

SIDC Space Weather Briefing

06 October 2019 - 13 October 2019

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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 2019-10-06 12:00 UT to 2019-10-13 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	None
Proton Events	None

Solar wind and geomagnetic conditions from 2019-10-06 12:00 UT to 2019-10-13 12:00 UT

Coronal Holes	One small negative polarity coronal hole
ICME	None
SW Conditions	Mildly enhanced SW conditions: speeds up to 500 km/s
K-indices	max K-index (Dourbes): 4.0 max Kp-index (NOAA): 4

All Quiet Alert: All week

Solar Activity

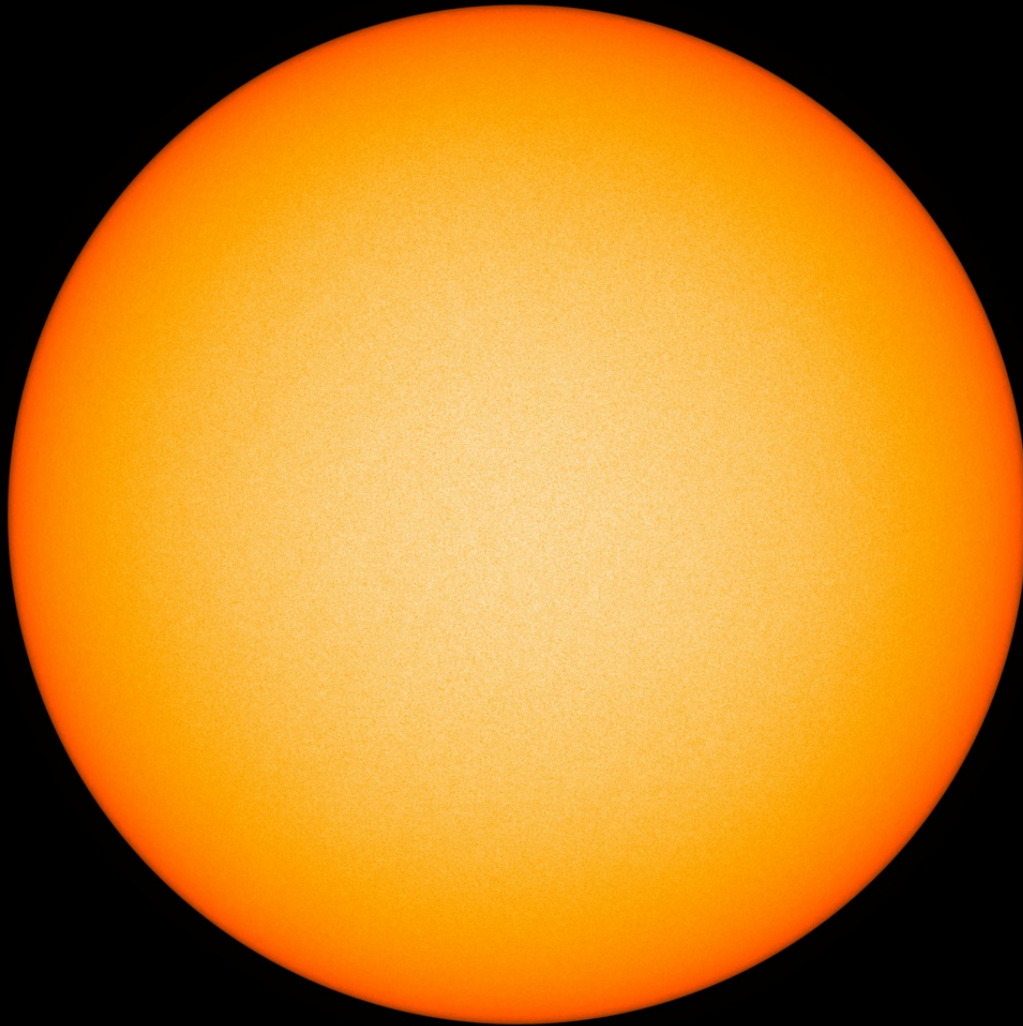


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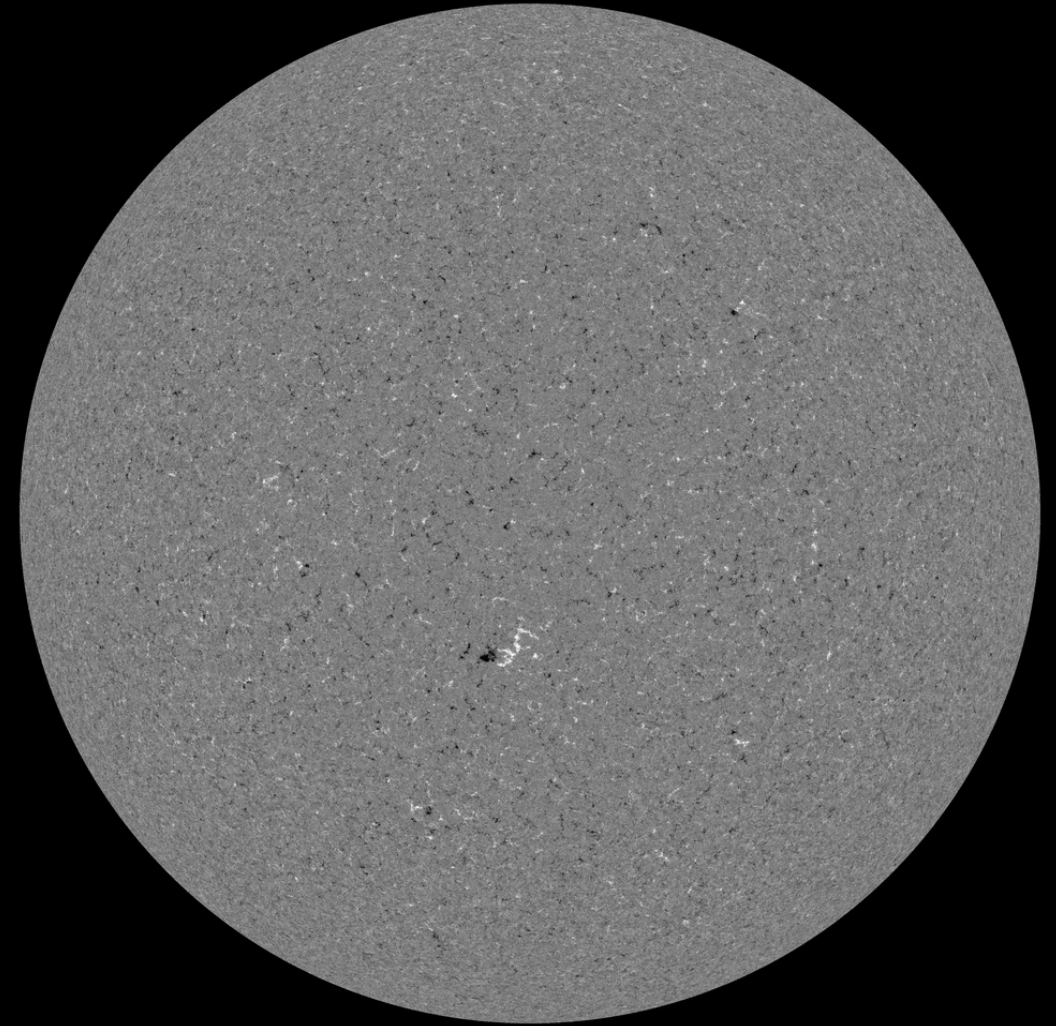
Solar active region - start of the week

SDO/HMI White Light 2019-10-06



SDO/HMI Quick-Look Continuum: 20191006_114500

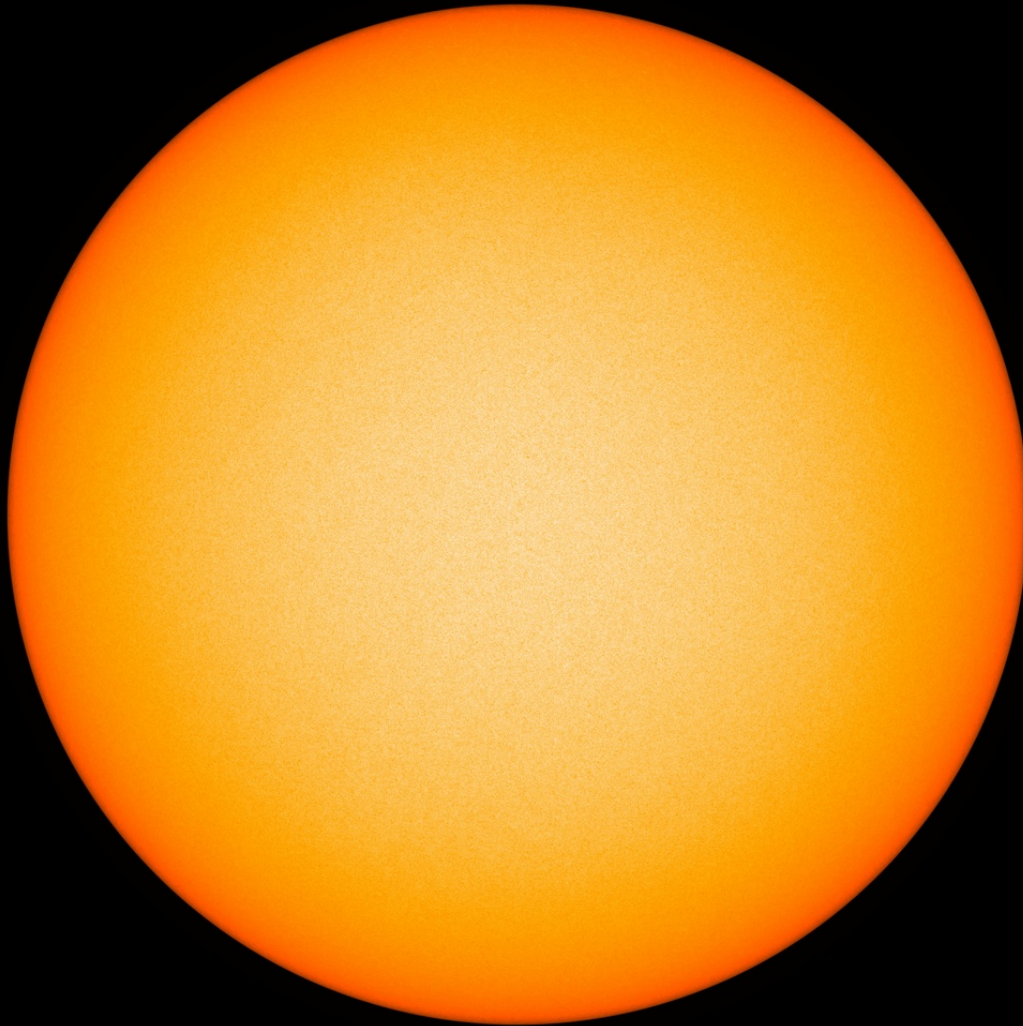
SDO/HMI Magnetogram 2019-10-06



SDO/HMI Quick-Look Magnetogram: 20191006_114500

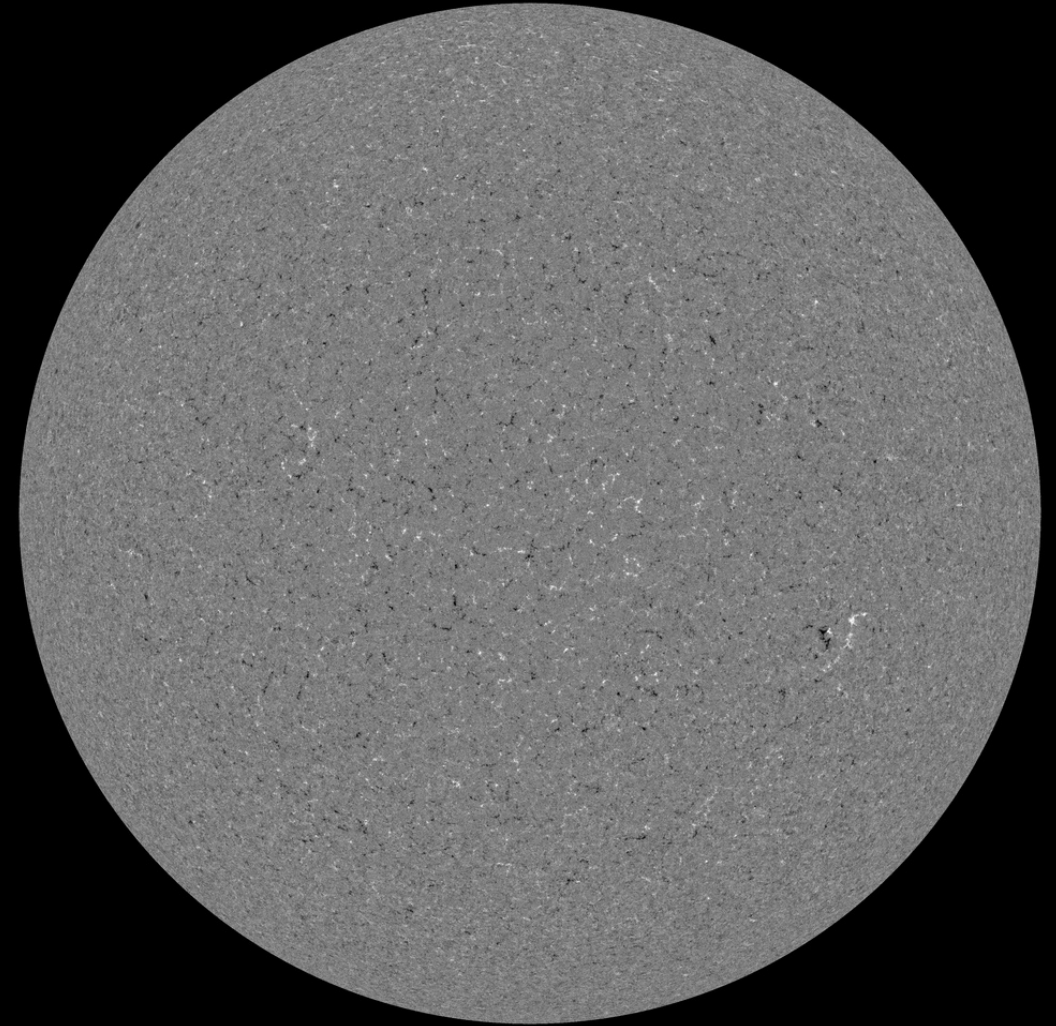
Solar active region - middle of the week

SDO/HMI White Light 2019-10-09



SDO/HMI Quick-Look Continuum: 20191009_120000

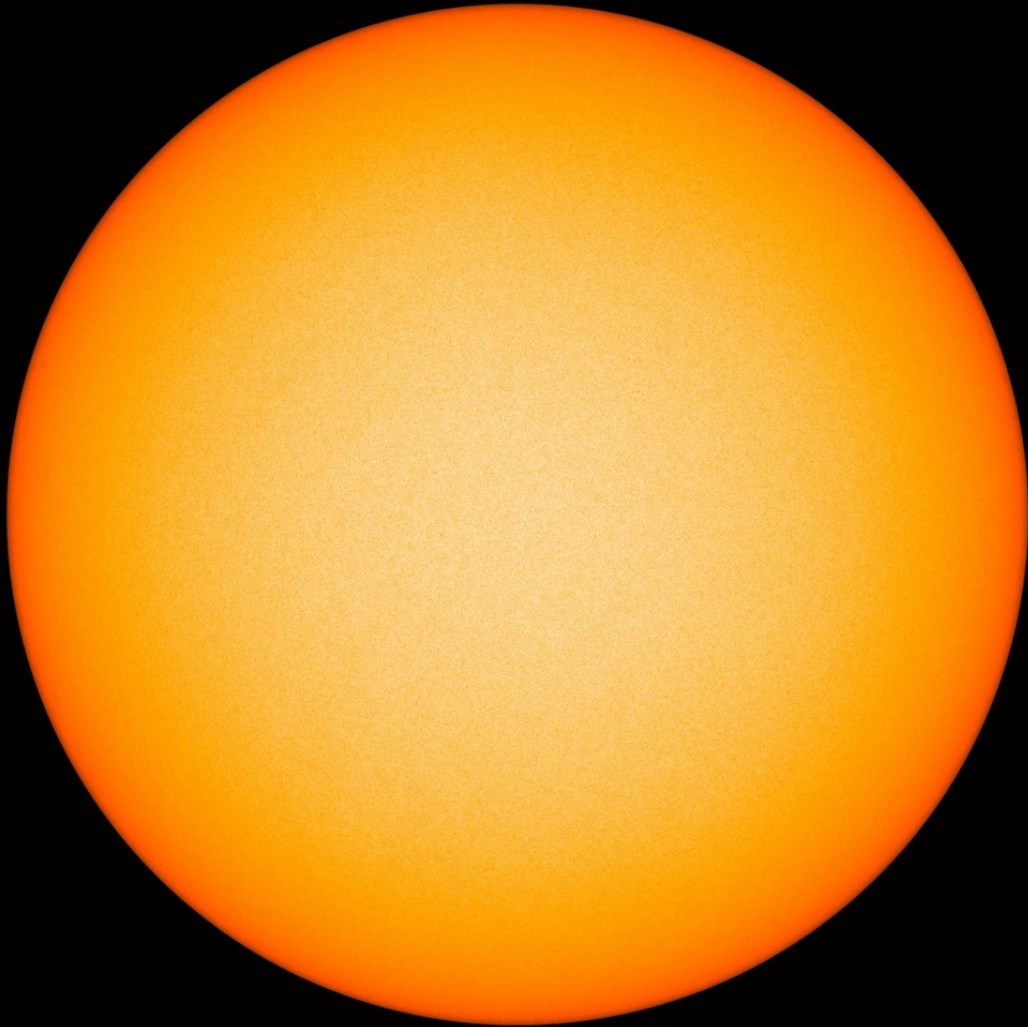
SDO/HMI Magnetogram 2019-10-09



SDO/HMI Quick-Look Magnetogram: 20191009_114500

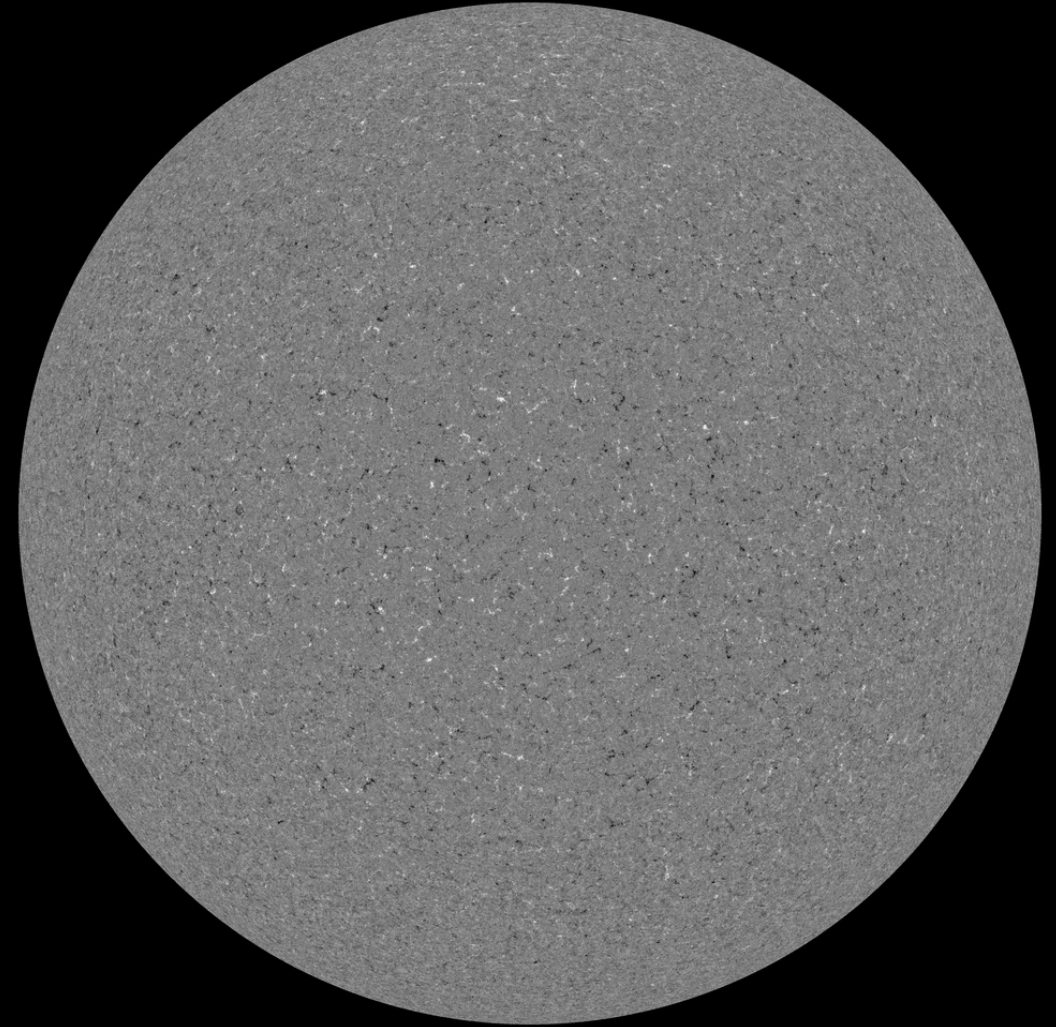
Solar active region - end of the week

SDO/HMI White Light 2019-10-13



SDO/HMI Quick-Look Continuum: 20191013_114500

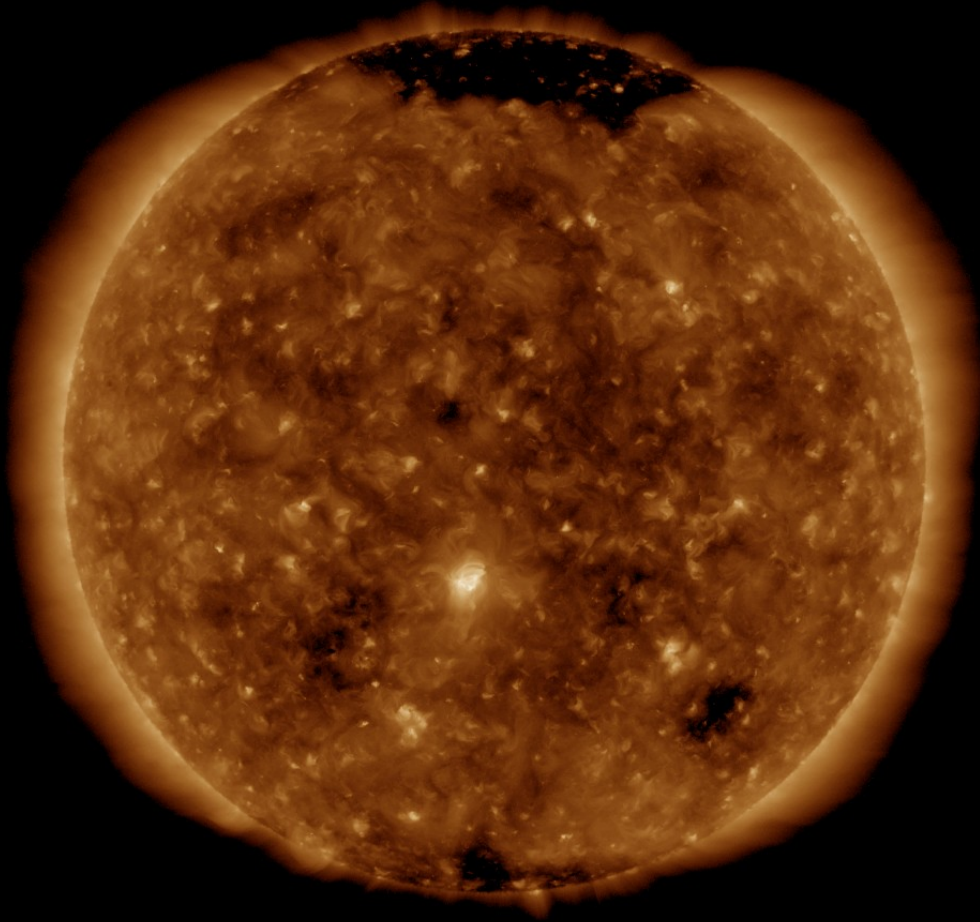
SDO/HMI Magnetogram 2019-10-13



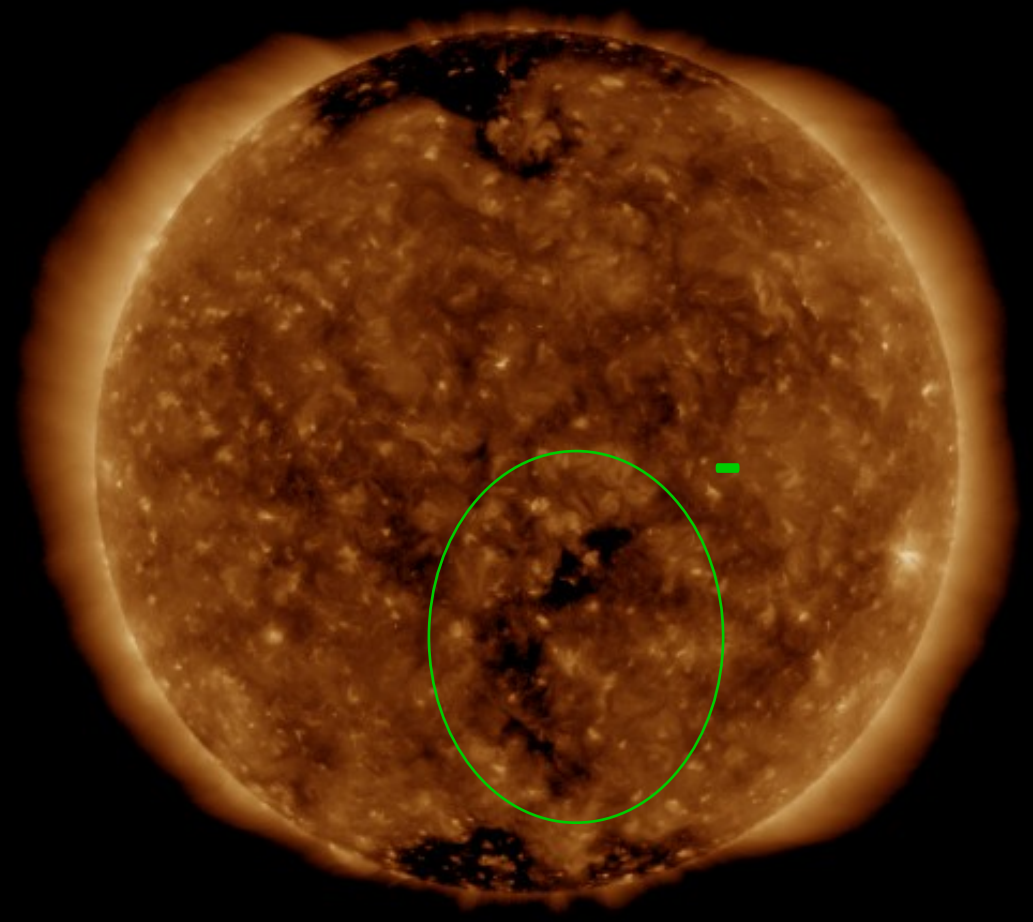
SDO/HMI Quick-Look Magnetogram: 20191013_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-10-06



SDO/AIA 19.3 nm 2019-10-11

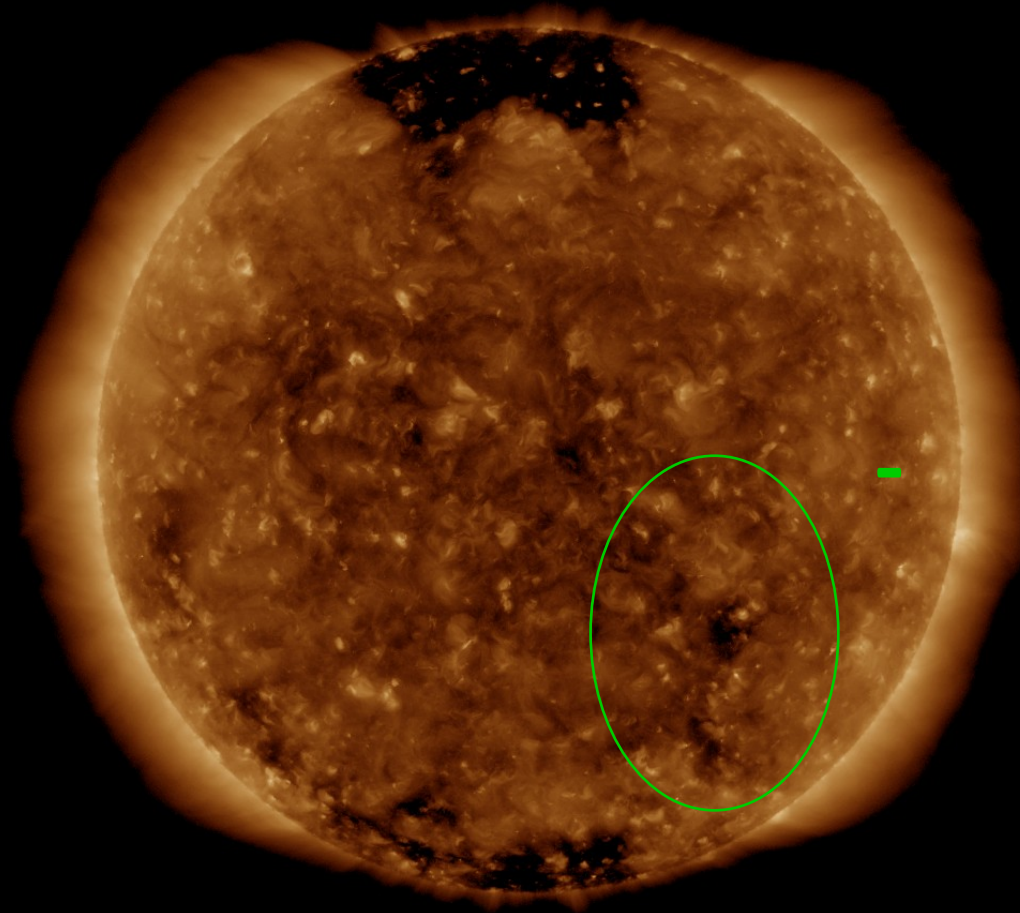


SDO/AIA 193 2019-10-06 12:10:53 UT

SDO/AIA 193 2019-10-11 07:56:53 UT

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-10-13

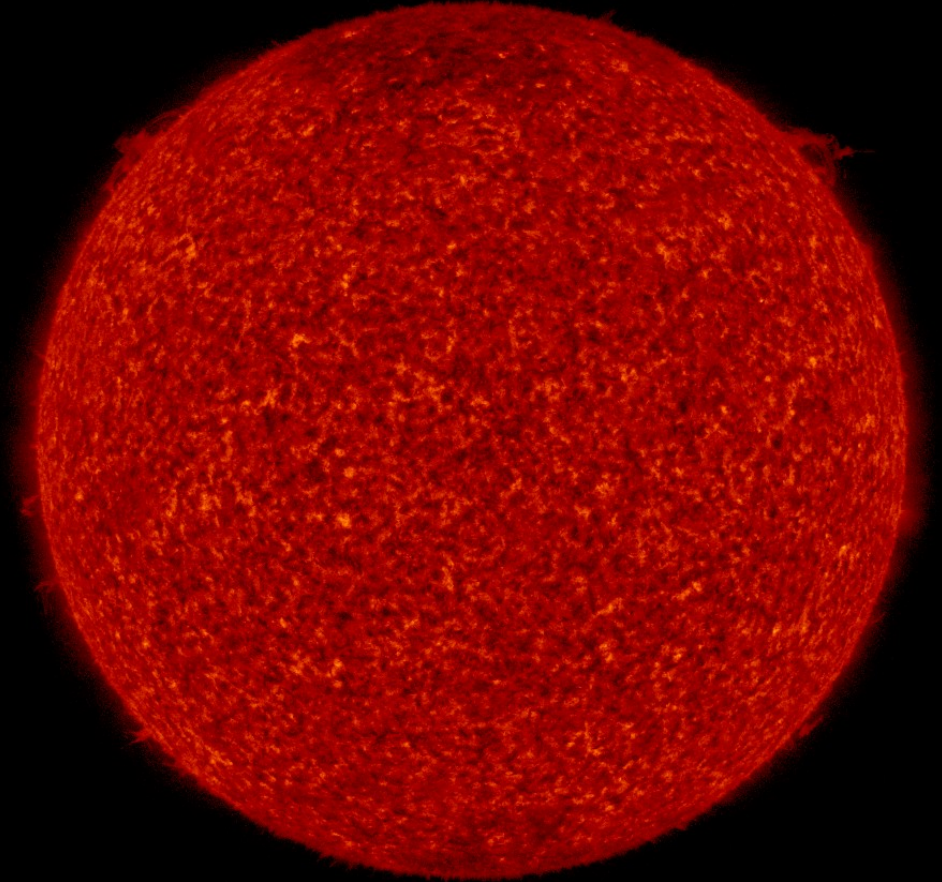
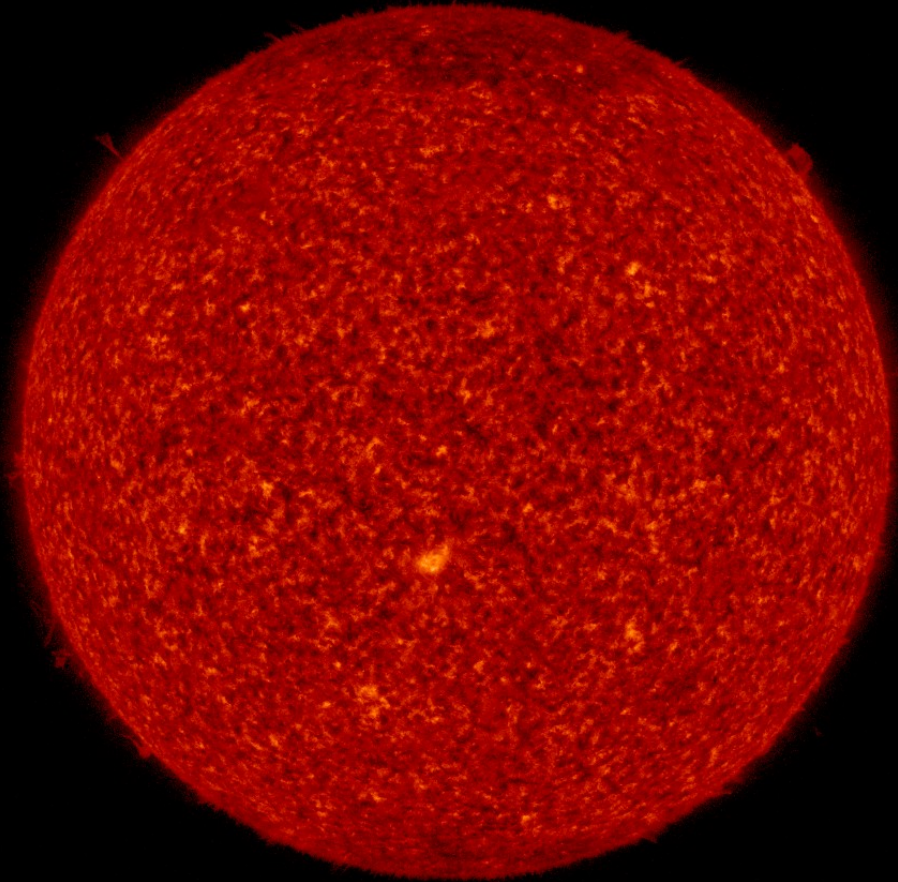


SDO/AIA 193 2019-10-13 12:10:41 UT

Solar active region & Filament

SDO/AIA 30.4 nm 2019-10-06

SDO/AIA 30.4 nm 2019-10-13



SDO/AIA 304 2019-10-06 12:13:42 UT

SDO/AIA 304 2019-10-13 12:13:42 UT

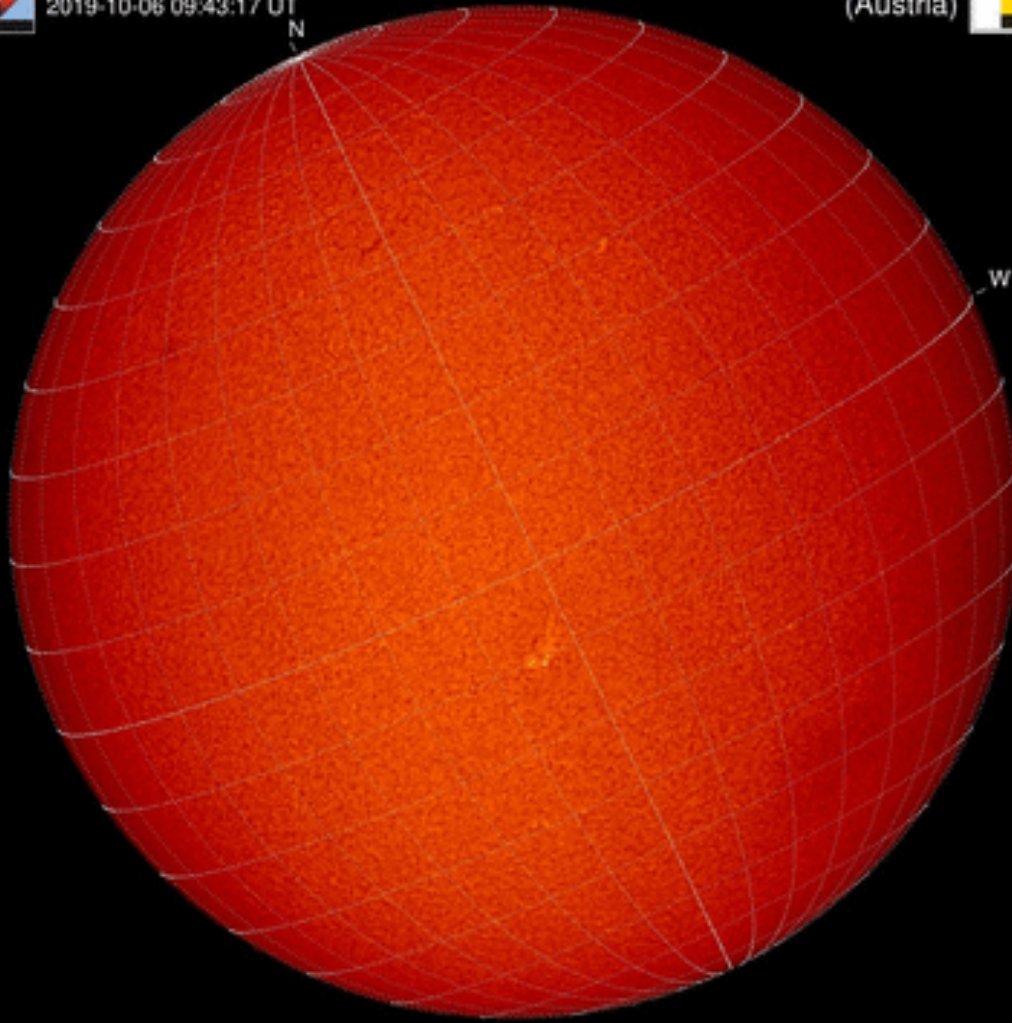
Filament & Filament eruption

H-alpha 2019-10-06



Kanzelhöhe Observatory
2019-10-06 09:43:17 UT

University of Graz
(Austria)

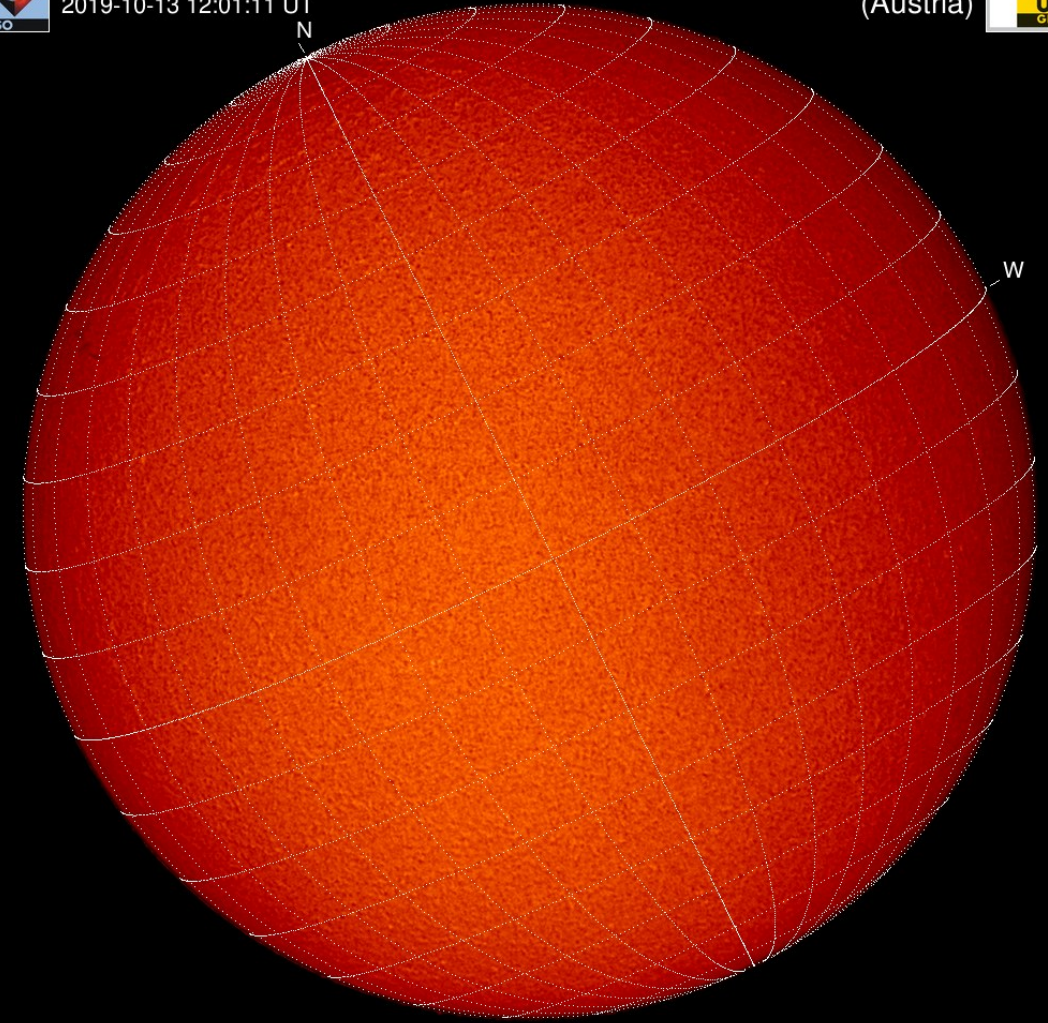


H-alpha 2019-10-13

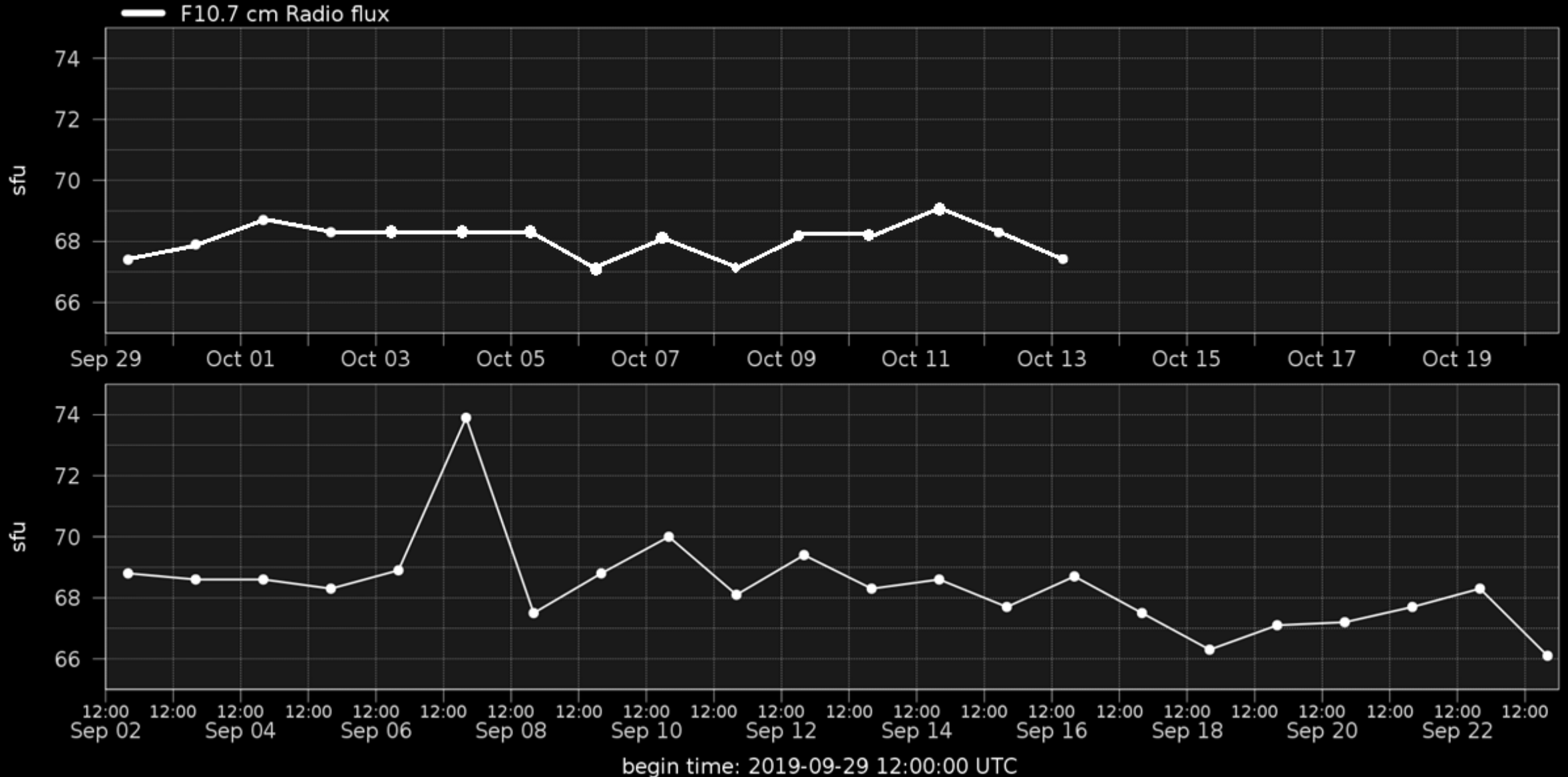


Kanzelhöhe Observatory
2019-10-13 12:01:11 UT

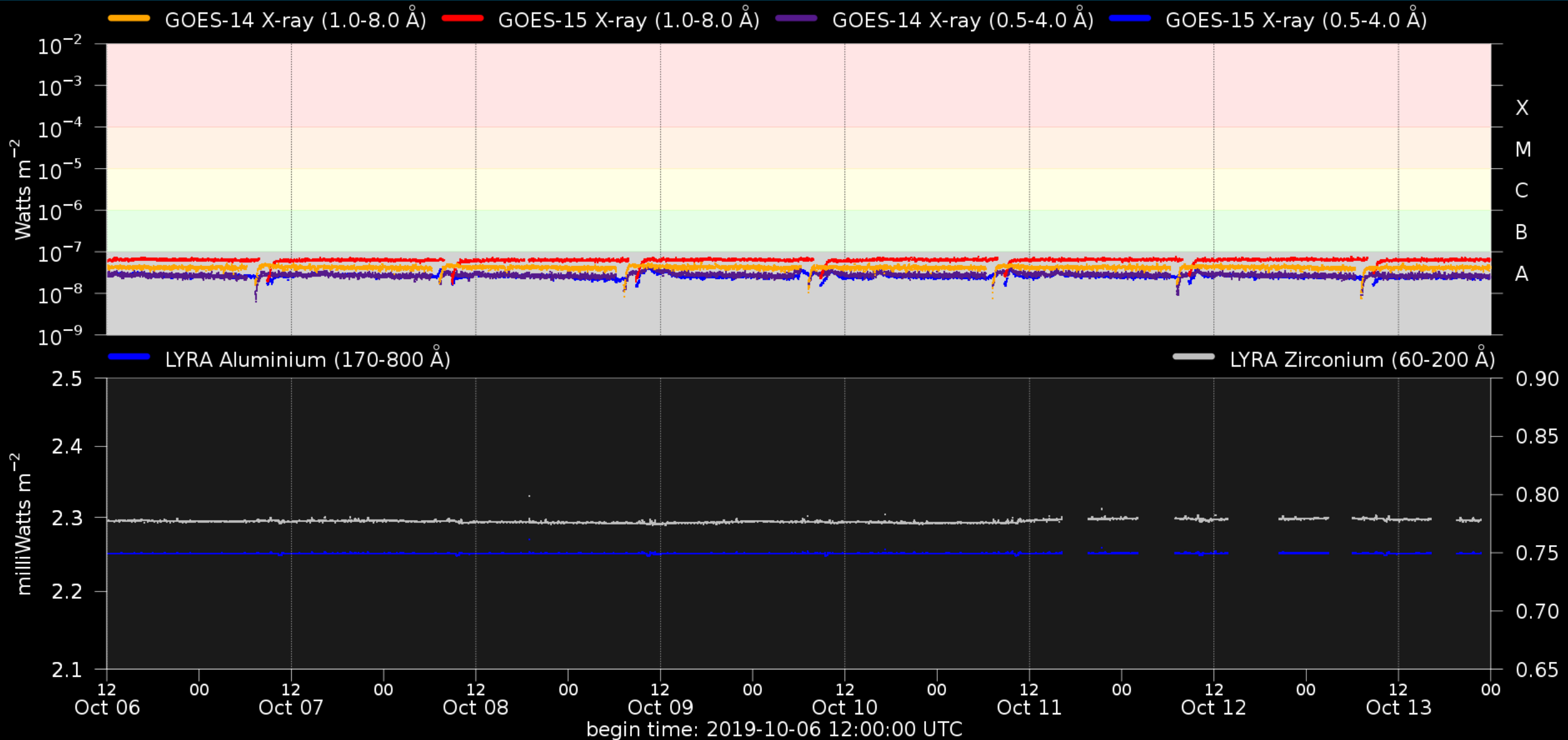
University of Graz
(Austria)



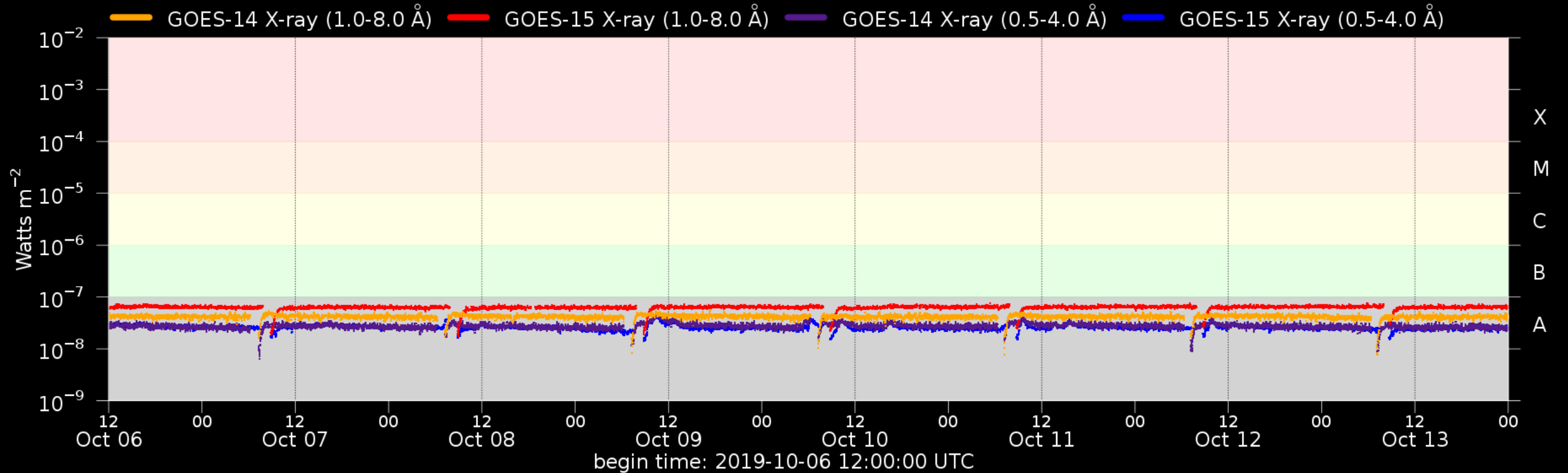
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity



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

Issue date	2019-10-06	2019-10-07	2019-10-08	2019-10-09	2019-10-10	2019-10-11	2019-10-12	2019-10-13
Probability	--- 01 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

Coronal Mass Ejection

No CMEs

01:36	10/13
20:12	10/12
17:24	10/12
14:48	10/12
11:36	10/12
08:12	10/12
05:36	10/12
02:48	10/12
23:24	10/11
20:00	10/11
16:48	10/11
13:36	10/11
10:48	10/11
07:24	10/11
03:24	10/11
23:24	10/10
19:36	10/10
16:12	10/10
12:48	10/10
09:48	10/10
06:36	10/10
03:30	10/10
00:12	10/10
20:24	10/09
17:36	10/09
12:00	10/09
09:12	10/09
06:06	10/09
03:12	10/09
23:48	10/08
20:24	10/08
17:36	10/08
14:36	10/08
11:48	10/08
08:48	10/08
06:12	10/08
03:30	10/08
00:24	10/08
21:12	10/07
18:00	10/07
15:12	10/07
12:00	10/07
08:48	10/07
06:12	10/07
03:24	10/07

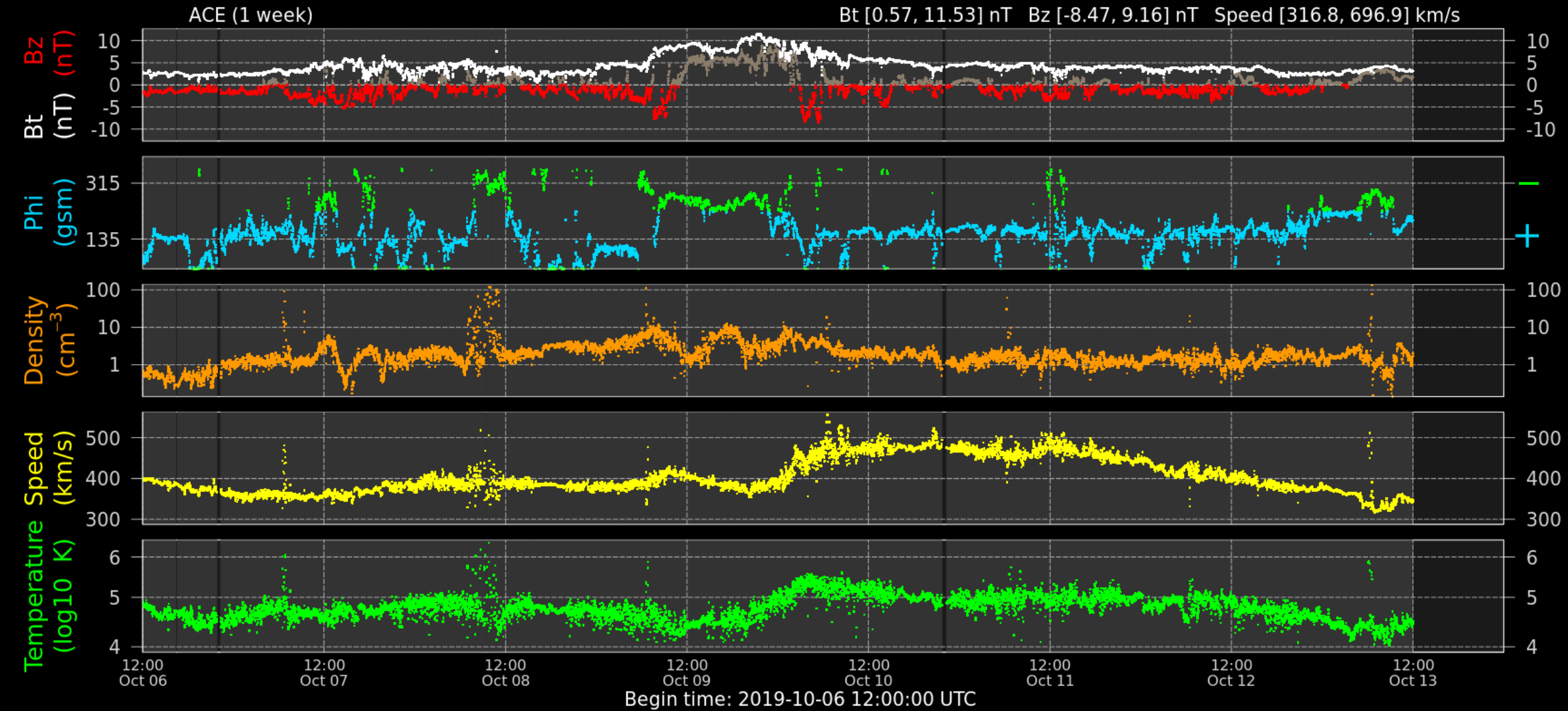
Solar Wind and Geomagnetic Activity



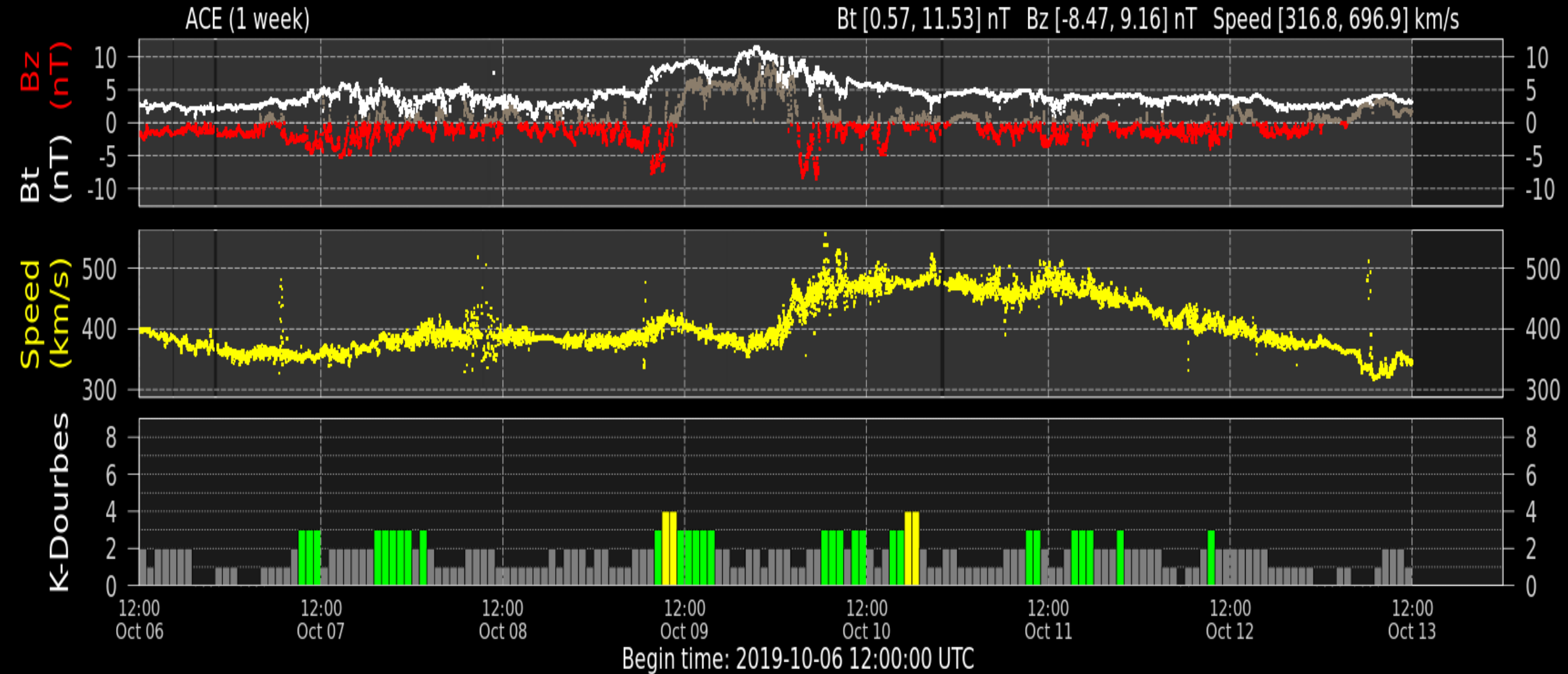
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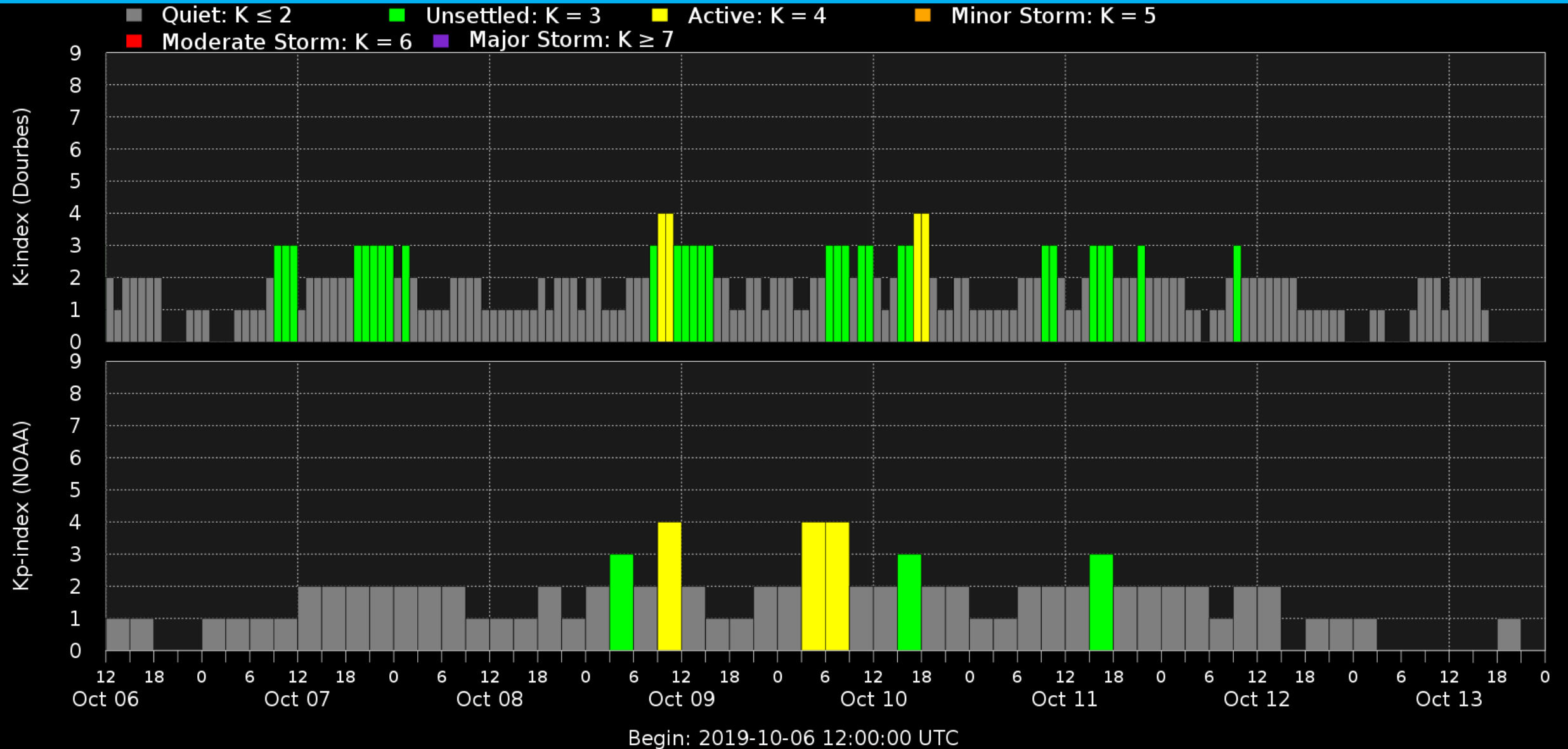
Solar wind parameters (ACE data)



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



Geomagnetic activity (K-indexes)



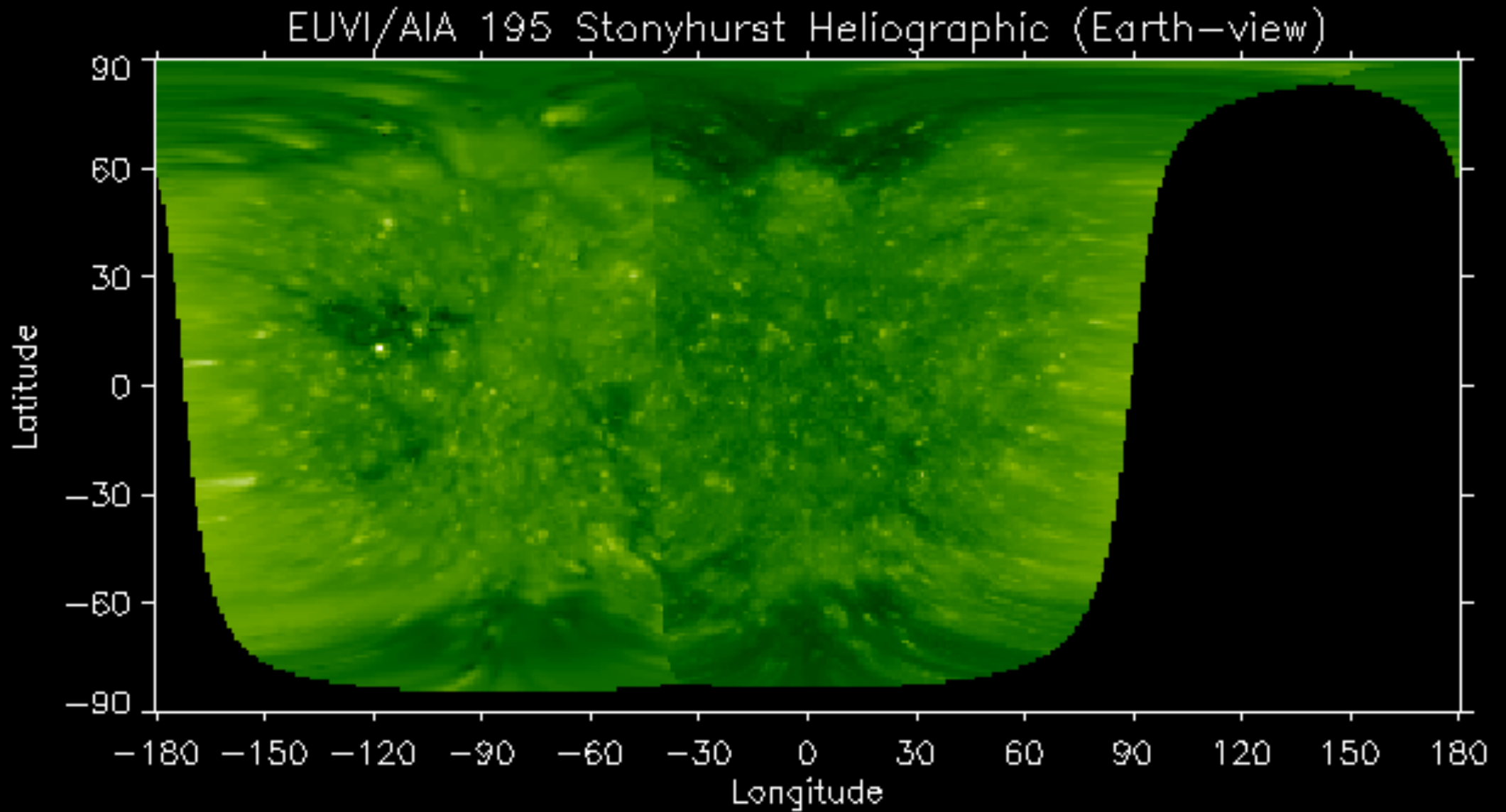
Outlook



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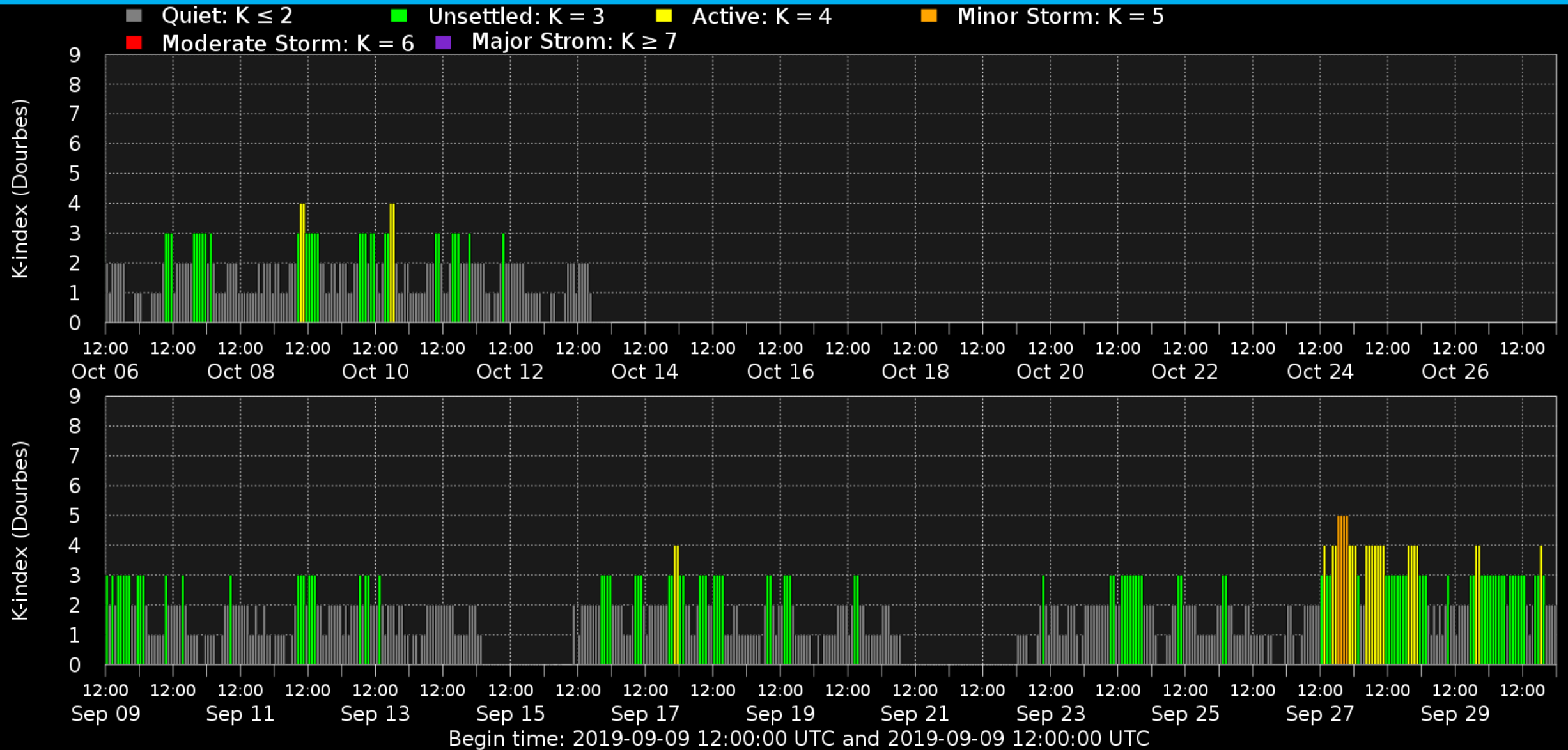
Outlook: Solar activity



Outlook: Solar wind

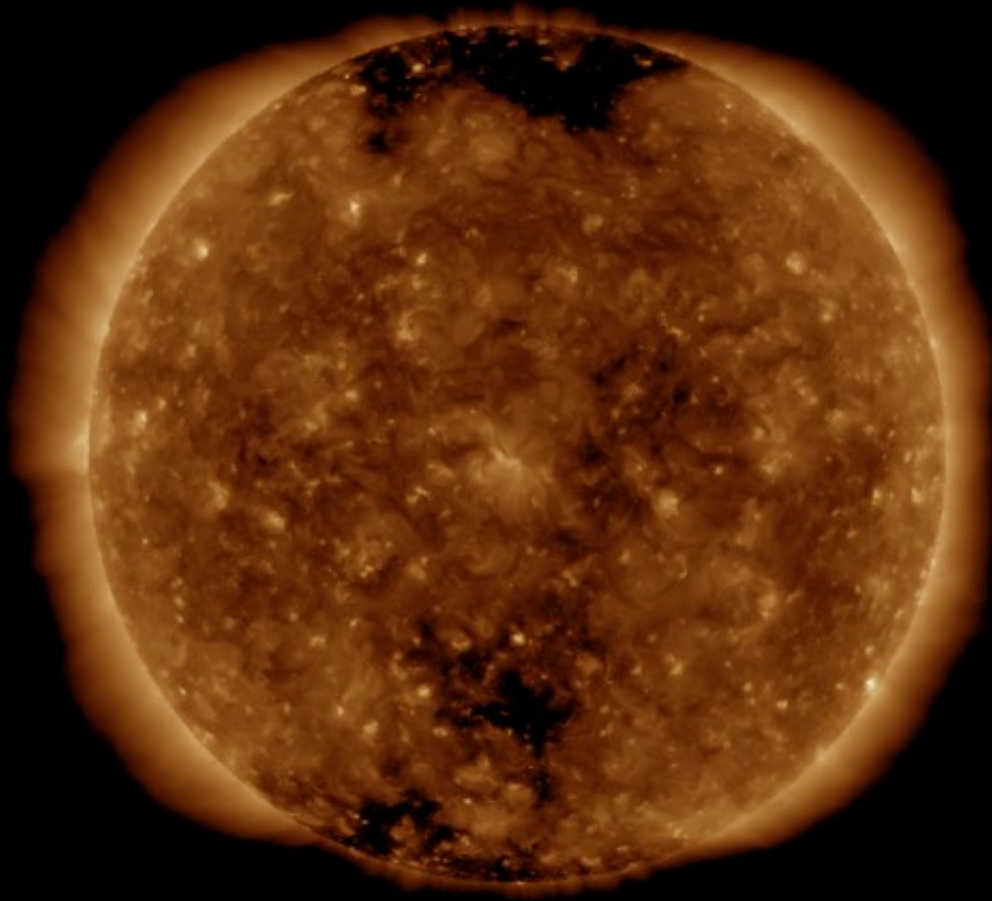


Outlook: Geomagnetic activity

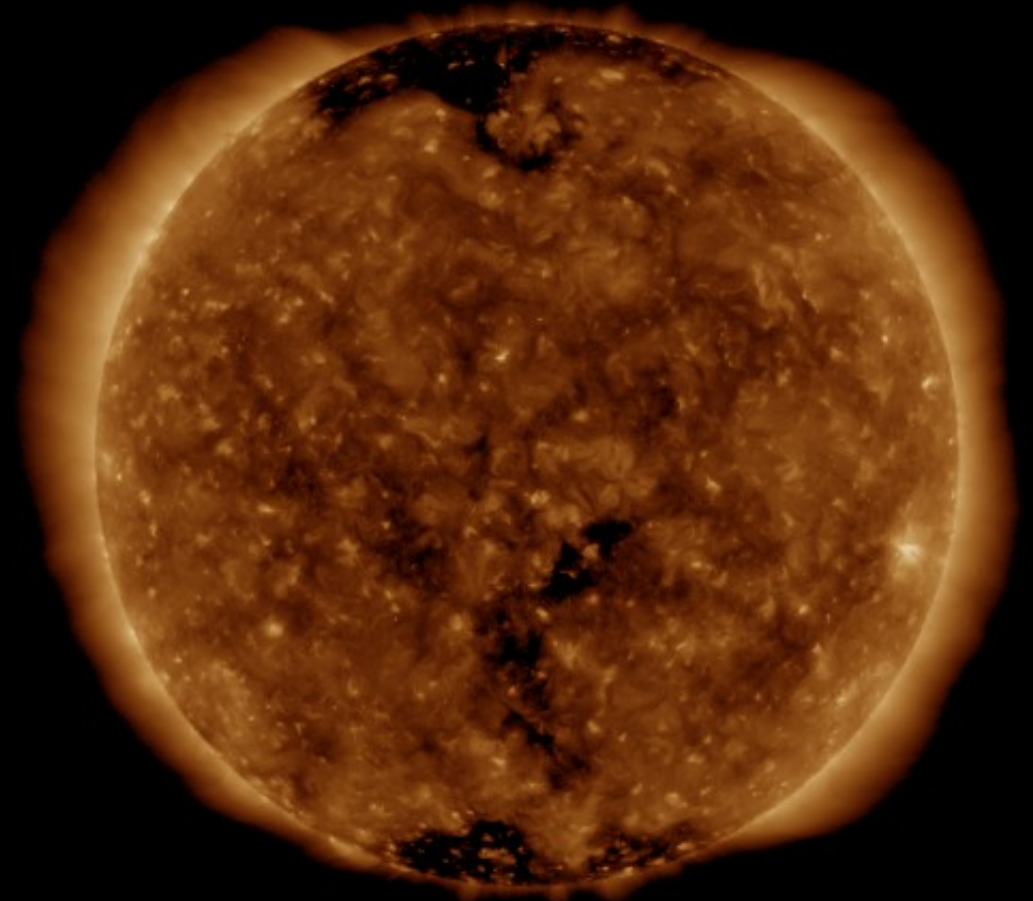


Outlook: Solar wind

SDO/AIA 19.3 nm 2019-09-13



SDO/AIA 19.3 nm 2019-10-11



SDO/AIA 193 2019-09-13 15:40:41 UT

SDO/AIA 193 2019-10-11 07:56:53 UT

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See you at our next briefing!

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