

SIDC Space Weather Briefing

20 October 2025-26 October 2025

Daria Shukhobodskaja
& the SIDC forecaster team



Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2025-10-20 00:00 to 2025-10-26 23:59

Active regions	15 Active Regions: SIDC Sunspot Groups 621 (NOAA AR 4248), 644(NOAA AR 4252), 607 (NOAA AR 4254), 672(NOAA AR 4256) – 683 (NOAA AR 4269)
Flares	# C-class flare: 32 # M-class flare: 1 # X-class flare: 0
Coronal Holes	Two negative and two positive polarity CHs
CMEs	Backsided halo CMEs on Oct 21, 22 and 25

Proton flux	Slightly elevated, but below the 10 pfu threshold
Electron flux	Below event threshold

Solar wind and geomagnetic conditions

ICMEs	None
Solar wind conditions	B : 0.57 - 11.31 nT //Bz: -7.17 nT to 8.06 nT //Speed: 338.9 - 625.3km/s
Geomagnetic conditions	max K _{Be} : 4.0, max K _p (NOAA): 3.67, Active conditions

All Quiet Alert: Off

Solar Activity

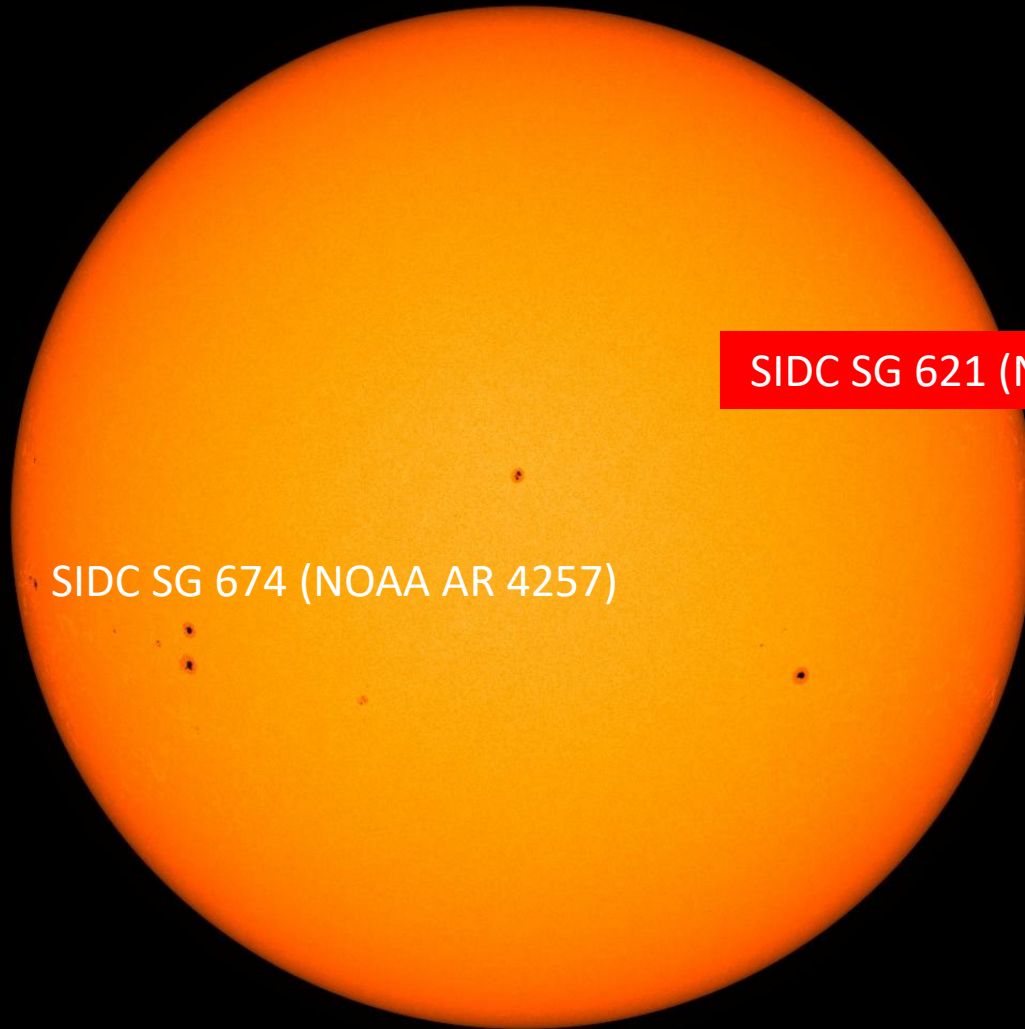


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Solar active regions

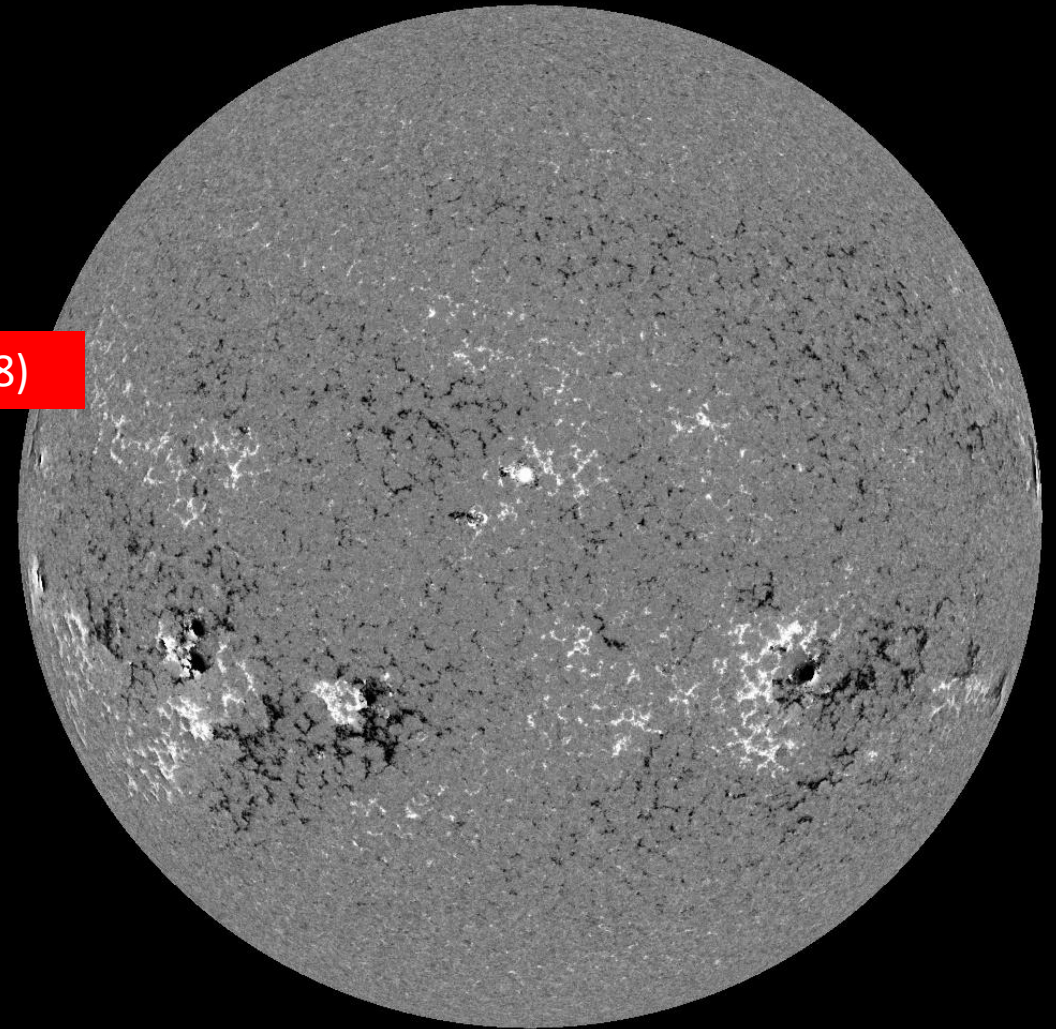
SDO/HMI White Light 2025-10-20



SIDC SG 674 (NOAA AR 4257)

SIDC SG 621 (NOAA AR 4248)

SDO/HMI Magnetogram 2025-10-20

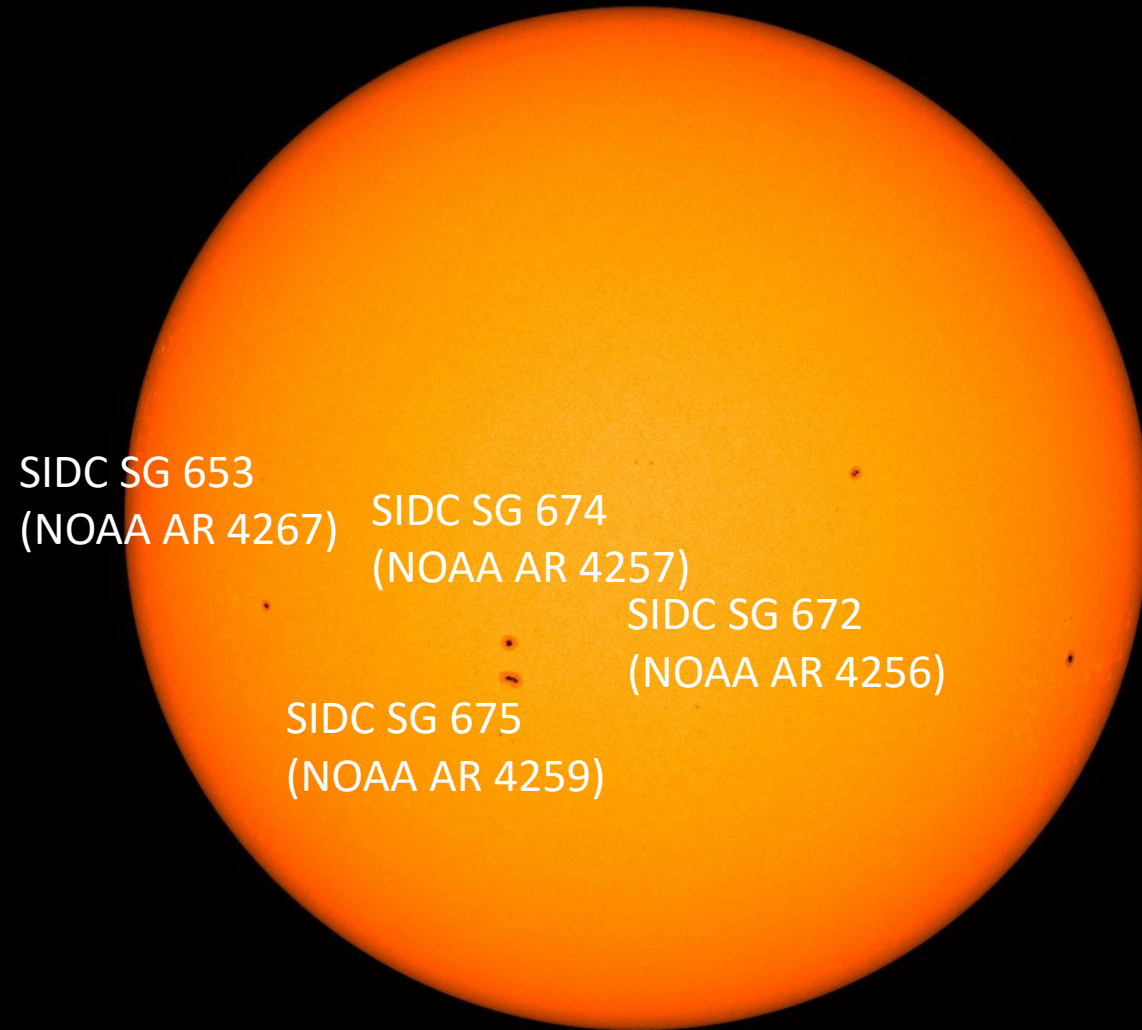


SDO/HMI Continuum: 20251020_120000

SDO/HMI Magnetogram: 20251020_120000

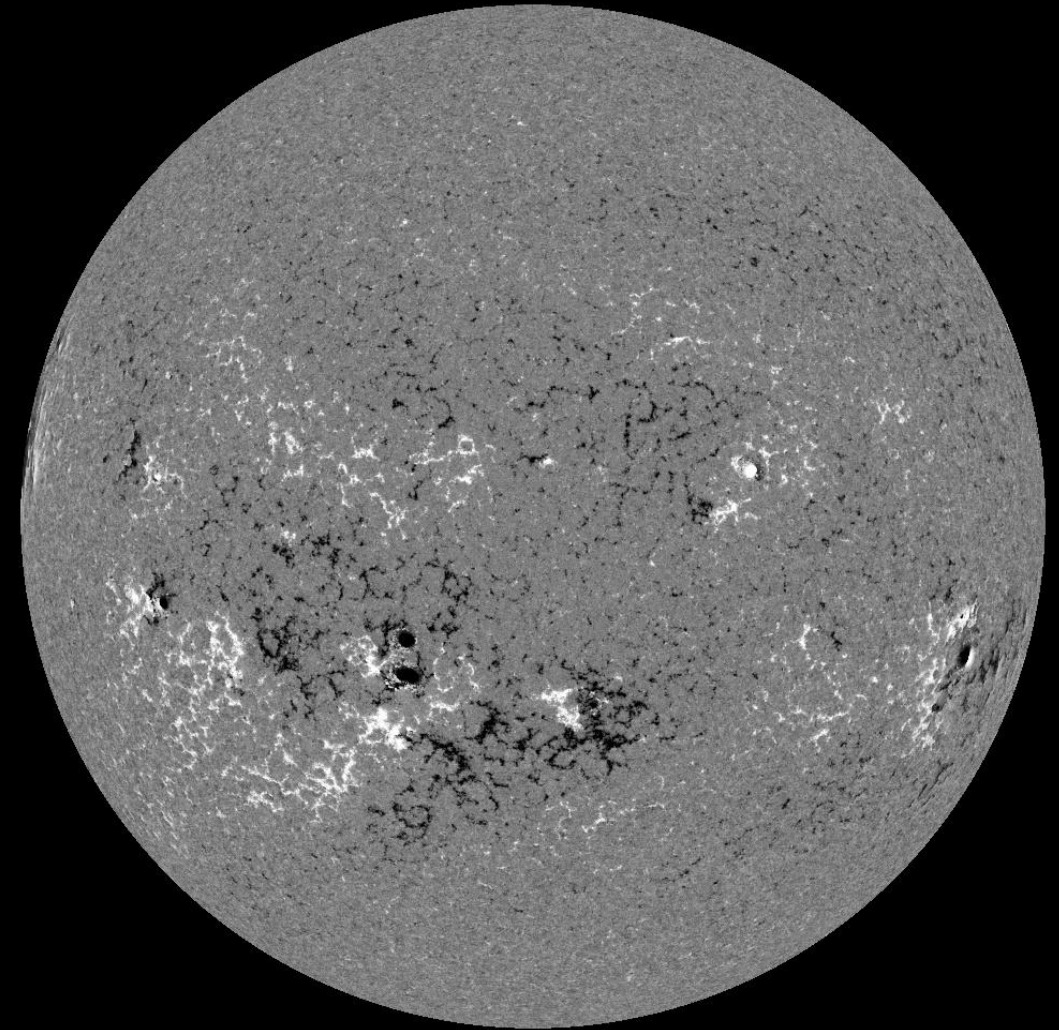
Solar active regions

SDO/HMI White Light 2025-10-22



SDO/HMI Continuum: 20251022_120000

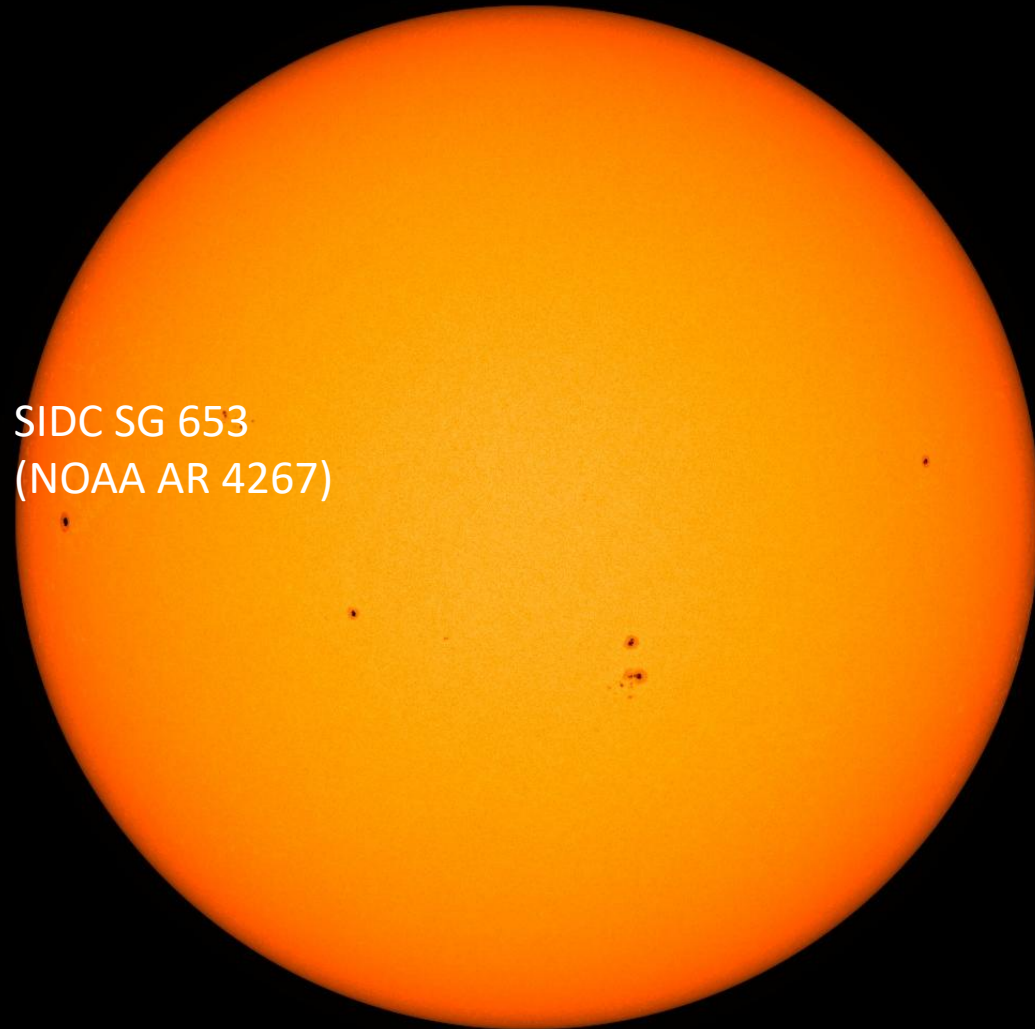
SDO/HMI Magnetogram 2025-10-22



SDO/HMI Magnetogram: 20251022_120000

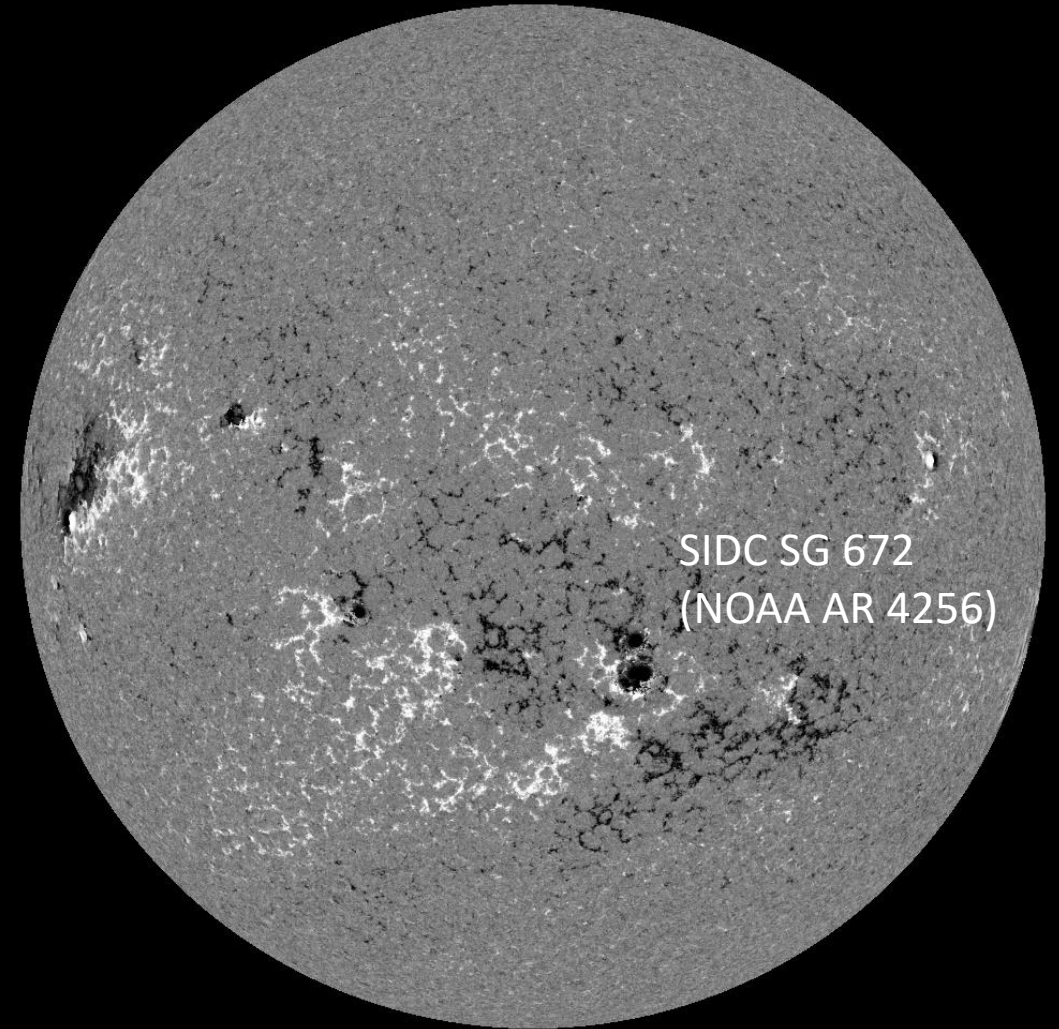
Solar active regions

SDO/HMI White Light 2025-10-24



SDO/HMI Quick-Look Continuum: 20251024_120000

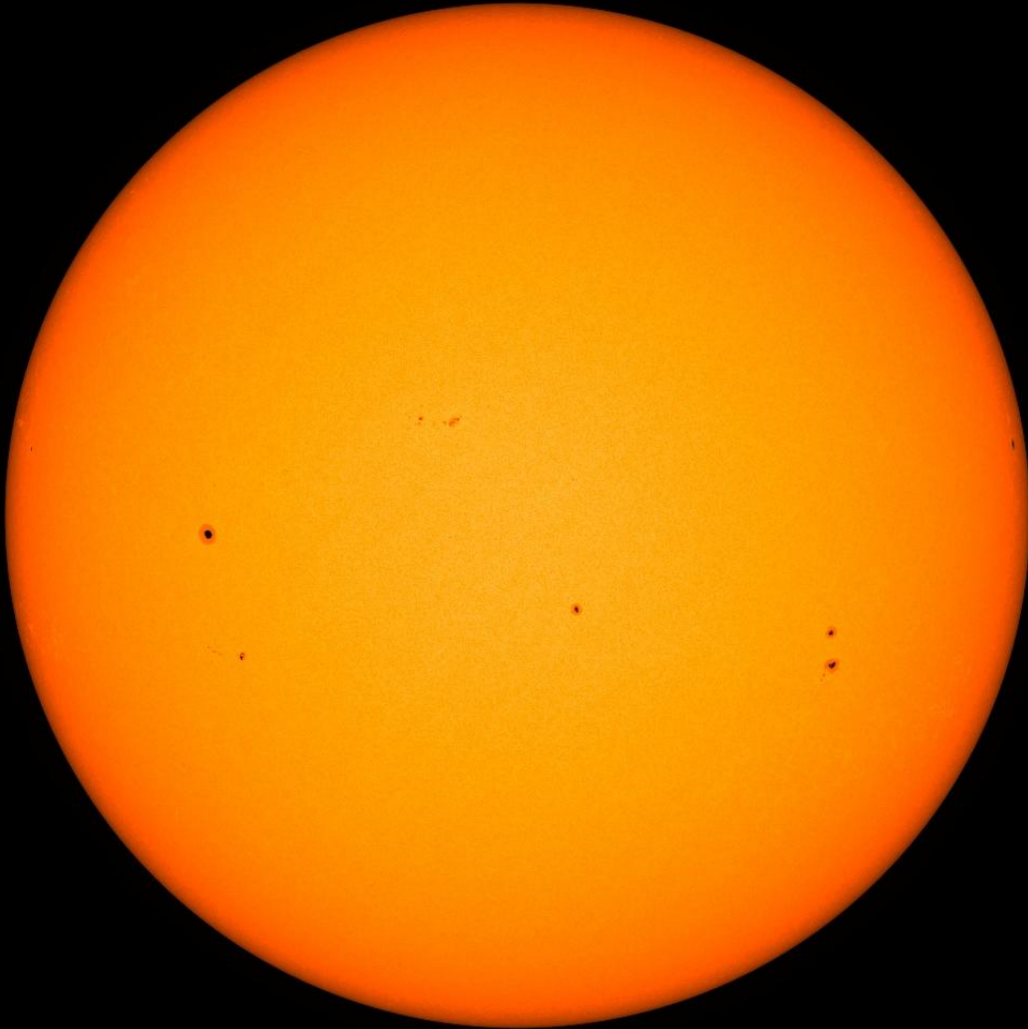
SDO/HMI Magnetogram 2025-10-24



SDO/HMI Quick-Look Magnetogram: 20251024_120000

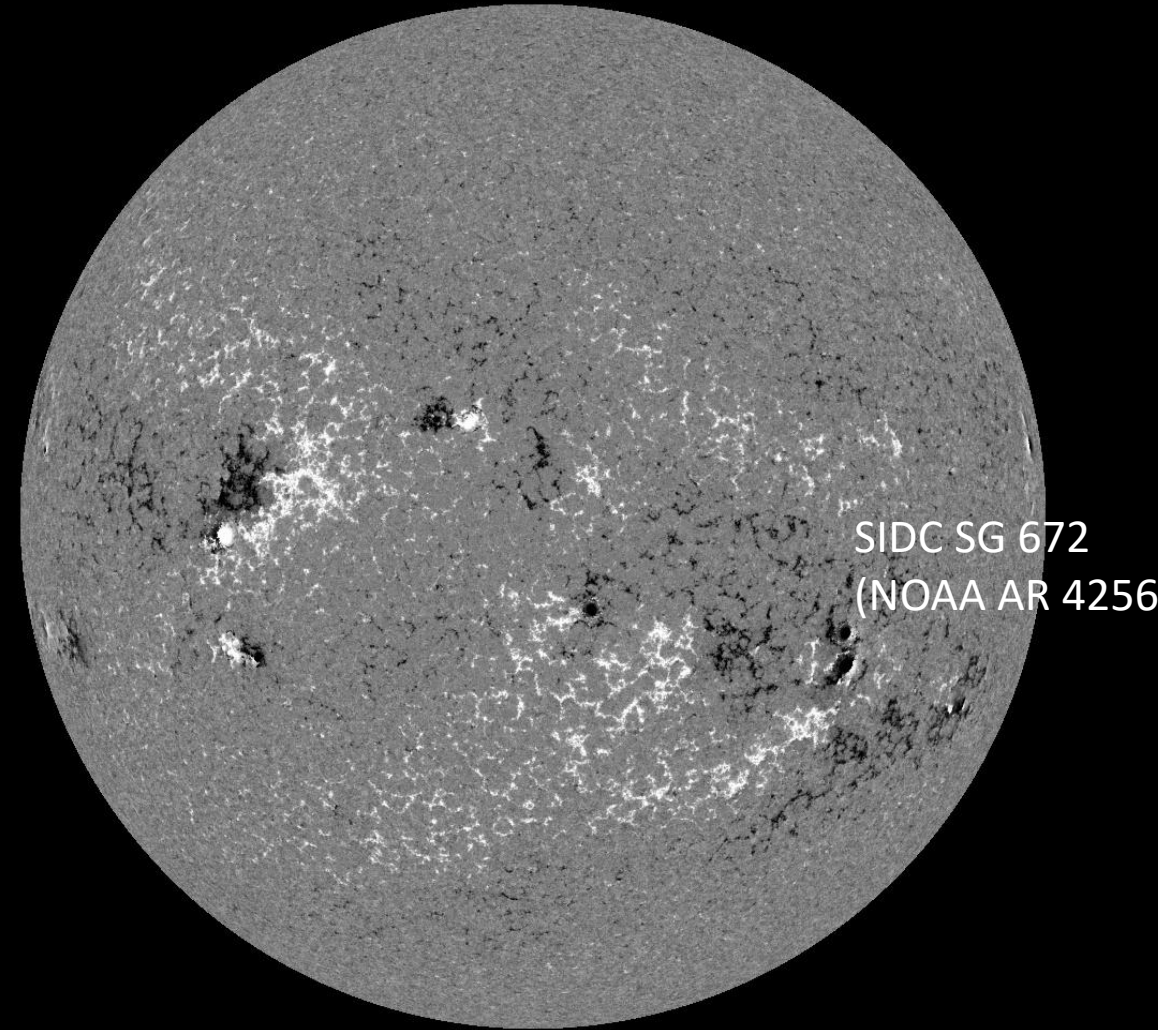
Solar active regions

SDO/HMI White Light 2025-10-26



SDO/HMI Quick-Look Continuum: 20251026_120000

SDO/HMI Magnetogram 2025-10-26

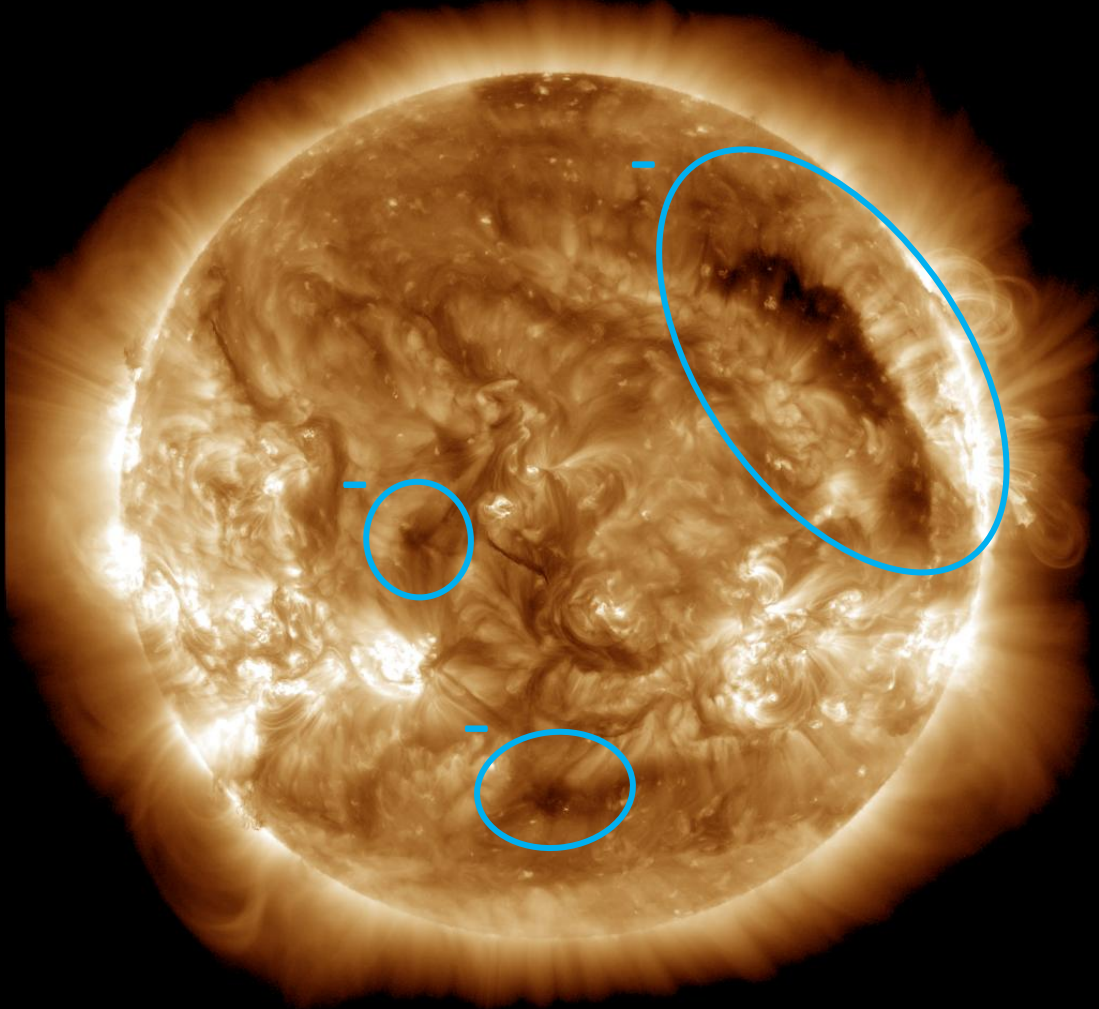


SDO/HMI Quick-Look Magnetogram: 20251026_120000

Coronal holes

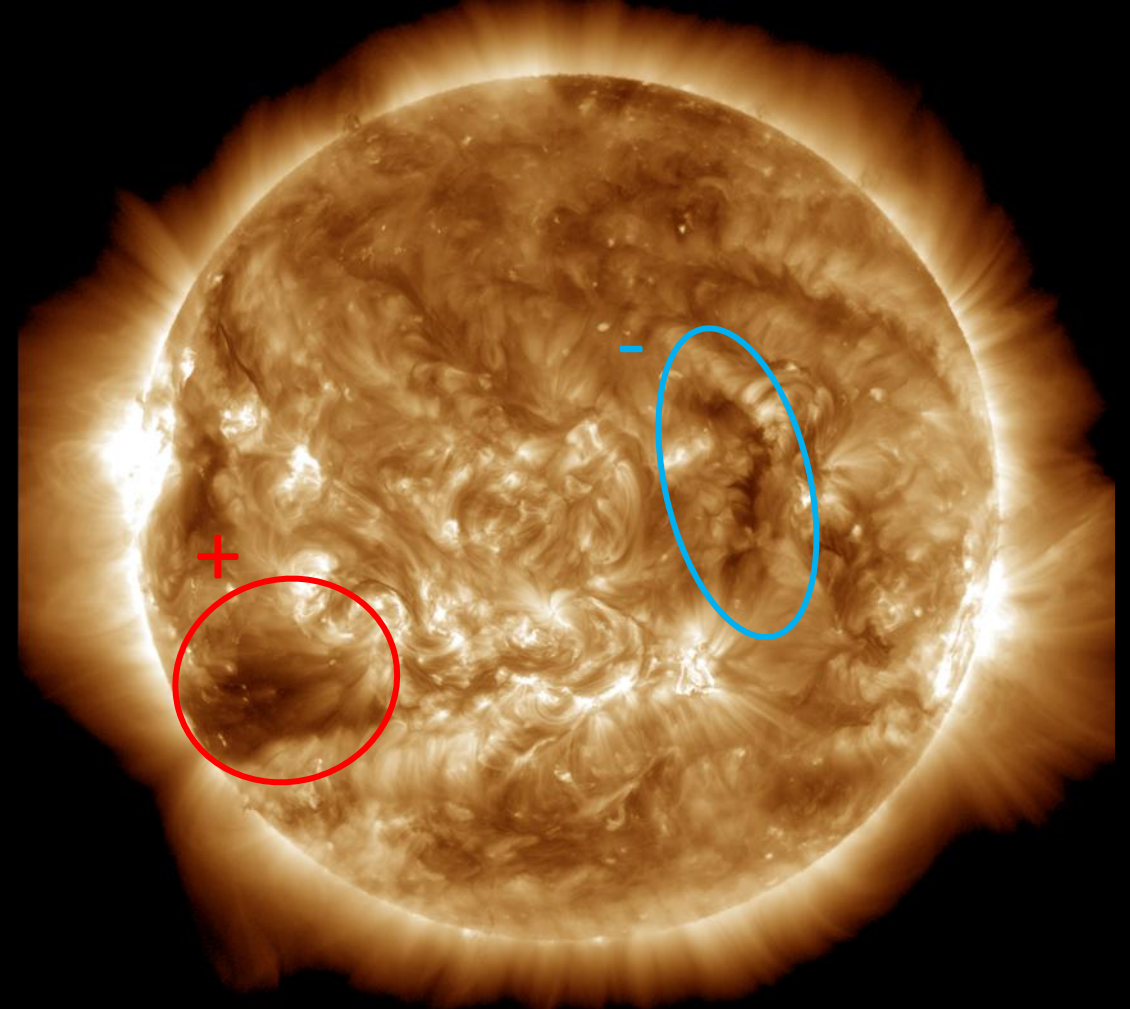
SDO/AIA 19.3 nm 2025-10-20

SDO/AIA AIA 193Å 2025-10-20T12:00:05.844



SDO/AIA 19.3 nm 2025-10-23

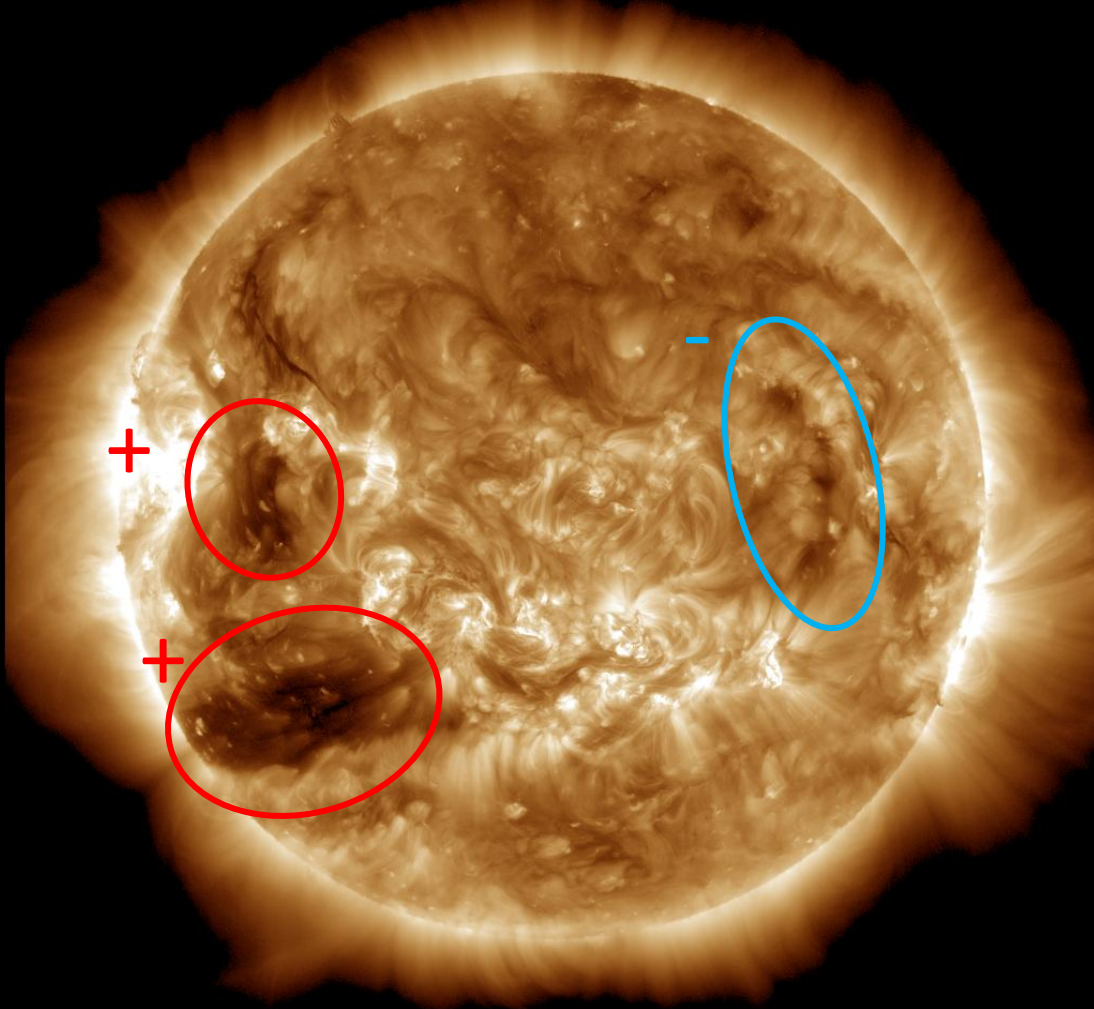
SDO/AIA AIA 193Å 2025-10-23T12:00:05.844



Coronal holes

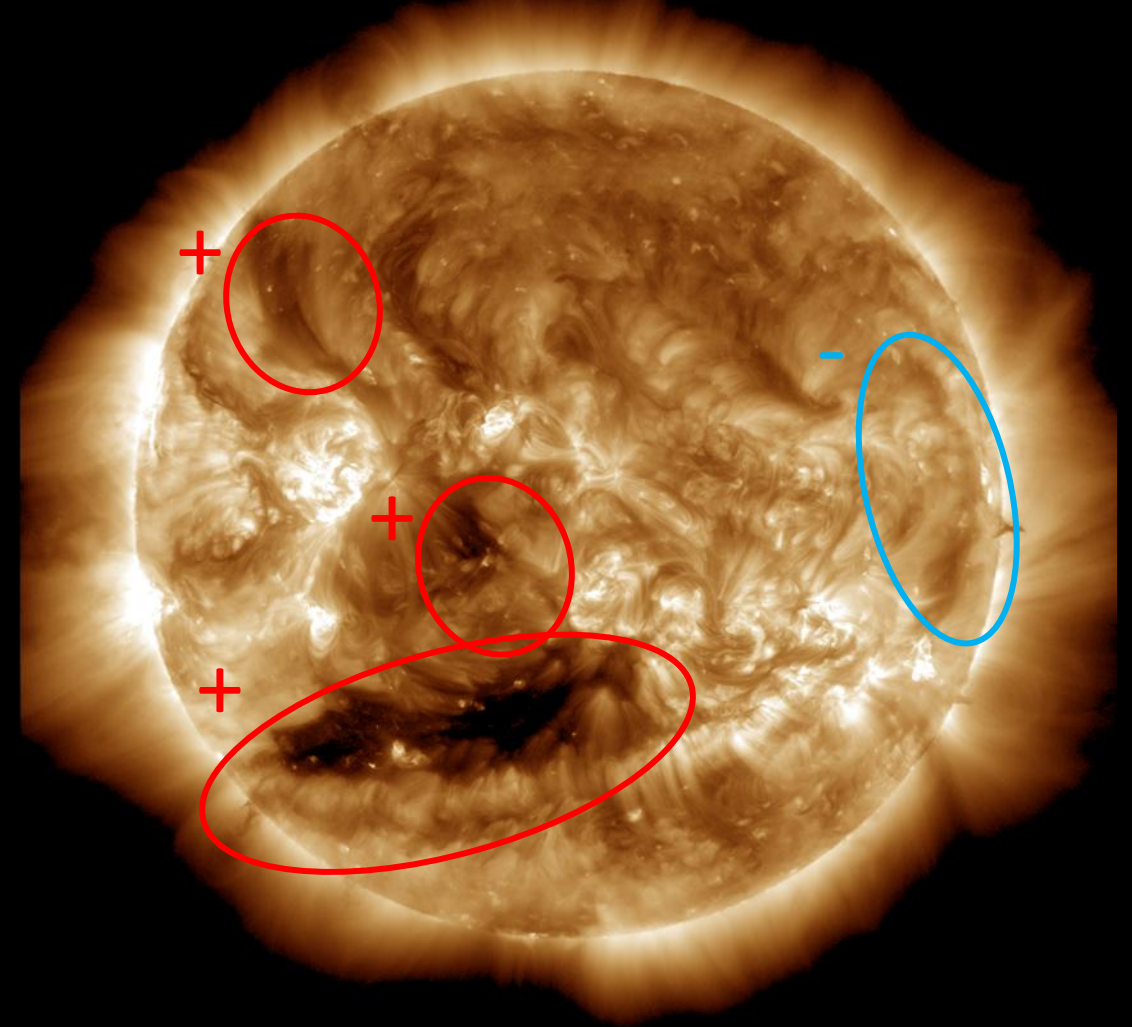
SDO/AIA 19.3 nm 2025-10-24

SDO/AIA AIA 193Å 2025-10-24T12:00:05.843



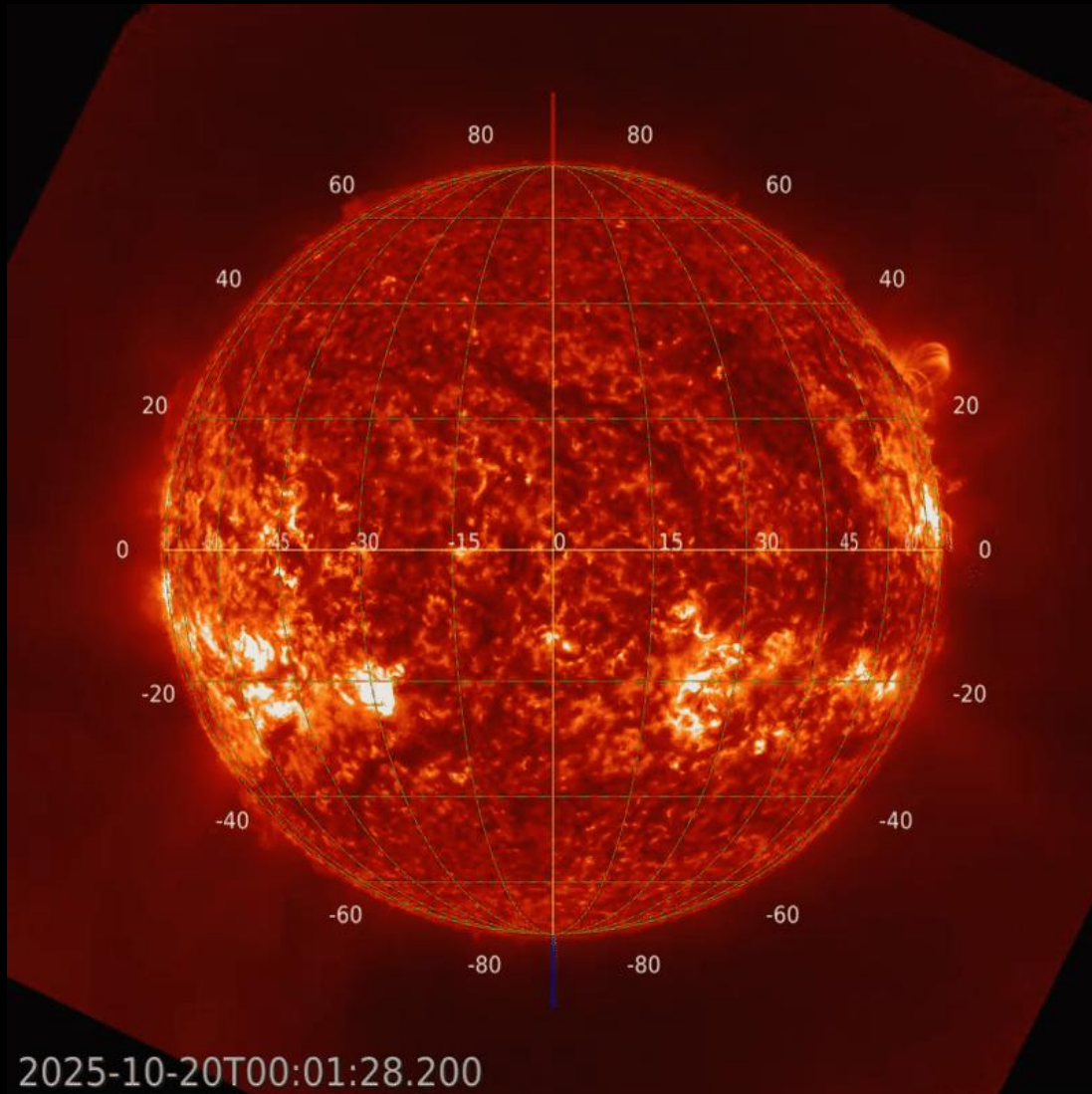
SDO/AIA 19.3 nm 2025-10-26

SDO/AIA AIA 193Å 2025-10-26T12:00:05.843

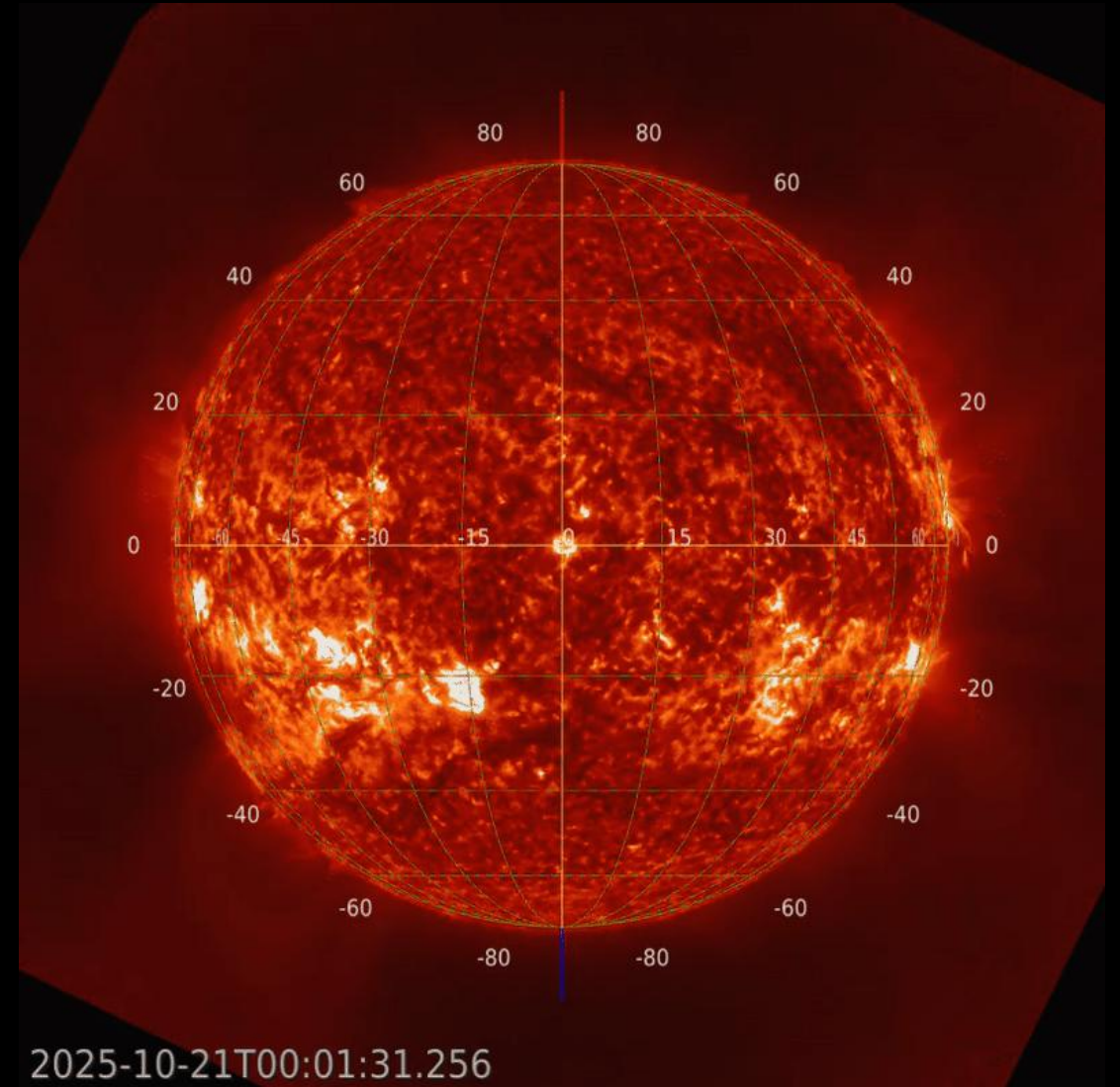


Filaments

GOES/SUVI 30.4 nm 2025-10-20

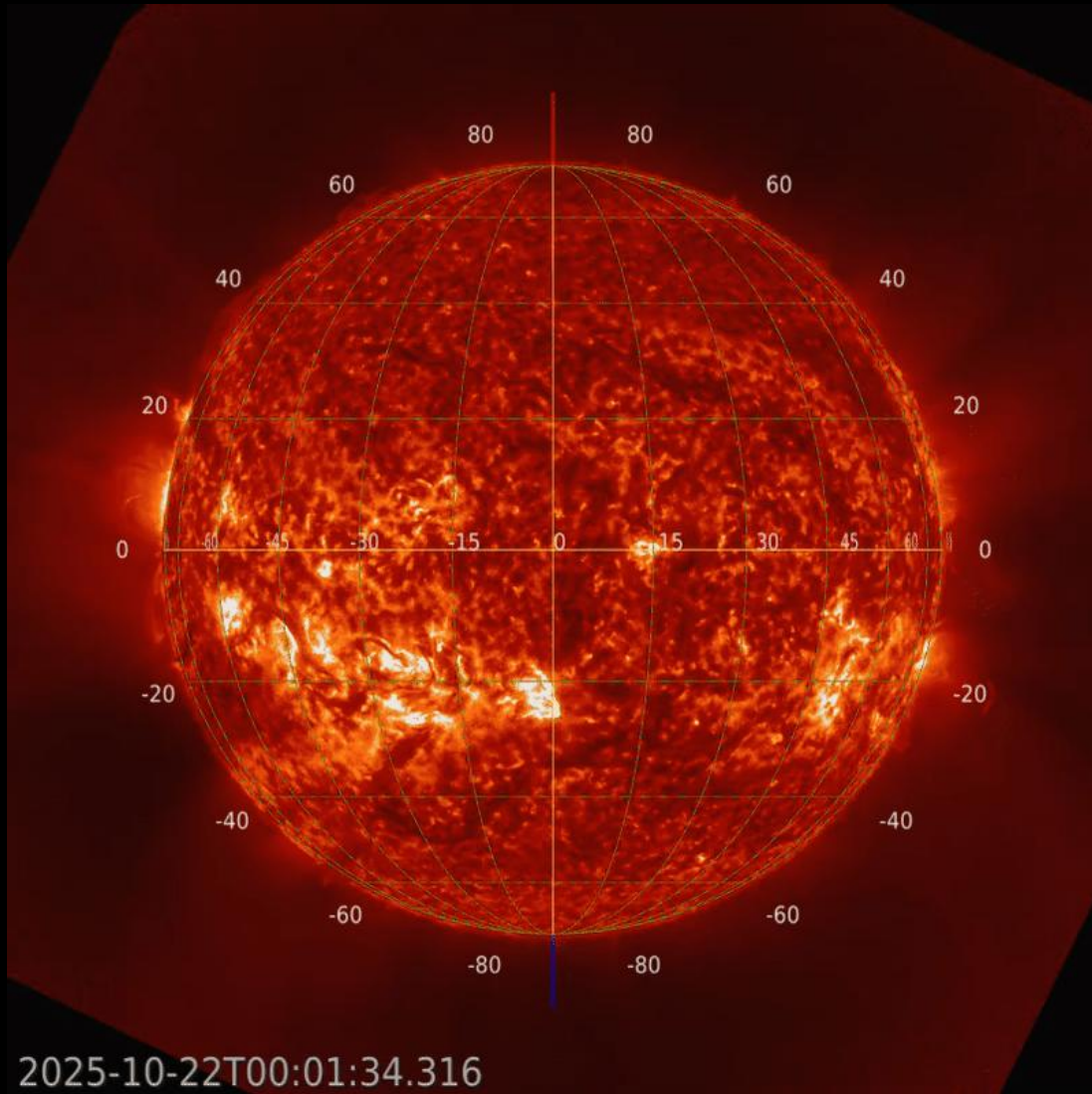


GOES/SUVI 30.4 nm 2025-10-21

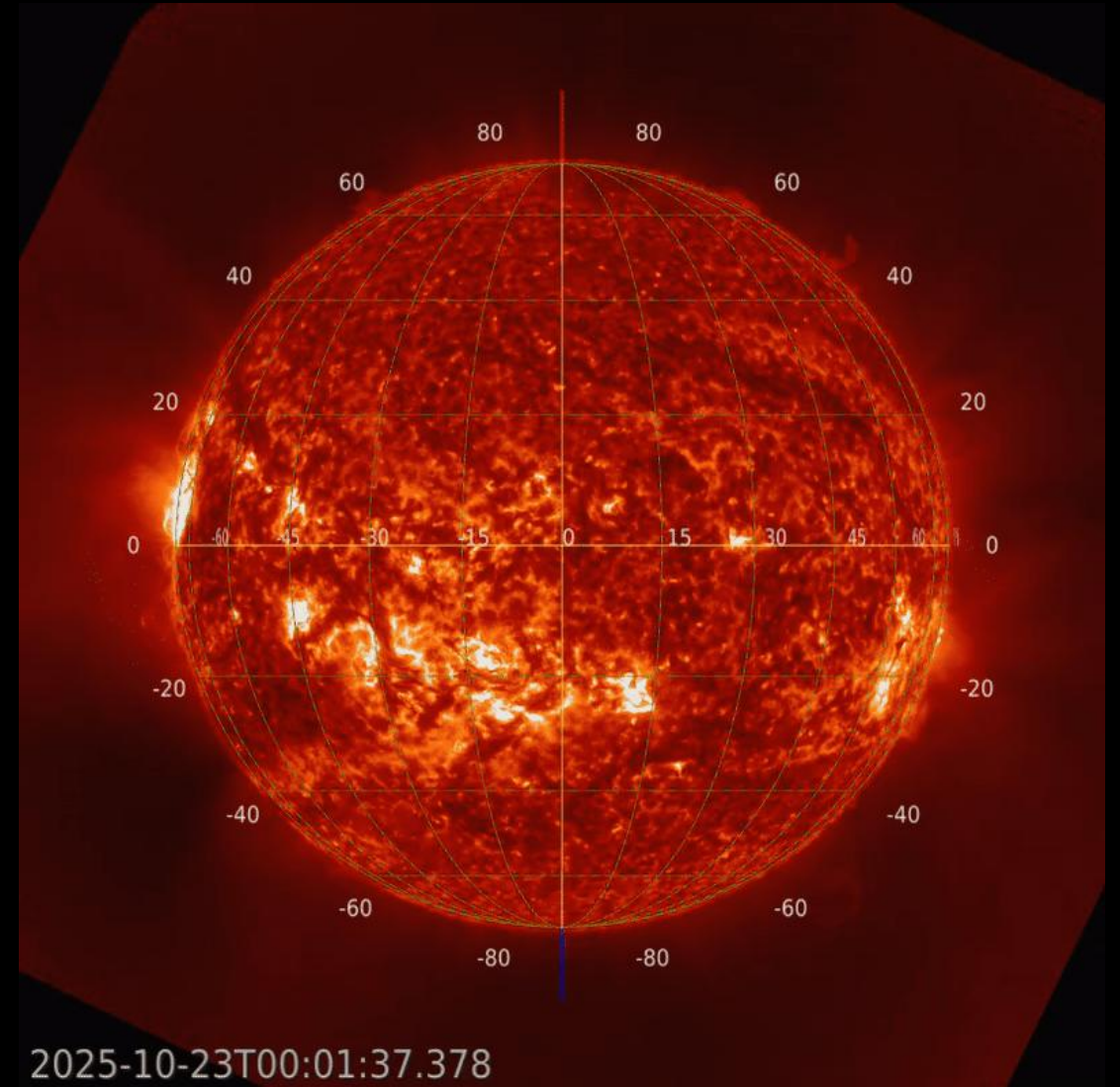


Filaments

GOES/SUVI 30.4 nm 2025-10-22

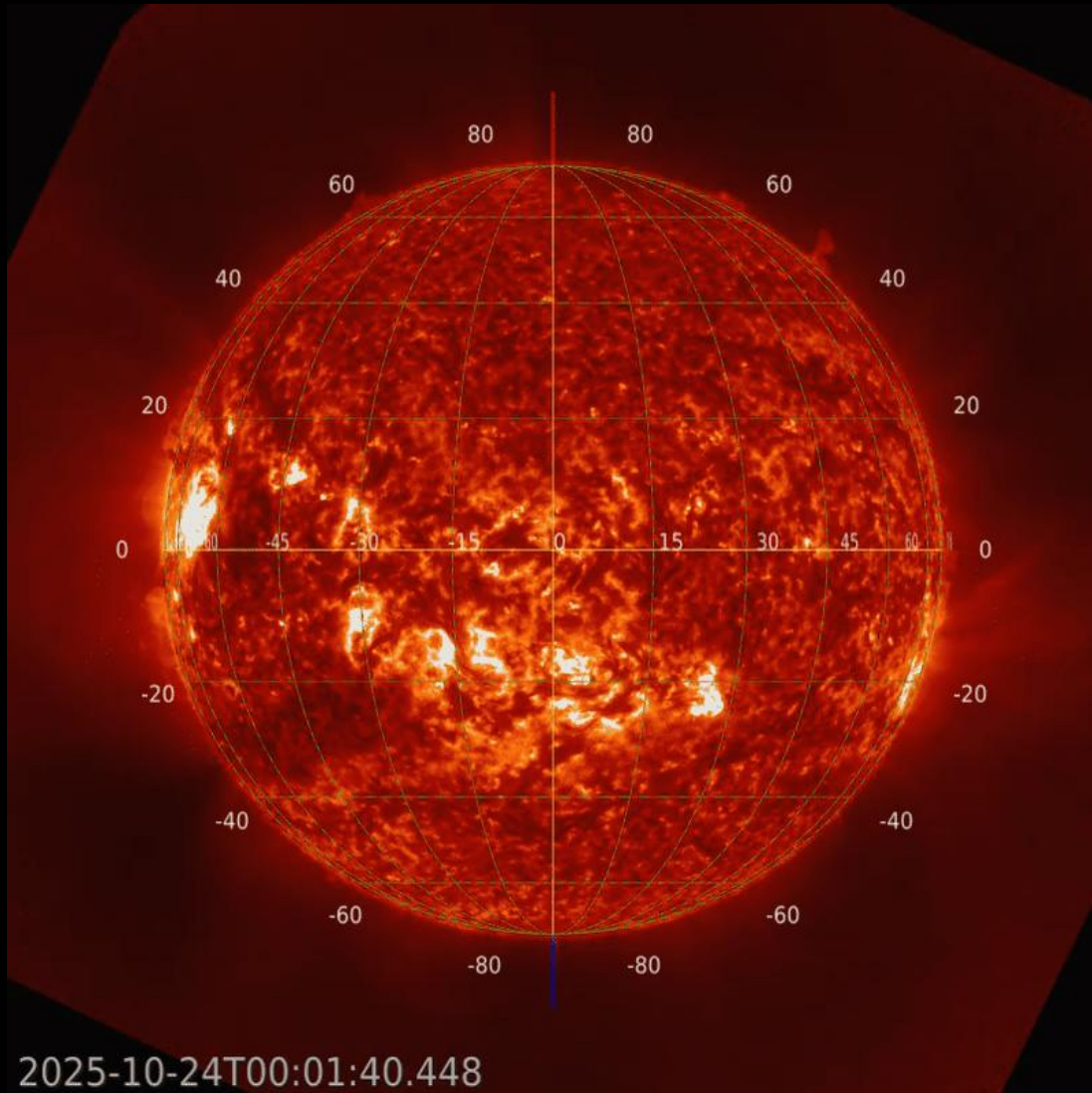


GOES/SUVI 30.4 nm 2025-10-23

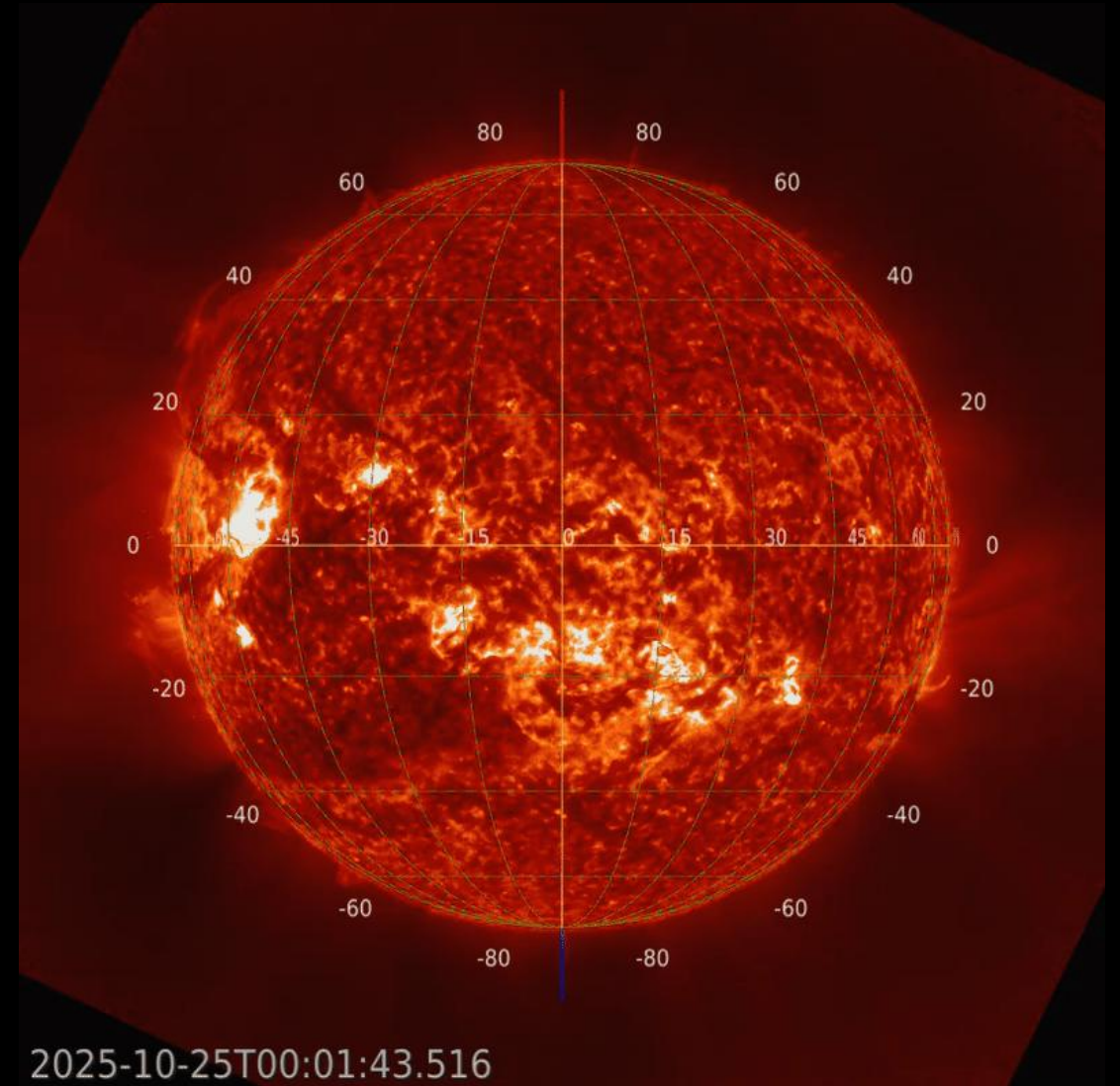


Filaments

GOES/SUVI 30.4 nm 2025-10-24

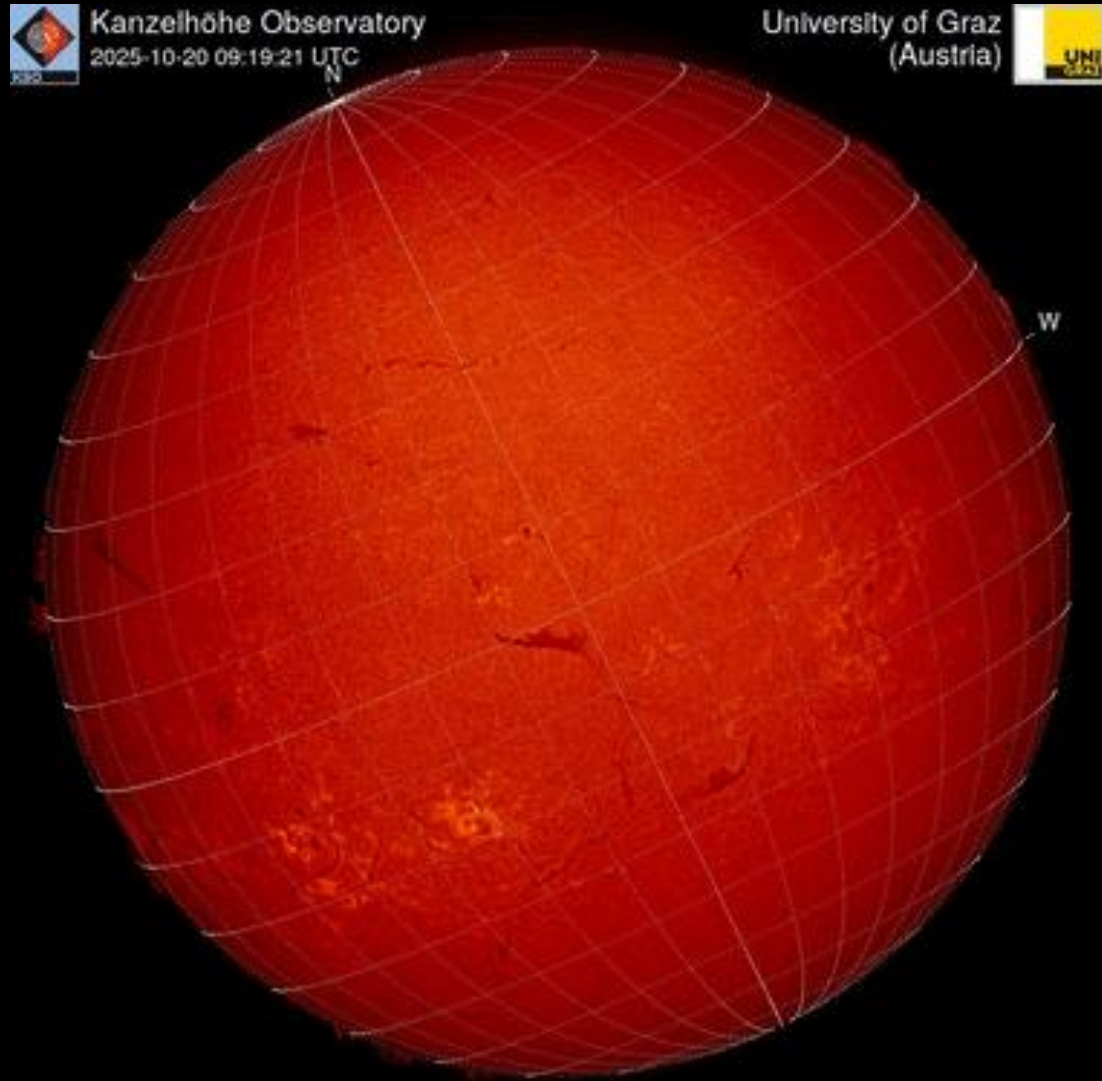


GOES/SUVI 30.4 nm 2025-10-25

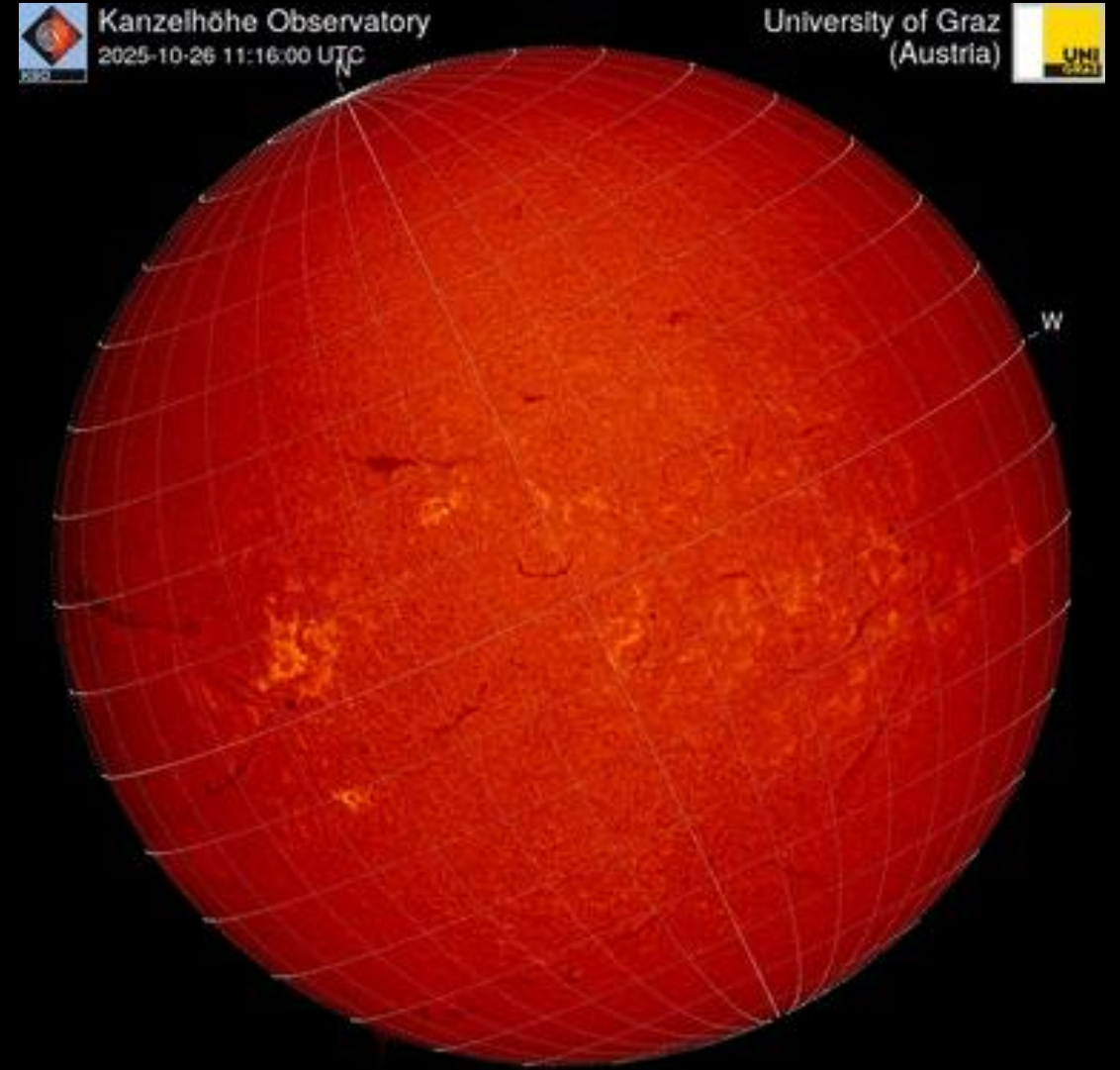


Filaments & Filament eruptions

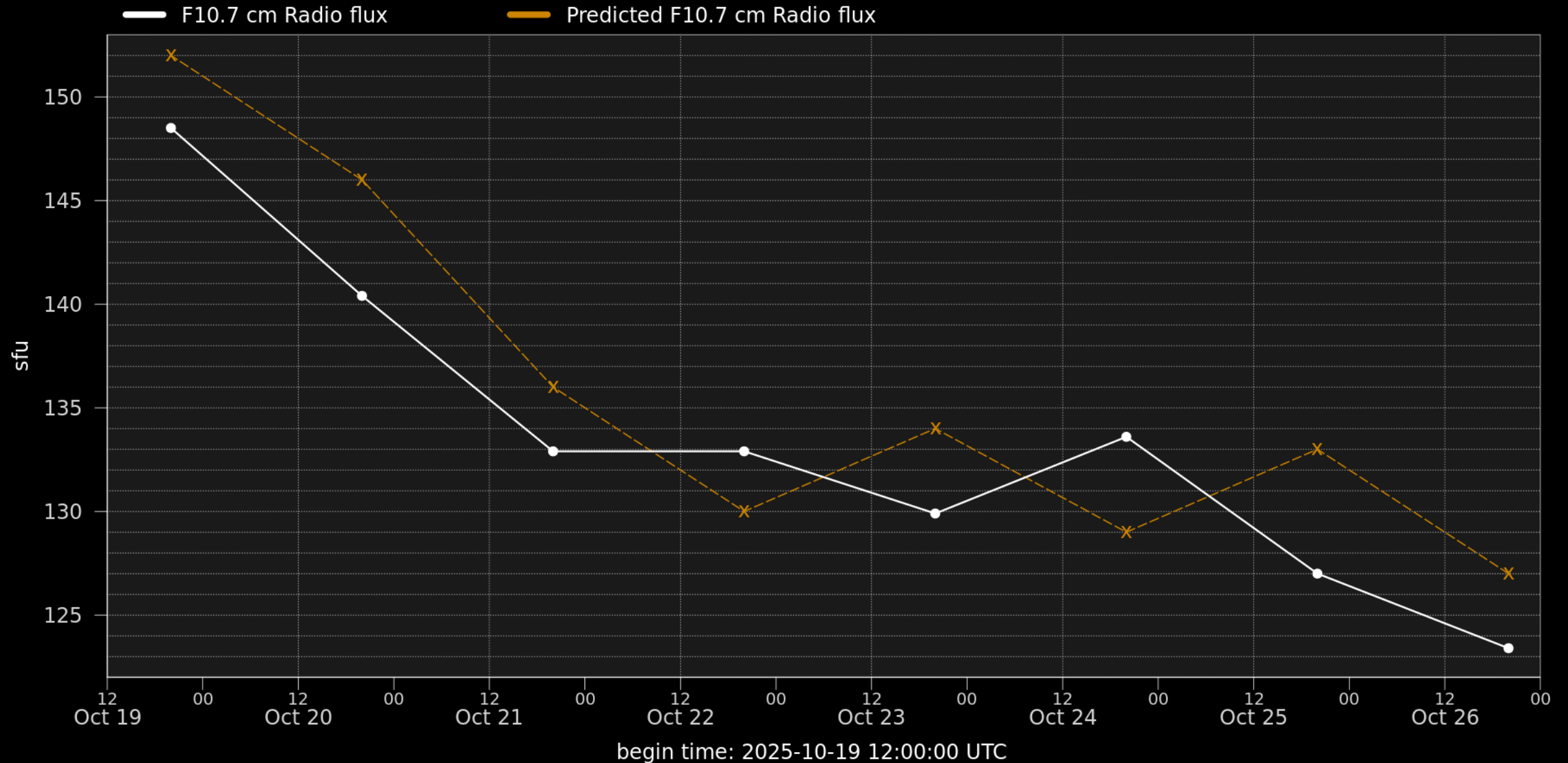
H-alpha 2025-10-20



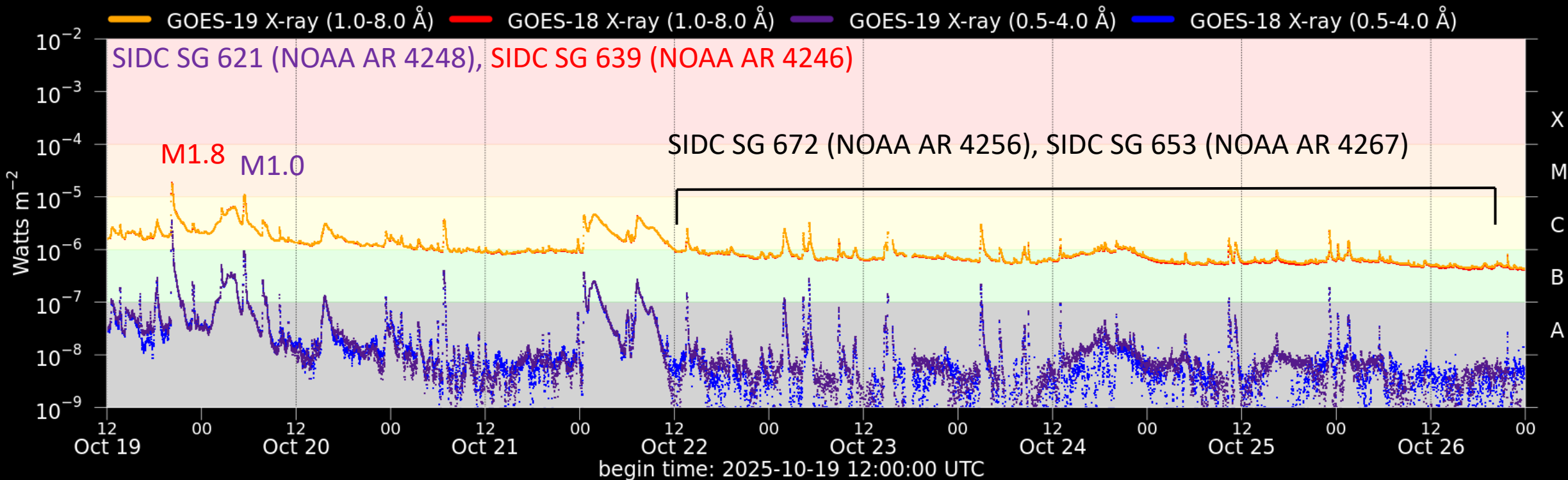
H-alpha 2025-10-26



Solar F10.7cm radio flux



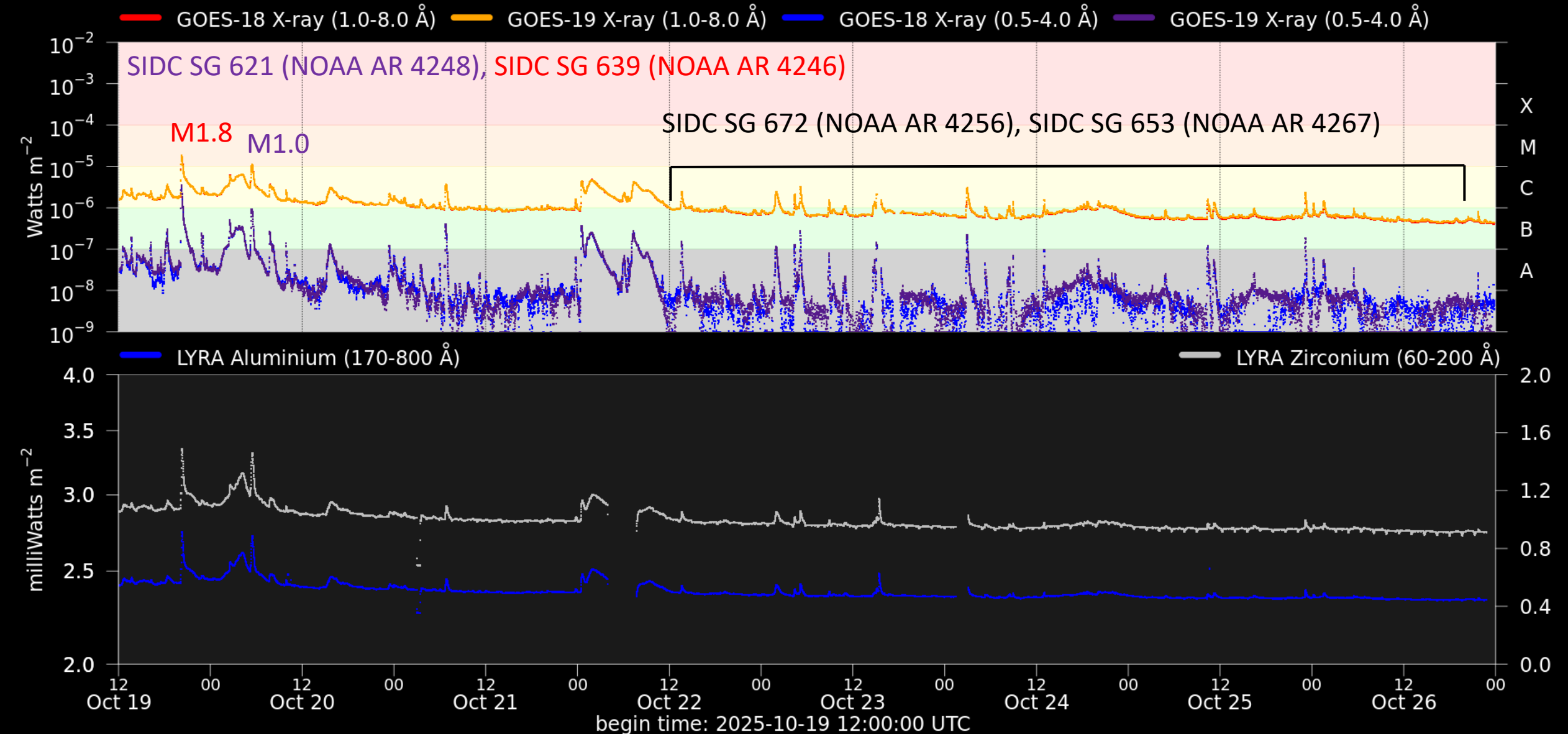
Flaring activity



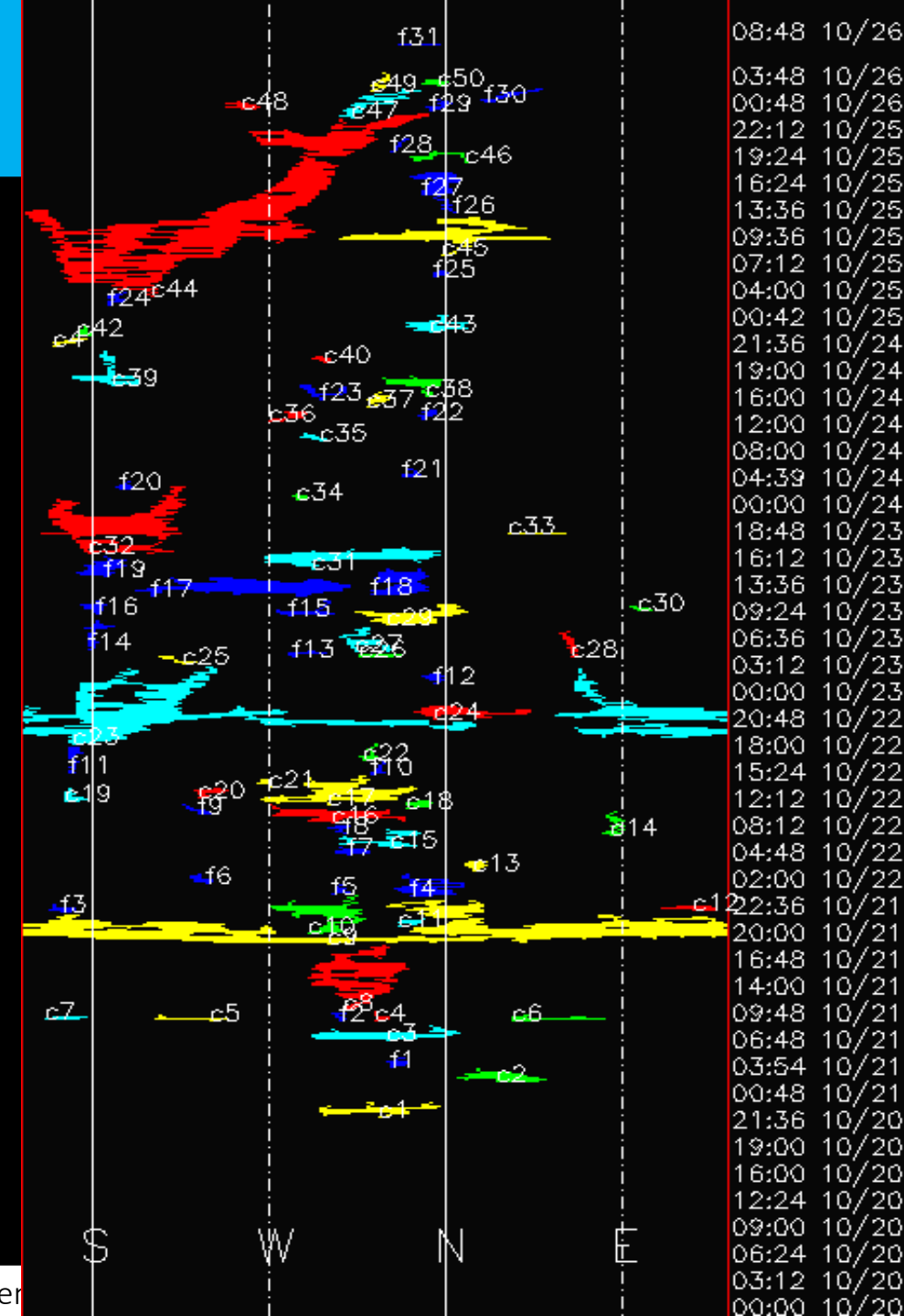
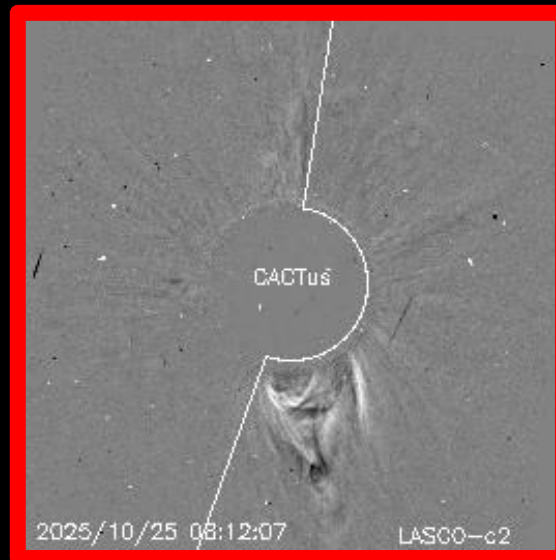
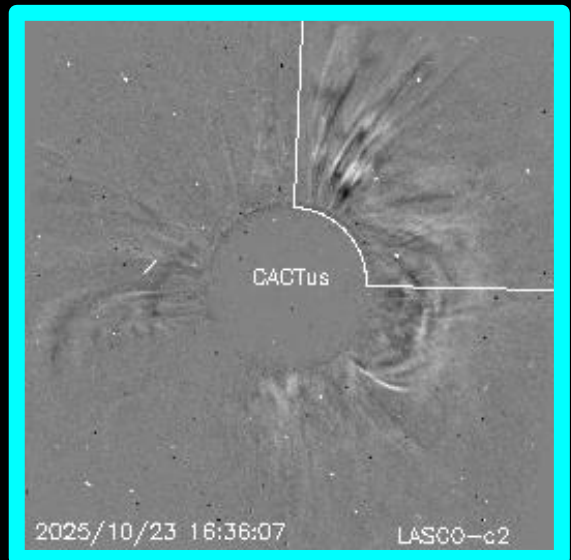
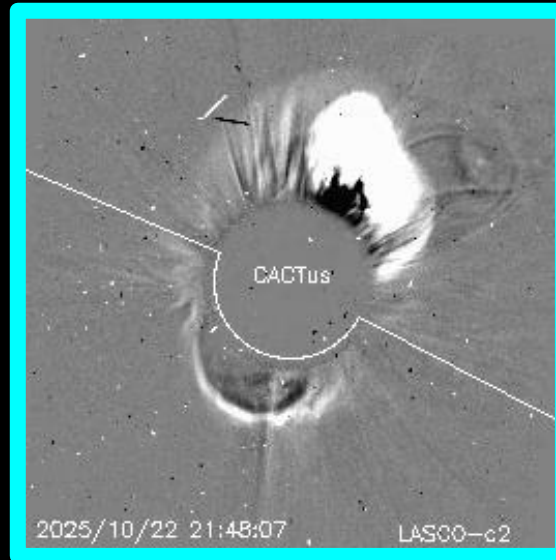
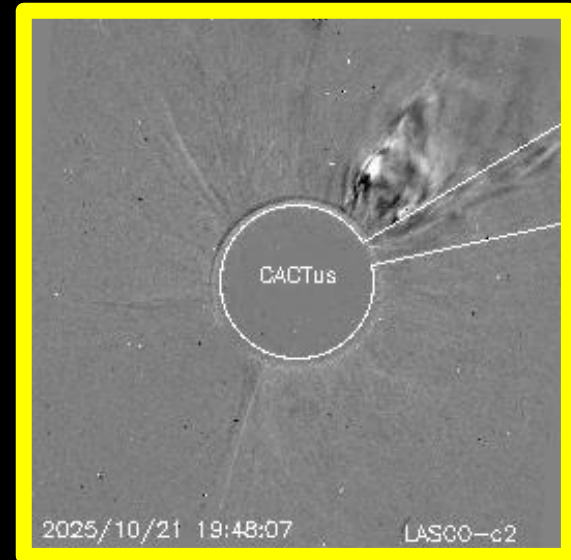
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2025-10-19	2025-10-20	2025-10-21	2025-10-22	2025-10-23	2025-10-24	2025-10-25	2025-10-26
Probability (%)	99 40 05	99 30 05	95 25 05	90 15 05	90 10 01	90 15 01	90 15 01	90 20 01
Observed (#)	08 02 00	04 00 00	05 00 00	05 00 00	07 00 00	05 00 00	03 00 00	04 00 00

Solar X-Ray and UV flux



Coronal Mass Ejections



Solar Wind and

Geomagnetic Activity



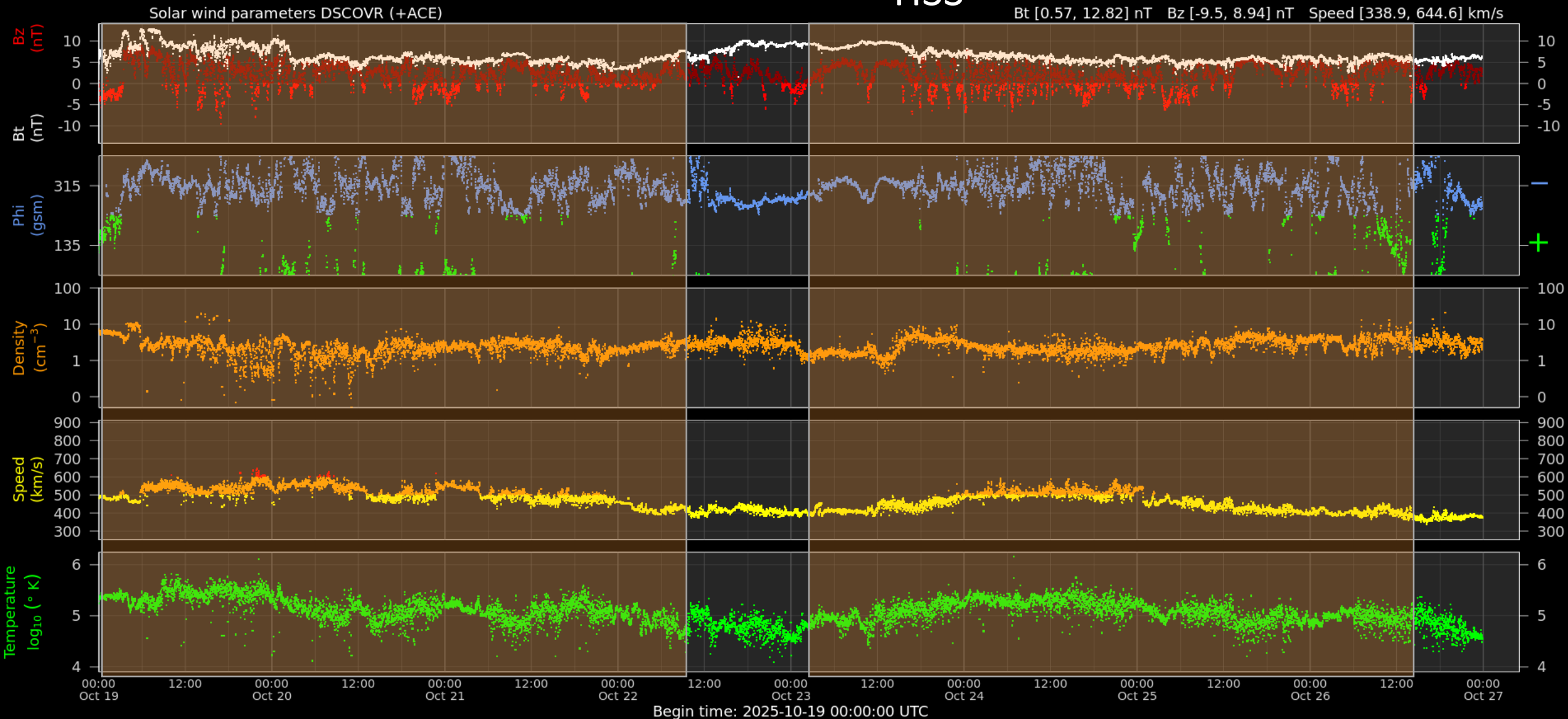
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Solar wind parameters

HSS

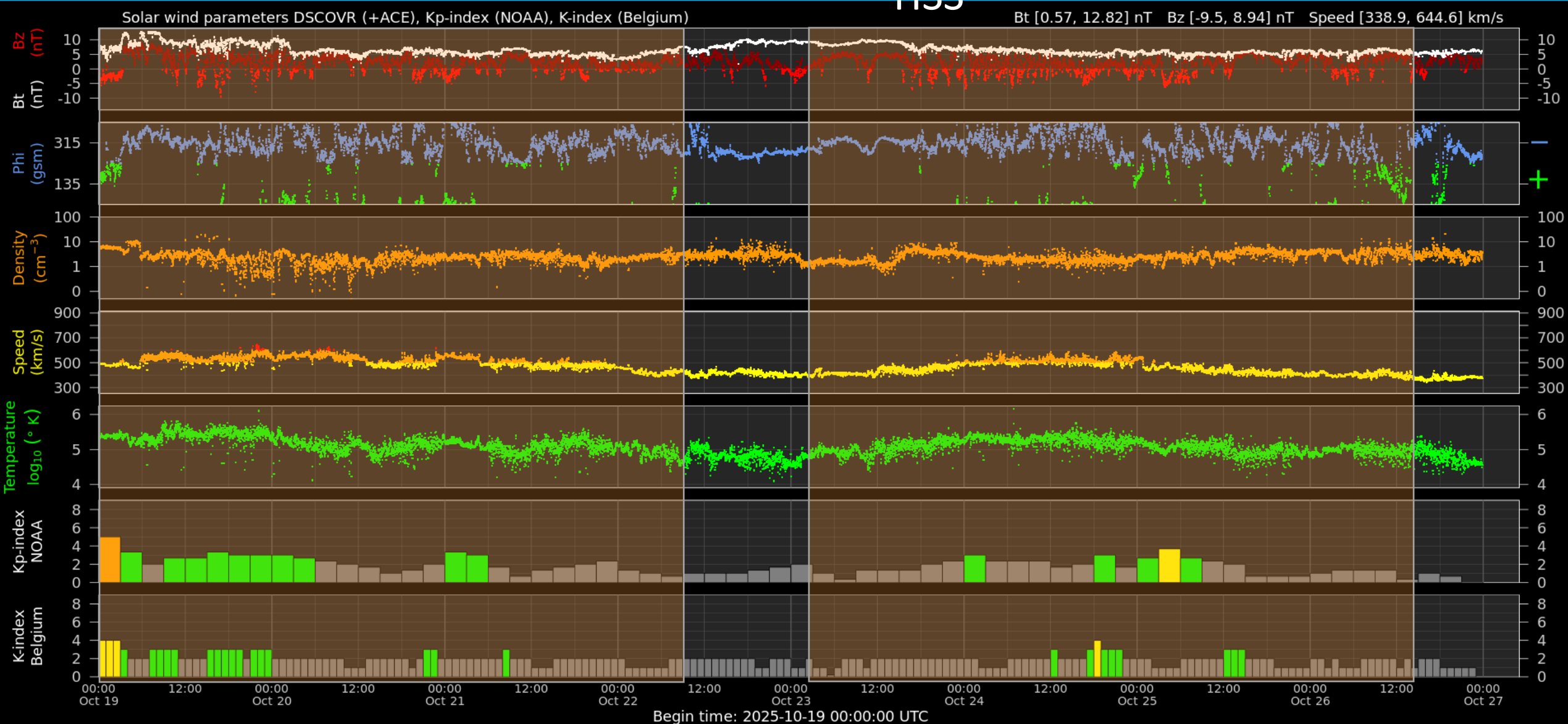
HSS



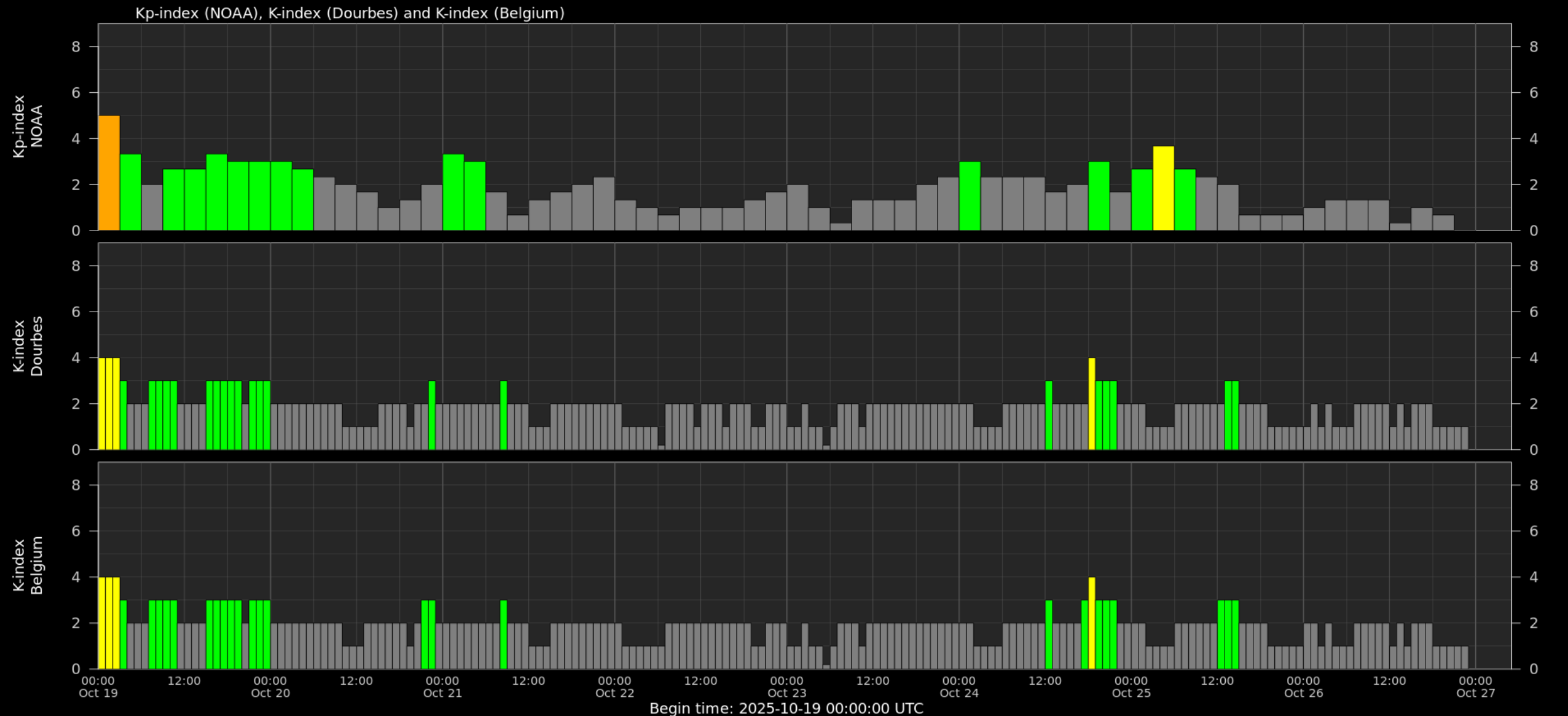
Solar wind parameters & K-indices

HSS

HSS

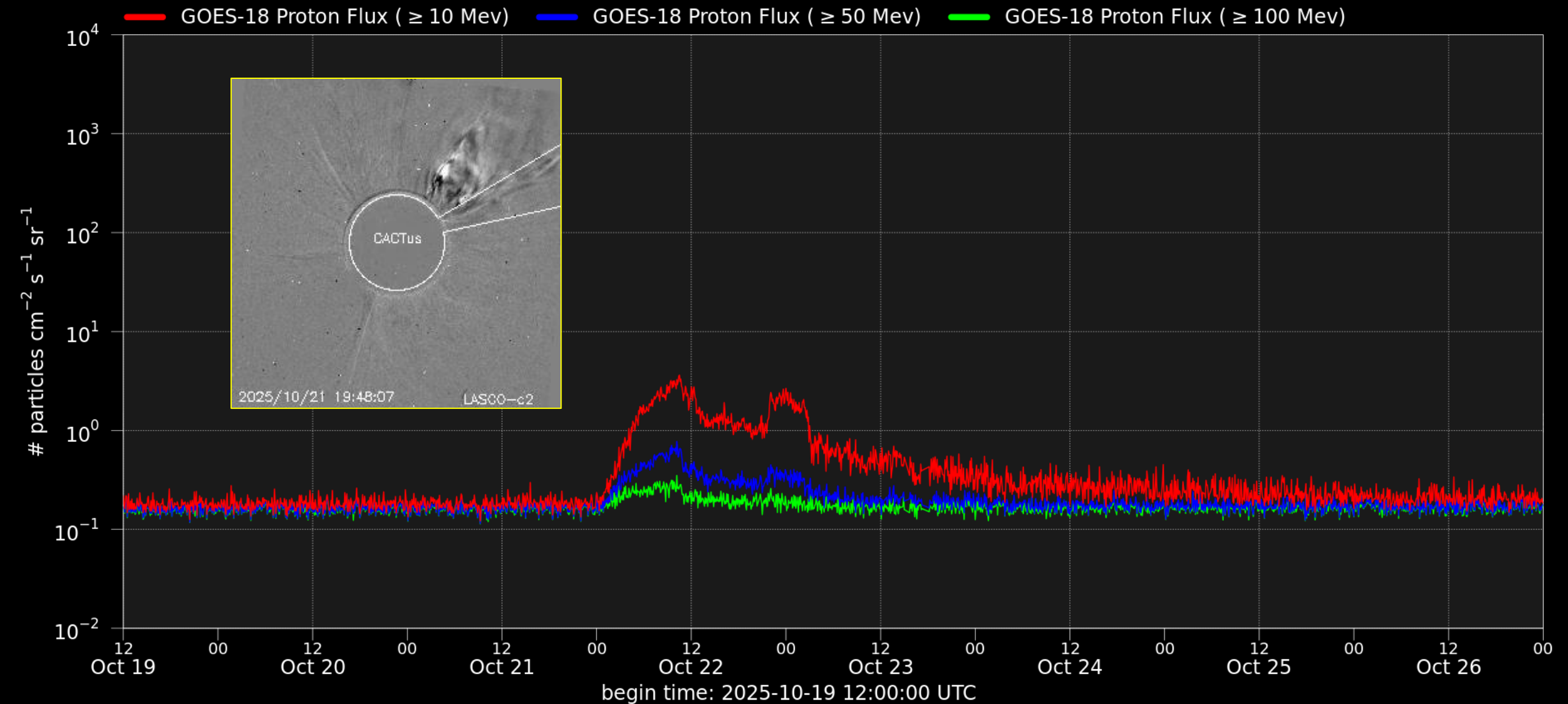


Geomagnetic activity (K-indexes)



Energetic Particles

Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



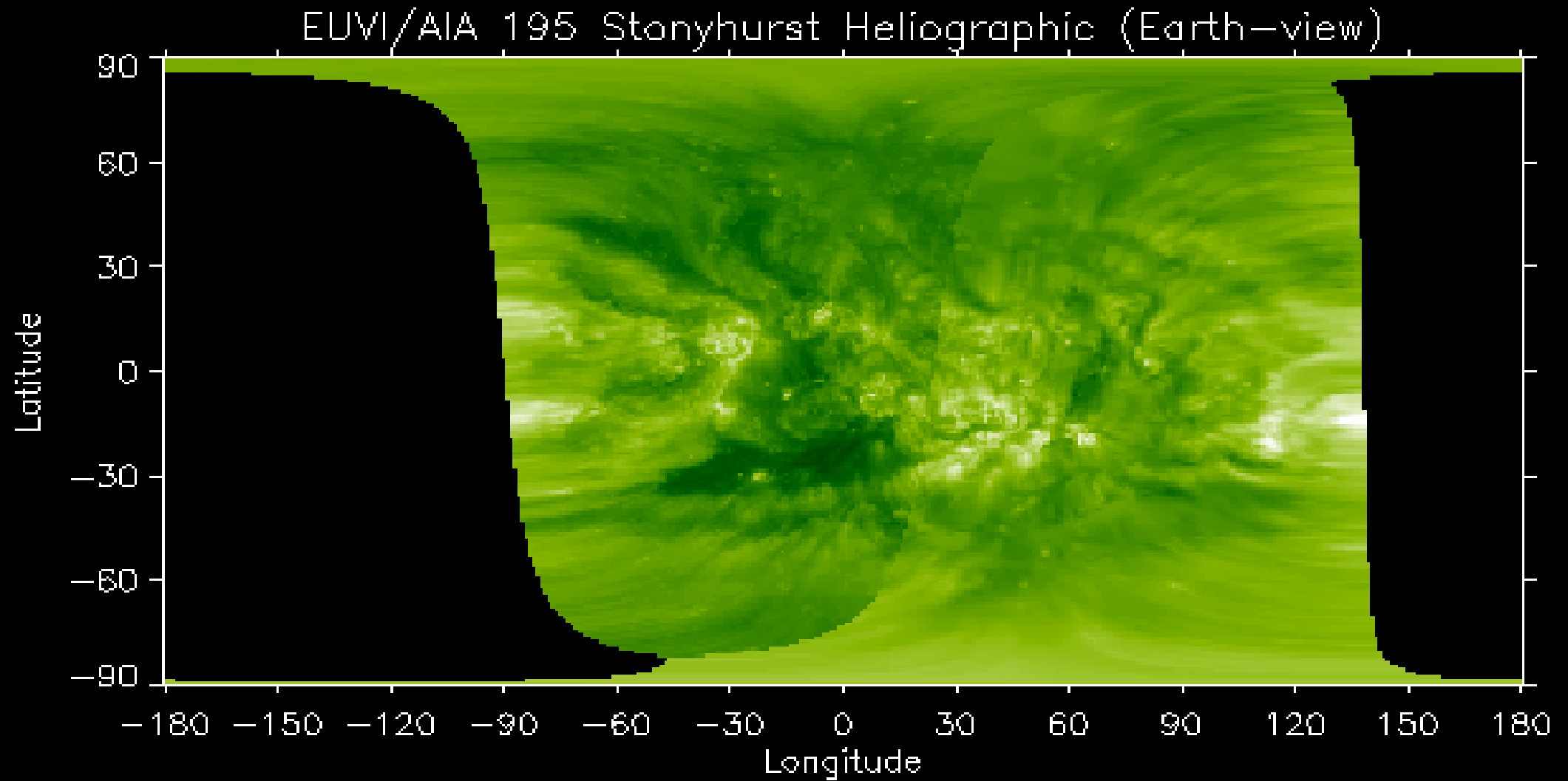
Outlook



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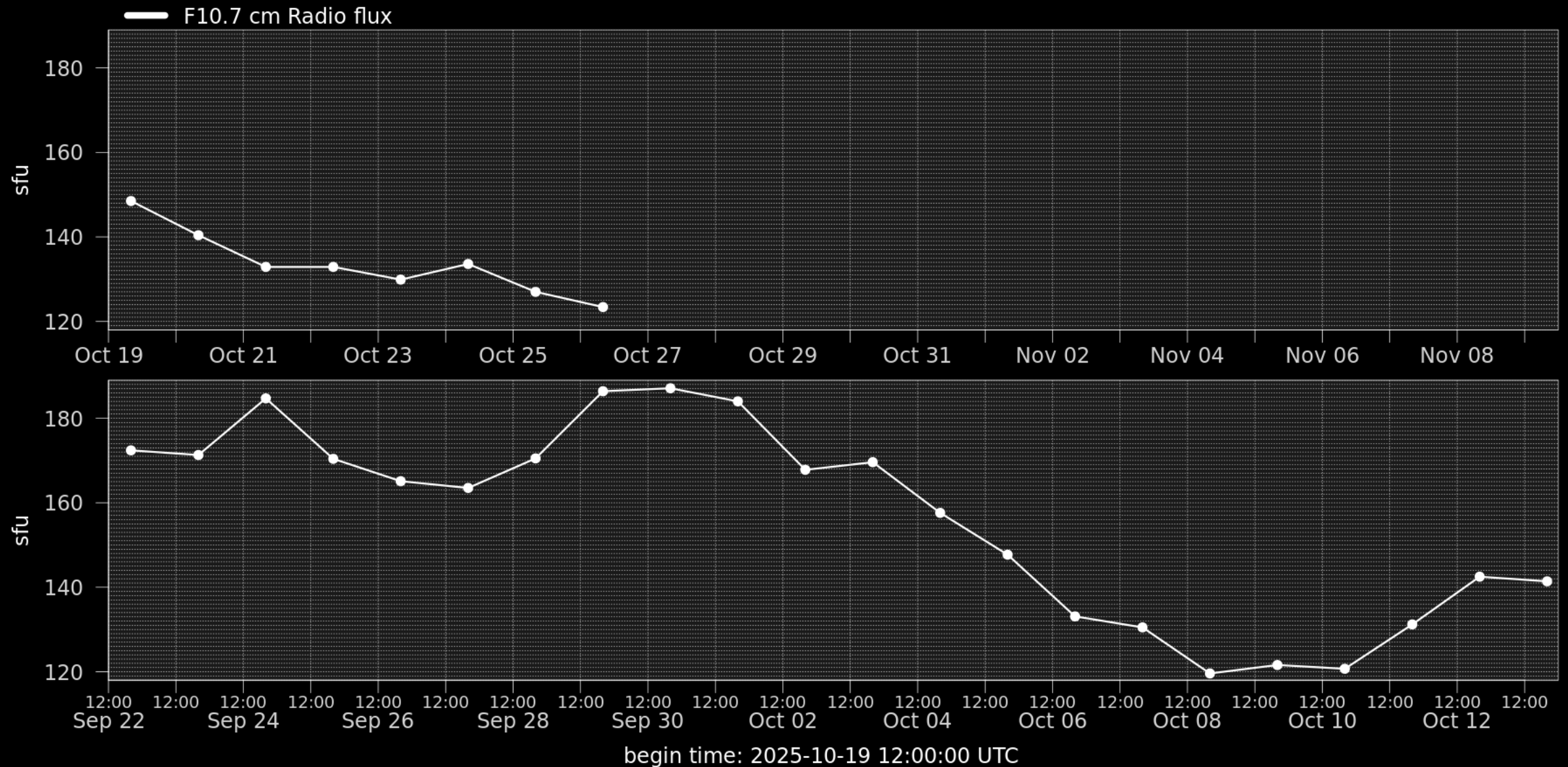
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Outlook: Solar activity

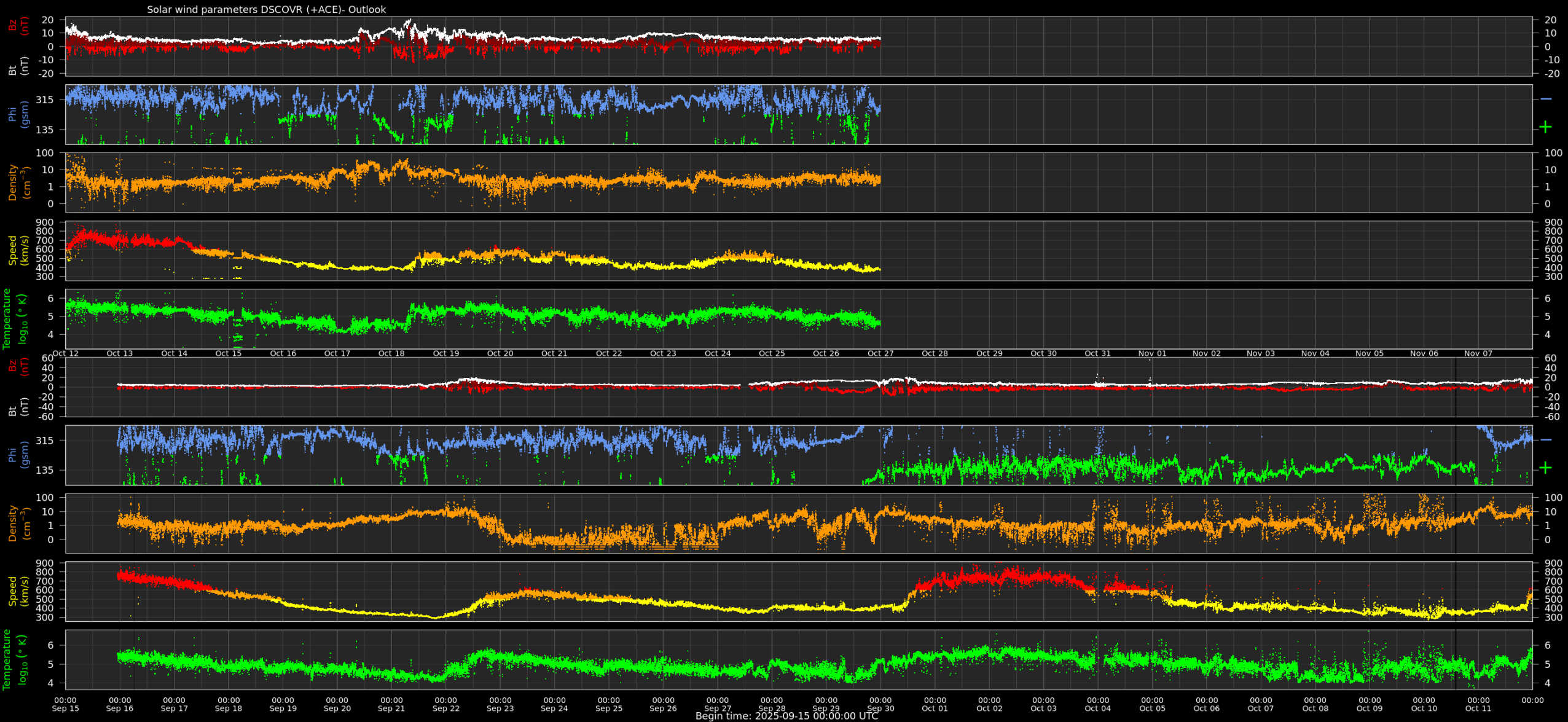


Observation date: 2025/10/26 19:55:00

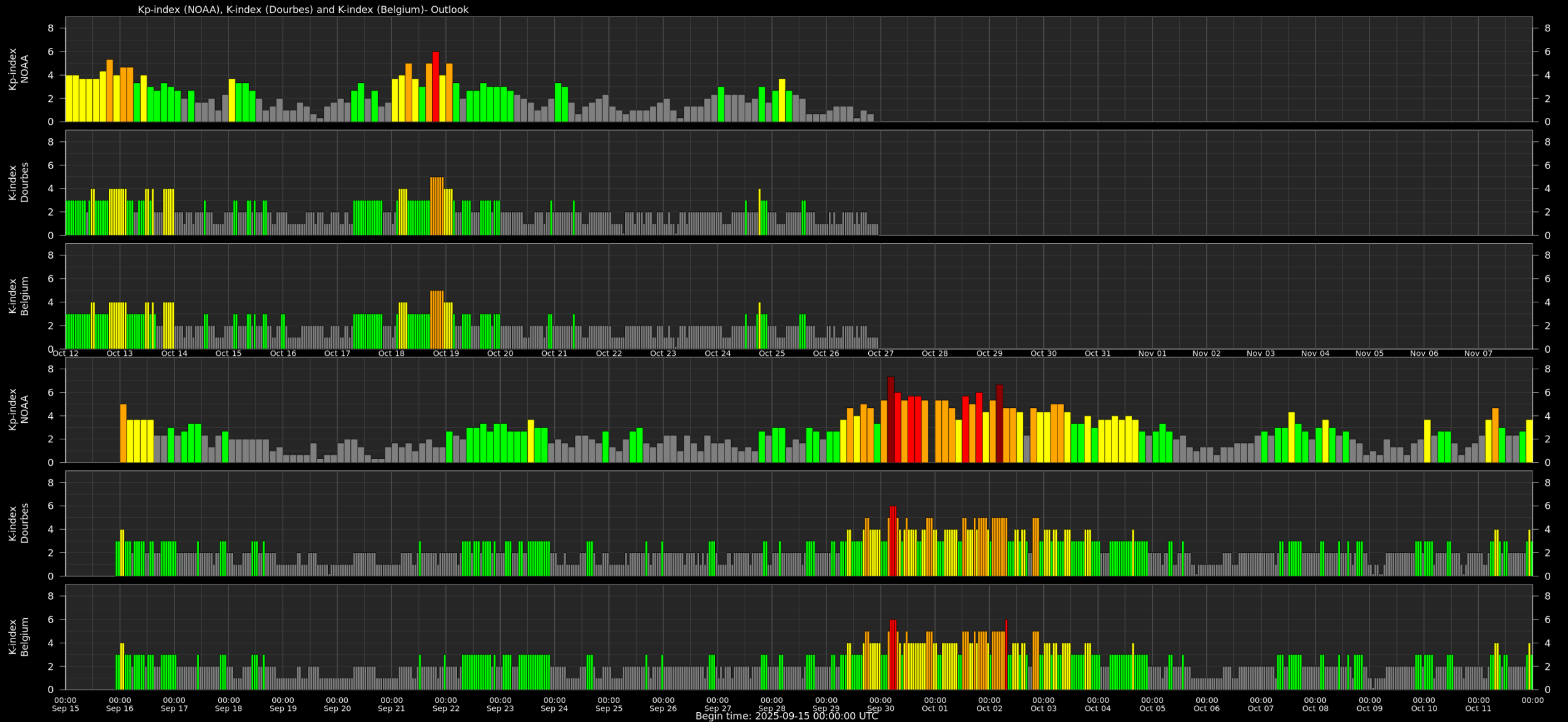
Outlook: Solar F10.7cm radio flux



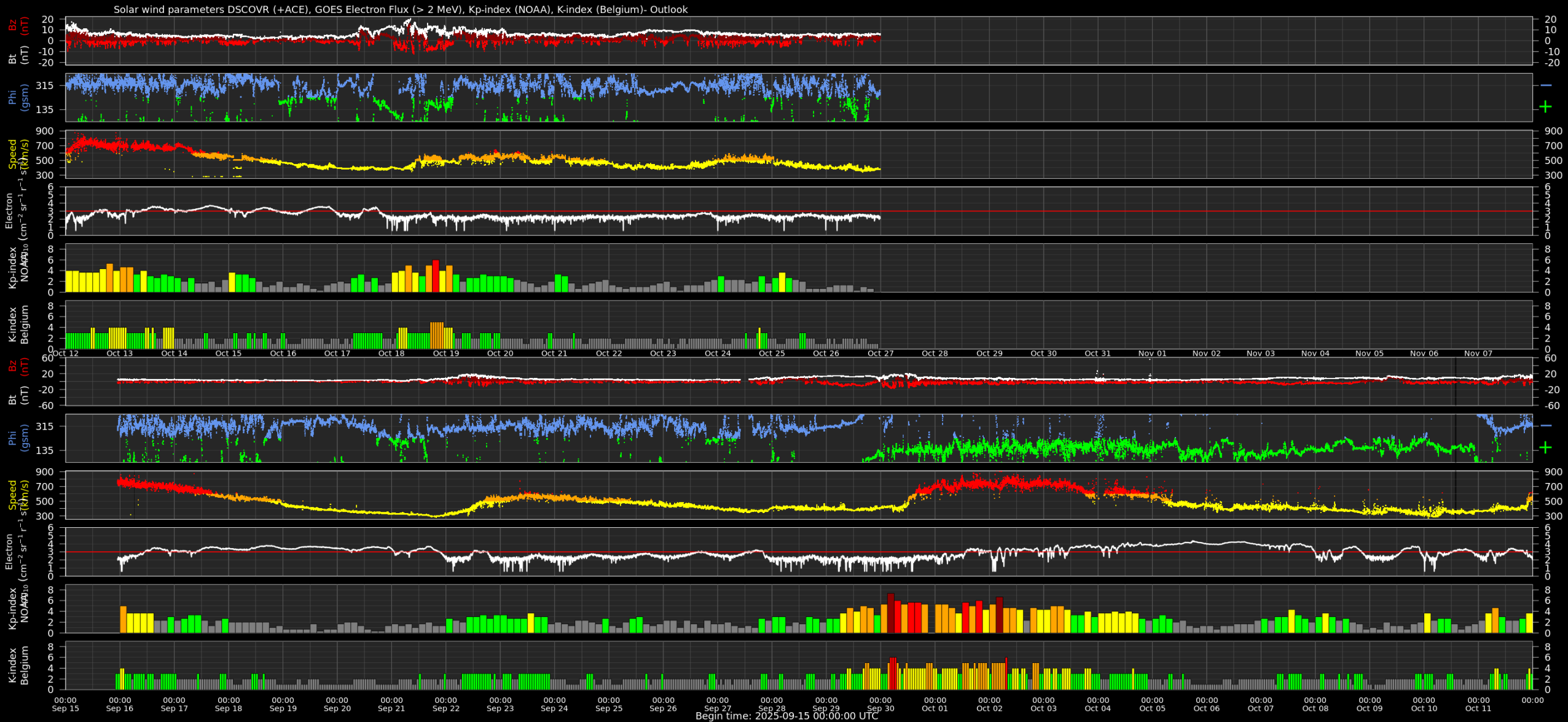
Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



SIDC Space Weather Briefing

See you at our next briefing!

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