

SIDC Space Weather Briefing

18 August 2025-24 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 2025-08-18 00:00 to 2025-08-24 23:59

Active regions	14 AR – SIDC 607/NOAA 4191 & east limb
Flares	# C-class flare: 14 # M-class flare: 3 # X-class flare: 0
Coronal Holes	3 neg CH
CMEs	No Earth directed CMEs

Proton flux	Increased but below 10 PFU threshold
Electron flux	Mainly below 1000 PFU threshold (but slight and short crossings)

Solar wind and geomagnetic conditions

ICMEs	No ICME arrivals
Solar wind conditions	B : 0.85 - 16 nT //Bz: -6 nT to 10 nT //Speed: 330 – 680 km/s
Geomagnetic conditions	max K _{Be} : 5.0, max K _p (NOAA): 4.67, Minor Storm conditions

All Quiet Alert: Not all quiet

Solar Activity

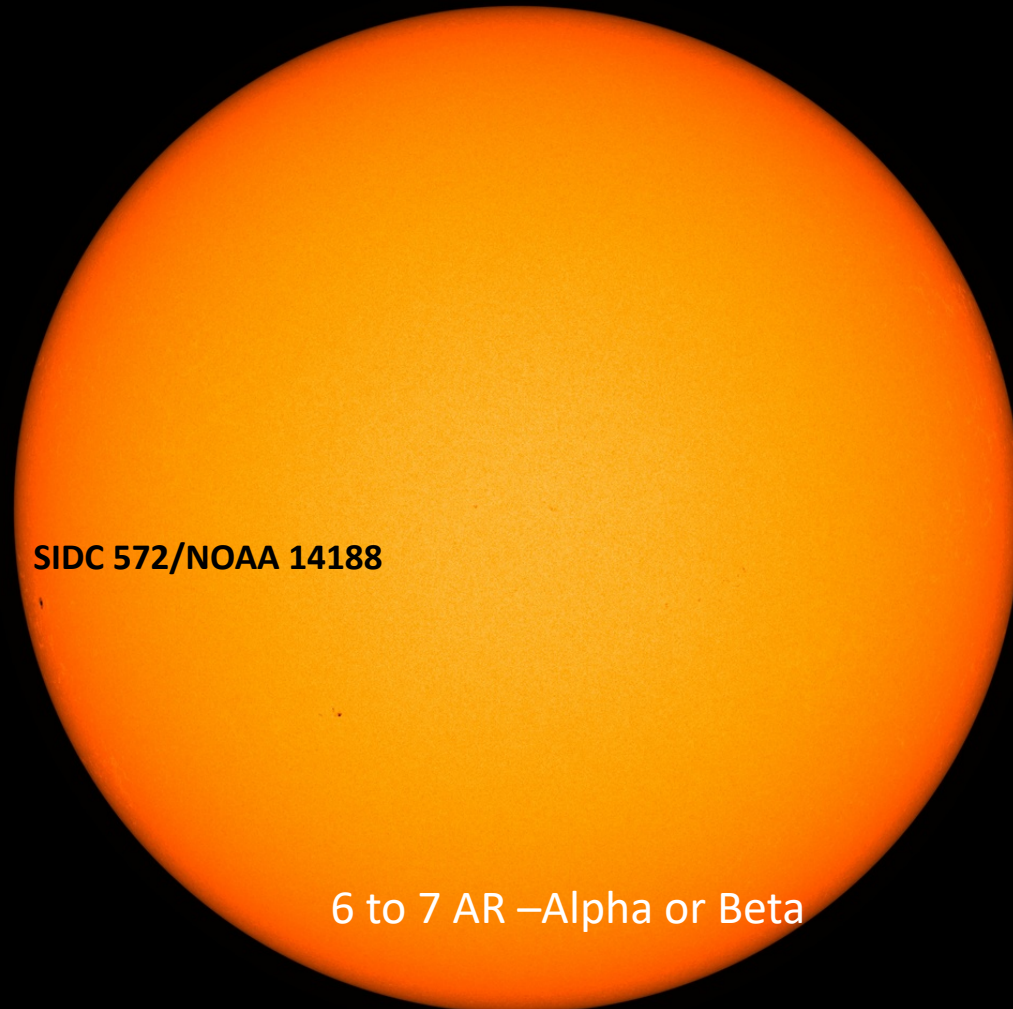


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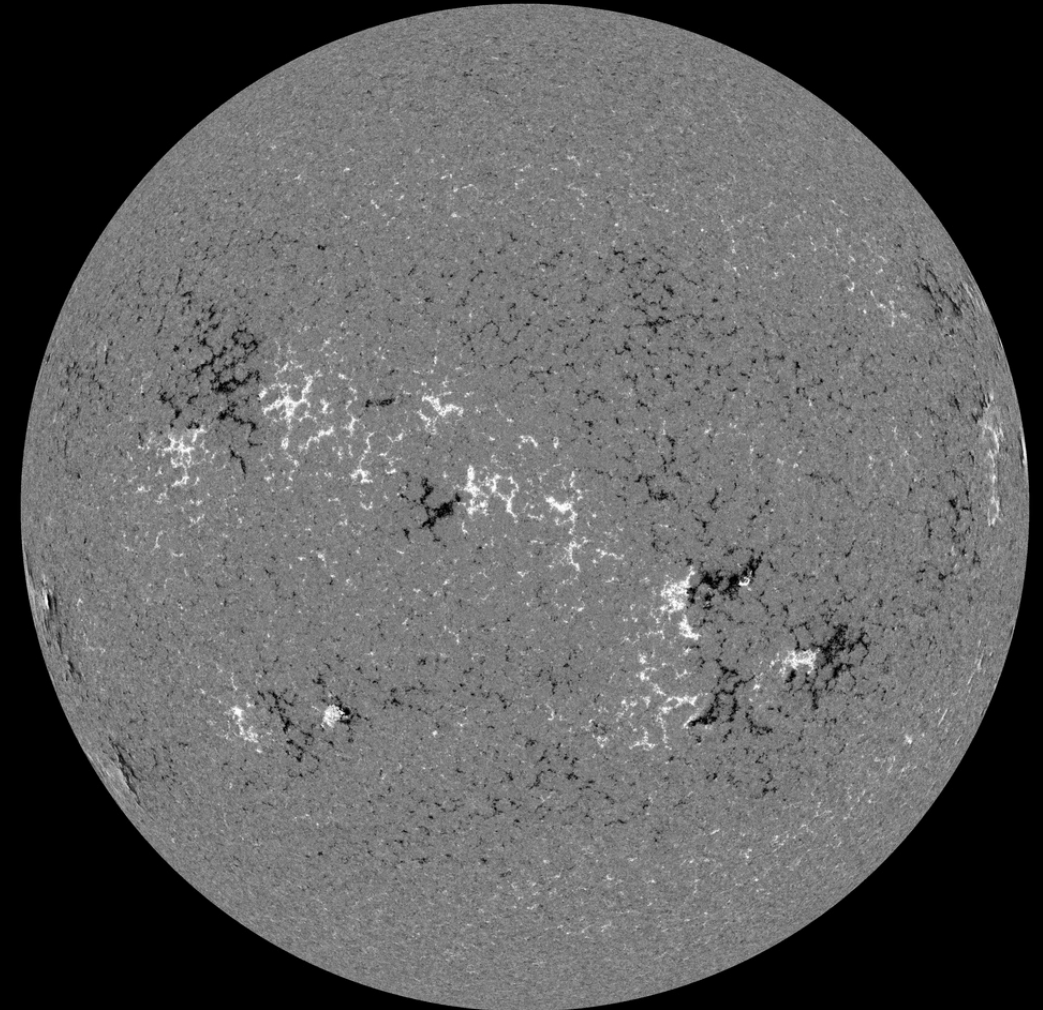
Solar active regions

SDO/HMI White Light 2025-08-19



SDO/HMI Quick-Look Continuum: 20250818_204500

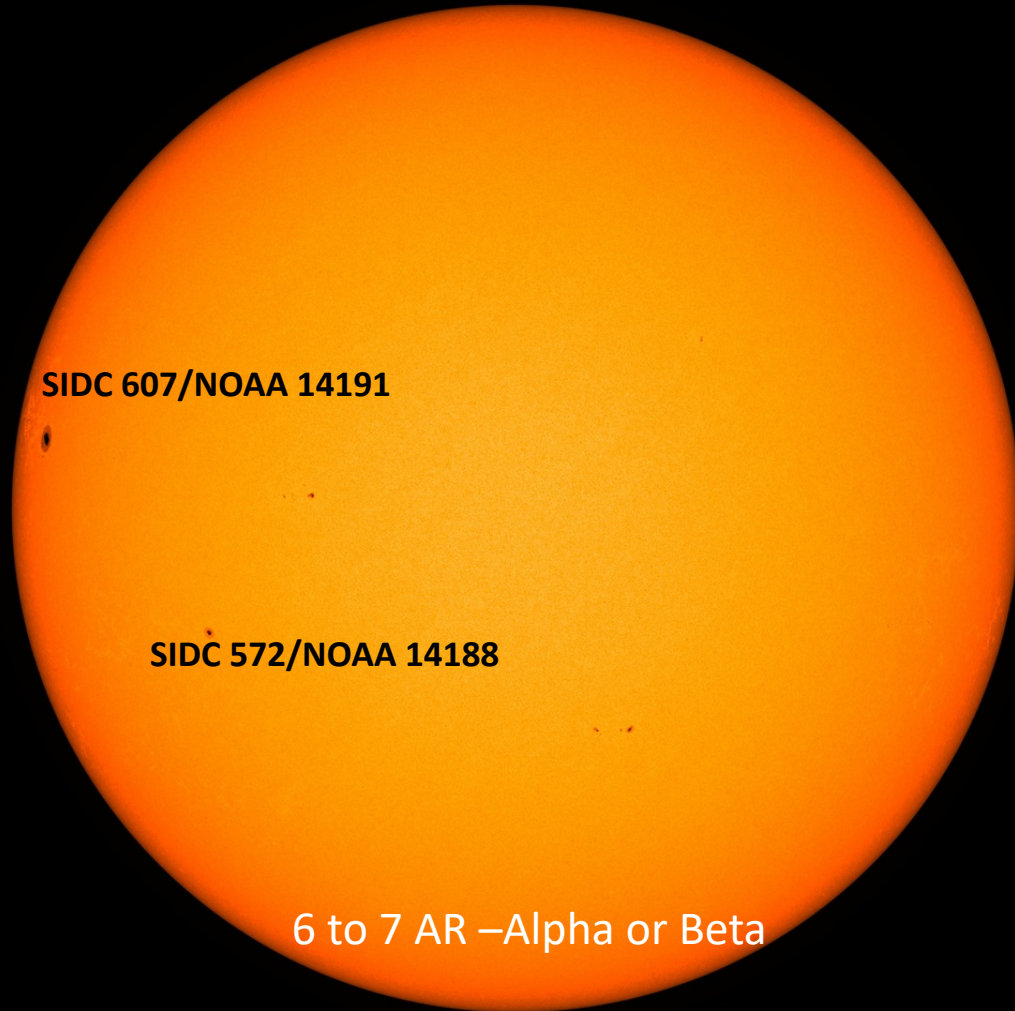
SDO/HMI Magnetogram 2025-08-19



SDO/HMI Quick-Look Magnetogram: 20250818_204500

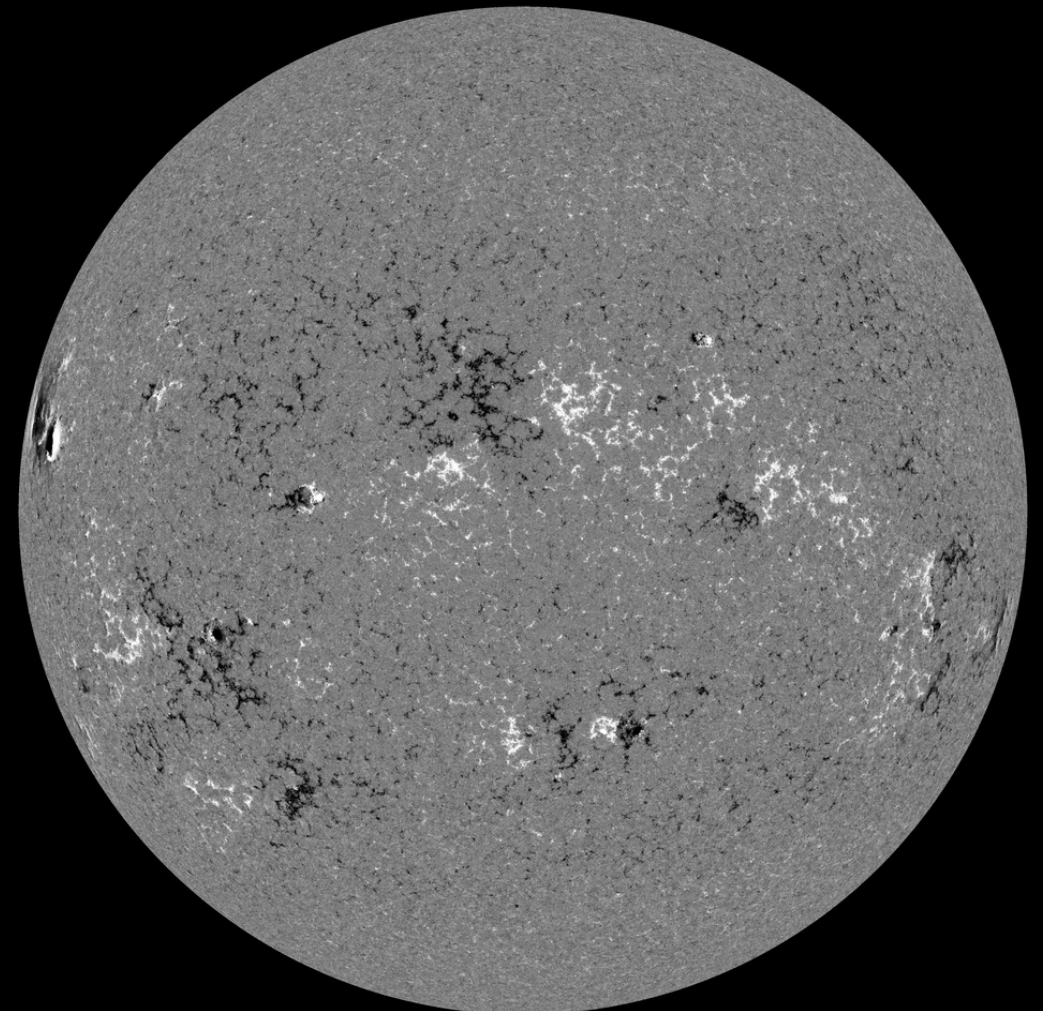
Solar active regions

SDO/HMI White Light 2025-08-21



SDO/HMI Quick-Look Continuum: 20250821_114500

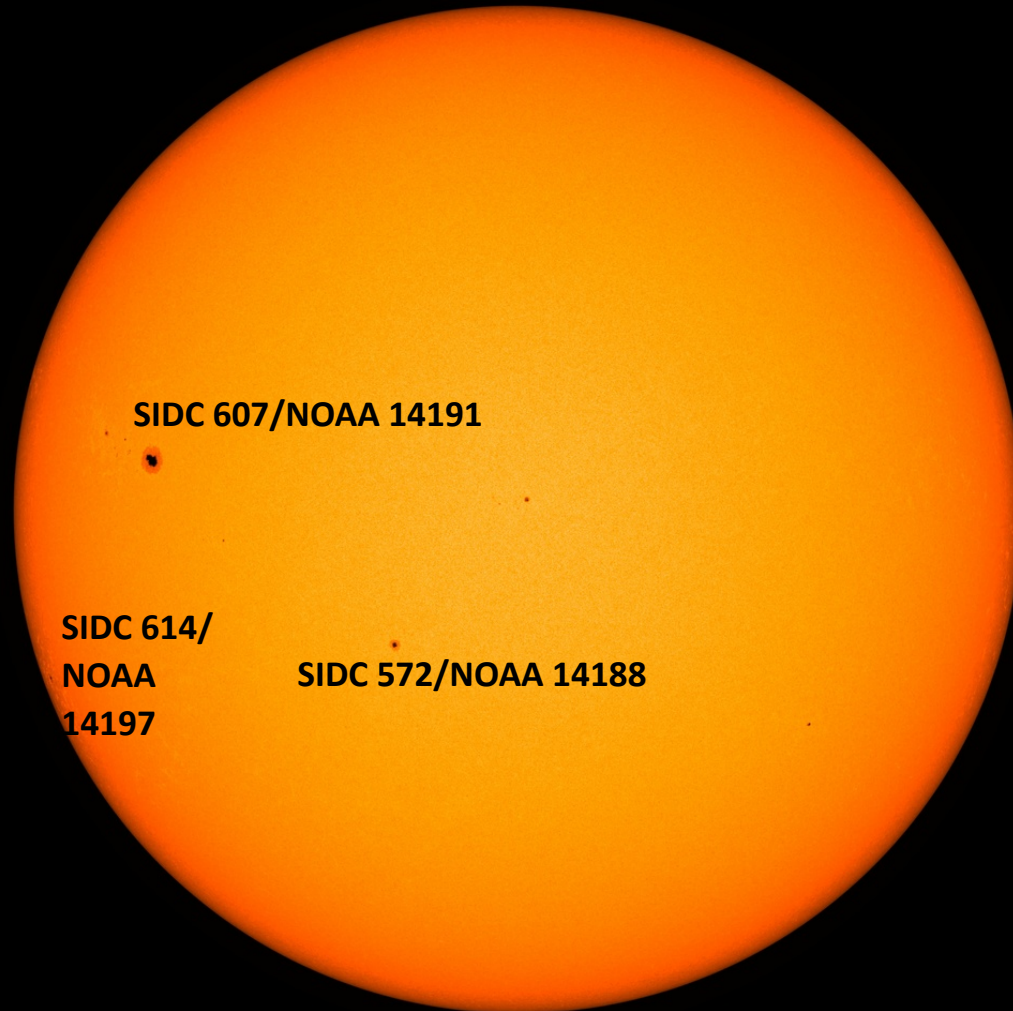
SDO/HMI Magnetogram 2025-08-21



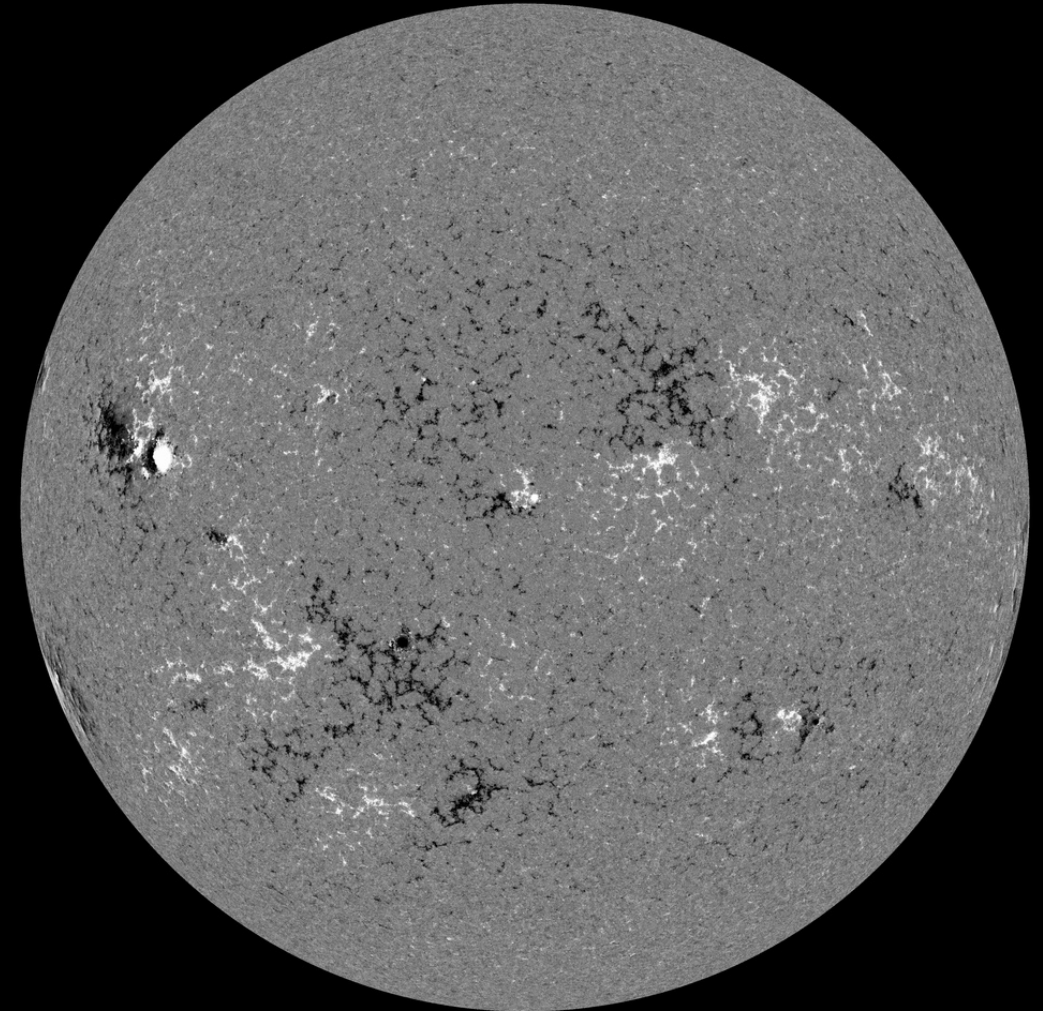
SDO/HMI Quick-Look Magnetogram: 20250821_114500

Solar active regions

SDO/HMI White Light 2025-08-24



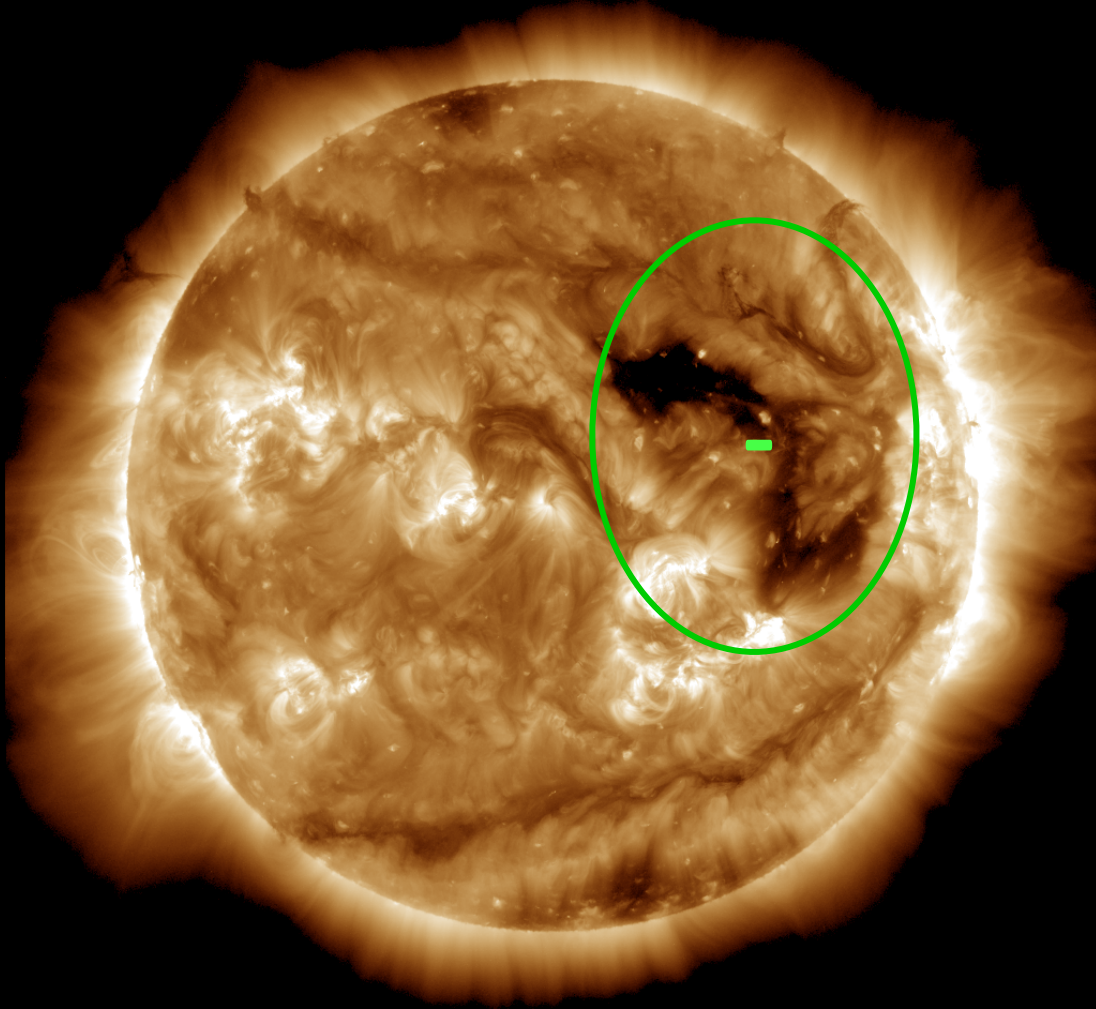
SDO/HMI Magnetogram 2025-08-24



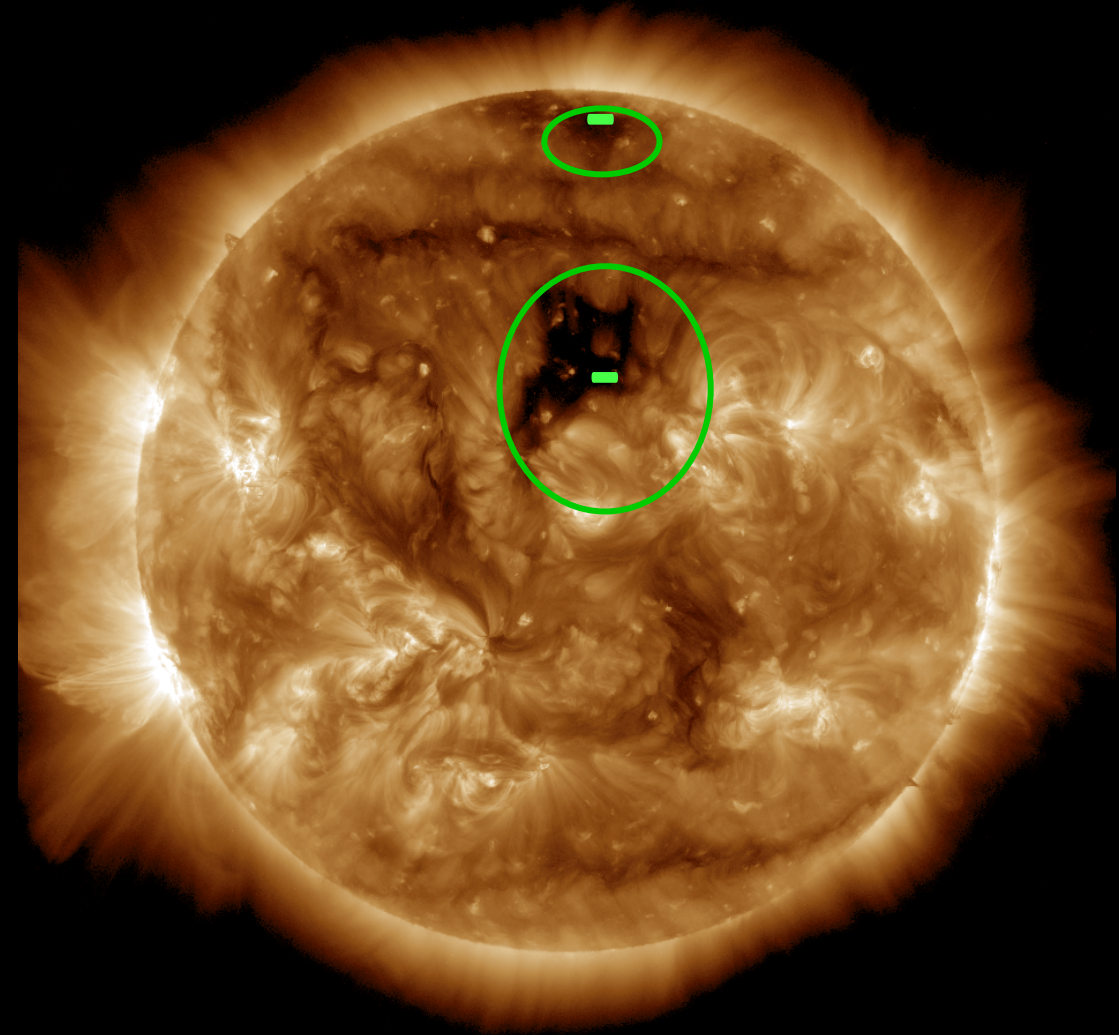
Coronal holes

SDO/AIA 19.3 nm 2025-08-18

SDO/AIA AIA 193Å 2025-08-18T12:00:05.846



SDO/AIA 19.3 nm 2025-08-23



2025-08-23T13:12:28.843

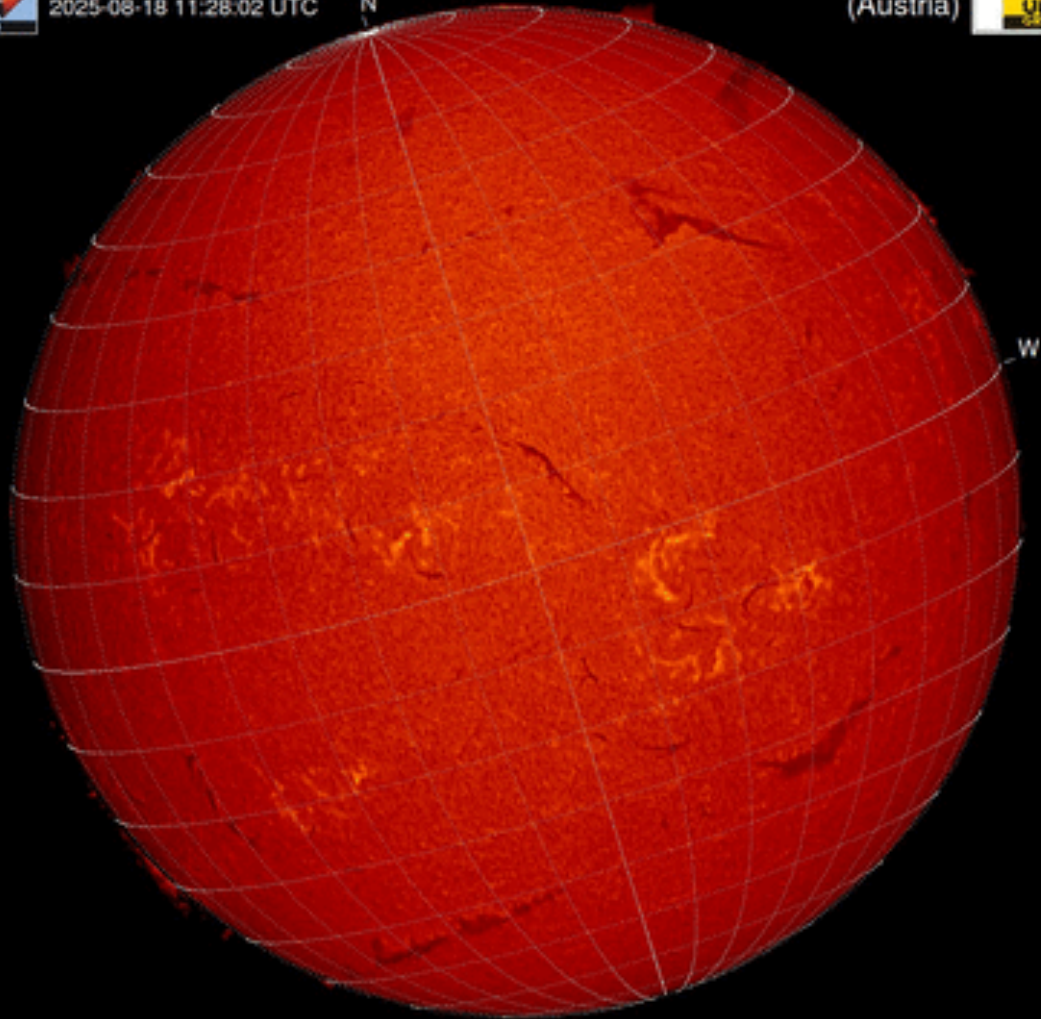
Filaments & Filament eruptions

H-alpha 2025-08-18



Kanzelhöhe Observatory
2025-08-18 11:28:02 UTC

University of Graz
(Austria)

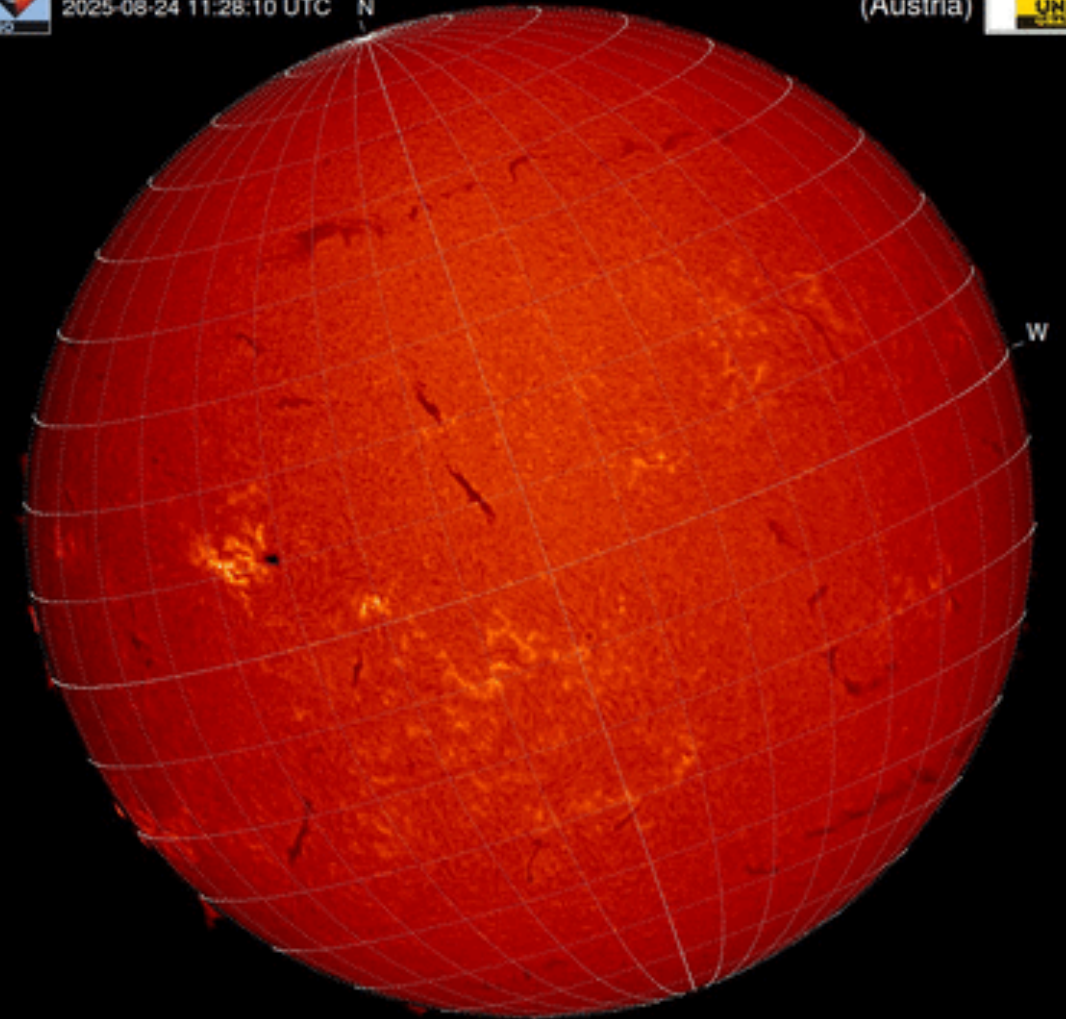


H-alpha 2025-08-24

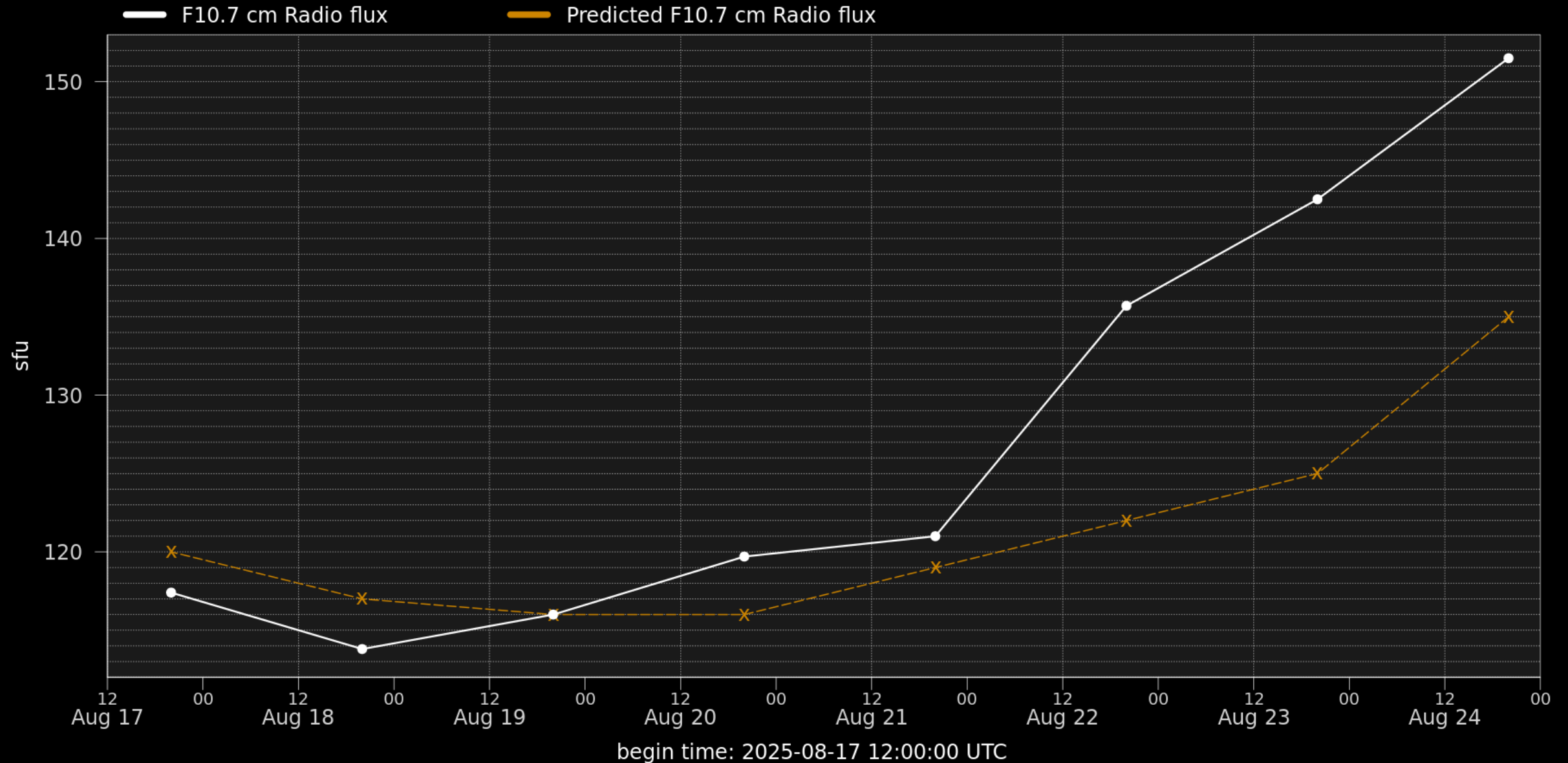


Kanzelhöhe Observatory
2025-08-24 11:28:10 UTC

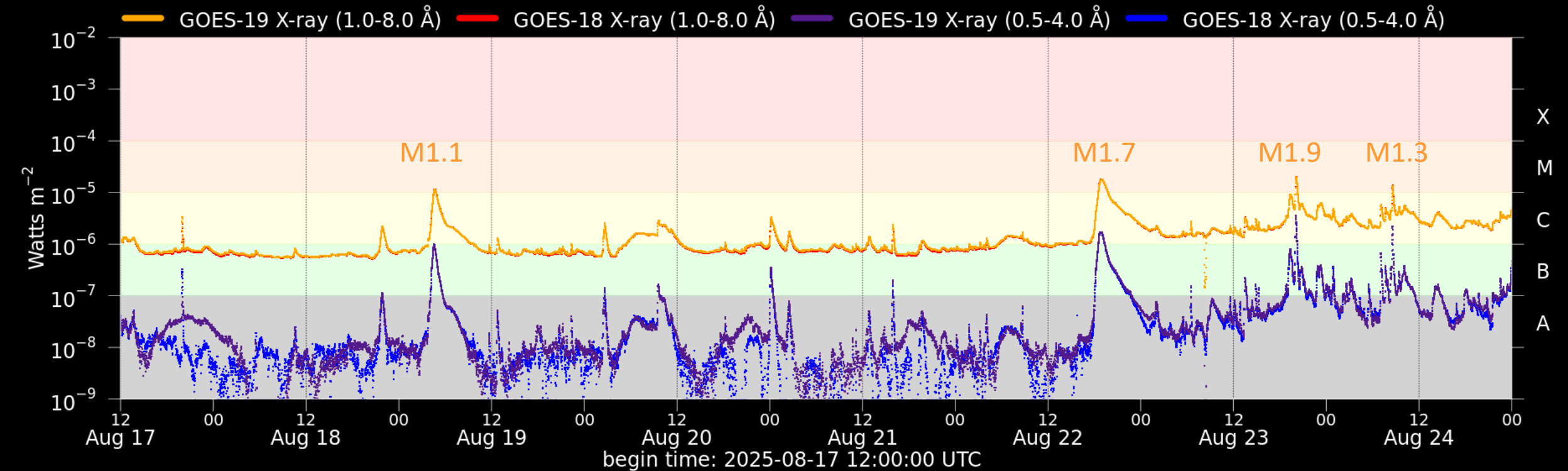
University of Graz
(Austria)



Solar F10.7cm radio flux



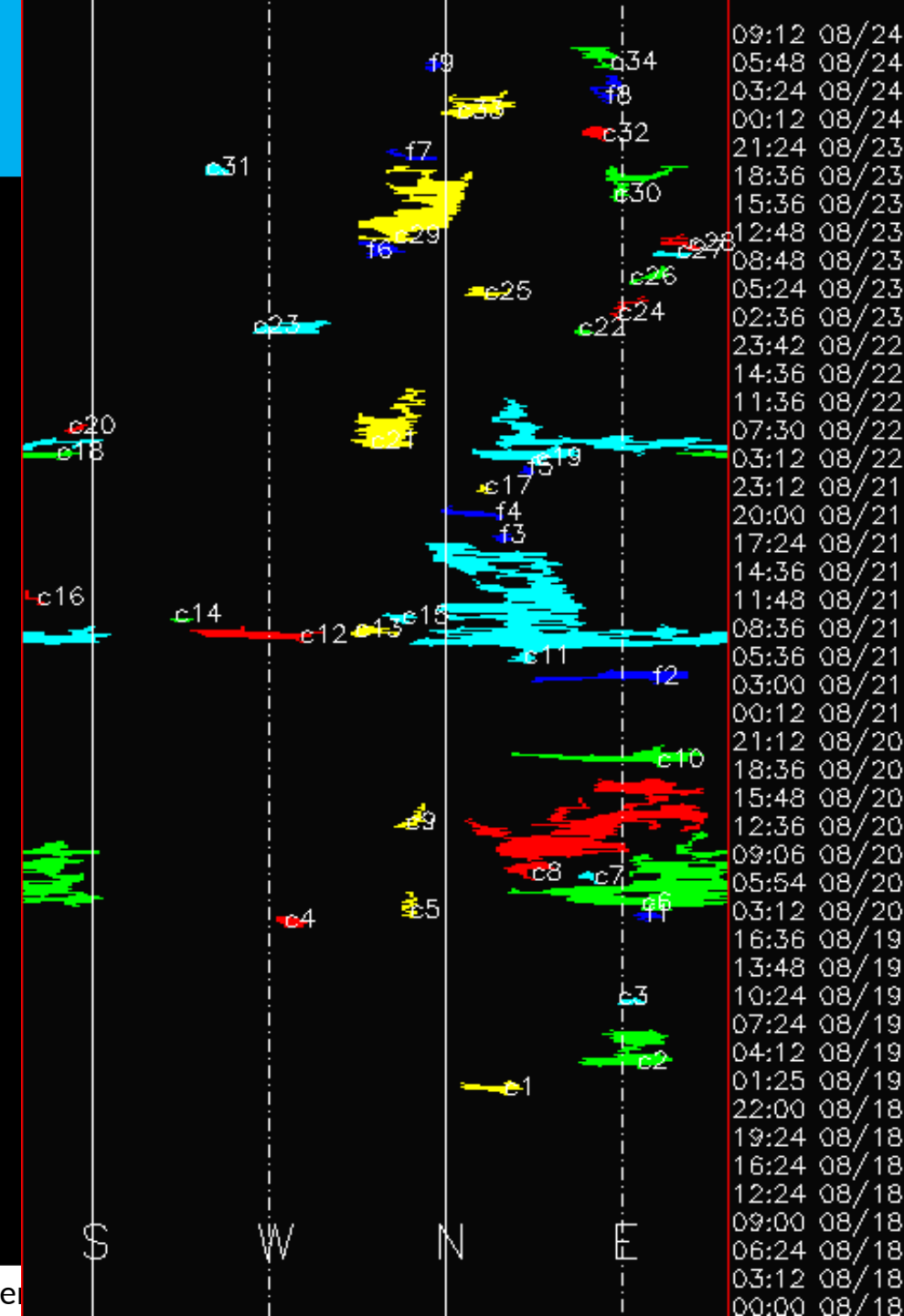
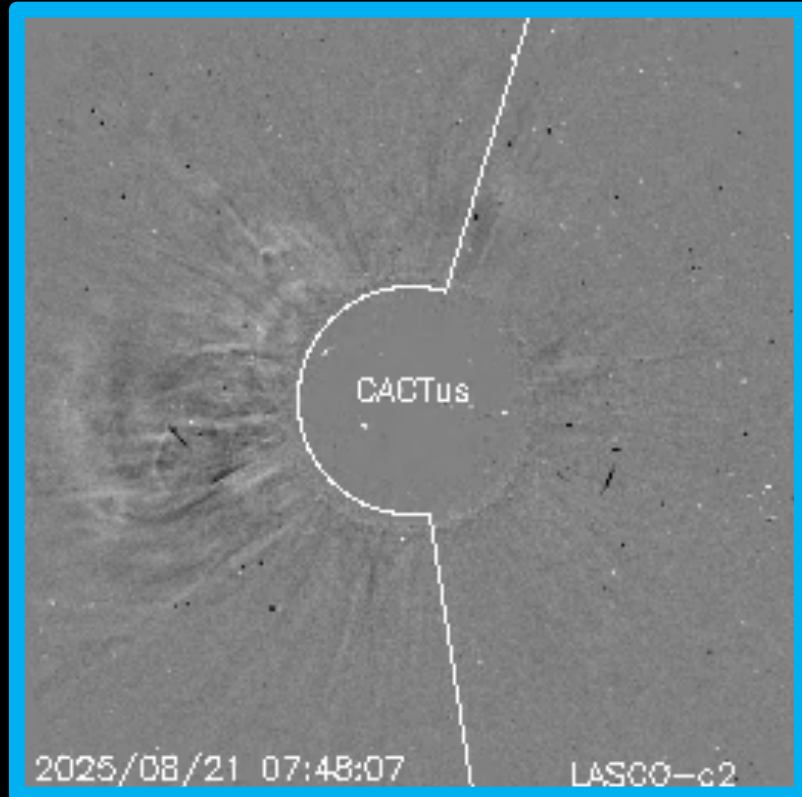
M1.1 Flaring activity



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

Issue date	2025-08-17	2025-08-18	2025-08-19	2025-08-20	2025-08-21	2025-08-22	2025-08-23	2025-08-24
Probability (%)	91 02 01	66 15 01	73 20 01	56 14 01	73 18 01	63 12 01	89 30 02	96 47 06
Observed (#)	01 00 00	01 01 00	04 00 00	01 00 00	01 00 00	01 00 00	05 02 00	00 00 00

Coronal Mass Ejections



No Earth directed CMEs observed during the week.

Backsided partial halo CME observed on AUG 21 08:24 UTC

Solar Wind and

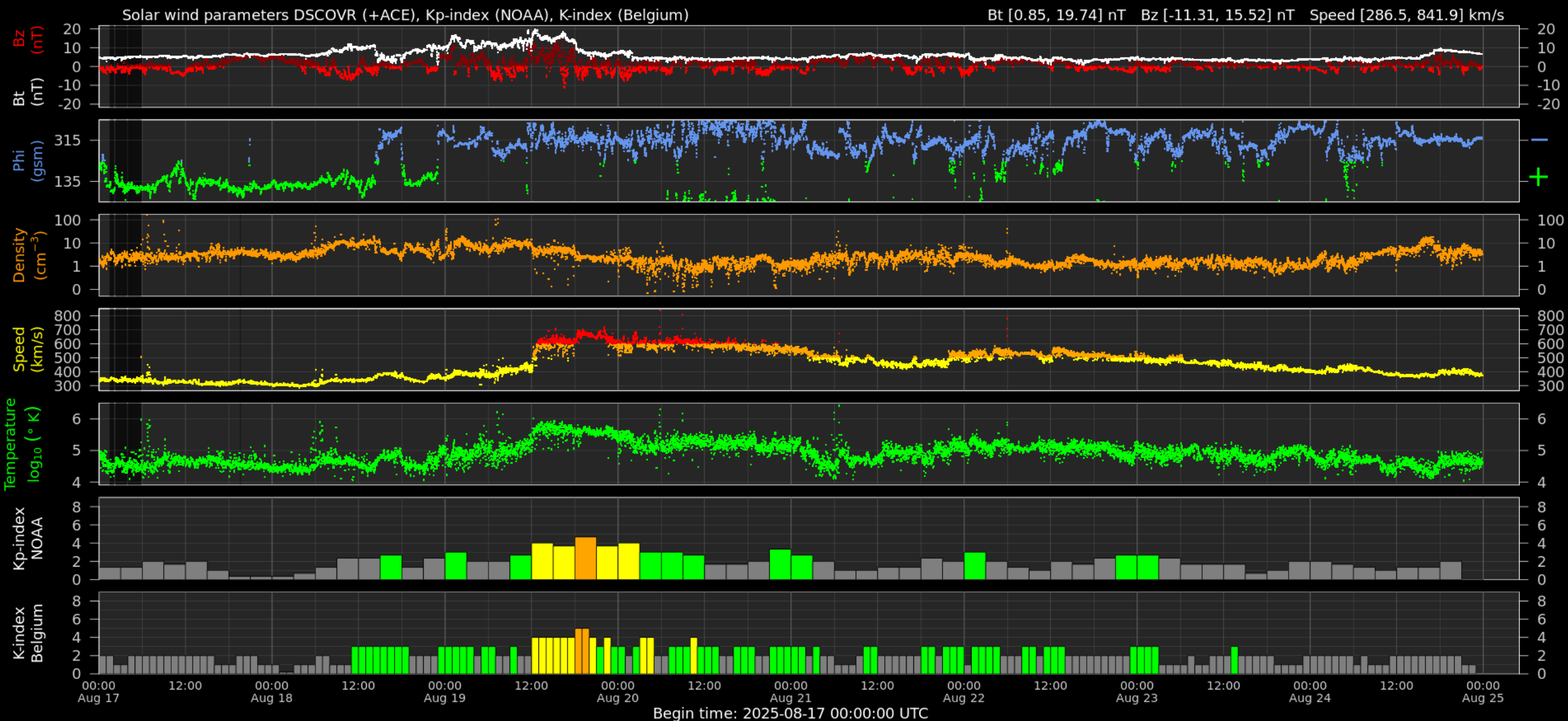
Geomagnetic Activity



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Solar wind parameters & K-indices



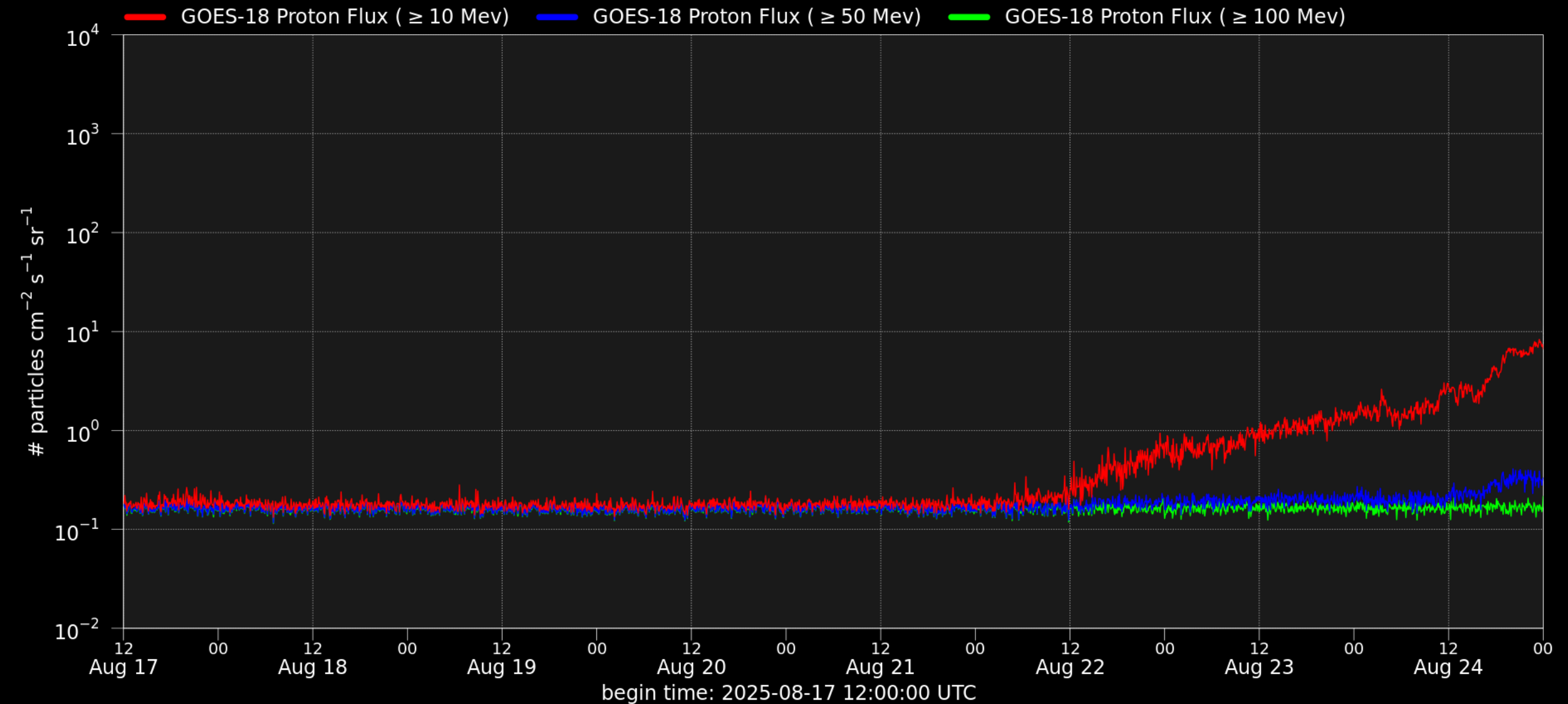
Energetic Particles



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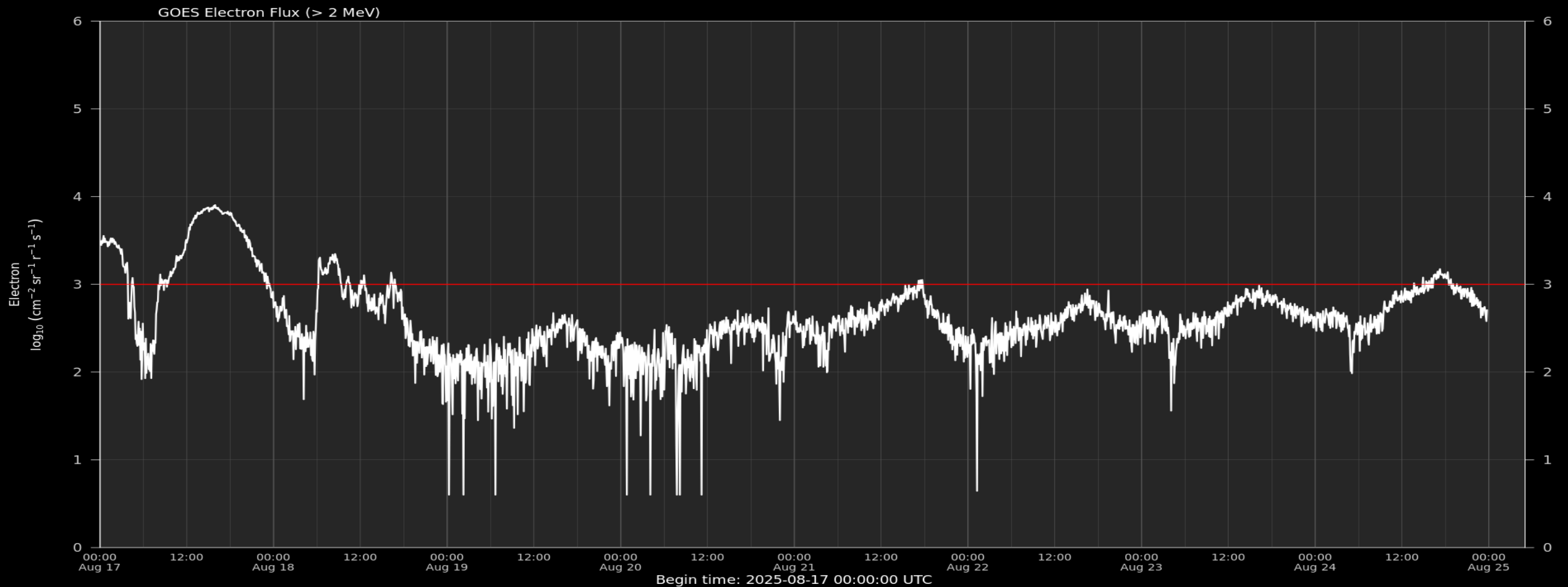
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



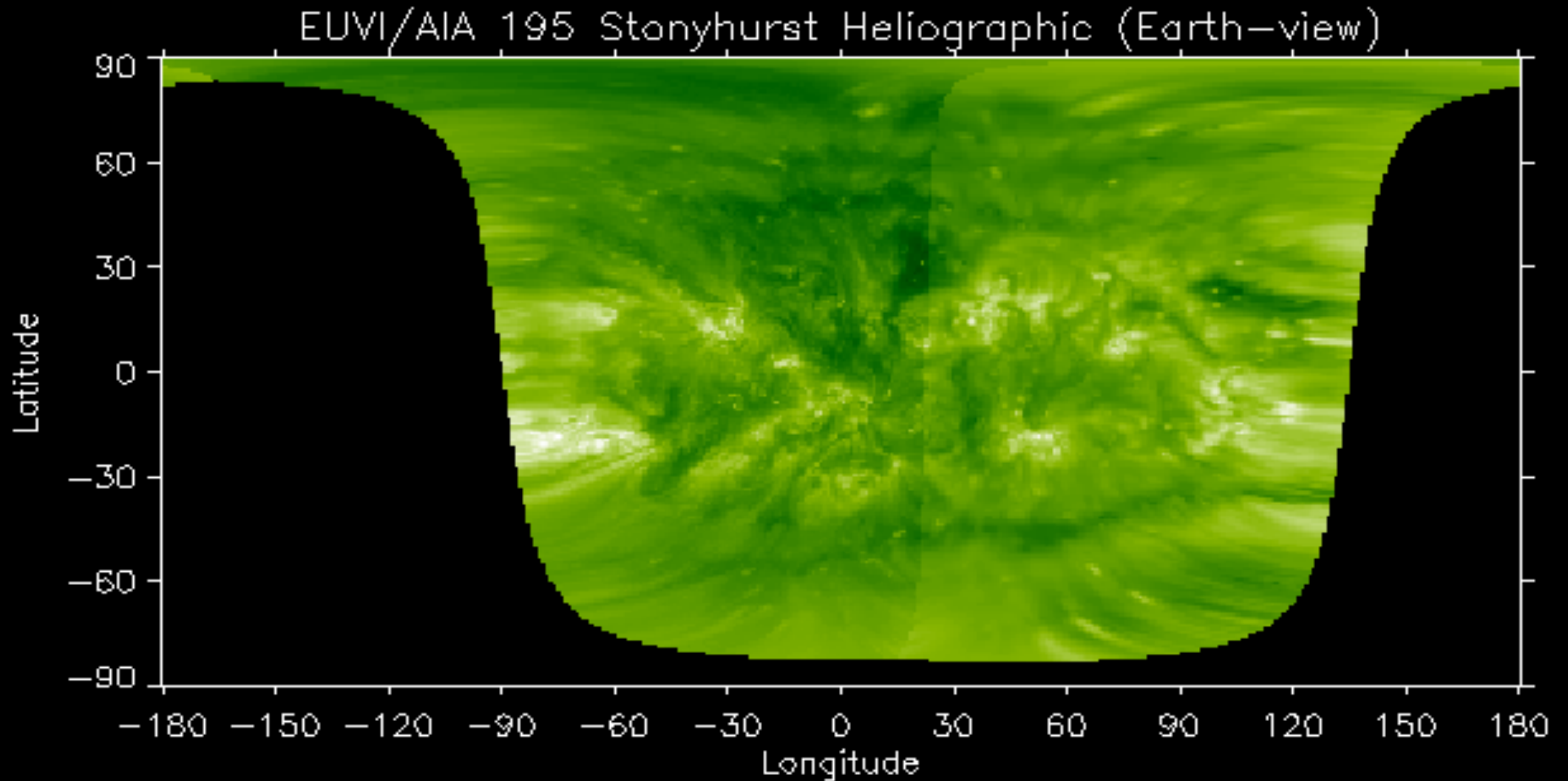
Outlook



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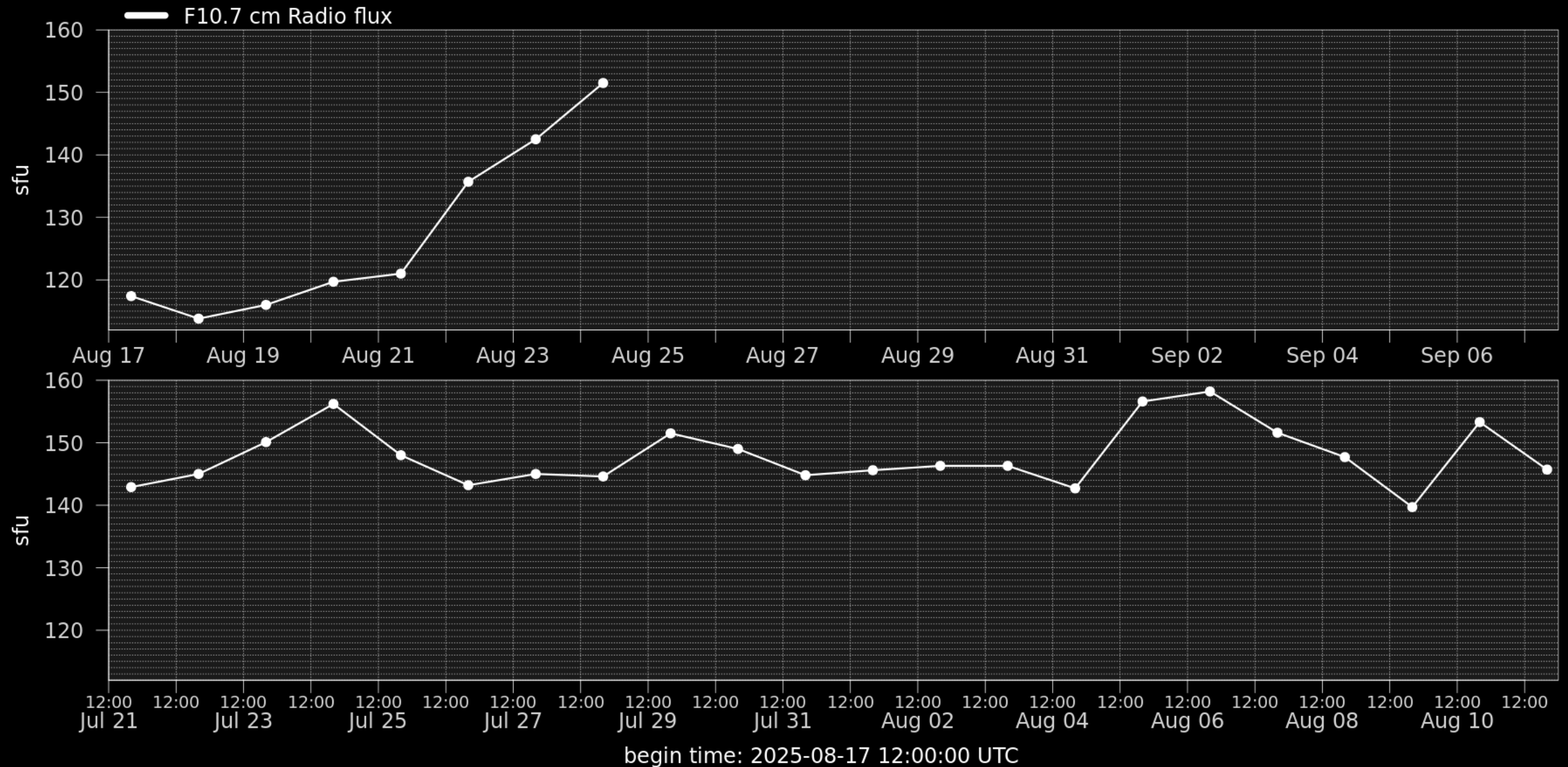
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Outlook: Solar activity



Observation date: 2025/08/24 23:05:00

Outlook: Solar F10.7cm radio flux



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pecarus related events

Amplitude and phase scintillation (GNSS)

SIDC Space Weather Briefing

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