

SIDC Space Weather Briefing

28 October 2018 - 04 November 2018

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& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2018-10-28 12:00 UT to 2018-11-04 12:00 UT

Active regions	The Sun was spotless during the entire week
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	No particular filaments or filament eruptions observed
CMEs	No earth-directed CMEs were observed
Proton Events	The > 10 MeV proton flux was at nominal levels

Solar wind and geomagnetic conditions from 2018-10-28 12:00 UT to 2018-11-04 12:00 UT

Coronal Holes	Neg. Polarity CH (Central Mer. transit: 27-28 Oct); Pos. Pol. CH (CM transit: 31 Oct – 02 Nov)
ICME	No ICMEs were observed during the period
SW Conditions	CIR and HSS associated with the pos. pol. CH arrived on 4 November
K-indices	max K-index (Dourbes): 5 max Kp-index (NOAA): 5, both late on 4 November

All Quiet Alert: *Ended on 02/12:12UT November 2018*

Solar Activity

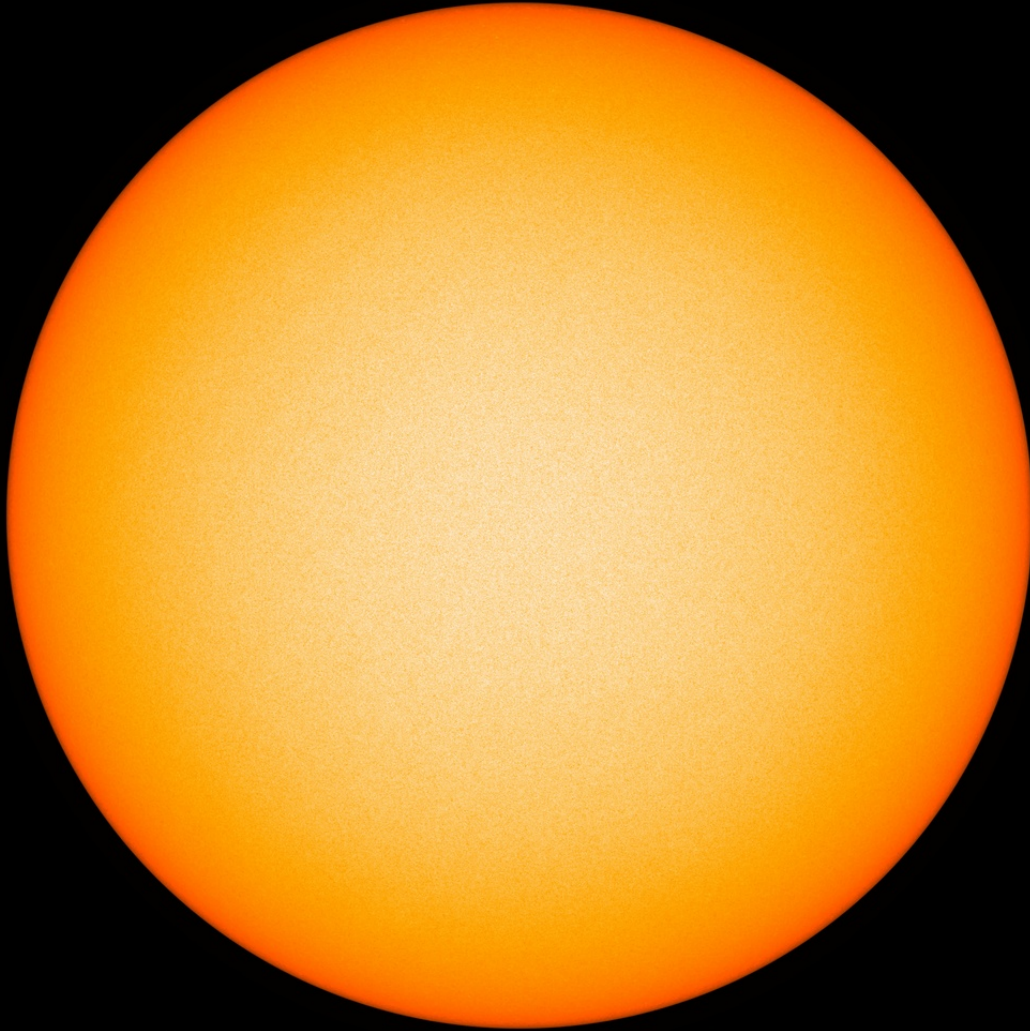


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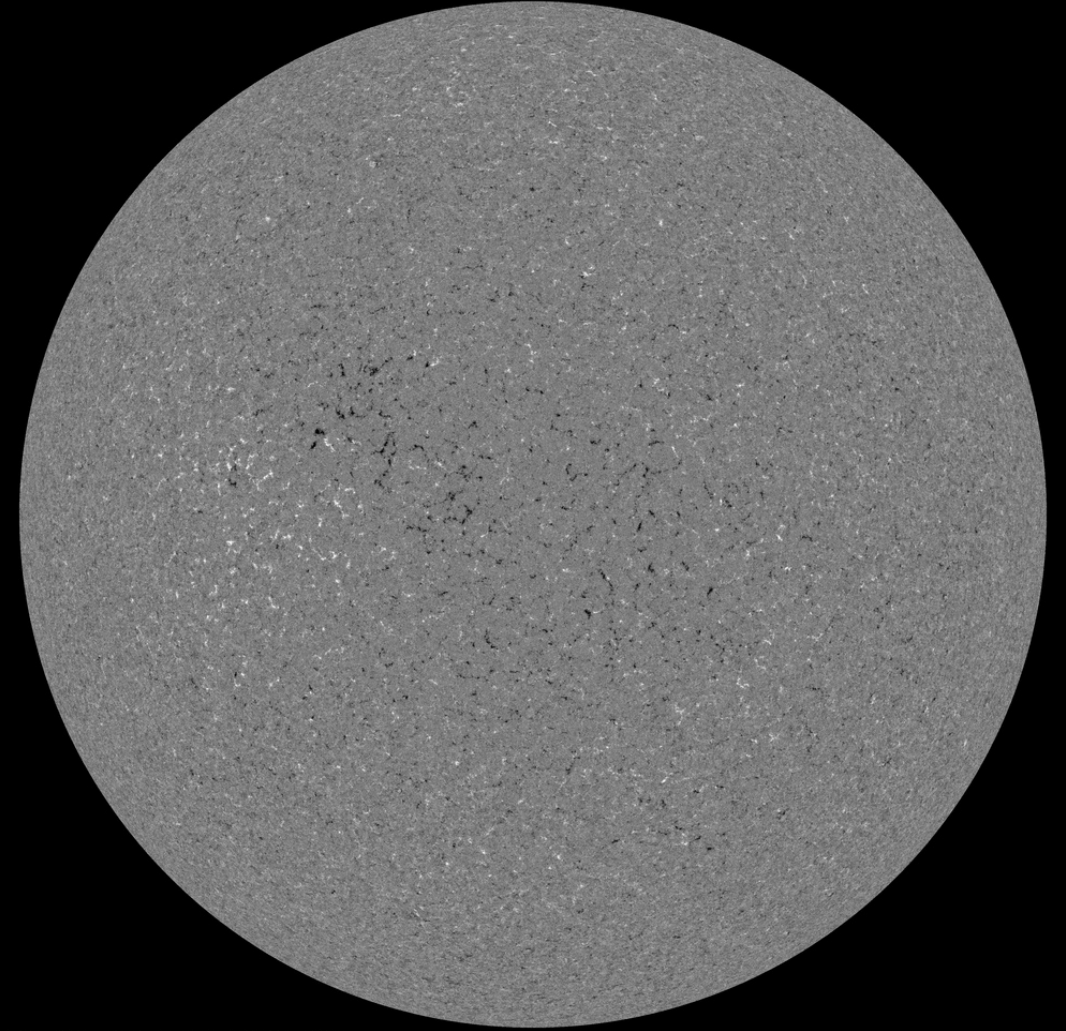
Solar active region - start of the week

SDO/HMI White Light 2018-10-28



SDO/HMI Quick-Look Continuum: 20181028_114500

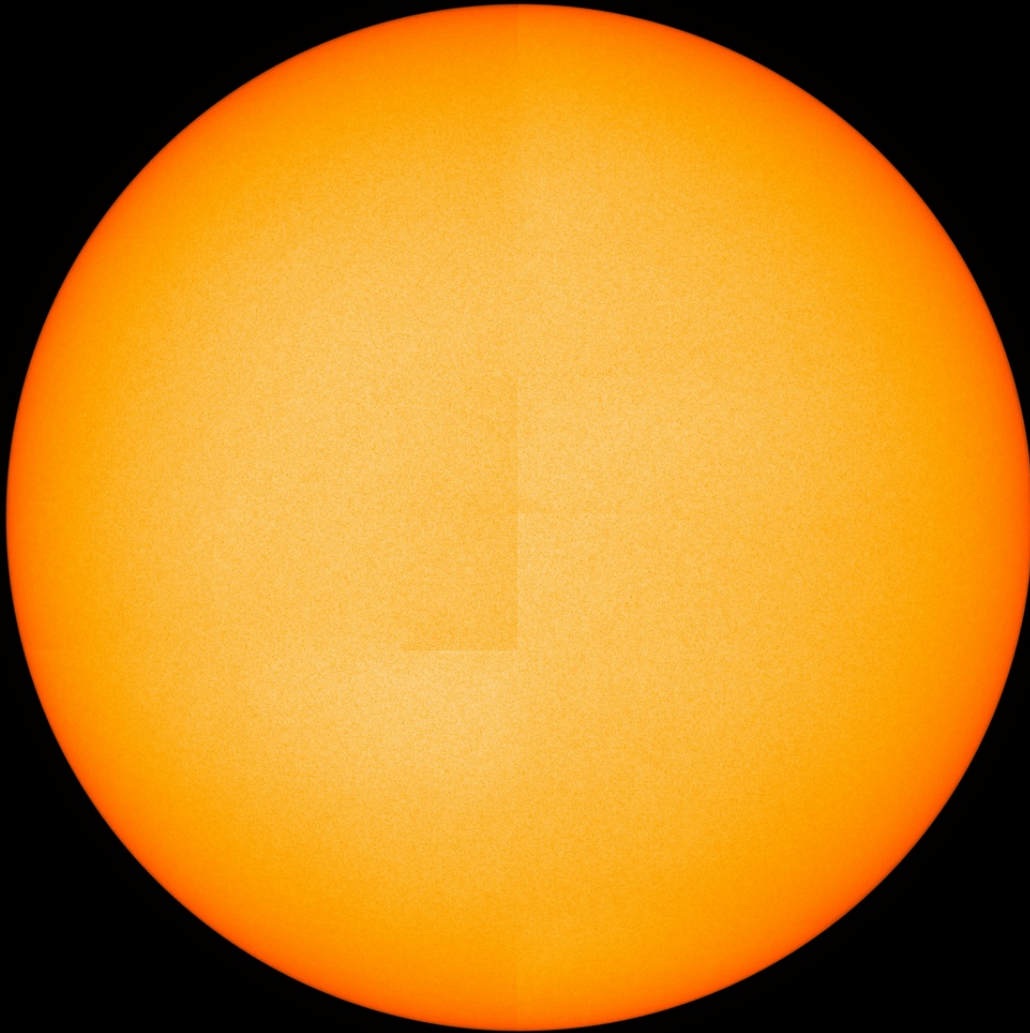
SDO/HMI Magnetogram 2018-10-28



SDO/HMI Quick-Look Magnetogram: 20181028_114500

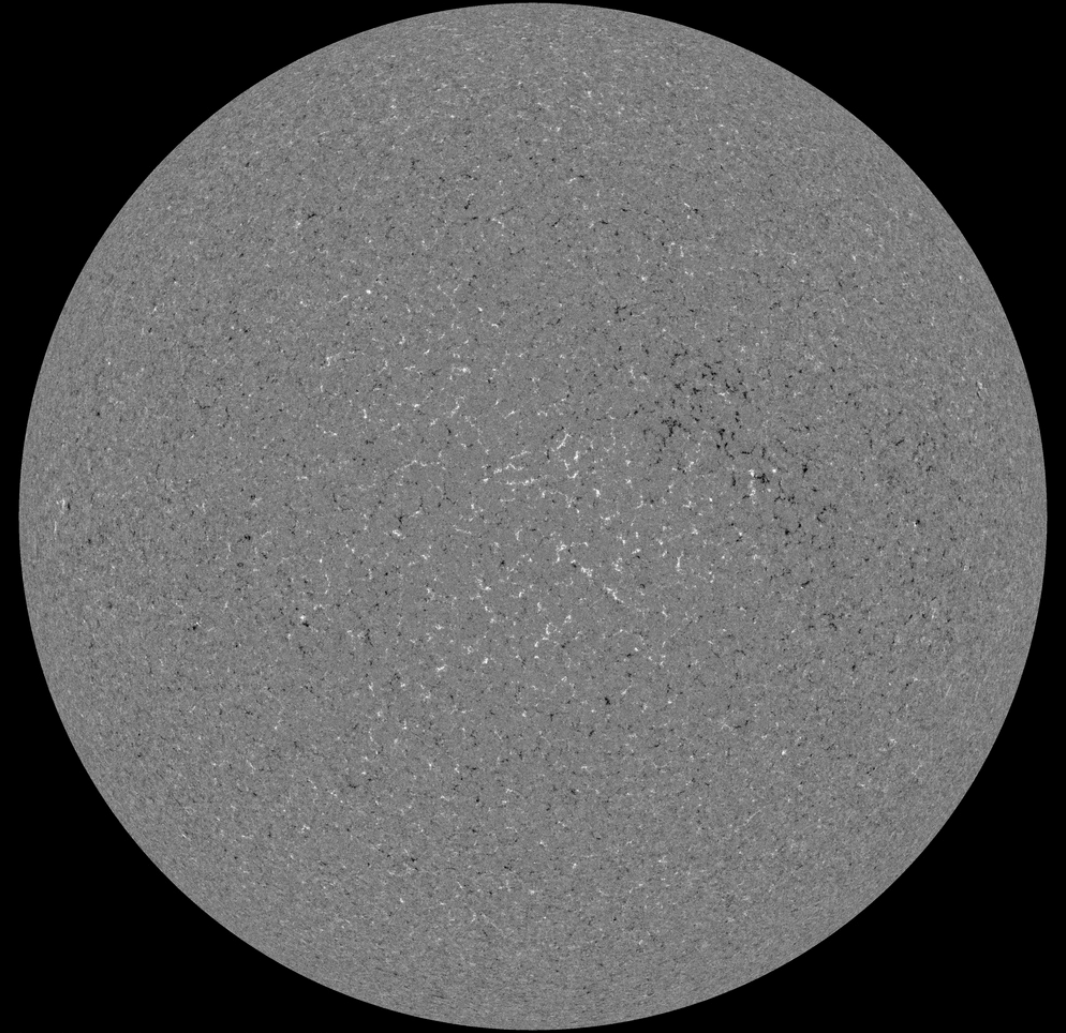
Solar active region - middle of the week

SDO/HMI White Light 2018-10-31



SDO/HMI Quick-Look Continuum: 20181031_114500

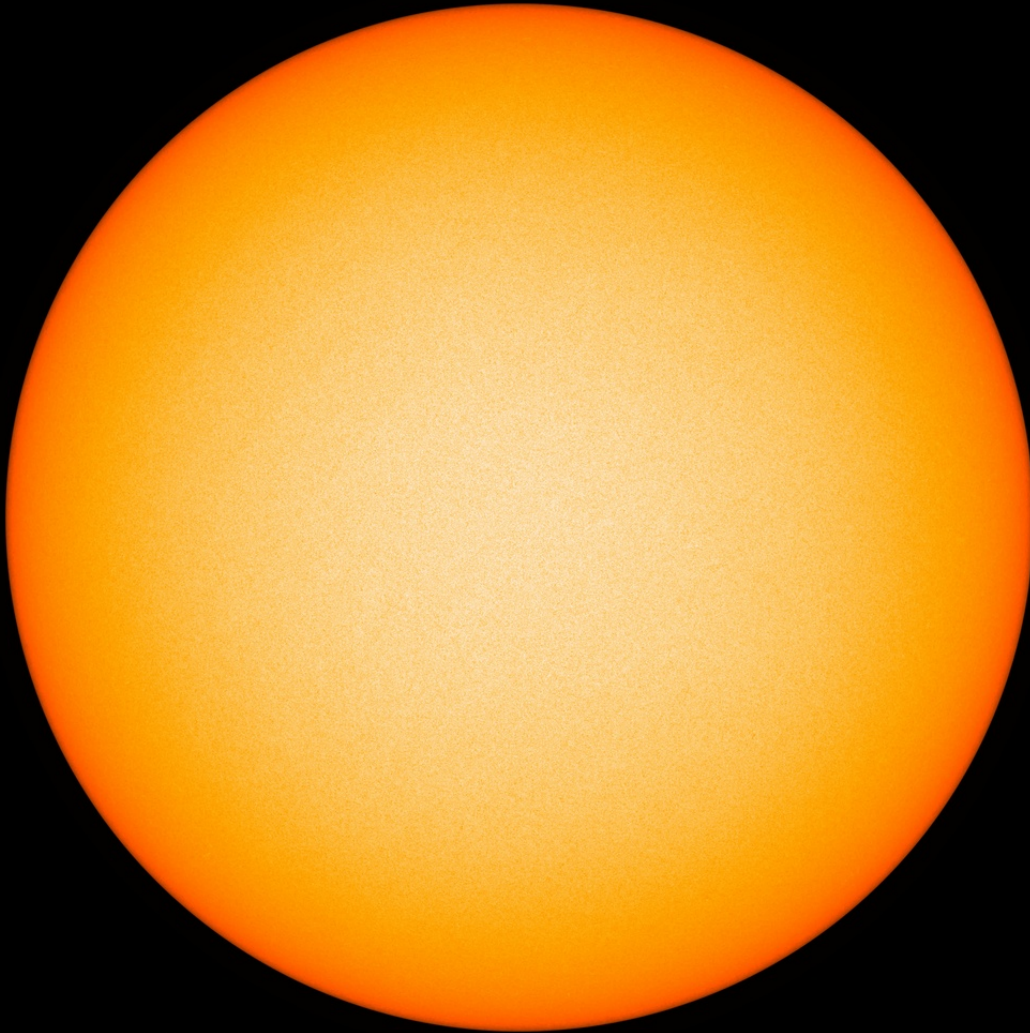
SDO/HMI Magnetogram 2018-10-31



SDO/HMI Quick-Look Magnetogram: 20181031_114500

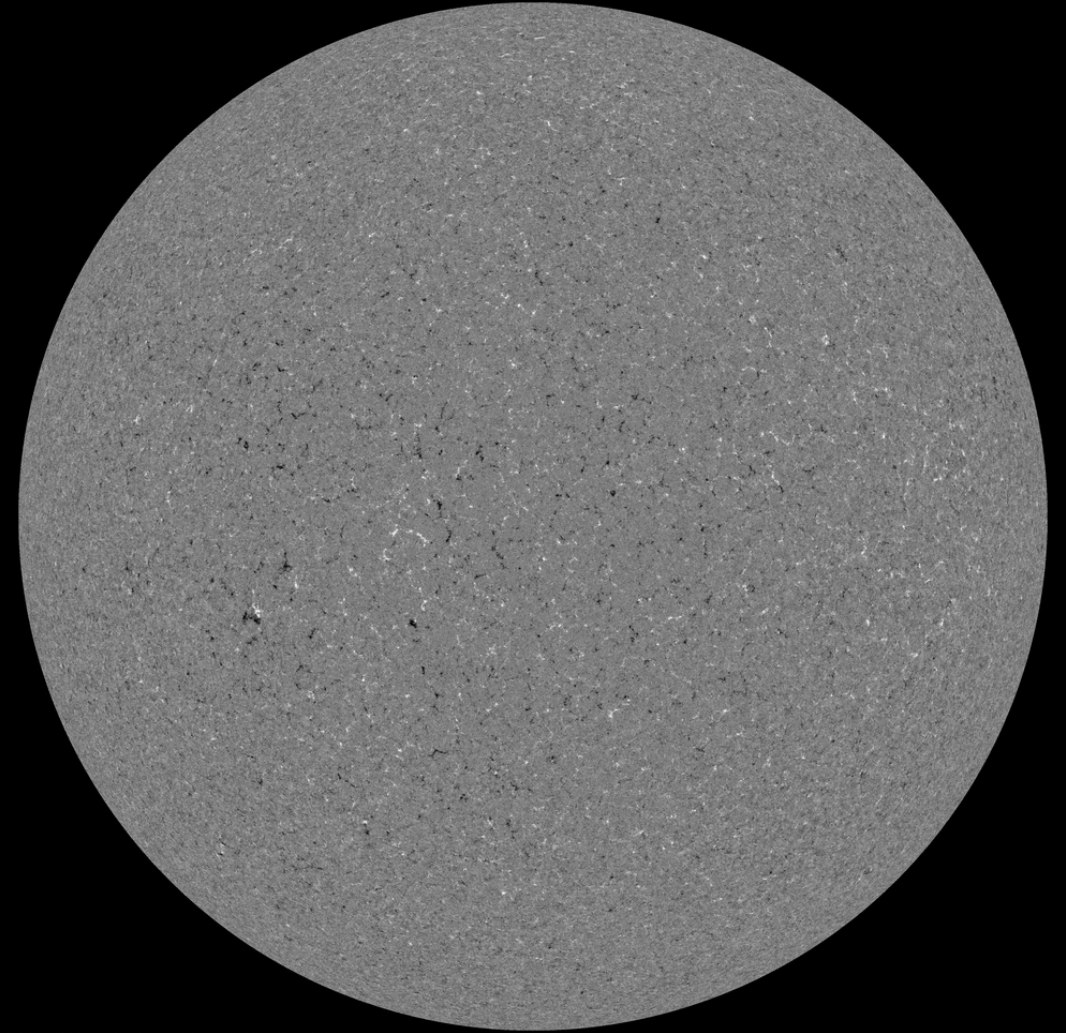
Solar active region - end of the week

SDO/HMI White Light 2018-11-04



SDO/HMI Quick-Look Continuum: 20181104_114500

SDO/HMI Magnetogram 2018-11-04

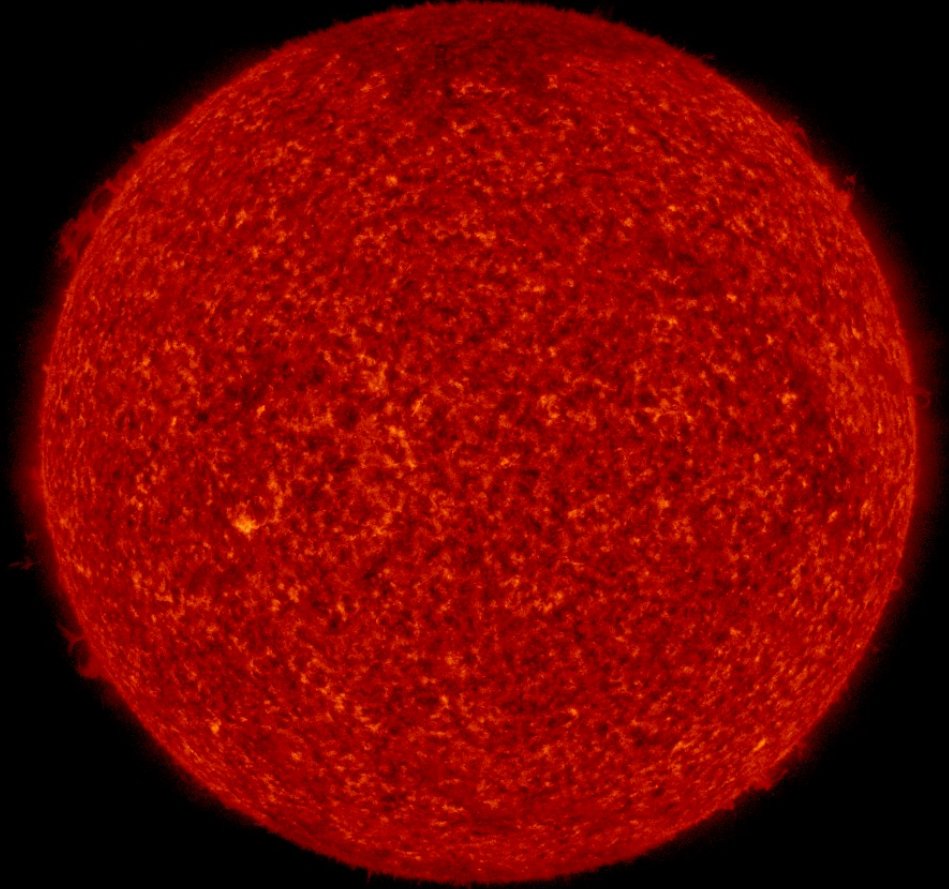
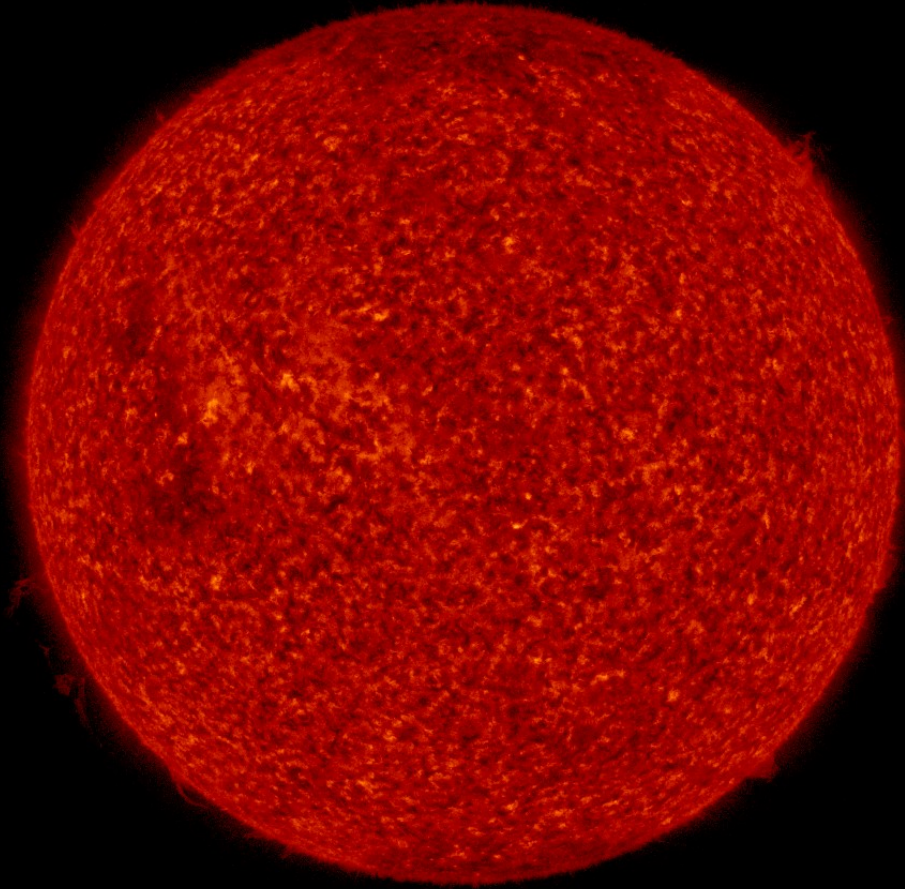


SDO/HMI Quick-Look Magnetogram: 20181104_114500

Solar active region & Filament

SDO/AIA 30.4 nm 2018-10-28

SDO/AIA 30.4 nm 2018-11-04



SDO/AIA 304 2018-10-28 12:14:06 UT

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

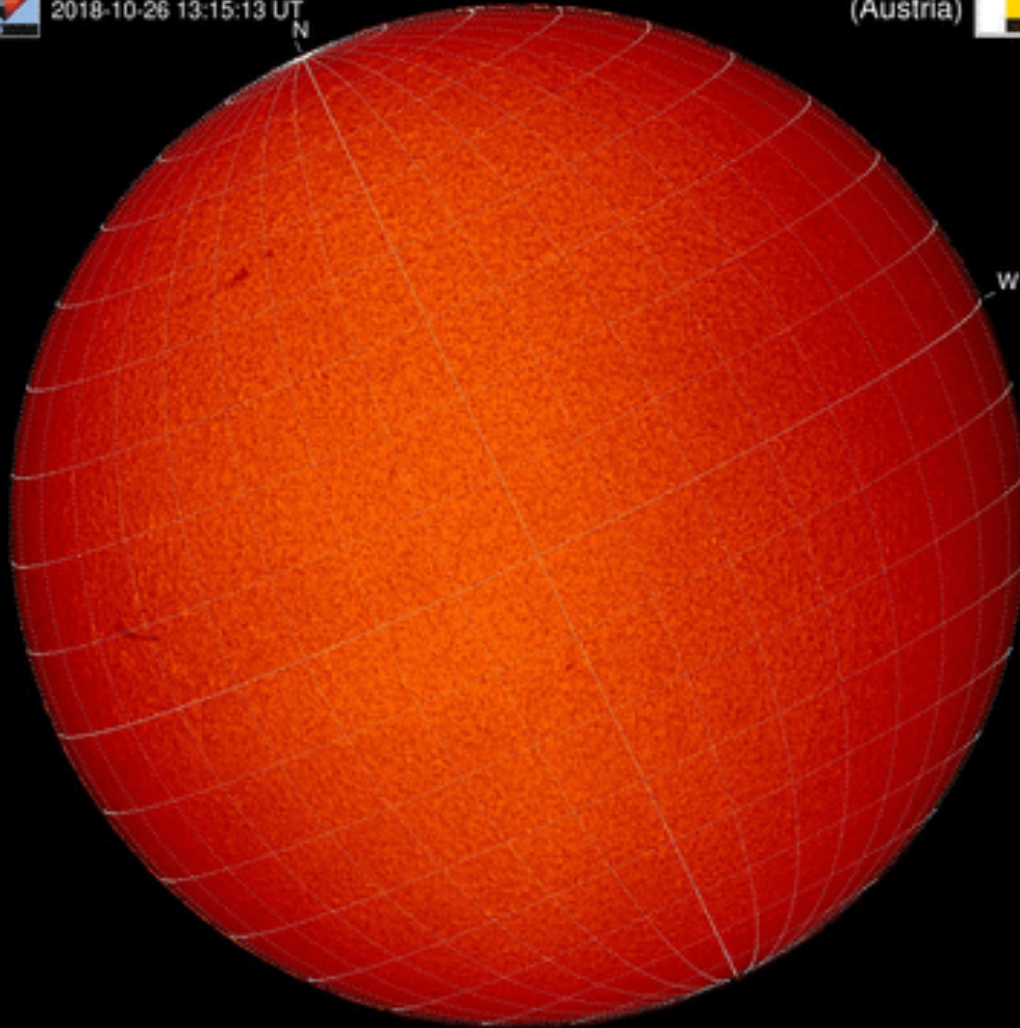
Filament & Filament eruption

H-alpha 2018-10-28



Kanzelhöhe Observatory
2018-10-26 13:15:13 UT

University of Graz
(Austria)

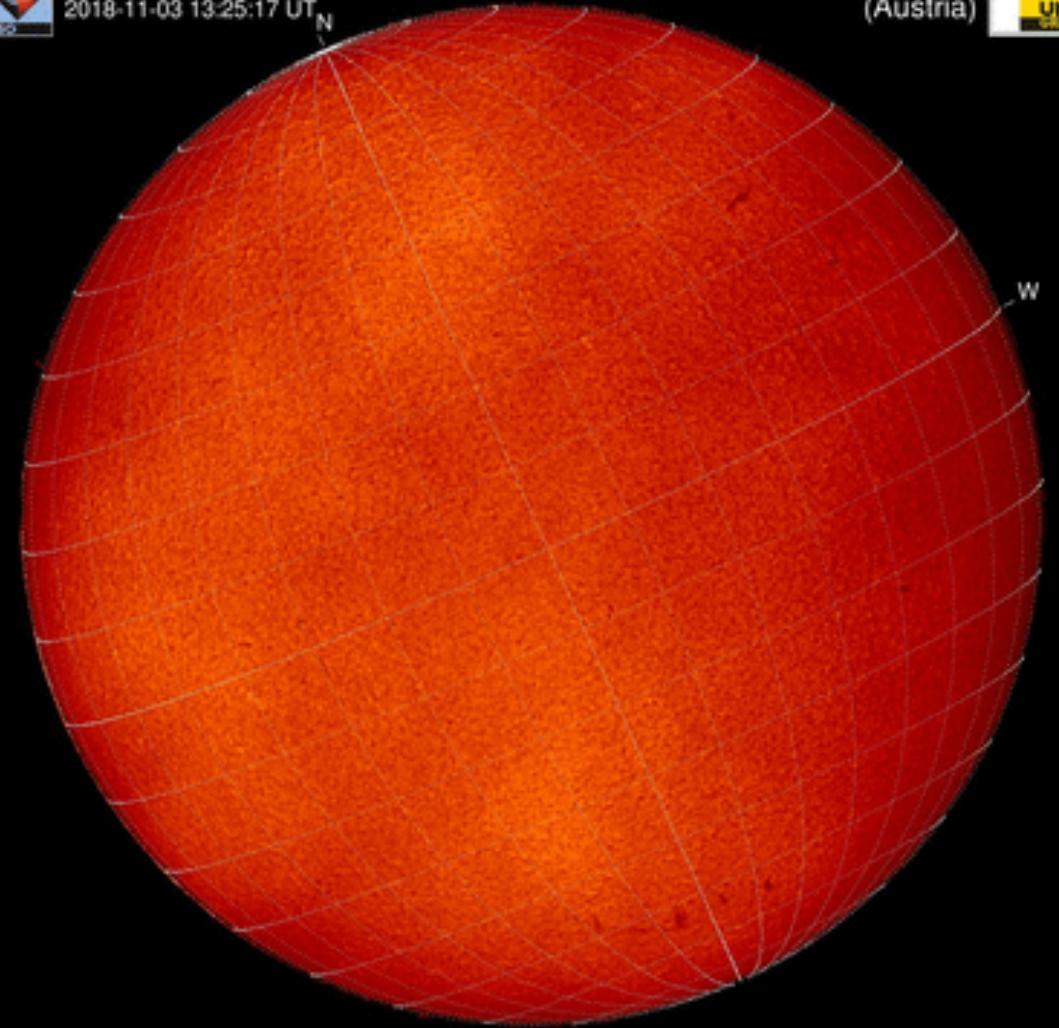


H-alpha 2018-11-04

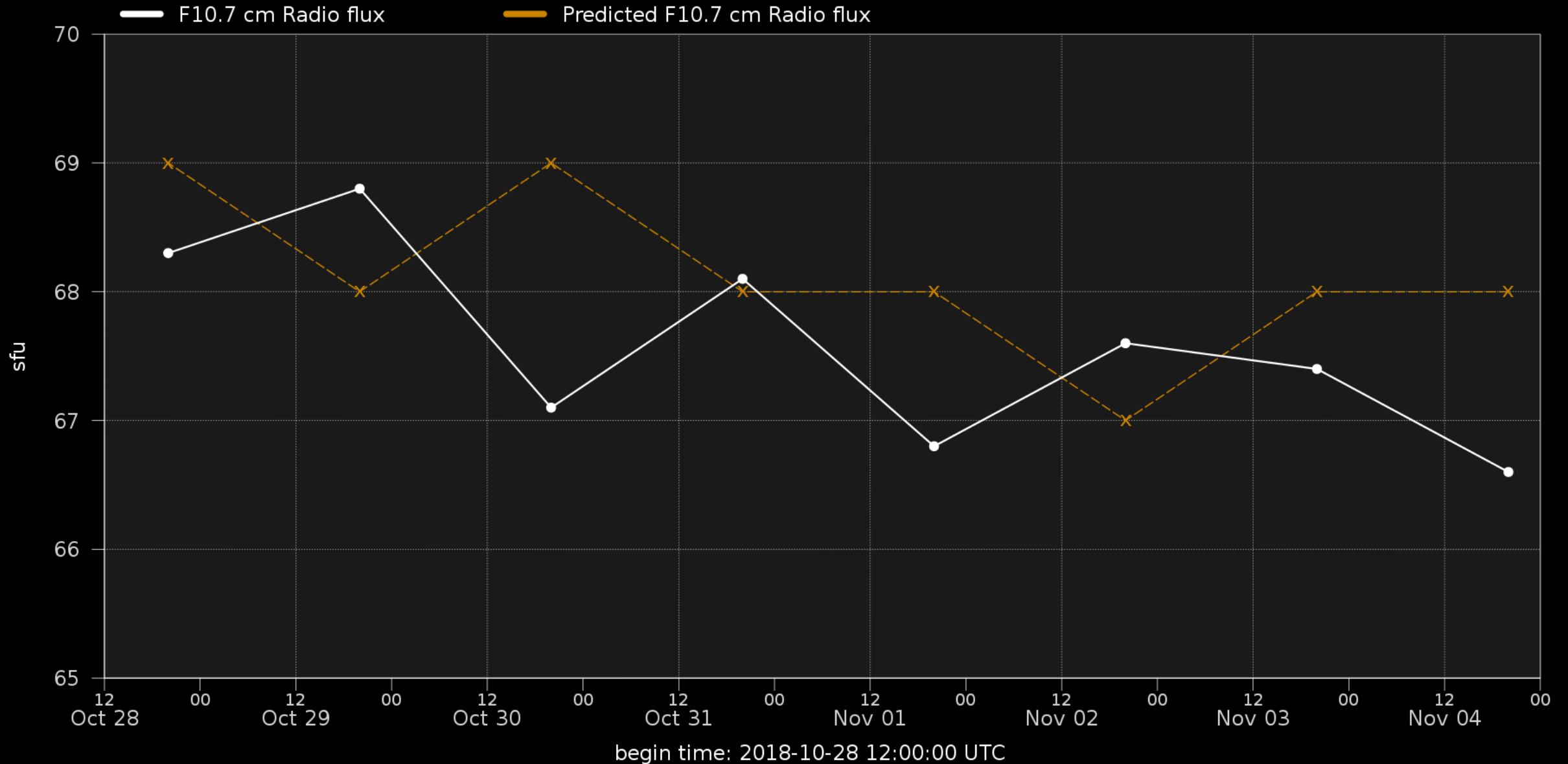


Kanzelhöhe Observatory
2018-11-03 13:25:17 UT

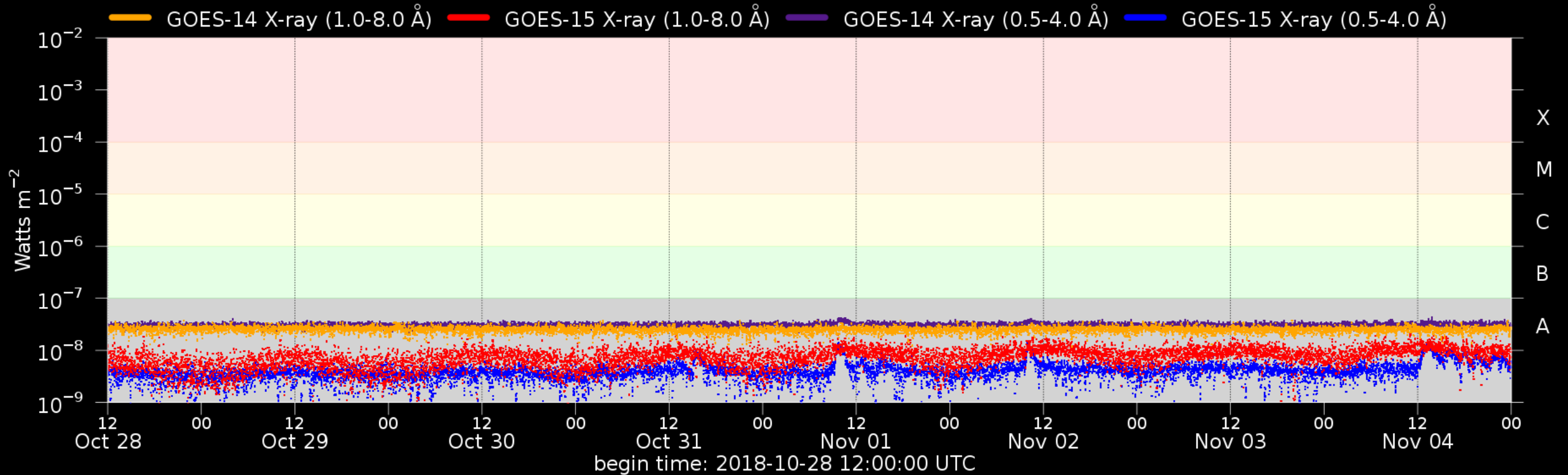
University of Graz
(Austria)



Solar F10.7cm radio flux



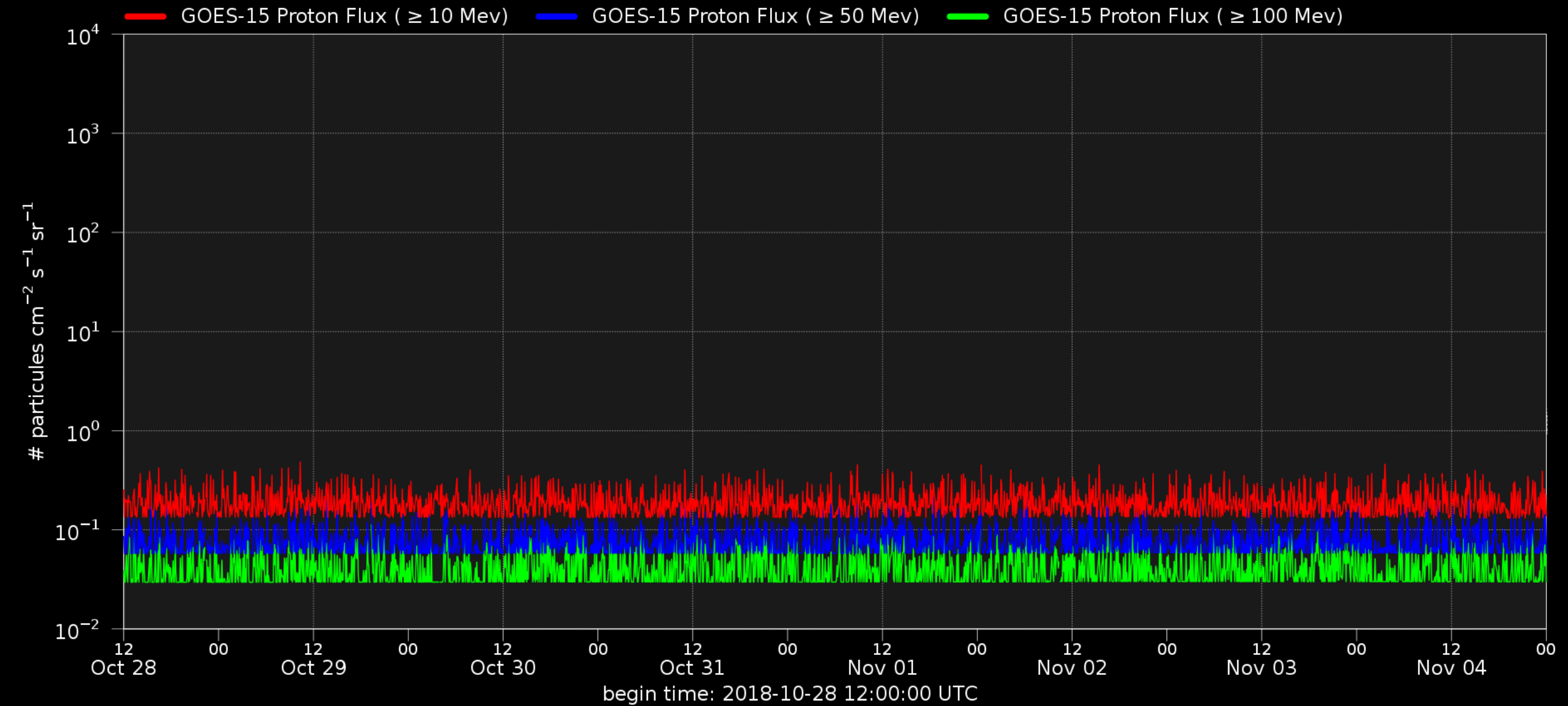
Flaring activity



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

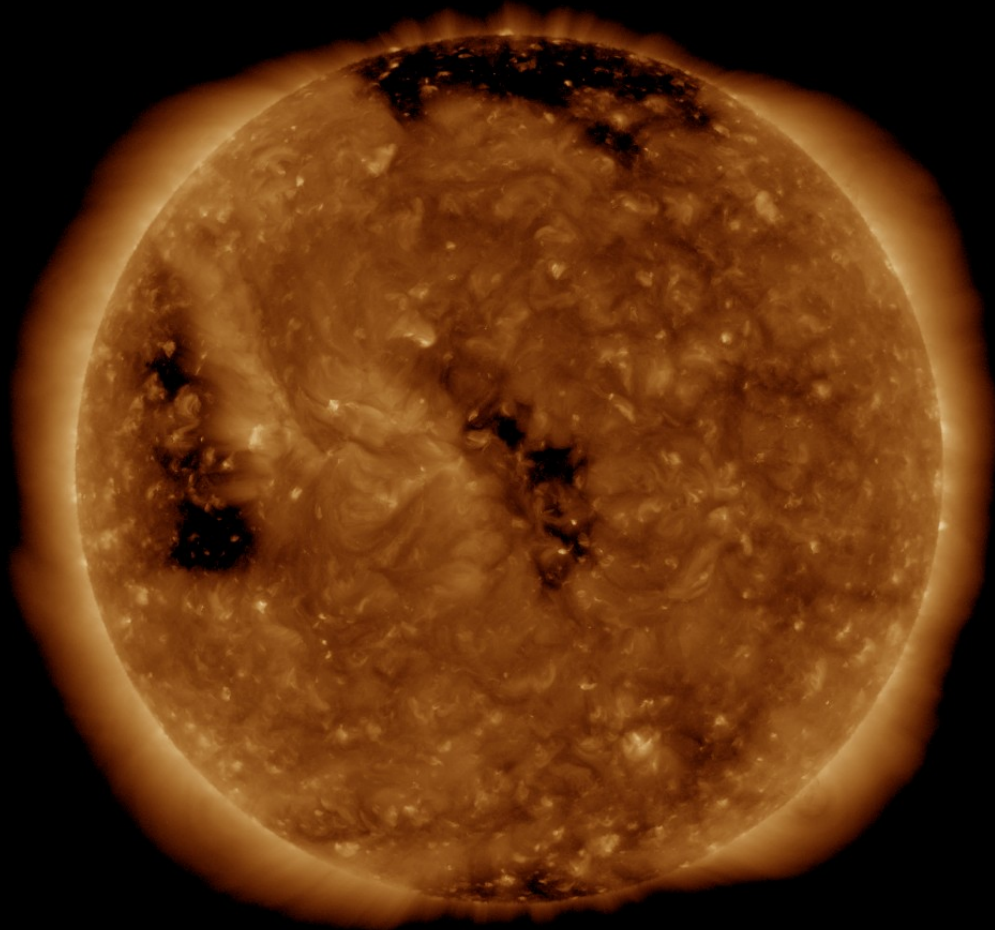
Issue date	2018-10-28	2018-10-29	2018-10-30	2018-10-31	2018-11-01	2018-11-02	2018-11-03	2018-11-04
Probability	--- 05 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Solar proton flux



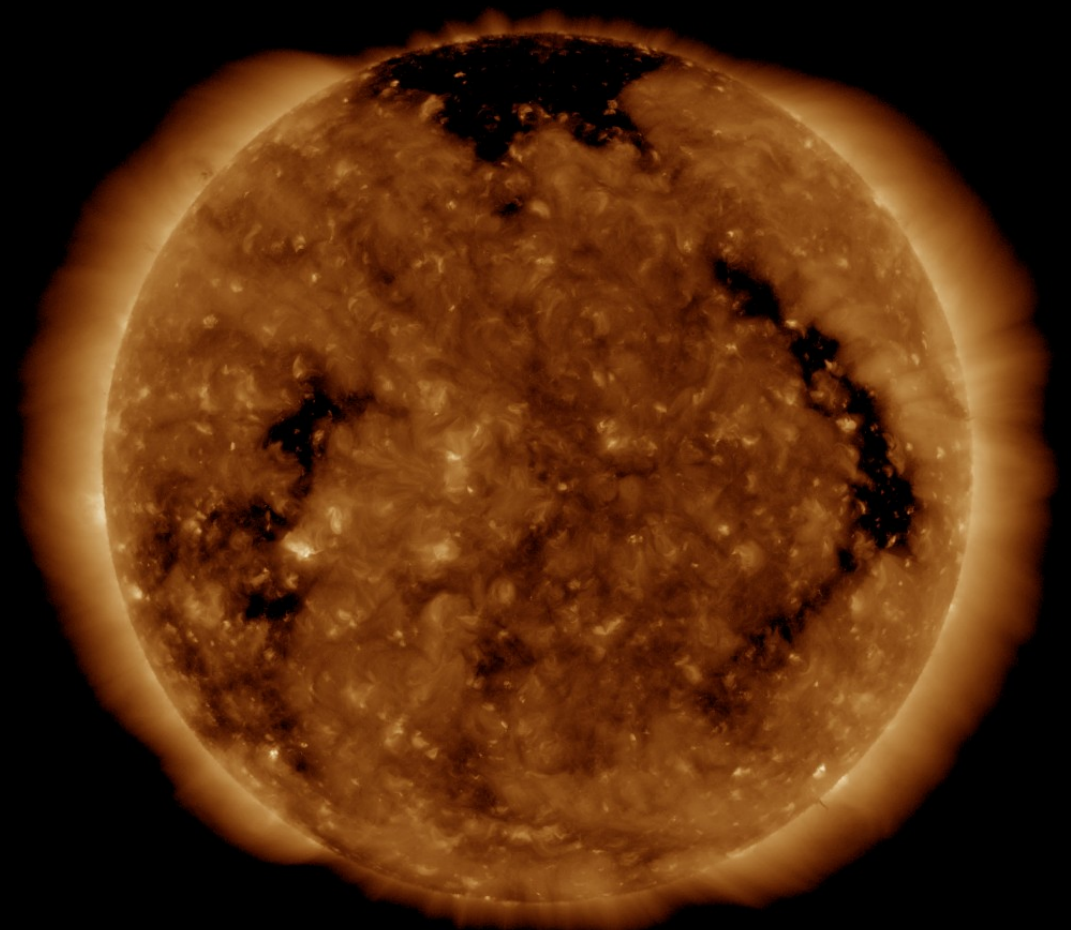
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-10-28



SDO/AIA 193 2018-10-28 12:11:05 UT

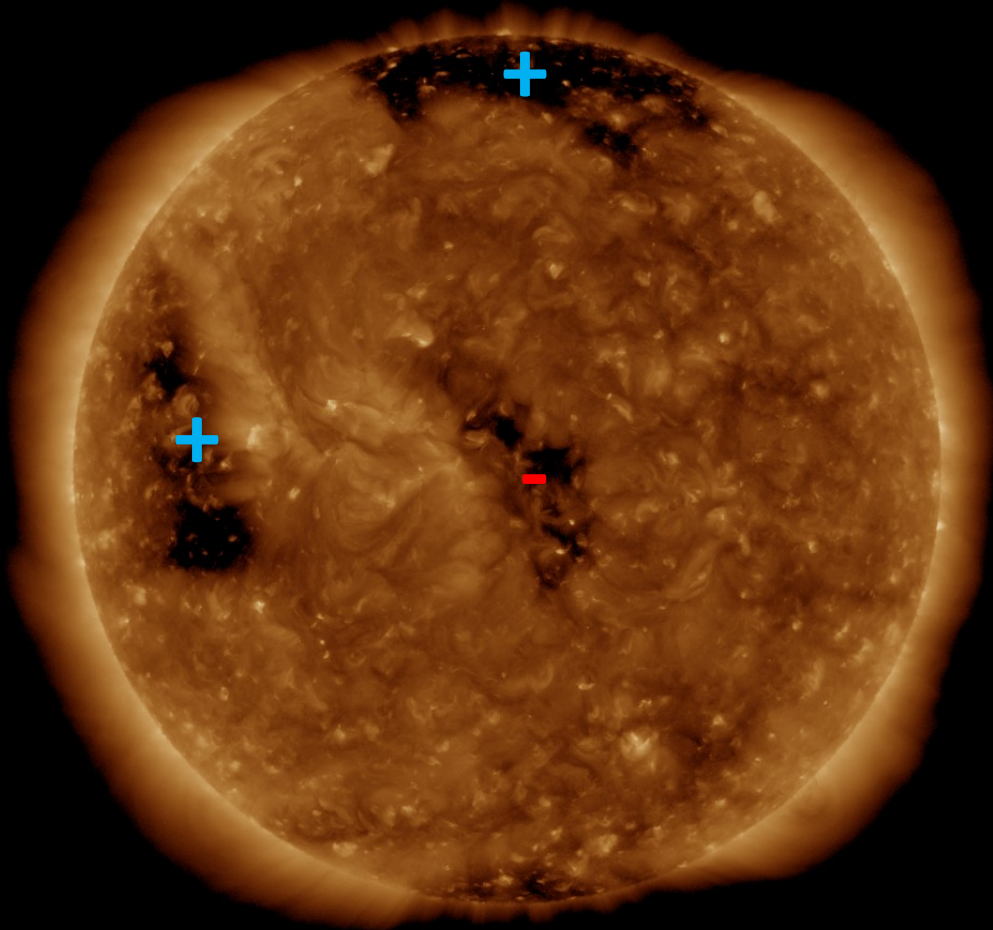
SDO/AIA 19.3 nm 2018-11-04



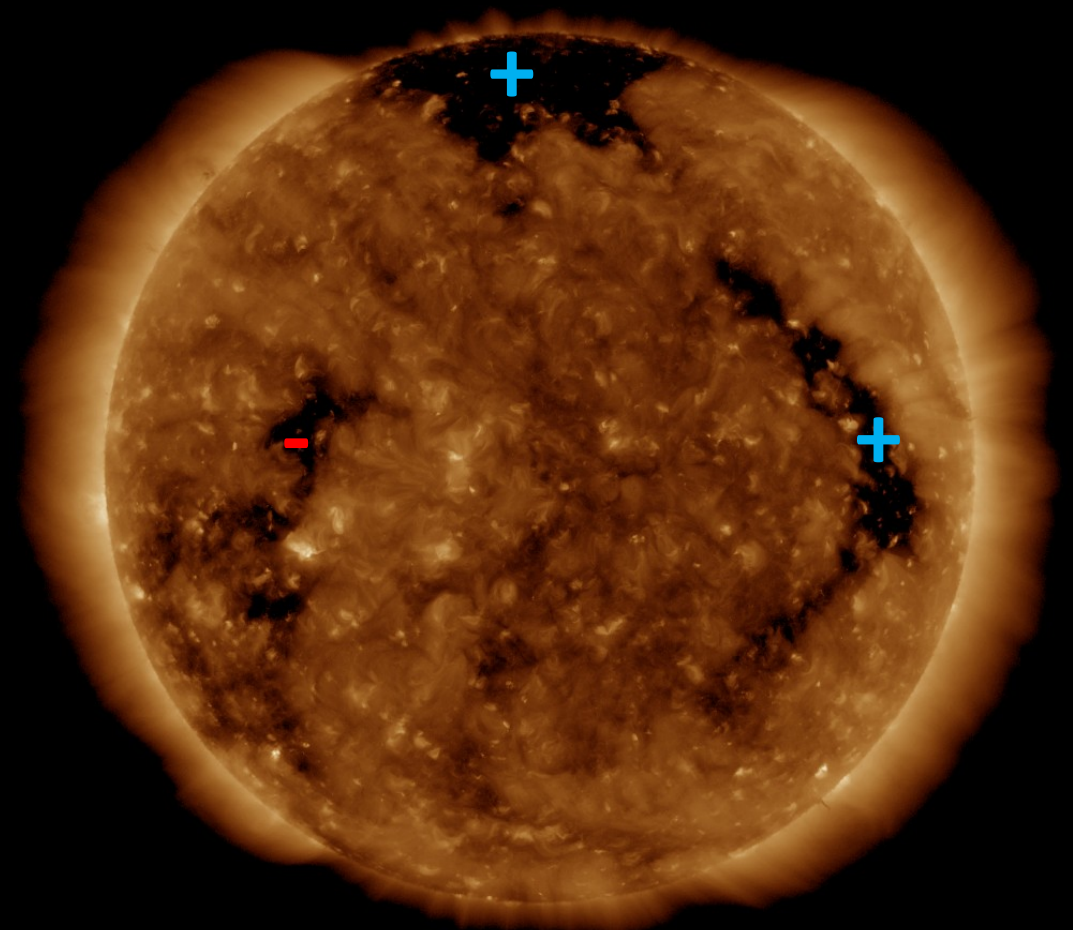
SDO/AIA 193 2018-11-04 12:10:41 UT

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-10-28



SDO/AIA 19.3 nm 2018-11-04



SDO/AIA 193 2018-10-28 12:11:05 UT

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

Coronal Mass Ejection

No CMEs were detected by CACTus in SOHO/LASCO C2 imagery

No earth-directed CMEs were observed in coronagraphic imagery

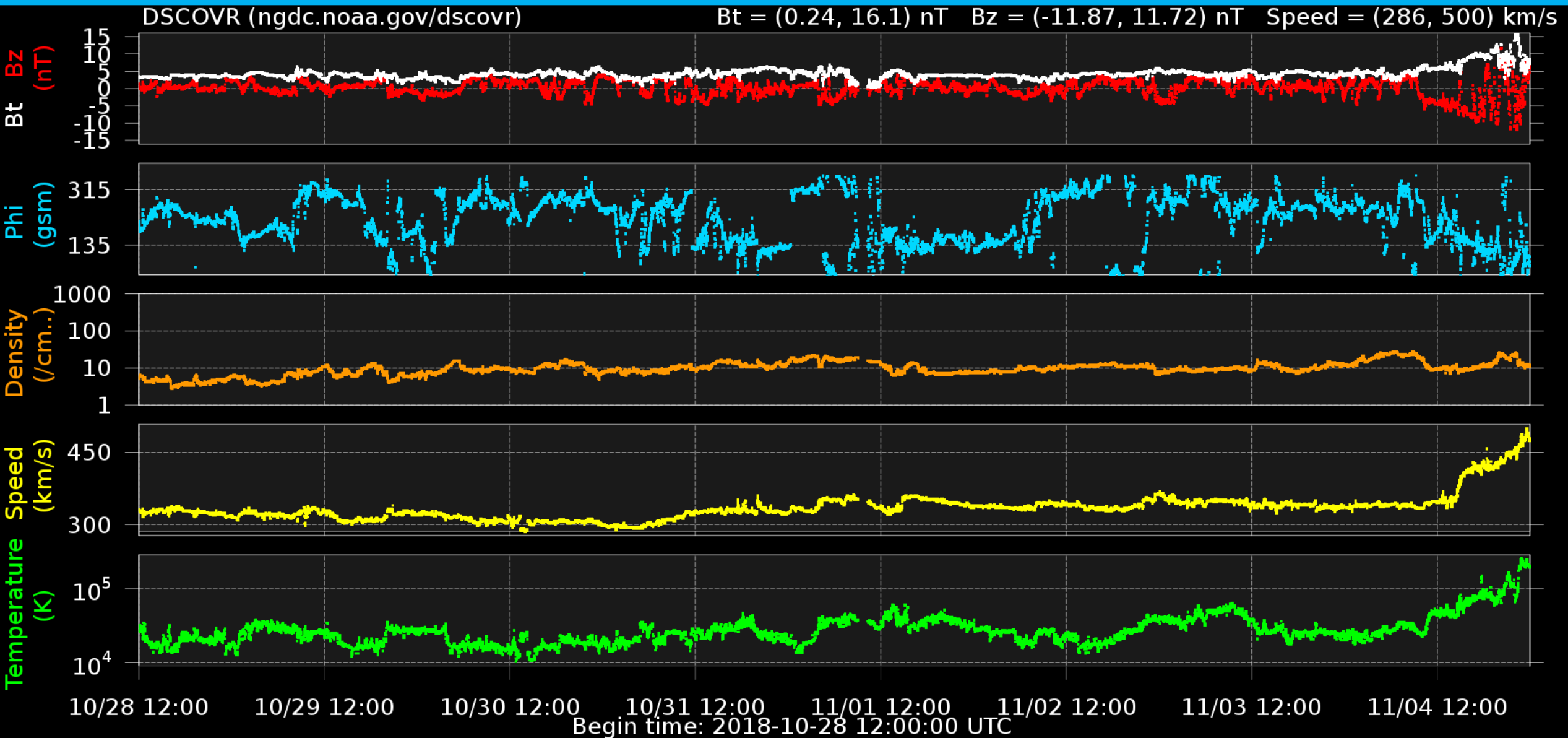
09:12 11/04
17:36 11/03
14:24 11/03
11:36 11/03
08:24 11/03
05:36 11/03
02:36 11/03
22:24 11/02
19:12 11/02
15:12 11/02
12:00 11/02
09:24 11/02
05:36 11/02
01:25 11/02
22:00 11/01
18:42 11/01
16:06 11/01
13:25 11/01
10:24 11/01
07:12 11/01
04:36 11/01
01:25 11/01
21:48 10/31
19:00 10/31
16:24 10/31
13:25 10/31
10:12 10/31
07:12 10/31
04:36 10/31
01:36 10/31
21:48 10/30
19:00 10/30
15:36 10/30
11:48 10/30
09:12 10/30
06:06 10/30
03:36 10/30
00:24 10/30
21:36 10/29
18:36 10/29
15:48 10/29
12:36 10/29
09:36 10/29
06:12 10/29
03:42 10/29

Solar Wind and Geomagnetic Activity

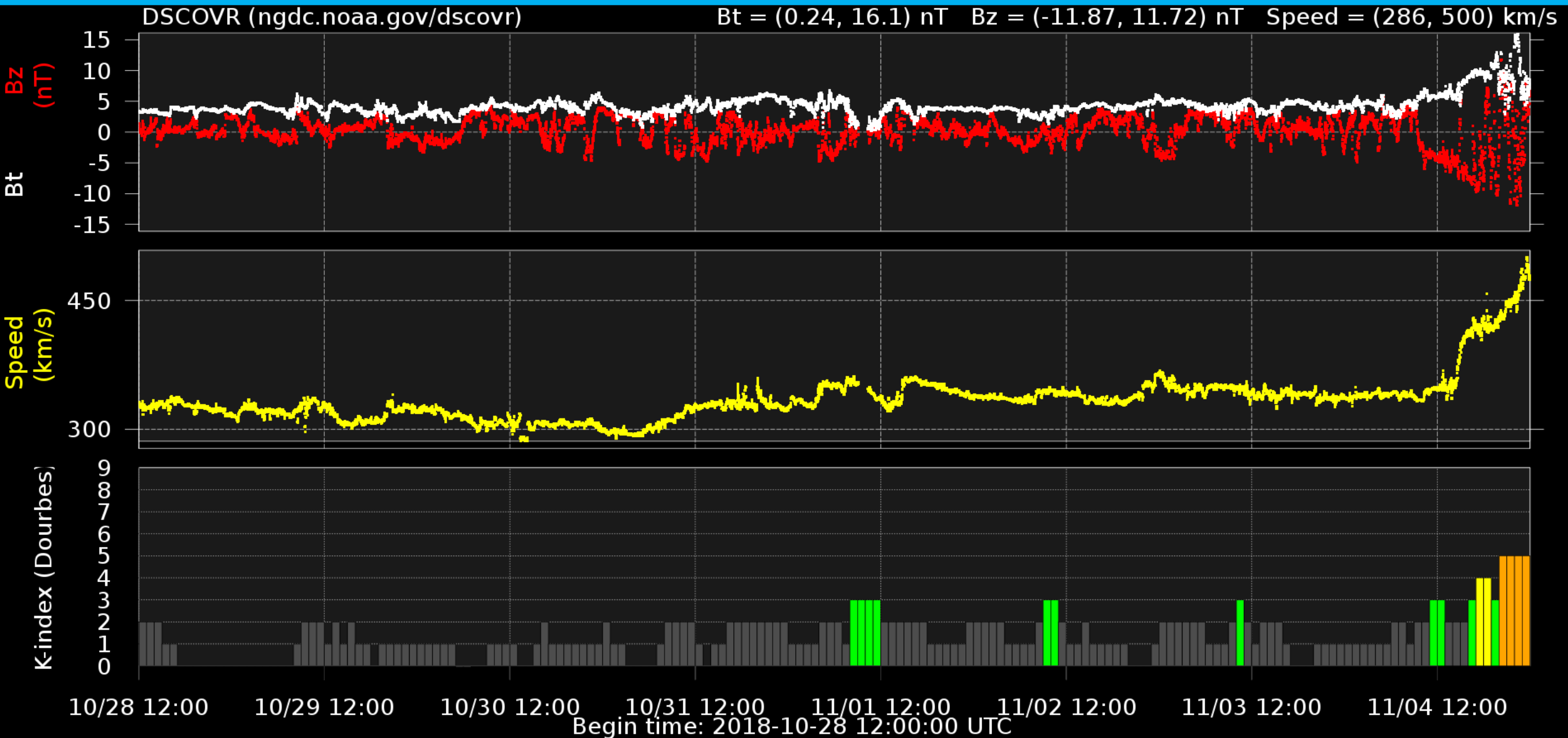


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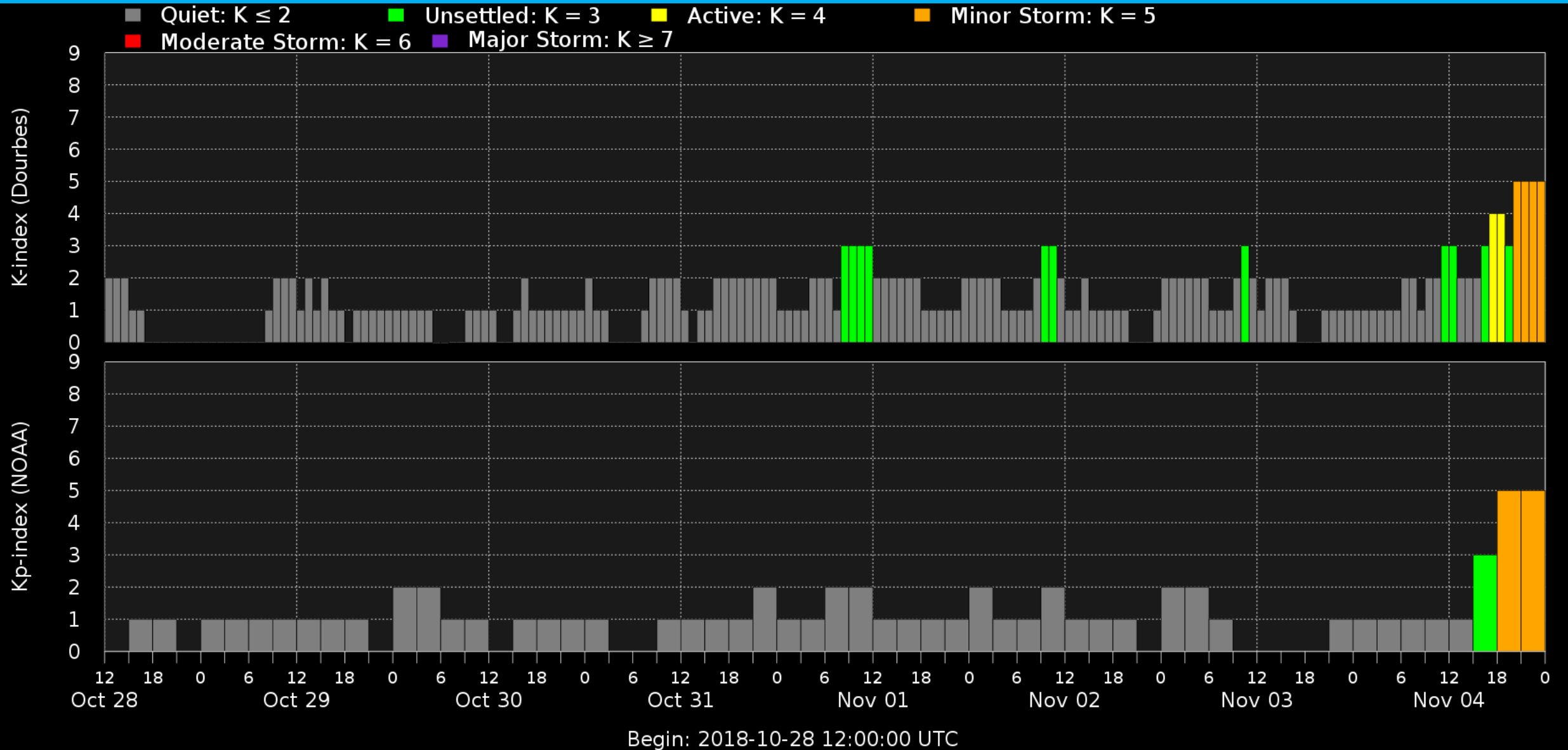
Solar wind parameters (DSCOVR data)



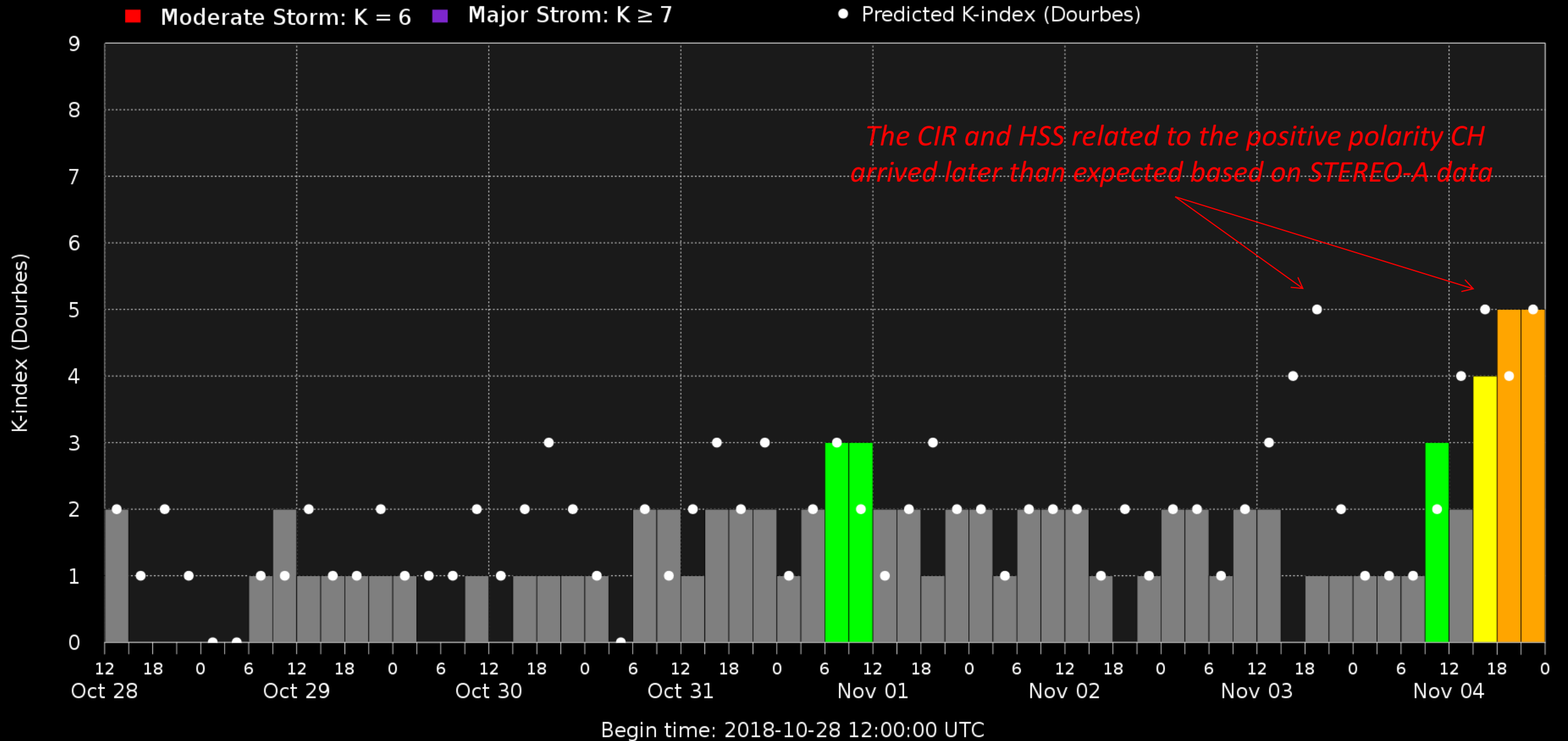
Solar wind parameters & K-index (DSCOVR/Dourbes)



Geomagnetic activity (K-indexes)



K-Dourbes index



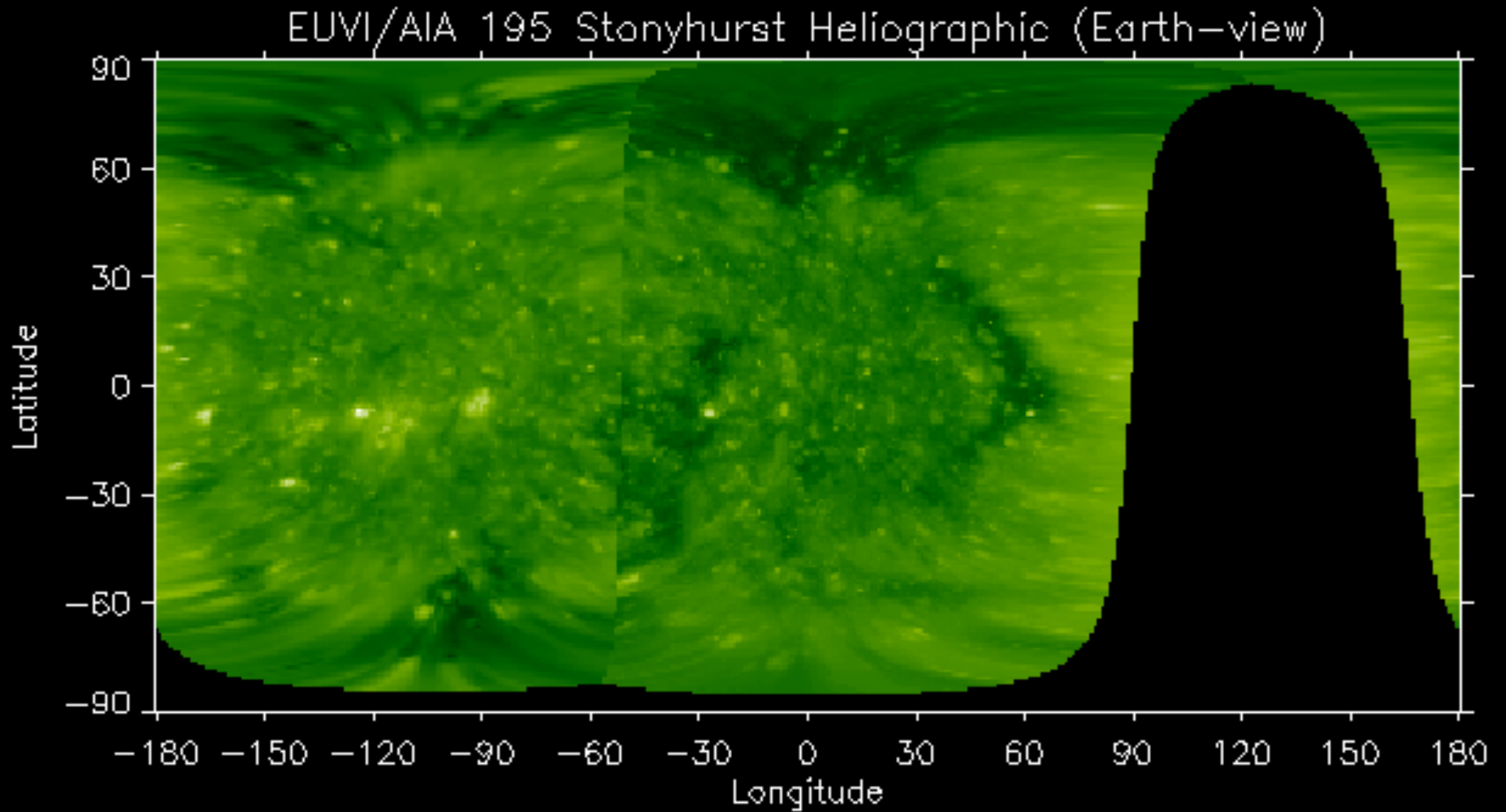
Outlook



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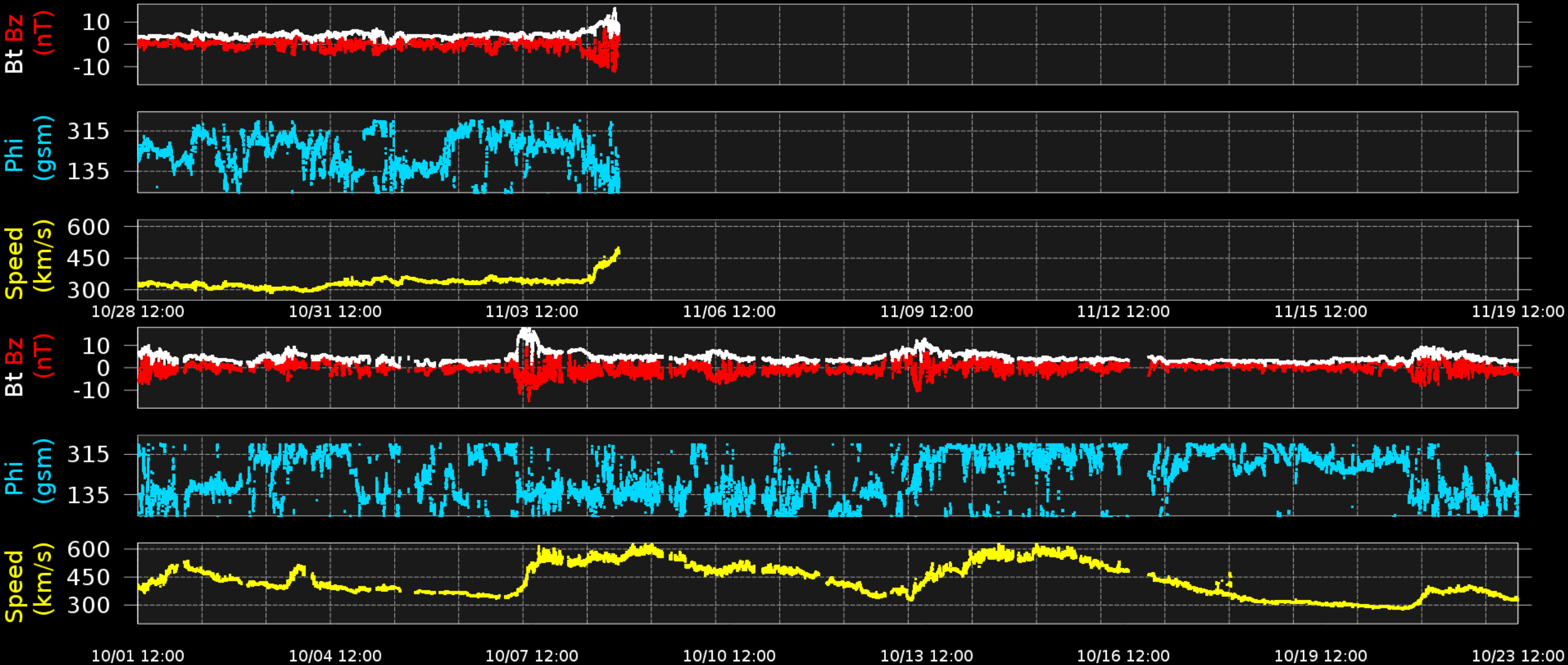
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Outlook: Solar activity



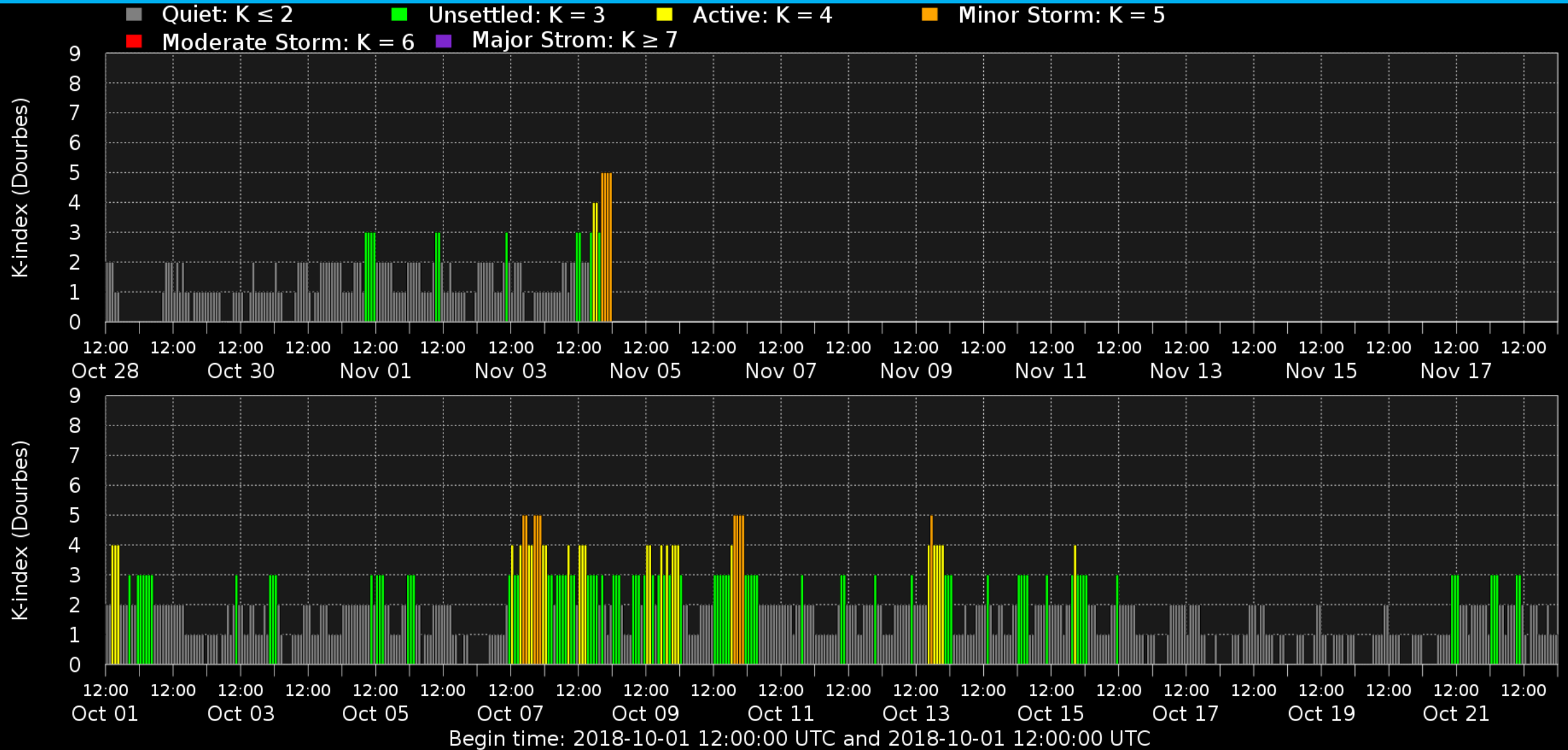
Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2018-10-01 12:00:00 UTC

Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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