

# SIDC Space Weather Briefing

04 November 2018 - 11 November 2018

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& the SIDC forecaster team



Royal Observatory  
of Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

# Summary Report

Solar activity from 2018-11-04 12:00 UT to 2018-11-11 12:00 UT

Active regions	Alpha region Catania 1; beta region NOAA 2726: both inactive
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	Filament eruption near South pole 2018-11-04 18:30 UT
CMEs	None
Proton Events	None

Solar wind and geomagnetic conditions from 2018-11-04 12:00 UT to 2018-11-11 12:00 UT

Coronal Holes	+ polarity equatorial CH (start of week), - polarity equatorial CH (end of week)
ICME	None
SW Conditions	High speed streams at start and end of week
K-indices	max K-index (Dourbes): 5      max Kp-index (NOAA): 6

# Solar Activity

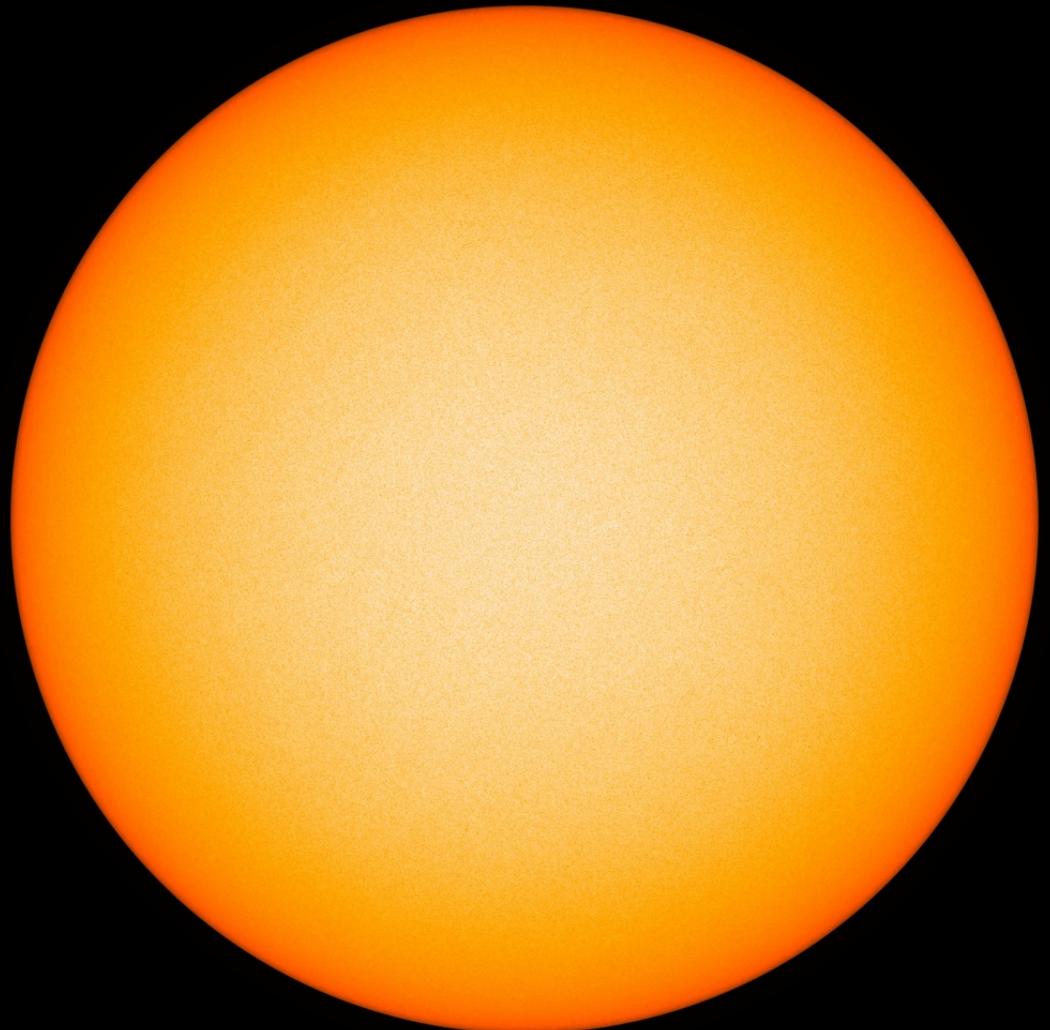


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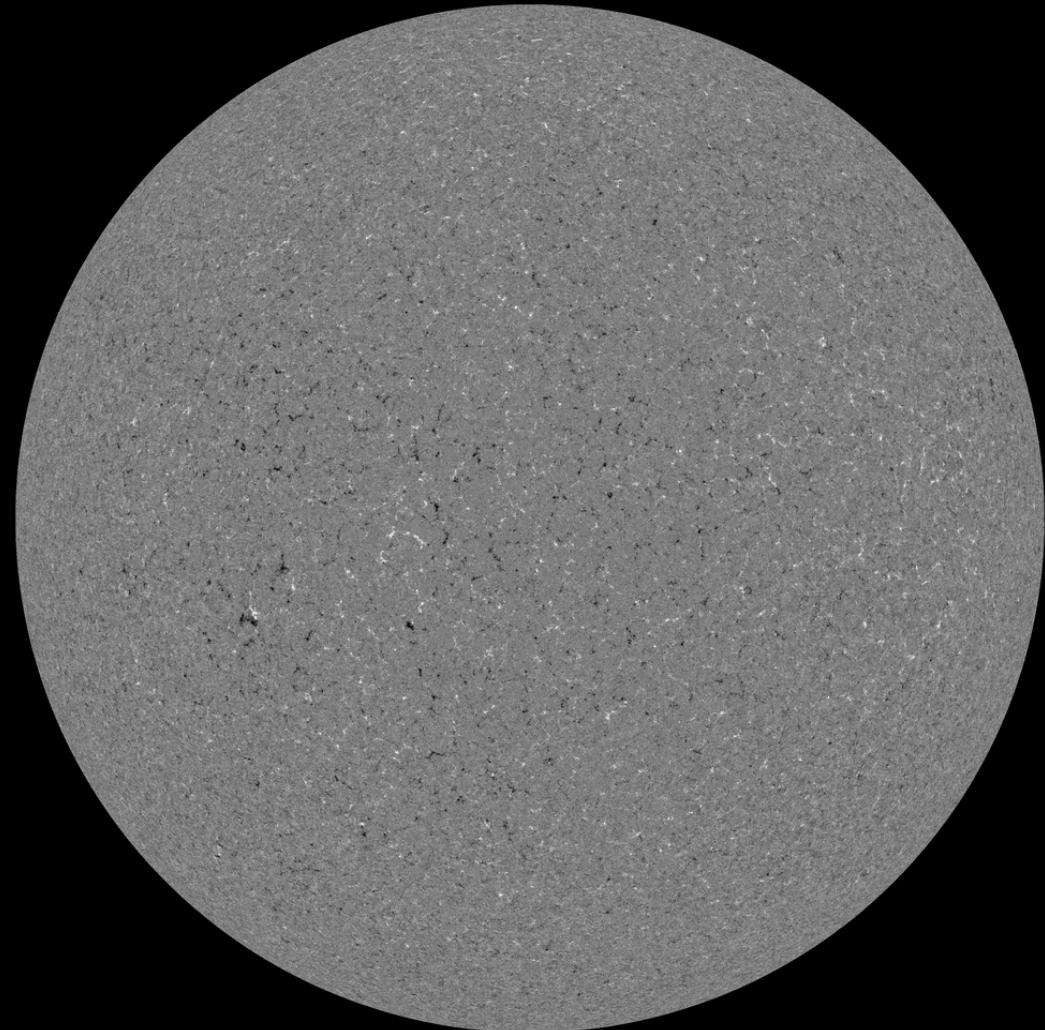
# Solar active region - start of the week

SDO/HMI White Light 2018-11-04



SDO/HMI Quick-Look Continuum: 20181104\_114500

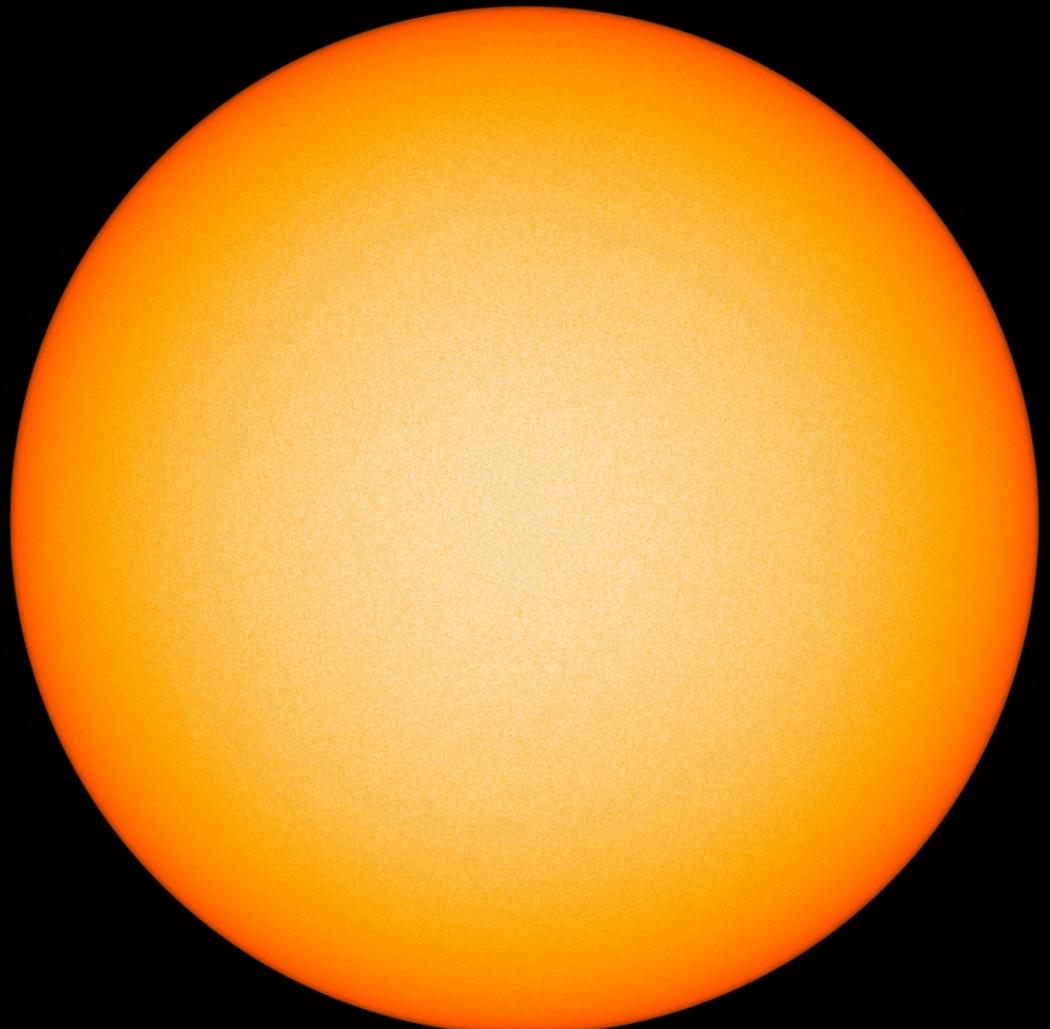
SDO/HMI Magnetogram 2018-11-04



SDO/HMI Quick-Look Magnetogram: 20181104\_114500

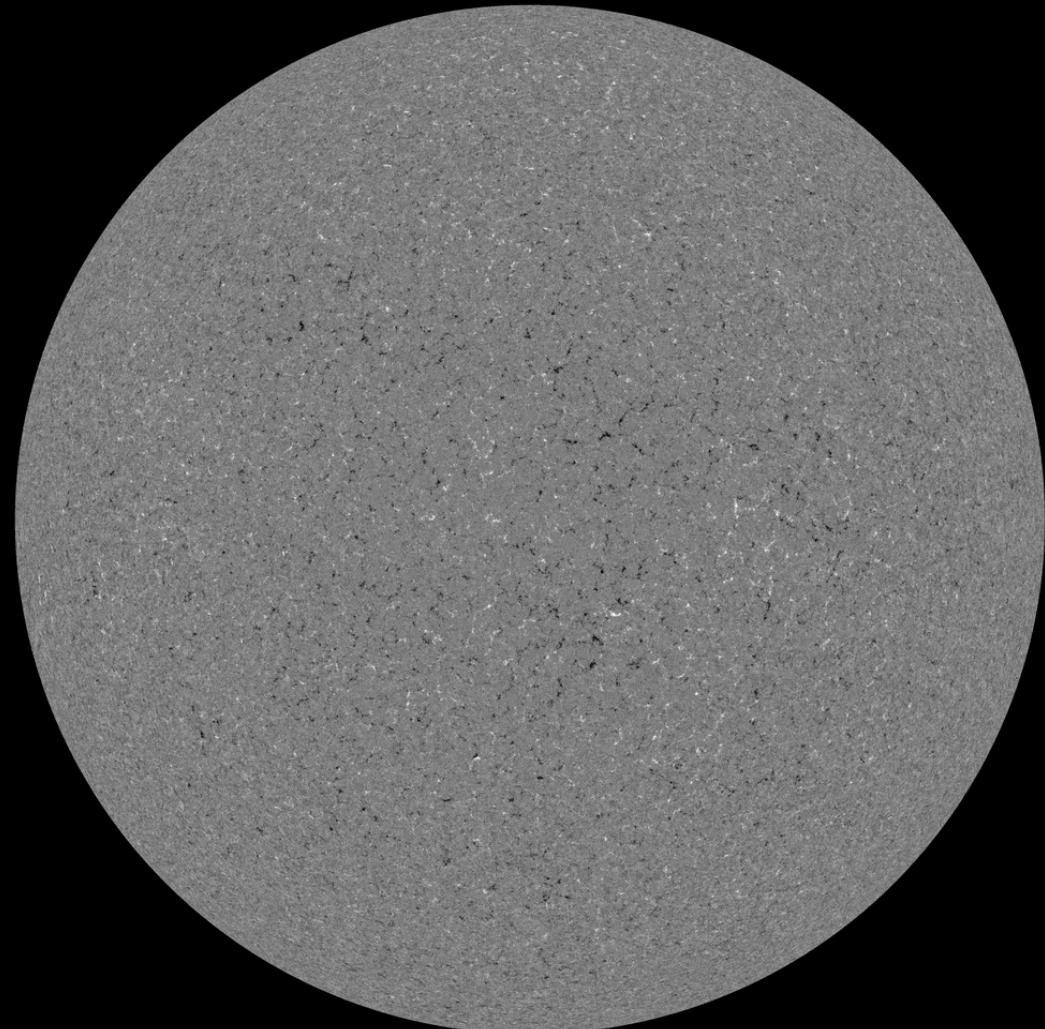
# Solar active region - middle of the week

SDO/HMI White Light 2018-11-07



SDO/HMI Quick-Look Continuum: 20181107\_114500

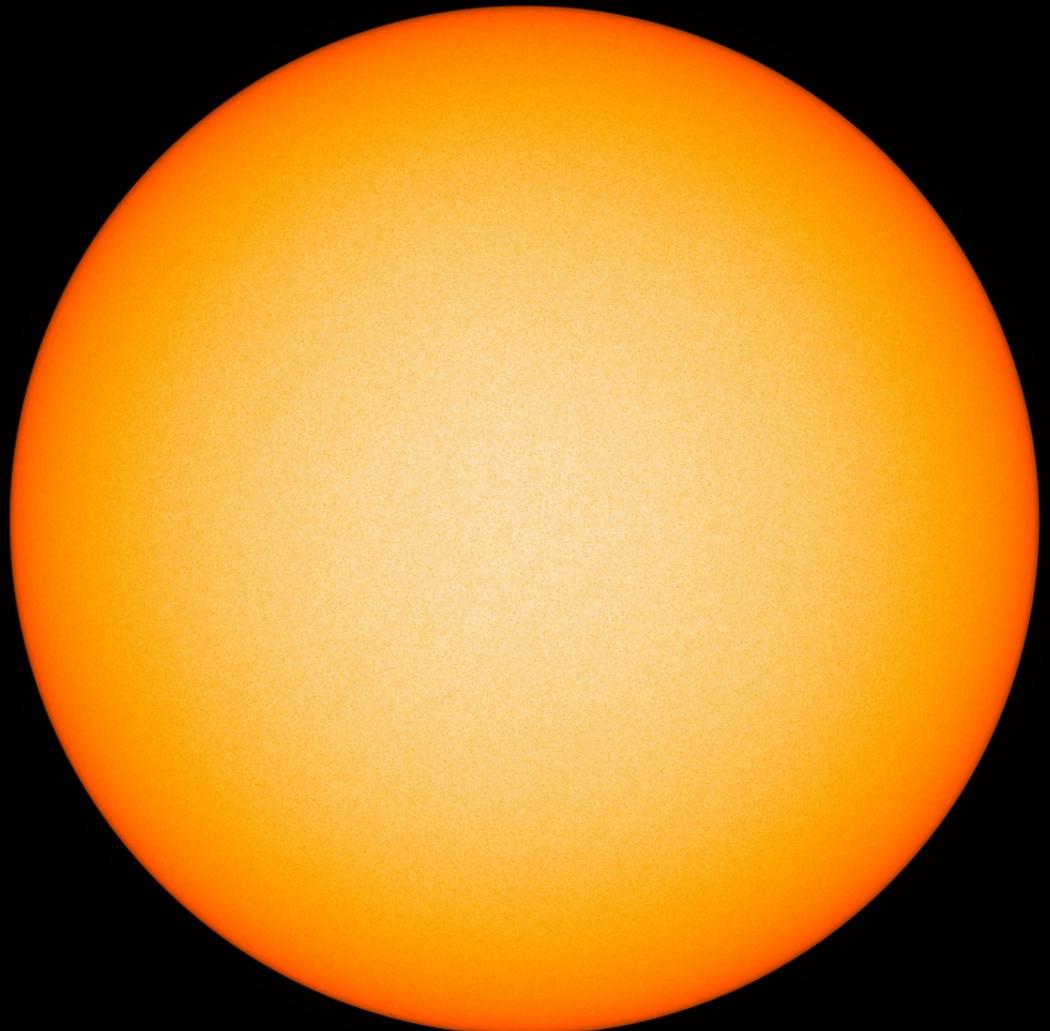
SDO/HMI Magnetogram 2018-11-07



SDO/HMI Quick-Look Magnetogram: 20181107\_114500

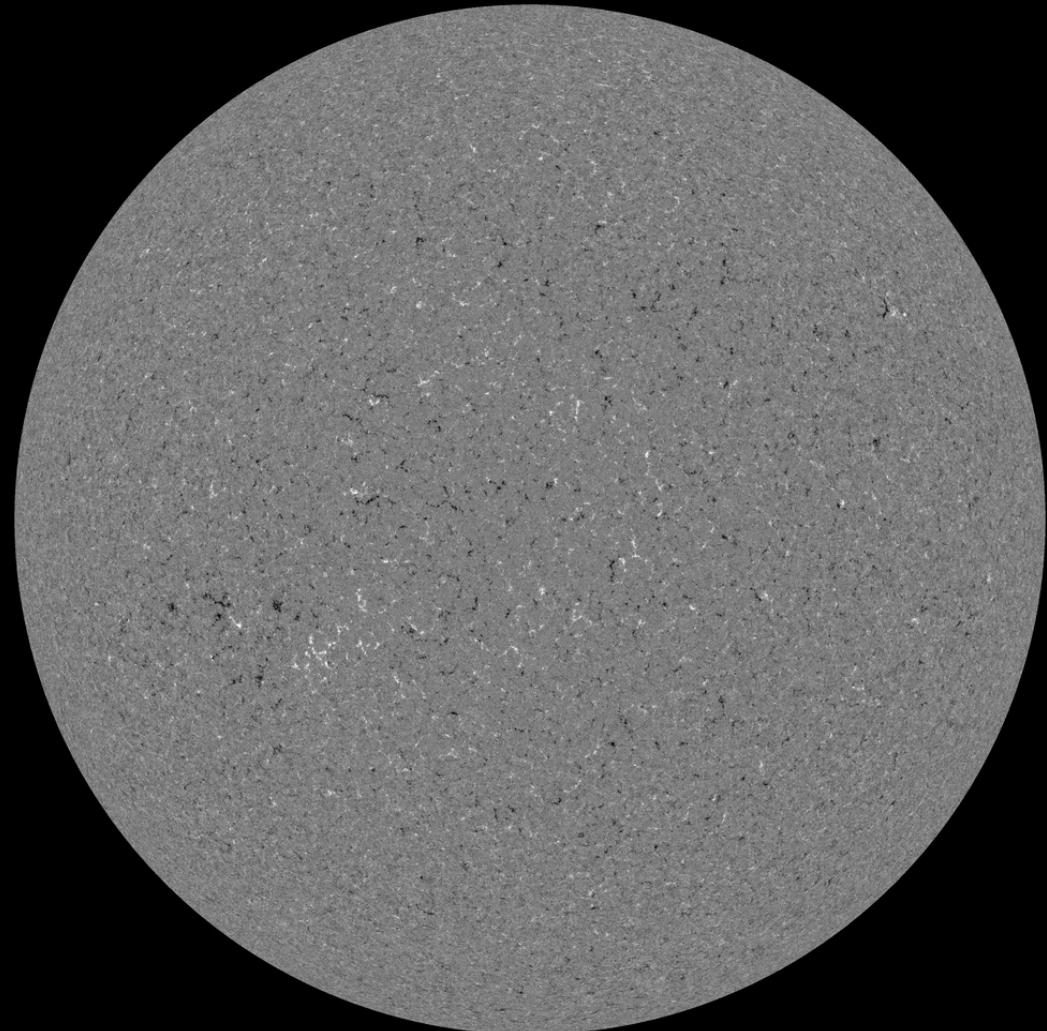
# Solar active region - end of the week

SDO/HMI White Light 2018-11-11



SDO/HMI Quick-Look Continuum: 20181111\_114500

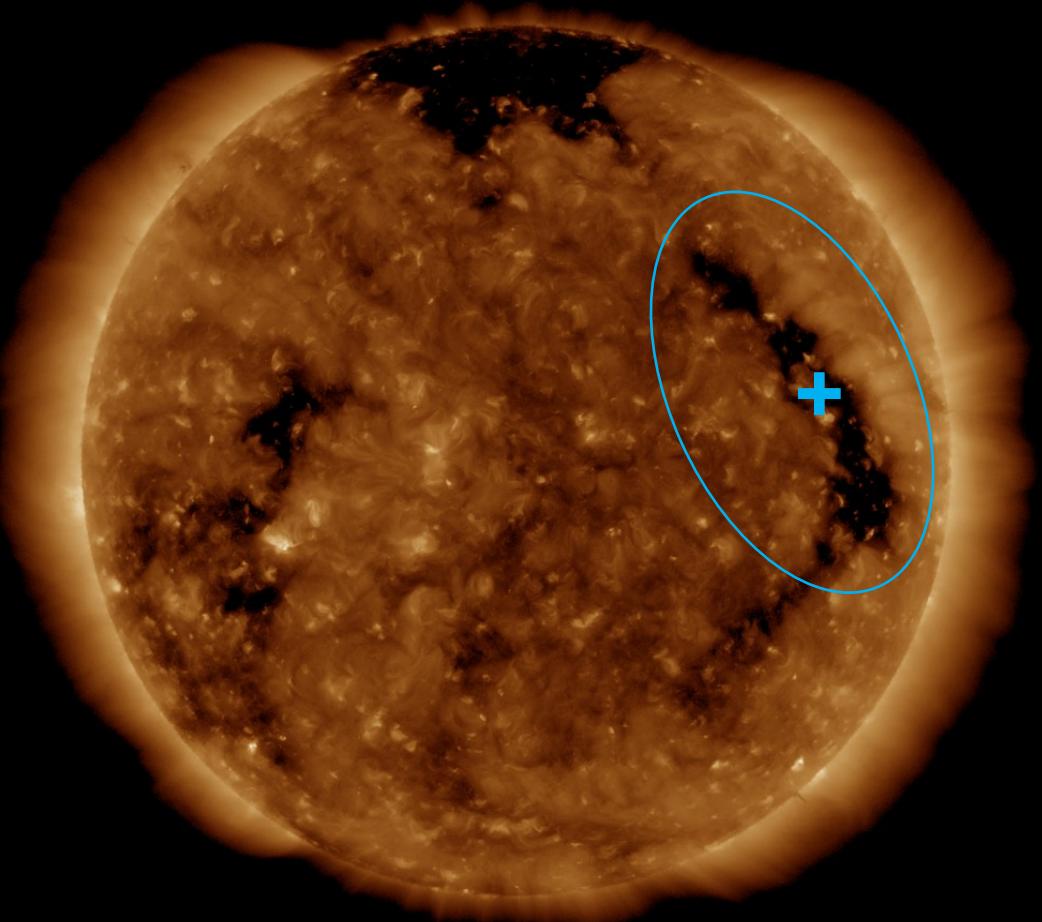
SDO/HMI Magnetogram 2018-11-11



SDO/HMI Quick-Look Magnetogram: 20181111\_114500

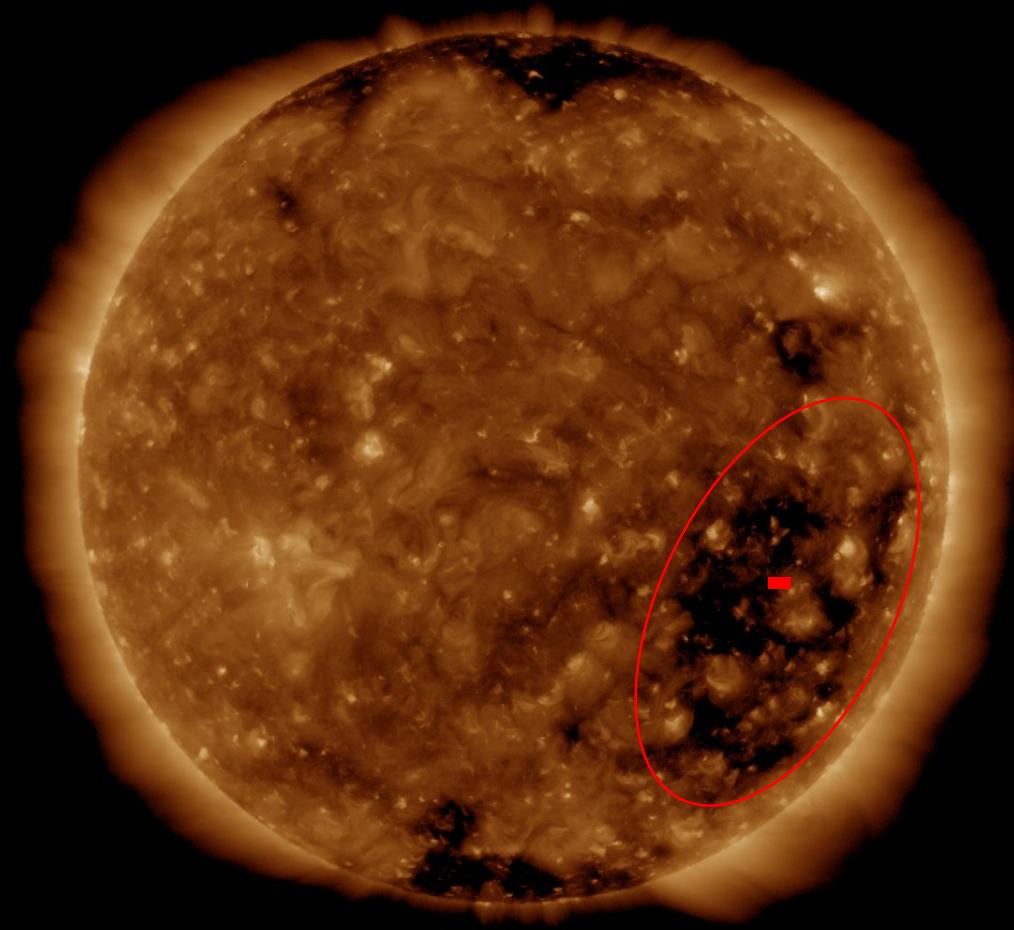
# Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-11-04



SDO/AIA 193 2018-11-04 12:10:41 UT

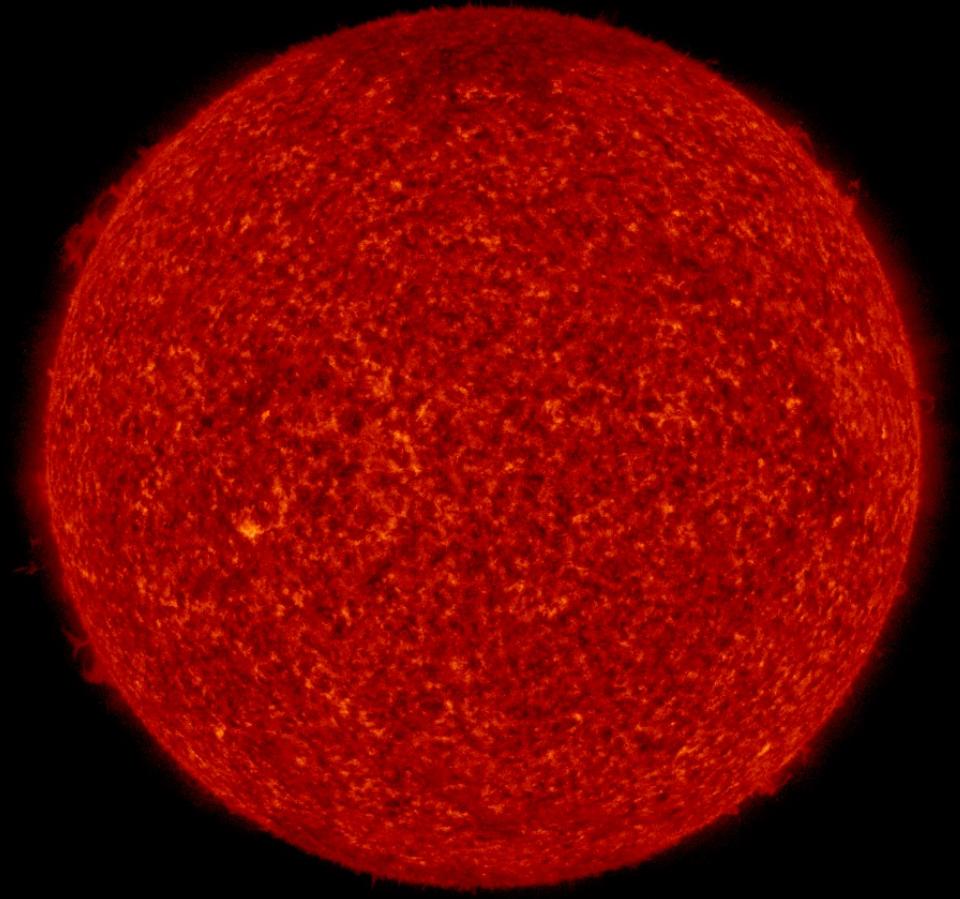
SDO/AIA 19.3 nm 2018-11-11



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

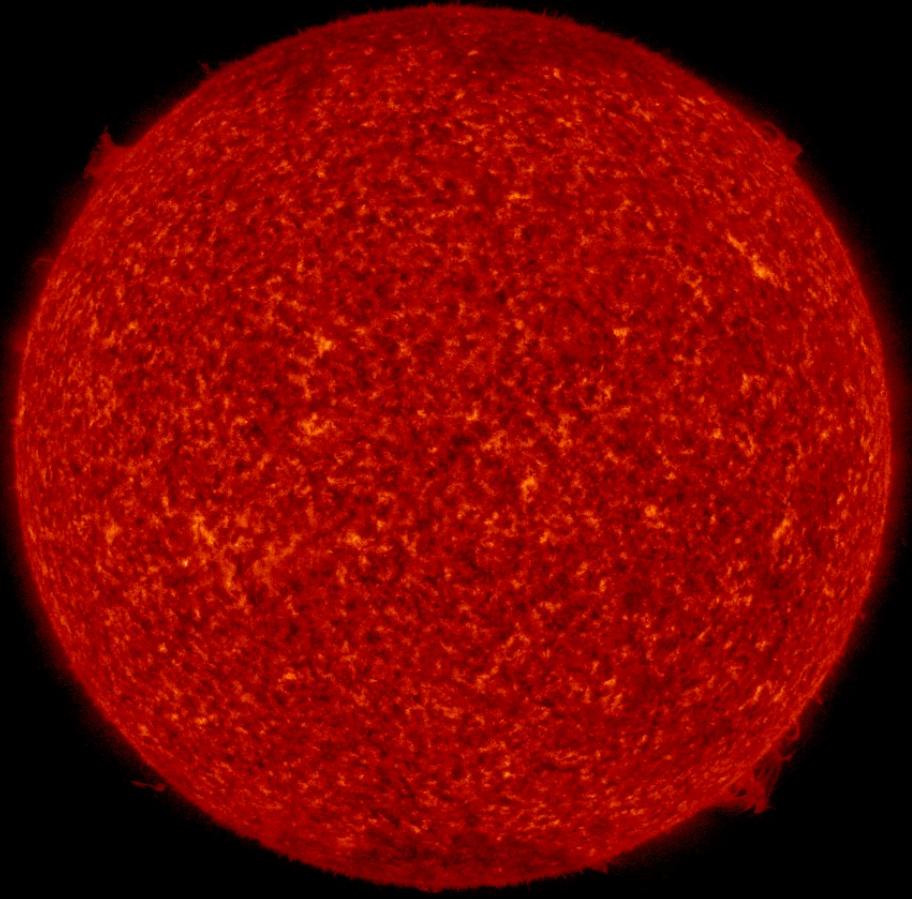
# Solar active region & Filament

SDO/AIA 30.4 nm 2018-11-04



SDO/AIA 304 2018-11-04 12:14:06 UT

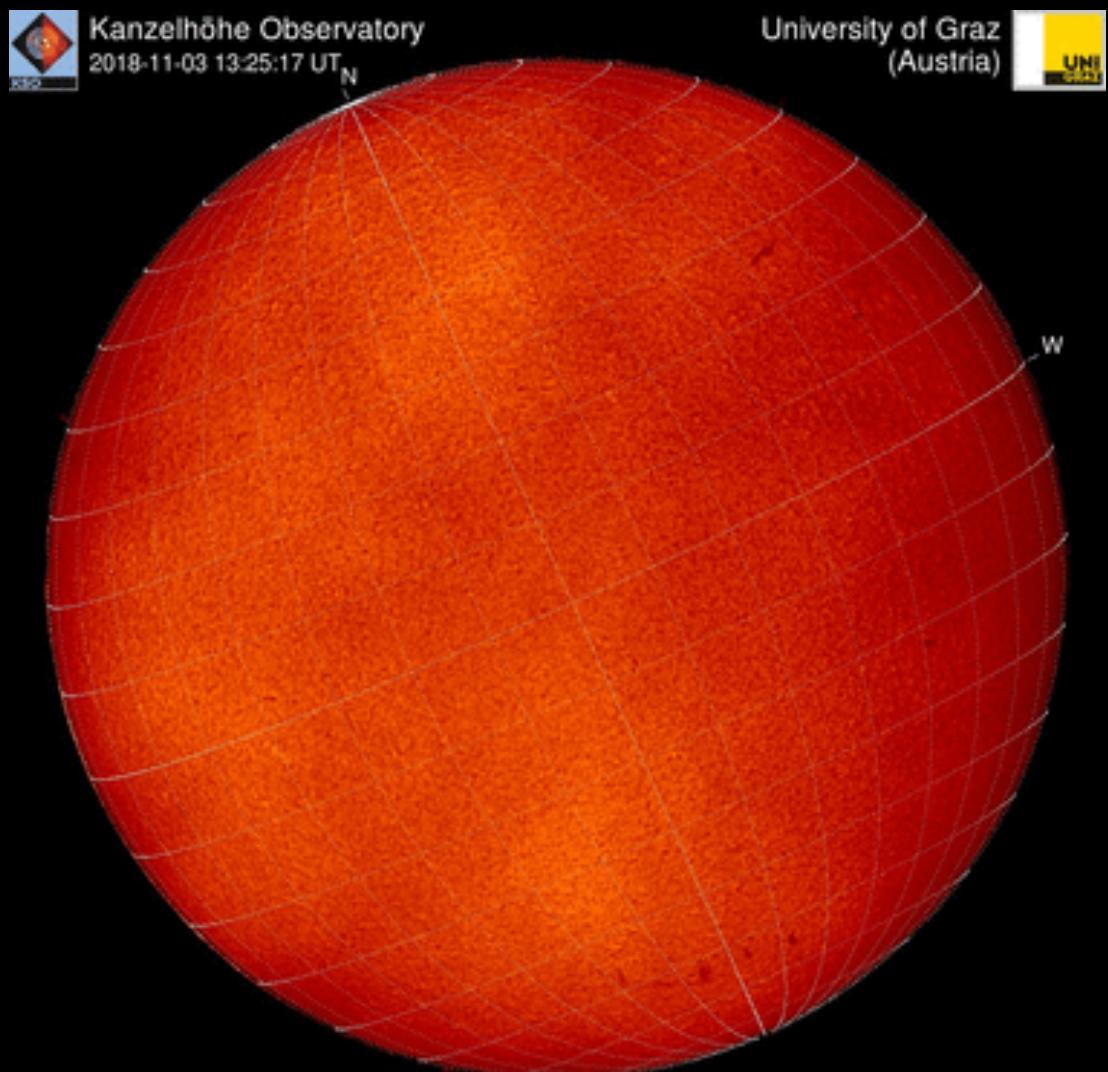
SDO/AIA 30.4 nm 2018-11-11



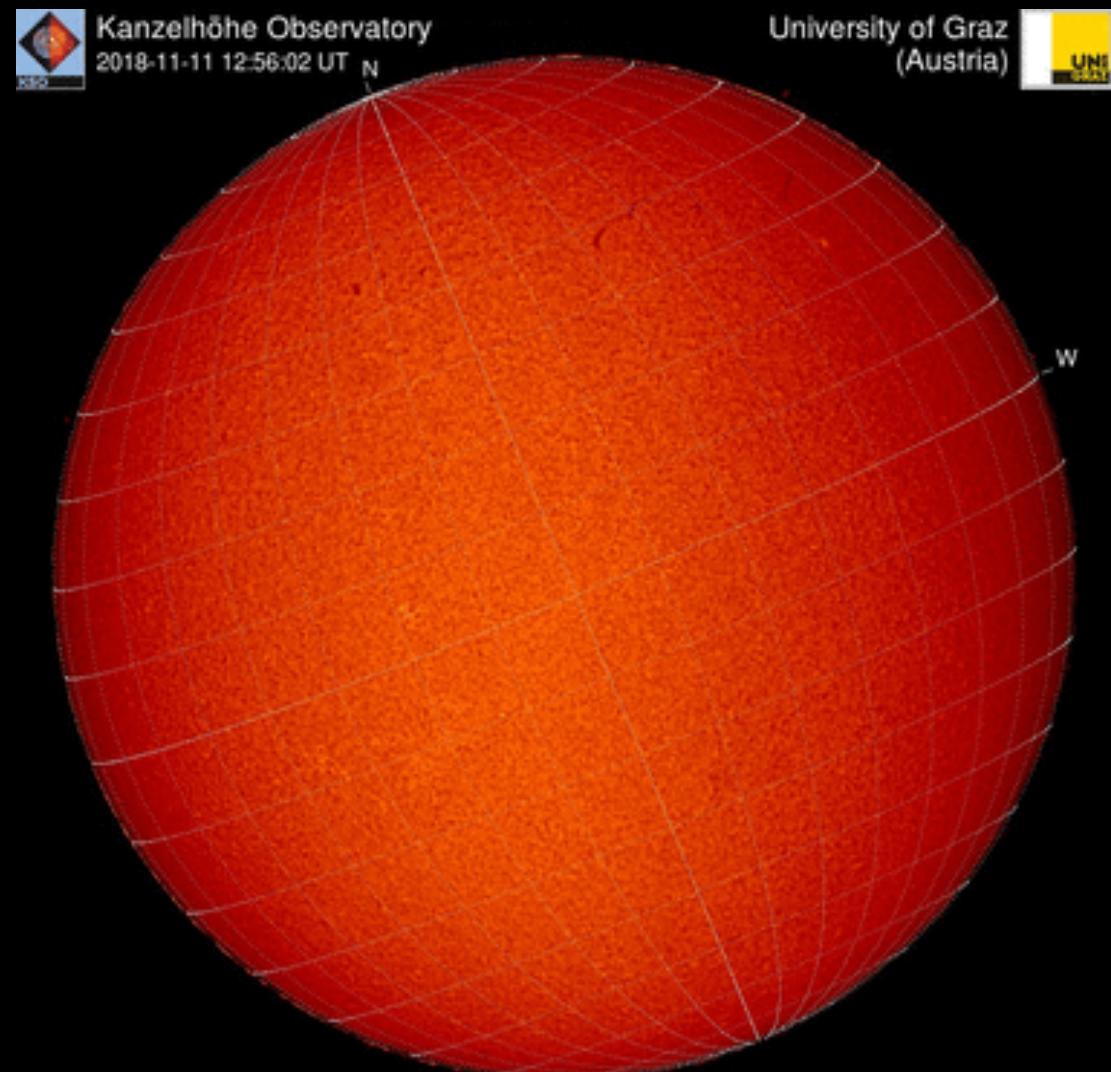
SDO/AIA 304 2018-11-11 12:13:54 UT

# Filament & Filament eruption

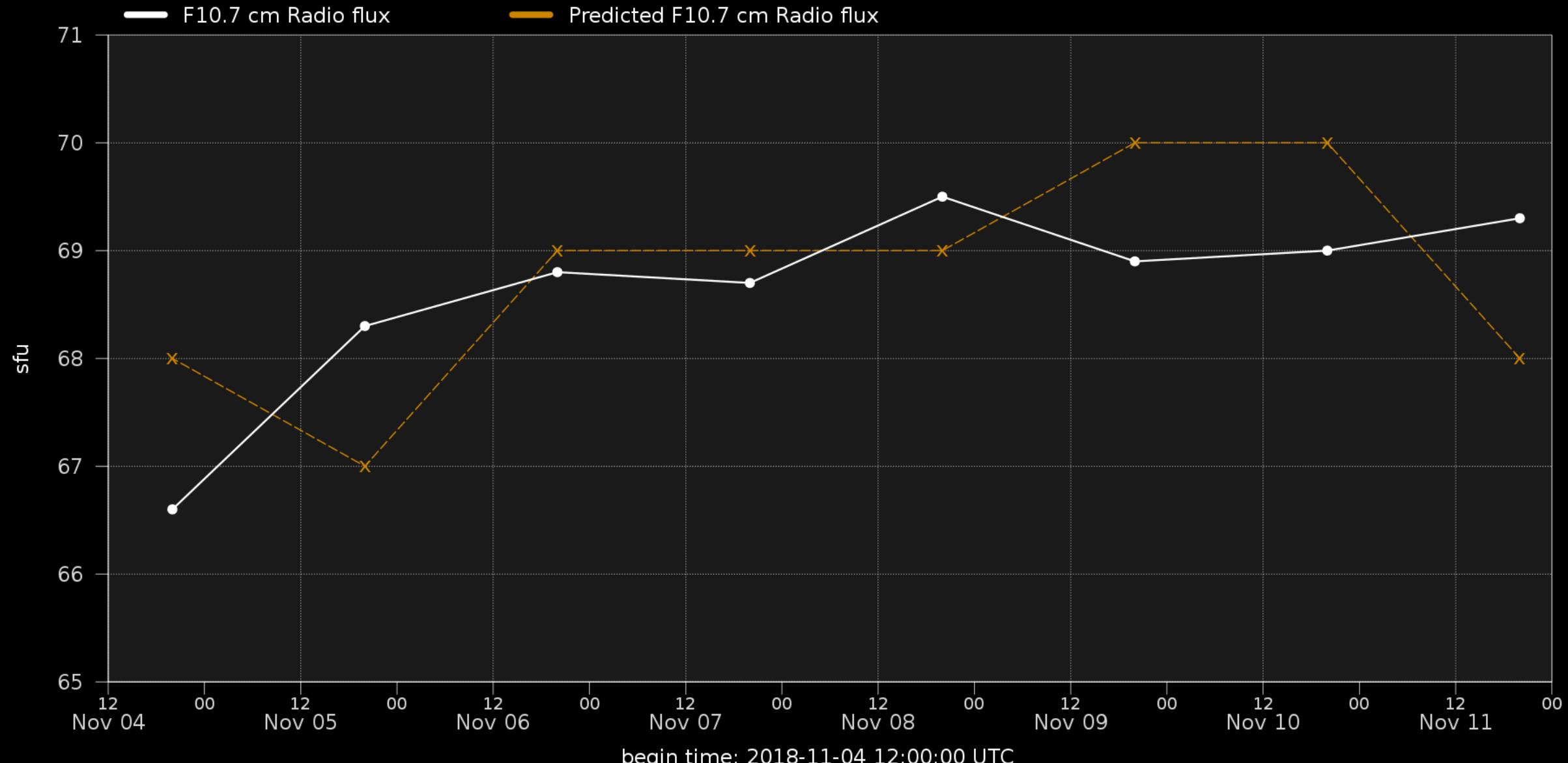
H-alpha 2018-11-04



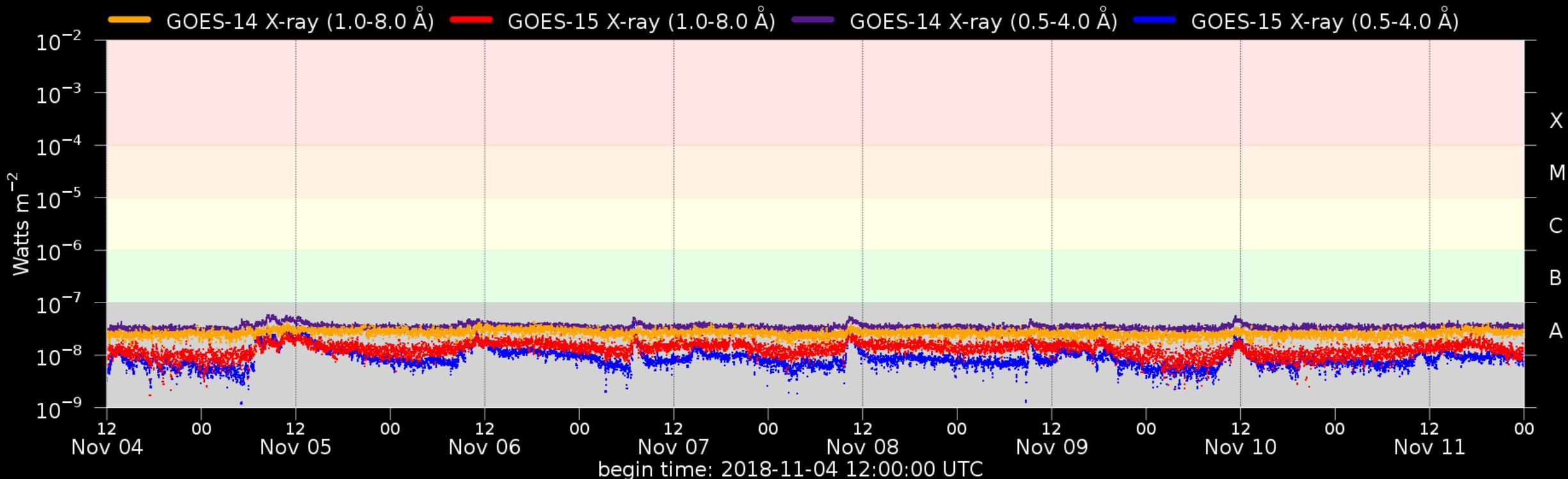
H-alpha 2018-11-11



# 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	2018-11-04	2018-11-05	2018-11-06	2018-11-07	2018-11-08	2018-11-09	2018-11-10	2018-11-11
Probability	--- 01 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 08 01 01	--- 07 01 01	--- 07 01 01	--- 05 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

08:48 11/11  
22:12 11/10  
14:36 11/10  
11:24 11/10  
08:36 11/10  
06:00 11/10  
03:24 11/10  
00:00 11/10  
20:20 11/09  
17:00 11/09  
14:00 11/09  
10:24 11/09  
06:36 11/09  
02:24 11/09  
22:36 11/08  
19:12 11/08  
16:24 11/08  
12:36 11/08  
09:54 11/08  
07:00 11/08  
04:12 11/08  
00:36 11/08  
21:12 11/07  
17:48 11/07  
14:36 11/07  
11:24 11/07  
08:12 11/07  
05:36 11/07  
02:12 11/07  
22:36 11/06  
19:00 11/06  
16:06 11/06  
13:25 11/06  
10:12 11/06  
07:00 11/06  
04:12 11/06  
00:48 11/06  
21:36 11/05  
18:12 11/05  
15:36 11/05  
12:12 11/05  
09:24 11/05  
06:24 11/05  
03:24 11/05  
00:00 11/05

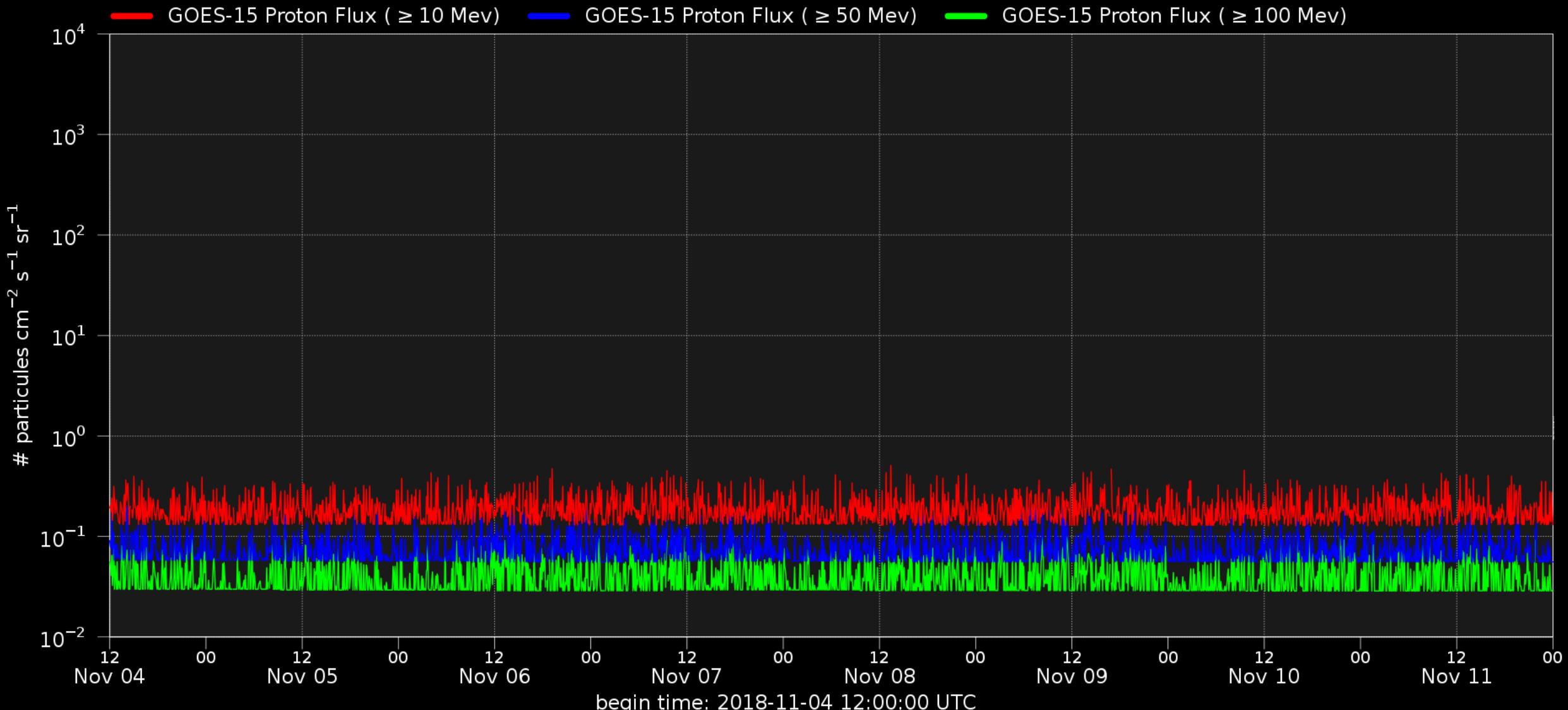
S

W

N

E

# Solar proton flux



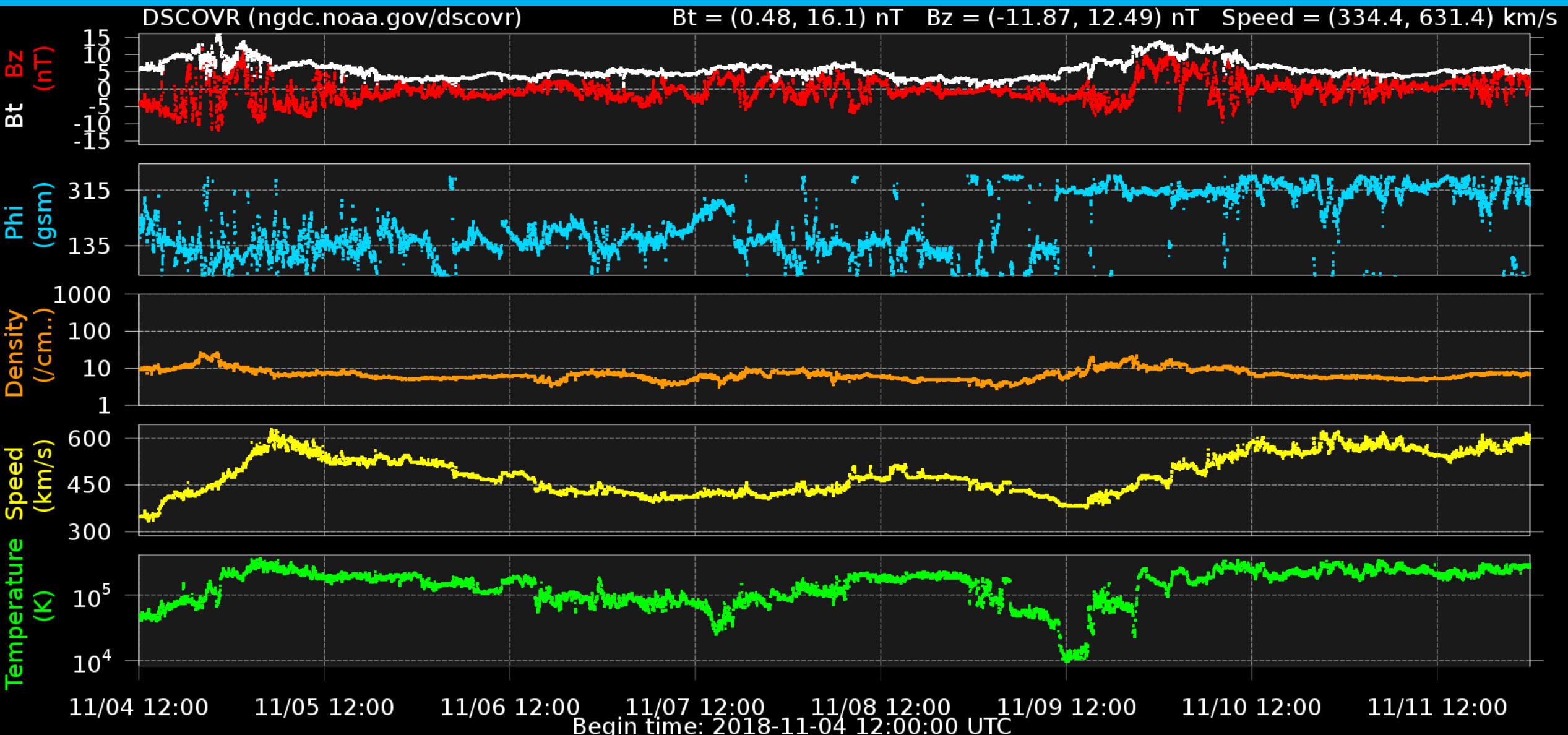
# Solar Wind and Geomagnetic Activity



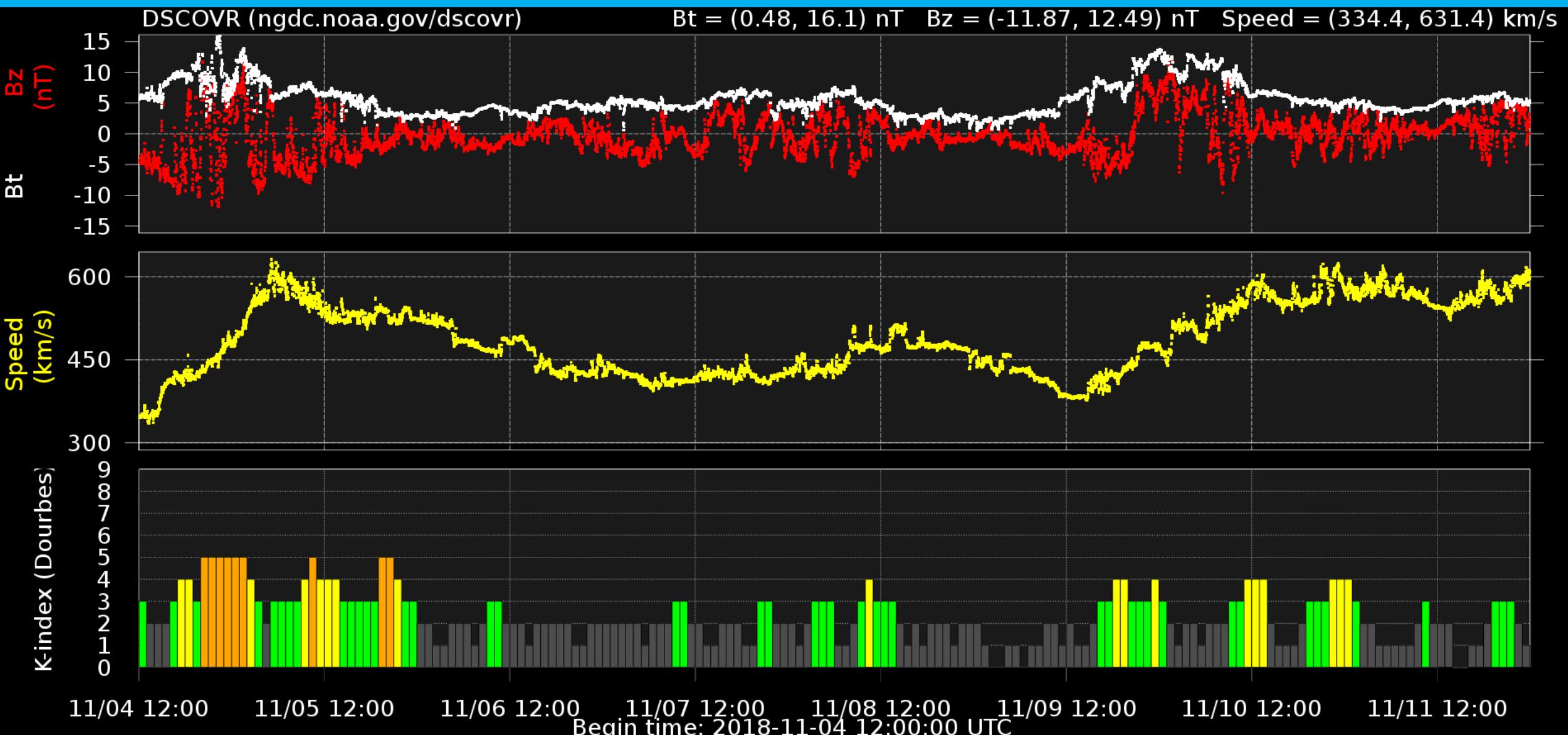
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# Solar wind parameters (DSCOVR data)

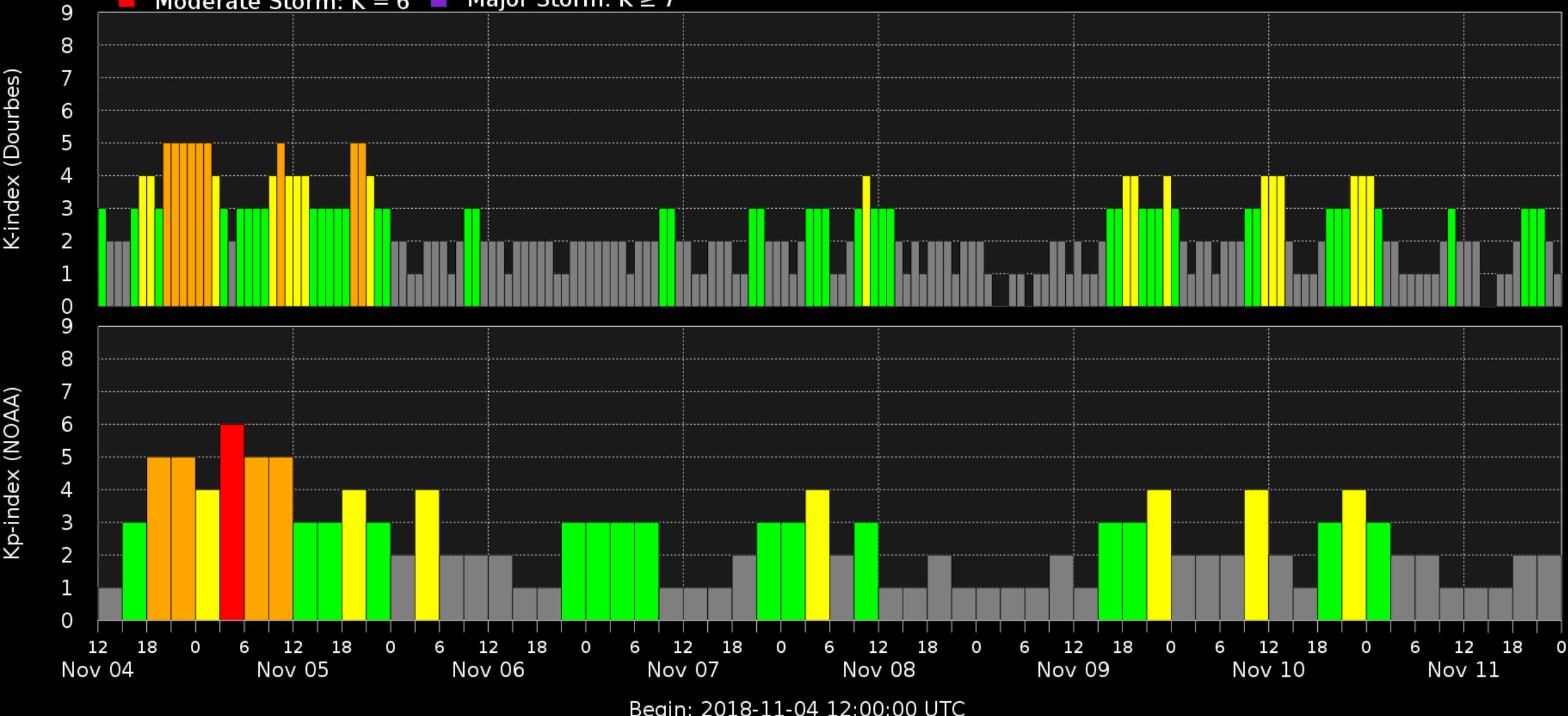


# Solar wind parameters & K-index (DSCOVR/Dourbes)

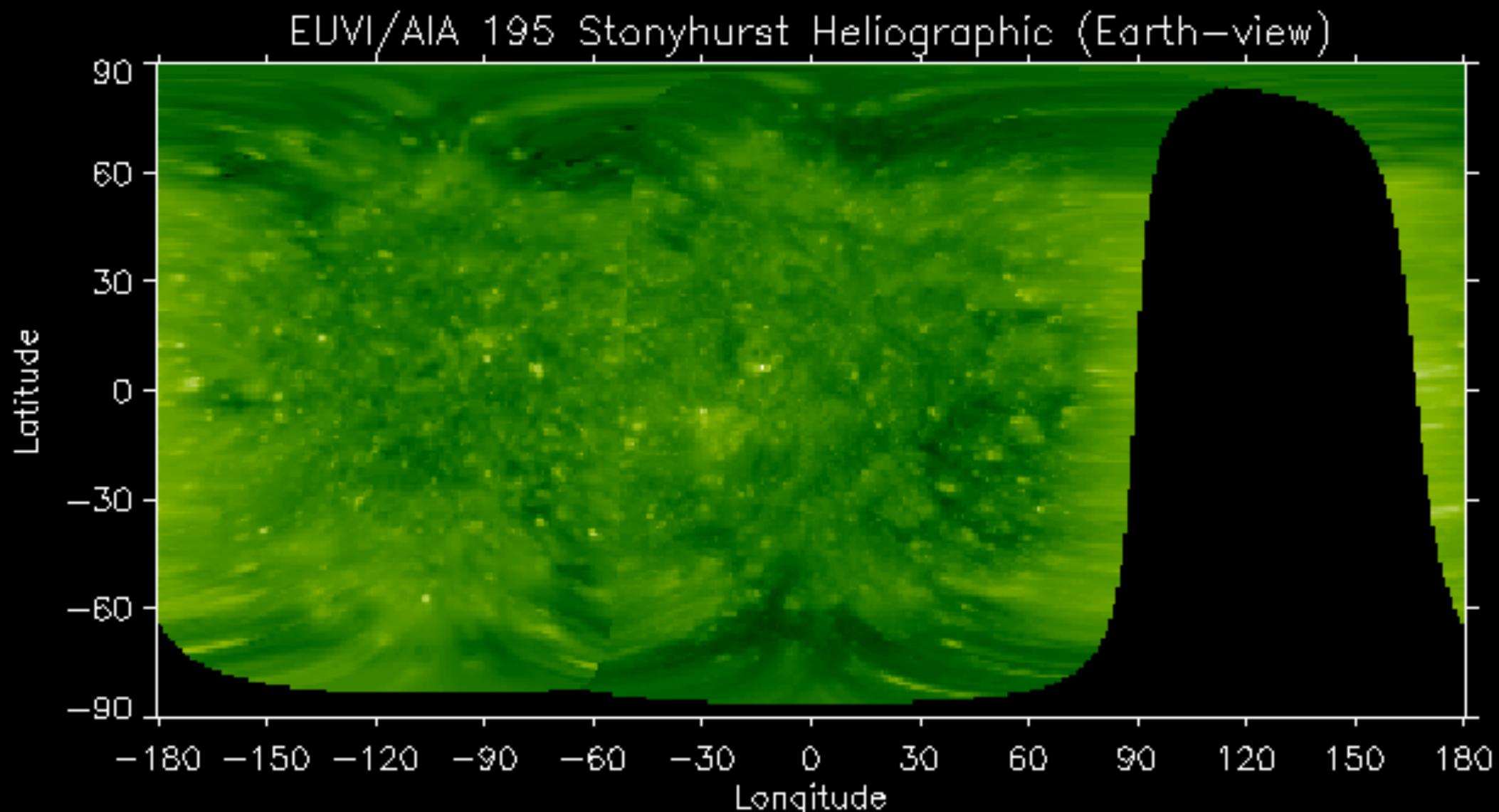


# Geomagnetic activity (K-indexes)

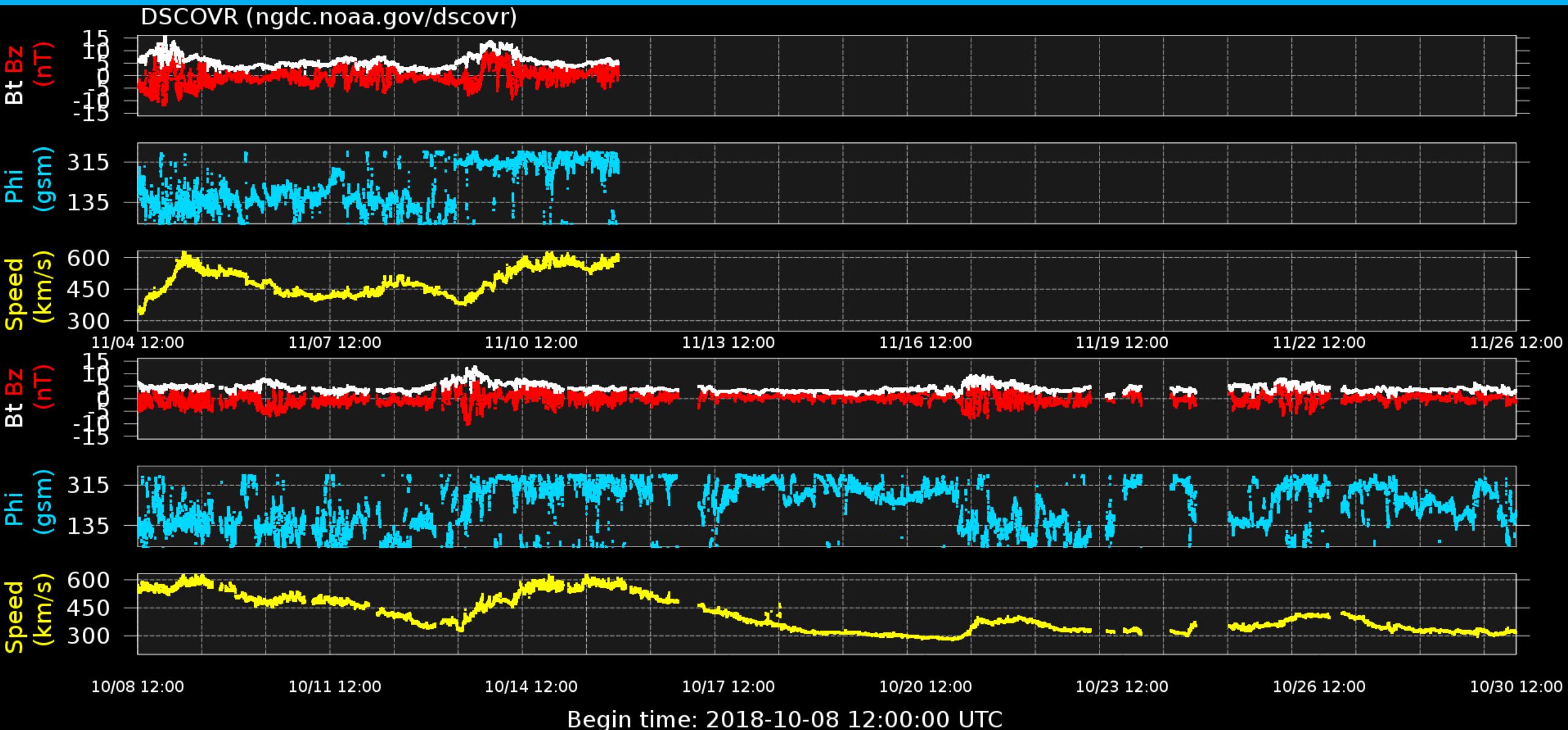
■ Quiet:  $K \leq 2$  ■ Unsettled:  $K = 3$  ■ Active:  $K = 4$  ■ Minor Storm:  $K = 5$   
■ Moderate Storm:  $K = 6$  ■ Major Storm:  $K \geq 7$



# Outlook: Solar activity



# Outlook: Solar wind



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