

SIDC Space Weather Briefing

16 August 2020 - 23 August 2020

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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 2020-08-16 12:00 UT to 2020-08-23 12:00 UT

Active regions	NOAA AR 2271, NOAA AR 2772
Flaring	# B-class flare: 9 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	One eruption, no Earth directed event
CMEs	None Earth directed
Proton Events	None

Solar wind and geomagnetic conditions from 2020-08-16 12:00 UT to 2020-08-23 12:00 UT

Coronal Holes	Two negative equatorial + extension of northern coronal hole
ICME	None
SW Conditions	Quiet
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 3

All Quiet Alert: On apart from Tuesday, Wednesday and Thursday

Solar Activity

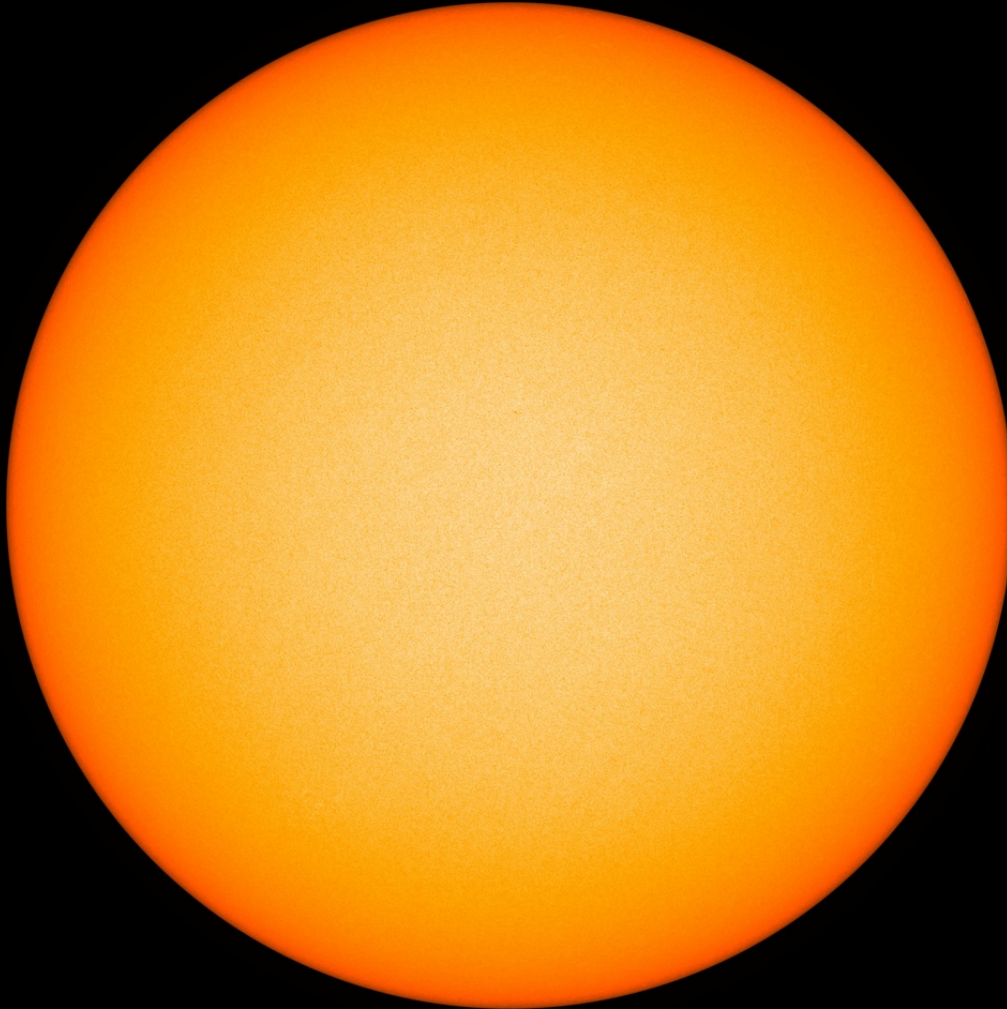


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Solar active region - start of the week

SDO/HMI White Light 2020-08-16

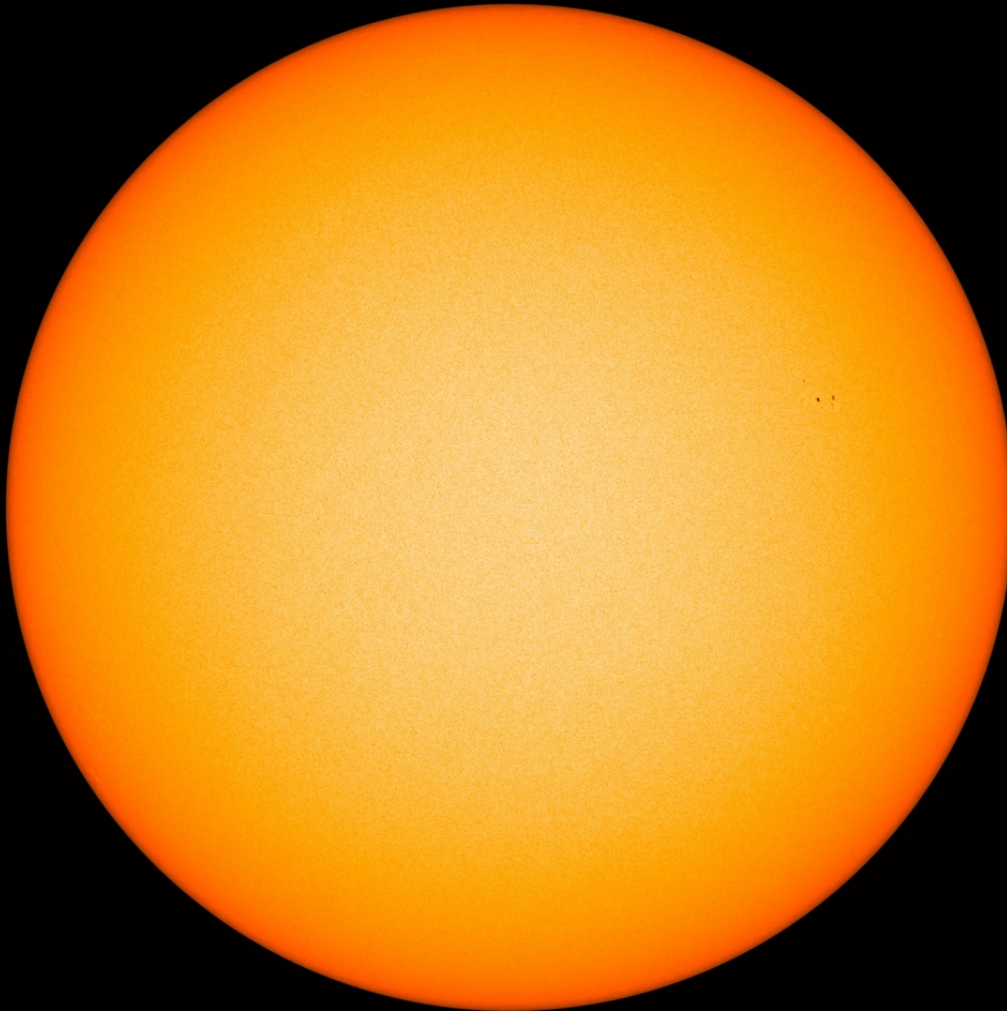


SDO/HMI Magnetogram 2020-08-16



Solar active region - middle of the week

SDO/HMI White Light 2020-08-19



SDO/HMI Quick-Look Continuum: 20200819_114500

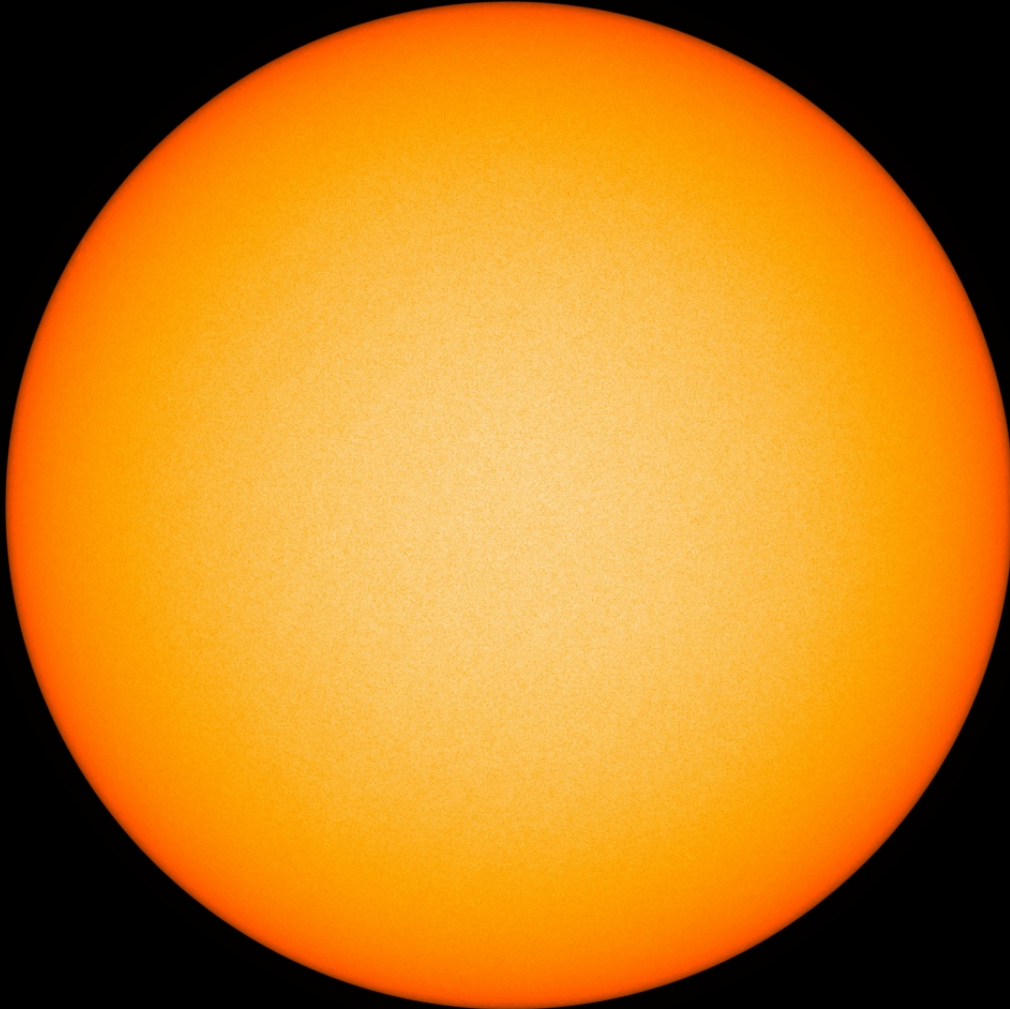
SDO/HMI Magnetogram 2020-08-19



SDO/HMI Quick-Look Magnetogram: 20200819_114500

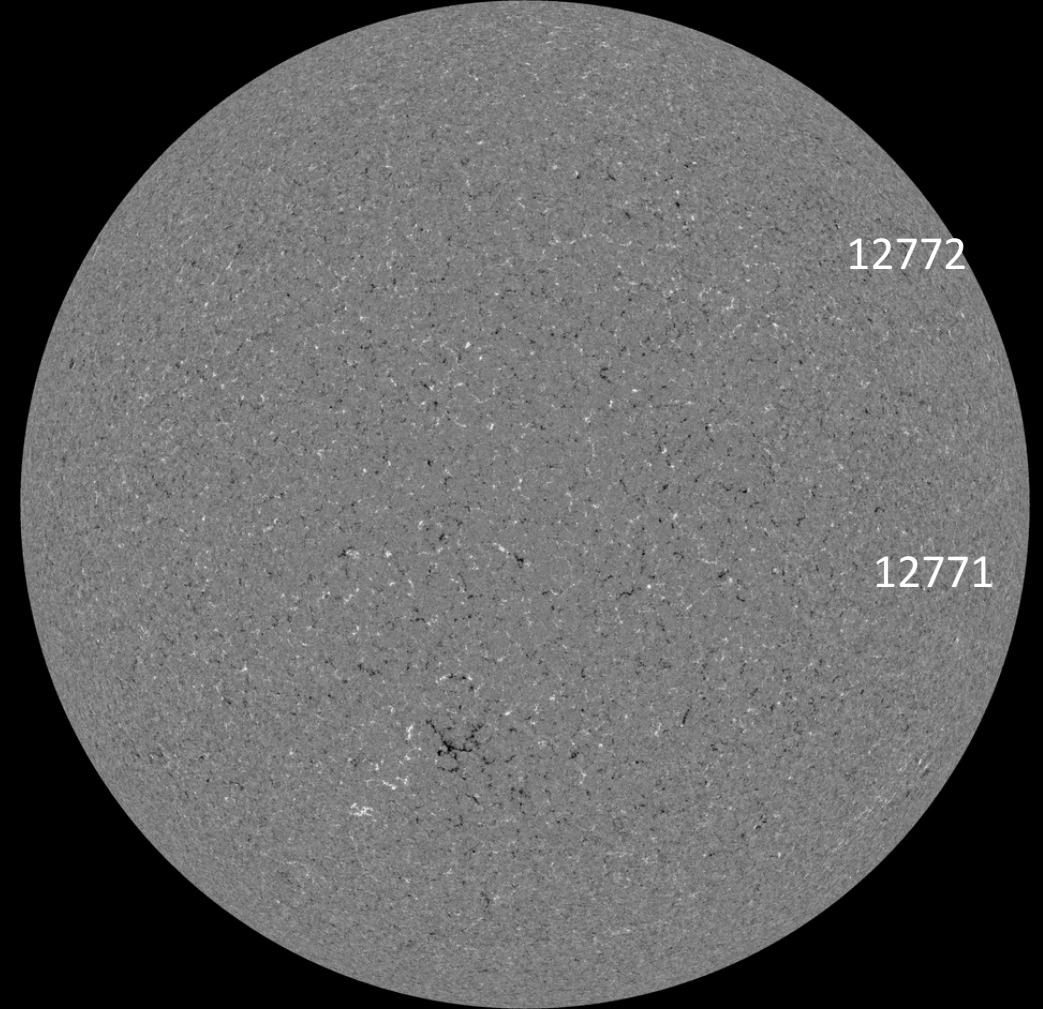
Solar active region - end of the week

SDO/HMI White Light 2020-08-23



SDO/HMI Quick-Look Continuum: 20200823_114500

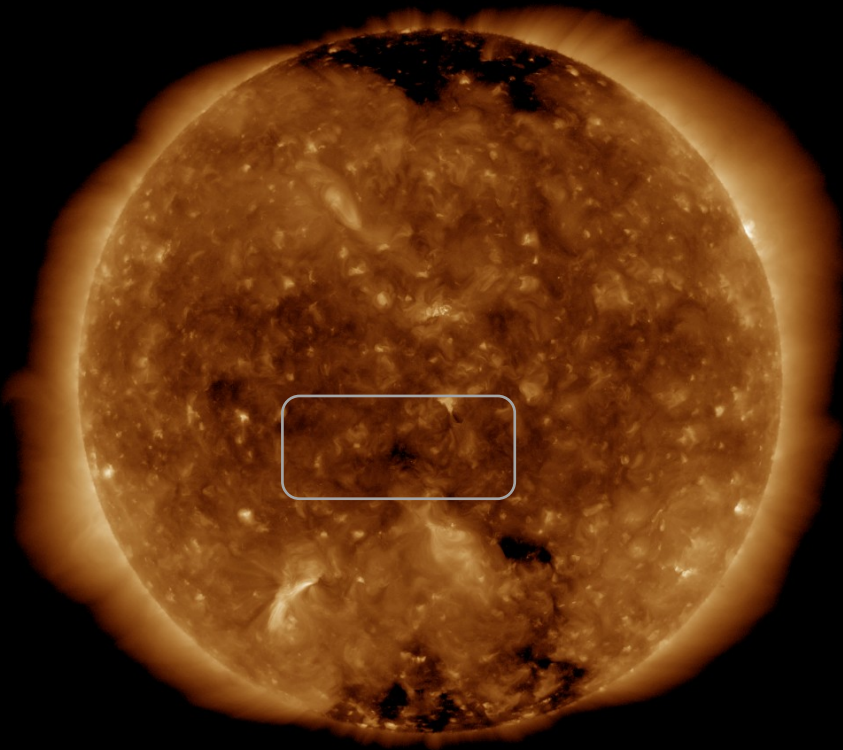
SDO/HMI Magnetogram 2020-08-23



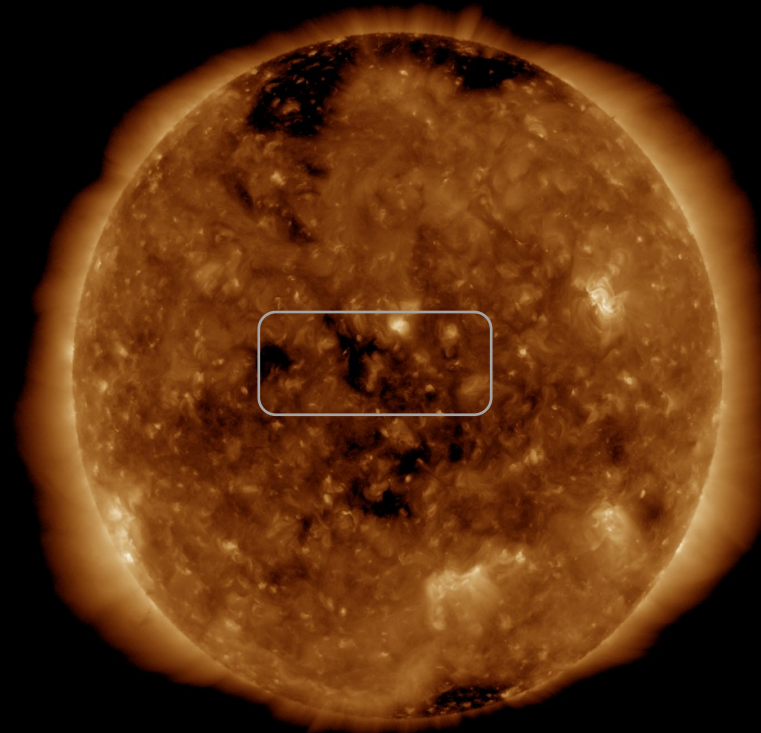
SDO/HMI Quick-Look Magnetogram: 20200823_114500

Solar active region & Coronal hole

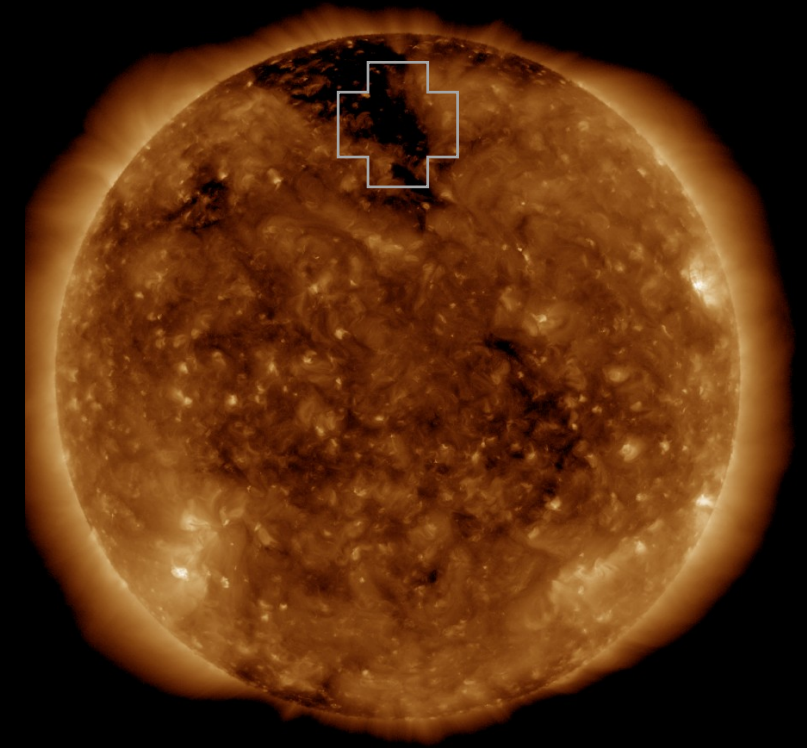
SDO/AIA 19.3 nm 2020-08-16



SDO/AIA 19.3 nm 2020-08-19



SDO/AIA 19.3 nm 2020-08-21



SDO/AIA 193 2020-08-16 12:17:29 UT

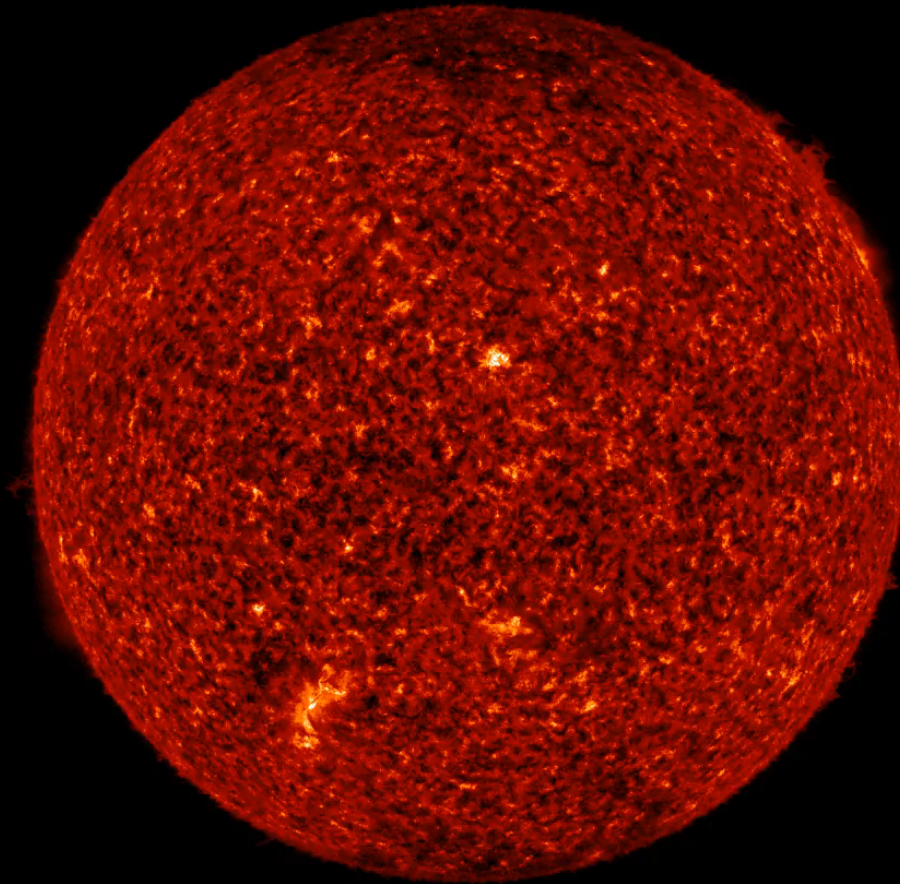
SDO/AIA 193 2020-08-19 12:17:53 UT

IA 193 2020-08-21 12:17:41 UT

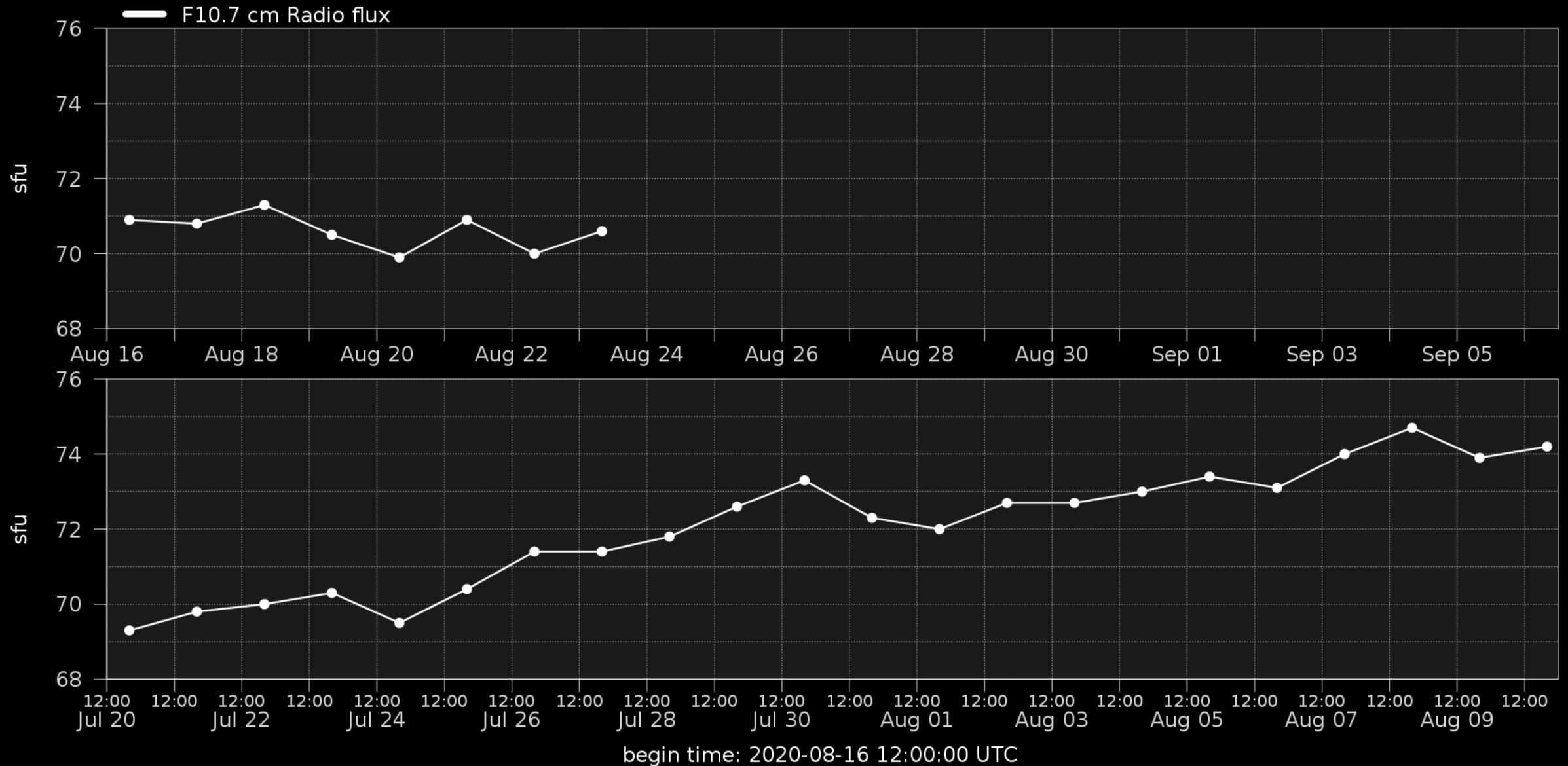
Solar active region & Filament

SDO/AIA AIA 304Å 2020-08-16T17:00:06.58

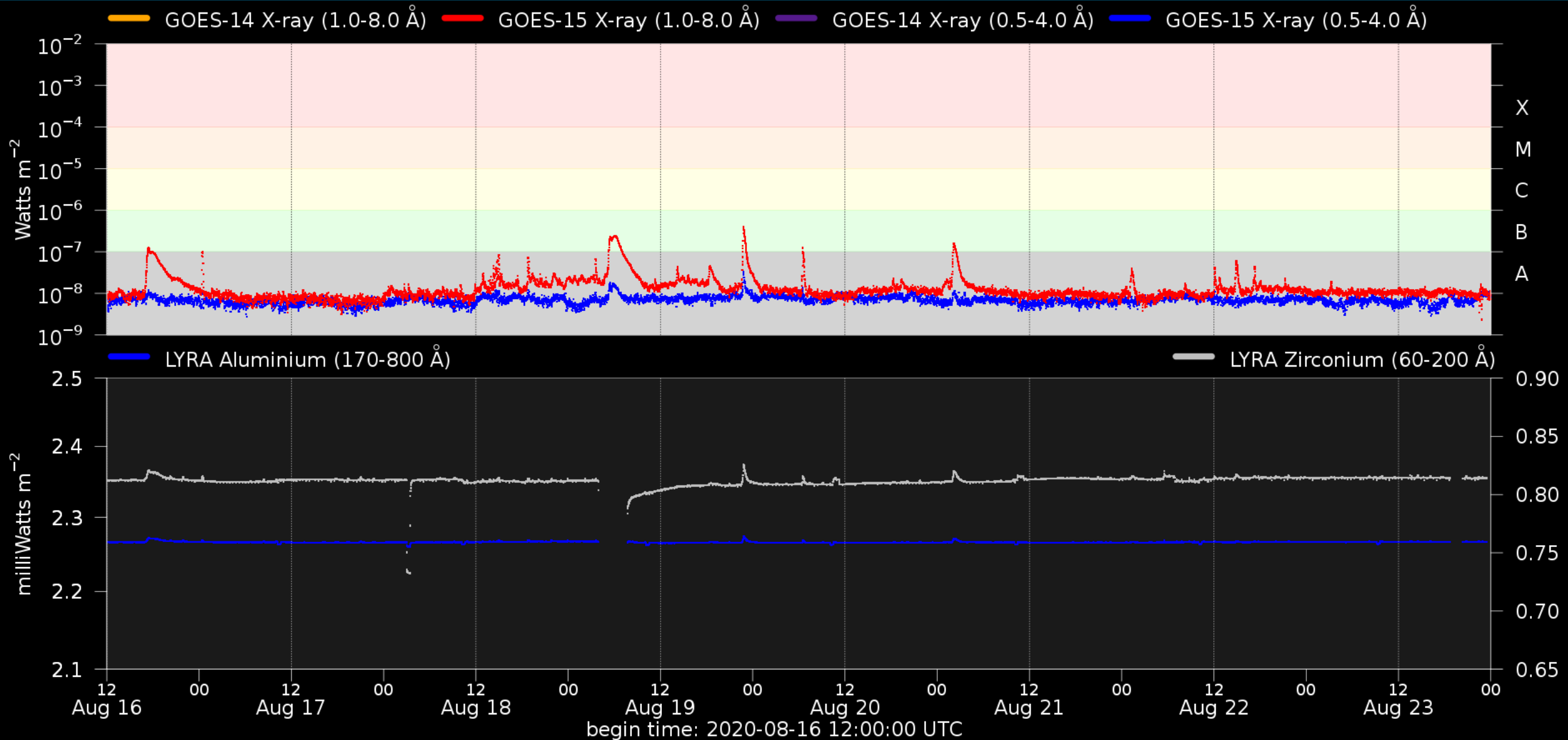
SDO/AIA 30.4 nm
2020-08-16



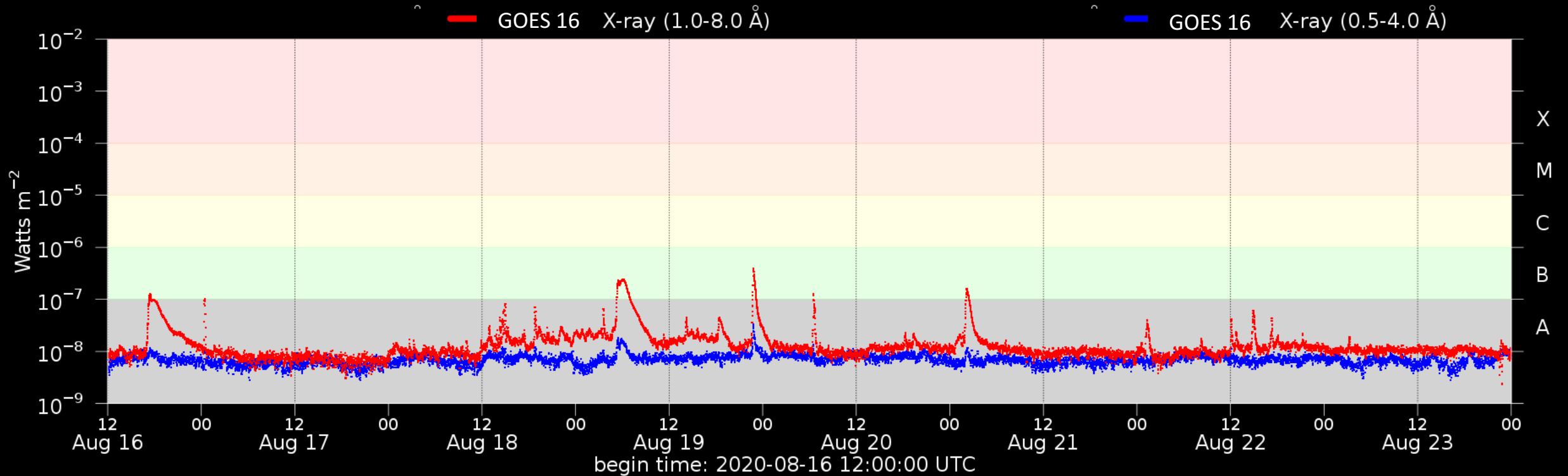
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity

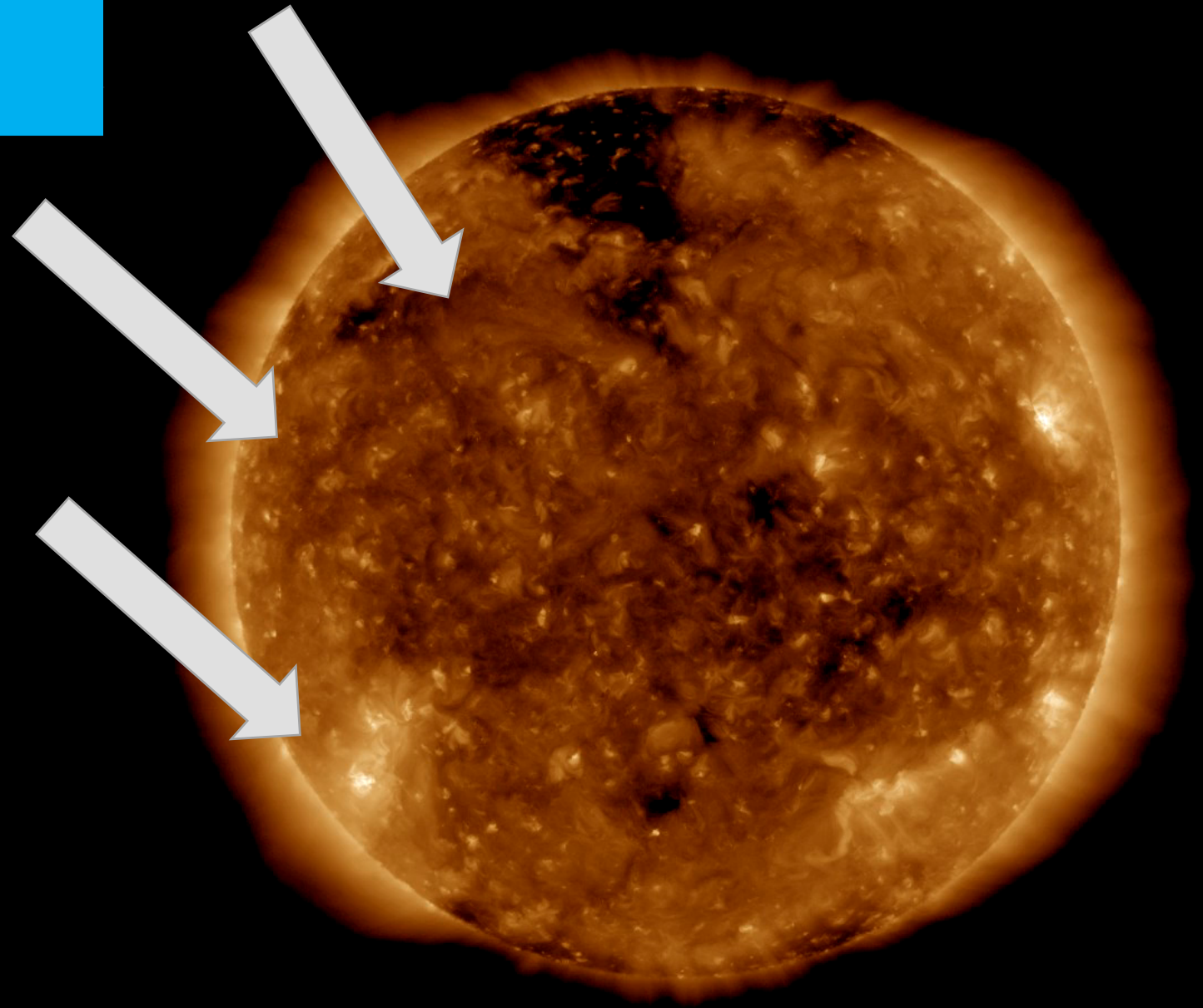


Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2020-08-16	2020-08-17	2020-08-18	2020-08-19	2020-08-20	2020-08-21	2020-08-22	2020-08-23
Probability	--- 01 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 01 01 01
Observed	02 00 00 00	00 00 00 00	02 00 00 00	04 00 00 00	01 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

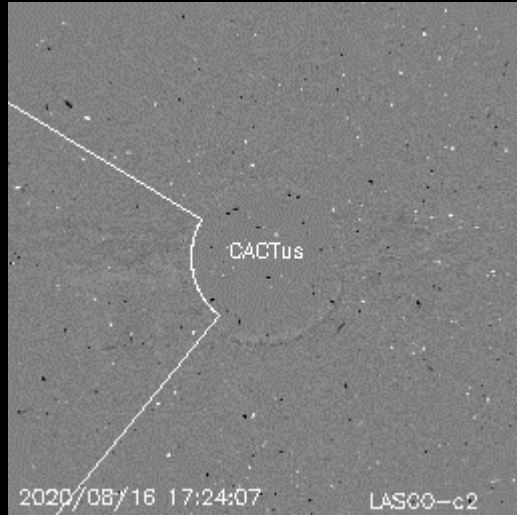
Flare and dimming

Aug 21st
B1.6 flare
01:58UT

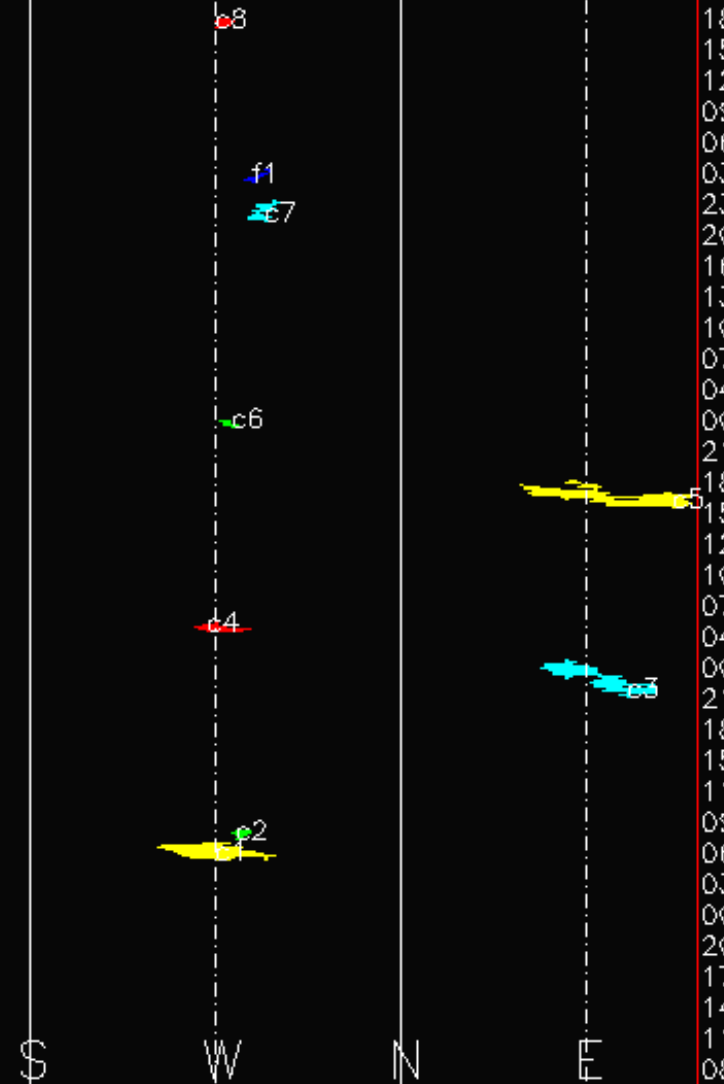
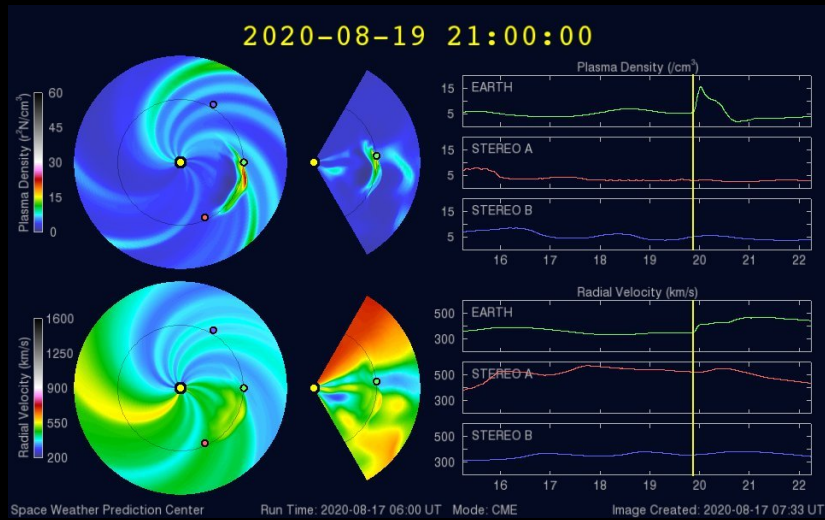
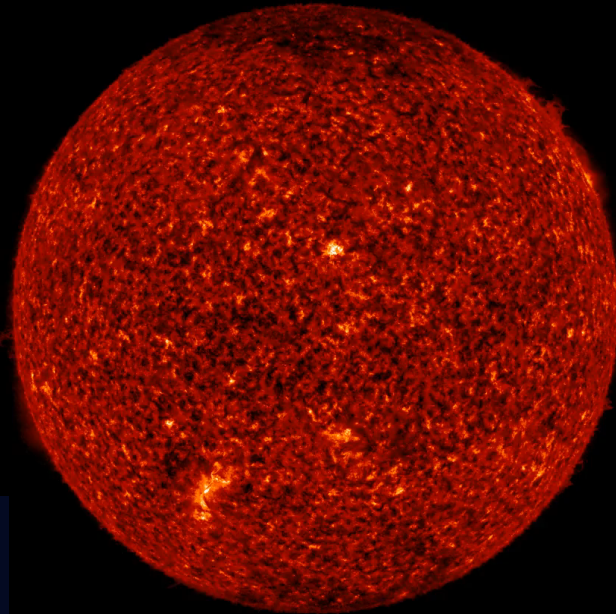


SDO/AIA 193 2020-08-21 00:07:17 UT

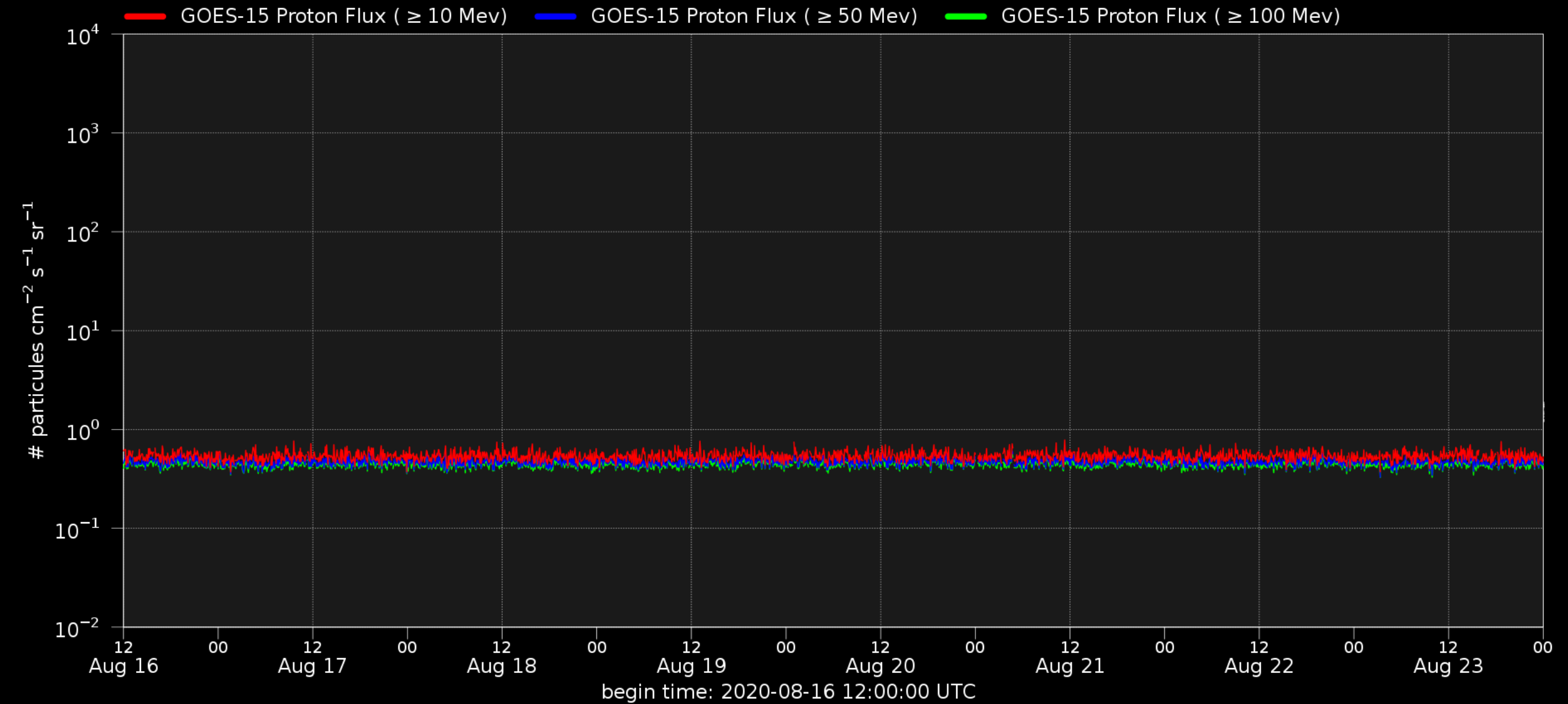
Coronal Mass Ejection



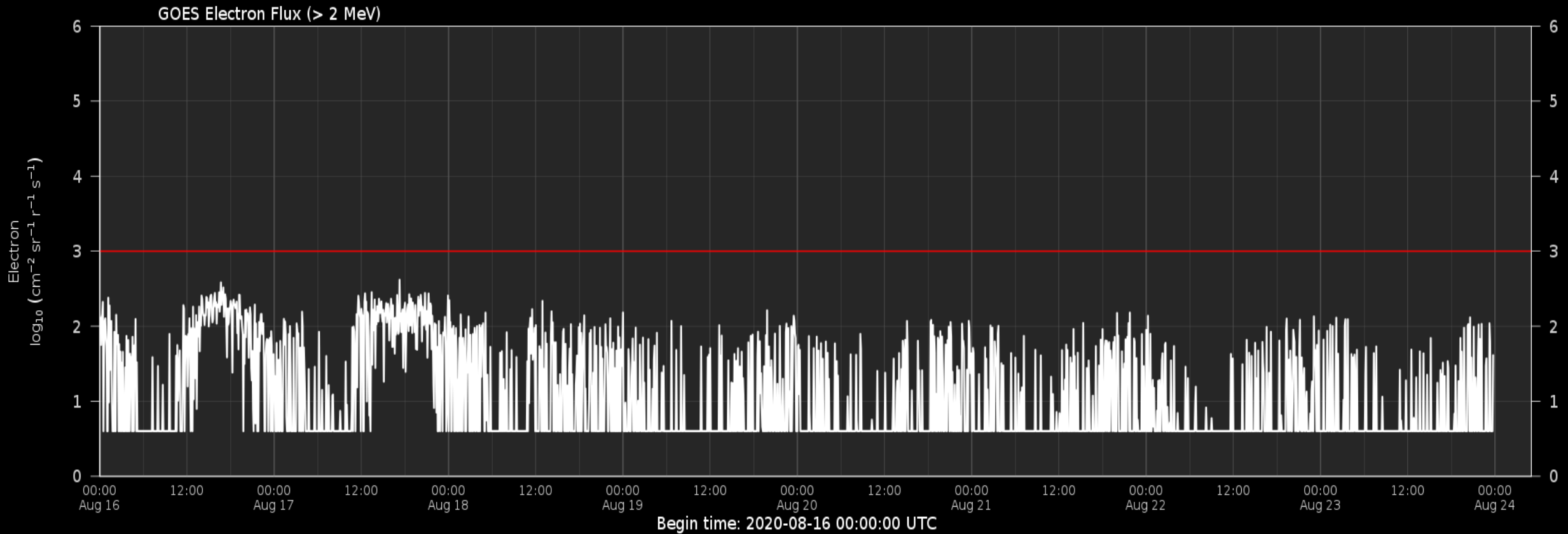
SDO/AIA AIA 304Å 2020-08-16T17:00:06.58



Solar proton flux



Solar electron flux



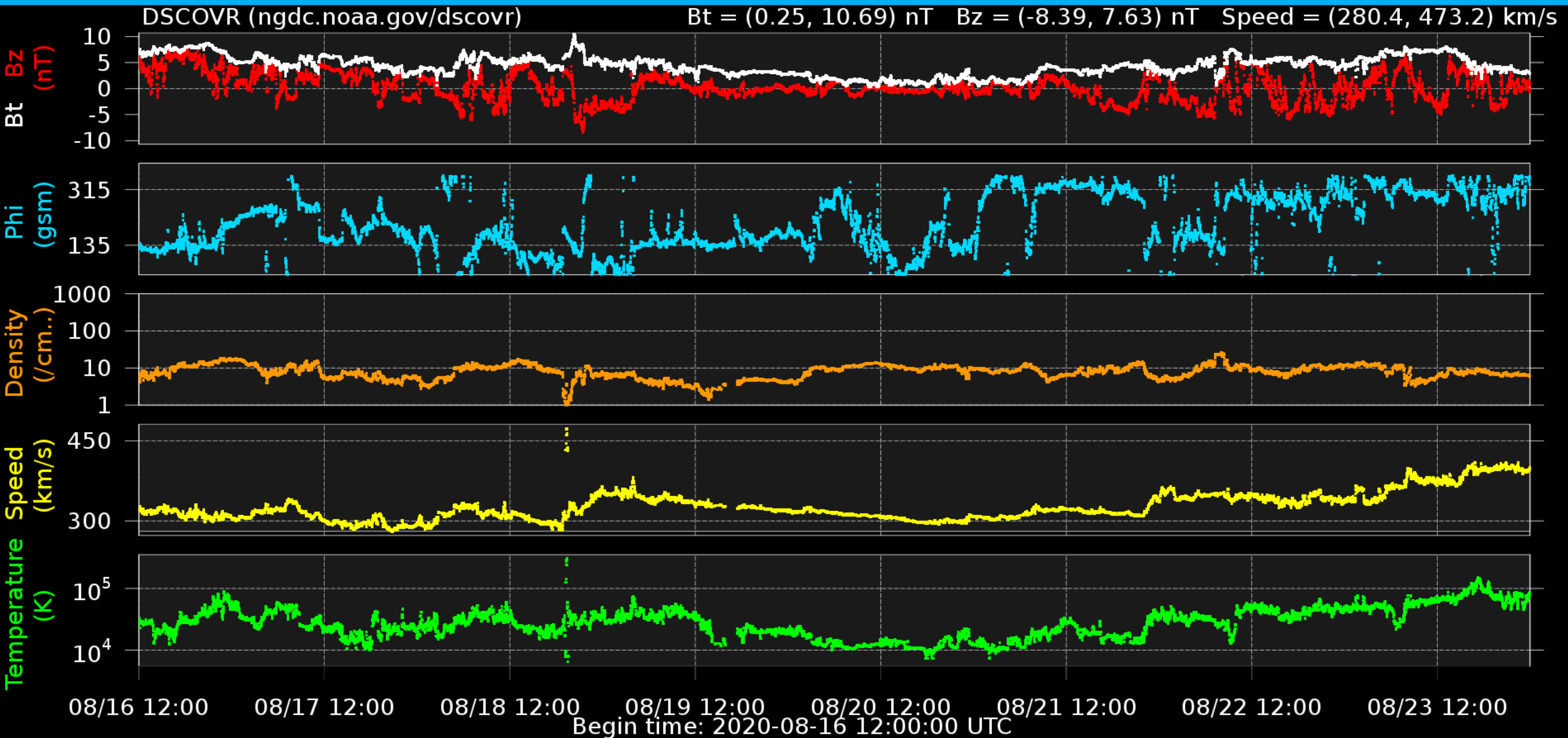
Solar Wind and Geomagnetic Activity



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Solar wind parameters (DSCOVR data)



Solar wind parameters & K-index (DSCOVR/Dourbes)



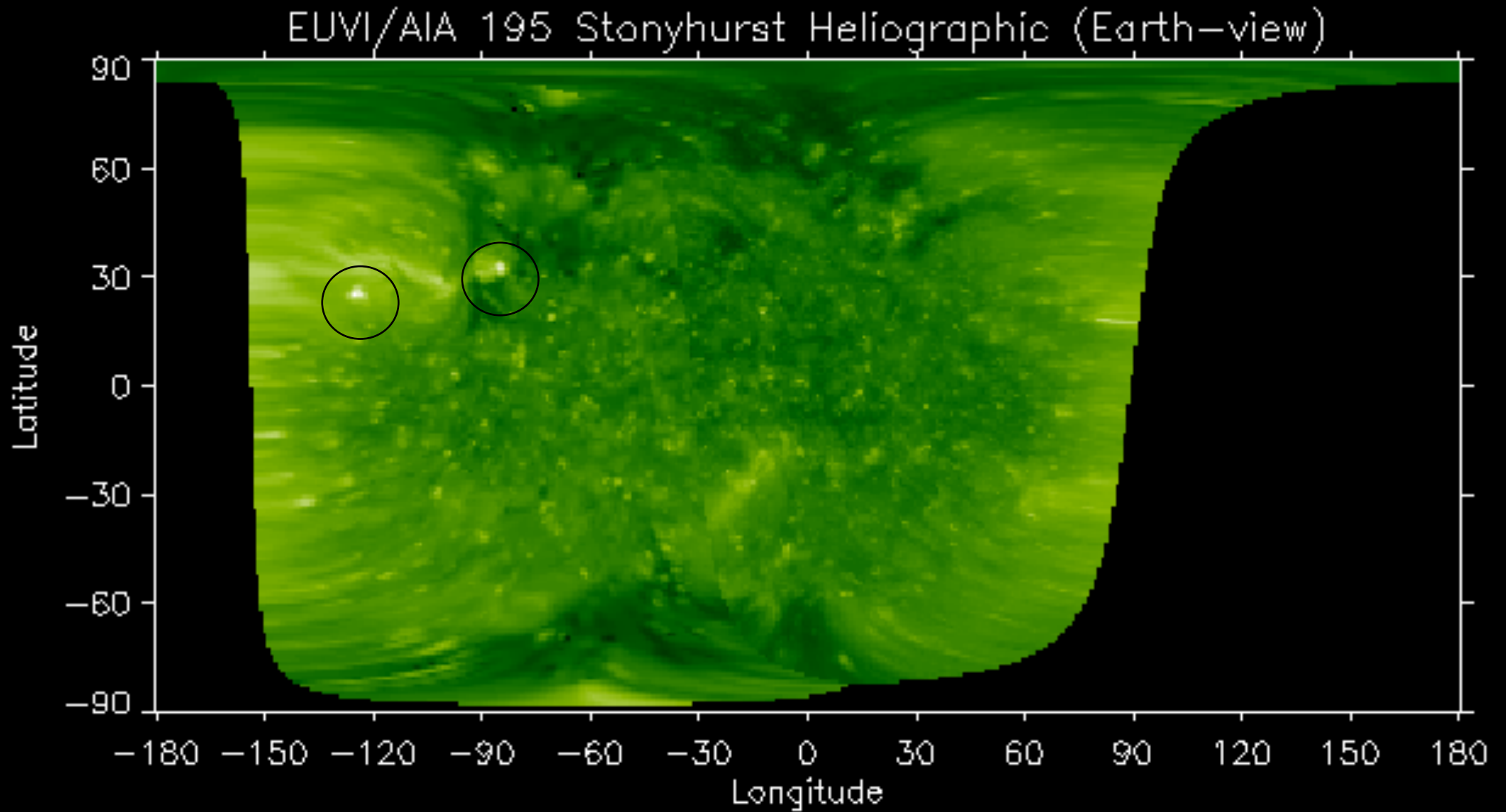
Outlook



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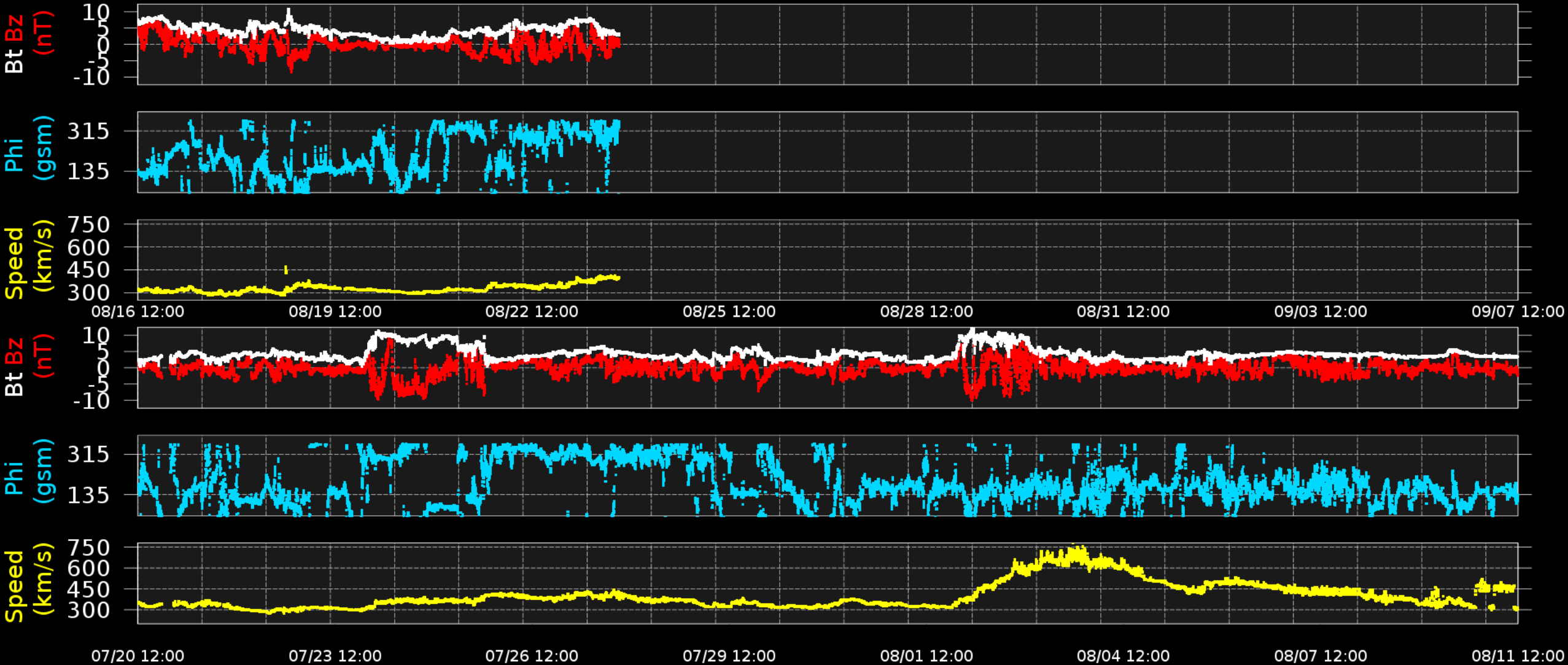
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Outlook: Solar activity



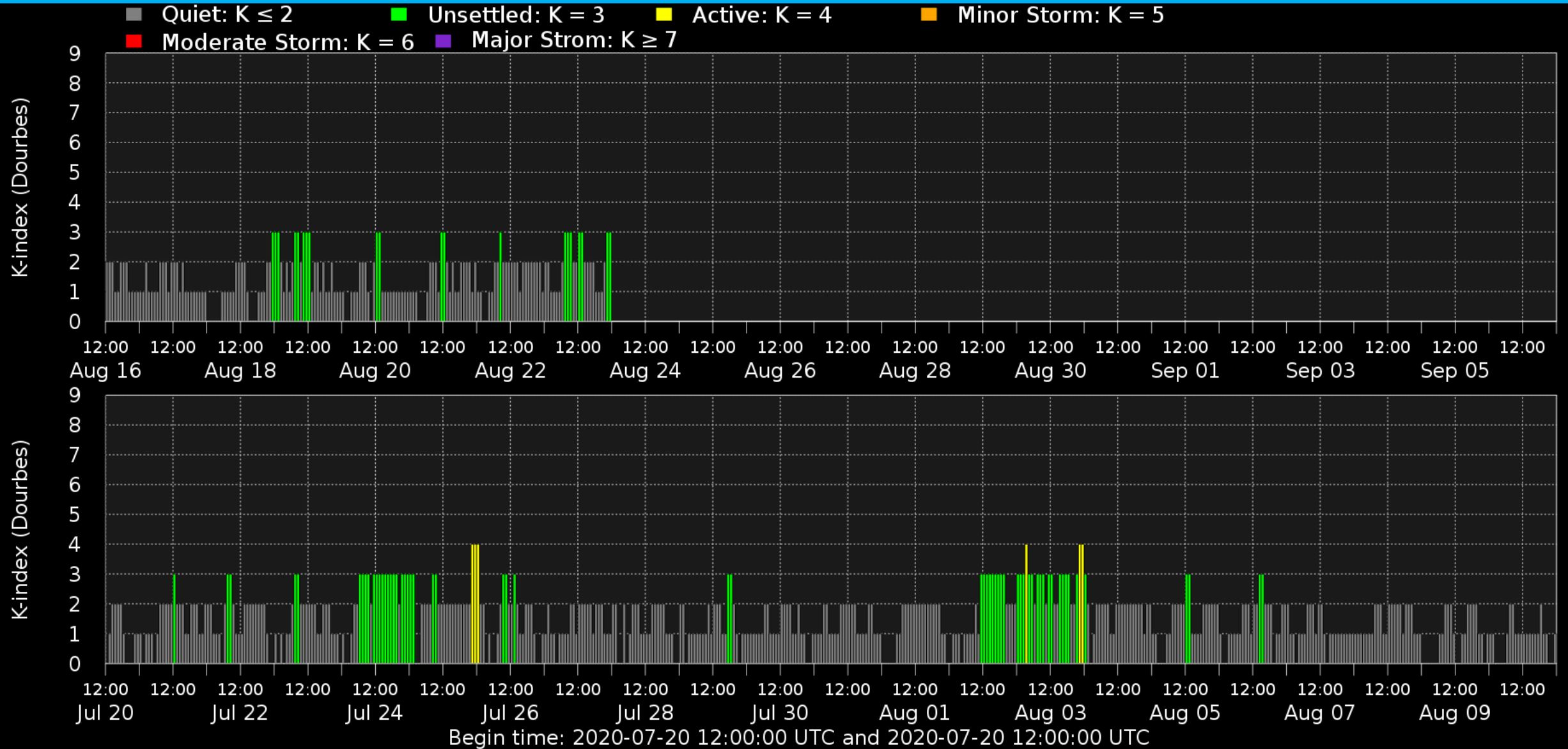
Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2020-07-20 12:00:00 UTC

Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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