

SIDC Space Weather Briefing

01 December 2025-07 December 2025

Yana Maneva

& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2025-12-01 00:00 to 2025-12-07 23:59

Active regions	14 ARs, SIDC 687/NOAA 4299, SIDC 709/NOAA 4294, SIDC 712/NOAA 4296
Flares	# C-class flare: 45 # M-class flare: 5 # X-class flare: 1
Coronal Holes	2 CH-
CMEs	2 halo CMEs (Dec 01, Dec 06)

Proton flux	Mildly enhanced, below proton event levels (< 10 pfu)
Electron flux	Moderate

Solar wind and geomagnetic conditions

ICMEs	No clear arrival
Solar wind conditions	B : 0.81 - 22.76 nT //Bz: -15.35 nT to 19.94 nT //Speed: 353.8 - 771.1km/s
Geomagnetic conditions	max K _{Be} : 6.0, max K _p (NOAA): 6.67, Major Storm conditions
All Quiet Alert: Off (not Quiet)	

Solar Activity

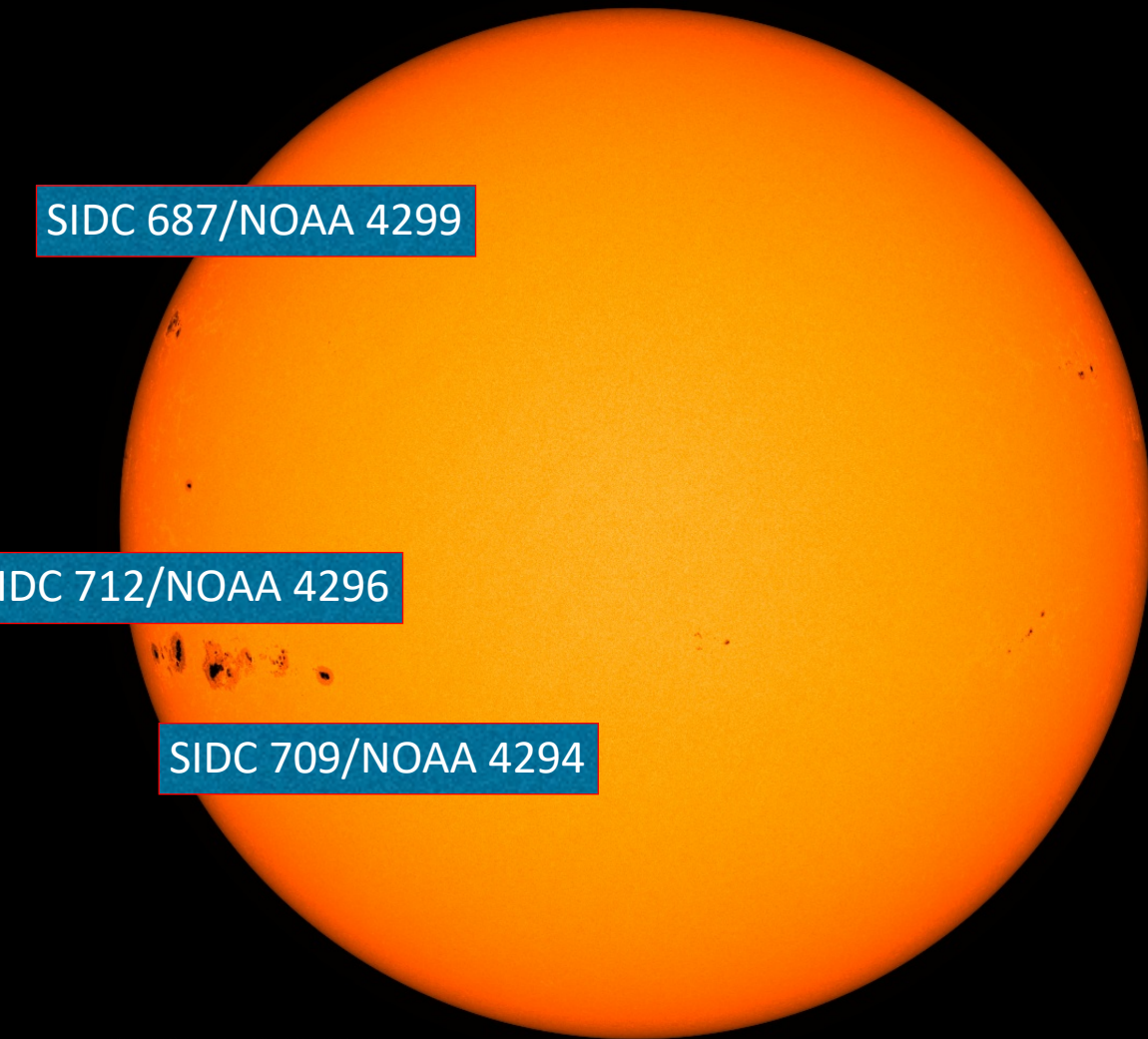


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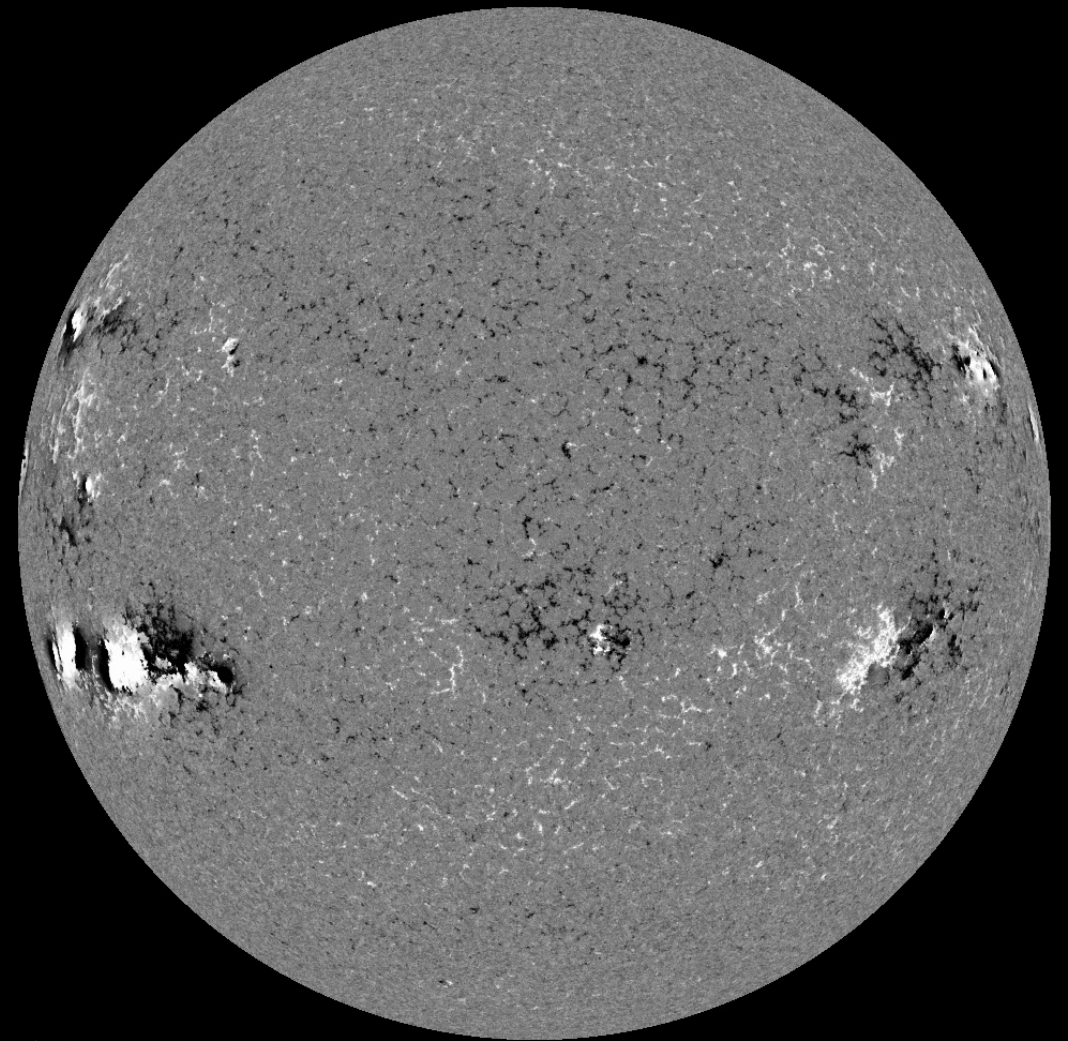
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Solar active regions

SDO/HMI White Light 2025-12-01

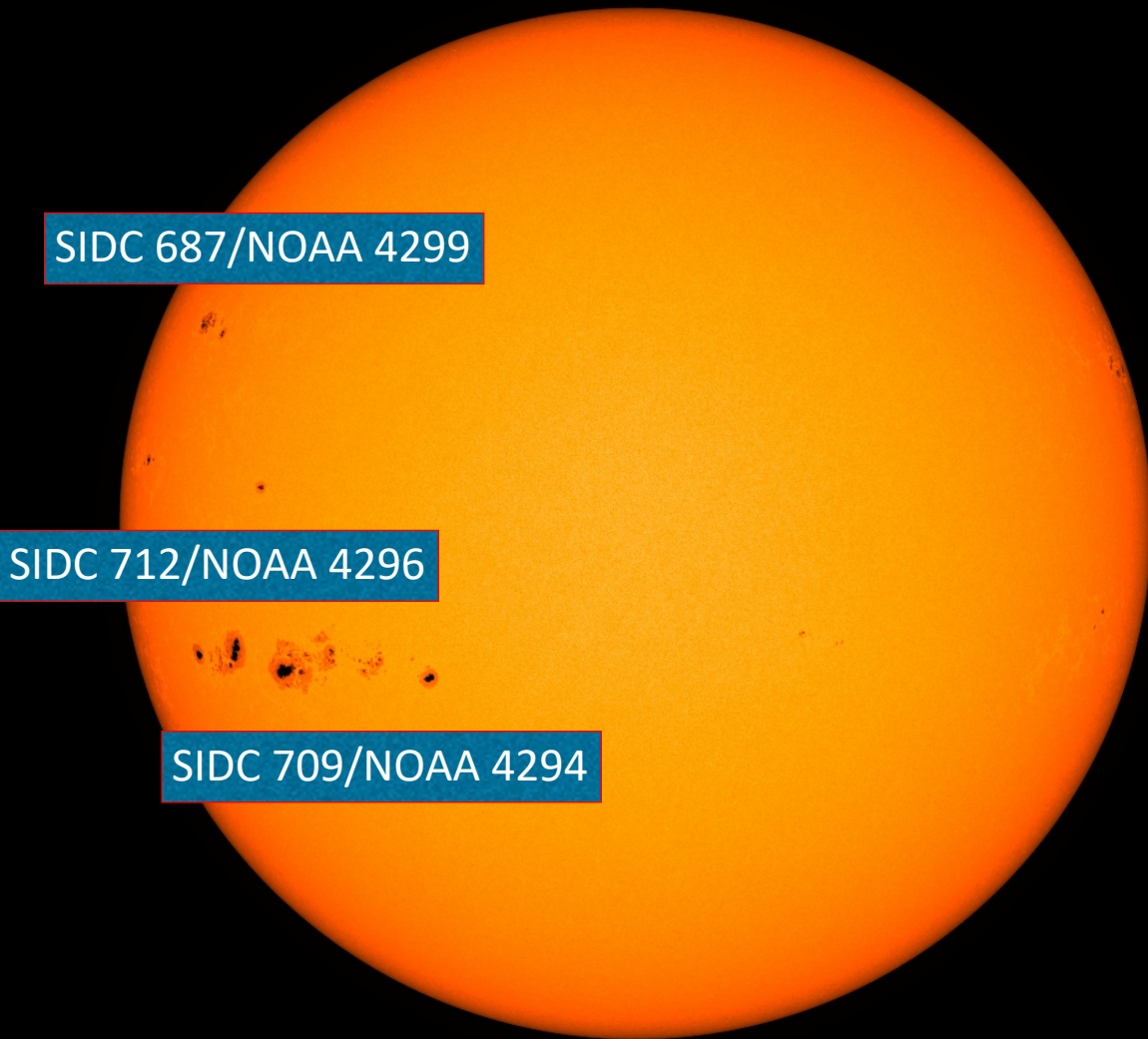


SDO/HMI Magnetogram 2025-12-01

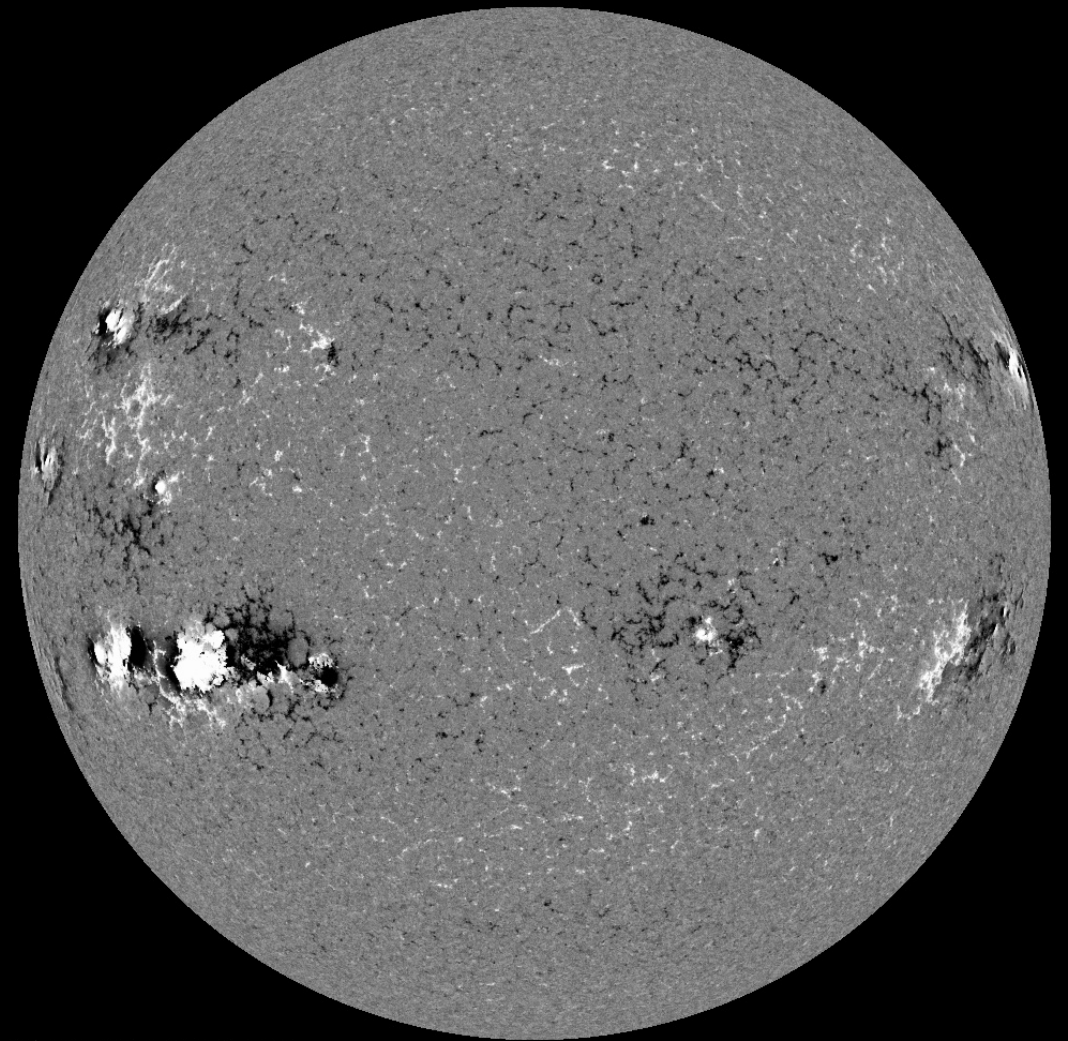


Solar active regions

SDO/HMI White Light 2025-12-02

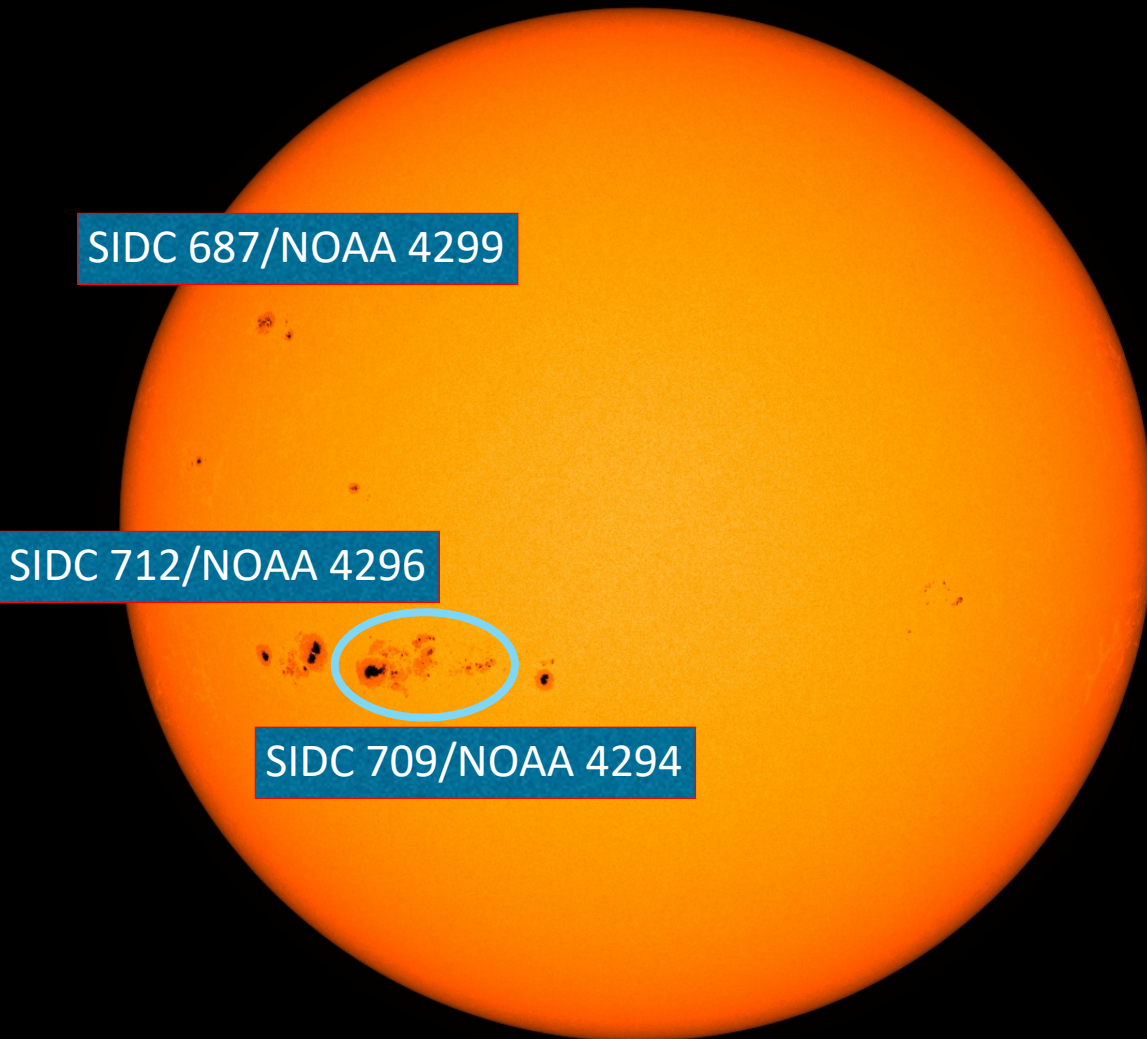


SDO/HMI Magnetogram 2025-12-02



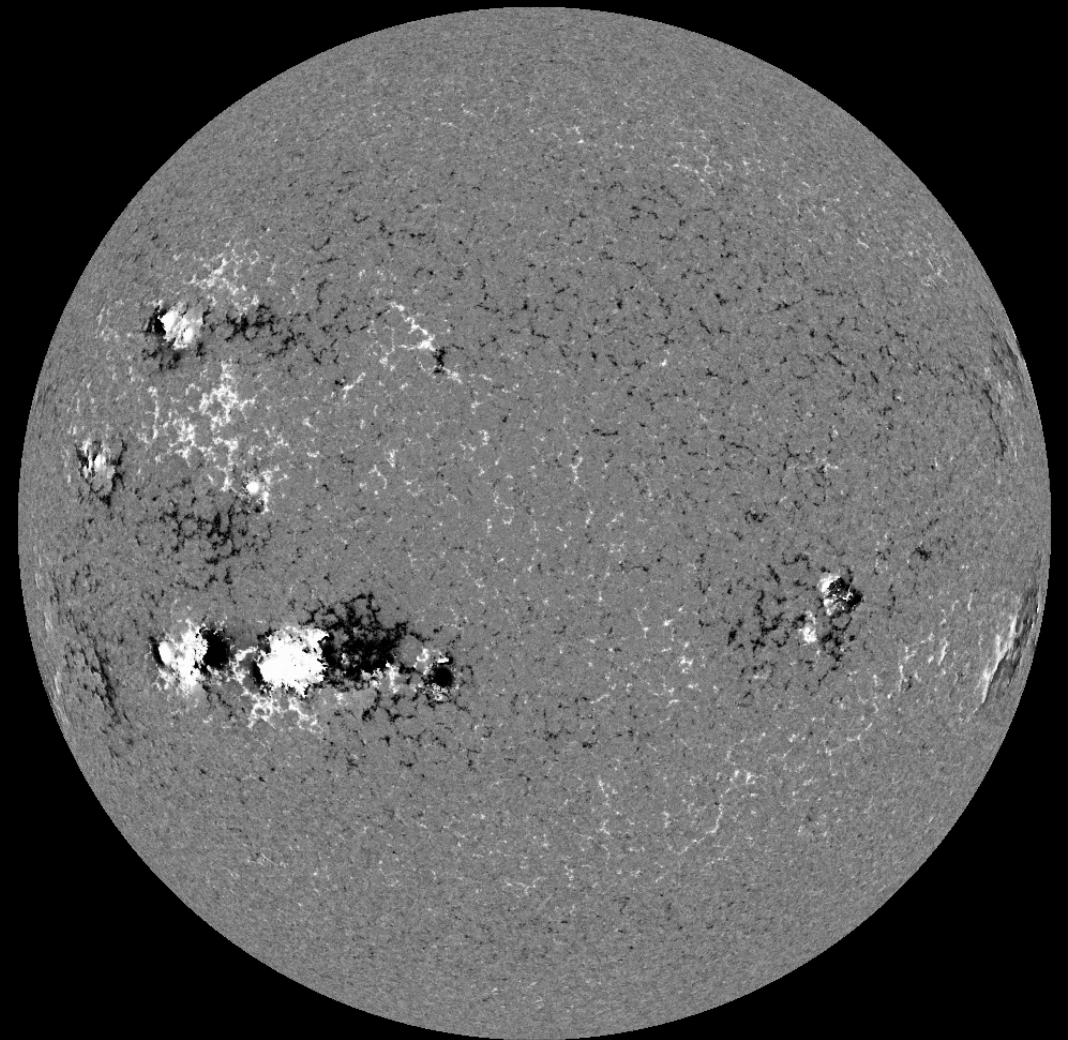
Solar active regions

SDO/HMI White Light 2025-12-03



SDO/HMI Continuum: 20251203_120000

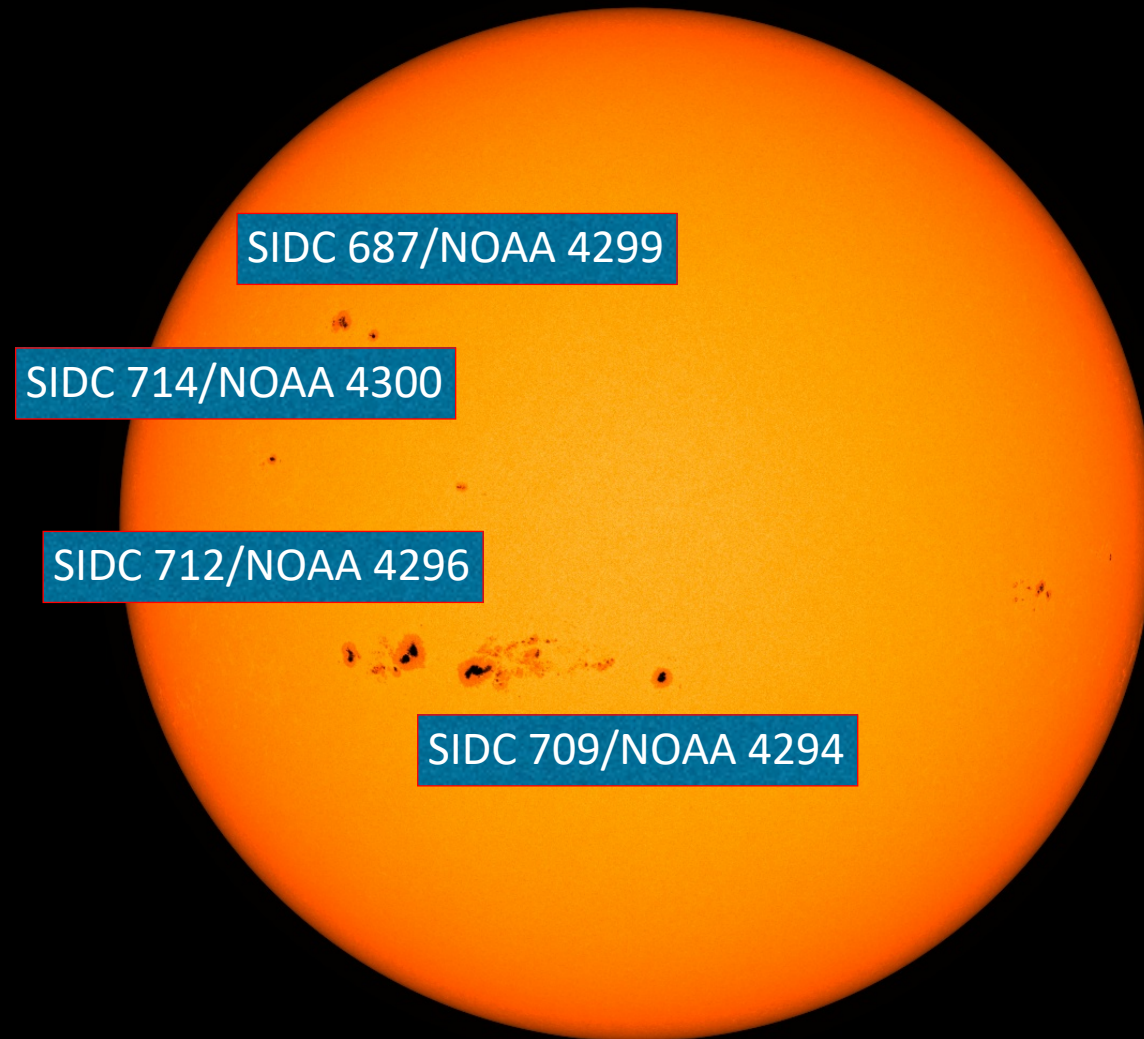
SDO/HMI Magnetogram 2025-12-03



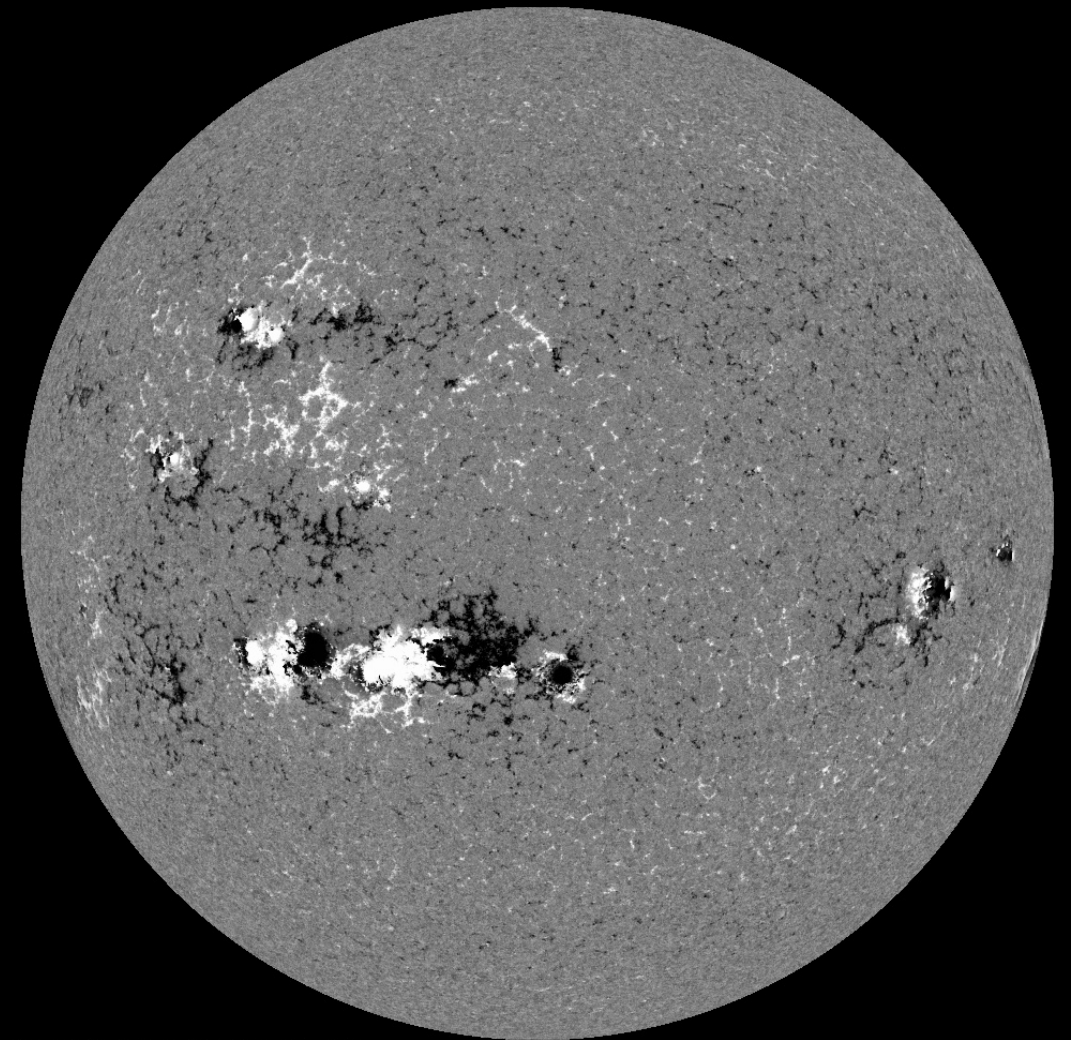
SDO/HMI Magnetogram: 20251203_120000

Solar active regions

SDO/HMI White Light 2025-12-04

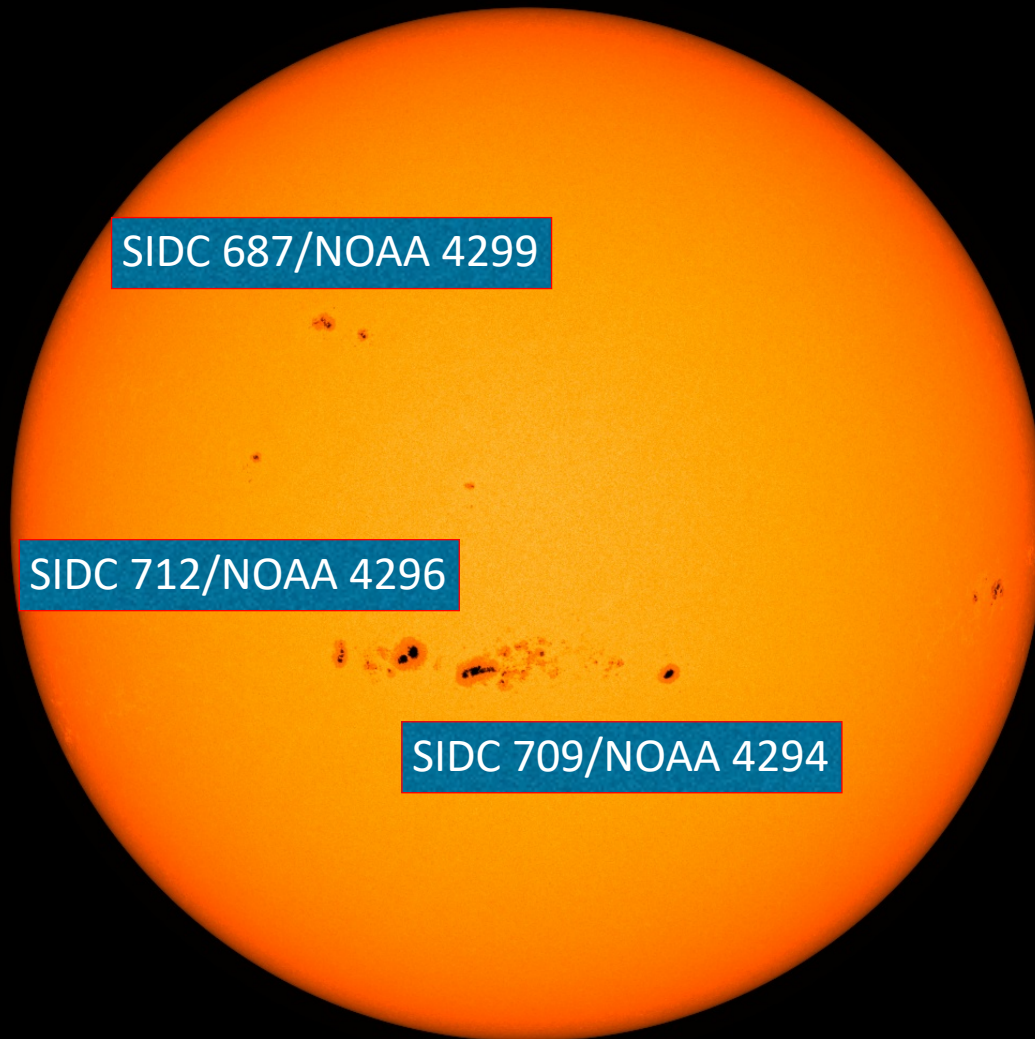


SDO/HMI Magnetogram 2025-12-04



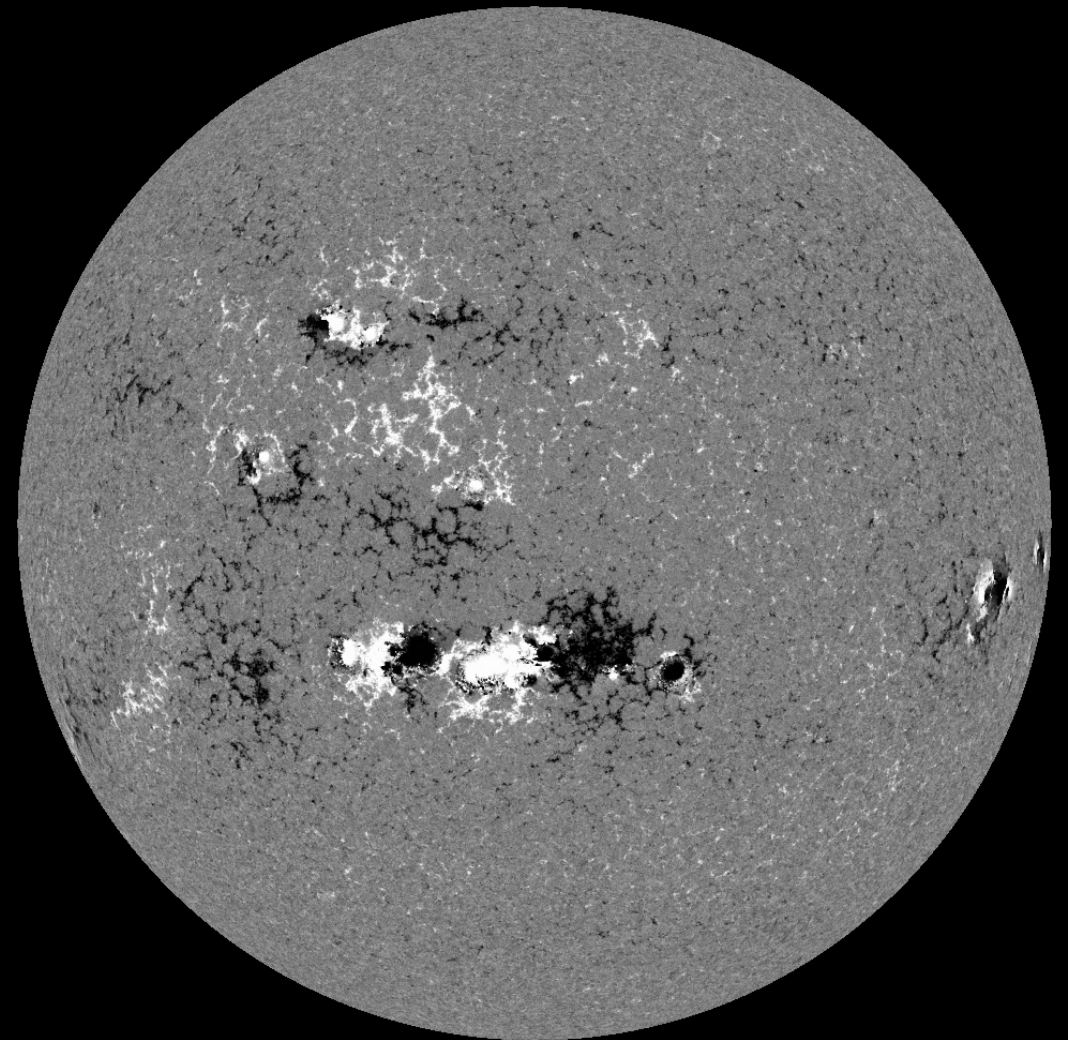
Solar active regions

SDO/HMI White Light 2025-12-05



SDO/HMI Quick-Look Continuum: 20251205_120000

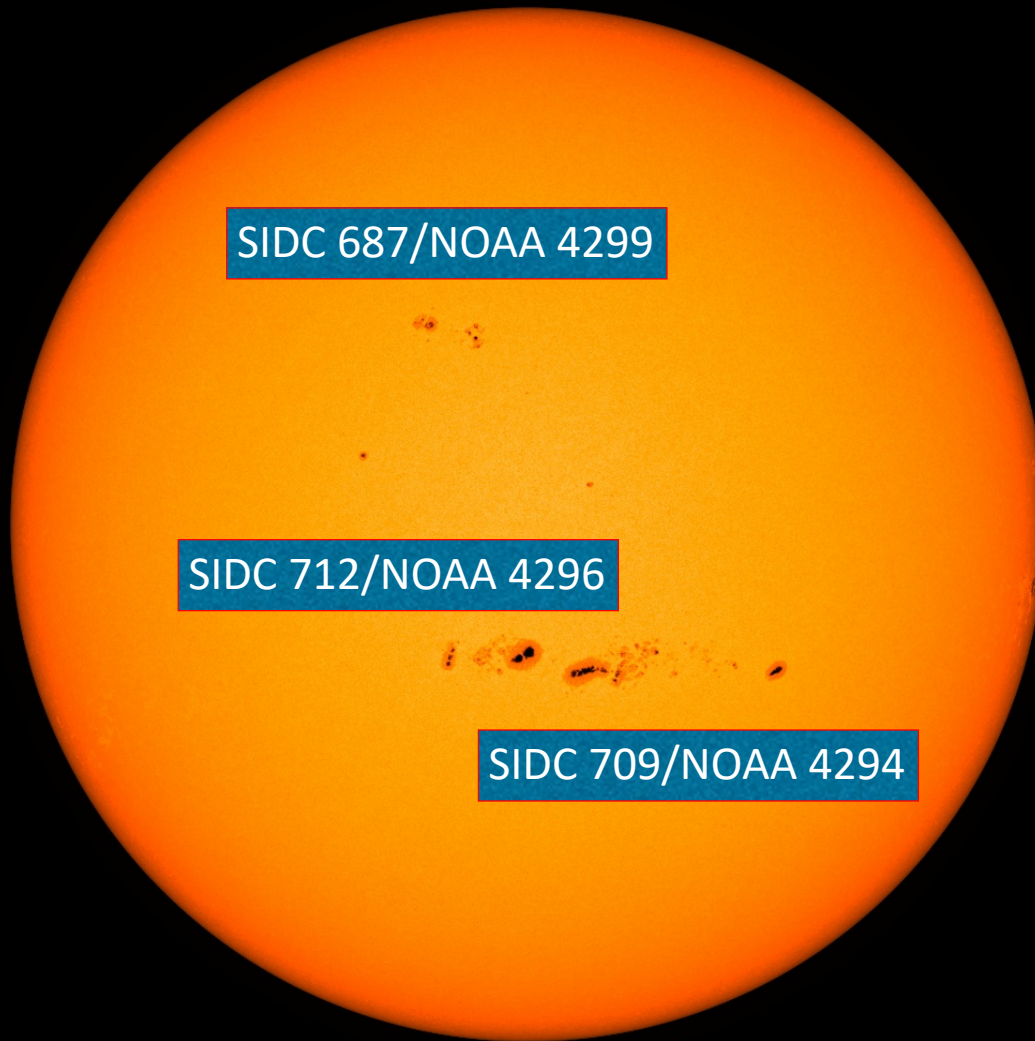
SDO/HMI Magnetogram 2025-12-05



SDO/HMI Quick-Look Magnetogram: 20251205_120000

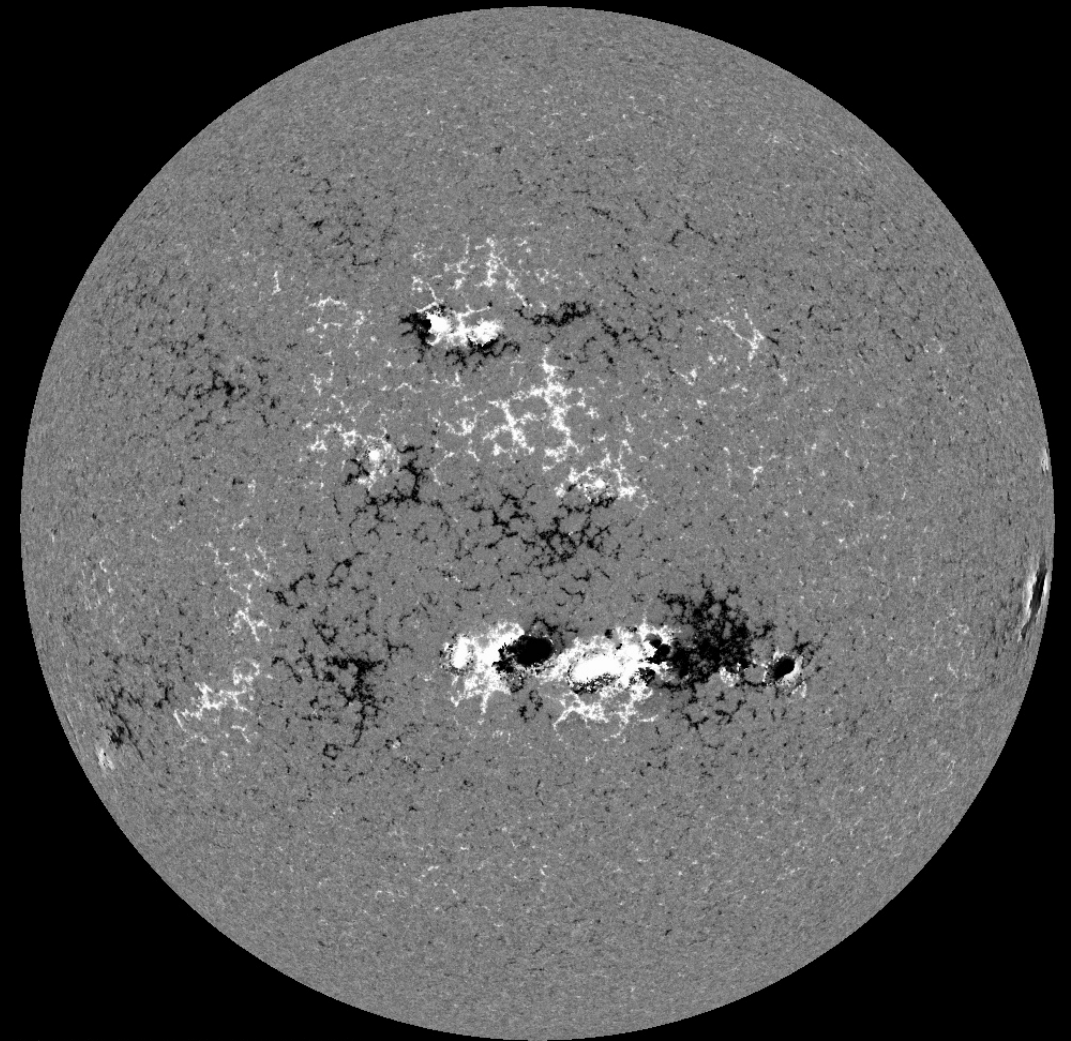
Solar active regions

SDO/HMI White Light 2025-12-06



SDO/HMI Quick-Look Continuum: 20251206_120000

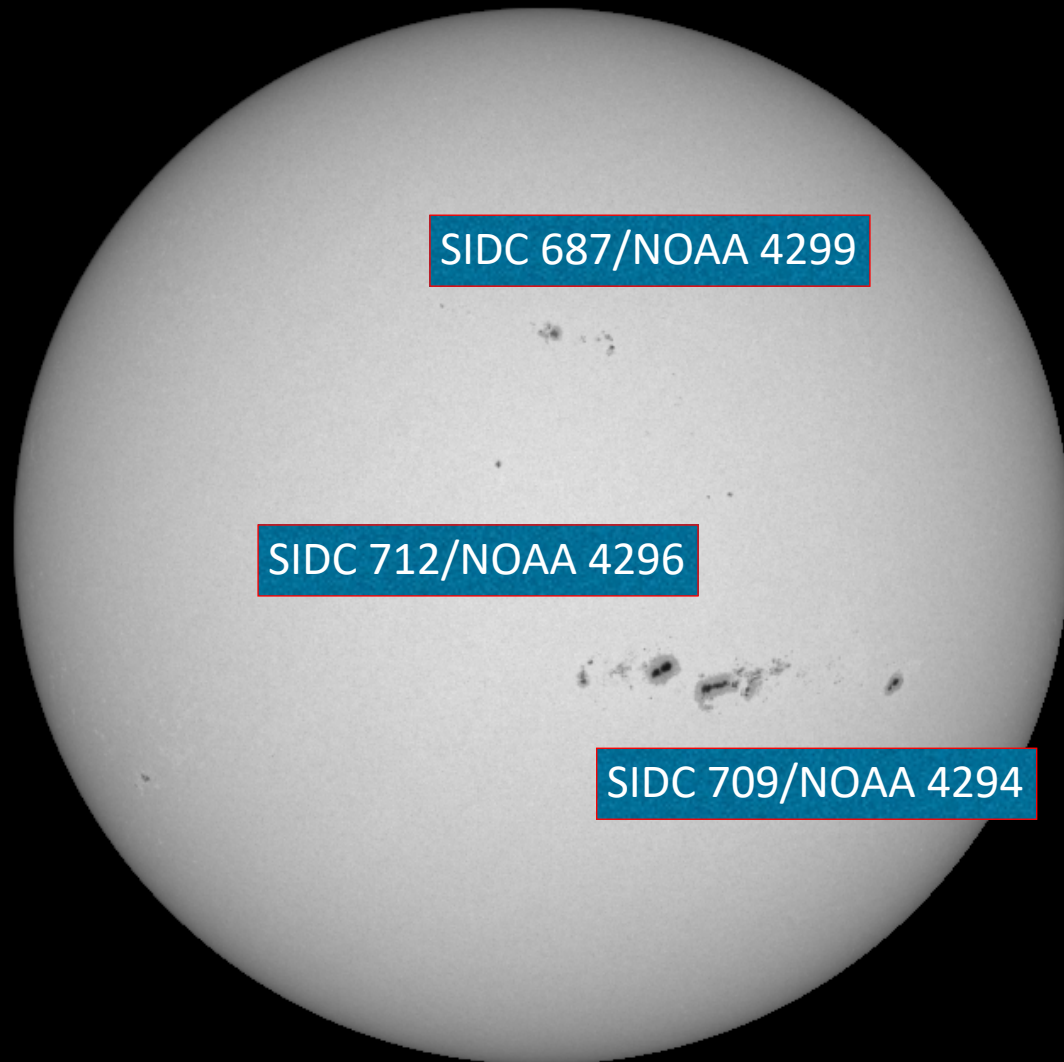
SDO/HMI Magnetogram 2025-12-06



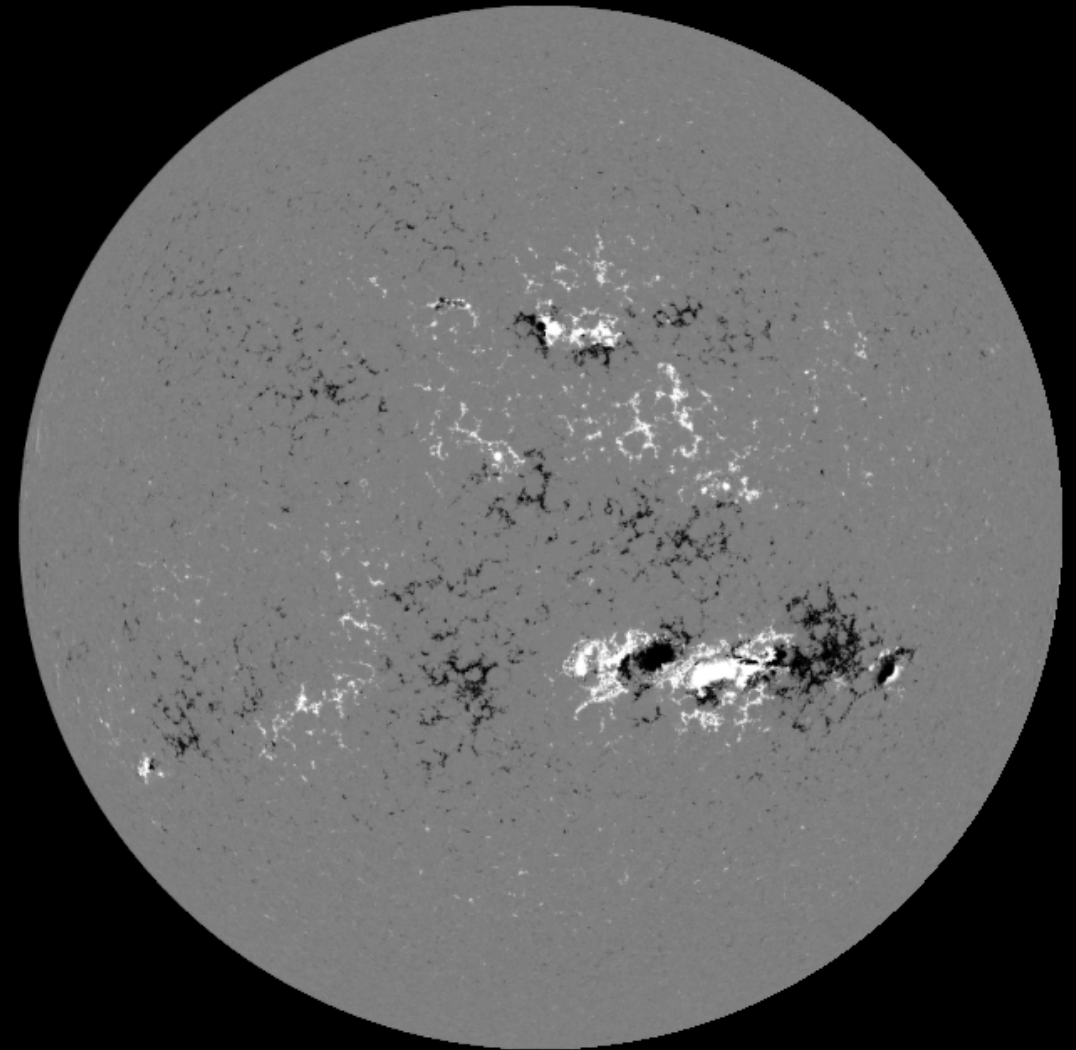
SDO/HMI Quick-Look Magnetogram: 20251206_120000

Solar active regions

SDO/HMI White Light 2025-12-07

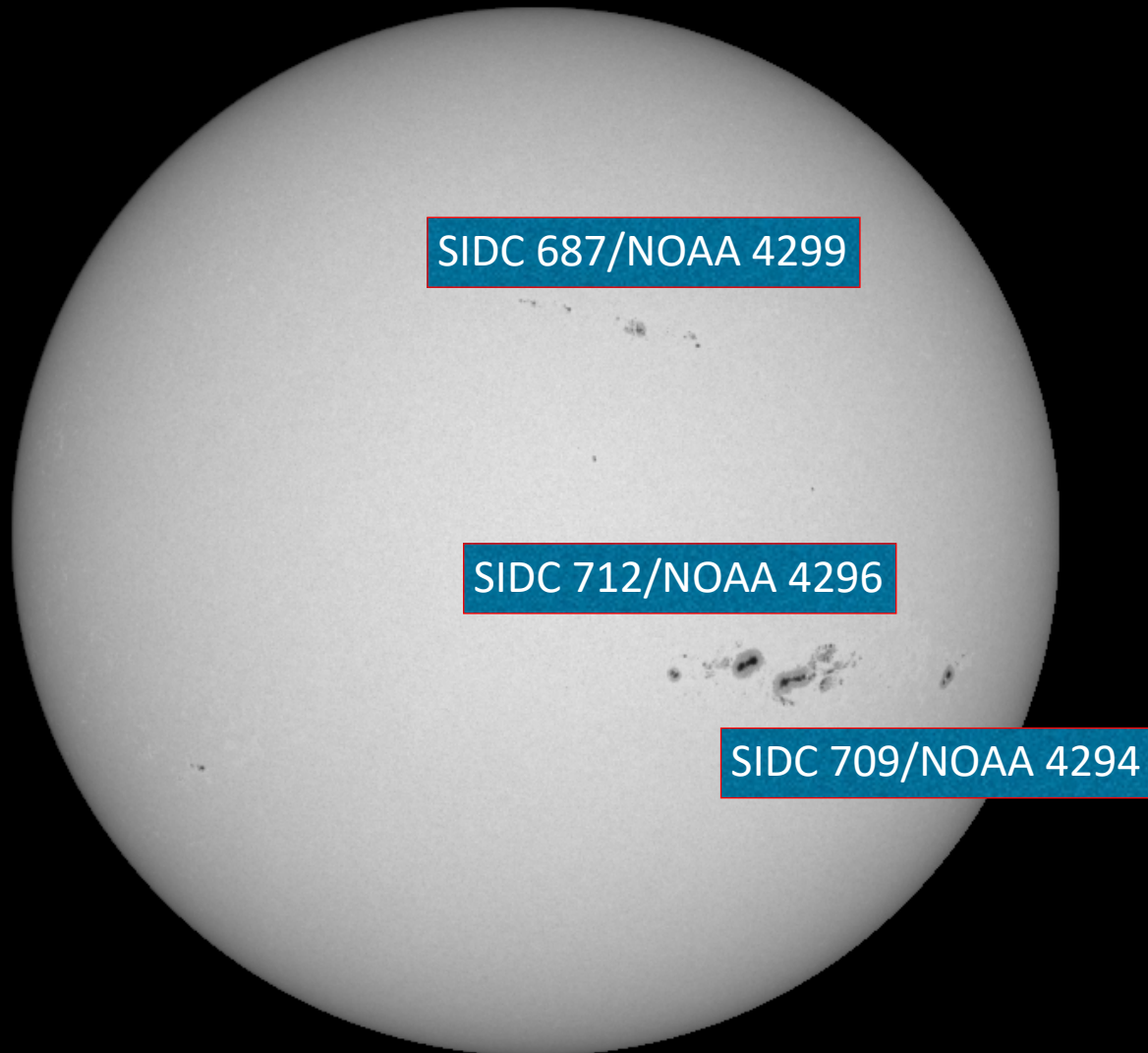


SDO/HMI Magnetogram 2025-12-07

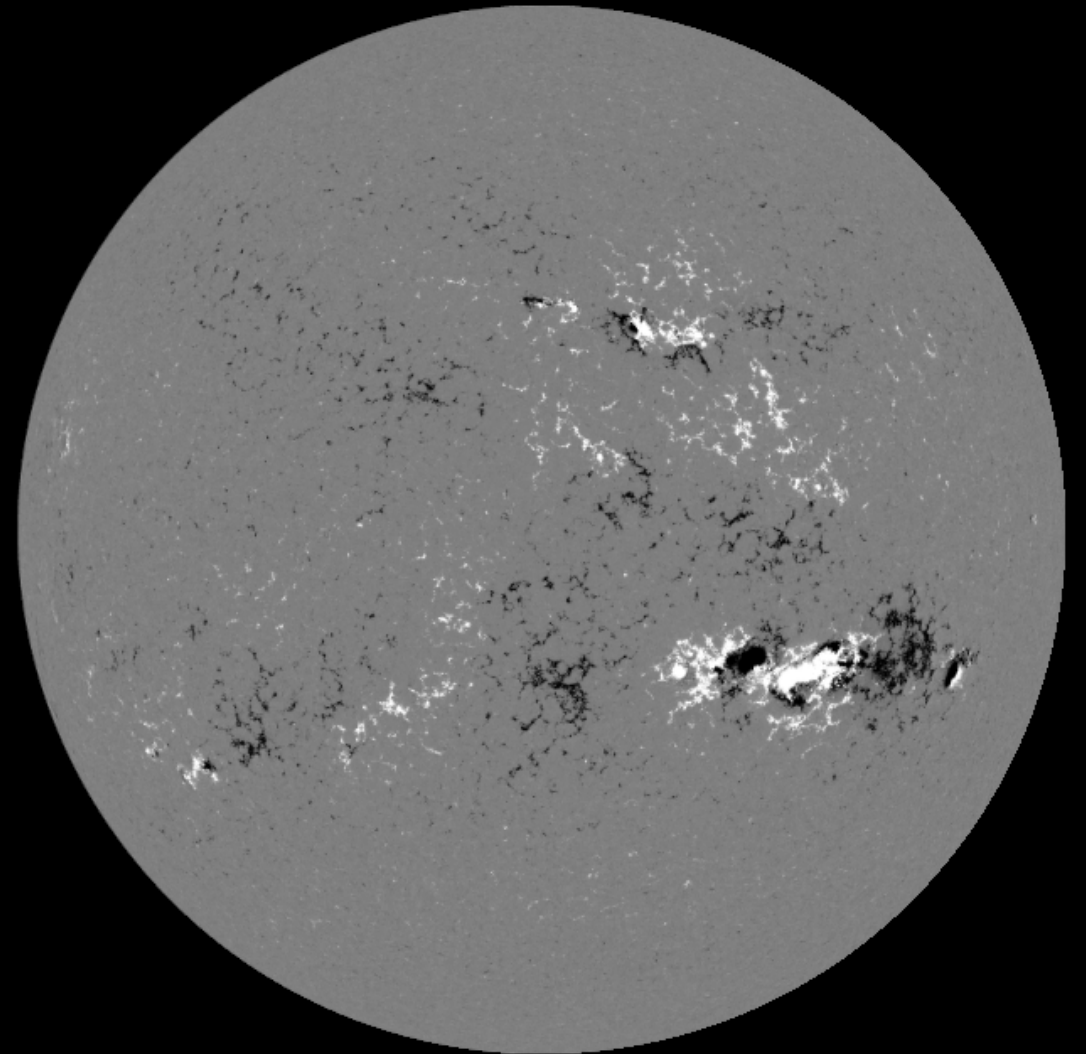


Solar active regions

SDO/HMI White Light 2025-12-08



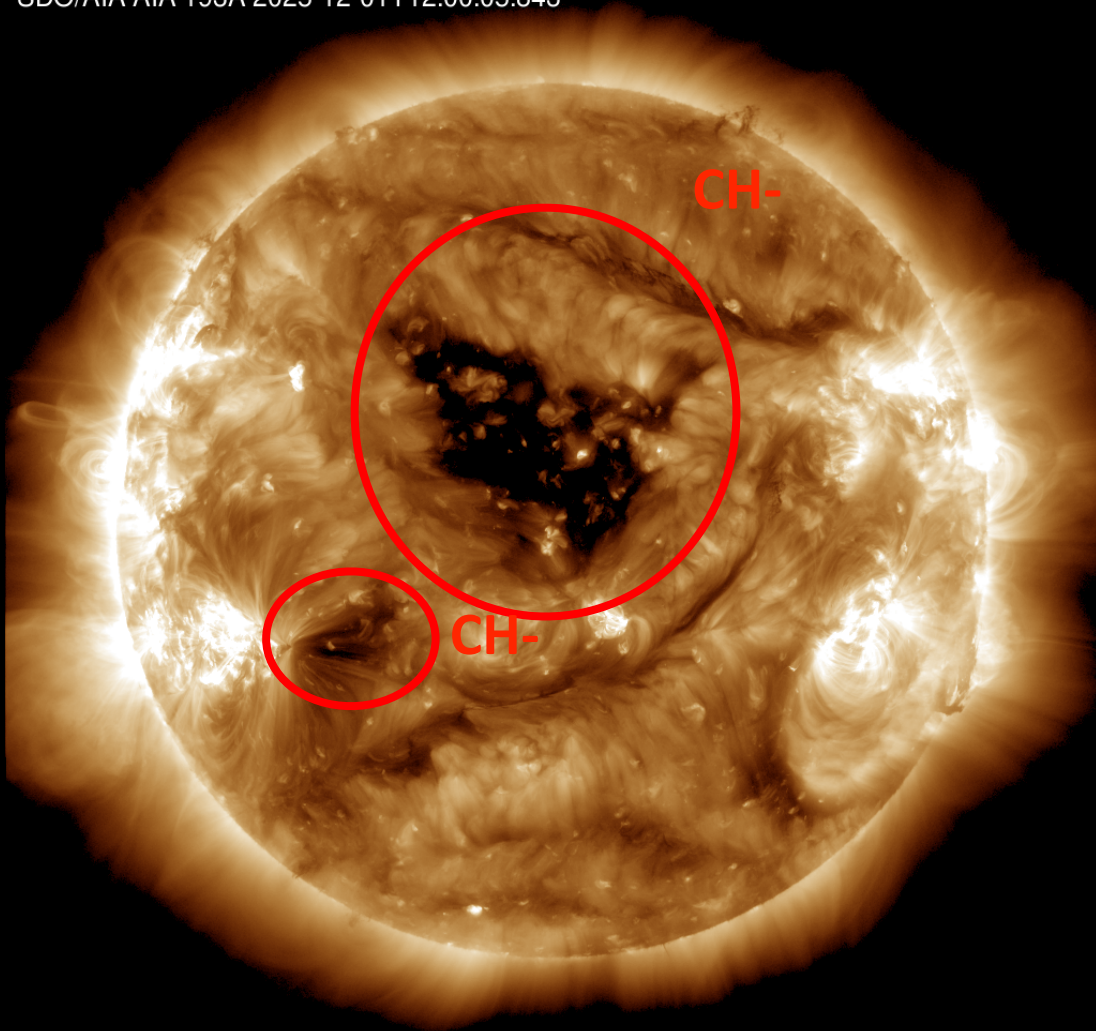
SDO/HMI Magnetogram 2025-12-08



Coronal holes

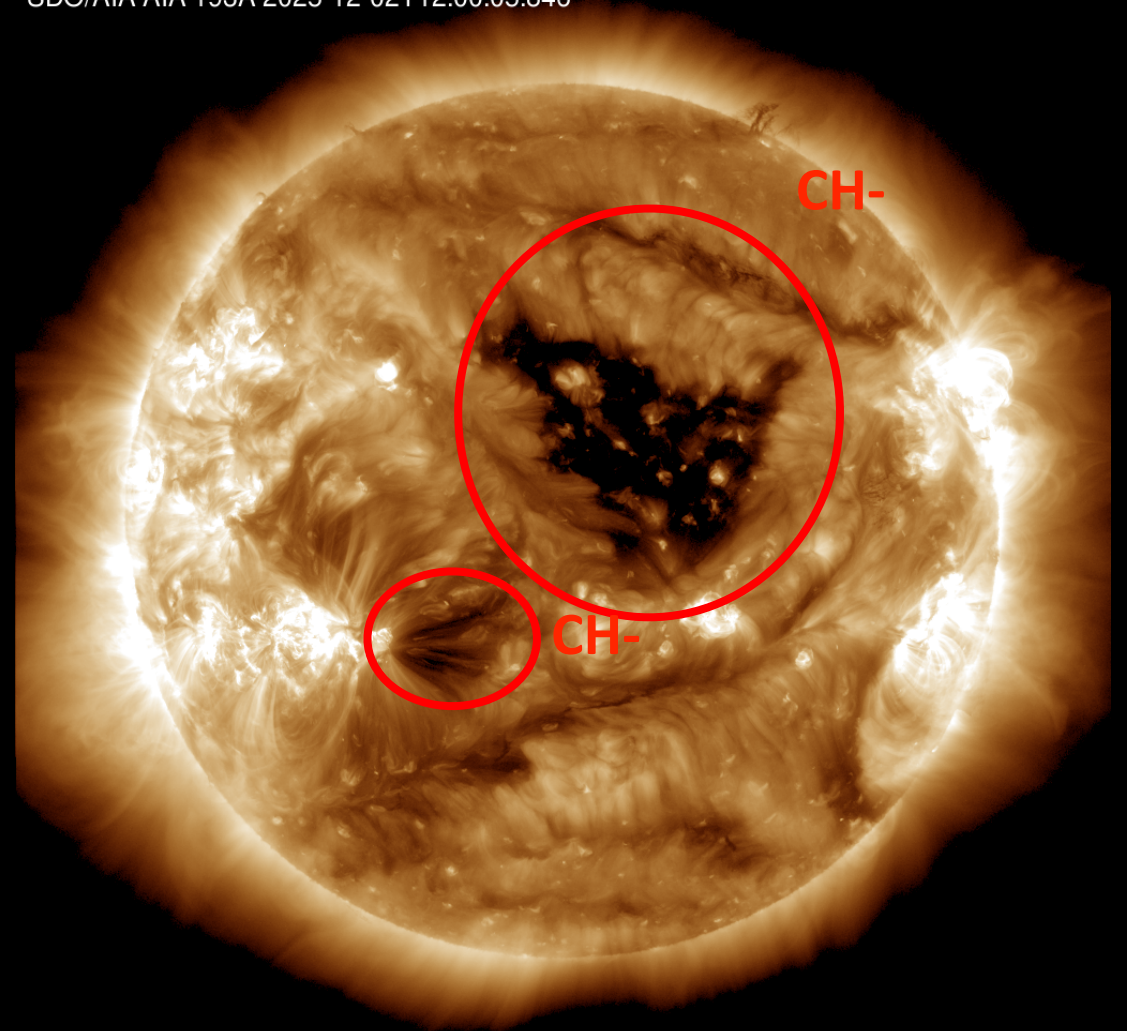
SDO/AIA 19.3 nm 2025-12-01

SDO/AIA AIA 193Å 2025-12-01T12:00:05.843



SDO/AIA 19.3 nm 2025-12-02

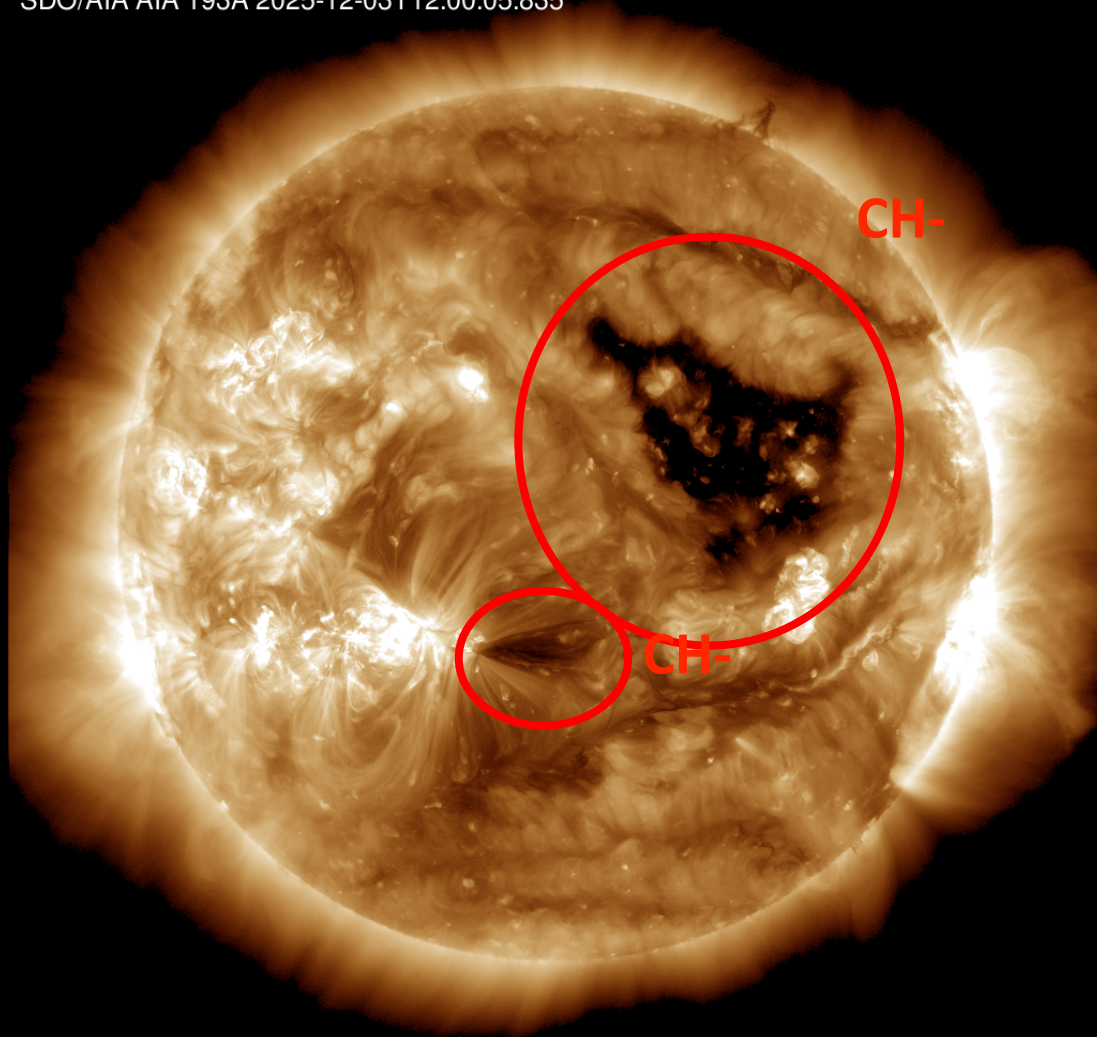
SDO/AIA AIA 193Å 2025-12-02T12:00:05.846



Coronal holes

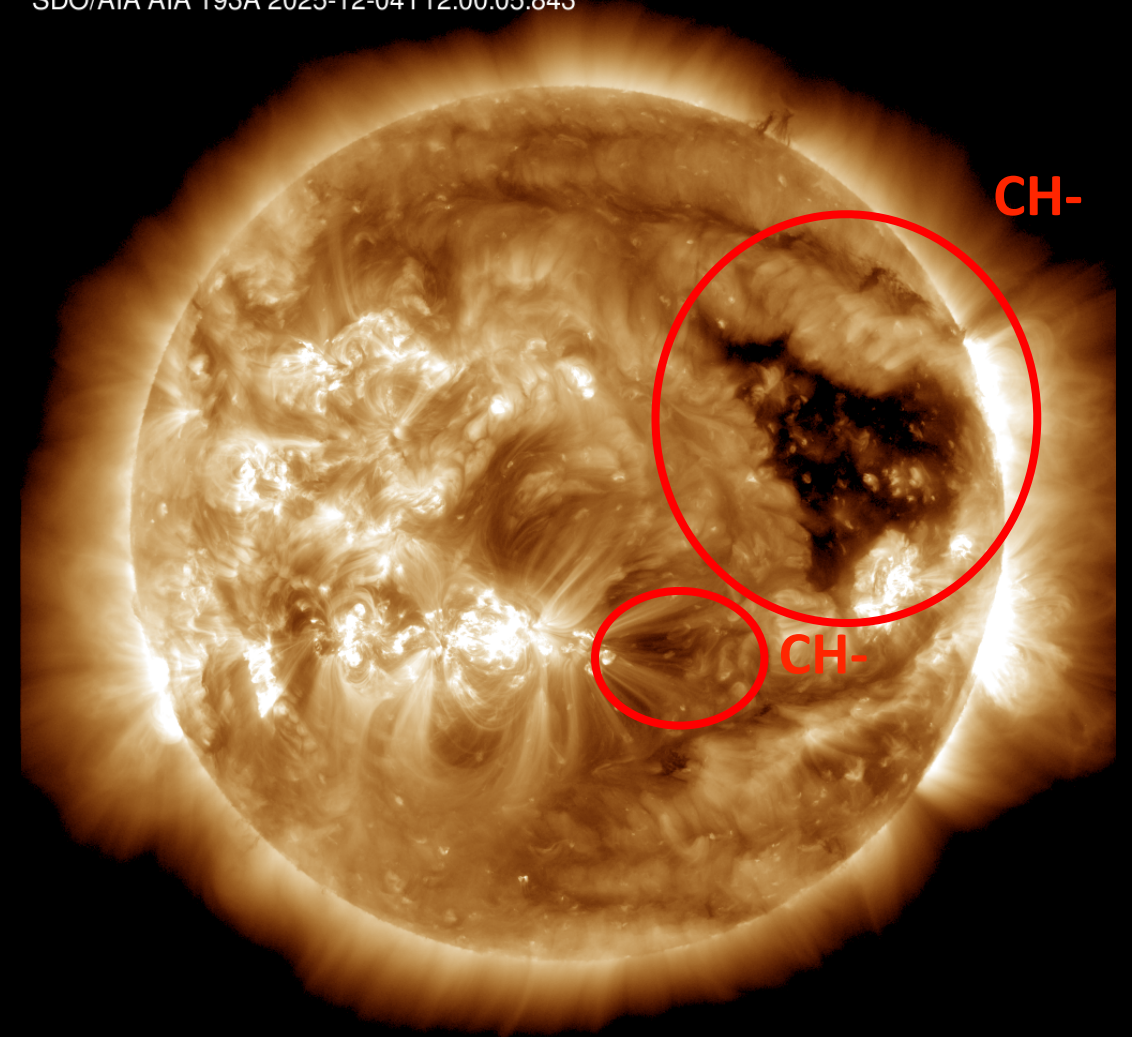
SDO/AIA 19.3 nm 2025-12-03

SDO/AIA AIA 193Å 2025-12-03T12:00:05.835



SDO/AIA 19.3 nm 2025-12-04

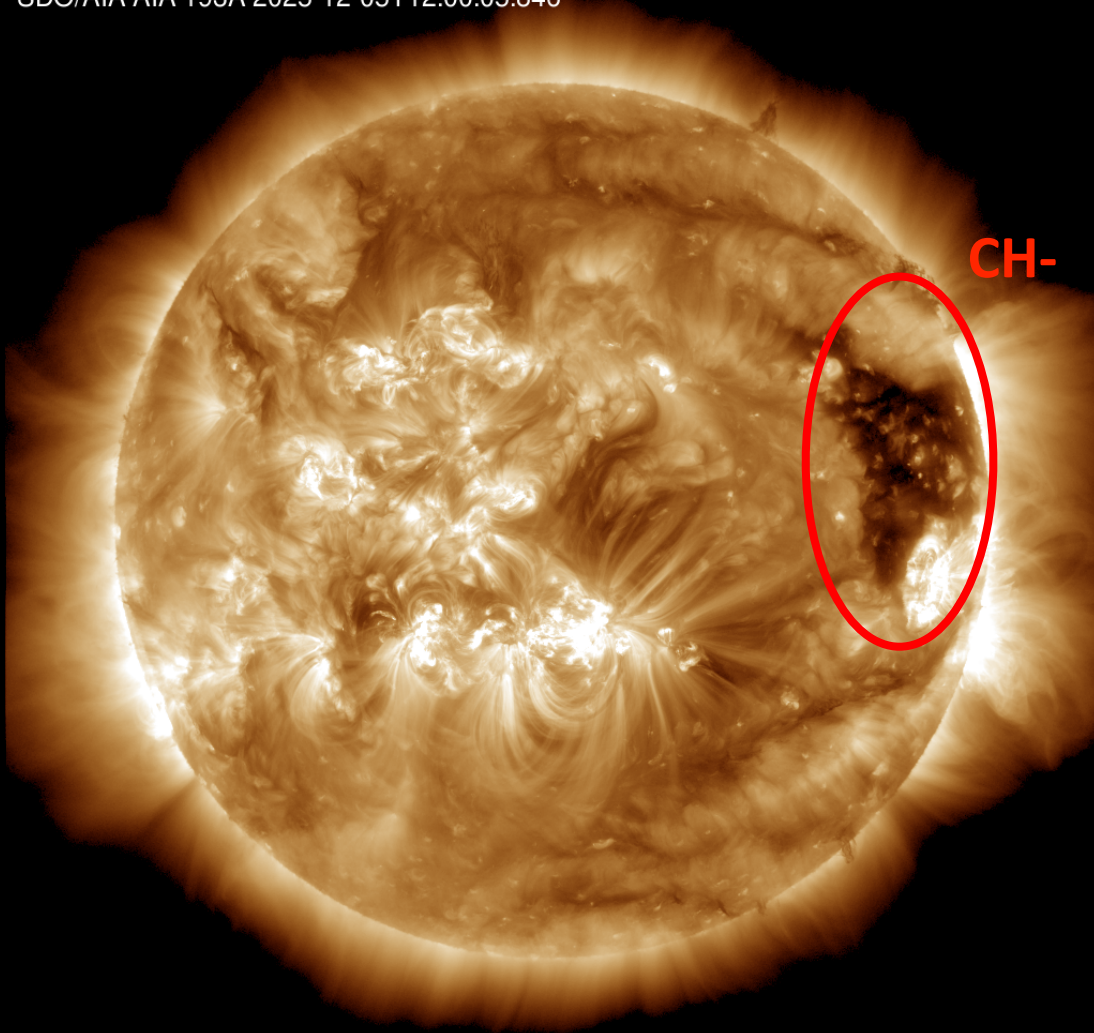
SDO/AIA AIA 193Å 2025-12-04T12:00:05.843



Coronal holes

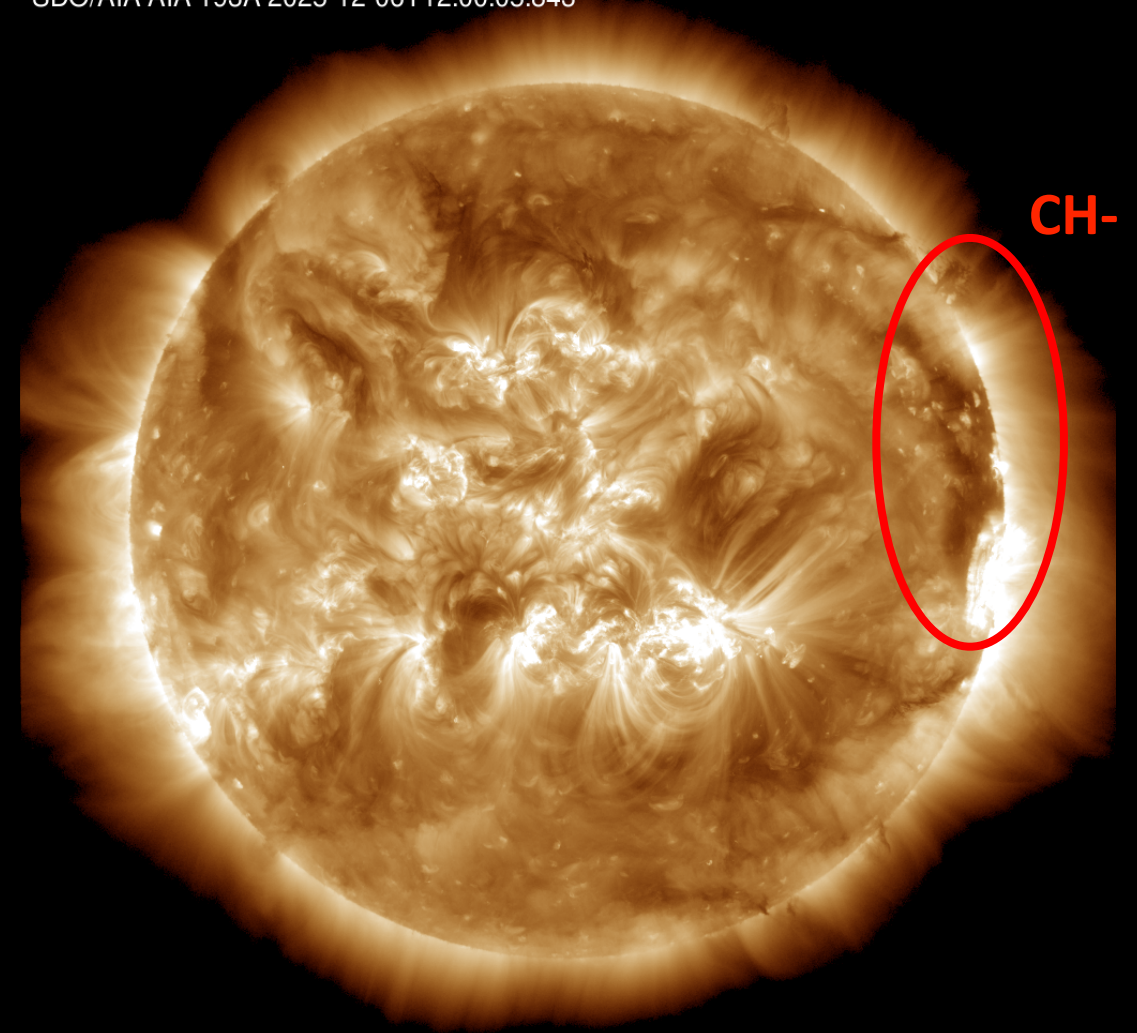
SDO/AIA 19.3 nm 2025-12-05

SDO/AIA AIA 193Å 2025-12-05T12:00:05.846



SDO/AIA 19.3 nm 2025-12-06

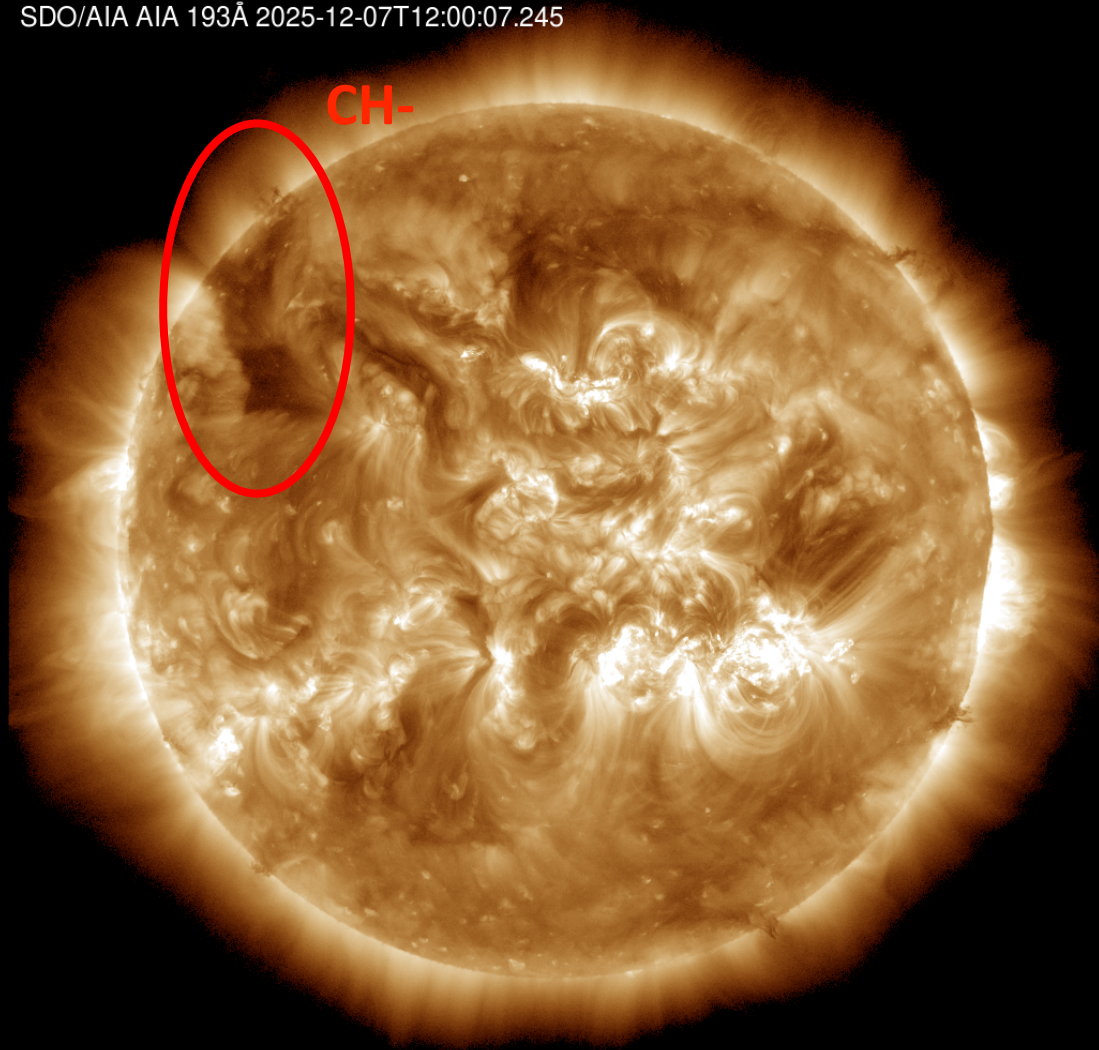
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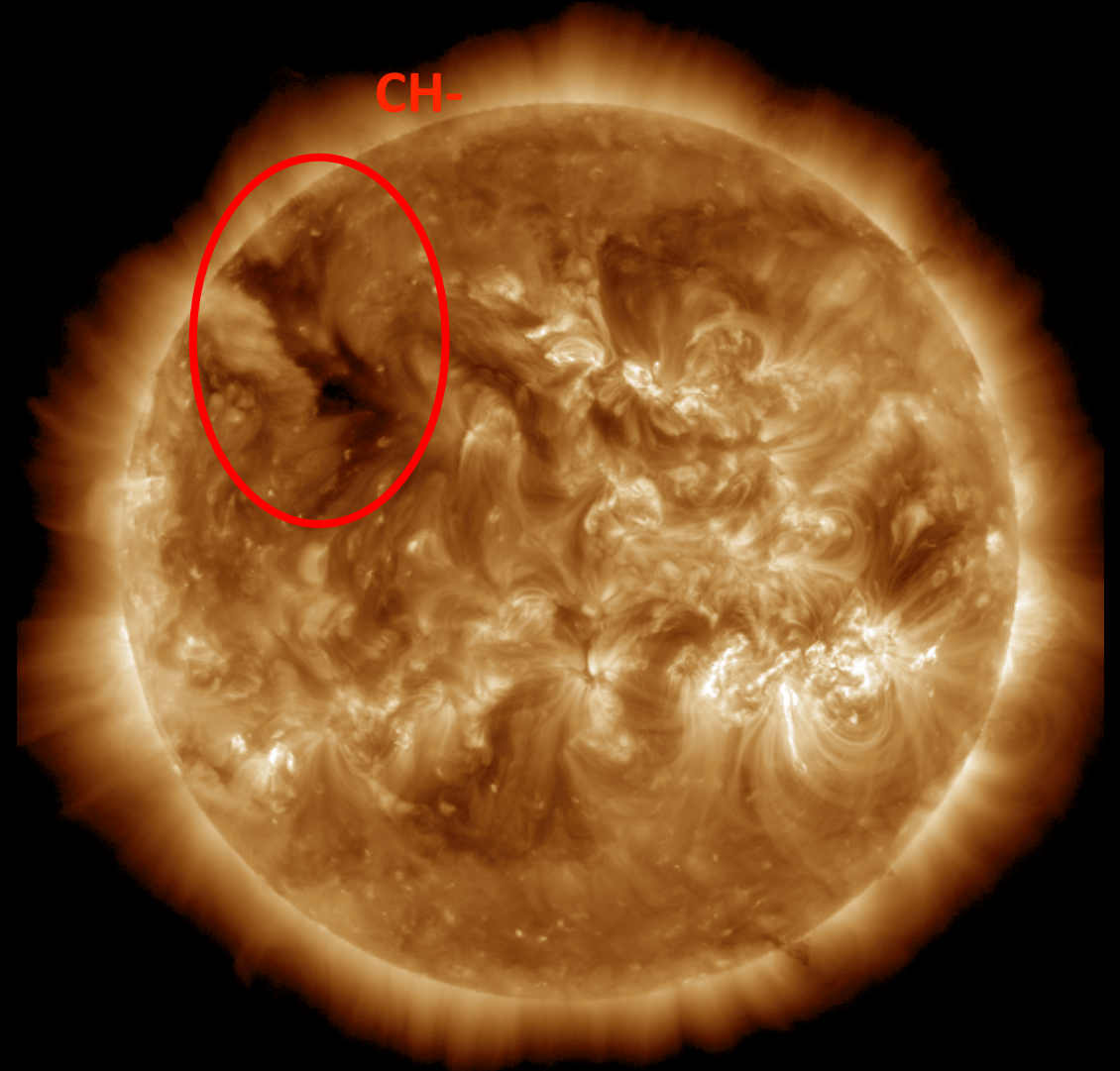
Coronal holes

SDO/AIA 19.3 nm 2025-12-07

SDO/AIA AIA 193Å 2025-12-07T12:00:07.245



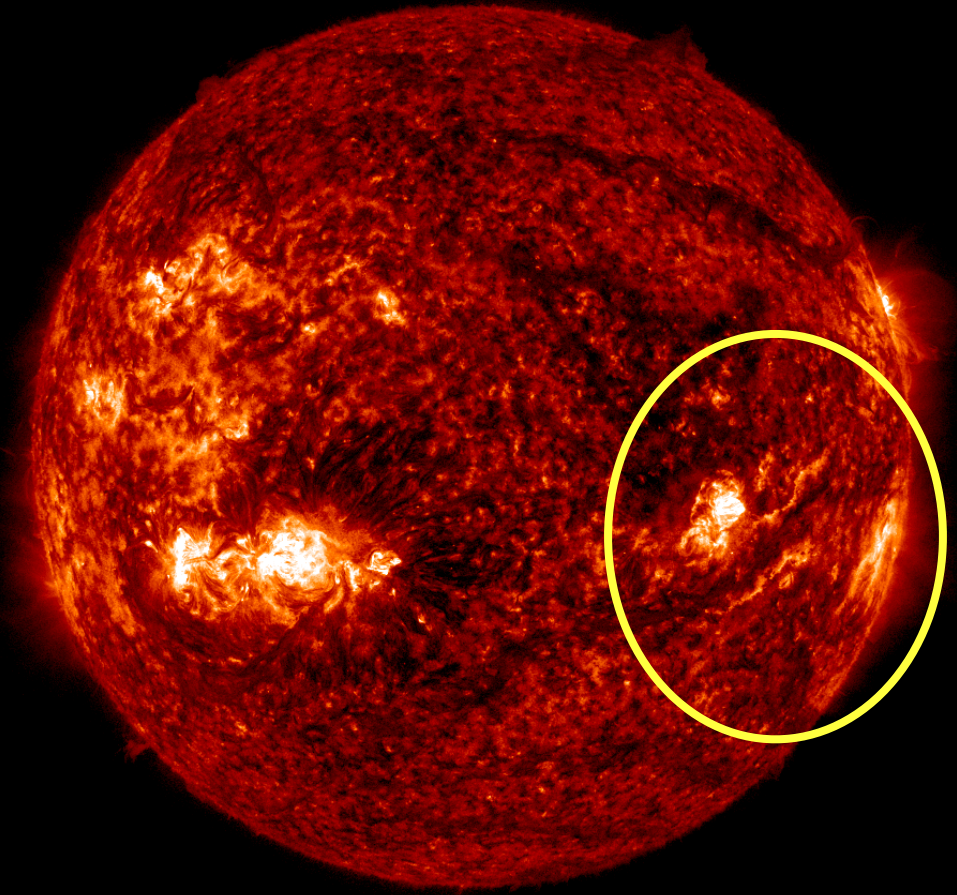
SDO/AIA 19.3 nm 2025-12-08



Filaments

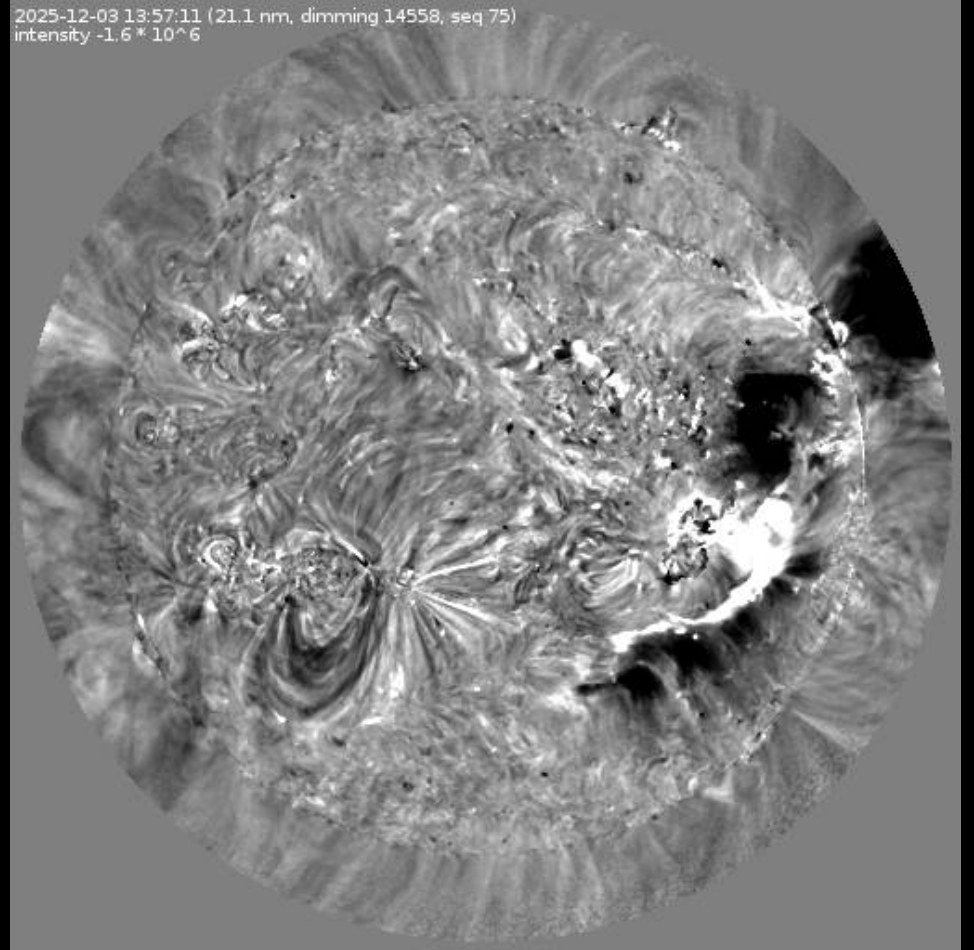
SDO/AIA 30.4 nm 2025-12-03

SDO/AIA AIA 304Å 2025-12-03T12:00:06.580



SDO/AIA 30.4 nm 2025-12-03

2025-12-03 13:57:11 (21.1 nm, dimming 14558, seq 75)
intensity -1.6×10^6

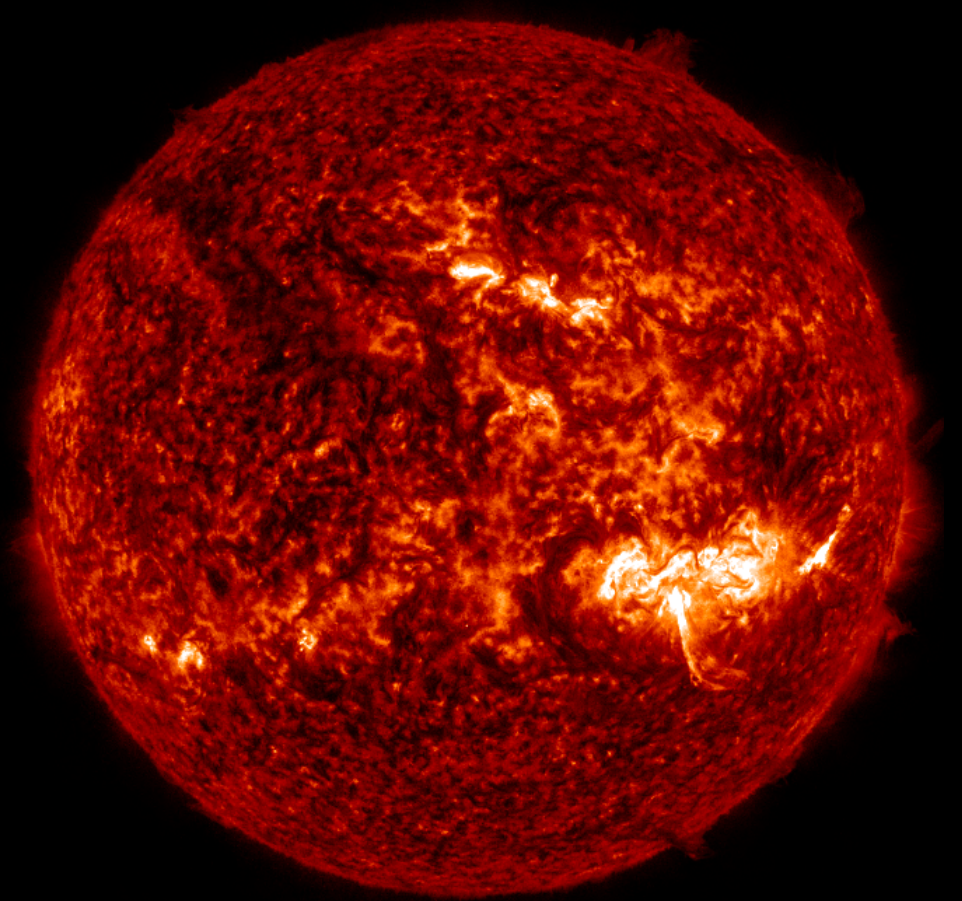
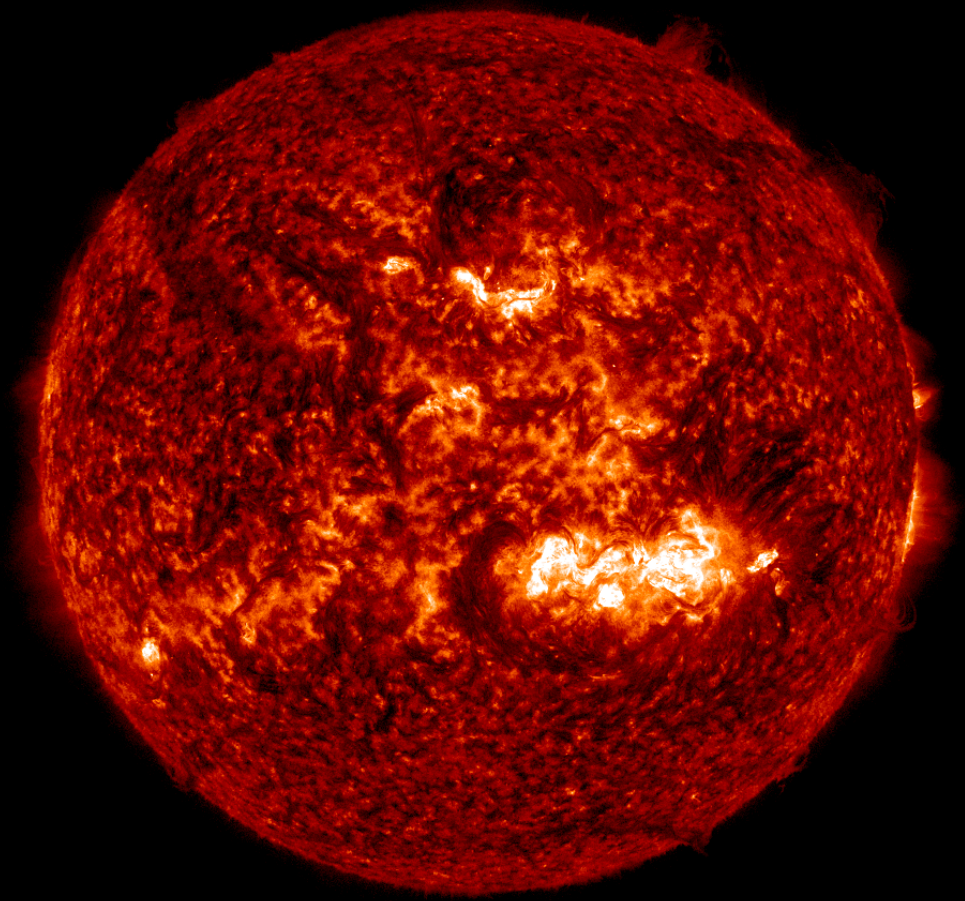


Filaments

SDO/AIA 30.4 nm 2025-12-07

SDO/AIA AIA 304Å 2025-12-07T12:00:06.580

SDO/AIA 30.4 nm 2025-12-08



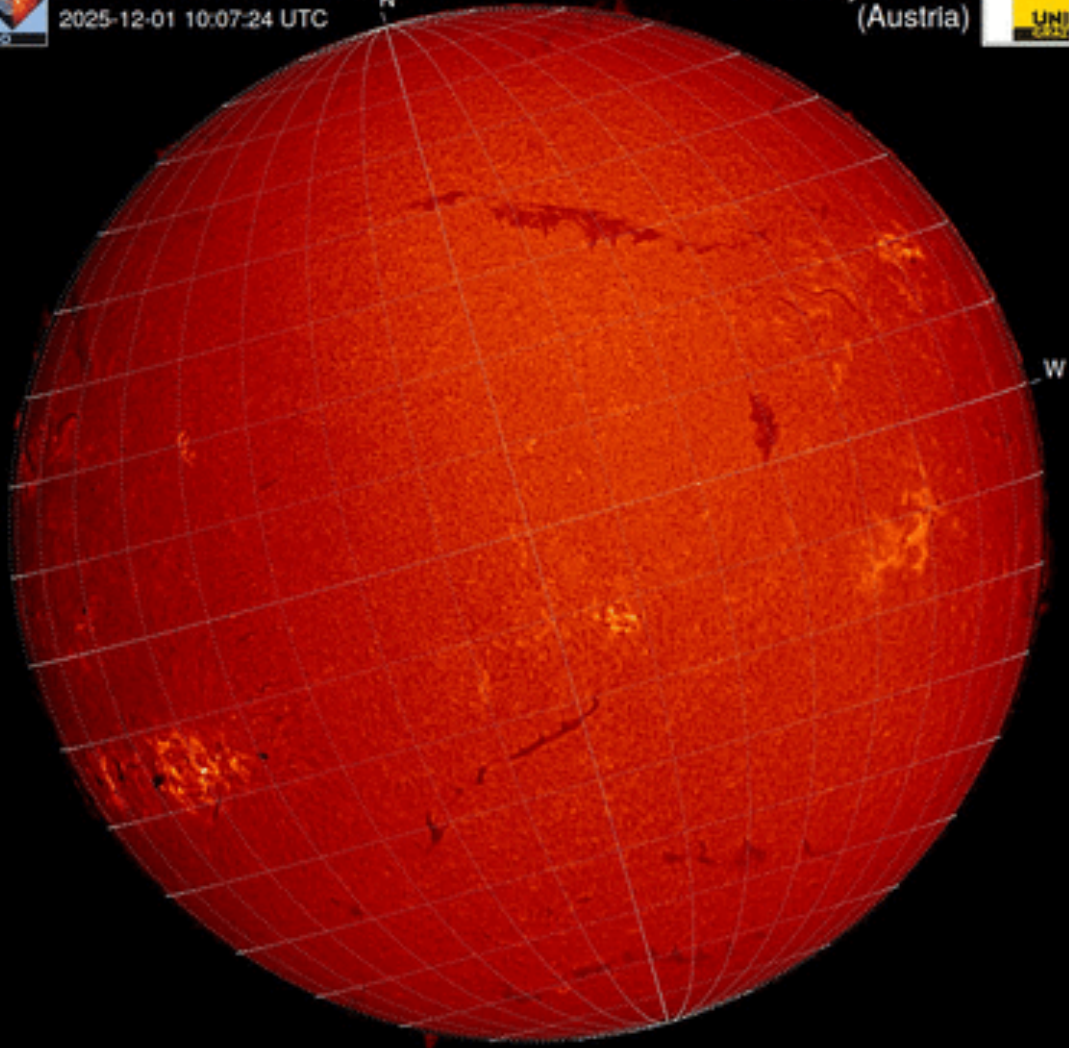
Filaments & Filament eruptions

H-alpha 2025-12-01



Kanzelhöhe Observatory
2025-12-01 10:07:24 UTC

University of Graz
(Austria)

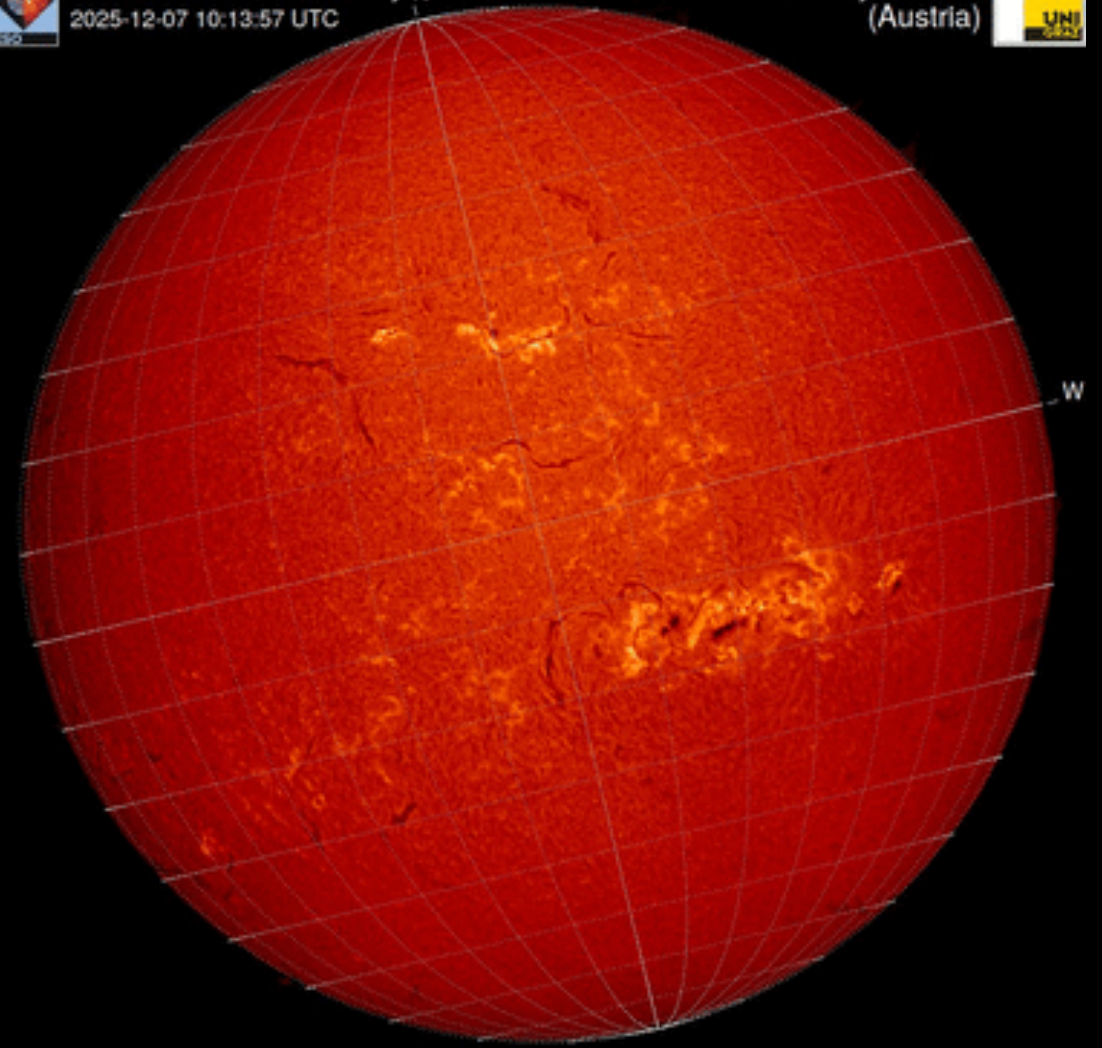


H-alpha 2025-12-07

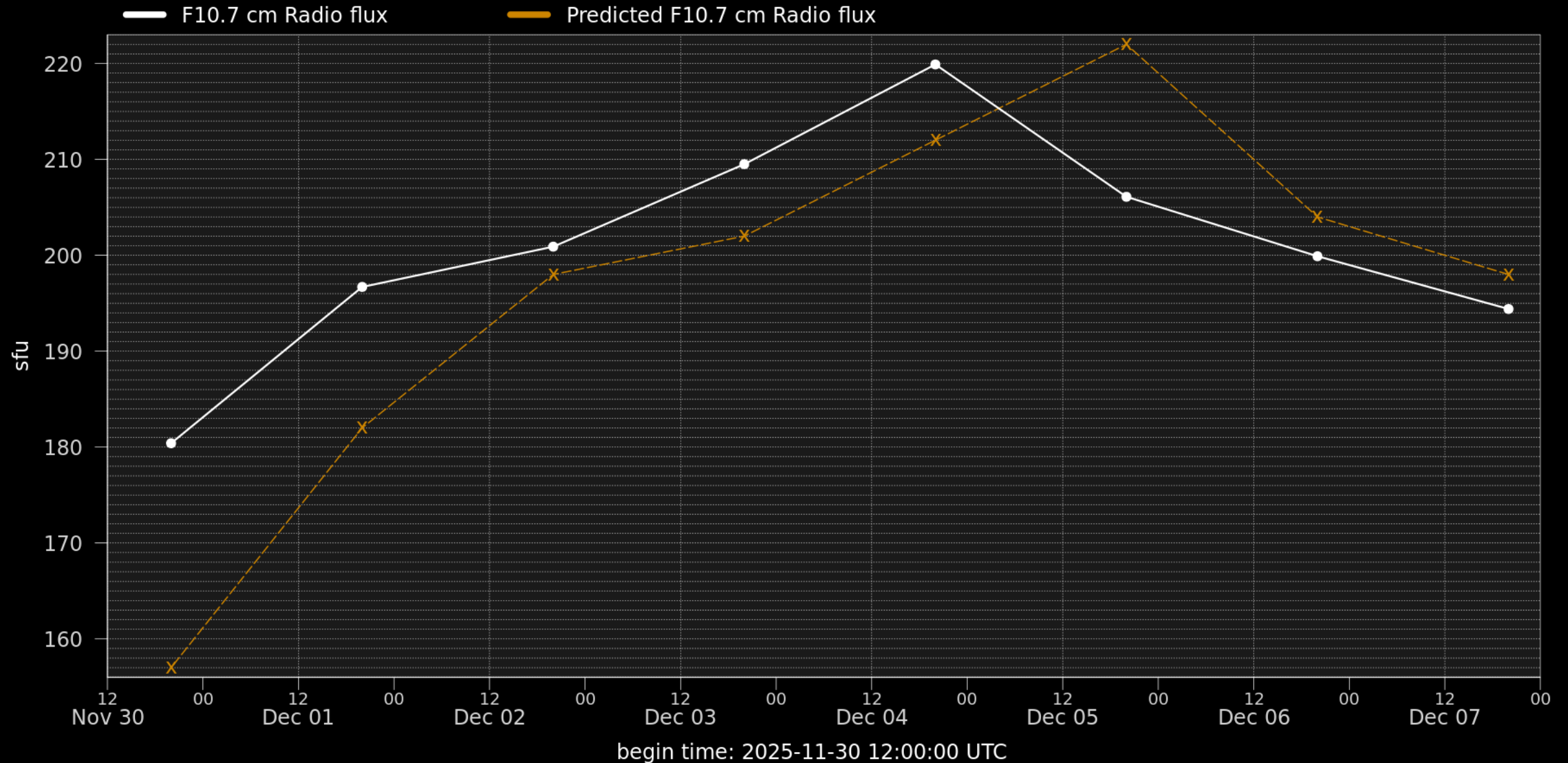


Kanzelhöhe Observatory
2025-12-07 10:13:57 UTC

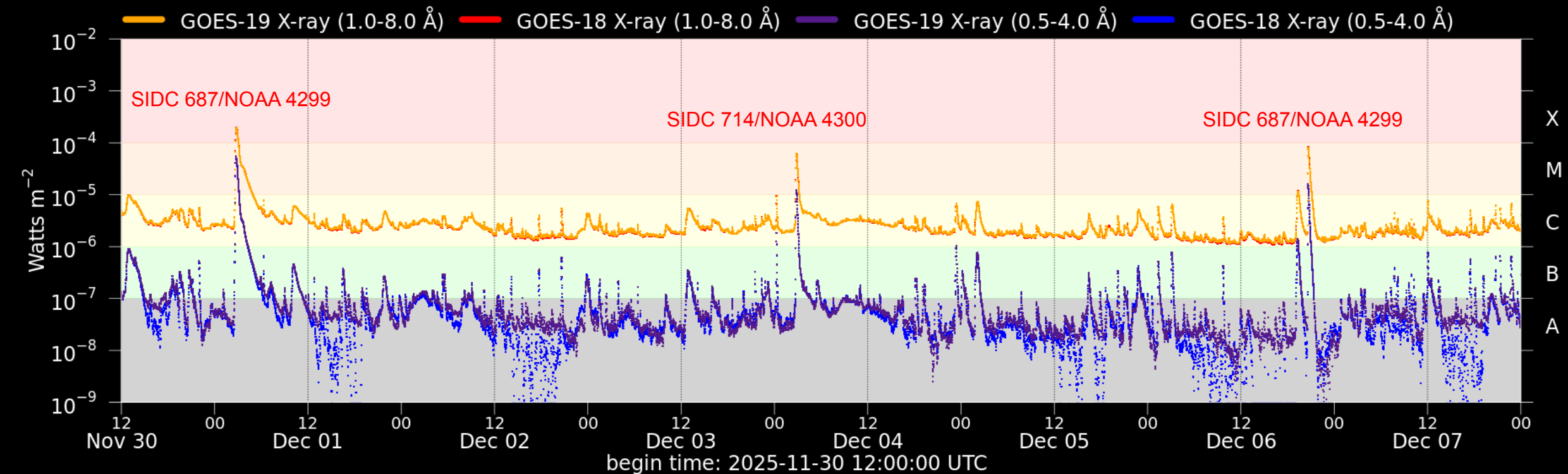
University of Graz
(Austria)



Solar F10.7cm radio flux



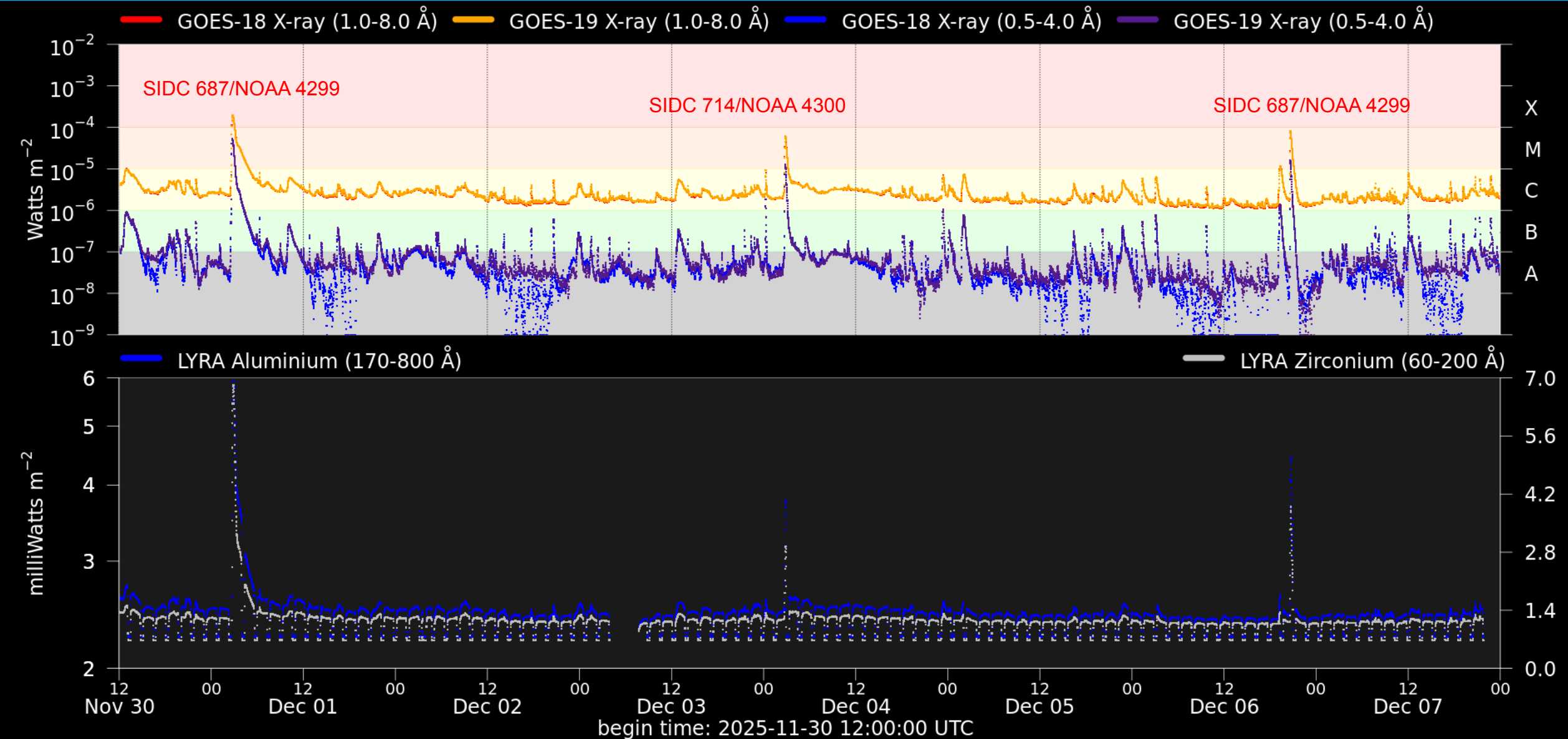
Flaring activity



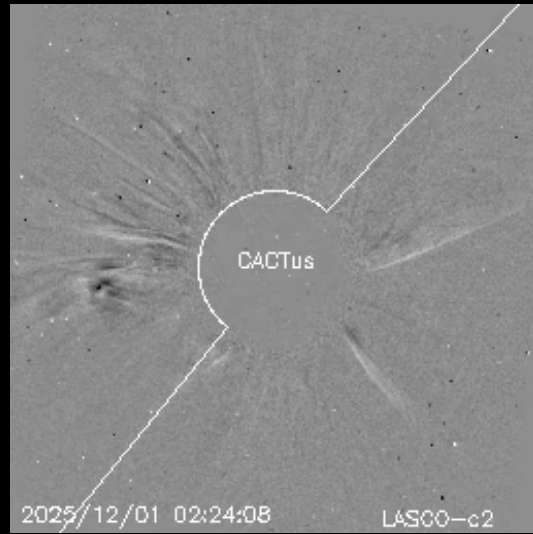
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-11-30	2025-12-01	2025-12-02	2025-12-03	2025-12-04	2025-12-05	2025-12-06	2025-12-07
Probability (%)	99 90 25	99 80 30	99 85 20	99 93 27	99 90 30	99 89 17	99 85 20	99 90 25
Observed (#)	03 00 01	03 00 00	06 00 00	03 01 00	05 00 00	10 00 00	07 02 00	08 02 00

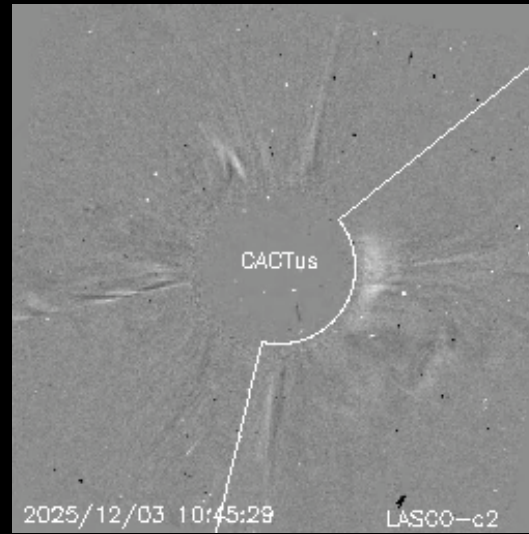
Solar X-Ray and UV flux



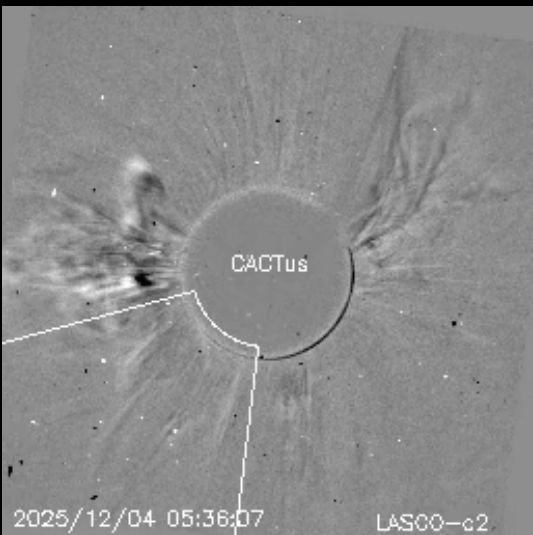
Coronal Mass Ejections



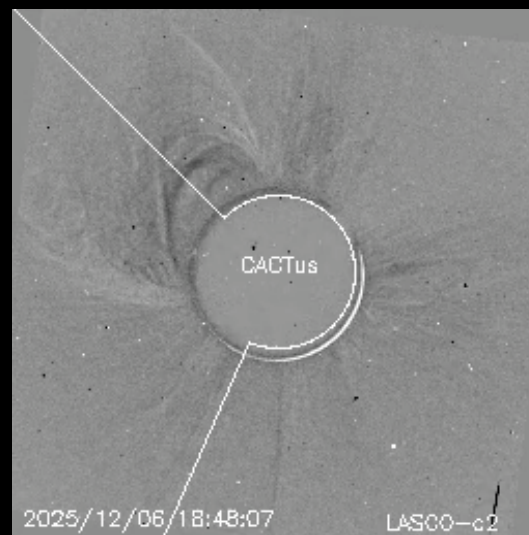
Dec 01:
not
expected



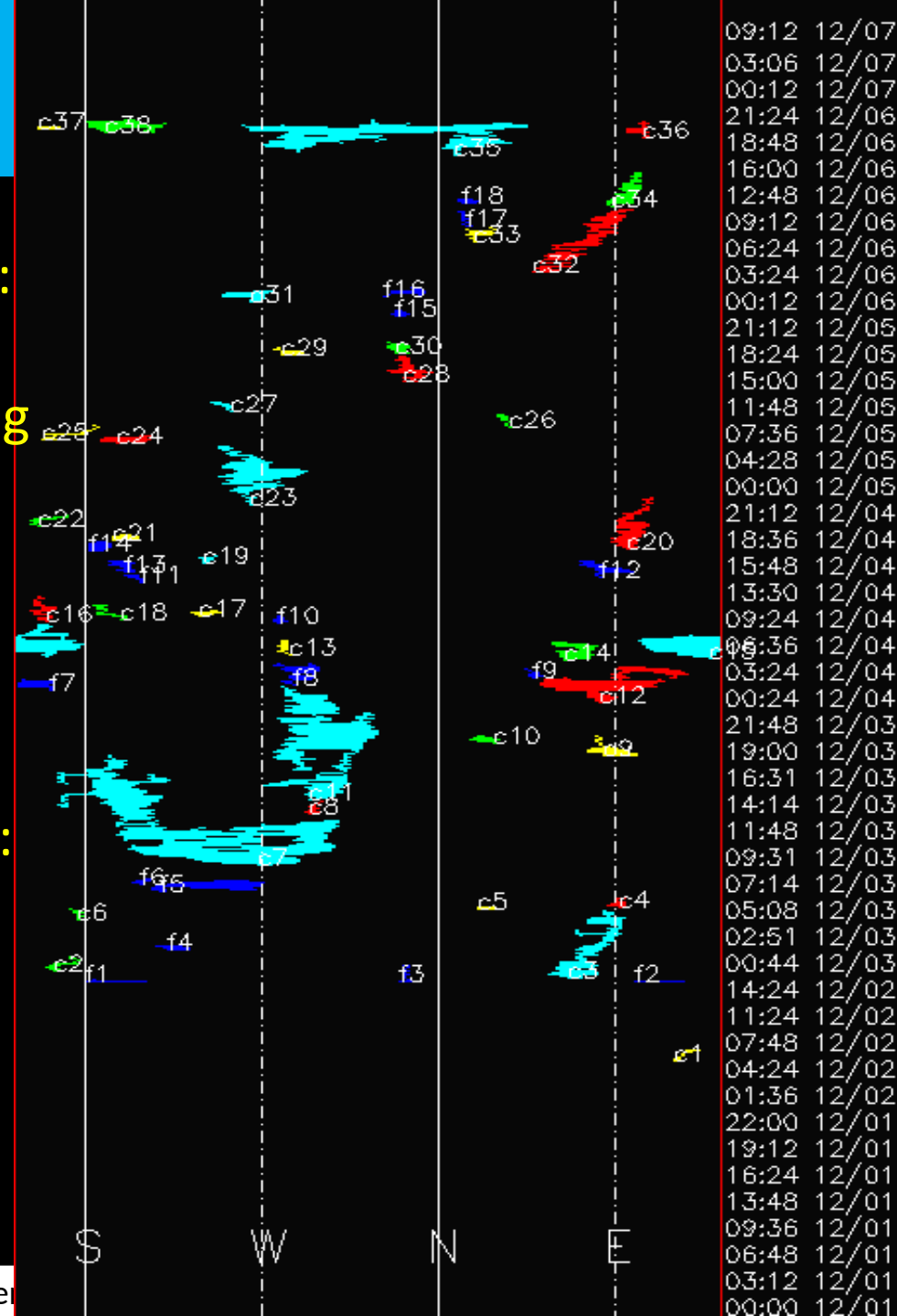
Dec 03:
minor
glancing
blow
Dec 06



Dec 04:
minor
glancing
blow
Dec
06/07



Dec 06:
mod/
major
storm
Dec 09



Solar Wind and

Geomagnetic Activity



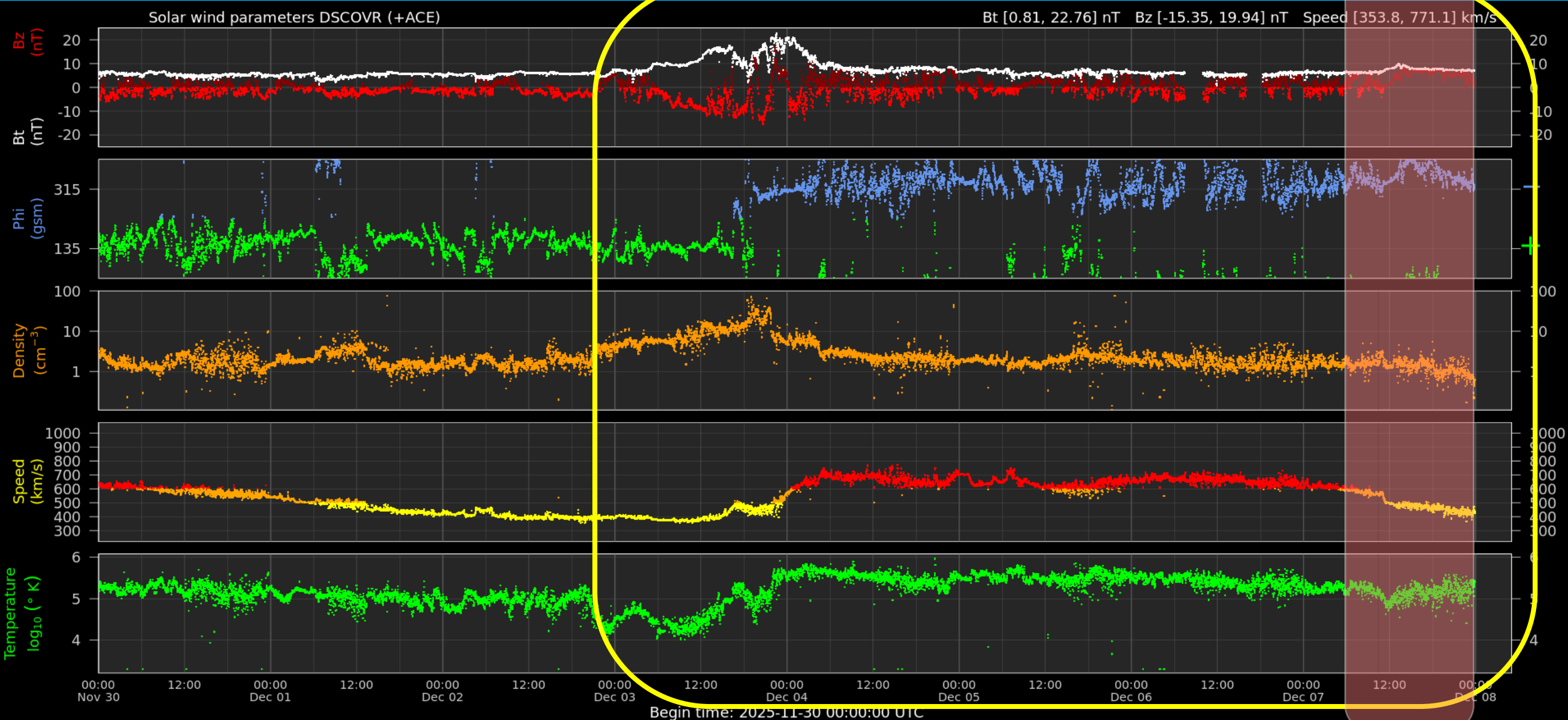
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Solar wind parameters

CIR + HSS

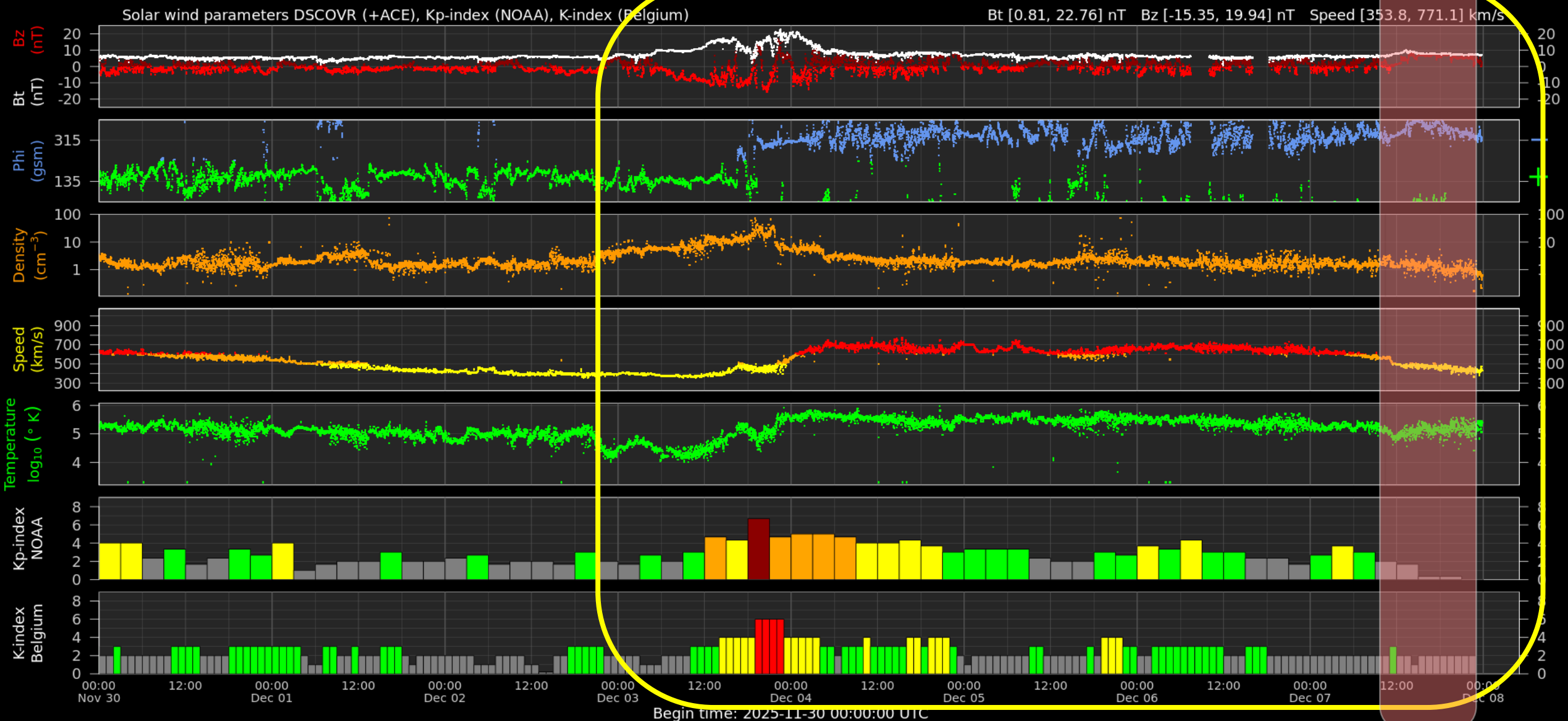
Dec 04 transient?



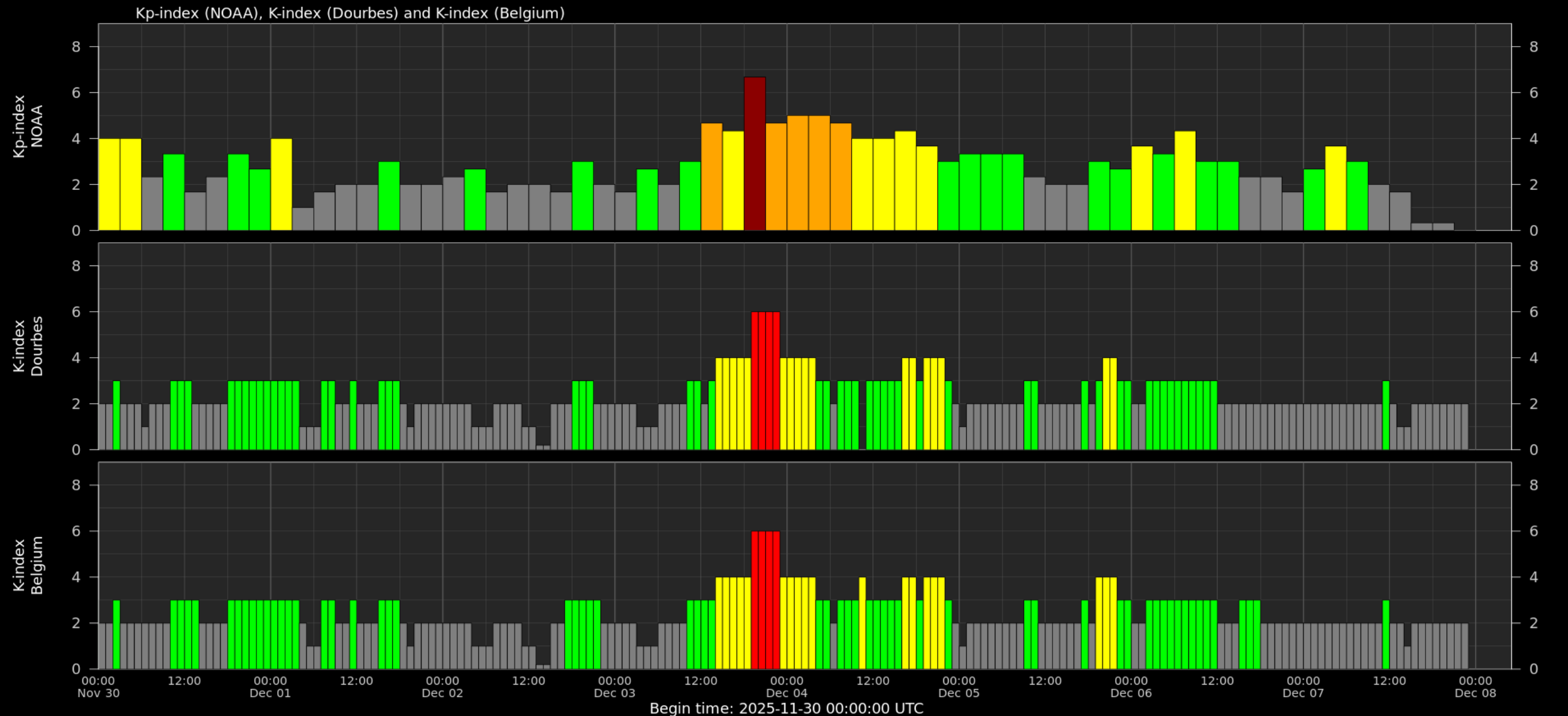
Solar wind parameters & K-indices

CIR + HSS

Dec 04 transient?



Geomagnetic activity (K-indexes)



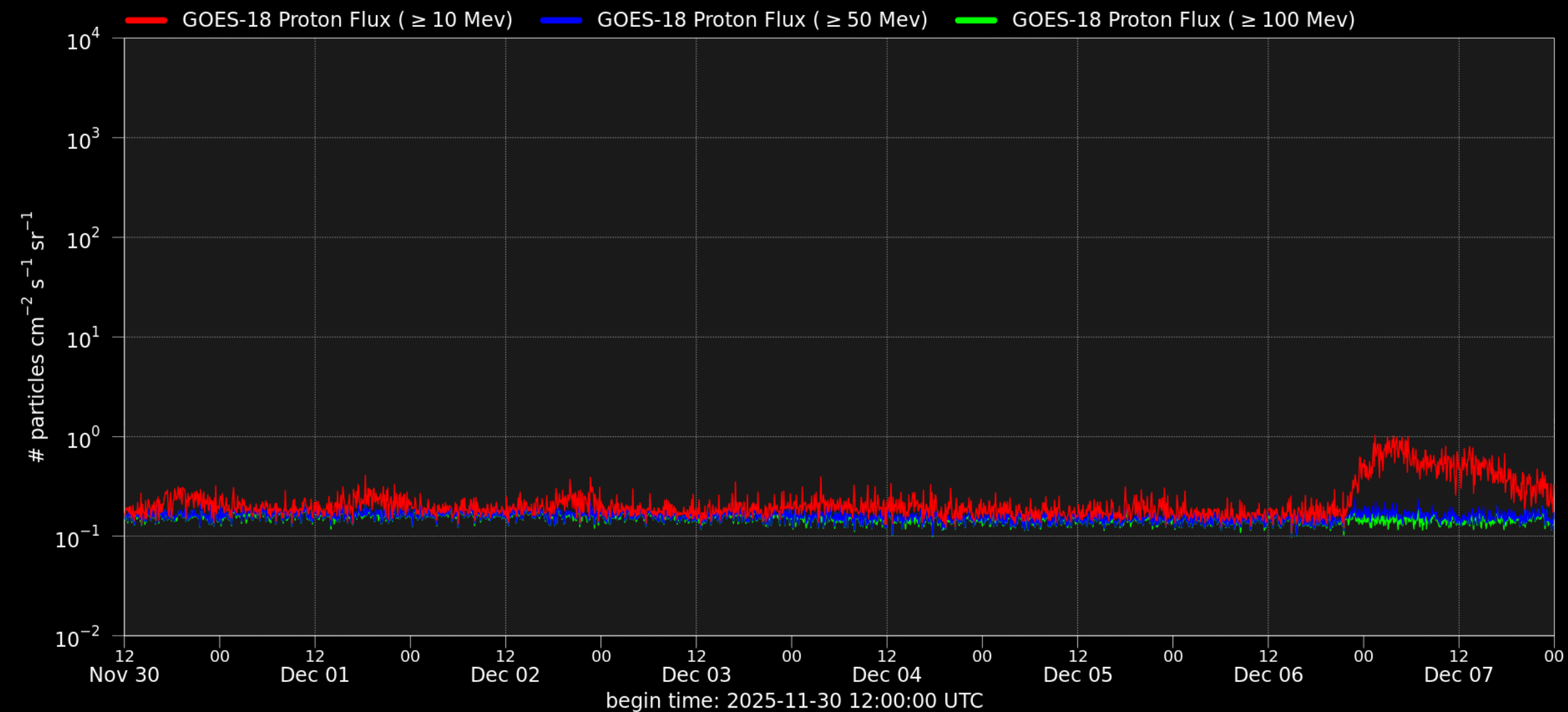
Energetic Particles



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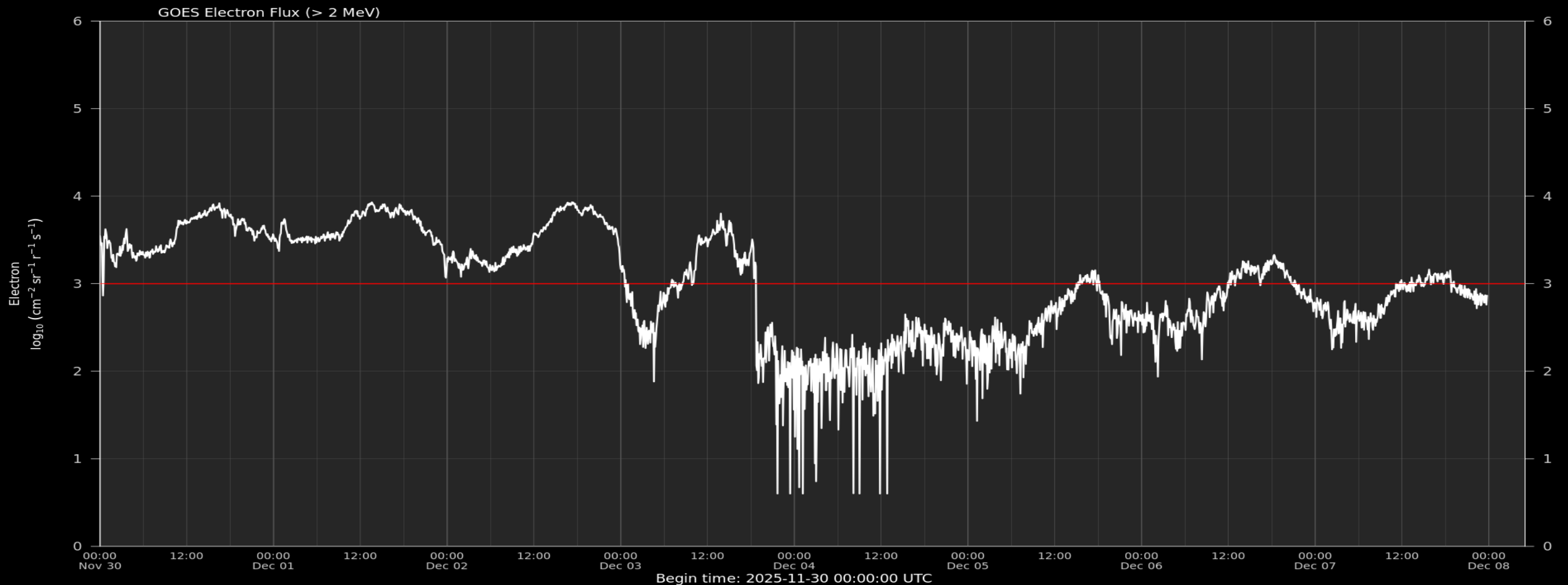
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



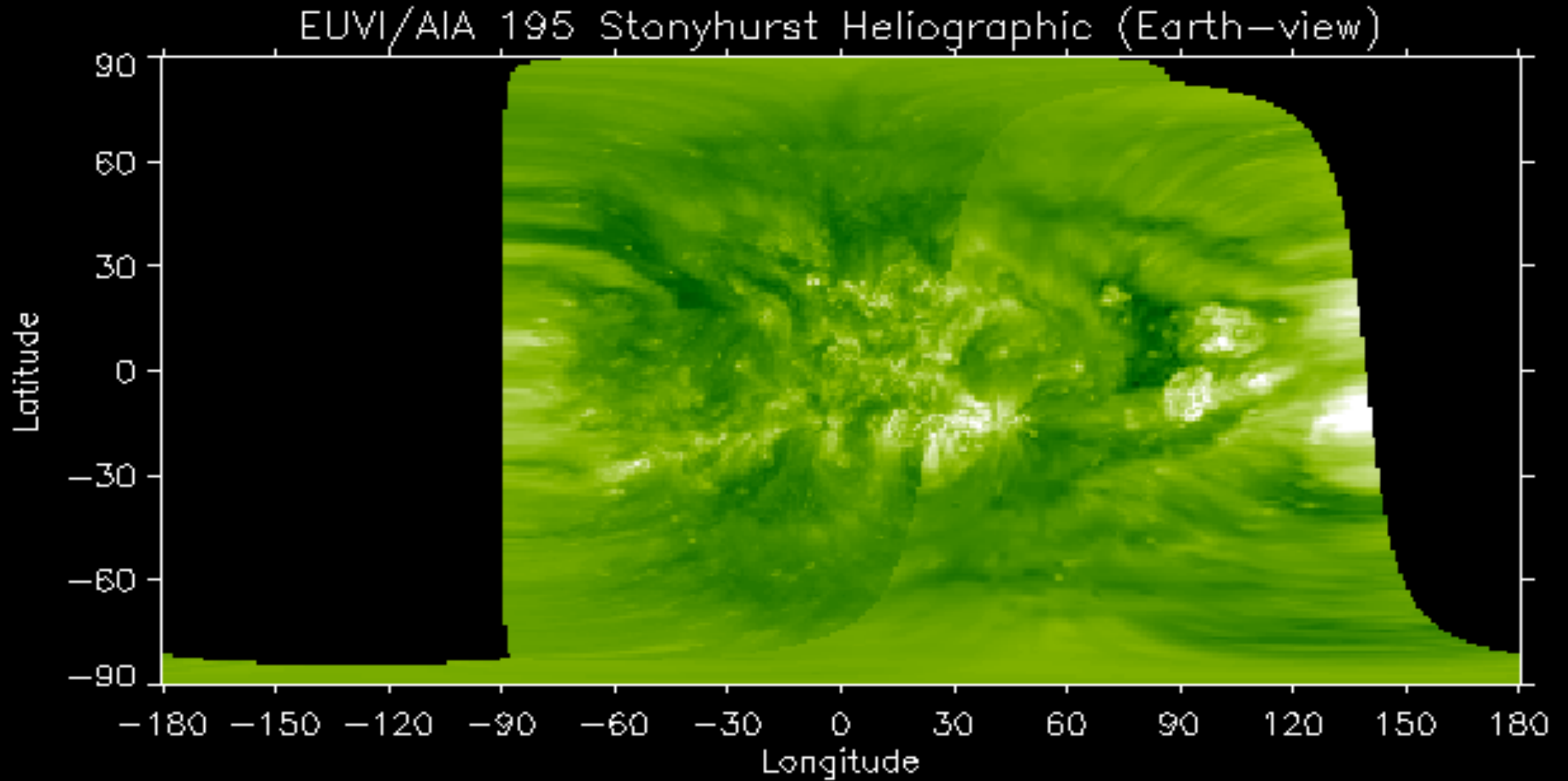
Outlook



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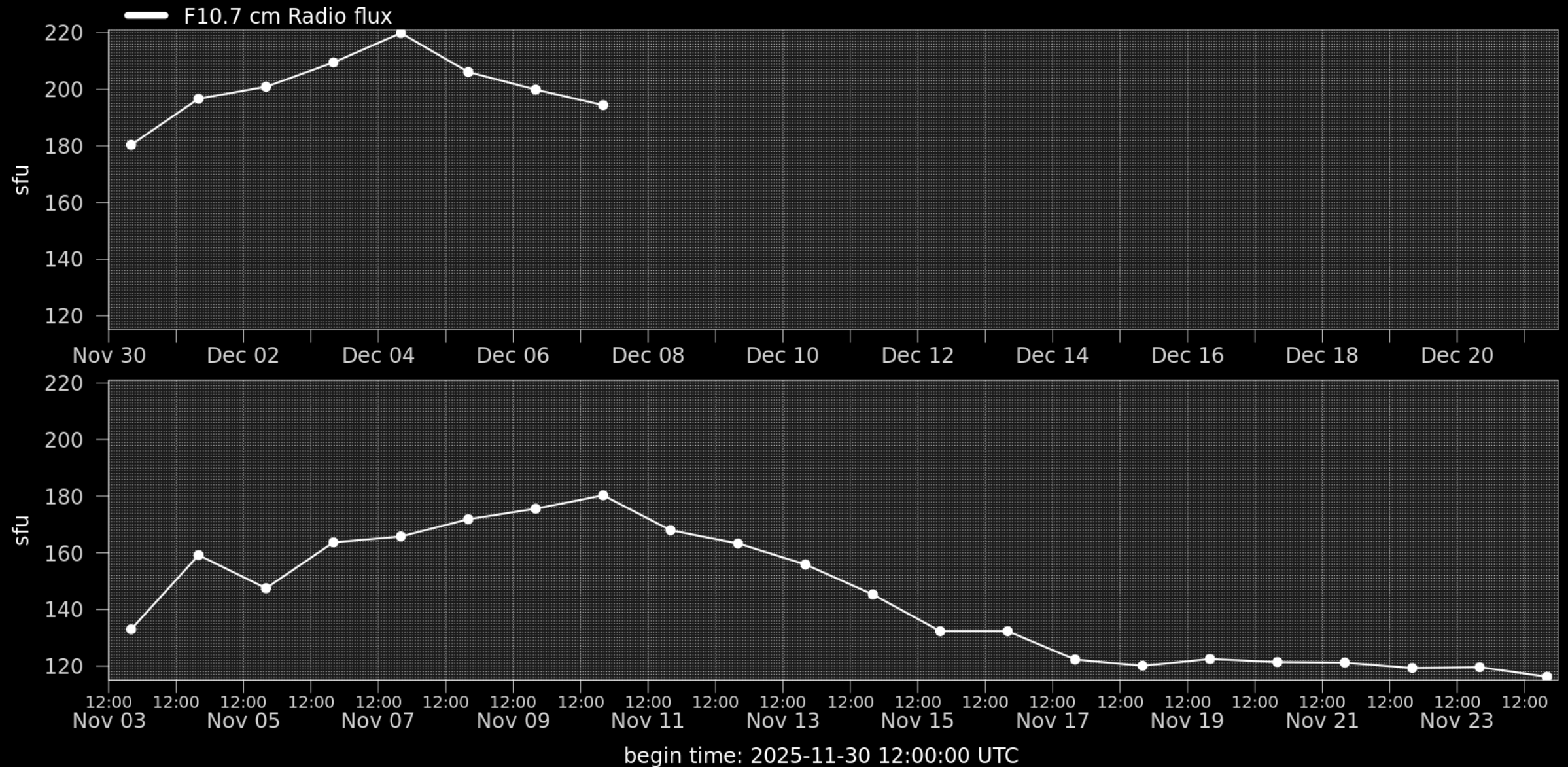
Solar Influences
Data analysis Centre
www.sidc.be

Outlook: Solar activity

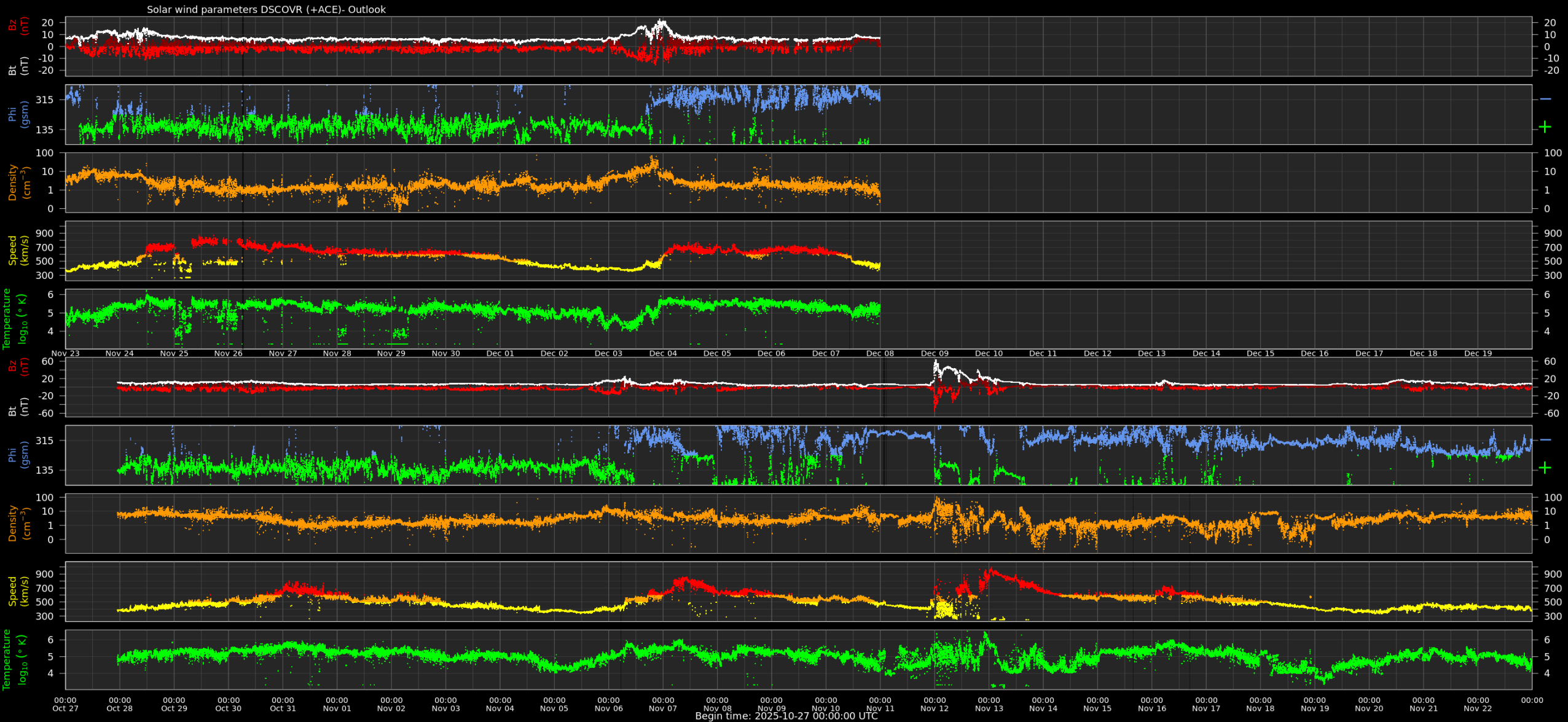


Observation date: 2025/12/07 21:35:00

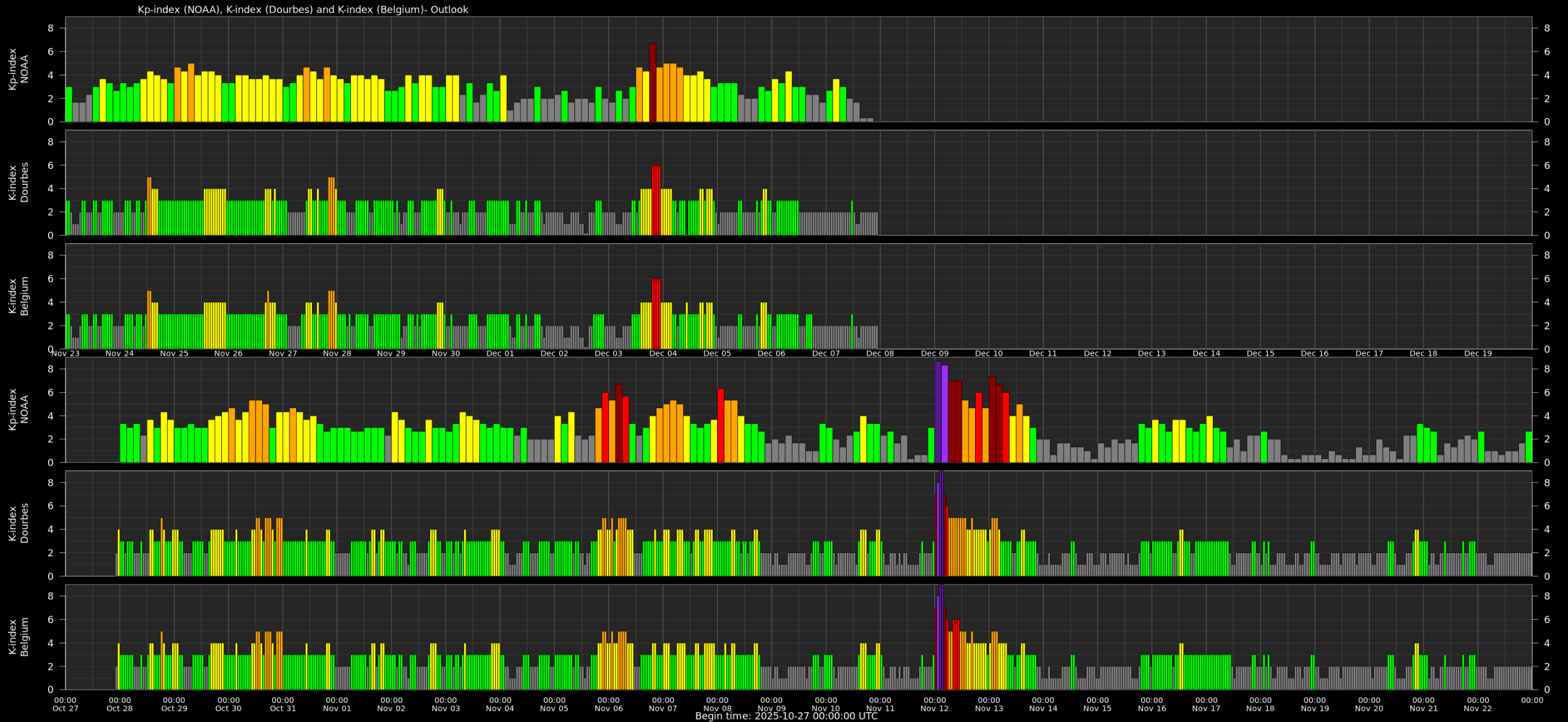
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pecarus related events

SWF, PSD, Scintillation events

SIDC Space Weather Briefing

See you at our next briefing!

Or visit us at www.sidc.be



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