SIDC Space Weather Briefing

20 July 2026-26 July 2026

Yana Maneva

& the SIDC forecaster team

Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2026-07-20 00:00 to 2026-07-26 23:59

Active regions	11 ARs
Flares	# C-class flare: 39 # M-class flare: 6 # X-class flare: 0
Coronal Holes	Several CH- and 1 CH+
CMEs	Possible Earth-directed component of July 24 CME

Proton flux	Nominal
Electron flux	> 1000 pfu on some days

Solar wind and geomagnetic conditions

ICMEs	None
Solar wind conditions	|B|: 1.53 - 17.23 nT// Bz: -12.68 nT to 13.48 nT// Speed: 251.0 - 748.8 km/s
Geomagnetic conditions	max KBel: 5.0, max Kp(NOAA): 5.33, Minor Storm conditions

All Quiet Alert: Off

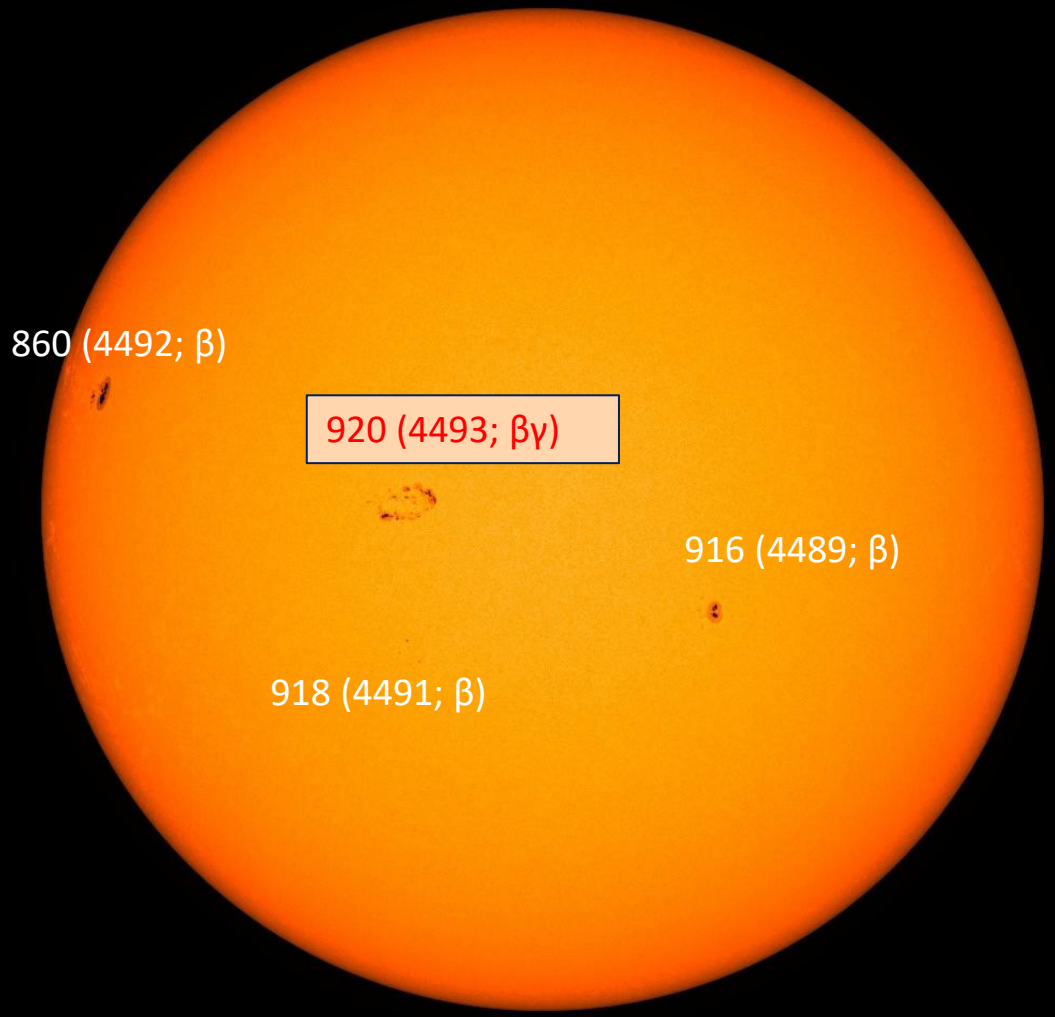
Solar Activity

Royal Observatory
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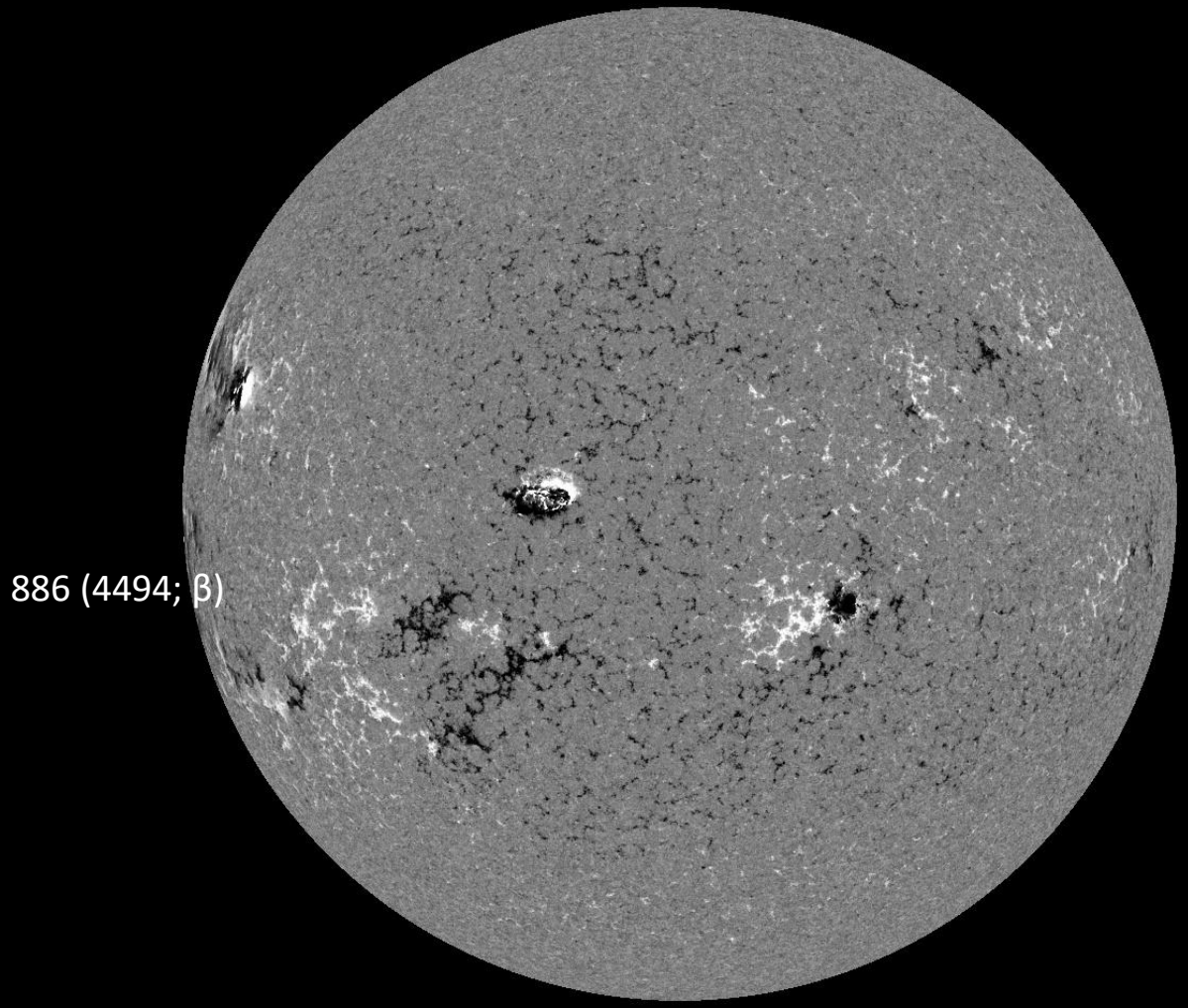
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Solar active regions

SDO/HMI White Light 2026-07-20

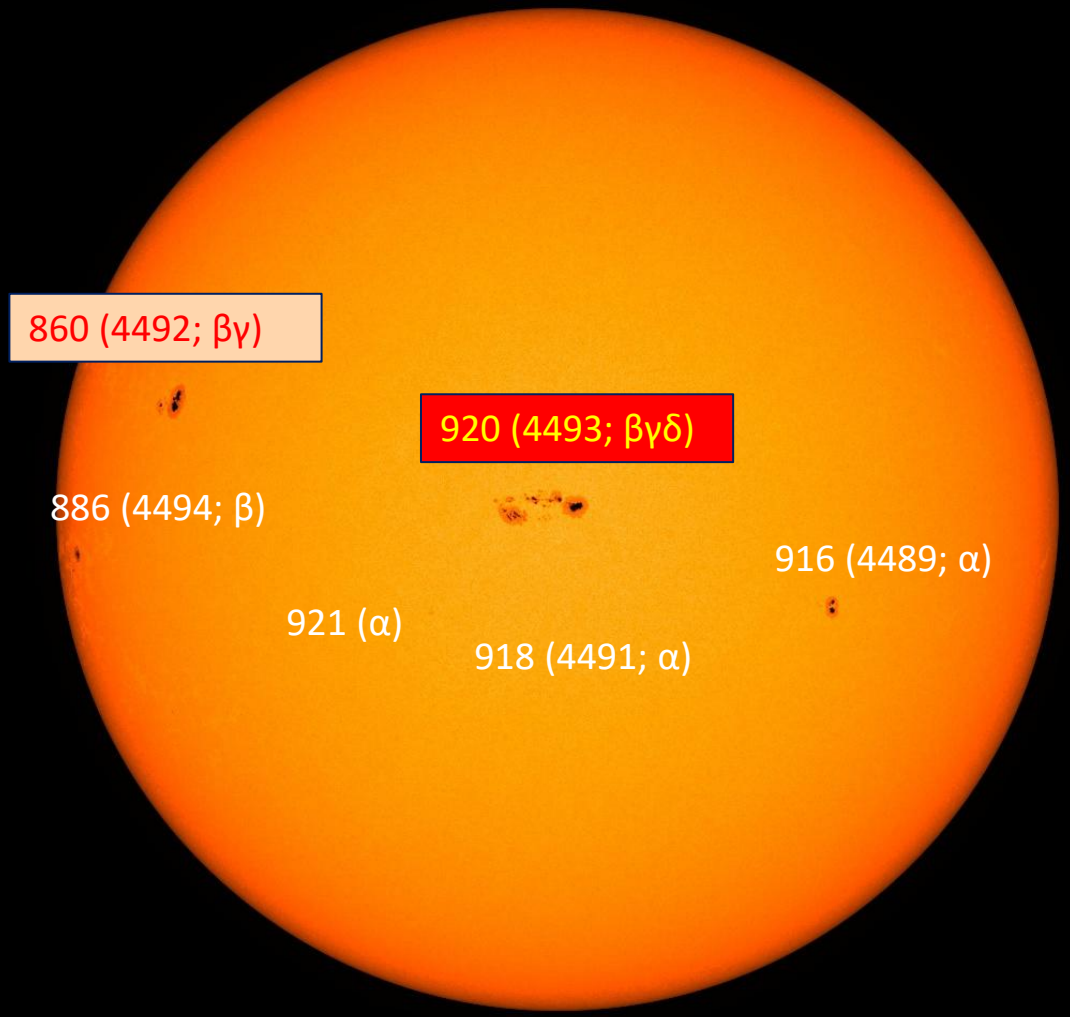


SDO/HMI Magnetogram 2026-07-20

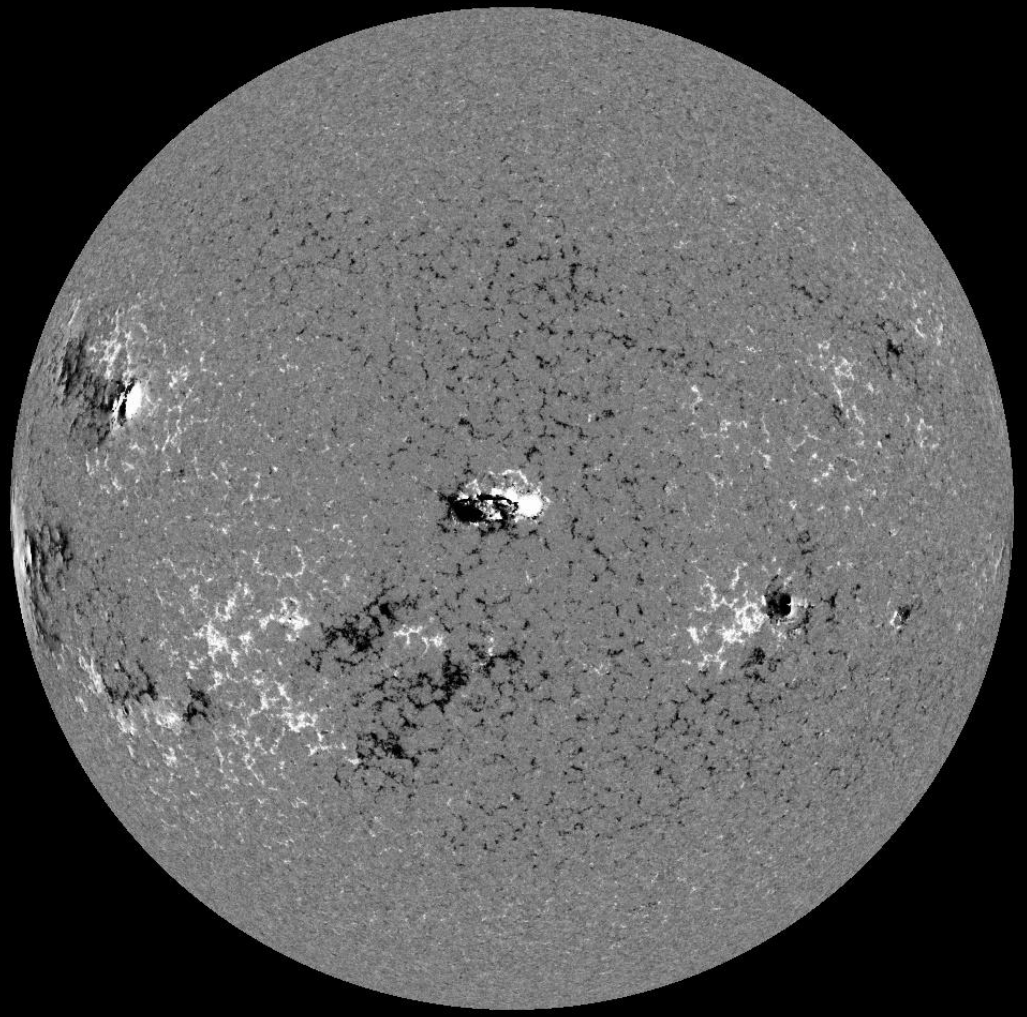


Solar active regions

SDO/HMI White Light 2026-07-21

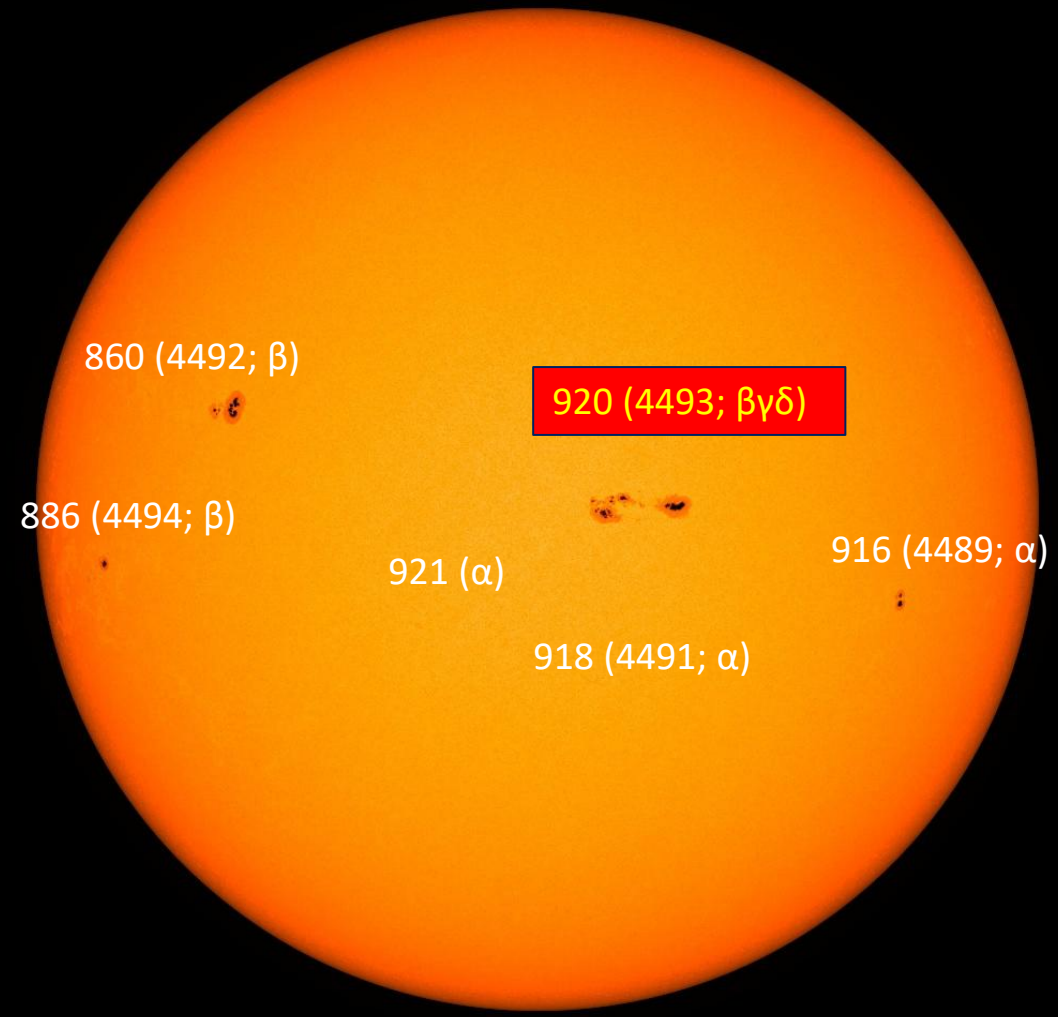


SDO/HMI Magnetogram 2026-07-21

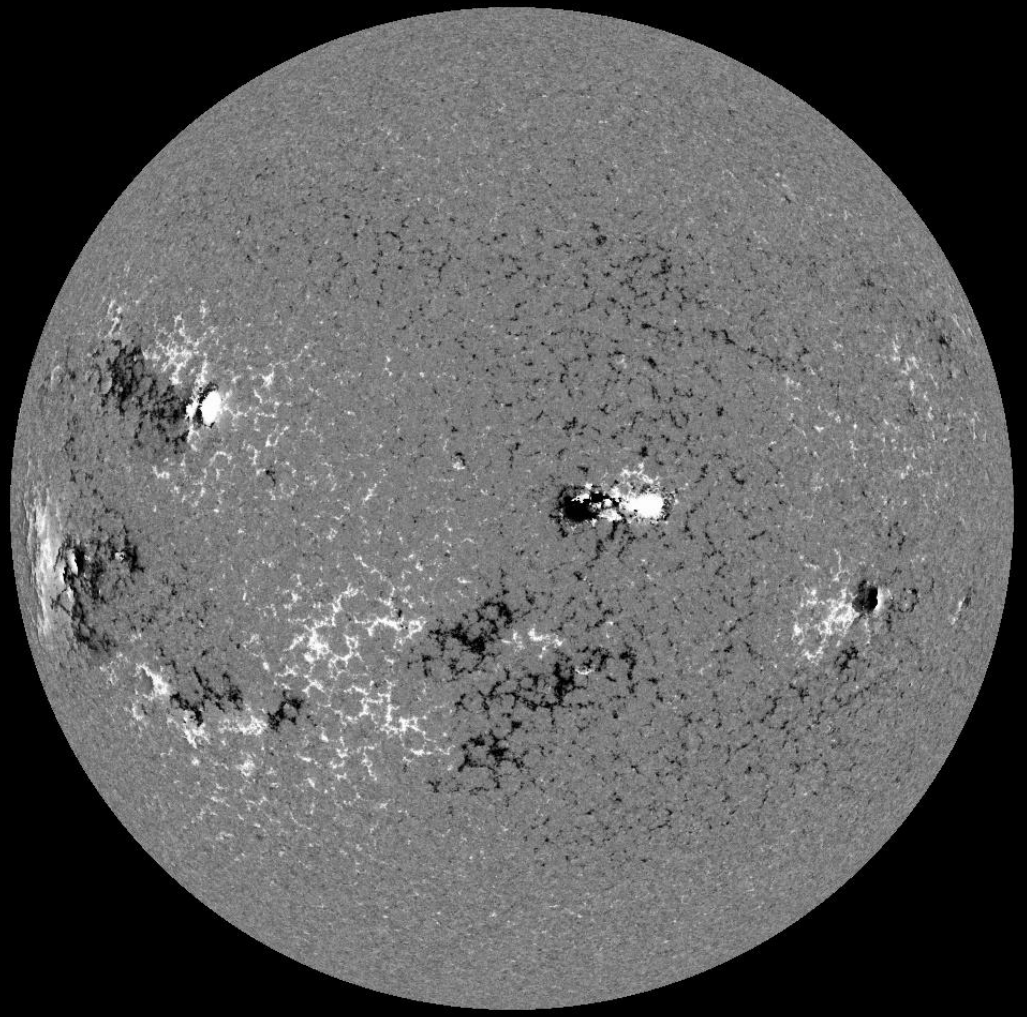


Solar active regions

SDO/HMI White Light 2026-07-22

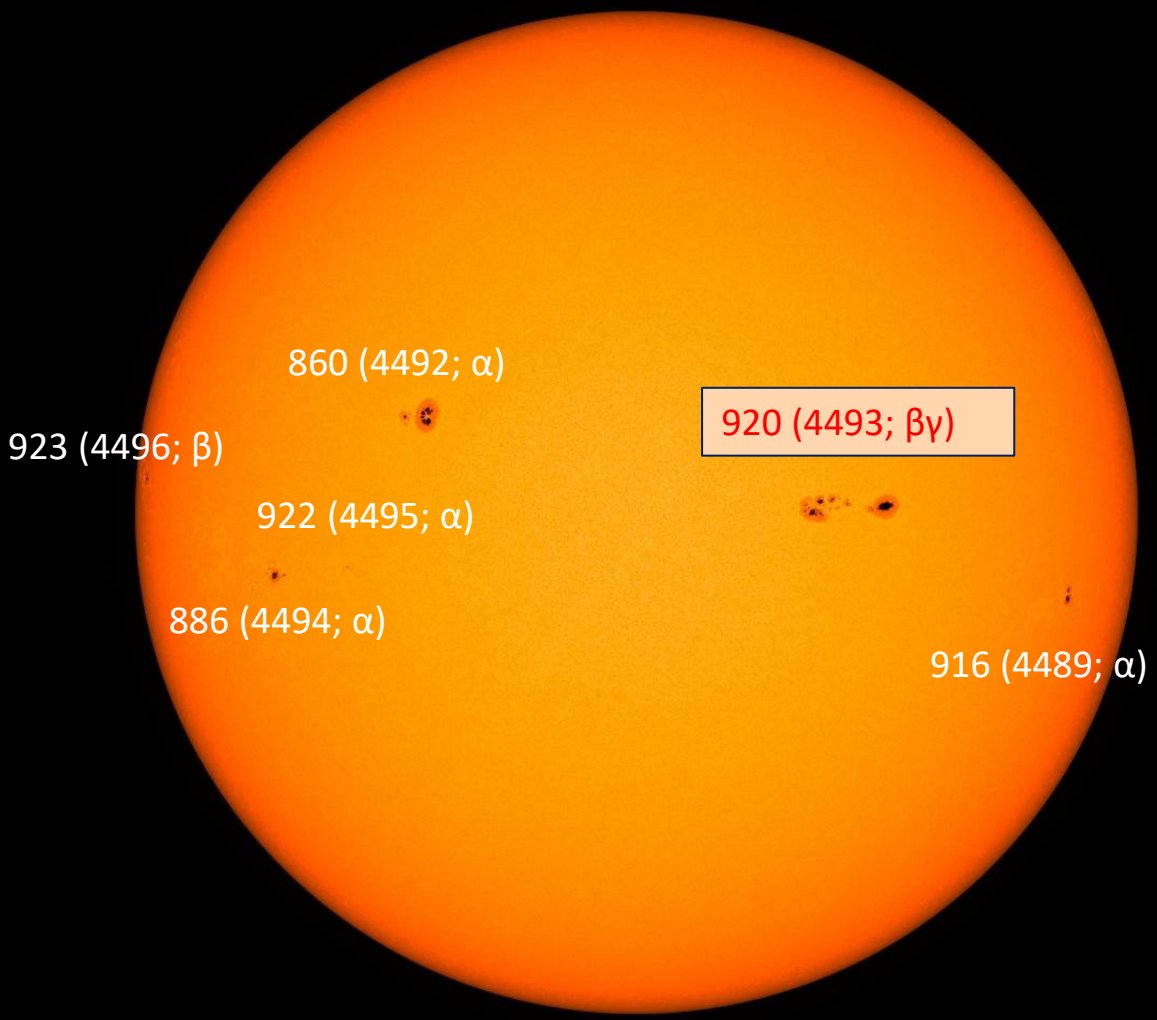


SDO/HMI Magnetogram 2026-07-22

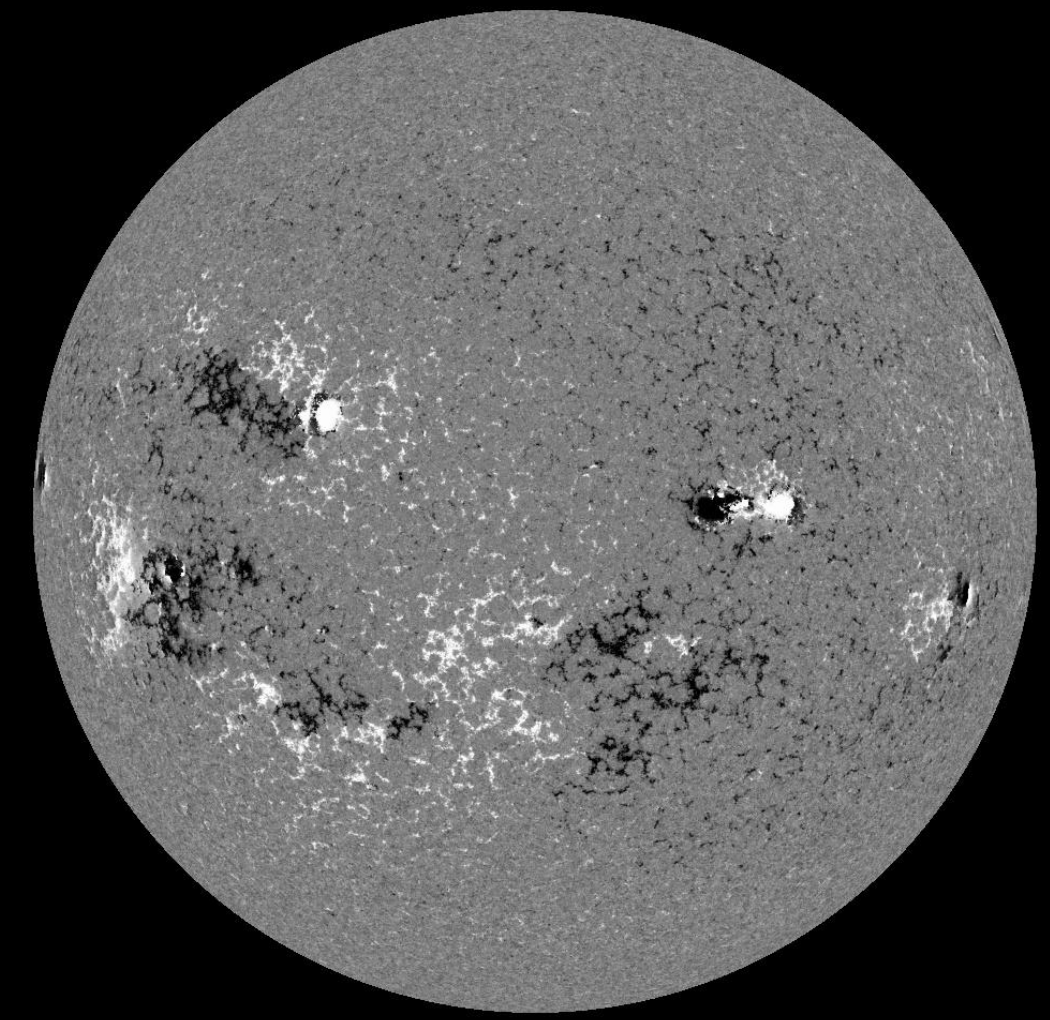


Solar active regions

SDO/HMI White Light 2026-07-23

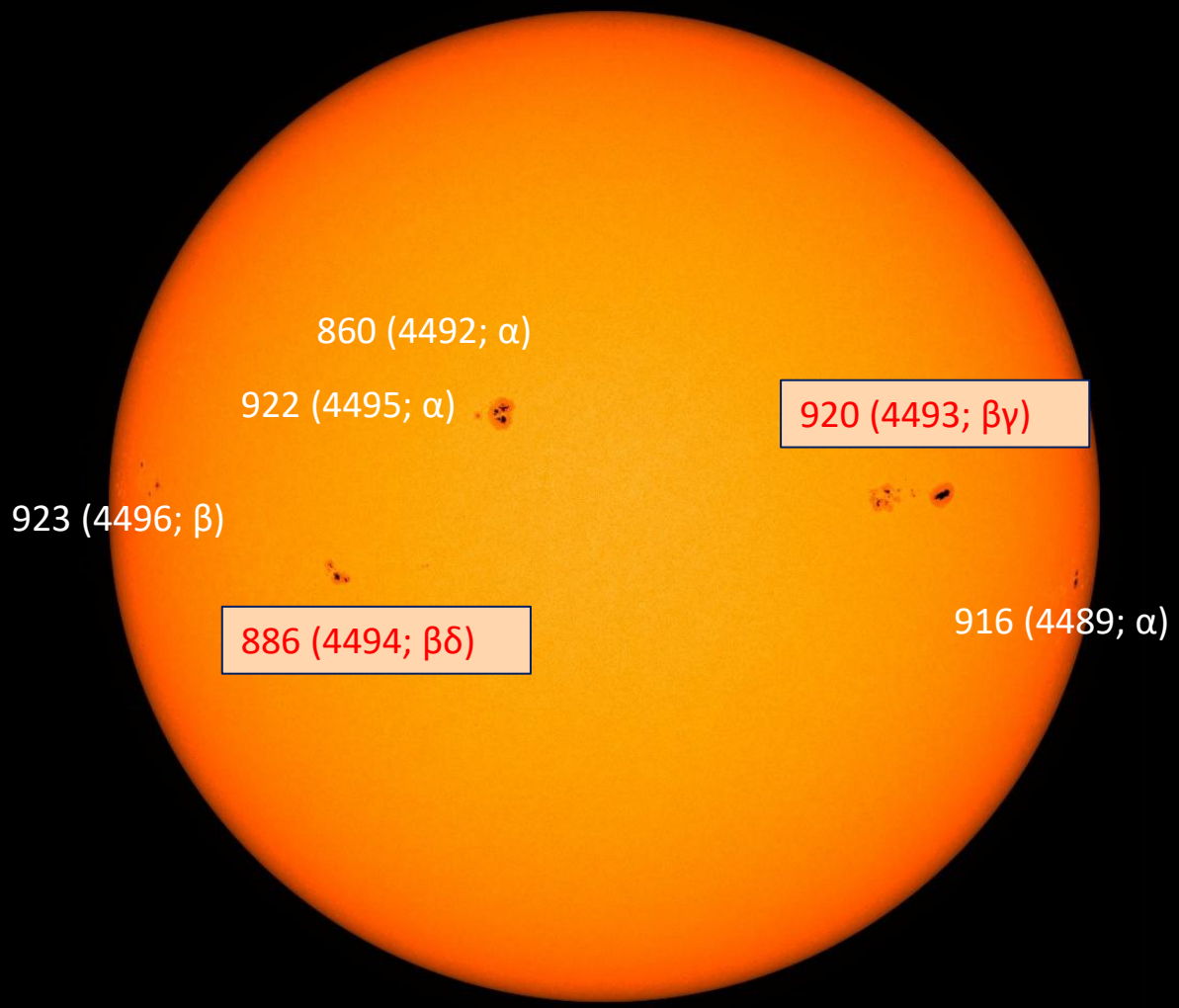


SDO/HMI Magnetogram 2026-07-23

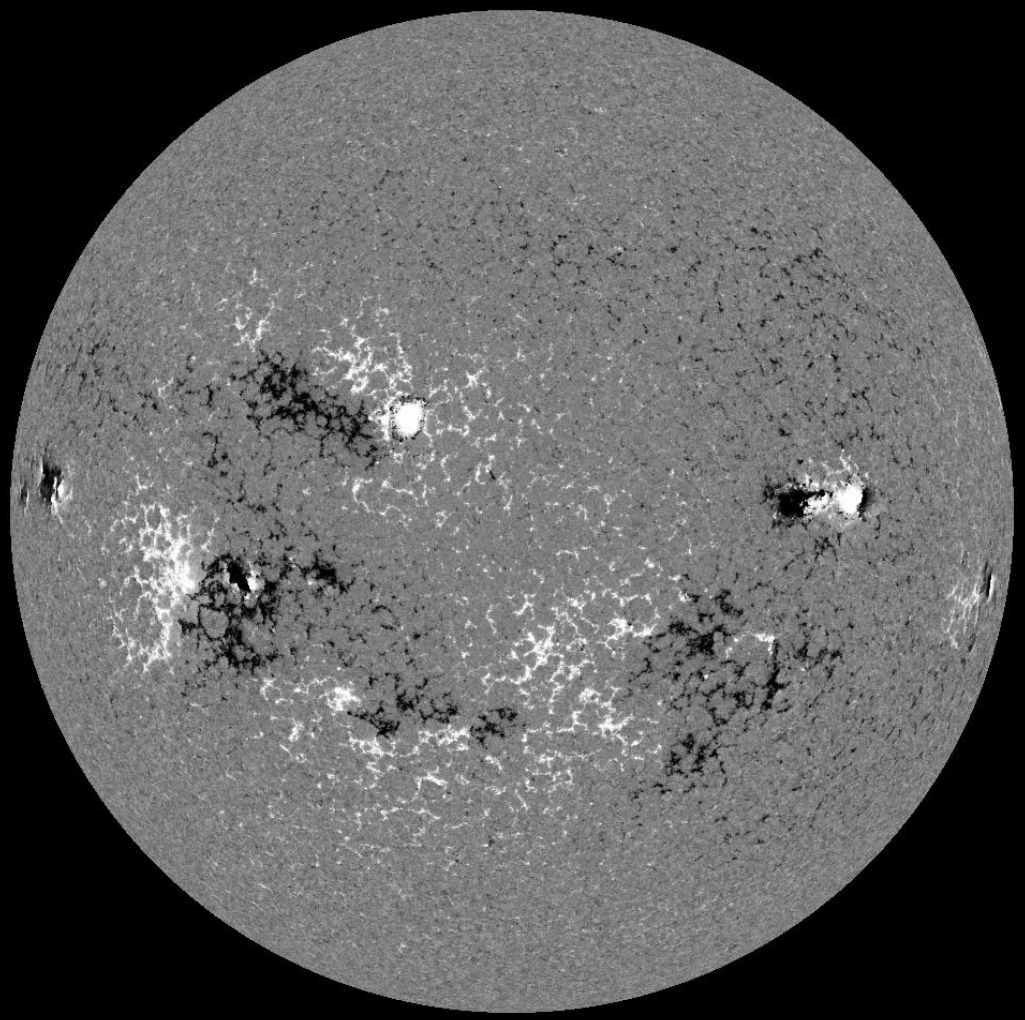


Solar active regions

SDO/HMI White Light 2026-07-24

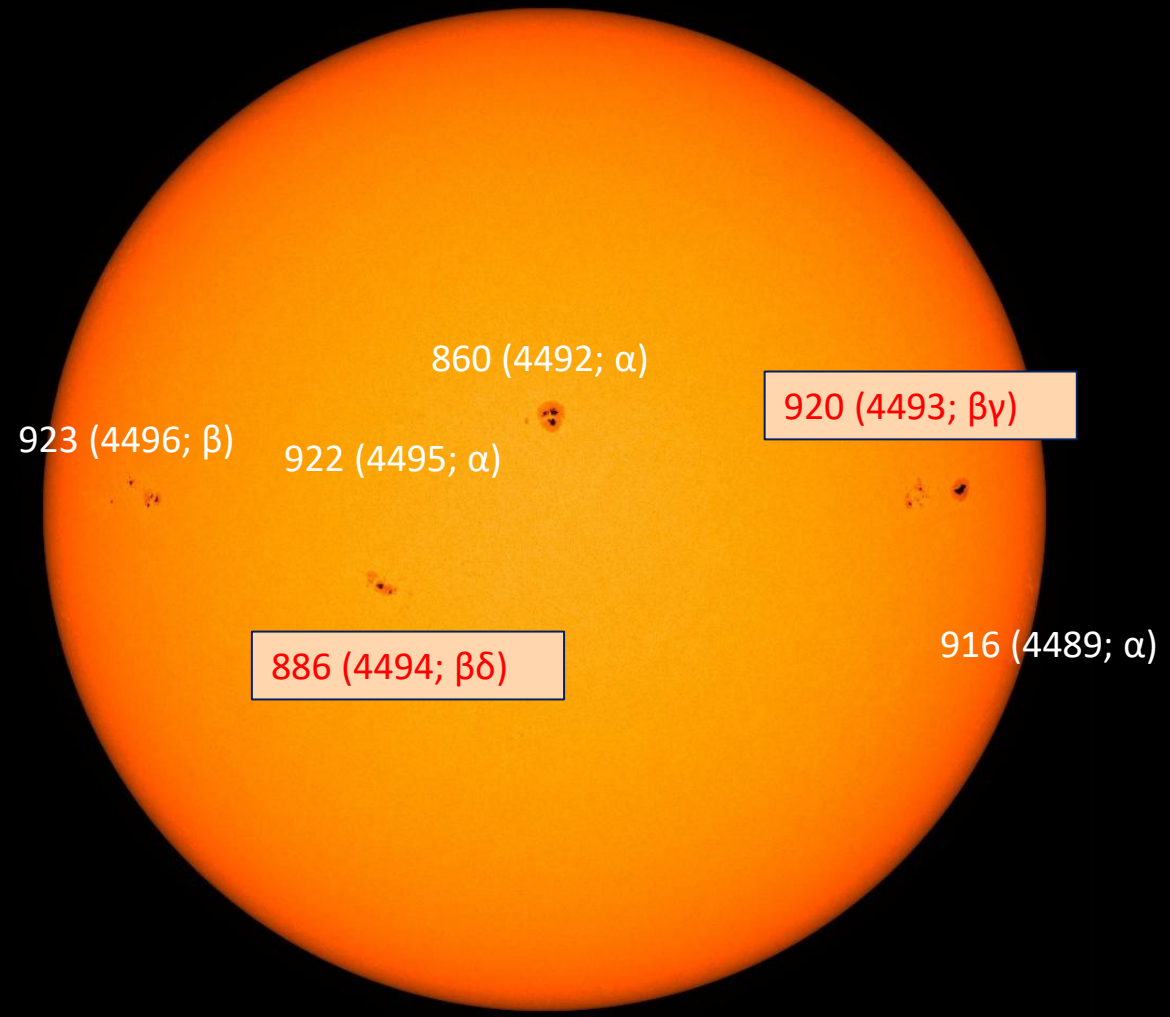


SDO/HMI Magnetogram 2026-07-24

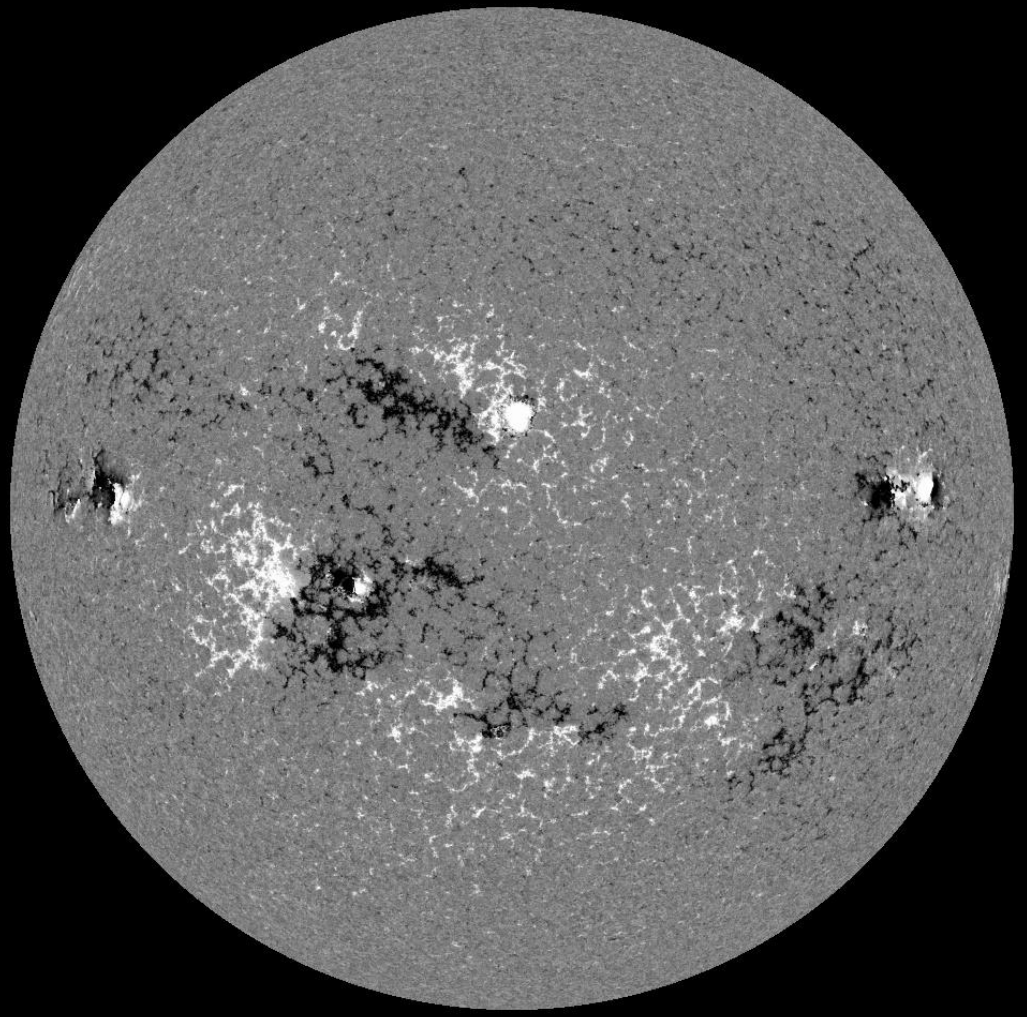


Solar active regions

SDO/HMI White Light 2026-07-25

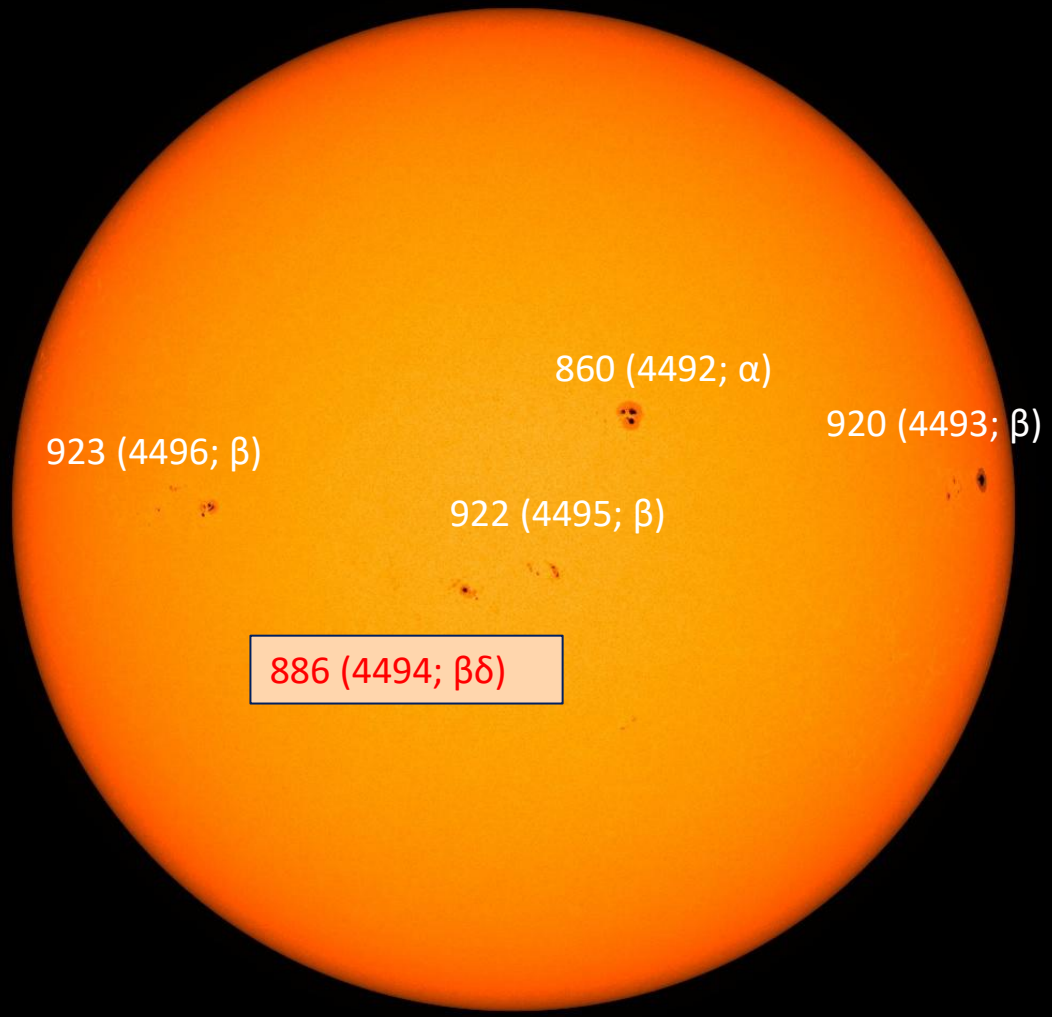


SDO/HMI Magnetogram 2026-07-25

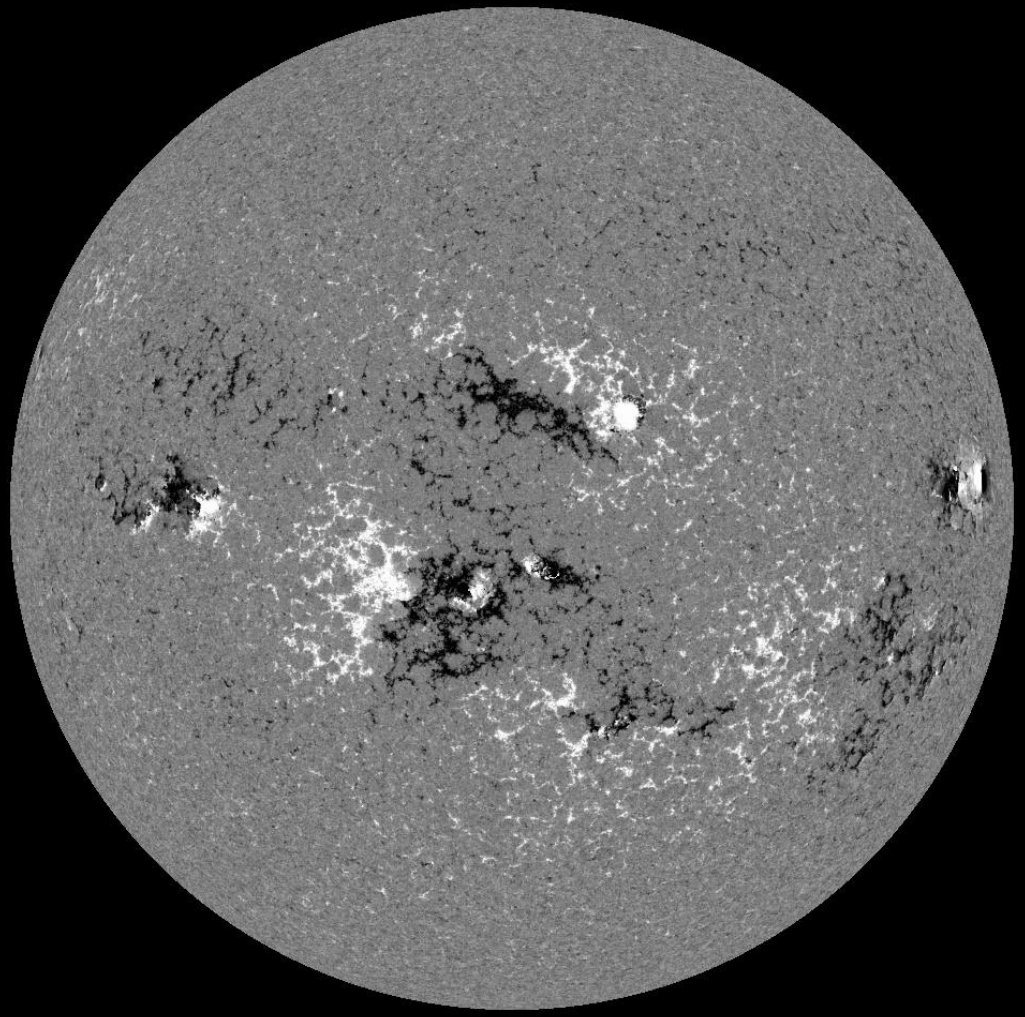


Solar active regions

SDO/HMI White Light 2026-07-26

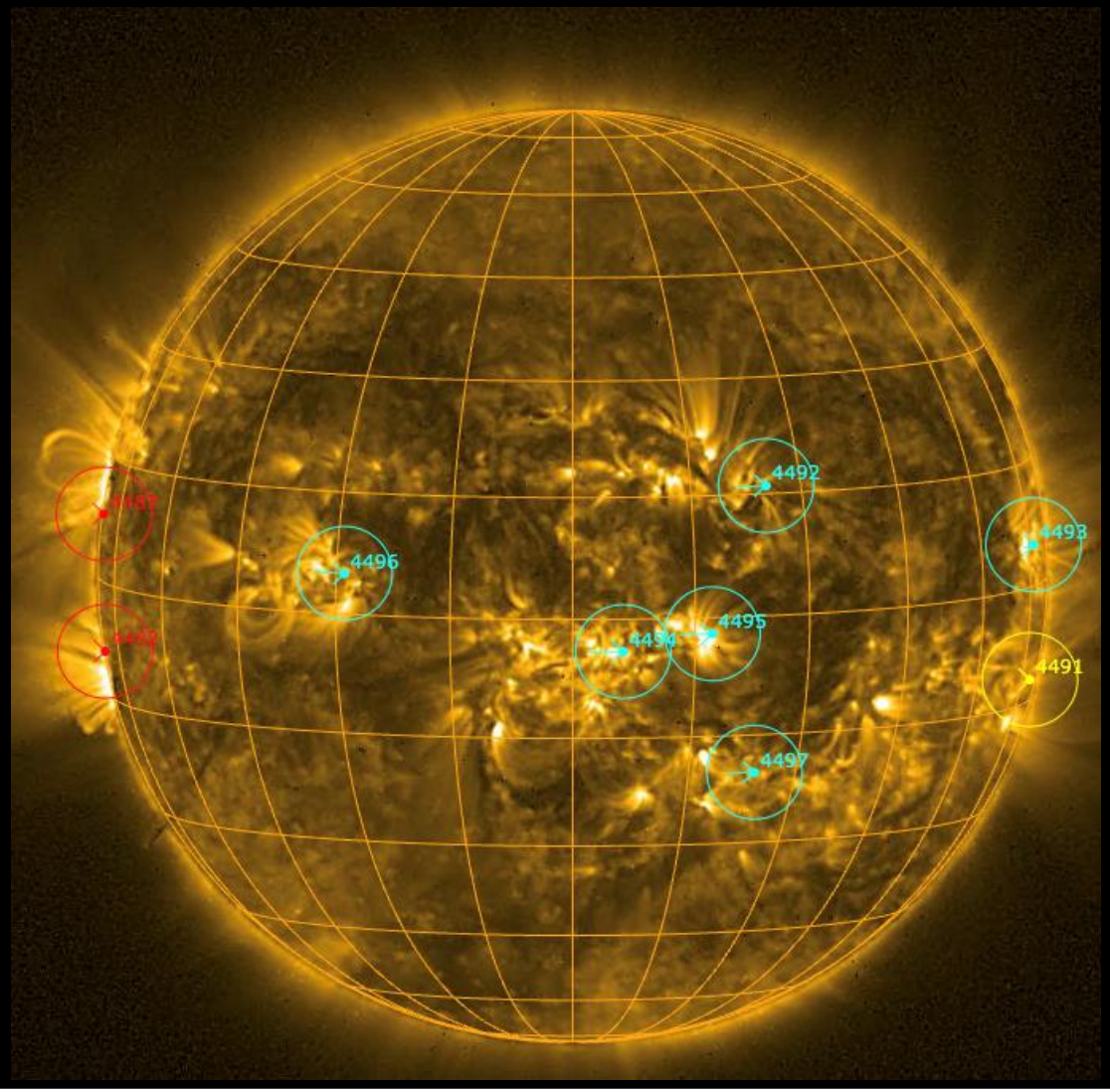


SDO/HMI Magnetogram 2026-07-26

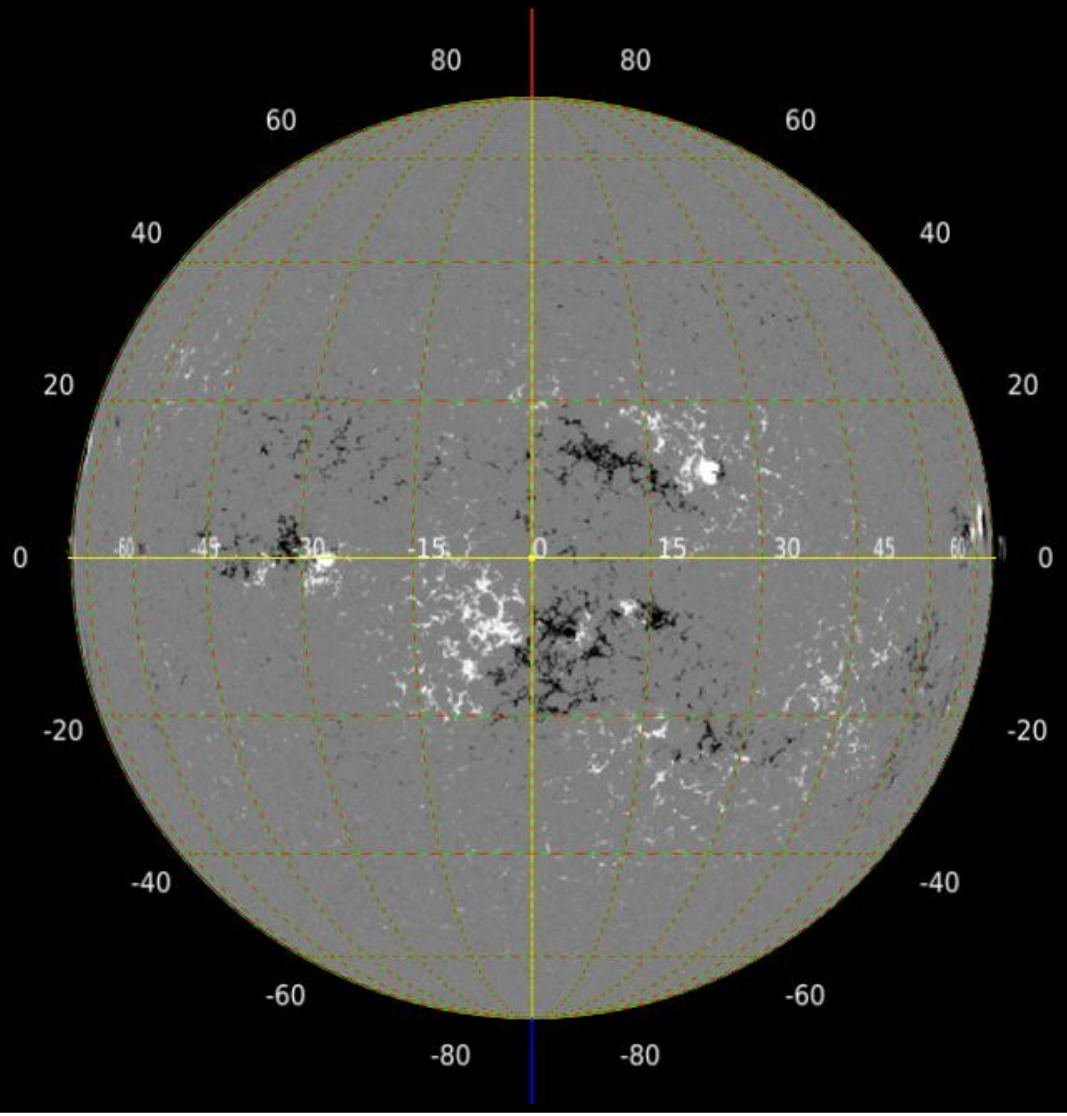


Solar active regions

SDO/HMI White Light 2026-07-27

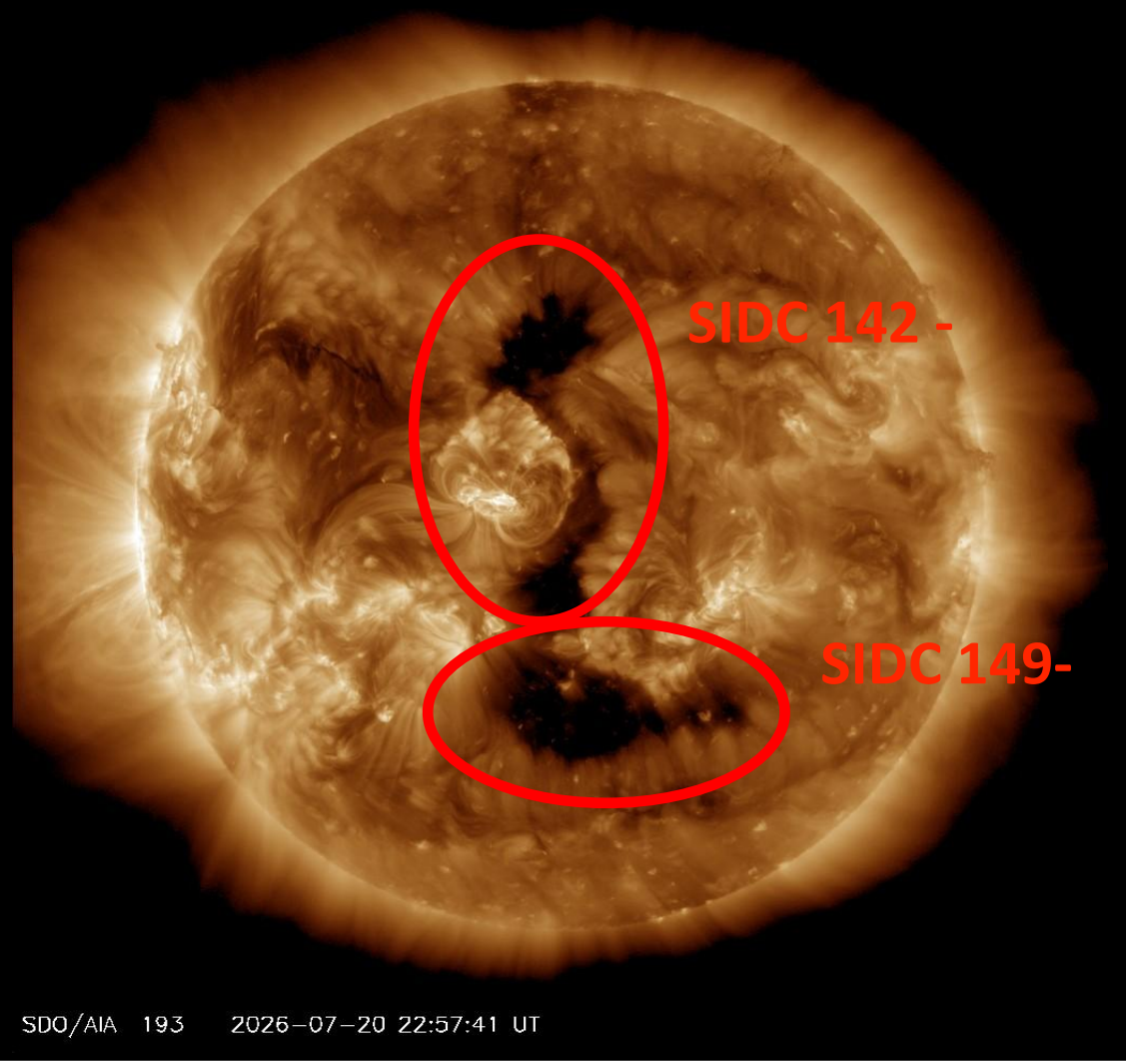


SDO/HMI Magnetogram 2026-07-27

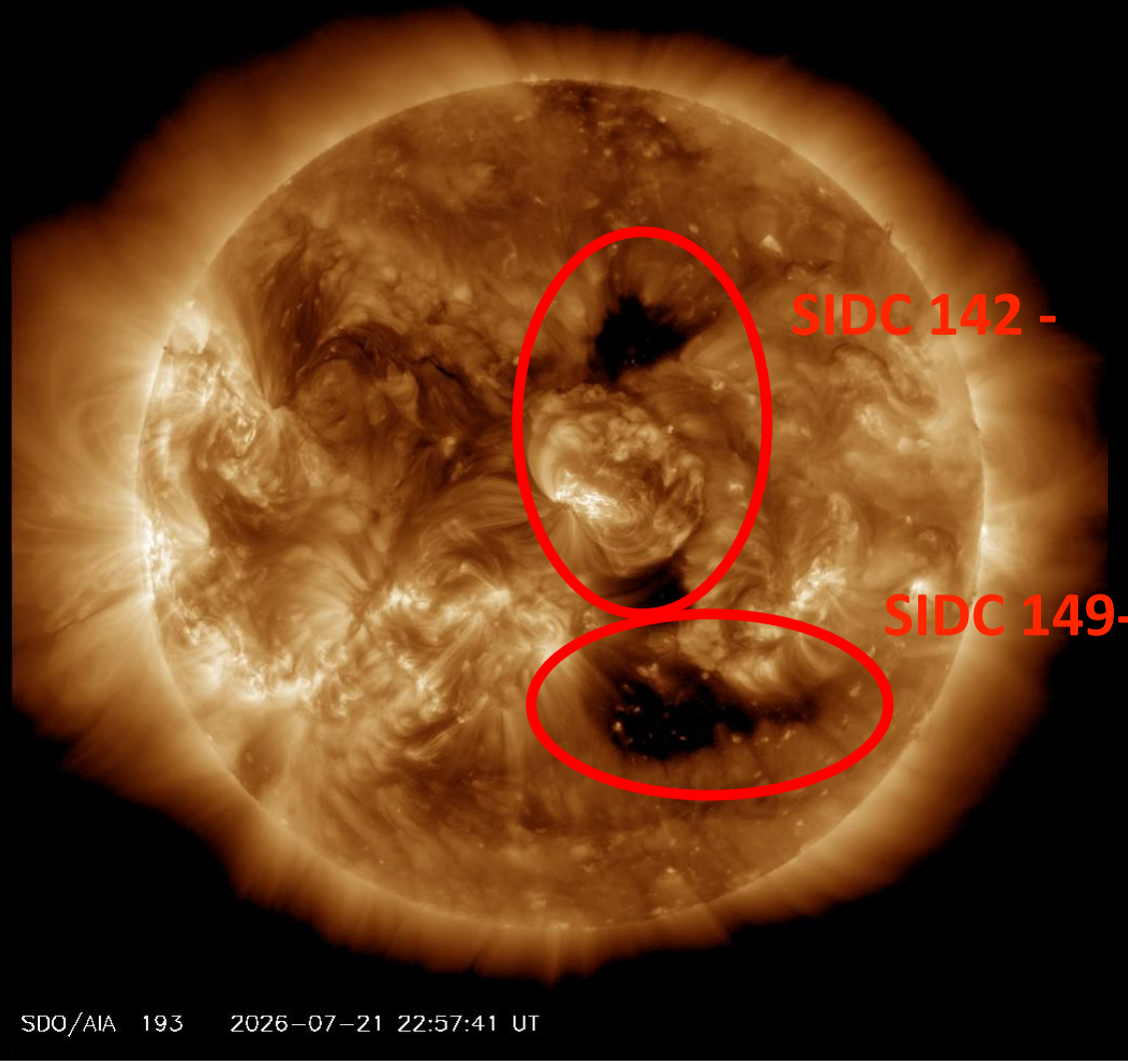


Coronal holes

SDO/AIA 19.3 nm 2026-07-20

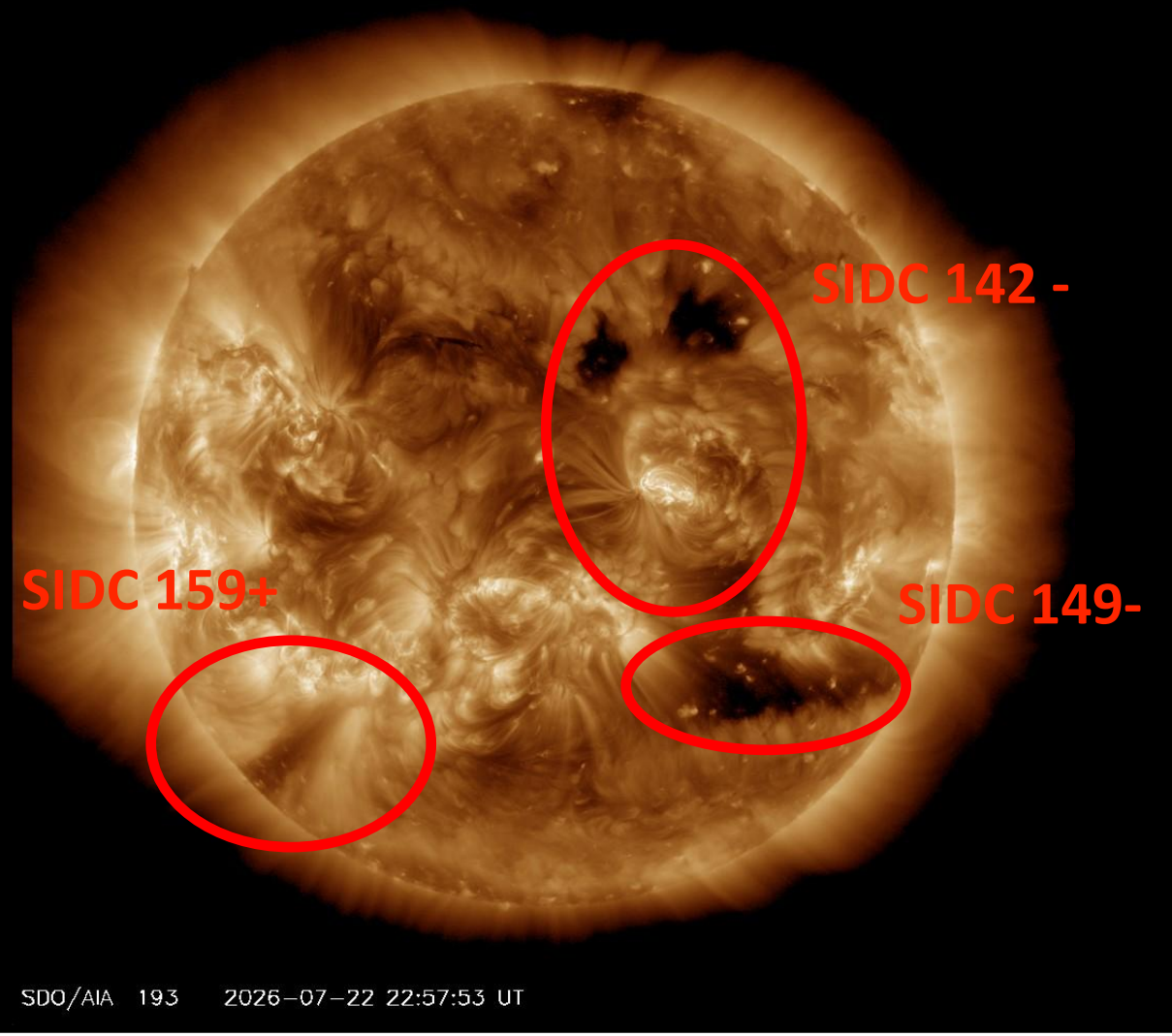


SDO/AIA 19.3 nm 2026-07-21

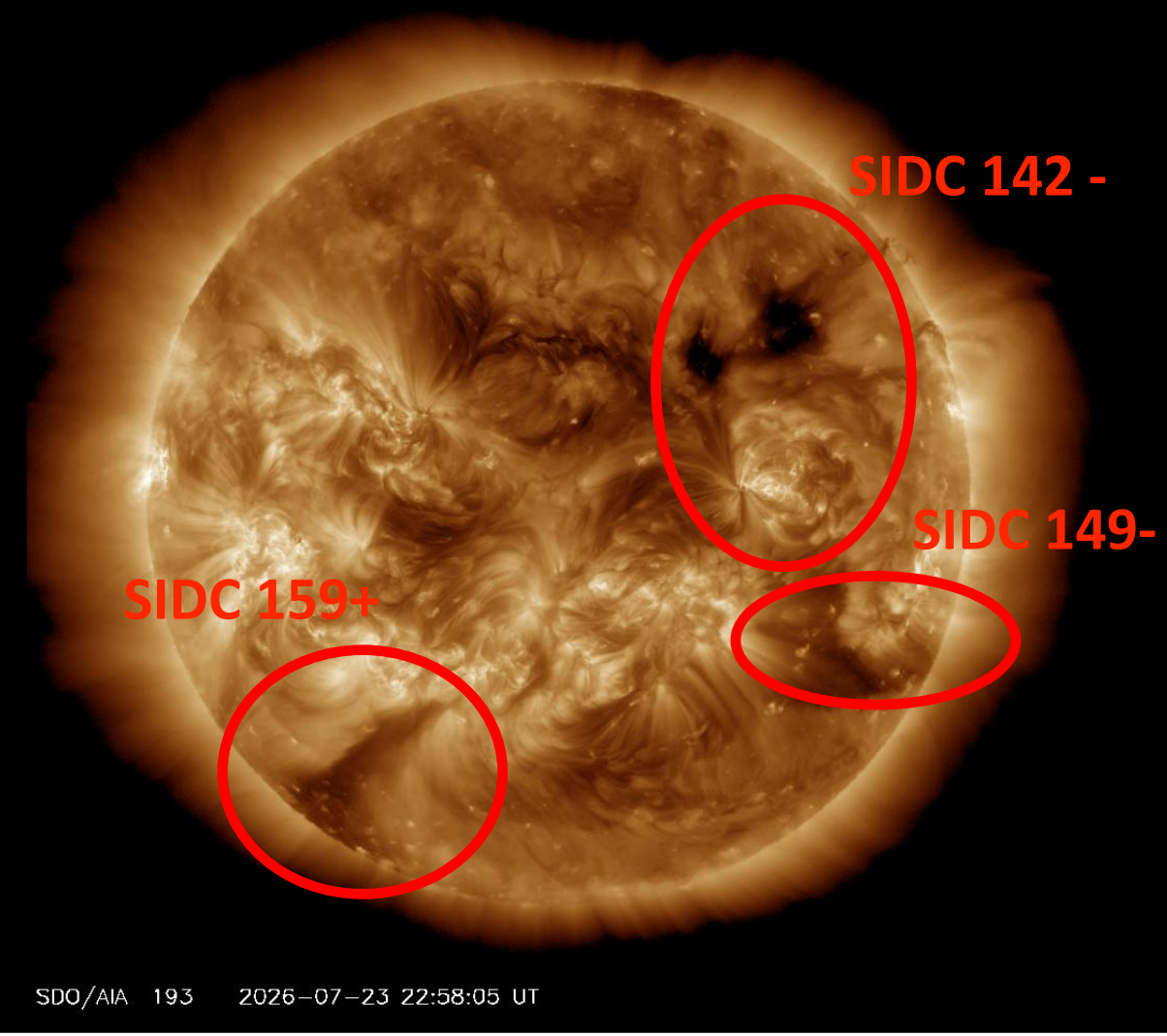


Coronal holes

SDO/AIA 19.3 nm 2026-07-22

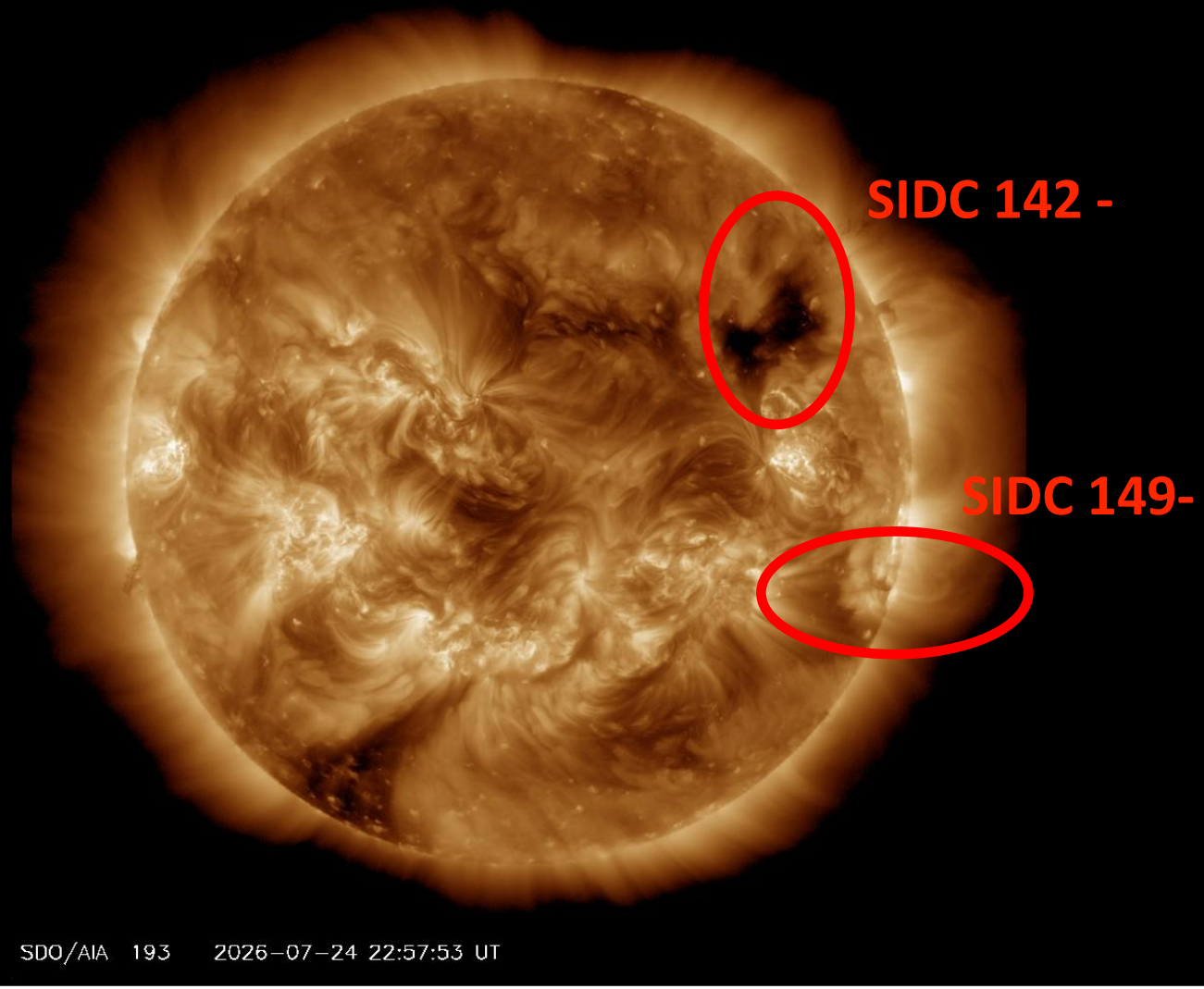


SDO/AIA 19.3 nm 2026-07-23

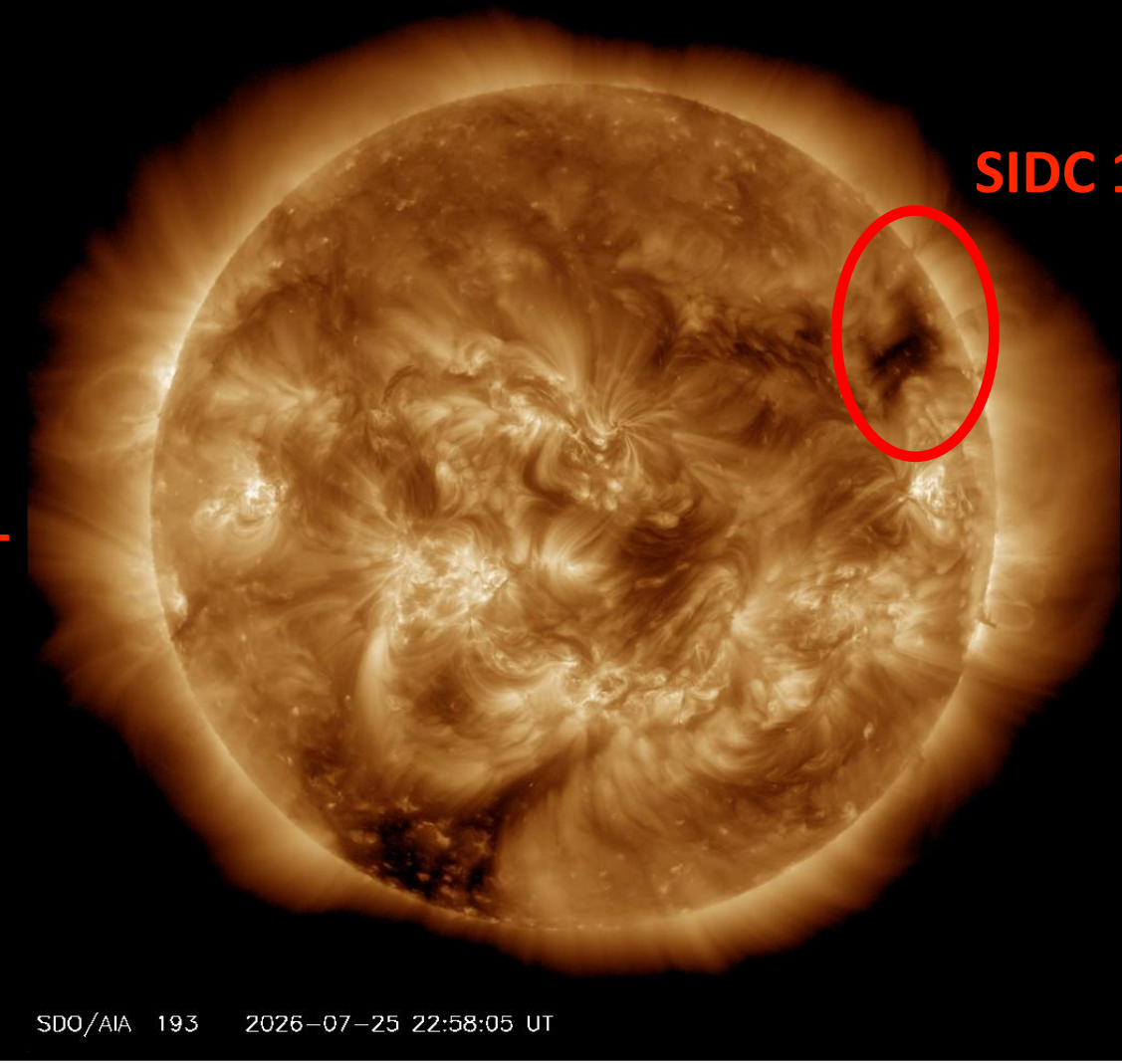


Coronal holes

SDO/AIA 19.3 nm 2026-07-24

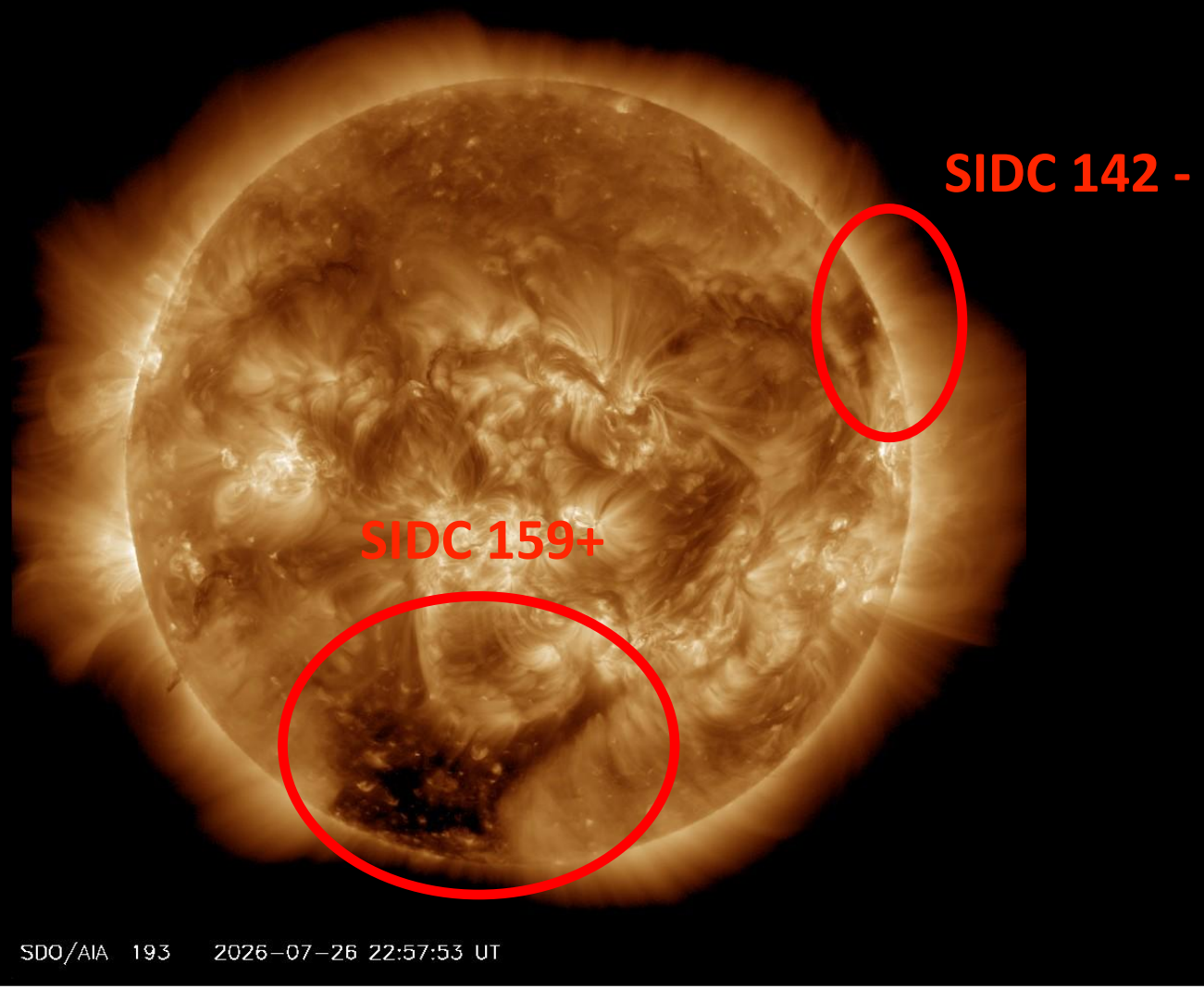


SDO/AIA 19.3 nm 2026-07-25

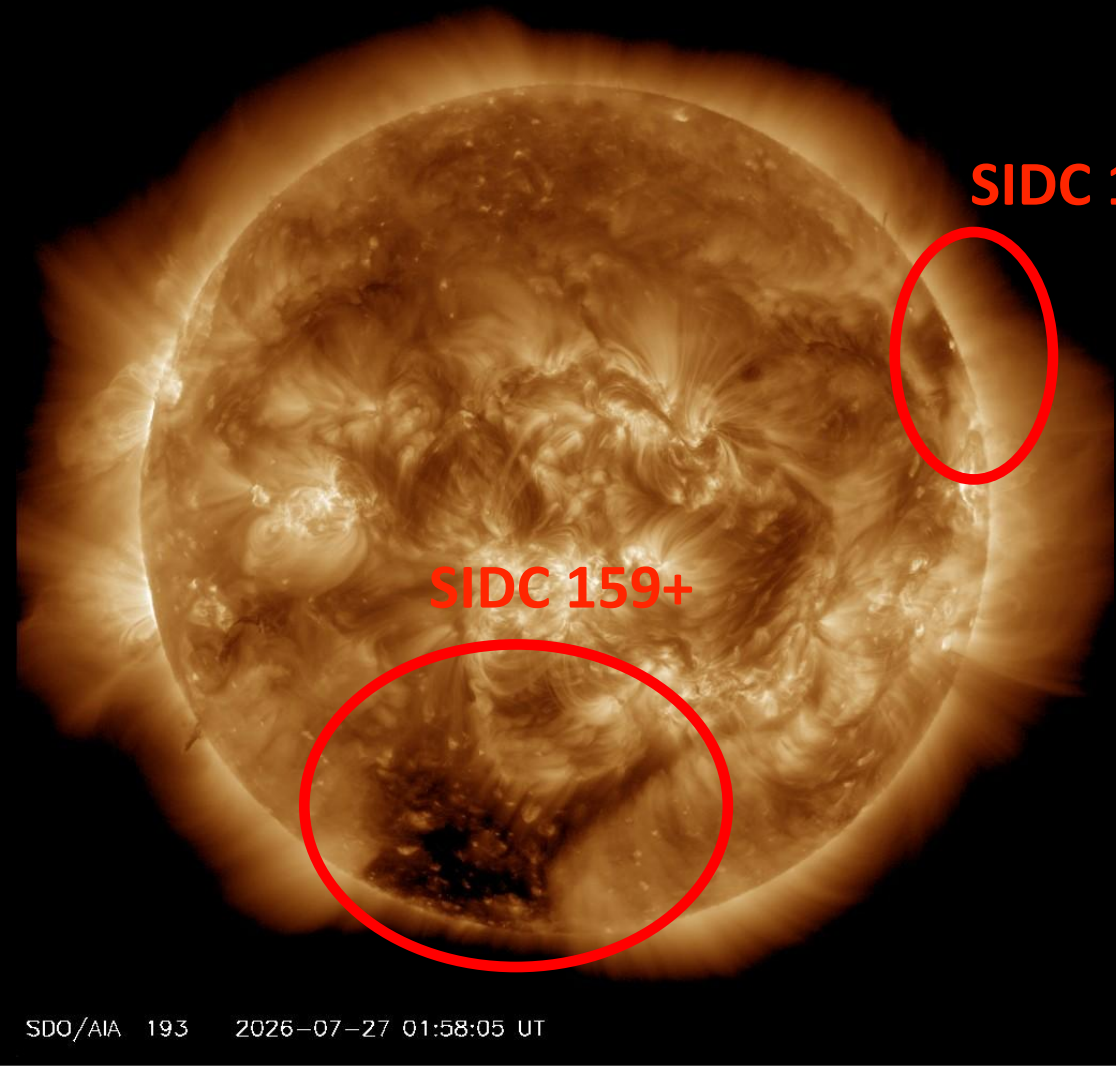


Coronal holes

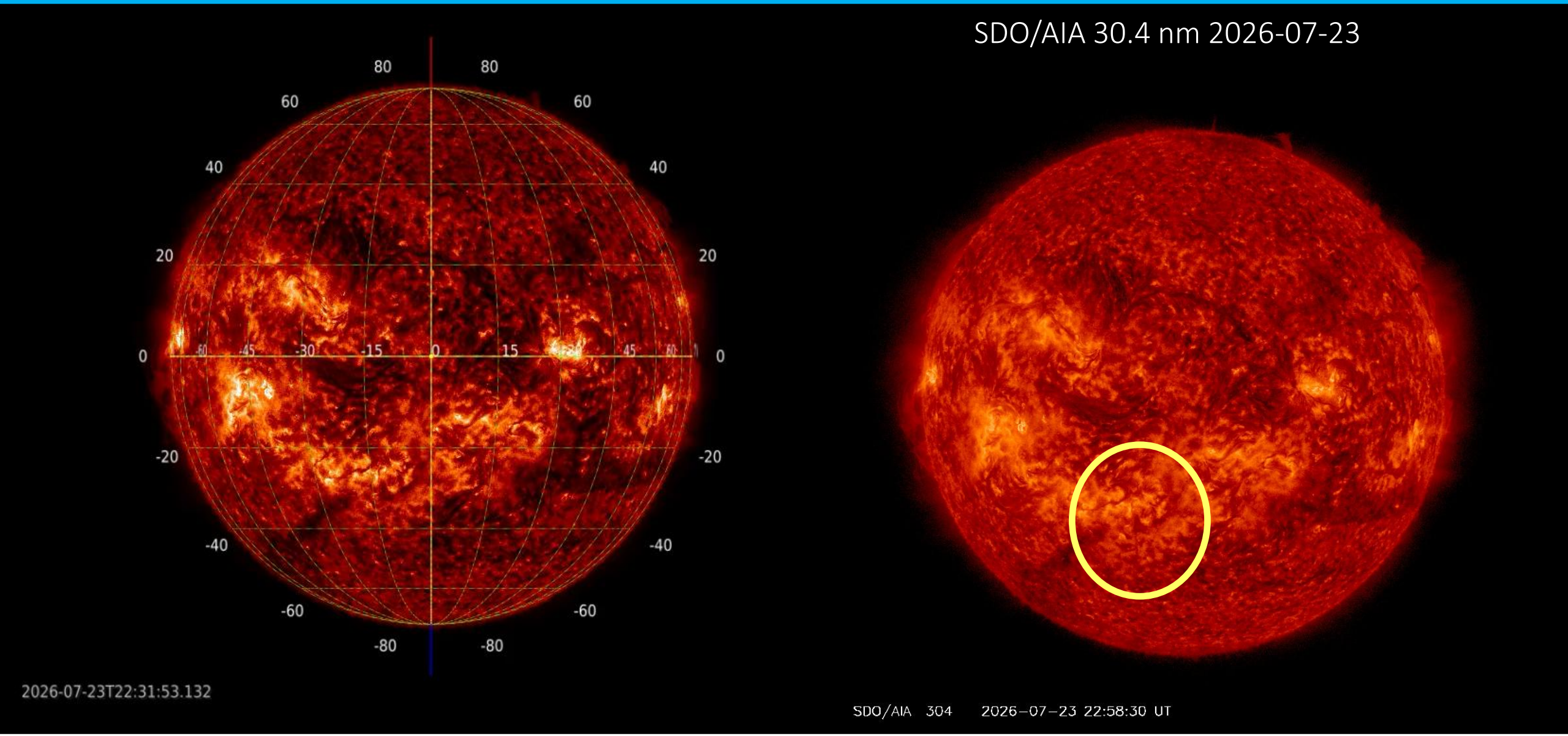
SDO/AIA 19.3 nm 2026-07-26



SDO/AIA 19.3 nm 2026-07-27

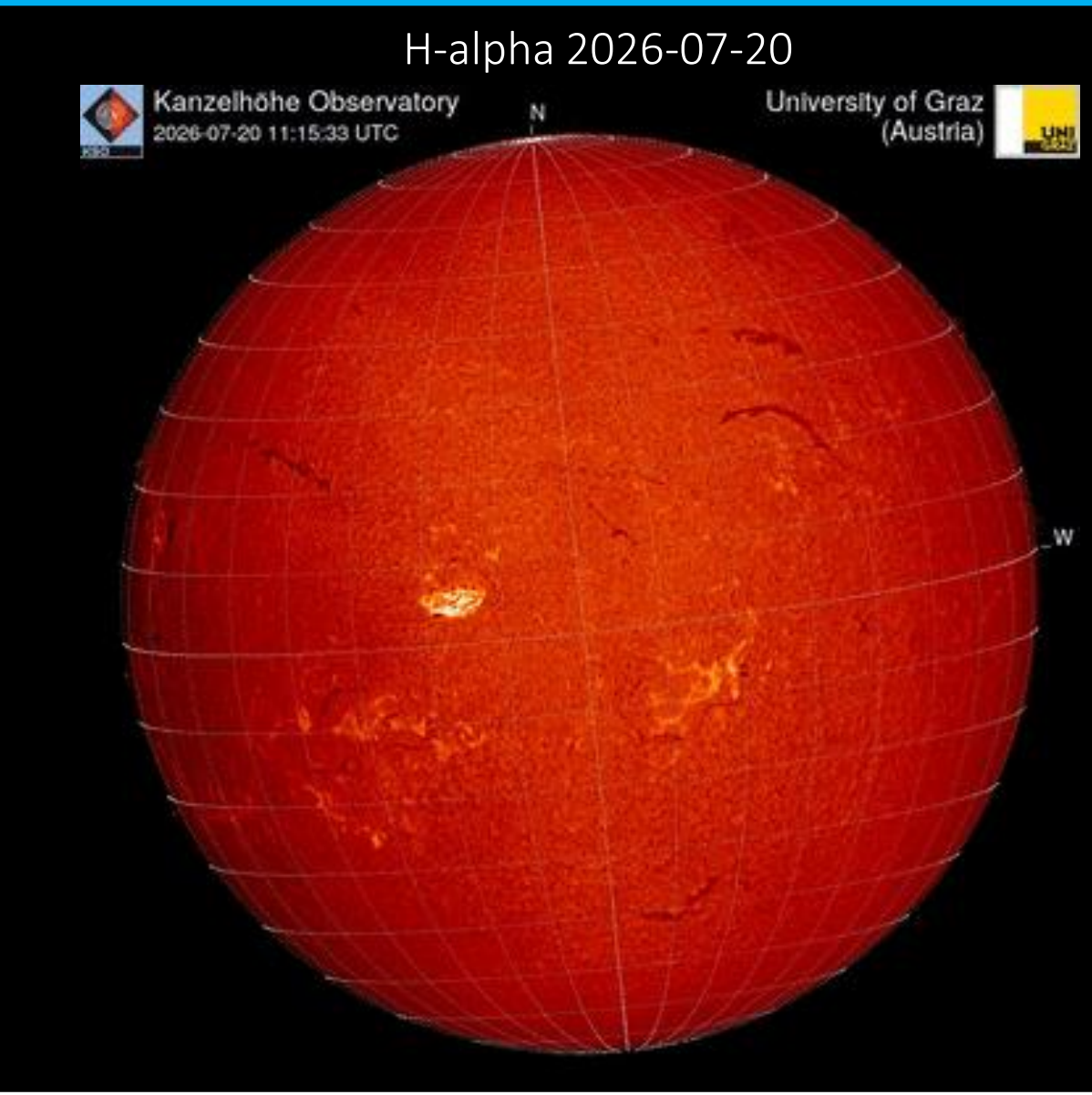


Filaments

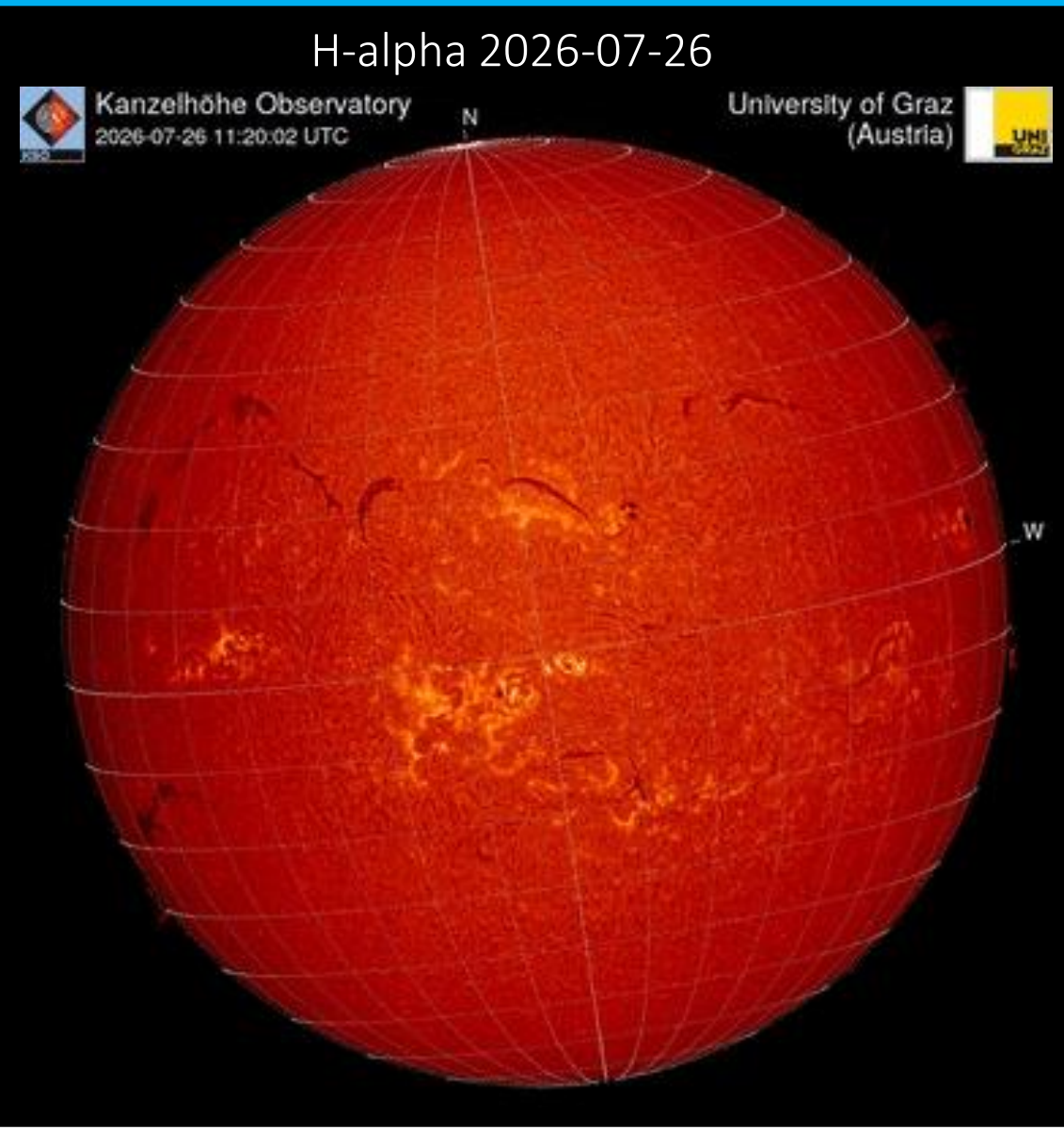

SDO/AIA 30.4 nm 2026-07-23
2026-07-23T22:31:53.132
SDO/AIA 304 2026-07-23 22:58:30 UT

Filaments & Filament eruptions

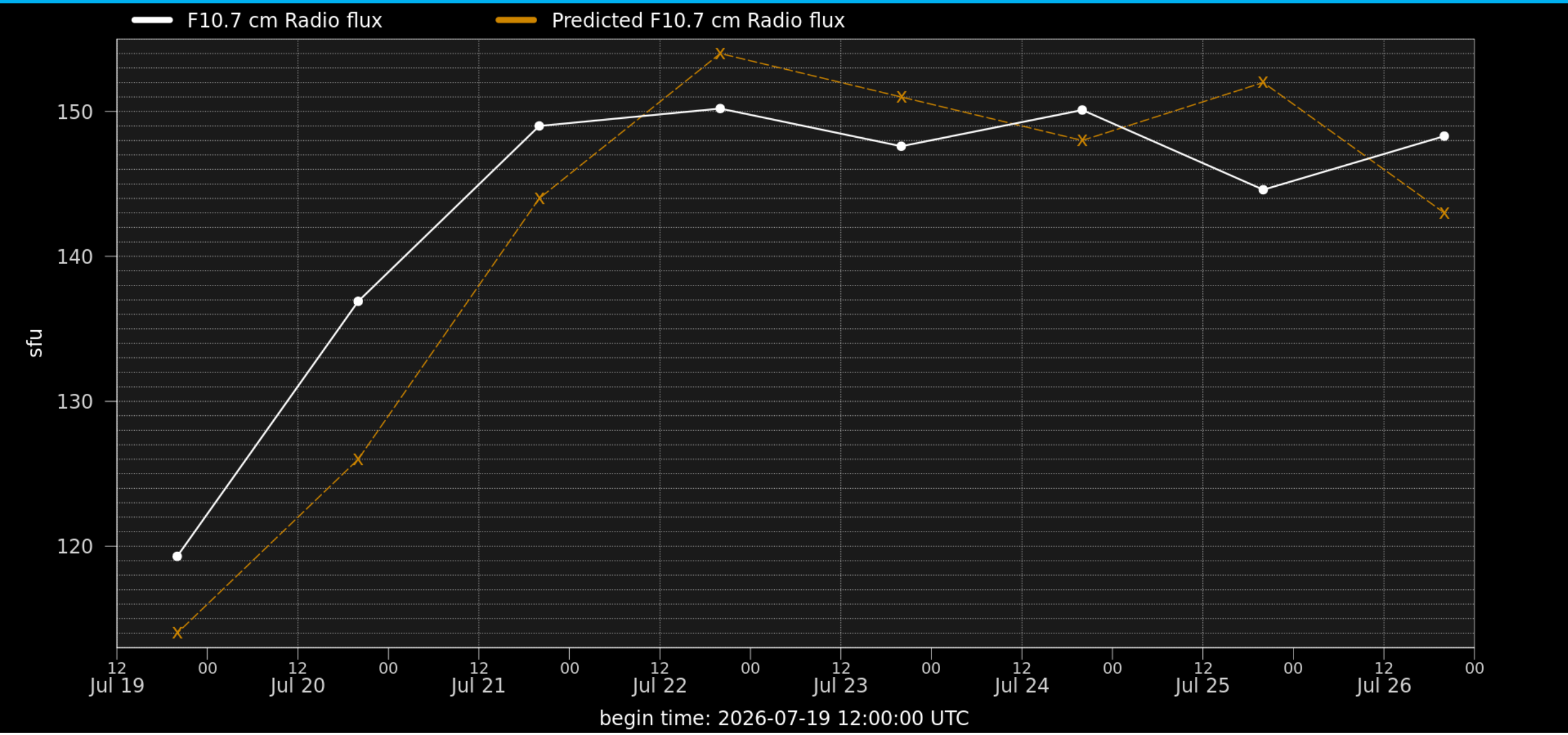
H-alpha 2026-07-20



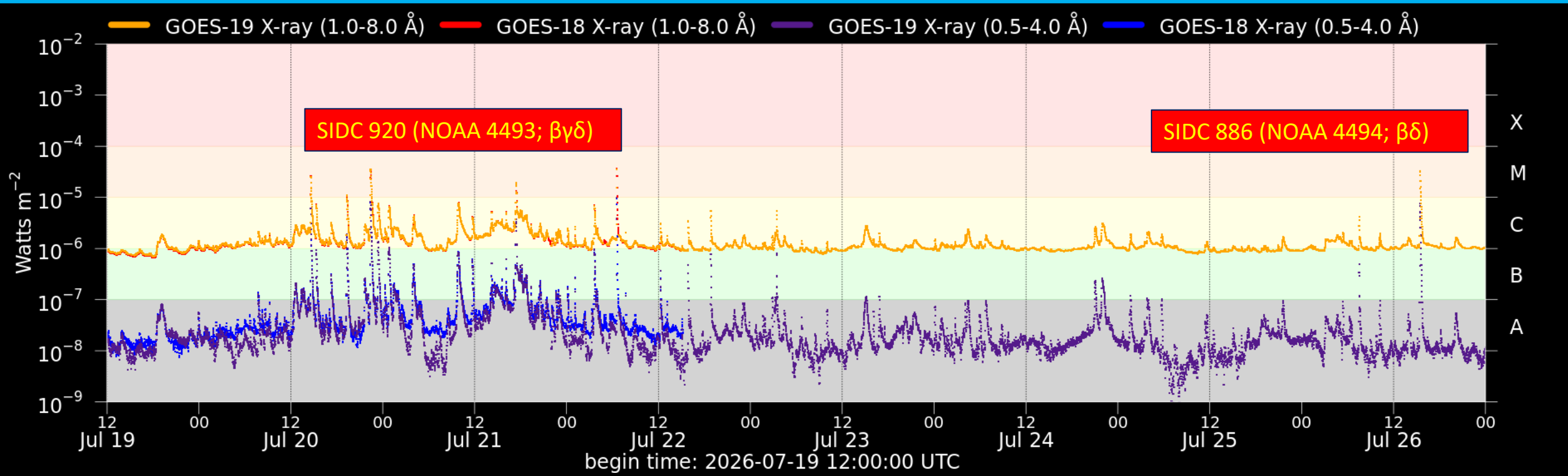
H-alpha 2026-07-26



Solar F10.7cm radio flux



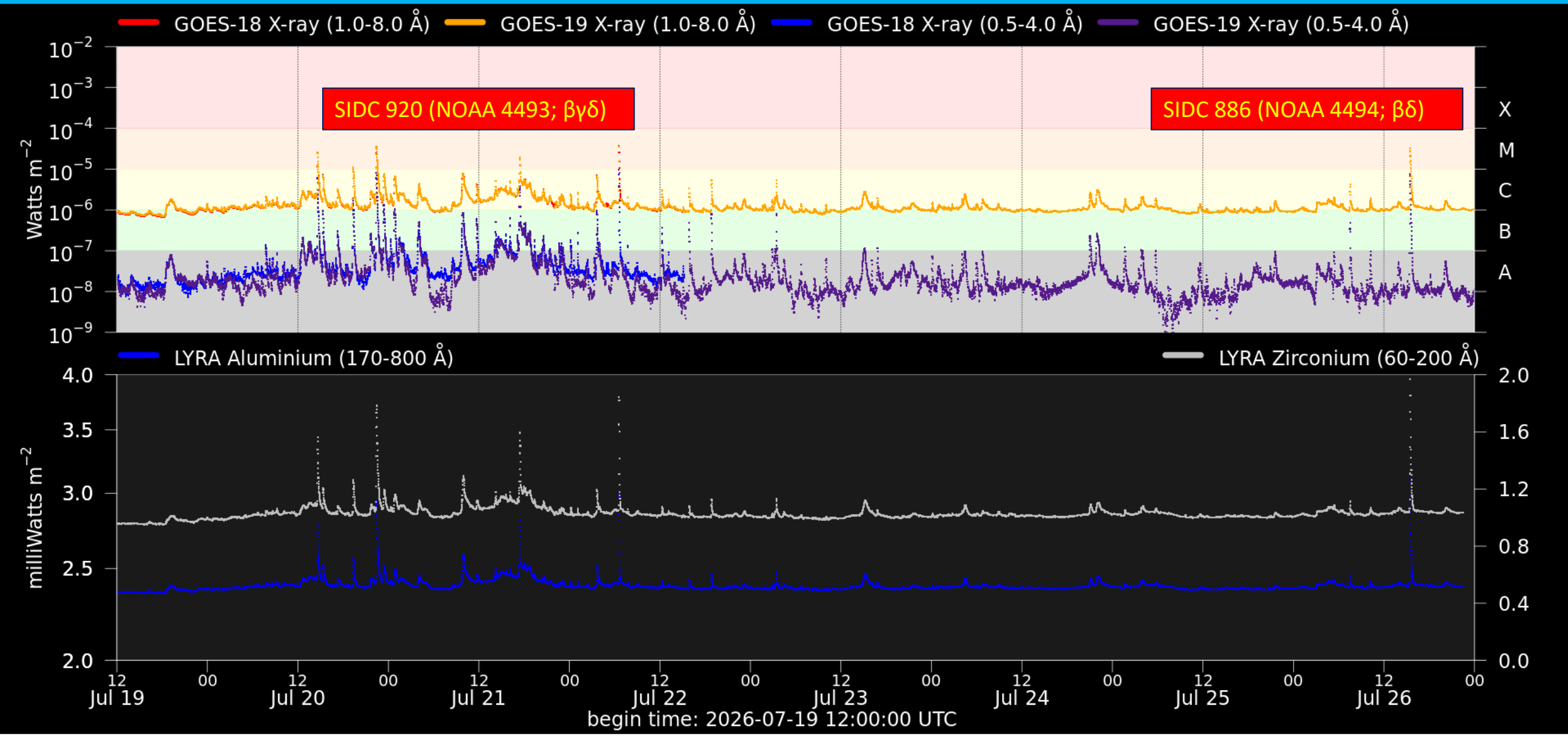
Flaring activity



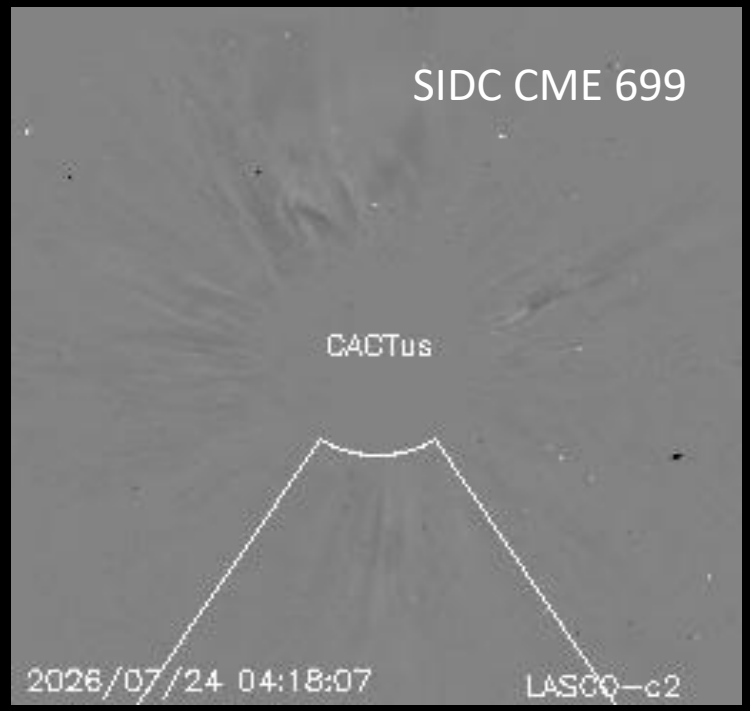
Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

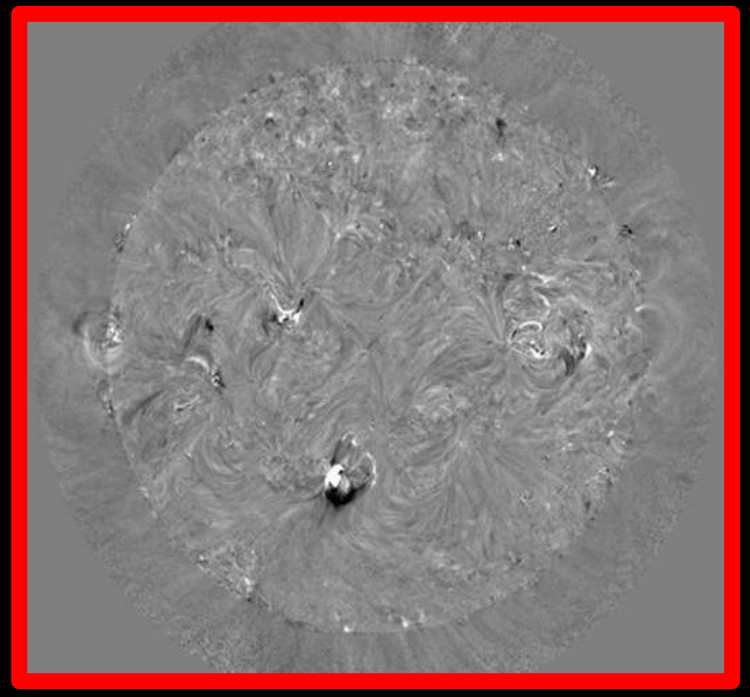
Issue date	2026-07-19	2026-07-20	2026-07-21	2026-07-22	2026-07-23	2026-07-24	2026-07-25	2026-07-26
Probability (%)	80|28|01	96|38|09	91|38|01	98|72|10	98|72|10	99|84|19	99|75|12	98|48|01
Observed (#)	02|00|00	09|03|00	09|01|00	07|00|00	04|00|00	05|00|00	03|00|00	00|01|00

Solar X-Ray and UV flux



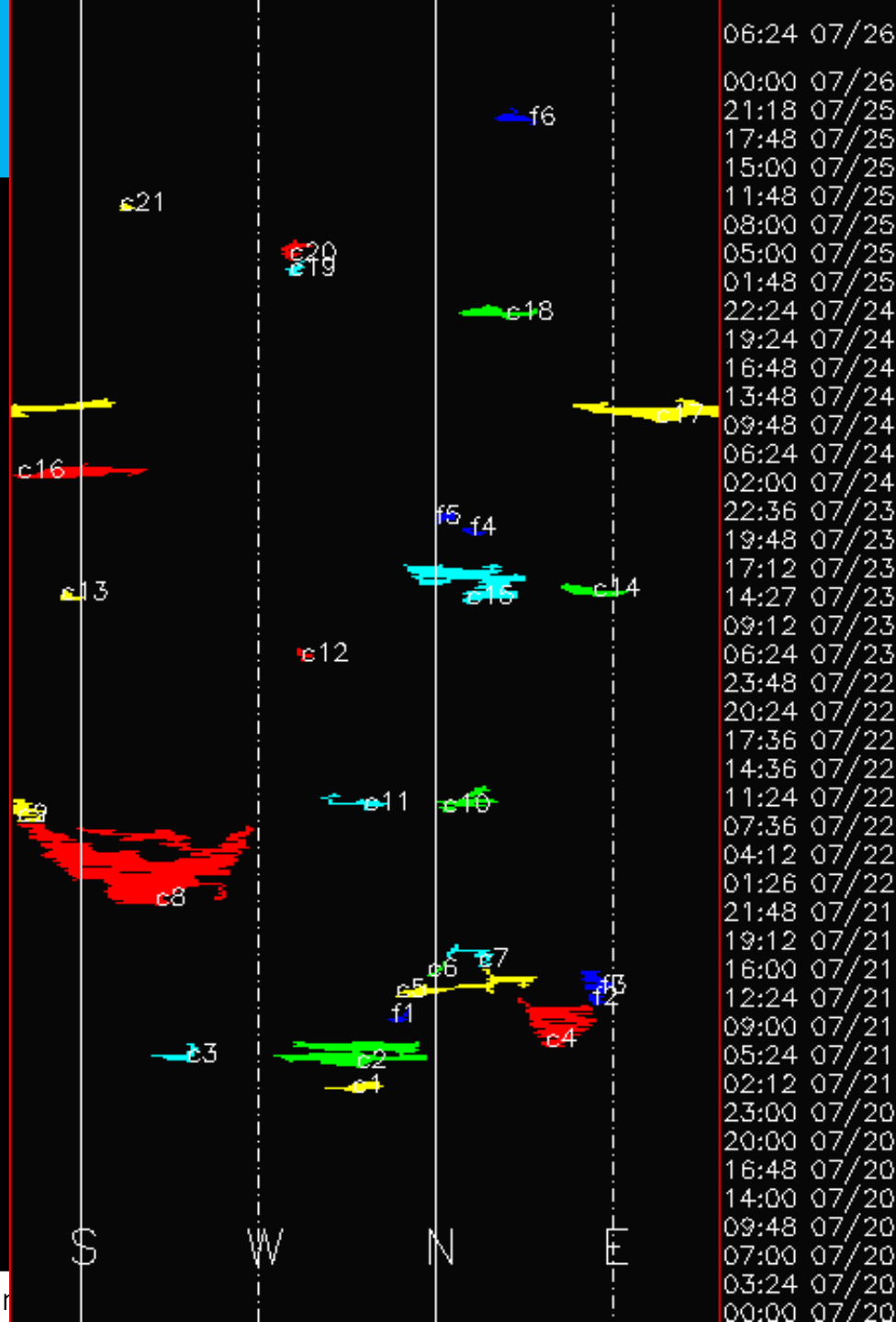
Coronal Mass Ejections





Observed in LASCO/C2 starting at 04:49 UTC
STEREO/COR2 around 04:38 UTC
Dimming observed in AIA around 04:12 UTC
Filament eruption starting around 04:22 UTC
C2.4 flare near S21E09 peaking at 04:27 UTC

CME speed ~ 450 km/s;
CACTUS estimated
Vmax = 316 km/s;
Possible glancing blow late UTC July 27 or early July 28;
Estimated Kp 3-5



Solar Wind and

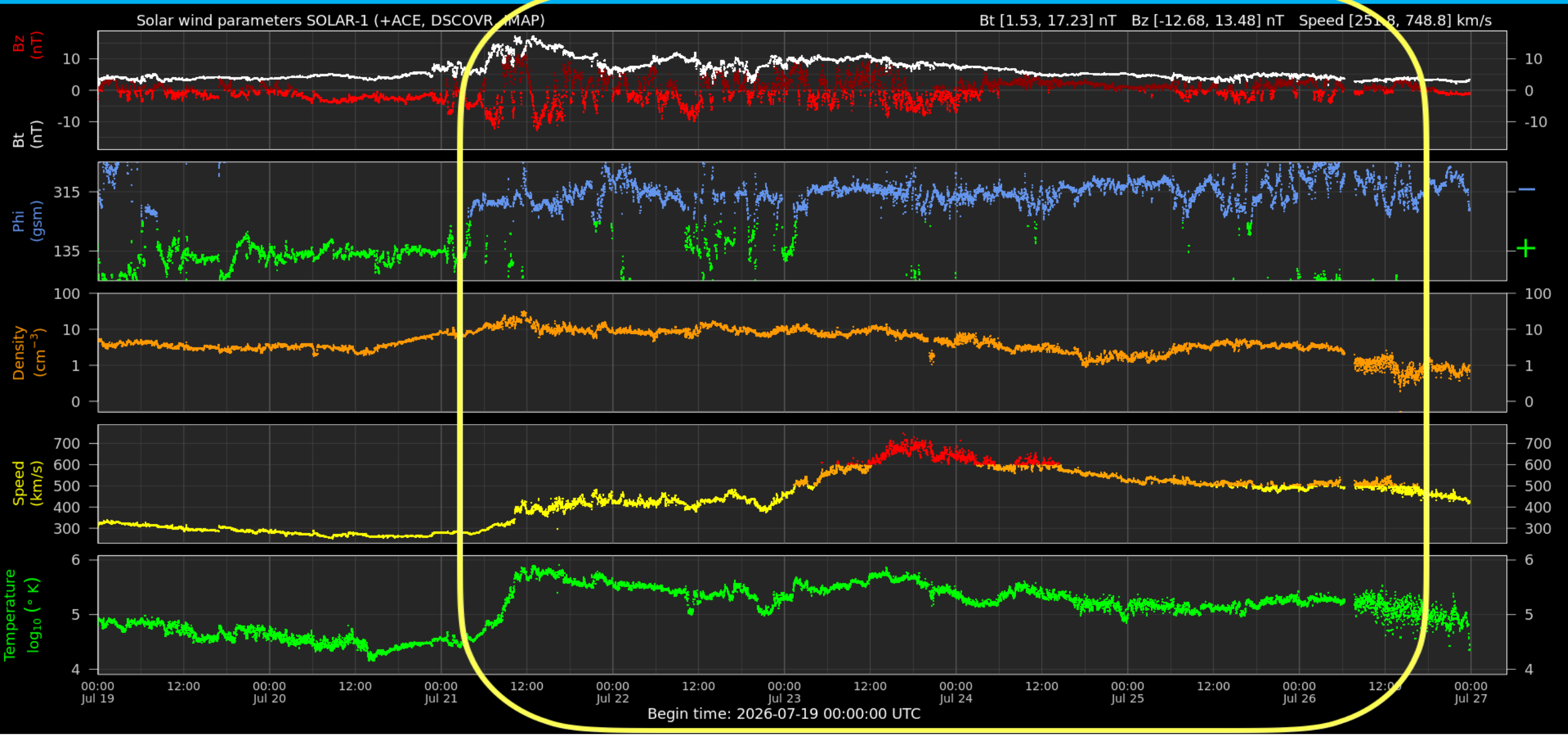
Geomagnetic Activity

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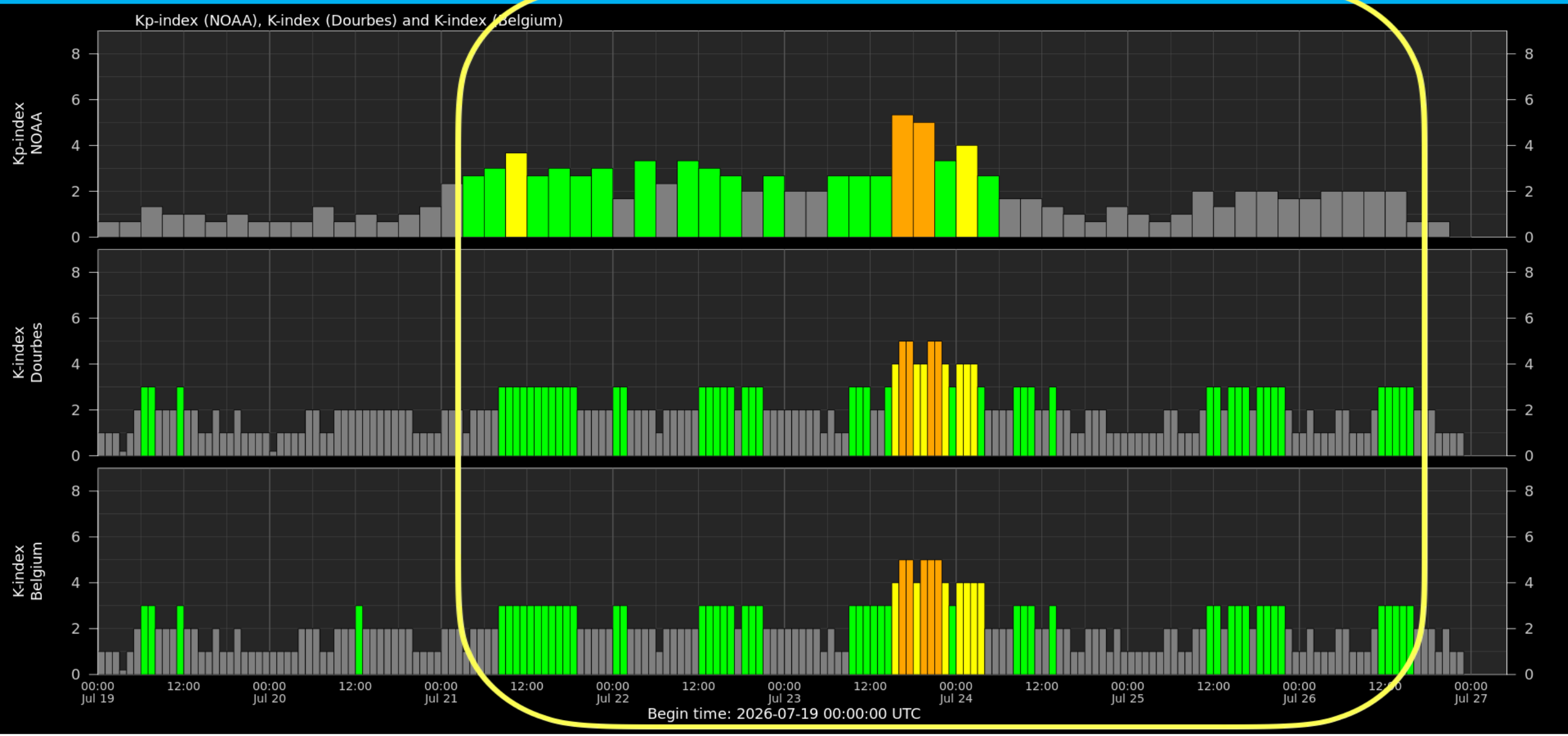
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Solar wind parameters

HSS SIDC 142 -, SIDC 149 -



Geomagnetic activity (K-indexes) **HSS SIDC 142 -, SIDC 149 -**



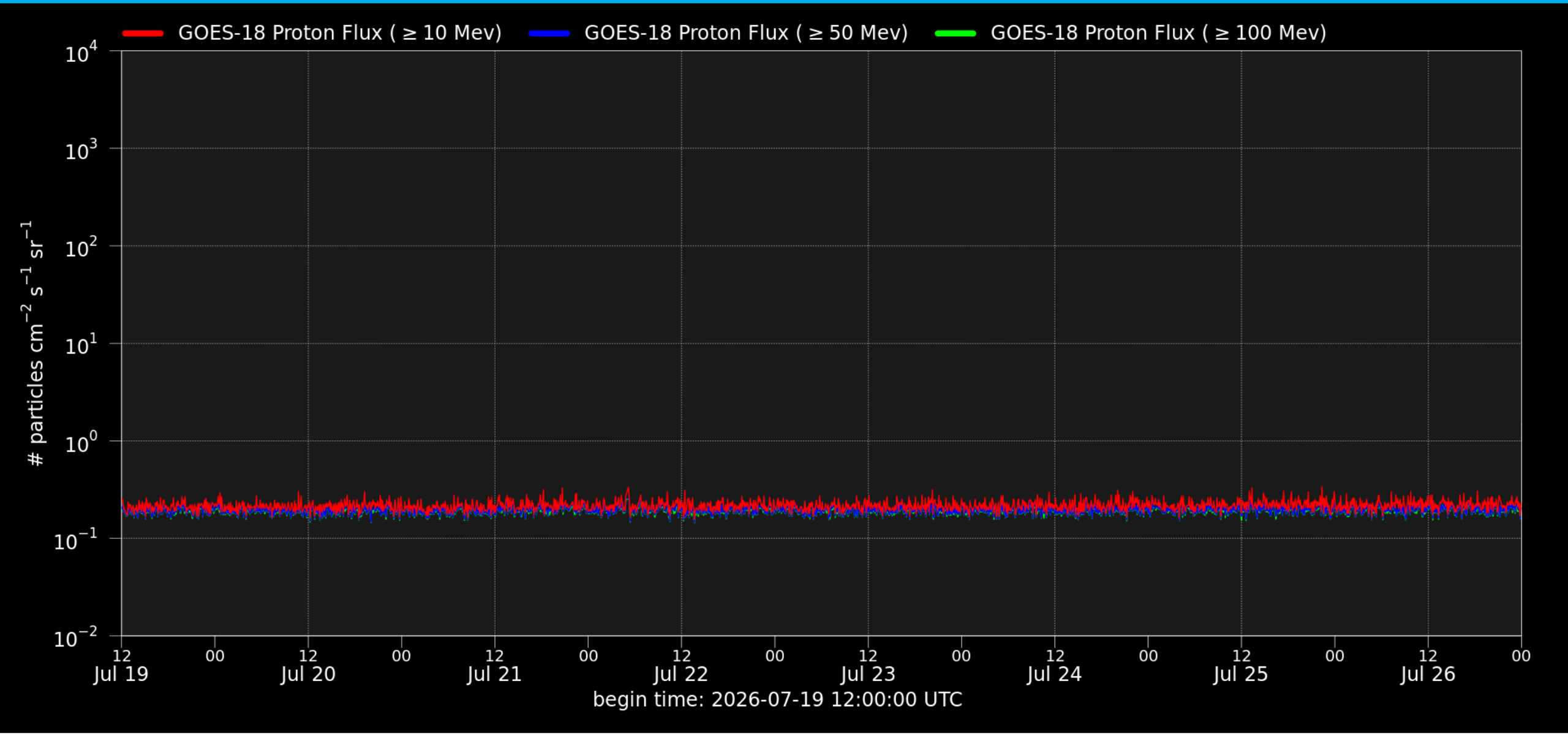
Energetic Particles



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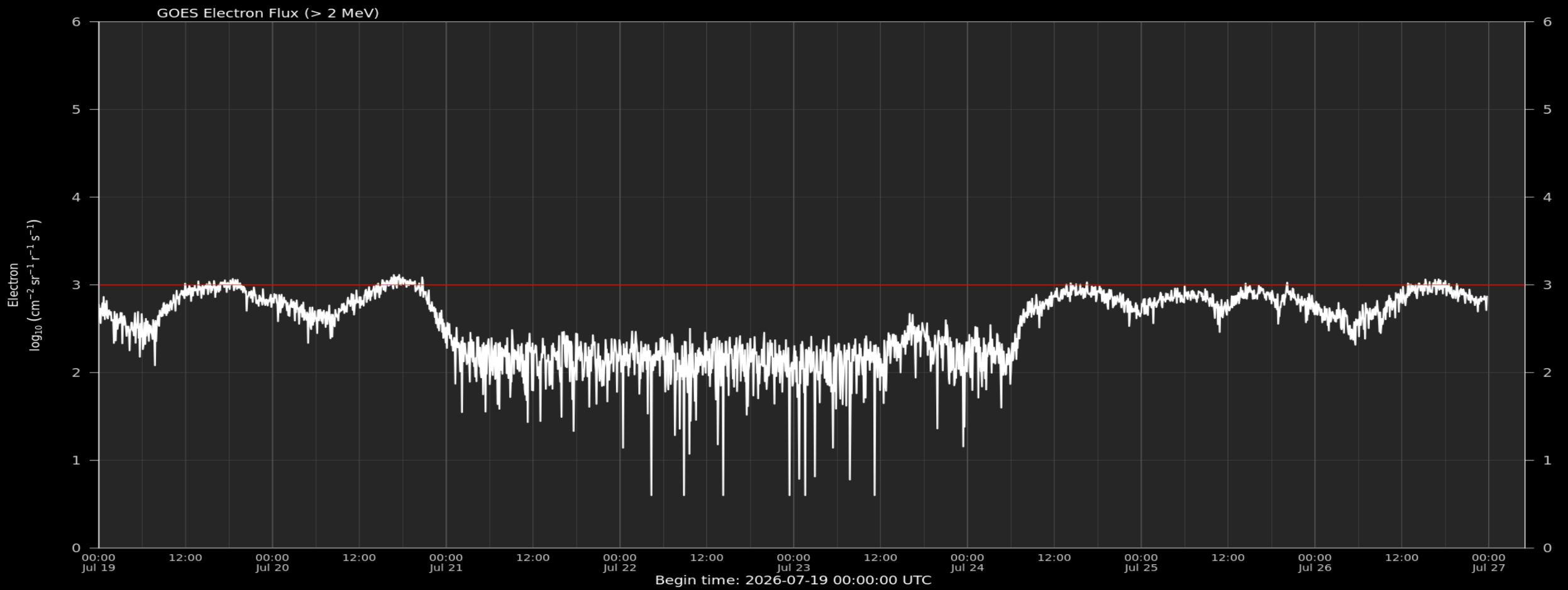
Solar proton flux



Electron flux at GEO

www.stce.be/educational/classification#electrons

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

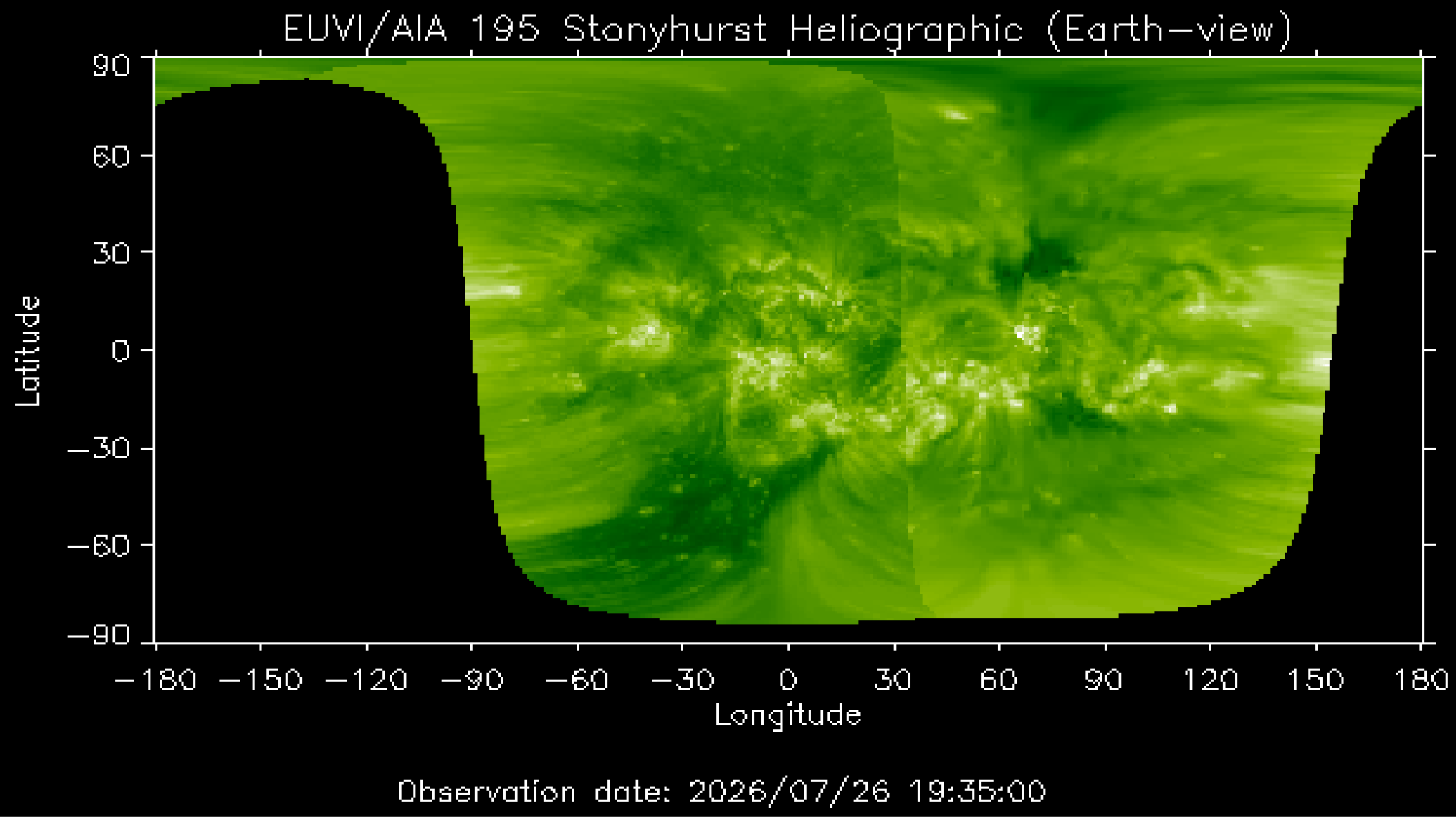


Outlook

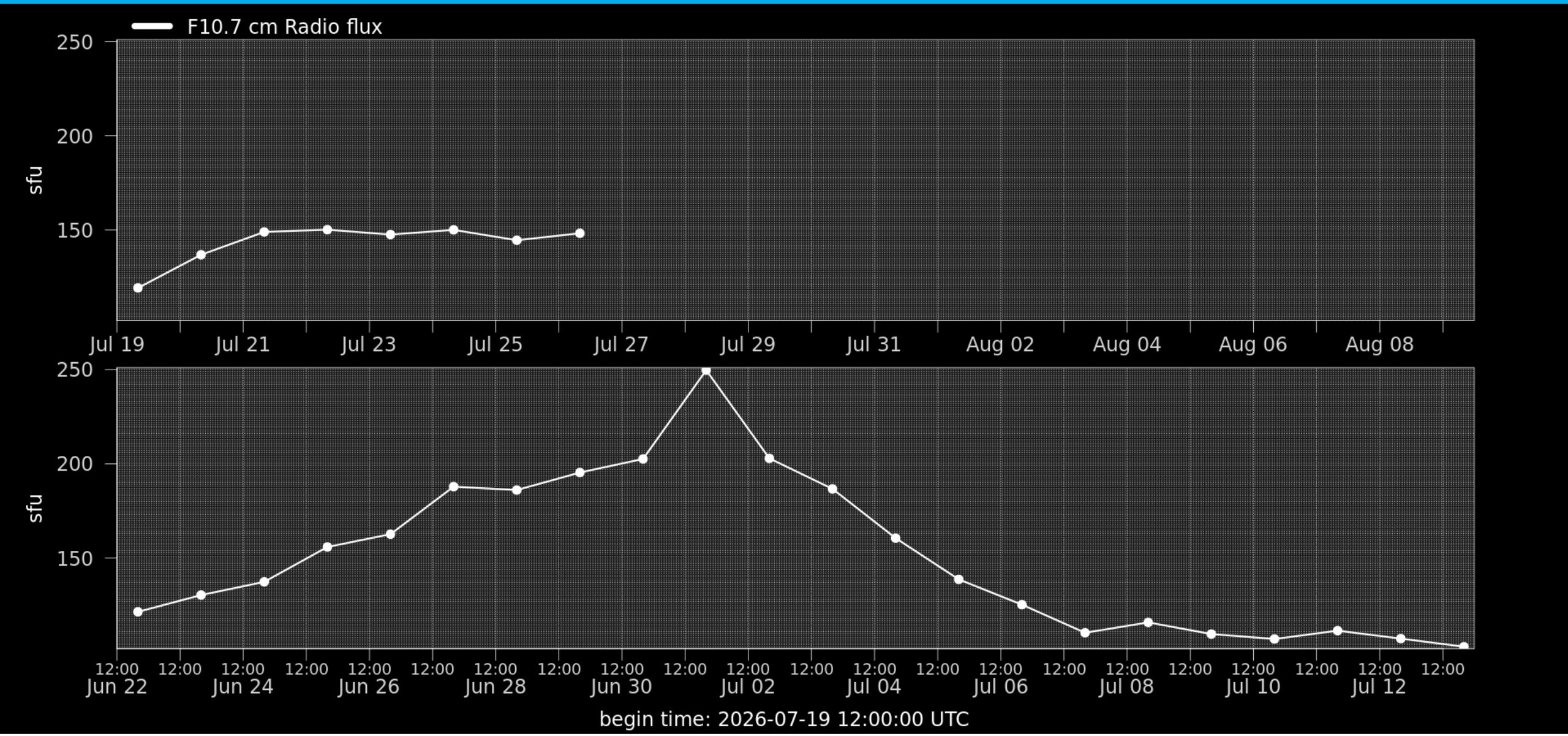
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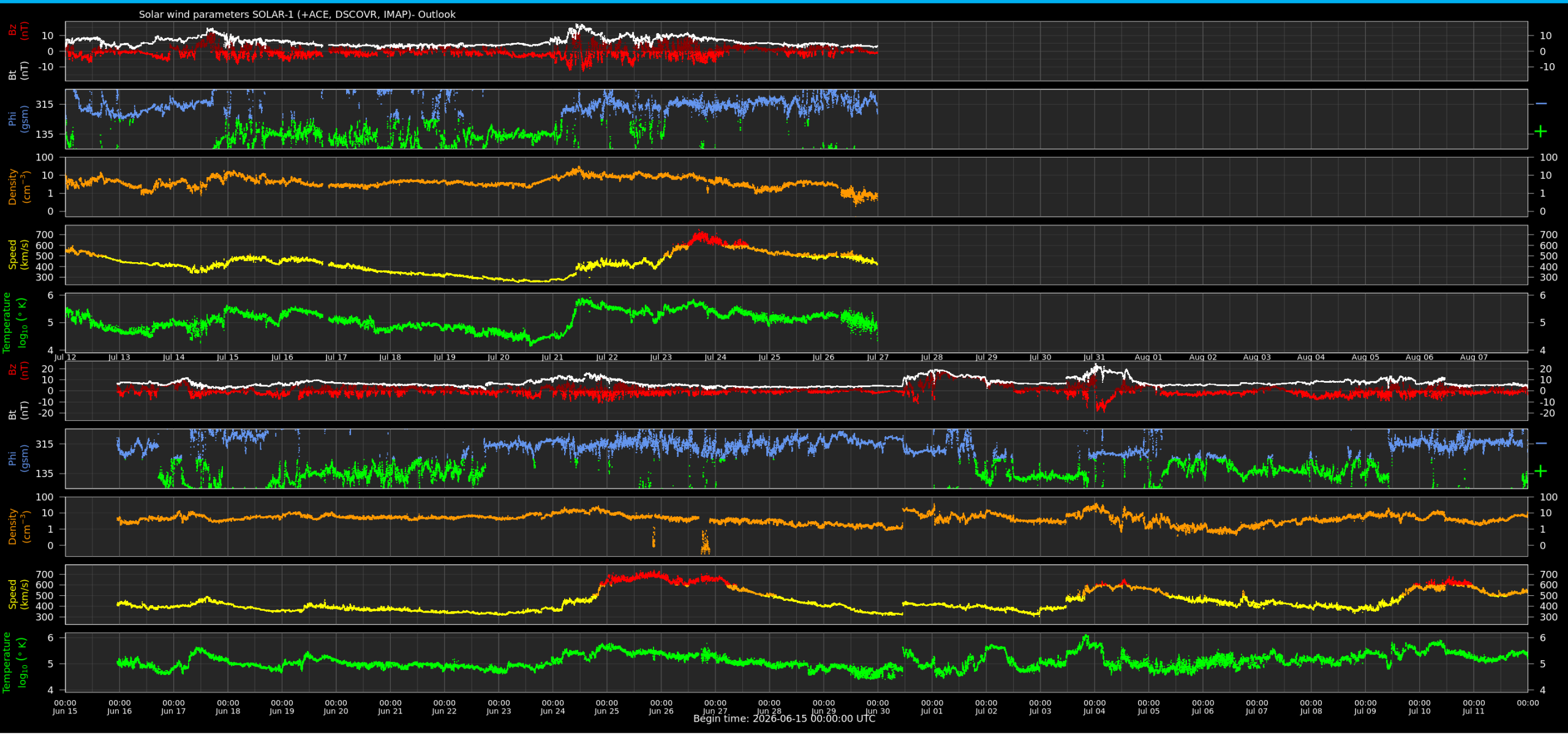
Outlook: Solar activity



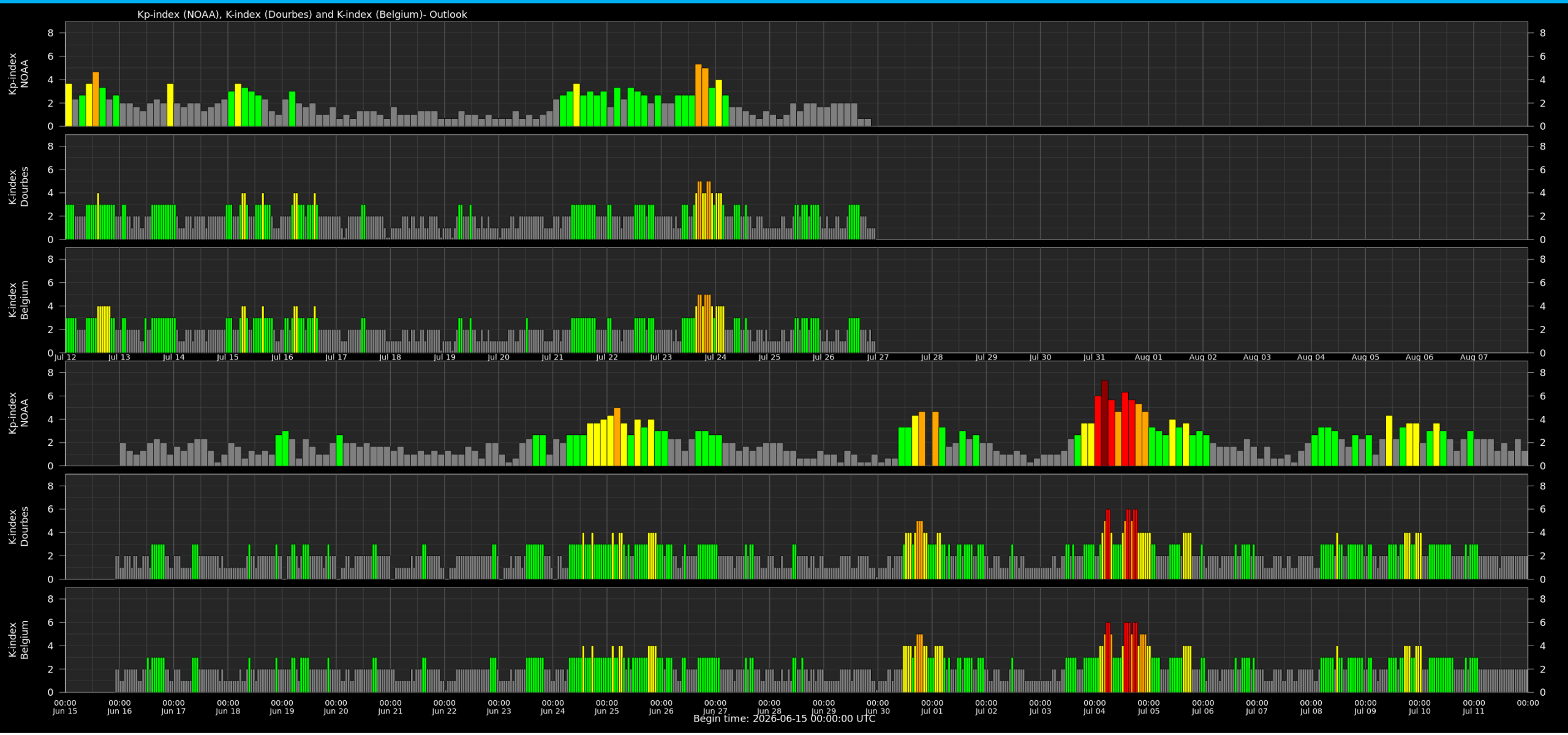
Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



Outlook: Electron Flux at GEO Outlook



PECASUS



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Pecasus related events

Nothing to report

SIDC Space Weather Briefing

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