

SIDC Space Weather Briefing

06 October 2025-12 October 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 2025-10-06 00:00 to 2025-10-12 23:59

Active regions	SIDC Sunspot Group 657 (NOAA AR 4236), 652 (4233), 639 (4246)
Flares	# C-class flare: 25 # M-class flare: 1 # X-class flare: 0
Coronal Holes	SIDC CH 116 crossing on 8 Oct, negative, equatorial. Arrival 11 Oct @ 21:30 UTC
CMEs	SIDC CME 578, 7 Oct 10:36 UTC

Proton flux	Background levels
Electron flux	Above 1000 pfu (most of the time) max 10000 pfu (start of the week)

Solar wind and geomagnetic conditions

ICMEs	Glancing blows: 9 Oct (SIDC CME 577 on 5 Oct 03:25 UTC) & 11 Oct (SIDC CME 578)
Solar wind conditions	B : 1.84 - 17.39 nT //Bz: -9.91 nT to 13.74 nT //Speed: 270 – 800 km/s
Geomagnetic conditions	max K _{Be} : 4.0, max K _p (NOAA): 5+, Minor Storm conditions

All Quiet Alert: Not quiet

Solar Activity

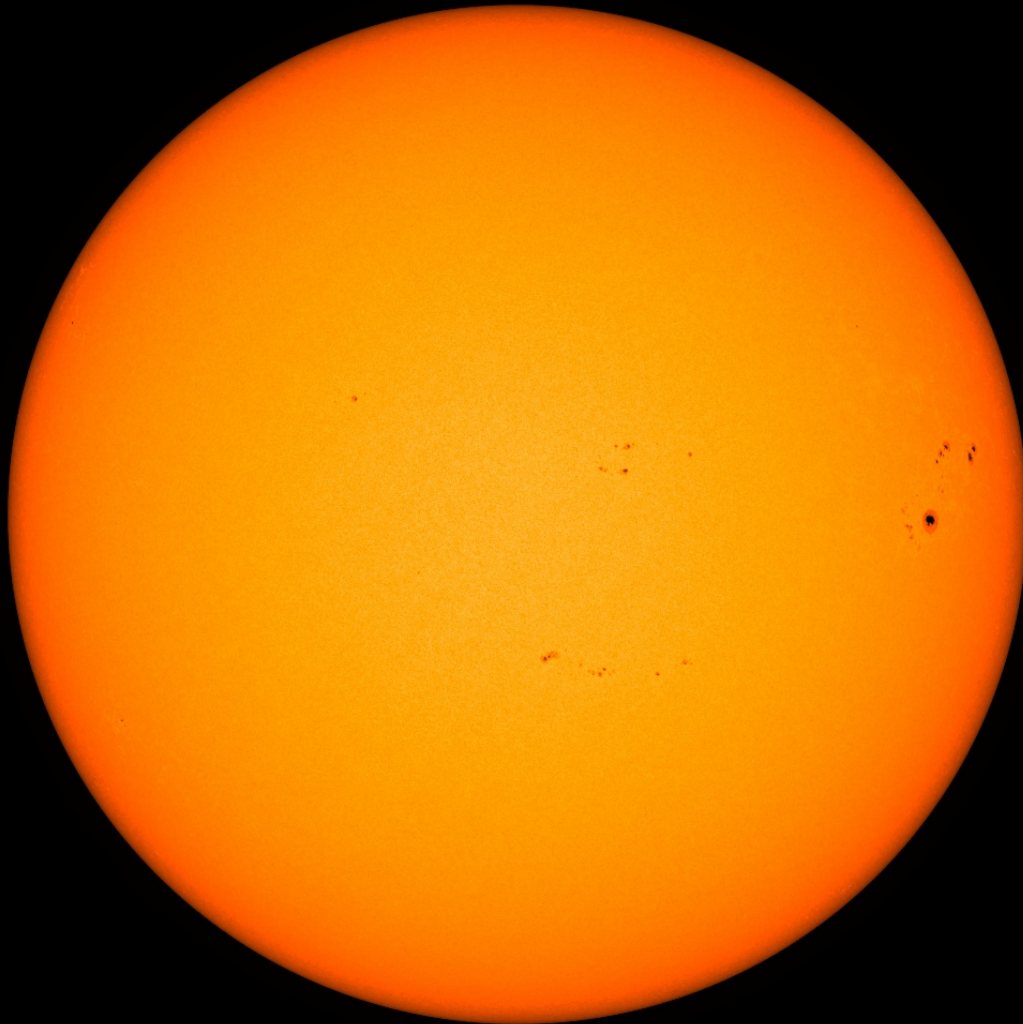


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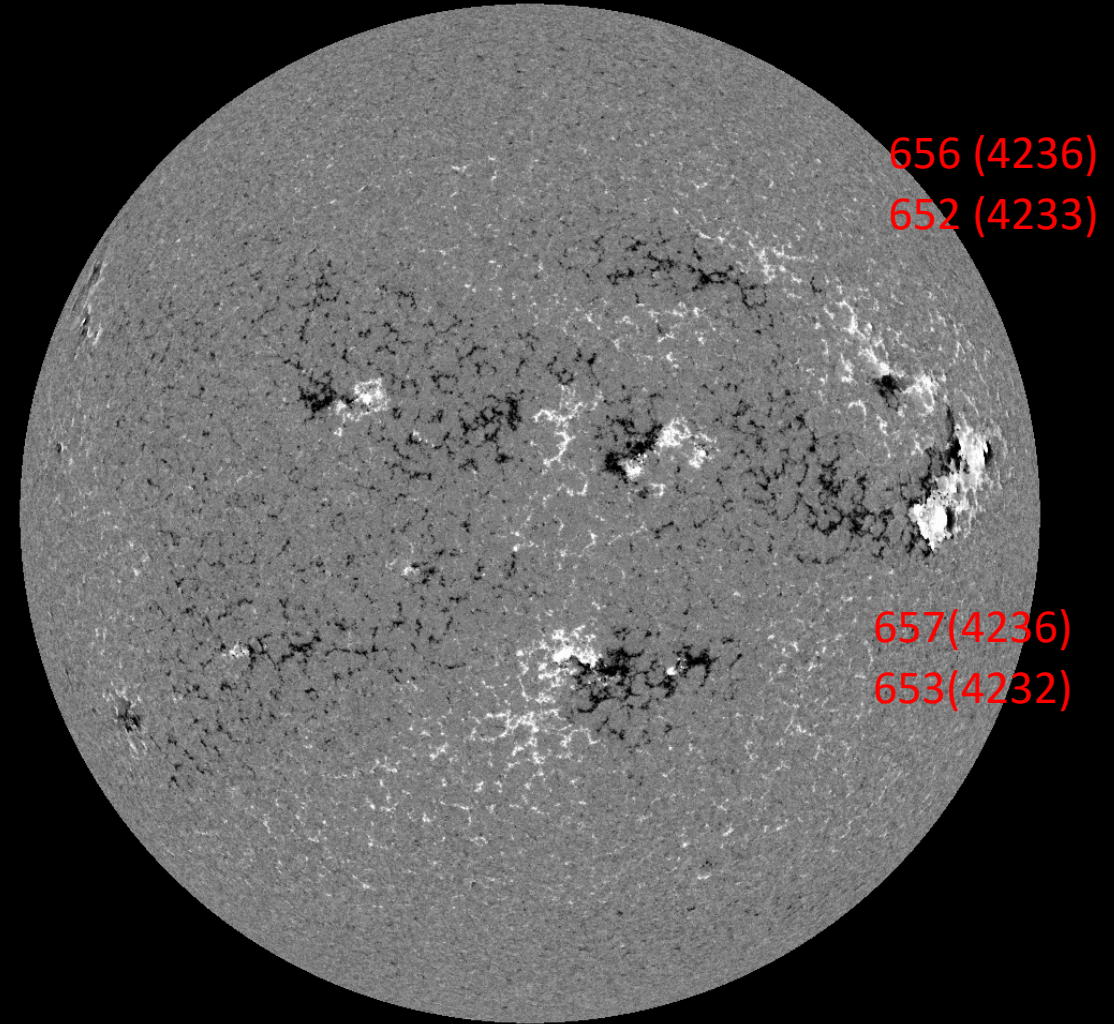
Solar active regions

SDO/HMI White Light 2025-10-06



SDO/HMI Continuum: 20251006_120000

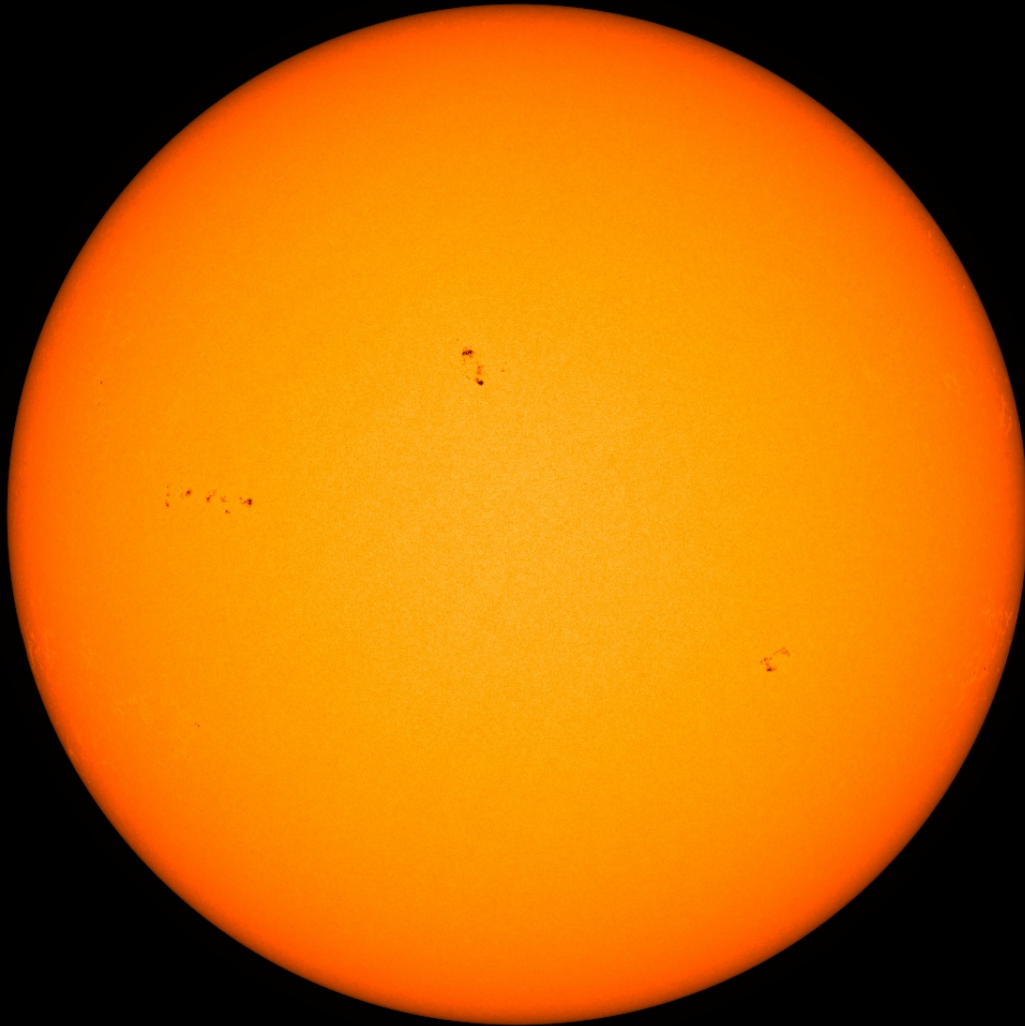
SDO/HMI Magnetogram 2025-10-06



SDO/HMI Magnetogram: 20251006_120000

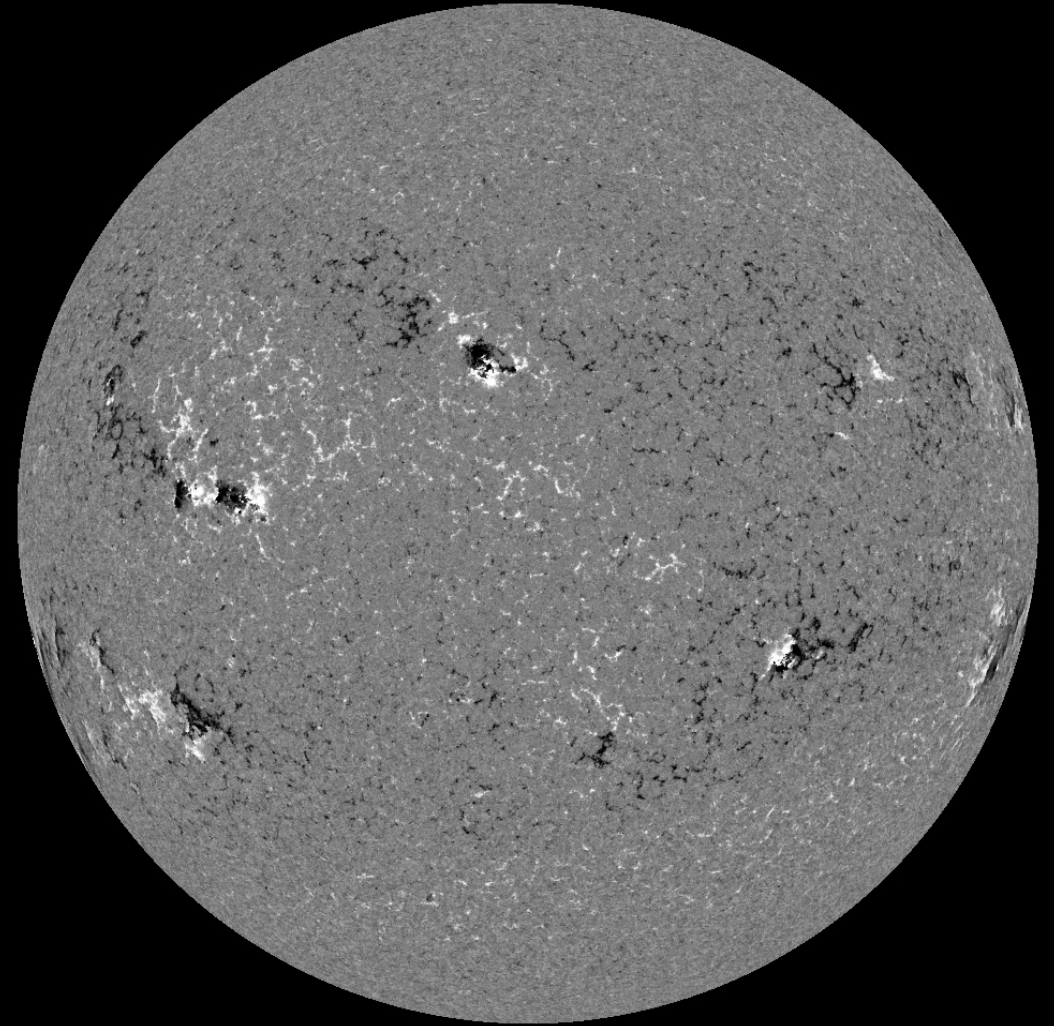
Solar active regions

SDO/HMI White Light 2025-10-11



SDO/HMI Quick-Look Continuum: 20251011_120000

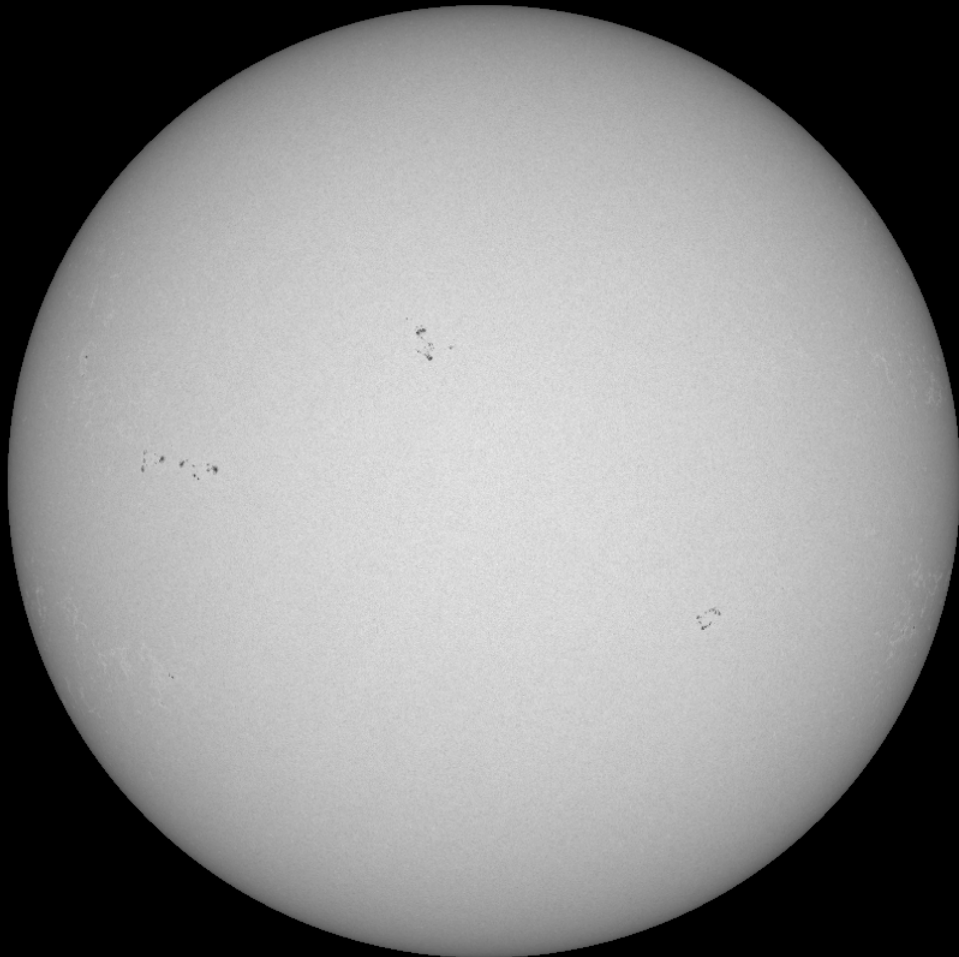
SDO/HMI Magnetogram 2025-10-11



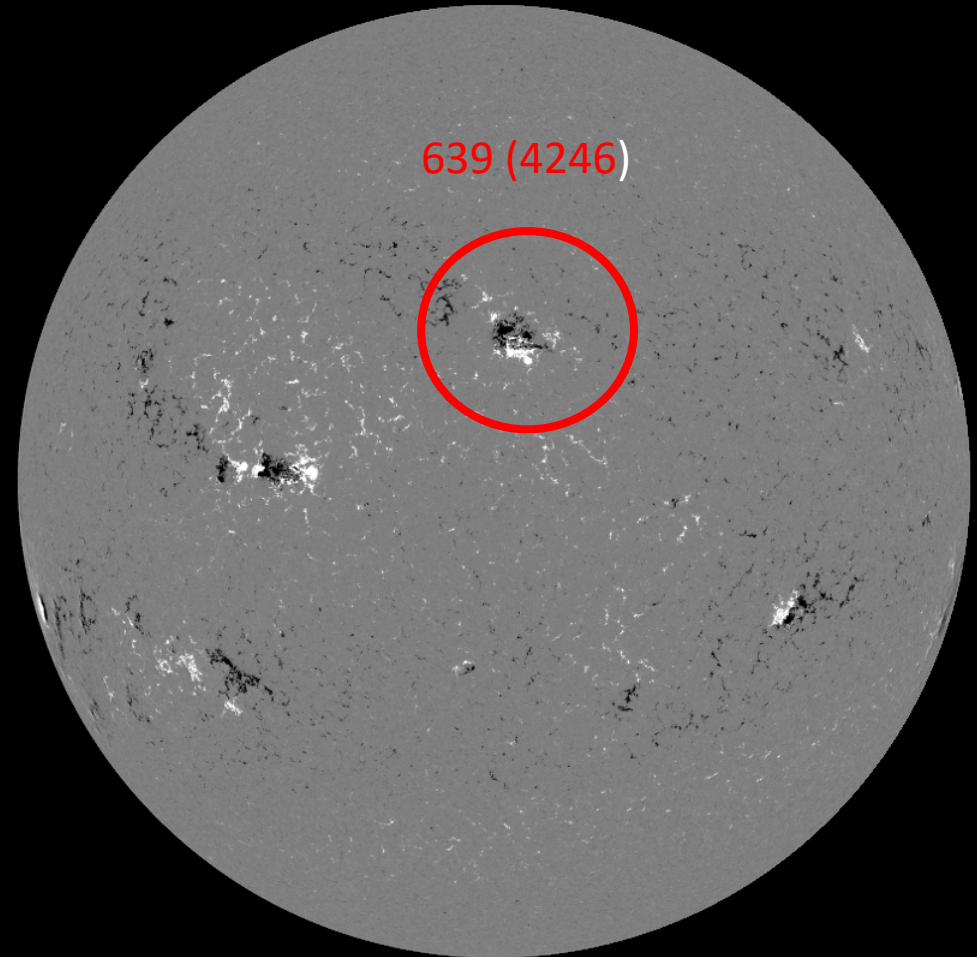
SDO/HMI Quick-Look Magnetogram: 20251011_120000

Solar active regions

SDO/HMI White Light 2025-10-12



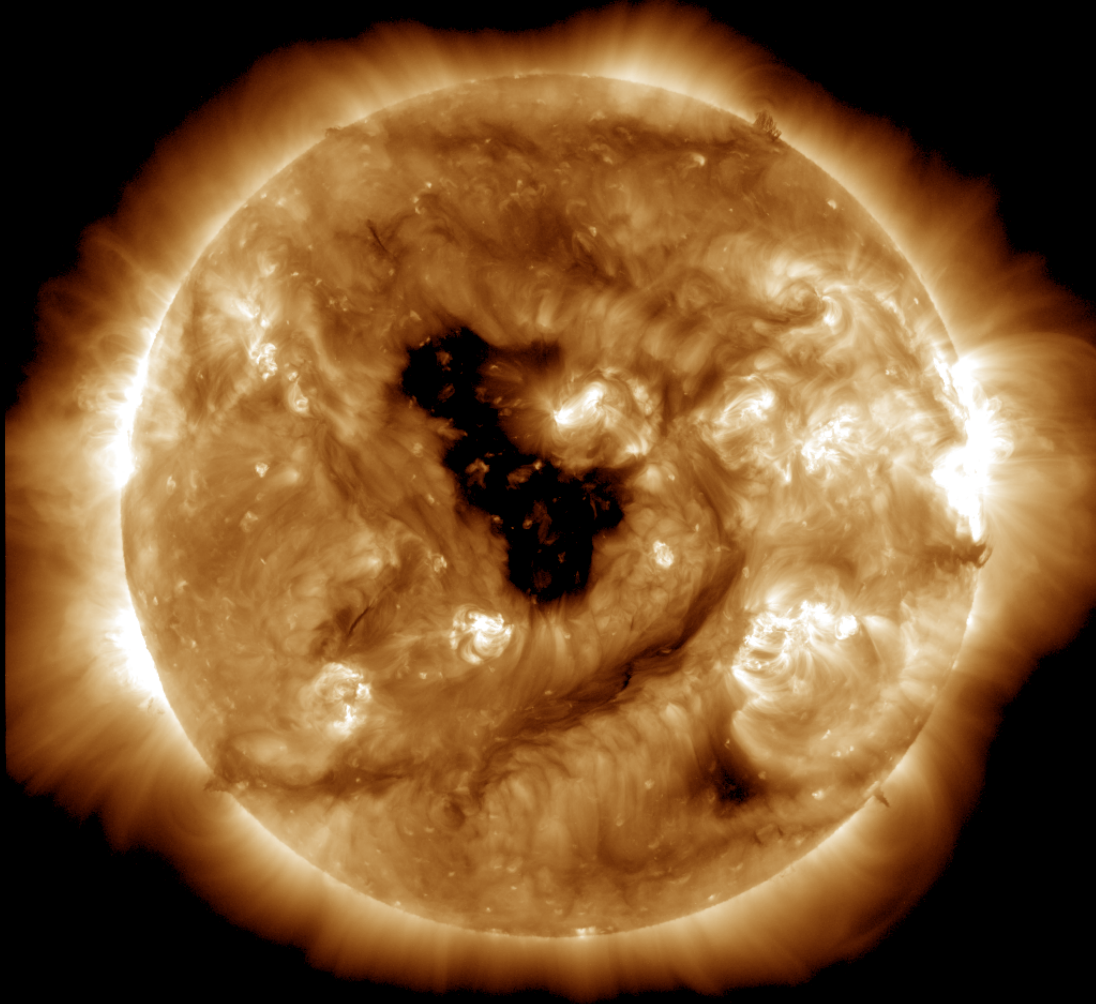
SDO/HMI Magnetogram 2025-10-12



Coronal holes

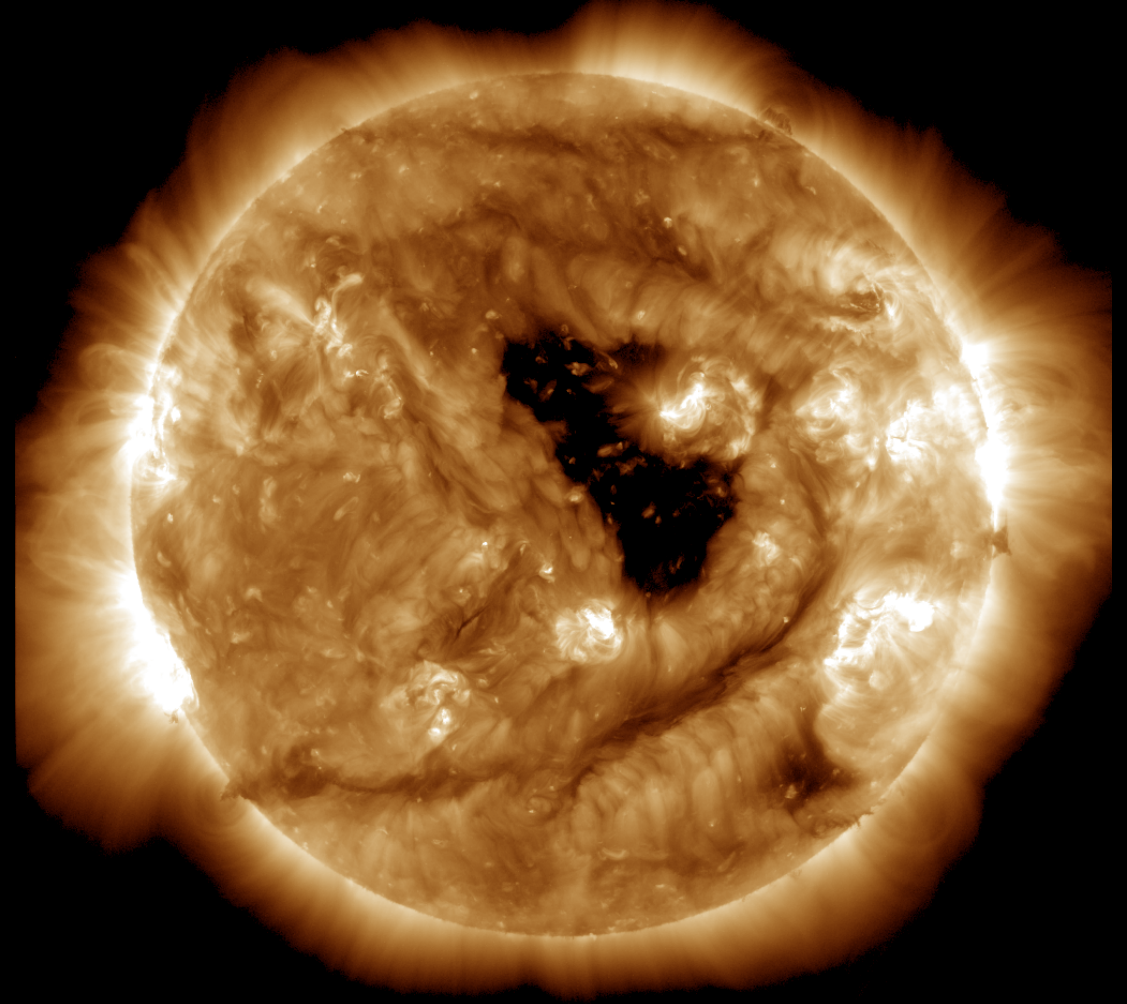
SDO/AIA 19.3 nm 2025-10-08

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



SDO/AIA 19.3 nm 2025-10-09

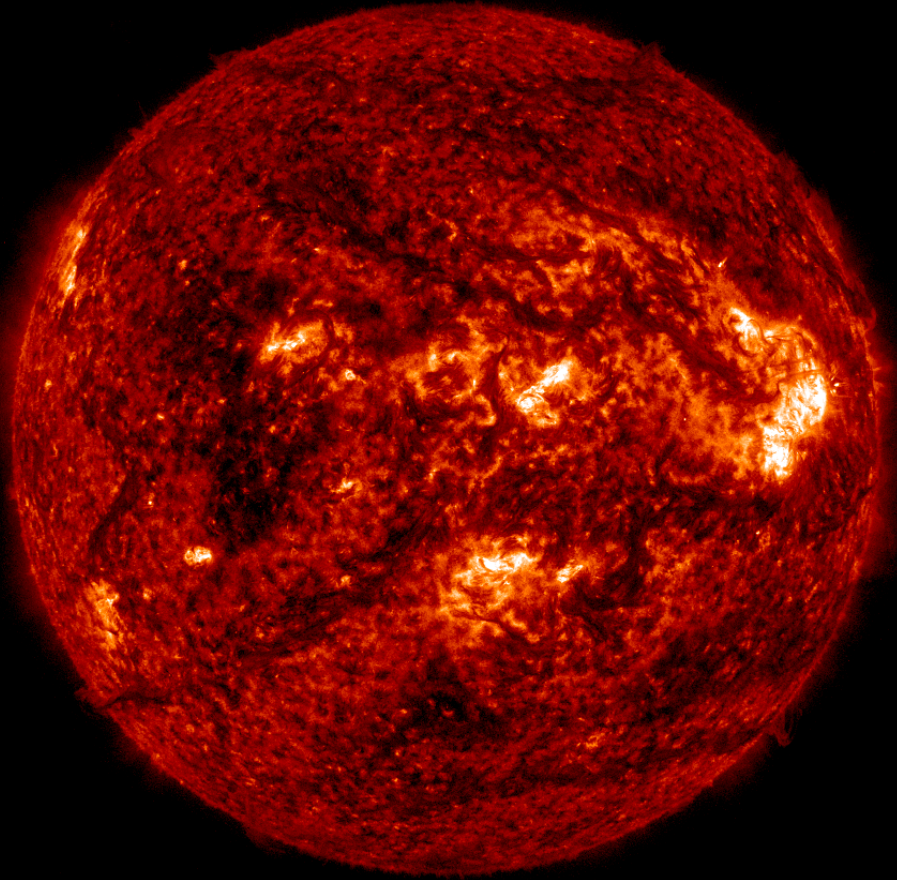
SDO/AIA AIA 193Å 2025-10-09T12:00:05.843



Filaments

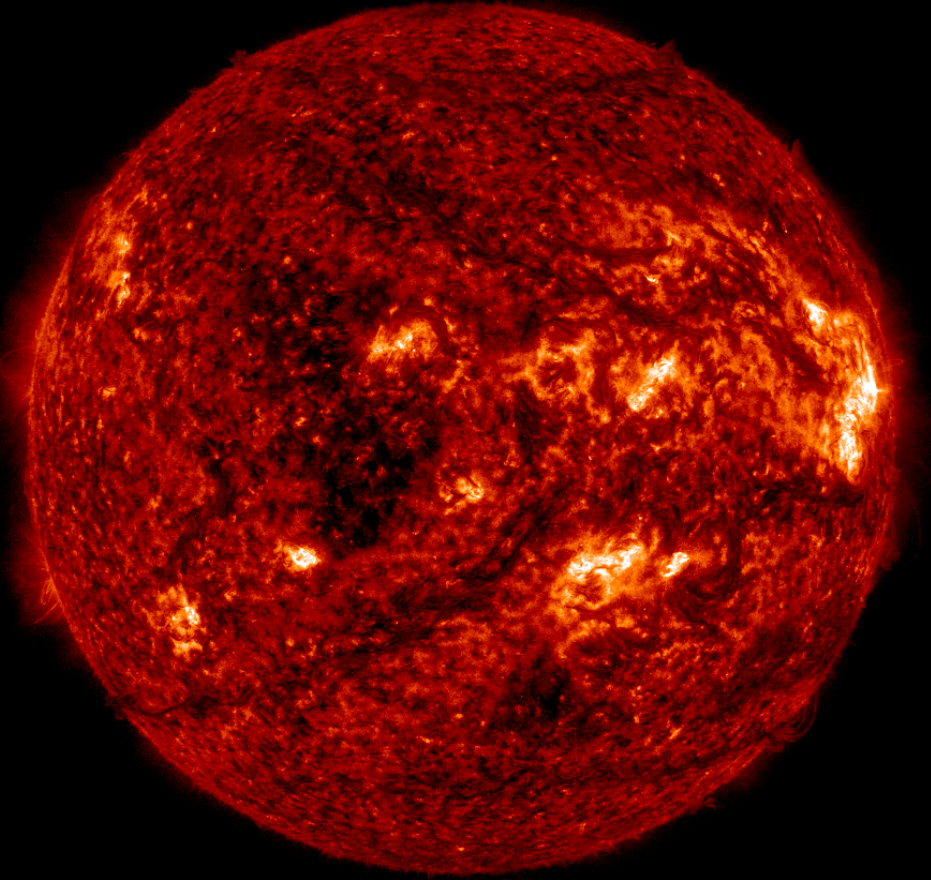
SDO/AIA 30.4 nm 2025-10-06

SDO/AIA AIA 304Å 2025-10-06T12:00:06.580



SDO/AIA 30.4 nm 2025-10-07

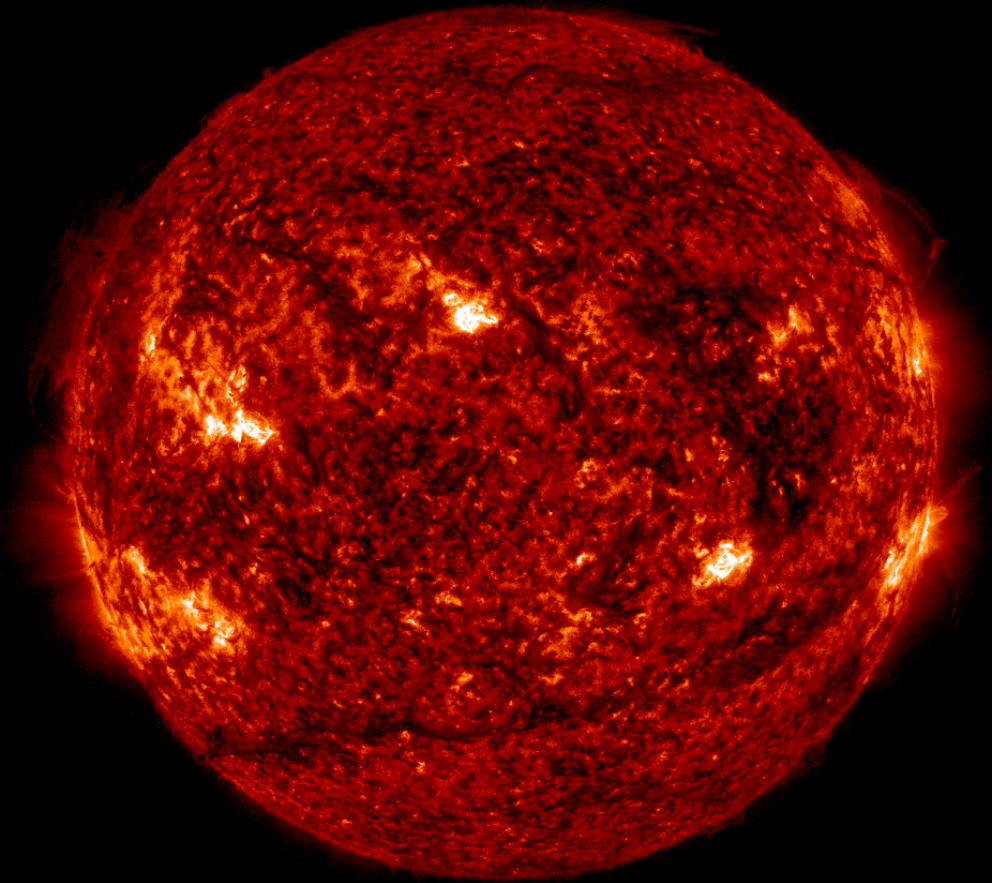
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Filaments

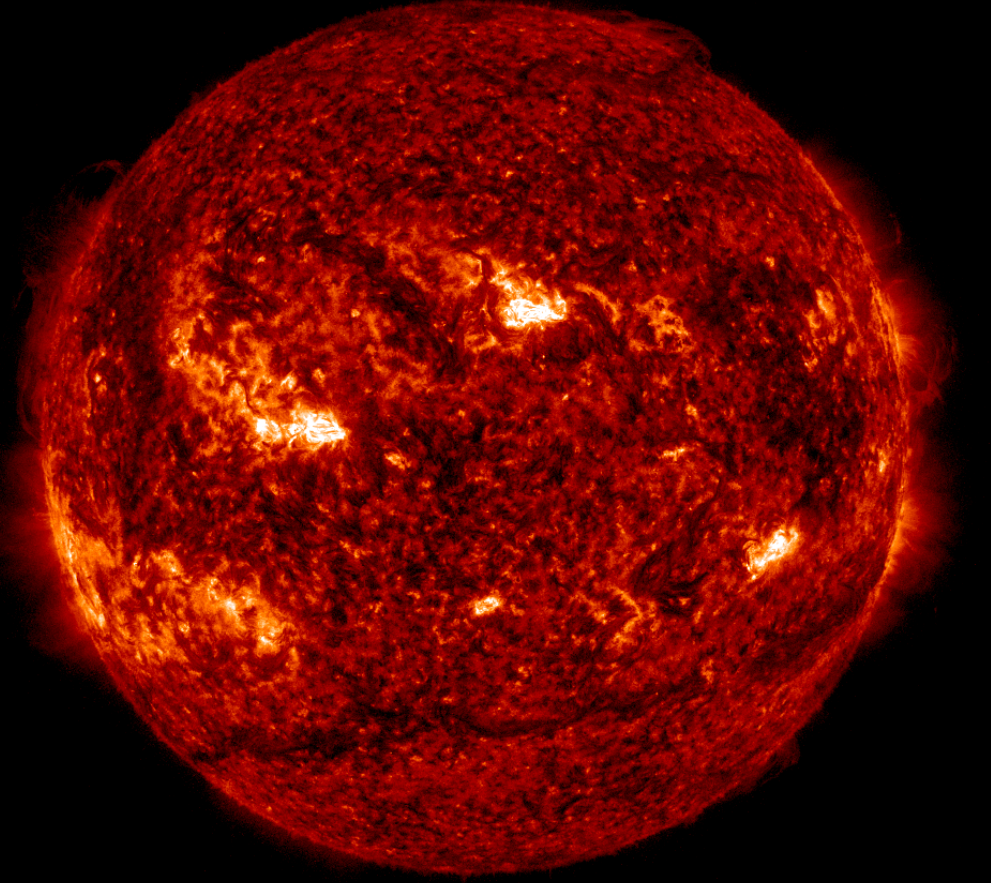
SDO/AIA 30.4 nm 2025-10-11

SDO/AIA AIA 304Å 2025-10-11T12:00:06.581



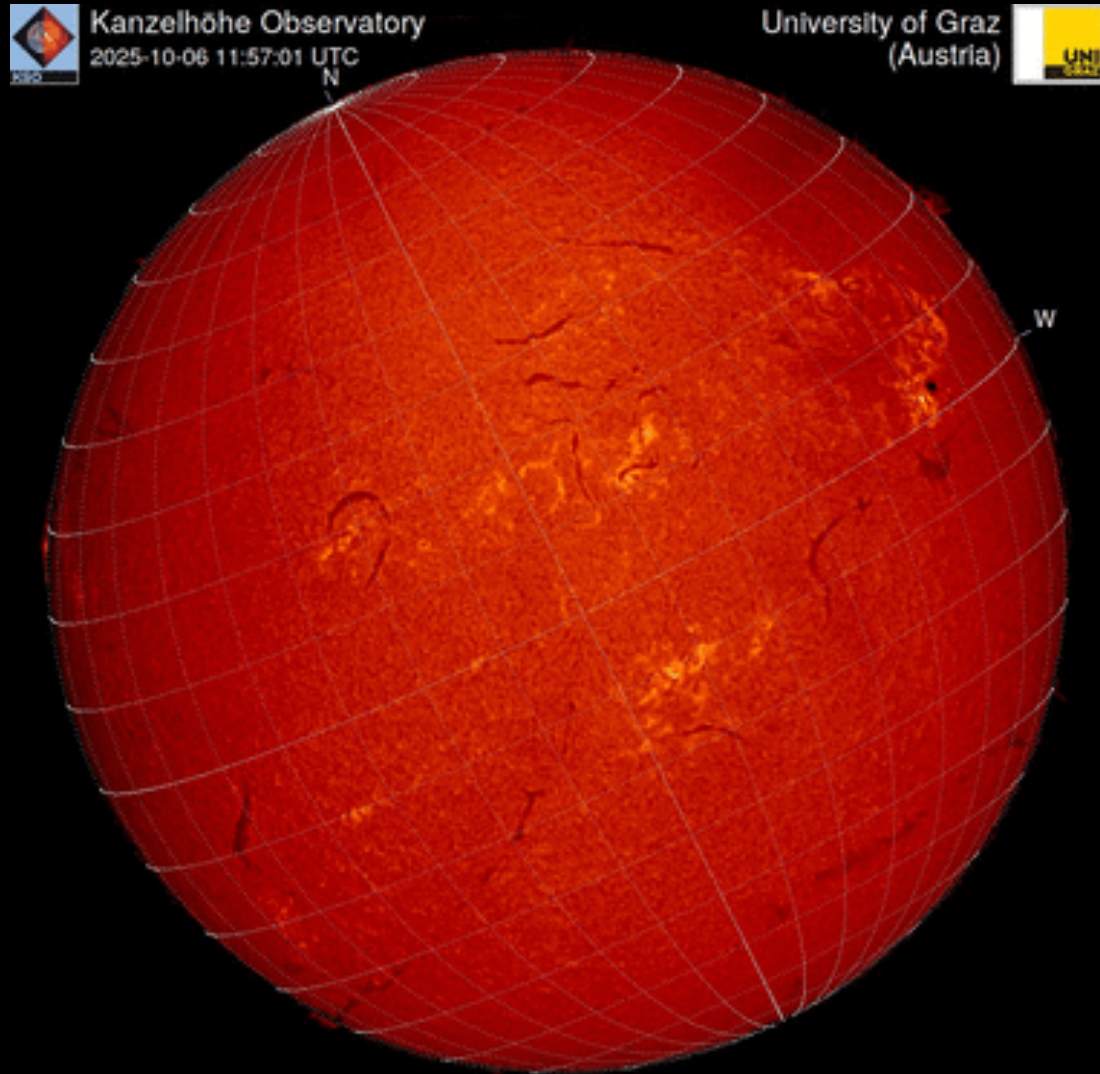
SDO/AIA 30.4 nm 2025-10-12

SDO/AIA AIA 304Å 2025-10-12T12:00:06.580

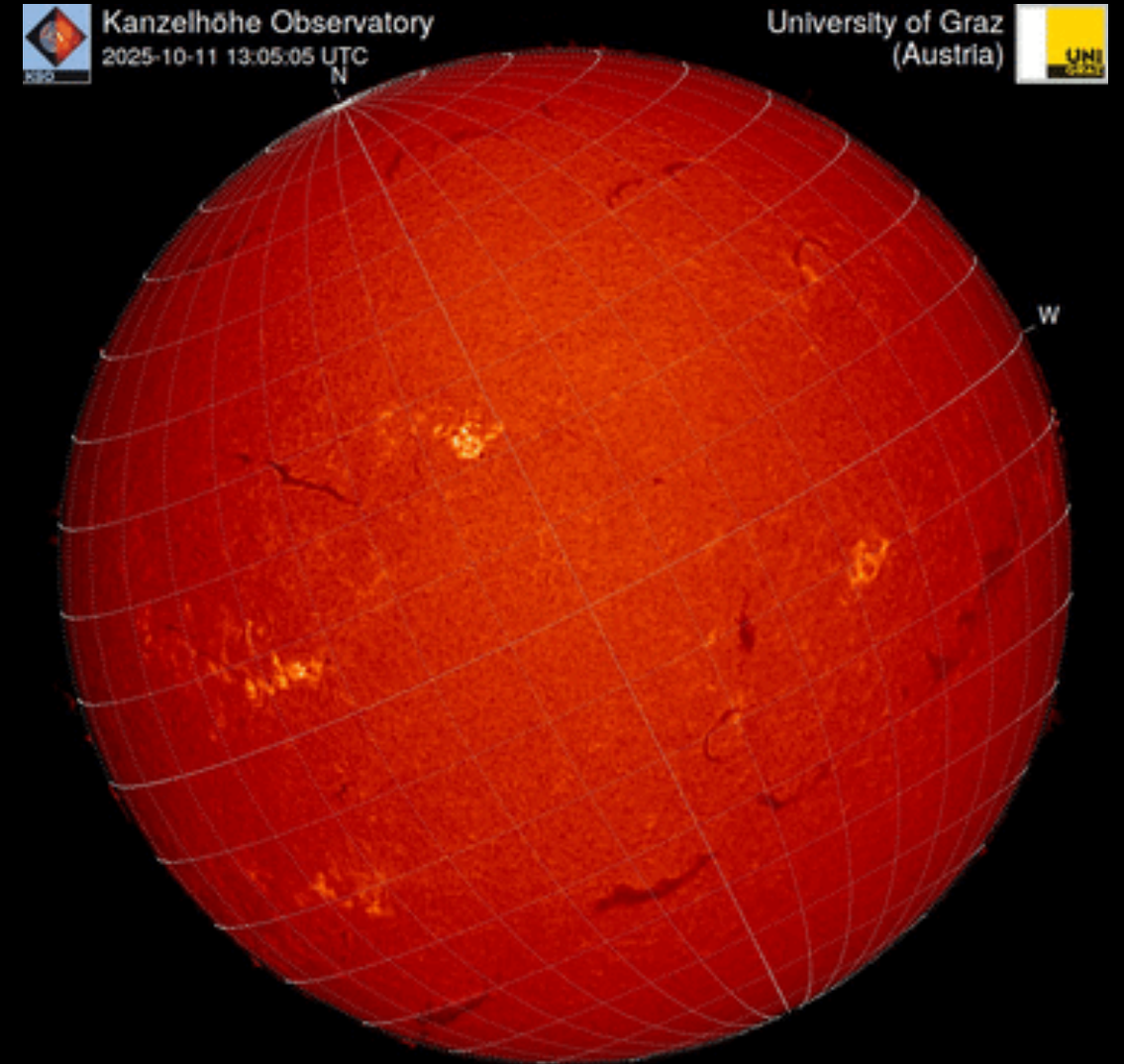


Filaments & Filament eruptions

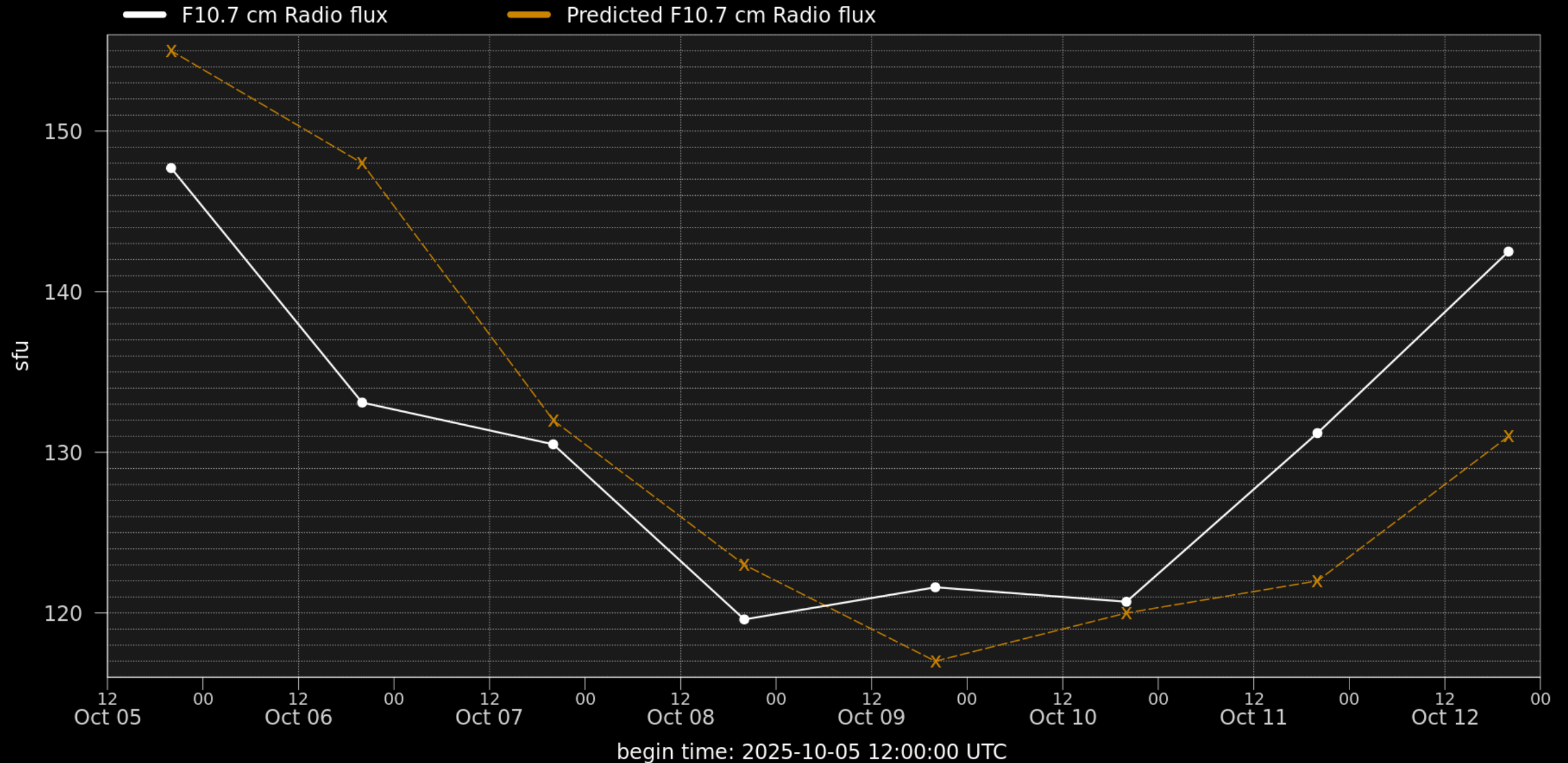
H-alpha 2025-10-06



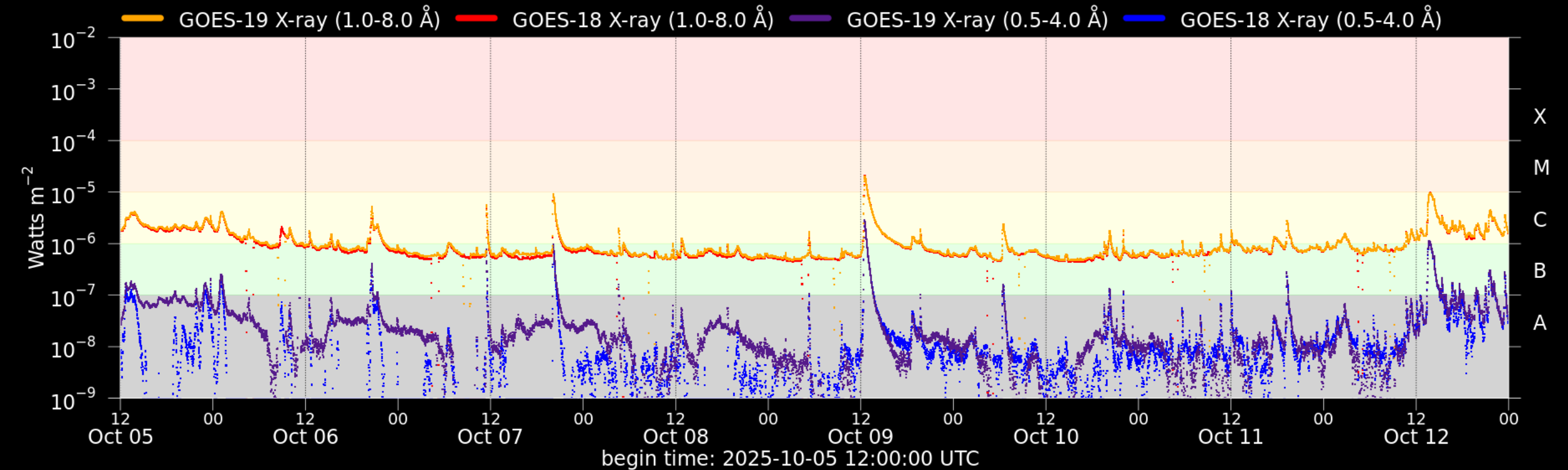
H-alpha 2025-10-12



Solar F10.7cm radio flux



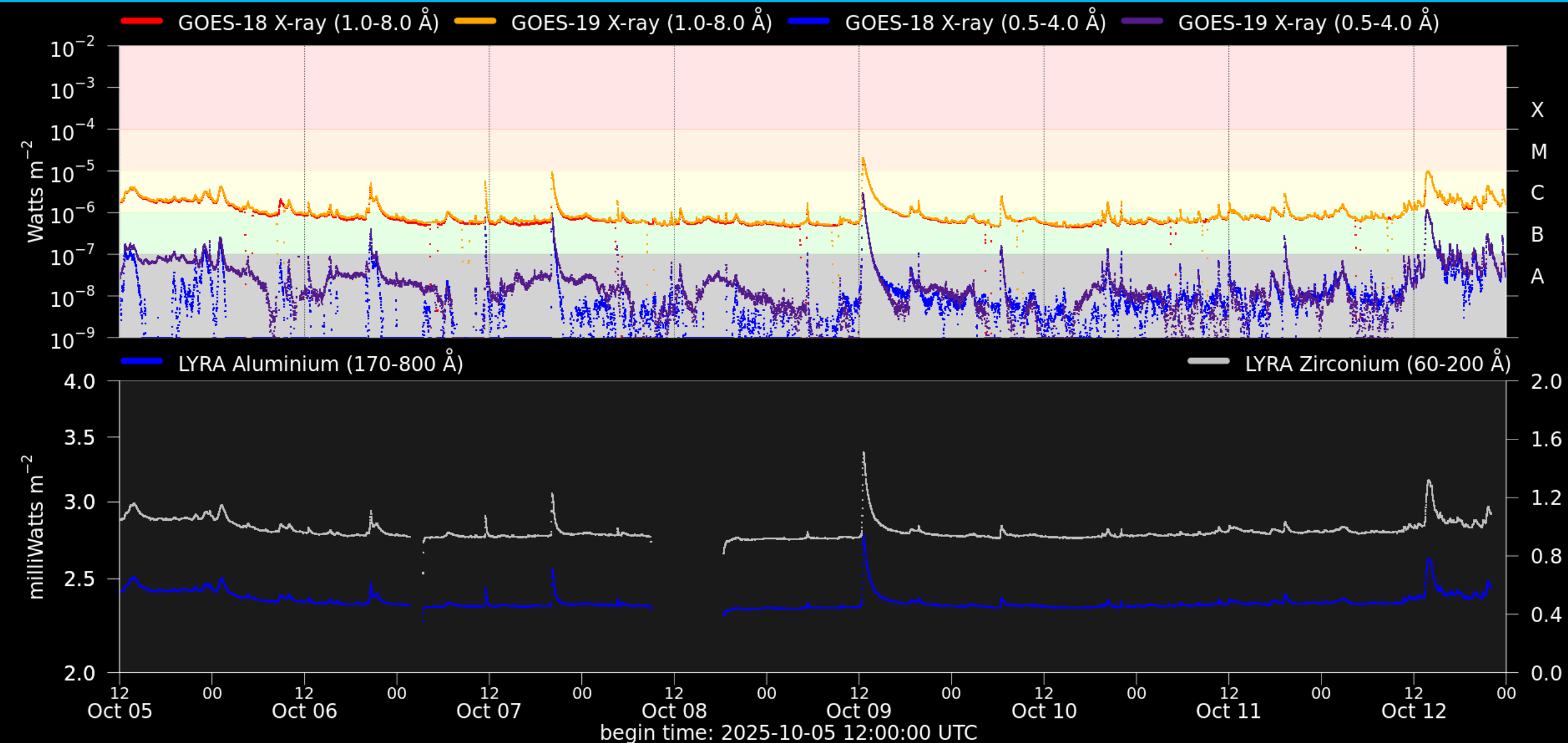
Flaring activity



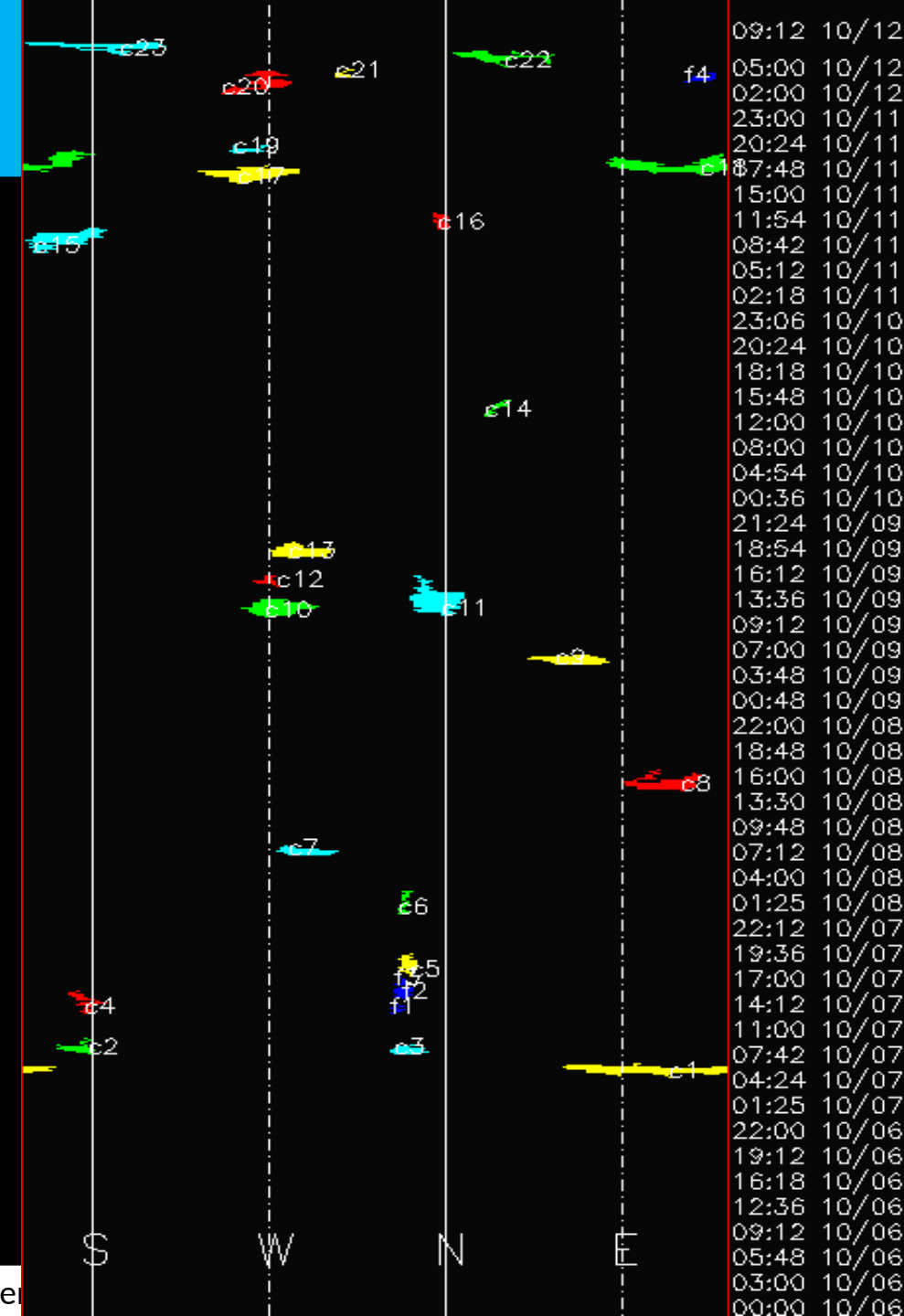
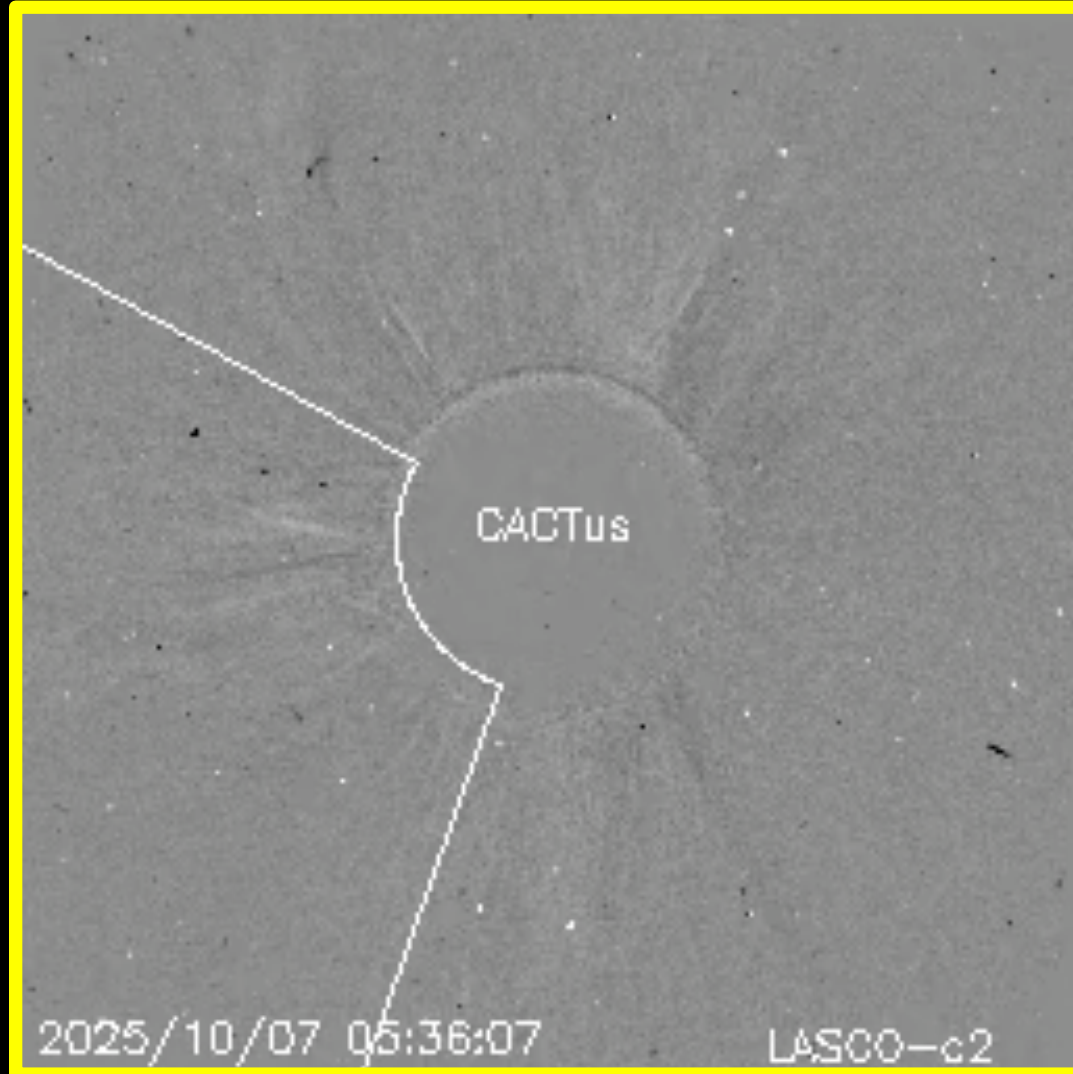
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-10-05	2025-10-06	2025-10-07	2025-10-08	2025-10-09	2025-10-10	2025-10-11	2025-10-12
Probability (%)	99 62 04	71 01 01	88 10 01	90 05 01	90 01 01	82 01 01	99 10 01	99 15 01
Observed (#)	01 00 00	04 00 00	02 00 00	02 00 00	02 01 00	06 00 00	04 00 00	04 00 00

Solar X-Ray and UV flux



Coronal Mass Ejections



Solar Wind and

Geomagnetic Activity



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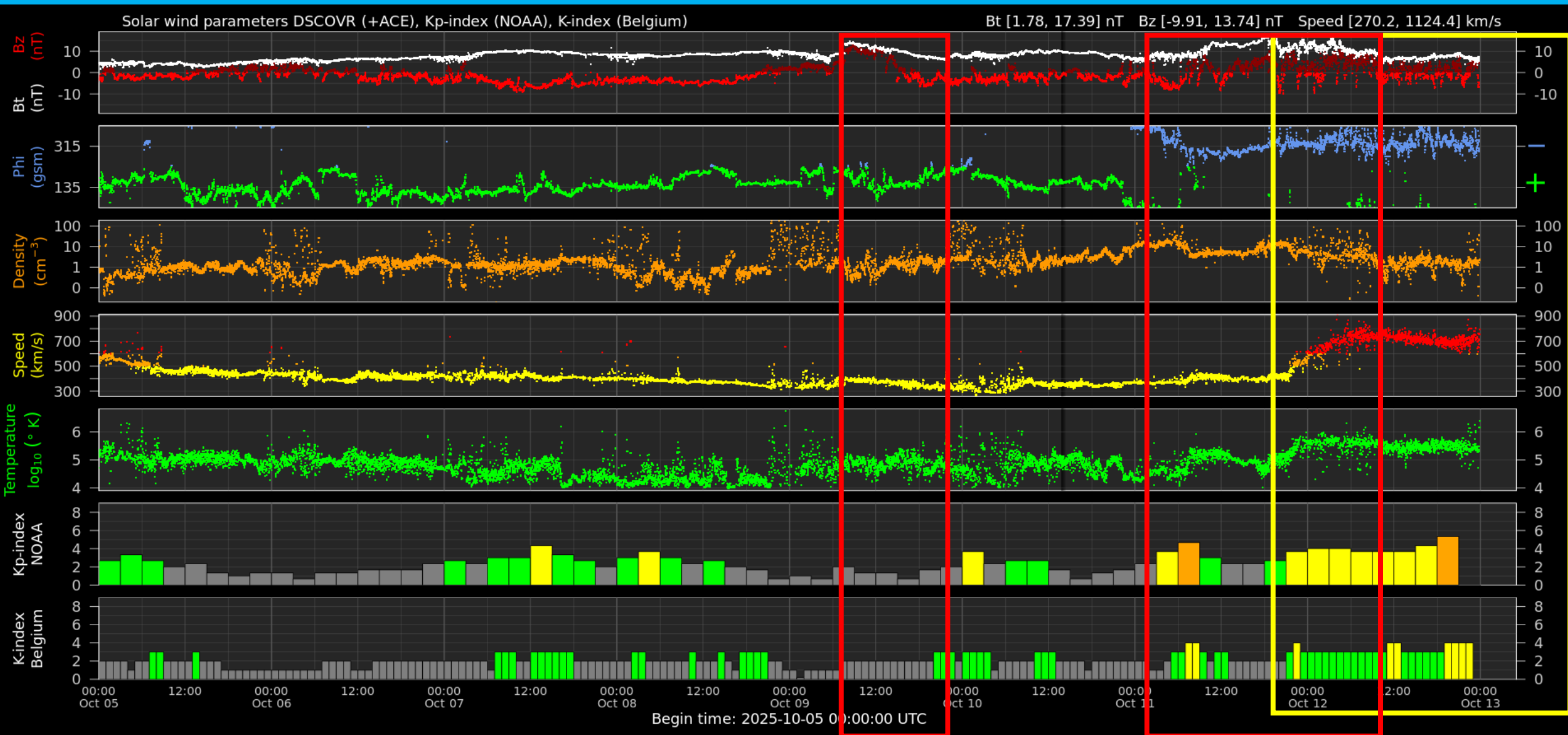
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Solar wind parameters & K-indices

CH 116 8/10

CME 577 5/10 03:25

CME 578 7/10 10:36



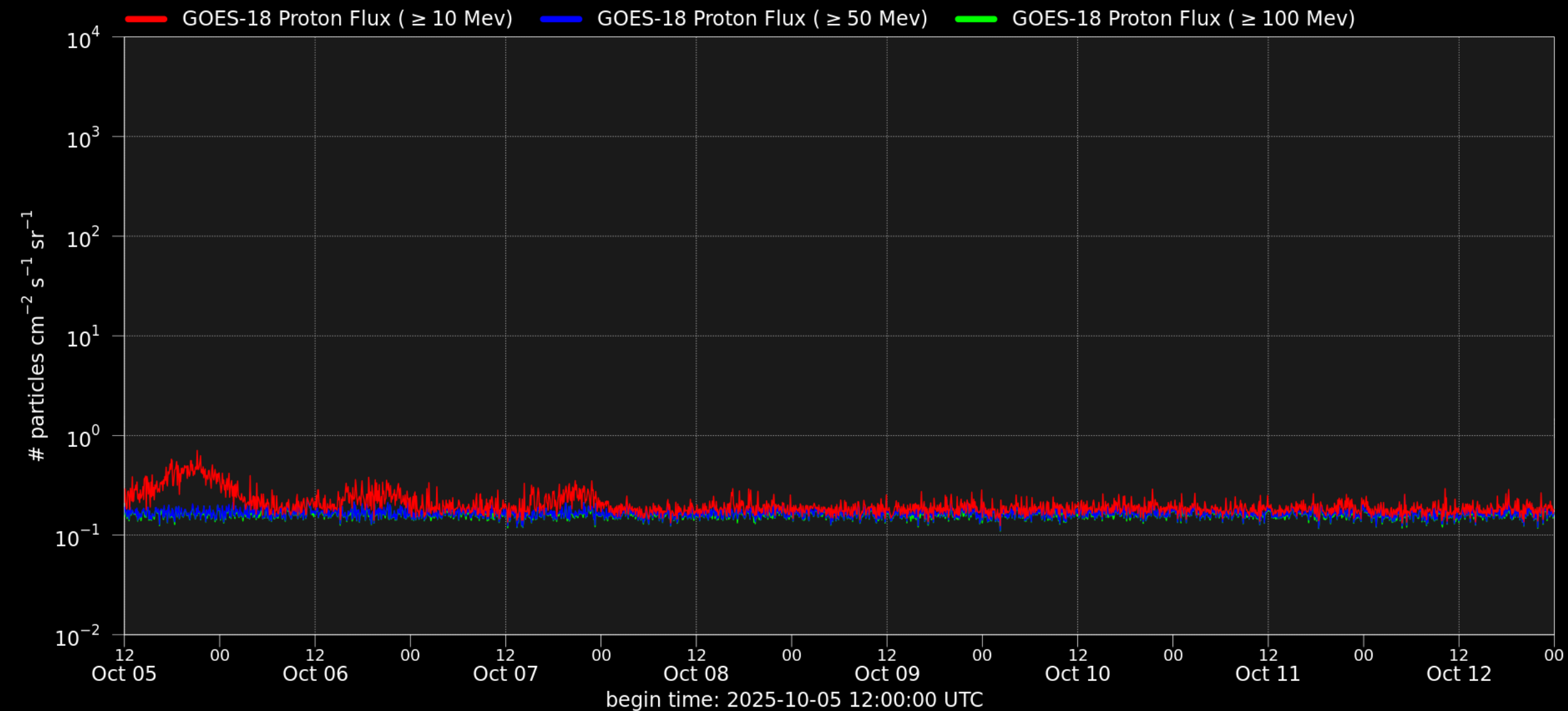
Energetic Particles



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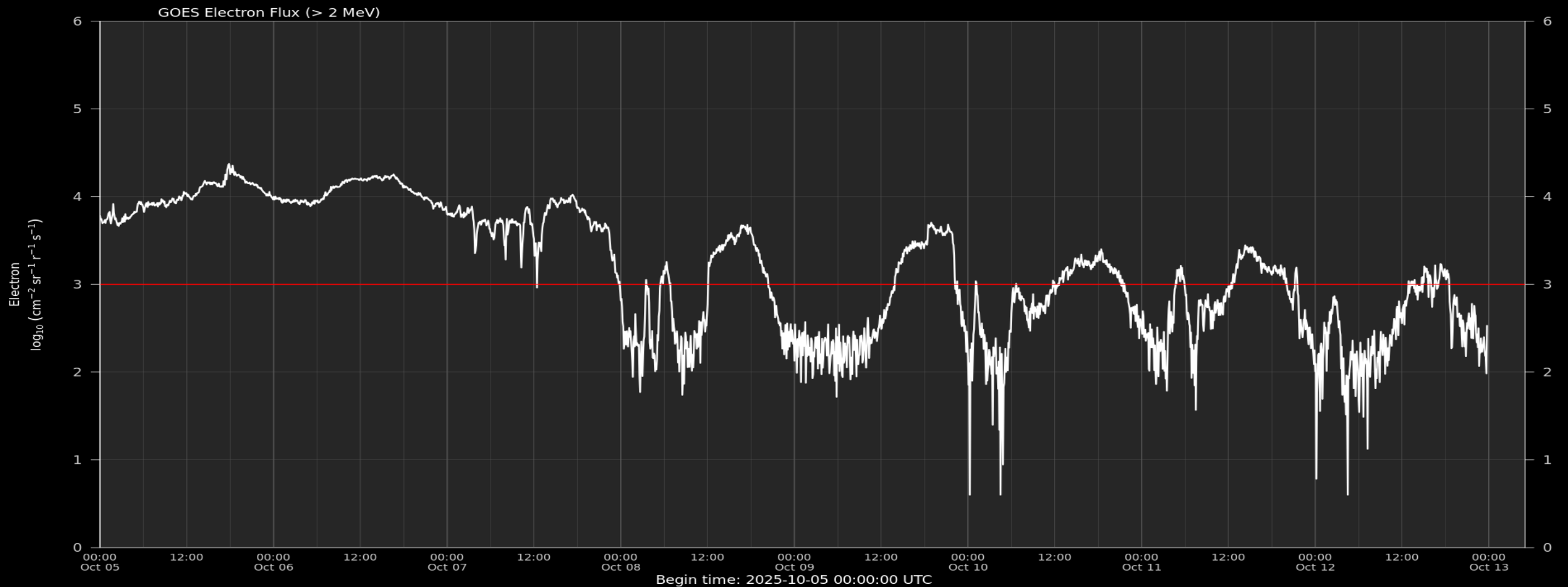
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



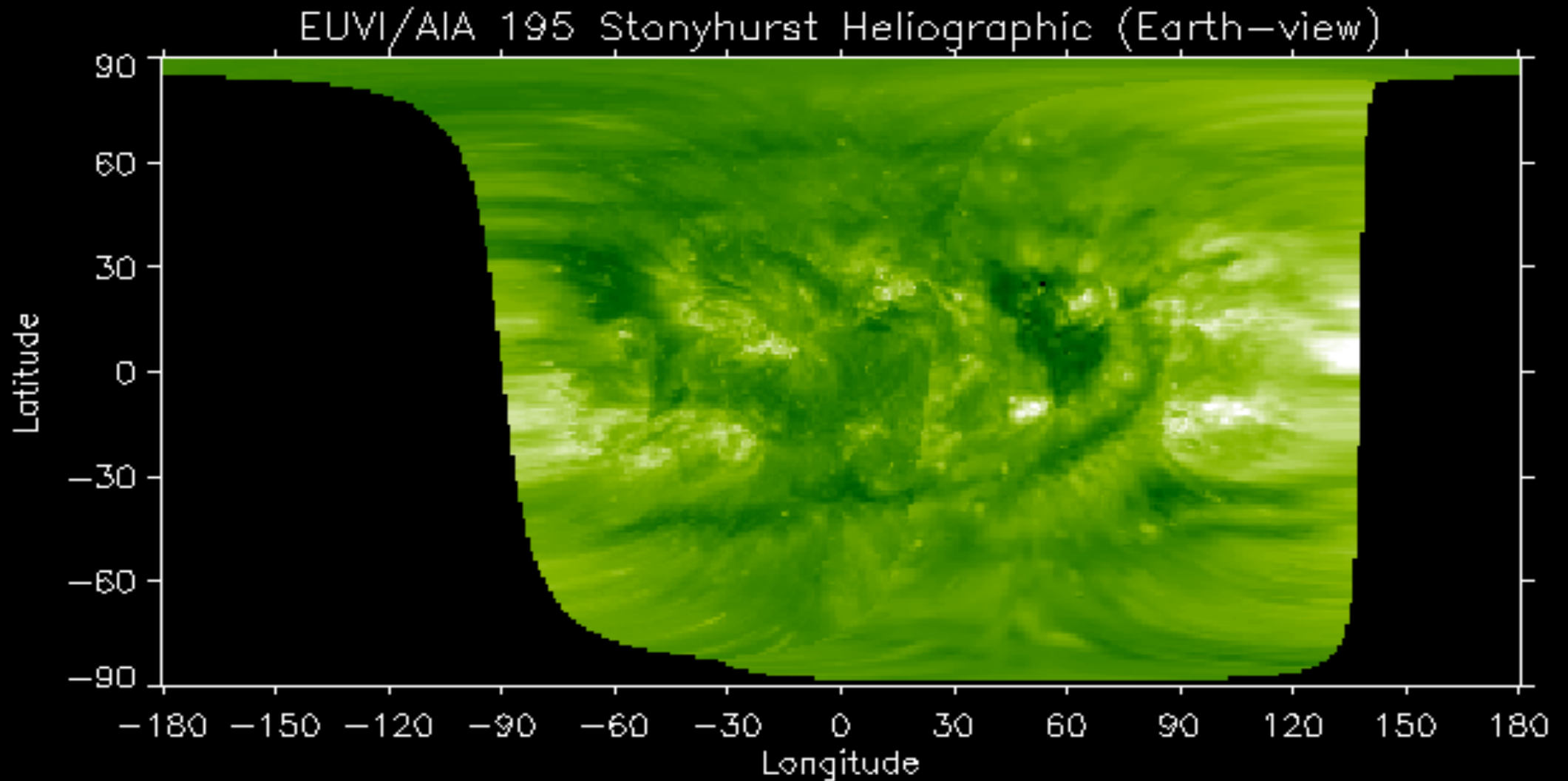
Outlook



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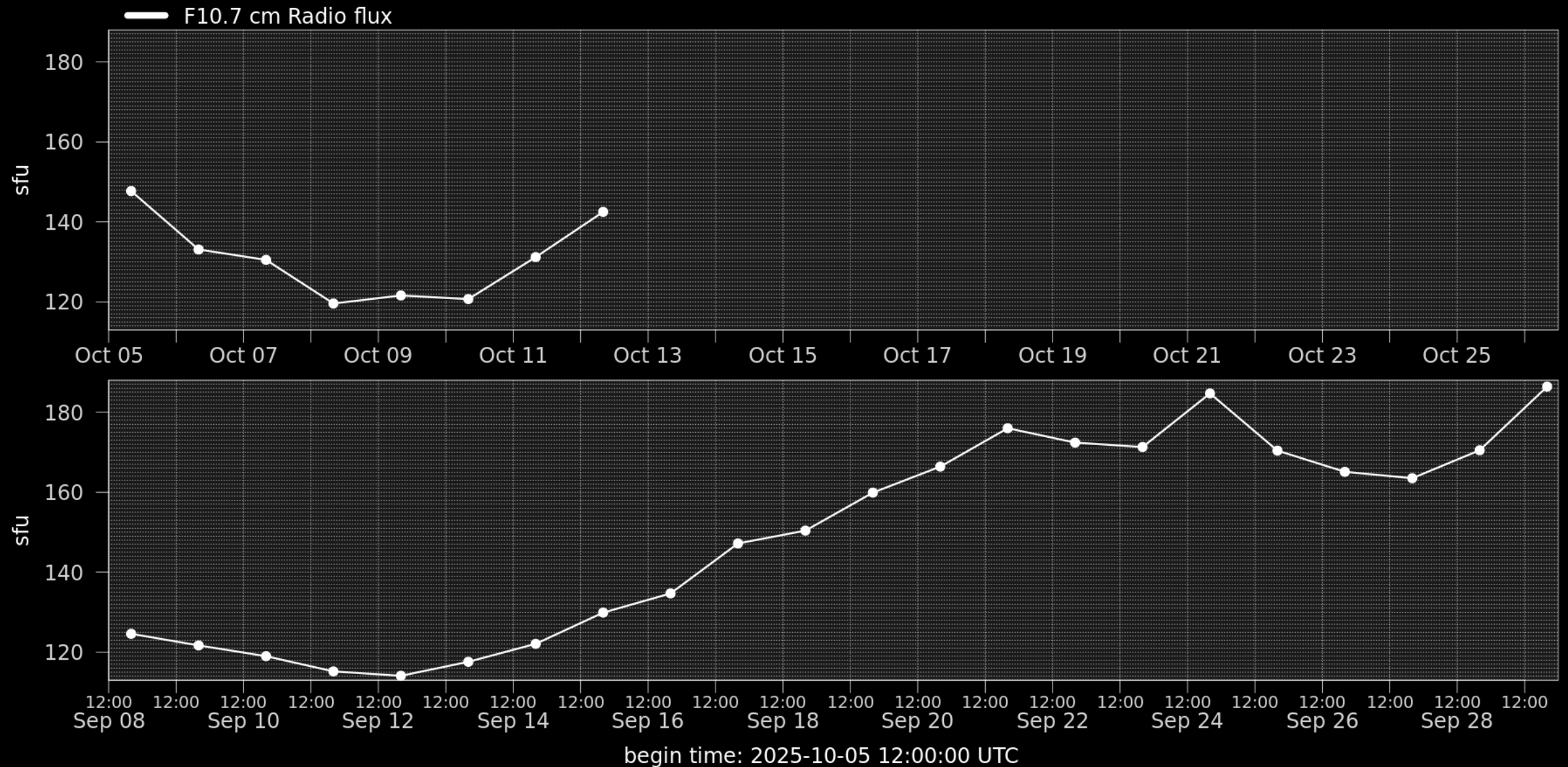
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Outlook: Solar activity



Observation date: 2025/10/12 23:05:00

Outlook: Solar F10.7cm radio flux



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pegasus related events

On Duty Centre(ODC):

- GNSS advisories issued daily
- HF COM (impact on higher HF): 6 Oct

SIDC Space Weather Briefing

See you at our next briefing!

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