

# SIDC Space Weather Briefing

07 June 2020 - 14 June 2020

Cis Verbeeck  
& the SIDC forecaster team



Royal Observatory  
of Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

# Summary Report

Solar activity from 2020-06-07 12:00 UT to 2020-06-14 12:00 UT

Active regions	Beta (later alpha) region NOAA 2765
Flaring	# B-class flare: 7 # 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 2020-06-07 12:00 UT to 2020-06-14 12:00 UT

Coronal Holes	Patchy coronal hole extensions of the northern crown coronal hole
ICME	None
SW Conditions	Nominal to slightly enhanced
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 4

All Quiet Alert valid for most of the week

# Solar Activity

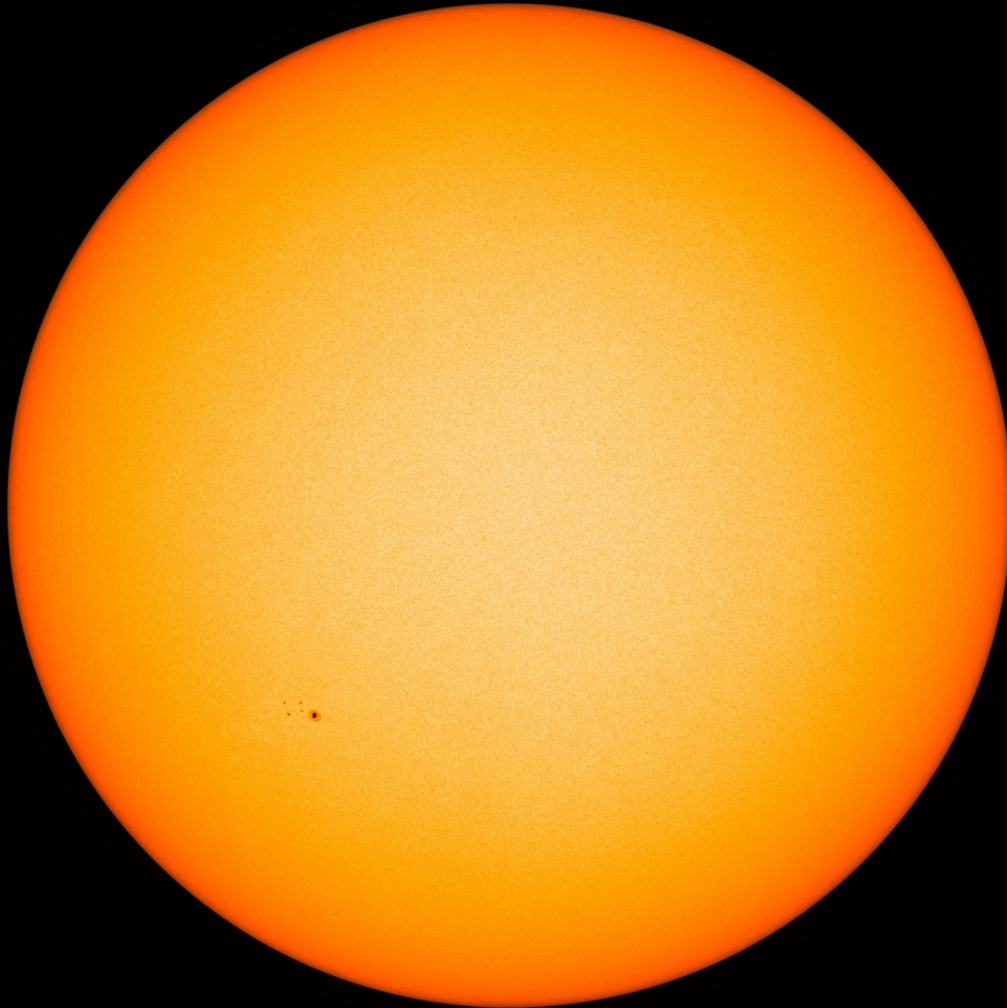


Royal Observatory  
*of* Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

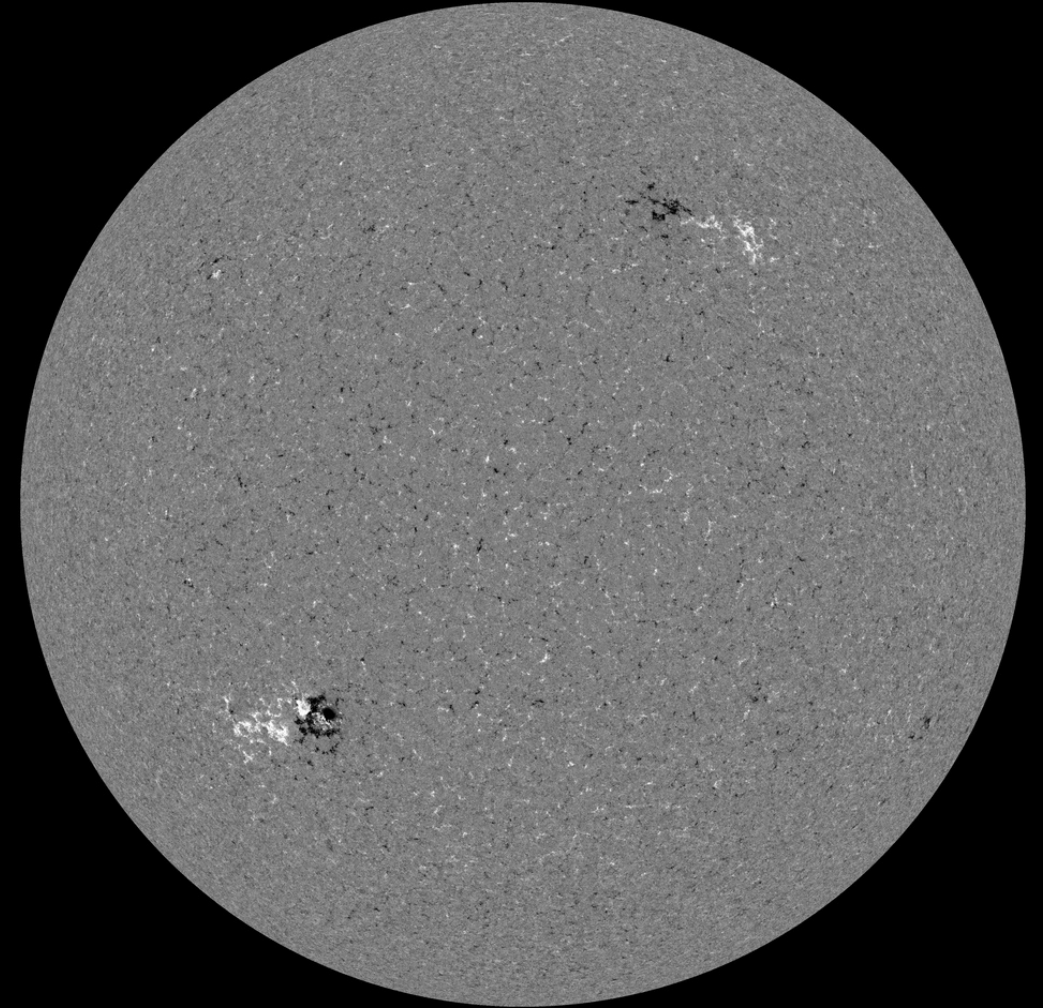
# Solar active region - start of the week

SDO/HMI White Light 2020-06-07



SDO/HMI Quick-Look Continuum: 20200607\_114500

SDO/HMI Magnetogram 2020-06-07

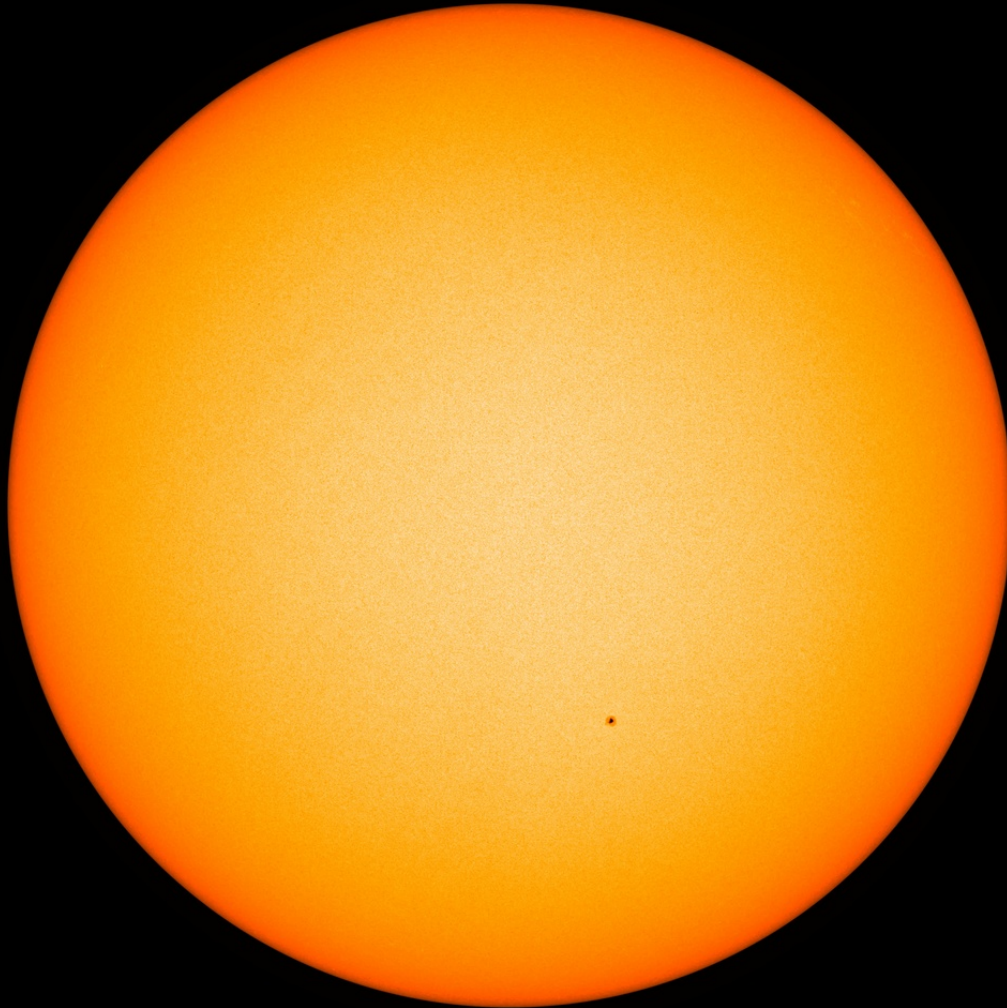


SDO/HMI Quick-Look Magnetogram: 20200607\_114500



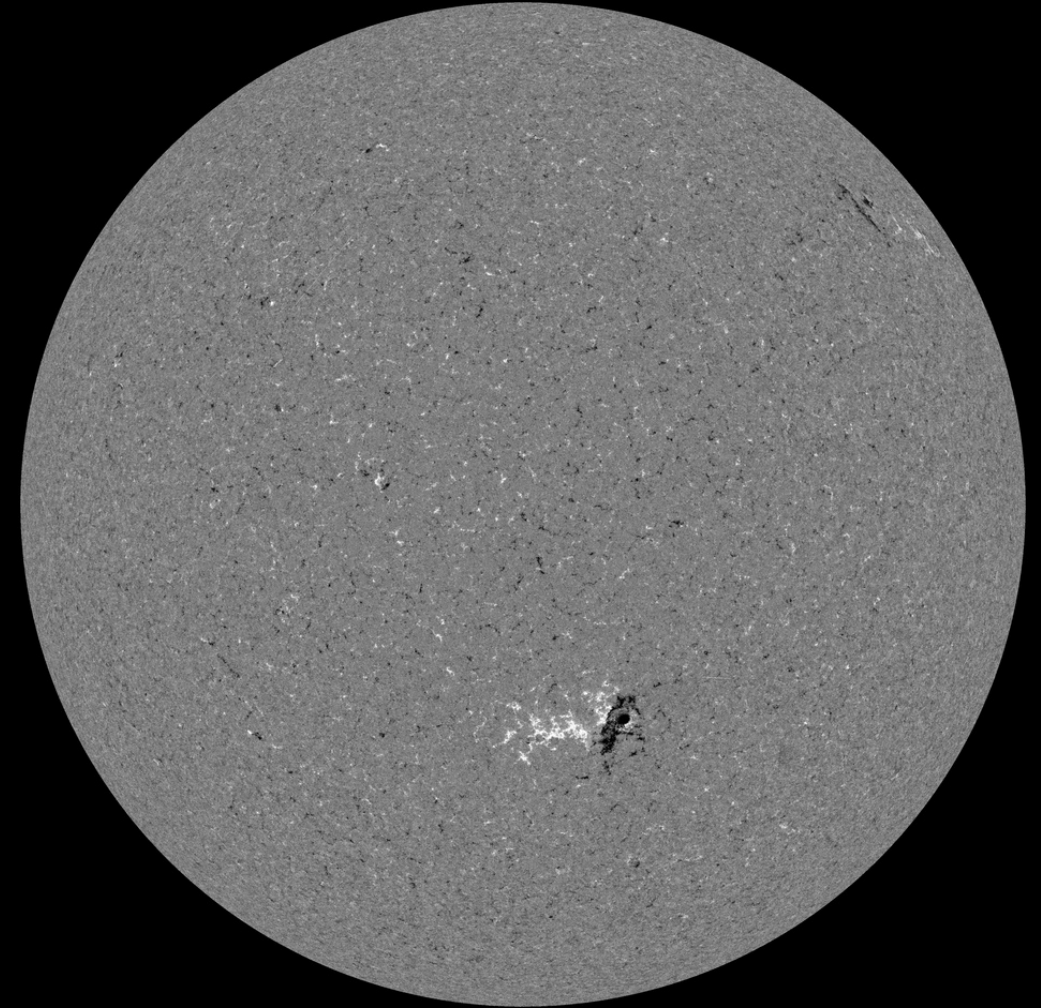
# Solar active region - middle of the week

SDO/HMI White Light 2020-06-10



SDO/HMI Quick-Look Continuum: 20200610\_114500

SDO/HMI Magnetogram 2020-06-10

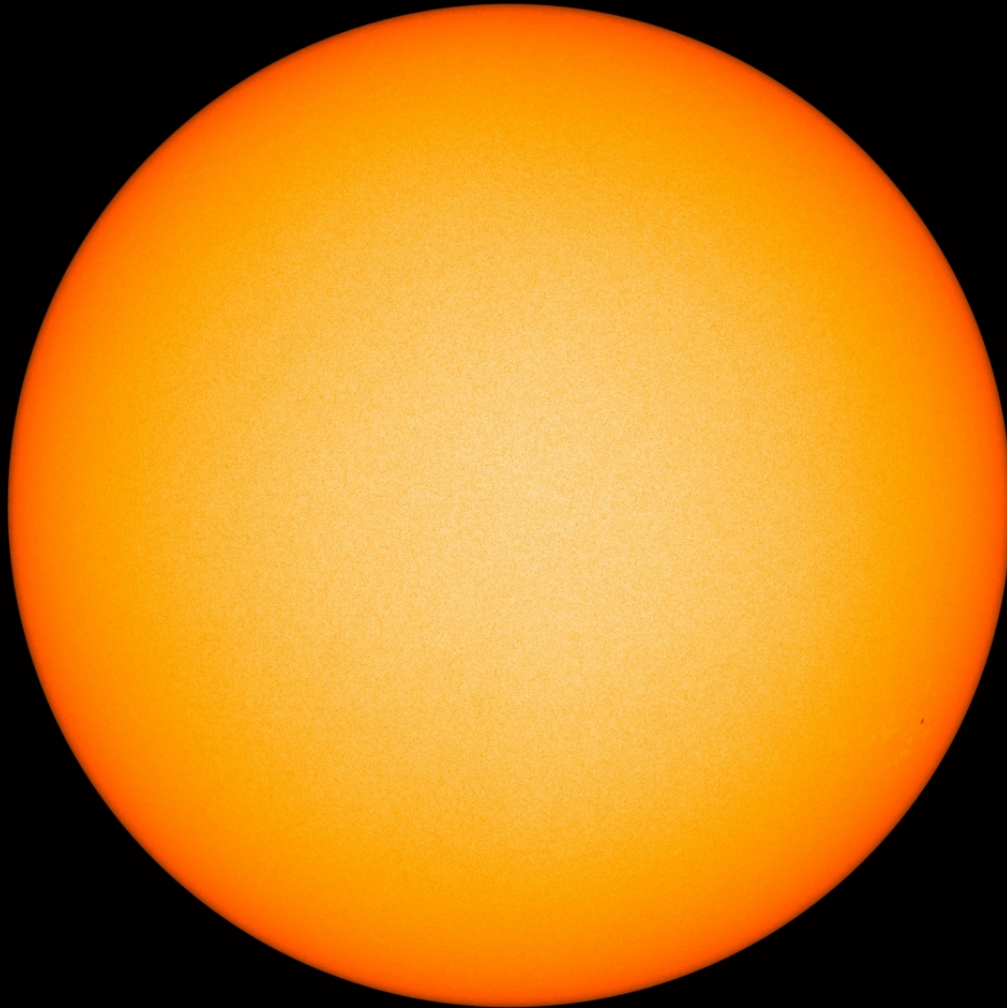


SDO/HMI Quick-Look Magnetogram: 20200610\_114500

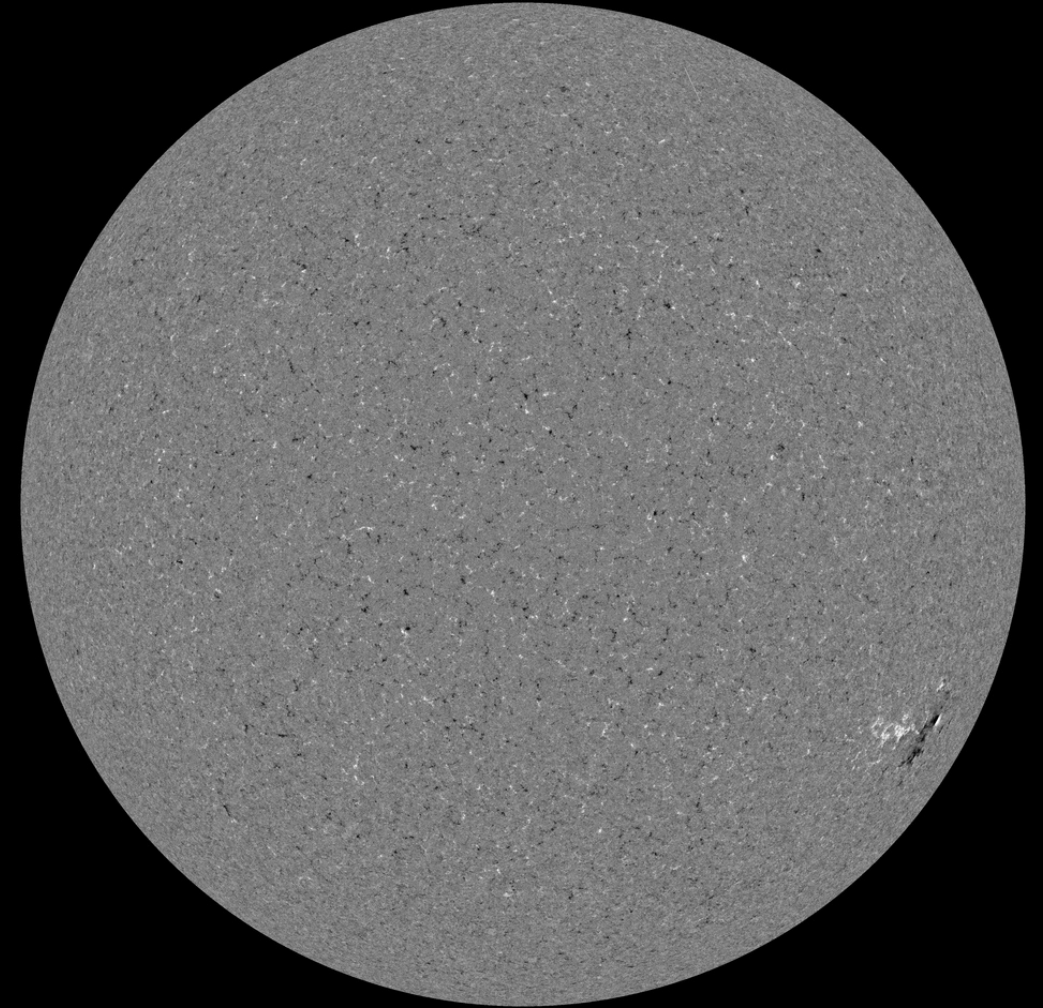


# Solar active region - end of the week

SDO/HMI White Light 2020-06-14



SDO/HMI Magnetogram 2020-06-14

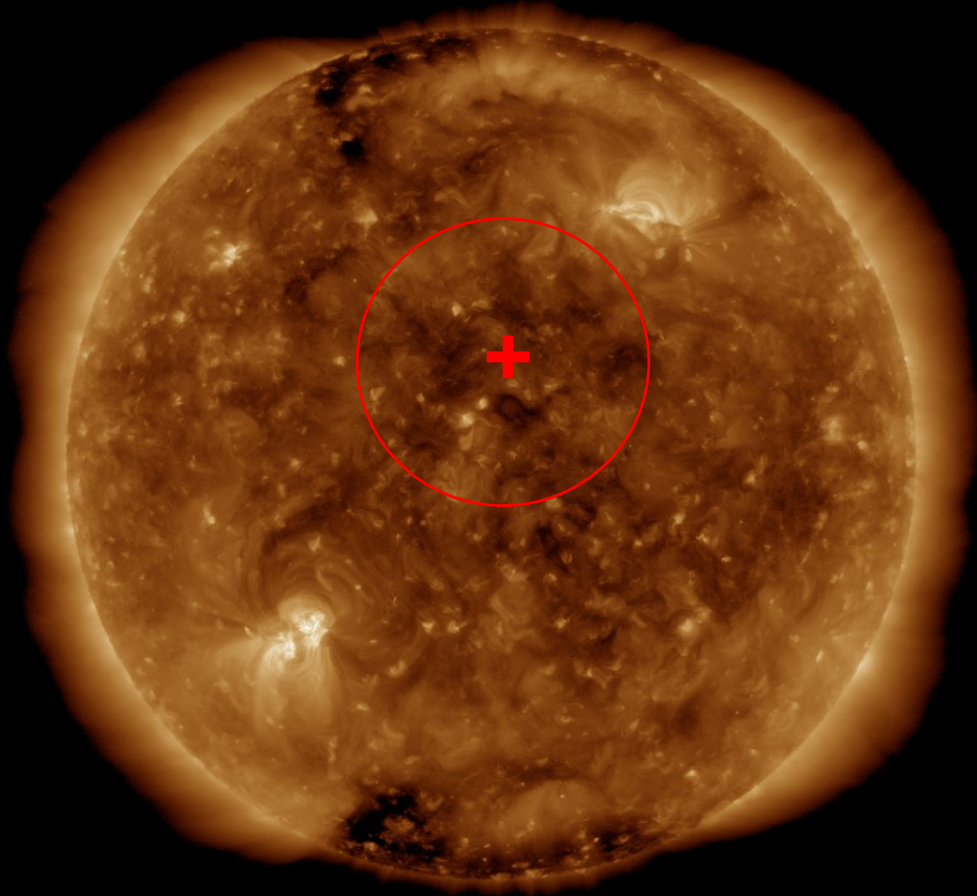


SDO/HMI Quick-Look Continuum: 20200614\_114500

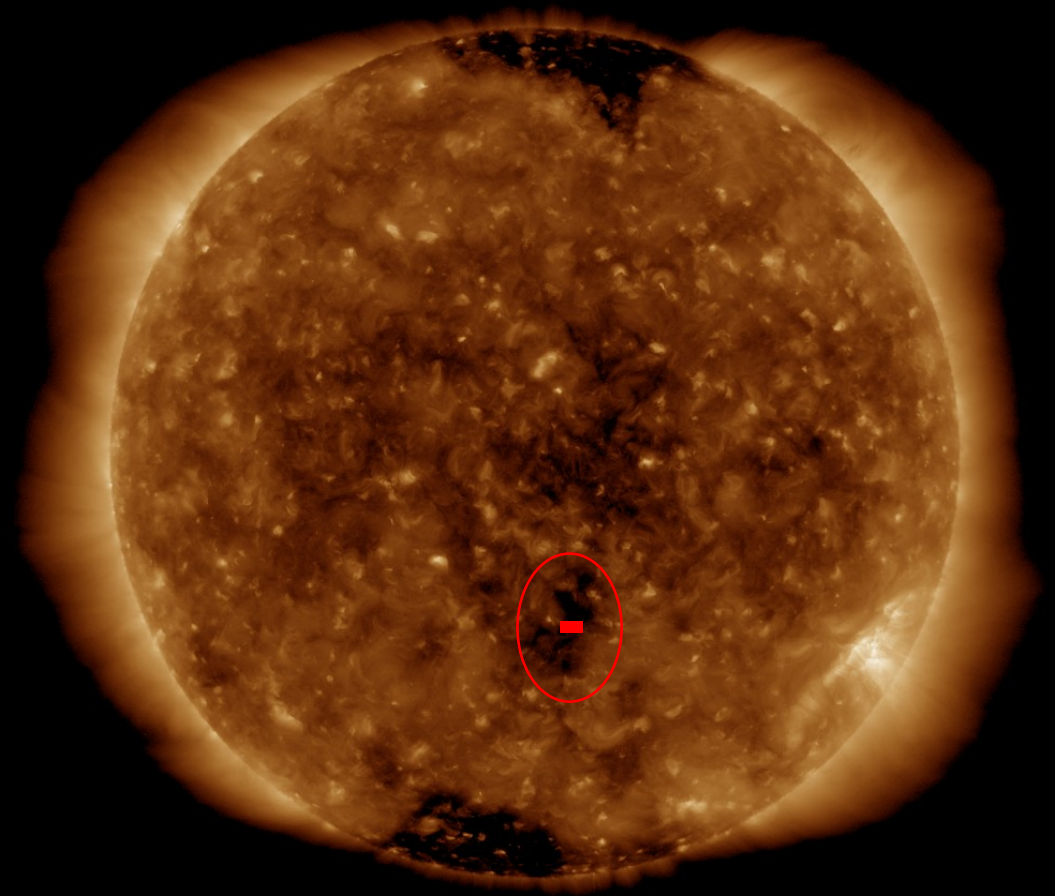
SDO/HMI Quick-Look Magnetogram: 20200614\_114500

# Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-06-07



SDO/AIA 19.3 nm 2020-06-14



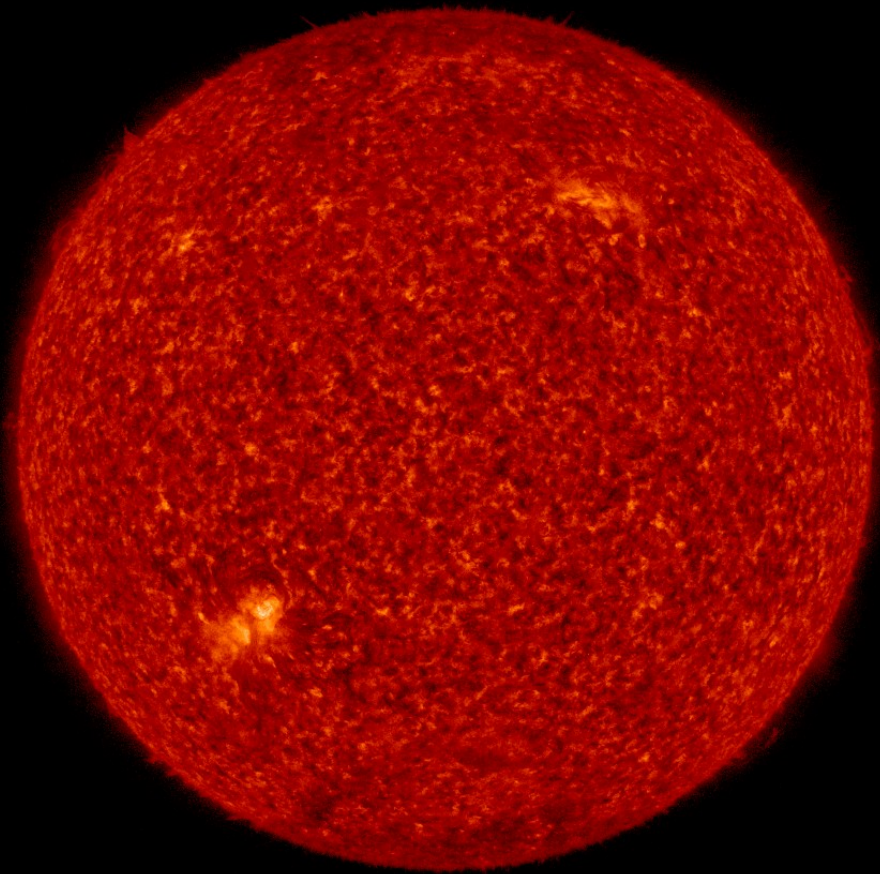
SDO/AIA 193 2020-06-07 12:17:41 UT

SDO/AIA 193 2020-06-14 12:18:05 UT

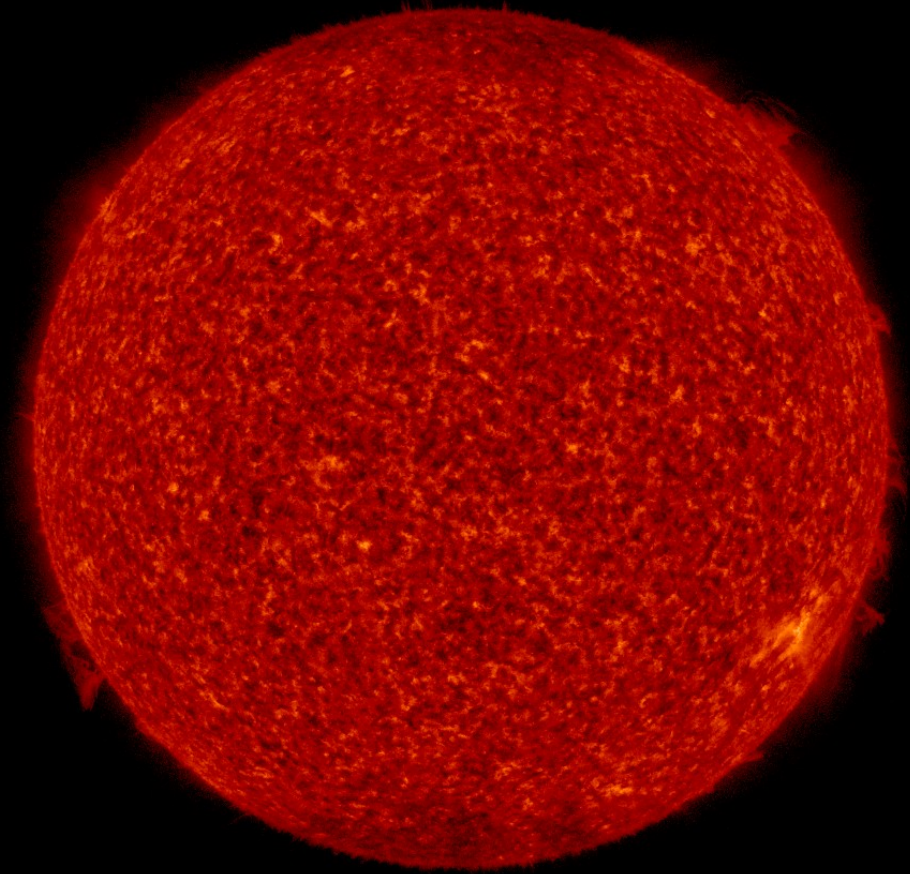


# Solar active region & Filament

SDO/AIA 30.4 nm 2020-06-07



SDO/AIA 30.4 nm 2020-06-14



SDO/AIA 304 2020-06-07 12:18:42 UT

SDO/AIA 304 2020-06-14 12:19:18 UT



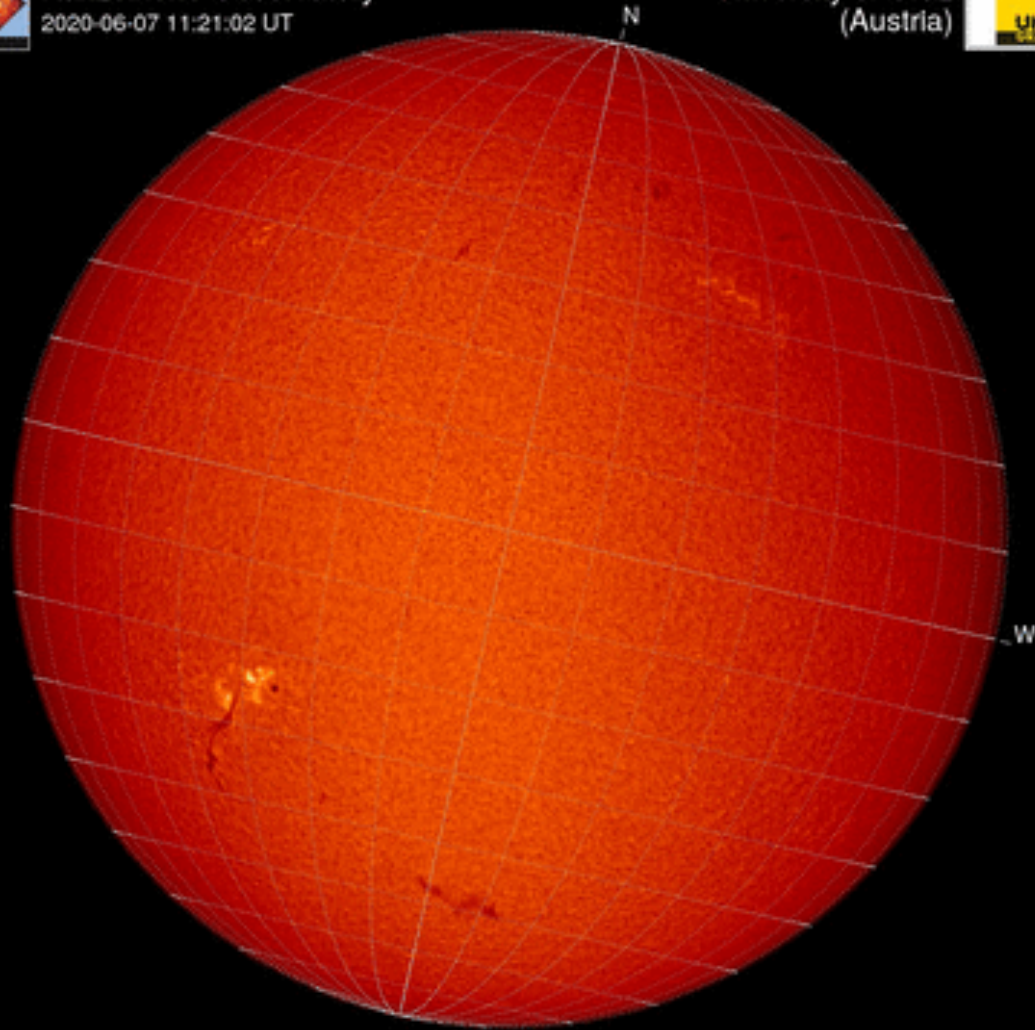
# Filament & Filament eruption

H-alpha 2020-06-07



Kanzelhöhe Observatory  
2020-06-07 11:21:02 UT

University of Graz  
(Austria)

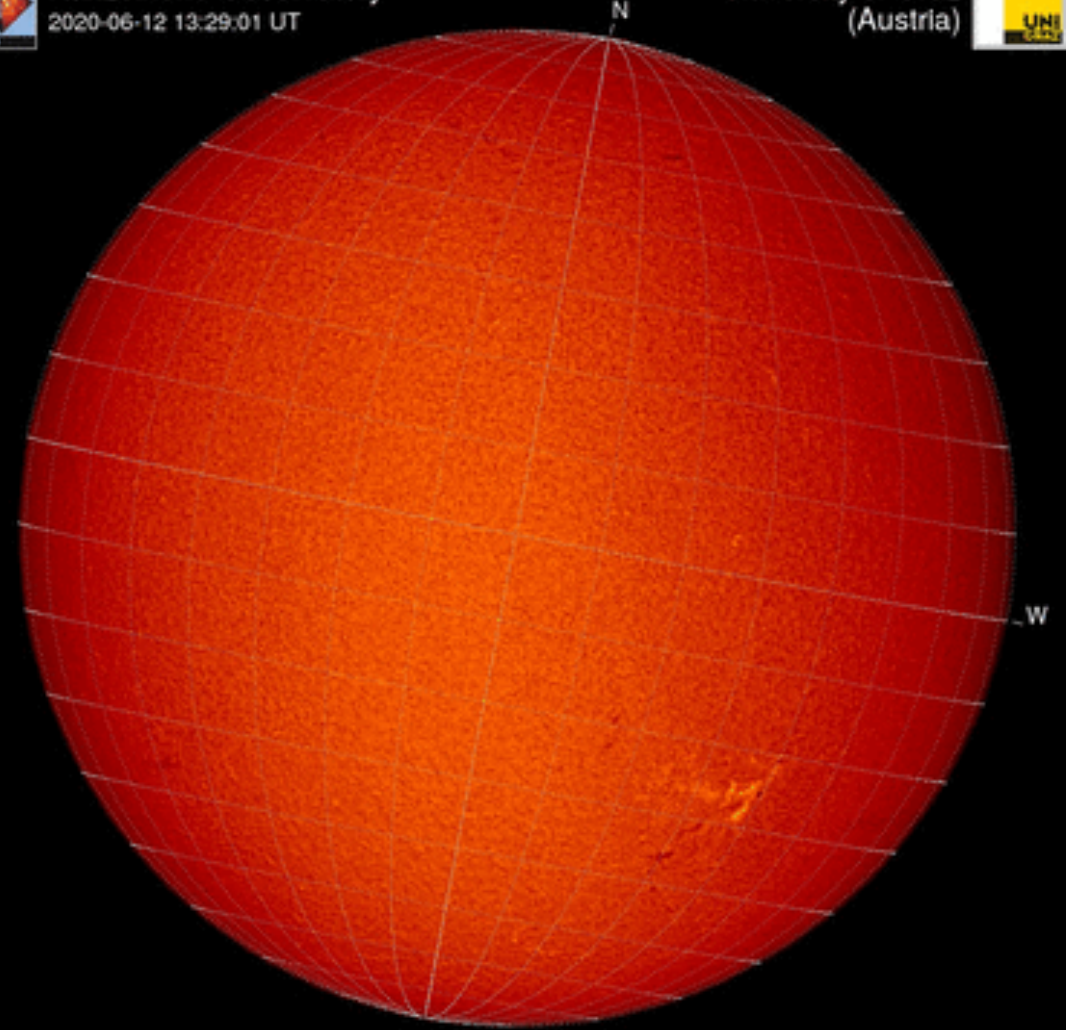


H-alpha 2020-06-14

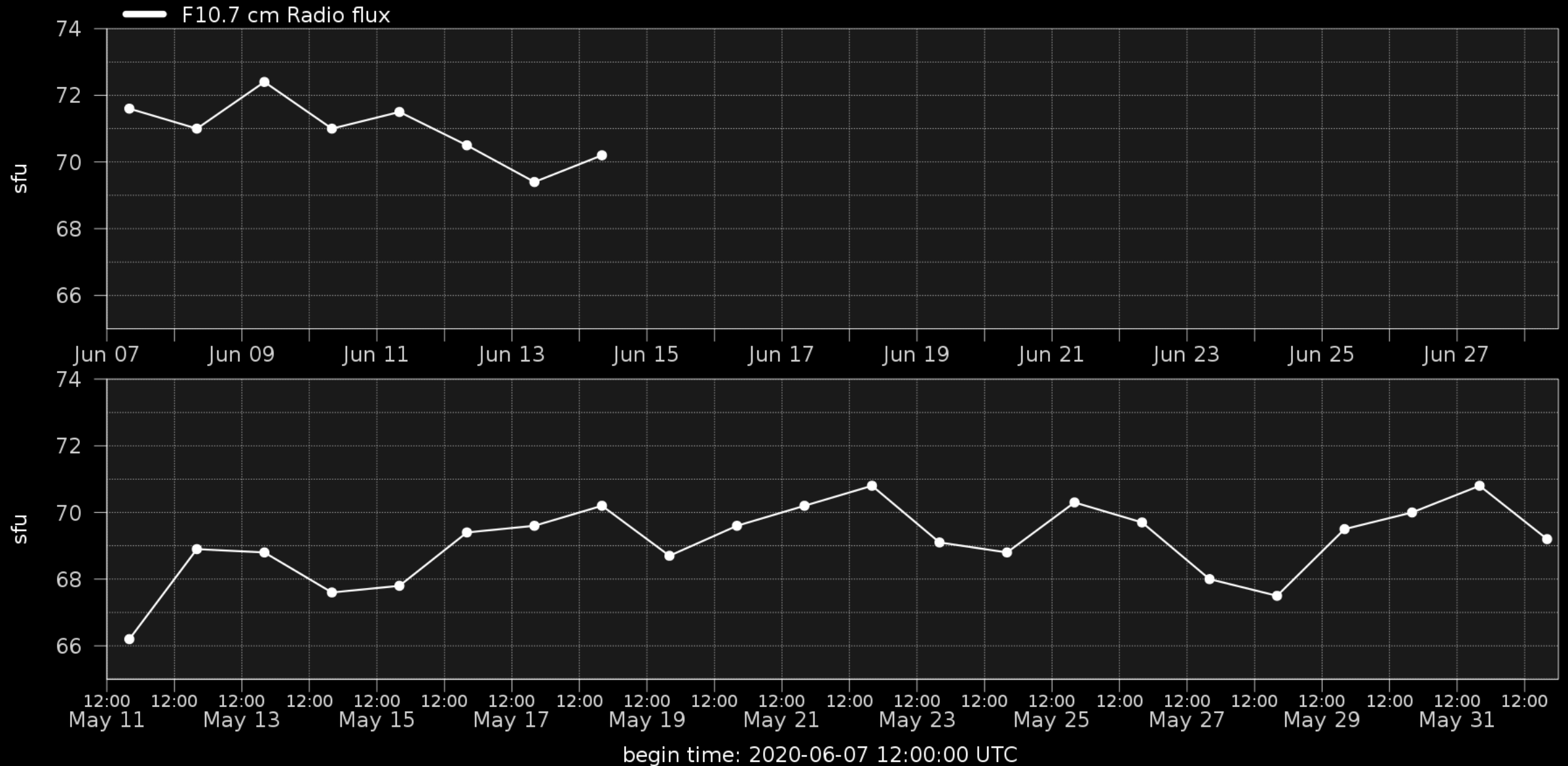


Kanzelhöhe Observatory  
2020-06-12 13:29:01 UT

University of Graz  
(Austria)

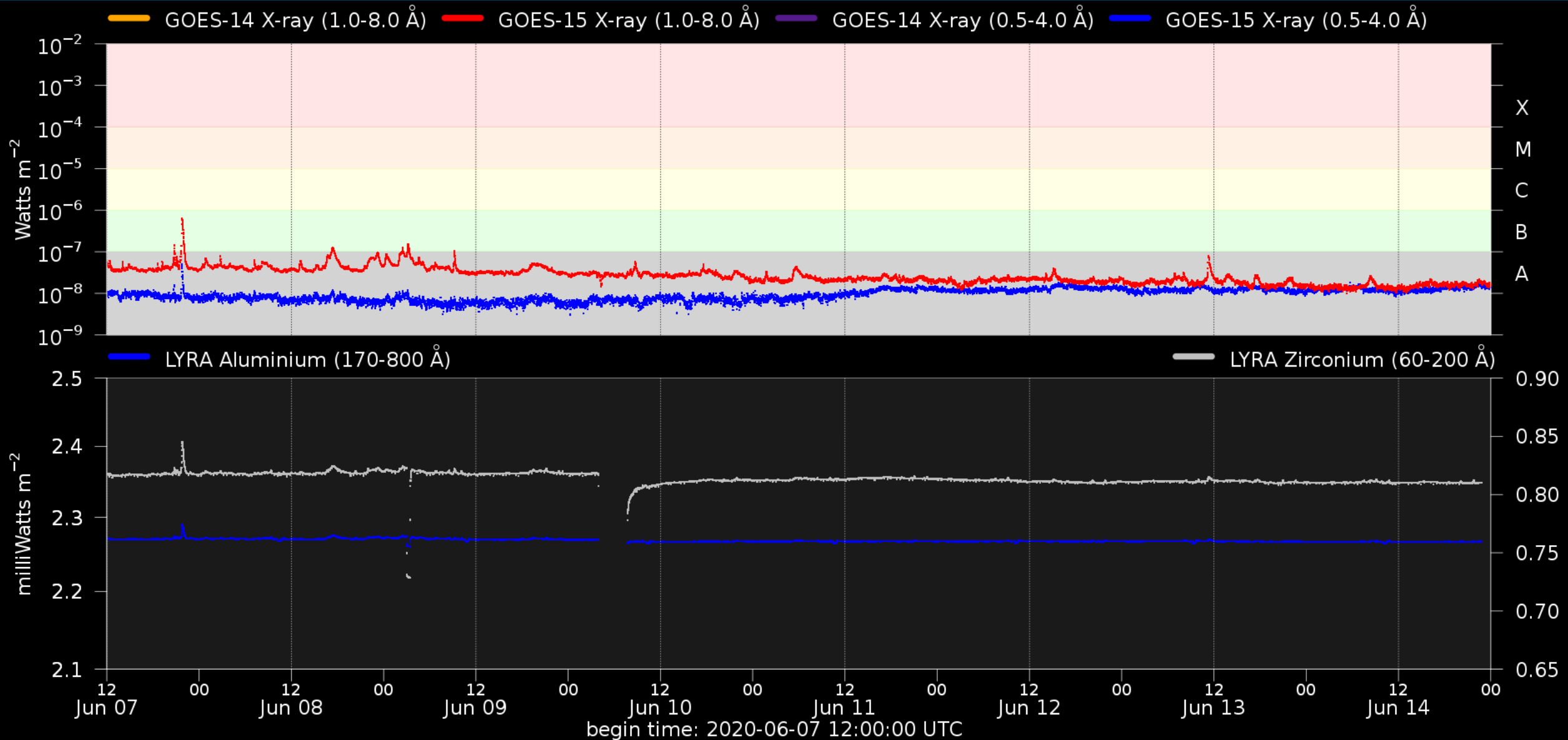


# Solar F10.7cm radio flux

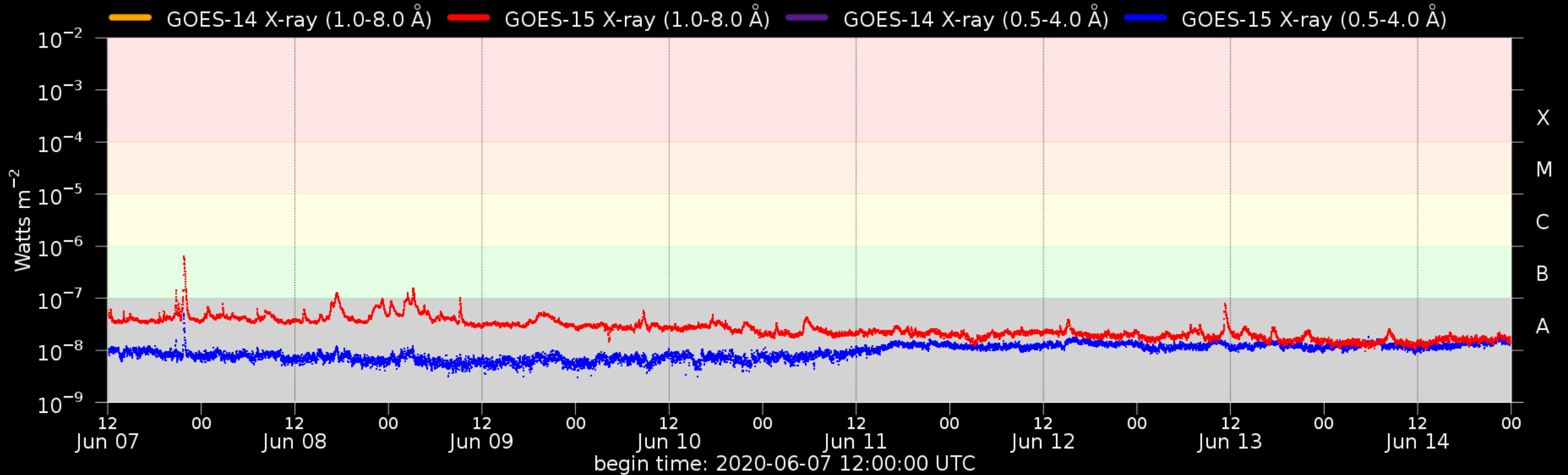




# Solar X-Ray and UV flux



# Flaring activity



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

Issue date	2020-06-07	2020-06-08	2020-06-09	2020-06-10	2020-06-11	2020-06-12	2020-06-13	2020-06-14
Probability	--- 15 01 01	--- 30 01 01	--- 20 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 02 01 01
Observed	03 00 00 00	04 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

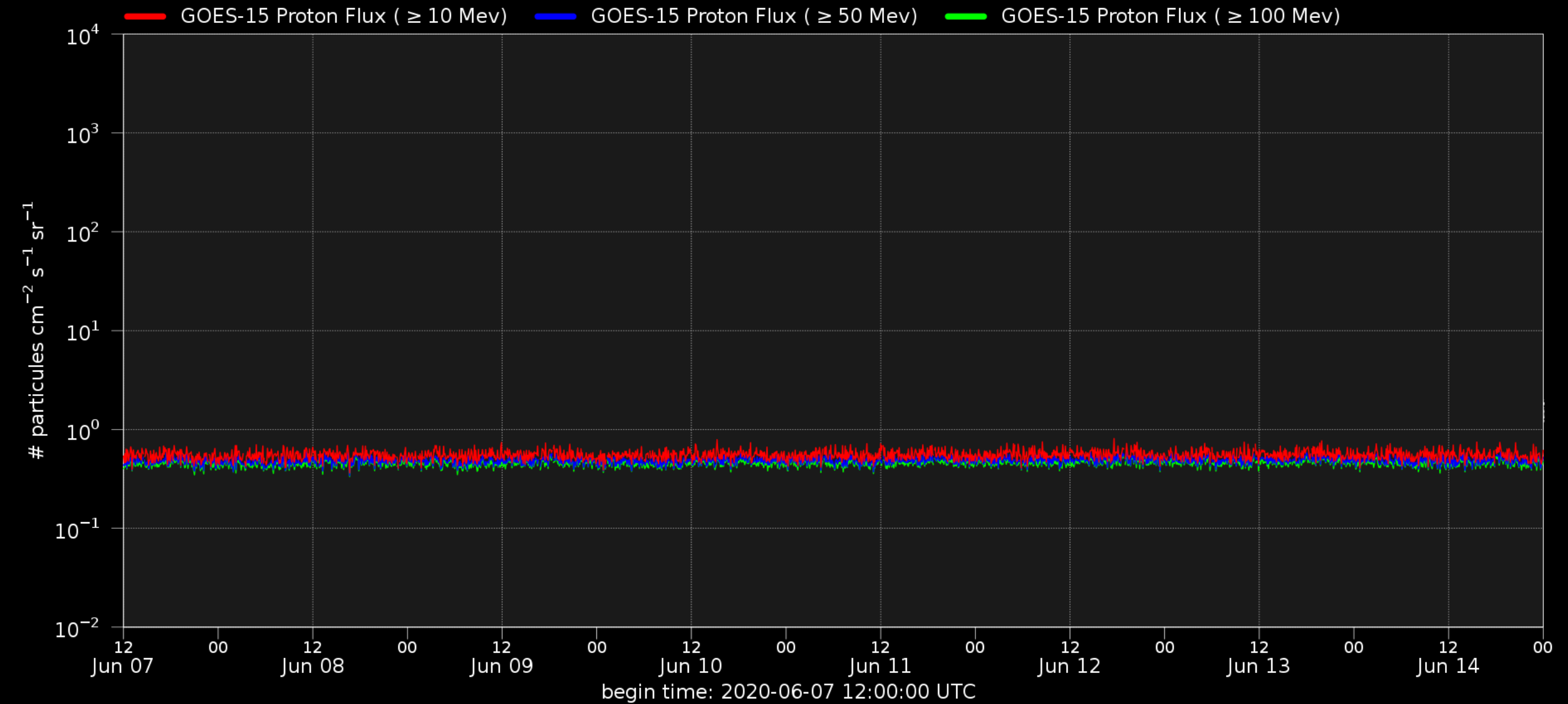


# Coronal Mass Ejection



11:12	06/13
08:00	06/13
05:12	06/13
02:12	06/13
22:36	06/12
19:42	06/12
17:00	06/12
12:36	06/12
09:36	06/12
06:12	06/12
03:12	06/12
00:00	06/12
22:32	06/11
21:09	06/11
19:39	06/11
18:10	06/11
16:41	06/11
15:17	06/11
13:47	06/11
12:24	06/11
10:54	06/11
09:19	06/11
07:50	06/11
06:21	06/11
04:51	06/11
03:28	06/11
01:58	06/11
00:29	06/11
23:00	06/10
21:30	06/10
20:07	06/10
18:43	06/10
17:14	06/10
15:50	06/10
14:20	06/10
12:57	06/10
11:16	06/10
09:52	06/10
08:23	06/10
06:59	06/10
05:30	06/10
04:06	06/10
02:37	06/10
01:08	06/10
23:38	06/09

# Solar proton flux



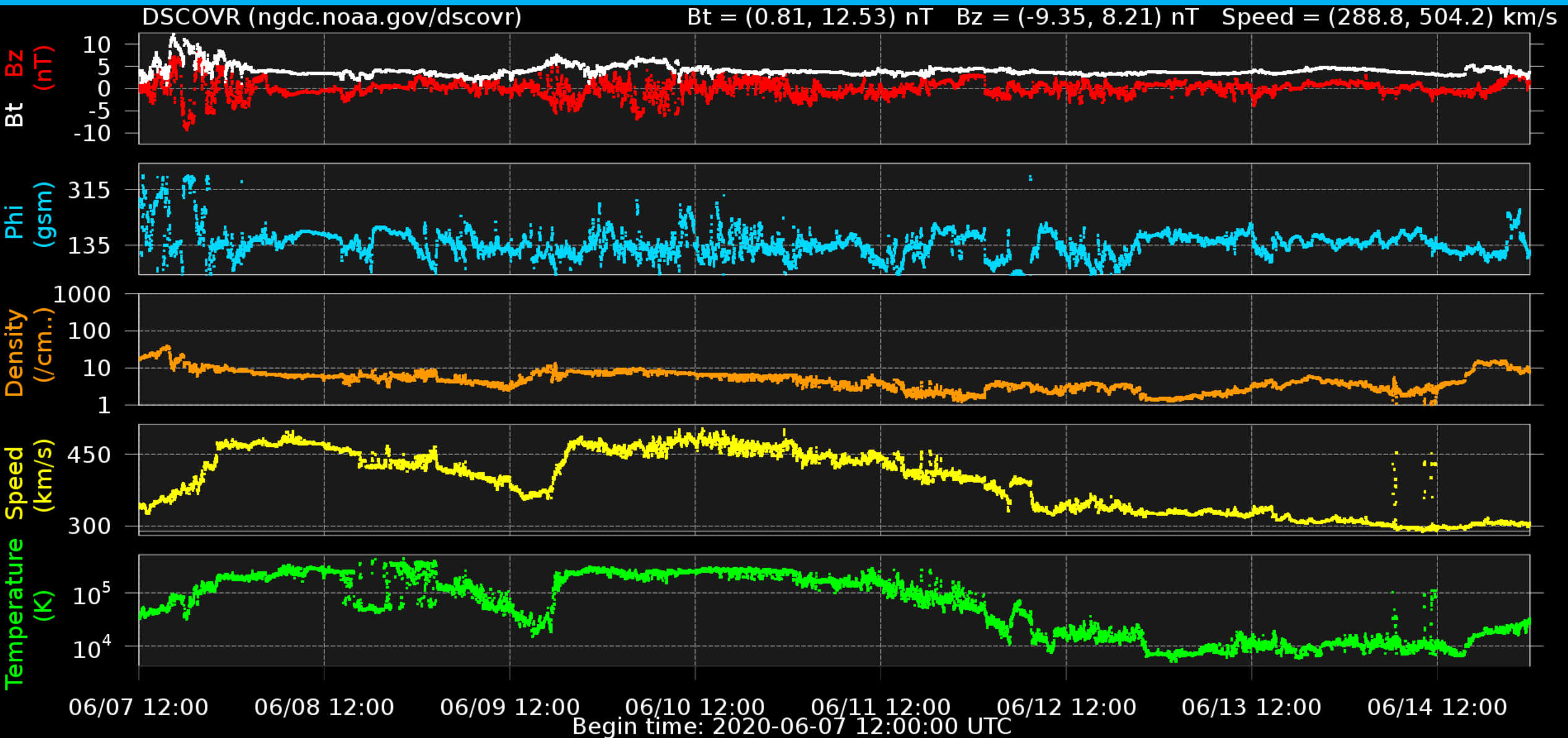


# Solar Wind and Geomagnetic Activity

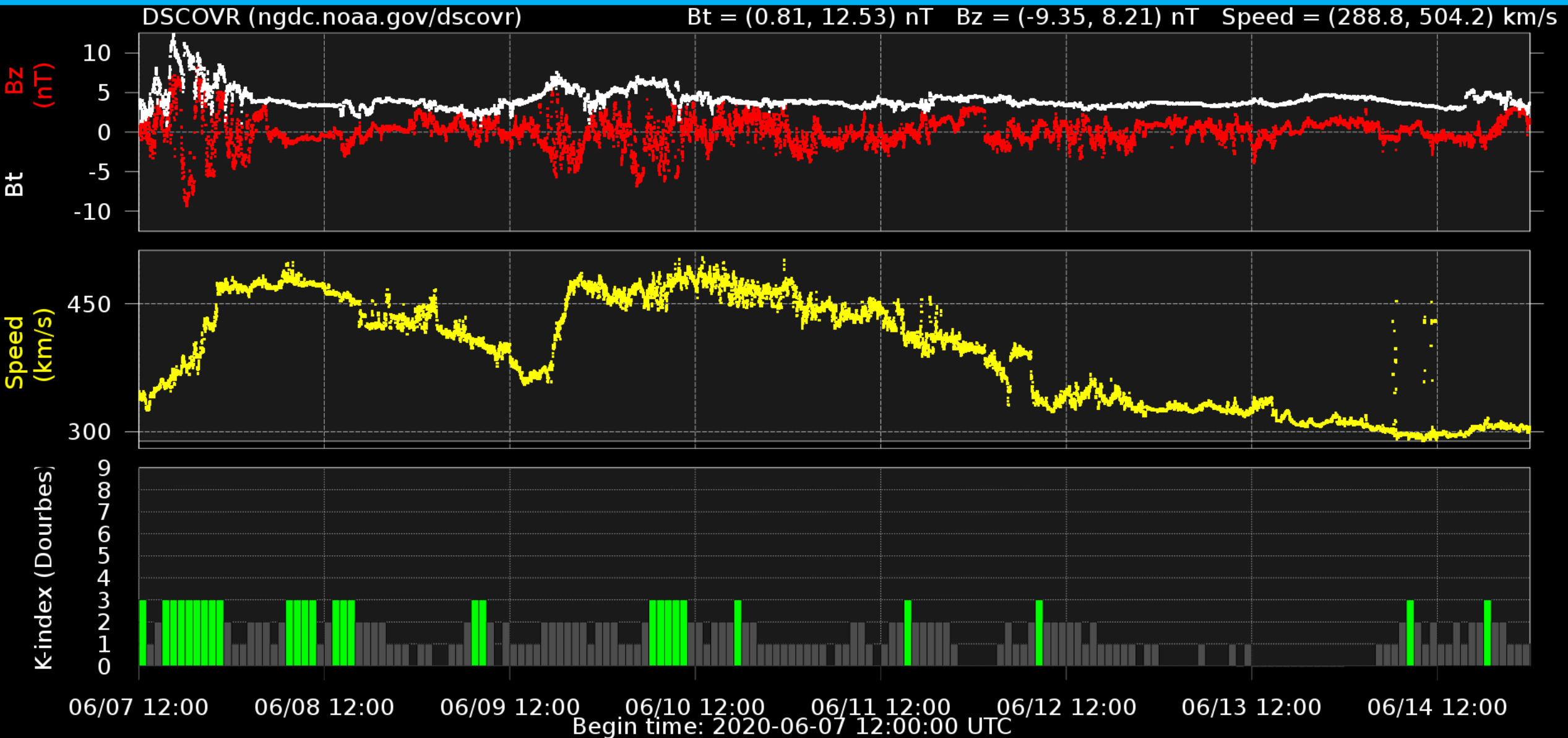


Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

# Solar wind parameters (DSCOVR data)

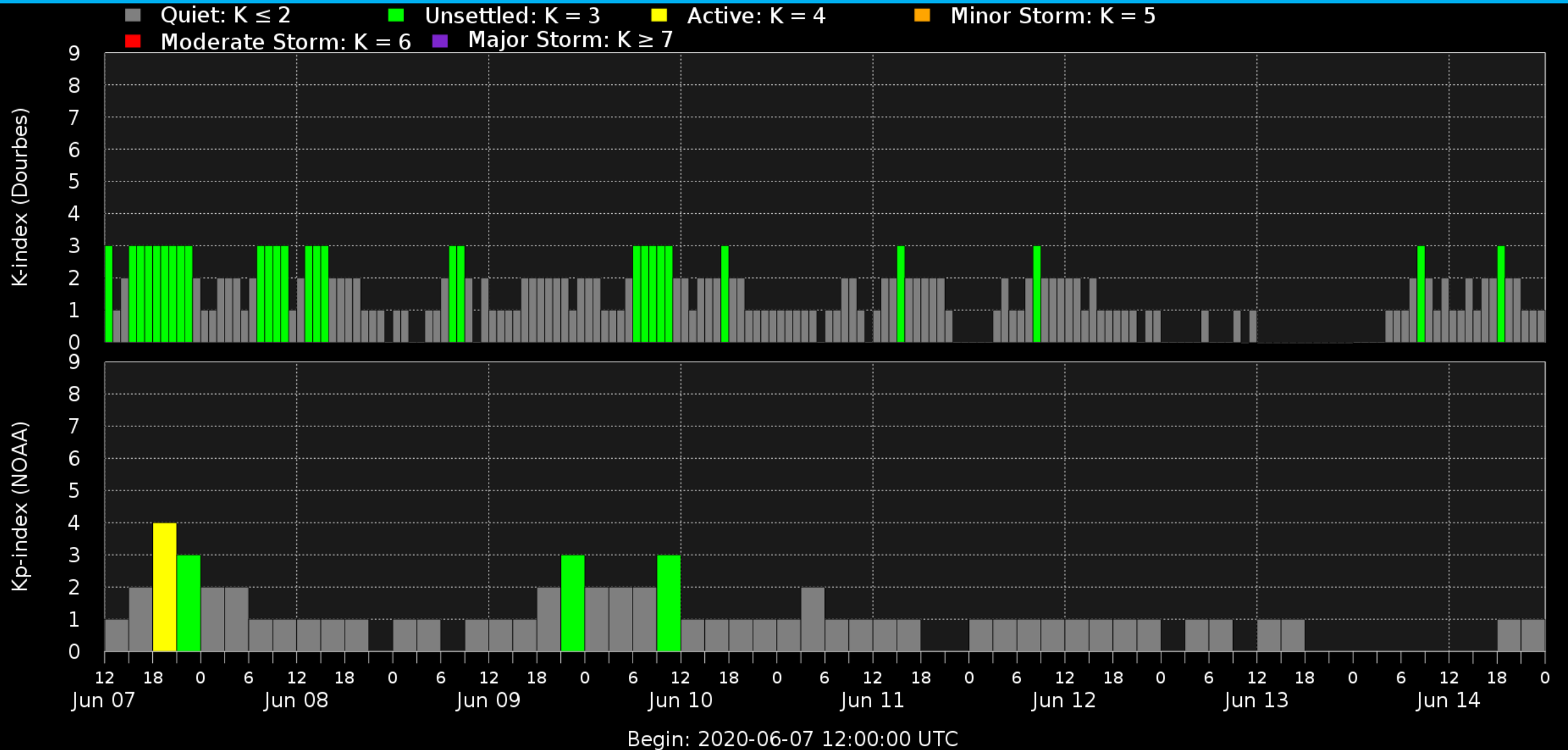


# Solar wind parameters & K-index (DSCOVR/Dourbes)





# Geomagnetic activity (K-indexes)



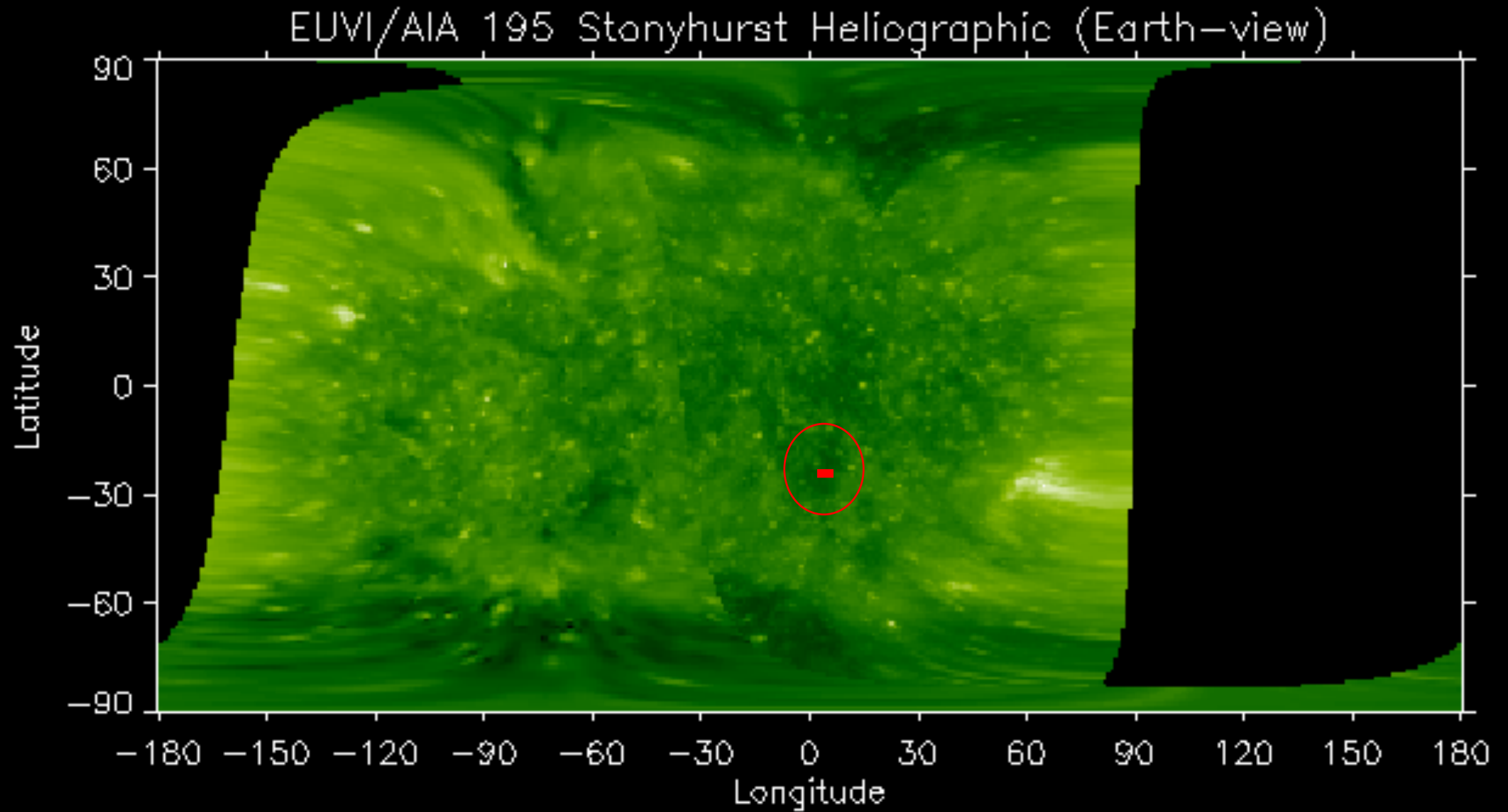
# Outlook



Royal Observatory  
*of* Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

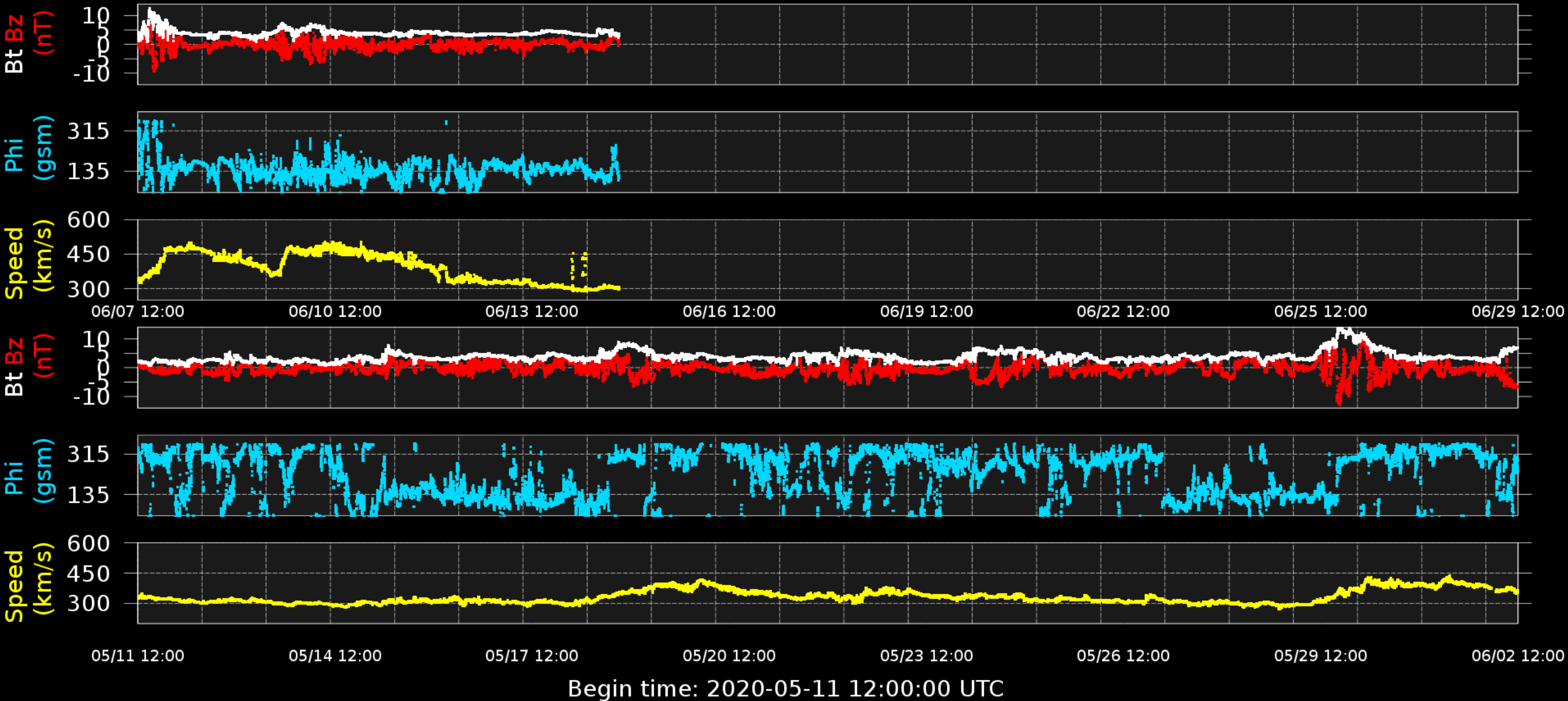
# Outlook: Solar activity





# Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



# SIDC Space Weather Briefing

See you at our next briefing!

Or visit us at [www.sidc.be](http://www.sidc.be)



Royal Observatory  
of Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)