

SIDC Space Weather Briefing

17 May 2020 - 24 May 2020

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& the SIDC forecaster team



Royal Observatory
of Belgium

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Summary Report

Solar activity from 2020-05-17 12:00 UT to 2020-05-24 12:00 UT

Active regions	Two small ARs, spotless
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	No eruptions
CMEs	Non-Earth directed
Proton Events	None

Solar wind and geomagnetic conditions from 2020-05-17 12:00 UT to 2020-05-24 12:00 UT

Coronal Holes	Some small Coronal Holes - Sun patchy
ICME	None
SW Conditions	Mostly in the slow regime, with some enhancements
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 2

All Quiet Alert: ON

Solar Activity

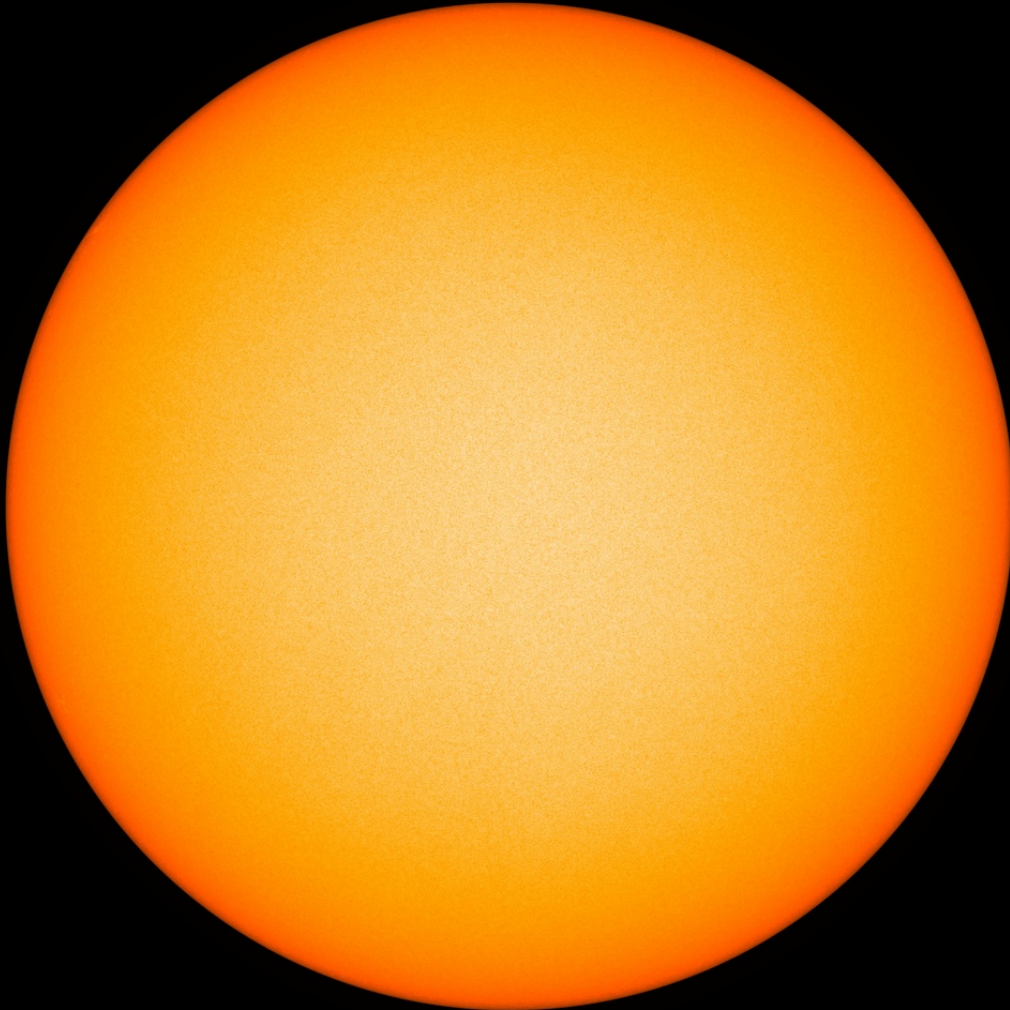


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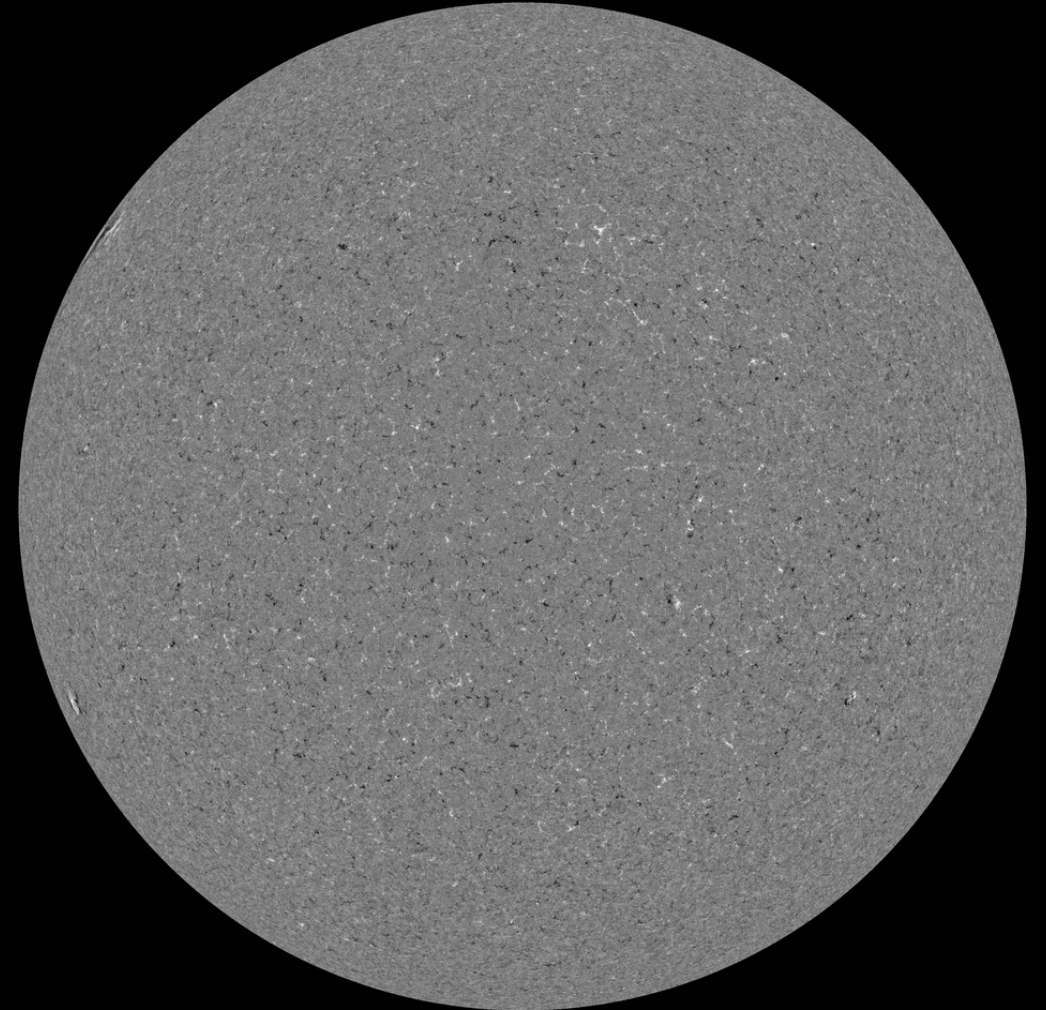
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Solar active region - start of the week

SDO/HMI White Light 2020-05-17

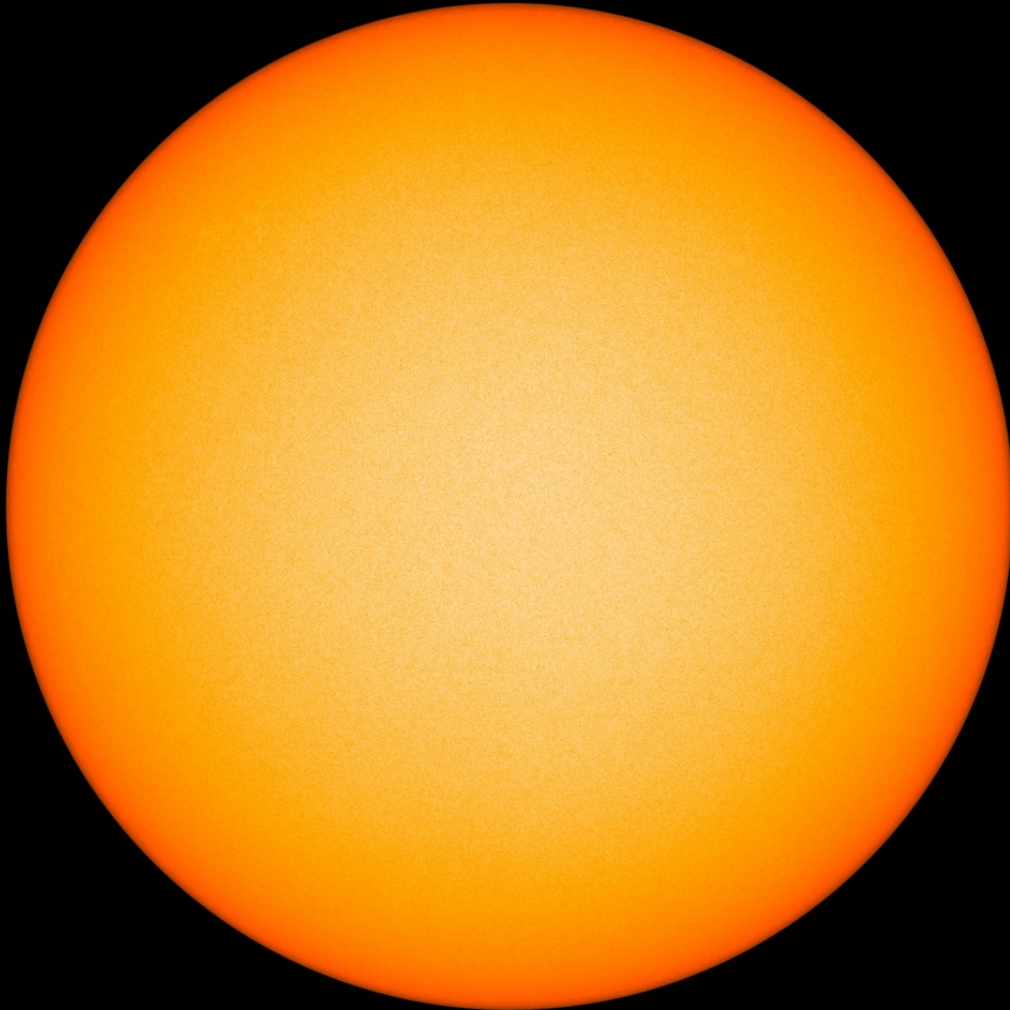


SDO/HMI Magnetogram 2020-05-17

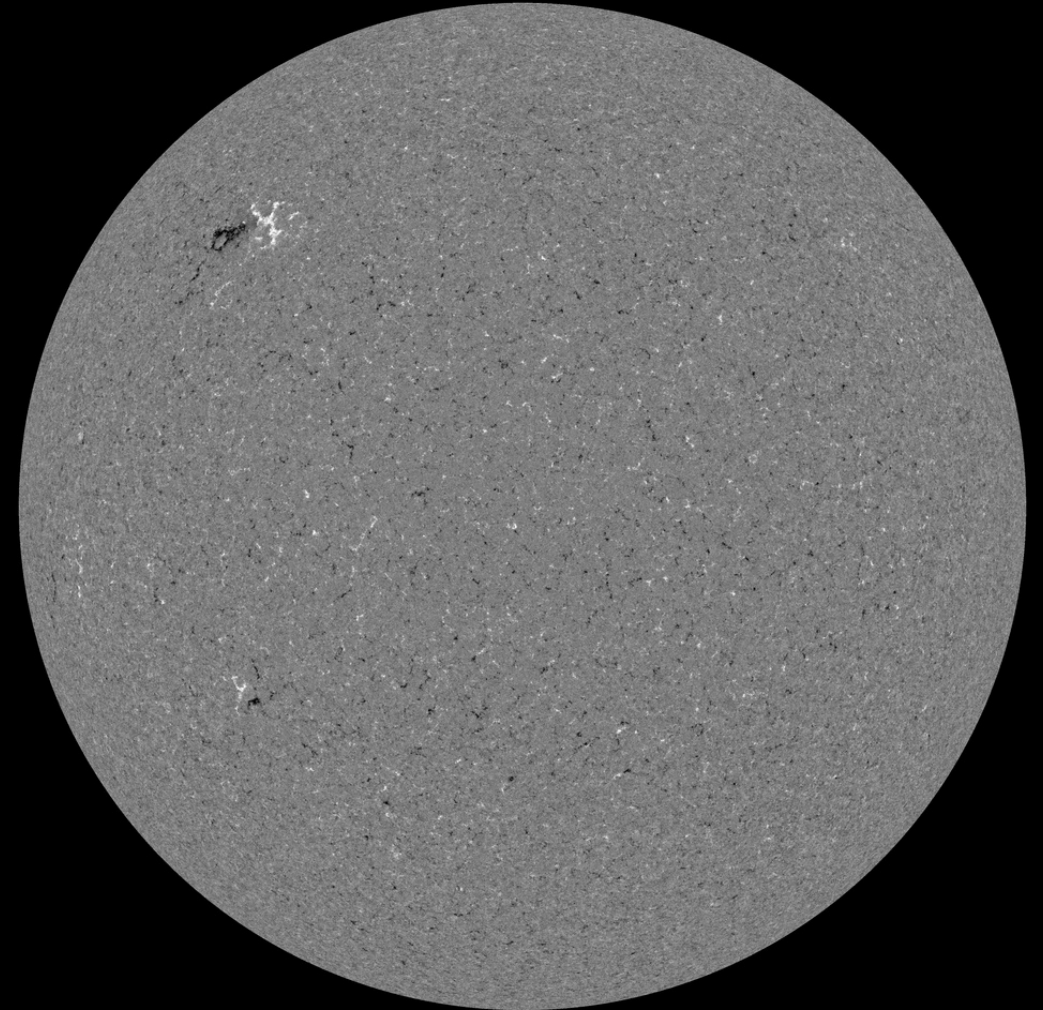


Solar active region - middle of the week

SDO/HMI White Light 2020-05-20

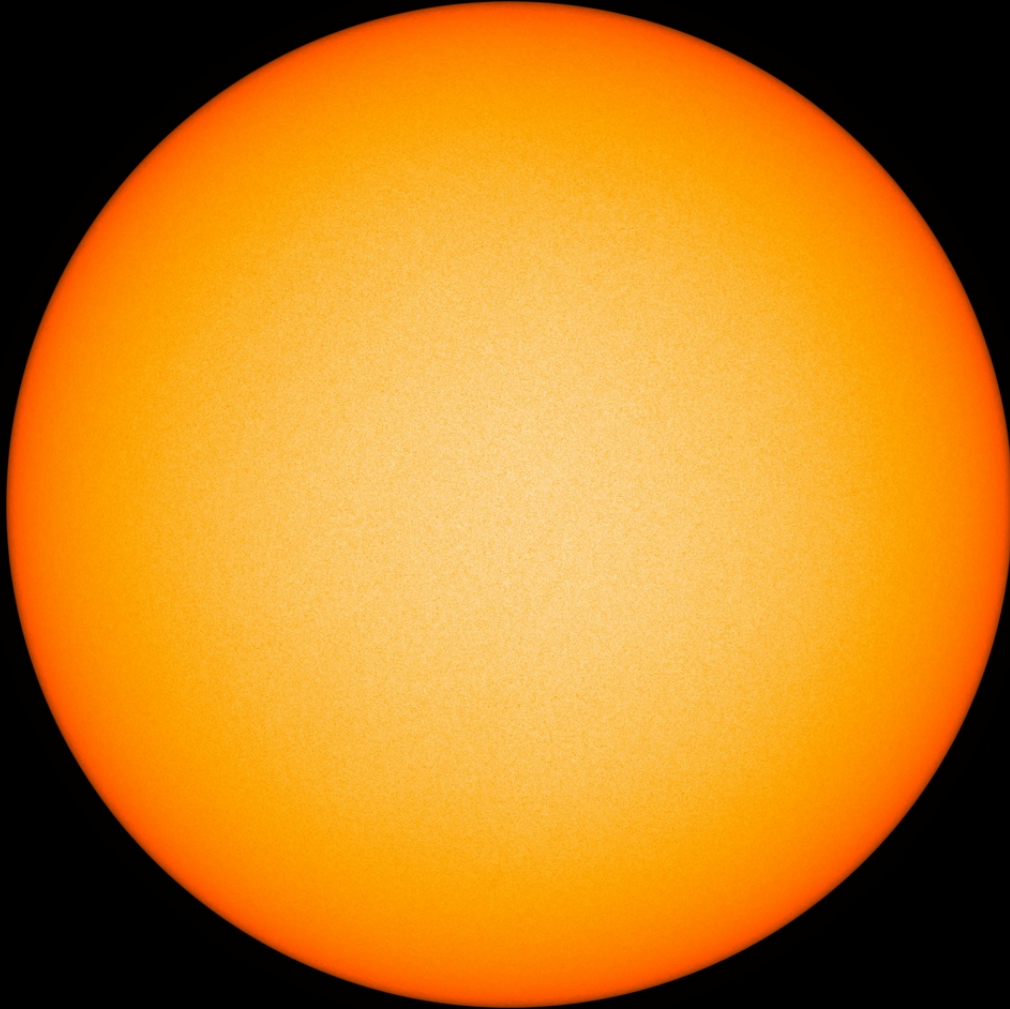


SDO/HMI Magnetogram 2020-05-20

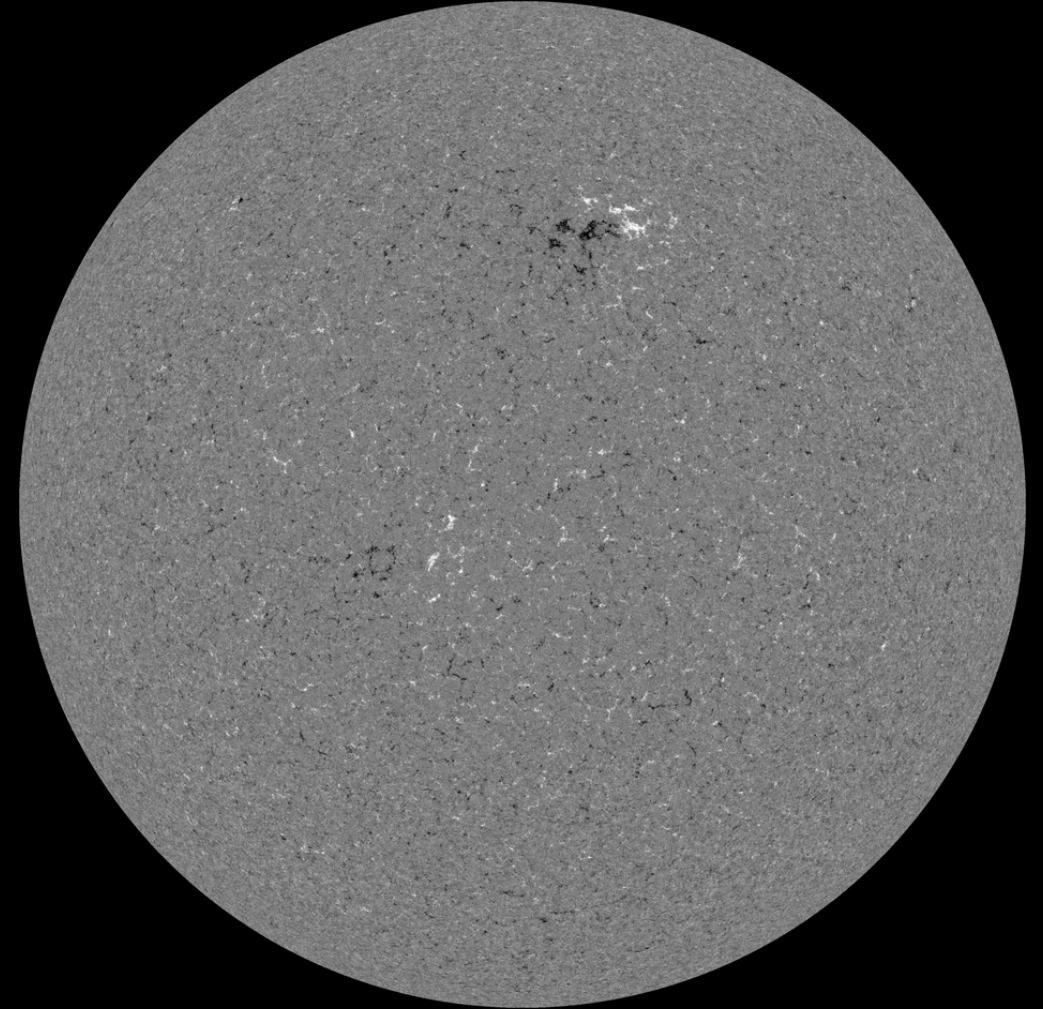


Solar active region - end of the week

SDO/HMI White Light 2020-05-24

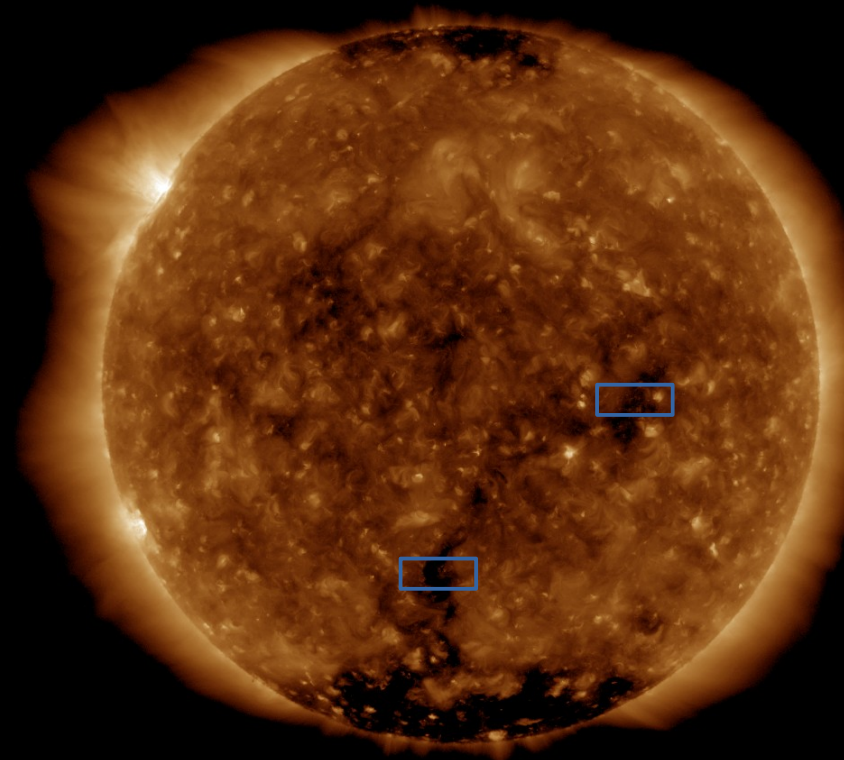


SDO/HMI Magnetogram 2020-05-24



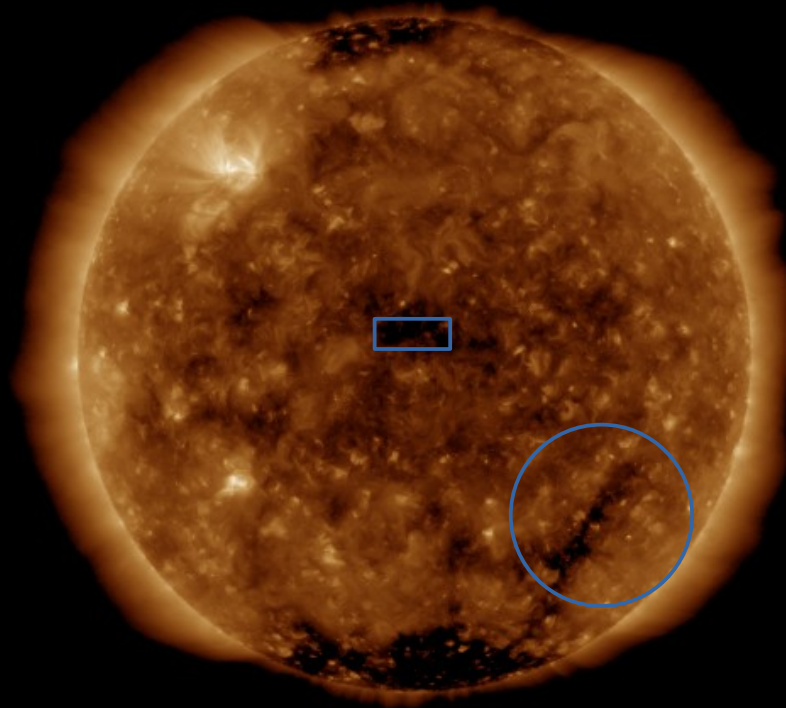
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-05-17



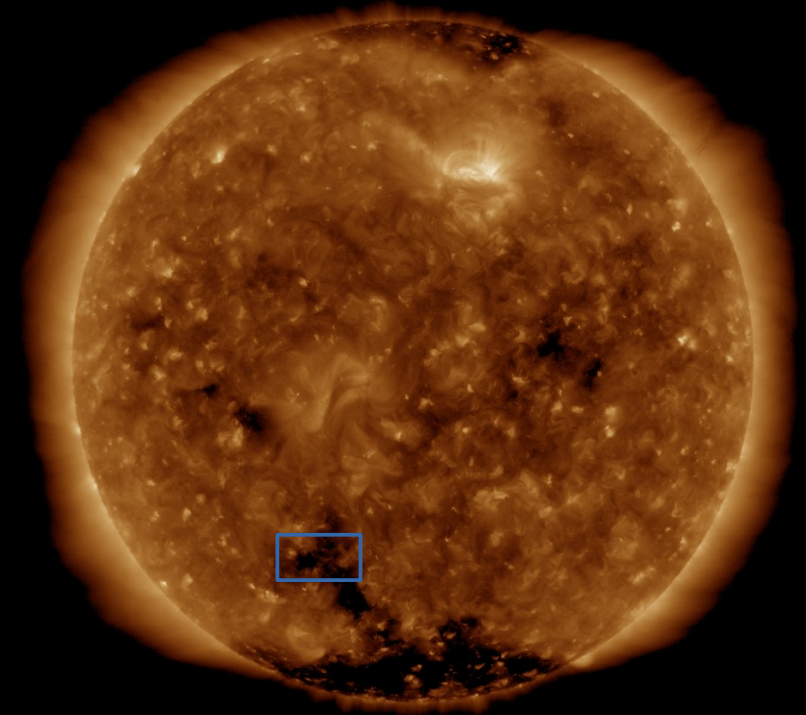
SDO/AIA 193 2020-05-17 12:10:17 UT

SDO/AIA 19.3 nm 2020-05-20



SDO/AIA 193 2020-05-20 14:55:41 UT

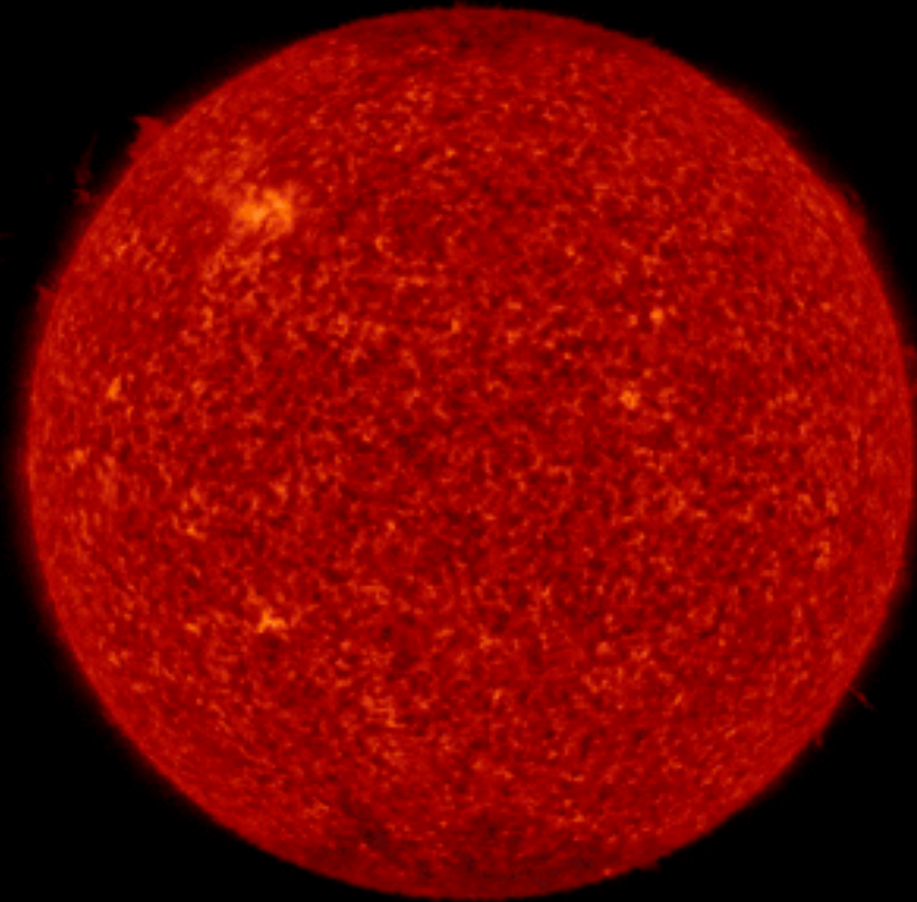
SDO/AIA 19.3 nm 2020-05-24



SDO/AIA 193 2020-05-24 12:10:53 UT

Solar active region & Filament

SDO/AIA 30.4 nm



SDO/AIA 304 2020-05-21 00:13:18 UT

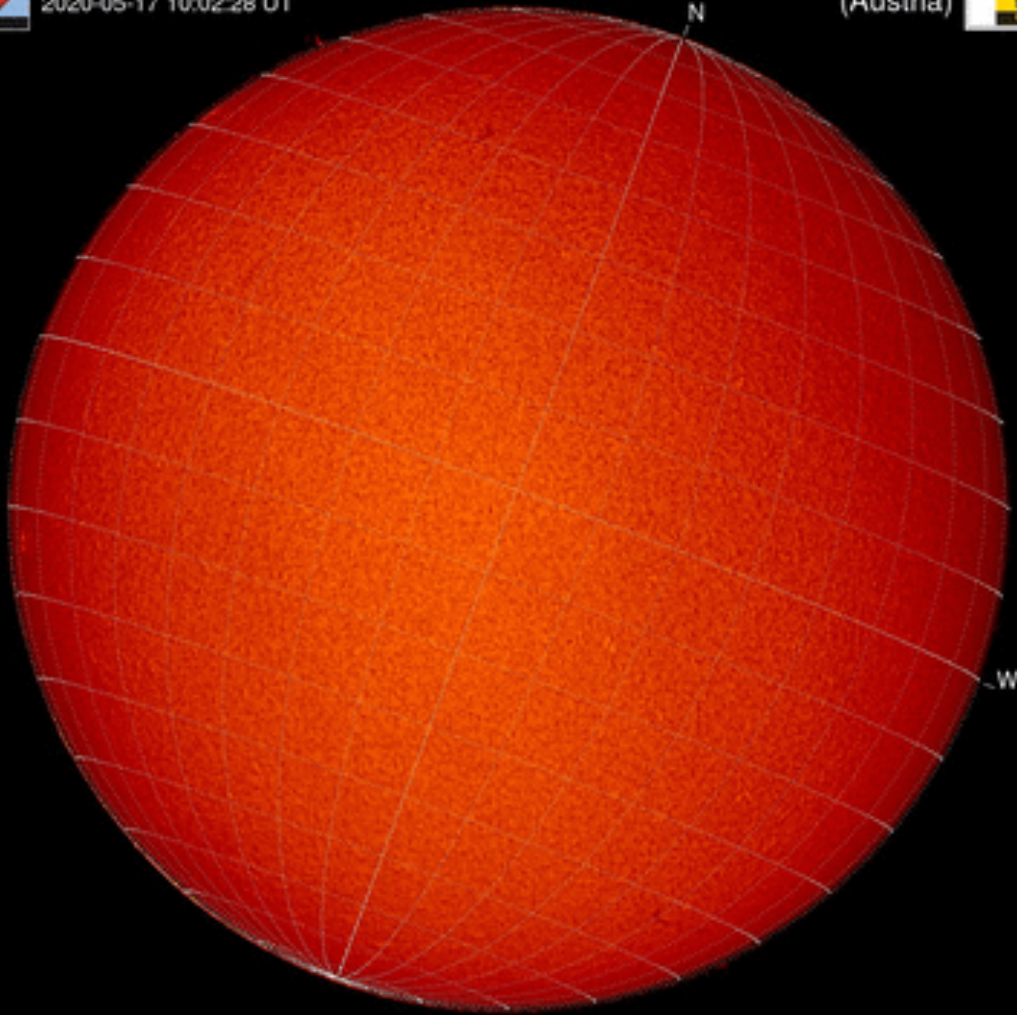
Filament & Filament eruption

H-alpha 2020-05-17



Kanzelhöhe Observatory
2020-05-17 10:02:28 UT

University of Graz
(Austria)

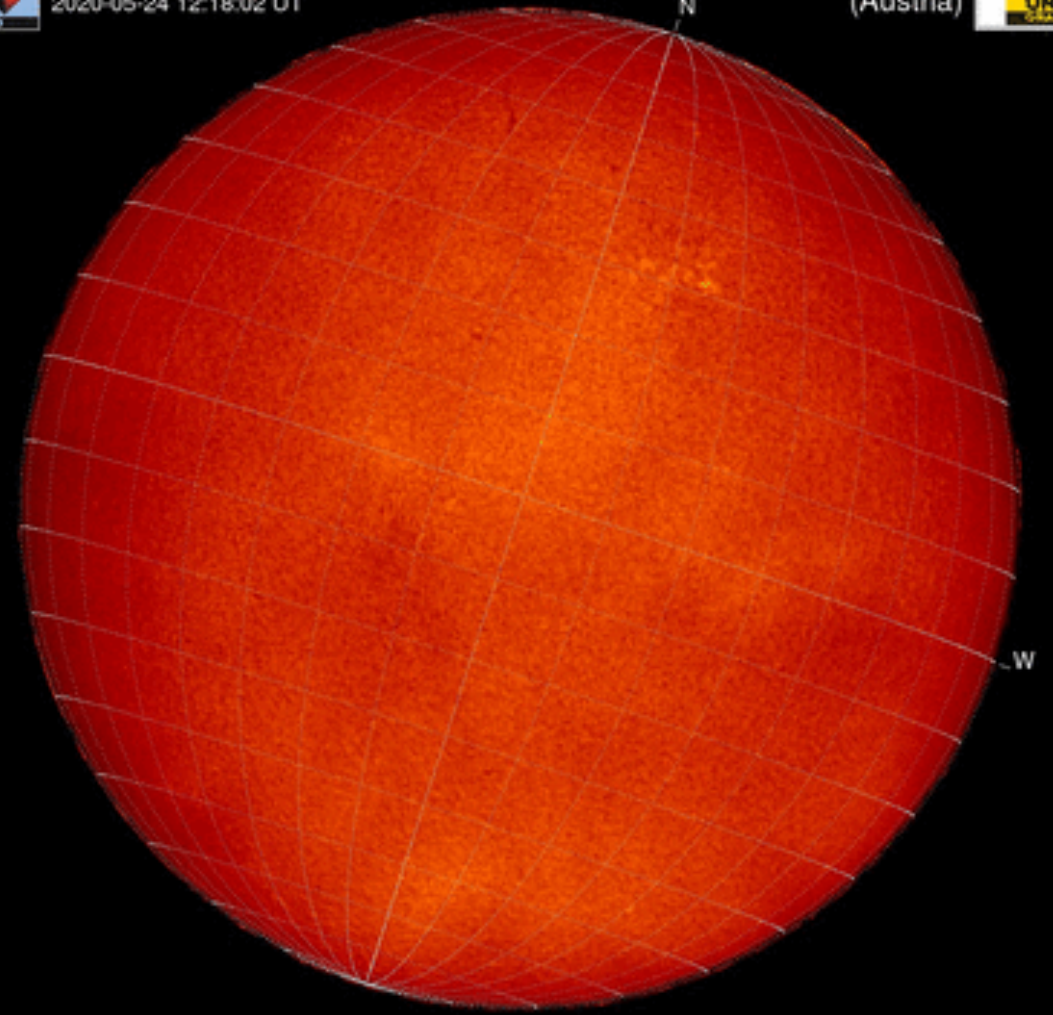


H-alpha 2020-05-24

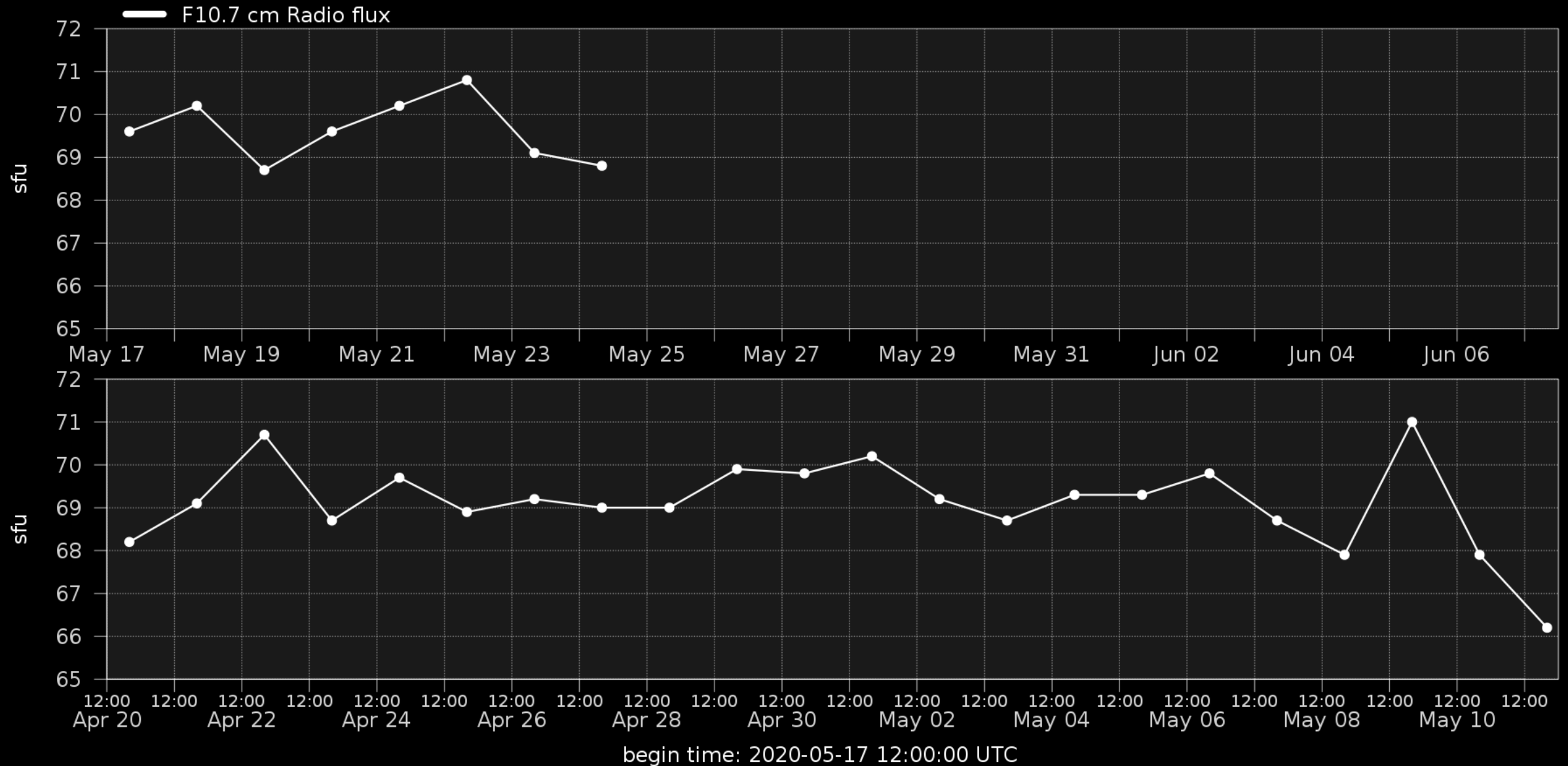


Kanzelhöhe Observatory
2020-05-24 12:18:02 UT

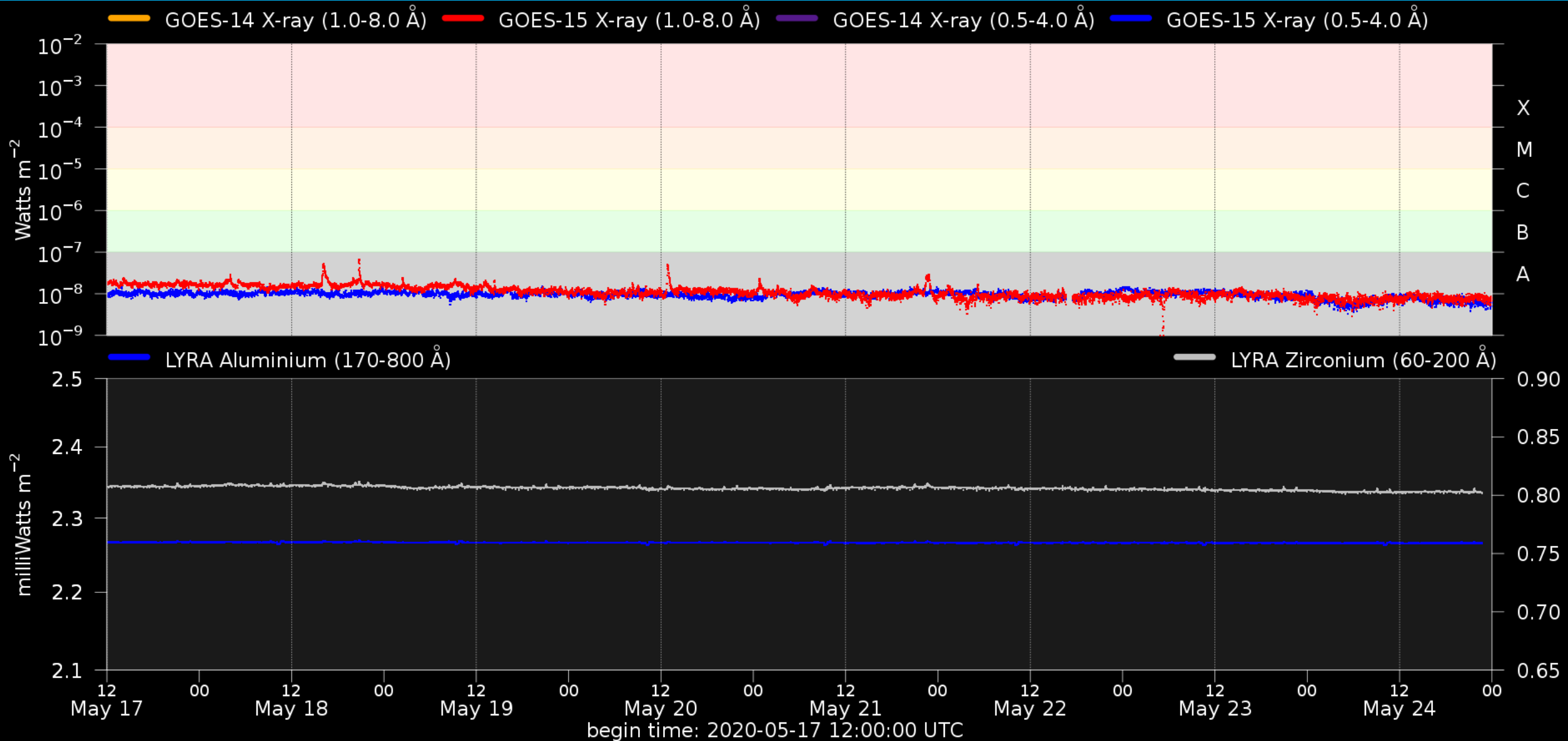
University of Graz
(Austria)



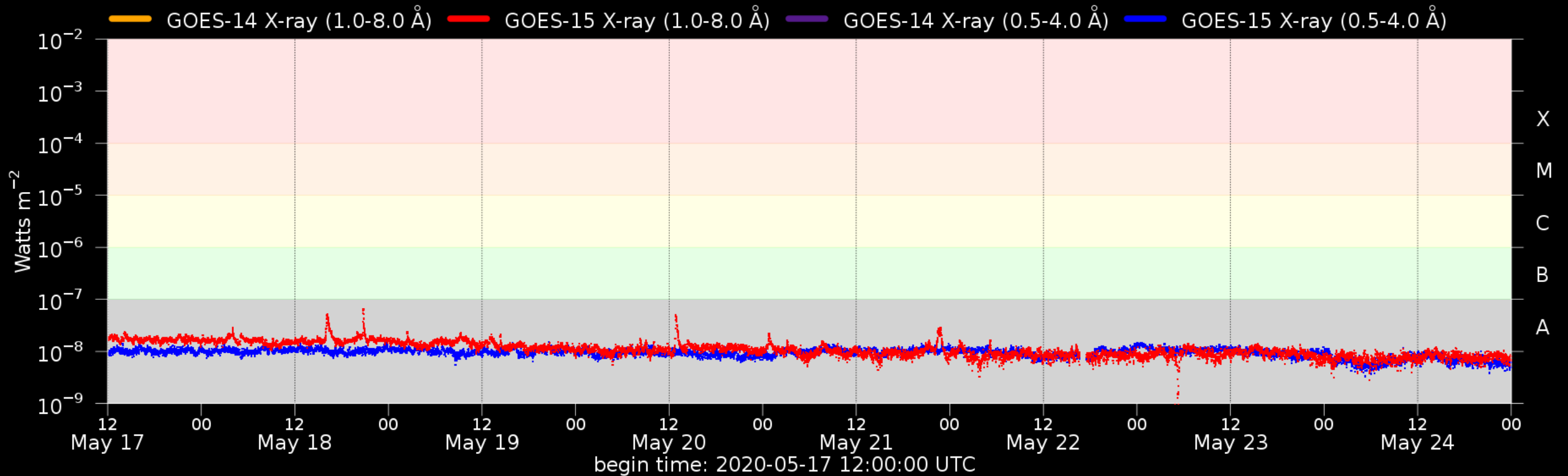
Solar F10.7cm radio flux



Solar X-Ray and UV flux



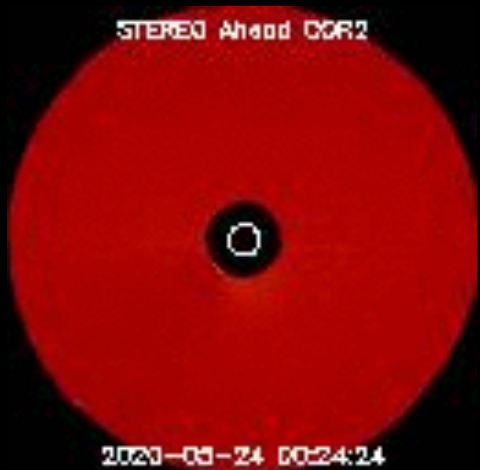
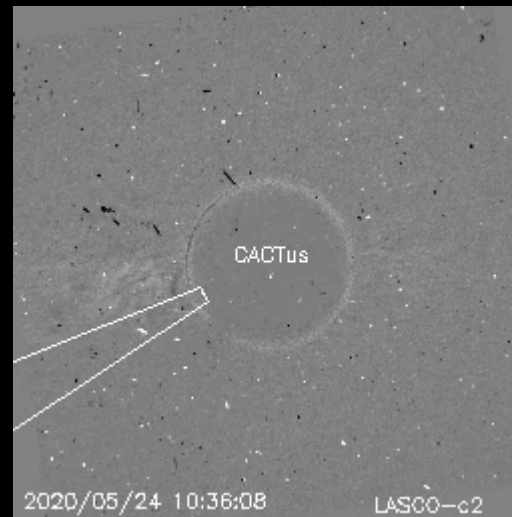
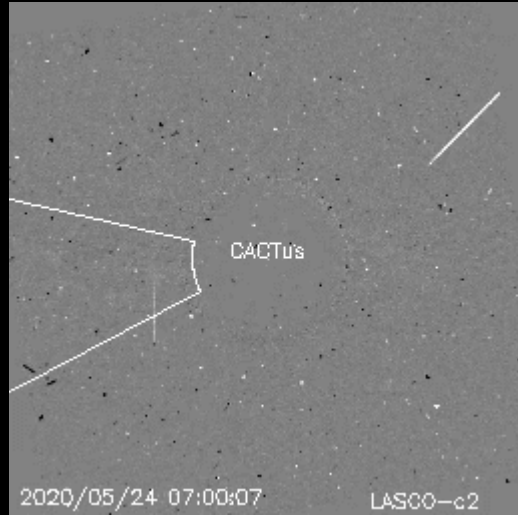
Flaring activity



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

Issue date	2020-05-17	2020-05-18	2020-05-19	2020-05-20	2020-05-21	2020-05-22	2020-05-23	2020-05-24
Probability	--- 10 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 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

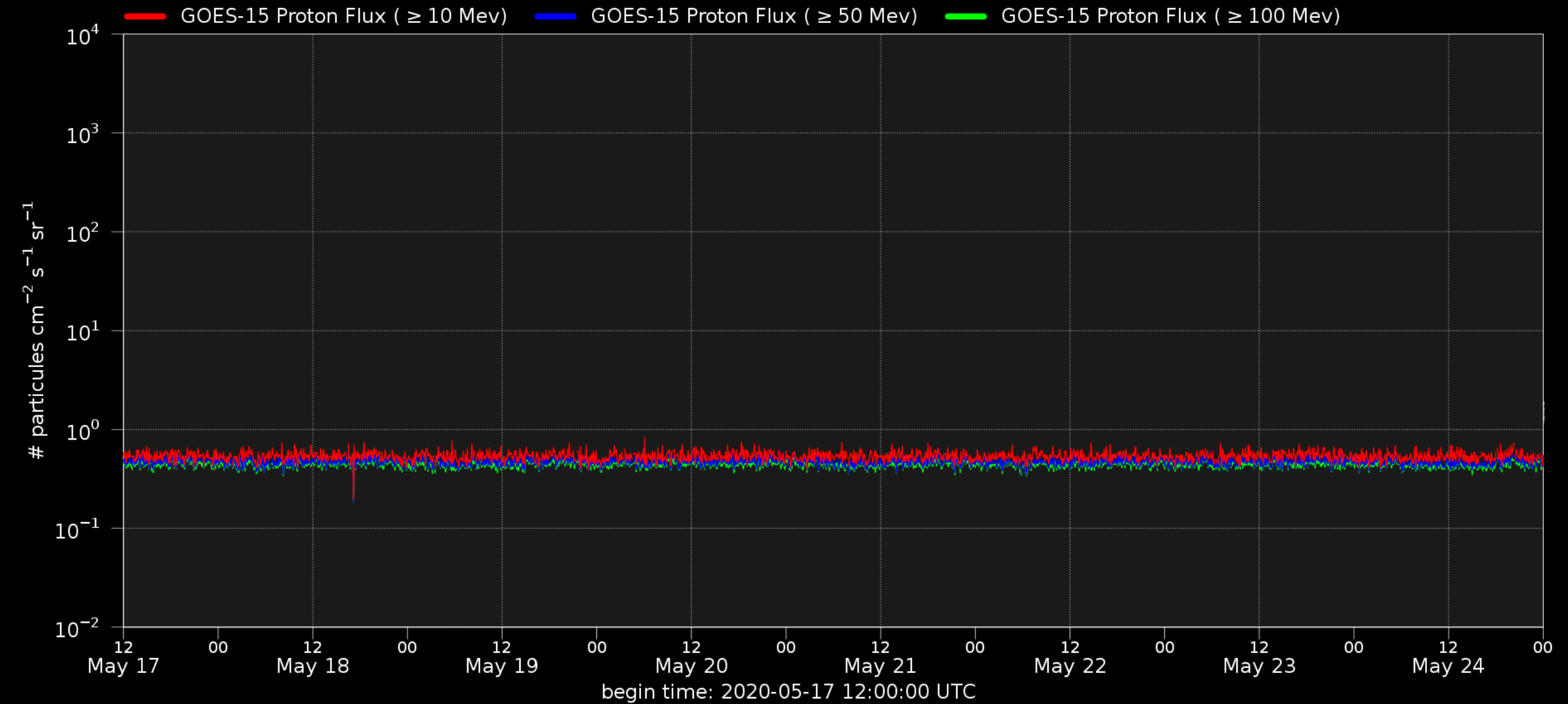
Coronal Mass Ejection



S W N FF

23:24	05/24
19:48	05/24
16:48	05/24
13:36	05/24
10:12	05/24
07:12	05/24
04:12	05/24
00:36	05/24
21:24	05/23
18:36	05/23
15:48	05/23
12:24	05/23
09:24	05/23
06:36	05/23
03:36	05/23
00:00	05/23
20:36	05/22
11:12	05/22
07:36	05/22
03:24	05/22
23:12	05/21
18:36	05/21
15:48	05/21
12:24	05/21
09:24	05/21
06:48	05/21
04:00	05/21
00:48	05/21
21:24	05/20
18:00	05/20
15:05	05/20
11:24	05/20
08:30	05/20
05:48	05/20
02:48	05/20
23:54	05/19
20:36	05/19
17:48	05/19
15:24	05/19
11:48	05/19
08:36	05/19
06:12	05/19

Solar proton flux



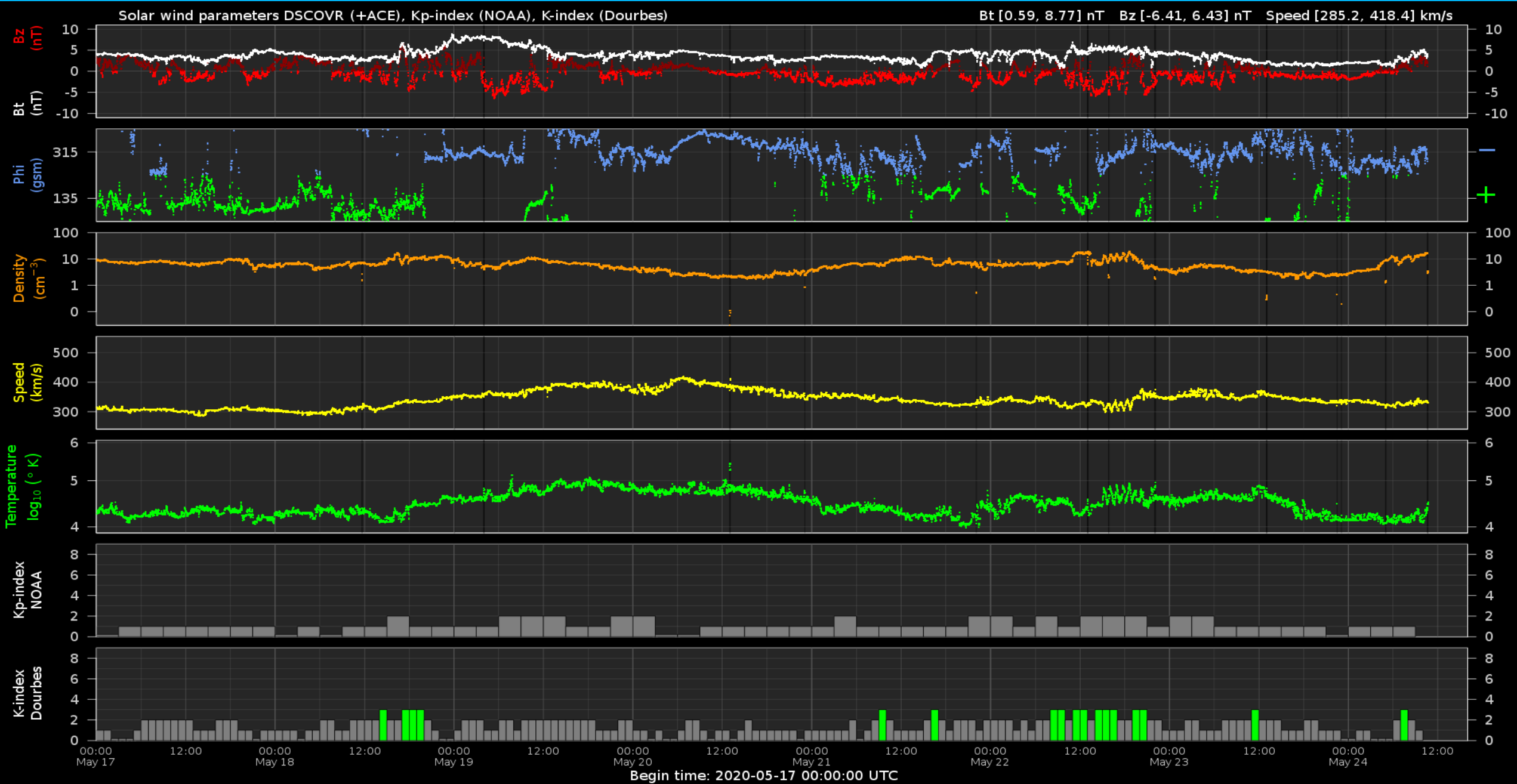
Solar Wind and Geomagnetic Activity



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Solar wind parameters



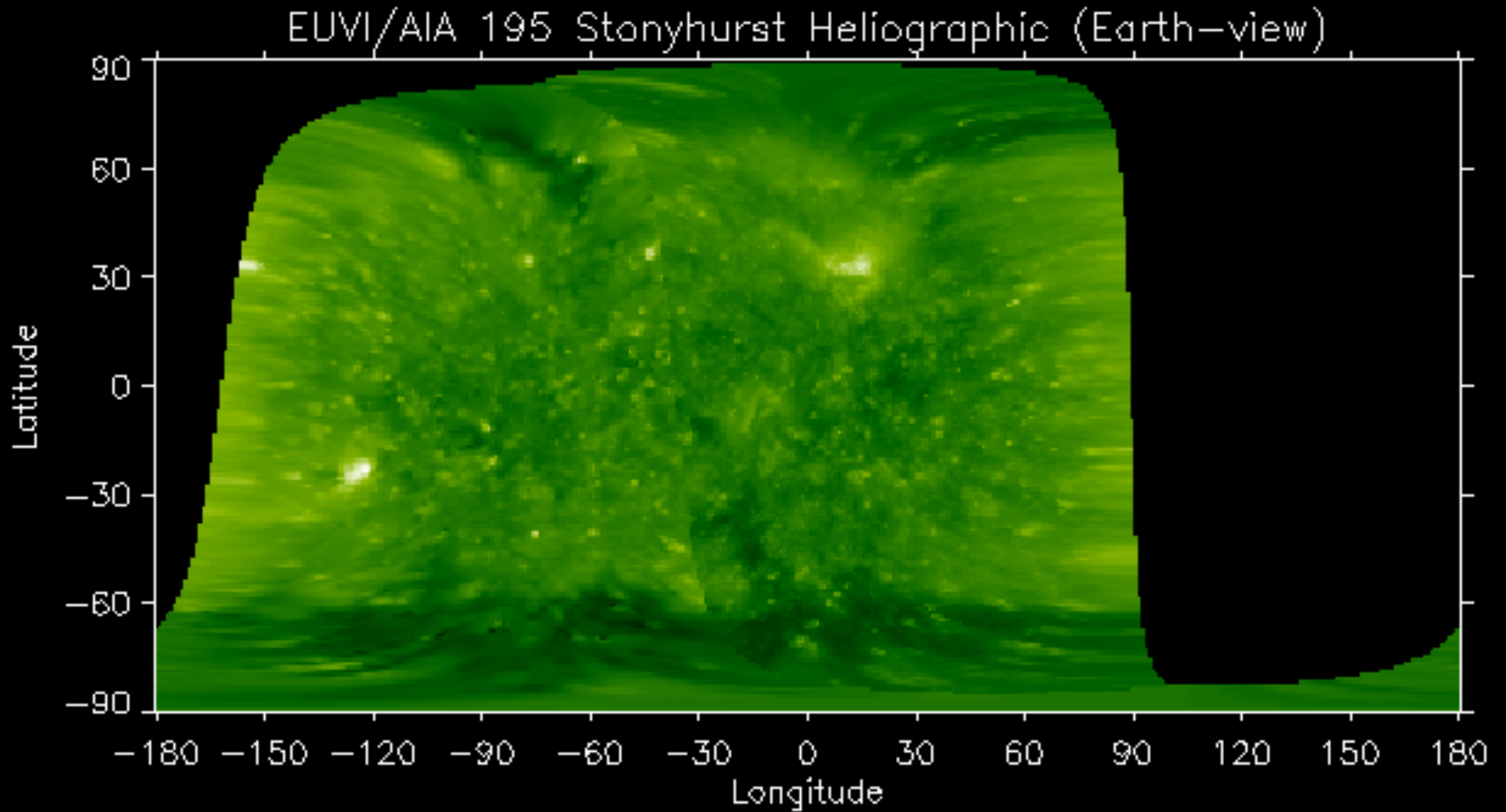
Outlook



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Outlook: Solar activity



Outlook: Solar wind



SIDC Space Weather Briefing

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