

SIDC Space Weather Briefing

25 August 2025-31 August 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 2025-08-25 00:00 to 2025-08-31 23:59

Active regions	25 SIDC sunspot groups were visible
Flares	# C-class flare: 28 # M-class flare: 13 # X-class flare: 0
Coronal Holes	Two, small and narrow equatorial negative polarity
CMEs	One full halo Earth directed CME

Proton flux	Above 10 pfu threshold (and increasing now)
Electron flux	Short periods above threshold

Solar wind and geomagnetic conditions

ICMEs	None
Solar wind conditions	B : 0.84 - 10.48 nT //Bz: -7.71 nT to 8.93 nT //Speed: 315.9 - 498.6km/s
Geomagnetic conditions	max KBel: 4.0, max Kp(NOAA): 3.33, Active conditions

All Quiet Alert: Off

Solar Activity

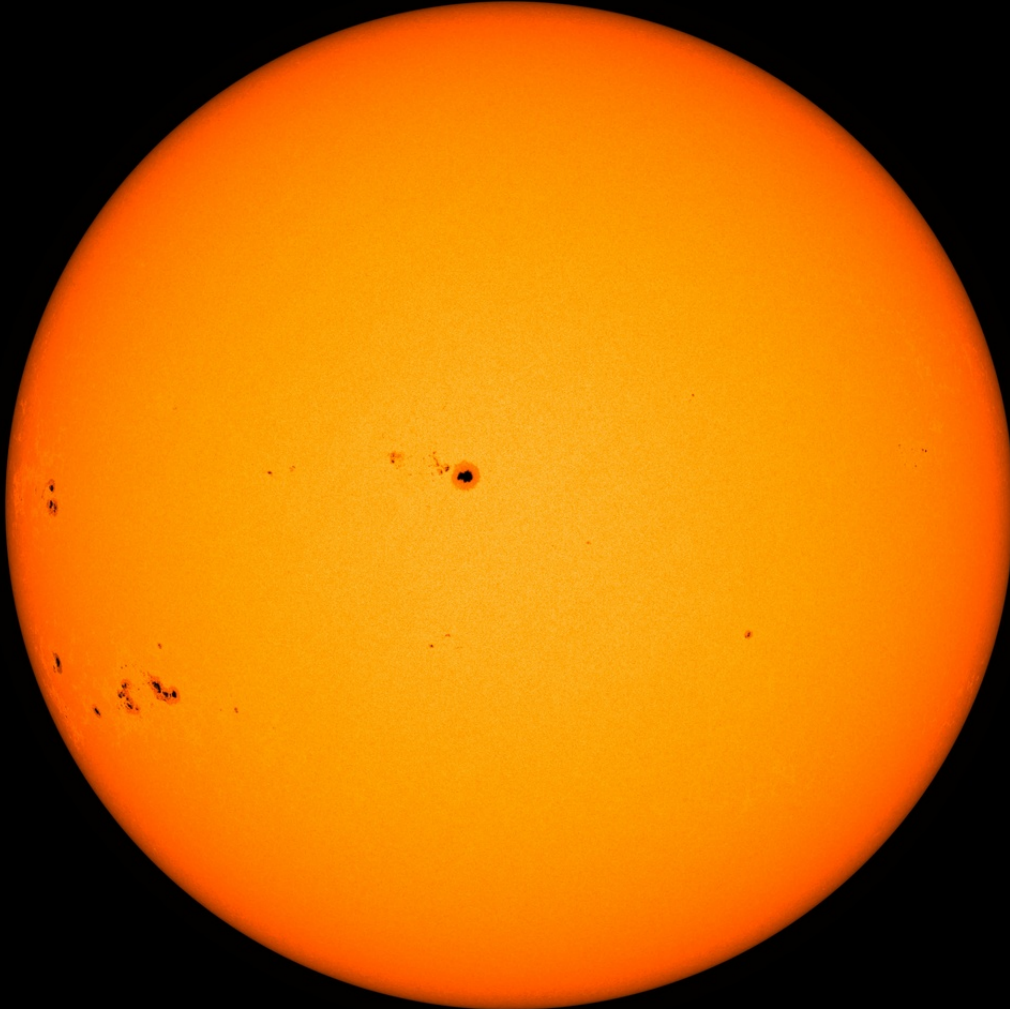


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Solar active regions

SDO/HMI White Light 2025-08-26

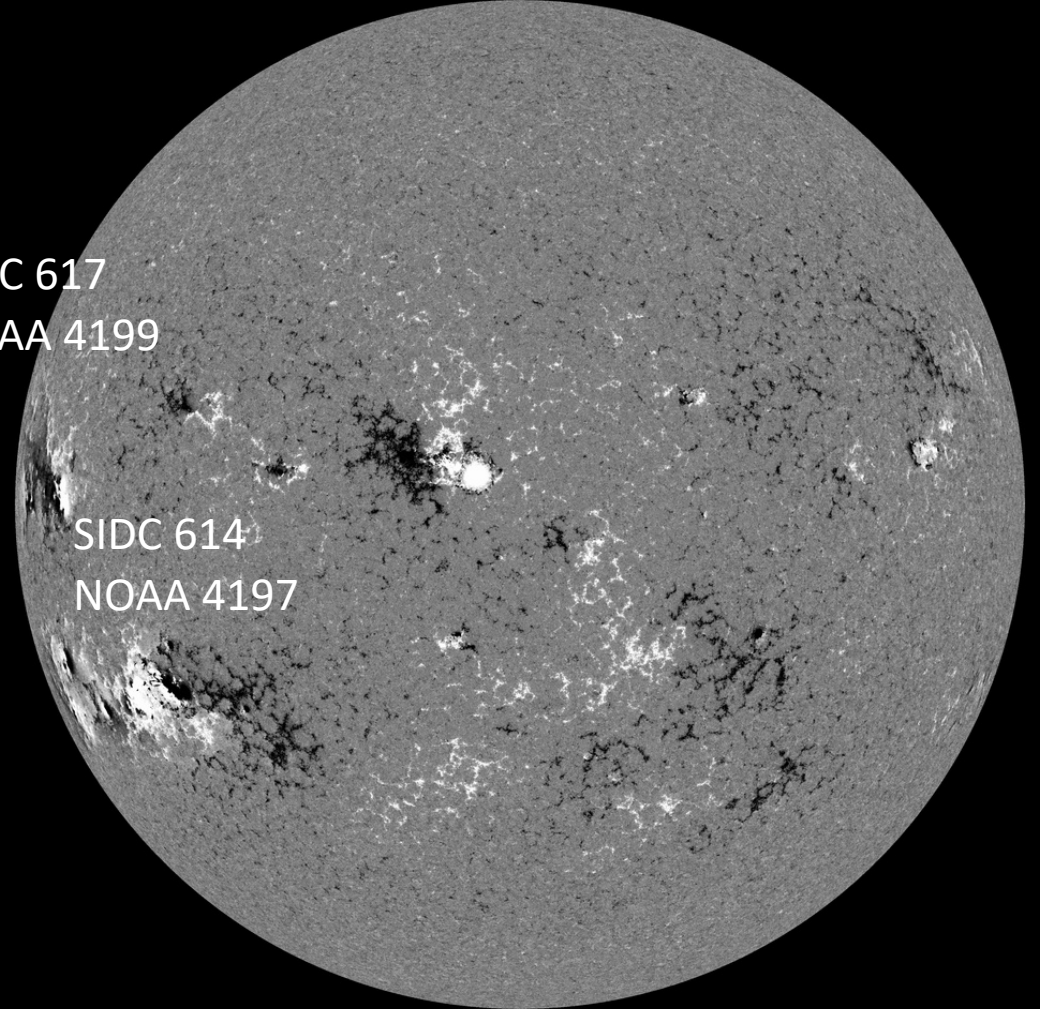


SDO/HMI Quick-Look Continuum: 20250826_114500

SDO/HMI Magnetogram 2025-08-26

SIDC 617
NOAA 4199

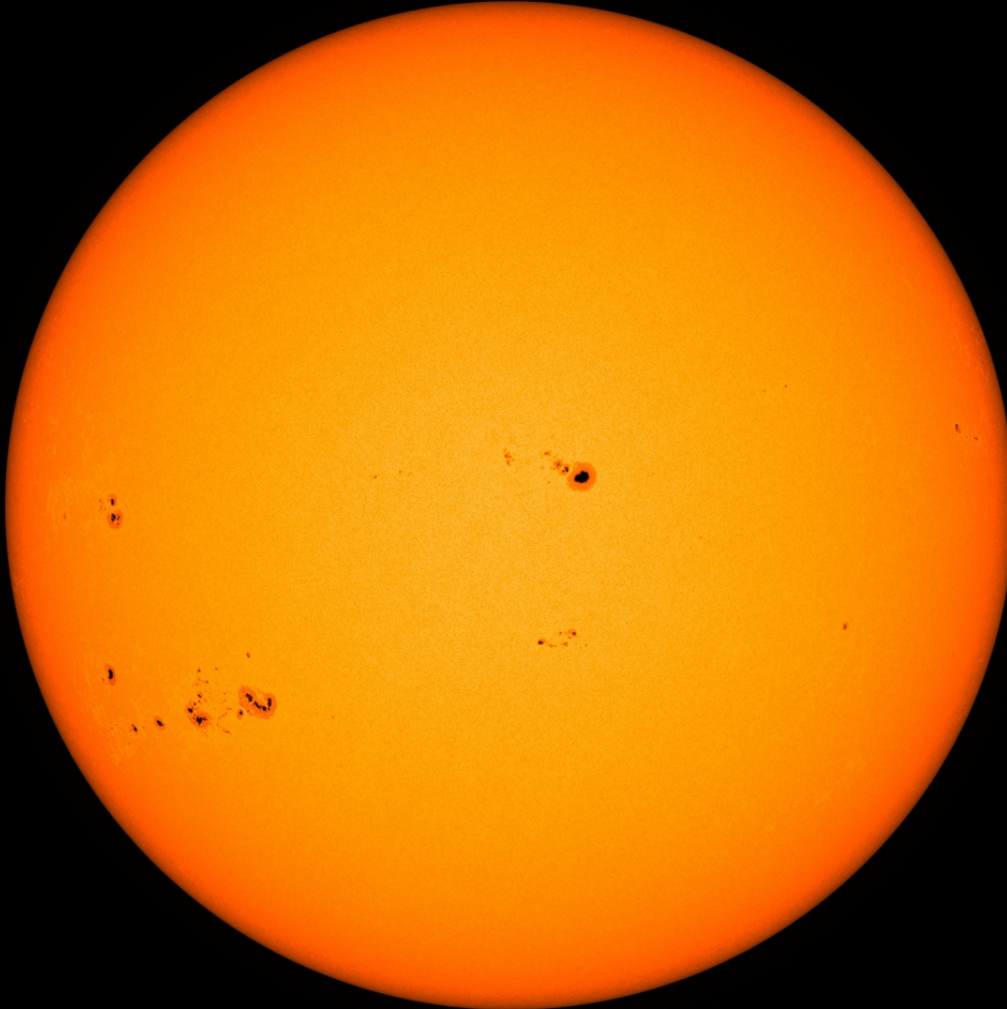
SIDC 614
NOAA 4197



SDO/HMI Quick-Look Magnetogram: 20250826_114500

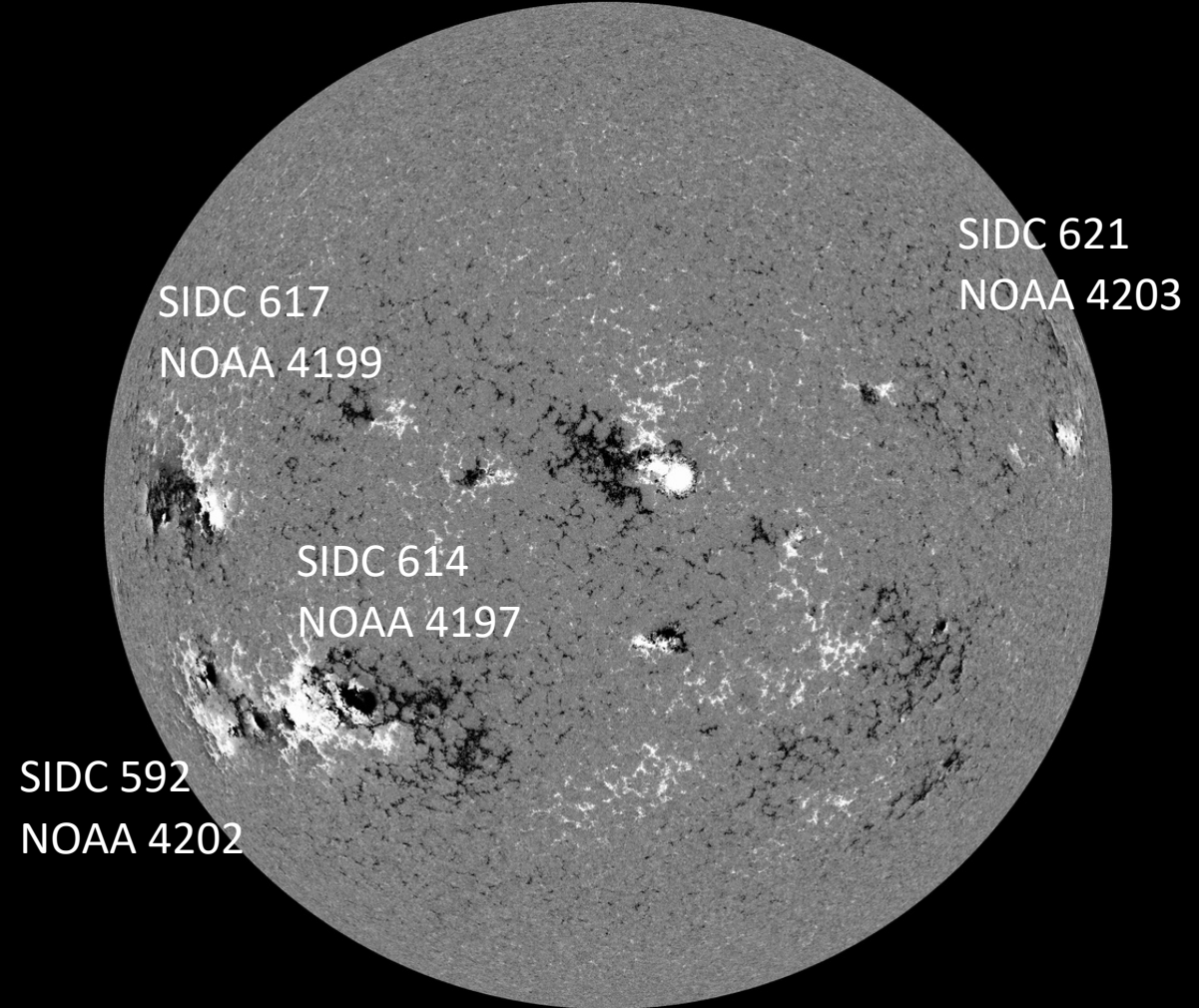
Solar active regions

SDO/HMI White Light 2025-08-27



SDO/HMI Quick-Look Continuum: 20250827_114500

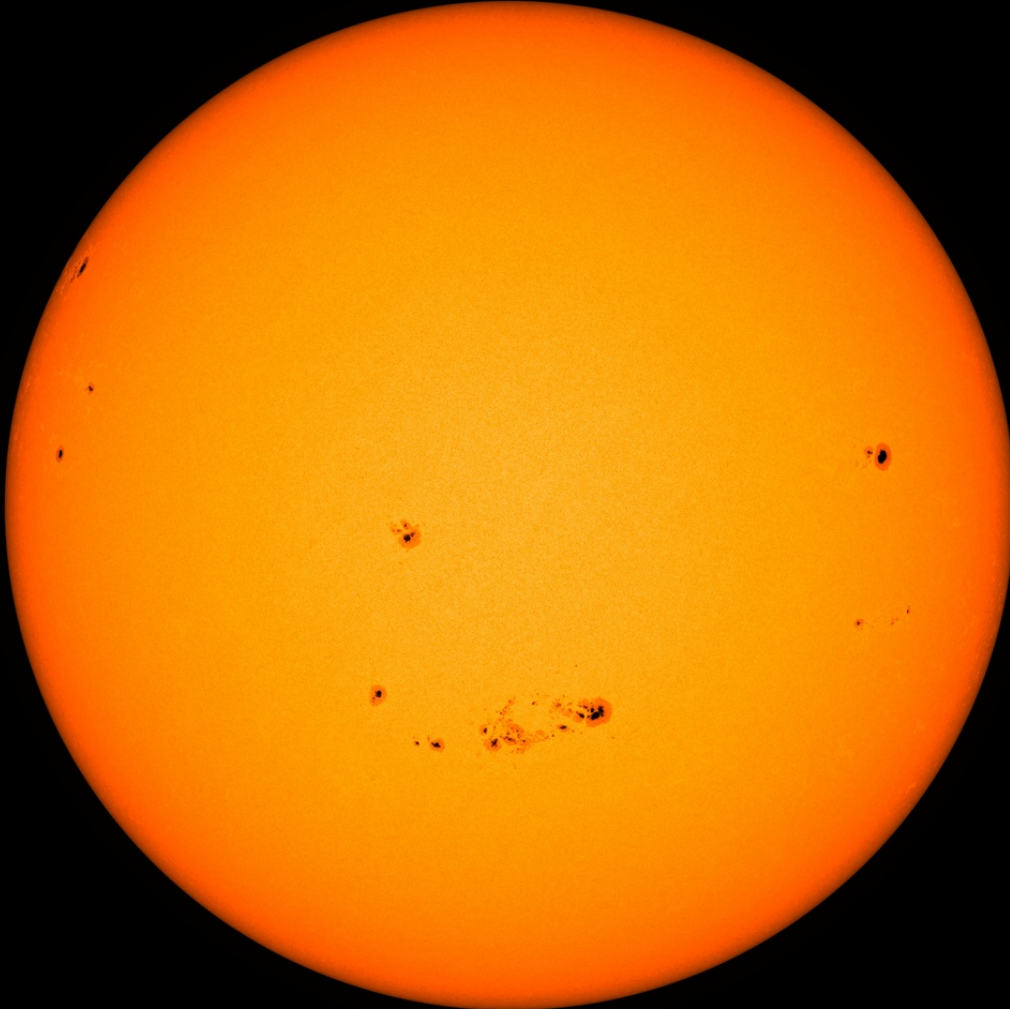
SDO/HMI Magnetogram 2025-08-27



SDO/HMI Quick-Look Magnetogram: 20250827_114500

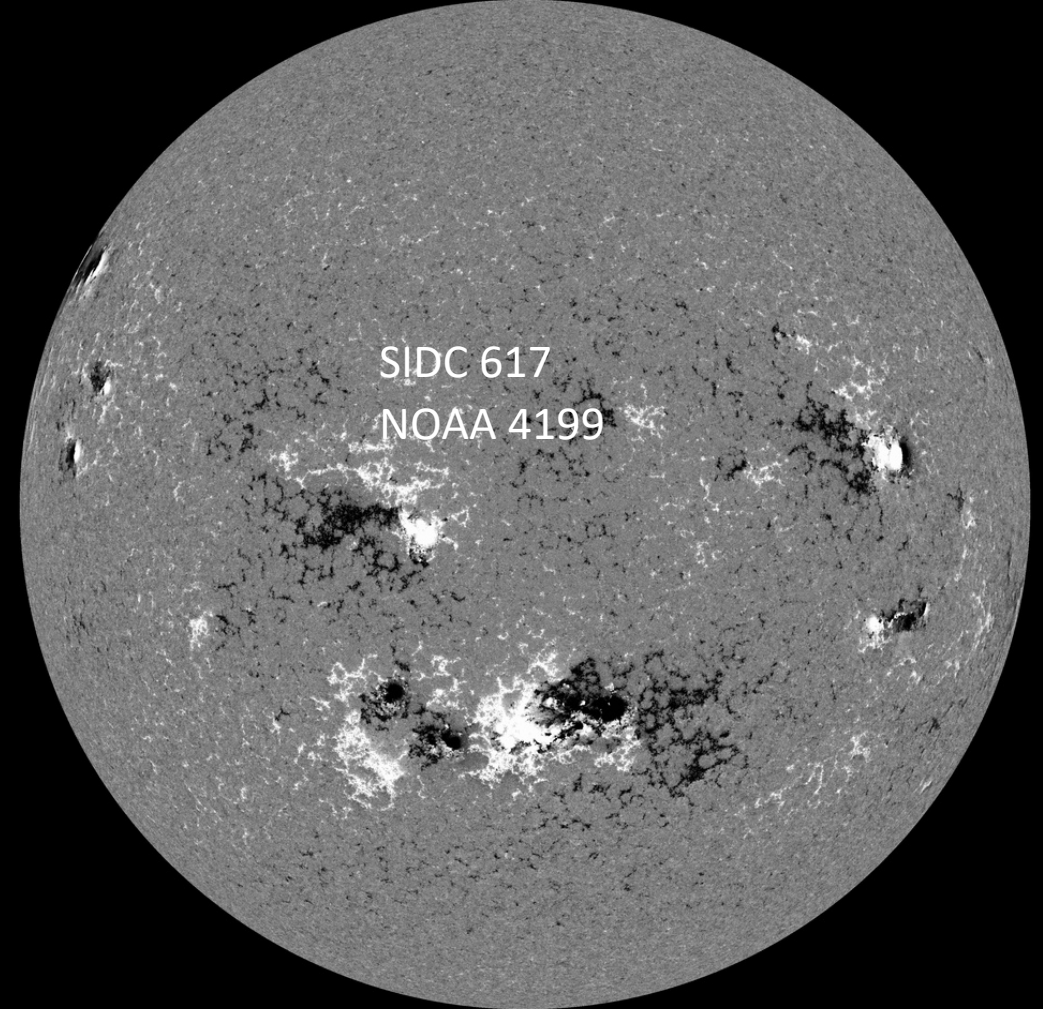
Solar active regions

SDO/HMI White Light 2025-08-30



SDO/HMI Quick-Look Continuum: 20250830_114500

SDO/HMI Magnetogram 2025-08-30

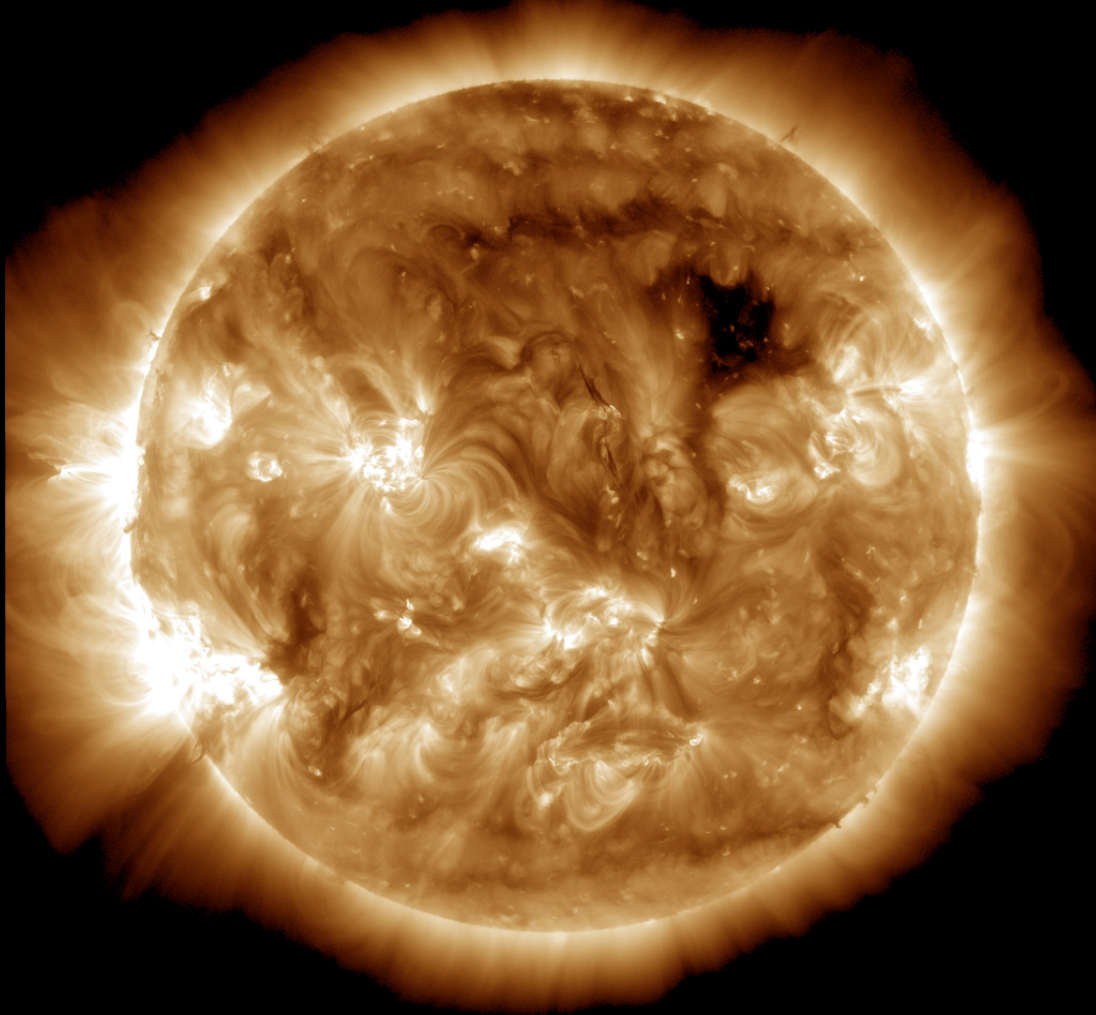


SDO/HMI Quick-Look Magnetogram: 20250830_114500

Coronal holes

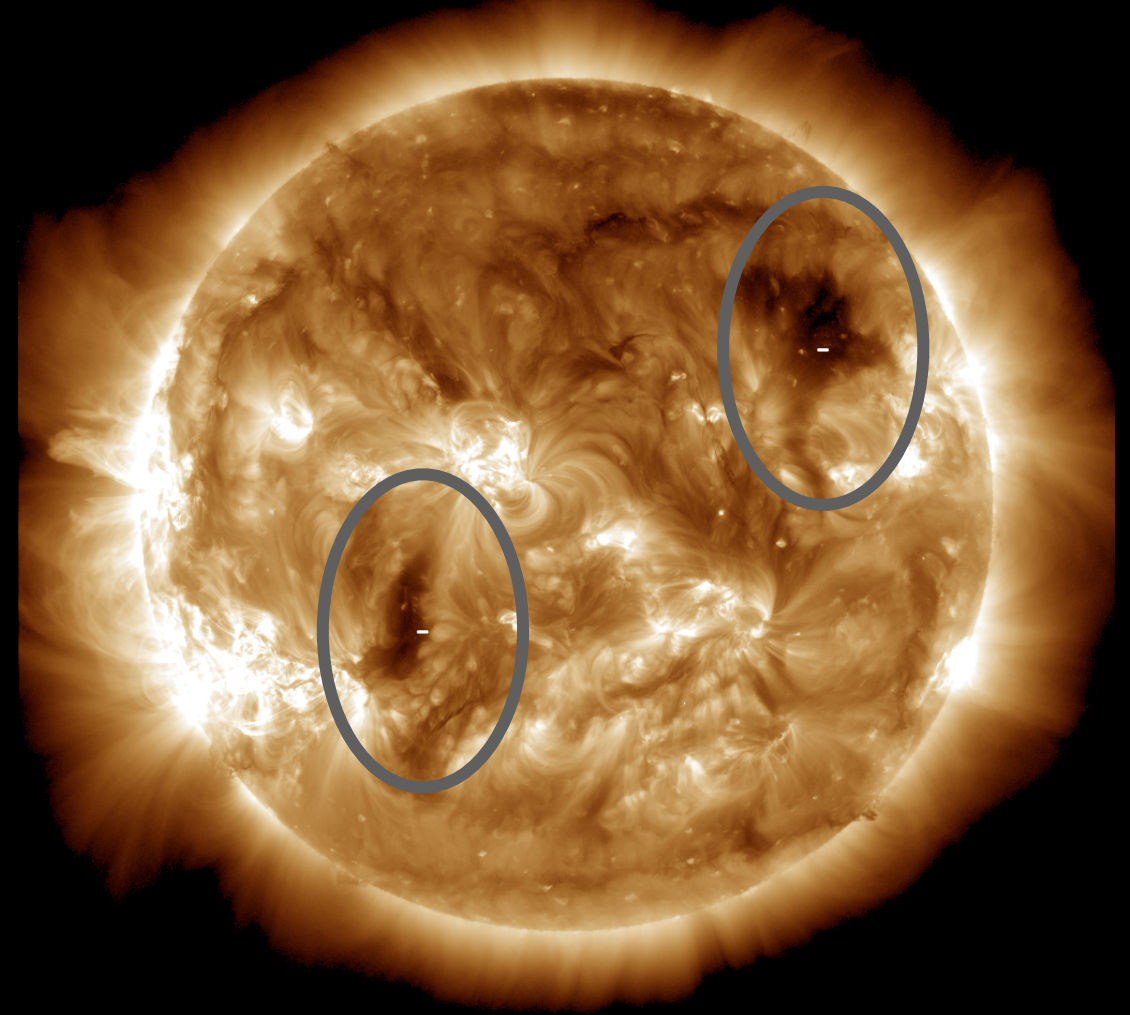
SDO/AIA 19.3 nm 2025-08-25

SDO/AIA AIA 193Å 2025-08-25T12:00:05.843

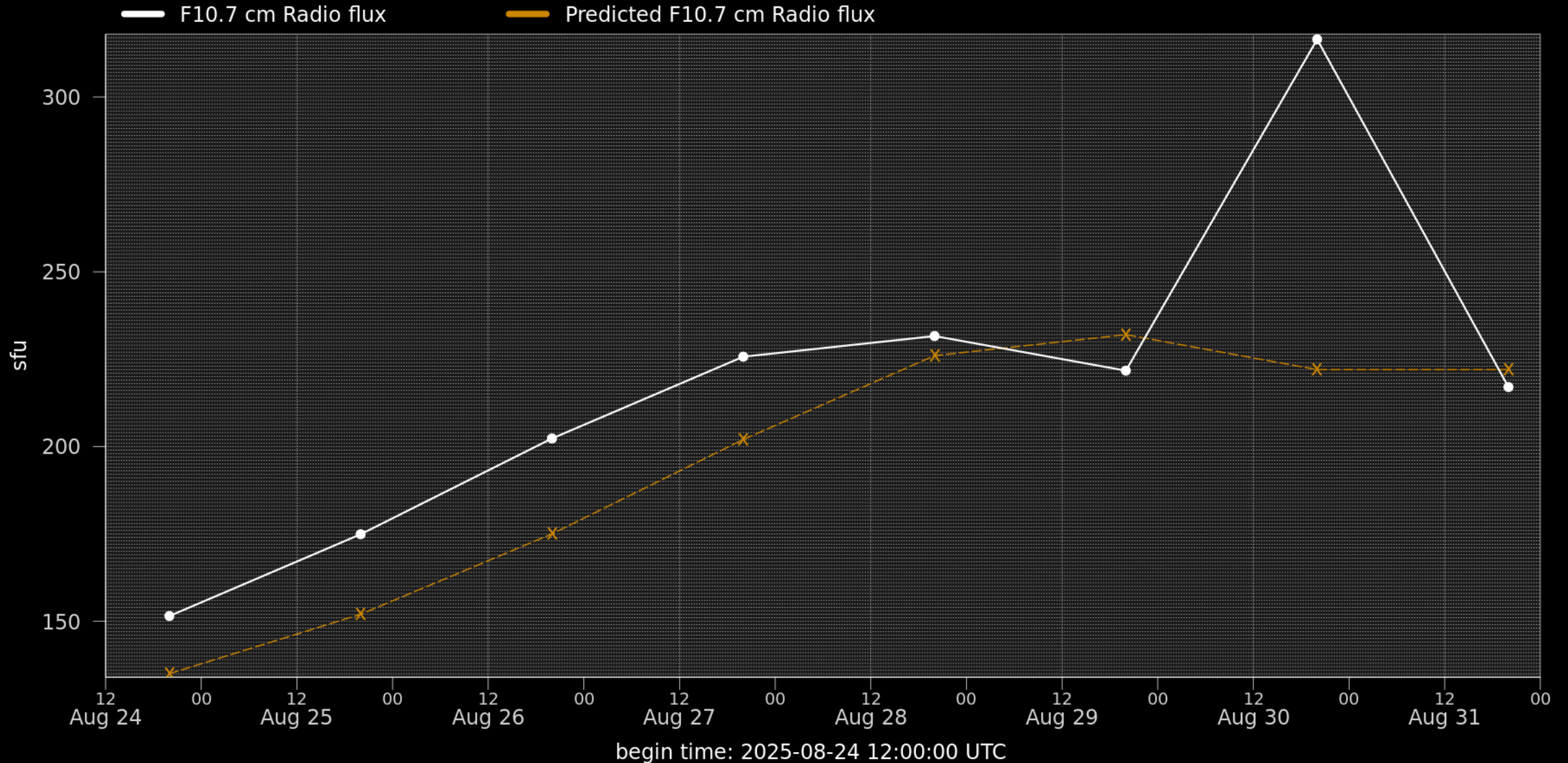


SDO/AIA 19.3 nm 2025-08-26

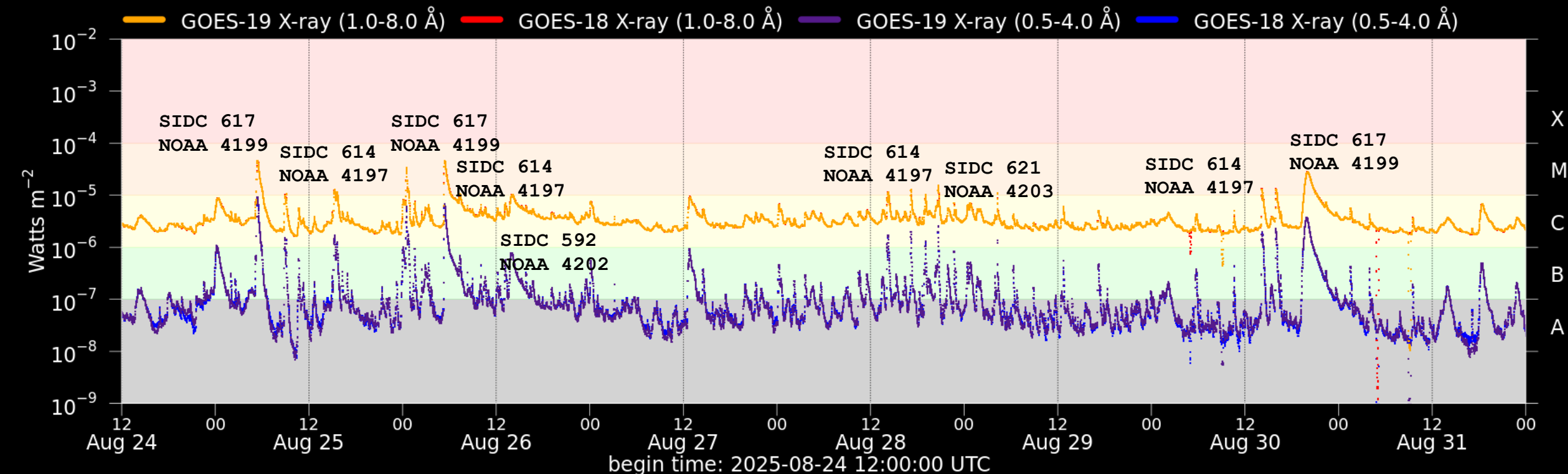
SDO/AIA AIA 193Å 2025-08-26T12:00:05.843



Solar F10.7cm radio flux



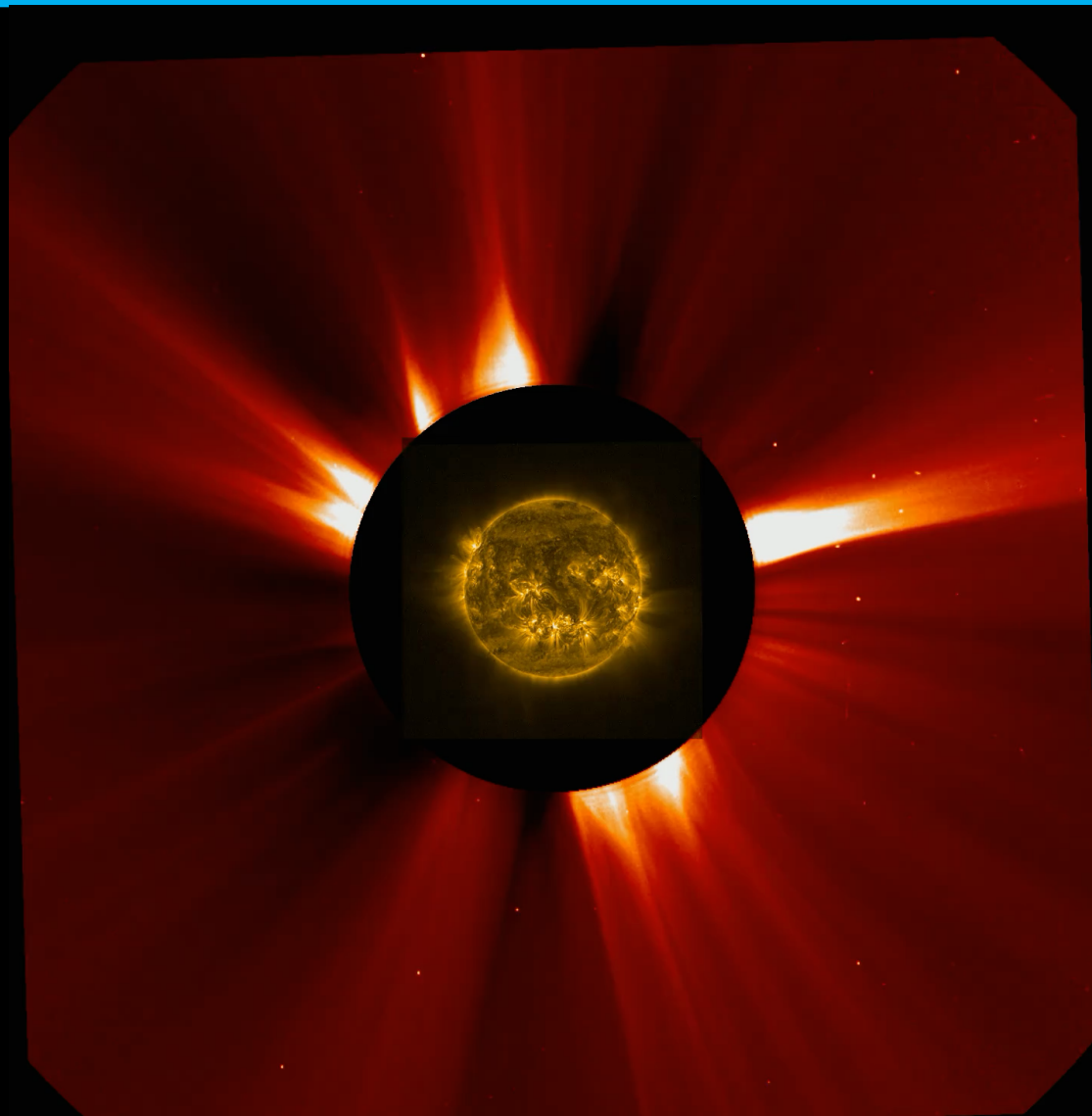
Flaring activity



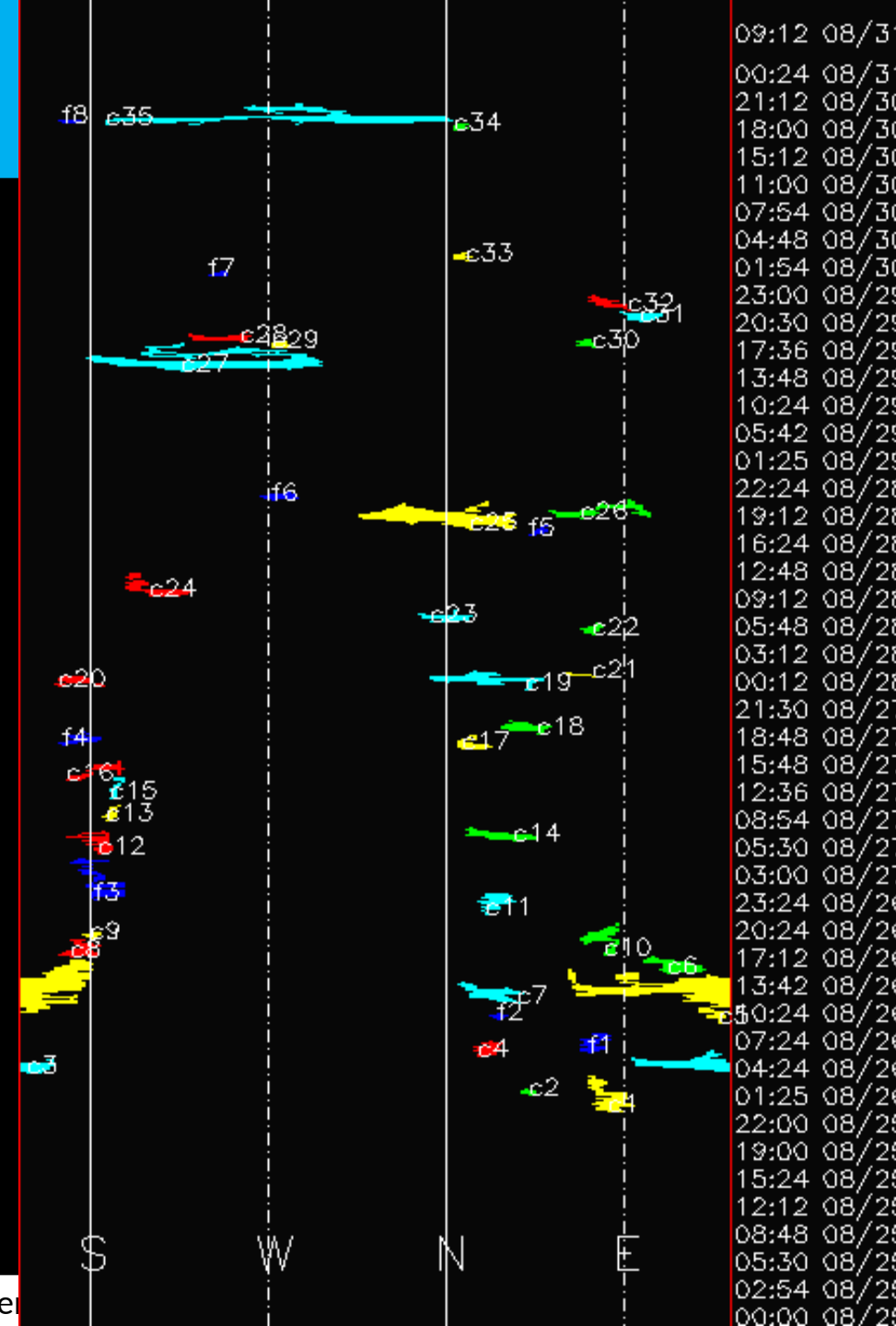
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-08-24	2025-08-25	2025-08-26	2025-08-27	2025-08-28	2025-08-29	2025-08-30	2025-08-31
Probability (%)	96 47 06	98 64 22	99 61 16	99 59 07	99 55 04	99 65 05	97 50 05	99 75 20
Observed (#)	01 02 00	07 03 00	02 01 00	03 00 00	04 05 00	05 00 00	04 02 00	02 00 00

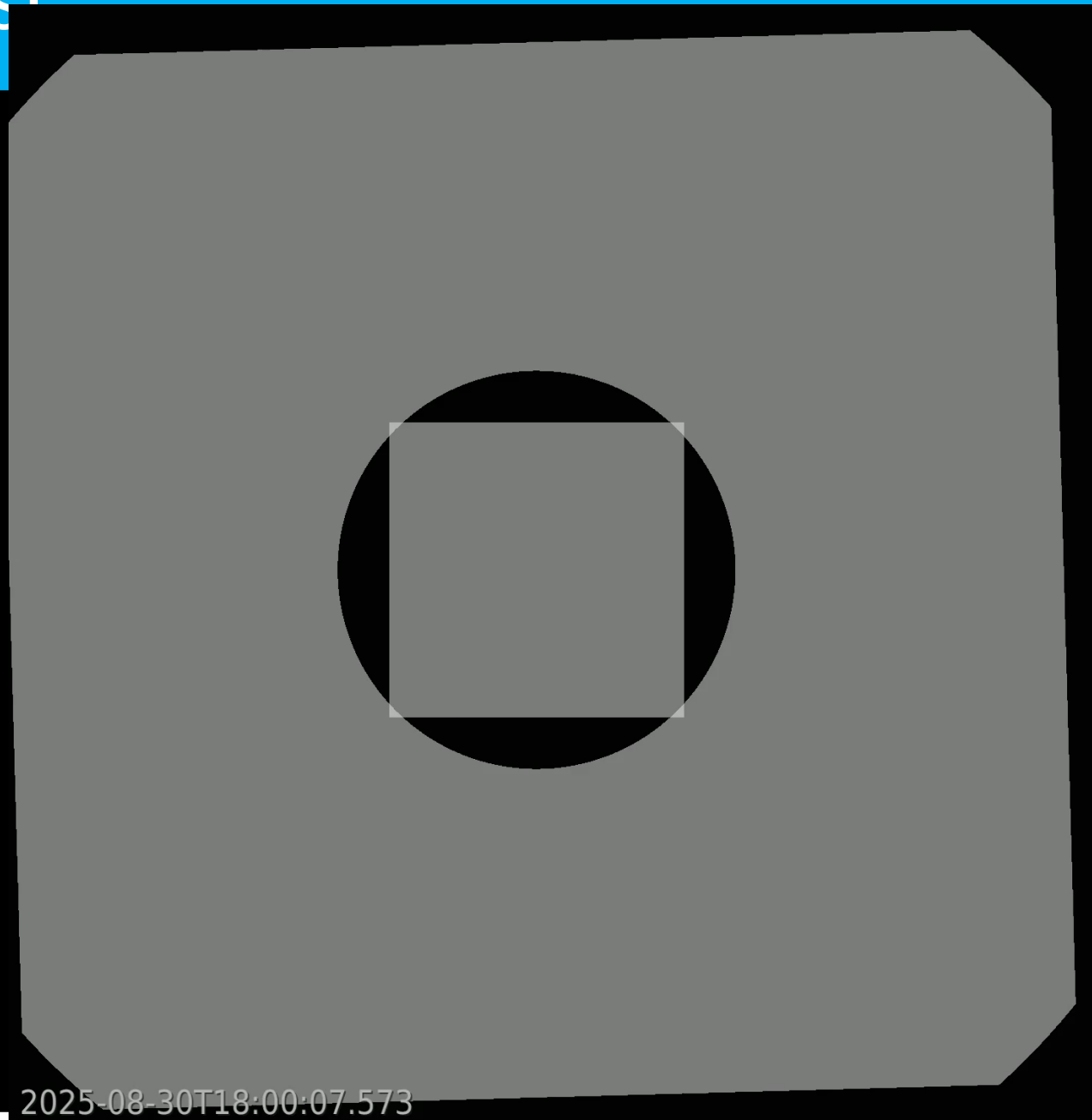
Coronal Mass Ejections



2025-08-30T18:01:46.333

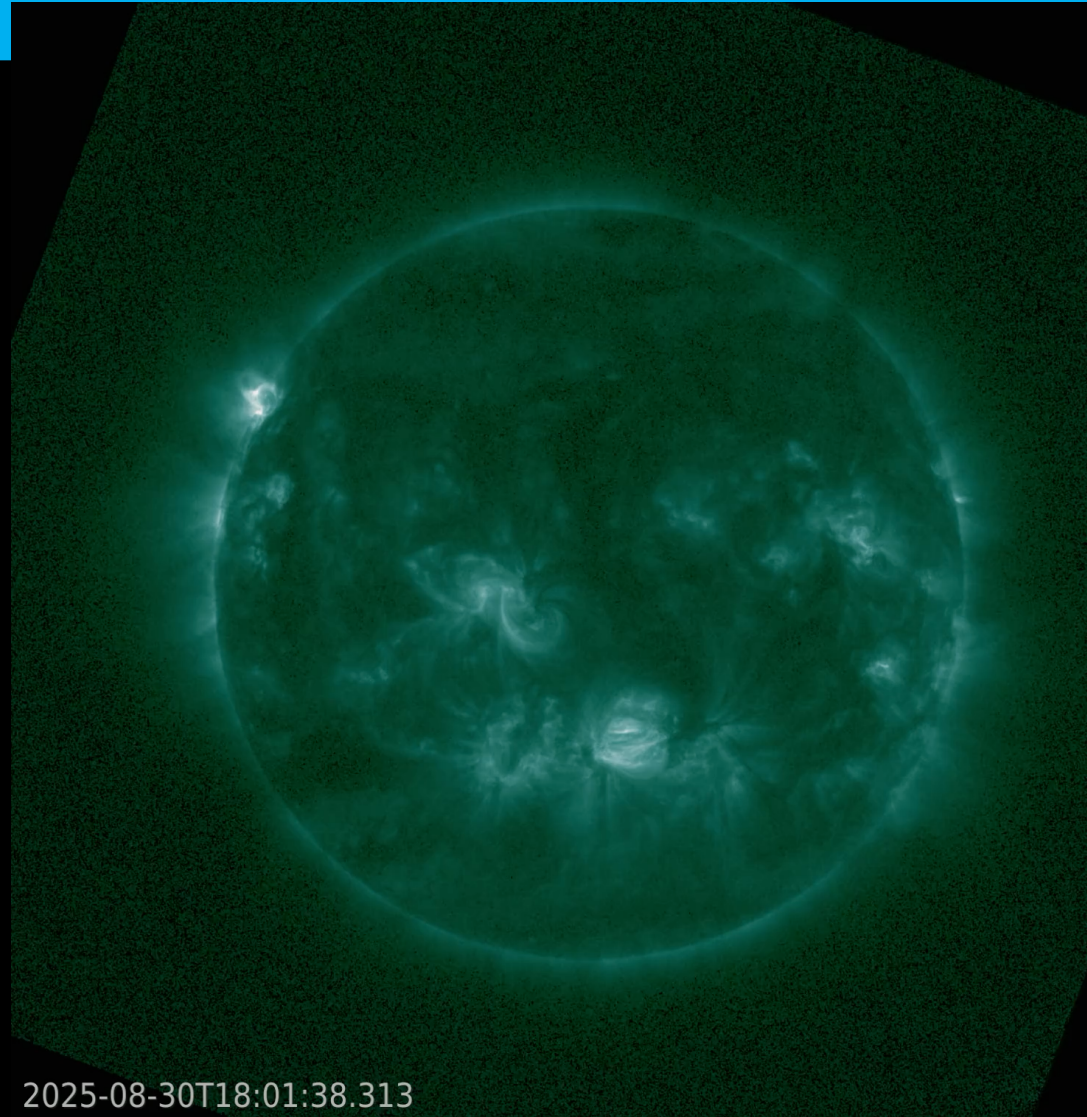


CME 30 August



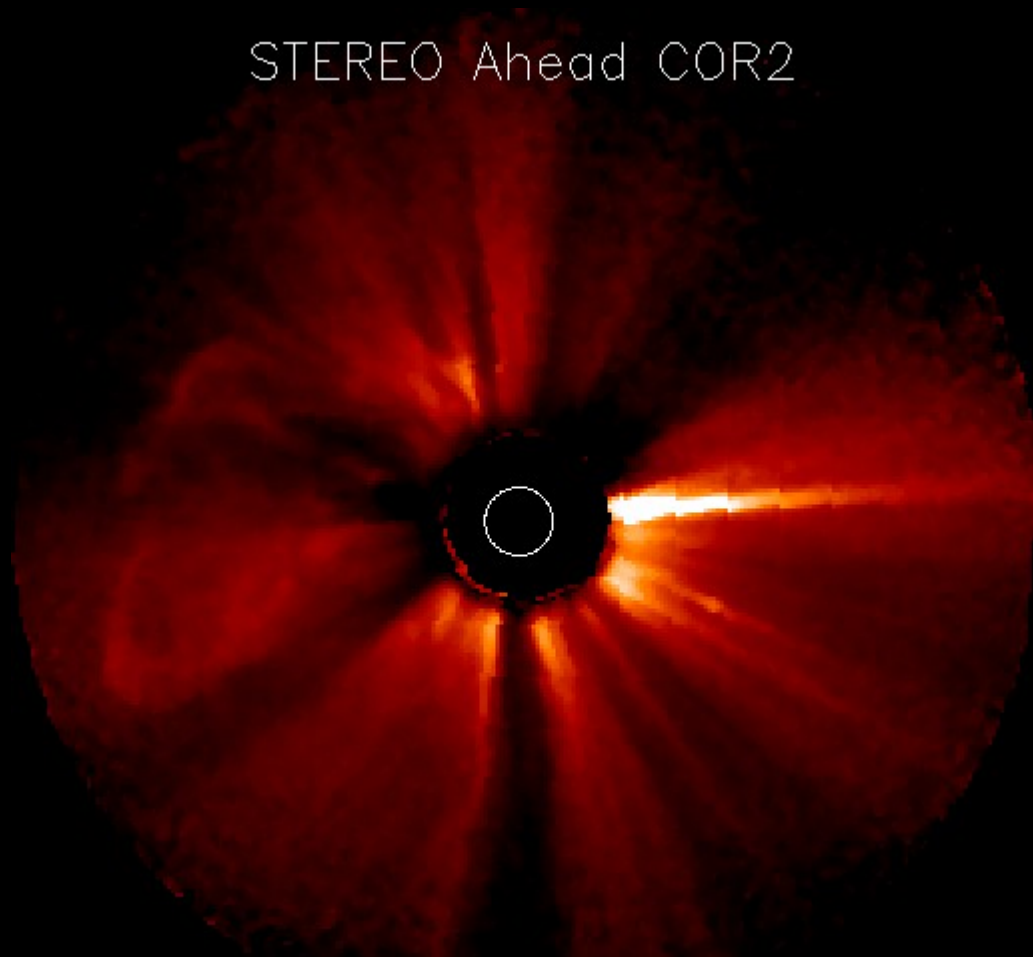
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CME 30 August

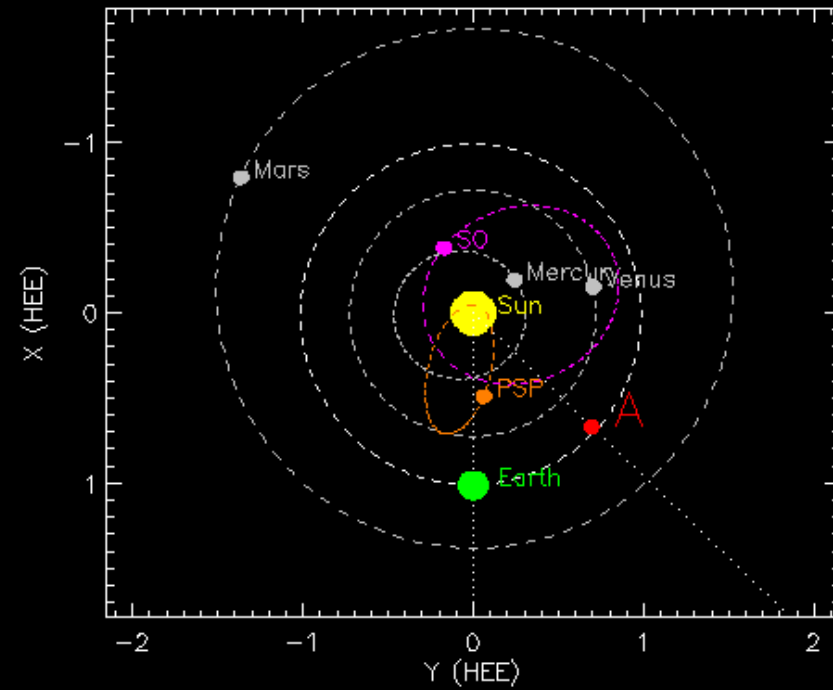


CME 30 August

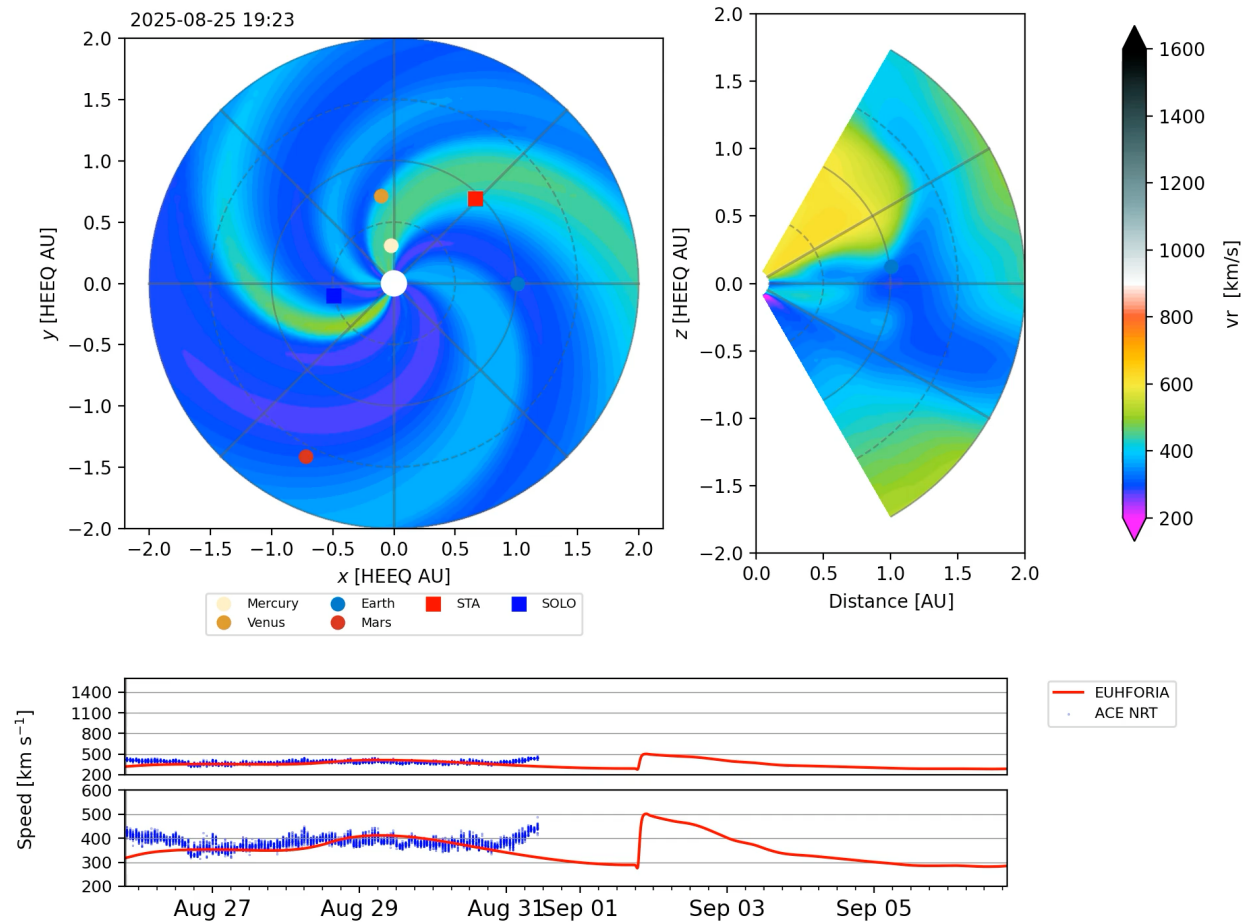
STEREO Ahead COR2



2025-08-30 21:38:54

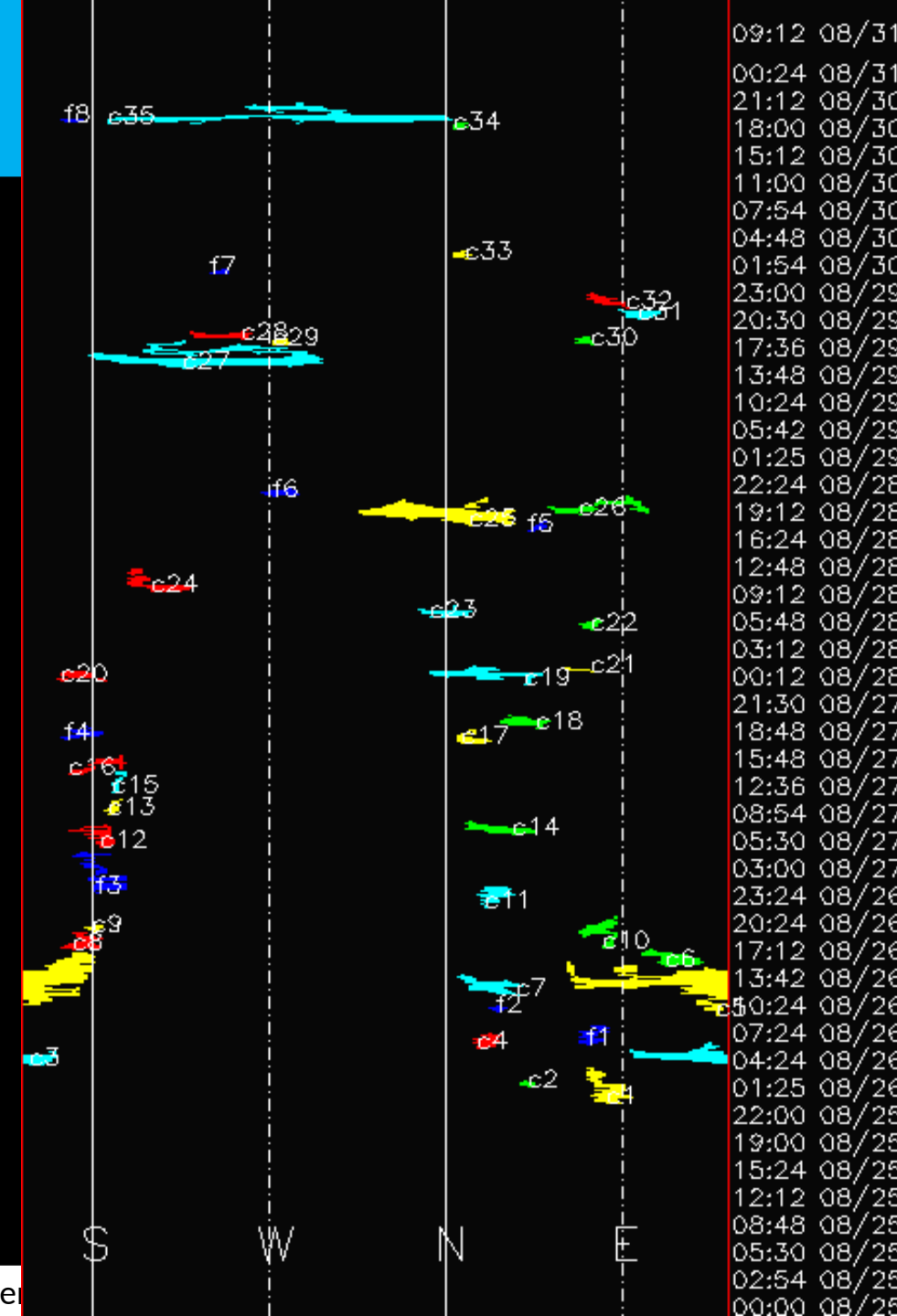


CME 30 August – EUHFORIA simulation



CME 30 August – Summary

- CME launch time: 30 August, 20:12 UT (LASCO C2)
- Expected arrival time: 1 September, 19:00 UT
- Geomagnetic impact: Kp/K_Bel 7



Solar Wind and

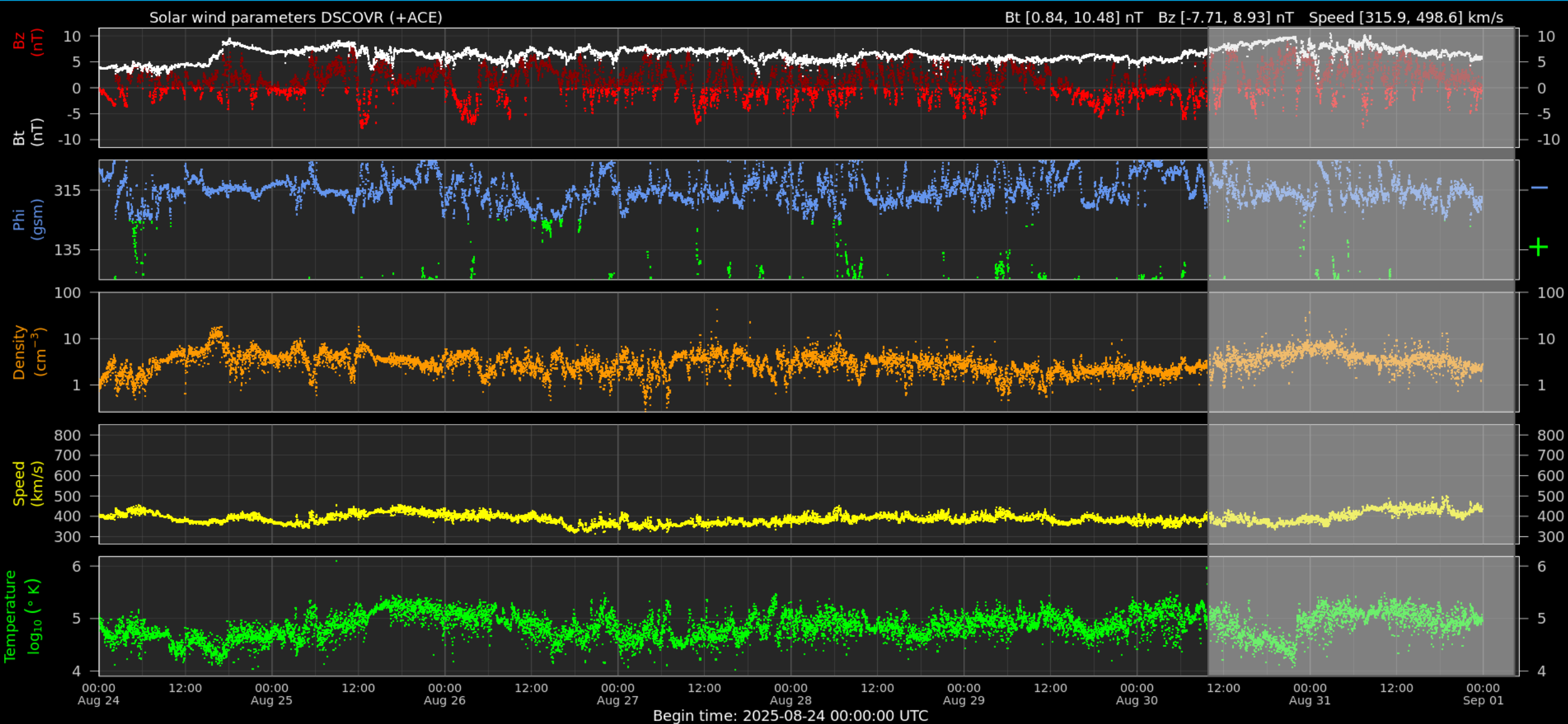
Geomagnetic Activity



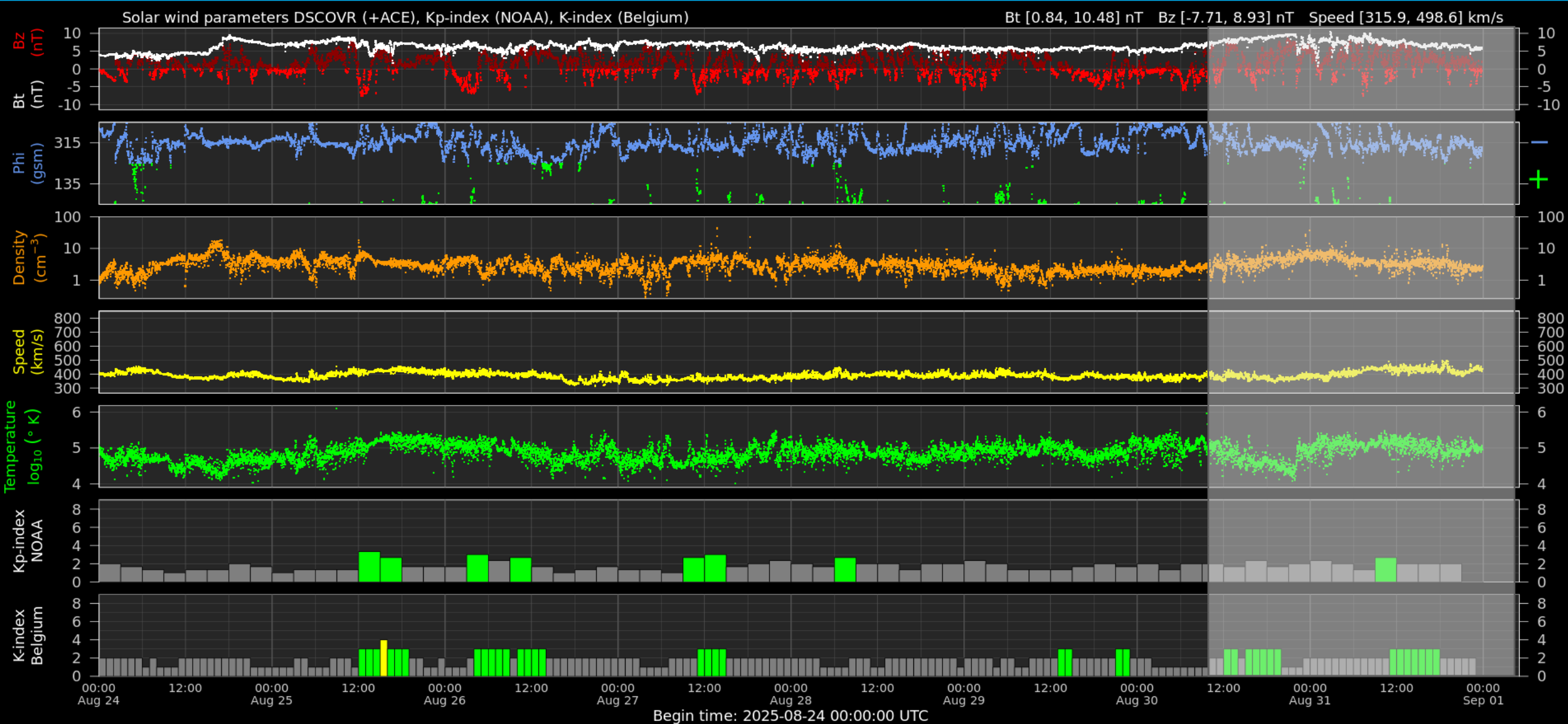
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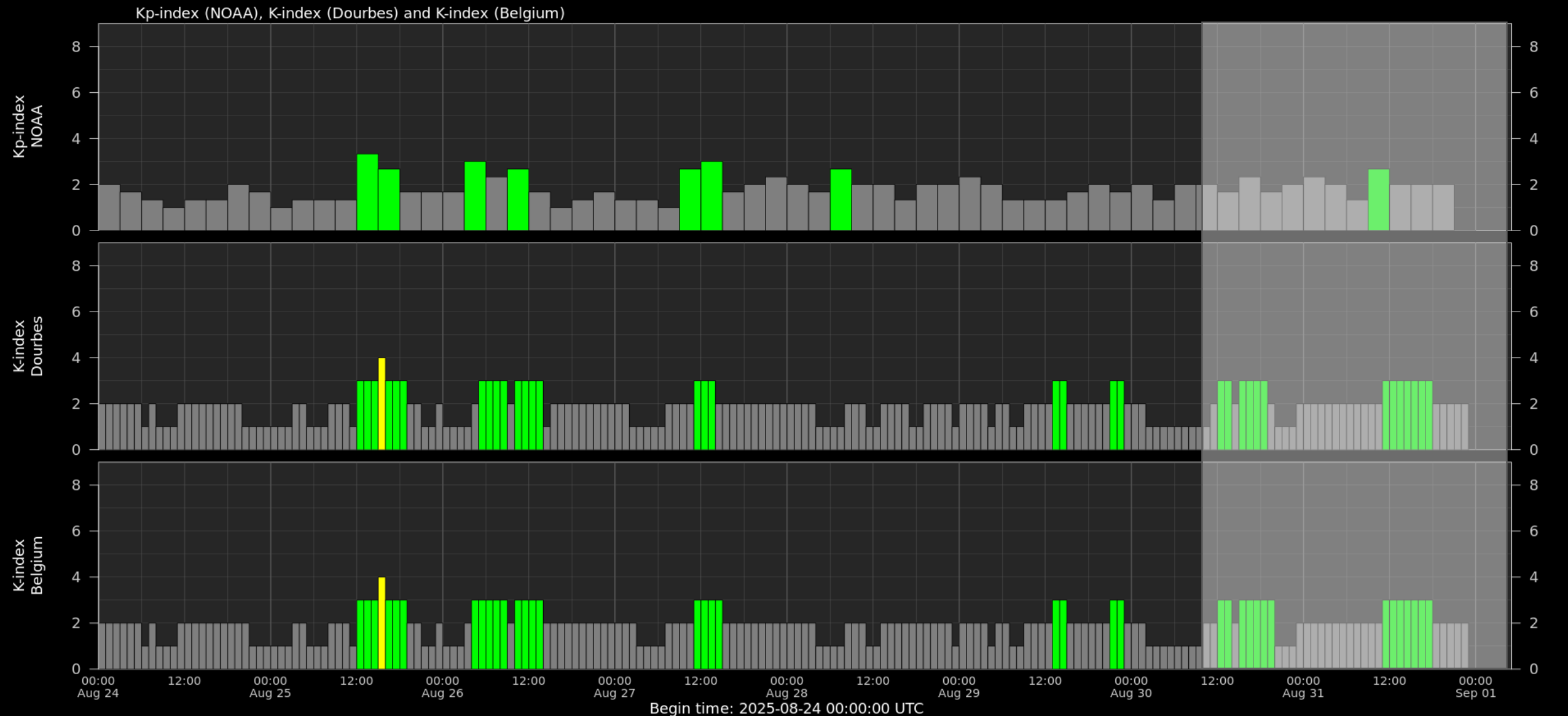
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



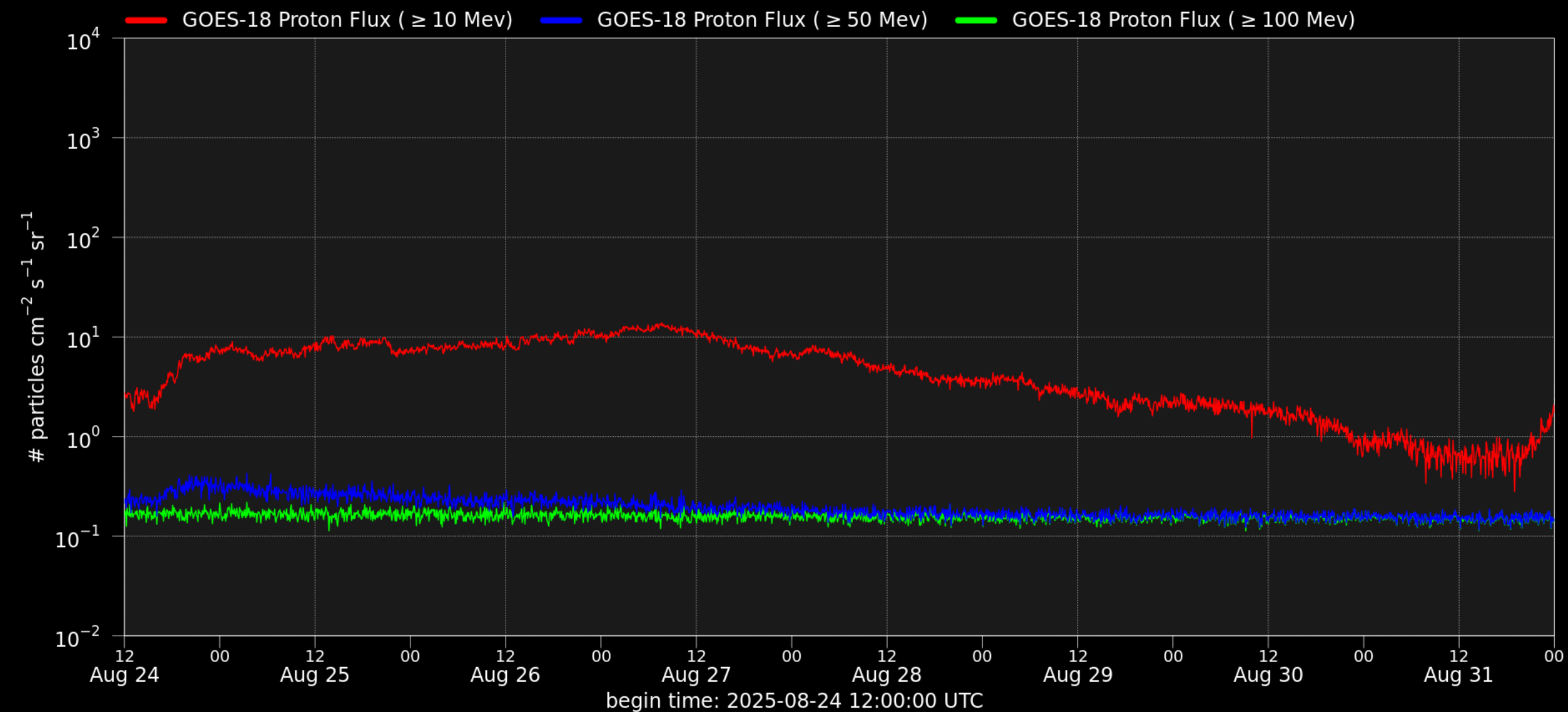
Energetic Particles



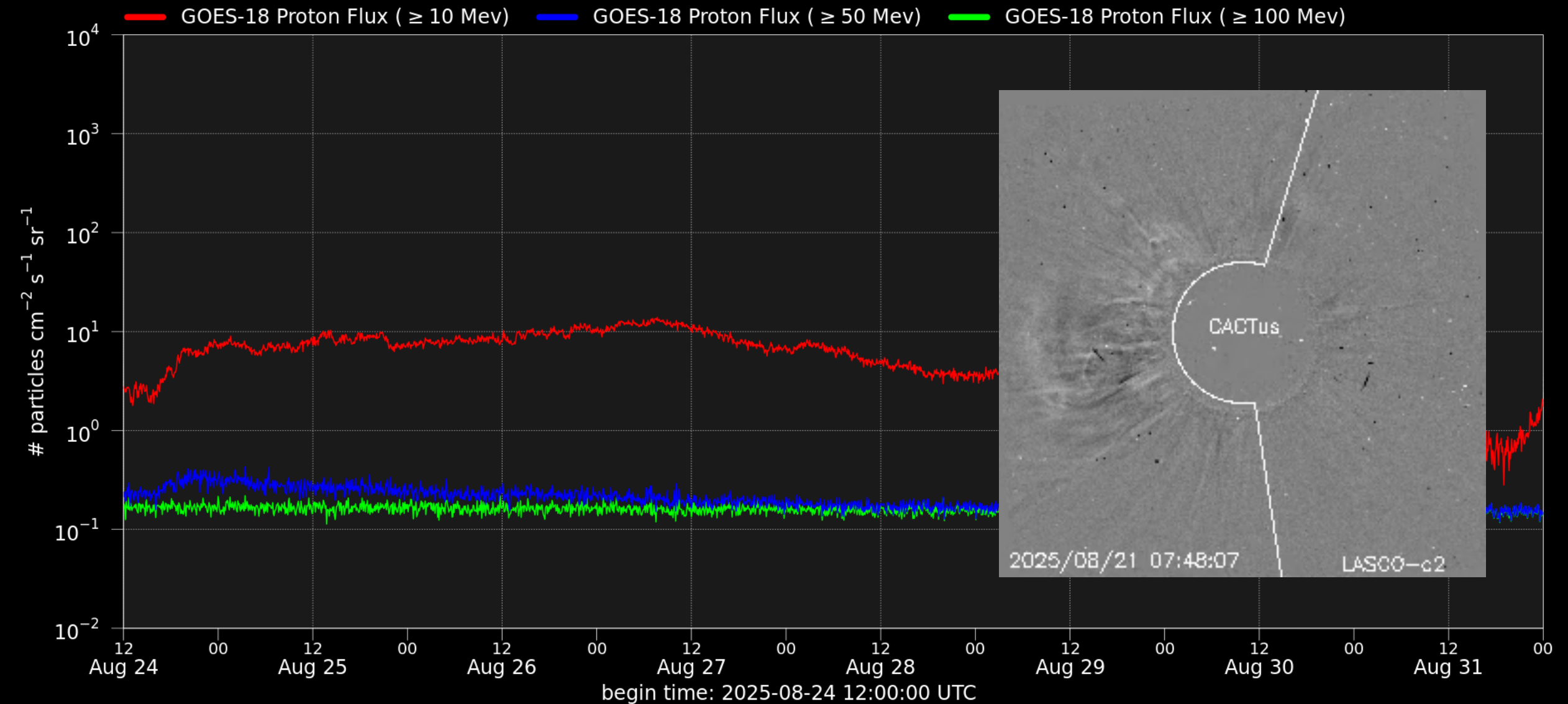
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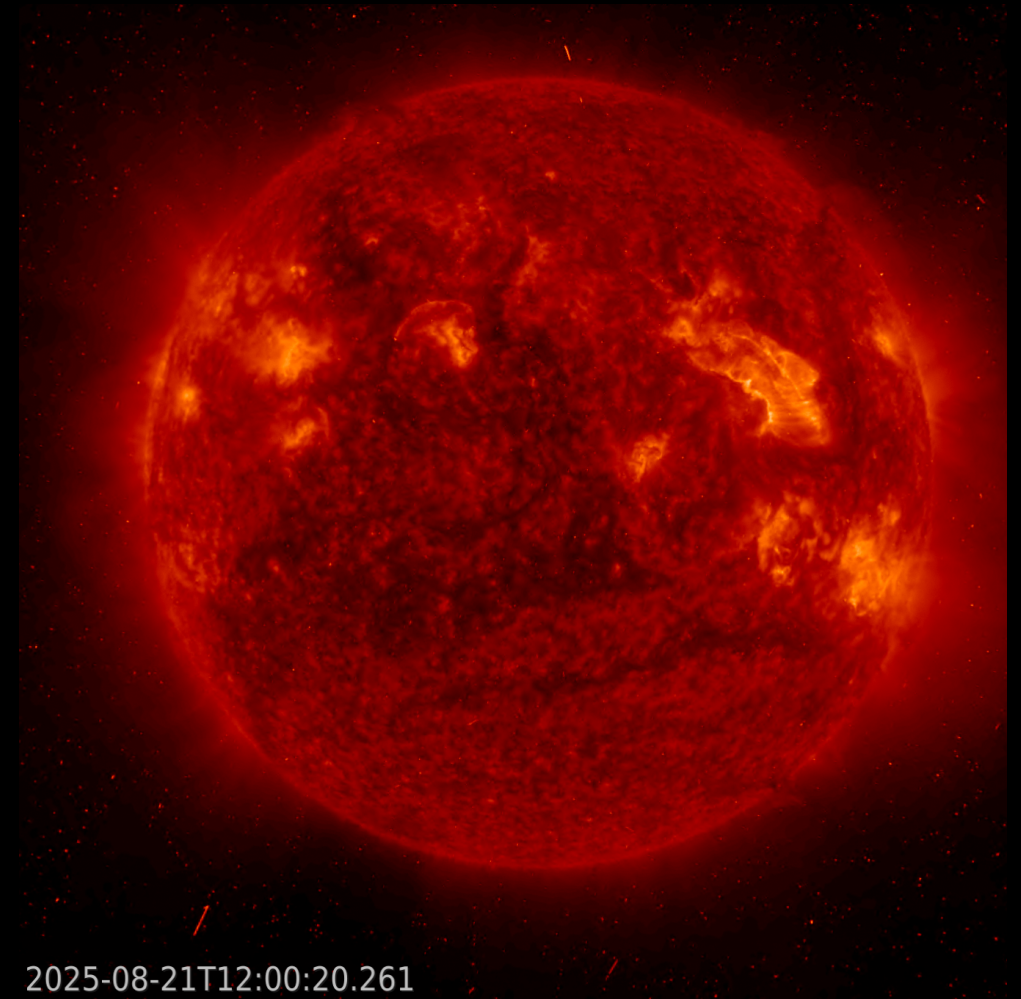
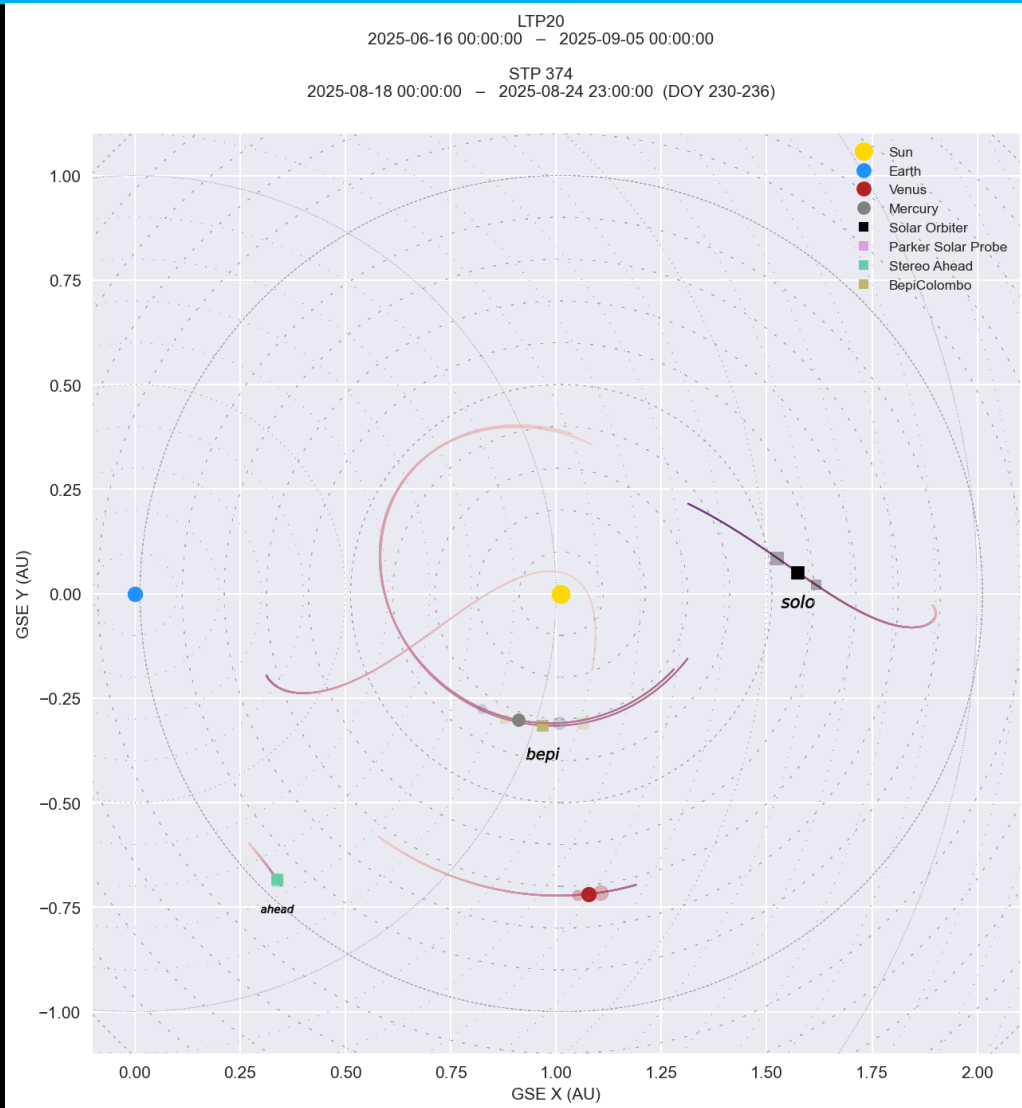
Solar proton flux



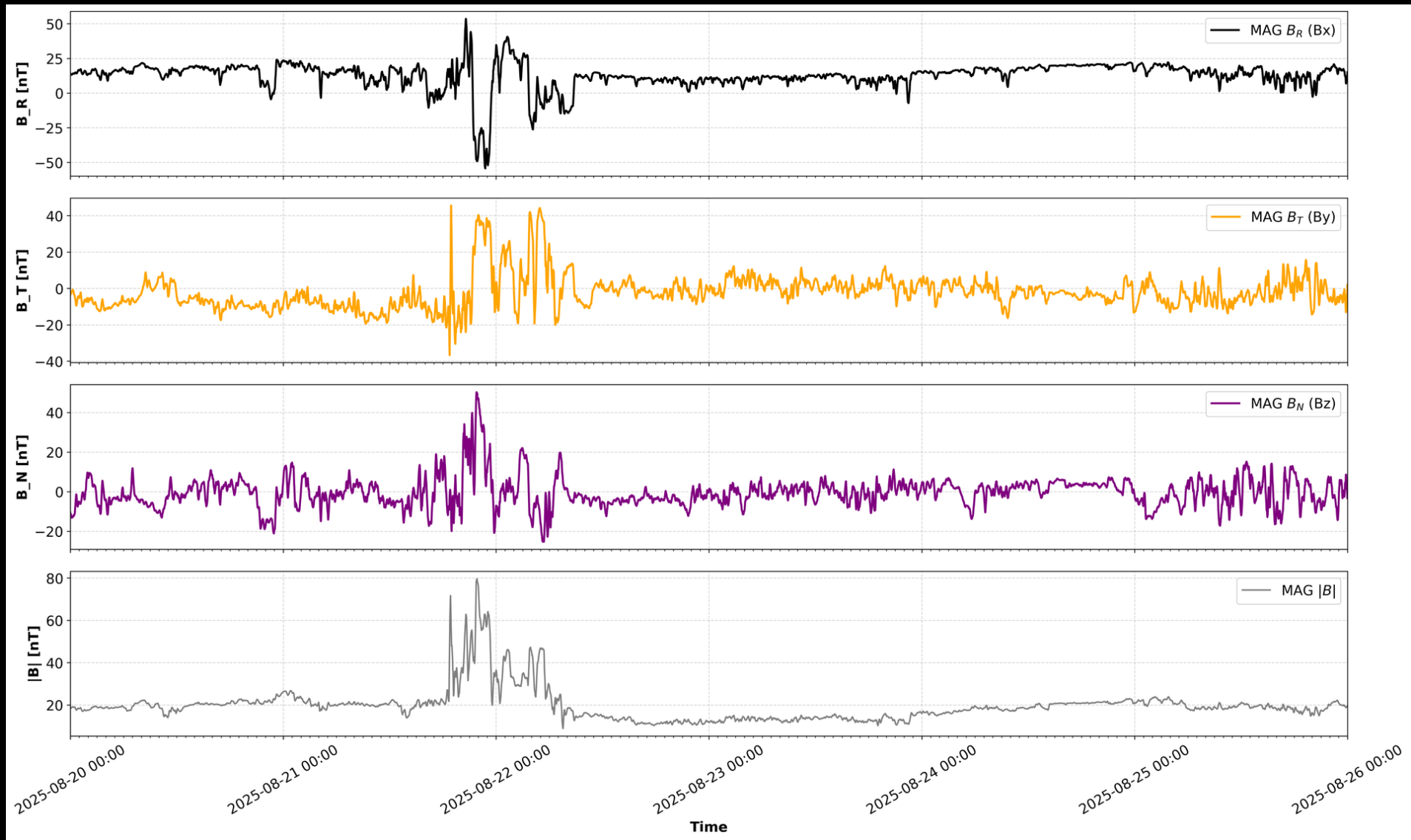
Solar proton flux



21 August CME in SoLO



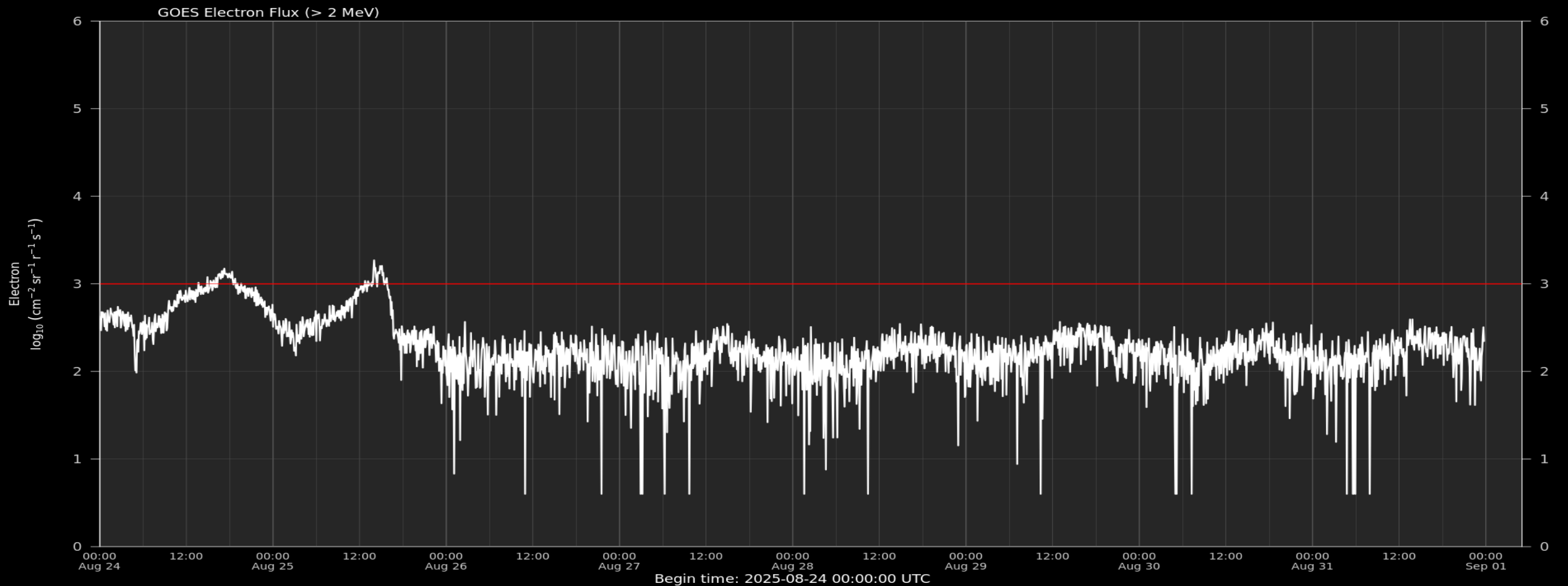
21 August CME in SoLo



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



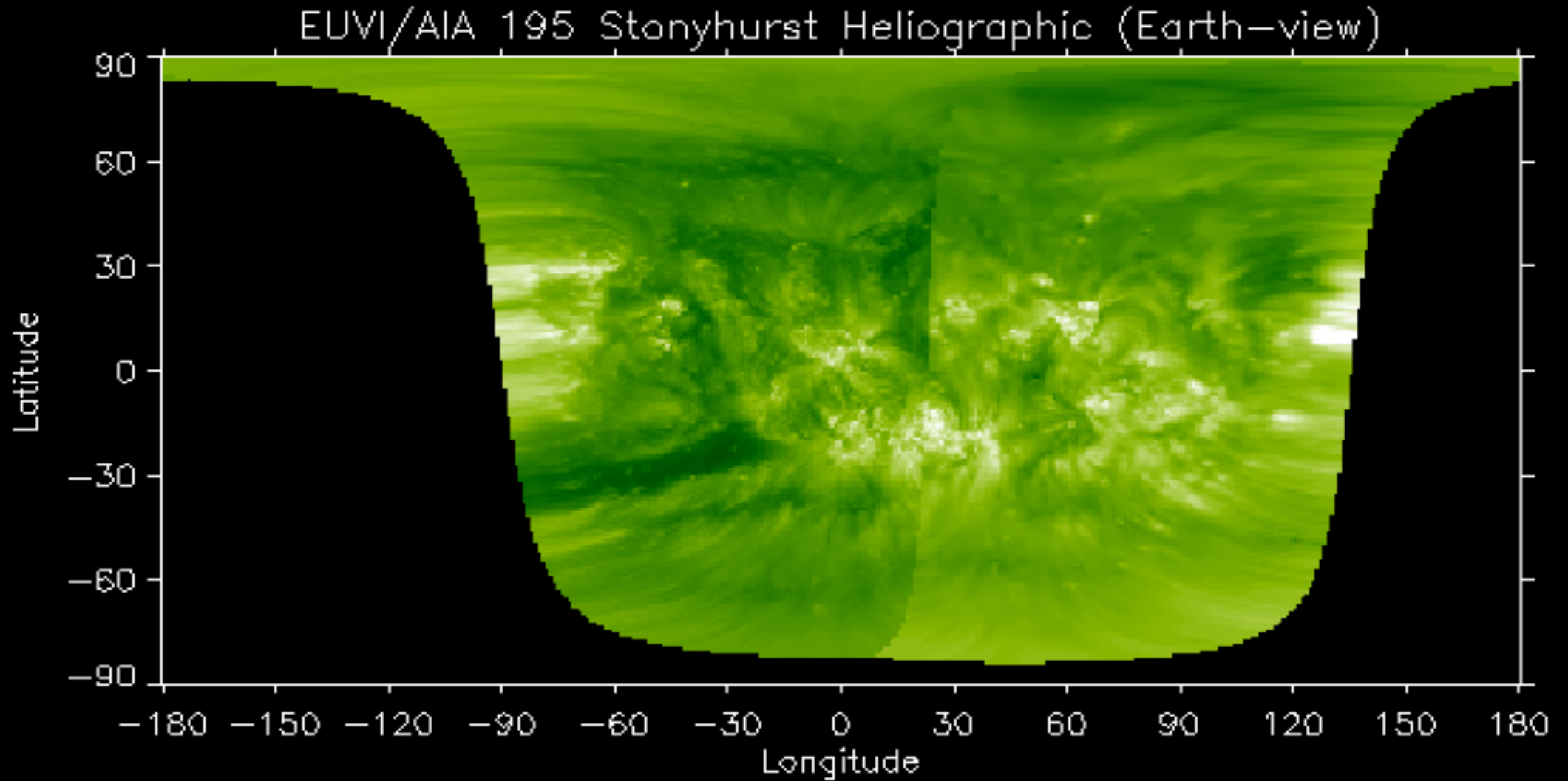
Outlook



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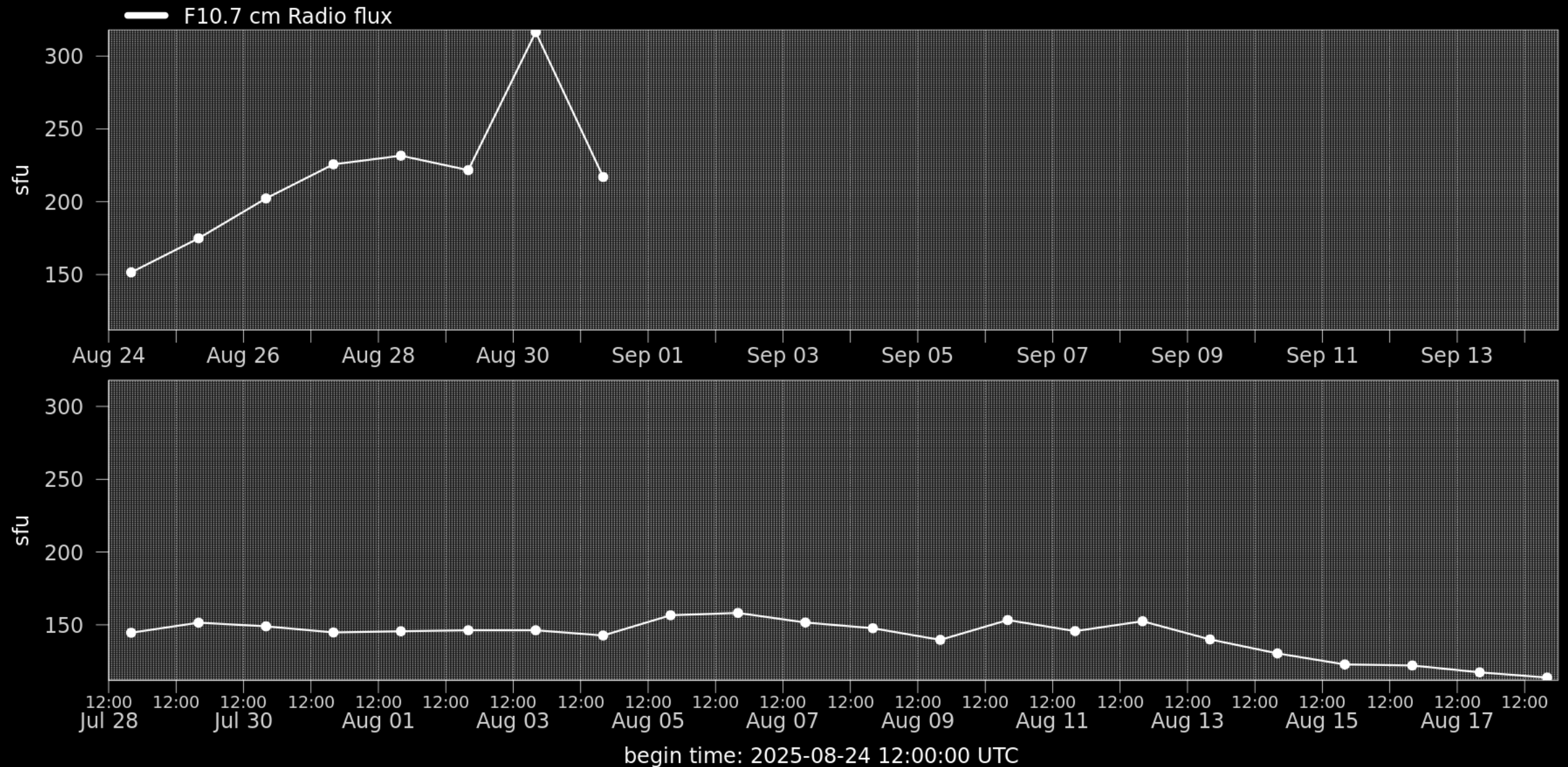
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Outlook: Solar activity

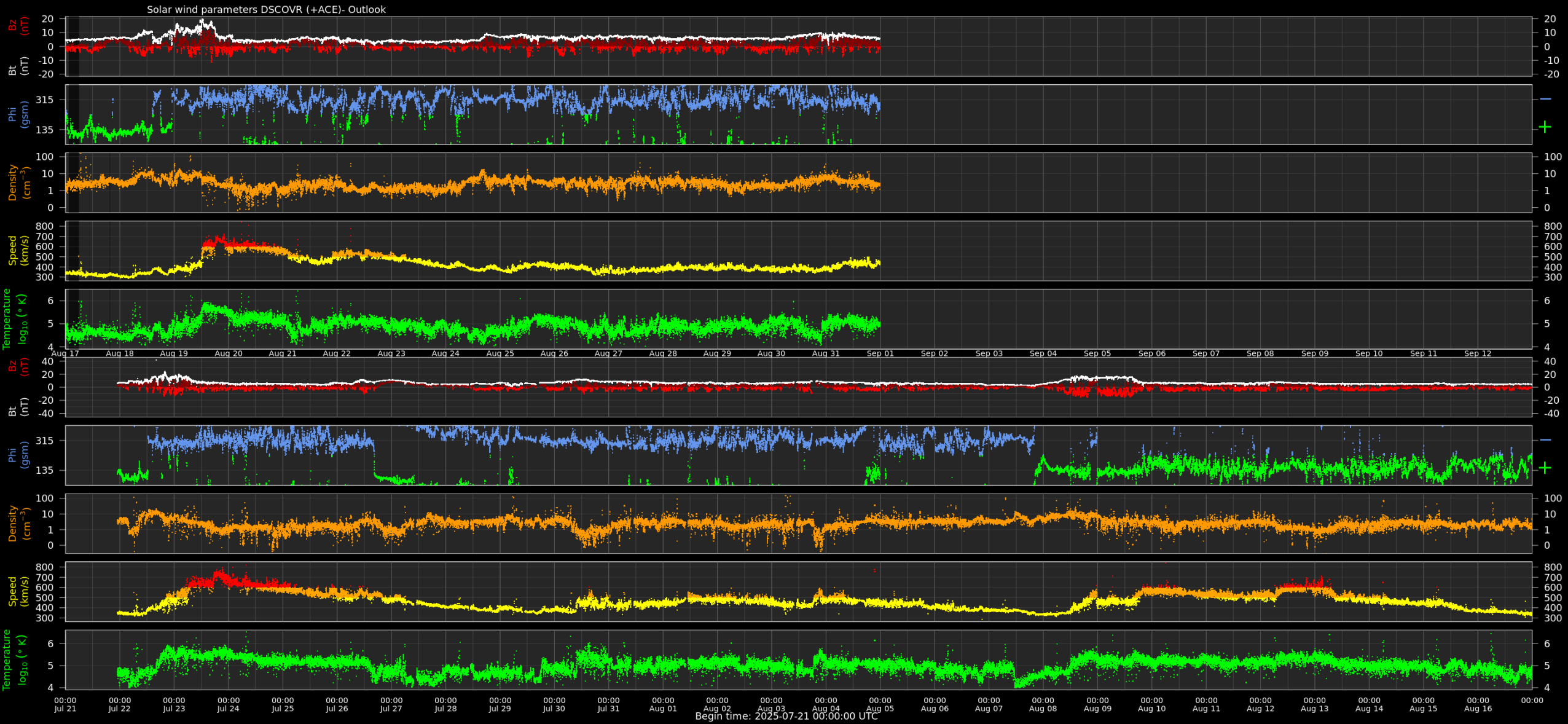


Observation date: 2025/08/31 23:05:00

Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



PECASUS



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Pegasus related events

PCA and GNSS Scintillation advisories were sent

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See you at our next briefing!

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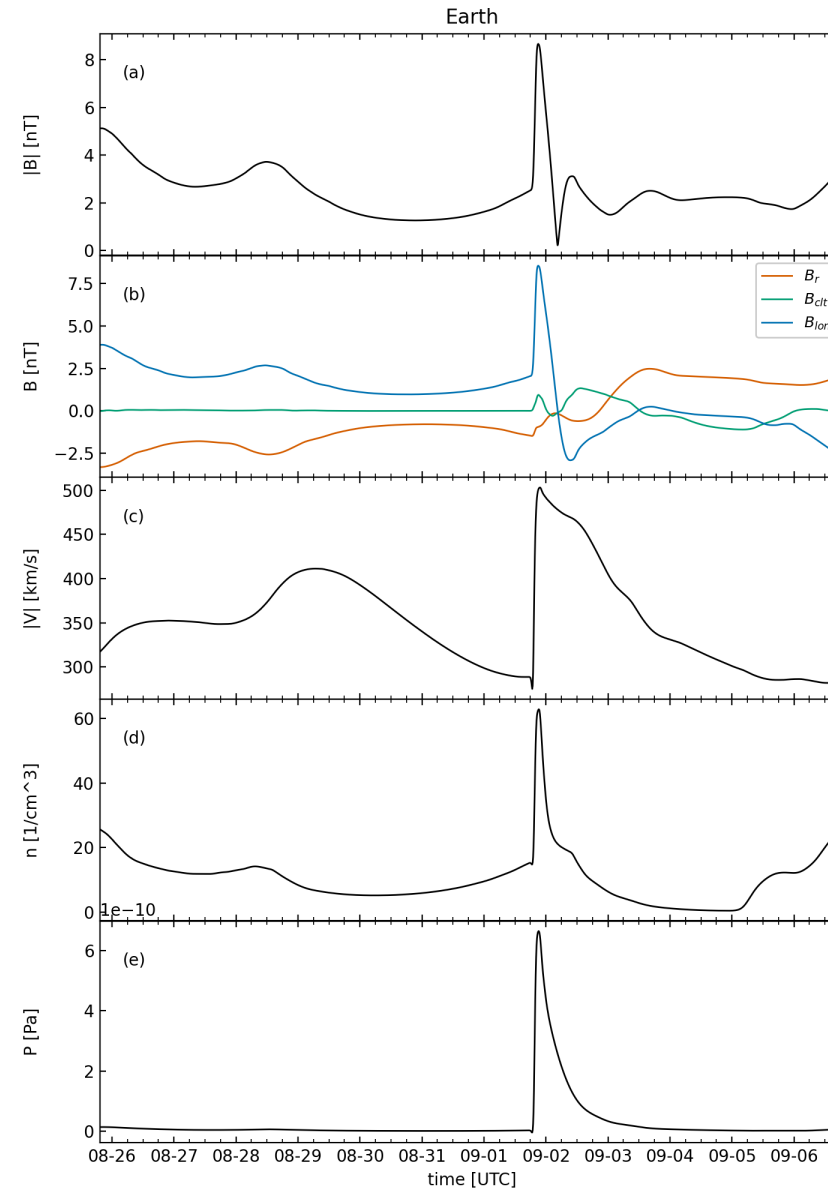


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