

SIDC Space Weather Briefing

30 March 2026-05 April 2026

de Patoul Judith

& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2026-03-30 00:00 to 2026-04-05 23:59

Active regions	X1.4 flare (SIDC Flare 7290) from SIDC Sunspot Group 836 (NOAA Active Region 4405)
Flares	# C-class flare: 53 # M-class flare: 7 # X-class flare: 1
Coronal Holes	SIDC Coronal Hole 149 & SIDC Coronal Hole 142
CMEs	full halo CME (SIDC CME 644) NNW (CME SIDC CME 645)

Proton flu	Gradual enhancement was observed.
Electron flux	Moderate levels

Solar wind and geomagnetic conditions

ICMEs	Solar wind shock: 01 April ICME (SIDC CME 644) & 03 April (CME (SIDC CME 645)
Solar wind conditions	B : 0.9 - 17.39 nT //Bz: -15.65 nT to 12.15 nT //Speed: 354.3 - 858.0km/s
Geomagnetic conditions	max K _{Be} : 6.0, max K _p (NOAA): 6.67, Major Storm conditions

All Quiet Alert: NOT QUIET

Solar Activity

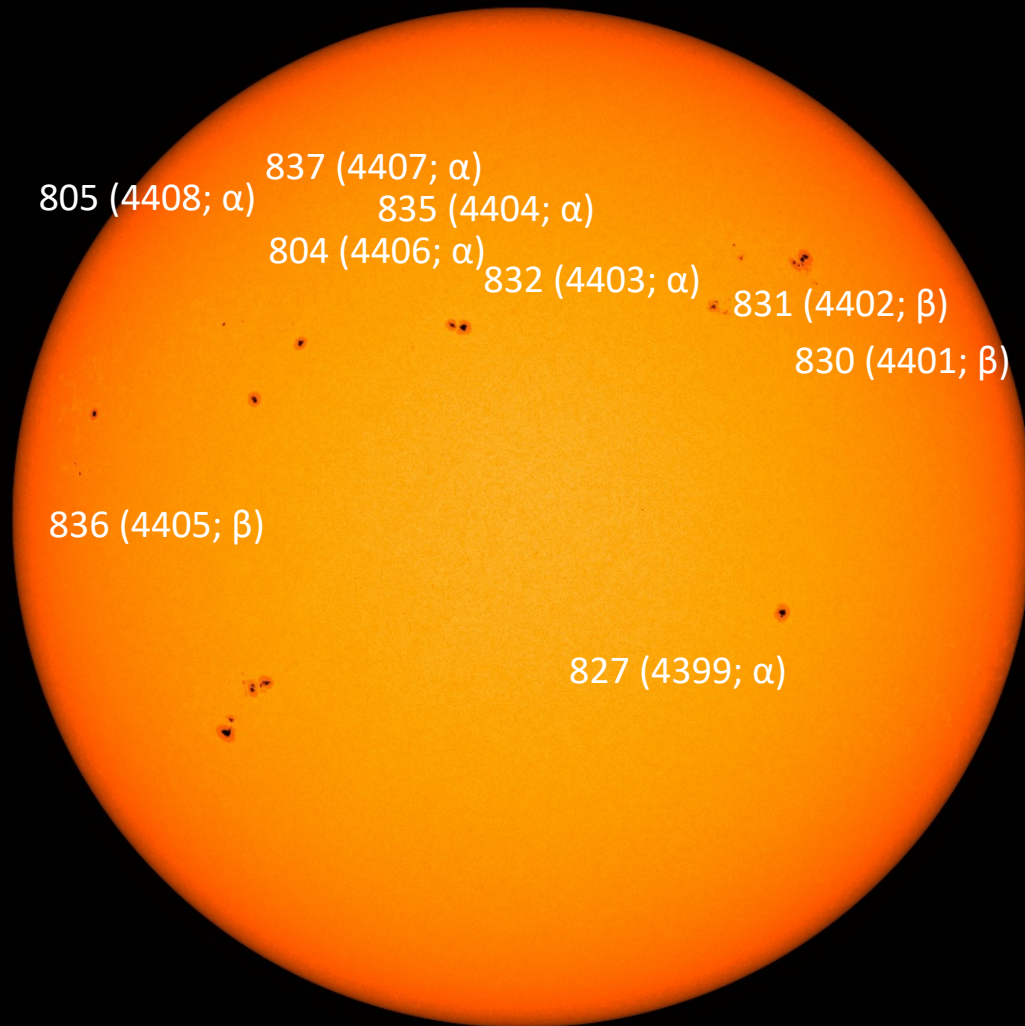


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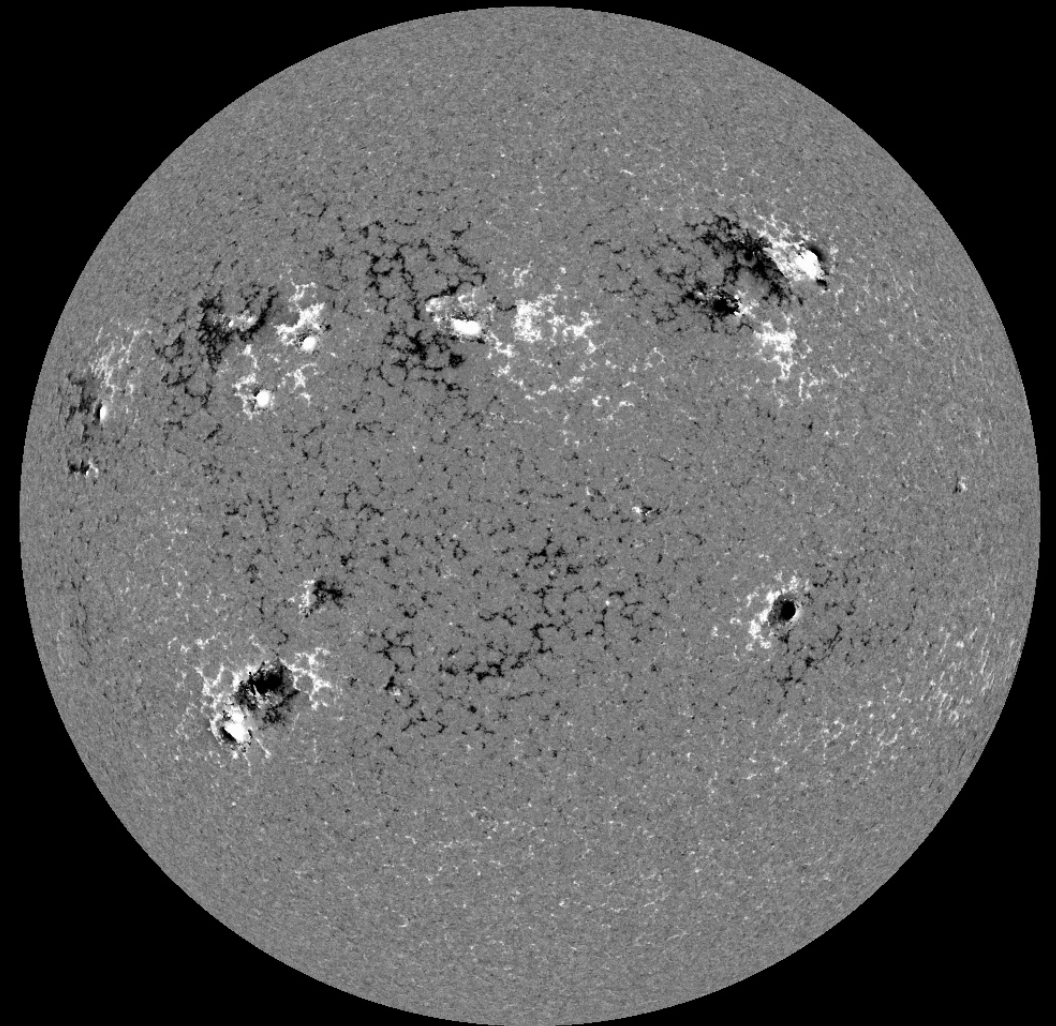
Solar active regions

SDO/HMI White Light 2026-03-30



SDO/HMI Continuum: 20260330_120000

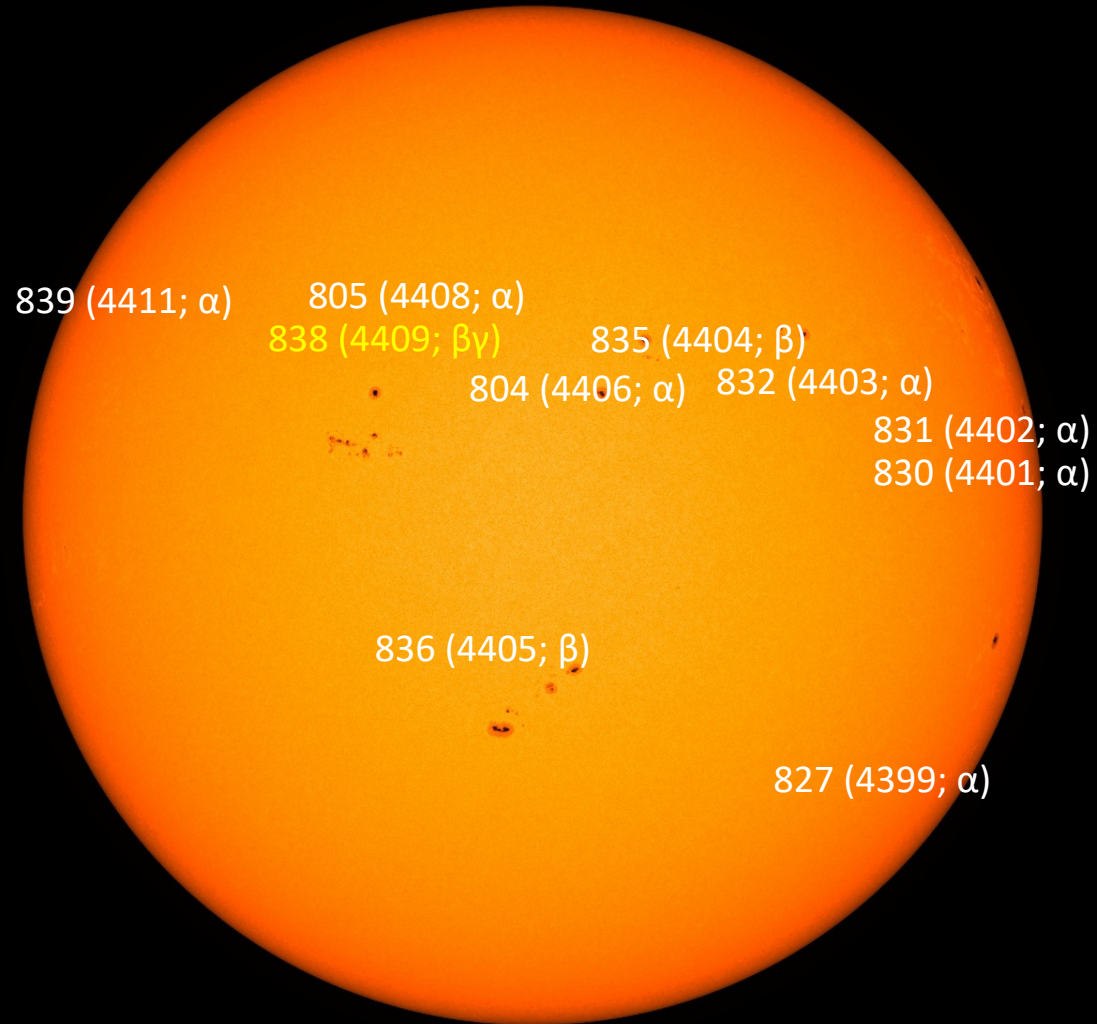
SDO/HMI Magnetogram 2026-03-30



SDO/HMI Magnetogram: 20260330_120000

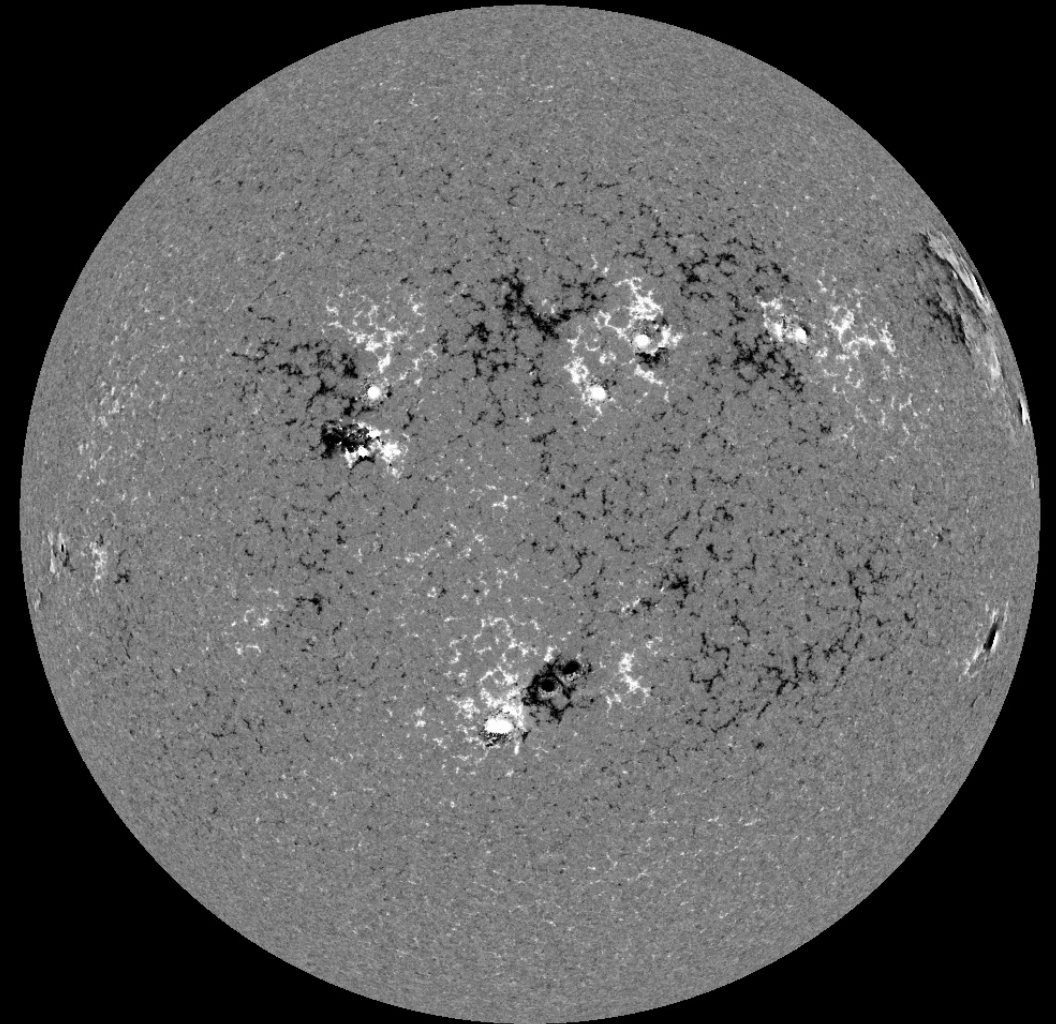
Solar active regions

SDO/HMI White Light 2026-04-02



SDO/HMI Quick-Look Continuum: 20260402_120000

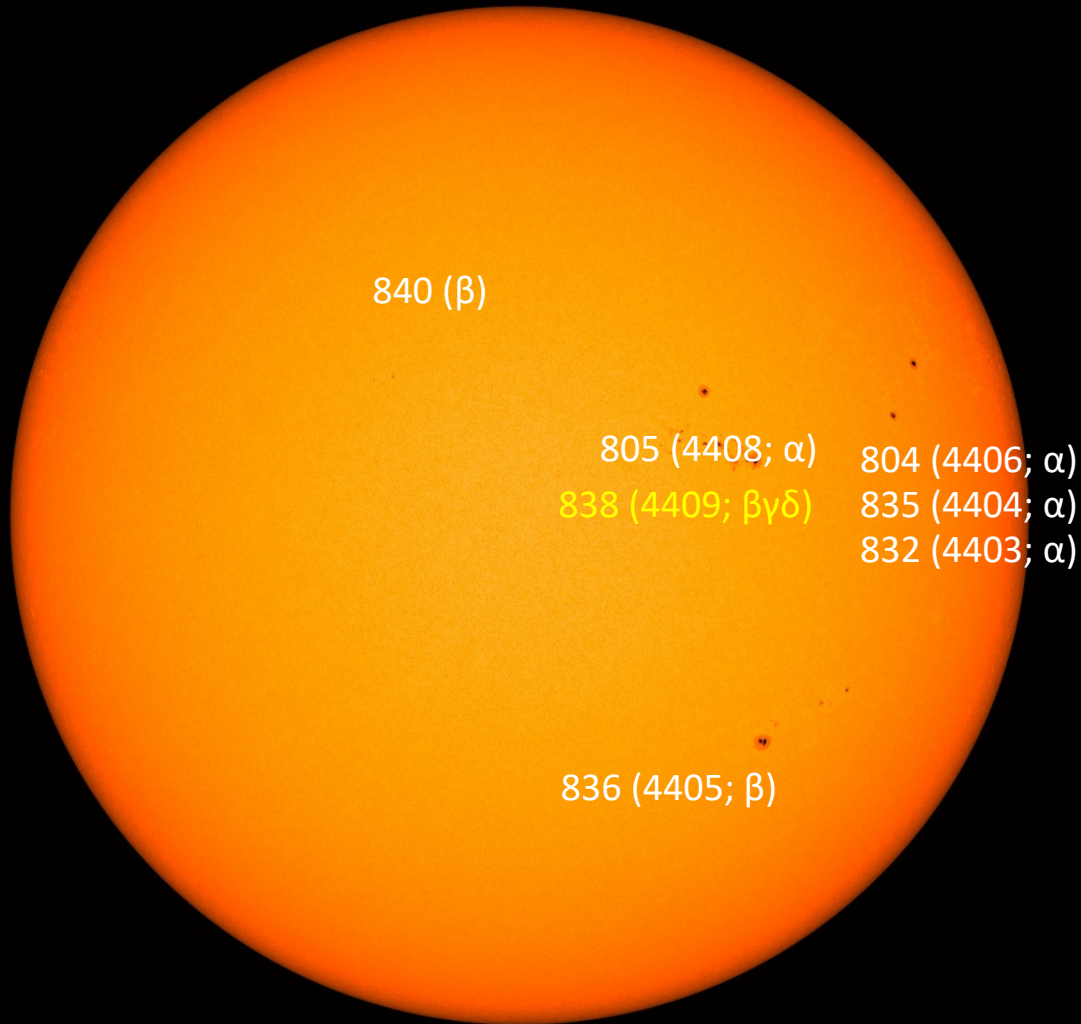
SDO/HMI Magnetogram 2026-04-02



SDO/HMI Quick-Look Magnetogram: 20260402_120000

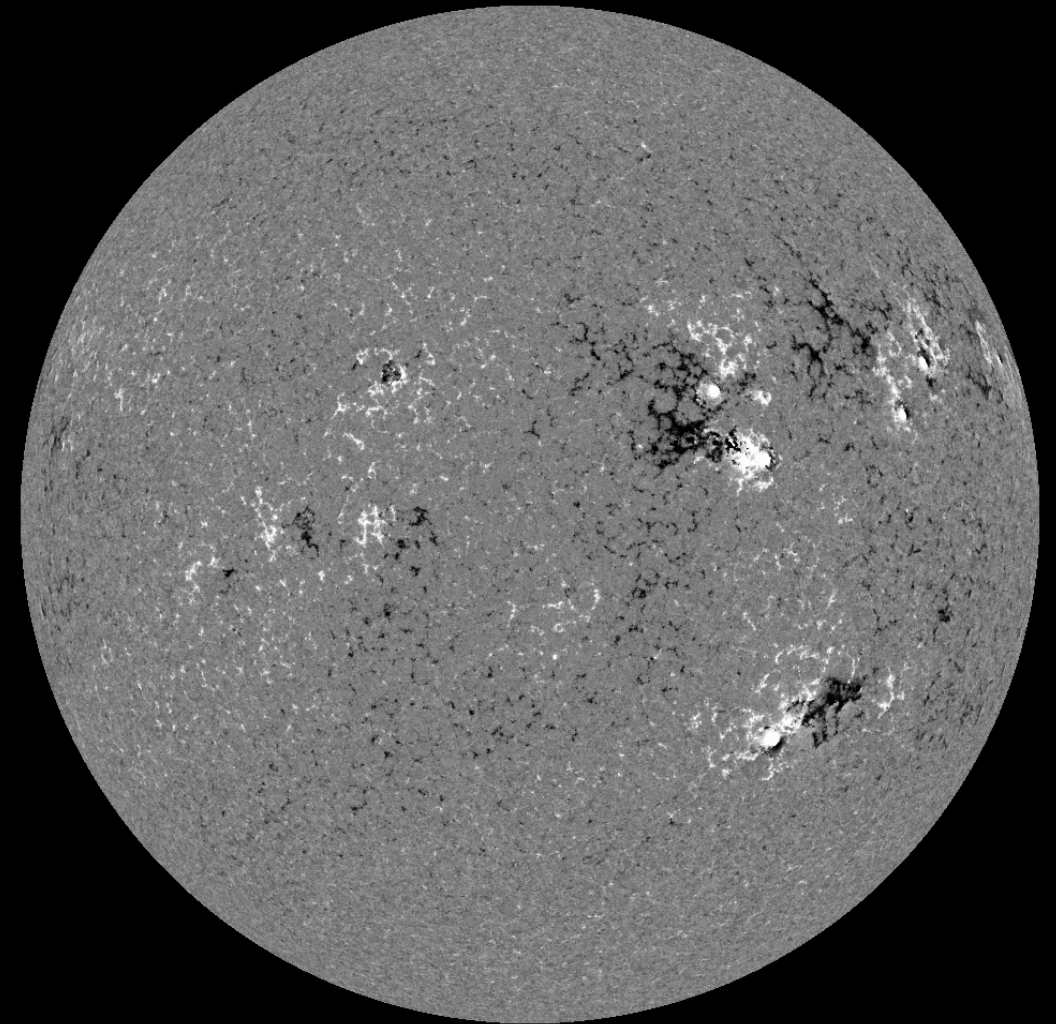
Solar active regions

SDO/HMI White Light 2026-04-05



SDO/HMI Quick-Look Continuum: 20260405_120000

SDO/HMI Magnetogram 2026-04-05



SDO/HMI Quick-Look Magnetogram: 20260405_120000

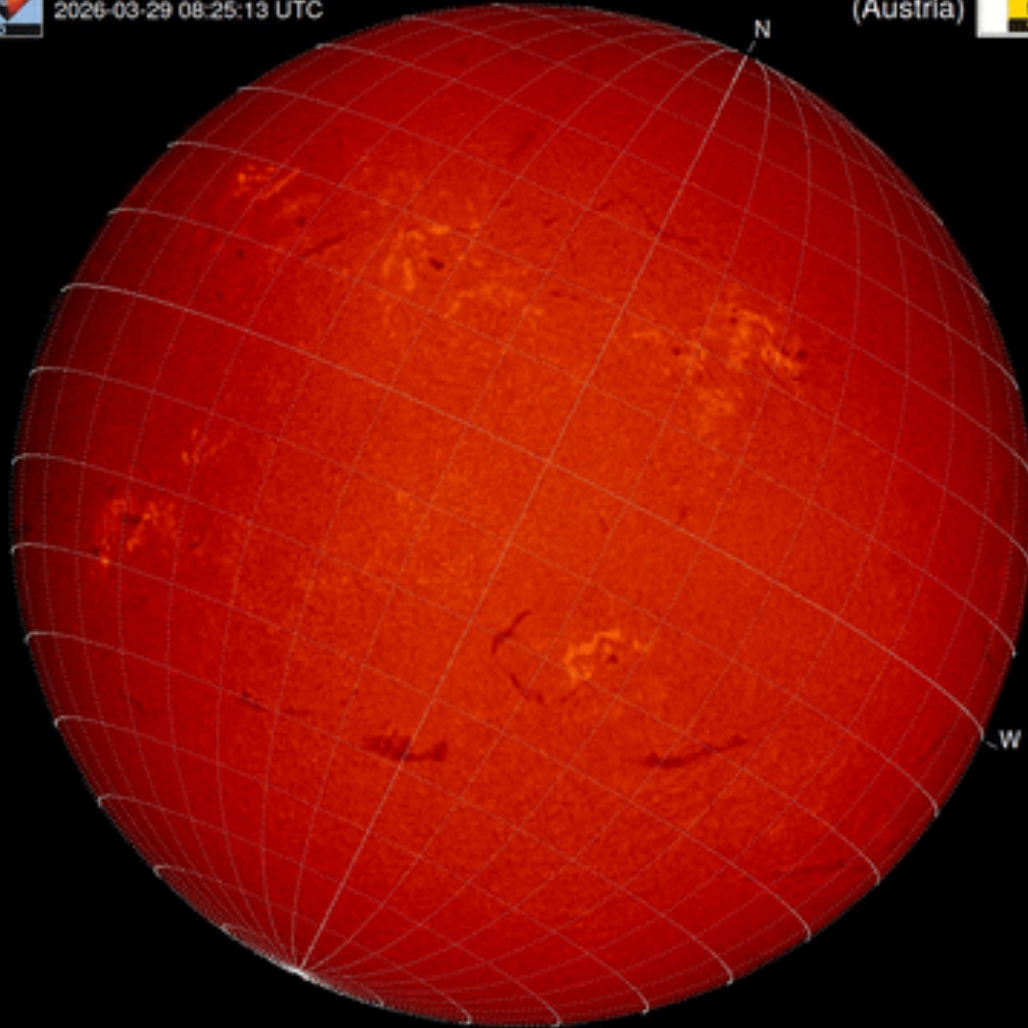
Filaments & Filament eruptions

H-alpha 2026-03-30



Kanzelhöhe Observatory
2026-03-29 08:25:13 UTC

University of Graz
(Austria)

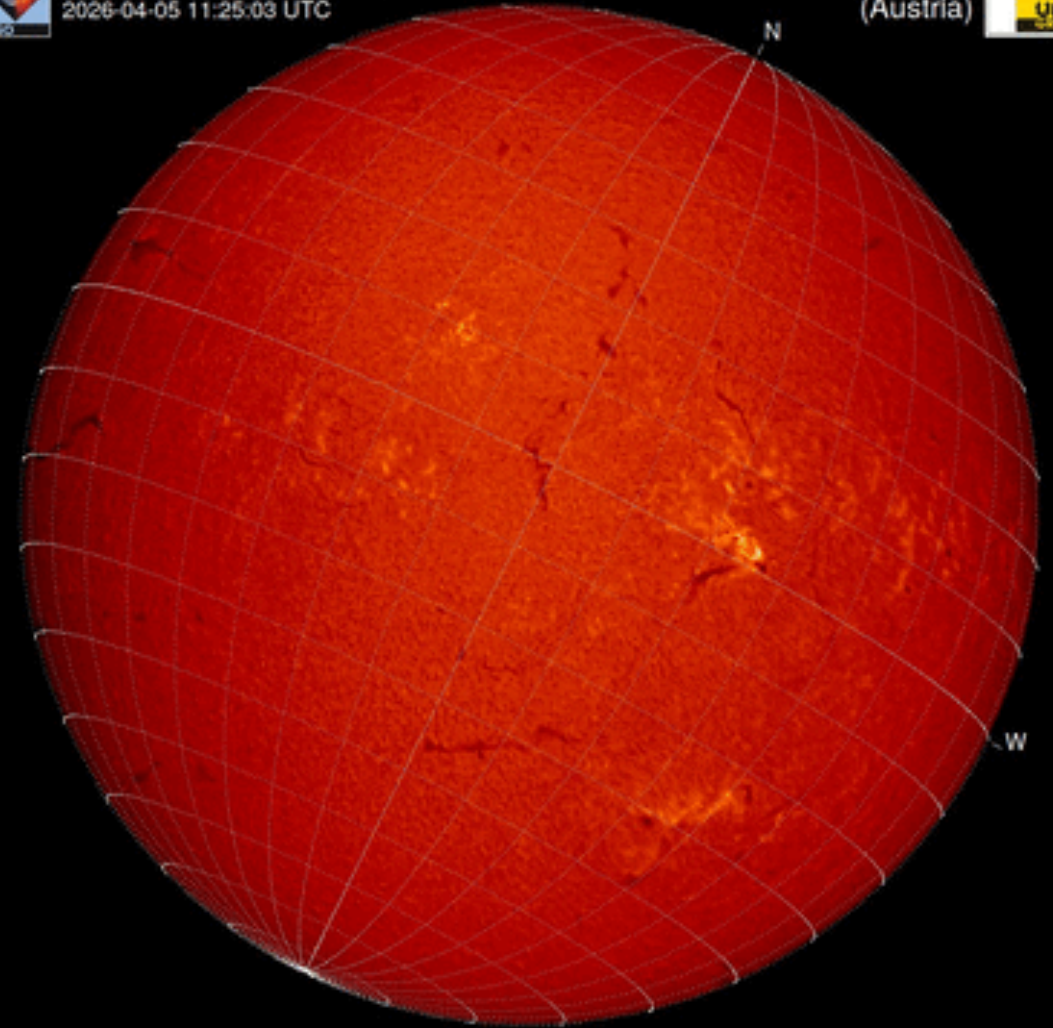


H-alpha 2026-04-05

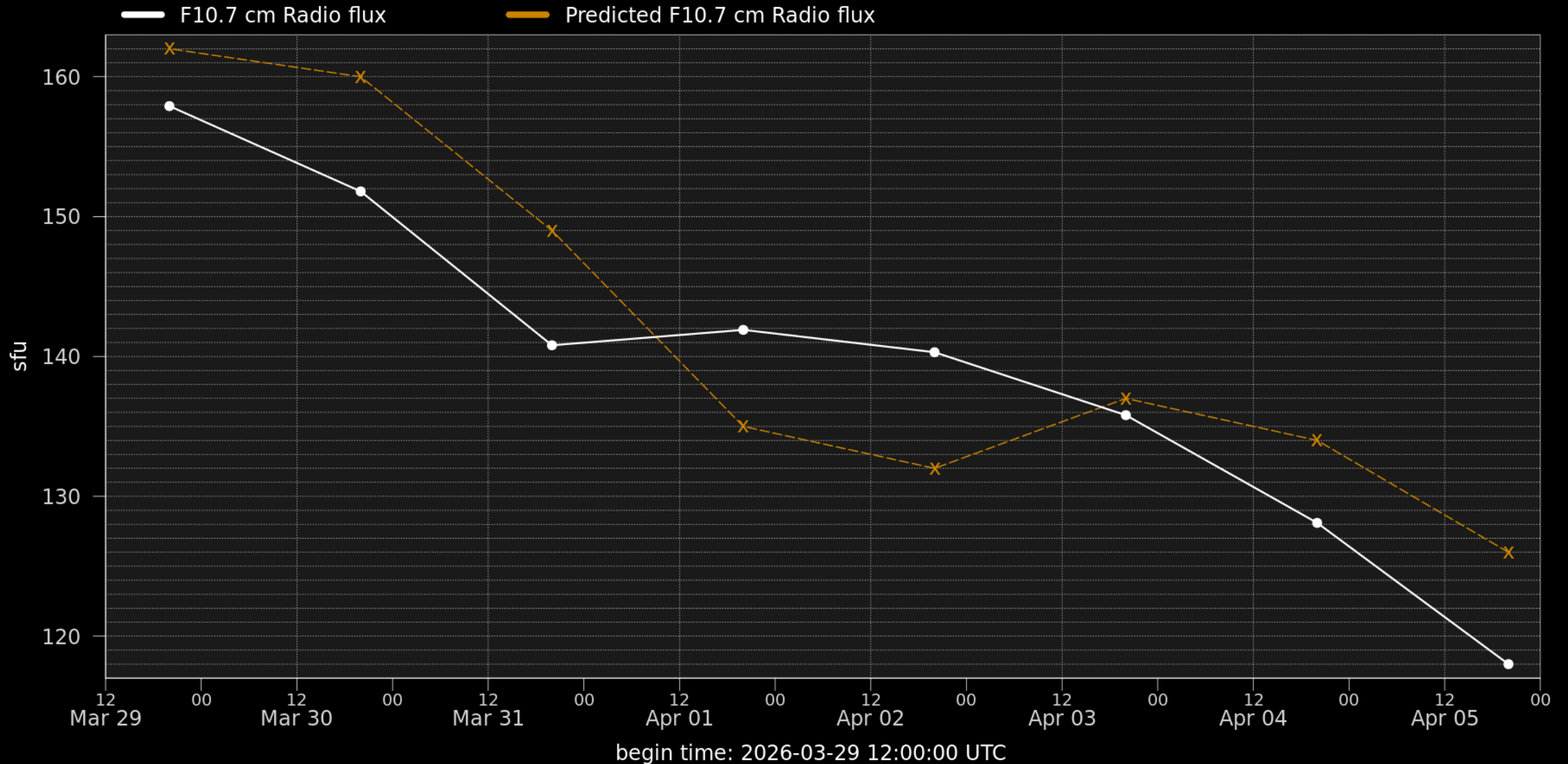


Kanzelhöhe Observatory
2026-04-05 11:25:03 UTC

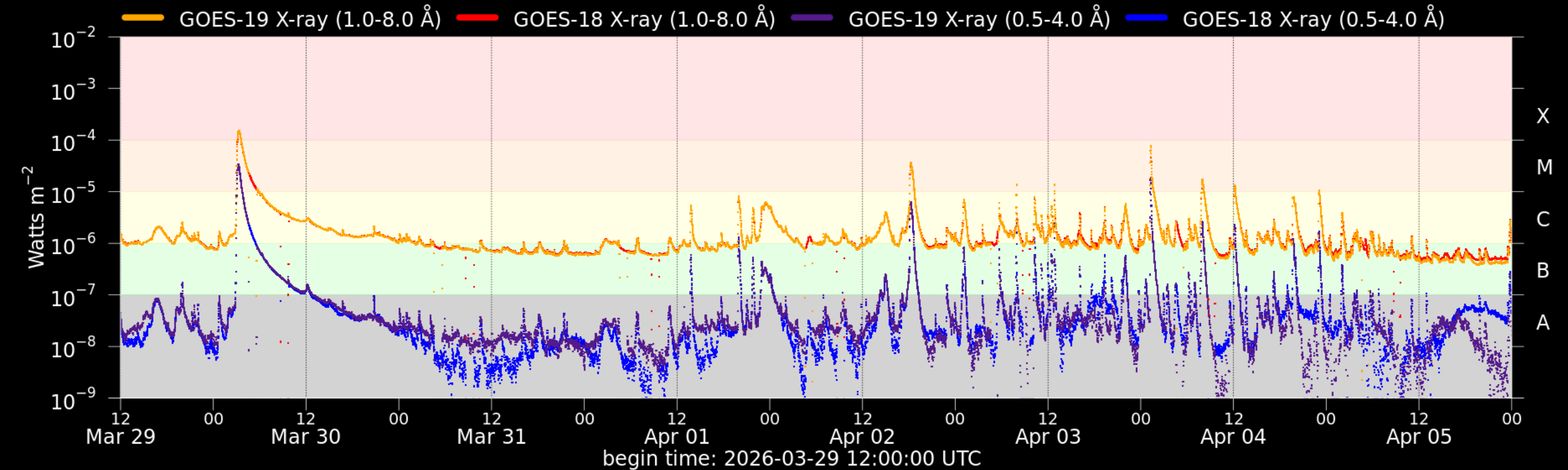
University of Graz
(Austria)



Solar F10.7cm radio flux



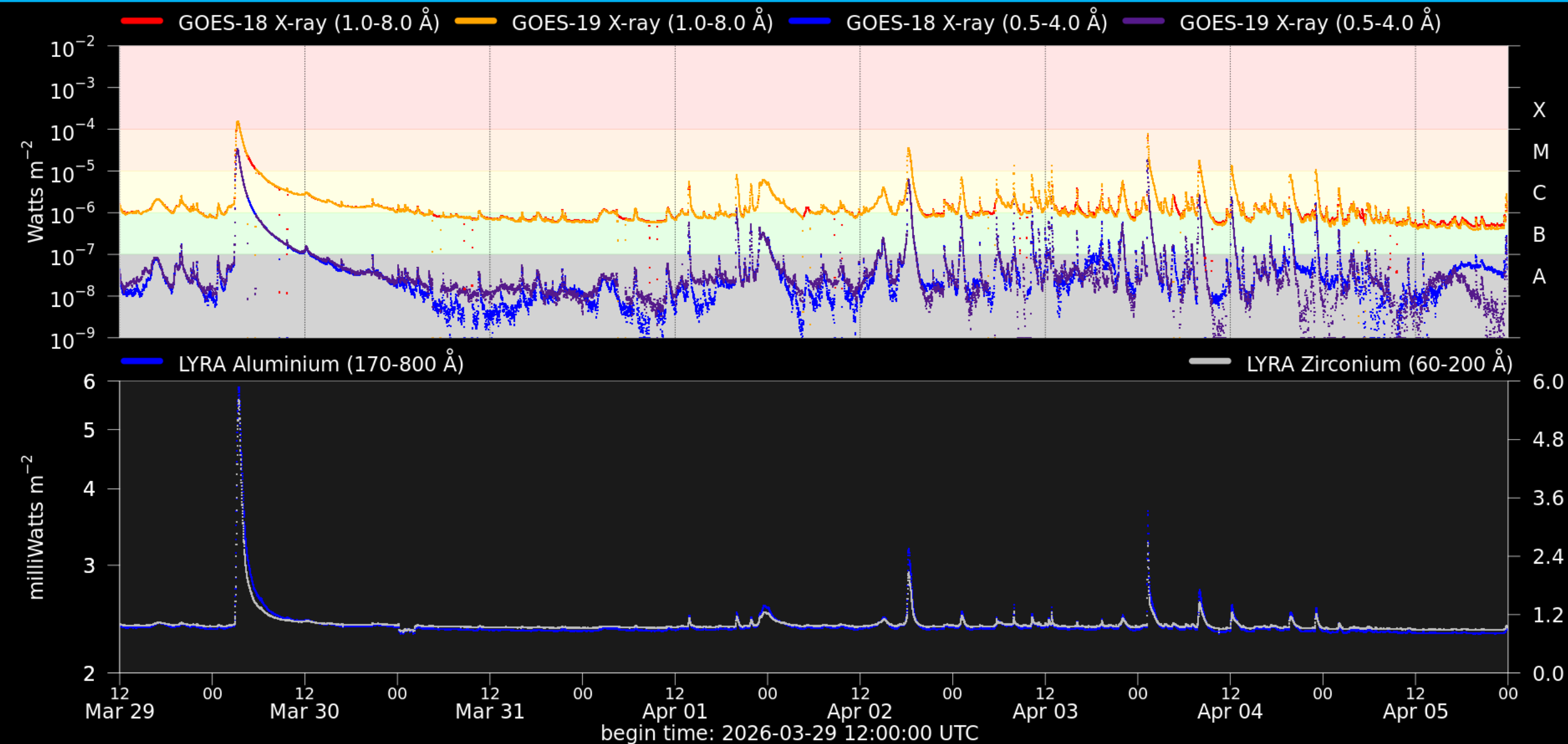
Flaring activity



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

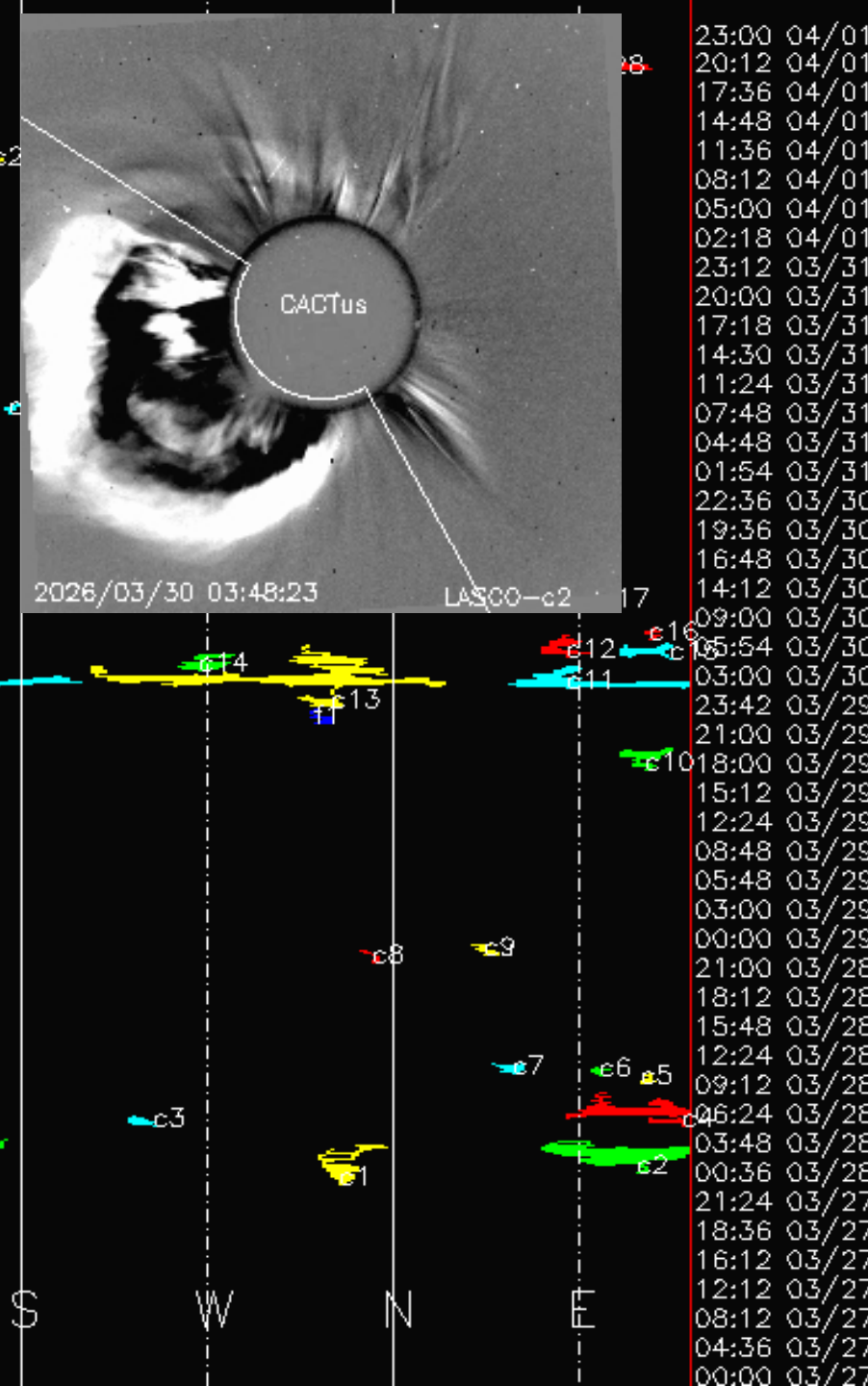
Issue date	2026-03-29	2026-03-30	2026-03-31	2026-04-01	2026-04-02	2026-04-03	2026-04-04	2026-04-05
Probability (%)	99 47 04	99 56 01	99 61 02	97 38 05	99 40 02	95 27 02	99 50 02	99 41 01
Observed (#)	03 00 01	01 00 00	02 00 00	08 00 00	07 02 00	15 03 00	15 02 00	02 00 00

Solar X-Ray and UV flux



Coronal Mass Ejections

A coronal mass ejection (SIDC CME 644) was detected in SOHO/LASCO-C2 on 30 March at 03:24 UTC. Automated CACTus detection reports a full halo CME (width 360 degrees) with a principal angle of 132 degrees and a projected speed of 1024 km/s. This CME is associated with the X1.4 flare (SIDC Flare 7290), which peaked at 03:19 UTC from SIDC Sunspot Group 836 (NOAA Active Region 4405). This event was also accompanied by a Type II radio emission, indicating the presence of a shock wave propagating through the solar corona, with an estimated velocity of 1872 km/s. Initial 3D analysis suggests a propagation direction towards (S15E30) with an angular width of approximately 45 degrees and a speed of about 1835 km/s. The source region is consistent with the flare location at approximately (S27E42).



Solar Wind and

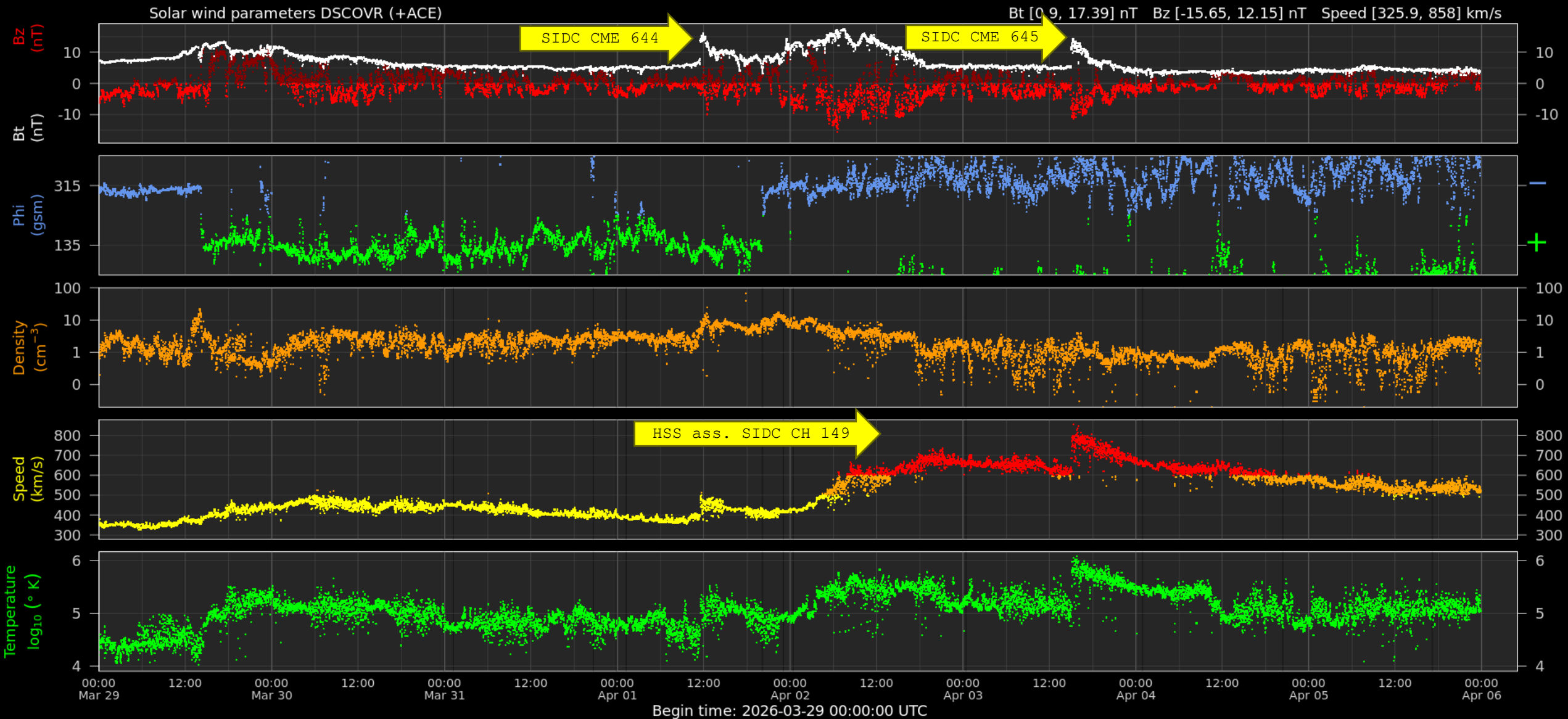
Geomagnetic Activity



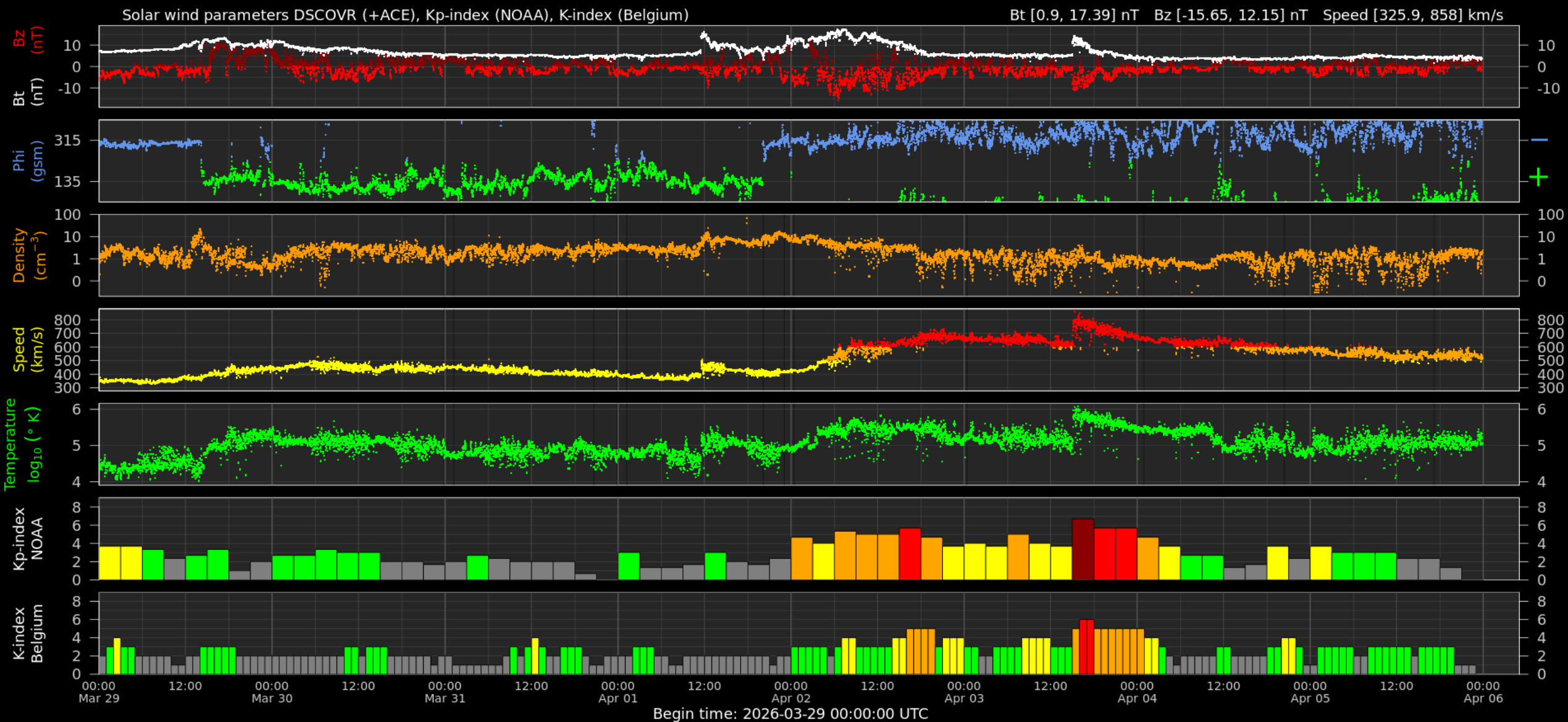
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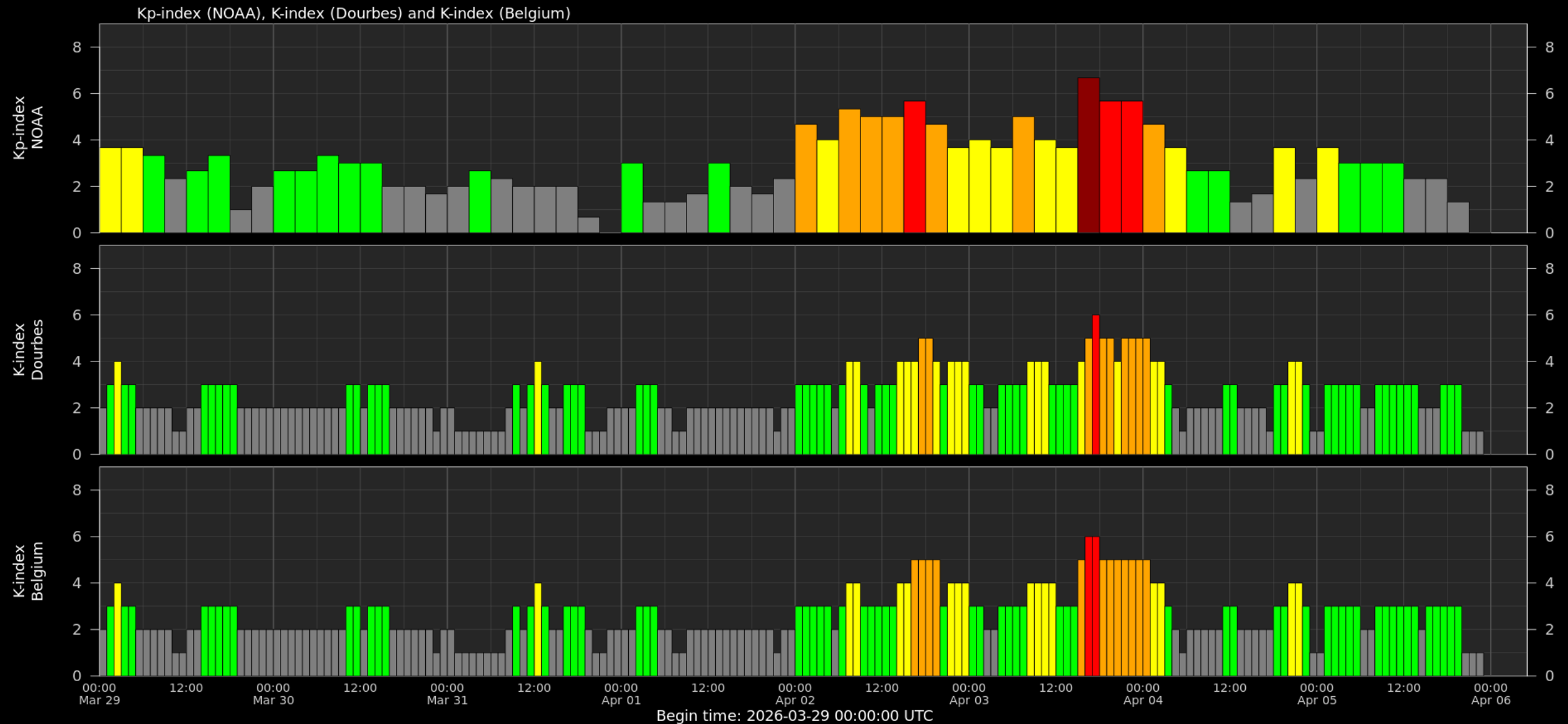
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



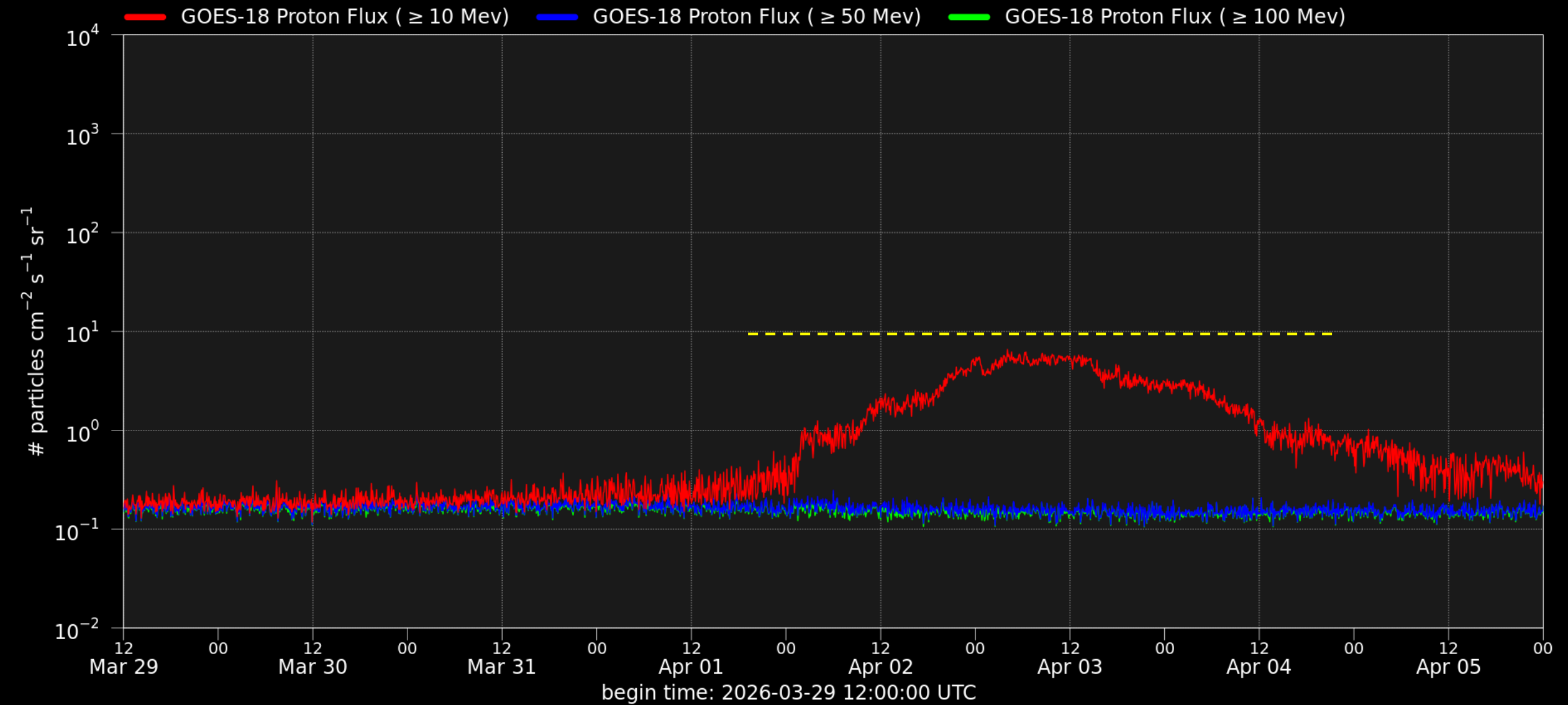
Energetic Particles



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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



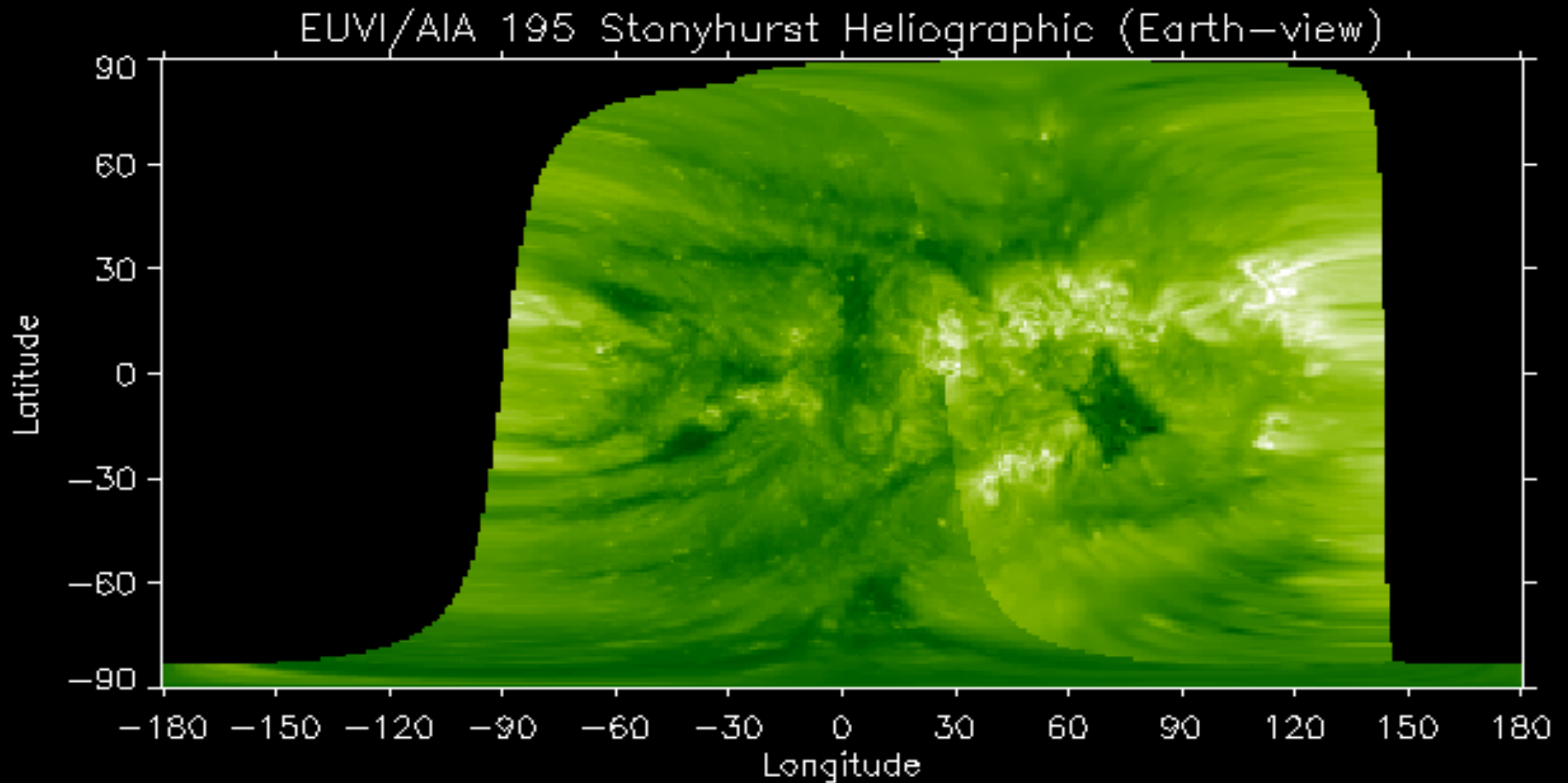
Outlook



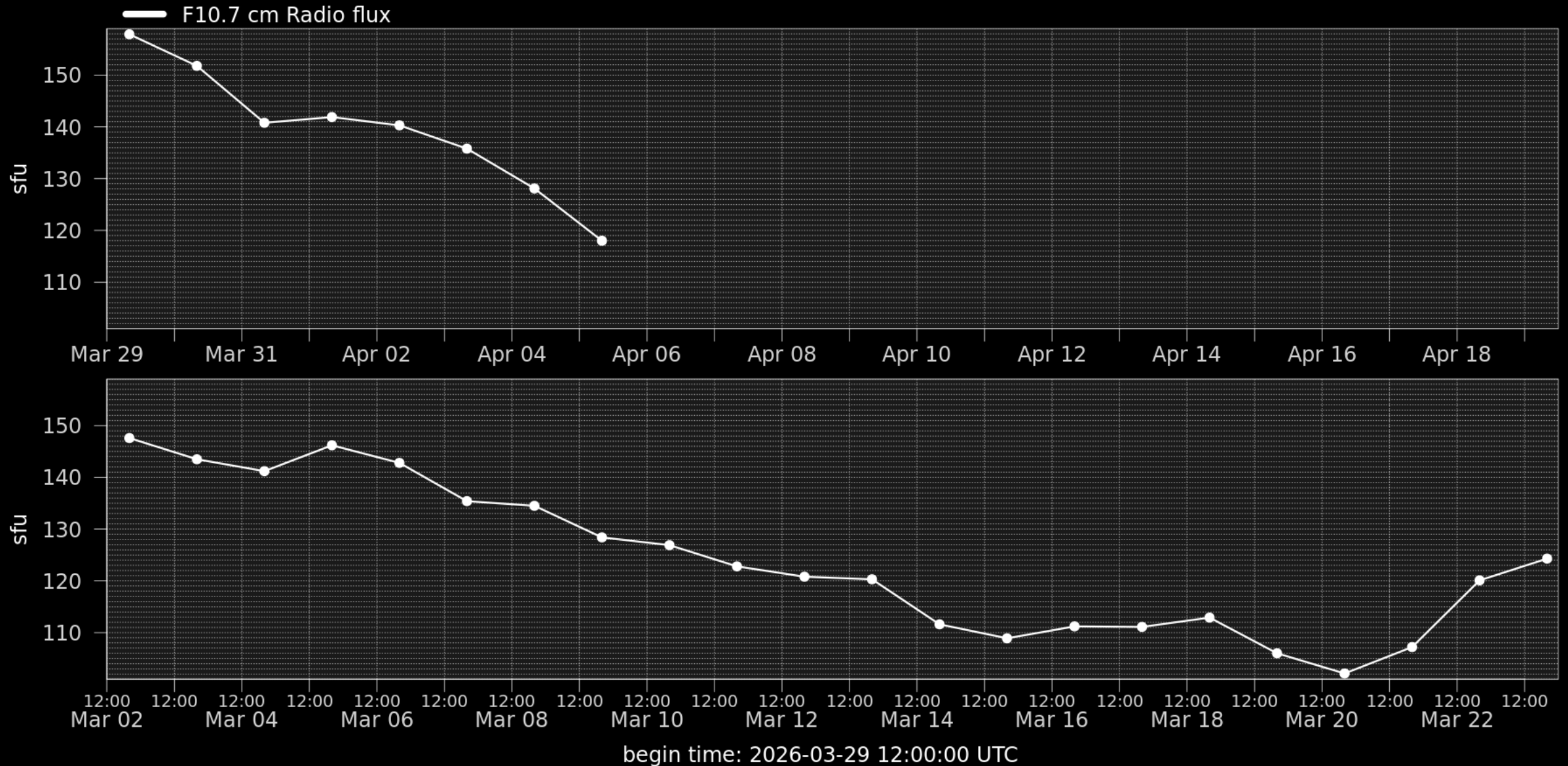
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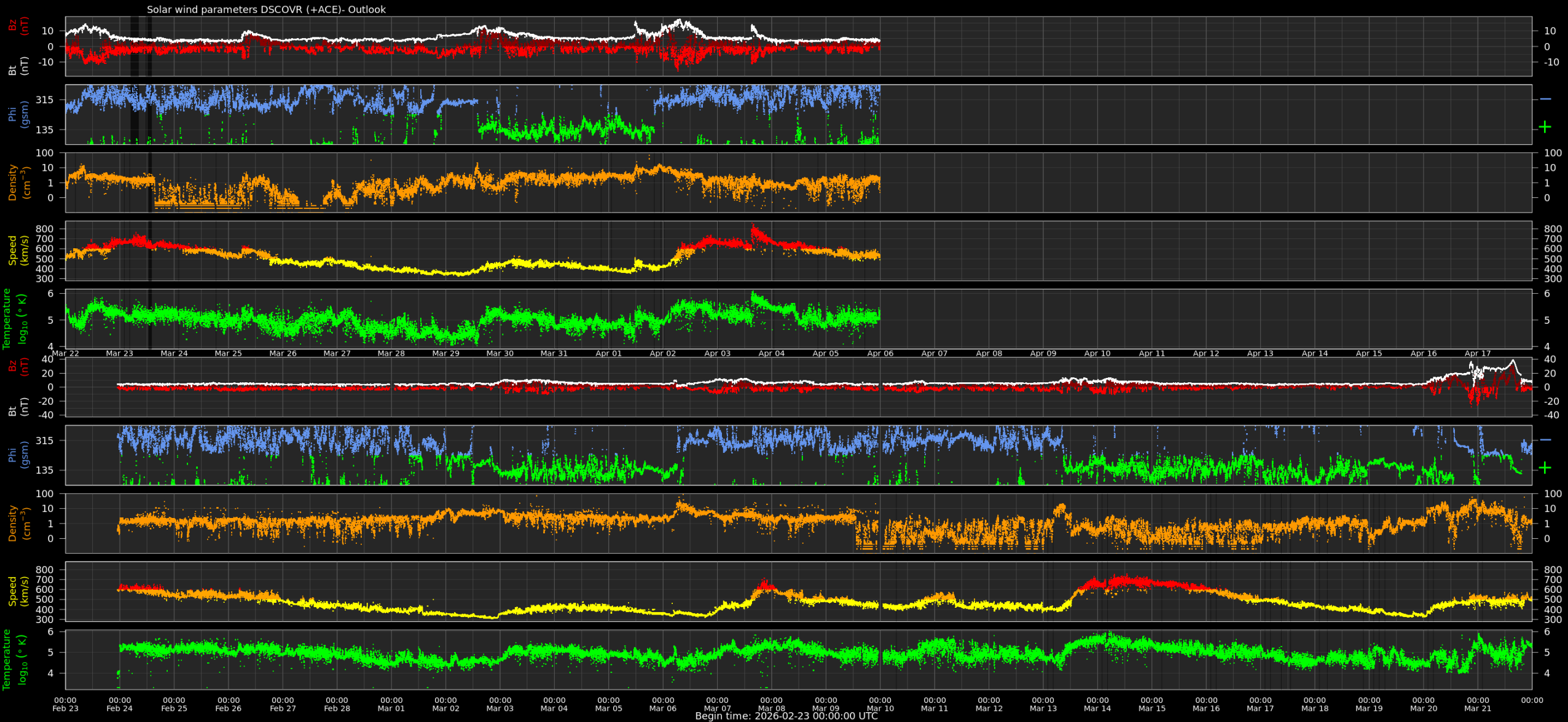
Outlook: Solar activity



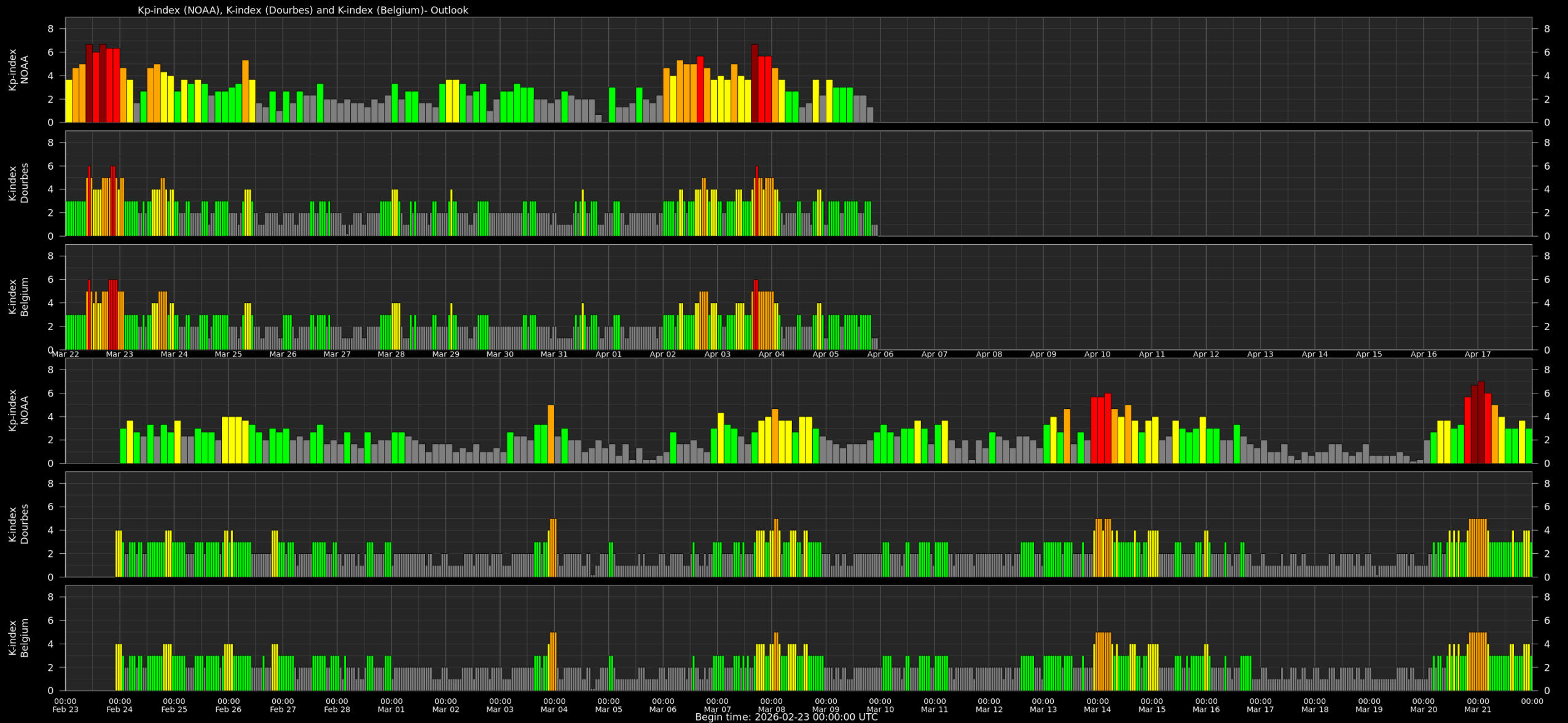
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



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See you at our next briefing!

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