SIDC Space Weather Briefing

08 September 2025-14 September 2025

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& the SIDC forecaster team

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2025-09-08 00:00 to 2025-09-14 23:59

Active regions	11 NOAA Active Regions: NOAA AR 4205 – 4207, 4210 – 4217
Flares	# C-class flare: >50 # M-class flare: 0 # X-class flare: 0
Coronal Holes	1 CH+, 1 CH-
CMEs	1 wide CME on Sep 11

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

Solar wind and geomagnetic conditions

ICMEs	1 ICME arrival (Sep 11 CME)?
Solar wind conditions	|B|: 0.16 - 20.0 nT //Bz: -16.68 nT to 17.04 nT //Speed: 315 - 655 km/s
Geomagnetic conditions	max KBel: 4.0, max Kp(NOAA): 5.67, Moderate Storm conditions

All Quiet Alert: All quiet off

Solar Activity

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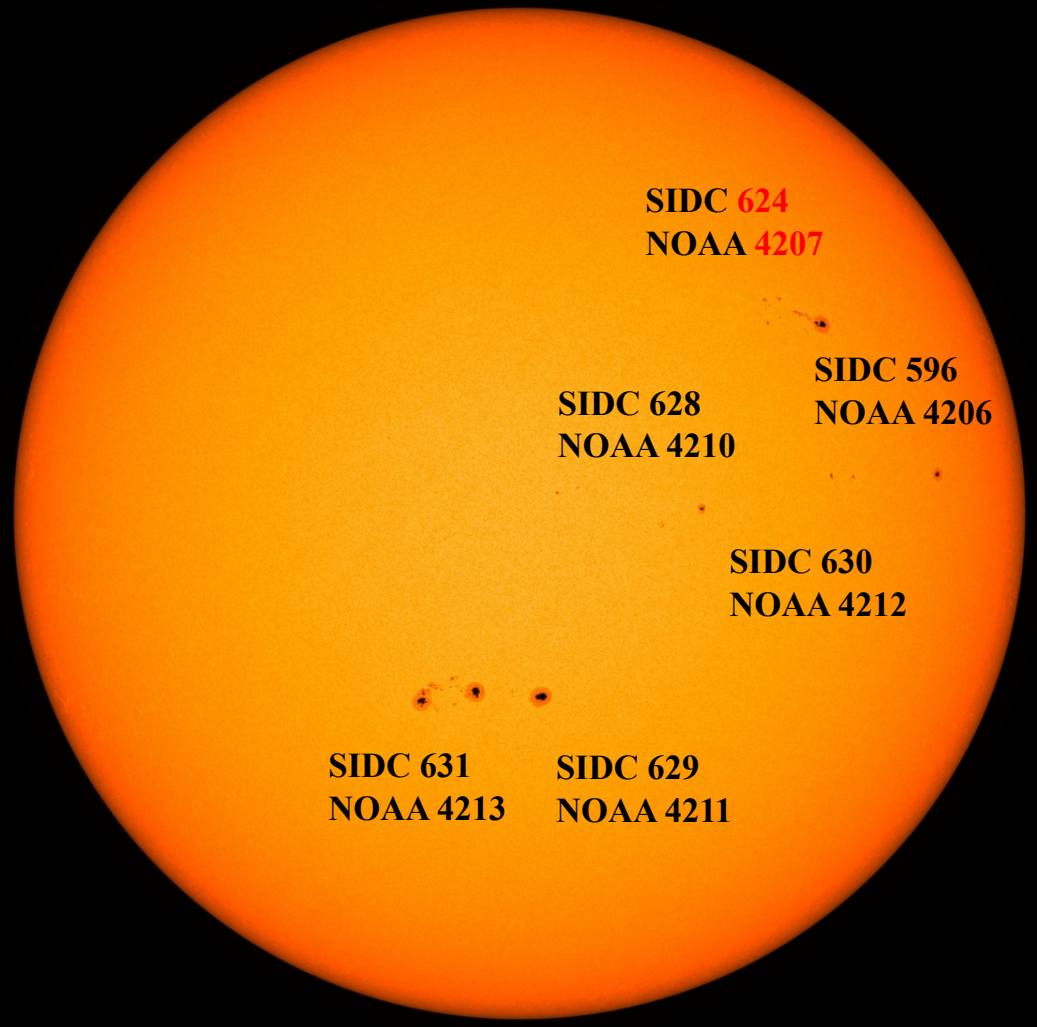
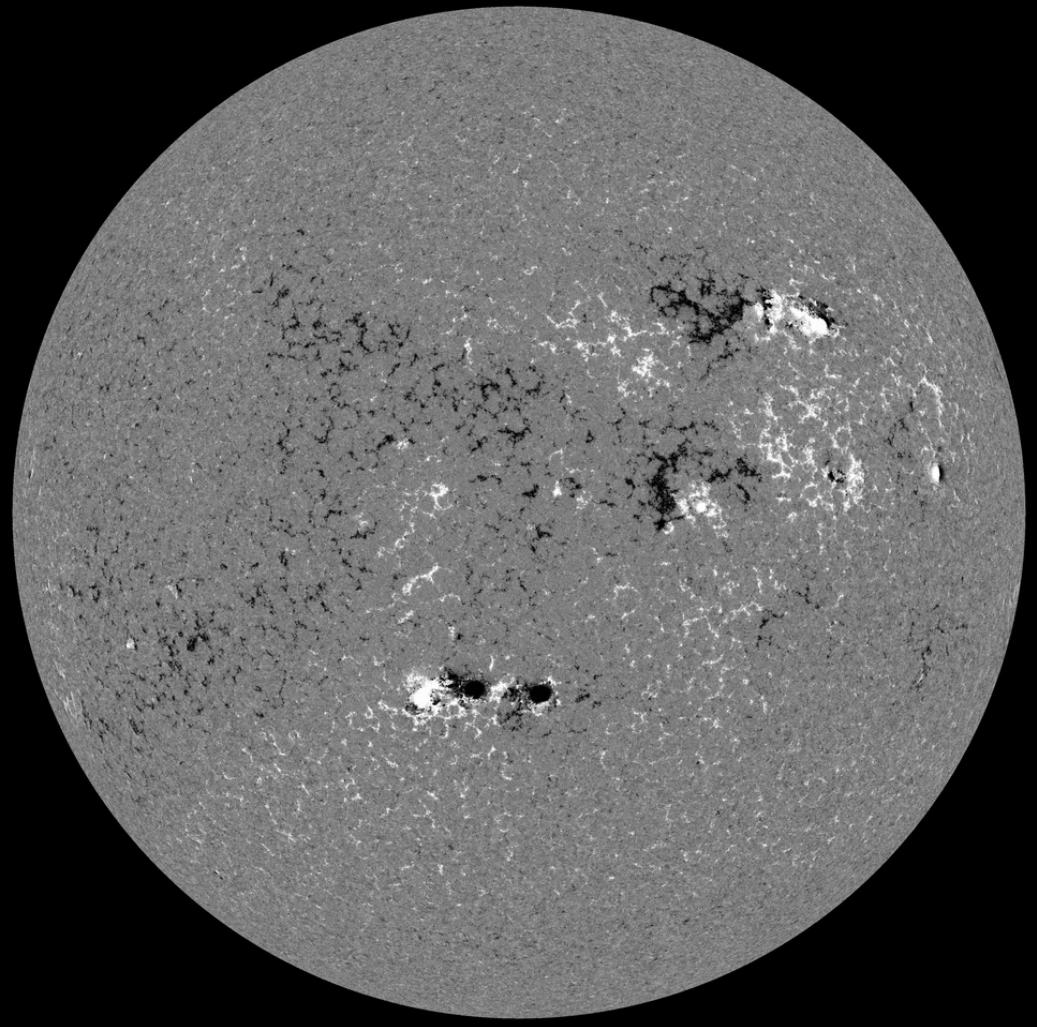
Solar active regions

SDO/HMI White Light 2025-09-08

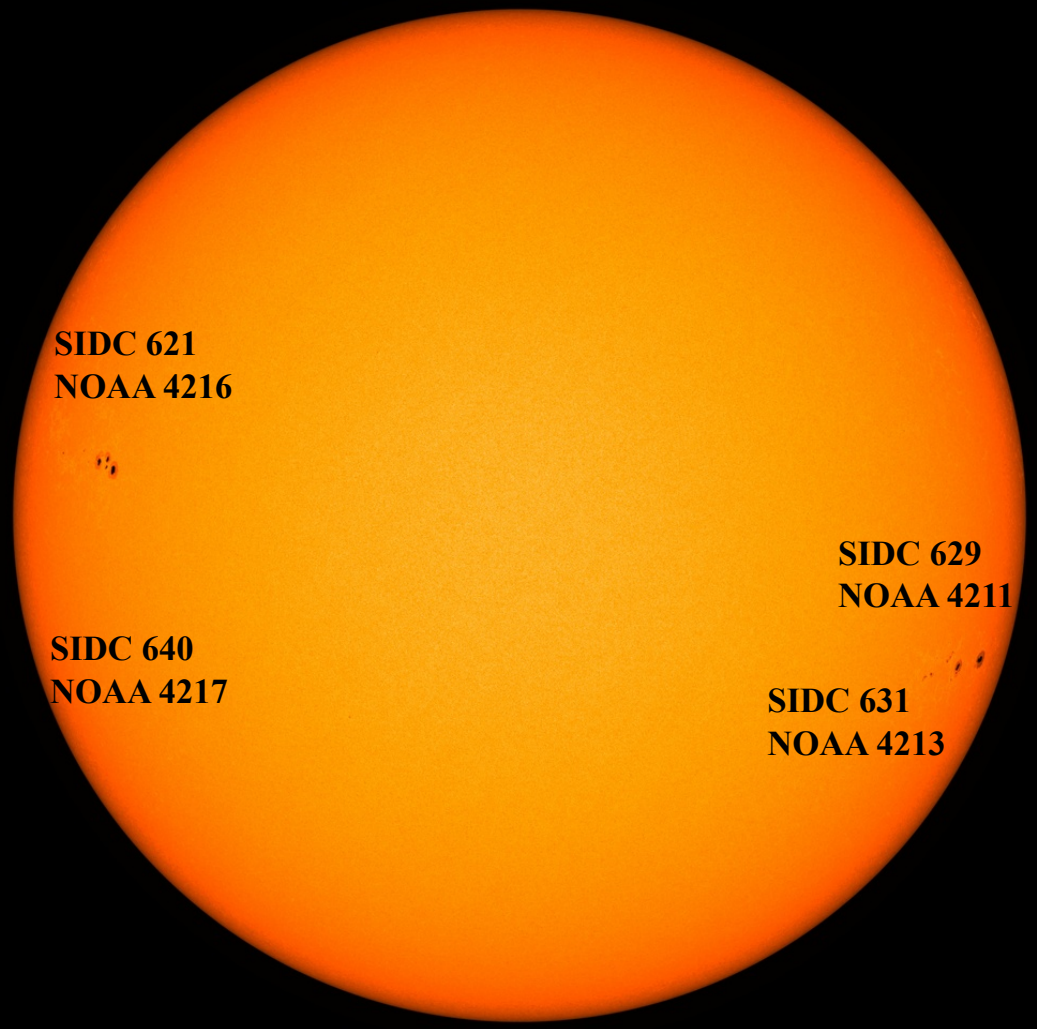


SDO/HMI Magnetogram 2025-09-08

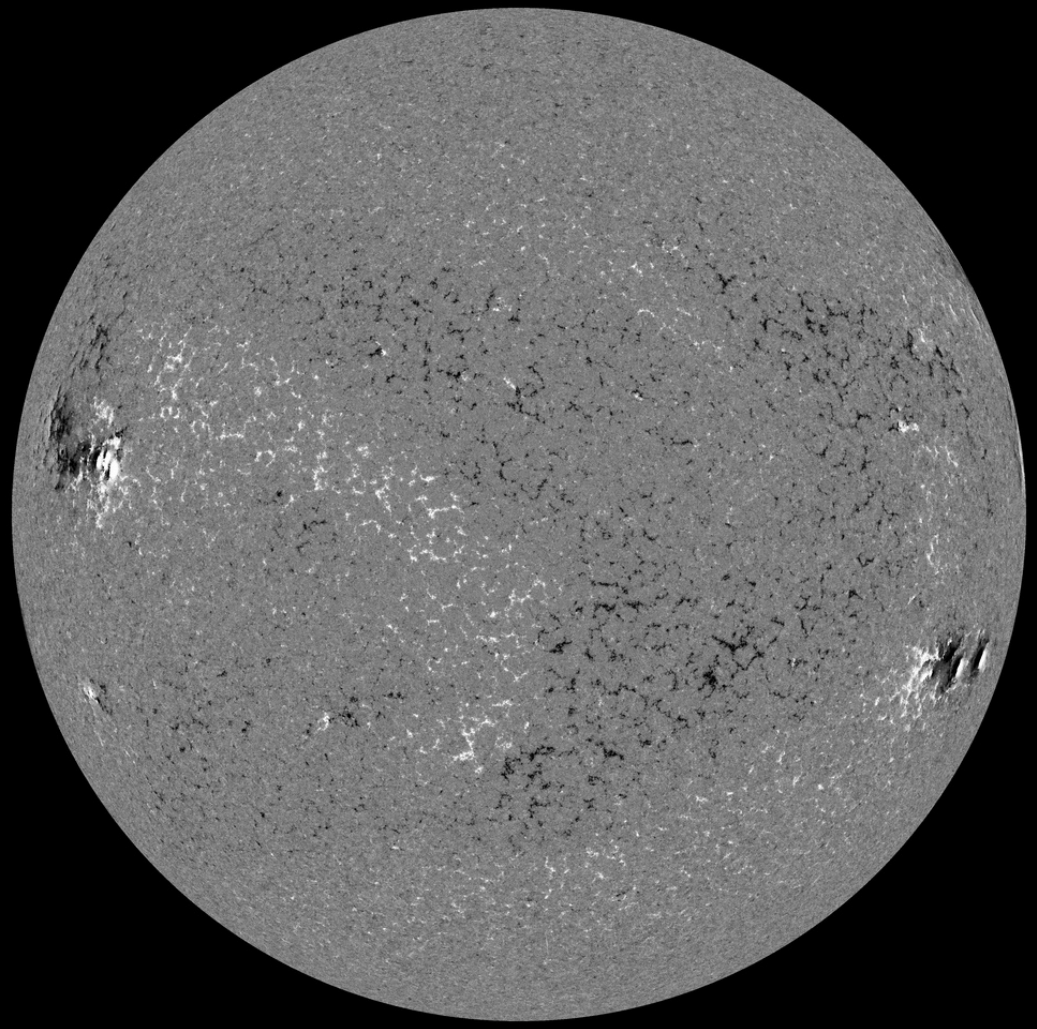


Solar active regions

SDO/HMI White Light 2025-09-14

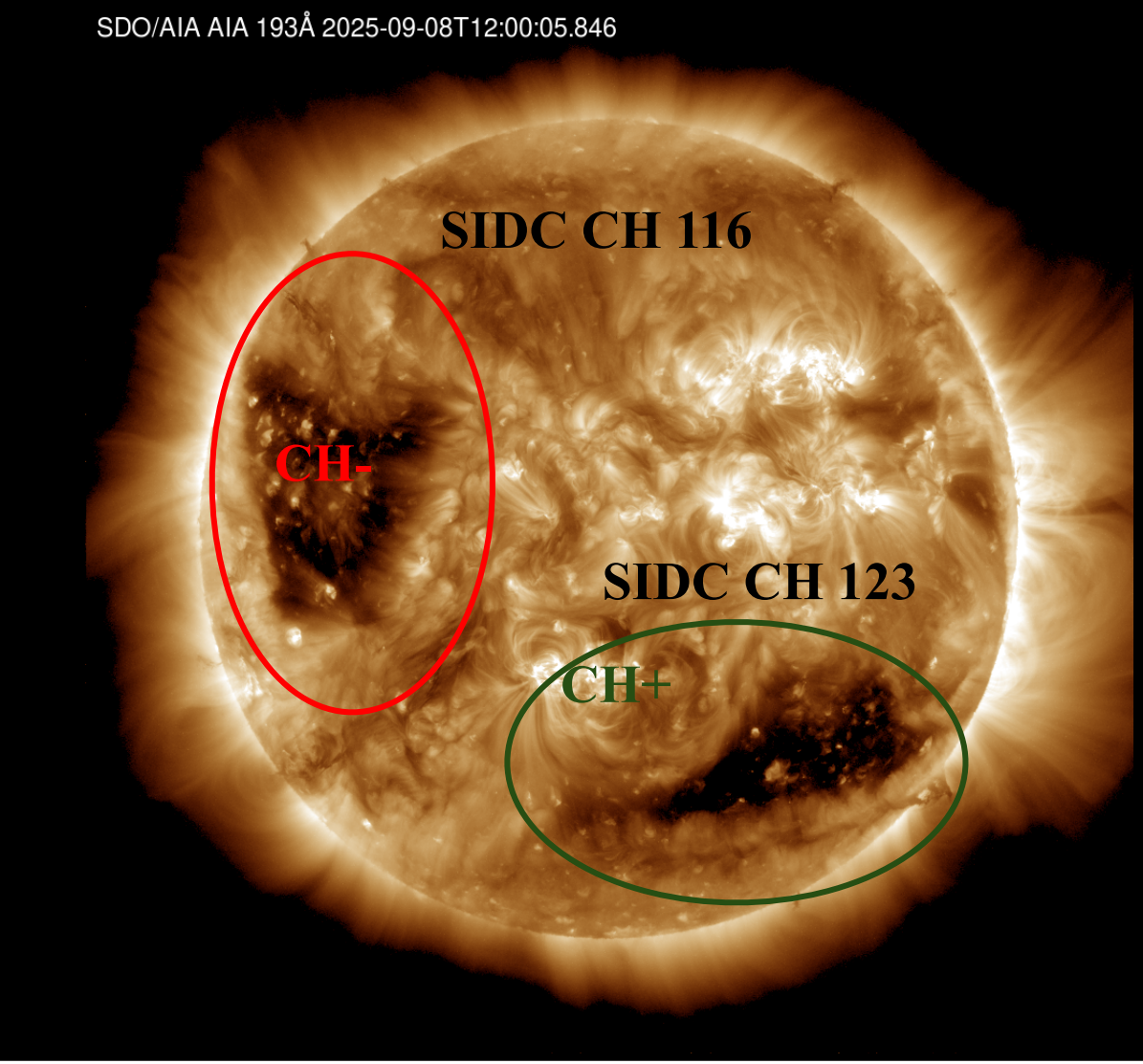


SDO/HMI Magnetogram 2025-09-14

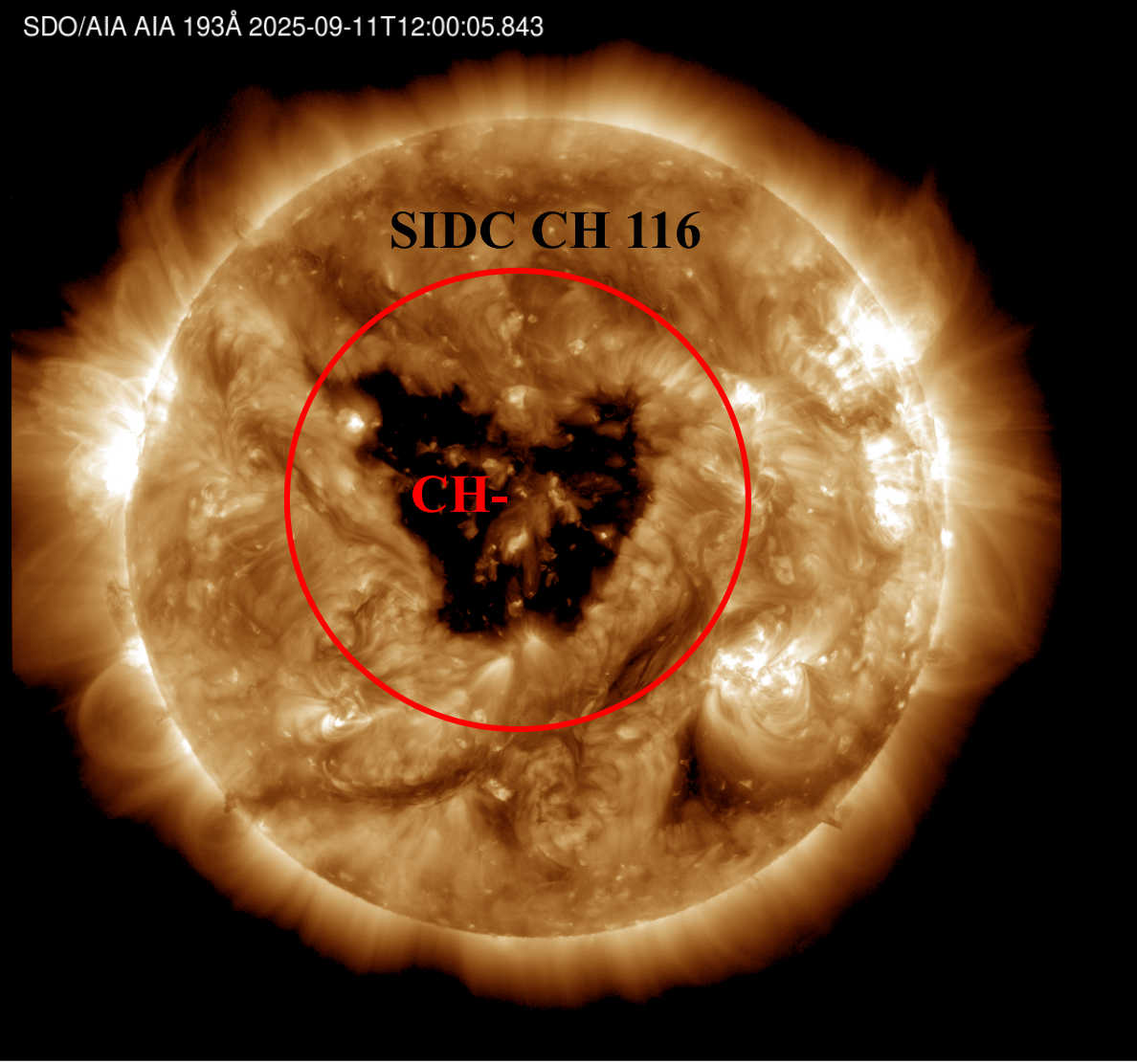


Coronal holes

SDO/AIA 19.3 nm 2025-09-08

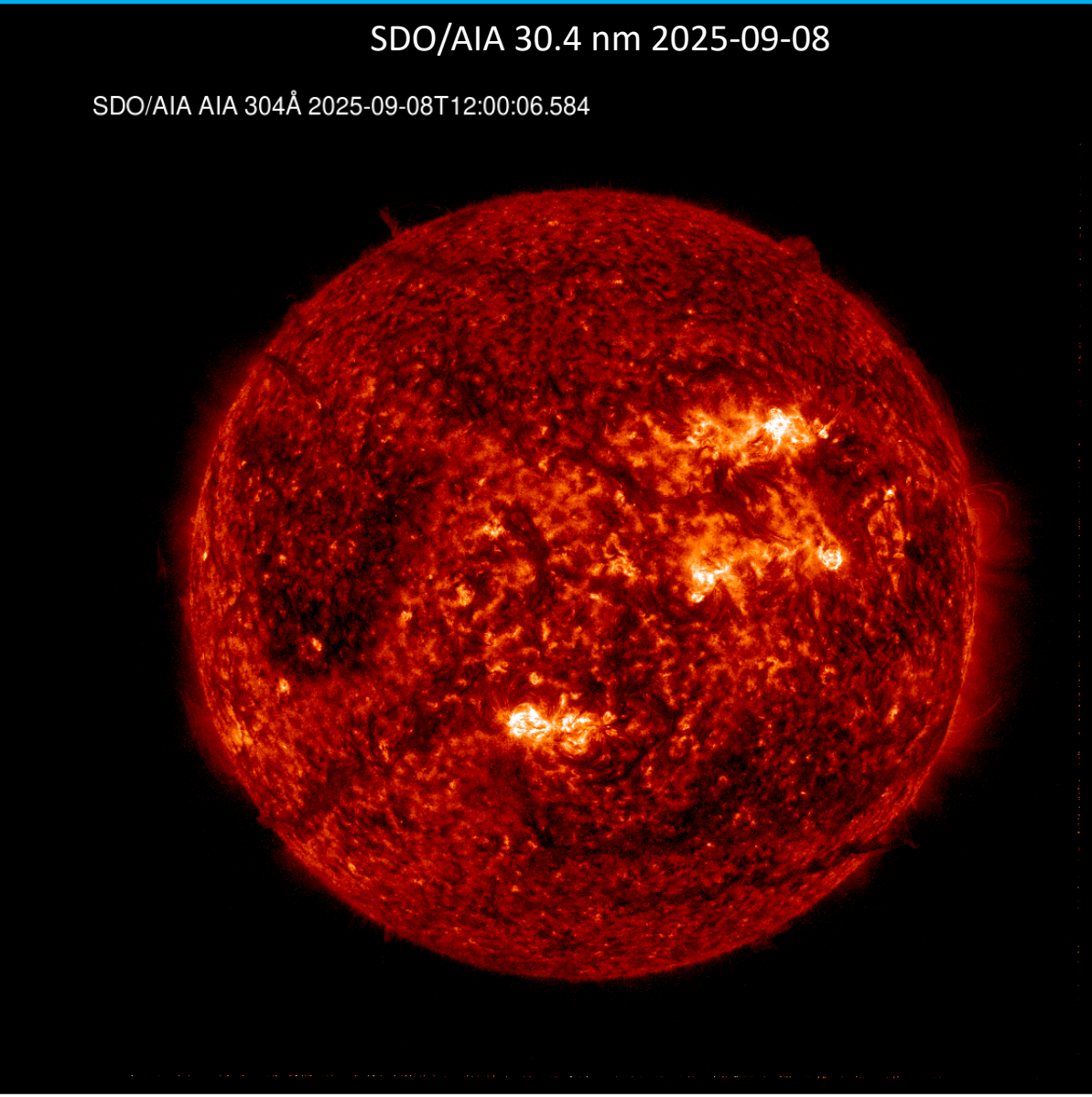


SDO/AIA 19.3 nm 2025-09-11

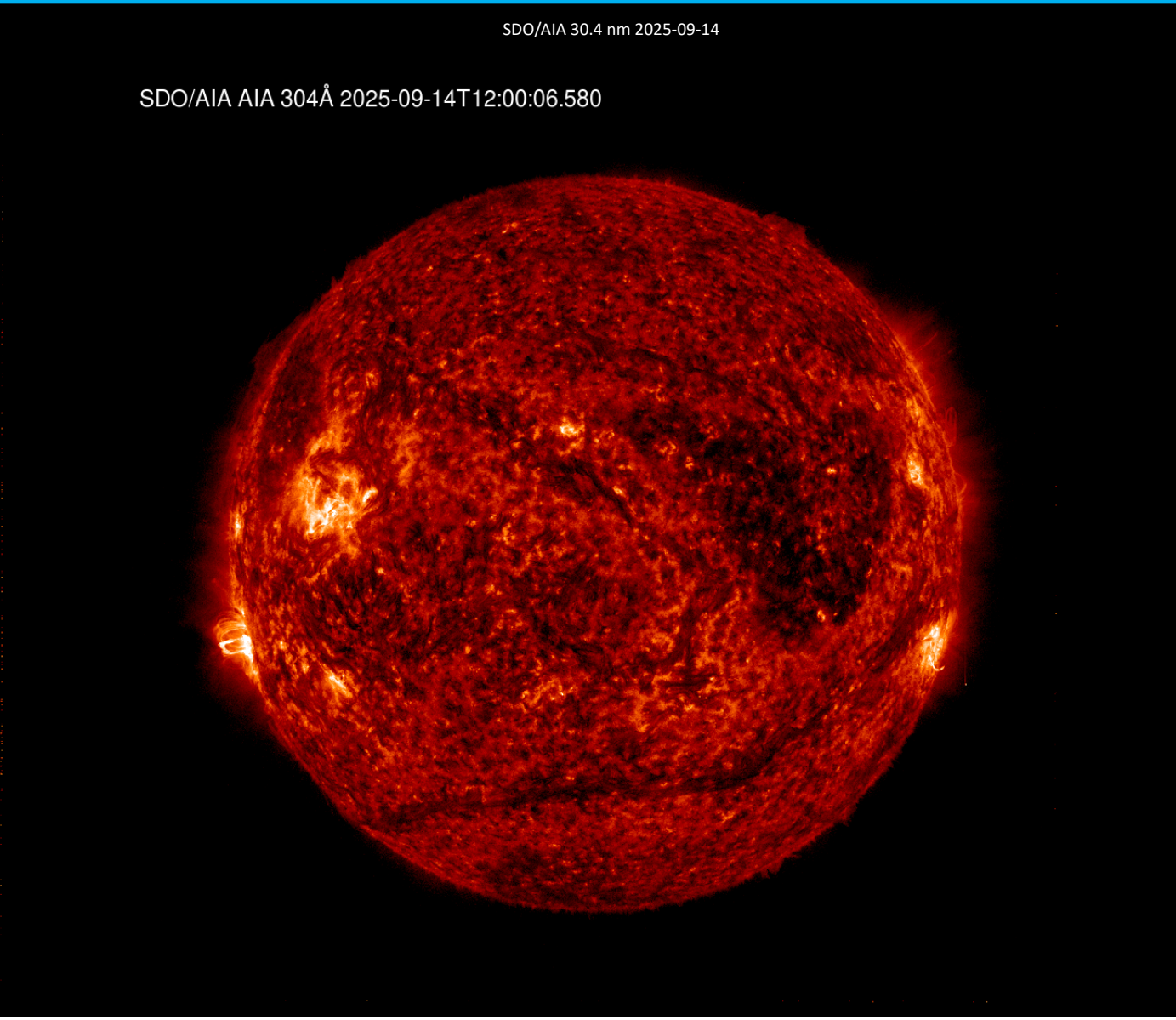


Filaments

SDO/AIA 30.4 nm 2025-09-08

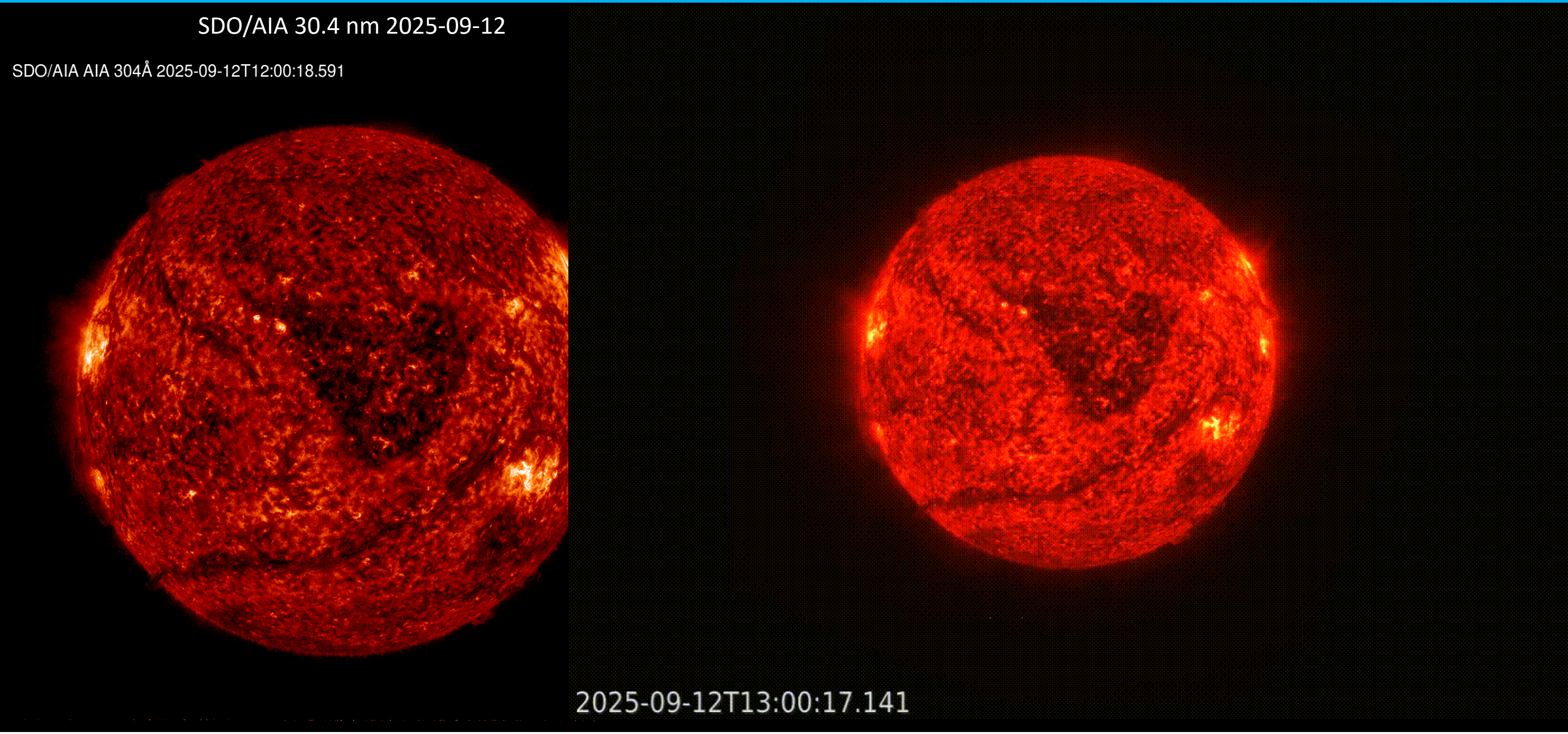


SDO/AIA 30.4 nm 2025-09-14



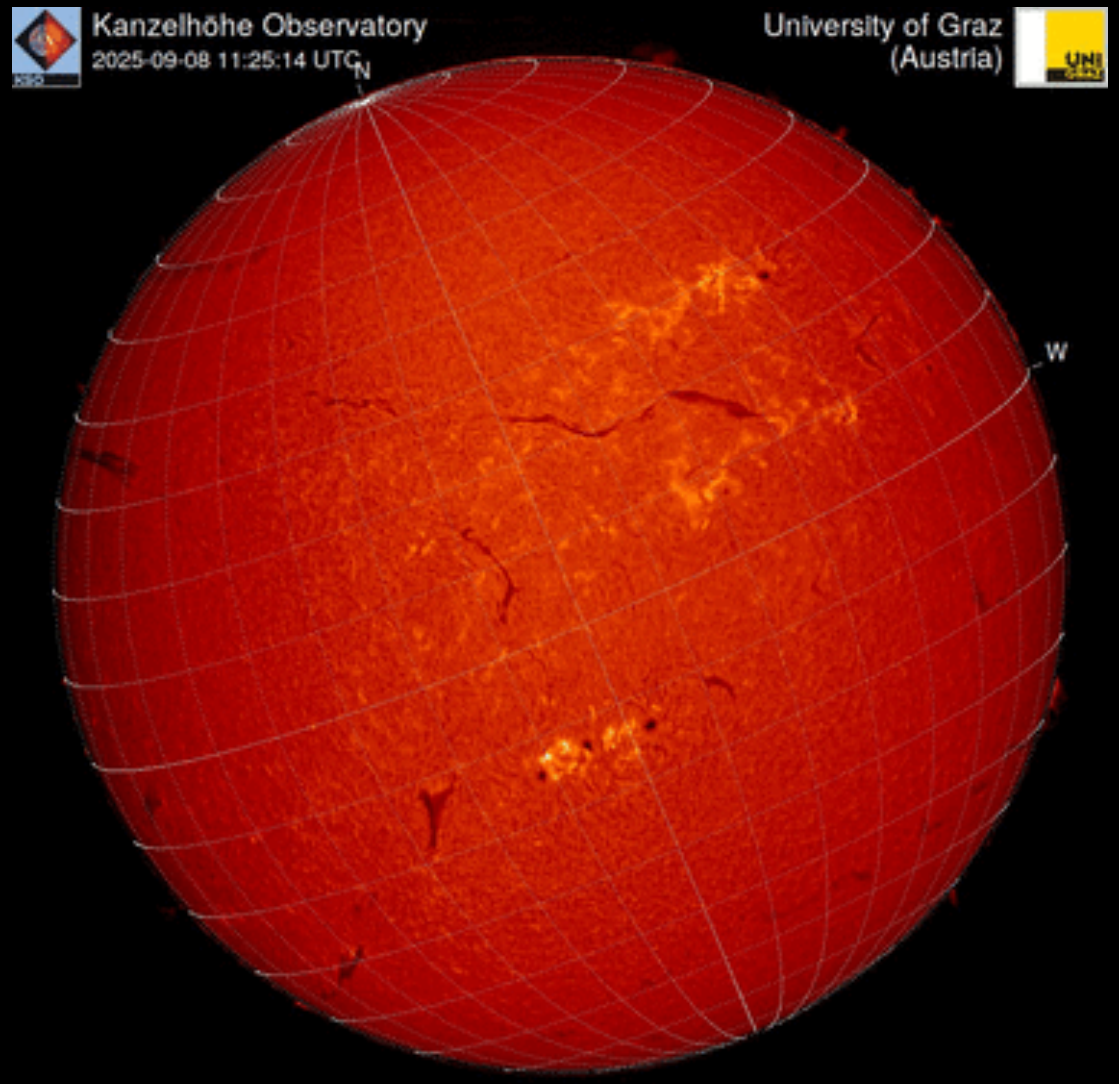
Filaments

SDO/AIA 30.4 nm 2025-09-12

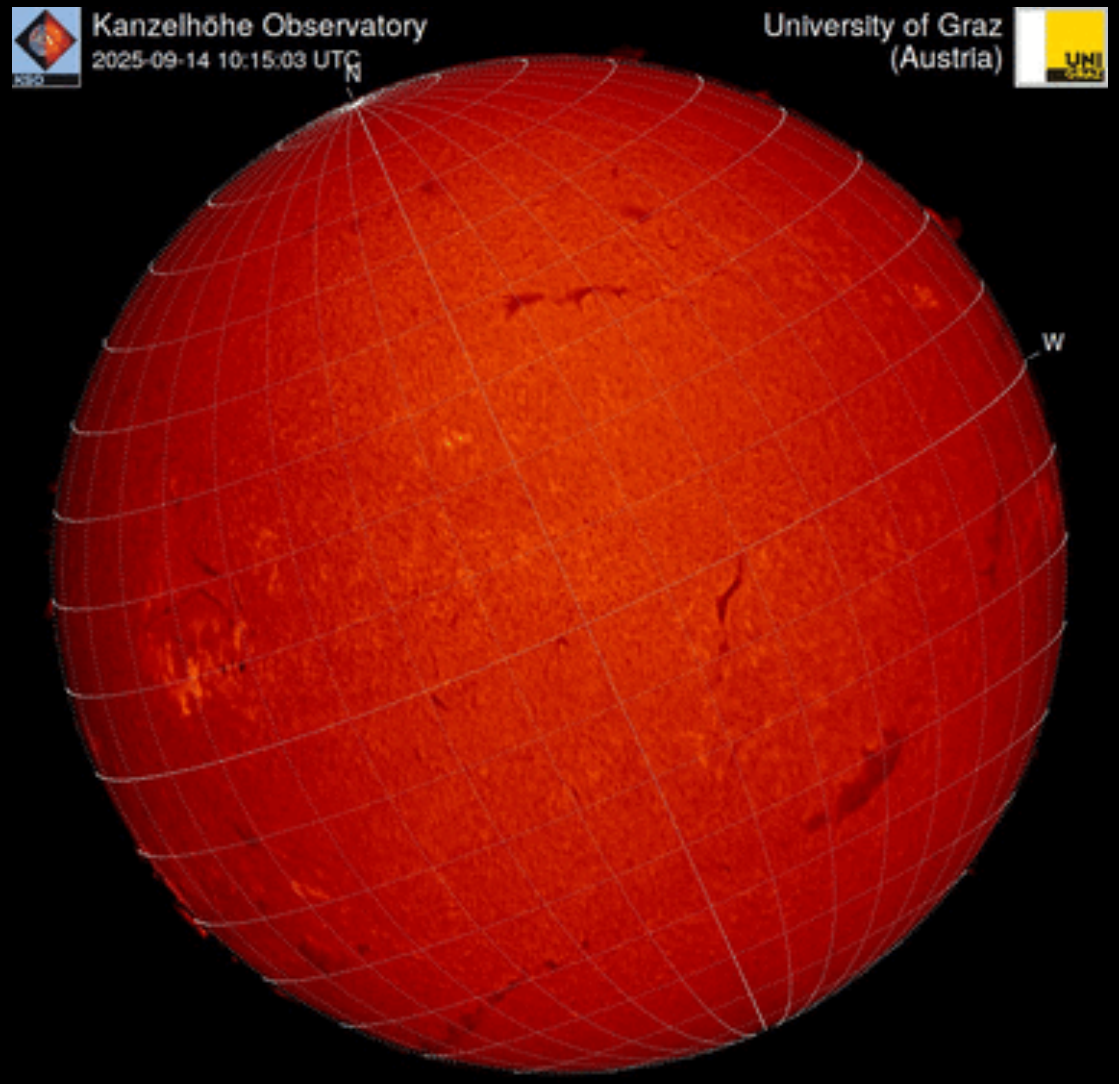


Filaments & Filament eruptions

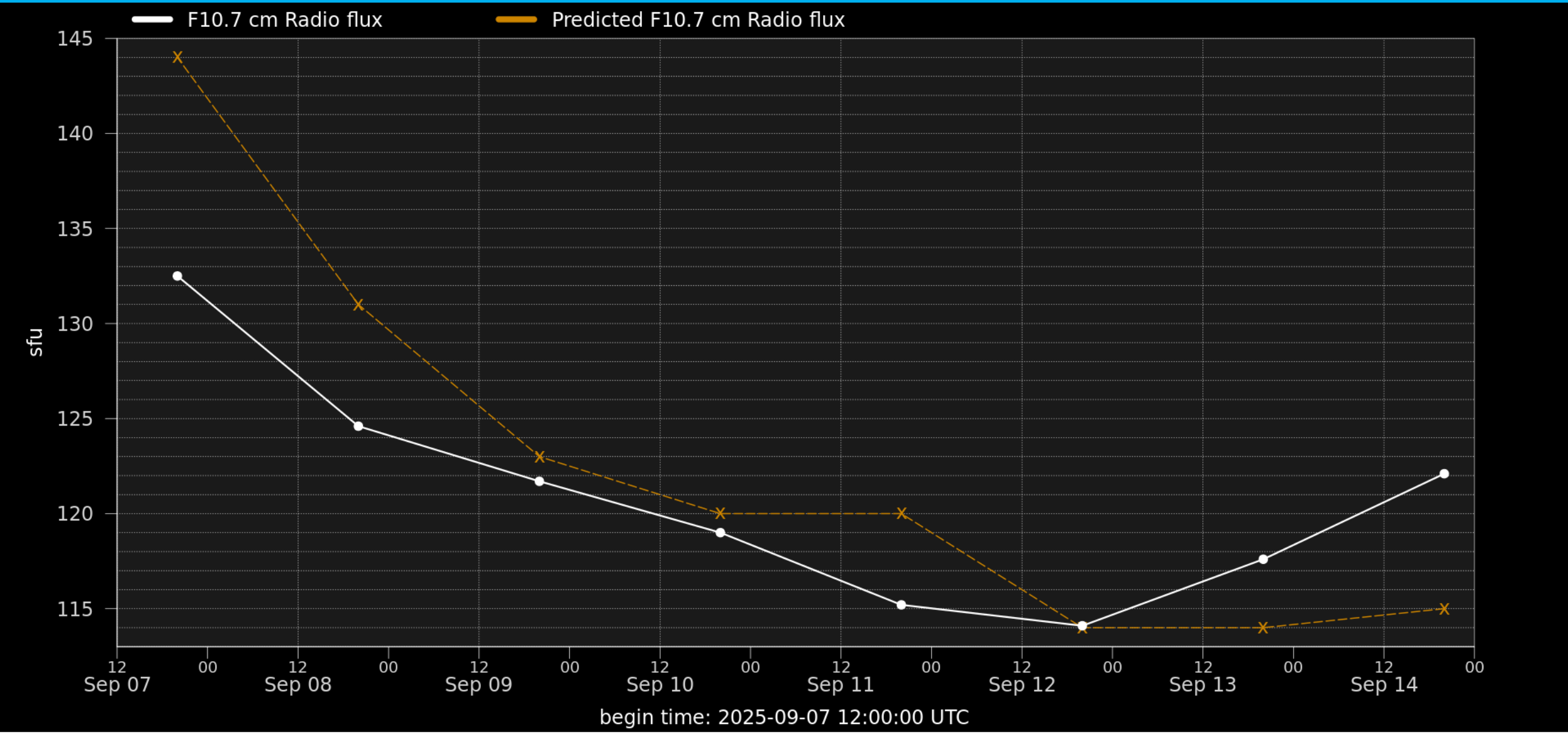
H-alpha 2025-09-08



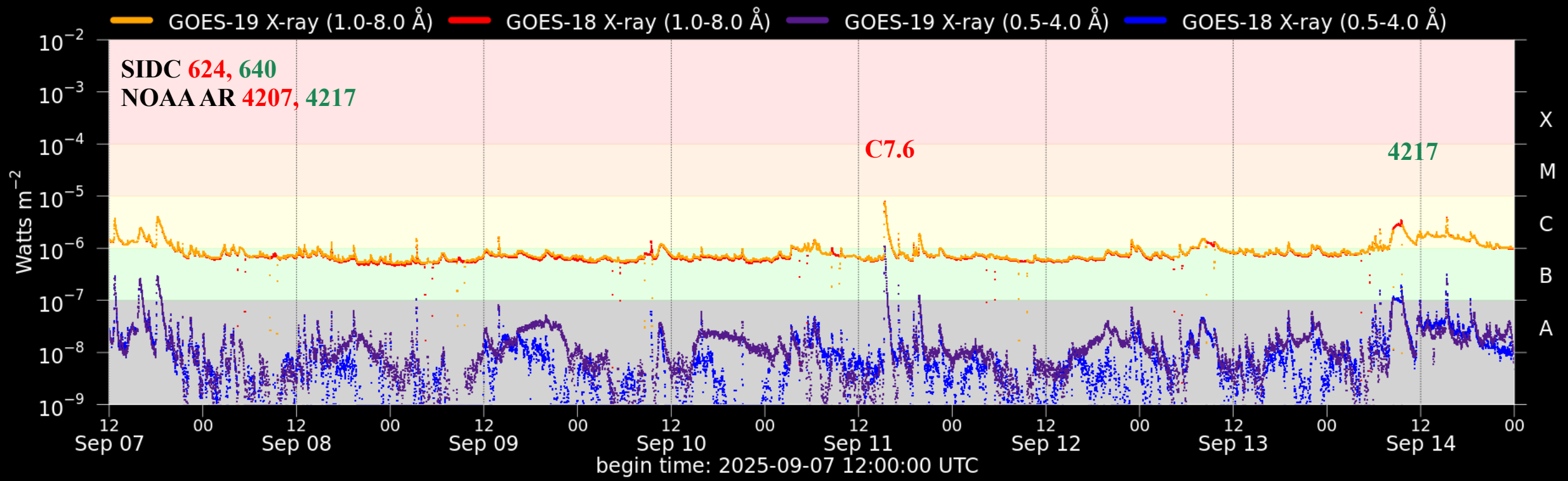
H-alpha 2025-09-14



Solar F10.7cm radio flux



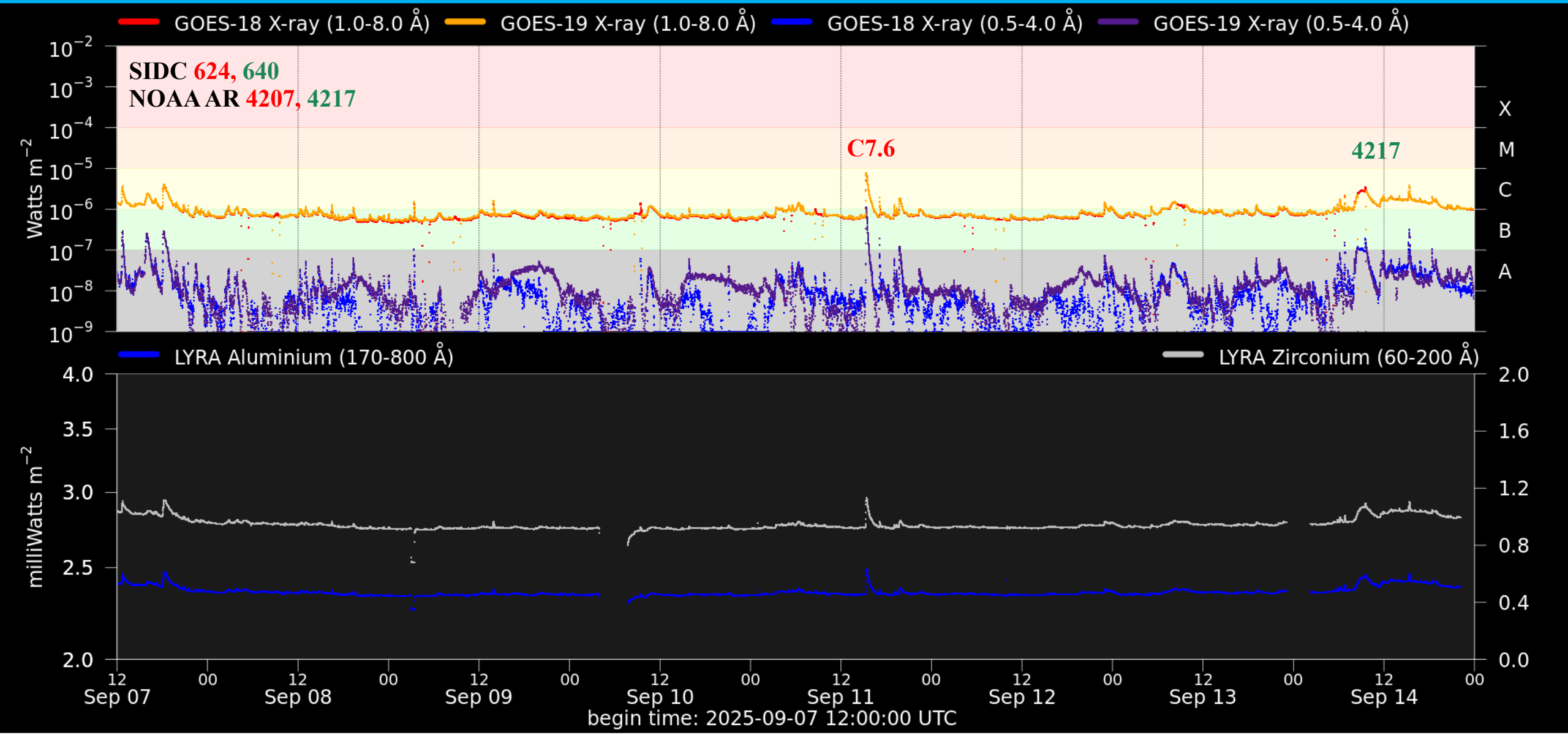
Flaring activity



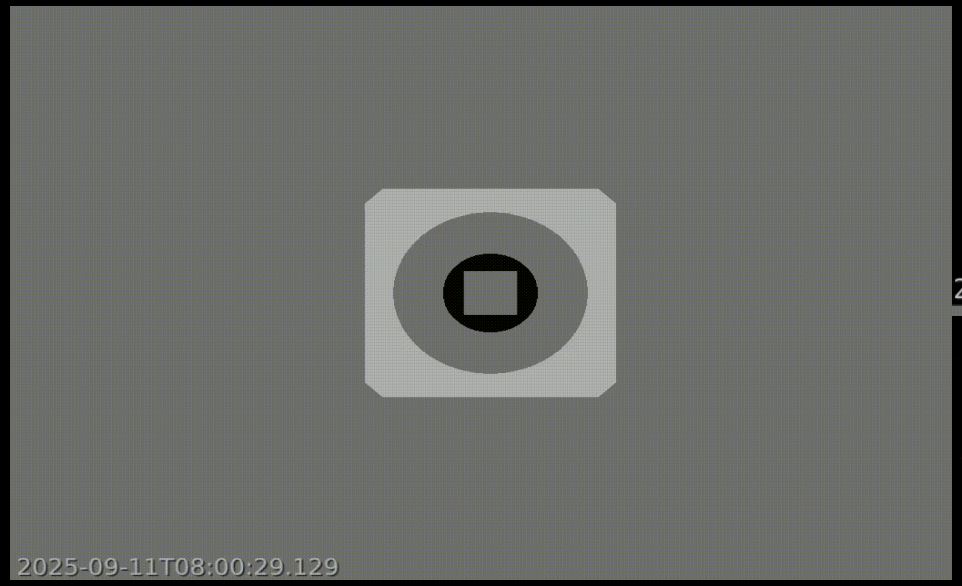
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

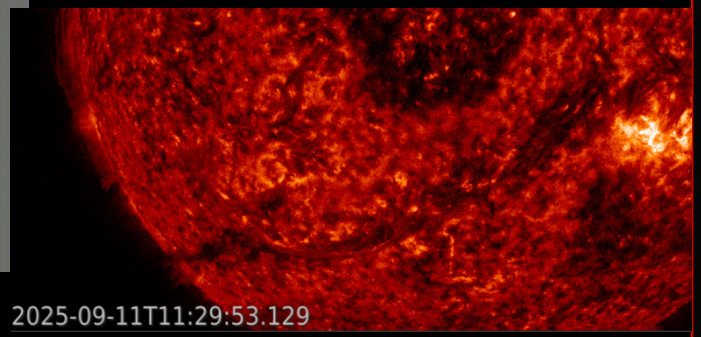
Issue date	2025-09-07	2025-09-08	2025-09-09	2025-09-10	2025-09-11	2025-09-12	2025-09-13	2025-09-14
Probability (%)	98|64|10	90|55|10	90|49|15	90|49|10	90|49|15	90|49|10	90|49|20	90|49|15
Observed (#)	03|00|00	04|00|00	01|00|00	01|00|00	04|00|00	03|00|00	03|00|00	03|00|00

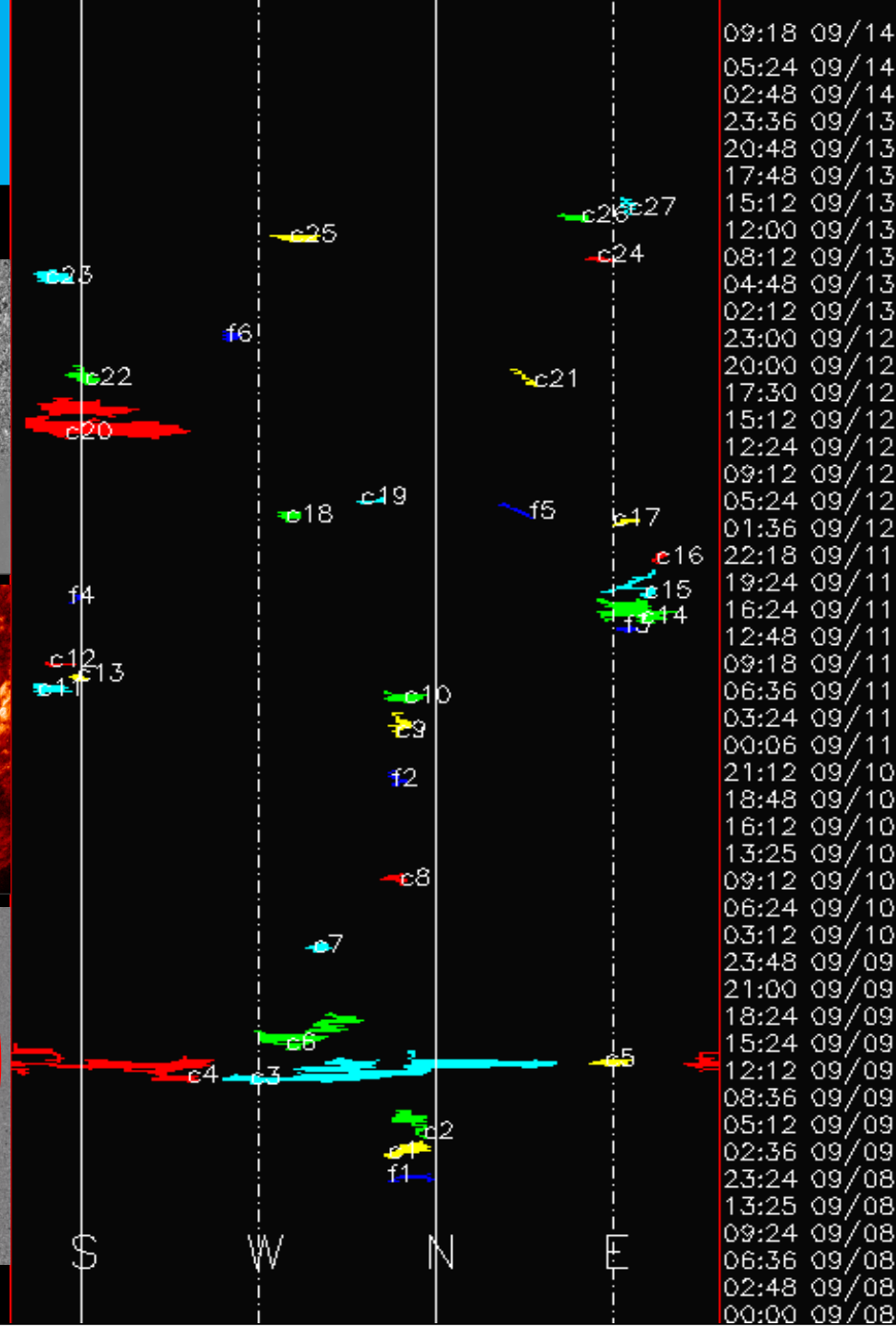
Solar X-Ray and UV flux



Coronal Mass Ejections







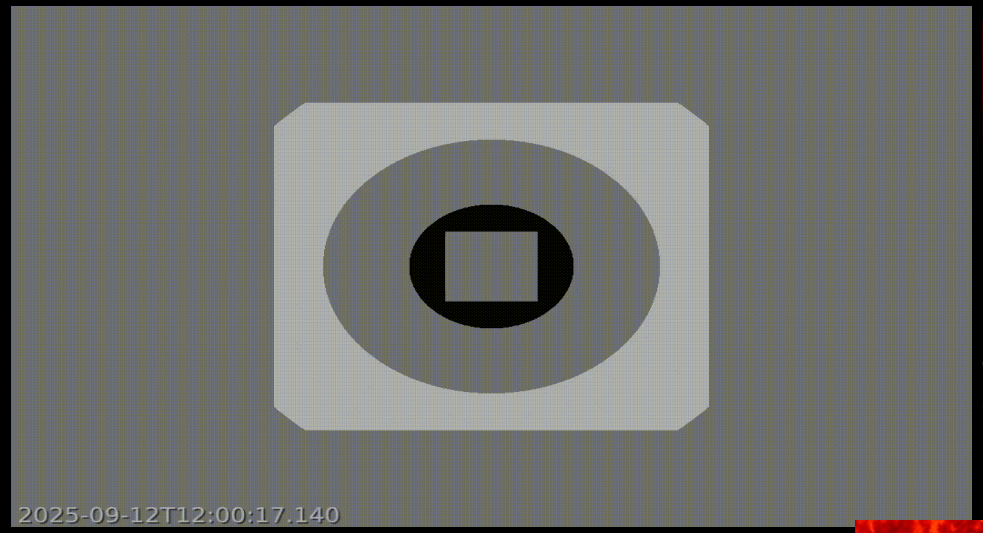
CME

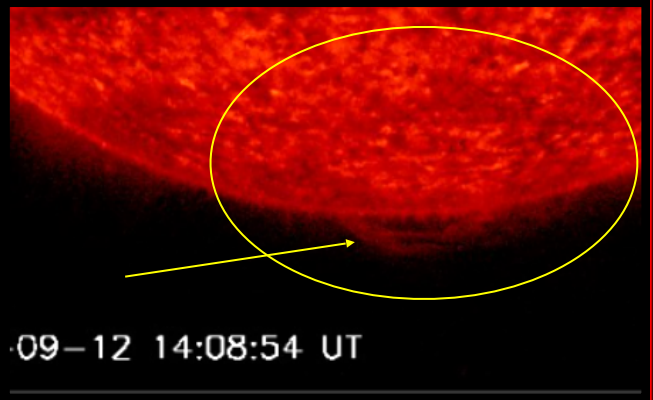
Observation: 10:36 UTC on Sep 11
Associated with filament eruption
Speed = 350 km/s, Ang. width = 100 deg

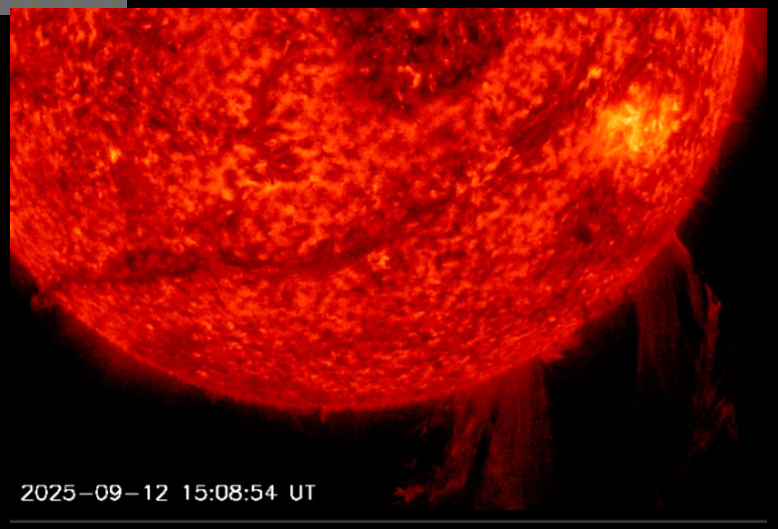
Prediction: Glancing blow on Sep 16T06:00

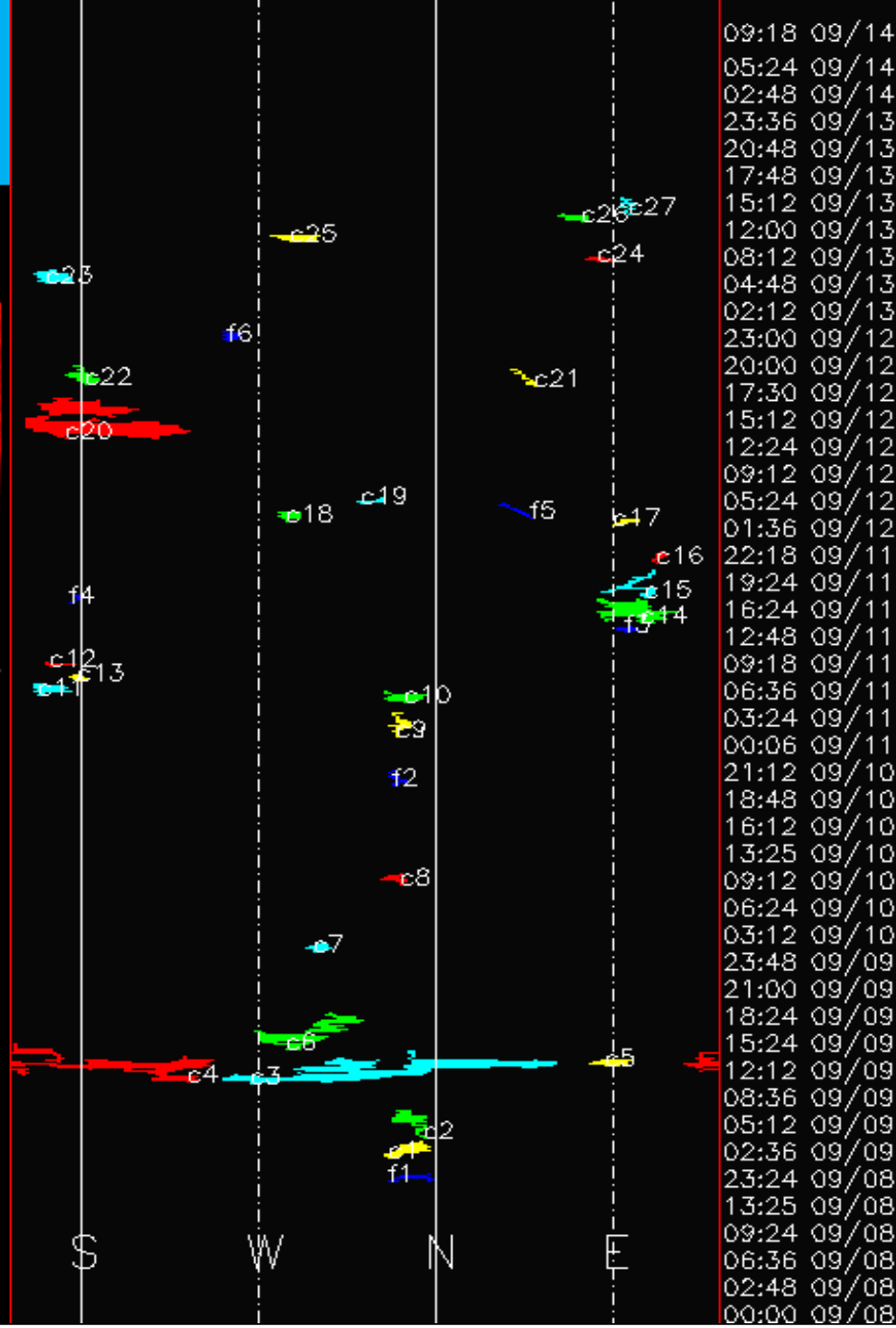
Observation: possibly on Sep 14?

Coronal Mass Ejections









CME

Observation: 15:00 UTC on Sep 12
Associated with prominence eruption, mostly backsided and towards South

Prediction: Not expected at Earth

Solar Wind and

Geomagnetic Activity

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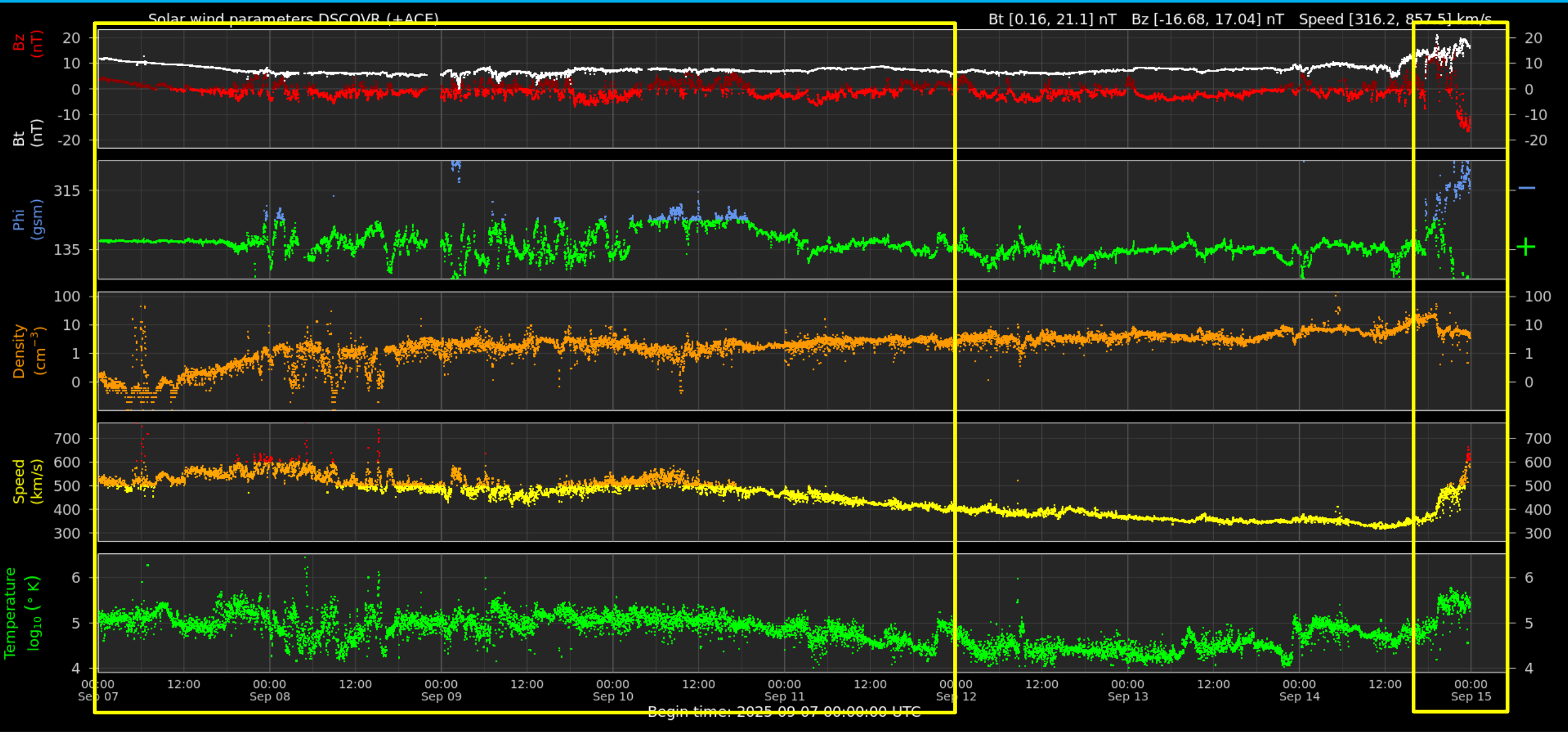
Solar wind parameters

HSS: CH 123 +

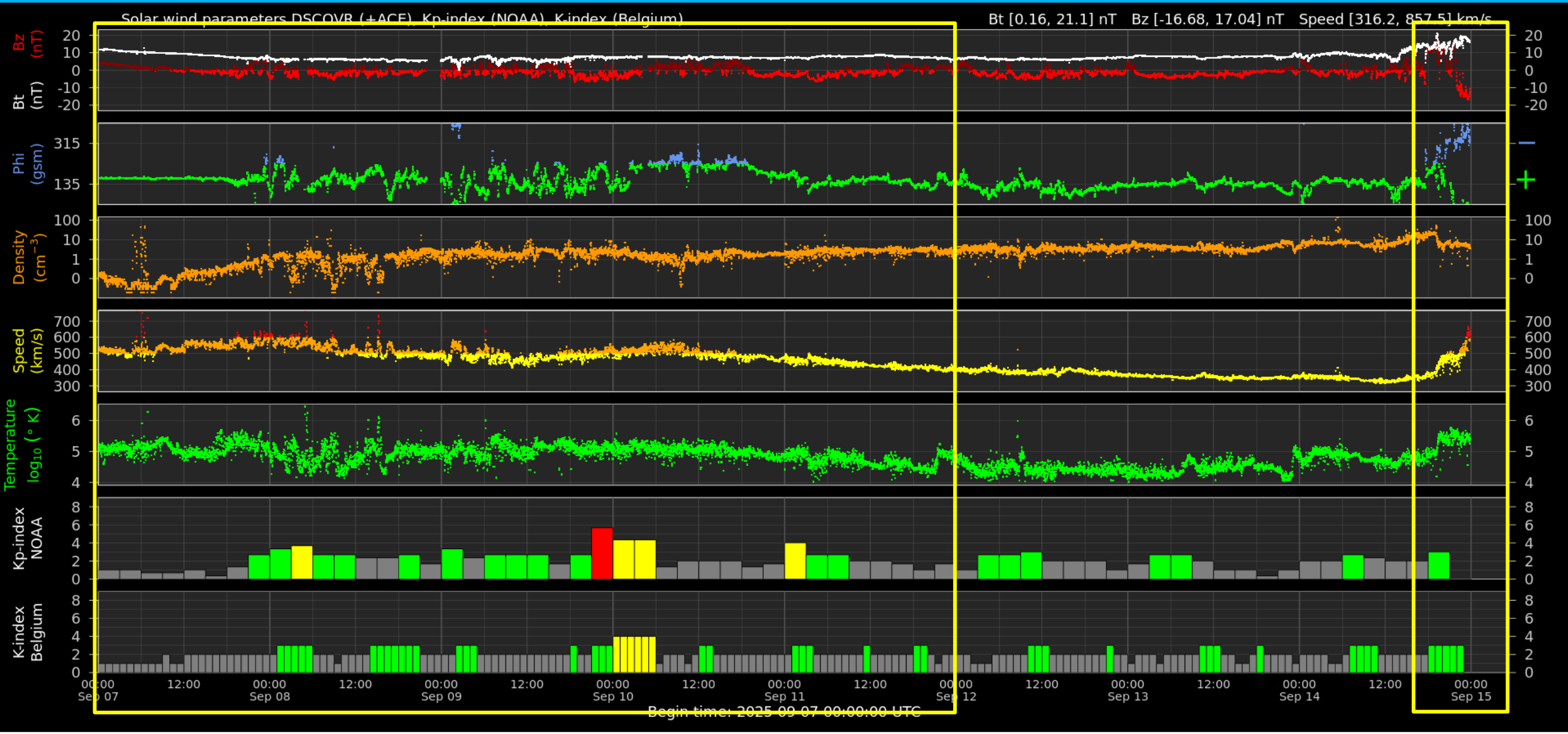
HSS: CH 116 -
ICME-CME on Sep 11?



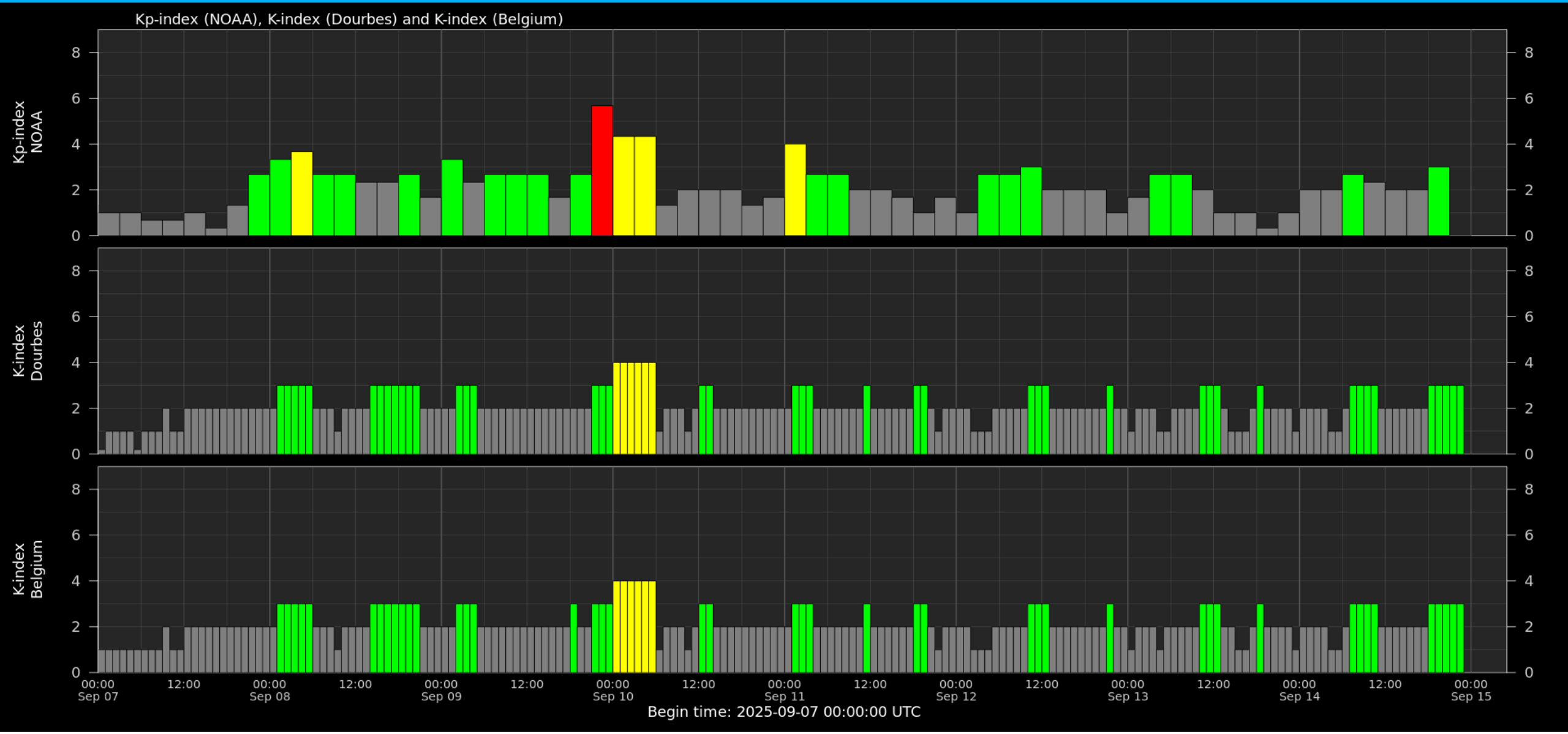
Solar wind parameters & K-indices

HSS: CH 123 +

HSS: CH 116 - ICME-CME on Sep 11?



Geomagnetic activity (K-indexes)



Energetic Particles

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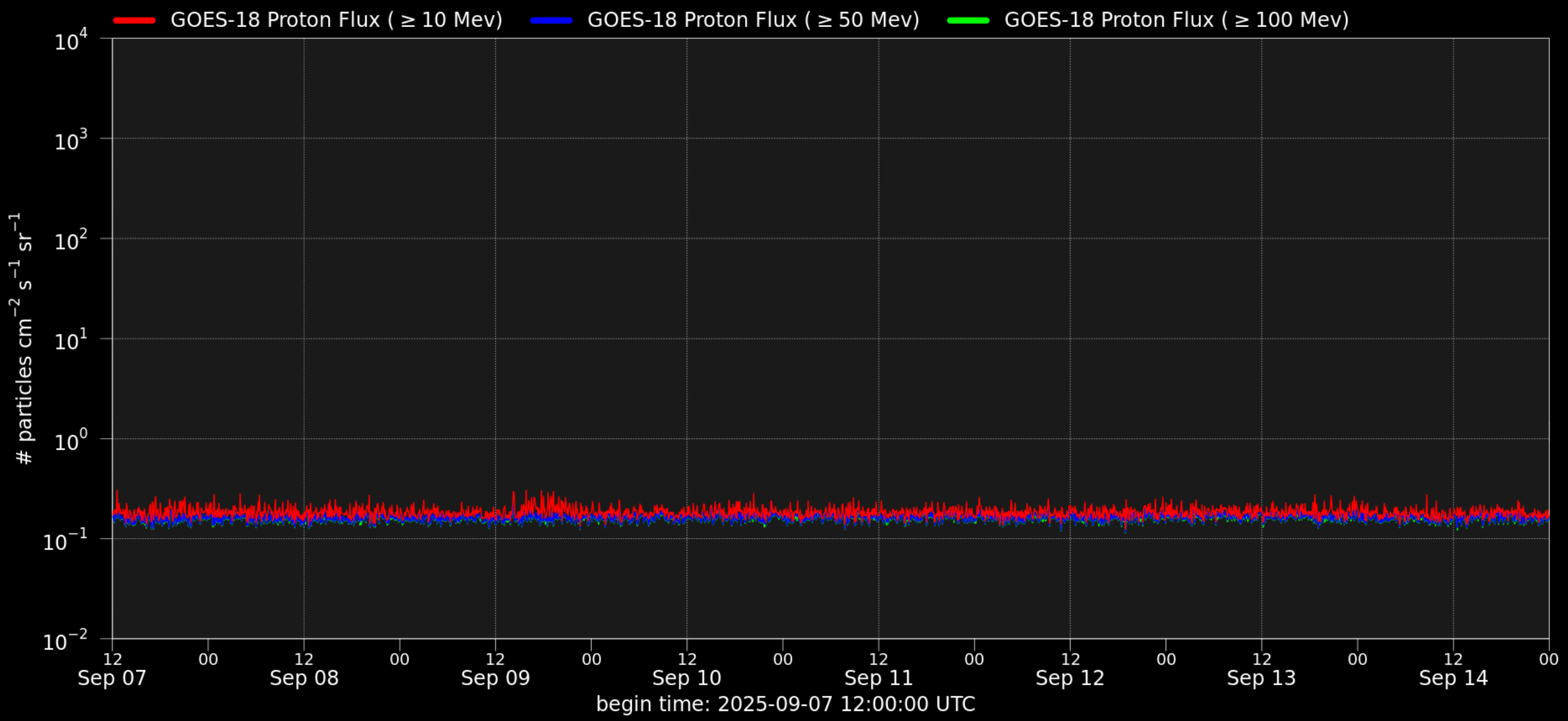
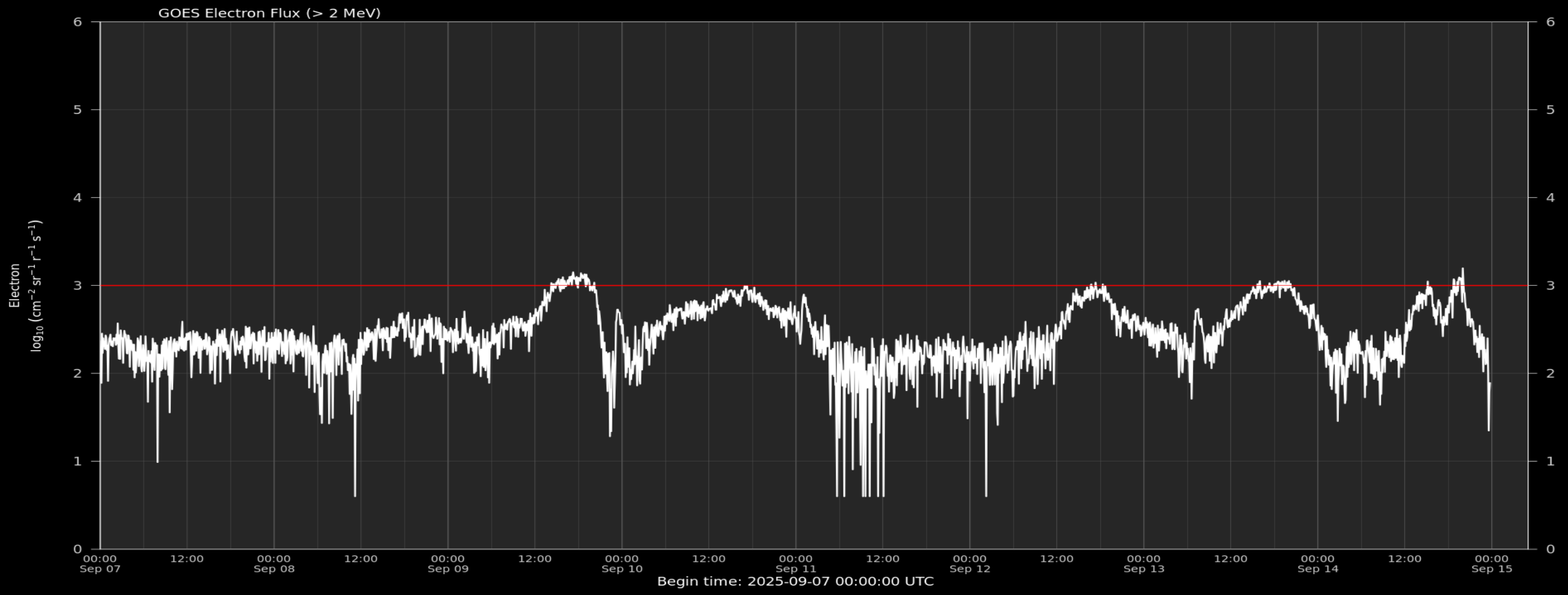
Solar proton flux



Electron flux at GEO

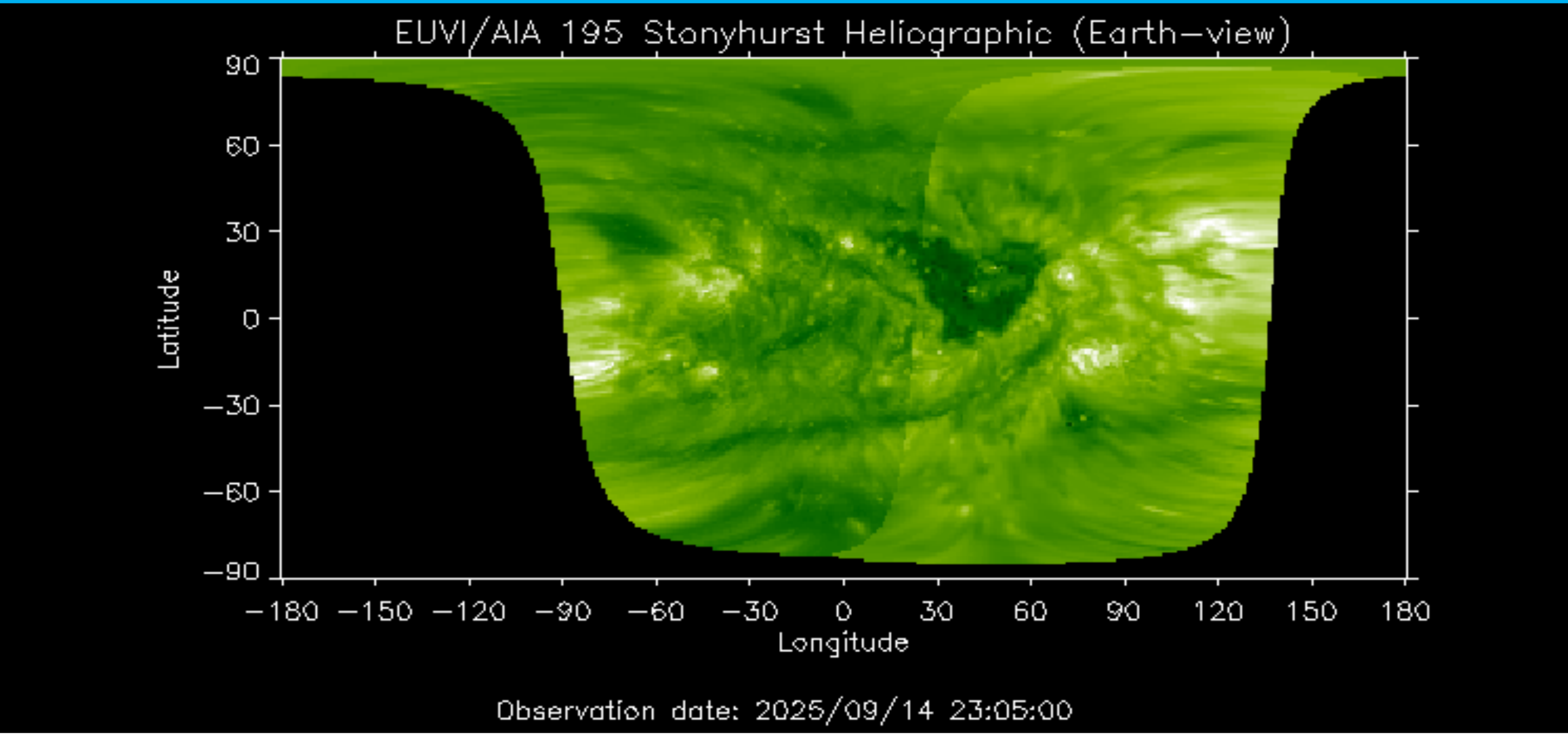
www.stce.be/educational/classification#electrons

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

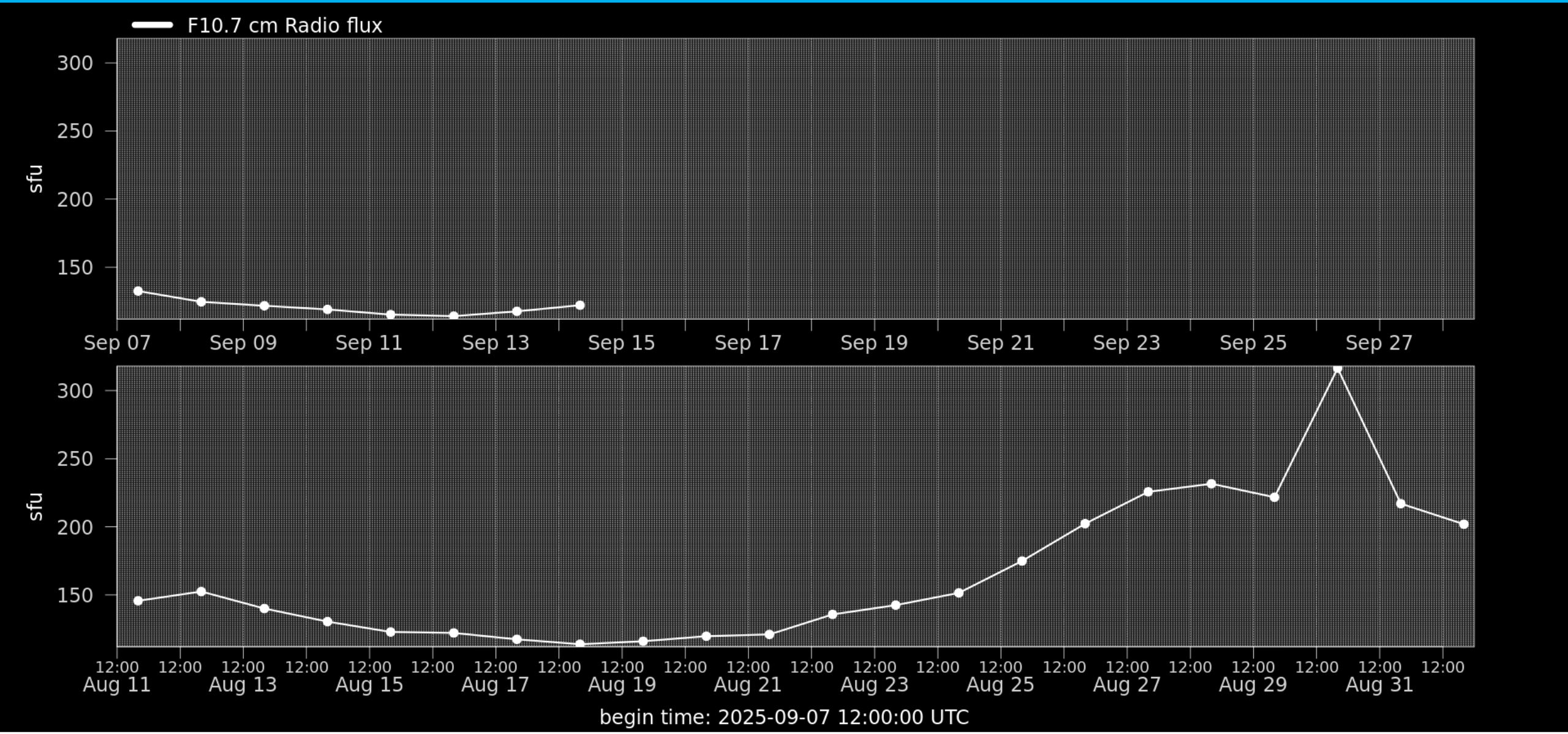


Outlook

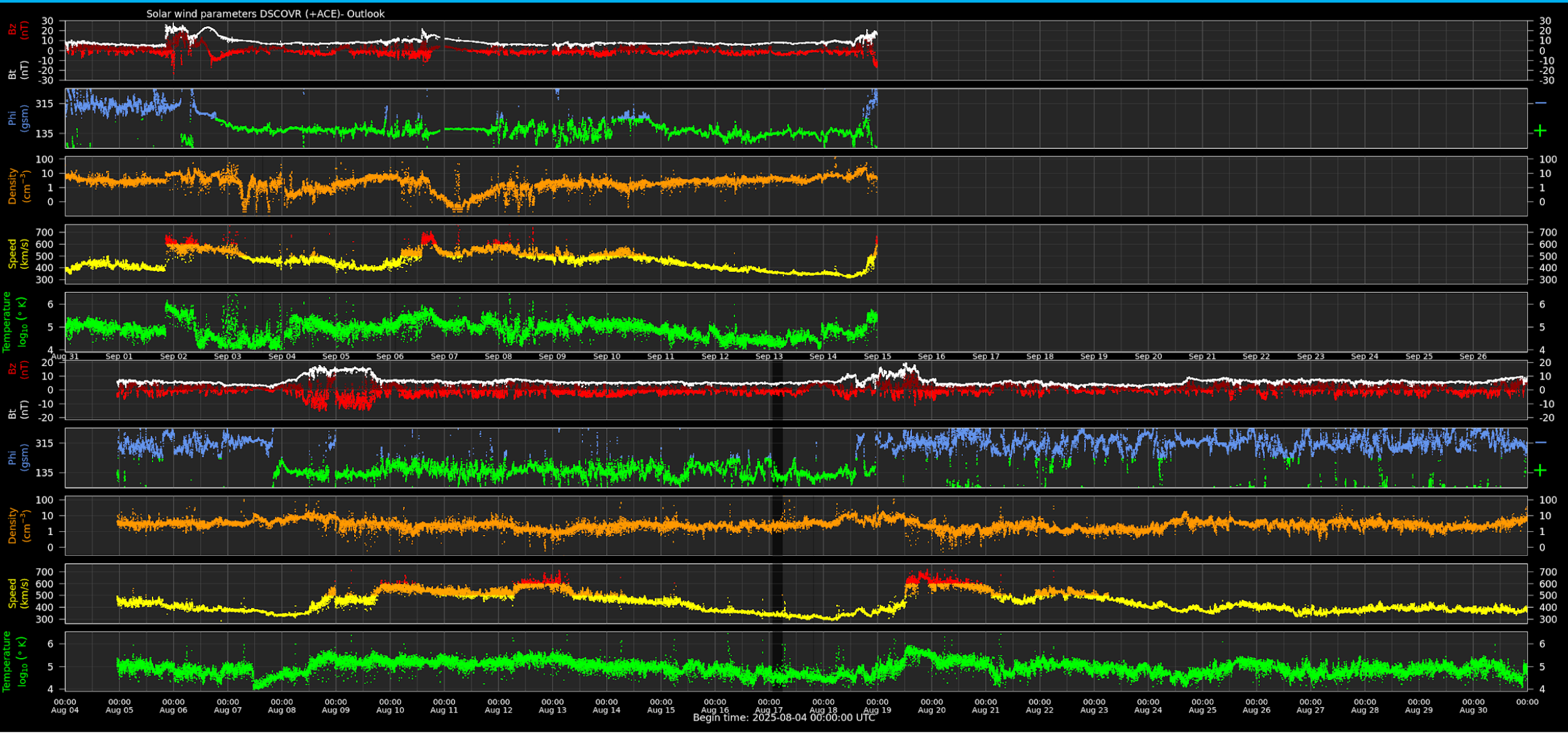
Outlook: Solar activity



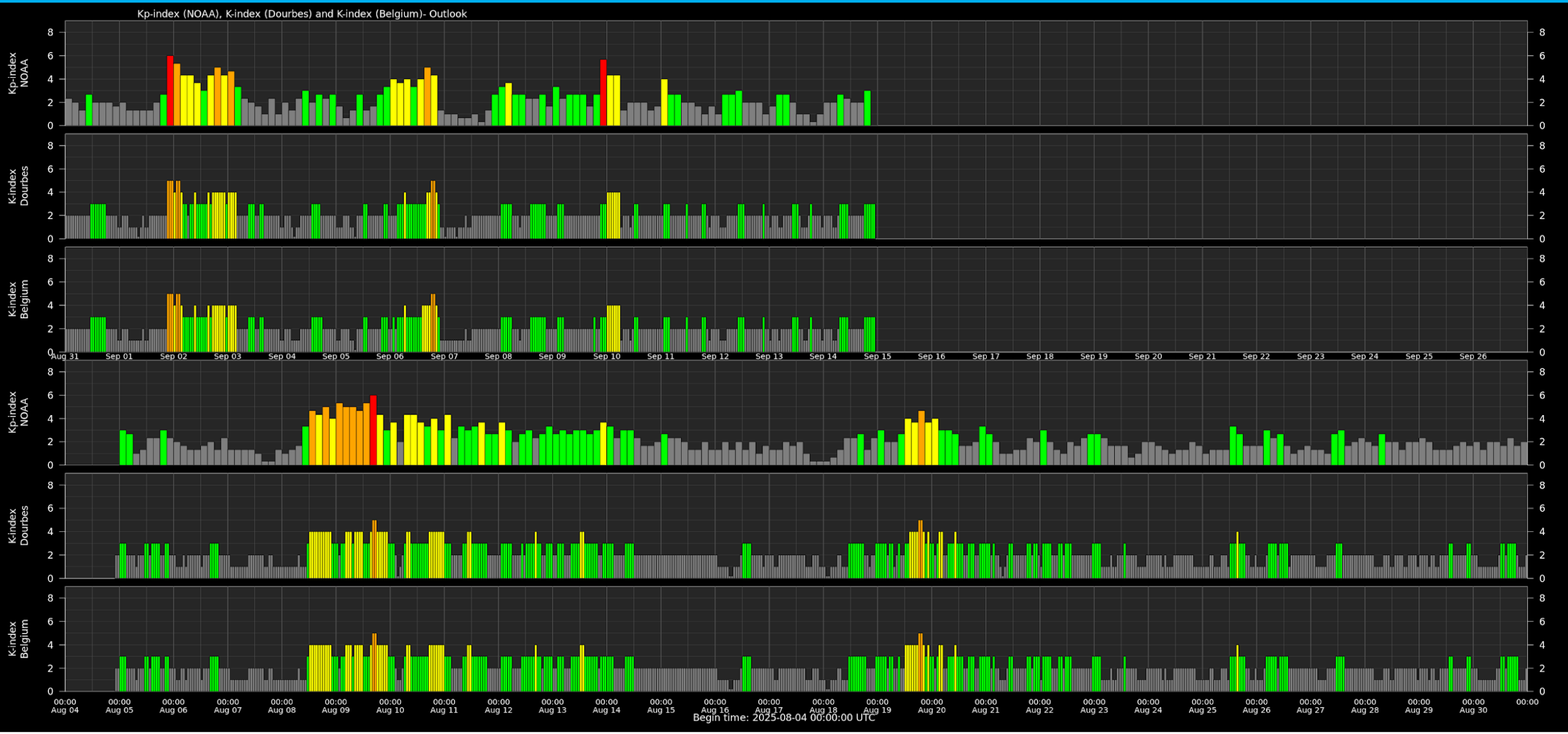
Outlook: Solar F10.7cm radio flux



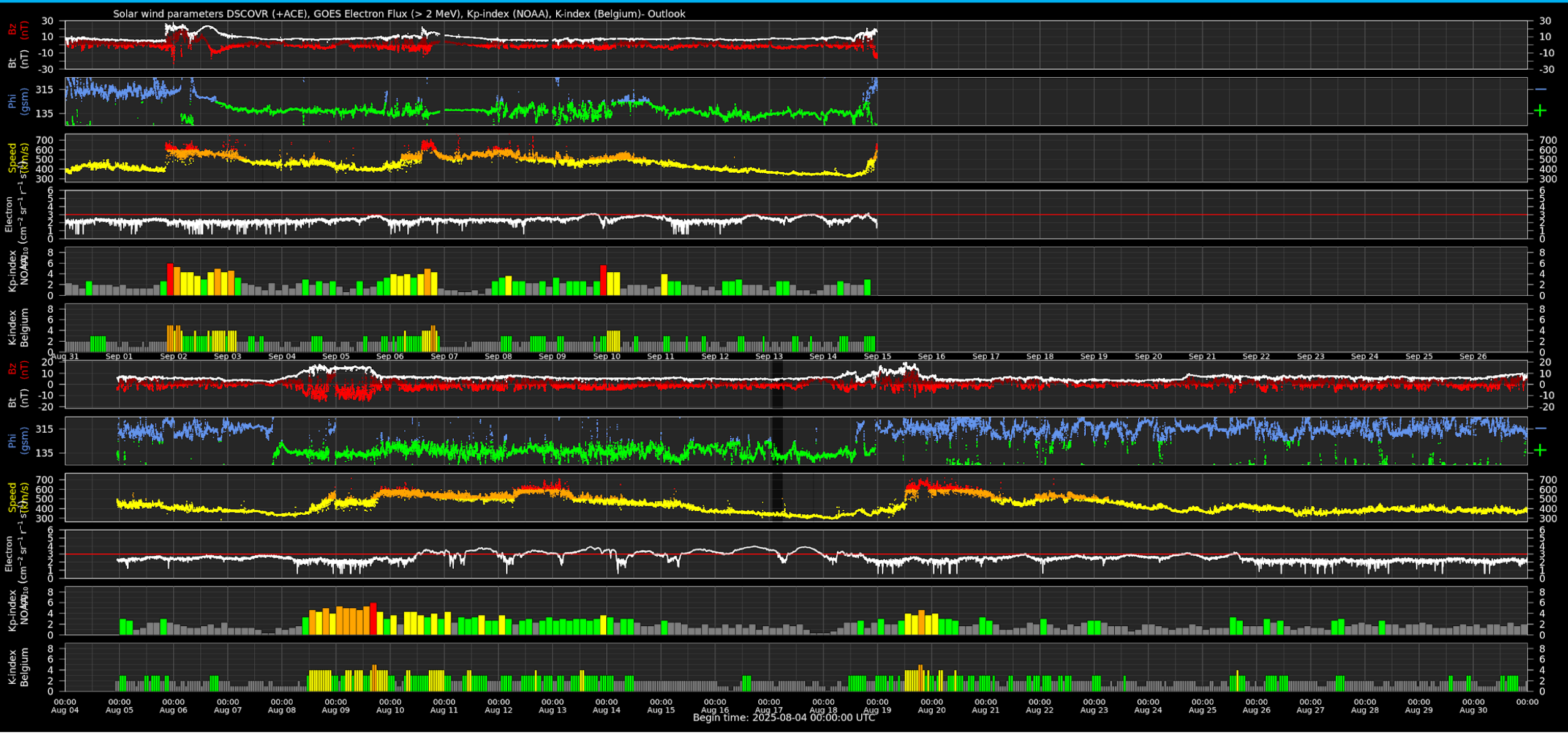
Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



PECASUS

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Pecasus related events

Several advisory issued for HF-COM/PSD

Amplitude and Phase Scintillations, Vertical TEC

See you at our next briefing!

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Some tips. Erase this slide

For Color suggestion of next slide: https://www.sidc.be/spaceweatherservices-private/data/PrefabBriefing/SWbriefing_ColorCodeSuggestion.pdf

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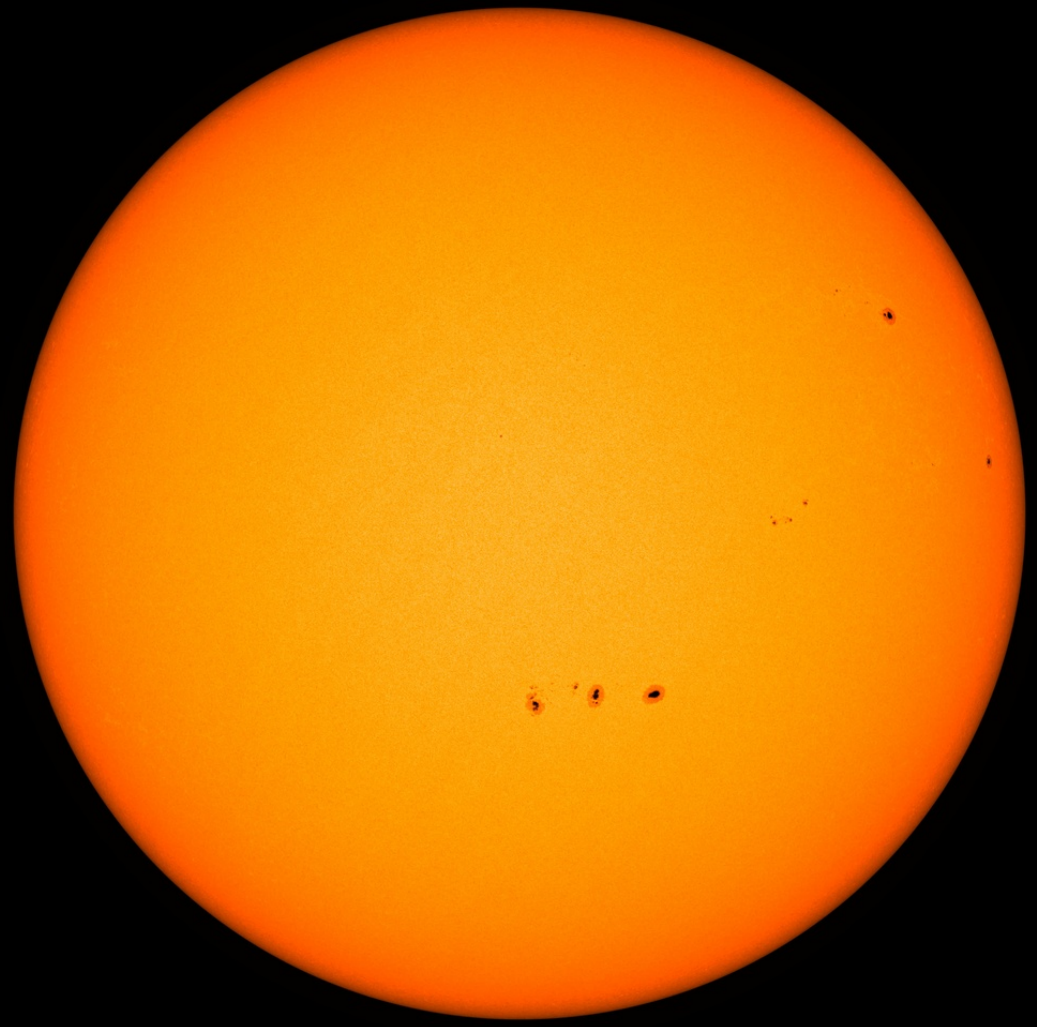
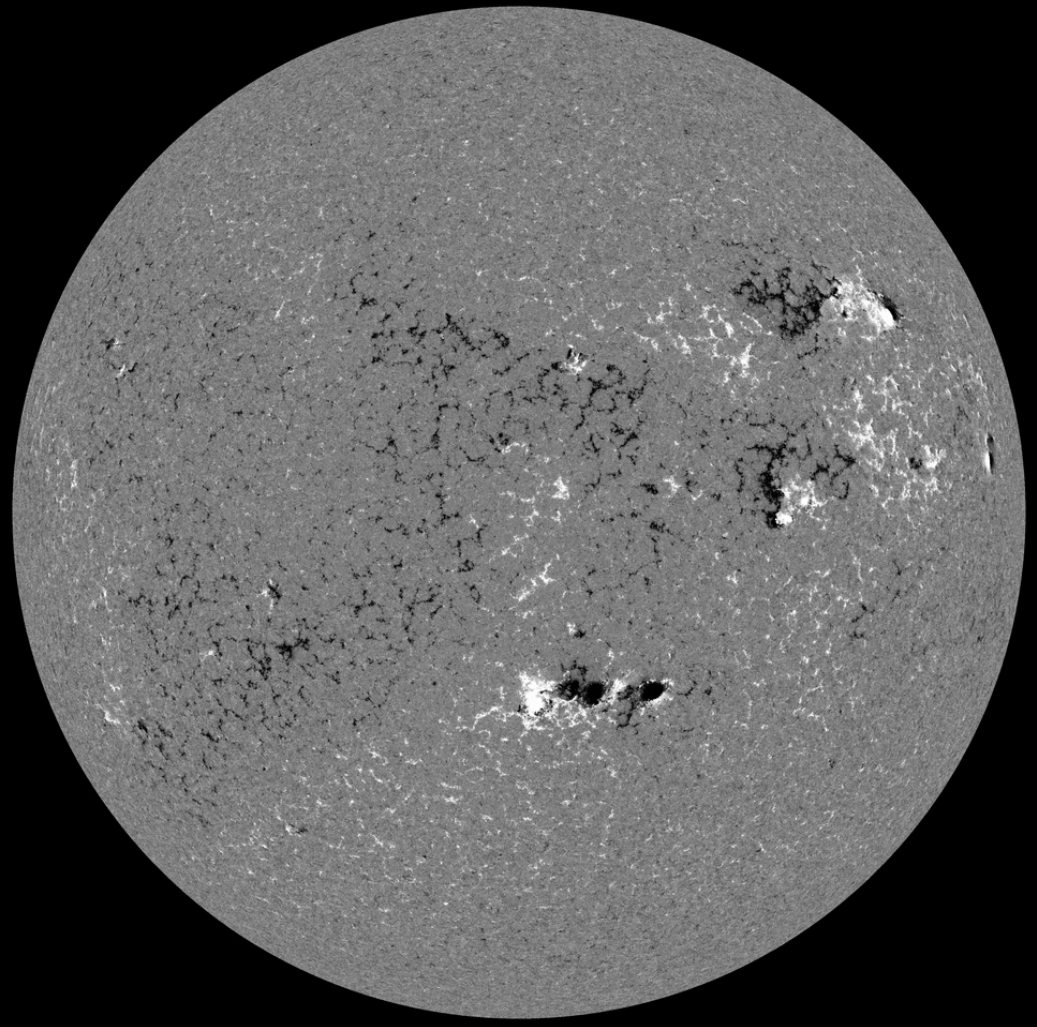
Solar active regions

SDO/HMI White Light 2025-09-09



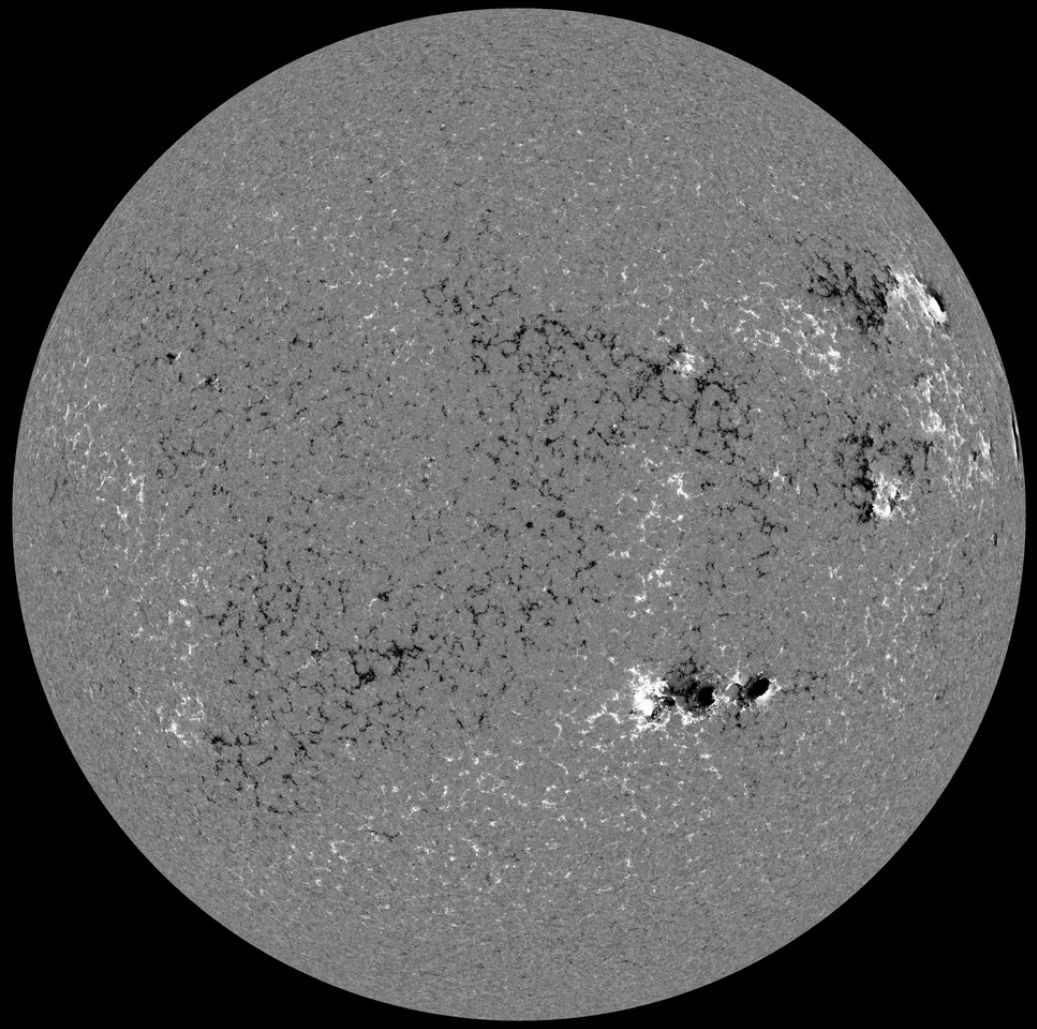
SDO/HMI Magnetogram 2025-09-09



Solar active regions

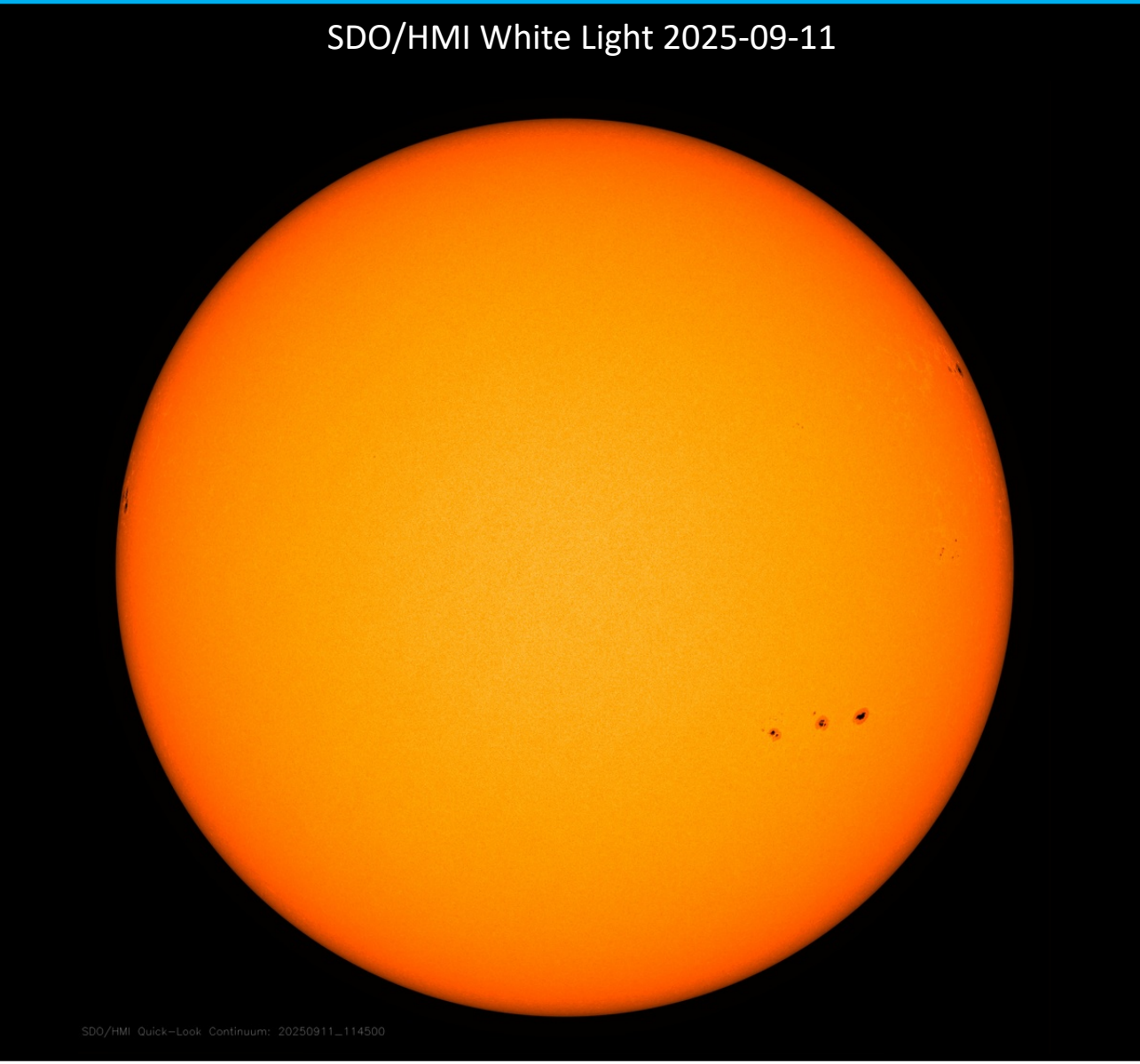
SDO/HMI White Light 2025-09-10

SDO/HMI Magnetogram 2025-09-10

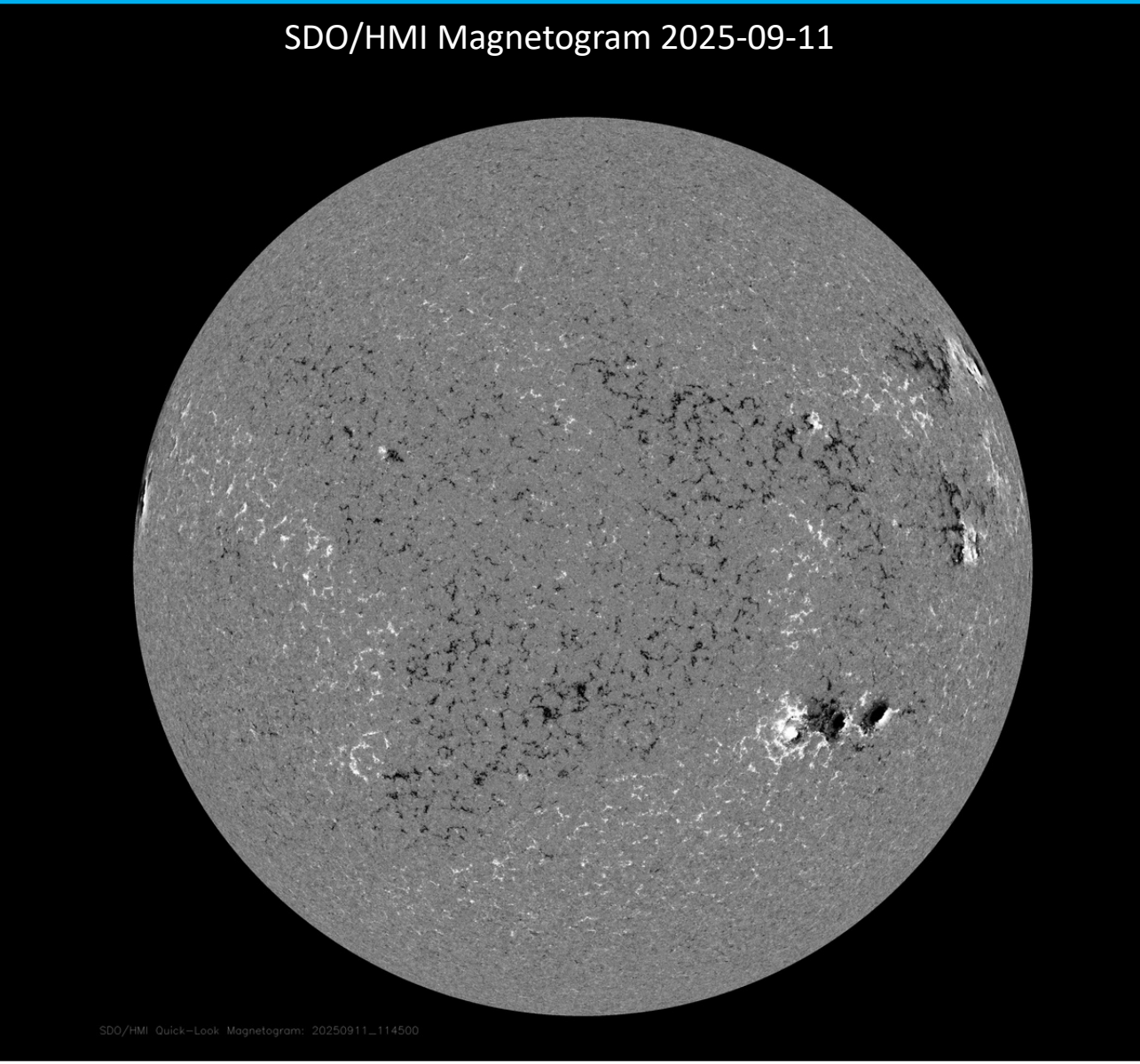


Solar active regions

SDO/HMI White Light 2025-09-11

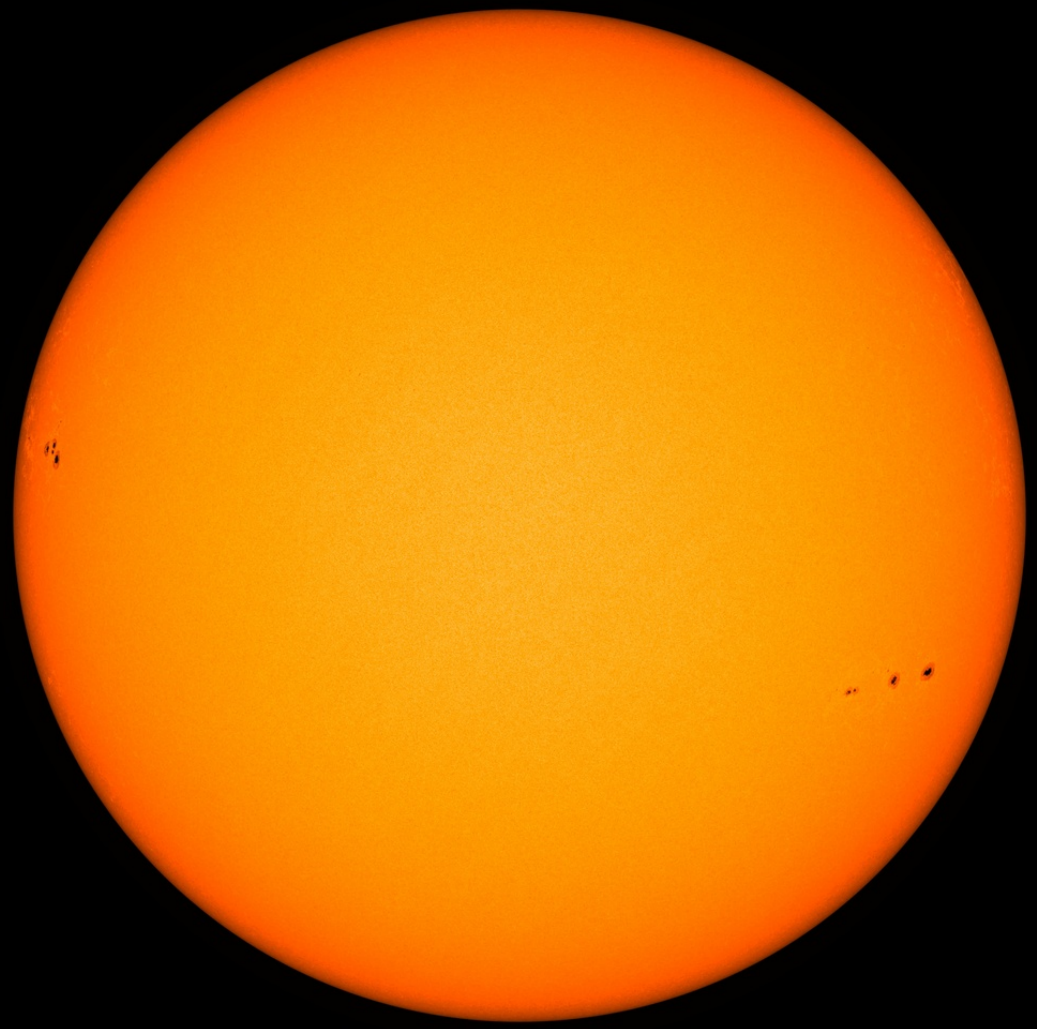


SDO/HMI Magnetogram 2025-09-11



Solar active regions

SDO/HMI White Light 2025-09-12



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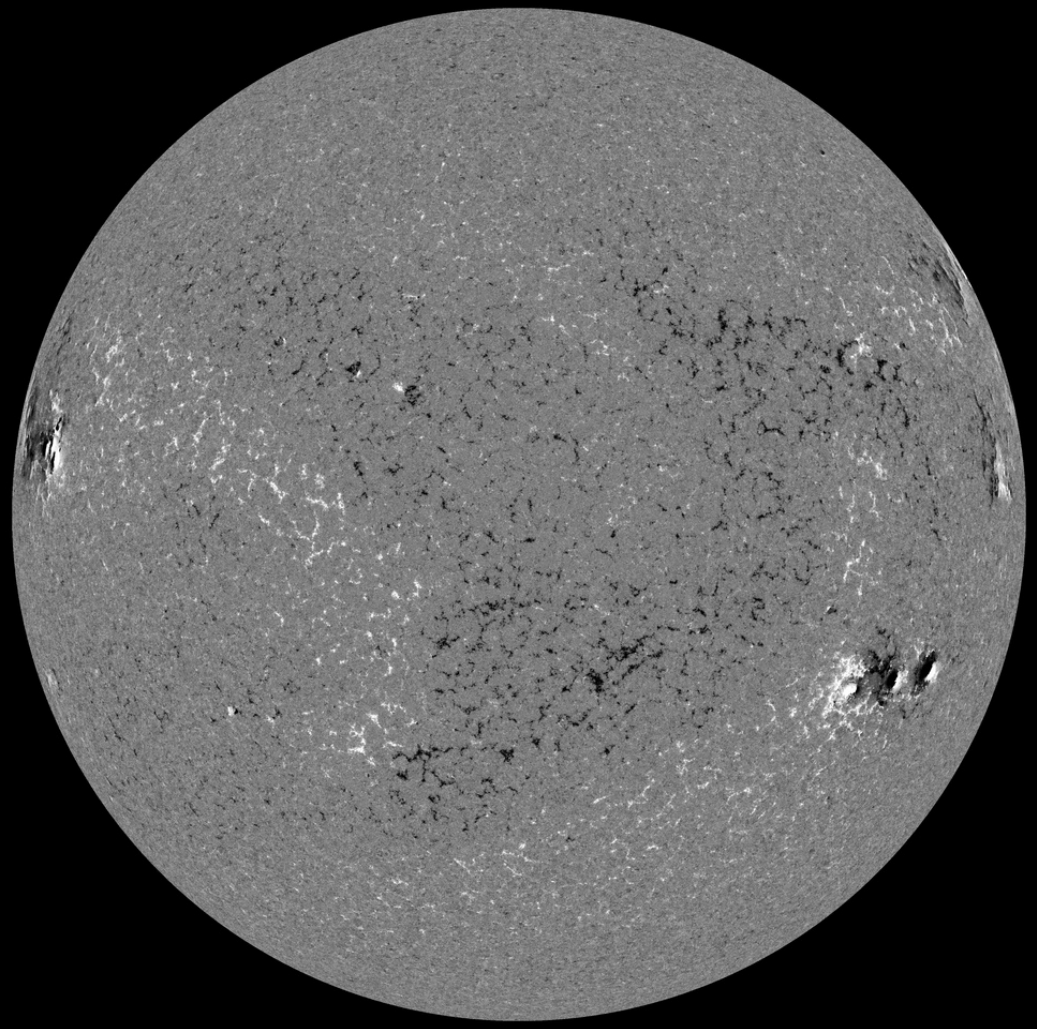
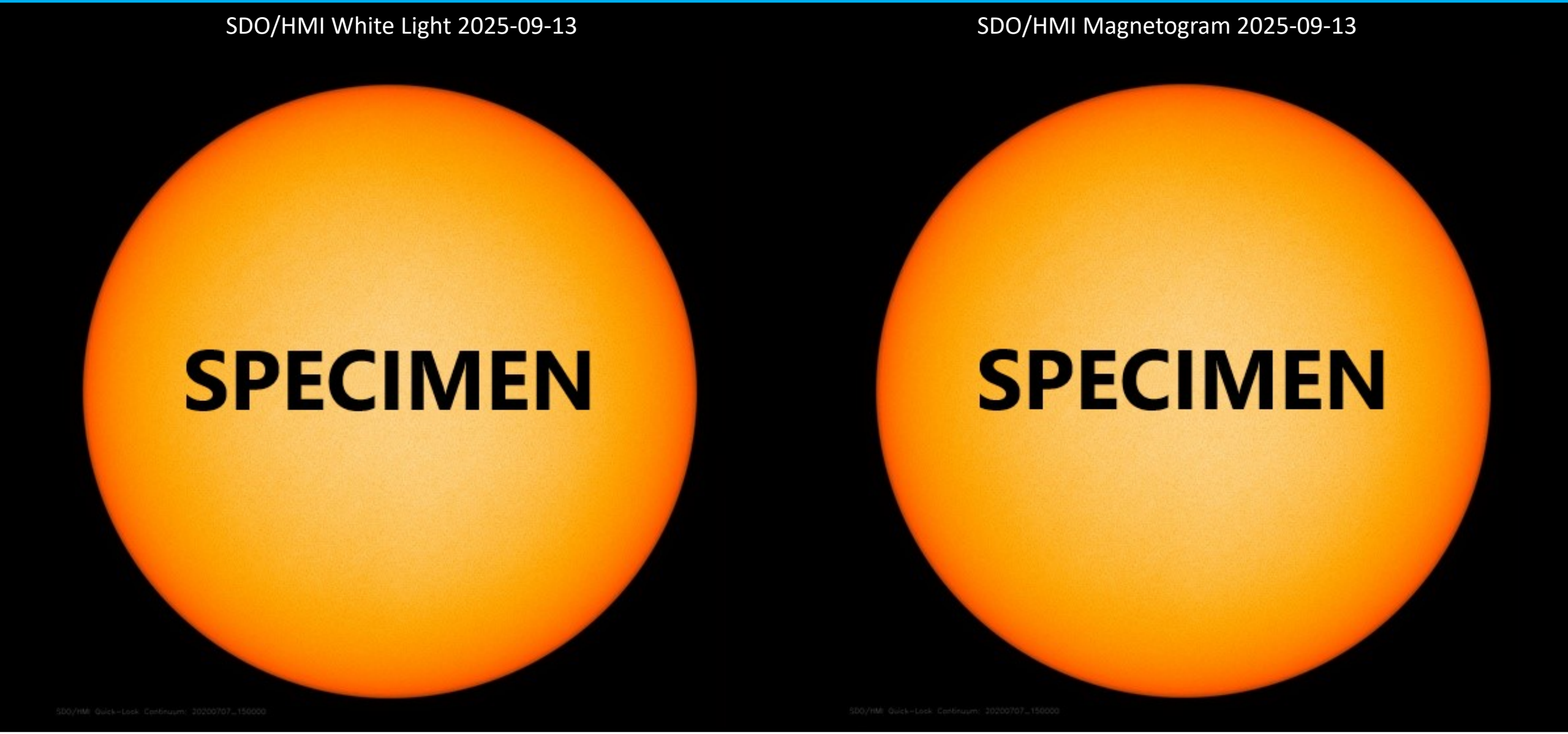


Solar active regions

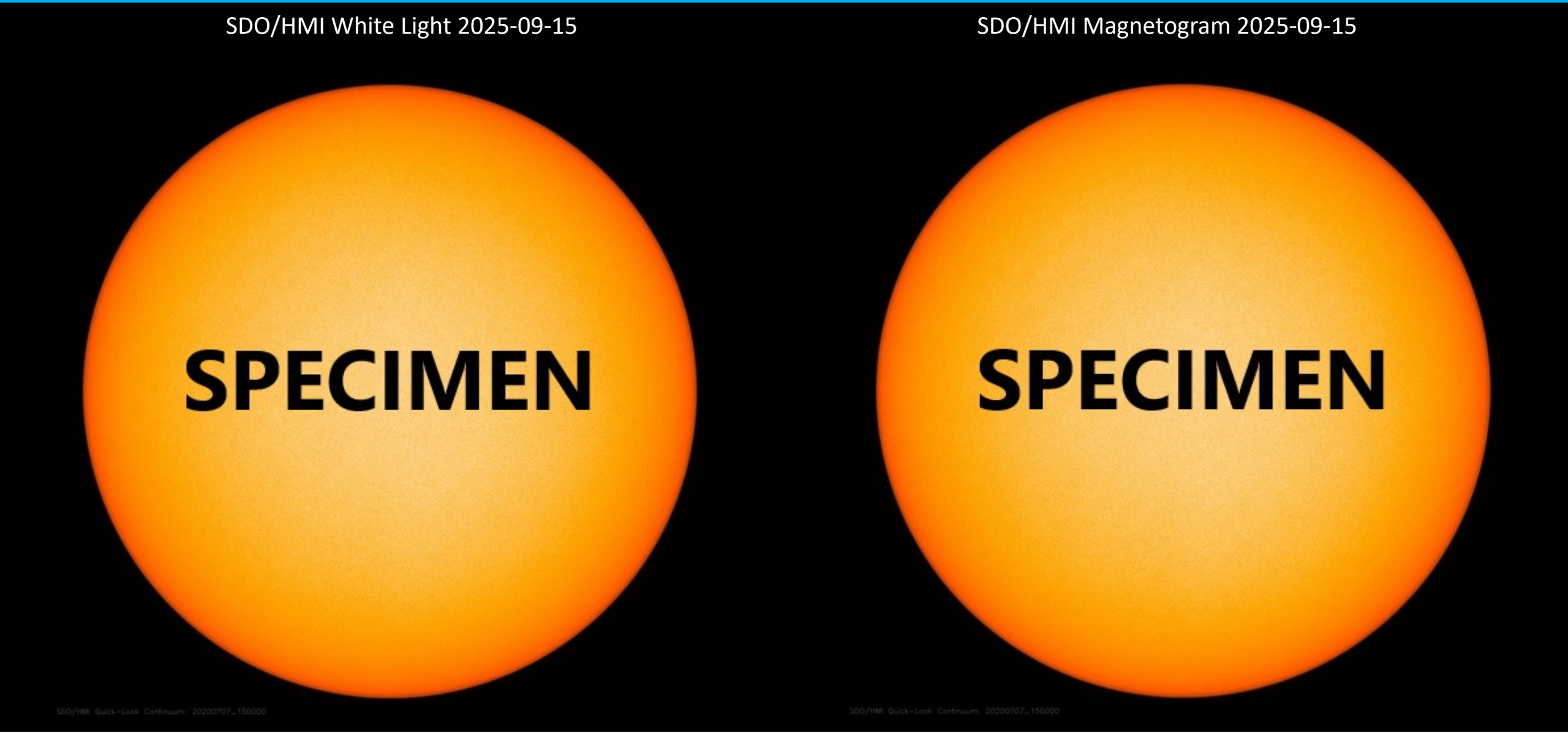
SDO/HMI White Light 2025-09-13



SDO/HMI Magnetogram 2025-09-13

Solar active regions

SDO/HMI White Light 2025-09-15



SDO/HMI Magnetogram 2025-09-15

Coronal holes

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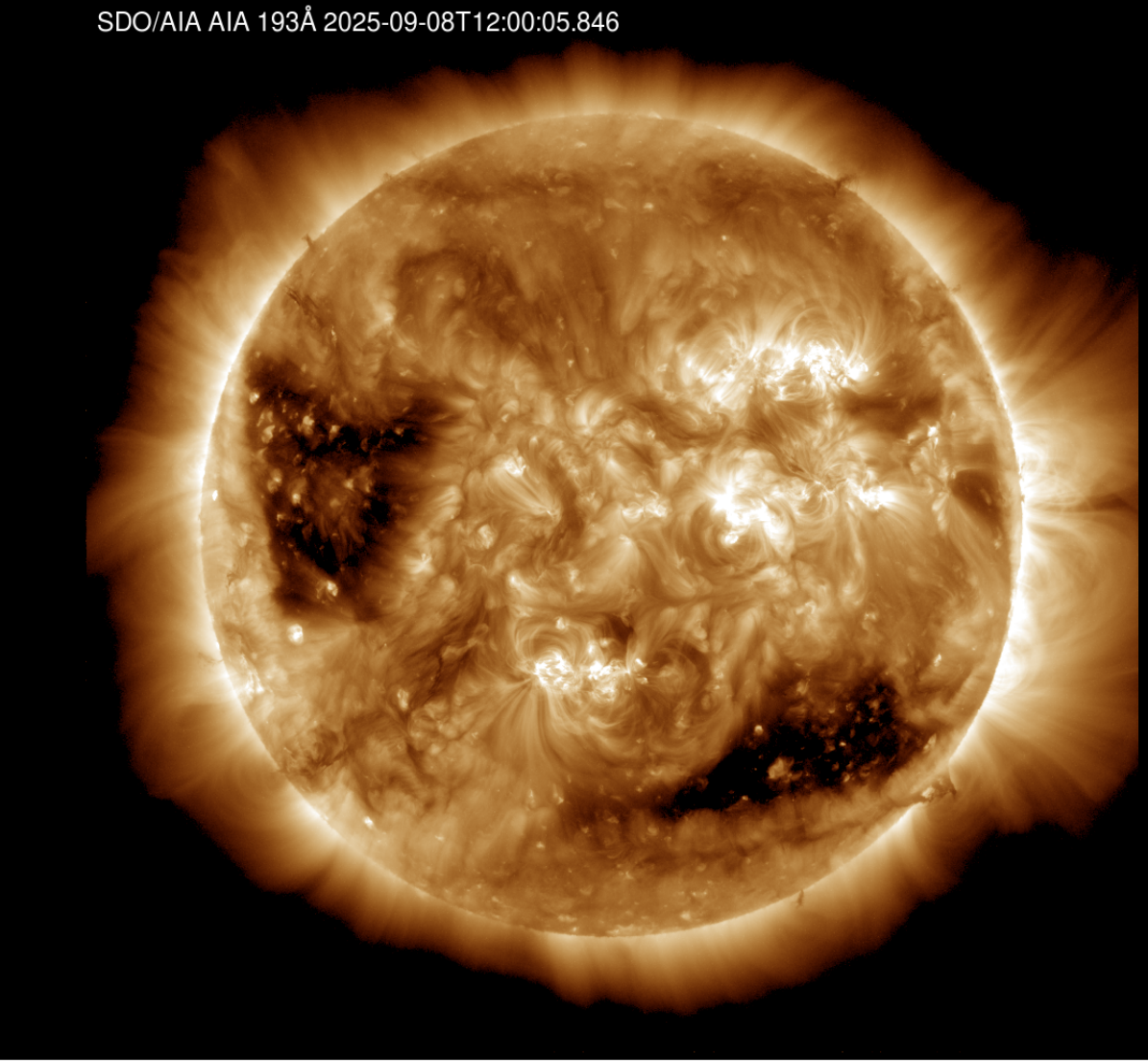
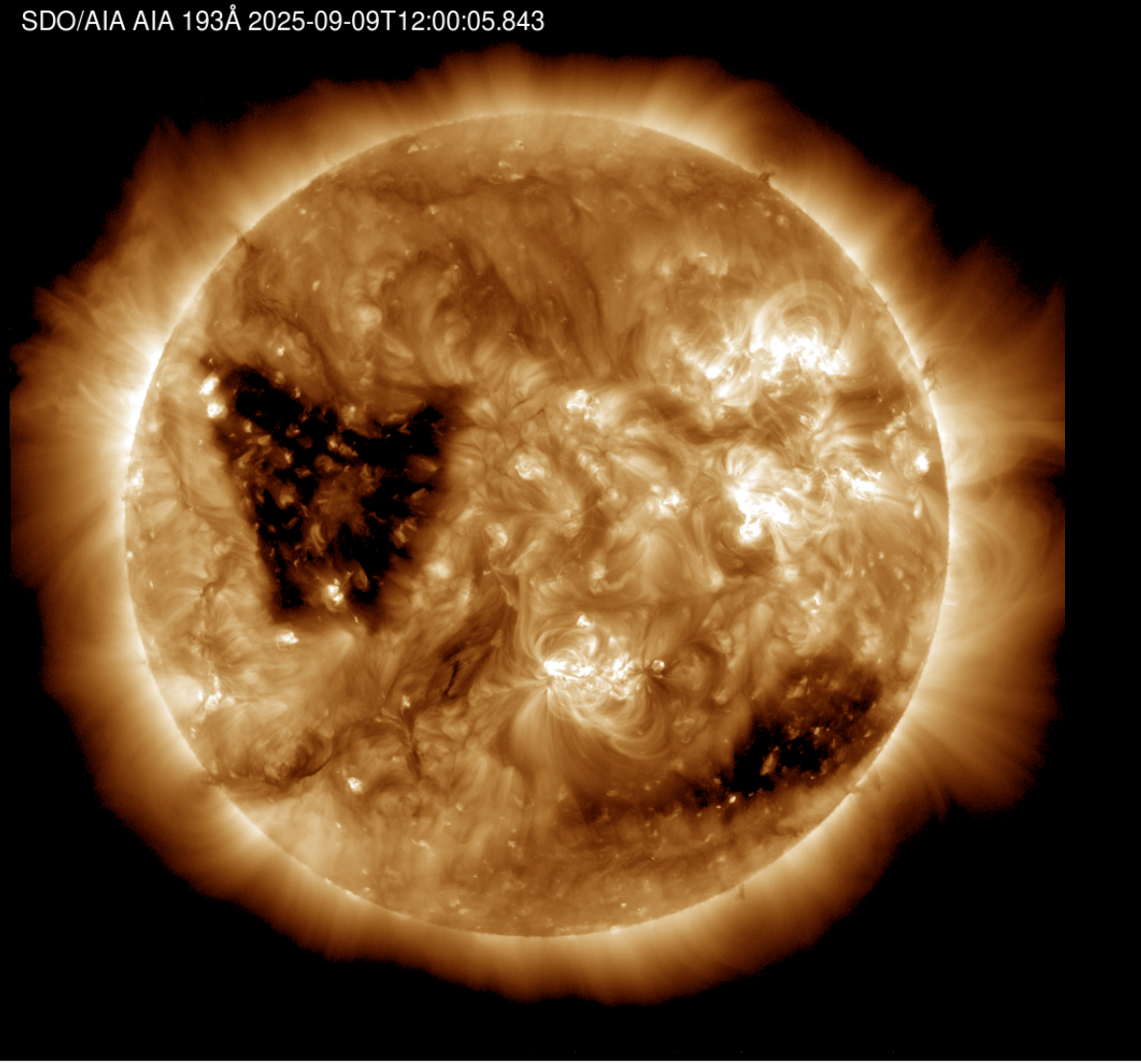
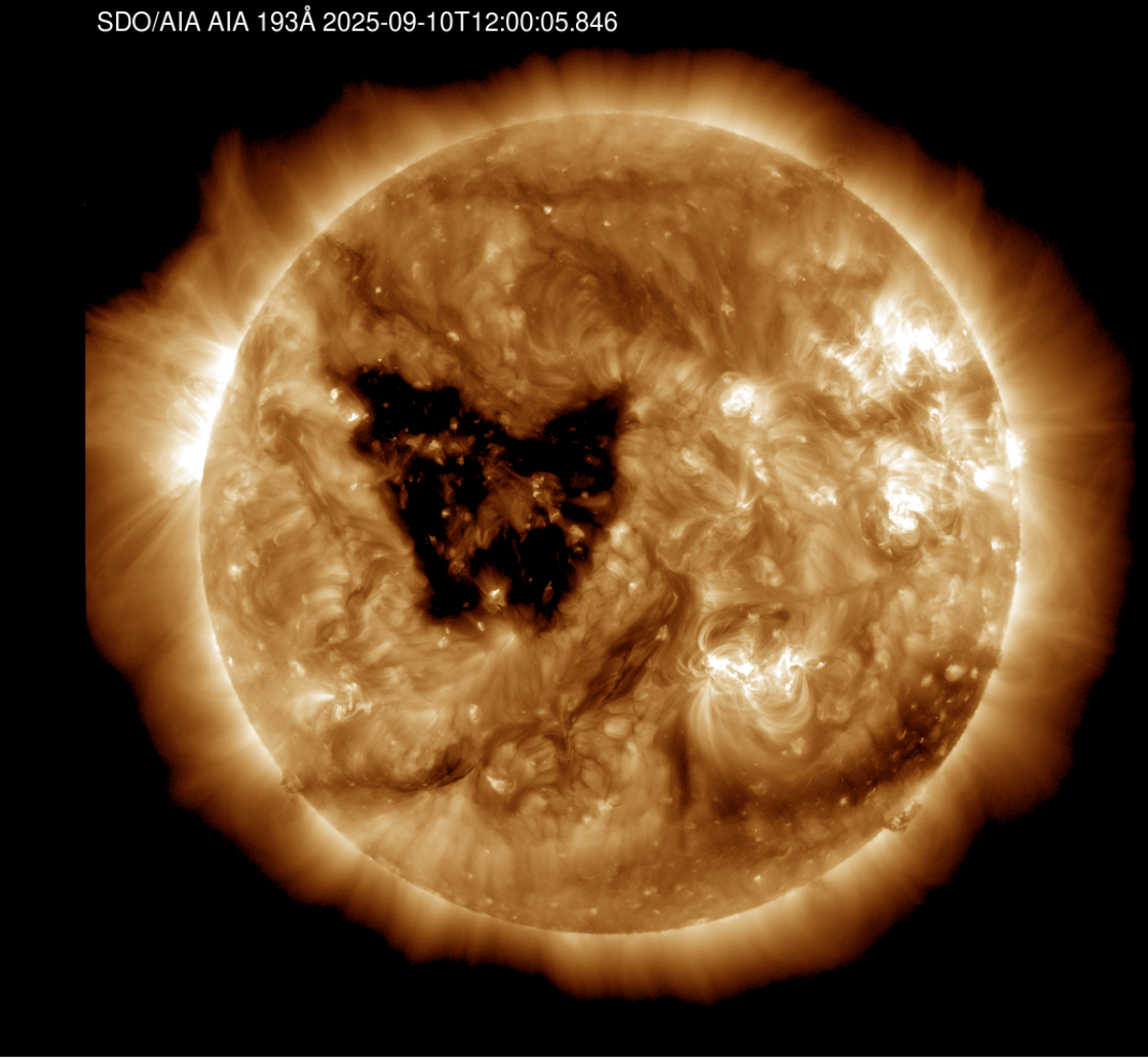


SDO/AIA 19.3 nm 2025-09-09



Coronal holes

SDO/AIA 19.3 nm 2025-09-10



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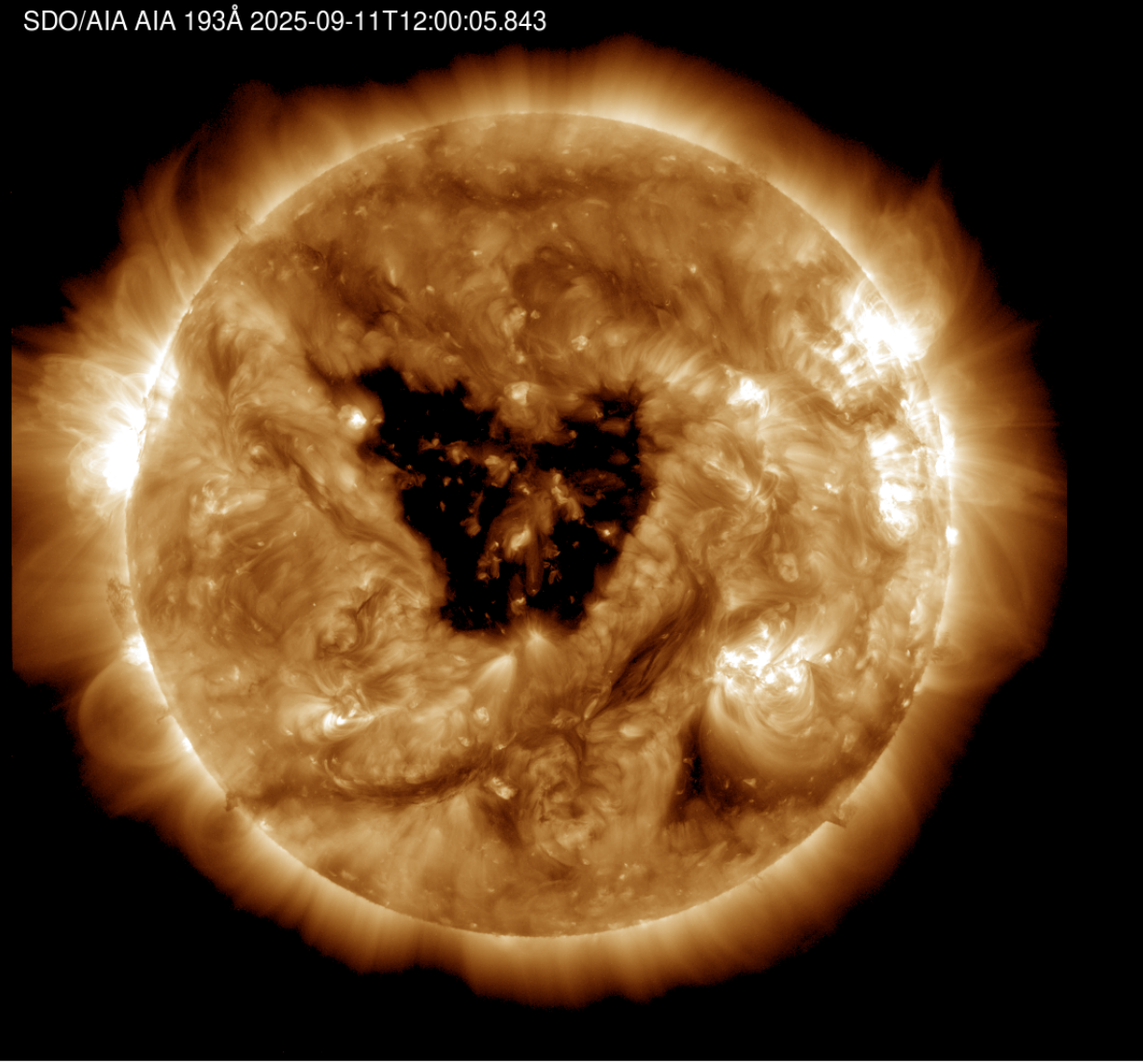

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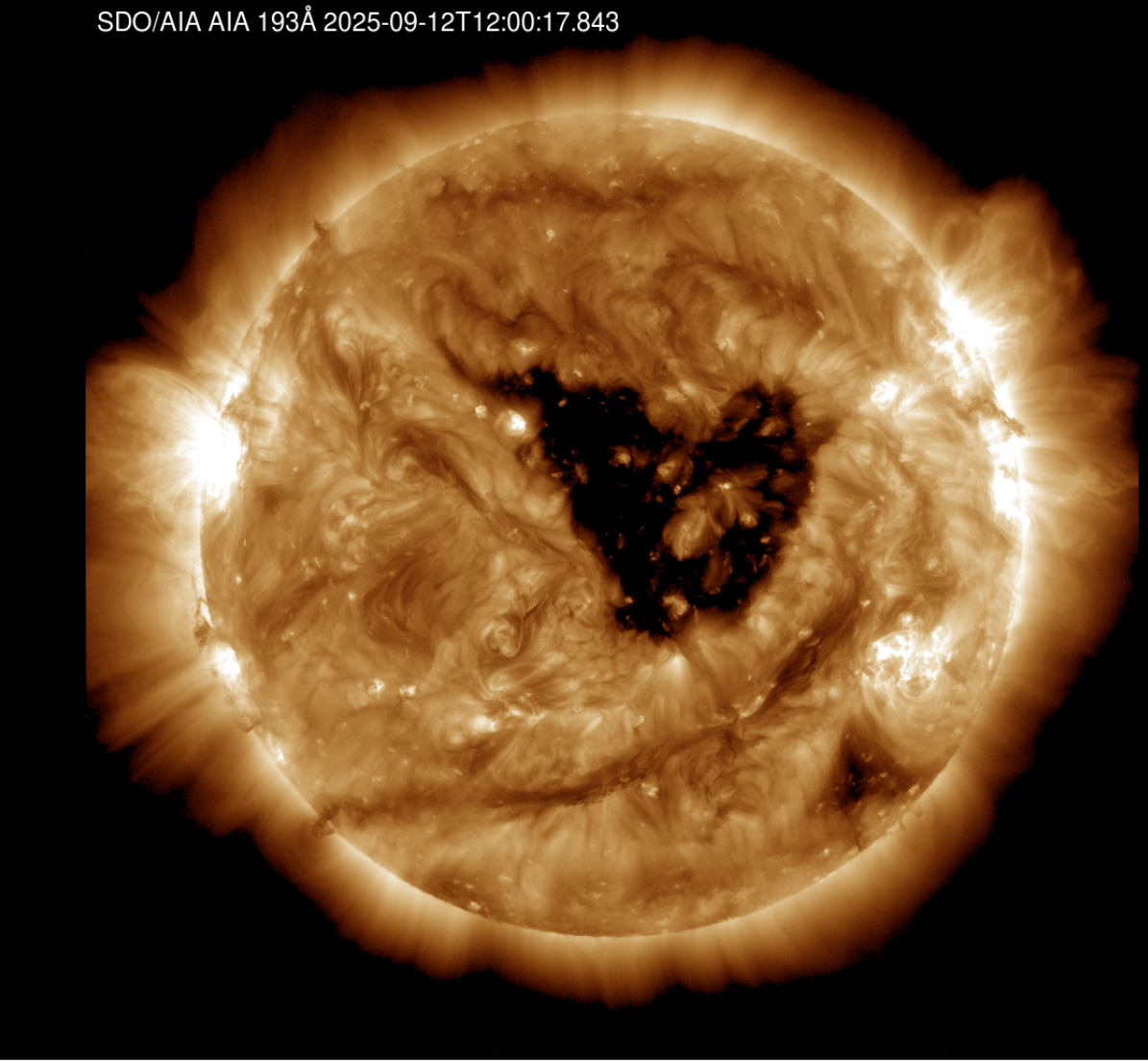
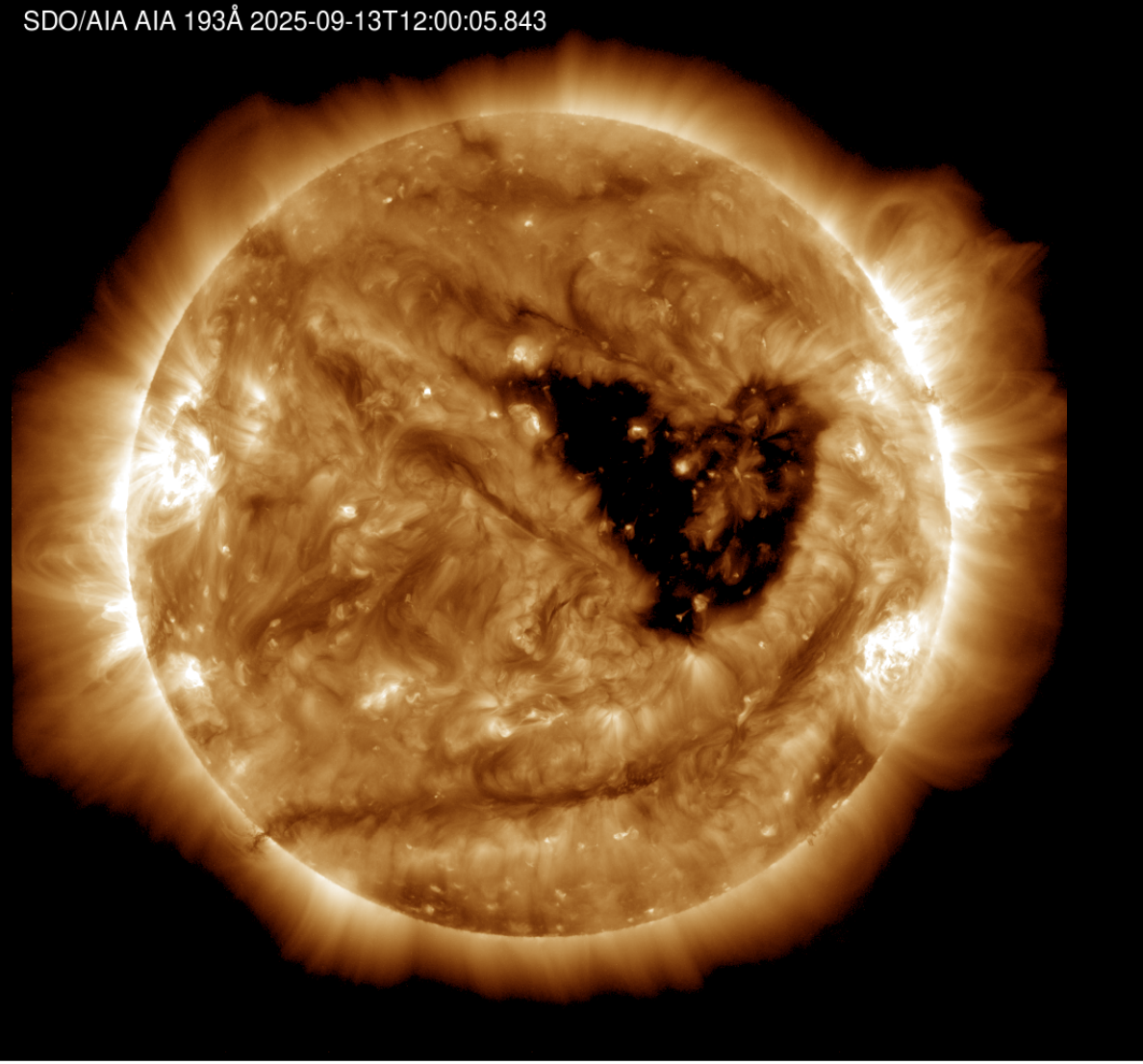
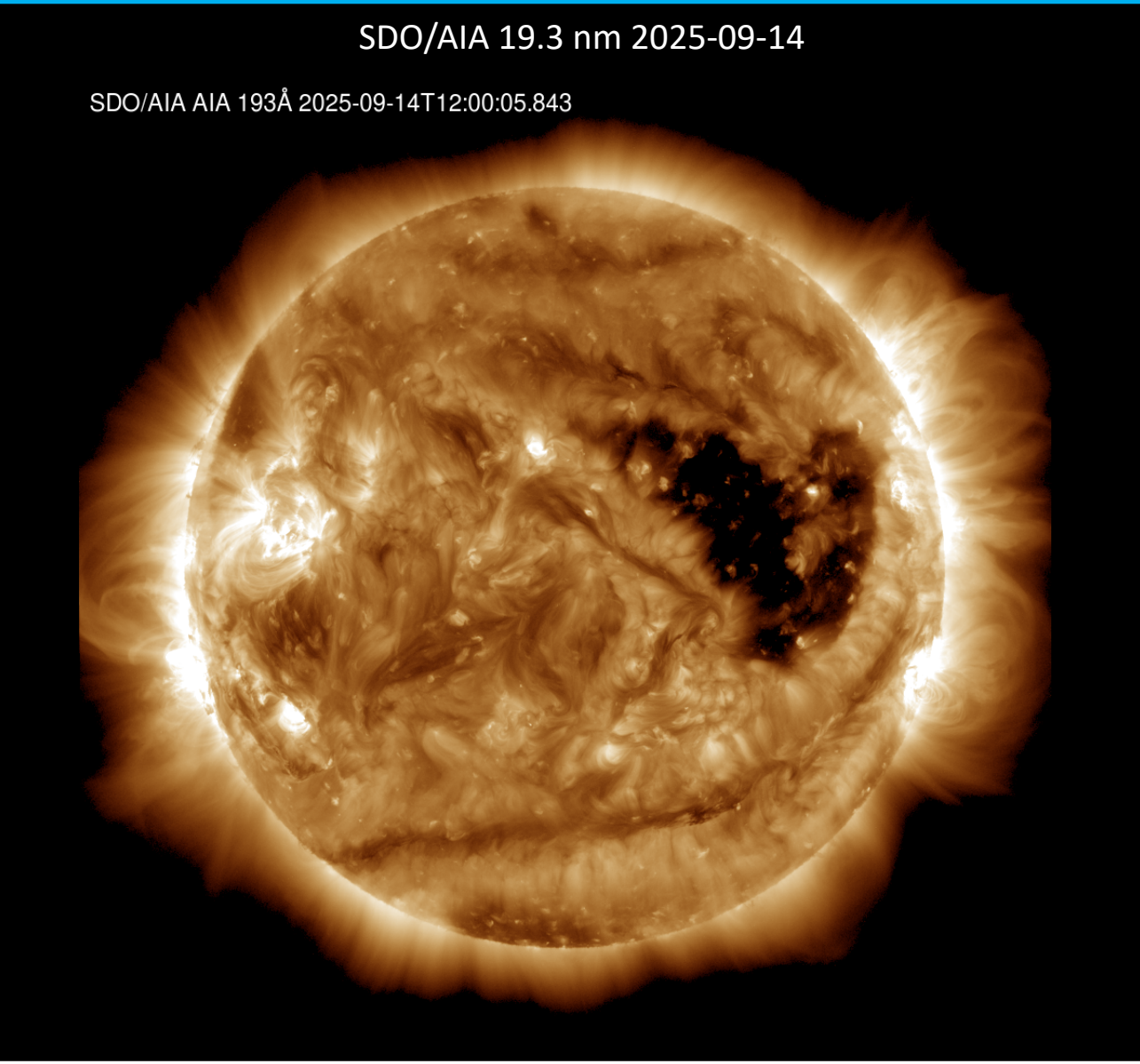


SDO/AIA 19.3 nm 2025-09-13

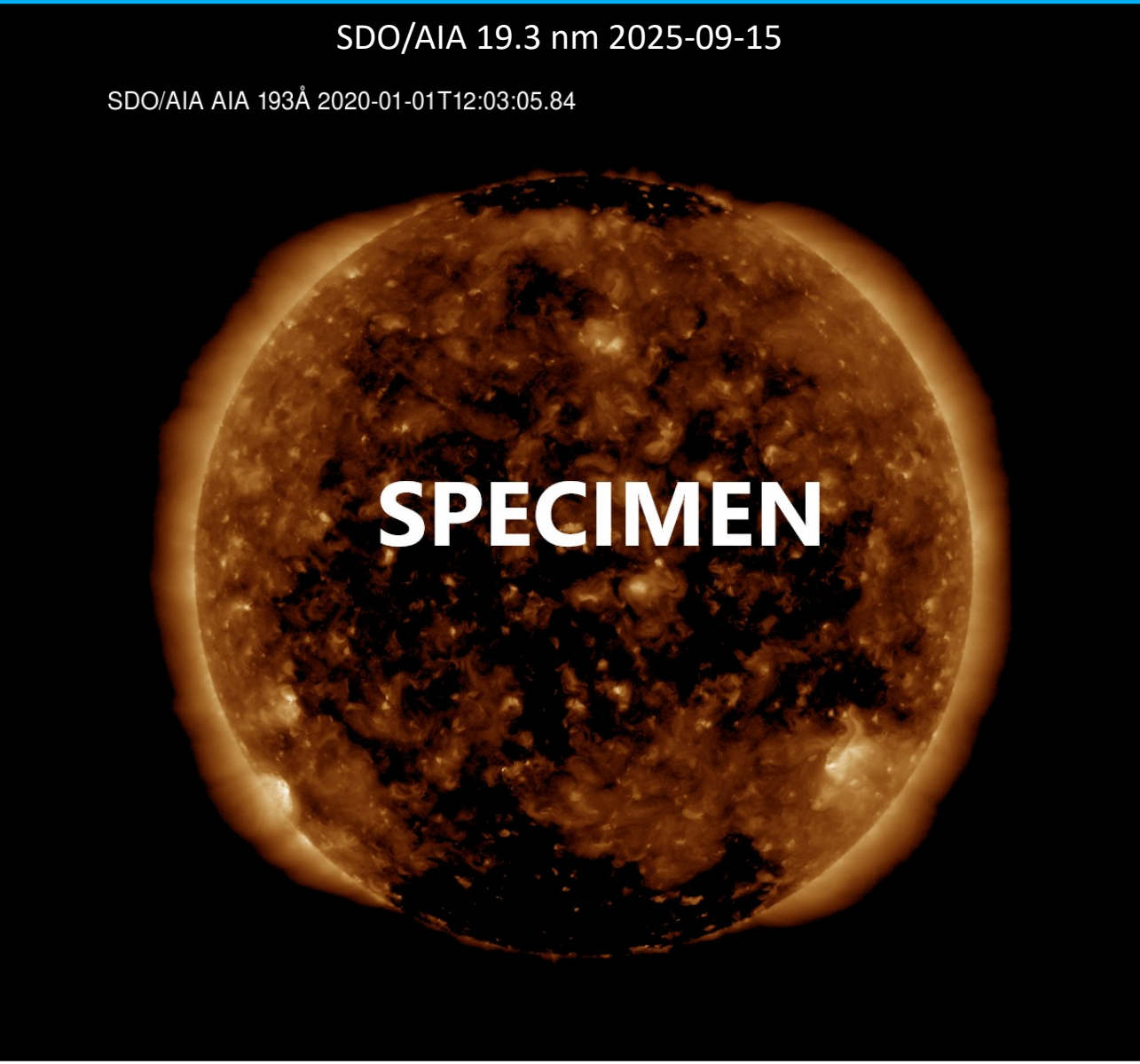


Coronal holes

SDO/AIA 19.3 nm 2025-09-14



SDO/AIA 19.3 nm 2025-09-15



Filaments

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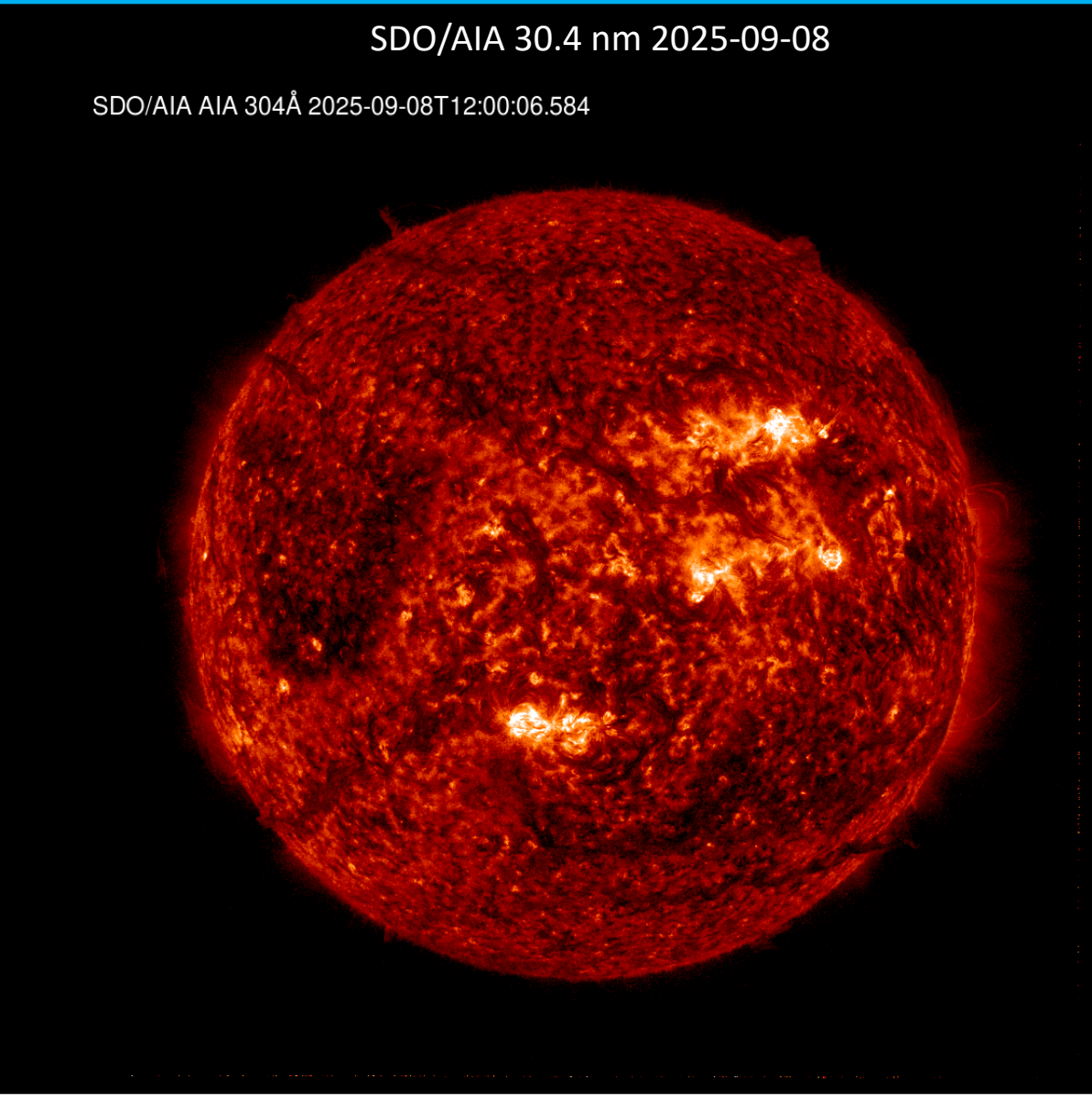

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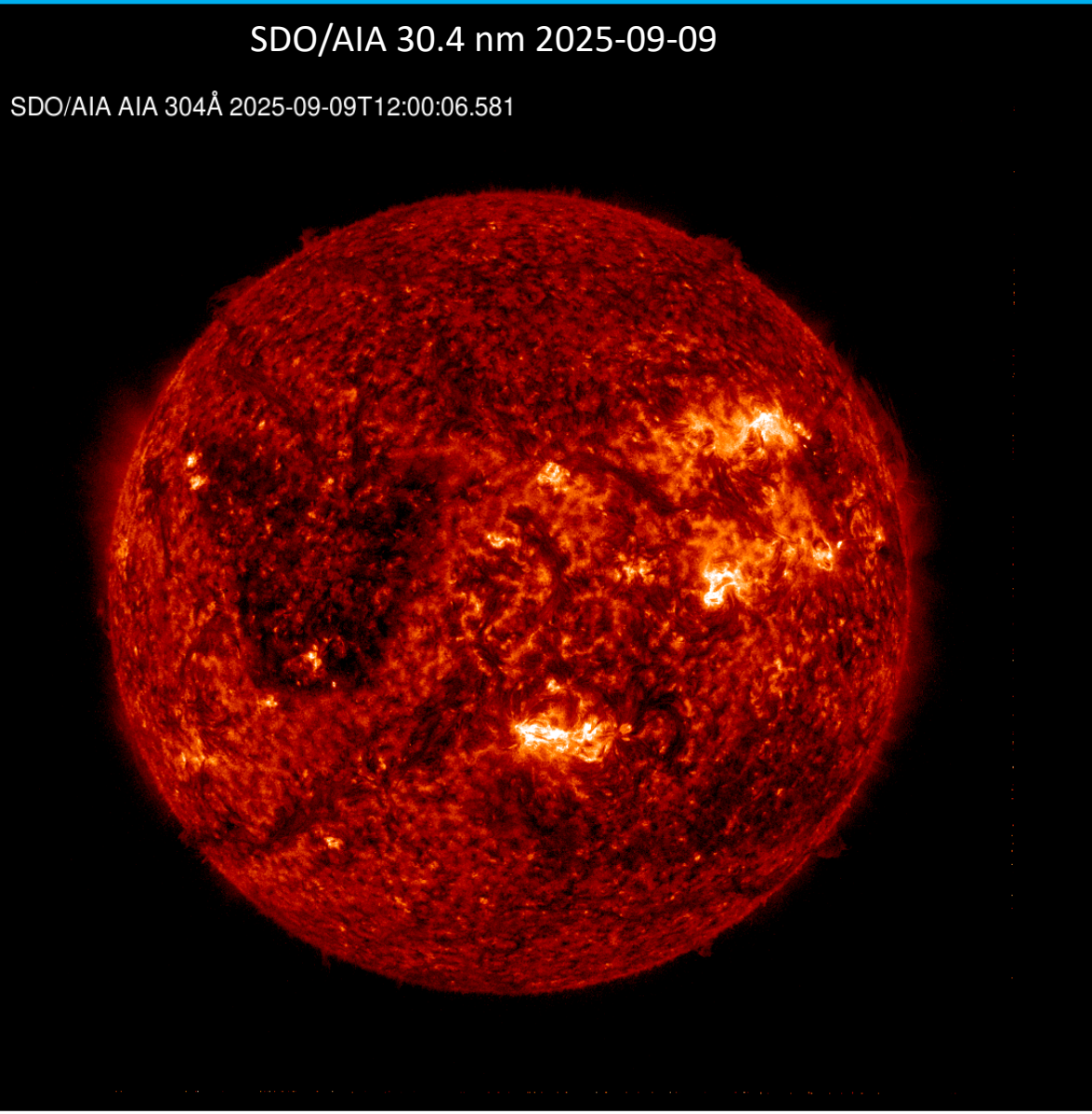
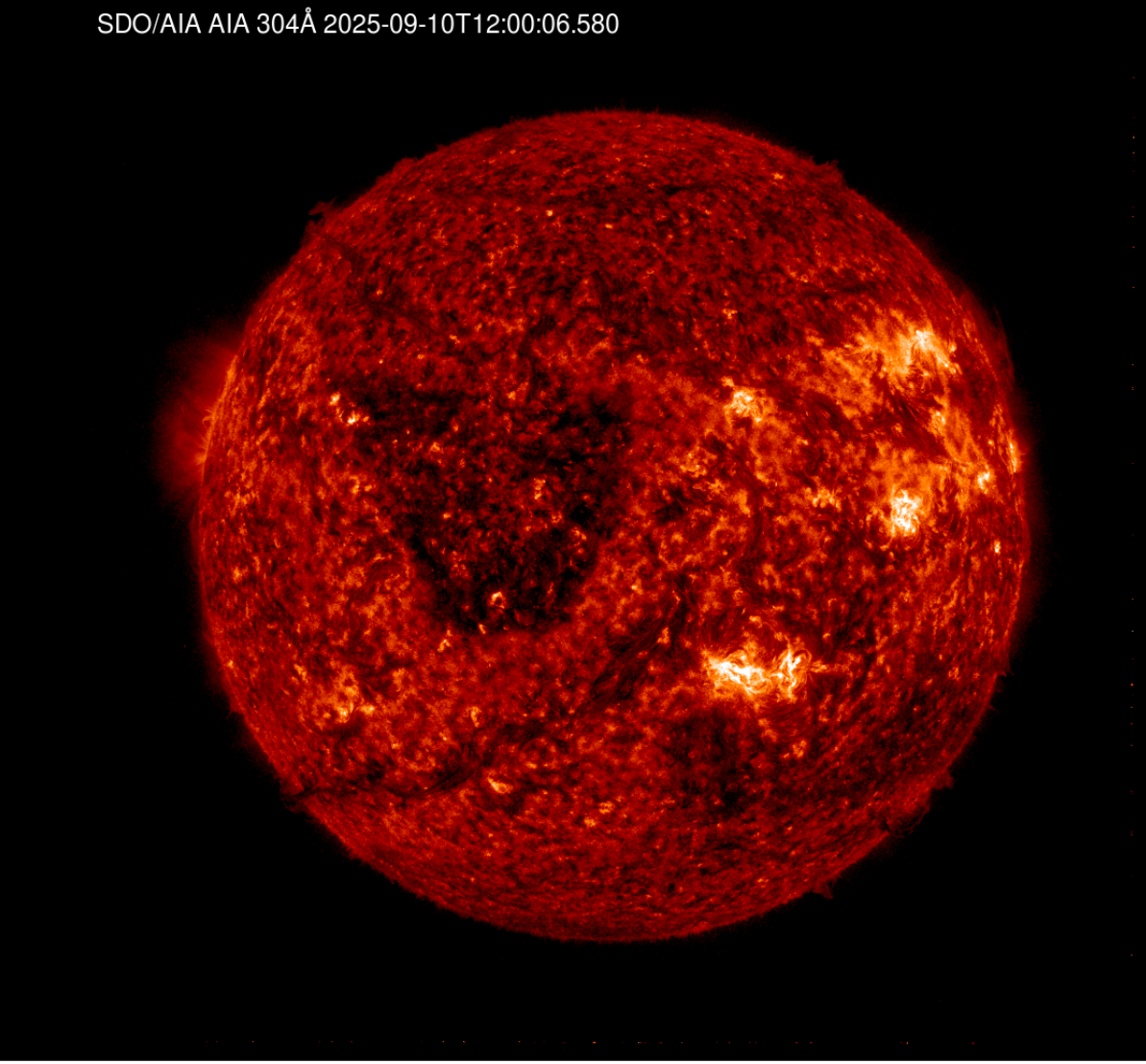
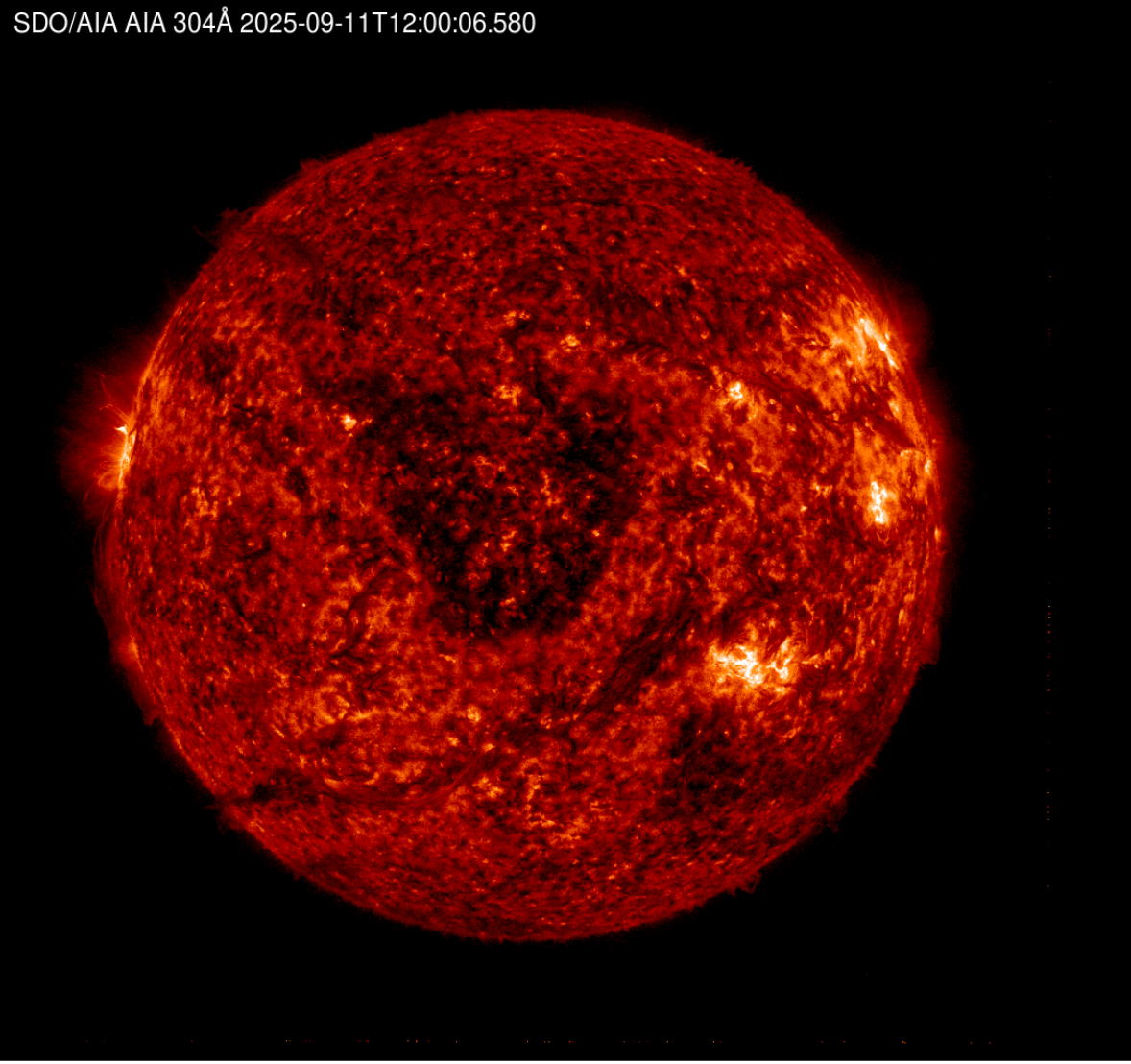


Filaments

SDO/AIA 30.4 nm 2025-09-10

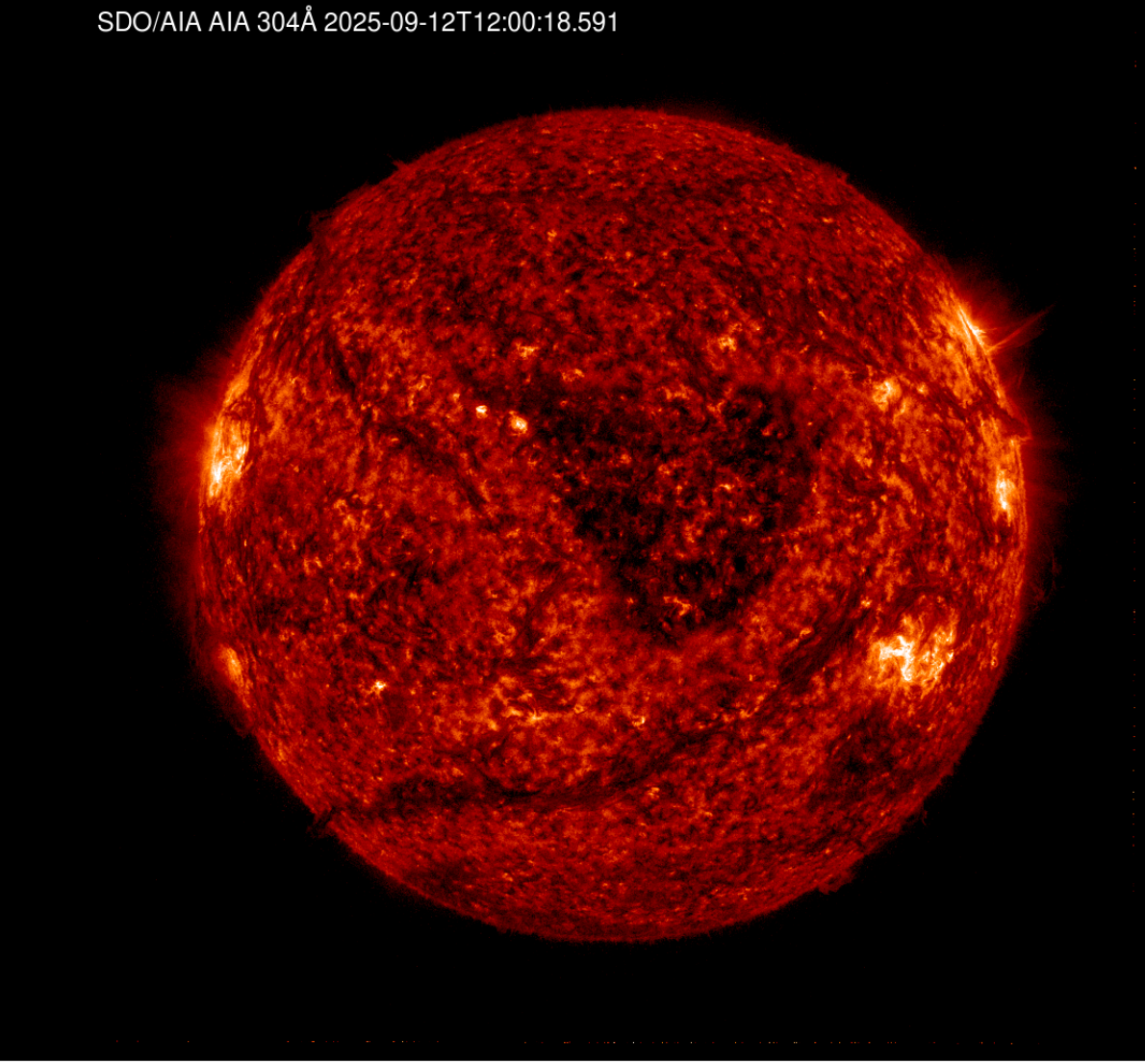


SDO/AIA 30.4 nm 2025-09-11

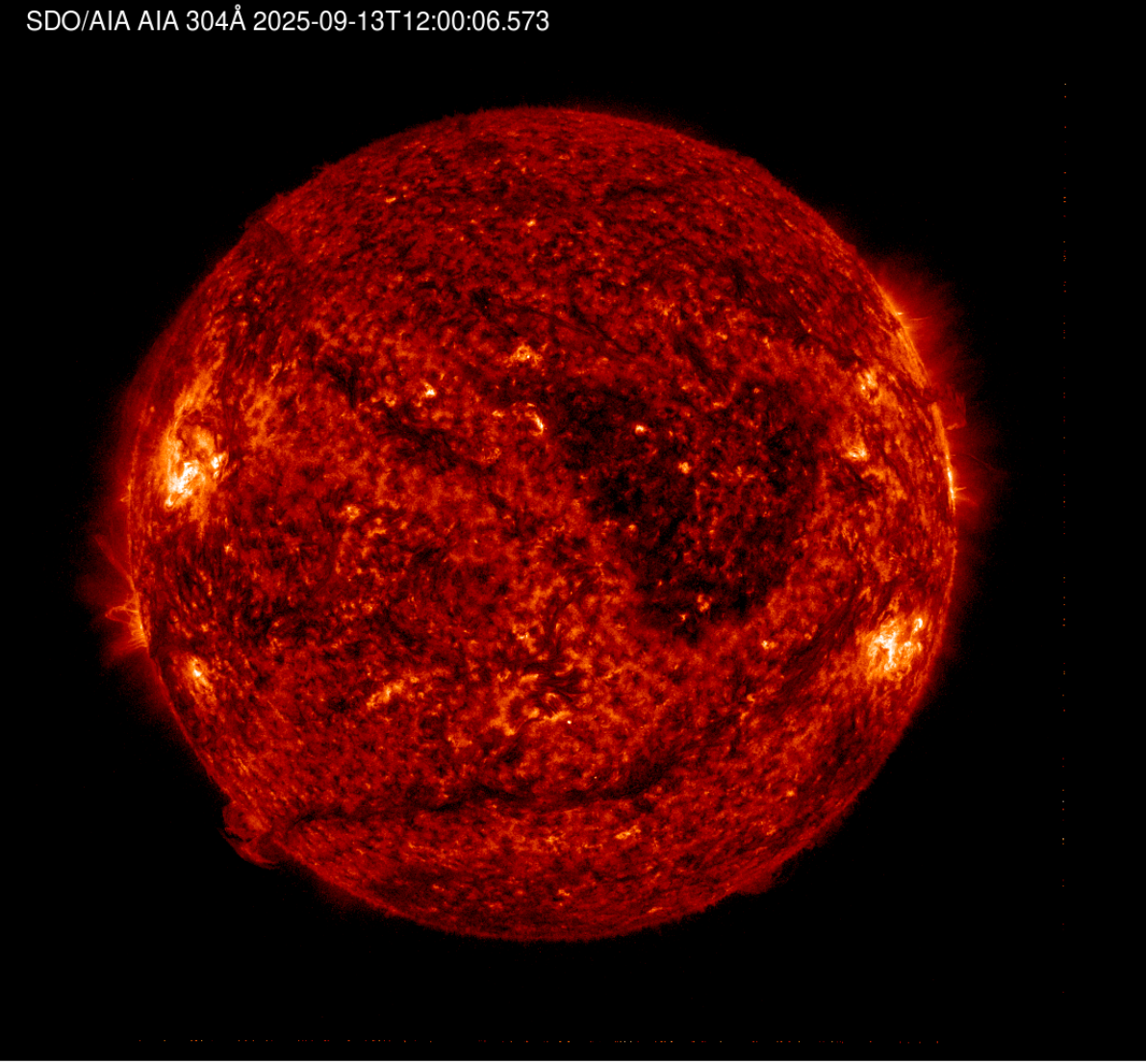


Filaments

SDO/AIA 30.4 nm 2025-09-12

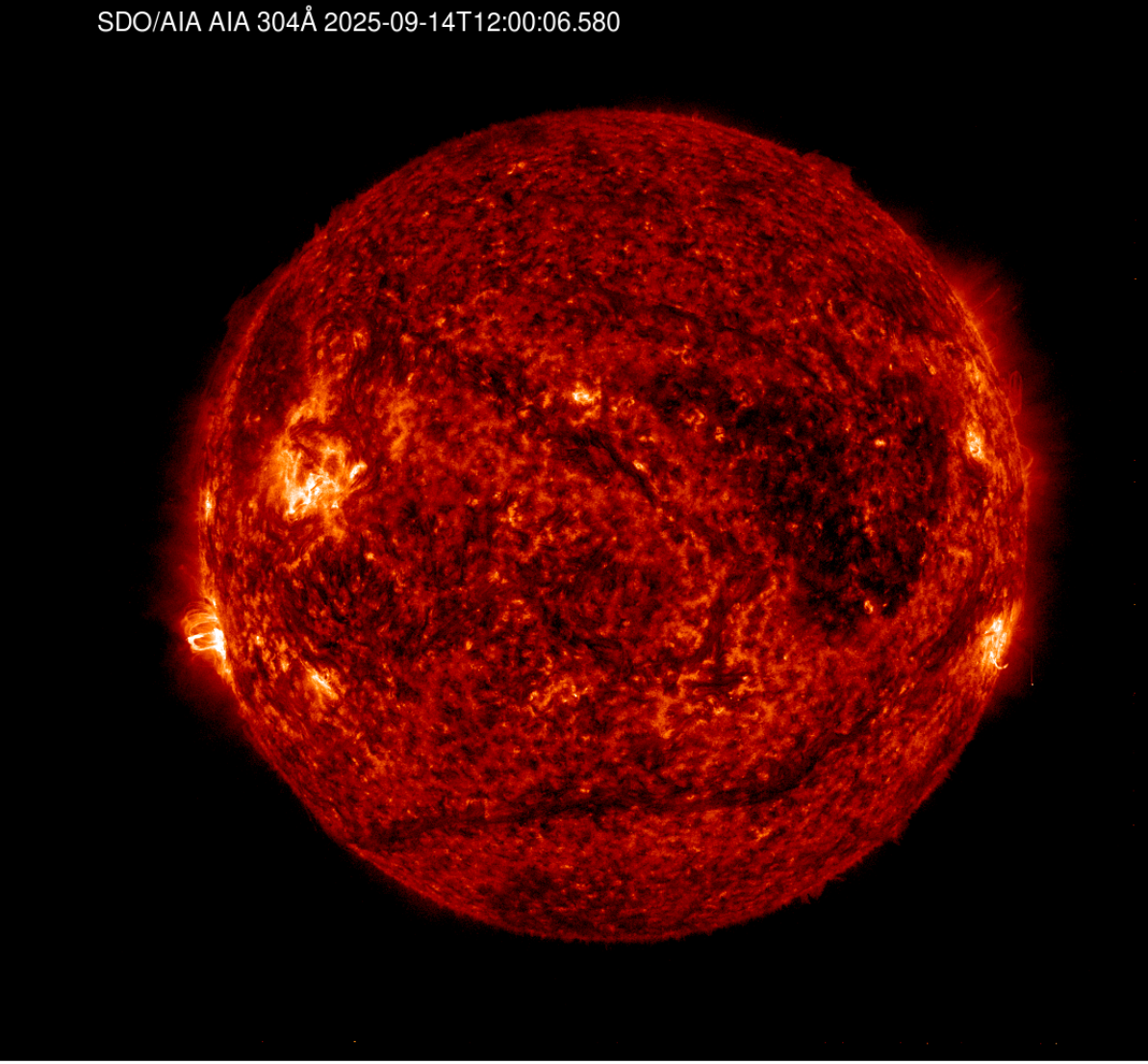


SDO/AIA 30.4 nm 2025-09-13



Filaments

SDO/AIA 30.4 nm 2025-09-14



SDO/AIA 30.4 nm 2025-09-15