SIDC Space Weather Briefing

03 November 2024-10 November 2024

Vansintjan Robbe

& the SIDC forecaster team

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2024-11-03 12:00 to 2024-11-10 23:59

Active regions	There were 17 AR on disk NOAA AR 3883 & 3889 where the most active
Flares	# C-class flare: 56 # M-class flare: 41 # X-class flare: 1
Coronal Holes	3 CH + & 2 CH -
CMEs	1 glancing blow

Proton flux	Elevated at the start of the week
Electron flux	Crossed the threshold on November 07

Solar wind and geomagnetic conditions

ICMEs	1 ICME
Solar wind conditions	|B|: 0.5 - 21.75 nT //Bz: -13.47 nT to 14.28 nT //Speed: 324.1 - 659.8km/s
Geomagnetic conditions	max KBel: 6.0, max Kp(NOAA): 5.33, Moderate Storm conditions

All Quiet Alert: Off

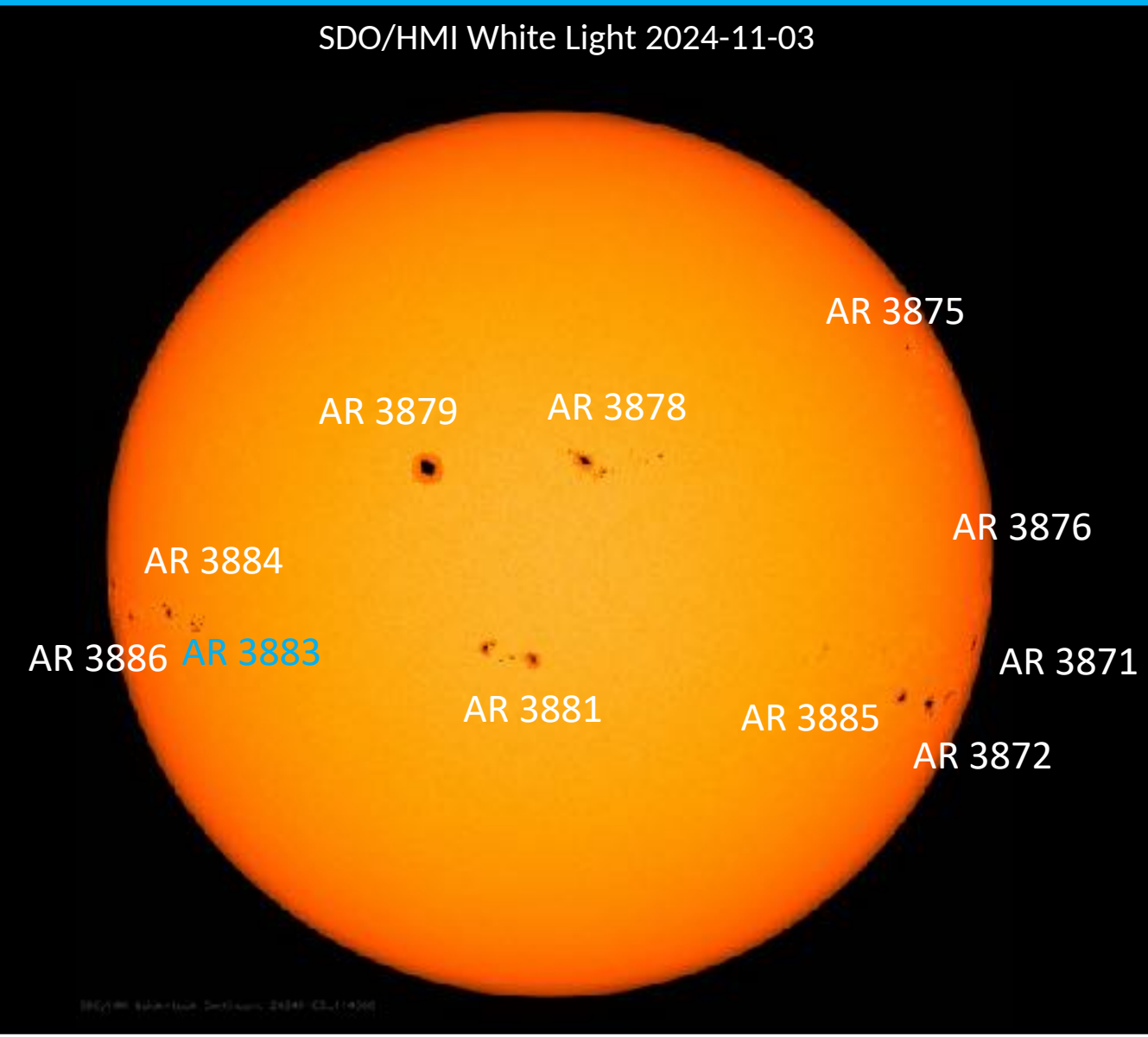
Solar Activity

Royal Observatory
of Belgium

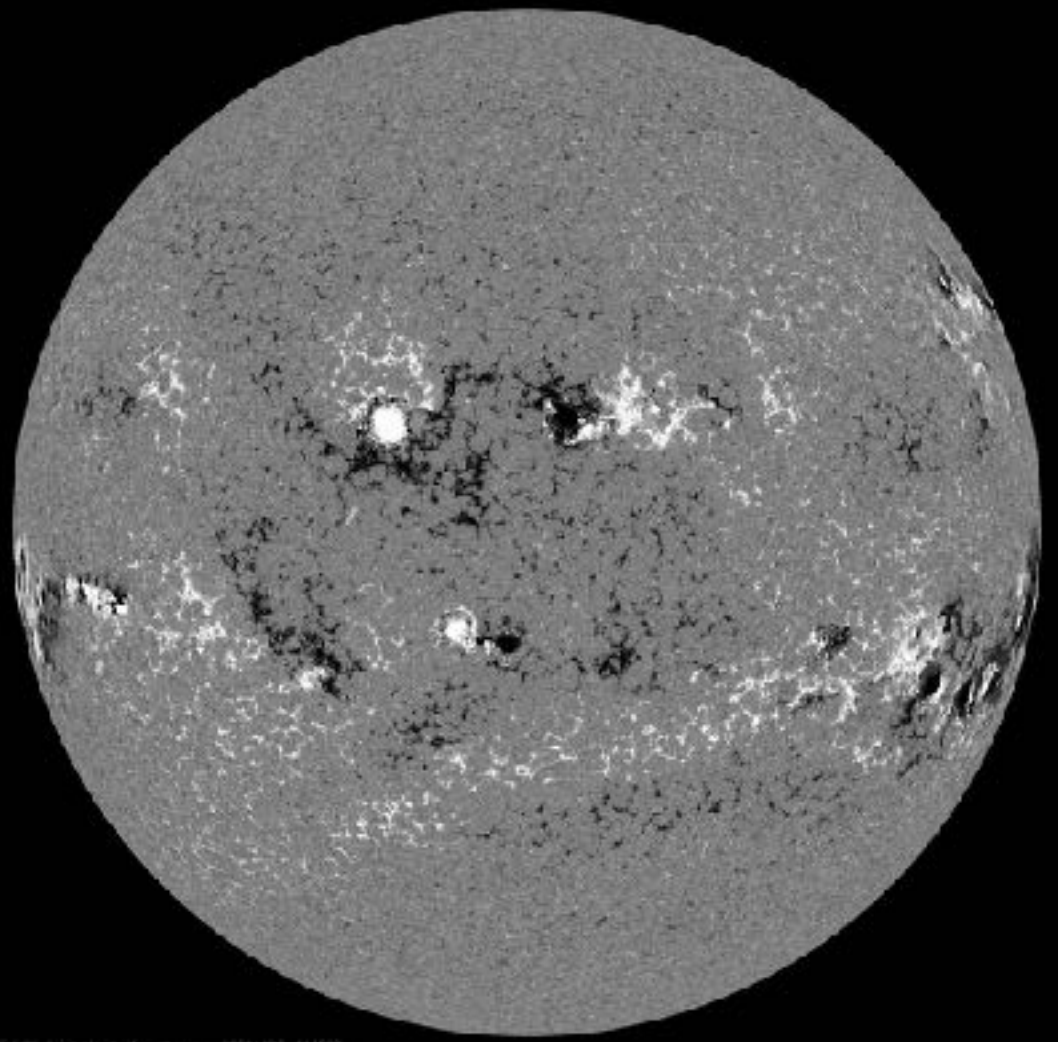
Solar Influences
Data analysis Centre
www.sidc.be

Solar active regions

SDO/HMI White Light 2024-11-03

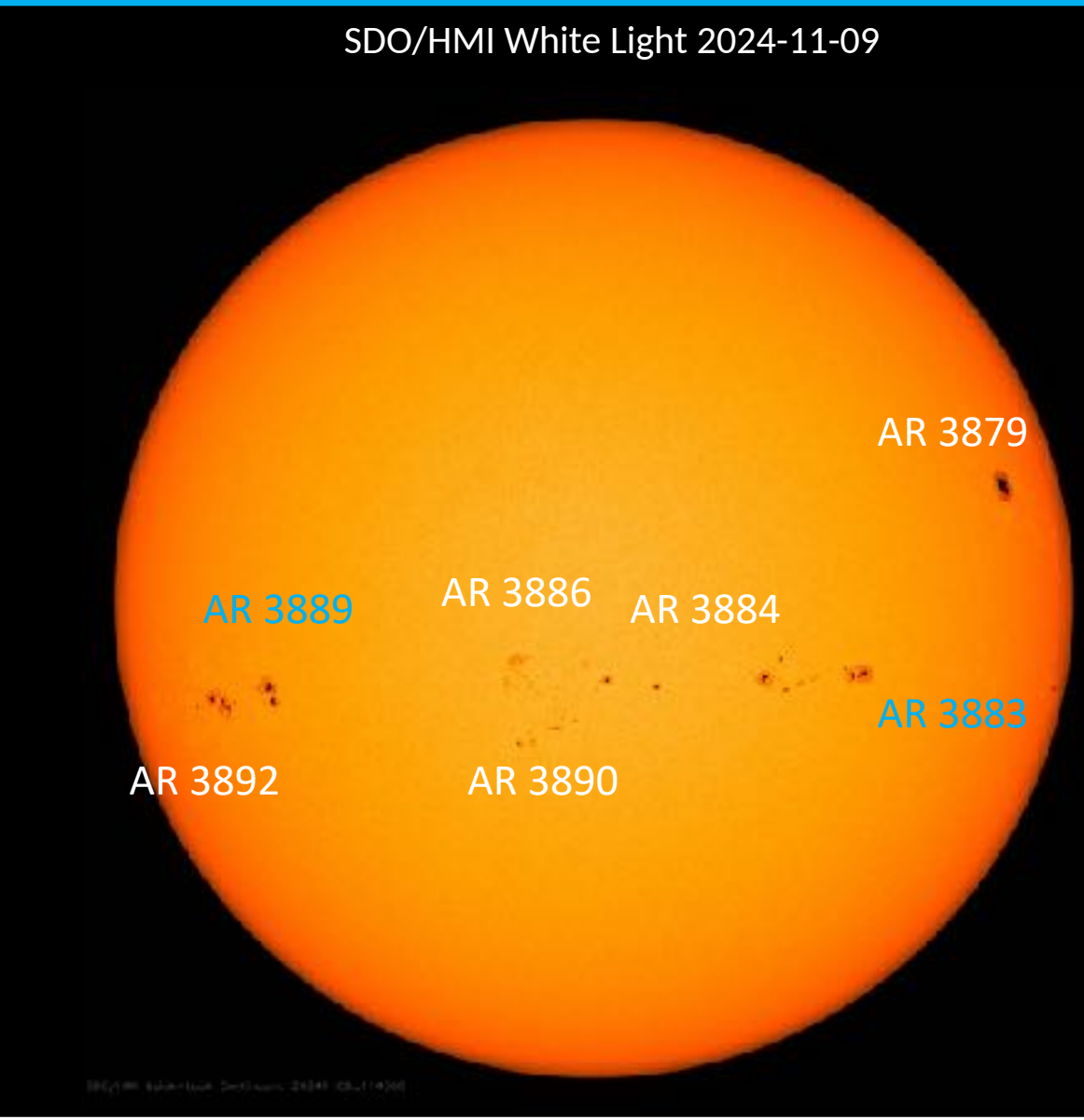


SDO/HMI Magnetogram 2024-11-03

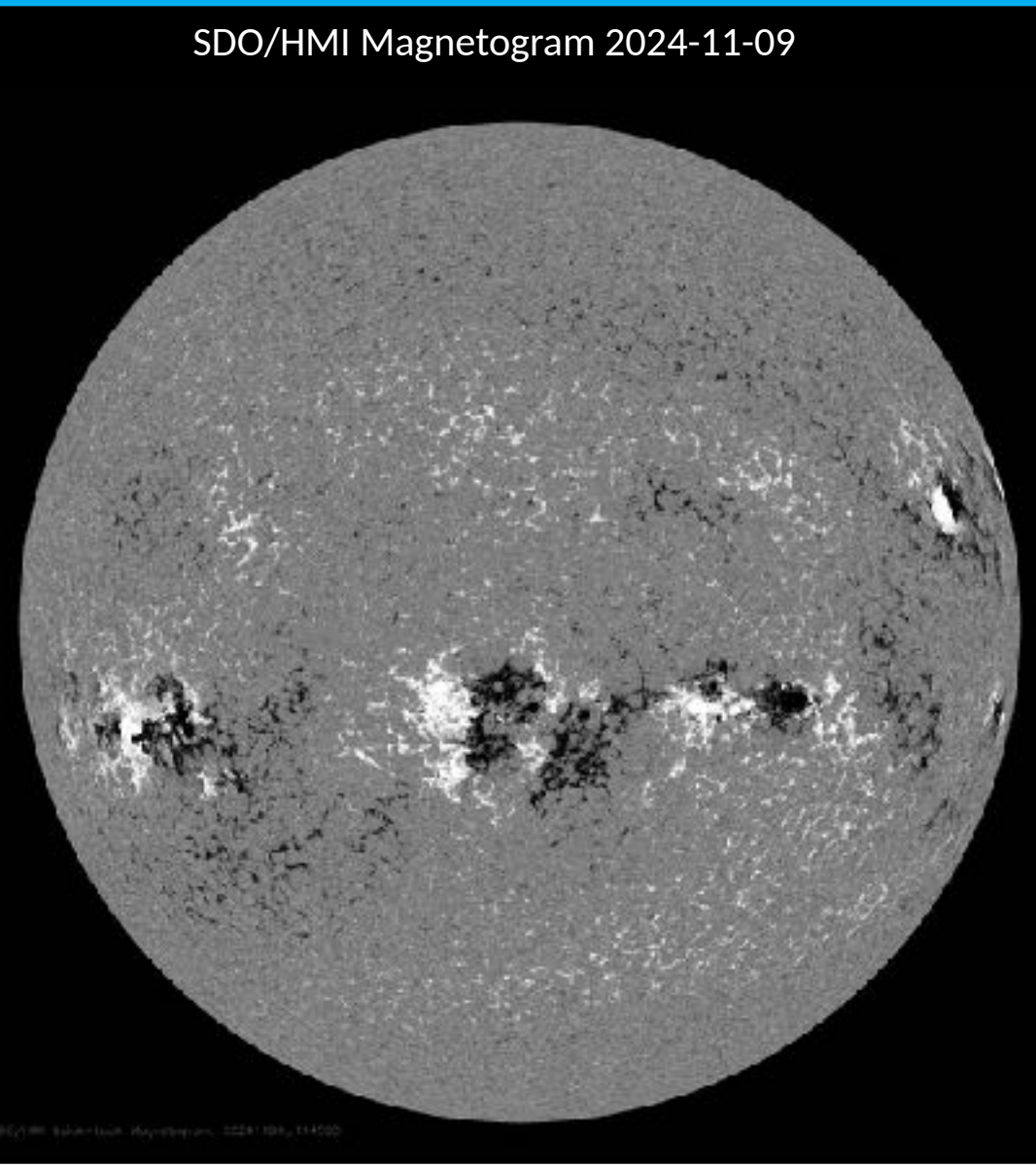


Solar active regions

SDO/HMI White Light 2024-11-09

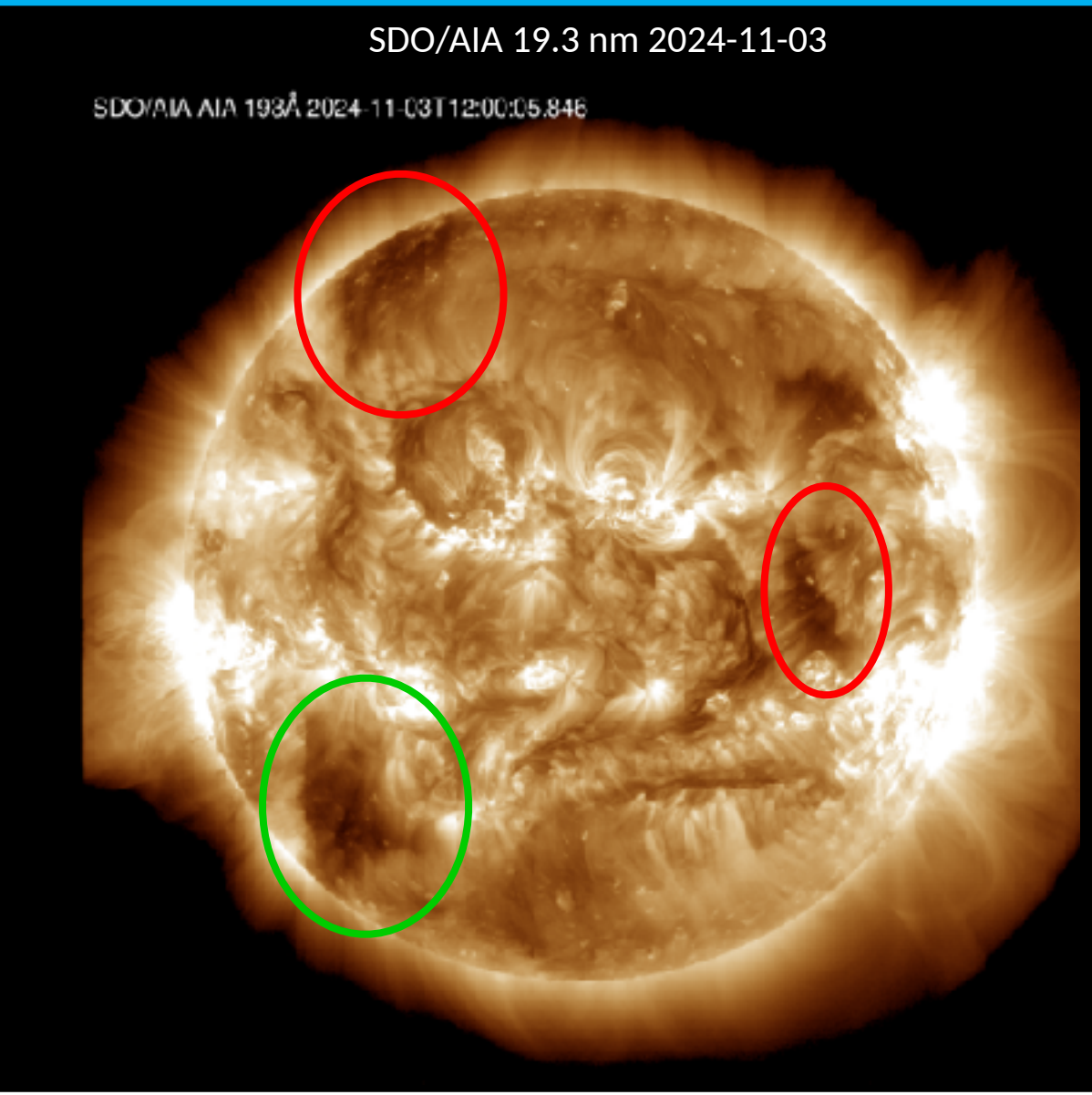


SDO/HMI Magnetogram 2024-11-09

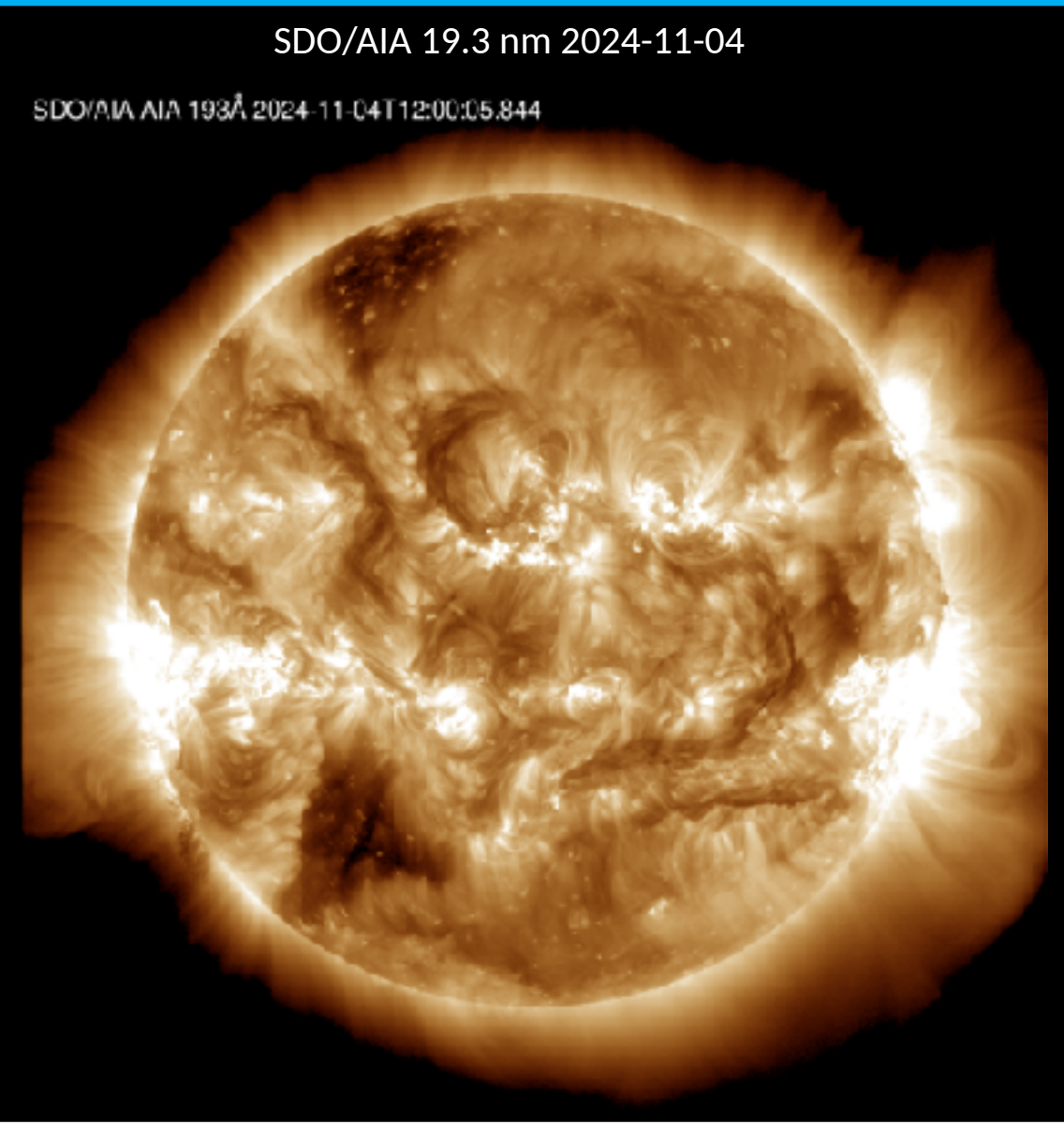


Coronal holes

SDO/AIA 19.3 nm 2024-11-03

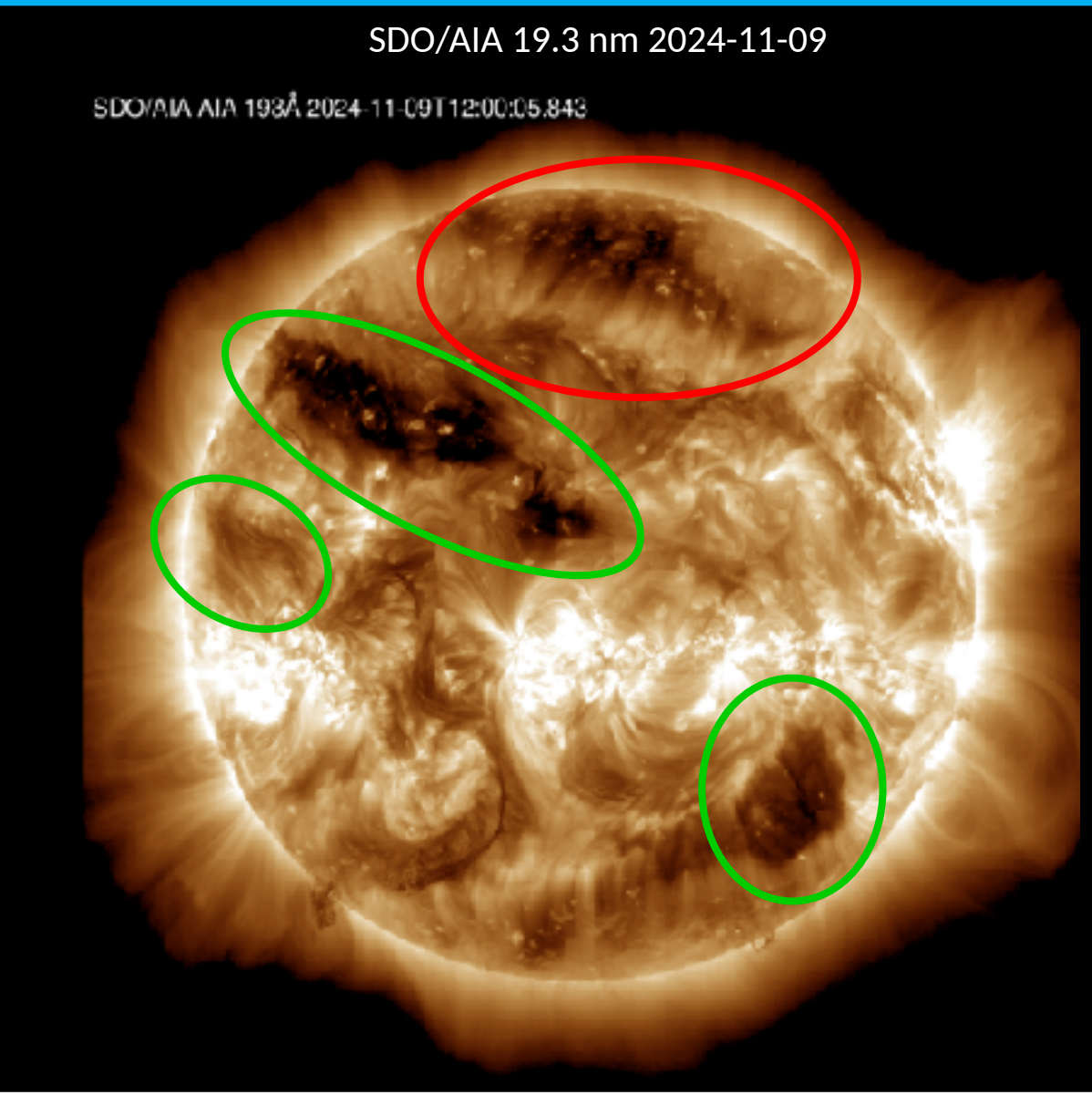


SDO/AIA 19.3 nm 2024-11-04

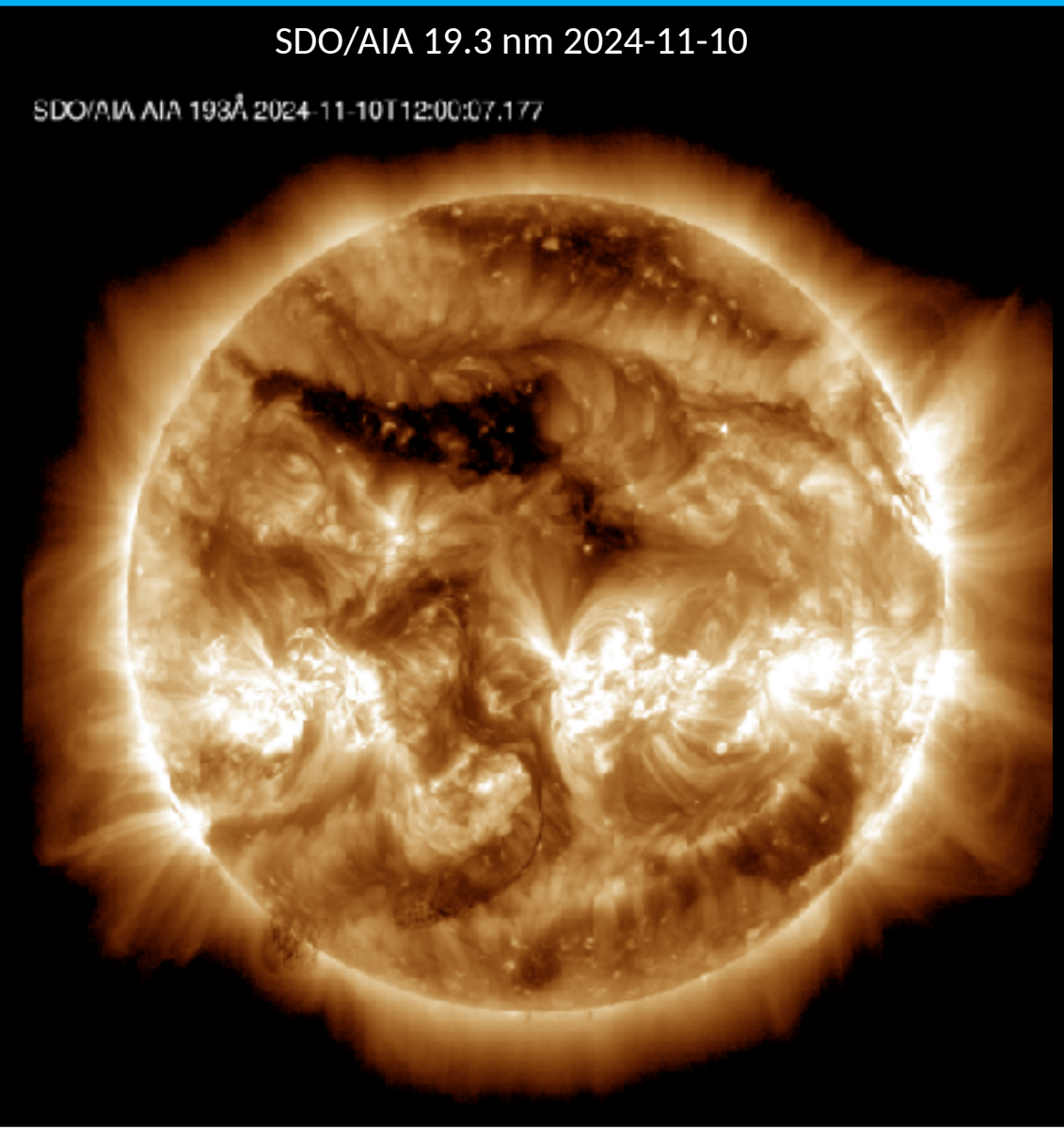


Coronal holes

SDO/AIA 19.3 nm 2024-11-09

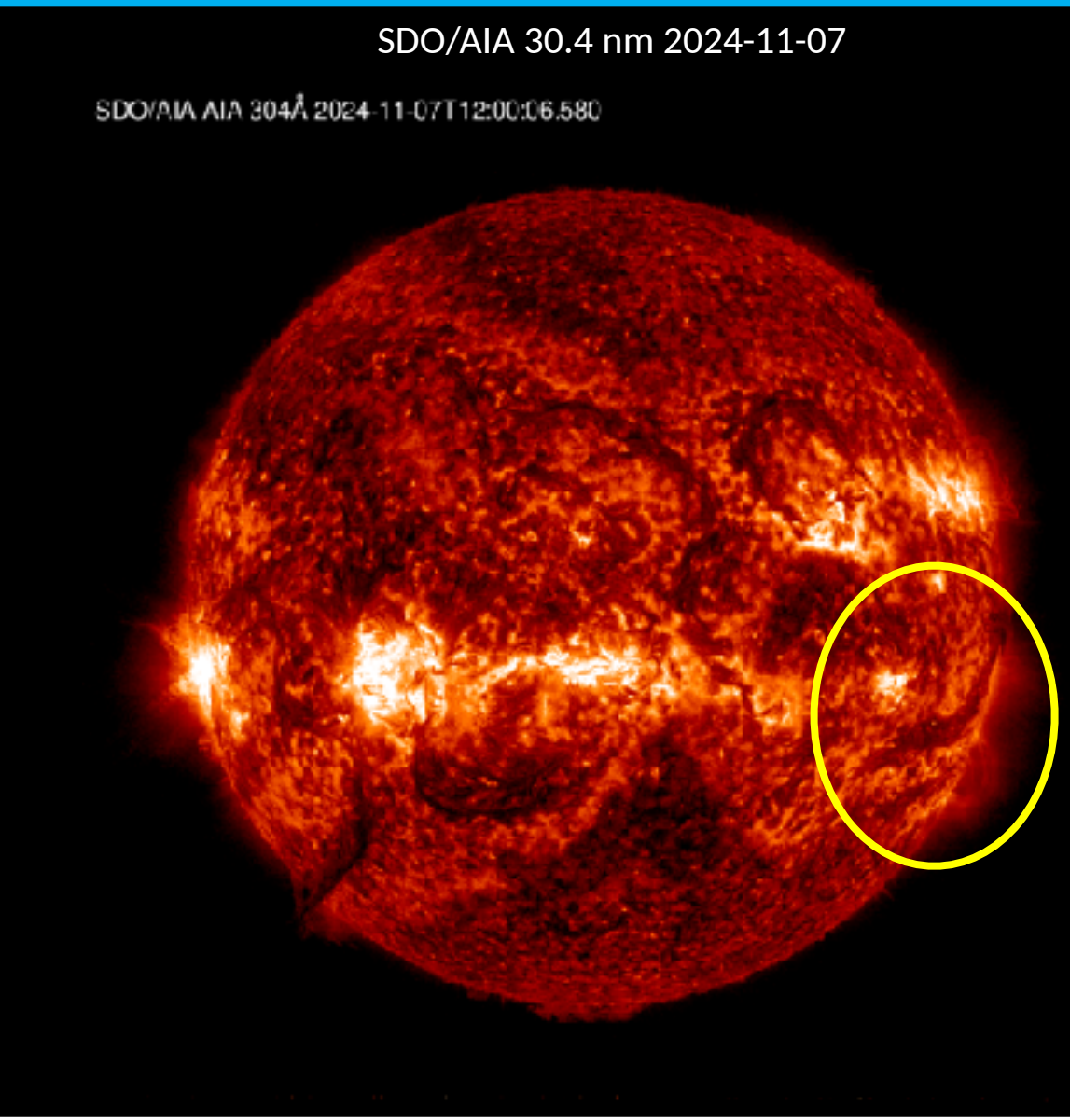


SDO/AIA 19.3 nm 2024-11-10

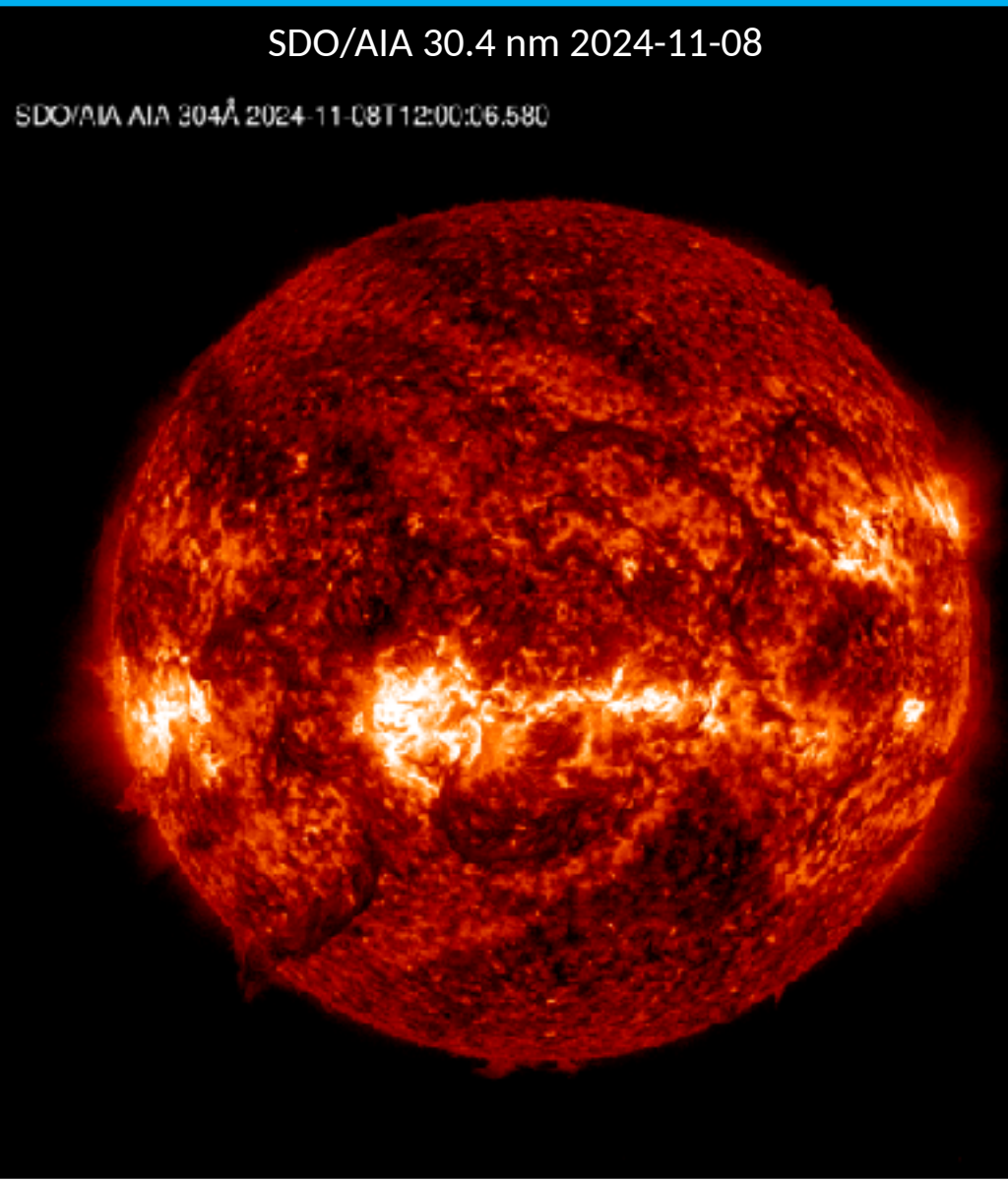


Filaments

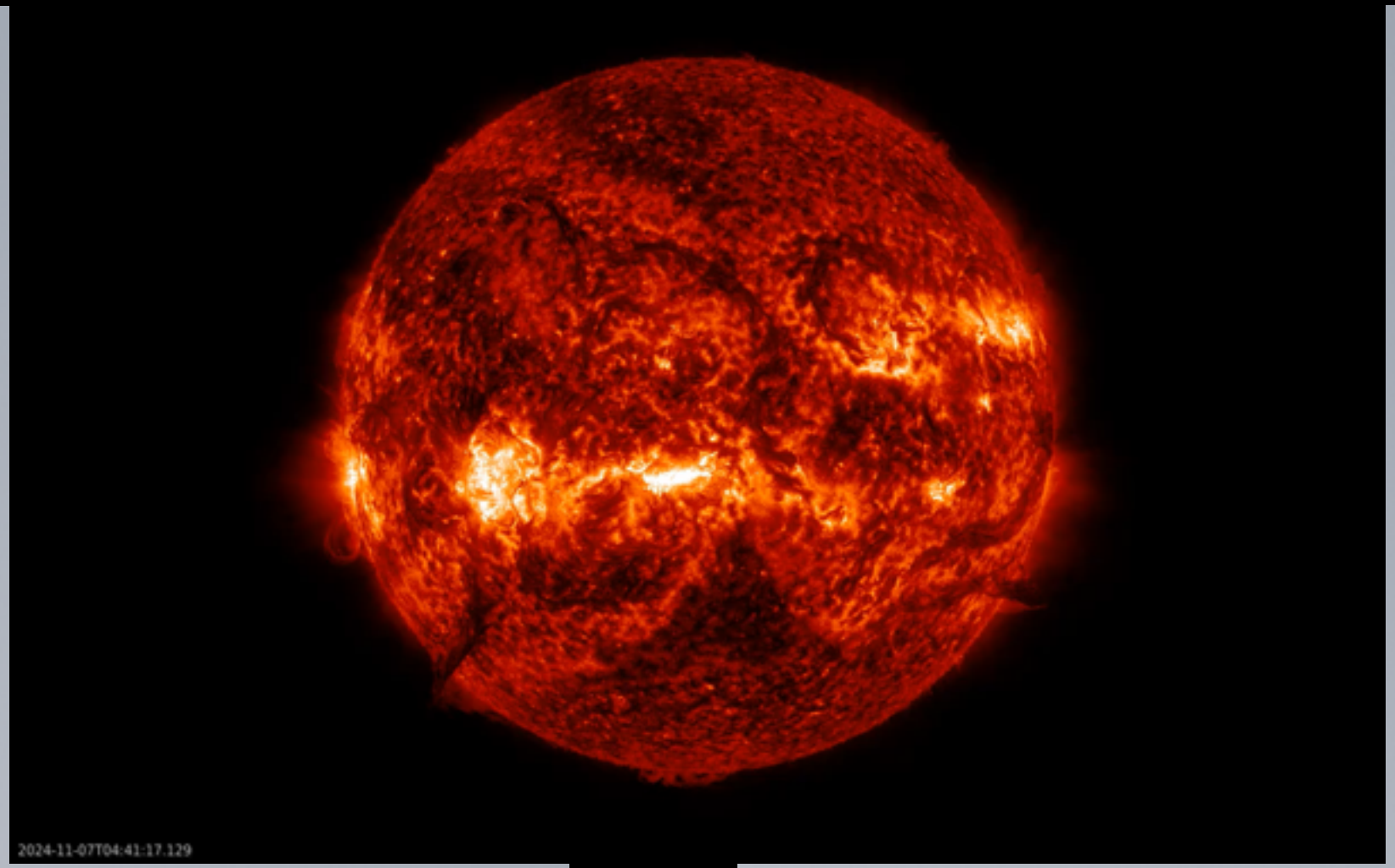
SDO/AIA 30.4 nm 2024-11-07



SDO/AIA 30.4 nm 2024-11-08

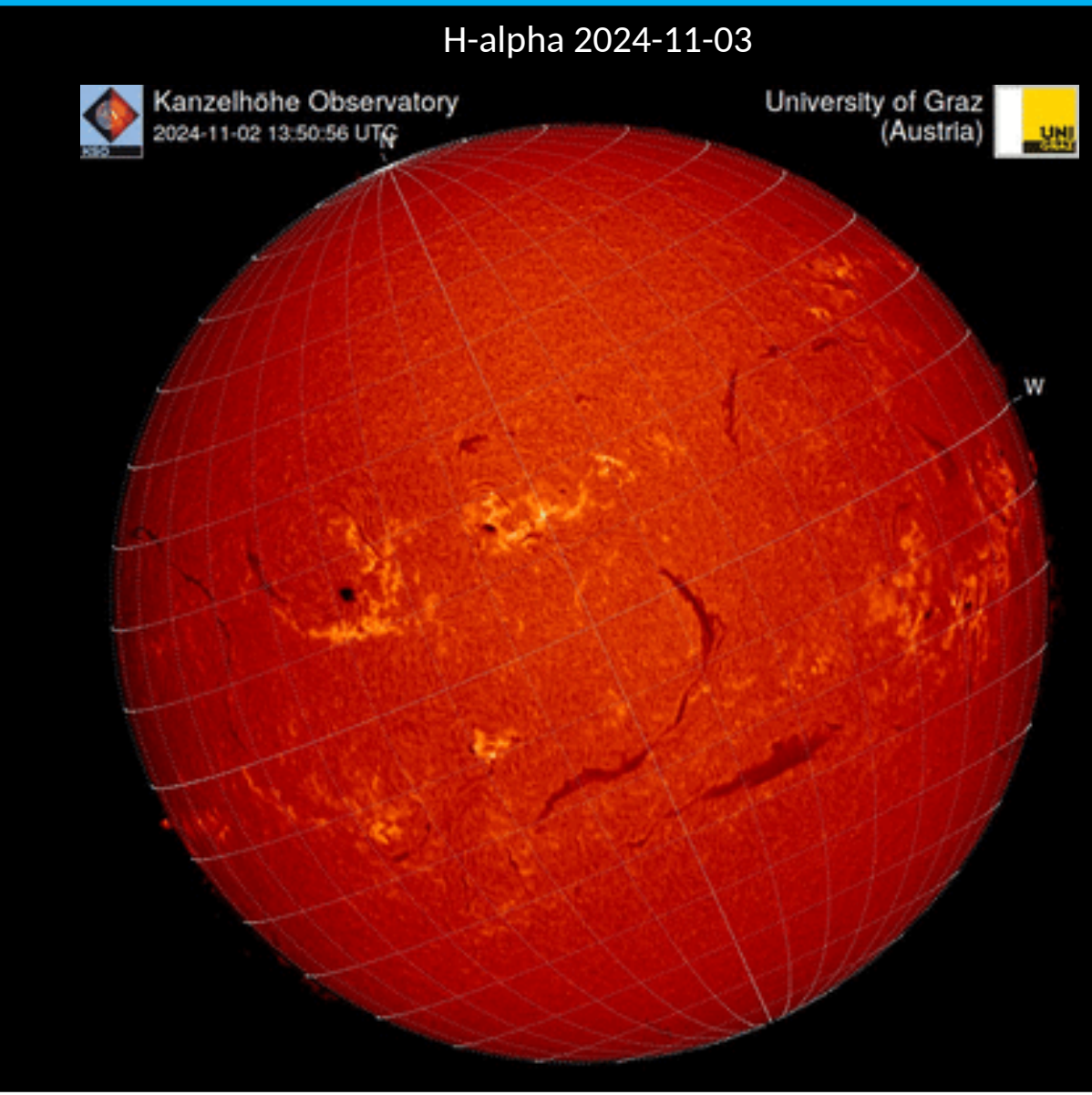


Filaments

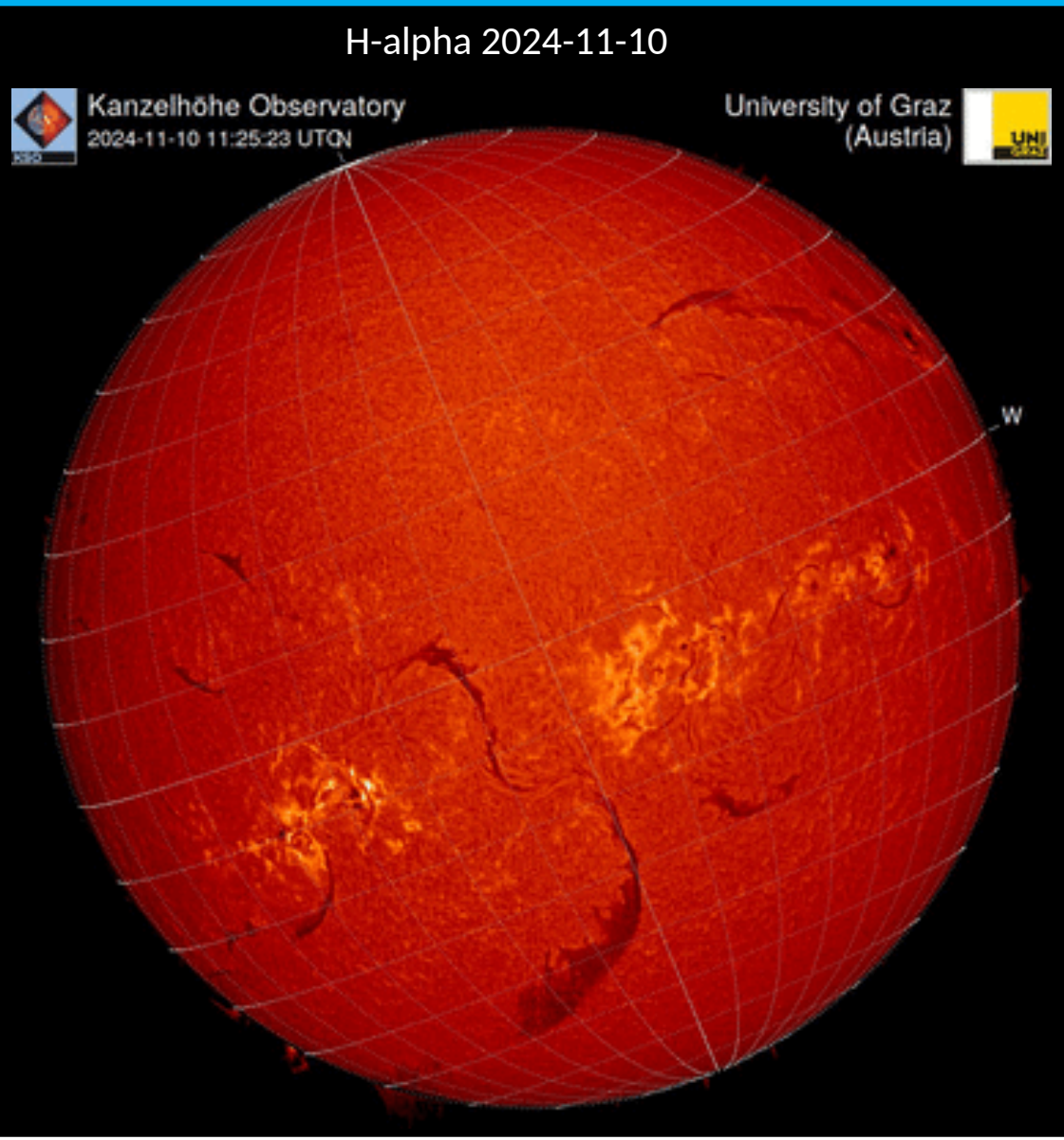


Filaments & Filament eruptions

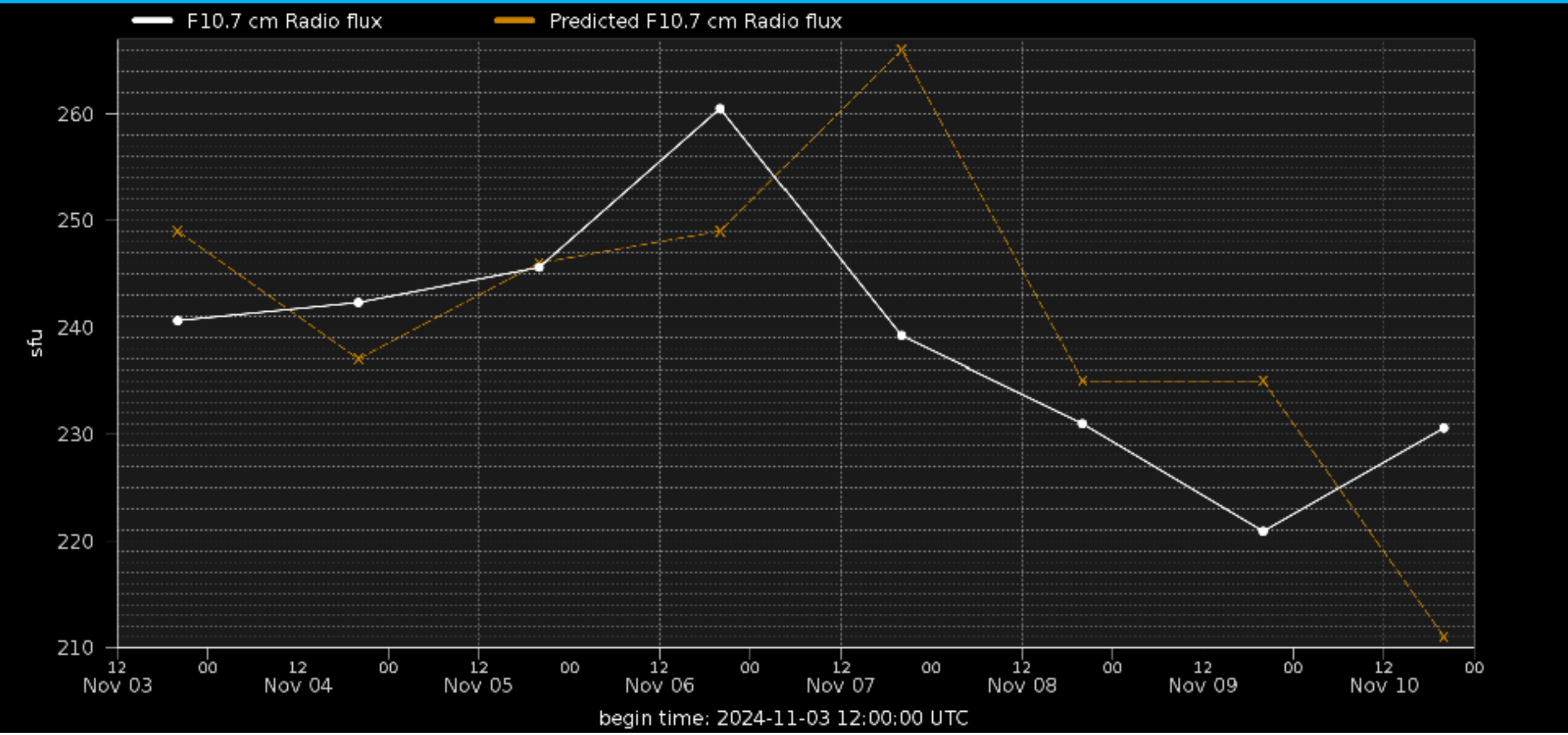
H-alpha 2024-11-03



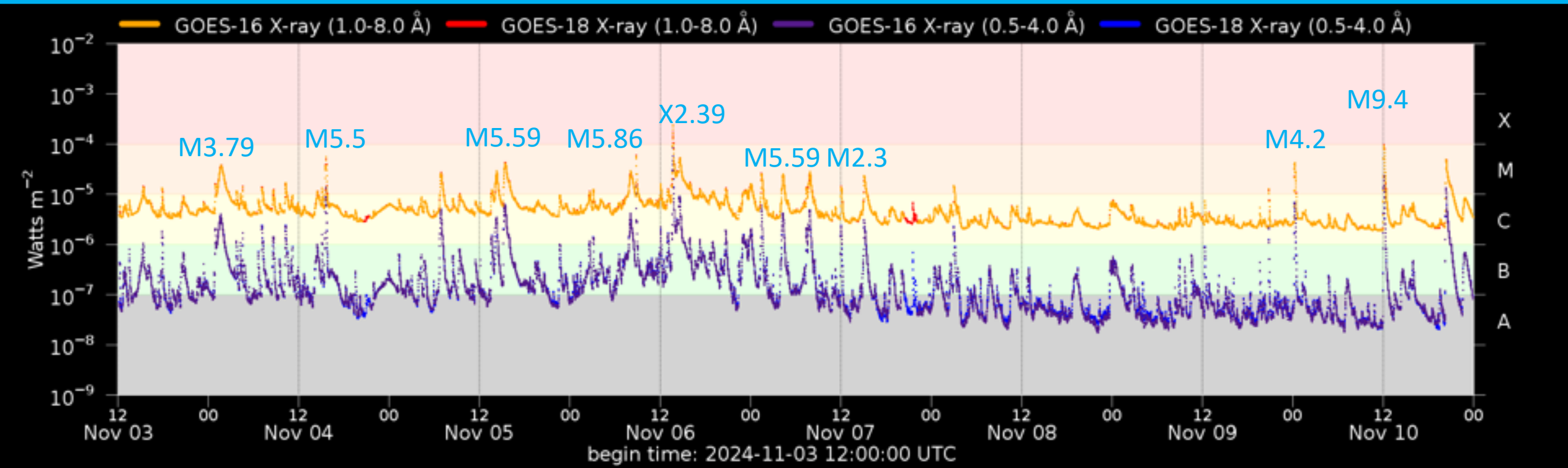
H-alpha 2024-11-10



Solar F10.7cm radio flux



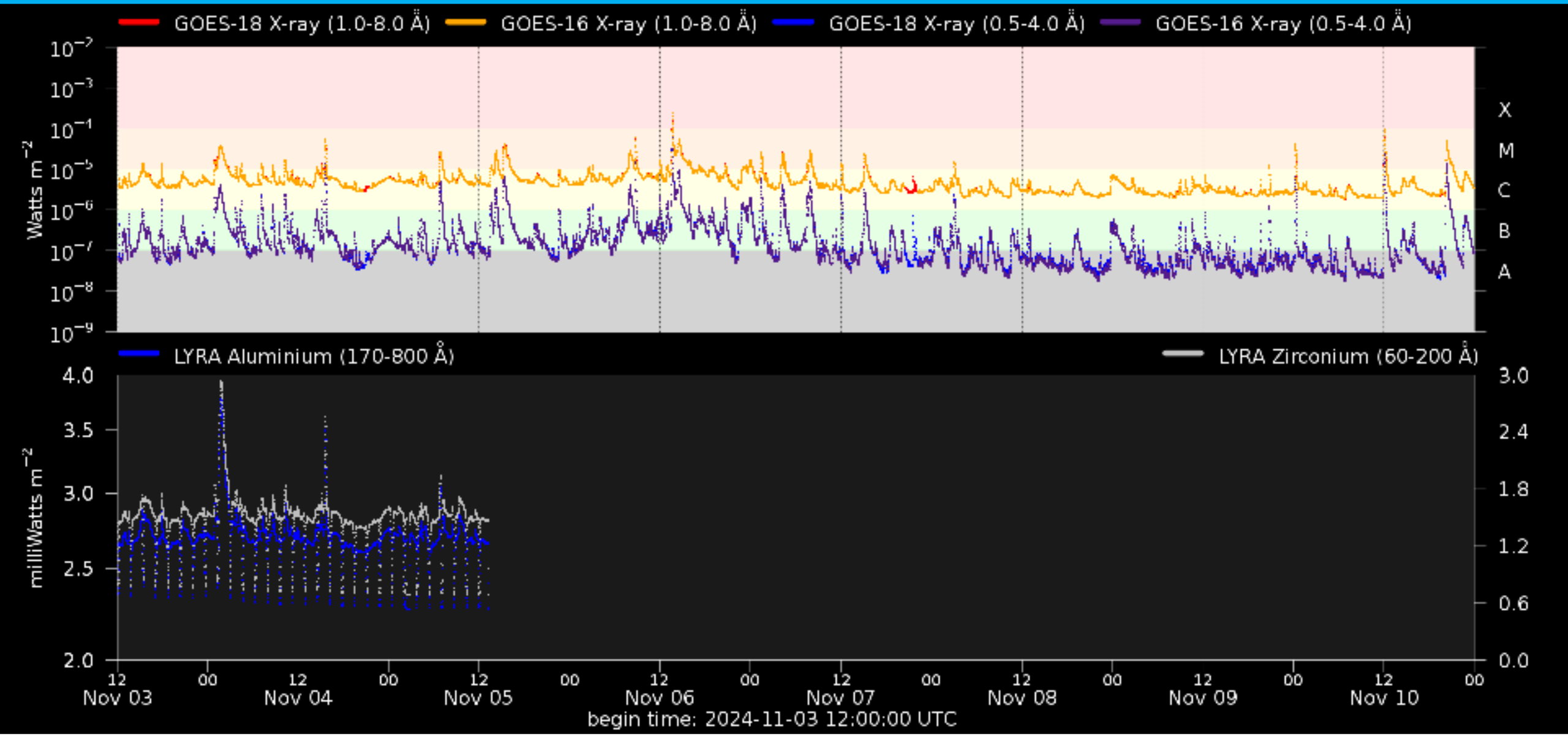
Flaring activity



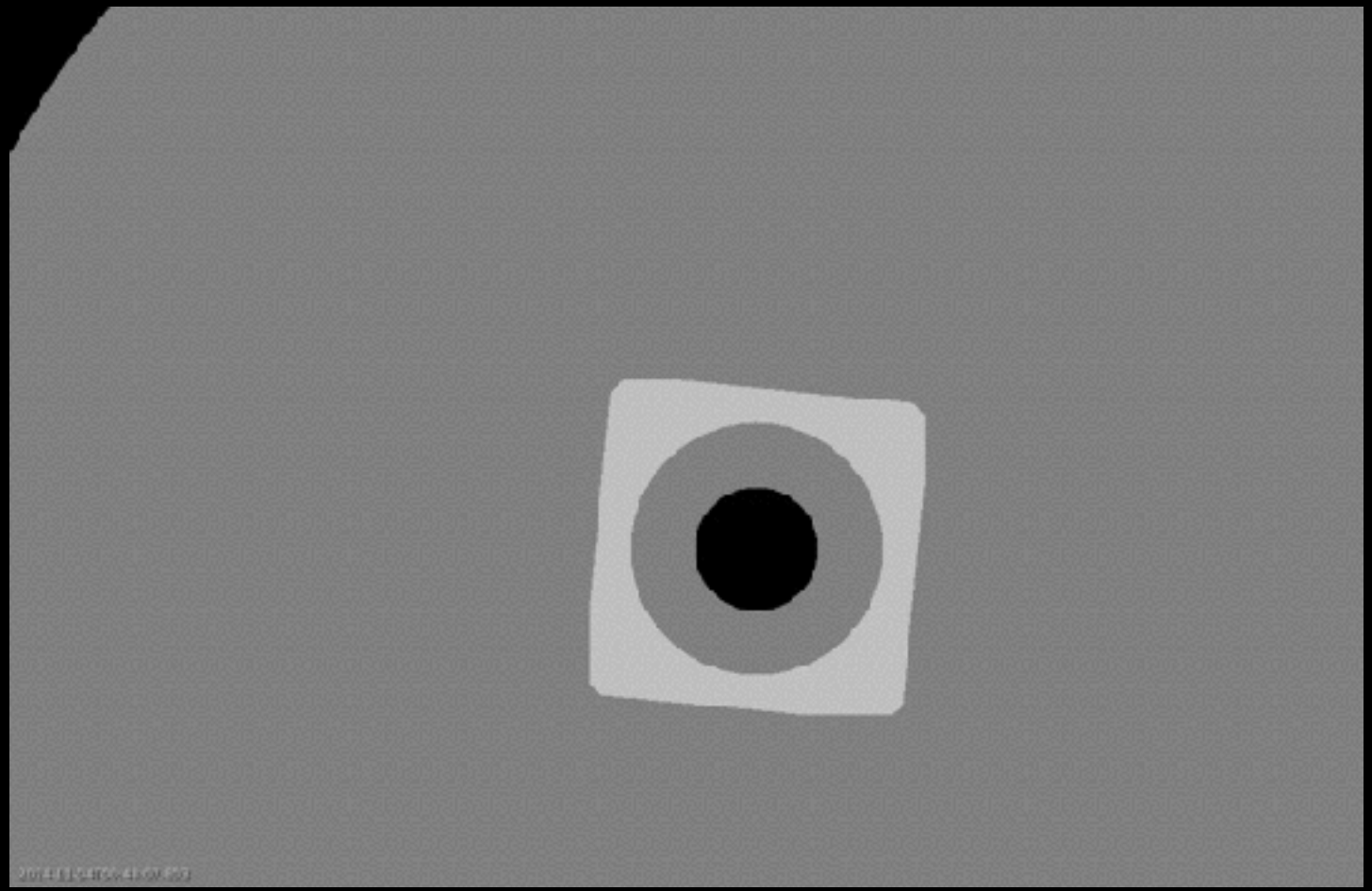
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2024-11-03	2024-11-04	2024-11-05	2024-11-06	2024-11-07	2024-11-08	2024-11-09	2024-11-10
Probability (%)	99|80|20	99|85|15	99|90|20	99|92|23	99|96|26	99|99|30	99|98|28	99|90|14
Observed (#)	06|04|00	06|11|00	07|05|00	07|10|01	06|07|00	13|01|00	08|01|00	00|00|00

Solar X-Ray and UV flux



Coronal Mass Ejections



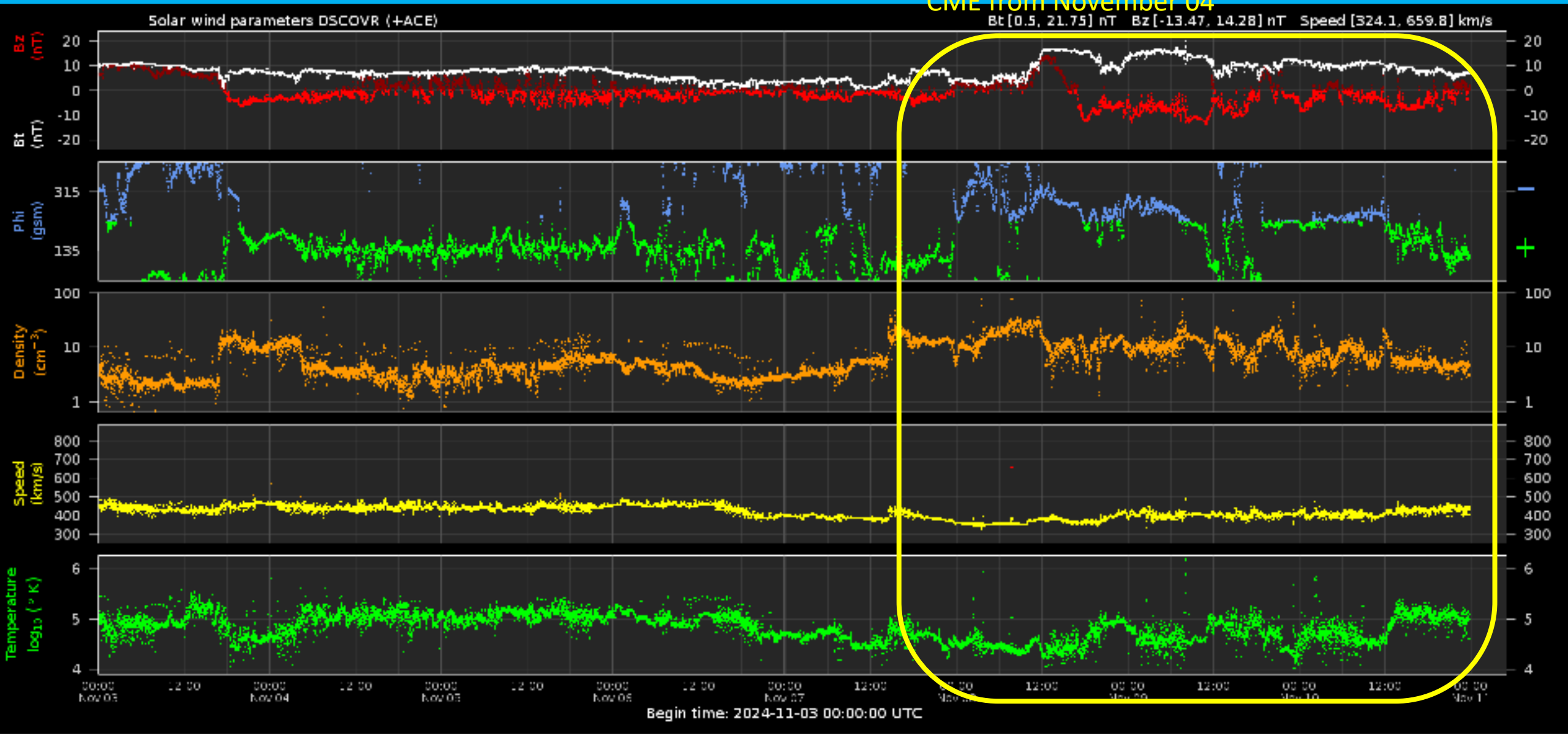
Solar Wind and

Geomagnetic Activity

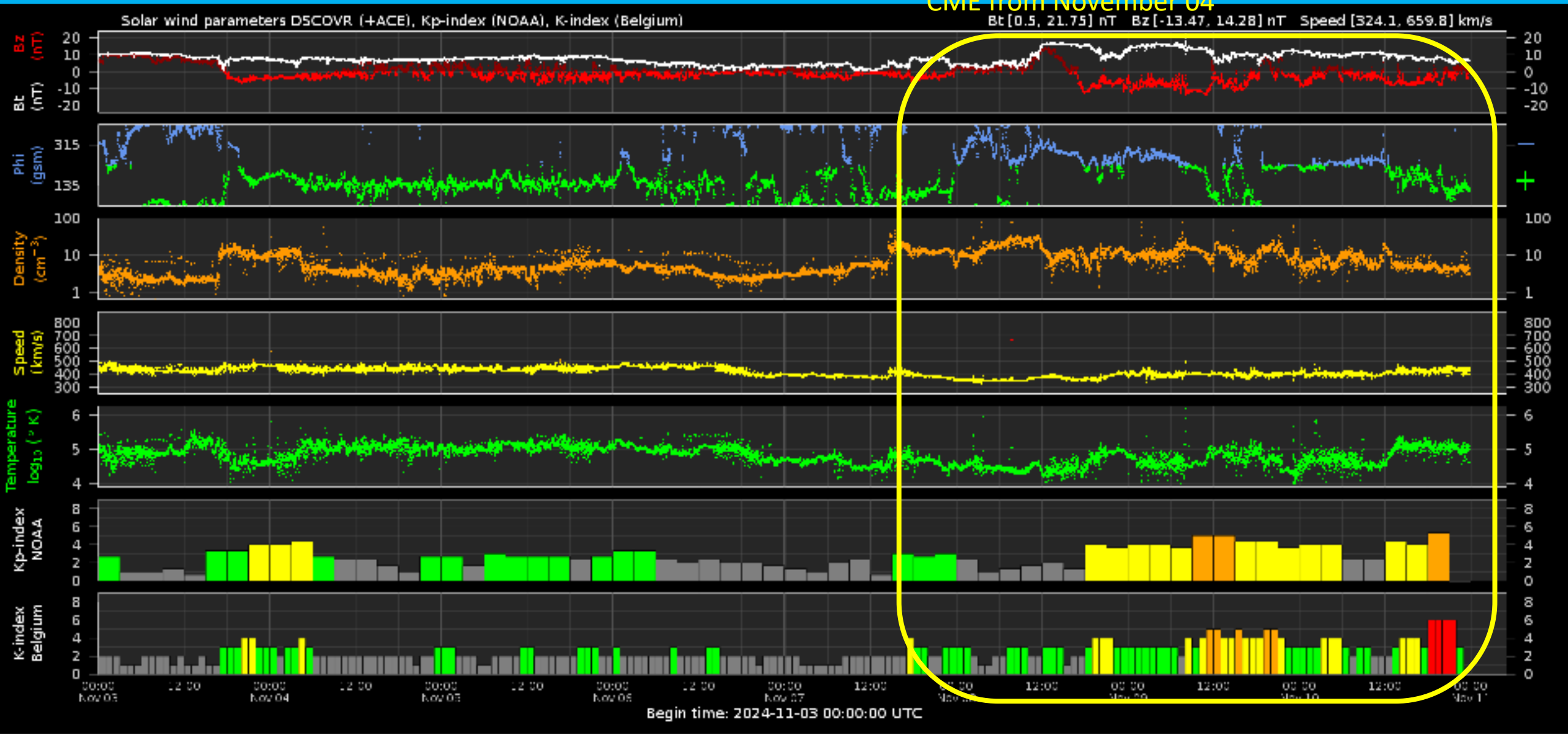
Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

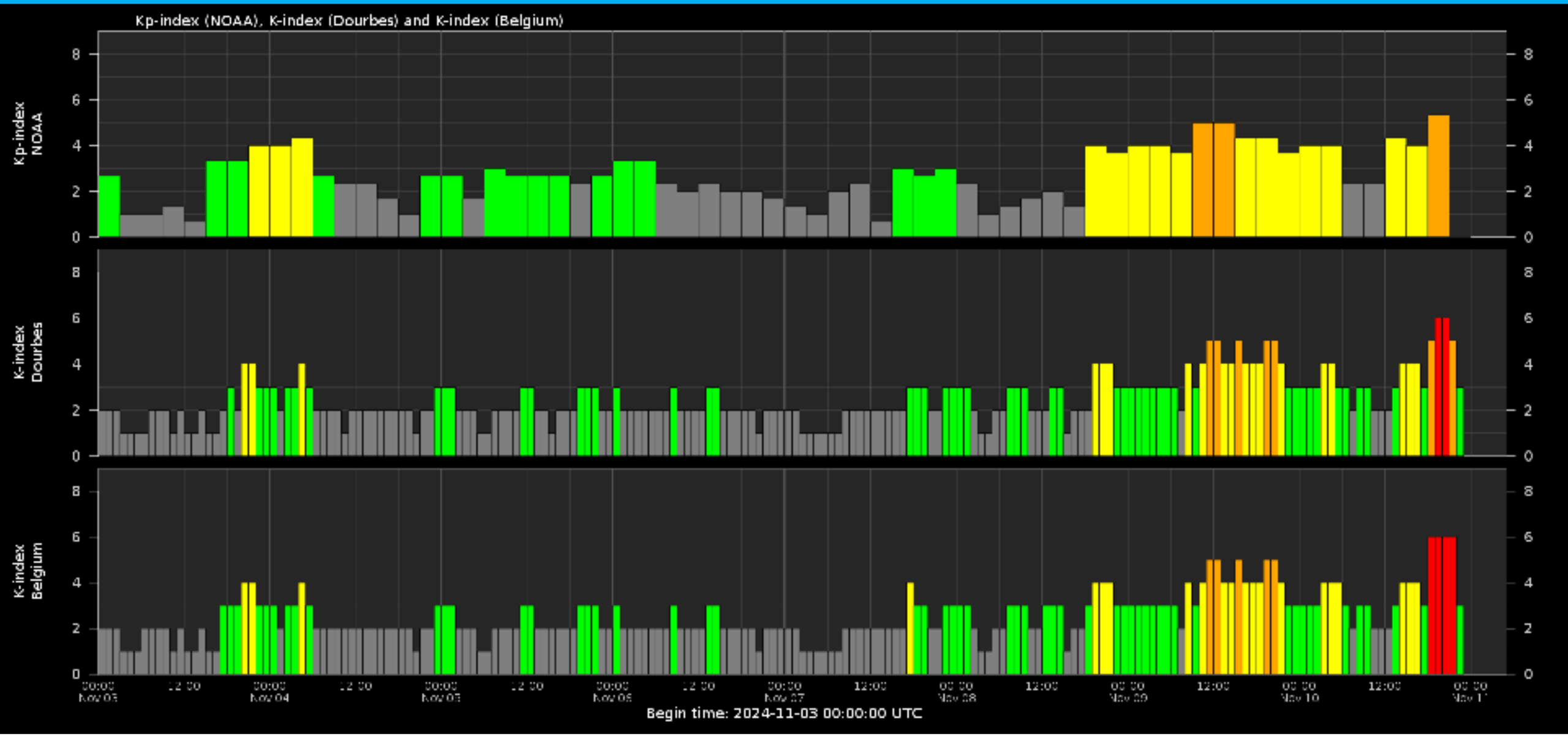
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)

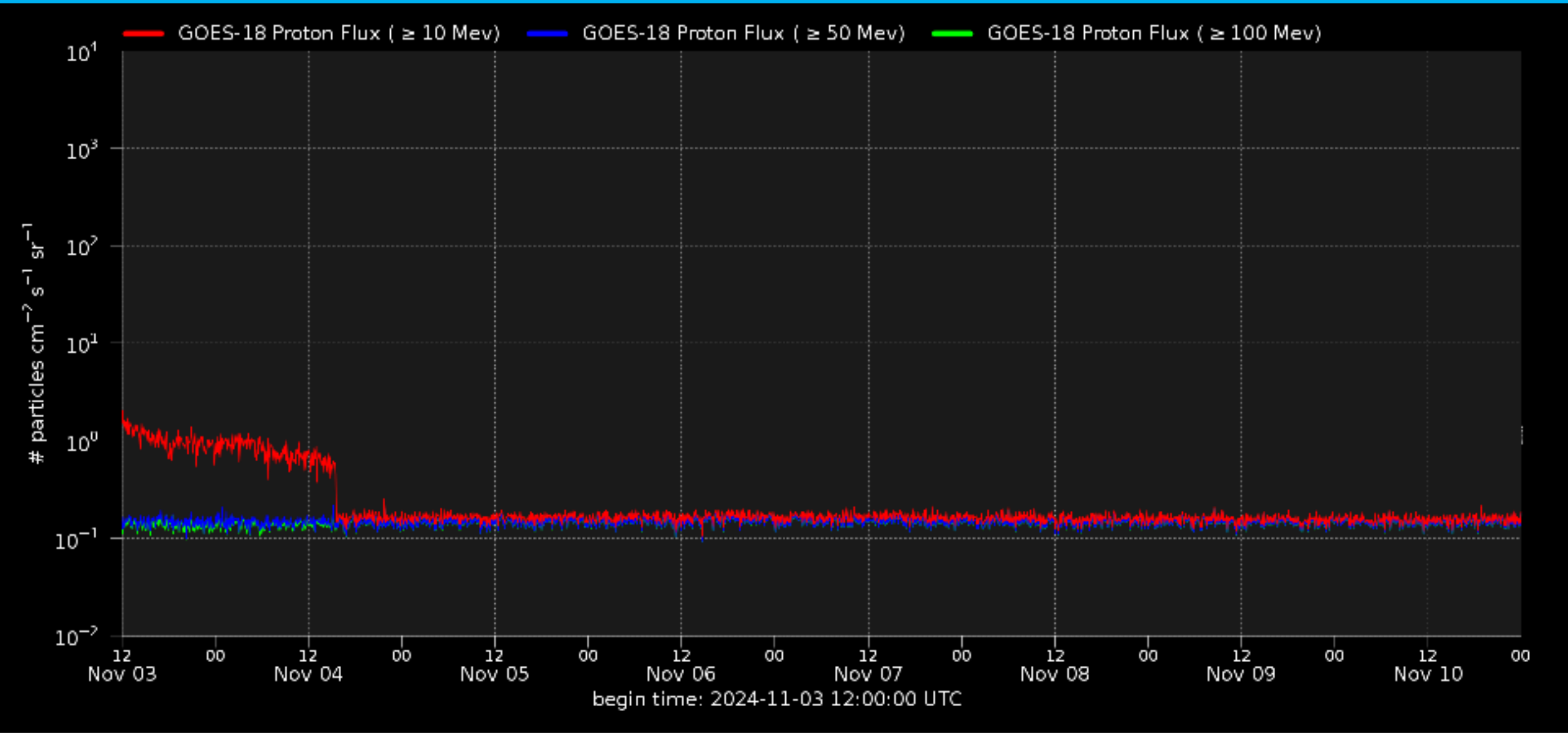


Energetic Particles

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

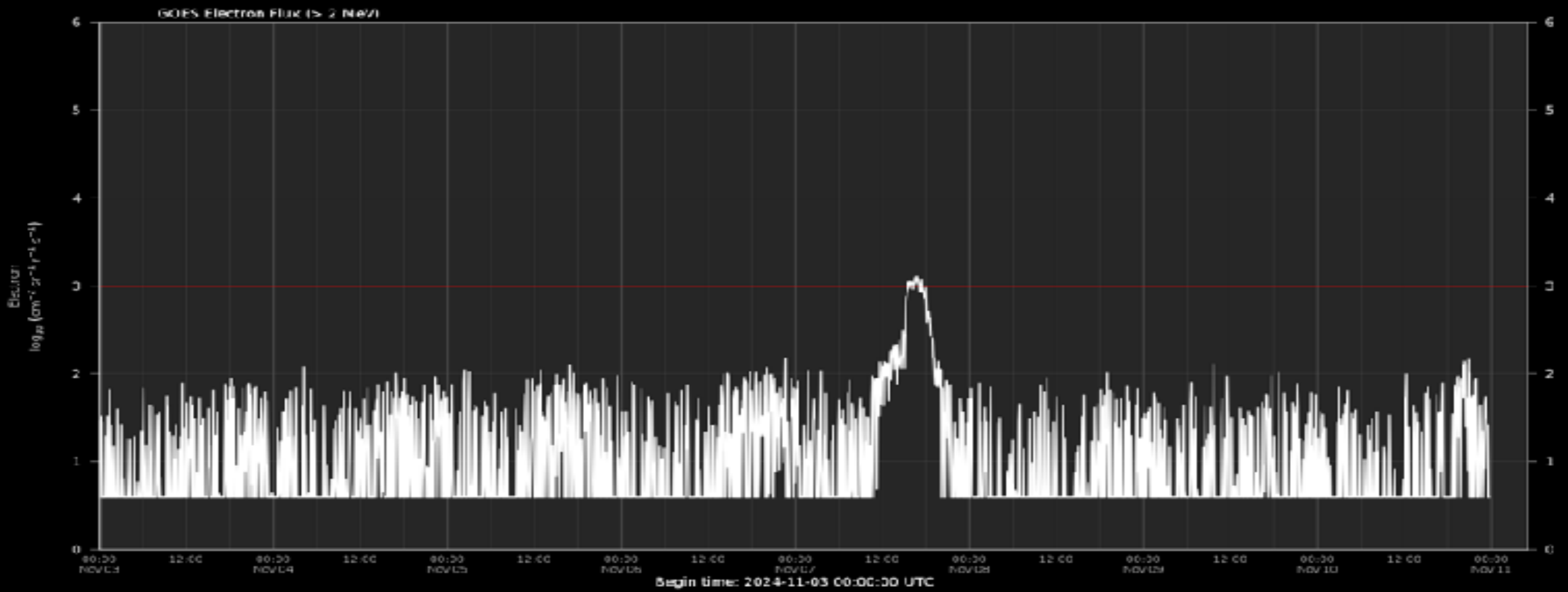
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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

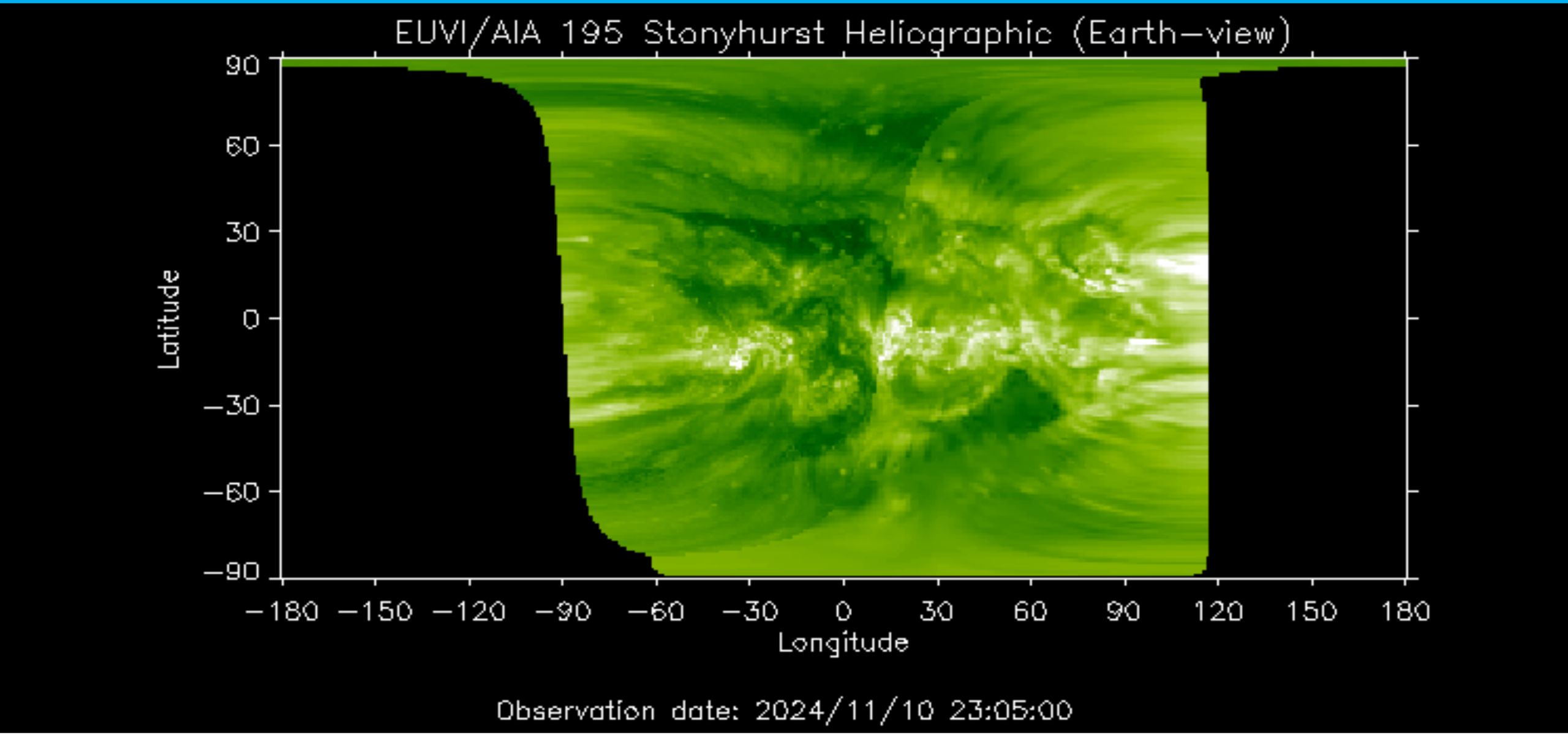


Outlook

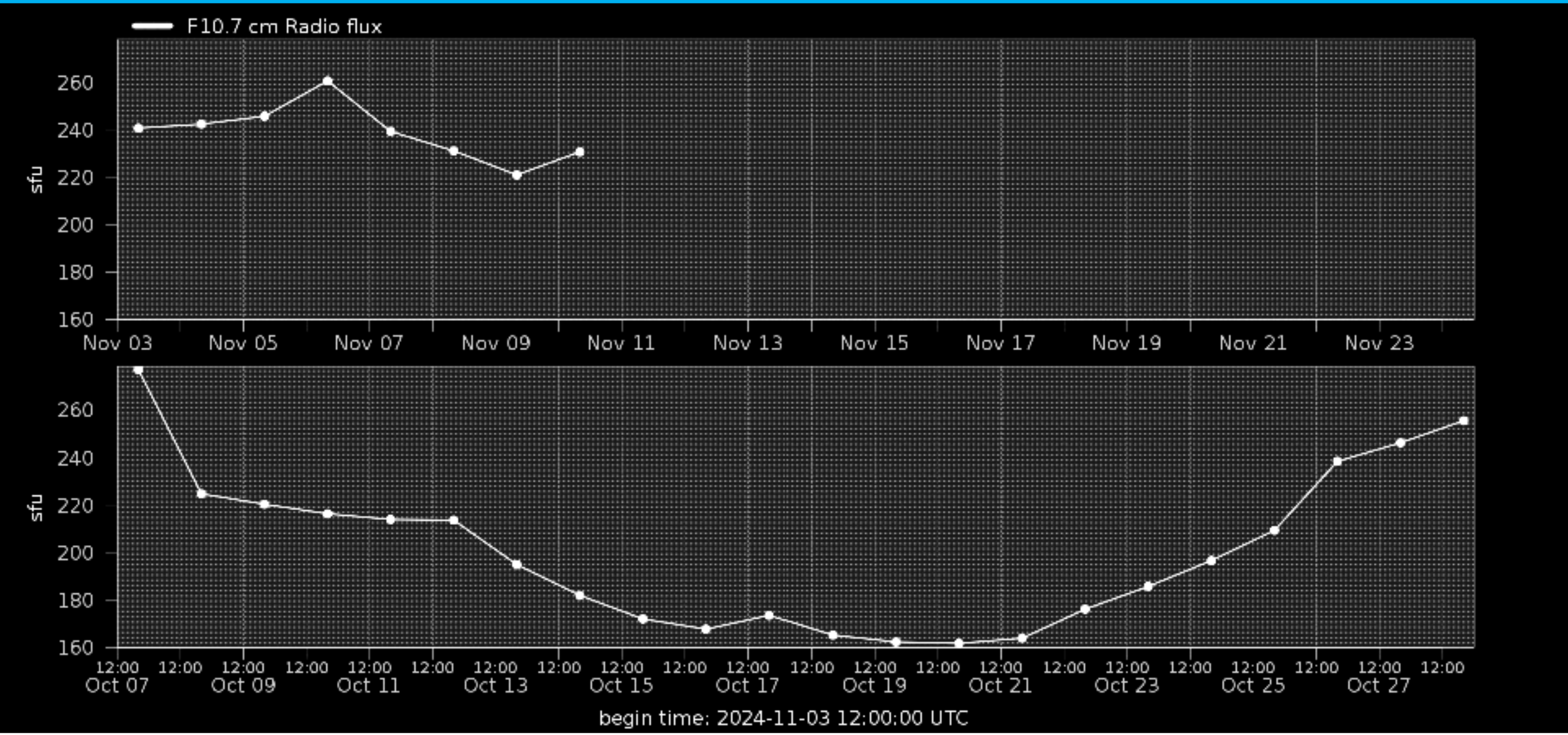
Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

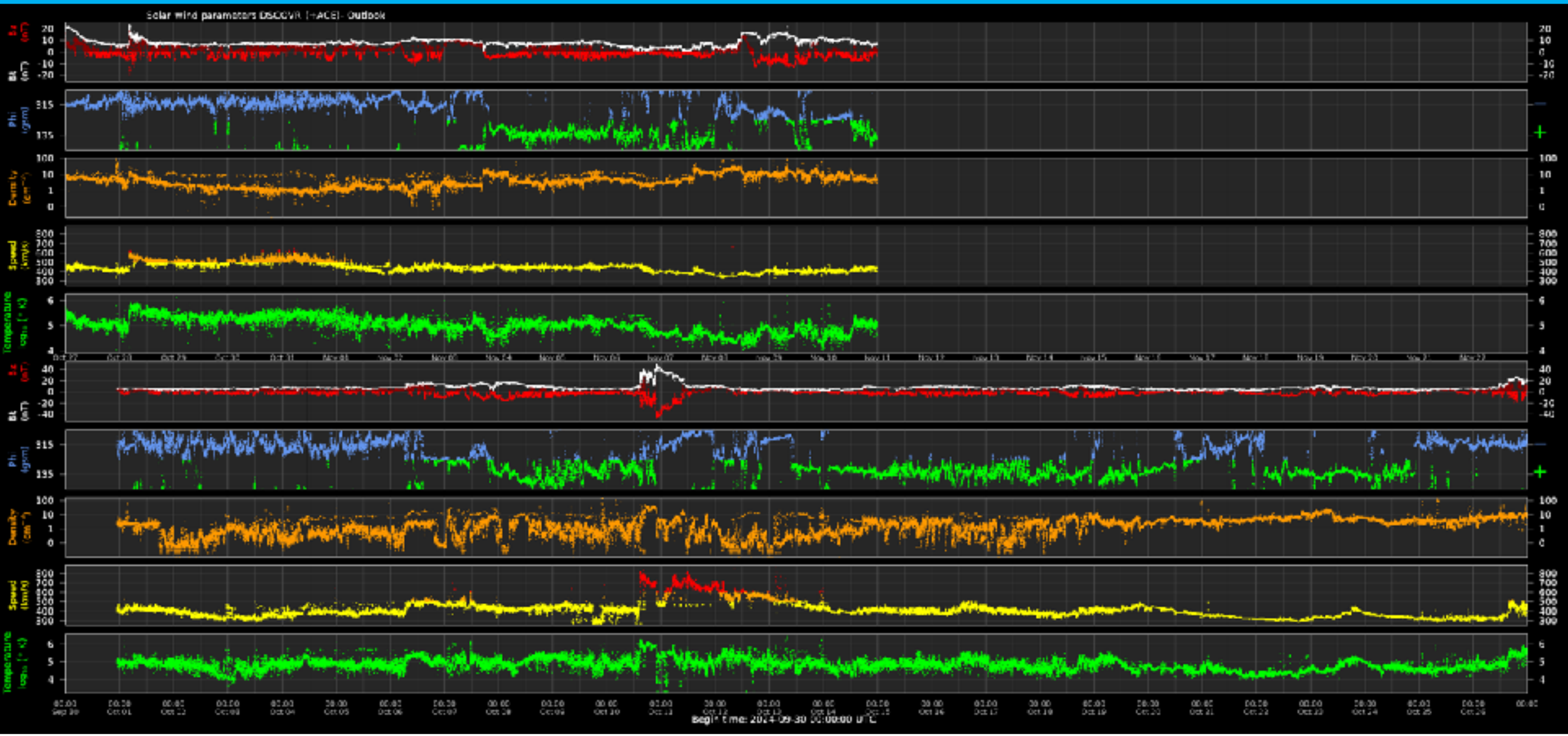
Outlook: Solar activity



Outlook: Solar F10.7cm radio flux

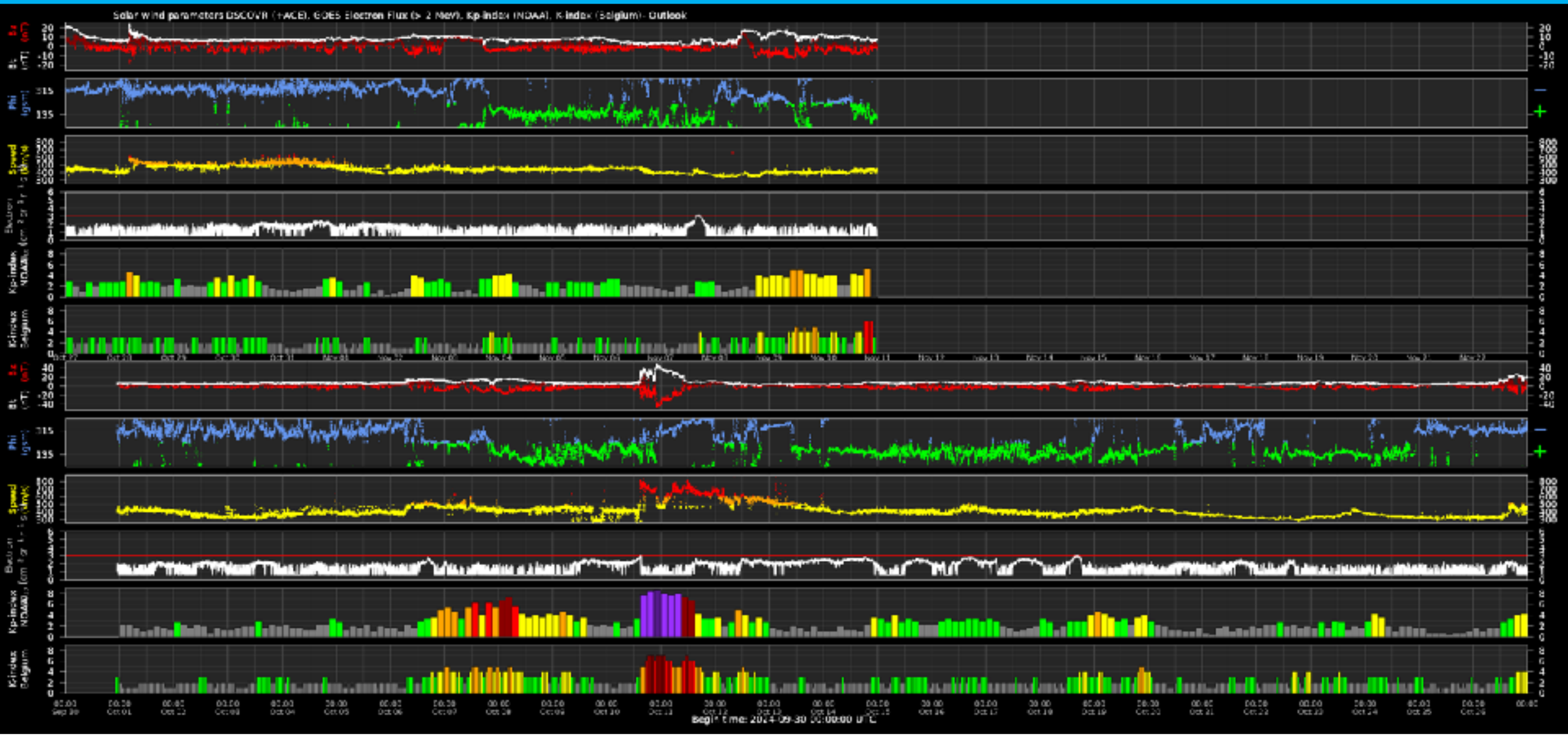


Outlook: Solar wind parameters



Outlook: Geomagnetic activity

Outlook: Electron Flux at GEO Outlook



PECASUS

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Pecasus related events

Anything notable that is Pecasus related?

- GNSS:
  - Scintillation advisory
  - VTEC advisory
- HF COM:
  - Moderate short wave fadeout due to X-class flare

SIDC Space Weather Briefing

See you at our next briefing!

Or visit us at www.sidc.be

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be