

# SIDC Space Weather Briefing

27 October 2025-02 November 2025

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& the SIDC forecaster team



Royal Observatory  
of Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

# Summary Report

Solar activity from 2025-10-27 00:00 to 2025-11-02 23:59

|                |                                                                            |
|----------------|----------------------------------------------------------------------------|
| Active regions | SIDC Sunspot Group 607 ( NOAA 4254) to SIDC Sunspot Group 684 (NOAA 4270)  |
| Flares         | # C-class flare: 13 # M-class flare: 1 # X-class flare: 0                  |
| Coronal Holes  | Three positive polarity CHs                                                |
| CMEs           | Several large backsided ones. Two with possible Earth directed components. |

|               |                            |
|---------------|----------------------------|
| Proton flux   | Below threshold            |
| Electron flux | Above threshold due to HSS |

## Solar wind and geomagnetic conditions

|                        |                                                                                    |
|------------------------|------------------------------------------------------------------------------------|
| ICMEs                  | One weak arrival                                                                   |
| Solar wind conditions  | B : 1.17 - 15.66 nT //Bz: -14.73 nT to 12.65 nT //Speed: 261.3 - 798.2km/s         |
| Geomagnetic conditions | max K <sub>Be</sub> : 5.0, max K <sub>p</sub> (NOAA): 5.33, Minor Storm conditions |

All Quiet Alert: Off

Solar Activity

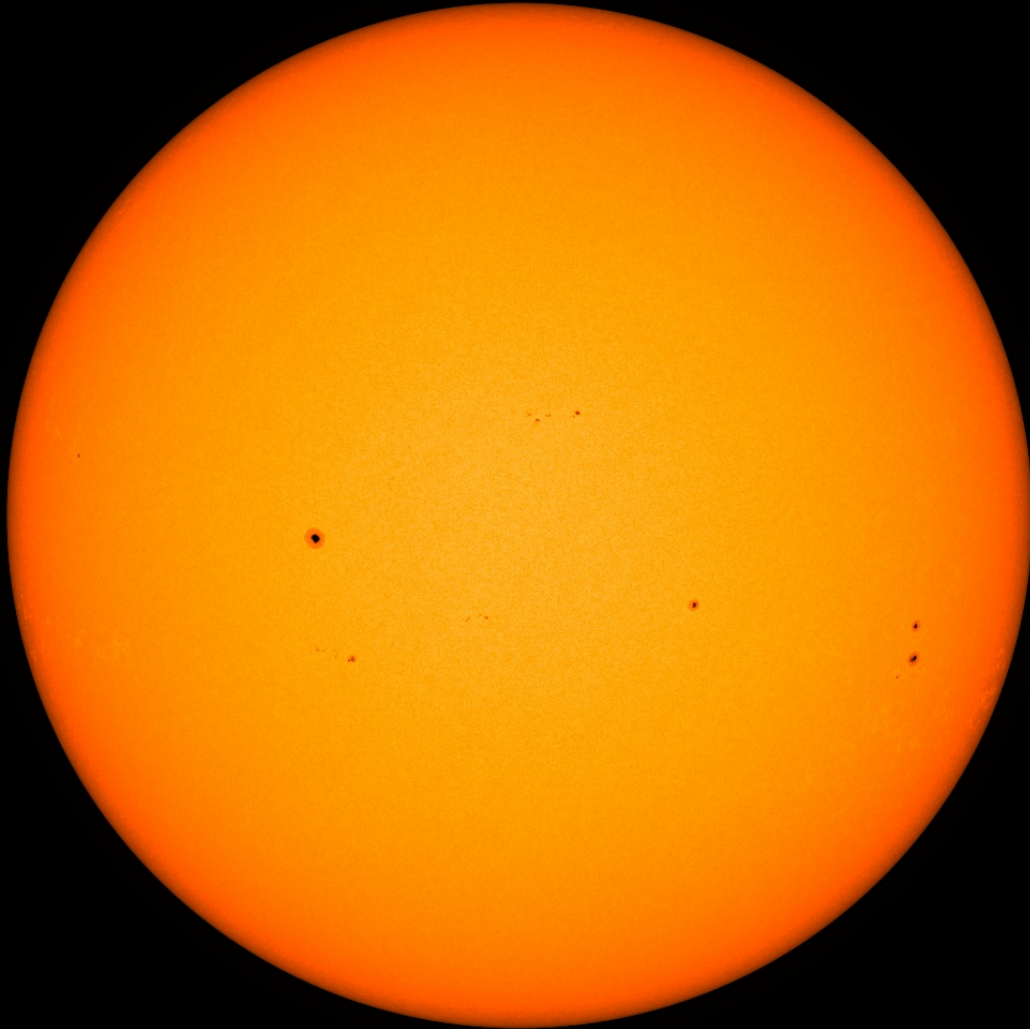


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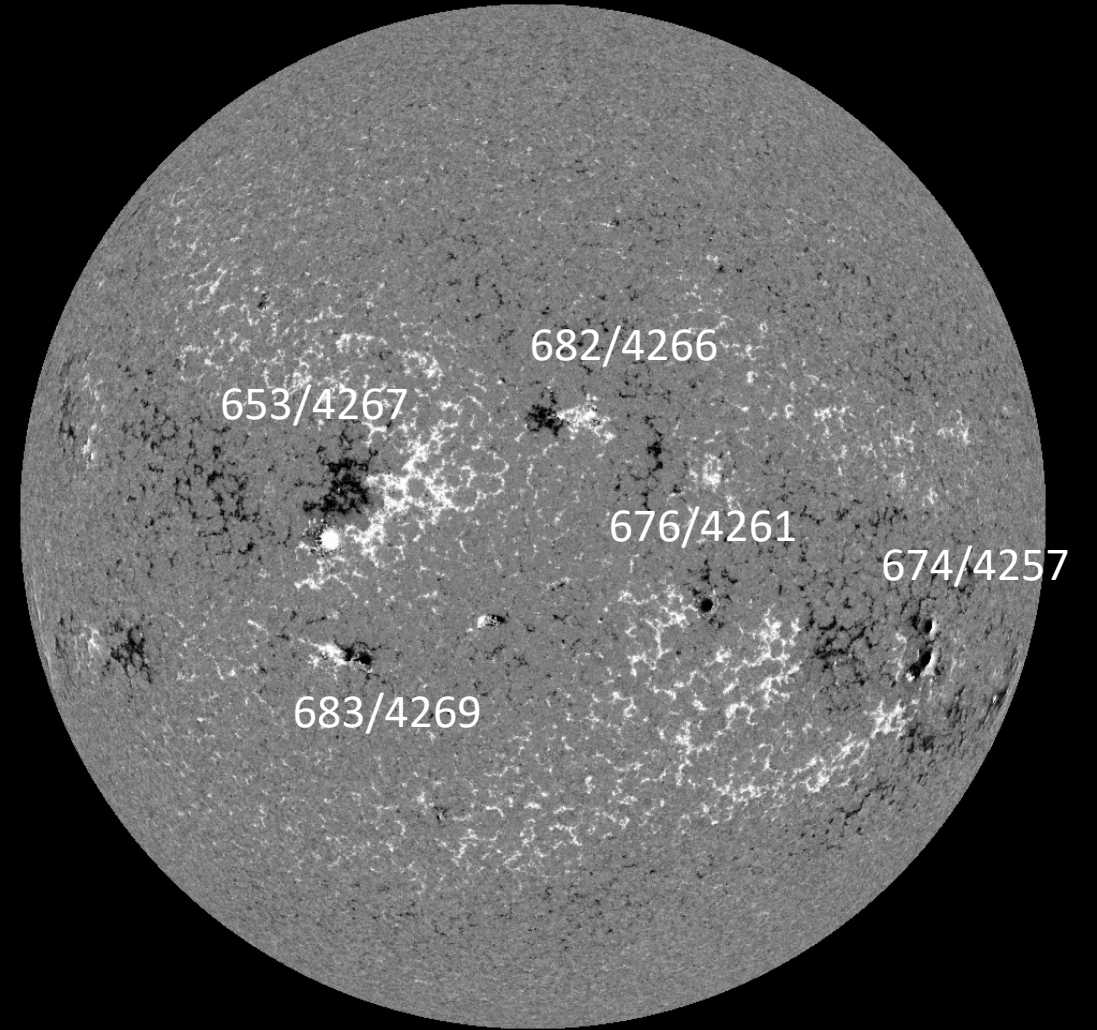
# Solar active regions

SDO/HMI White Light 2025-10-27



SDO/HMI Continuum: 20251027\_120000

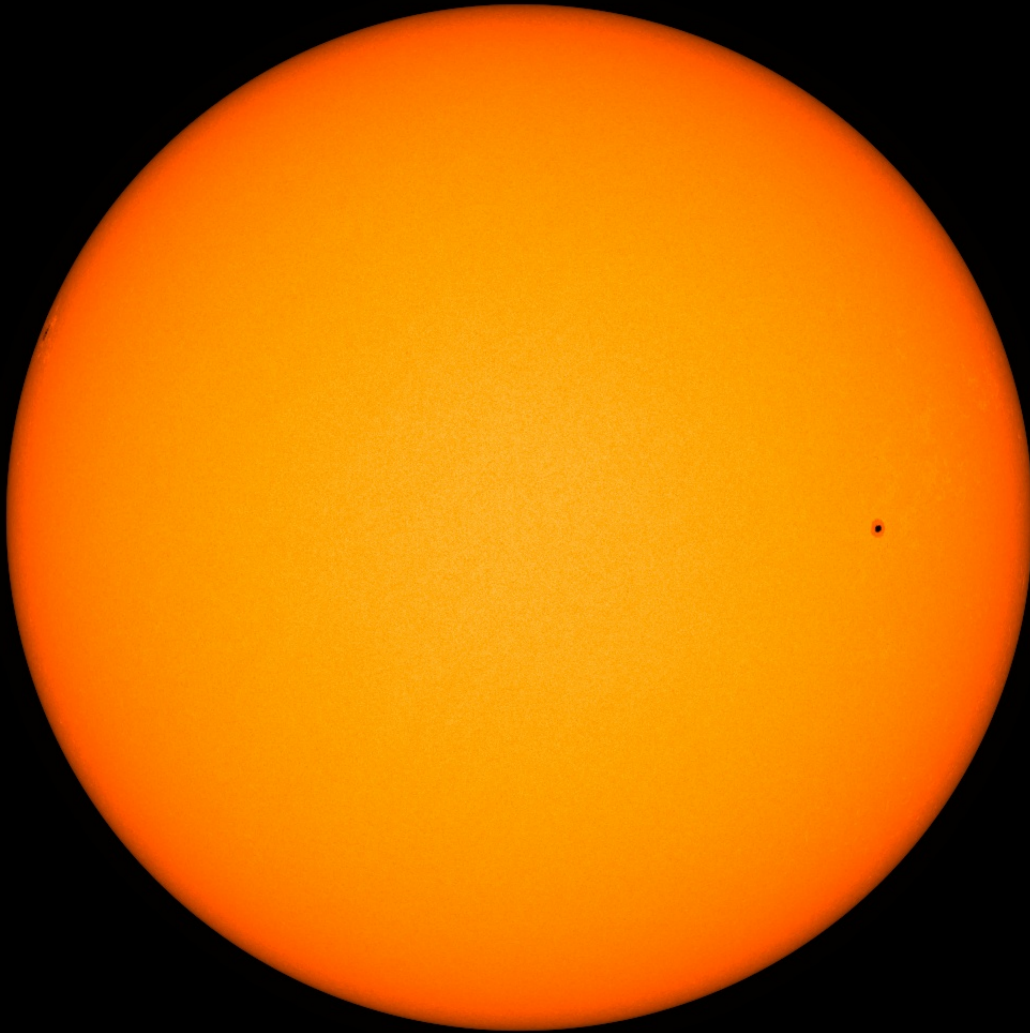
SDO/HMI Magnetogram 2025-10-27



SDO/HMI Magnetogram: 20251027\_120000

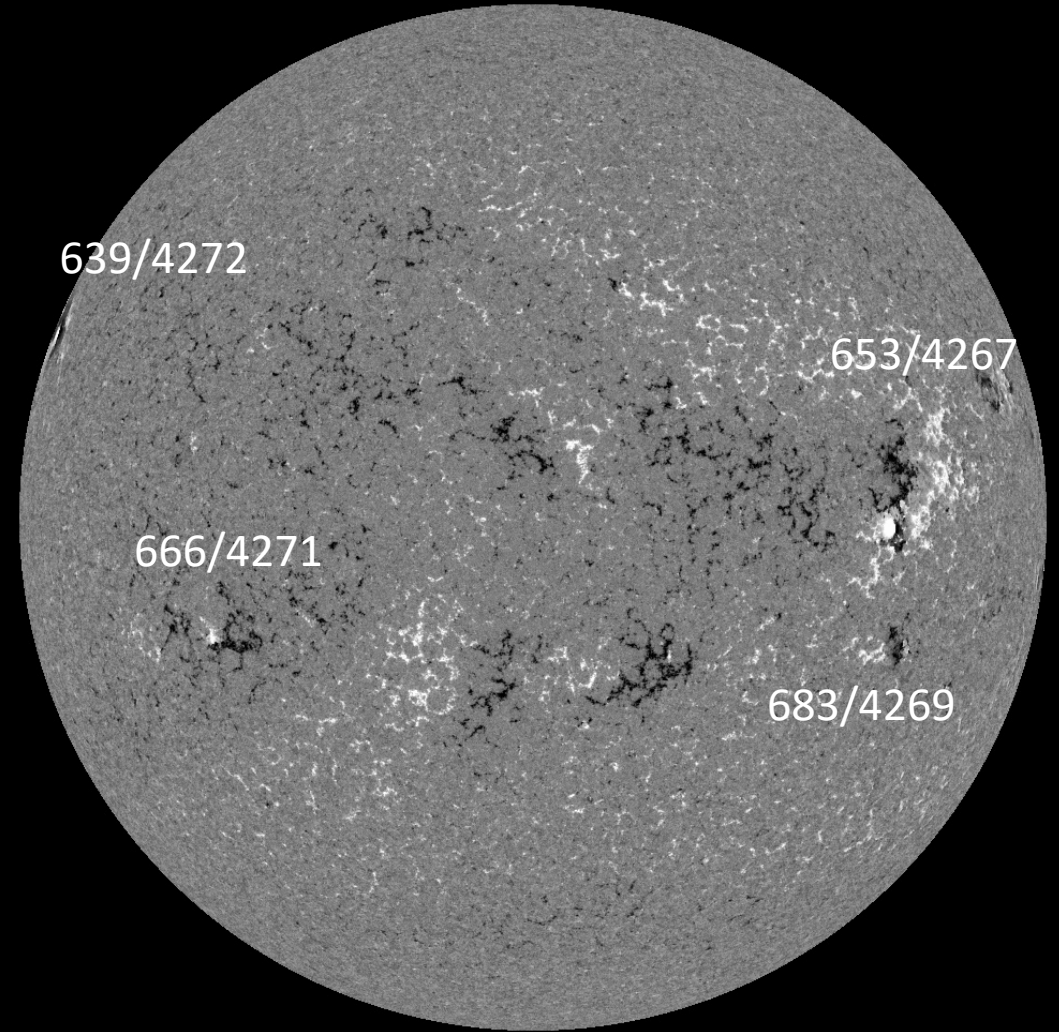
# Solar active regions

SDO/HMI White Light 2025-11-01



SDO/HMI Quick-Look Continuum: 20251101\_120000

SDO/HMI Magnetogram 2025-11-01

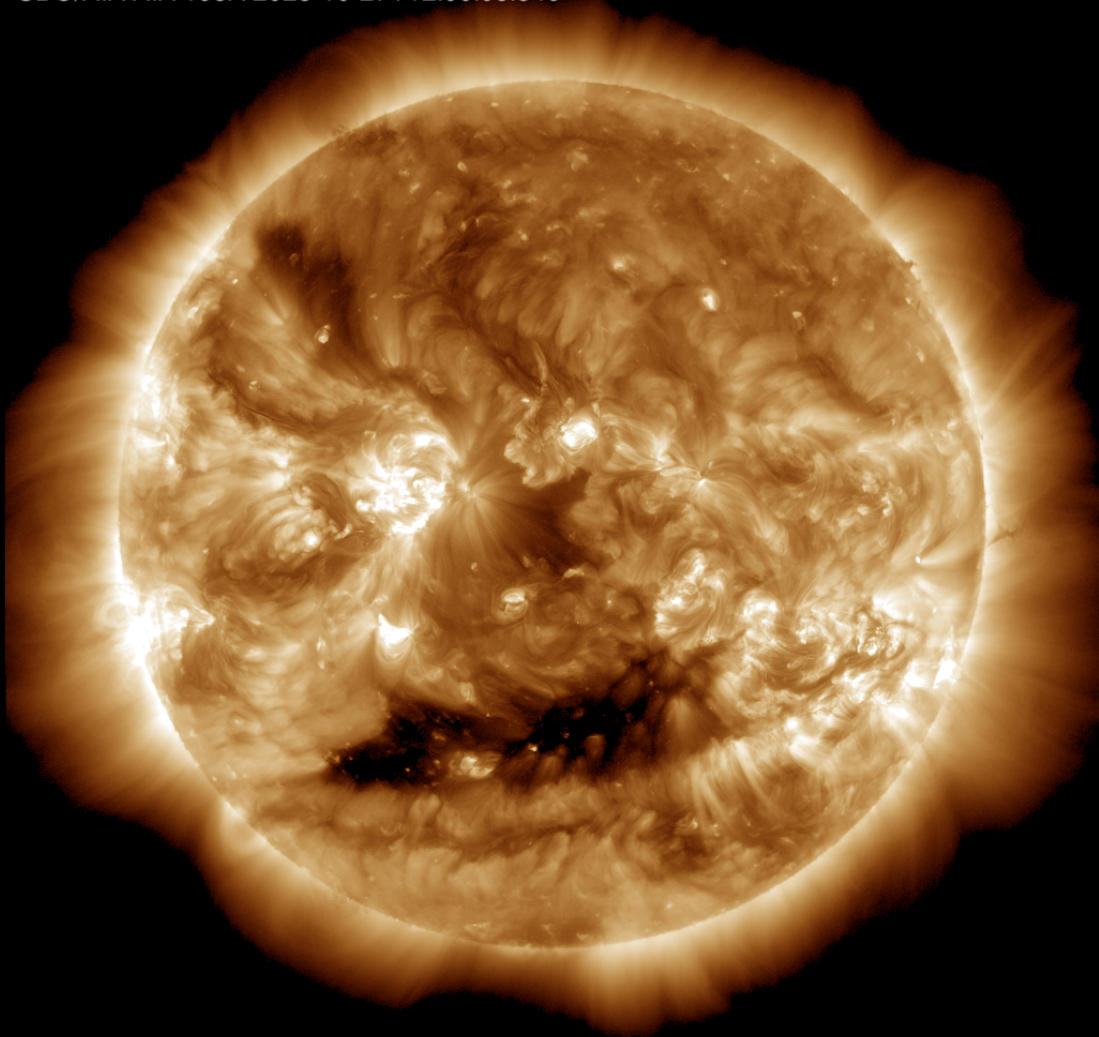


SDO/HMI Quick-Look Magnetogram: 20251101\_120000

# Coronal holes

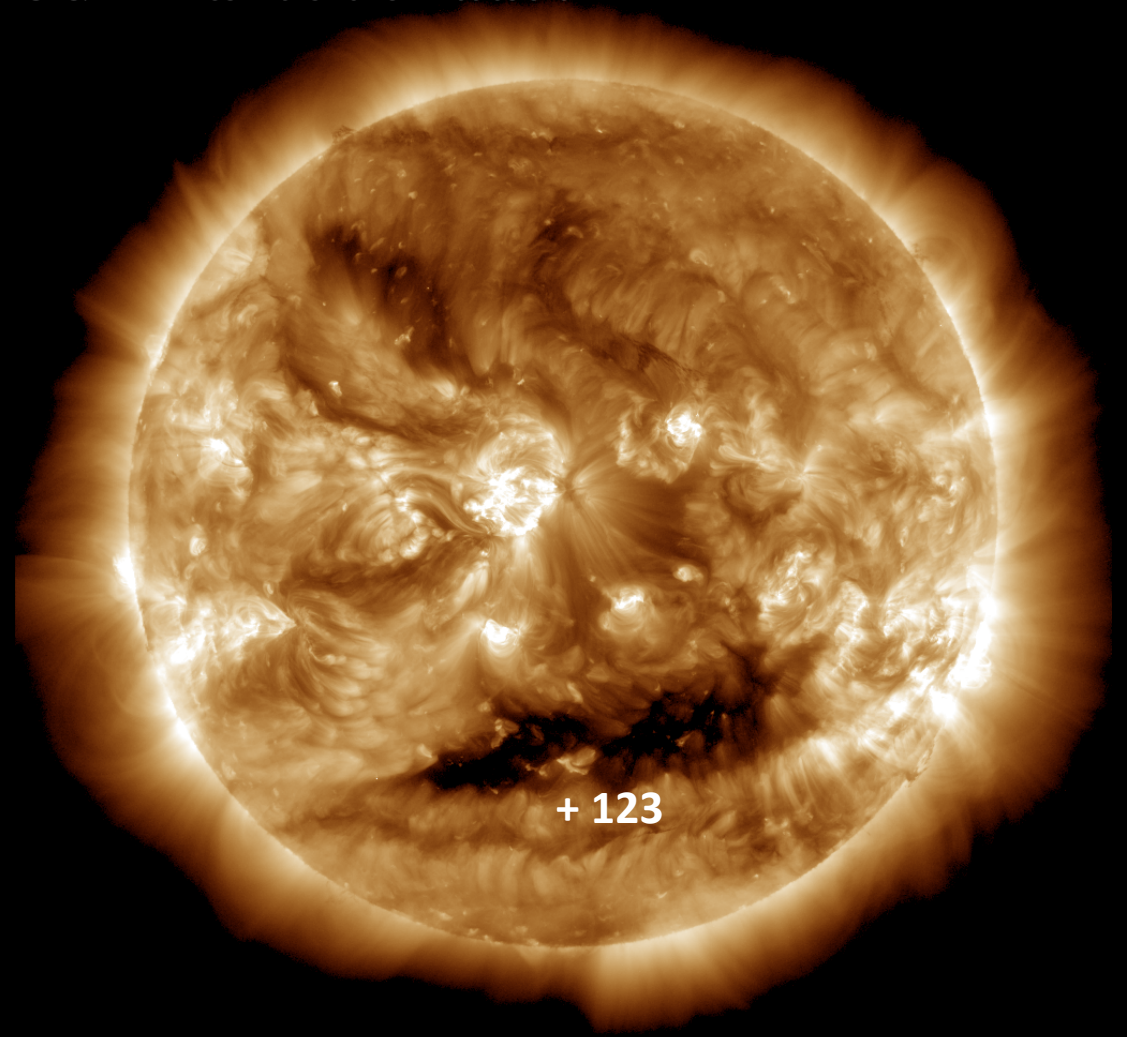
SDO/AIA 19.3 nm 2025-10-27

SDO/AIA AIA 193Å 2025-10-27T12:00:05.846



SDO/AIA 19.3 nm 2025-10-28

SDO/AIA AIA 193Å 2025-10-28T12:00:05.846

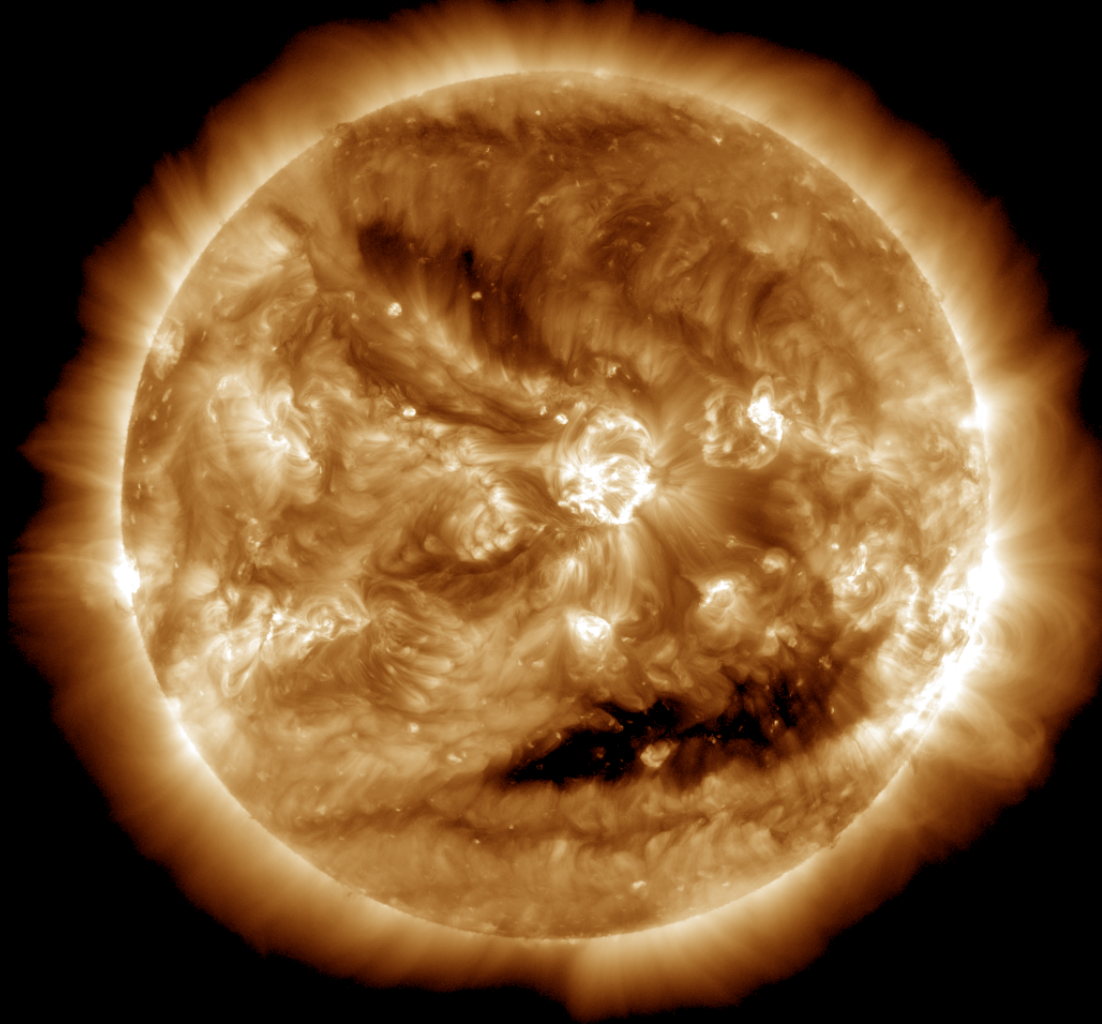


+ 123

# Coronal holes

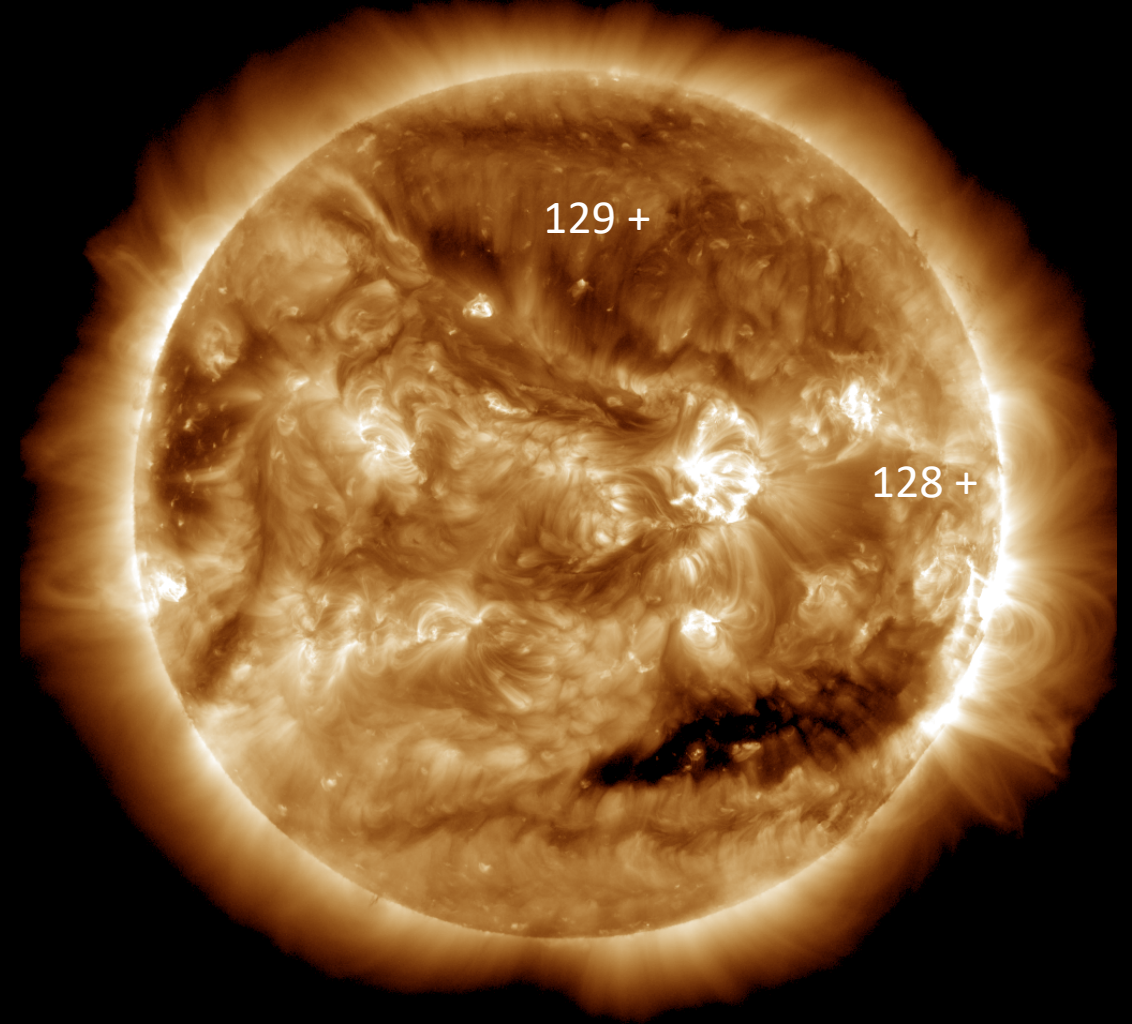
SDO/AIA 19.3 nm 2025-10-29

SDO/AIA AIA 193Å 2025-10-29T12:00:05.843



SDO/AIA 19.3 nm 2025-10-30

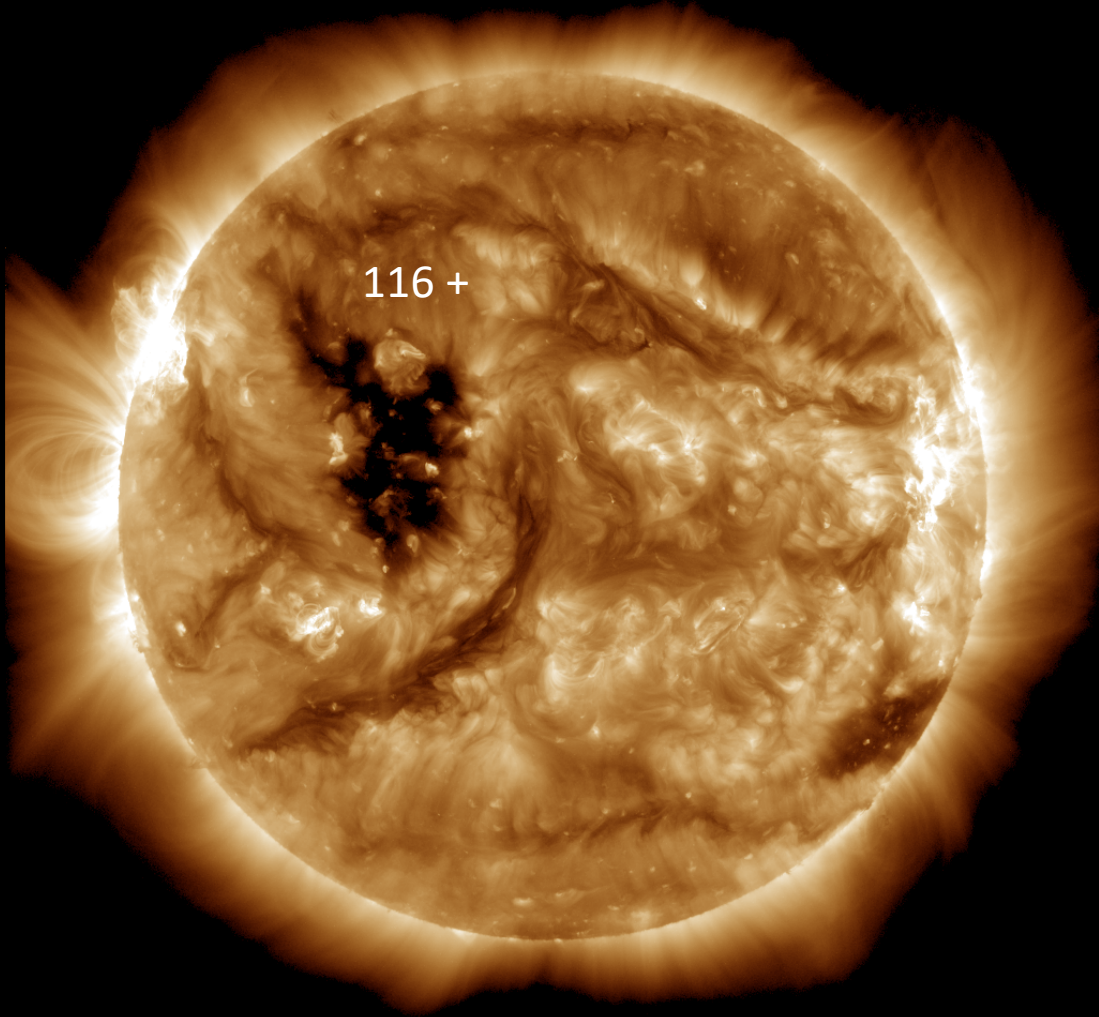
SDO/AIA AIA 193Å 2025-10-30T12:00:05.847



# Coronal holes

SDO/AIA 19.3 nm 2025-11-02

SDO/AIA AIA 193Å 2025-11-02T12:00:05.843



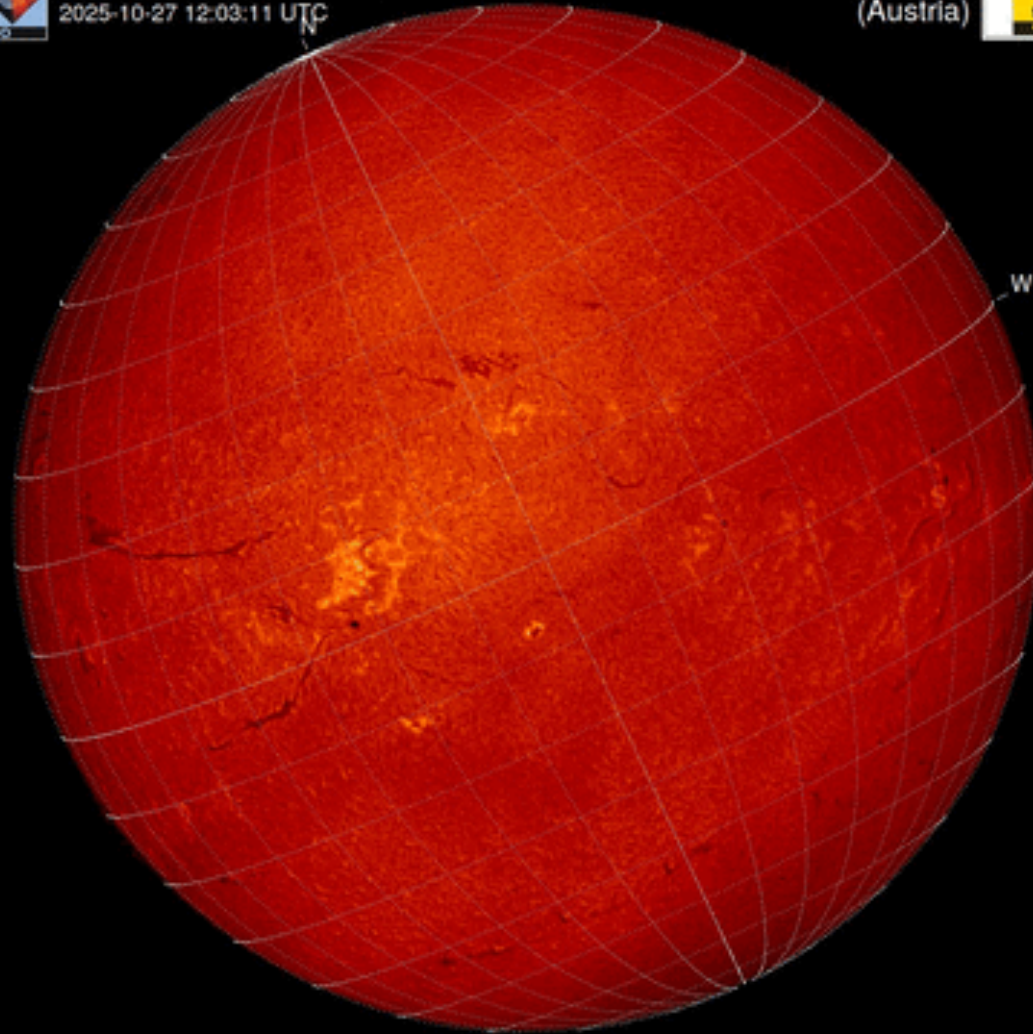
# Filaments & Filament eruptions

H-alpha 2025-10-27



Kanzelhöhe Observatory  
2025-10-27 12:03:11 UTC

University of Graz  
(Austria)

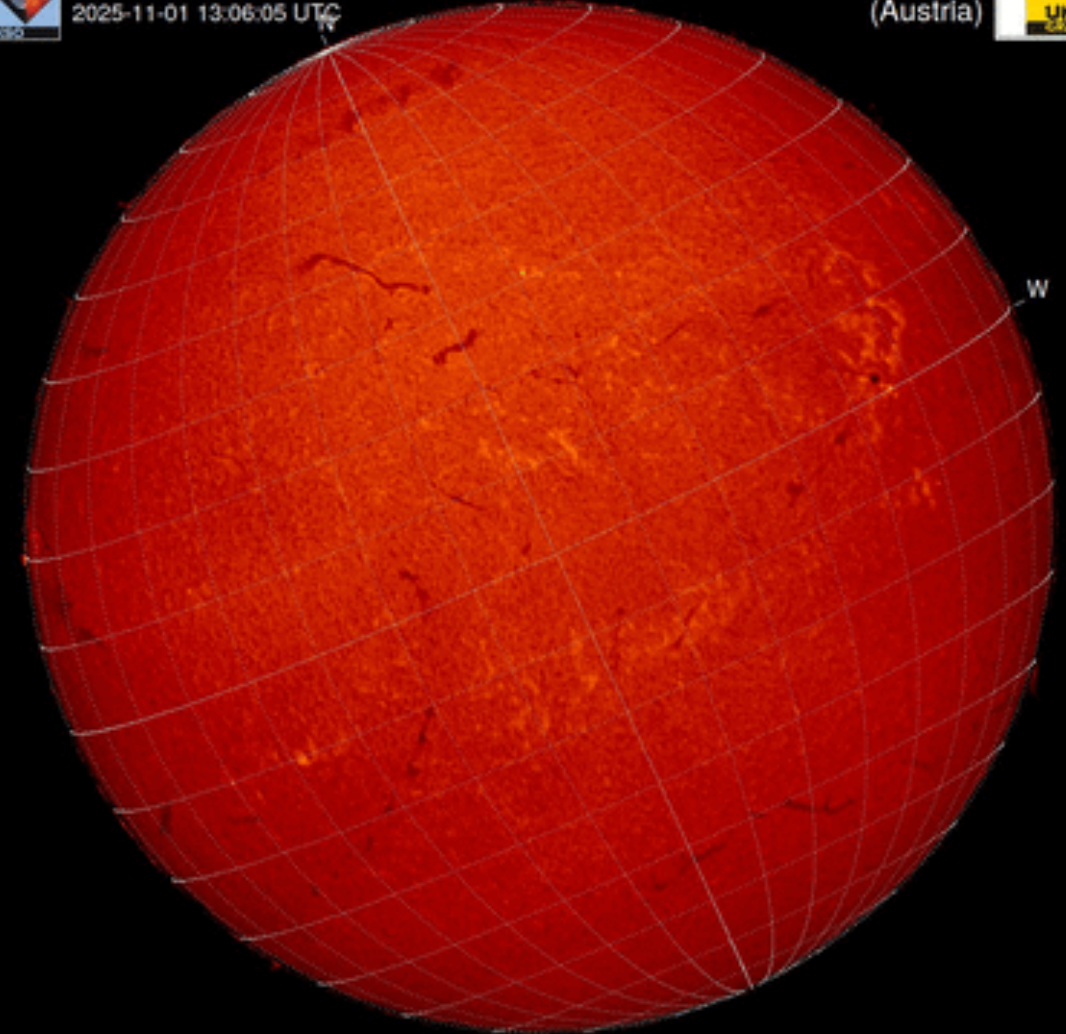


H-alpha 2025-11-02

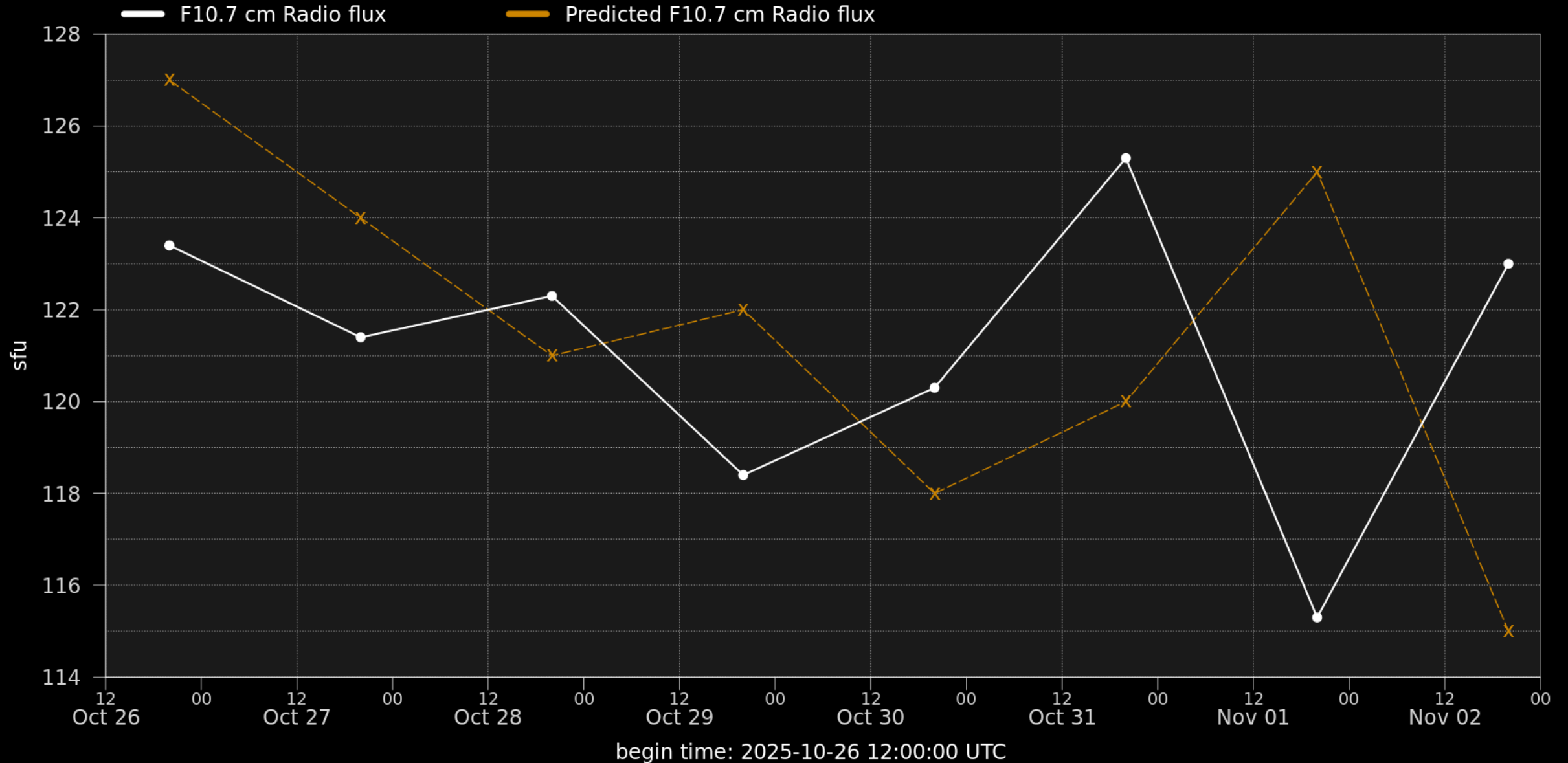


Kanzelhöhe Observatory  
2025-11-01 13:06:05 UTC

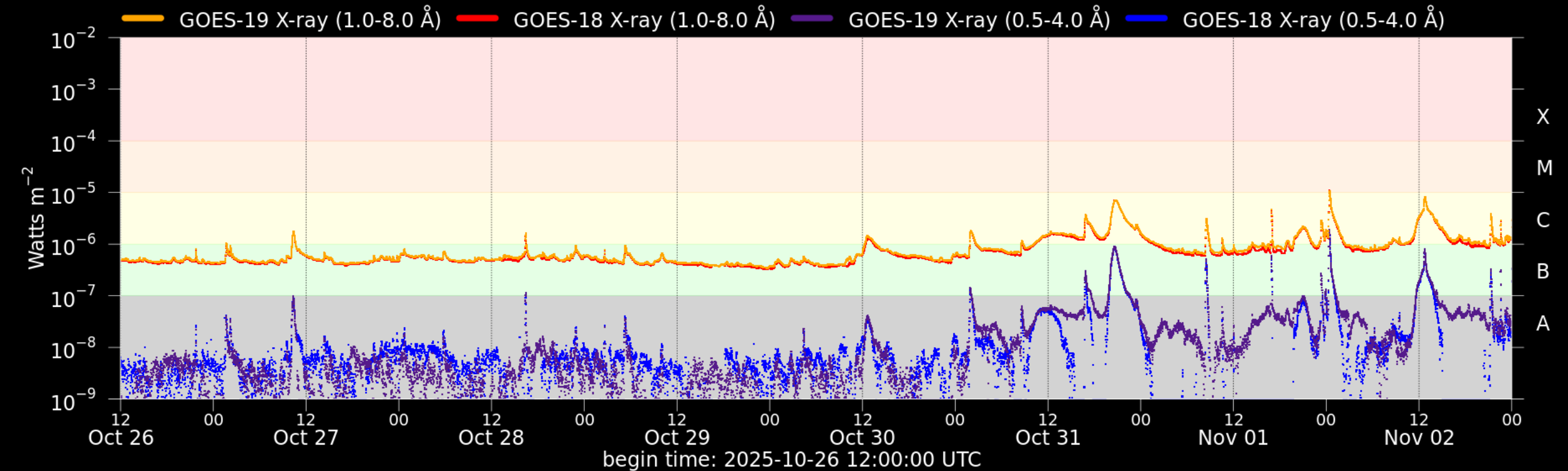
University of Graz  
(Austria)



# Solar F10.7cm radio flux



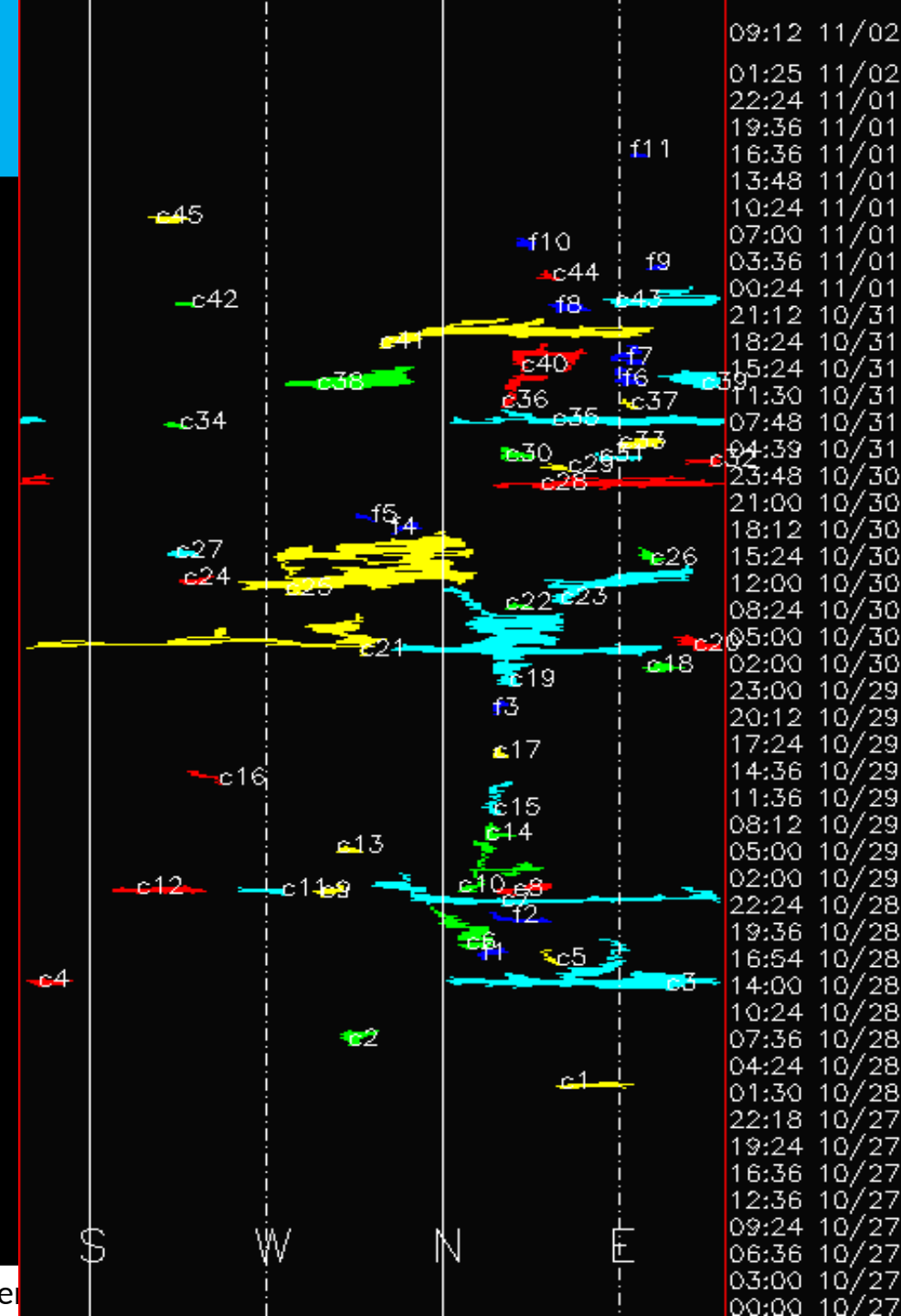
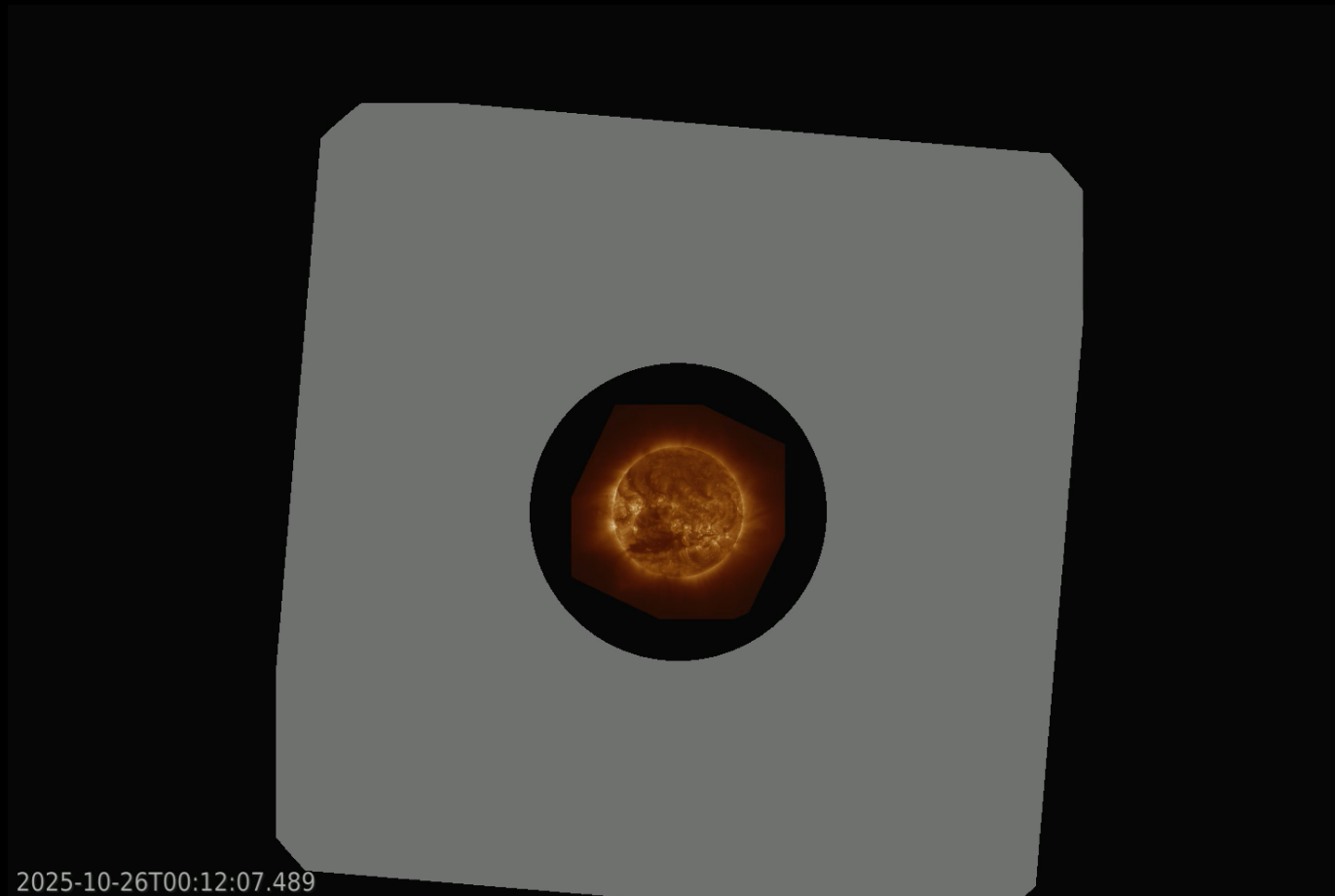
# Flaring activity



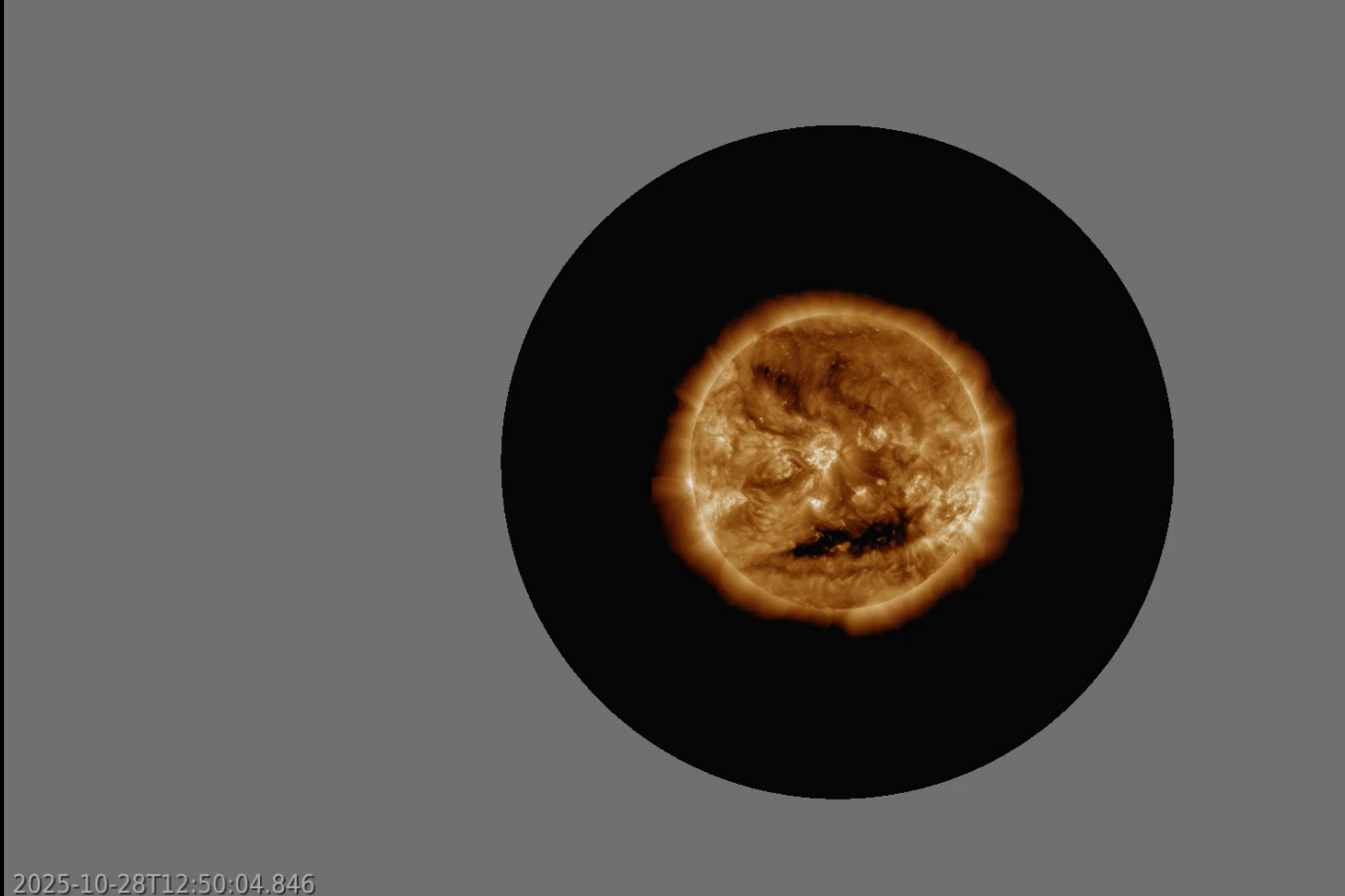
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

| Issue date      | 2025-10-26 | 2025-10-27 | 2025-10-28 | 2025-10-29 | 2025-10-30 | 2025-10-31 | 2025-11-01 | 2025-11-02 |
|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Probability (%) | 90 20 01   | 76 17 01   | 60 10 01   | 60 10 01   | 55 10 01   | 49 08 01   | 87 62 10   | 98 70 15   |
| Observed (#)    | 02 00 00   | 00 00 00   | 01 00 00   | 00 00 00   | 00 00 00   | 04 00 00   | 02 01 00   | 04 00 00   |

# Coronal Mass Ejections



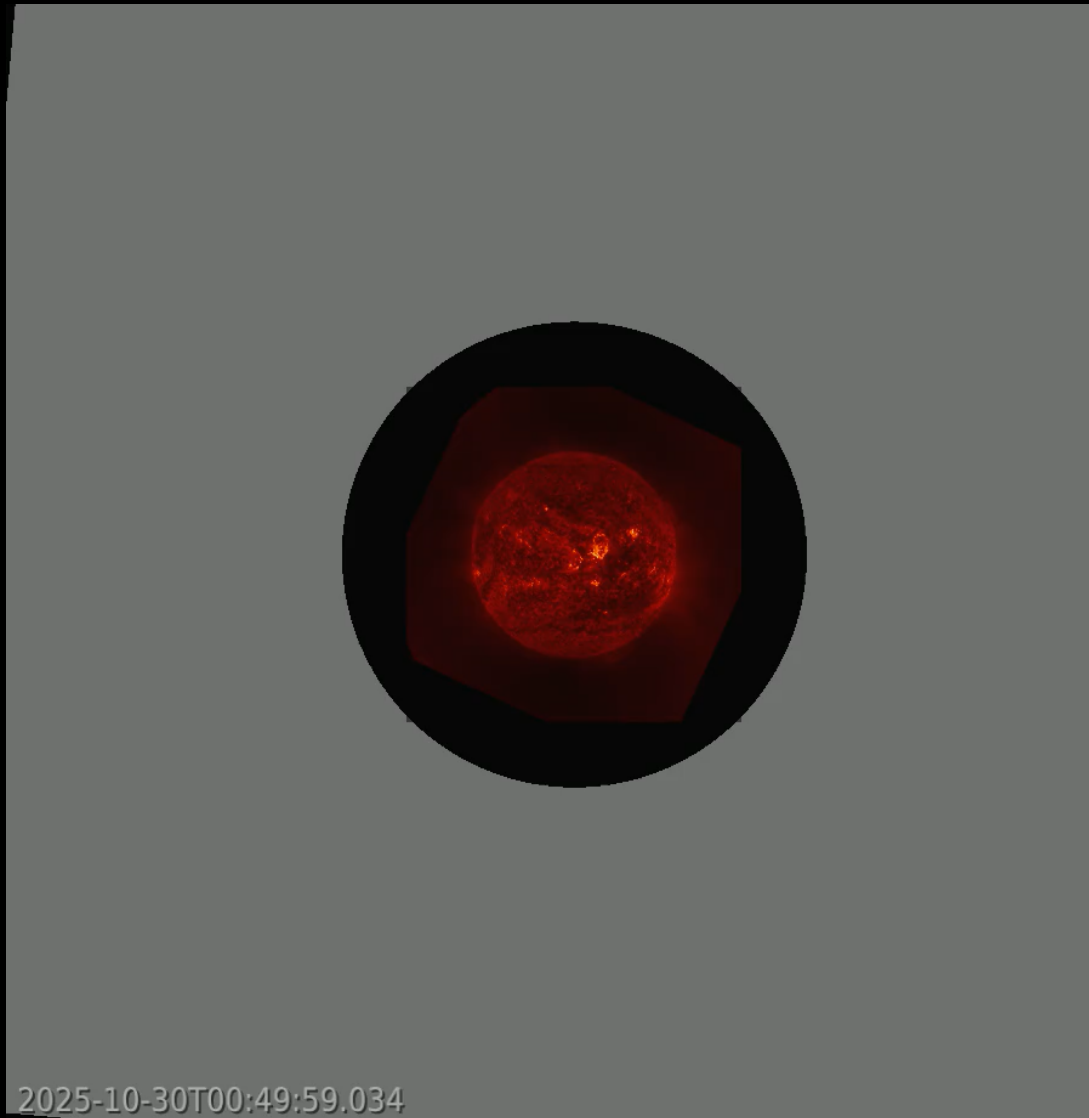
# Coronal Mass Ejections



- CME on 2025-10-28 15:21 UT
- Expected arrival 2025-11-01 20:00 UT
- Probability 30%

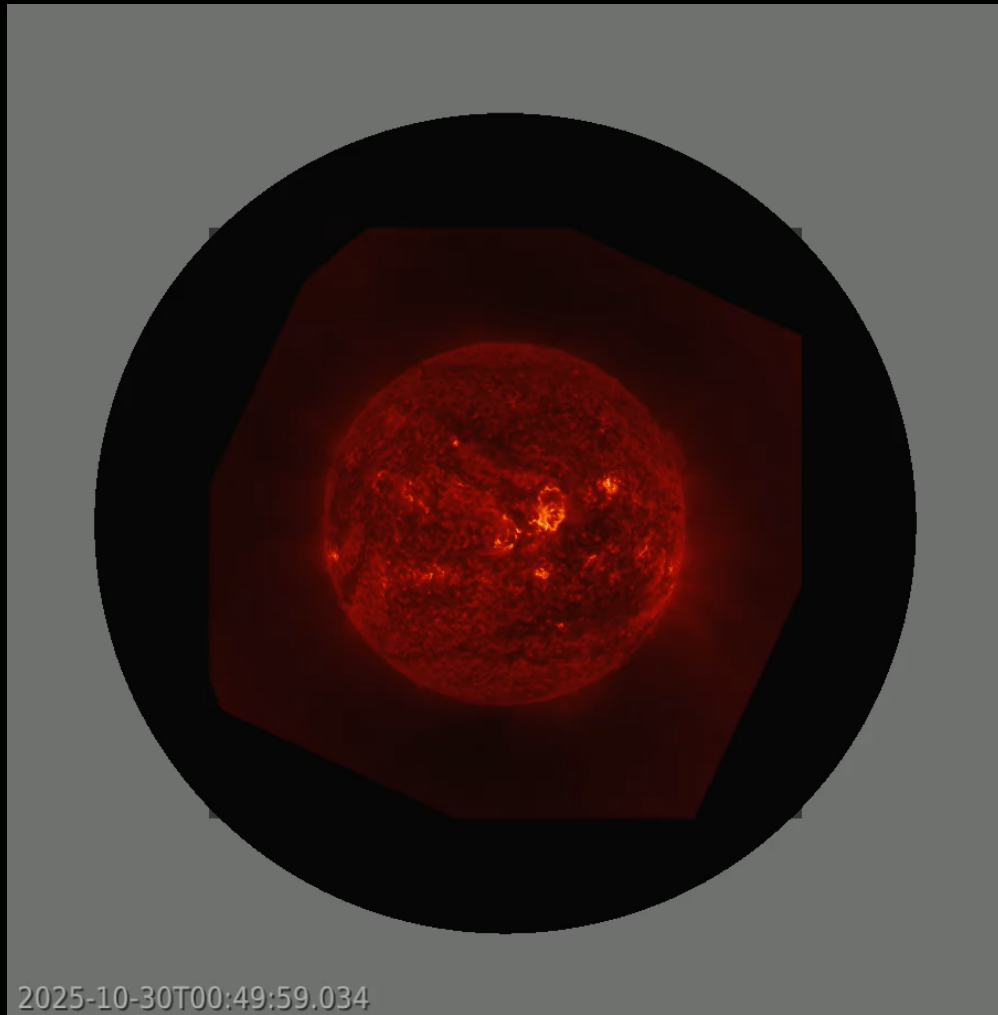
**Did not arrive**

# Coronal Mass Ejections



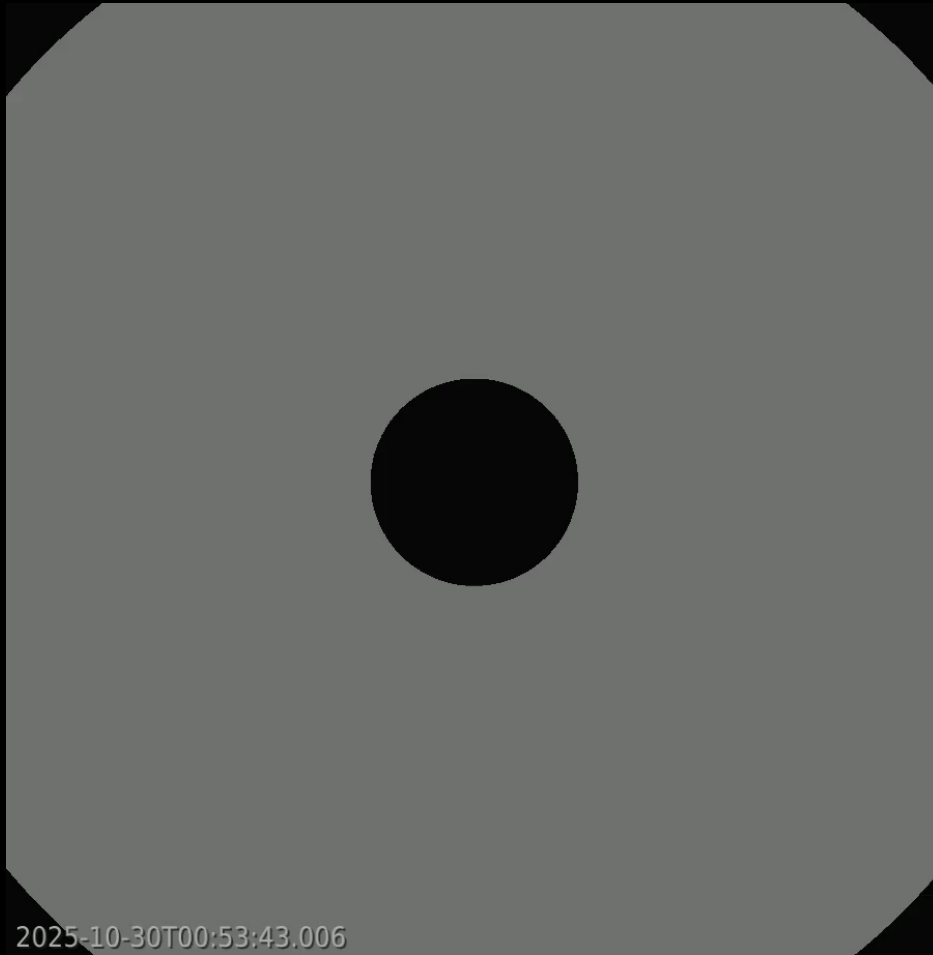
- CME on 2025-10-30 10:00 UT
- Expected arrival 2025-11-03 12:00 UT
- Probability 40%

# Coronal Mass Ejections

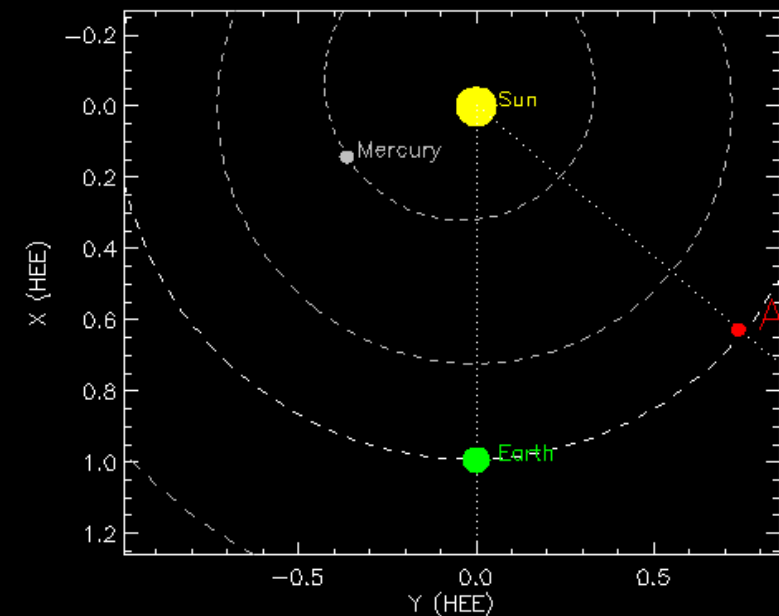


- CME on 2025-10-30 10:00 UT
- Expected arrival 2025-11-03 12:00 UT
- Probability 40%

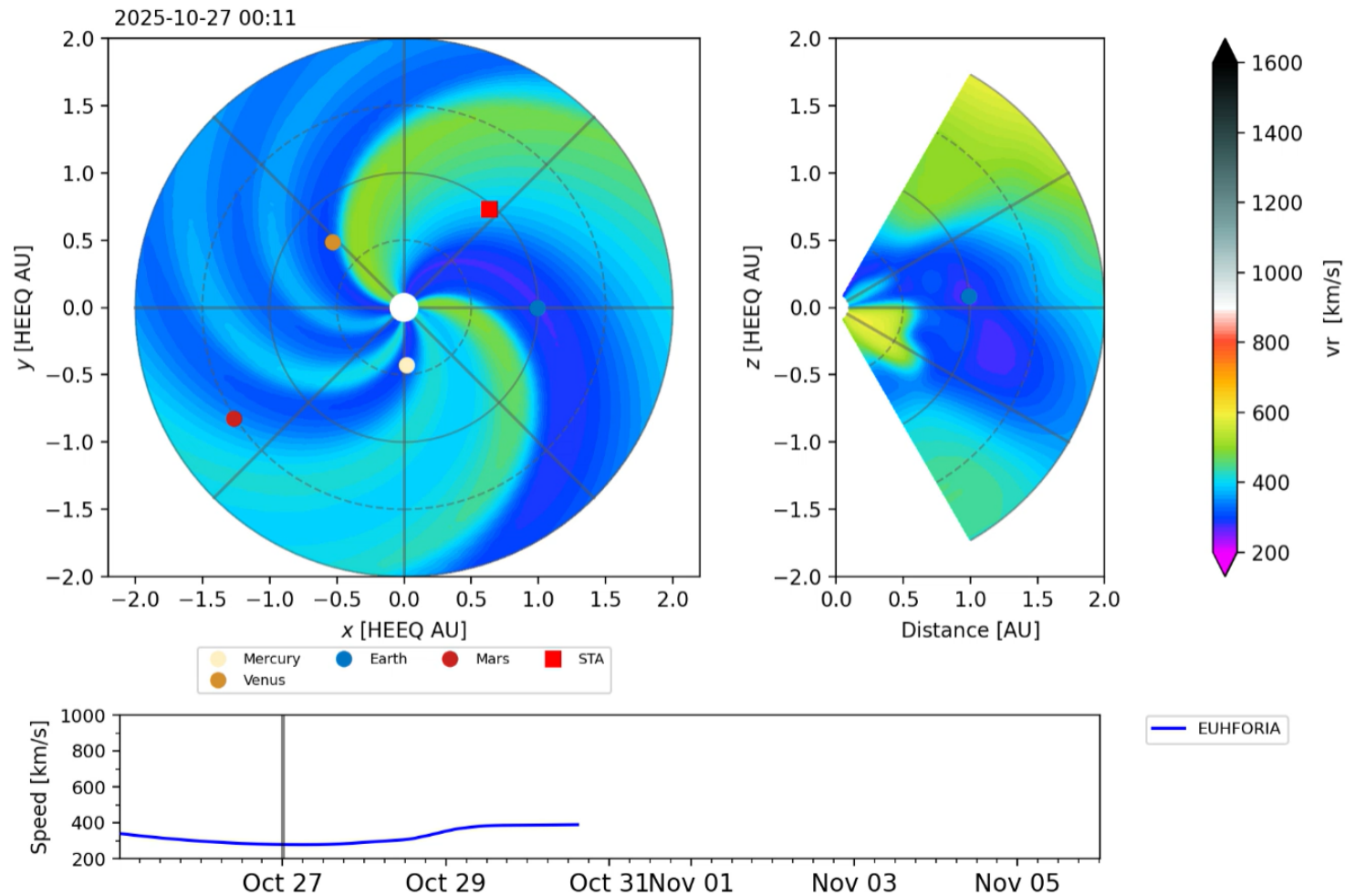
# Coronal Mass Ejections



- CME on 2025-10-30 10:00 UT
- Expected arrival 2025-11-03 12:00 UT
- Probability 40%



# Coronal Mass Ejections



- CME on 2025-10-30 10:00 UT
- Expected arrival 2025-11-03 12:00 UT
- Probability 40%

Solar Wind and

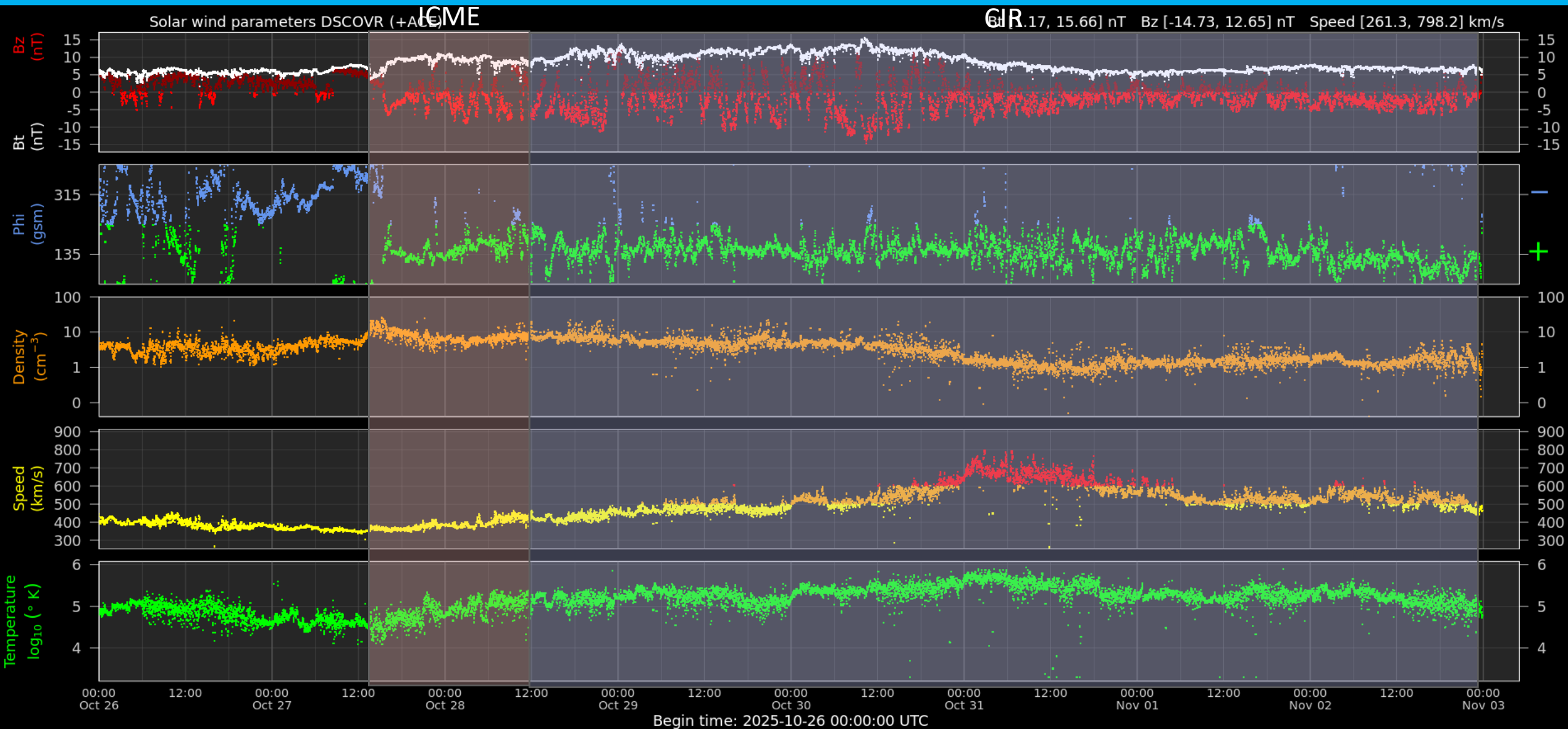
# Geomagnetic Activity



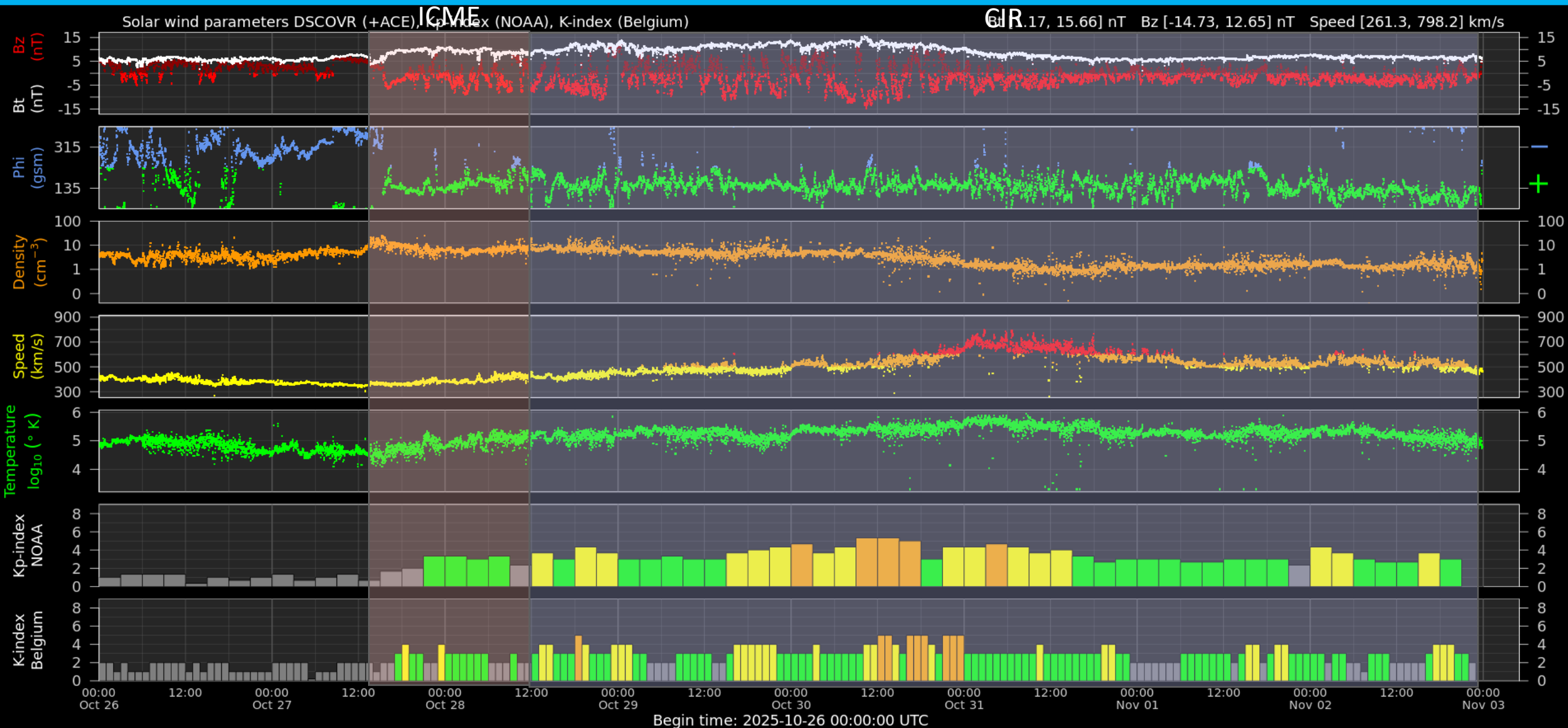
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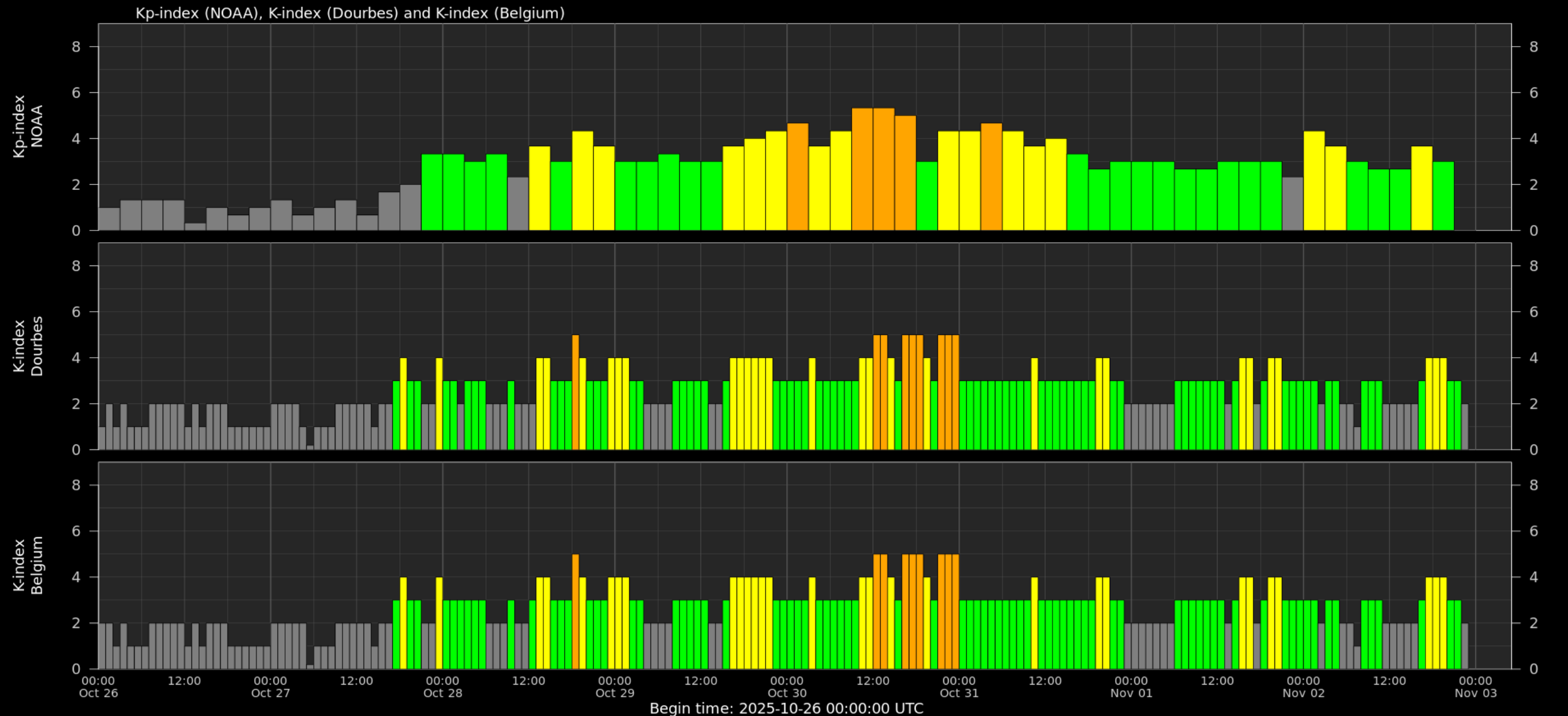
# Solar wind parameters



# Solar wind parameters & K-indices



# Geomagnetic activity (K-indexes)



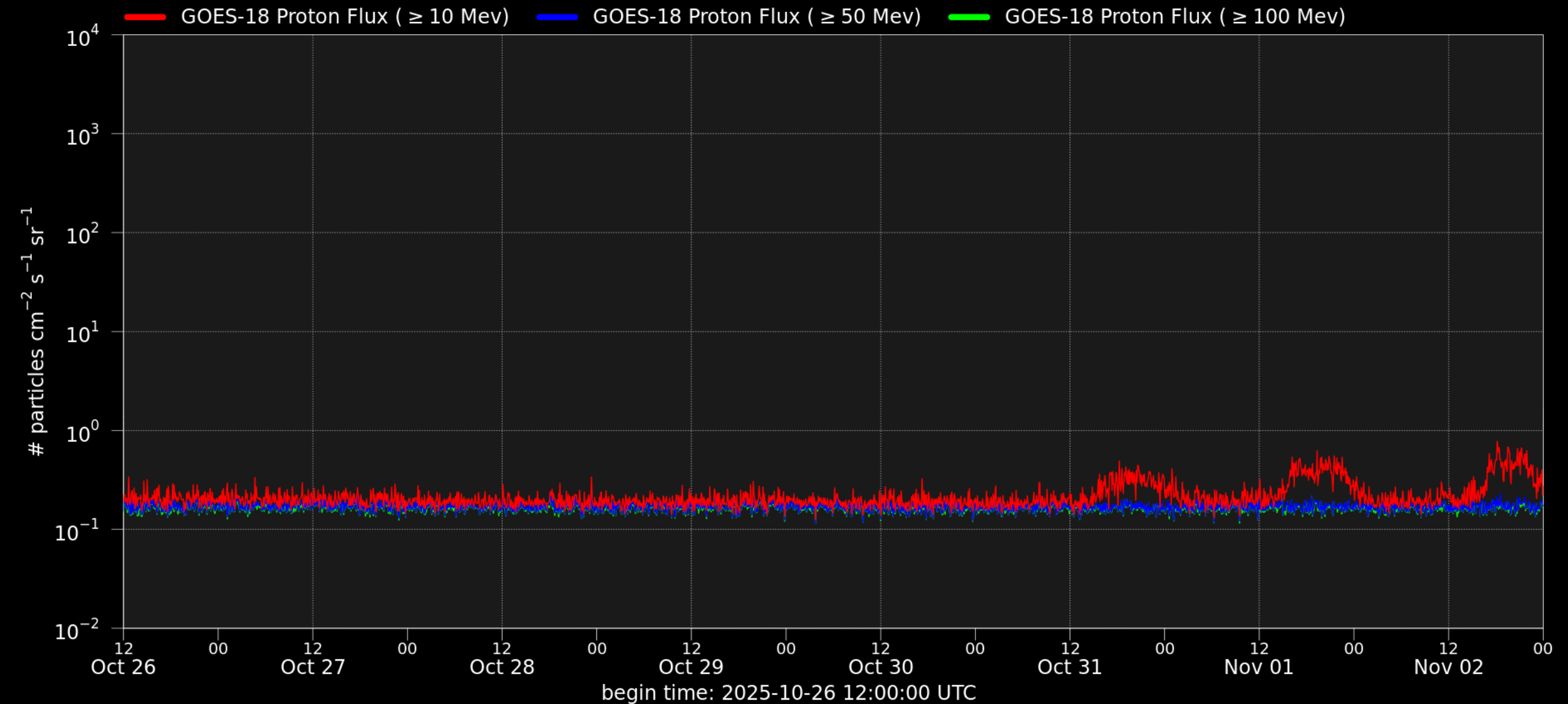
# Energetic Particles



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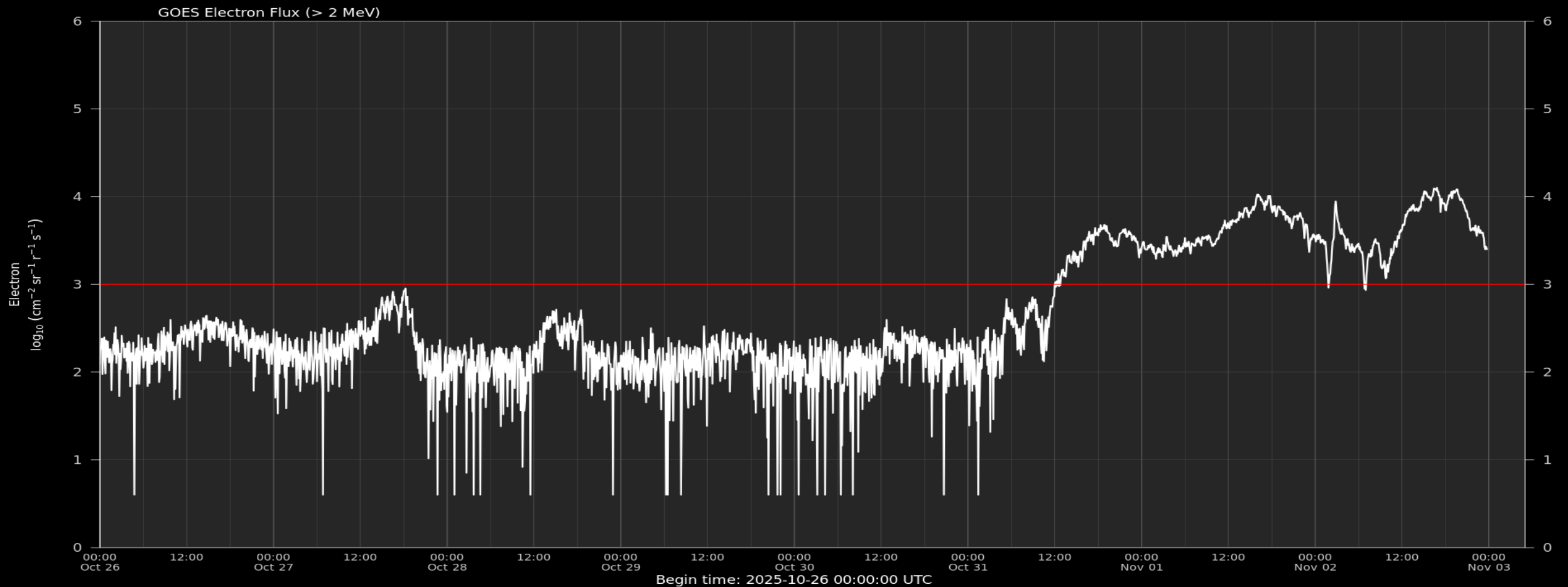
# Solar proton flux



# Electron flux at GEO

[www.stce.be/educational/classification#electrons](http://www.stce.be/educational/classification#electrons)

[www.spaceweather.gc.ca/forecast-prevision/space-spatiale/sffl-en.php](http://www.spaceweather.gc.ca/forecast-prevision/space-spatiale/sffl-en.php)



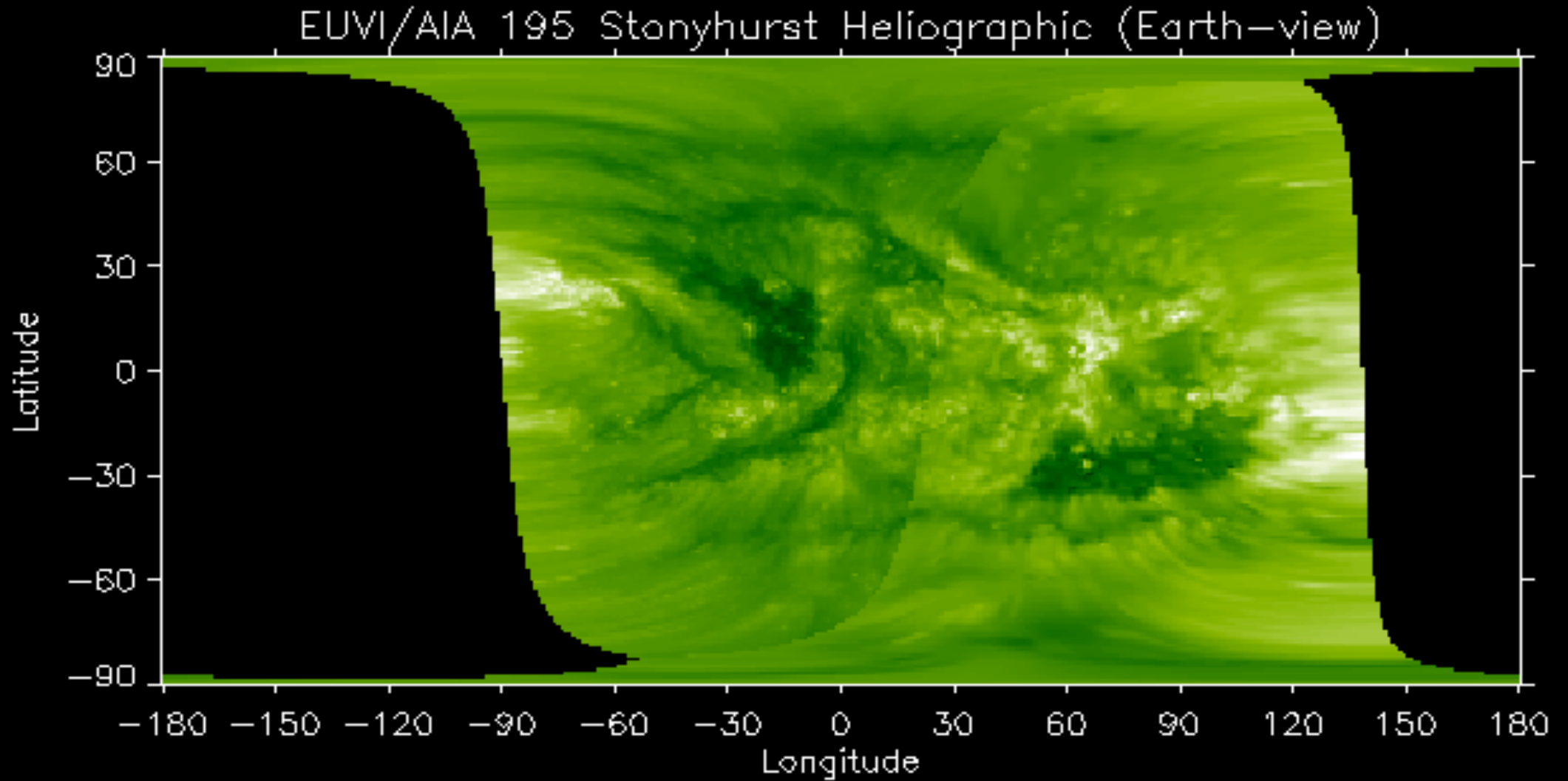
Outlook



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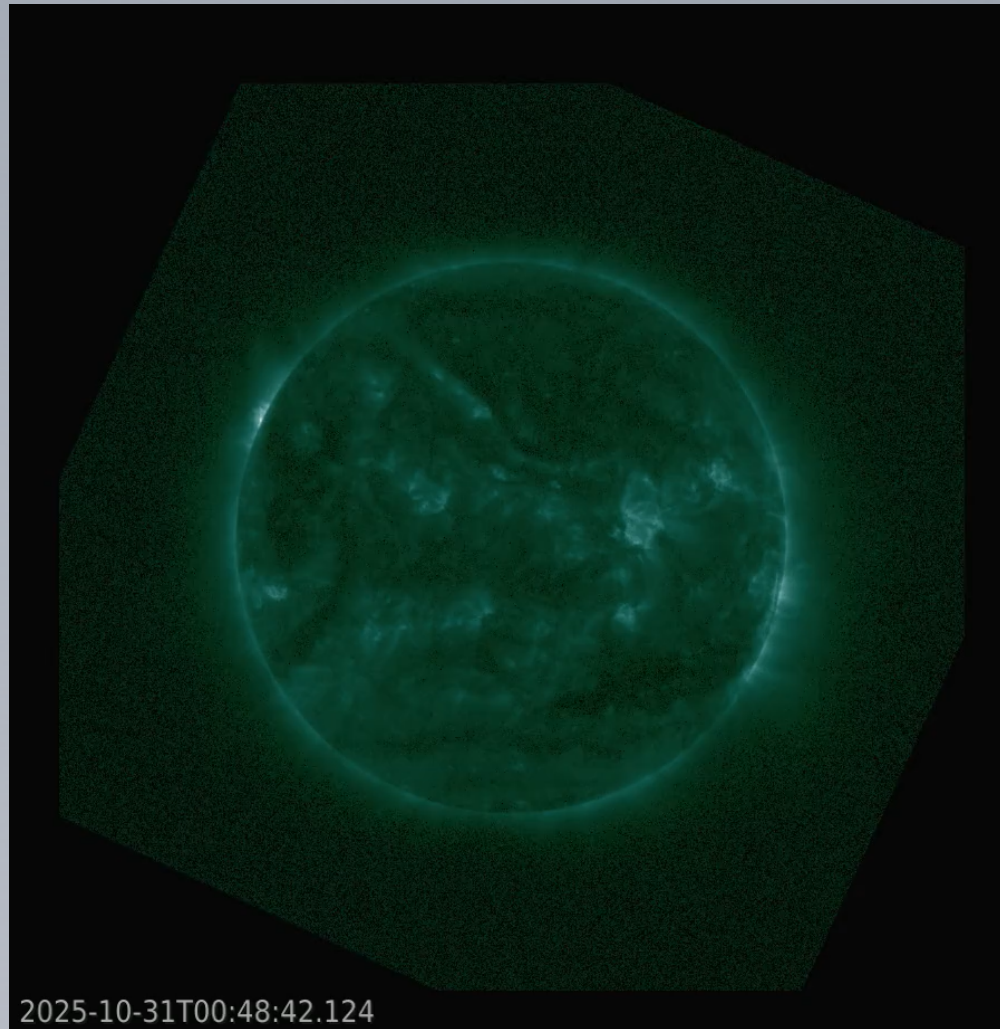
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# Outlook: Solar activity

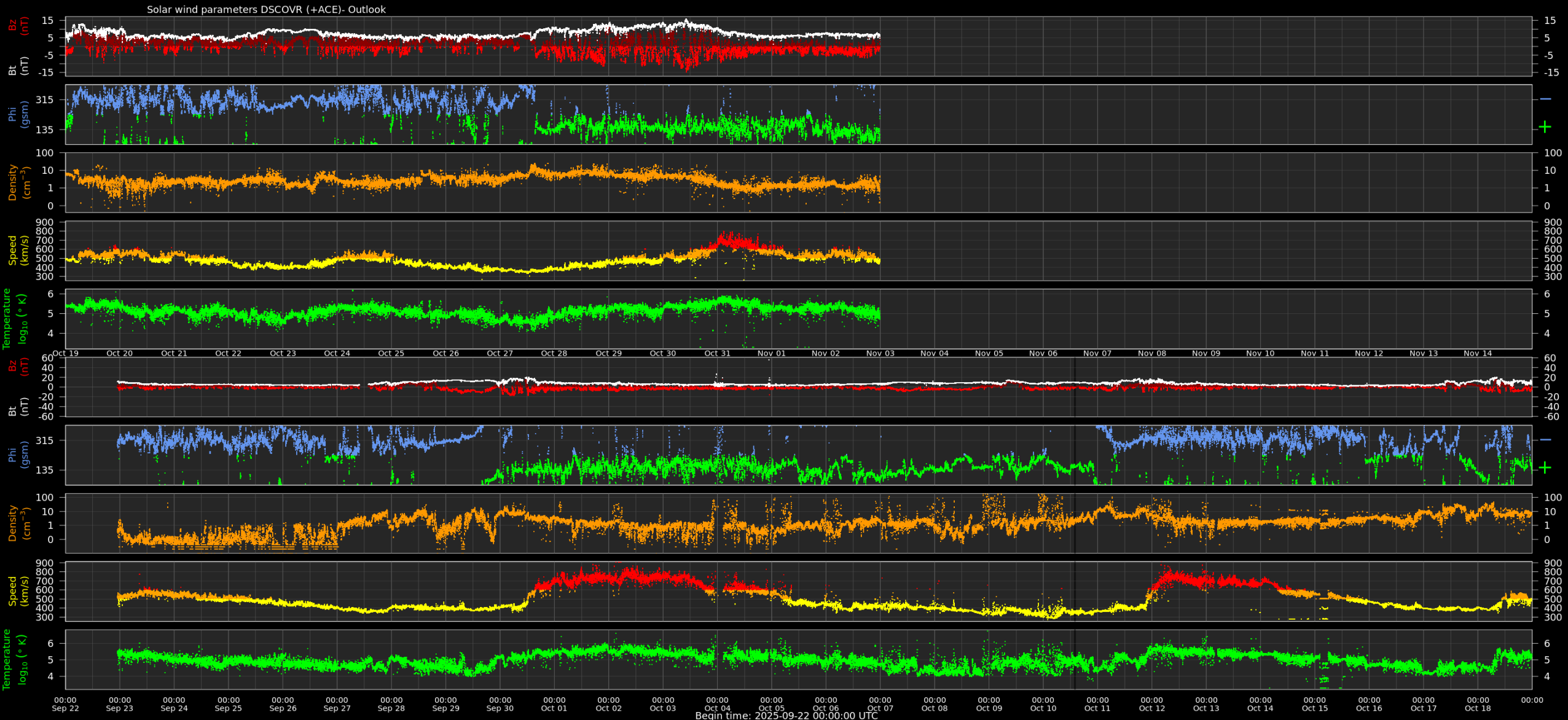


Observation date: 2025/11/02 23:05:00

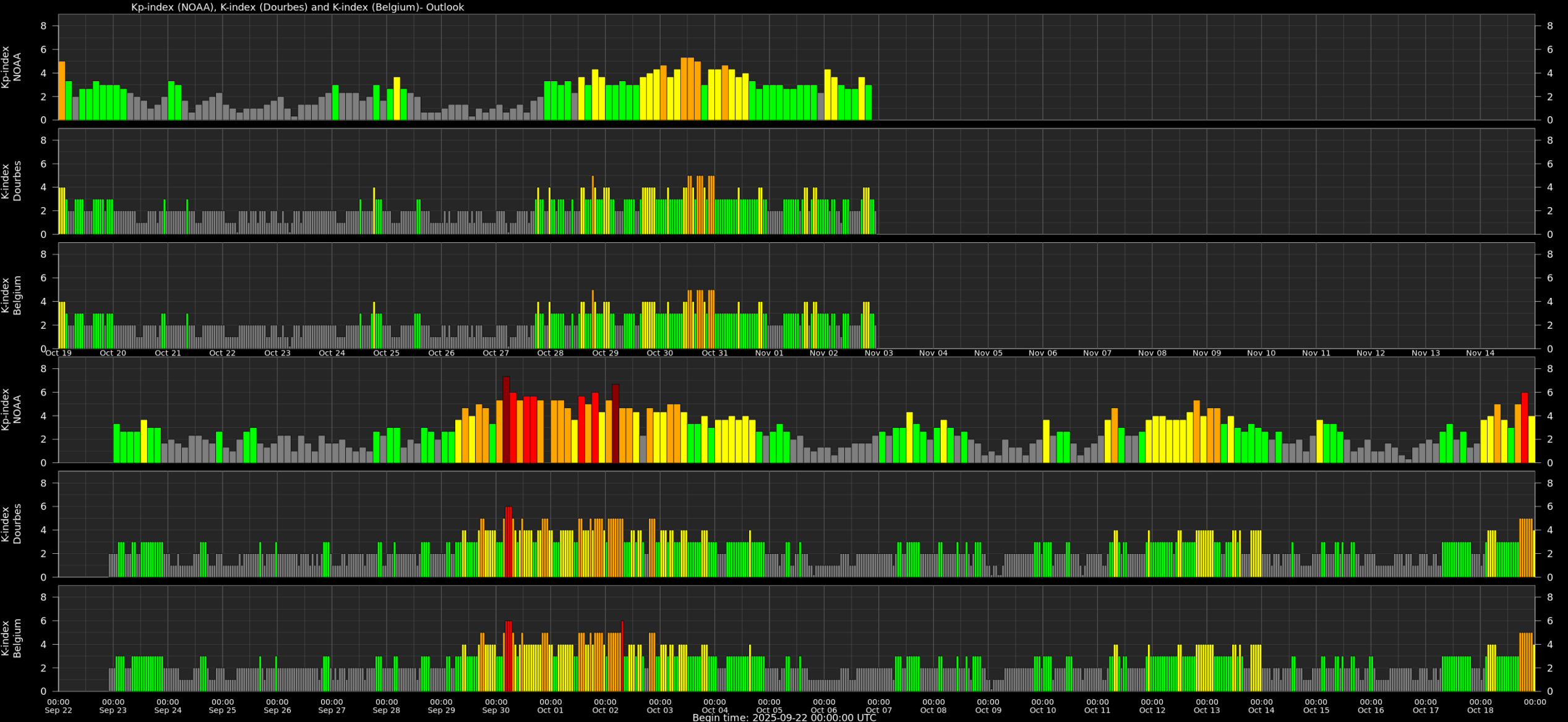
# Outlook: Solar activity



# Outlook: Solar wind parameters



# Outlook: Geomagnetic activity



PECASUS



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# Pegasus related events

GNSS scintillation advisories were sent almost every day

SIDC Space Weather Briefing

See you at our next briefing!

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