

SIDC Space Weather Briefing

01 August 2021 - 08 August 2021

Cis Verbeeck

& the SIDC forecaster team



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Summary Report

Solar activity from 2021-08-01 12:00 to 2021-08-08 23:59

Active regions	Beta regions NOAA 2850, 2851 and 2852
Flares	# C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filament eruptions	Filament eruption on August 5
Coronal Holes	+ polarity CH August 3; - polarity CH August 4-6

Proton flux	Nominal
Electron flux	Moderate levels on August 4 and 5

Solar wind and geomagnetic conditions

ICME	ICME on August 2 (likely associated to July 28, 10:36 UT CME)
SW Conditions	B : 1.14 - 13.53 nT // Bz: -12.64 nT to 7.83 nT // Speed: 281.5 - 500.5km/s
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 5

Solar Activity

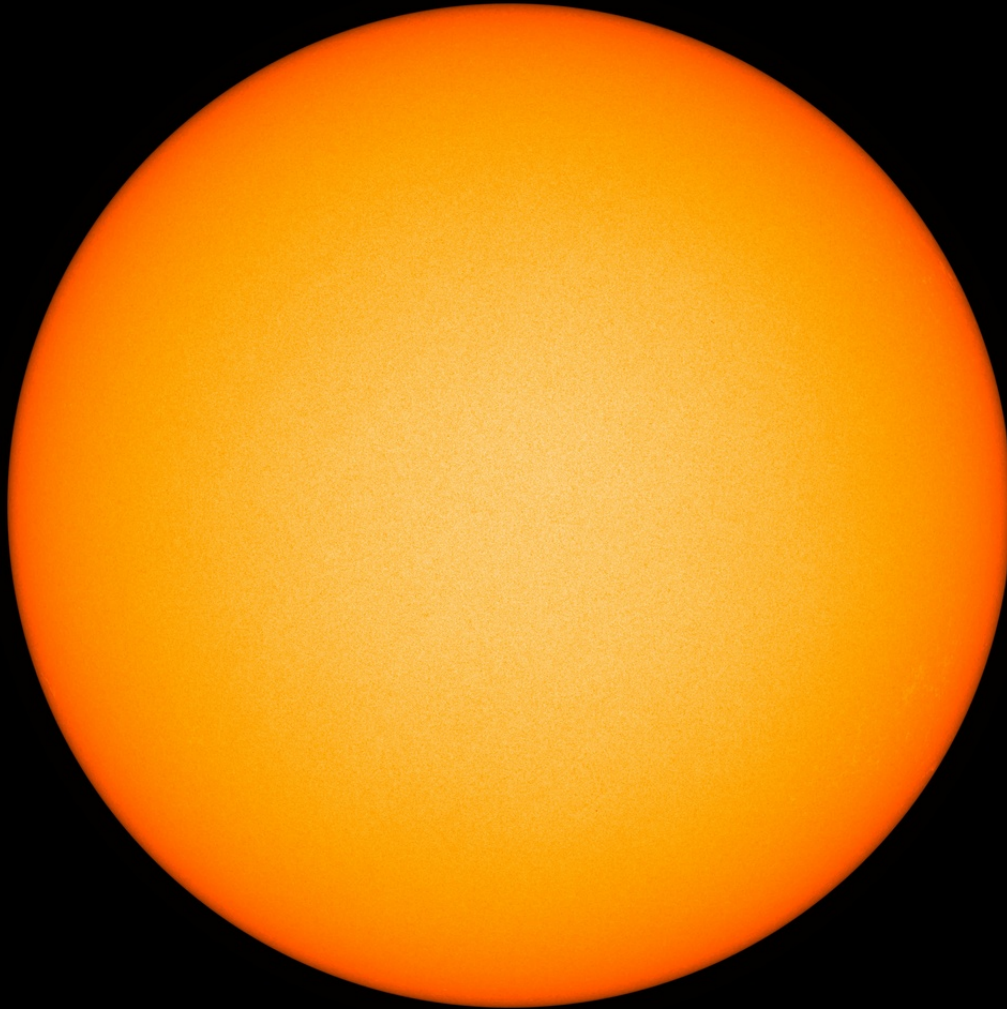


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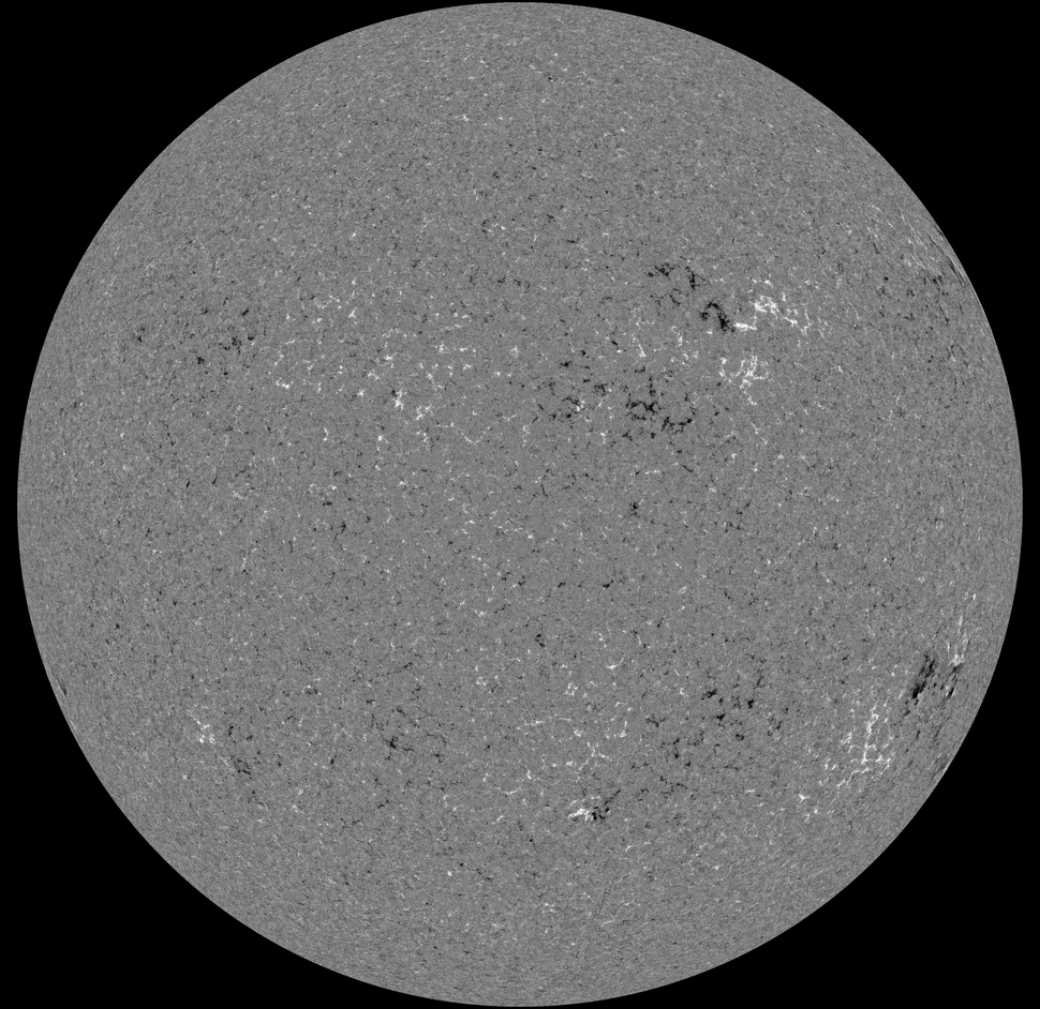
Solar active regions

SDO/HMI White Light 2021-08-01



SDO/HMI Quick-Look Continuum: 20210801_114500

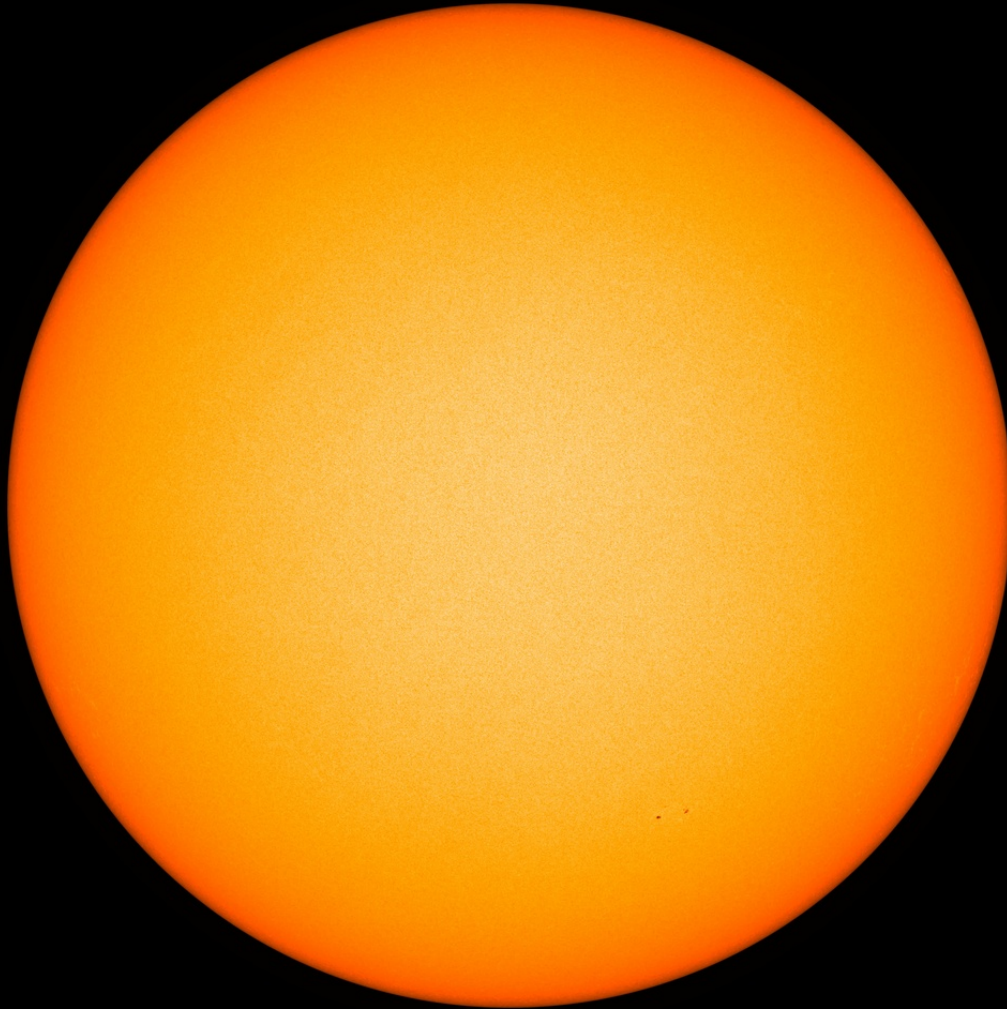
SDO/HMI Magnetogram 2021-08-01



SDO/HMI Quick-Look Magnetogram: 20210801_114500

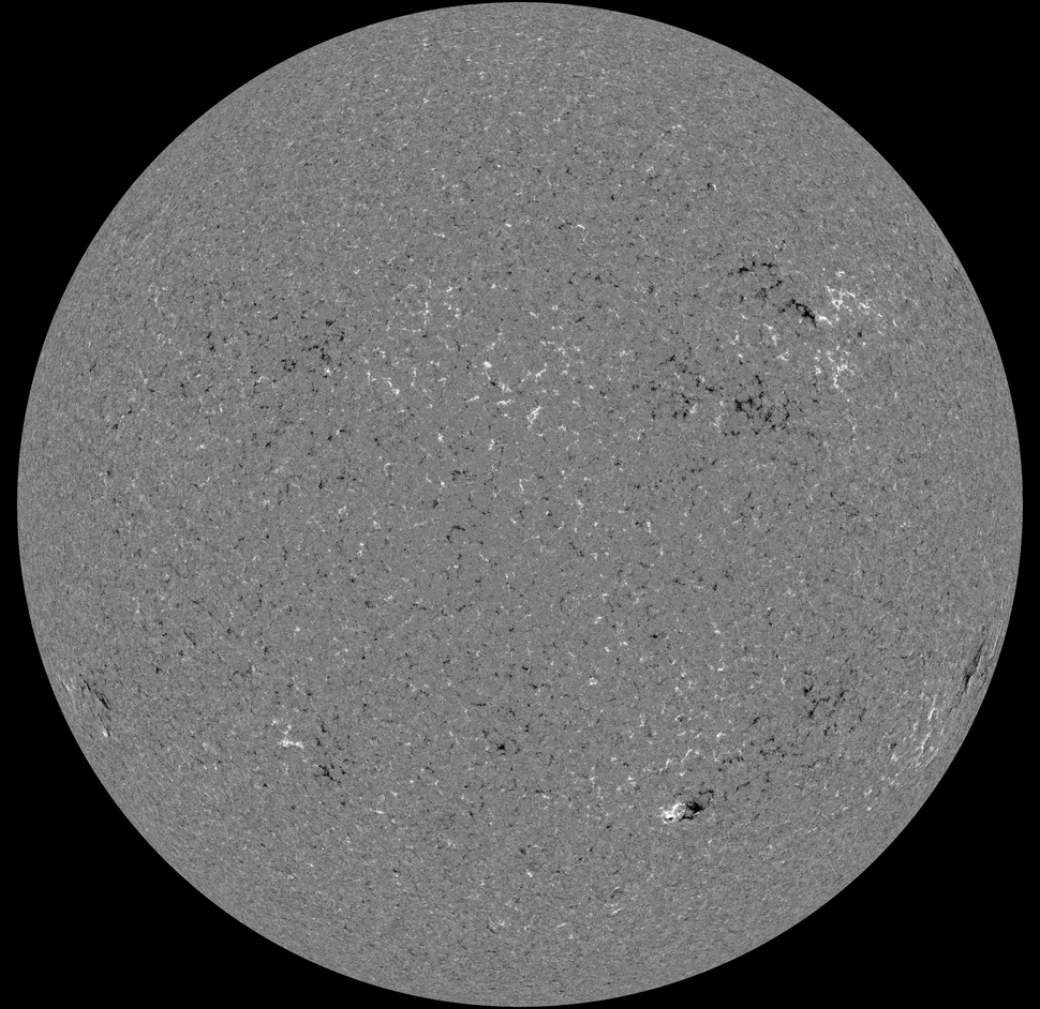
Solar active regions

SDO/HMI White Light 2021-08-02



SDO/HMI Quick-Look Continuum: 20210802_114500

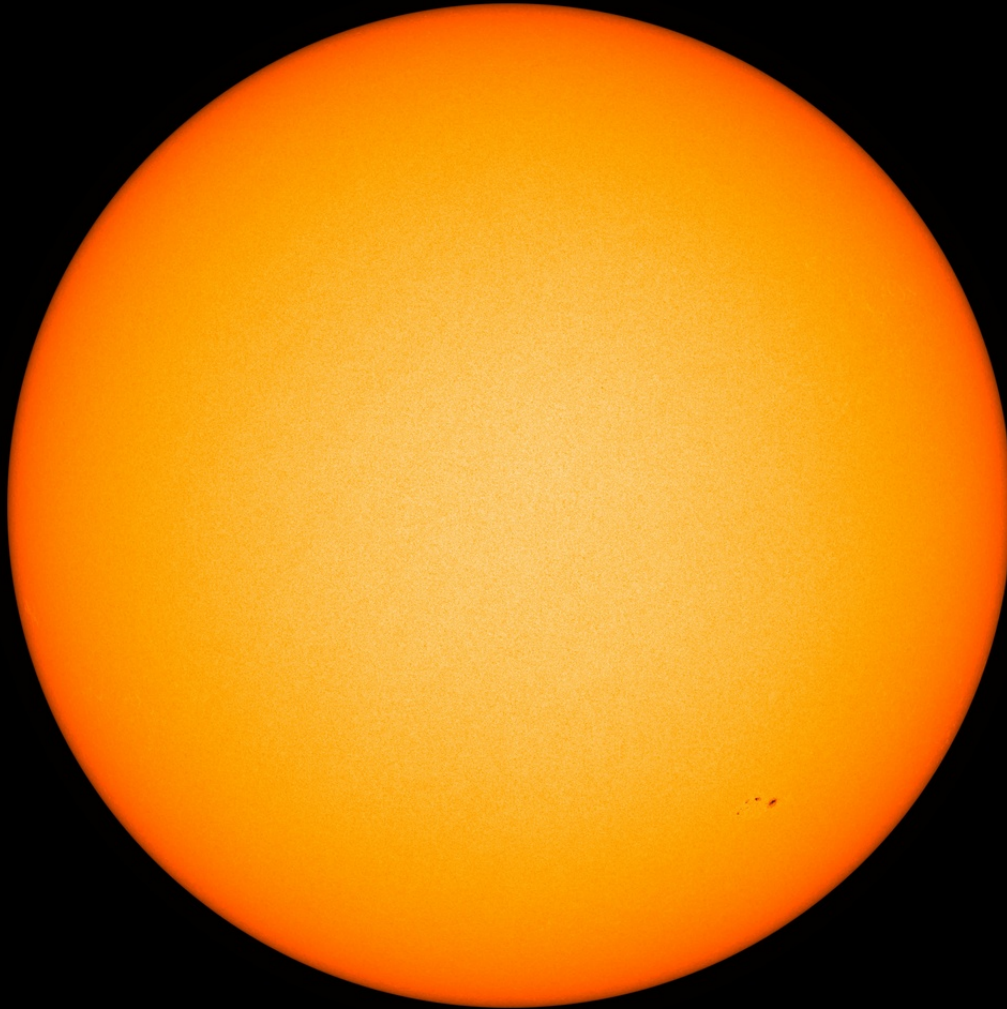
SDO/HMI Magnetogram 2021-08-02



SDO/HMI Quick-Look Magnetogram: 20210802_114500

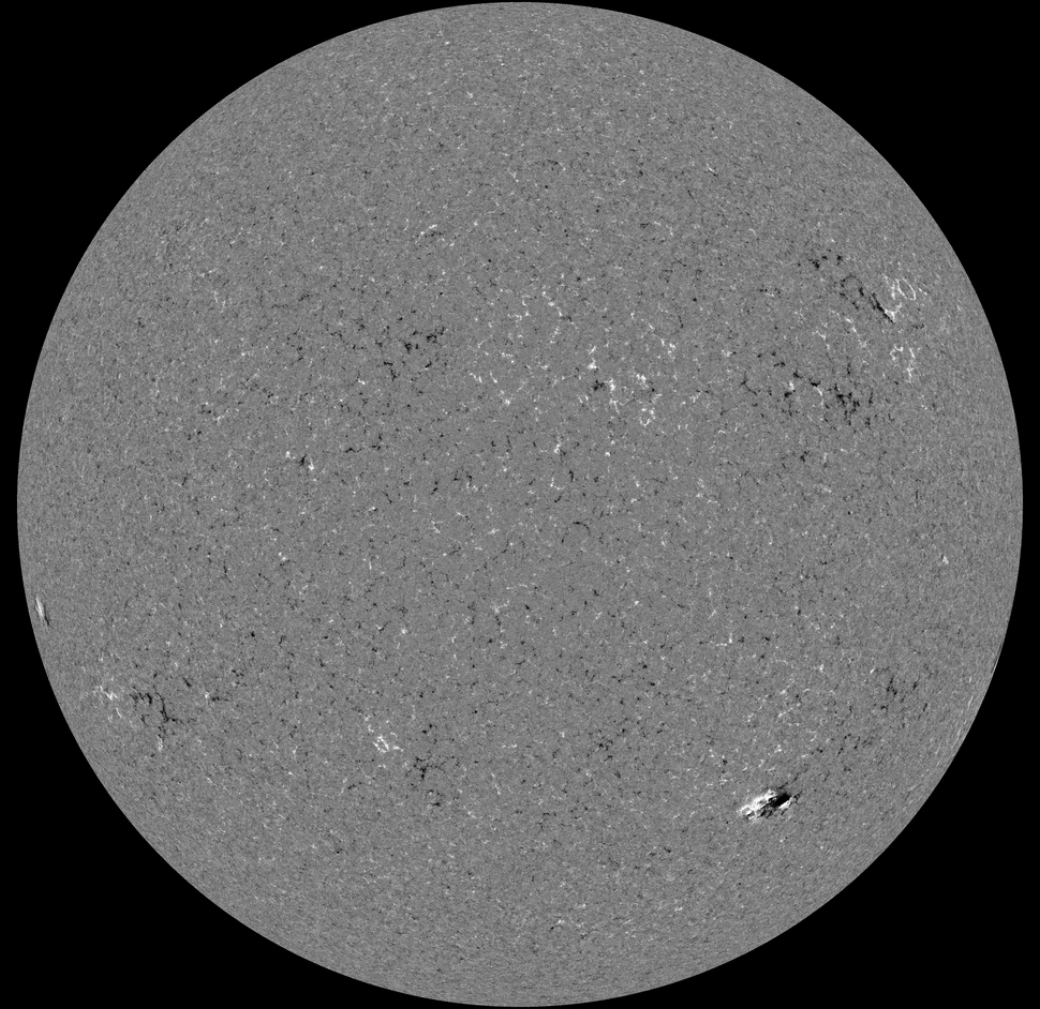
Solar active regions

SDO/HMI White Light 2021-08-03



SDO/HMI Quick-Look Continuum: 20210803_114500

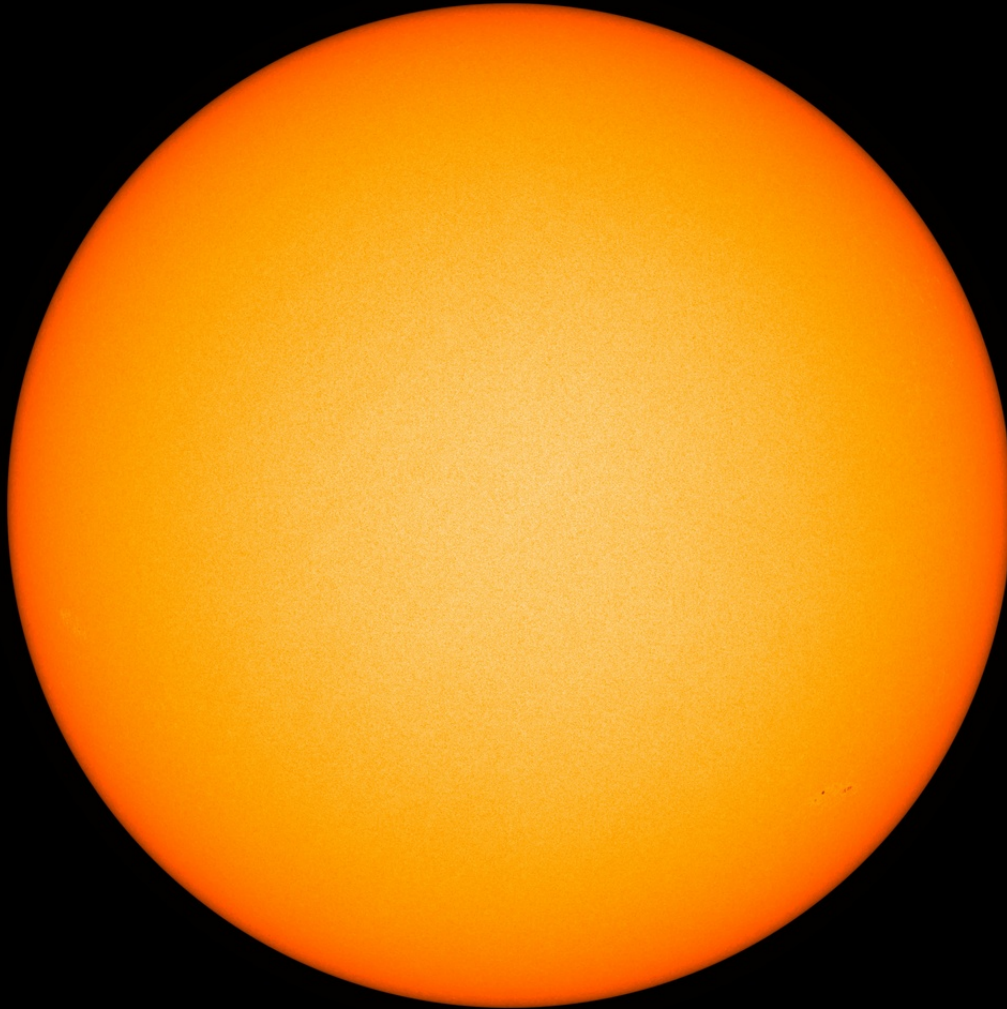
SDO/HMI Magnetogram 2021-08-03



SDO/HMI Quick-Look Magnetogram: 20210803_114500

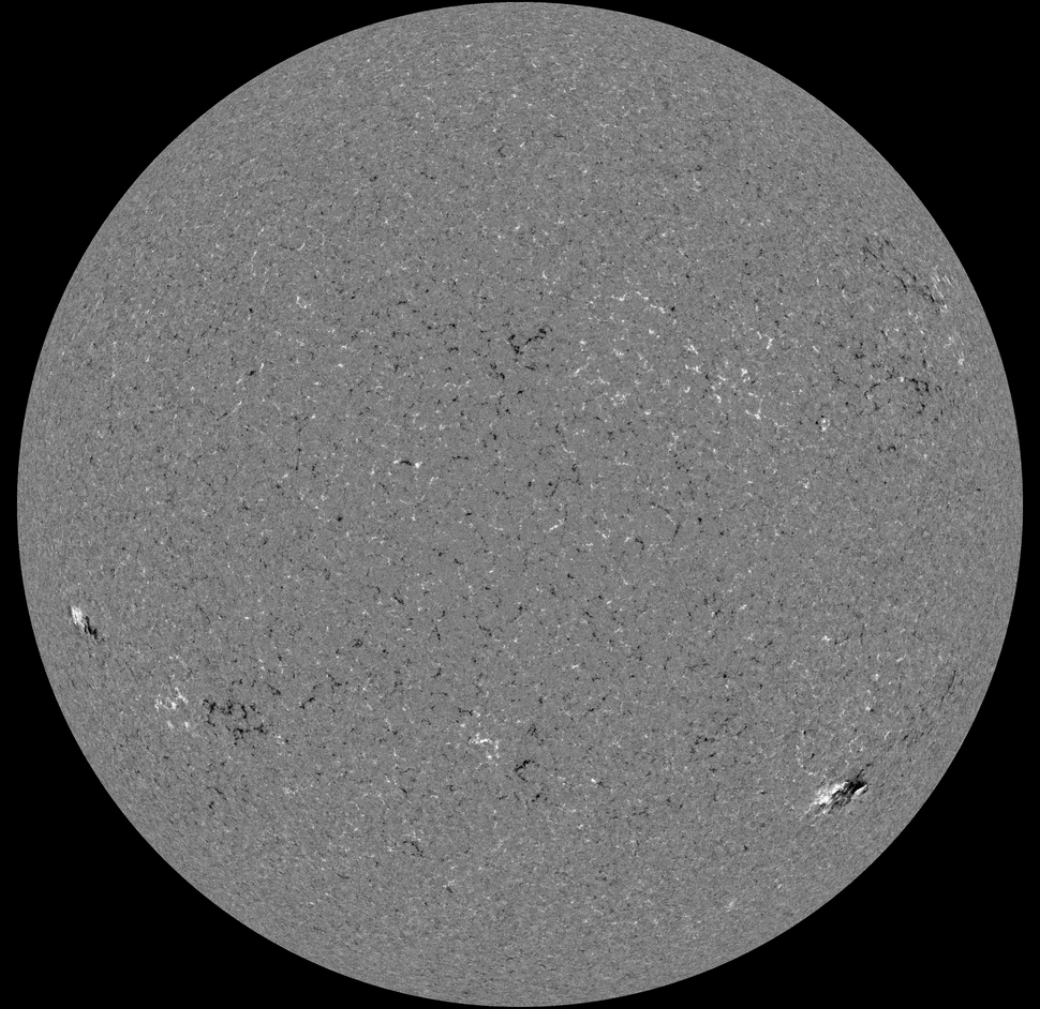
Solar active regions

SDO/HMI White Light 2021-08-04



SDO/HMI Quick-Look Continuum: 20210804_114500

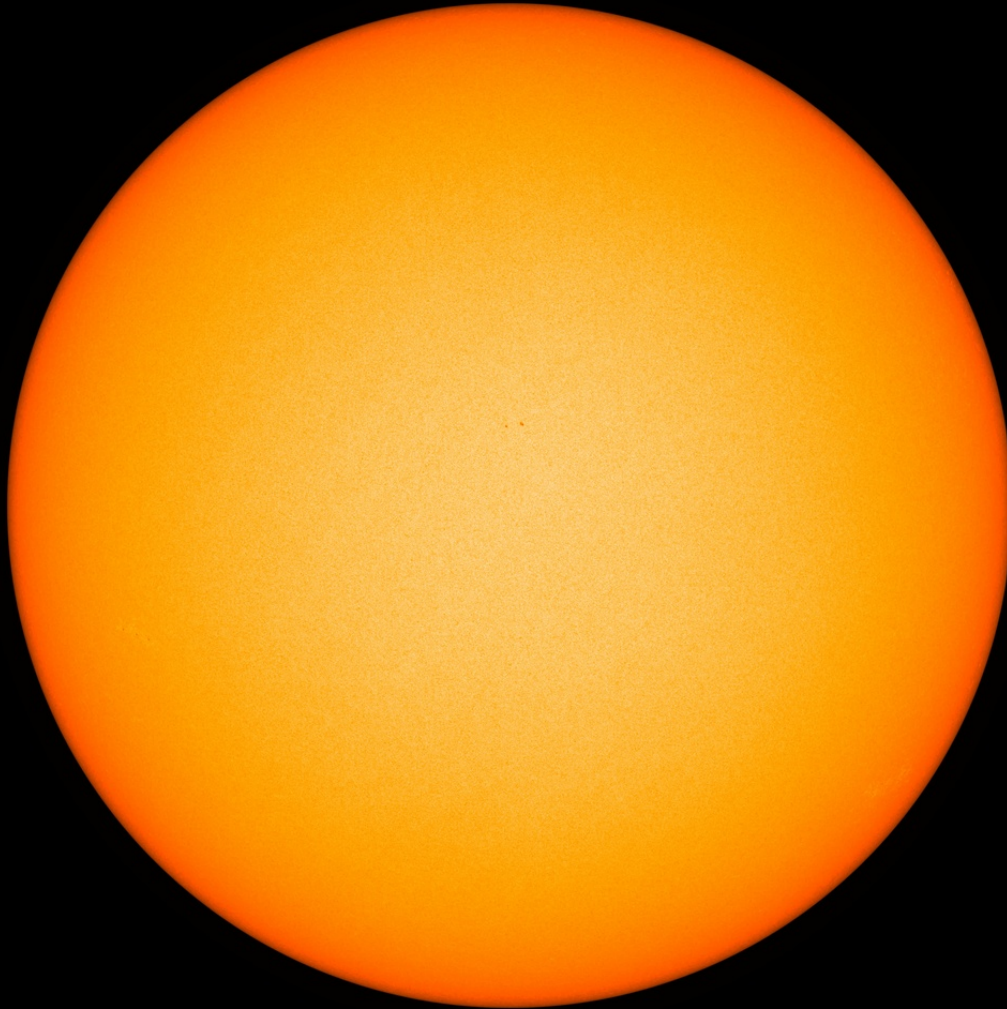
SDO/HMI Magnetogram 2021-08-04



SDO/HMI Quick-Look Magnetogram: 20210804_114500

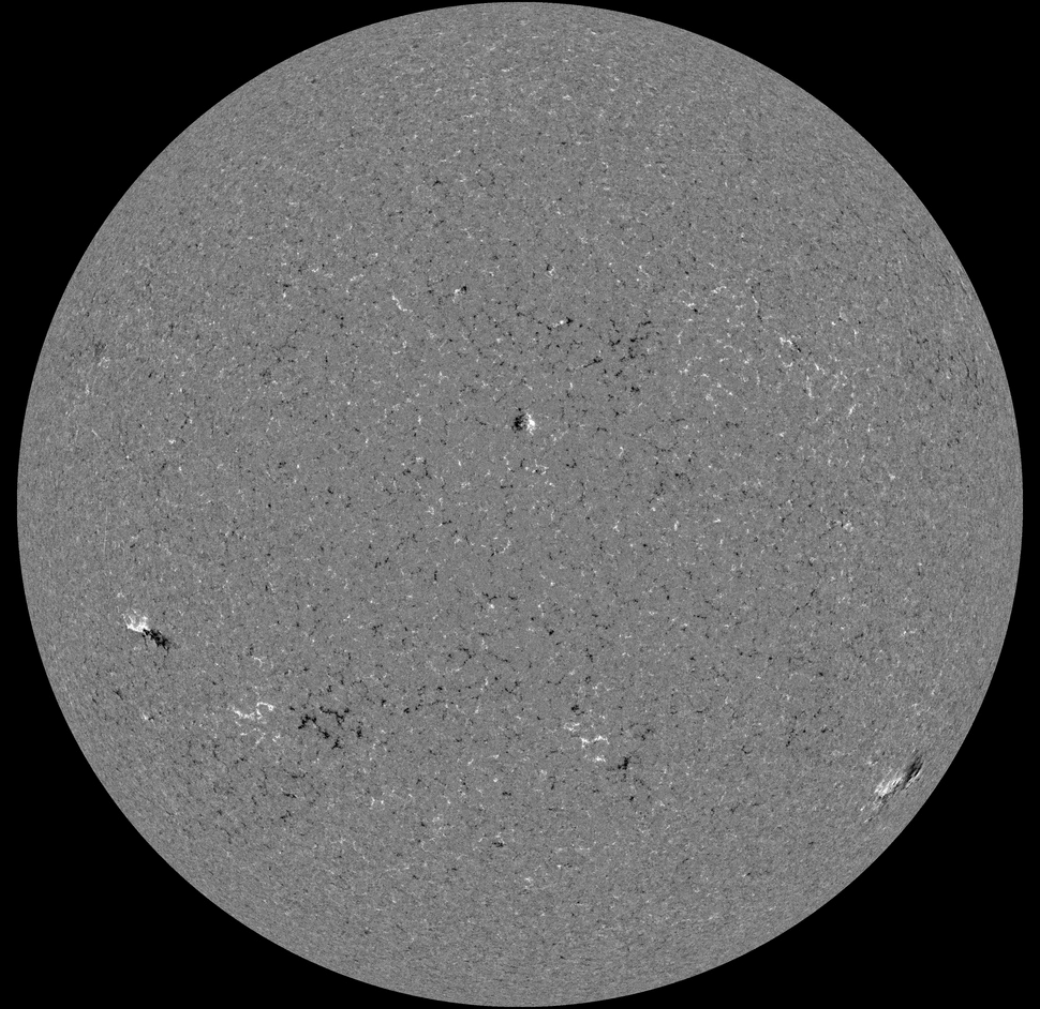
Solar active regions

SDO/HMI White Light 2021-08-05



SDO/HMI Quick-Look Continuum: 20210805_114500

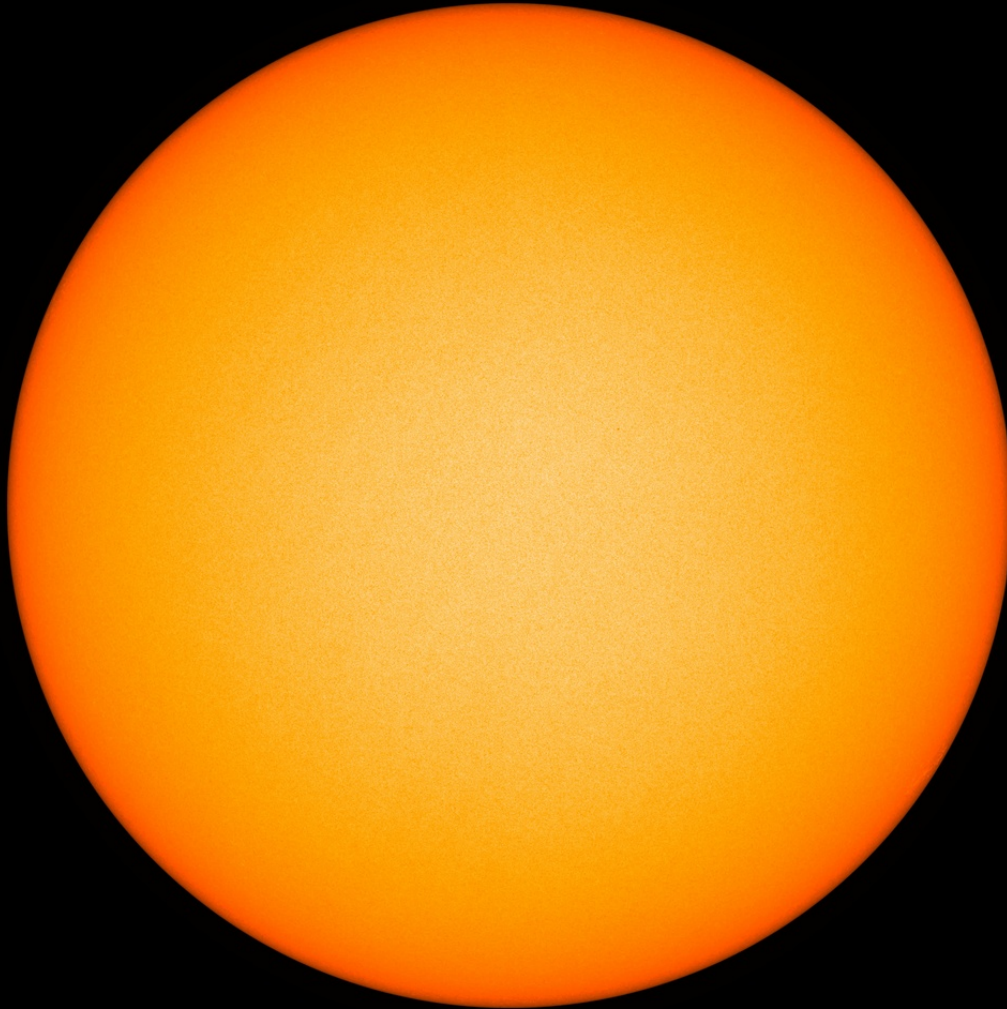
SDO/HMI Magnetogram 2021-08-05



SDO/HMI Quick-Look Magnetogram: 20210805_114500

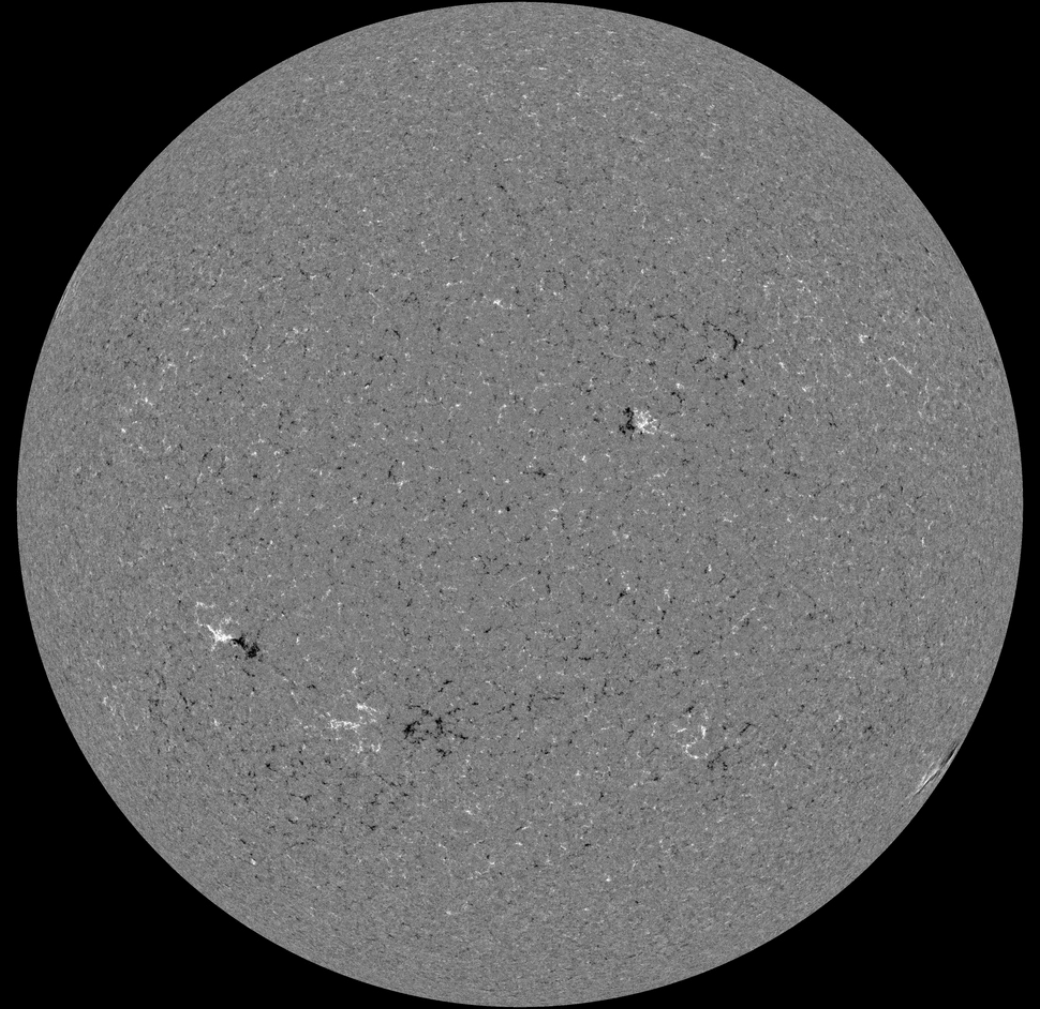
Solar active regions

SDO/HMI White Light 2021-08-06



SDO/HMI Quick-Look Continuum: 20210806_114500

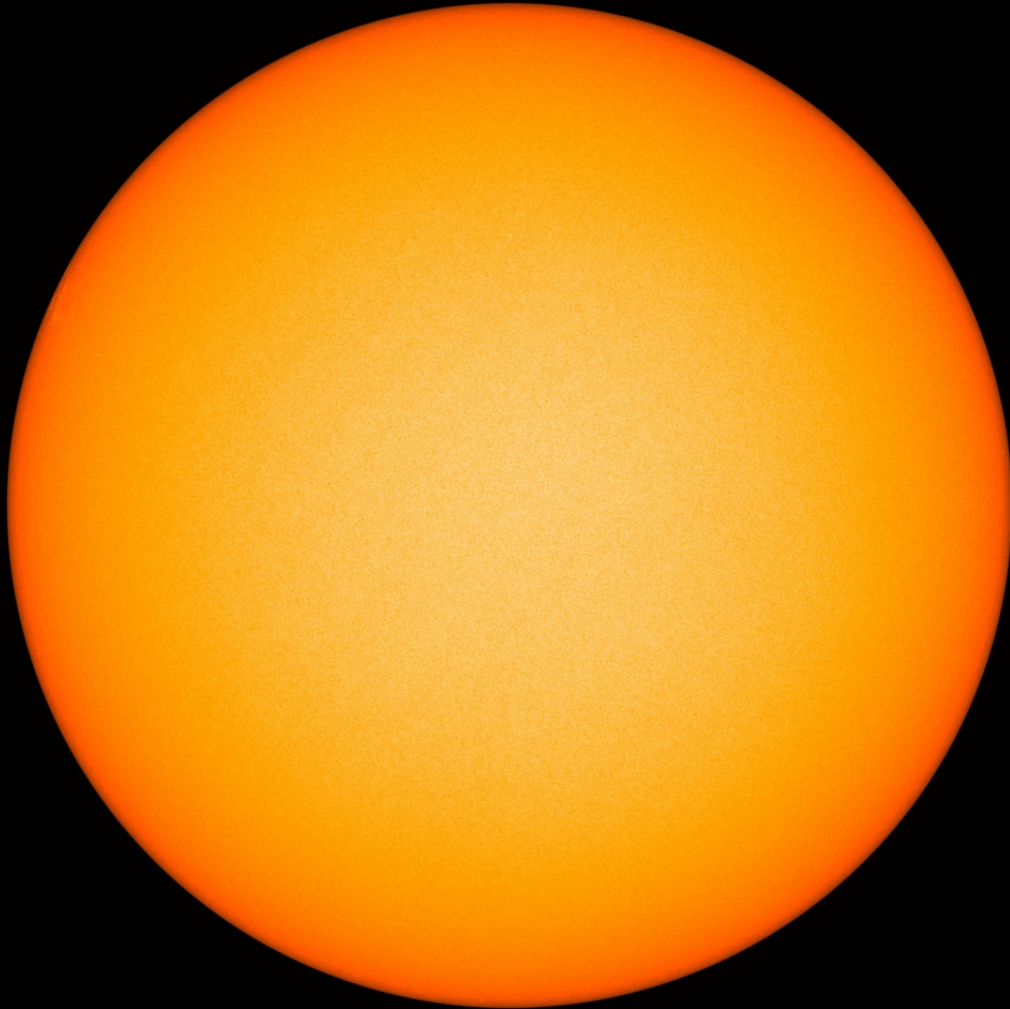
SDO/HMI Magnetogram 2021-08-06



SDO/HMI Quick-Look Magnetogram: 20210806_114500

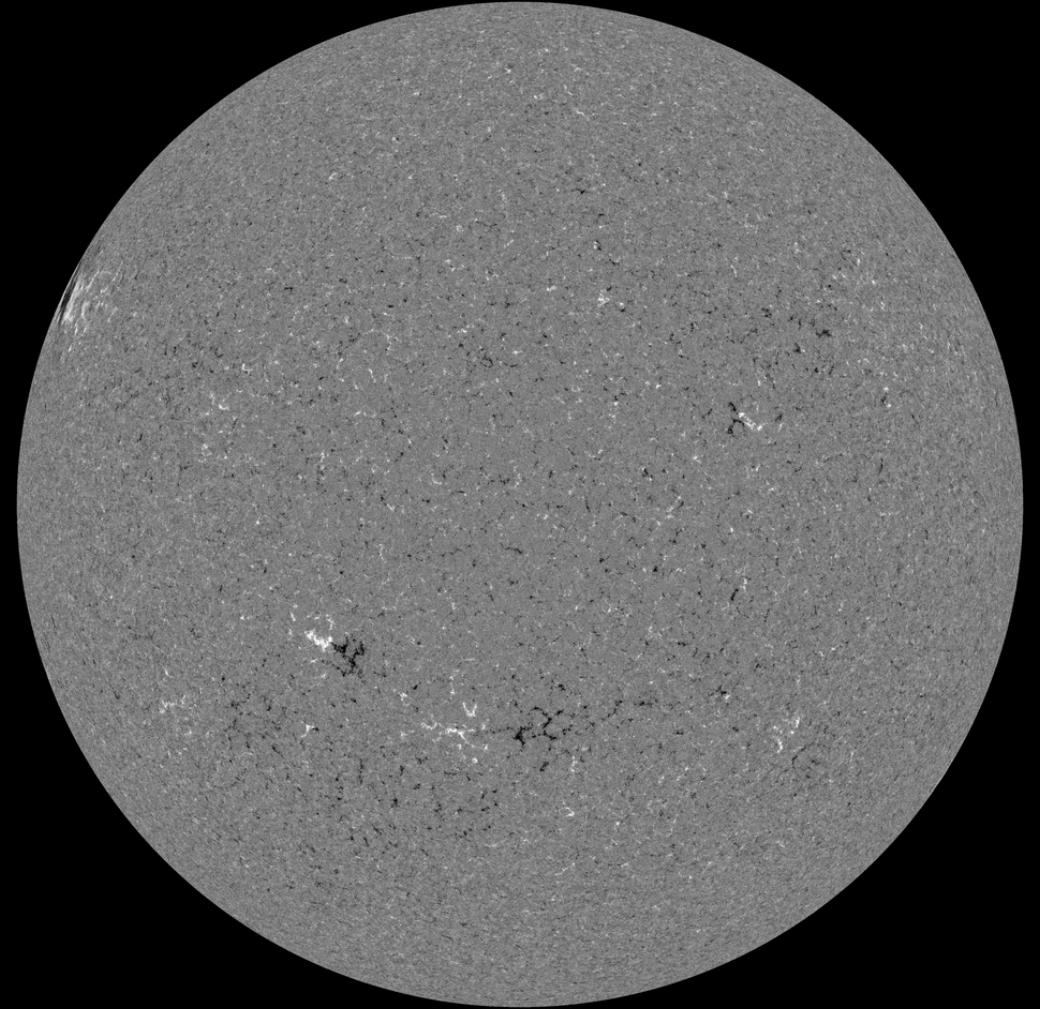
Solar active regions

SDO/HMI White Light 2021-08-07



SDO/HMI Quick-Look Continuum: 20210807_114500

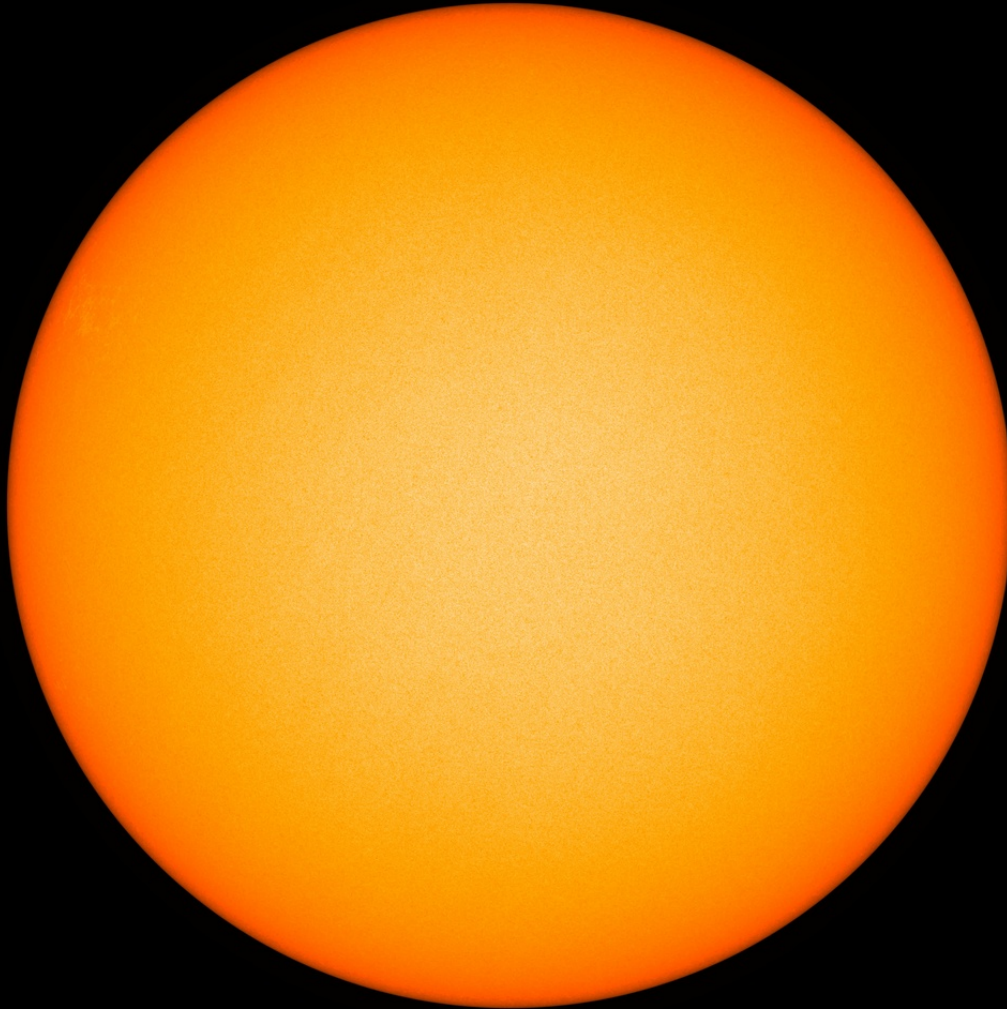
SDO/HMI Magnetogram 2021-08-07



SDO/HMI Quick-Look Magnetogram: 20210807_114500

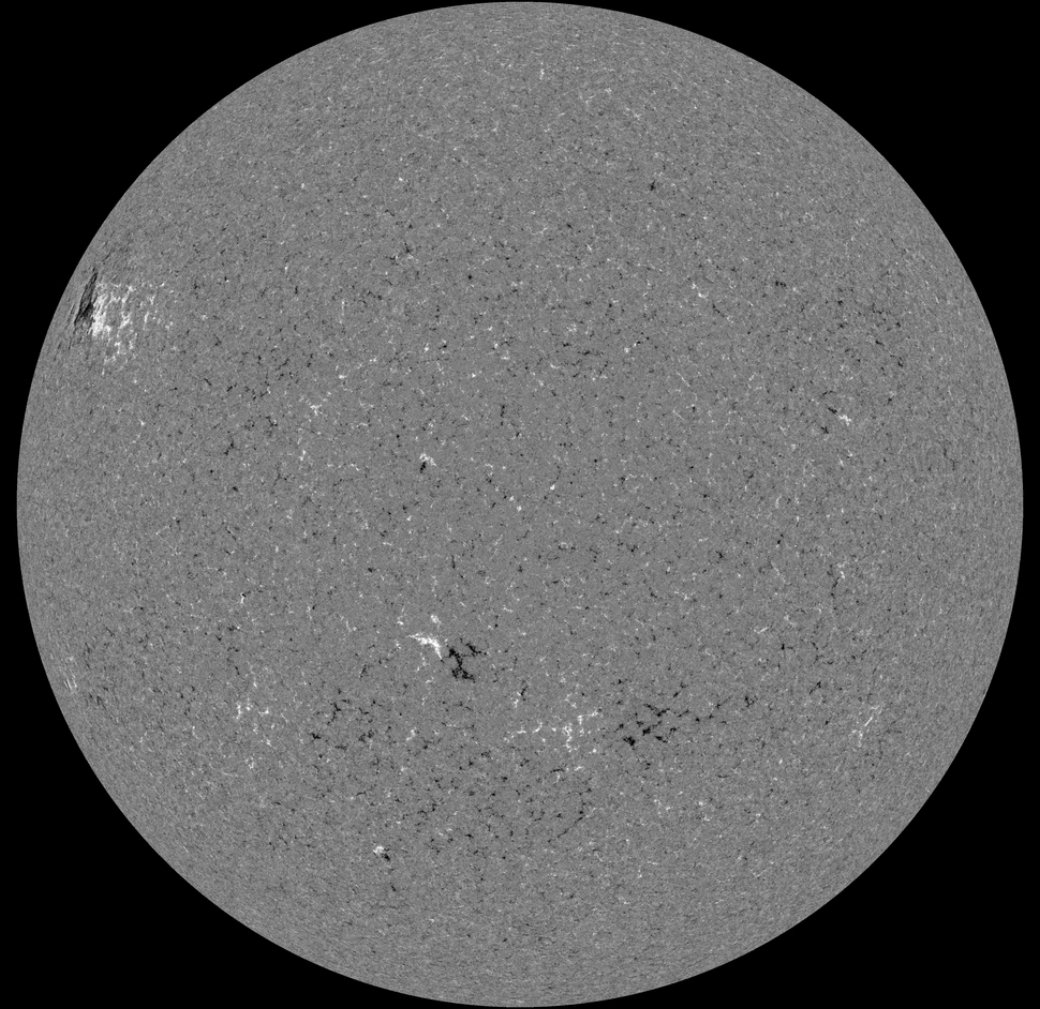
Solar active regions

SDO/HMI White Light 2021-08-08



SDO/HMI Quick-Look Continuum: 20210808_114500

SDO/HMI Magnetogram 2021-08-08

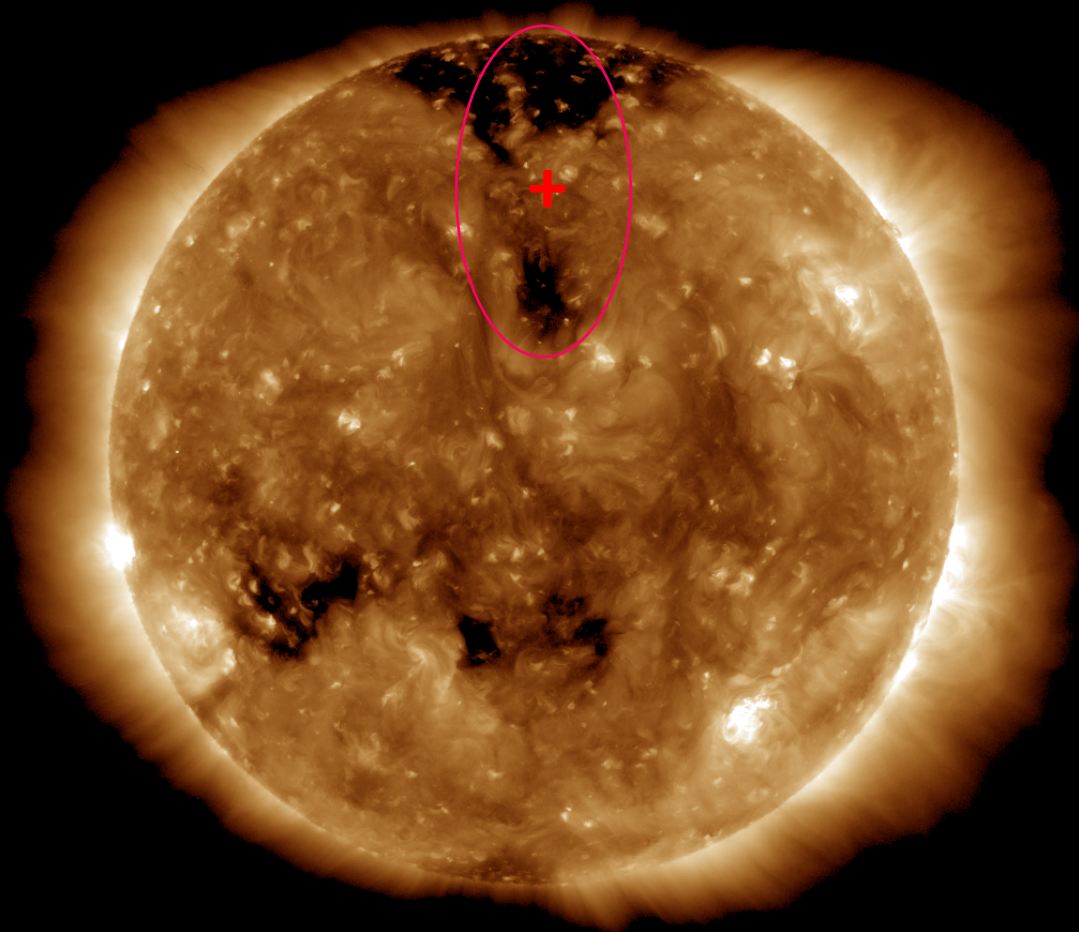


SDO/HMI Quick-Look Magnetogram: 20210808_114500

Coronal holes

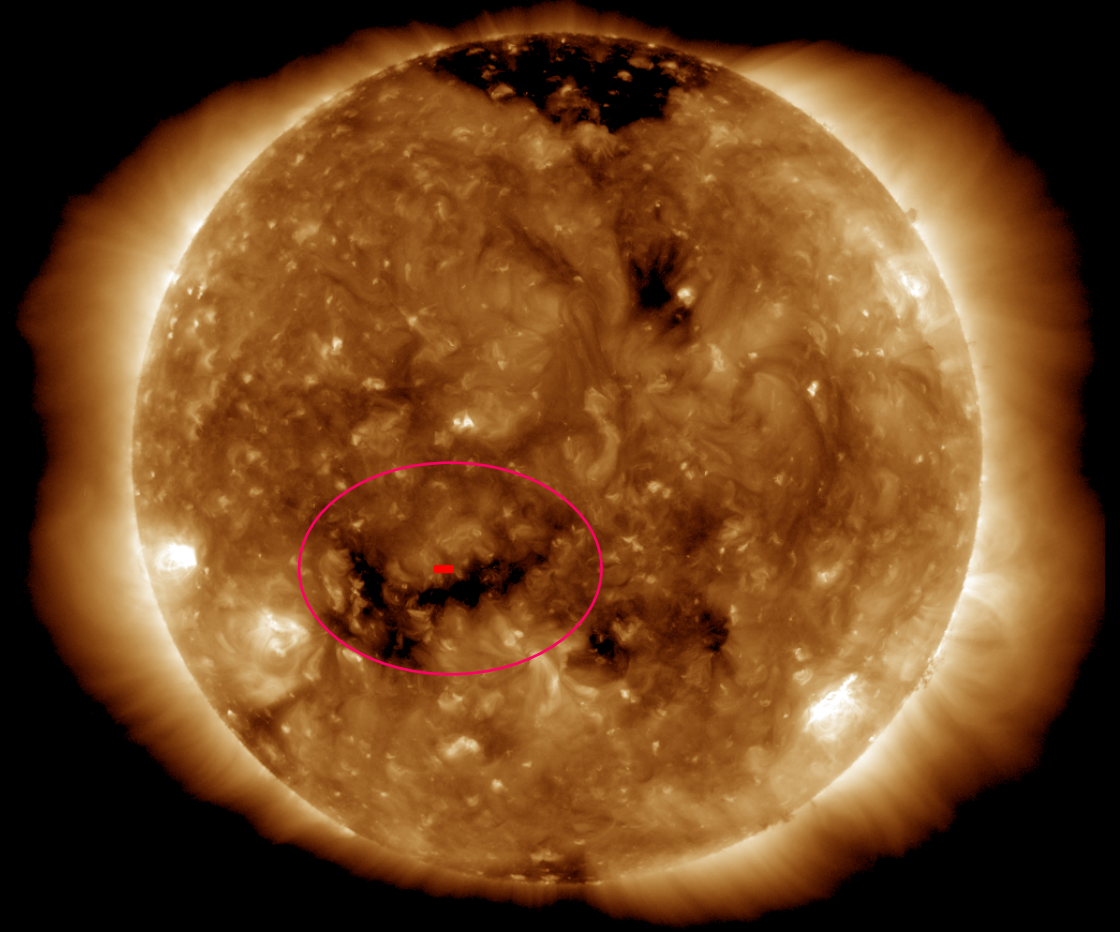
SDO/AIA 19.3 nm 2021-08-03

SDO/AIA AIA 193Å 2021-08-03T12:00:05.843



SDO/AIA 19.3 nm 2021-08-04

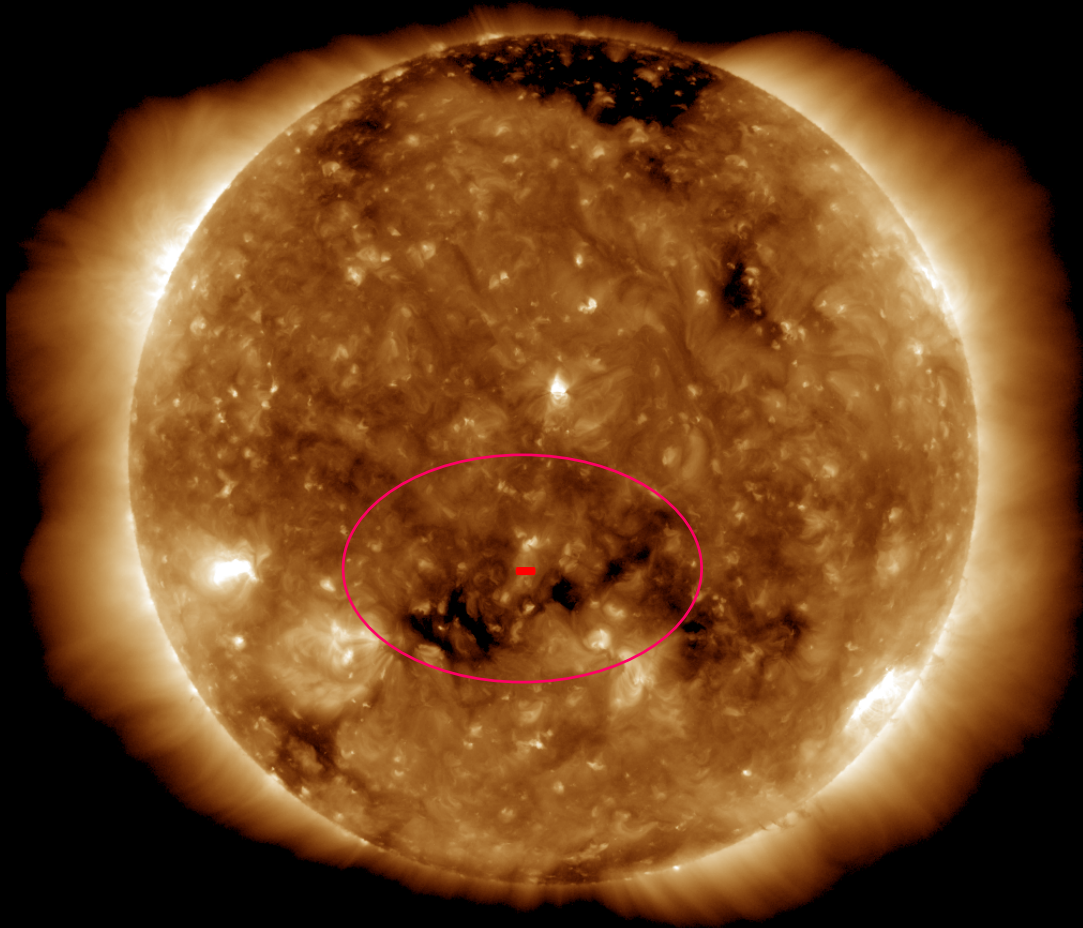
SDO/AIA AIA 193Å 2021-08-04T12:00:05.843



Coronal holes

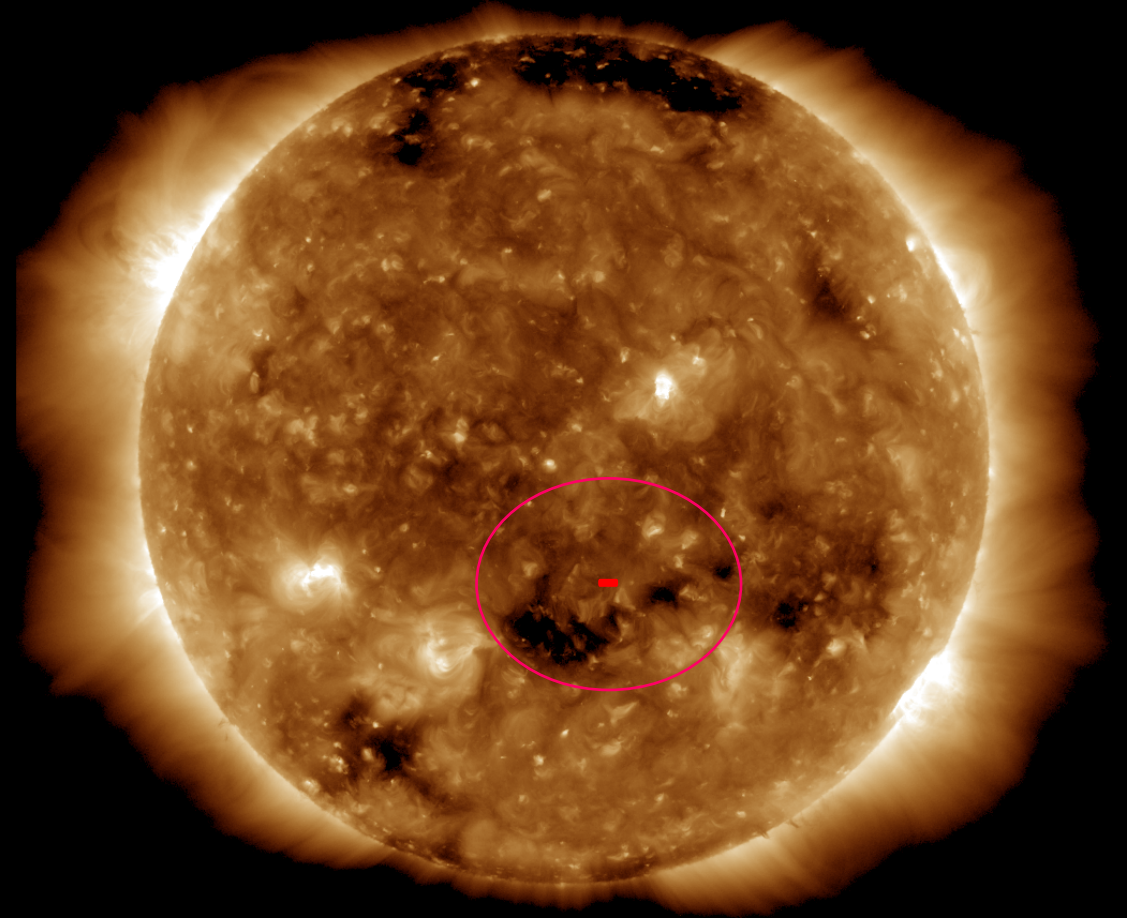
SDO/AIA 19.3 nm 2021-08-05

SDO/AIA AIA 193Å 2021-08-05T12:00:05.844



SDO/AIA 19.3 nm 2021-08-06

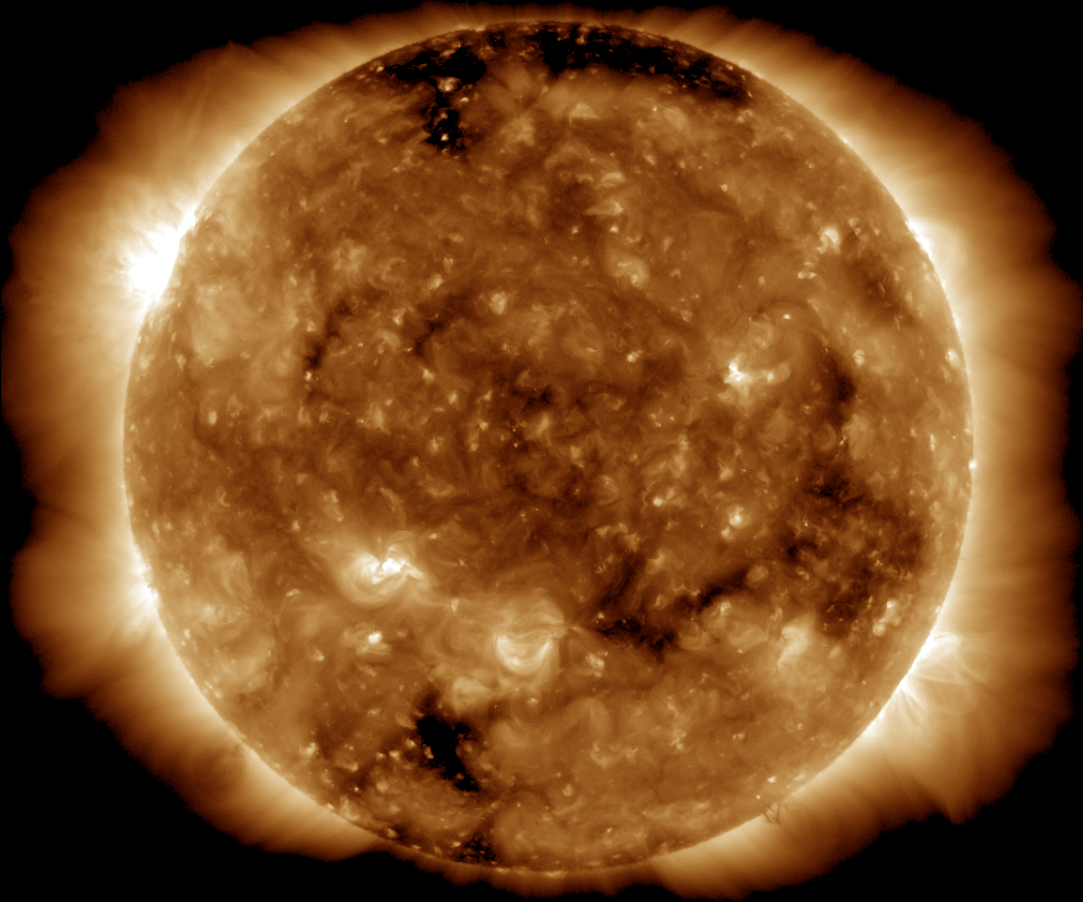
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Coronal holes

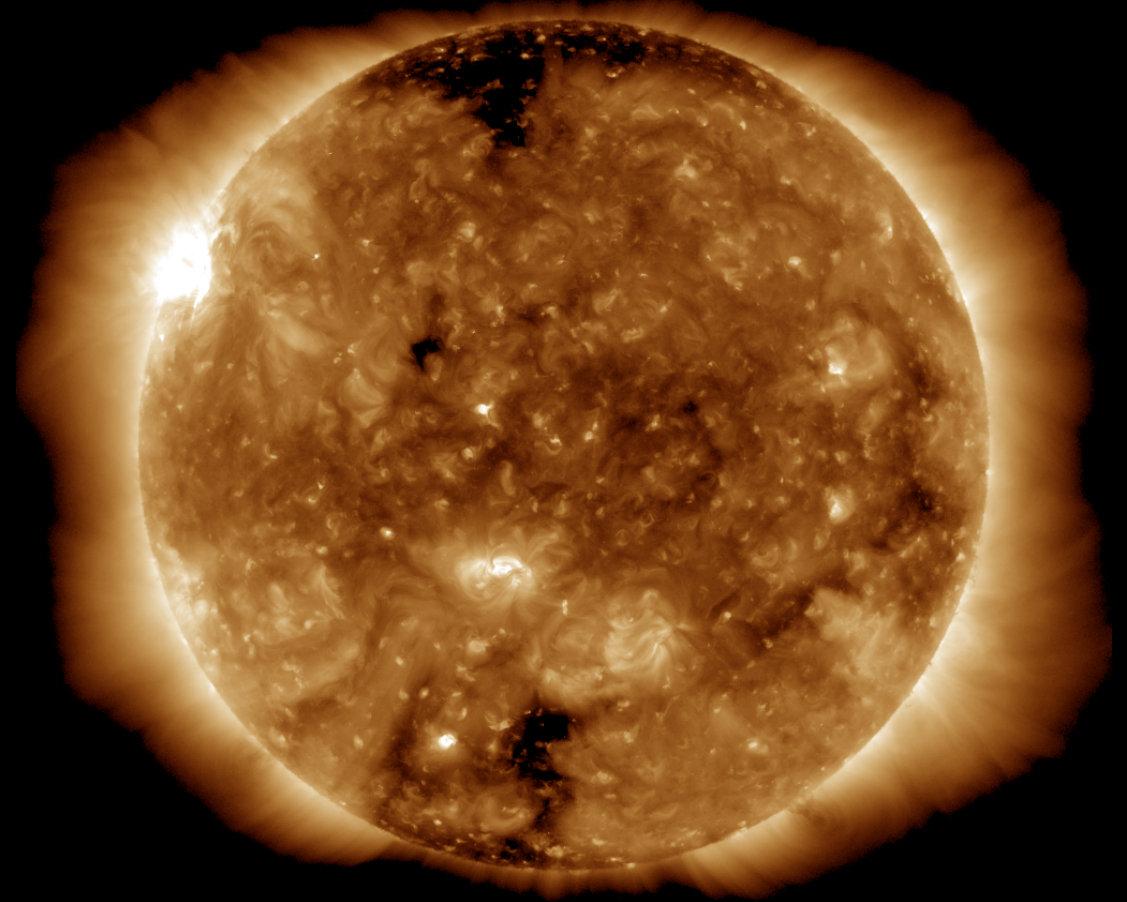
SDO/AIA 19.3 nm 2021-08-07

SDO/AIA AIA 193Å 2021-08-07T12:00:05.843

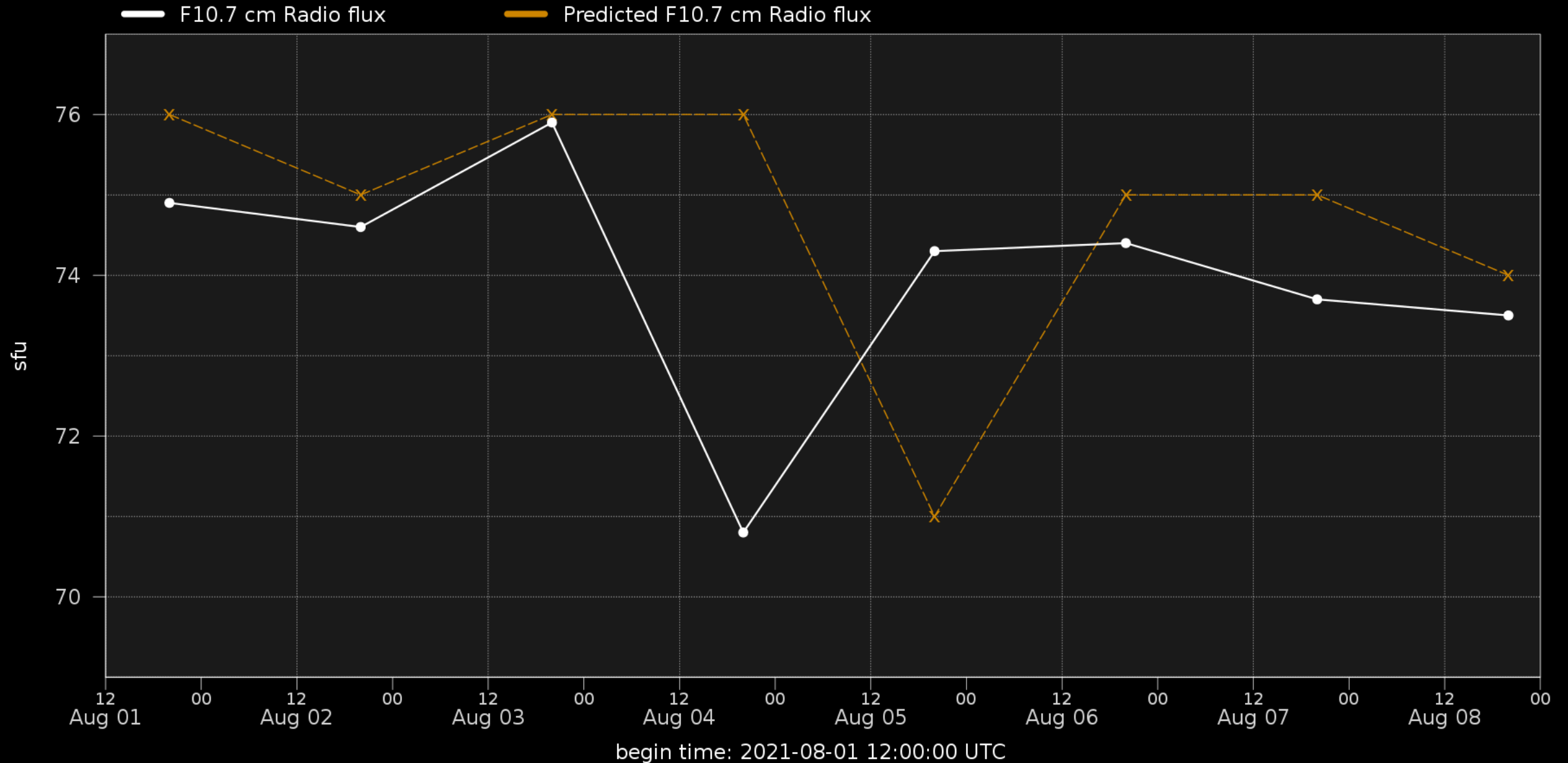


SDO/AIA 19.3 nm 2021-08-08

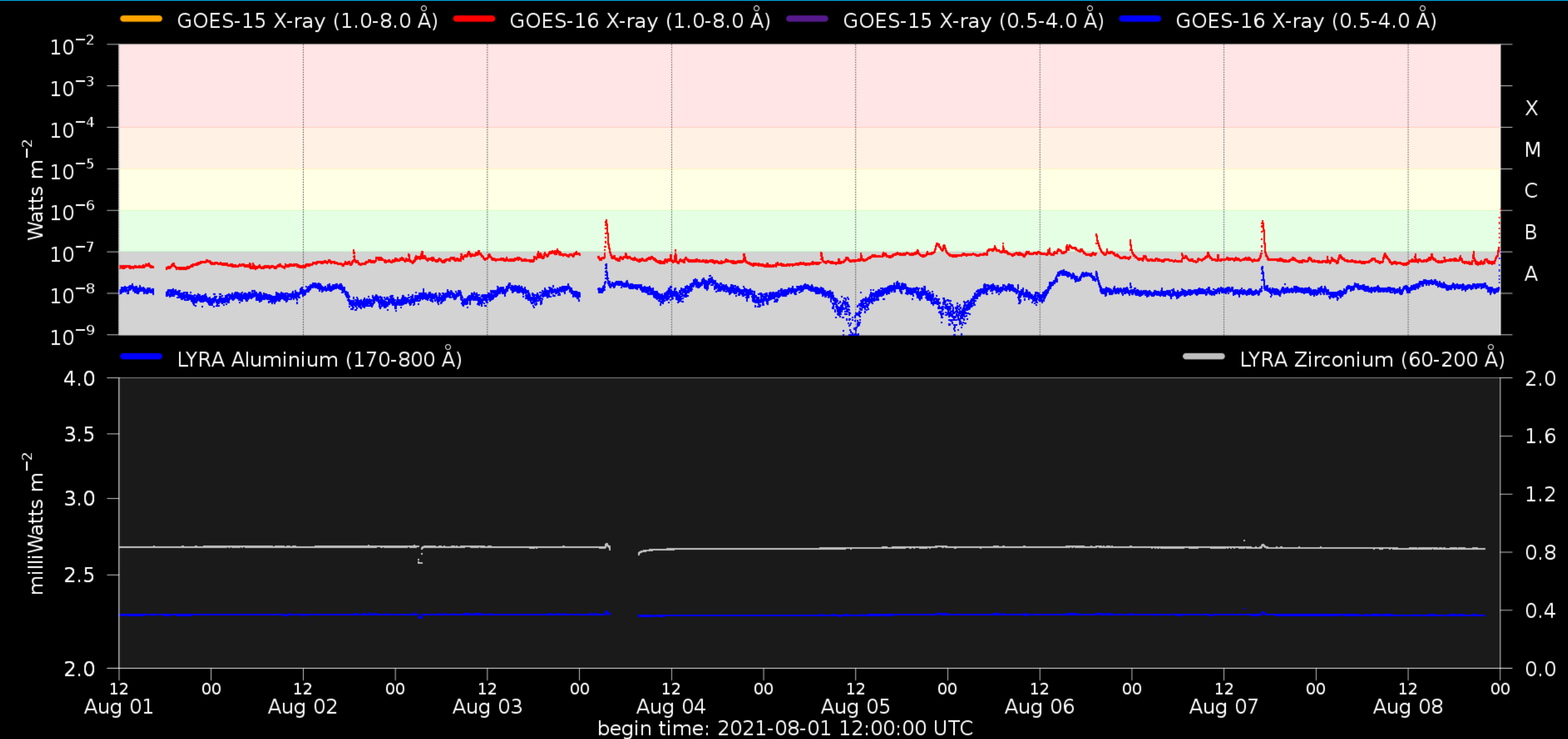
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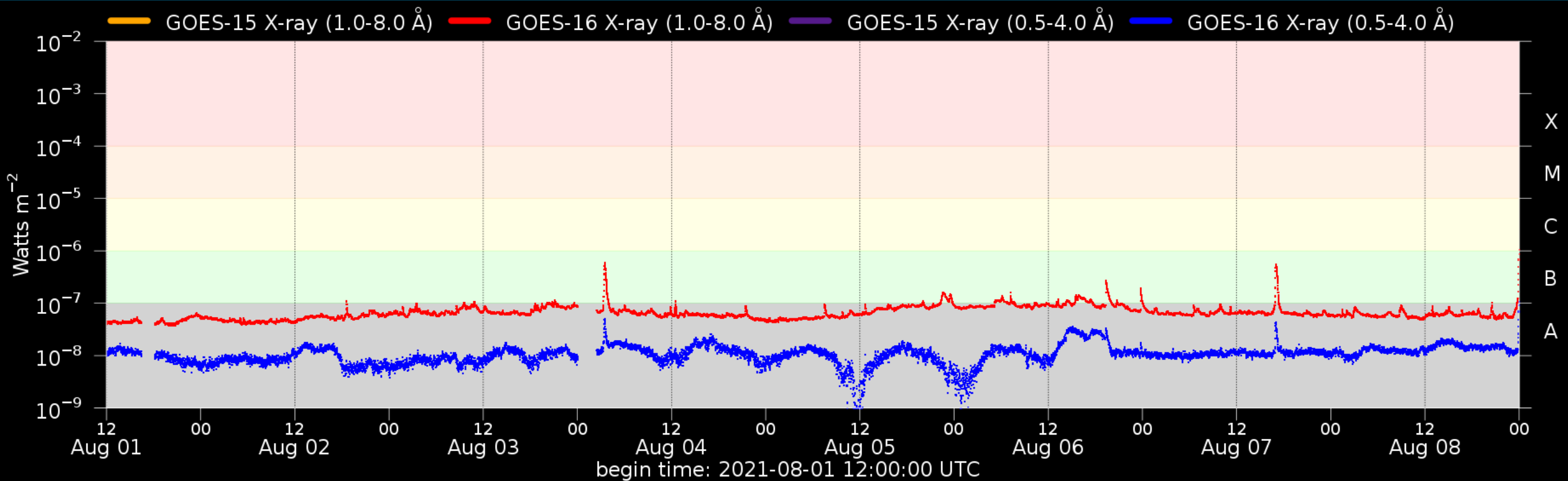
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity

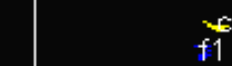


Probabilities (%) and occurrences (#) of C/M/X-flares daily, from noon to noon:

Issue date	2021-08-01	2021-08-02	2021-08-03	2021-08-04	2021-08-05	2021-08-06	2021-08-07	2021-08-08
Probability (%)	01 01 01	10 01 01	15 01 01	30 01 01	15 01 01	35 01 01	25 01 01	10 01 01
Observed (#)	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00

Coronal Mass Ejections

No Earth-directed CMEs were observed



S W N E

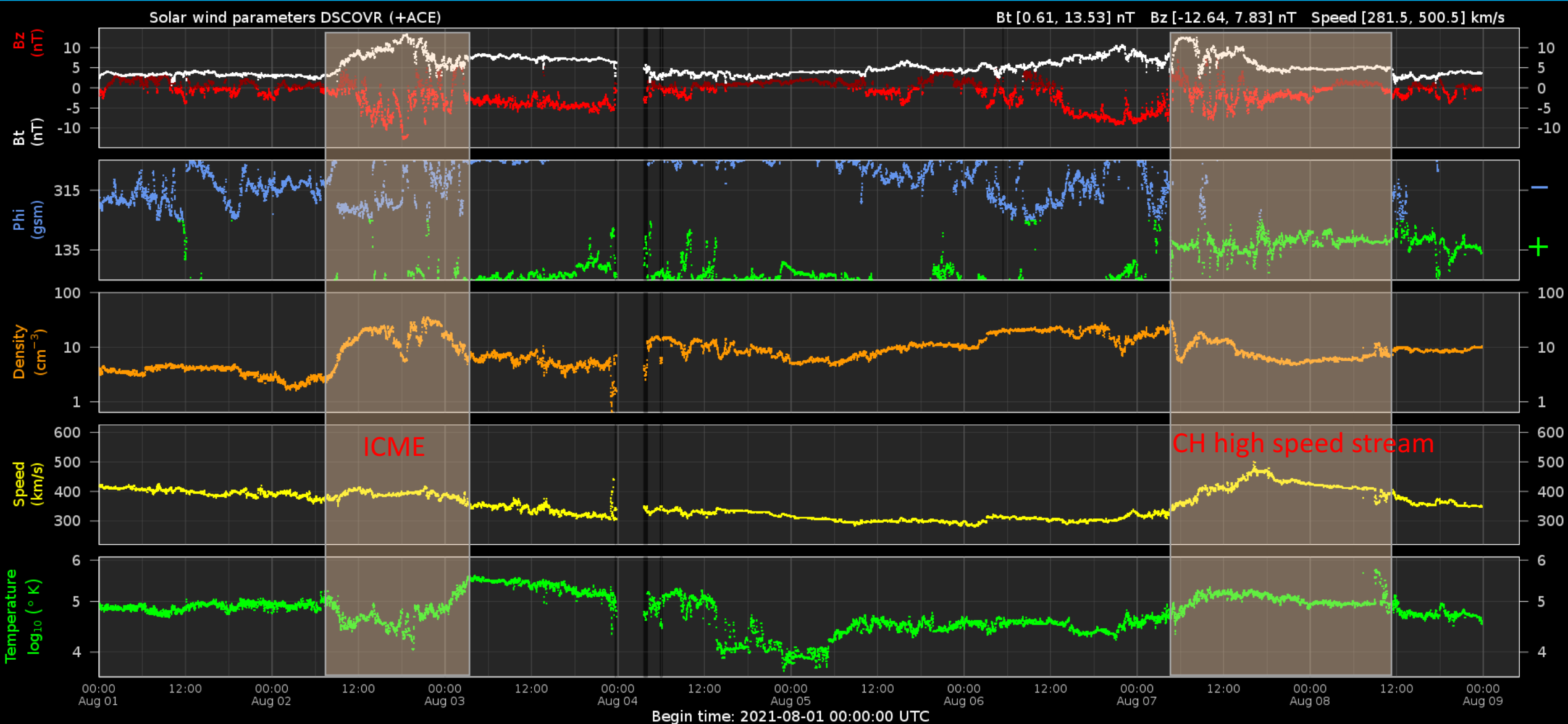
09:12 08/0
18:36 08/0
13:36 08/0
09:18 08/0
05:12 08/0
23:48 08/0
18:48 08/0
15:12 08/0
10:48 08/0
06:12 08/0
00:48 08/0
21:48 08/0
18:48 08/0
15:54 08/0
12:48 08/0
10:00 08/0
06:36 08/0
02:24 08/0
22:30 08/0
19:30 08/0
16:48 08/0
14:00 08/0
10:48 08/0
07:48 08/0
05:00 08/0
01:36 08/0
22:24 08/0
19:36 08/0
16:48 08/0
13:36 08/0
10:00 08/0
07:06 08/0
04:12 08/0
00:48 08/0
21:48 08/0
19:00 08/0
15:42 08/0
12:12 08/0
09:12 08/0
06:24 08/0
03:36 08/0
00:00 08/0

Solar Wind and Geomagnetic Activity



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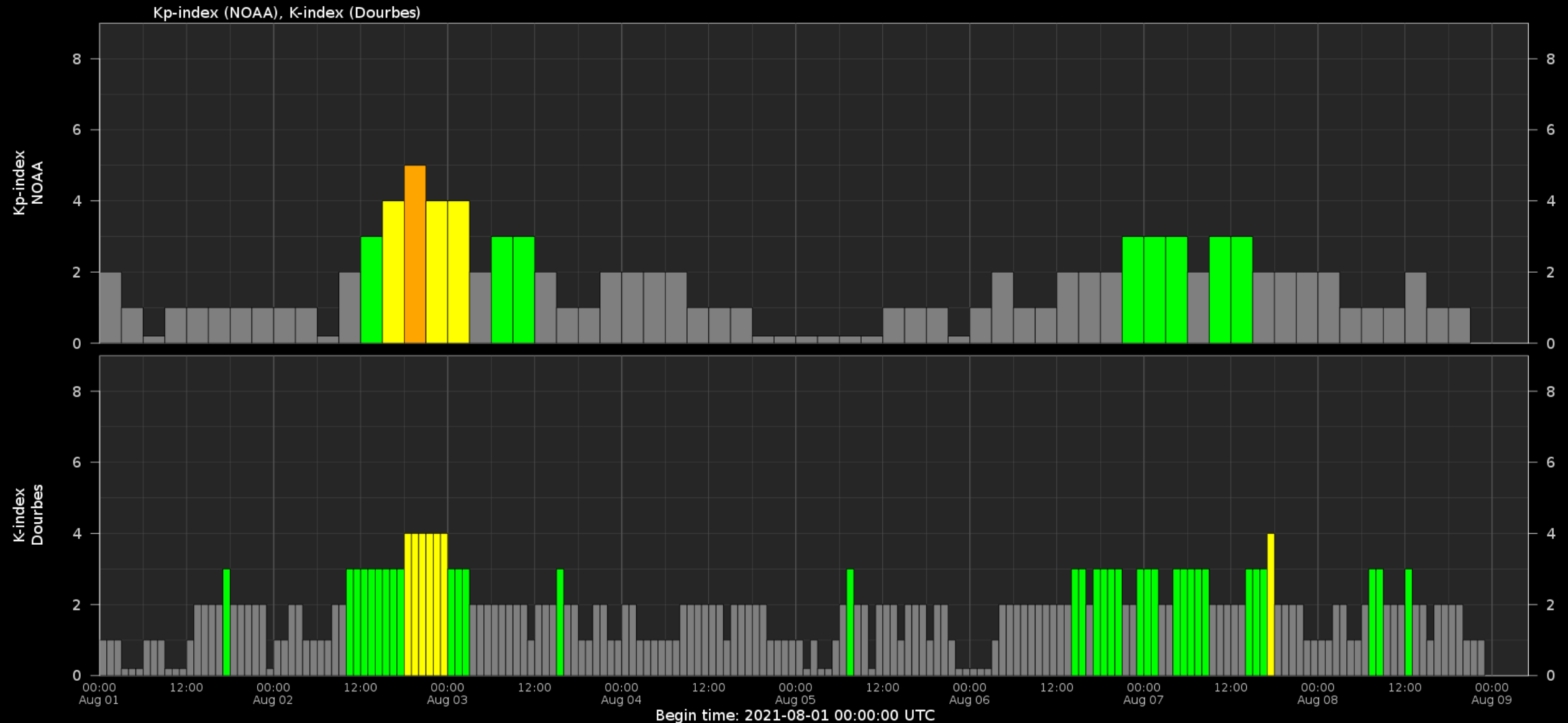
Solar wind parameters



Solar wind parameters & K-indices



Geomagnetic activity (K-indexes)

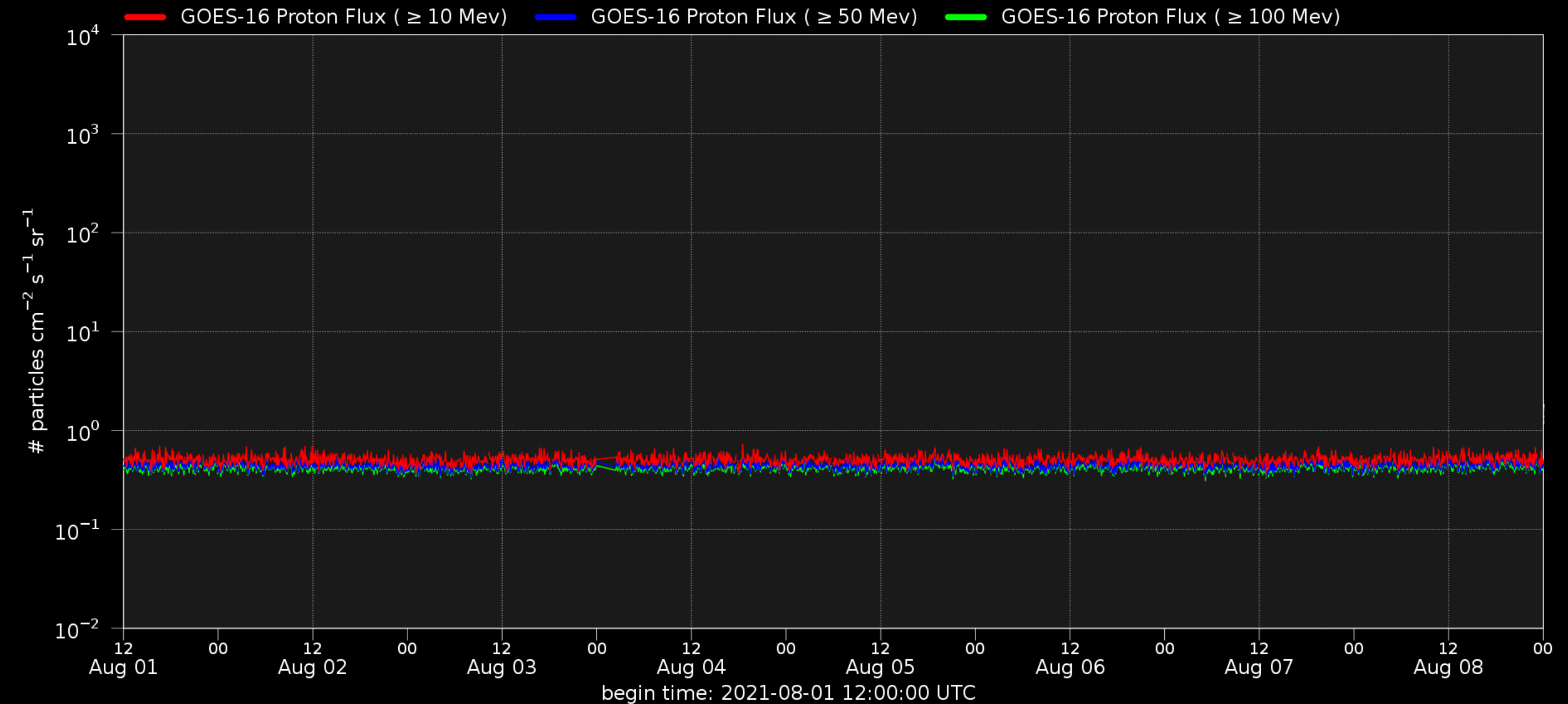


Energetic Particles

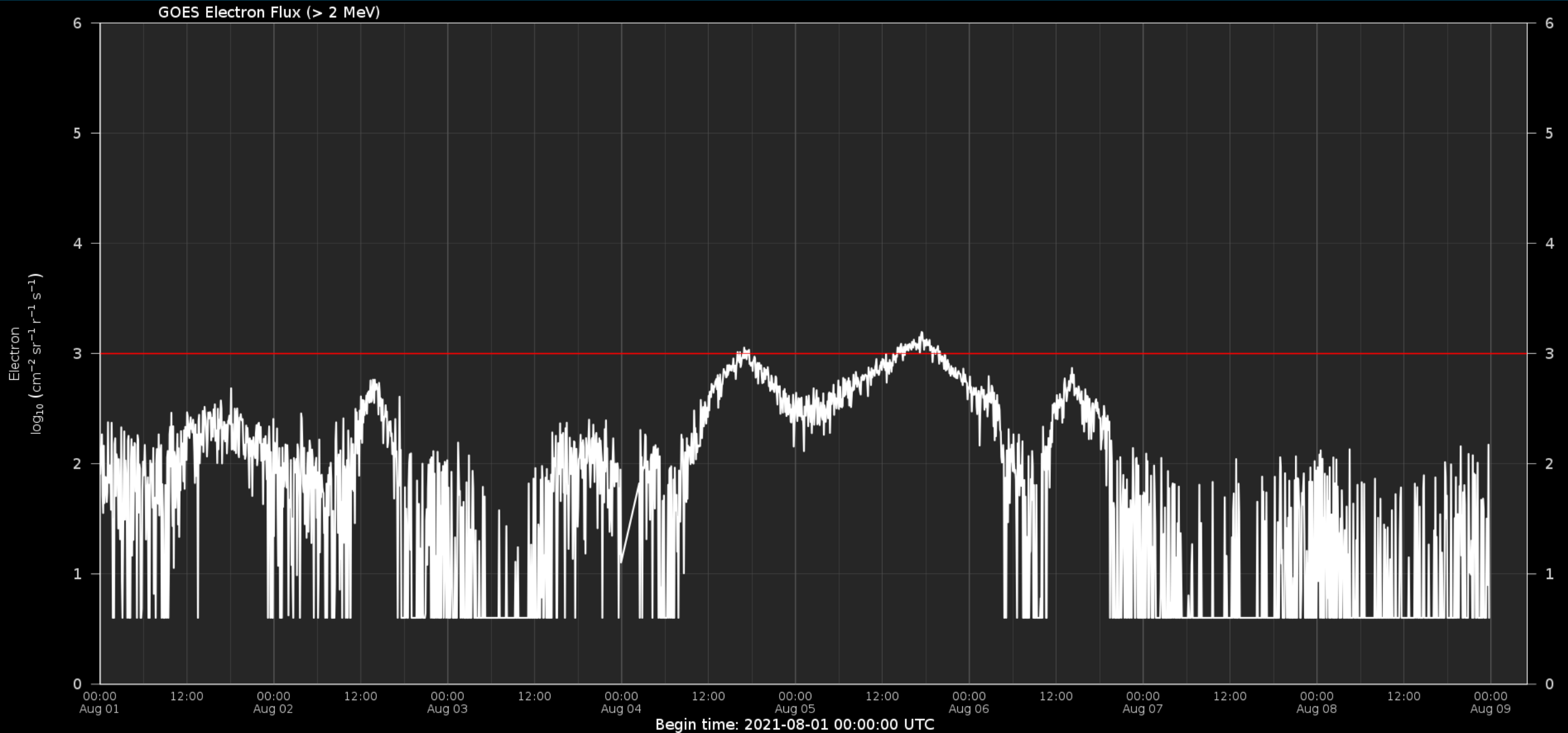


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Solar proton flux



Electron flux at GEO



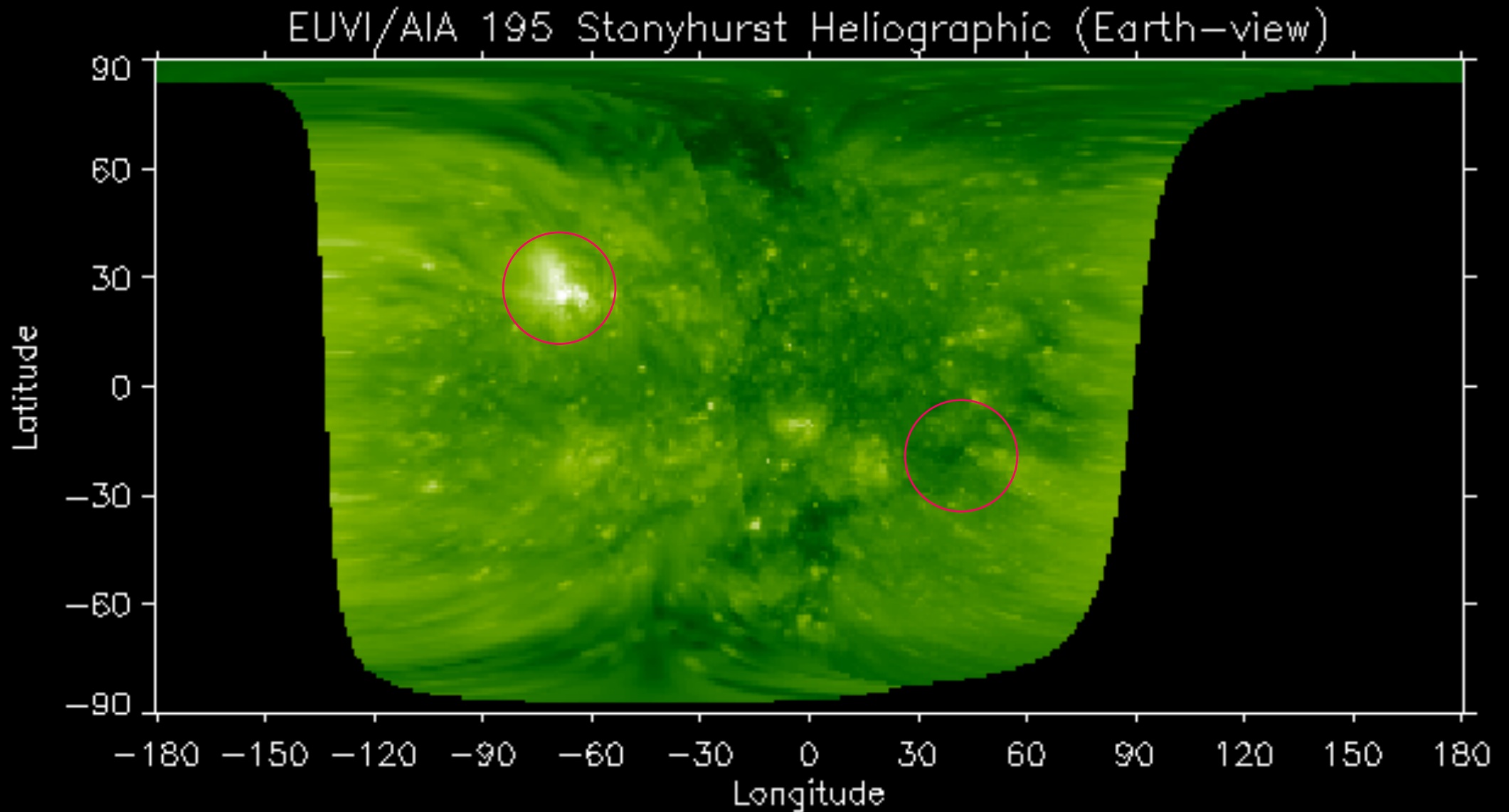
Outlook



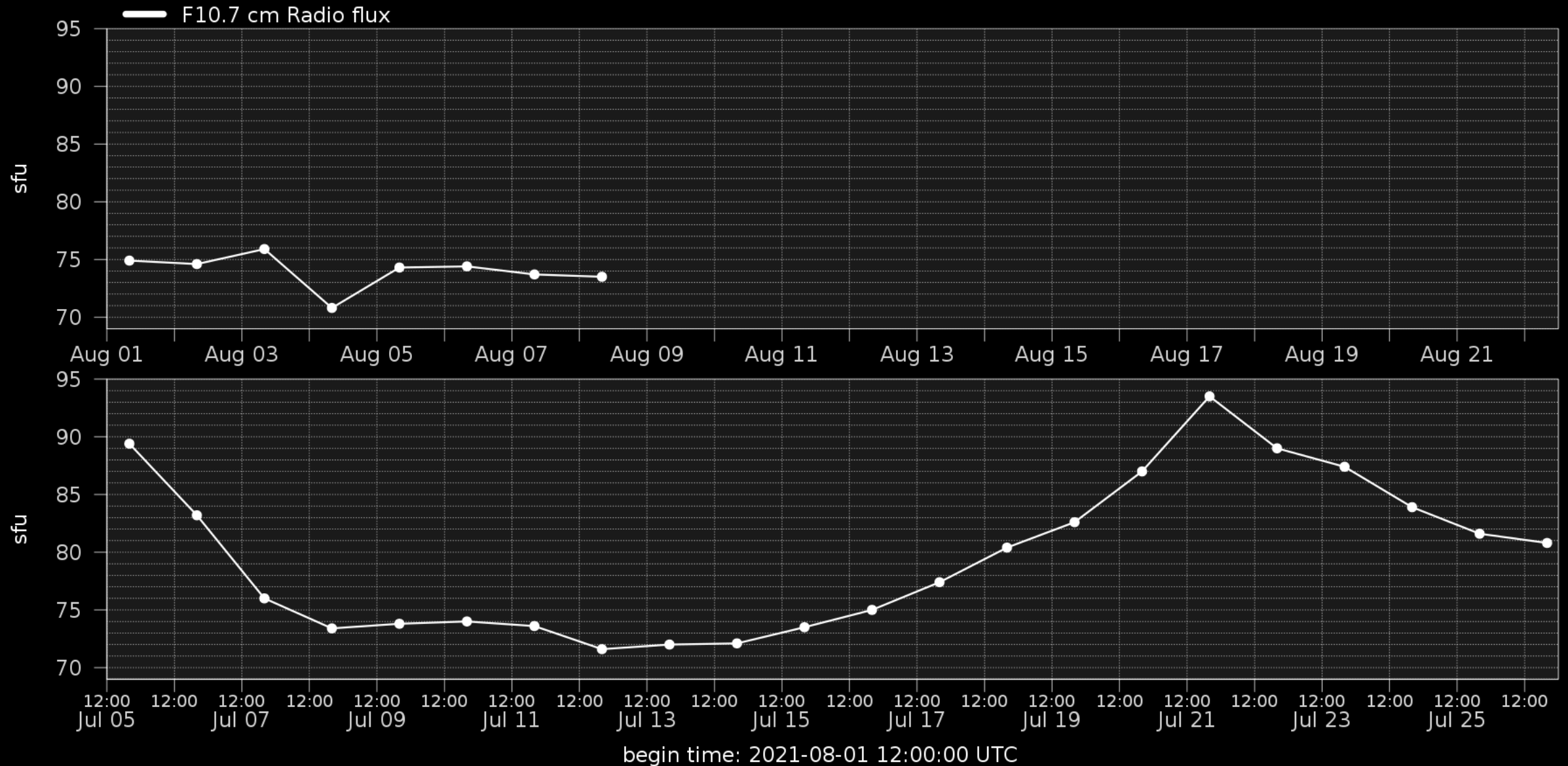
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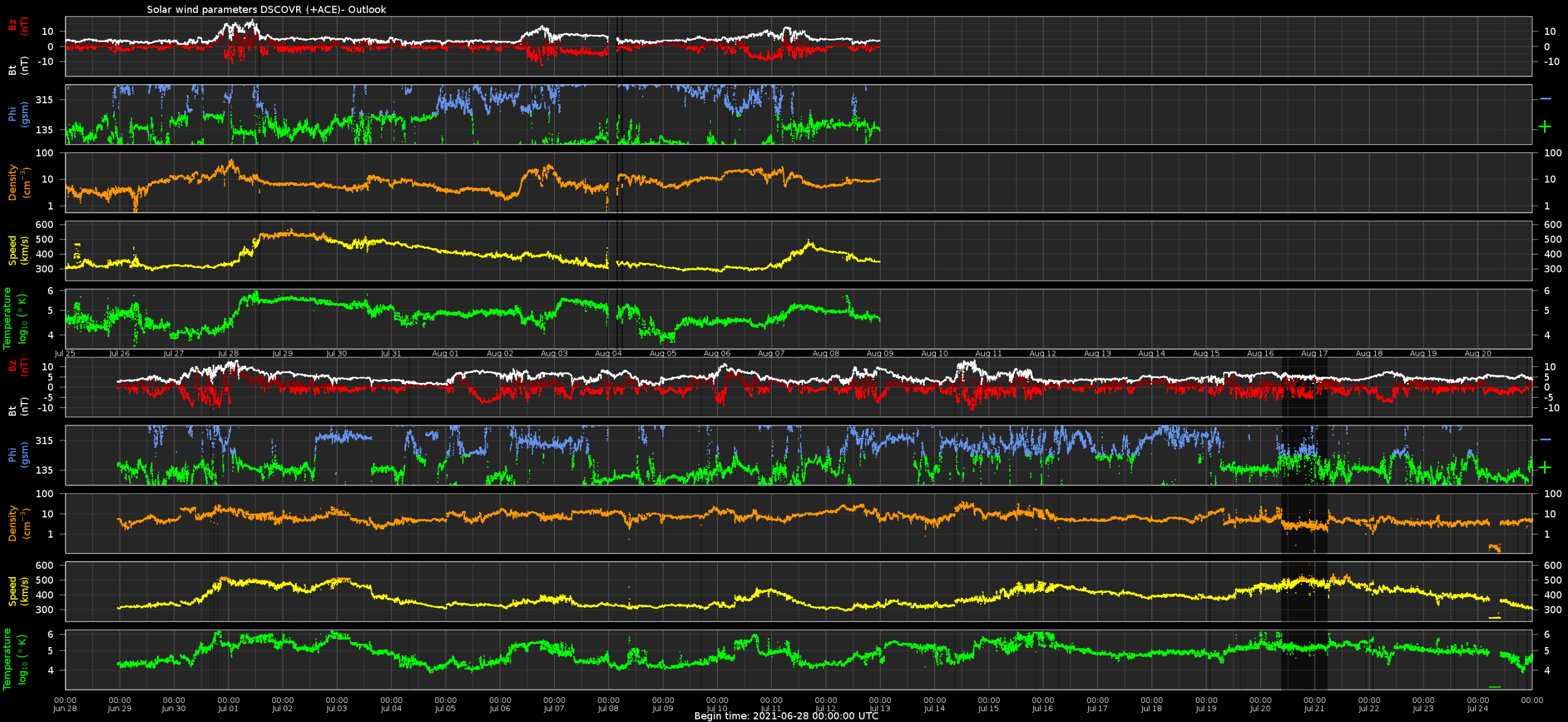
Outlook: Solar activity



Outlook: Solar F10.7cm radio flux



Outlook: Solar wind parameters



Outlook: Electron Flux at GEO Outlook



SIDC Space Weather Briefing

See you at our next briefing!

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