

SIDC Space Weather Briefing

16 February 2026-22 February 2026

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& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2026-02-16 00:00 to 2026-02-22 23:59

Active regions	6 active regions: SIDC Sunspot Group 735, 762, 790, 795 – 797, NOAA AR 4373 – 4377
Flares	# C-class flare: 16 # M-class flare: 1 # X-class flare: 0
Coronal Holes	1 CH+, 1 CH-
CMEs	3 CMEs (1 partial halo)

Proton flux	Below 10 pfu threshold level
Electron flux	Exceeded 1000 pfu threshold level

Solar wind and geomagnetic conditions

ICMEs	1 weak ICME arrival
Solar wind conditions	B : 1.87 - 15.59 nT //Bz: -10 nT to 13.64 nT //Speed: 418.9 - 735.9km/s
Geomagnetic conditions	max K _{Be} : 5.0, max K _p (NOAA): 6.0, Moderate Storm conditions

All Quiet Alert: All quiet off

Solar Activity

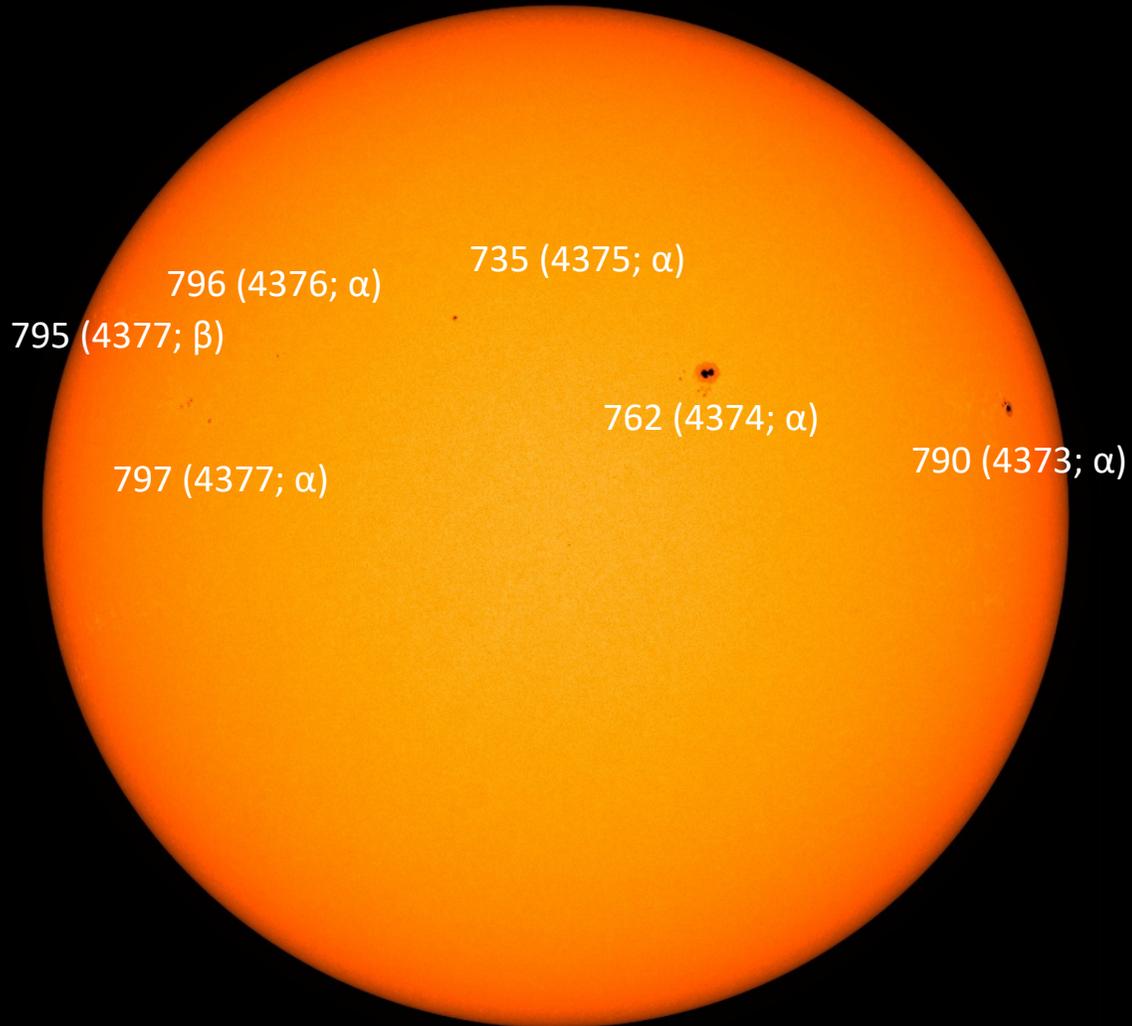


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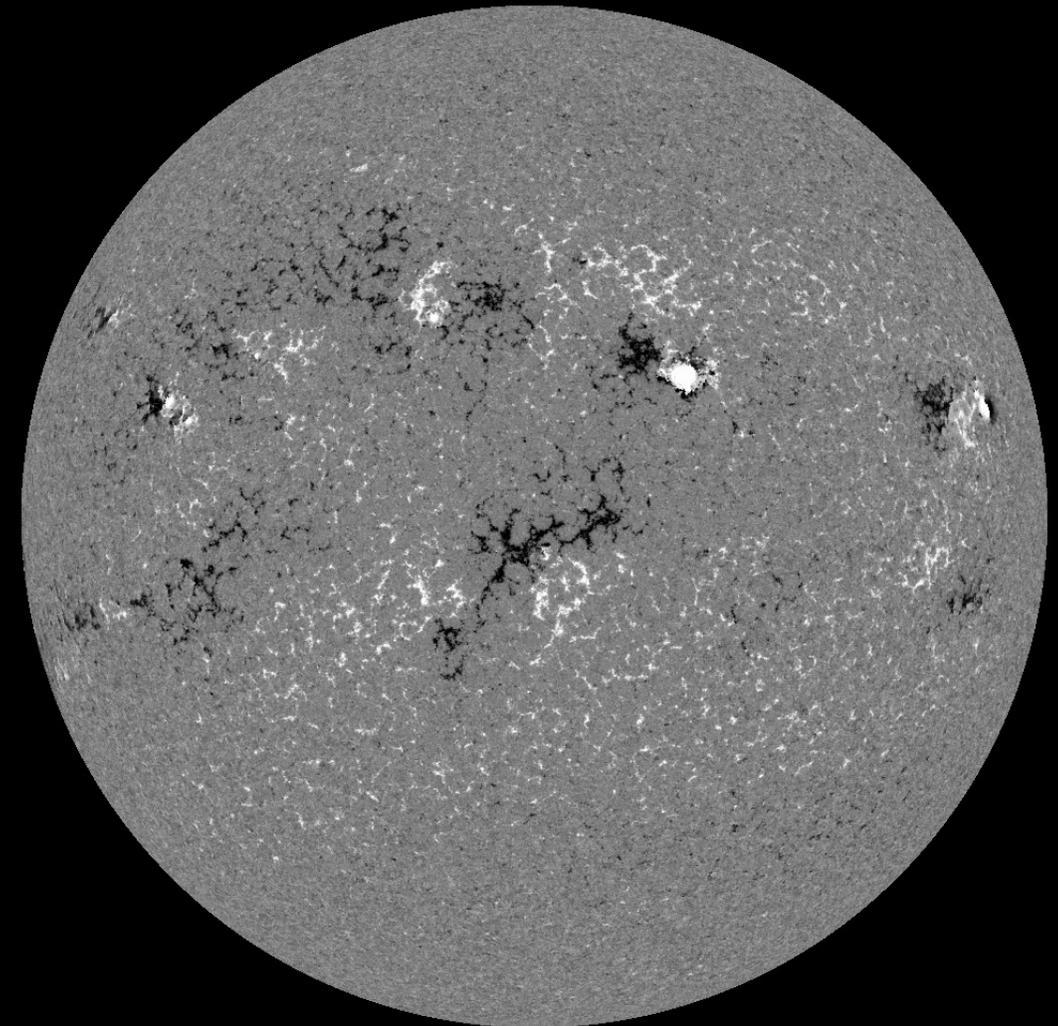
Solar active regions

SDO/HMI White Light 2026-02-16



SDO/HMI Continuum: 20260216_120000

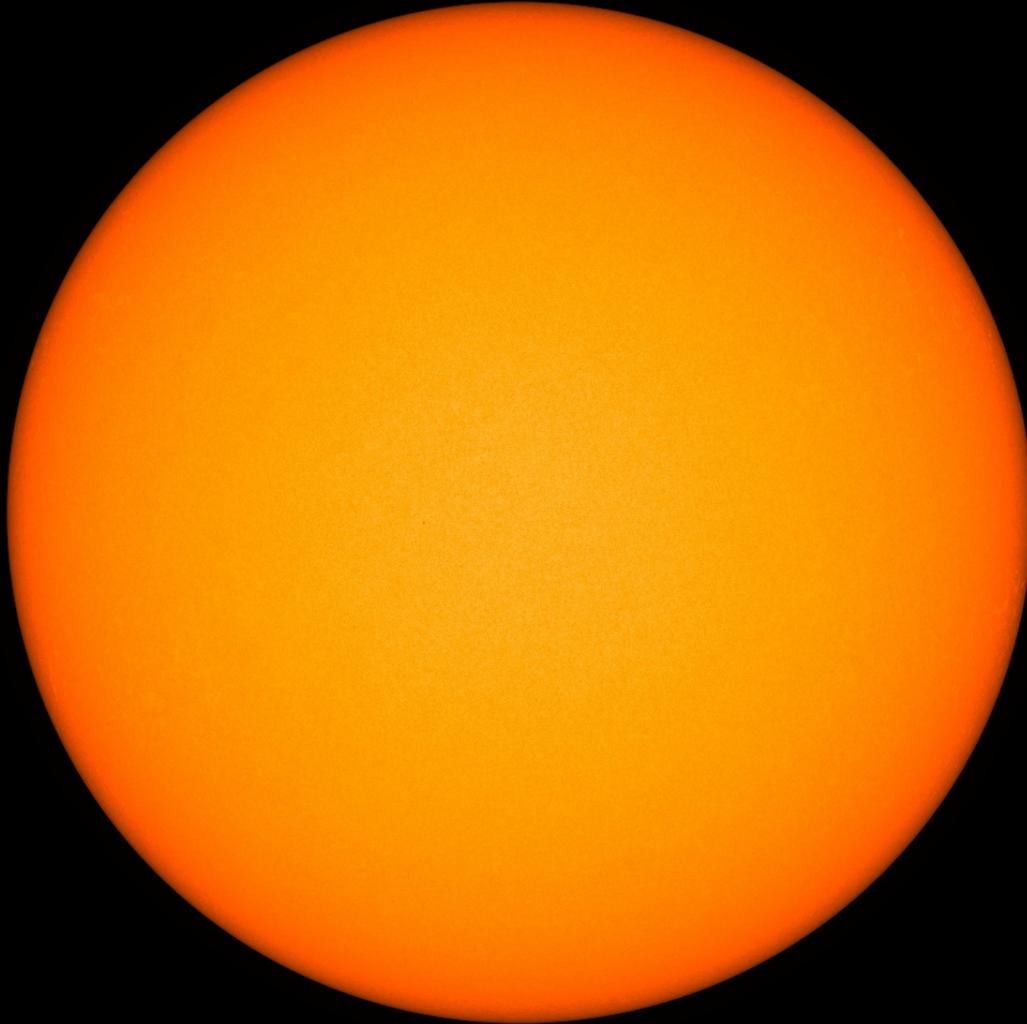
SDO/HMI Magnetogram 2026-02-16



SDO/HMI Magnetogram: 20260216_120000

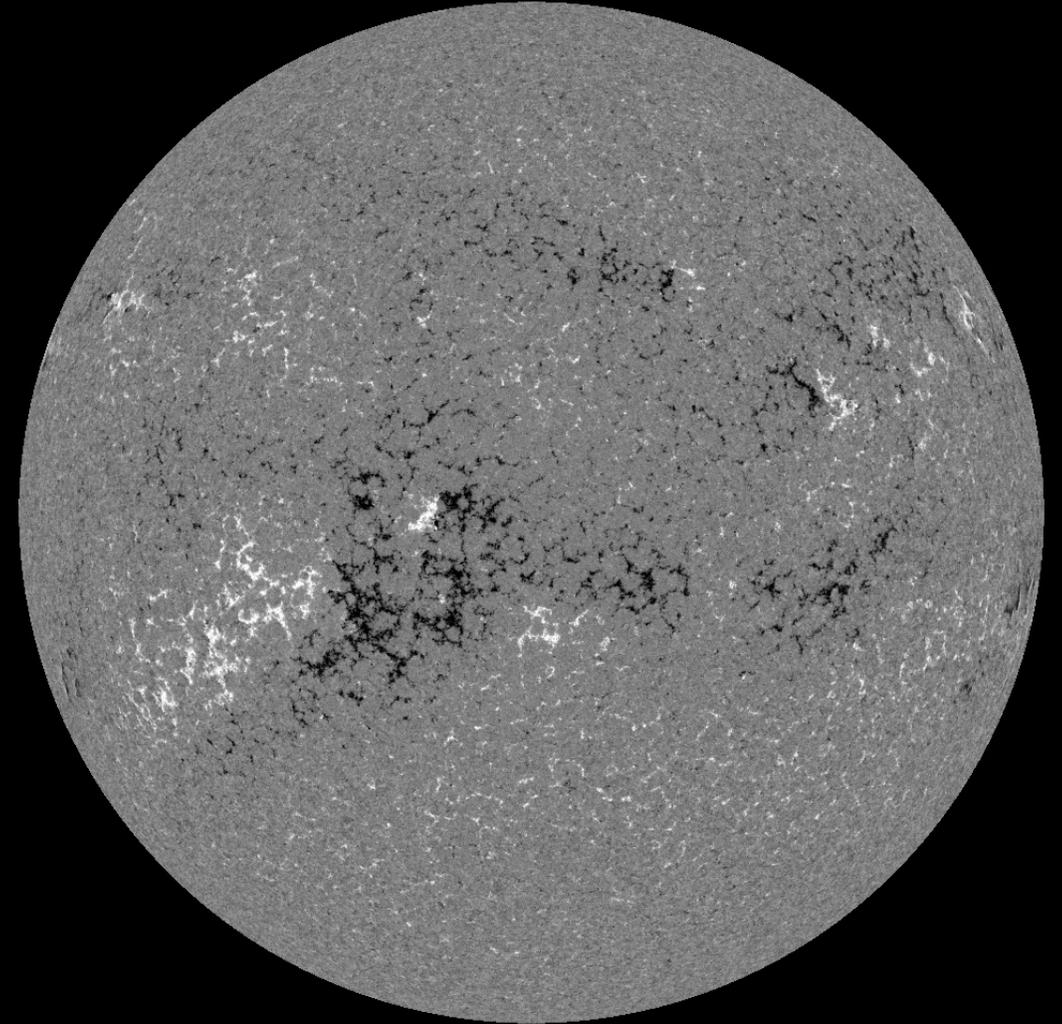
Solar active regions

SDO/HMI White Light 2026-02-22



SDO/HMI Quick-Look Continuum: 20260222_120000

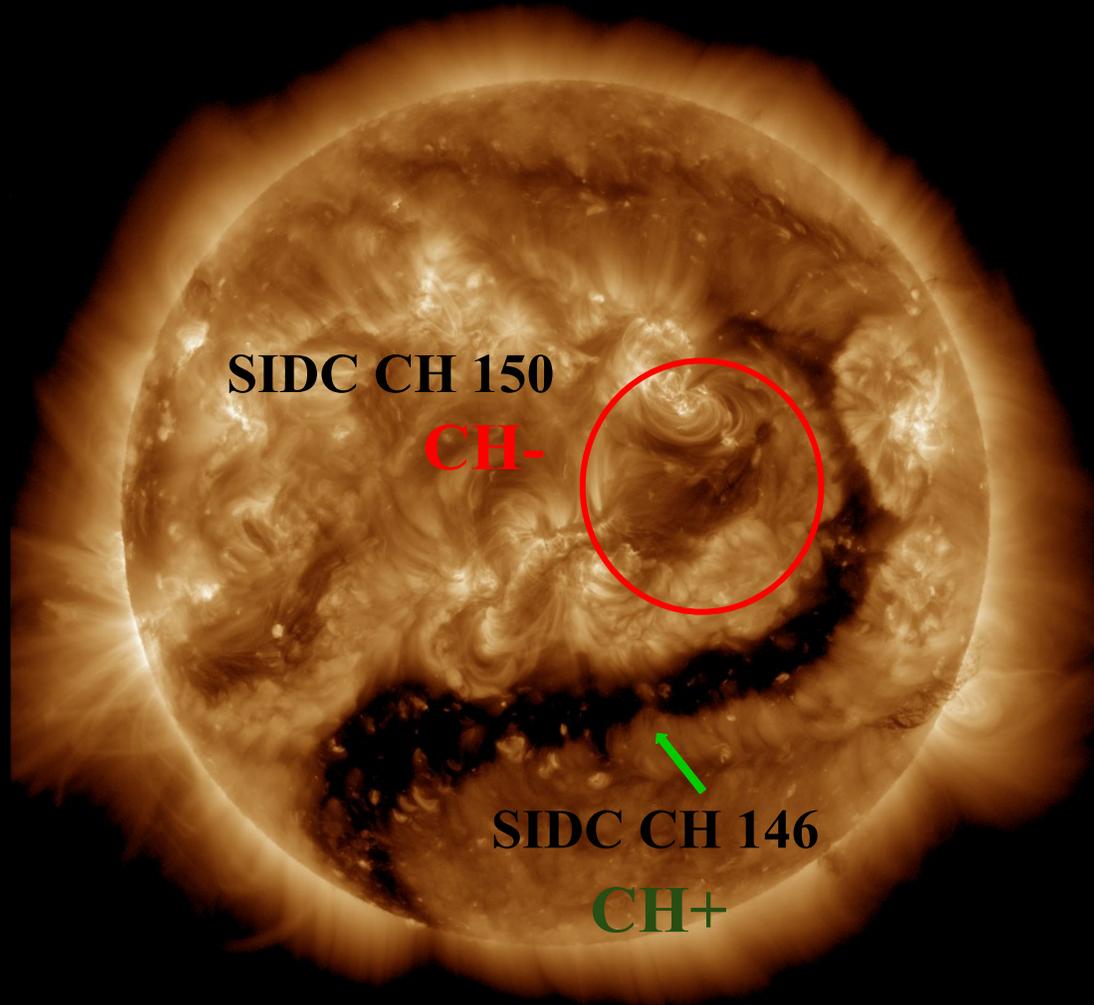
SDO/HMI Magnetogram 2026-02-22



SDO/HMI Quick-Look Magnetogram: 20260222_120000

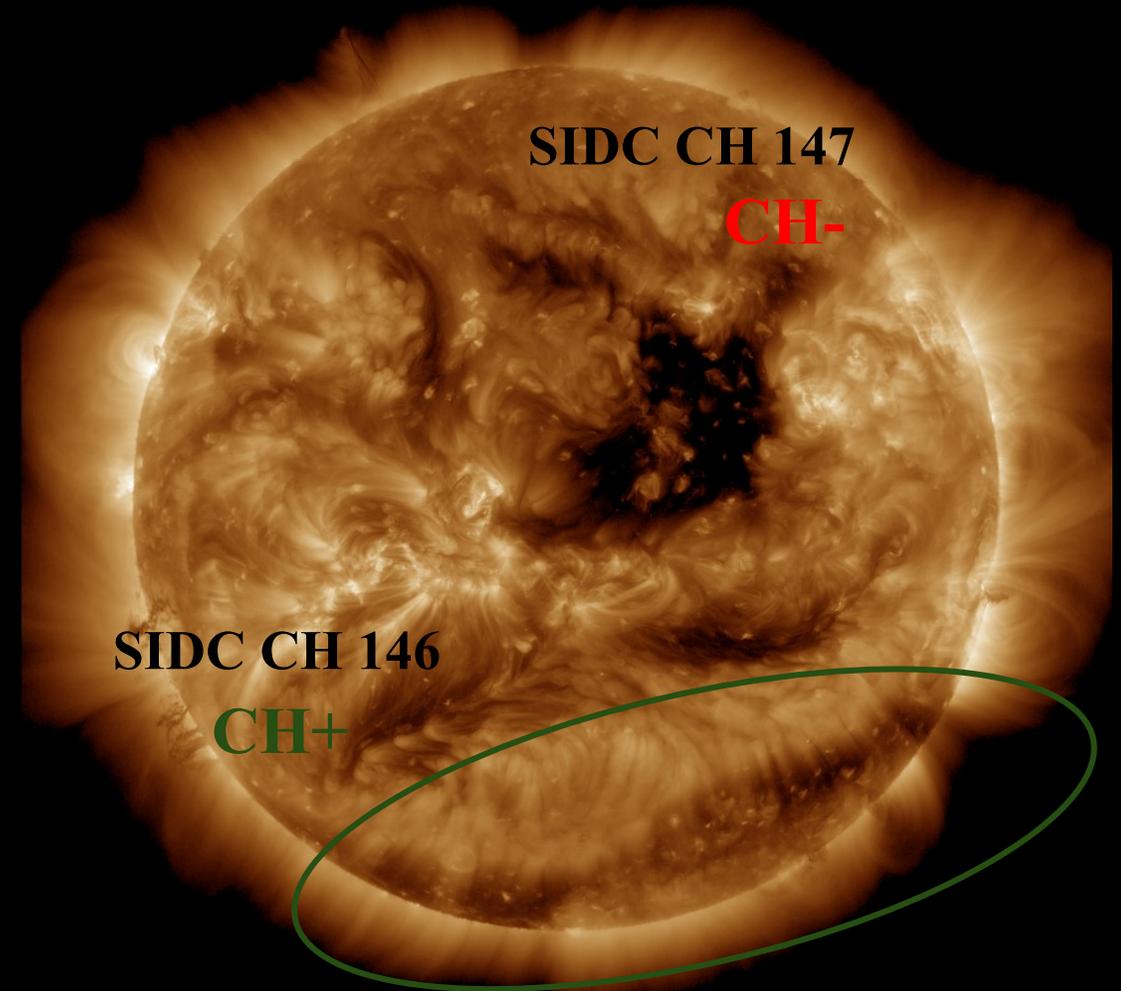
Coronal holes

SDO/AIA 19.3 nm 2026-02-16



SDO/AIA 193 2026-02-16 11:58:05 UT

SDO/AIA 19.3 nm 2026-02-22

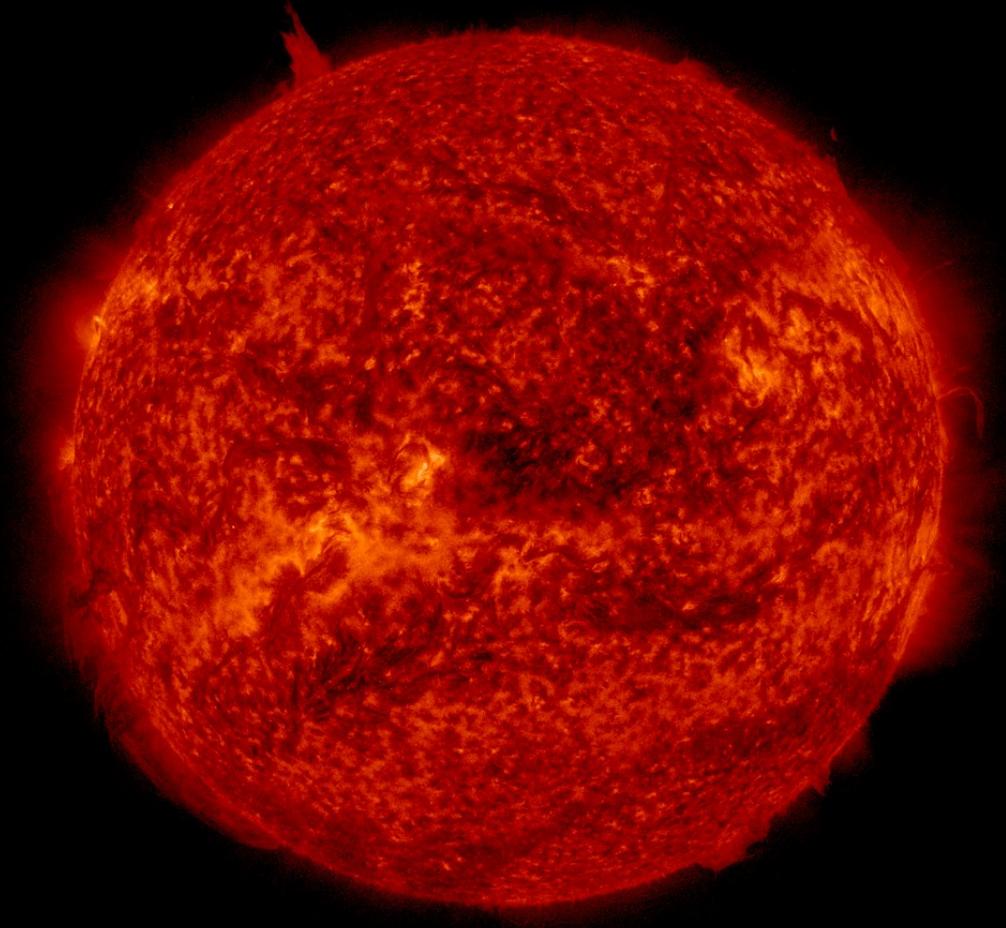
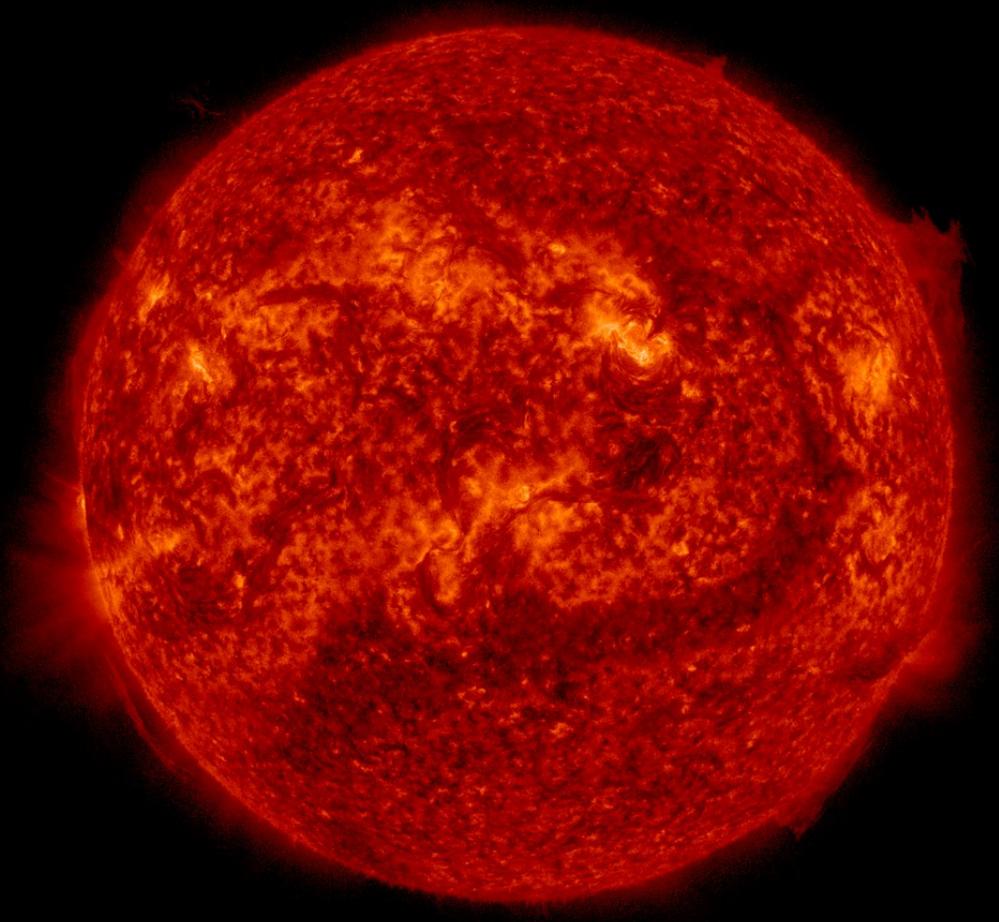


SDO/AIA 193 2026-02-22 11:58:17 UT

Filaments

SDO/AIA 30.4 nm 2026-02-16

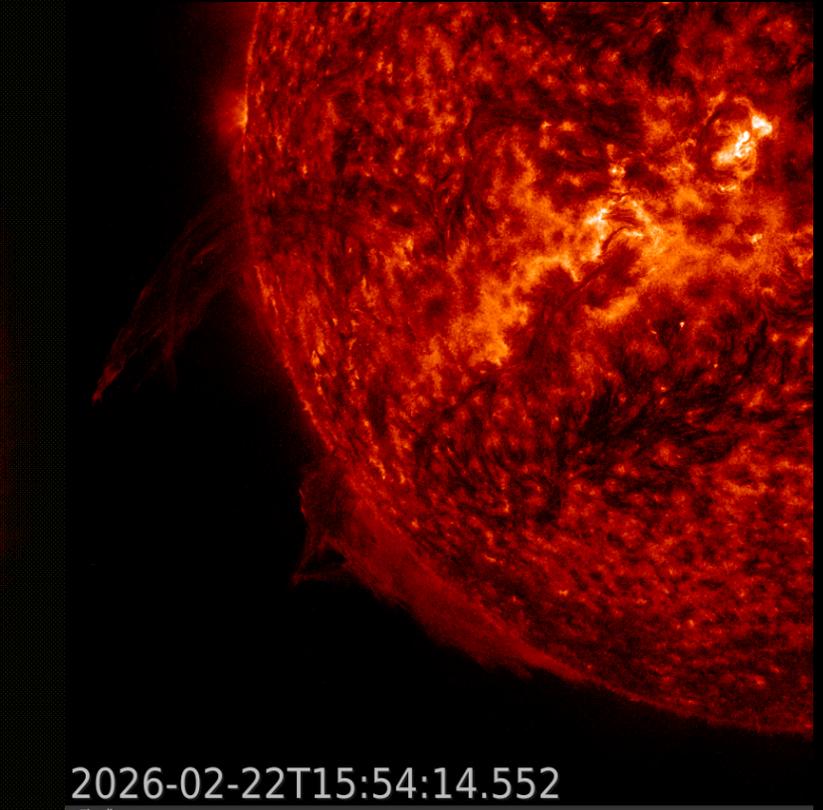
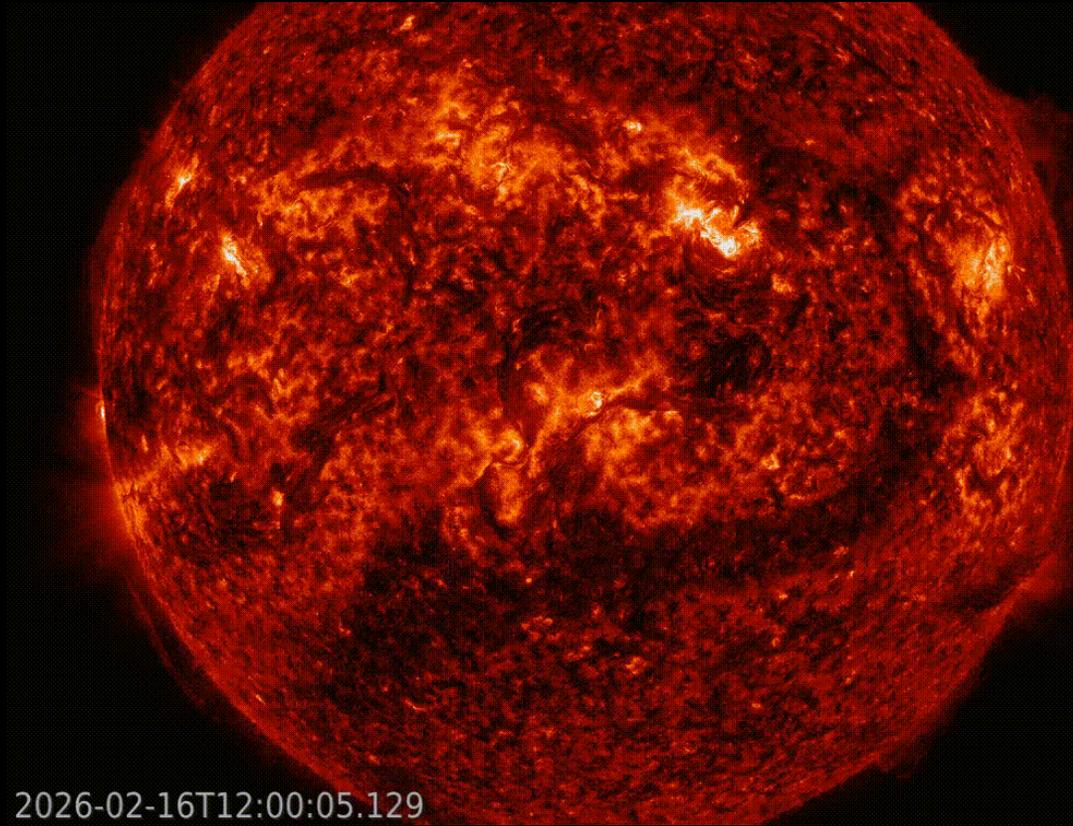
SDO/AIA 30.4 nm 2026-02-22



SDO/AIA 304 2026-02-16 11:58:06 UT

SDO/AIA 304 2026-02-22 11:59:06 UT

Filaments



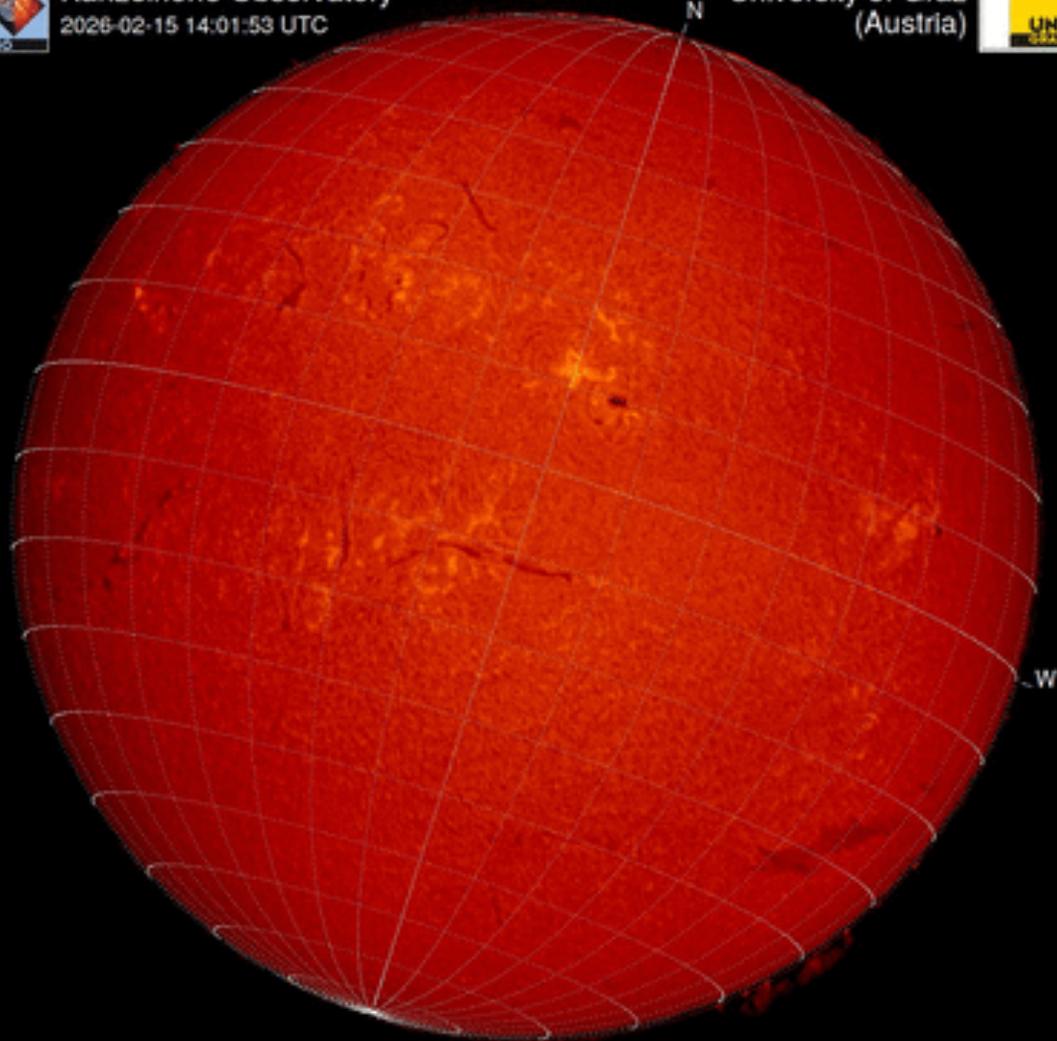
Filaments & Filament eruptions

H-alpha 2026-02-16



Kanzelhöhe Observatory
2026-02-15 14:01:53 UTC

University of Graz
(Austria)

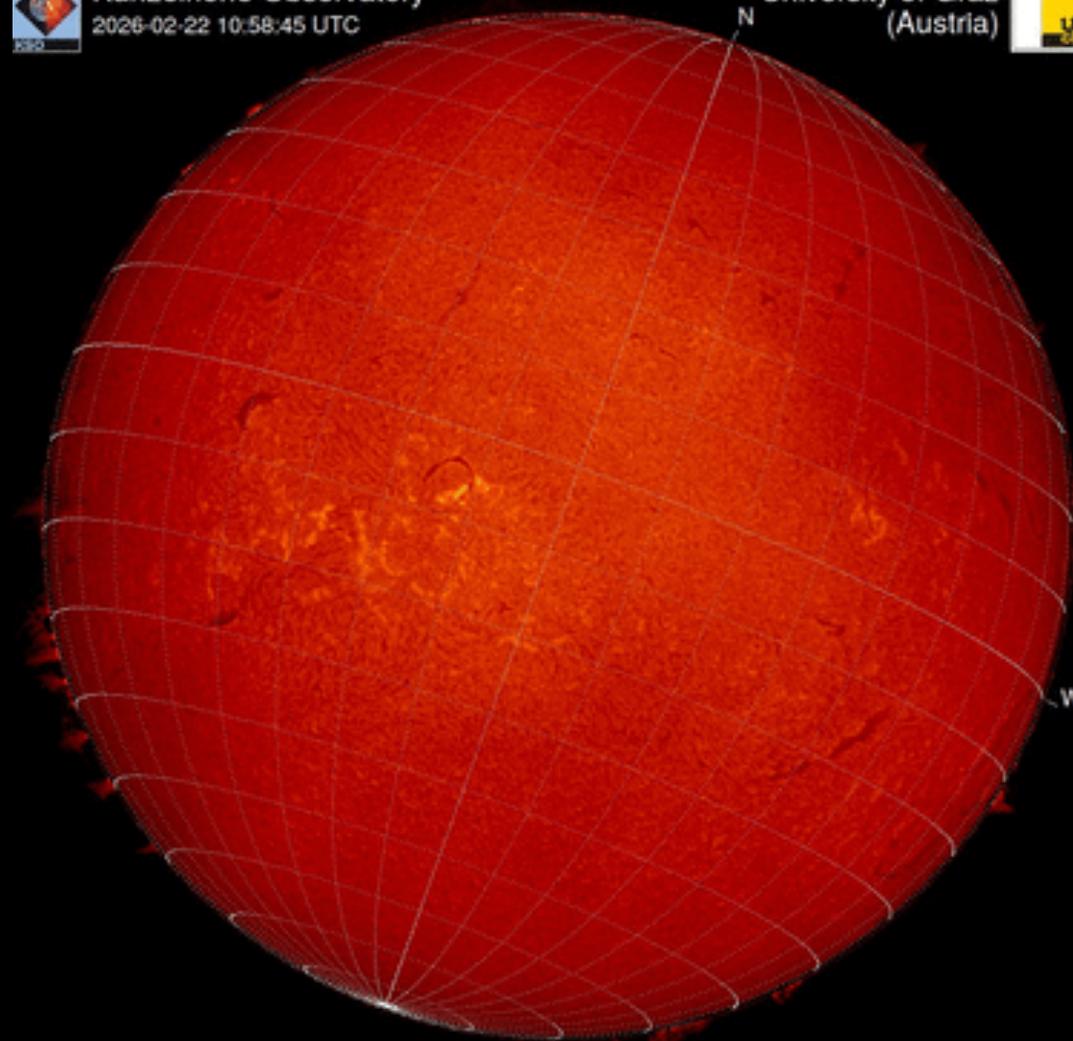


H-alpha 2026-02-22

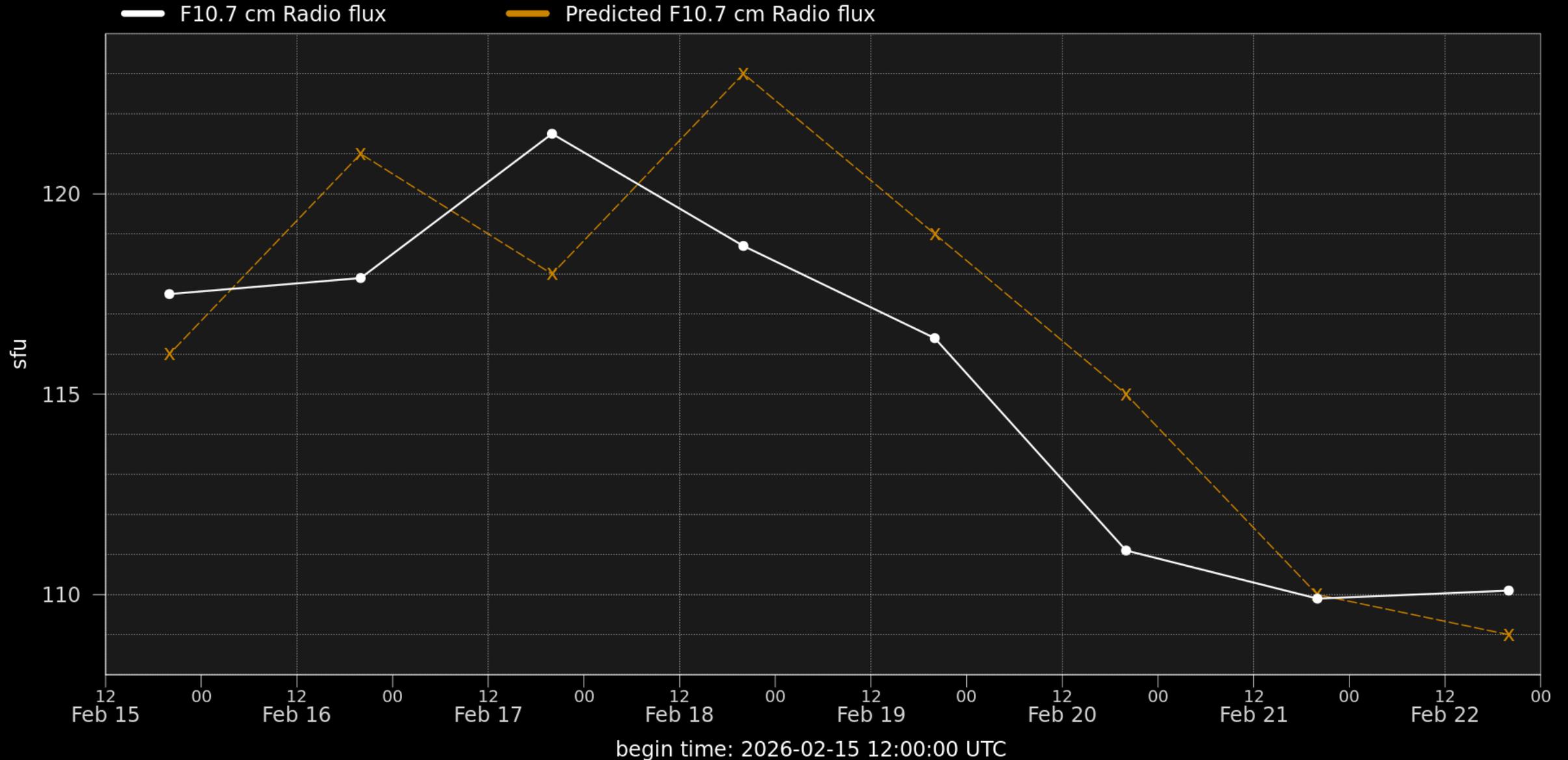


Kanzelhöhe Observatory
2026-02-22 10:58:45 UTC

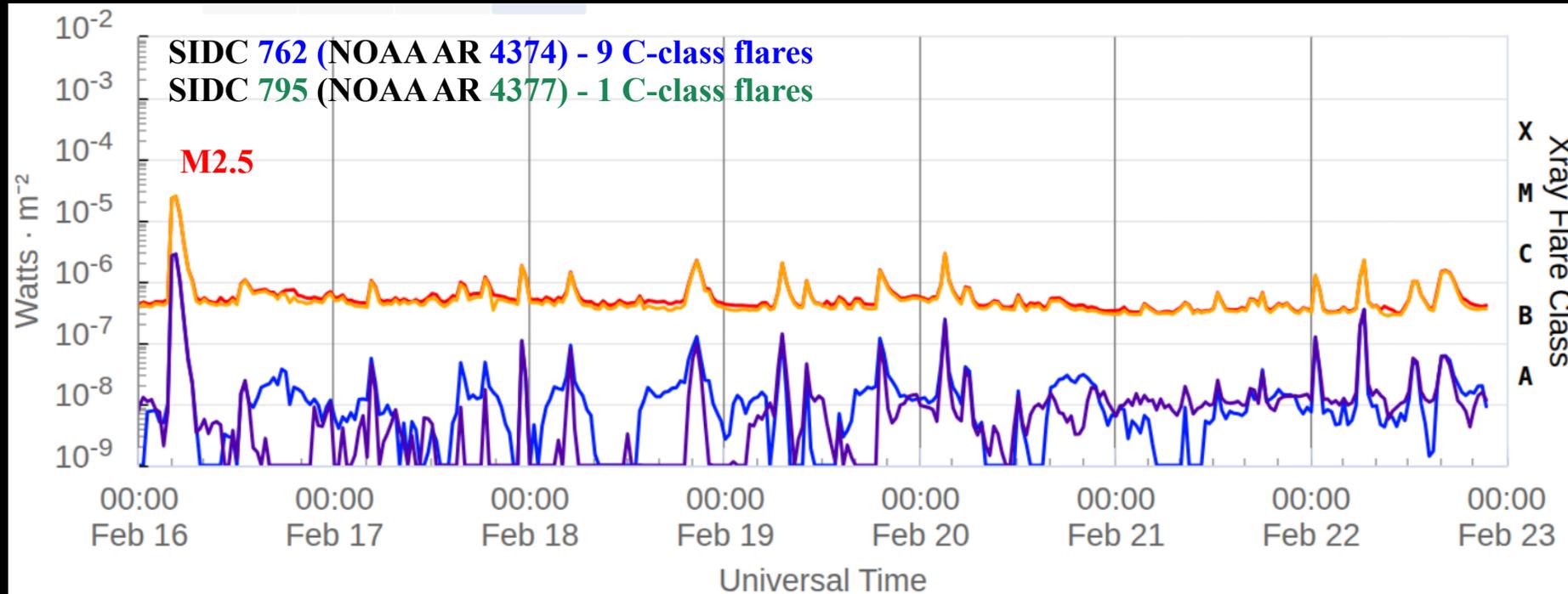
University of Graz
(Austria)



Solar F10.7cm radio flux



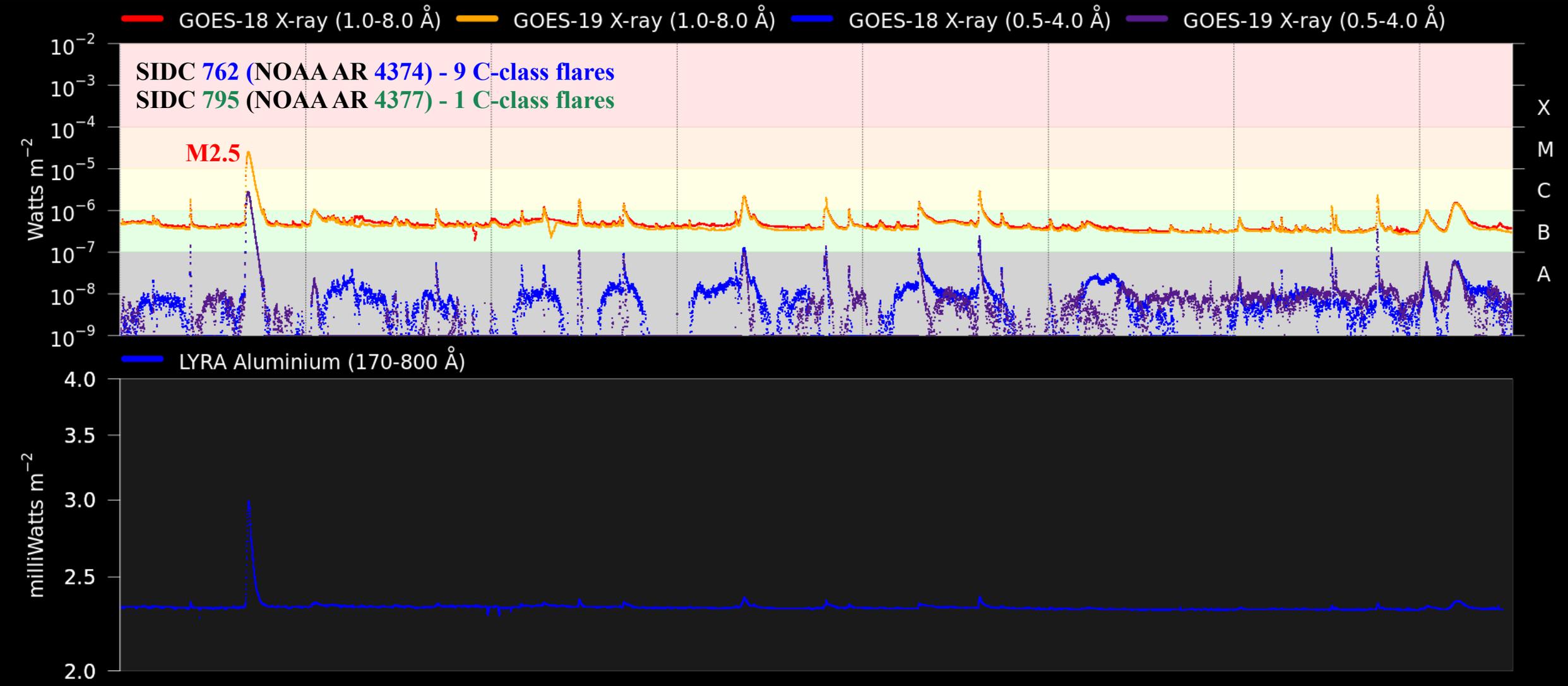
Flaring activity



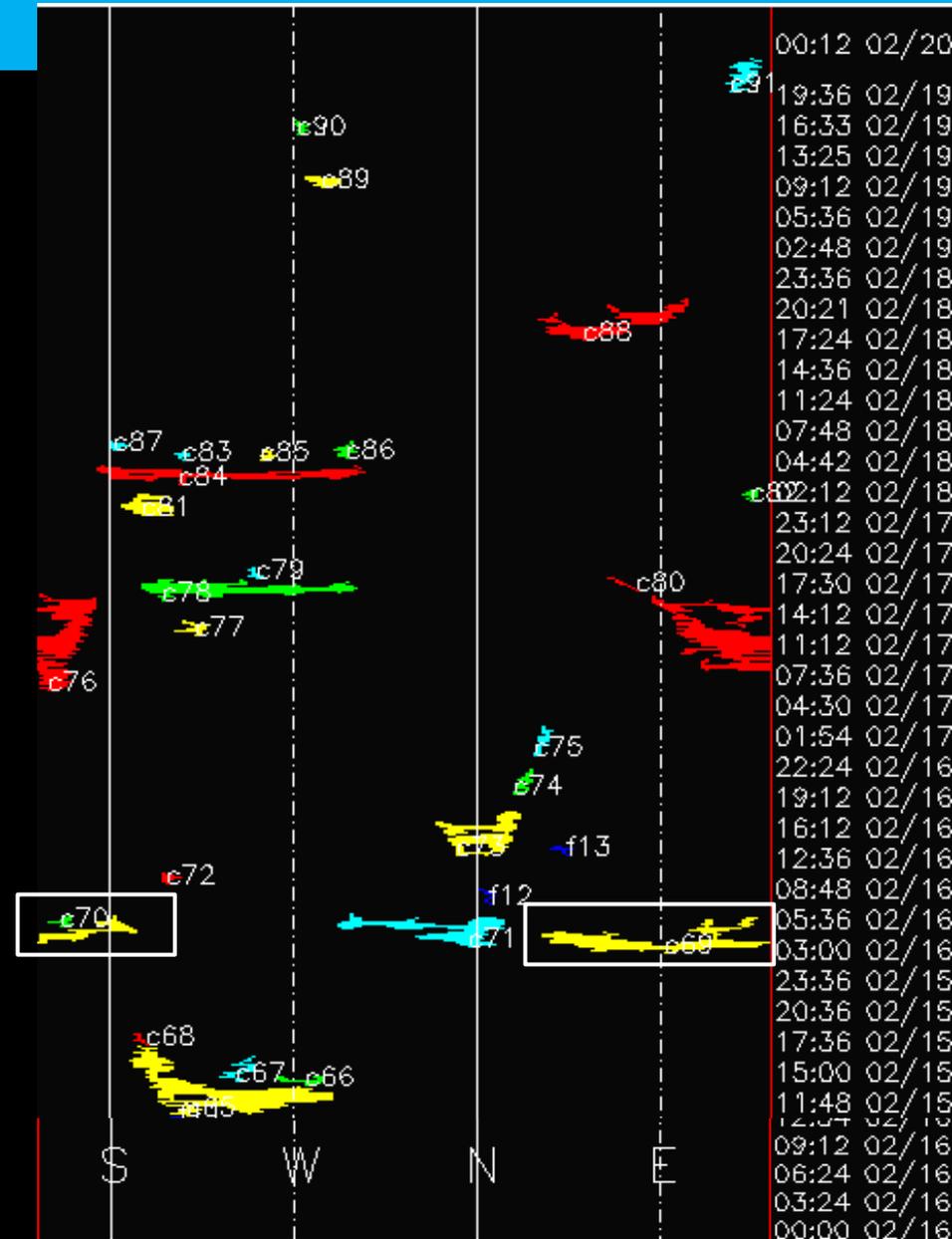
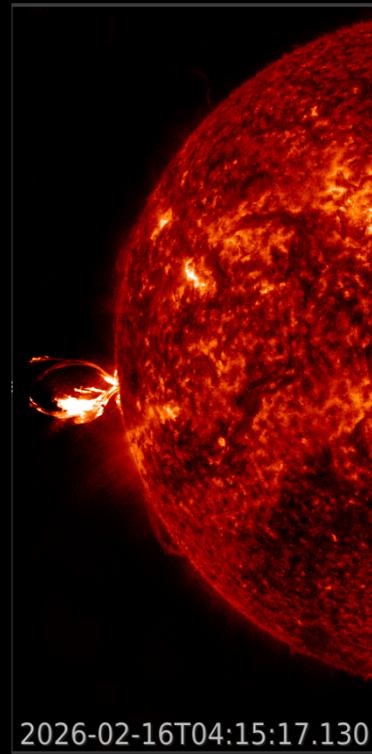
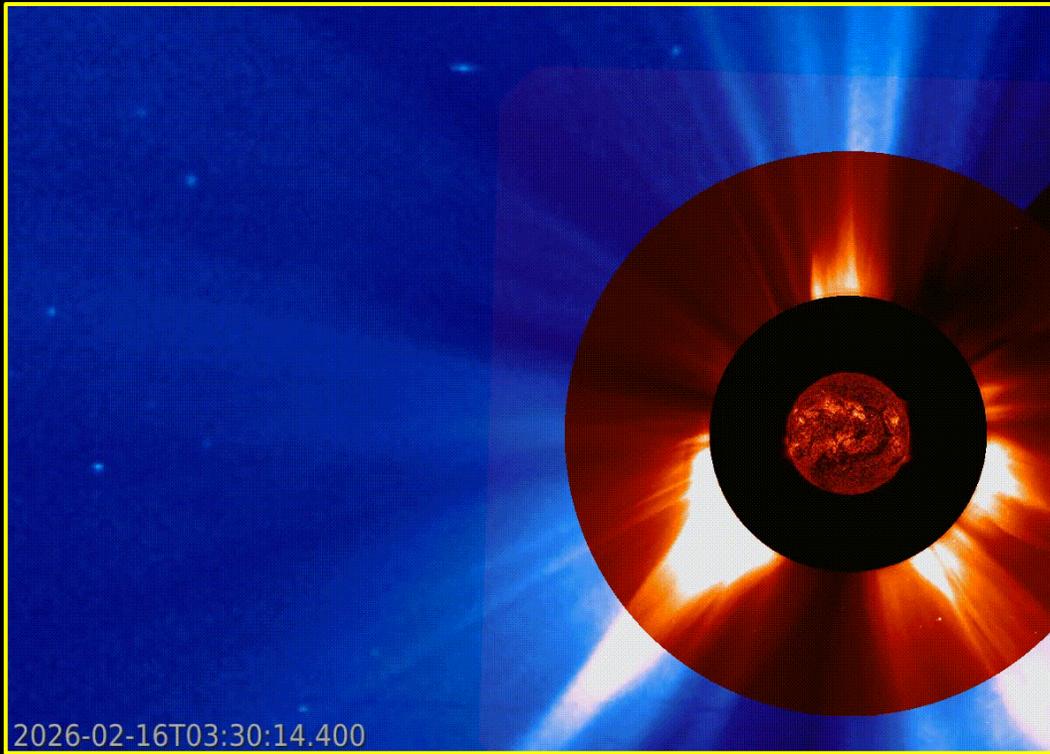
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2026-02-15	2026-02-16	2026-02-17	2026-02-18	2026-02-19	2026-02-20	2026-02-21	2026-02-22
Probability (%)	50 01 01	61 02 01	90 38 01	90 34 01	90 45 01	90 49 10	80 49 10	64 18 01
Observed (#)	01 01 00	01 00 00	02 00 00	03 00 00	02 00 00	00 00 00	02 00 00	02 00 00

Solar X-Ray and UV flux



Coronal Mass Ejections



Partial halo CME:

Observation: 04:24 UTC on Feb 16

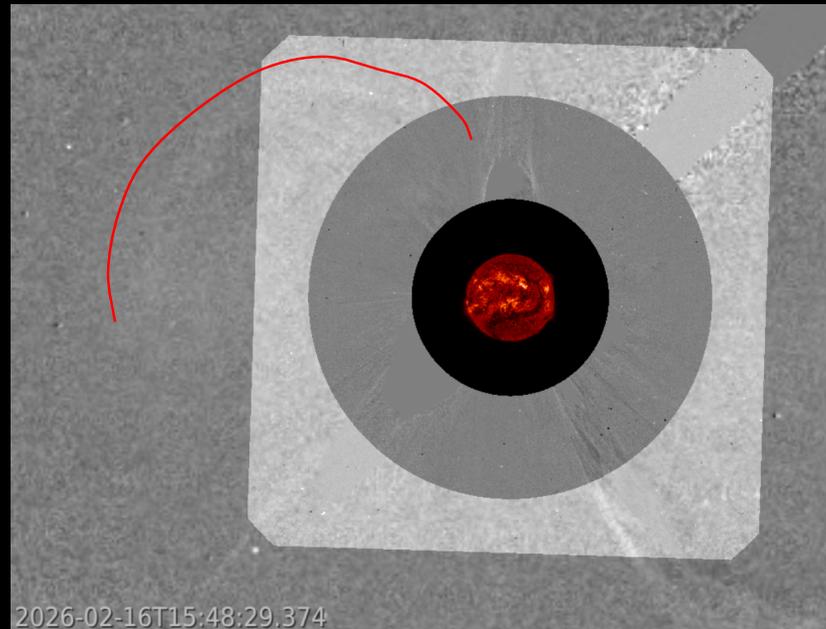
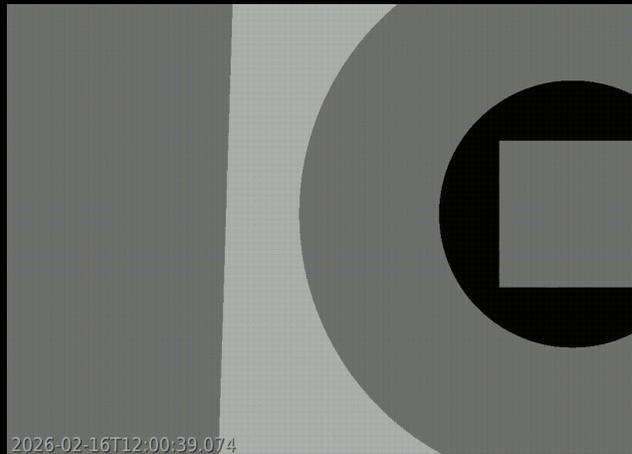
Possibly associated with M2.4 flare (peak: 04:35 UTC, S09 E89) from an unnumbered region and a prominence eruption around 04:15 UTC on the E limb.

Speed = 1600 km/s, Ang. width = 180 deg

Prediction: Glancing blow on Feb 18 T04:00

Observation: Didn't arrive to Earth

Coronal Mass Ejections



CME:
Observation: 14:00 UTC on Feb 16
Possibly associated a filament eruption near central meridian
Speed = 457 km/s, Ang. width = 110 deg

Prediction: Impact on Feb 19T20:00

Observation: Possible arrival on Feb 20T22:00



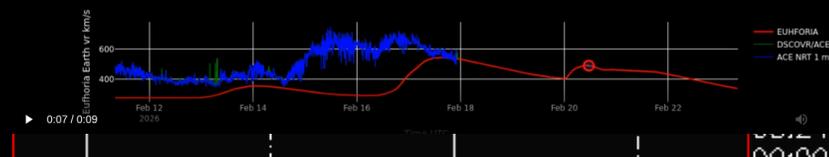
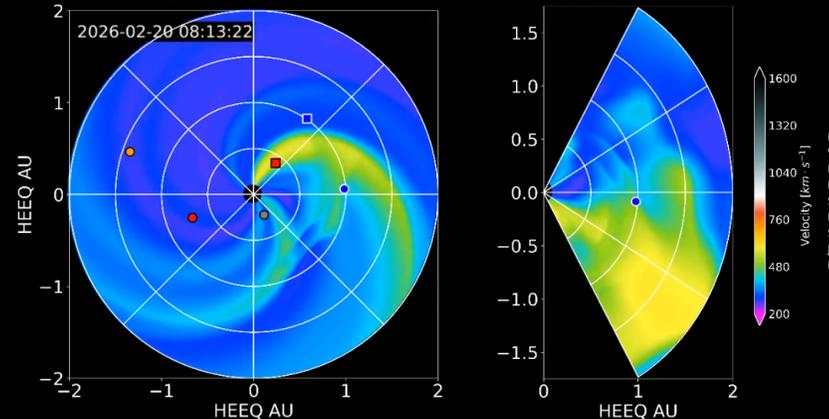
2026-02-16T12:00:05.129

Collection : CME - 2026-02-16 08:00:00

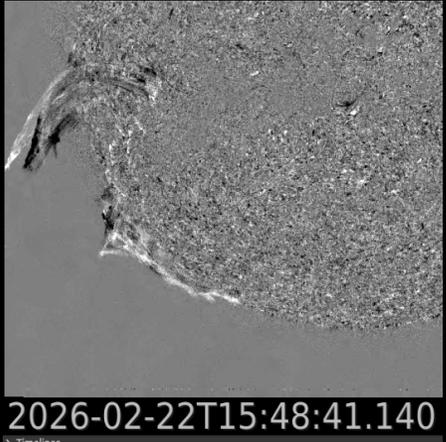
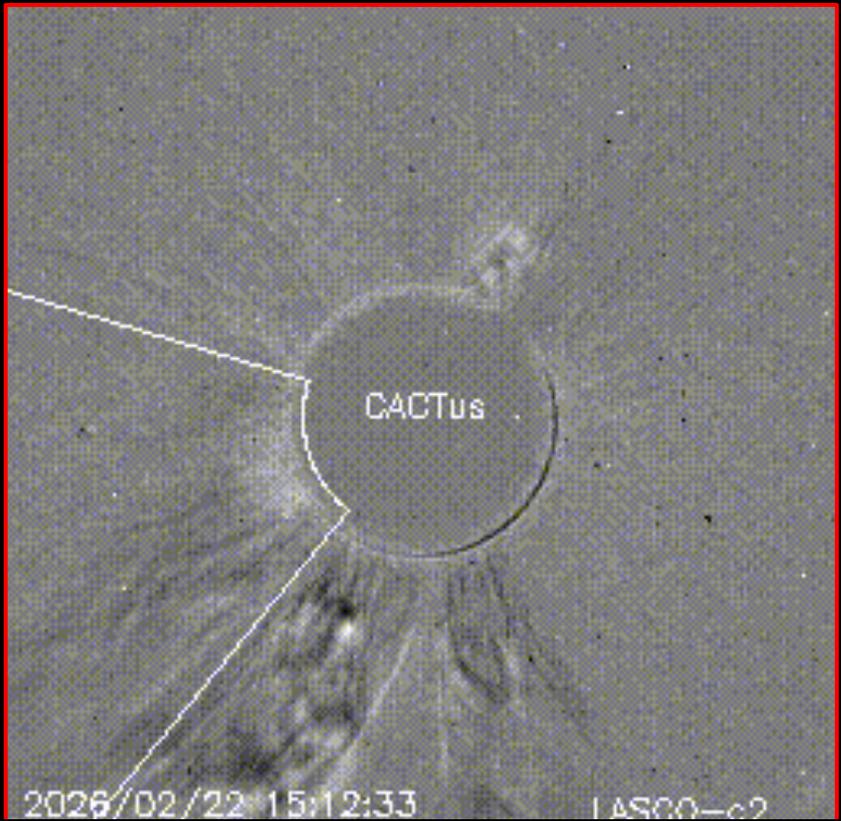
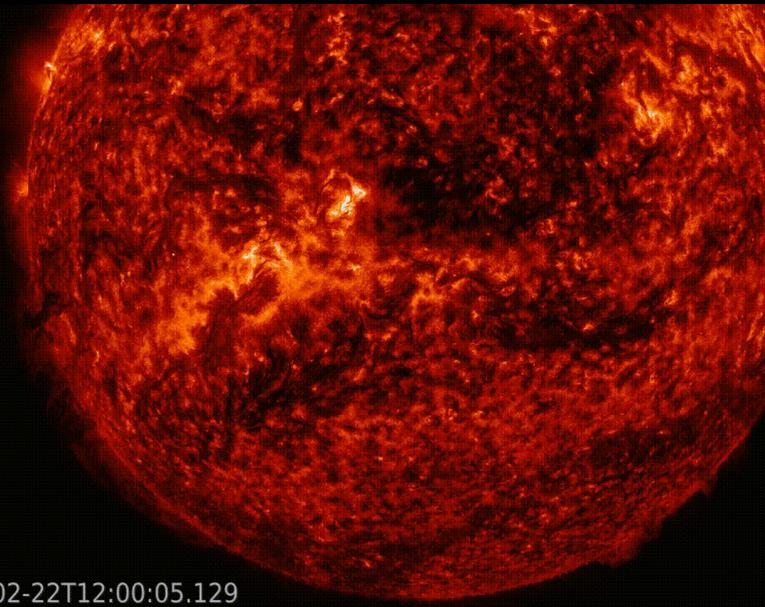
Start date : 2026-02-11T08:04:11

© SIDC ÉUHFORIA Preview

End date : 2026-02-23T08:12:57

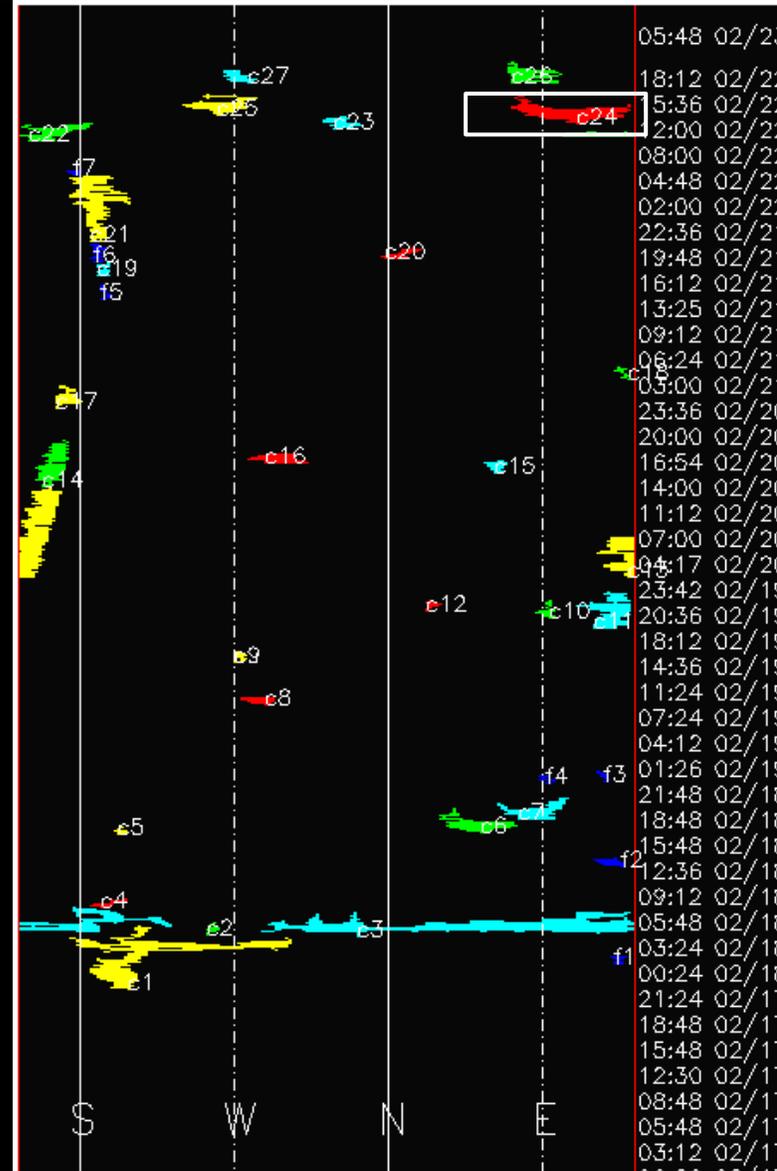


Coronal Mass Ejections



CME:
Observation: 15:48 UTC on Feb 22
 Possibly associated with filament eruption on the SE limb.
 Speed = 200 km/s, Ang. width = ~100 deg

Prediction: No significant impact expected



Solar Wind and

Geomagnetic Activity



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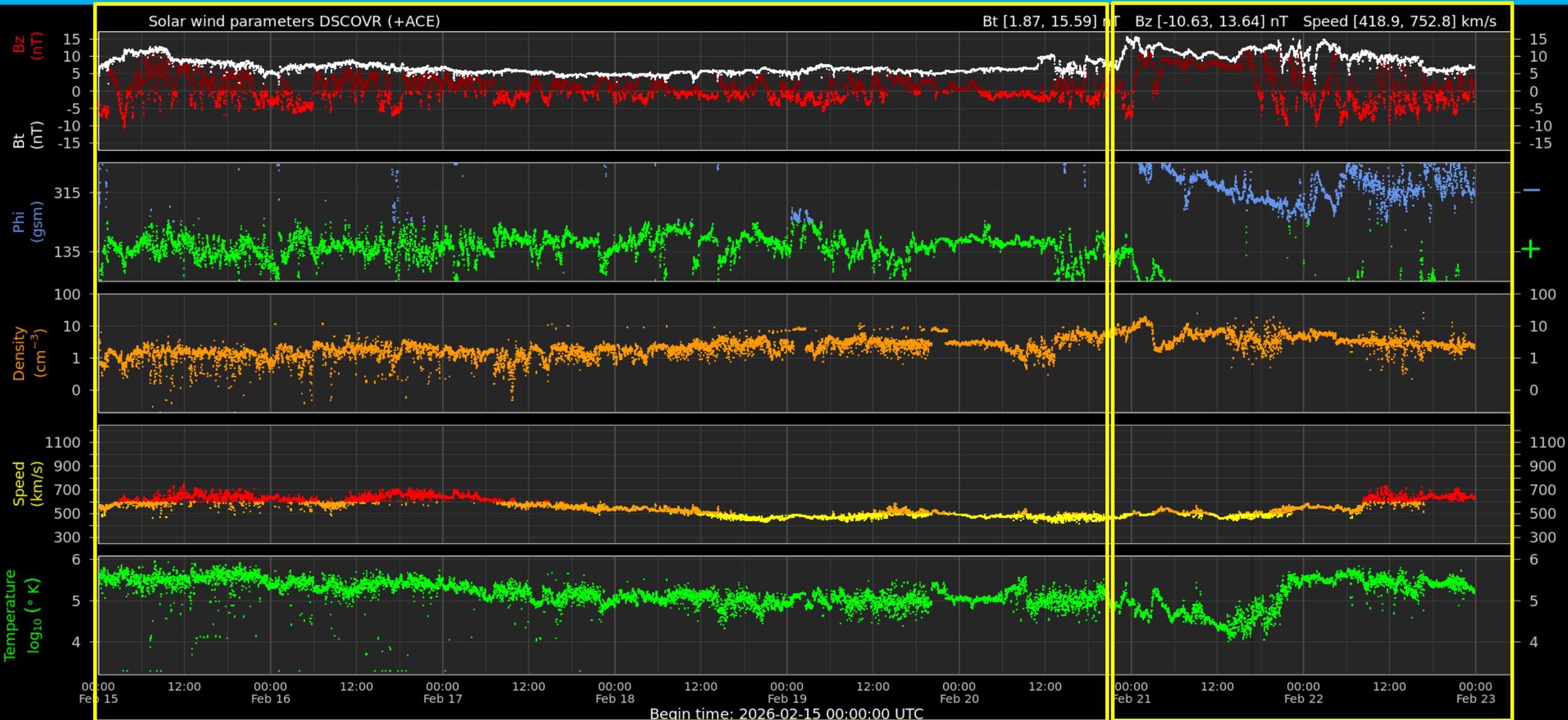
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Solar wind parameters

HSS: CH 146 +

ICME-CME on Feb 16T14:00?

HSS: CH 147 -

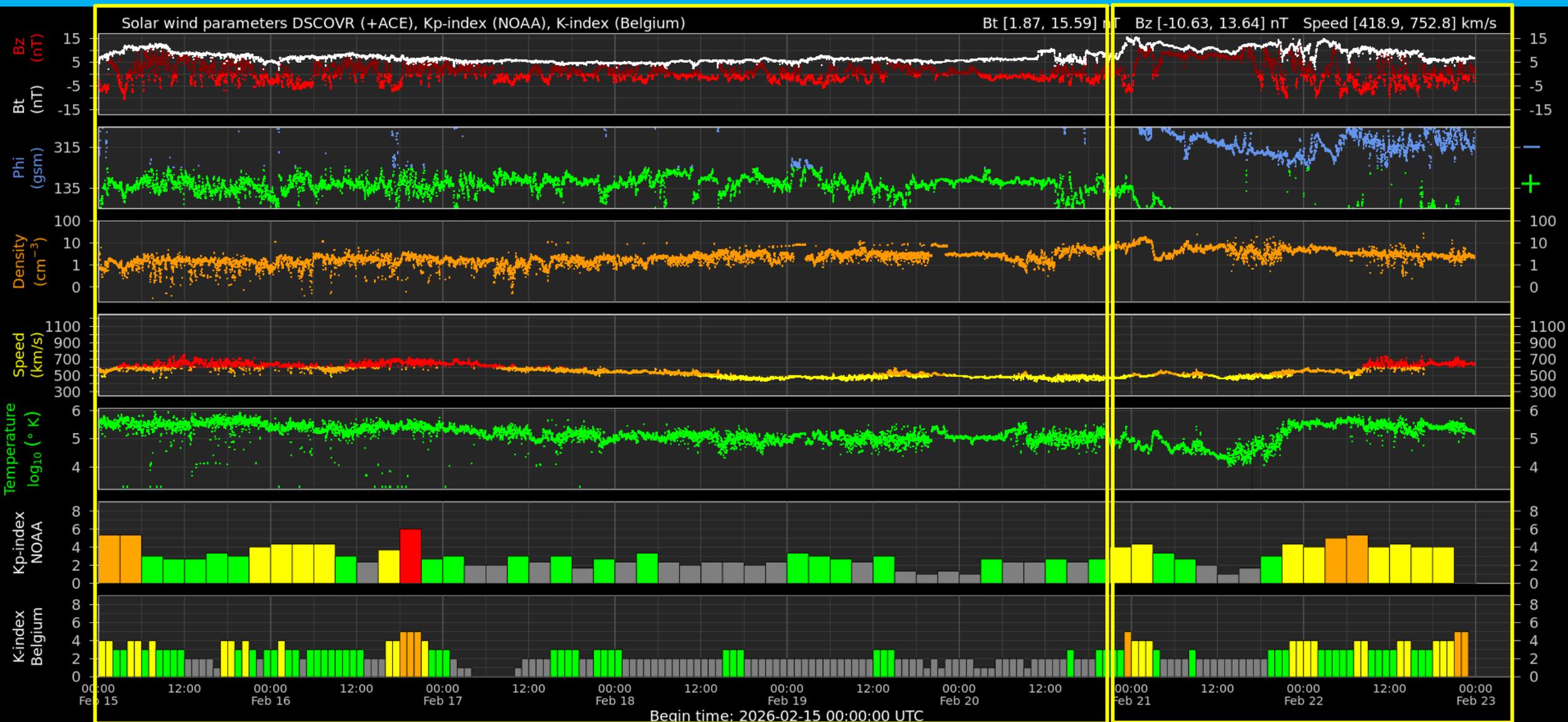


Solar wind parameters & K-indices

HSS: CH 146 +

ICME-CME on Feb 16T14:00?

HSS: CH 147 -

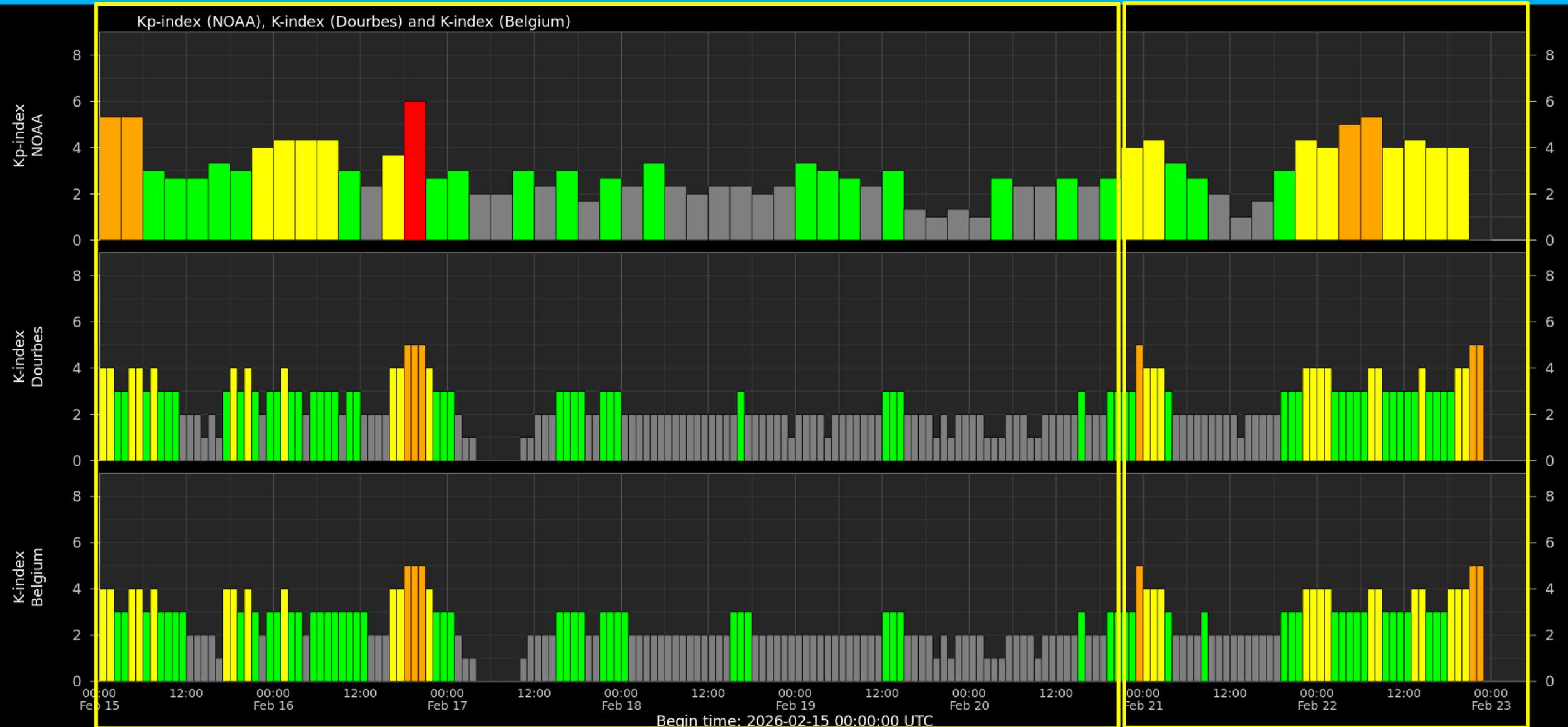


Geomagnetic activity (K-indexes)

HSS: CH 146 +

ICME-CME on Feb 16T14:00?

HSS: CH 147 -



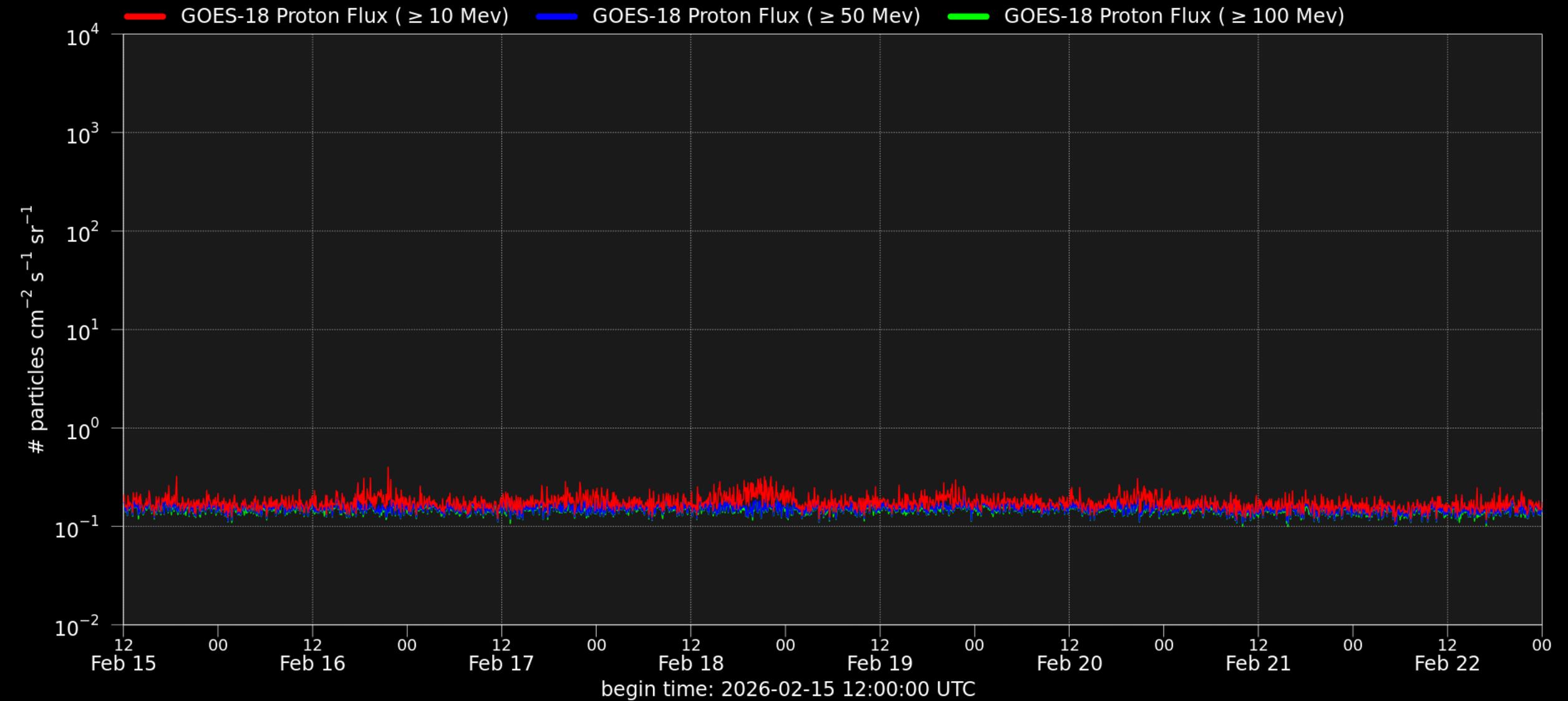
Energetic Particles



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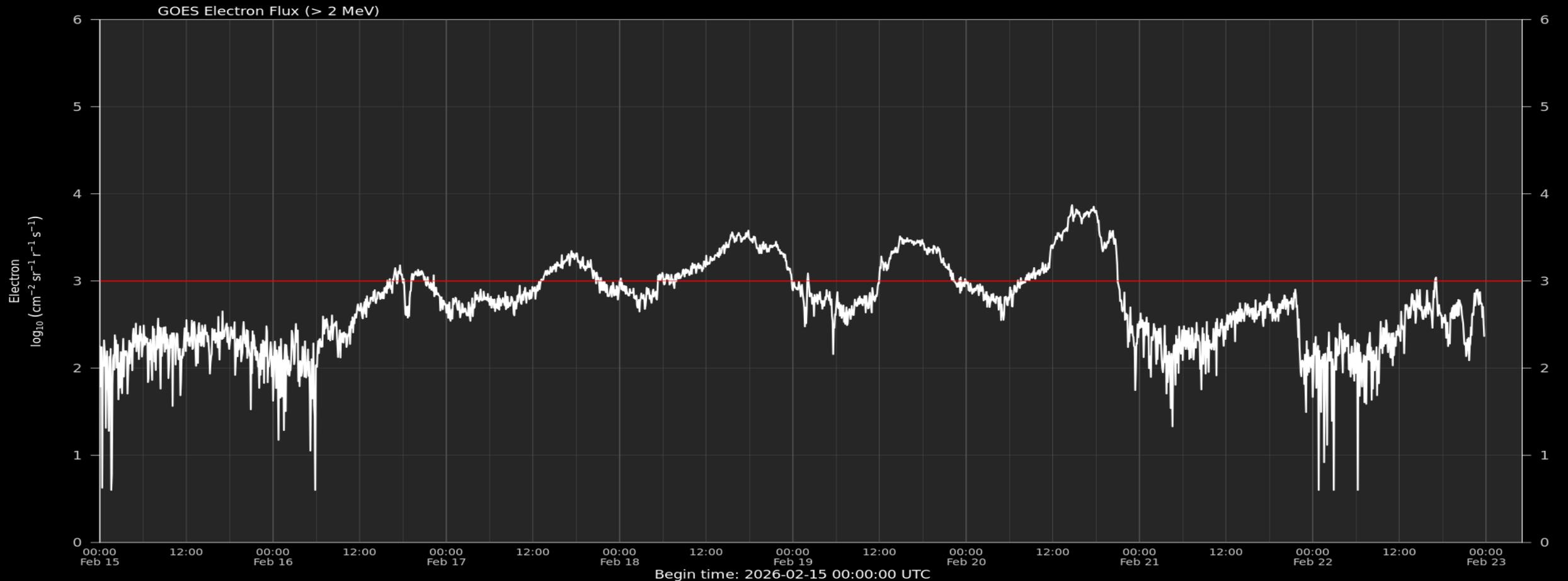
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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



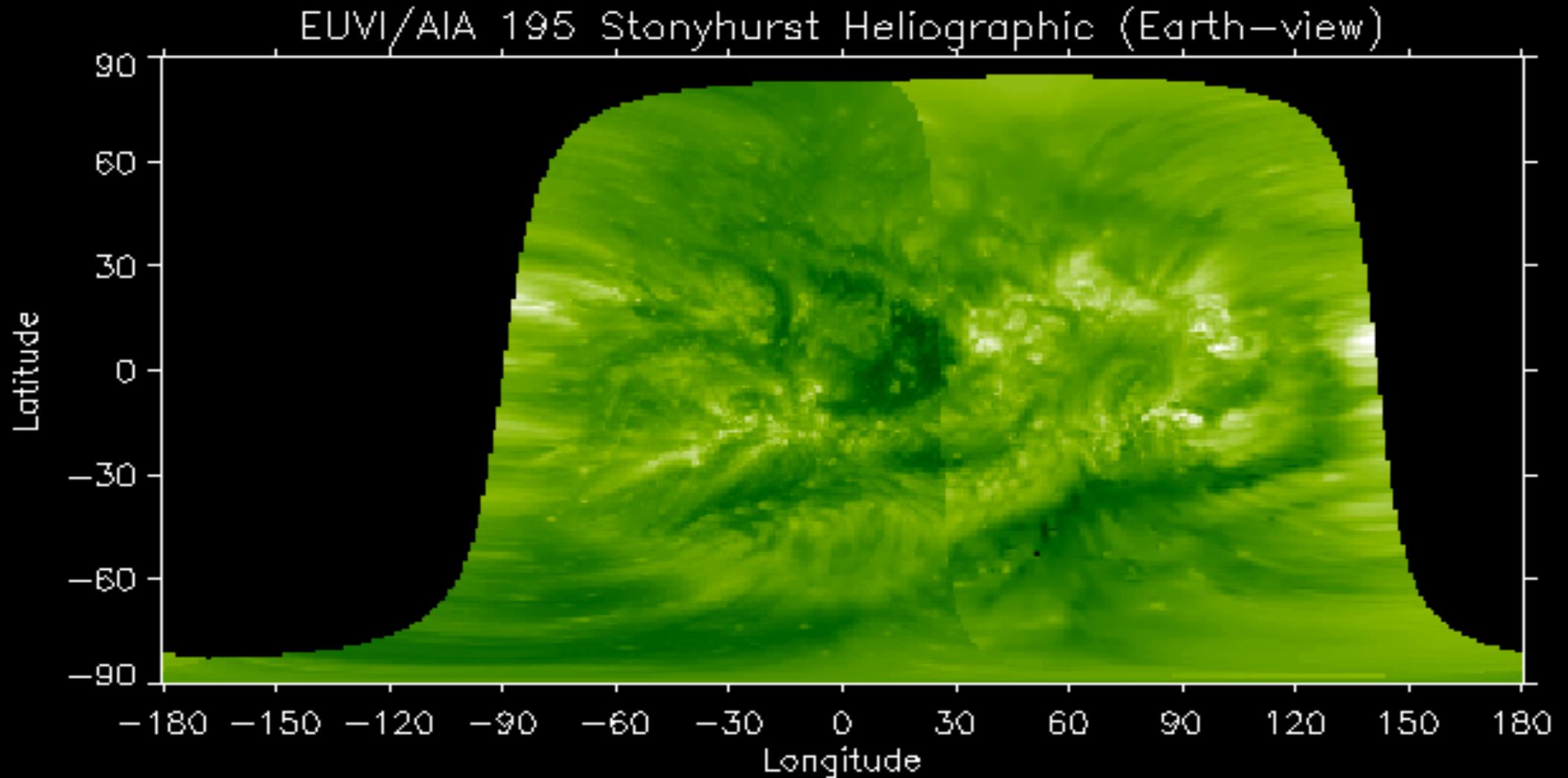
Outlook



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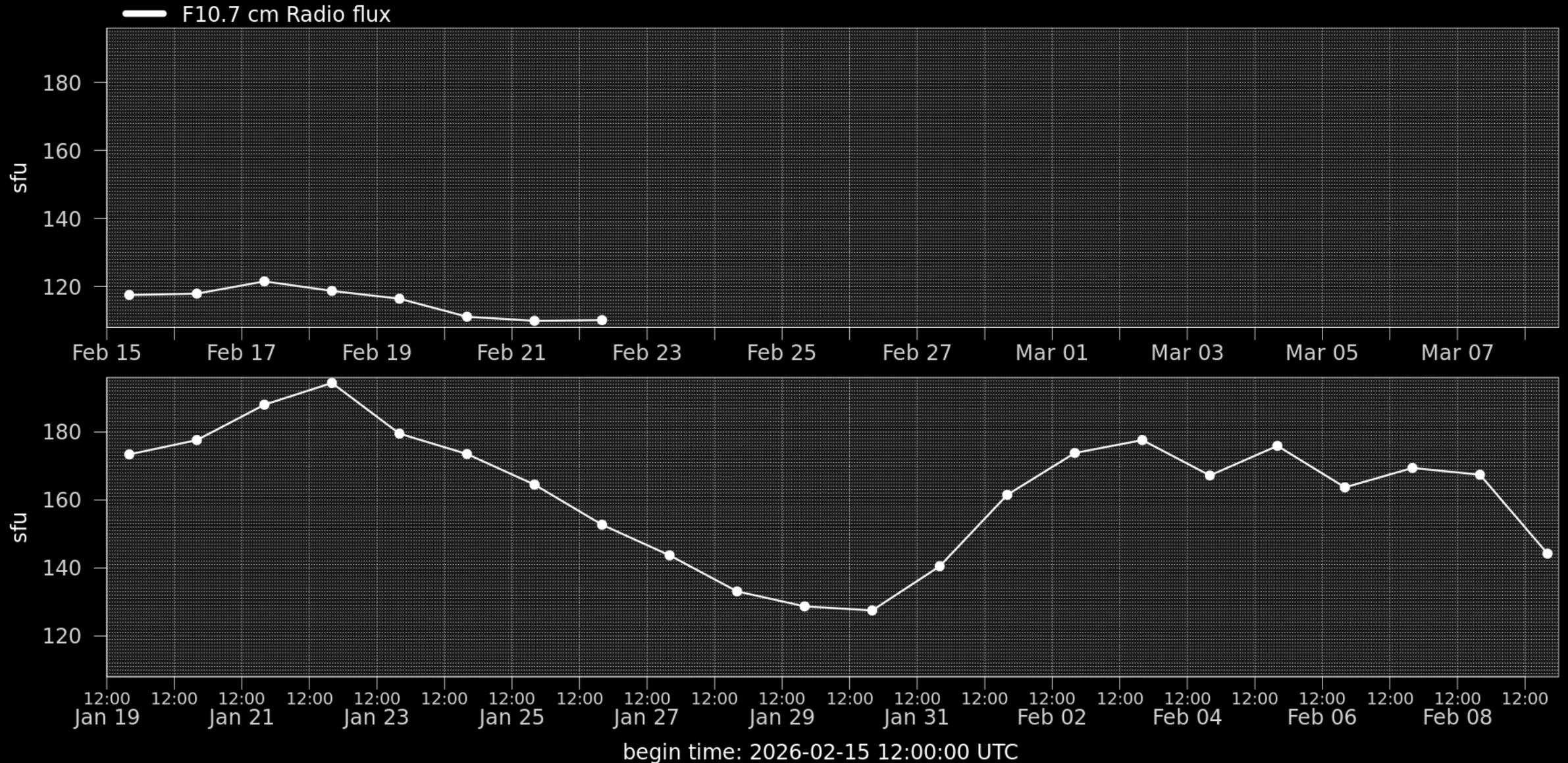
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Outlook: Solar activity

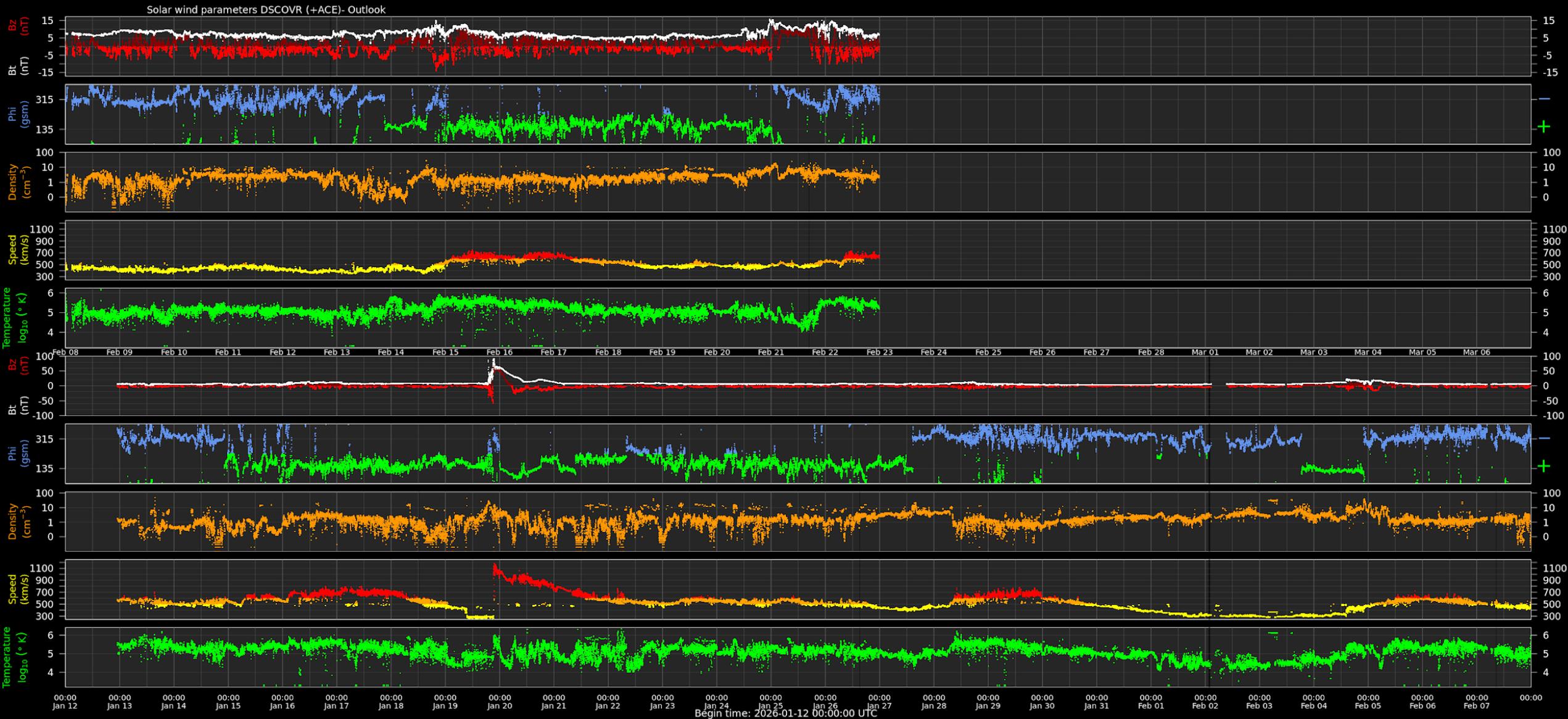


Observation date: 2026/02/22 17:35:00

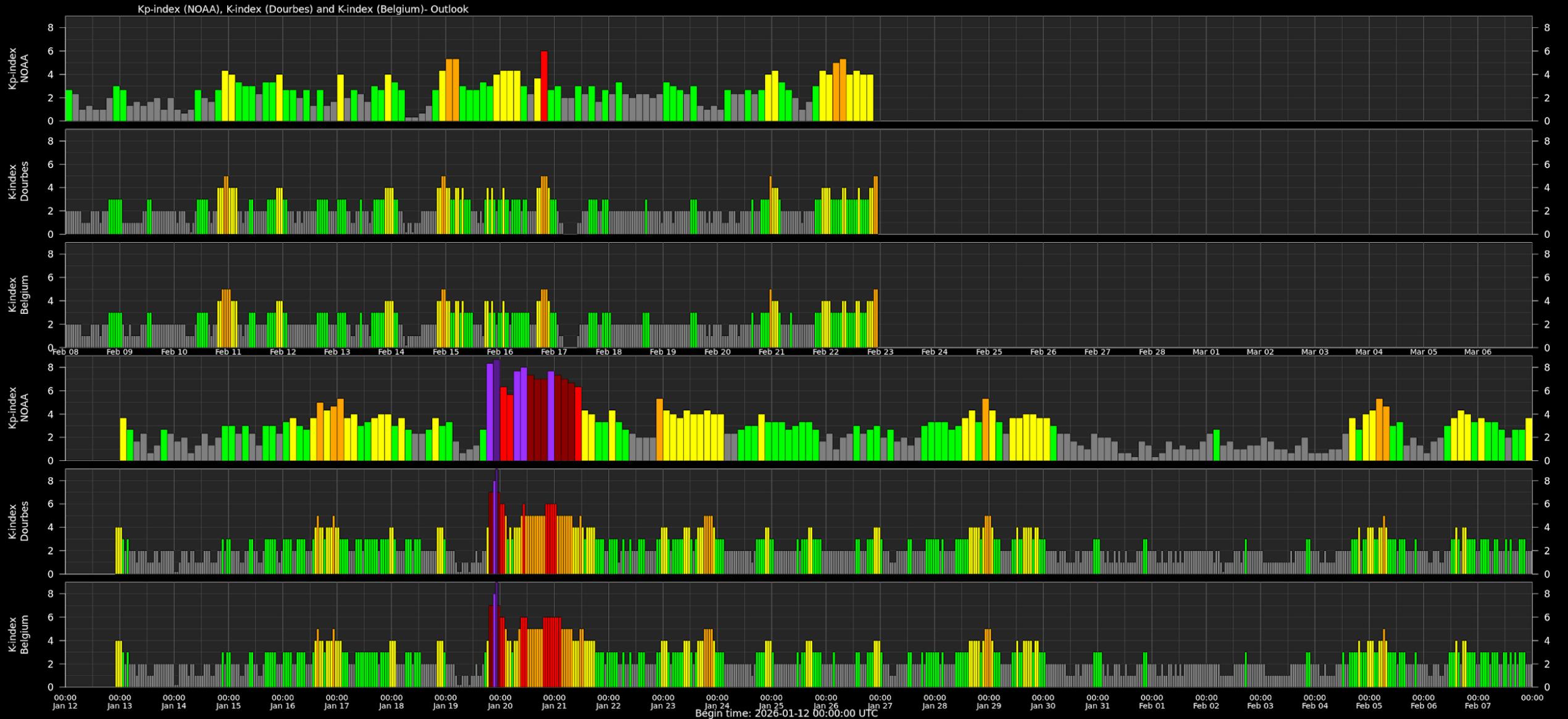
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



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GNSS Scintillation Advisories
PSD advisories

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