

SIDC Space Weather Briefing

22 September 2025-28 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 2025-09-22 00:00 to 2025-09-28 23:59

Active regions	26 ARs, most notable SIDC 640/NOAA 4217, SIDC 592/NOAA 4226, SIDC 650/NOAA 4229, SIDC 653/NOAA 4232
Flares	# C-class flare: 48 # M-class flare: 6 # X-class flare: 0
Coronal Holes	Multiple CH- and CH+
CMEs	No Earth-directed CMEs

Proton flux	Nominal levels
Electron flux	Moderate levels at the beginning of the week and then nominal levels

Solar wind and geomagnetic conditions

ICMEs	No clear arrivals
Solar wind conditions	B : 0.85 - 19.19 nT //Bz: -13.26 nT to 17.4 nT //Speed: 304.6 – 650 km/s
Geomagnetic conditions	max K _{Be} : 3.0, max K _p (NOAA): 4 -, Active conditions

All Quiet Alert: Off

Solar Activity



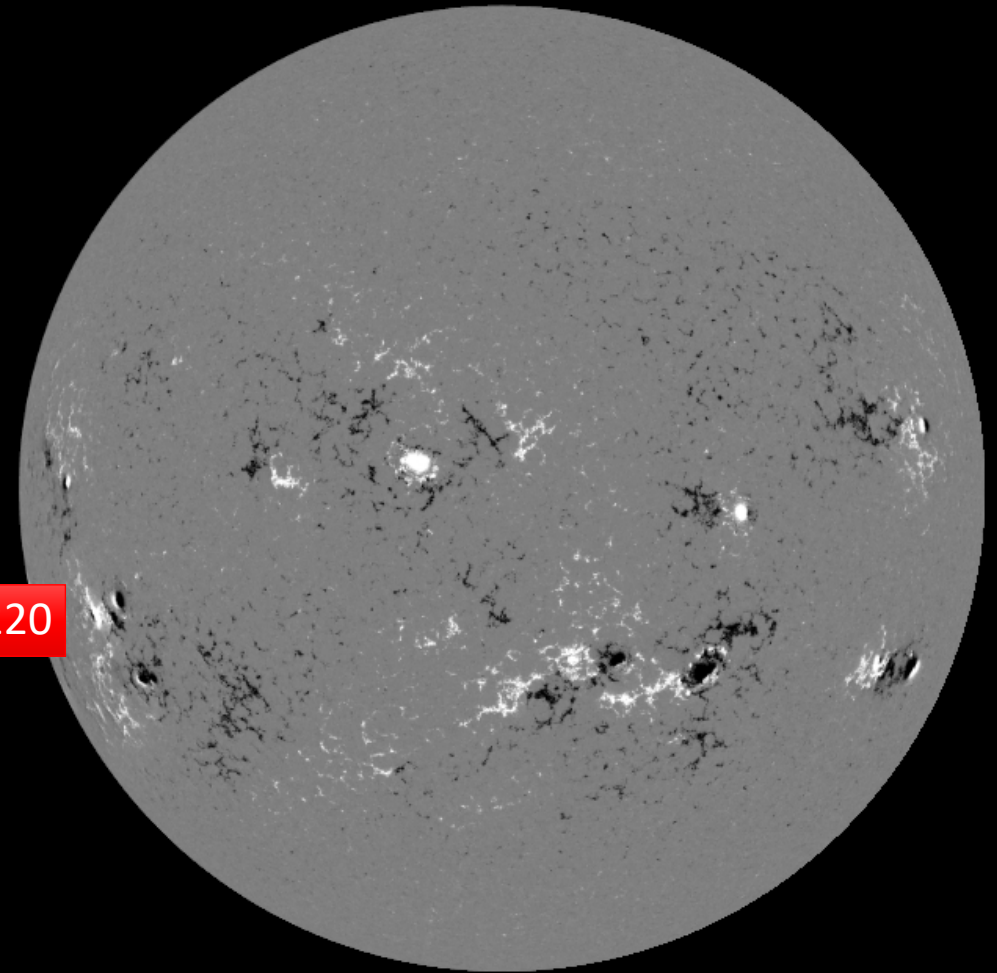
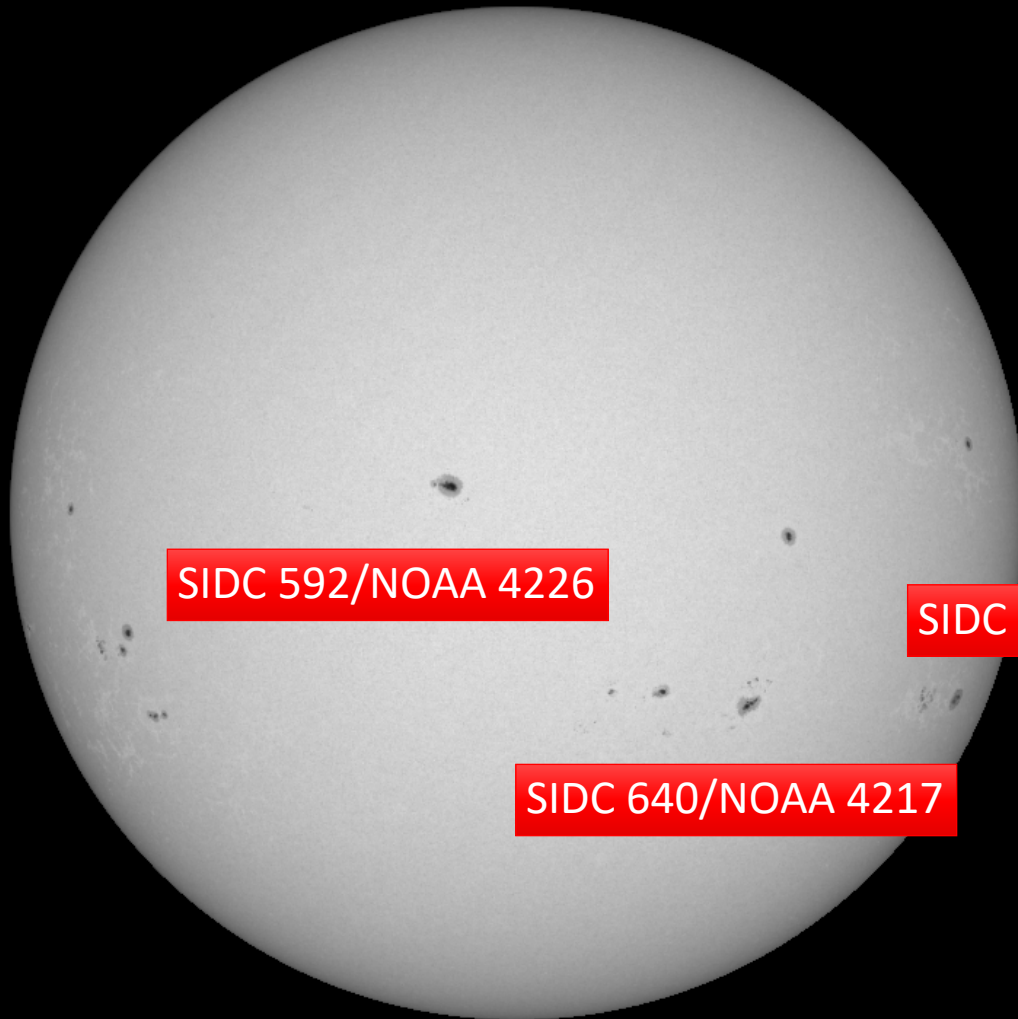
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Solar active regions

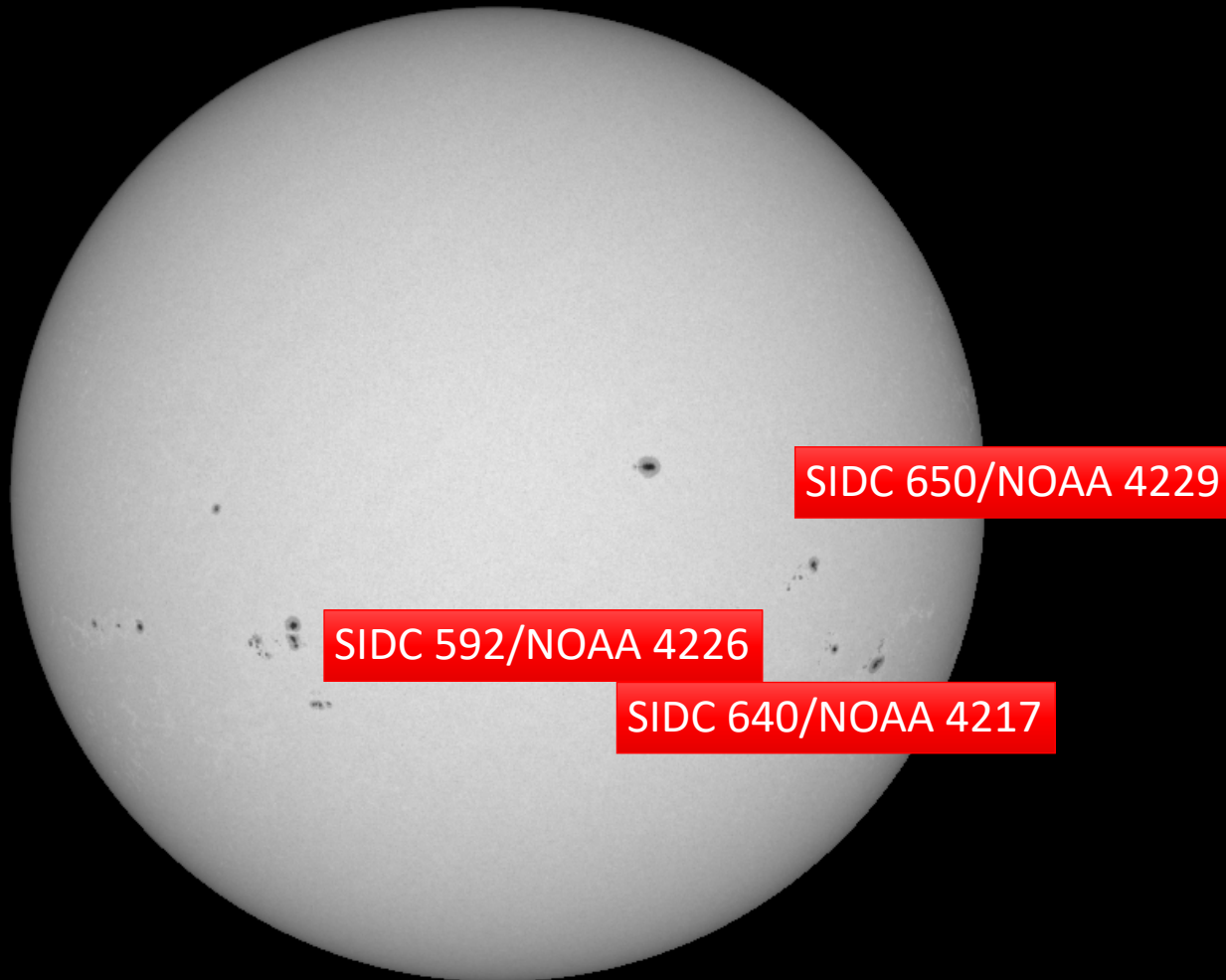
SDO/HMI White Light 2025-09-22

SDO/HMI Magnetogram 2025-09-22

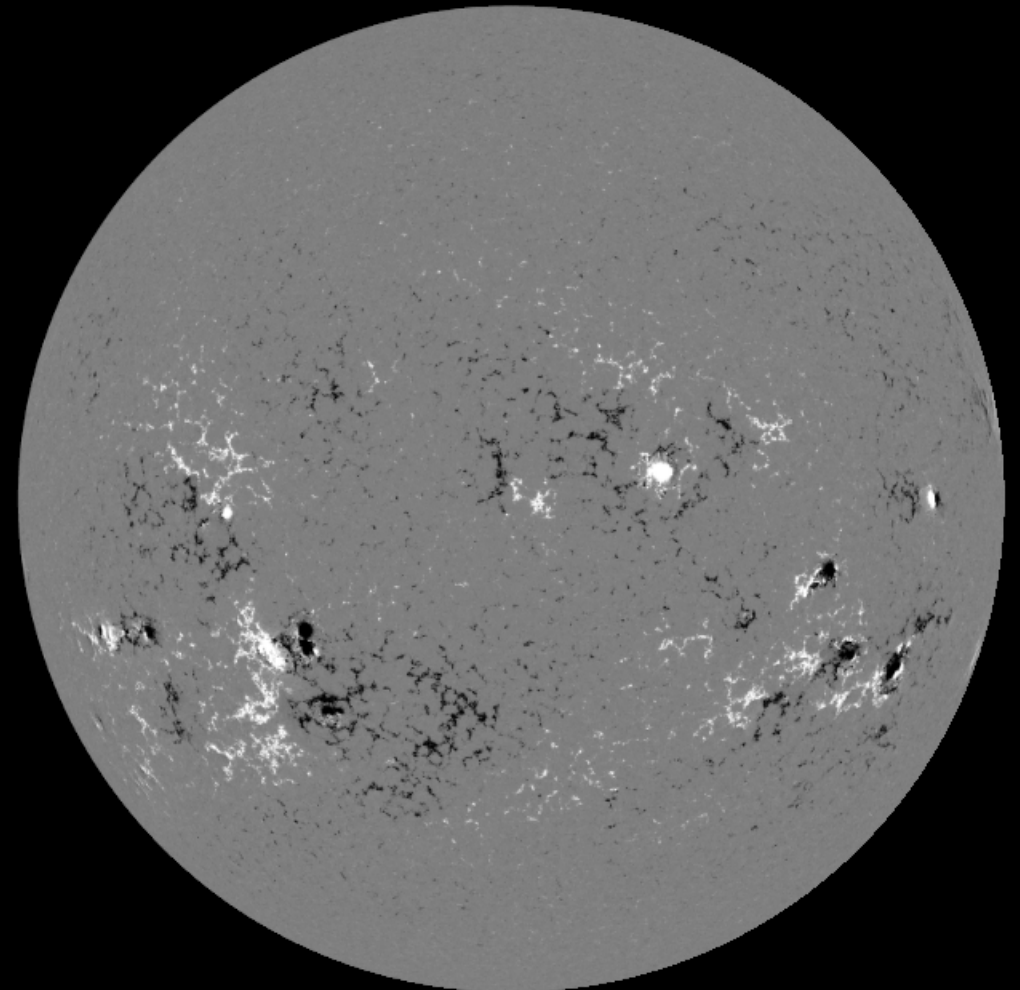


Solar active regions

SDO/HMI White Light 2025-09-24

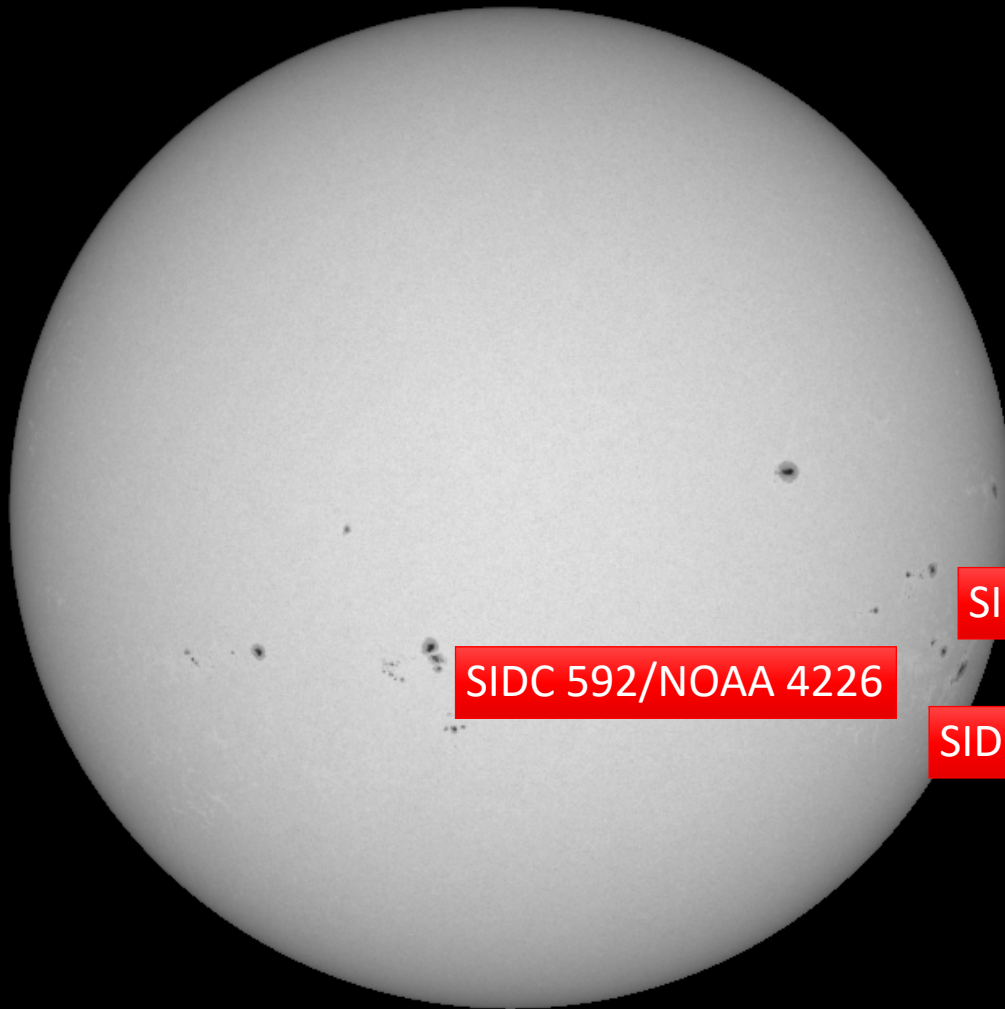


SDO/HMI Magnetogram 2025-09-24

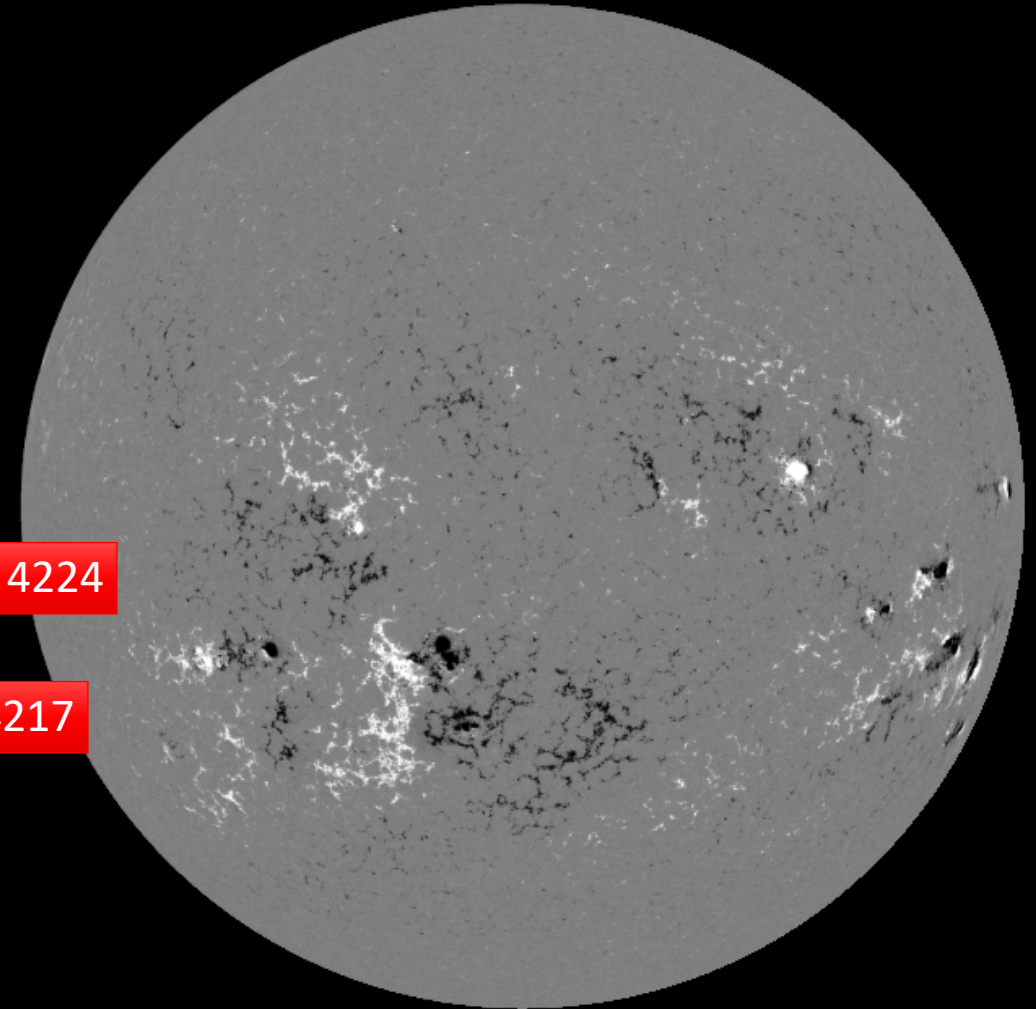


Solar active regions

SDO/HMI White Light 2025-09-25

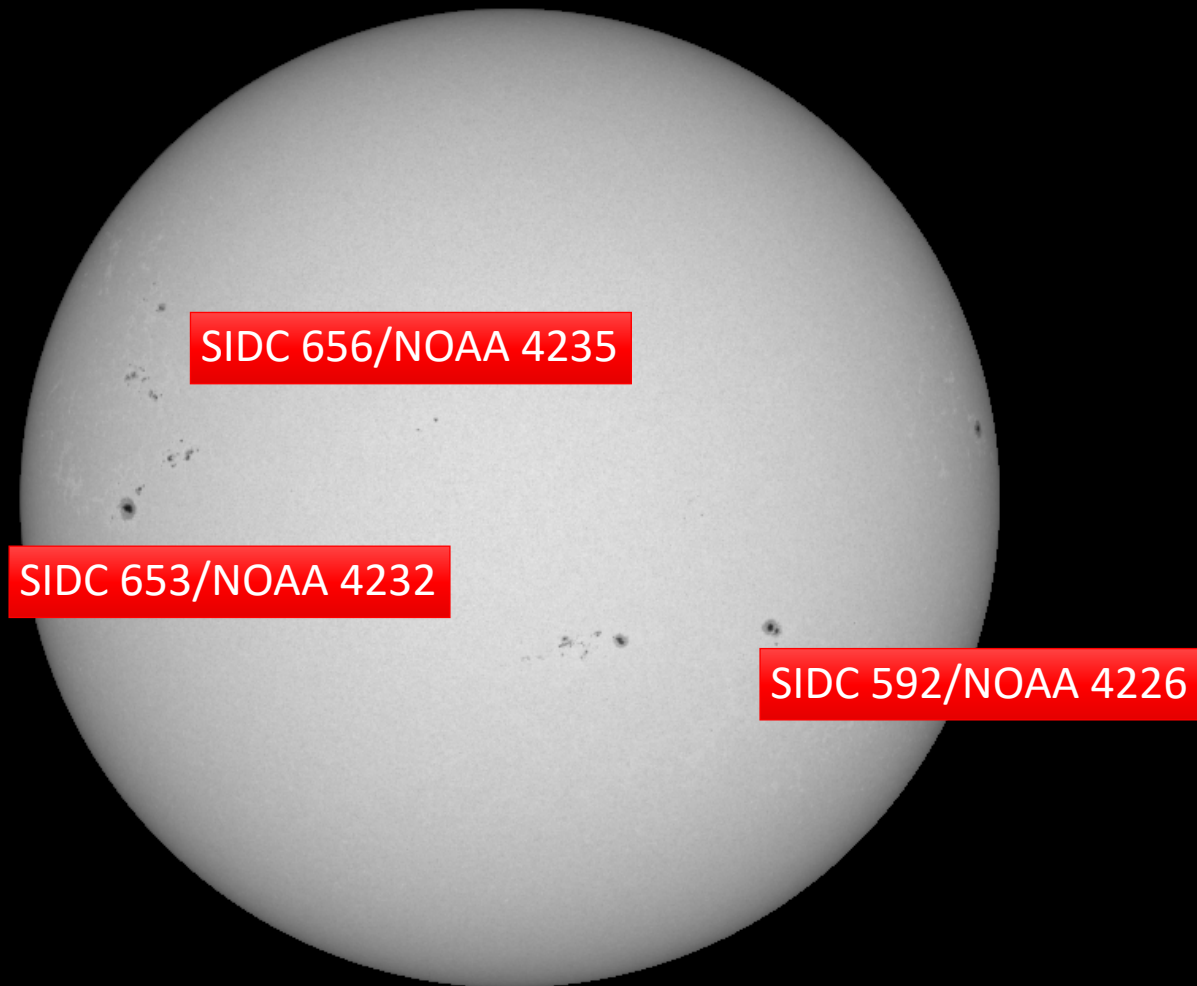


SDO/HMI Magnetogram 2025-09-25

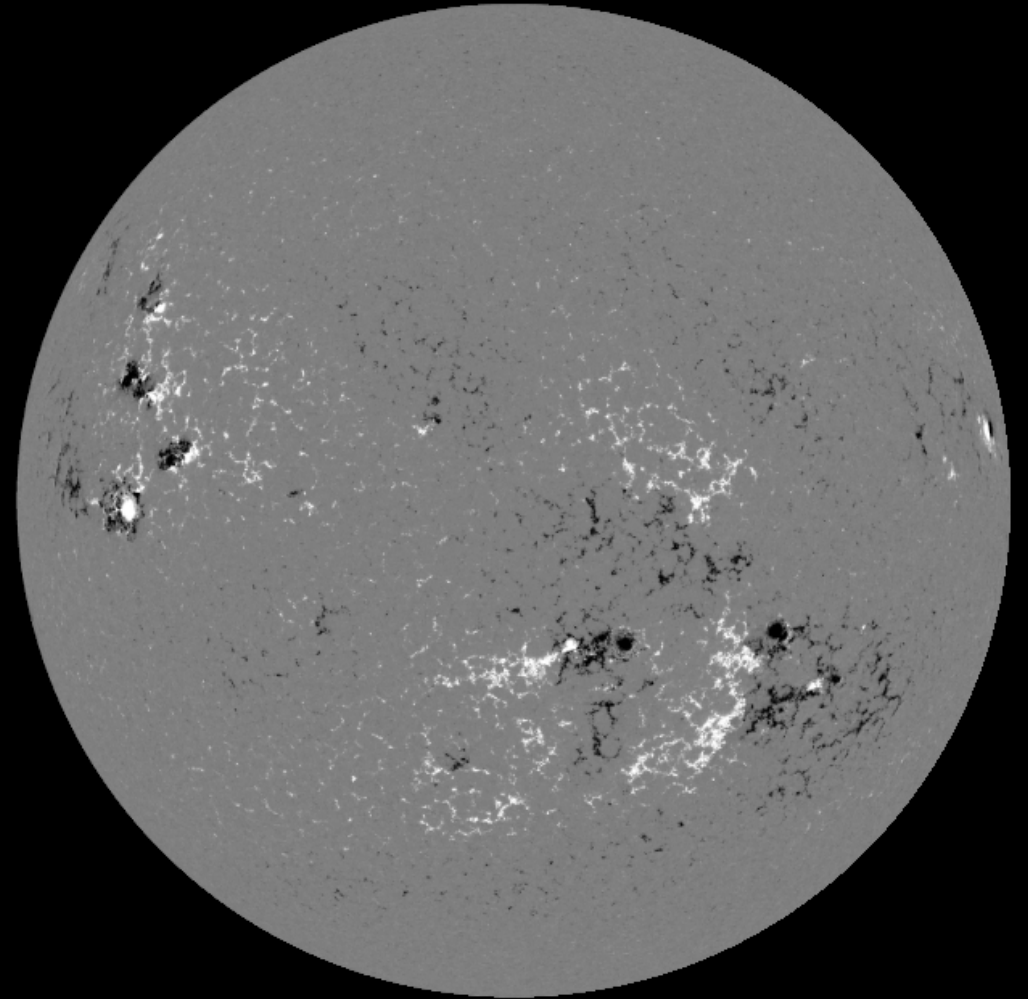


Solar active regions

SDO/HMI White Light 2025-09-28



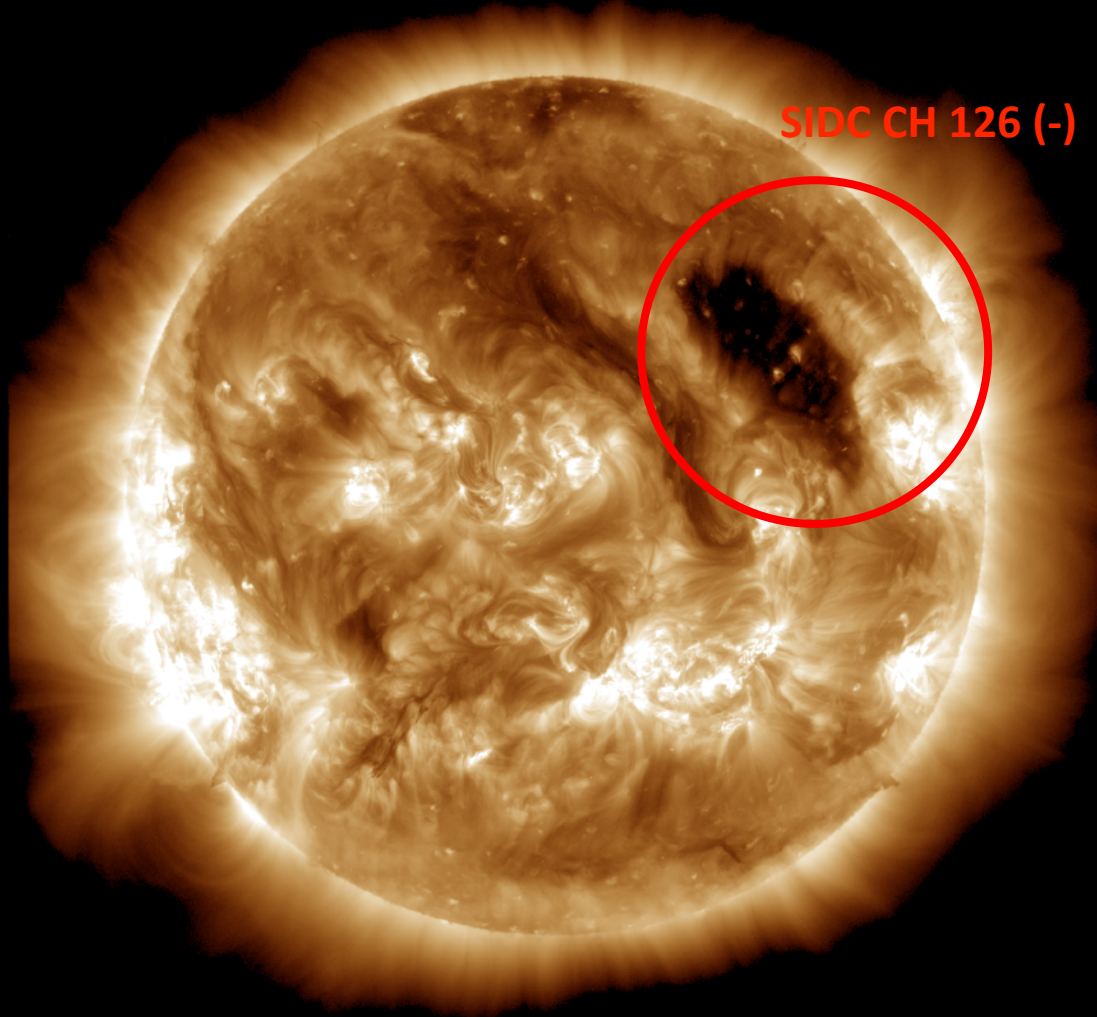
SDO/HMI Magnetogram 2025-09-28



Coronal holes

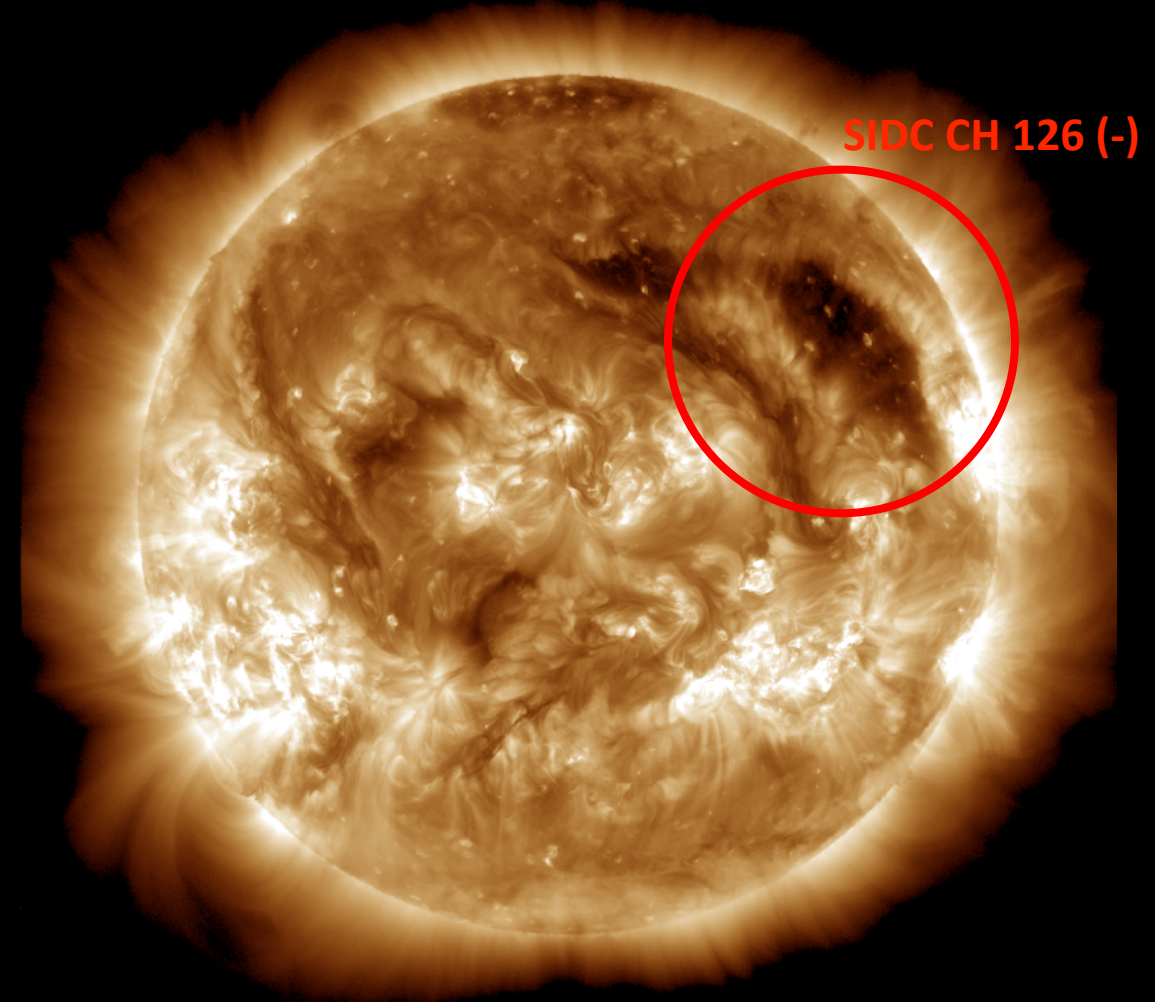
SDO/AIA 19.3 nm 2025-09-22

SDO/AIA AIA 193Å 2025-09-22T12:00:05.843



SDO/AIA 19.3 nm 2025-09-23

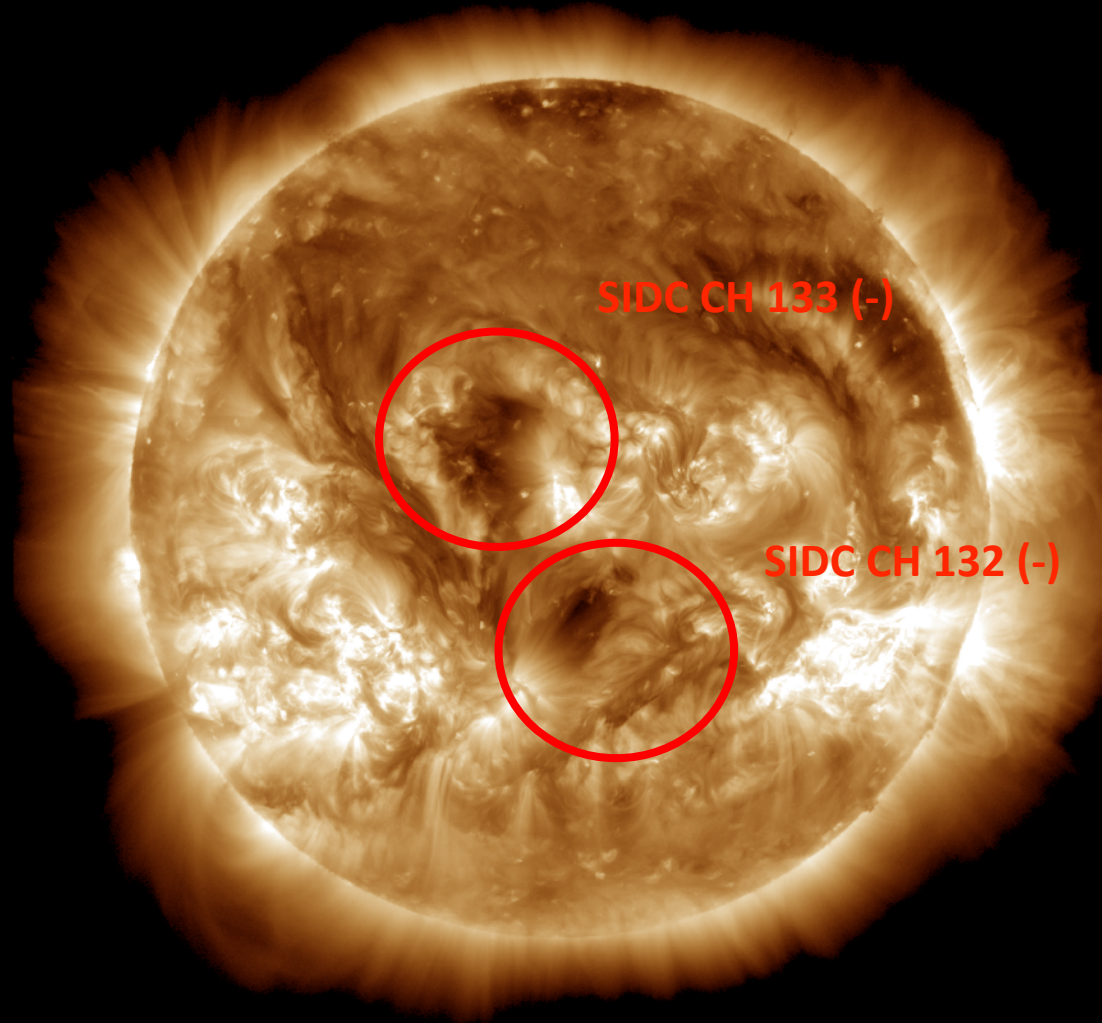
SDO/AIA AIA 193Å 2025-09-23T12:00:05.844



Coronal holes

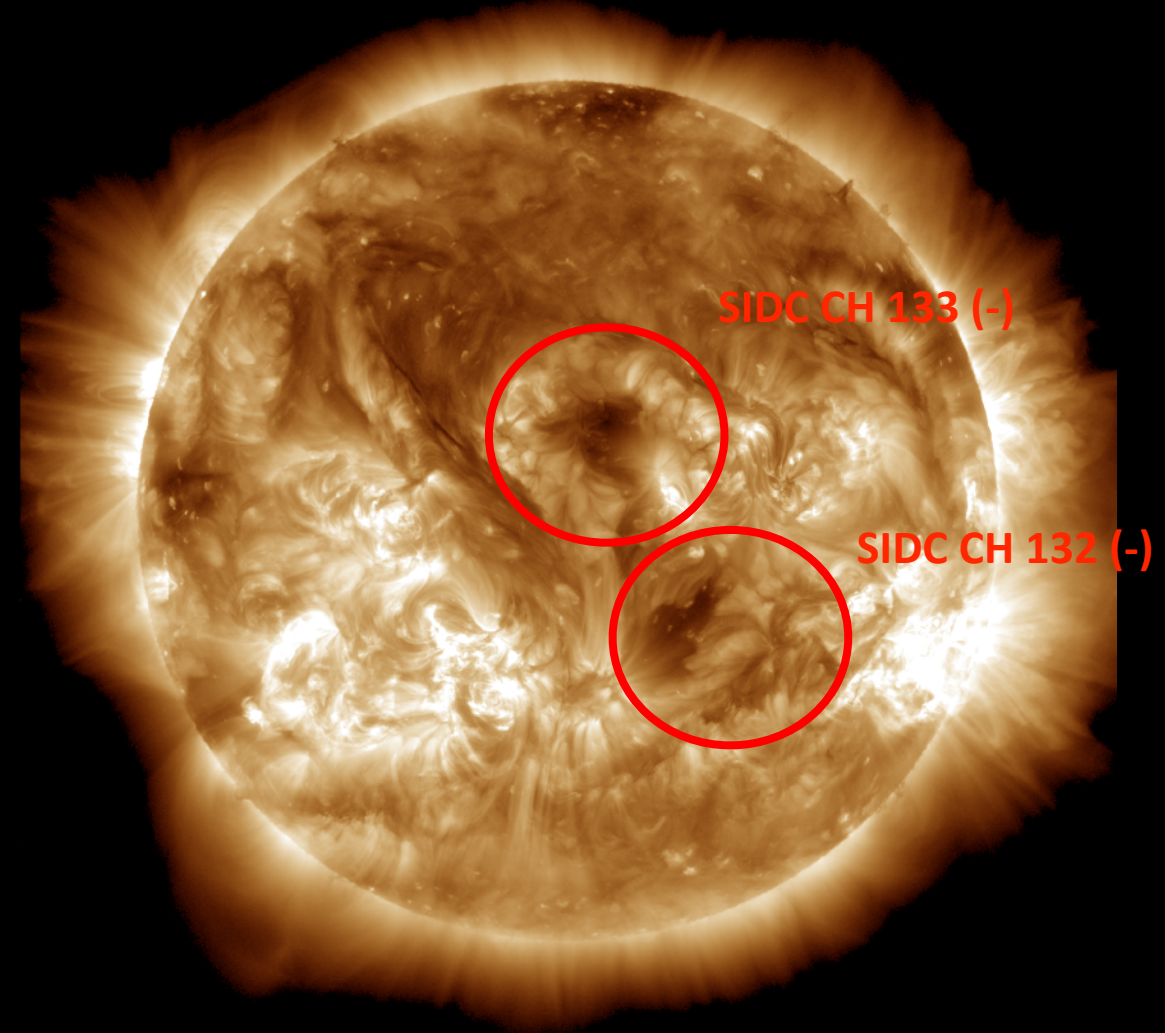
SDO/AIA 19.3 nm 2025-09-24

SDO/AIA AIA 193Å 2025-09-24T12:00:05.843



SDO/AIA 19.3 nm 2025-09-25

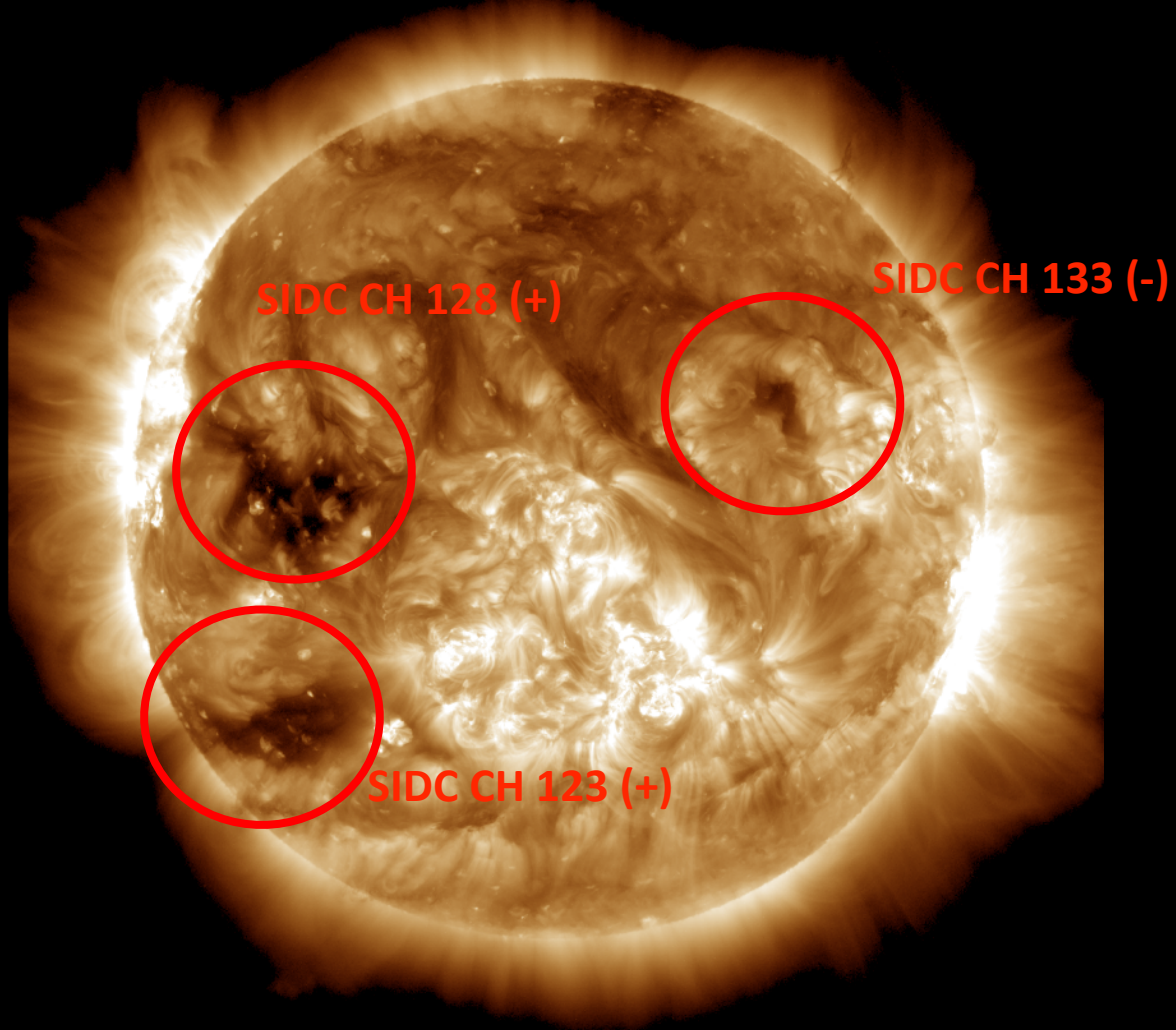
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Coronal holes

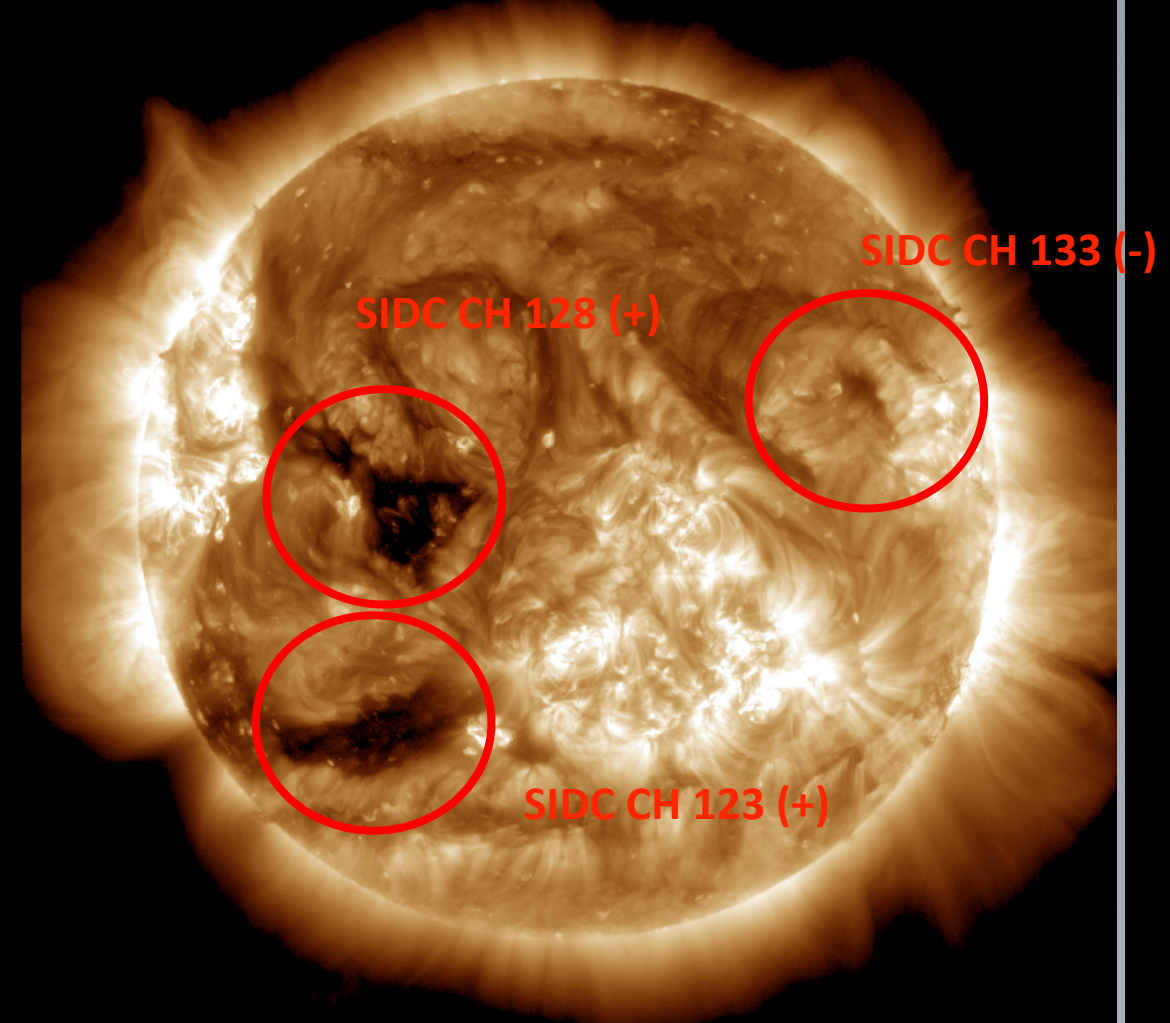
SDO/AIA 19.3 nm 2025-09-27

SDO/AIA AIA 193Å 2025-09-27T12:00:05.843



SDO/AIA 19.3 nm 2025-09-28

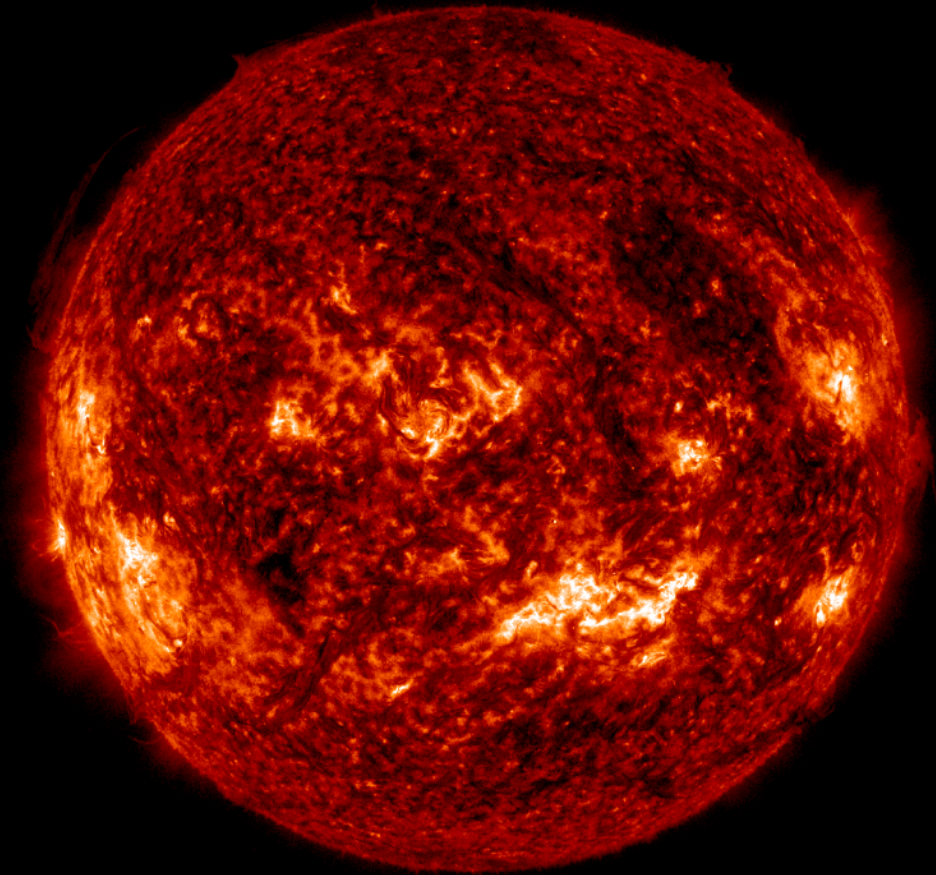
SDO/AIA AIA 193Å 2025-09-28T12:00:05.843



Filaments

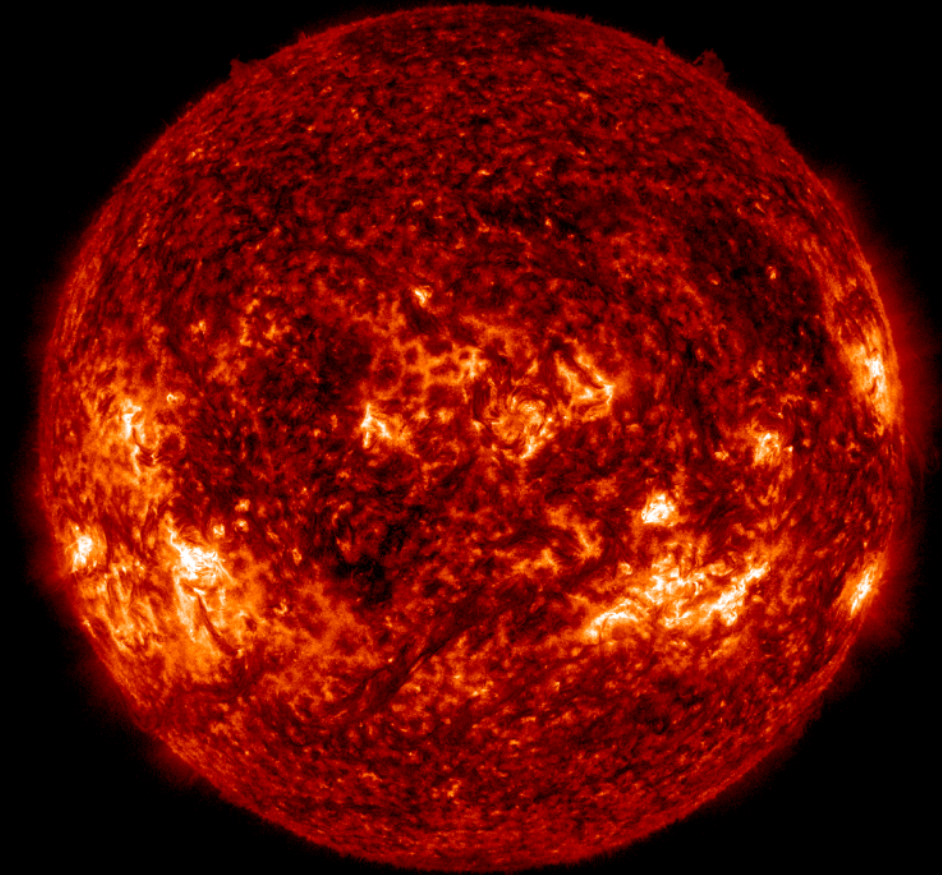
SDO/AIA 30.4 nm 2025-09-22

SDO/AIA AIA 304Å 2025-09-22T12:00:06.580



SDO/AIA 30.4 nm 2025-09-23

SDO/AIA AIA 304Å 2025-09-23T12:00:06.580



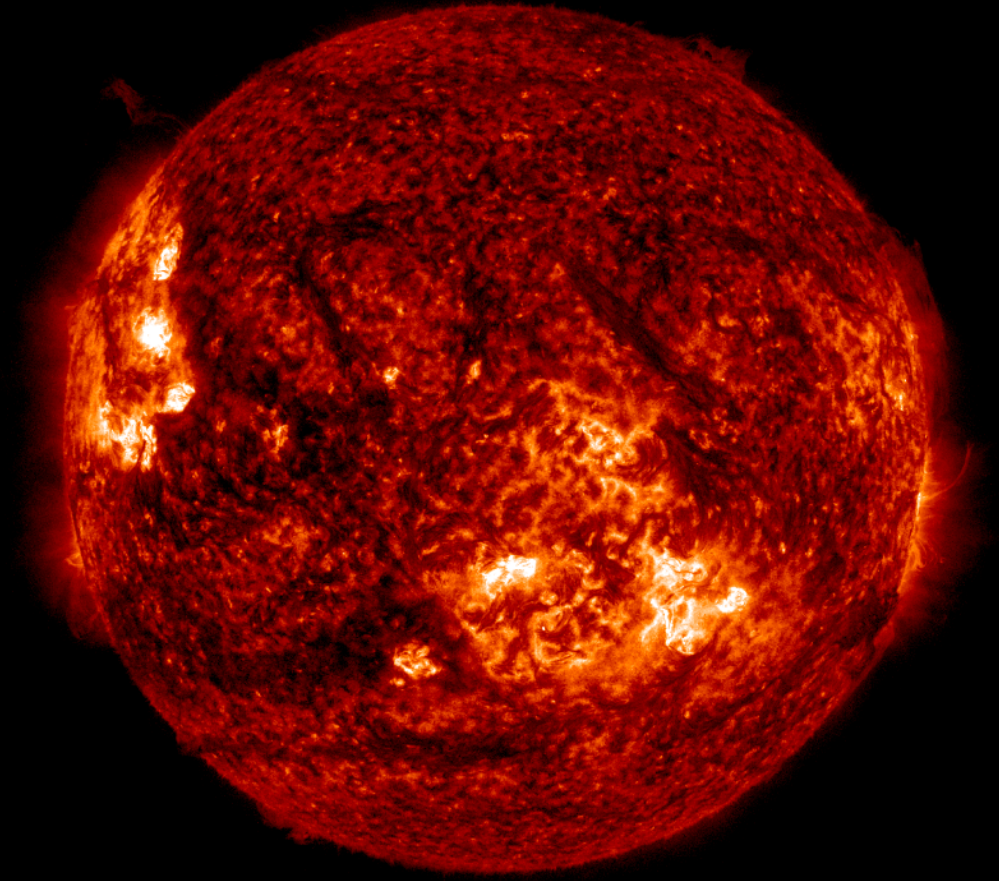
Filaments

SDO/AIA 30.4 nm 2025-09-27



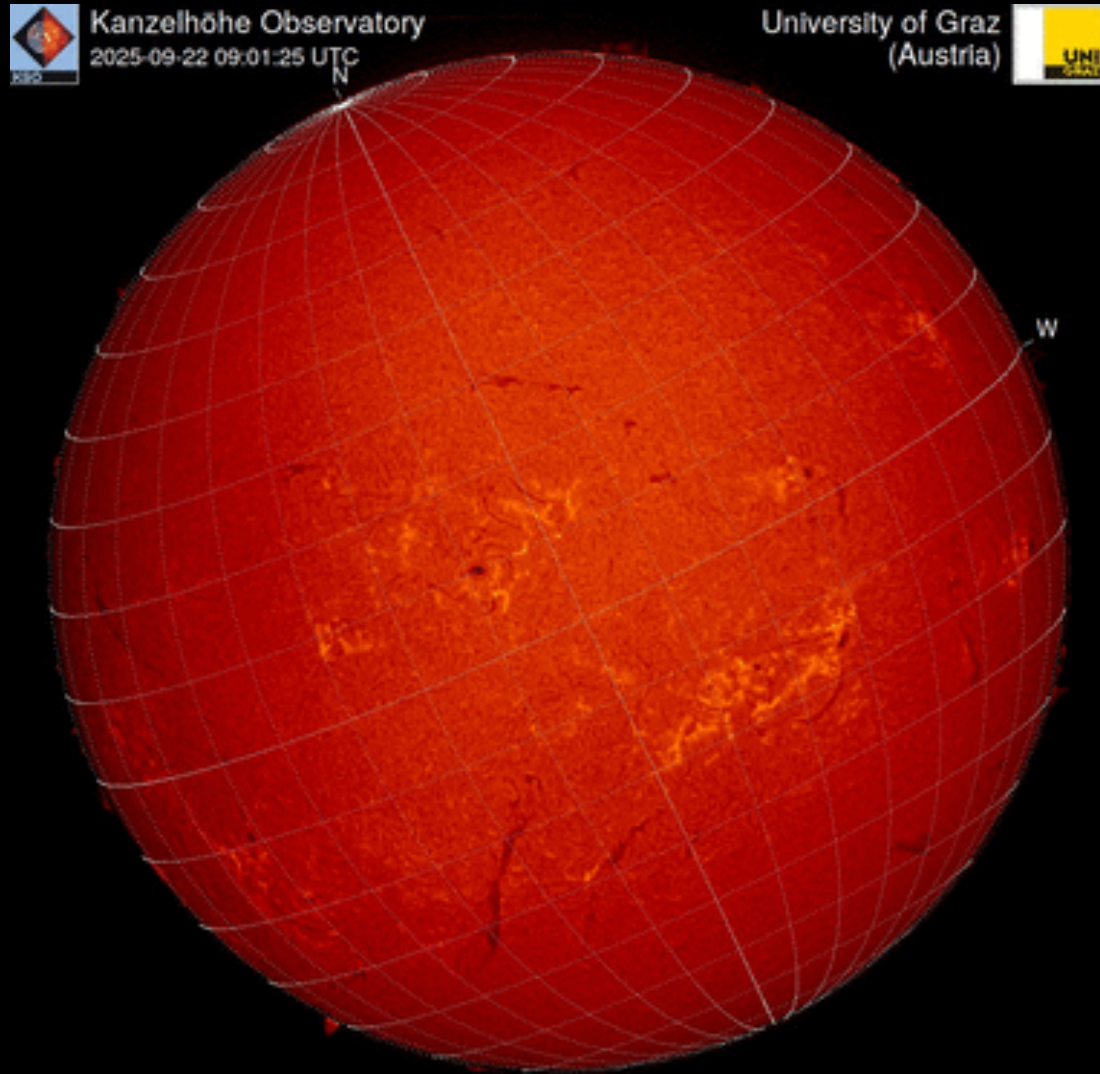
SDO/AIA 30.4 nm 2025-09-28

SDO/AIA AIA 304Å 2025-09-28T12:00:06.580

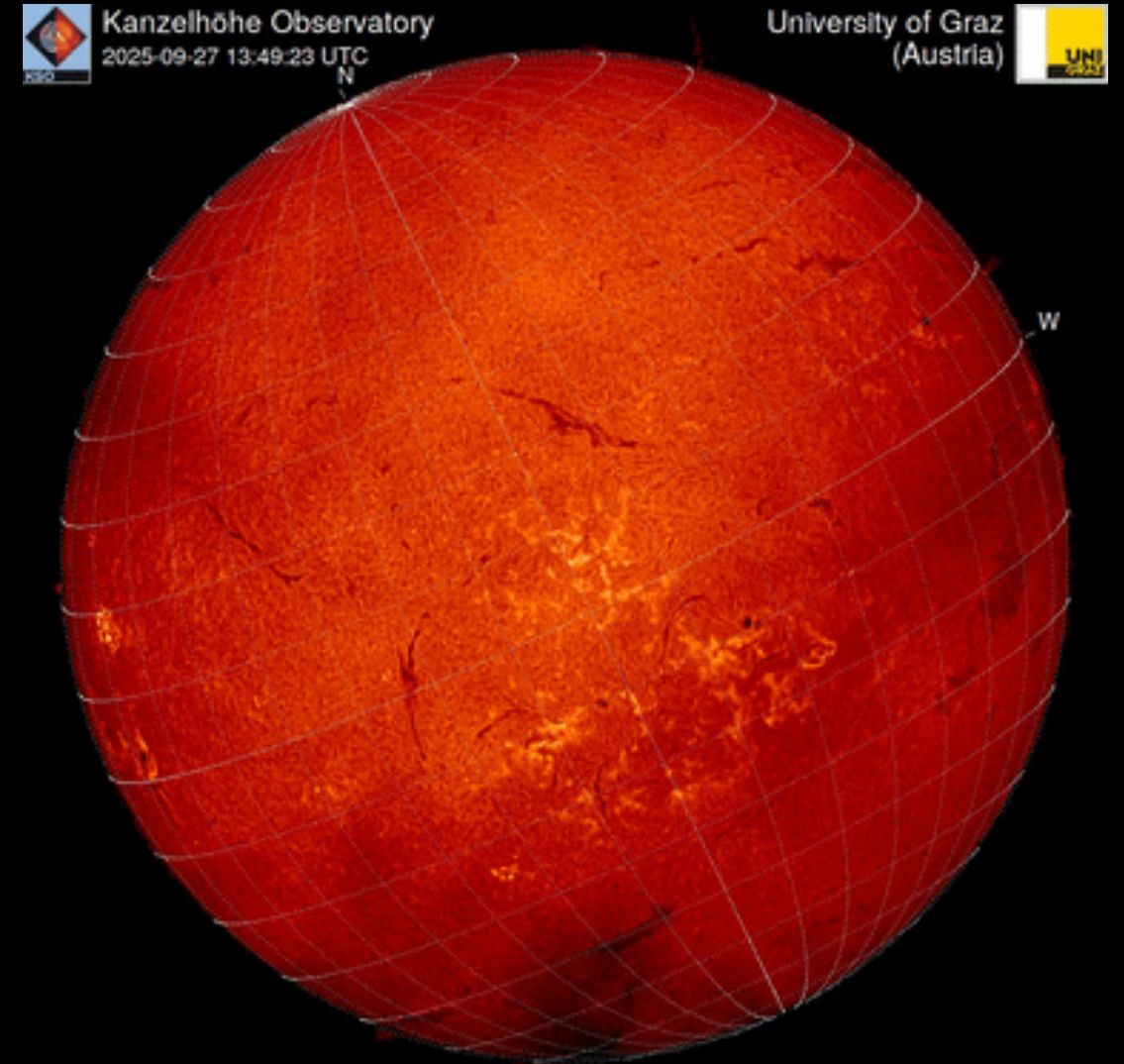


Filaments & Filament eruptions

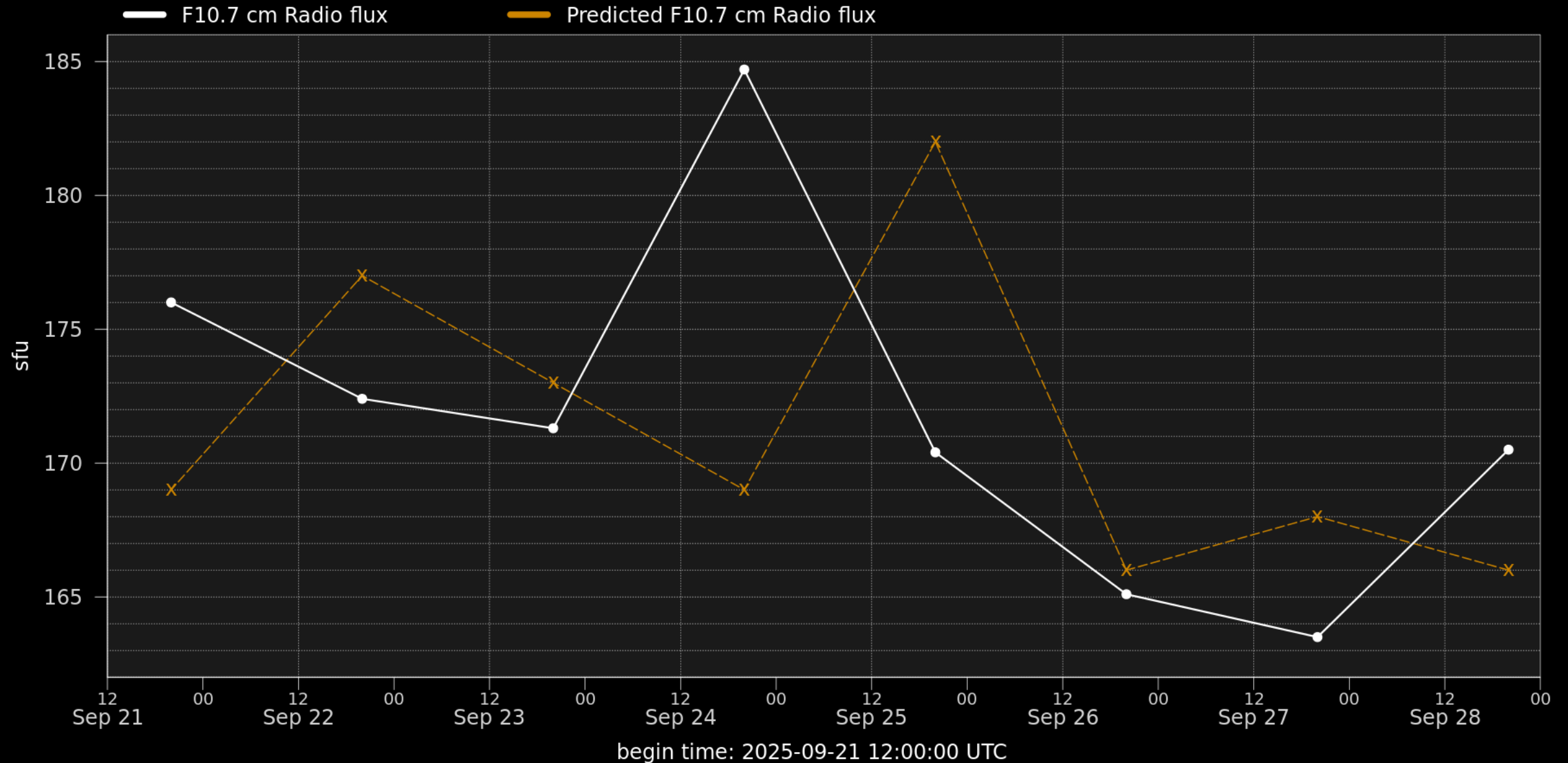
H-alpha 2025-09-22



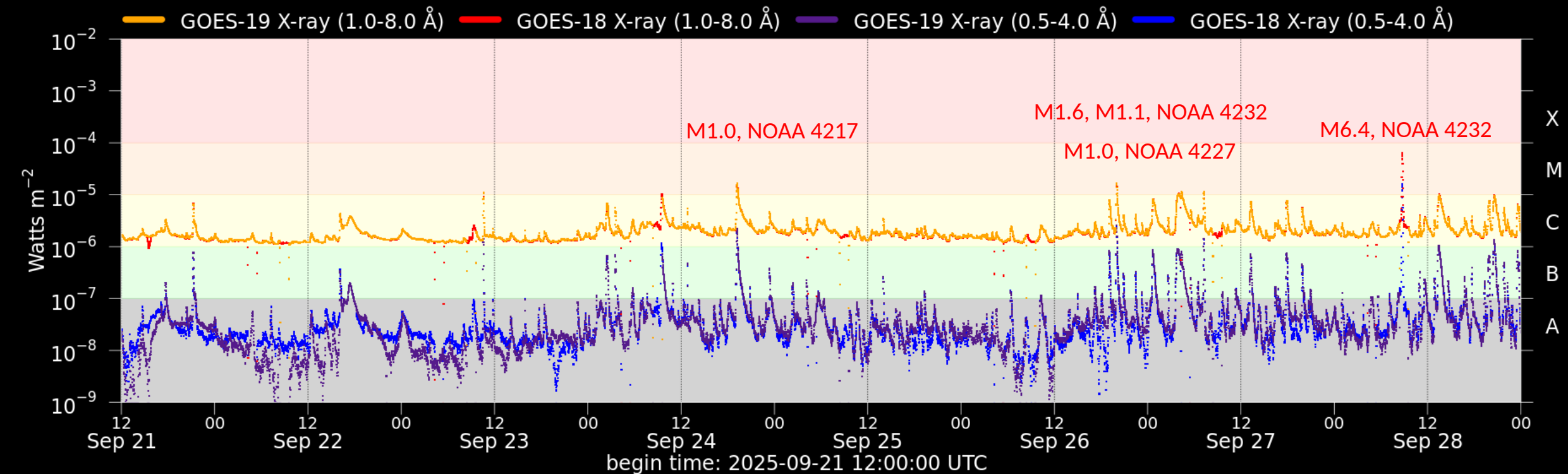
H-alpha 2025-09-28



Solar F10.7cm radio flux



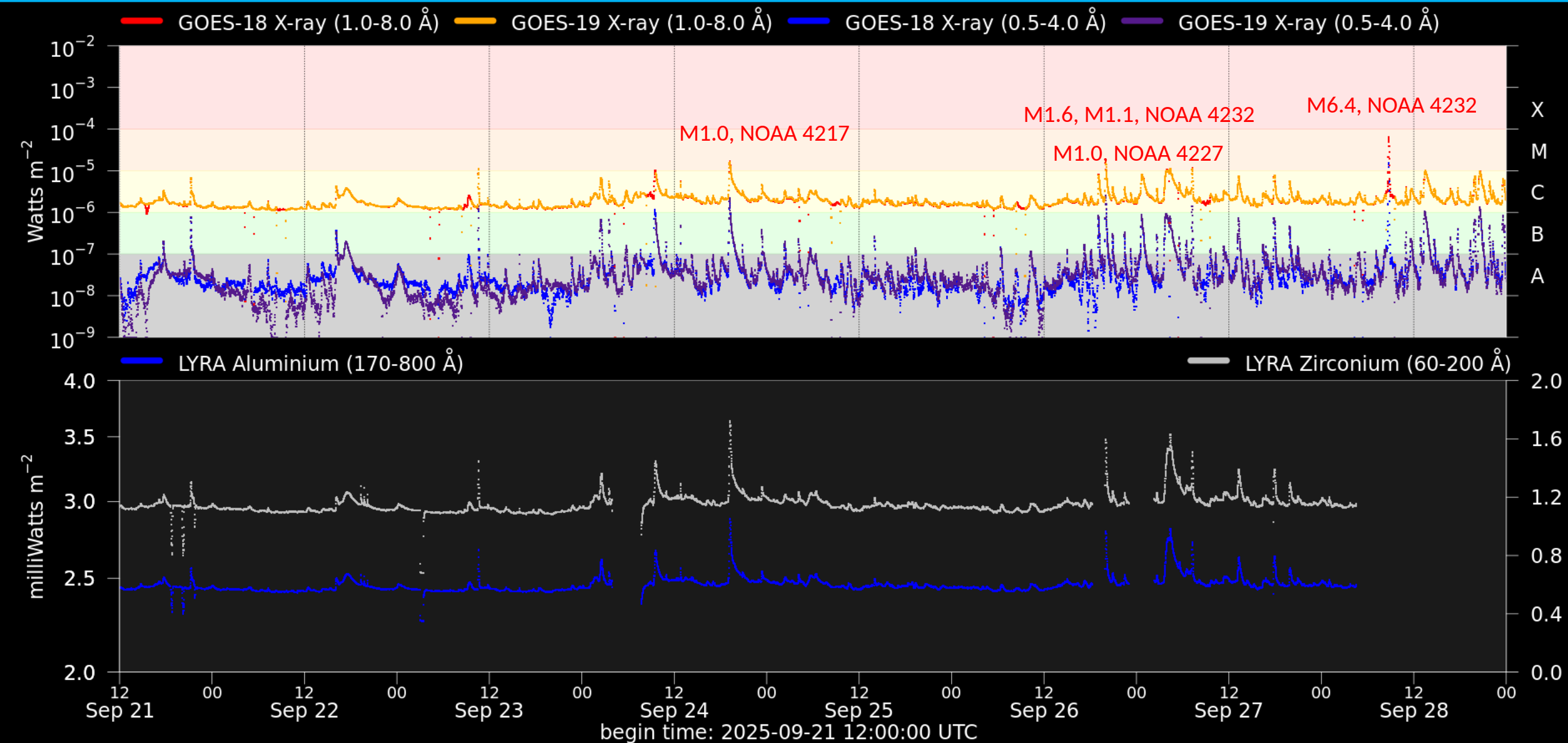
Flaring activity



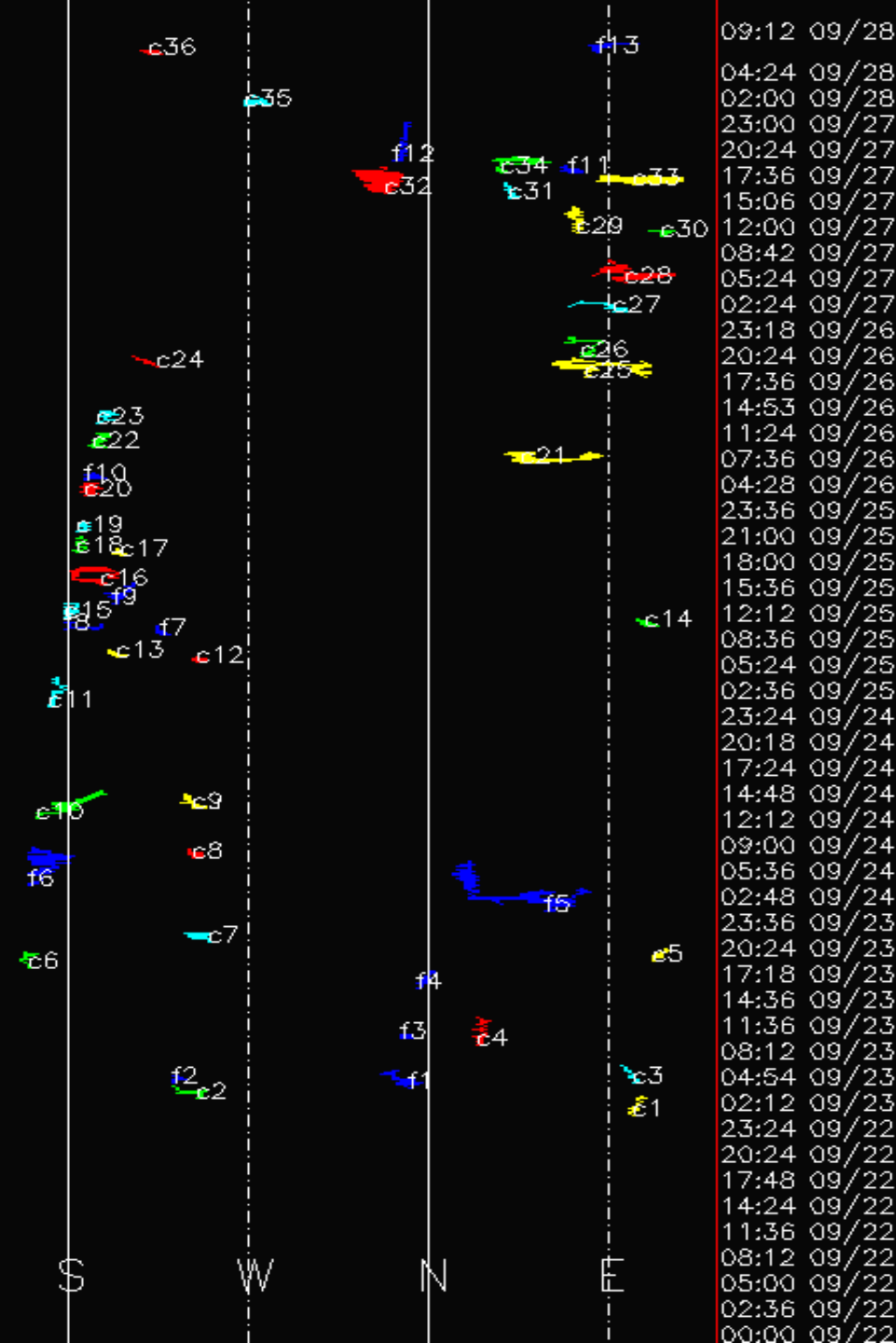
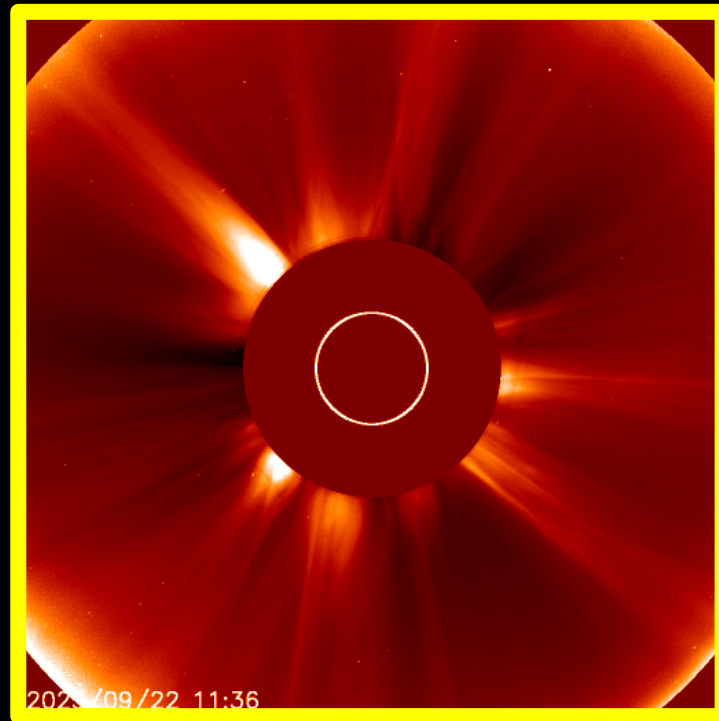
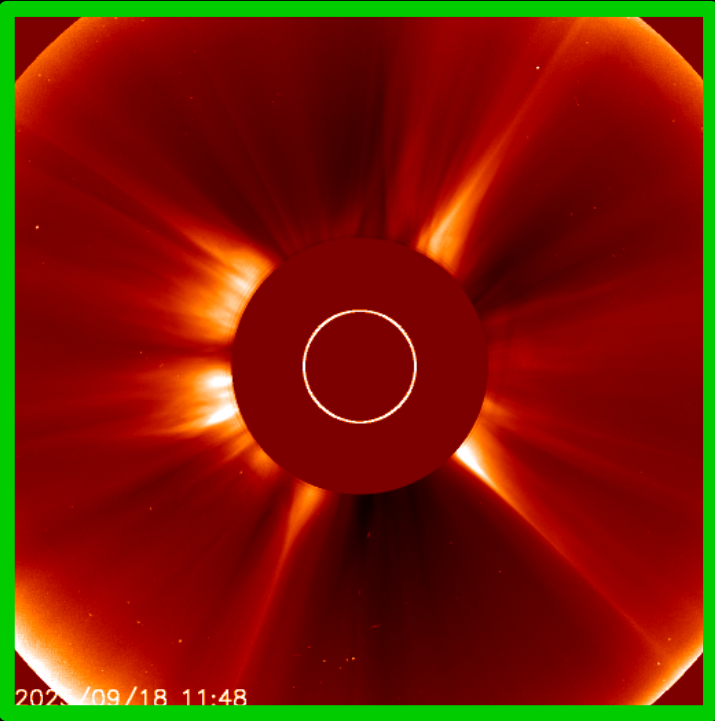
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-09-21	2025-09-22	2025-09-23	2025-09-24	2025-09-25	2025-09-26	2025-09-27	2025-09-28
Probability (%)	99 63 02	99 61 01	99 59 04	99 56 01	99 68 01	94 38 01	99 56 01	99 55 02
Observed (#)	02 00 00	03 01 00	06 00 00	04 01 00	03 00 00	08 03 00	11 00 00	11 01 00

Solar X-Ray and UV flux



Coronal Mass Ejections



Solar Wind and

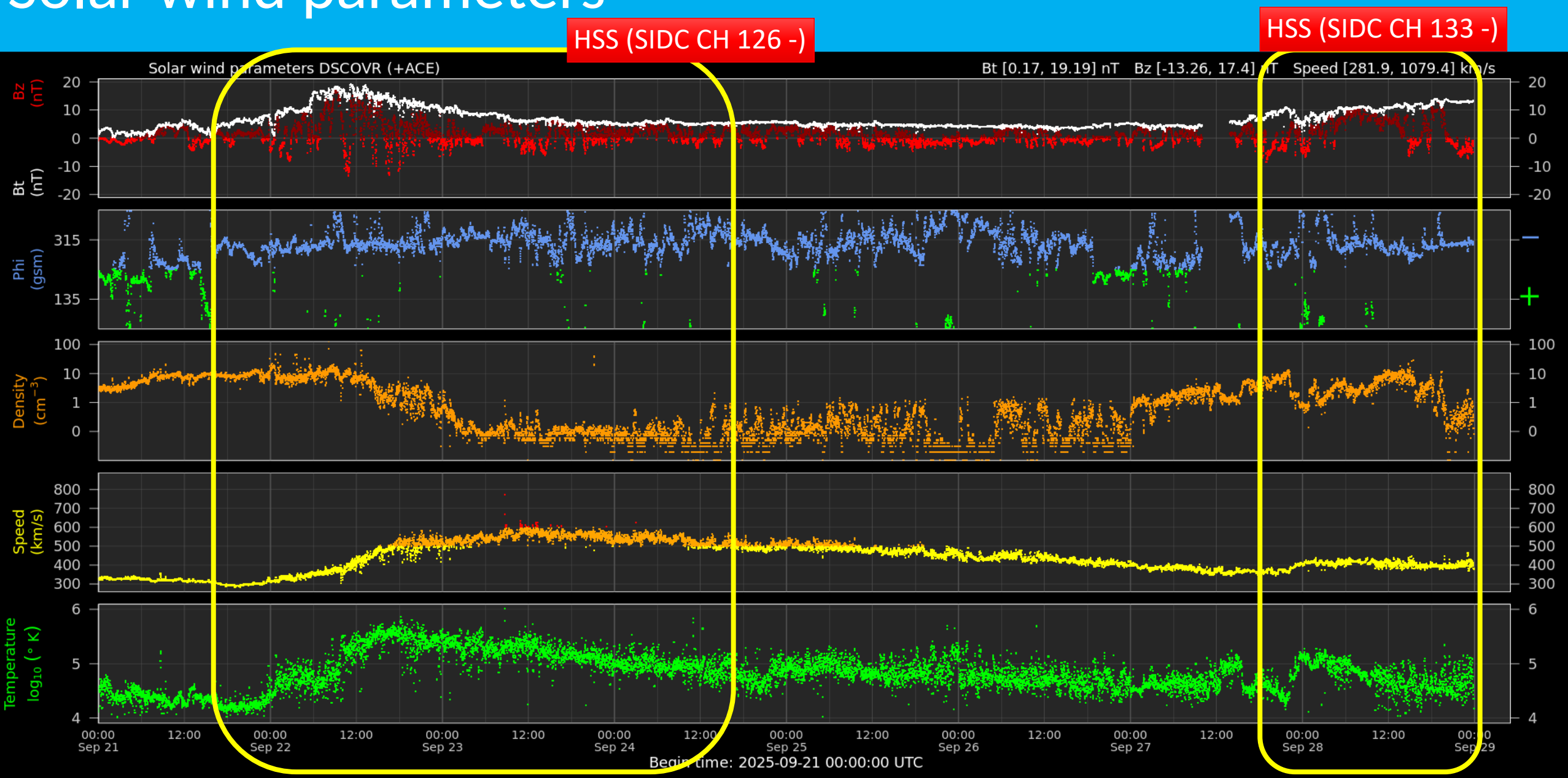
Geomagnetic Activity



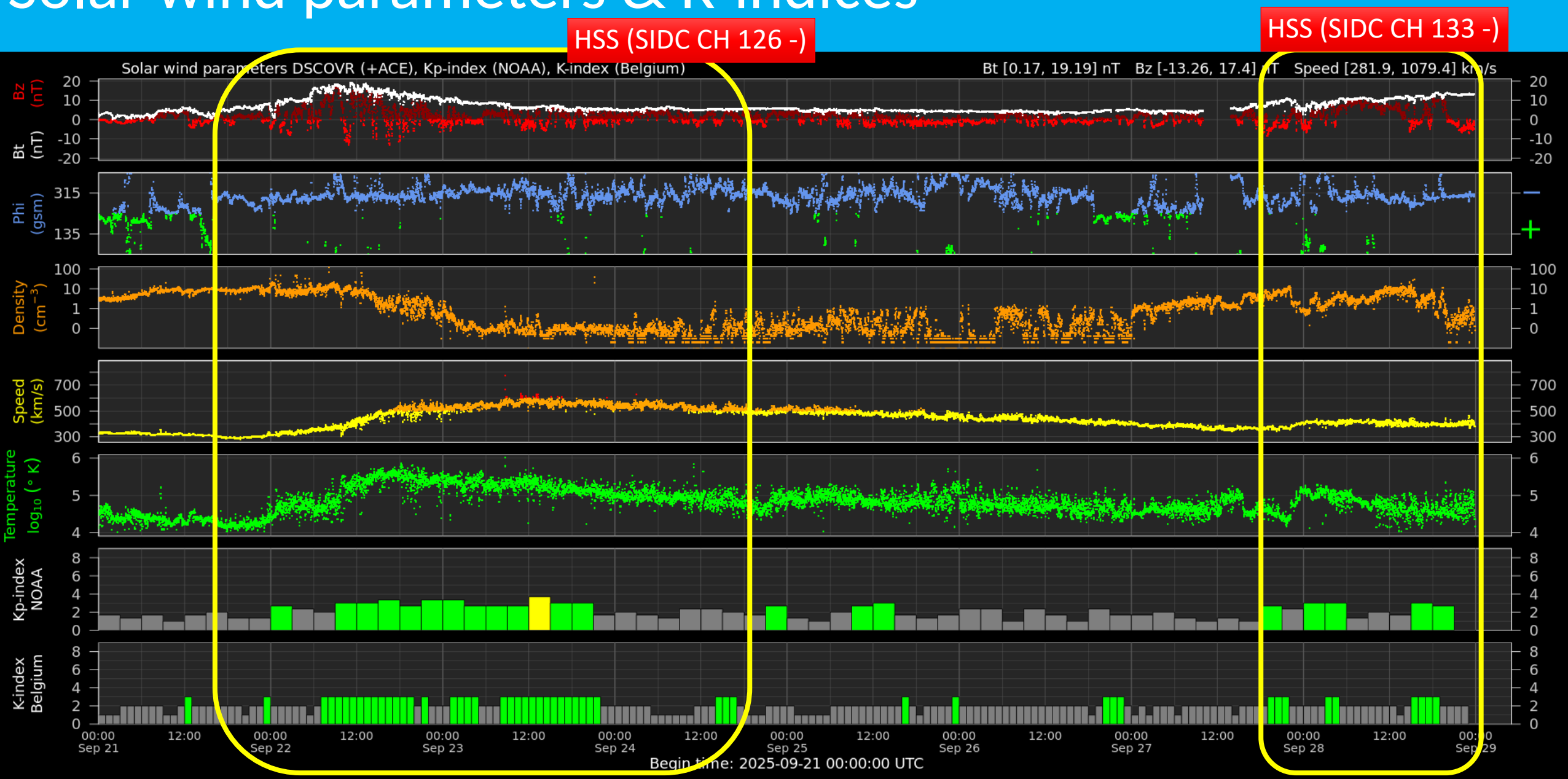
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Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



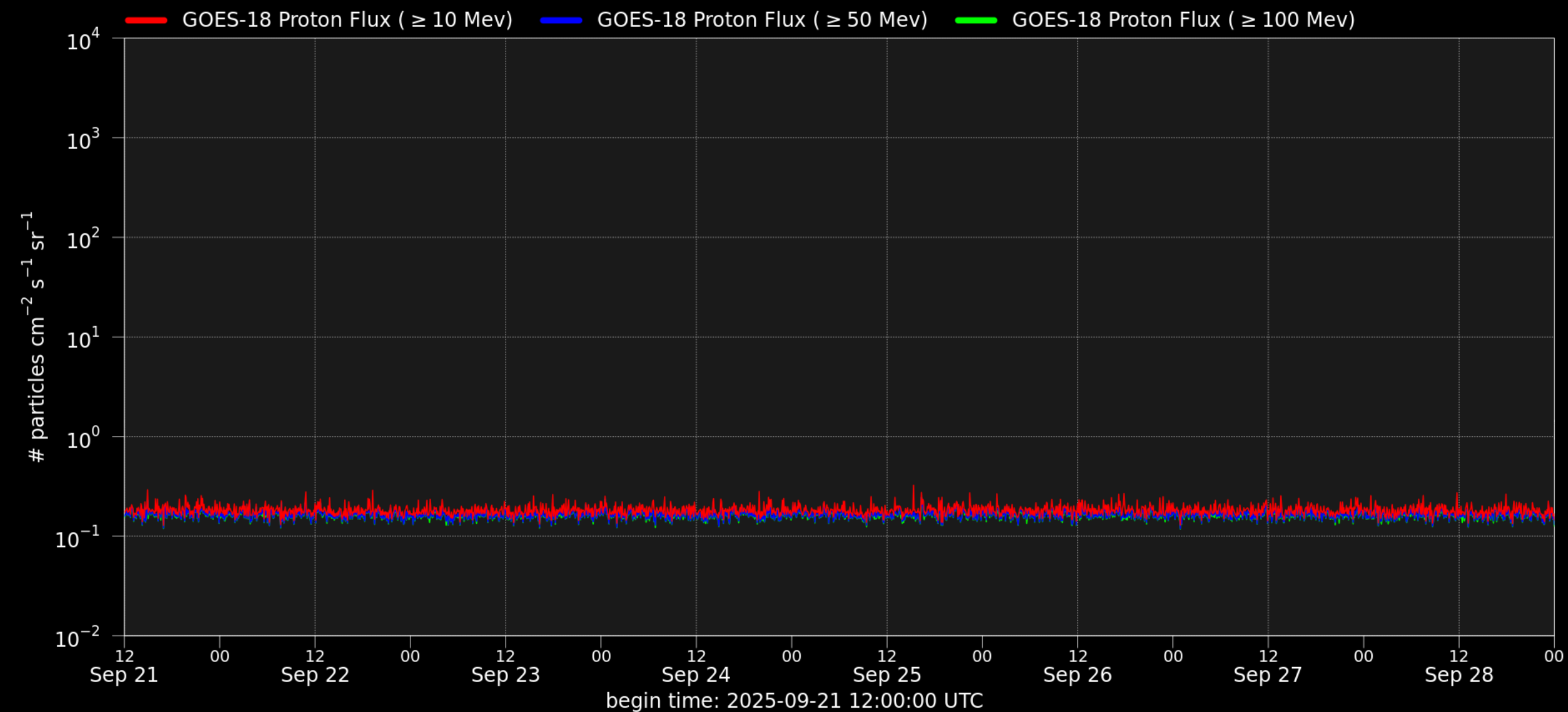
Energetic Particles



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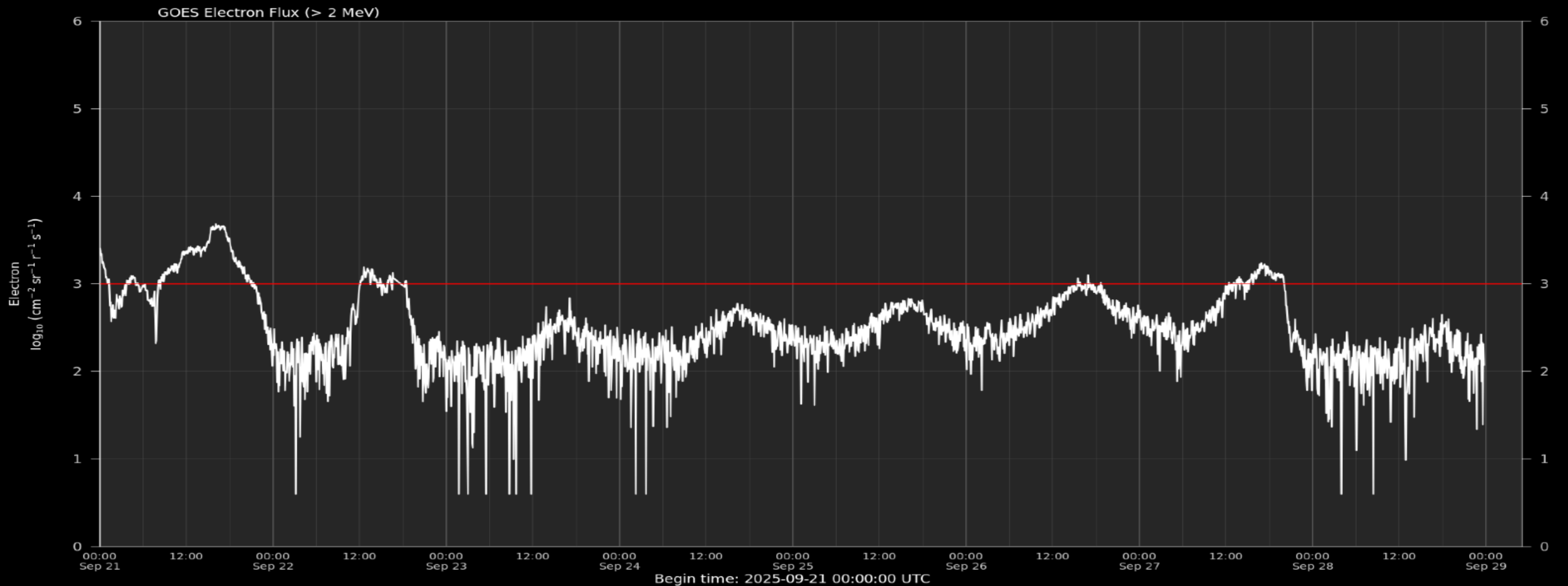
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



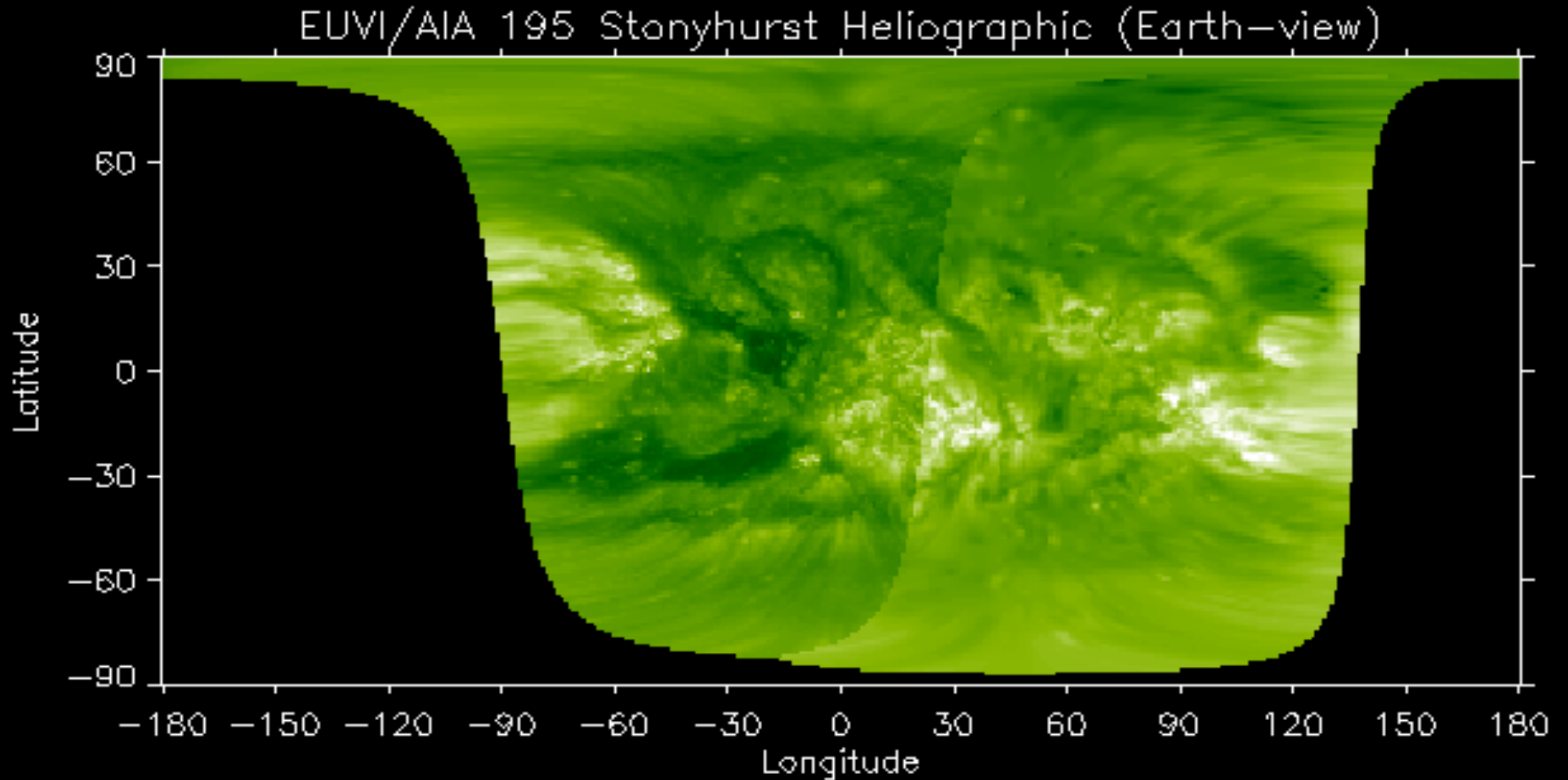
Outlook



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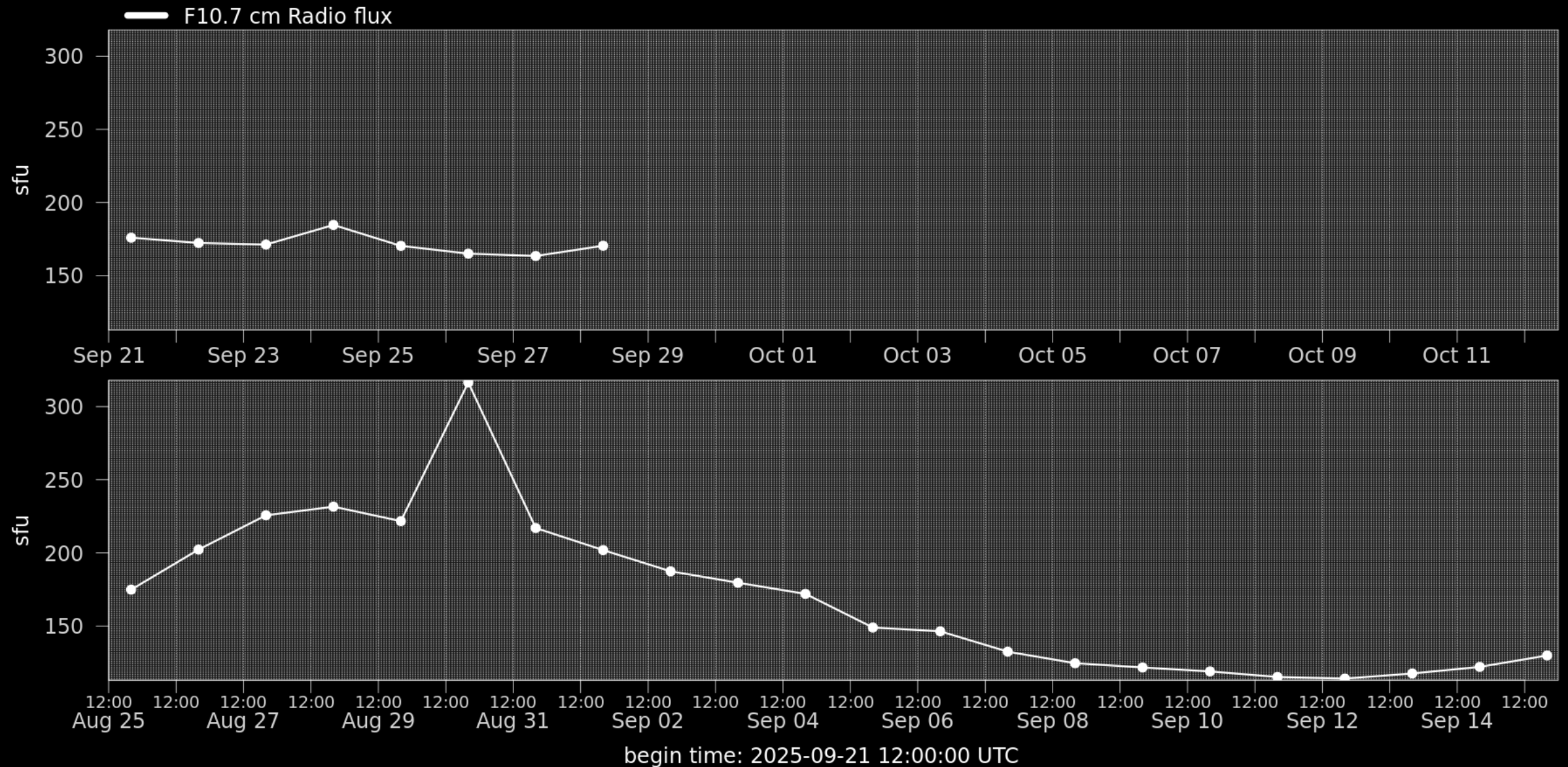
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Outlook: Solar activity

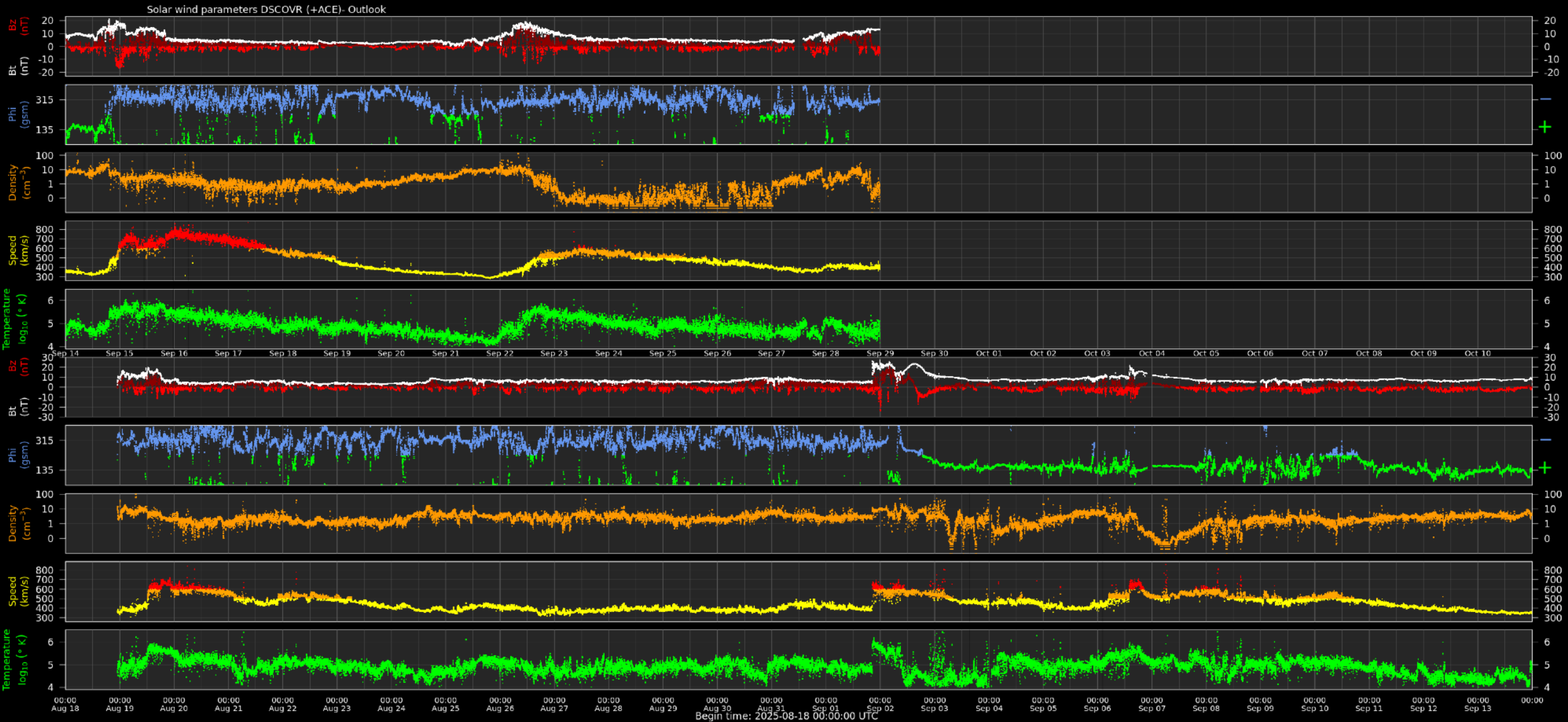


Observation date: 2025/09/28 18:05:00

Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pegasus related events

GNSS Scintillation Advisories

SIDC Space Weather Briefing

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