

SIDC Space Weather Briefing

16 December 2018 - 23 December 2018

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& the SIDC forecaster team



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Summary Report

Solar activity from 2018-12-16 12:00 UT to 2018-12-23 12:00 UT

Active regions	None
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	No filament eruptions
CMEs	No earth-directed CMEs
Proton Events	None

Solar wind and geomagnetic conditions from 2018-12-16 12:00 UT to 2018-12-23 12:00 UT

Coronal Holes	Negative polarity equatorial extension of southern polar coronal hole
ICME	None
SW Conditions	HSS (620 km/s) from negative polarity CHs
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 3

All Quiet Alert: Started on 18 December 2018

Solar Activity

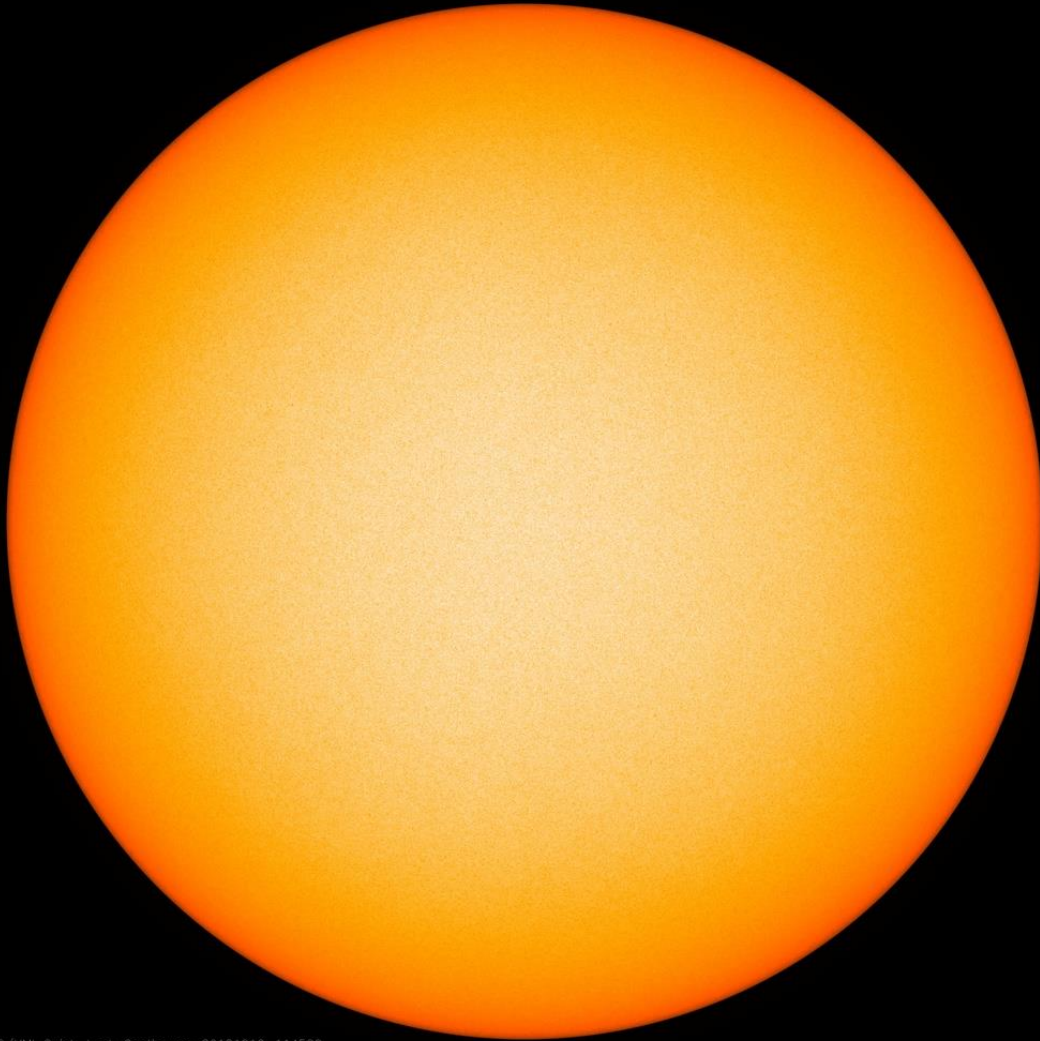


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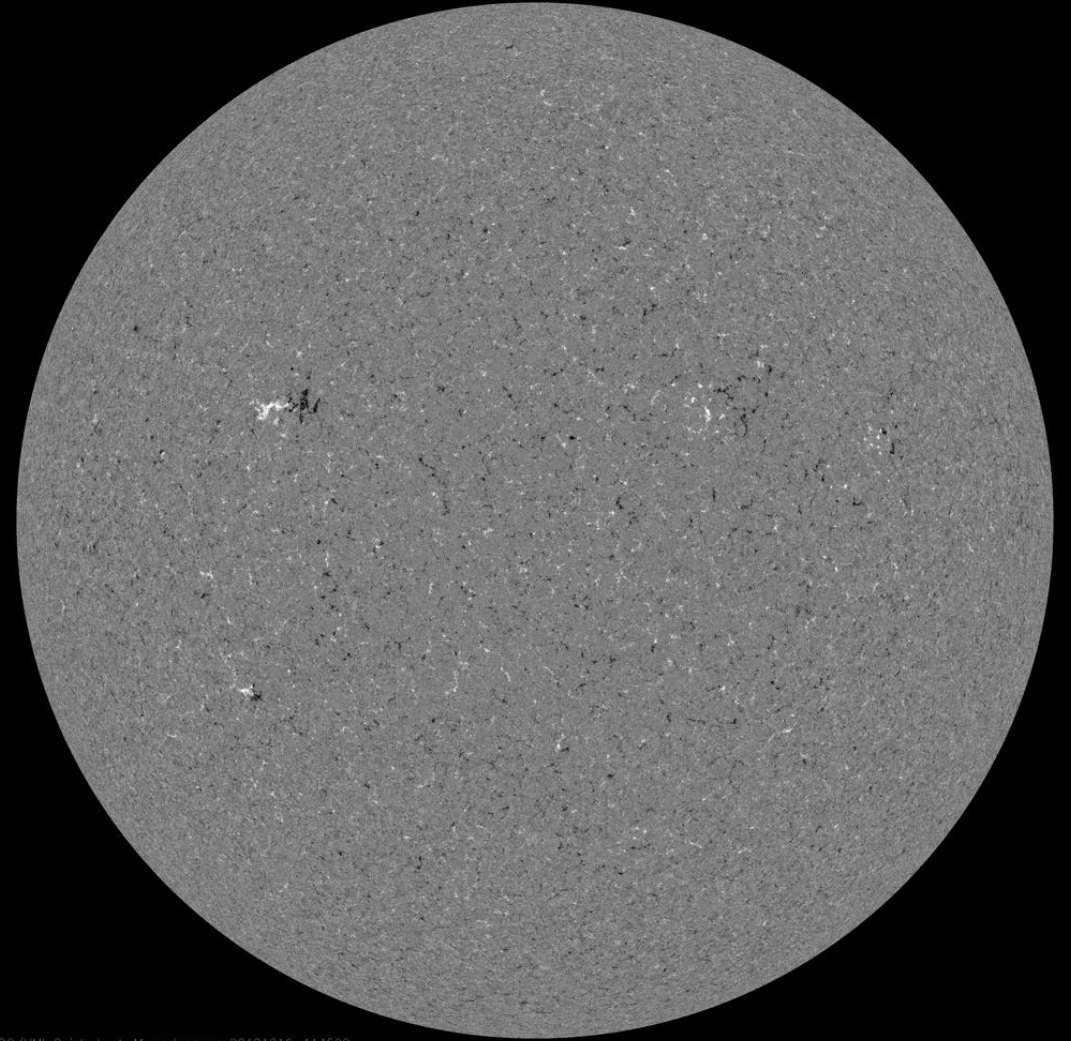
Solar active region - start of the week

SDO/HMI White Light 2018-12-16



SDO/HMI Quick-Look Continuum: 20181216_114500

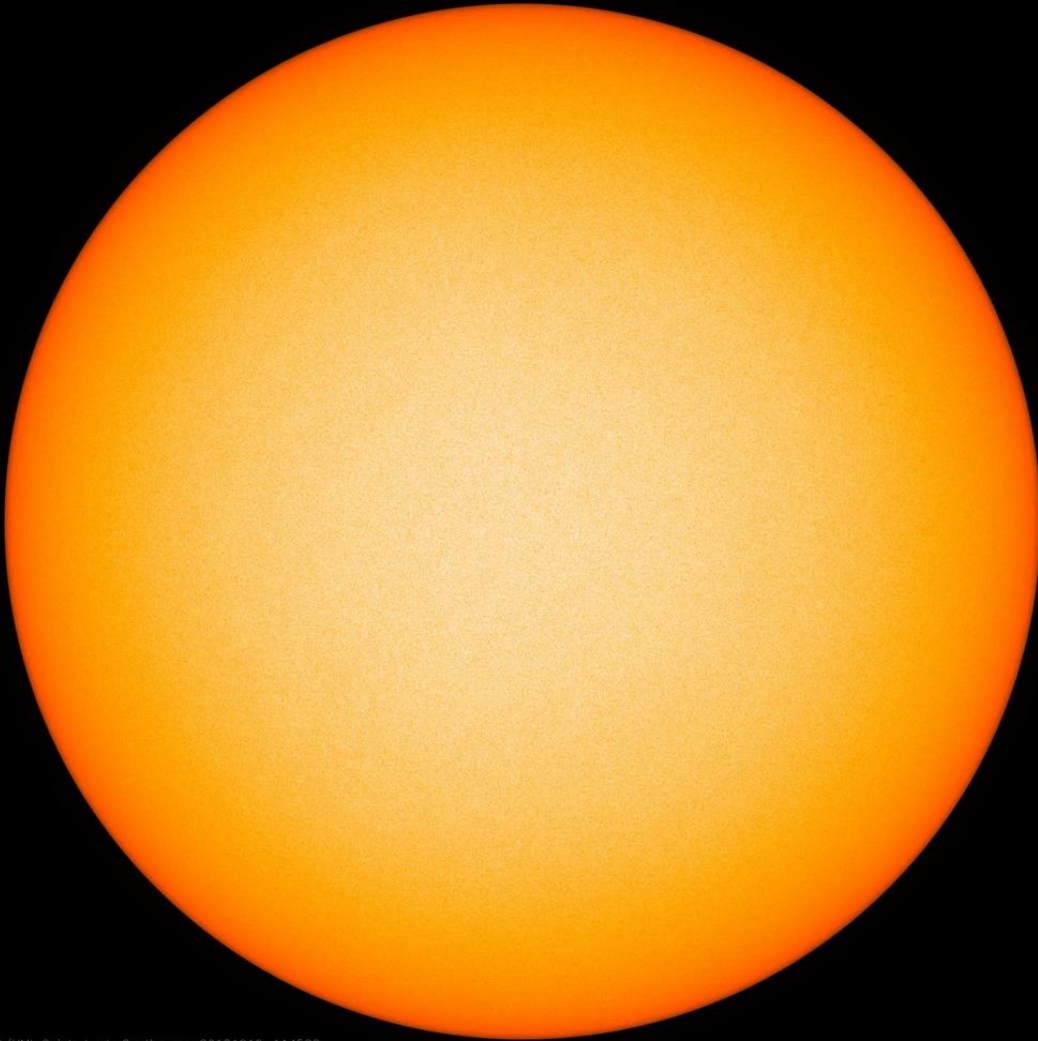
SDO/HMI Magnetogram 2018-12-16



SDO/HMI Quick-Look Magnetogram: 20181216_114500

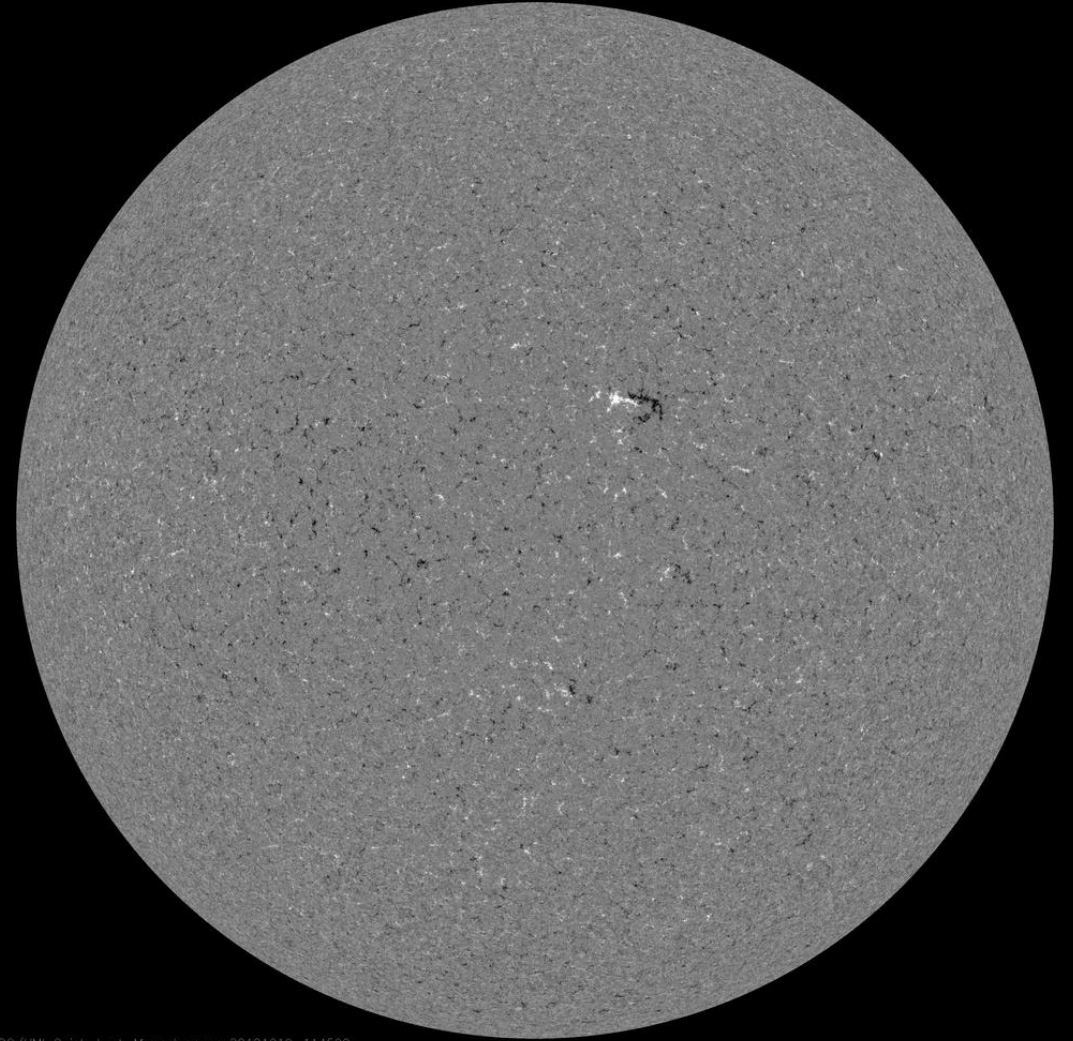
Solar active region - middle of the week

SDO/HMI White Light 2018-12-19



SDO/HMI Quick-Look Continuum: 20181219_114500

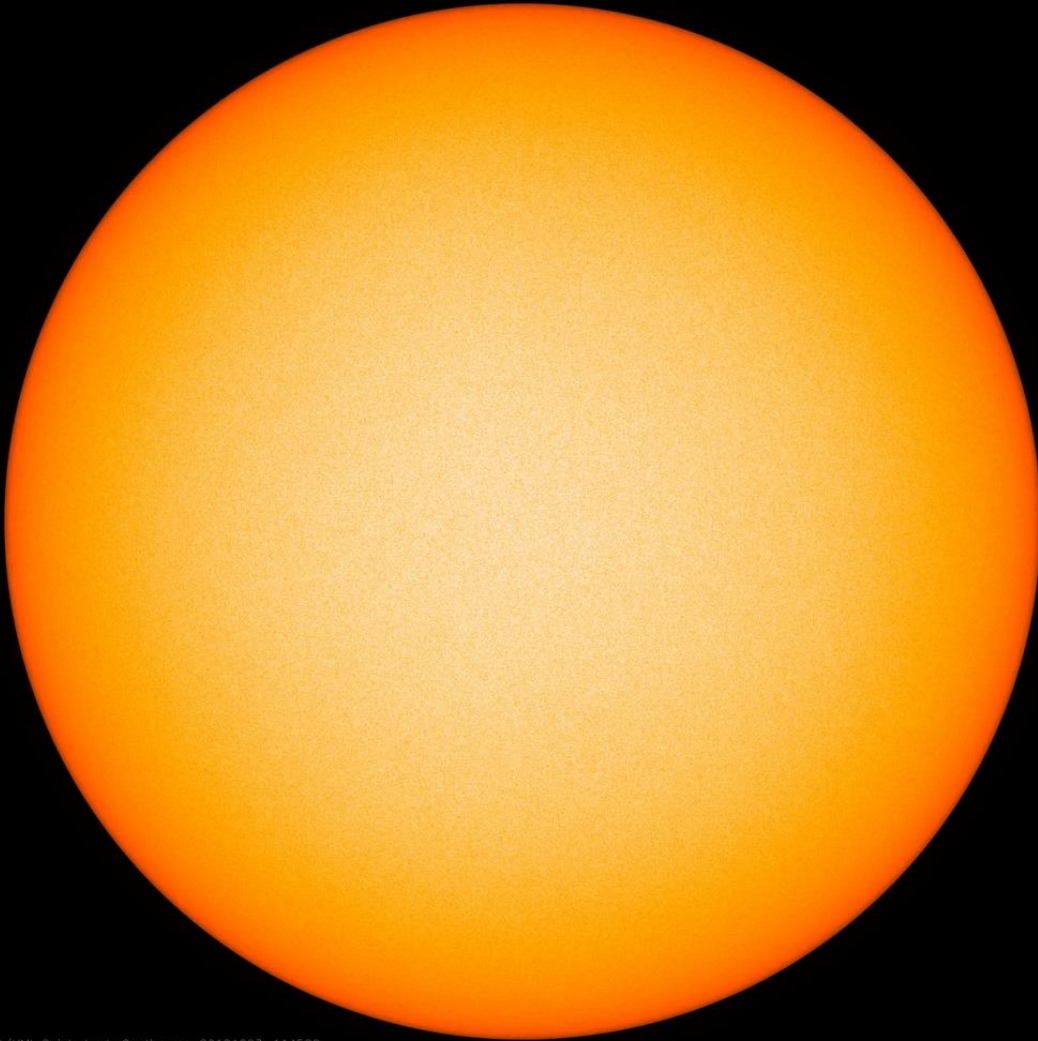
SDO/HMI Magnetogram 2018-12-19



SDO/HMI Quick-Look Magnetogram: 20181219_114500

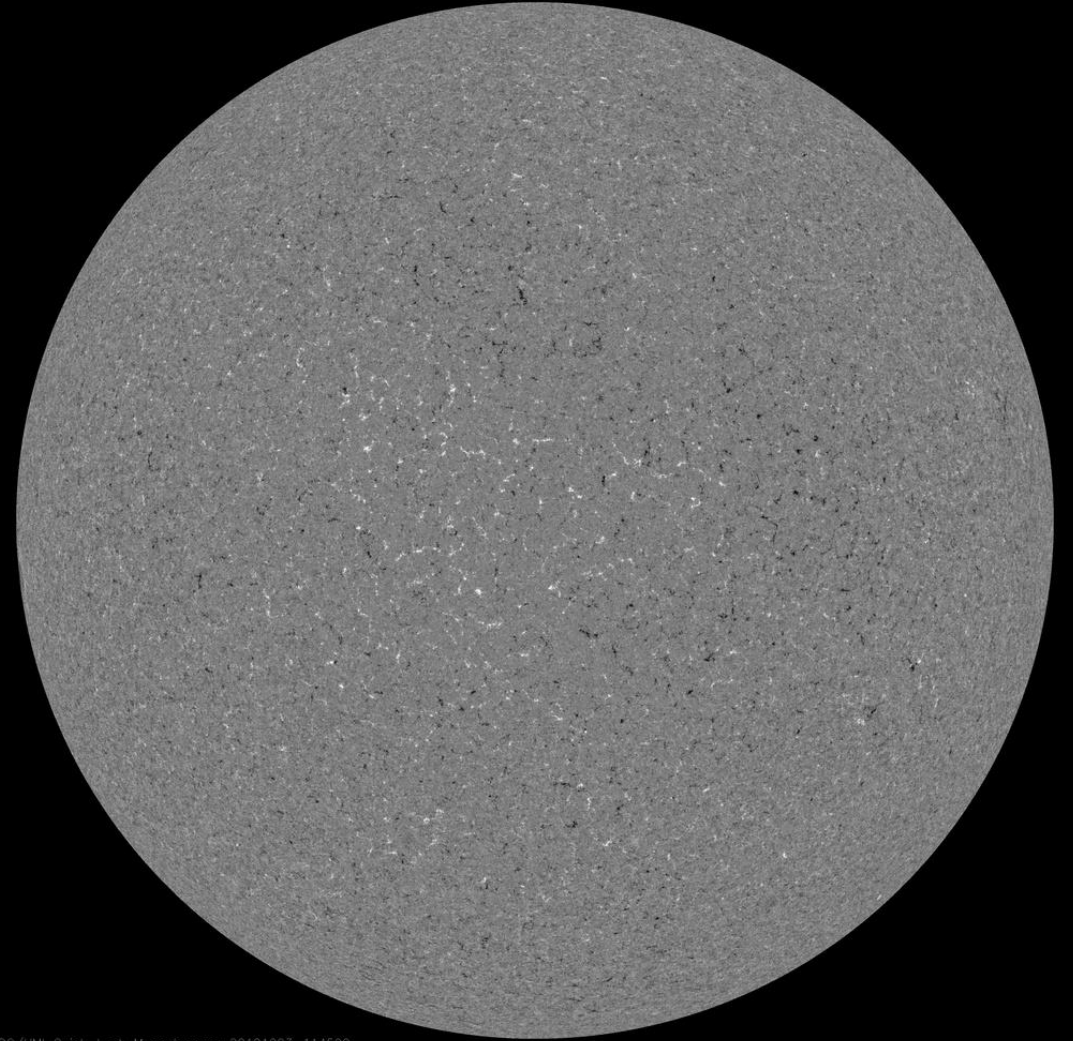
Solar active region - end of the week

SDO/HMI White Light 2018-12-23



SDO/HMI Quick-Look Continuum: 20181223_114500

SDO/HMI Magnetogram 2018-12-23

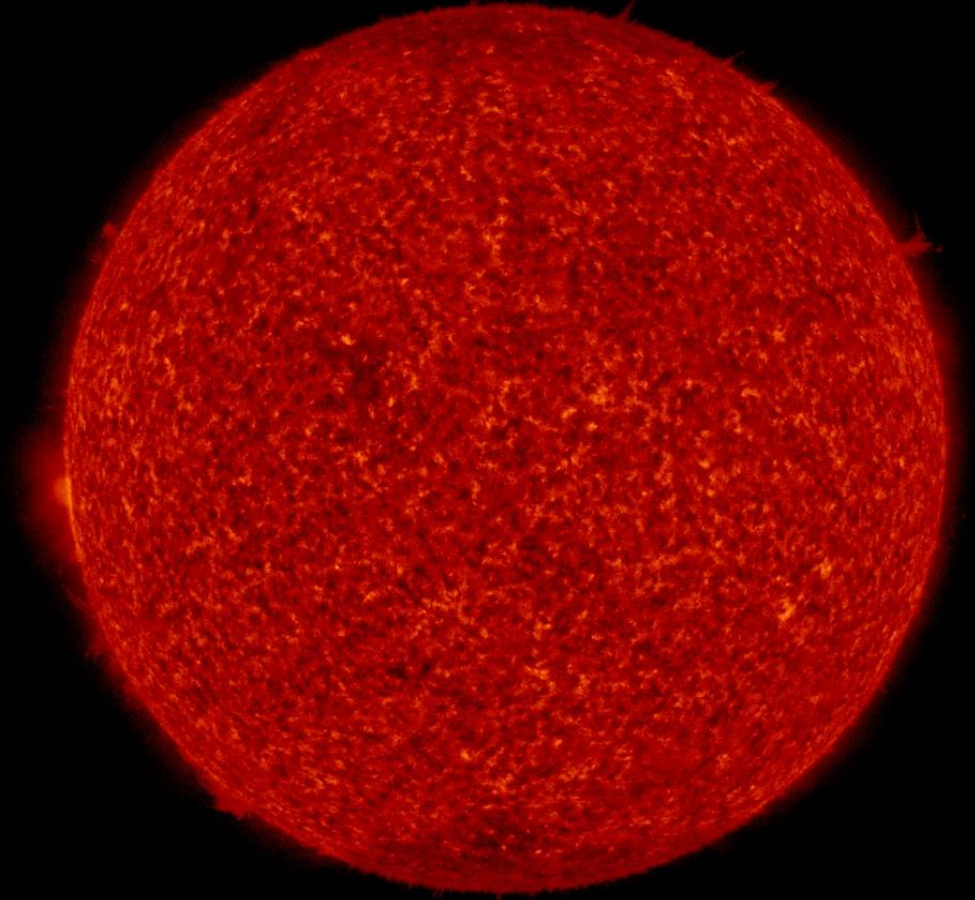
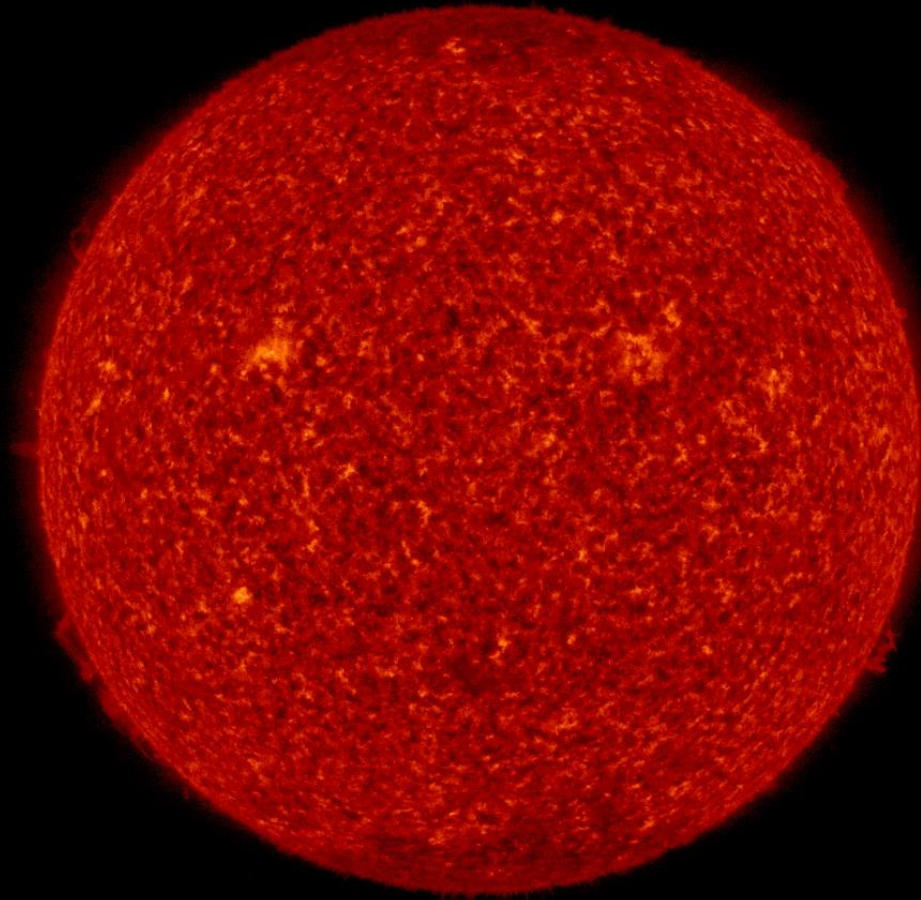


SDO/HMI Quick-Look Magnetogram: 20181223_114500

Solar active region & Filament

SDO/AIA 30.4 nm 2018-12-16

SDO/AIA 30.4 nm 2018-12-23

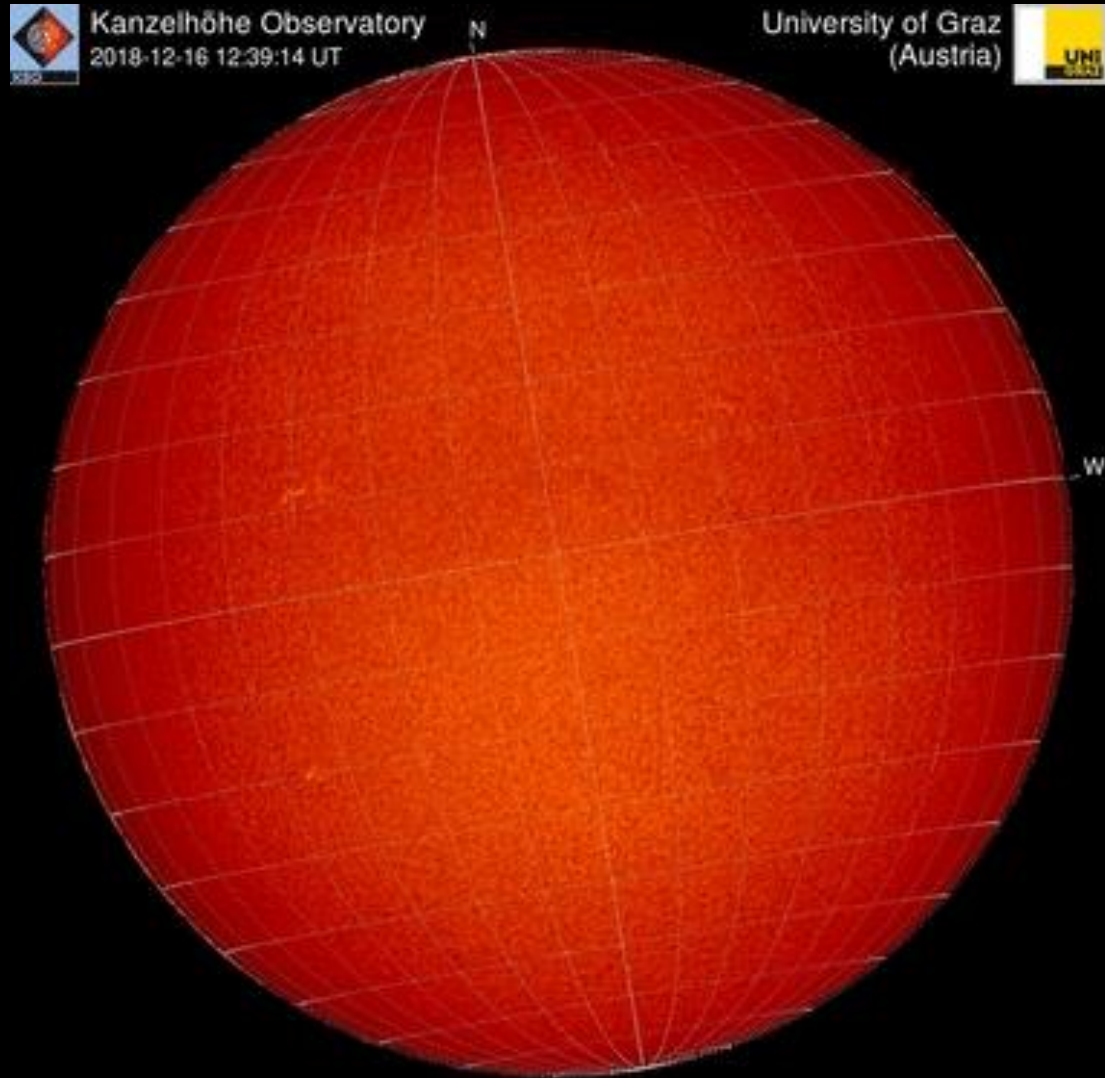


SDO/AIA 304 2018-12-16 12:13:18 UT

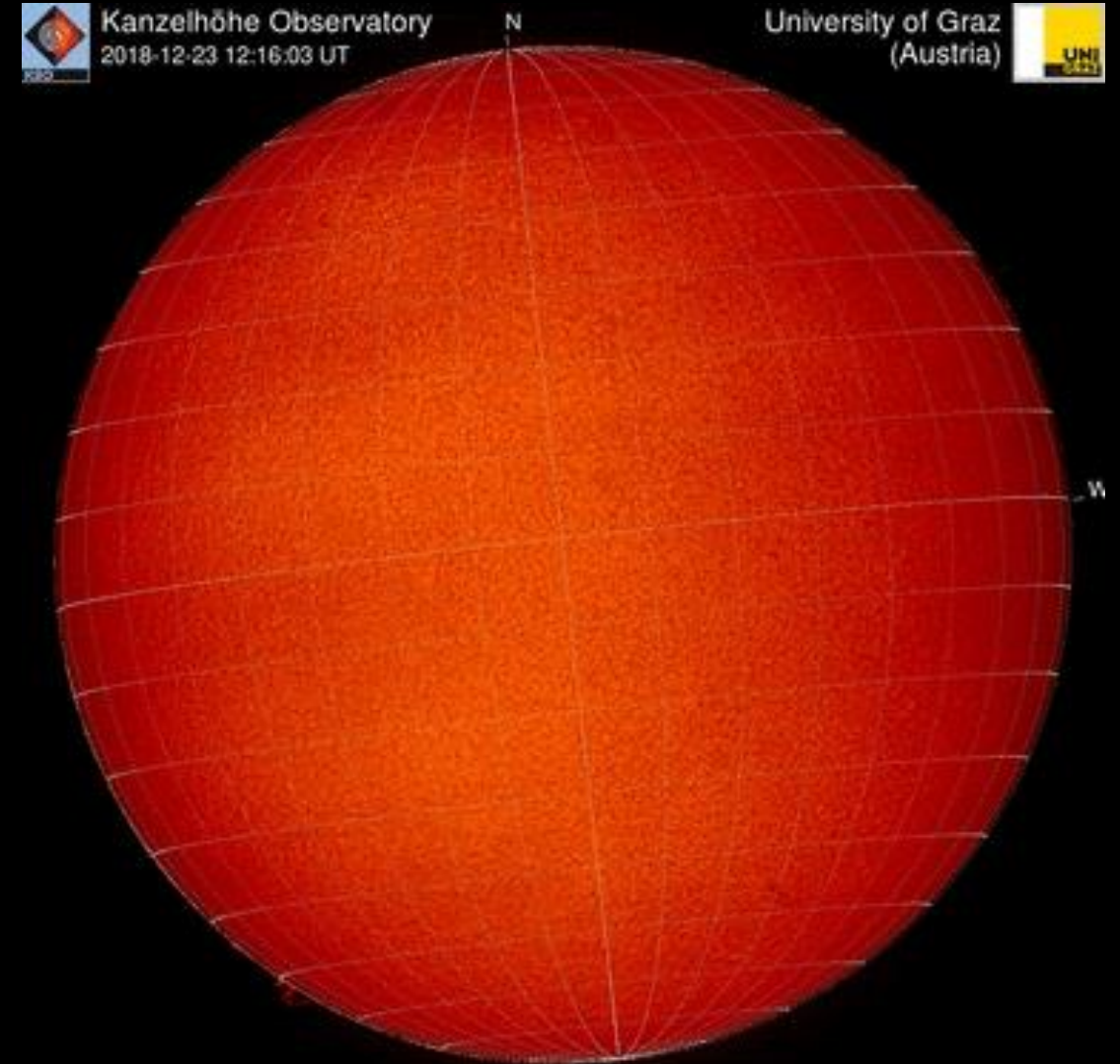
SDO/AIA 304 2018-12-23 12:13:54 UT

Filament & Filament eruption

H-alpha 2018-12-16

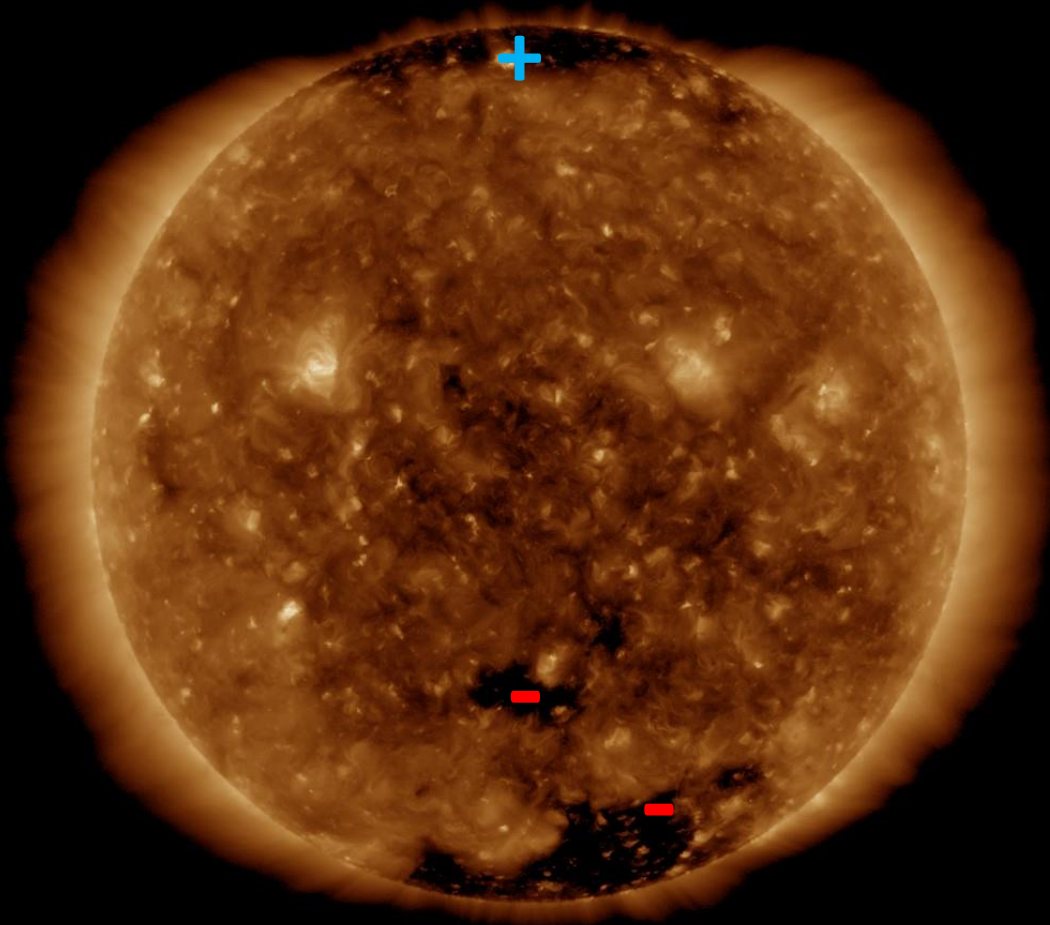


H-alpha 2018-12-23



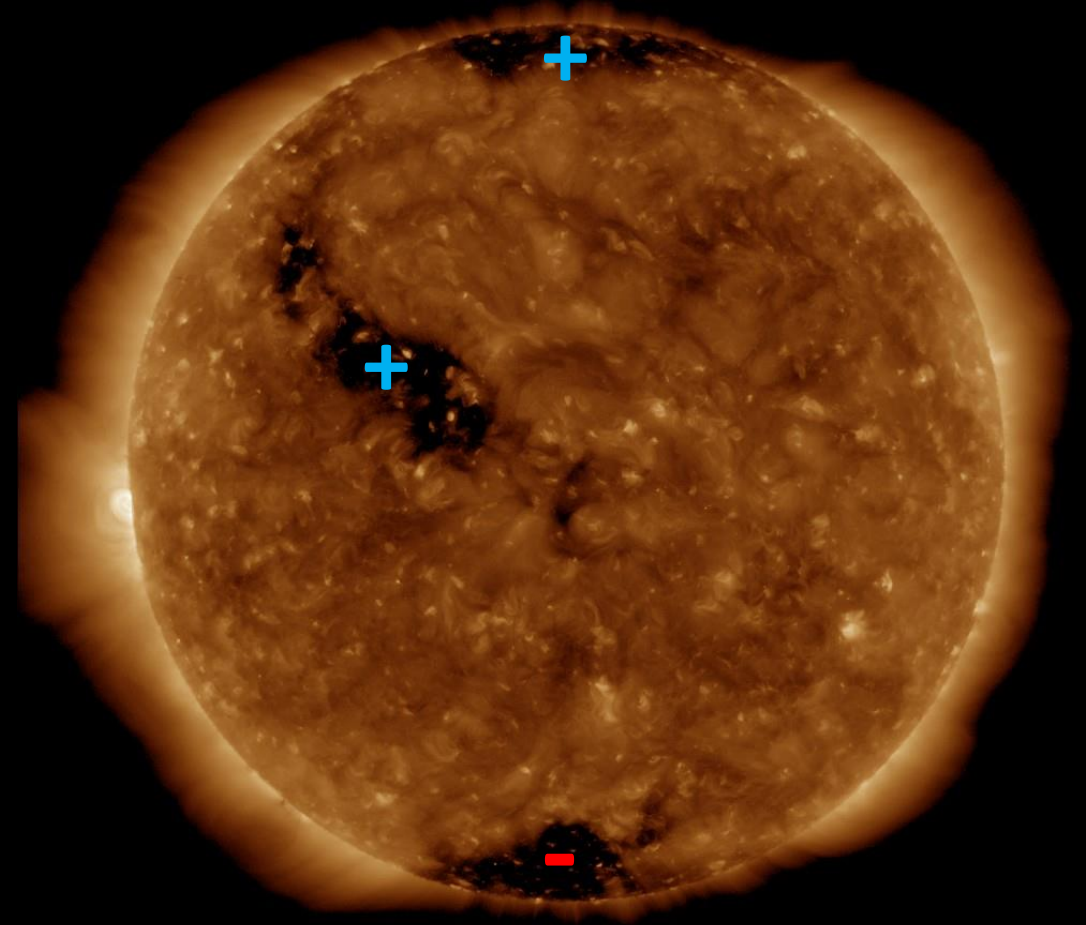
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-12-16



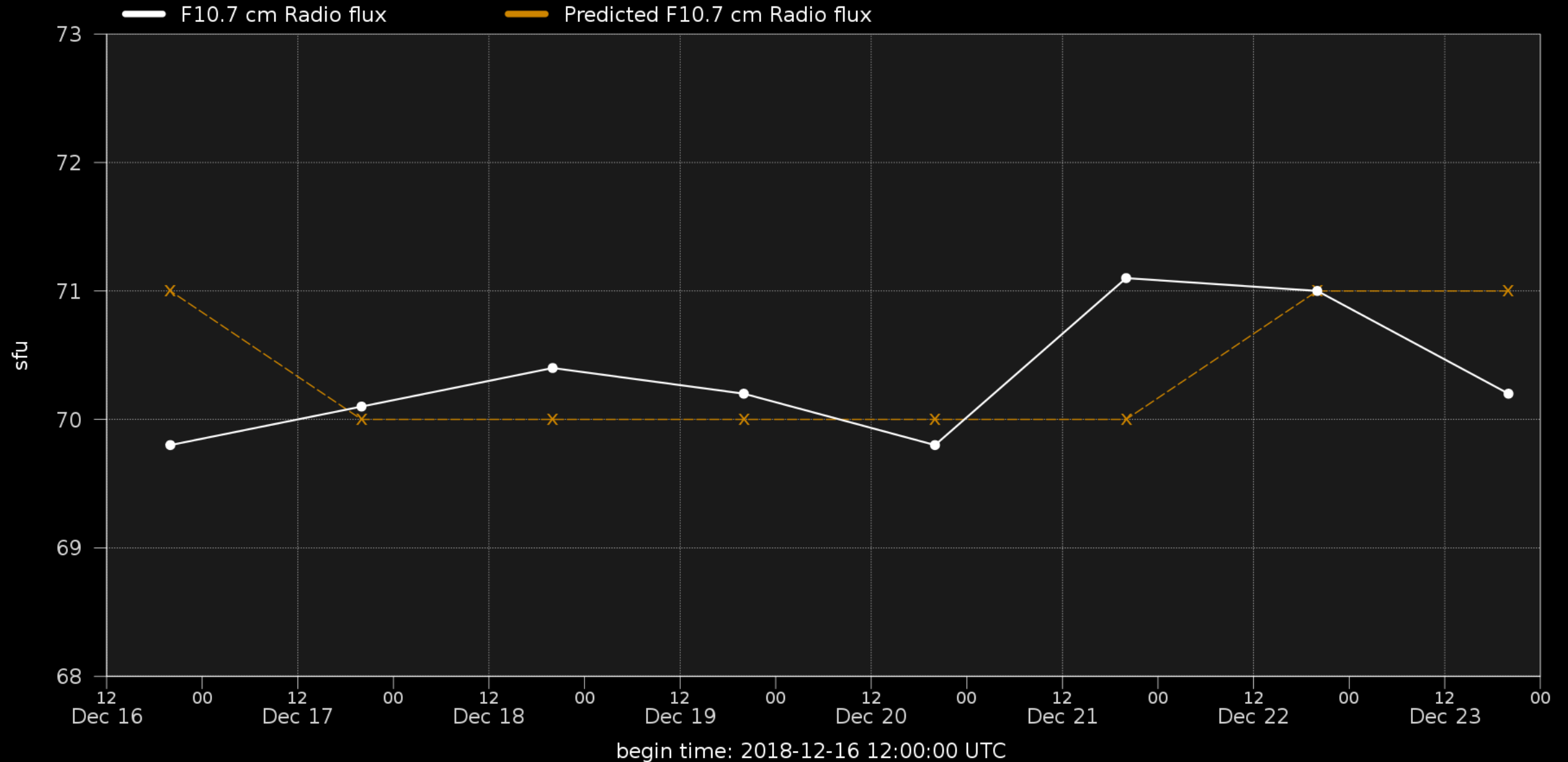
SDO/AIA 193 2018-12-16 12:09:29 UT

SDO/AIA 19.3 nm 2018-12-23

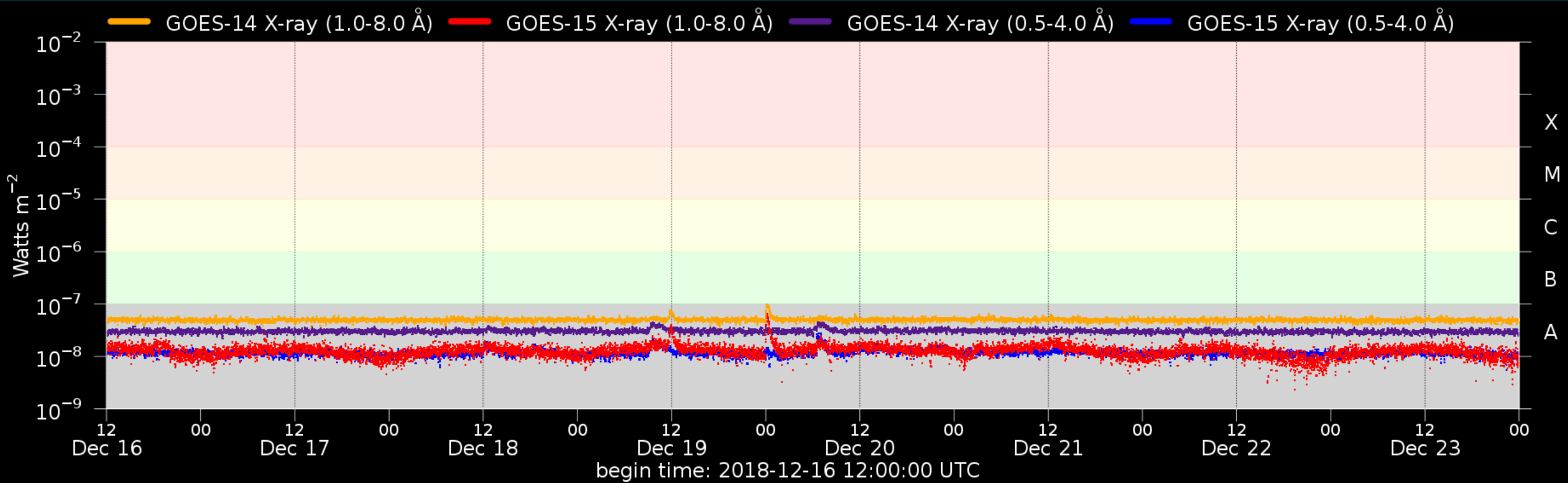


SDO/AIA 193 2018-12-23 12:10:41 UT

Solar F10.7cm radio flux



Flaring activity



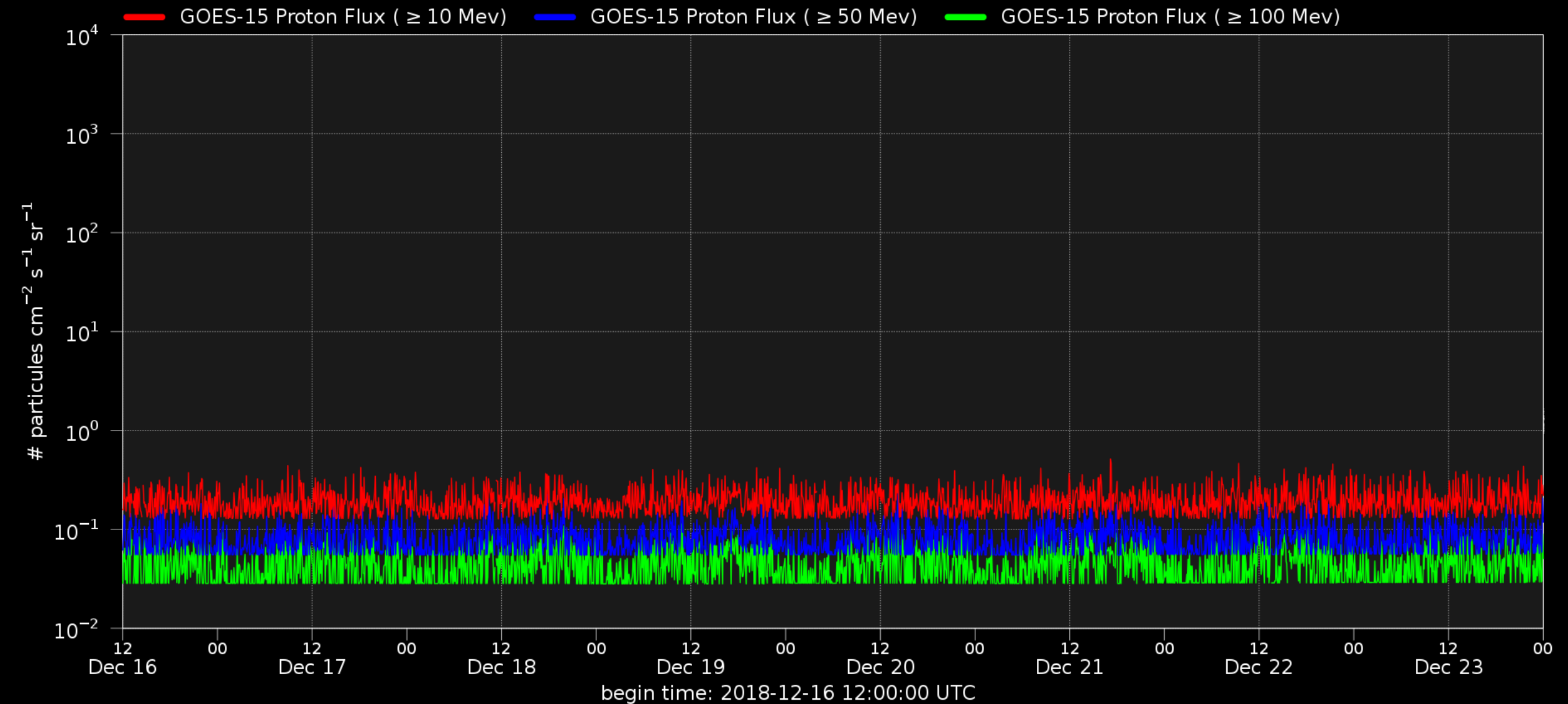
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2018-12-16	2018-12-17	2018-12-18	2018-12-19	2018-12-20	2018-12-21	2018-12-22	2018-12-23
Probability	--- 05 01 01	--- 02 01 01	--- 02 01 01	--- 02 01 01	--- 05 01 01	--- 05 01 01	--- 05 00 00	--- 05 00 00
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

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

Solar proton flux



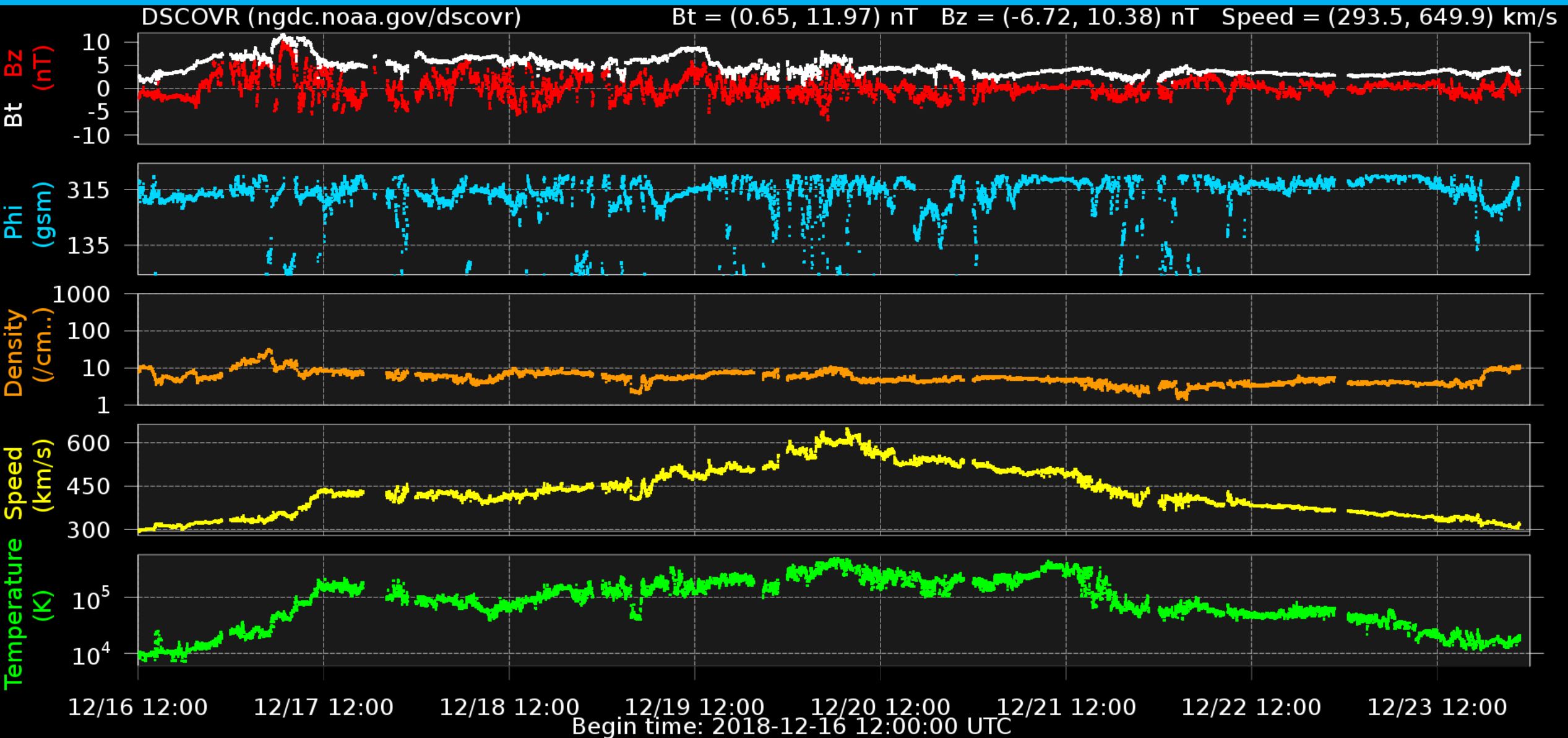
Solar Wind and Geomagnetic Activity



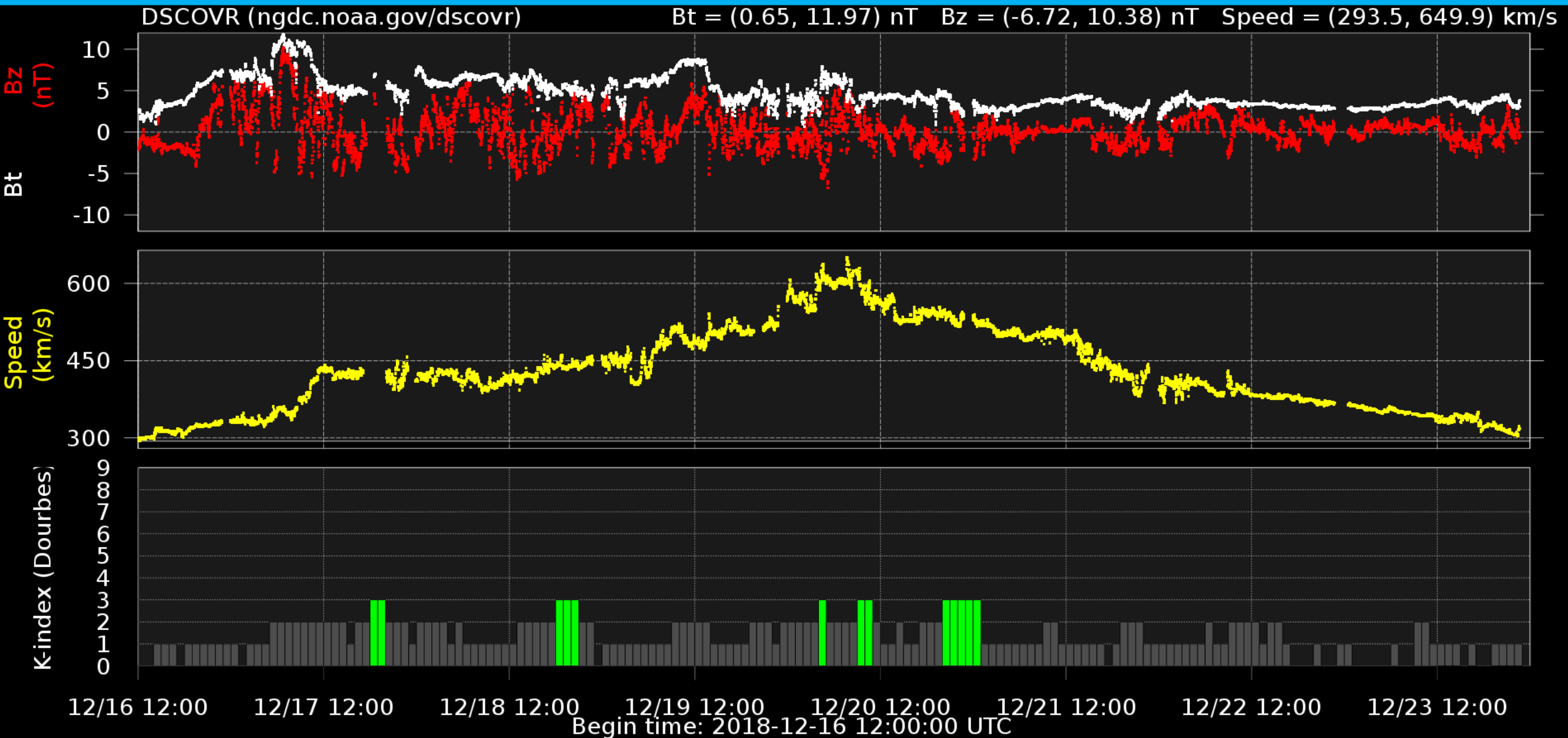
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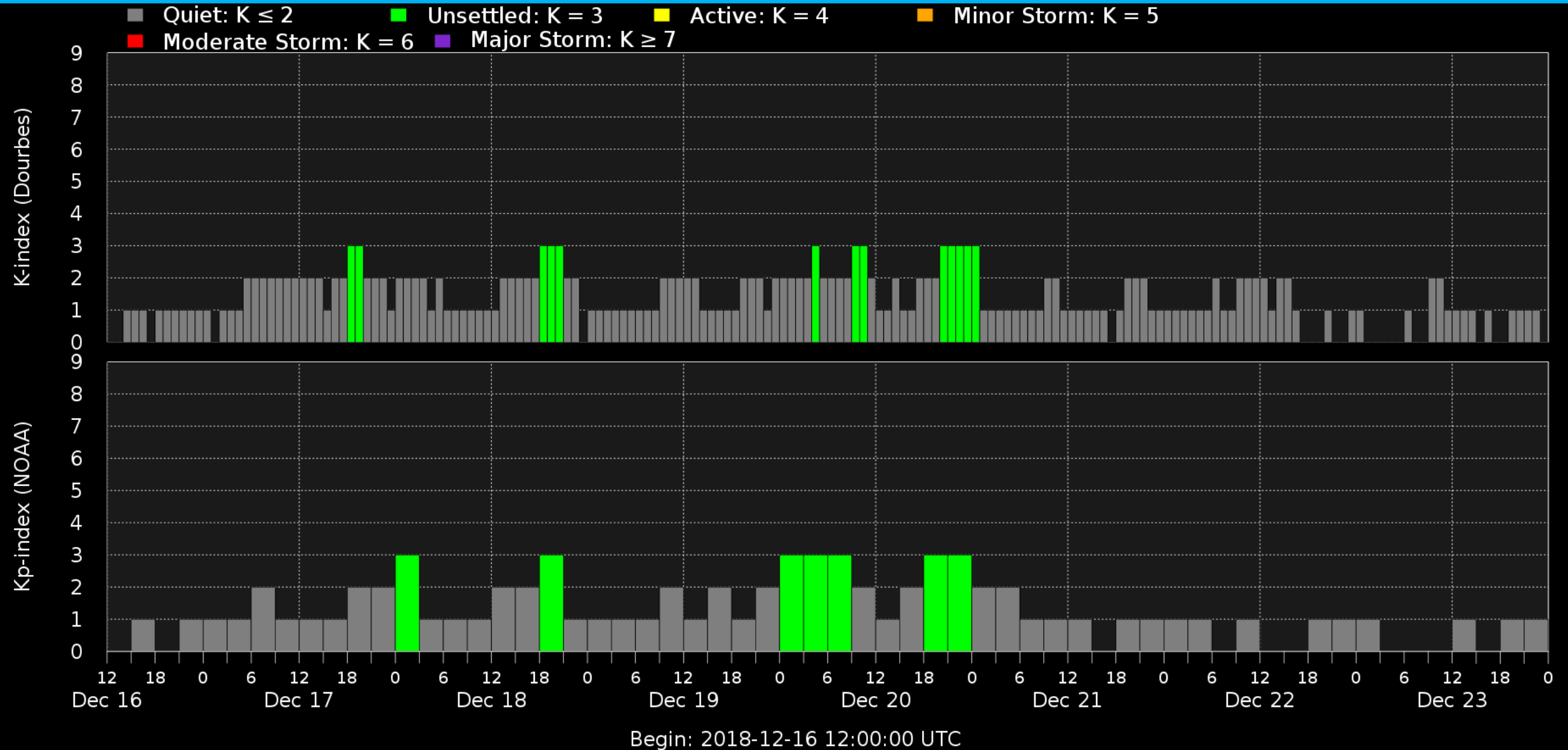
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



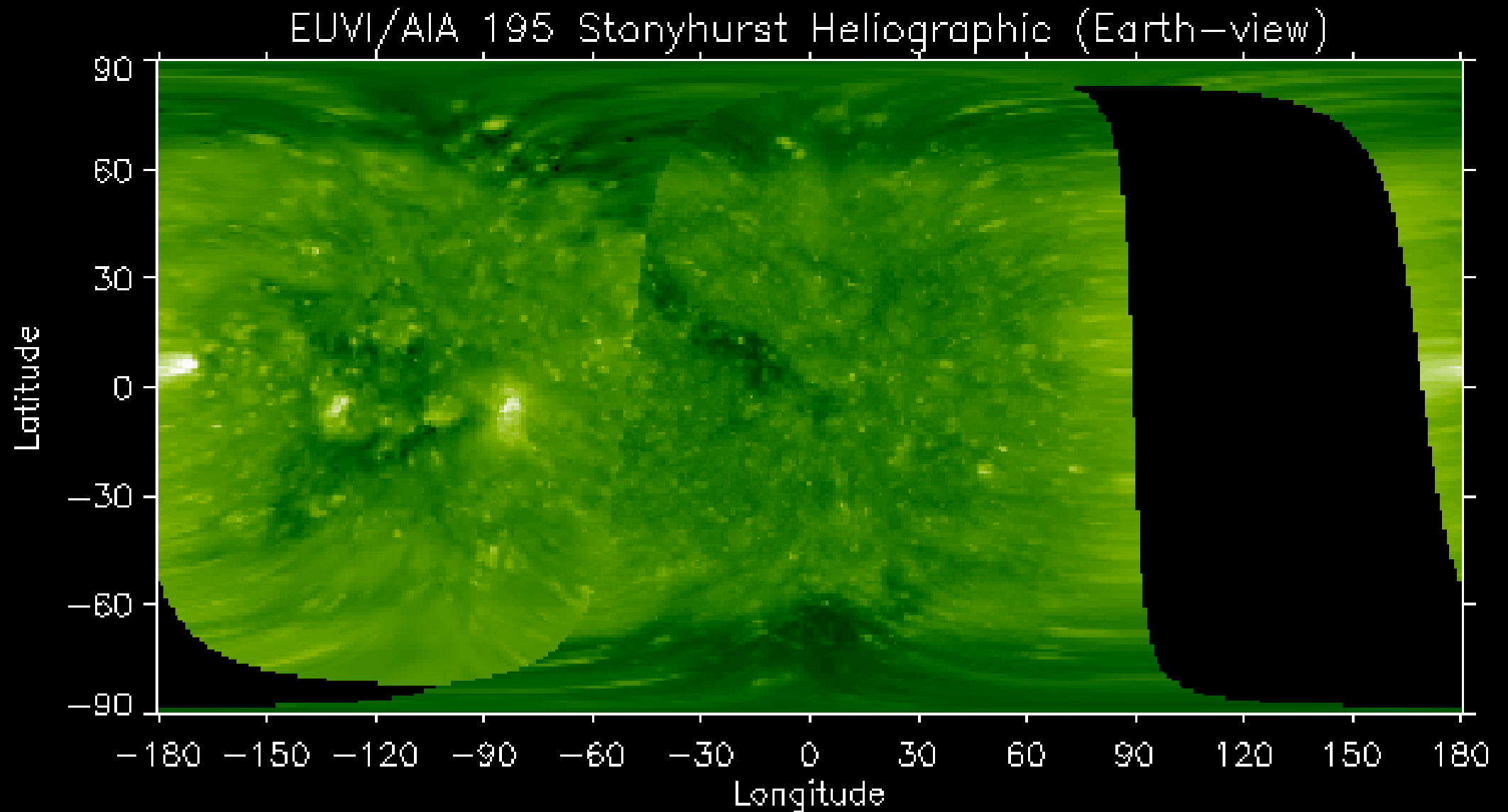
Outlook



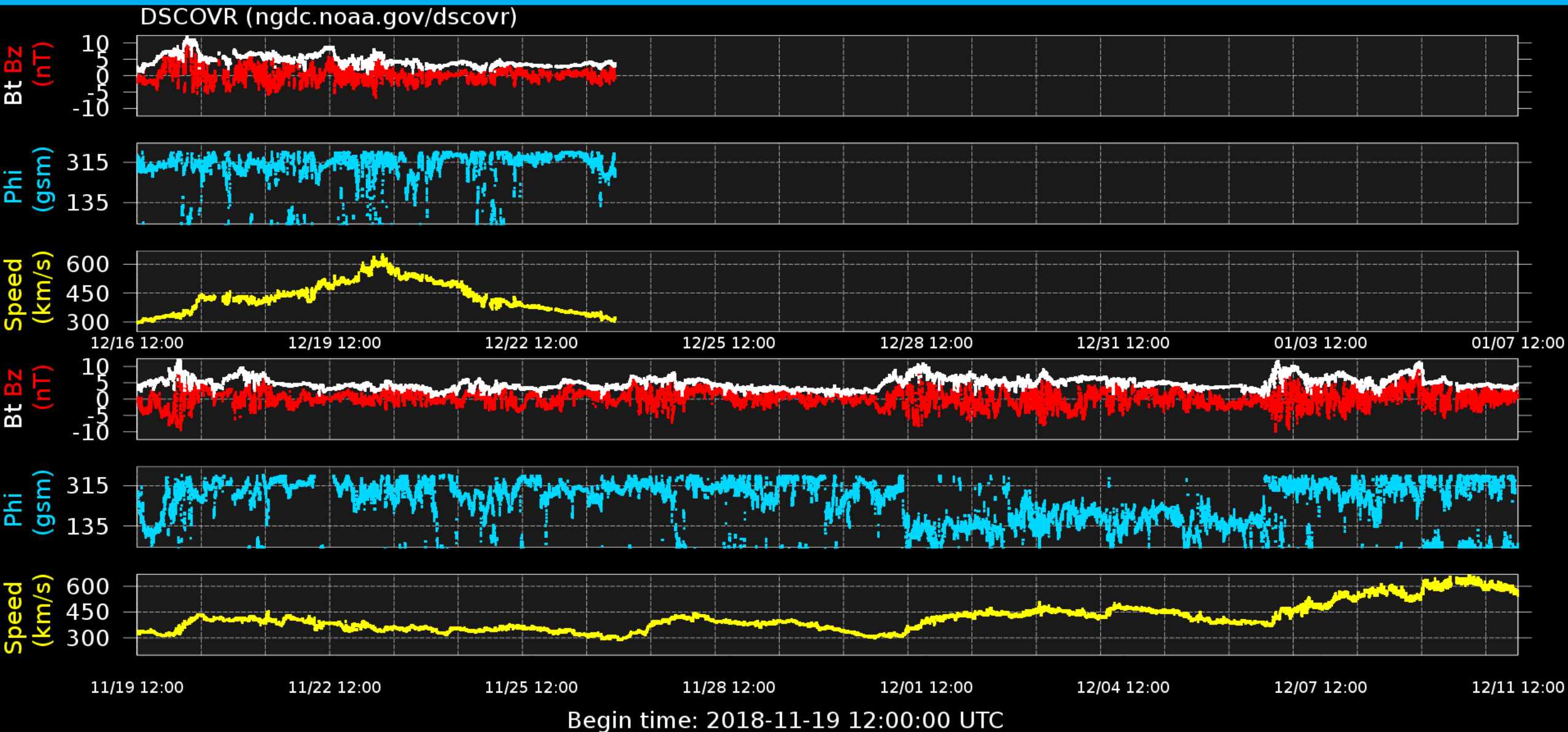
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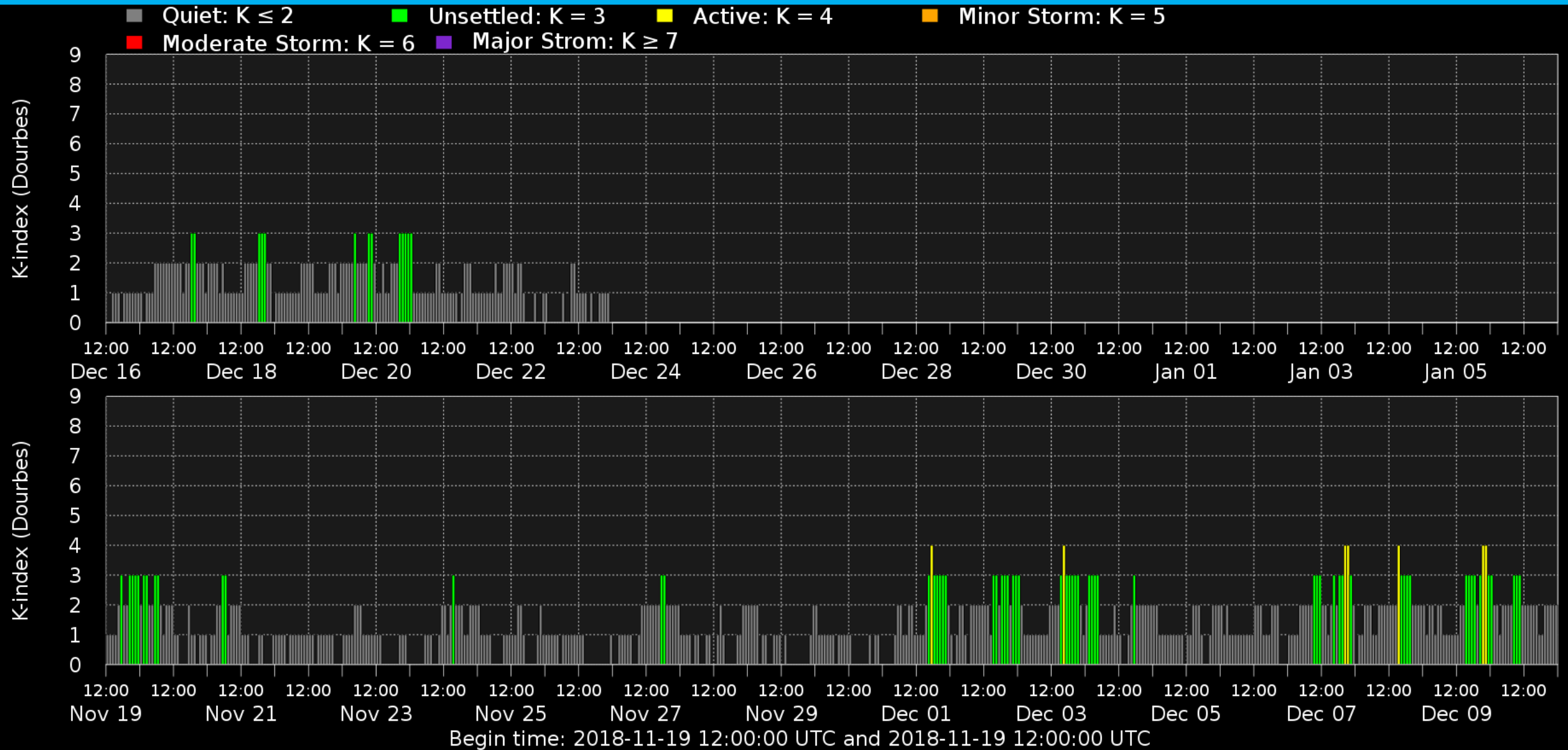
Outlook: Solar activity



Outlook: Solar wind



Outlook: Geomagnetic activity



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