SIDC Space Weather Briefing

05 January 2025-12 January 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 2025-01-05 12:00 to 2025-01-12 23:59

Active regions	Over 15, dominant one being SIDC 360/NOAA 3947 (beta-gamma-delta)
Flares	# C-class flare: 38 # M-class flare: 5 # X-class flare: 0
Coronal Holes	Multiple CH+ and CH-
CMEs	Filament eruption on Jan 09

Proton flux	Started slightly elevated, then nominal for the rest of the week
Electron flux	Some periods above 1000 pfu threshold

Solar wind and geomagnetic conditions

ICMEs	Glancing blow from Jan 04
Solar wind conditions	|B|: 1.4 - 21.24 nT //Bz: -10.12 nT to 18.07 nT //Speed: 295.3 - 680 km/s
Geomagnetic conditions	max KBel: 5.0, max Kp(NOAA): 4.0, Minor Storm conditions

All Quiet Alert: Off

Solar Activity

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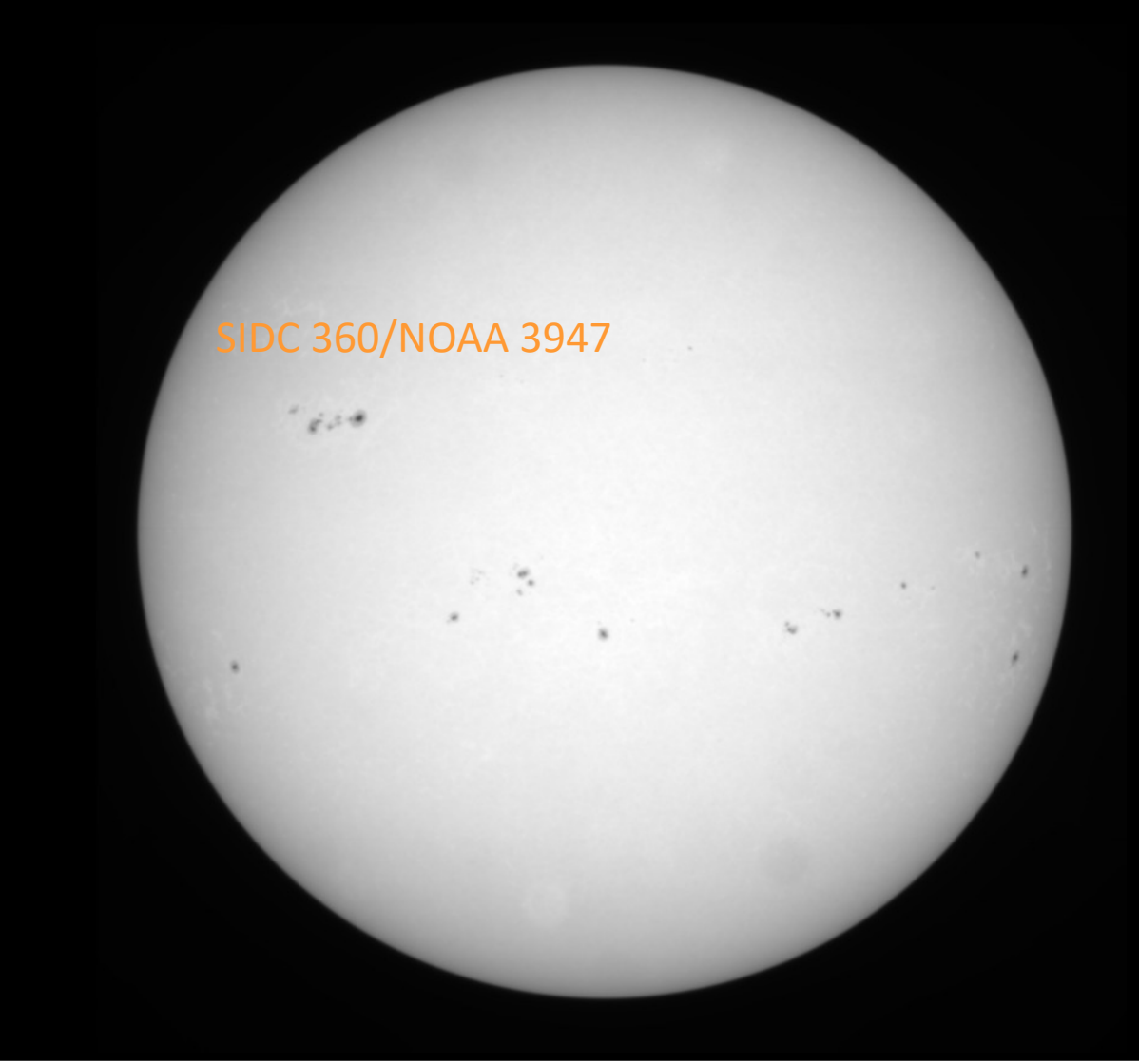
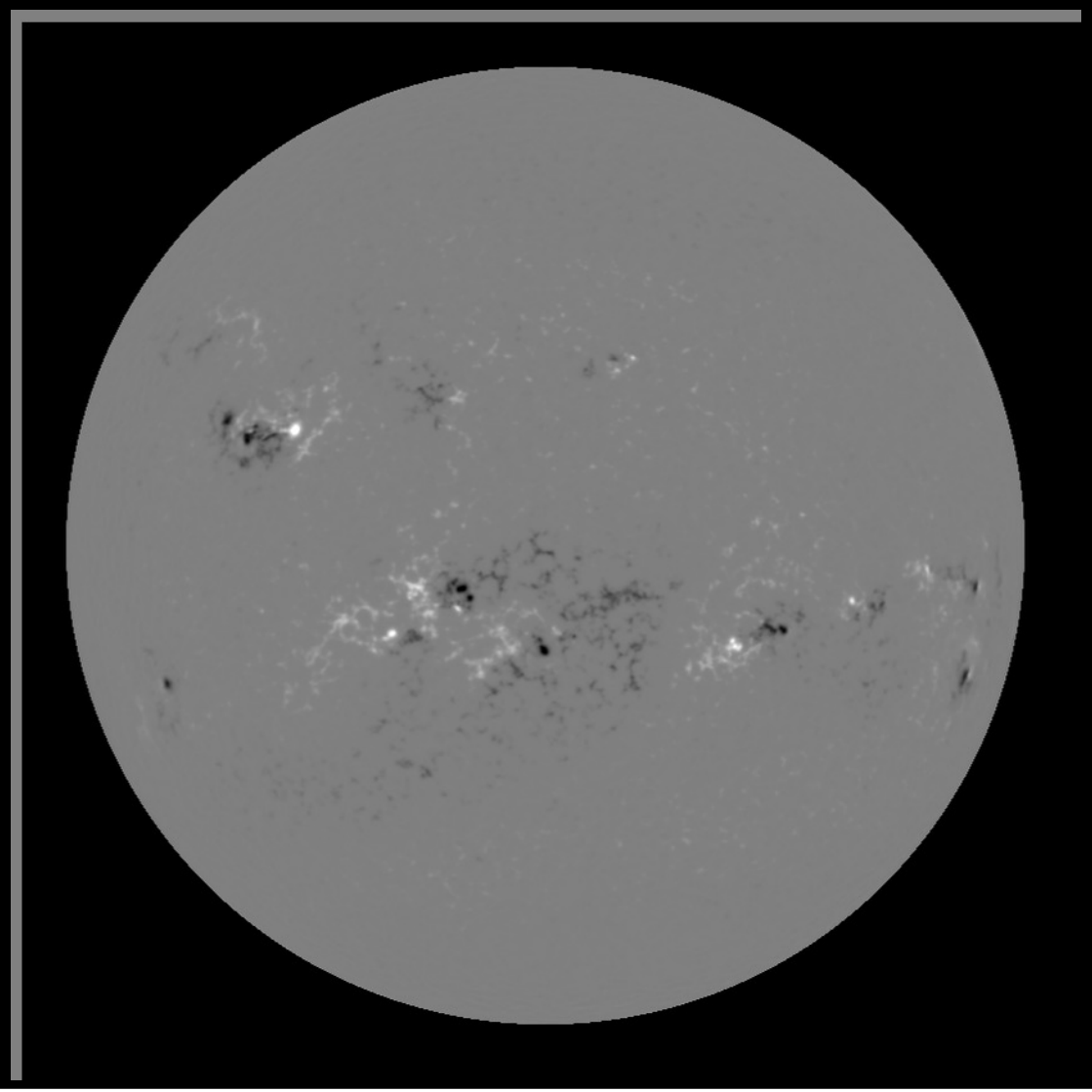
Solar active regions

GONG 677 nm 2025-01-05

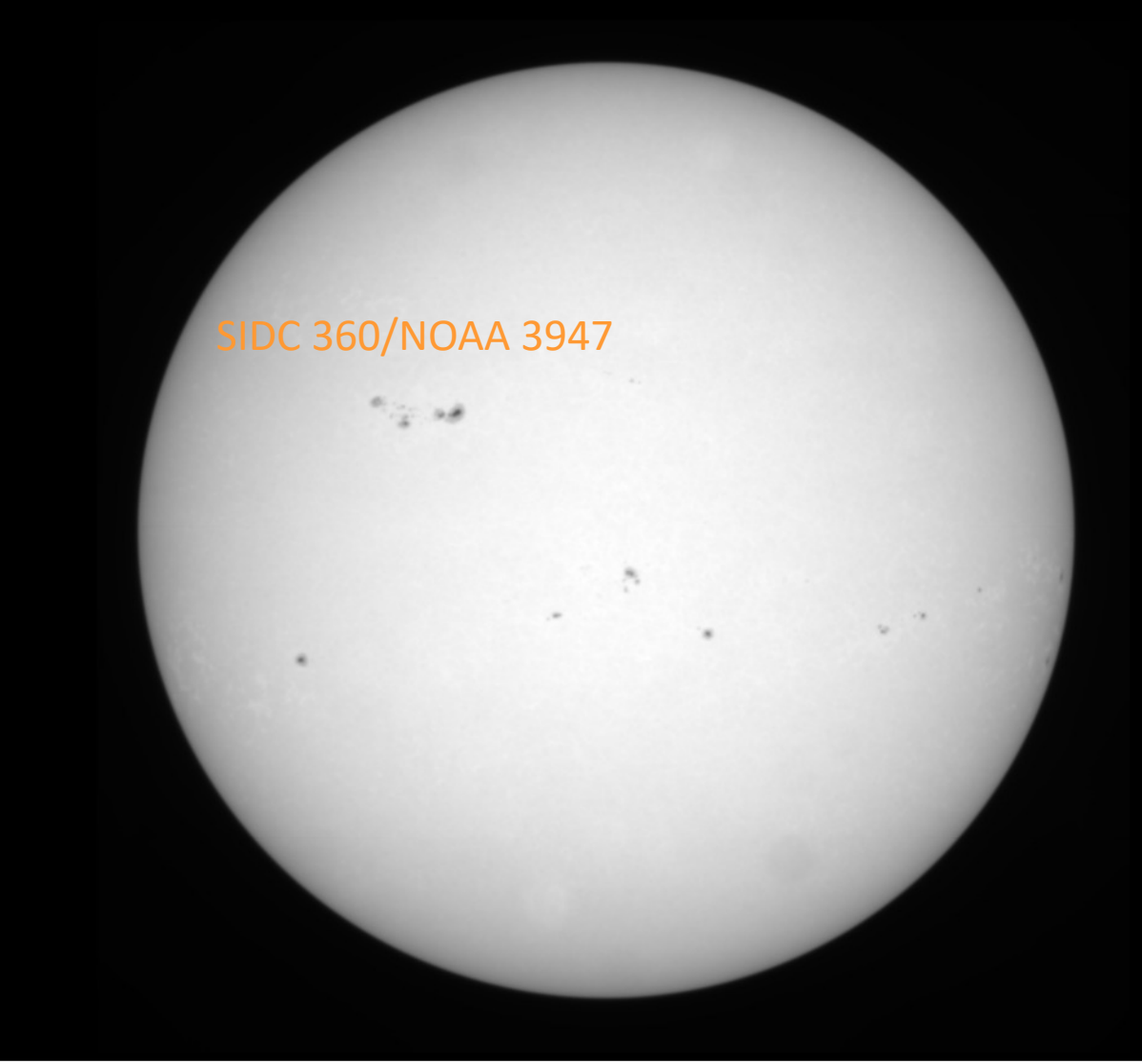


GONG Magnetogram 2025-01-05

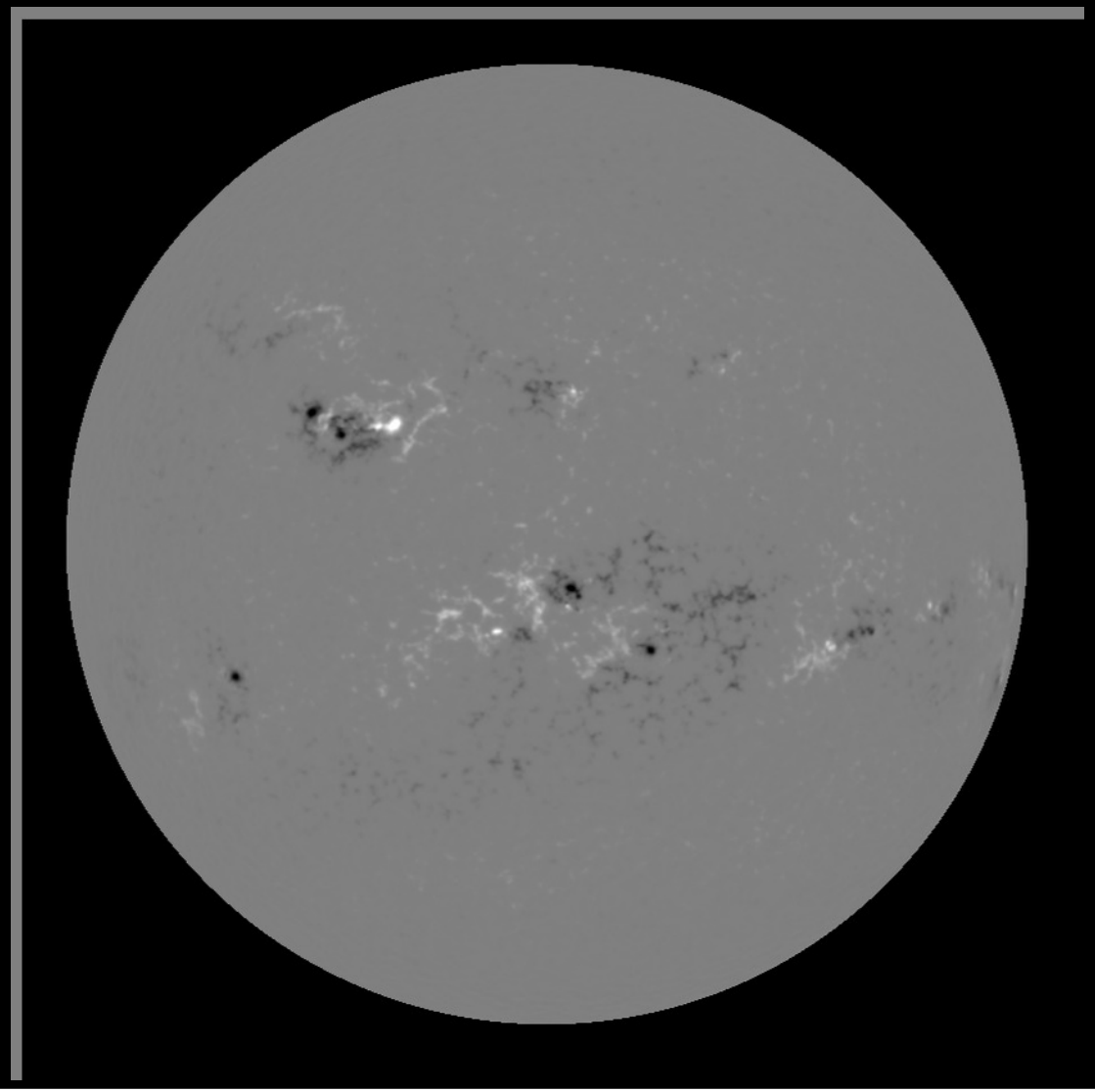


Solar active regions

GONG 677 nm 2025-01-06

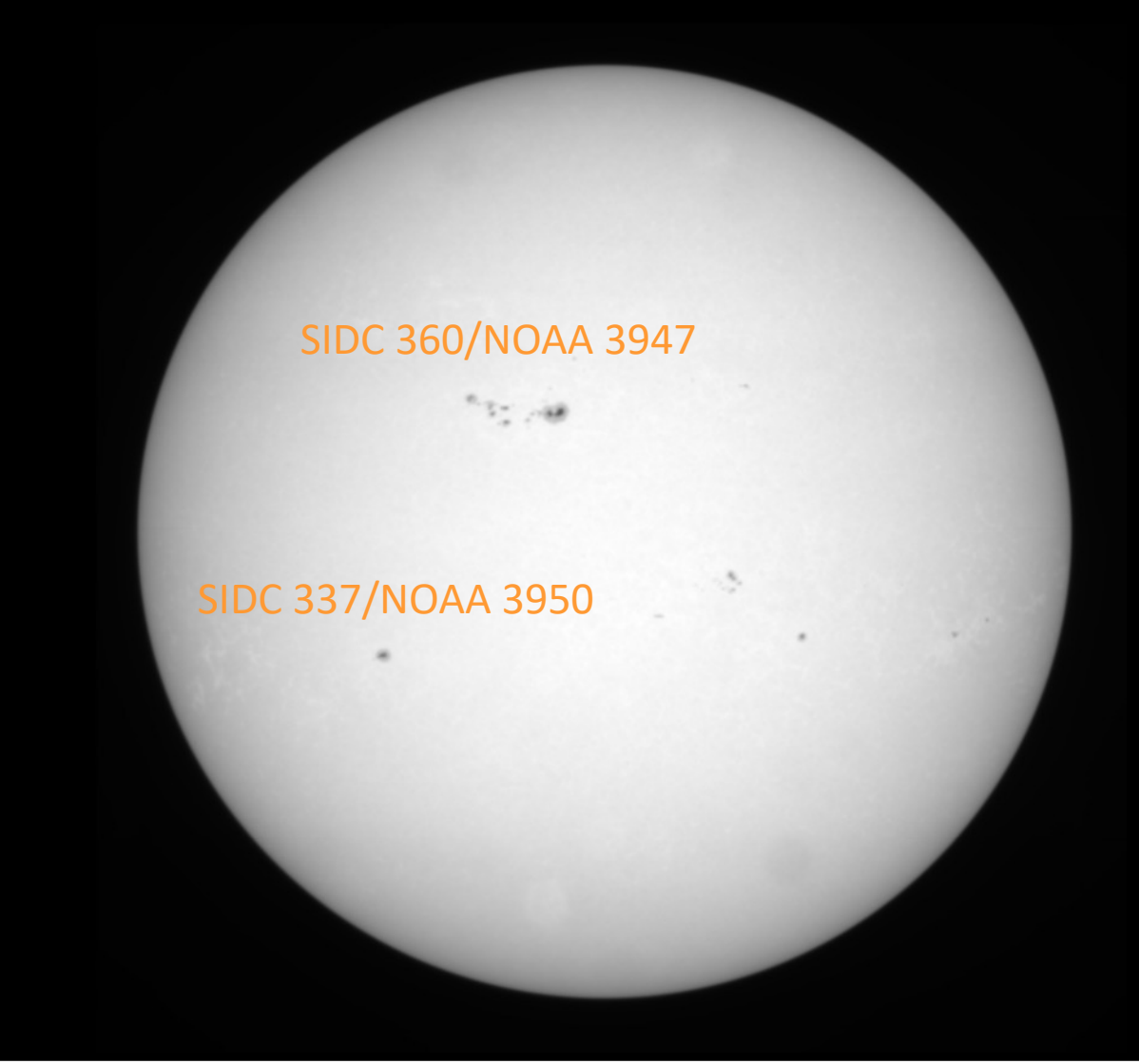


GONG Magnetogram 2025-01-06

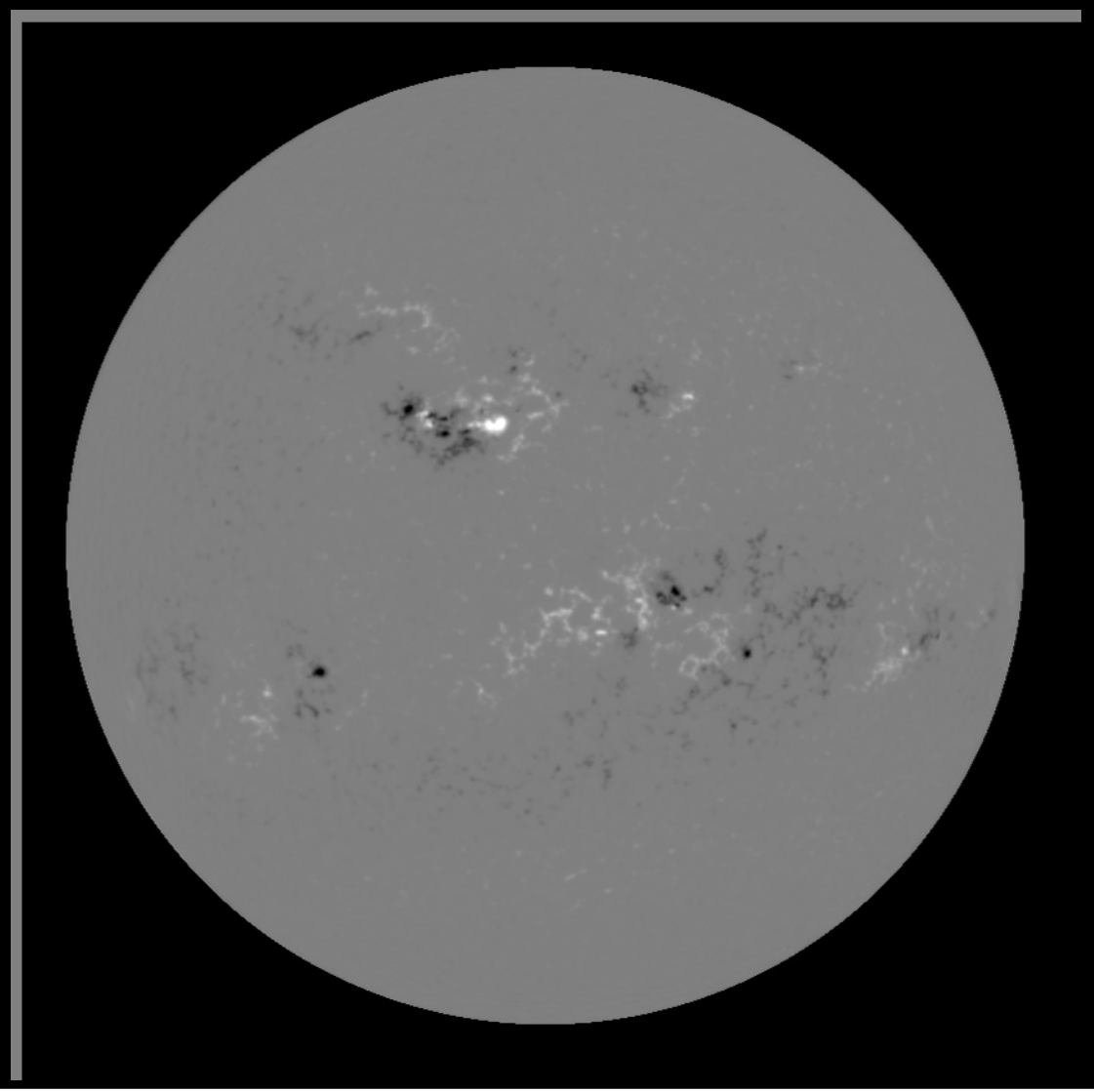


Solar active regions

GONG 677 nm 2025-01-07

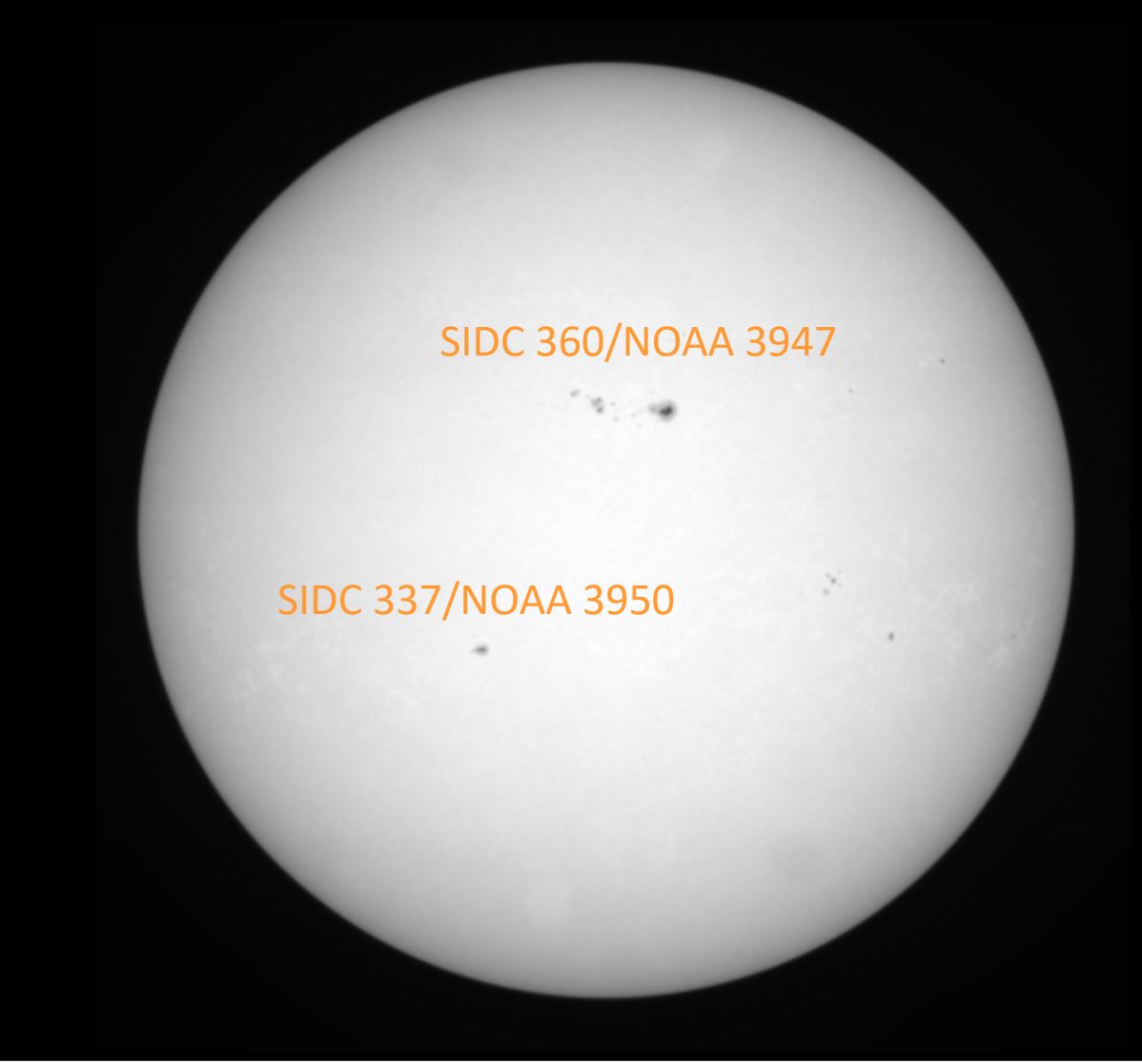


GONG Magnetogram 2025-01-07

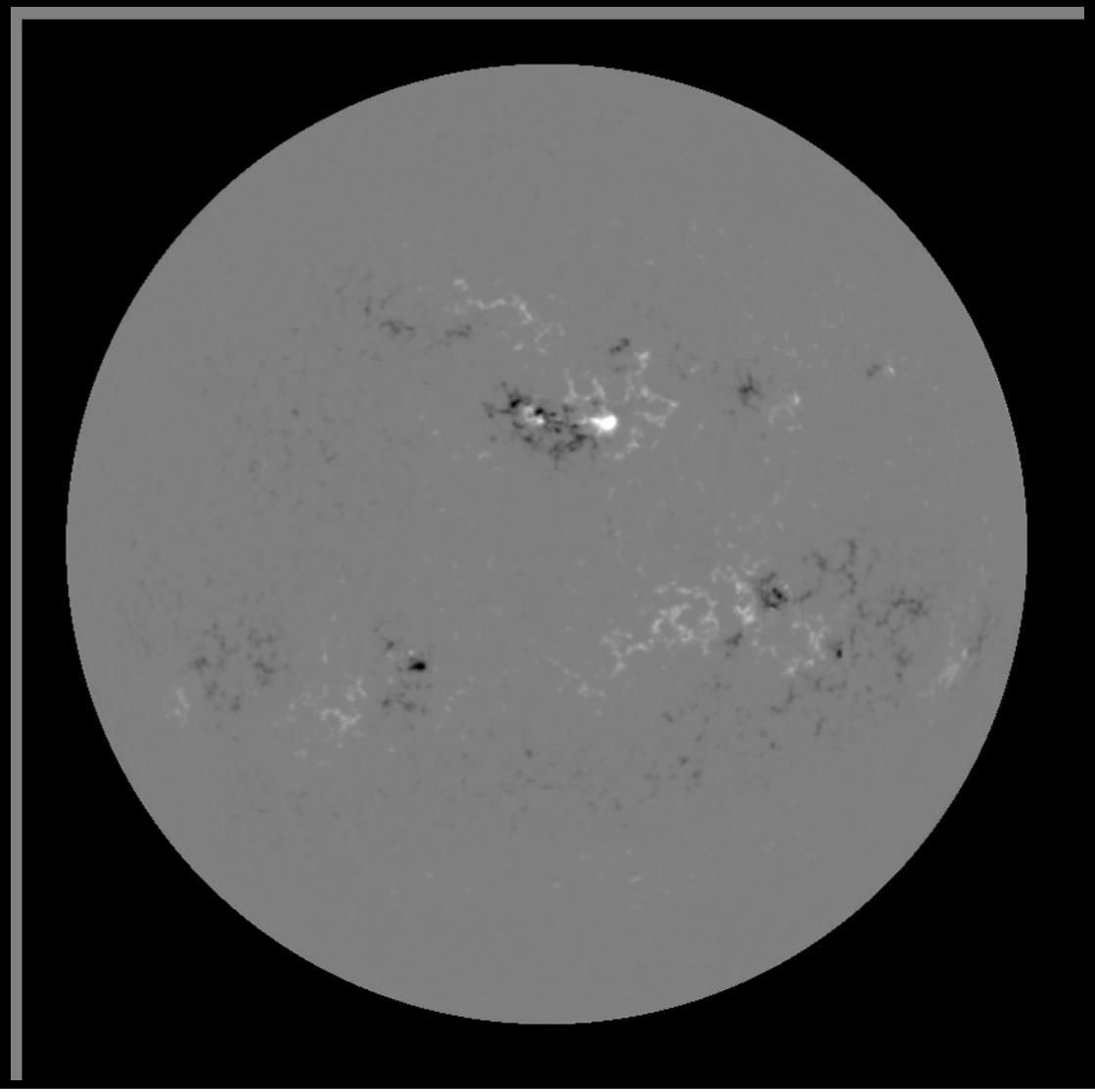


Solar active regions

GONG 677 nm 2025-01-08

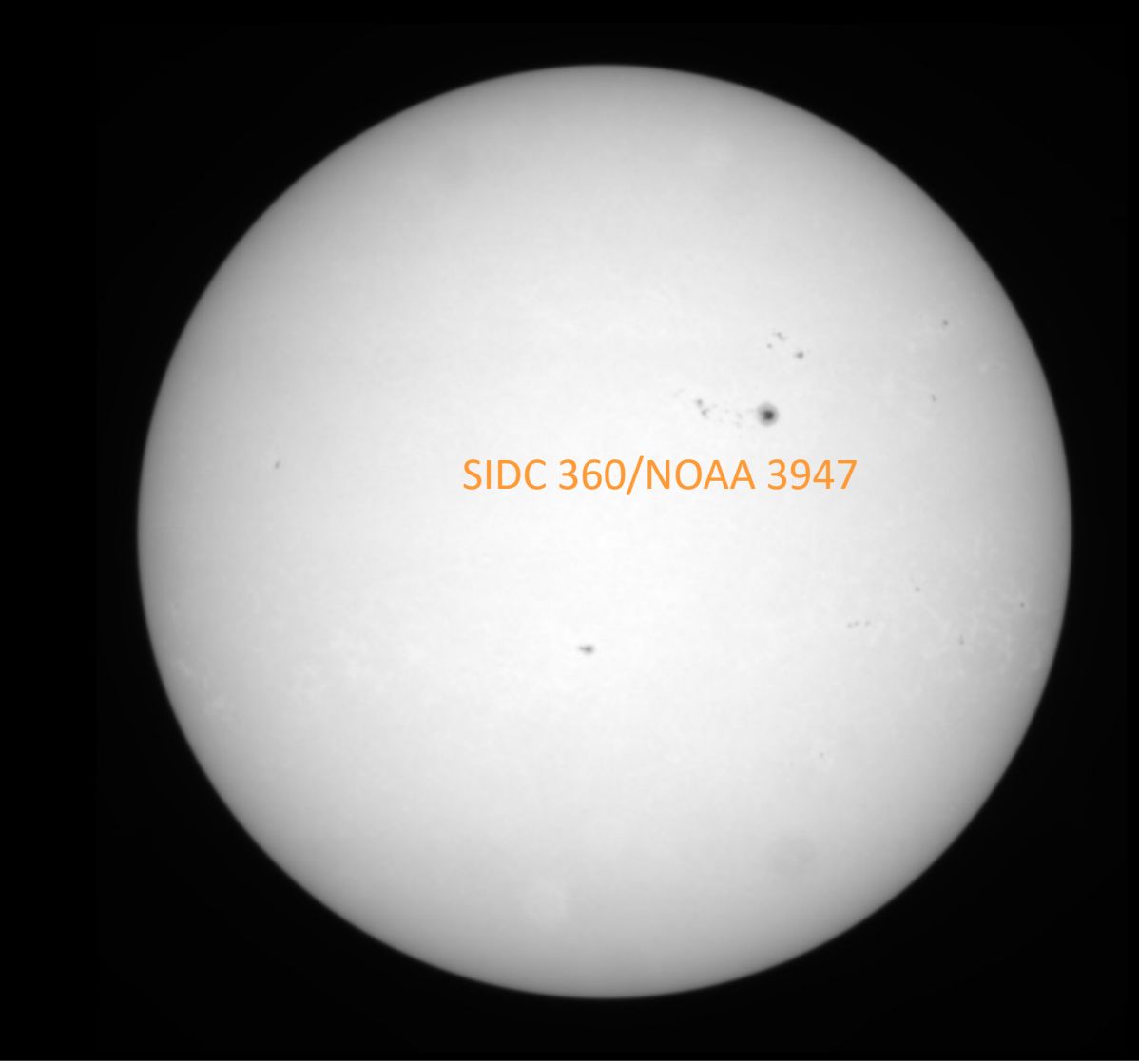


GONG Magnetogram 2025-01-08

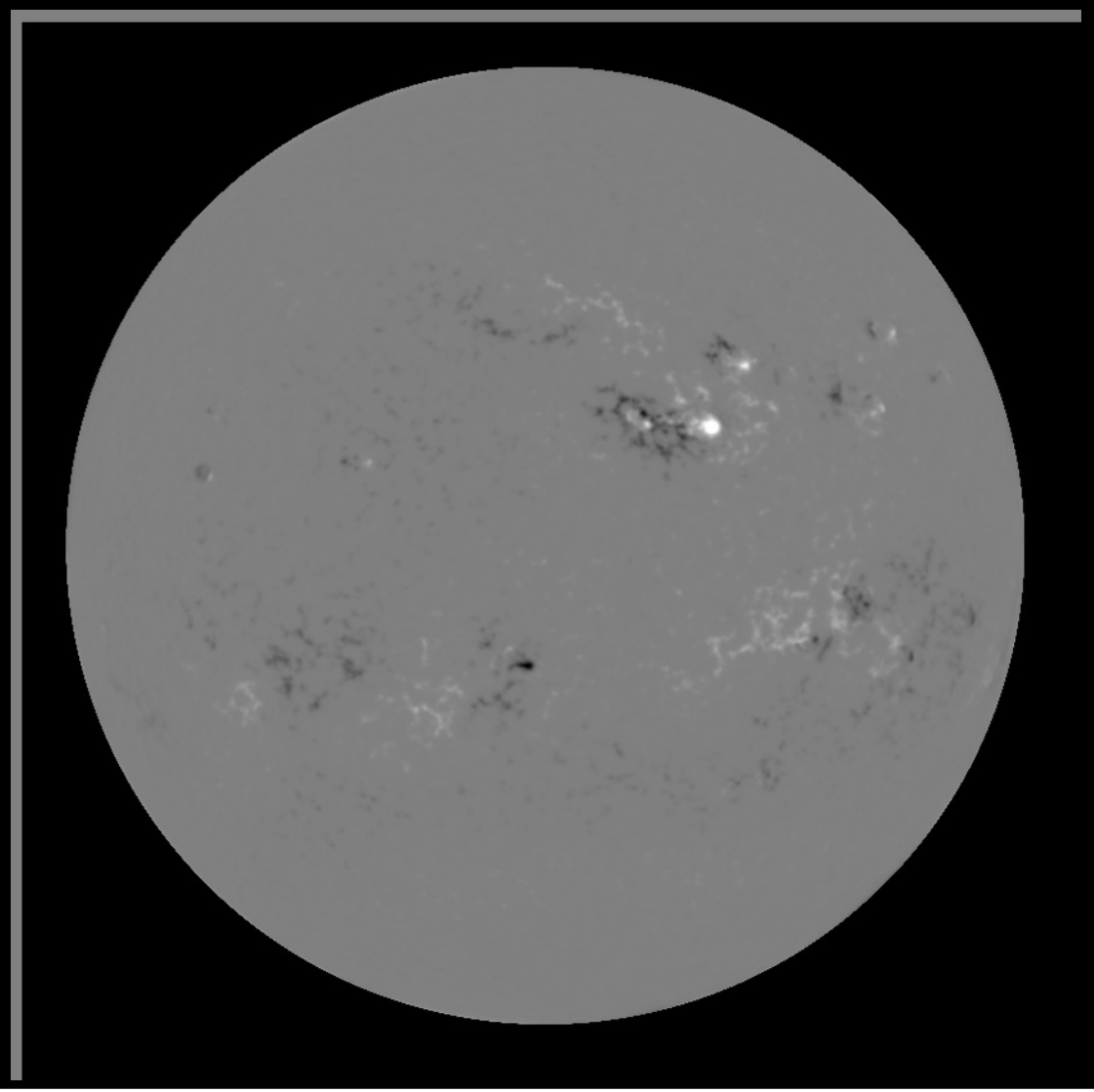


Solar active regions

GONG 677 nm 2025-01-09

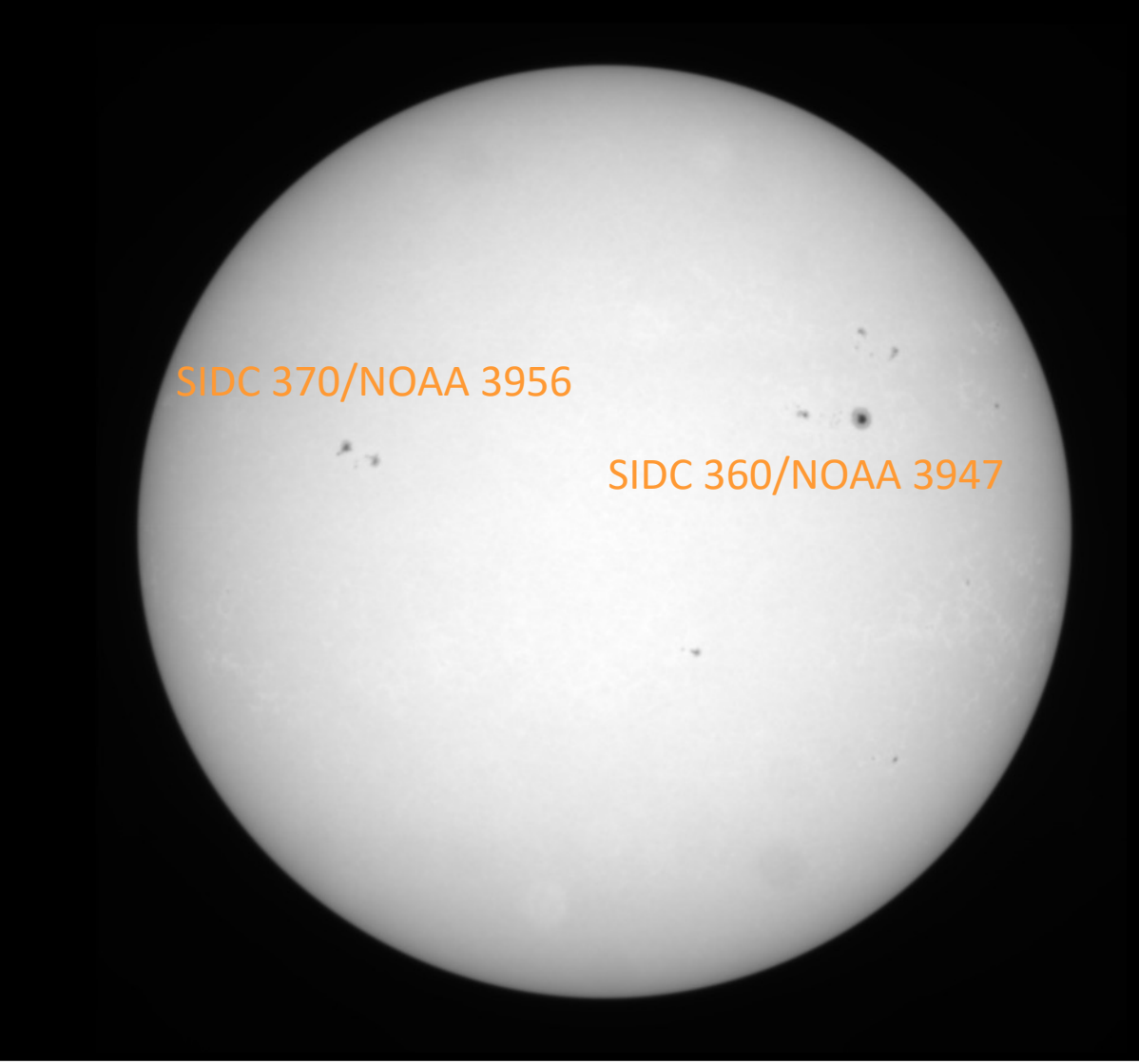


GONG Magnetogram 2025-01-09

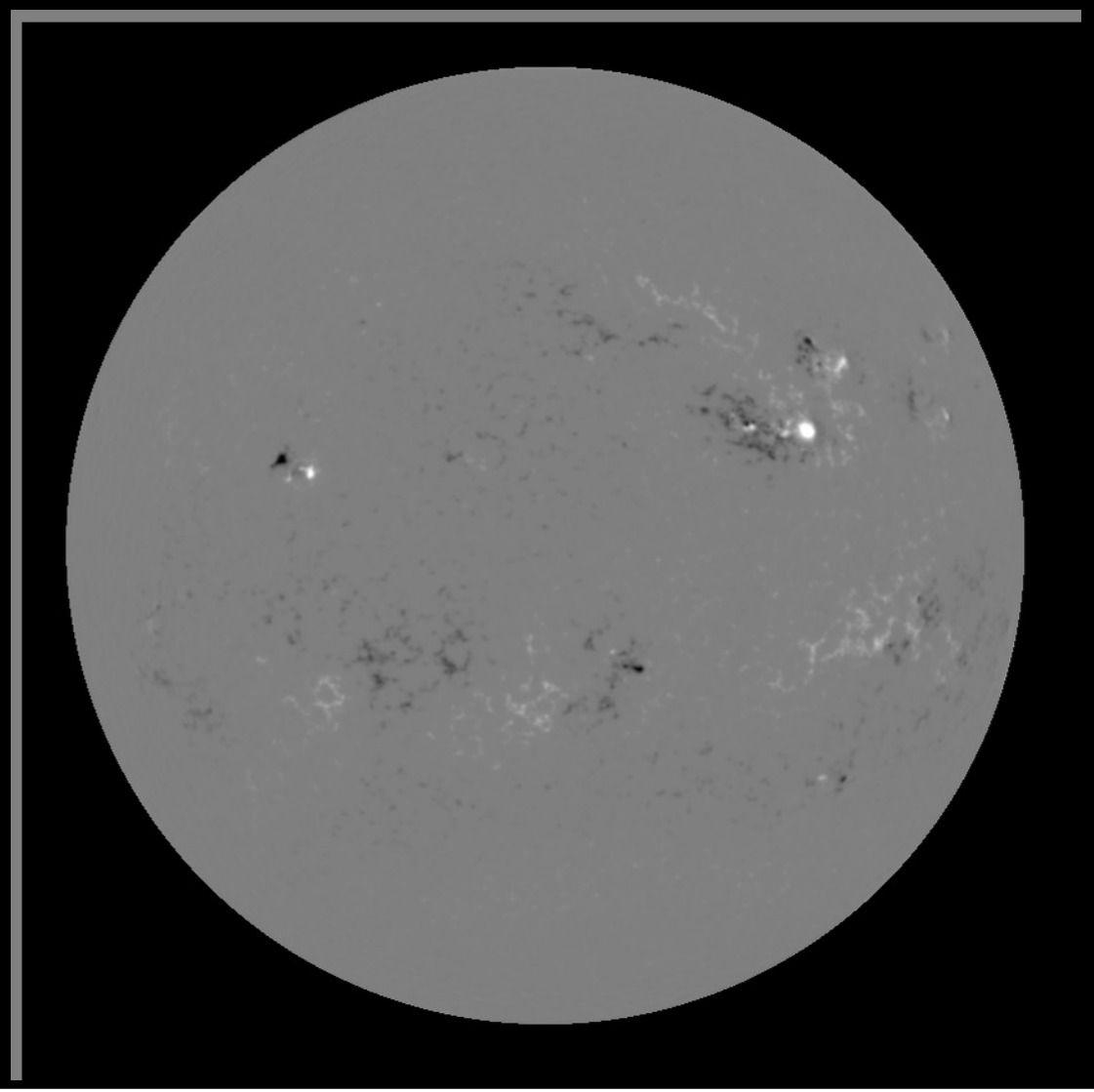


Solar active regions

GONG 677 nm 2025-01-10

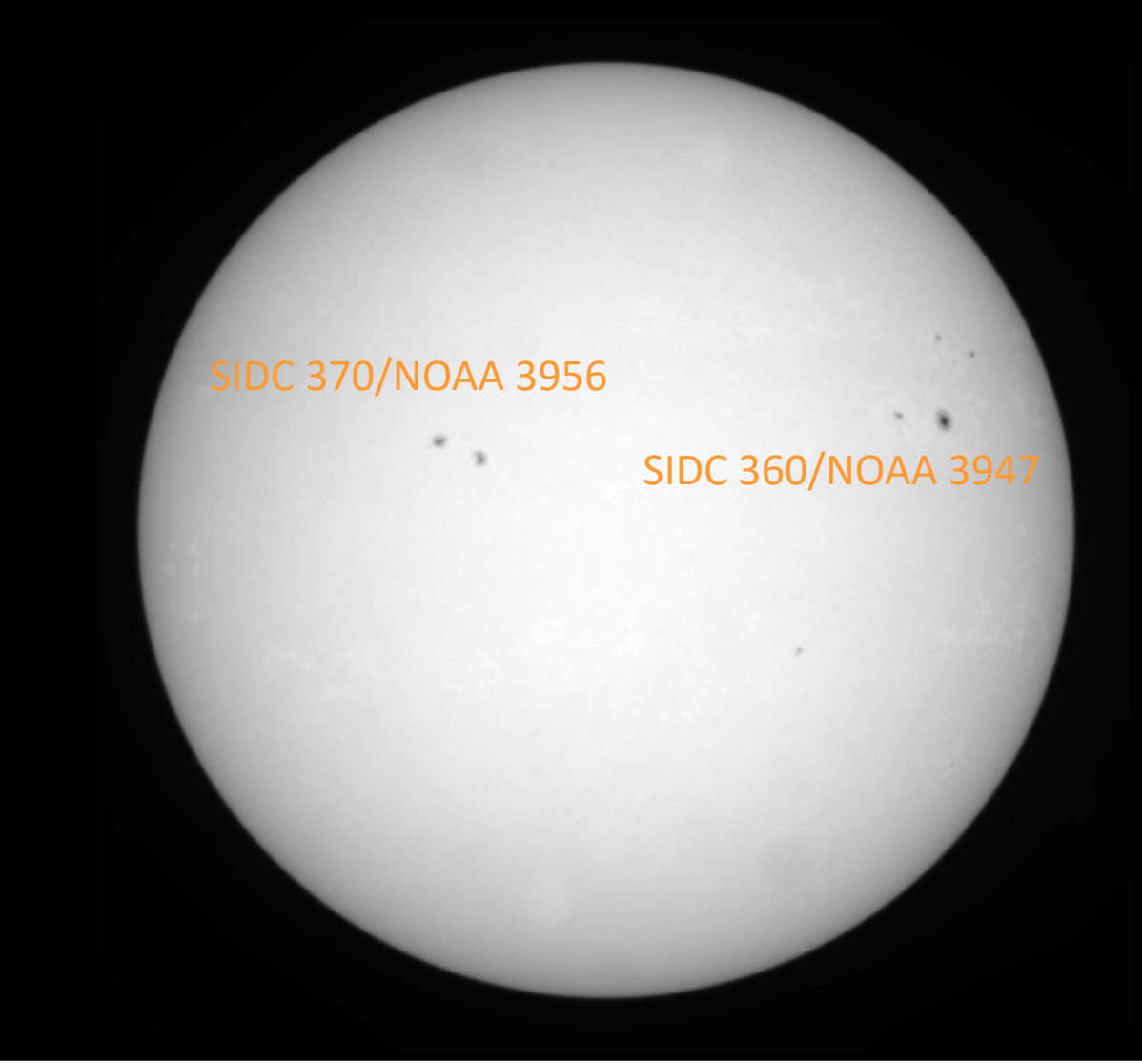


GONG Magnetogram 2025-01-10



Solar active regions

GONG 677 nm 2025-01-11



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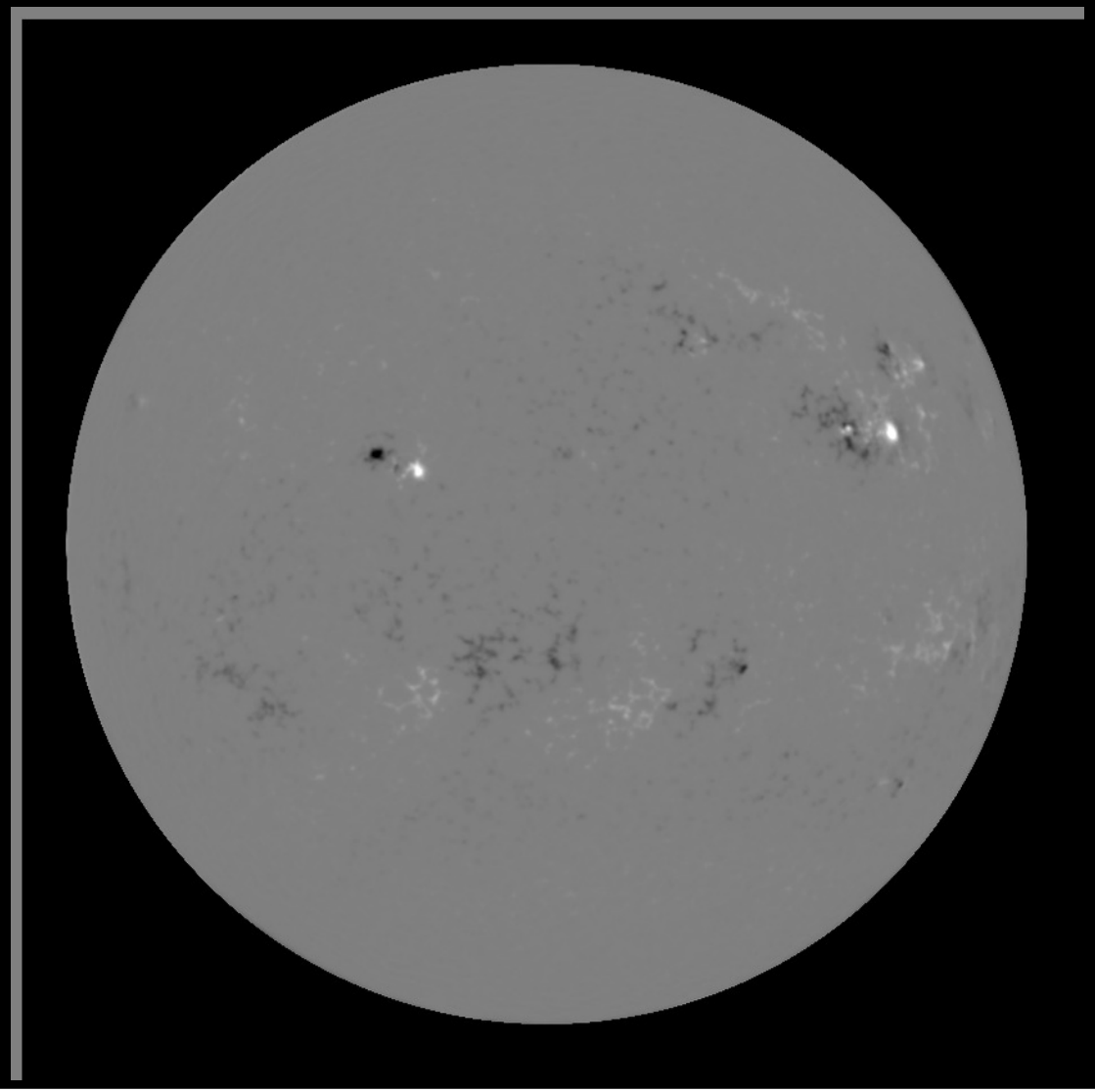
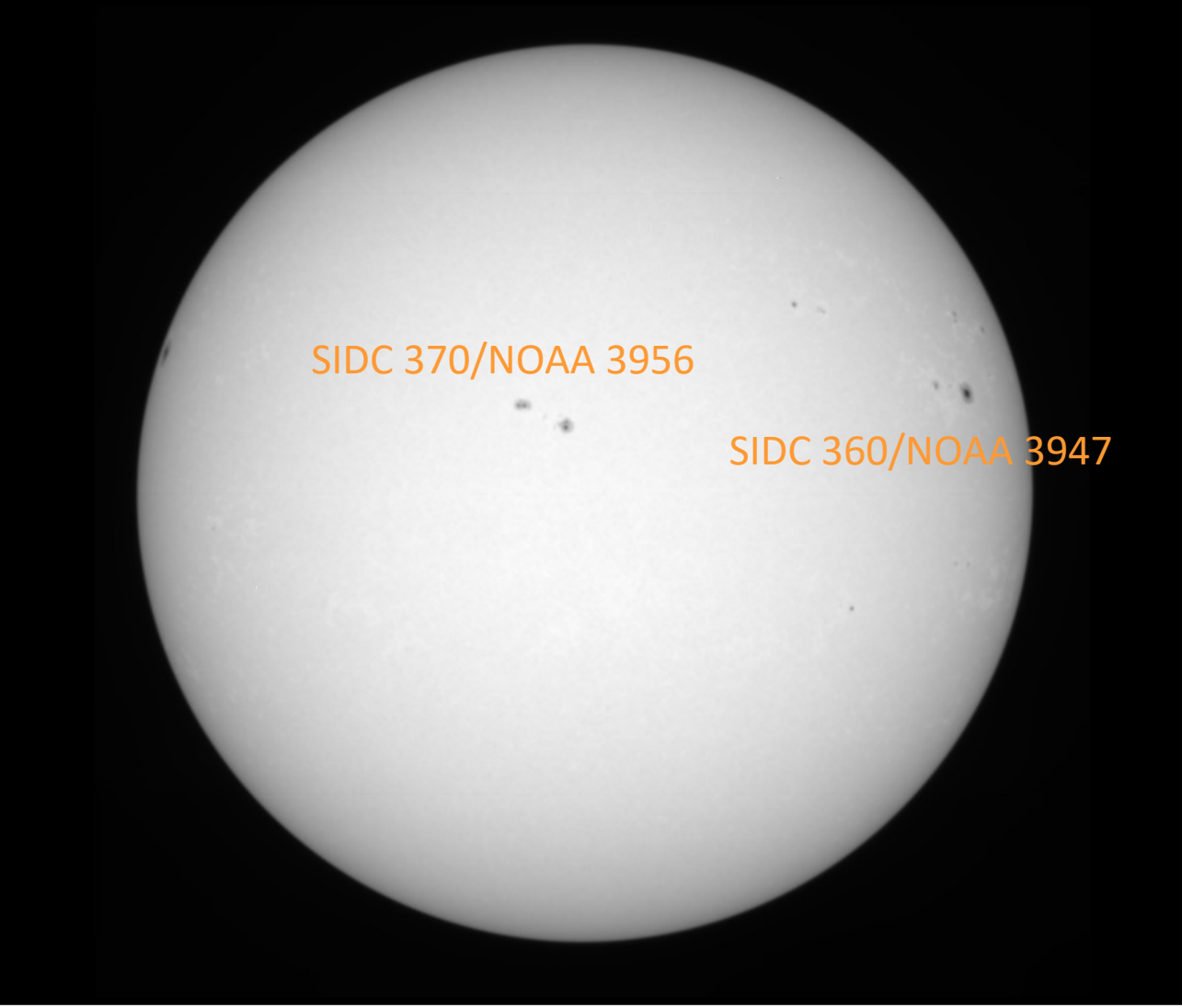
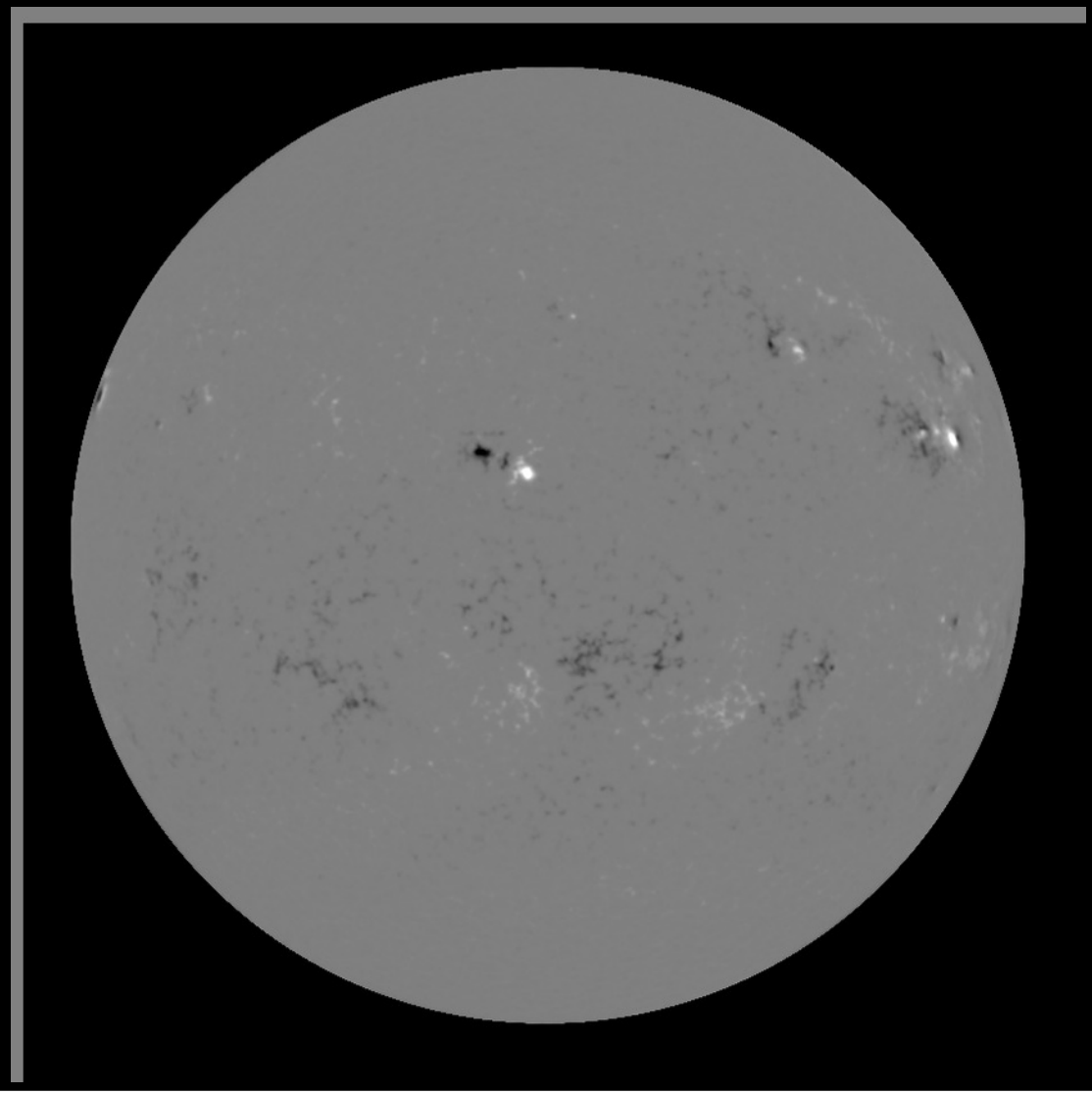


Solar active regions

GONG 677 nm 2025-01-12

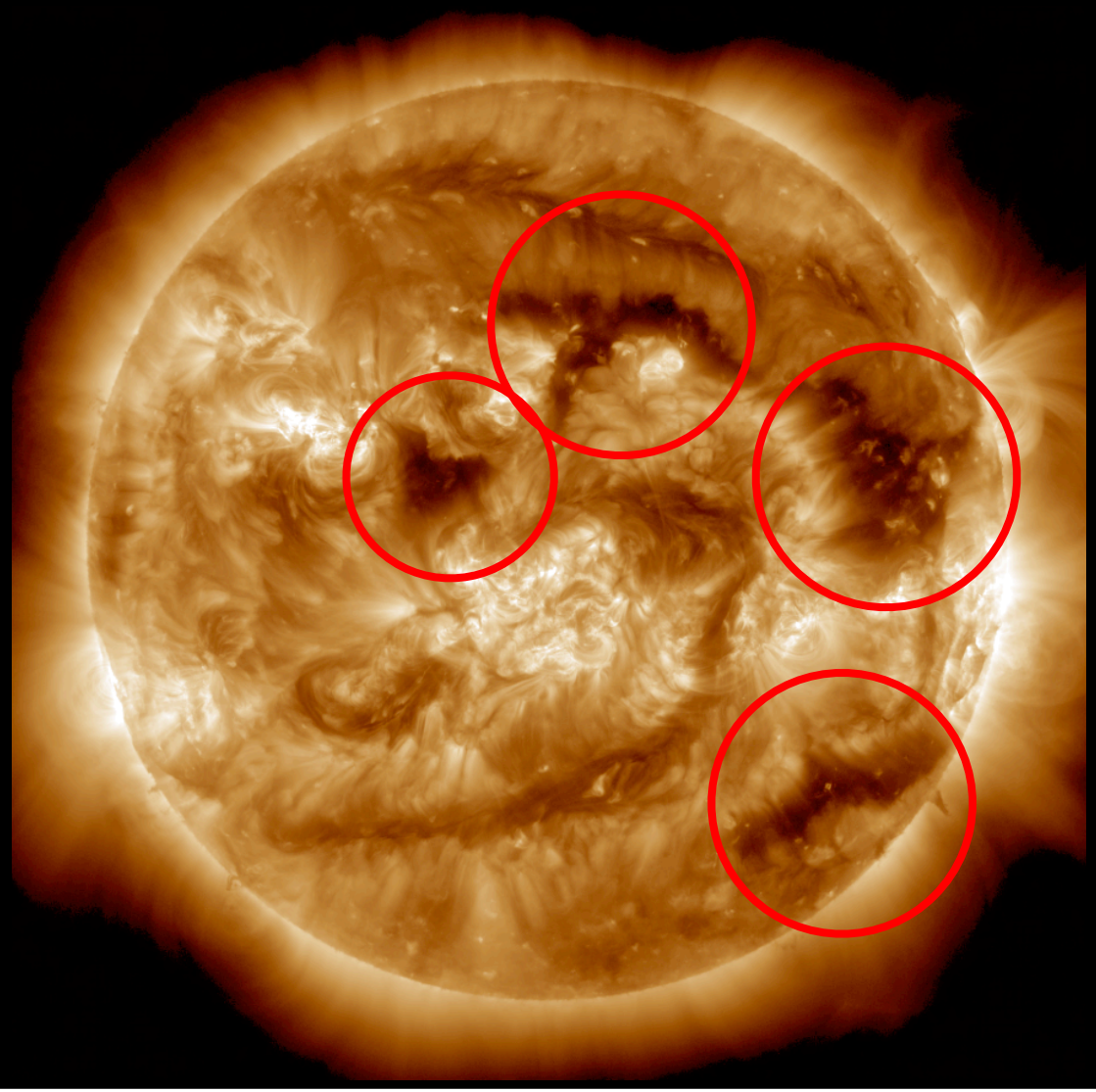


GONG Magnetogram 2025-01-12

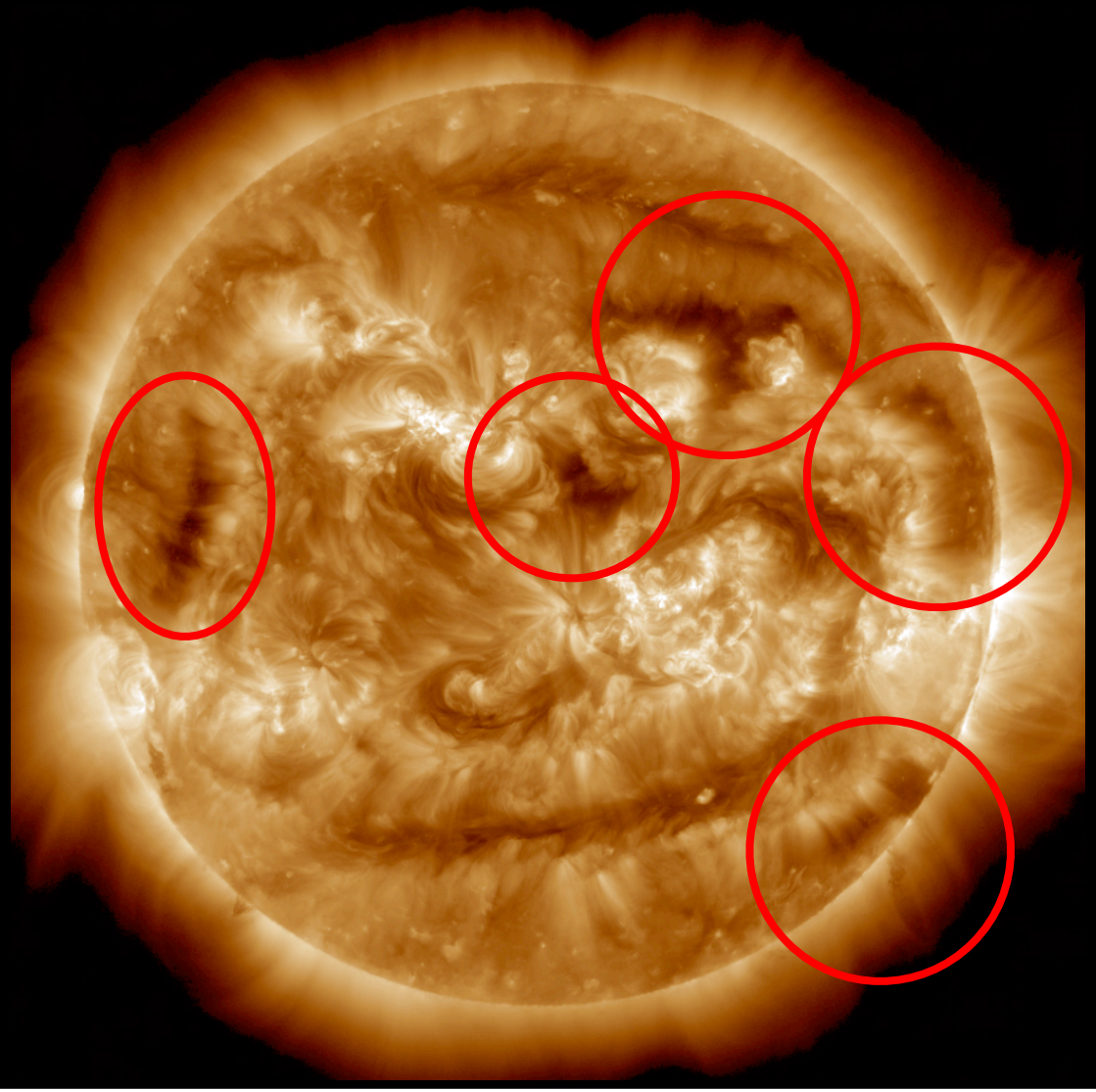


Coronal holes

SDO/AIA 19.3 nm 2025-01-06

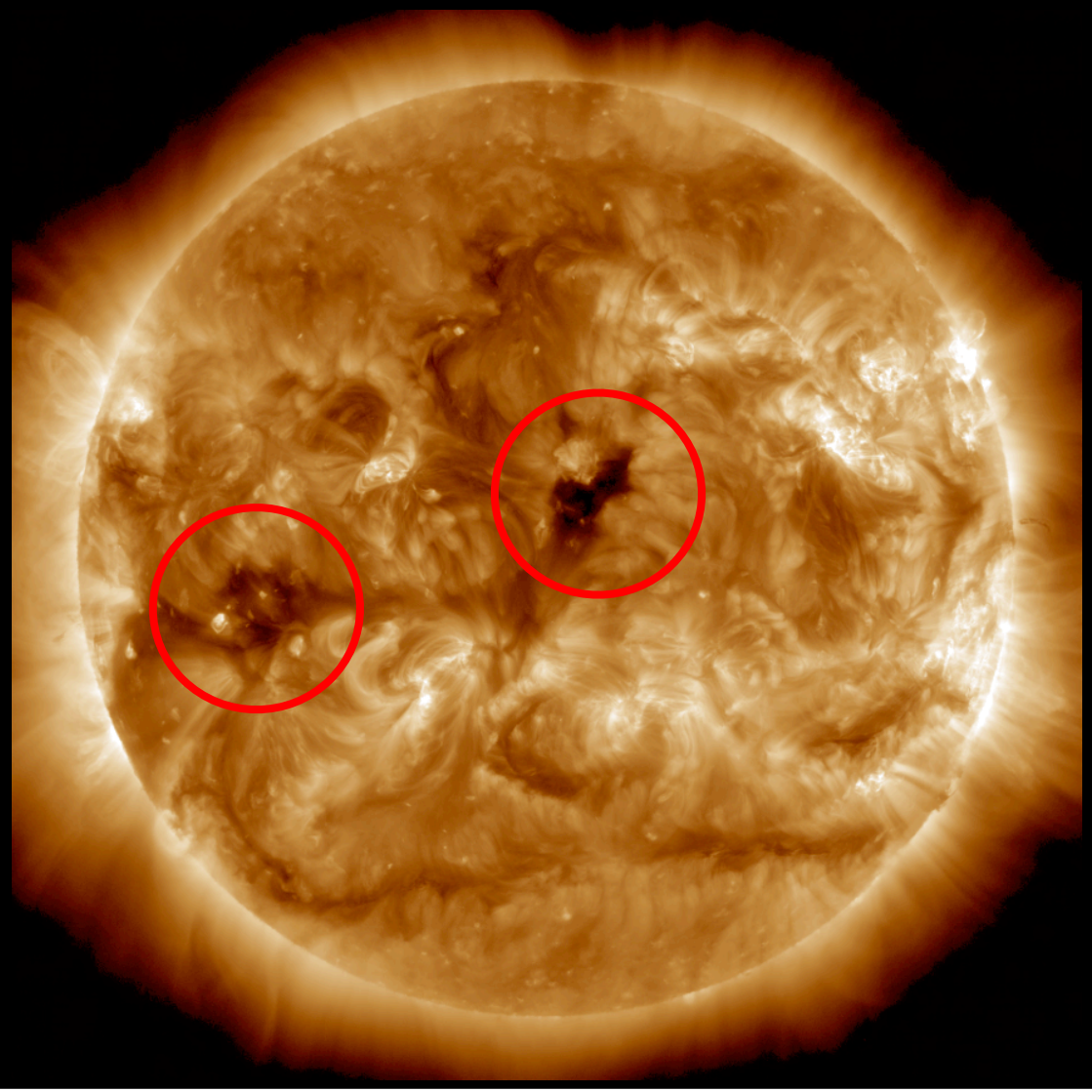


SDO/AIA 19.3 nm 2025-01-07

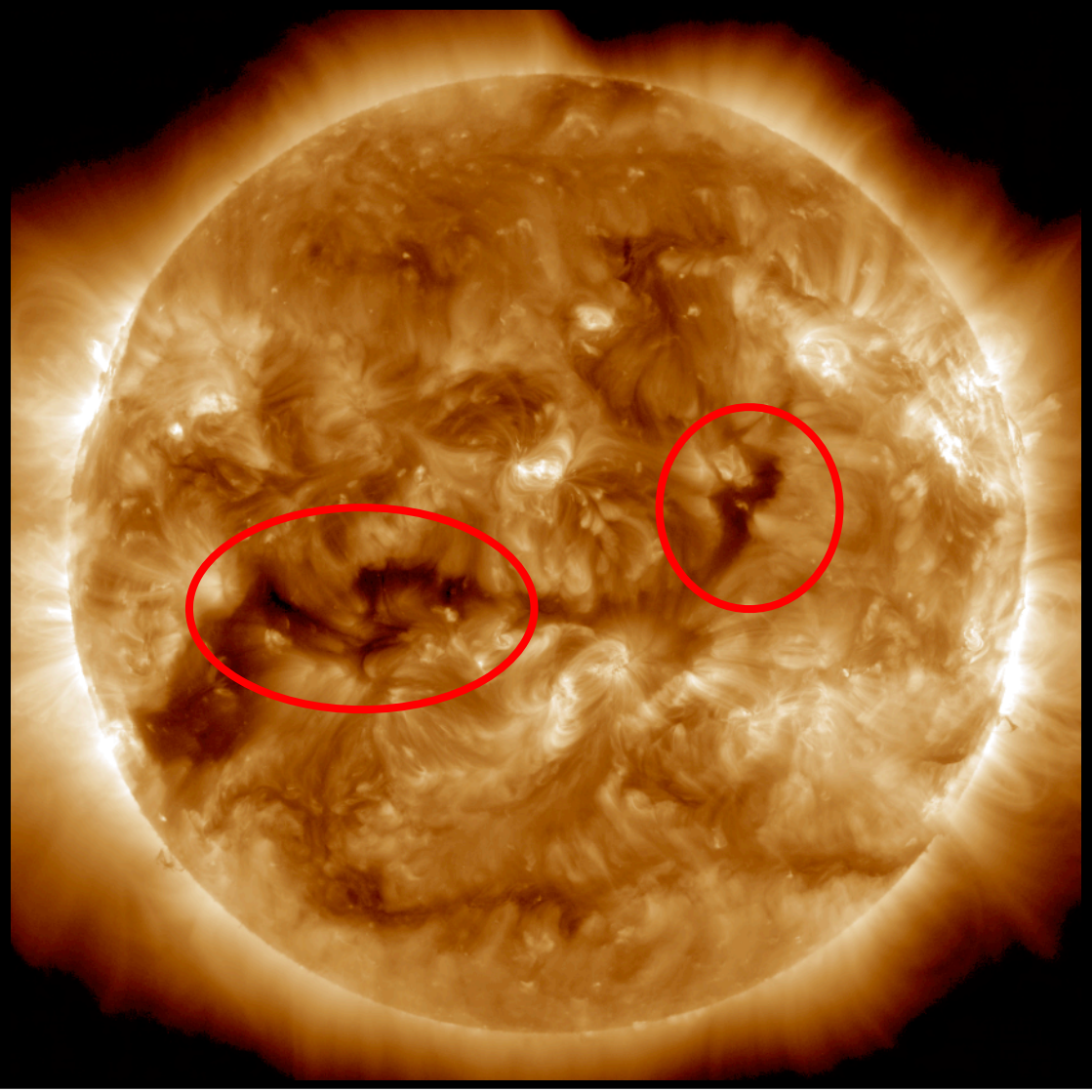


Coronal holes

SDO/AIA 19.3 nm 2025-01-11

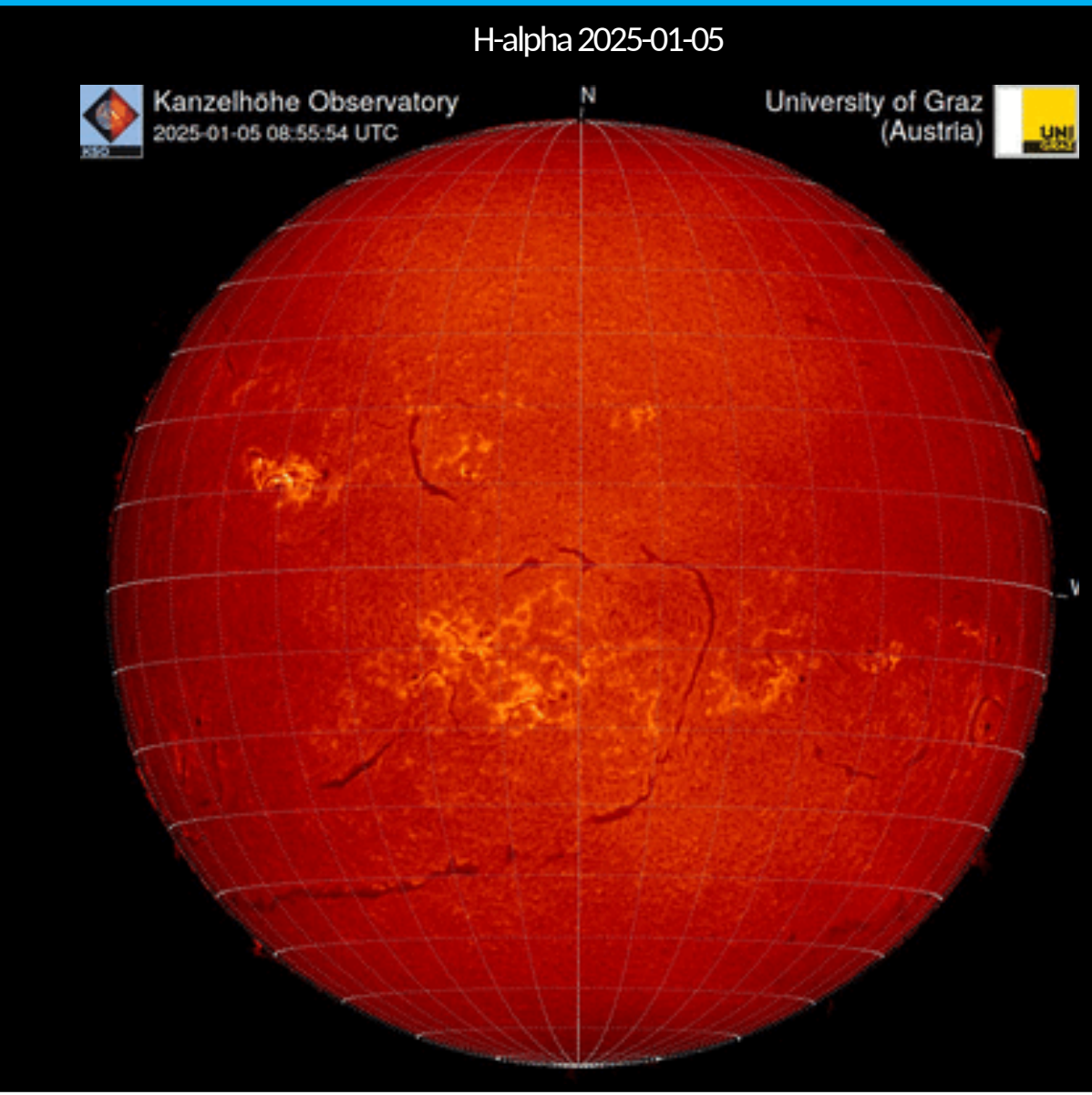


SDO/AIA 19.3 nm 2025-01-12

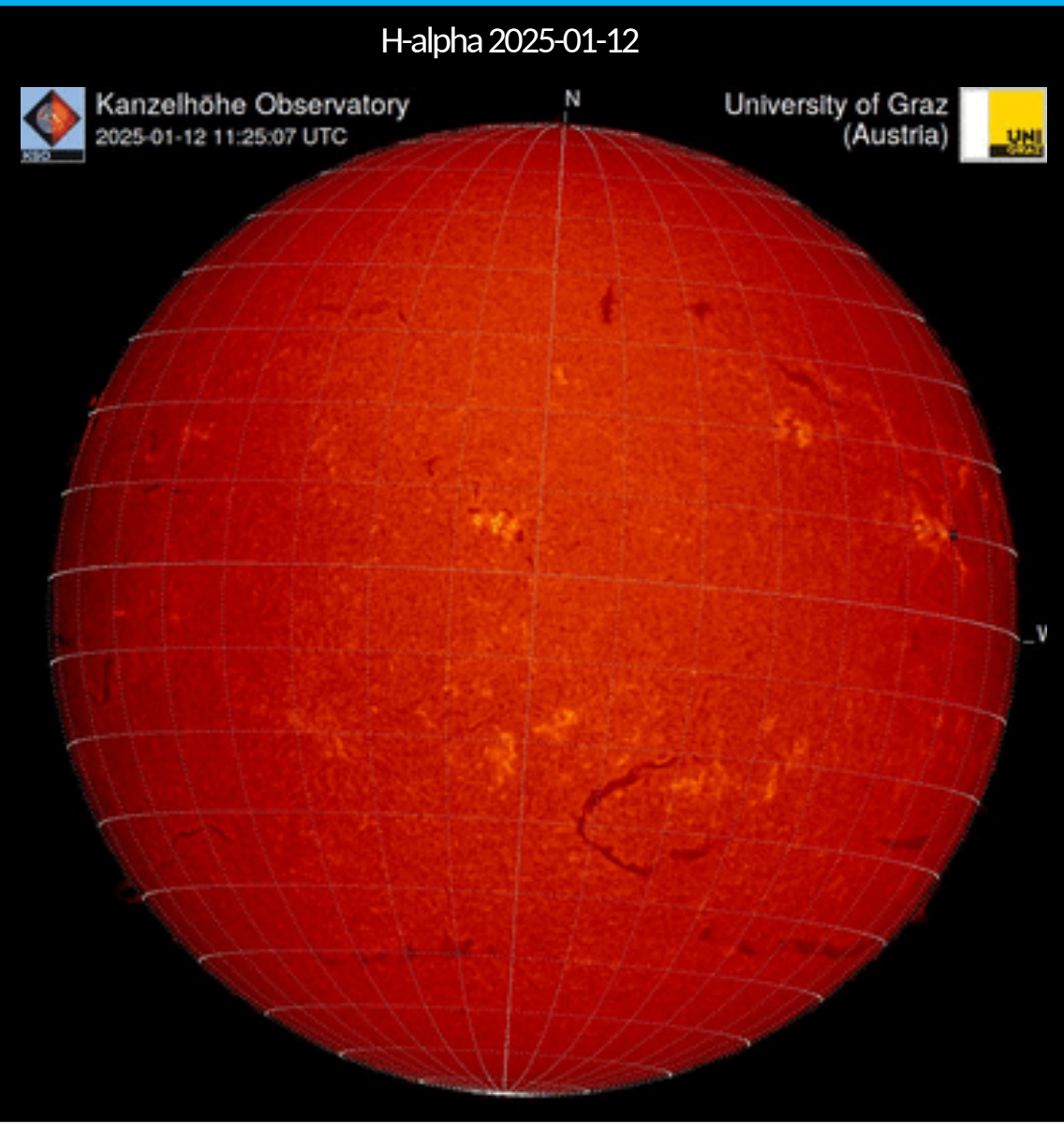


Filaments & Filament eruptions

H-alpha 2025-01-05

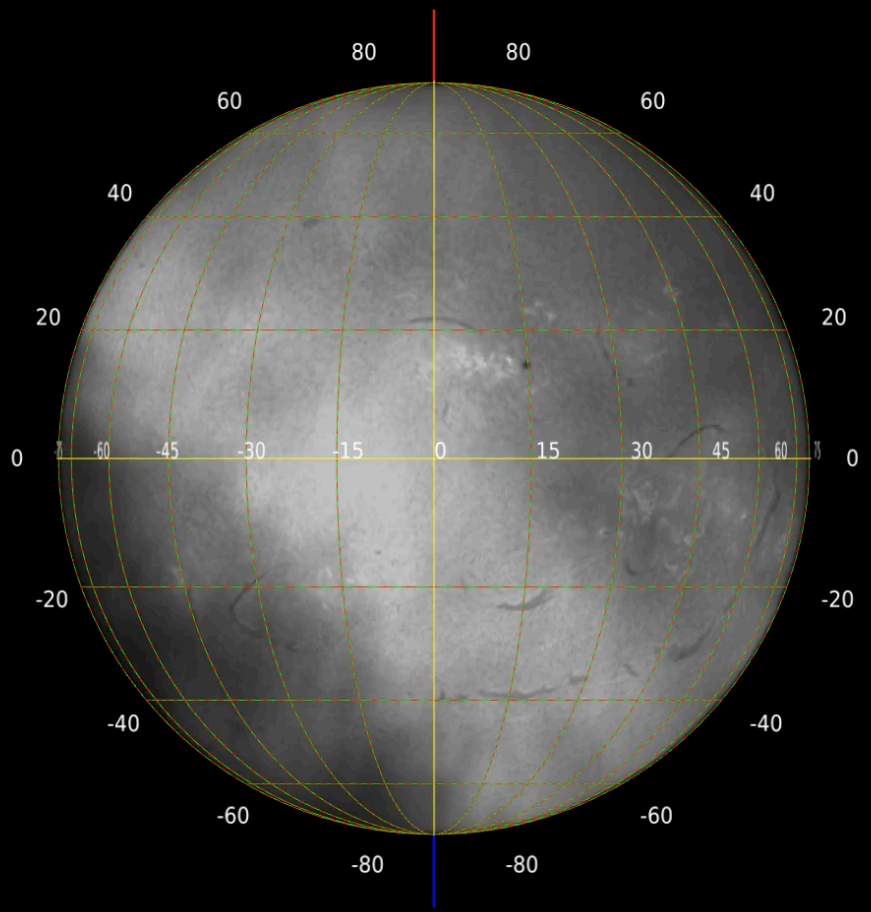


H-alpha 2025-01-12



Filaments & Filament eruptions

GONG 2025-01-09



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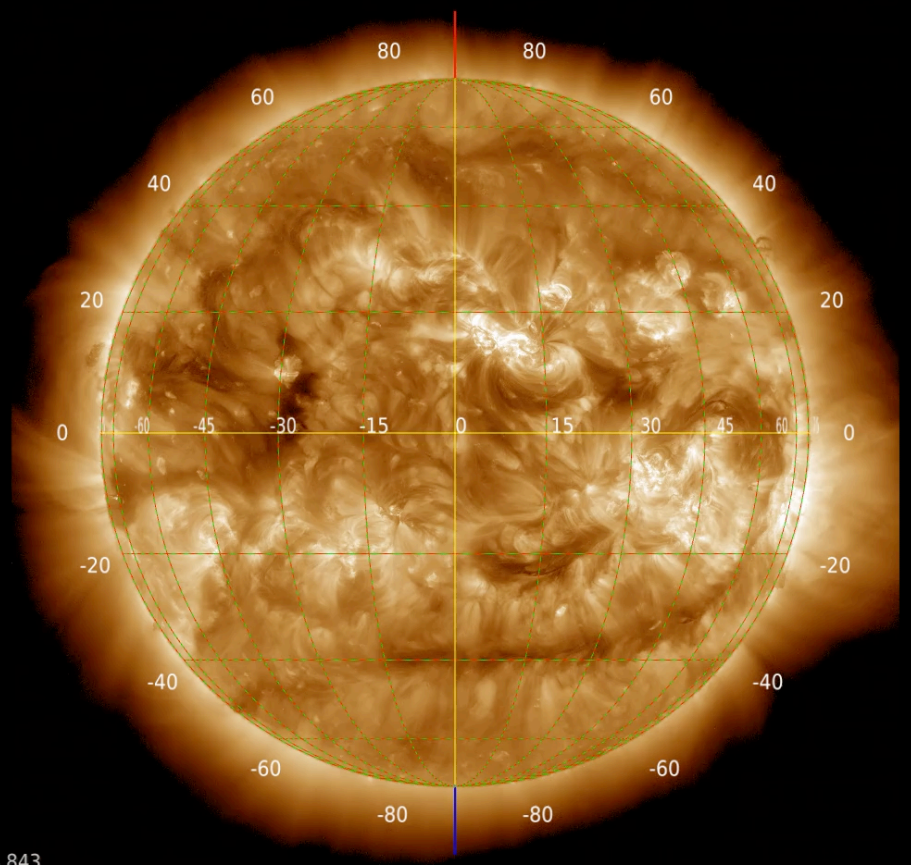
SDO AIA 2025-01-09



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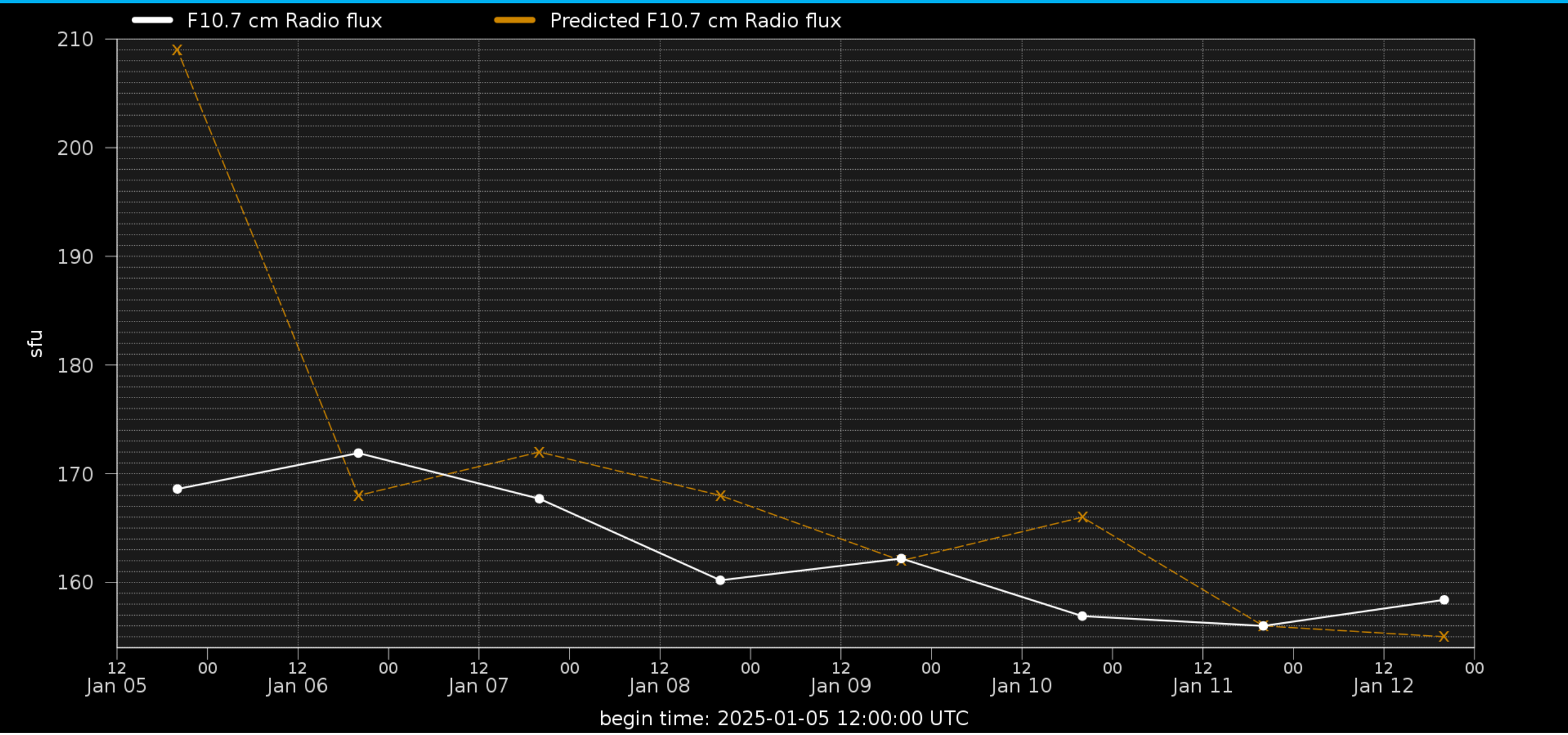
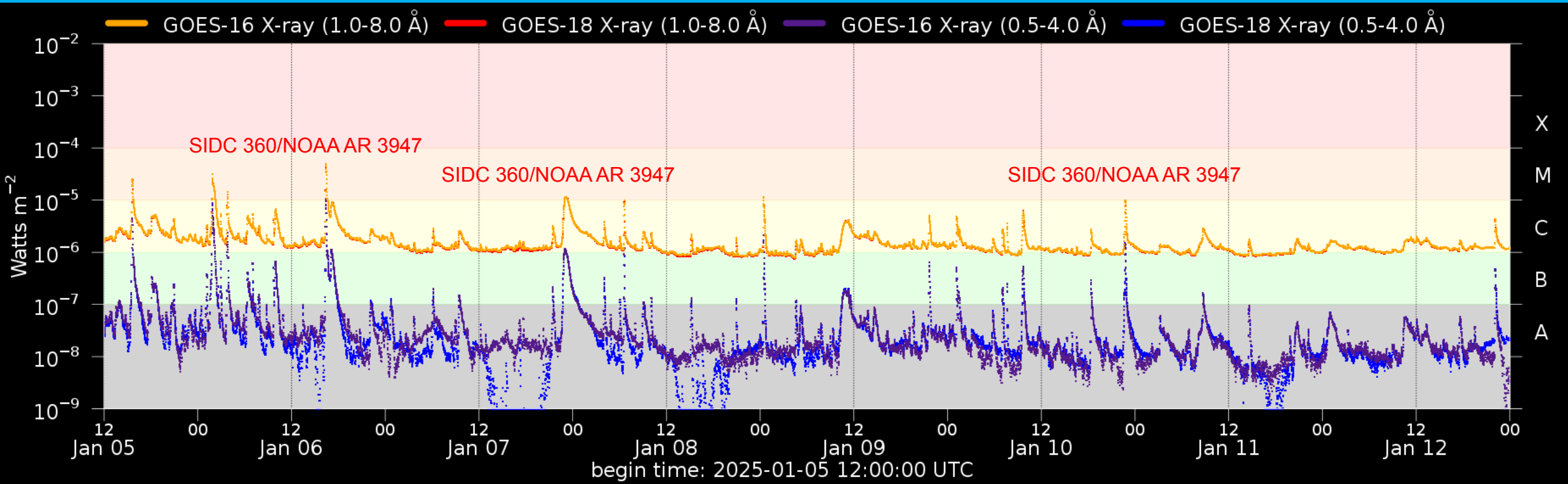
Solar F10.7cm radio flux



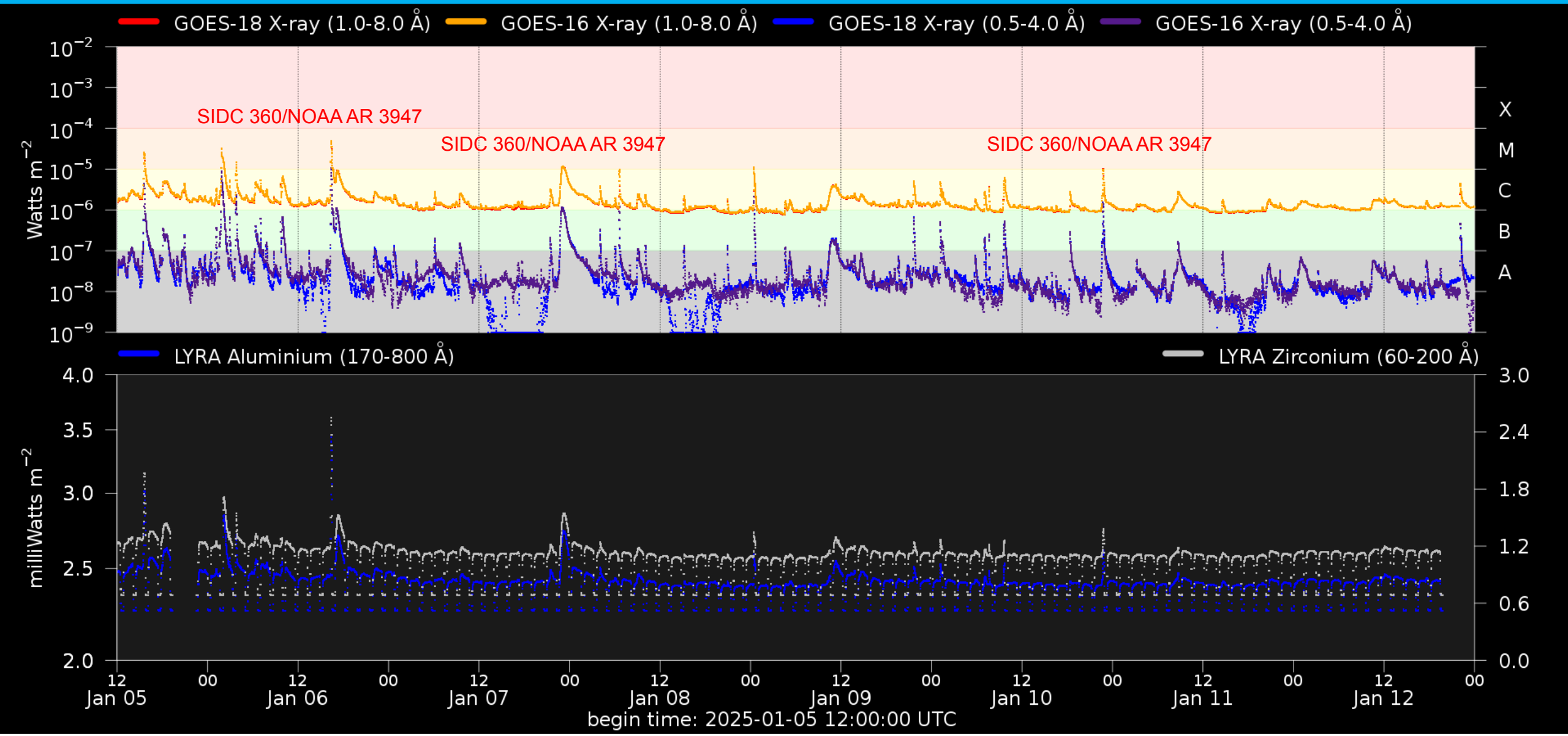
Flaring activity



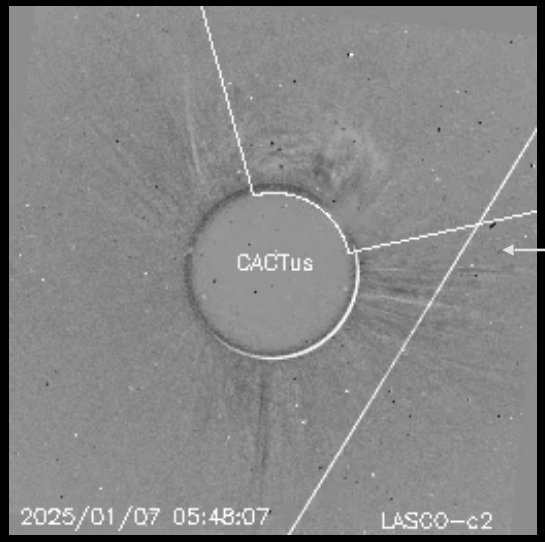
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-01-05	2025-01-06	2025-01-07	2025-01-08	2025-01-09	2025-01-10	2025-01-11	2025-01-12
Probability (%)	99|85|25	99|76|10	99|60|15	98|70|10	99|83|15	99|50|10	99|55|10	91|40|05
Observed (#)	08|03|00	05|01|00	08|00|00	04|01|00	07|00|00	03|00|00	01|00|00	02|00|00

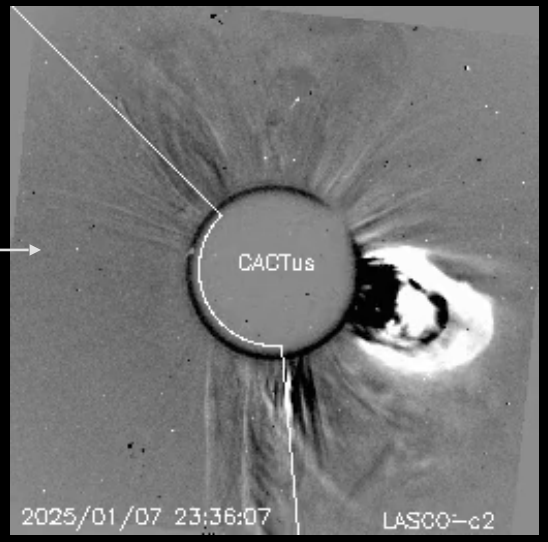
Solar X-Ray and UV flux

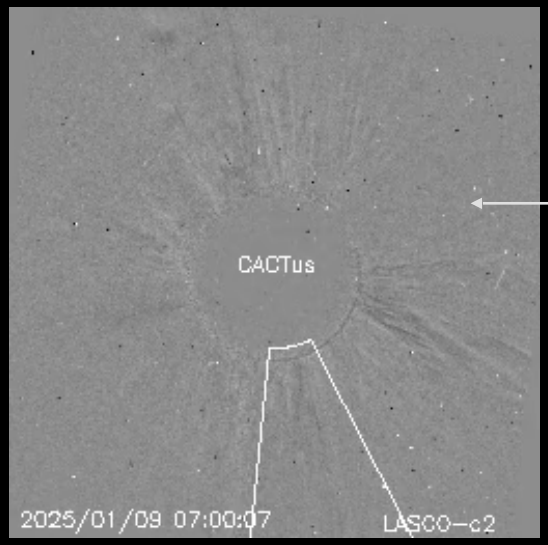


Coronal Mass Ejections

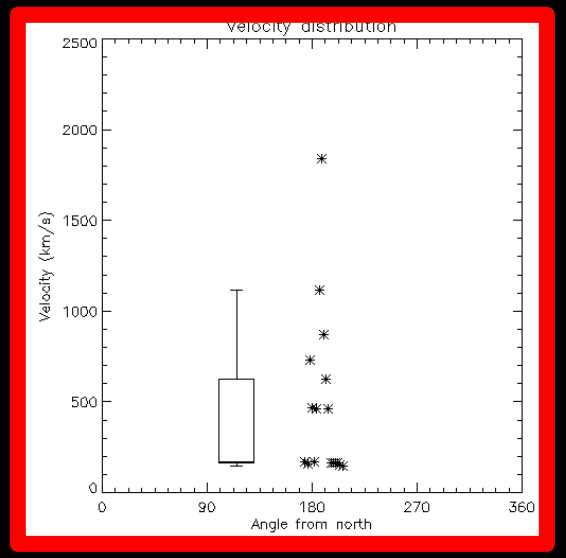


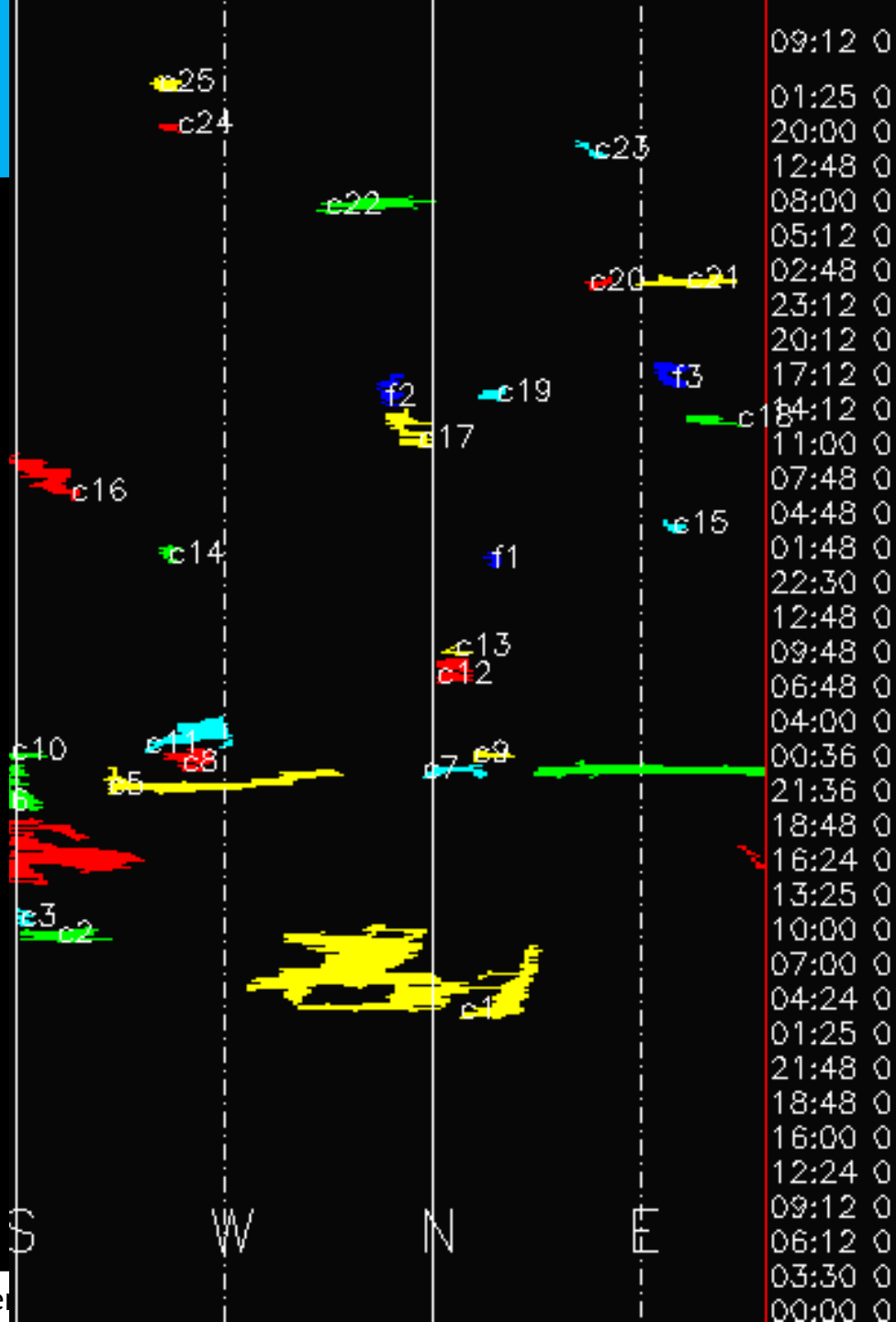
Not Earth directed





Related to the flaring and filament eruption on Jan 09





Solar Wind and

Geomagnetic Activity

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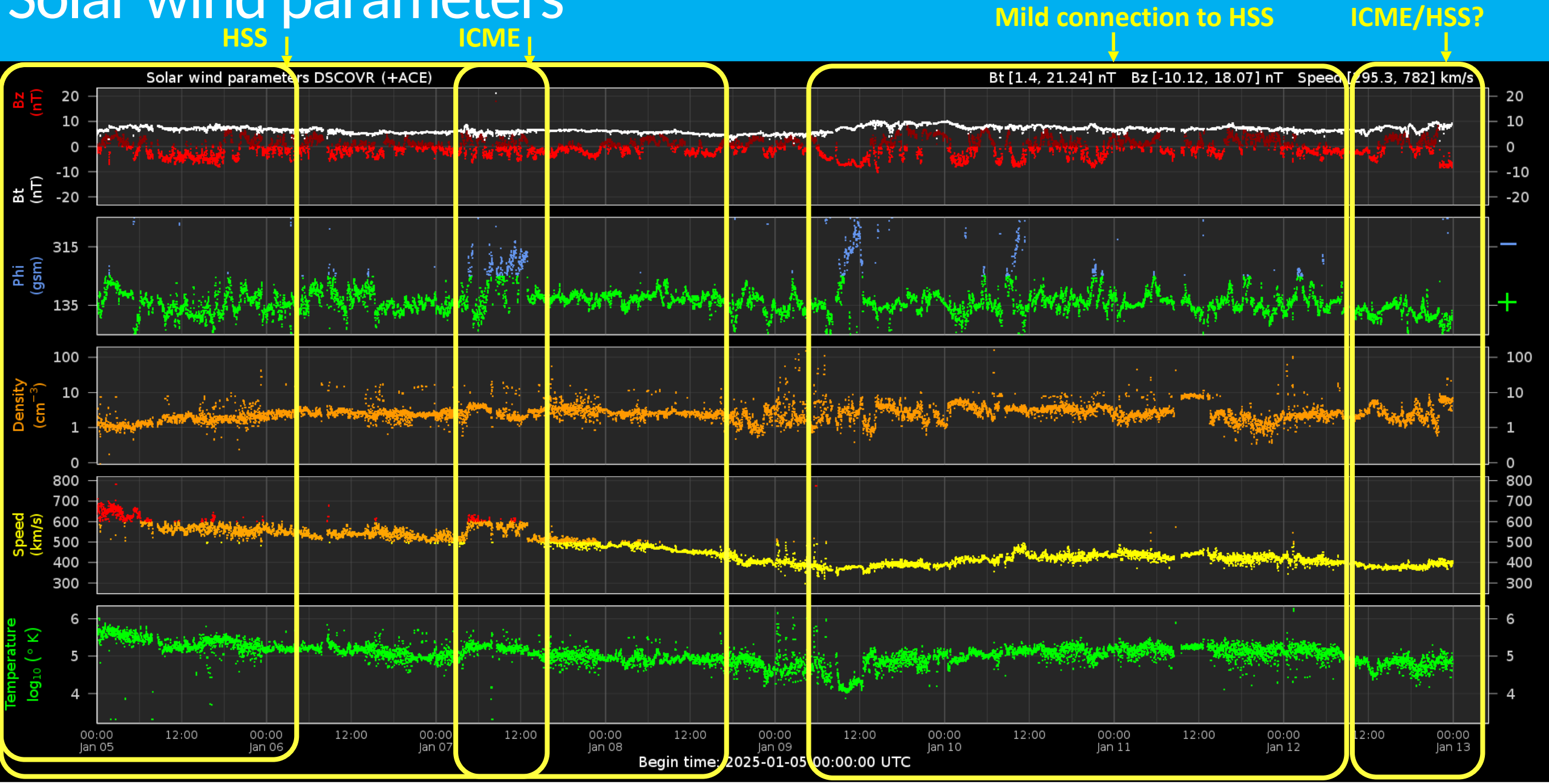
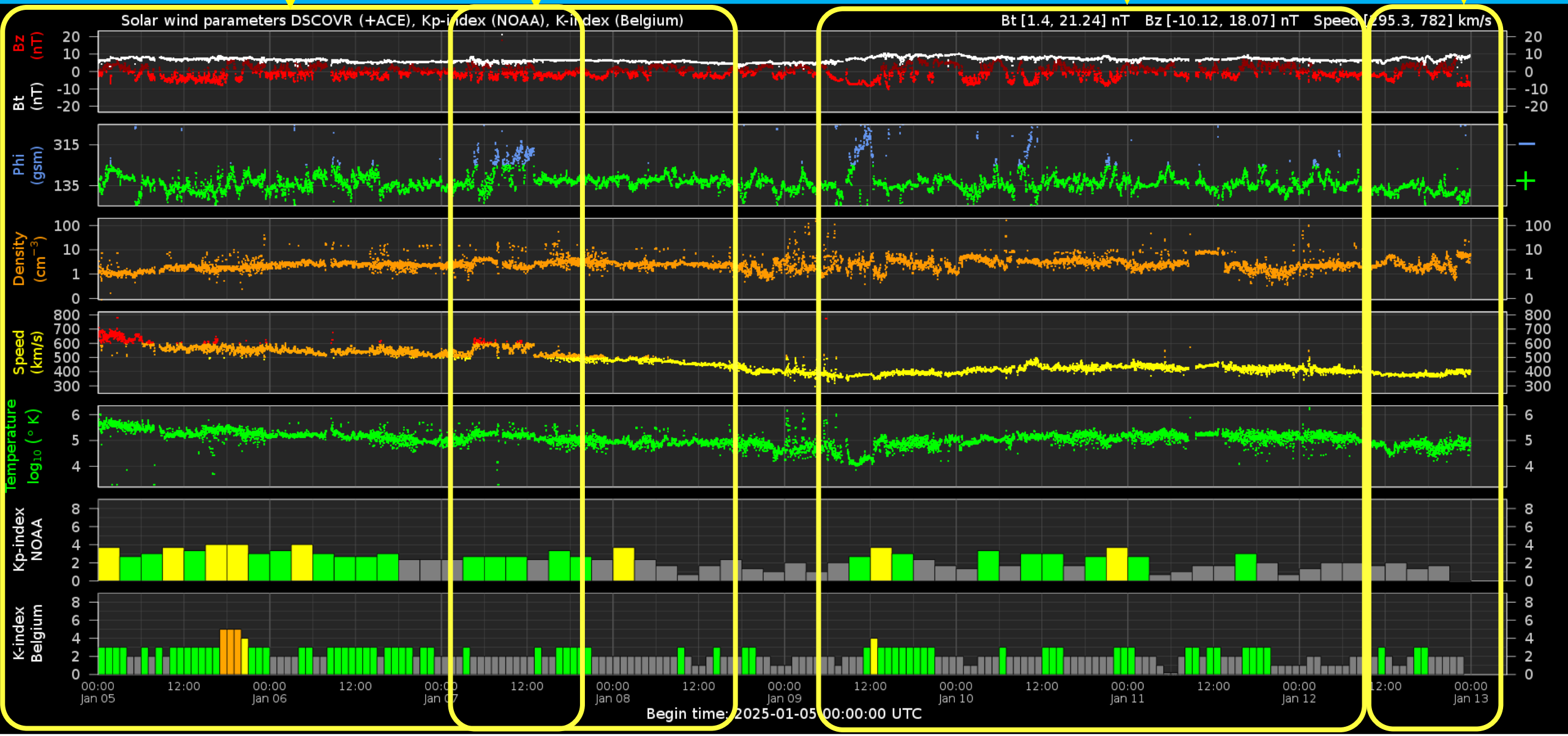
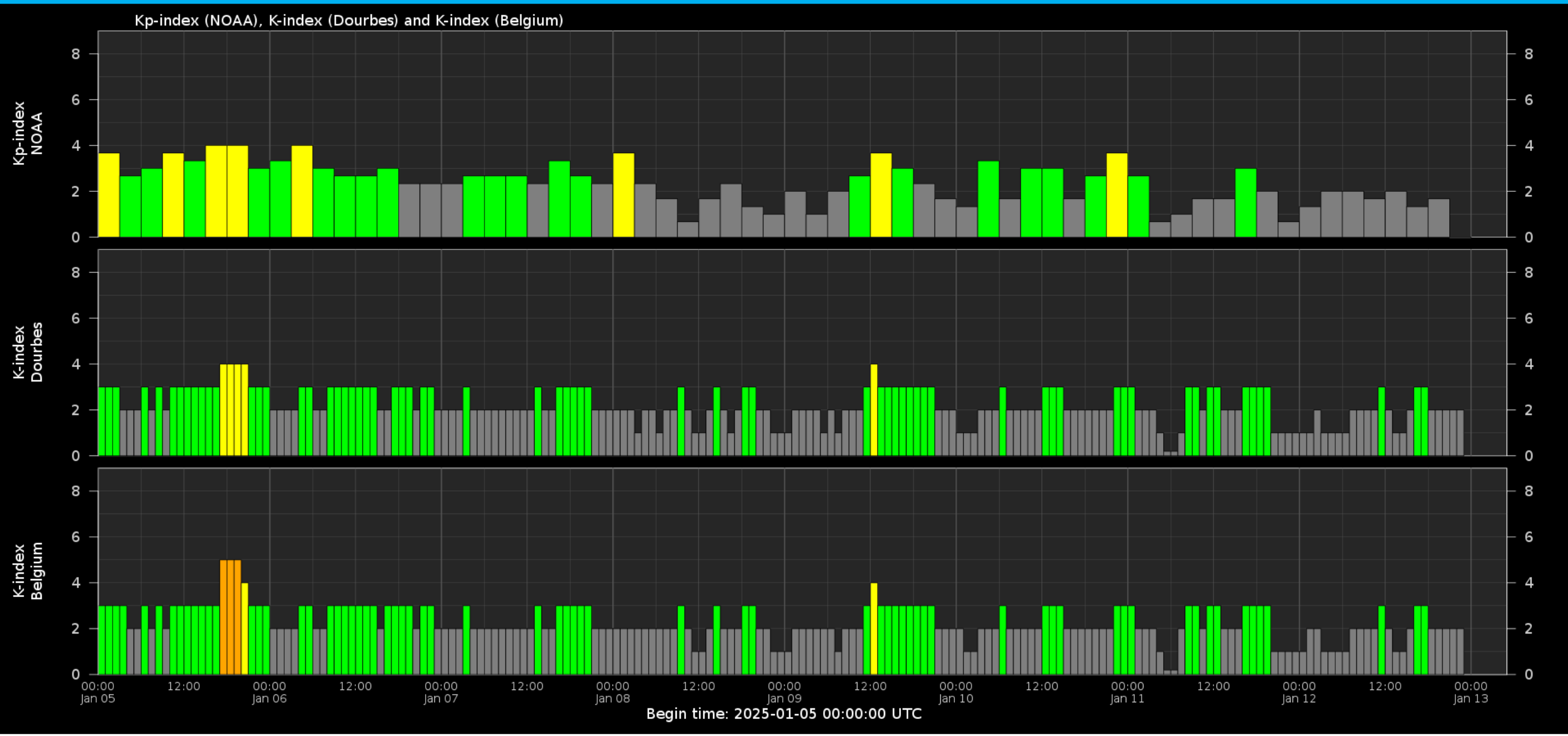
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



Energetic Particles

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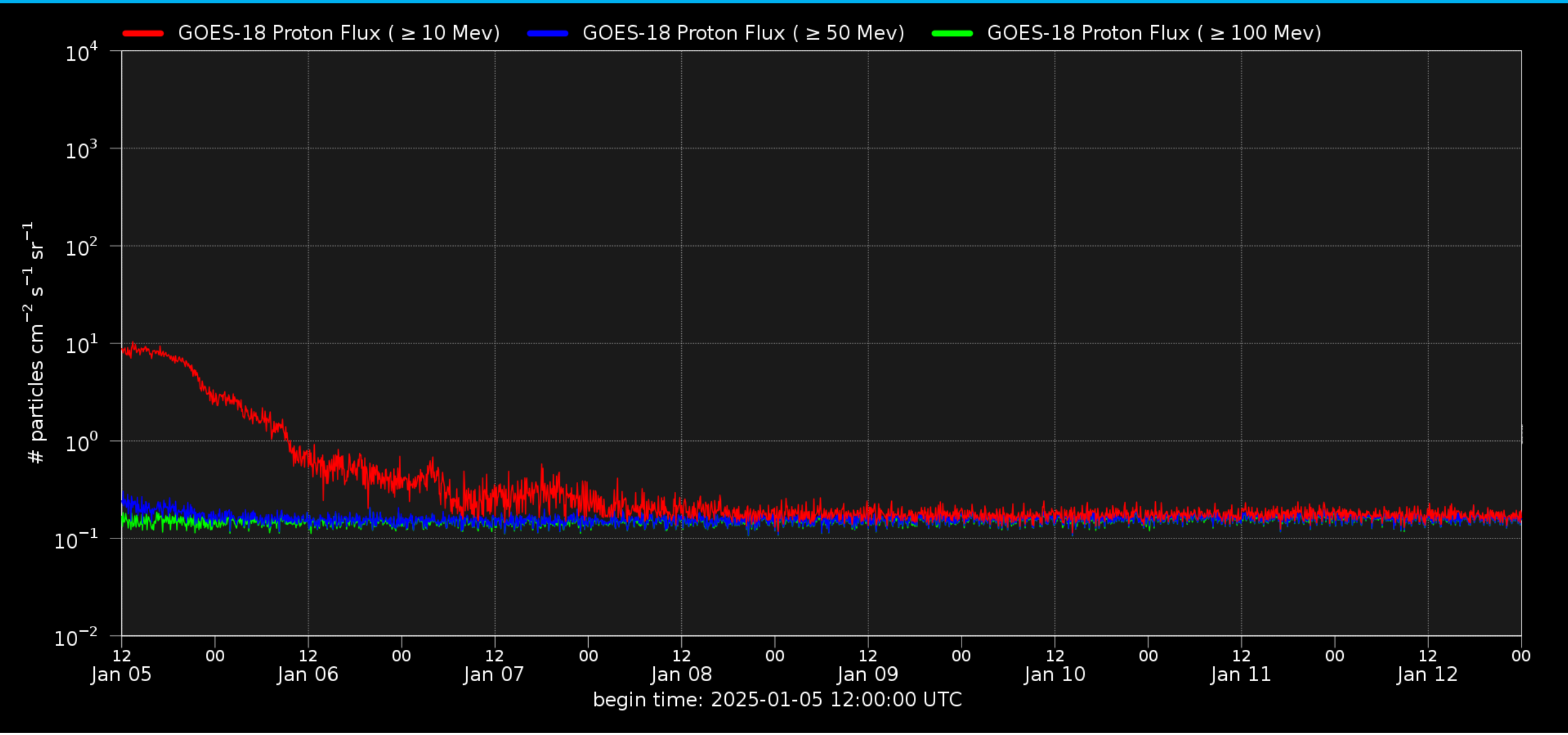
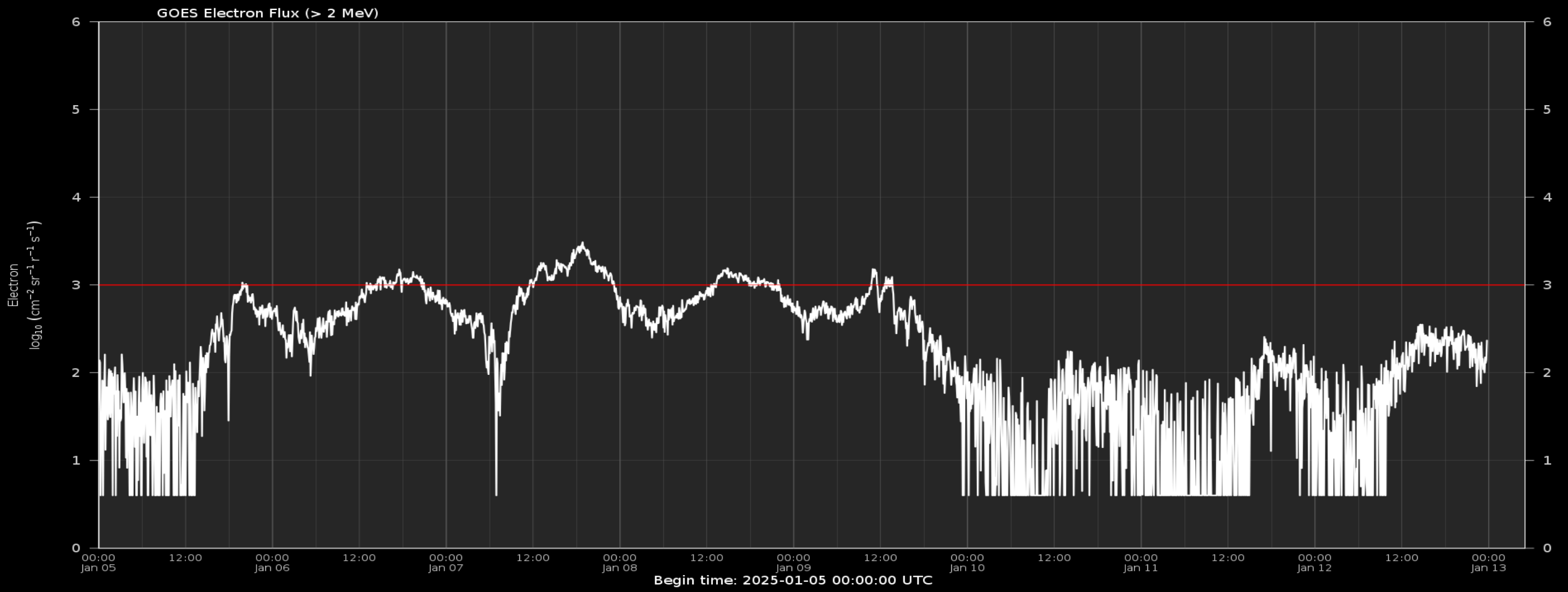
Solar proton flux



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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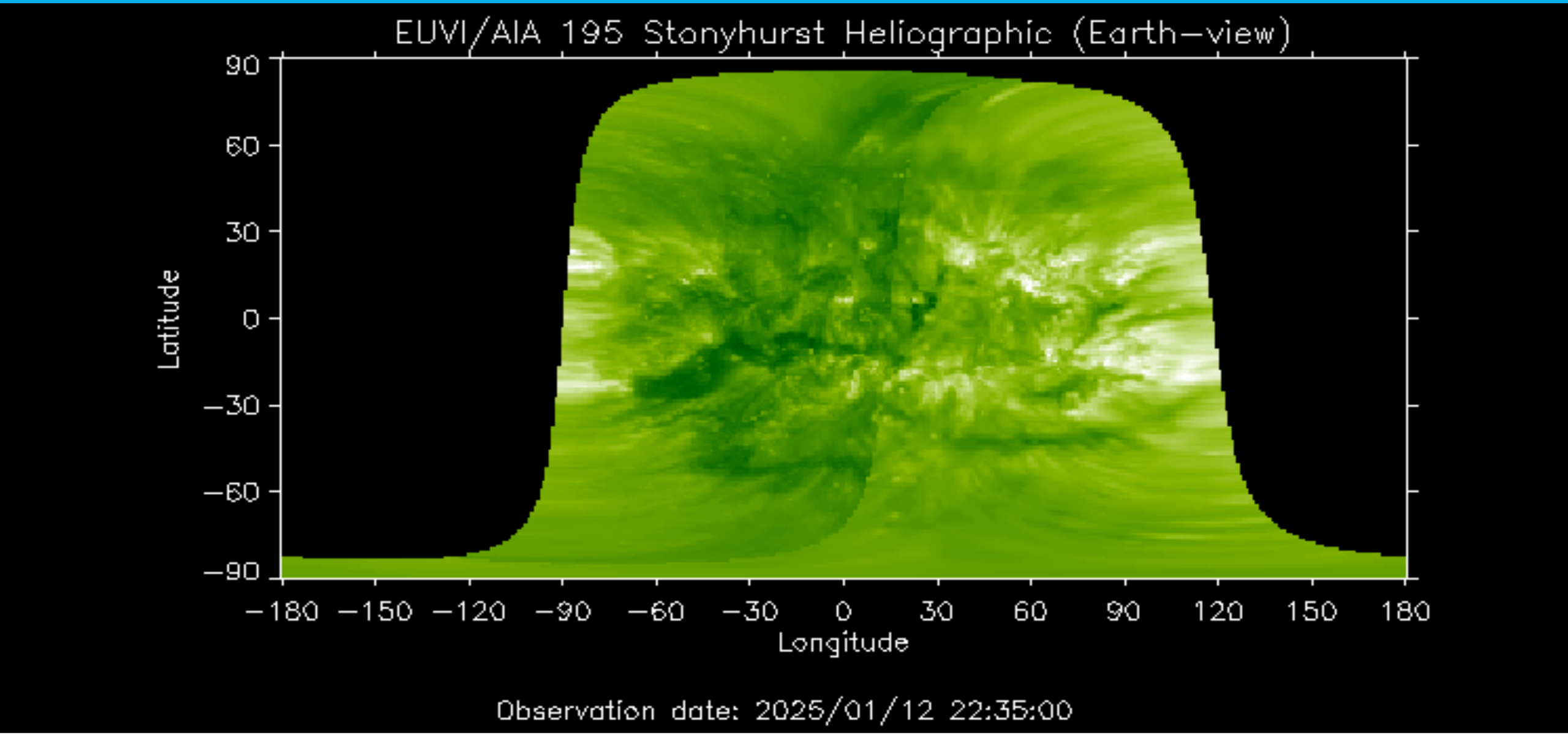
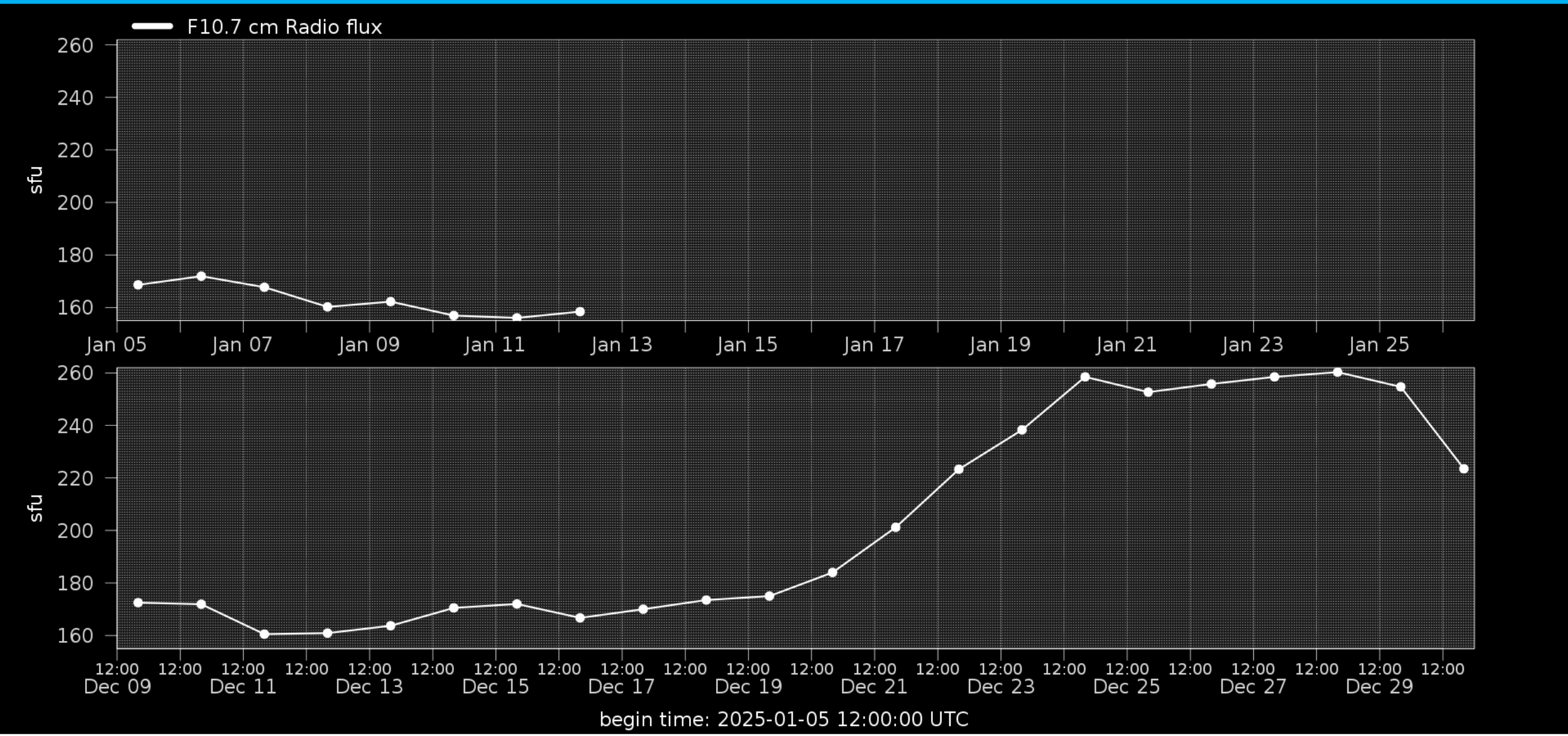
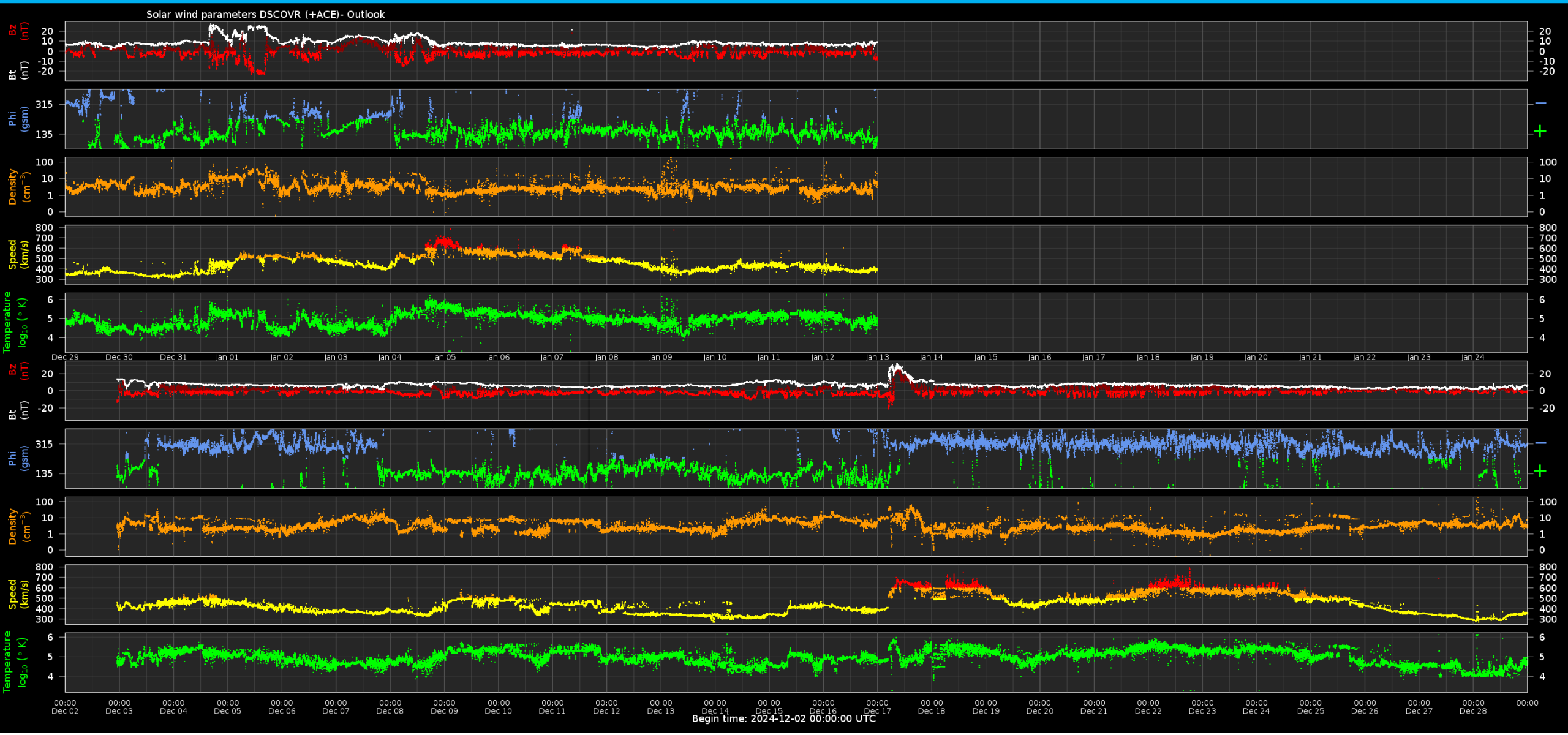
Outlook: Solar activity



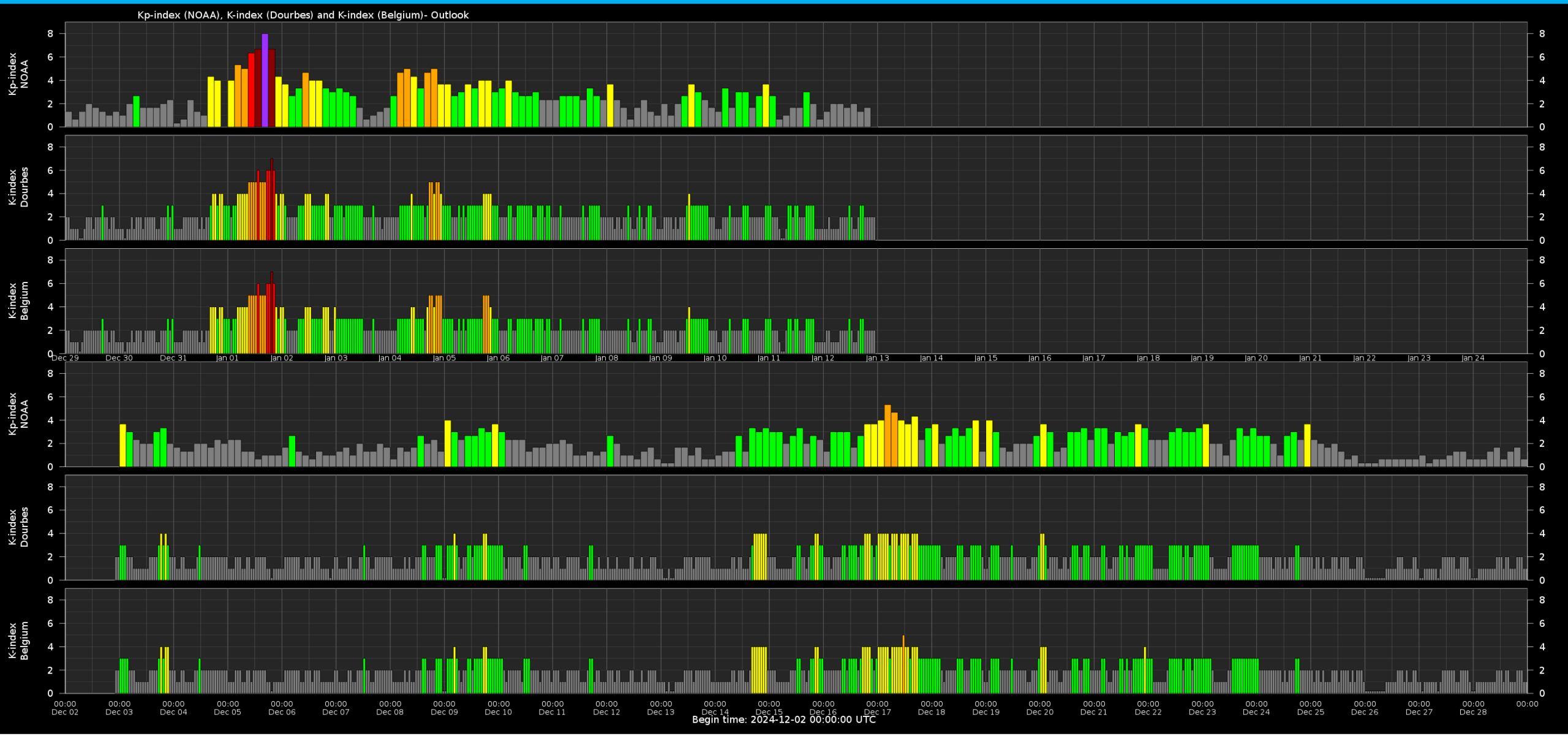
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook

PECASUS

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Pecasus related events

Regular Scintillation events

SIDC Space Weather Briefing

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