

SIDC Space Weather Briefing

08 November 2020 - 15 November 2020

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& the SIDC forecaster team



Solar Influences
Data analysis Centre
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Summary Report

Solar activity from 2020-11-08 to 2020-11-15

Active regions	NOAA 2781 (Esi / BG) and NOAA 2782 (Eri / B)
Flares	# B-class flare: 27 # C-class flare: 4 # M-class flare: 0 # X-class flare: 0
Filament eruptions	Nothing particular
Coronal Holes	Nothing particular

Proton flux	Nominal levels
Electron flux	Nominal levels except on 11 November (2250 pfu)

Solar wind and geomagnetic conditions from 2020-11-08T12:00:00 to 2020-11-15T12:00:00

ICME	No obvious ICME signatures observed
SW Conditions	B : 0.89 - 10.53 nT // Bz: -5.81 nT to 5.03 nT // Speed: 298.4 - 478.6km/s
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 2

All Quiet Alert: OFF since 4 November

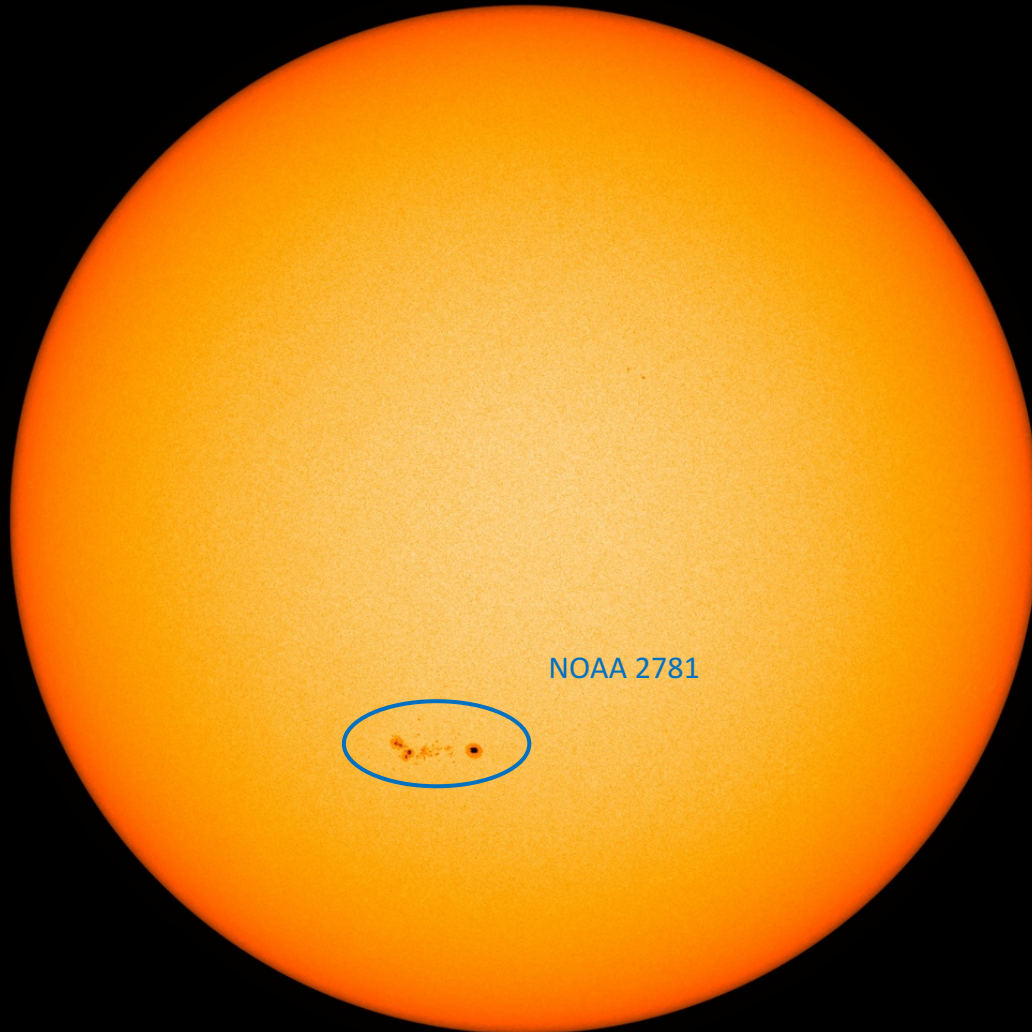
Solar Activity



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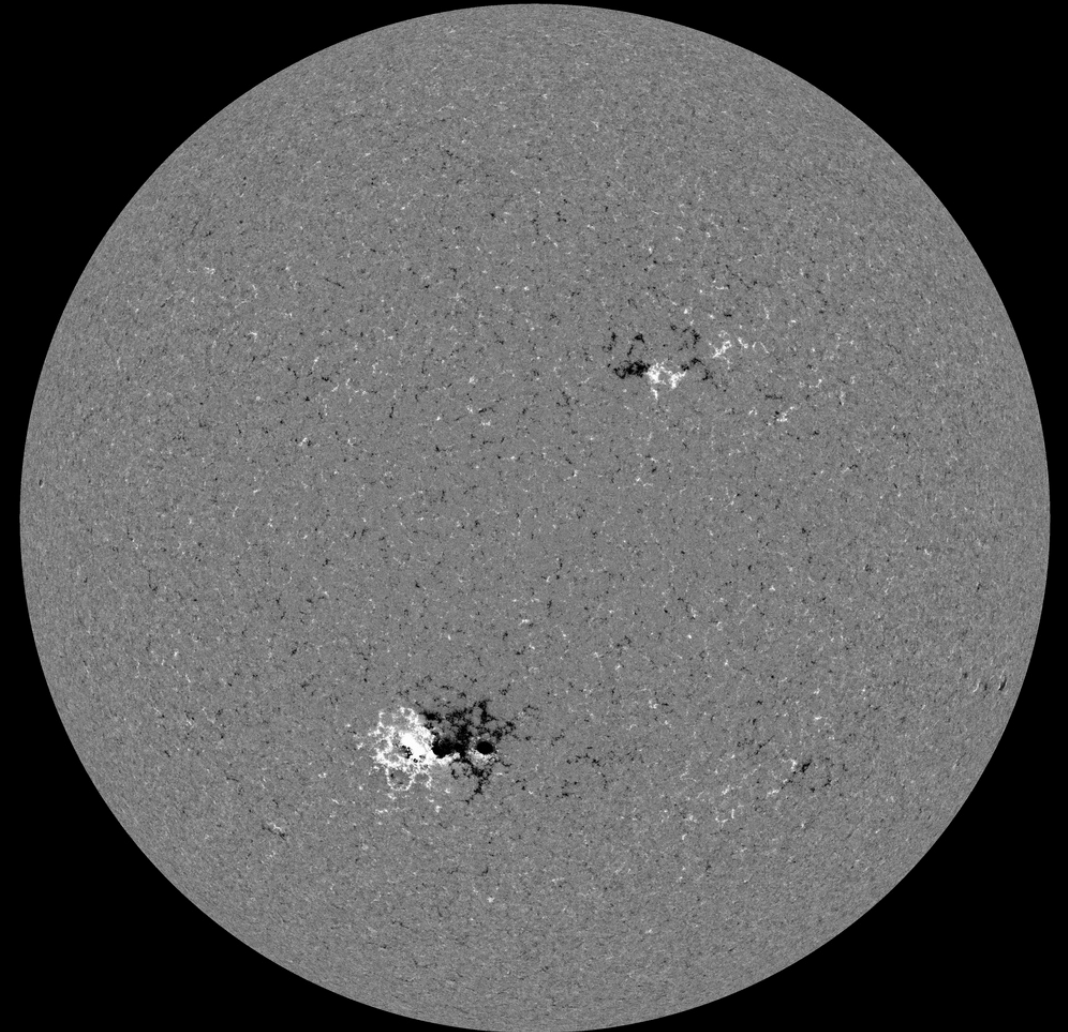
Solar active regions - Sunday

SDO/HMI White Light 2020-11-08



SDO/HMI Quick-Look Continuum: 20201108_114500

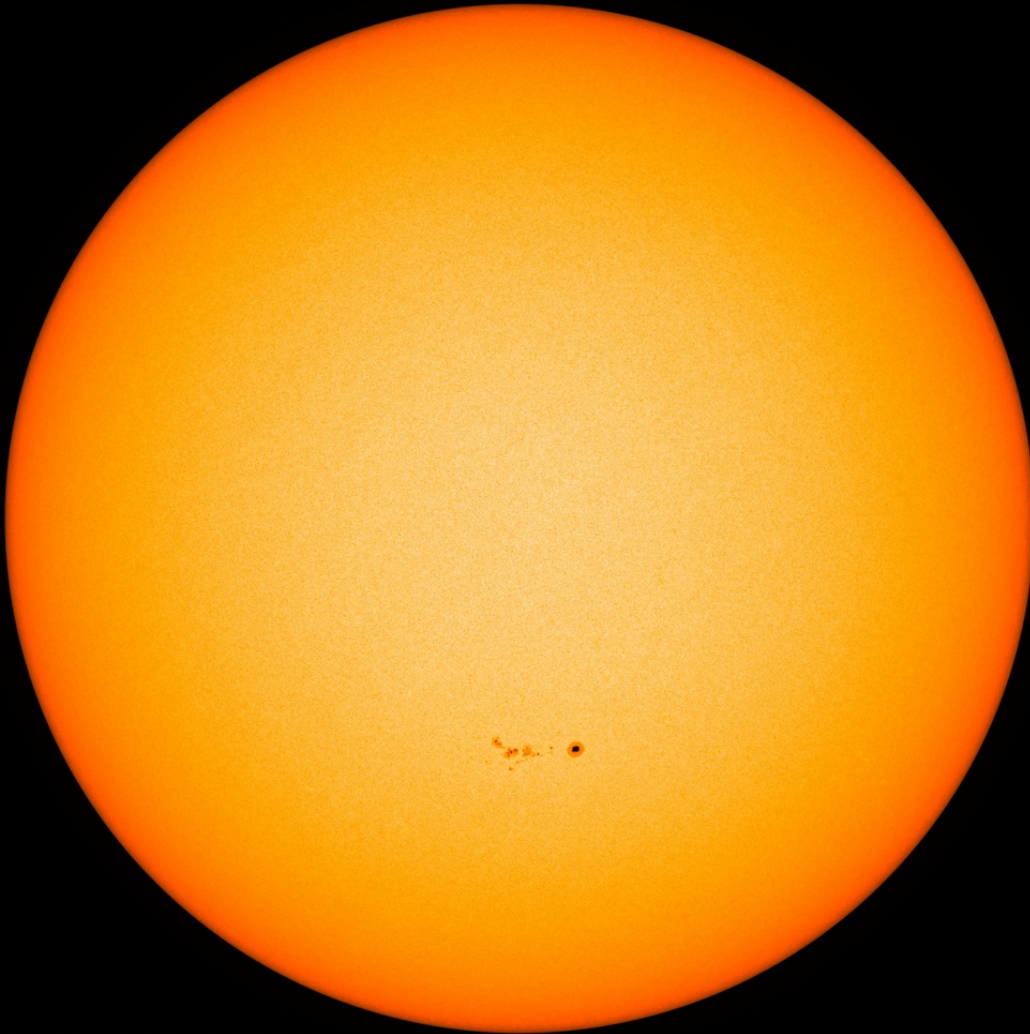
SDO/HMI Magnetogram 2020-11-08



SDO/HMI Quick-Look Magnetogram: 20201108_114500

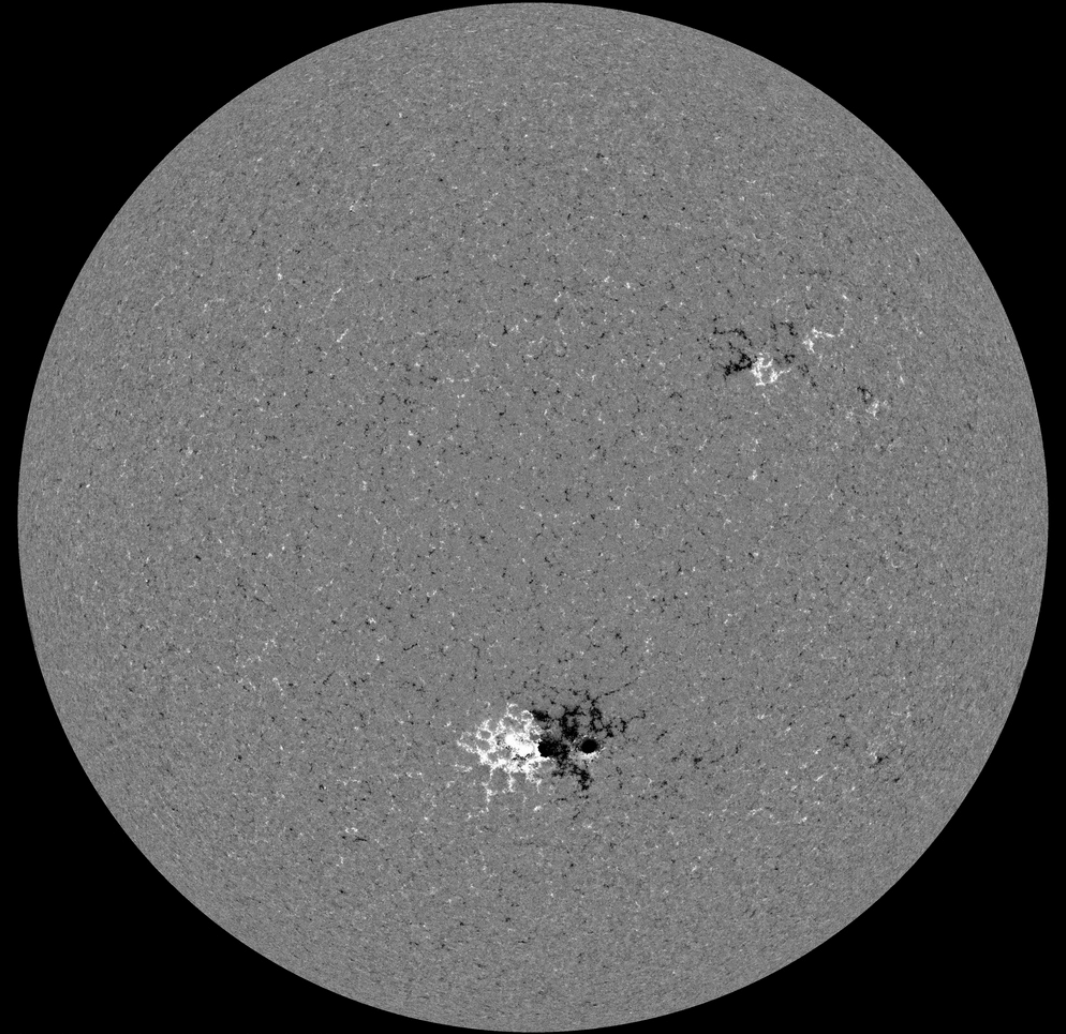
Solar active regions - Monday

SDO/HMI White Light 2020-11-09



SDO/HMI Quick-Look Continuum: 20201109_114500

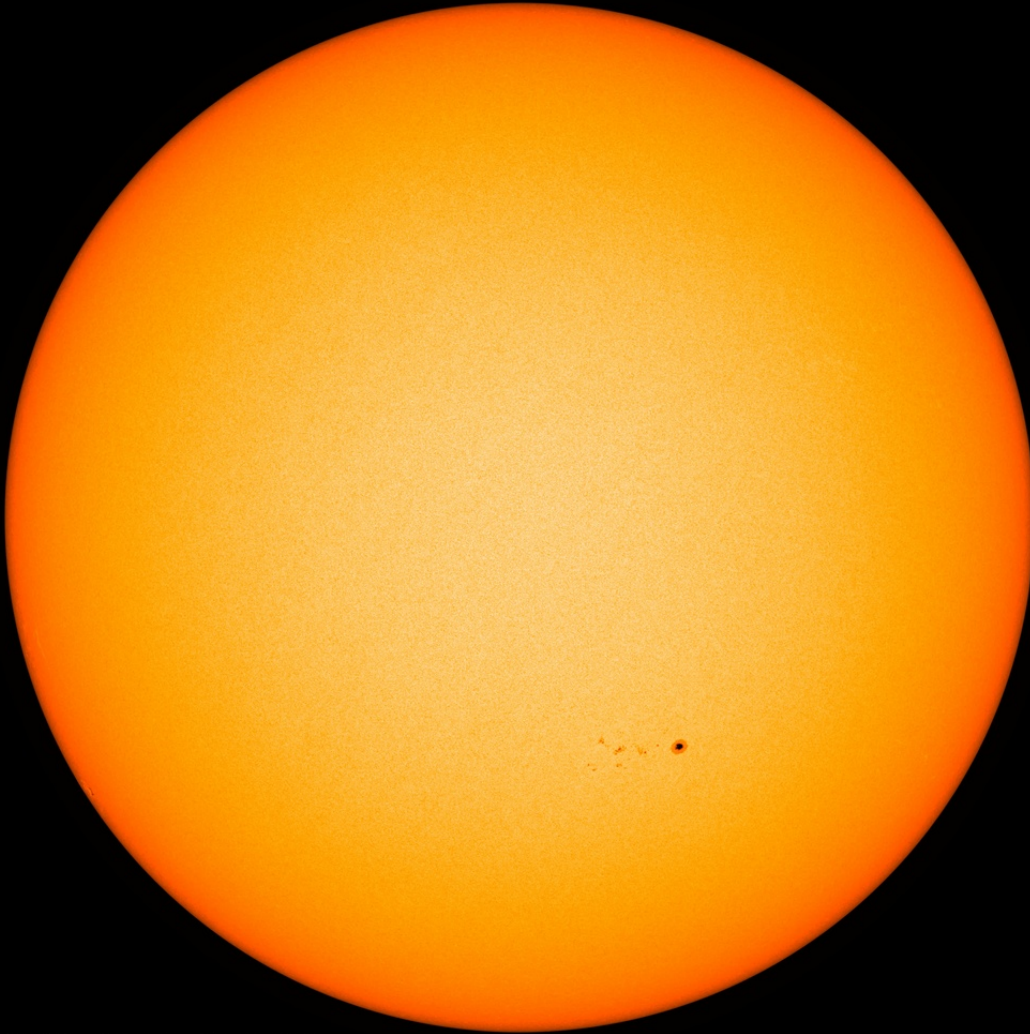
SDO/HMI Magnetogram 2020-11-09



SDO/HMI Quick-Look Magnetogram: 20201109_114500

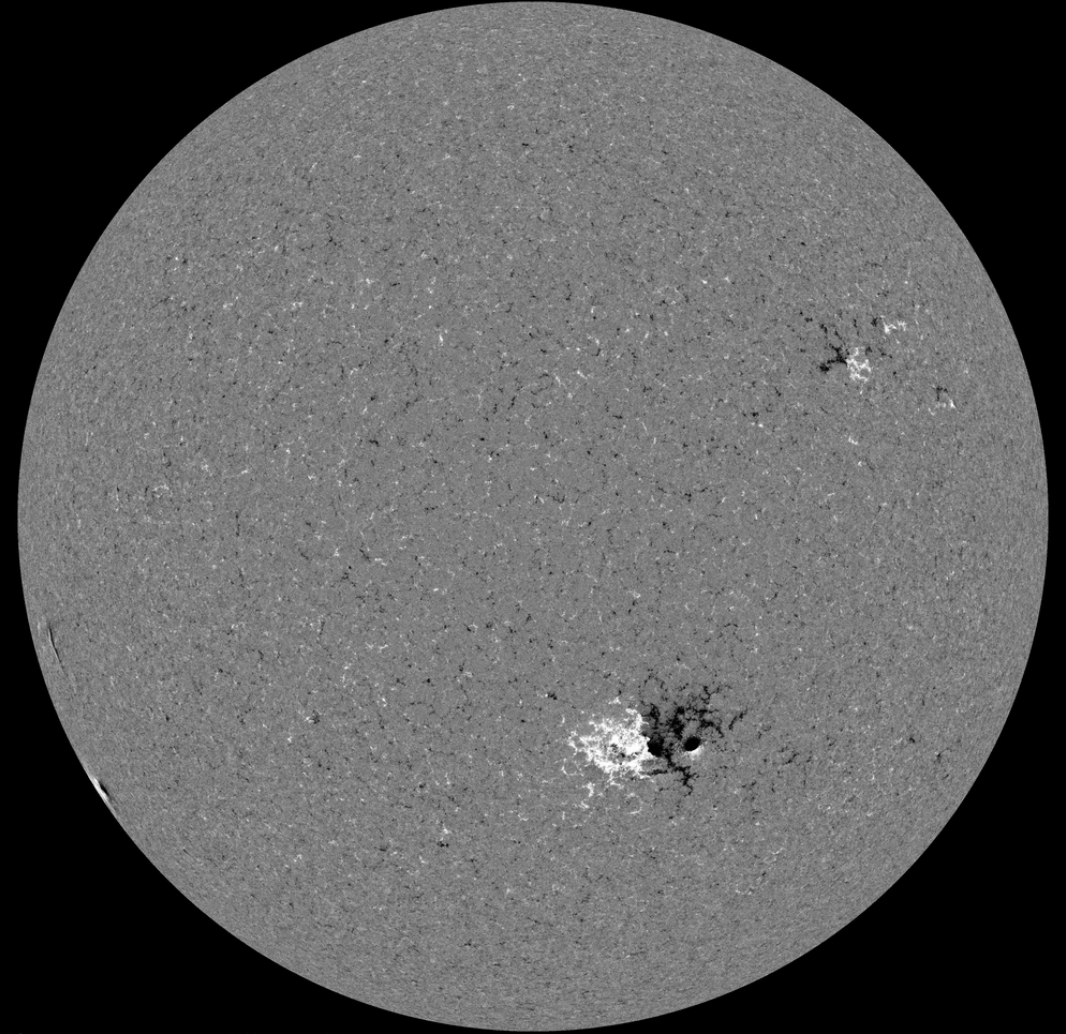
Solar active regions - Tuesday

SDO/HMI White Light 2020-11-10



SDO/HMI Quick-Look Continuum: 20201110_114500

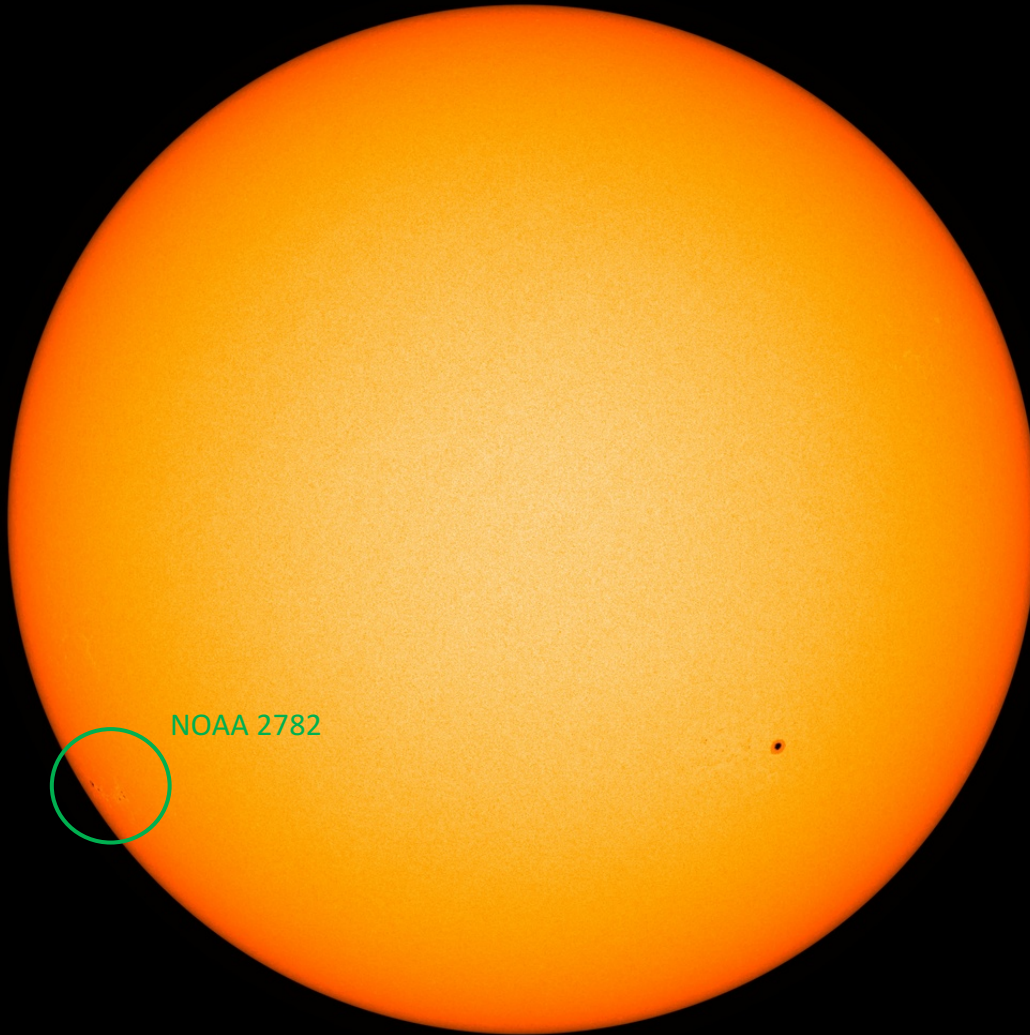
SDO/HMI Magnetogram 2020-11-10



SDO/HMI Quick-Look Magnetogram: 20201110_114500

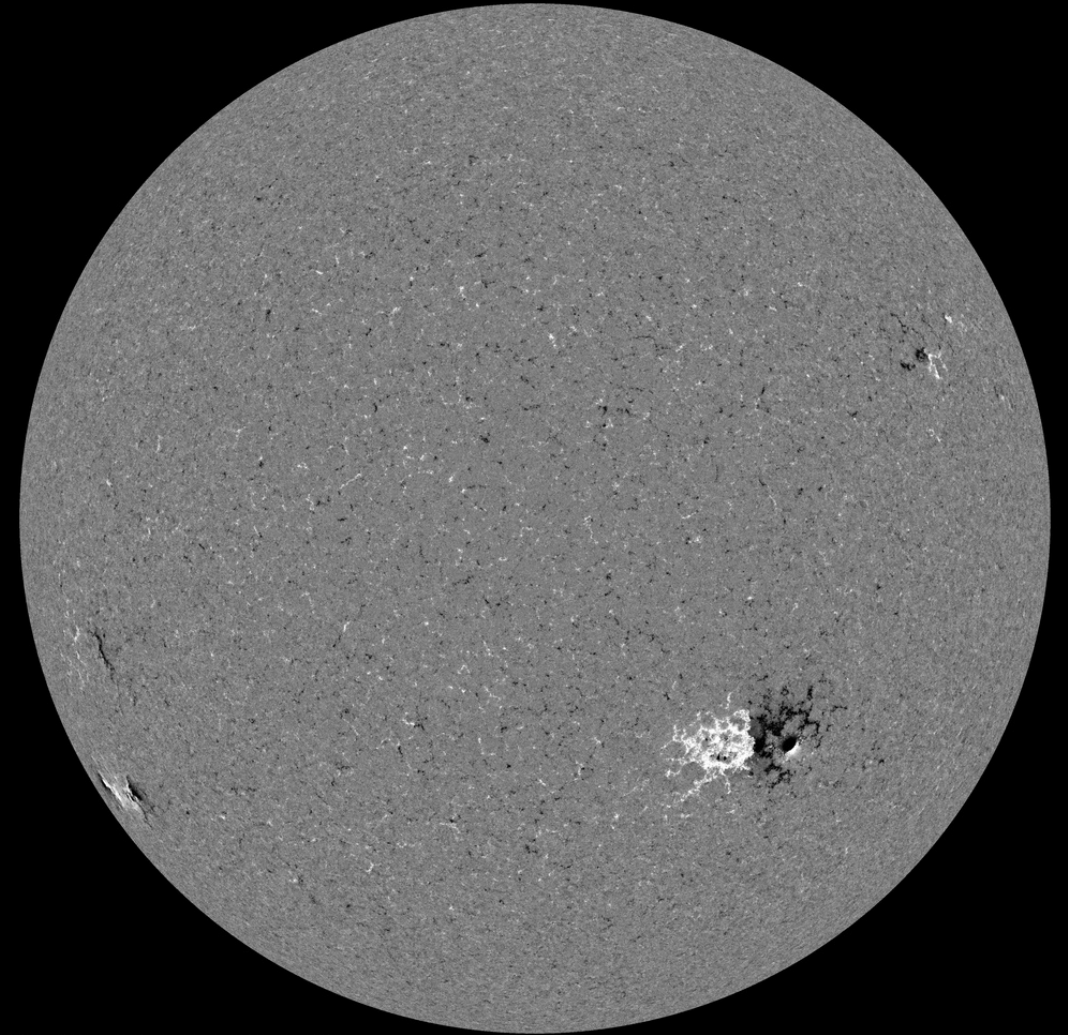
Solar active regions - Wednesday

SDO/HMI White Light 2020-11-11



SDO/HMI Quick-Look Continuum: 20201111_114500

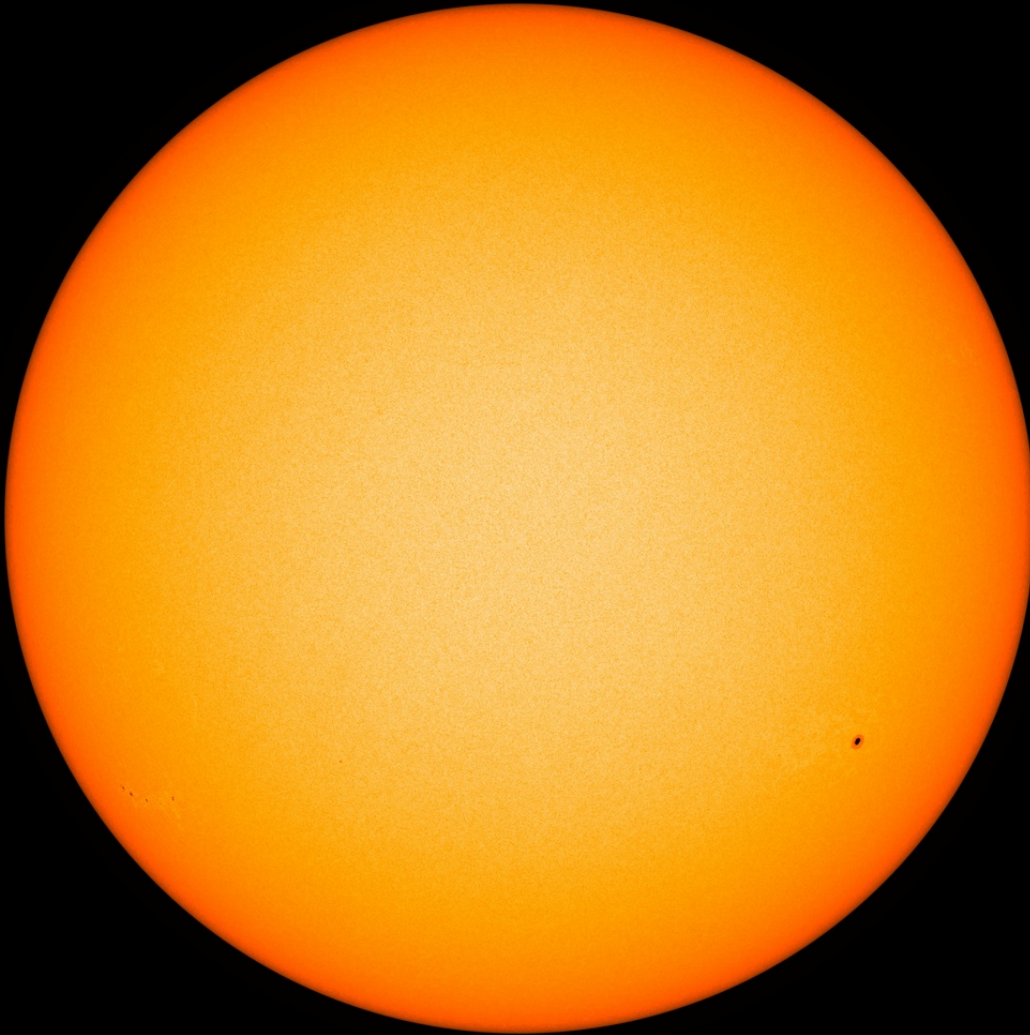
SDO/HMI Magnetogram 2020-11-11



SDO/HMI Quick-Look Magnetogram: 20201111_114500

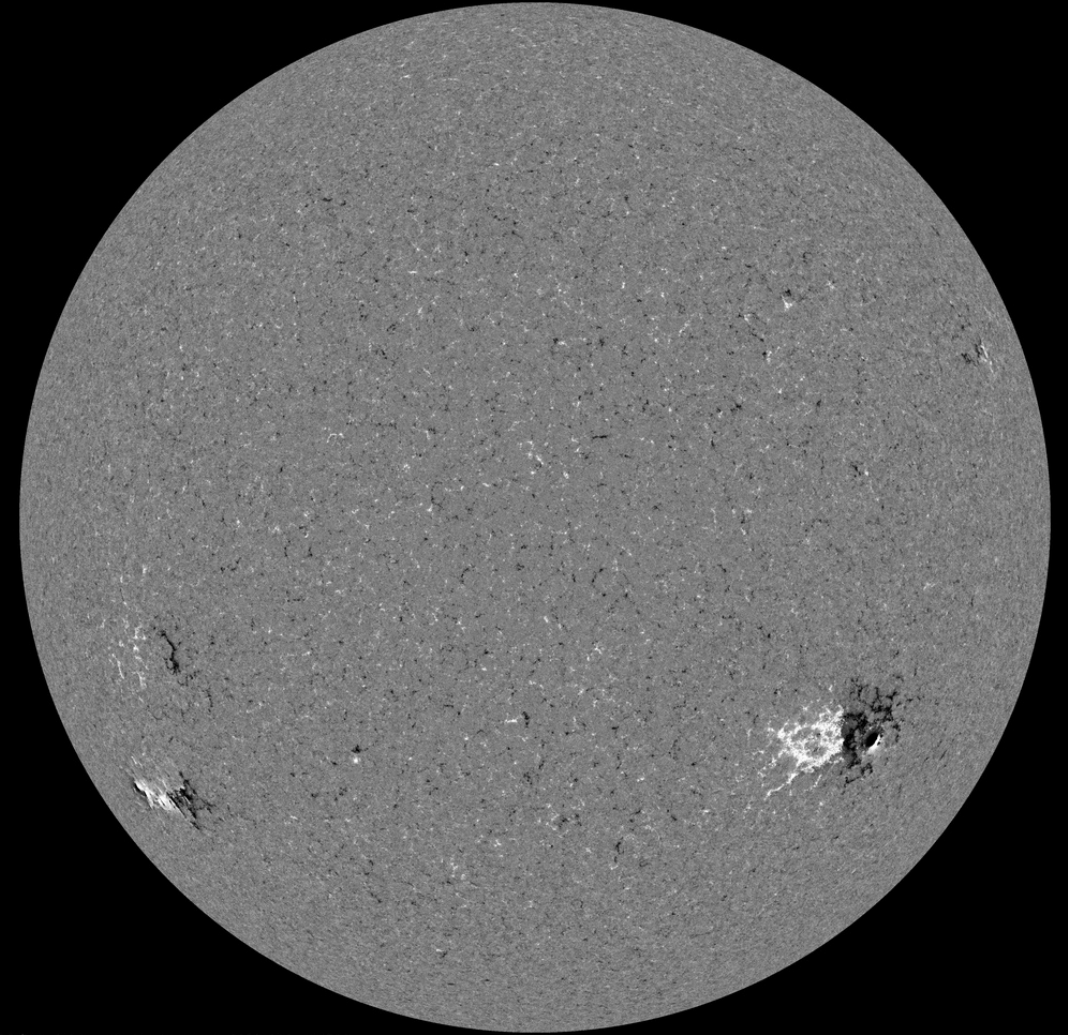
Solar active regions - Thursday

SDO/HMI White Light 2020-11-12



SDO/HMI Quick-Look Continuum: 20201112_114500

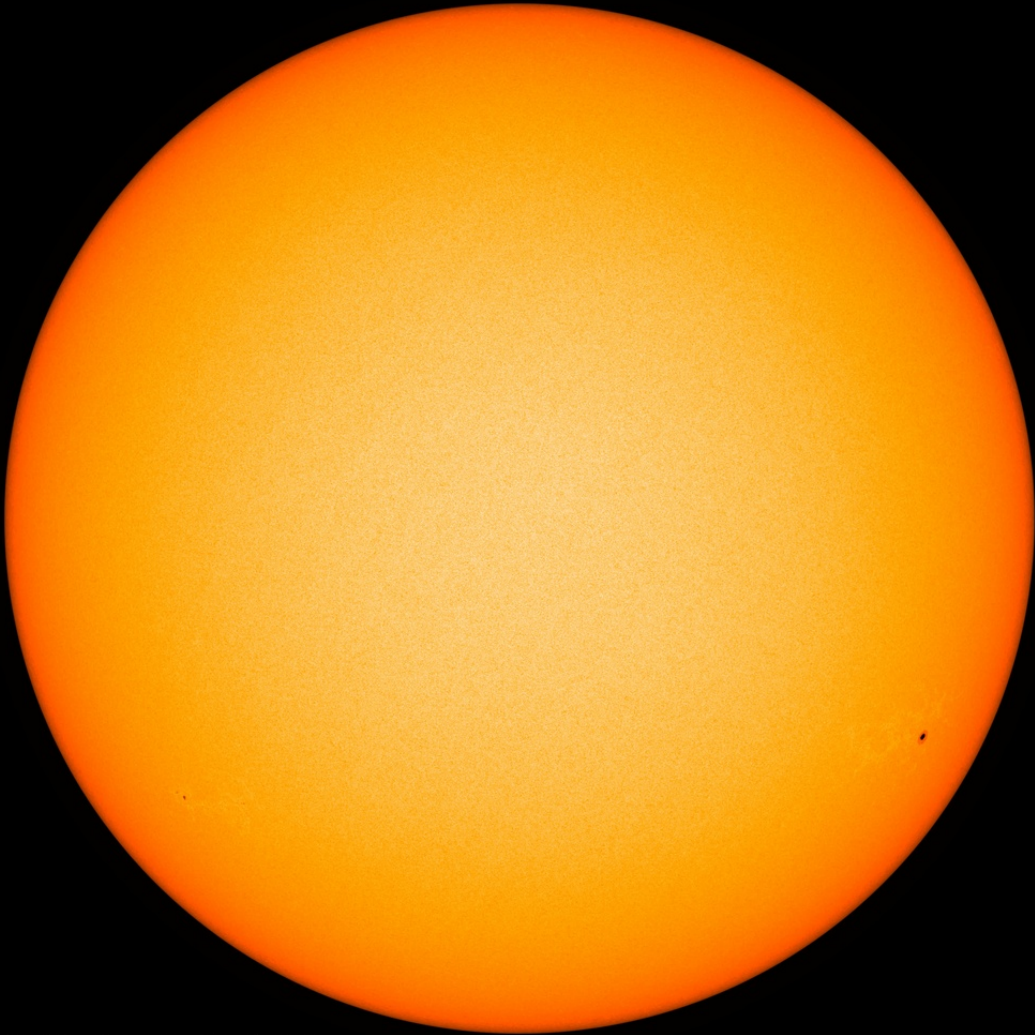
SDO/HMI Magnetogram 2020-11-12



SDO/HMI Quick-Look Magnetogram: 20201112_114500

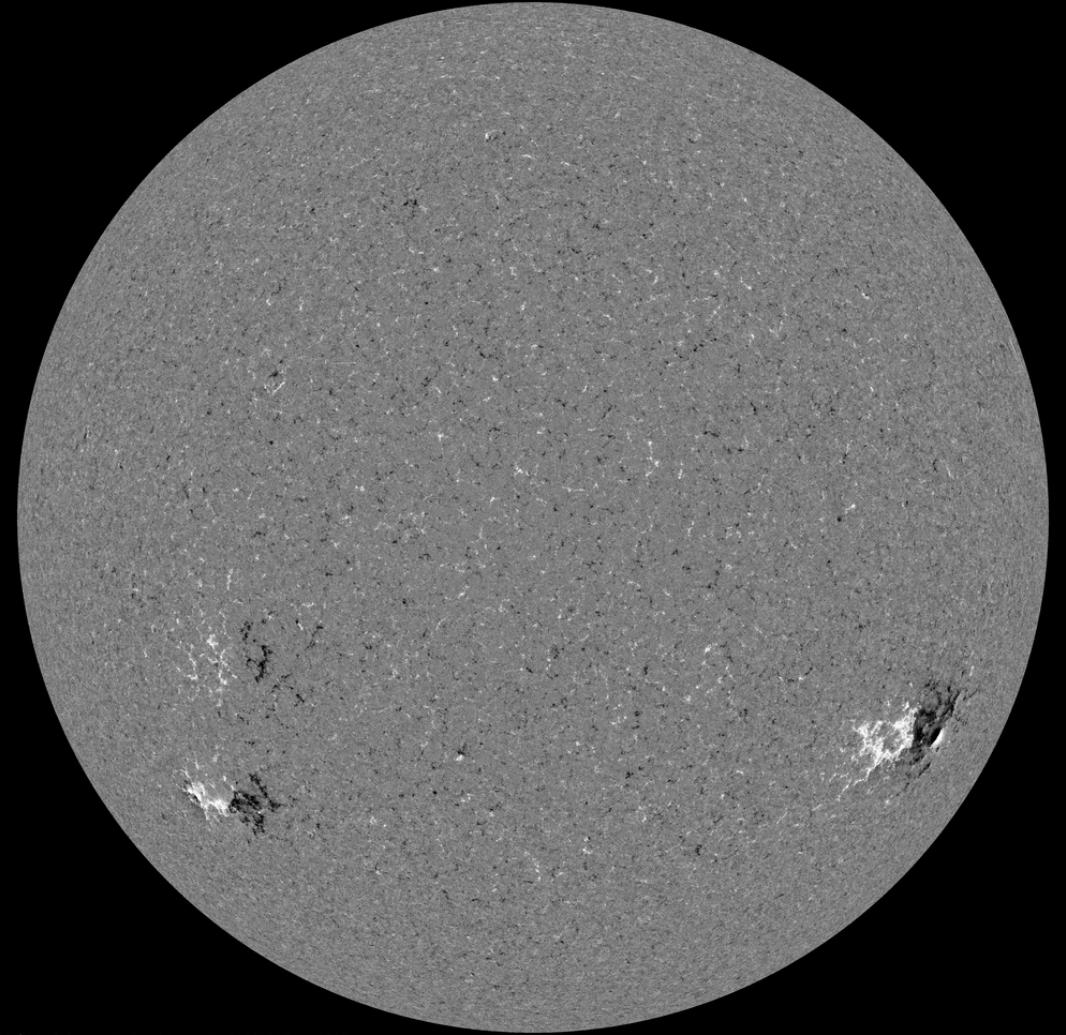
Solar active regions - Friday

SDO/HMI White Light 2020-11-13



SDO/HMI Quick-Look Continuum: 20201113_114500

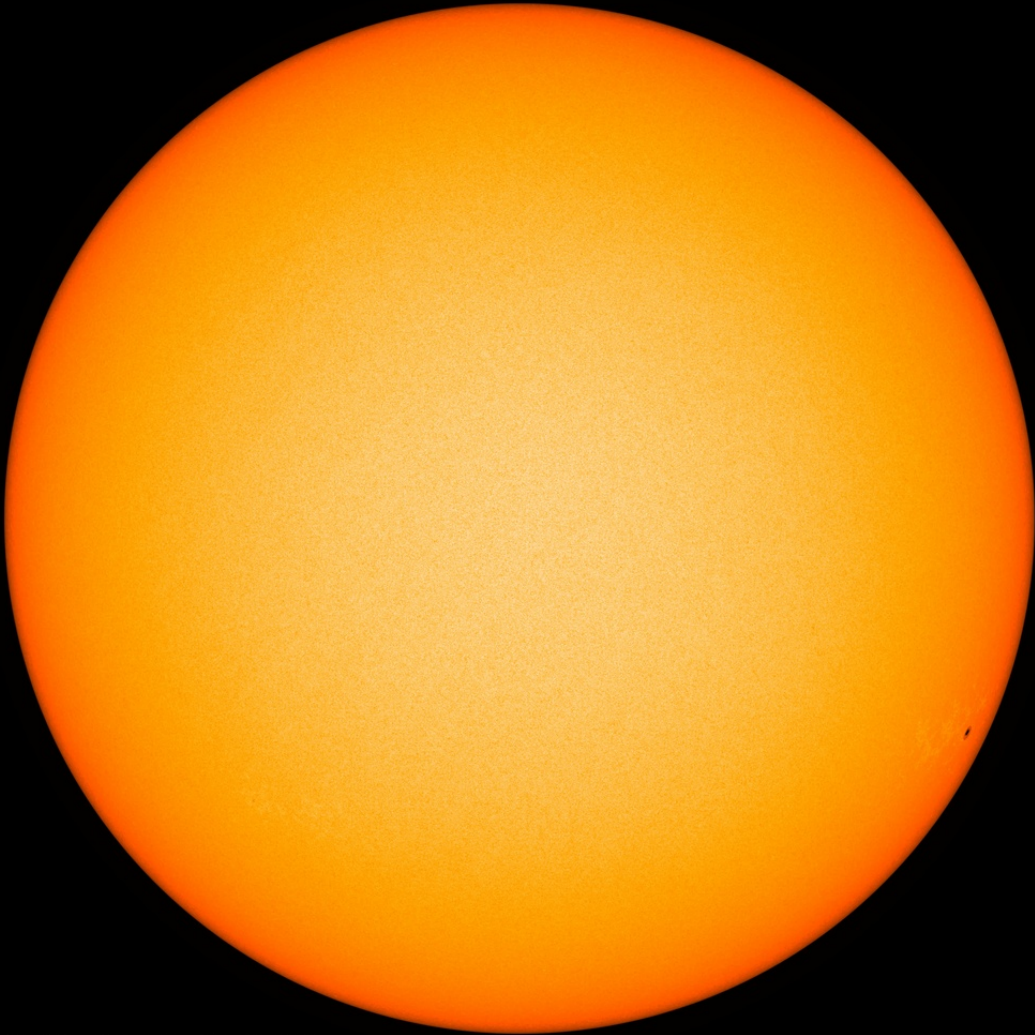
SDO/HMI Magnetogram 2020-11-13



SDO/HMI Quick-Look Magnetogram: 20201113_114500

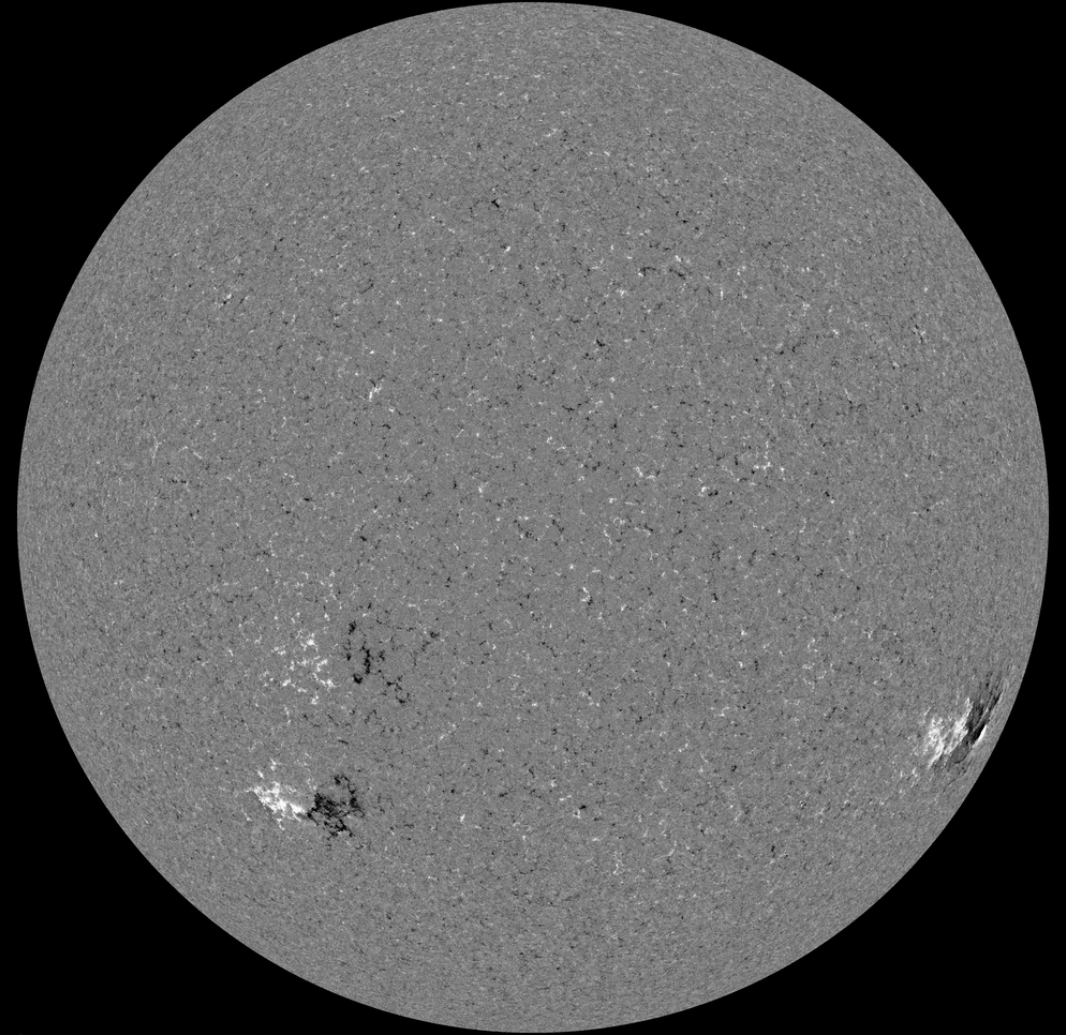
Solar active regions - Saturday

SDO/HMI White Light 2020-11-14



SDO/HMI Quick-Look Continuum: 20201114_114500

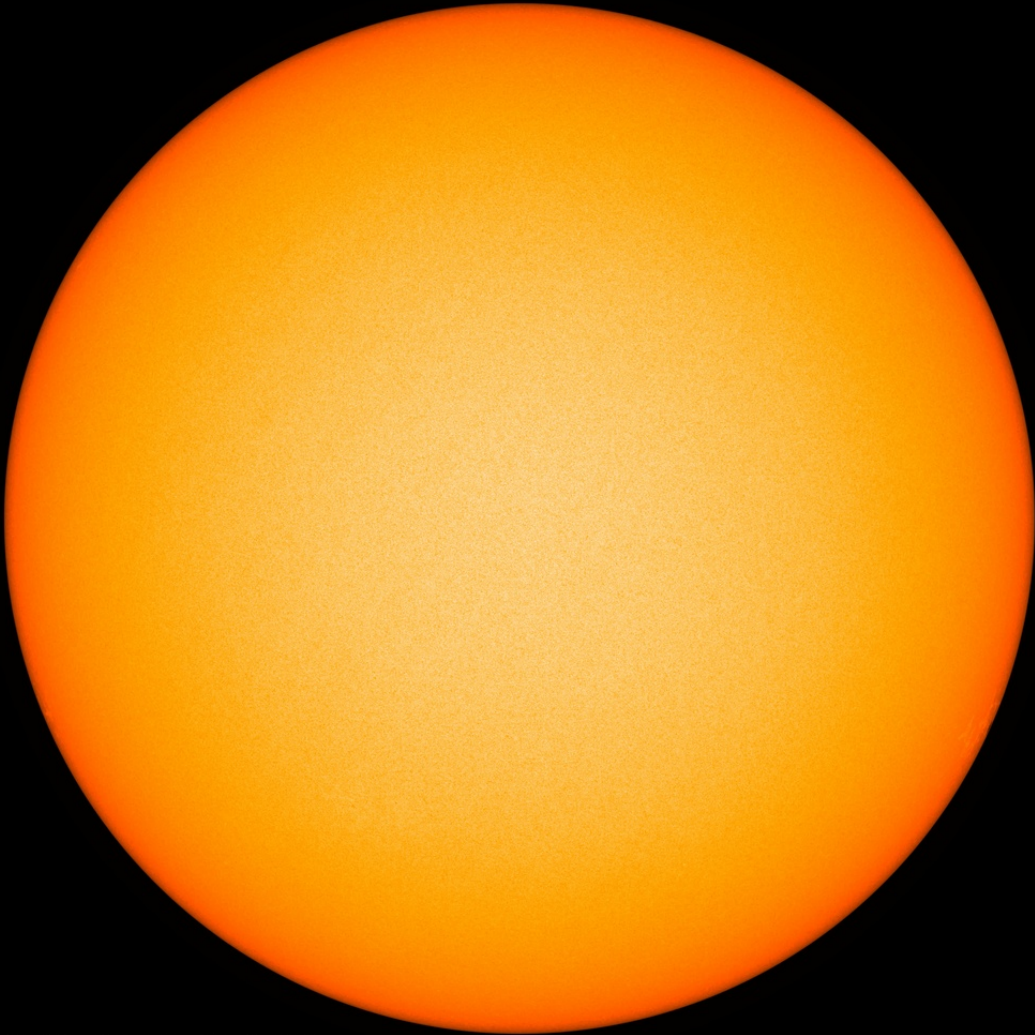
SDO/HMI Magnetogram 2020-11-14



SDO/HMI Quick-Look Magnetogram: 20201114_114500

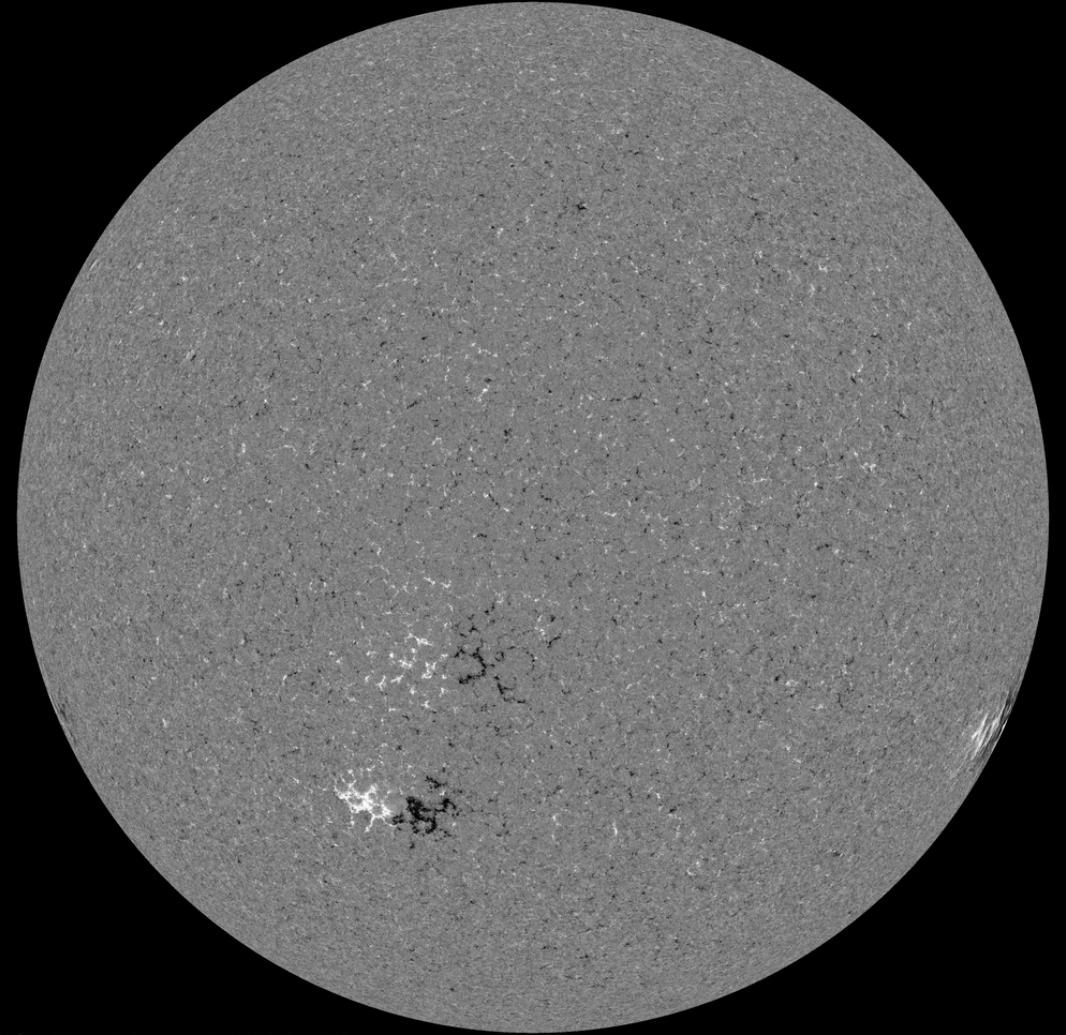
Solar active regions - Sunday

SDO/HMI White Light 2020-11-15



SDO/HMI Quick-Look Continuum: 20201115_114500

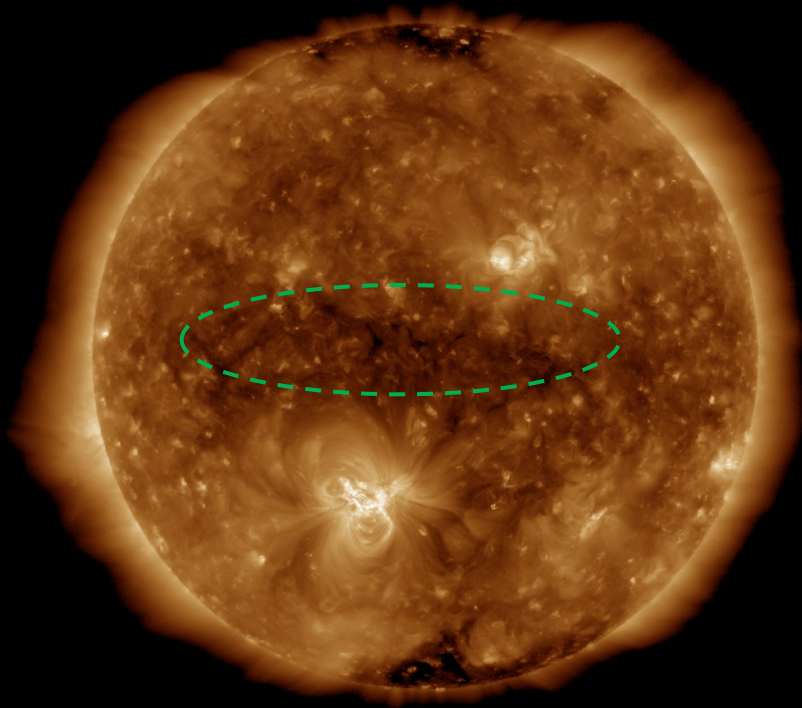
SDO/HMI Magnetogram 2020-11-15



SDO/HMI Quick-Look Magnetogram: 20201115_114500

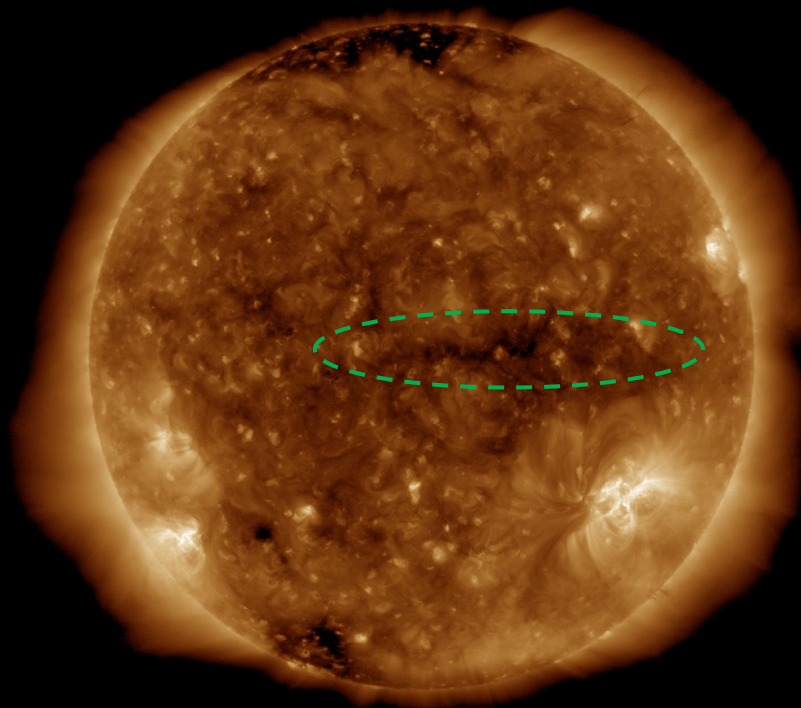
Coronal holes

SDO/AIA 19.3 nm 2020-11-08



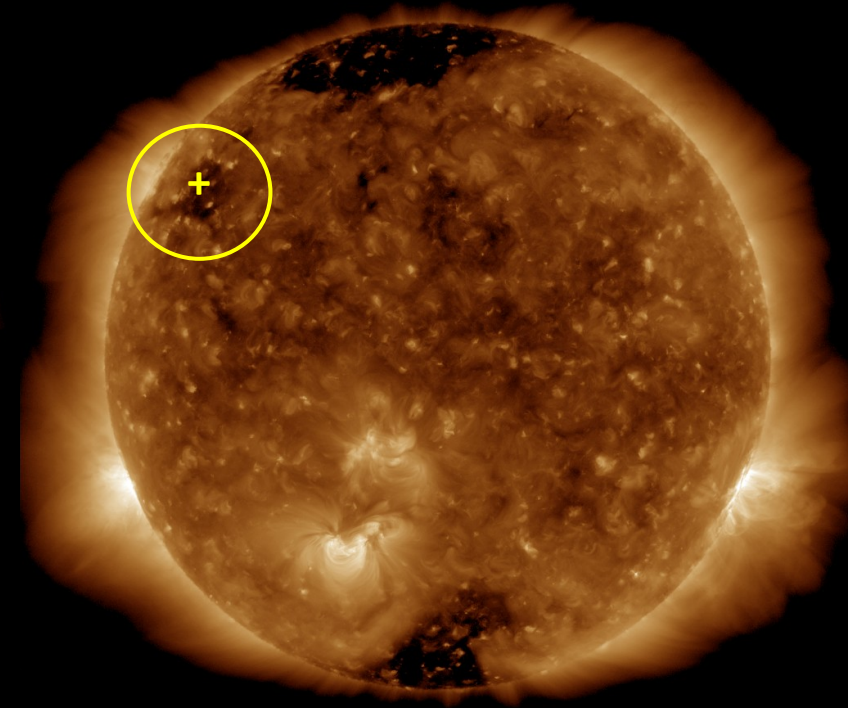
SDO/AIA 193 2020-11-08 12:17:53 UT

SDO/AIA 19.3 nm 2020-11-12



SDO/AIA 193 2020-11-12 12:17:05 UT

SDO/AIA 19.3 nm 2020-11-15

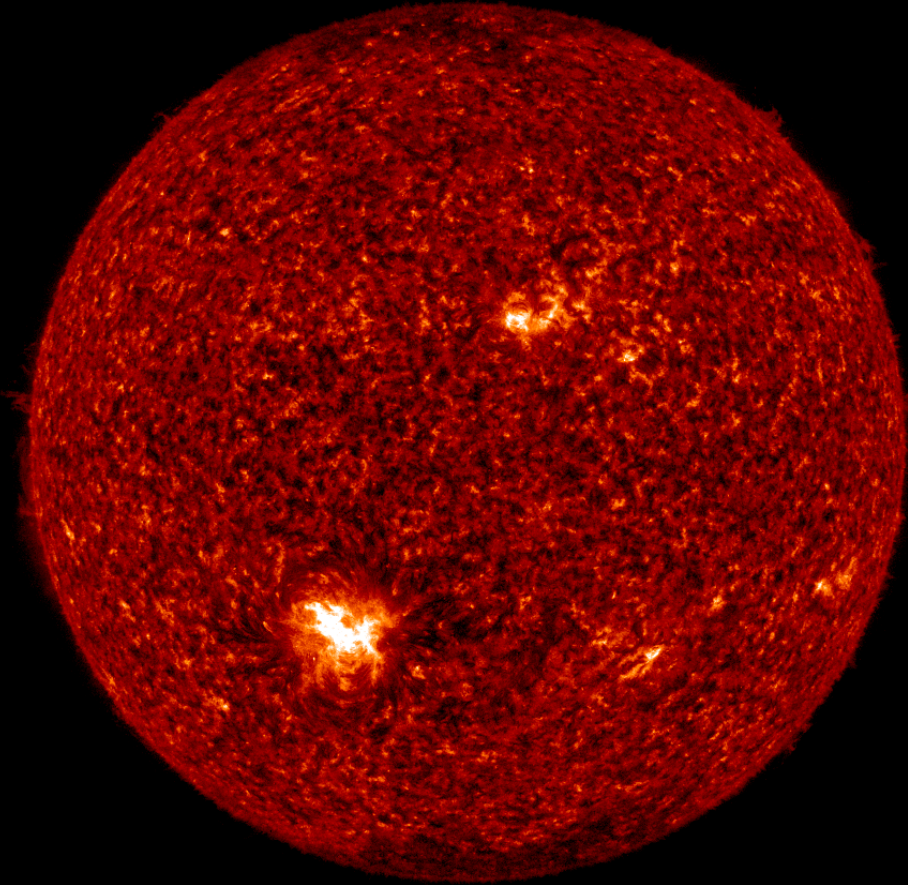


SDO/AIA 193 2020-11-15 12:17:29 UT

Filaments

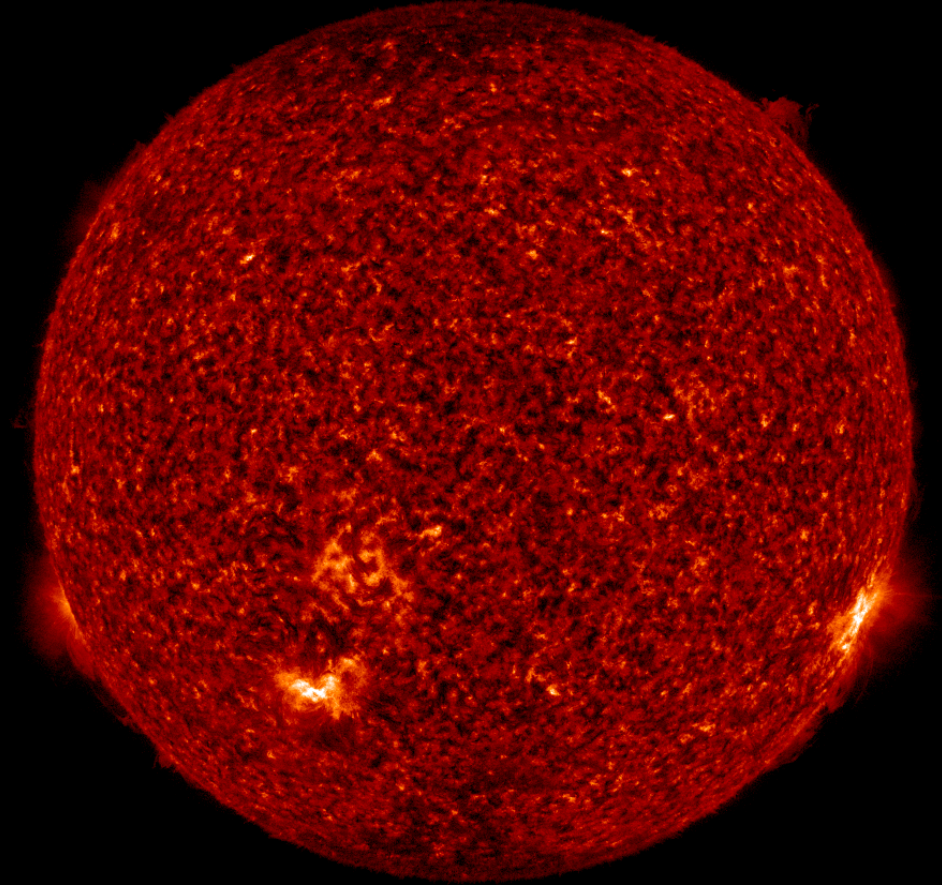
SDO/AIA 30.4 nm 2020-11-08

SDO/AIA AIA 304Å 2020-11-08T00:00:06.57

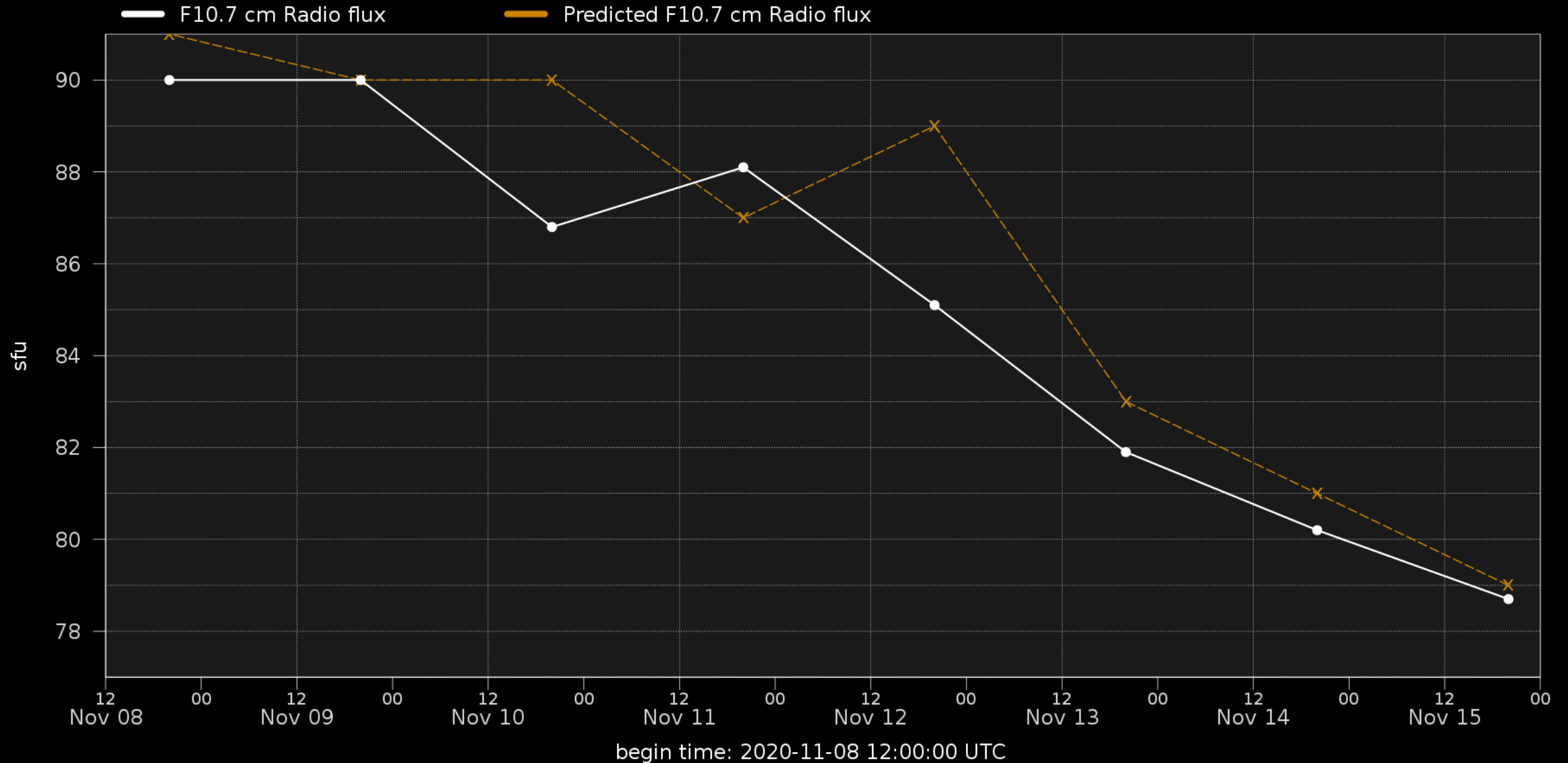


SDO/AIA 30.4 nm 2020-11-15

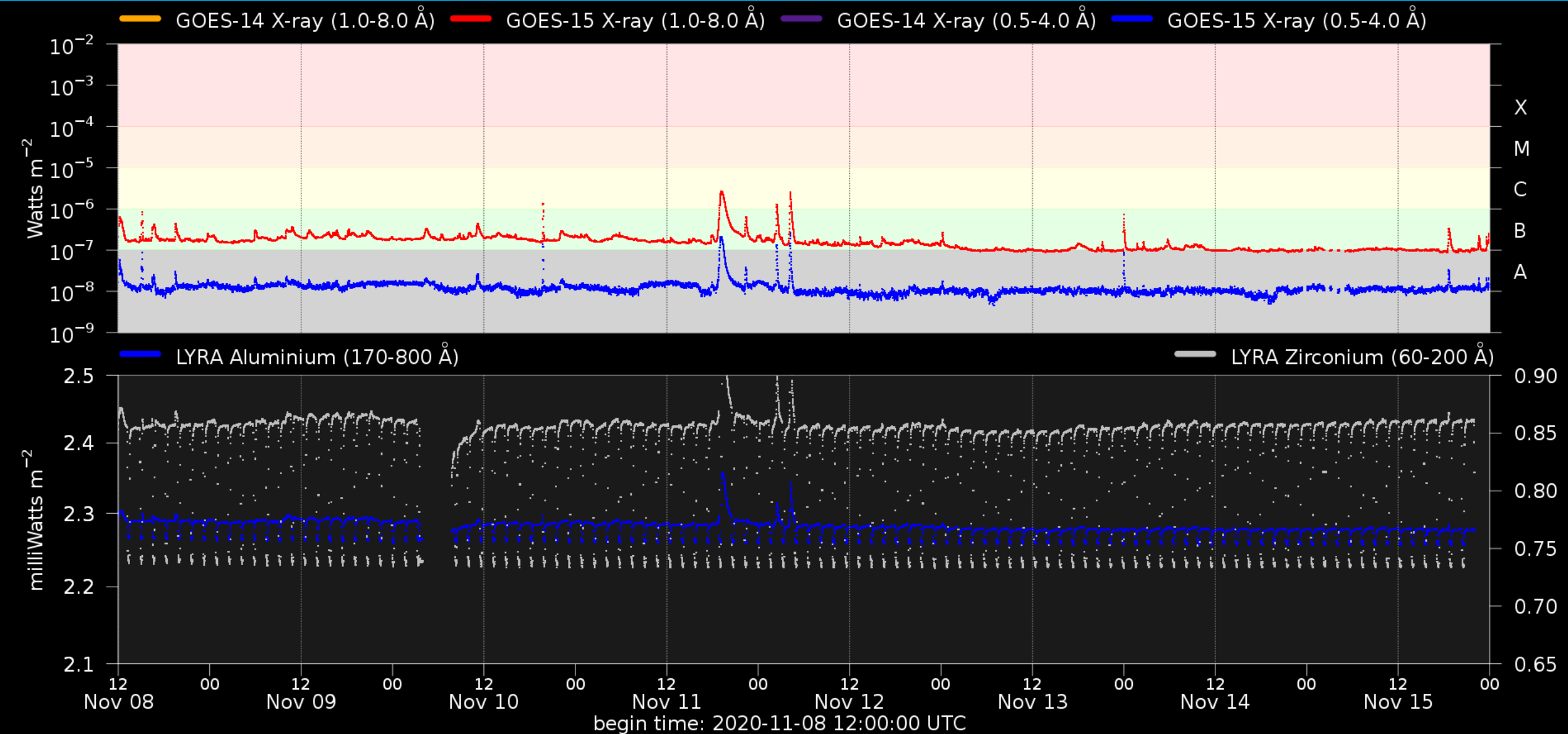
SDO/AIA AIA 304Å 2020-11-15T00:00:06.58



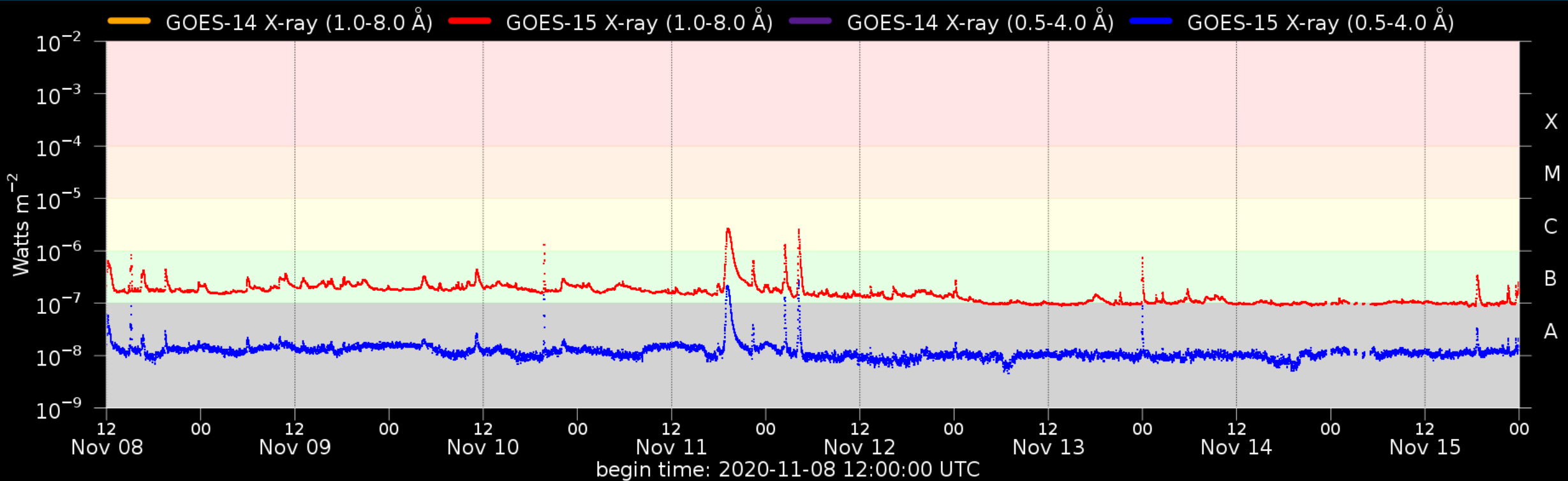
Solar F10.7cm radio flux



Solar X-Ray and UV flux



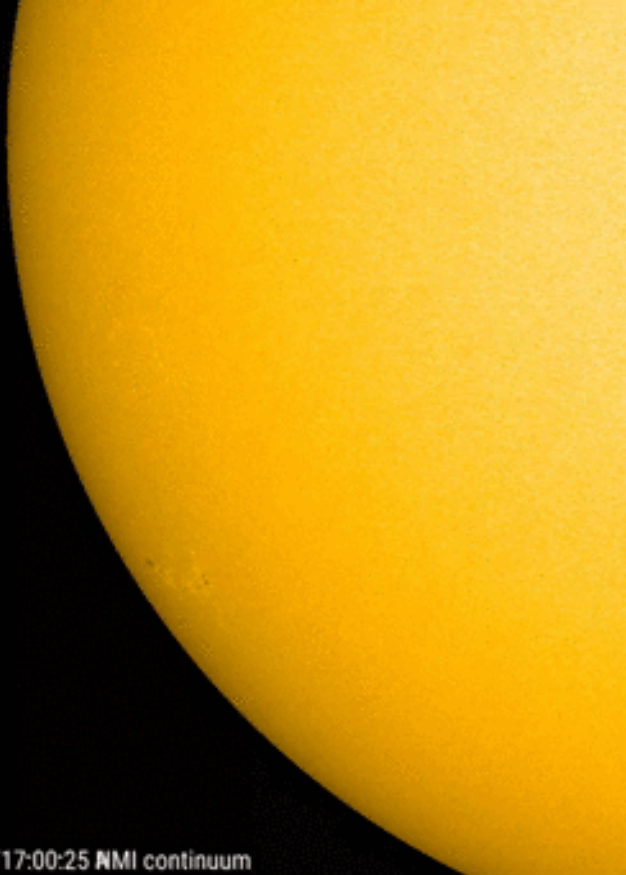
Flaring activity



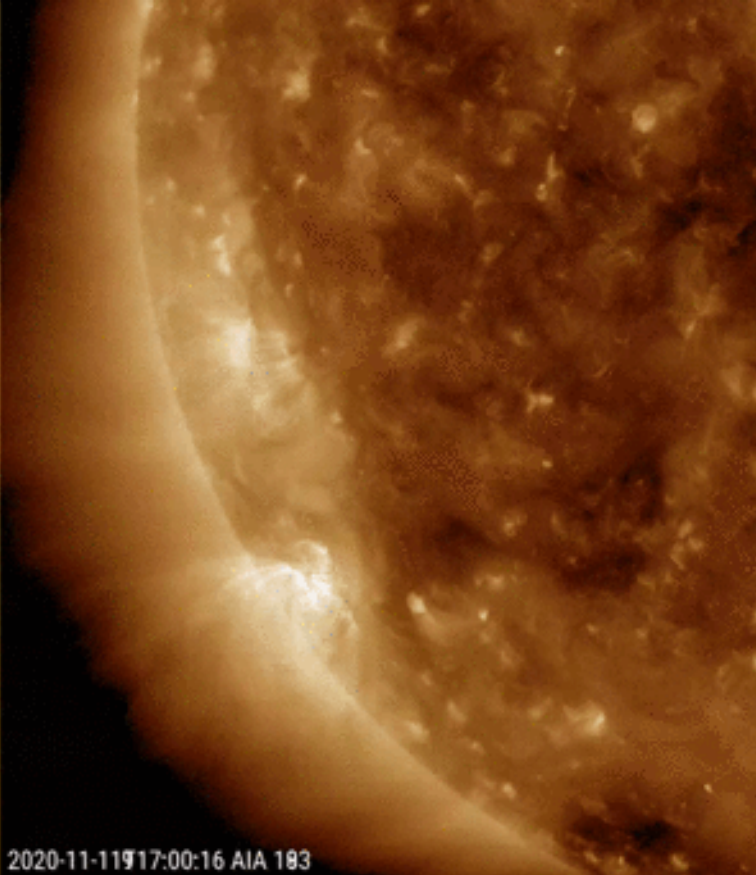
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2020-11-08	2020-11-09	2020-11-10	2020-11-11	2020-11-12	2020-11-13	2020-11-14	2020-11-15
Probability	--- 65 10 01	--- 40 10 01	--- 40 05 01	--- 25 01 01	--- 30 01 01	--- 15 01 01	--- 10 01 01	--- 10 01 01
Observed	07 00 00 00	00 00 00 00	01 01 00 00	06 03 00 00	04 00 00 00	05 00 00 00	00 00 00 00	04 00 00 00

C2.6 flare LDE in NOAA 2782

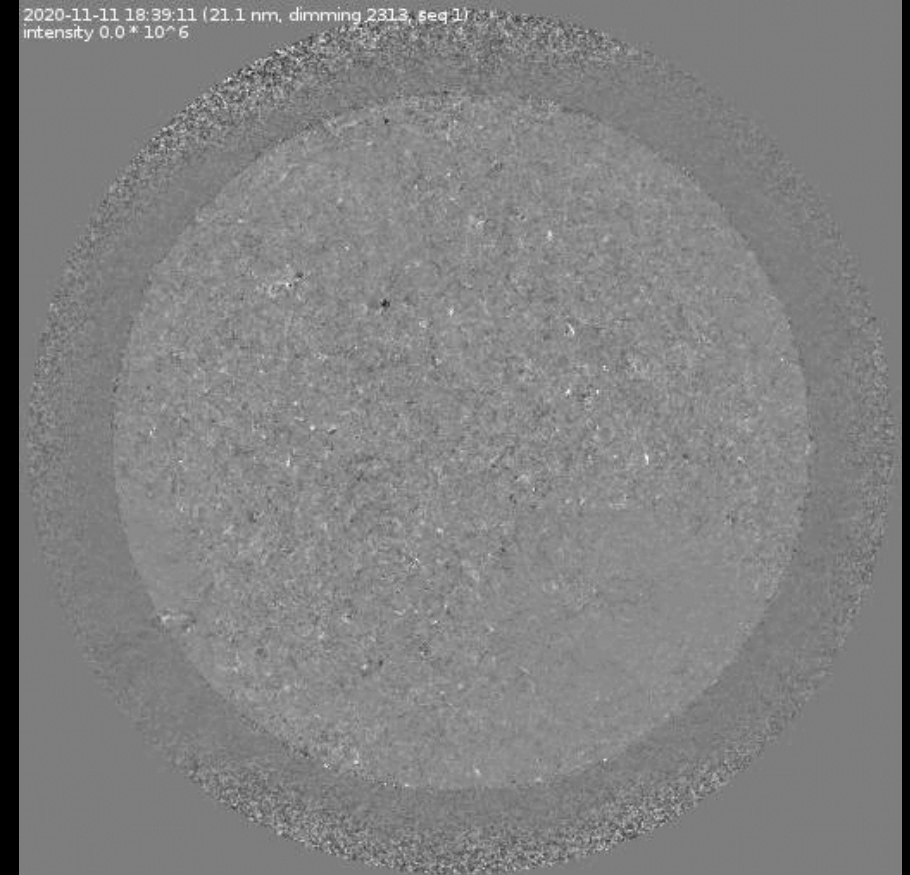


2020-11-11 17:00:25 NMI continuum



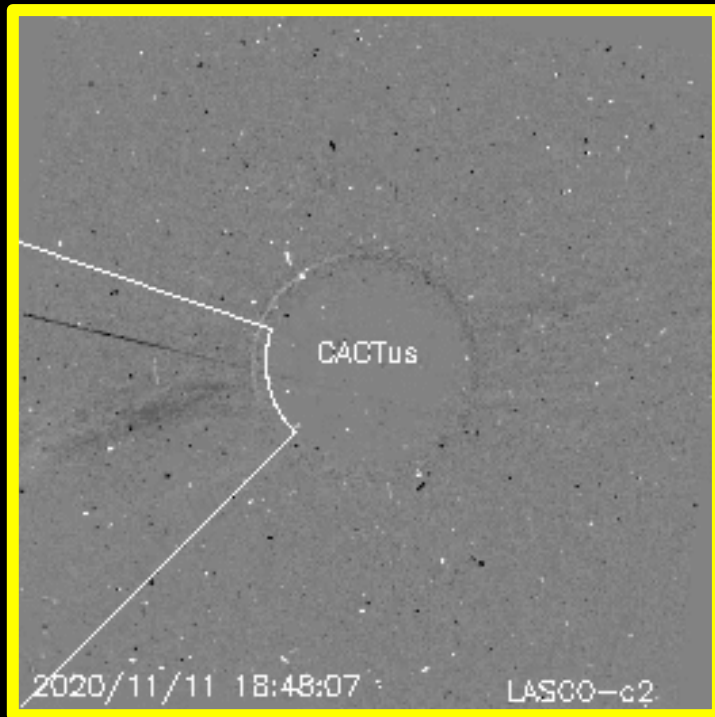
2020-11-11 17:00:16 AIA 183

<https://www.jhelioviewer.org/>



<http://solar demon.oma.be/>

Coronal Mass Ejections



Solar Wind and Geomagnetic Activity

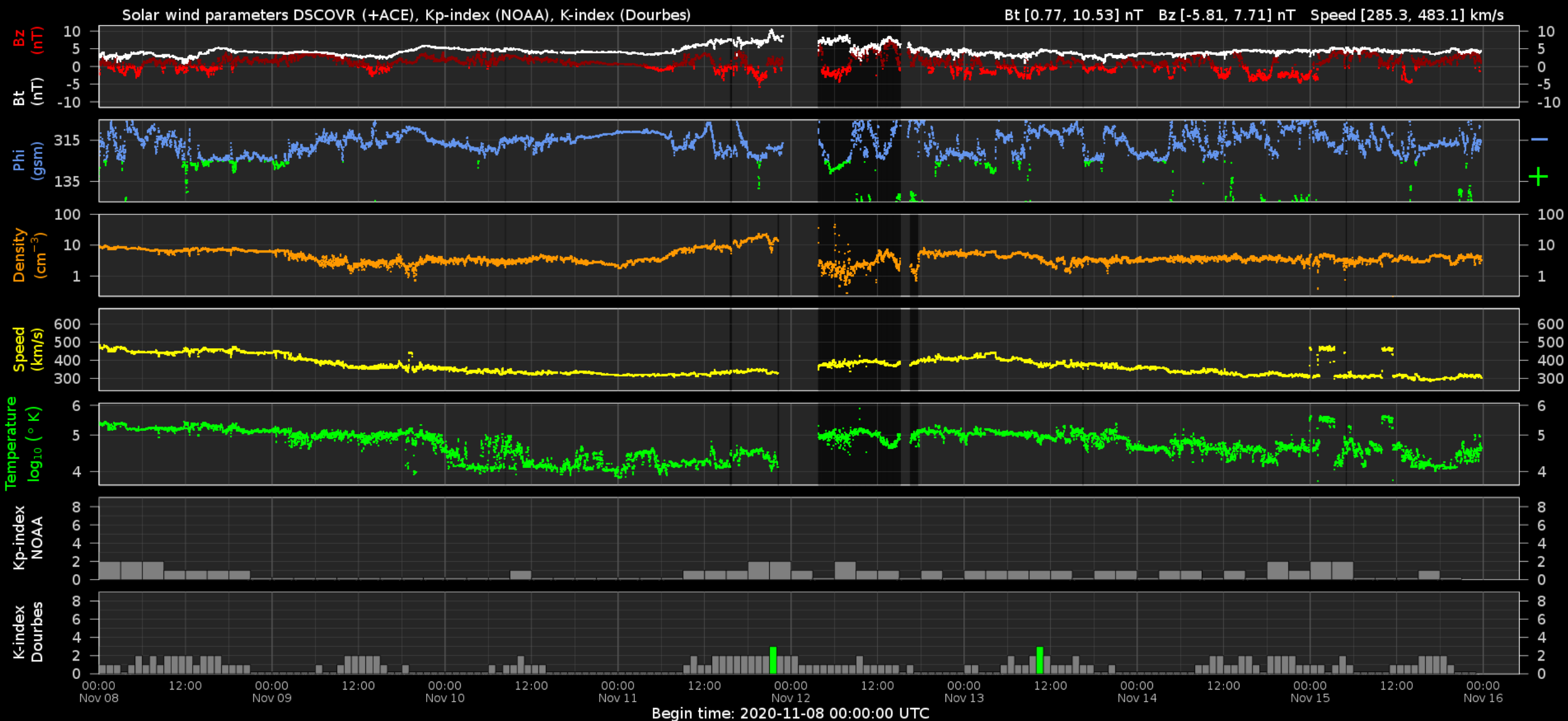


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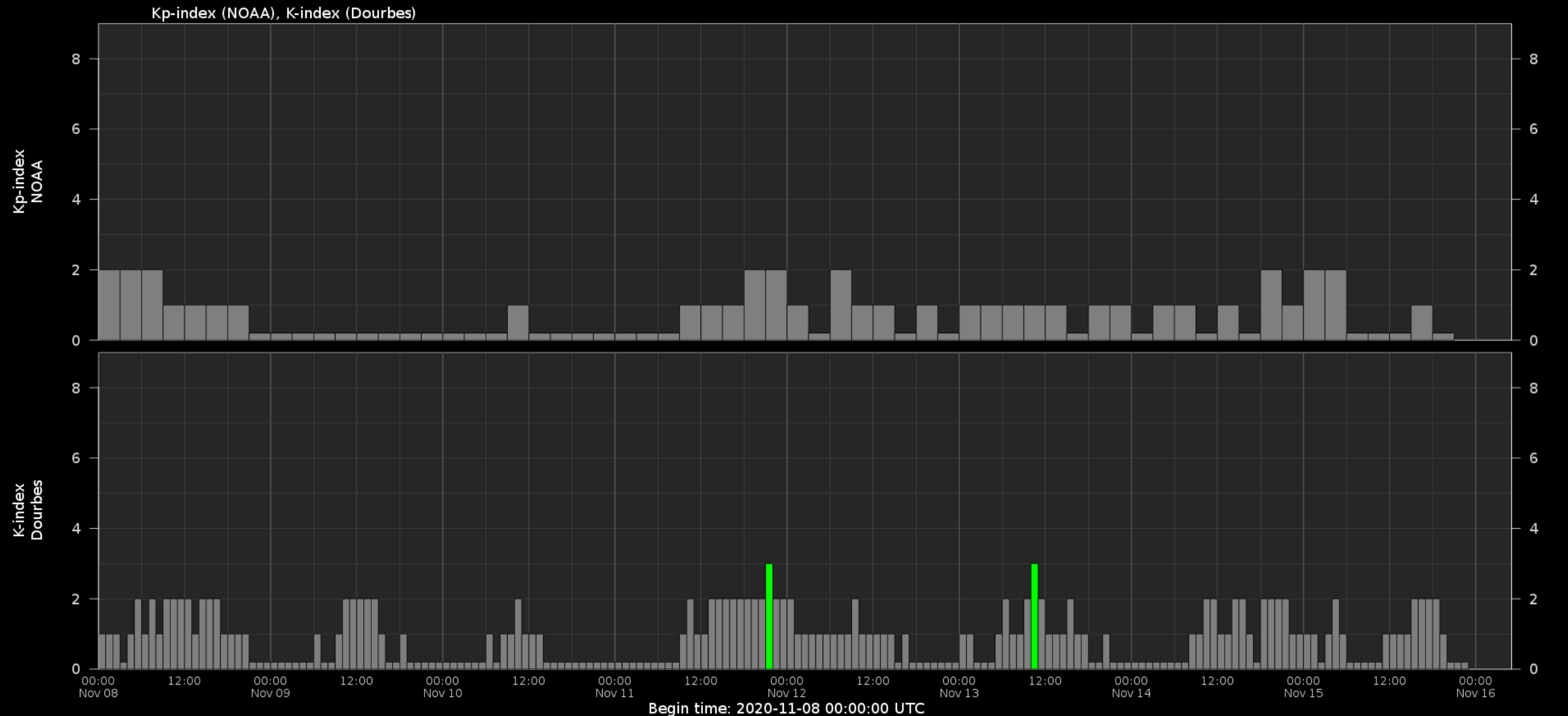
Solar wind parameters (DSCOVR & ACE data)



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



Geomagnetic activity (K-indexes)



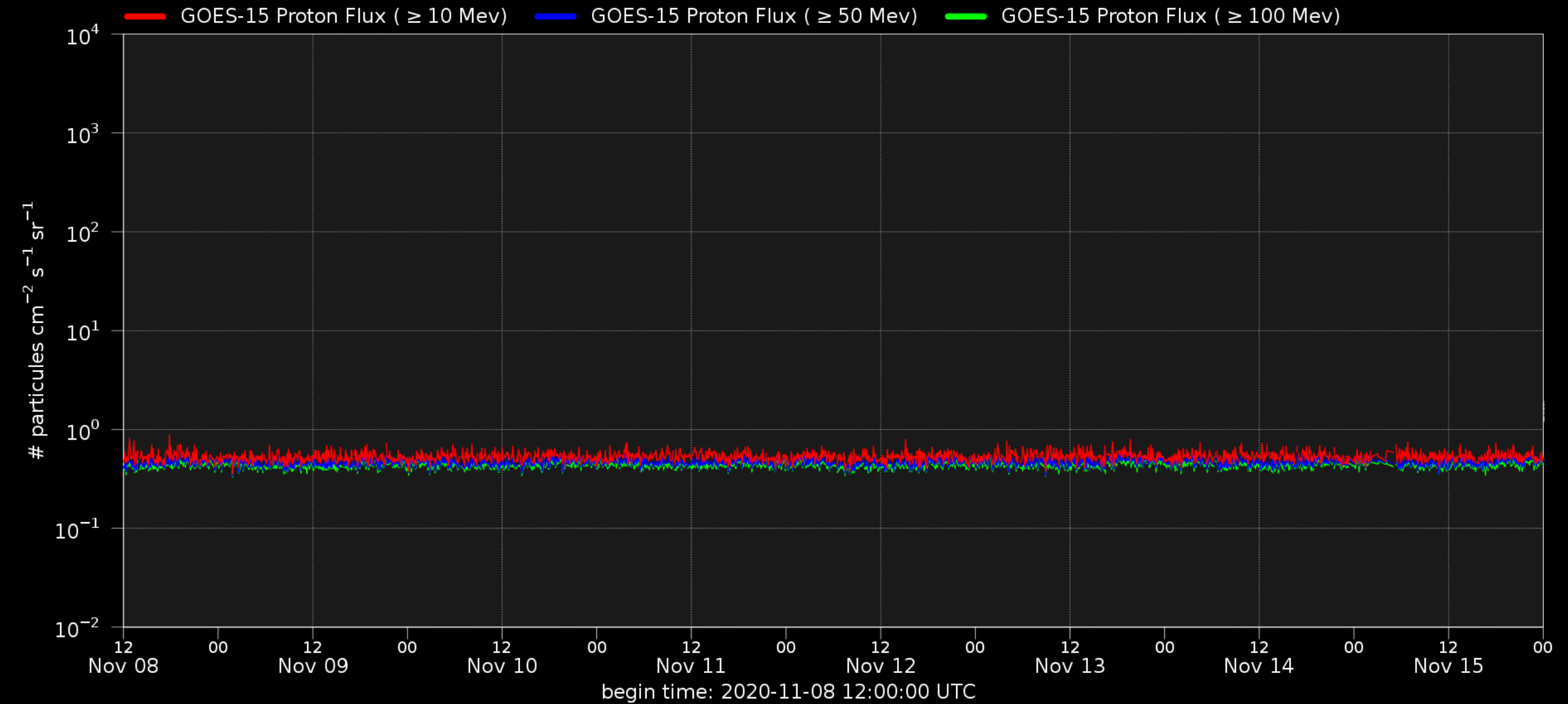
Solar Energetic Particles



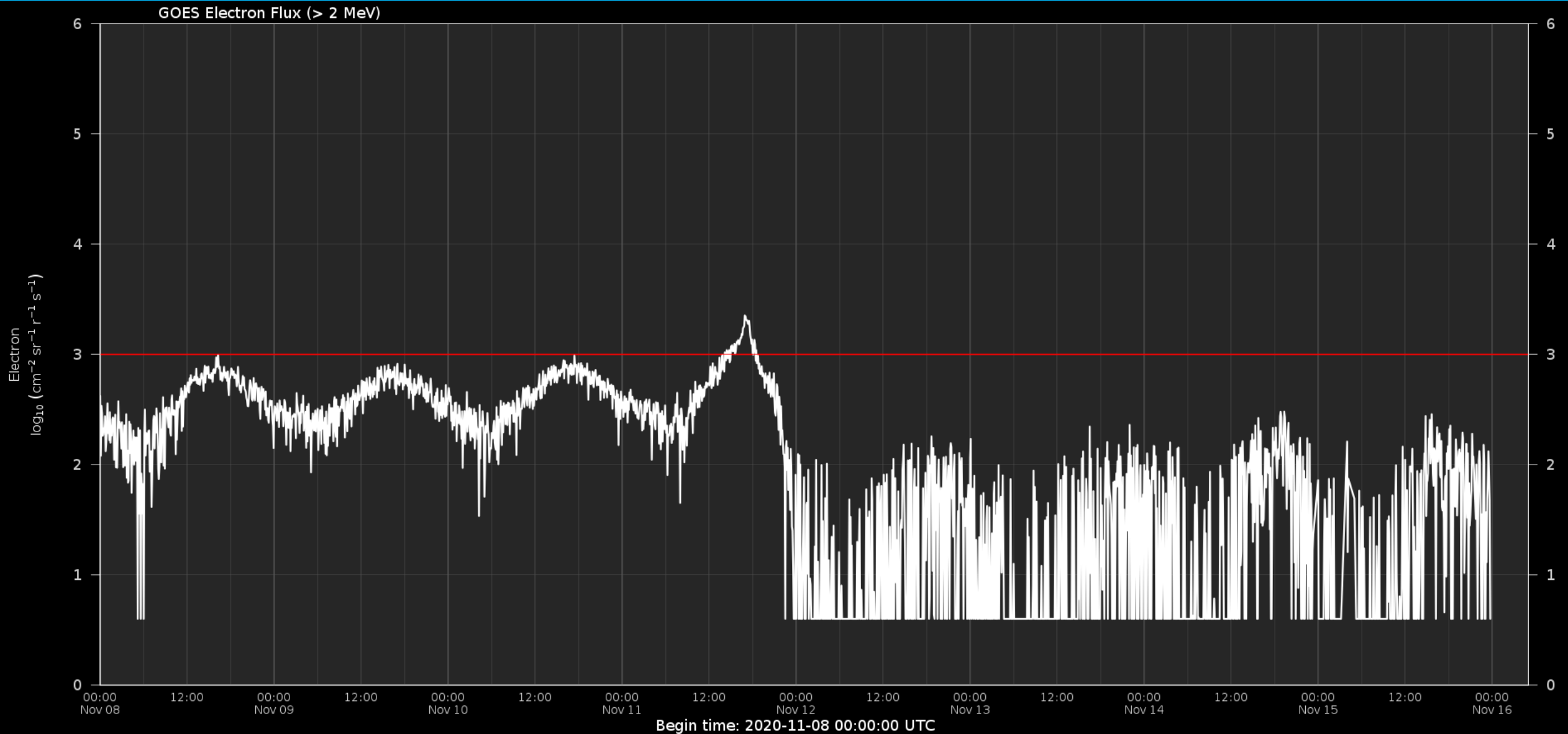
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Solar proton flux



Solar electron flux



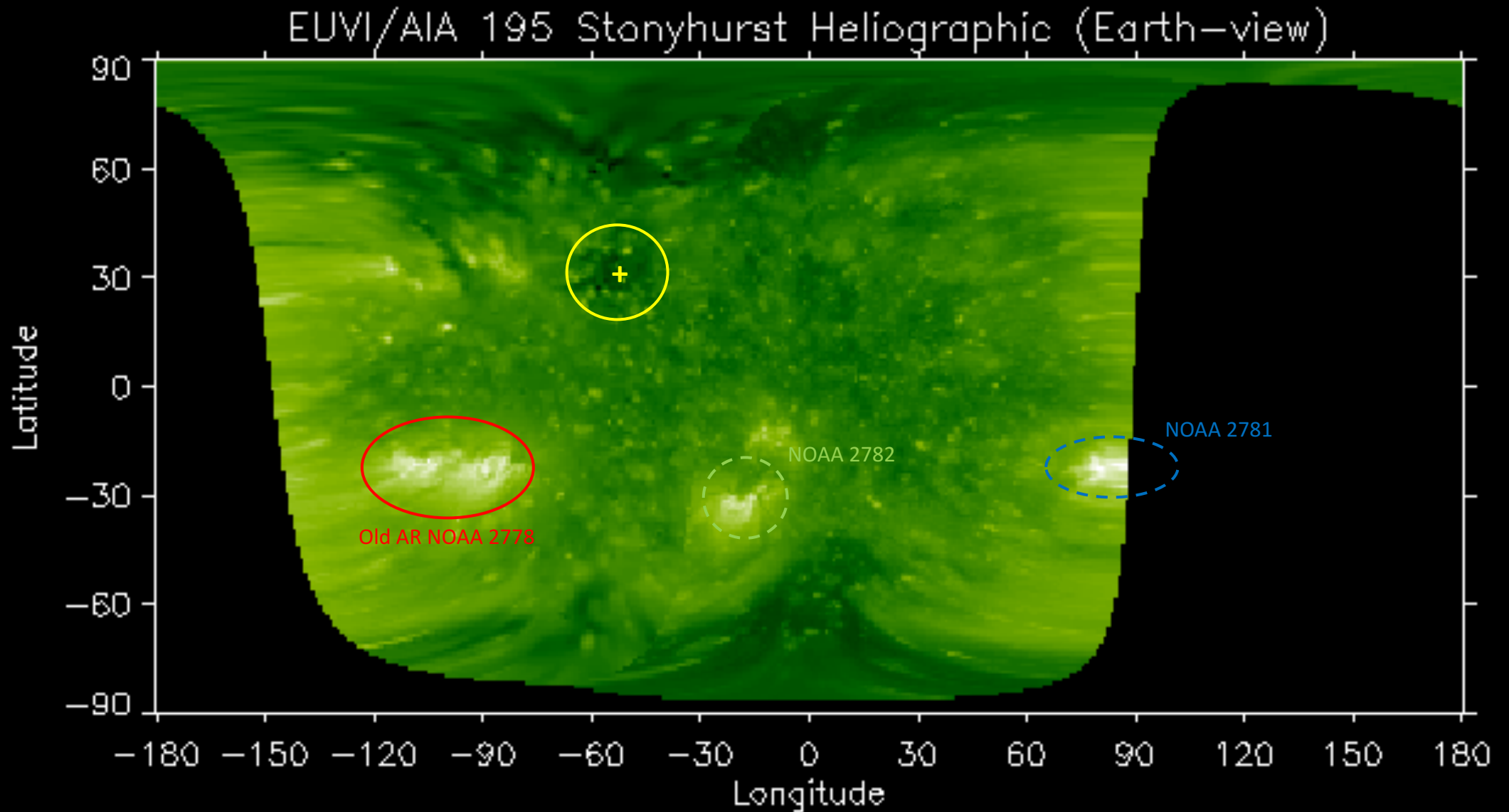
Outlook



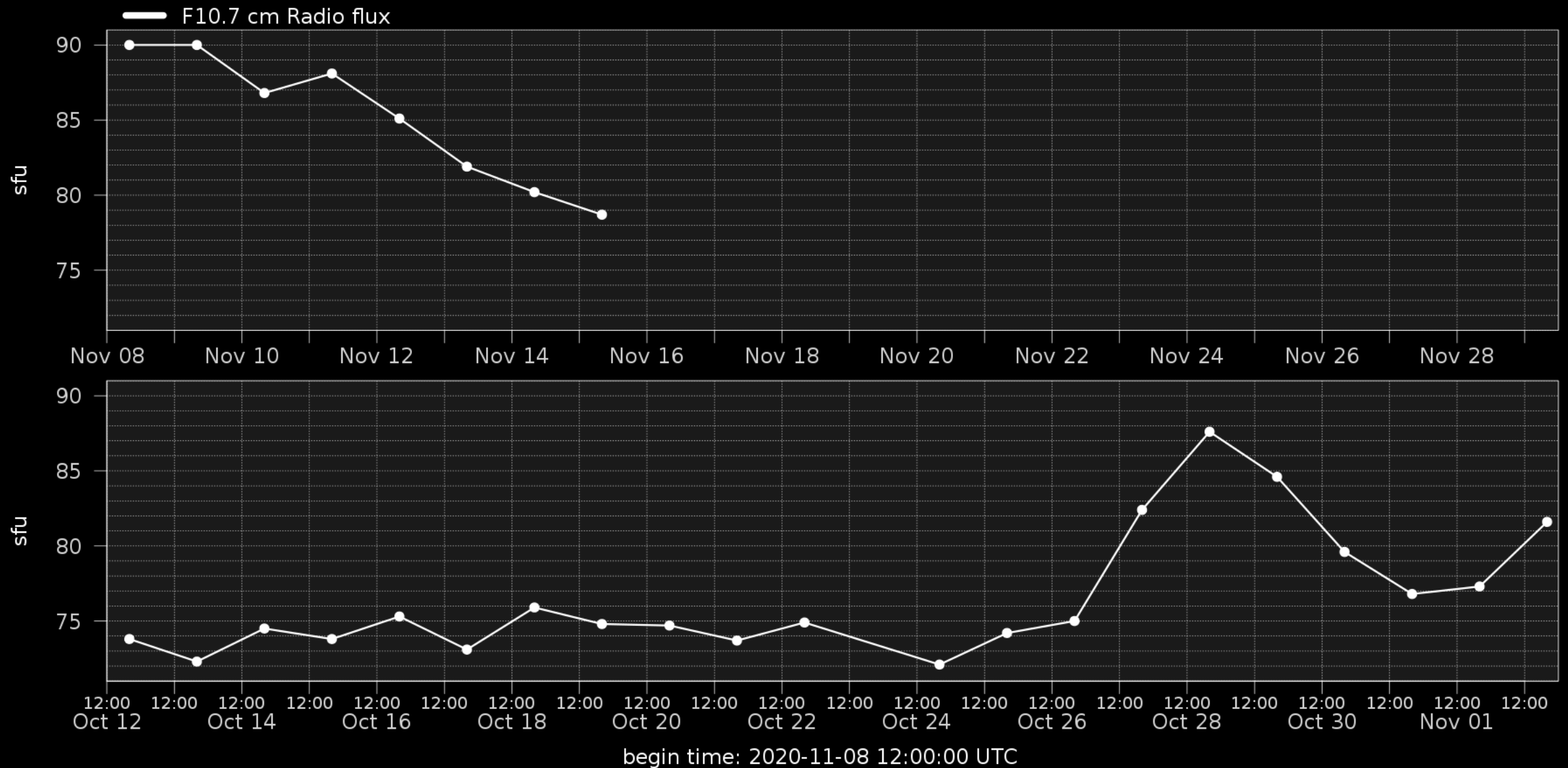
Royal Observatory
of Belgium

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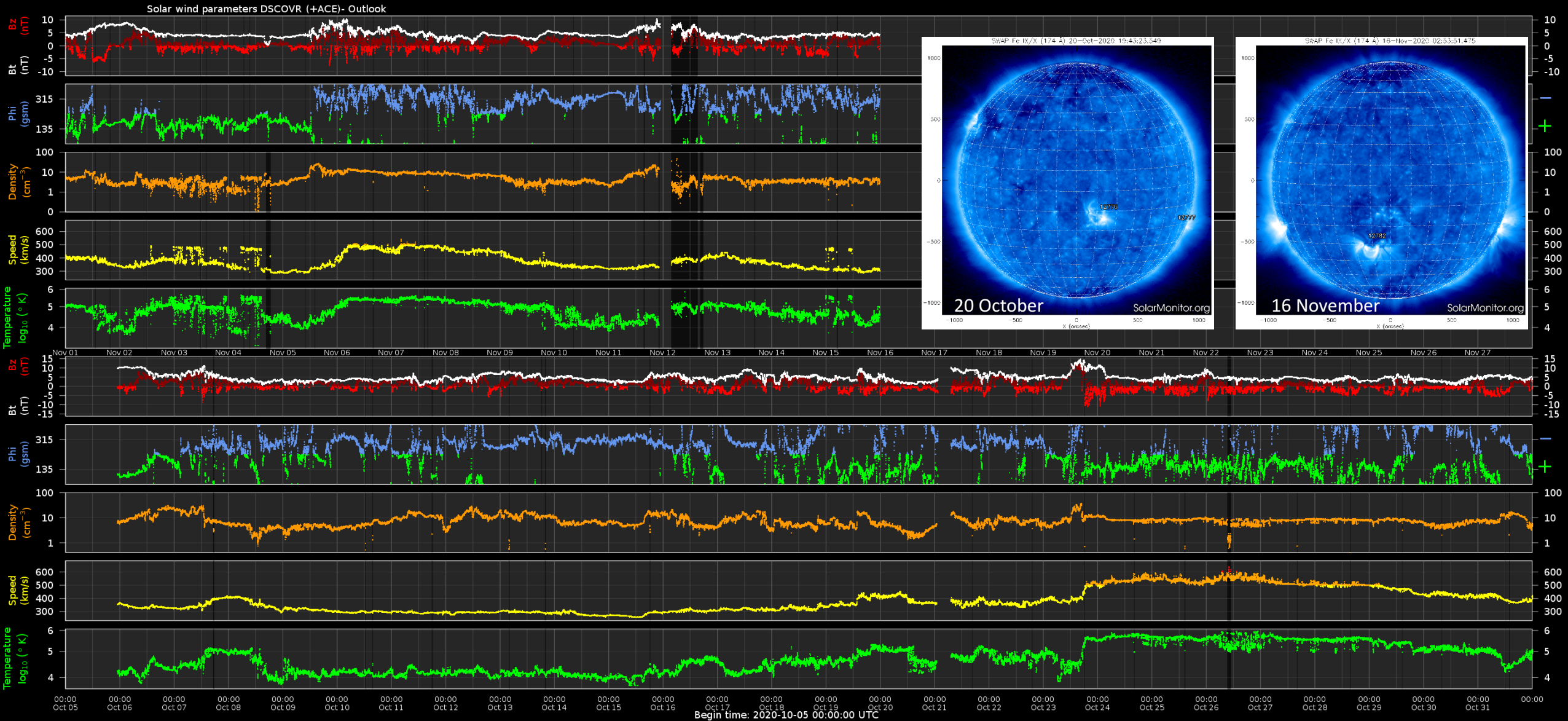
Outlook: Solar activity



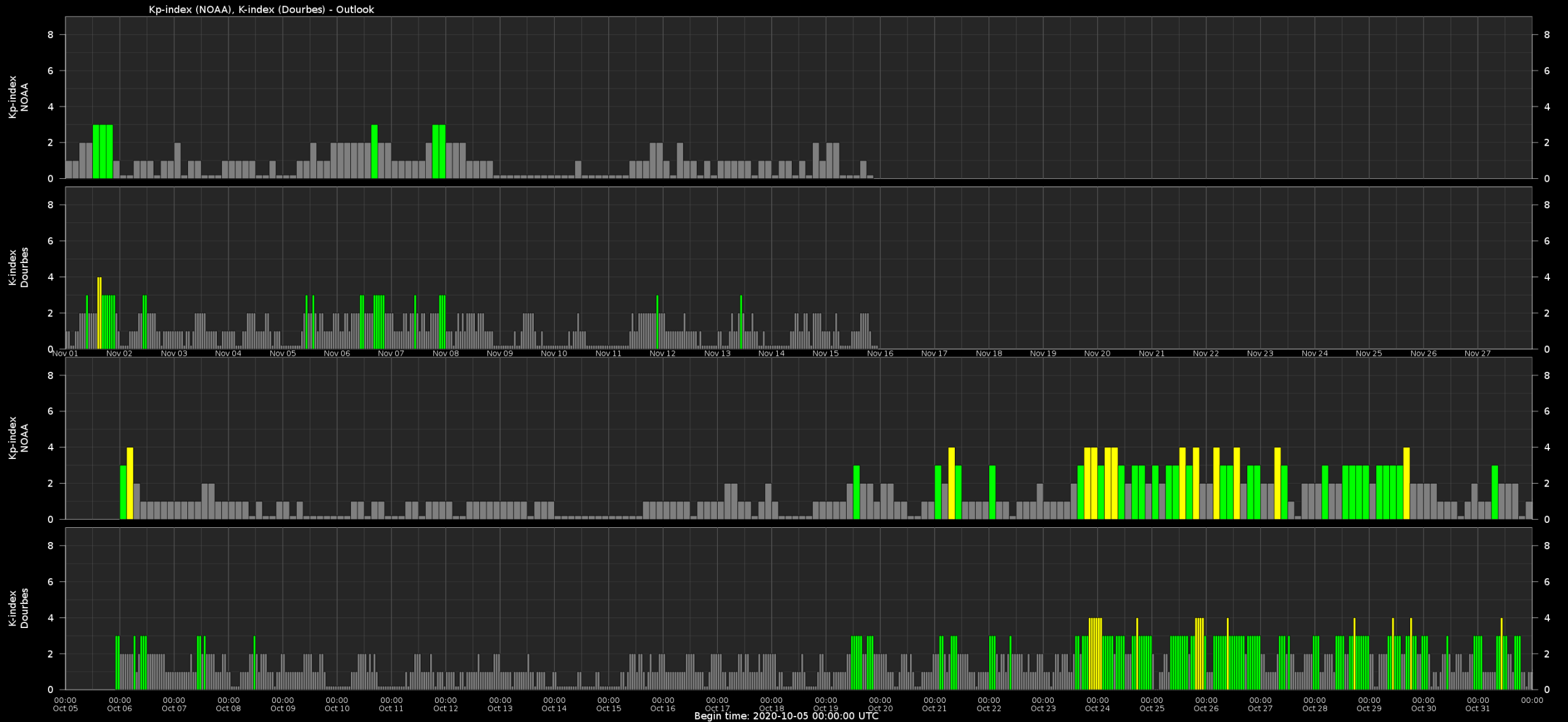
Outlook: F10 flux



Outlook: Solar wind parameters



Outlook: Geomagnetic activity



SIDC Space Weather Briefing

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