

SIDC Space Weather Briefing

29 July 2018 - 05 August 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 2018-07-29 12:00 UT to 2018-08-05 12:00 UT

Active regions	NOAA 2717
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	Small; one filament eruption on 31 July
CMEs	One CME on 2 August
Proton Events	None

Solar wind and geomagnetic conditions from 2018-07-29 12:00 UT to 2018-08-05 12:00 UT

Coronal Holes	Some small equatorial CHs
ICME	None observed
SW Conditions	Variable at nominal levels (wind speed between 300 and 450 km/s)
K-indices	max K-index (Dourbes): 3.0 max Kp-index (NOAA): 3

All Quiet Alert since *27 Jul 2018 at 08:46UT*

Solar Activity

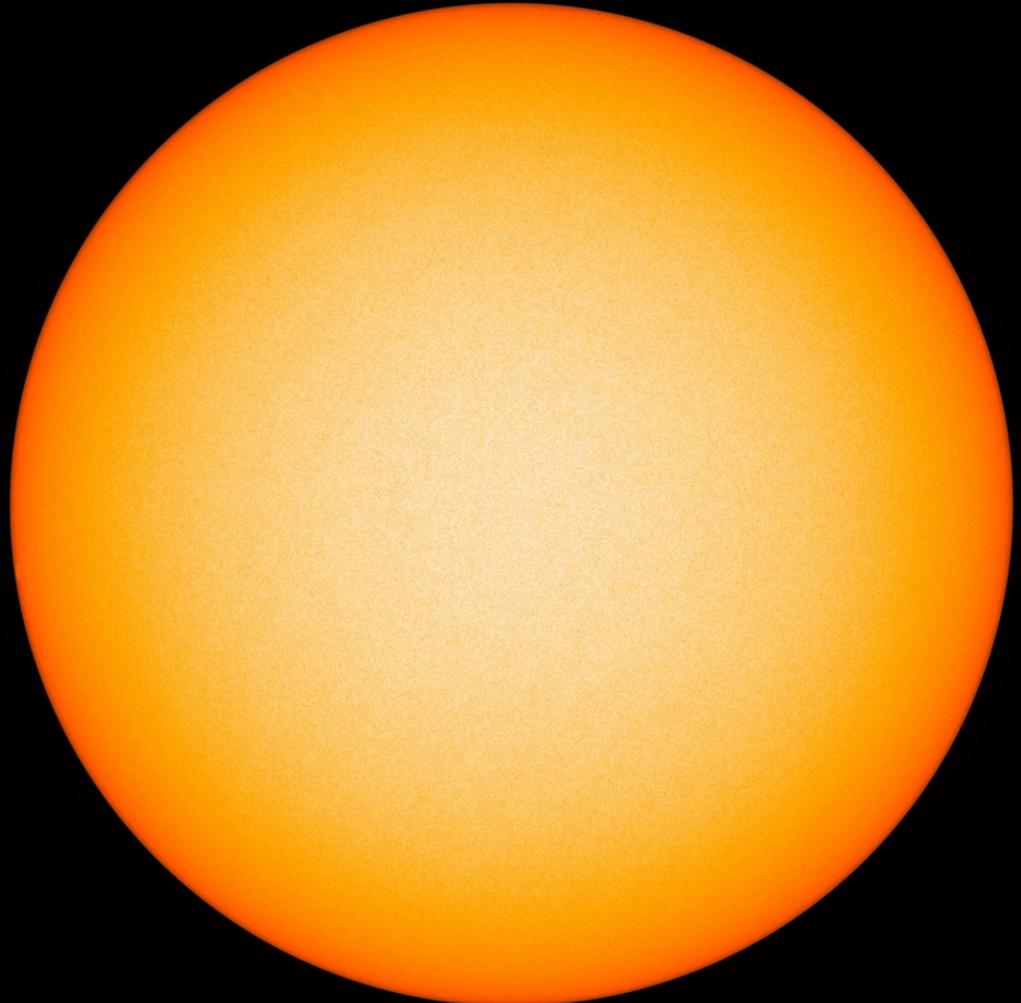


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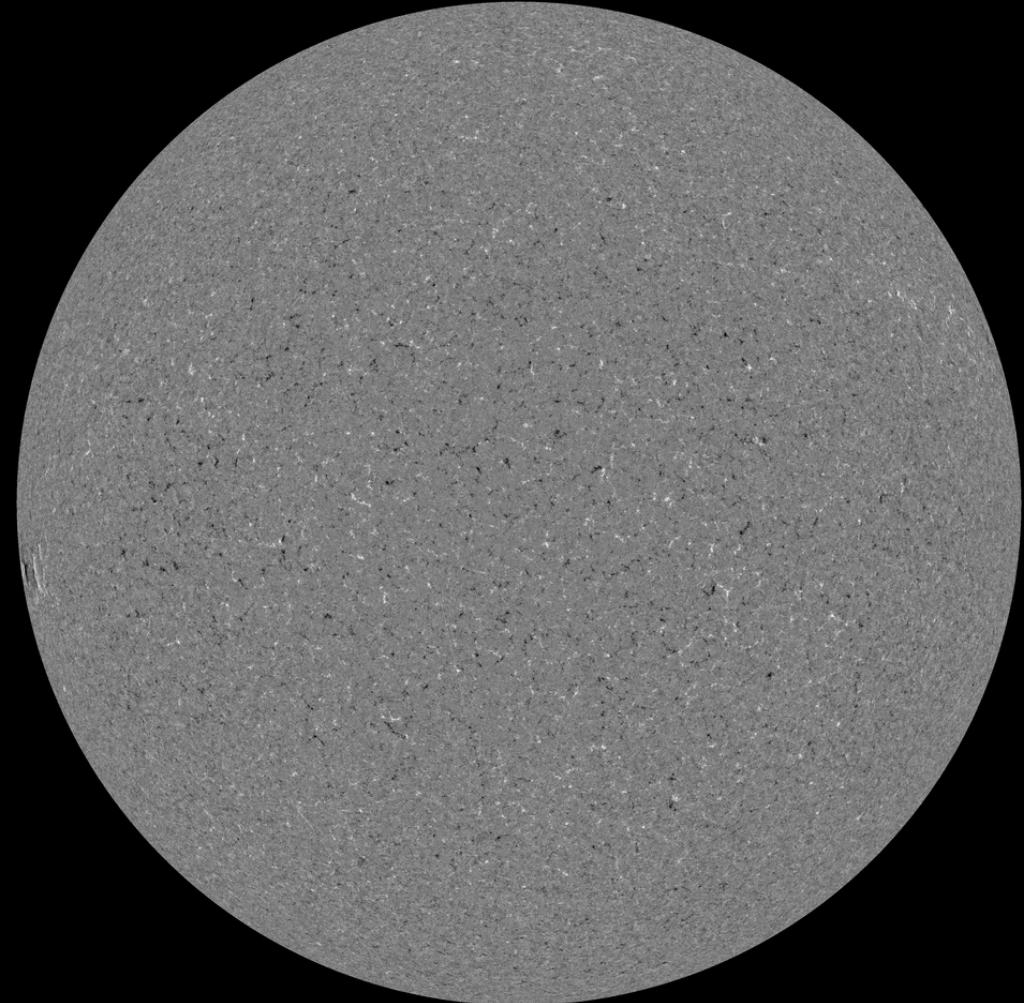
Solar active region - start of the week

SDO/HMI White Light 2018-07-29



SDO/HMI Quick-Look Continuum: 20180729_113000

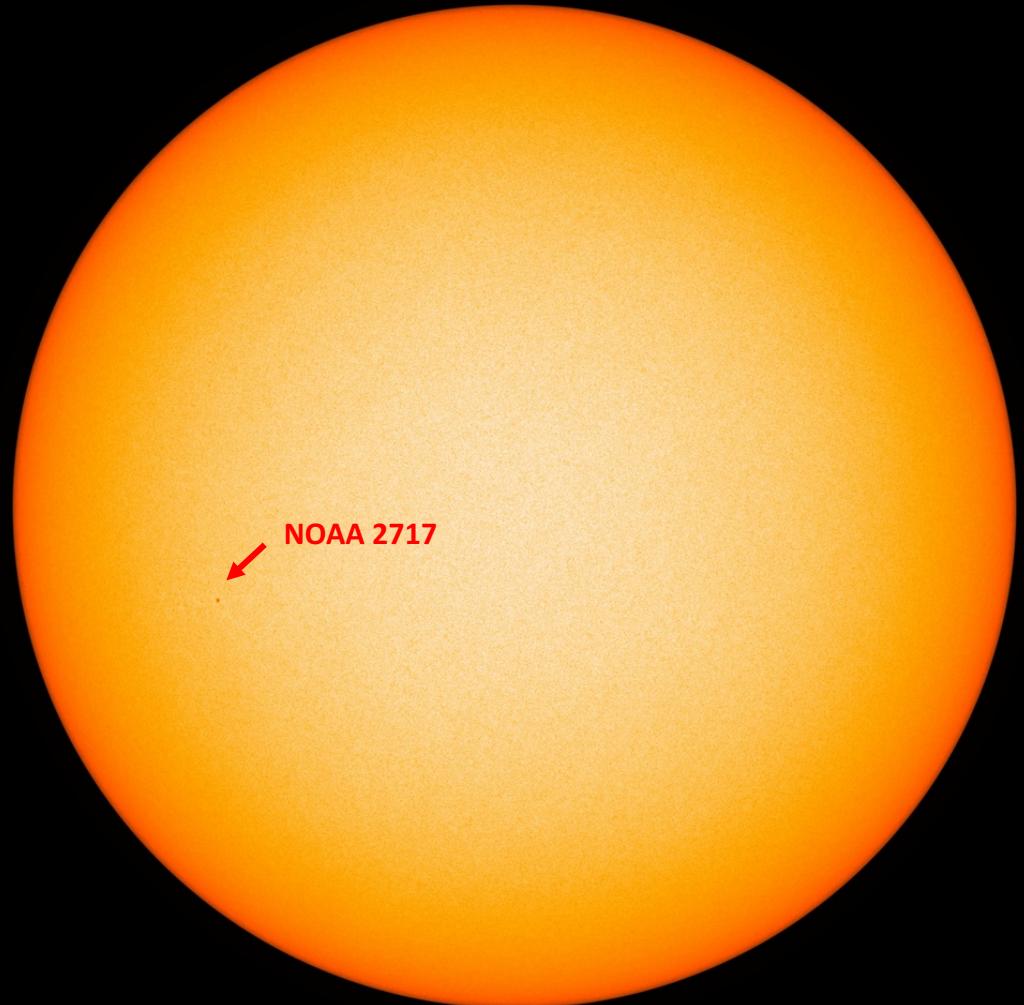
SDO/HMI Magnetogram 2018-07-29



SDO/HMI Quick-Look Magnetogram: 20180729_113000

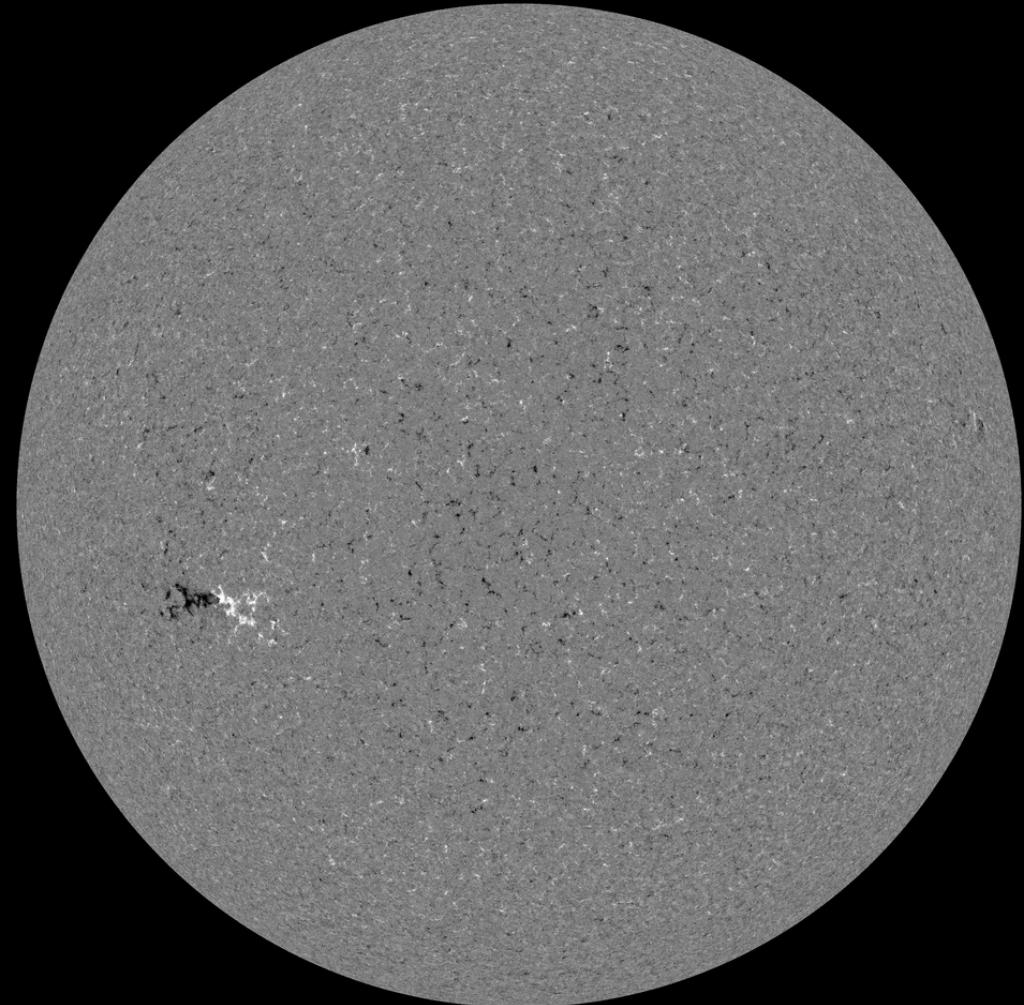
Solar active region - middle of the week

SDO/HMI White Light 2018-08-01



SDO/HMI Quick-Look Continuum: 20180801_114500

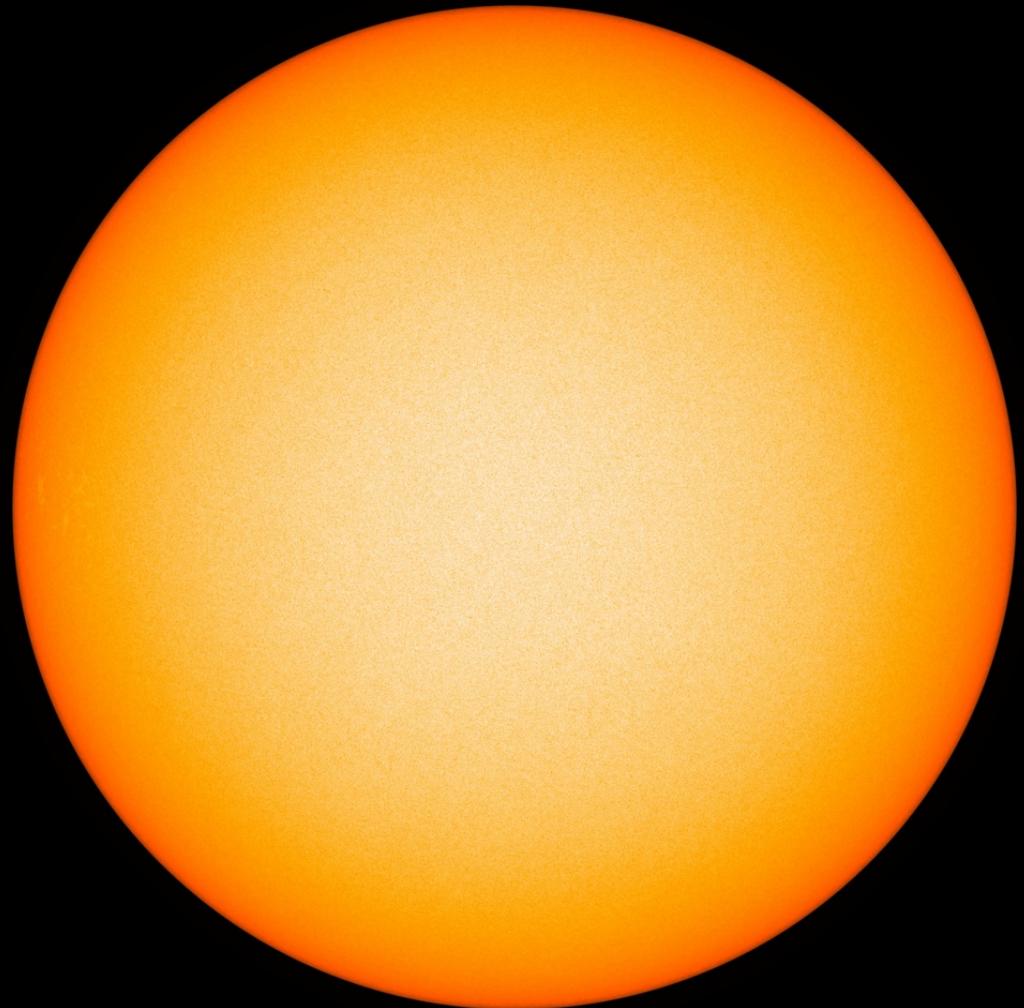
SDO/HMI Magnetogram 2018-08-01



SDO/HMI Quick-Look Magnetogram: 20180801_114500

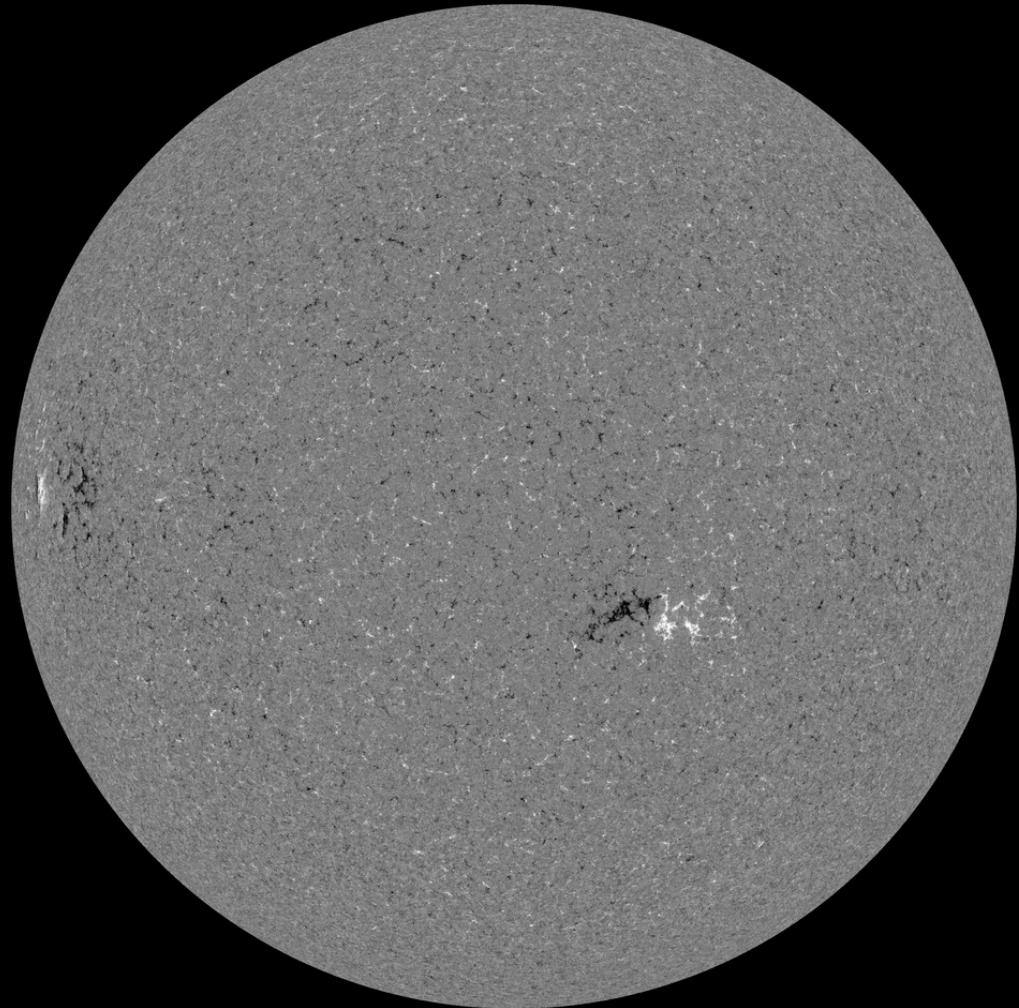
Solar active region - end of the week

SDO/HMI White Light 2018-08-05



SDO/HMI Quick-Look Continuum: 20180805_114500

SDO/HMI Magnetogram 2018-08-05



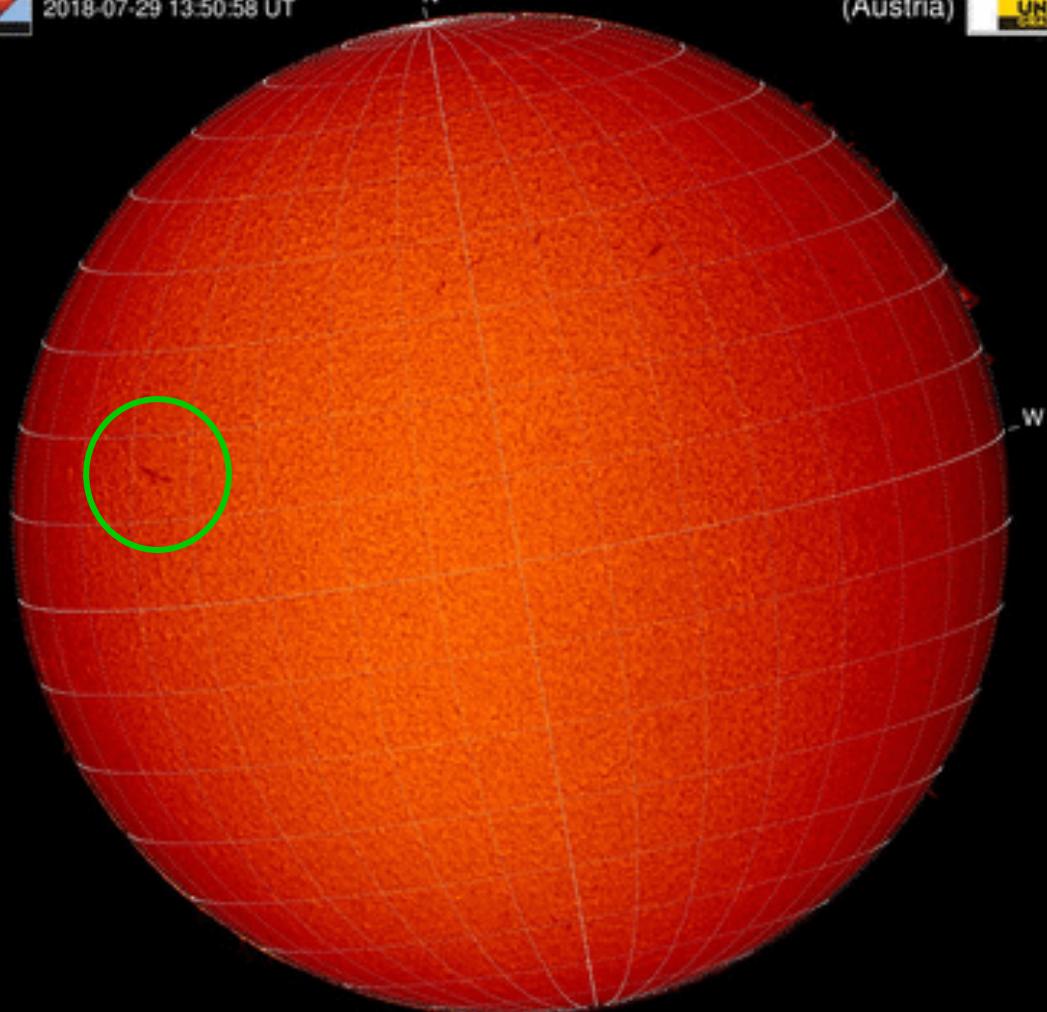
SDO/HMI Quick-Look Magnetogram: 20180805_114500

Filament & Filament eruption

H-alpha 2018-07-29

Kanzelhöhe Observatory
2018-07-29 13:50:58 UT

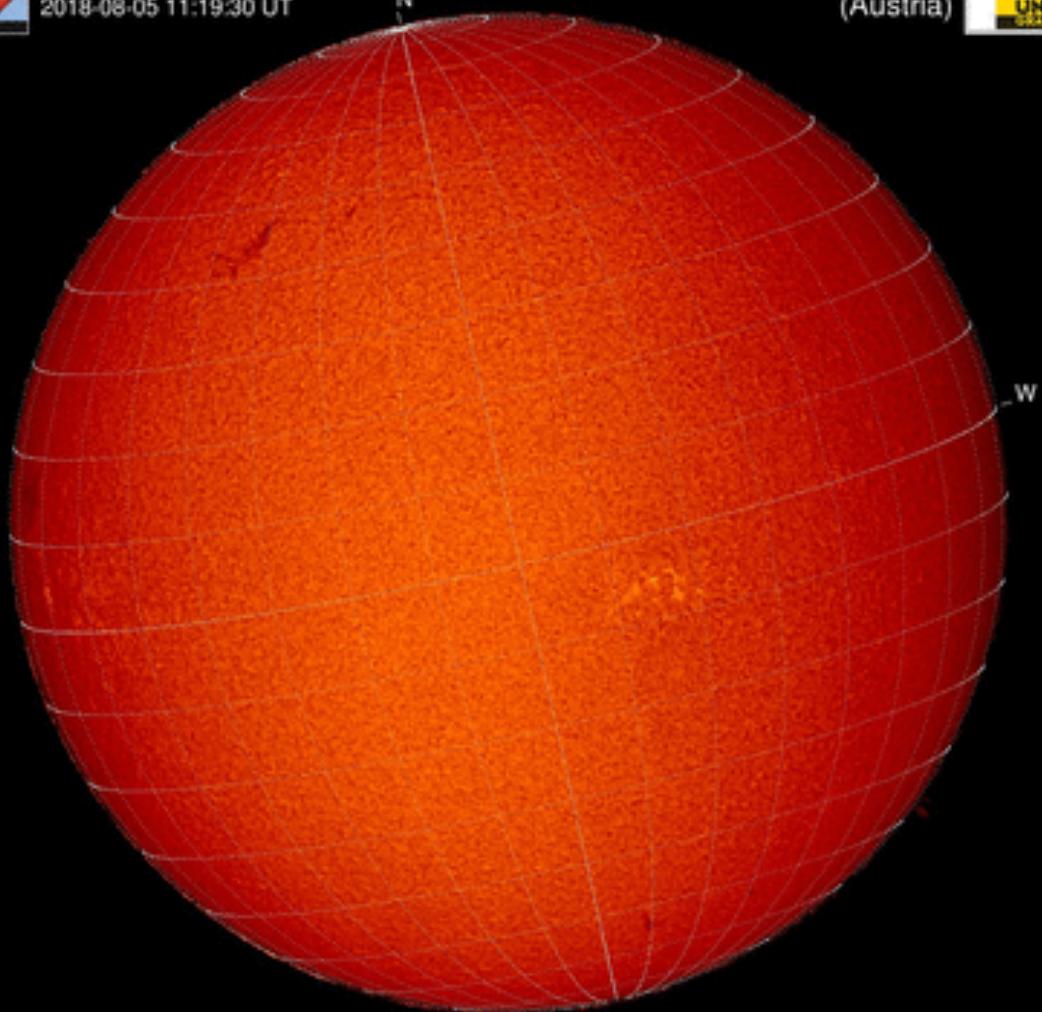
University of Graz
(Austria)



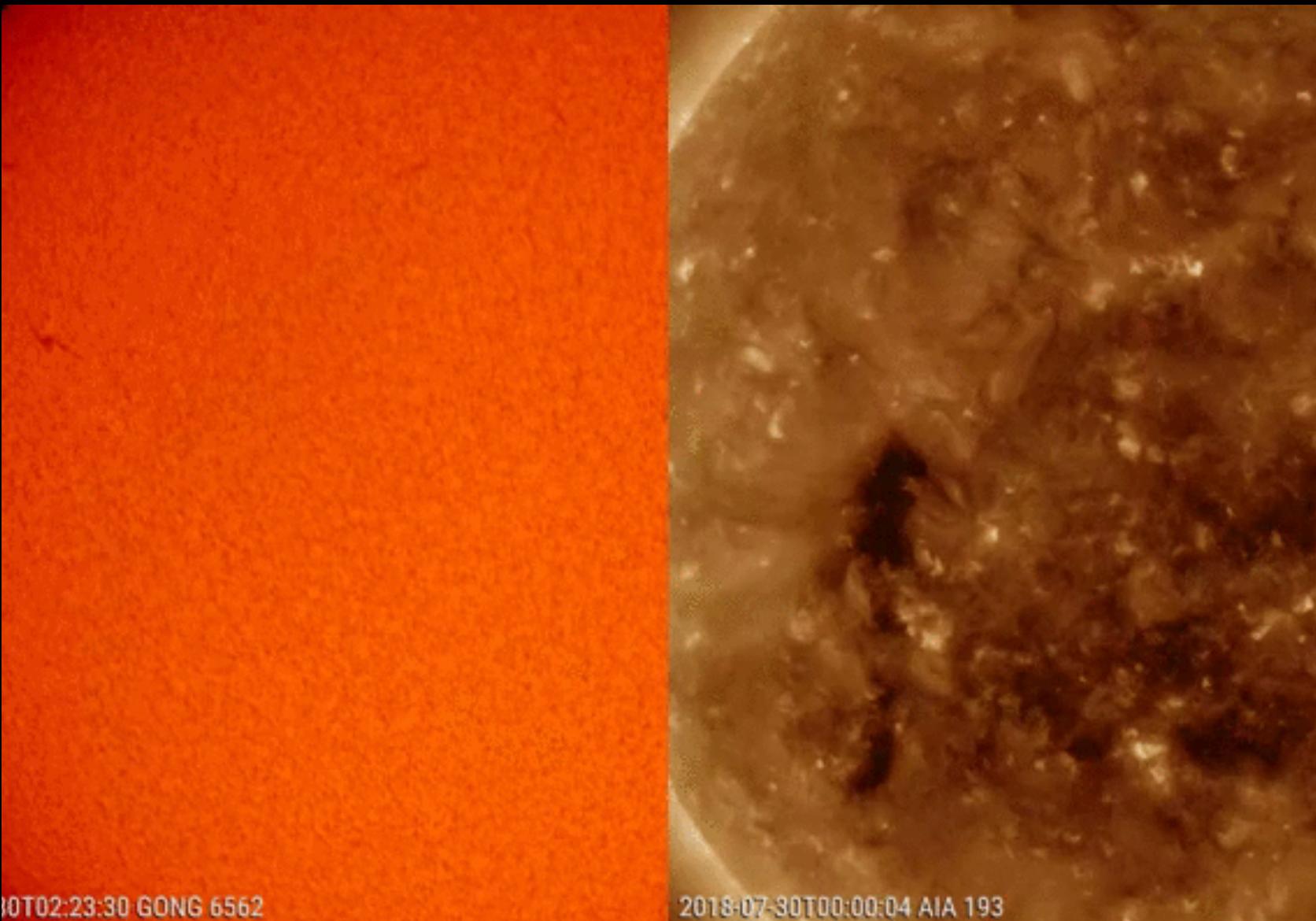
H-alpha 2018-08-05

Kanzelhöhe Observatory
2018-08-05 11:19:30 UT

University of Graz
(Austria)



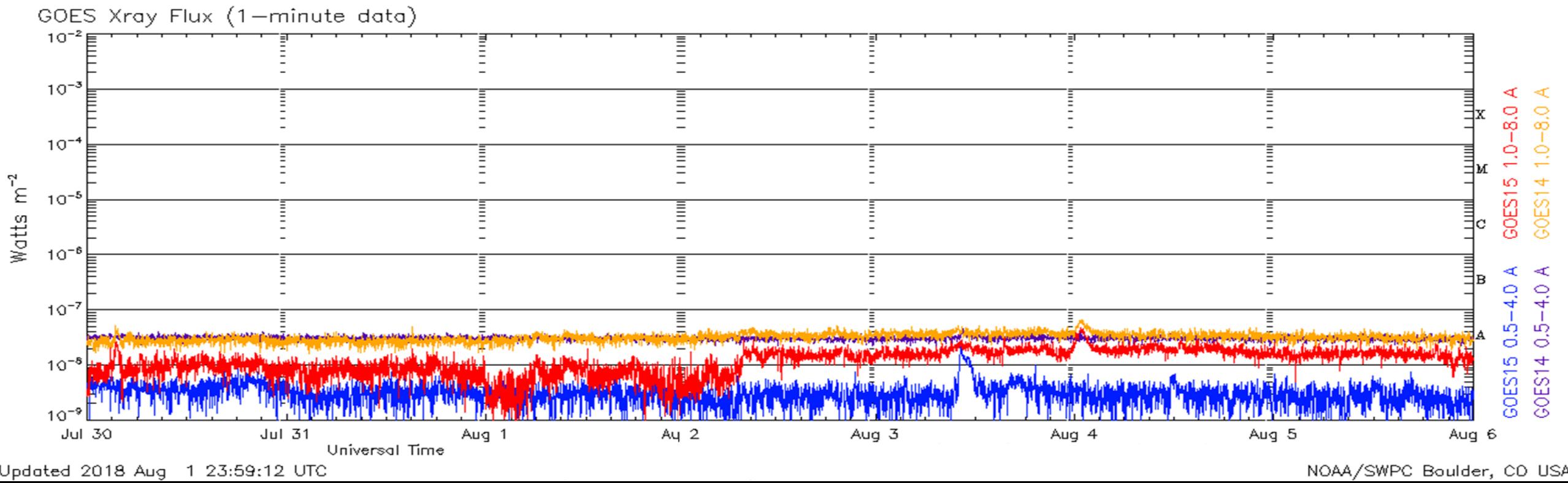
Filament & Filament eruption



2018-07-30T02:23:30 GONG 6562

2018-07-30T00:00:04 AIA 193

Flaring activity



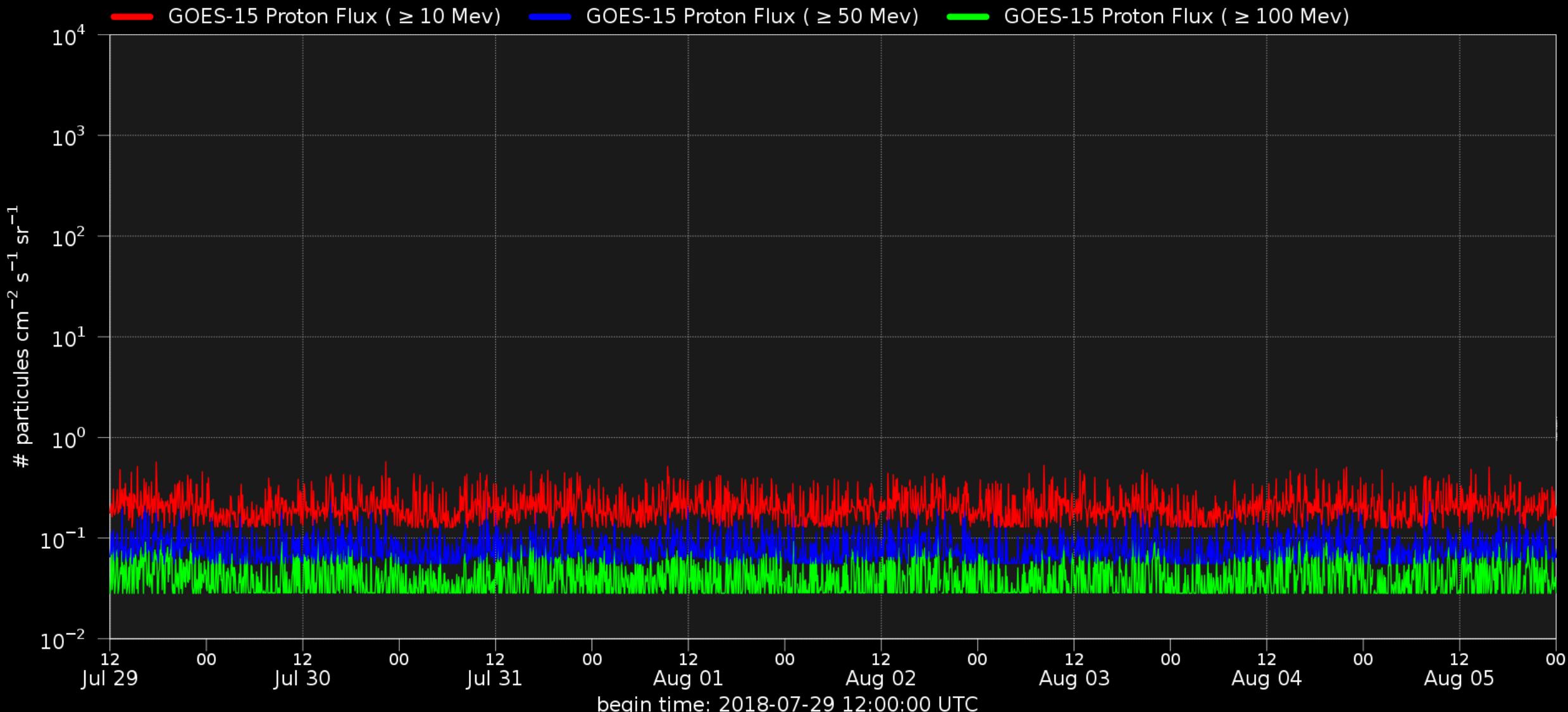
Updated 2018 Aug 1 23:59:12 UTC

NOAA/SWPC Boulder, CO USA

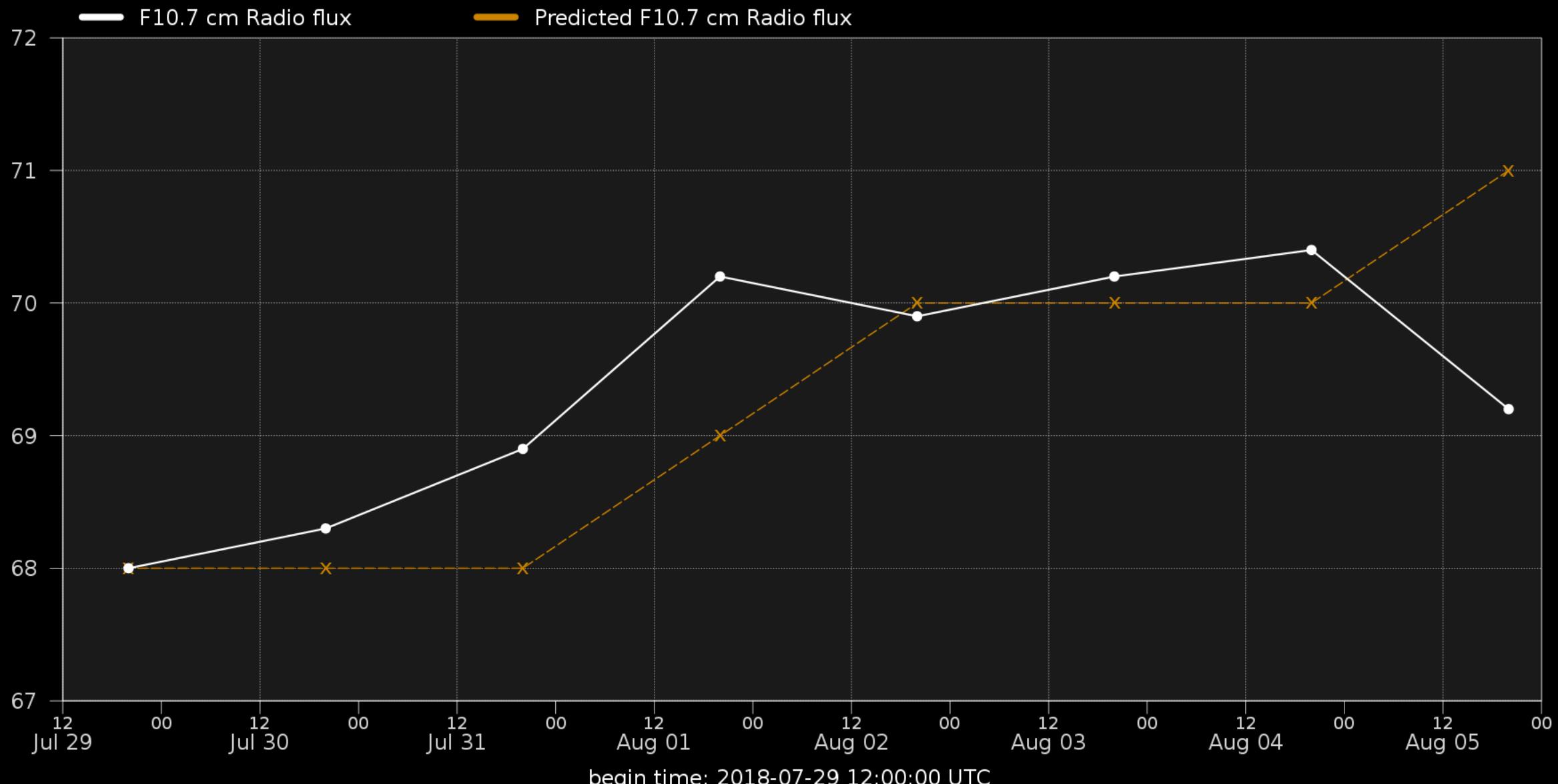
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2018-07-30	2018-07-31	2018-08-01	2018-08-02	2018-08-03	2018-08-04	2018-08-05
Probability	--- 01 01 01	--- 01 01 01	--- 05 01 01	--- 05 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

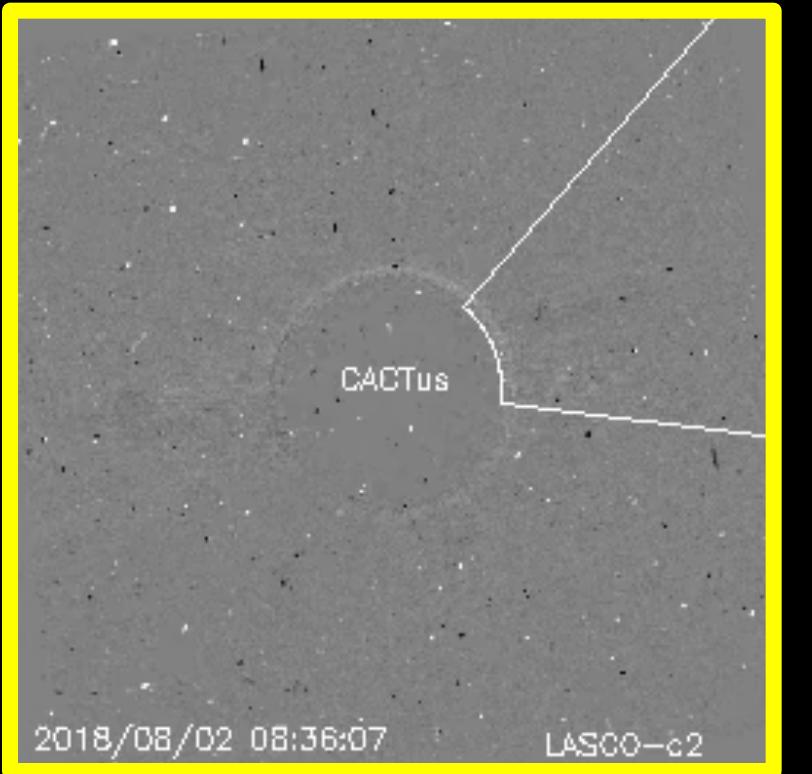
Solar proton flux



Solar F10.7cm radio flux



Coronal Mass Ejection

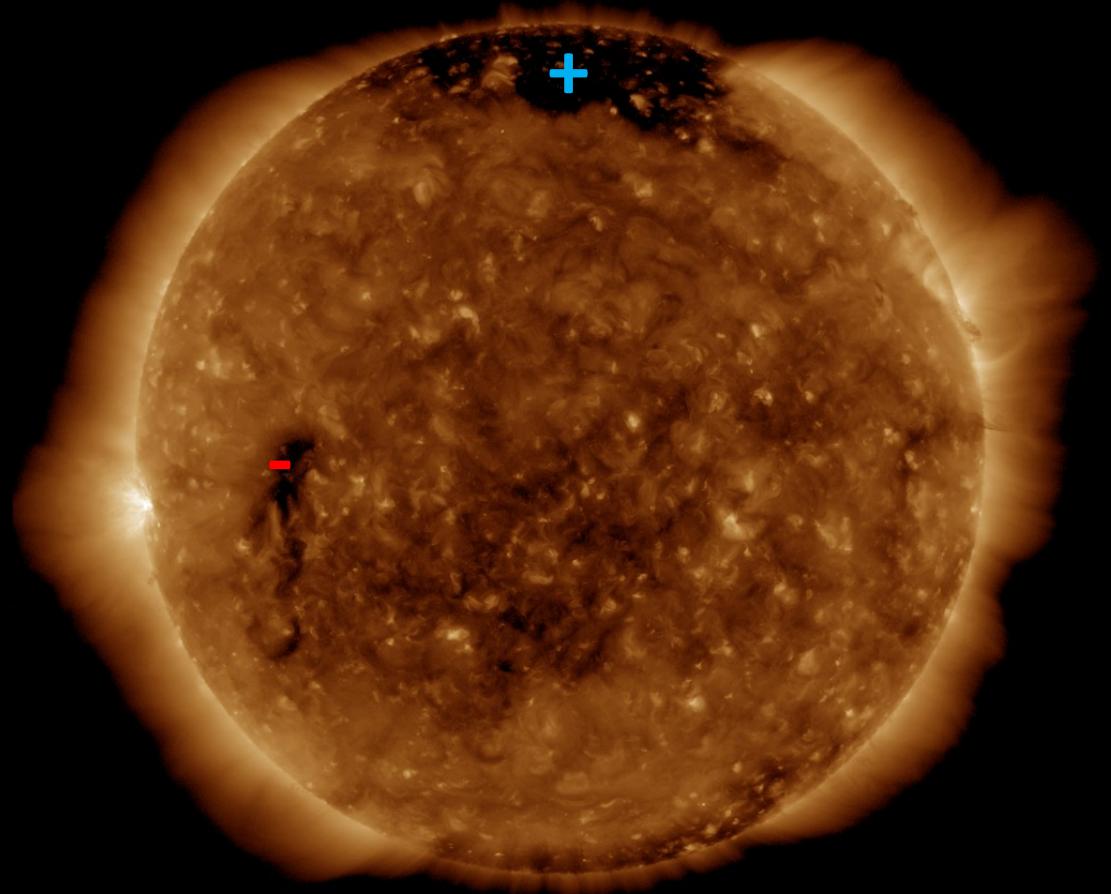


S W N E

09:12 08/05
06:24 08/05
03:24 08/05
22:36 08/04
19:12 08/04
16:00 08/04
12:00 08/04
08:12 08/04
04:12 08/04
23:48 08/03
19:36 08/03
16:24 08/03
12:24 08/03
09:36 08/03
05:48 08/03
01:25 08/03
21:48 08/02
18:24 08/02
15:30 08/02
12:00 08/02
08:36 08/02
05:48 08/02
02:30 08/02
22:12 08/01
18:00 08/01
15:16 08/01
10:48 08/01
05:36 08/01
02:12 08/01
20:24 07/31
16:36 07/31
12:36 07/31
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20:00 07/30
15:48 07/30
08:24 07/30
00:12 07/30

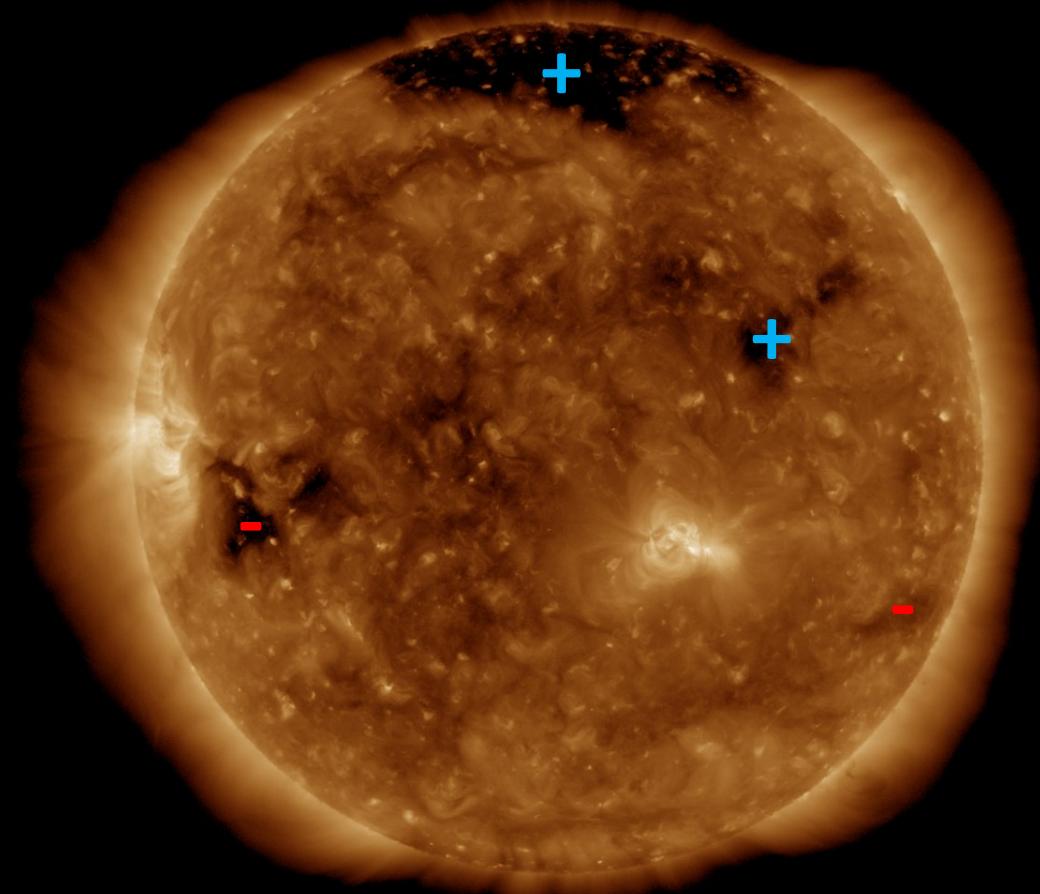
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2018-07-29



SDO/AIA 193 2018-07-29 12:11:17 UT

SDO/AIA 19.3 nm 2018-08-05



SDO/AIA 193 2018-08-05 12:10:41 UT

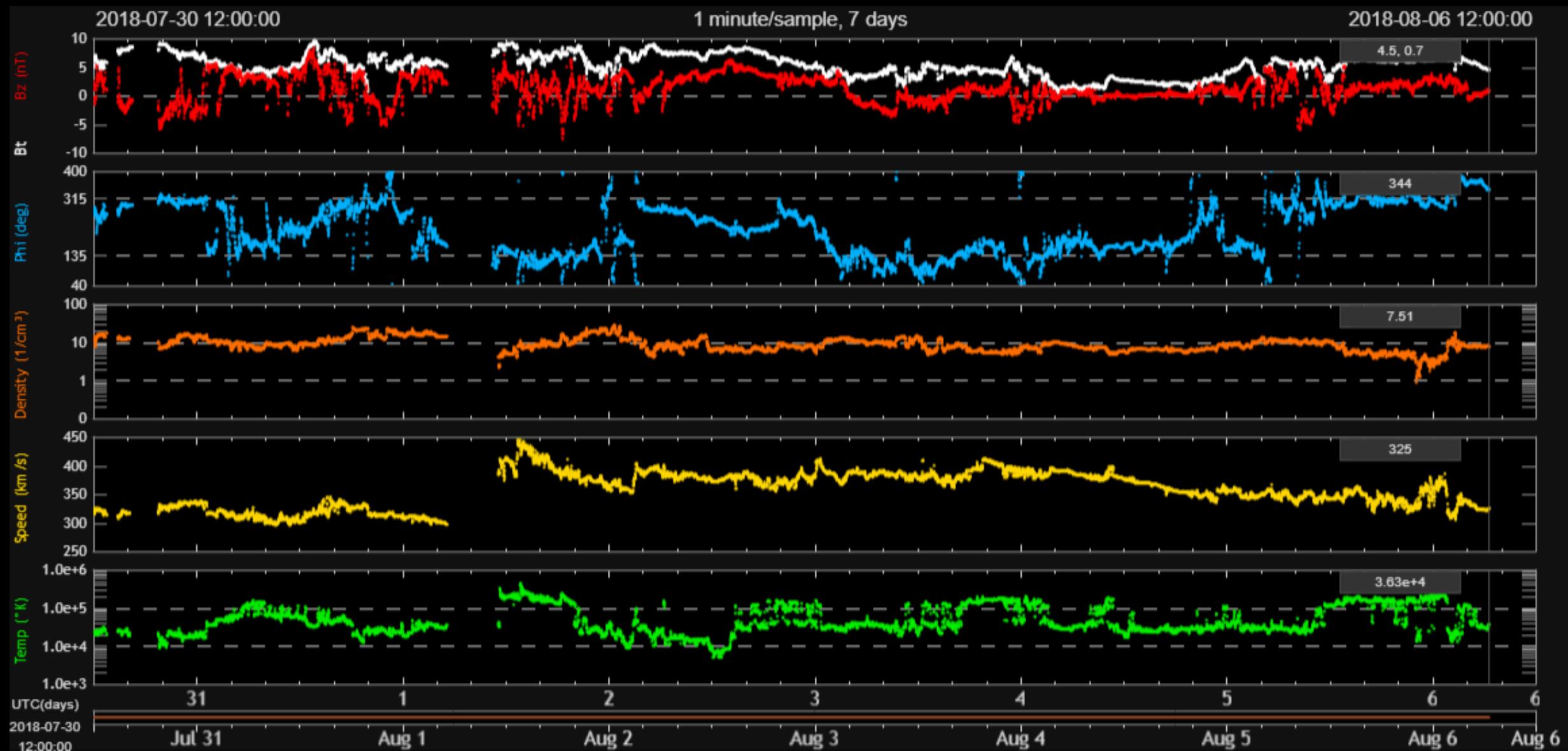
Solar Wind and Geomagnetic Activity



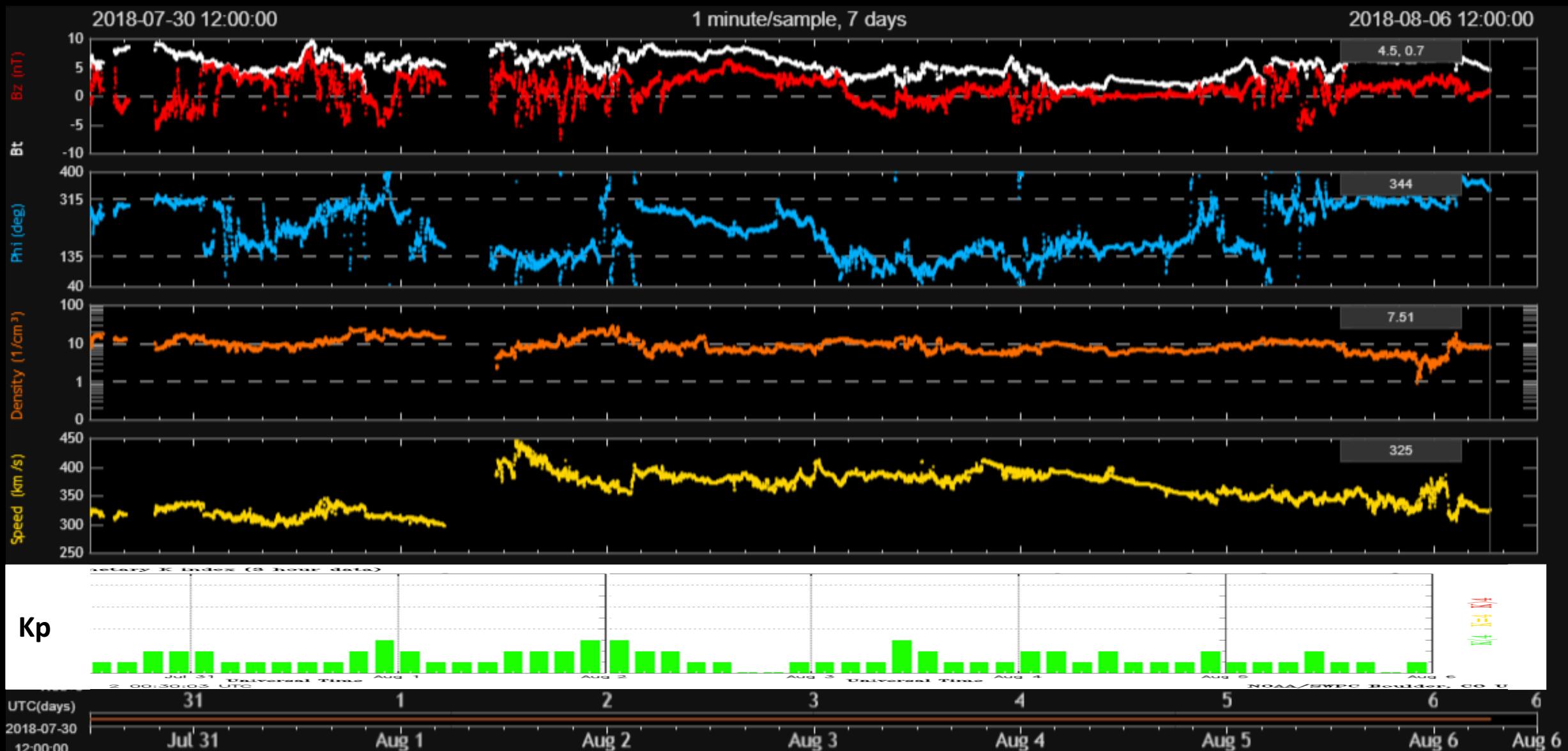
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Solar wind parameters (DSCOVR data)

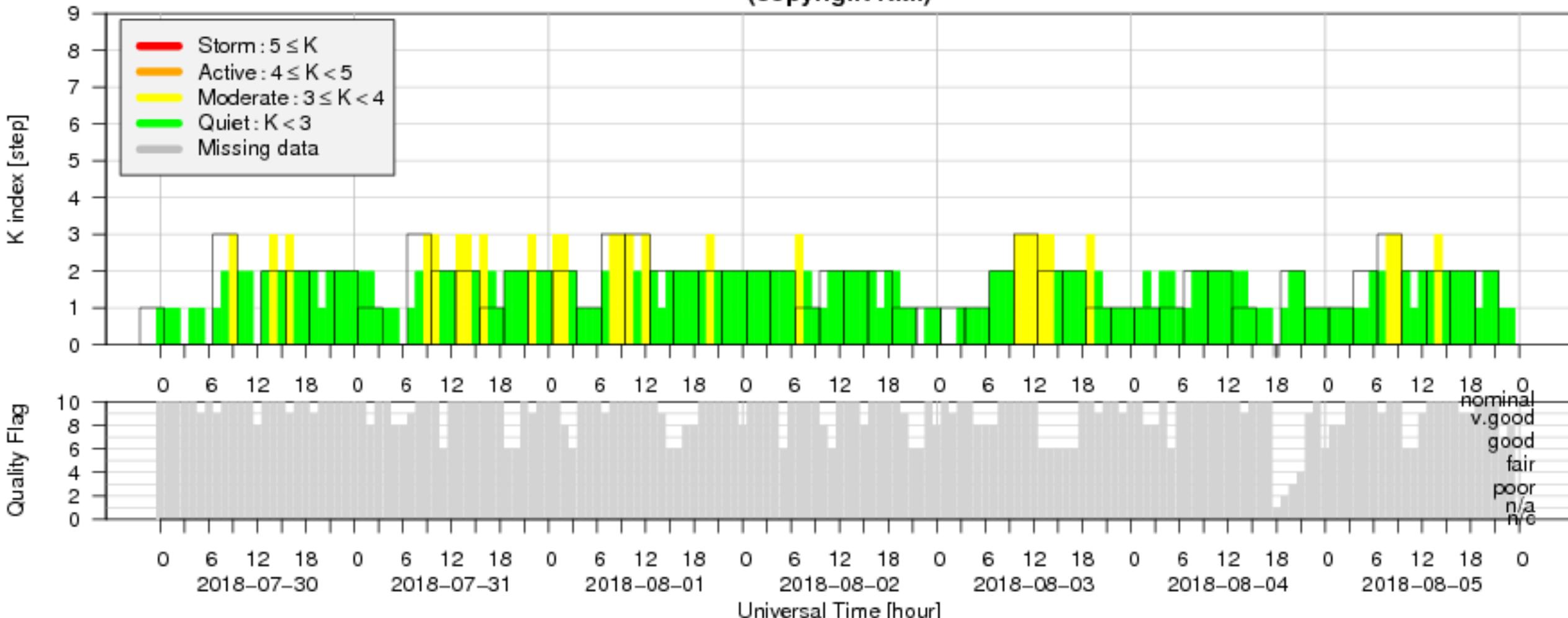


Solar wind parameters & Kp index (DSCOVR/NOAA data)



K-index (Dourbes)

Local K index at Dourbes (50.1°N , 4.6°E)
from ground-based measurements
(copyright RMI)



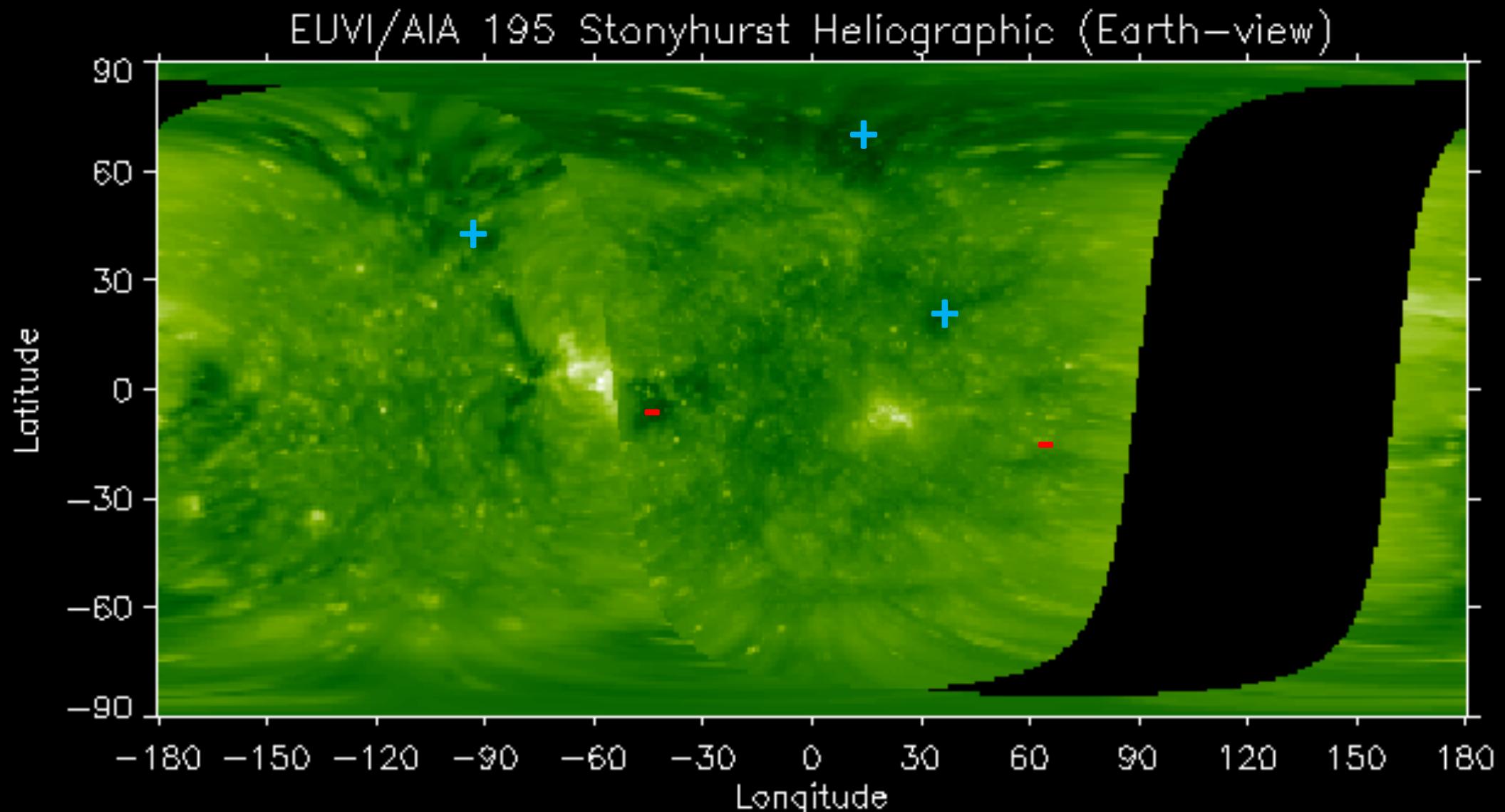
Outlook



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Outlook: Solar activity



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