

SIDC Space Weather Briefing

22 March 2020 - 29 March 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 2020-03-22 12:00 UT to 2020-03-29 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 significant eruptions
CMEs	No Earth directed CMEs
Proton Events	None

Solar wind and geomagnetic conditions from 2020-03-22 12:00 UT to 2020-03-29 12:00 UT

Coronal Holes	Extension to southern polar CH passing central meridian on Mar 26
ICME	None
SW Conditions	Solar wind speed between 350 and 530 km/s
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 3

All Quiet Alert: On

Solar Activity

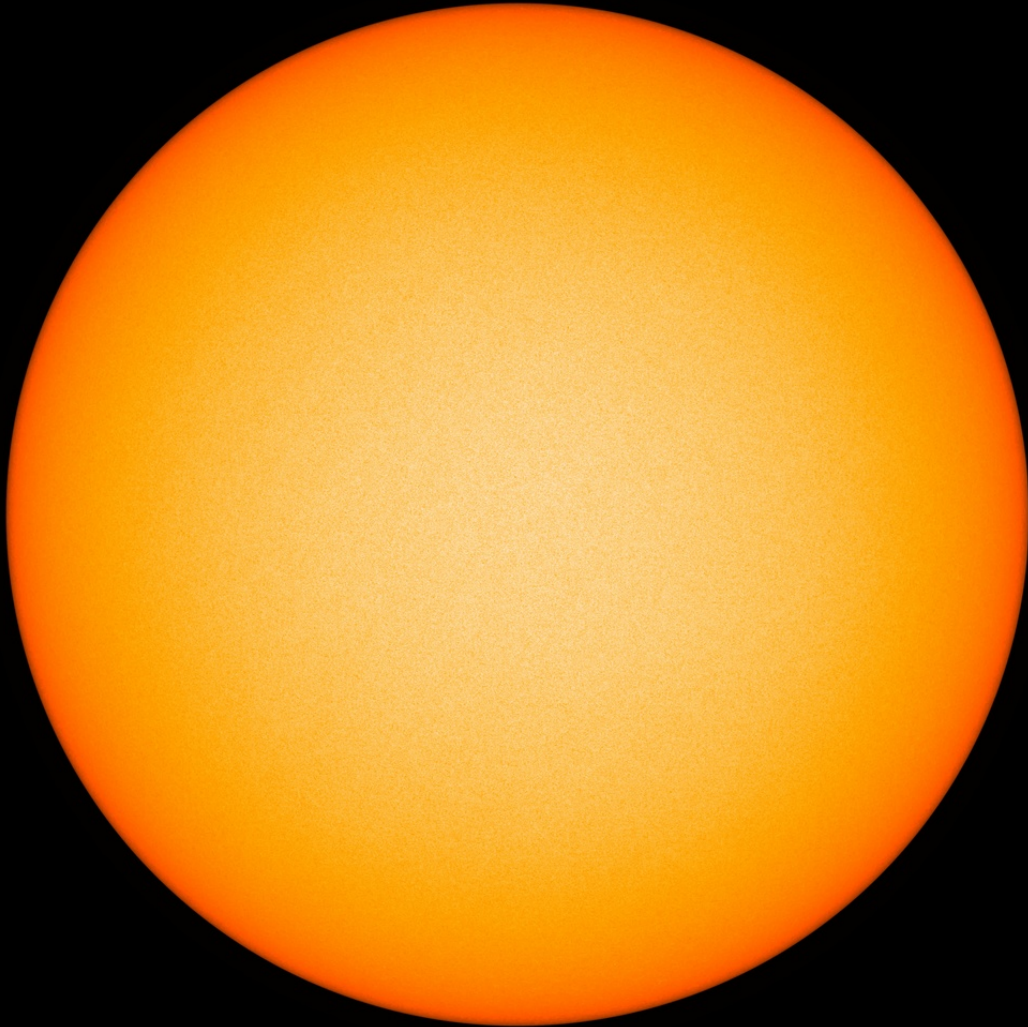


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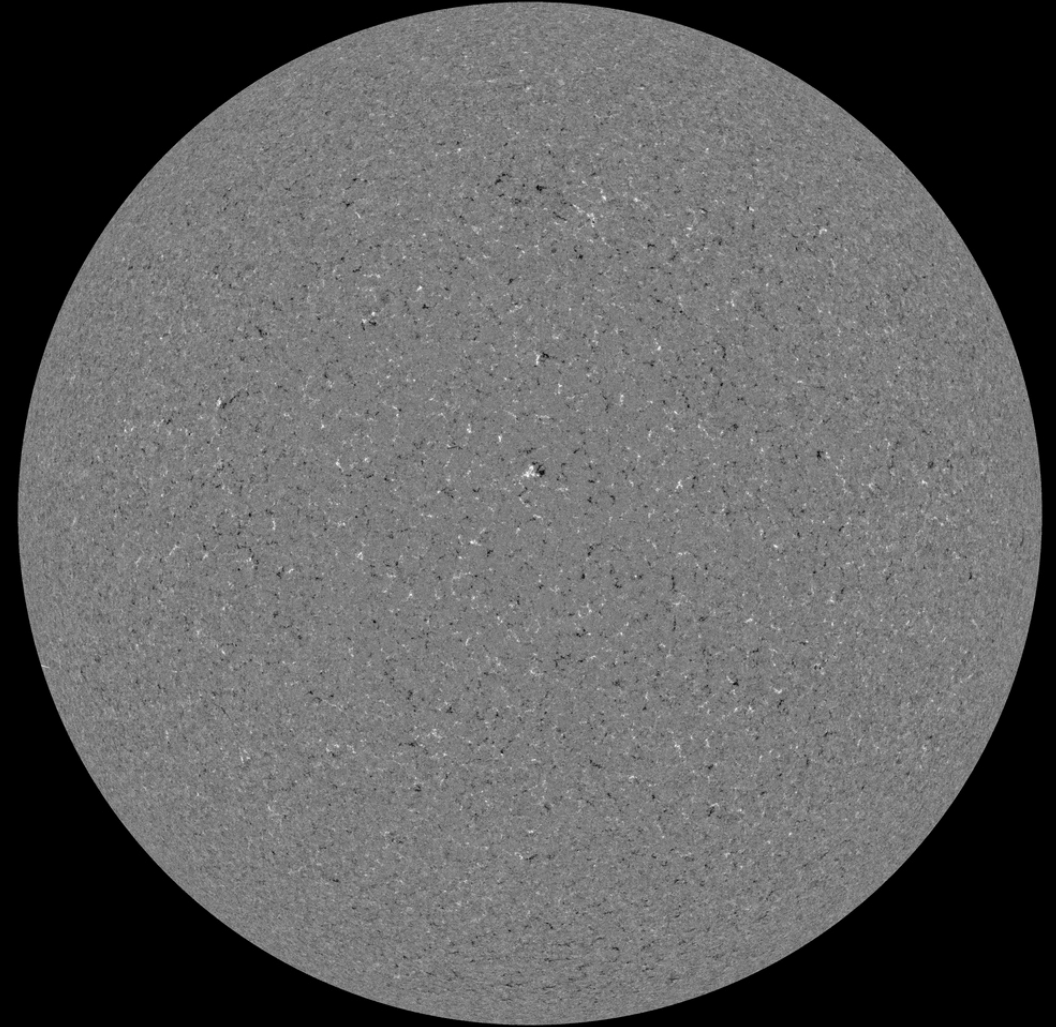
Solar active region - start of the week

SDO/HMI White Light 2020-03-22



SDO/HMI Quick-Look Continuum: 20200322_114500

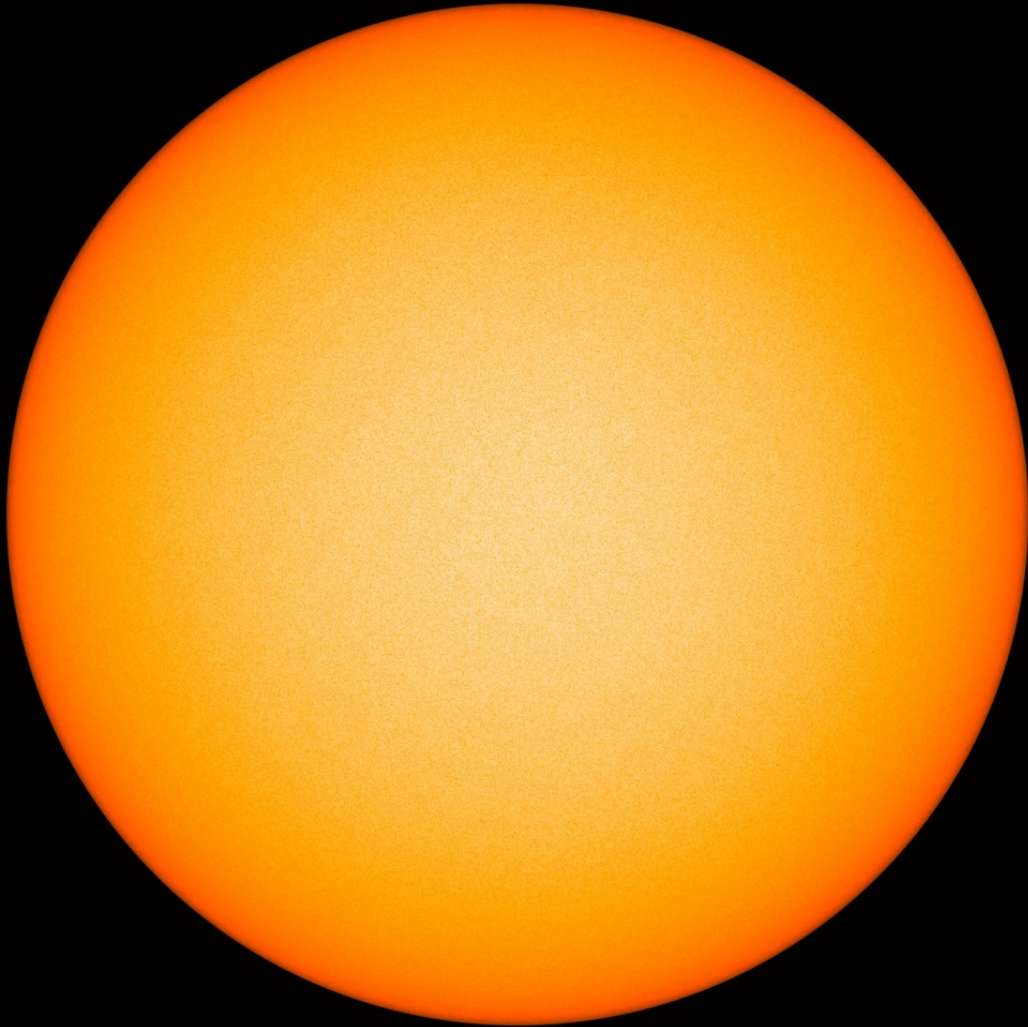
SDO/HMI Magnetogram 2020-03-22



SDO/HMI Quick-Look Magnetogram: 20200322_114500

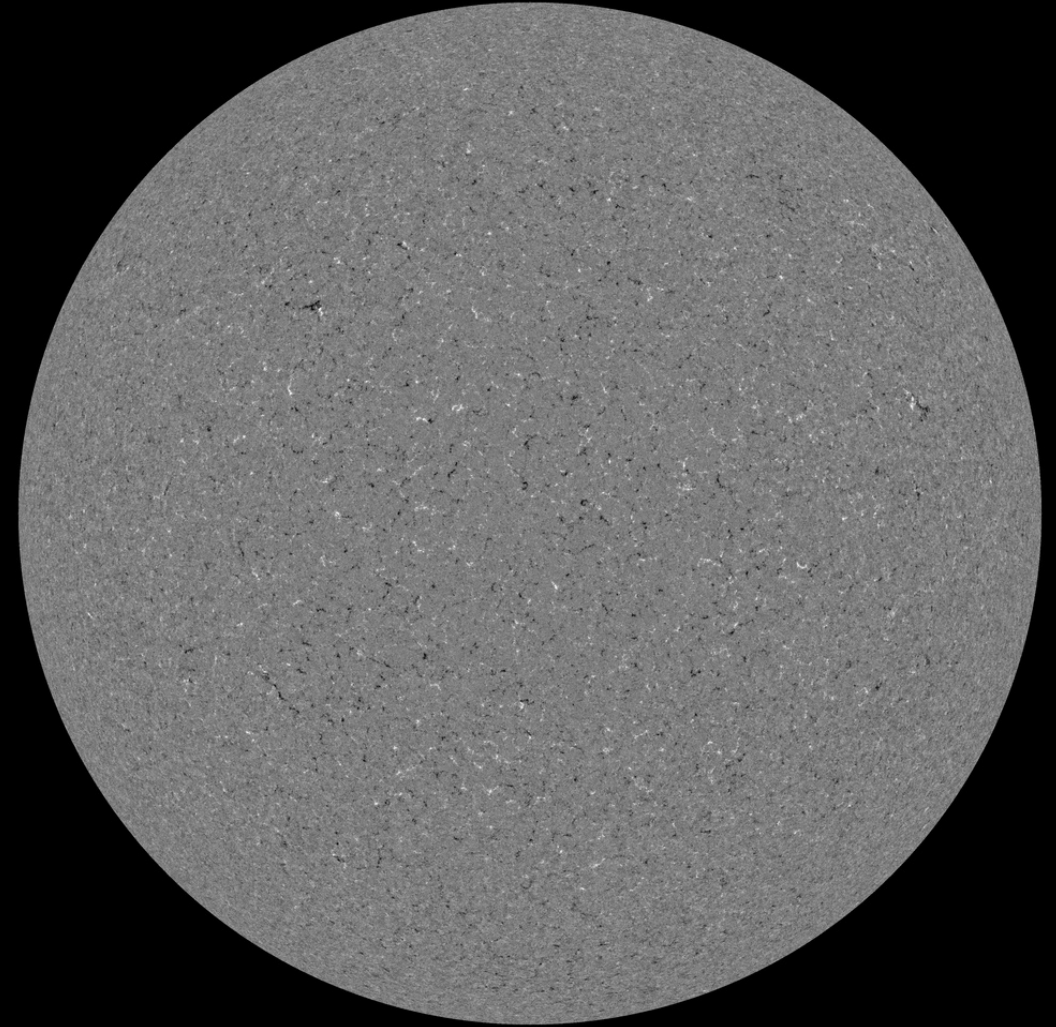
Solar active region - middle of the week

SDO/HMI White Light 2020-03-25



SDO/HMI Quick-Look Continuum: 20200325_114500

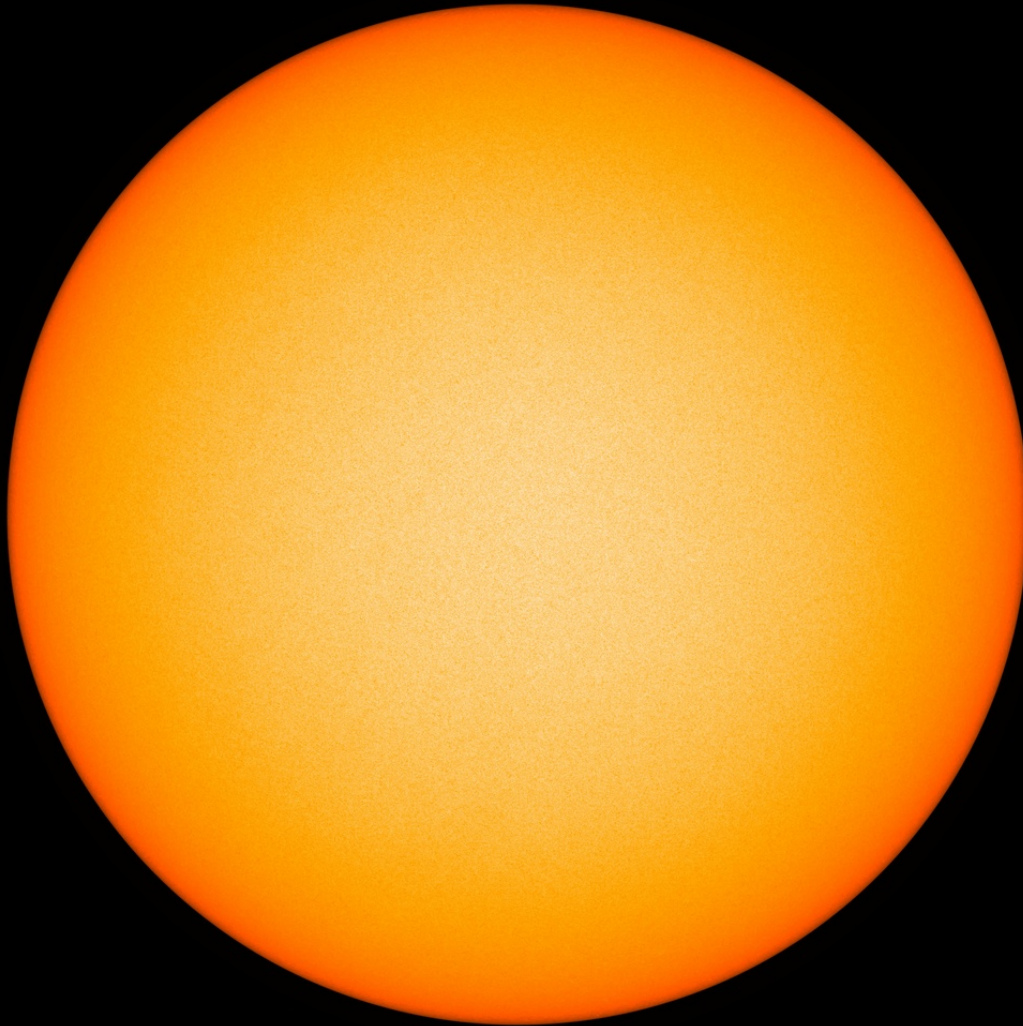
SDO/HMI Magnetogram 2020-03-25



SDO/HMI Quick-Look Magnetogram: 20200325_114500

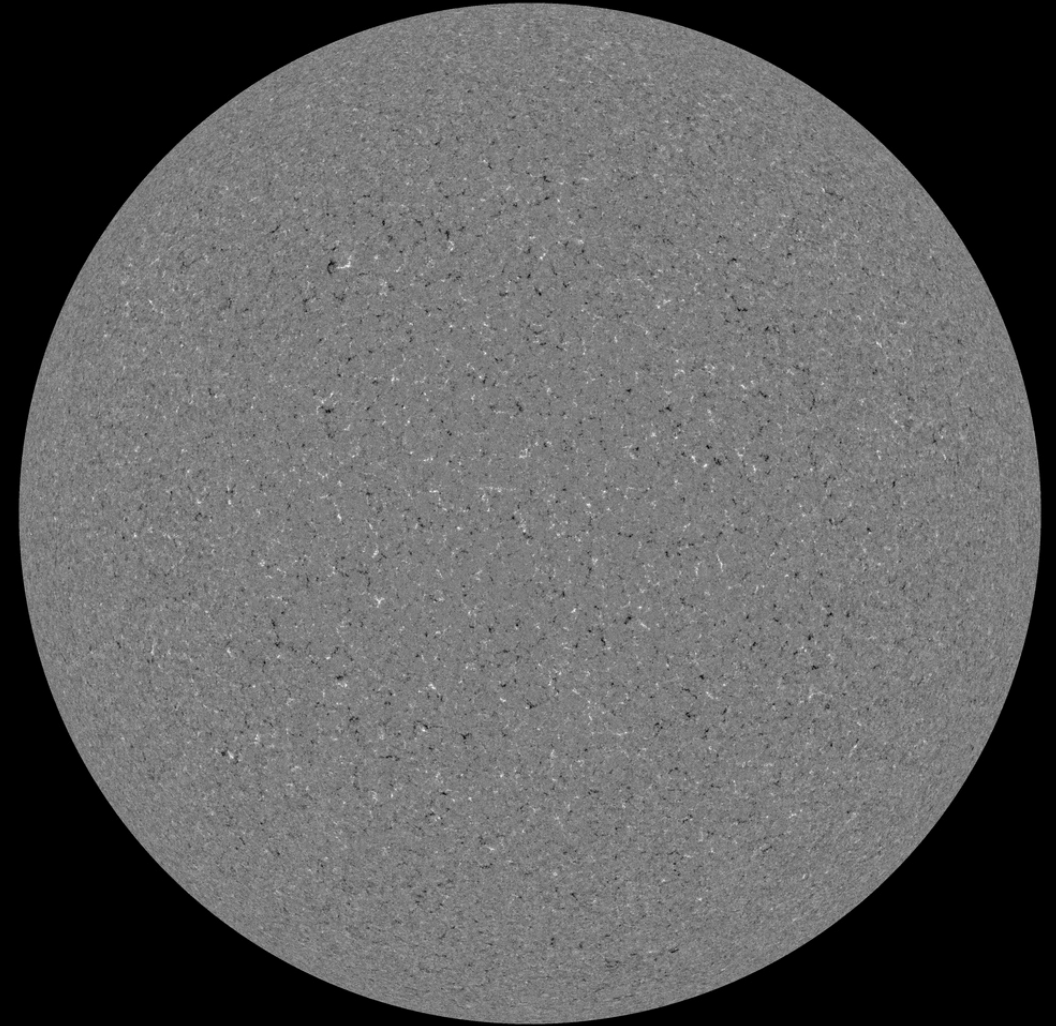
Solar active region - end of the week

SDO/HMI White Light 2020-03-29



SDO/HMI Quick-Look Continuum: 20200329_114500

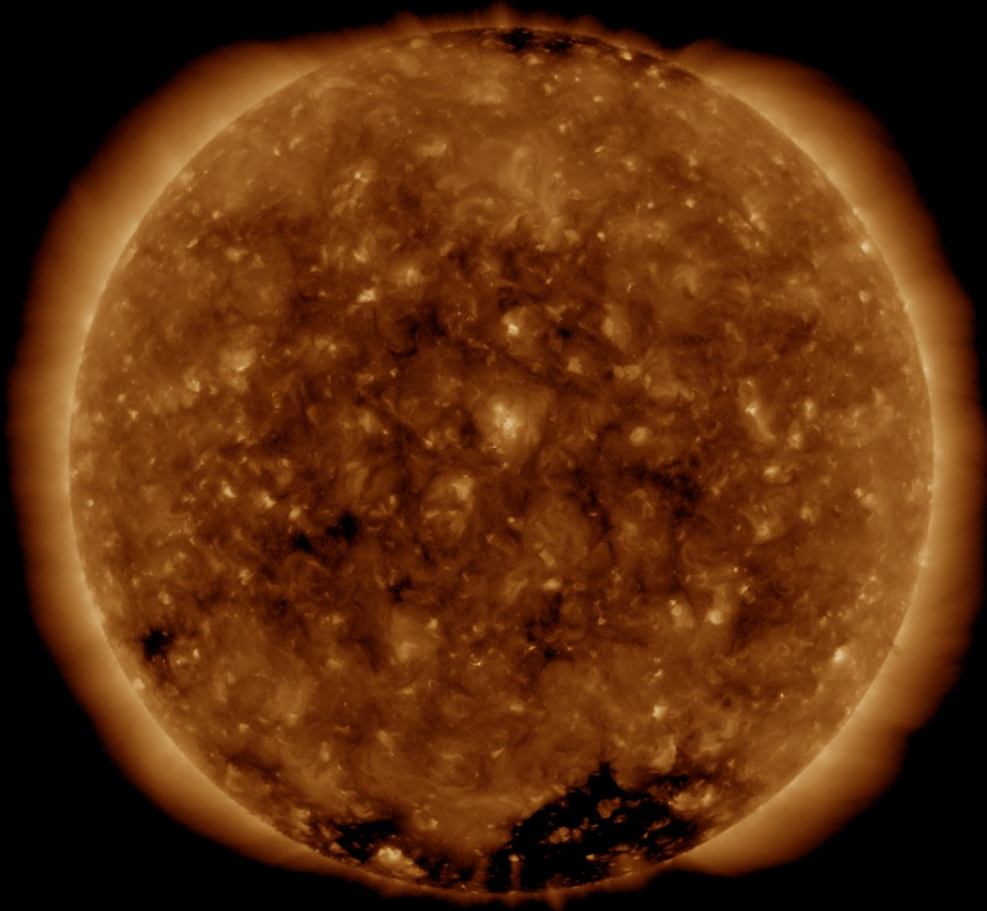
SDO/HMI Magnetogram 2020-03-29



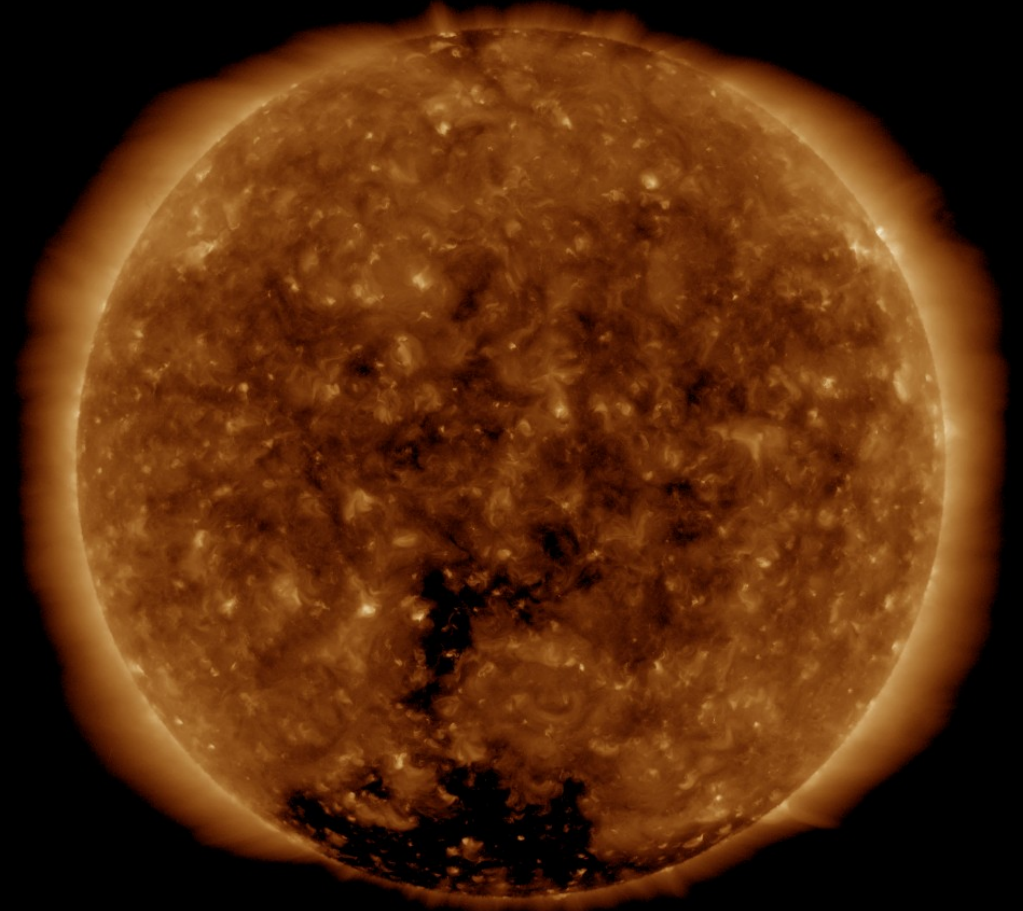
SDO/HMI Quick-Look Magnetogram: 20200329_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-03-22



SDO/AIA 19.3 nm 2020-03-26

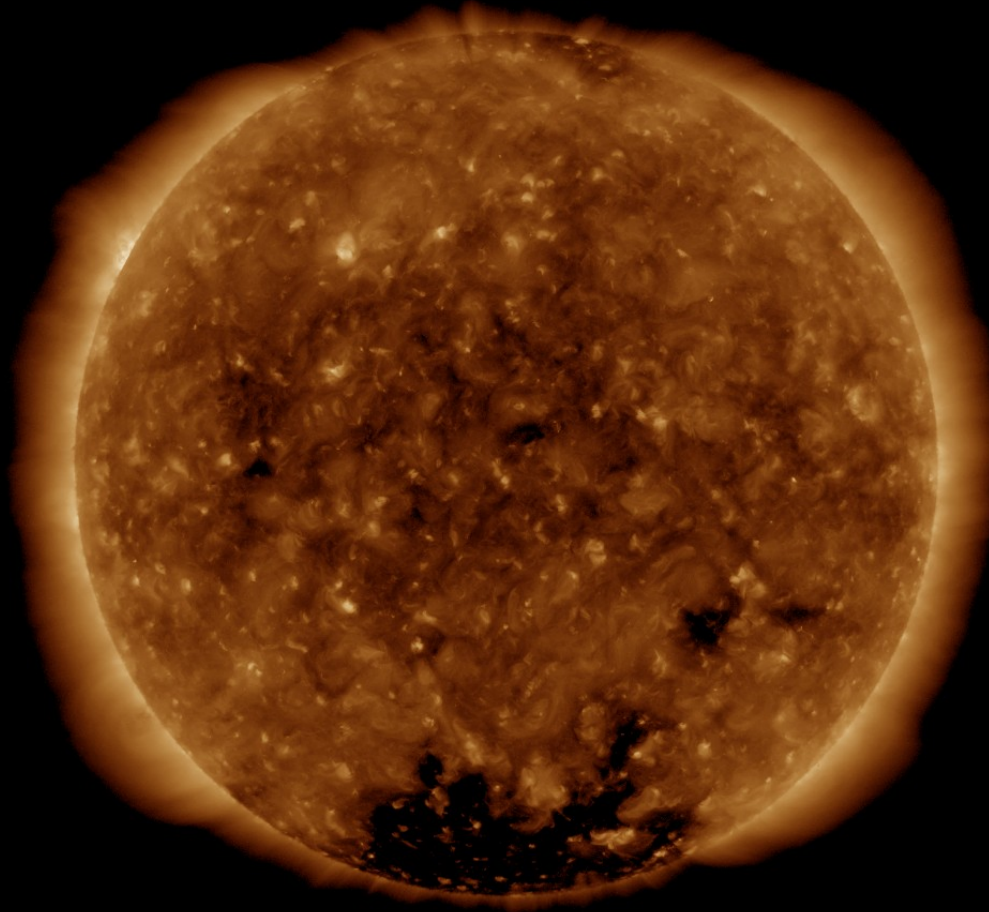


SDO/AIA 193 2020-03-22 12:10:29 UT

SDO/AIA 193 2020-03-26 12:10:05 UT

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-03-29



SDO/AIA 193 2020-03-29 12:10:17 UT

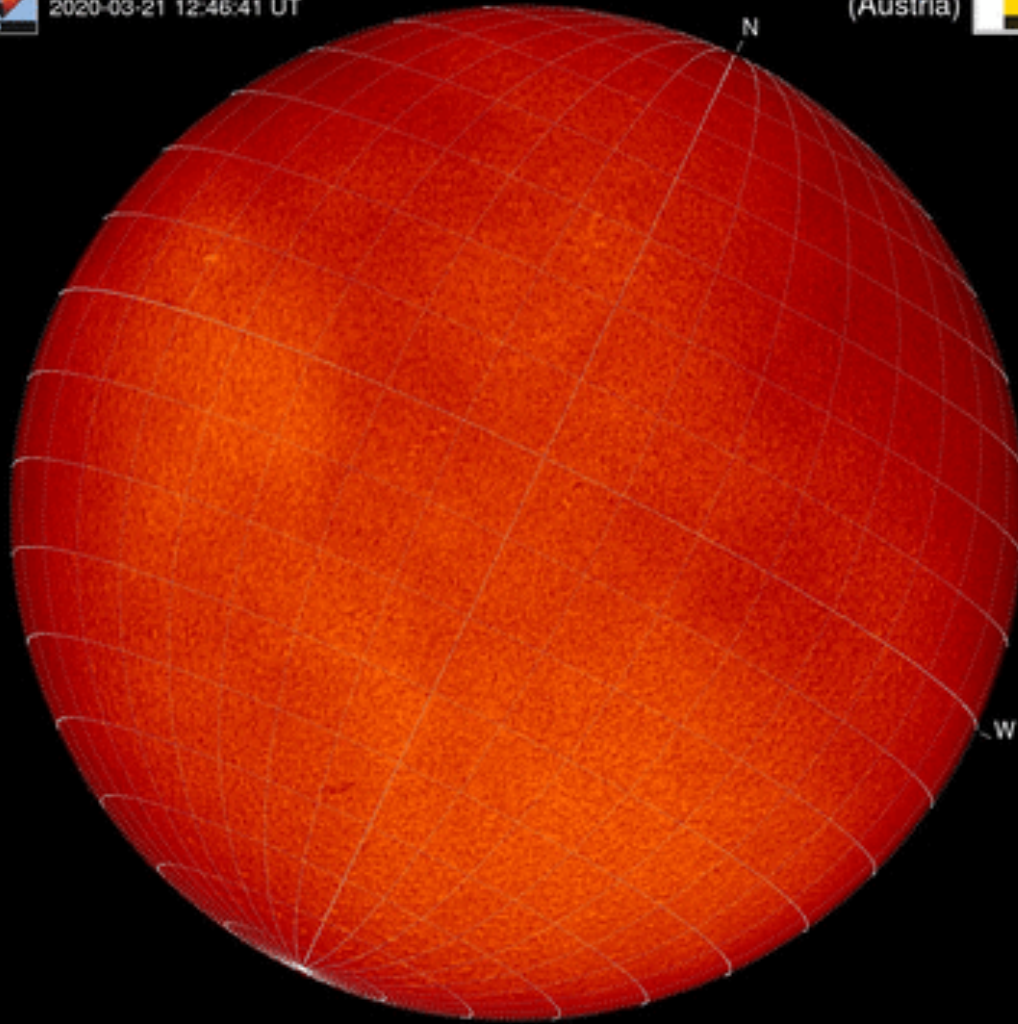
Filament & Filament eruption

H-alpha 2020-03-21



Kanzelhöhe Observatory
2020-03-21 12:46:41 UT

University of Graz
(Austria)

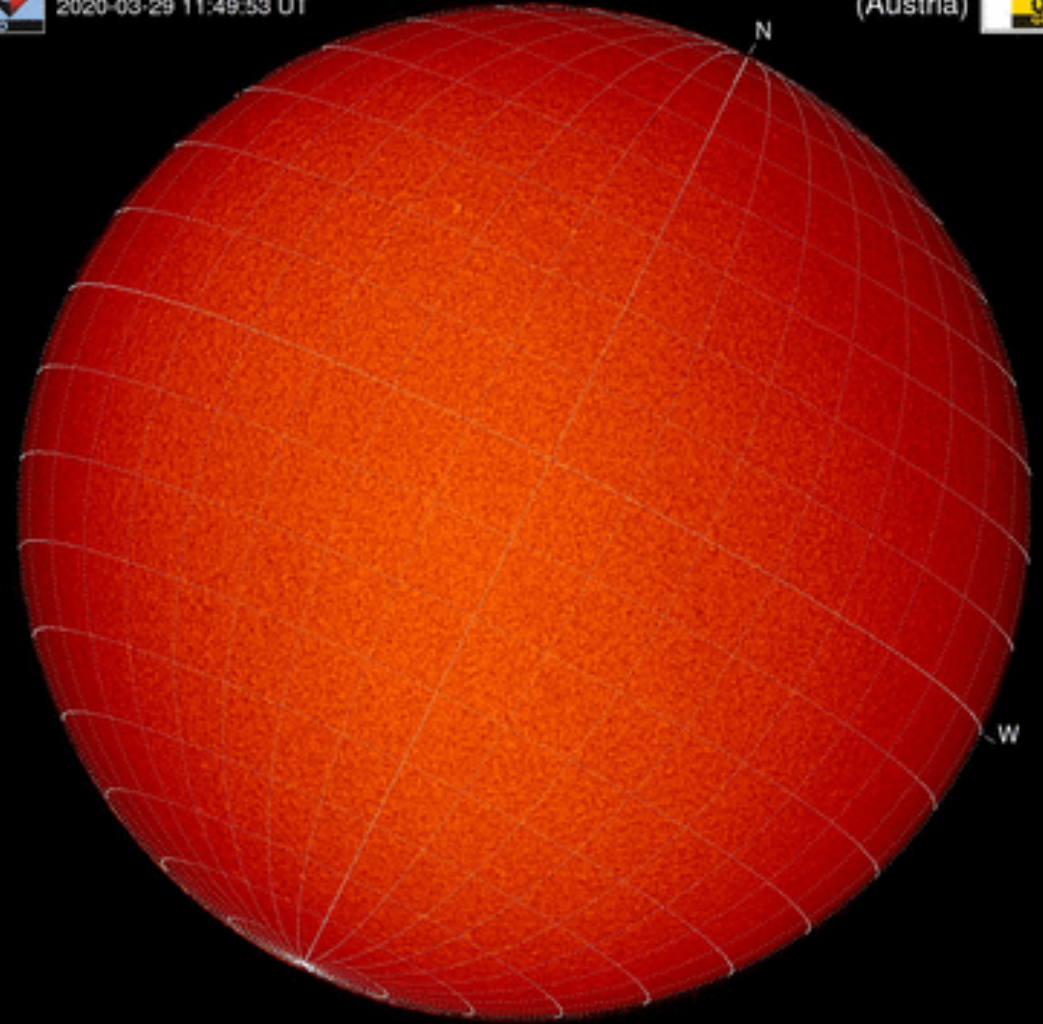


H-alpha 2020-03-29

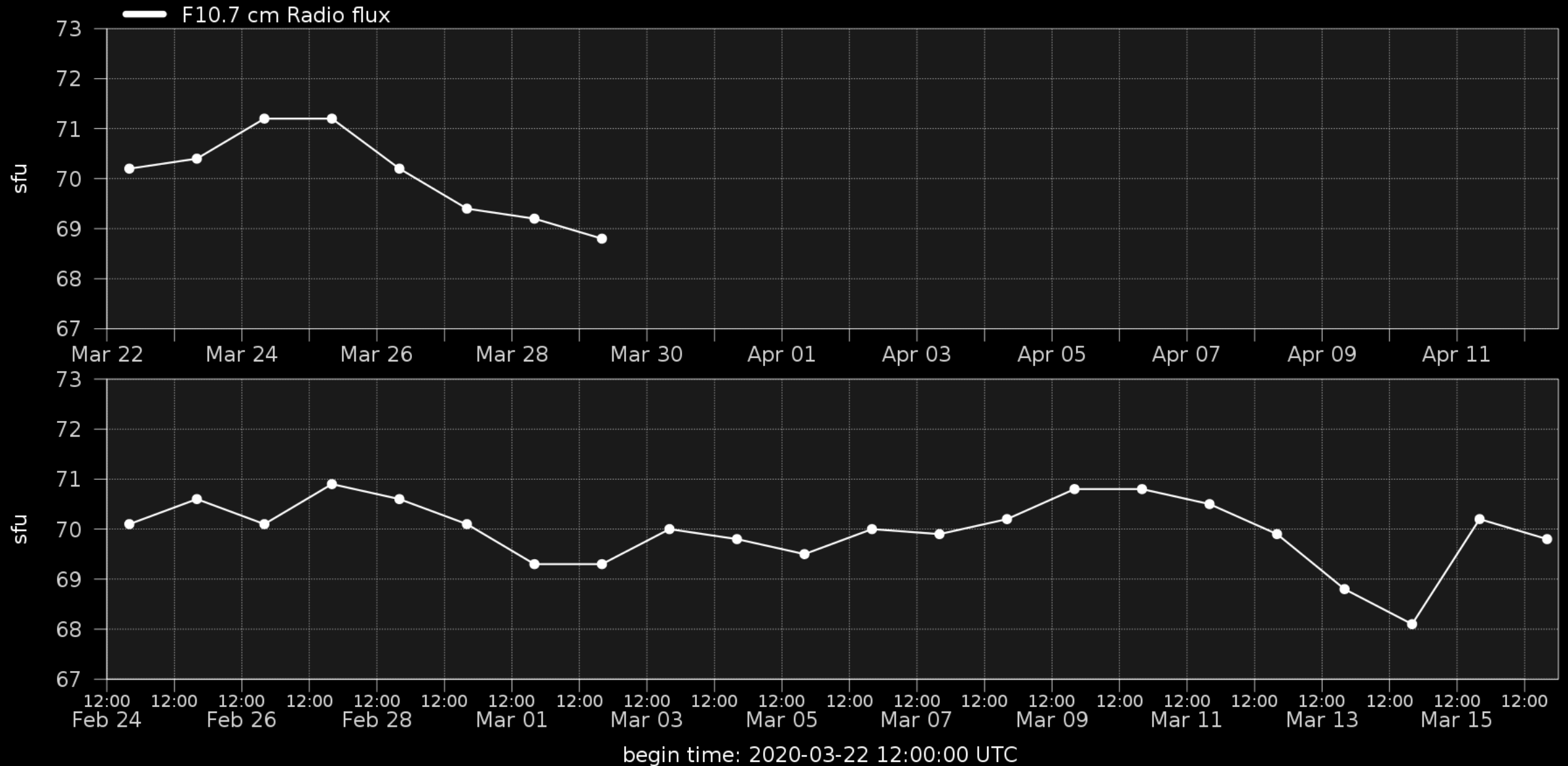


Kanzelhöhe Observatory
2020-03-29 11:49:53 UT

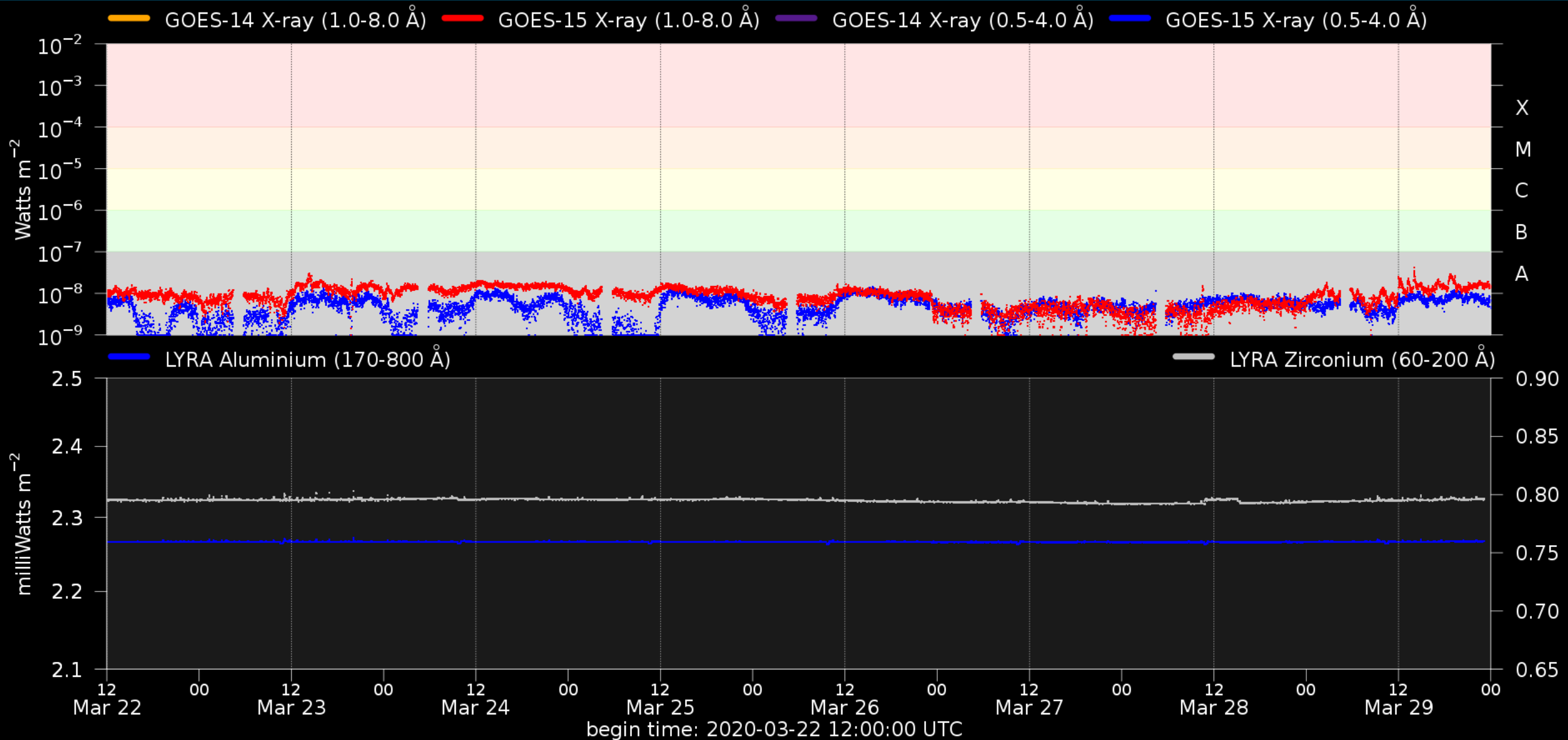
University of Graz
(Austria)



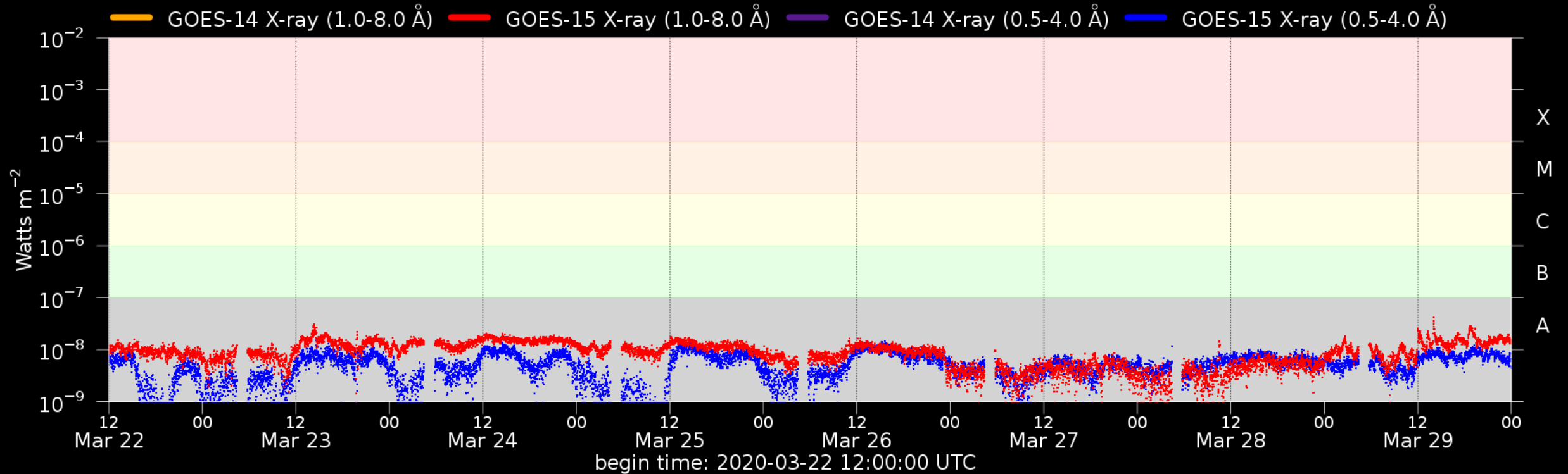
Solar F10.7cm radio flux



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:

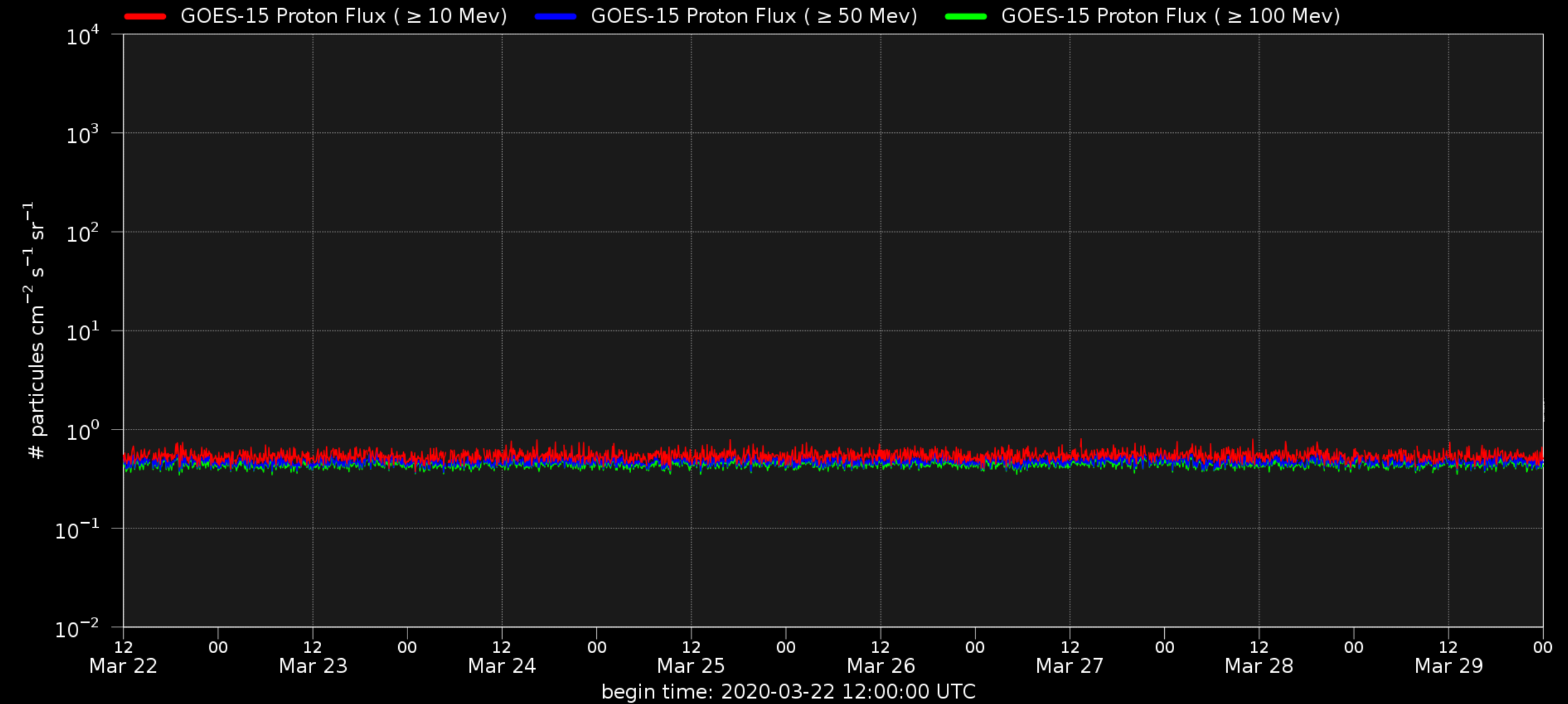
Issue date	2020-03-22	2020-03-23	2020-03-24	2020-03-25	2020-03-26	2020-03-27	2020-03-28	2020-03-29
Probability	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Coronal Mass Ejection

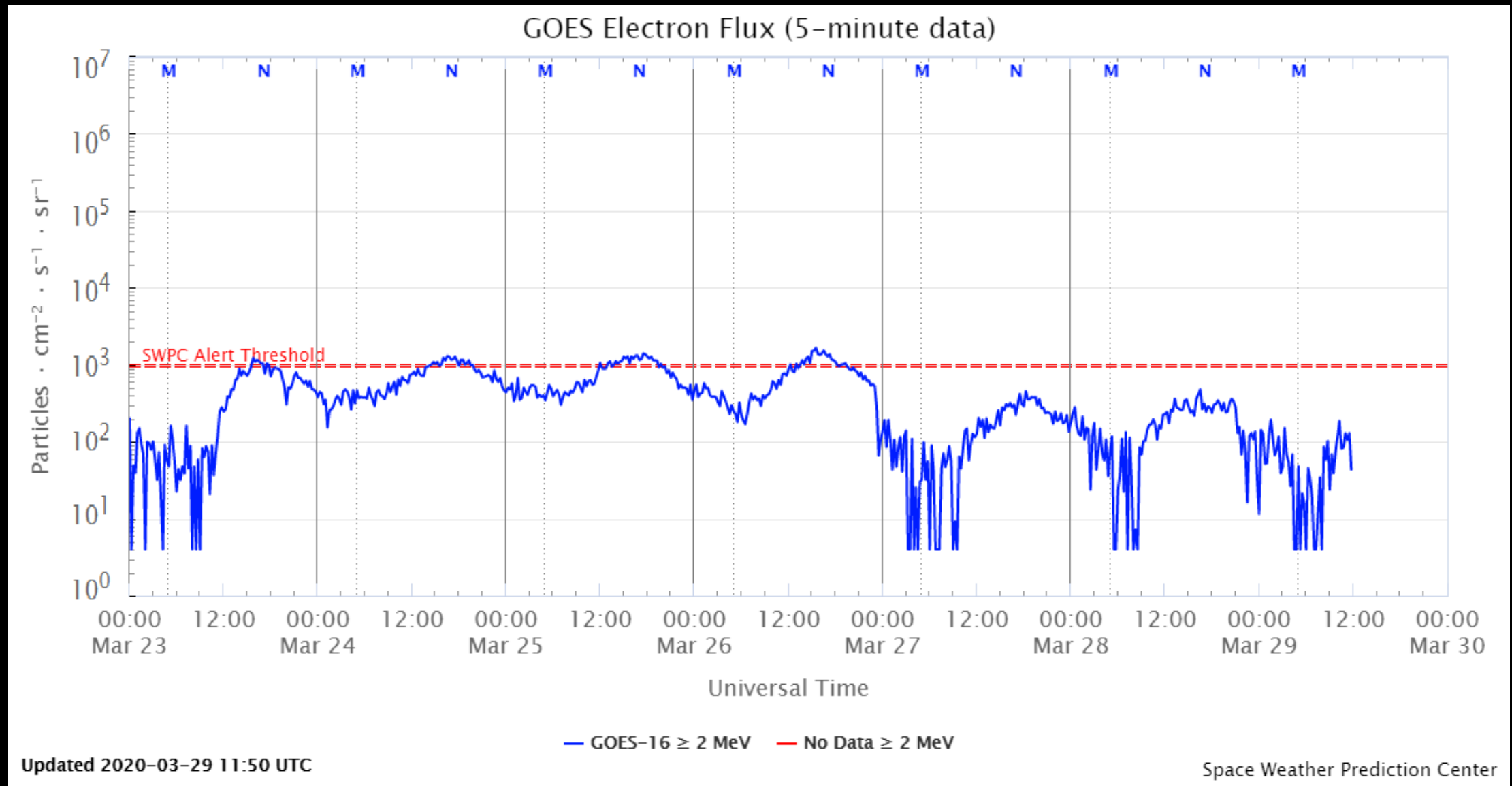
No Earth Directed CMEs

19:48 03/28
17:00 03/28
14:24 03/28
11:00 03/28
08:24 03/28
05:36 03/28
02:12 03/28
22:36 03/27
19:48 03/27
16:36 03/27
13:36 03/27
10:48 03/27
07:24 03/27
02:48 03/27
22:36 03/26
19:36 03/26
17:12 03/26
14:24 03/26
11:12 03/26
08:00 03/26
05:24 03/26
02:12 03/26
22:24 03/25
19:24 03/25
17:00 03/25
14:00 03/25
10:48 03/25
07:48 03/25
05:00 03/25
02:12 03/25
23:12 03/24
20:00 03/24
17:00 03/24
14:00 03/24
11:00 03/24
08:12 03/24
05:48 03/24
03:12 03/24
00:00 03/24
20:48 03/23
18:00 03/23
14:36 03/23
11:30 03/23
08:48 03/23
06:00 03/23

Solar proton flux



Electron flux

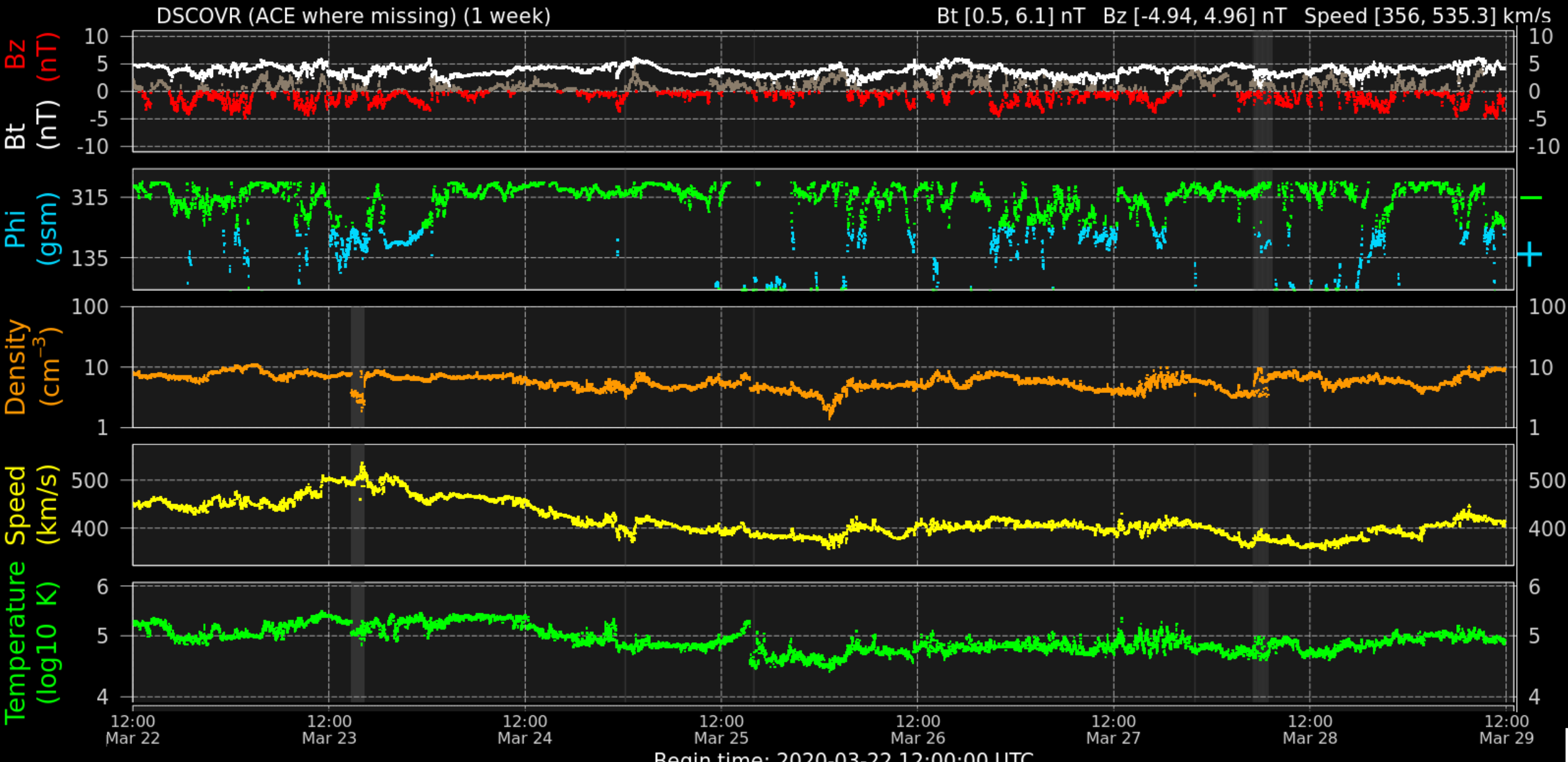


Solar Wind and Geomagnetic Activity

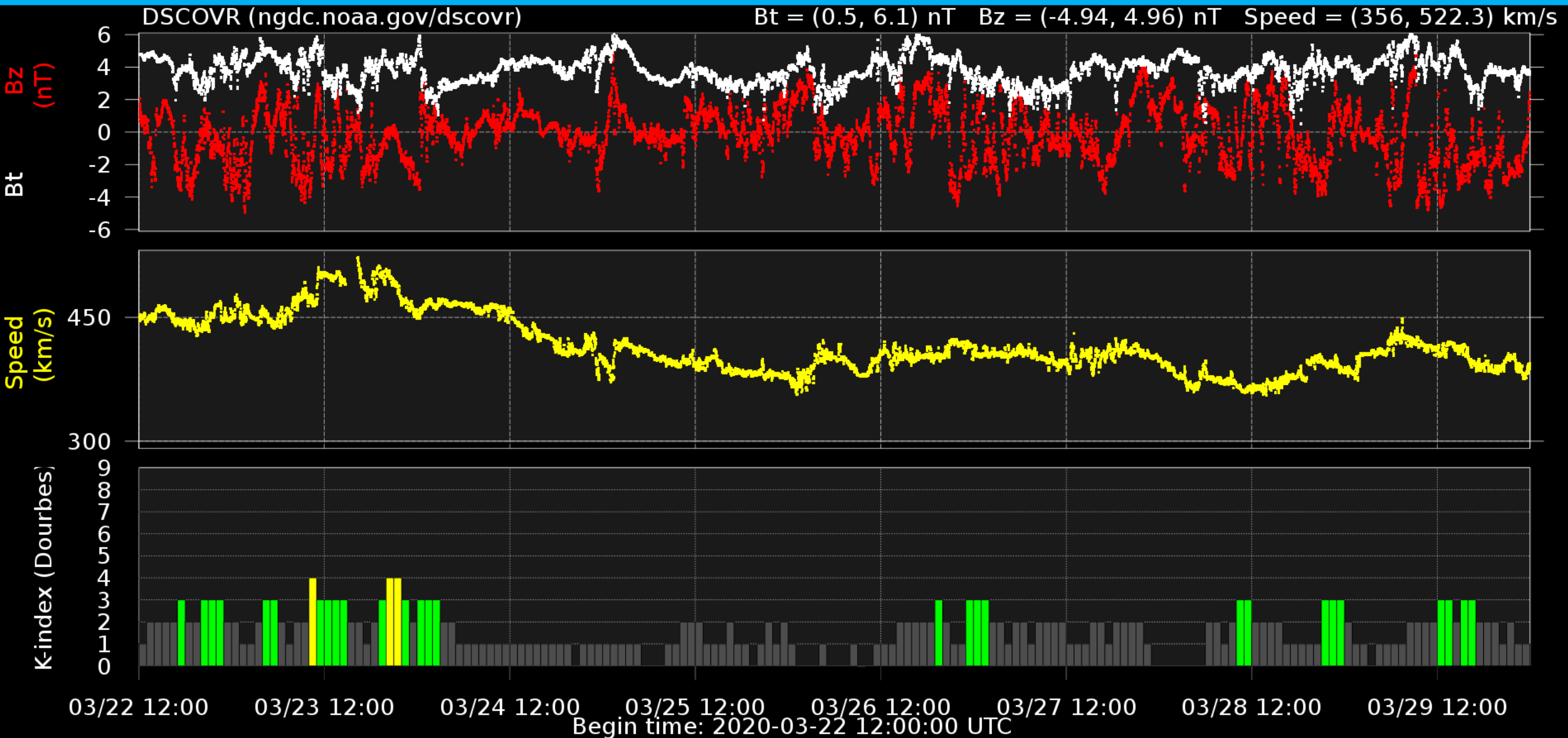


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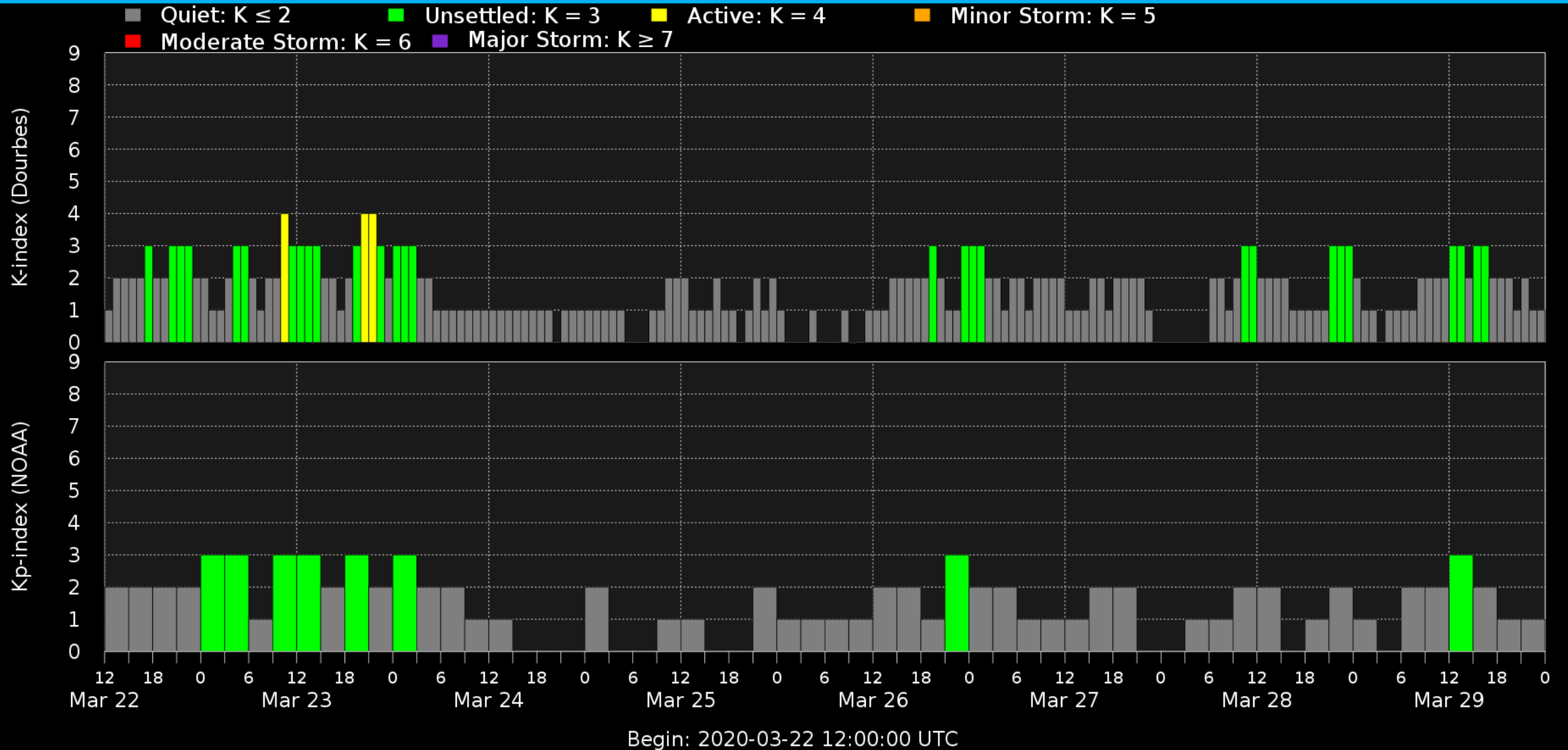
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



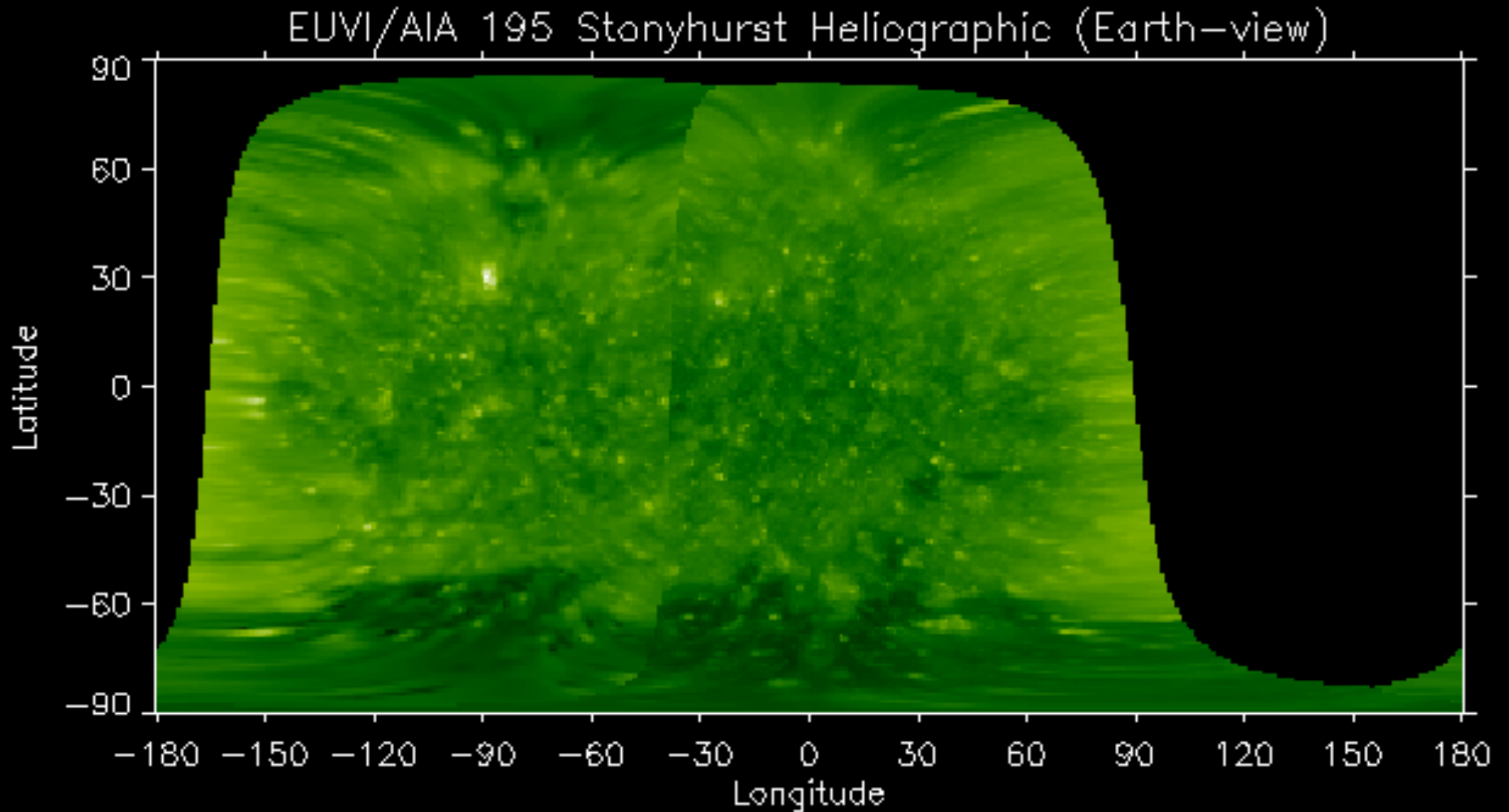
Outlook



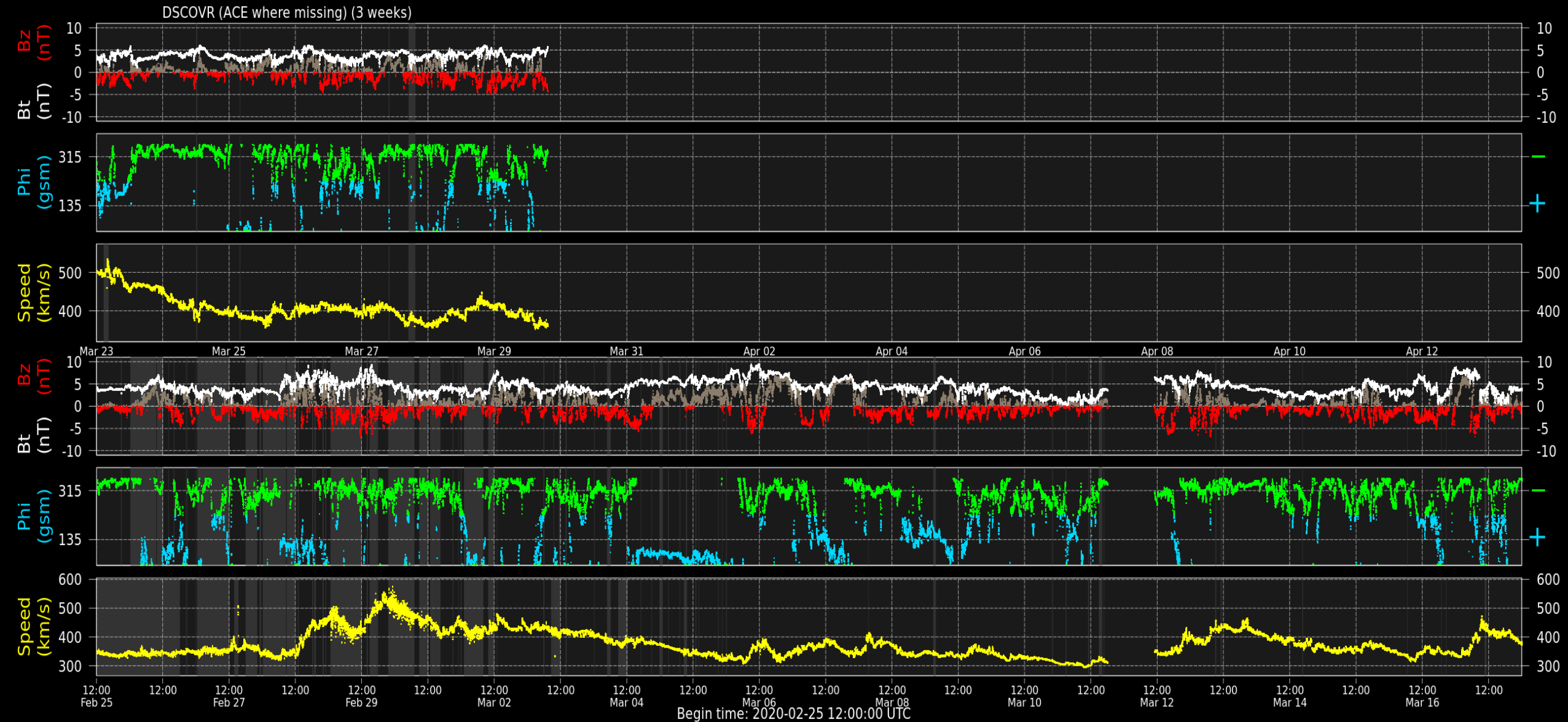
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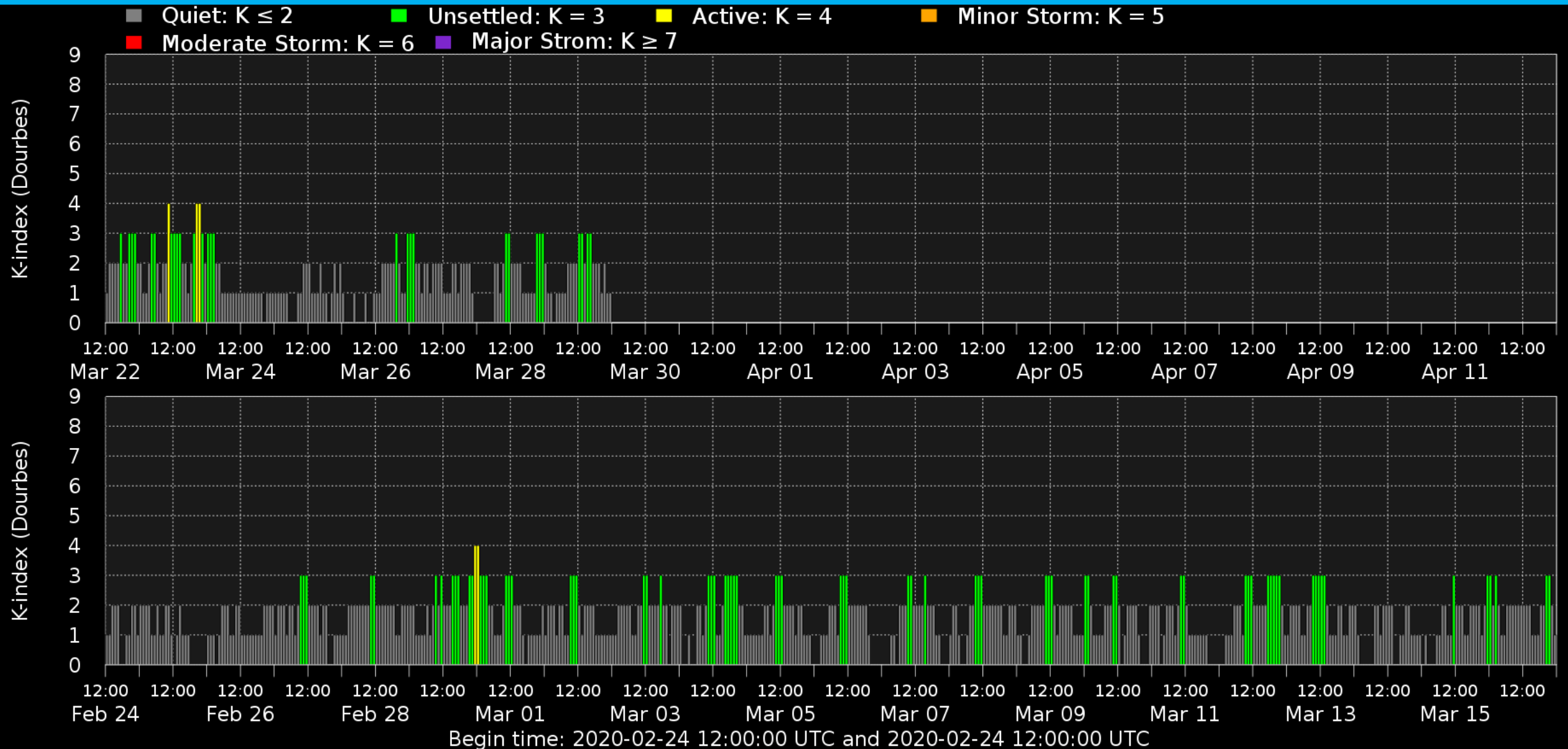
Outlook: Solar activity



Outlook: Solar wind



Outlook: Geomagnetic activity



SIDC Space Weather Briefing

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