

SIDC Space Weather Briefing

15 December 2025-21 December 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 2025-12-15 00:00 to 2025-12-21 23:59

Active regions	20 in total / magnetic type alpha and beta
Flares	# C-class flares: 32 # M-class flares: 3 # X-class flares: 0
Coronal Holes	1 complex with negative polarity / 1 with positive polarity
CMEs	A few, none Earth-directed

Proton flux	Below 10 pfu threshold
Electron flux	Exceeded the 1000 pfu threshold

Solar wind and geomagnetic conditions

ICMEs	None
Solar wind conditions	B : 0.25 - 15.54 nT //Bz: -11.74 nT to 12.84 nT //Speed: 380 – 700 km/s
Geomagnetic conditions	max K _{Be} : 5.0, max K _p (NOAA): 5.0, Minor Storm conditions

All Quiet Alert: Off

Solar Activity

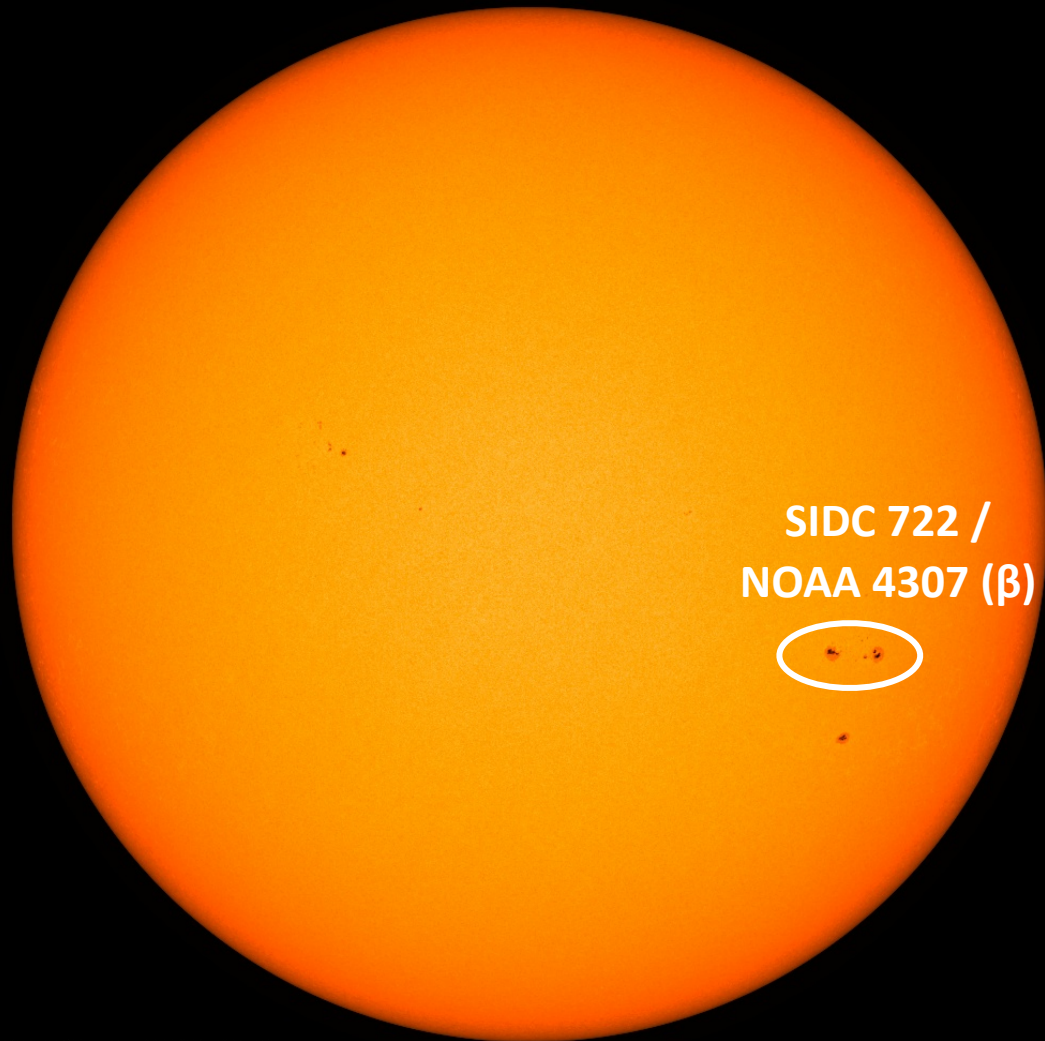


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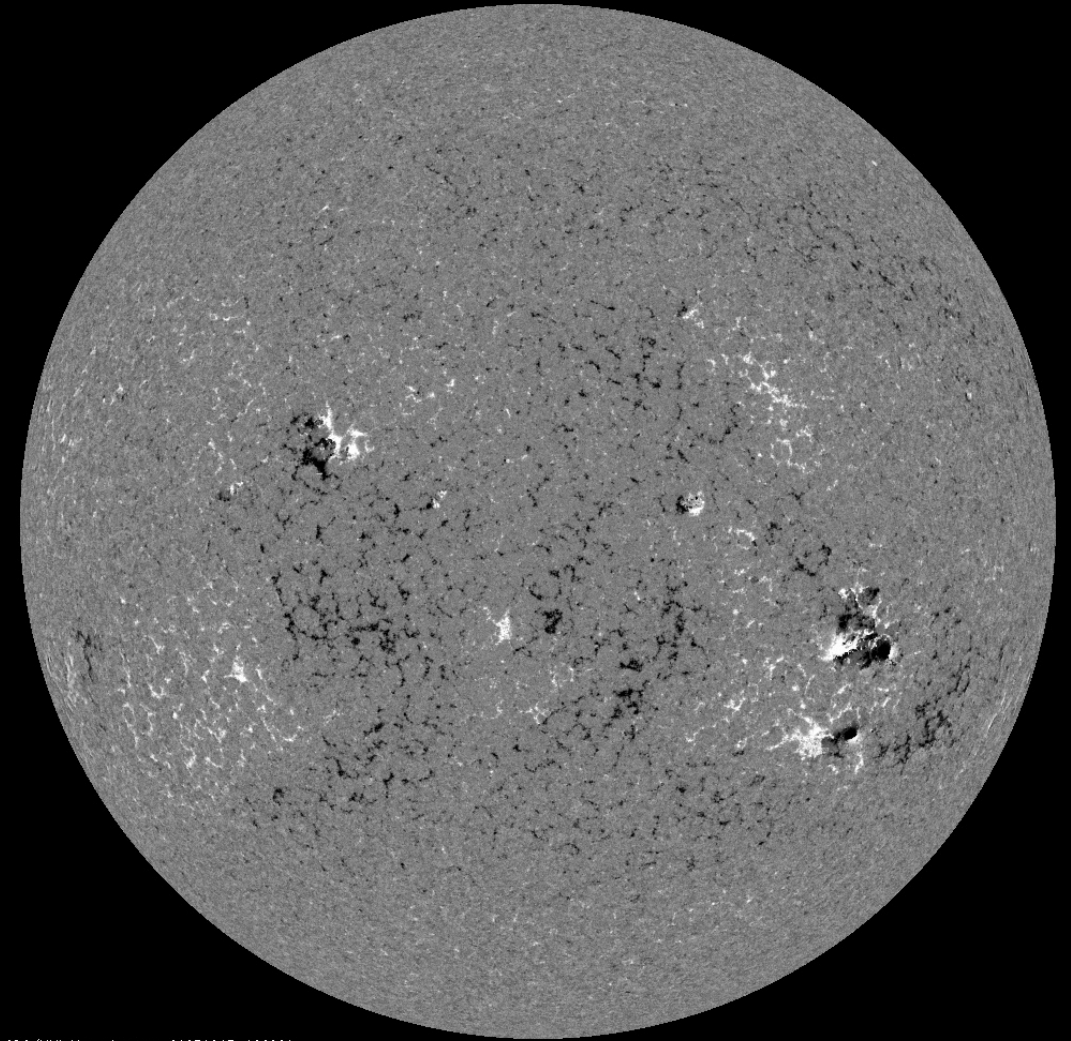
Solar active regions

SDO/HMI White Light 2025-12-15



SDO/HMI Continuum: 20251215_120000

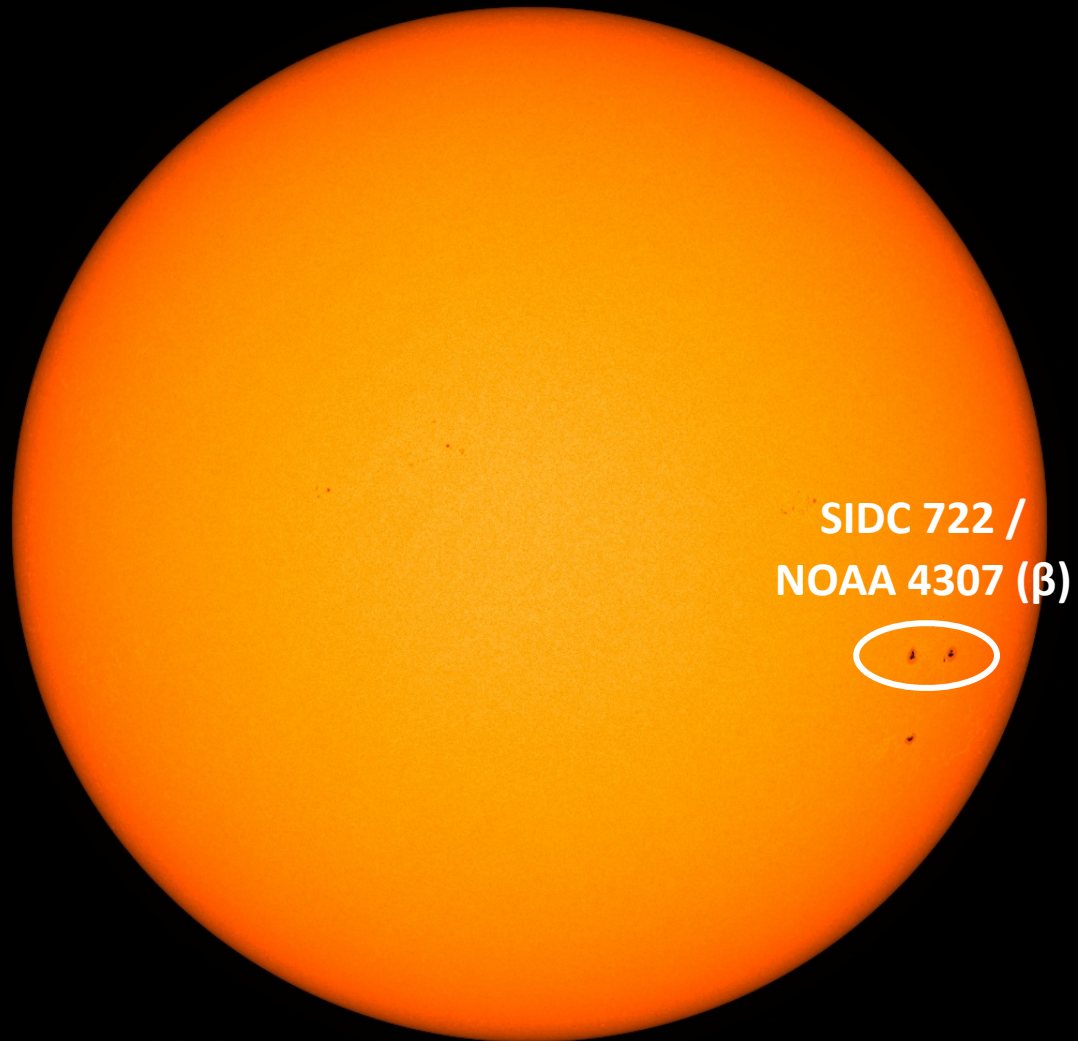
SDO/HMI Magnetogram 2025-12-15



SDO/HMI Magnetogram: 20251215_120000

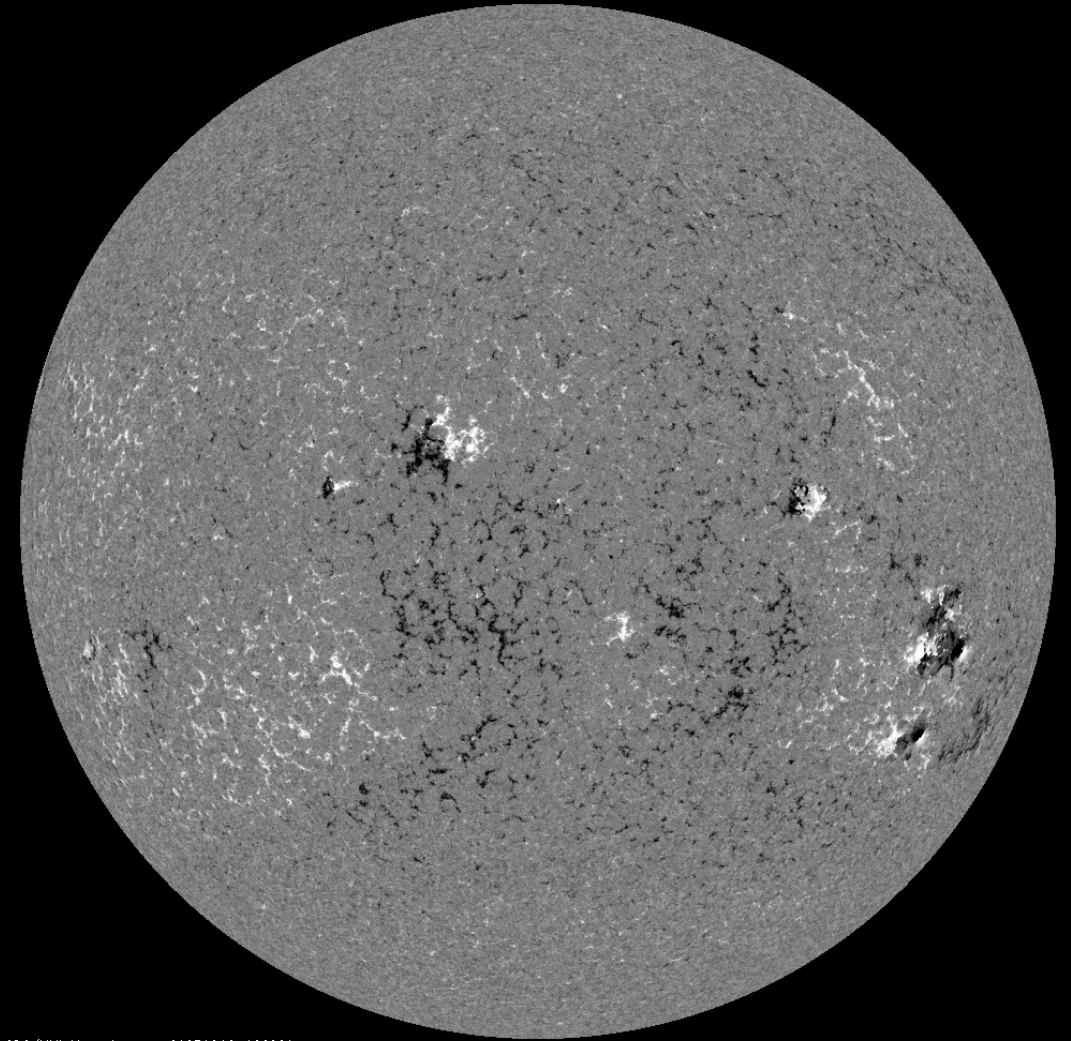
Solar active regions

SDO/HMI White Light 2025-12-16



SDO/HMI Continuum: 20251216_120000

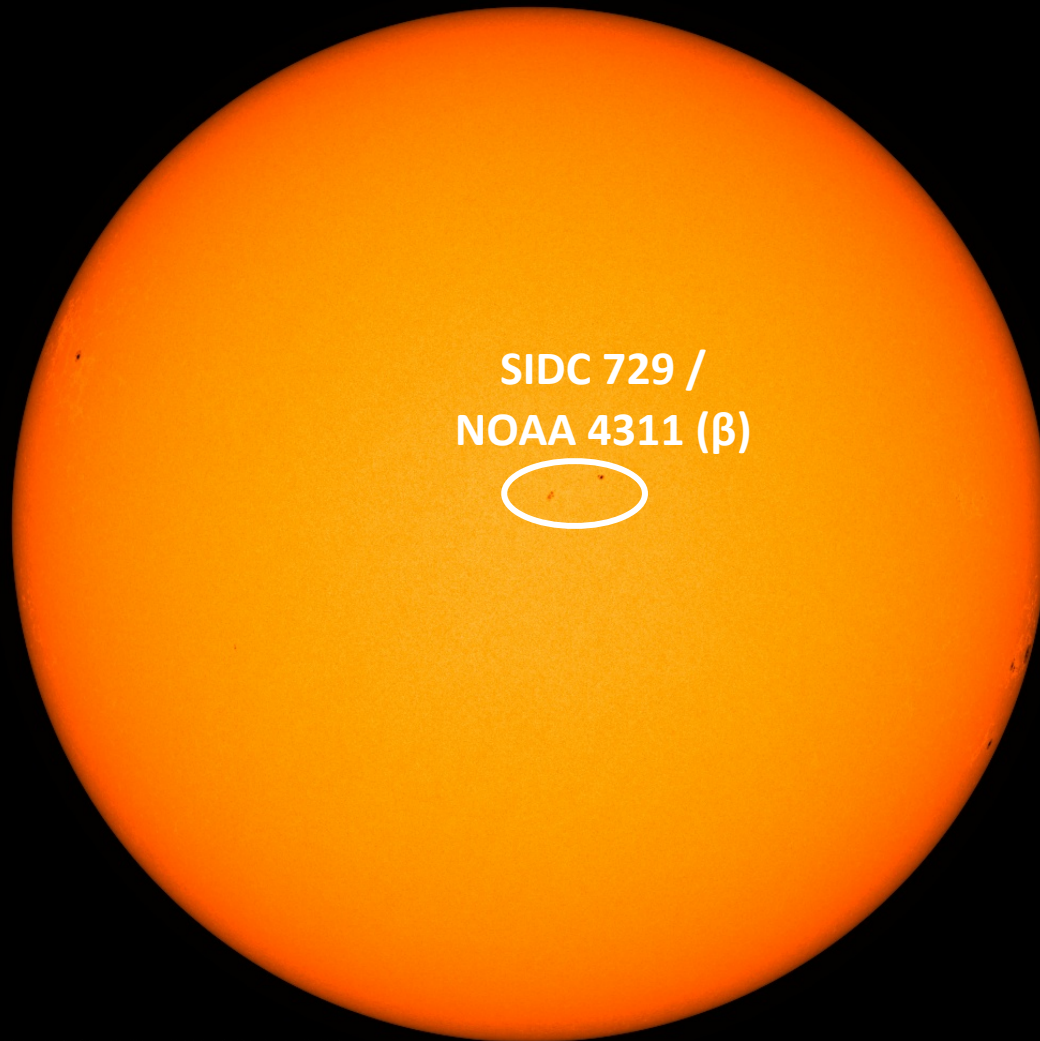
SDO/HMI Magnetogram 2025-12-16



SDO/HMI Magnetogram: 20251216_120000

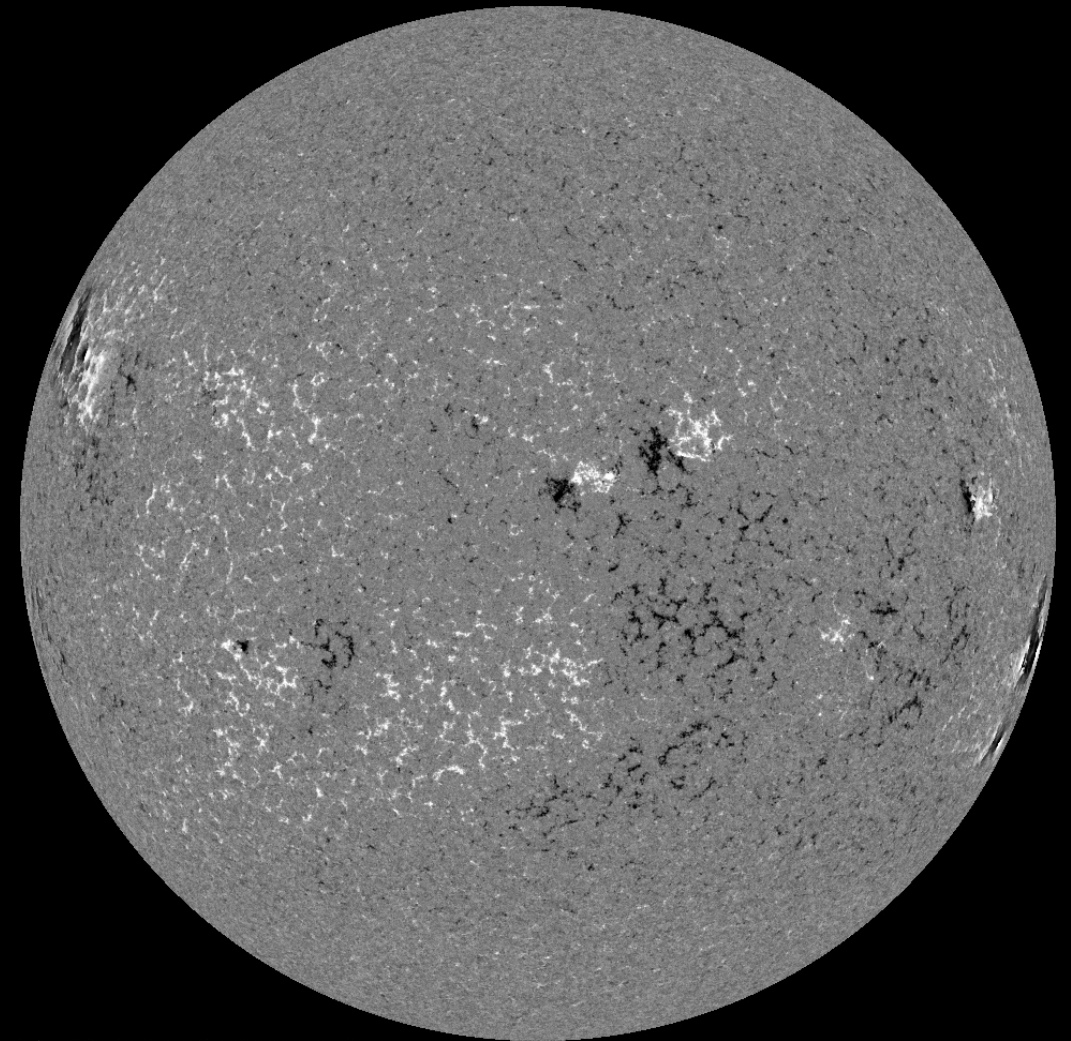
Solar active regions

SDO/HMI White Light 2025-12-18



SDO/HMI Quick-Look Continuum: 20251218_120000

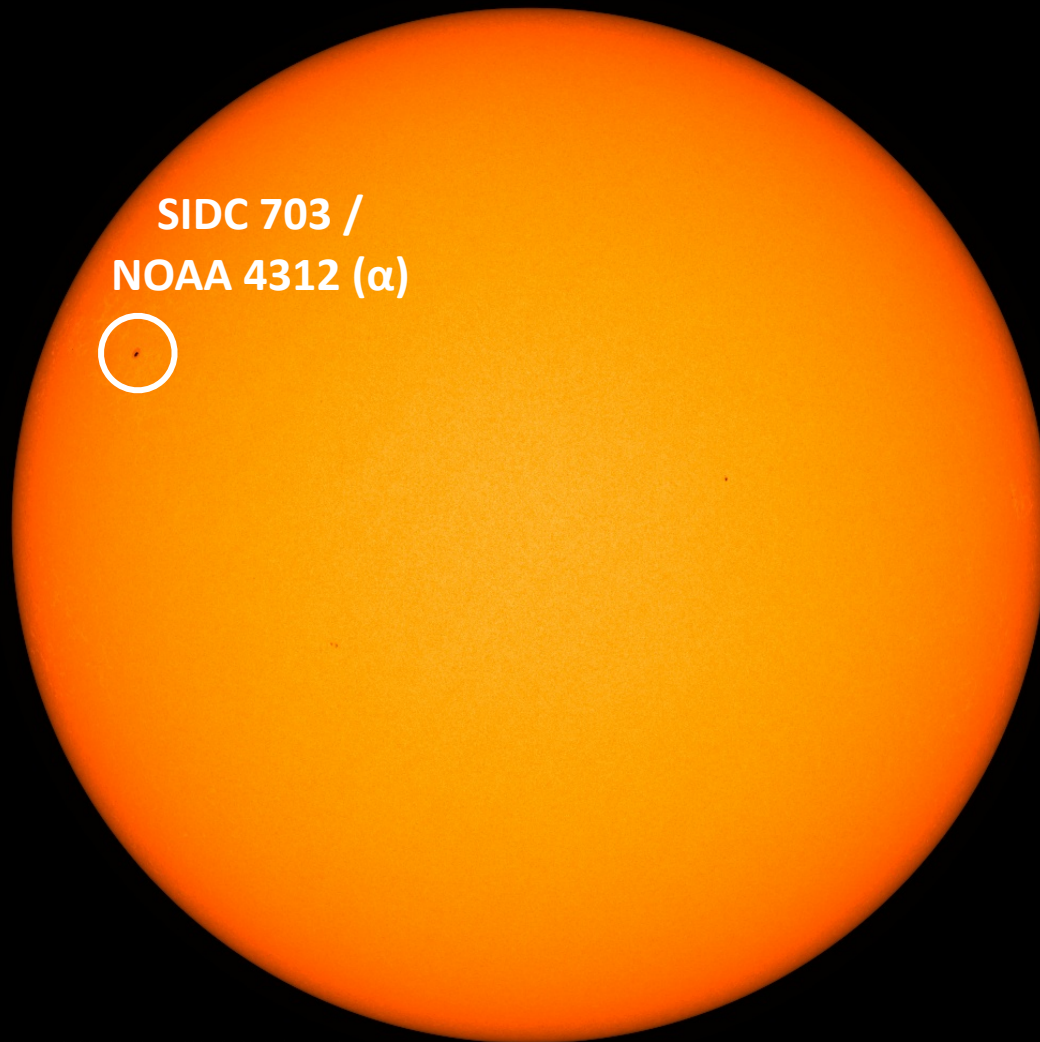
SDO/HMI Magnetogram 2025-12-18



SDO/HMI Quick-Look Magnetogram: 20251218_120000

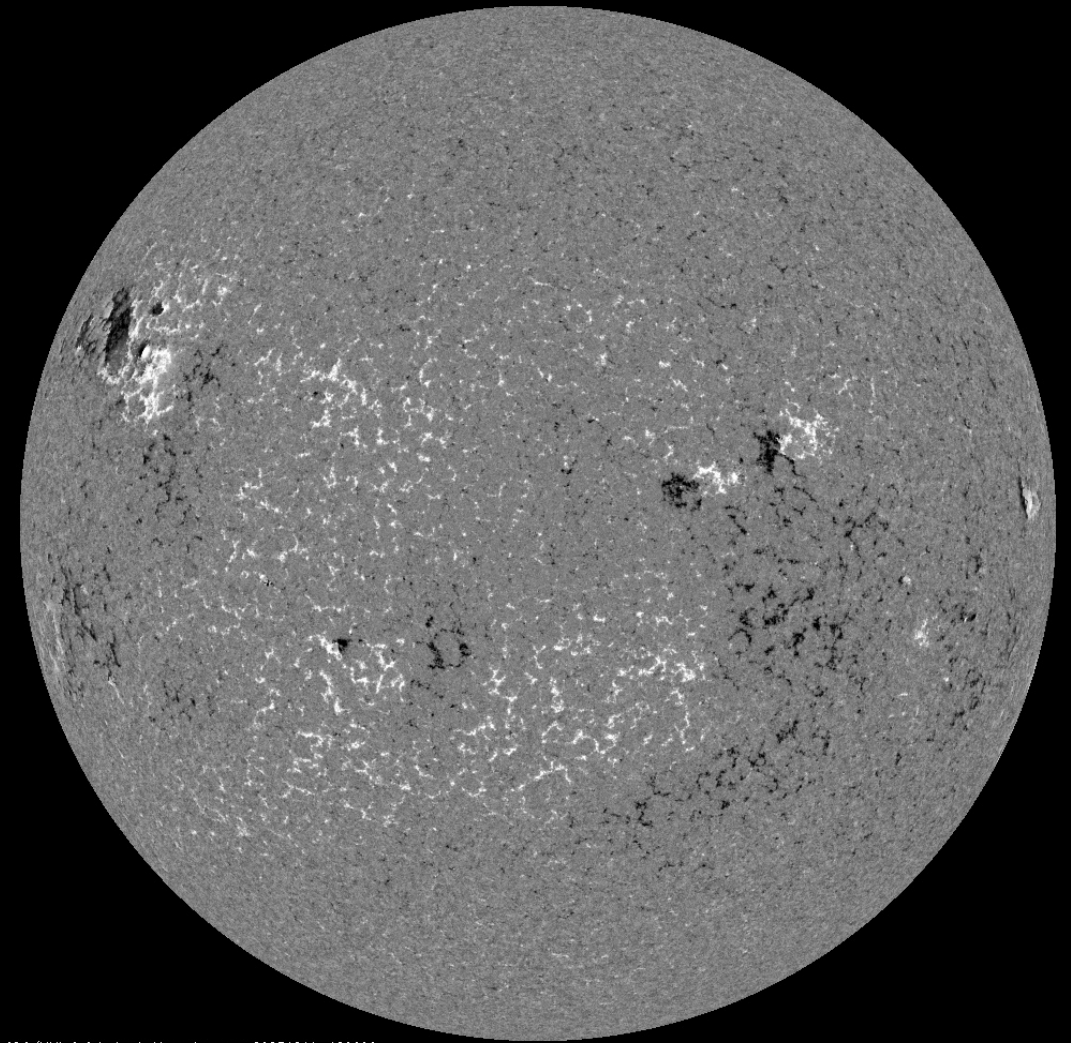
Solar active regions

SDO/HMI White Light 2025-12-19



SDO/HMI Quick-Look Continuum: 20251219_120000

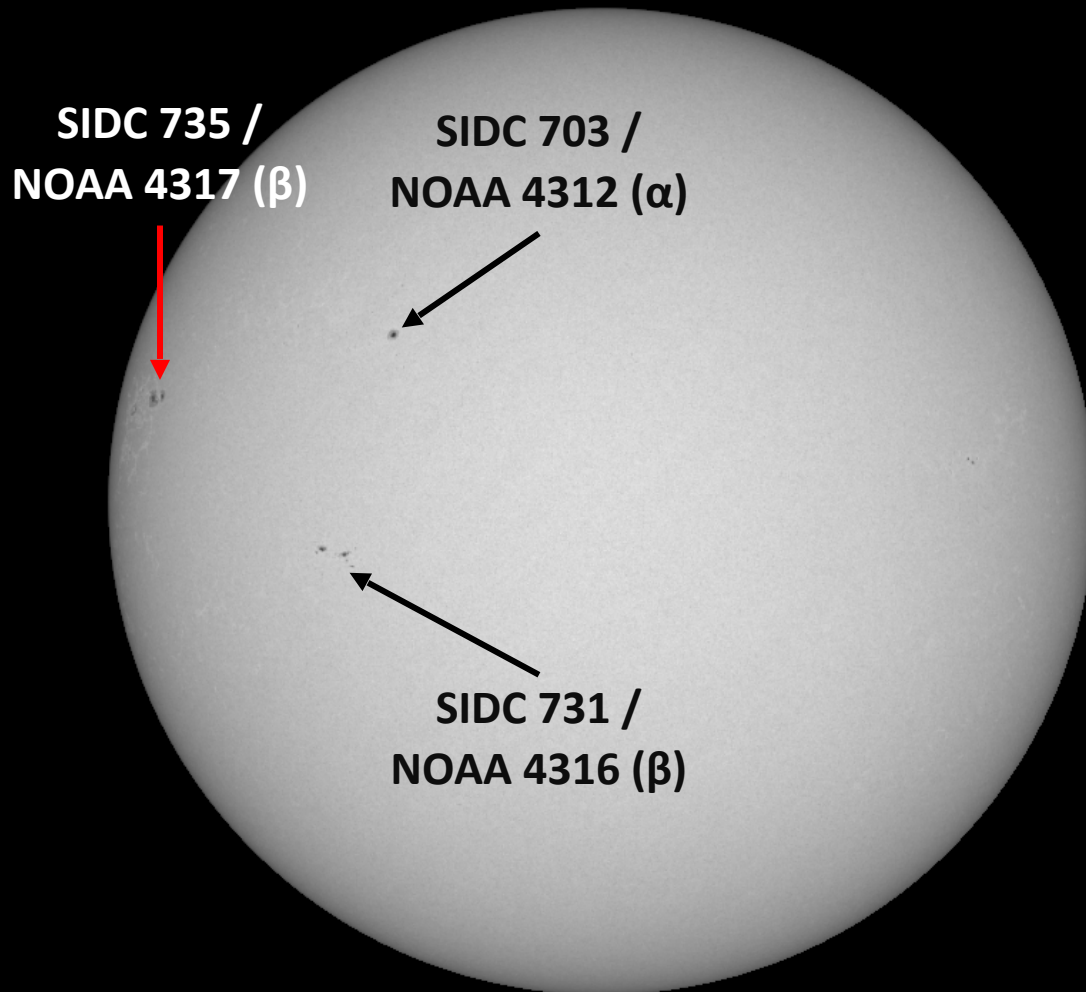
SDO/HMI Magnetogram 2025-12-19



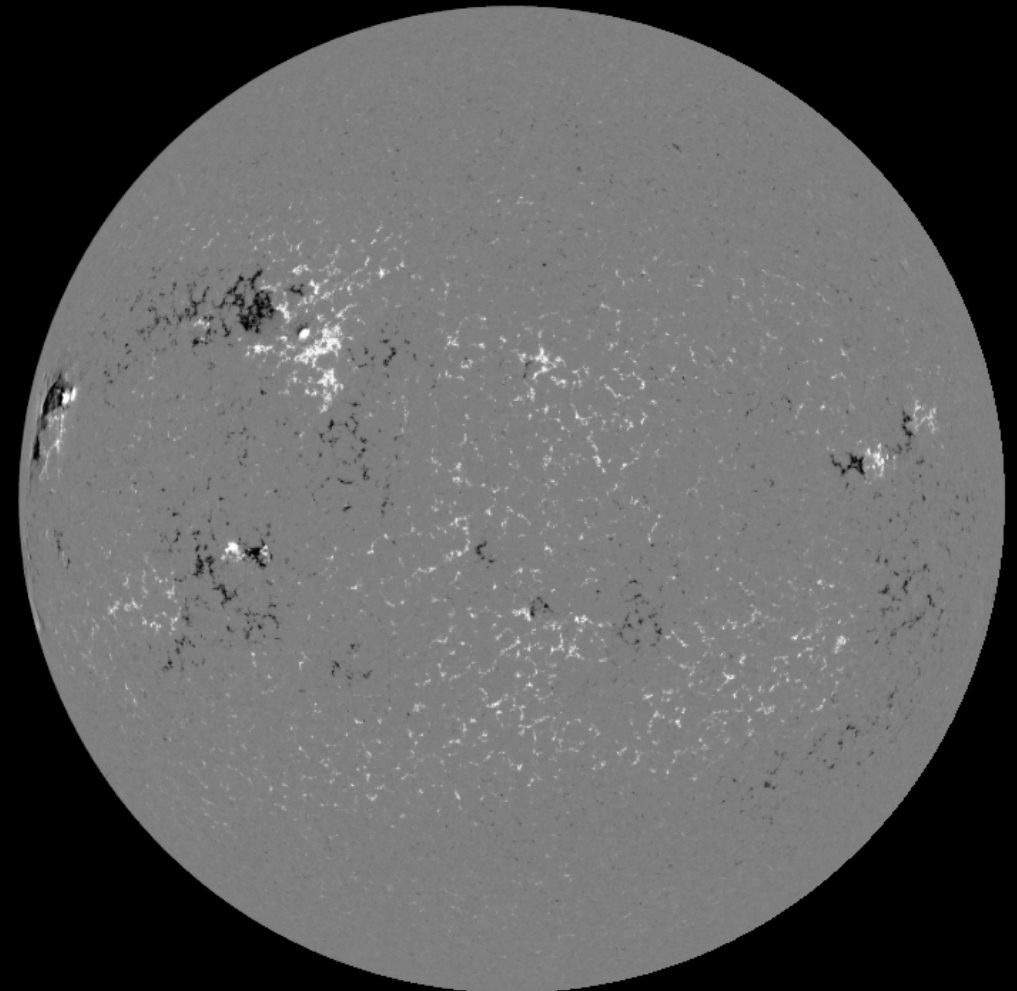
SDO/HMI Quick-Look Magnetogram: 20251219_120000

Solar active regions

SDO/HMI White Light 2025-12-21



SDO/HMI Magnetogram 2025-12-21

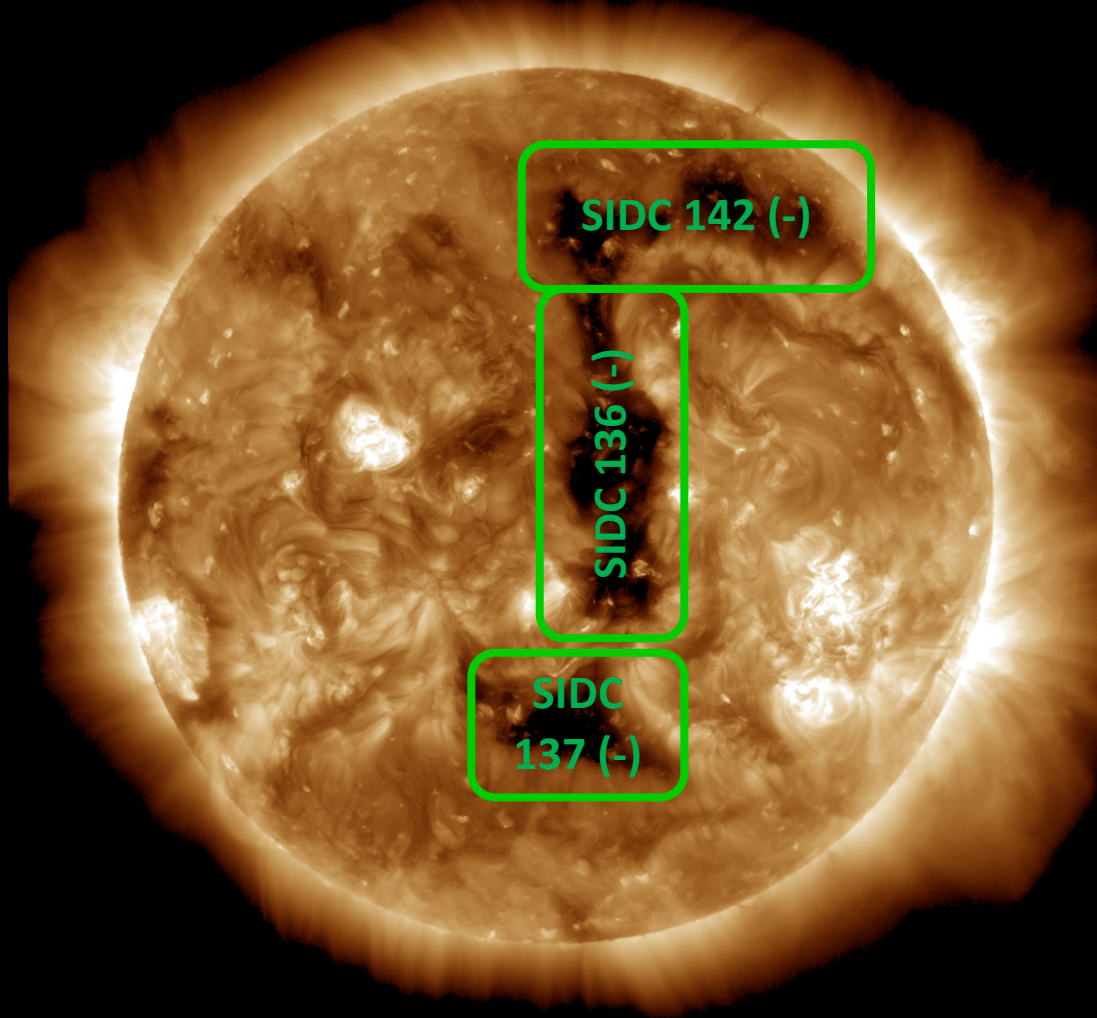


12:00 UTC

Coronal holes

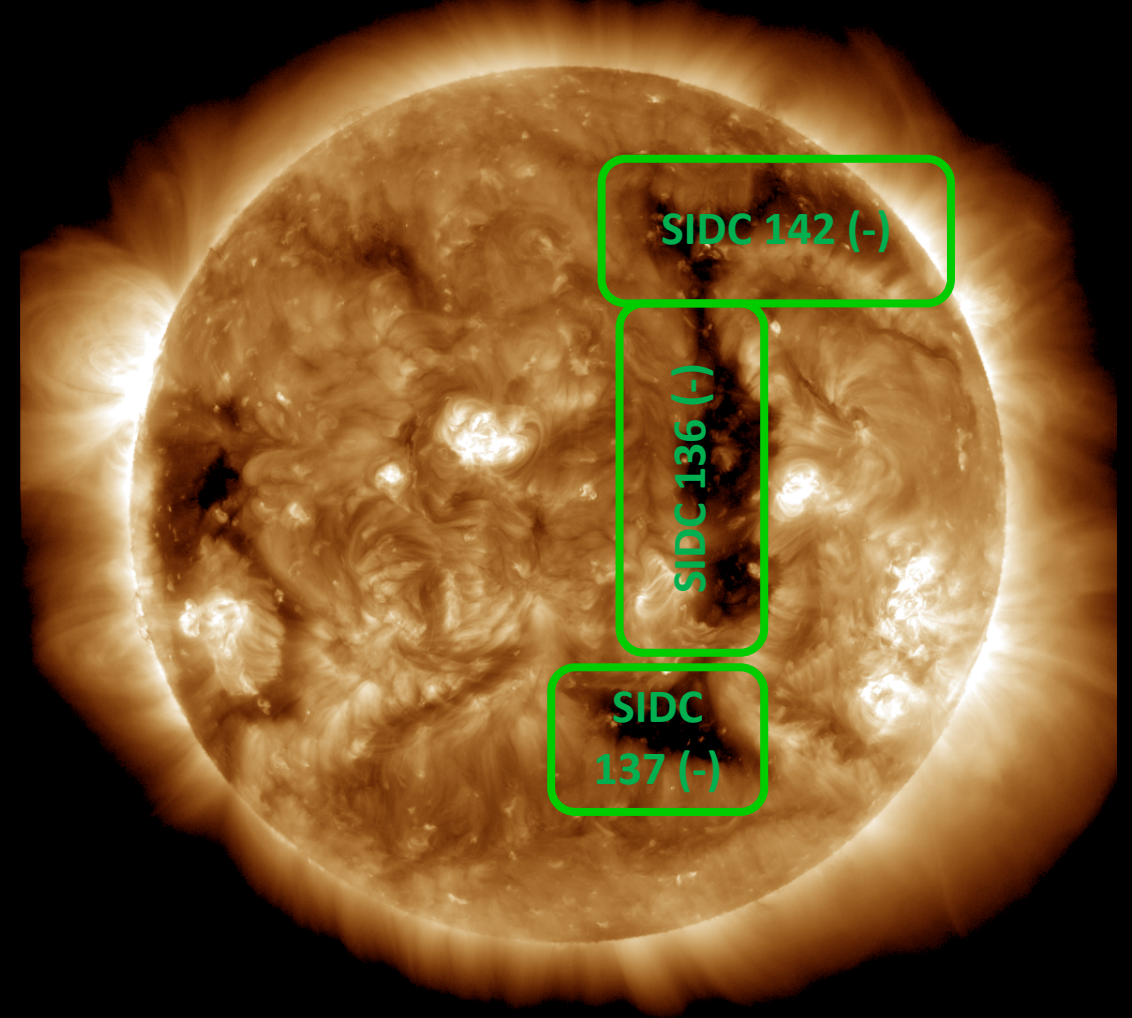
SDO/AIA 19.3 nm 2025-12-15

SDO/AIA AIA 193Å 2025-12-15T12:00:05.843



SDO/AIA 19.3 nm 2025-12-16

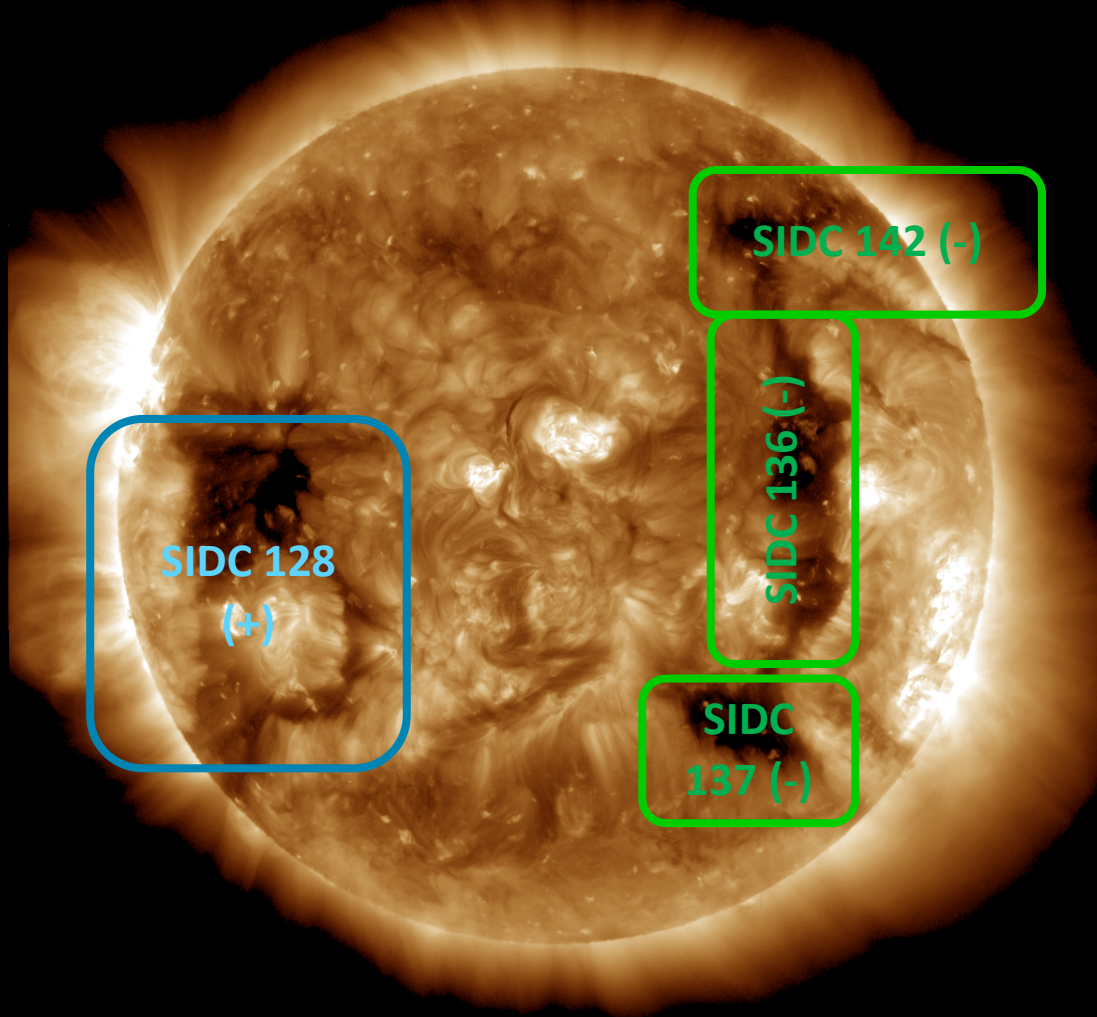
SDO/AIA AIA 193Å 2025-12-16T12:00:05.835



Coronal holes

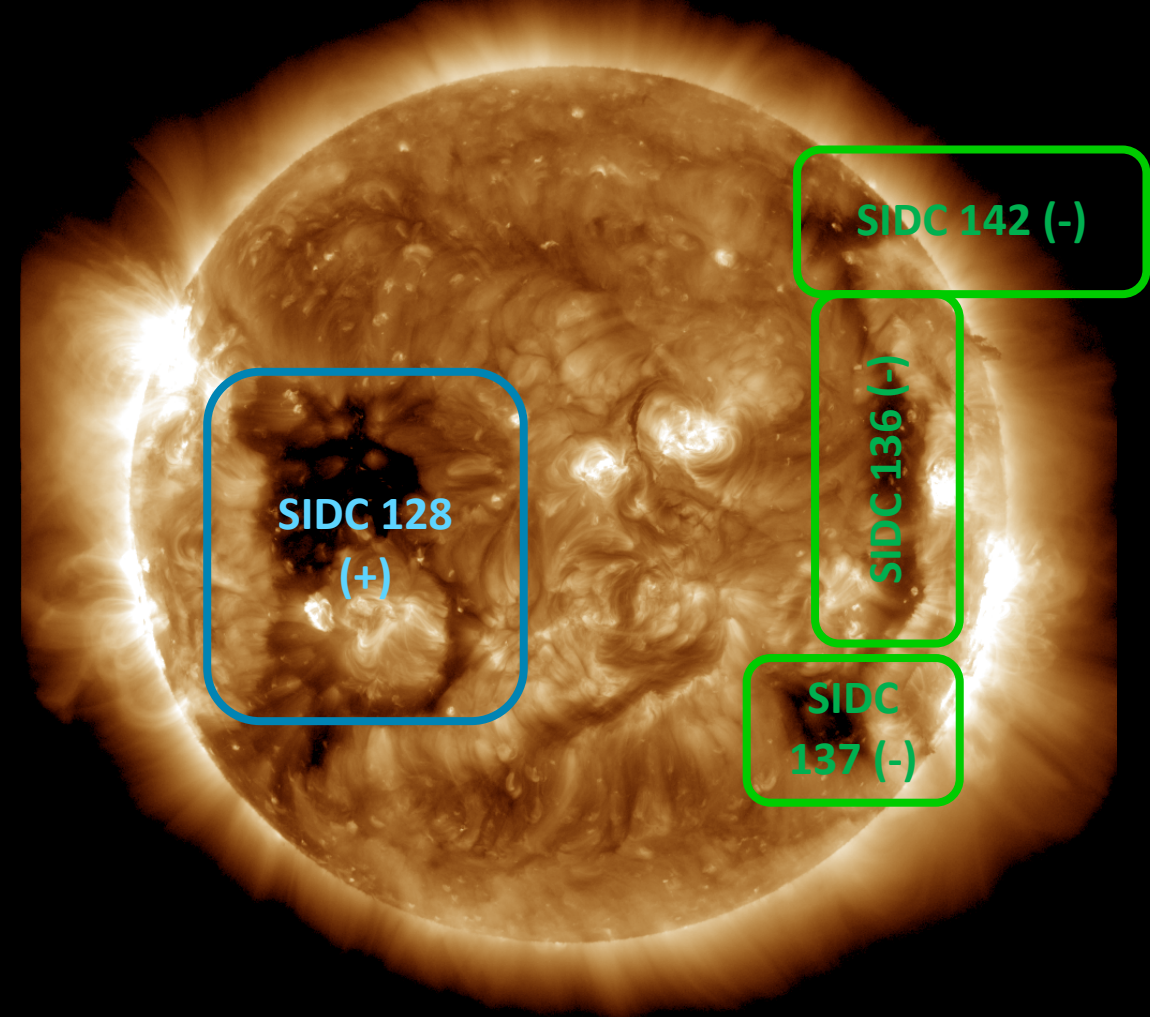
SDO/AIA 19.3 nm 2025-12-17

SDO/AIA AIA 193Å 2025-12-17T12:00:05.835



SDO/AIA 19.3 nm 2025-12-18

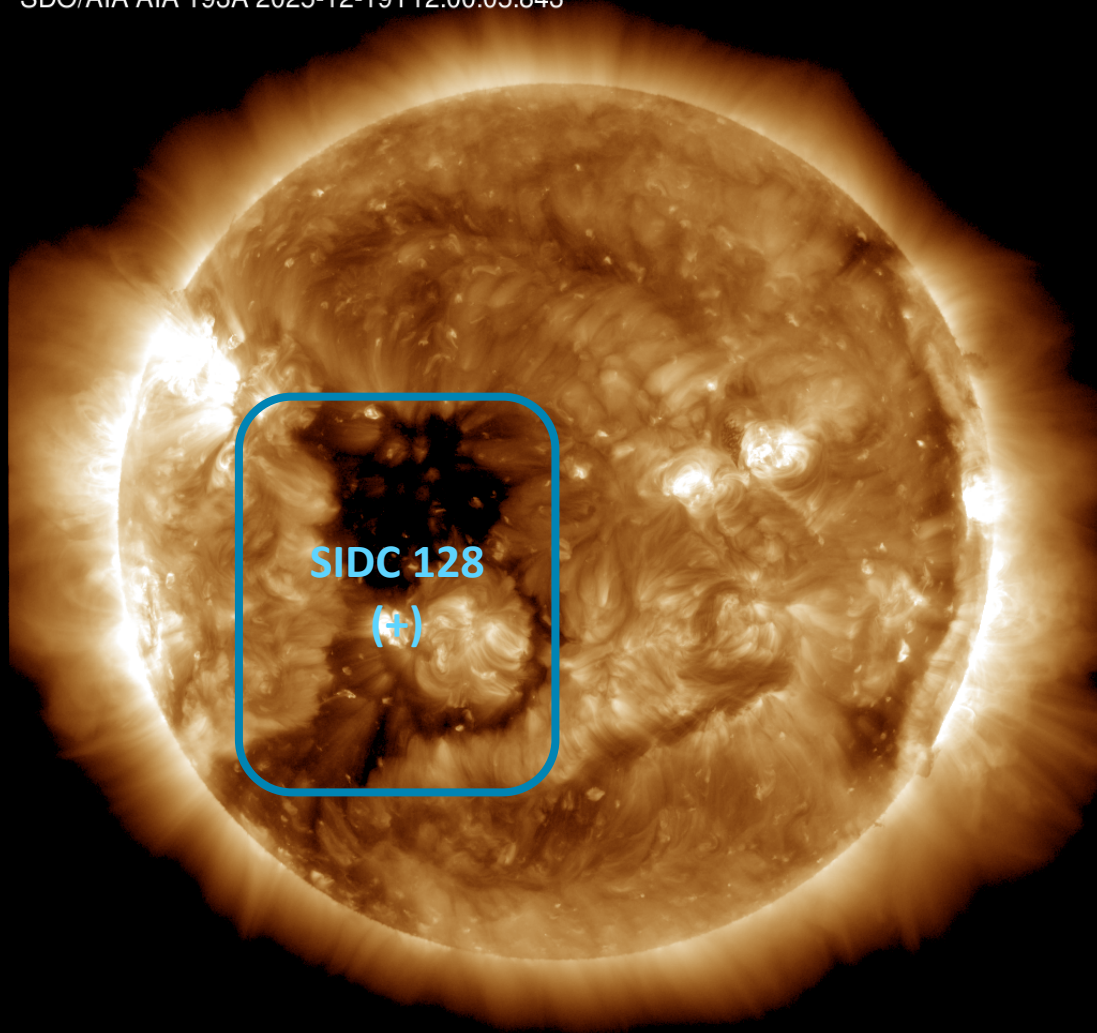
SDO/AIA AIA 193Å 2025-12-18T12:00:05.842



Coronal holes

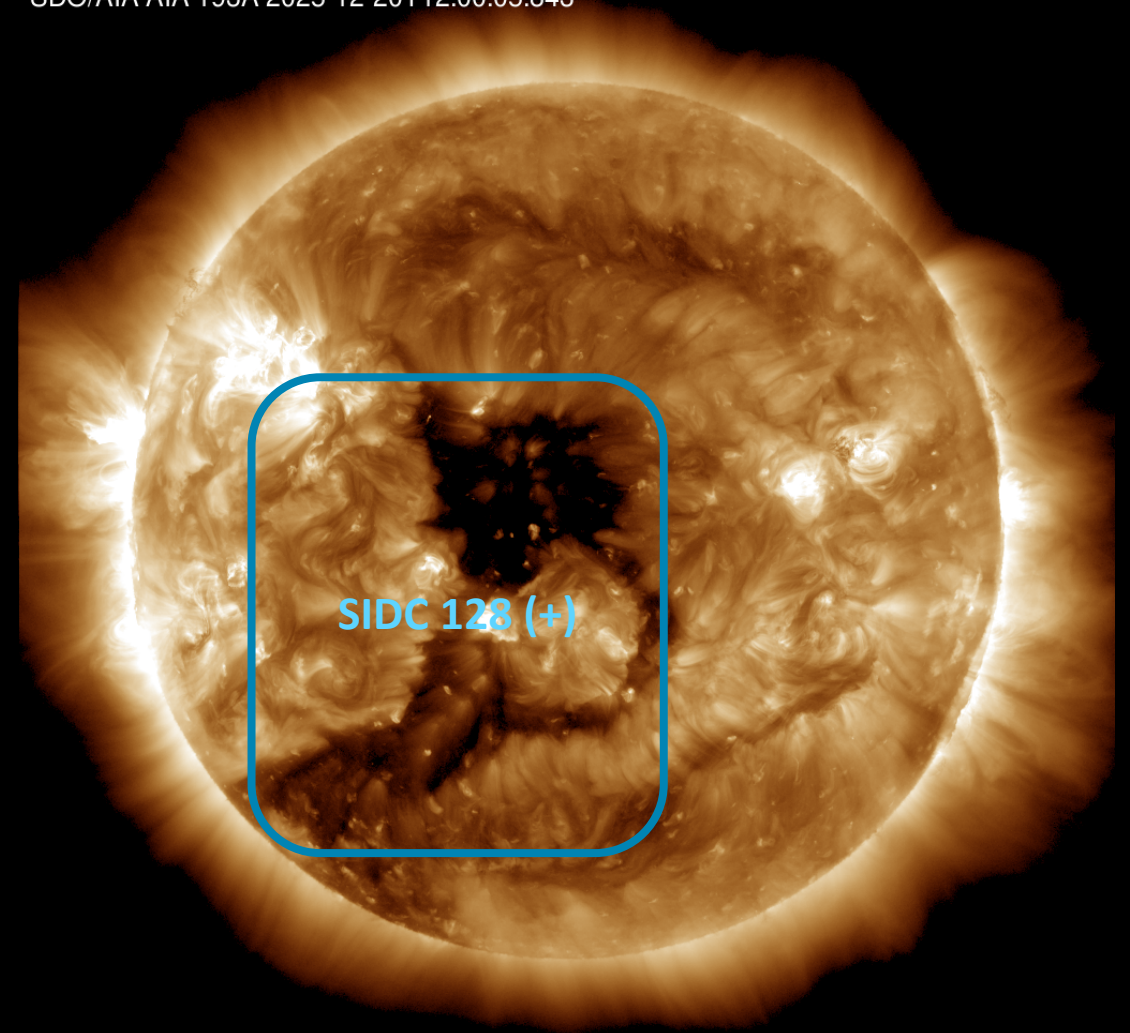
SDO/AIA 19.3 nm 2025-12-19

SDO/AIA AIA 193Å 2025-12-19T12:00:05.843



SDO/AIA 19.3 nm 2025-12-20

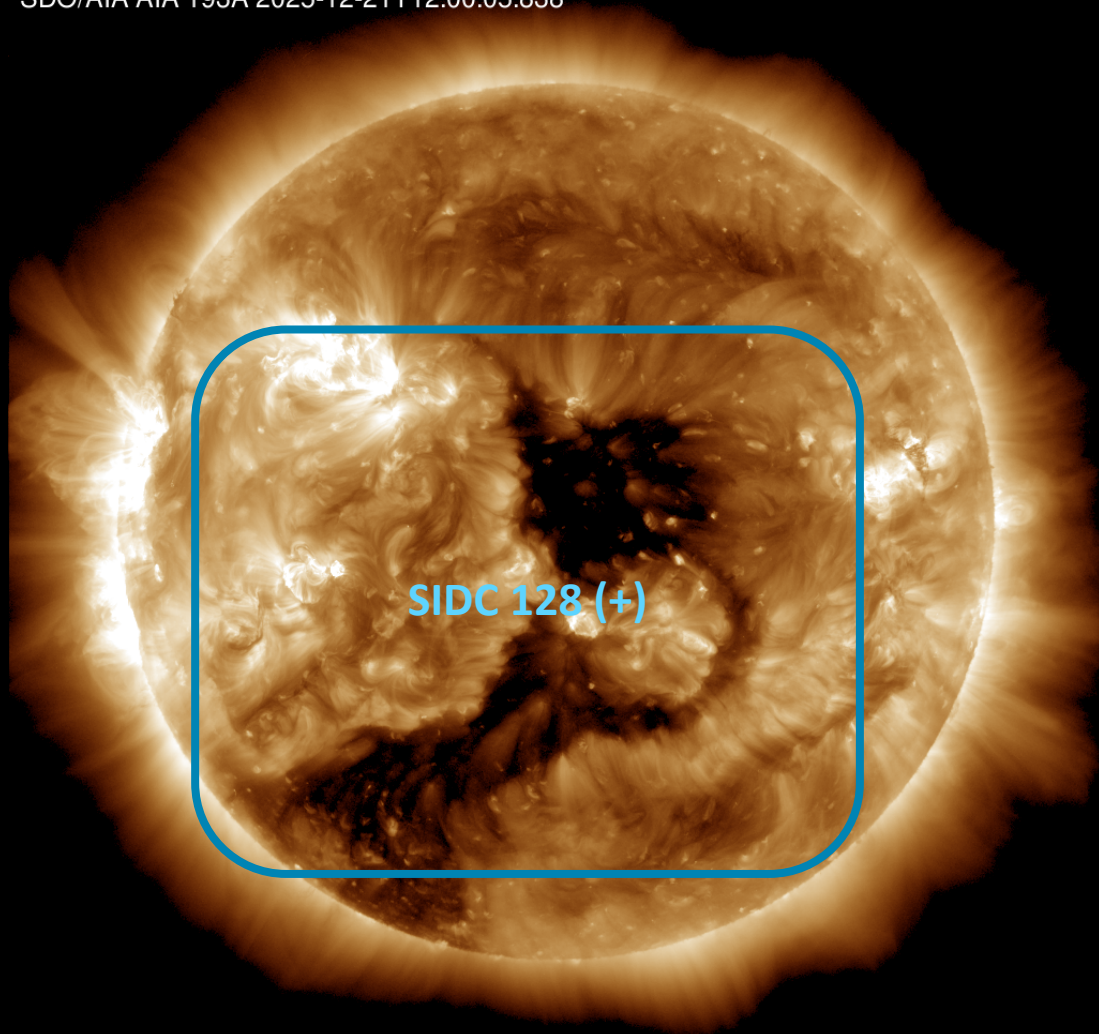
SDO/AIA AIA 193Å 2025-12-20T12:00:05.843



Coronal holes

SDO/AIA 19.3 nm 2025-12-21

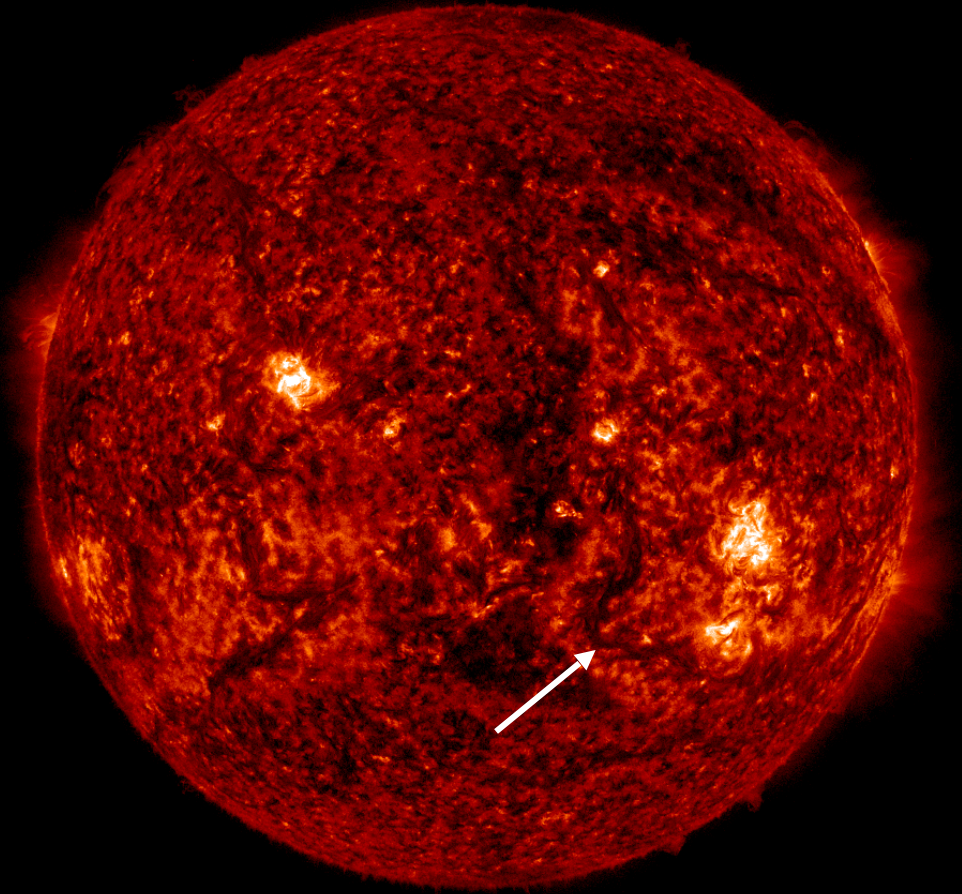
SDO/AIA AIA 193Å 2025-12-21T12:00:05.838



Filaments

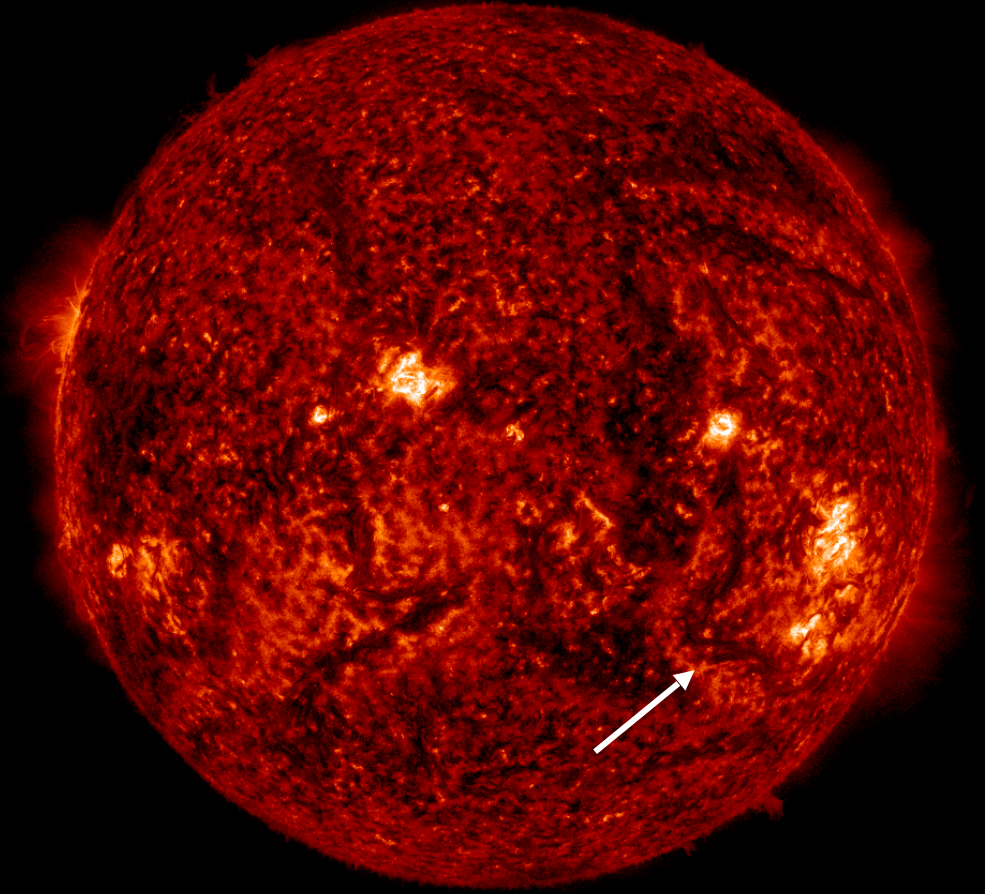
SDO/AIA 30.4 nm 2025-12-15

SDO/AIA AIA 304Å 2025-12-15T12:00:06.580



SDO/AIA 30.4 nm 2025-12-16

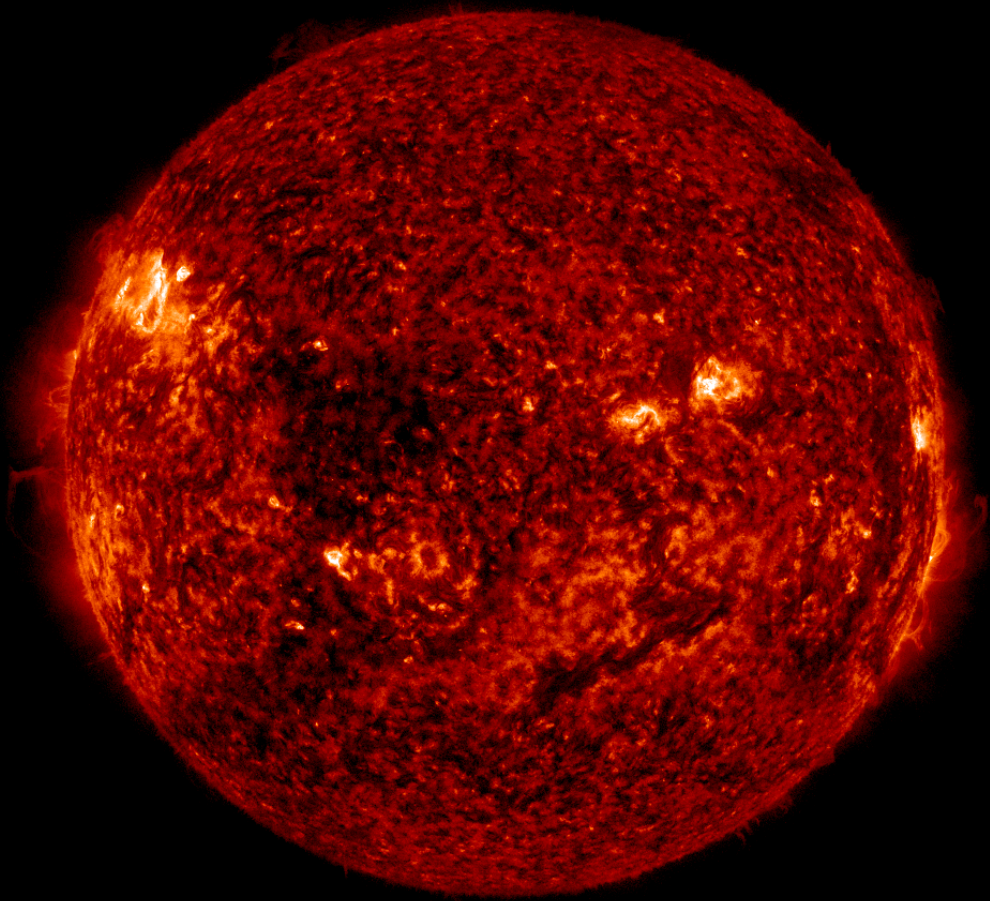
SDO/AIA AIA 304Å 2025-12-16T12:00:06.580



Filaments

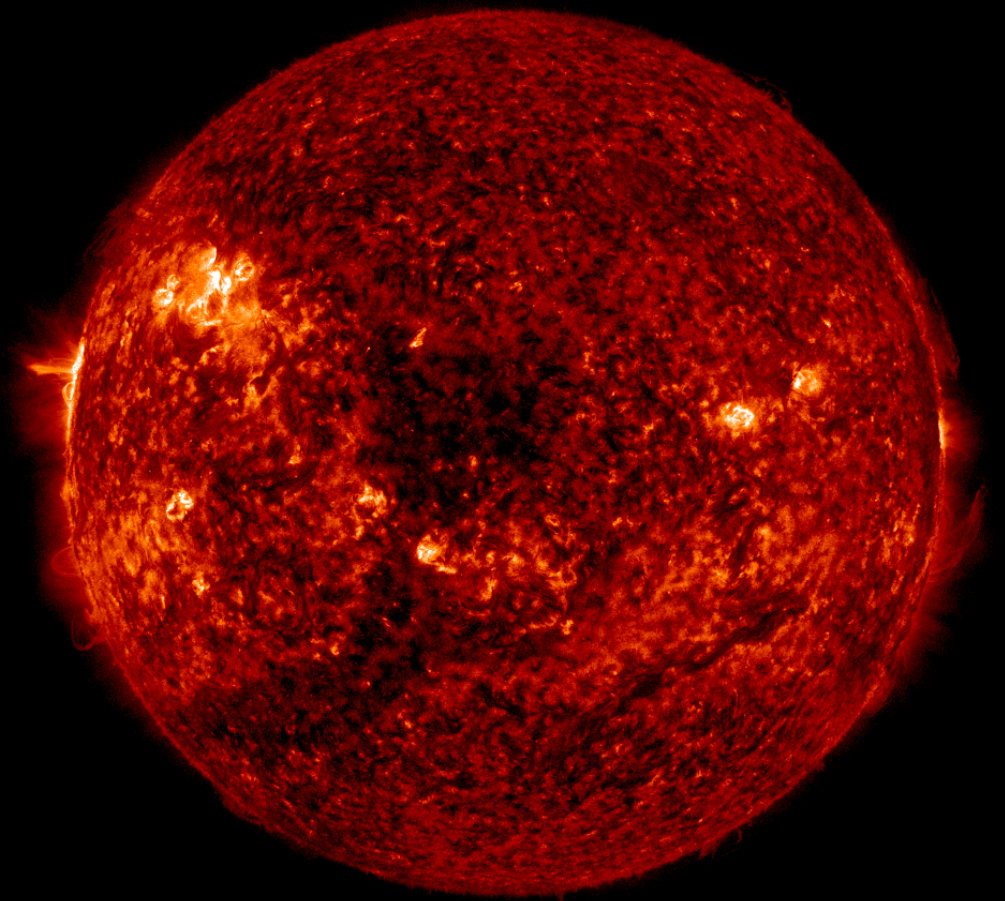
SDO/AIA 30.4 nm 2025-12-19

SDO/AIA AIA 304Å 2025-12-19T12:00:06.597



SDO/AIA 30.4 nm 2025-12-20

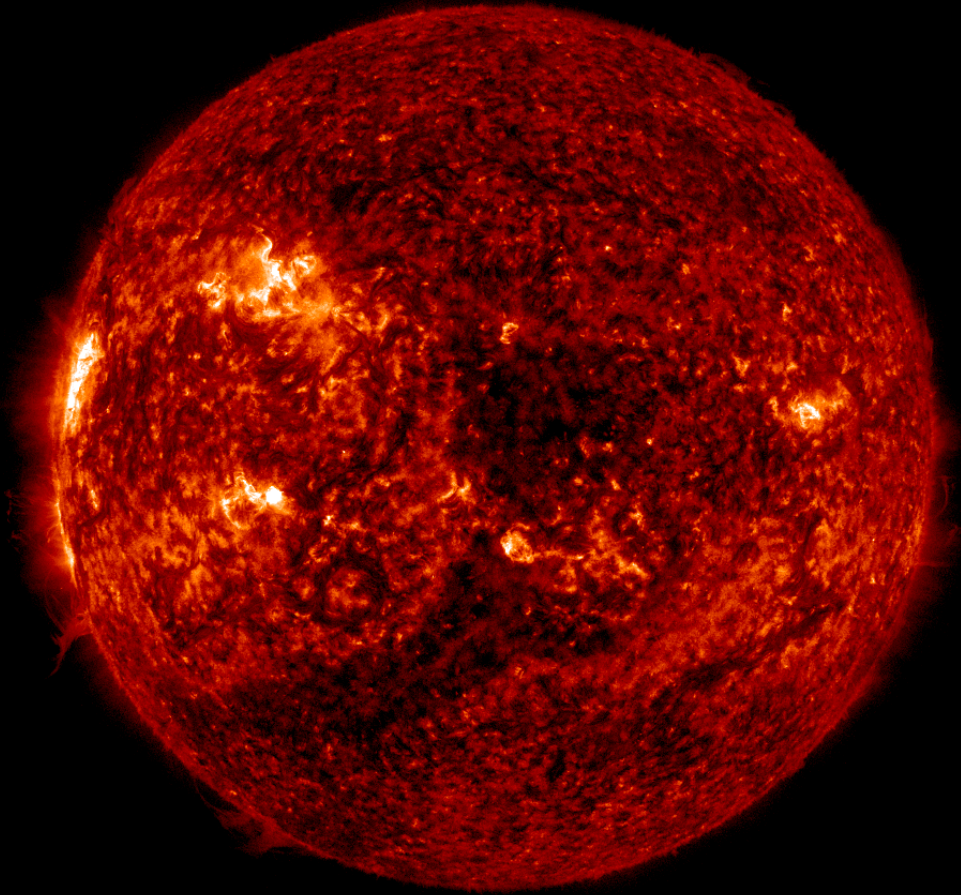
SDO/AIA AIA 304Å 2025-12-20T12:00:06.580



Filaments

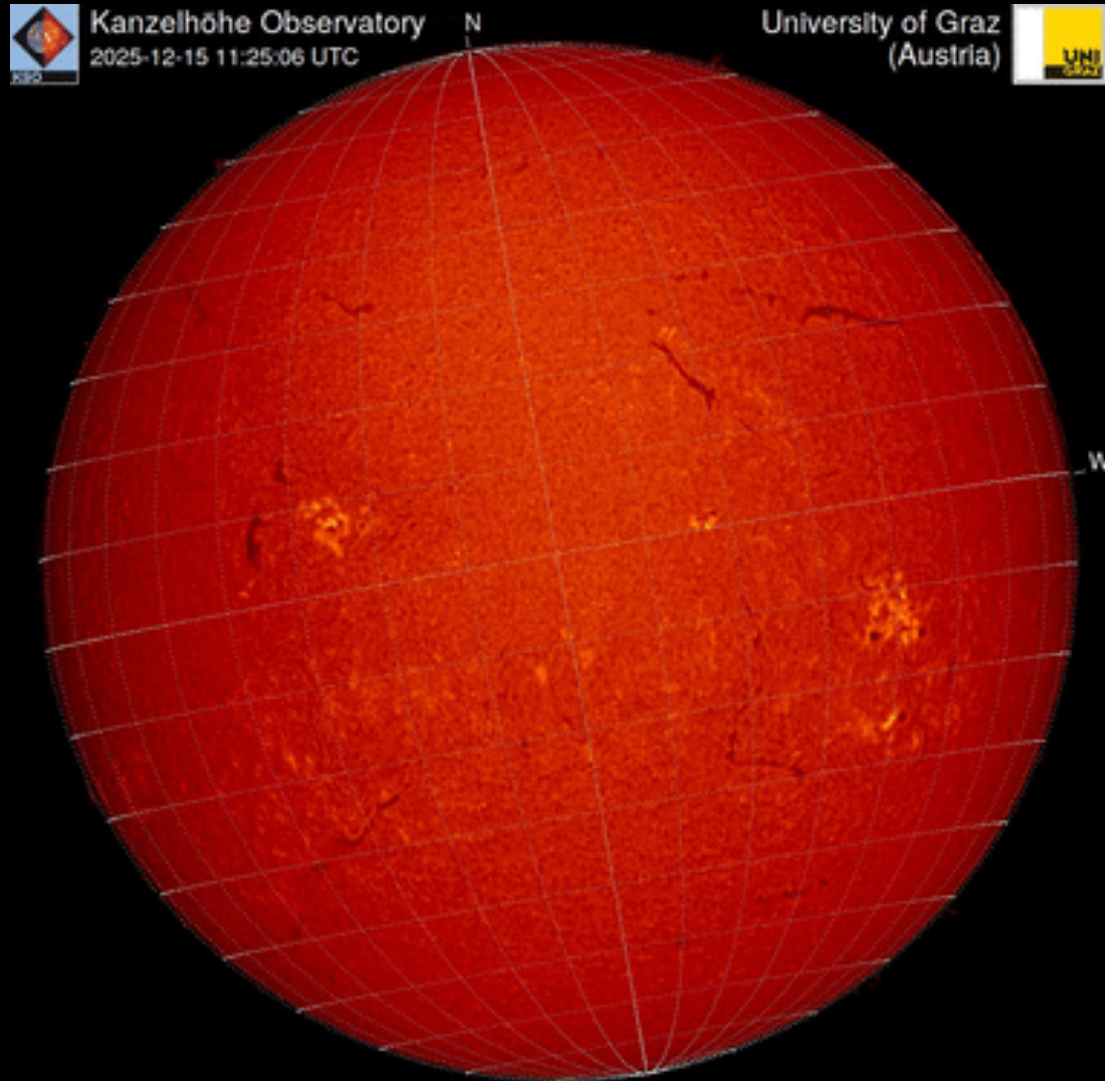
SDO/AIA 30.4 nm 2025-12-21

SDO/AIA AIA 304Å 2025-12-21T12:00:06.581

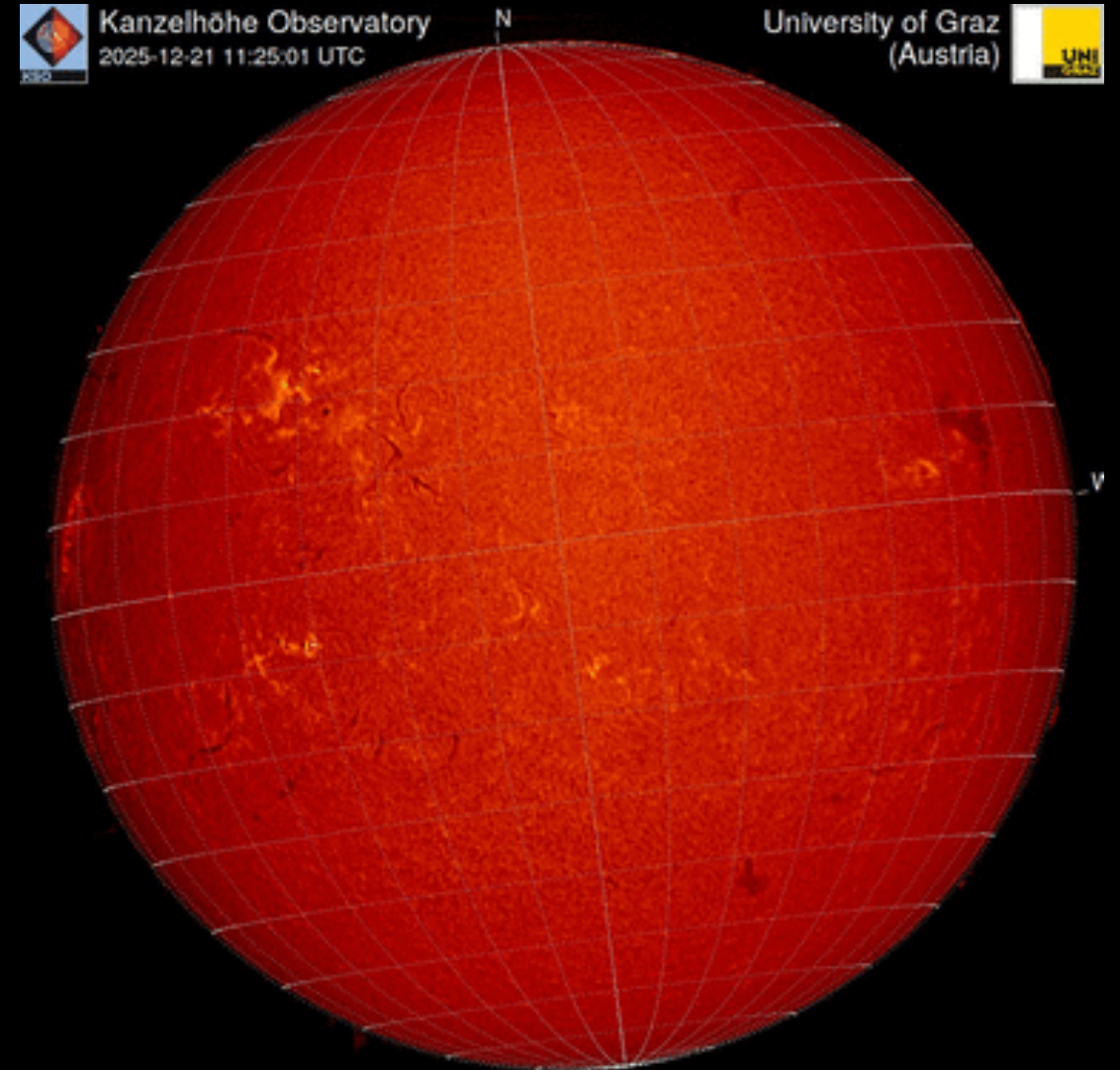


Filaments & Filament eruptions

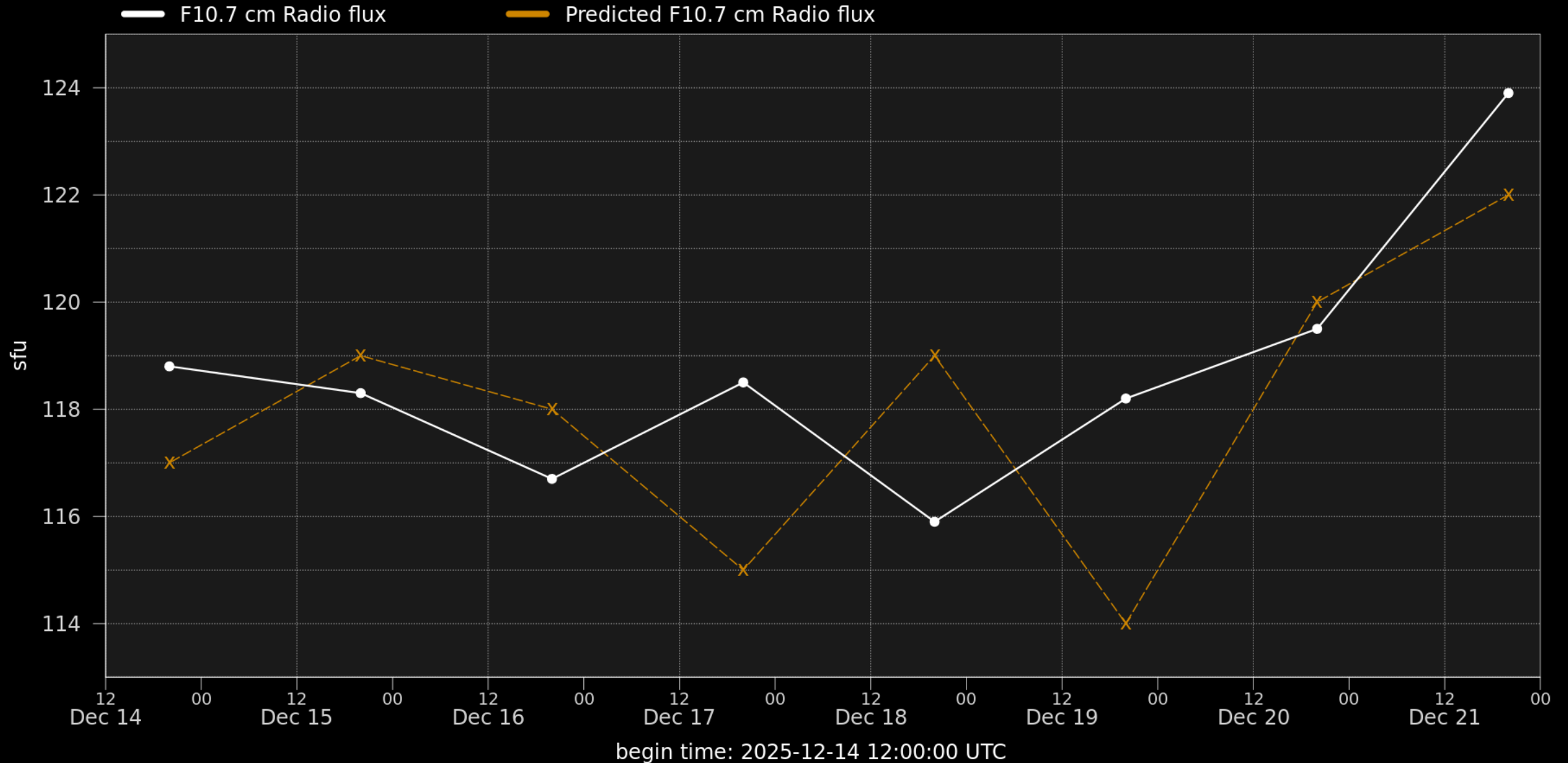
H-alpha 2025-12-15



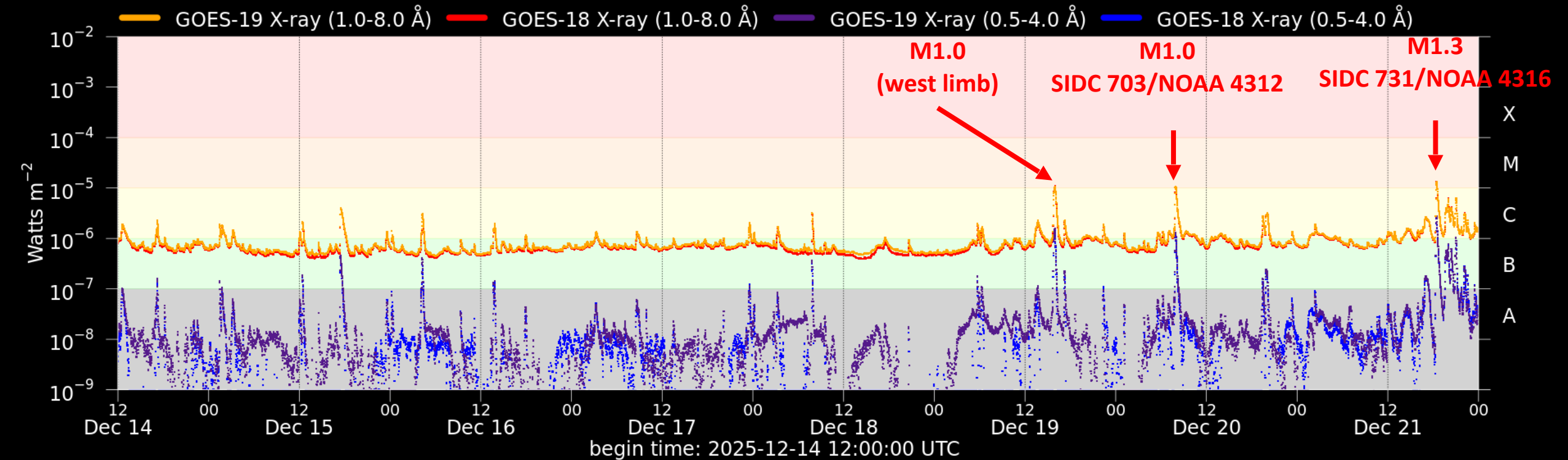
H-alpha 2025-12-21



Solar F10.7cm radio flux



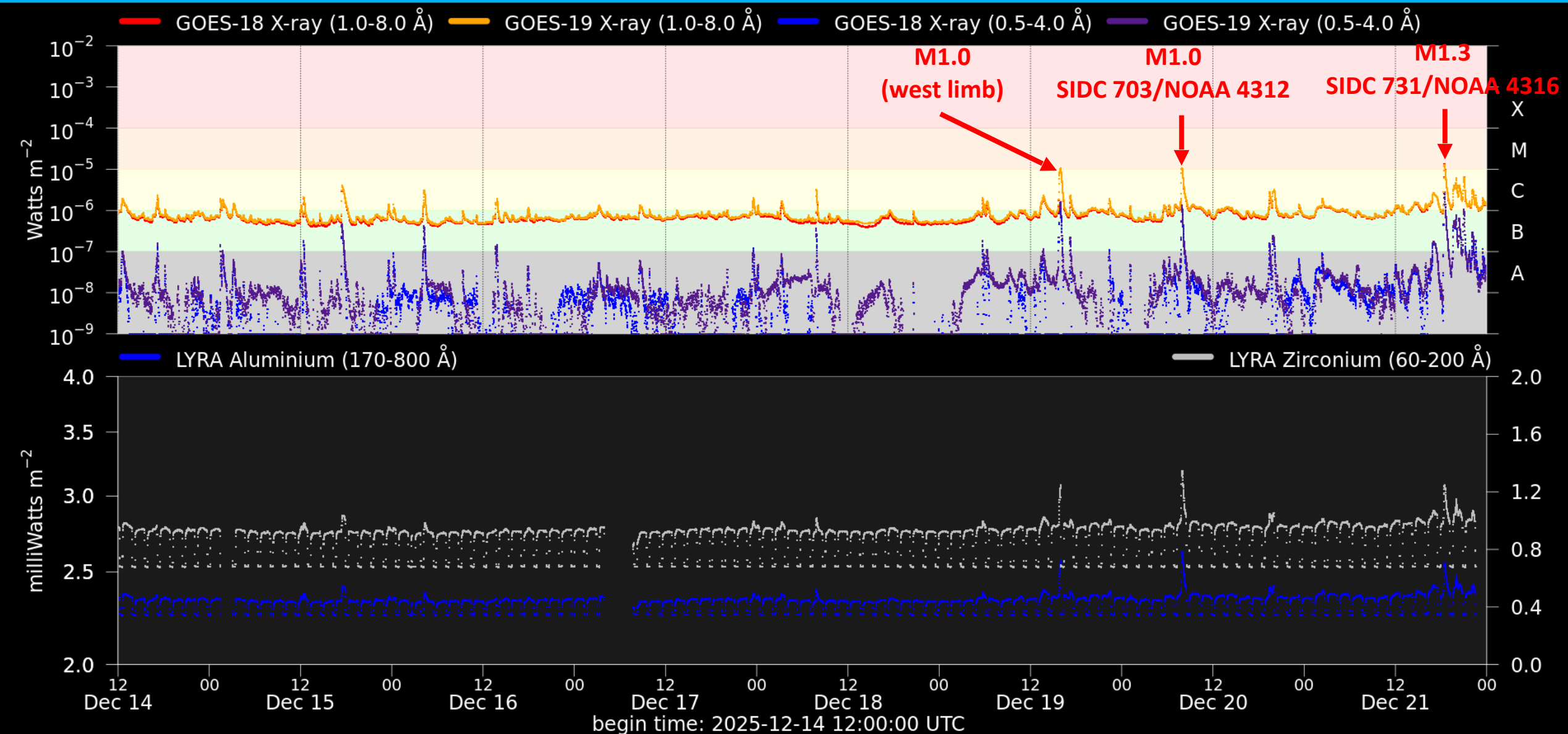
Flaring activity



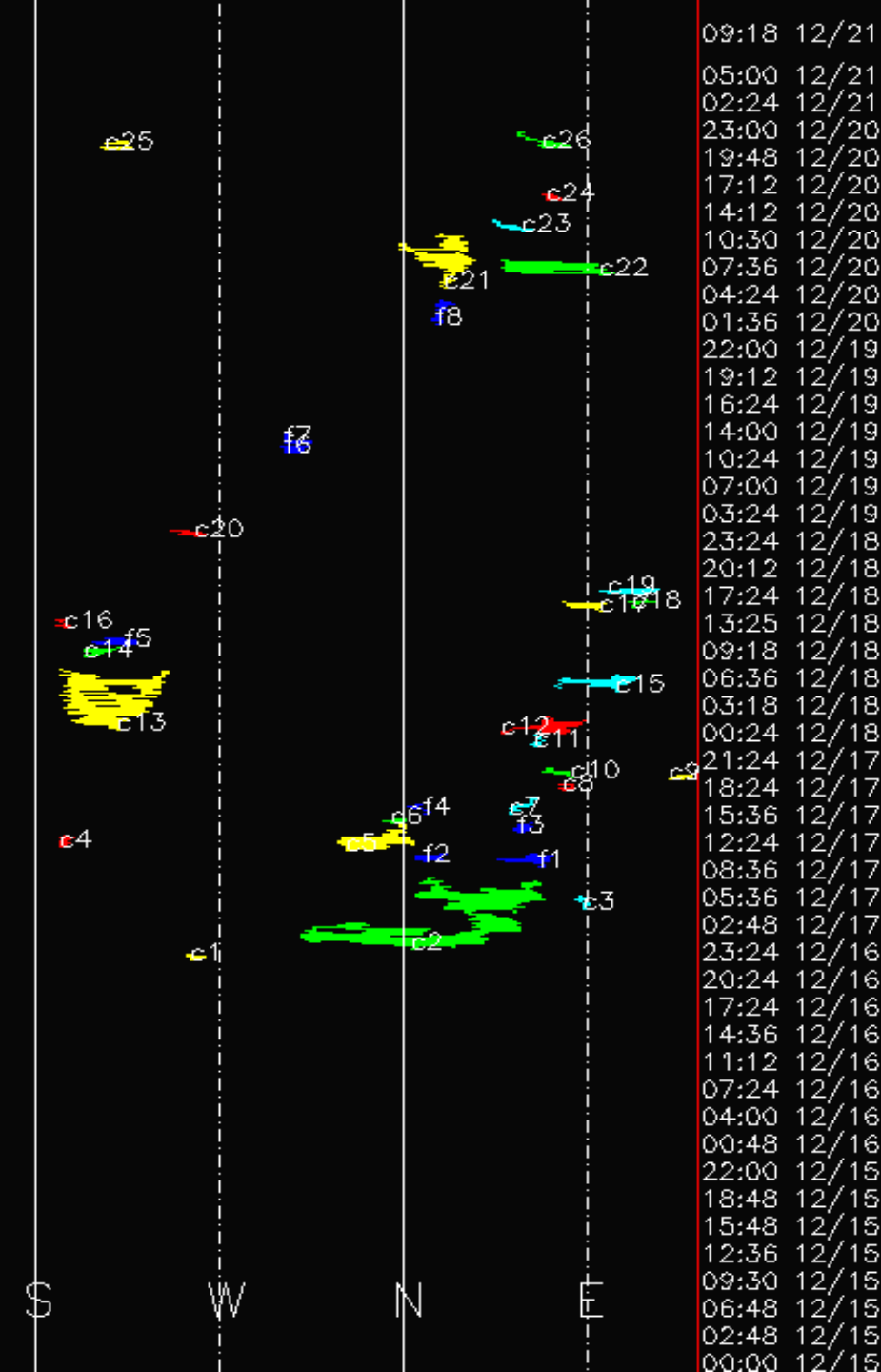
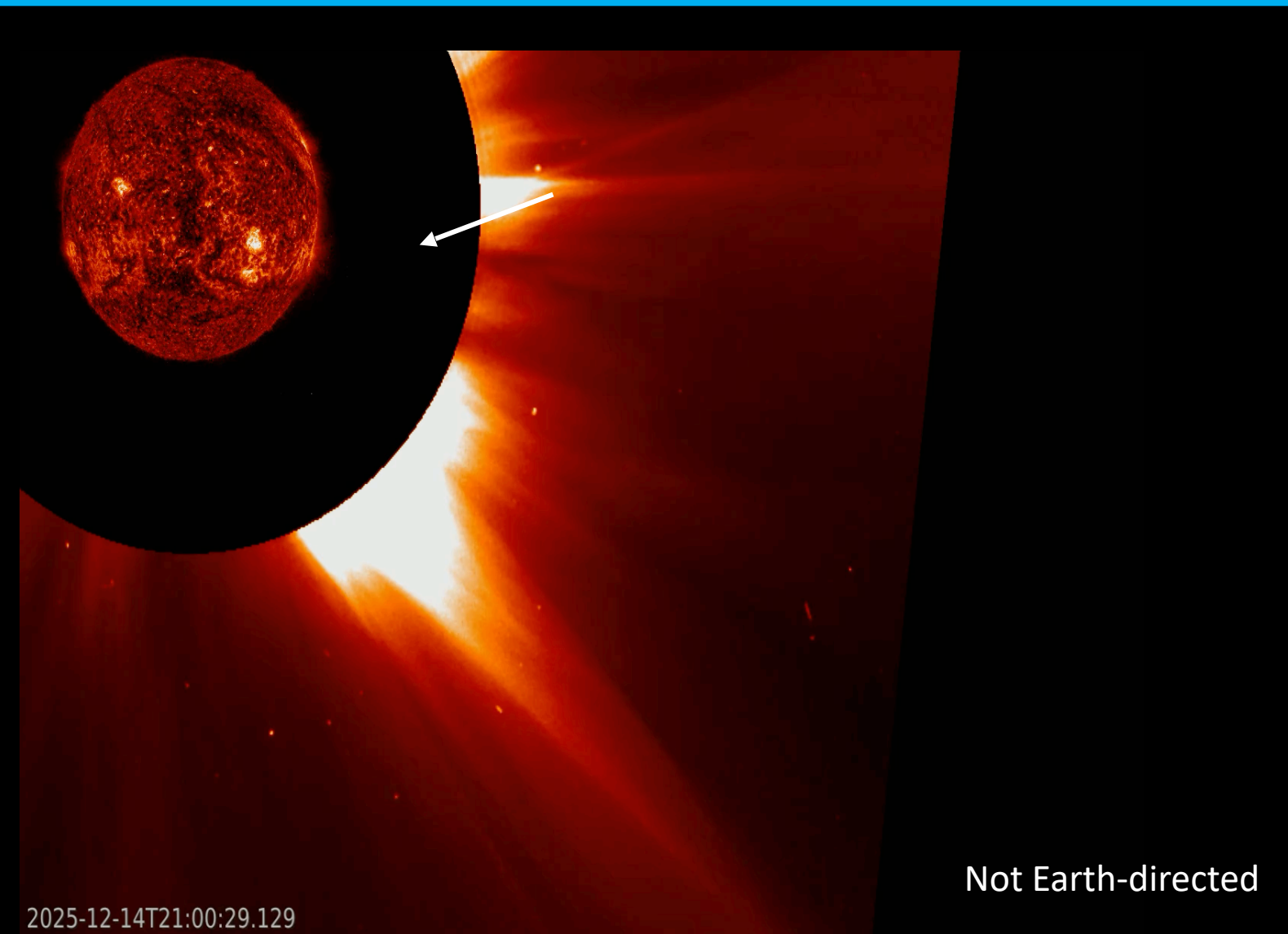
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-12-14	2025-12-15	2025-12-16	2025-12-17	2025-12-18	2025-12-19	2025-12-20	2025-12-21
Probability (%)	89 32 01	93 36 01	76 20 01	90 20 01	78 20 01	75 18 01	71 14 01	93 40 04
Observed (#)	04 00 00	06 00 00	01 00 00	03 00 00	02 00 00	05 02 00	04 00 00	08 01 00

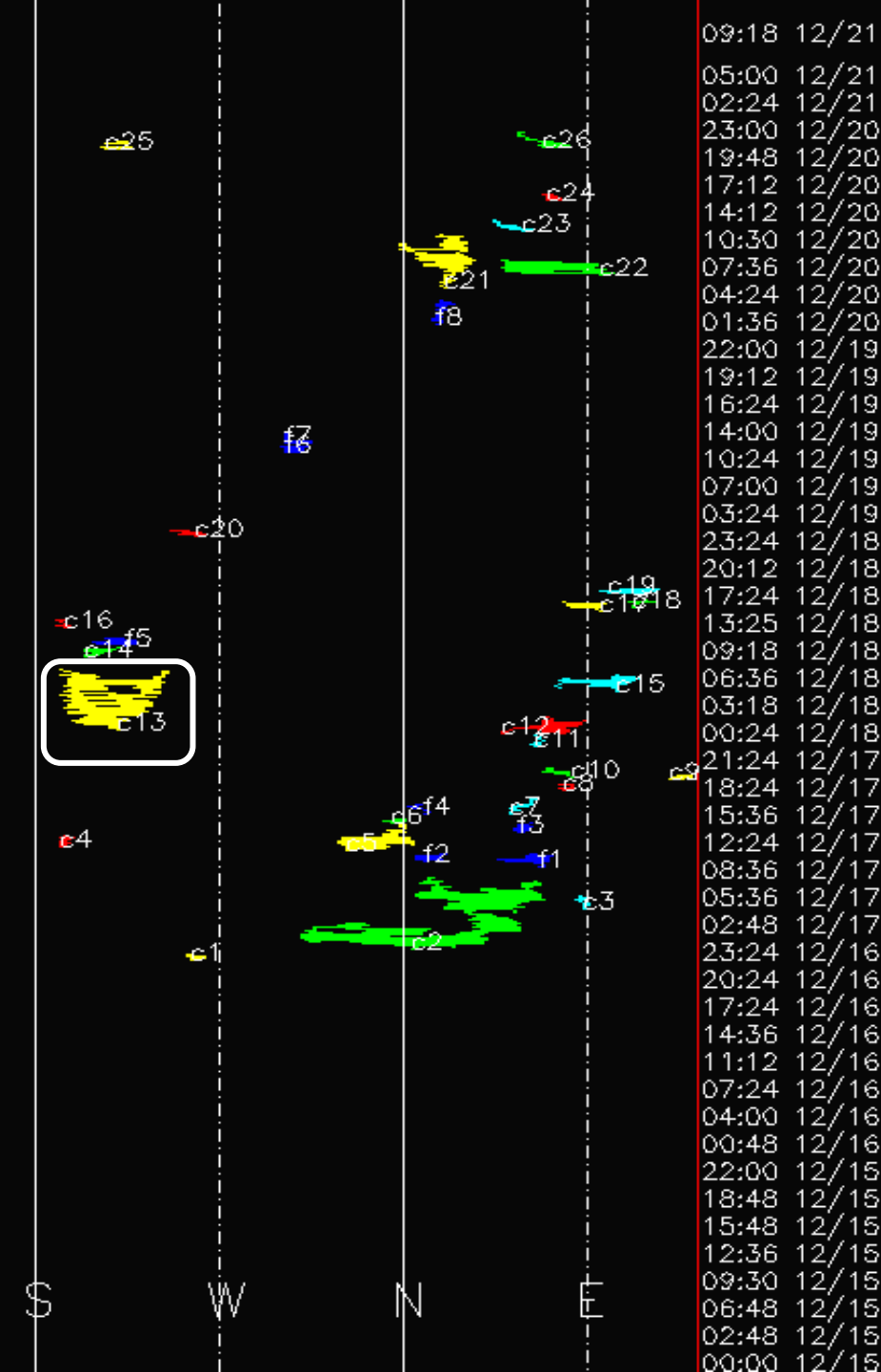
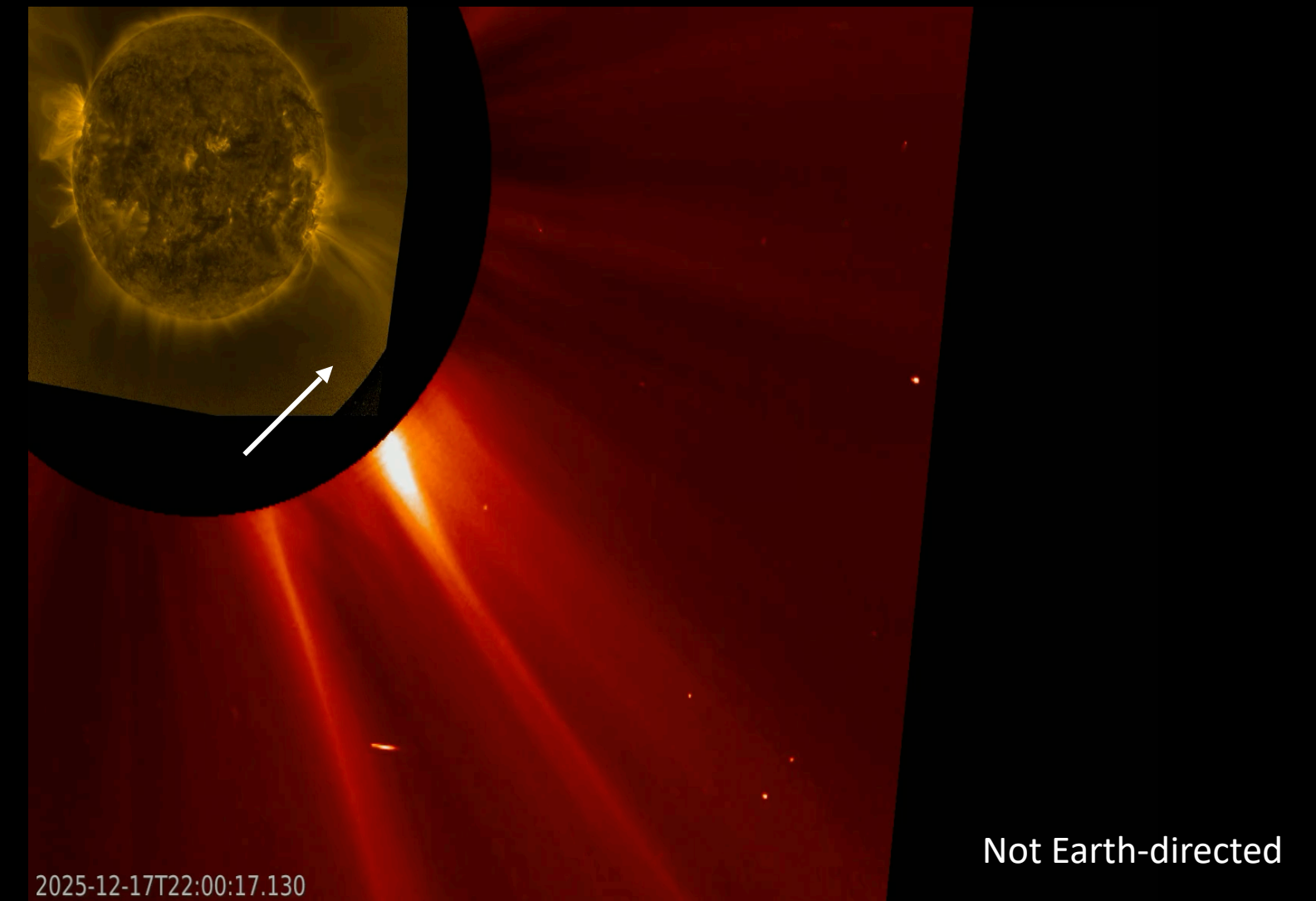
Solar X-Ray and UV flux



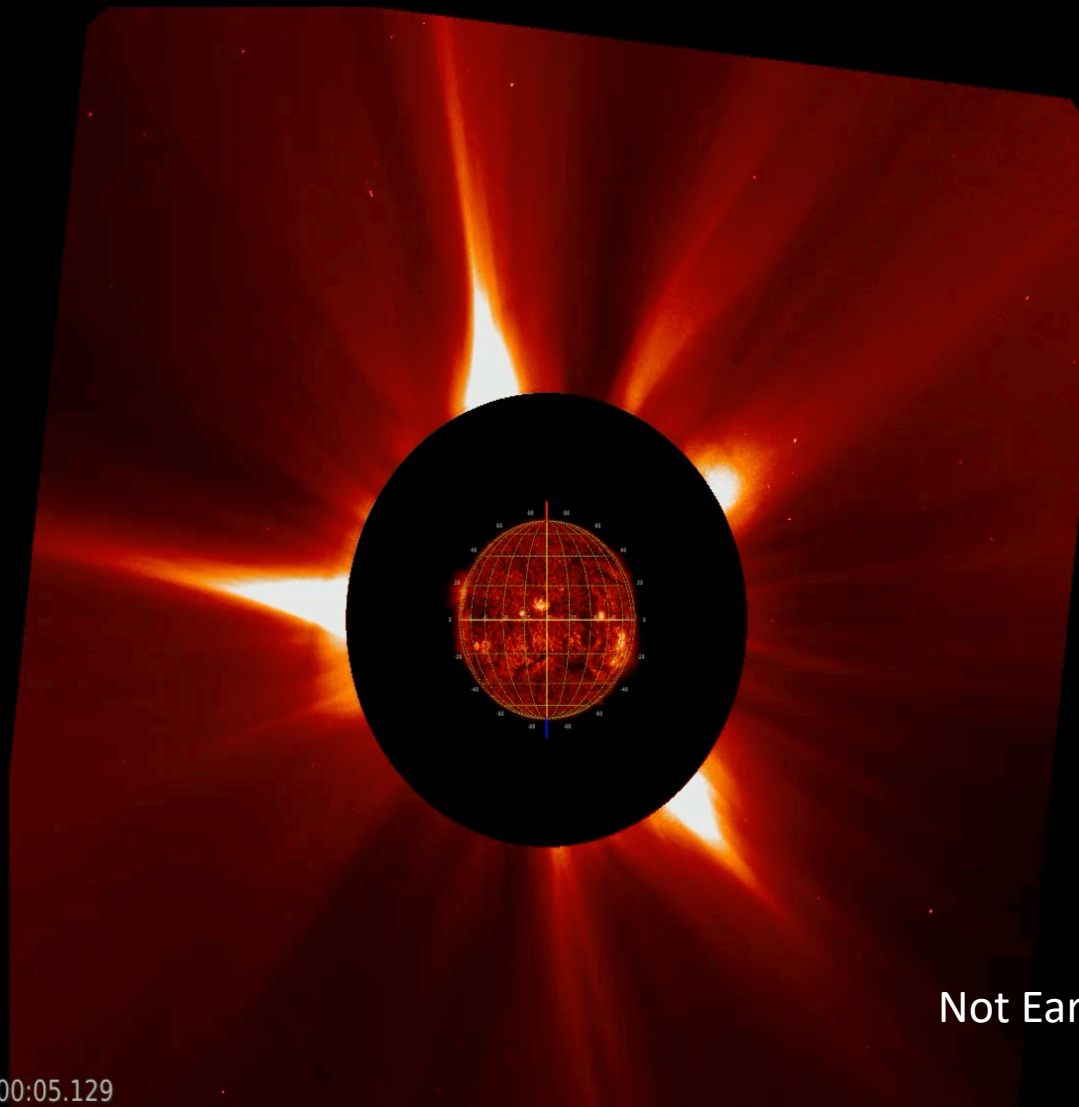
Coronal Mass Ejections



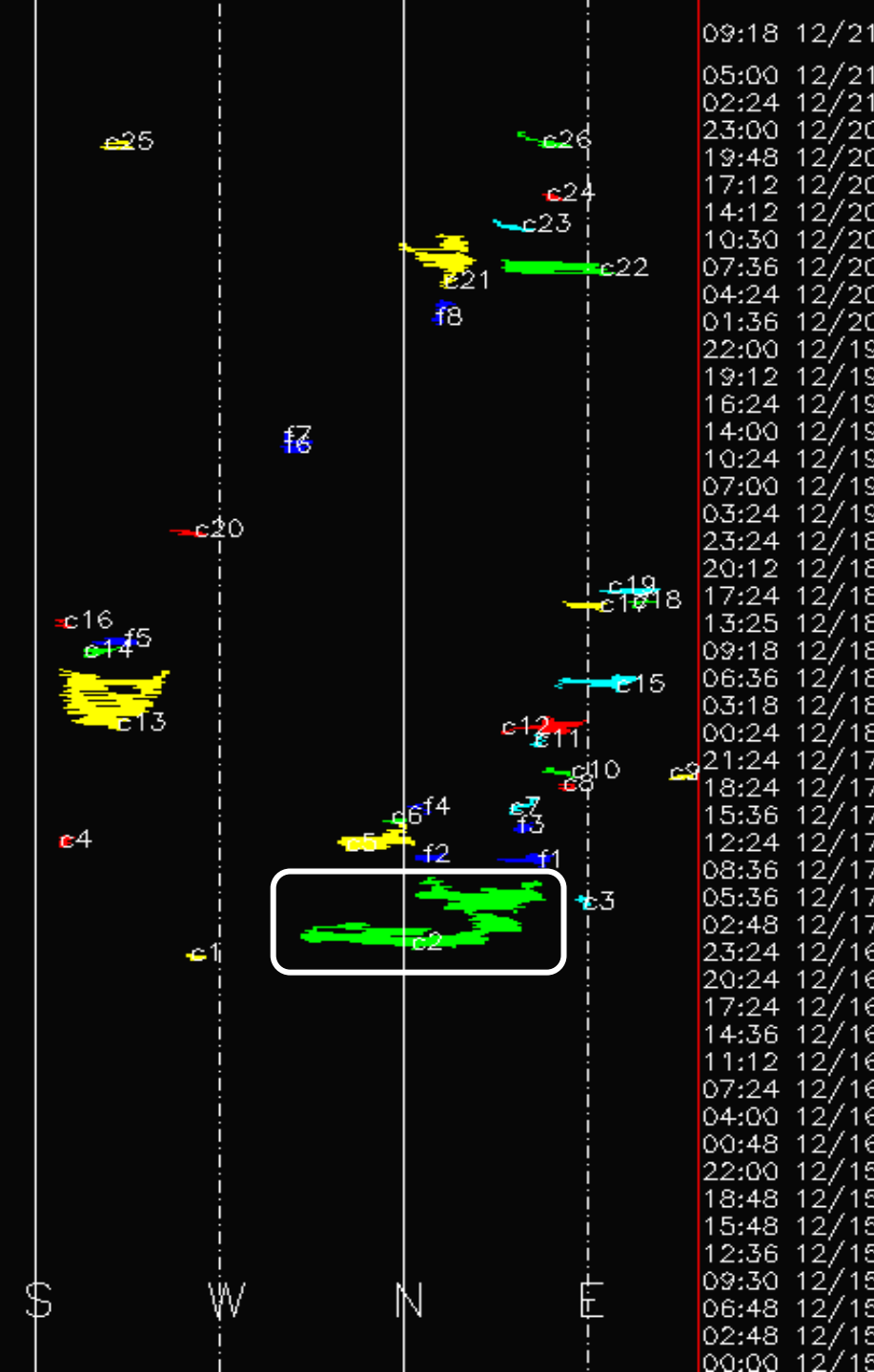
Coronal Mass Ejections



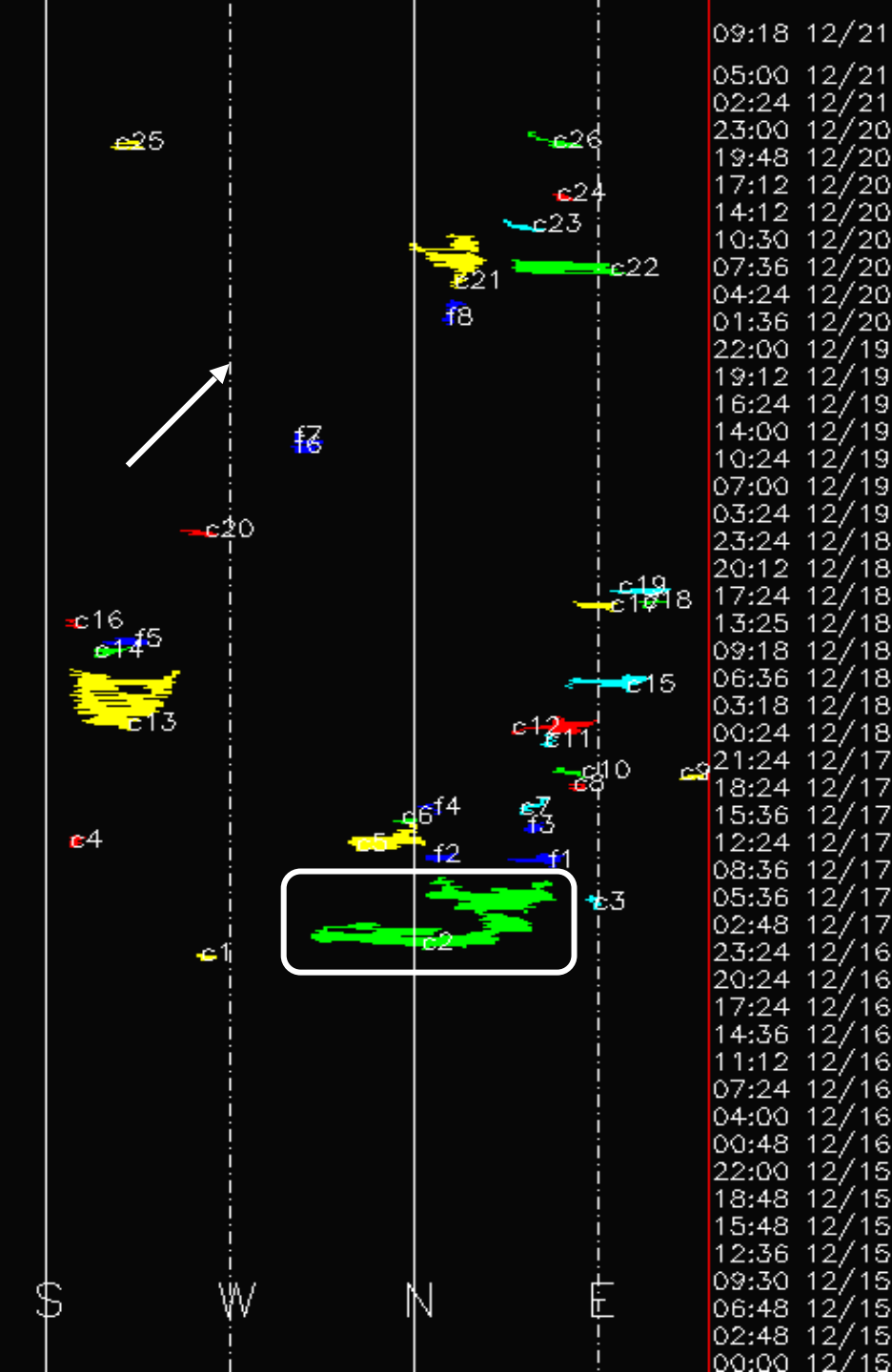
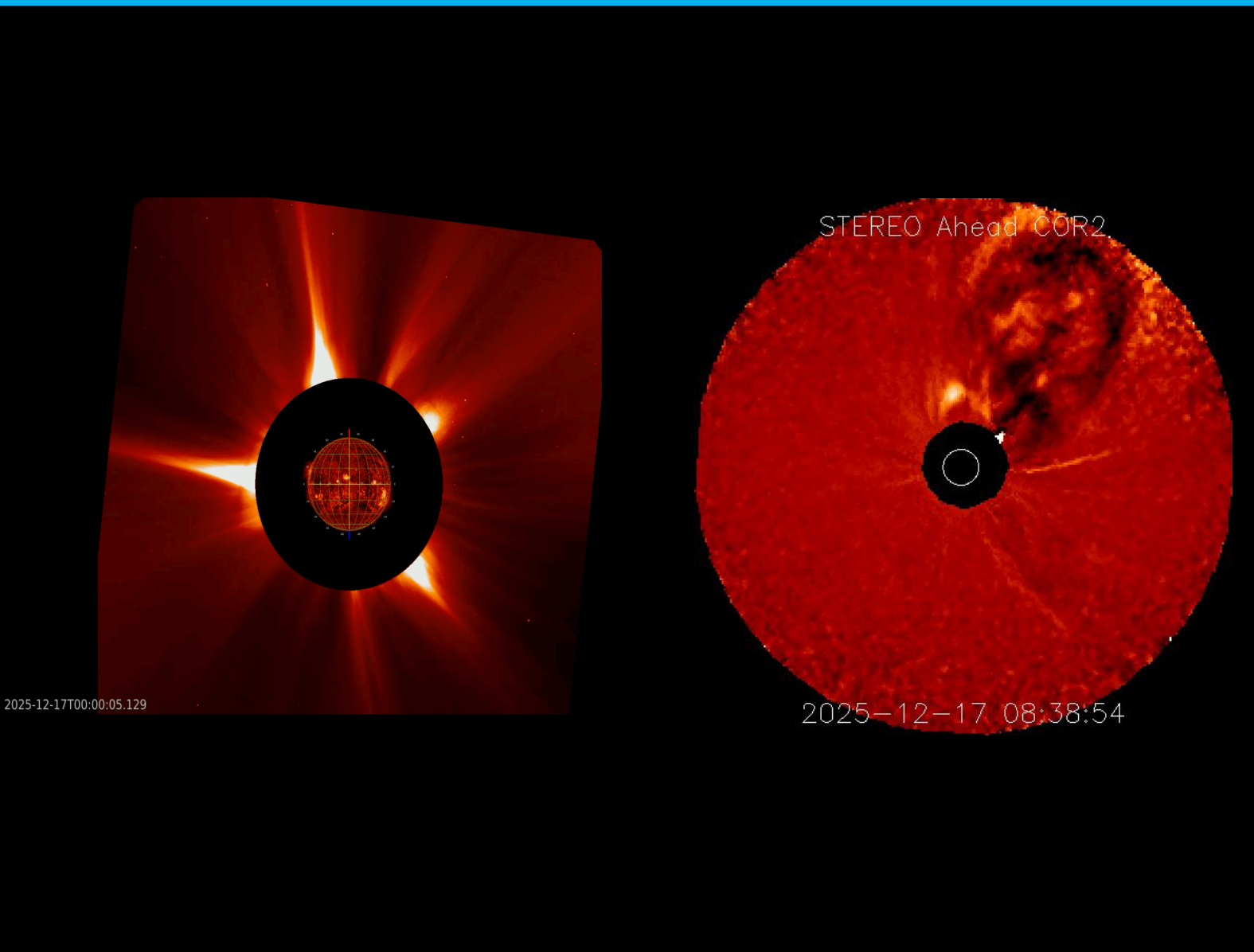
Coronal Mass Ejections



2025-12-17T00:00:05.129



Coronal Mass Ejections



Solar Wind and

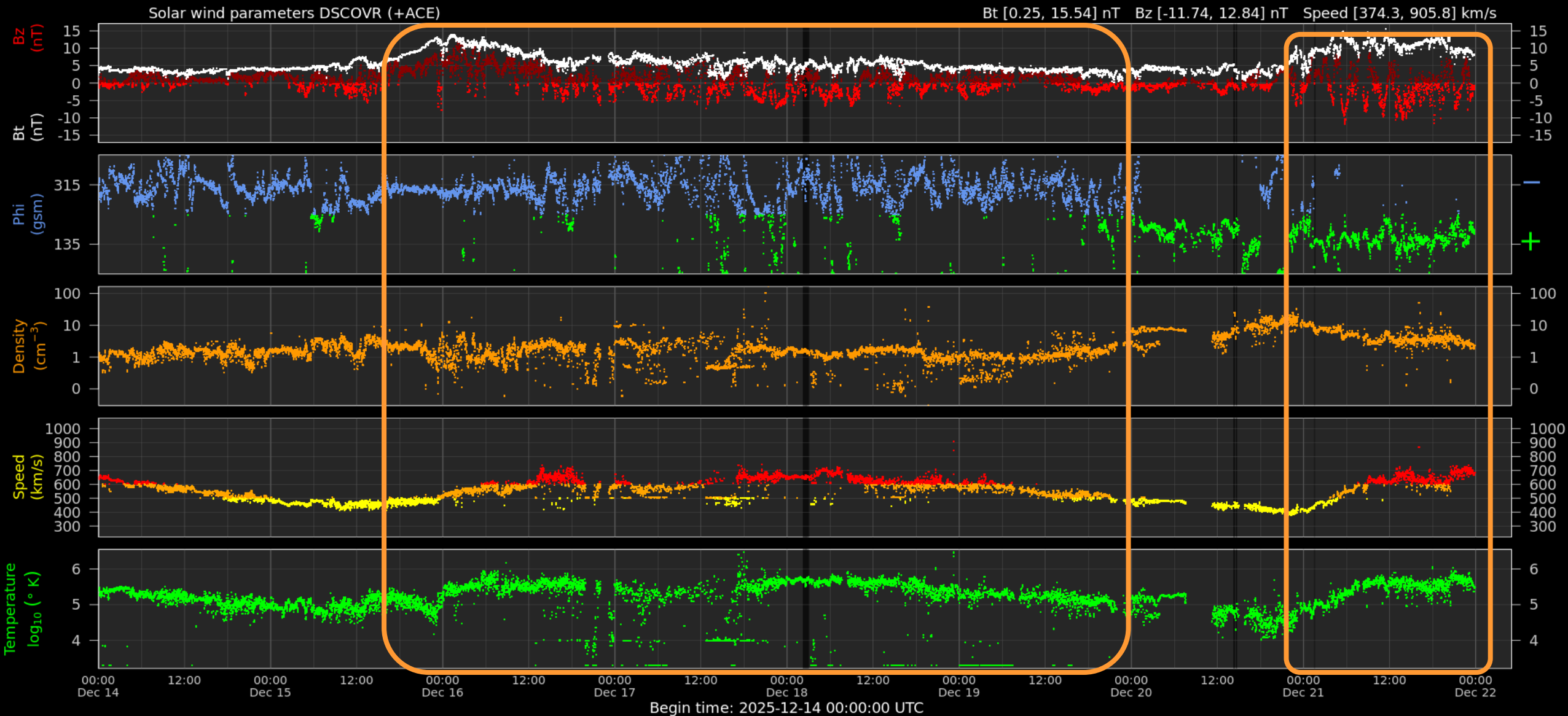
Geomagnetic Activity



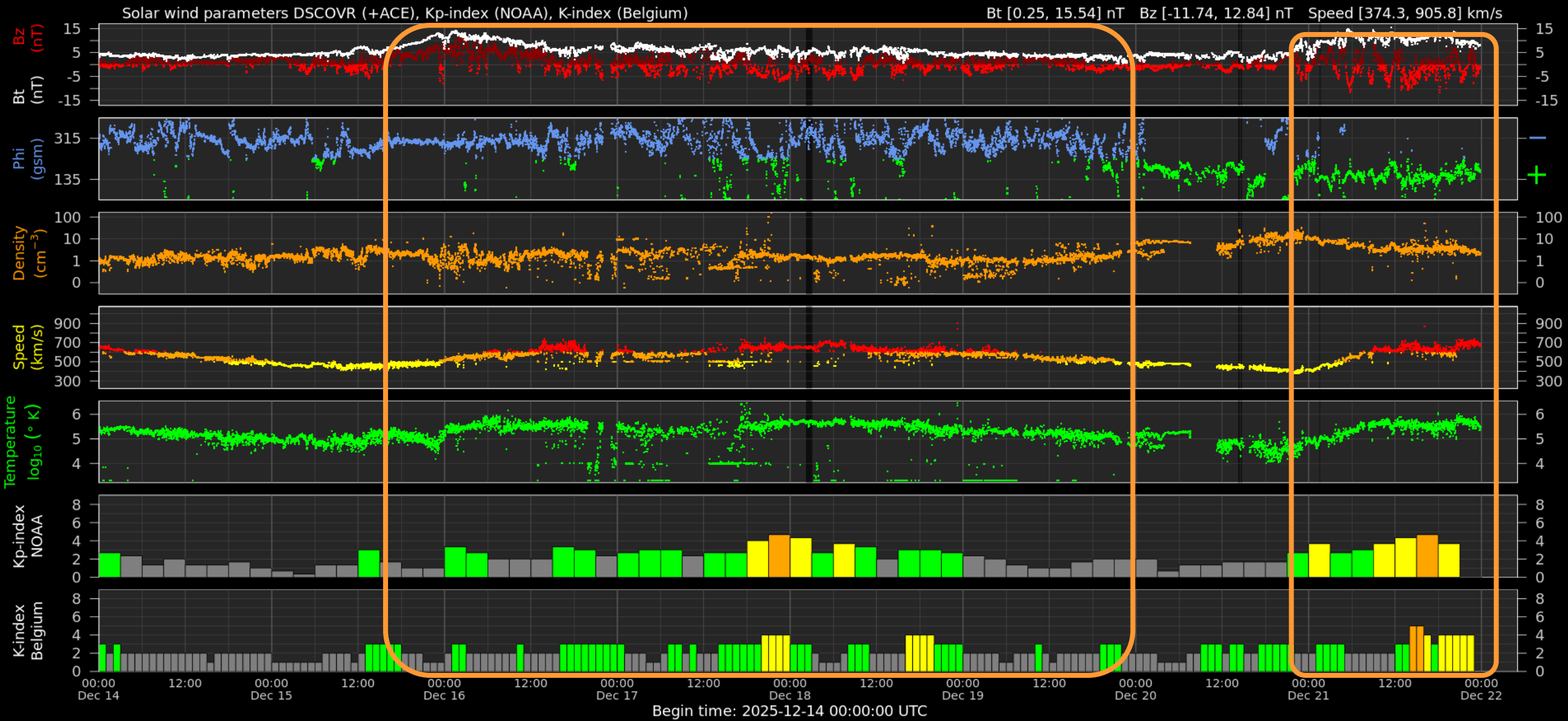
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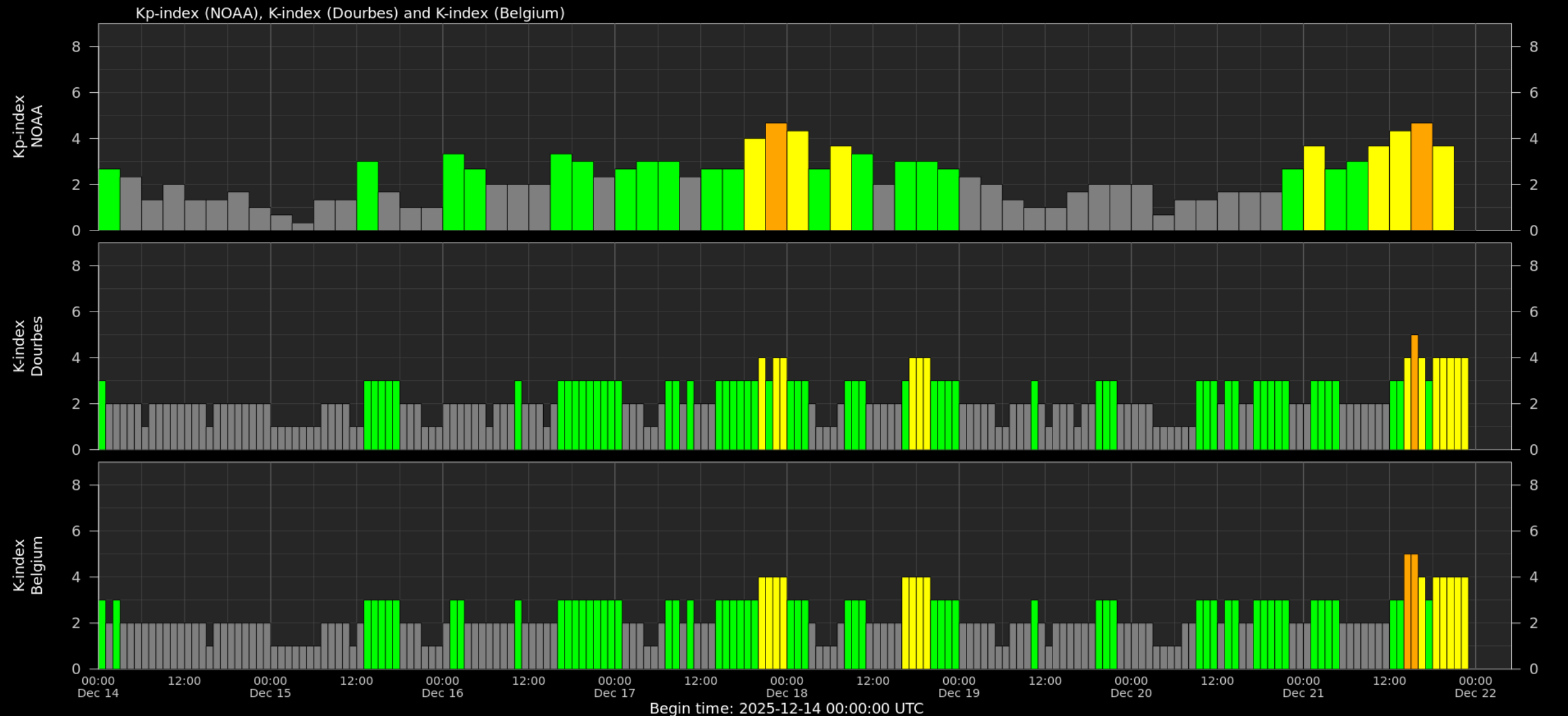
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



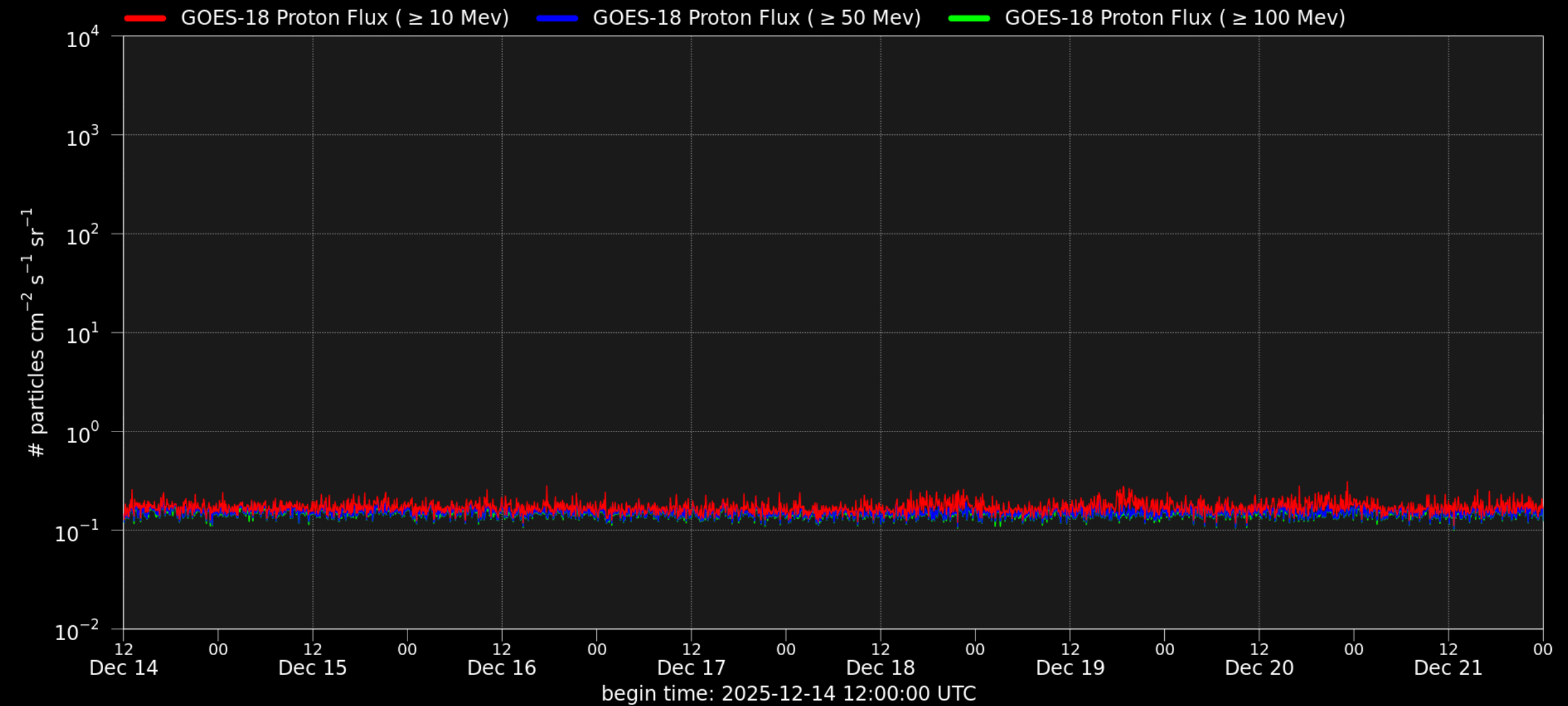
Energetic Particles



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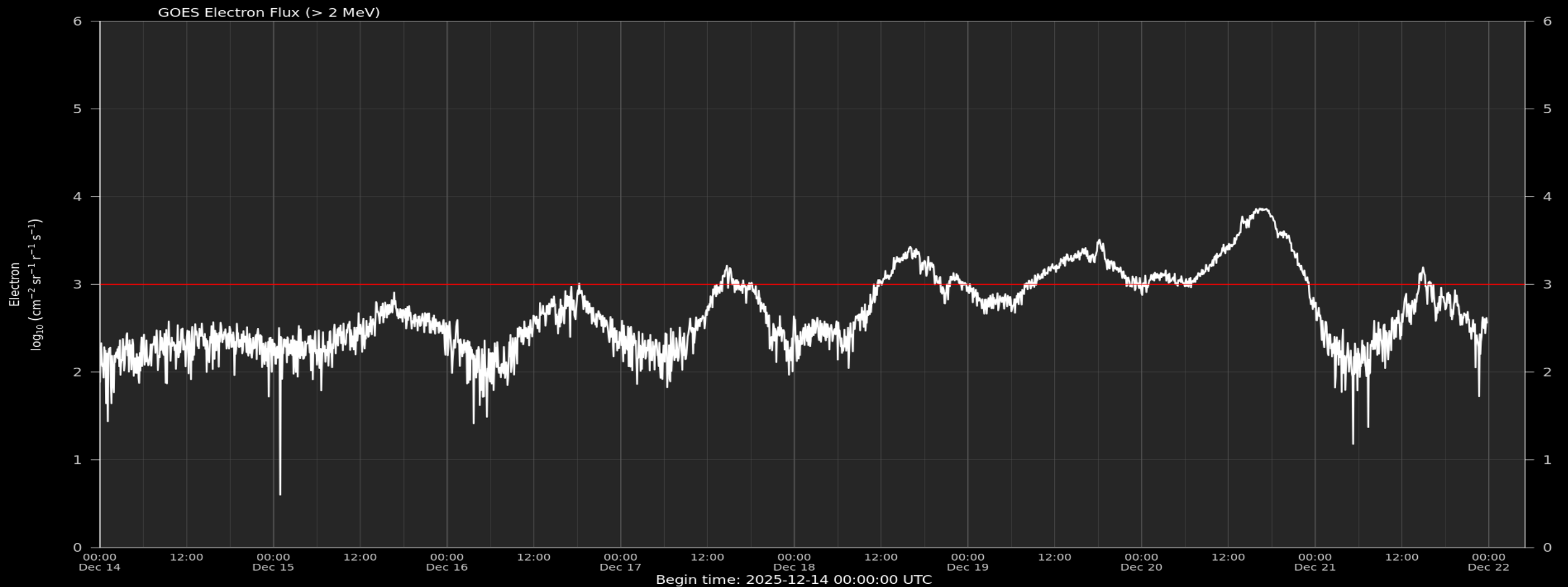
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



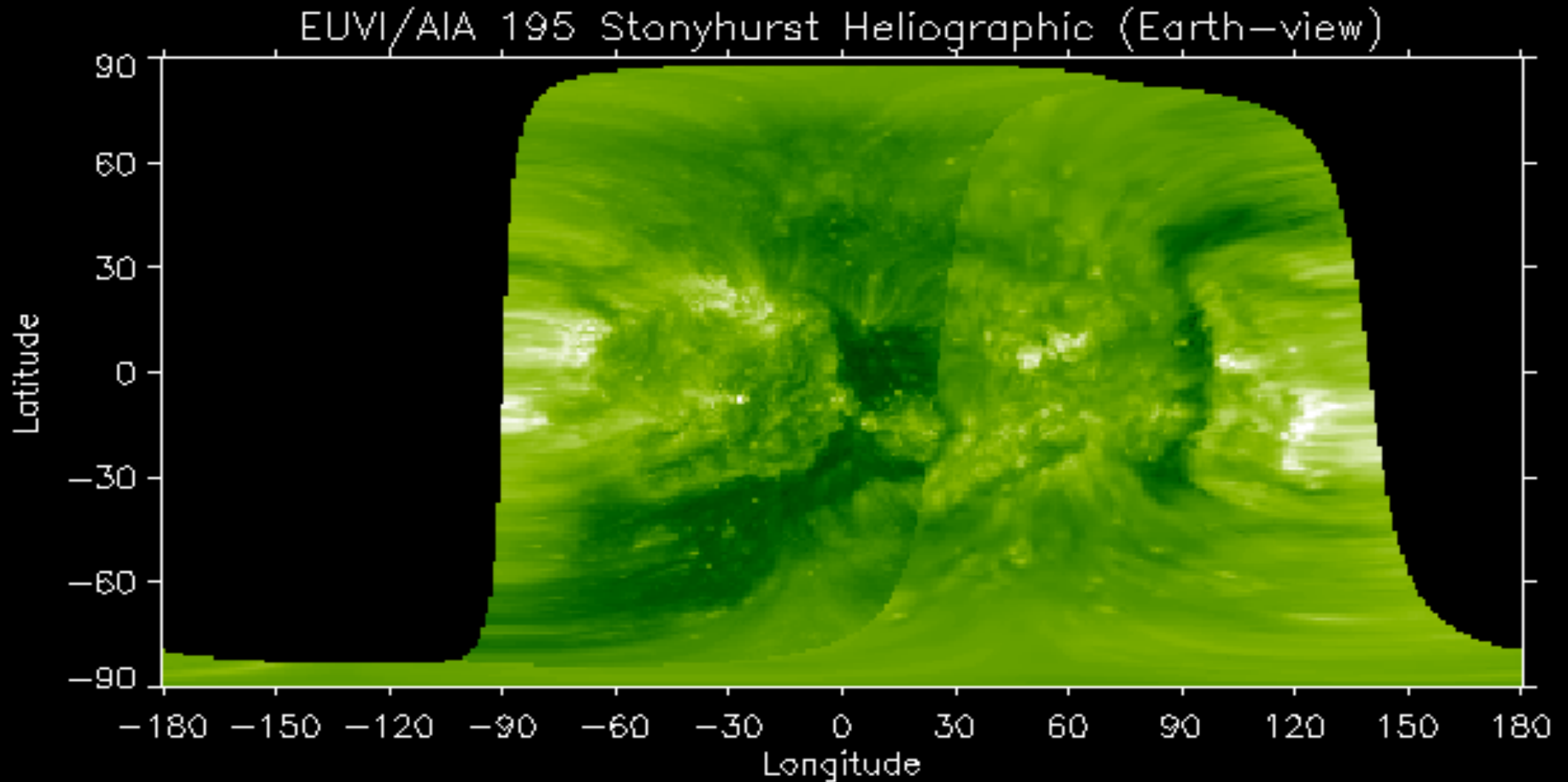
Outlook



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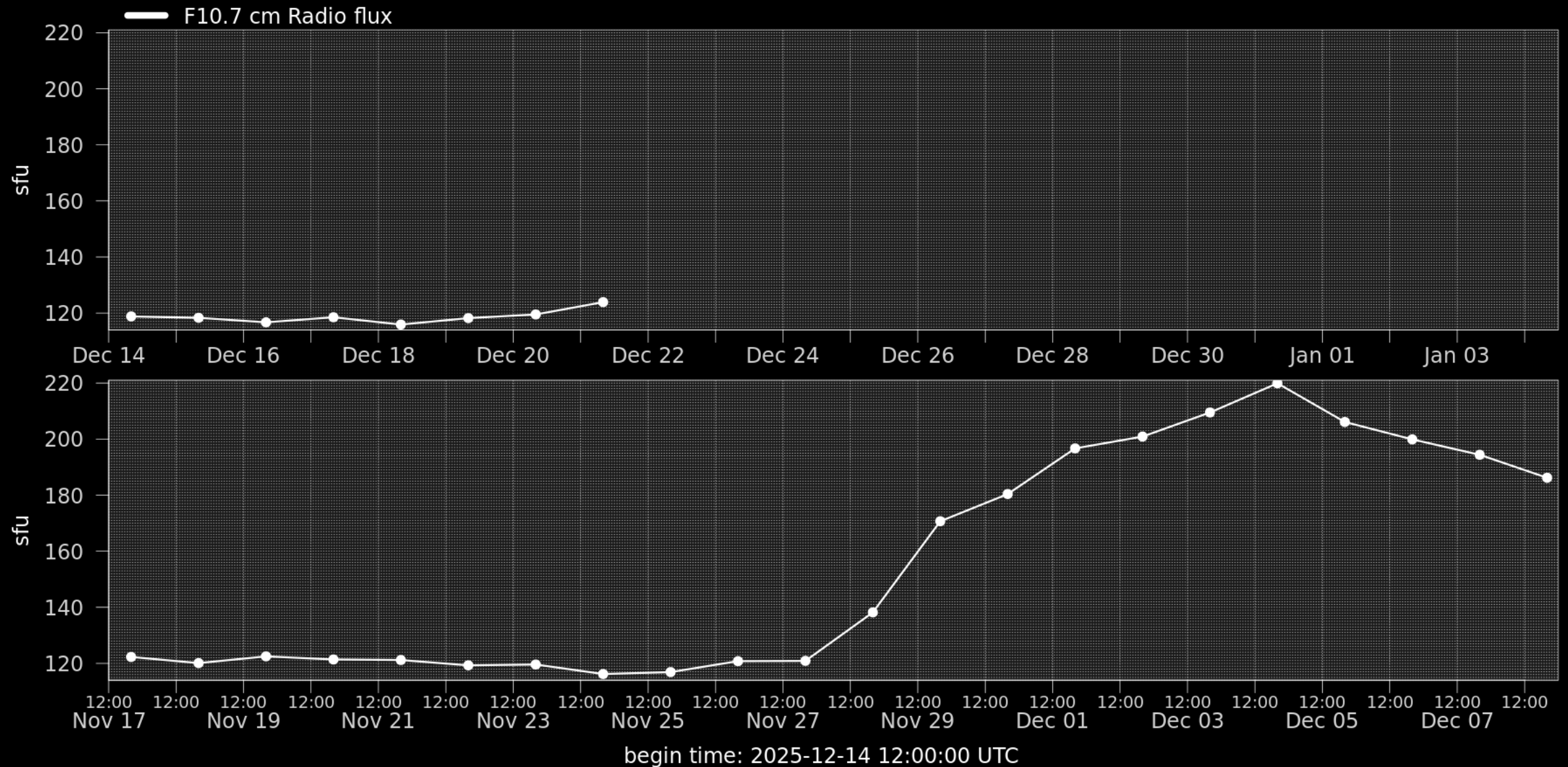
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Data analysis Centre
www.sidc.be

Outlook: Solar activity

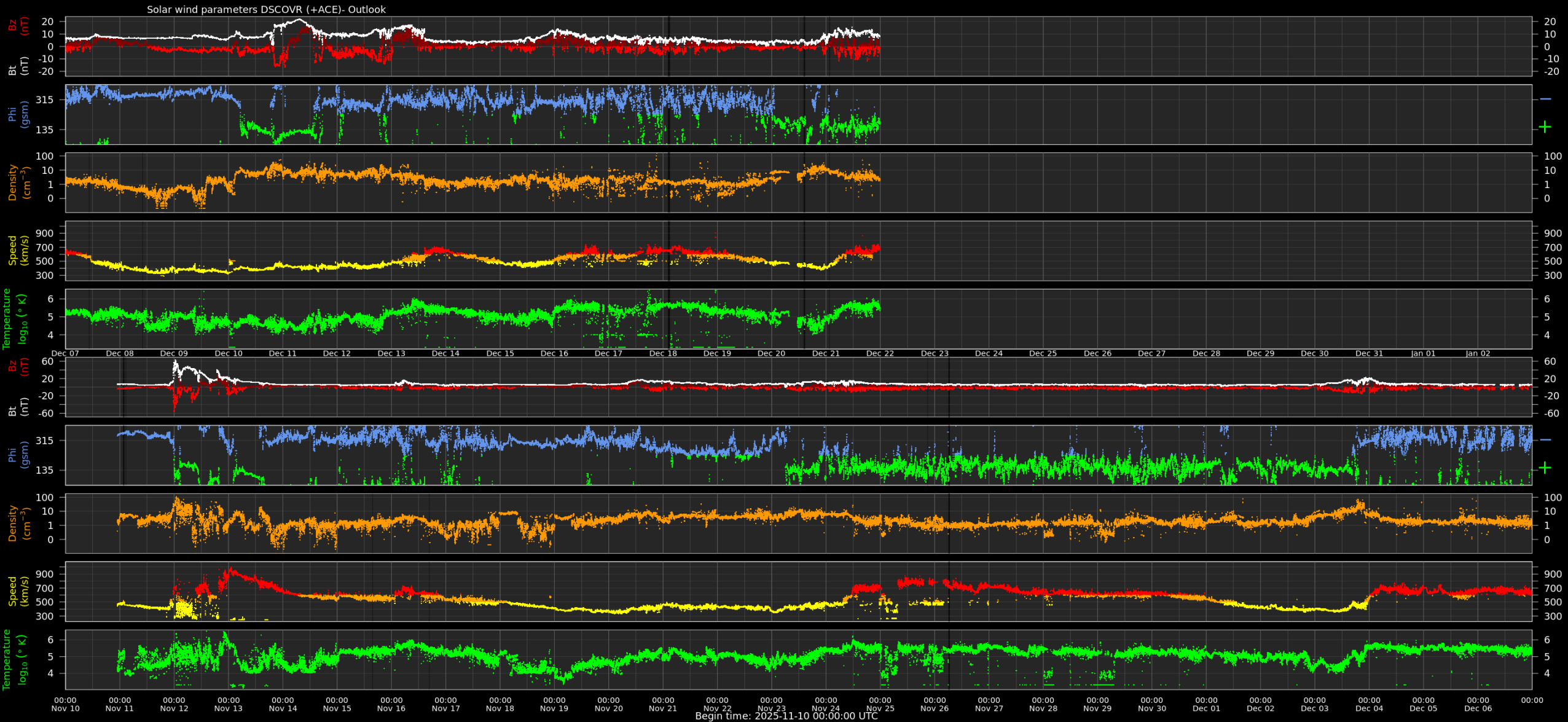


Observation date: 2025/12/21 18:55:00

Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



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Pegasus related events

Status: MOC

GNSS advisories (Scintillations)

SIDC Space Weather Briefing

See you at our next briefing! (January 2026 ☺)

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