

SIDC Space Weather Briefing

02 August 2020 - 09 August 2020

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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 2020-08-02 12:00 UT to 2020-08-09 12:00 UT

Active regions	NOAA AR 2768, 2769 and 2770
Flaring	# B-class flare: 11 # C-class flare: 1 # M-class flare: 0 # X-class flare: 0 (NOAA AR 2770)
Filaments	No filament eruption
CMEs	Few narrow, faint, slow and not Earth-directed CMEs
Proton Events	No proton Event

Solar wind and geomagnetic conditions from 2020-08-02 12:00 UT to 2020-08-09 12:00 UT

Coronal Holes	One equatorial positive polarity coronal hole (central meridian August 03)
ICME	No ICME observed
SW Conditions	V_{MAX} 770 km/s and $ B _{MAX}$ 10 n
K-indices	max K-index (Dourbes): 4.0 max Kp-index (NOAA): 4

All Quiet Alert: NOT QUIET

Solar Activity

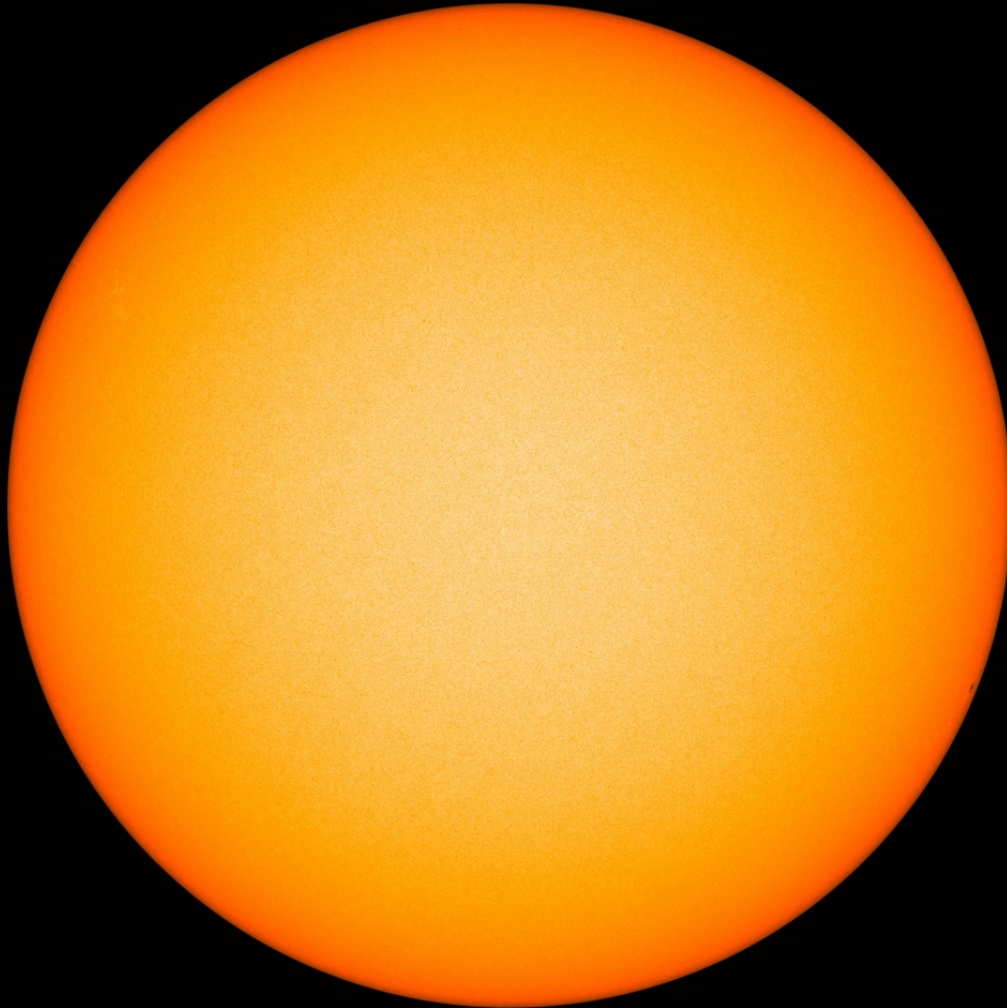


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Solar active region - start of the week

SDO/HMI White Light 2020-08-02



SDO/HMI Quick-Look Continuum: 20200802_114500

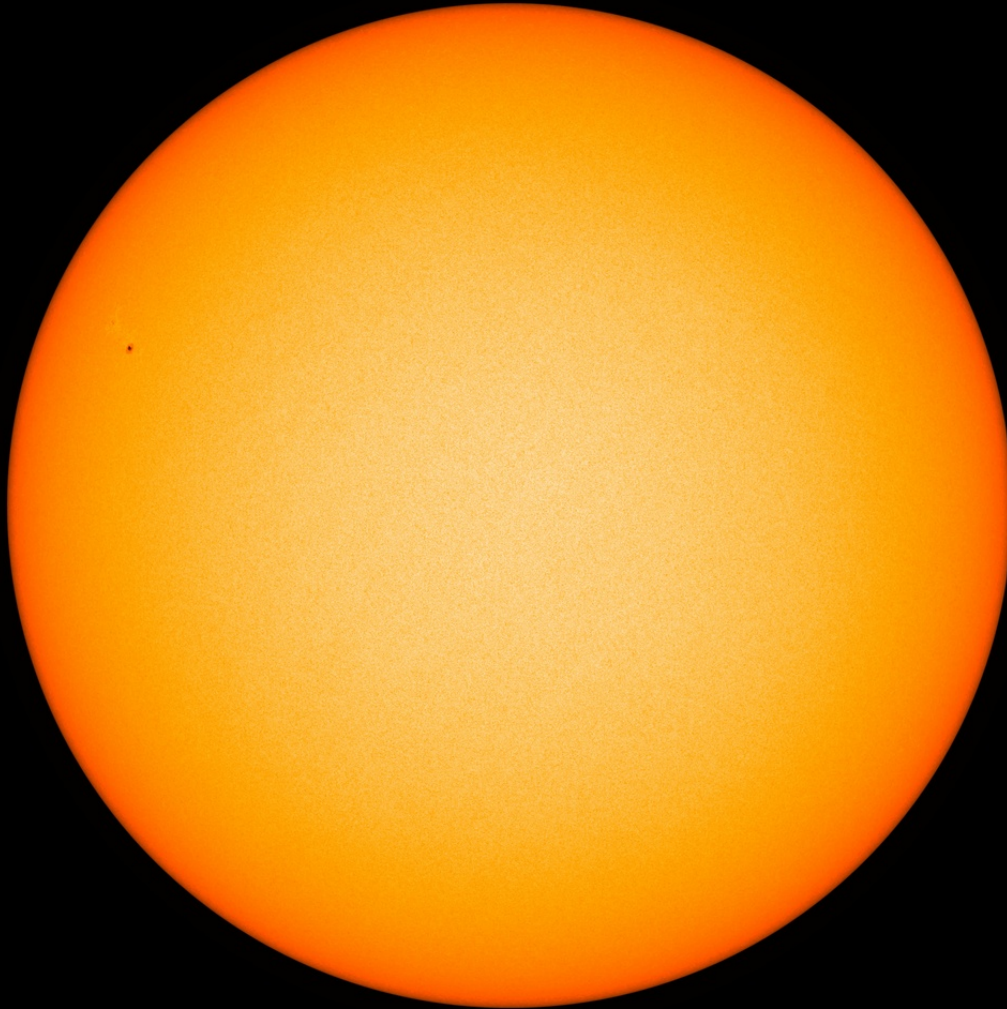
SDO/HMI Magnetogram 2020-08-02



SDO/HMI Quick-Look Magnetogram: 20200802_114500

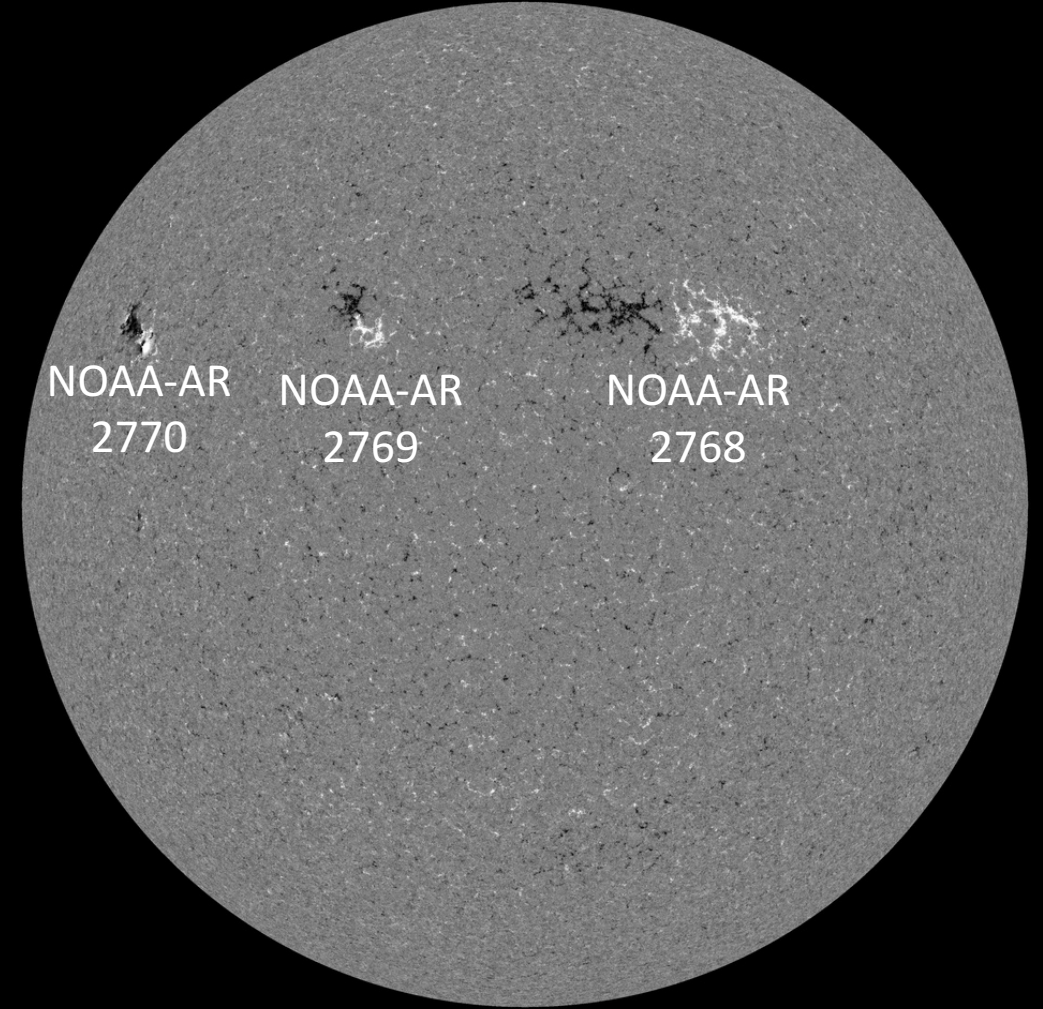
Solar active region - middle of the week

SDO/HMI White Light 2020-08-05



SDO/HMI Quick-Look Continuum: 20200805_114500

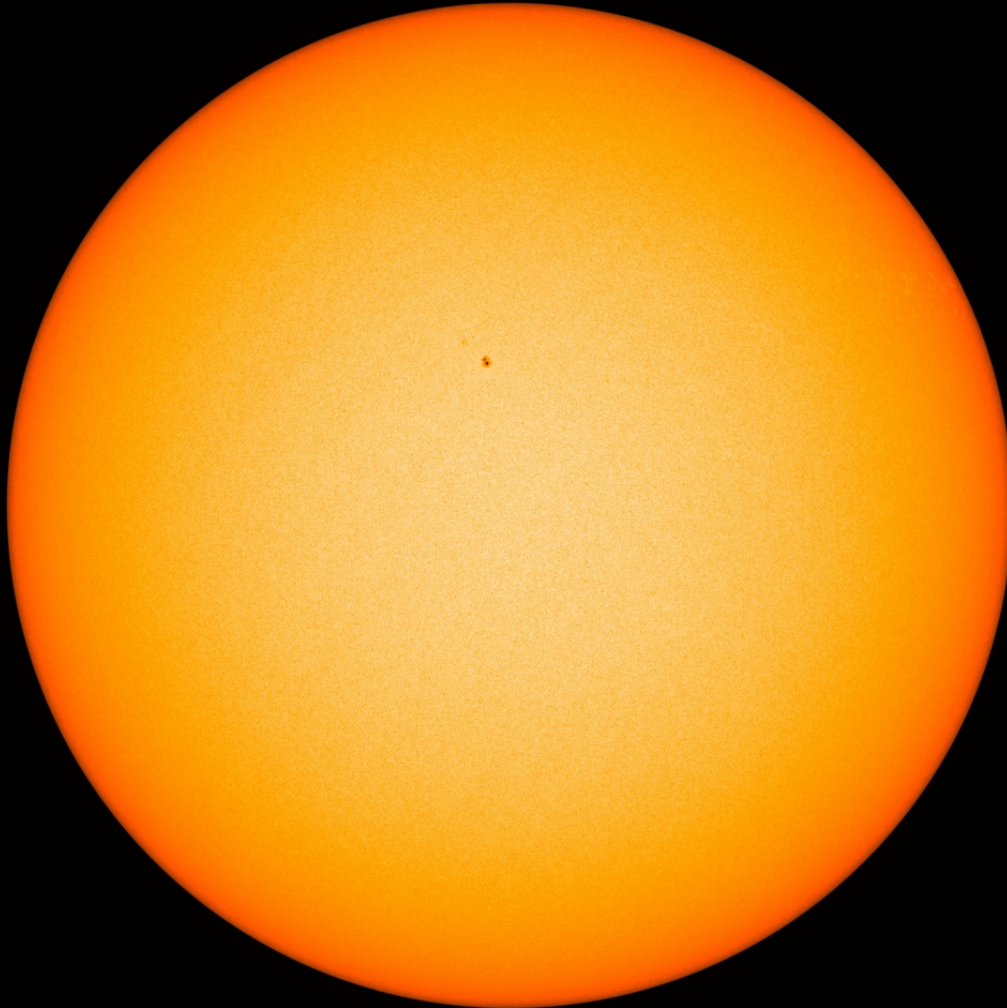
SDO/HMI Magnetogram 2020-08-05



SDO/HMI Quick-Look Magnetogram: 20200805_114500

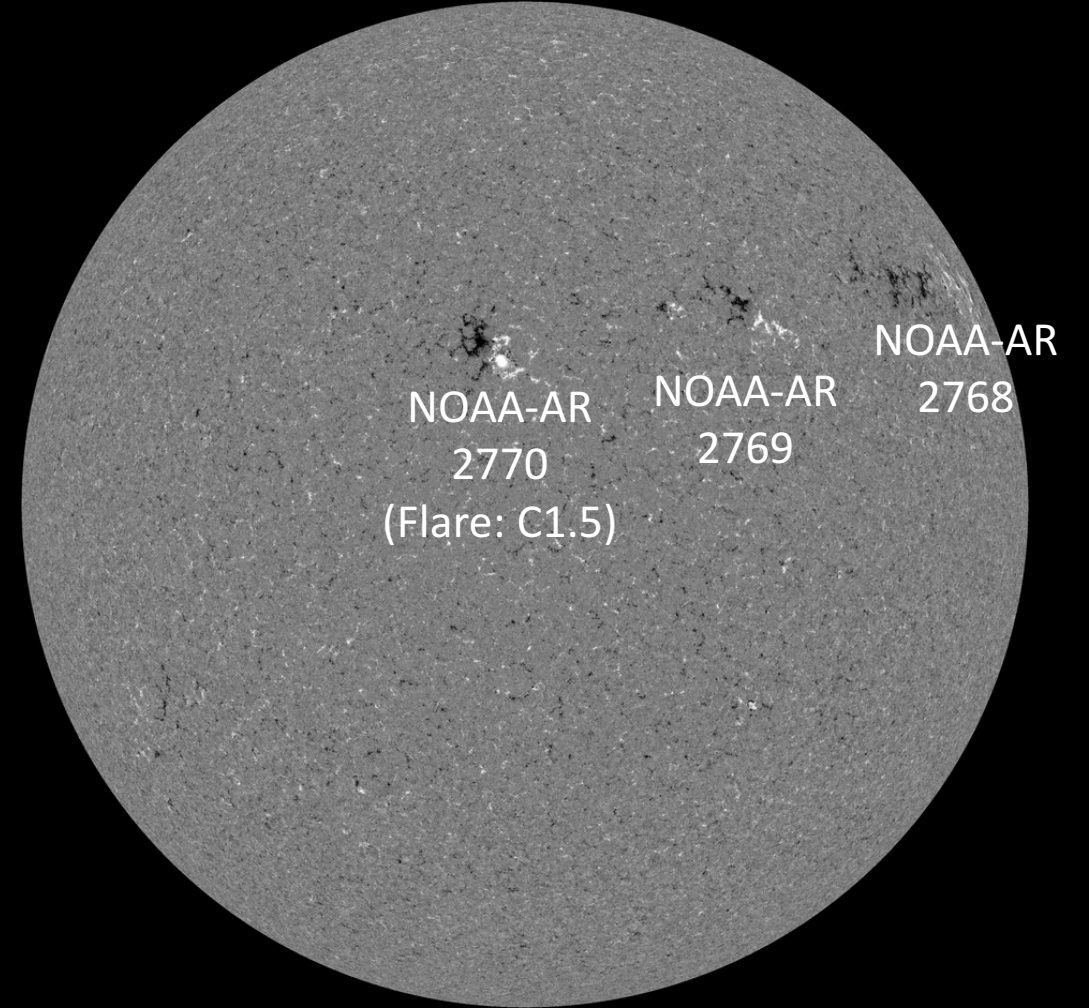
Solar active region - end of the week

SDO/HMI White Light 2020-08-09



SDO/HMI Quick-Look Continuum: 20200809_114500

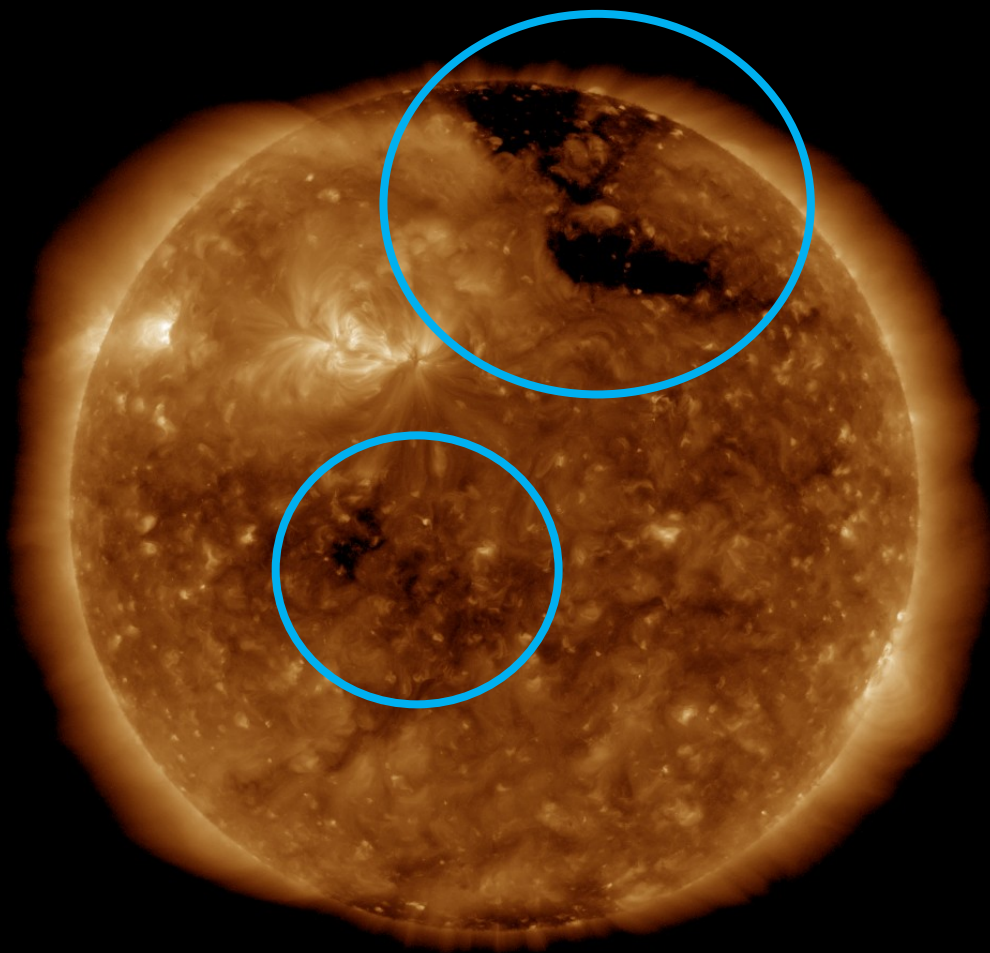
SDO/HMI Magnetogram 2020-08-09



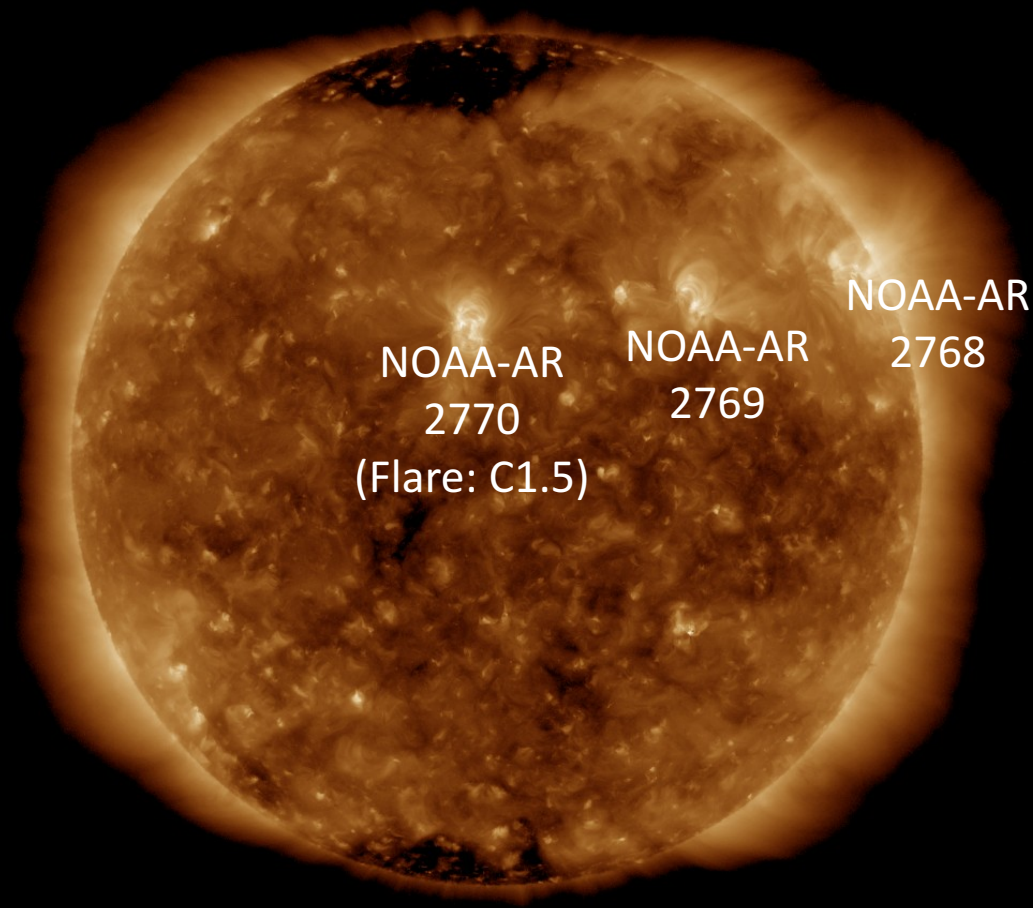
SDO/HMI Quick-Look Magnetogram: 20200809_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-08-02



SDO/AIA 19.3 nm 2020-08-09



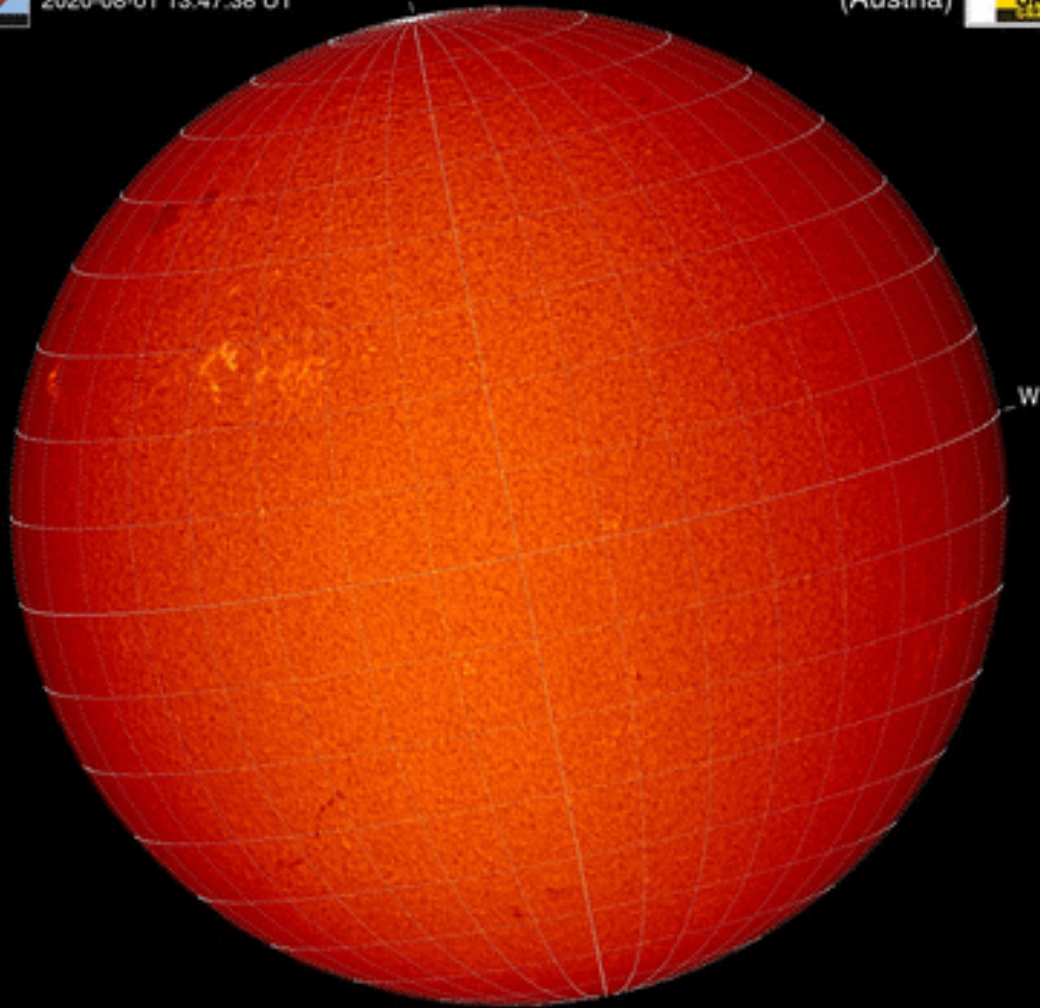
Filament & Filament eruption

H-alpha 2020-08-02



Kanzelhöhe Observatory
2020-08-01 13:47:38 UT

University of Graz
(Austria)

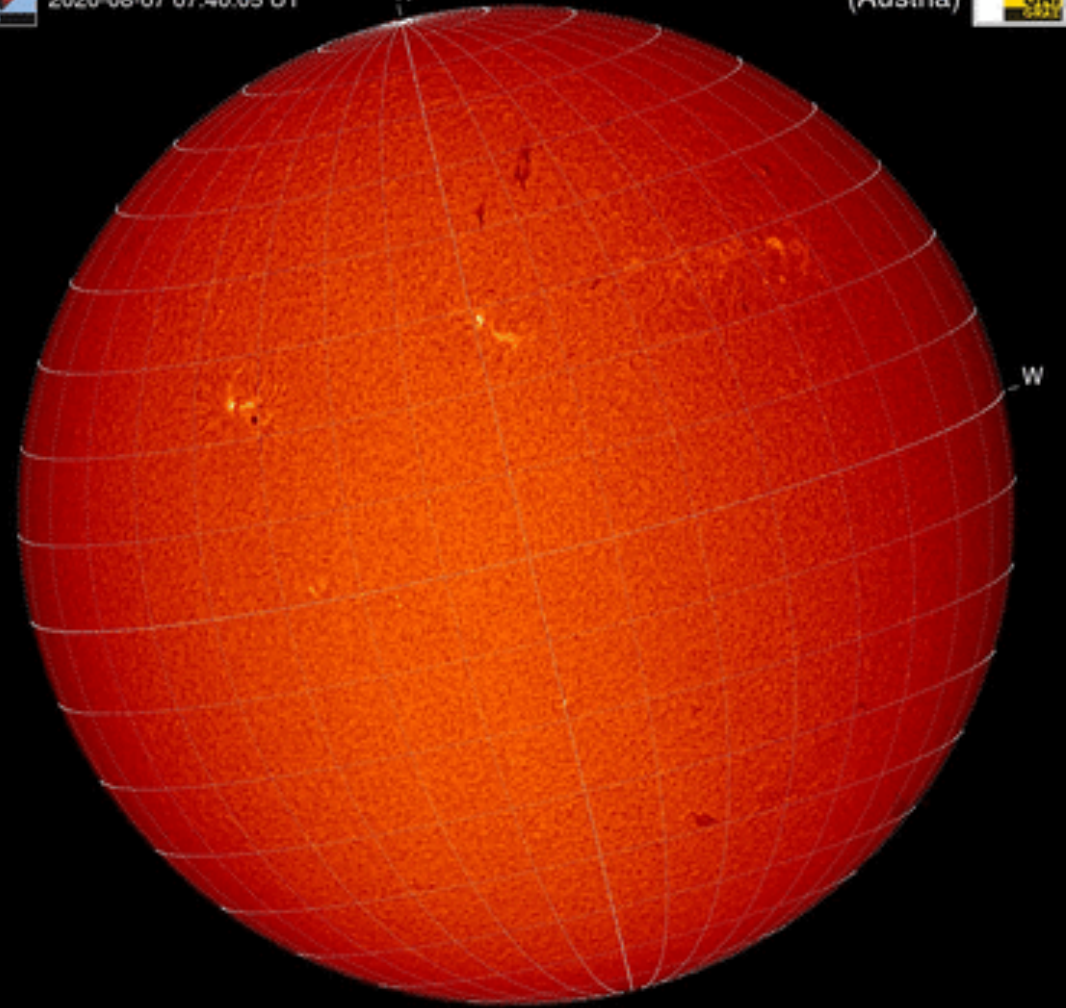


H-alpha 2020-08-09

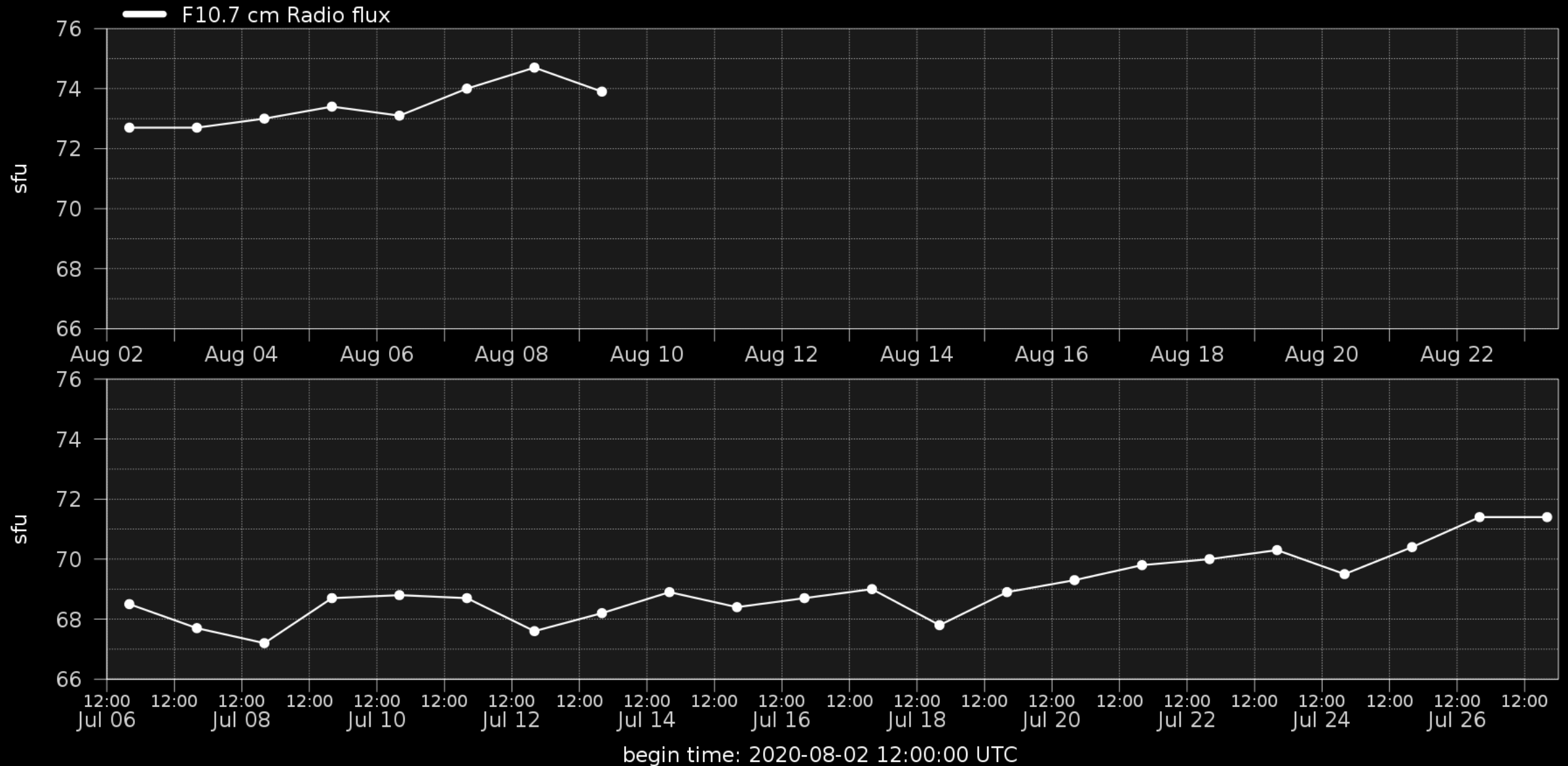


Kanzelhöhe Observatory
2020-08-07 07:40:05 UT

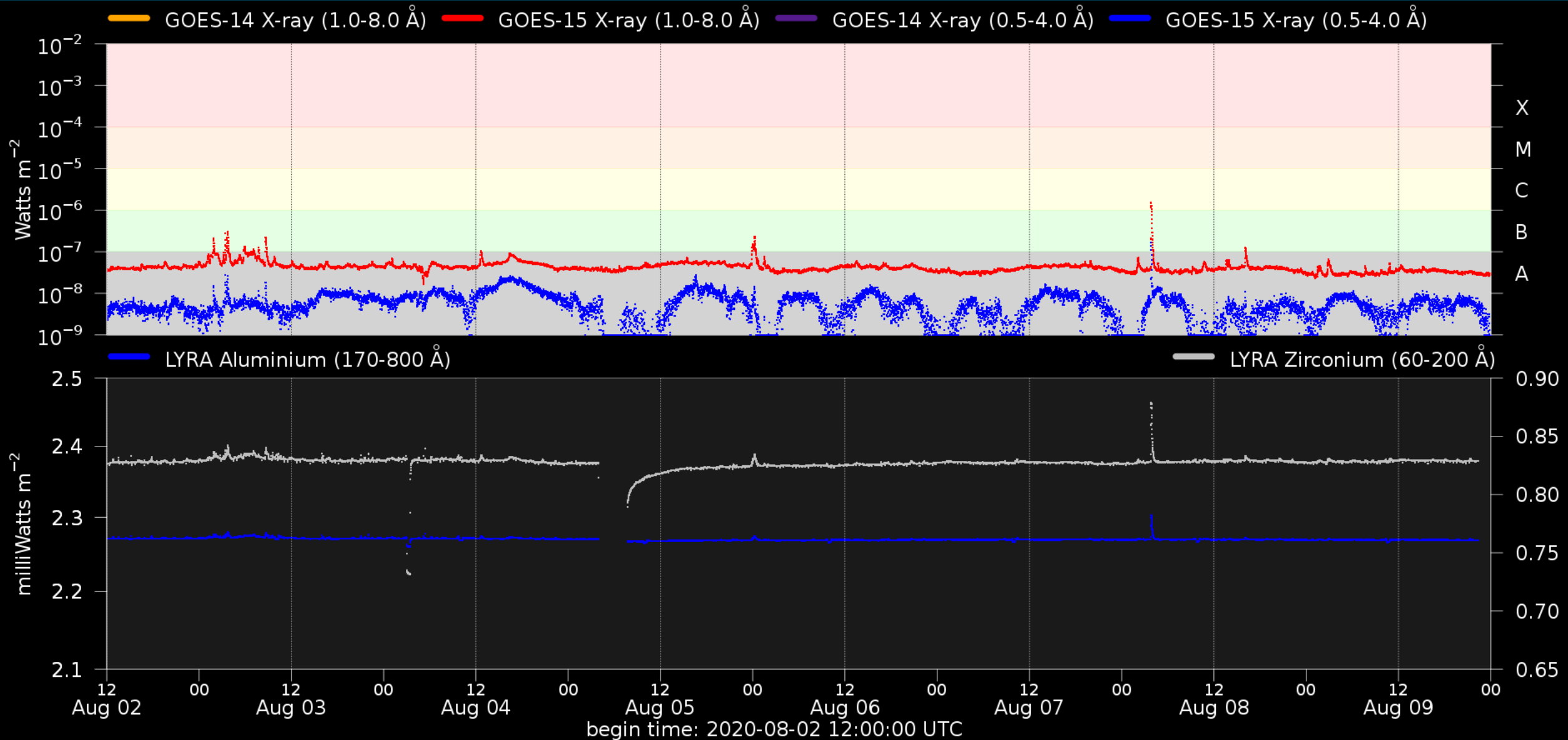
University of Graz
(Austria)



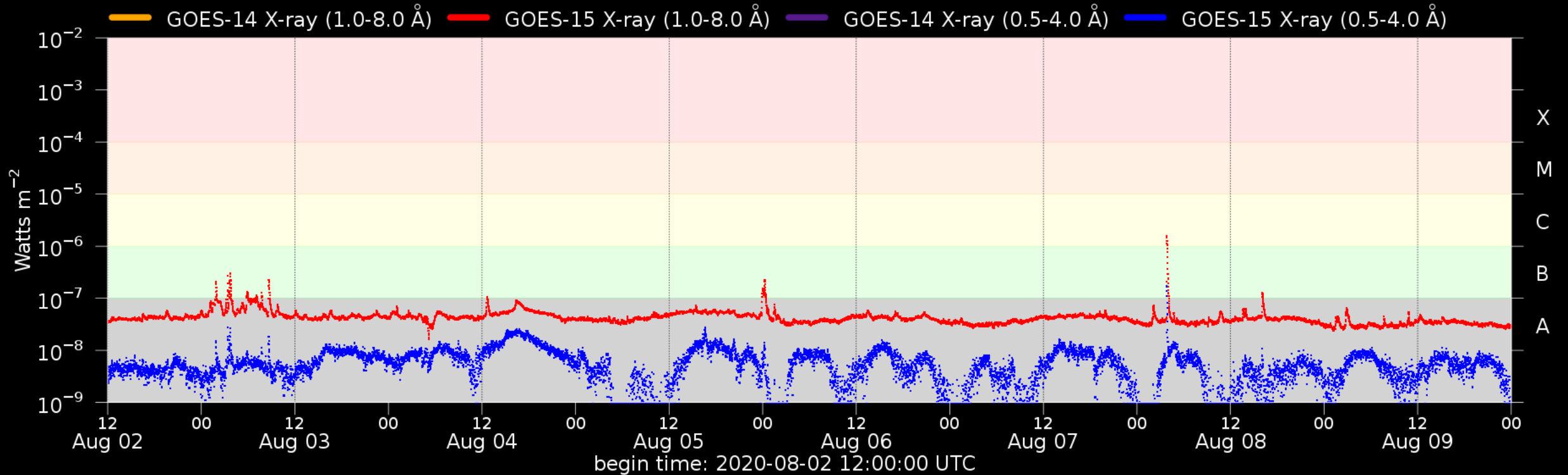
Solar F10.7cm radio flux



Solar X-Ray and UV flux



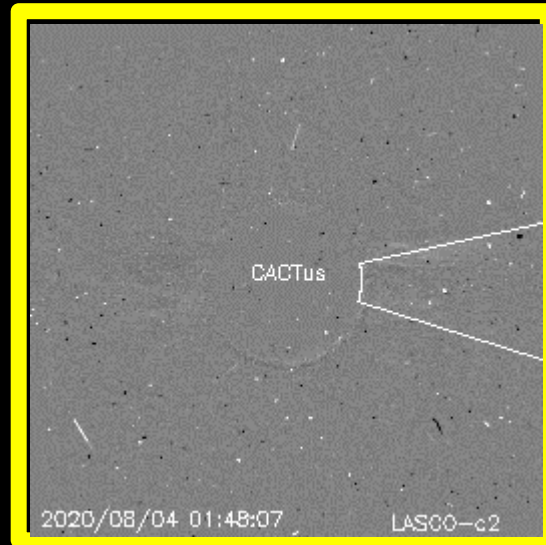
Flaring activity



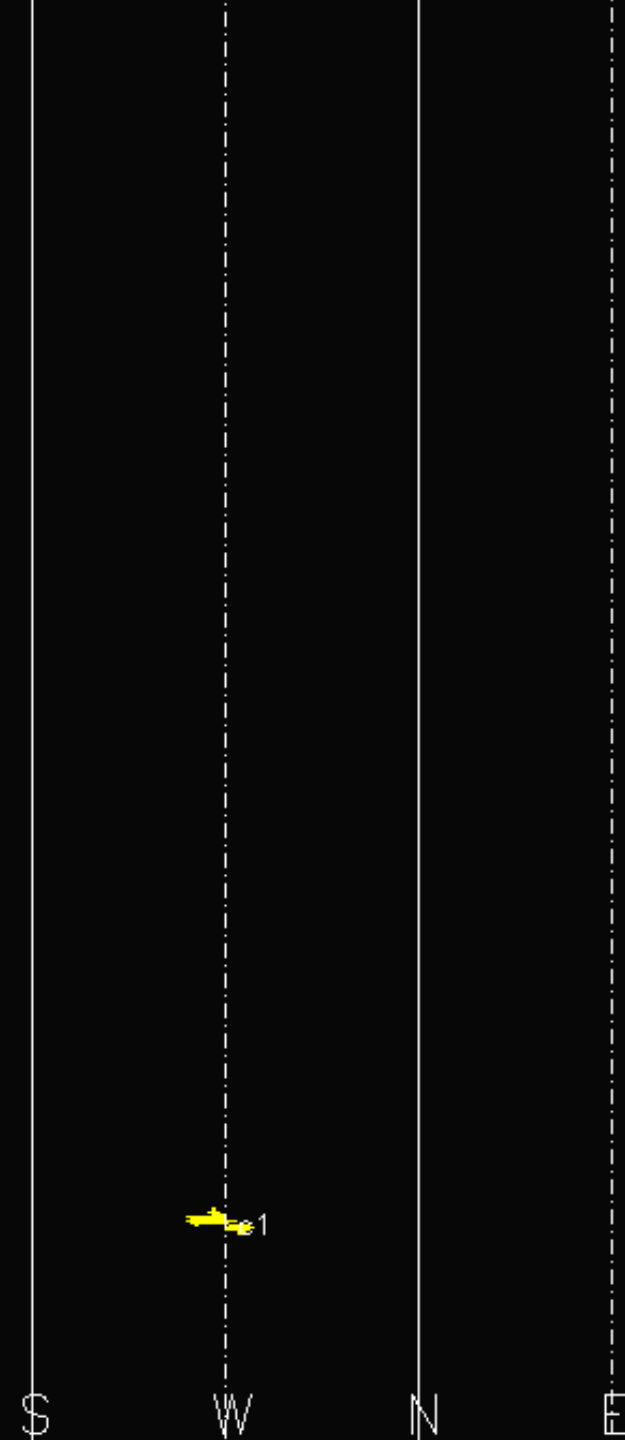
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2020-08-02	2020-08-03	2020-08-04	2020-08-05	2020-08-06	2020-08-07	2020-08-08	2020-08-09
Probability	--- 15 01 01	--- 10 01 01	--- 09 01 01	--- 05 01 01	--- 05 01 01	--- 05 01 01	--- 10 01 01	--- 05 01 01
Observed	07 00 00 00	00 00 00 00	01 00 00 00	01 00 00 00	00 00 00 00	01 01 00 00	01 00 00 00	00 00 00 00

Coronal Mass Ejection

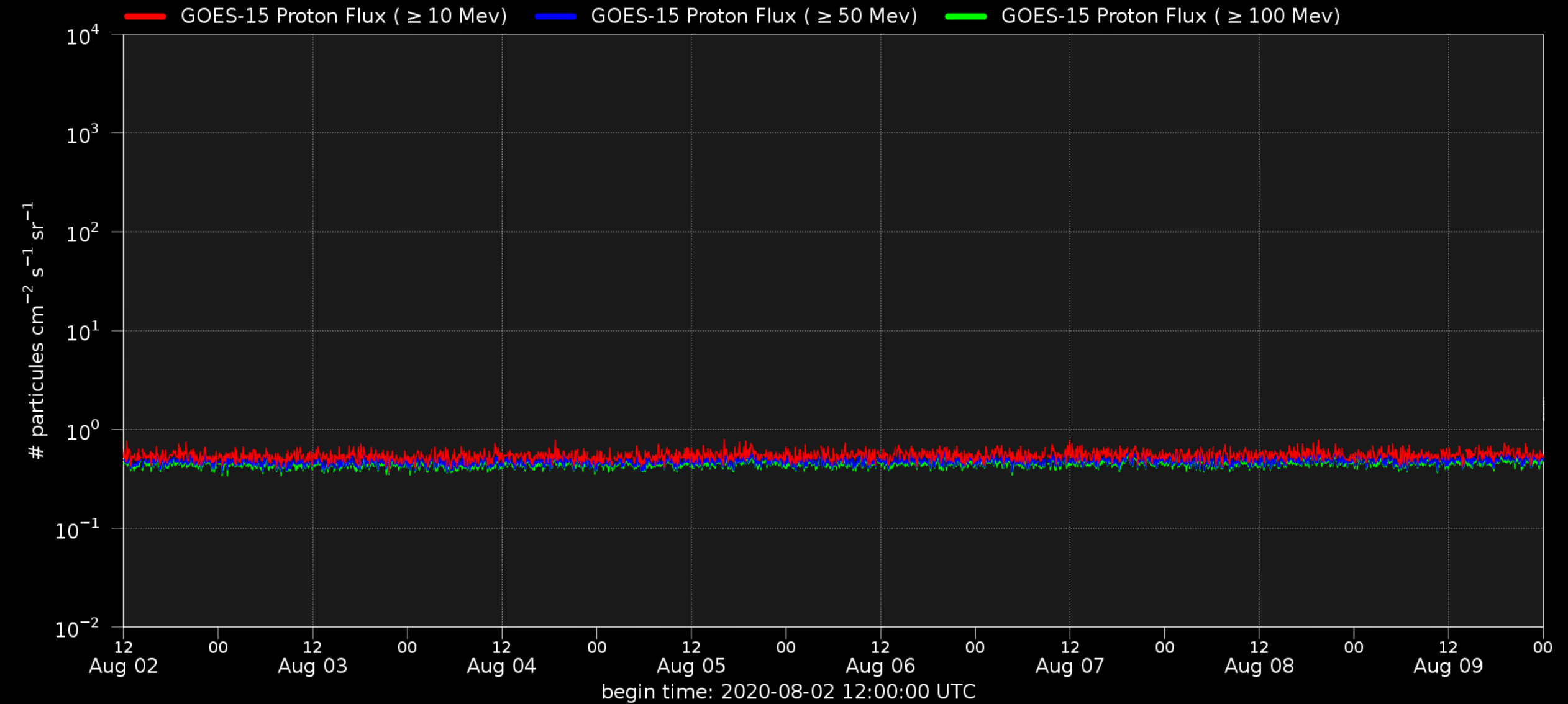


No Earth-directed CME observed
this week



01:36 08/09
22:12 08/08
19:24 08/08
16:36 08/08
12:48 08/08
10:00 08/08
06:48 08/08
04:00 08/08
00:36 08/08
19:48 08/07
17:00 08/07
14:12 08/07
10:48 08/07
07:36 08/07
03:24 08/07
23:24 08/06
19:36 08/06
16:36 08/06
14:00 08/06
11:00 08/06
07:48 08/06
04:24 08/06
00:48 08/06
21:48 08/05
19:00 08/05
16:12 08/05
13:25 08/05
10:36 08/05
07:36 08/05
04:30 08/05
01:48 08/05
22:12 08/04
19:12 08/04
16:12 08/04
12:48 08/04
10:12 08/04
07:00 08/04
04:24 08/04
00:48 08/04
21:36 08/03
18:24 08/03
15:12 08/03
11:48 08/03
09:12 08/03
06:00 08/03

Solar proton flux

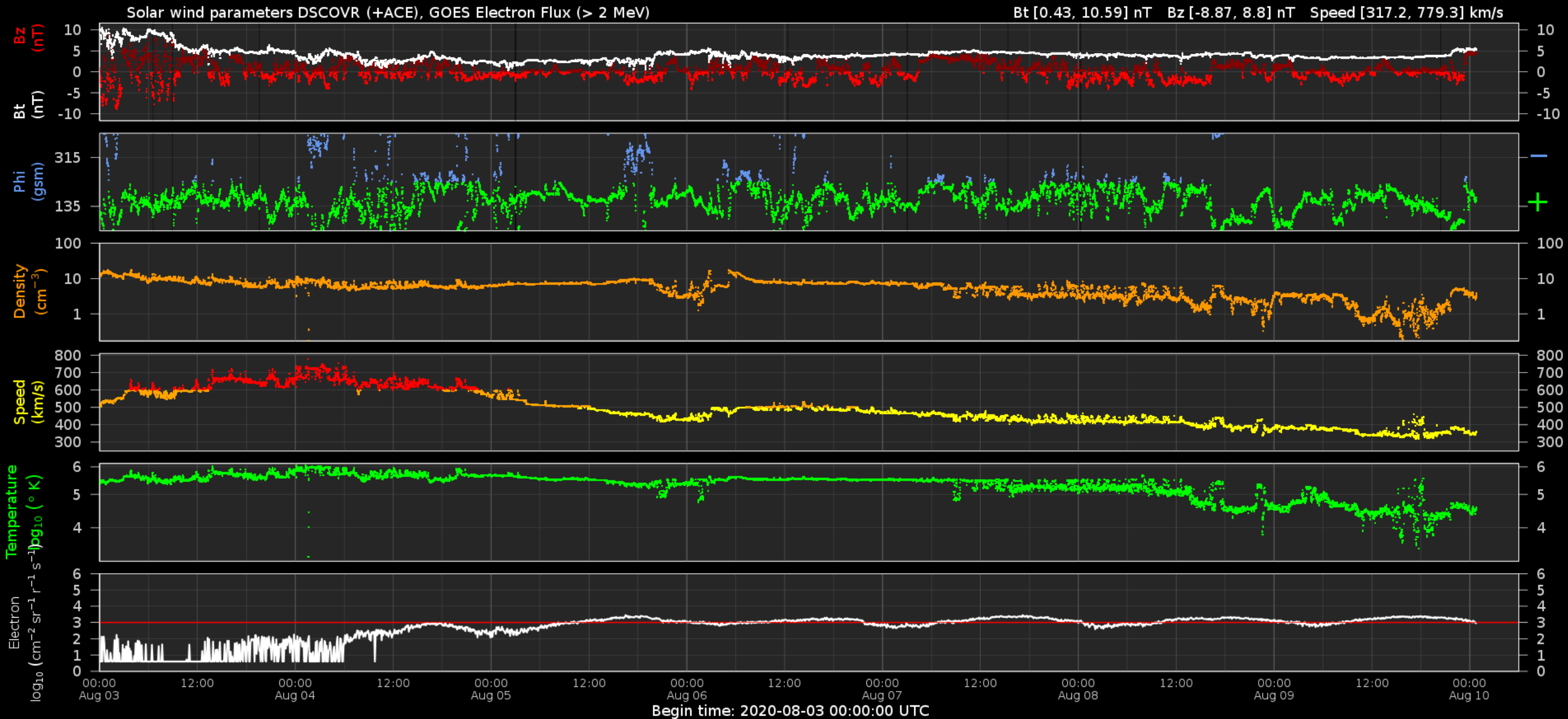


Solar Wind and Geomagnetic Activity

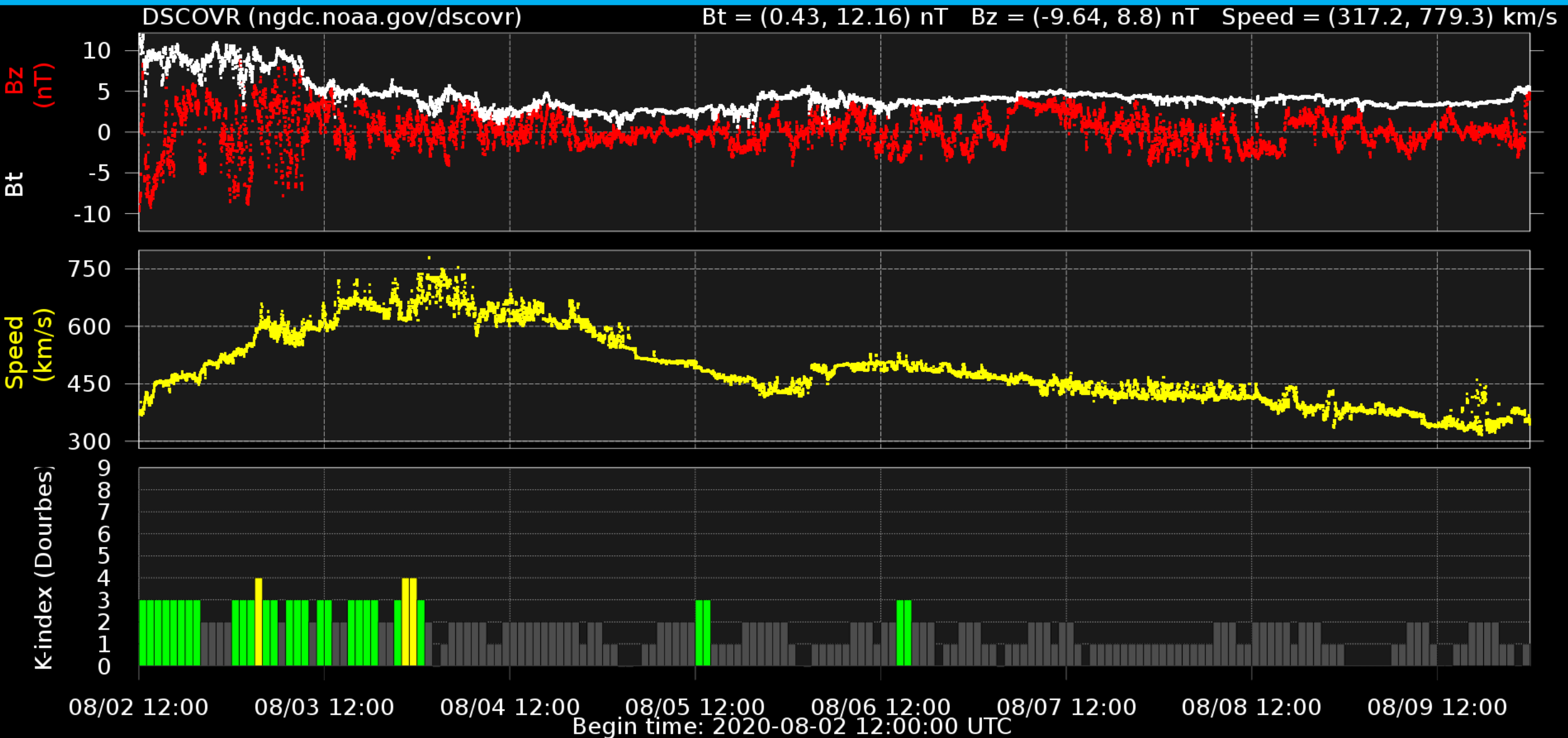


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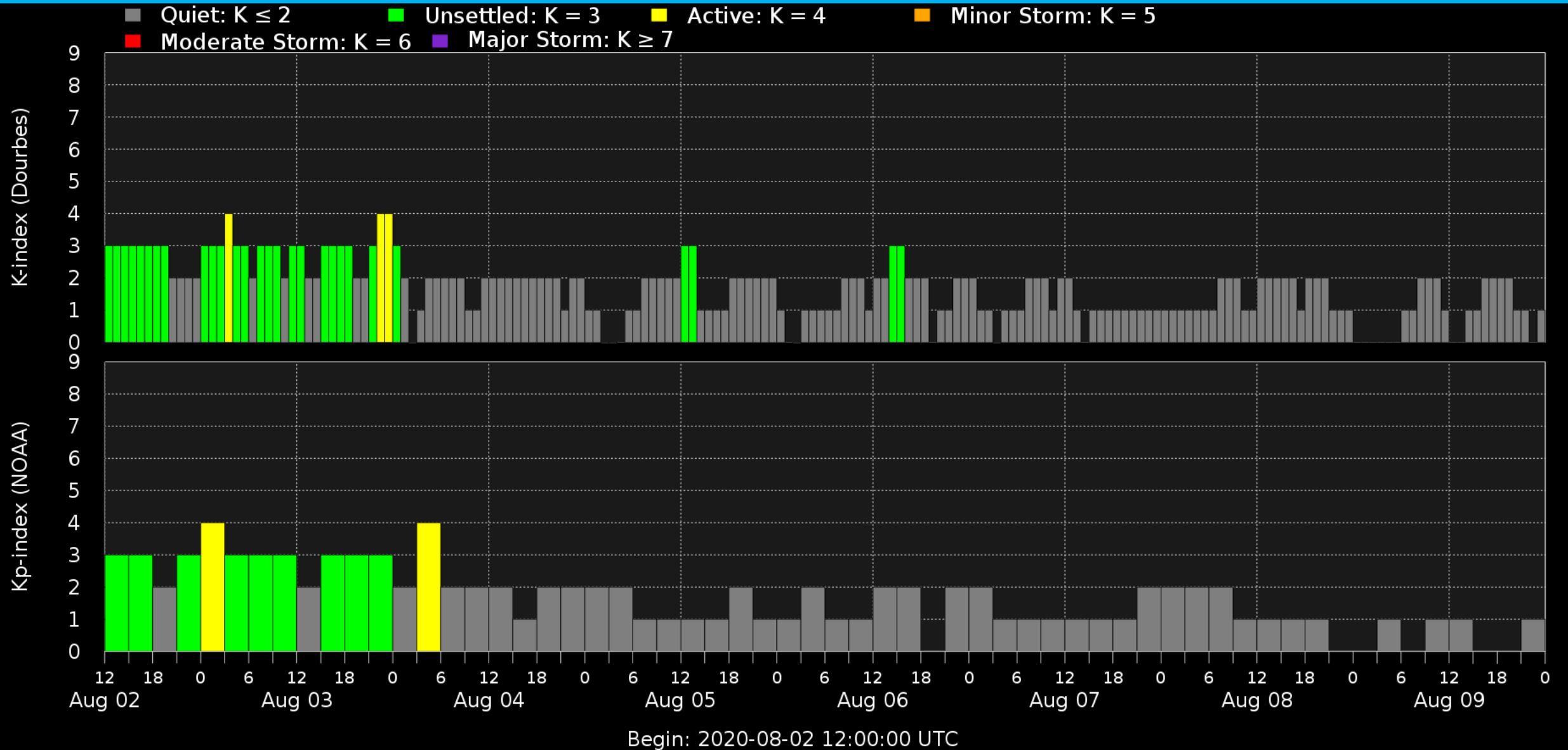
Solar wind parameters (DSCOVR data)



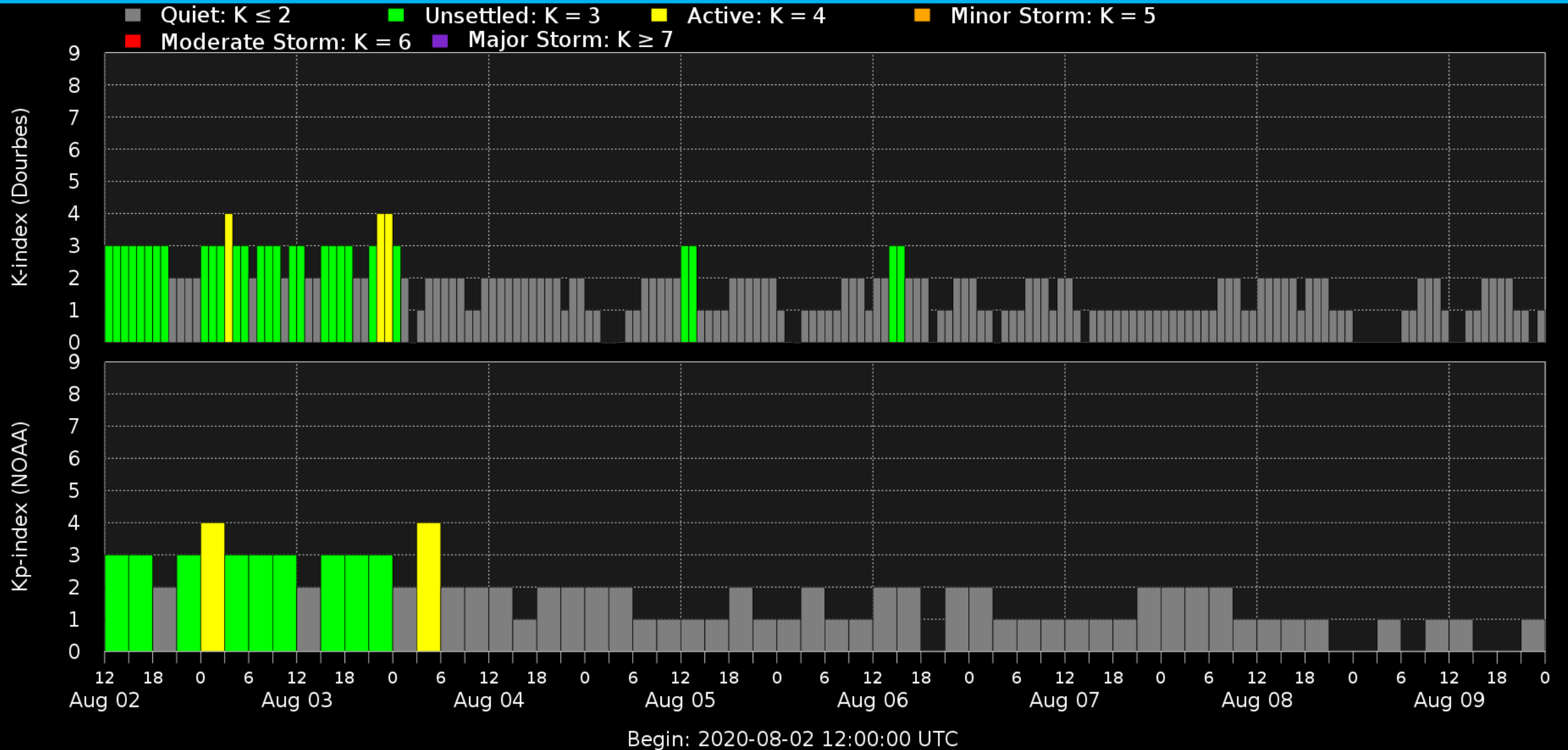
Solar wind parameters & K-index (DSCOVR/Dourbes)



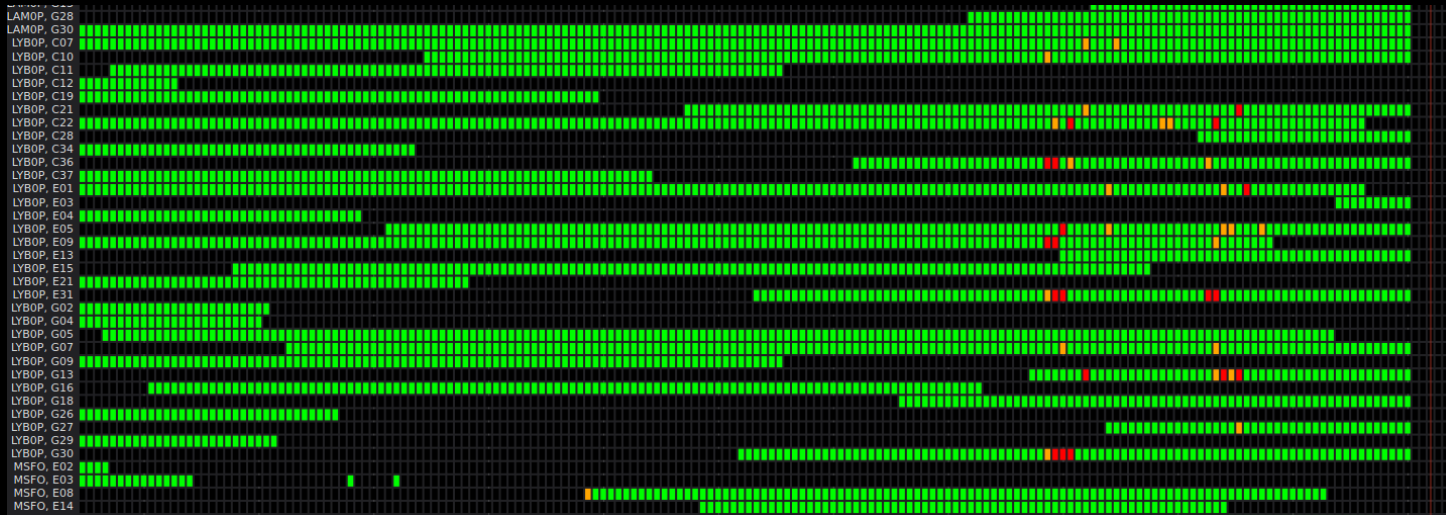
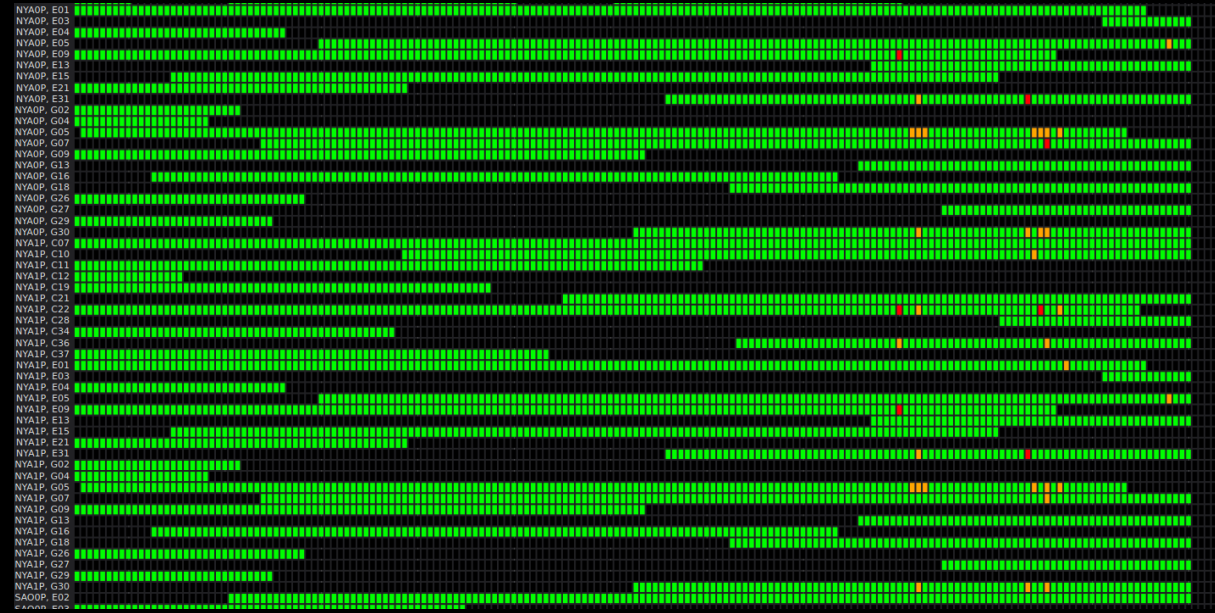
Geomagnetic activity (K-indexes)



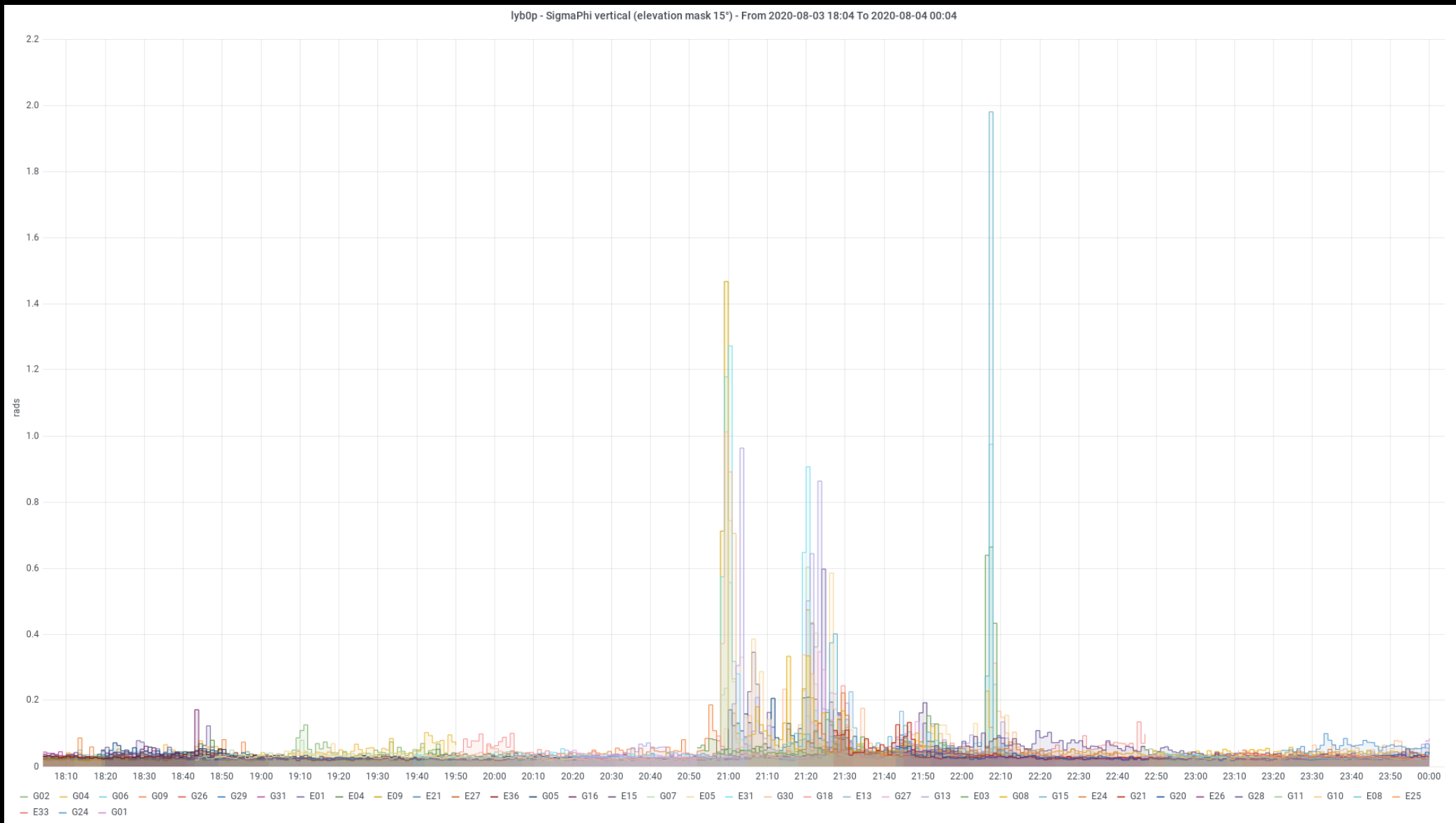
Geomagnetic activity (K-indexes)



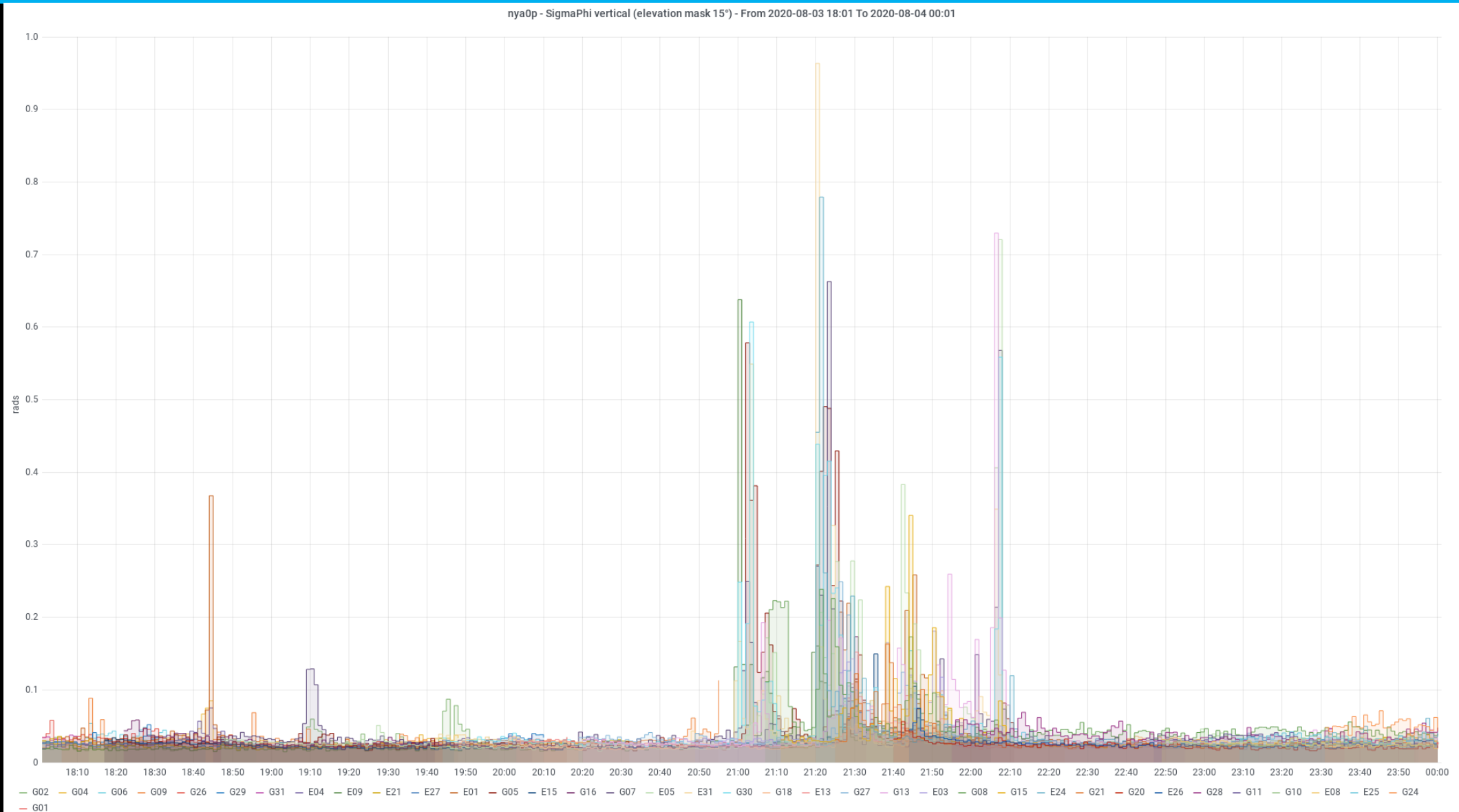
Scintillation event on 2020-08-03 around 21:00 UTC



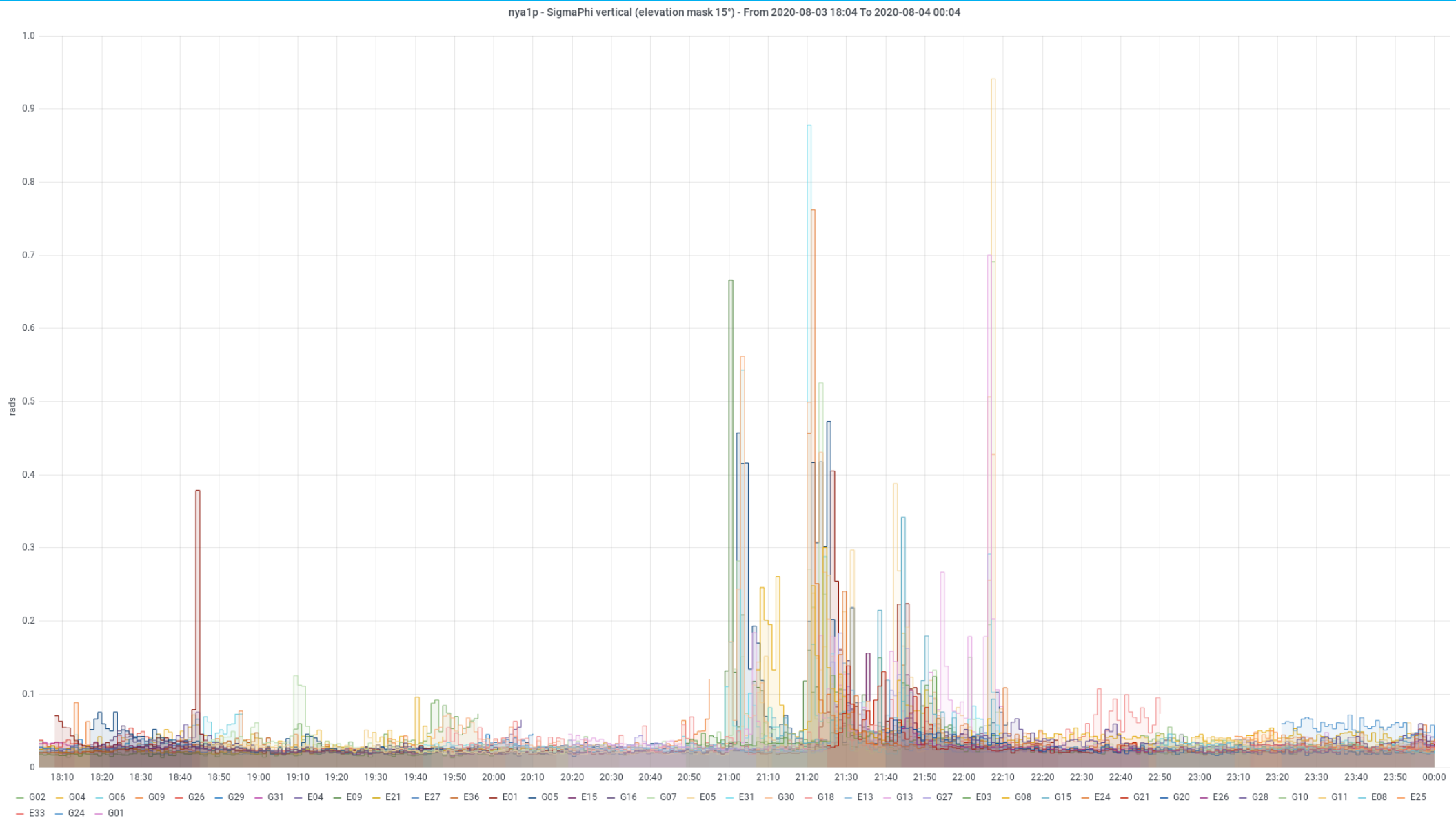
Scintillation event on 2020-08-03 around 21:00 UTC



Scintillation event on 2020-08-03 around 21:00 UTC



Scintillation event on 2020-08-03 around 21:00 UTC



Scintillation event on 2020-08-03 around 21:00 UTC

SWX ADVISORY

DTG: 20200804/0932Z

SWXC: PECASUS

ADVISORY NR: 2020/27

SWX EFFECT: GNSS SEV

OBS SWX: 03/2058Z HNH E000 - E030

FCST SWX +6 HR: 04/0300Z NOT AVBL

FCST SWX +12 HR: 04/0900Z NOT AVBL

FCST SWX +18 HR: 04/1500Z NOT AVBL

FCST SWX +24 HR: 04/2100Z NOT AVBL

RMK: SPACE WEATHER EVENT (IONOSPHERIC
DISTURBANCE) IN PROGRESS. IMPACT ON GNSS
PERFORMANCE POSSIBLY LEADING TO LOSS OF
GNSS SIGNALS AND/OR DEGRADATION OF
TIMING AND POSITIONING PERFORMANCE.

NXT ADVISORY: WILL BE ISSUED BY 20200804/1518Z

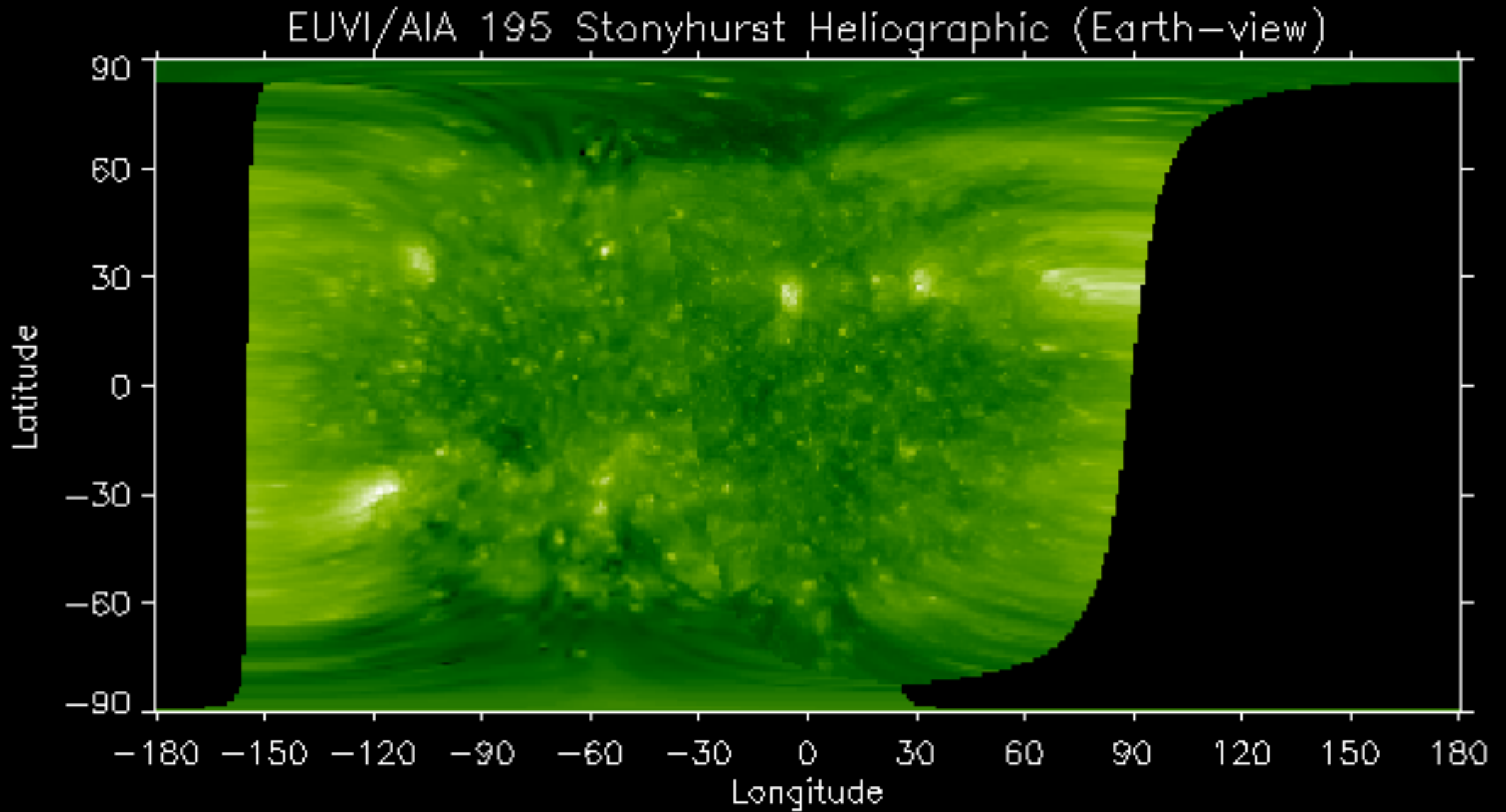
Outlook



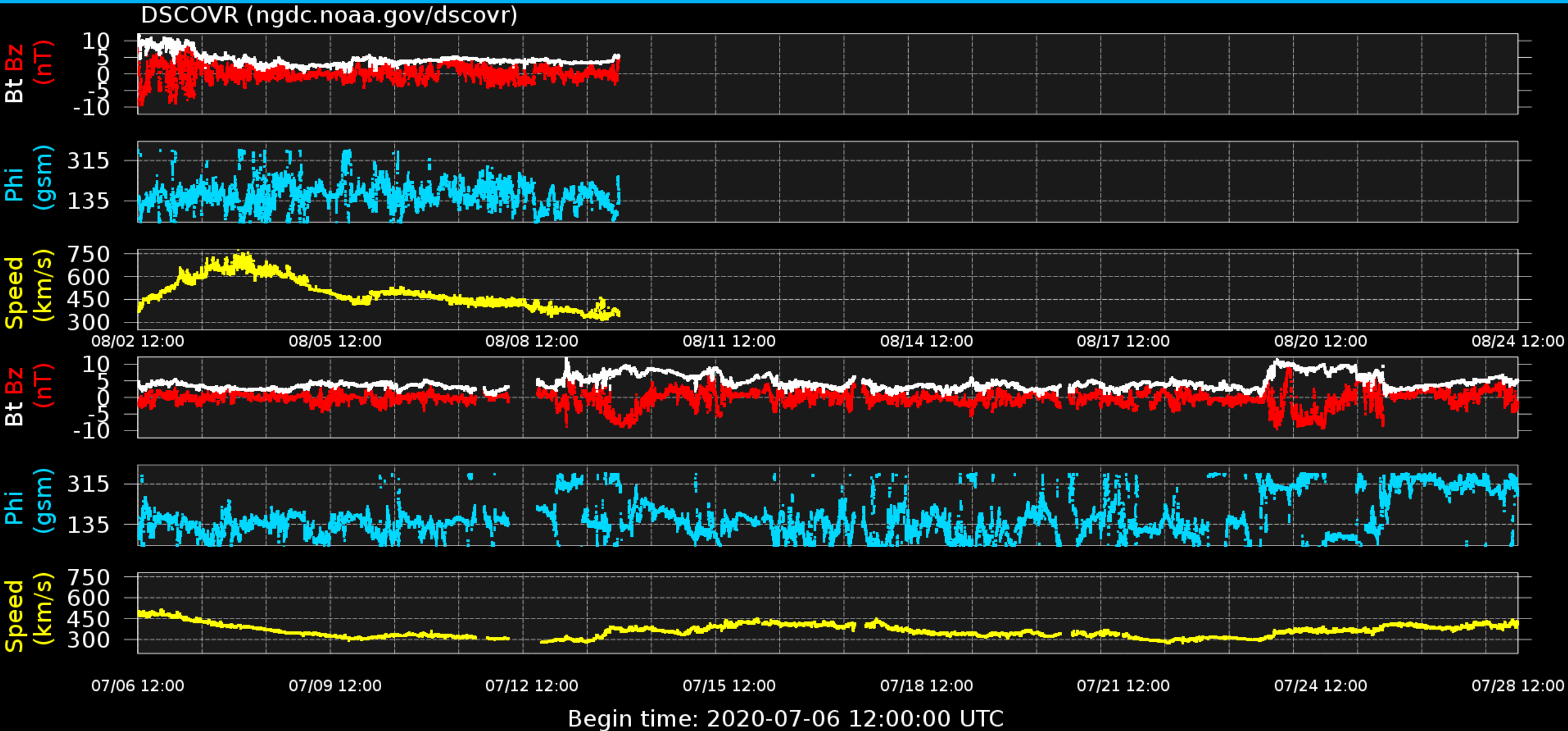
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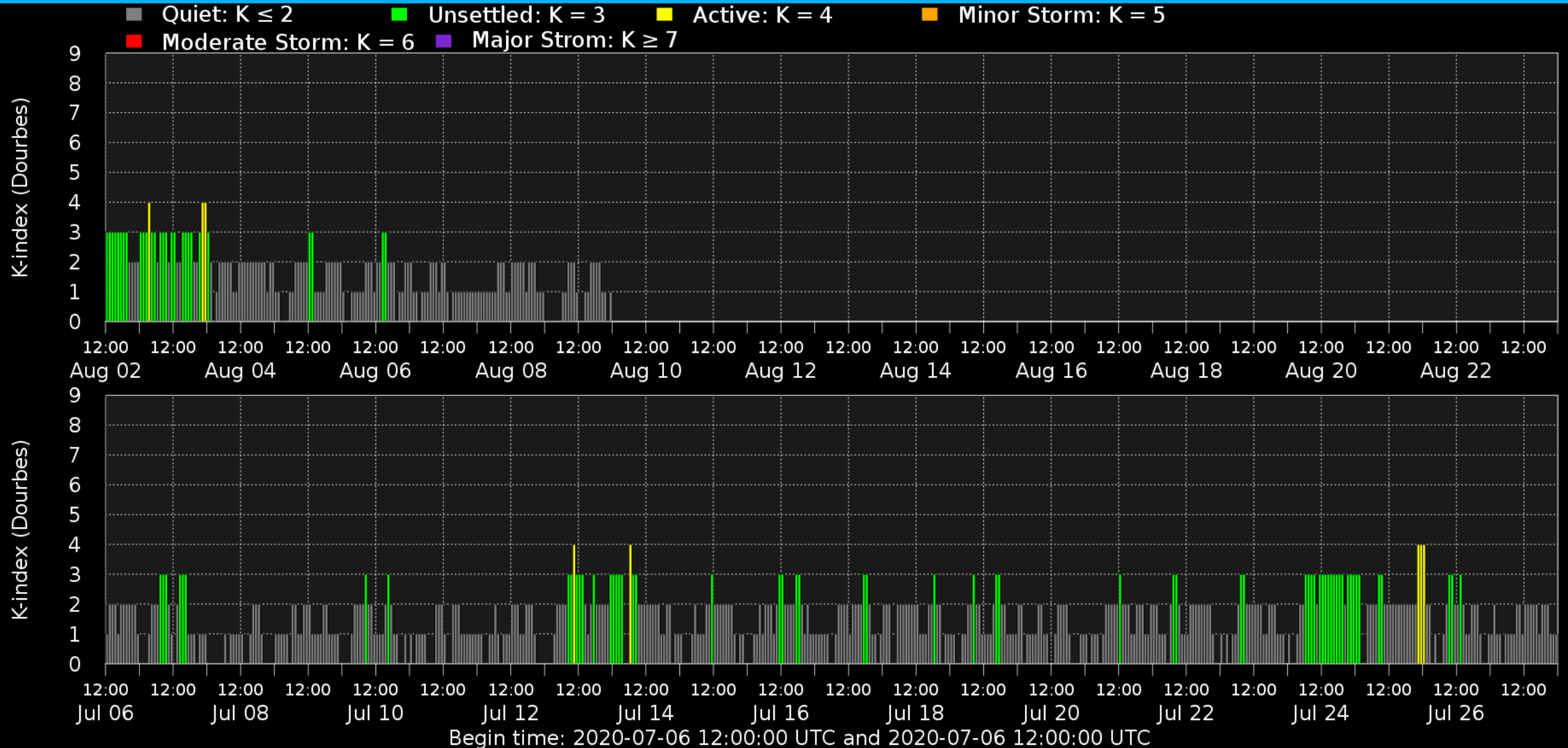
Outlook: Solar activity



Outlook: Solar wind



Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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