

SIDC Space Weather Briefing

01 December 2019 - 08 December 2019

Jennifer O'Hara
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2019-12-01 12:00 UT to 2019-12-08 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 2019-12-01 12:00 UT to 2019-12-08 12:00 UT

Coronal Holes	Extension to Southern CH & Weak negative polarity coronal hole observed
ICME	None
SW Conditions	Solar wind at background levels
K-indices	max K-index (Dourbes): 2.0 max Kp-index (NOAA): 2

All Quiet Alert: ON all week

Solar Activity

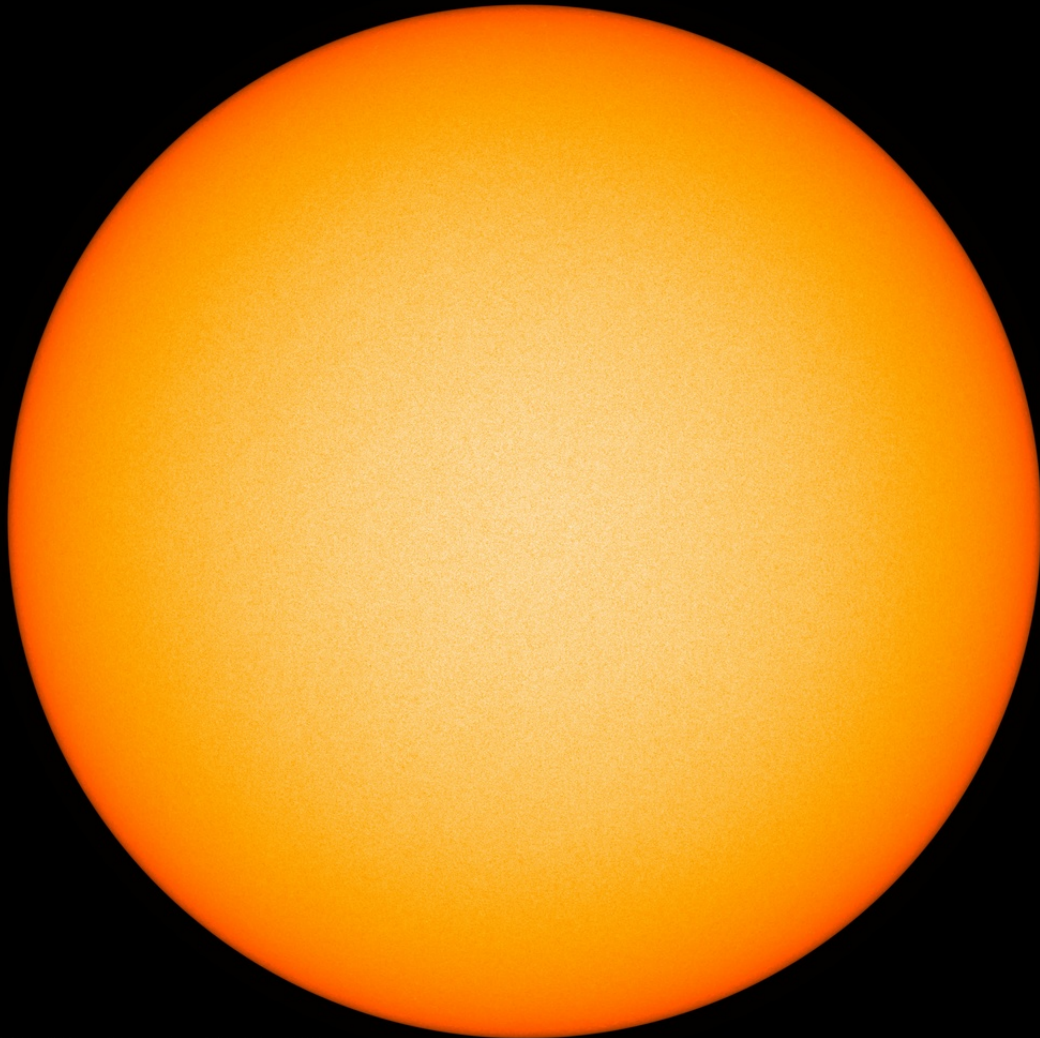


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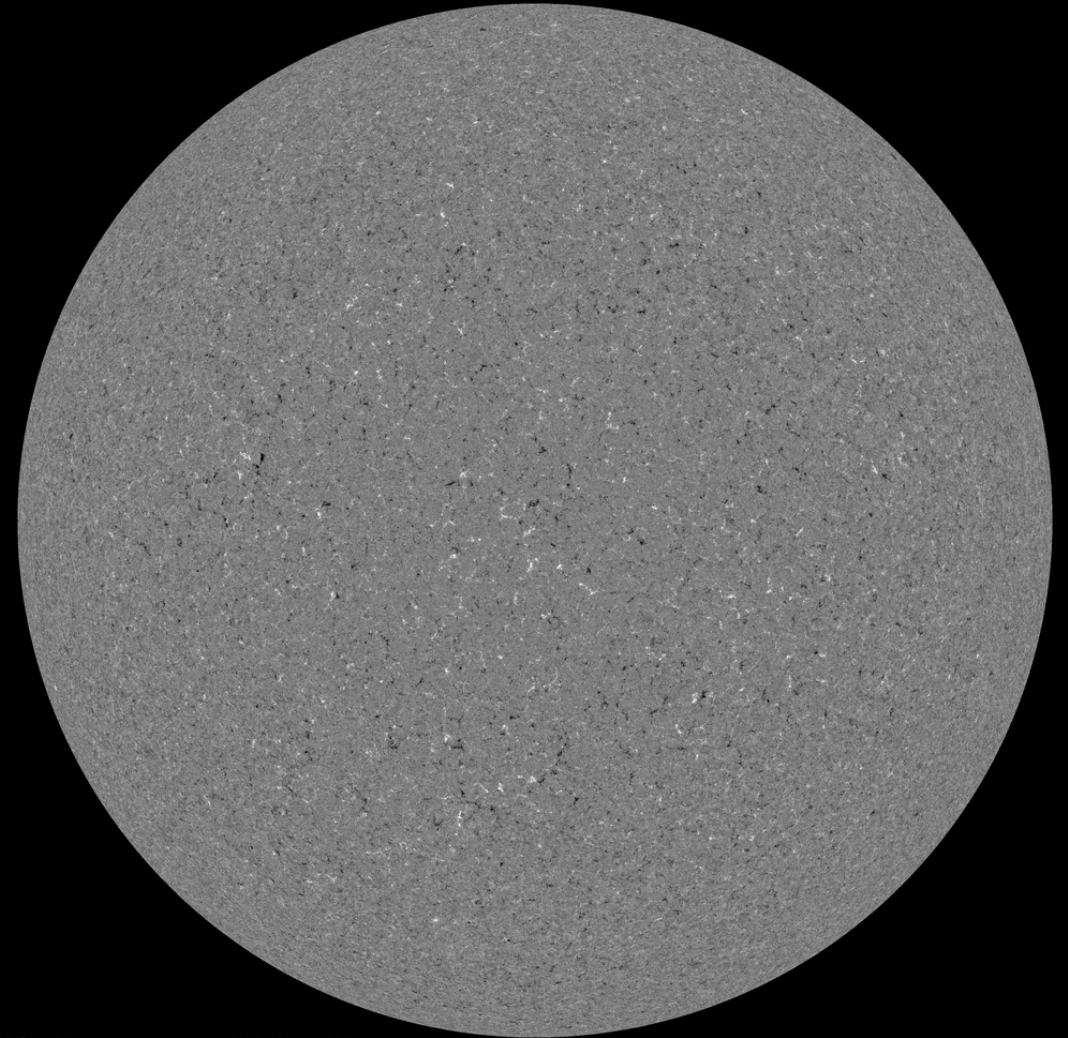
Solar active region - start of the week

SDO/HMI White Light 2019-12-01



SDO/HMI Quick-Look Continuum: 20191201_120000

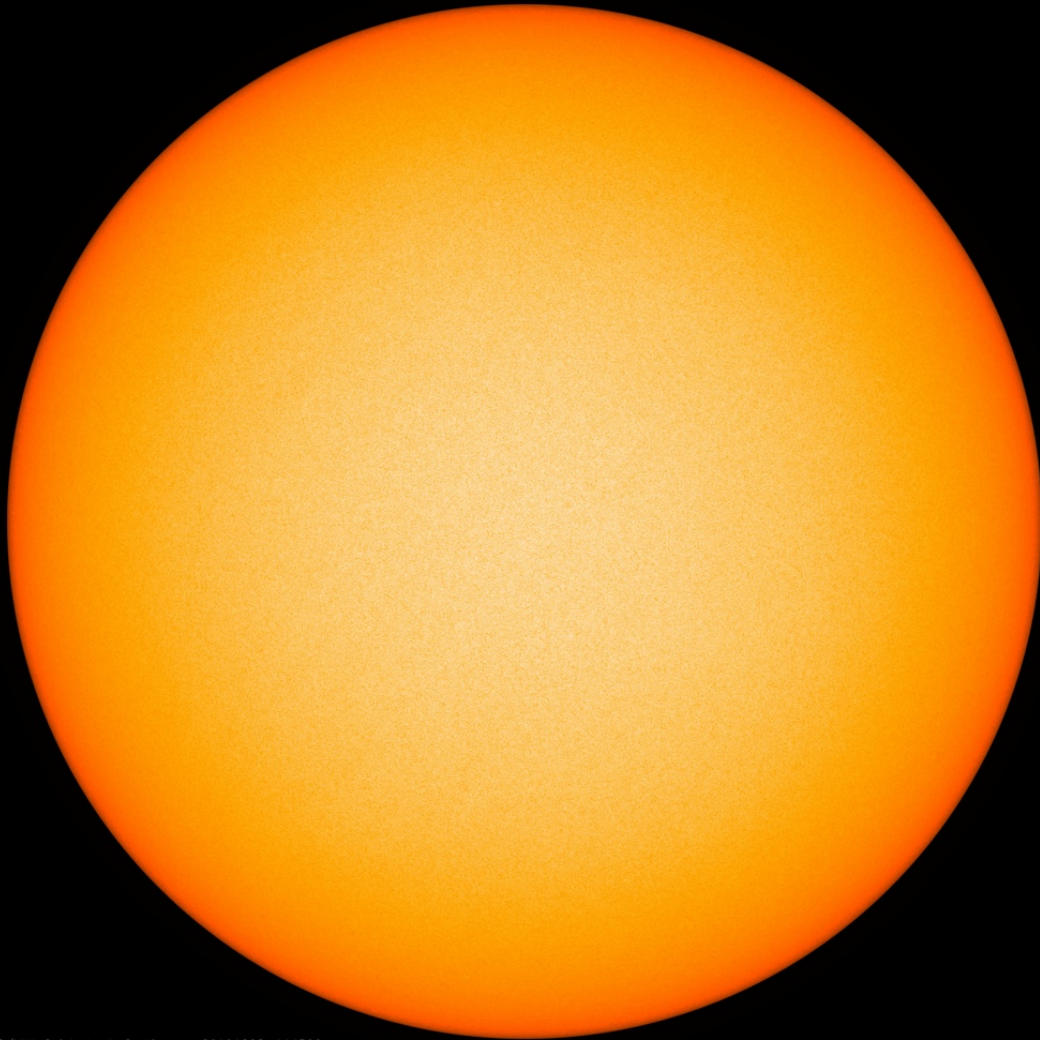
SDO/HMI Magnetogram 2019-12-01



SDO/HMI Quick-Look Magnetogram: 20191201_114500

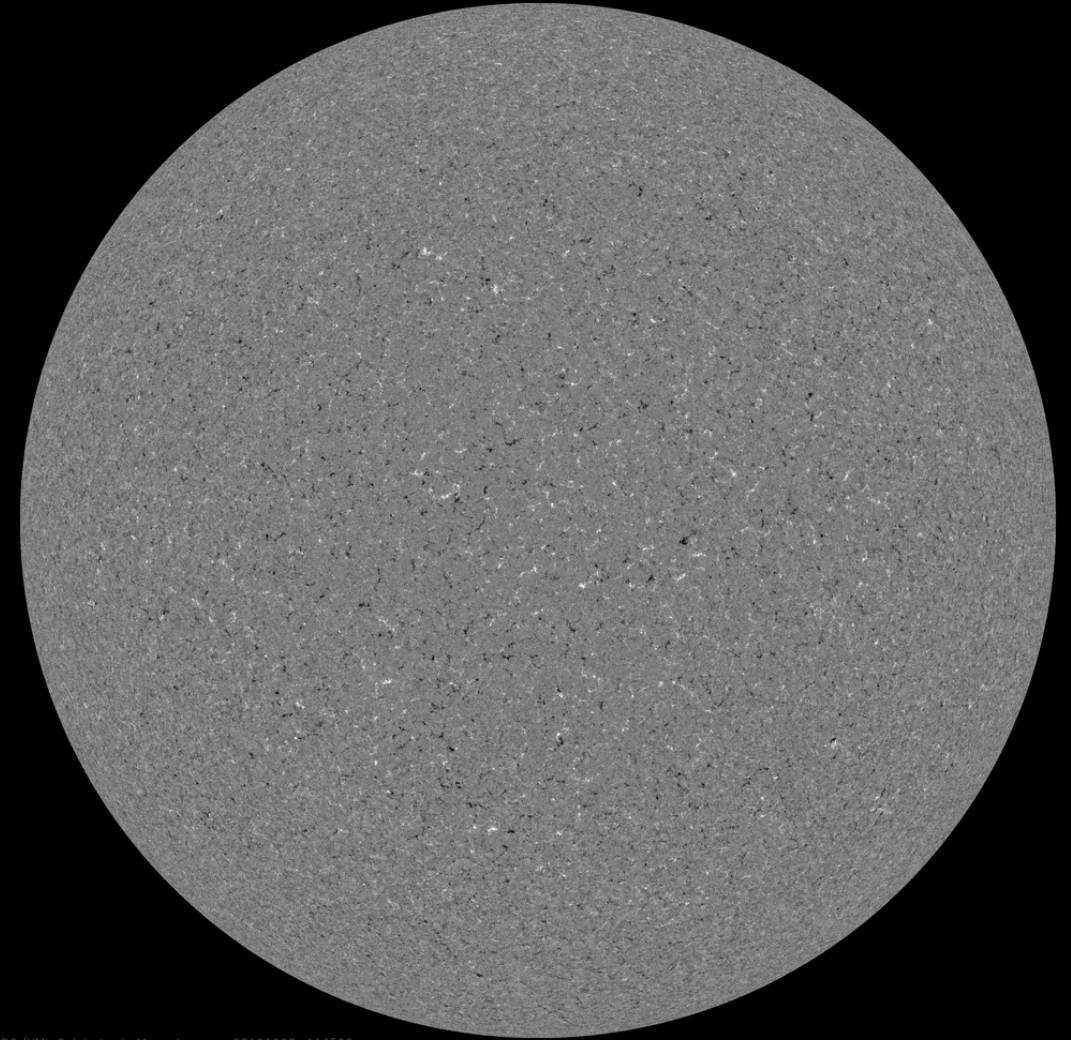
Solar active region - end of the week

SDO/HMI White Light 2019-12-08



SDO/HMI Quick-Look Continuum: 20191208_114500

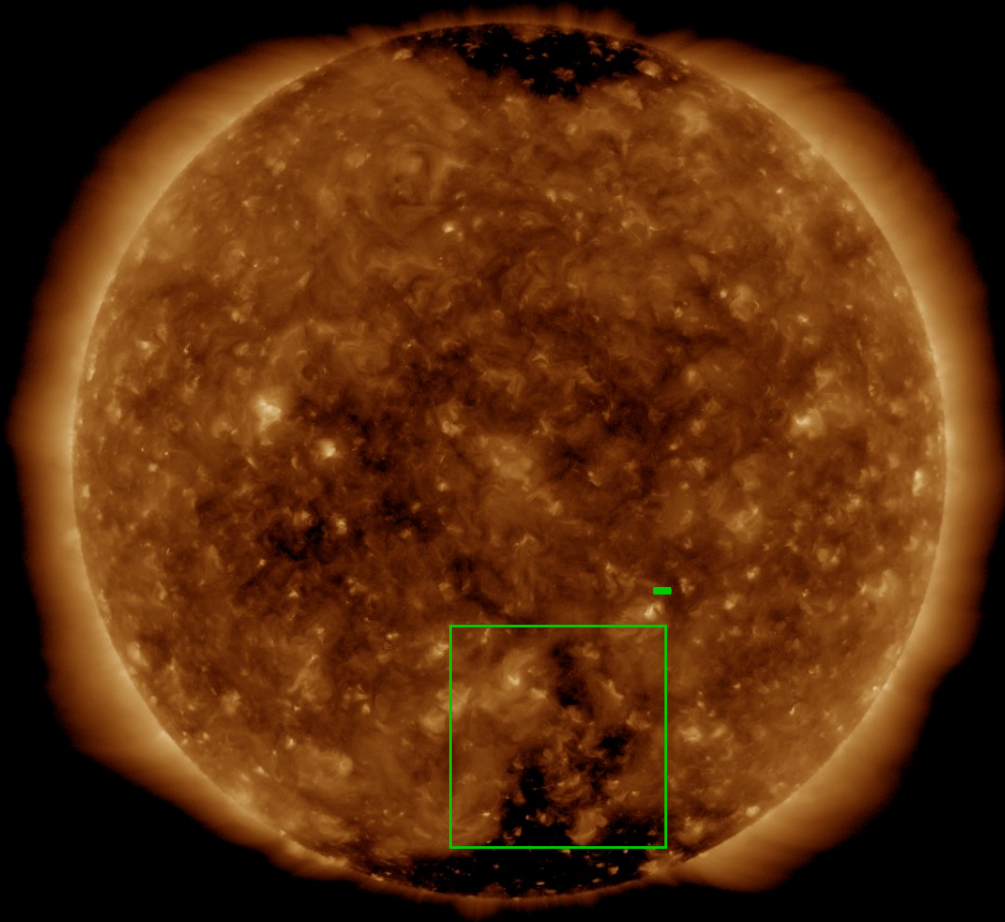
SDO/HMI Magnetogram 2019-12-08



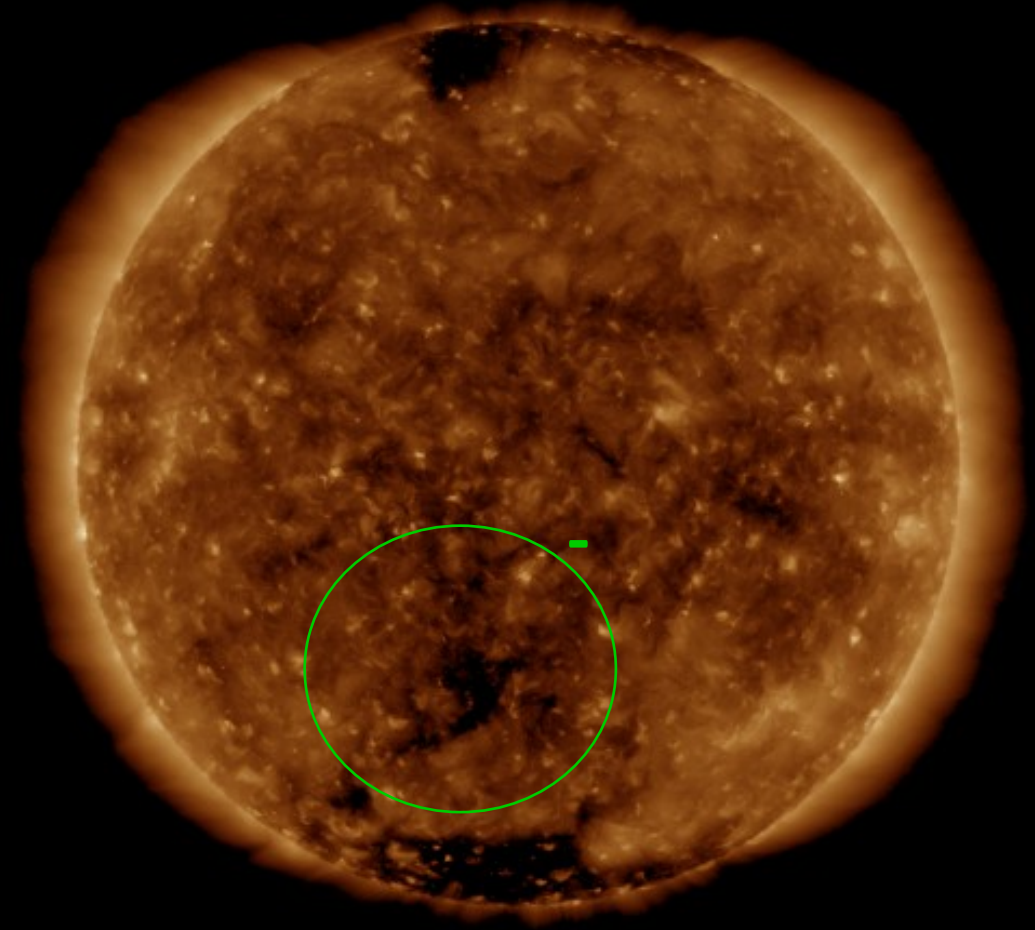
SDO/HMI Quick-Look Magnetogram: 20191208_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-12-01



SDO/AIA 19.3 nm 2019-12-05



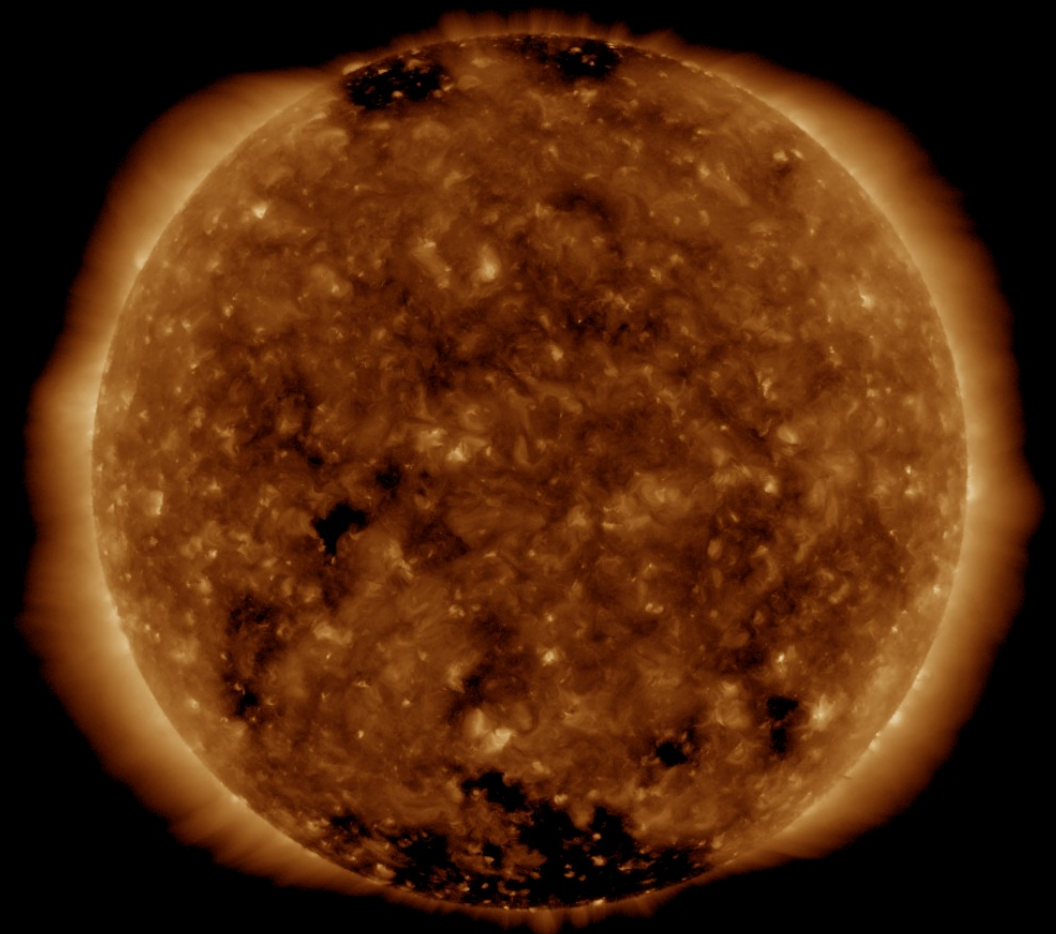
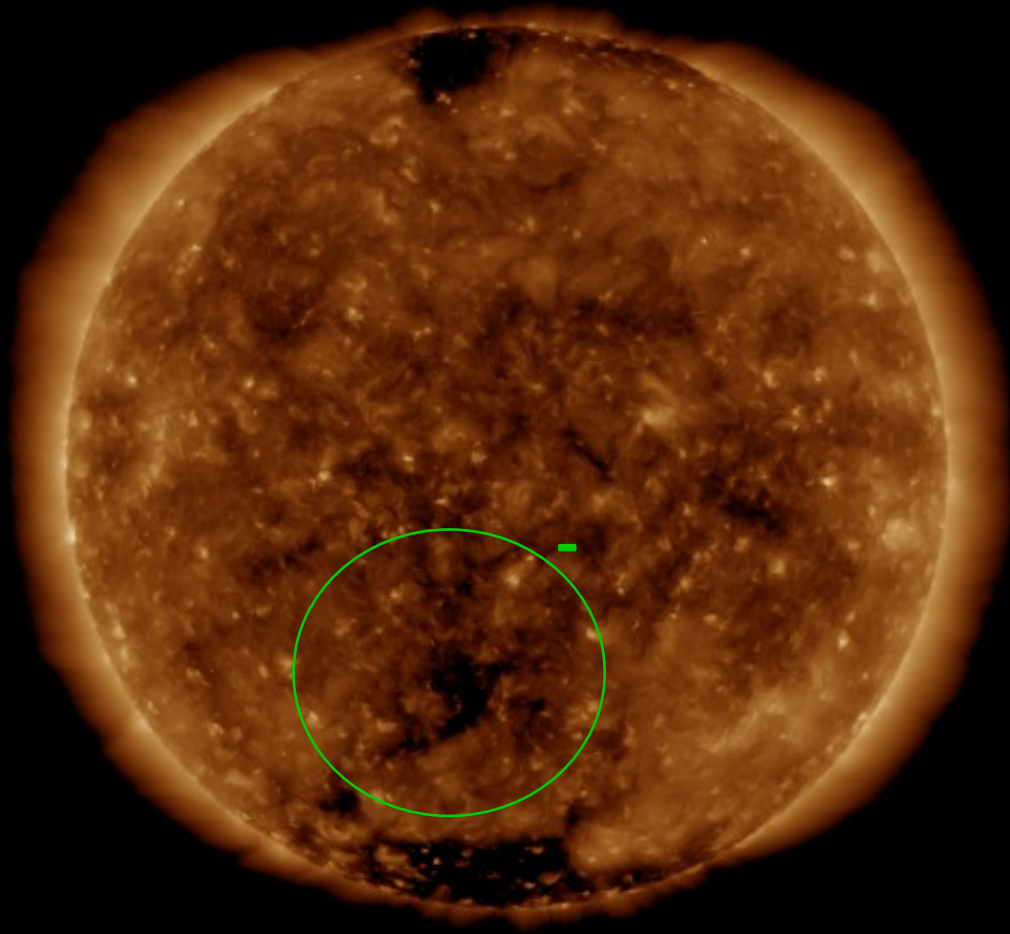
SDO/AIA 193 2019-12-01 12:10:53 UT

SDO/AIA 193 2019-12-05 10:55:41 UT

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-12-05

SDO/AIA 19.3 nm 2019-12-08



SDO/AIA 193 2019-12-05 10:55:41 UT

SDO/AIA 193 2019-12-08 12:10:53 UT

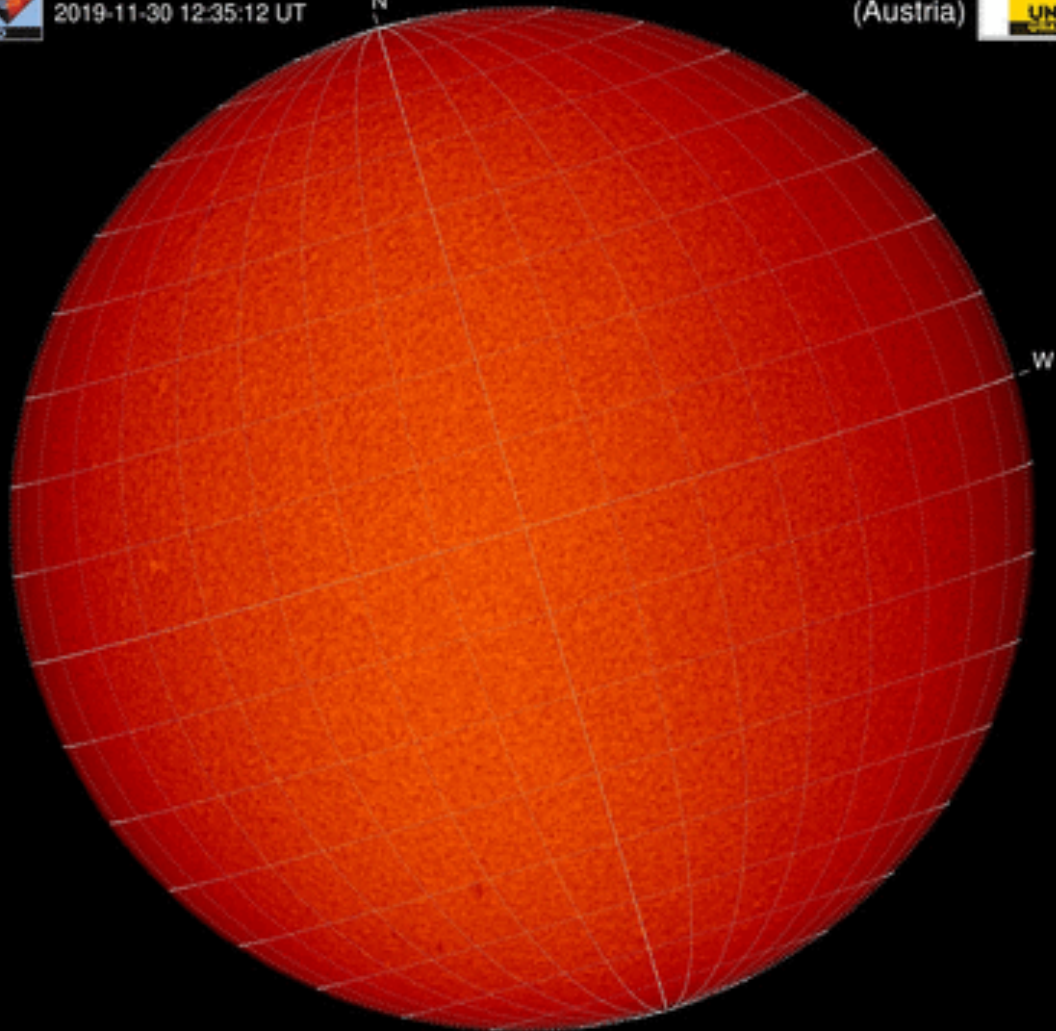
Filament & Filament eruption

H-alpha 2019-12-01



Kanzelhöhe Observatory
2019-11-30 12:35:12 UT

University of Graz
(Austria)

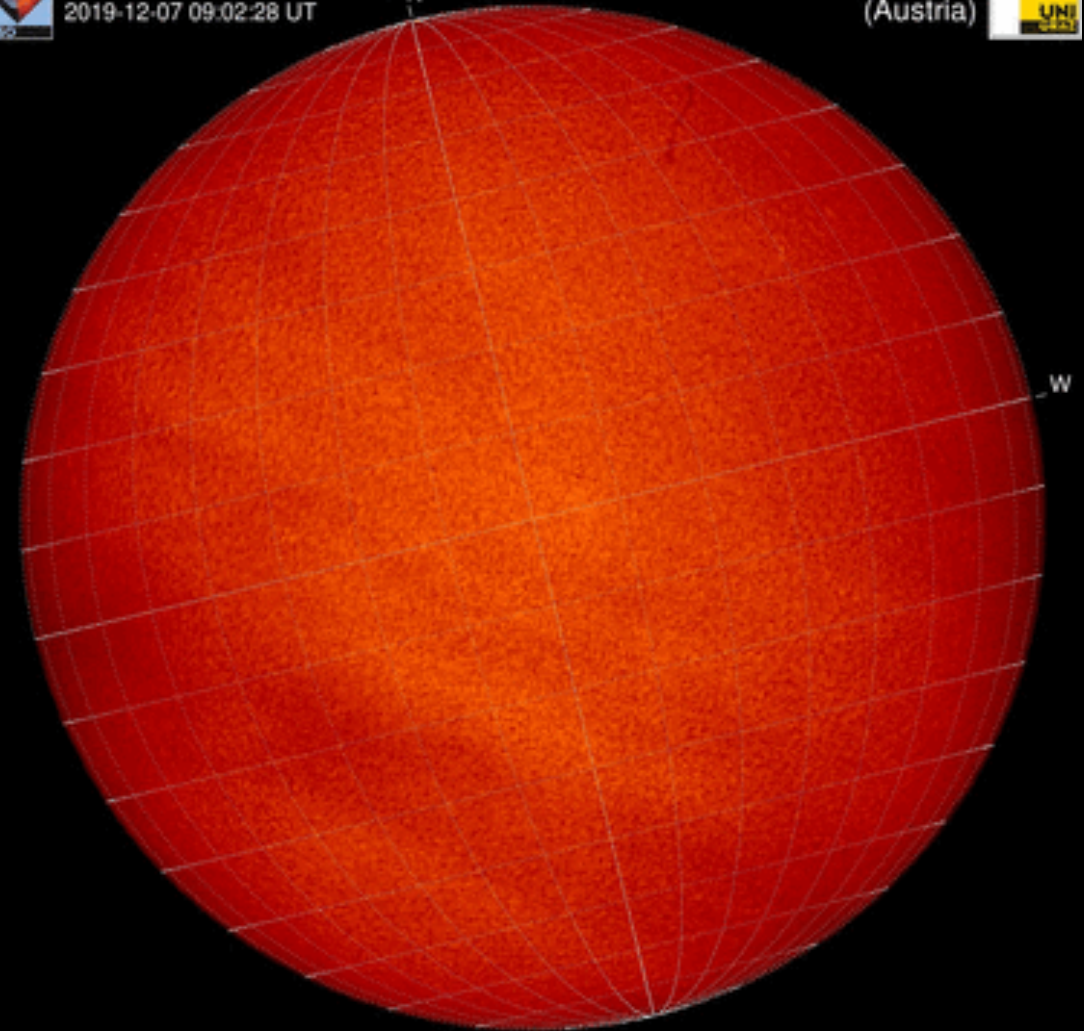


H-alpha 2019-12-07

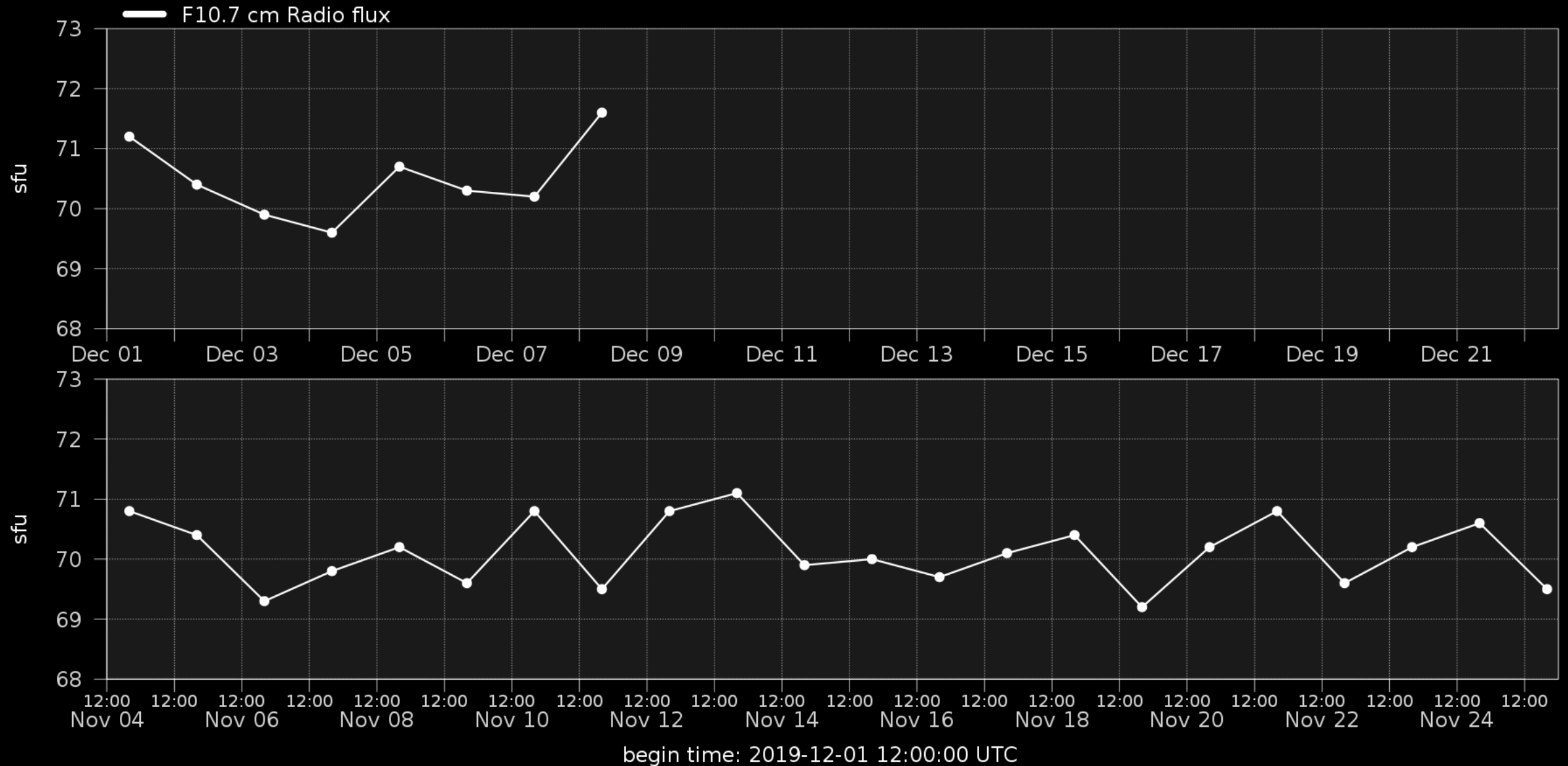


Kanzelhöhe Observatory
2019-12-07 09:02:28 UT

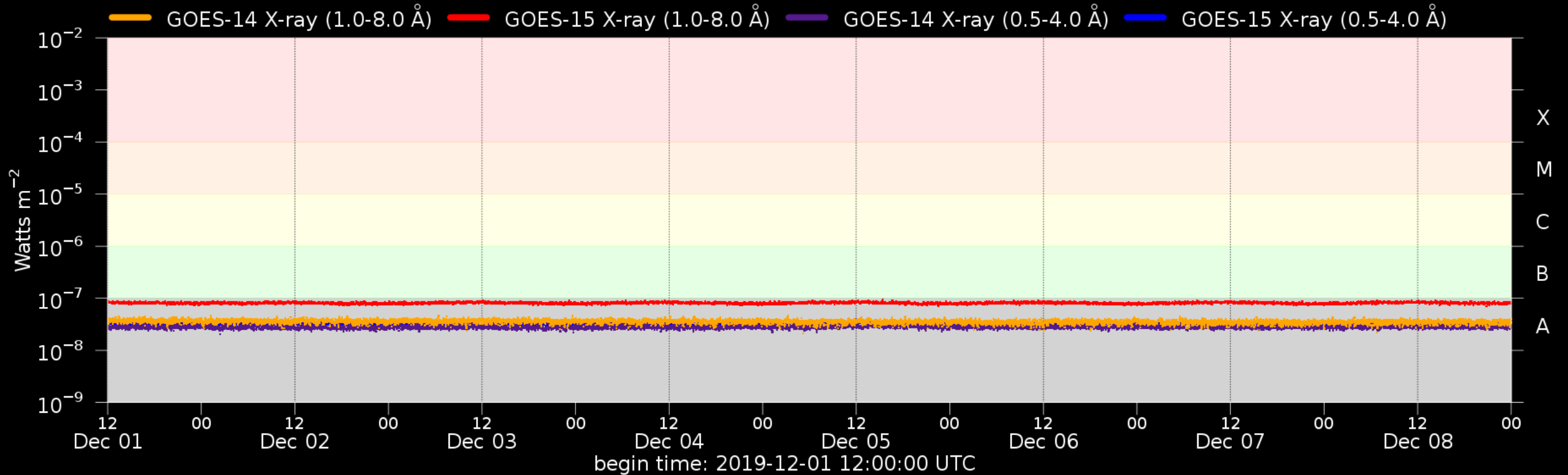
University of Graz
(Austria)



Solar F10.7cm radio flux



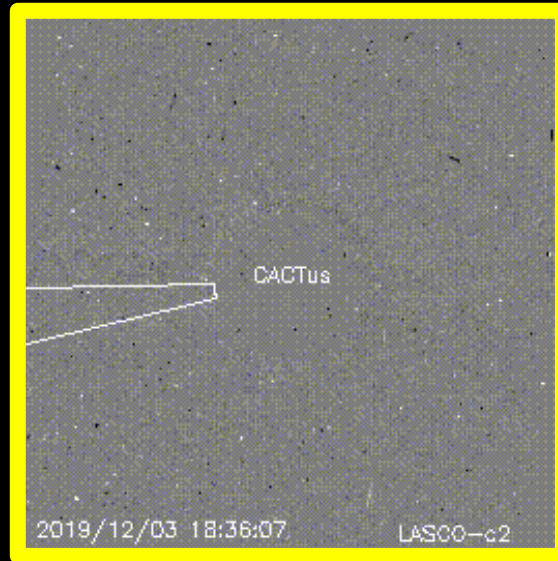
Flaring activity



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

Issue date	2019-12-01	2019-12-02	2019-12-03	2019-12-04	2019-12-05	2019-12-06	2019-12-07	2019-12-08
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

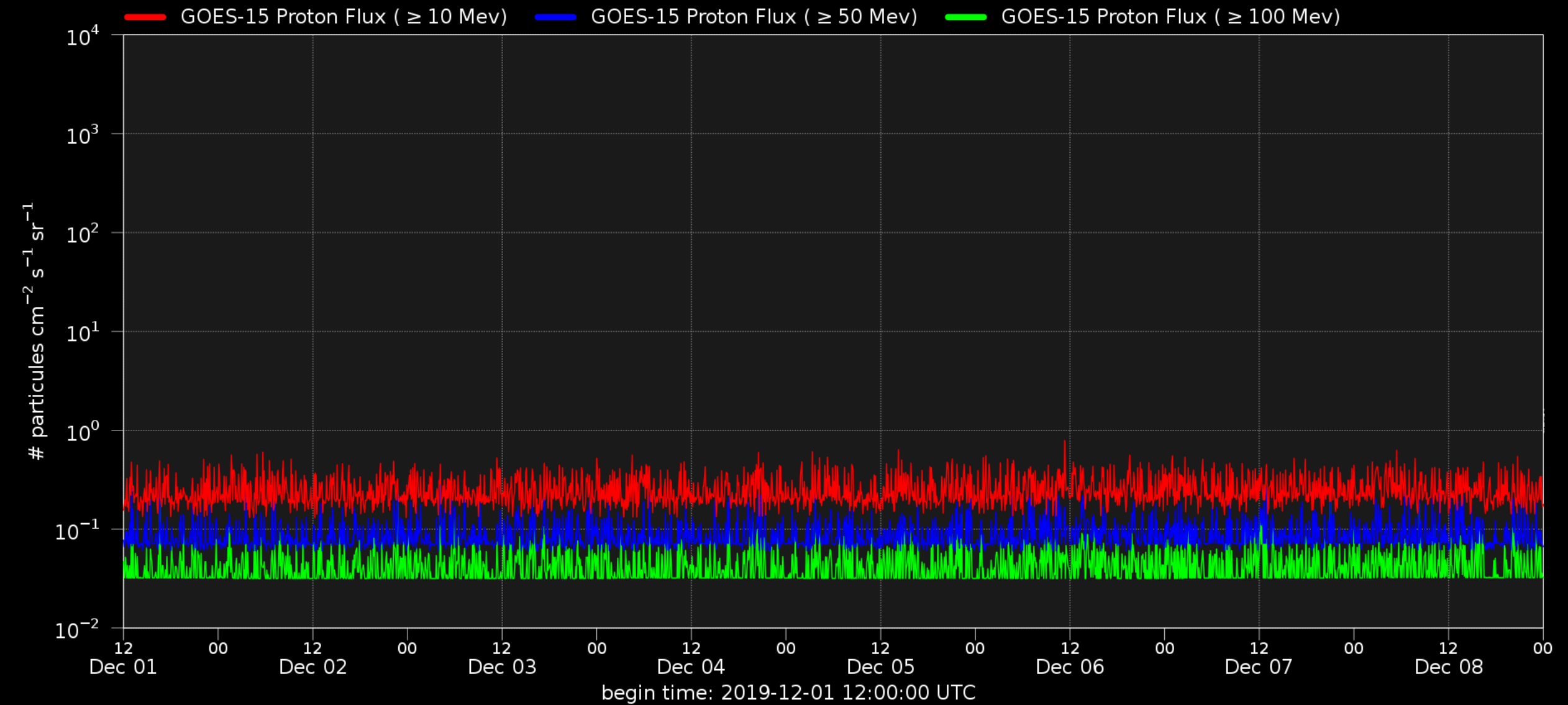
Coronal Mass Ejection



One small Non-Earth directed CME detected by CACTUS

Time	Date
23:12	12/07
19:48	12/07
17:00	12/07
14:00	12/07
10:54	12/07
07:48	12/07
04:48	12/07
01:48	12/07
22:12	12/06
19:24	12/06
16:36	12/06
12:36	12/06
10:00	12/06
06:24	12/06
02:48	12/06
22:36	12/05
19:36	12/05
16:48	12/05
13:36	12/05
10:36	12/05
07:48	12/05
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20:24	12/04
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15:16	12/04
11:48	12/04
08:48	12/04
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04:00	12/04
00:36	12/04
21:24	12/03
18:24	12/03
15:54	12/03
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09:24	12/03
06:12	12/03
03:36	12/03
00:12	12/03
20:24	12/02
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Solar proton flux

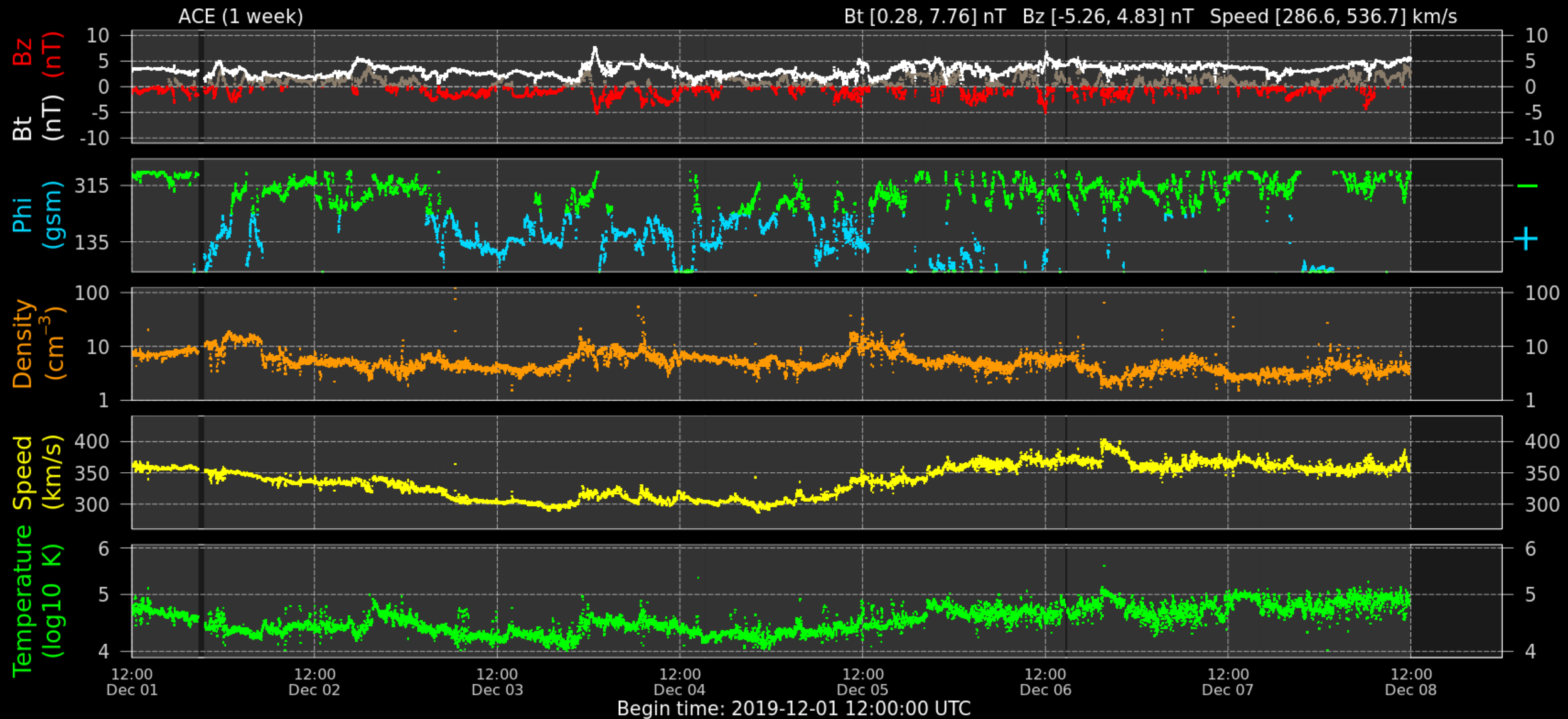


Solar Wind and Geomagnetic Activity

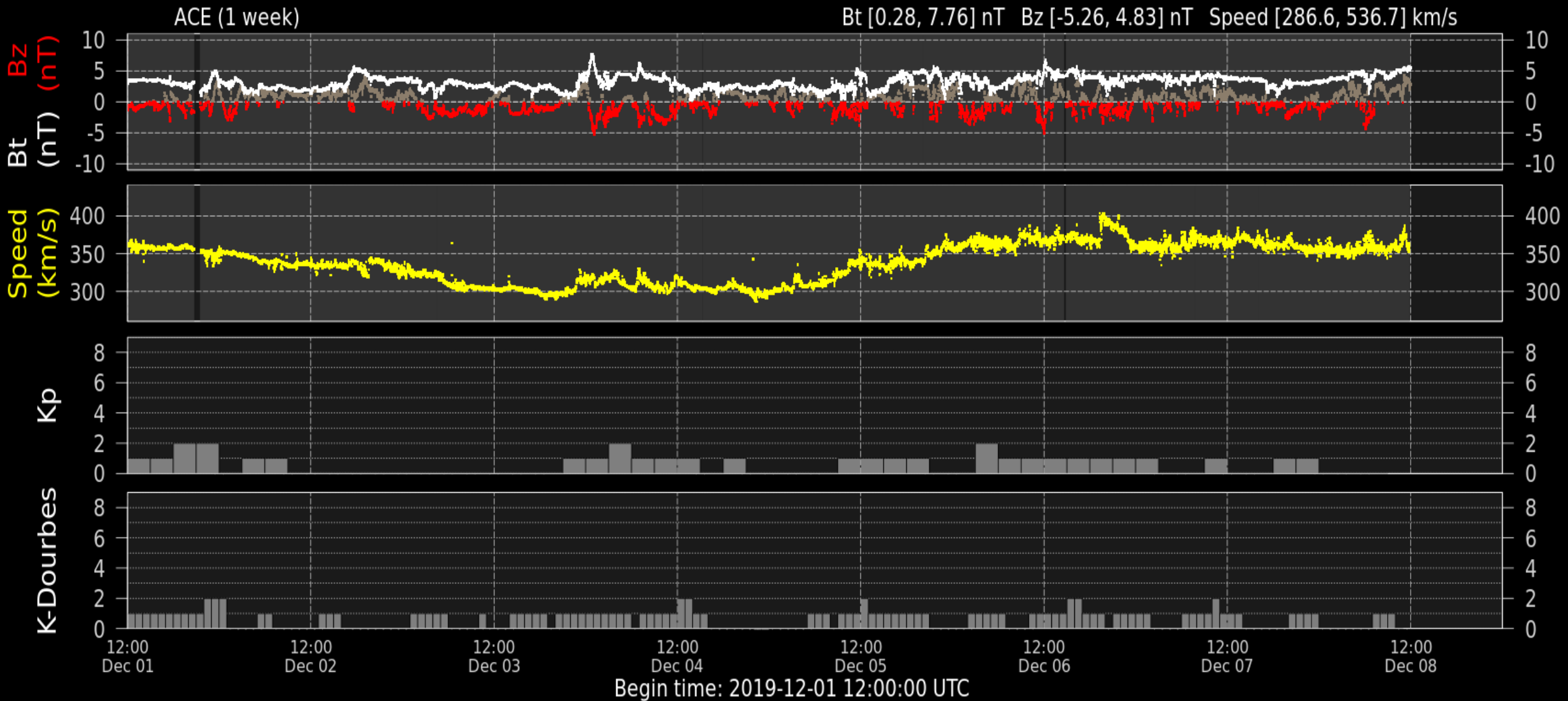


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Solar wind parameters (ACE data)



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



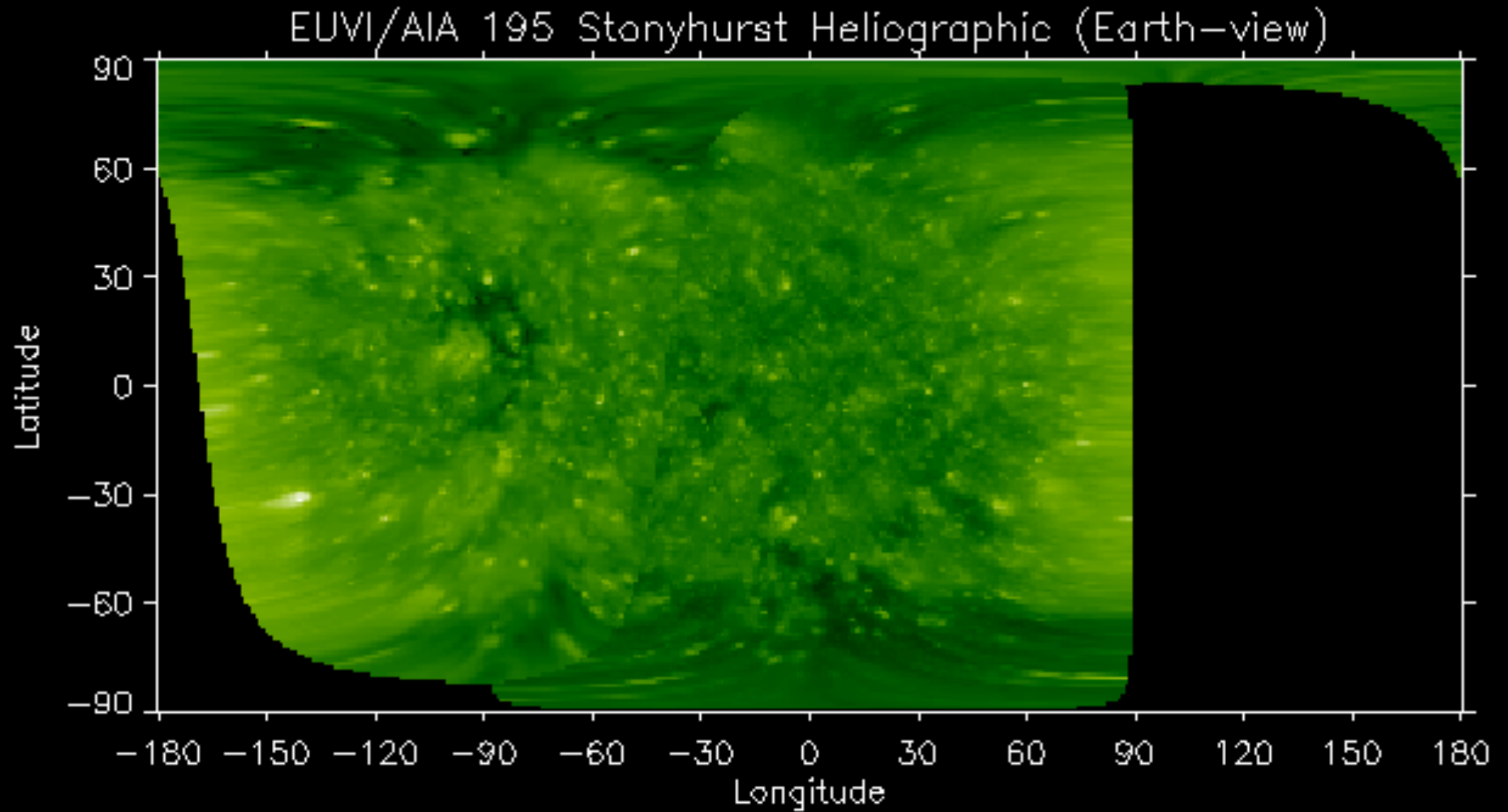
Outlook



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Outlook: Solar activity



Outlook: Solar wind



SIDC Space Weather Briefing

See you at our next briefing!

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