

# SIDC Space Weather Briefing

07 October 2018 - 14 October 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 2018-10-07 12:00 UT to 2018-10-14 12:00 UT

Active regions	AR 2724 (alpha) and AR 2725 (alpha)
Flaring	# B-class flare: 5 # 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 2018-10-07 12:00 UT to 2018-10-14 12:00 UT

Coronal Holes	+ polarity equatorial coronal hole, - polarity equatorial coronal hole
ICME	None
SW Conditions	High speed streams 2018-10-07 till 2018-10-09 and 2018-10-13 till 2018-10-14
K-indices	max K-index (Dourbes): 5 max Kp-index (NOAA): 5

# Solar Activity

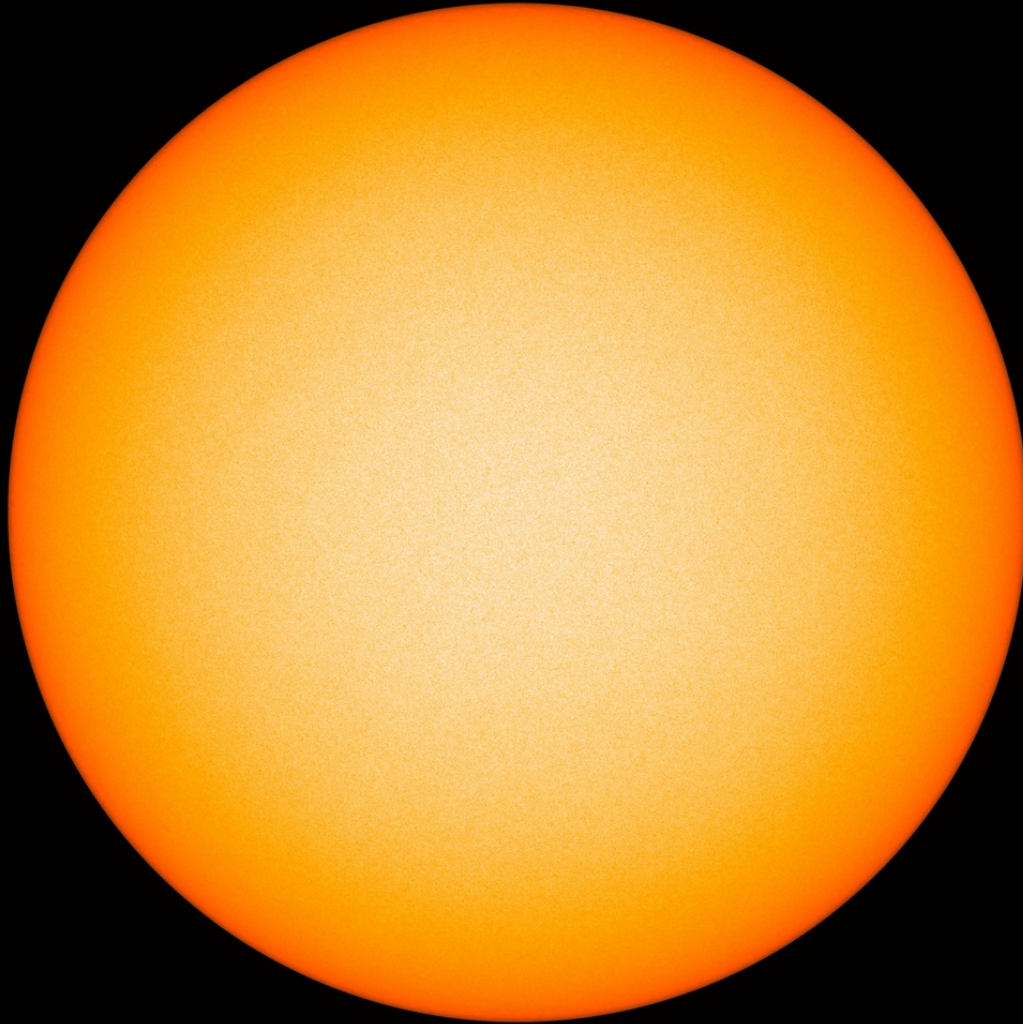


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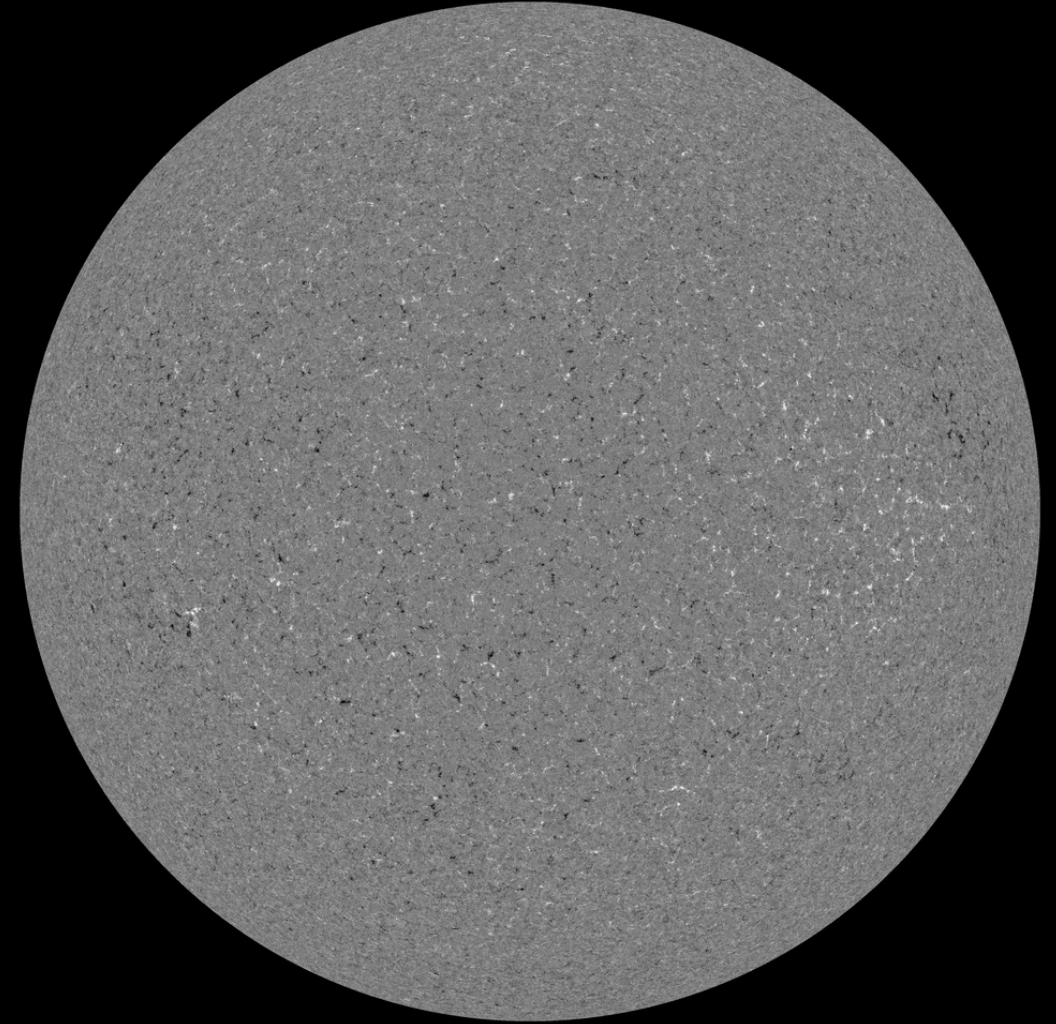
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# Solar active region - start of the week

SDO/HMI White Light 2018-10-07



SDO/HMI Magnetogram 2018-10-07



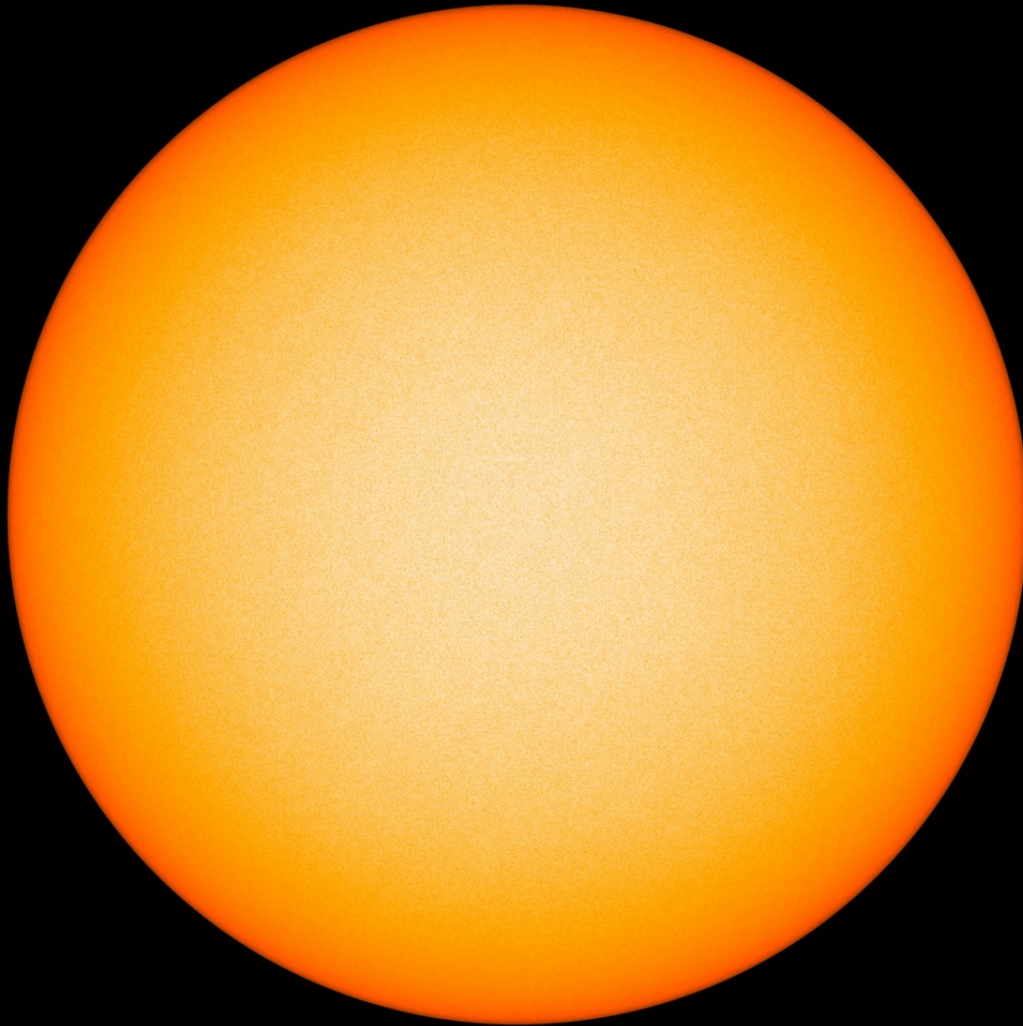
SDO/HMI Quick-Look Continuum: 20181007\_114500

SDO/HMI Quick-Look Magnetogram: 20181007\_114500



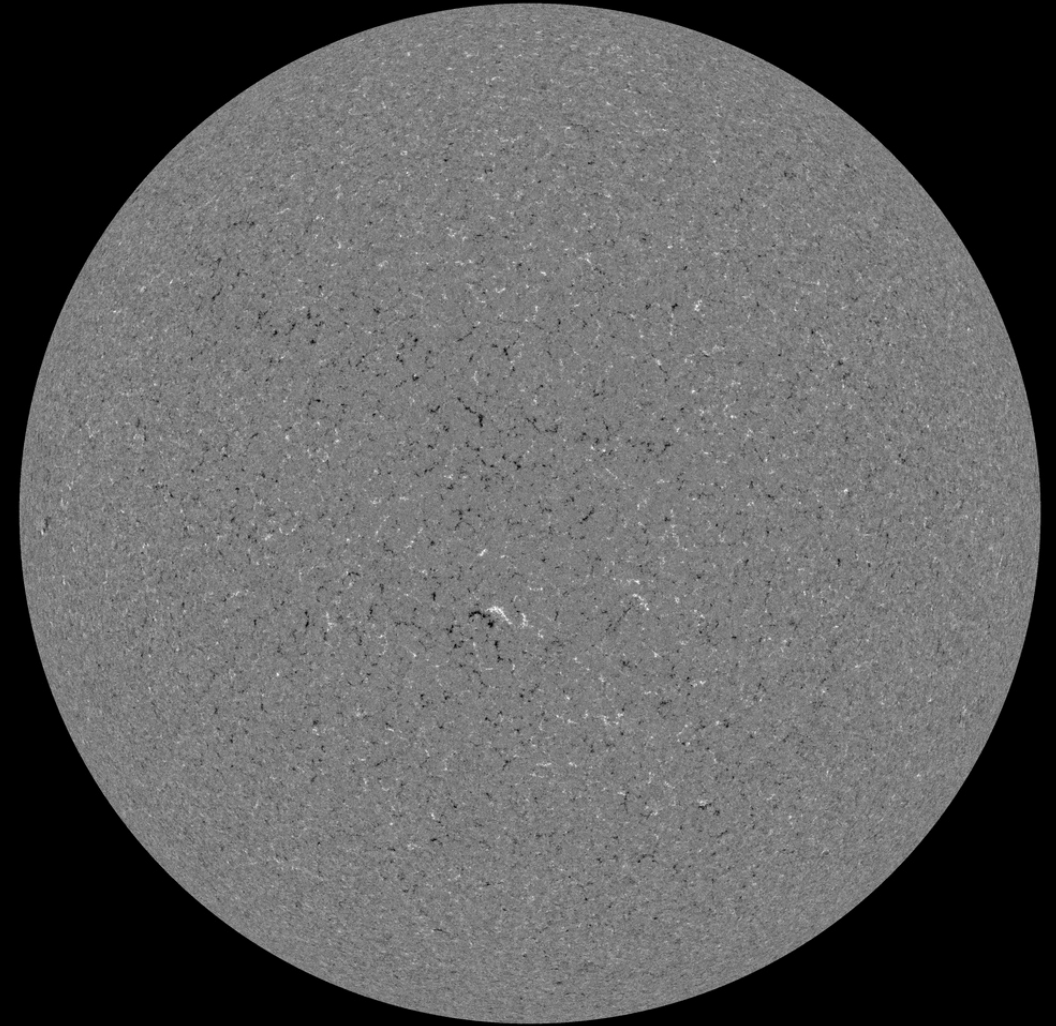
# Solar active region - middle of the week

SDO/HMI White Light 2018-10-10



SDO/HMI Quick-Look Continuum: 20181010\_114500

SDO/HMI Magnetogram 2018-10-10

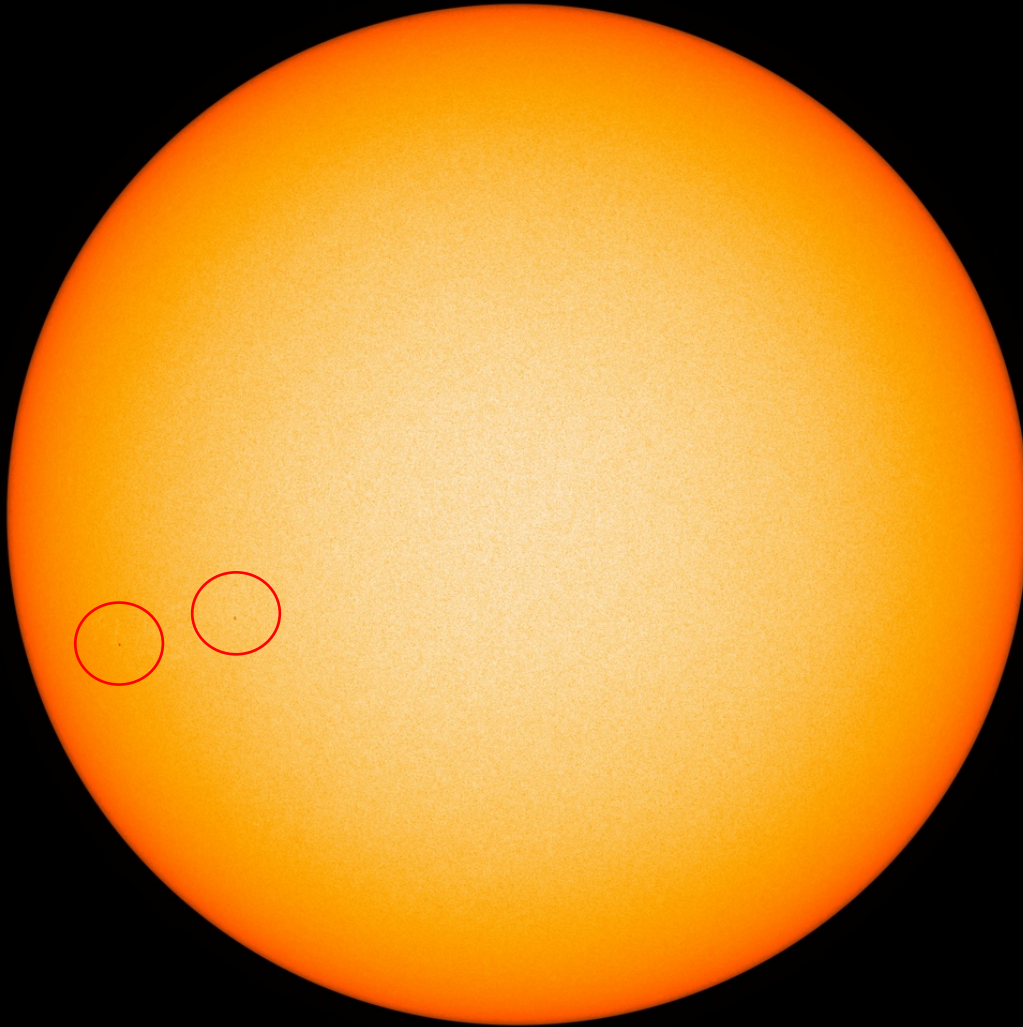


SDO/HMI Quick-Look Magnetogram: 20181010\_114500



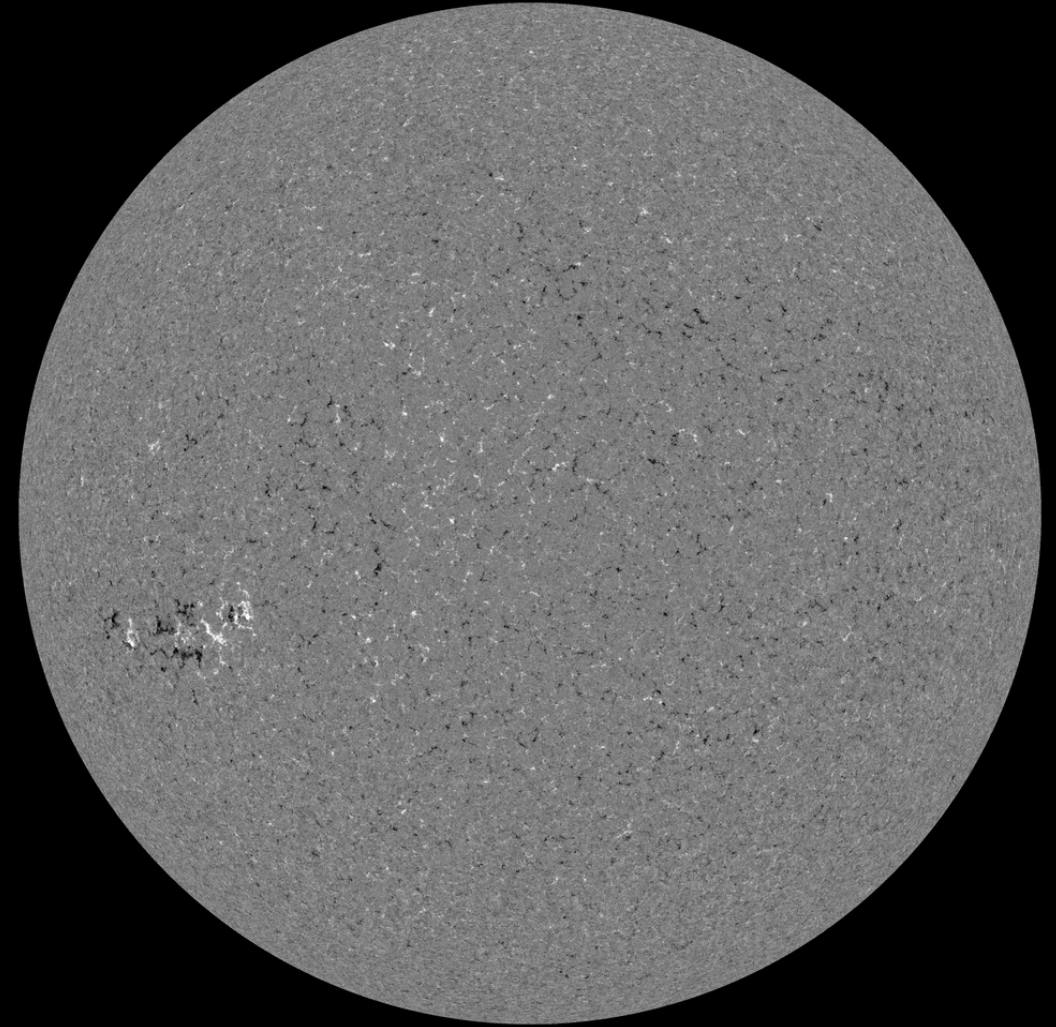
# Solar active region - end of the week

SDO/HMI White Light 2018-10-14



SDO/HMI Quick-Look Continuum: 20181014\_114500

SDO/HMI Magnetogram 2018-10-14

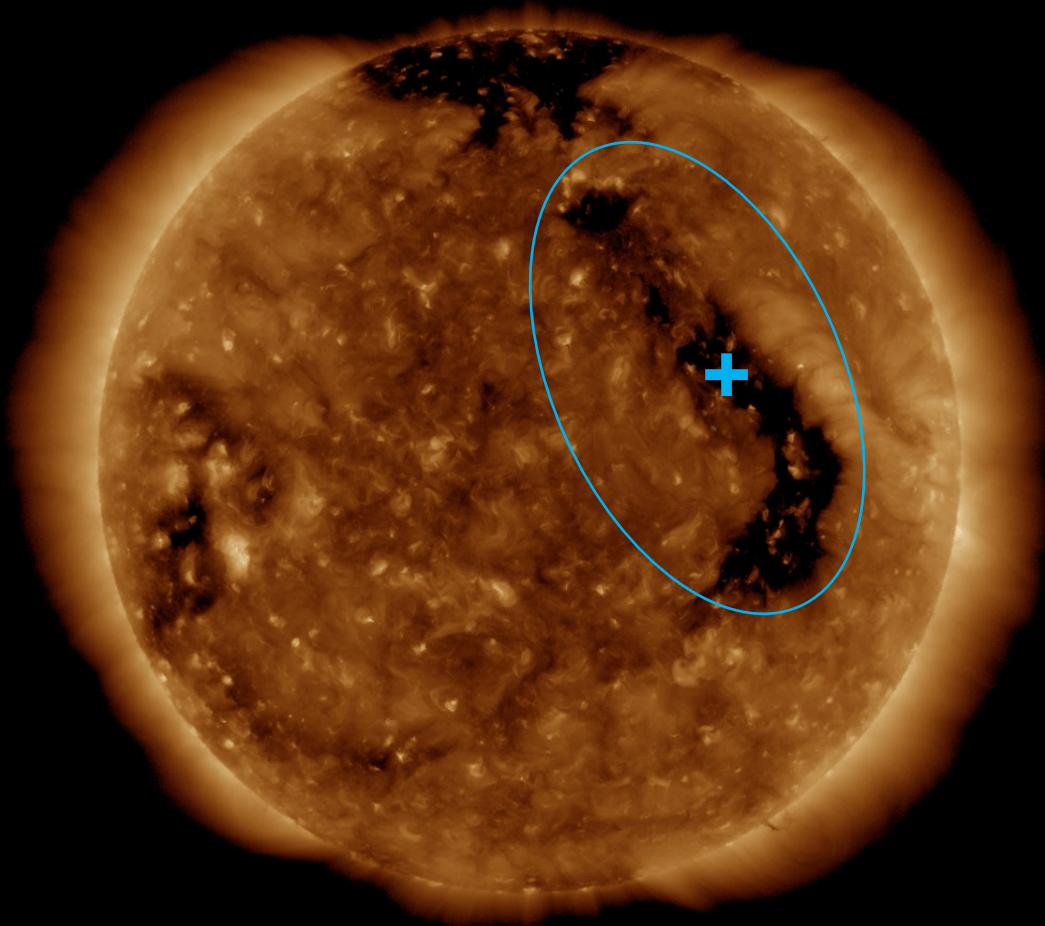


SDO/HMI Quick-Look Magnetogram: 20181014\_114500

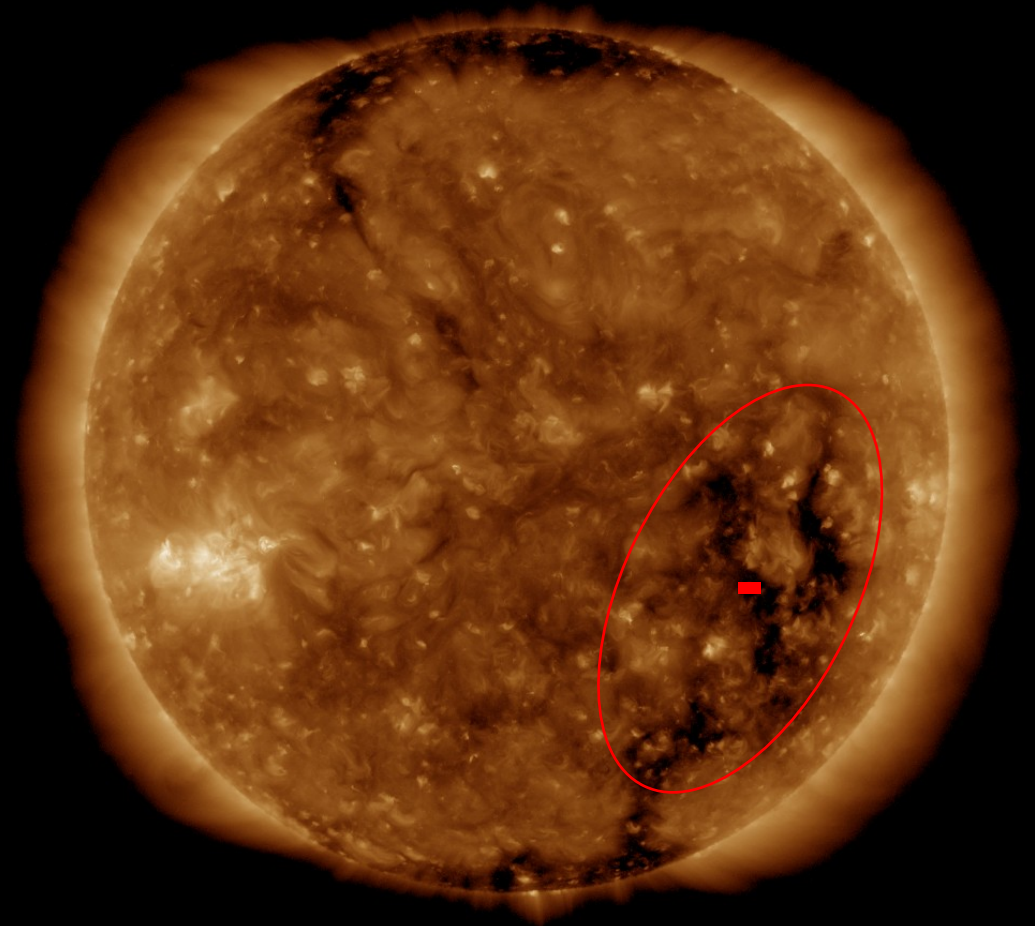


# Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-10-07



SDO/AIA 19.3 nm 2018-10-14



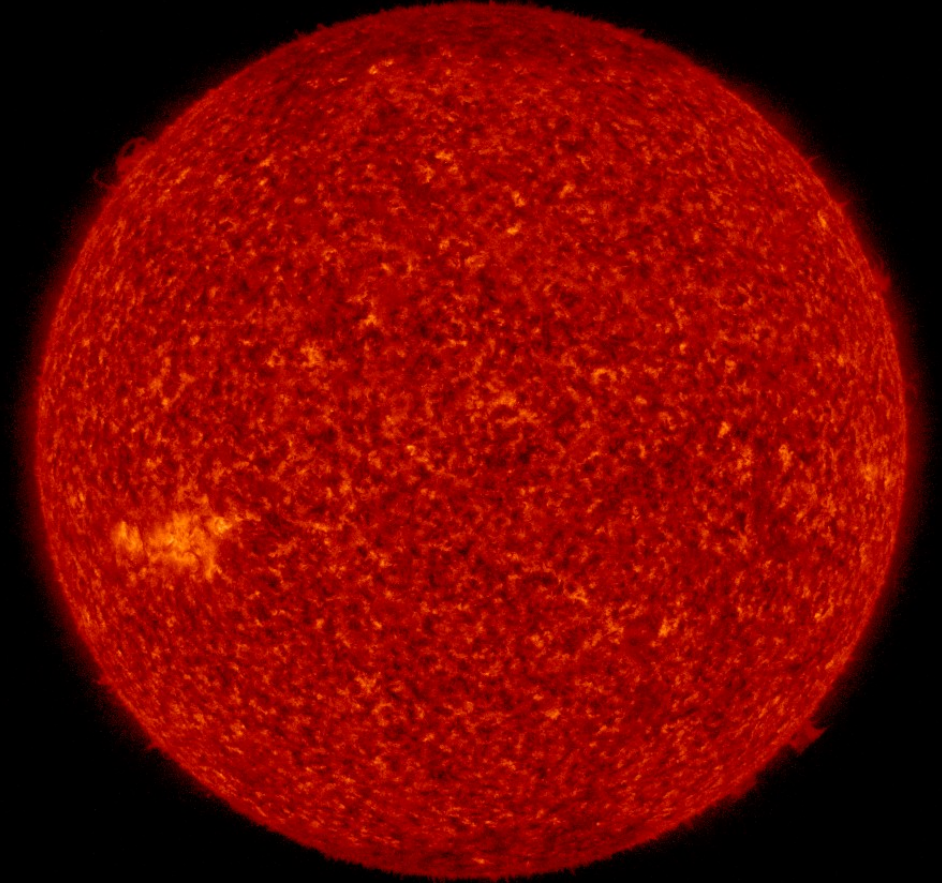
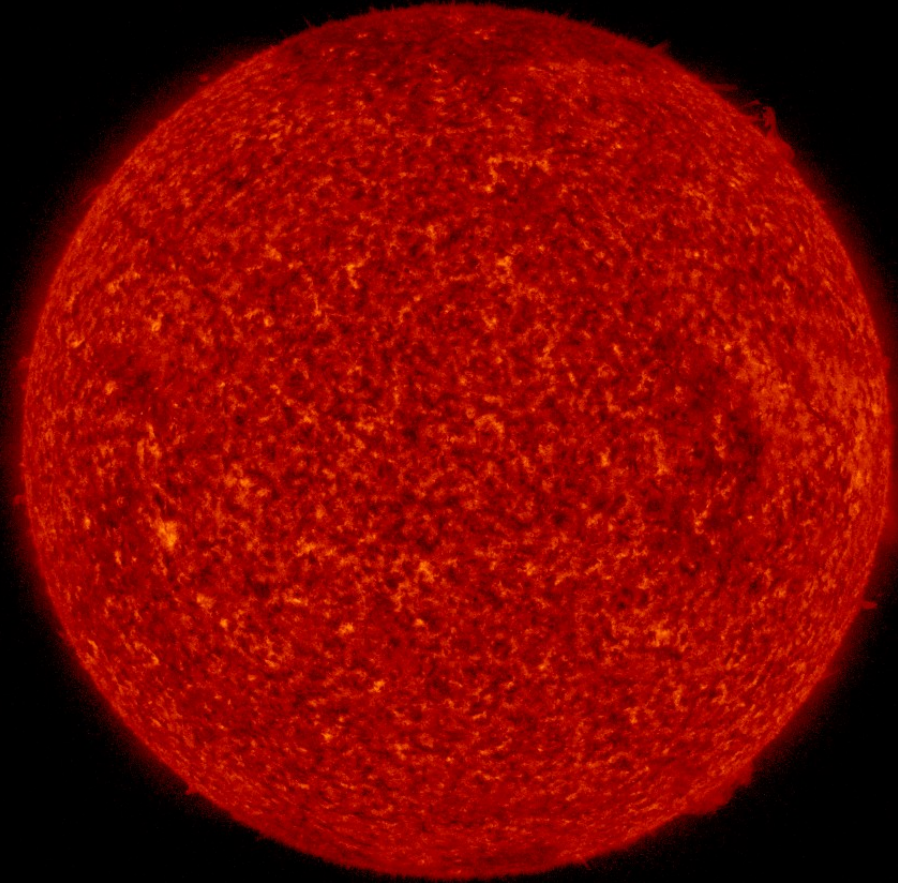
SDO/AIA 193 2018-10-07 12:10:05 UT

SDO/AIA 193 2018-10-14 12:11:29 UT

# Solar active region & Filament

SDO/AIA 30.4 nm 2018-10-07

SDO/AIA 30.4 nm 2018-10-14



SDO/AIA 304 2018-10-07 12:13:06 UT

SDO/AIA 304 2018-10-14 12:13:42 UT



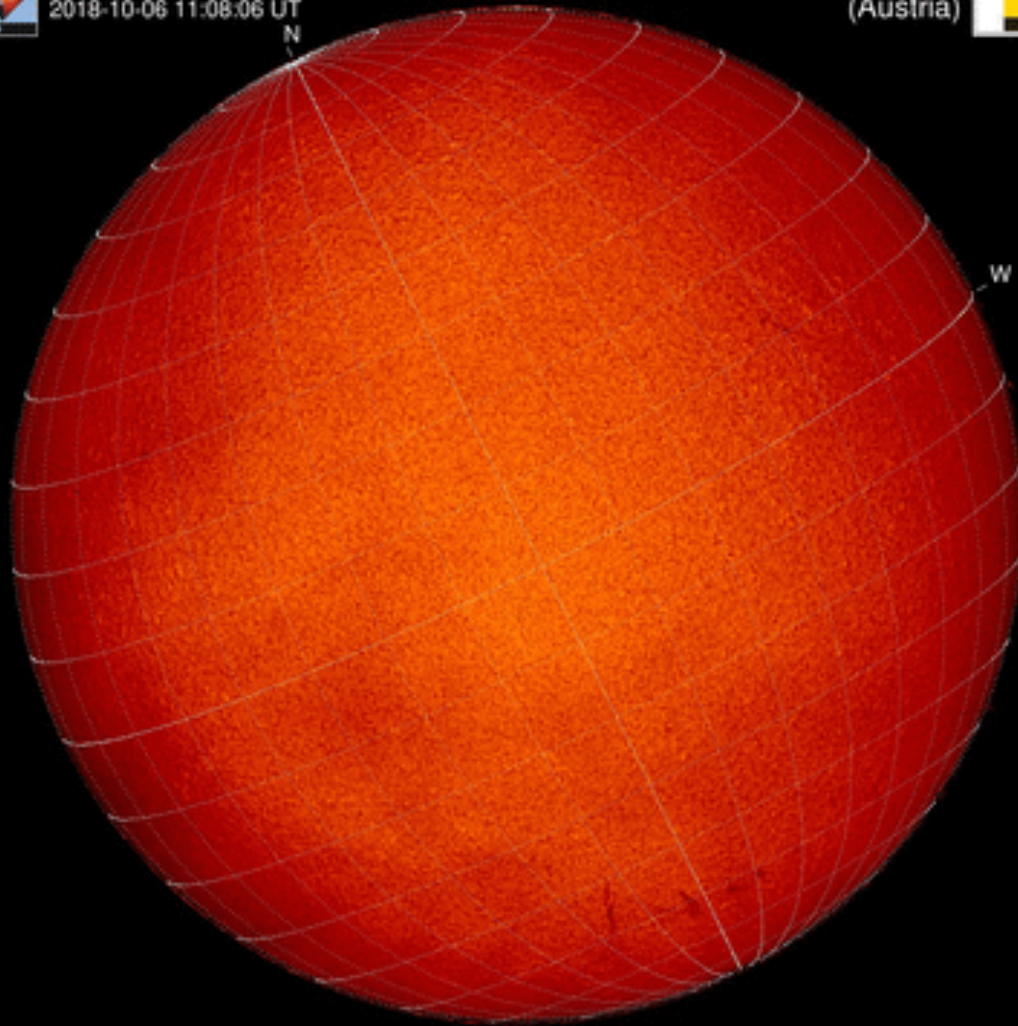
# Filament & Filament eruption

H-alpha 2018-10-07



Kanzelhöhe Observatory  
2018-10-06 11:08:06 UT

University of Graz  
(Austria)

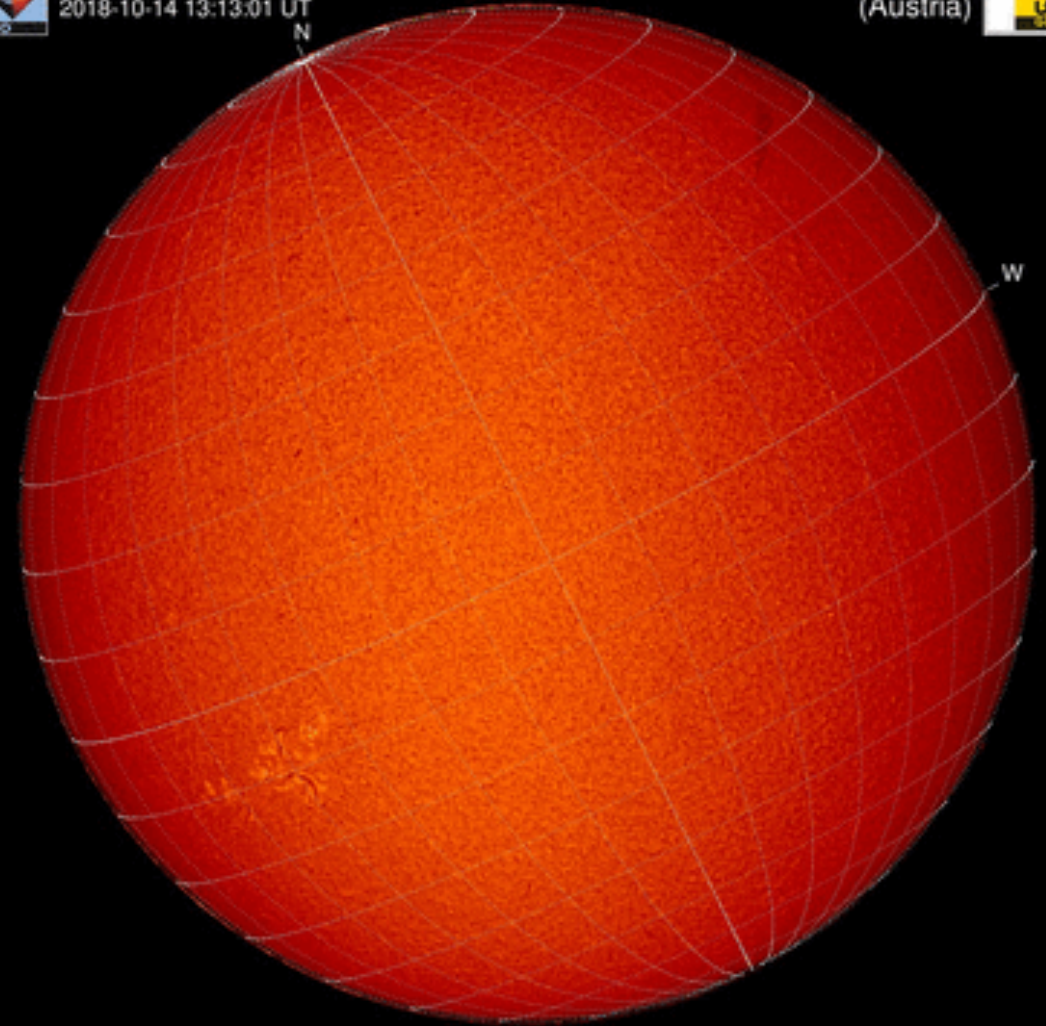


H-alpha 2018-10-14

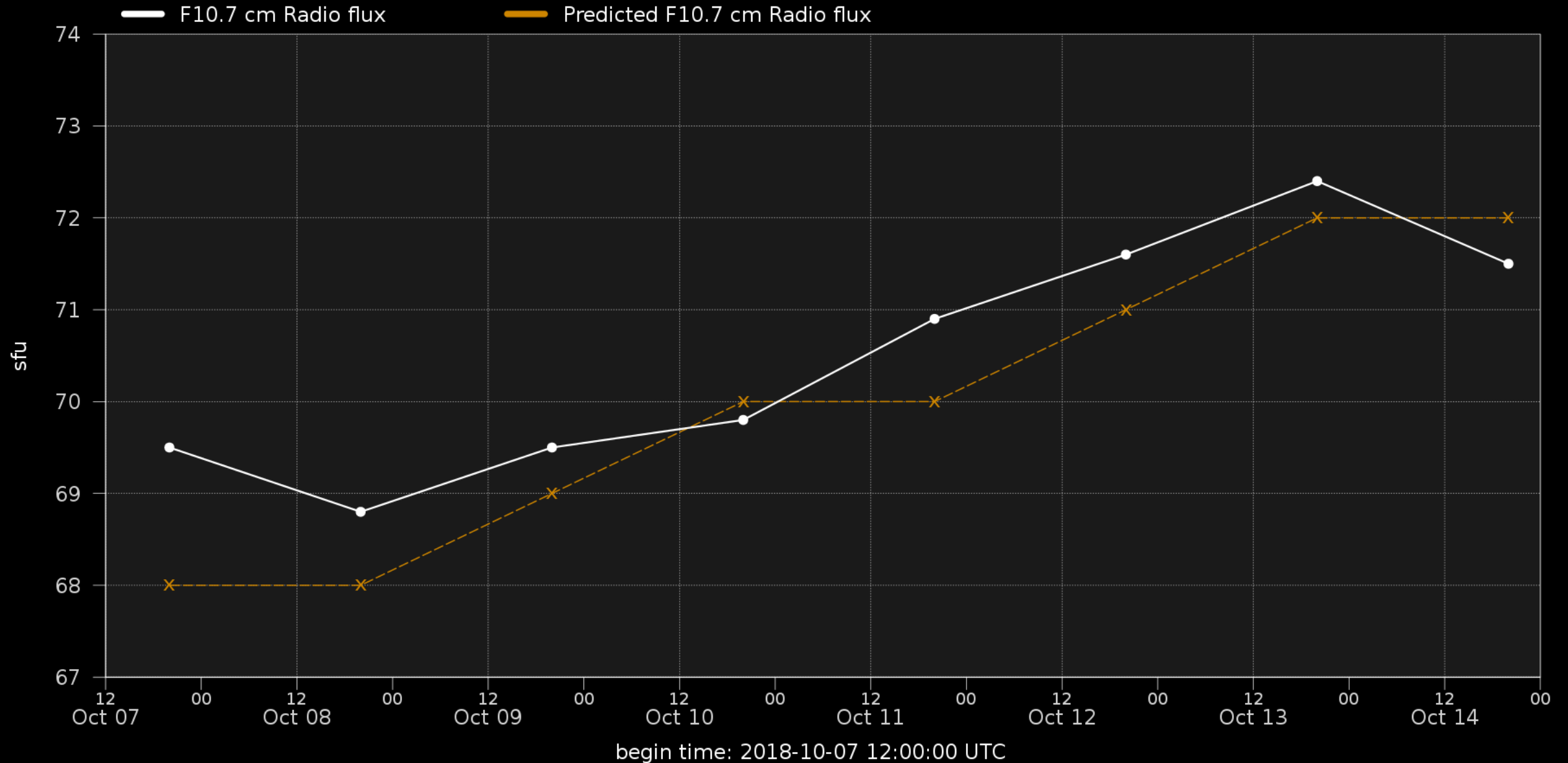


Kanzelhöhe Observatory  
2018-10-14 13:13:01 UT

University of Graz  
(Austria)

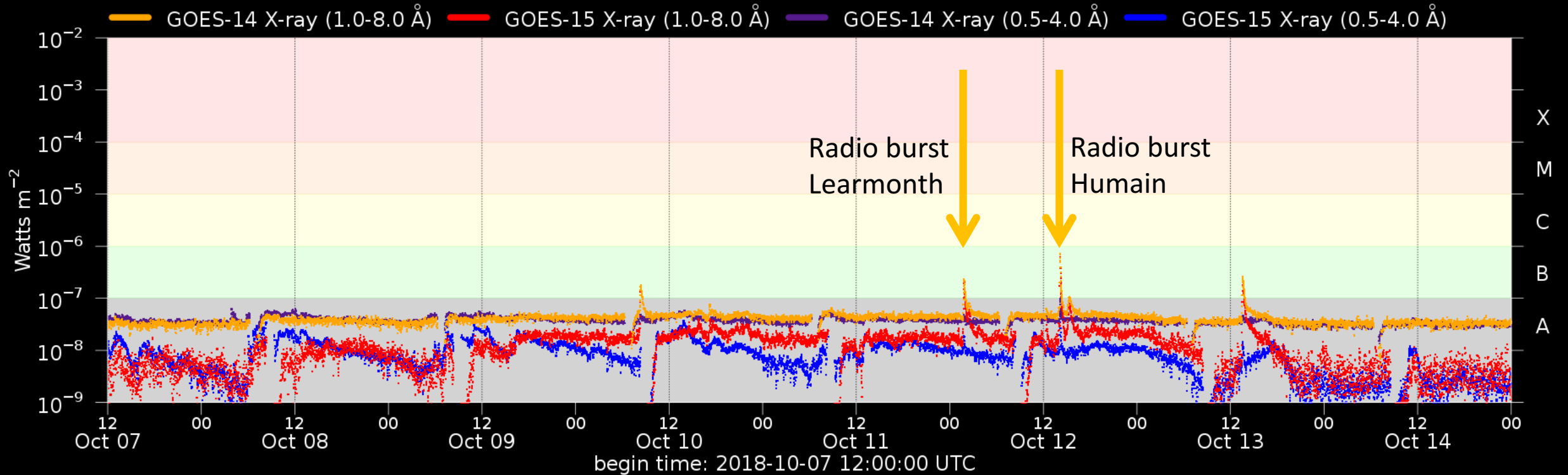


# Solar F10.7cm radio flux



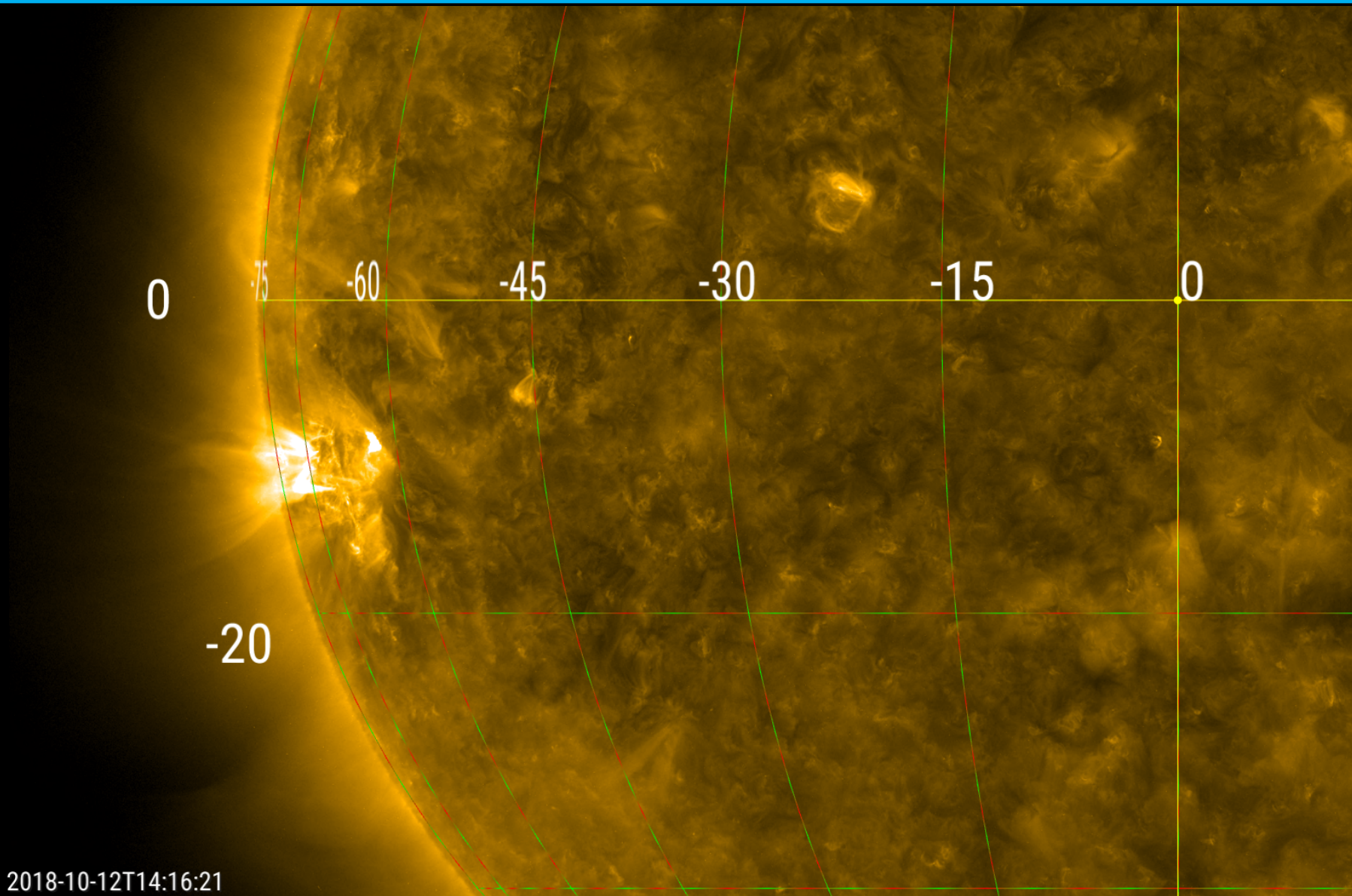


# Flaring activity



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

Issue date	2018-10-07	2018-10-08	2018-10-09	2018-10-10	2018-10-11	2018-10-12	2018-10-13	2018-10-14
Probability	--- 05 01 01	--- 05 01 01	--- 01 01 01	--- 01 01 01	--- 03 01 01	--- 03 01 01	--- 35 01 01	--- 35 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	01 00 00 00	02 00 00 00	01 00 00 00	00 00 00 00

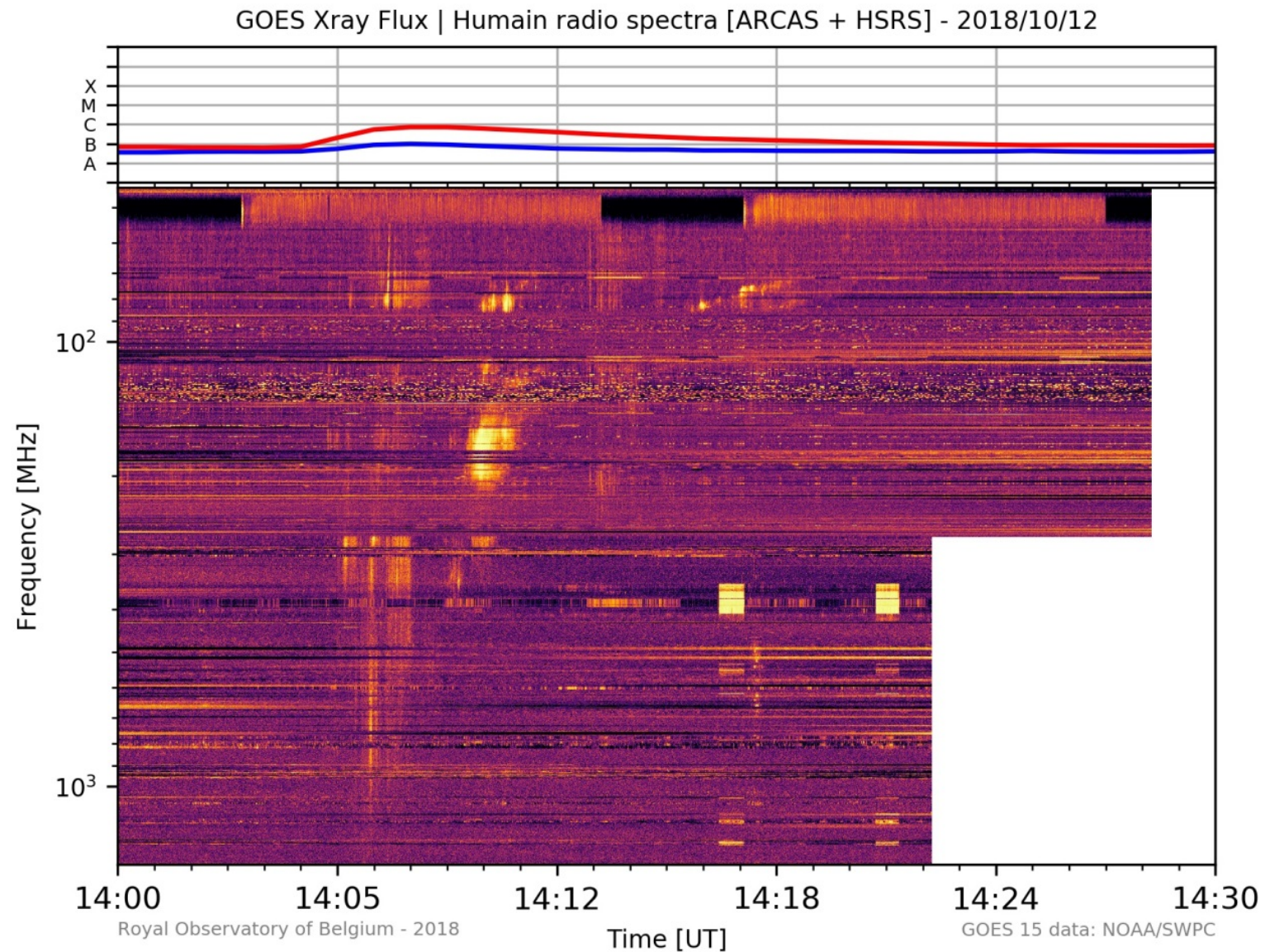


[video](#)

2018-10-12T14:16:21



# Type II radio burst in Humain on 2018-10-12



# Coronal Mass Ejection

S

W

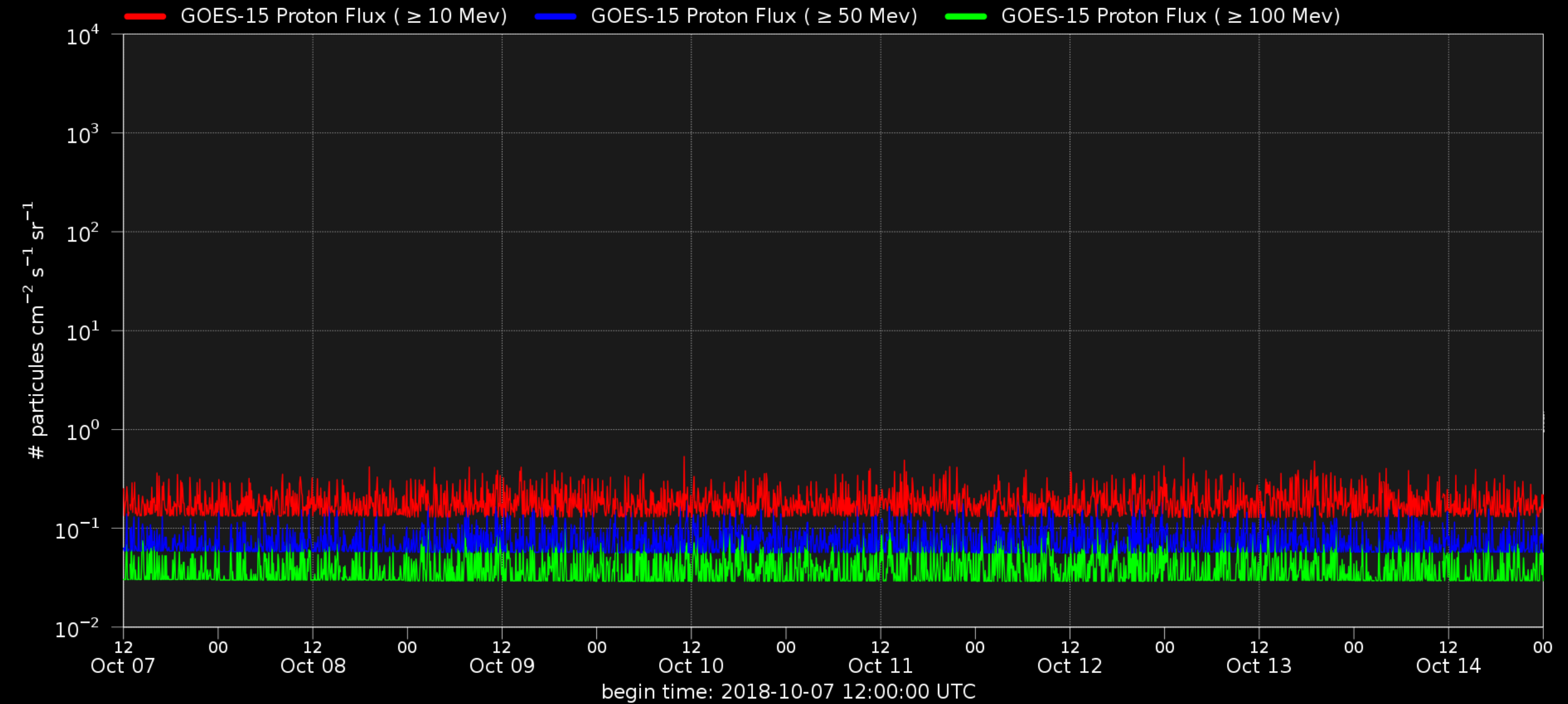
N

E

20:00 10/13  
17:12 10/13  
14:24 10/13  
11:00 10/13  
07:48 10/13  
05:24 10/13  
02:36 10/13  
23:48 10/12  
20:24 10/12  
17:24 10/12  
14:24 10/12  
11:24 10/12  
07:48 10/12  
04:49 10/12  
00:36 10/12  
21:36 10/11  
18:36 10/11  
15:36 10/11  
11:24 10/11  
08:24 10/11  
05:36 10/11  
02:24 10/11  
23:12 10/10  
19:36 10/10  
17:00 10/10  
13:54 10/10  
10:36 10/10  
07:12 10/10  
04:12 10/10  
00:48 10/10  
21:36 10/09  
18:12 10/09  
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12:12 10/09  
09:12 10/09  
06:12 10/09  
03:24 10/09  
00:06 10/09  
20:36 10/08  
17:54 10/08  
14:48 10/08  
11:36 10/08  
08:24 10/08  
05:48 10/08



# Solar proton flux



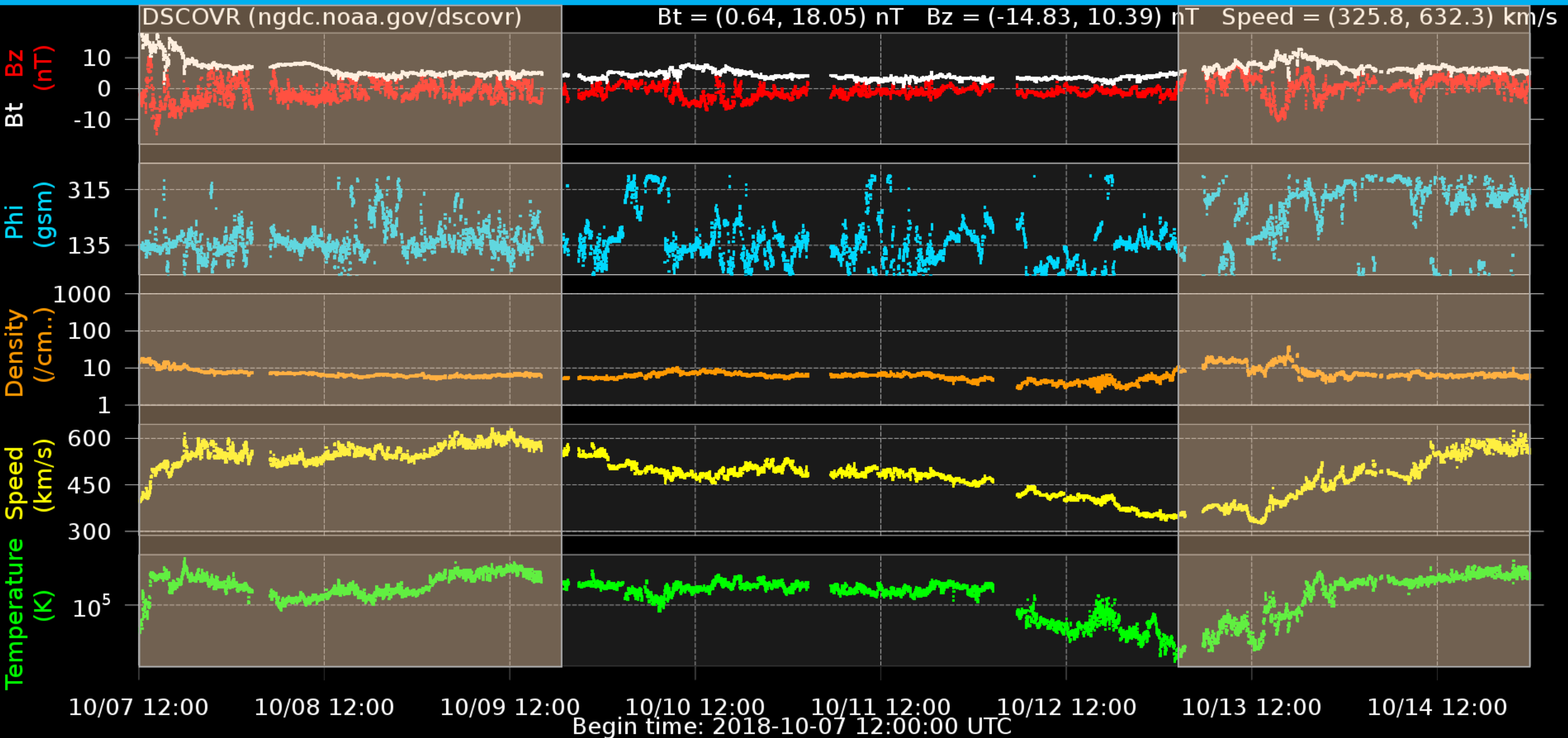
# Solar Wind and Geomagnetic Activity



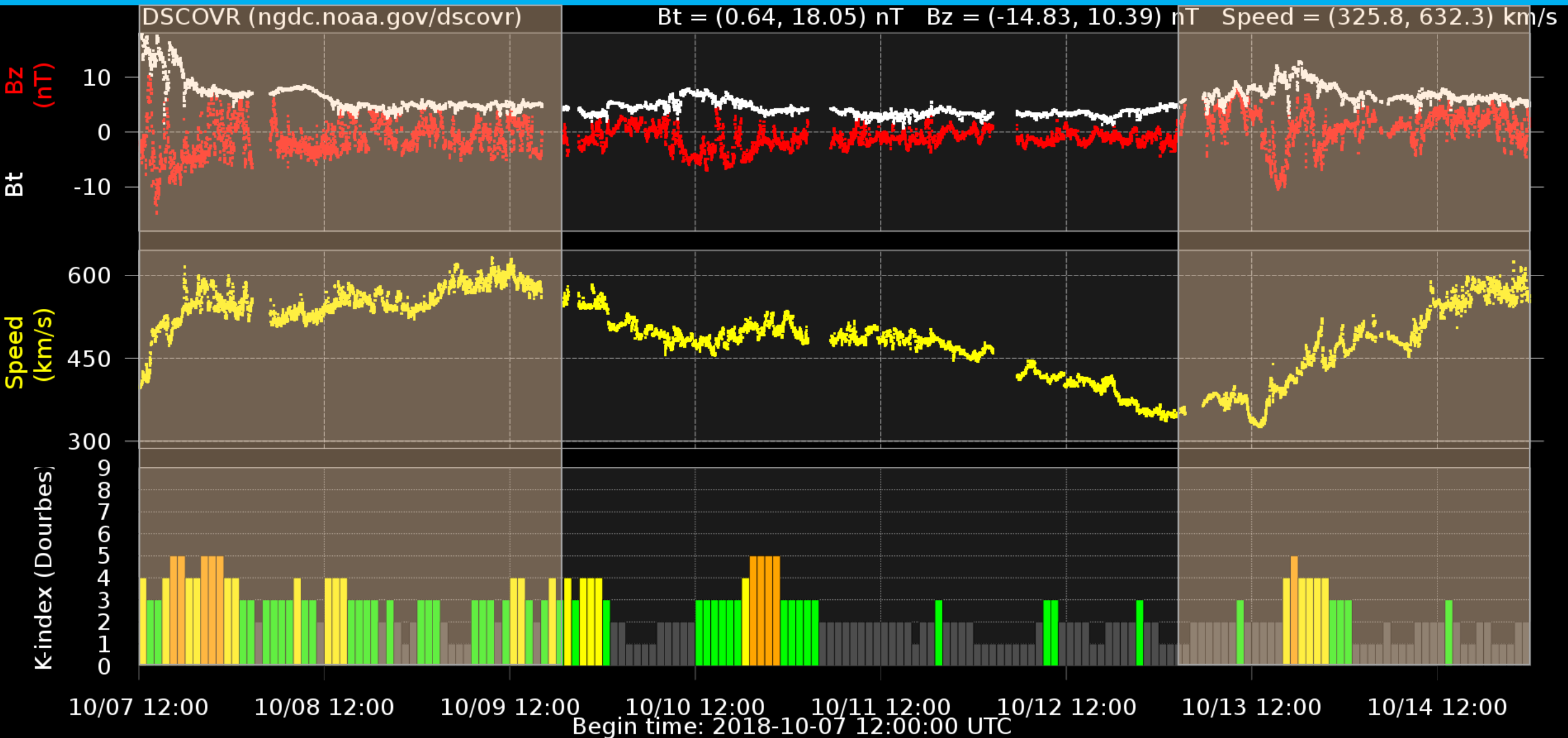
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# Solar wind parameters (DSCOVR data)

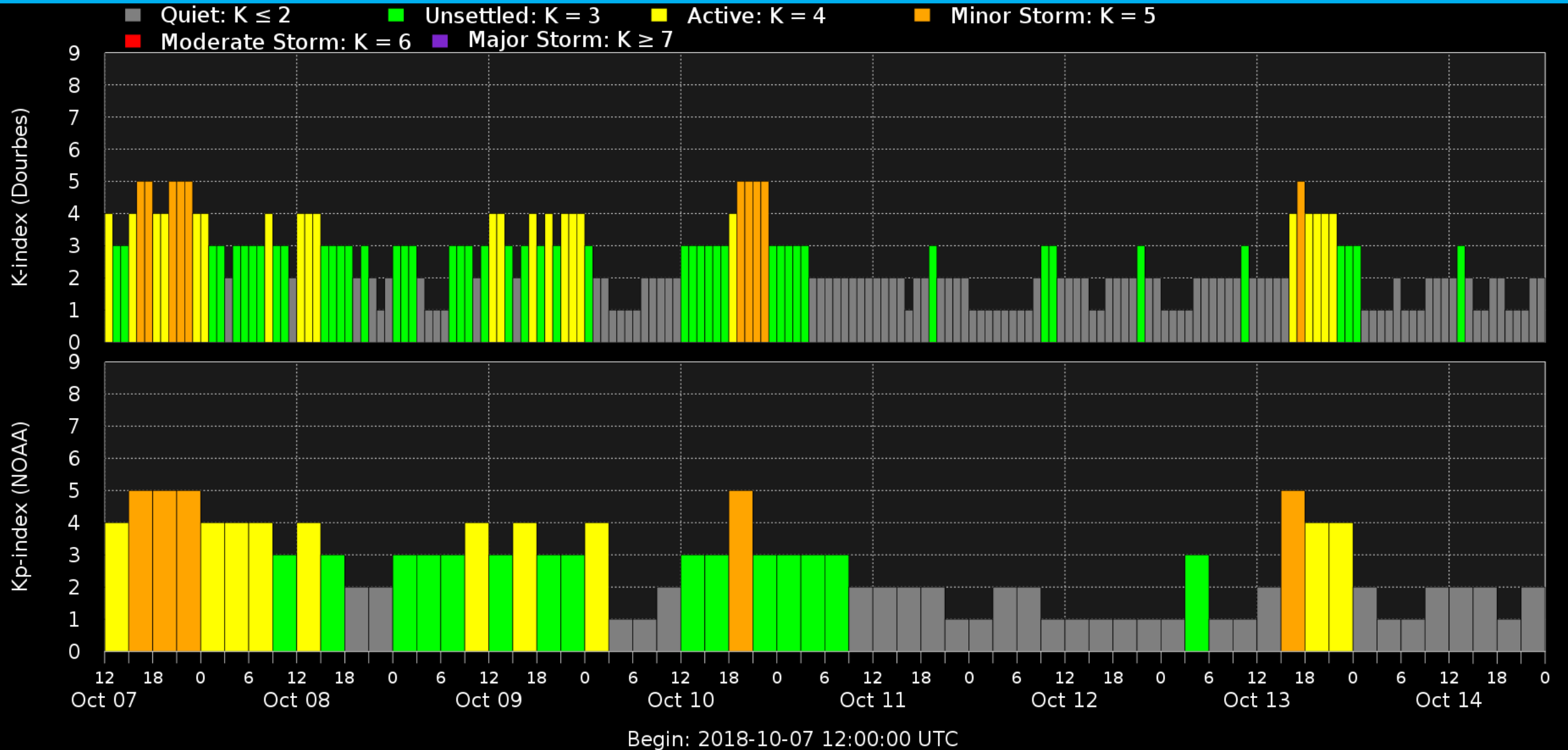


# Solar wind parameters & K-index (DSCOVR/Dourbes)





# Geomagnetic activity (K-indexes)





# Outlook

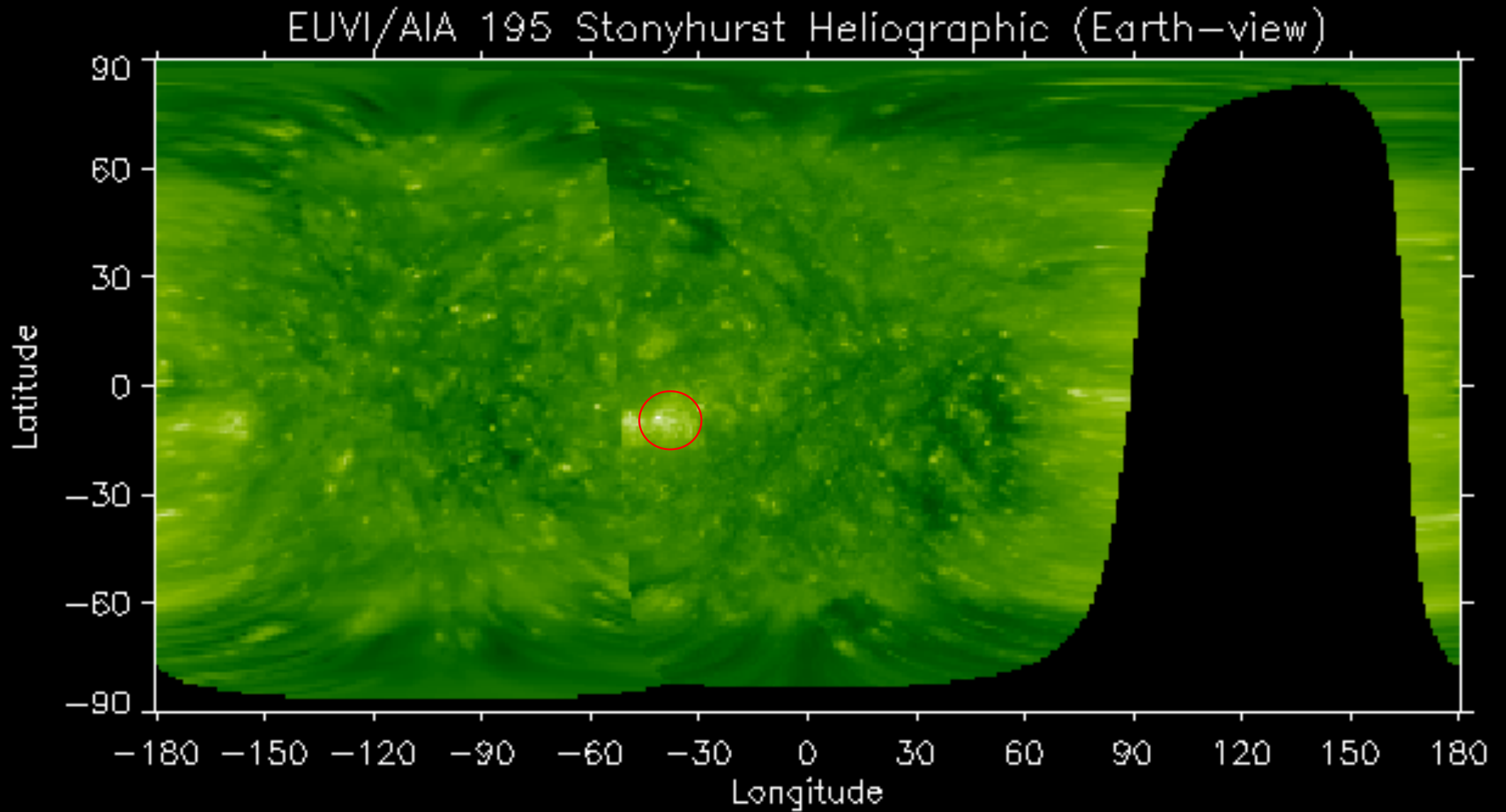


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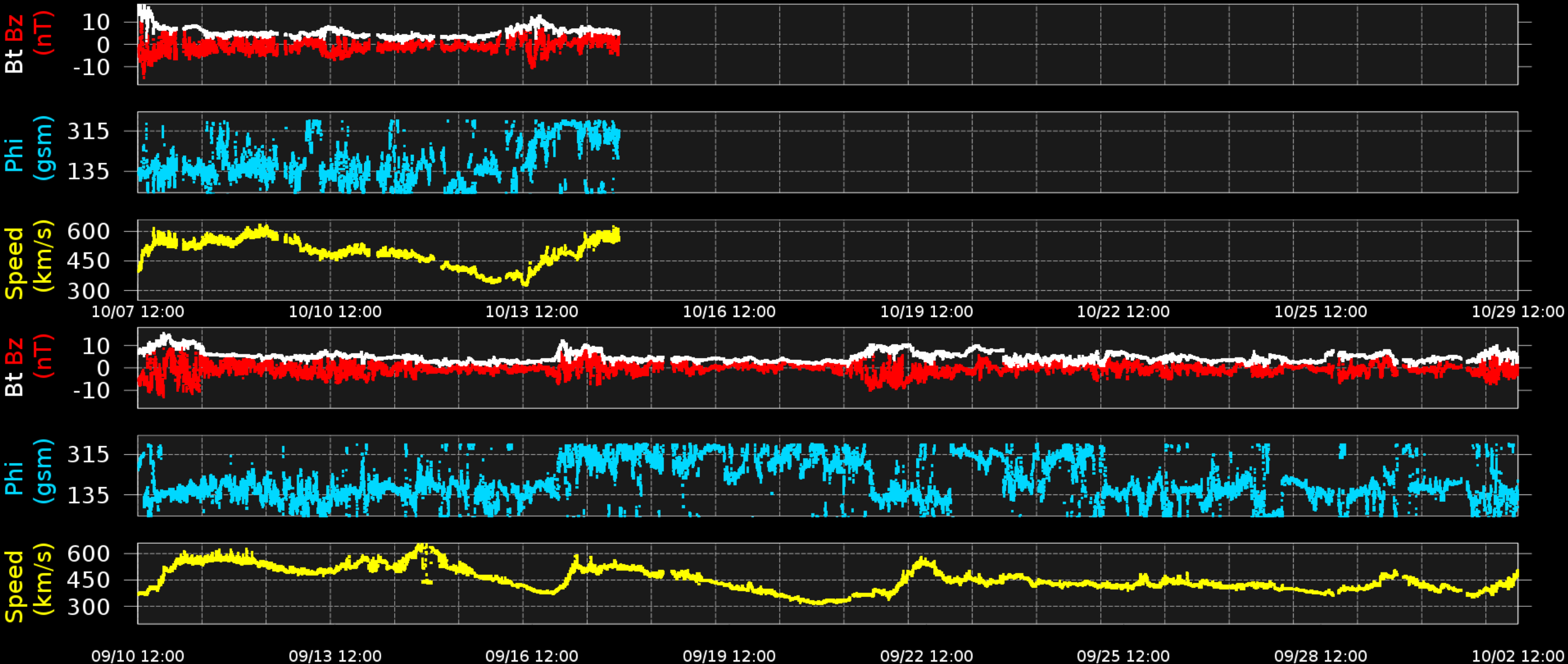


# Outlook: Solar activity



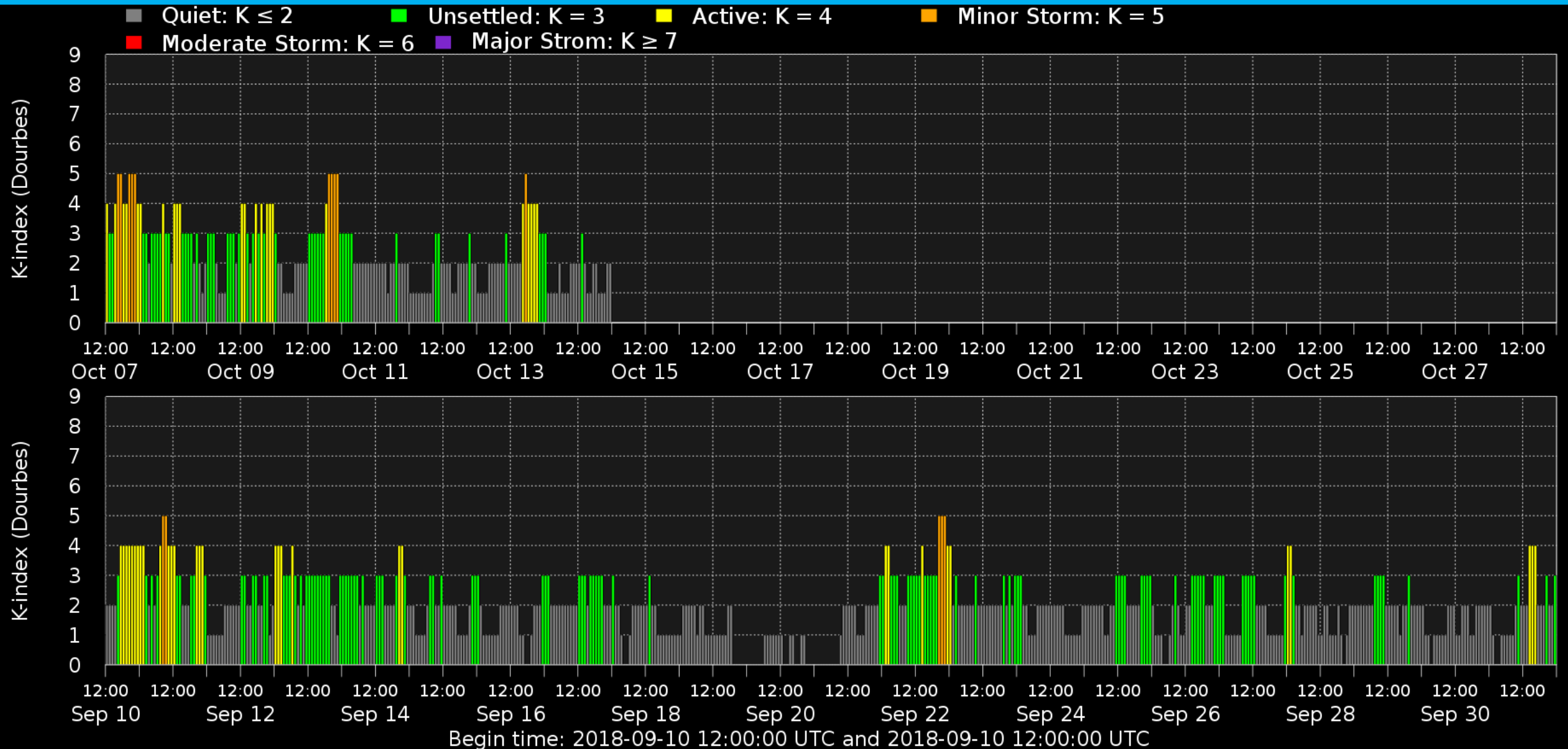
# Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2018-09-10 12:00:00 UTC

# Outlook: Geomagnetic activity





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