

SIDC Space Weather Briefing

04 August 2025-10 August 2025

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& the SIDC forecaster team



Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2025-08-04 00:00 to 2025-08-10 23:59

Active regions	22 ARs / Most interesting: SIDC 588 / NOAA 4168 ($\beta\gamma\delta$)
Flares	# C-class flare: 49 # M-class flare: 14 # X-class flare: 0
Coronal Holes	SIDC CH 123,124,125 (all positive)
CMEs	Many / 1 potentially Earth-directed / 1 low confidence glancing blow

Proton flux	Nominal
Electron flux	Exceeded 1000pfu threshold

Solar wind and geomagnetic conditions

ICMEs	One (August 09) – embedded in the HSS
Solar wind conditions	B : 1.38 - 17.84 nT //Bz: -15.41 nT to 13.91 nT //Speed: 285.9 – 600 km/s
Geomagnetic conditions	max K _{Be} : 5.0, max K _p (NOAA): 6.0, Moderate Storm conditions

All Quiet Alert: Off

Solar Activity

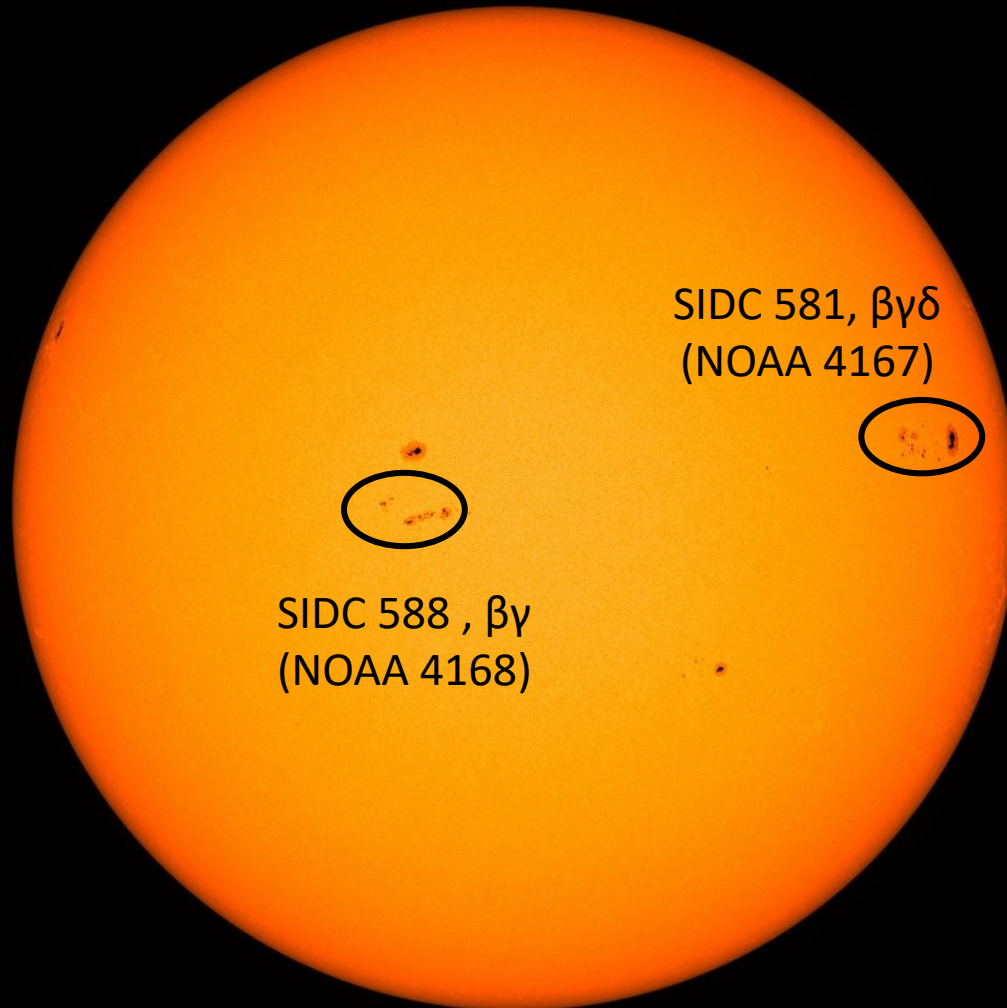


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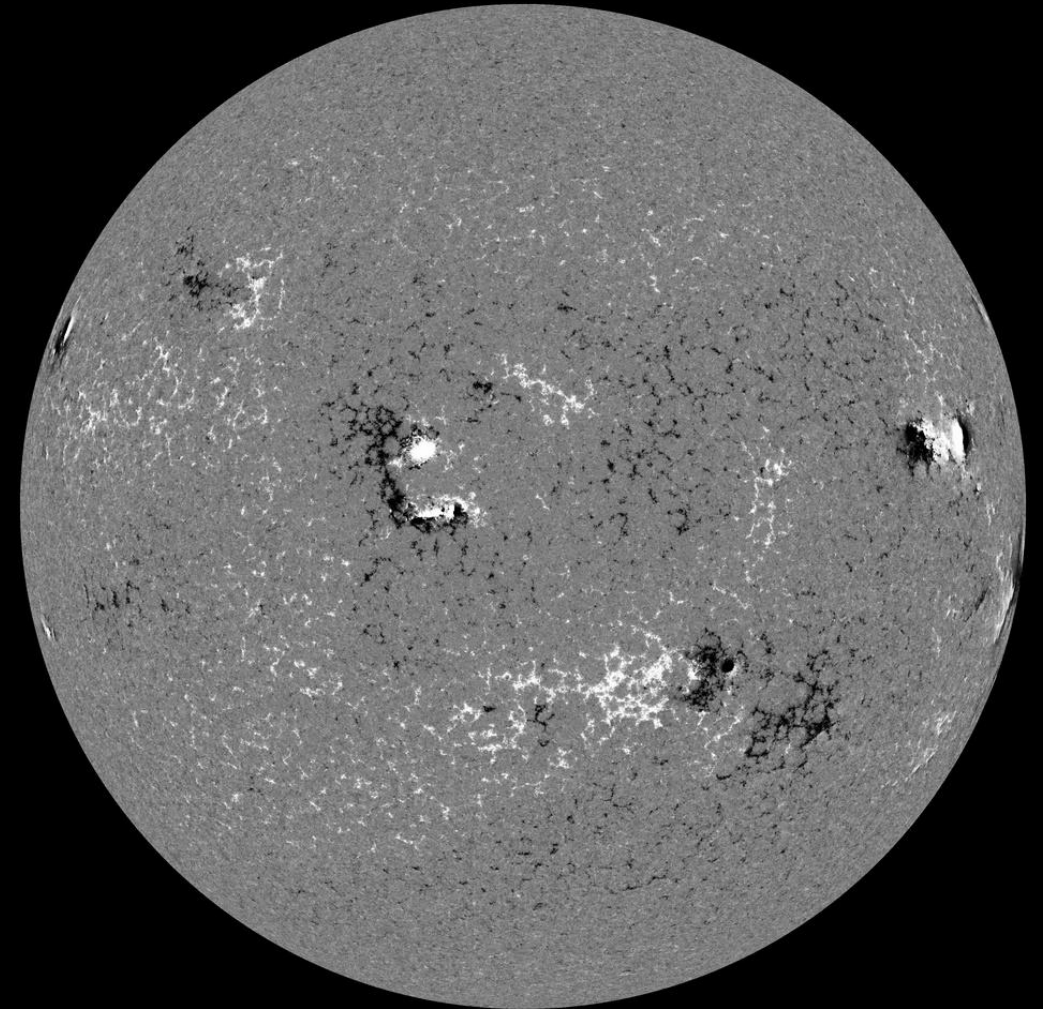
Solar active regions

SDO/HMI White Light 2025-08-04



SDO/HMI Quick-Look Continuum: 20250804_114500

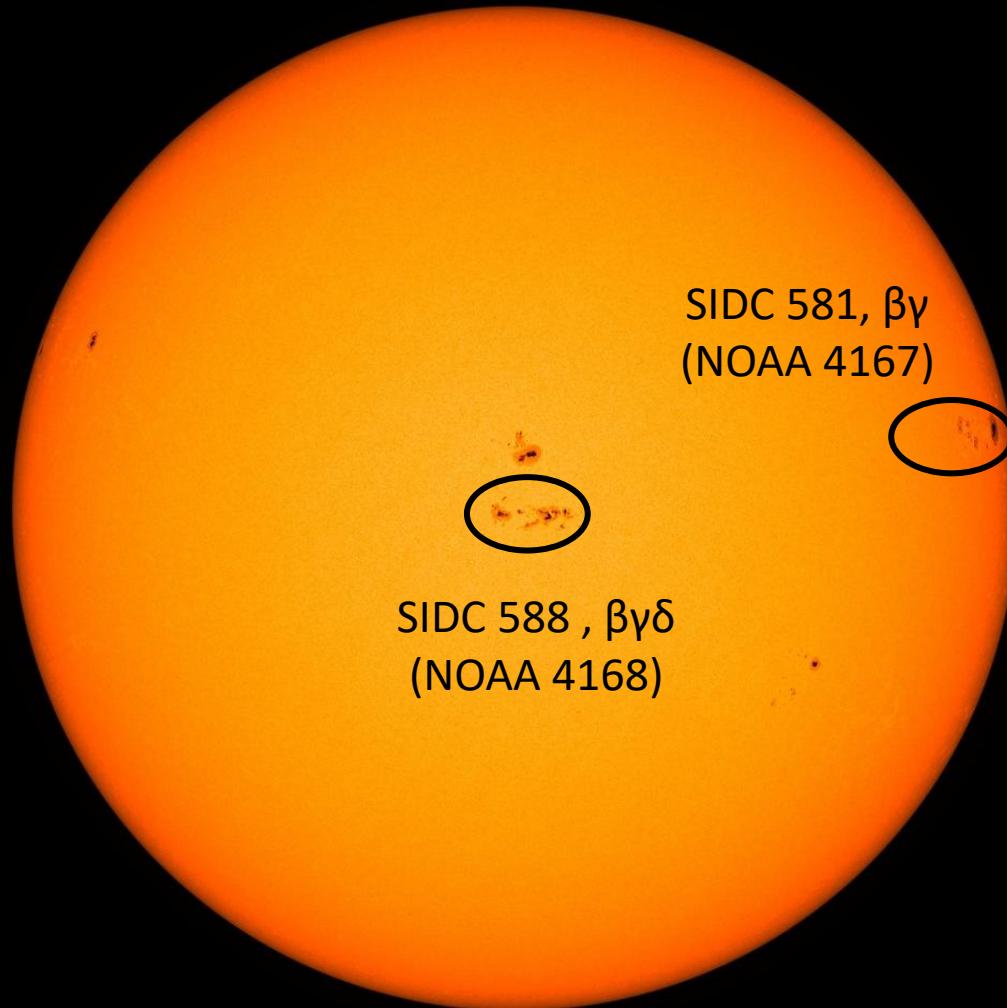
SDO/HMI Magnetogram 2025-08-04



SDO/HMI Quick-Look Magnetogram: 20250804_114500

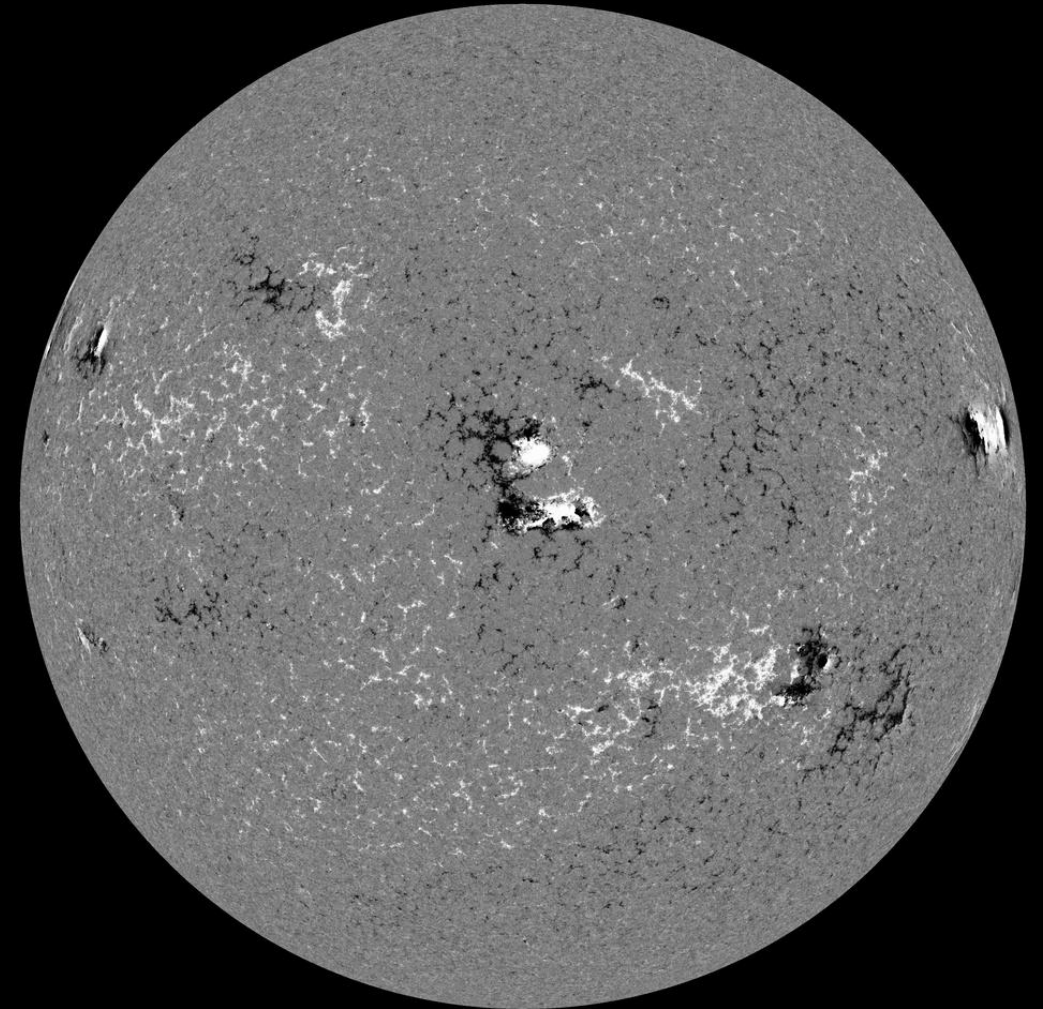
Solar active regions

SDO/HMI White Light 2025-08-05



SDO/HMI Quick-Look Continuum: 20250805_114500

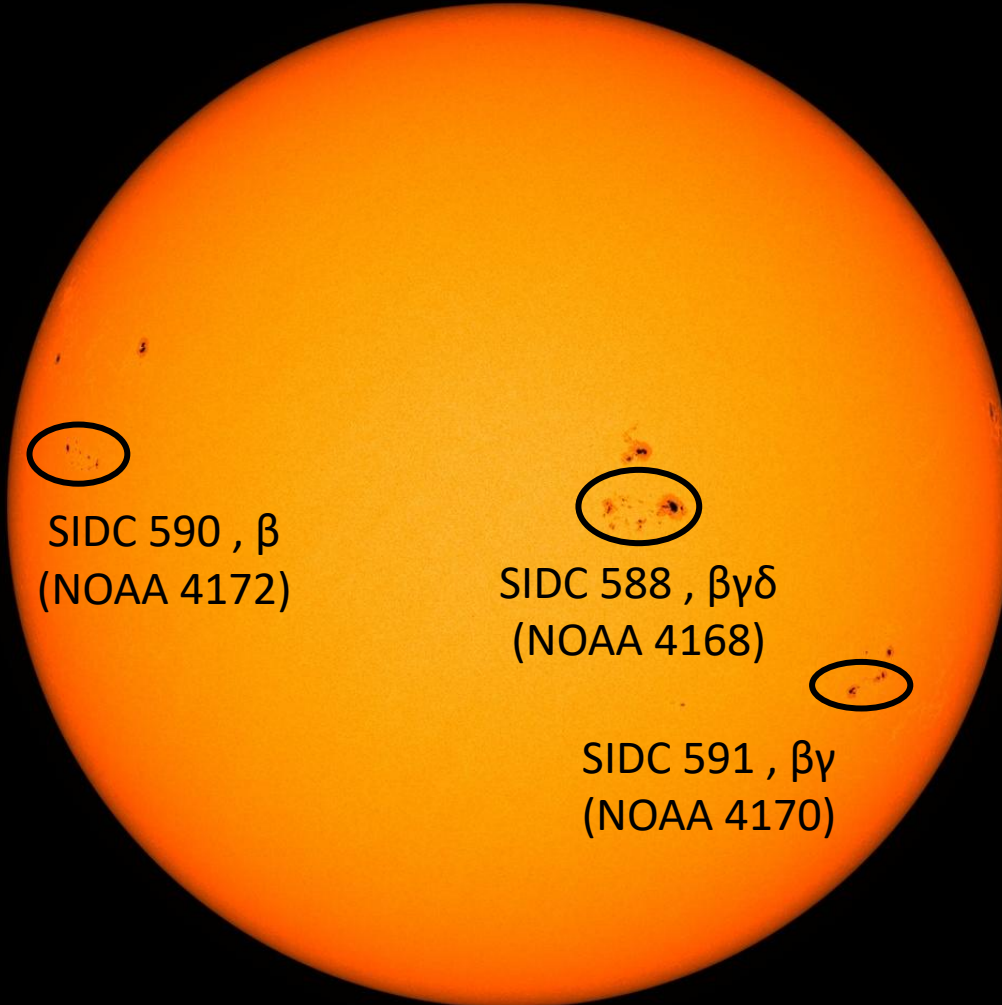
SDO/HMI Magnetogram 2025-08-05



SDO/HMI Quick-Look Magnetogram: 20250805_114500

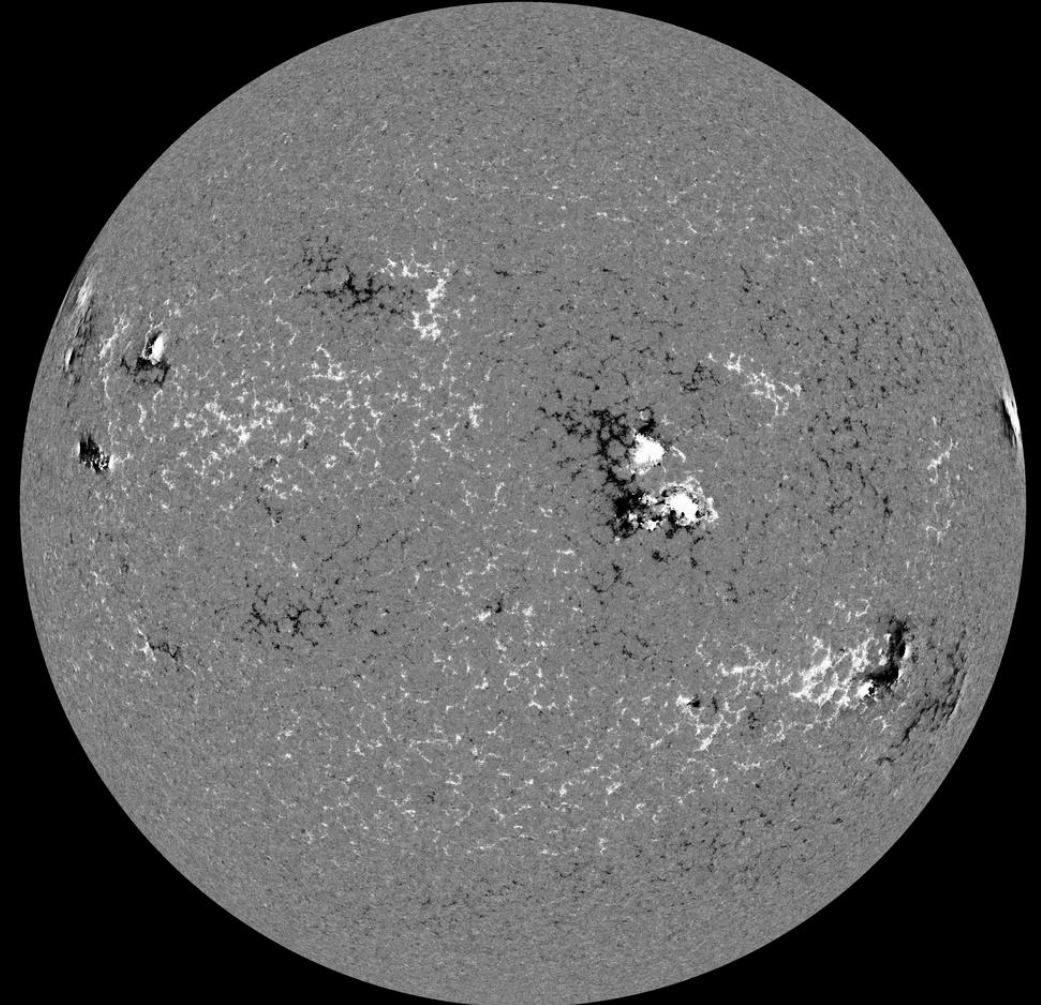
Solar active regions

SDO/HMI White Light 2025-08-06



SDO/HMI Quick-Look Continuum: 20250806_120000

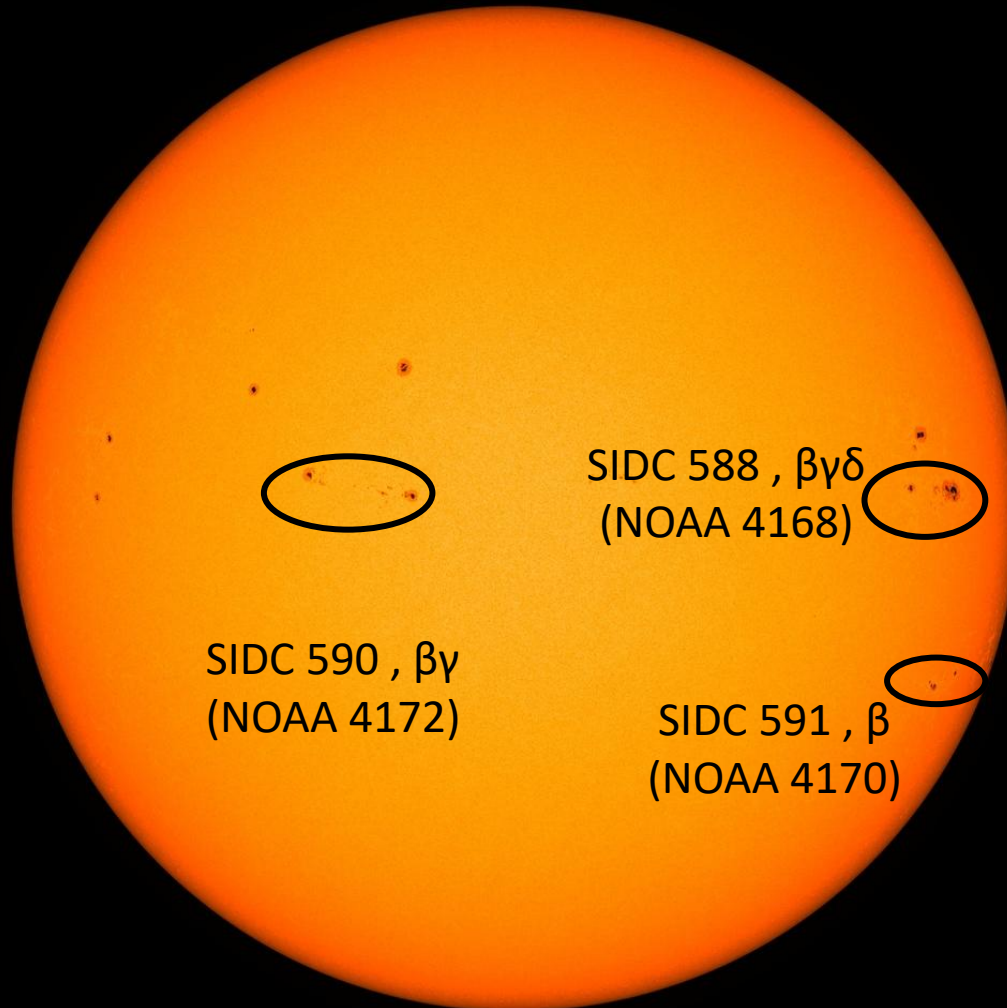
SDO/HMI Magnetogram 2025-08-06



SDO/HMI Quick-Look Magnetogram: 20250806_120000

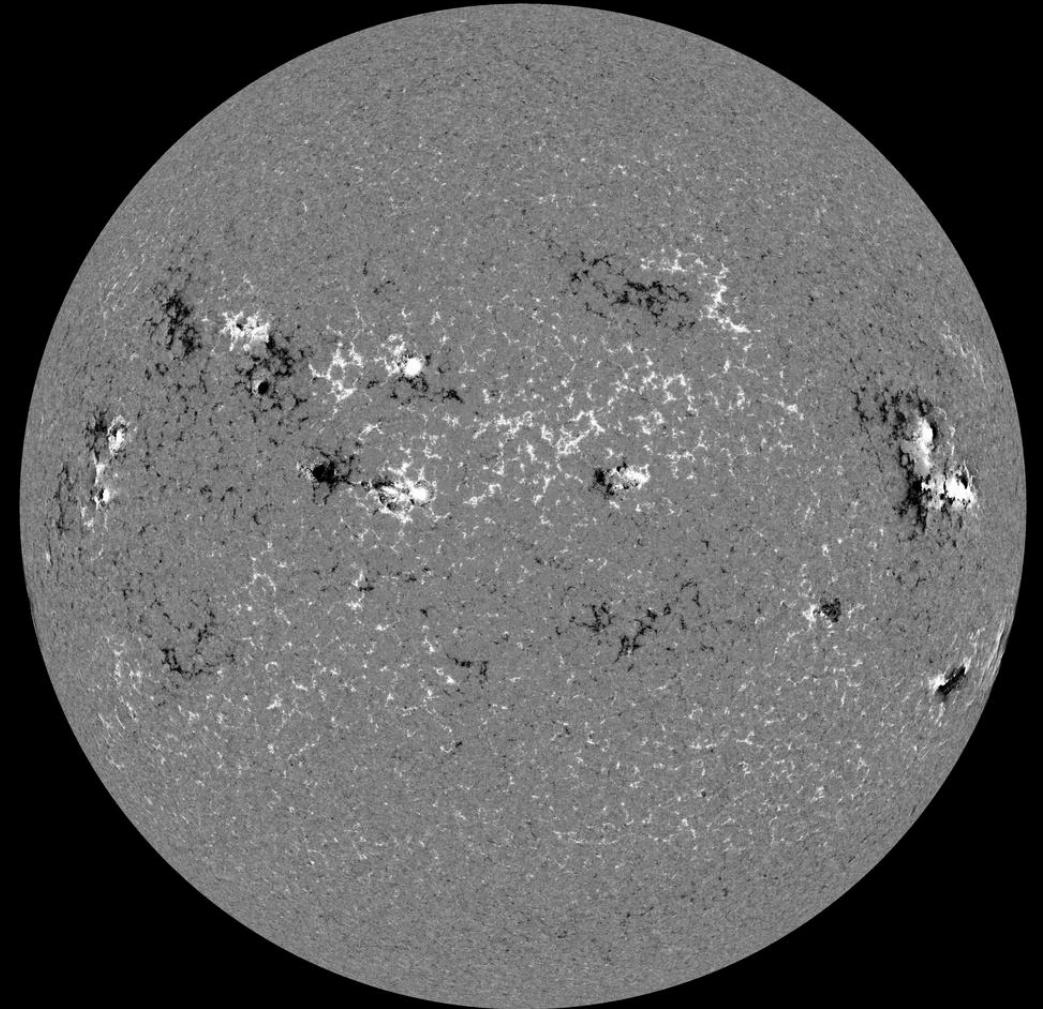
Solar active regions

SDO/HMI White Light 2025-08-09



SDO/HMI Quick-Look Continuum: 20250809_114500

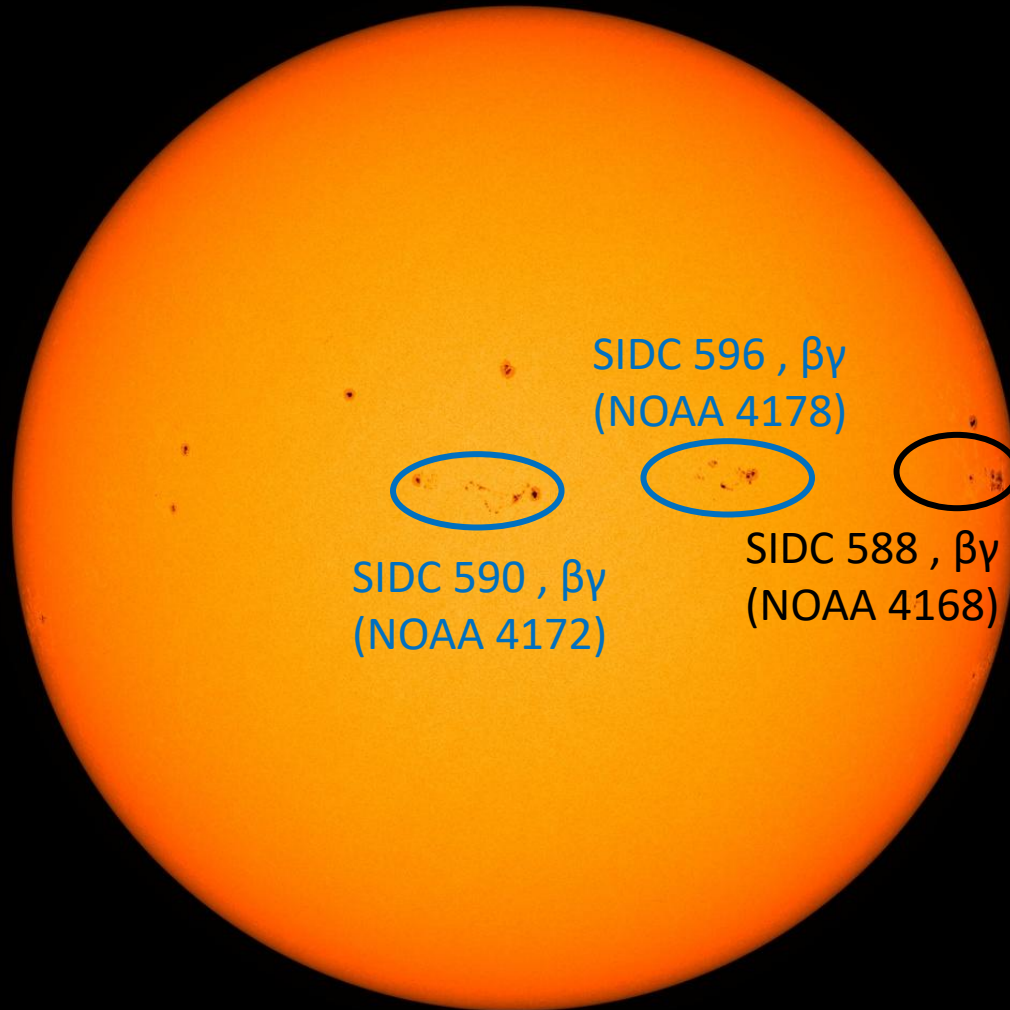
SDO/HMI Magnetogram 2025-08-09



SDO/HMI Quick-Look Magnetogram: 20250809_114500

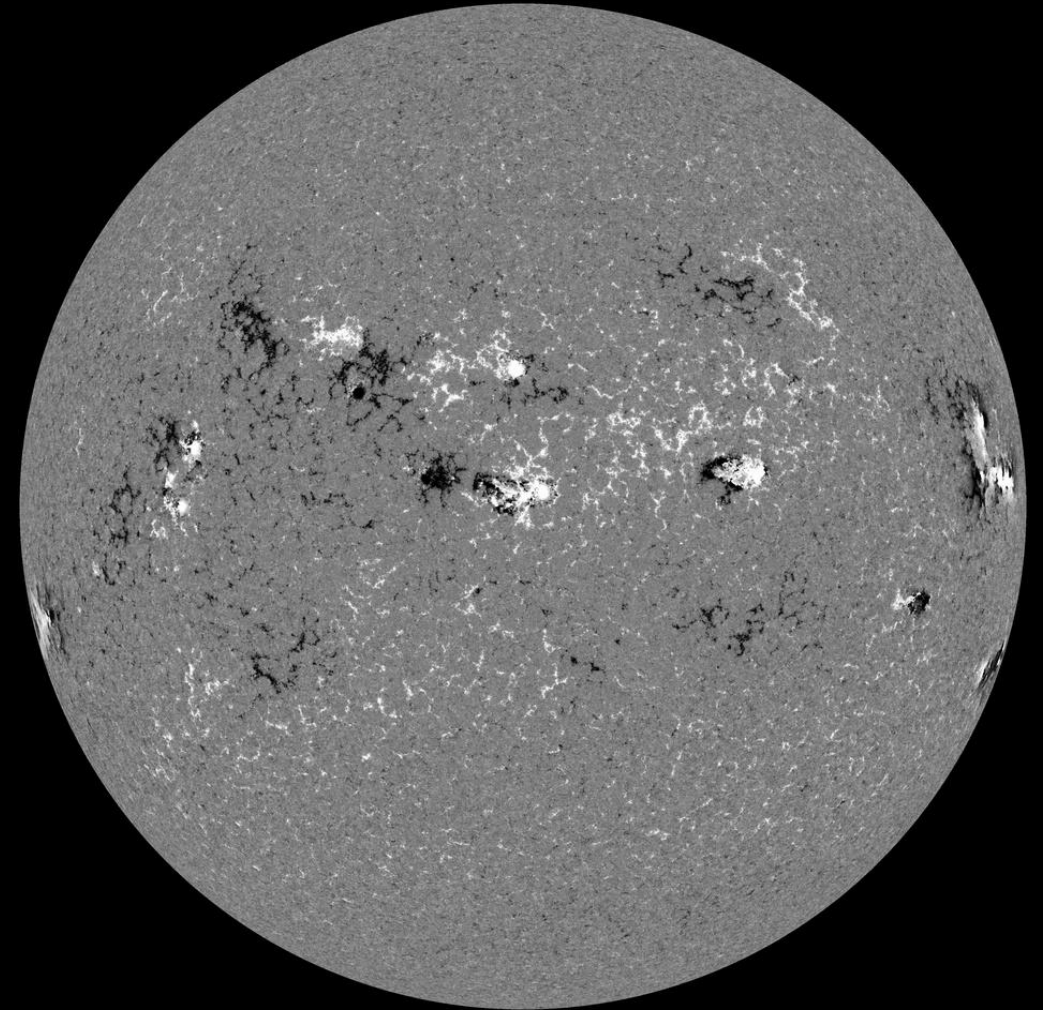
Solar active regions

SDO/HMI White Light 2025-08-10



SDO/HMI Quick-Look Continuum: 20250810_114500

SDO/HMI Magnetogram 2025-08-10

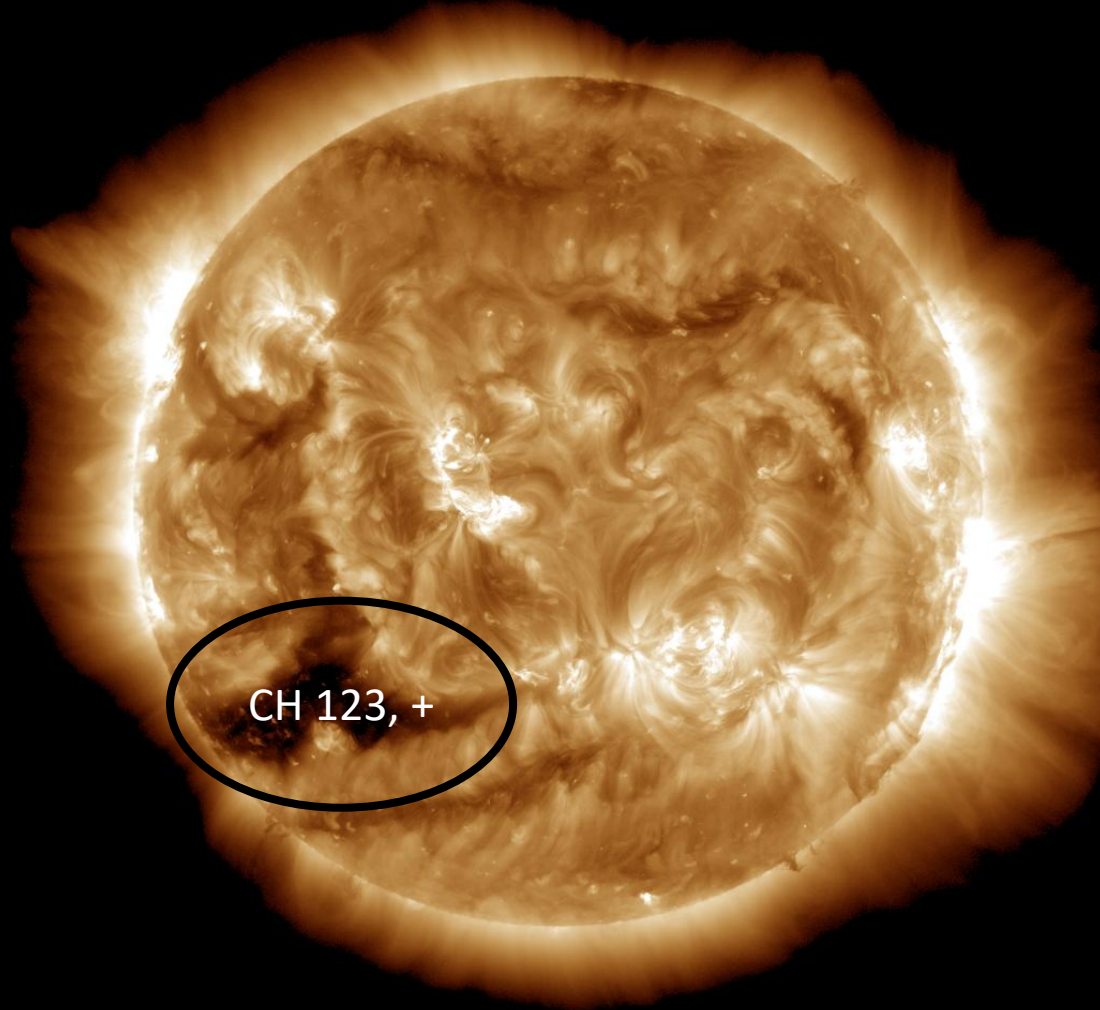


SDO/HMI Quick-Look Magnetogram: 20250810_114500

Coronal holes

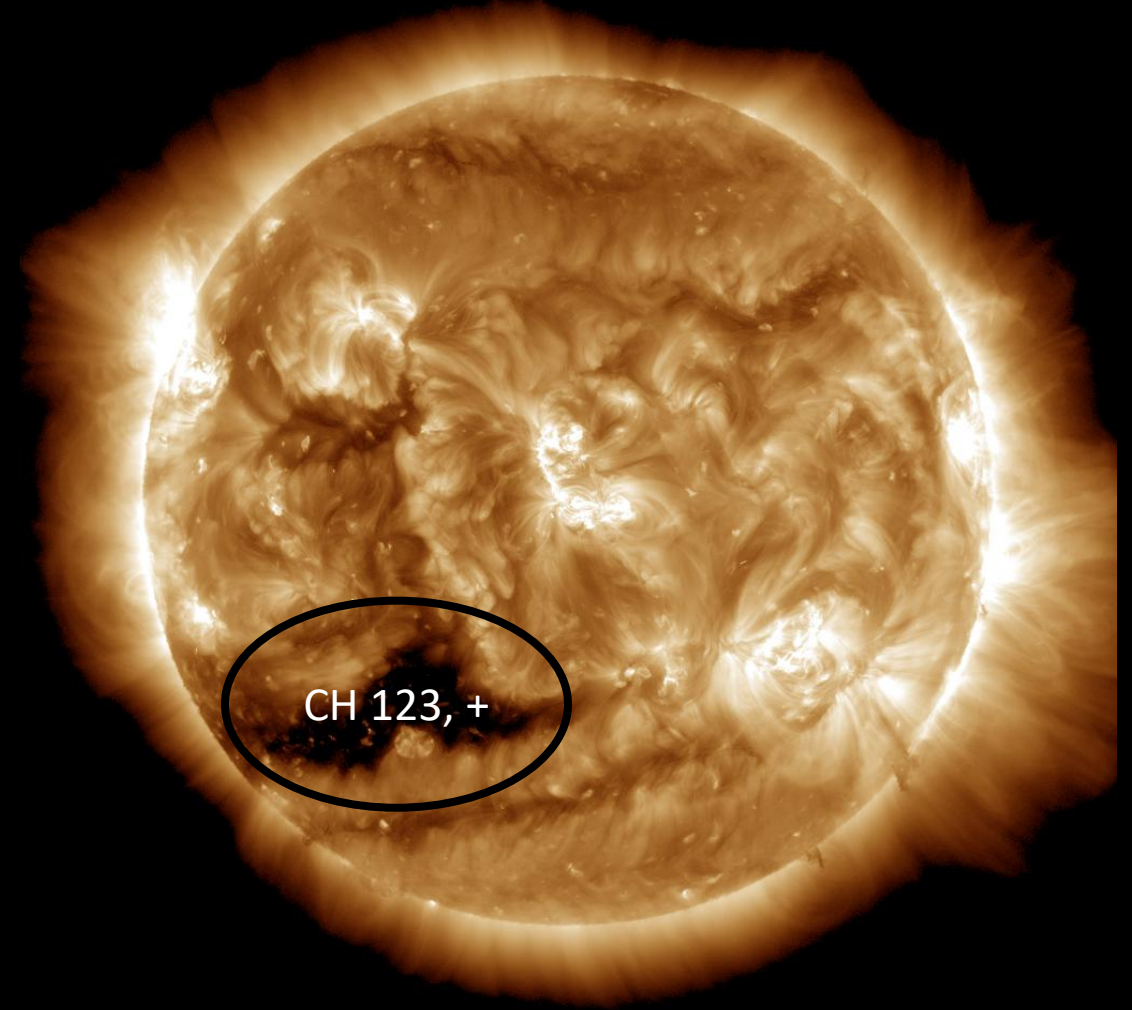
SDO/AIA 19.3 nm 2025-08-04

SDO/AIA AIA 193Å 2025-08-04T12:00:05.843



SDO/AIA 19.3 nm 2025-08-05

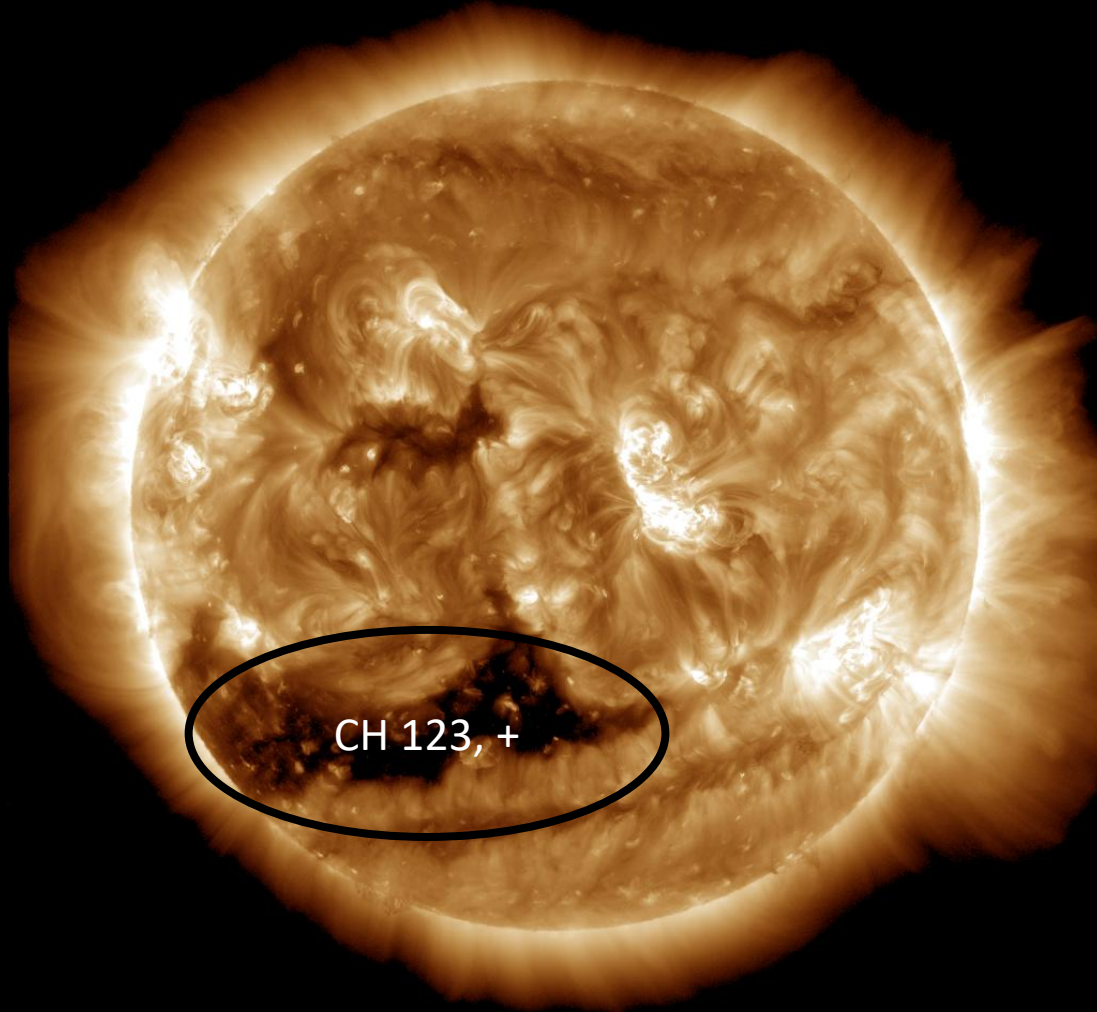
SDO/AIA AIA 193Å 2025-08-05T12:00:05.846



Coronal holes

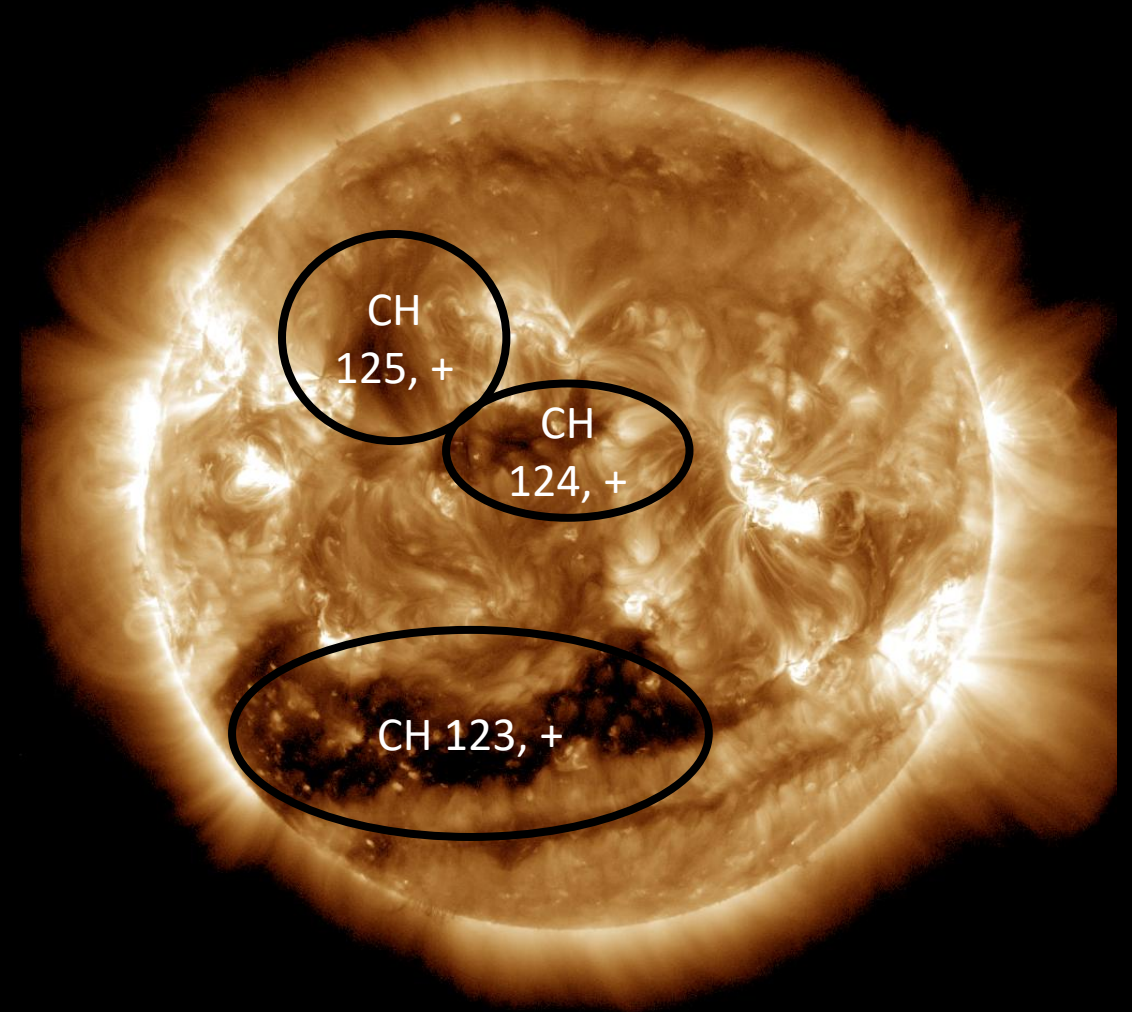
SDO/AIA 19.3 nm 2025-08-06

SDO/AIA AIA 193Å 2025-08-06T12:00:05.842



SDO/AIA 19.3 nm 2025-08-07

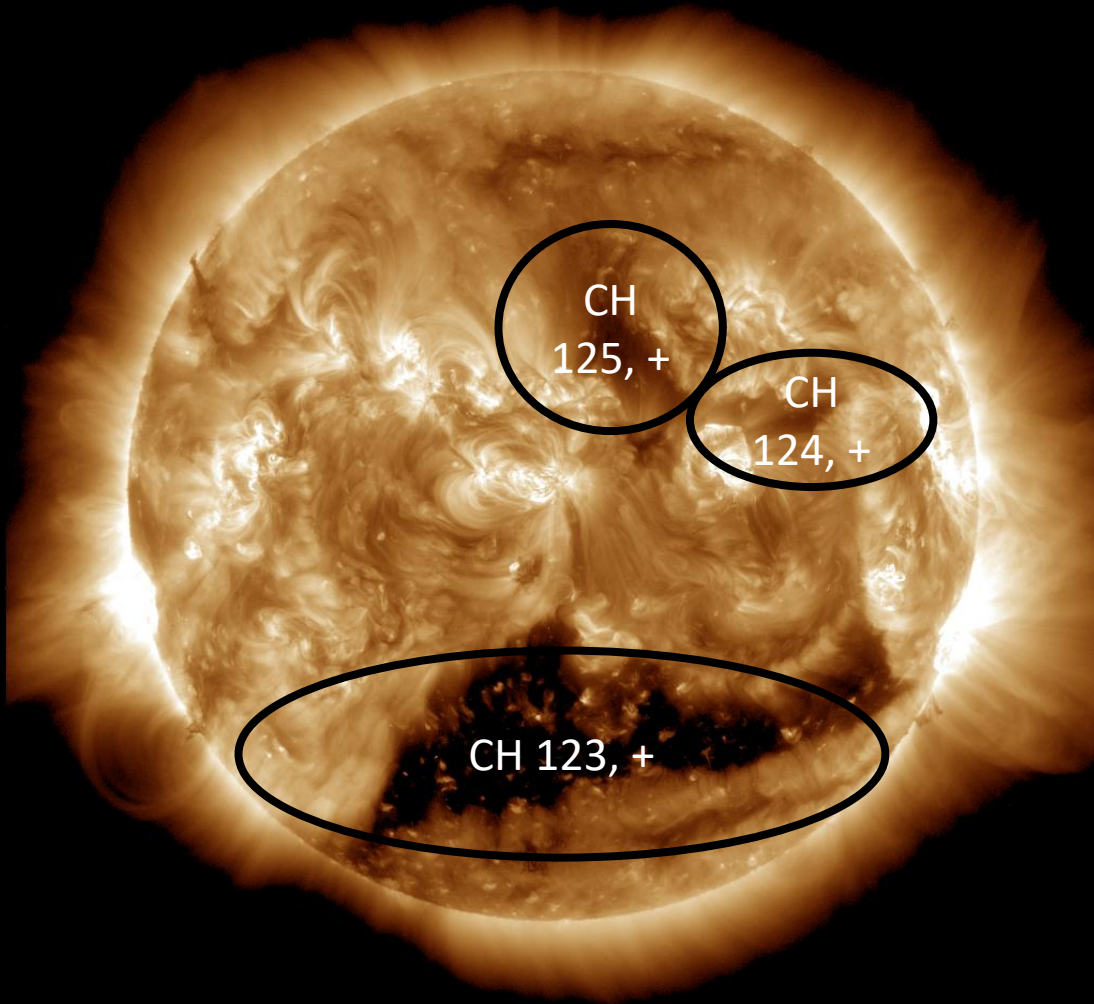
SDO/AIA AIA 193Å 2025-08-07T12:00:07.225



Coronal holes

SDO/AIA 19.3 nm 2025-08-10

SDO/AIA AIA 193Å 2025-08-10T12:00:05.843



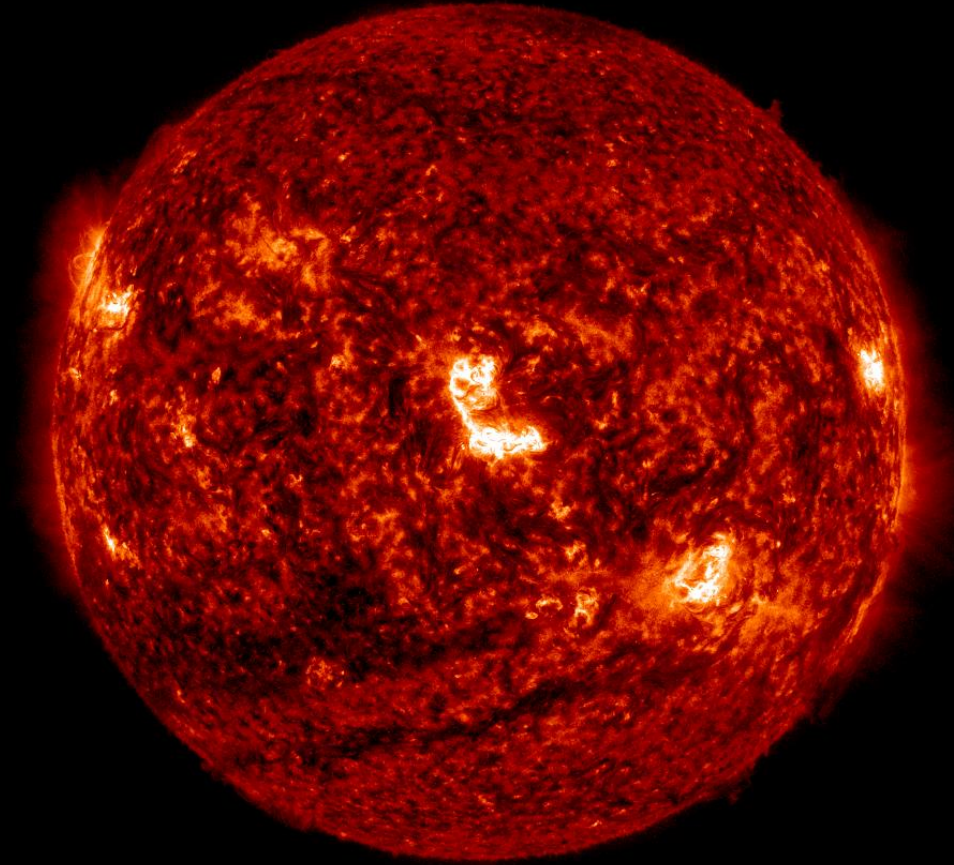
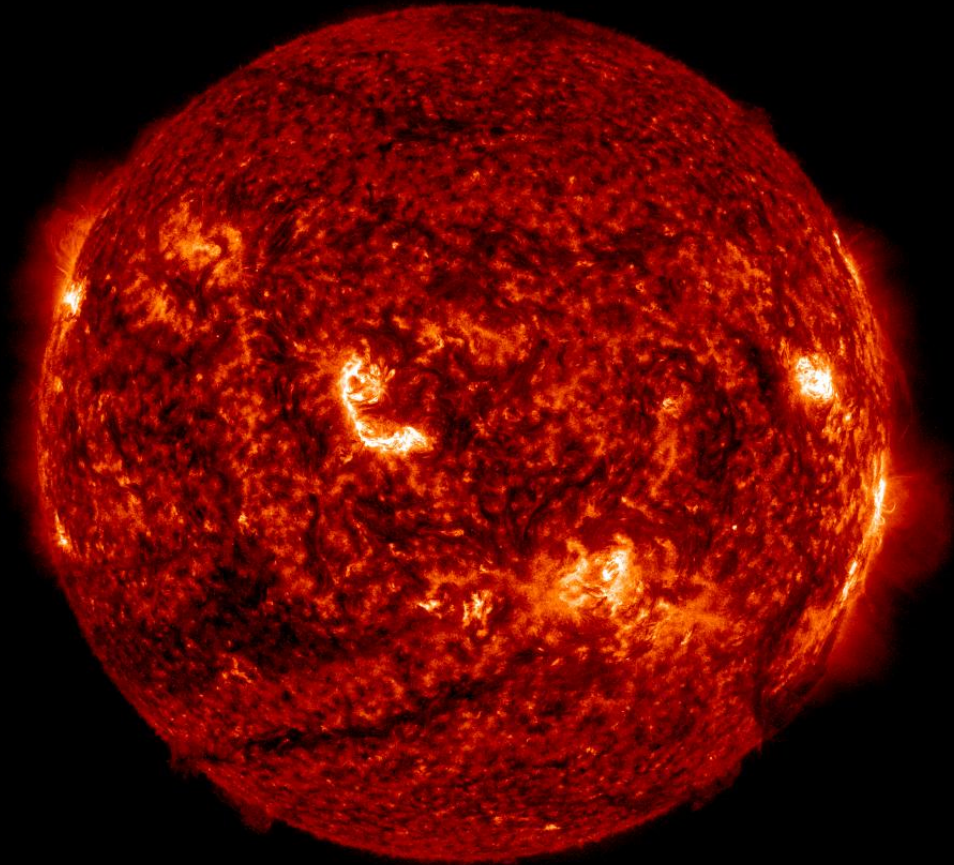
Filaments

SDO/AIA 30.4 nm 2025-08-04

SDO/AIA AIA 304Å 2025-08-04T12:00:06.580

SDO/AIA 30.4 nm 2025-08-05

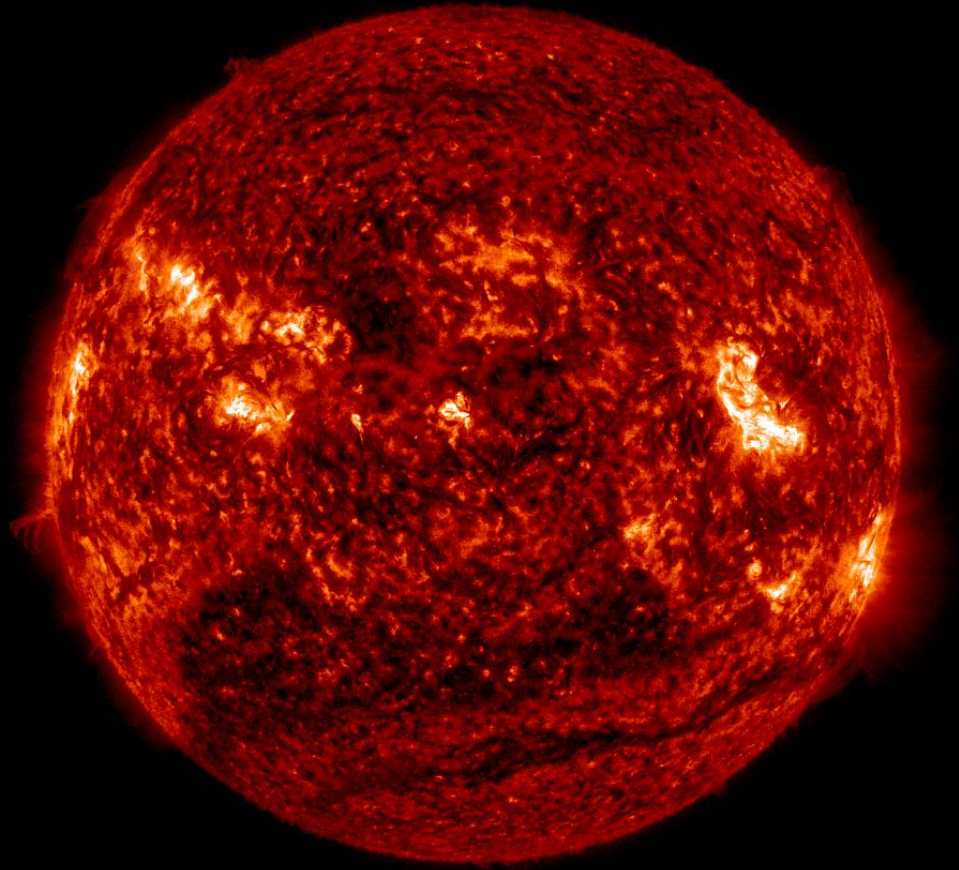
SDO/AIA AIA 304Å 2025-08-05T12:00:06.581



Filaments

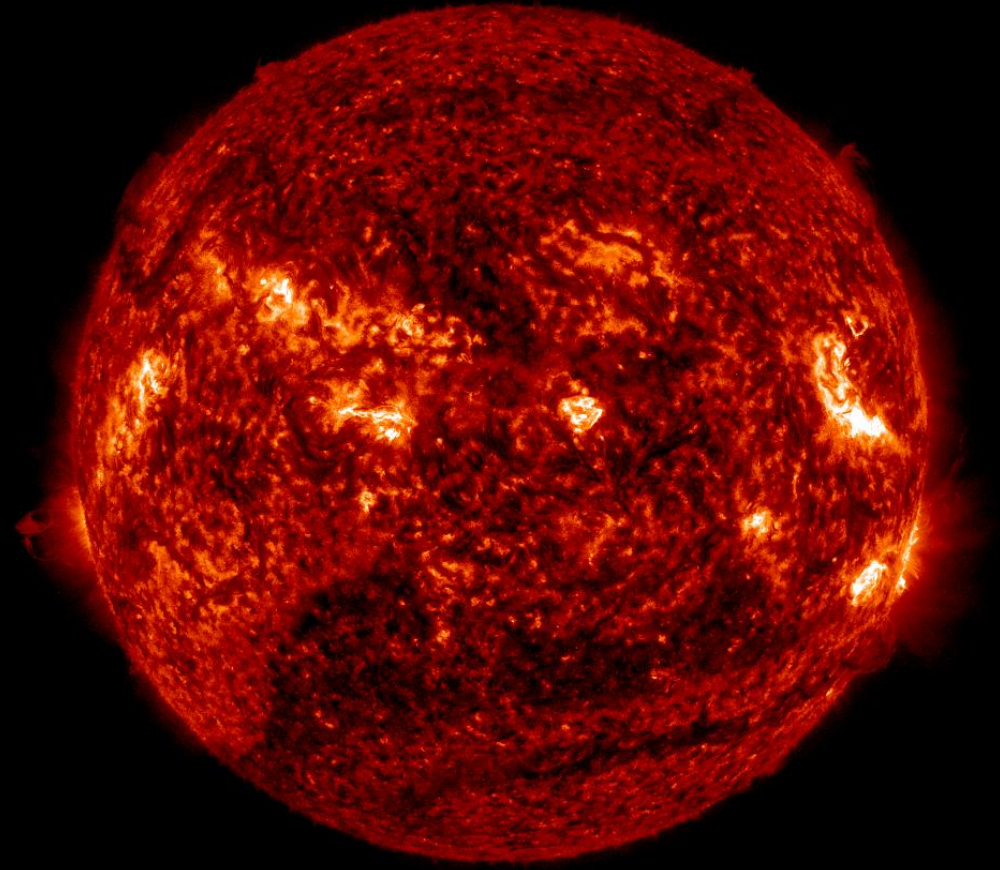
SDO/AIA 30.4 nm 2025-08-08

SDO/AIA AIA 304Å 2025-08-08T12:00:06.580



SDO/AIA 30.4 nm 2025-08-09

SDO/AIA AIA 304Å 2025-08-09T12:00:06.597

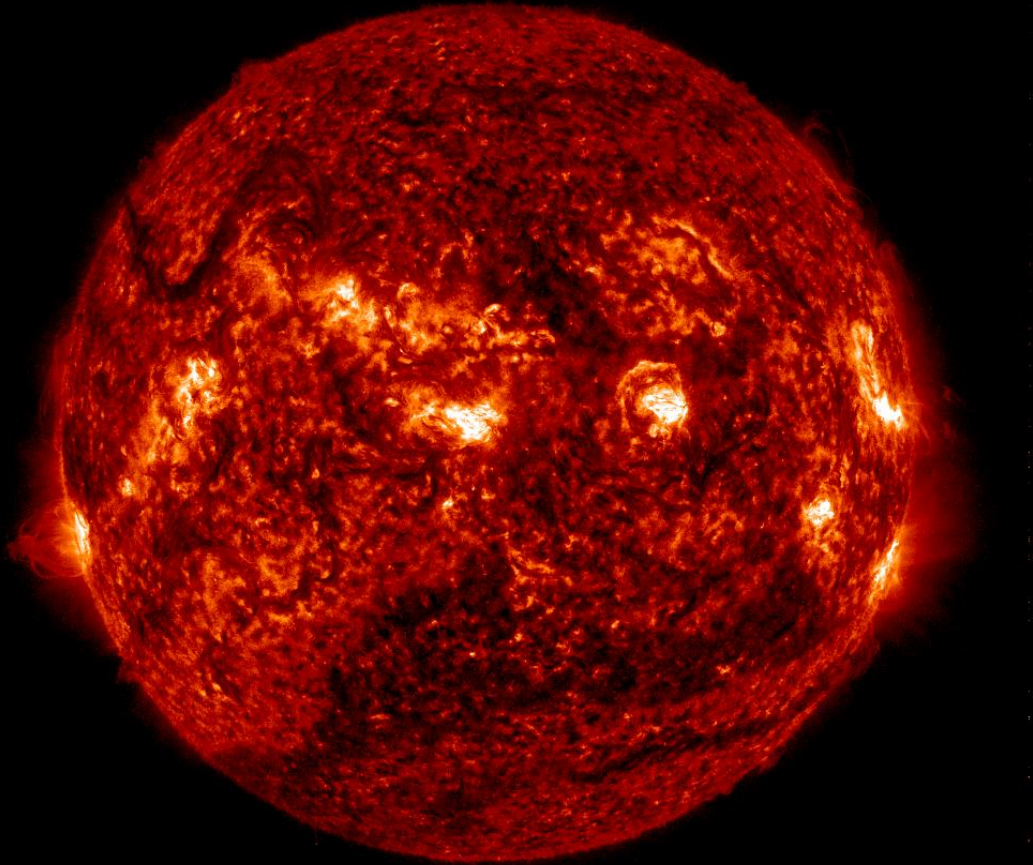


Filaments

SDO/AIA 30.4 nm 2025-08-10

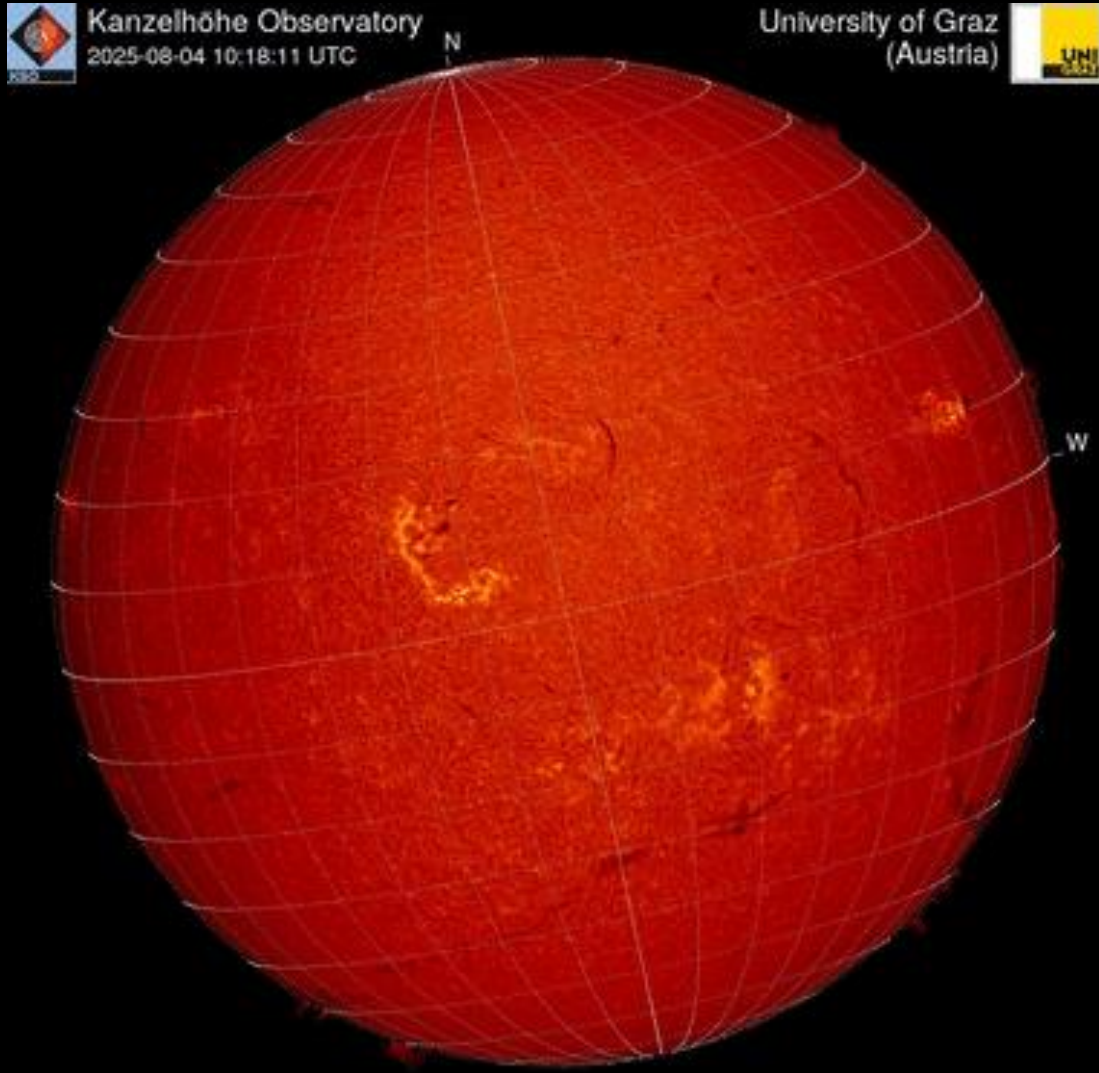
SDO/AIA AIA 304Å 2025-08-10T12:00:06.583

SDO/AIA 30.4 nm 2025-08-11

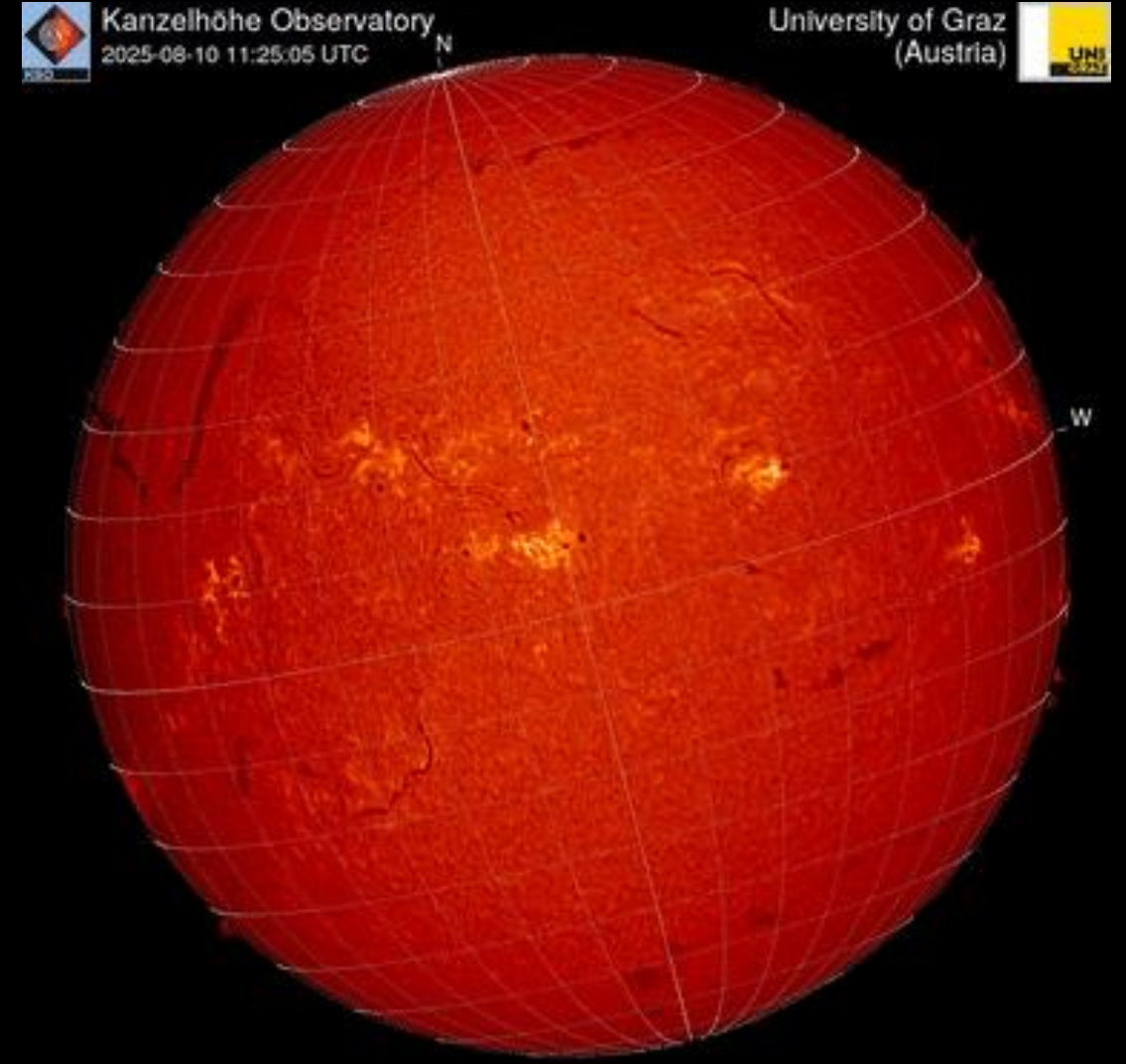


Filaments & Filament eruptions

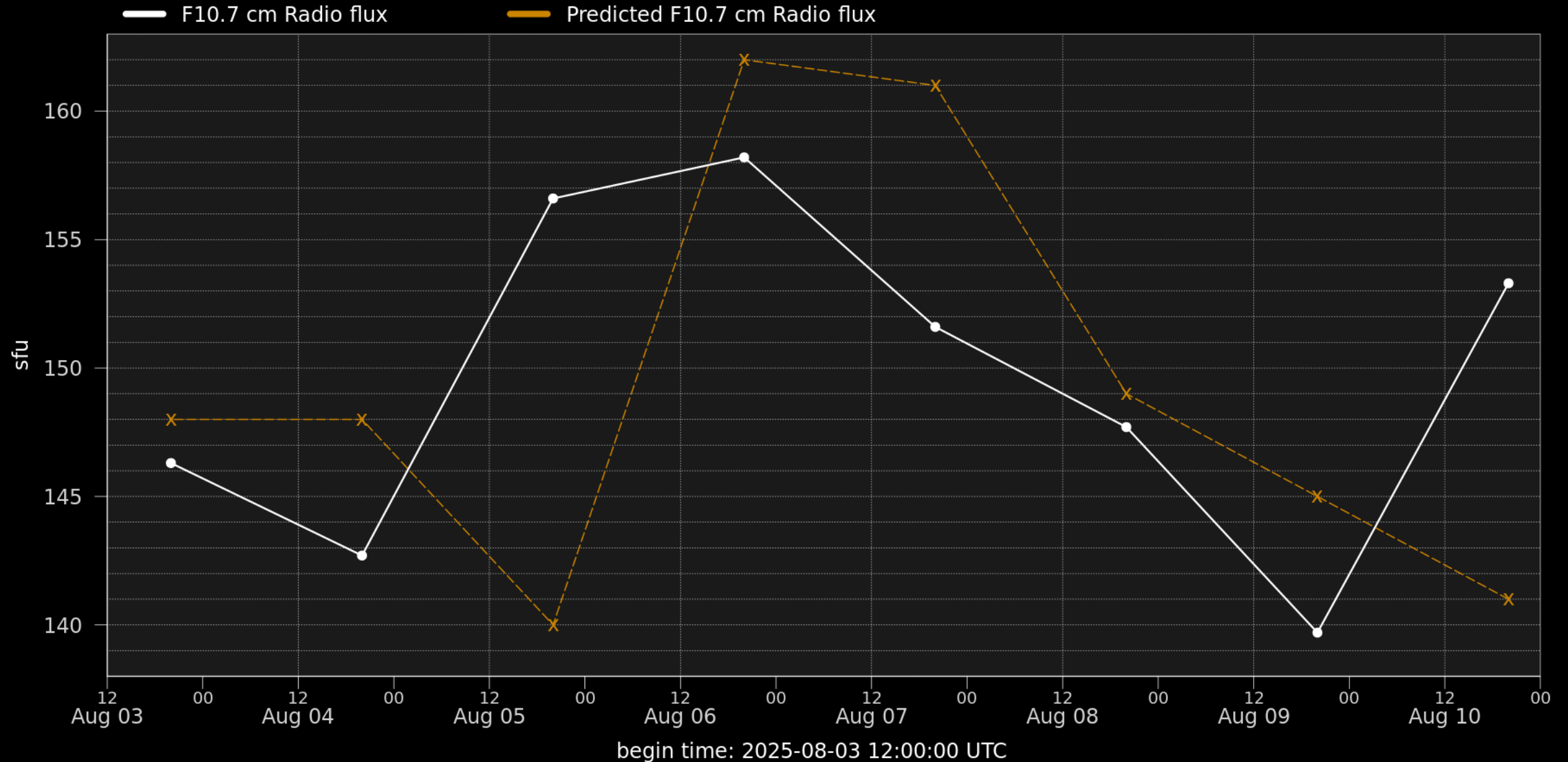
H-alpha 2025-08-04



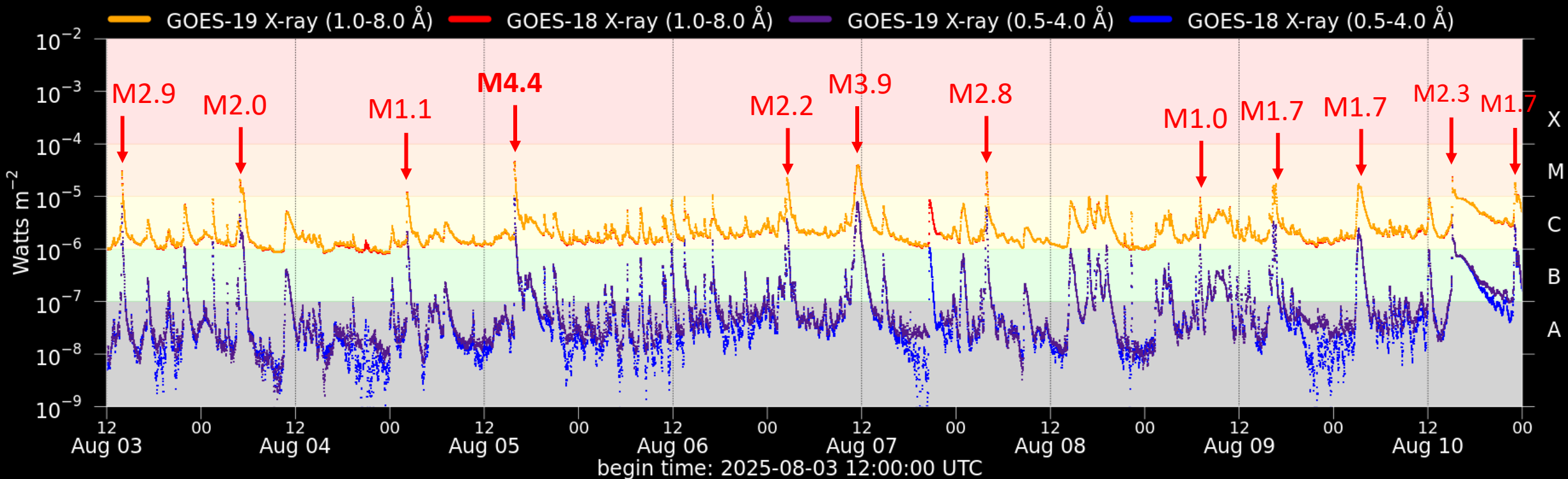
H-alpha 2025-08-10



Solar F10.7cm radio flux



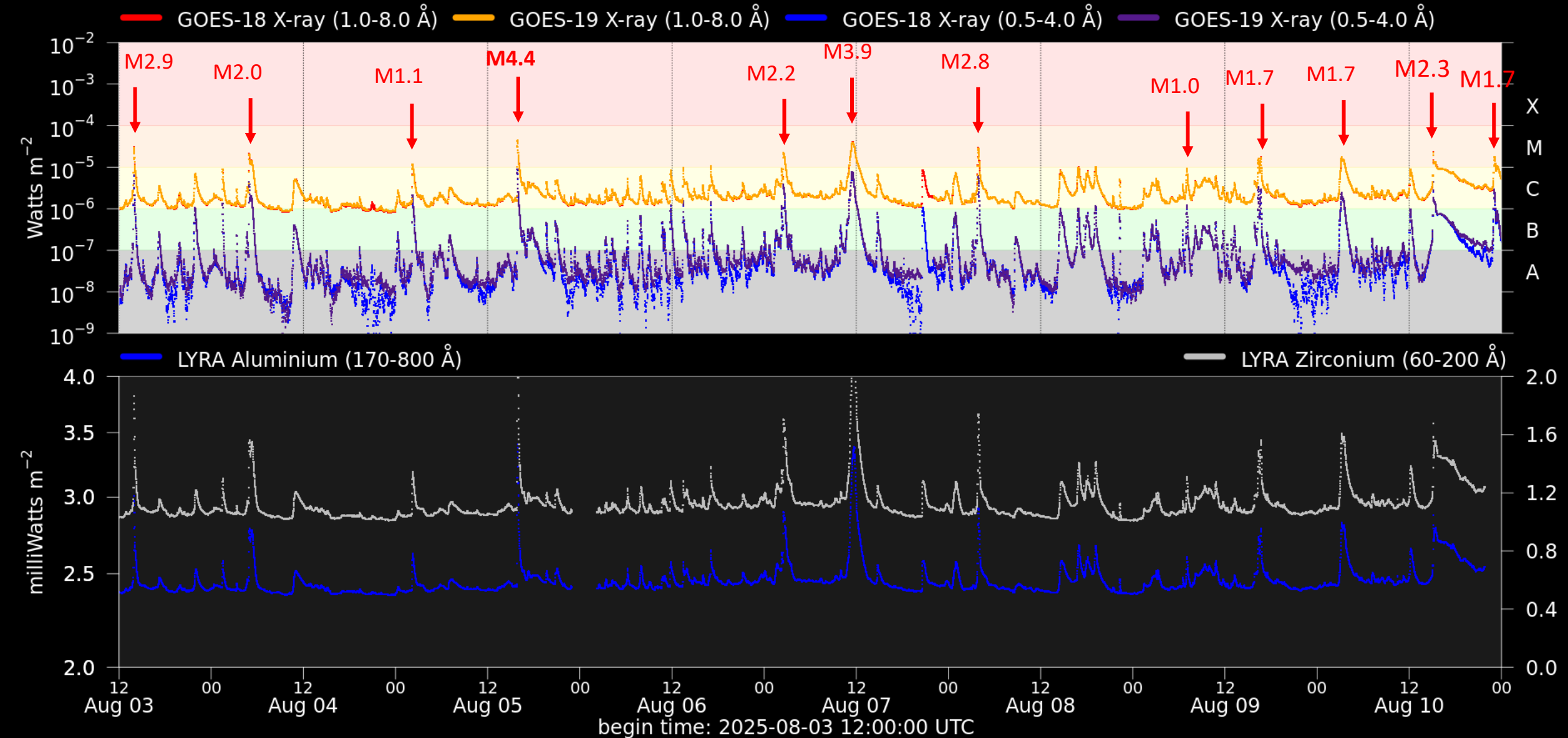
Flaring activity



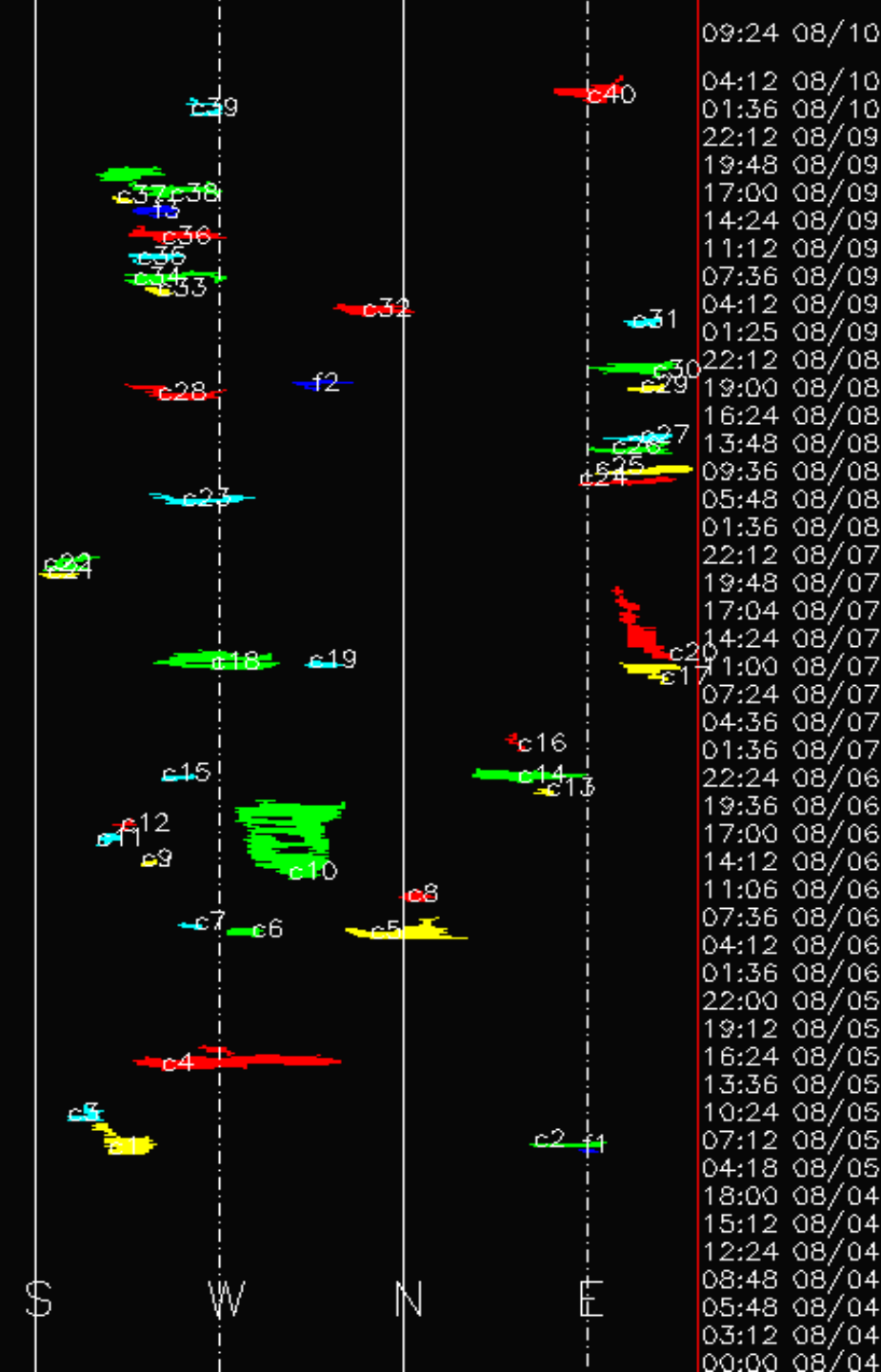
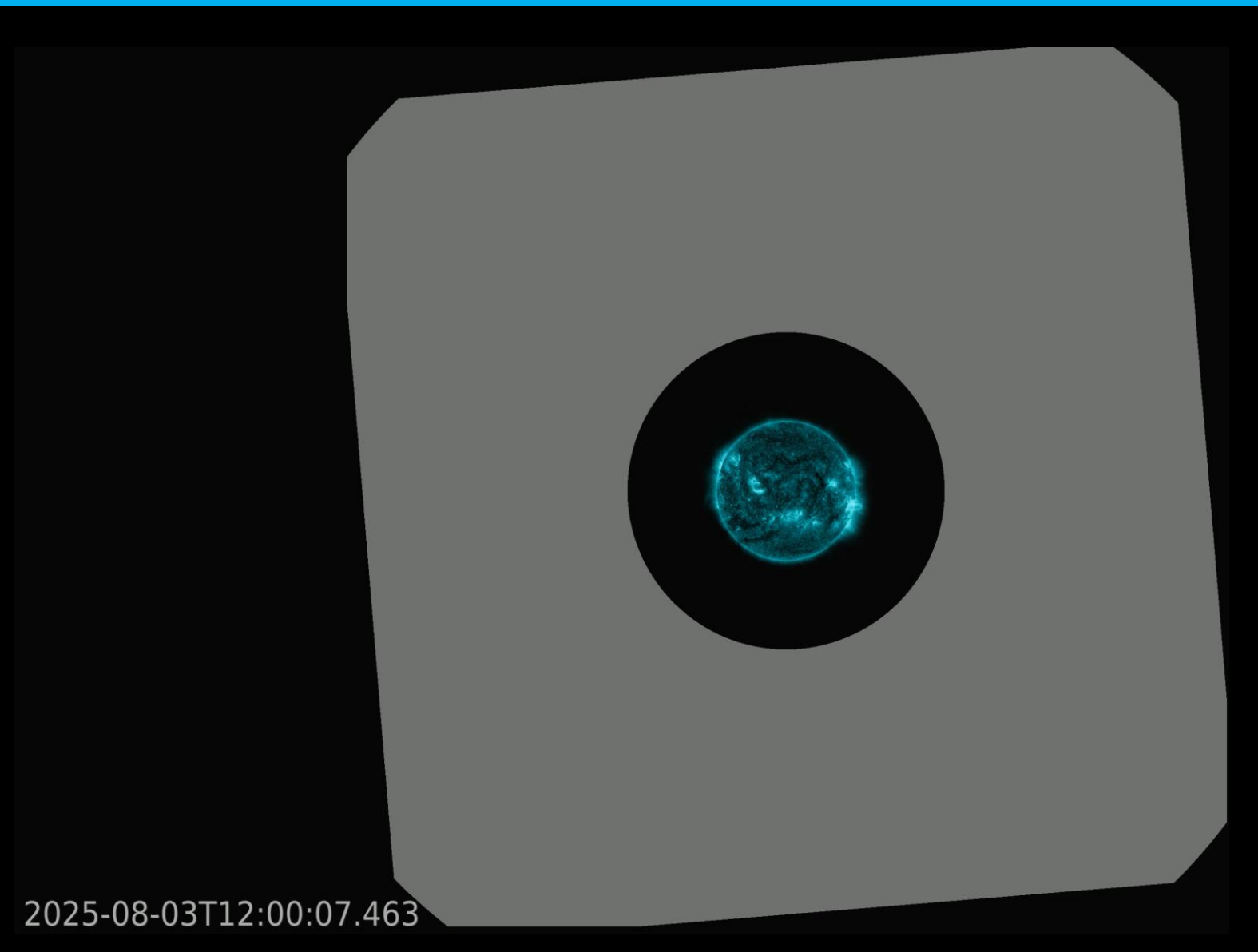
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-08-03	2025-08-04	2025-08-05	2025-08-06	2025-08-07	2025-08-08	2025-08-09	2025-08-10
Probability (%)	99 75 10	99 76 12	99 80 10	99 71 05	99 83 12	99 83 10	99 78 14	99 79 01
Observed (#)	05 01 00	04 01 00	12 01 00	06 03 00	03 01 00	12 01 00	06 03 00	01 03 00

Solar X-Ray and UV flux

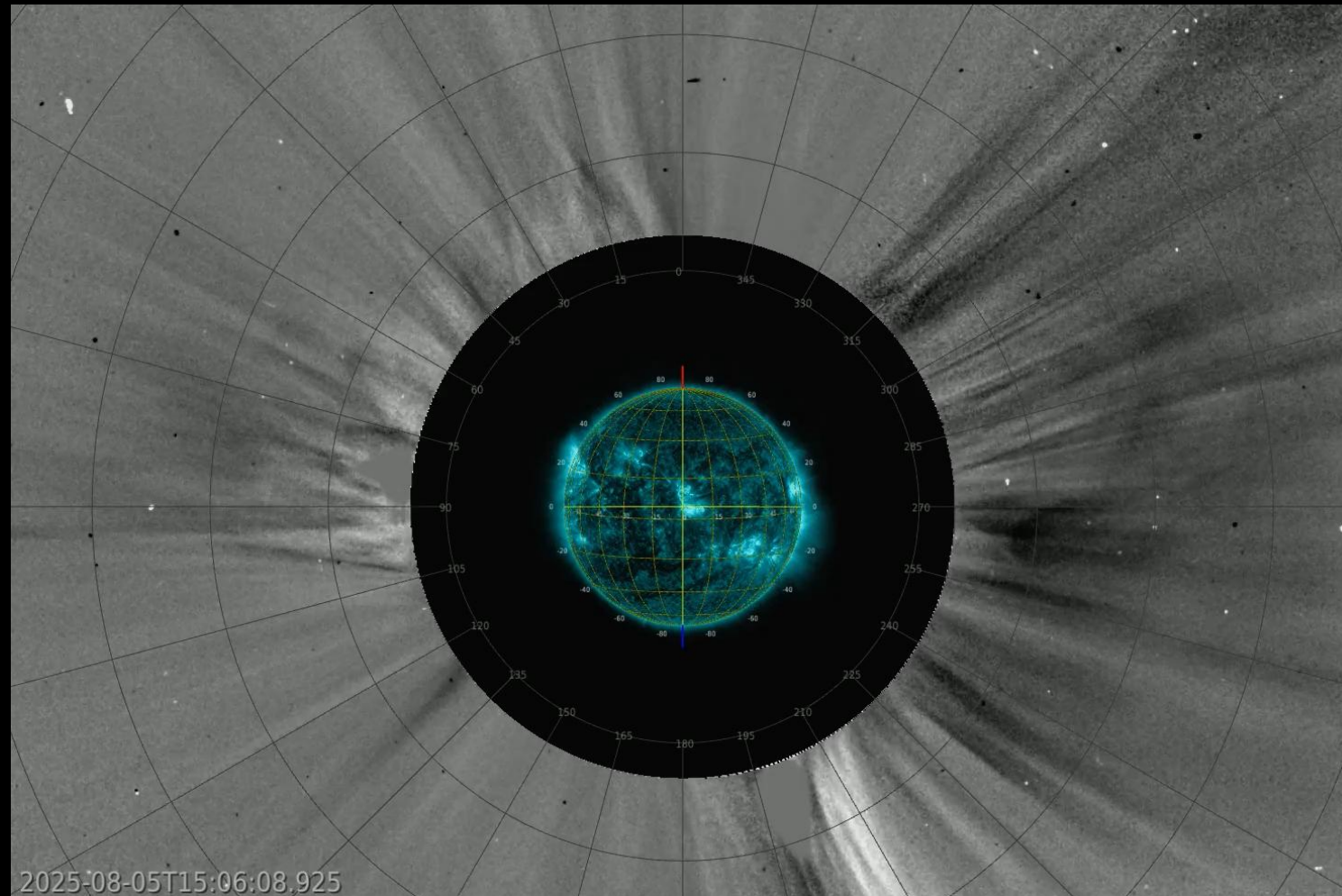


Coronal Mass Ejections

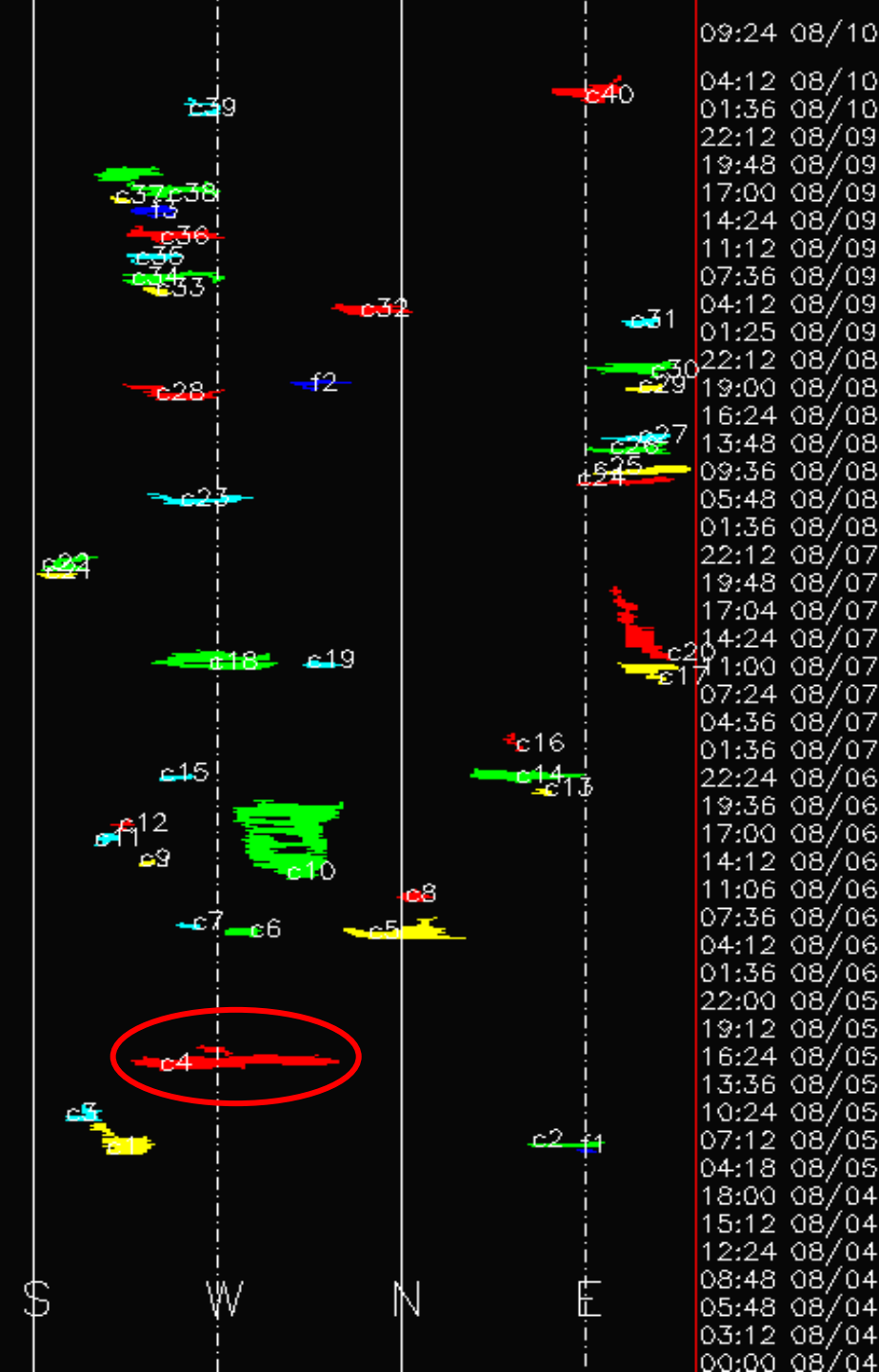


Coronal Mass Ejections

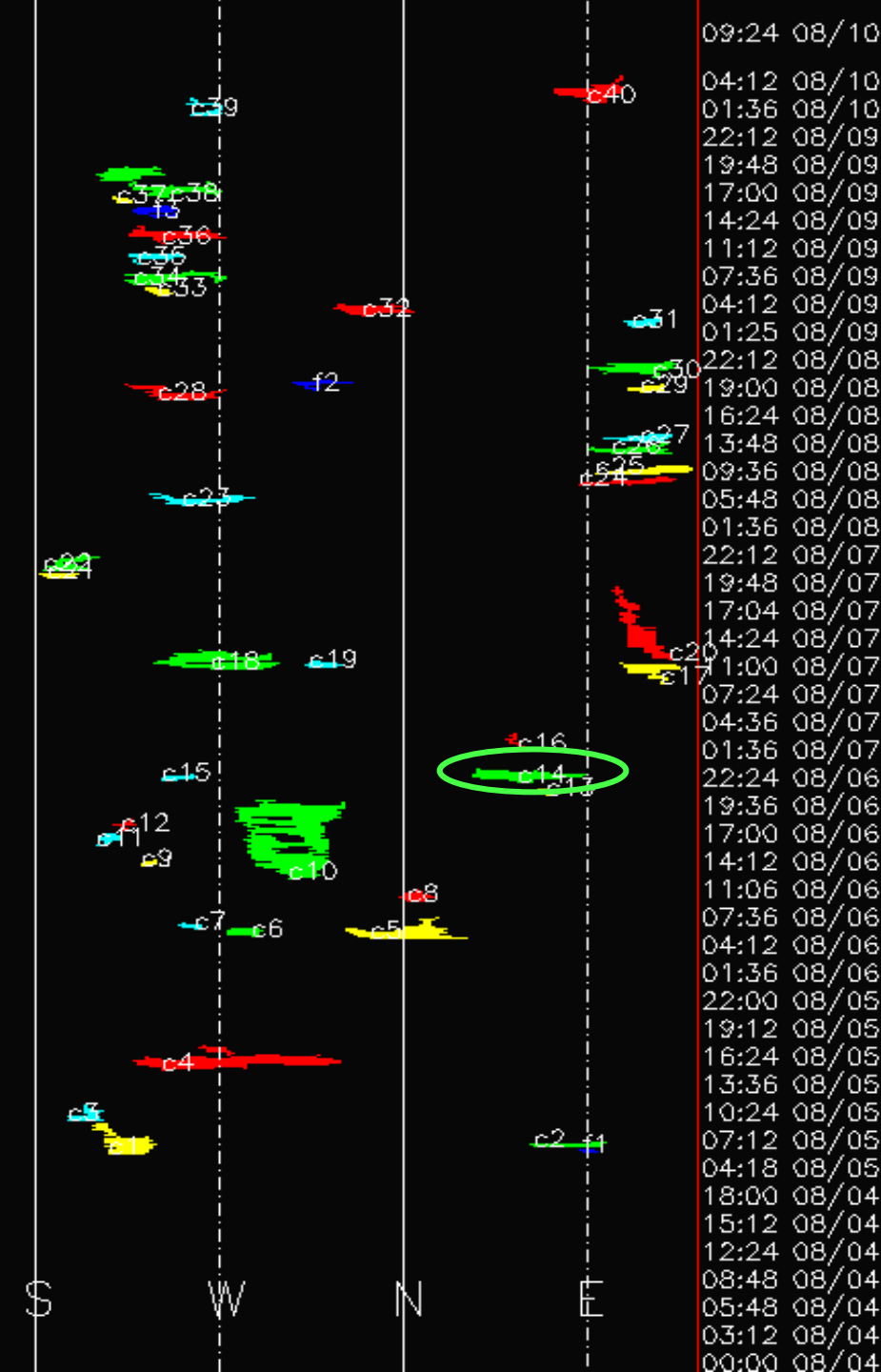
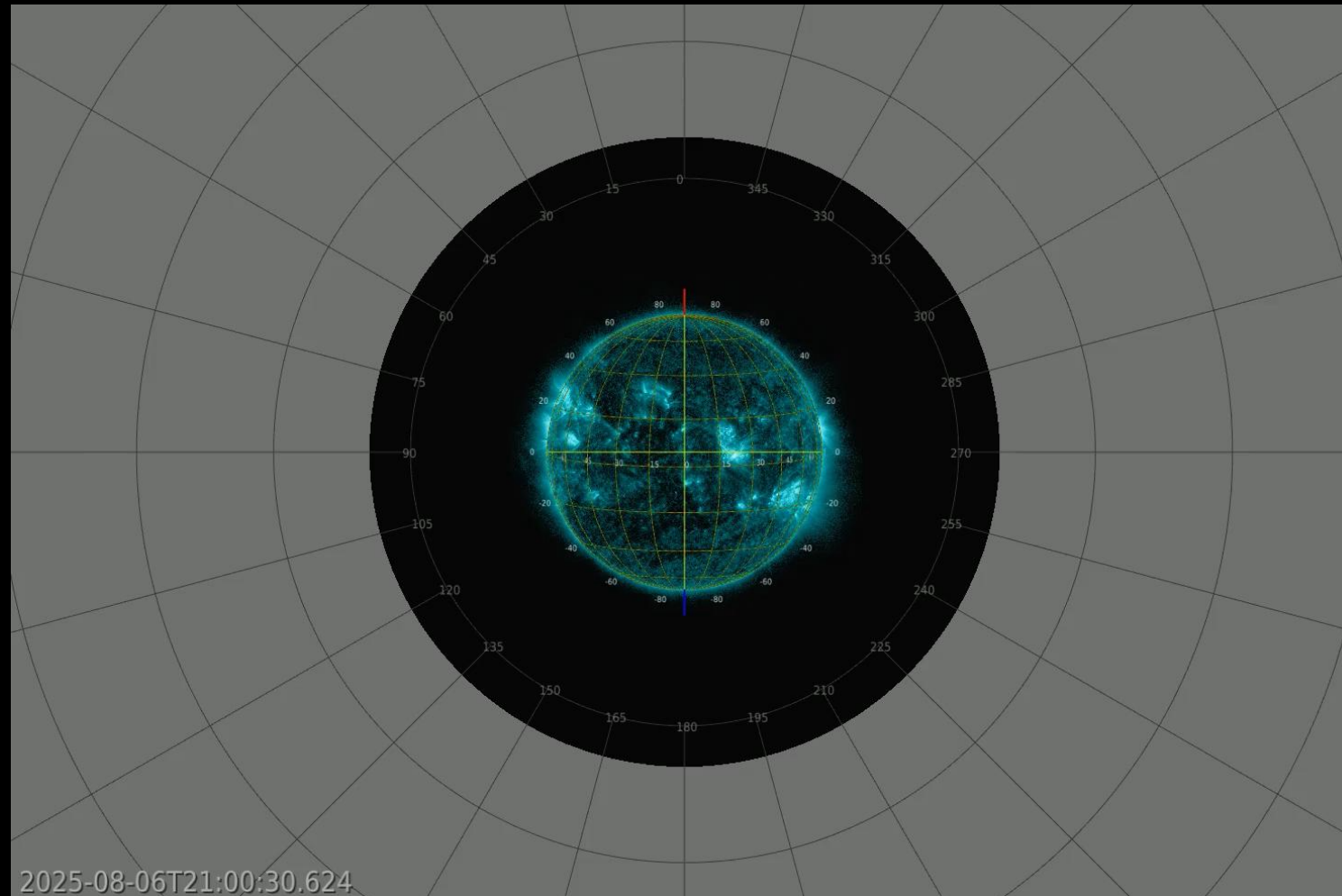
Associated with an M4.4 flare (peak 15:53 UTC August 05)



Type IV radio emission detected

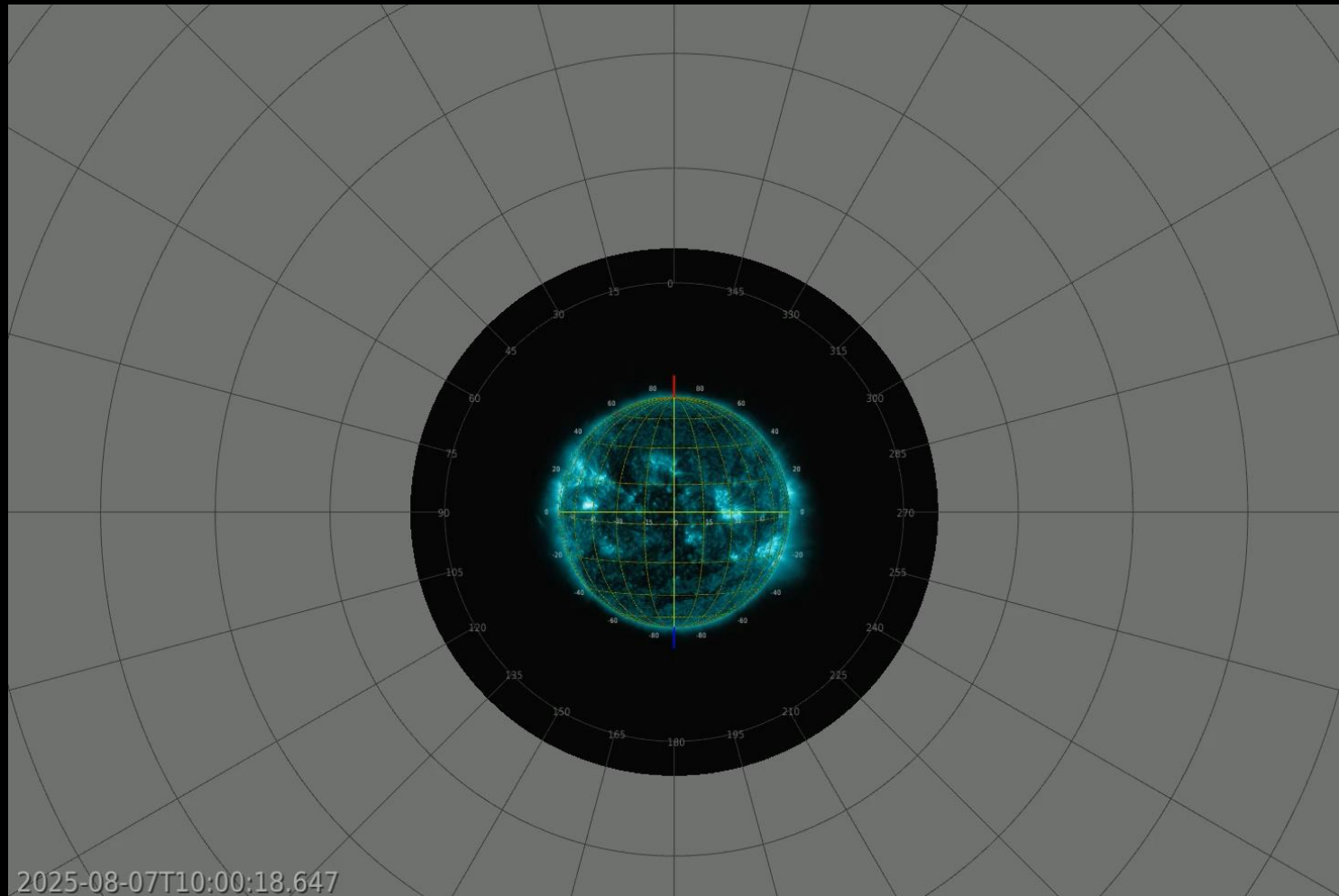


Coronal Mass Ejections

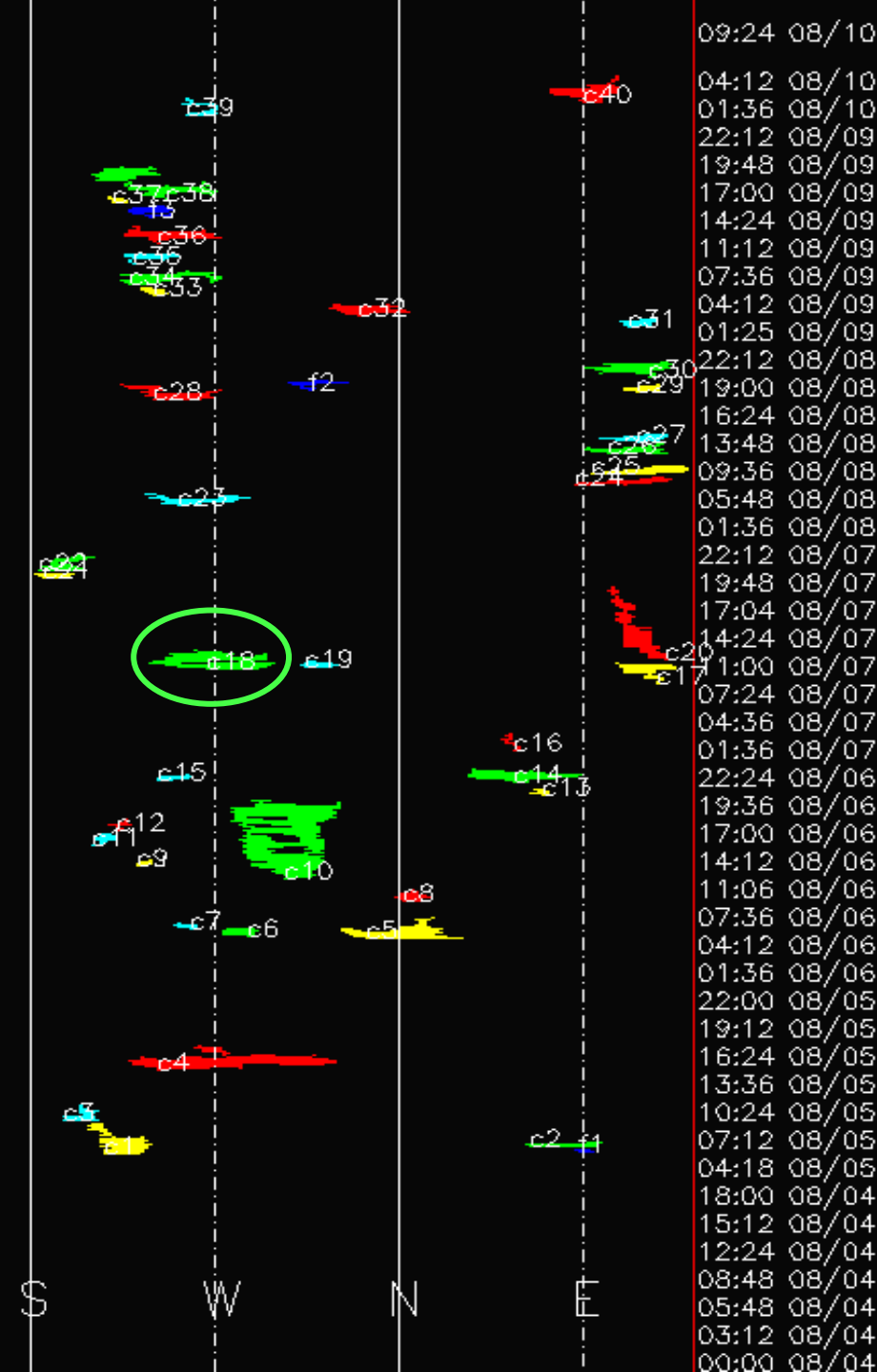


Coronal Mass Ejections

Associated with an M3.9 flare (peak 11:31 UTC August 07)



Type IV radio emission detected



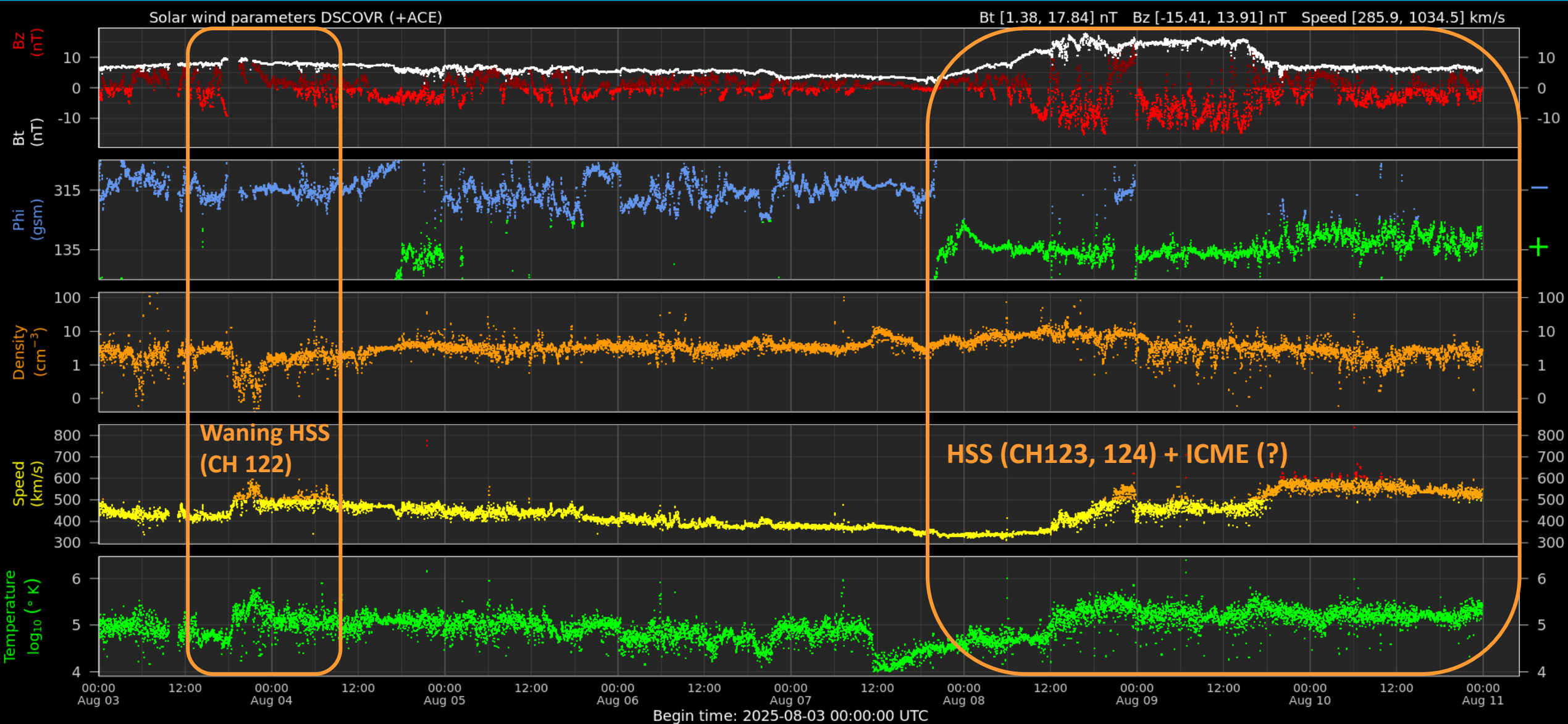
Solar Wind and

Geomagnetic Activity

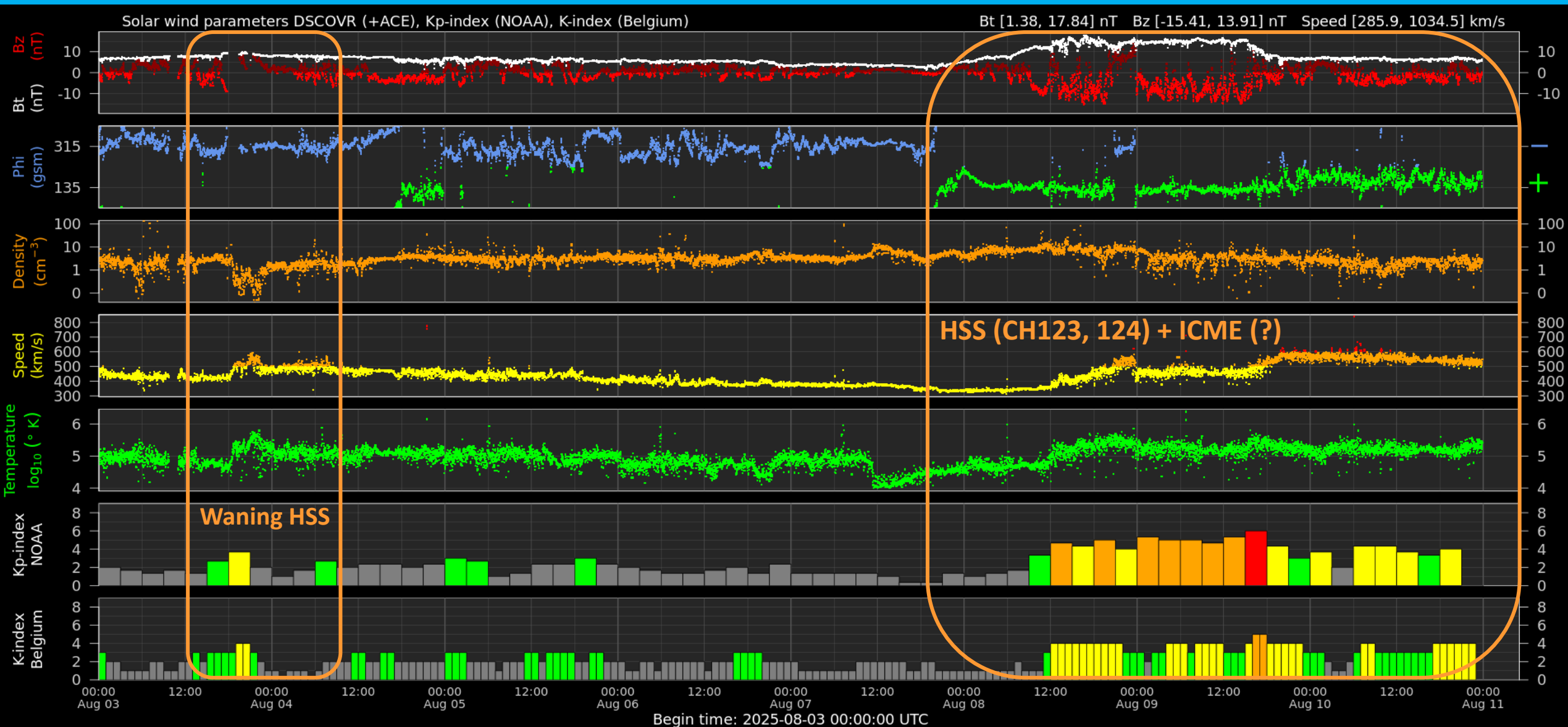


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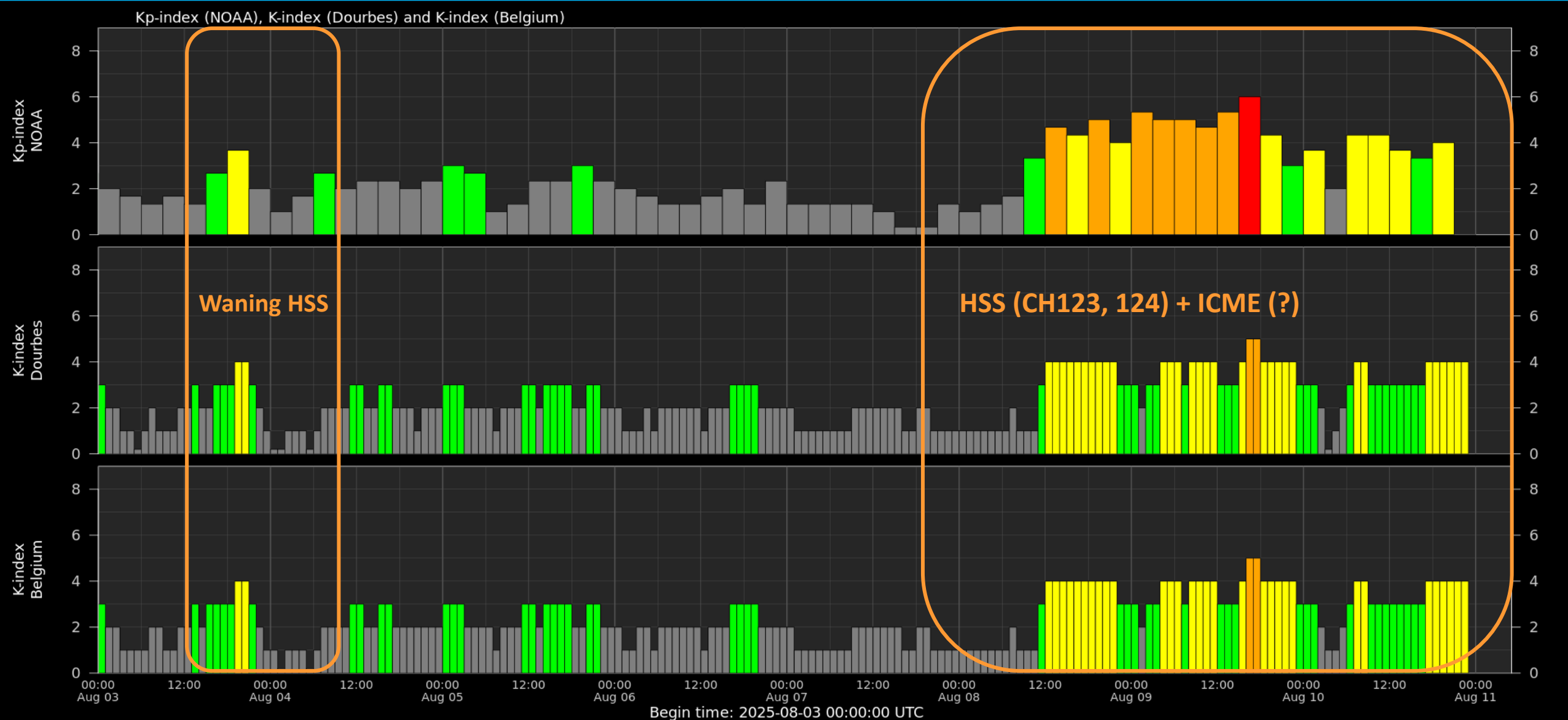
Solar wind parameters



Solar wind parameters & K-indices

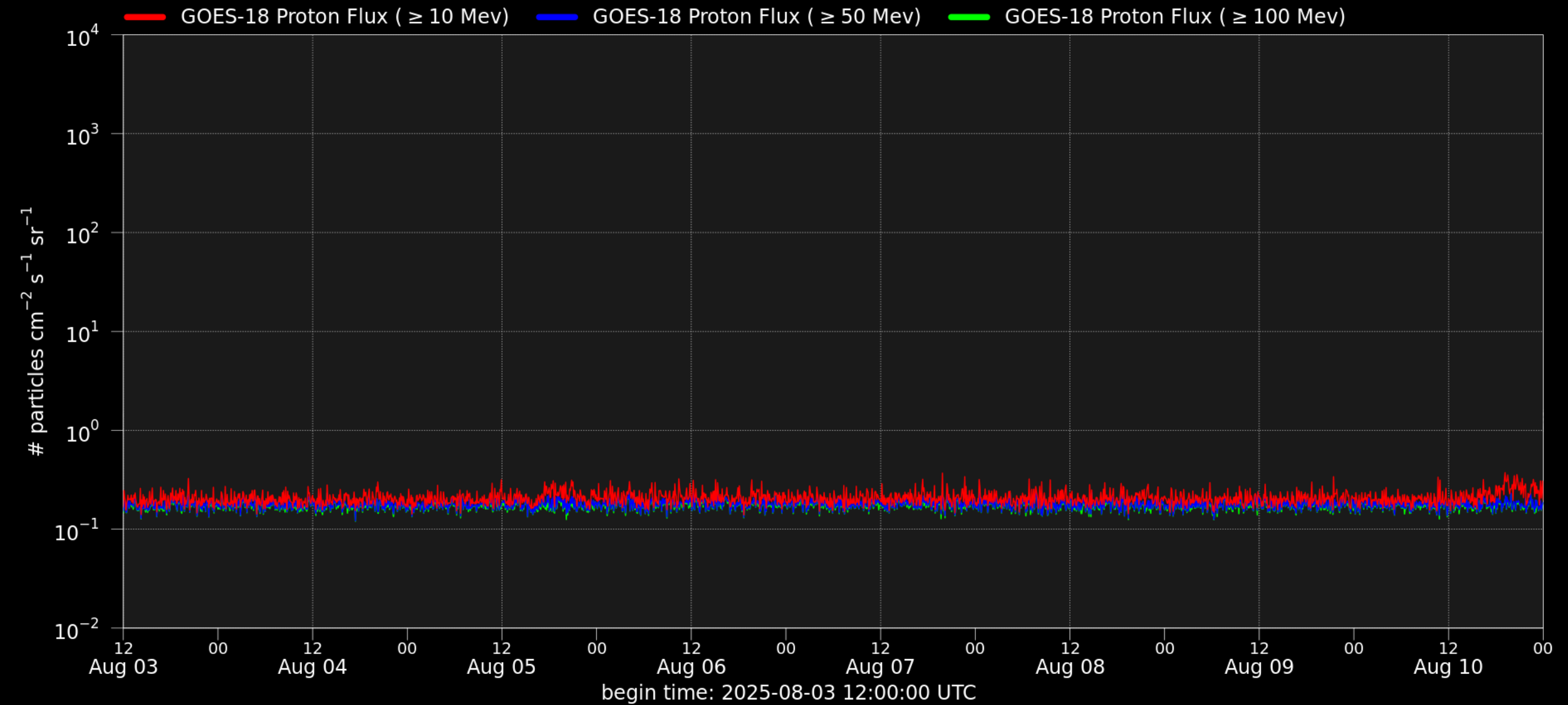


Geomagnetic activity (K-indexes)



Energetic Particles

Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



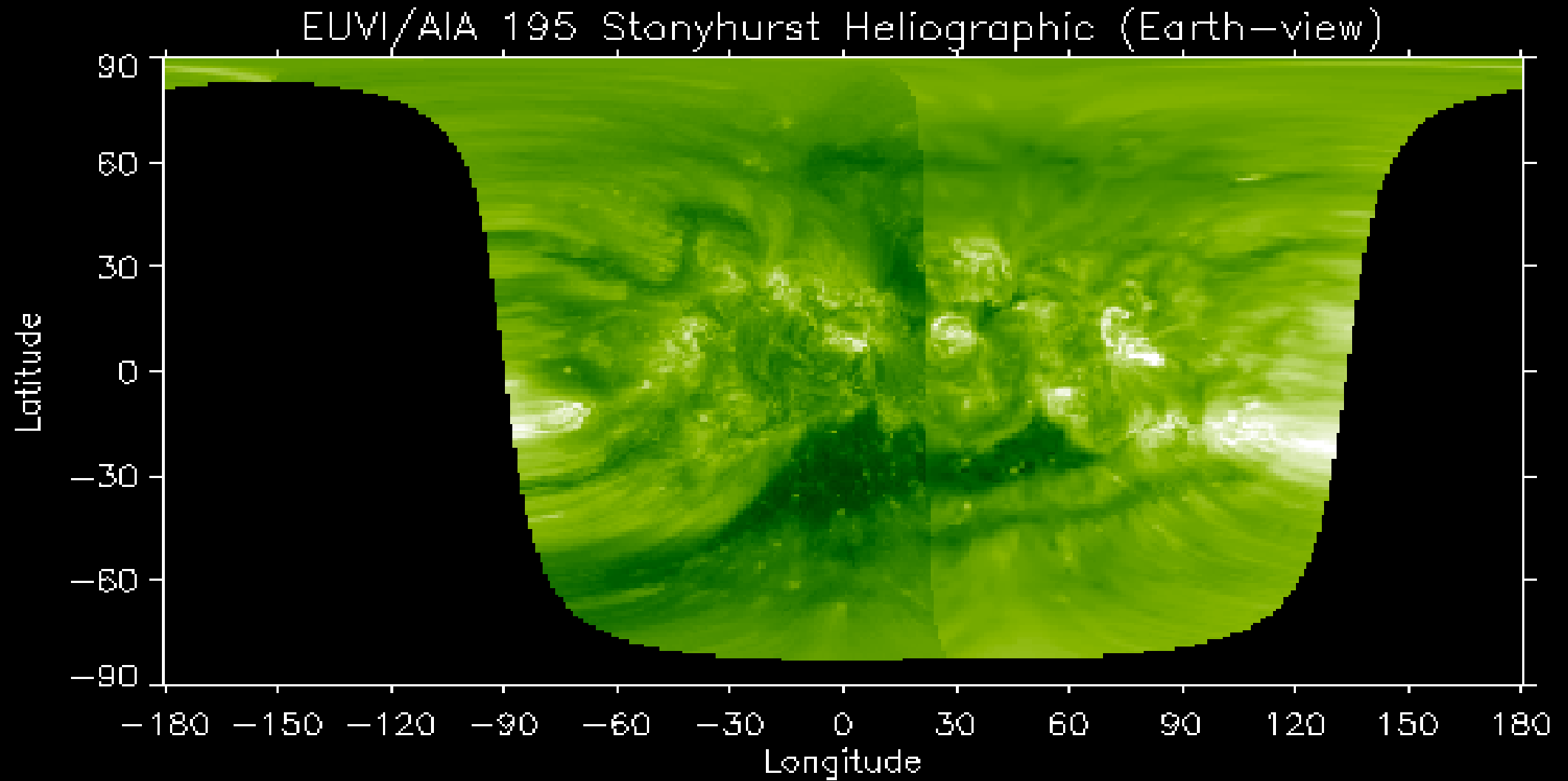
Outlook



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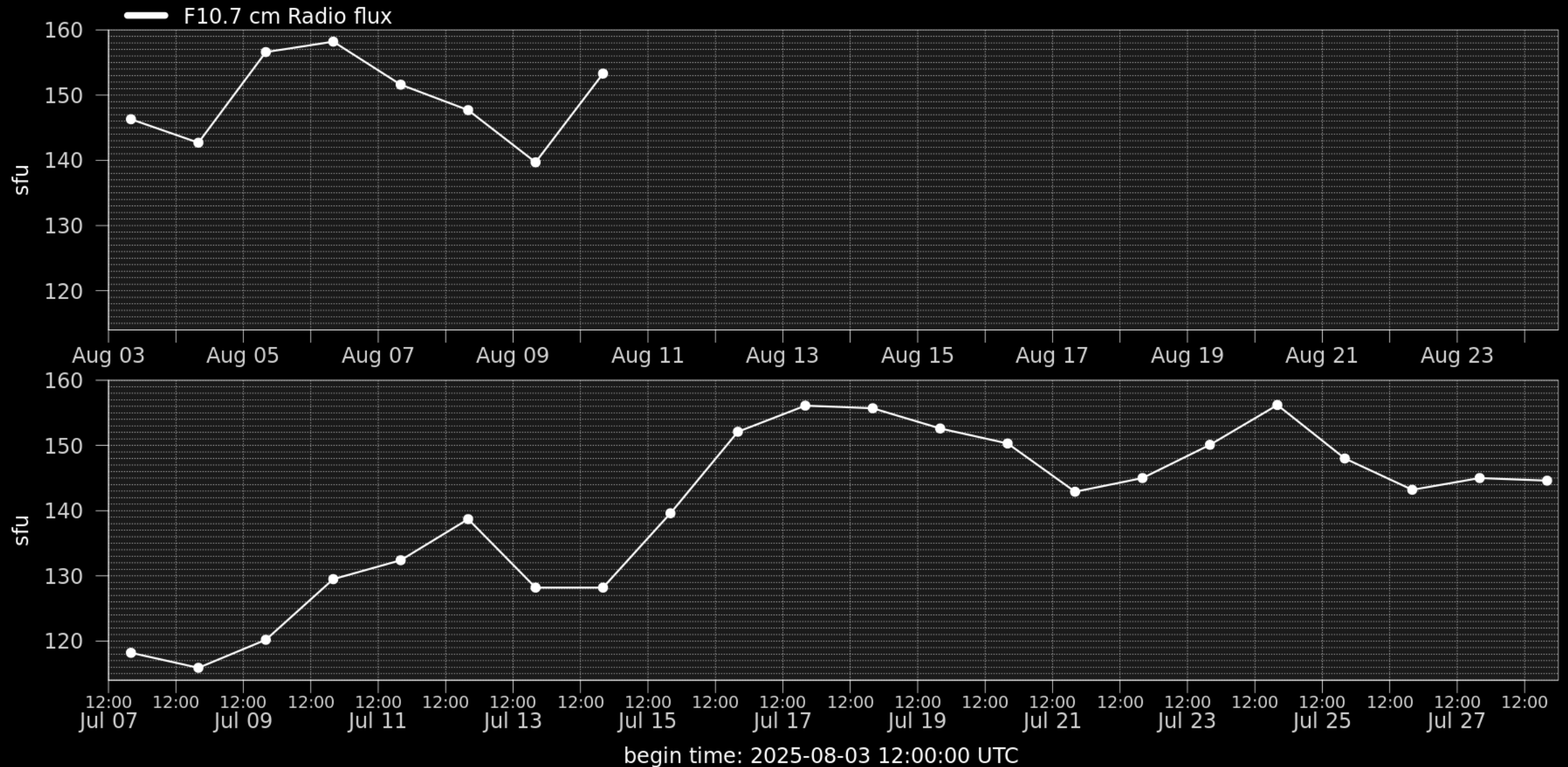
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Outlook: Solar activity

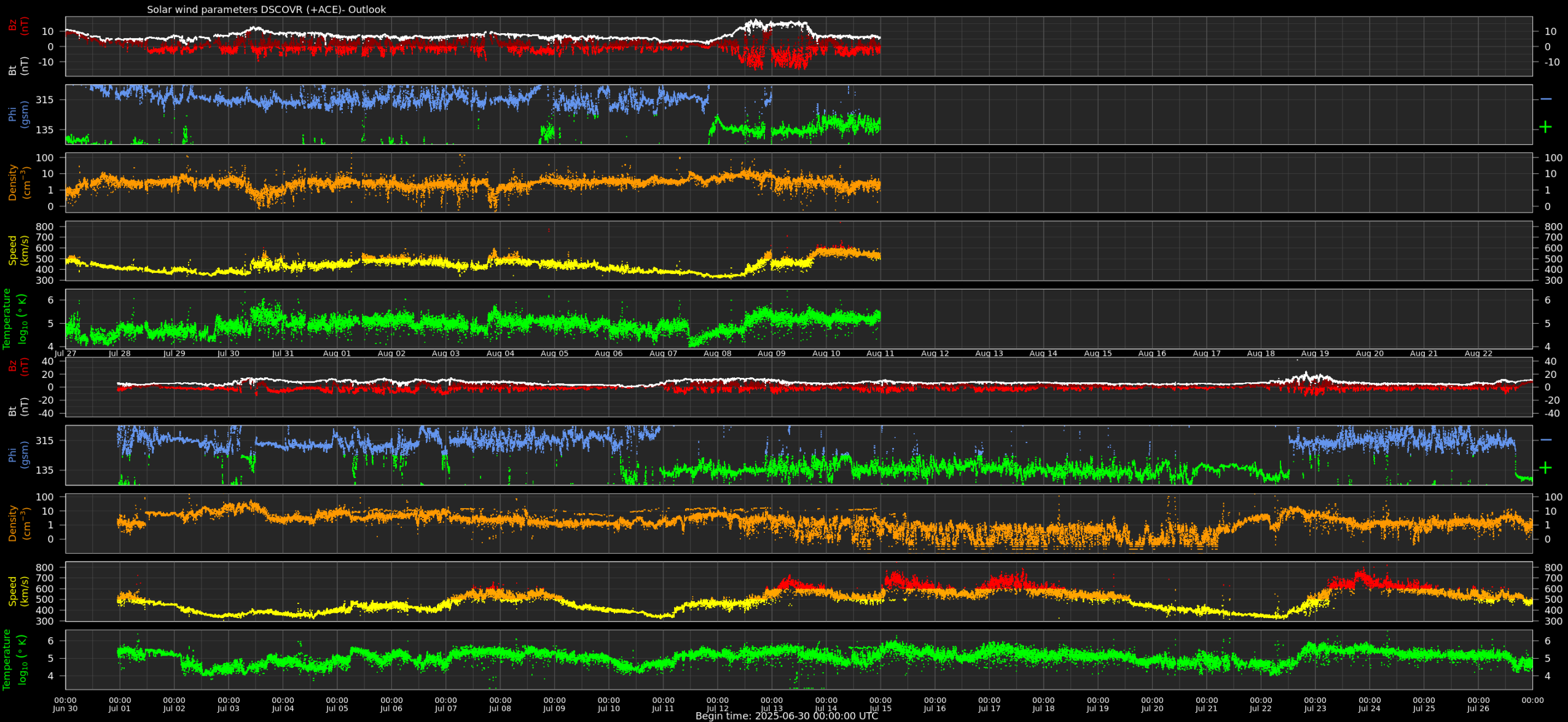


Observation date: 2025/08/10 23:05:00

Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pecarus related events

- GNSS (Amplitude/Phase Scintillation) advisory
- HF (Post Storm Depression) advisories

SIDC Space Weather Briefing

See you at our next briefing!

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