SIDC Space Weather Briefing

12 October 2026-18 October 2026

Micera Alfredo

& the SIDC forecaster team

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2026-10-12 00:00 to 2026-10-18 23:59

Active regions	14 numbered regions over the week, most active were SIDC Group 976 (NOAA AR 4549), SIDC Sunspot Group 980 (NOAA AR 4551) and SIDC Sunspot Group 966 (NOAA AR 4557)
Flares	# C-class flare: 37 # M-class flare: 1 # X-class flare: 0
Coronal Holes	SIDC CH 149 (-), SIDC CH 142 (-), SIDC CH 159 (+)
CMEs	1 CME with possible Earth directed components observed (SIDC CME 730)

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

Solar wind and geomagnetic conditions

ICMEs	Possible signatures of a glancing blow on October 12 and on October 14
Solar wind conditions	|B|: 0.34 - 16.31 nT// Bz: -8.71 nT to 14.76 nT// Speed: 389.8 - 670.5 km/s
Geomagnetic conditions	max KBel: 4.0, max Kp(NOAA): 3.67, Active conditions

All Quiet Alert: Off/Not Quiet

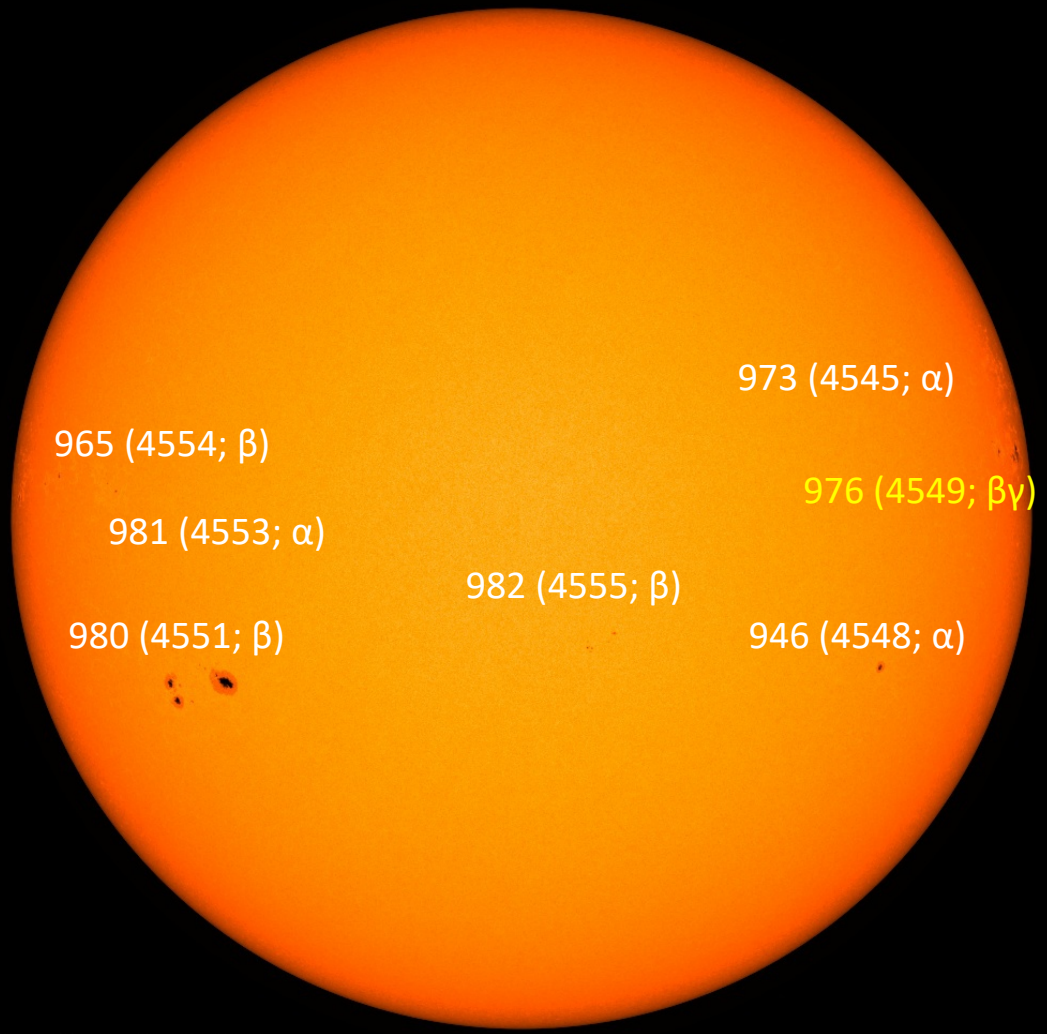
Solar Activity

Royal Observatory
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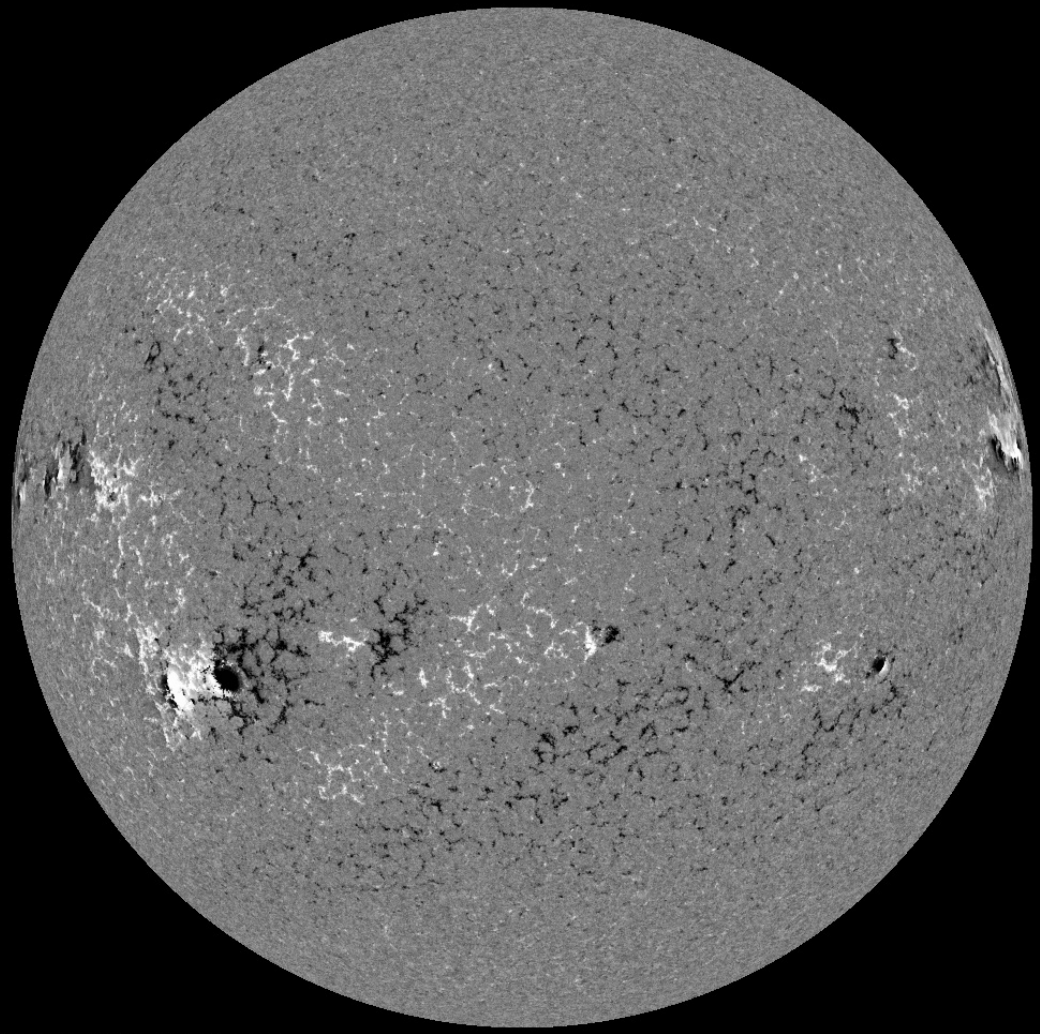
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Solar active regions

SDO/HMI White Light 2026-10-12

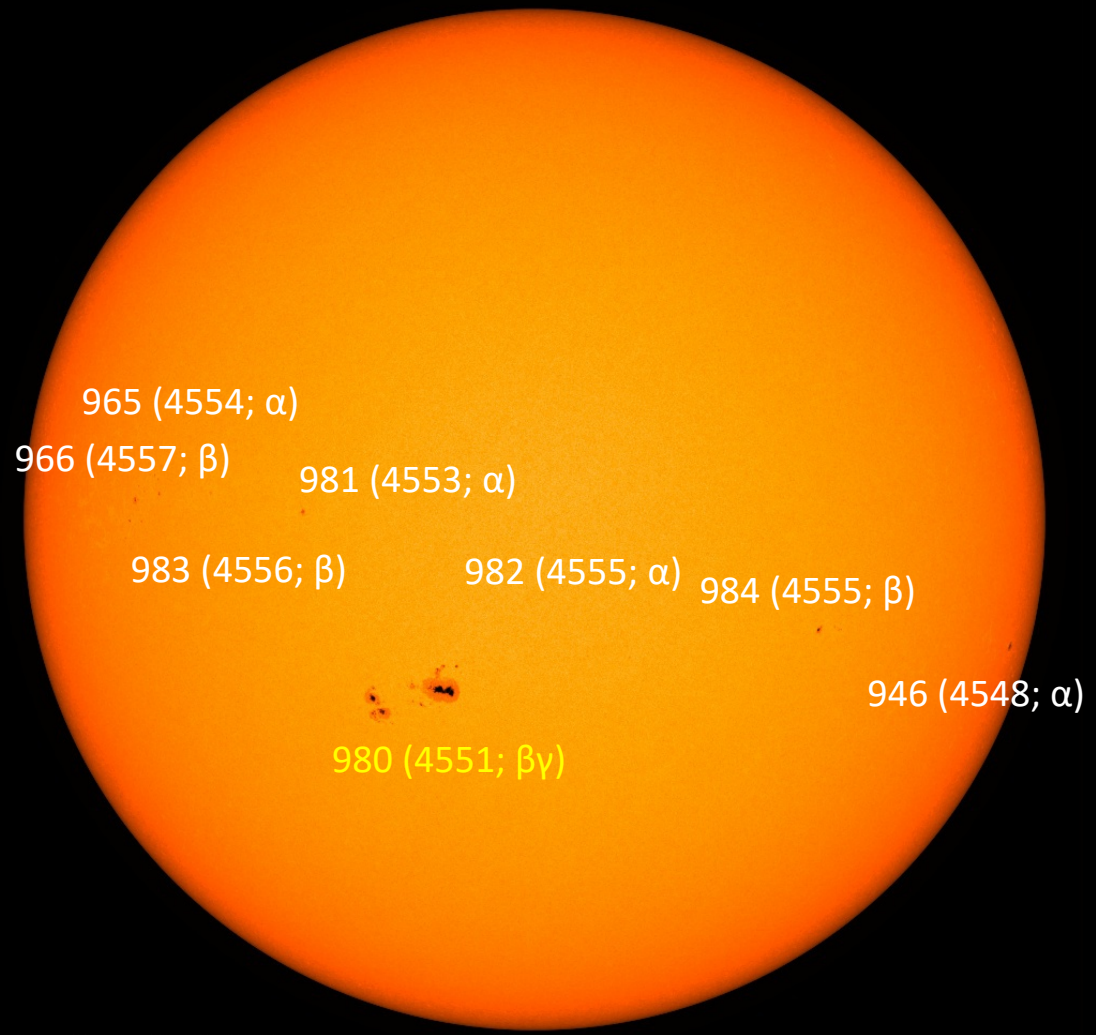


SDO/HMI Magnetogram 2026-10-12

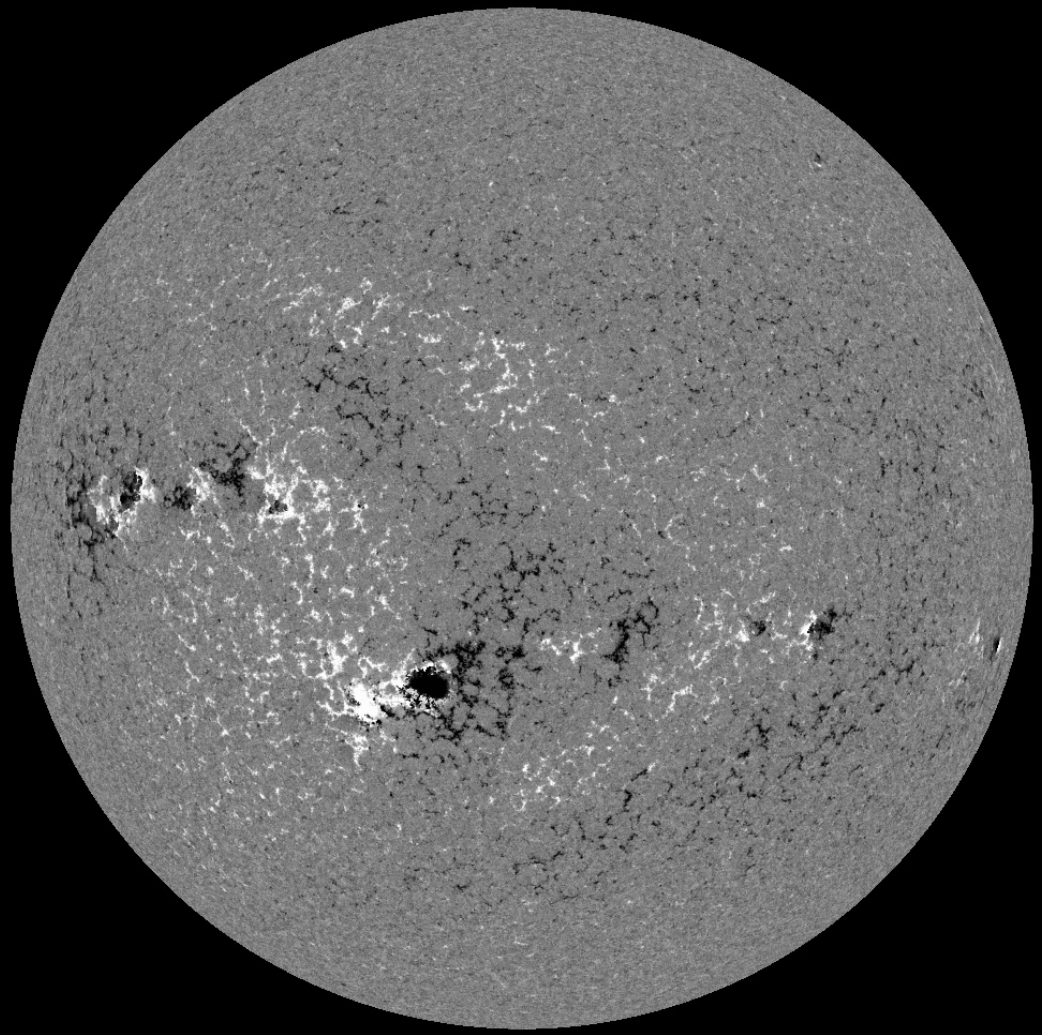


Solar active regions

SDO/HMI White Light 2026-10-14

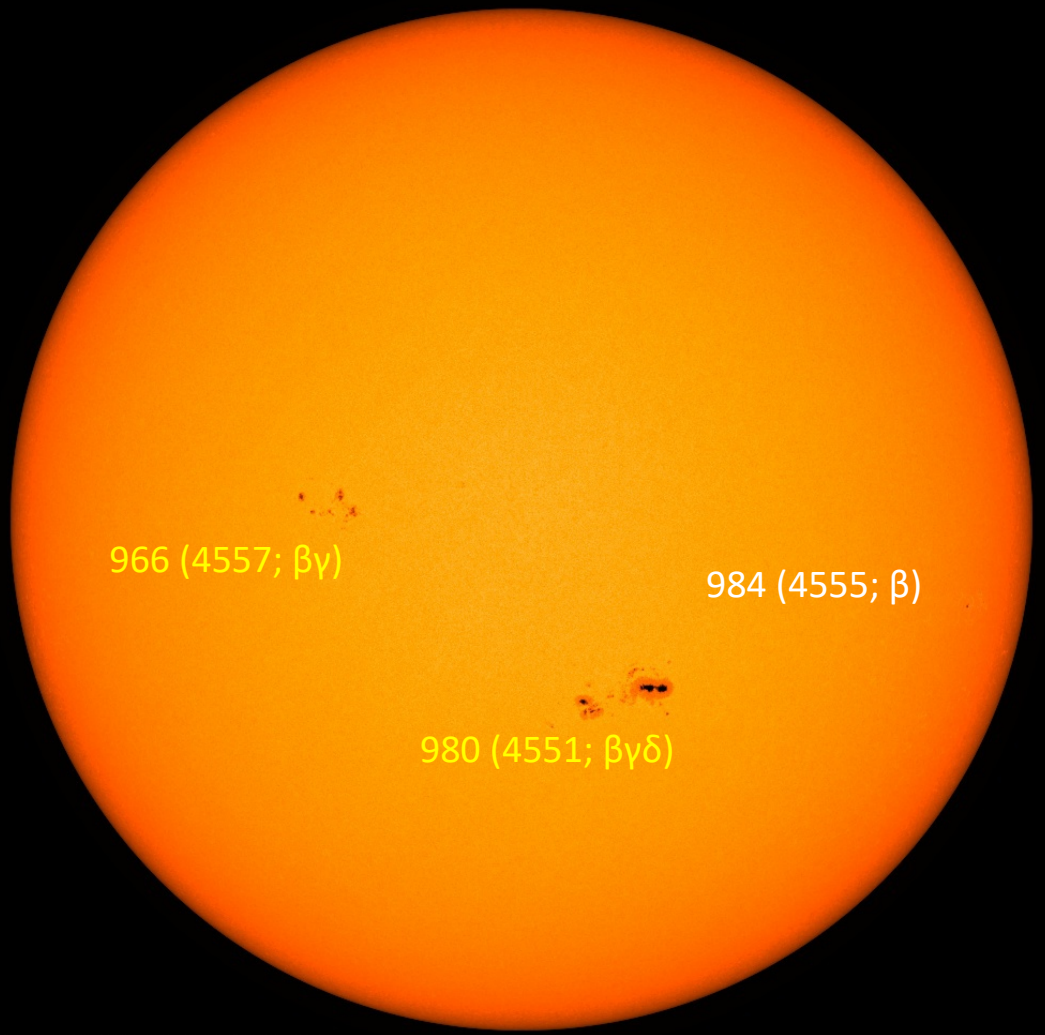


SDO/HMI Magnetogram 2026-10-14

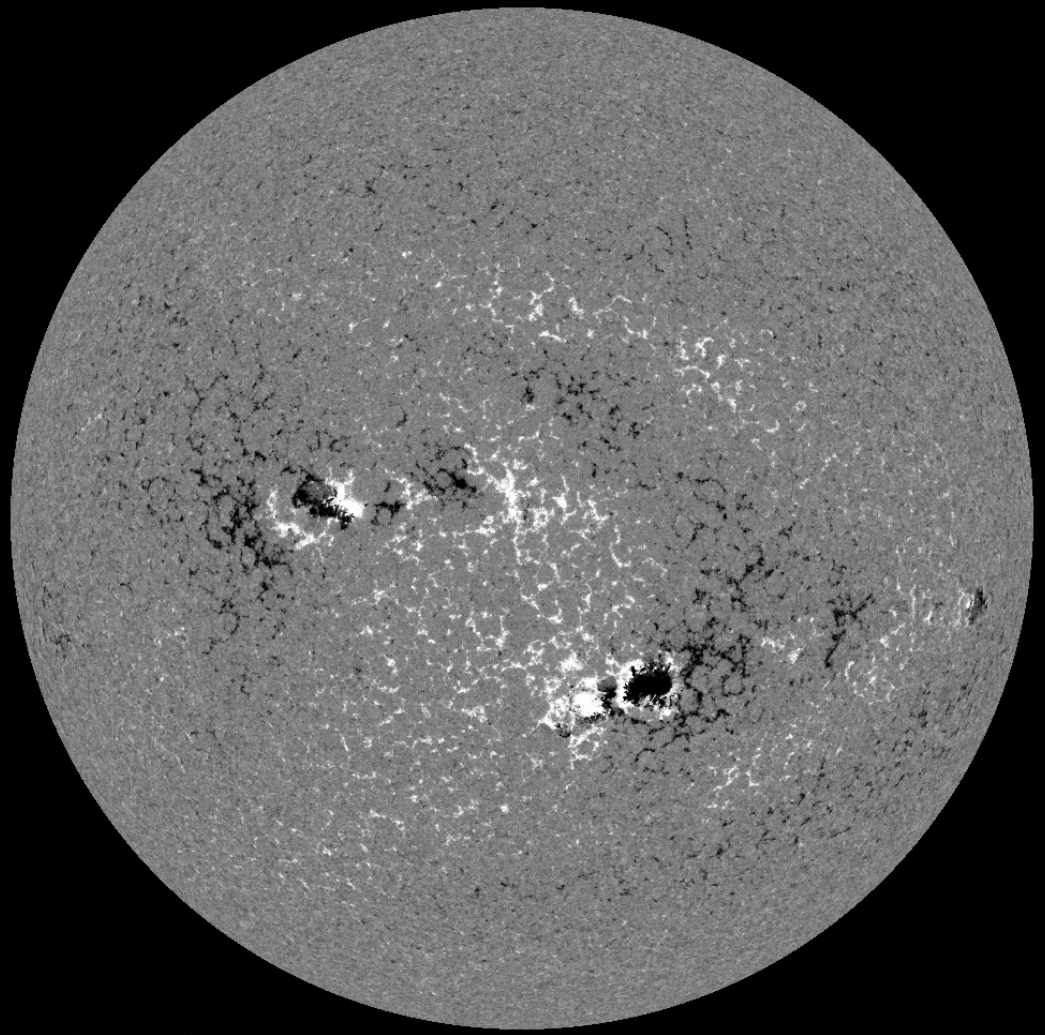


Solar active regions

SDO/HMI White Light 2026-10-16

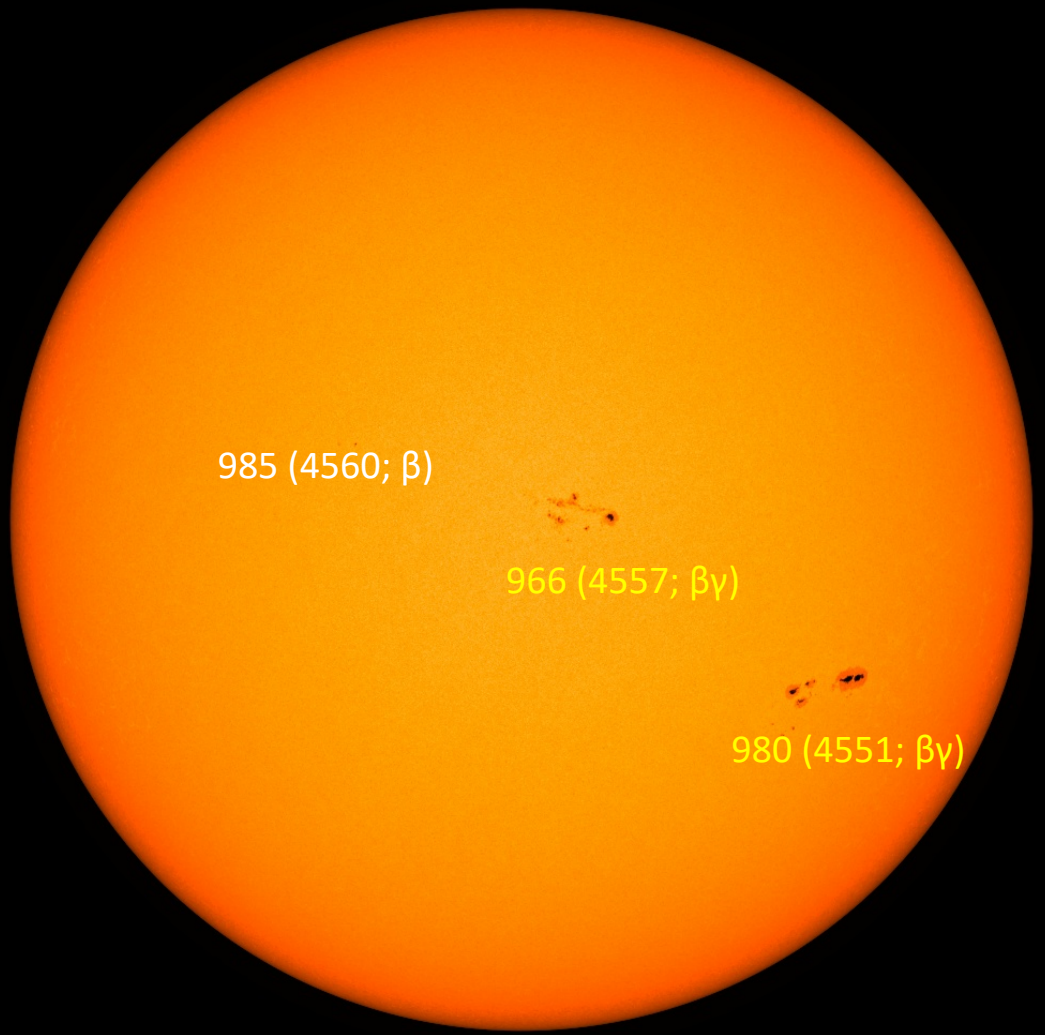


SDO/HMI Magnetogram 2026-10-16

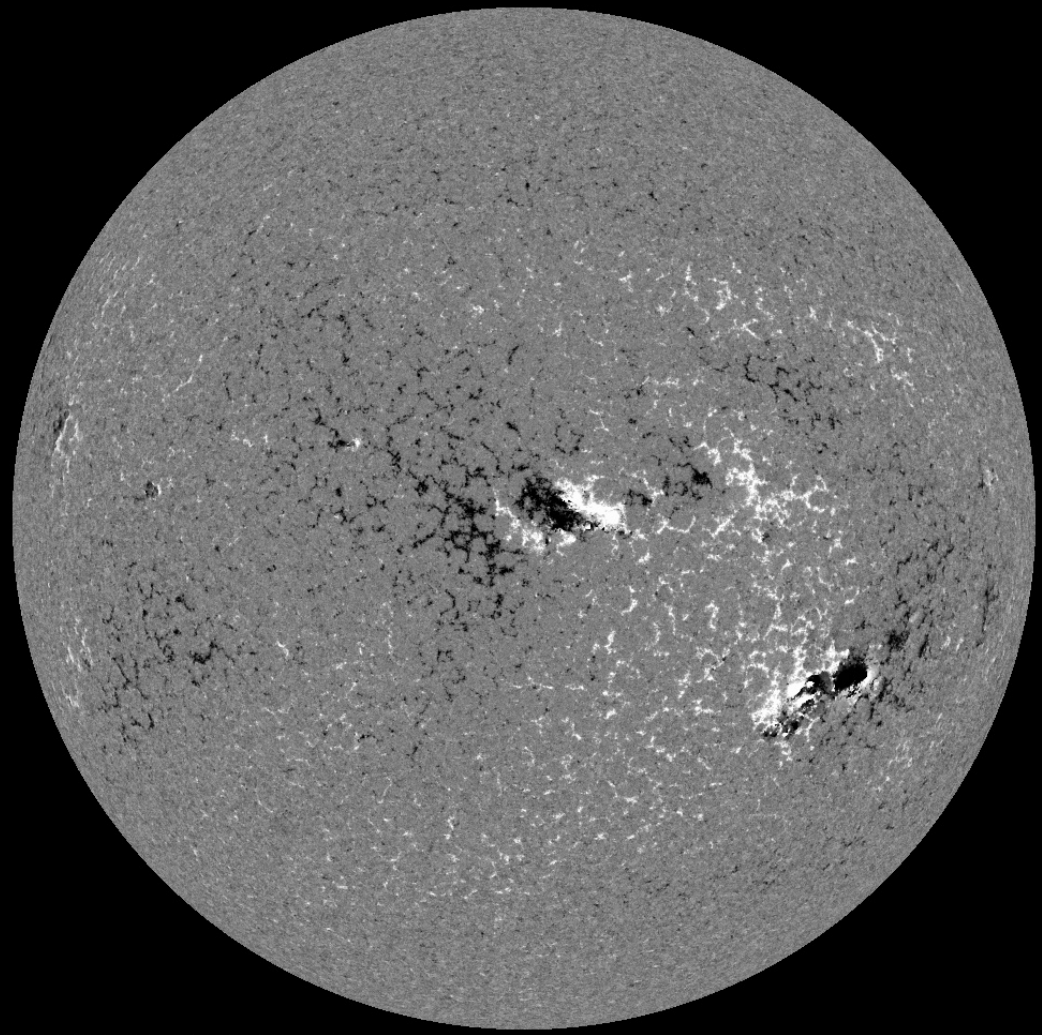


Solar active regions

SDO/HMI White Light 2026-10-18

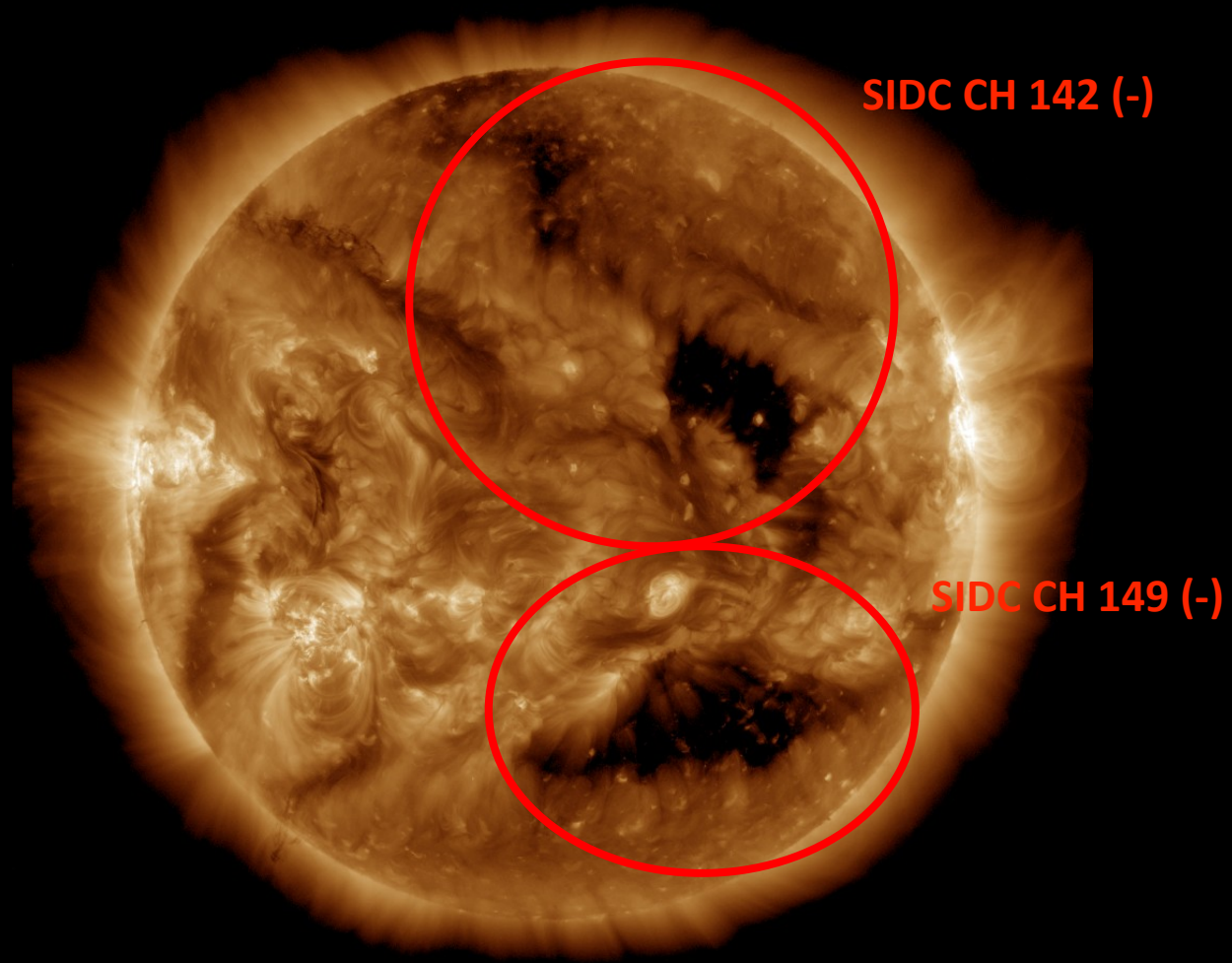


SDO/HMI Magnetogram 2026-10-18

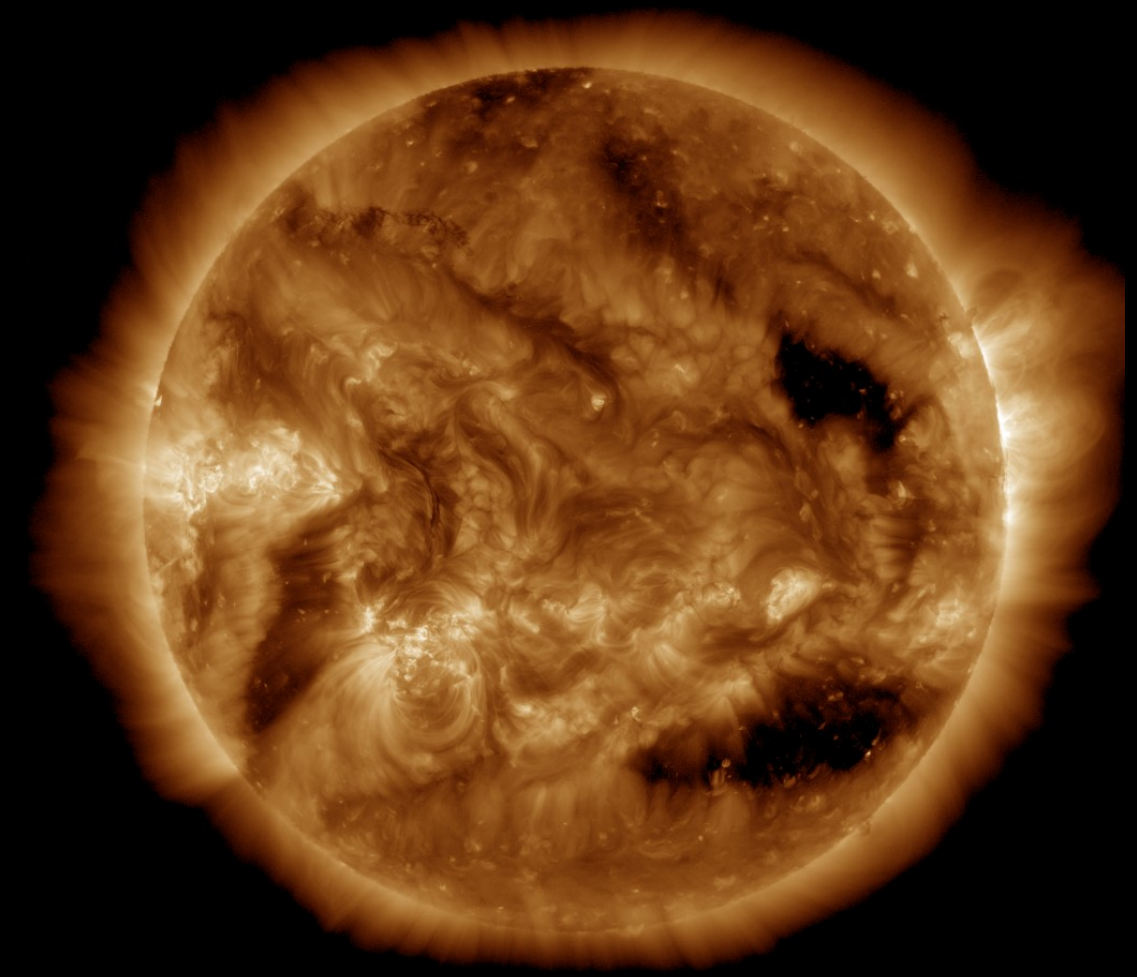


Coronal holes

SDO/AIA 19.3 nm 2026-10-12

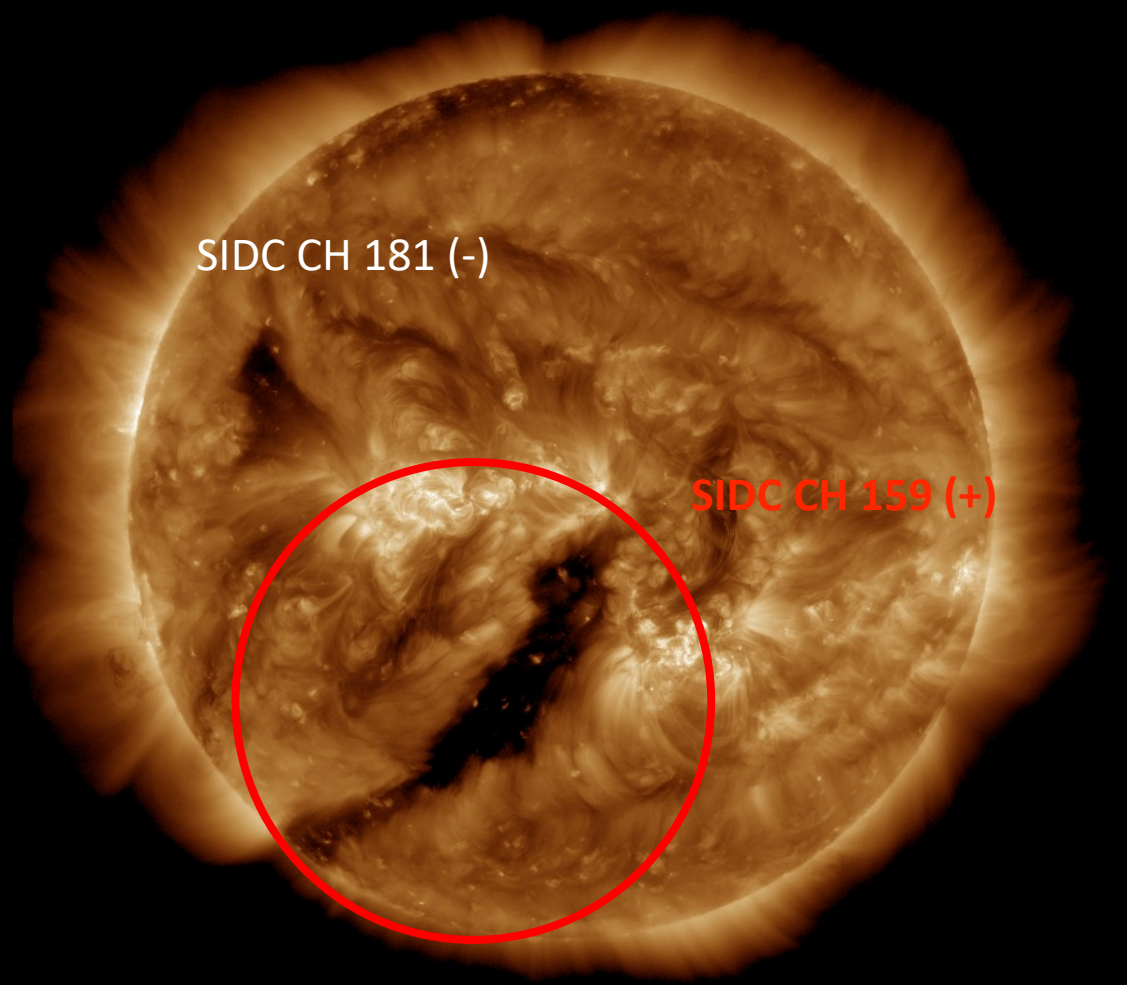


SDO/AIA 19.3 nm 2026-10-13

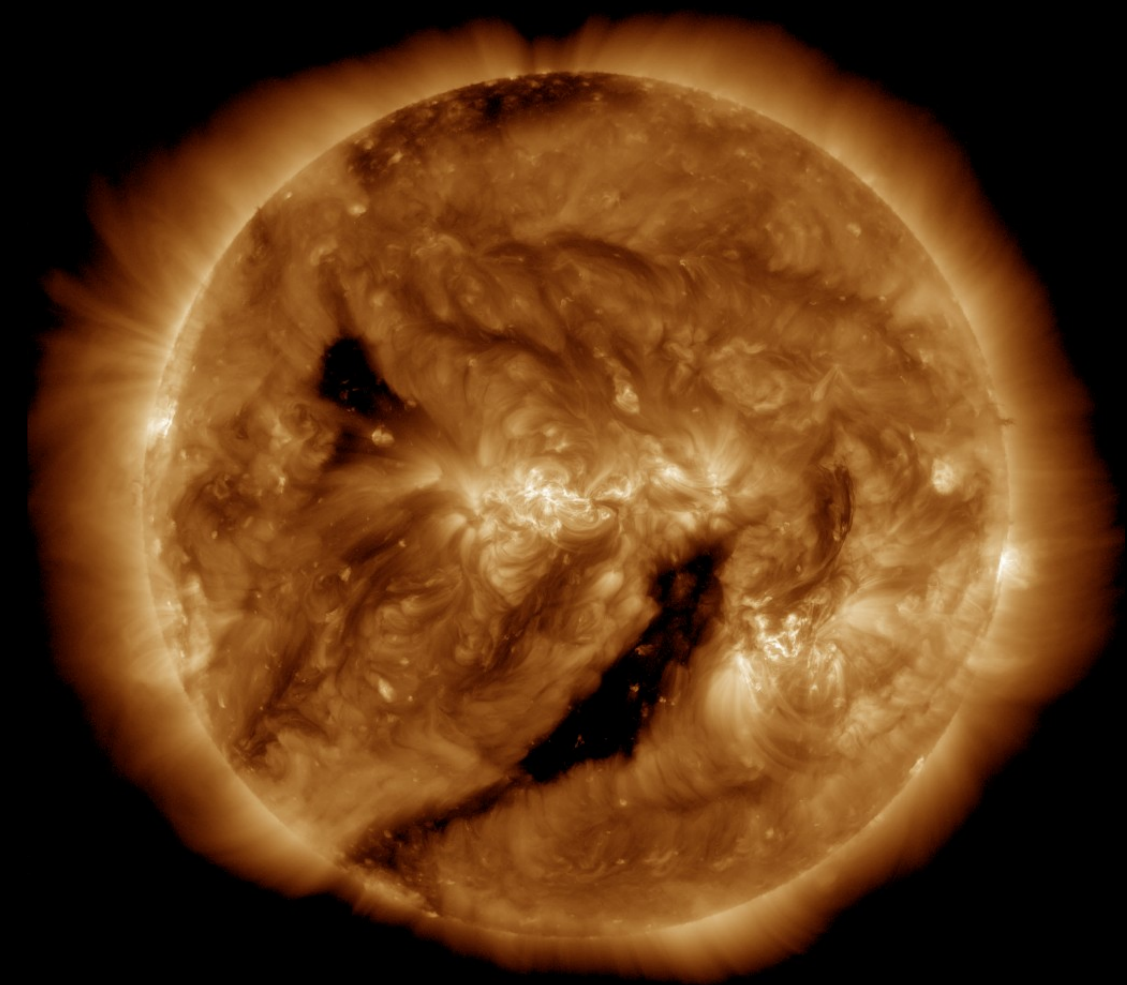


Coronal holes

SDO/AIA 19.3 nm 2026-10-16

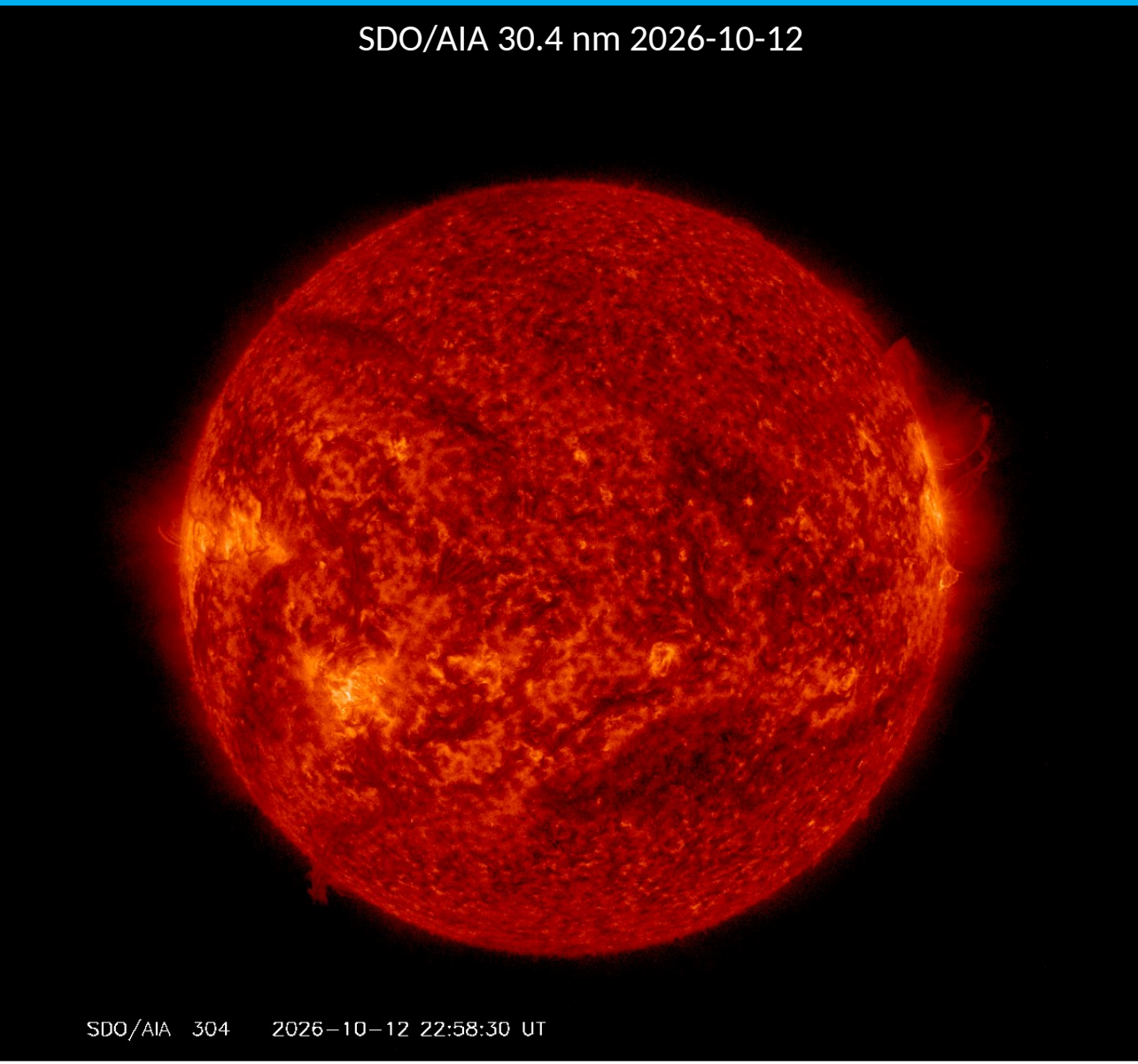


SDO/AIA 19.3 nm 2026-10-17

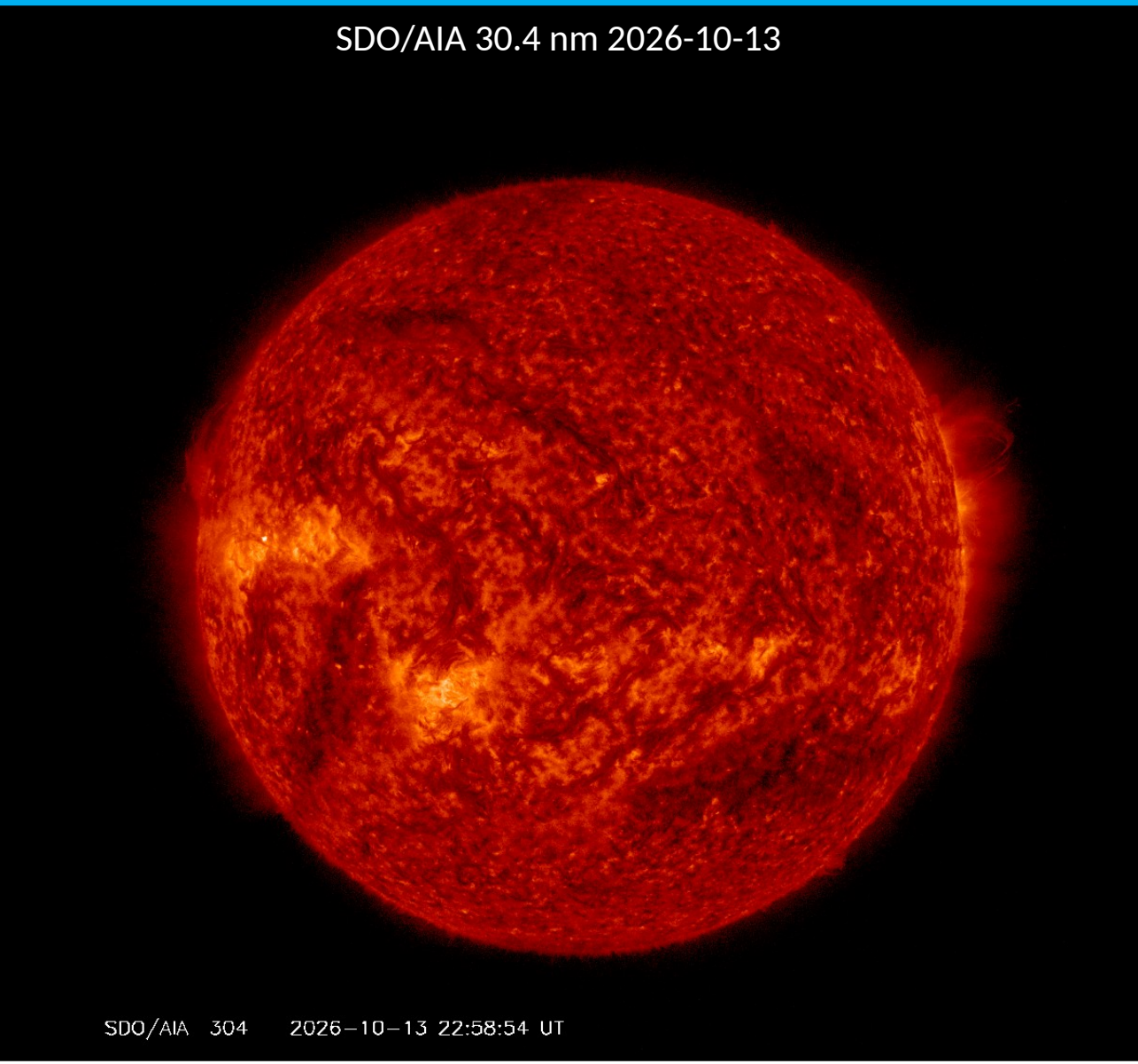


Filaments

SDO/AIA 30.4 nm 2026-10-12

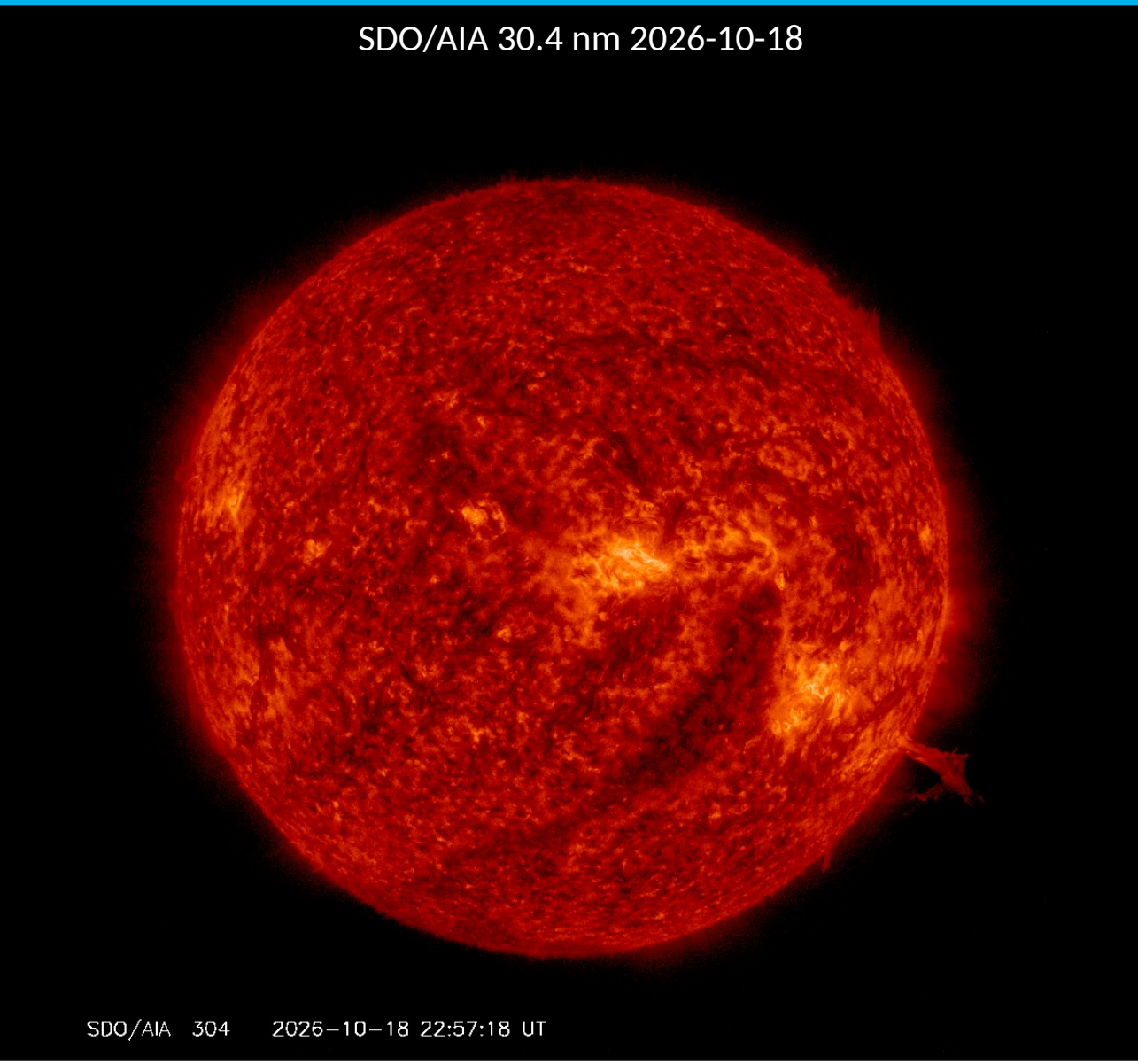


SDO/AIA 30.4 nm 2026-10-13

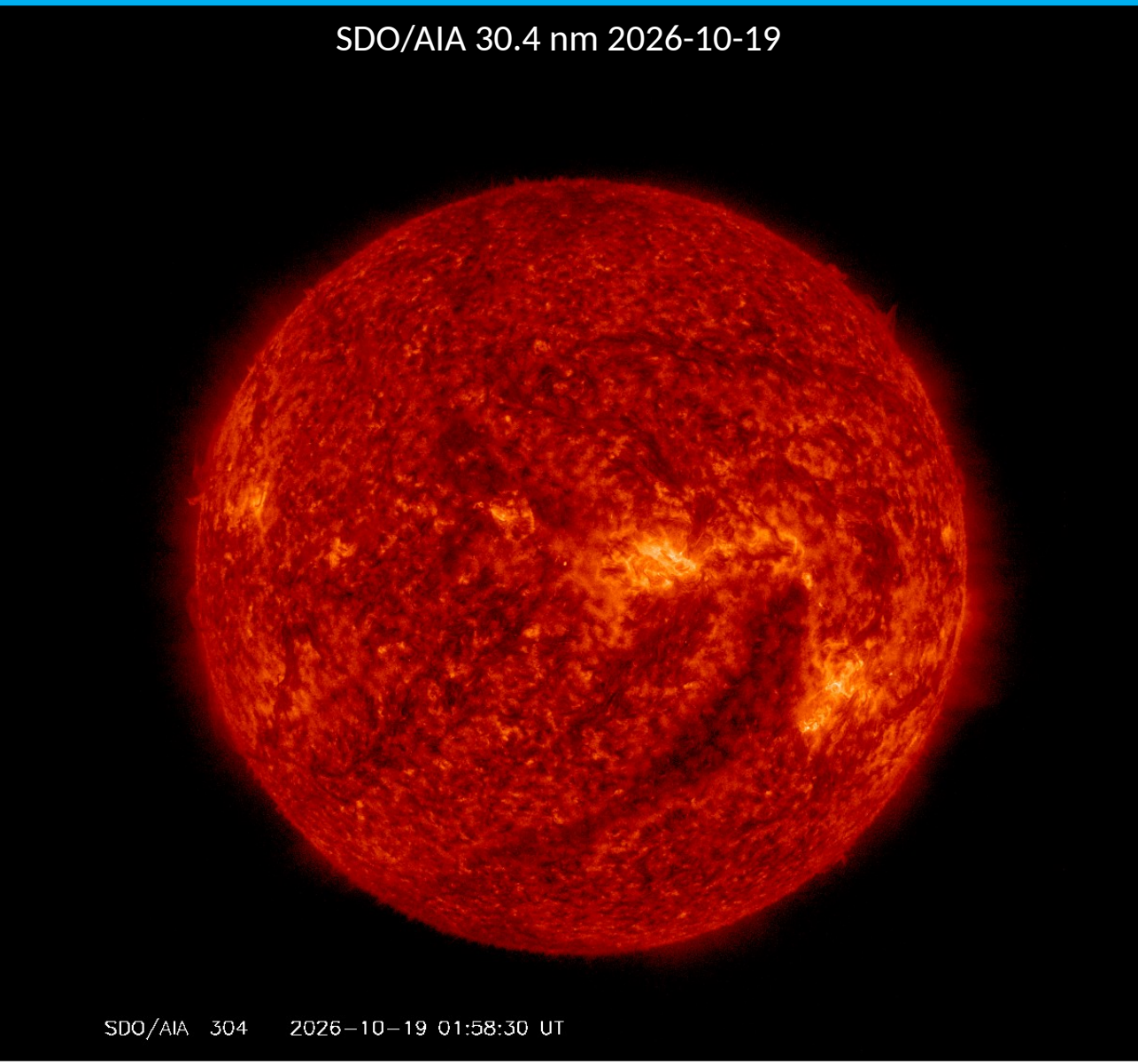


Filaments

SDO/AIA 30.4 nm 2026-10-18

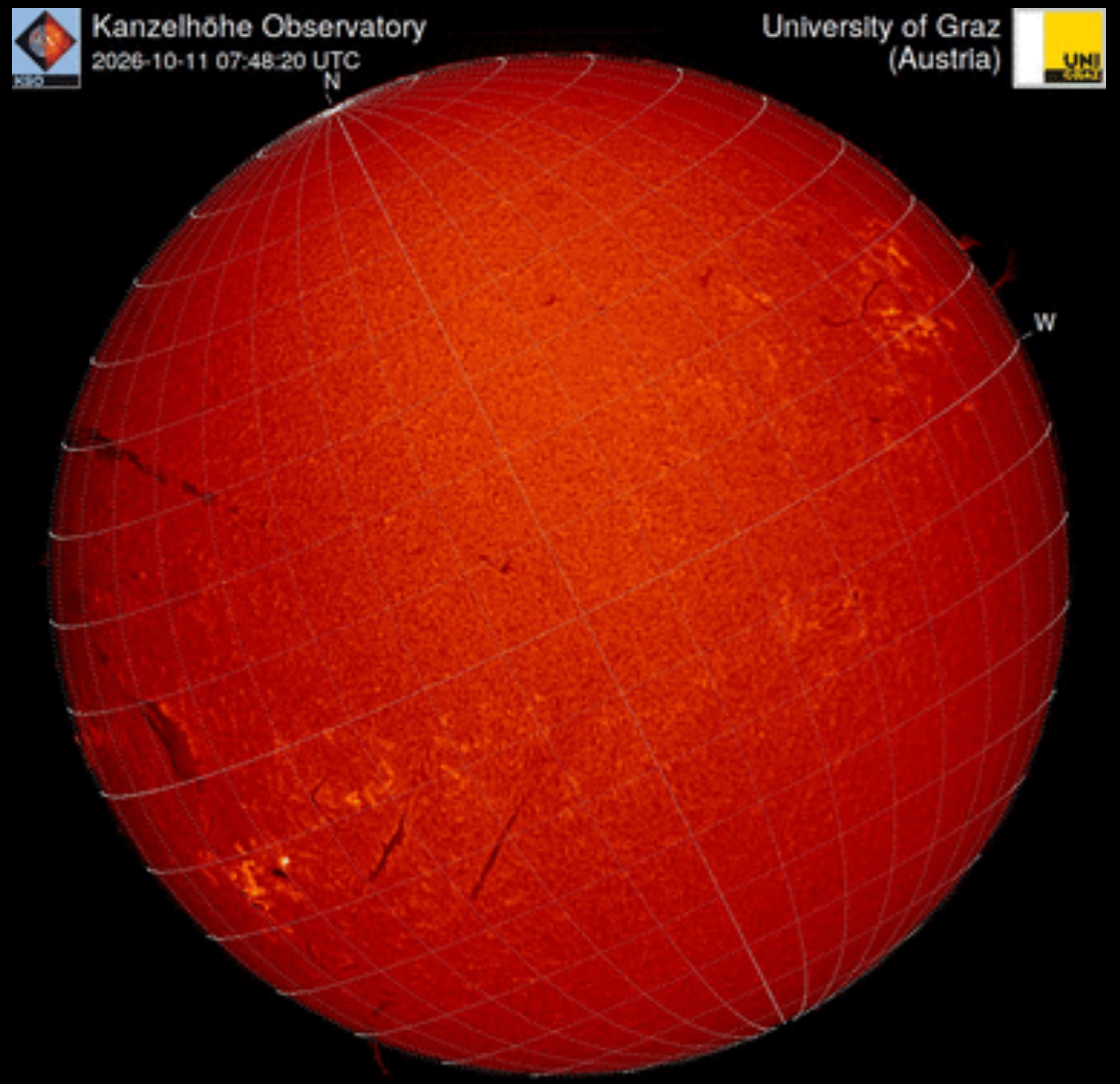


SDO/AIA 30.4 nm 2026-10-19

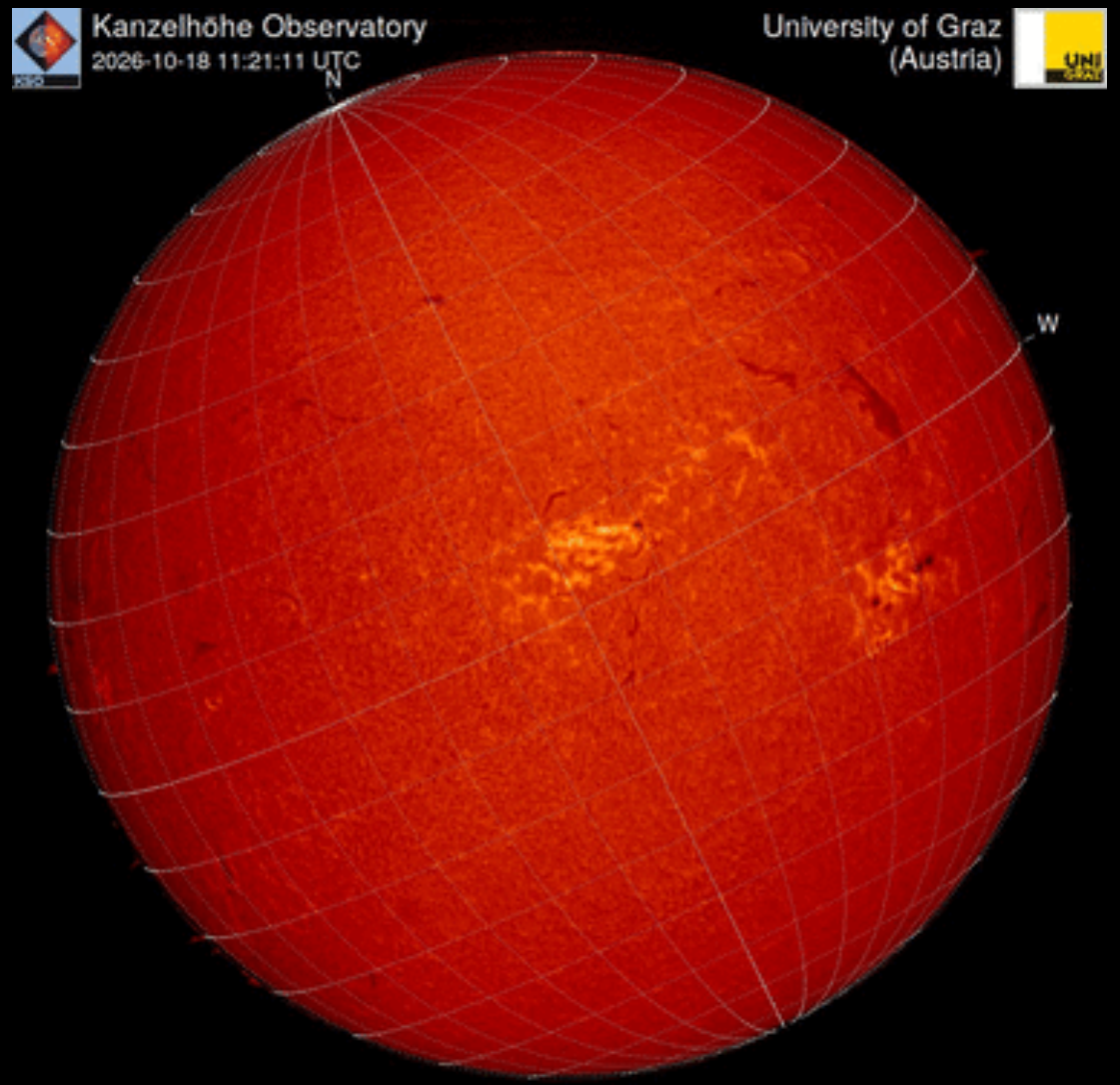


Filaments & Filament eruptions

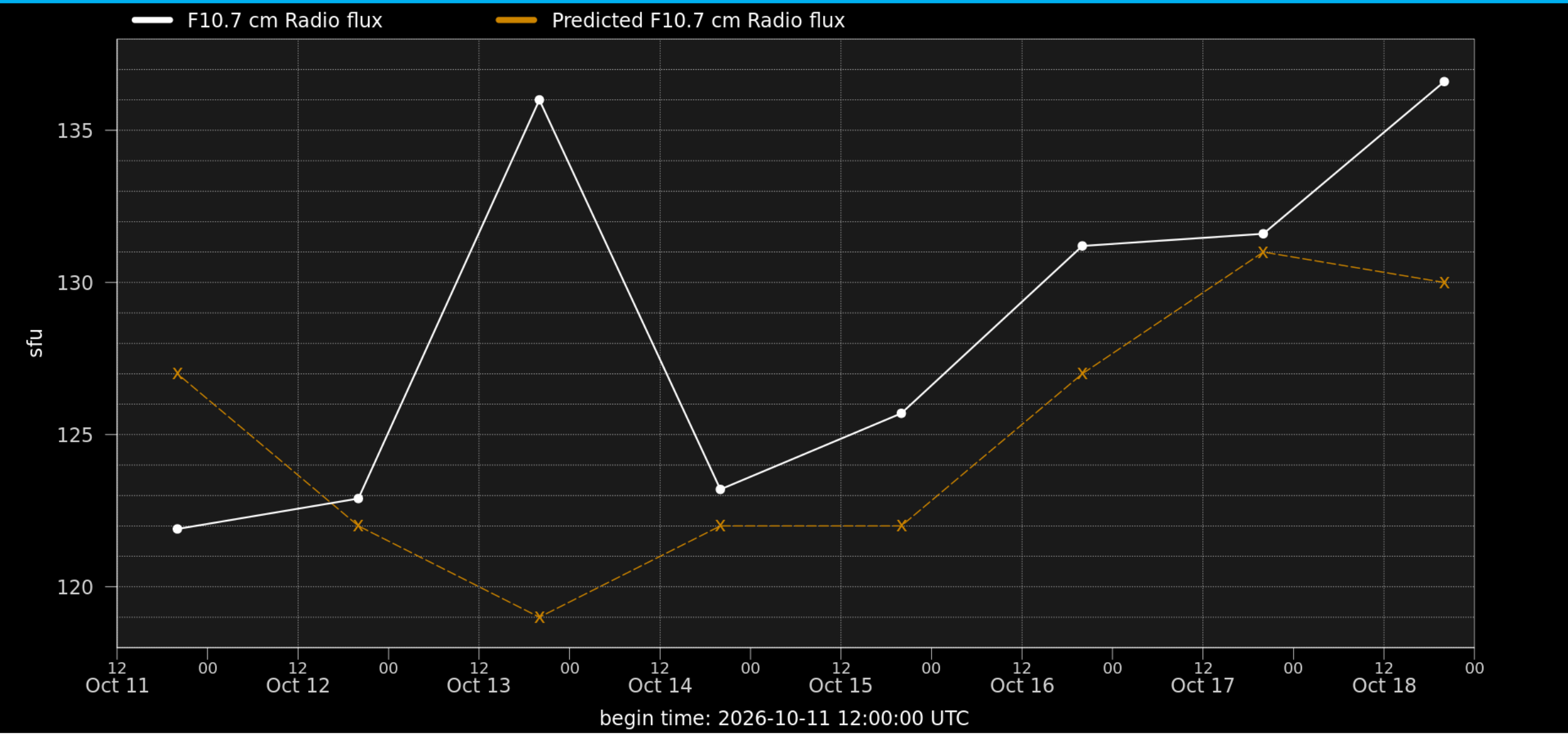
H-alpha 2026-10-12



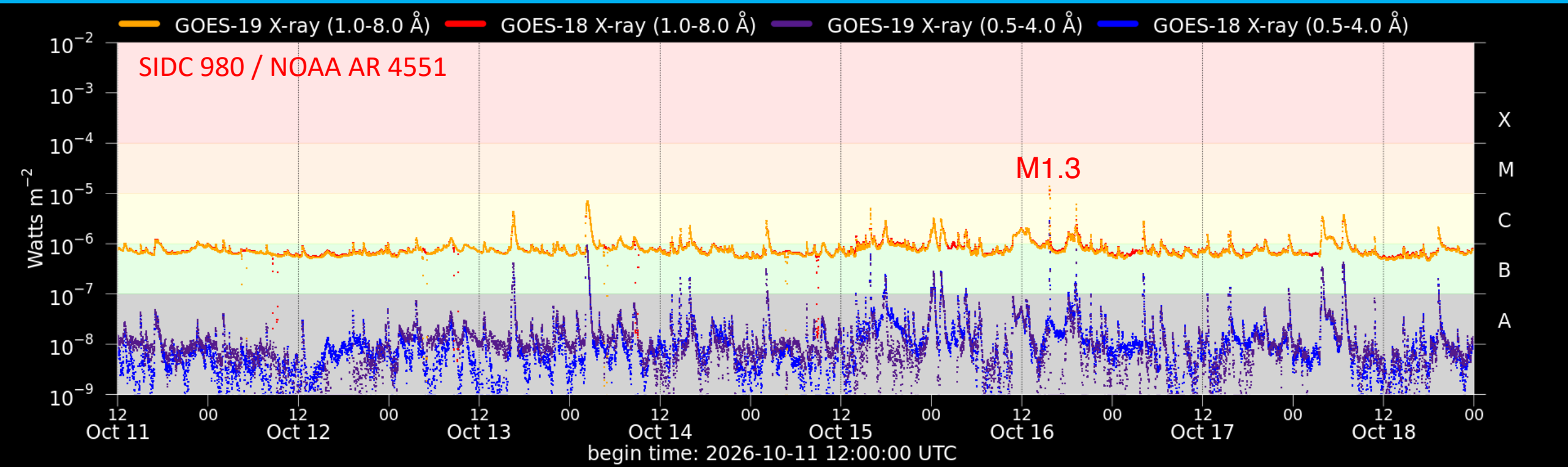
H-alpha 2026-10-18



Solar F10.7cm radio flux



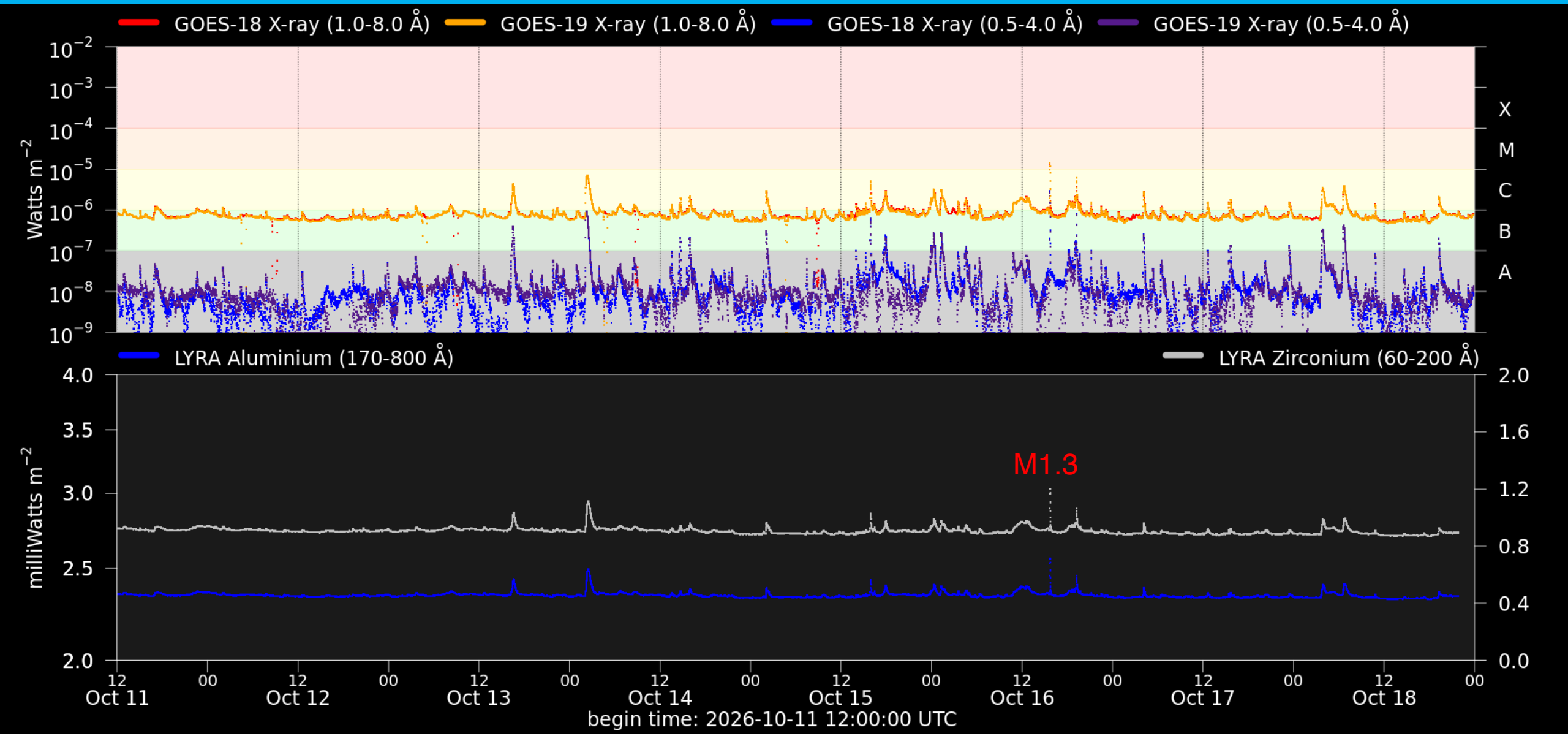
Flaring activity



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

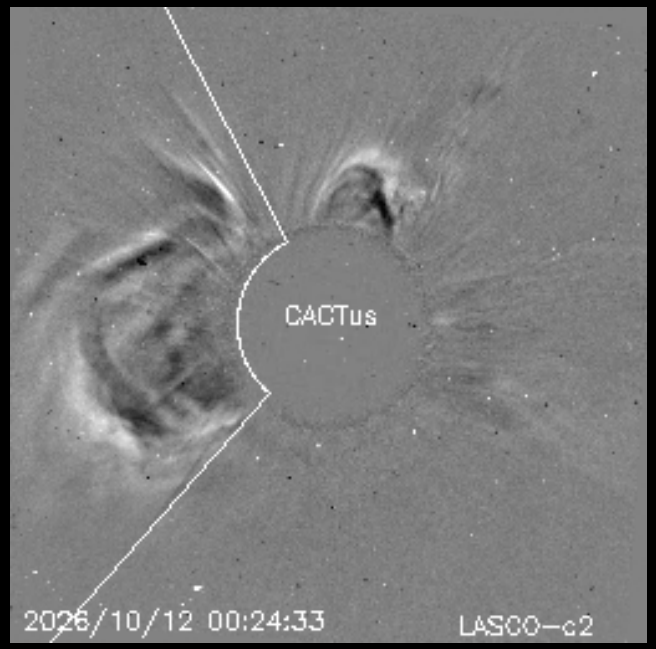
Issue date	2026-10-11	2026-10-12	2026-10-13	2026-10-14	2026-10-15	2026-10-16	2026-10-17	2026-10-18
Probability (%)	99|78|10	98|64|07	83|27|01	93|49|07	96|69|10	98|73|10	98|73|10	99|78|10
Observed (#)	02|00|00	04|00|00	02|00|00	07|00|00	09|00|00	05|01|00	07|00|00	01|00|00

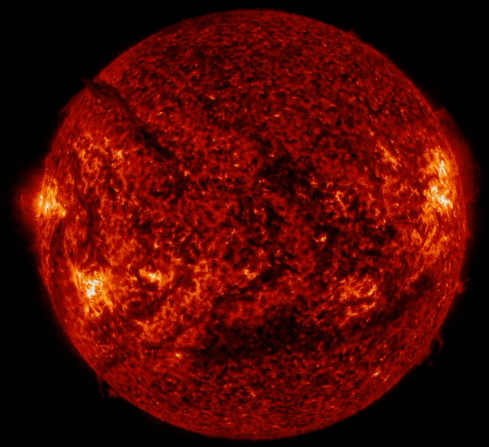
Solar X-Ray and UV flux



Coronal Mass Ejections

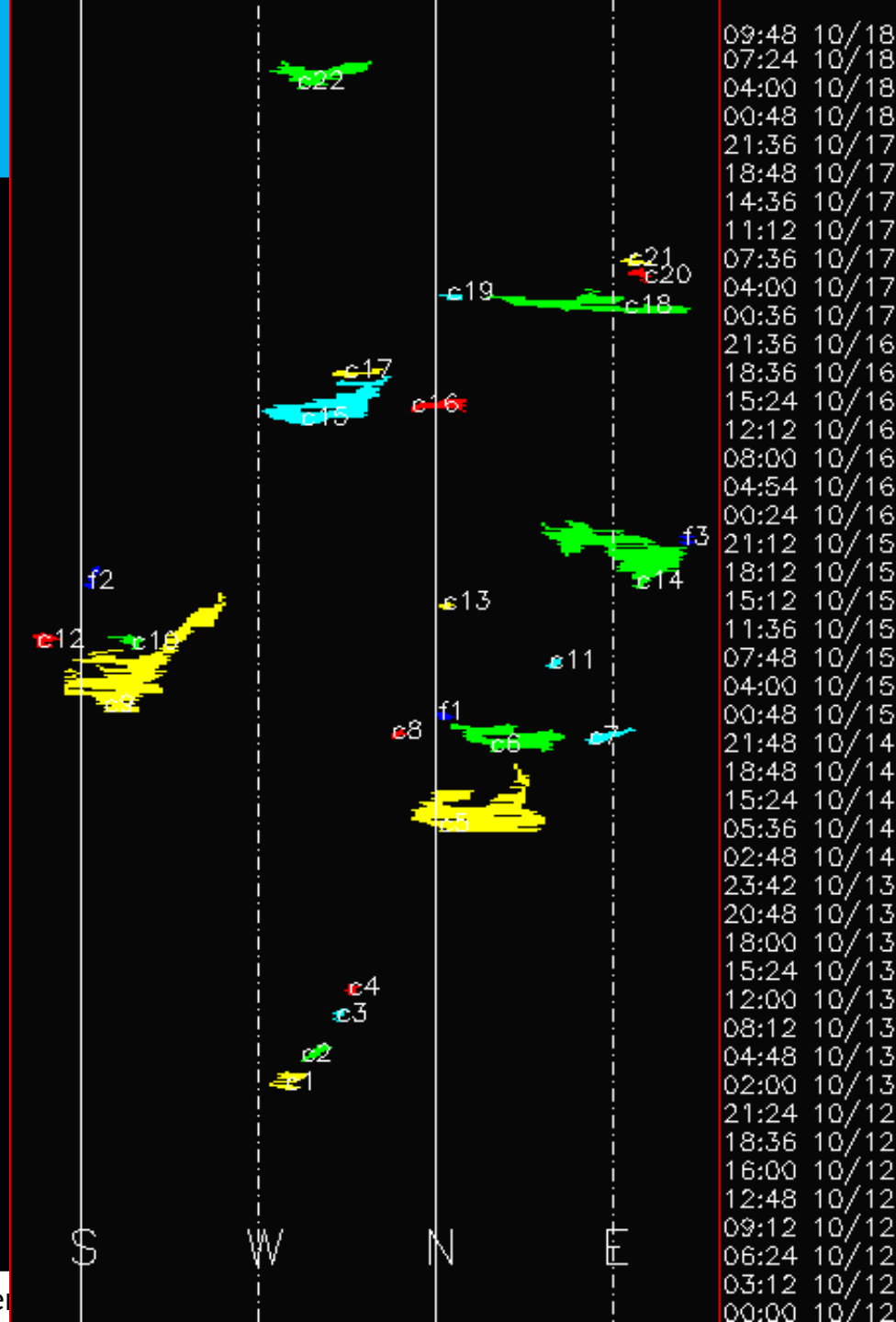
SIDC CME 730



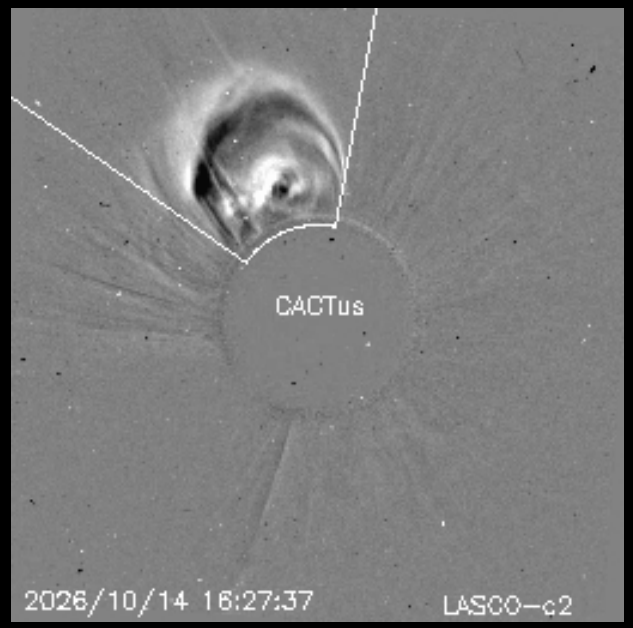


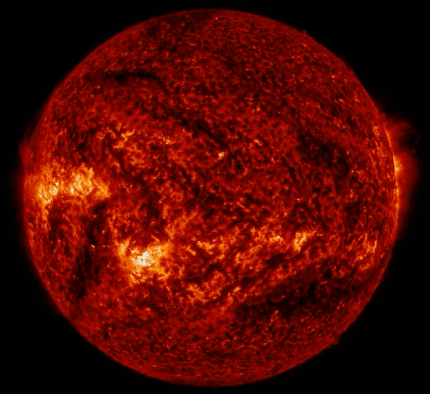
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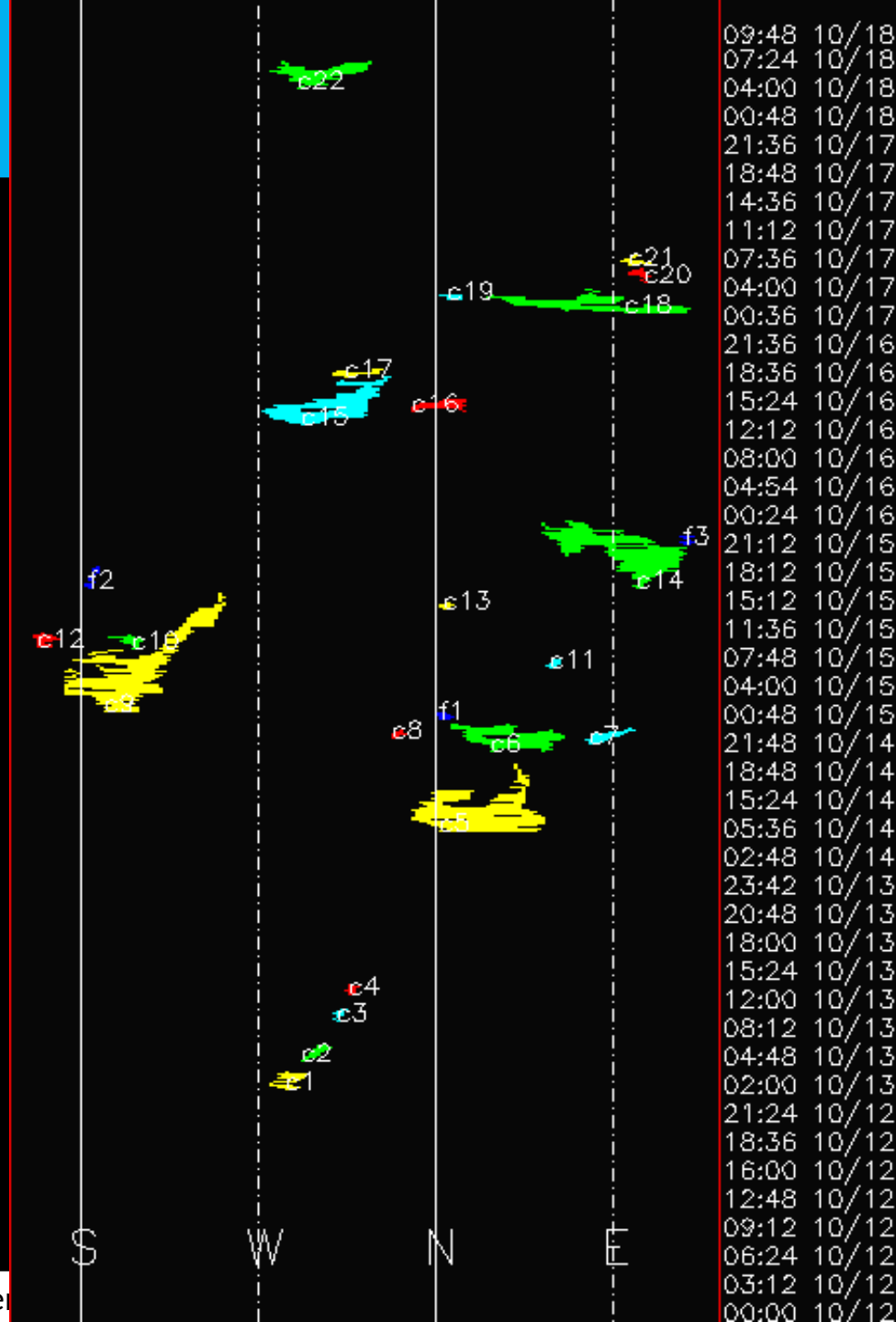
A wide, mainly eastward CME (SIDC CME 730), associated with EUV dimming in the southeast quadrant on October 11, was assessed as potentially producing a glancing blow at Earth late on October 14.



Coronal Mass Ejections







A slow, northeastward CME associated with a filament eruption on October 14 was assessed to miss Earth due to its source location and limited angular width.

Solar Wind and

Geomagnetic Activity



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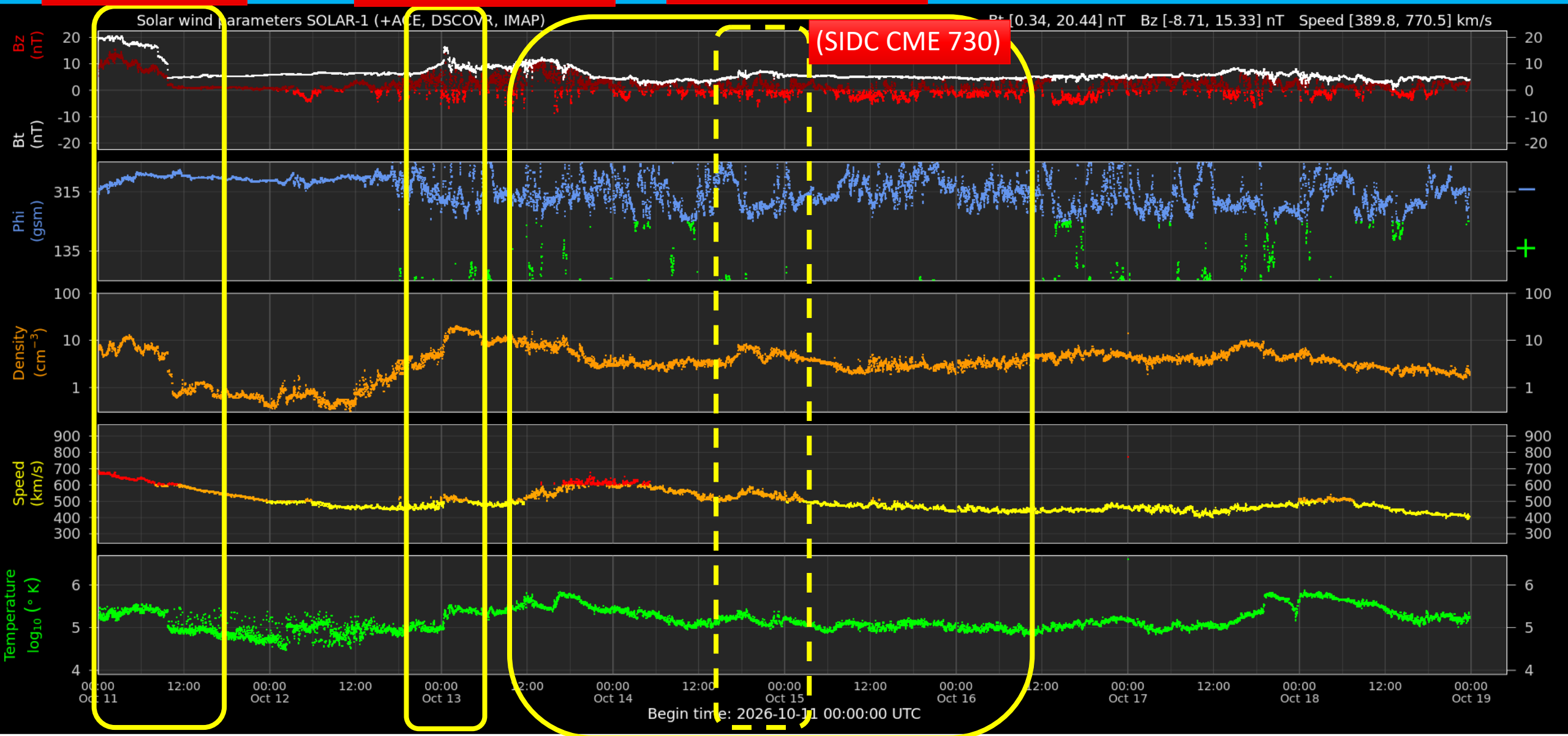
Solar wind parameters

(SIDC CME 727)

(SIDC CME 729)

HSS (SIDC CH 142 -)

(SIDC CME 730)



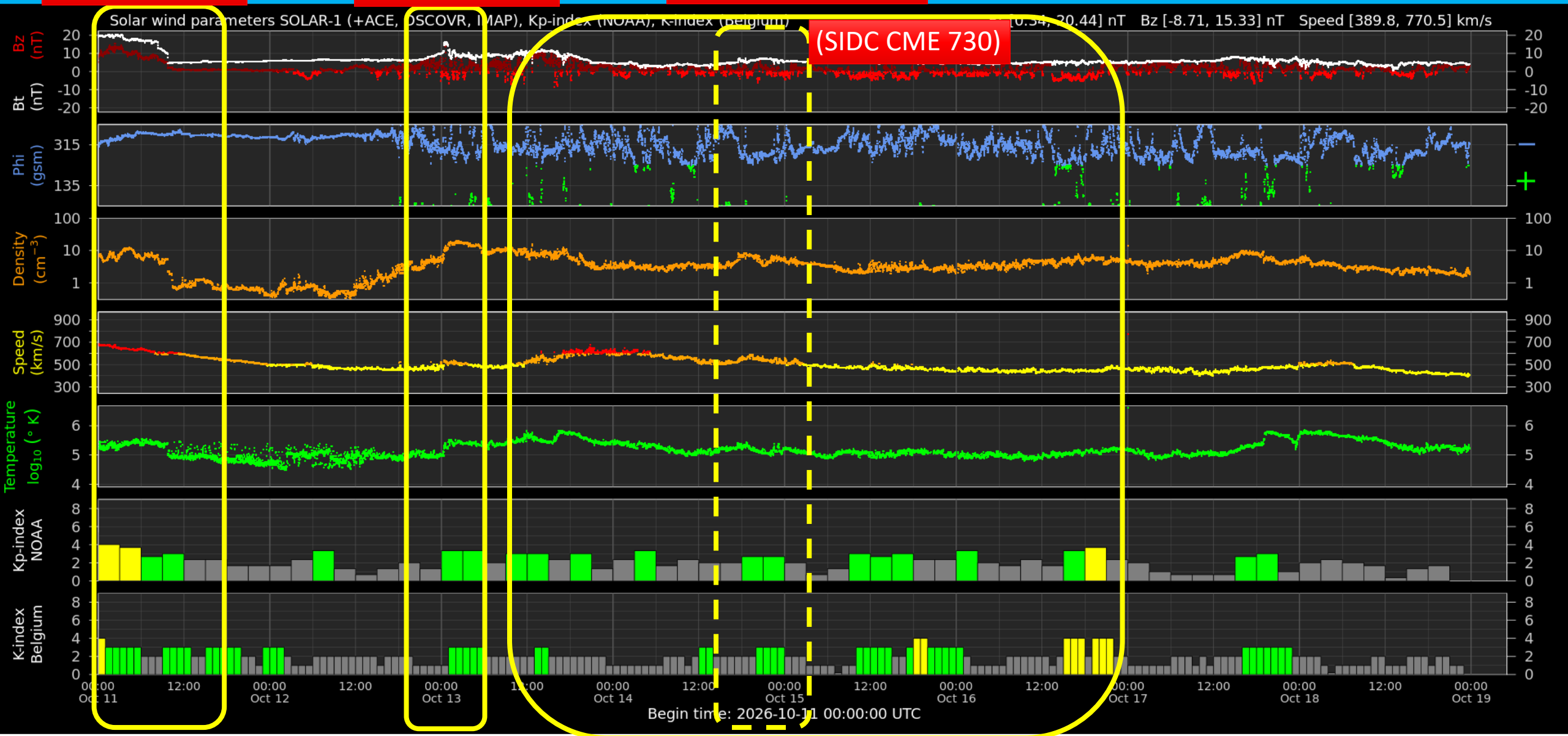
Solar wind parameters & K-indices

(SIDC CME 727)

(SIDC CME 729)

HSS (SIDC CH 142 -)

(SIDC CME 730)

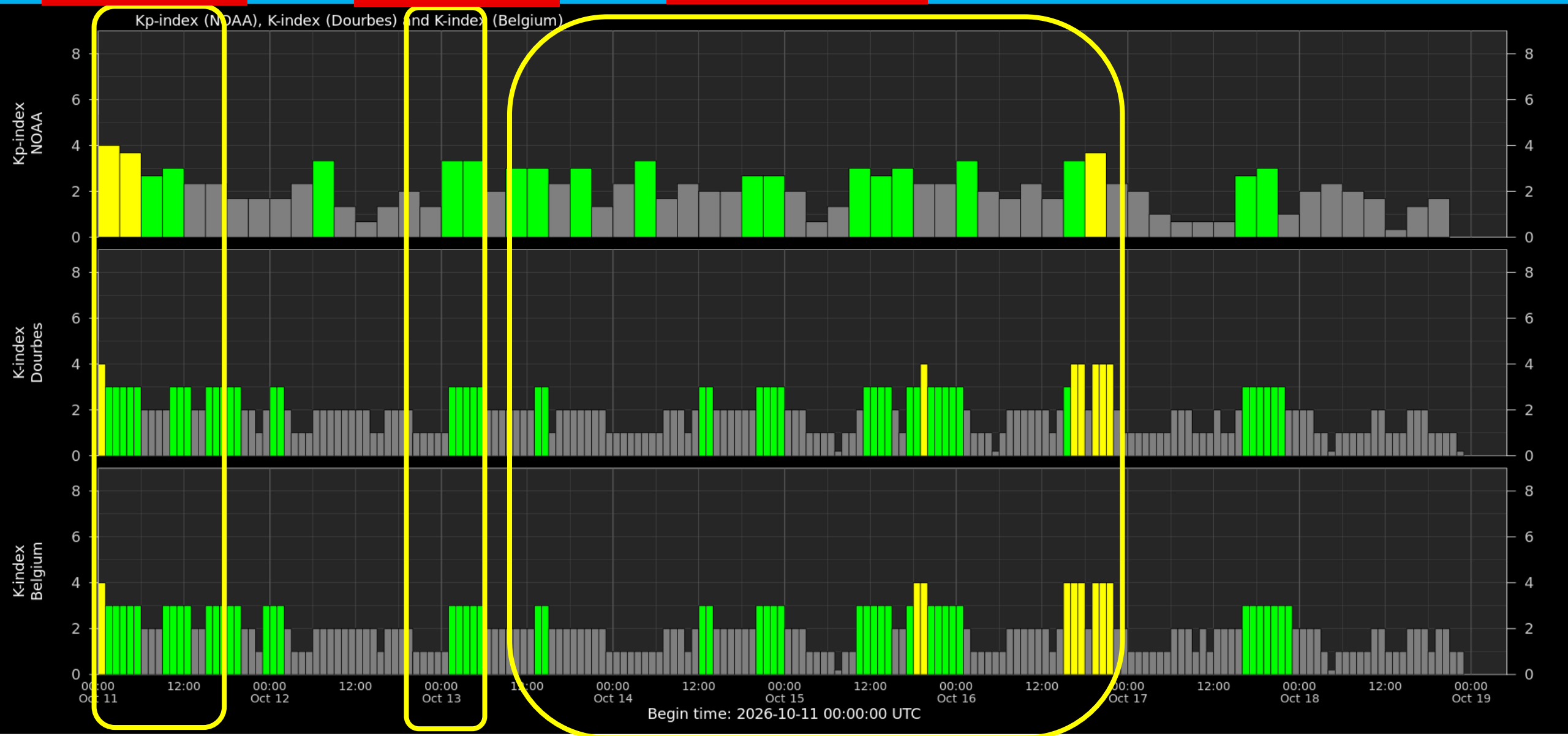


Geomagnetic activity (K-indexes)

(SIDC CME 727)

(SIDC CME 729)

HSS (SIDC CH 142 -)



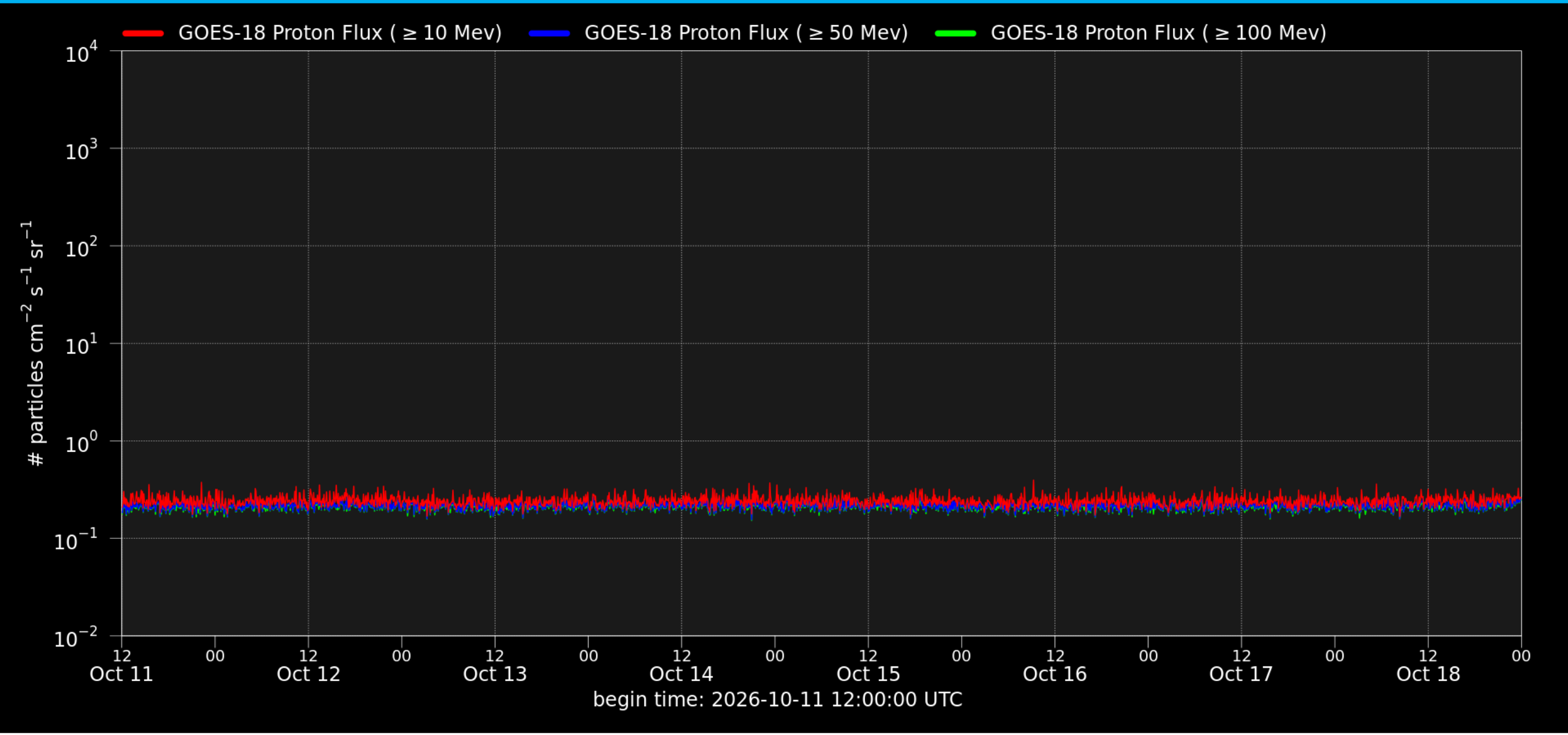
Energetic Particles



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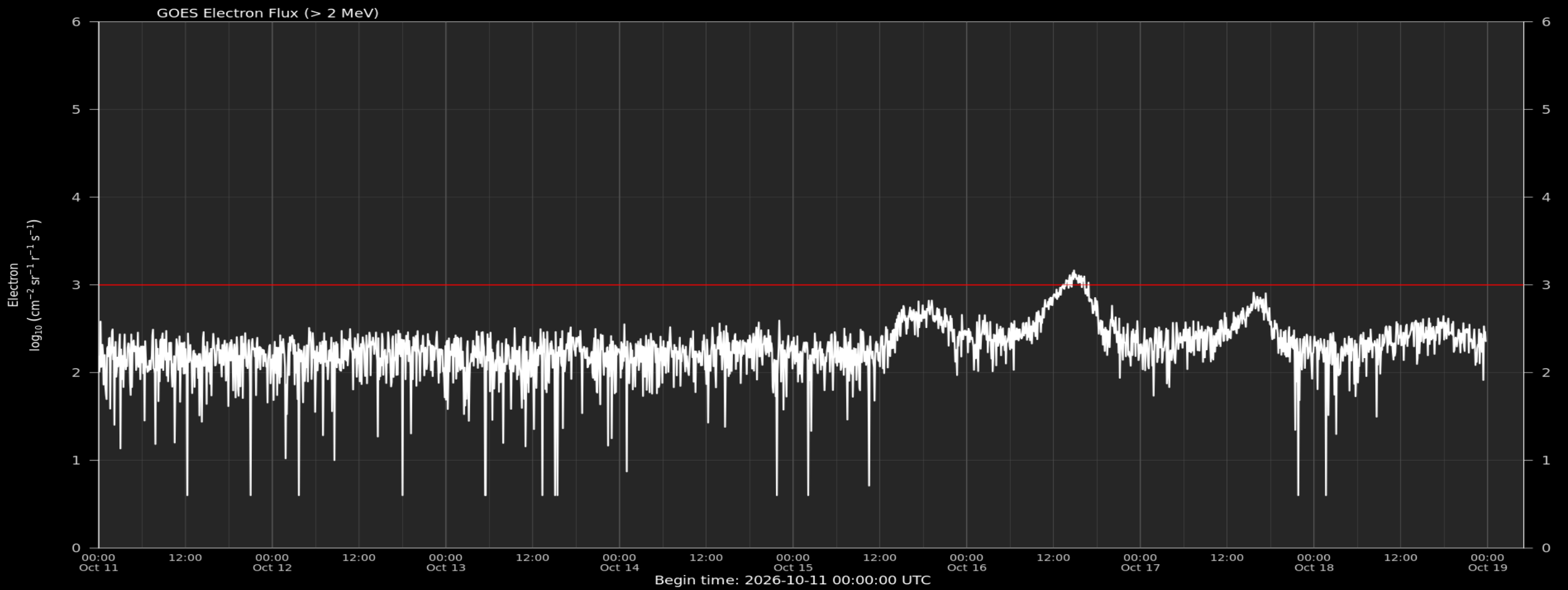
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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

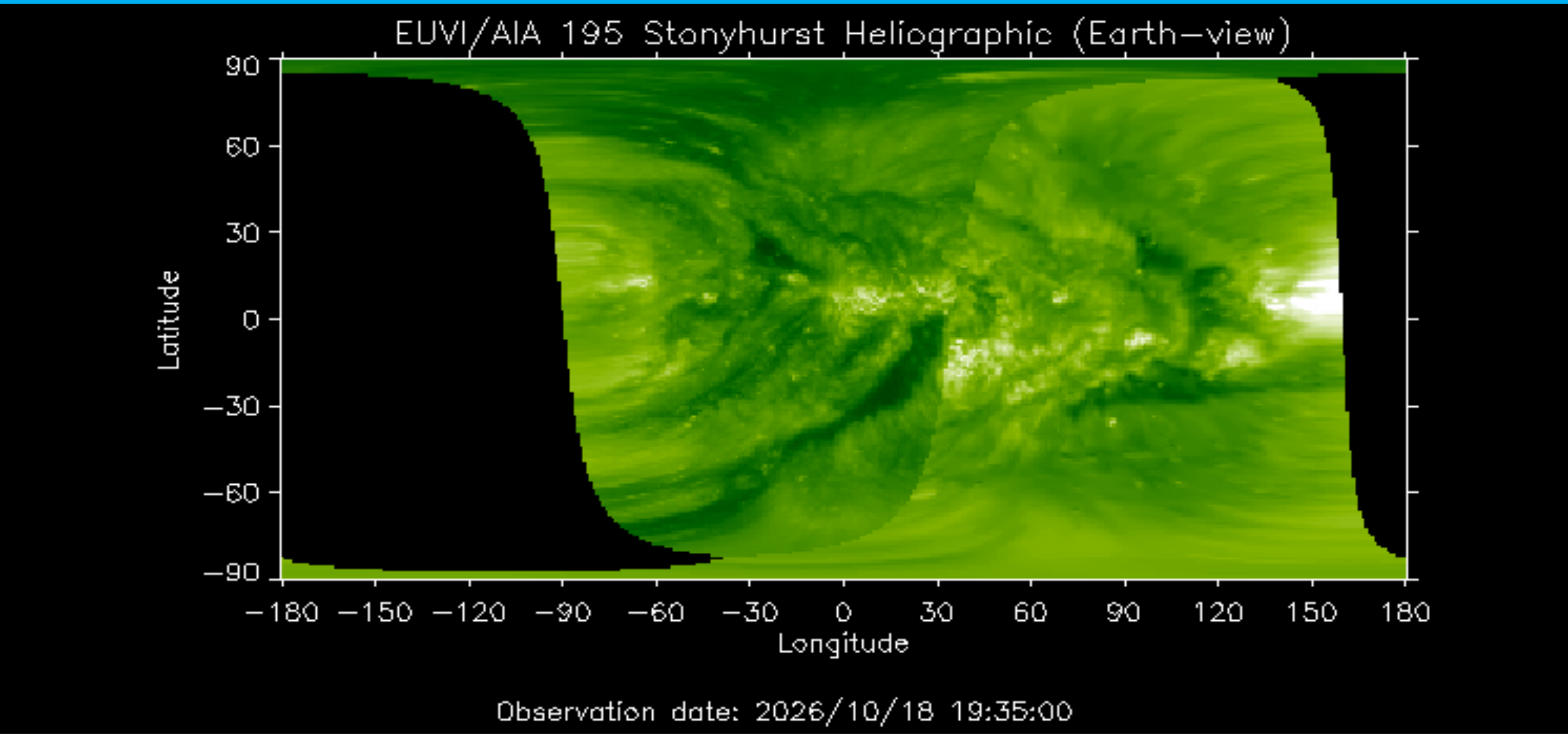


Outlook

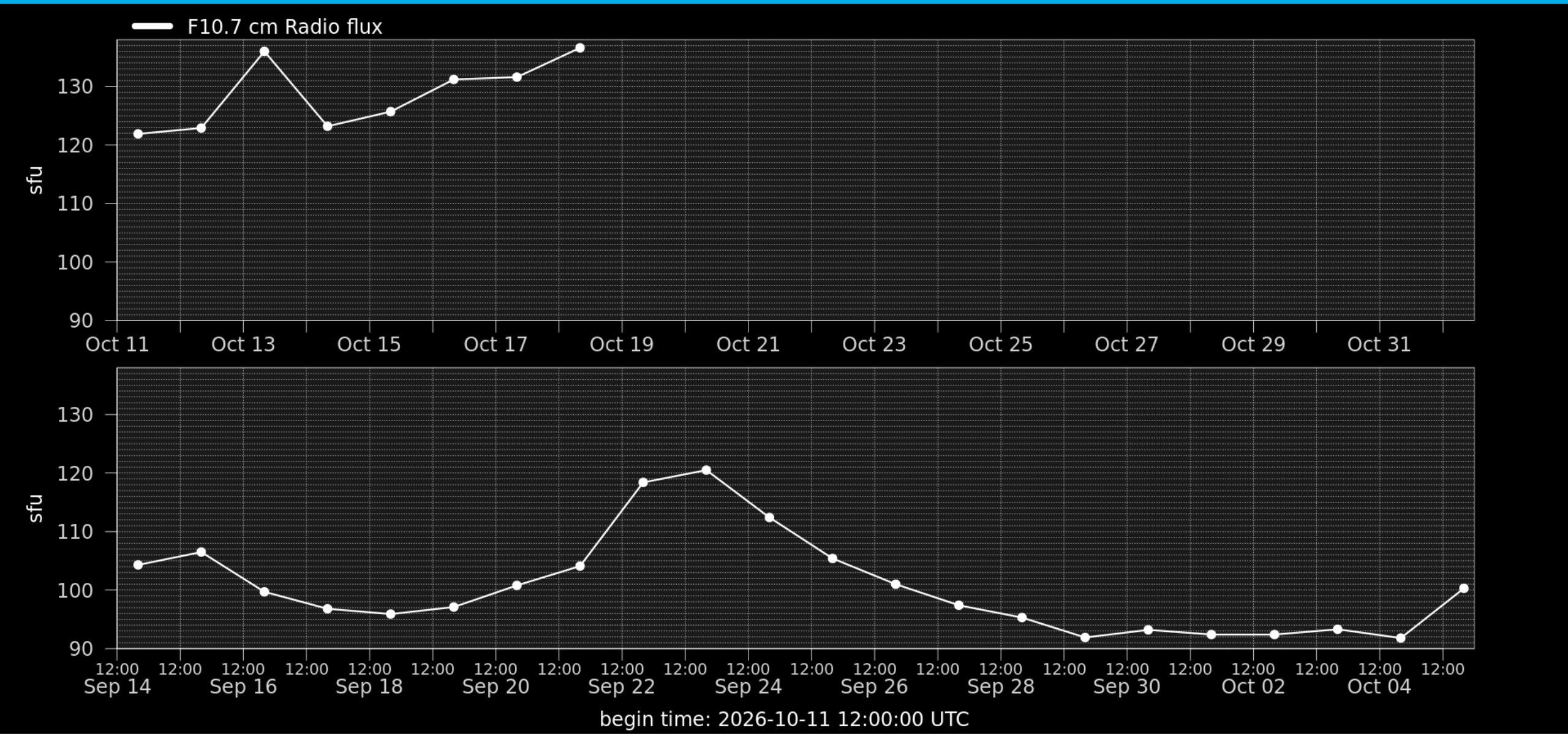
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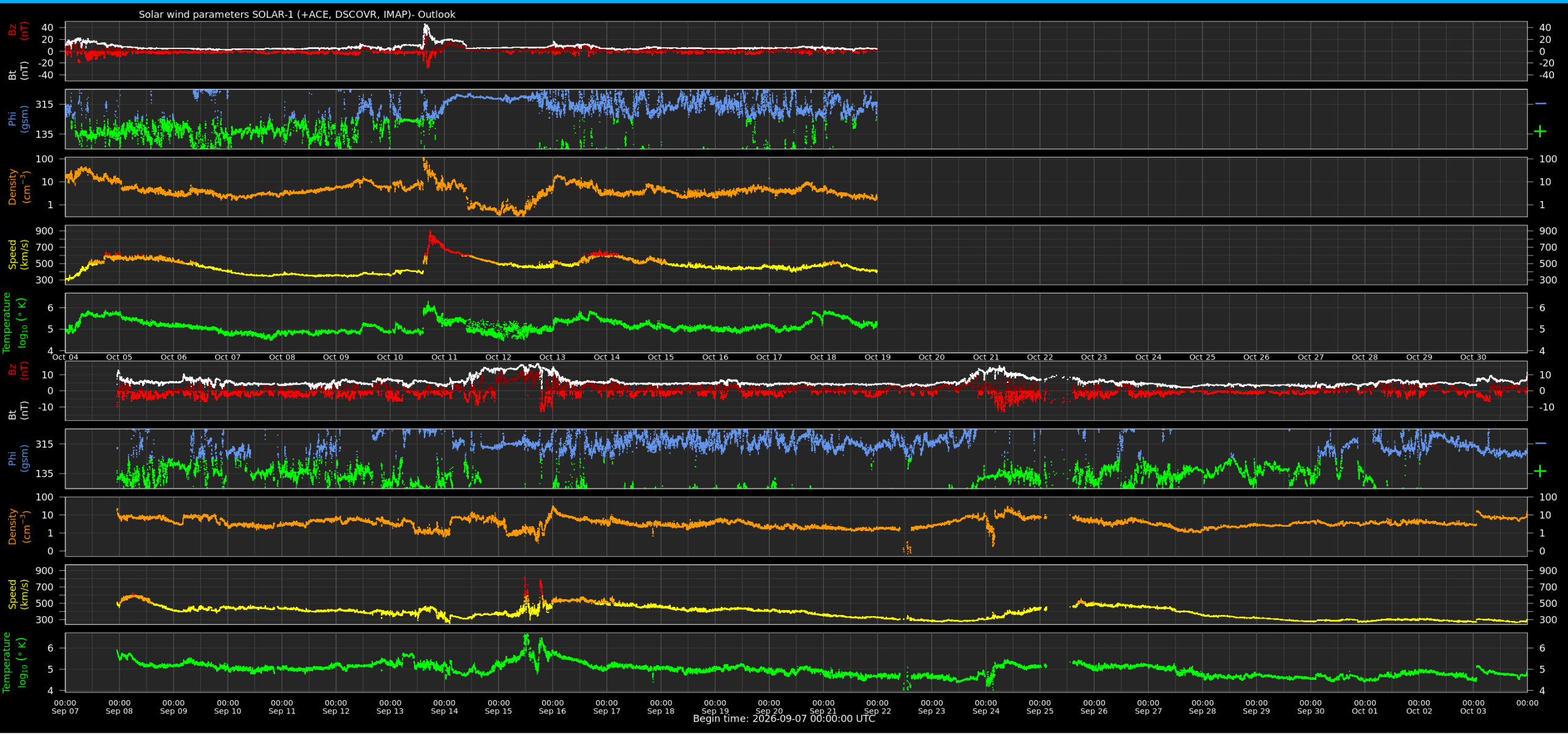
Outlook: Solar activity



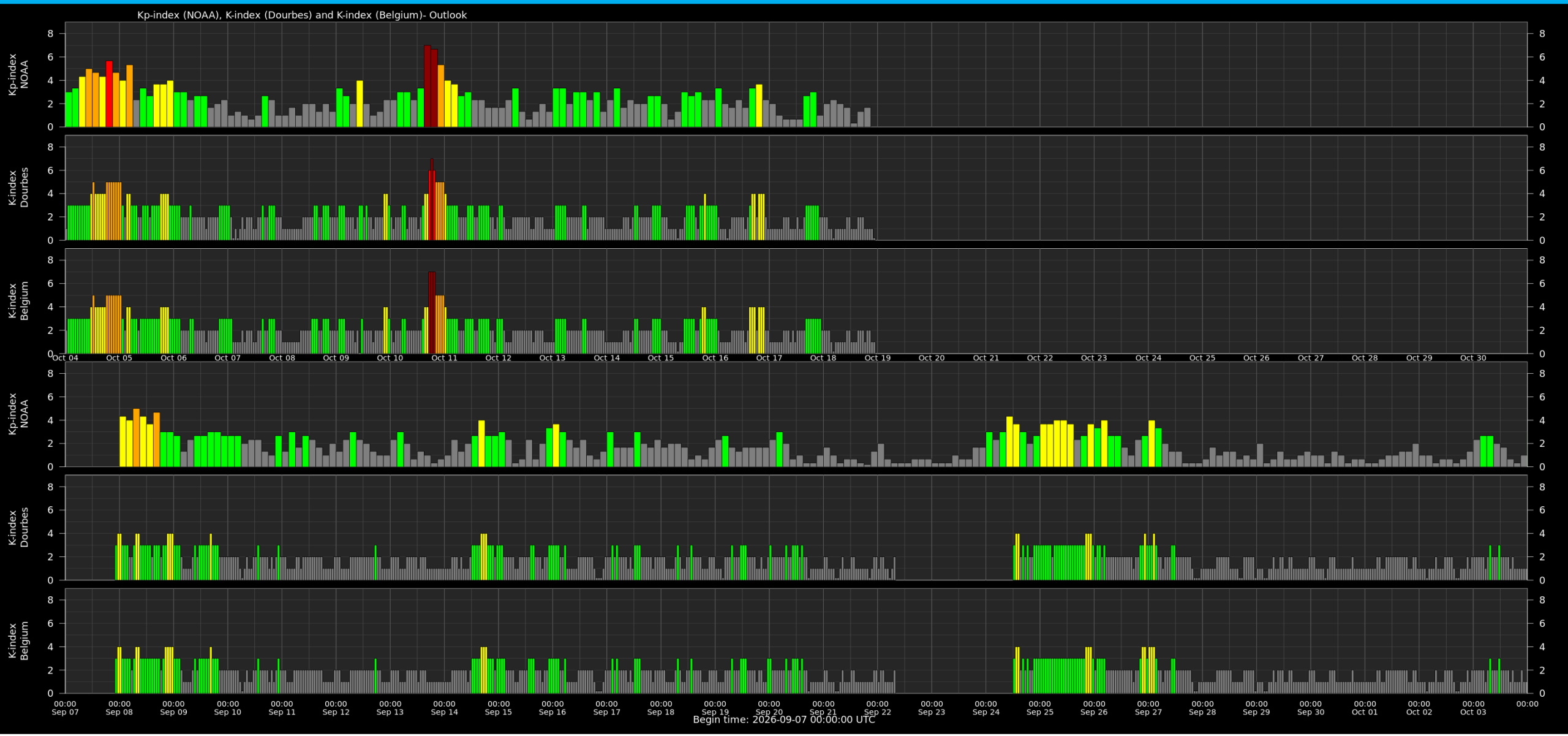
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



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Pecasus related events

Primary Backup Centre
PSD and Scintillation advisories issued.

SIDC Space Weather Briefing

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