SIDC Space Weather Briefing

28 October 2018 - 04 November 2018

Jan Janssens
& 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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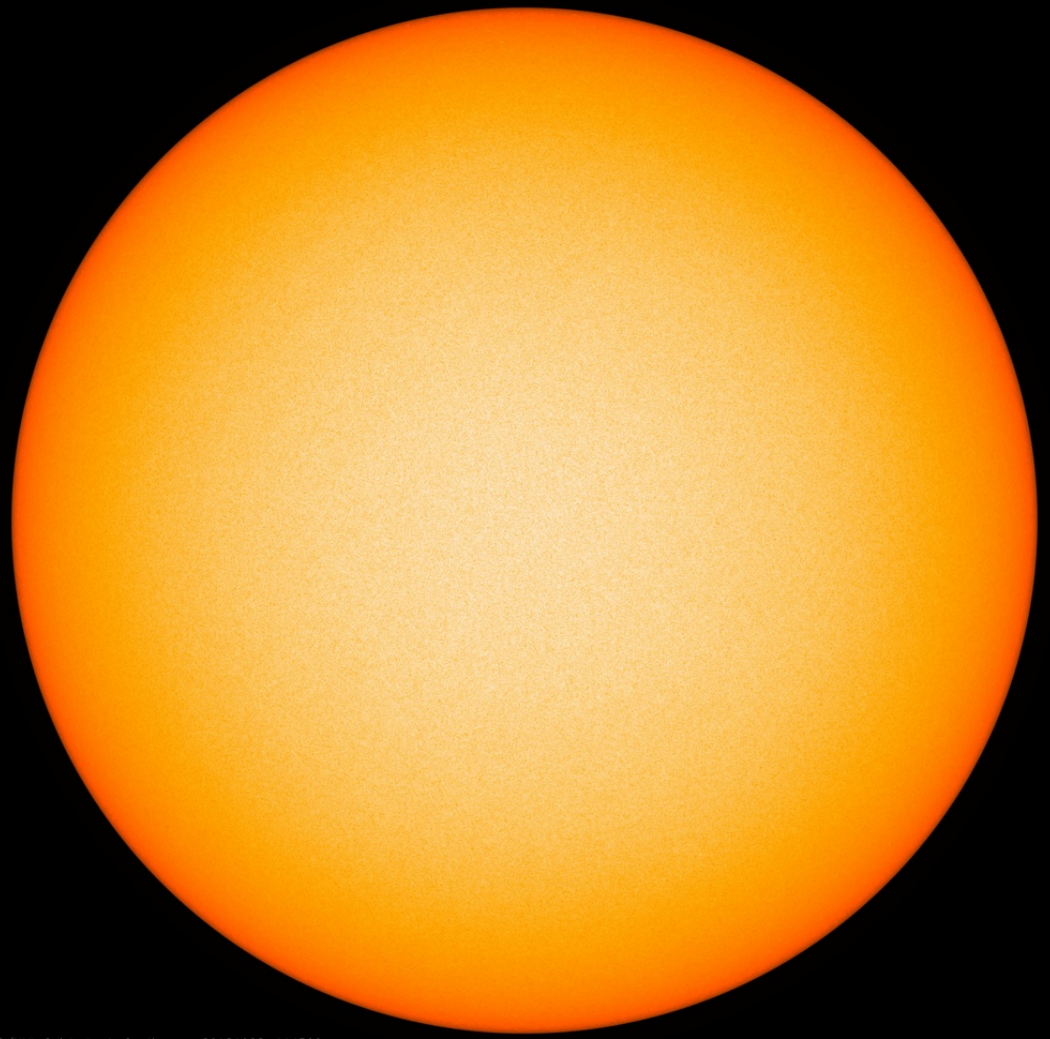
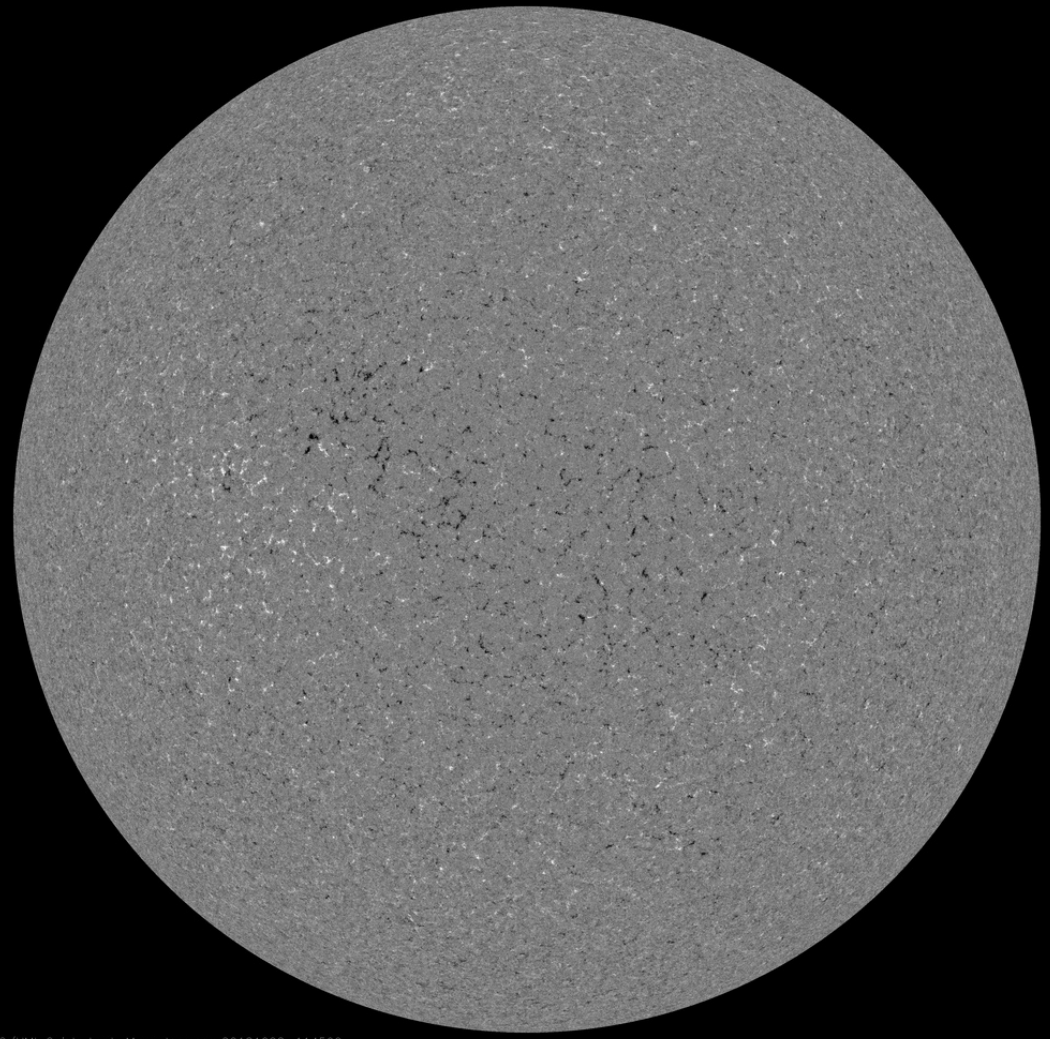
Solar active region - start of the week

SDO/HMI White Light 2018-10-28

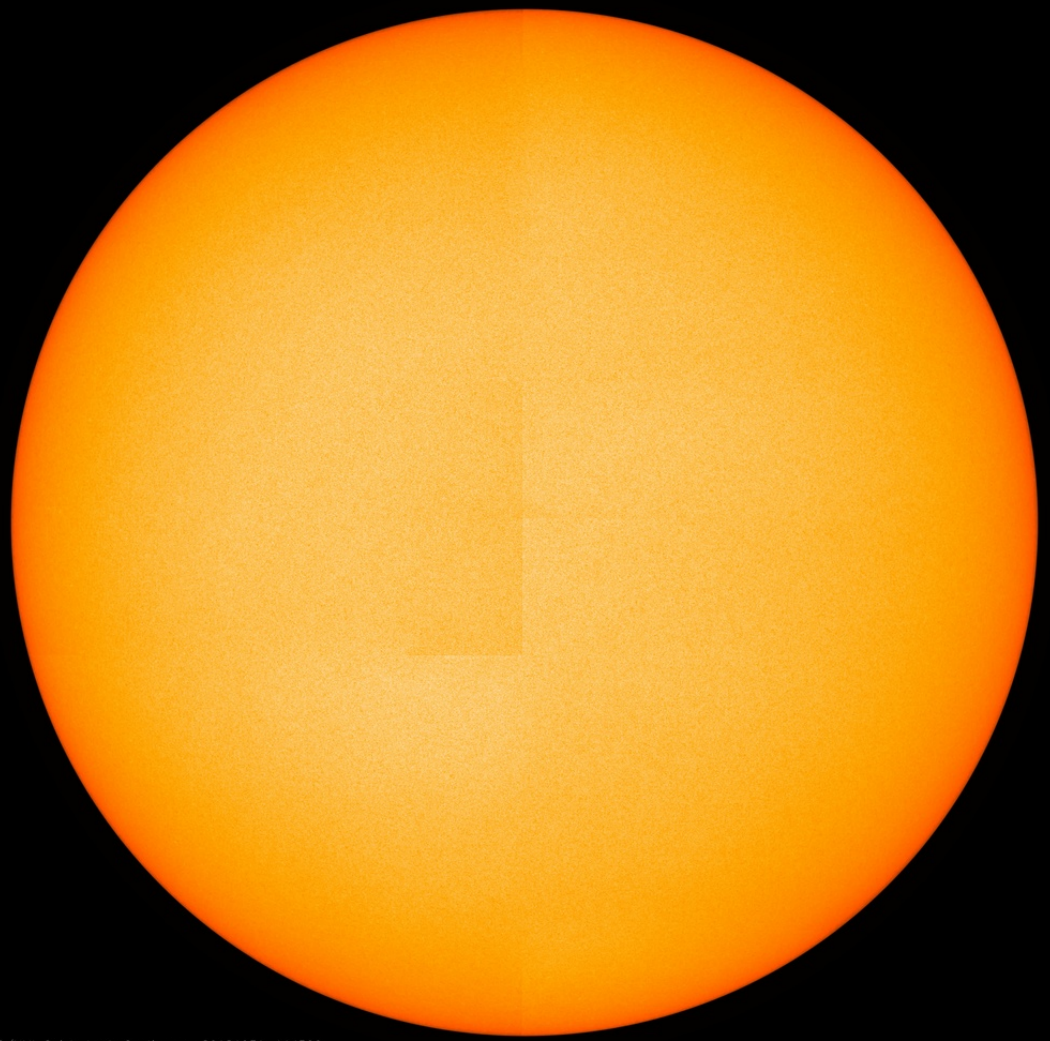


SDO/HMI Magnetogram 2018-10-28

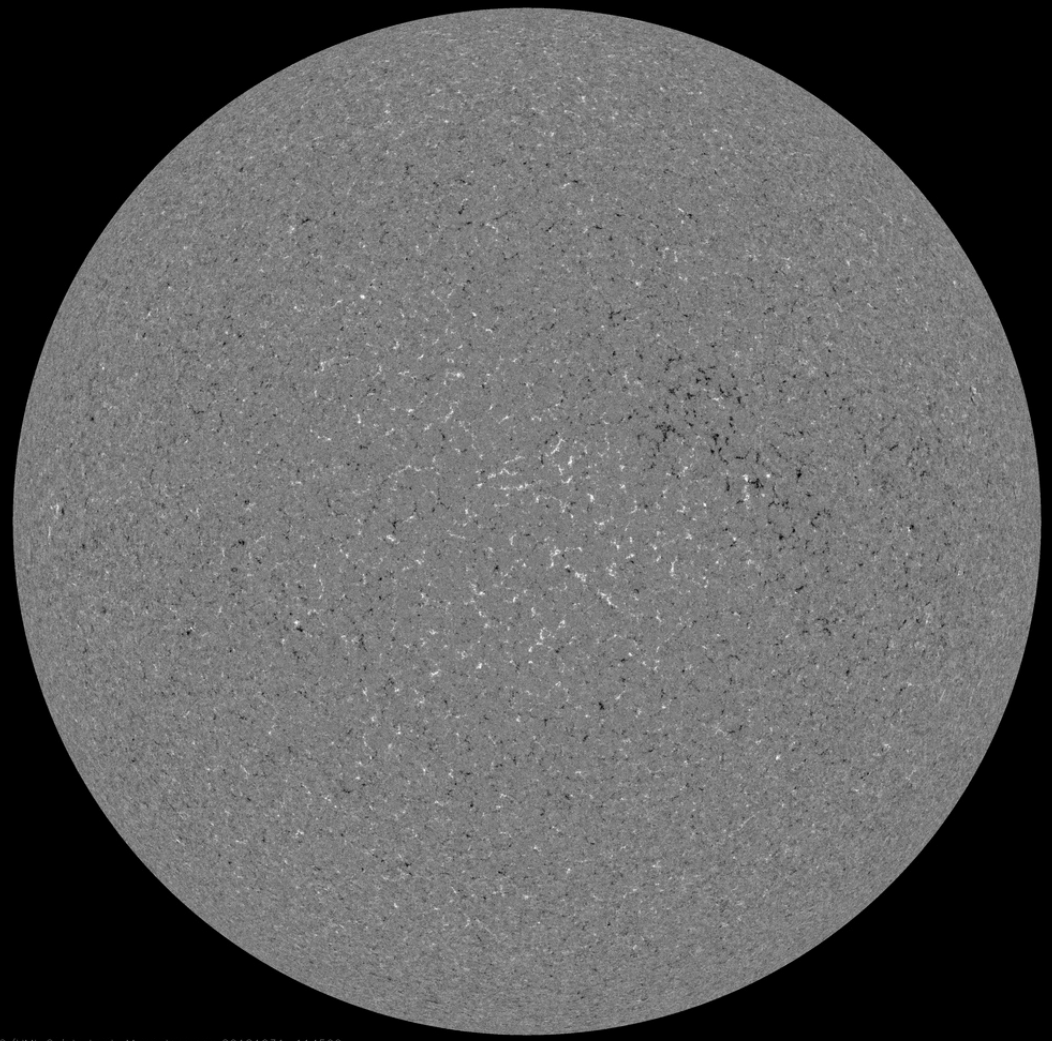


Solar active region - middle of the week

SDO/HMI White Light 2018-10-31

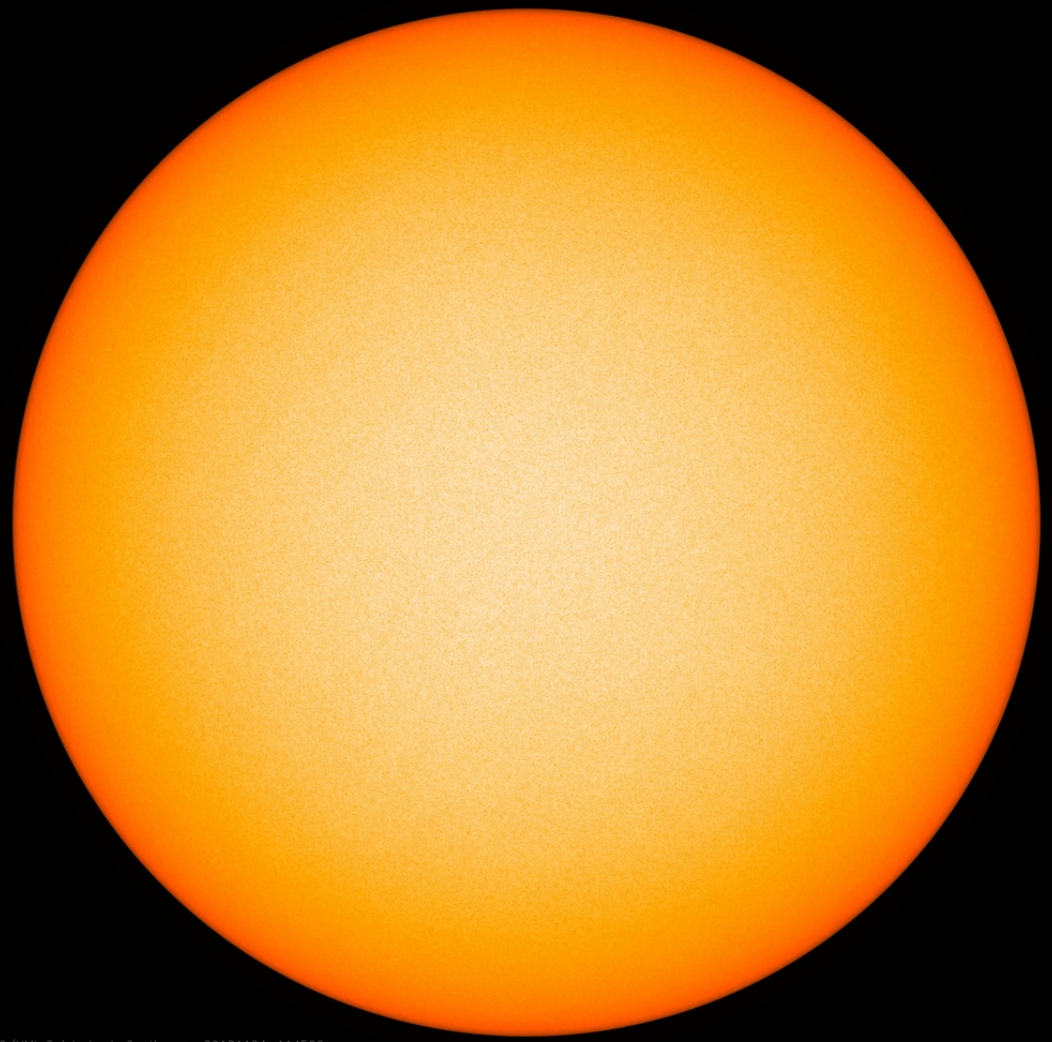


SDO/HMI Magnetogram 2018-10-31

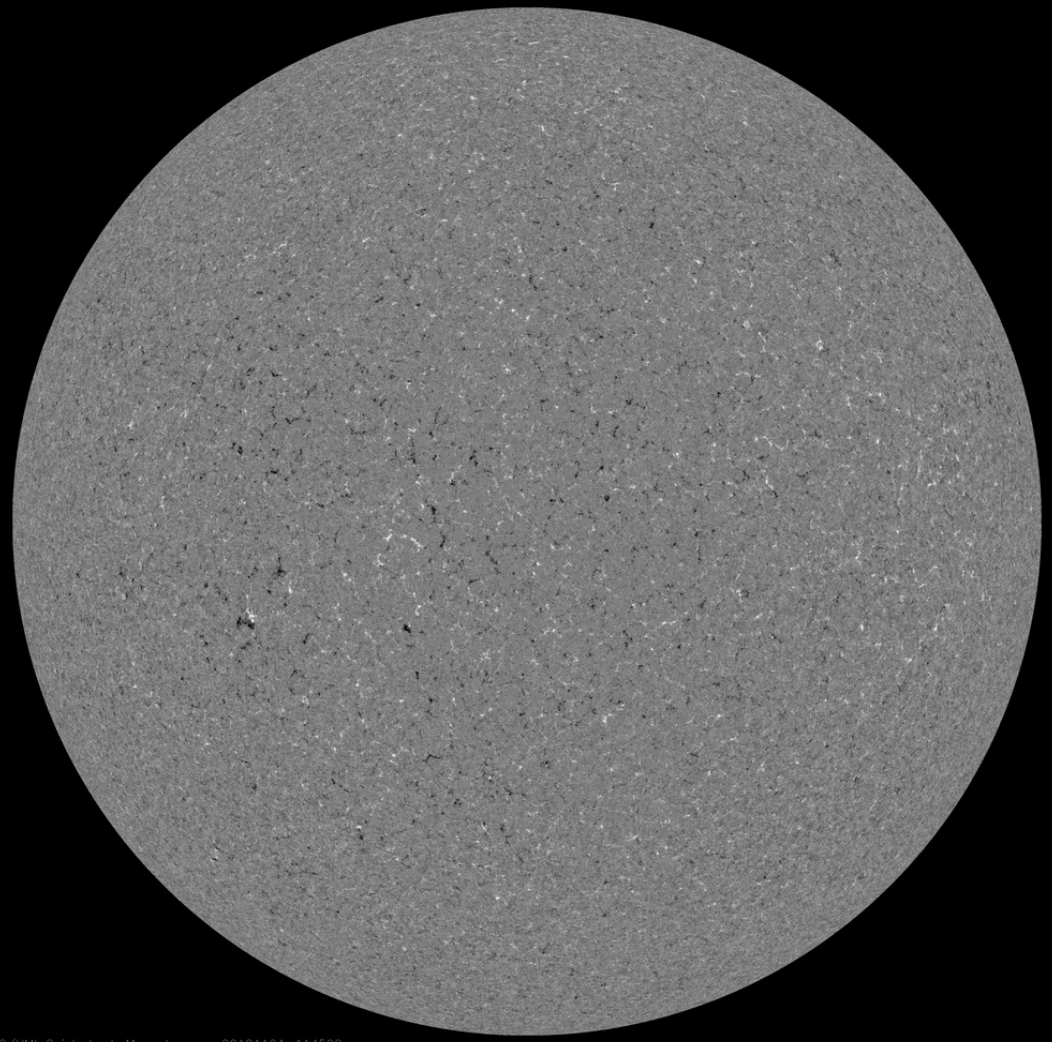


Solar active region - end of the week

SDO/HMI White Light 2018-11-04

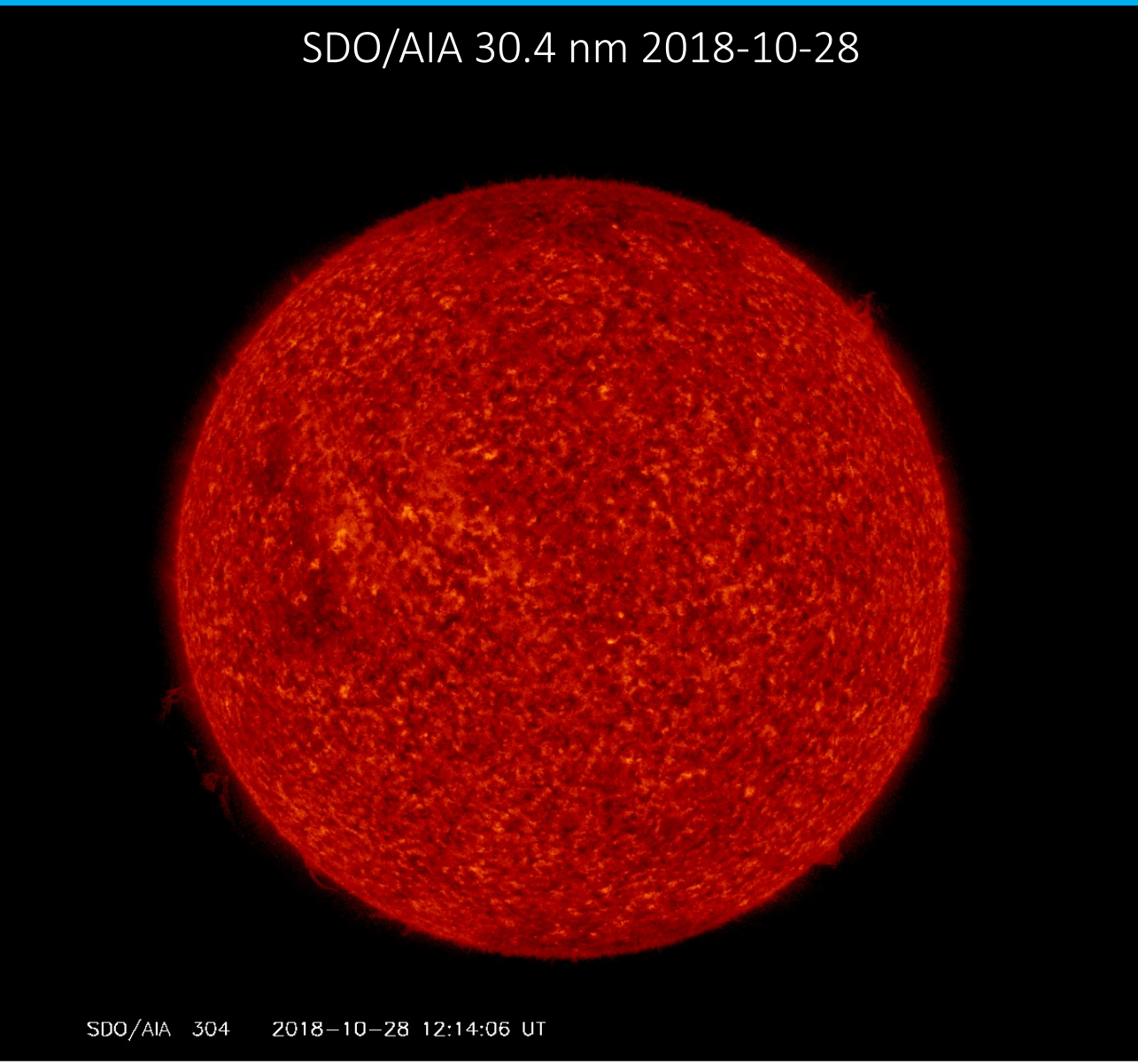


SDO/HMI Magnetogram 2018-11-04

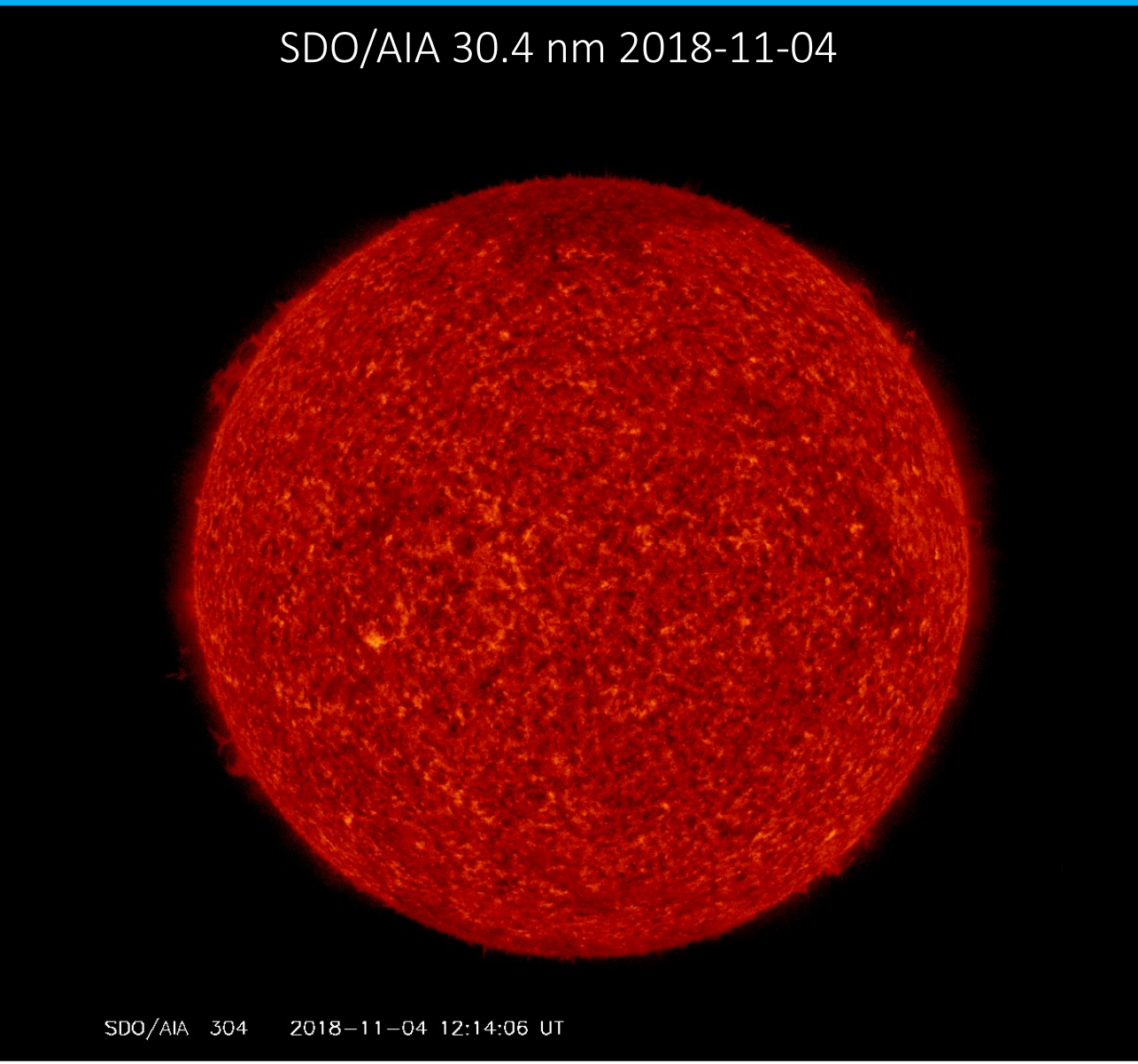


Solar active region & Filament

SDO/AIA 30.4 nm 2018-10-28

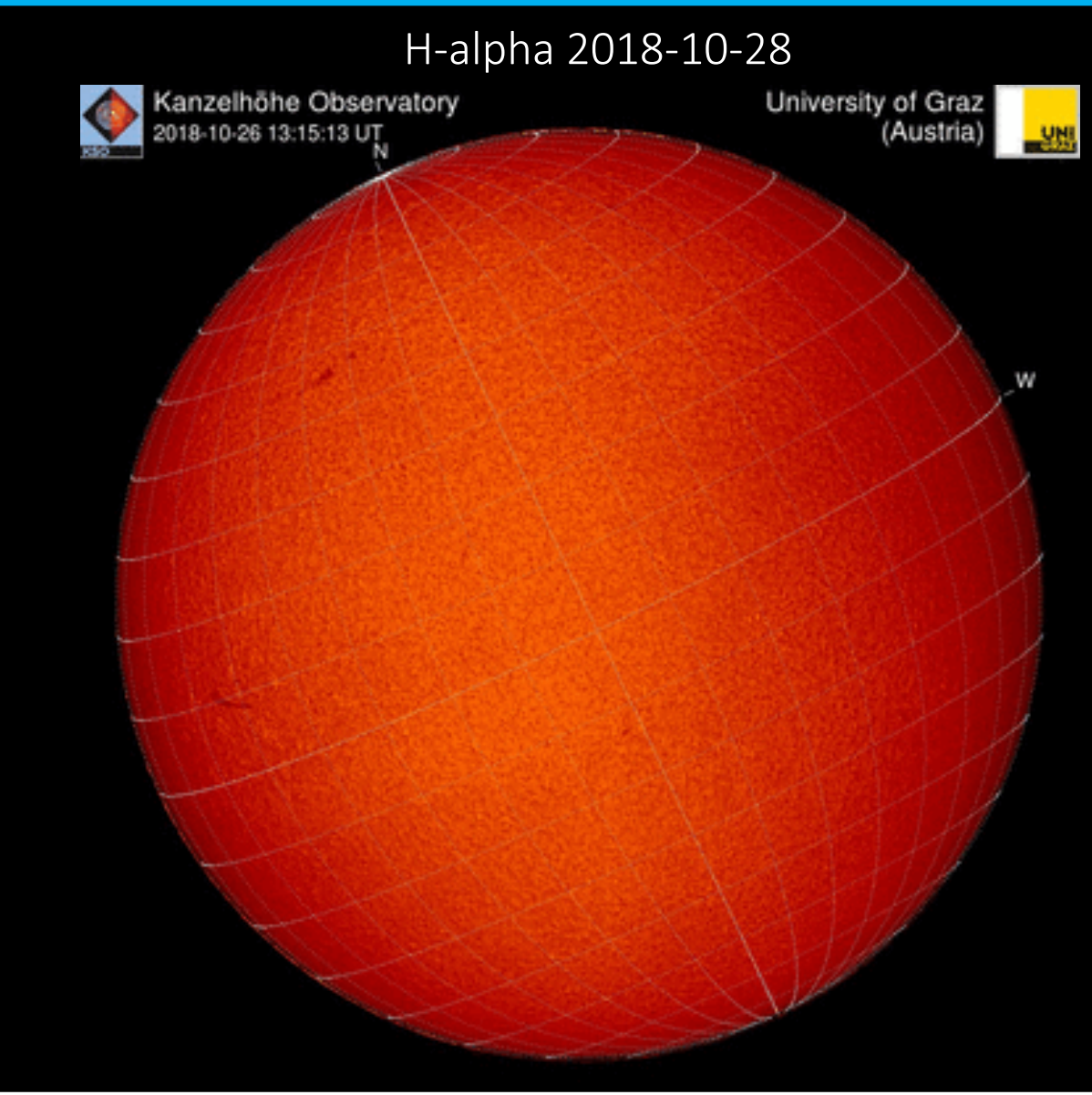


SDO/AIA 30.4 nm 2018-11-04

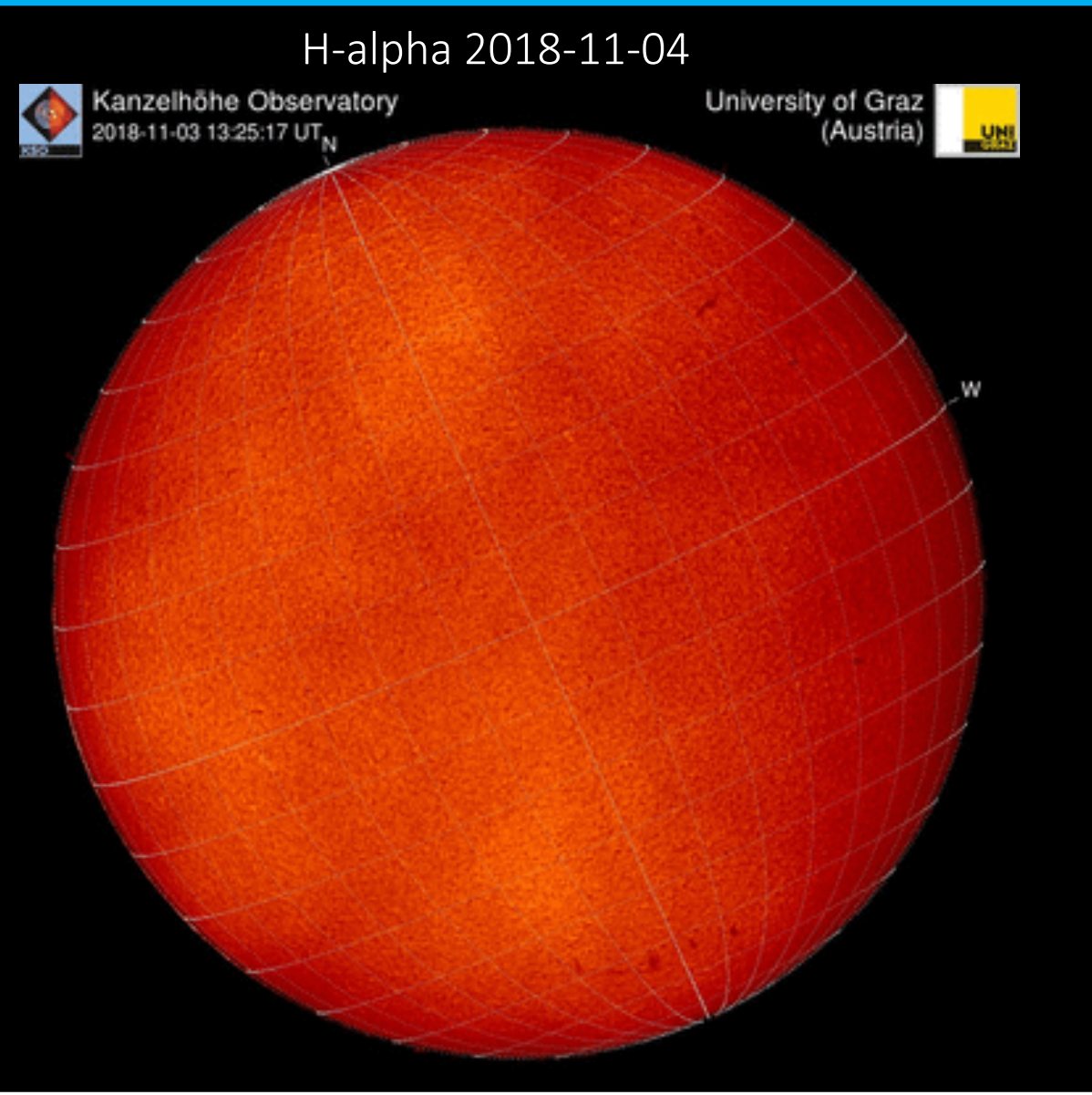


Filament & Filament eruption

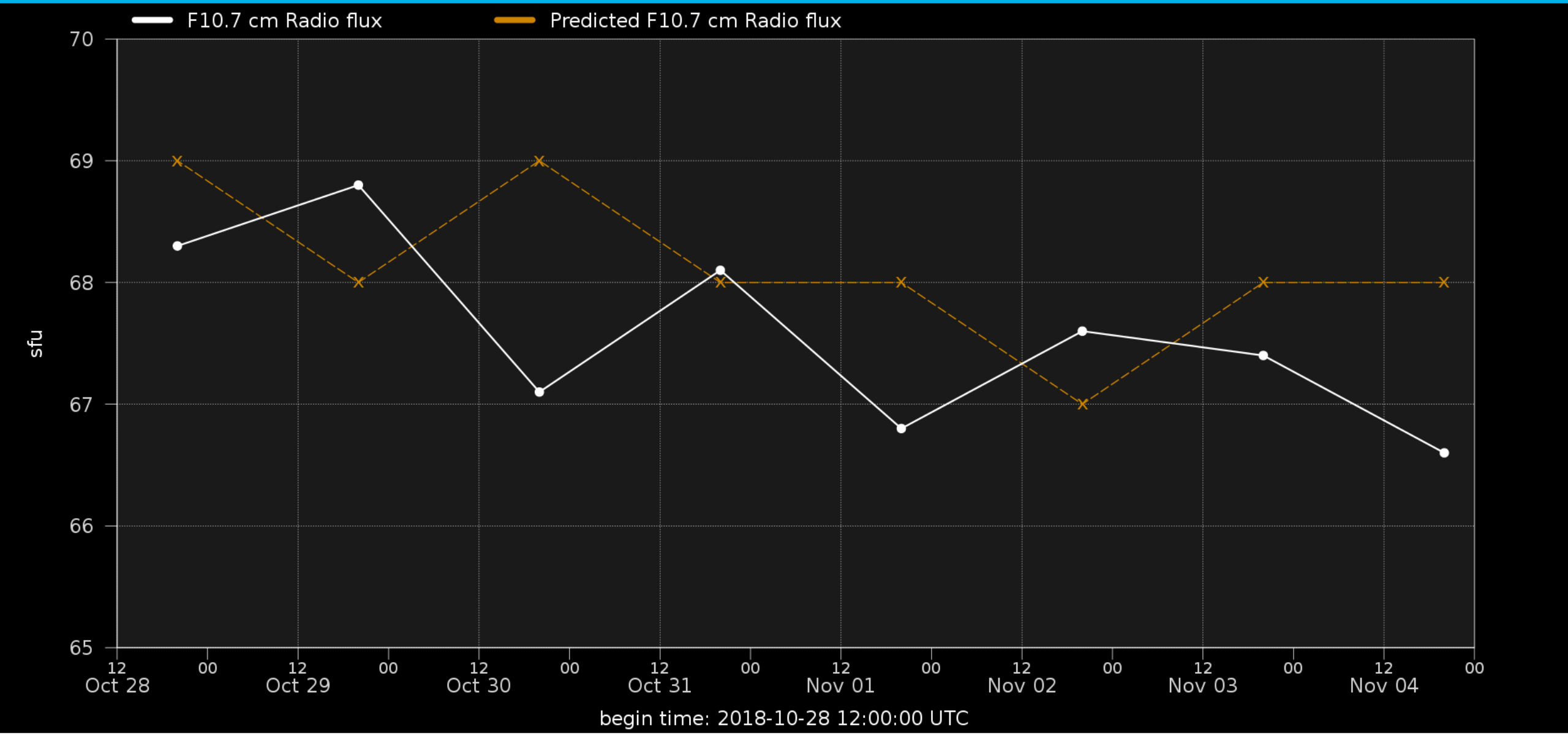
H-alpha 2018-10-28



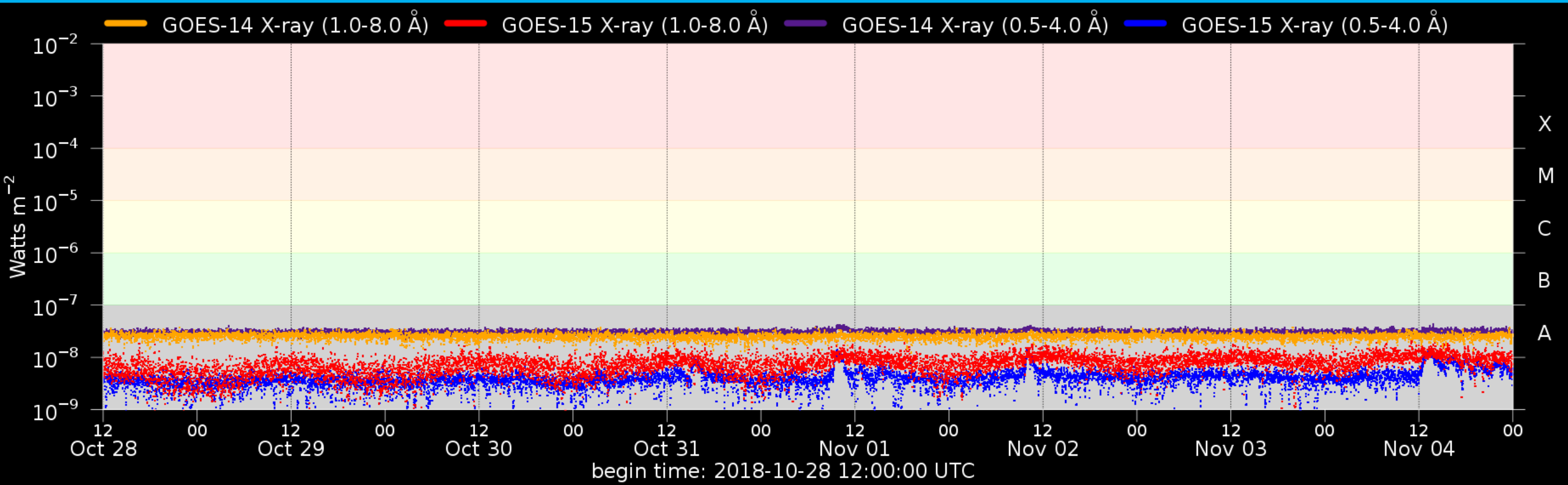
H-alpha 2018-11-04



Solar F10.7cm radio flux



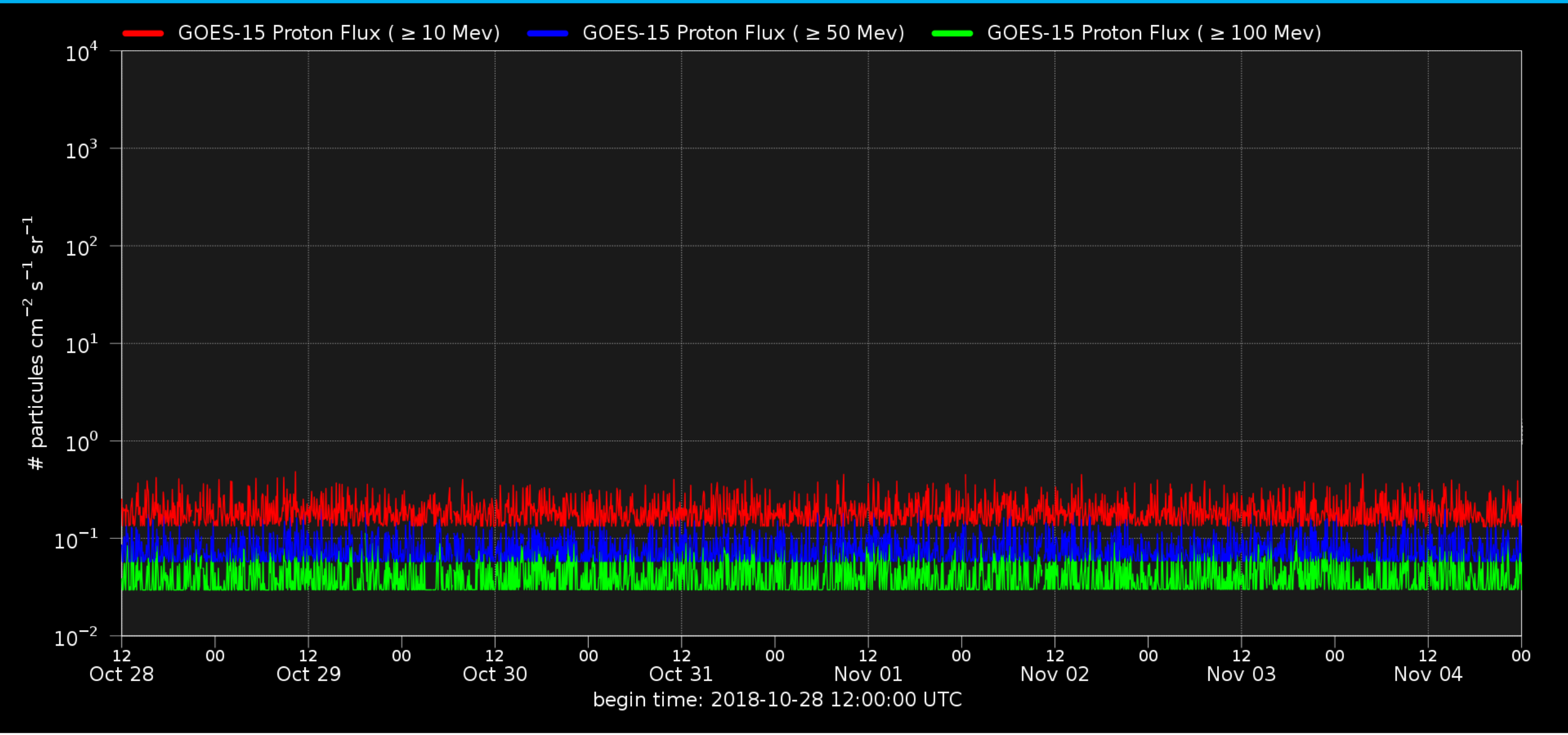
Flaring activity



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

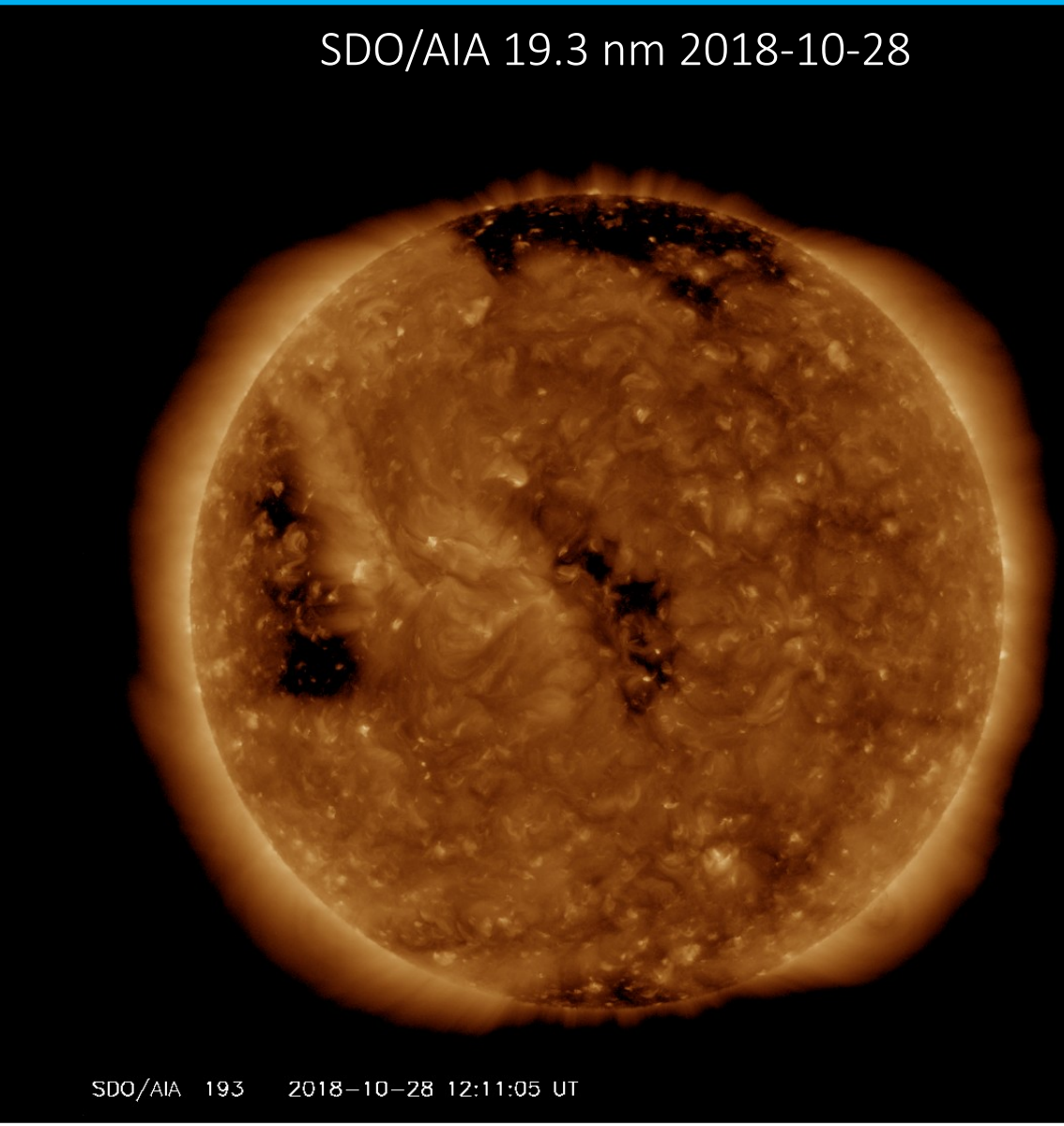
Issue date	2018-10-28	2018-10-29	2018-10-30	2018-10-31	2018-11-01	2018-11-02	2018-11-03	2018-11-04
Probability	---|05|01|01	---|01|01|01	---|01|01|01	---|01|01|01	---|01|01|01	---|01|01|01	---|01|01|01	---|01|01|01
Observed	00|00|00|00	00|00|00|00	00|00|00|00	00|00|00|00	00|00|00|00	00|00|00|00	00|00|00|00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

Solar proton flux



Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-10-28



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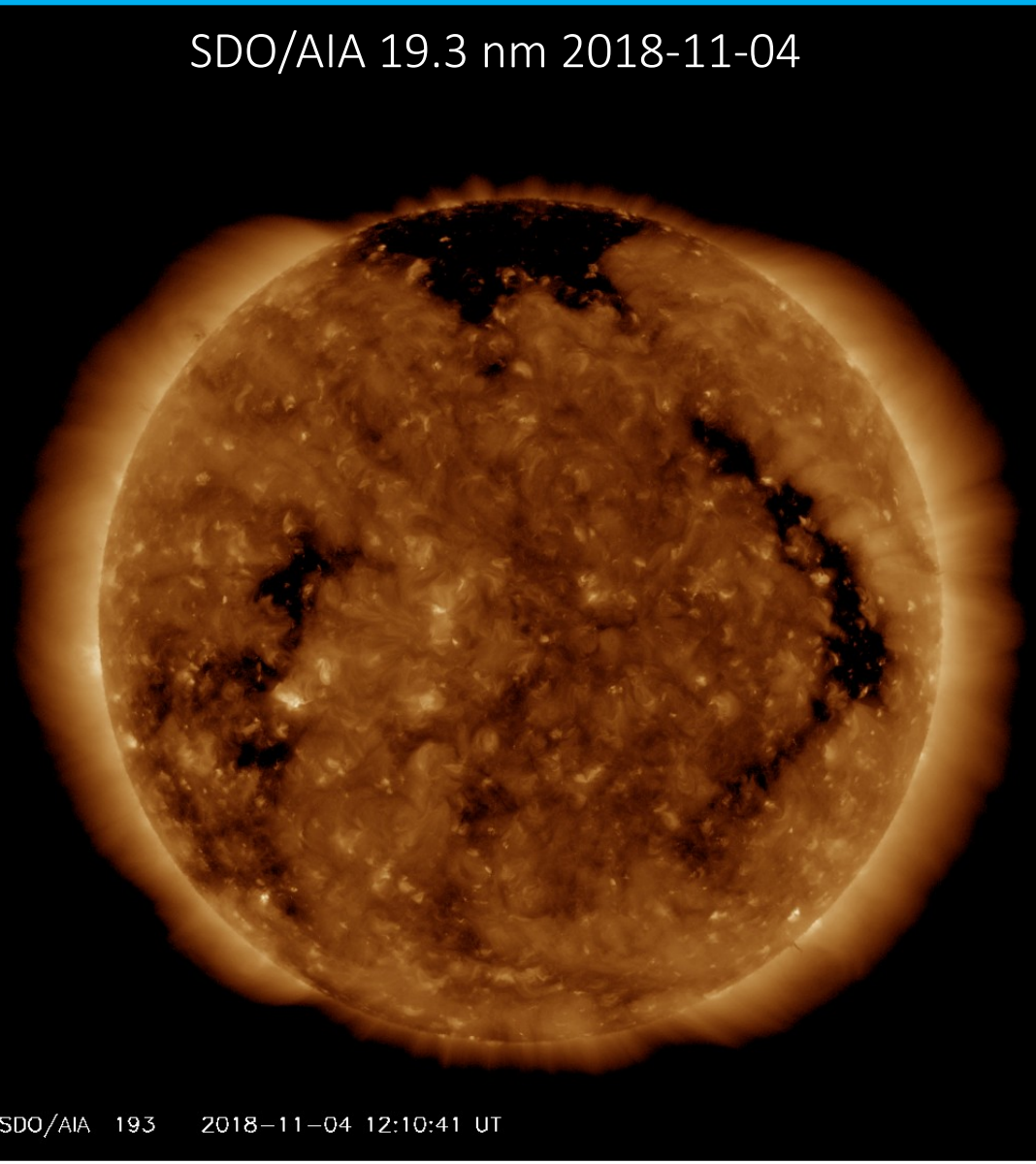

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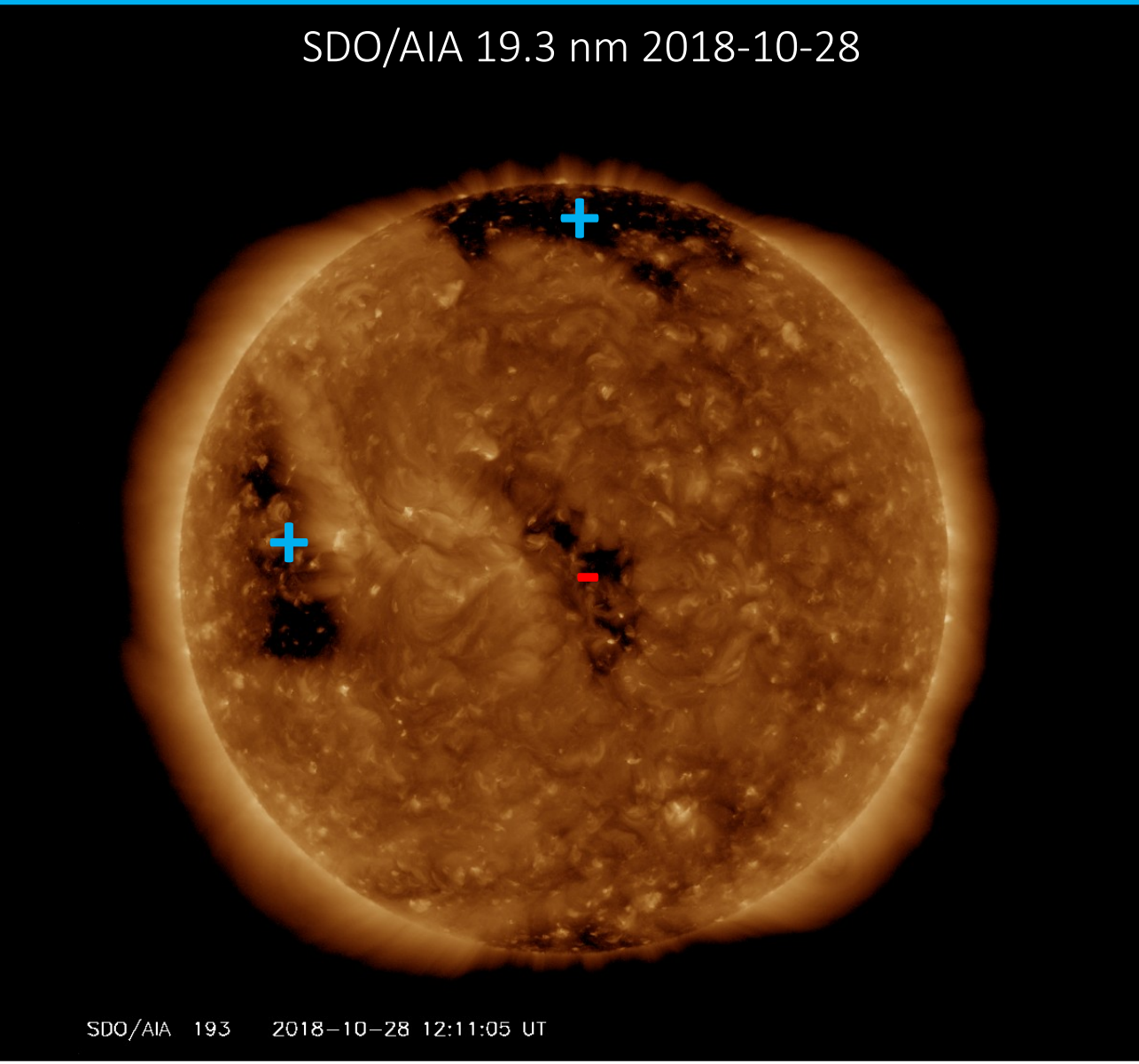

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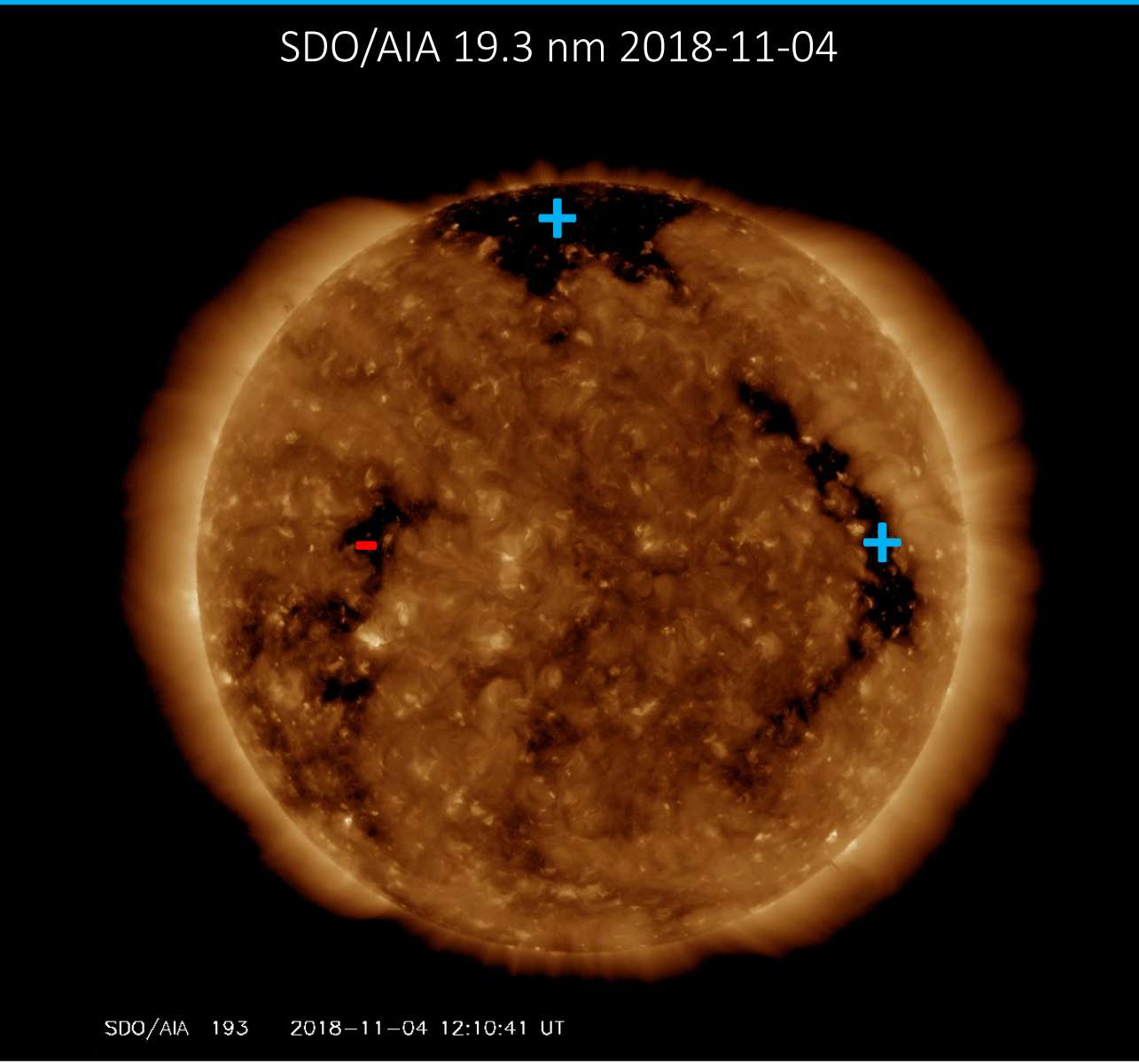
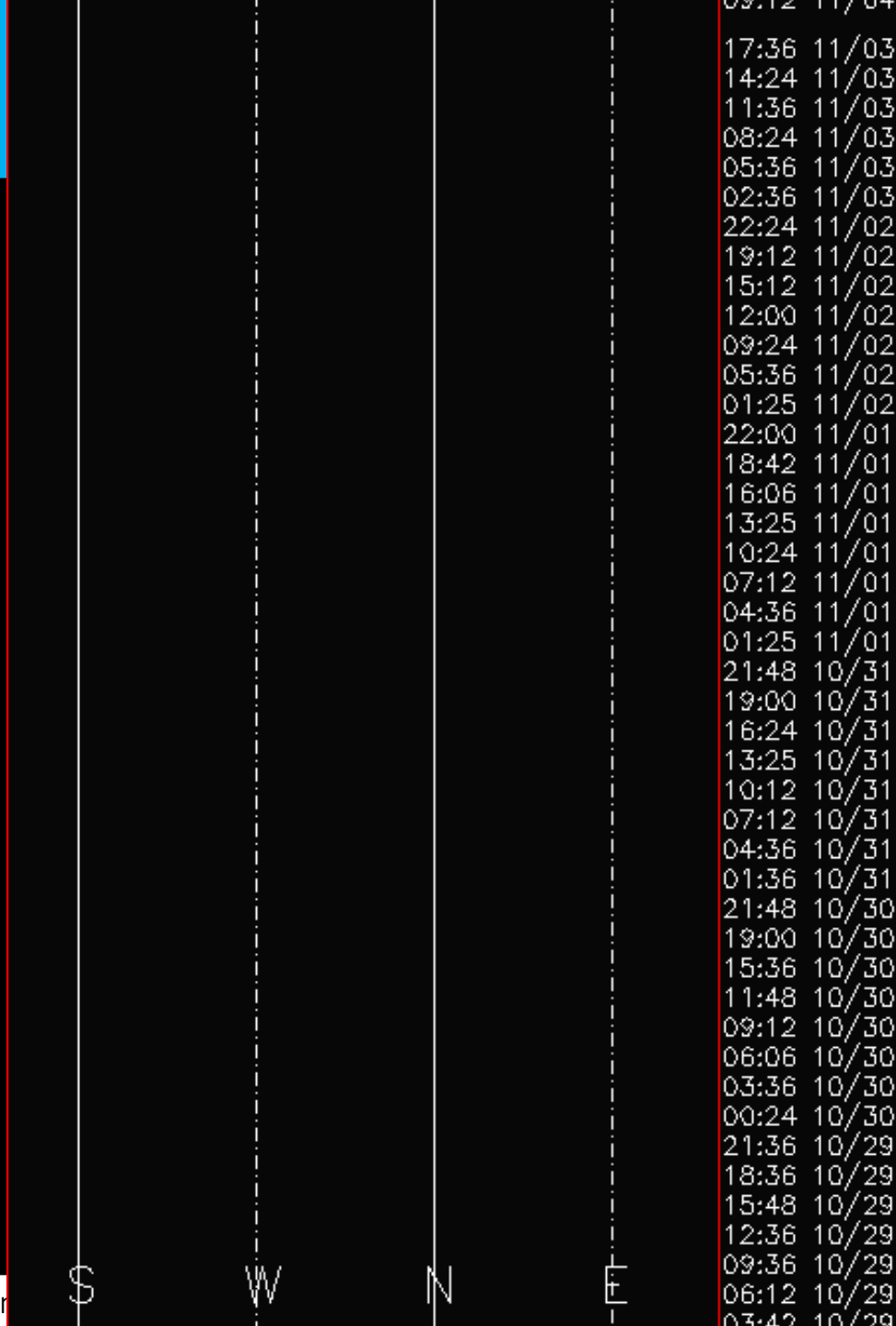


Coronal Mass Ejection

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

No earth-directed CMEs were observed in coronagraphic imagery



Solar Wind and Geomagnetic Activity

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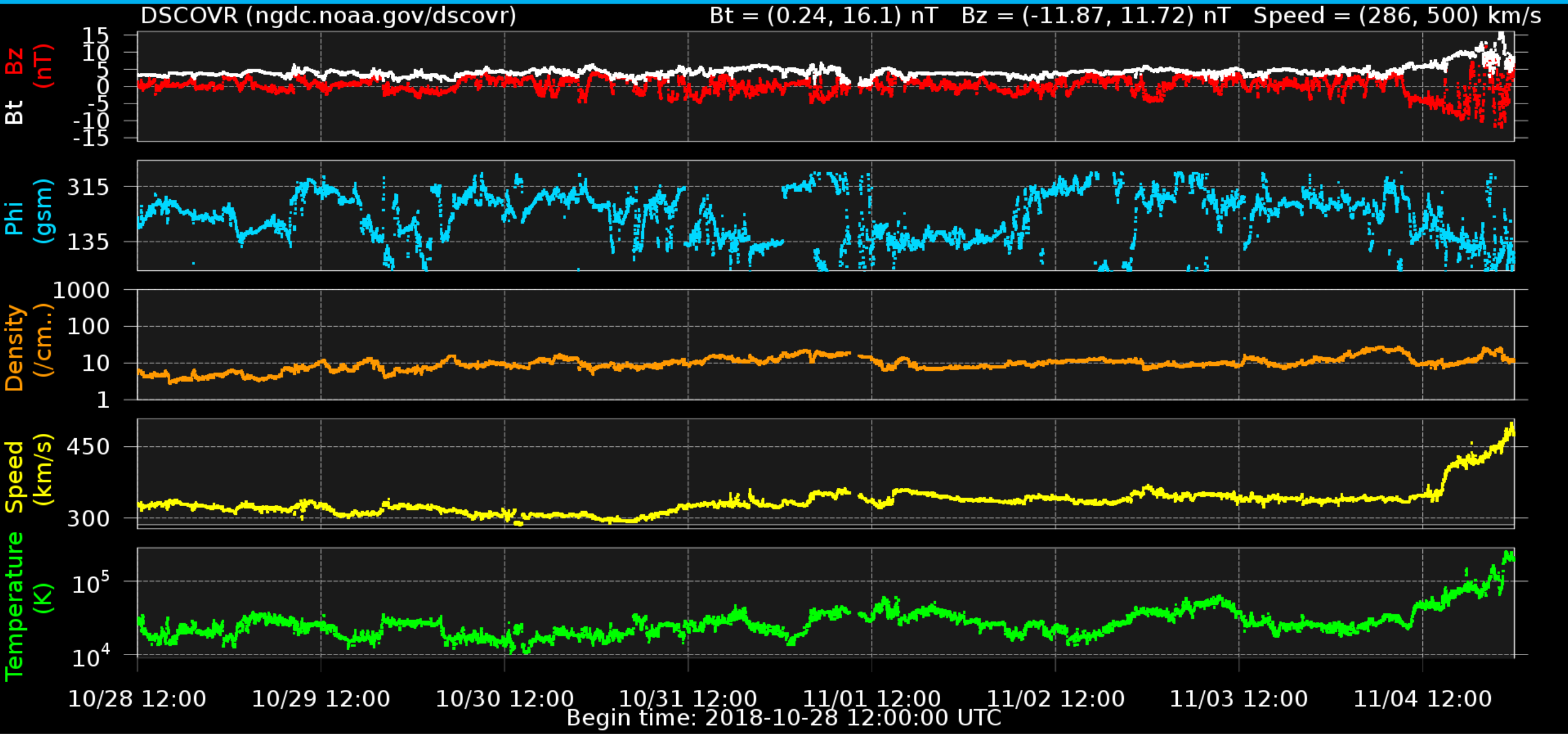
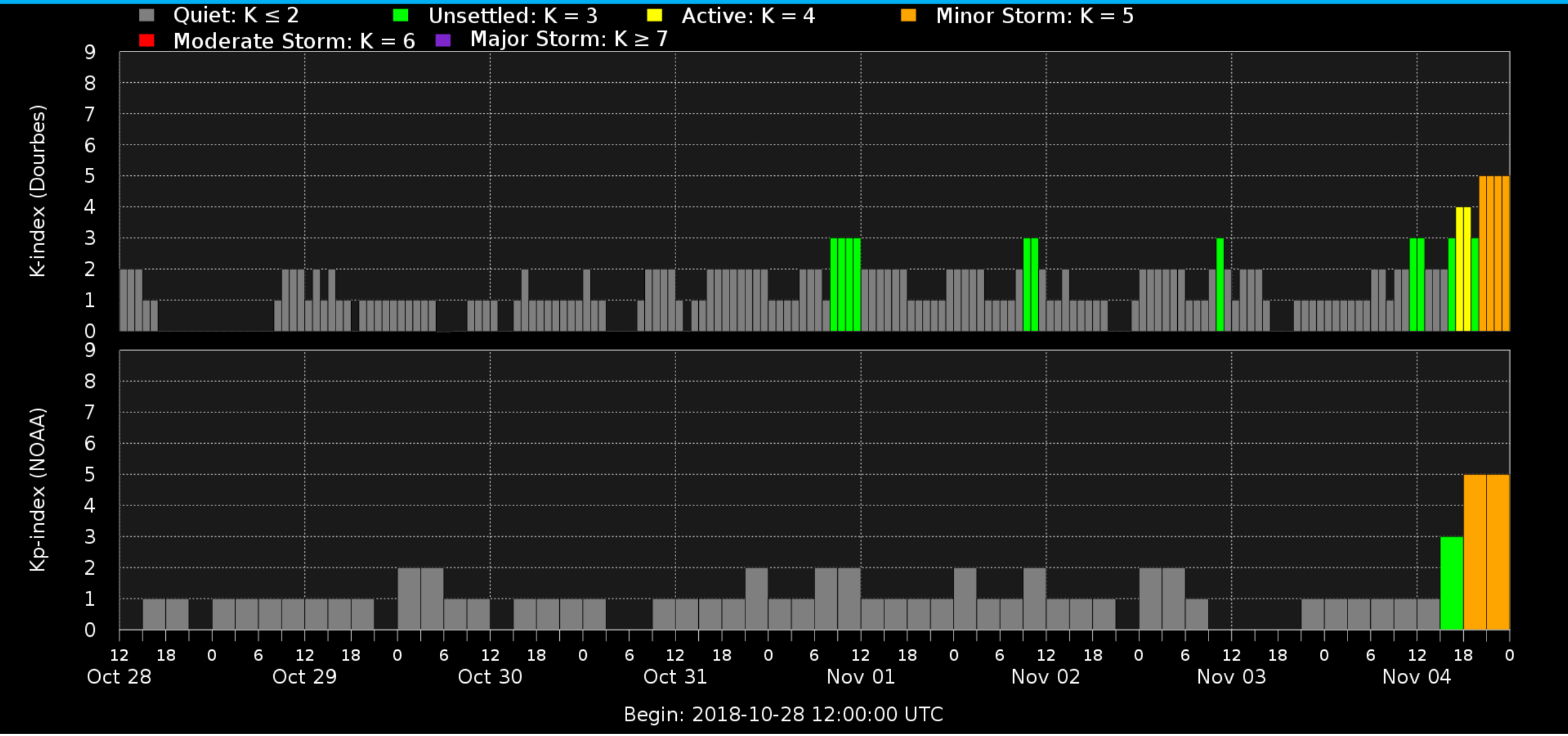
Solar wind parameters (DSCOVR data)

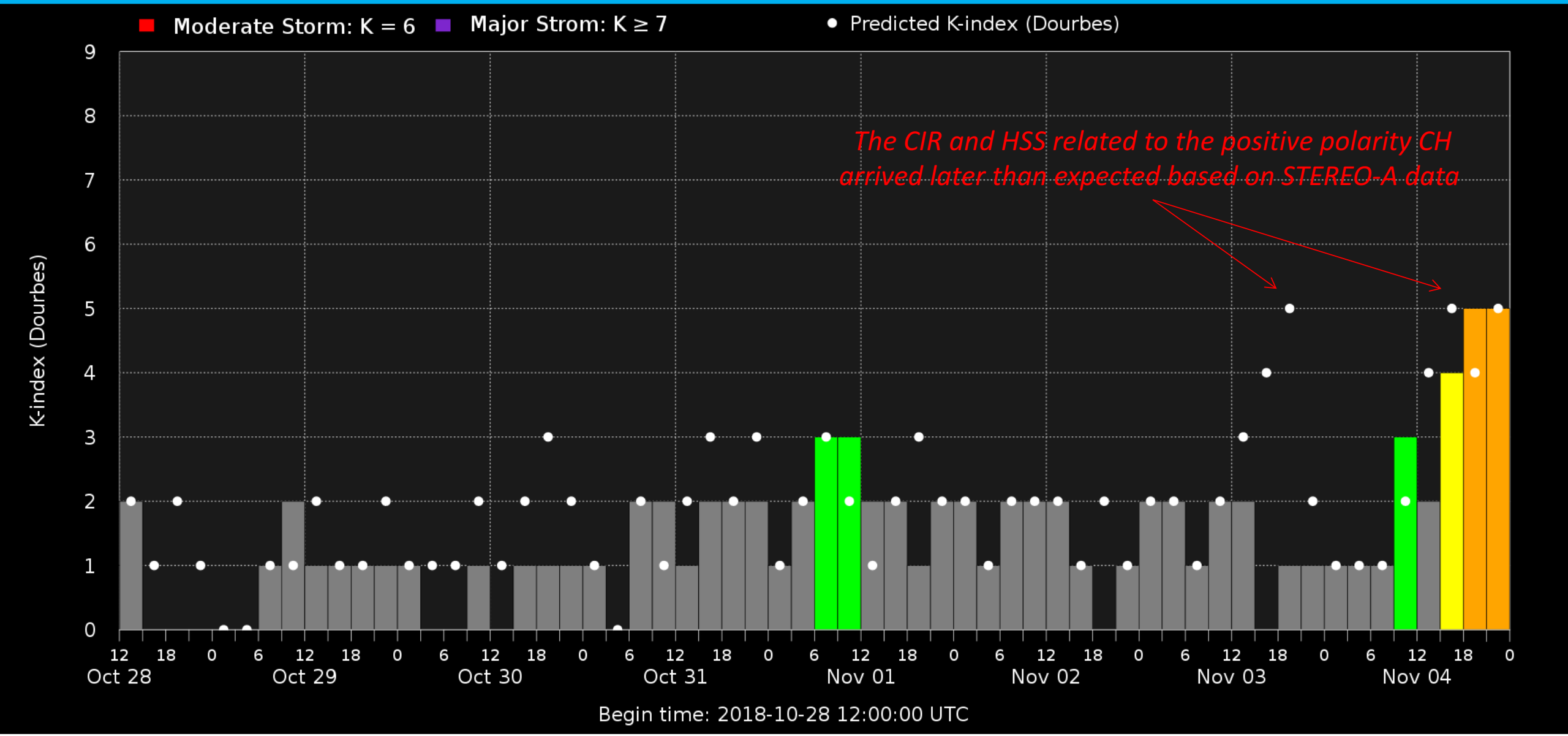


Solar wind parameters & K-index (DSCOVR/Dourbes)

Geomagnetic activity (K-indexes)



K-Dourbes index



Outlook

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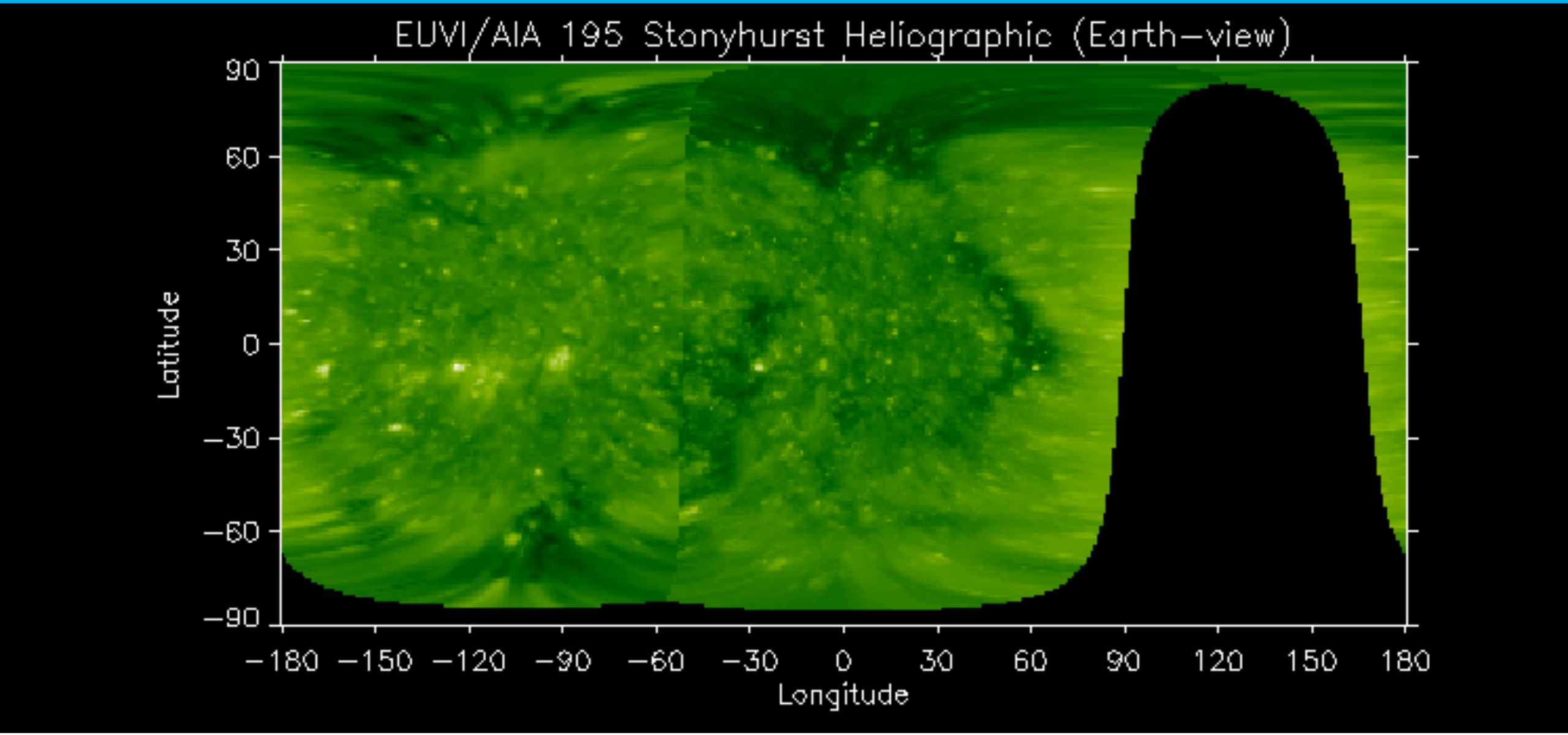
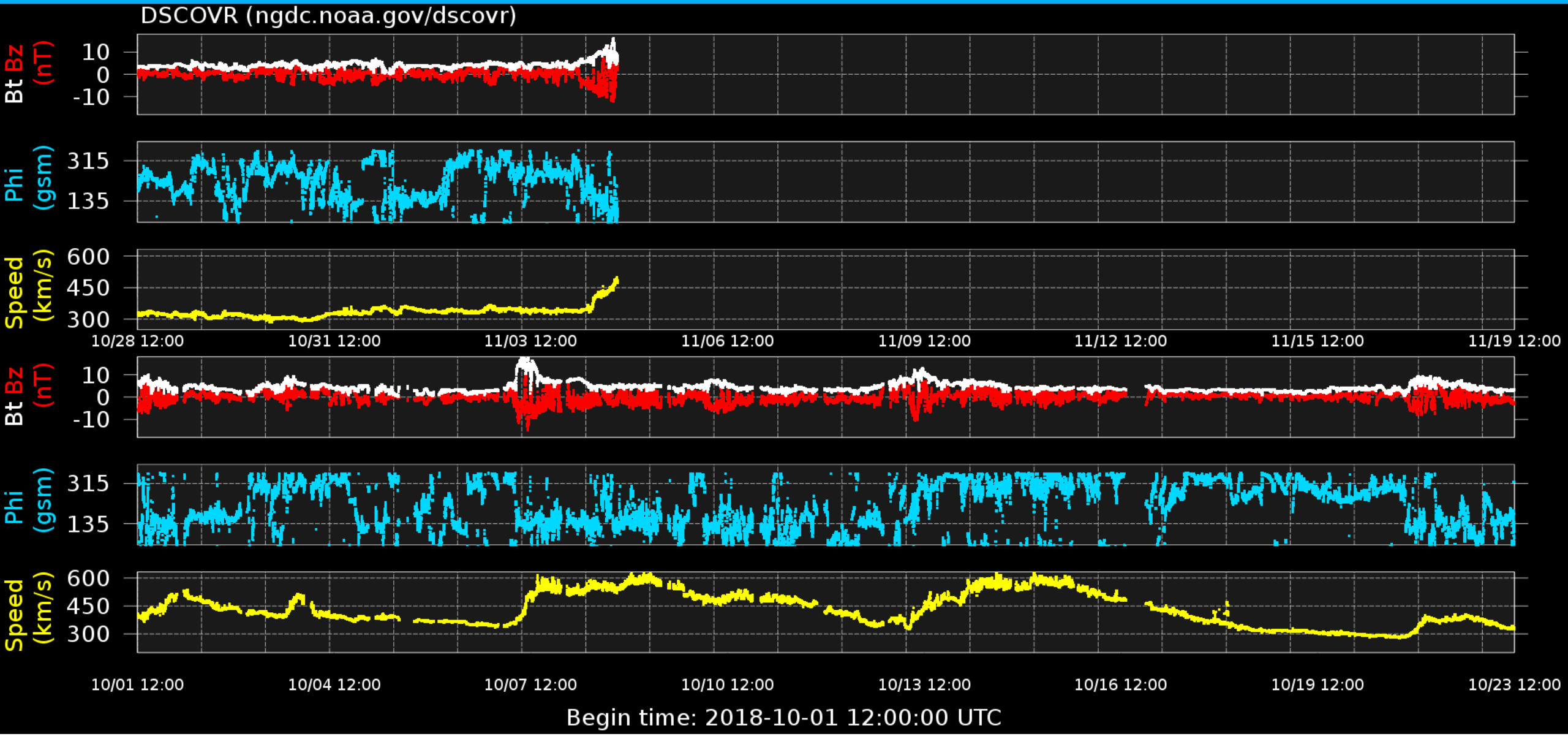
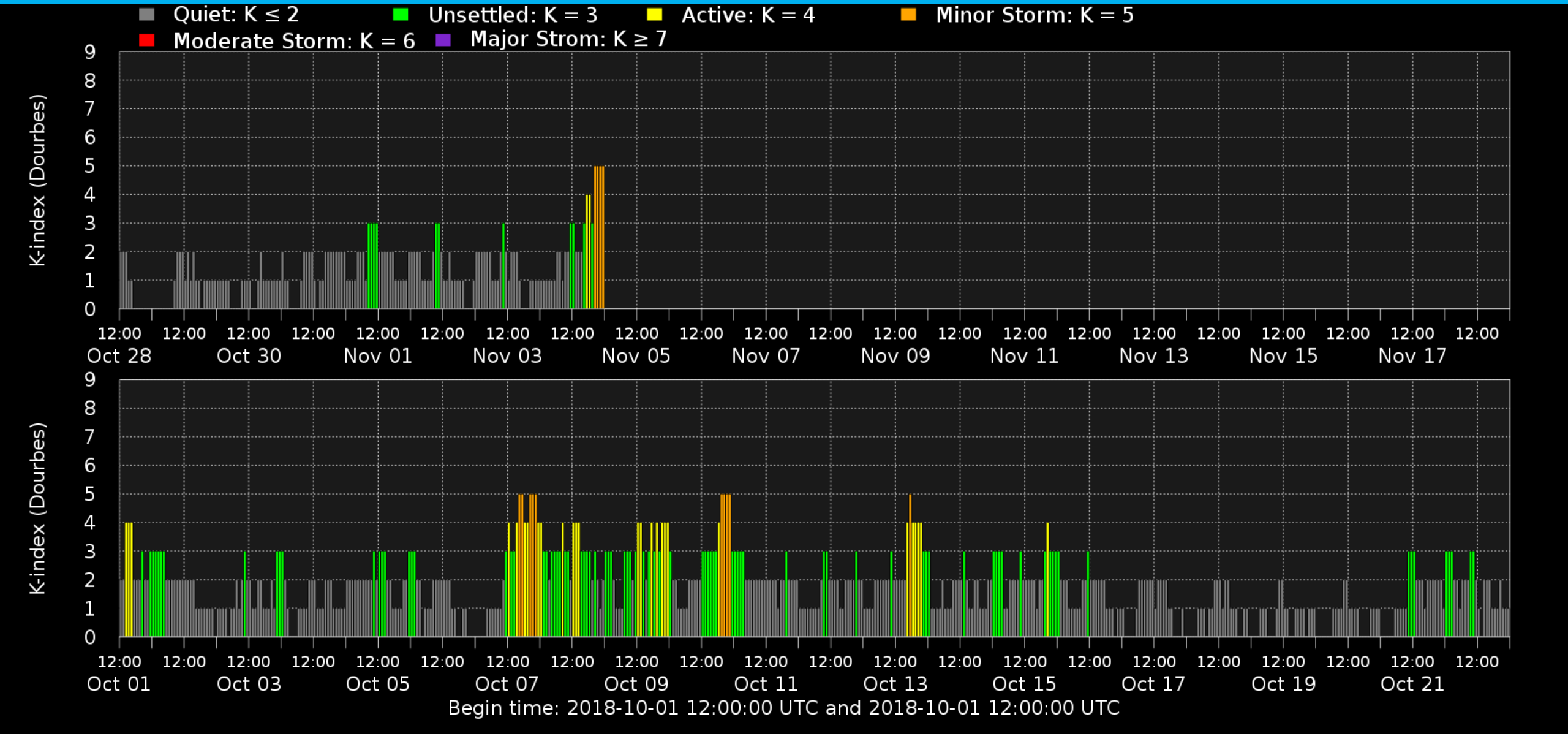
Outlook: Solar activity



Outlook: Solar wind



Outlook: Geomagnetic activity



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