

SIDC Space Weather Briefing

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& the SIDC forecaster team



Royal Observatory

Solar Influences
Data analysis Centre
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Summary Report

Active regions	13 ARs / SIDC 496 (NOAA 4087, $\beta\delta/\beta\gamma$) ; SIDC 504 (NOAA 4095, $\beta\gamma$) ; SIDC 505 (NOAA 4097, $\beta\gamma$) ; SIDC 506 (NOAA 4098, $\beta\gamma\delta$)
Flares	# C-class flare: 36 # M-class flare: 6 # X-class flare: 1
Coronal Holes	SIDC CH 104 (+) , SIDC CH 115 (+), SIDC CH 99 (-)
CMEs	1 halo, 1 partial halo (backsided) / many not-Earth directed / one that missed Earth

Proton flux	Normal
Electron flux	Above the 1000 pfu threshold

ICMEs	None
Solar wind conditions	B : 1.79 - 11.44 nT //Bz: -8.15 nT to 8.81 nT //Speed: 380 – 680 km/s
Geomagnetic conditions	max K _{Bel} : 4.0, max K _p (NOAA): 4.0, Active conditions

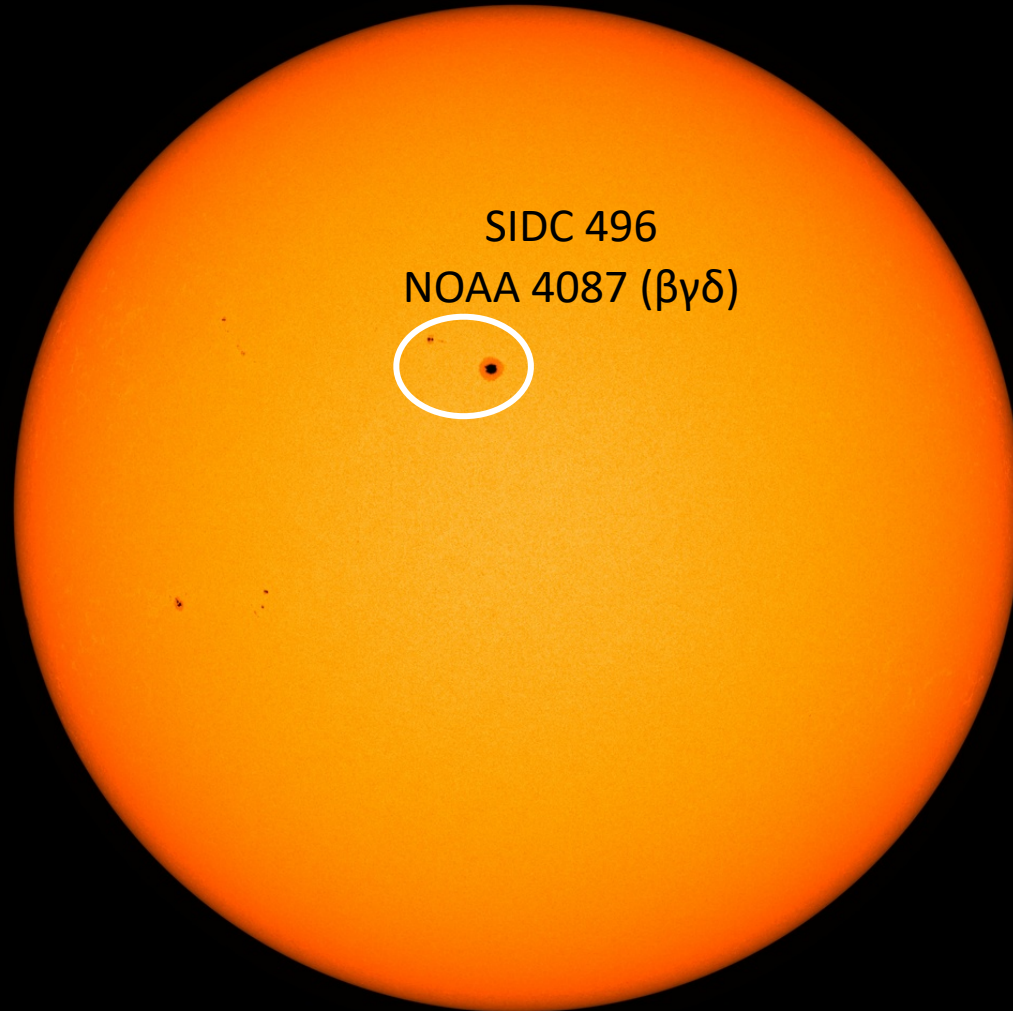
Solar Activity



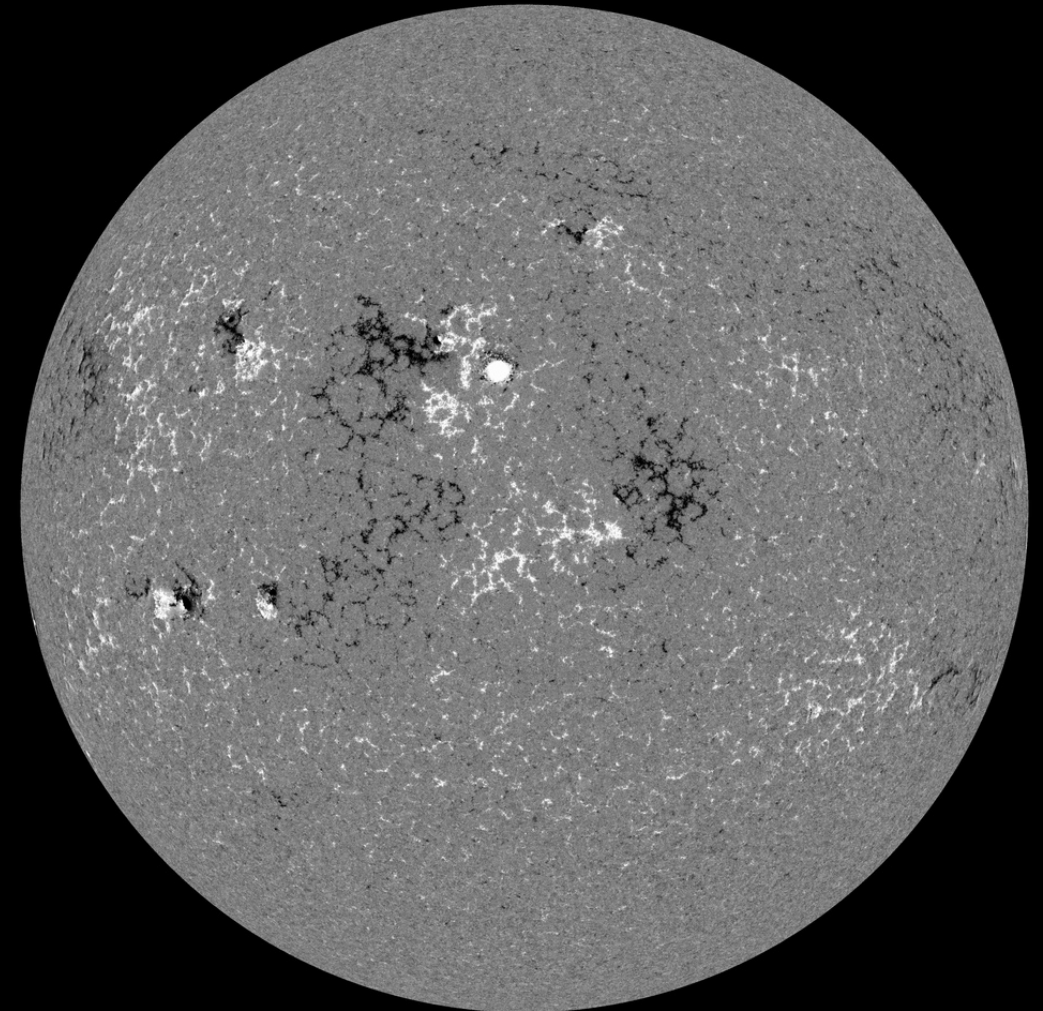
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Solar active regions

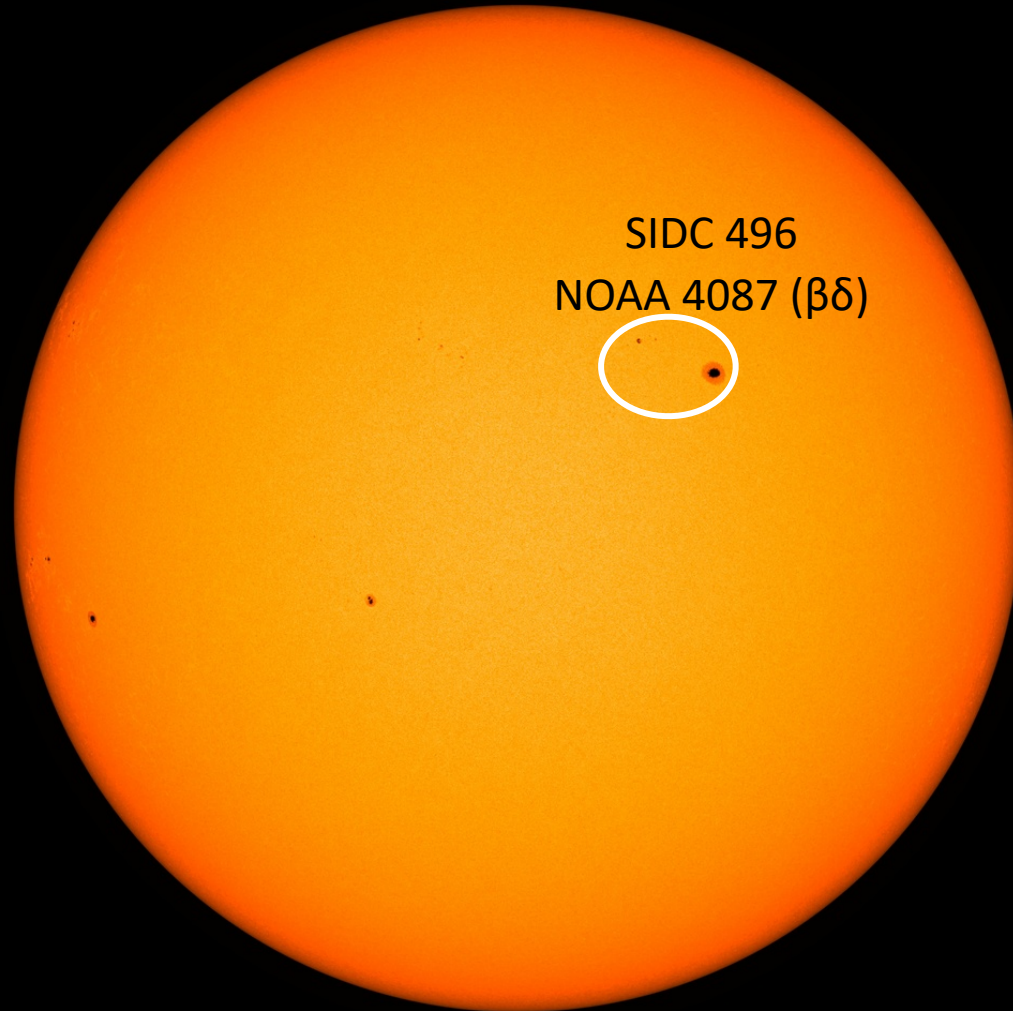


SDO/HMI Quick-Look Continuum: 20250518_114500

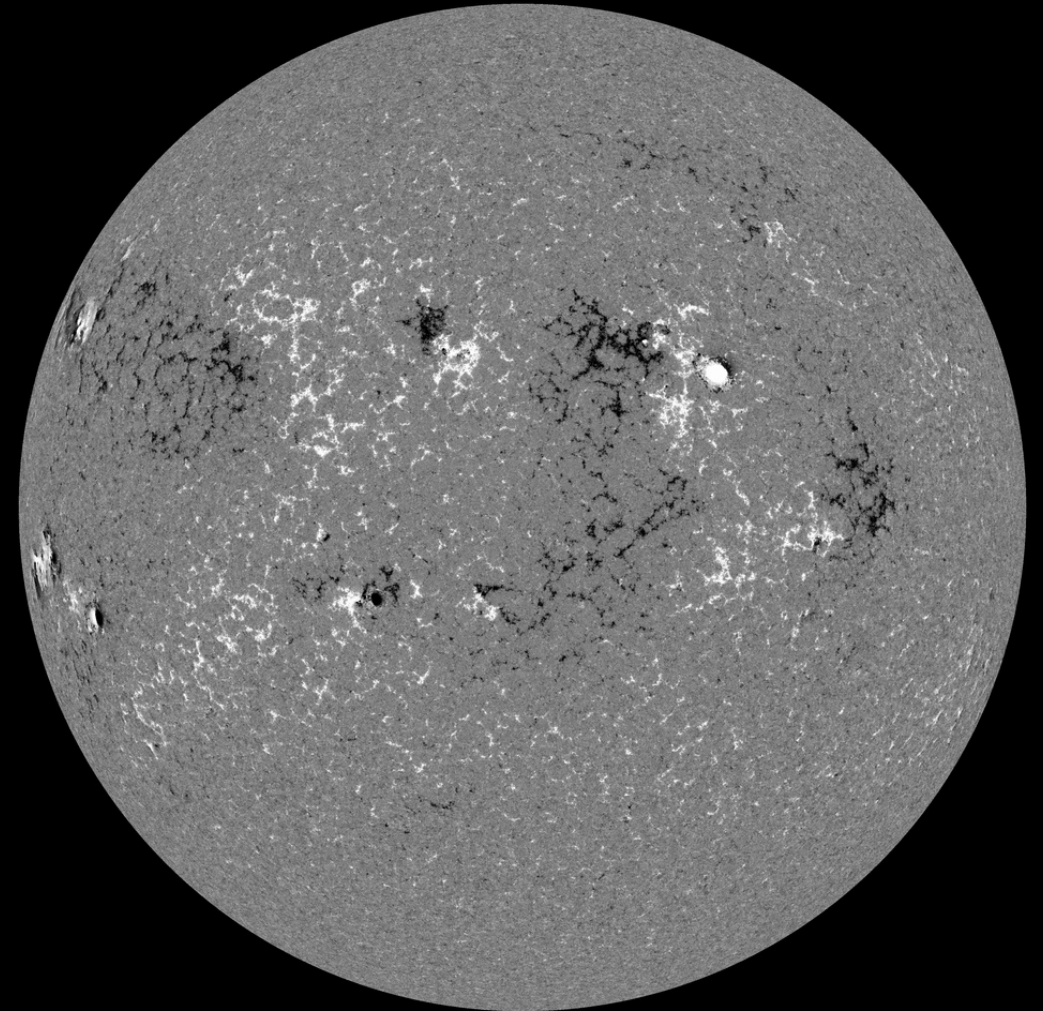


SDO/HMI Quick-Look Magnetogram: 20250518_114500

Solar active regions

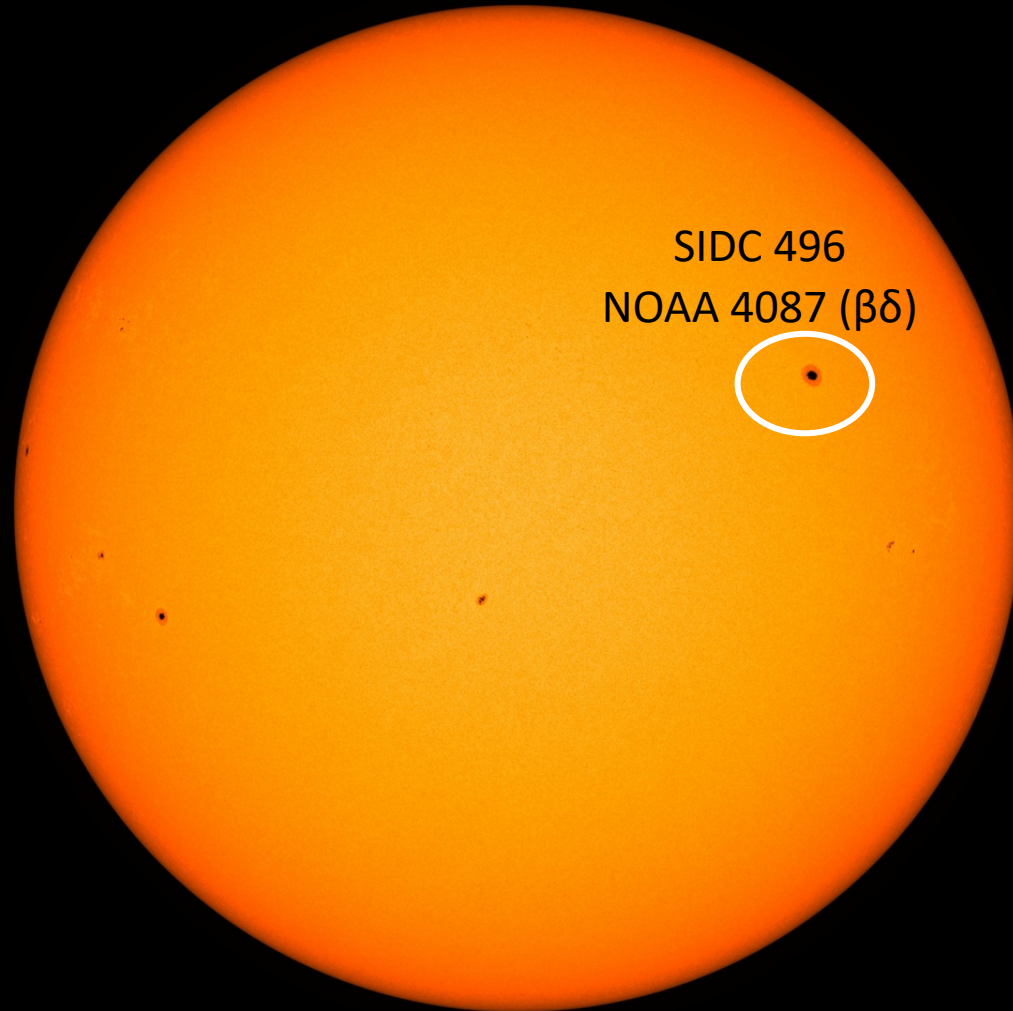


SDO/HMI Quick-Look Continuum: 20250520_114500

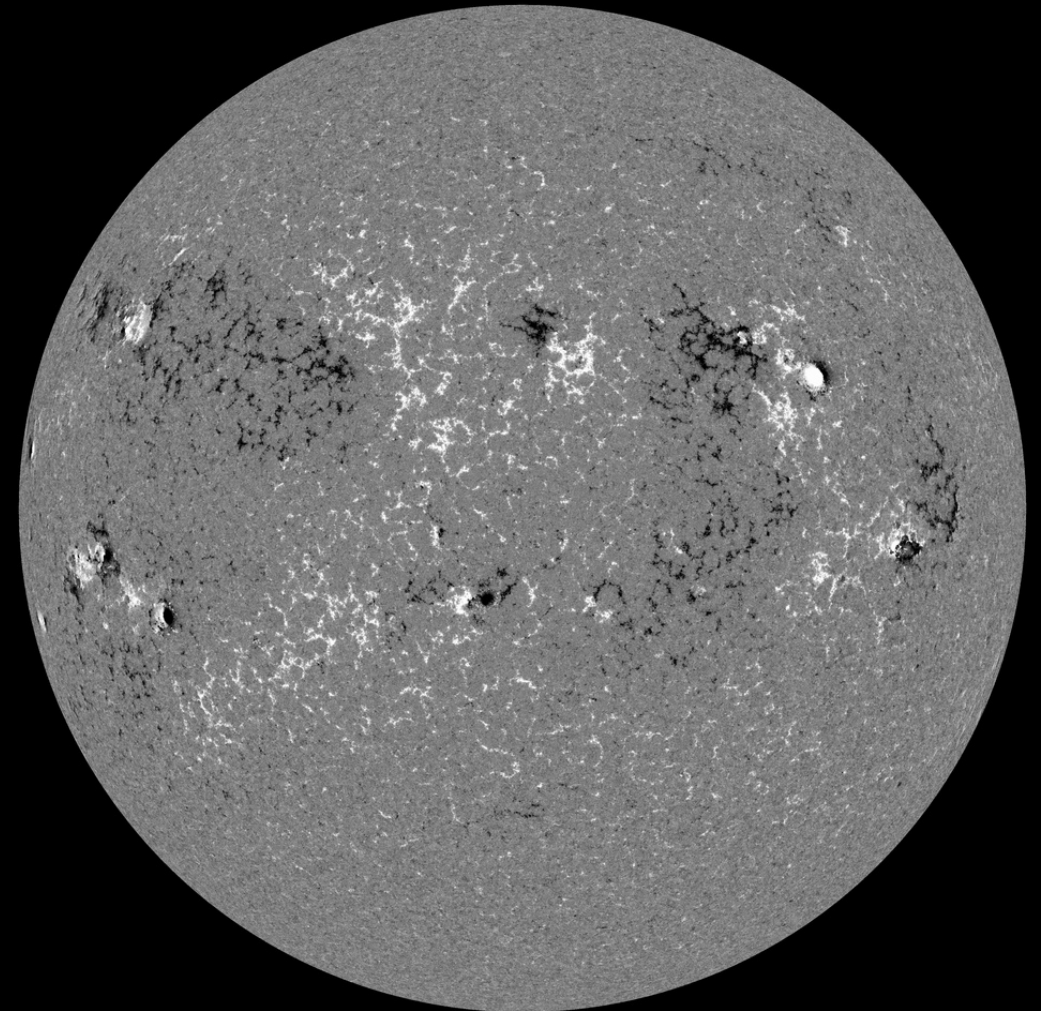


SDO/HMI Quick-Look Magnetogram: 20250520_114500

Solar active regions

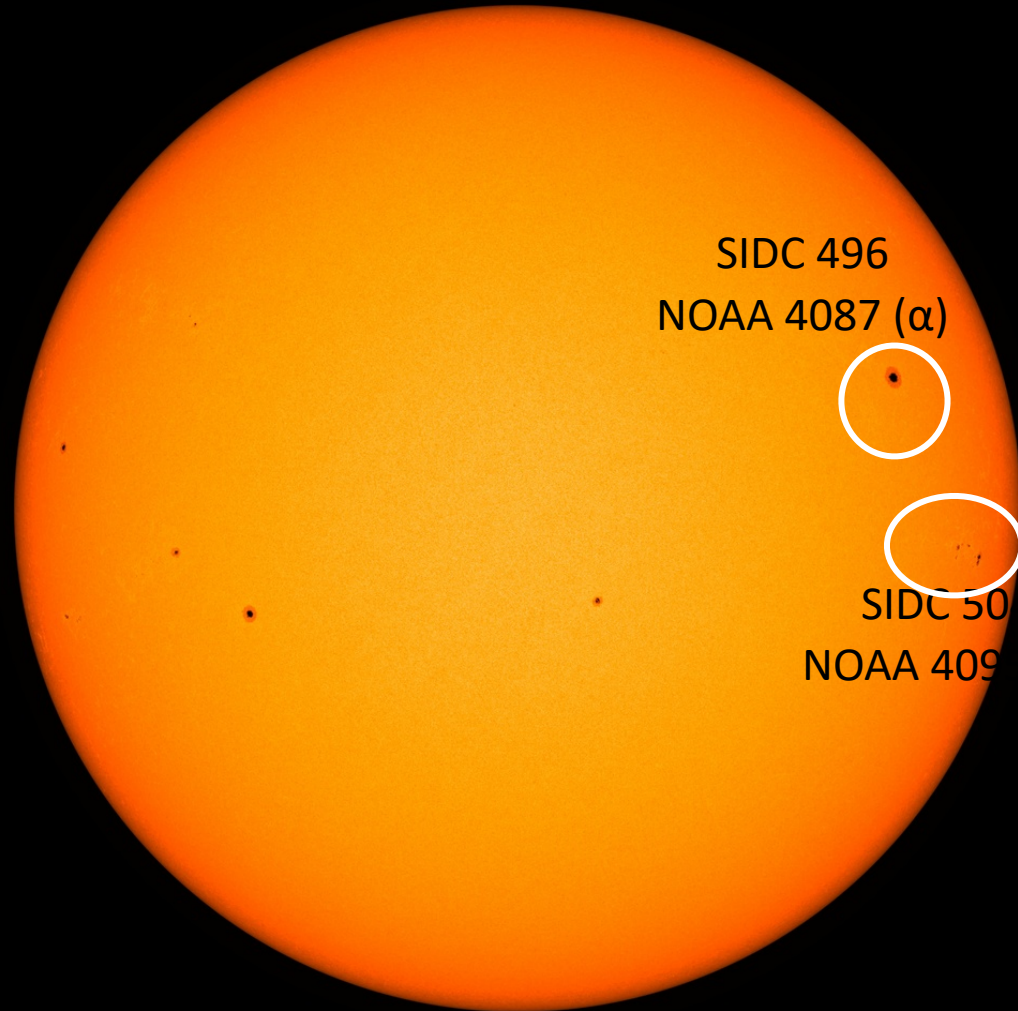


SDO/HMI Quick-Look Continuum: 20250521_114500

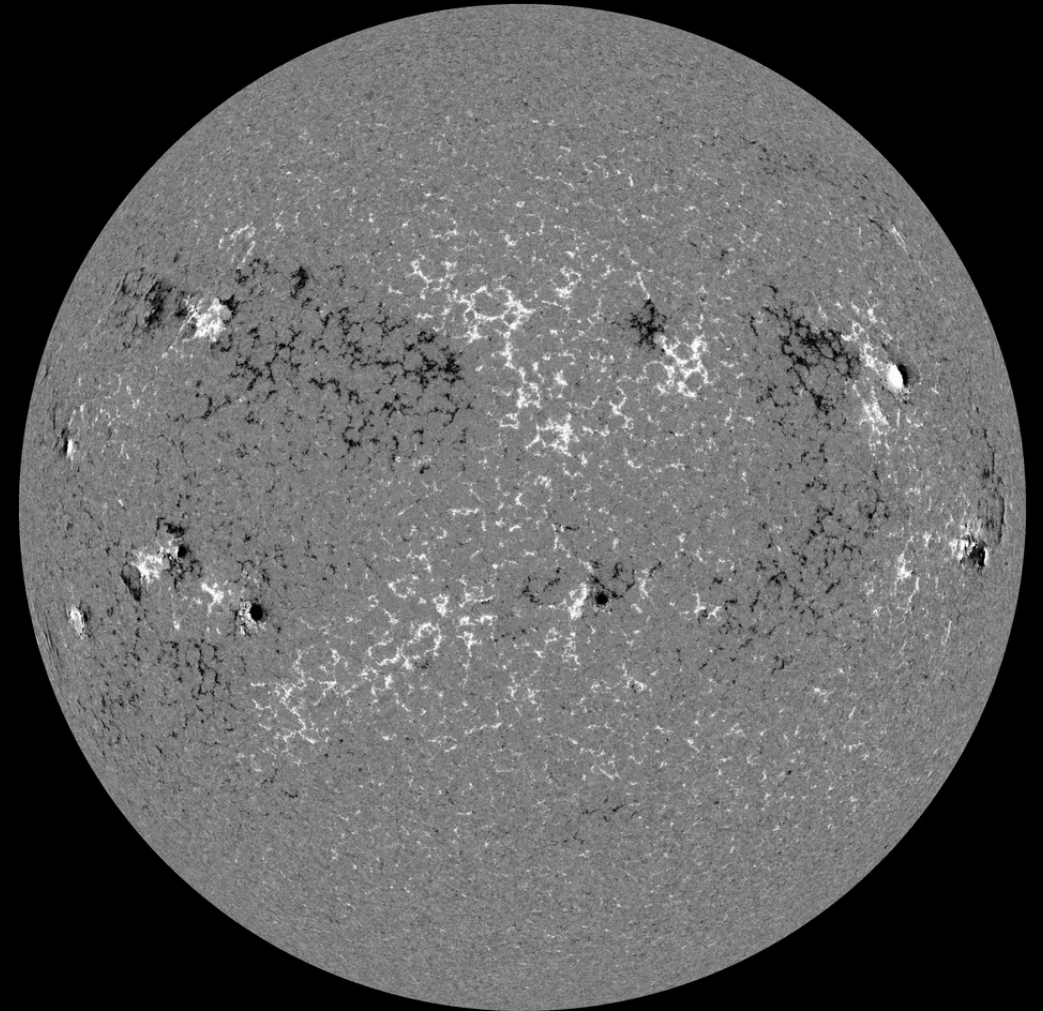


SDO/HMI Quick-Look Magnetogram: 20250521_114500

Solar active regions

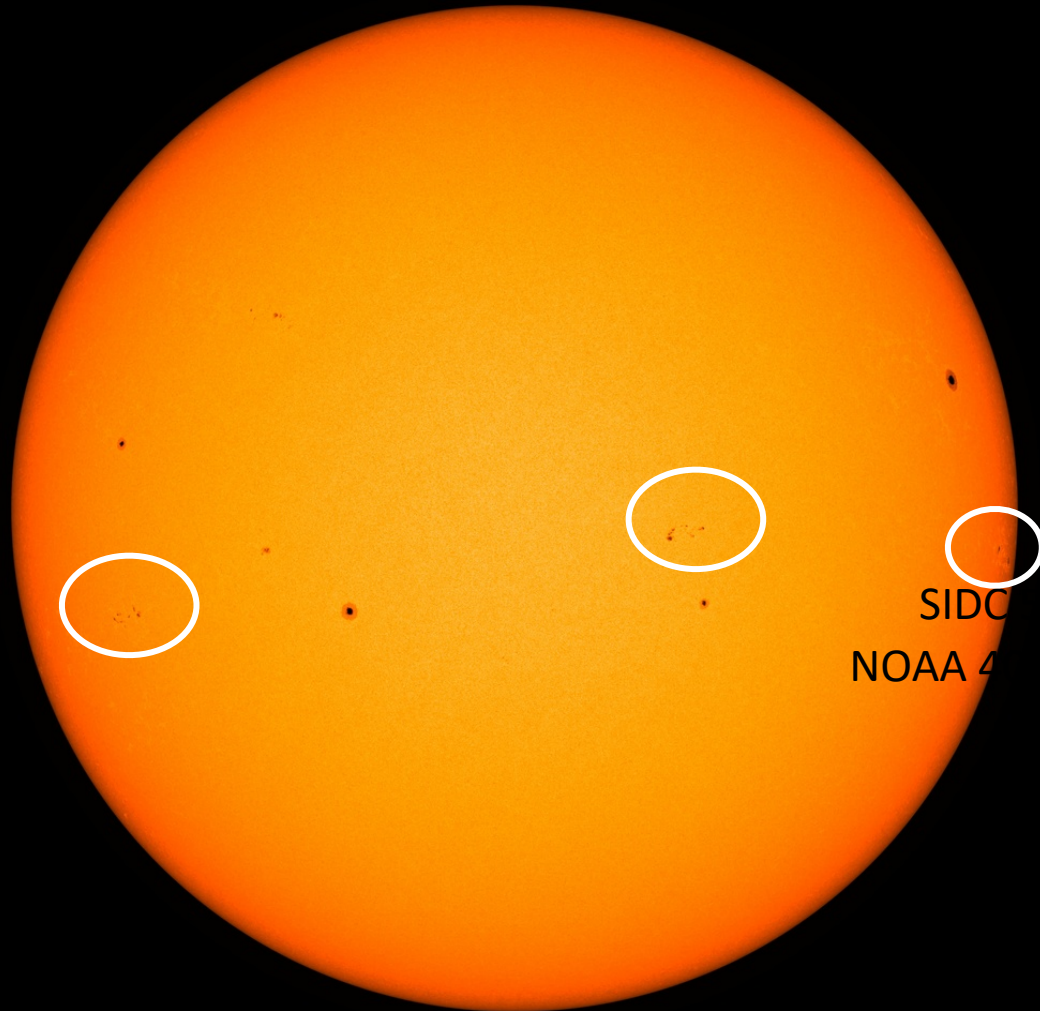


SDO/HMI Quick-Look Continuum: 20250522_114500

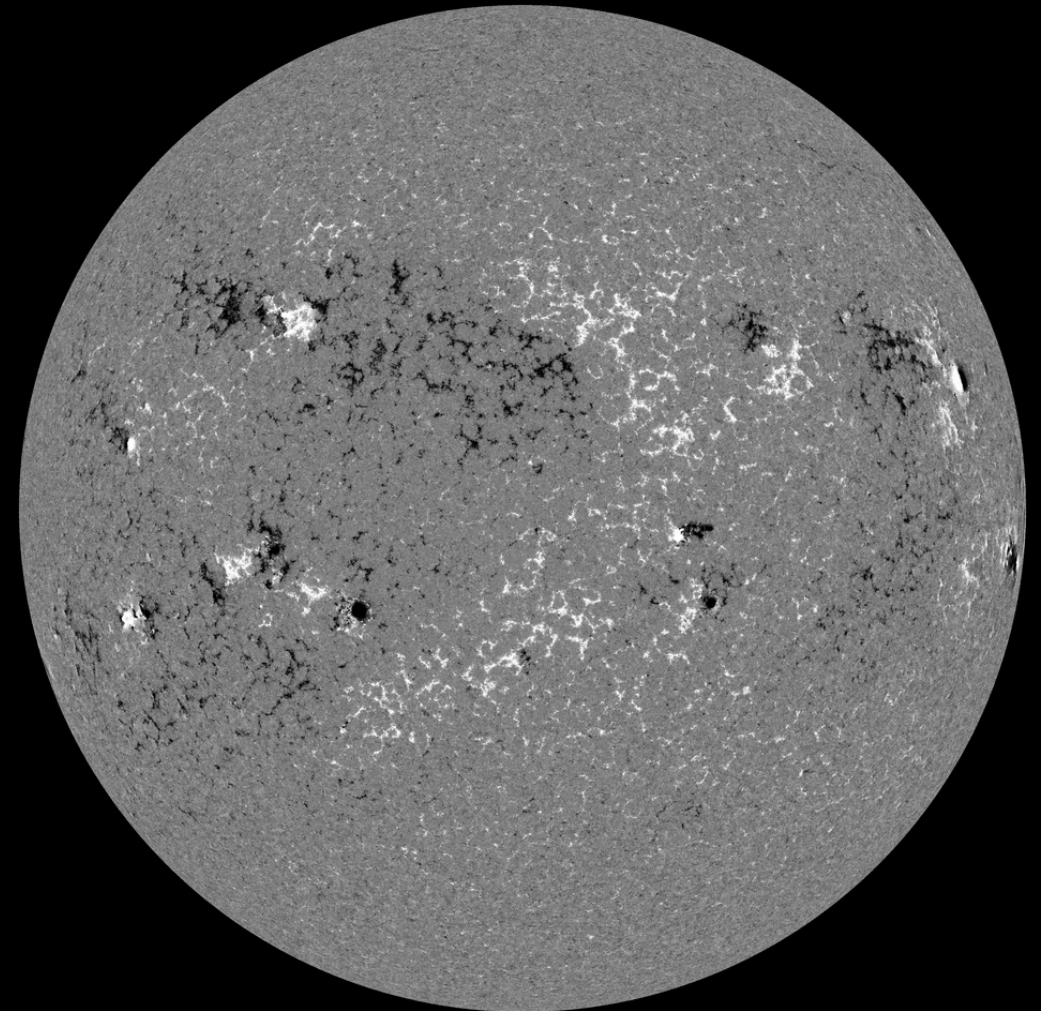


SDO/HMI Quick-Look Magnetogram: 20250522_114500

Solar active regions

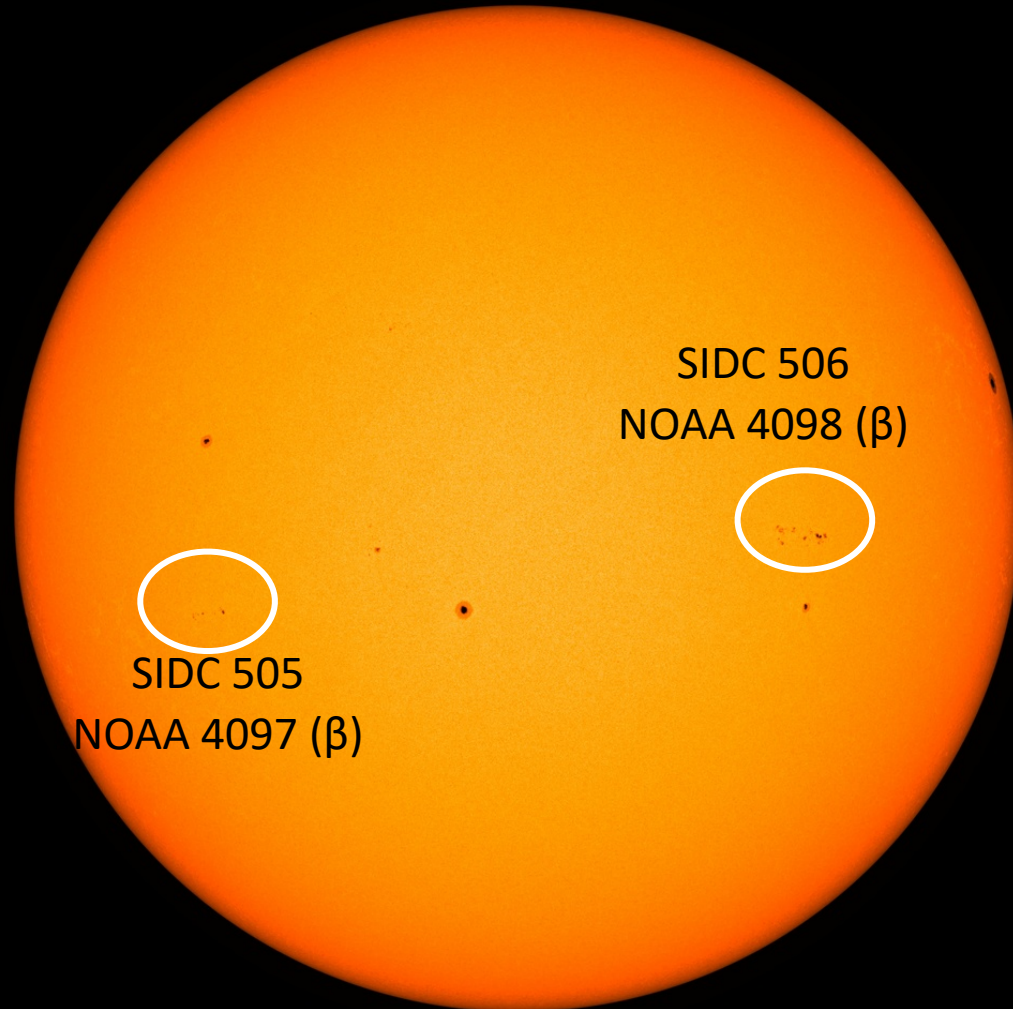


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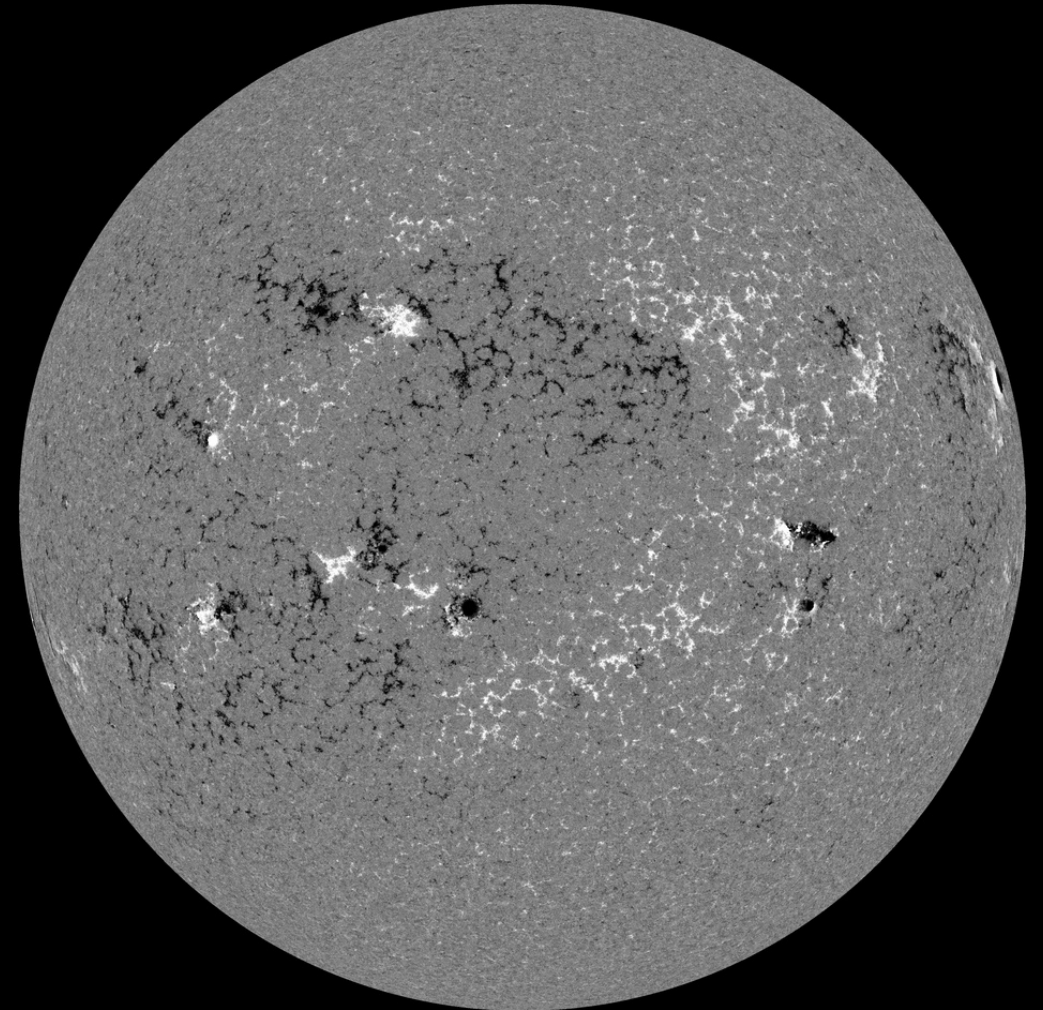


SDO/HMI Quick-Look Magnetogram: 20250523_114500

Solar active regions

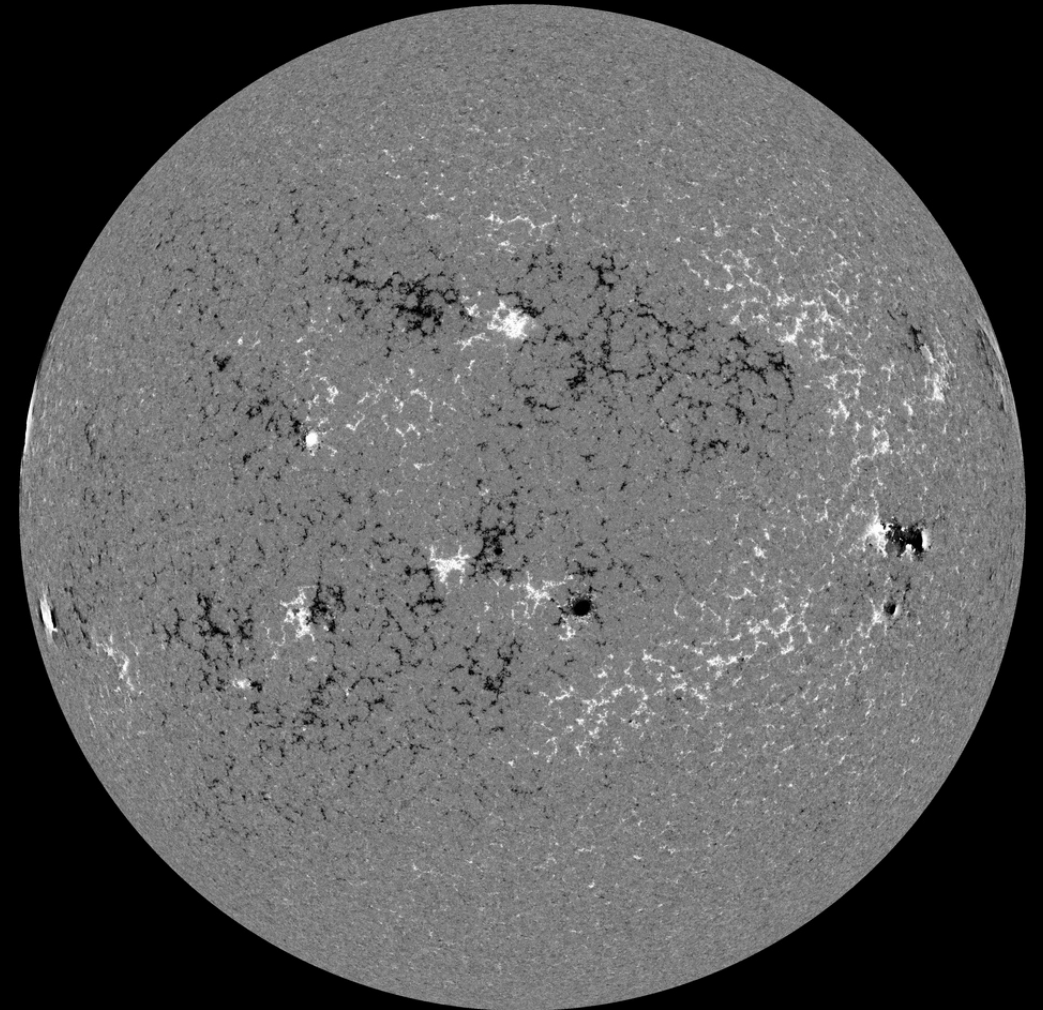
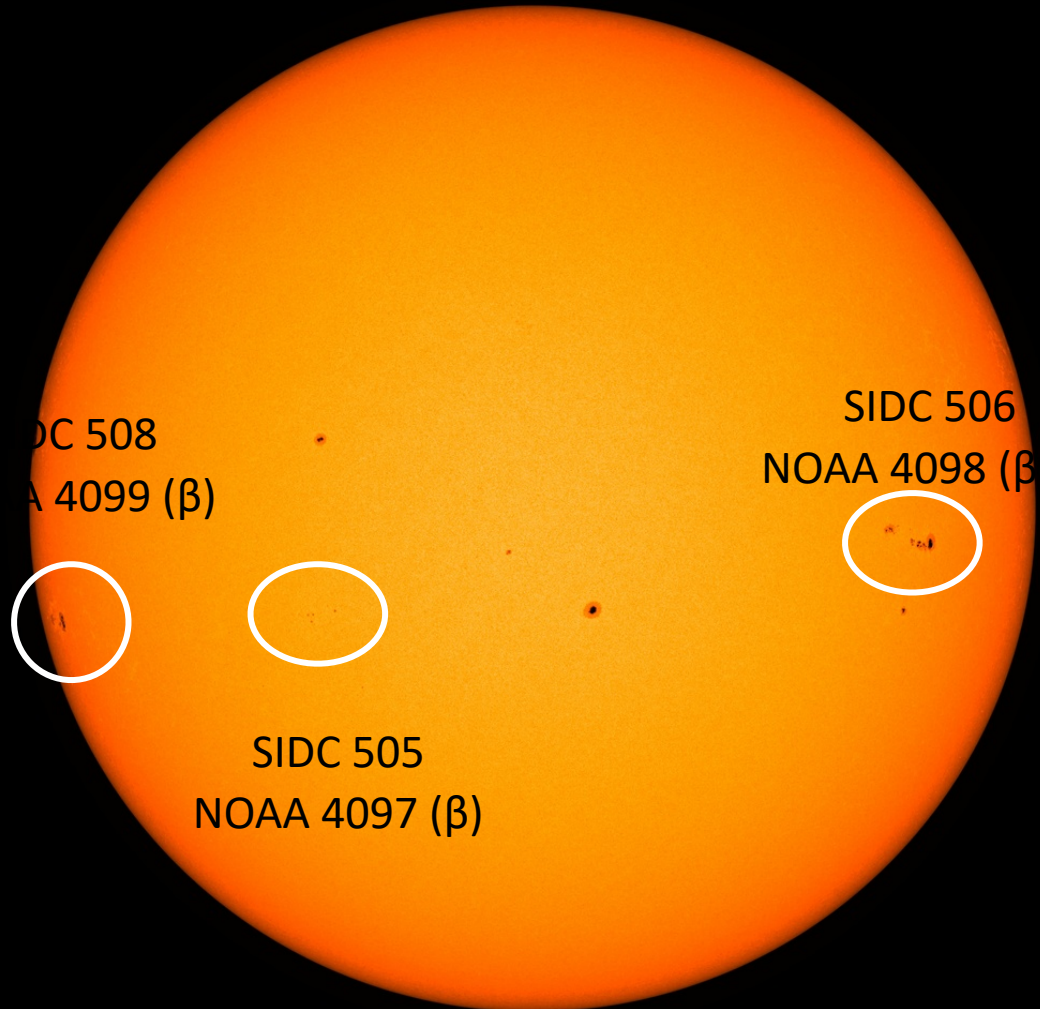


SDO/HMI Quick-Look Continuum: 20250524_114500



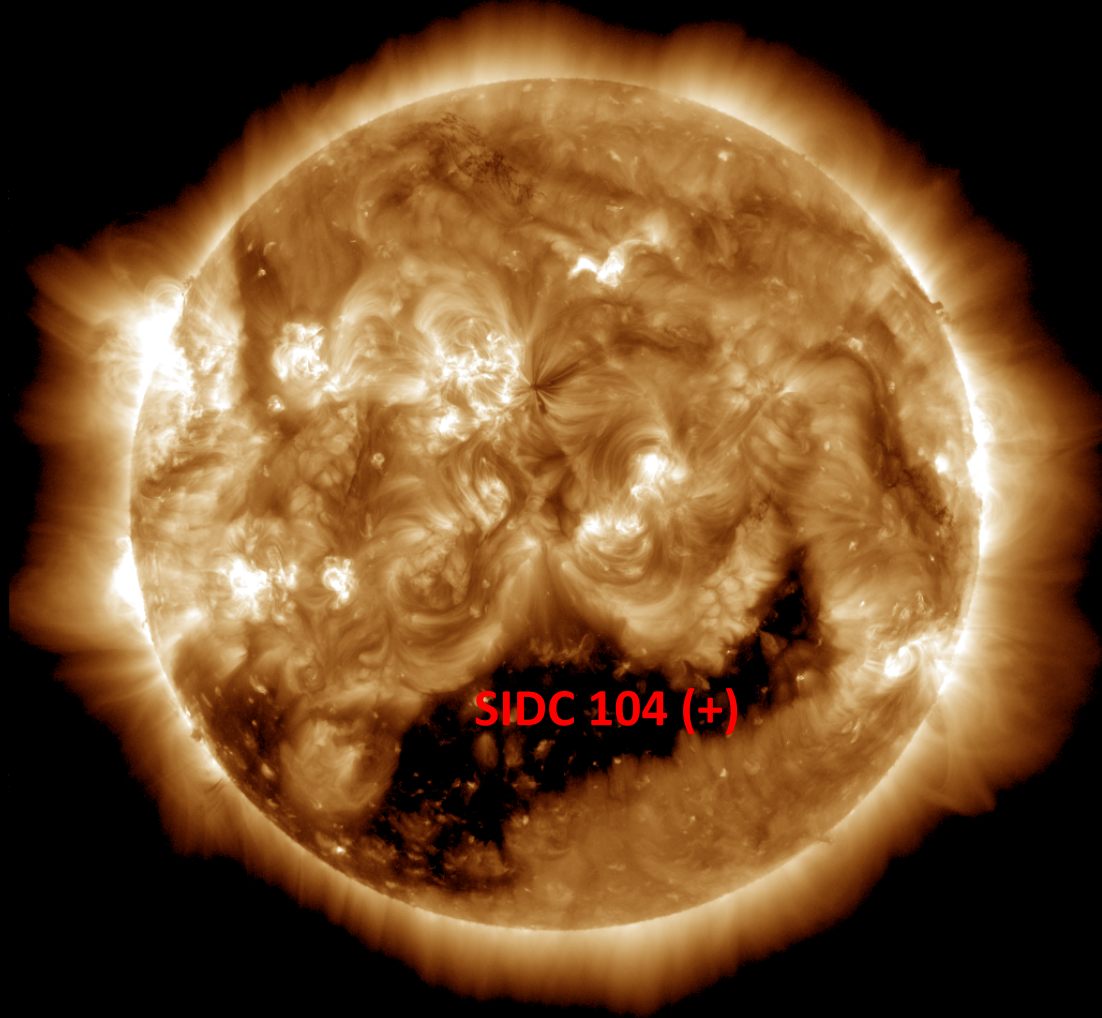
SDO/HMI Quick-Look Magnetogram: 20250524_114500

Solar active regions

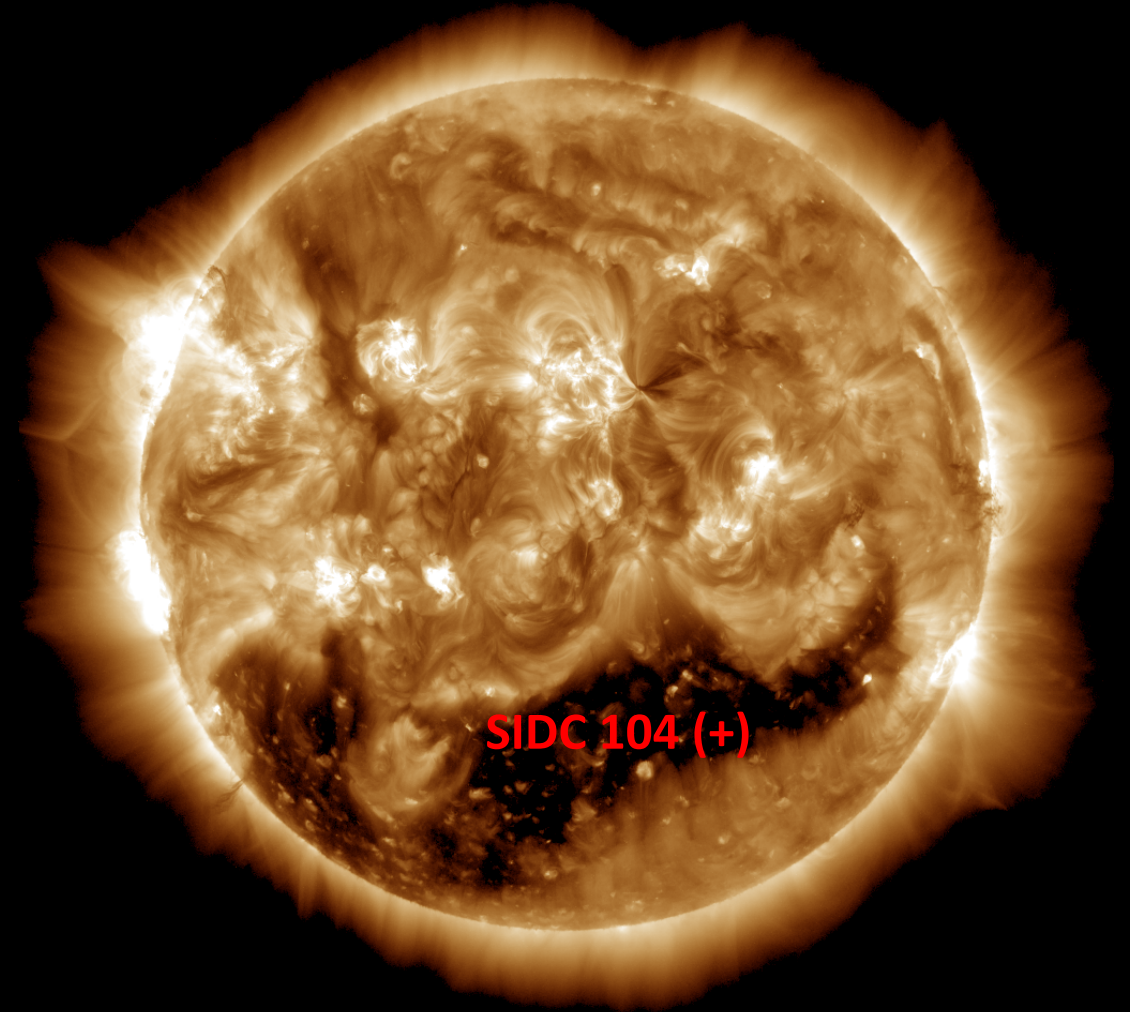


Coronal holes

SDO/AIA AIA 193Å 2025-05-18T12:00:05.843

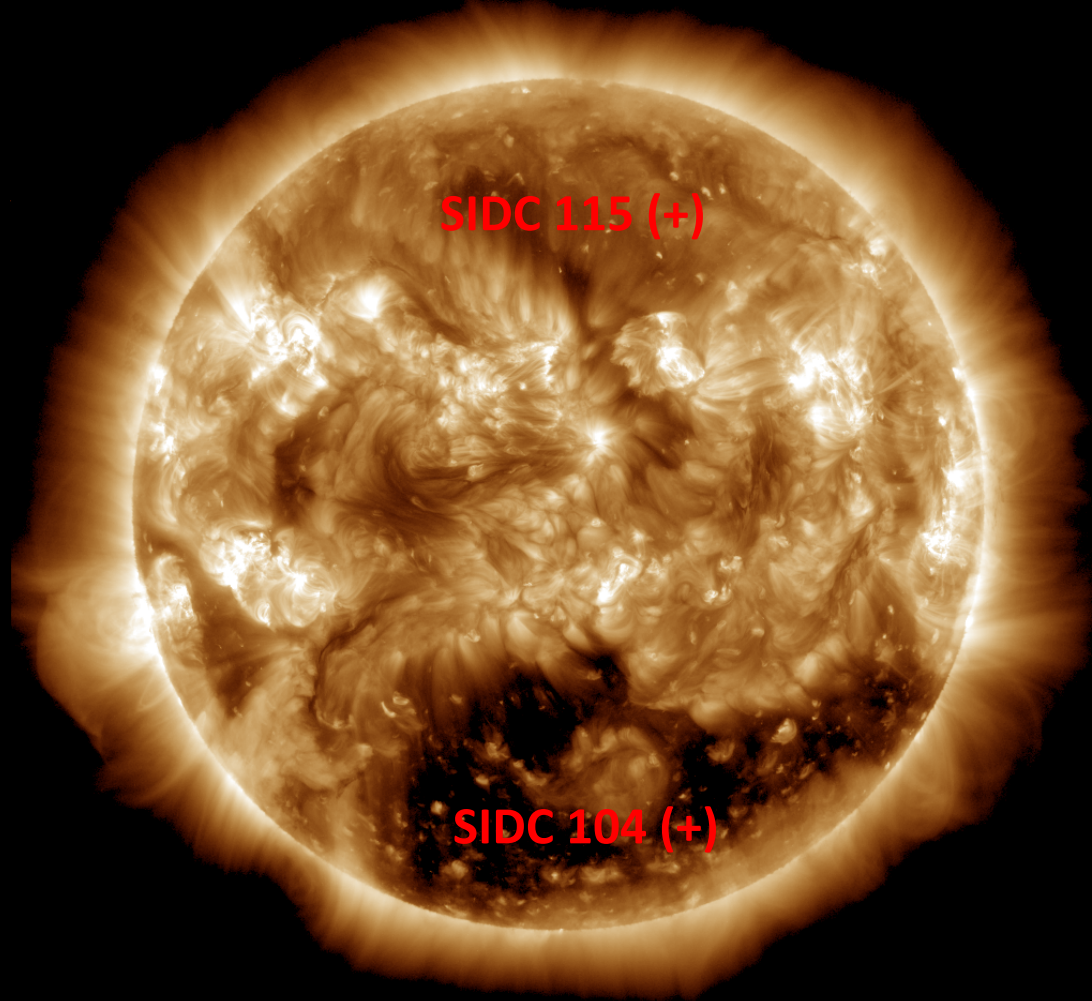


SDO/AIA AIA 193Å 2025-05-19T12:00:05.843

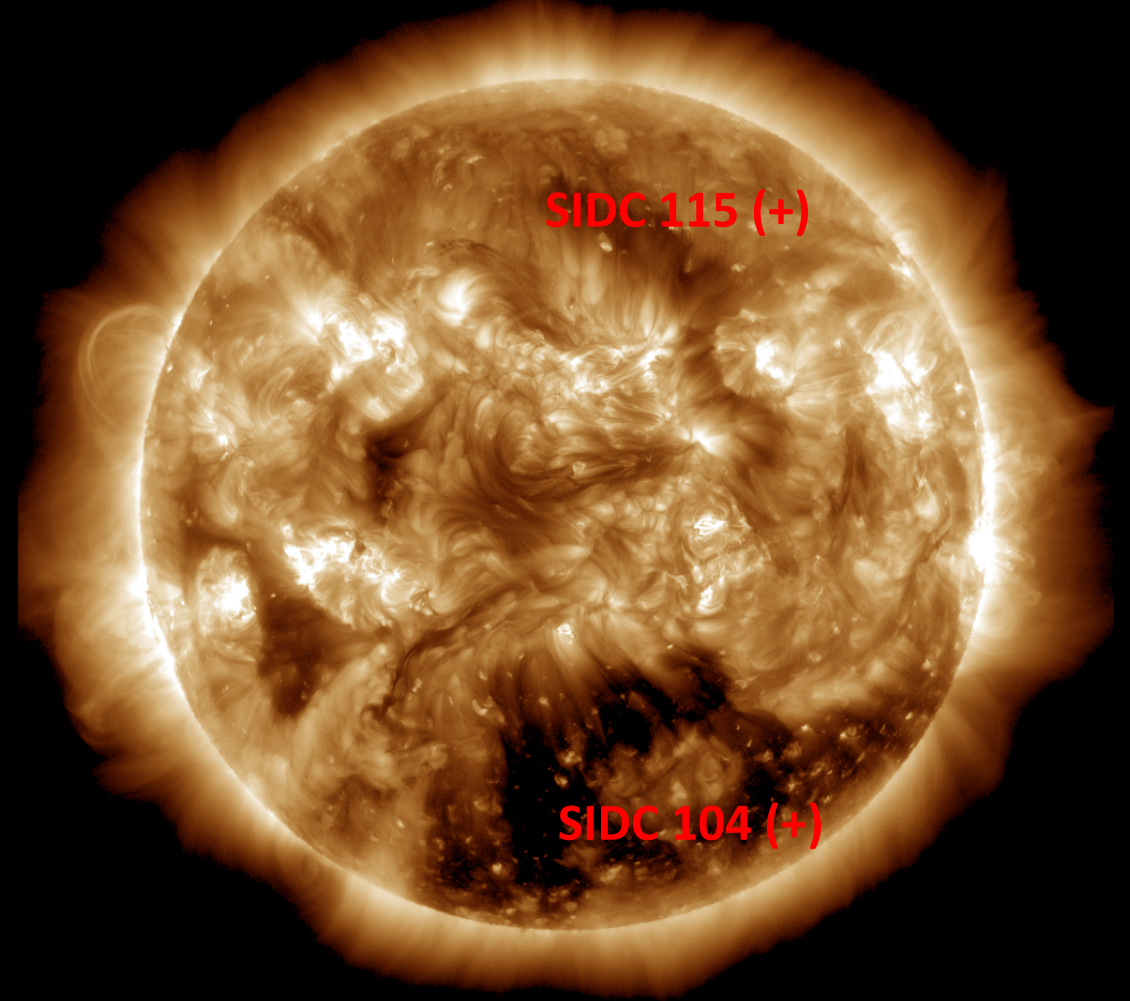


Coronal holes

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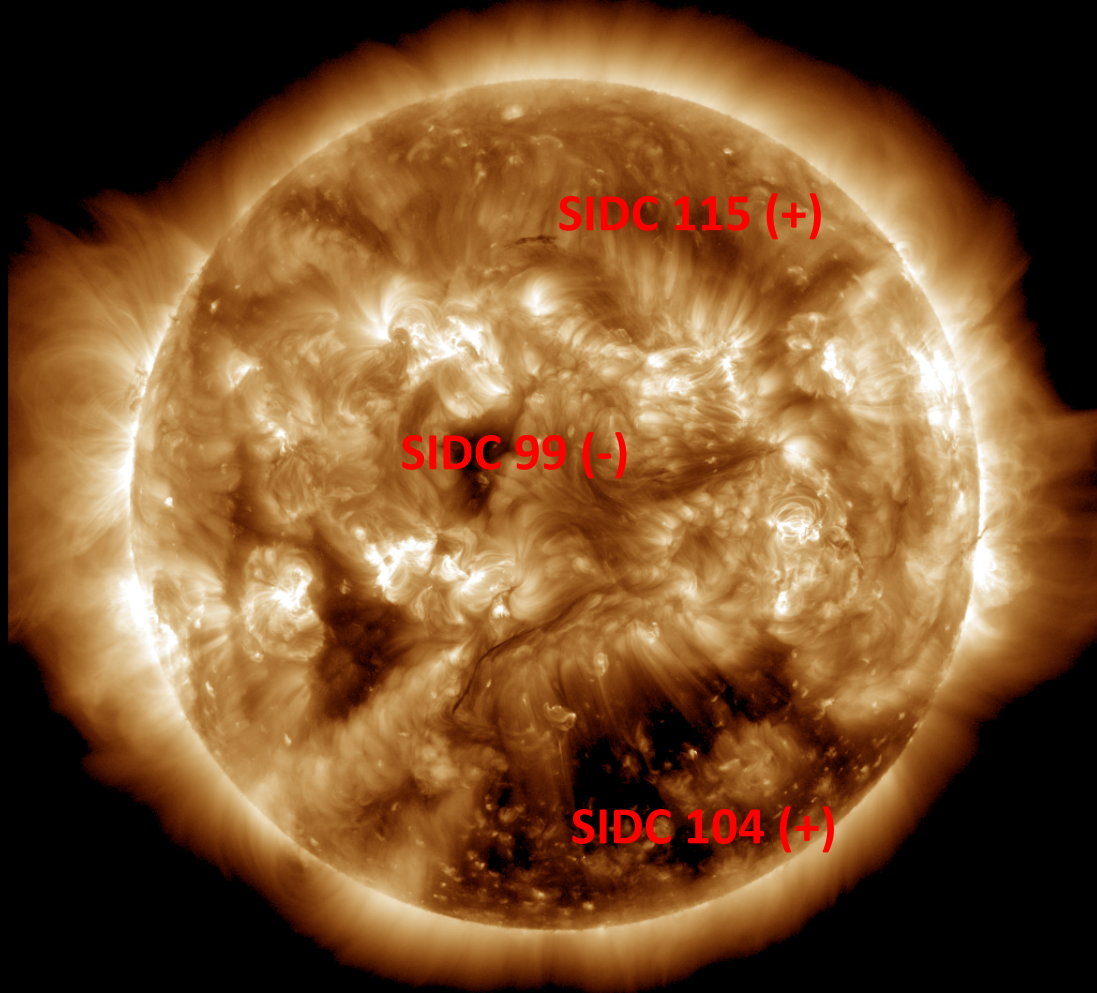


SDO/AIA AIA 193Å 2025-05-23T12:00:05.842

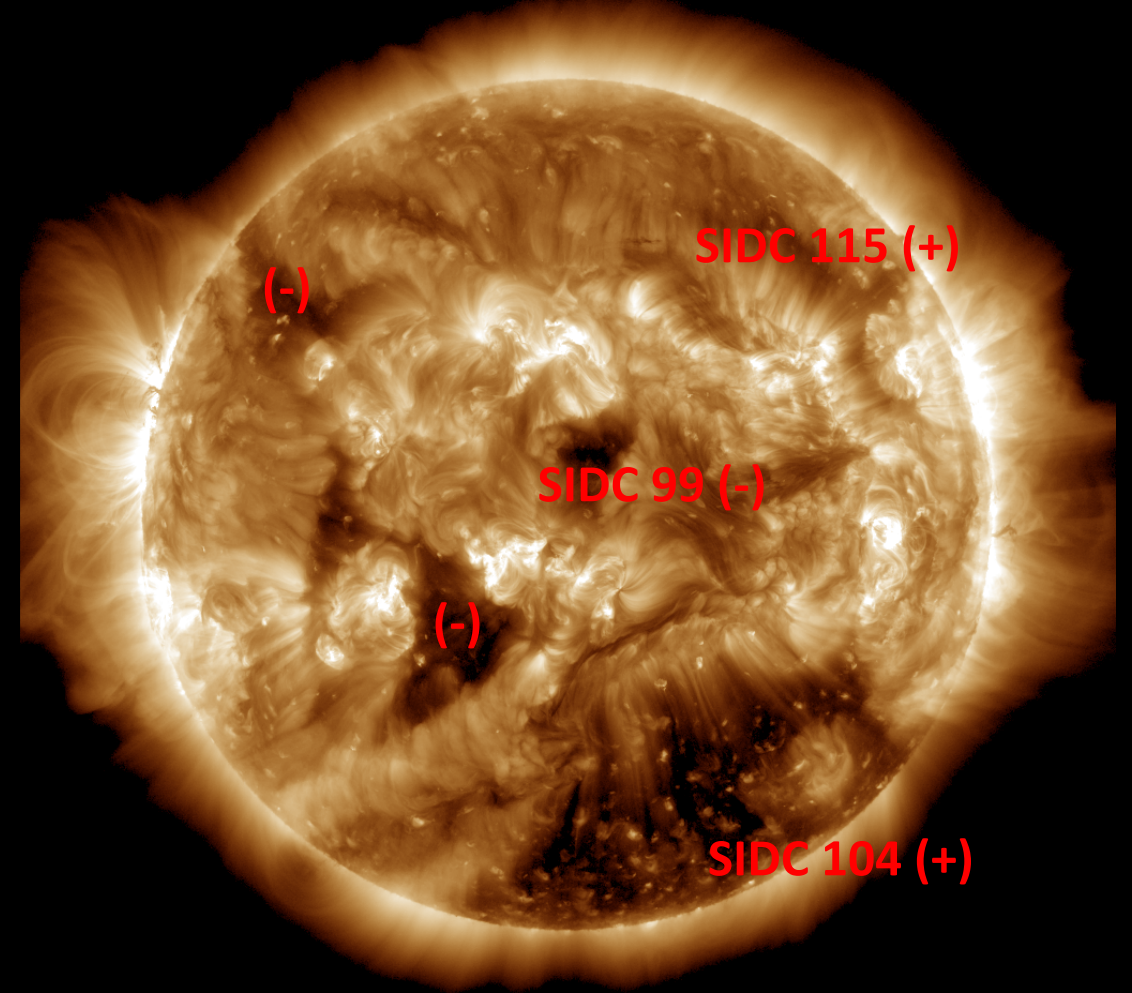


Coronal holes

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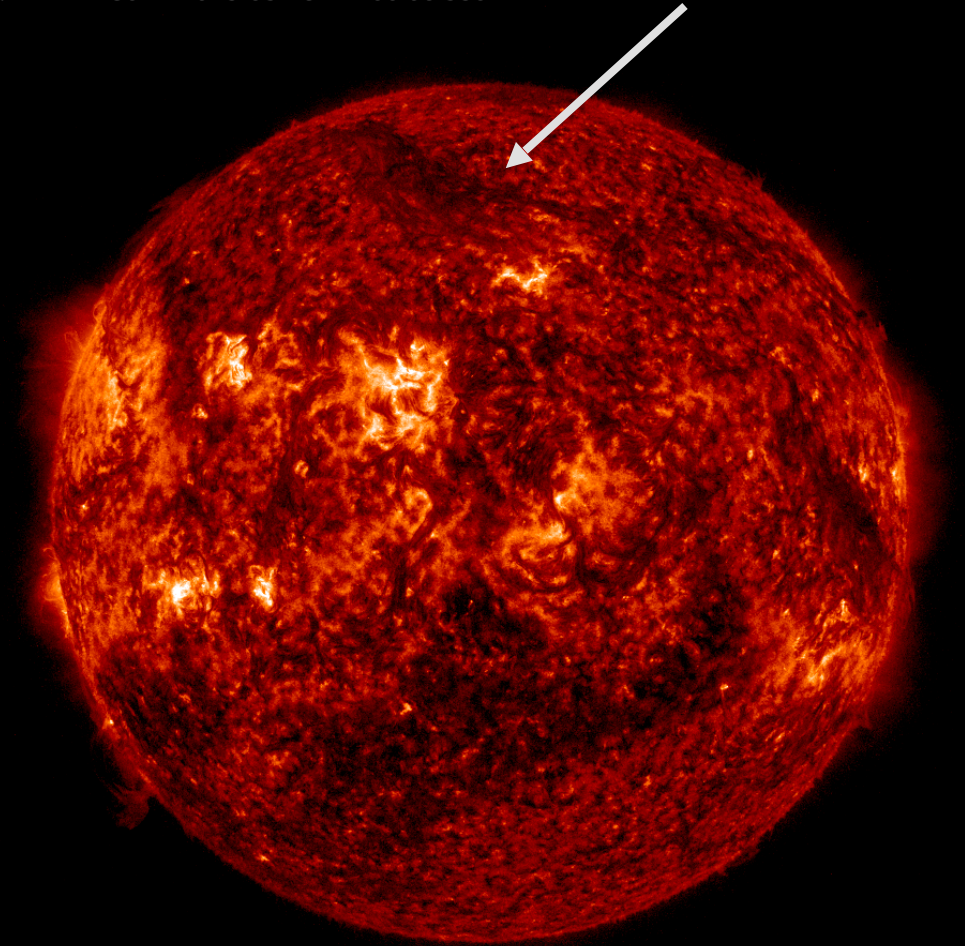


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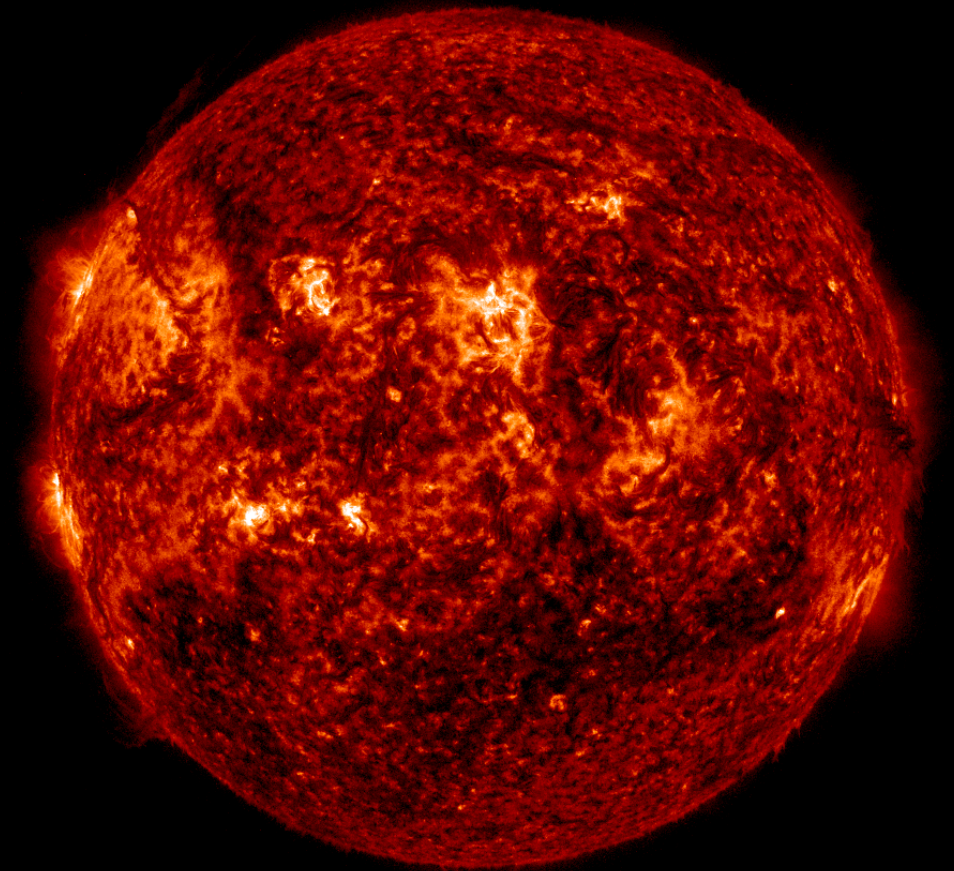


Filaments

SDO/AIA AIA 304Å 2025-05-18T12:00:06.580



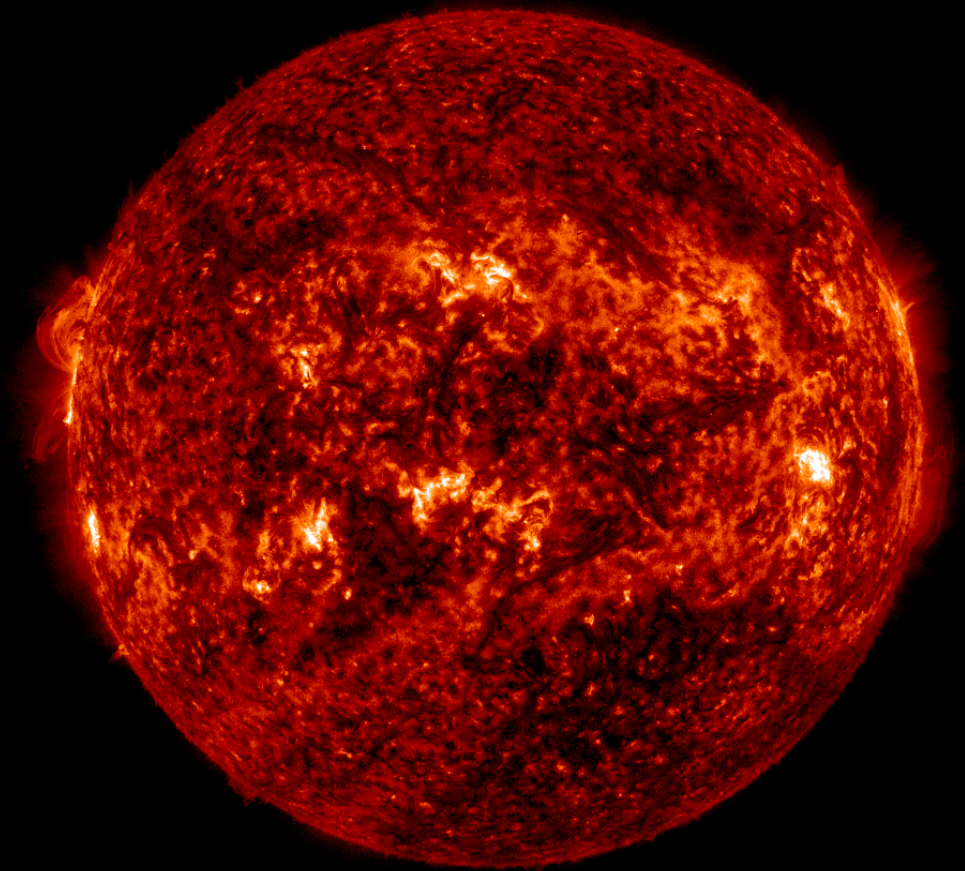
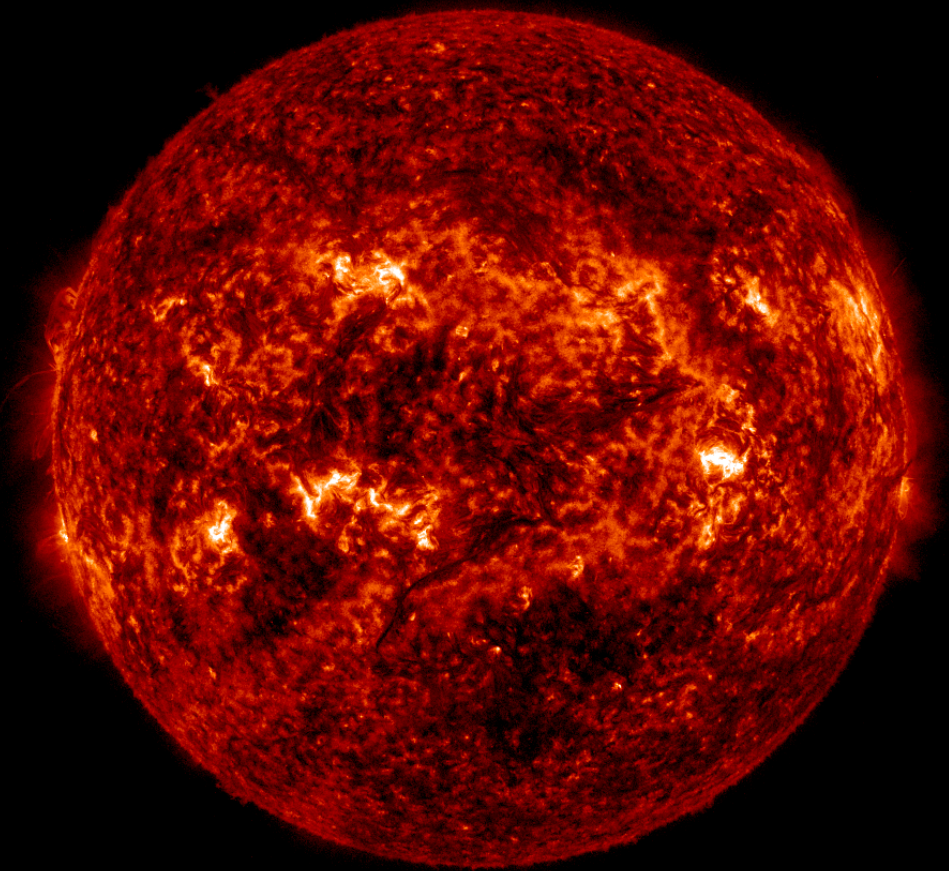
SDO/AIA AIA 304Å 2025-05-19T12:00:06.580



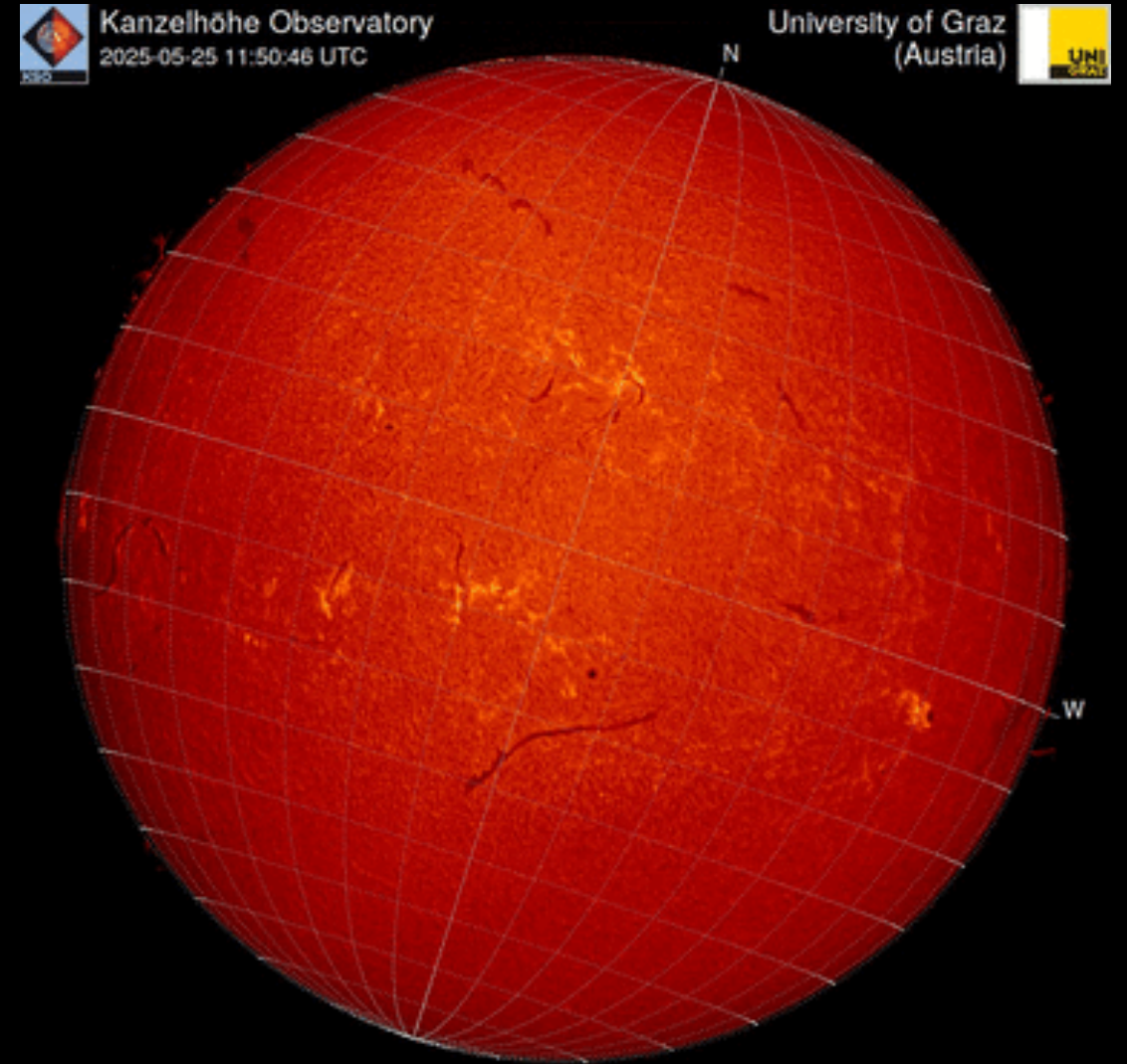
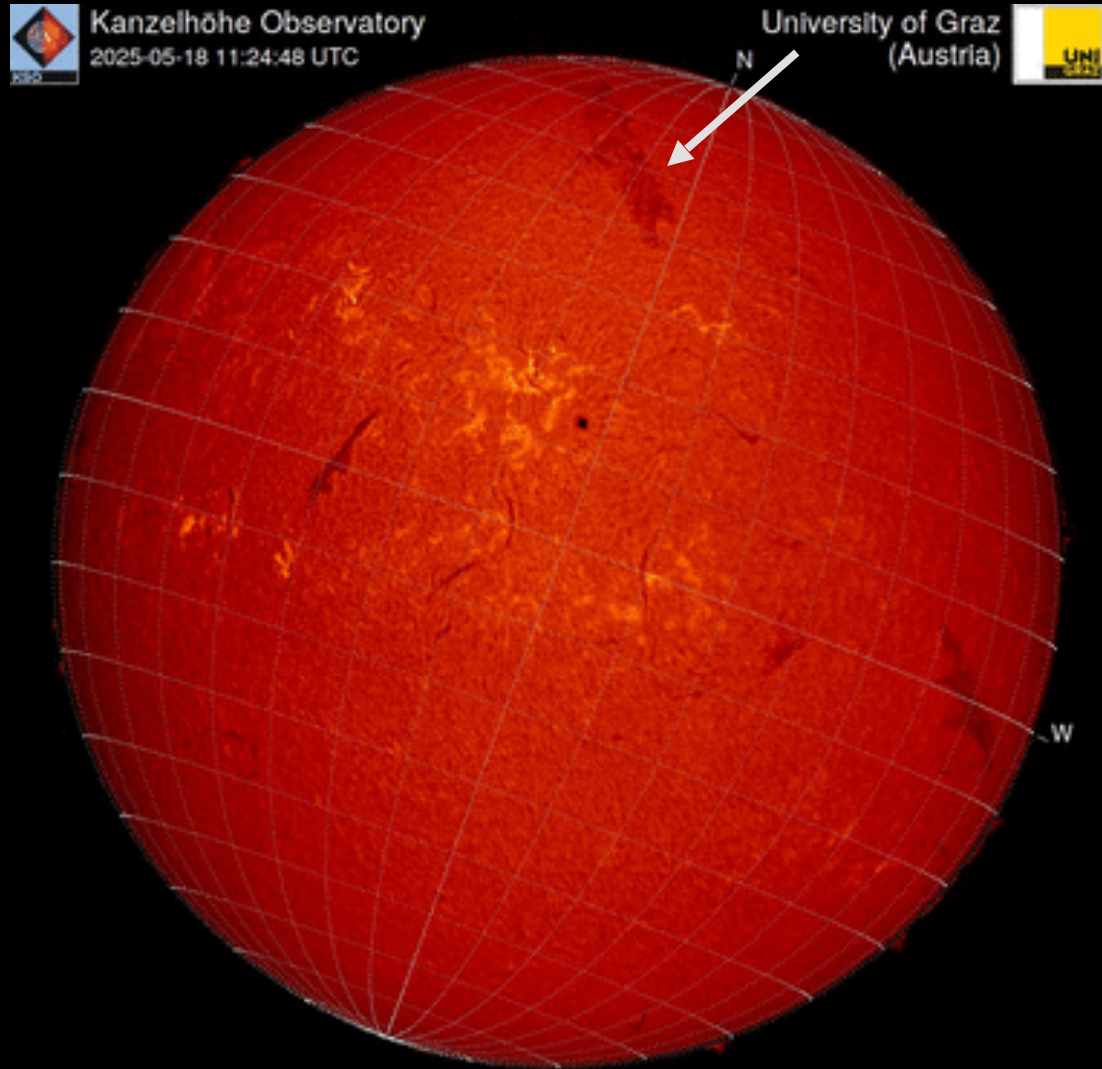
Filaments

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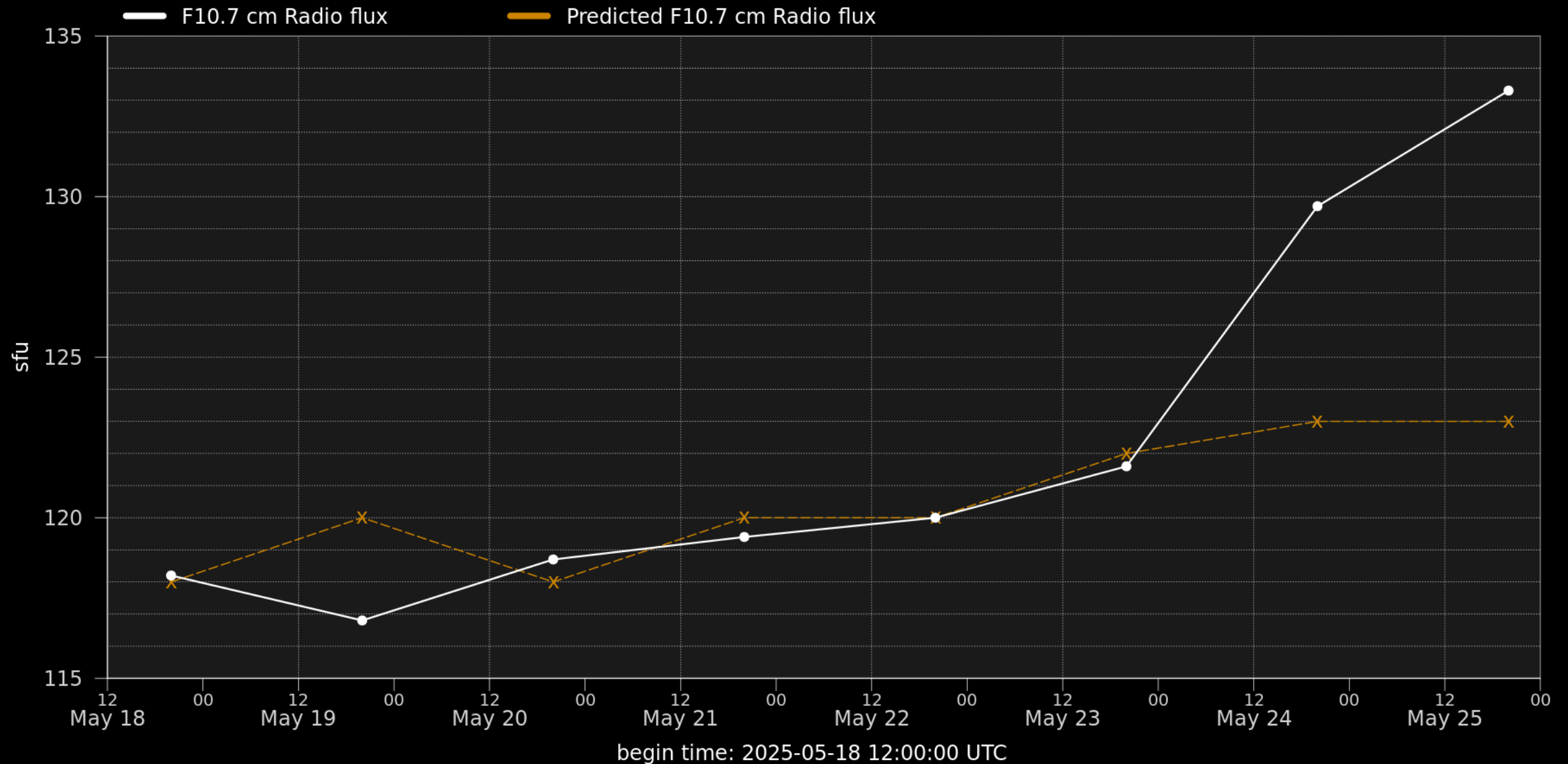
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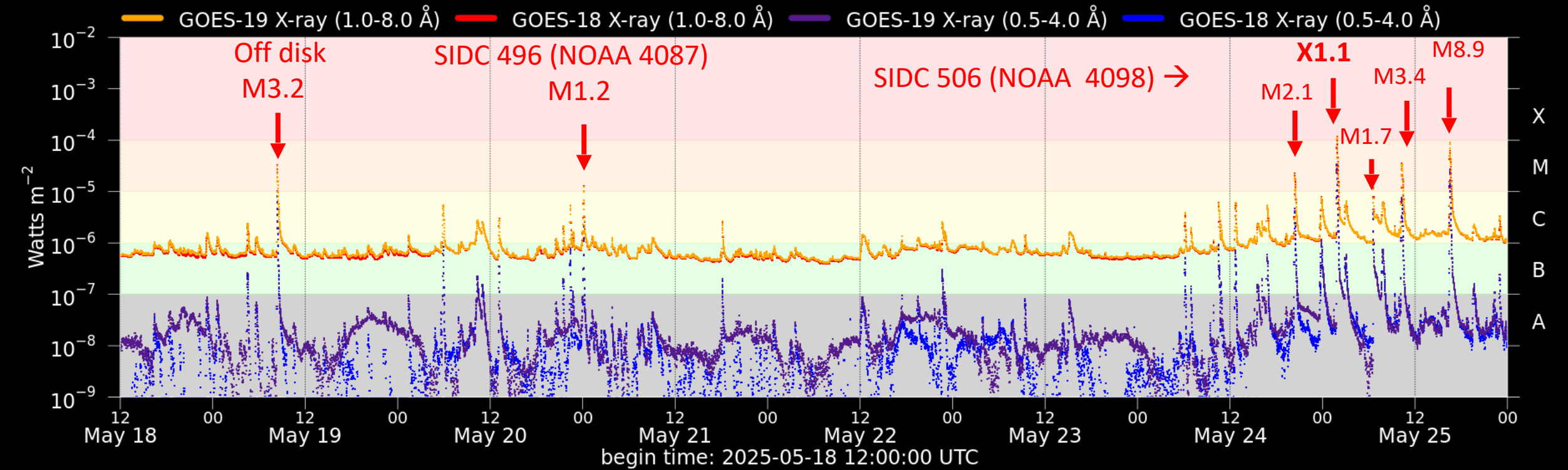
Filaments & Filament eruptions



Solar F10.7cm radio flux

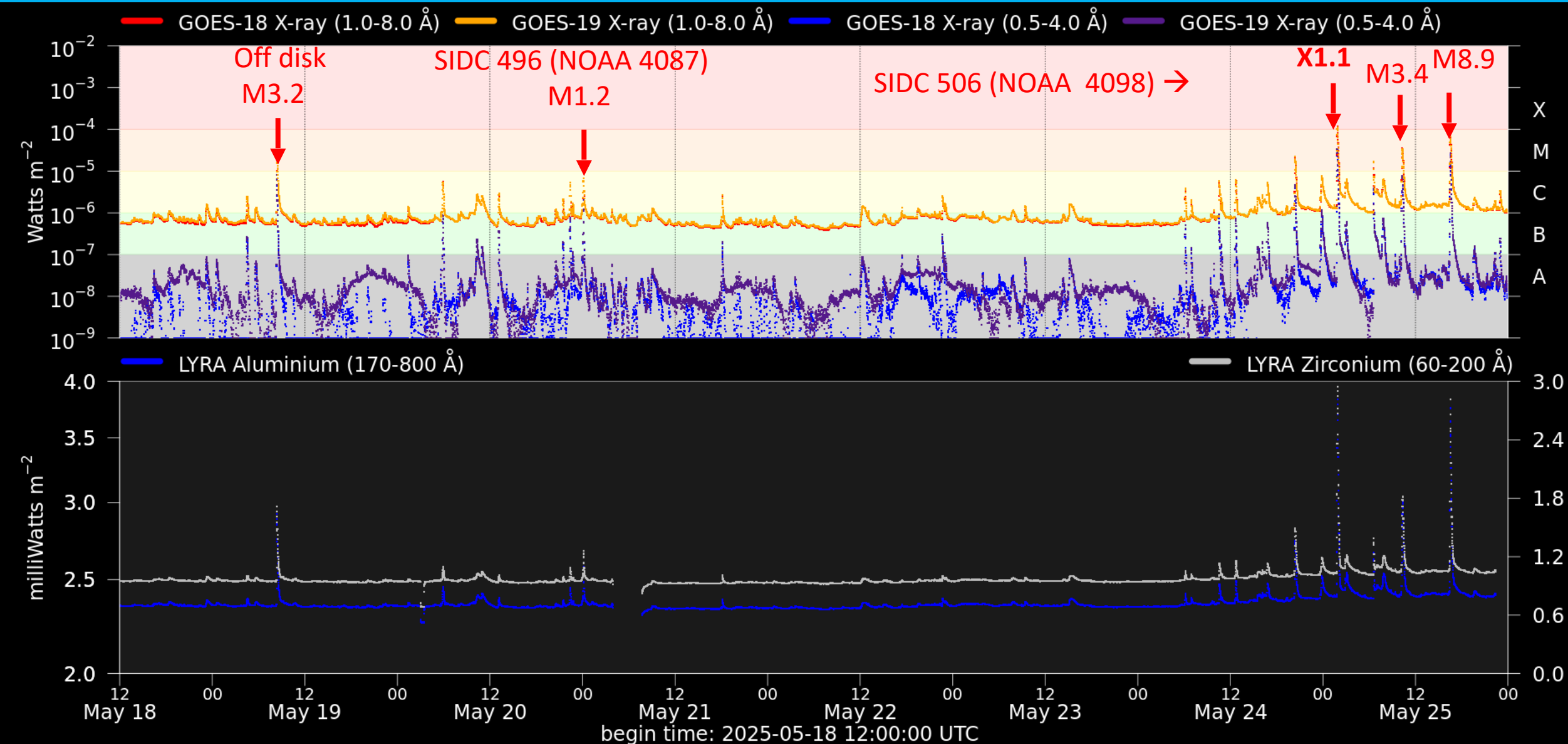


Flaring activity

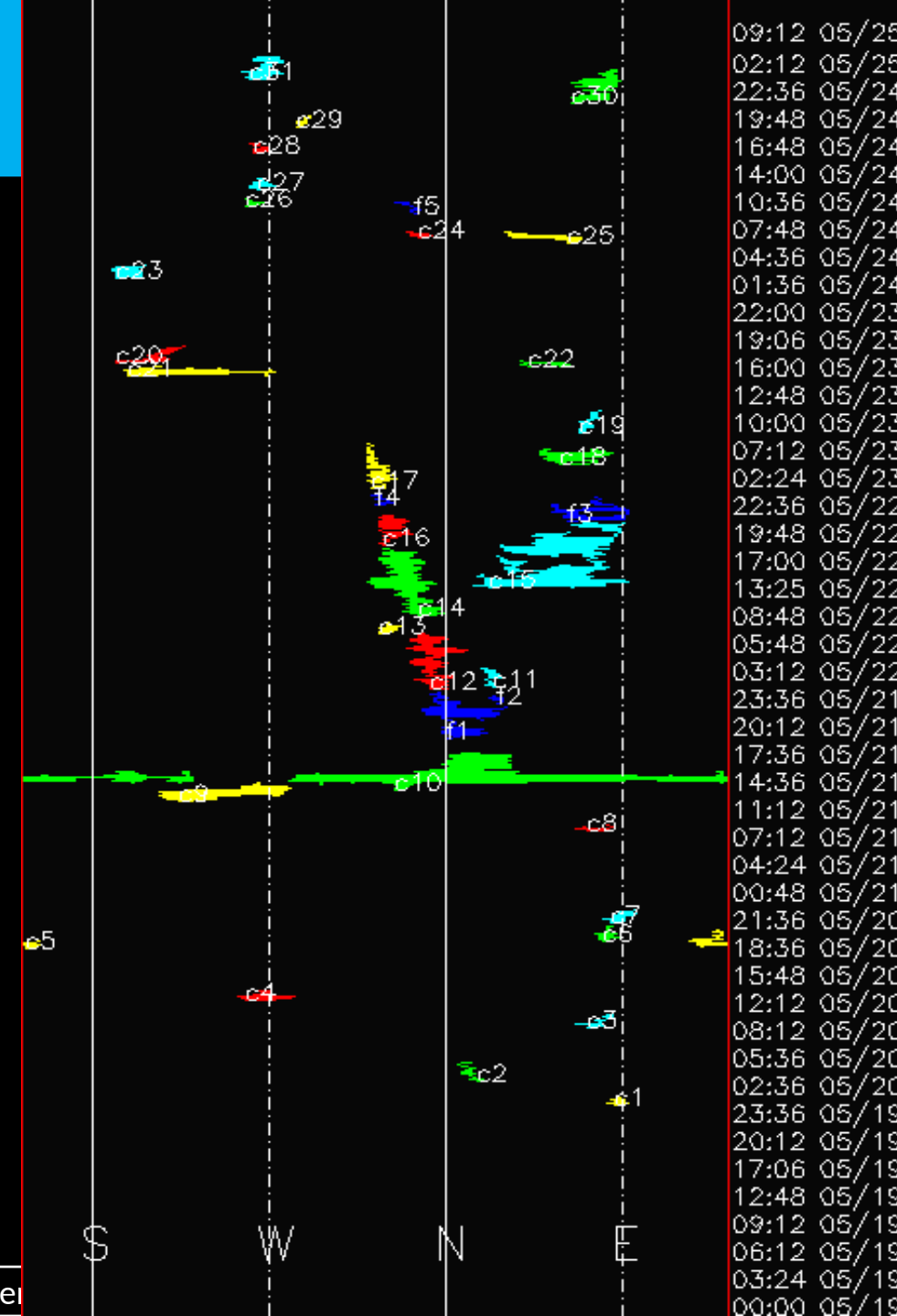
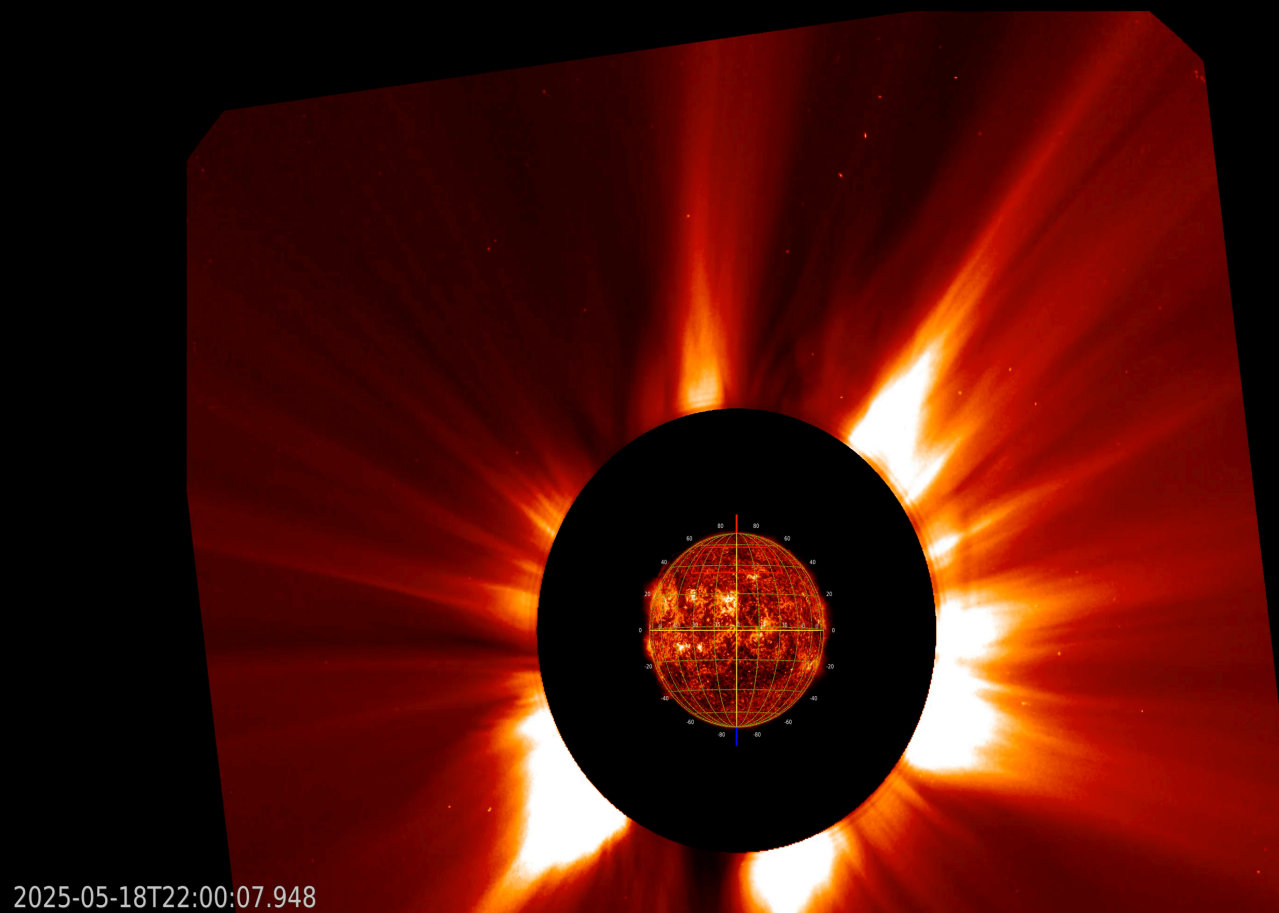


Issue date	2025-05-18	2025-05-19	2025-05-20	2025-05-21	2025-05-22	2025-05-23	2025-05-24	2025-05-25
Probability (%)	75 15 01	75 15 01	85 19 01	87 27 01	88 32 05	98 55 10	81 15 01	97 37 10
Observed (#)	04 01 00	04 00 00	07 01 00	01 00 00	05 00 00	05 00 00	09 03 01	02 01 00

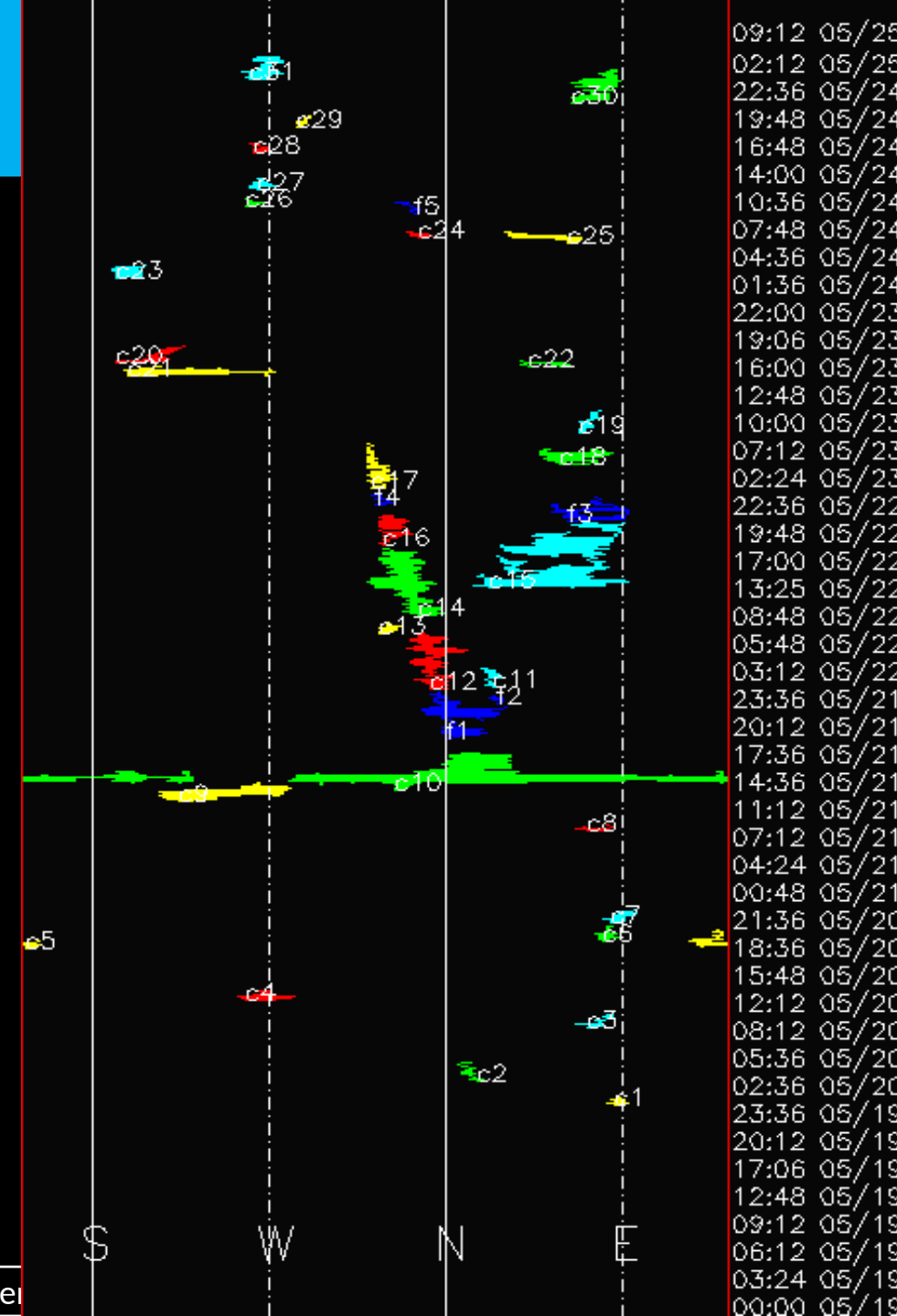
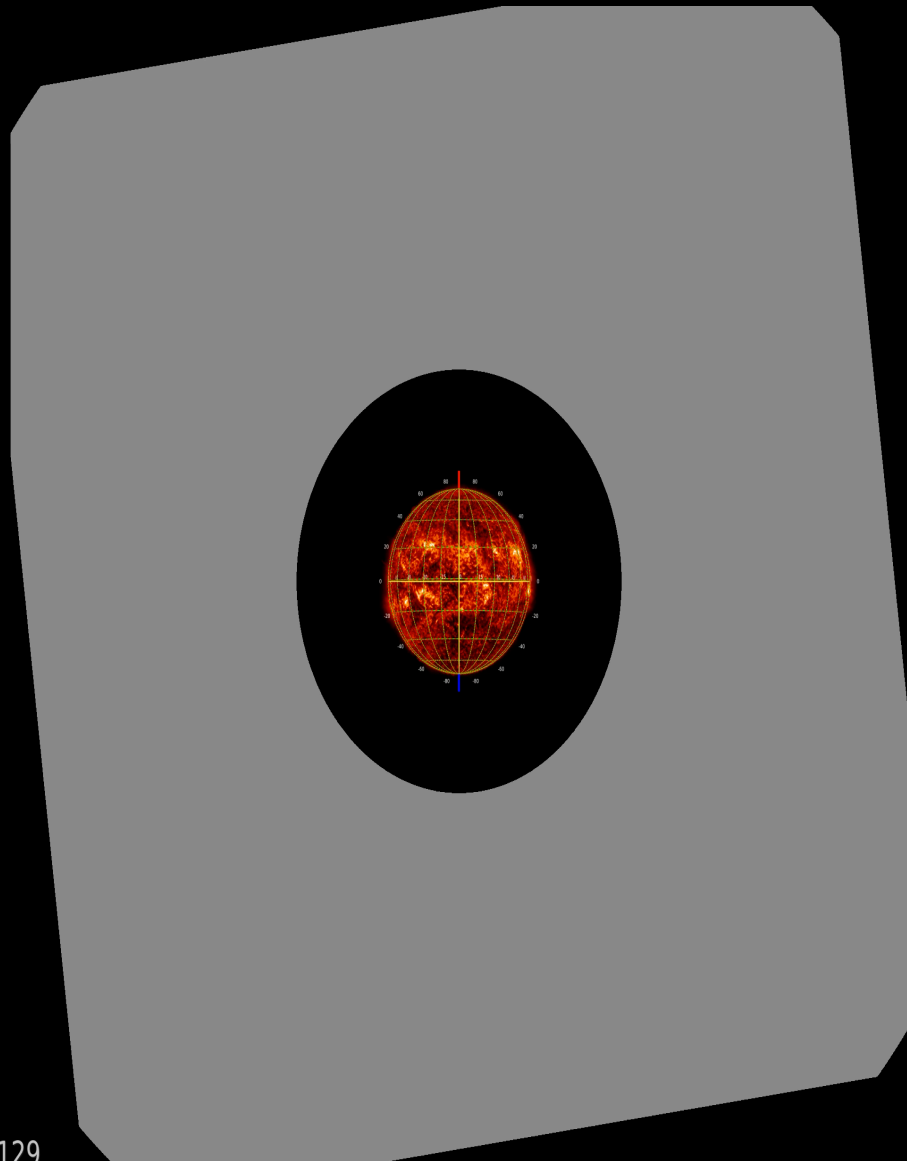
Solar X-Ray and UV flux



Coronal Mass Ejections

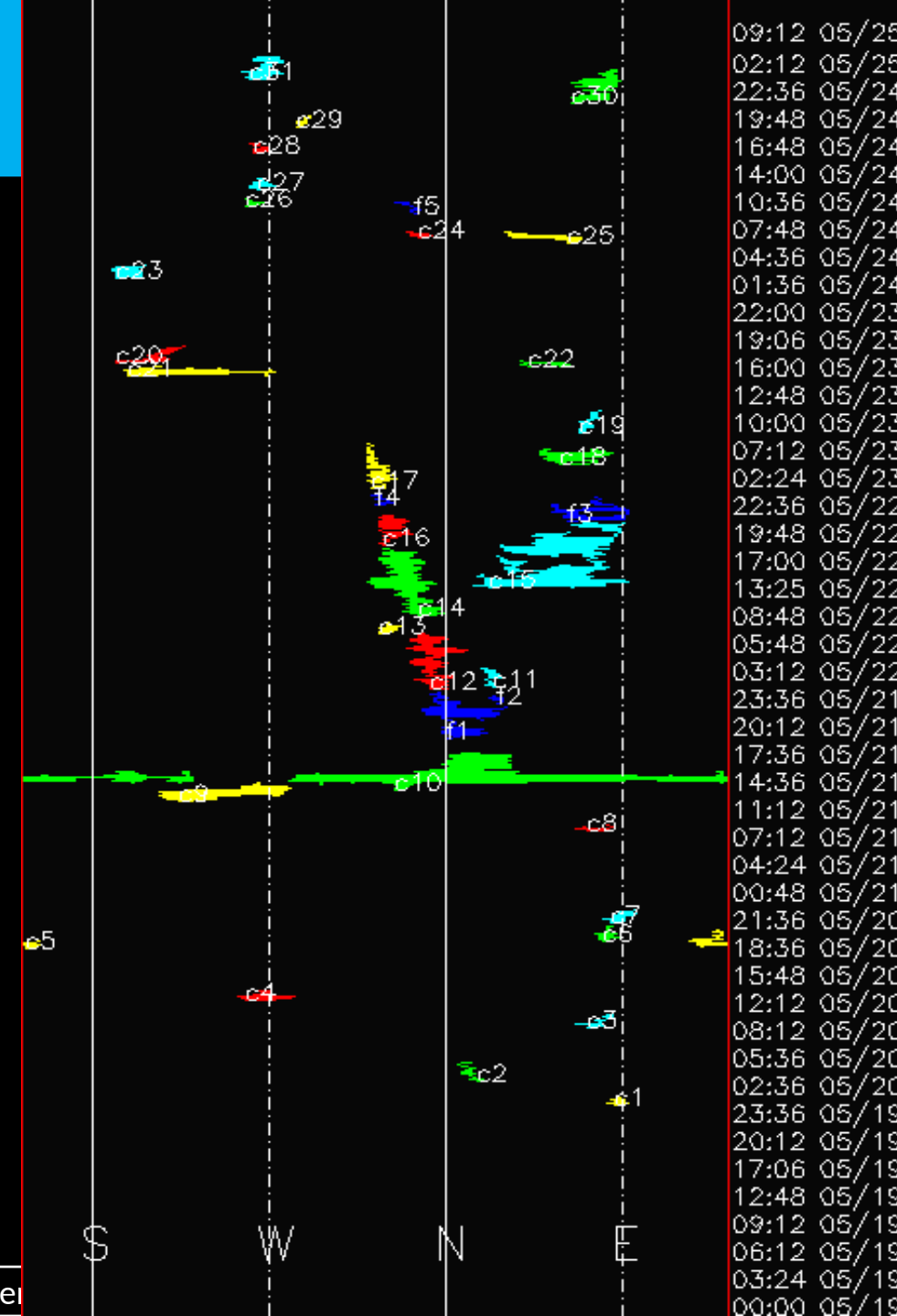
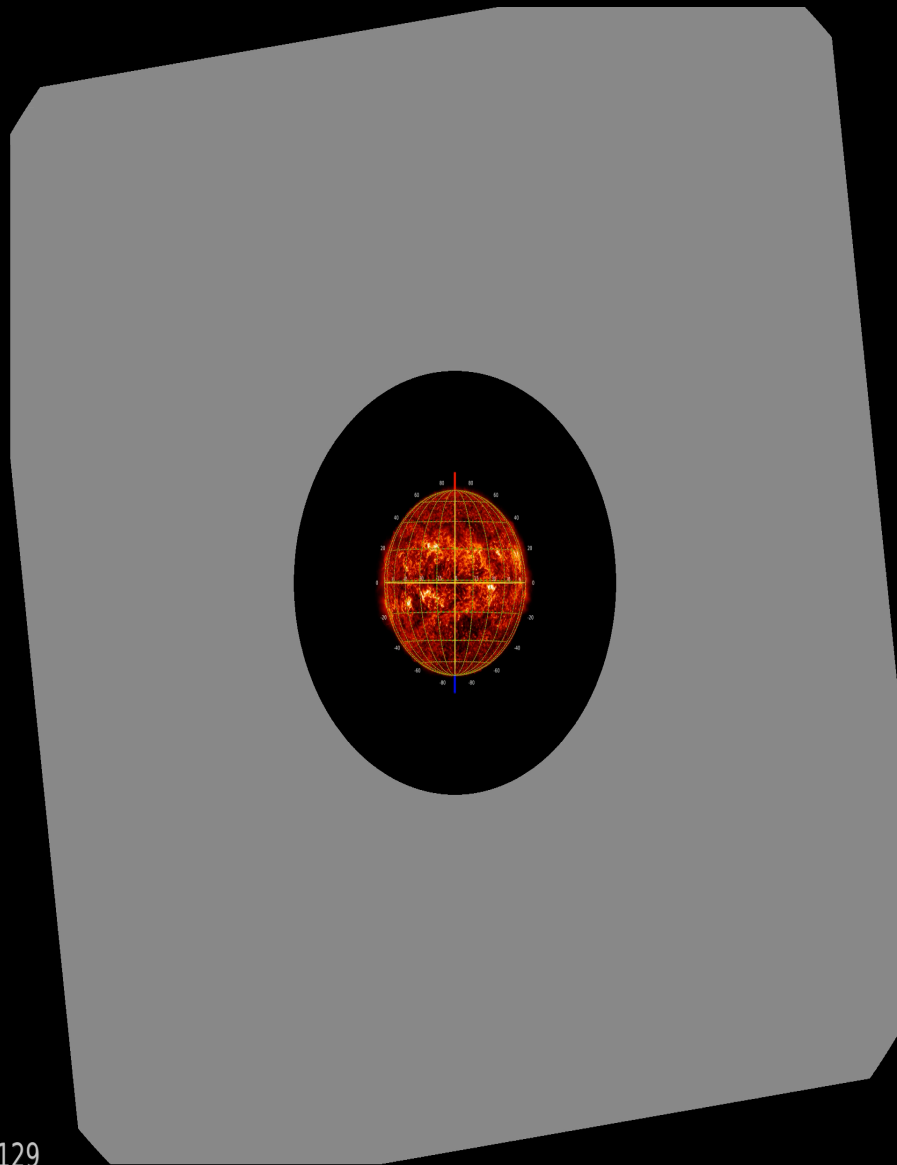


Coronal Mass Ejections



2025-05-23T16:00:05.129

Coronal Mass Ejections



2025-05-24T06:00:29.129

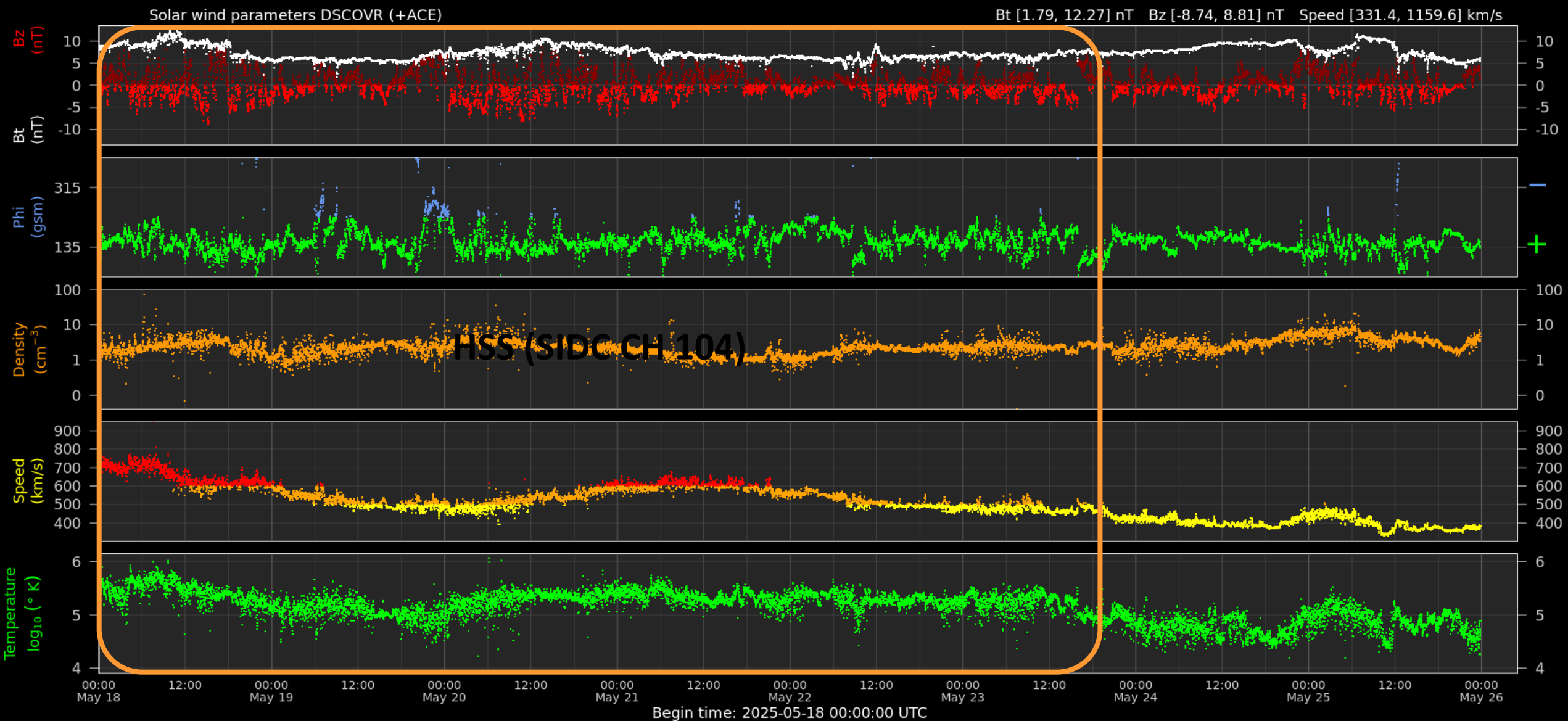
Geomagnetic Activity



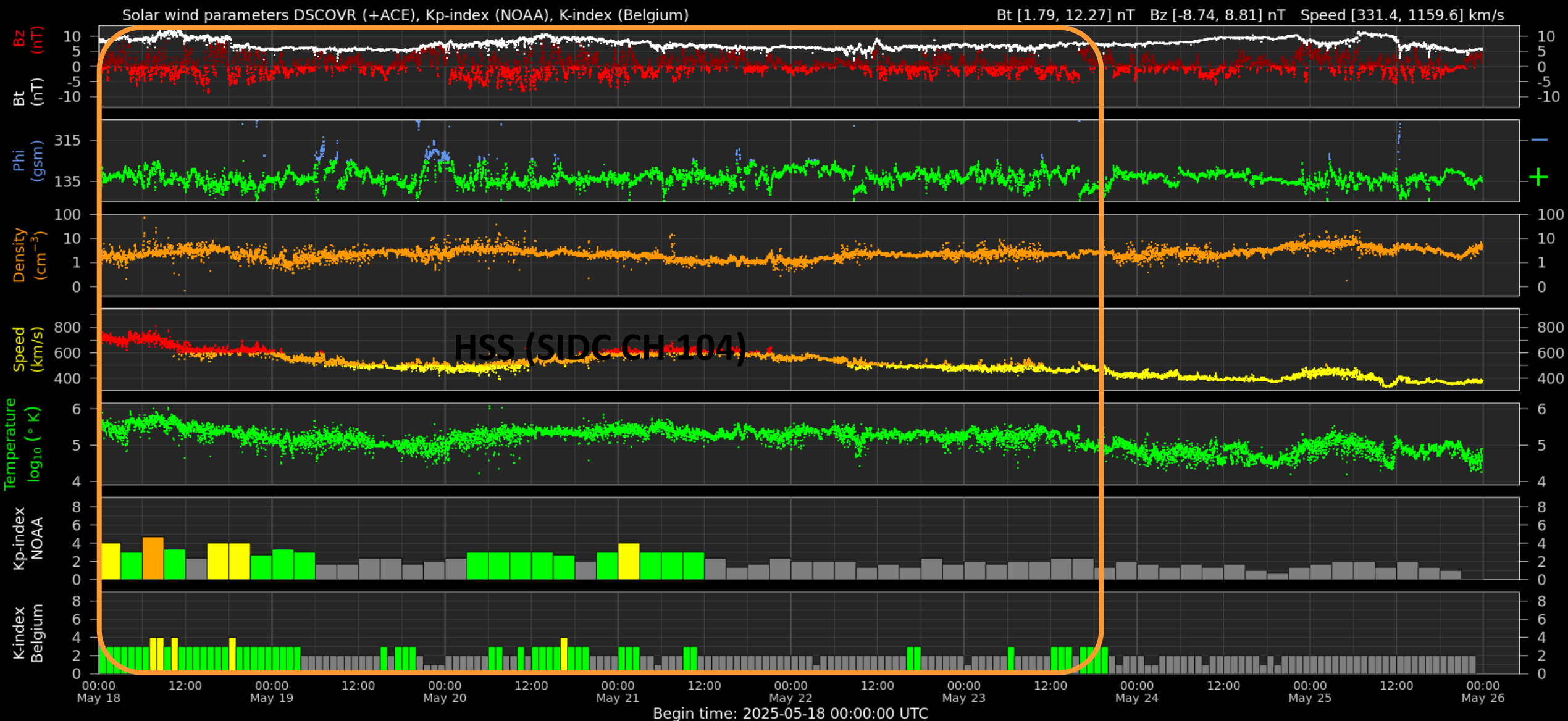
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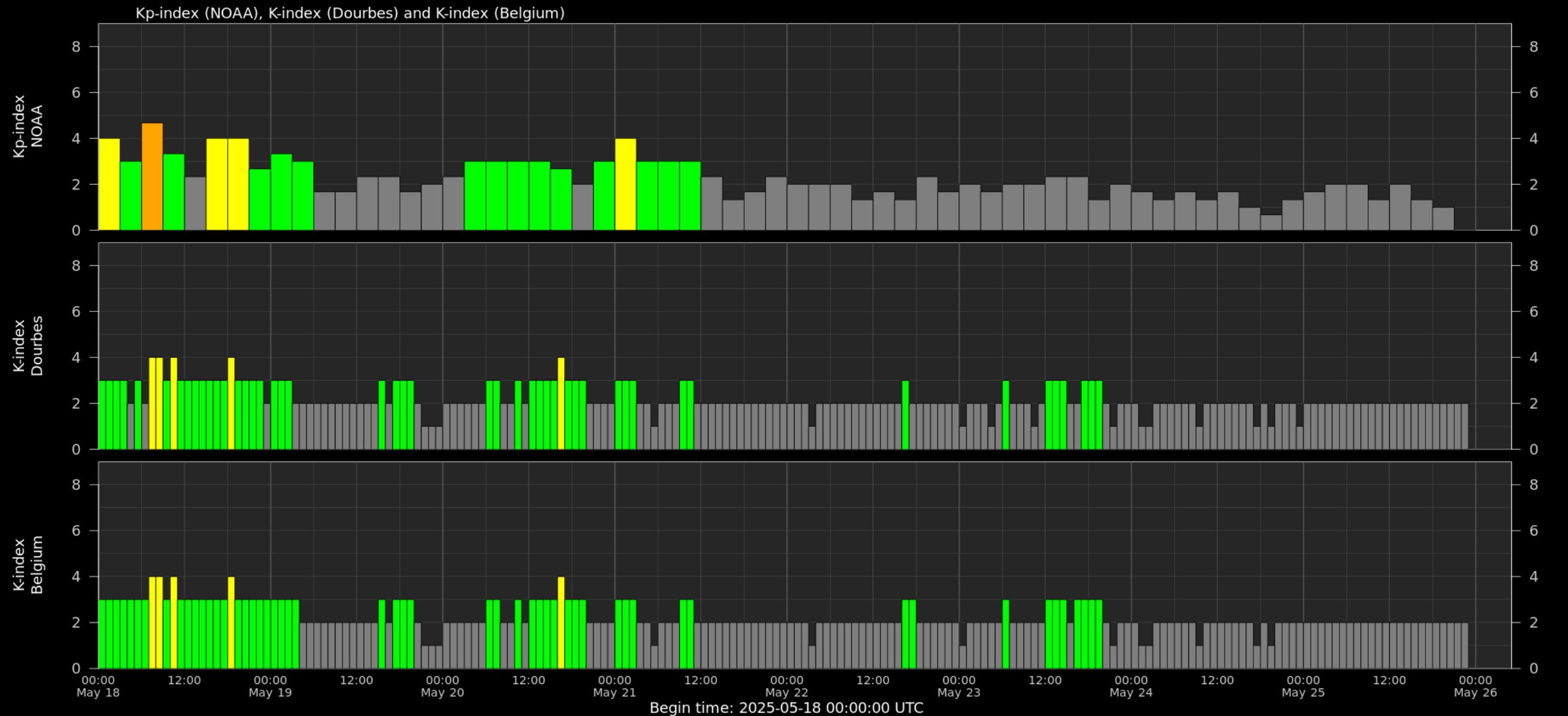
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)



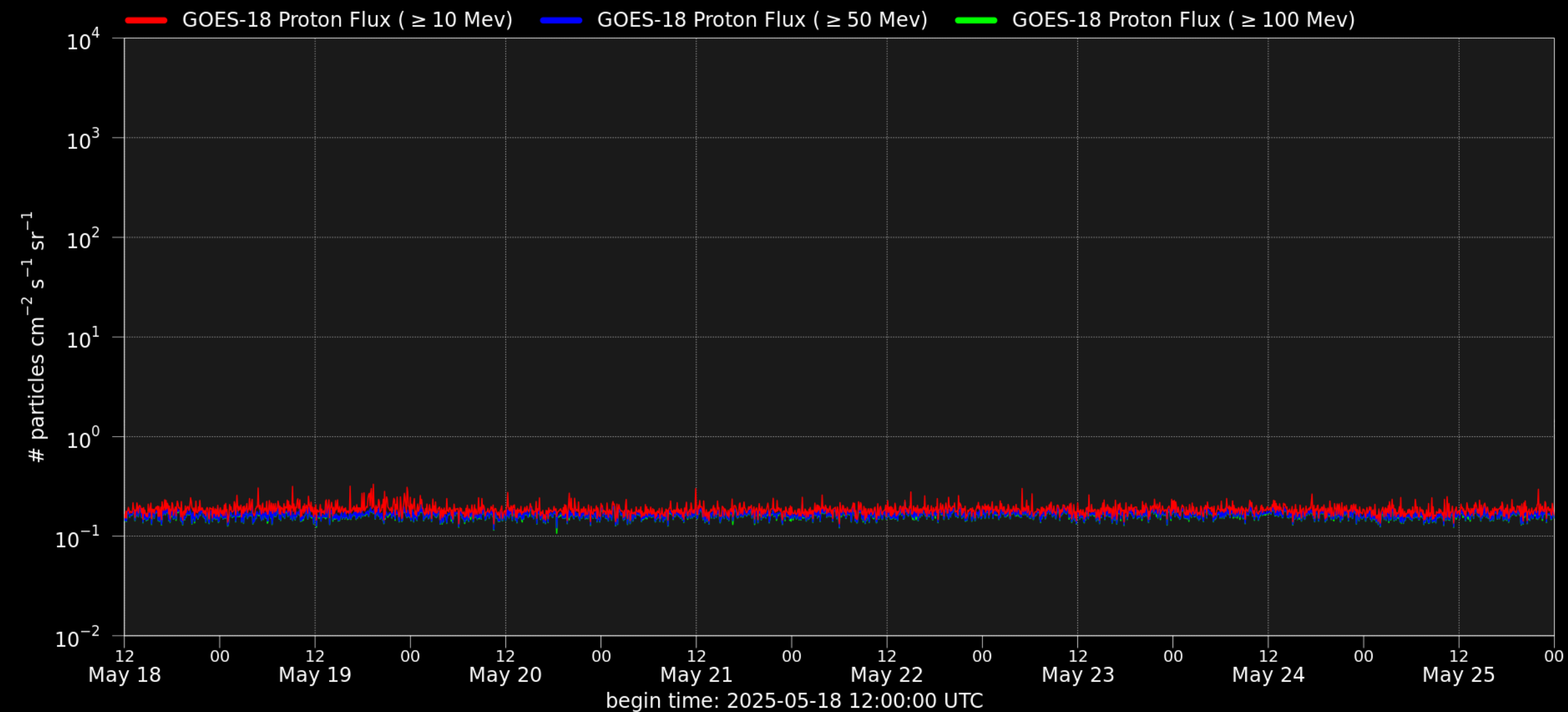
Energetic Particles



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Solar proton flux



Electron flux at GEO



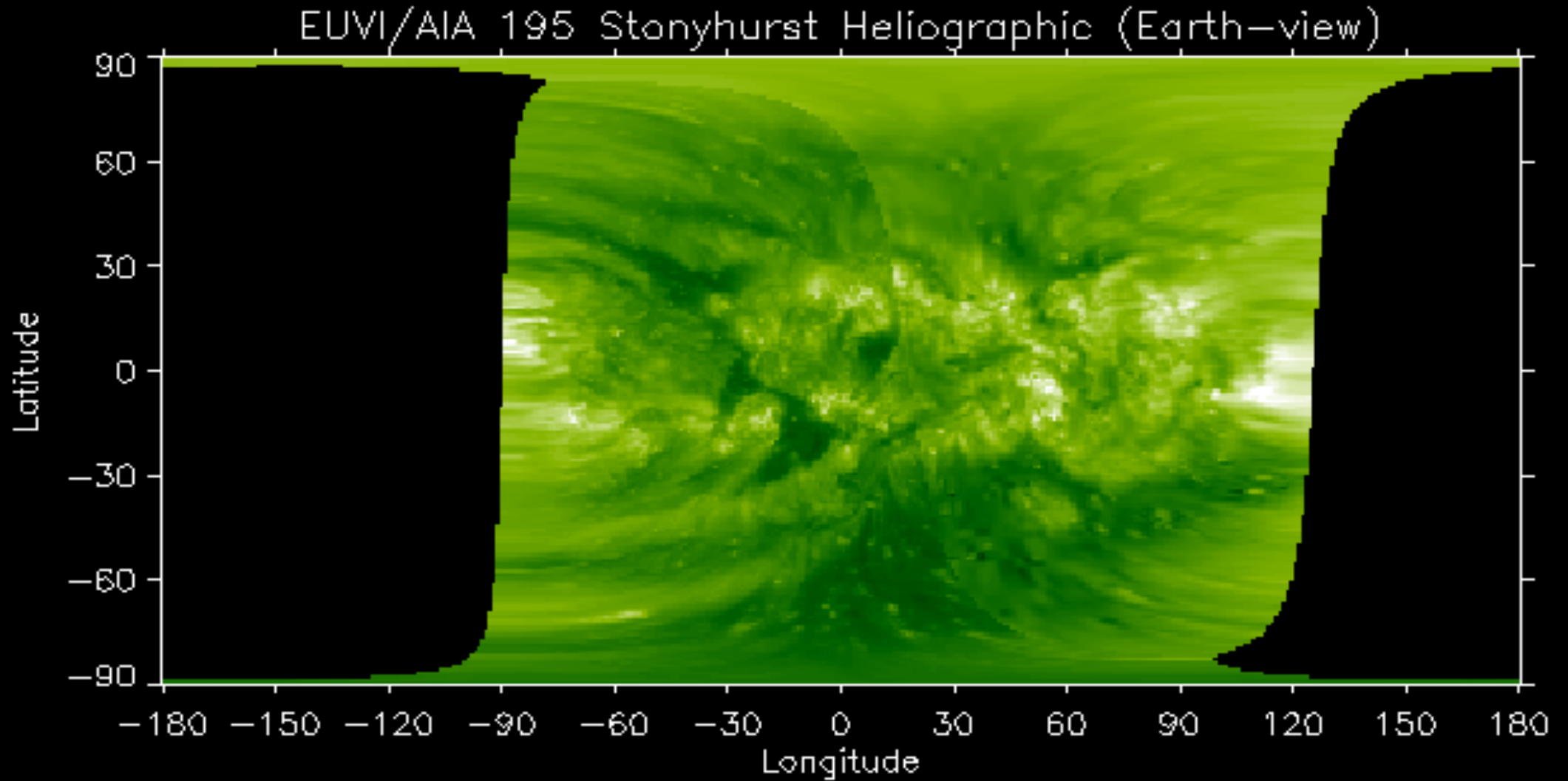
Outlook



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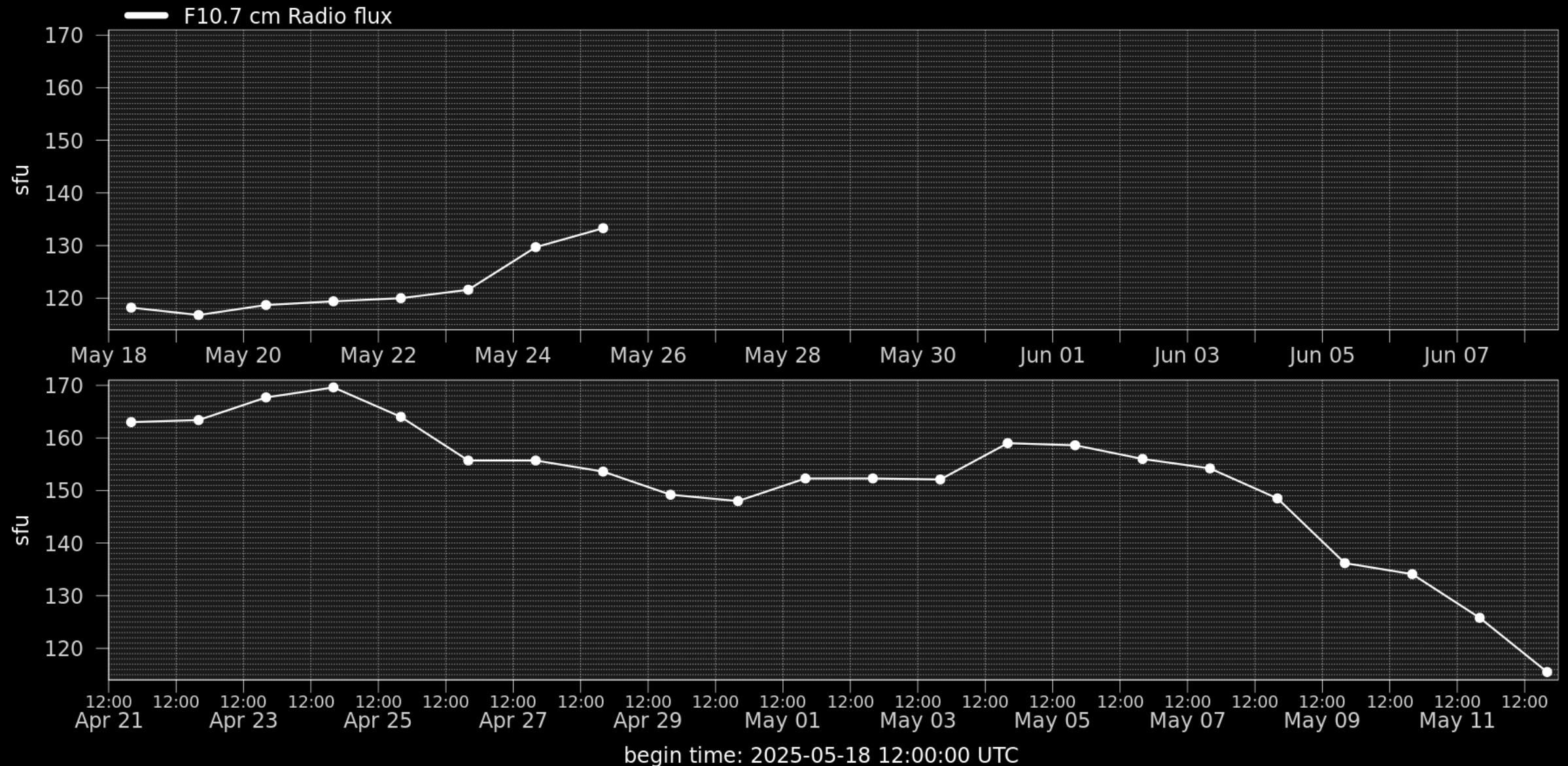
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Outlook: Solar activity

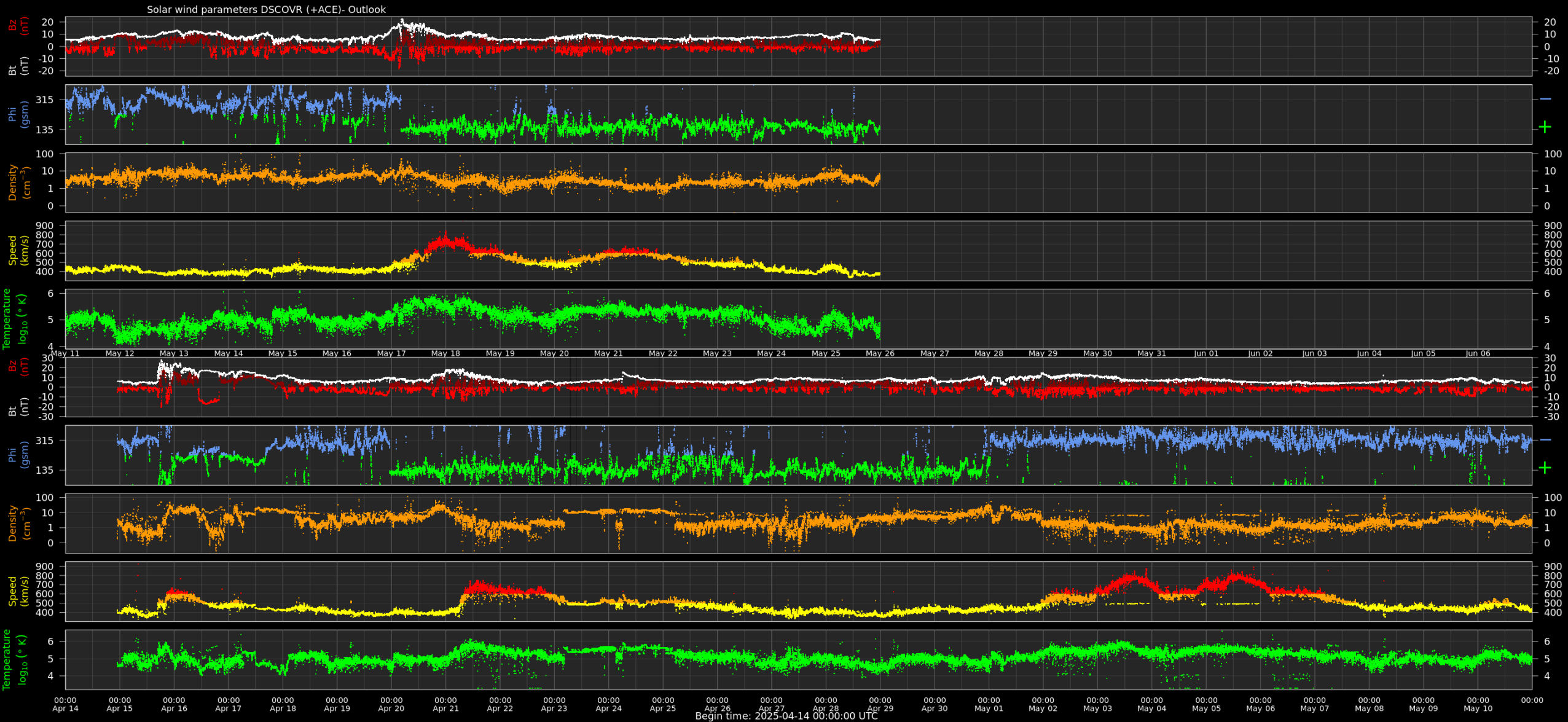


Observation date: 2025/05/25 22:35:00

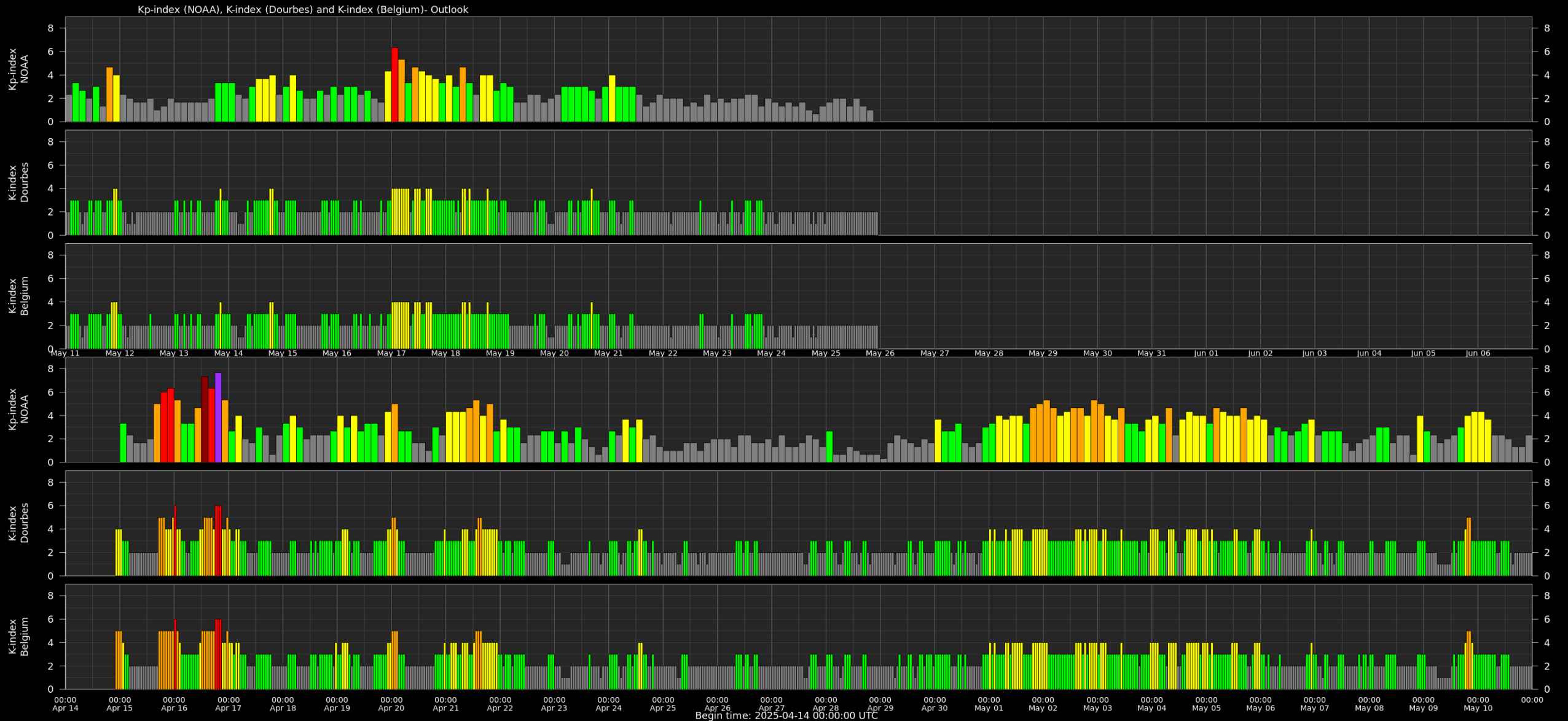
Outlook: Solar F10.7cm radio flux



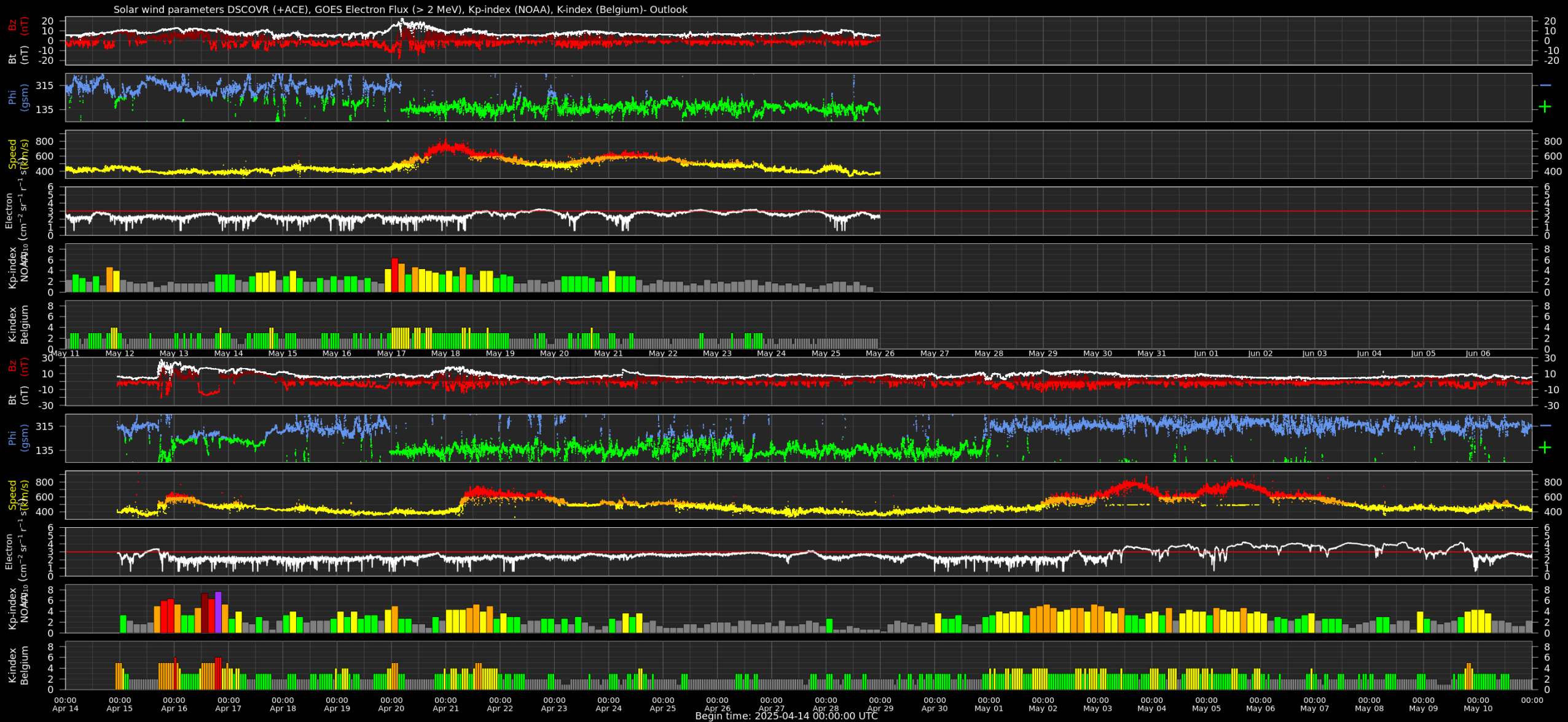
Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



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Pegasus related events

- Post Storm Depression (moderate storm of last week)
- Short Wave Fadeout (X1.1 flare)

See you at our next briefing!



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