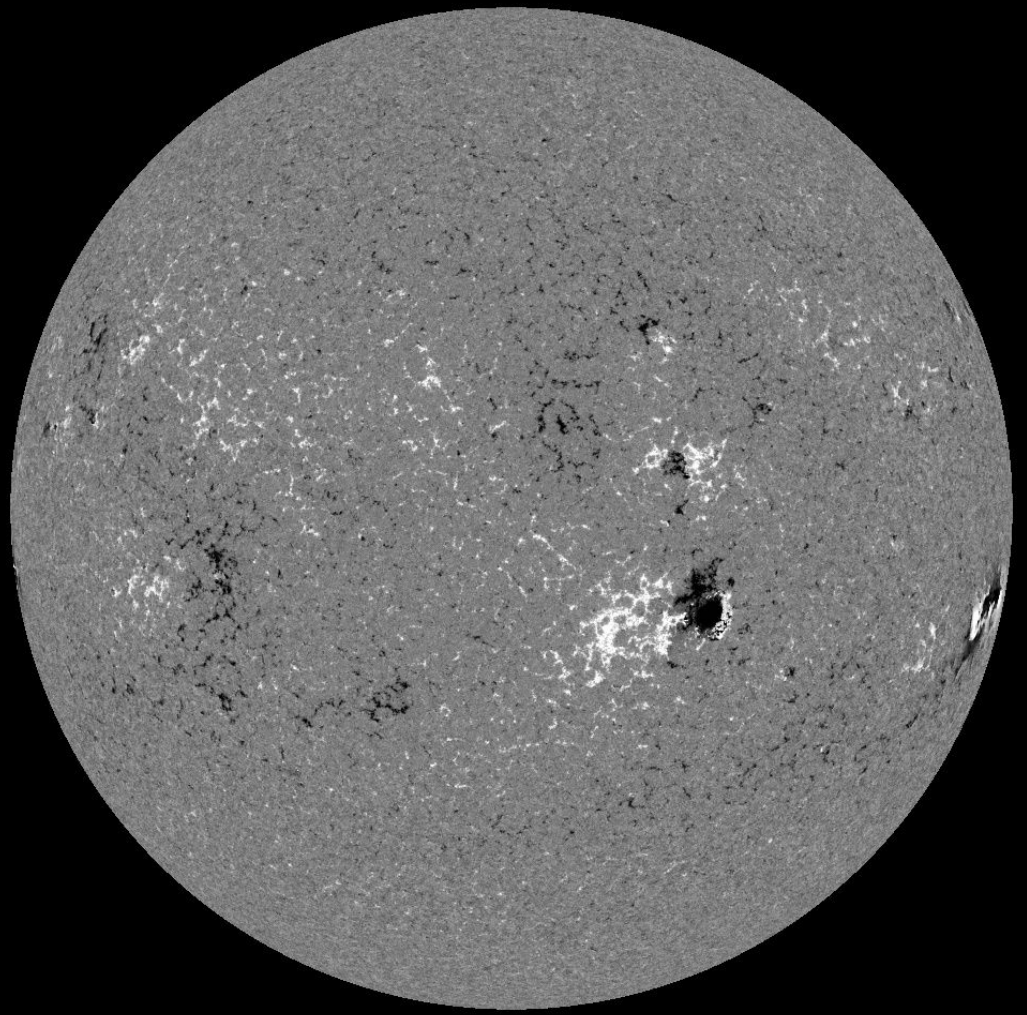


Solar active regions

SDO/HMI White Light 2026-07-12

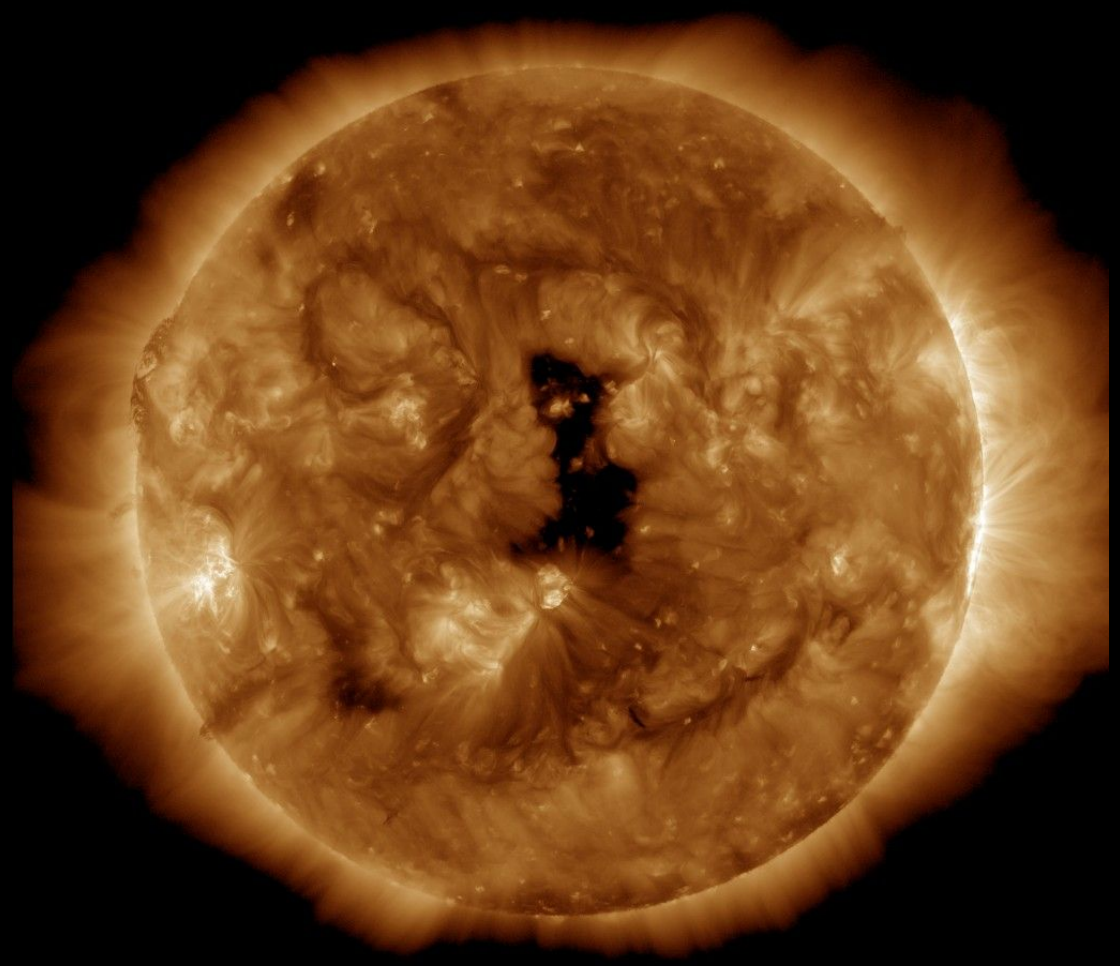


SDO/HMI Magnetogram 2026-07-12

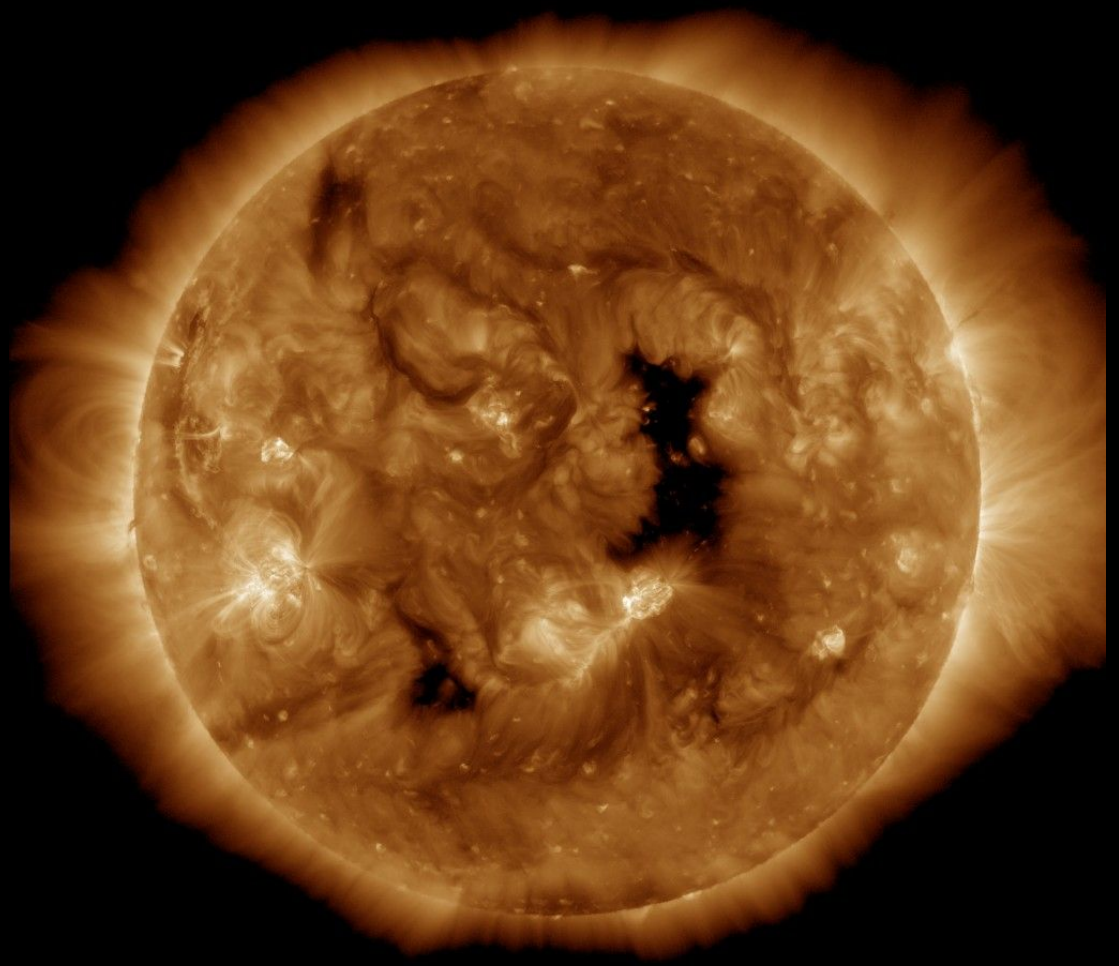


Coronal holes

SDO/AIA 19.3 nm 2026-07-06

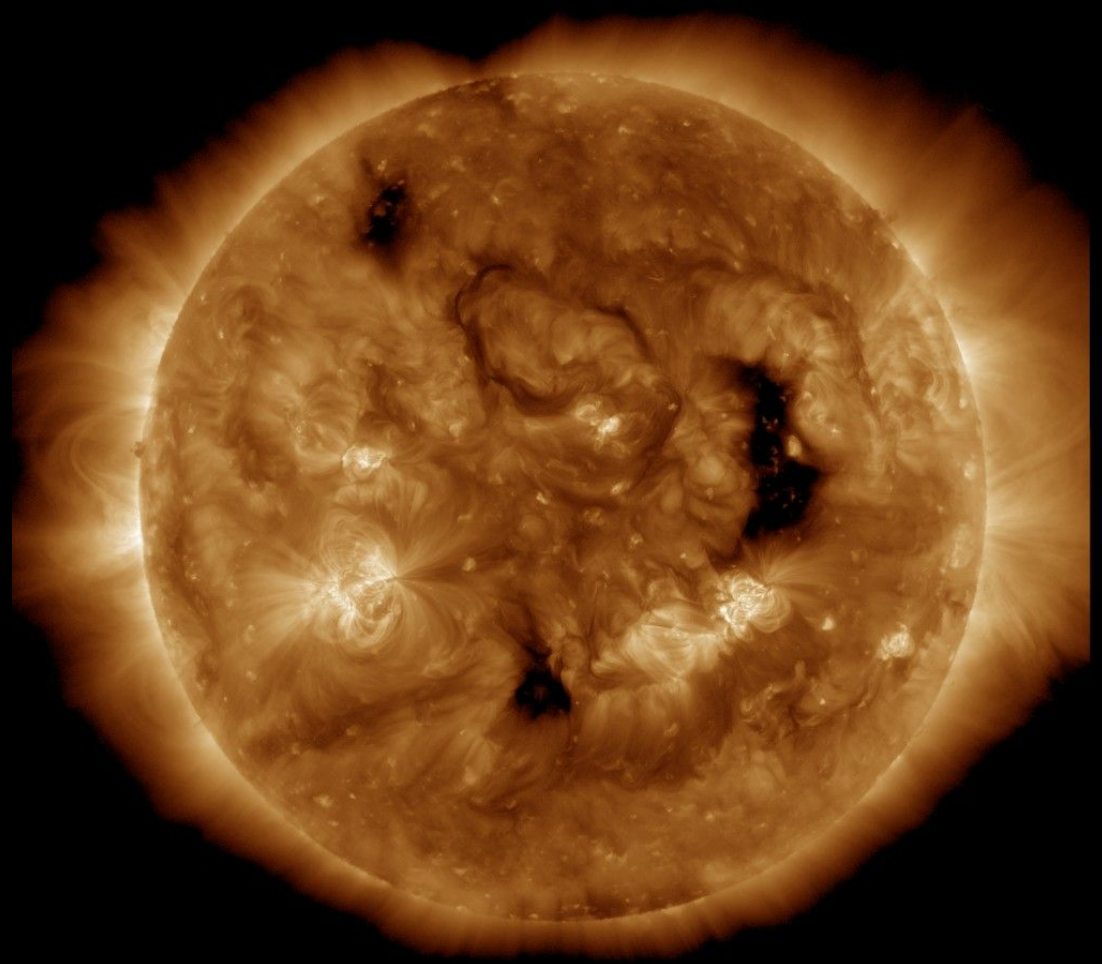


SDO/AIA 19.3 nm 2026-07-07

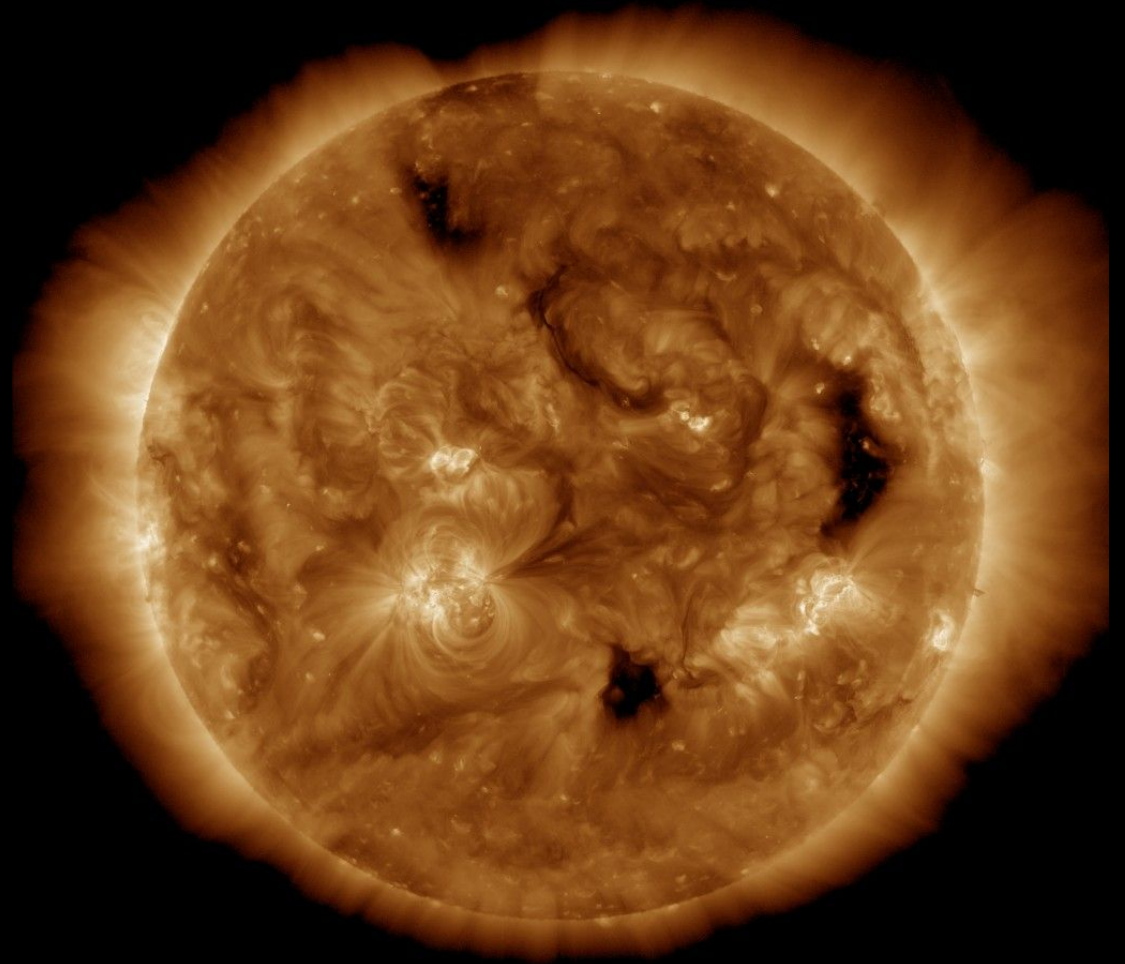


Coronal holes

SDO/AIA 19.3 nm 2026-07-08

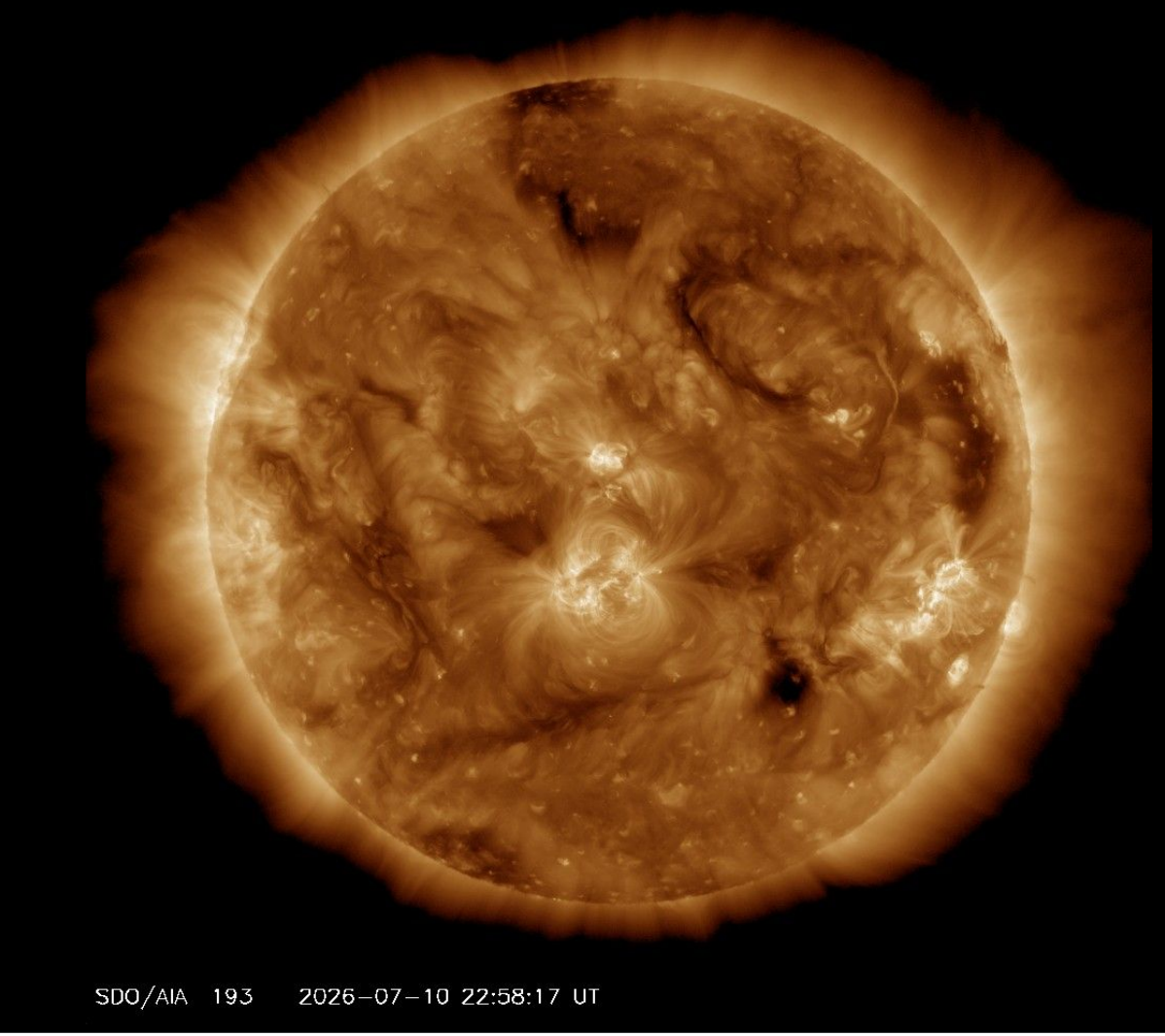


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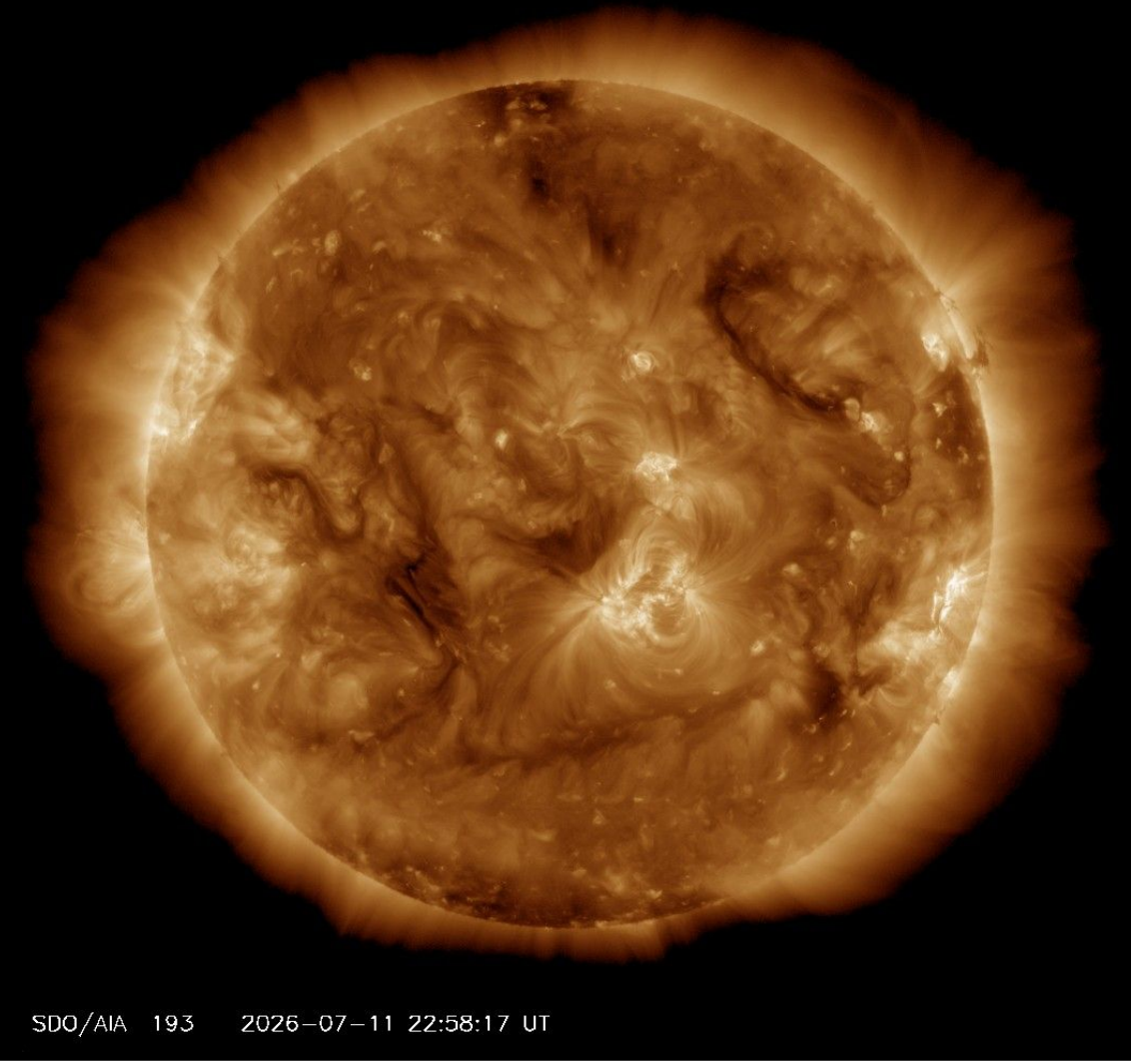


Coronal holes

SDO/AIA 19.3 nm 2026-07-10

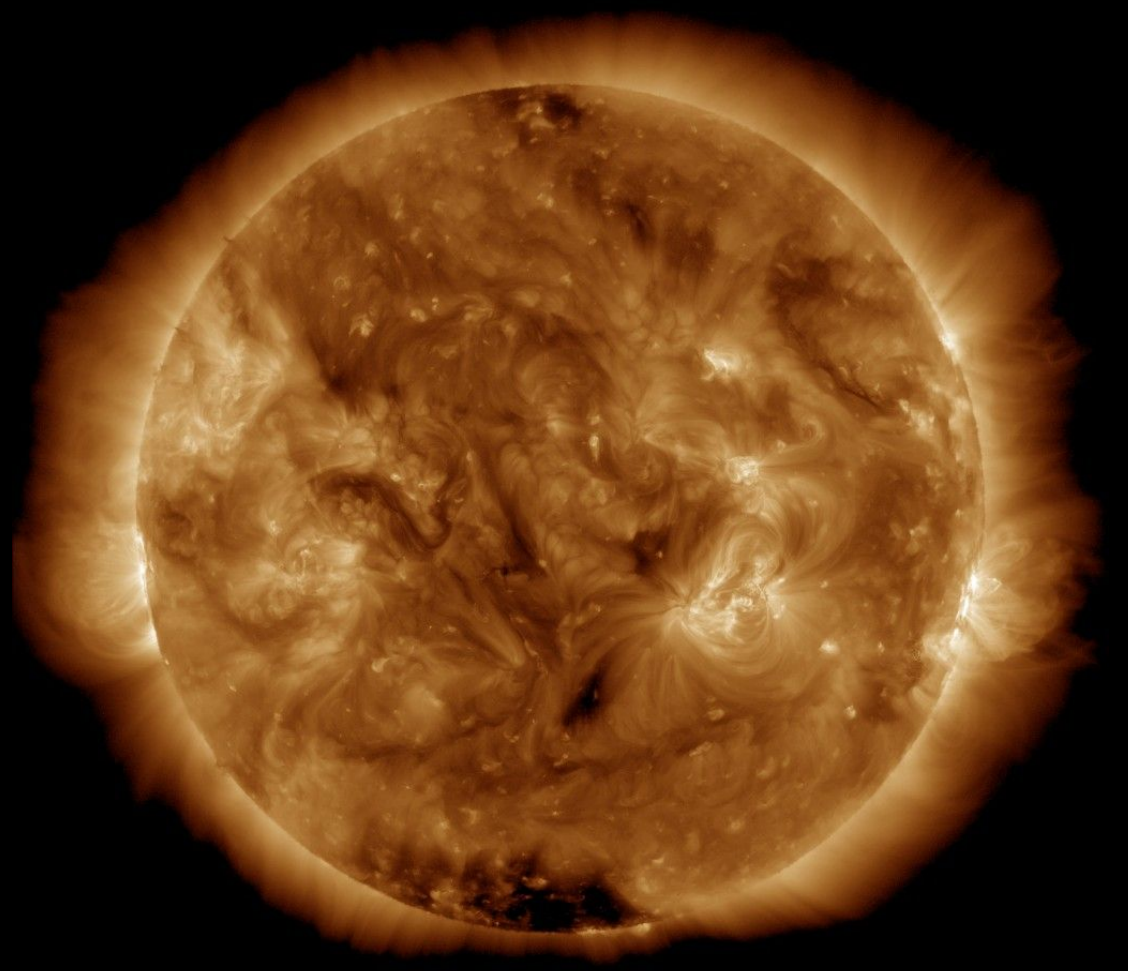


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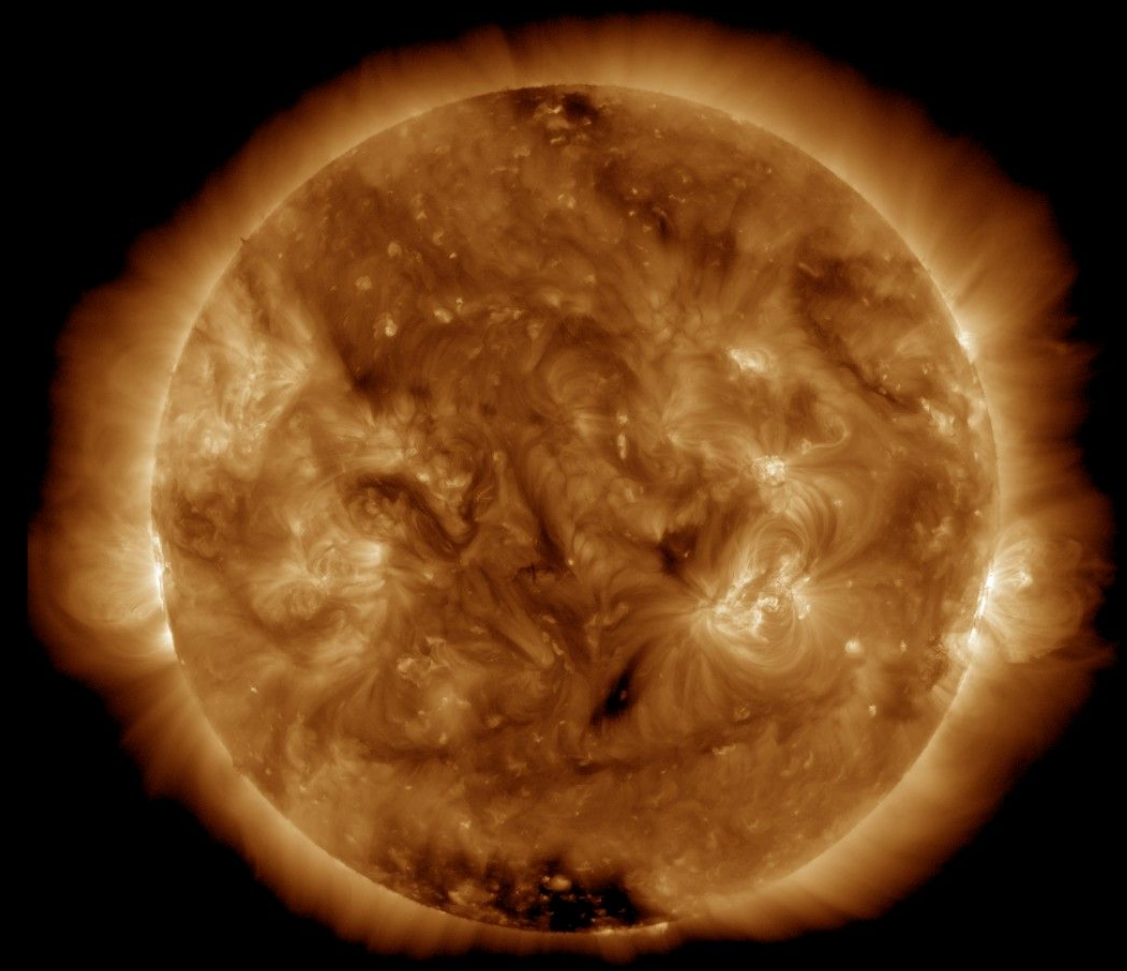


Coronal holes

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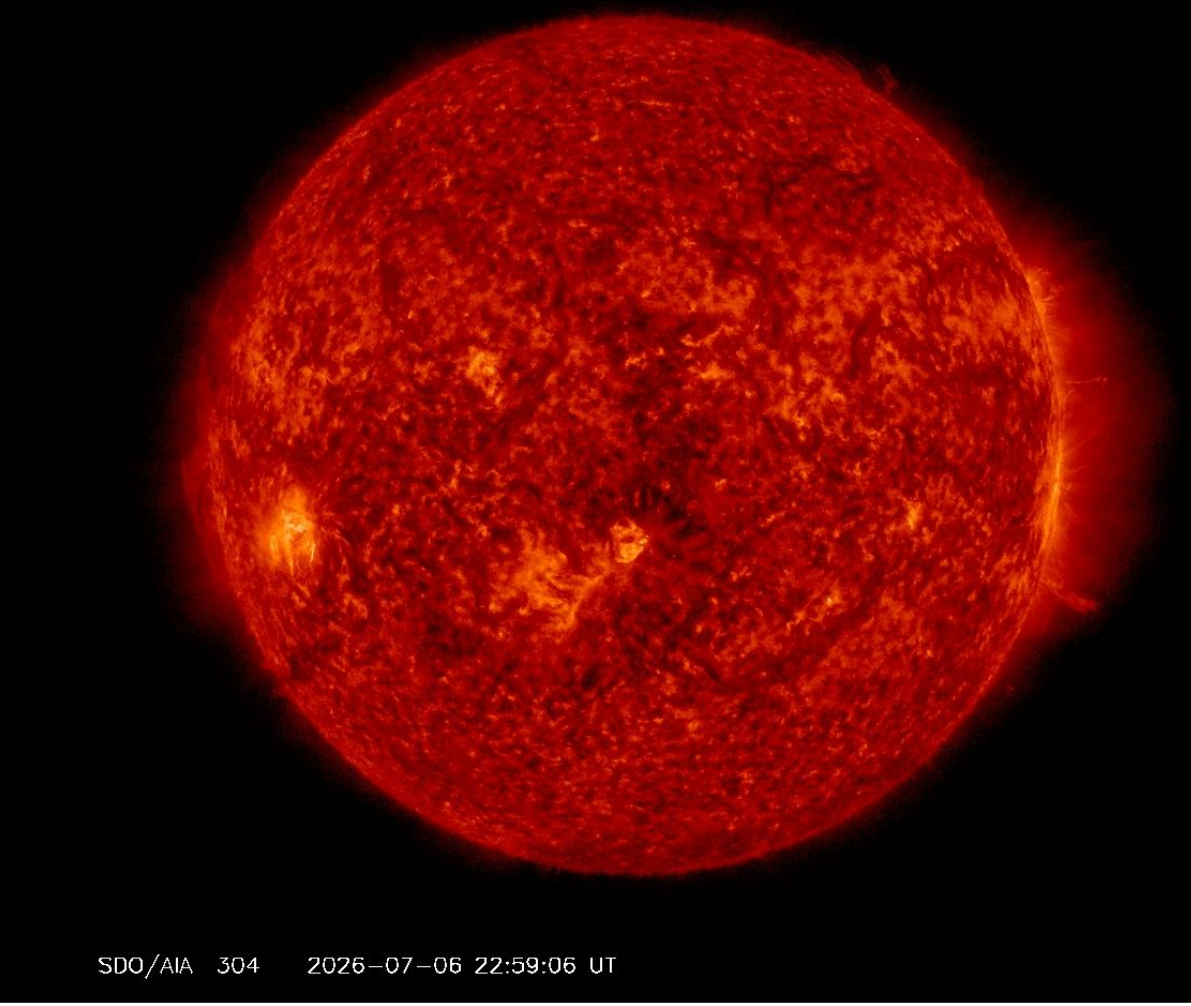


SDO/AIA 19.3 nm 2026-07-13

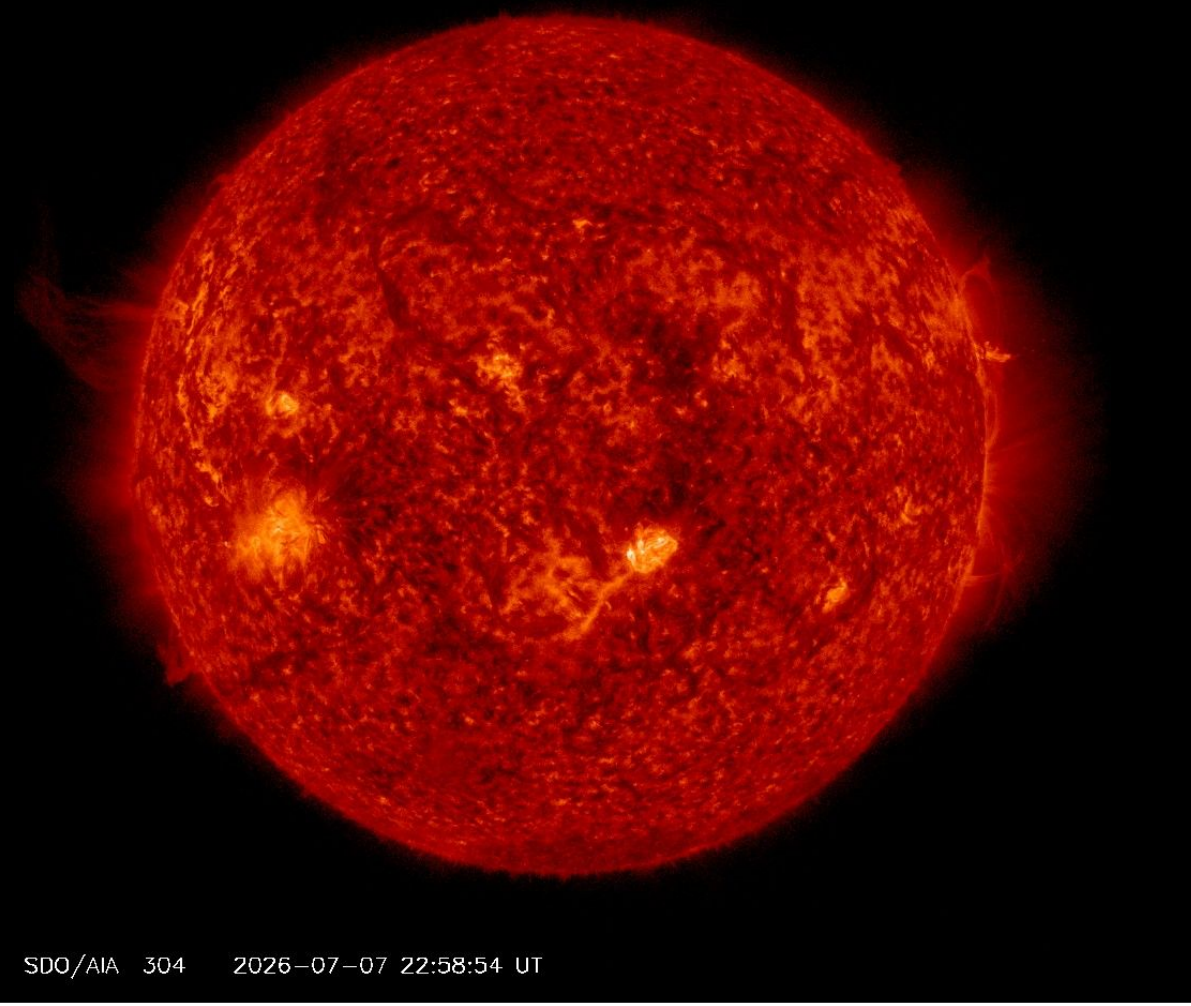


Filaments

SDO/AIA 30.4 nm 2026-07-06

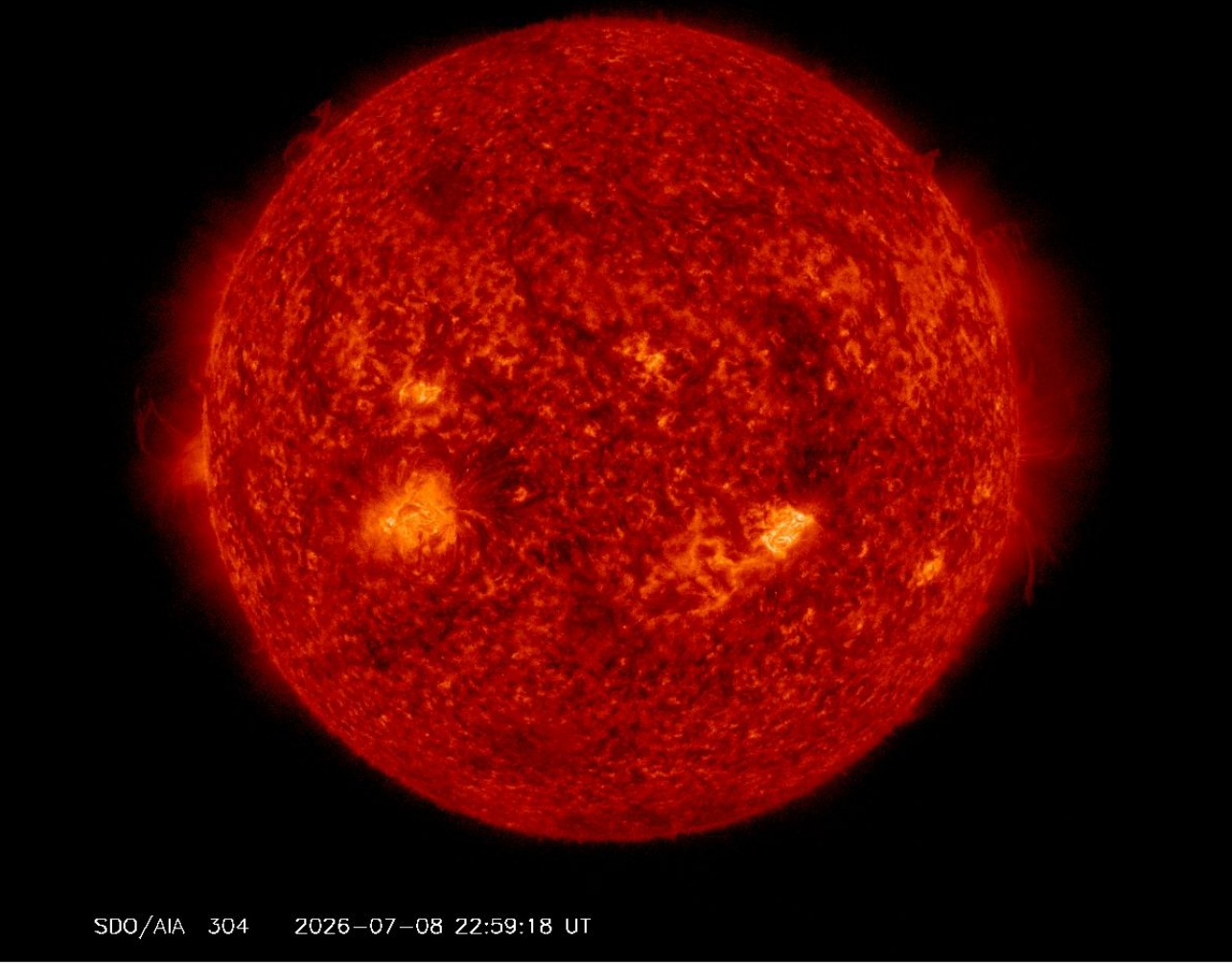


SDO/AIA 30.4 nm 2026-07-07

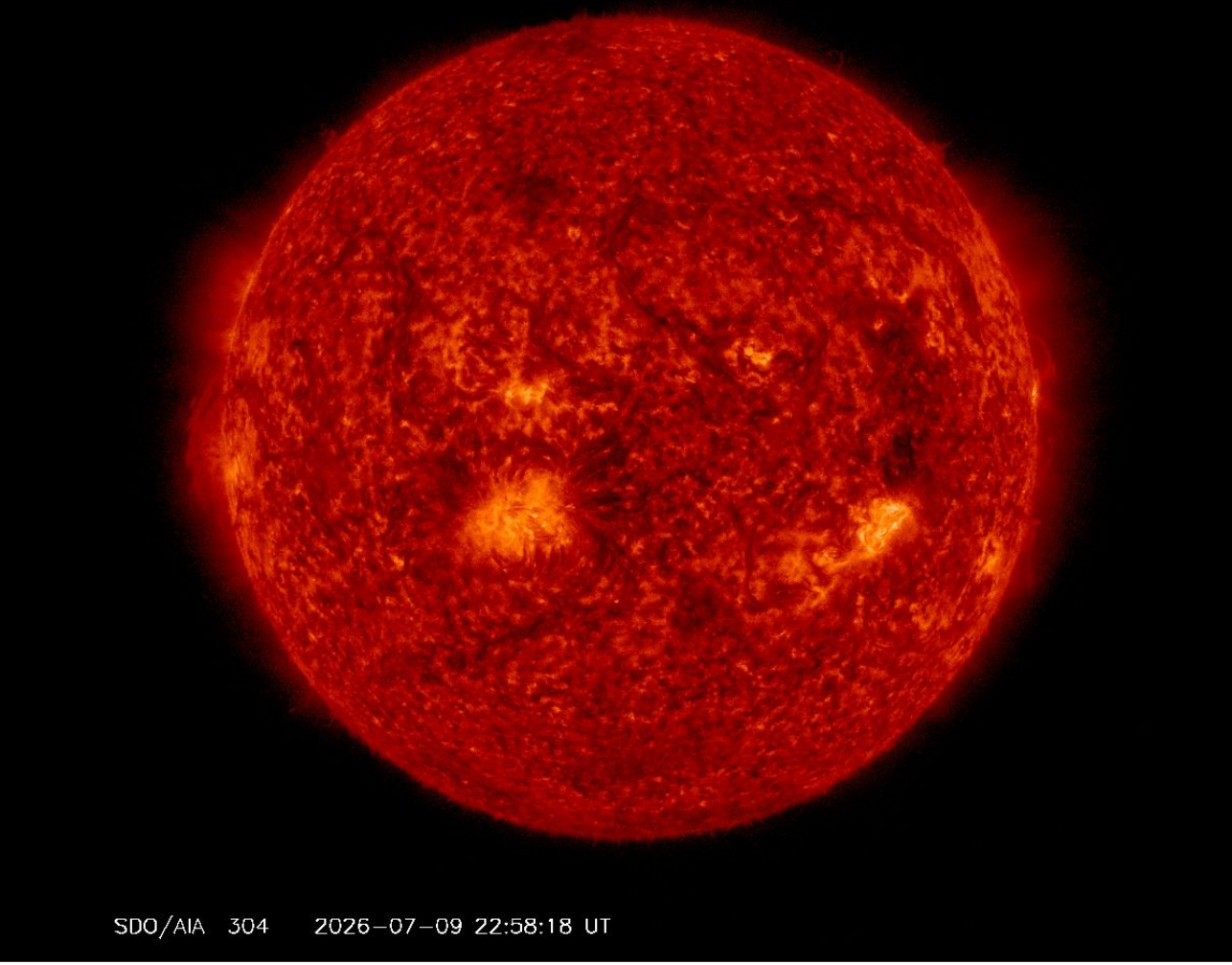


Filaments

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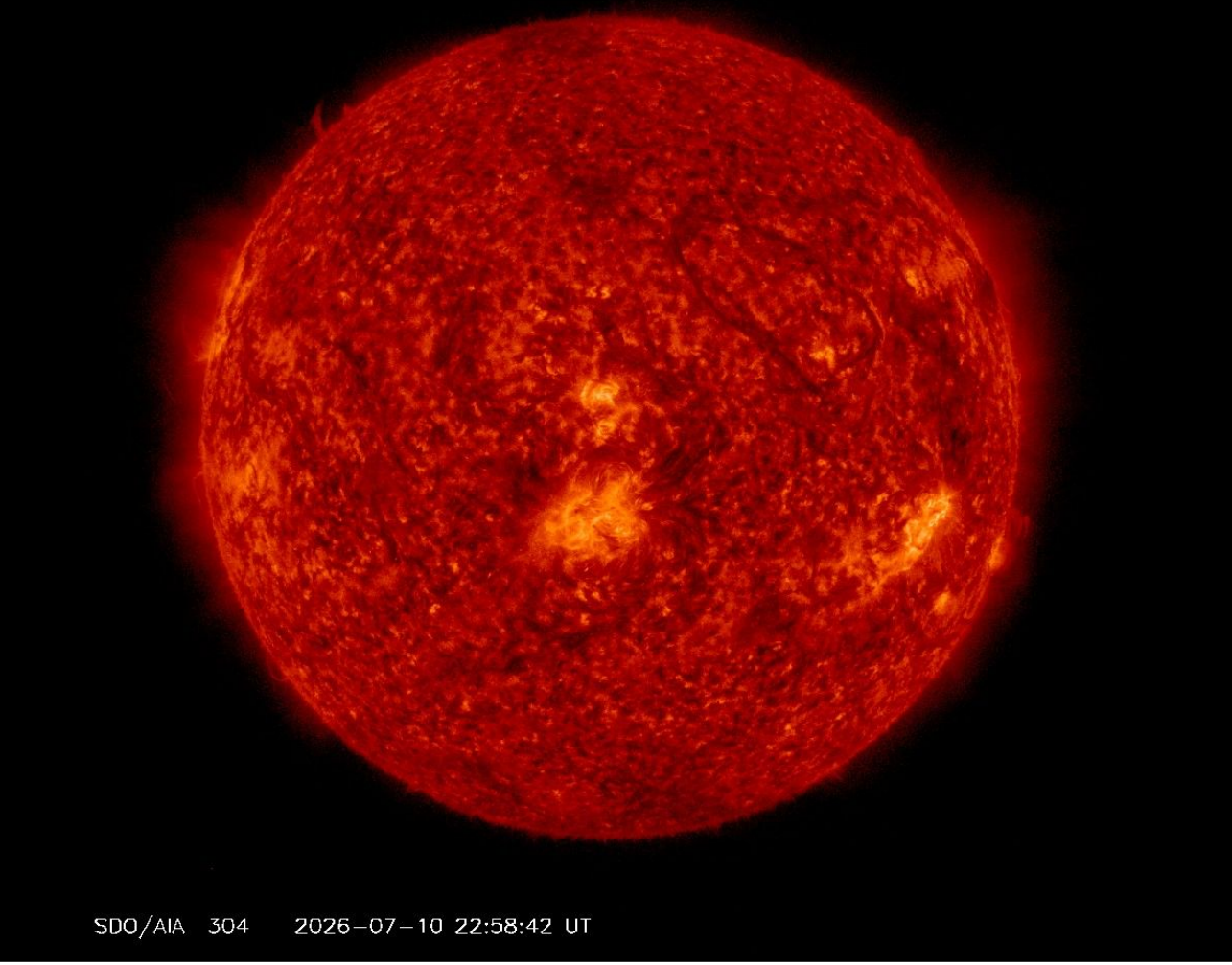


SDO/AIA 30.4 nm 2026-07-09

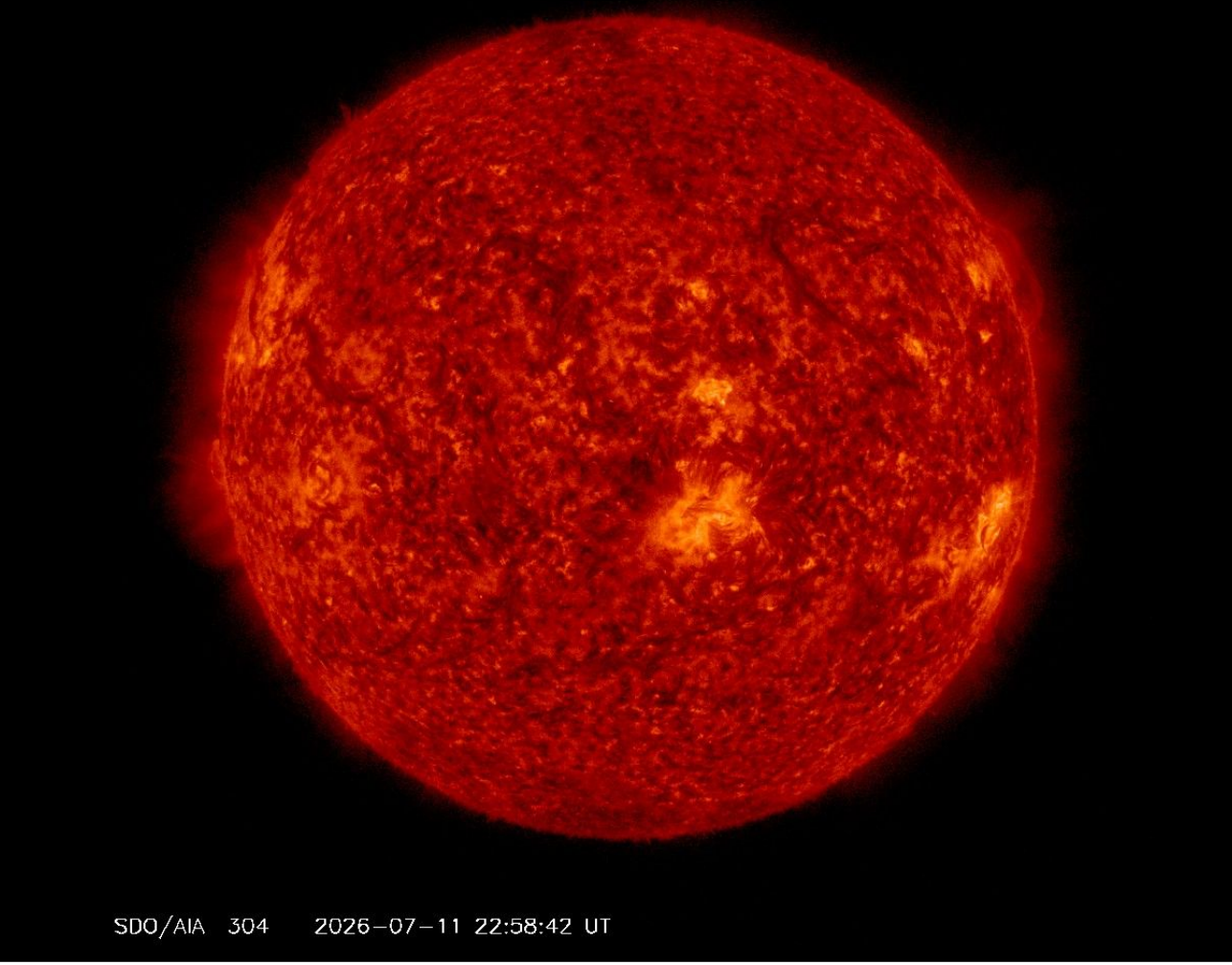


Filaments

SDO/AIA 30.4 nm 2026-07-10

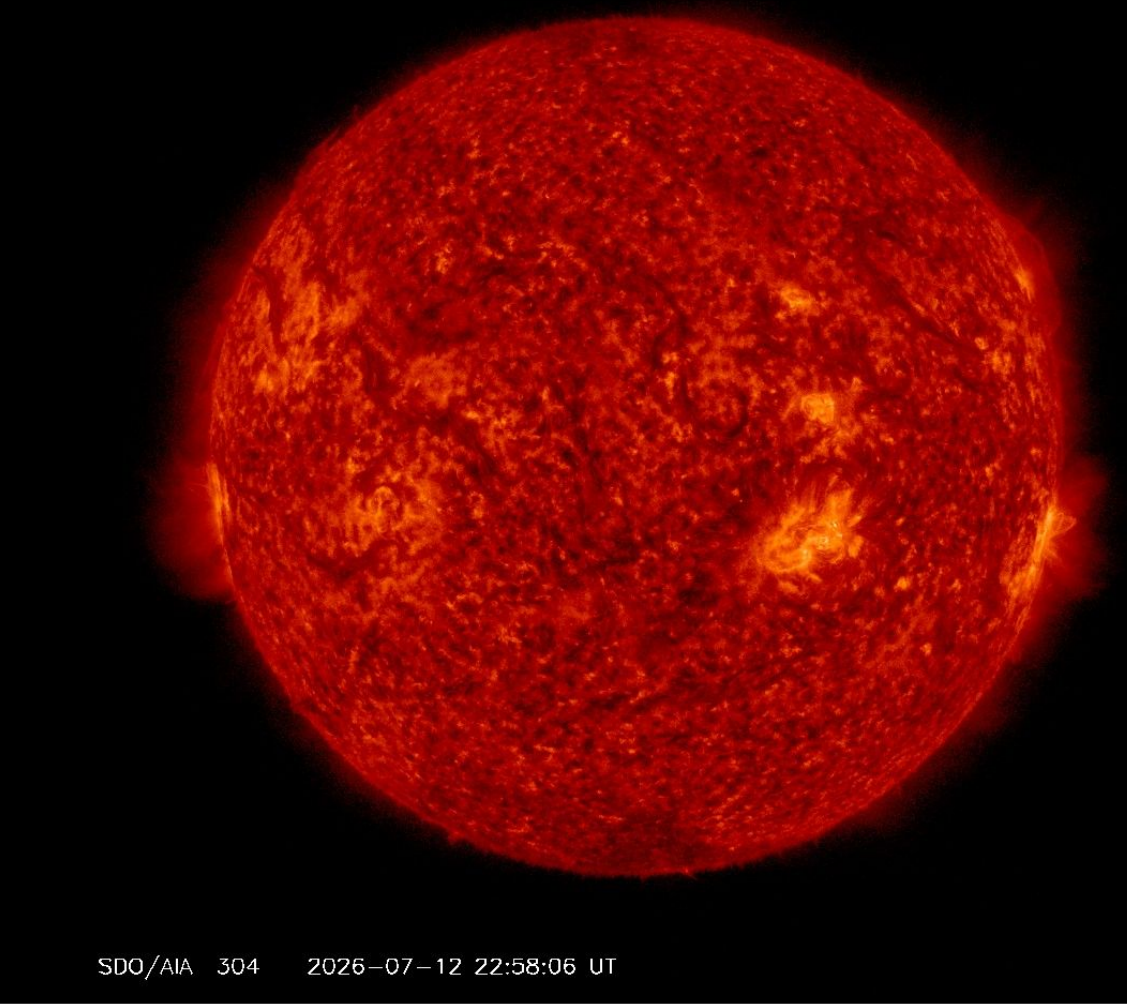


SDO/AIA 30.4 nm 2026-07-11



Filaments

SDO/AIA 30.4 nm 2026-07-12



SDO/AIA 30.4 nm 2026-07-13

