

SIDC Space Weather Briefing

10 November 2024-17 November 2024

de Patoul Judith

& the SIDC forecaster team



Royal Observatory
of Belgium

www.sidc.be

Summary Report

Solar activity from 2024-11-10 12:00 to 2024-11-17 23:59

Active regions	Them most active region: SIDC Sunspot Group 288 (NOAA Active Region 3889) / Beta-Gamma-Delta magnetic / Several M-class Flares.
Flares	Many C-class flares and several M-class flares, no X-class flare observed
Coronal Holes	Several Coronal Holes crossed the central meridian
CMEs	No clear Earth-directed coronal mass ejections (CMEs) have been detected.

Proton flux	GOES proton flux remained below the 10 pfu threshold
Electron flux	Electron flux was below the 1000 pfu threshold.

Solar wind and geomagnetic conditions

ICMEs	One ICME in the beginning of the week.
Solar wind conditions	B : 0.86 - 13.95 nT //Bz: -12.7 nT to 10.56 nT //Speed: 298.1 - 577.3km/s
Geomagnetic conditions	max K _{BeI} : 6.0, max K _p (NOAA): 5.33, Moderate Storm conditions

All Quiet Alert: No Quite Alert for this Week

Solar Activity

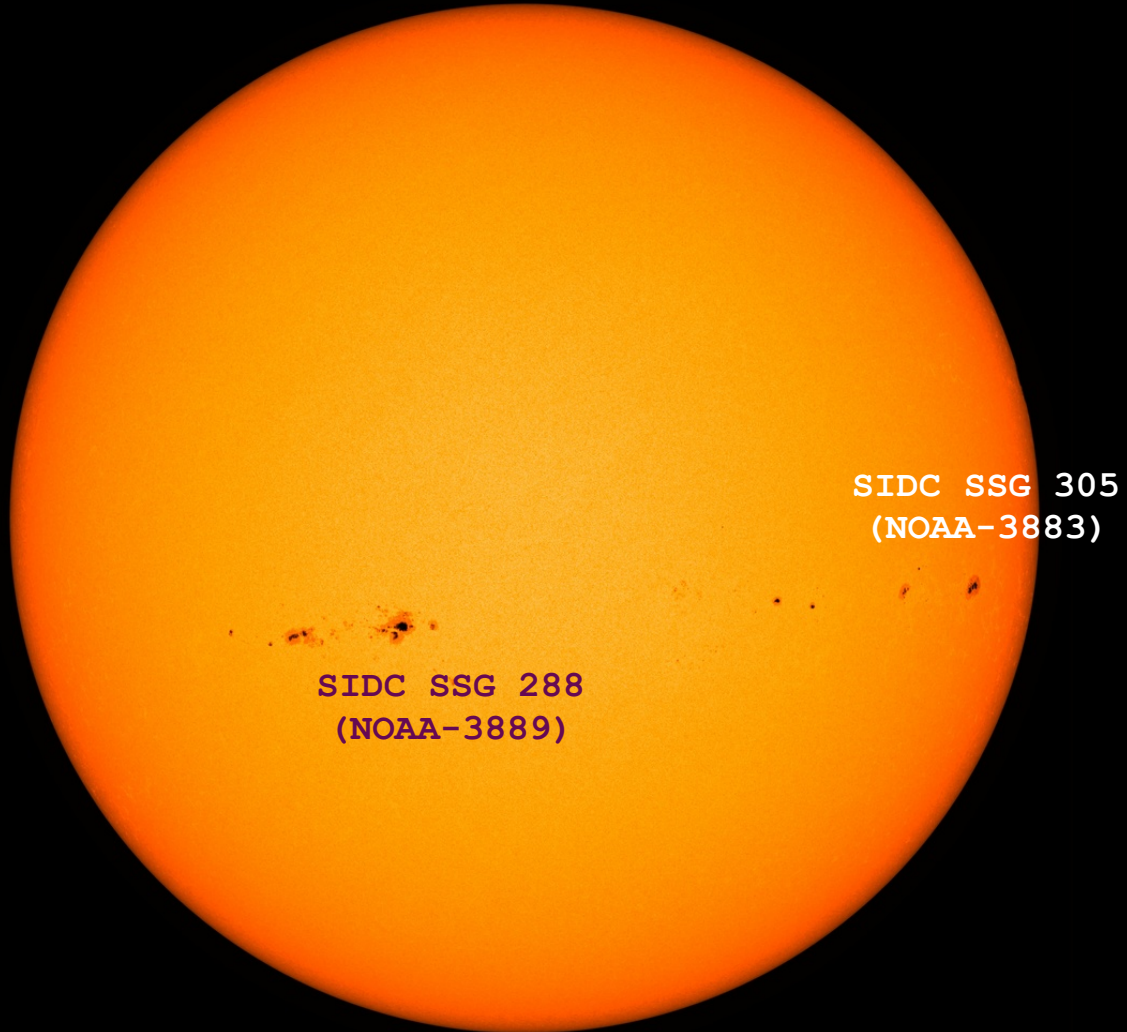


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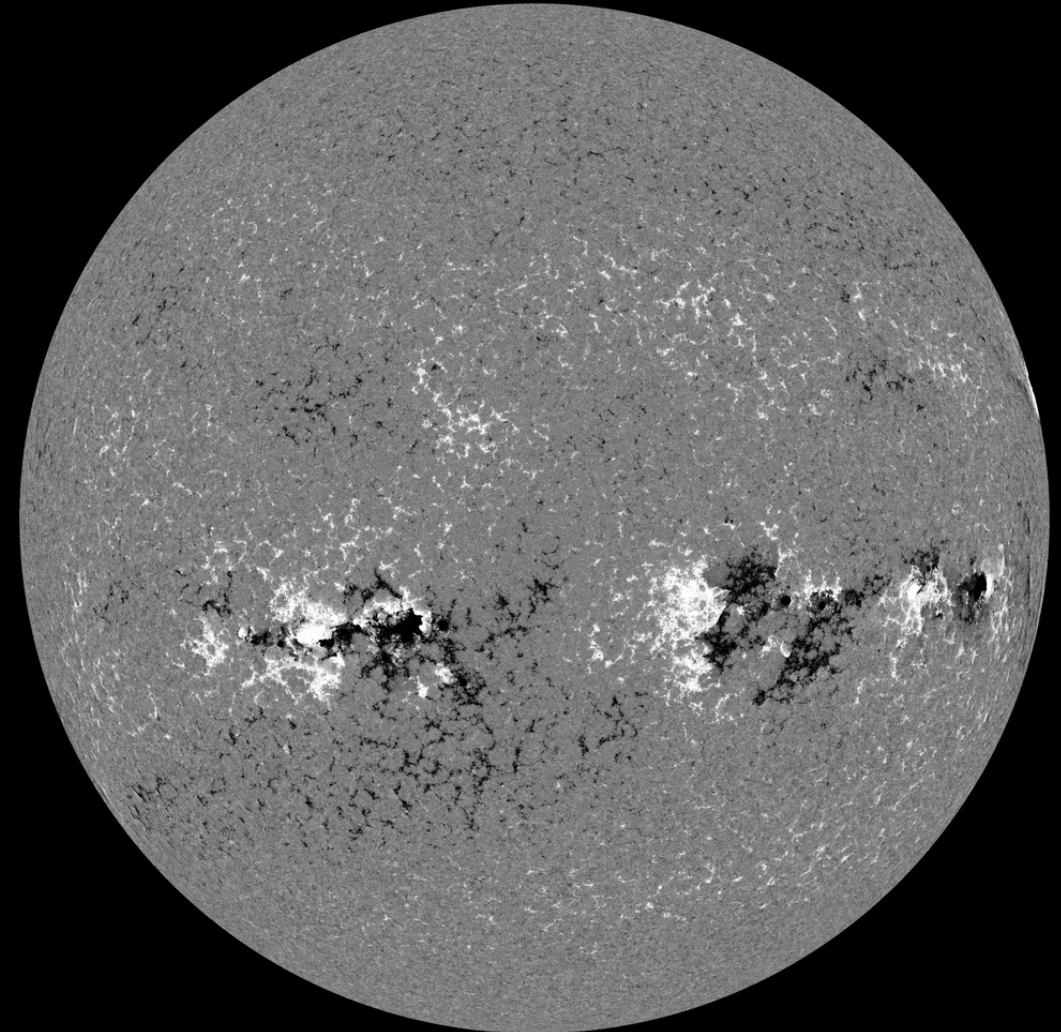
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Solar active regions

SDO/HMI White Light 2024-11-11

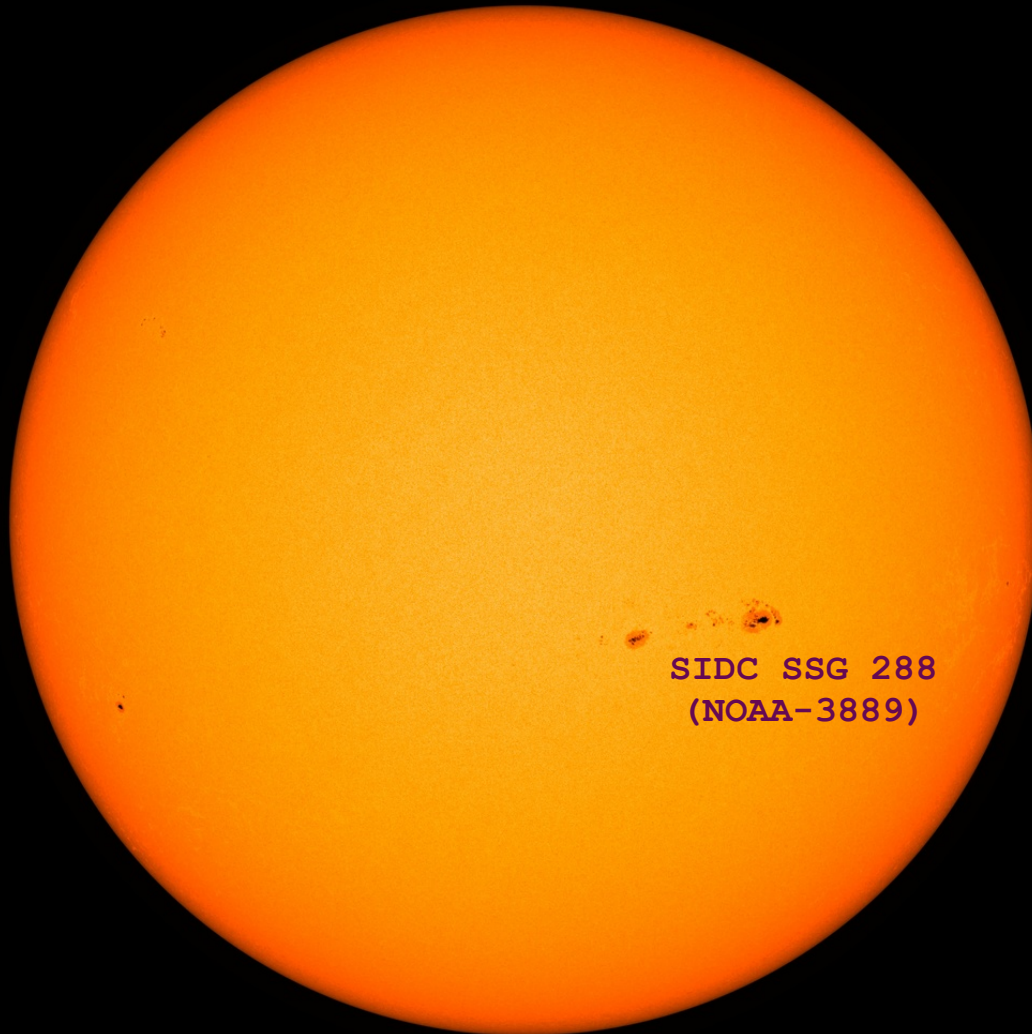


SDO/HMI Magnetogram 2024-11-11



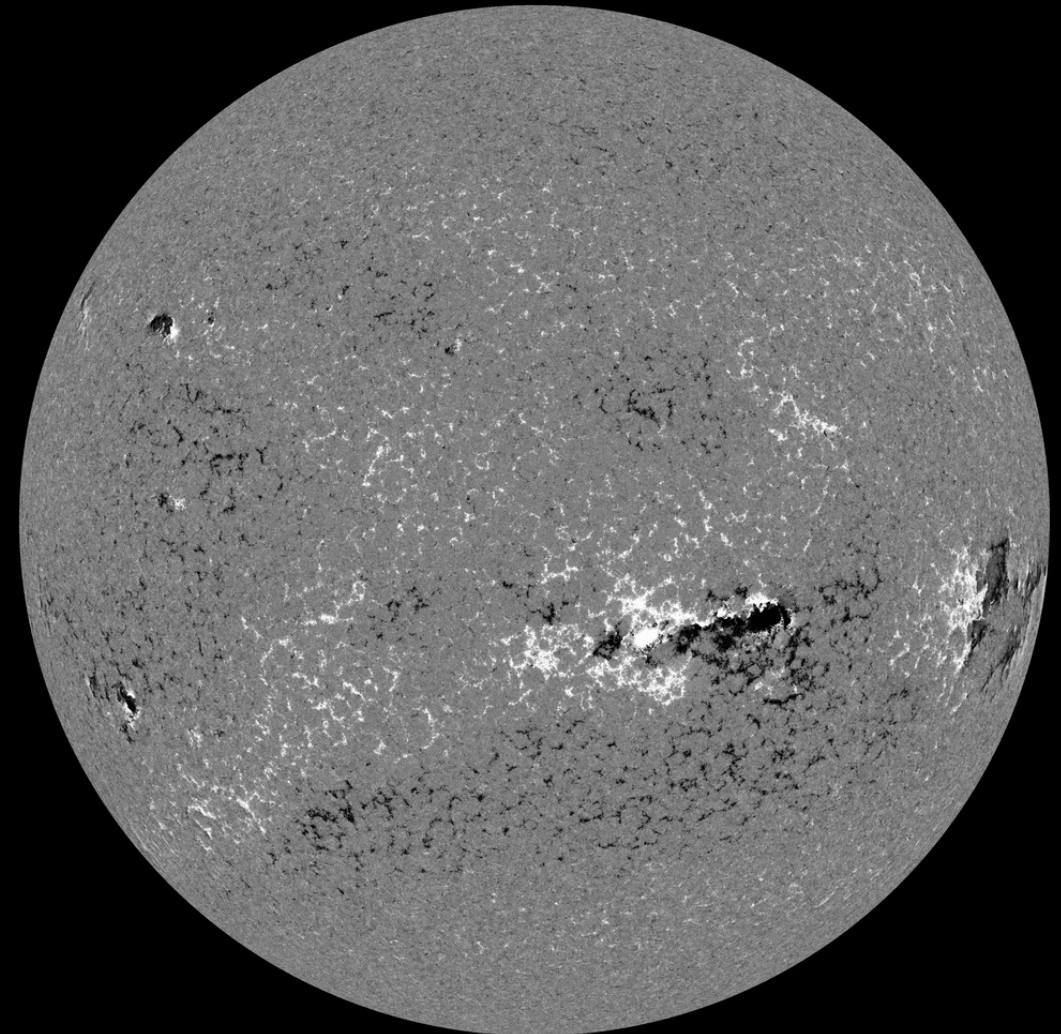
Solar active regions

SDO/HMI White Light 2024-11-14



SDO/HMI Quick-Look Continuum: 20241114_114500

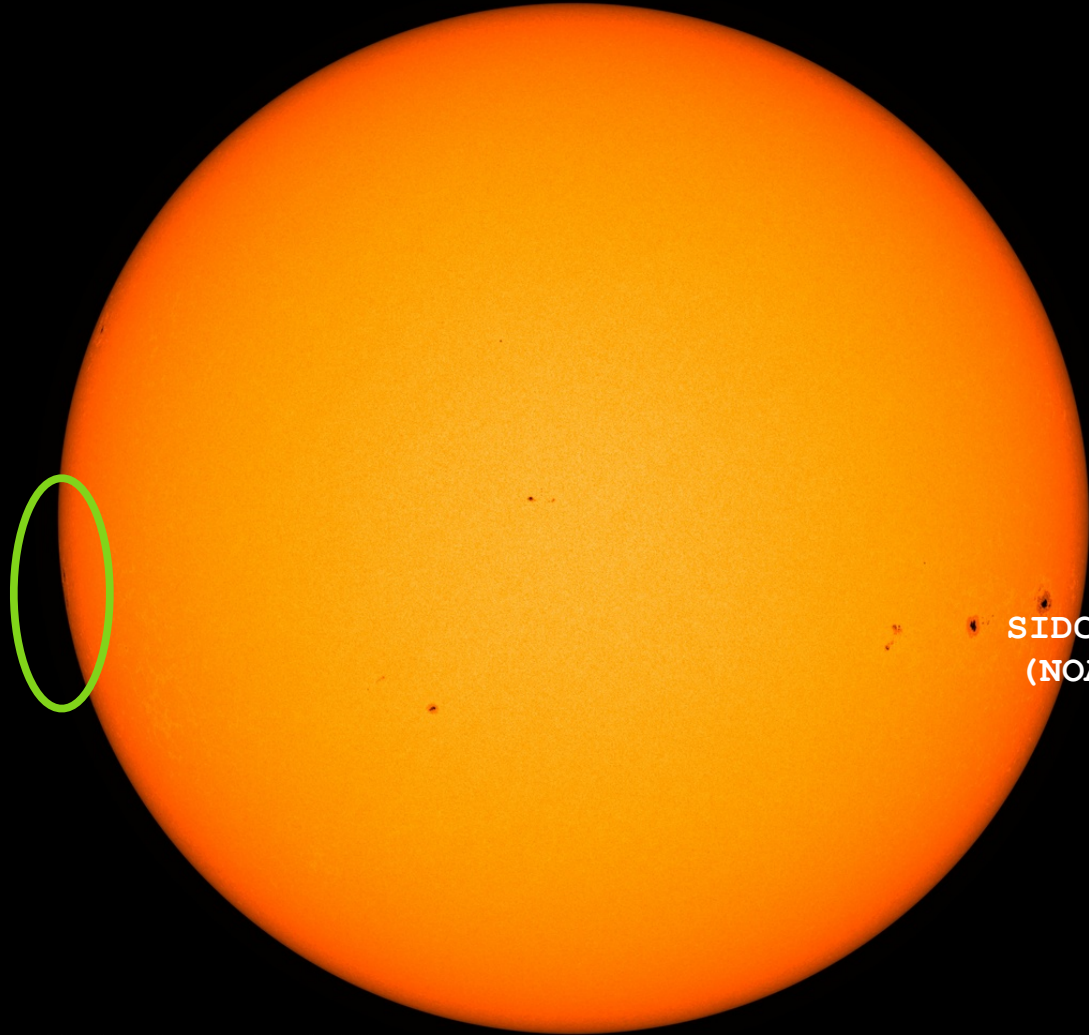
SDO/HMI Magnetogram 2024-11-14



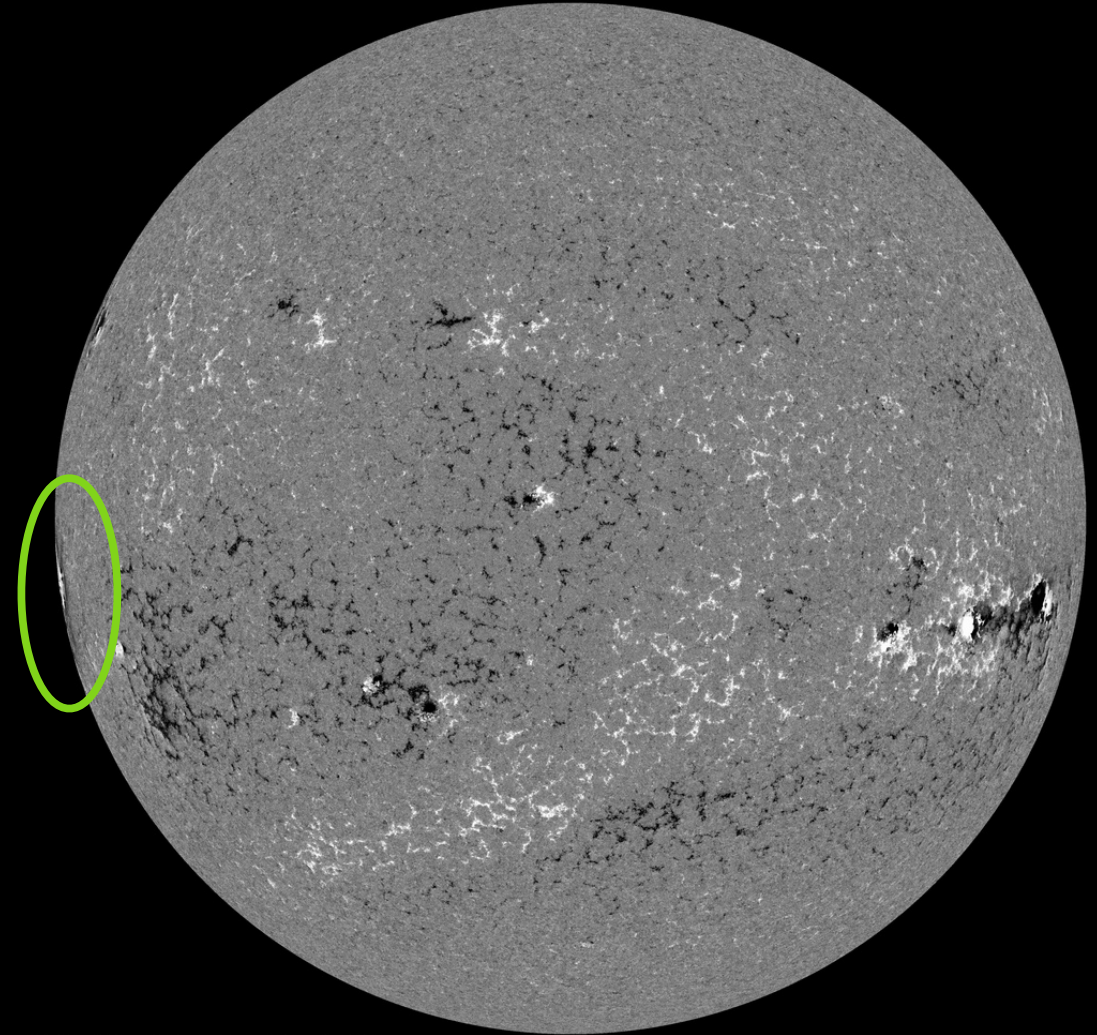
SDO/HMI Quick-Look Magnetogram: 20241114_114500

Solar active regions

SDO/HMI White Light 2024-11-17



SDO/HMI Magnetogram 2024-11-17

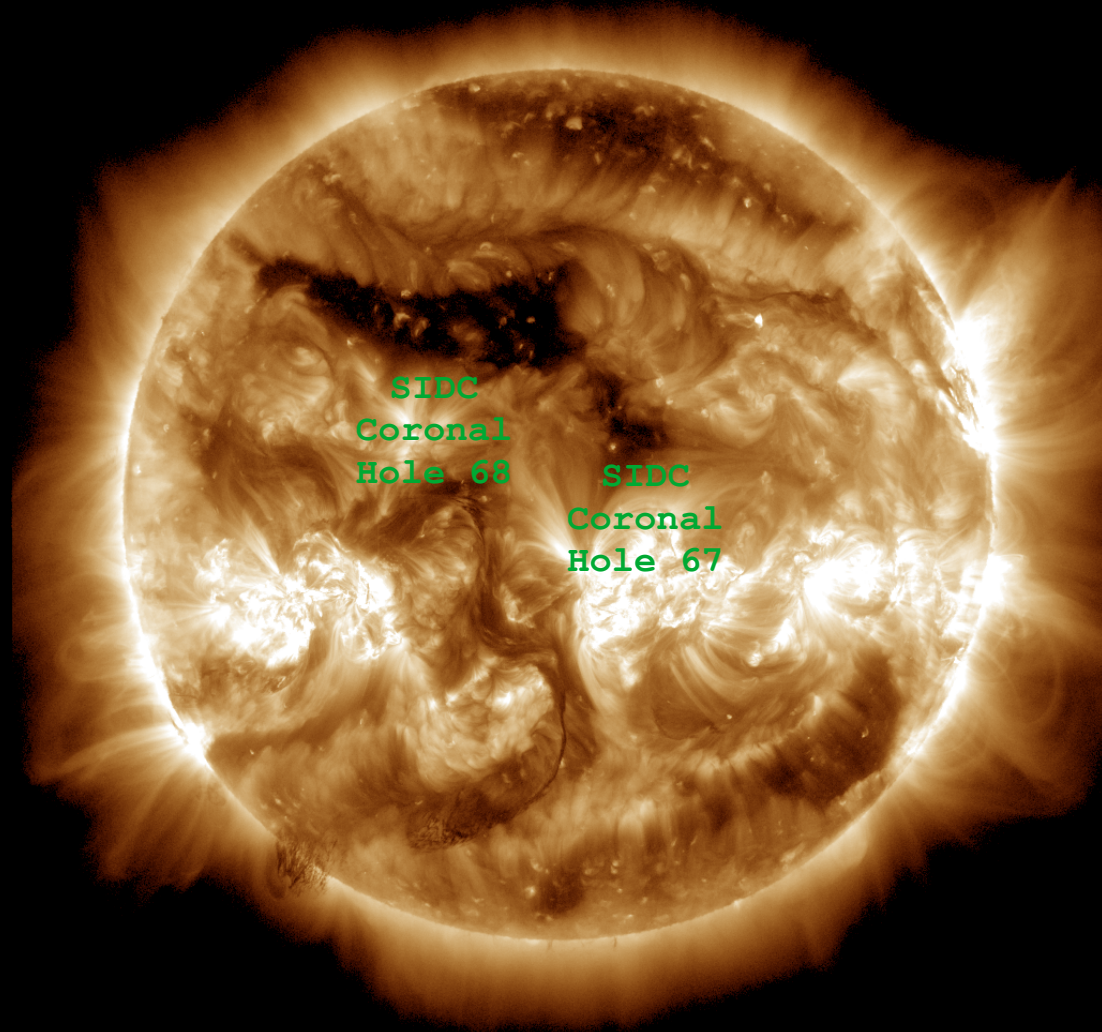


SIDC SSG 288
(NOAA-3889)

Coronal holes

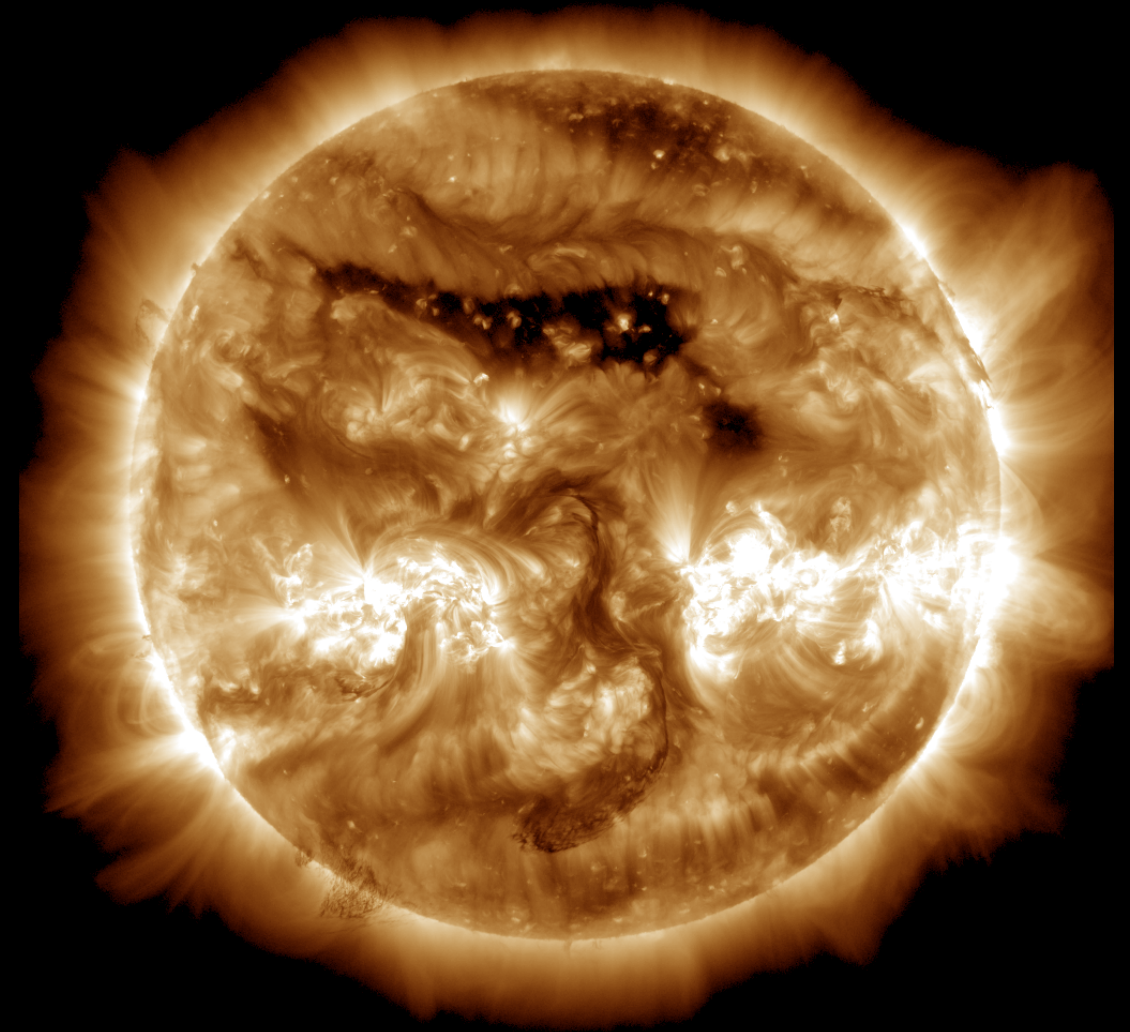
SDO/AIA 19.3 nm 2024-11-10

SDO/AIA AIA 193Å 2024-11-10T12:00:07.177



SDO/AIA 19.3 nm 2024-11-11

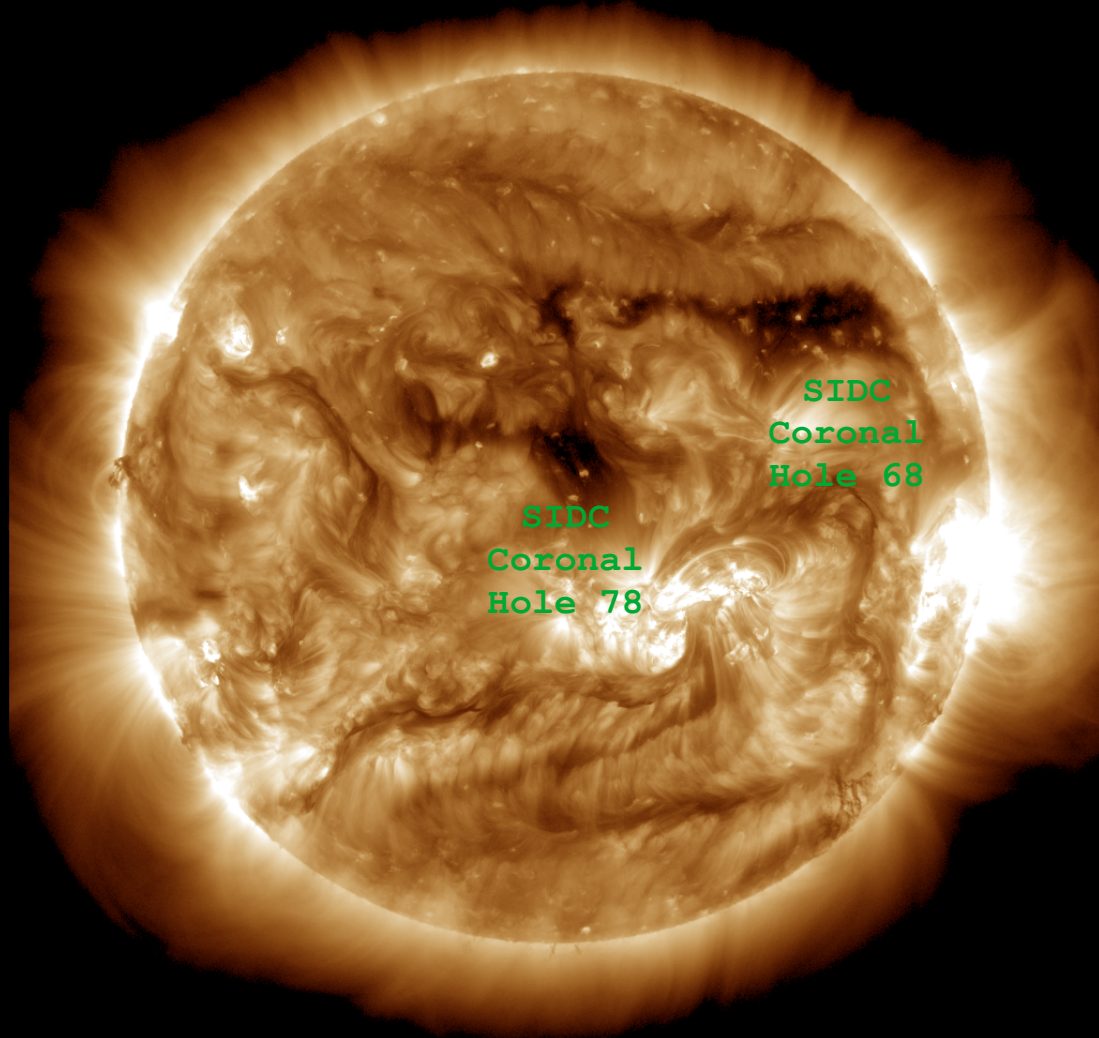
SDO/AIA AIA 193Å 2024-11-11T12:00:05.843



Coronal holes

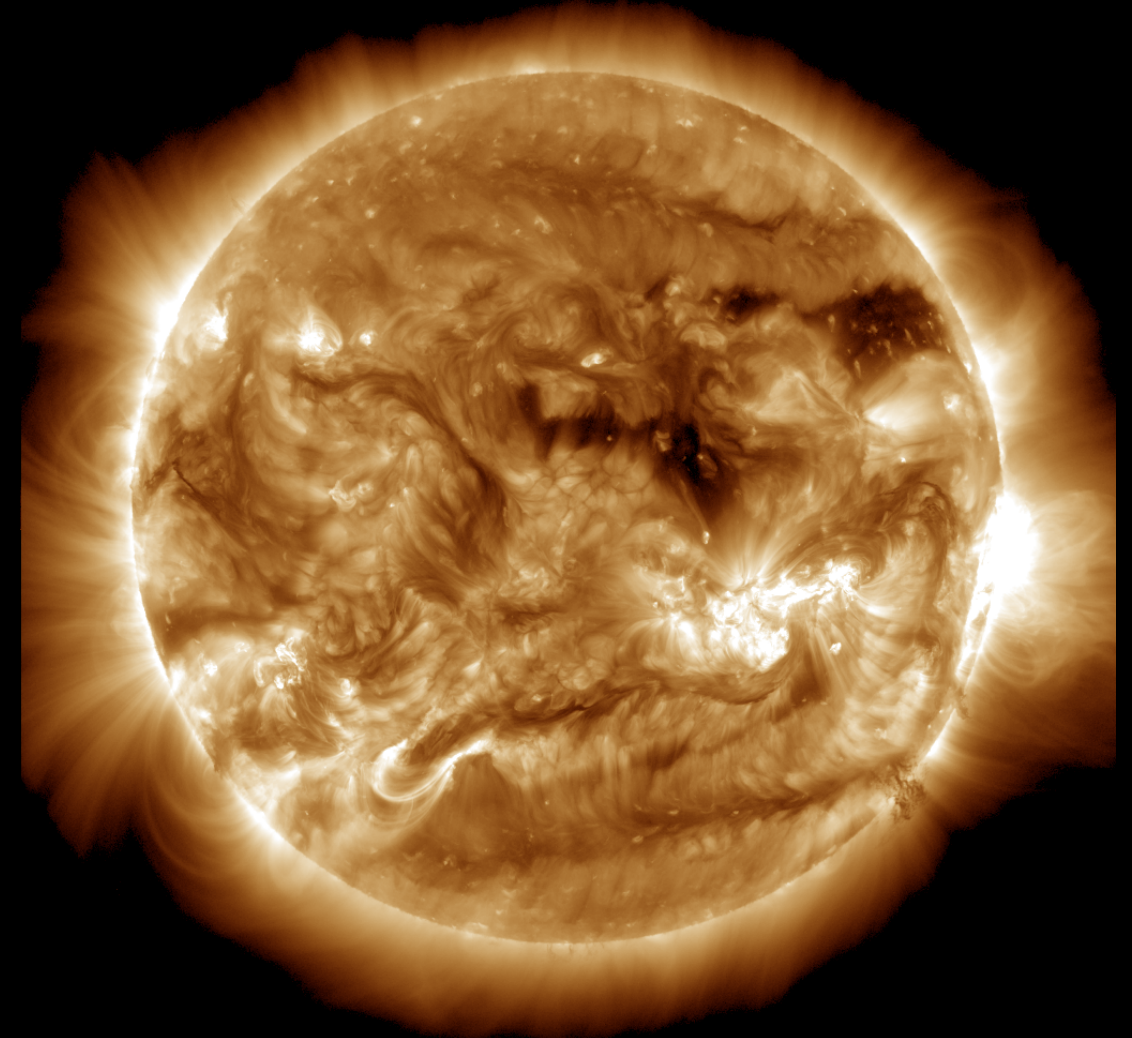
SDO/AIA 19.3 nm 2024-11-14

SDO/AIA AIA 193Å 2024-11-14T12:00:06.088



SDO/AIA 19.3 nm 2024-11-15

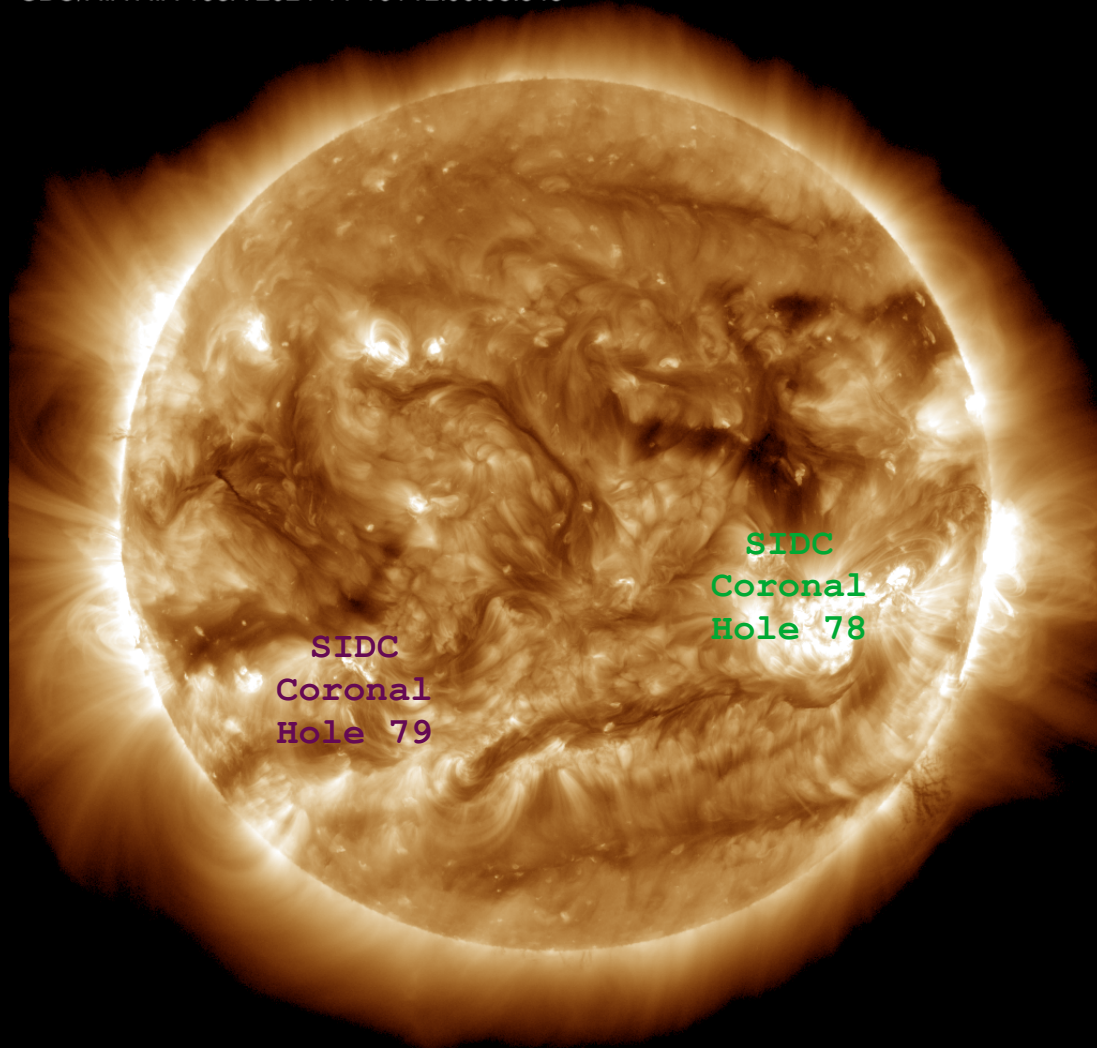
SDO/AIA AIA 193Å 2024-11-15T12:00:05.843



Coronal holes

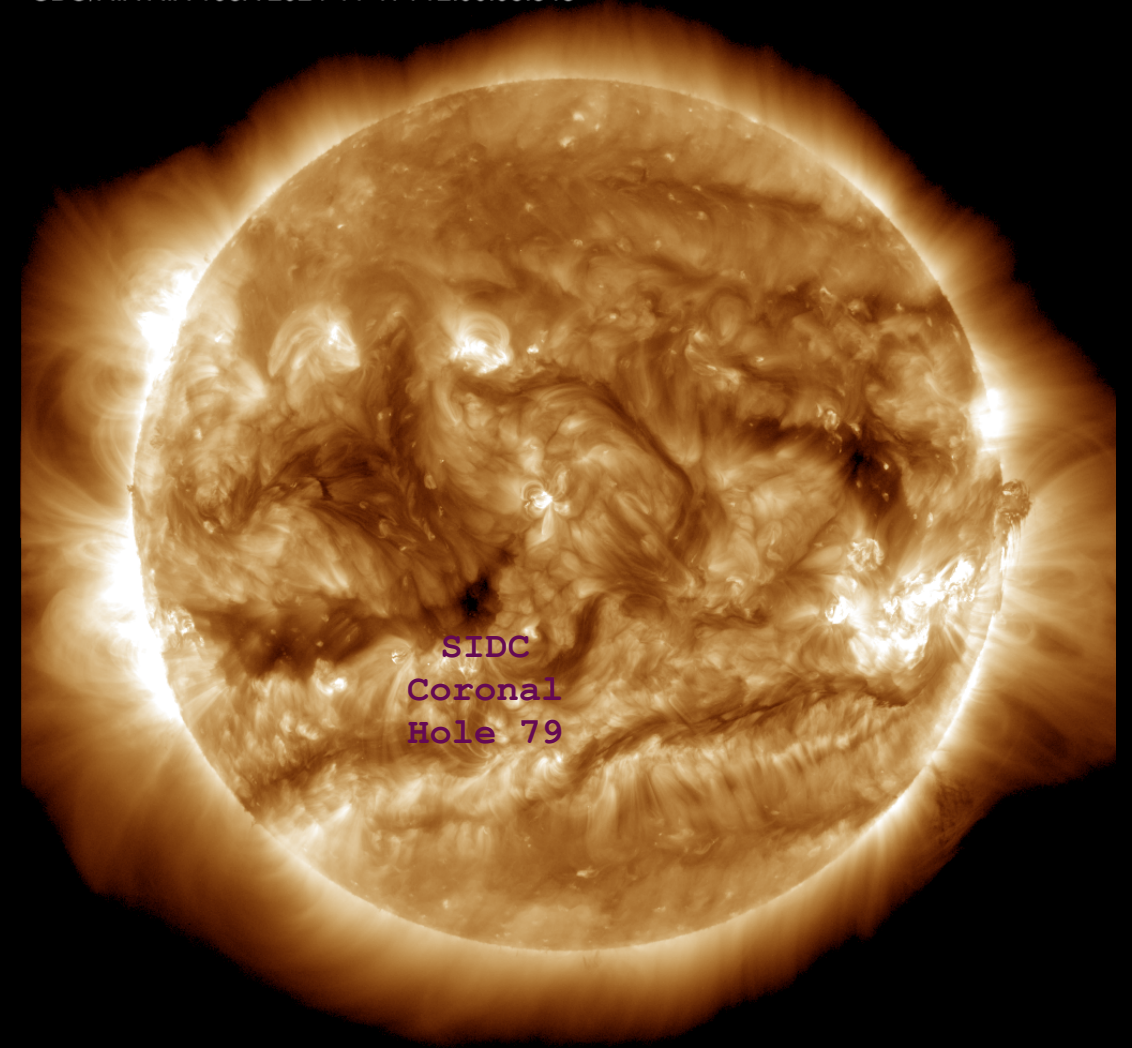
SDO/AIA 19.3 nm 2024-11-16

SDO/AIA AIA 193Å 2024-11-16T12:00:05.843



SDO/AIA 19.3 nm 2024-11-17

SDO/AIA AIA 193Å 2024-11-17T12:00:05.843



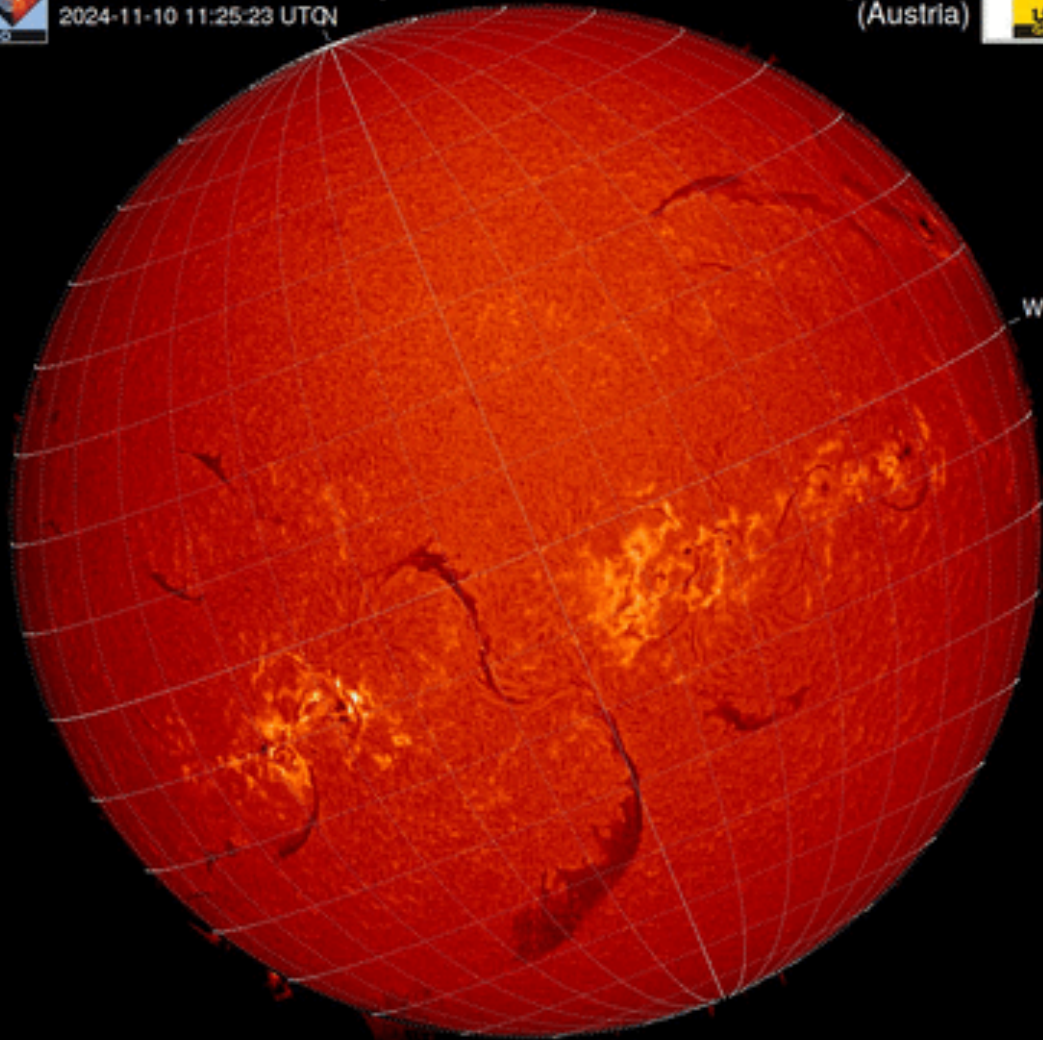
Filaments & Filament eruptions

H-alpha 2024-11-10



Kanzelhöhe Observatory
2024-11-10 11:25:23 UTC

University of Graz
(Austria)

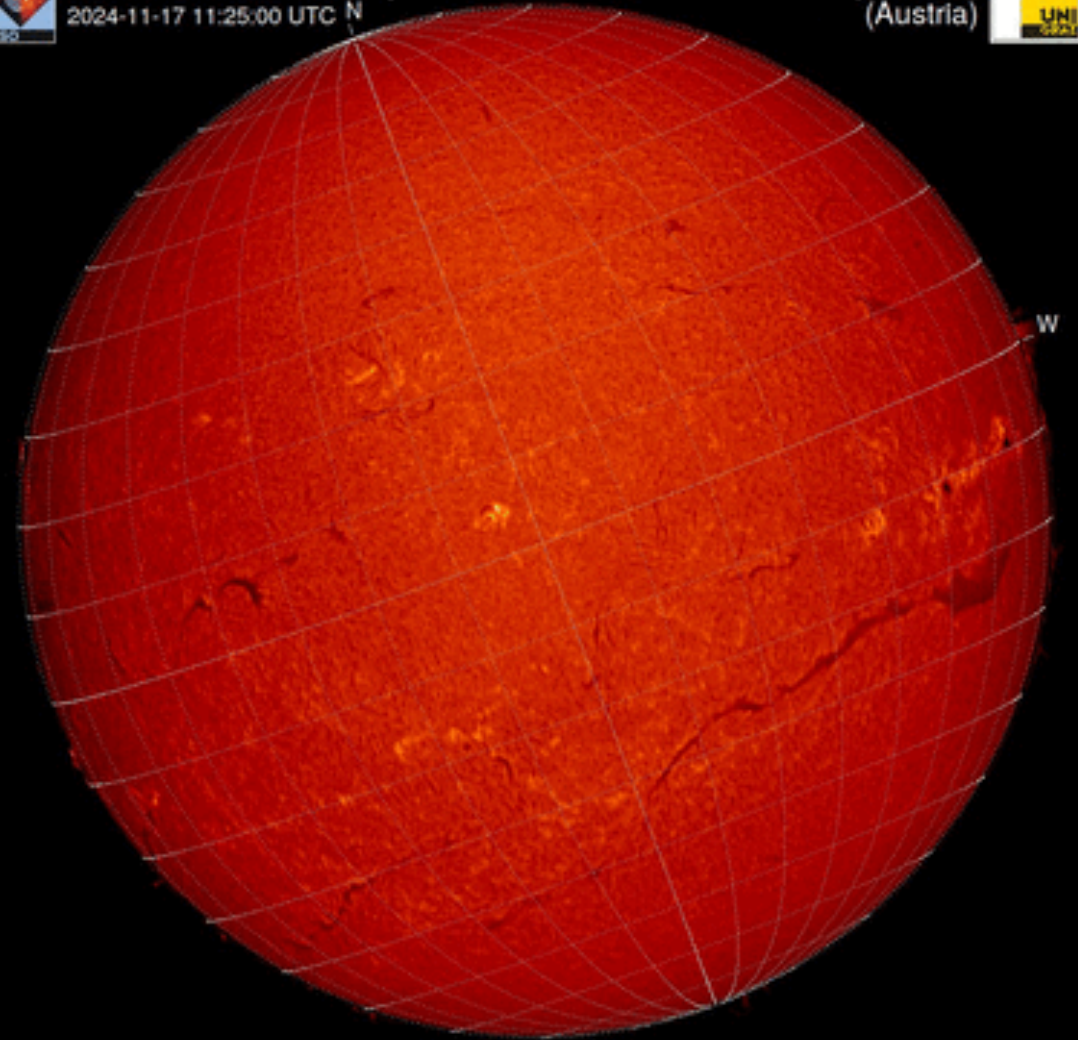


H-alpha 2024-11-17

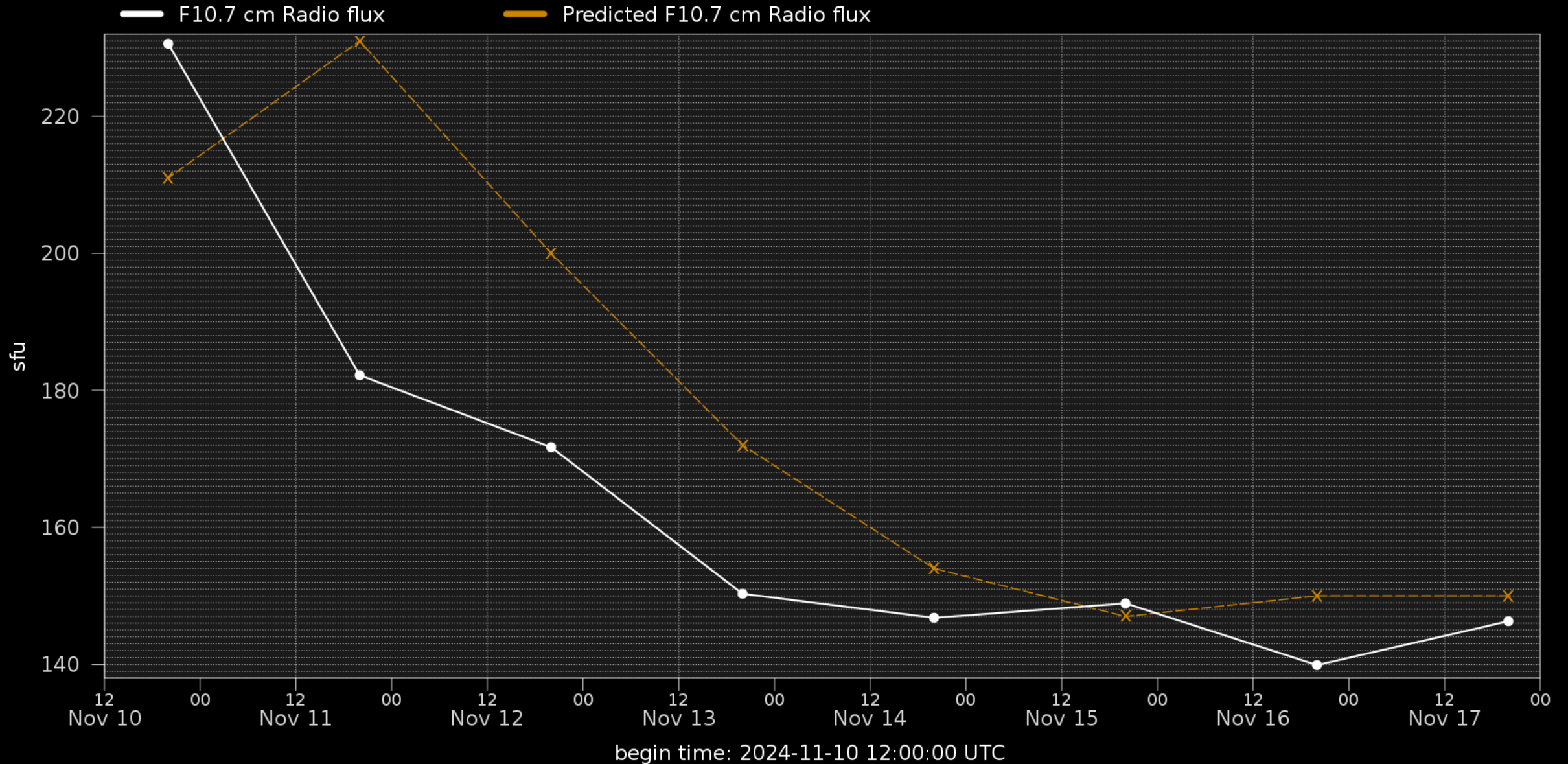


Kanzelhöhe Observatory
2024-11-17 11:25:00 UTC

University of Graz
(Austria)

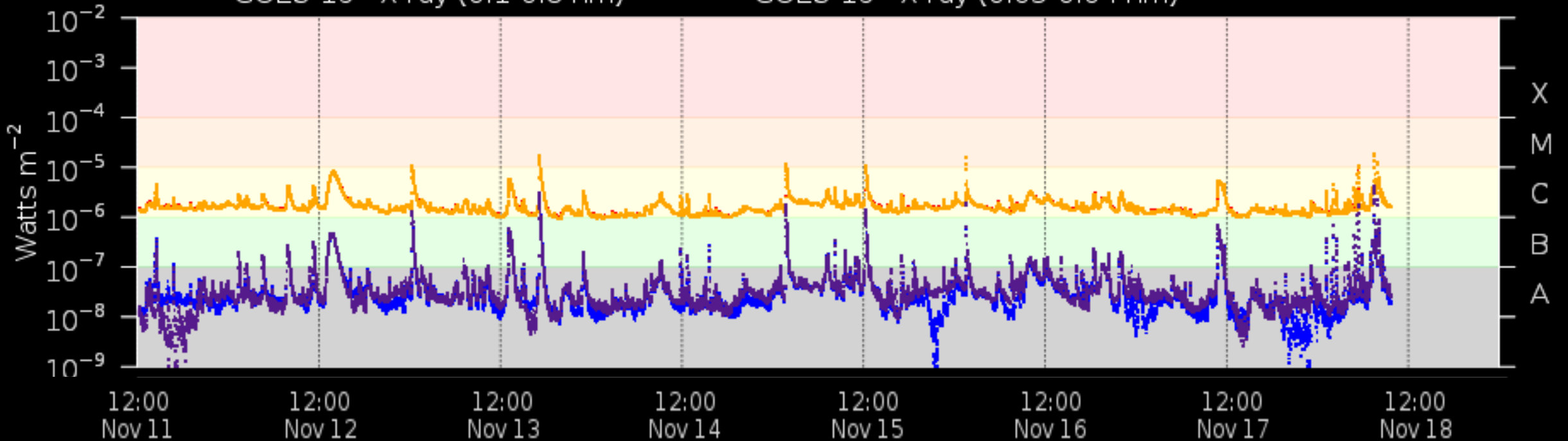


Solar F10.7cm radio flux



Flaring activity

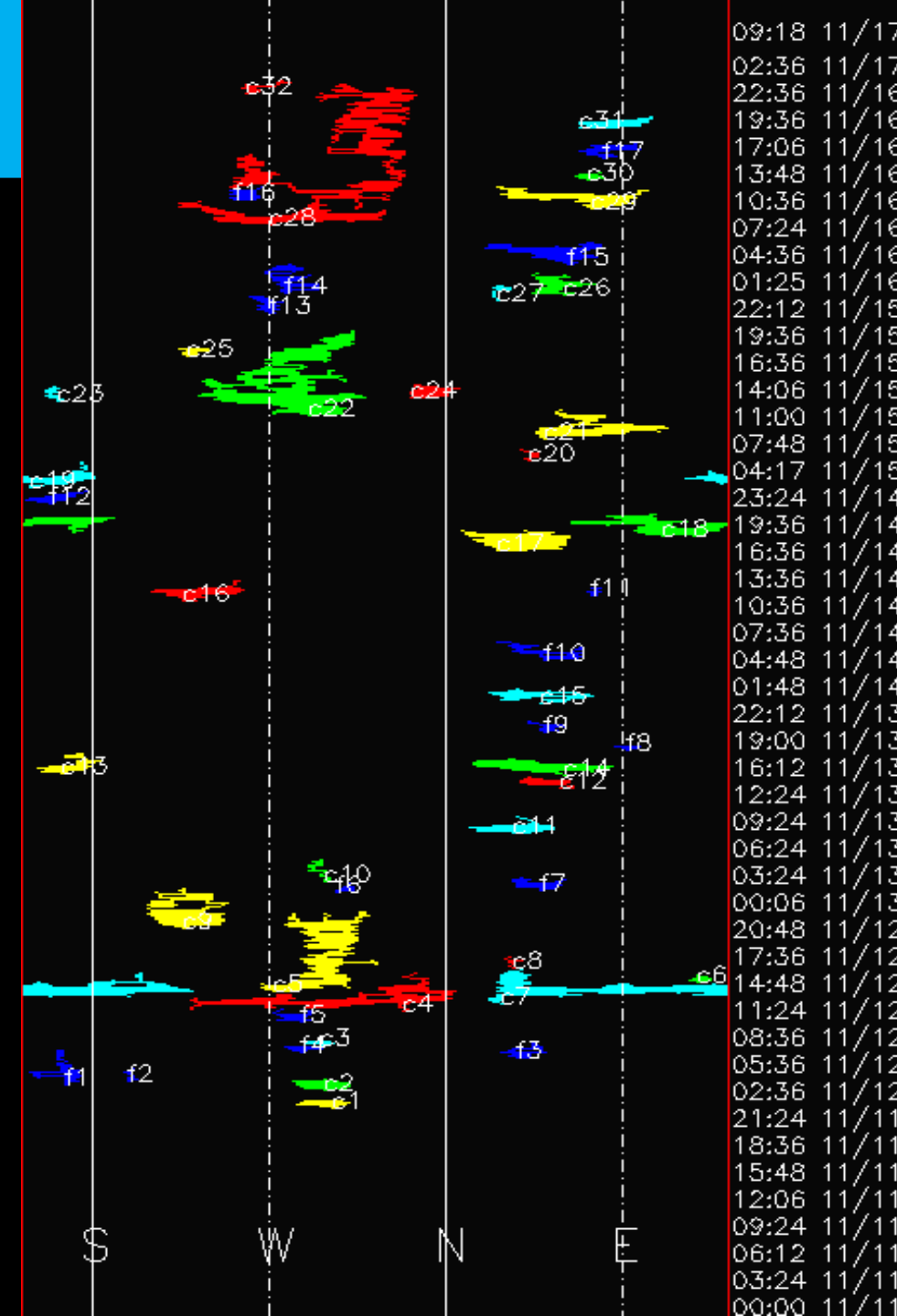
GOES-18 X-ray (0.1-0.8 nm) GOES-18 X-ray (0.05-0.04 nm)
GOES-16 X-ray (0.1-0.8 nm) GOES-16 X-ray (0.05-0.04 nm)



begin time: 2024-11-11 12:00:00 UTC

Coronal Mass Ejections

No clear Earth-directed coronal mass ejections (CMEs) have been detected.



Solar Wind and

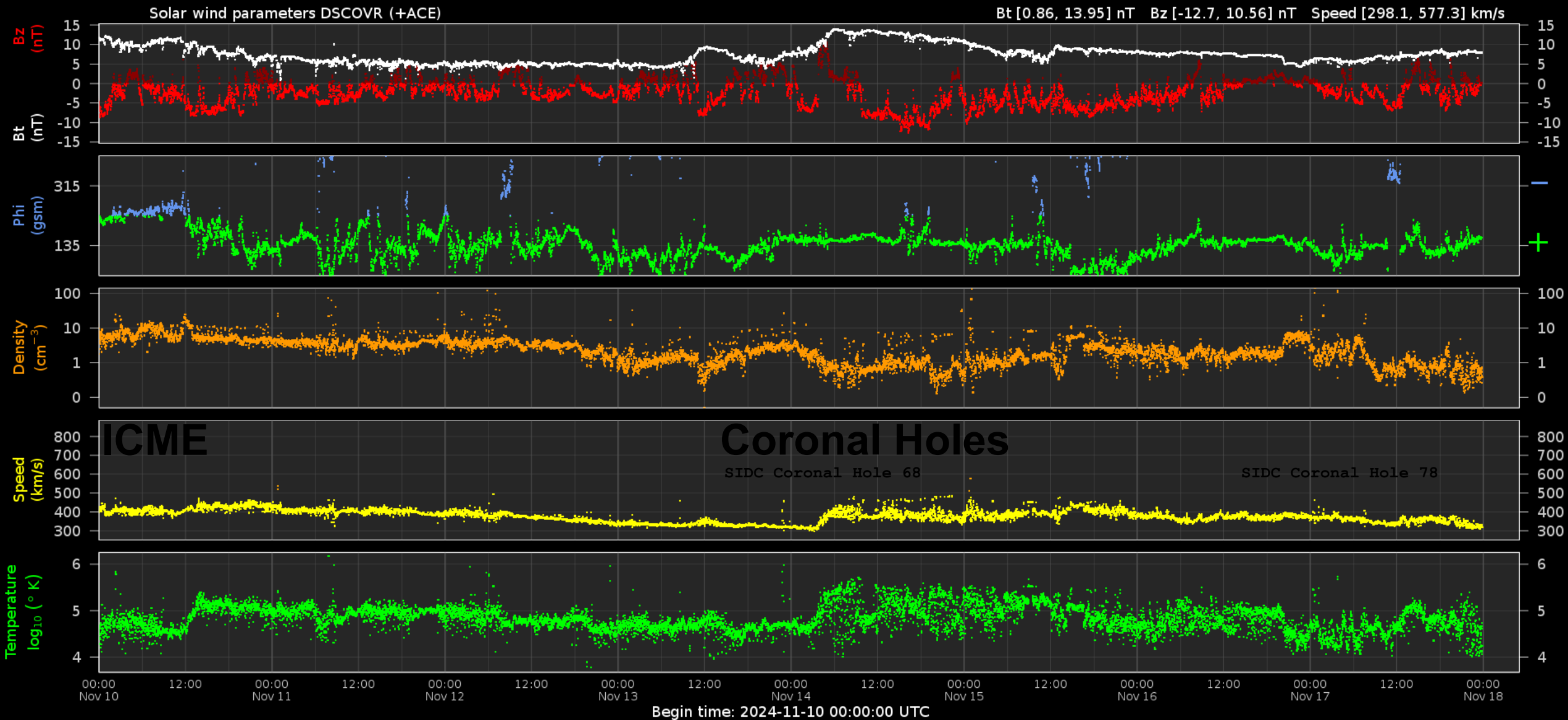
Geomagnetic Activity



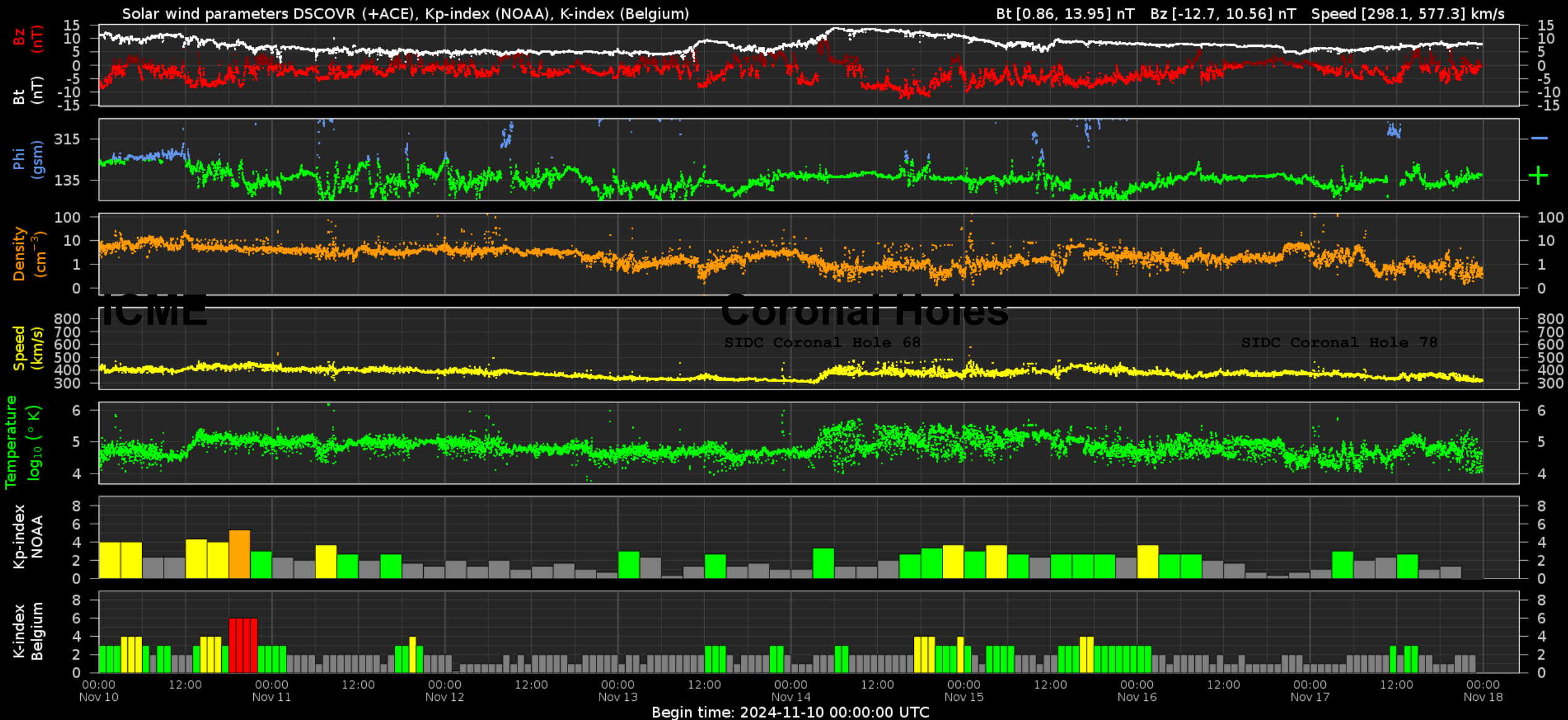
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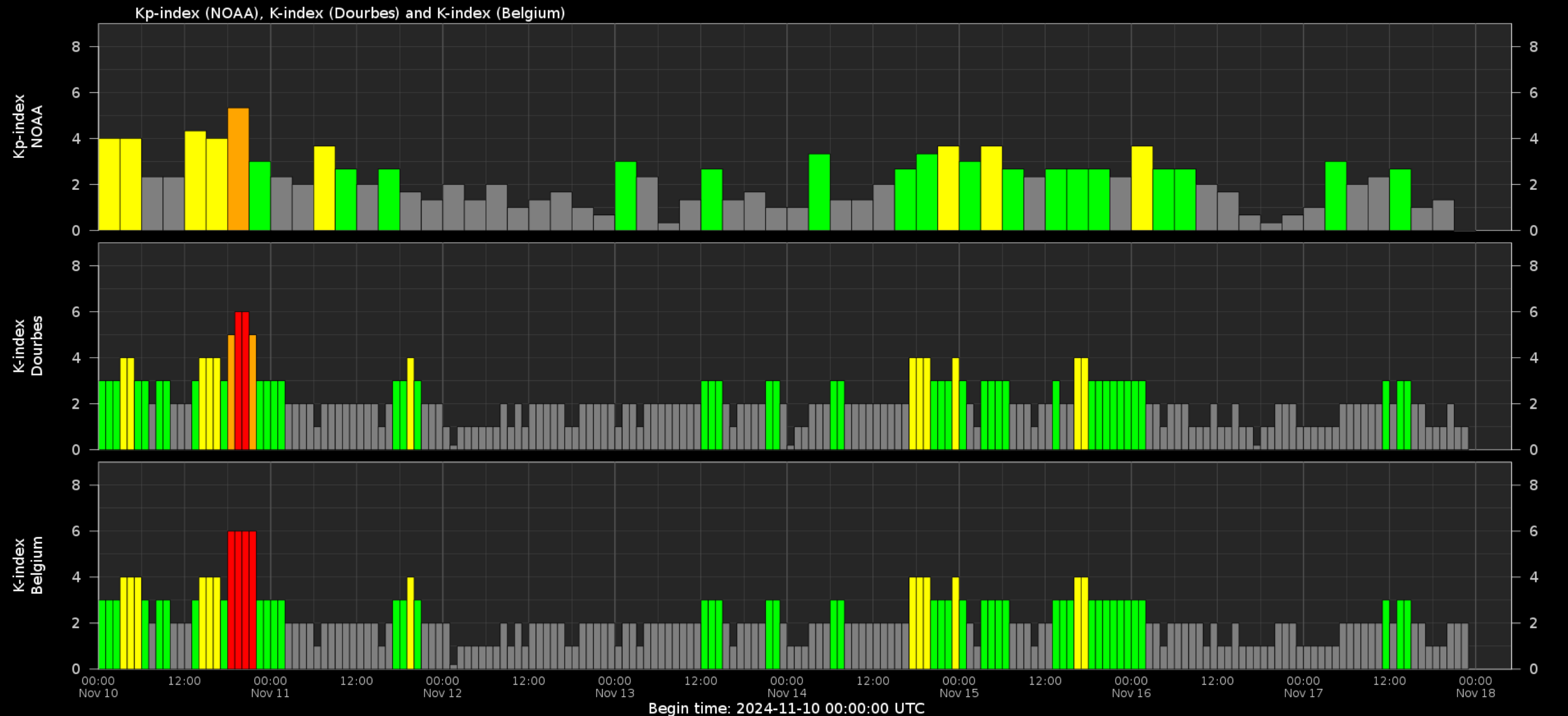
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



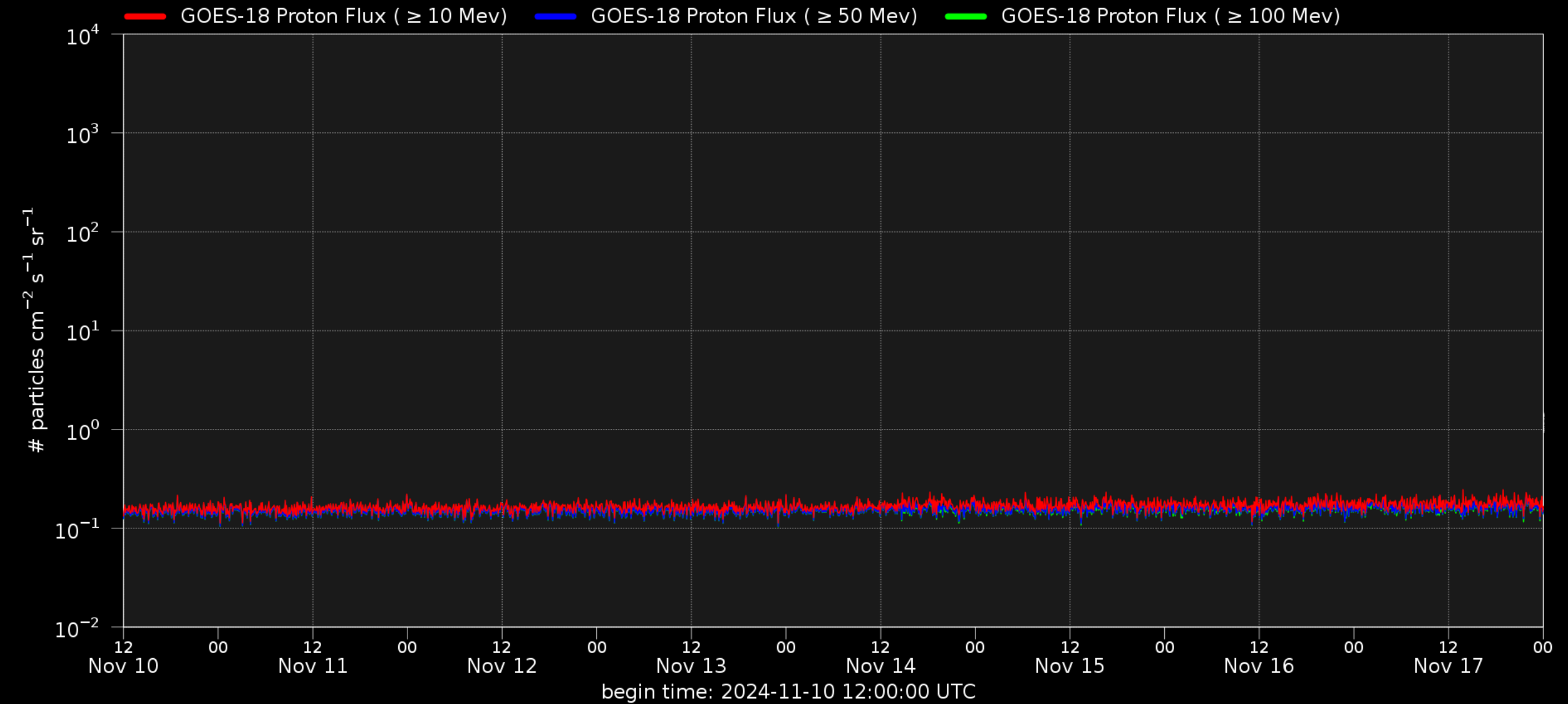
Energetic Particles



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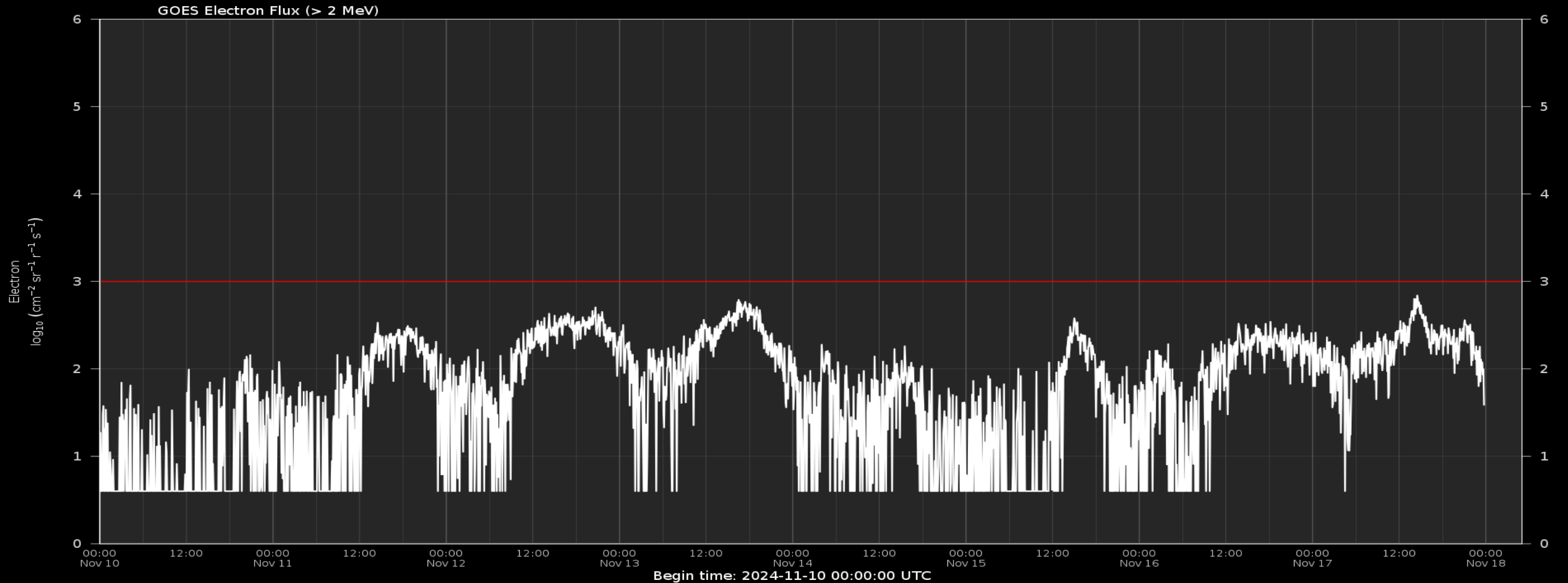
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



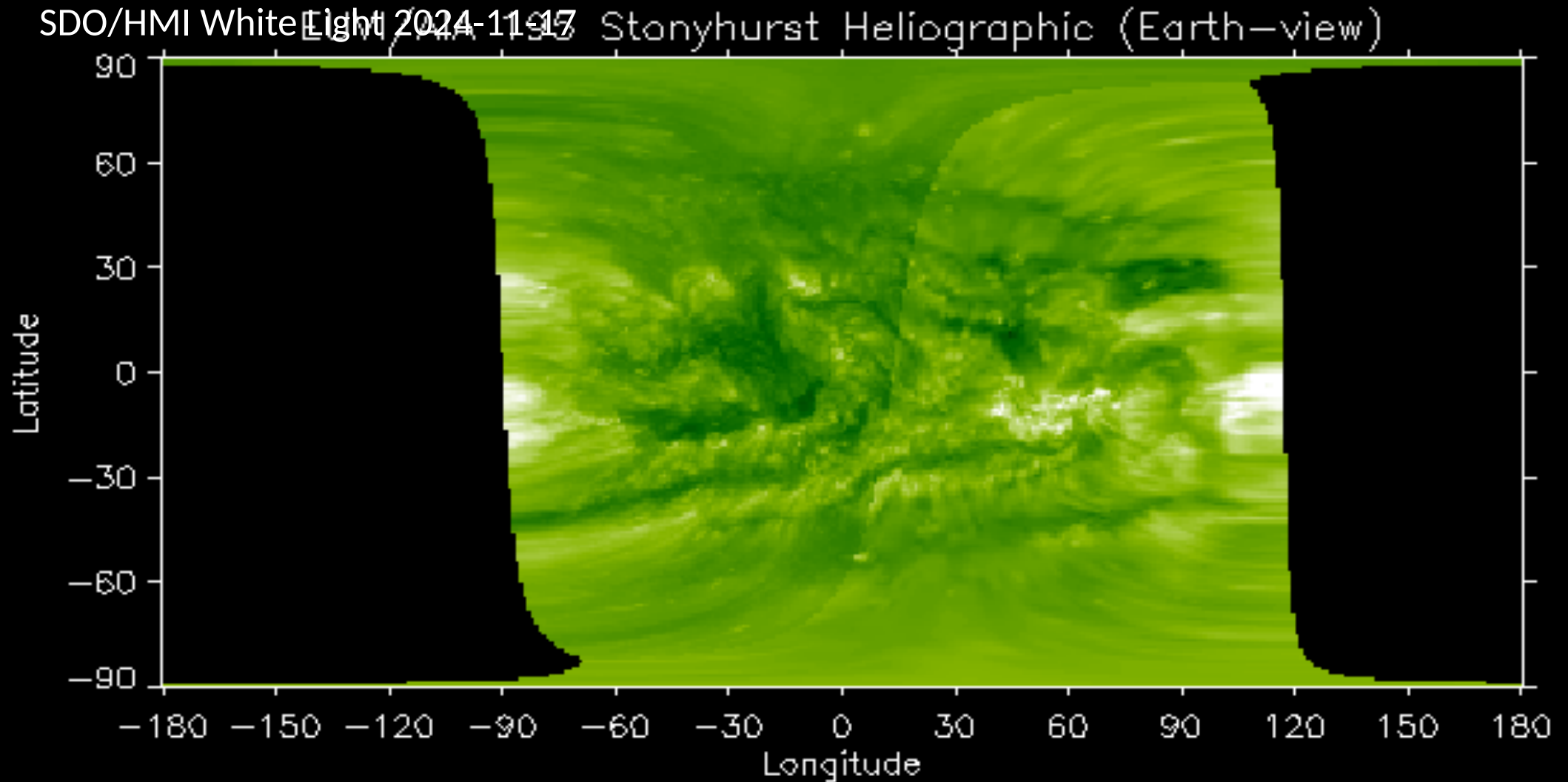
Outlook



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Outlook: Solar activity

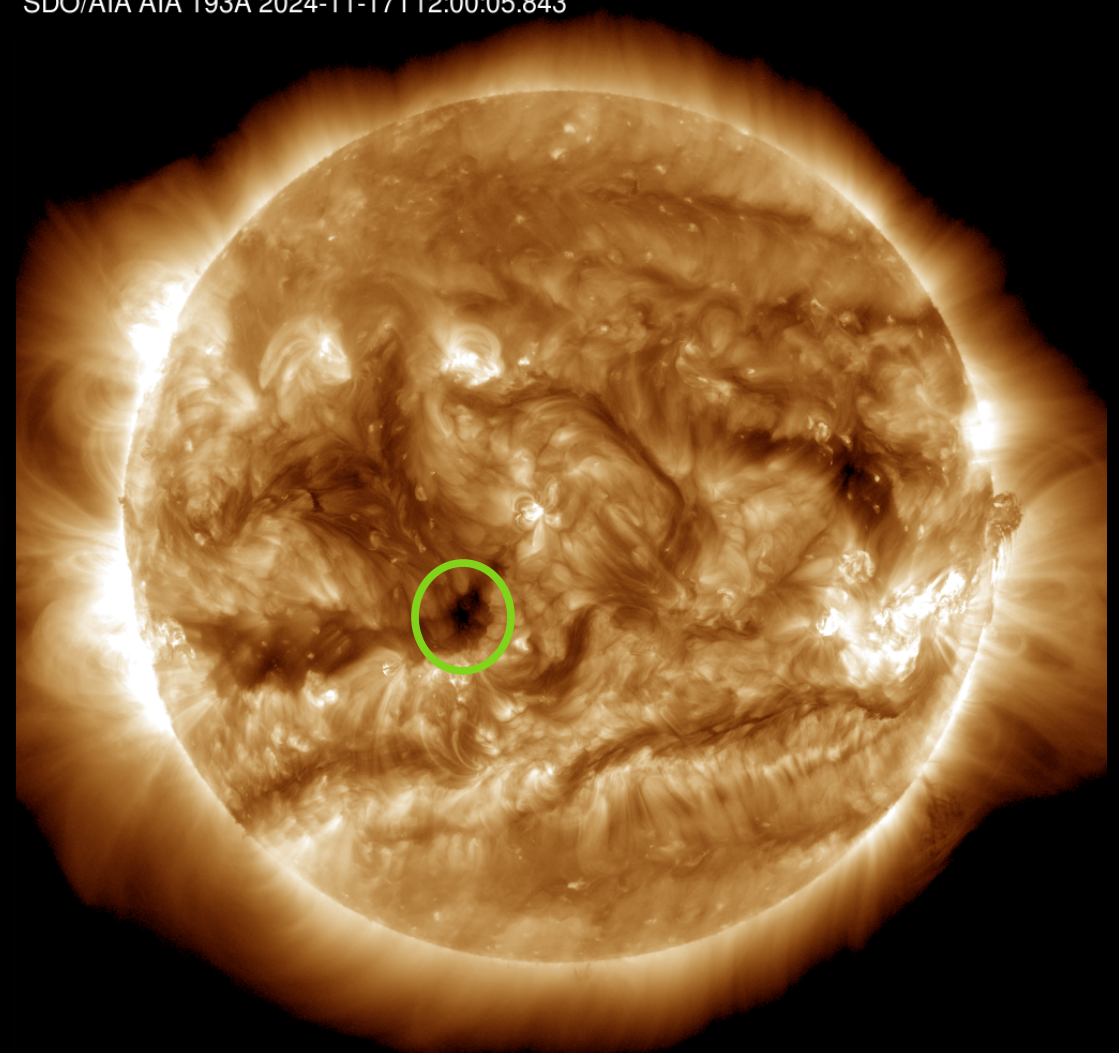
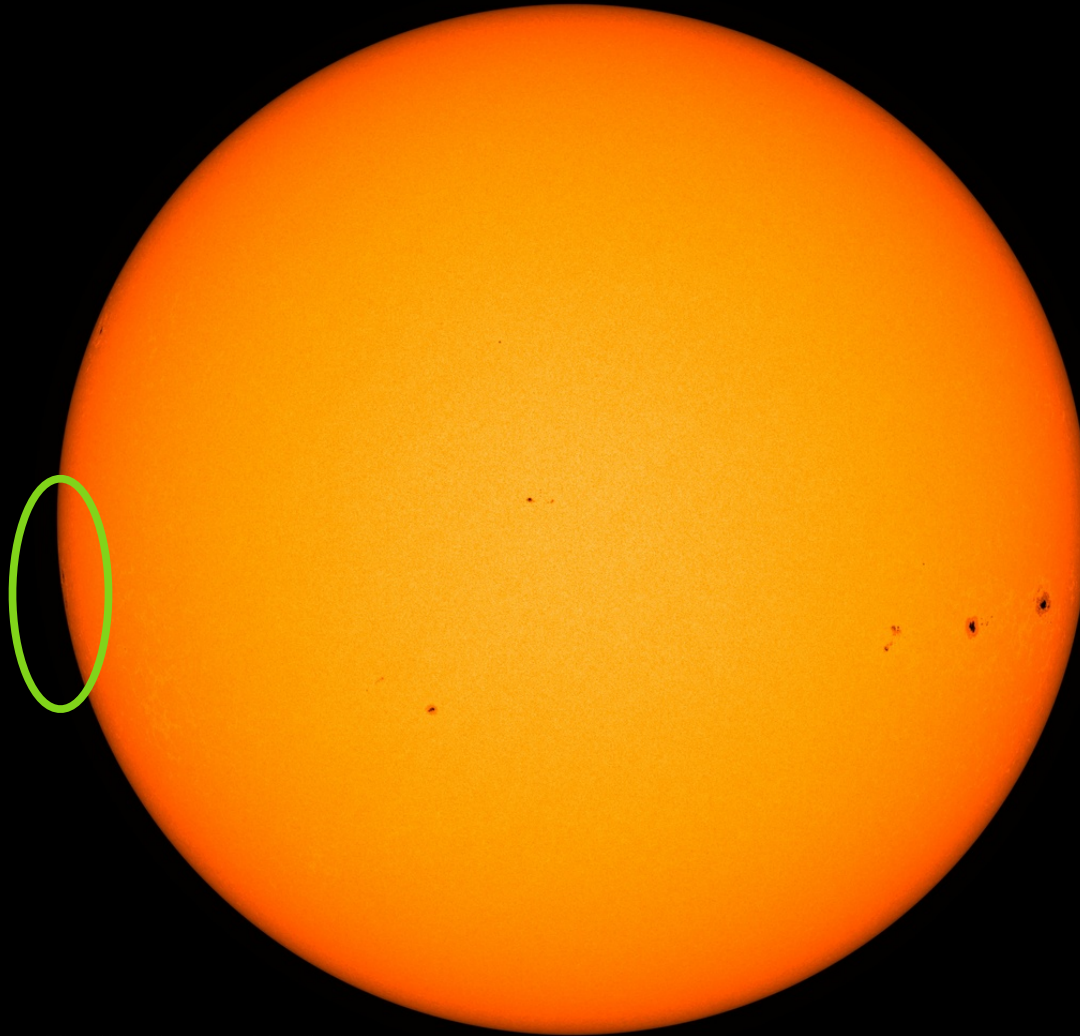


Observation date: 2024/11/17 17:05:00

Outlook: Solar activity

EUVI/AIA 195 Stonyhurst Heliographic (Earth-view)

SDO/AIA AIA 193Å 2024-11-17T12:00:05.843



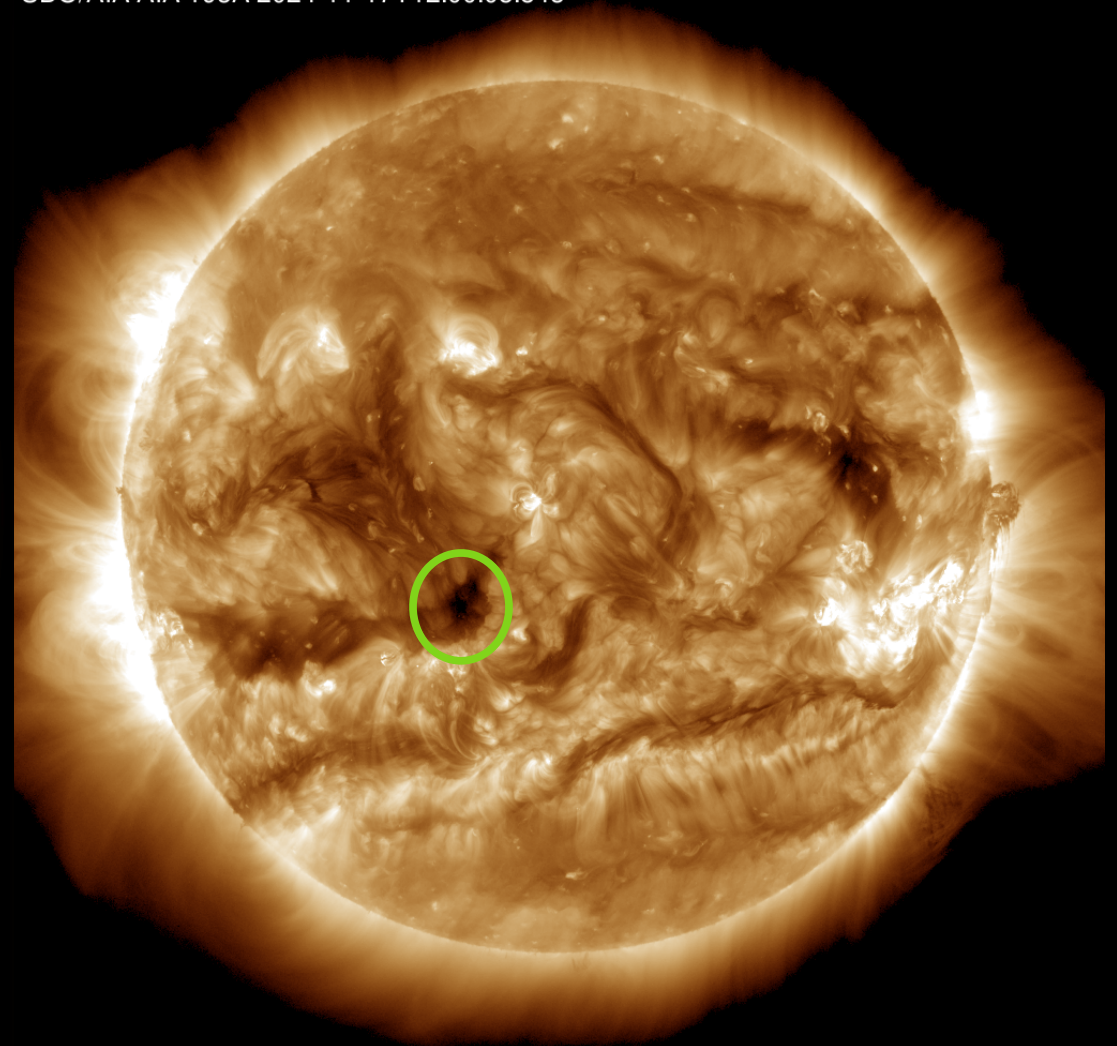
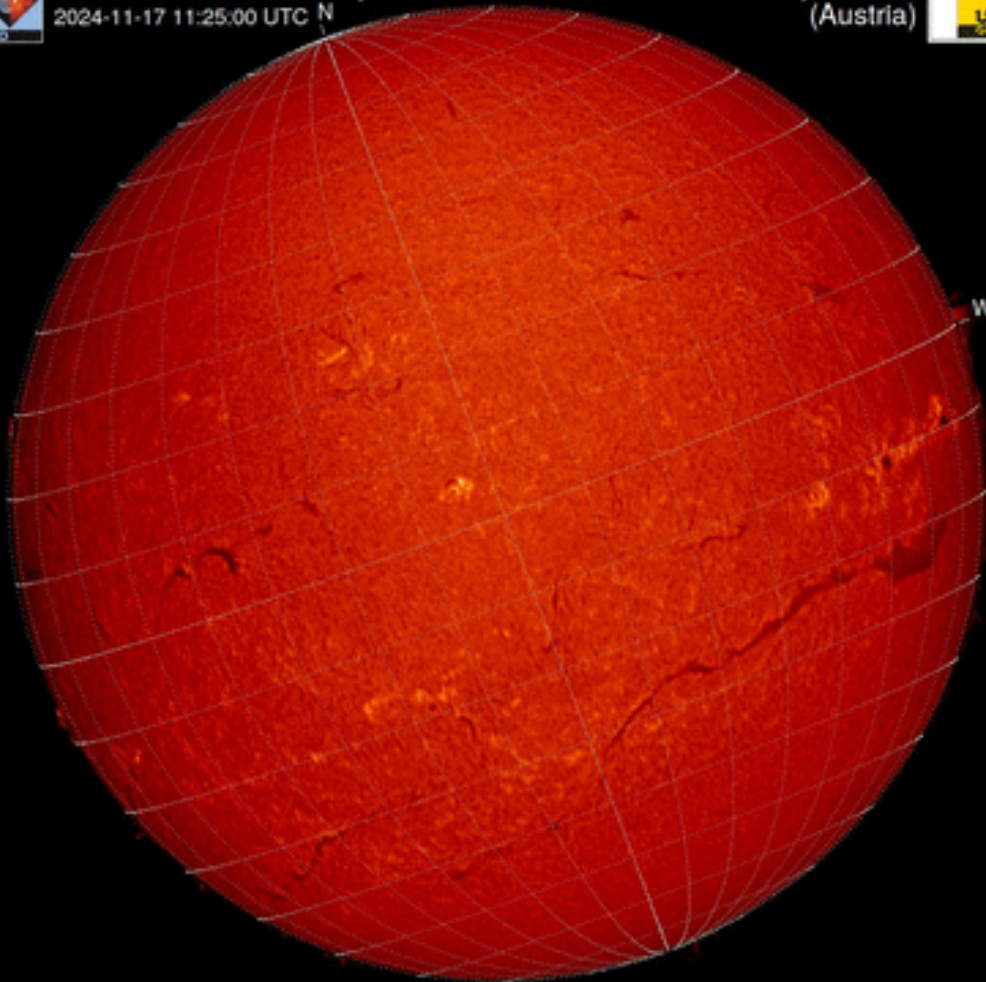
Outlook: Solar activity

EUVI/AIA 195 Stonyhurst Heliographic (Earth-view)

Kanzelhöhe Observatory
2024-11-17 11:25:00 UTC N

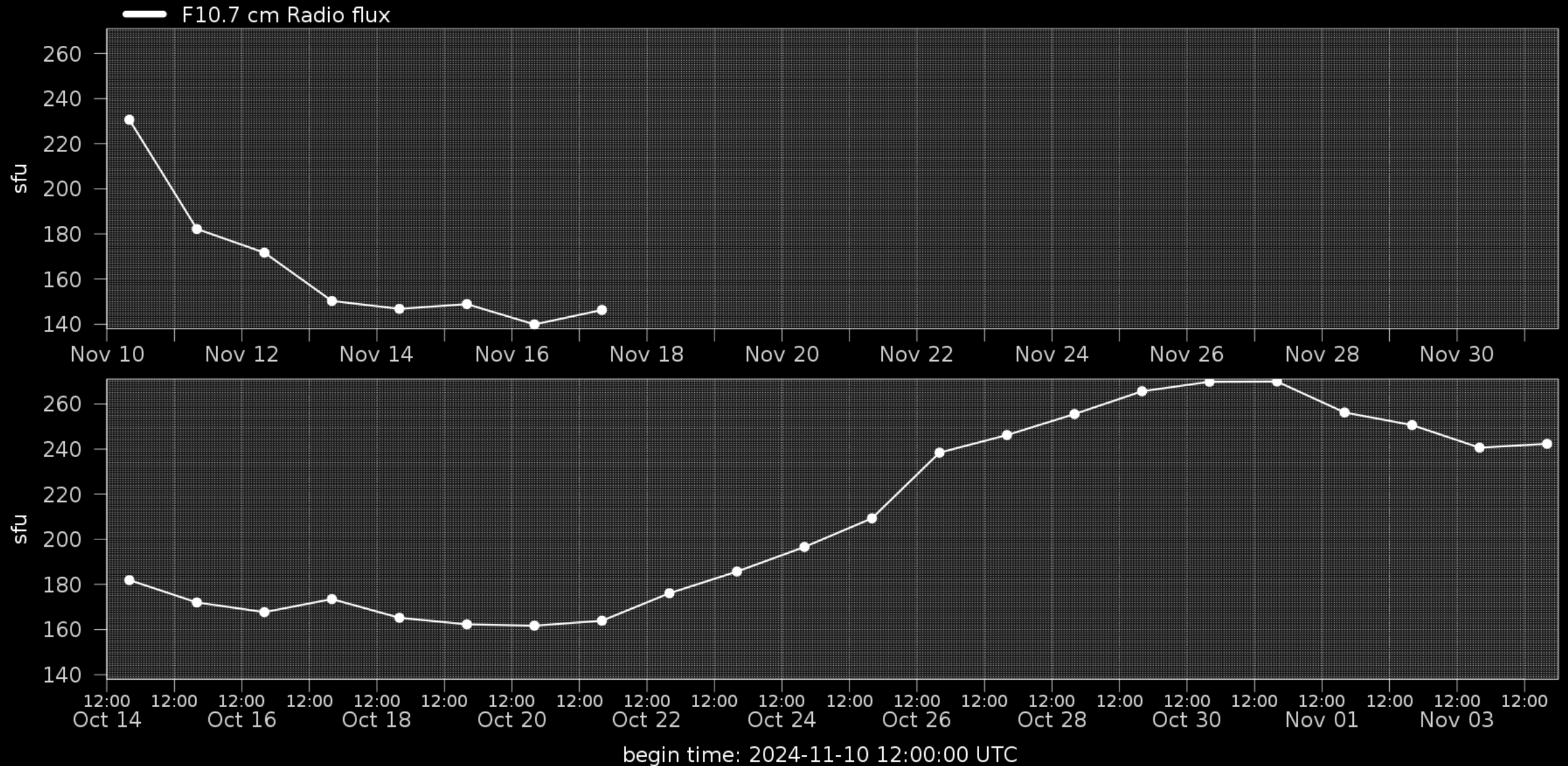
University of Graz
(Austria)

SDO/AIA AIA 193Å 2024-11-17T12:00:05.843

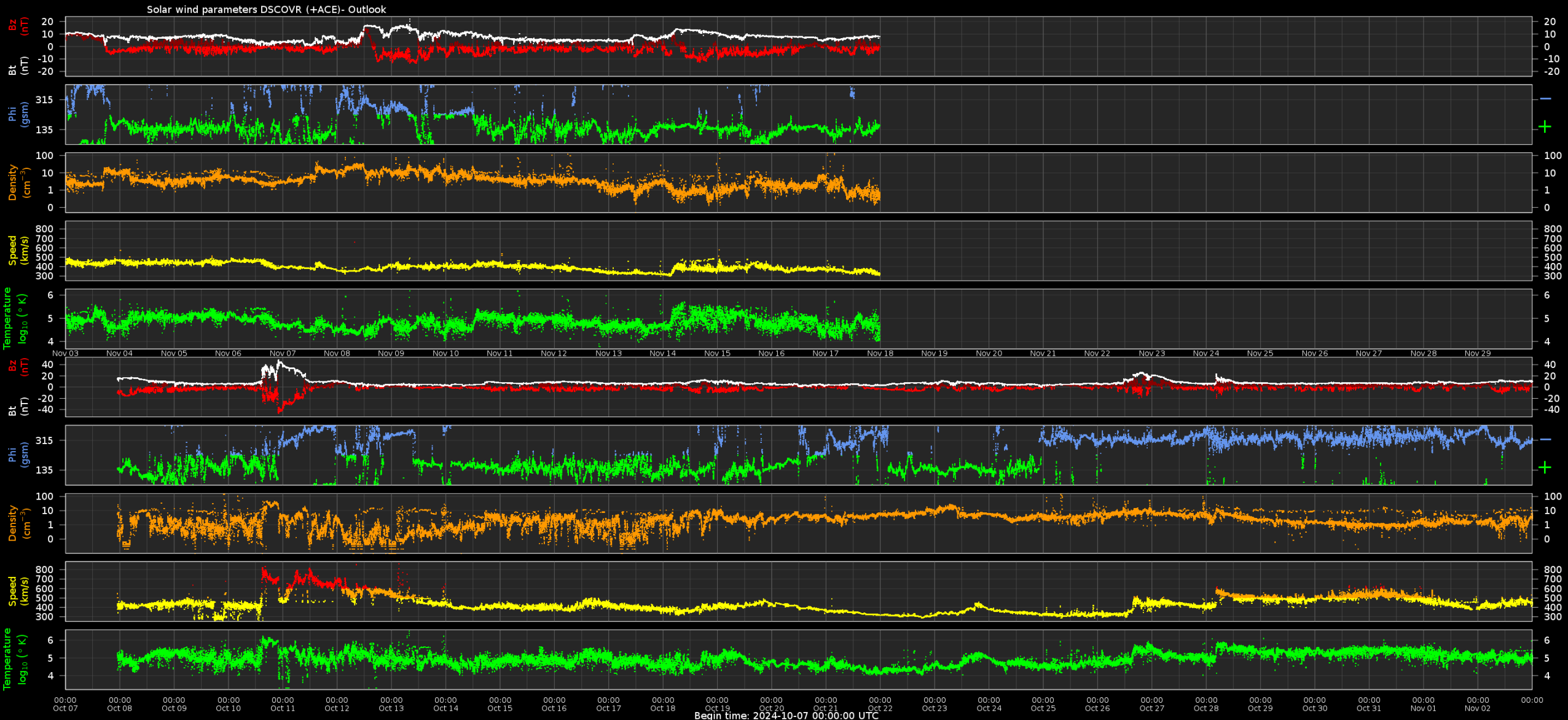


SDO/HMI Quick-Look Continuum: 20241117_114500

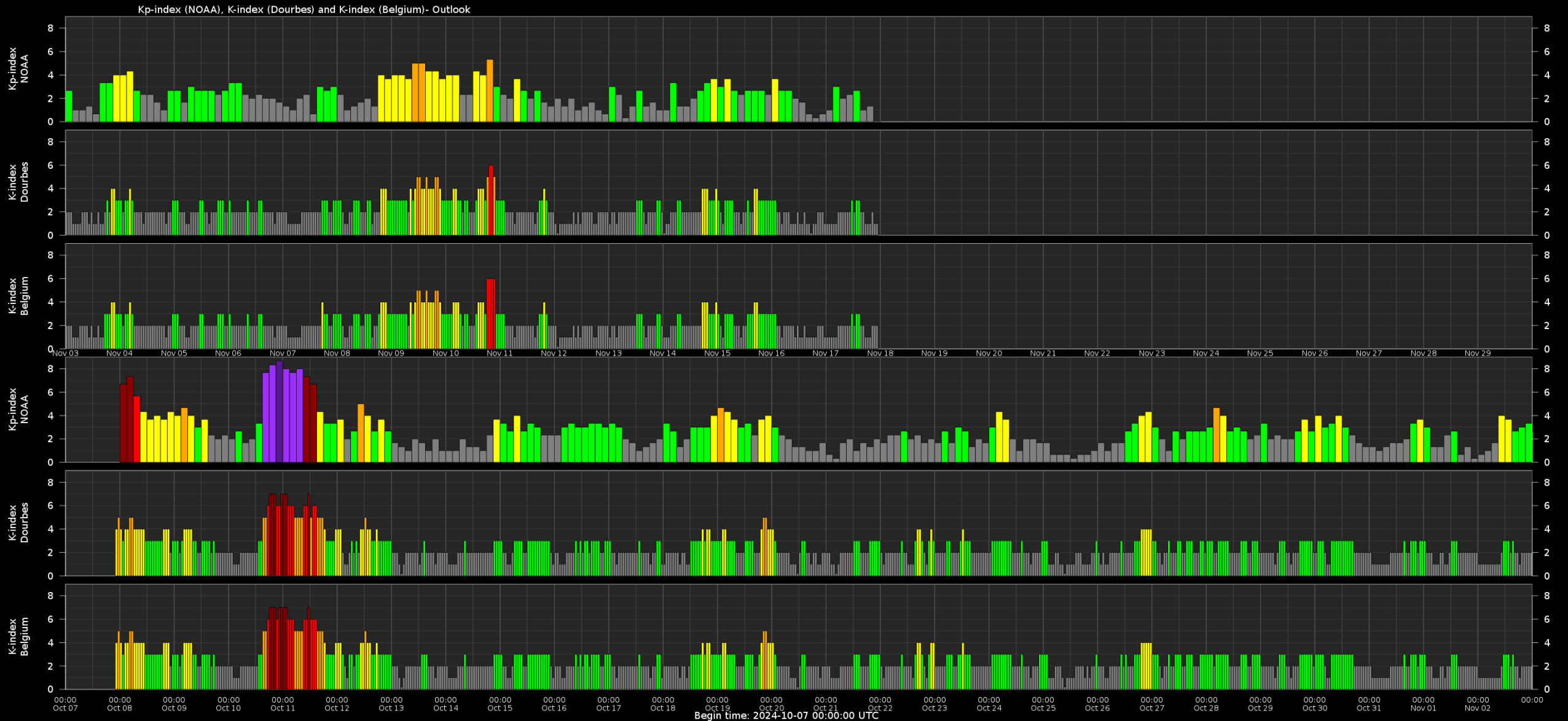
Outlook: Solar F10.7cm radio flux



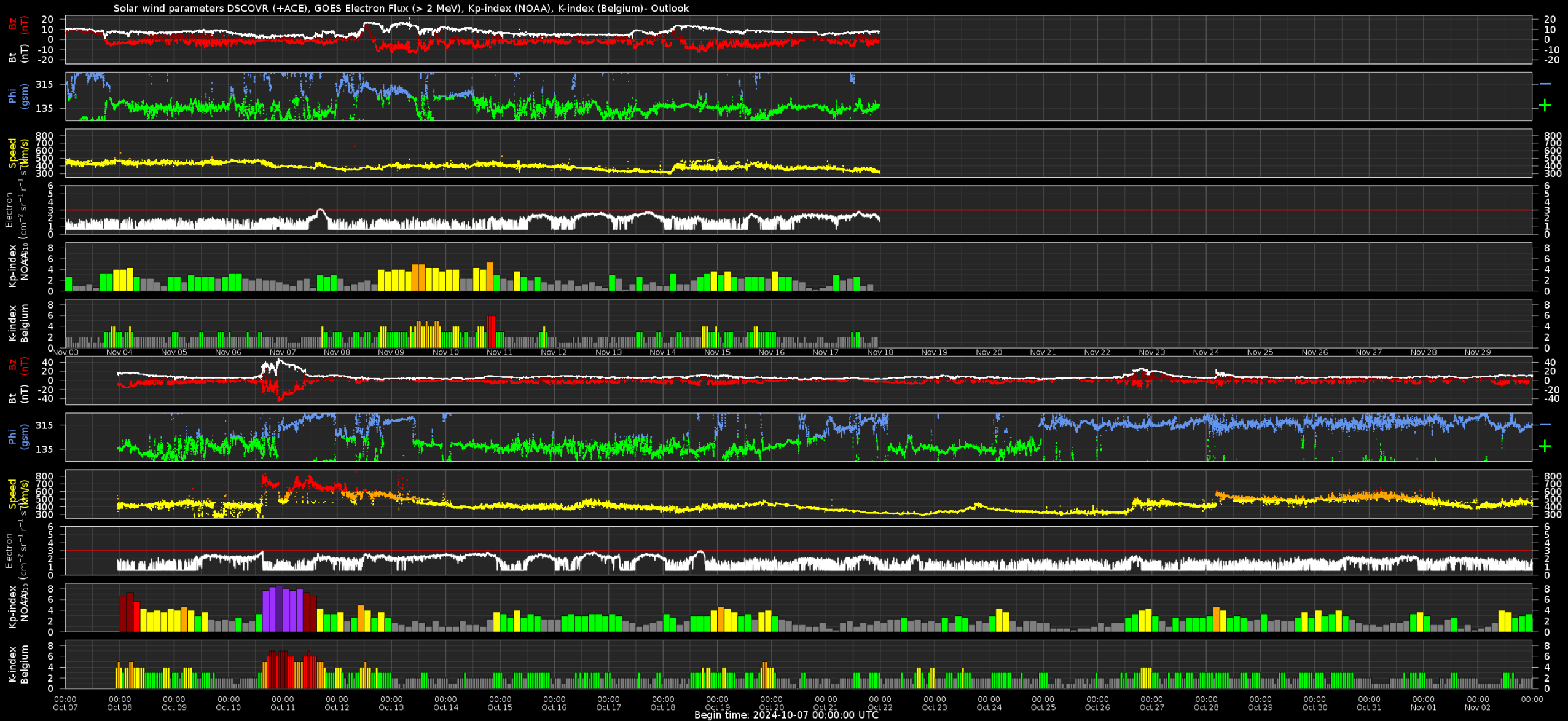
Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



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Pegasus related events

Anything notable that is Pegasus related?

SIDC Space Weather Briefing

See you at our next briefing!

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