

SIDC Space Weather Briefing

11 November 2018 - 18 November 2018

Cis Verbeeck
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2018-11-11 12:00 UT to 2018-11-18 12:00 UT

Active regions	AR 2726 (beta) and AR 2727 (beta)
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	None
CMEs	None
Proton Events	None

Solar wind and geomagnetic conditions from 2018-11-11 12:00 UT to 2018-11-18 12:00 UT

Coronal Holes	Two negative polarity, equatorial coronal holes, second half of the week
ICME	None
SW Conditions	High speed stream from negative polarity, equatorial coronal hole (first half of the week)
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 3

All Quiet Alert from 2018-11-13 till 2018-11-18

Solar Activity

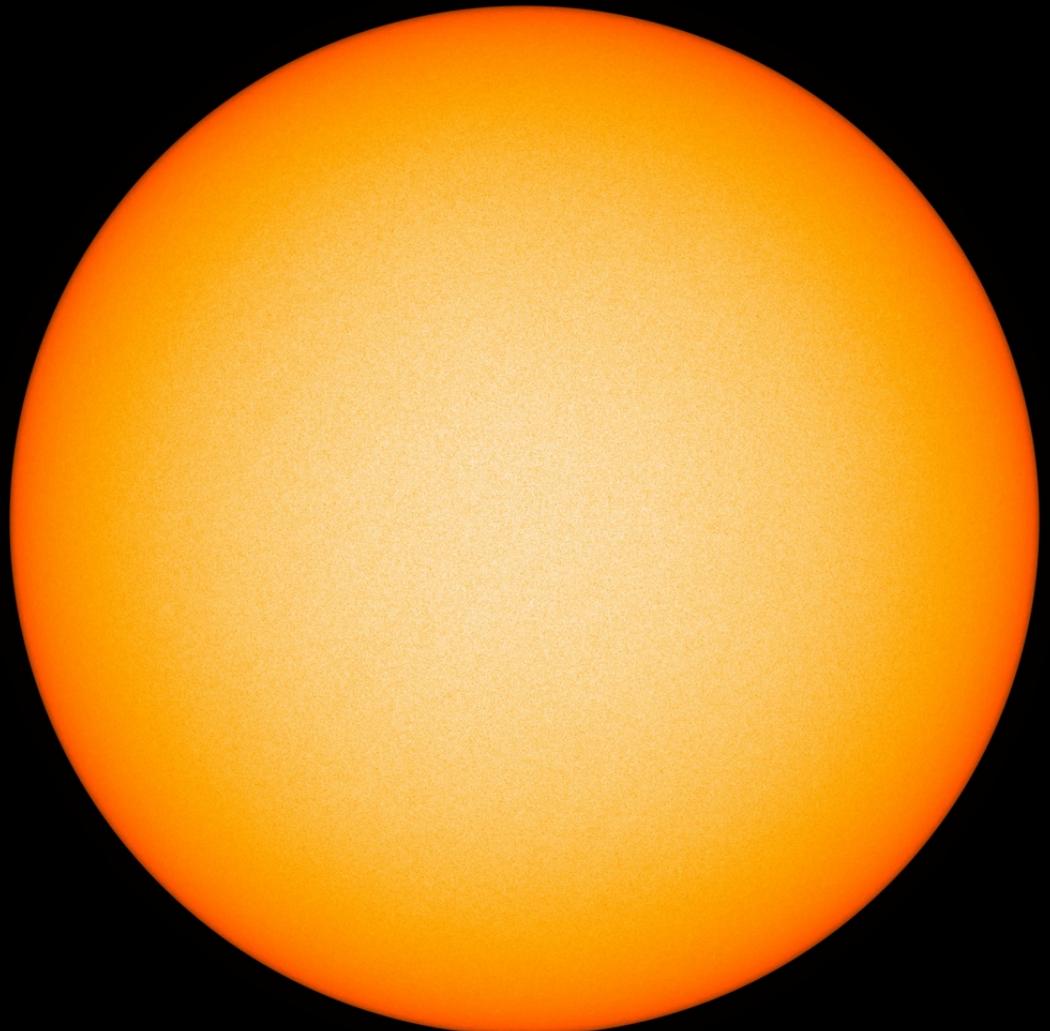


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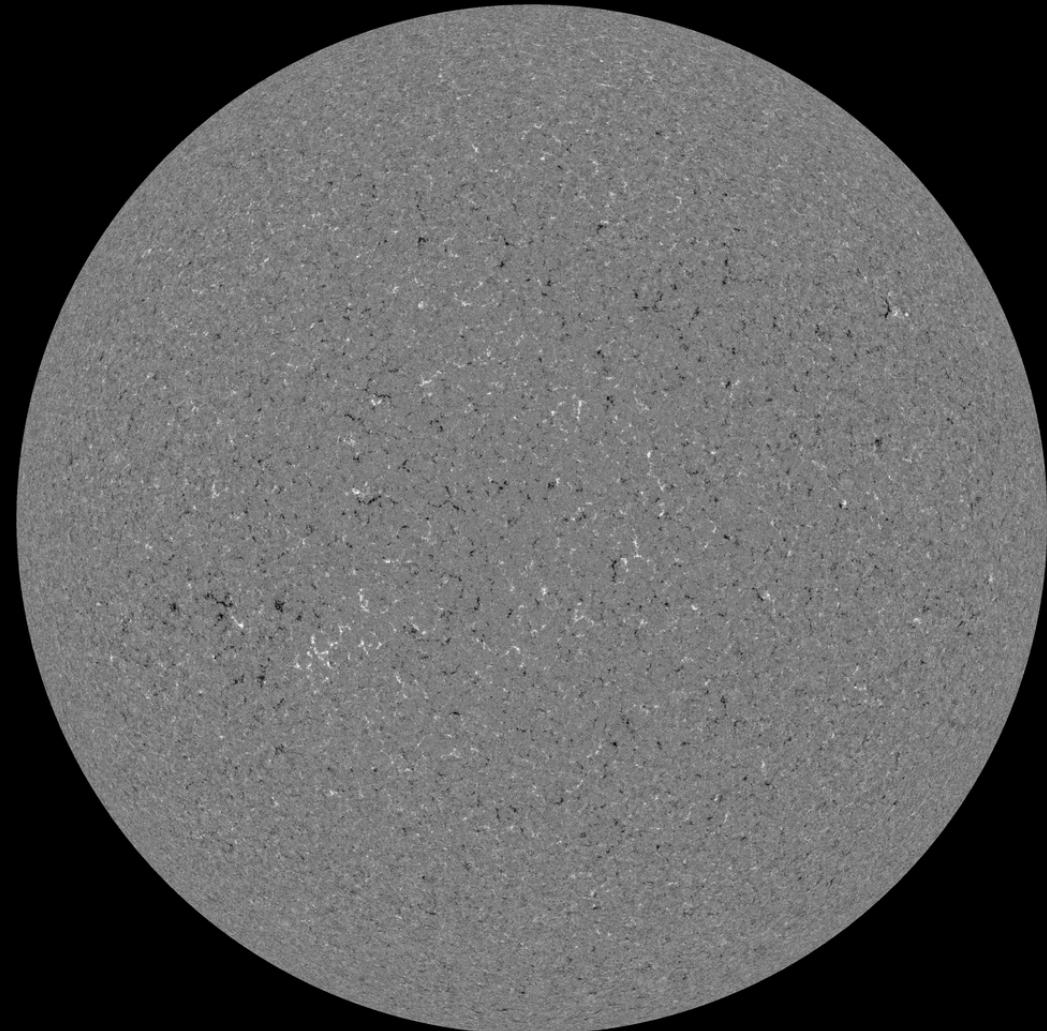
Solar active region - start of the week

SDO/HMI White Light 2018-11-11



SDO/HMI Quick-Look Continuum: 20181111_114500

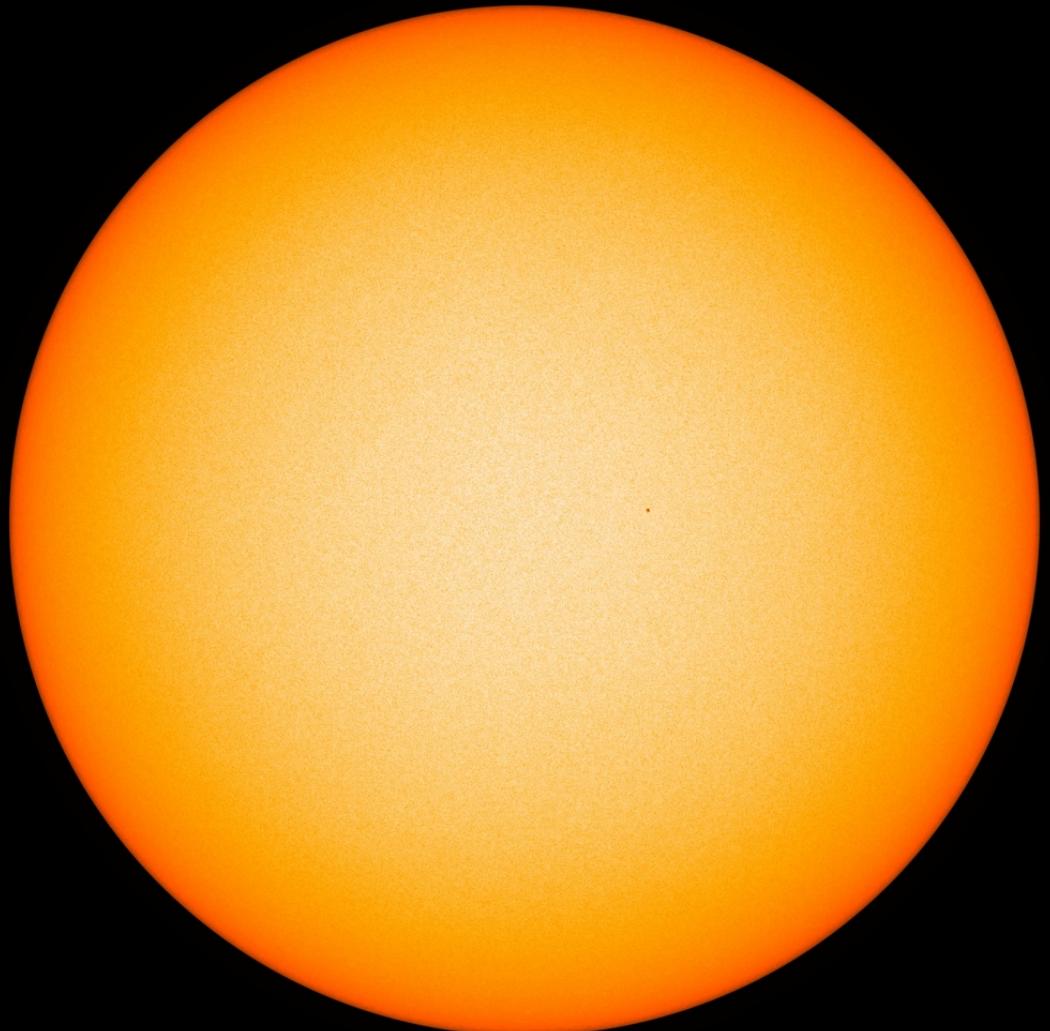
SDO/HMI Magnetogram 2018-11-11



SDO/HMI Quick-Look Magnetogram: 20181111_114500

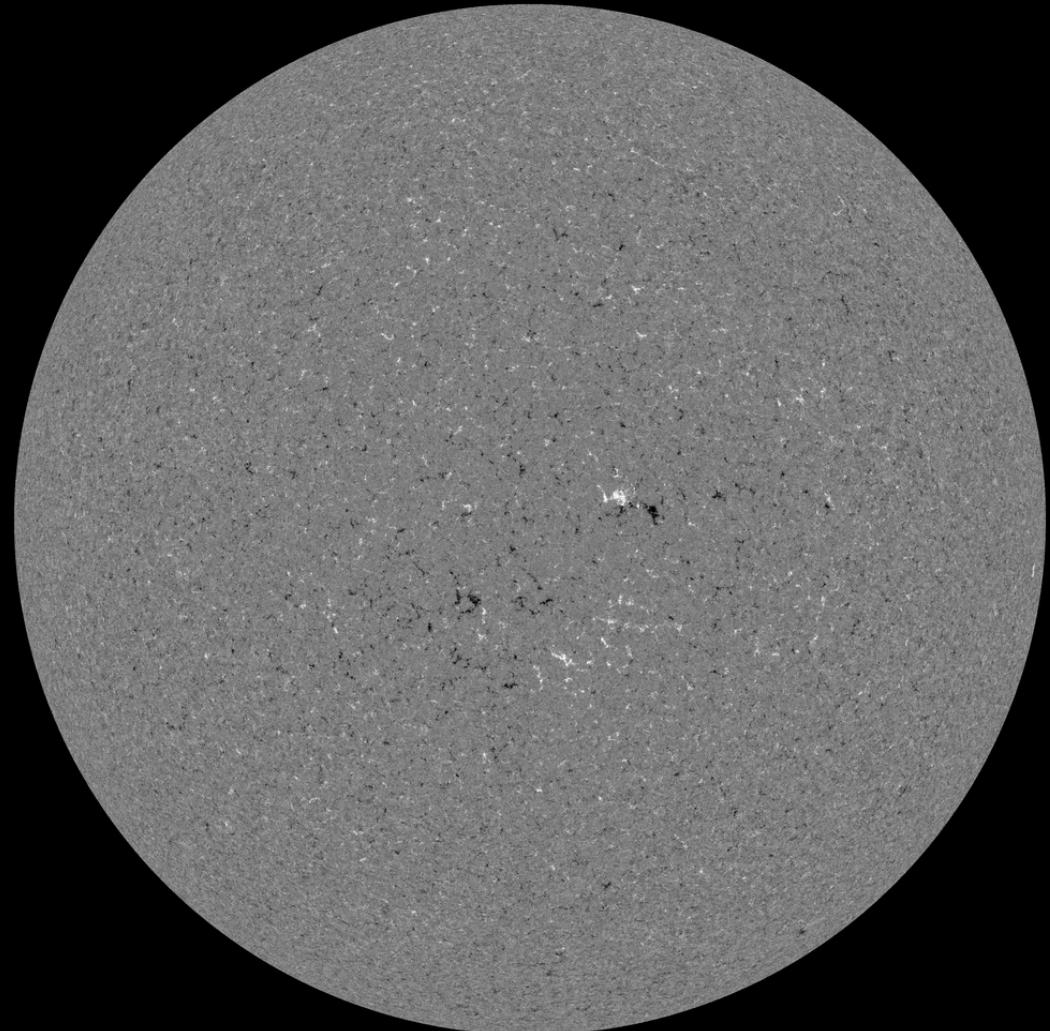
Solar active region - middle of the week

SDO/HMI White Light 2018-11-14



SDO/HMI Quick-Look Continuum: 20181113_171500

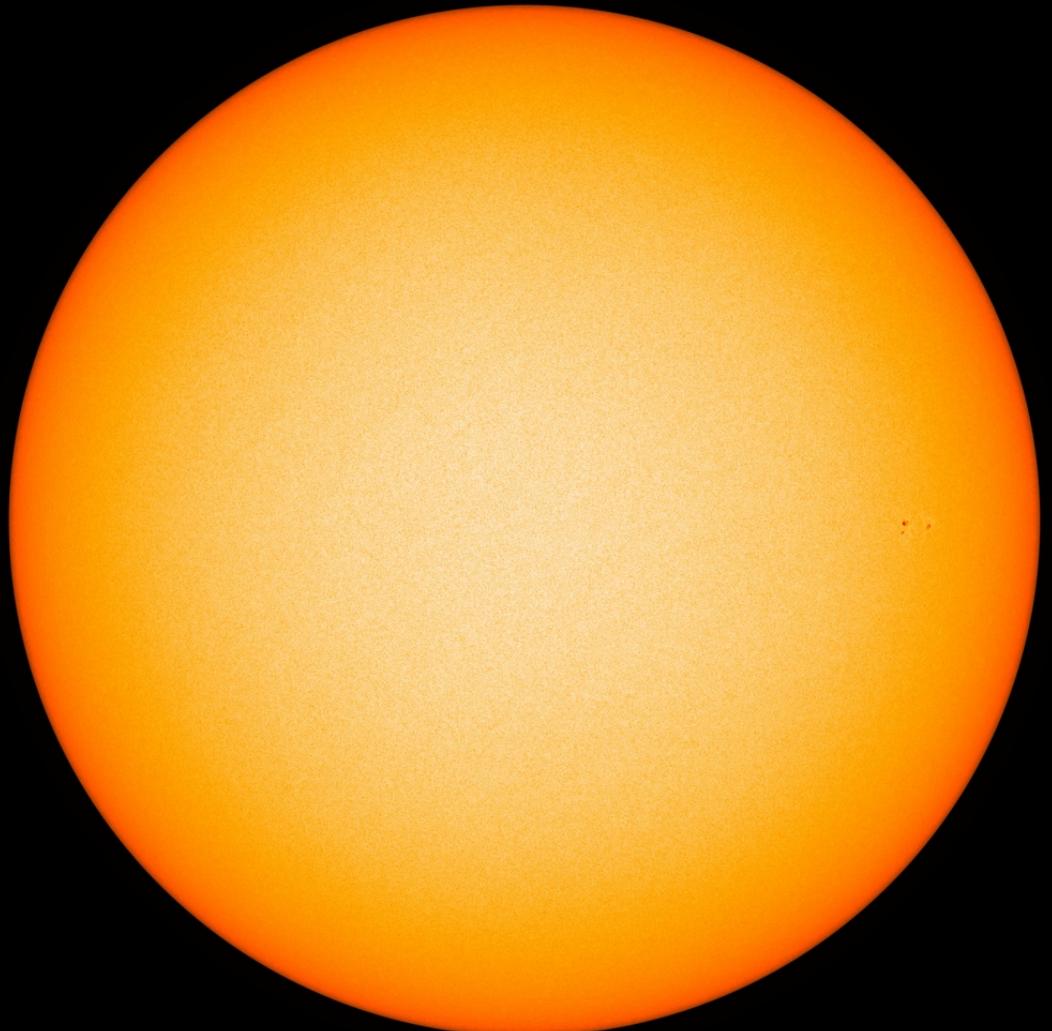
SDO/HMI Magnetogram 2018-11-14



SDO/HMI Quick-Look Magnetogram: 20181113_171500

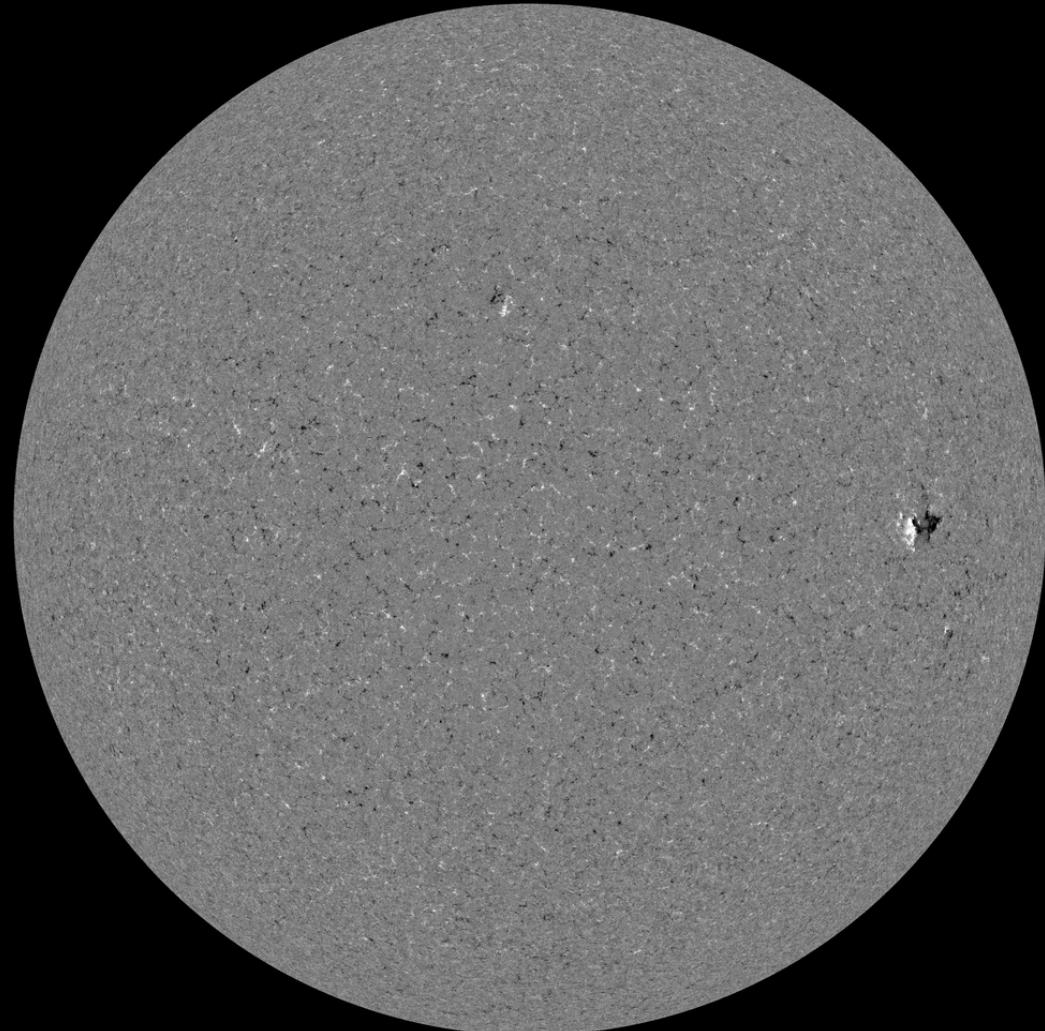
Solar active region - end of the week

SDO/HMI White Light 2018-11-18



SDO/HMI Quick-Look Continuum: 20181118_114500

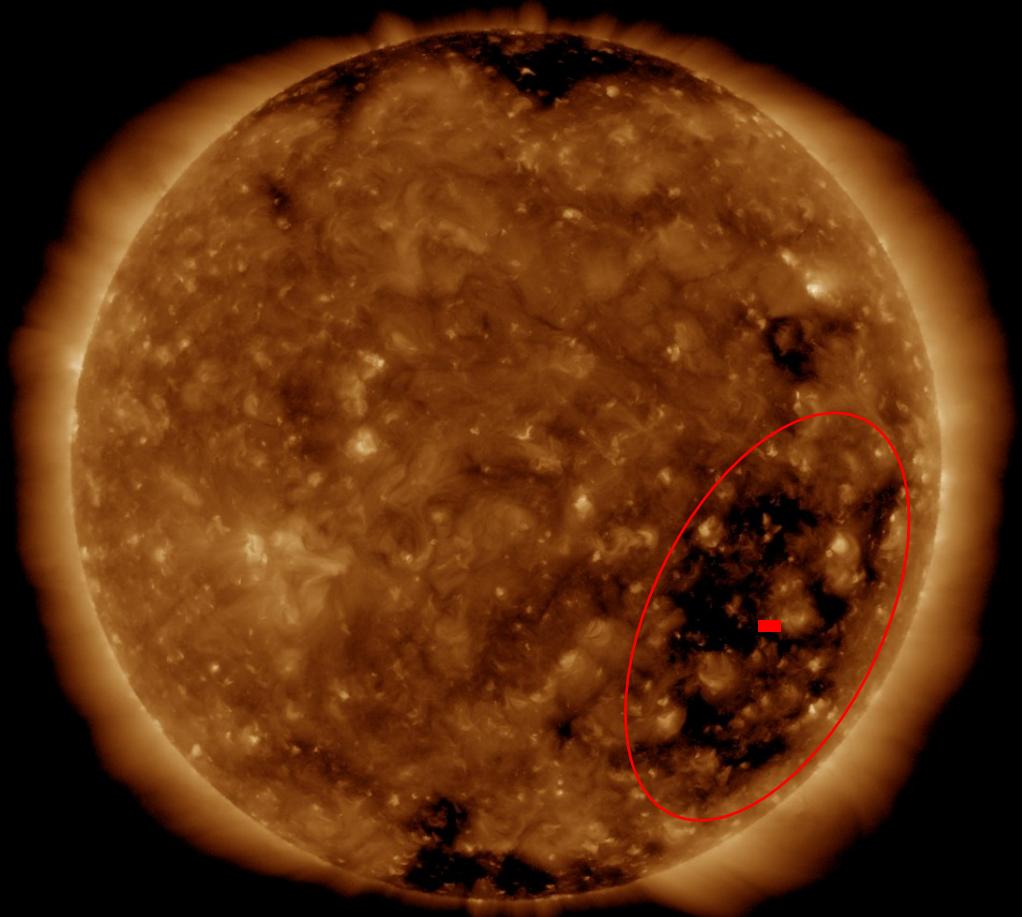
SDO/HMI Magnetogram 2018-11-18



SDO/HMI Quick-Look Magnetogram: 20181118_114500

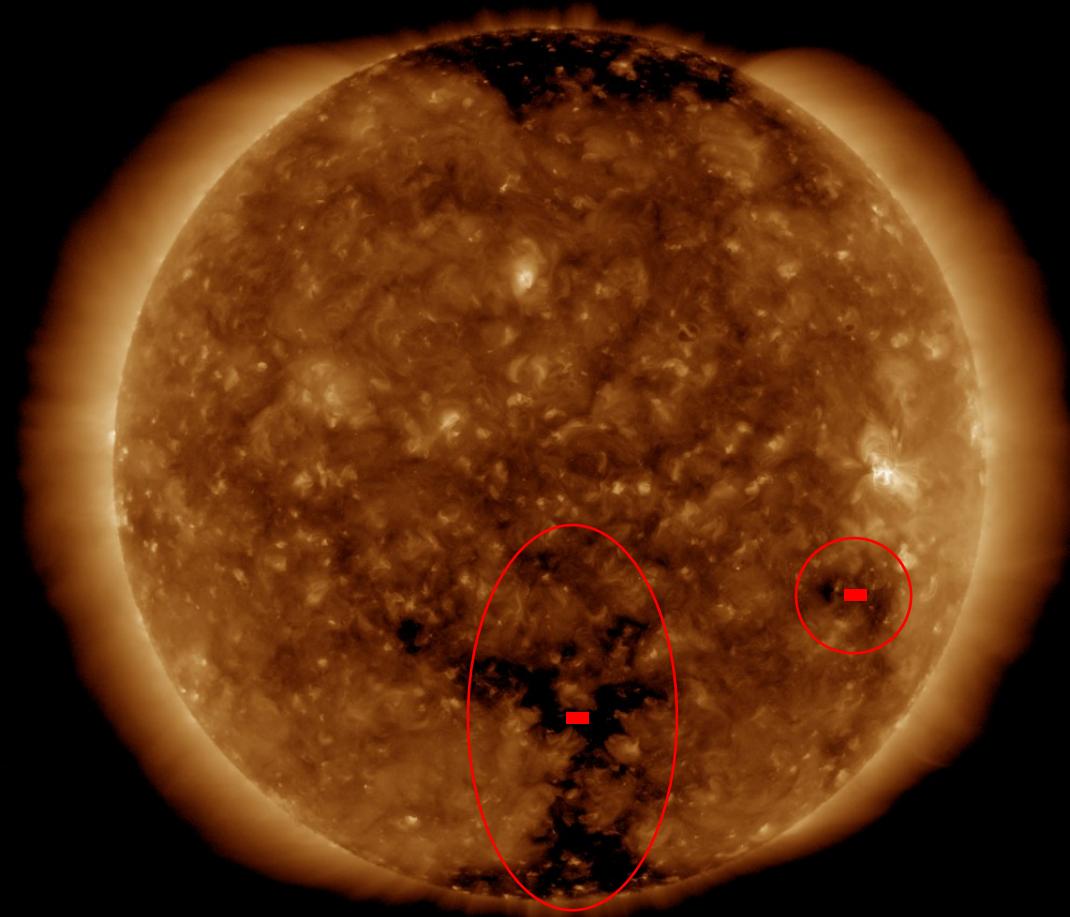
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-11-11



SDO/AIA 193 2018-11-11 12:10:17 UT

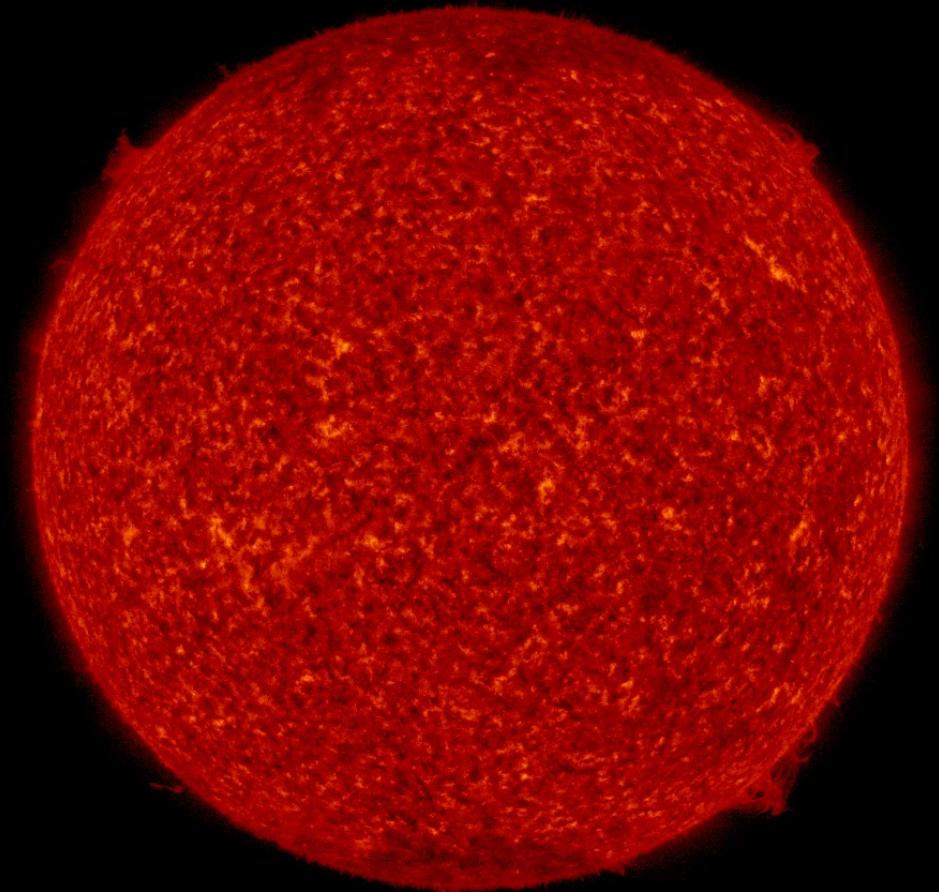
SDO/AIA 19.3 nm 2018-11-18



SDO/AIA 193 2018-11-18 12:10:41 UT

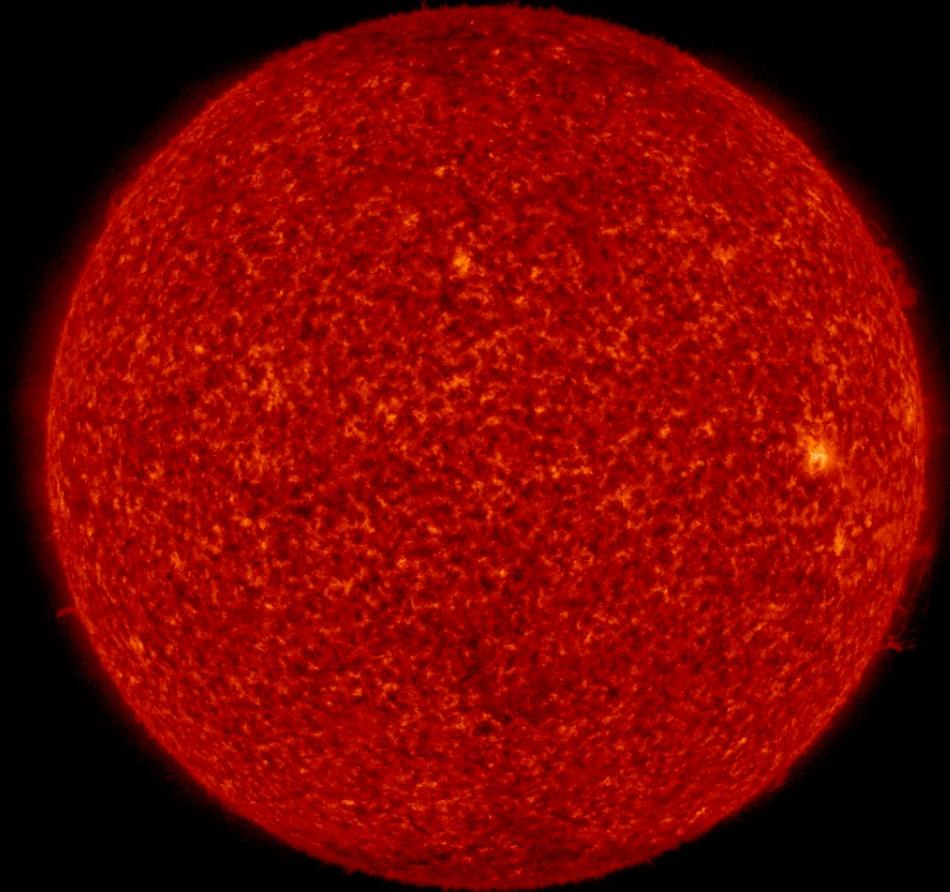
Solar active region & Filament

SDO/AIA 30.4 nm 2018-11-11



SDO/AIA 304 2018-11-11 12:13:54 UT

SDO/AIA 30.4 nm 2018-11-18



SDO/AIA 304 2018-11-18 12:13:54 UT

Filament & Filament eruption

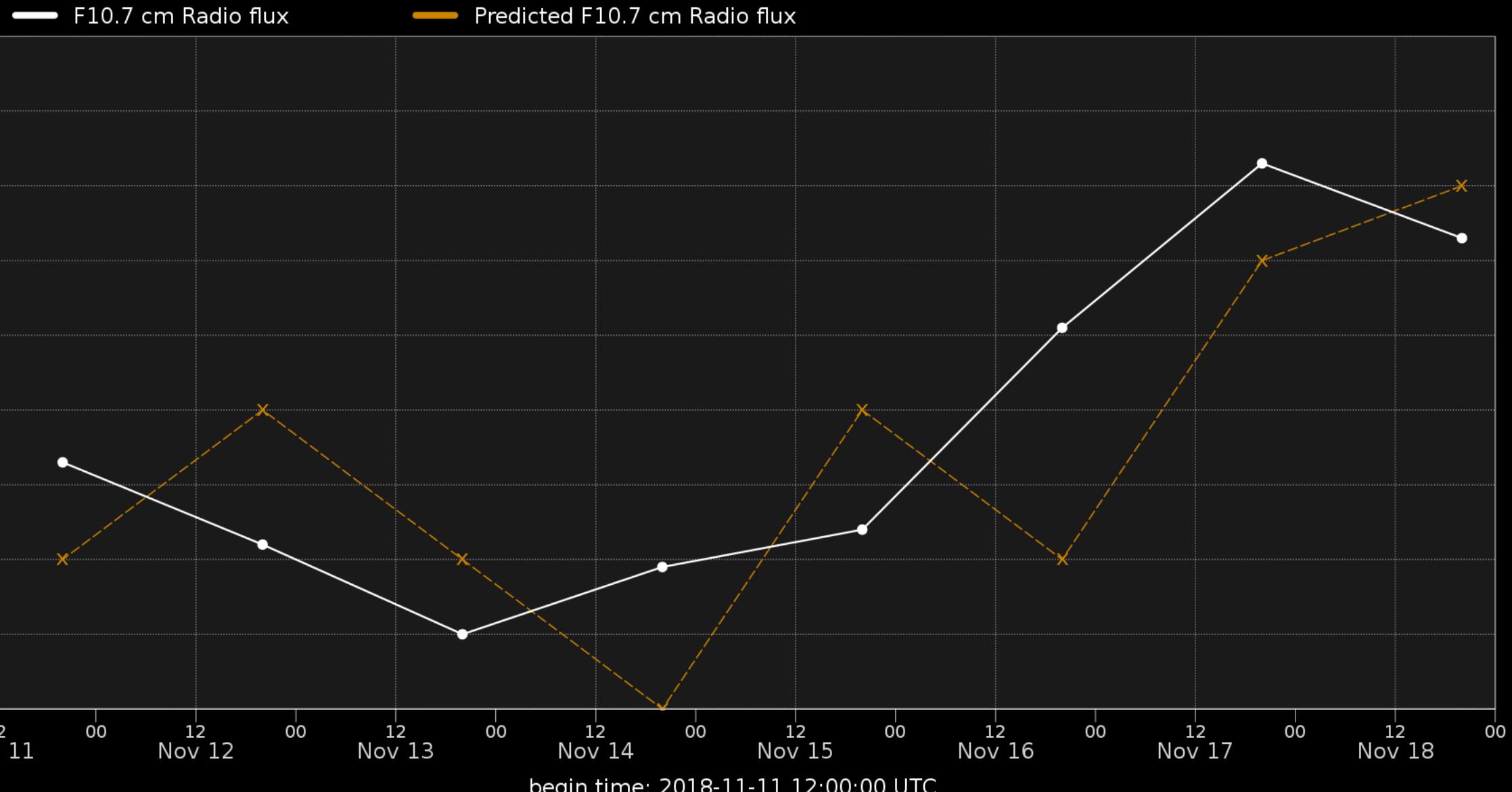
H-alpha 2018-11-11



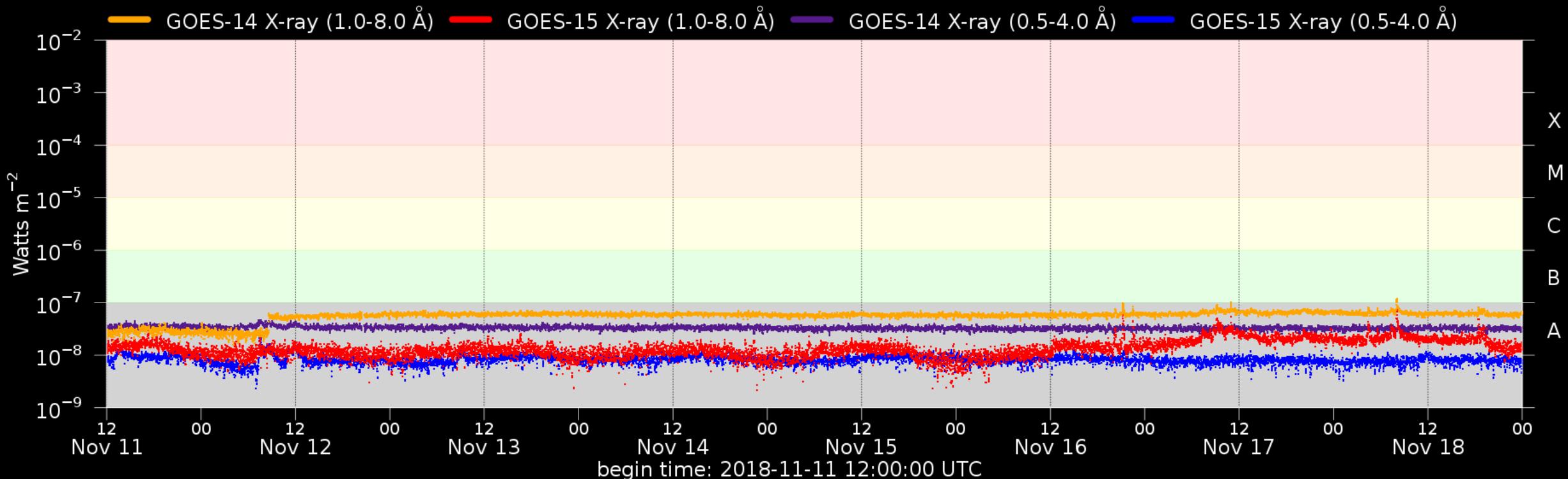
H-alpha 2018-11-18



Solar F10.7cm radio flux



Flaring activity

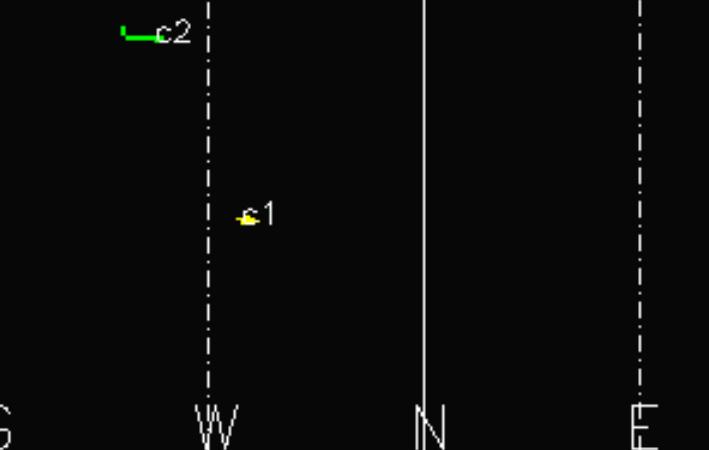


Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

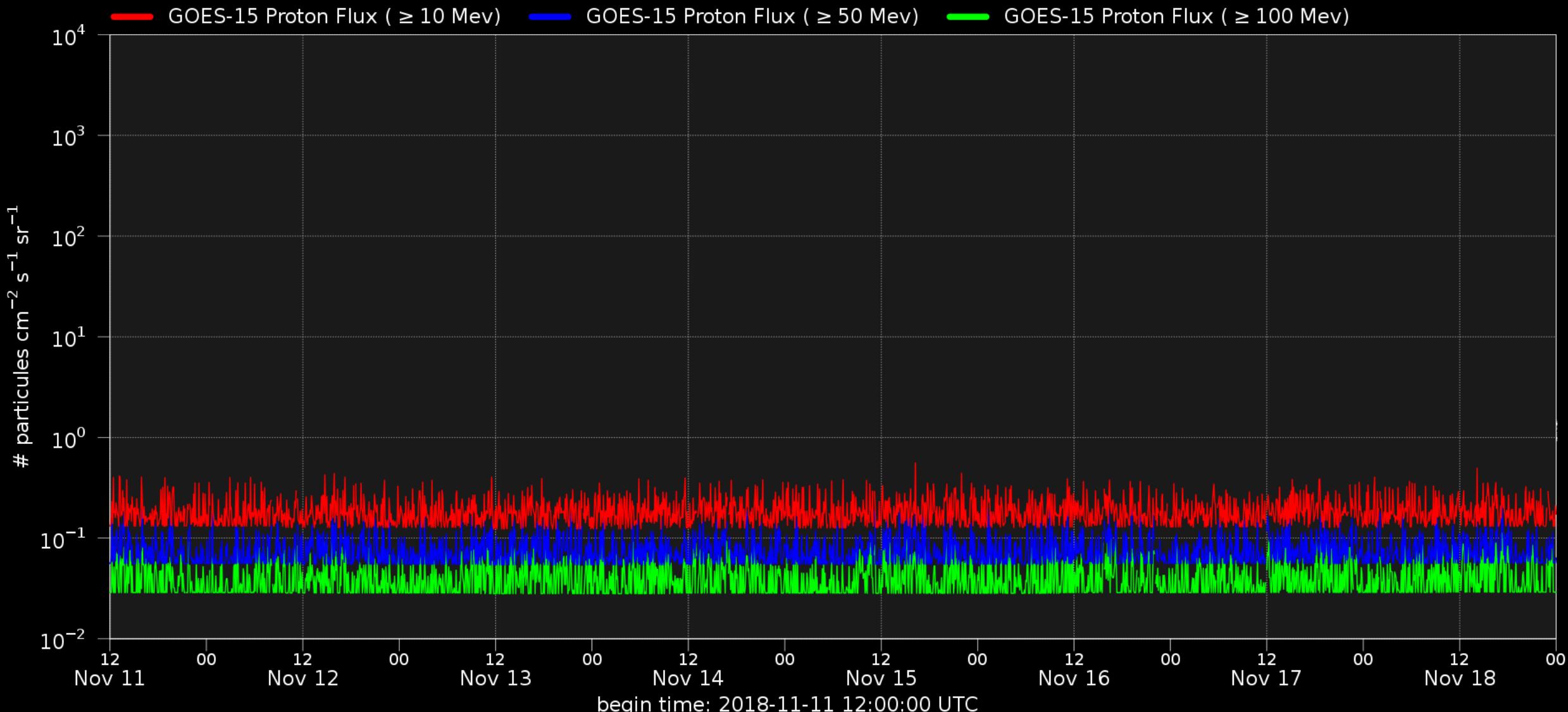
Issue date	2018-11-11	2018-11-12	2018-11-13	2018-11-14	2018-11-15	2018-11-16	2018-11-17	2018-11-18
Probability	--- 05 01 01	--- 02 01 01	--- 02 01 01	--- 02 01 01	--- 10 01 01	--- 10 01 01	--- 10 01 01	--- 15 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Coronal Mass Ejection

09:12 11/
20:36 11/
17:36 11/
23:12 11/
19:48 11/
17:00 11/
13:25 11/
10:12 11/
06:36 11/
02:48 11/
22:24 11/
19:12 11/
16:24 11/
13:36 11/
10:12 11/
07:24 11/
04:36 11/
00:48 11/
14:36 11/
11:24 11/
08:24 11/
05:12 11/
02:00 11/
22:12 11/
19:12 11/
16:36 11/
13:30 11/
10:12 11/
07:00 11/
04:12 11/
00:48 11/
21:24 11/
18:00 11/
15:12 11/
12:00 11/
09:12 11/
06:00 11/
03:12 11/
00:00 11/



Solar proton flux



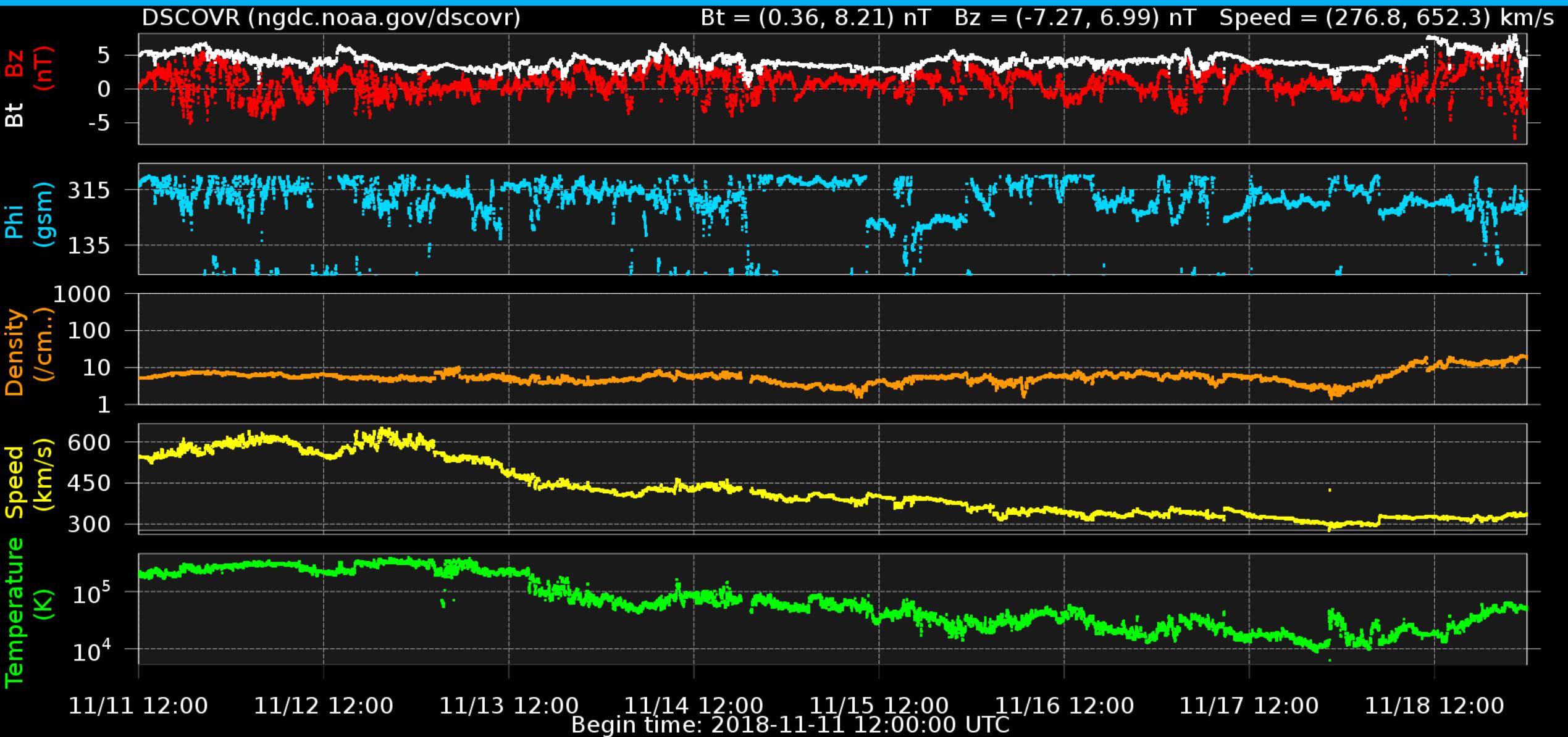
Solar Wind and Geomagnetic Activity



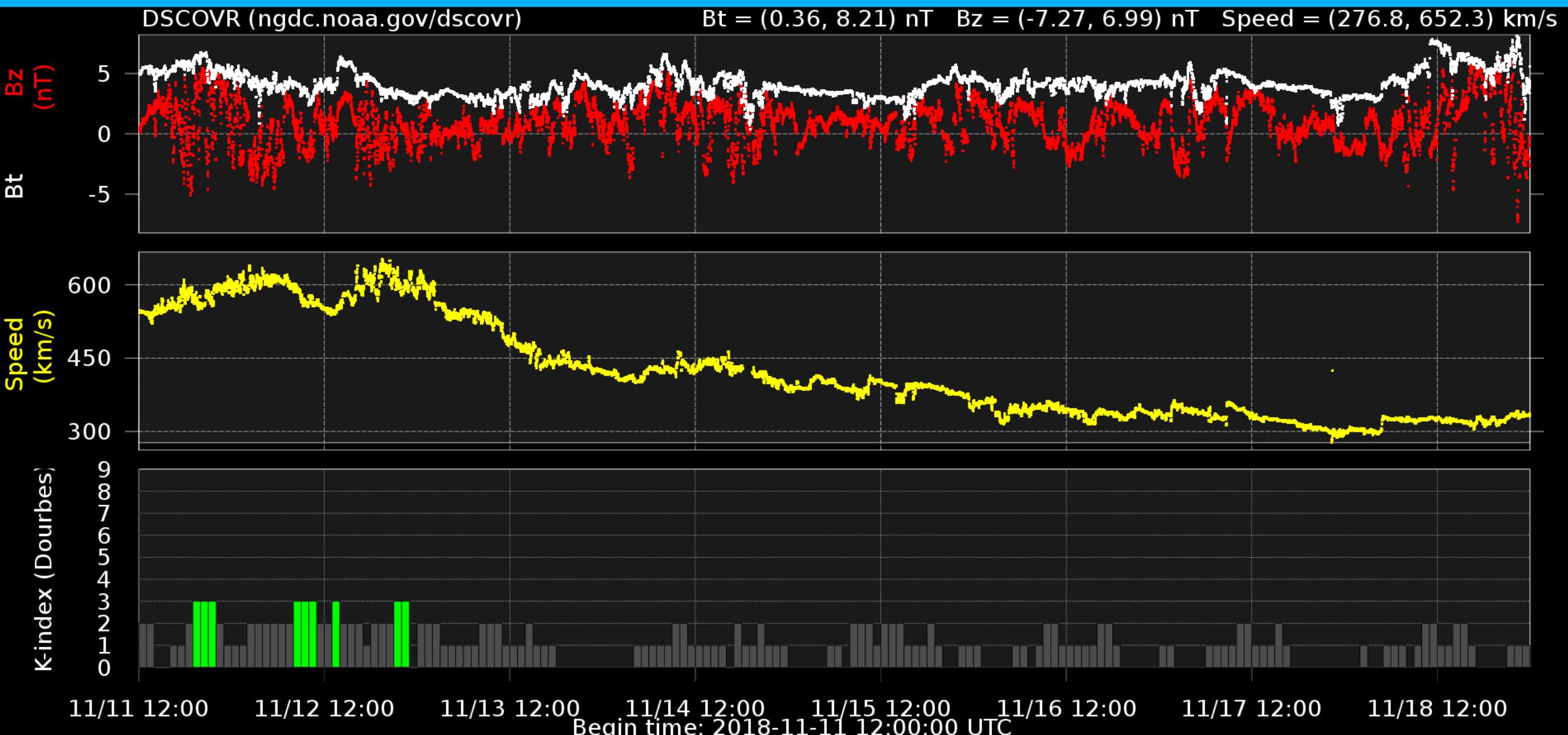
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Solar wind parameters (DSCOVR data)

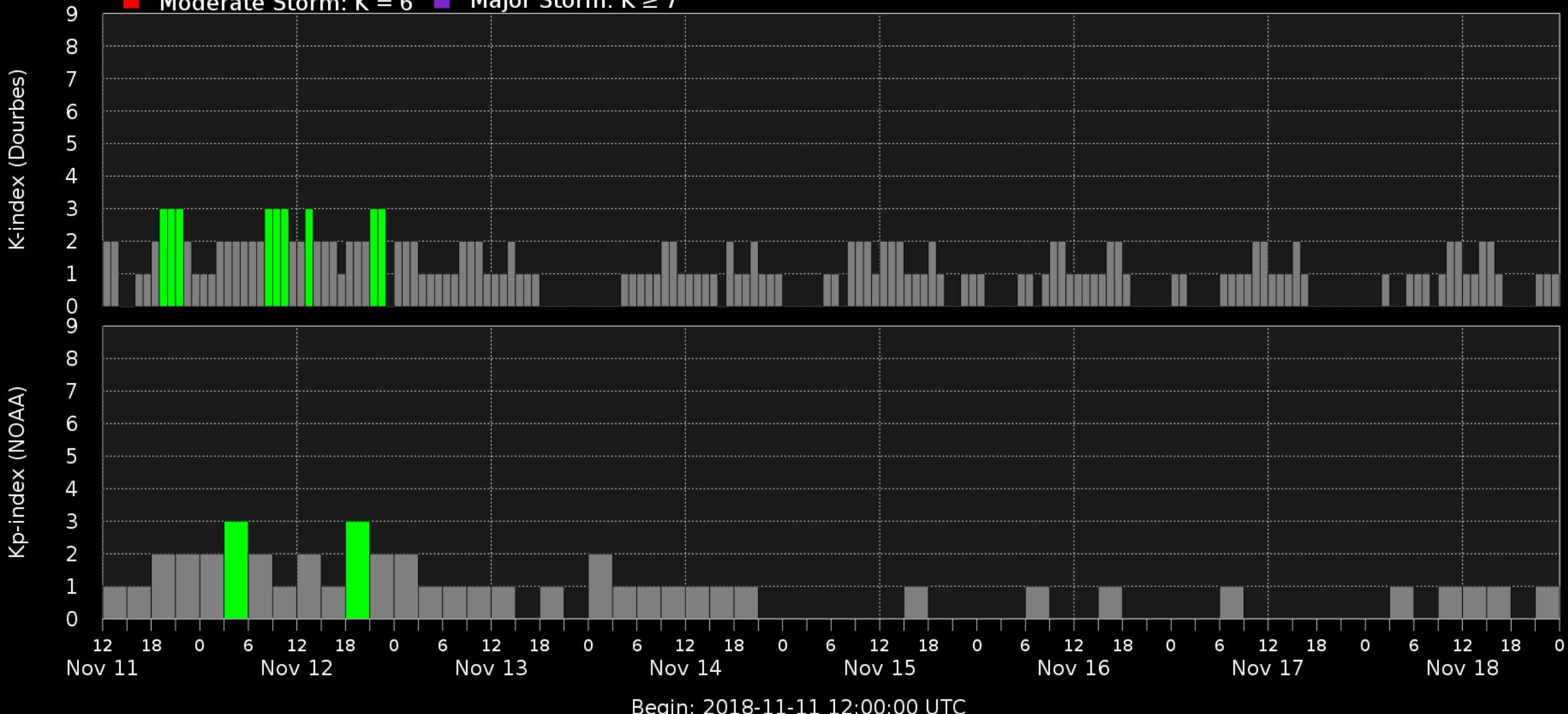


Solar wind parameters & K-index (DSCOVR/Dourbes)



Geomagnetic activity (K-indexes)

■ Quiet: $K \leq 2$ ■ Unsettled: $K = 3$ ■ Active: $K = 4$ ■ Minor Storm: $K = 5$
■ Moderate Storm: $K = 6$ ■ Major Storm: $K \geq 7$



Begin: 2018-11-11 12:00:00 UTC

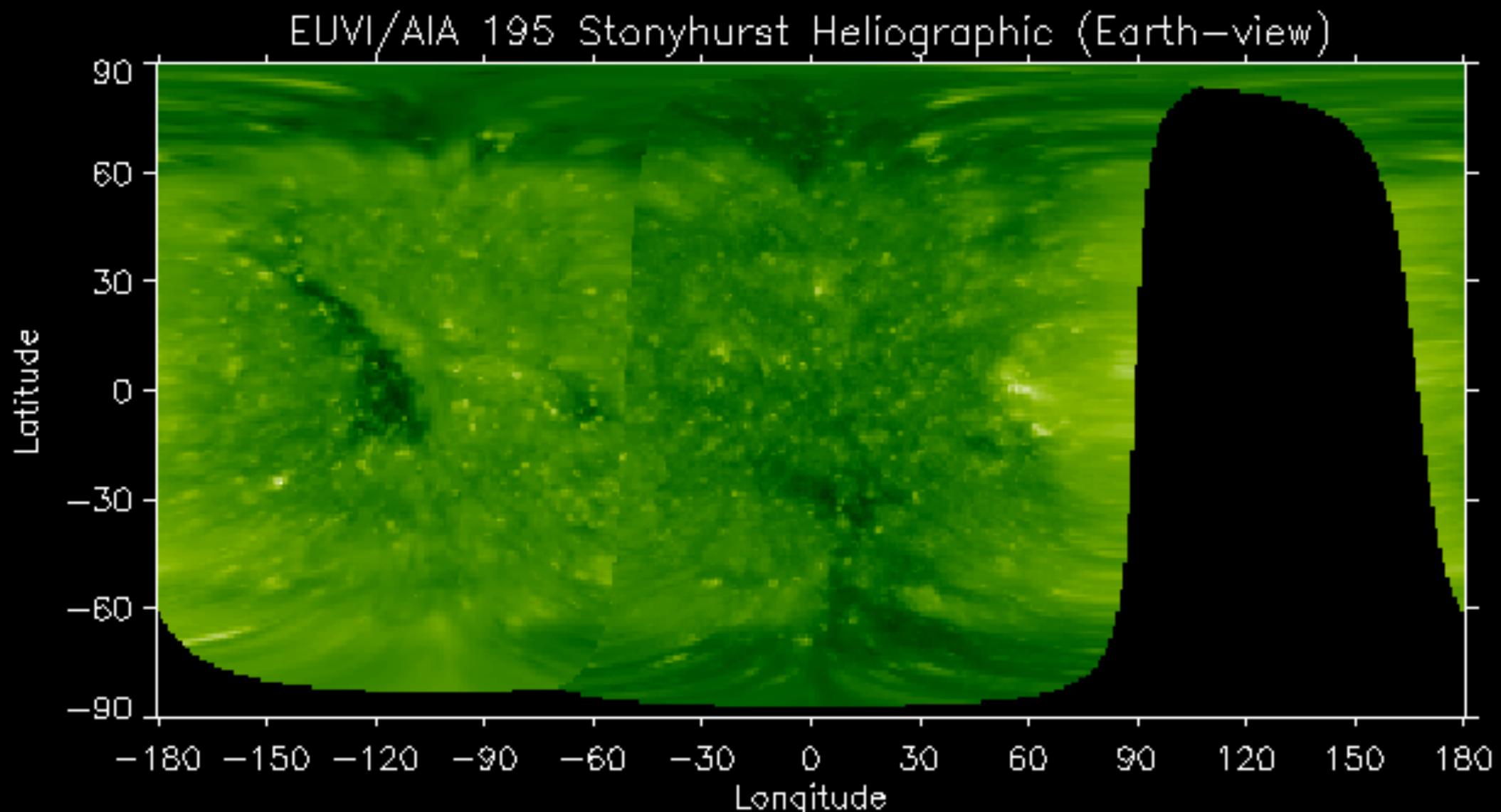
Outlook



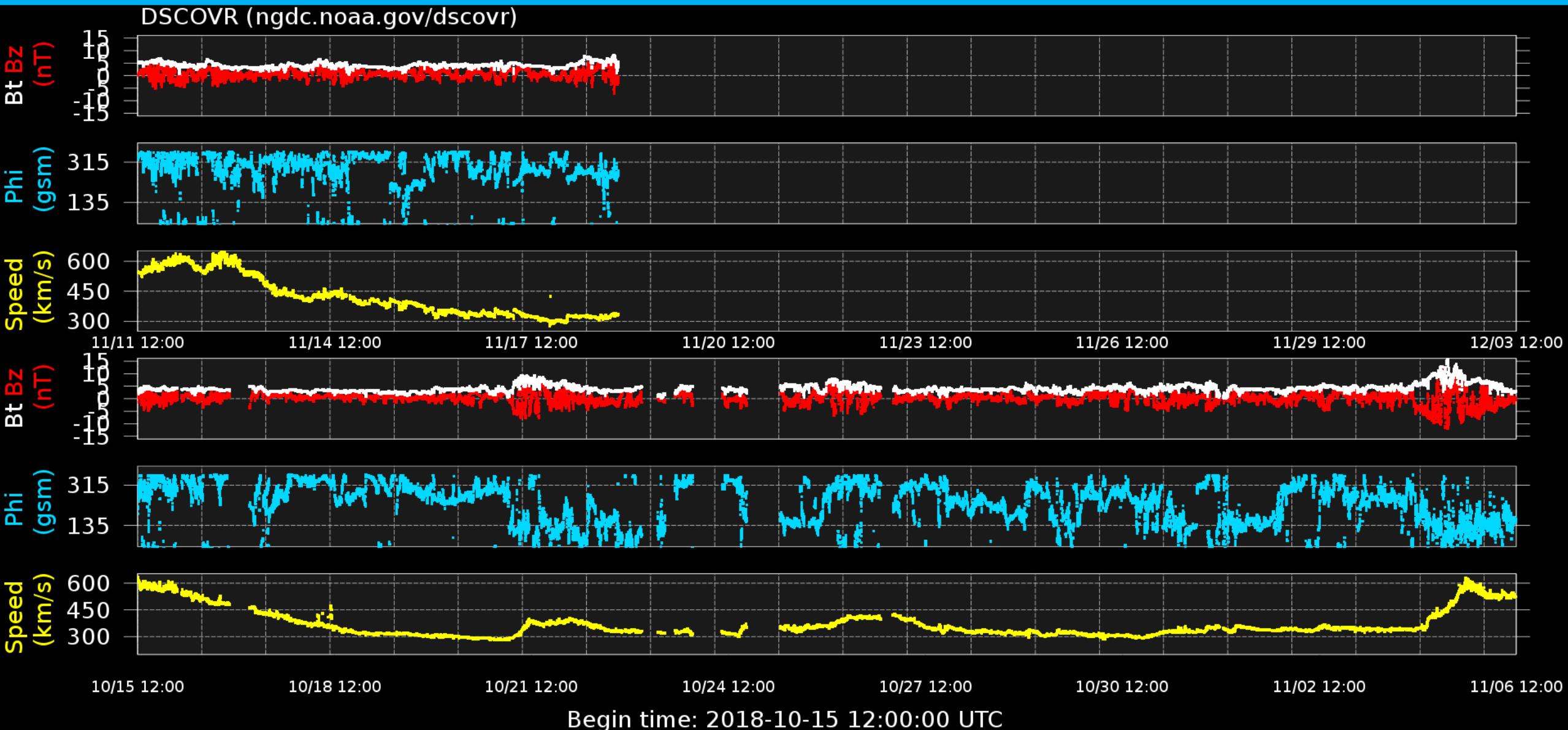
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Outlook: Solar activity



Outlook: Solar wind



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