

SIDC Space Weather Briefing

15 March 2020 - 22 March 2020

Cis Verbeeck
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2020-03-15 12:00 UT to 2020-03-22 12:00 UT

Active regions	None
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	None
CMEs	No Earth-directed CMEs
Proton Events	None

Solar wind and geomagnetic conditions from 2020-03-15 12:00 UT to 2020-03-22 12:00 UT

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

All Quiet Alert active

Solar Activity

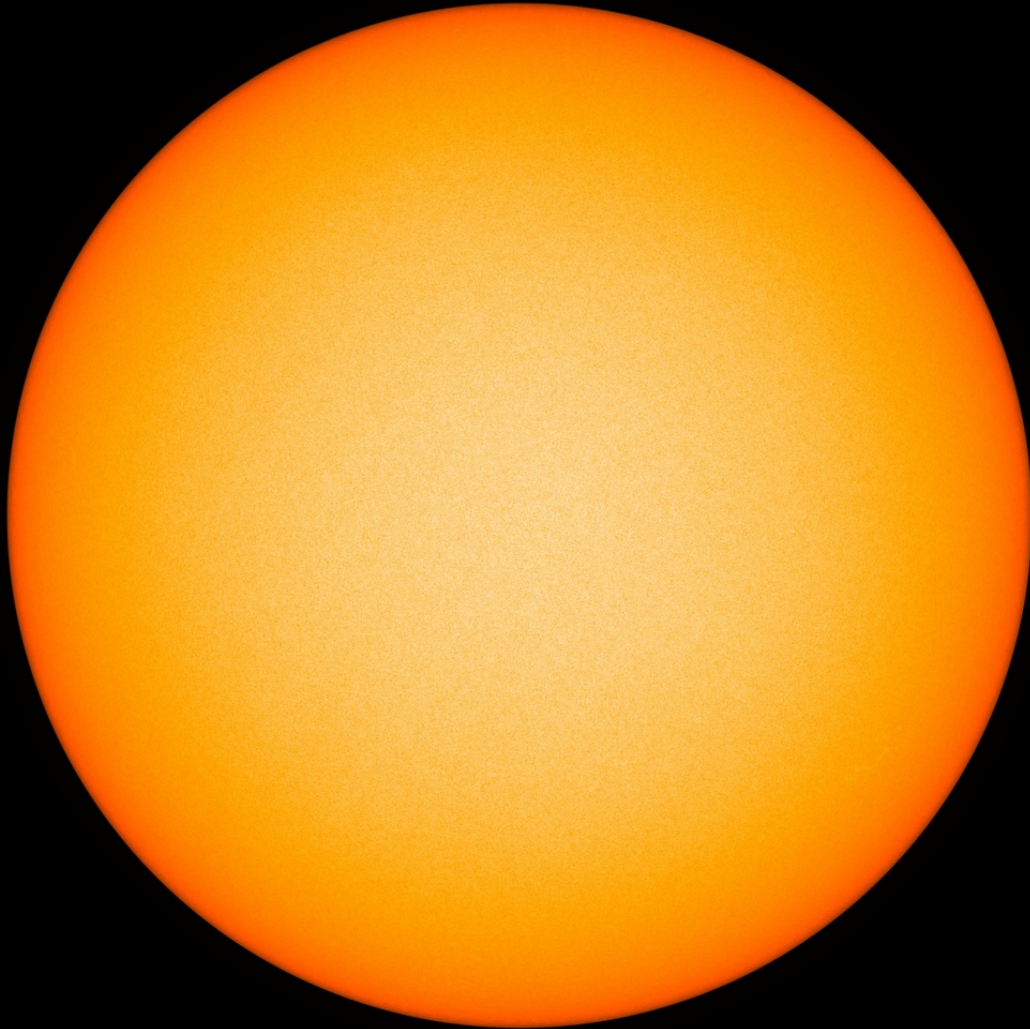


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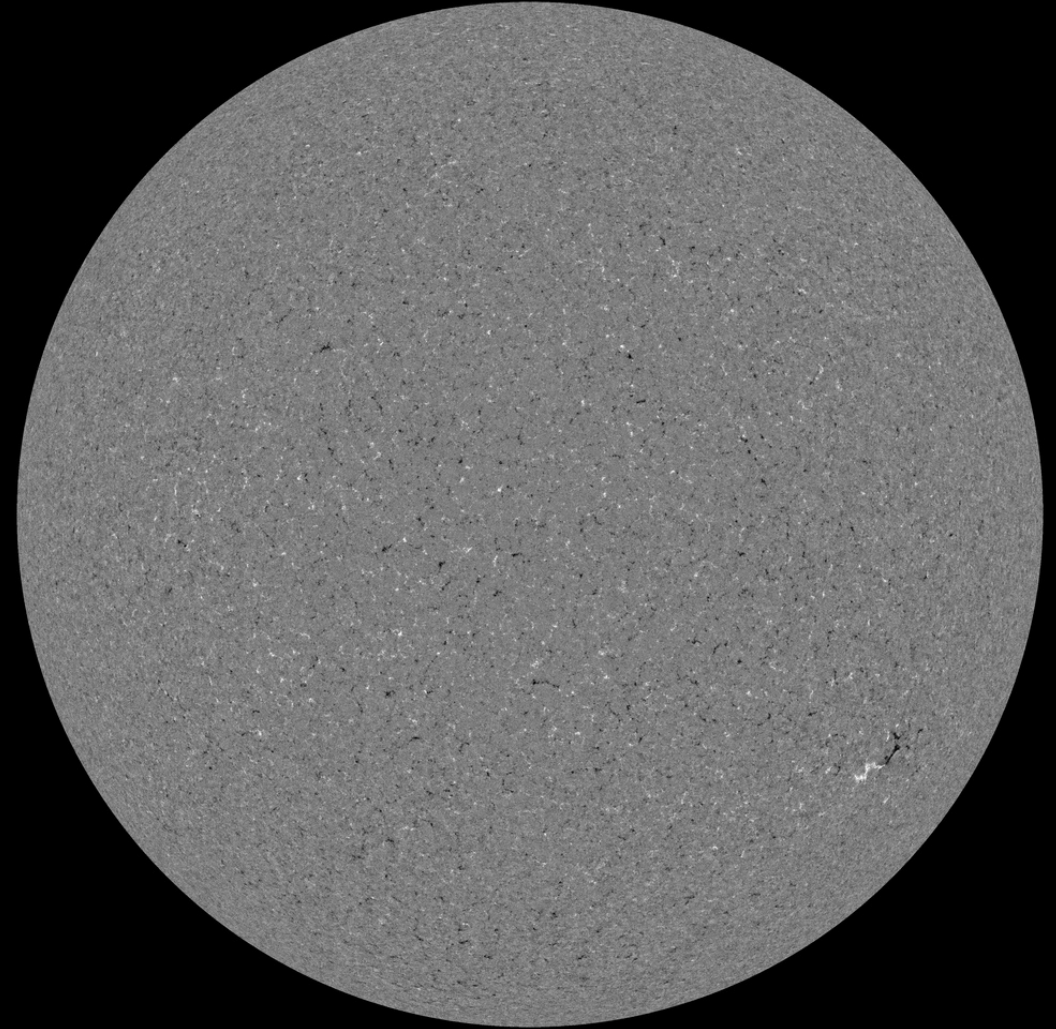
Solar active region - start of the week

SDO/HMI White Light 2020-03-15



SDO/HMI Quick-Look Continuum: 20200315_114500

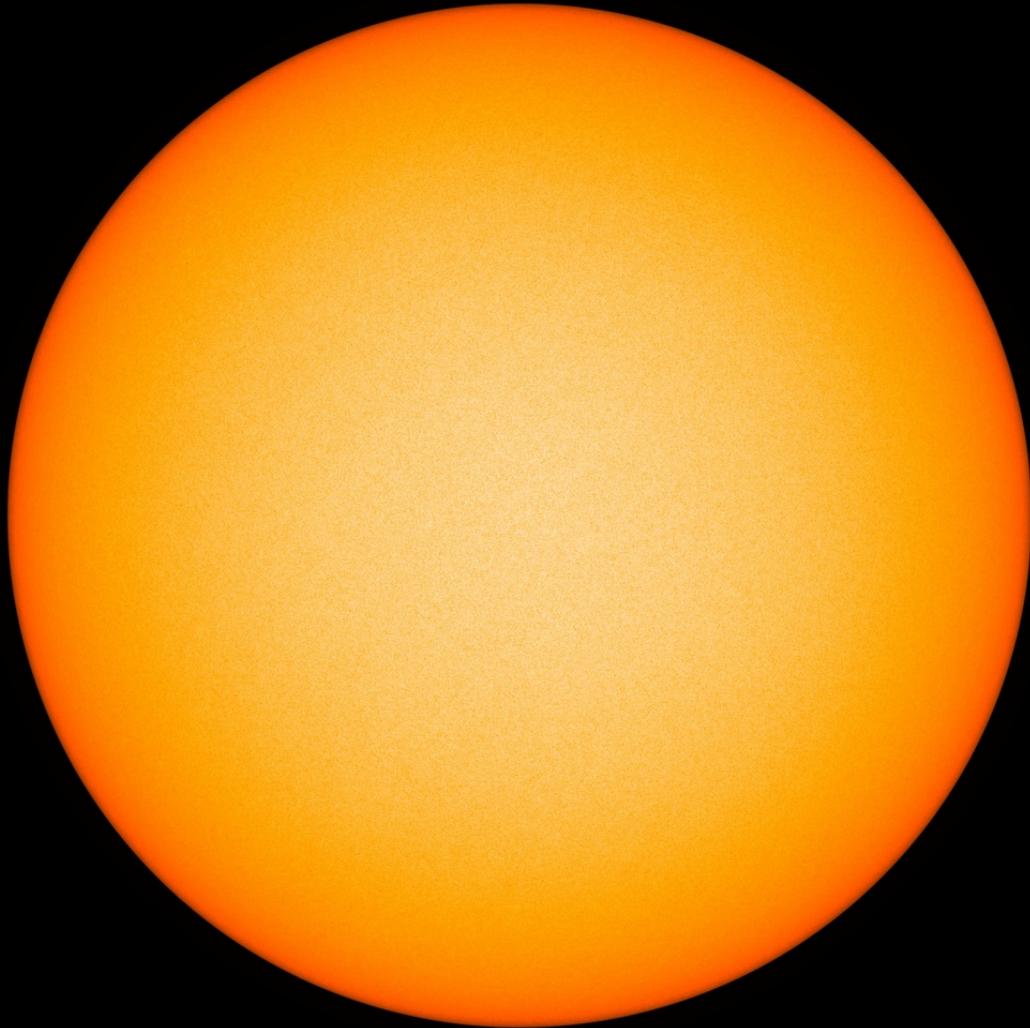
SDO/HMI Magnetogram 2020-03-15



SDO/HMI Quick-Look Magnetogram: 20200315_114500

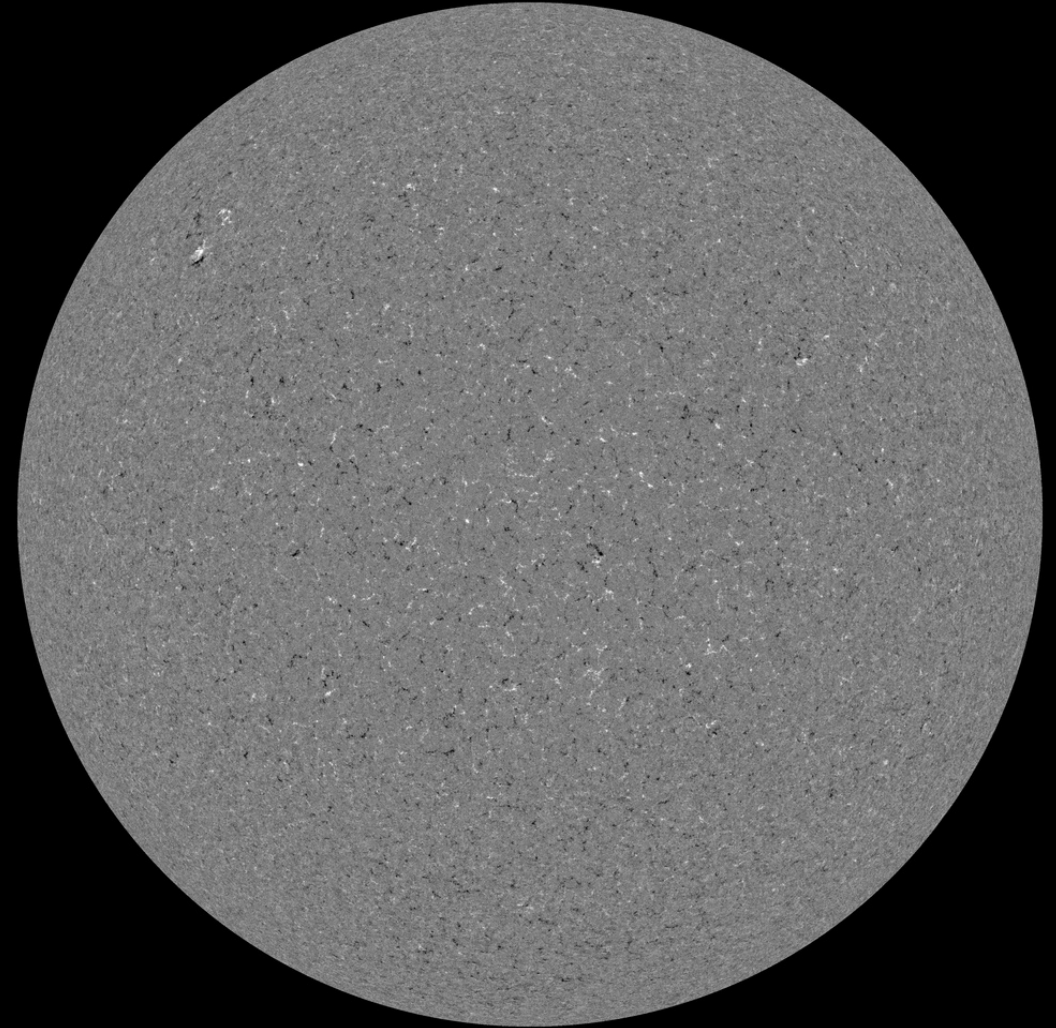
Solar active region - middle of the week

SDO/HMI White Light 2020-03-18



SDO/HMI Quick-Look Continuum: 20200318_114500

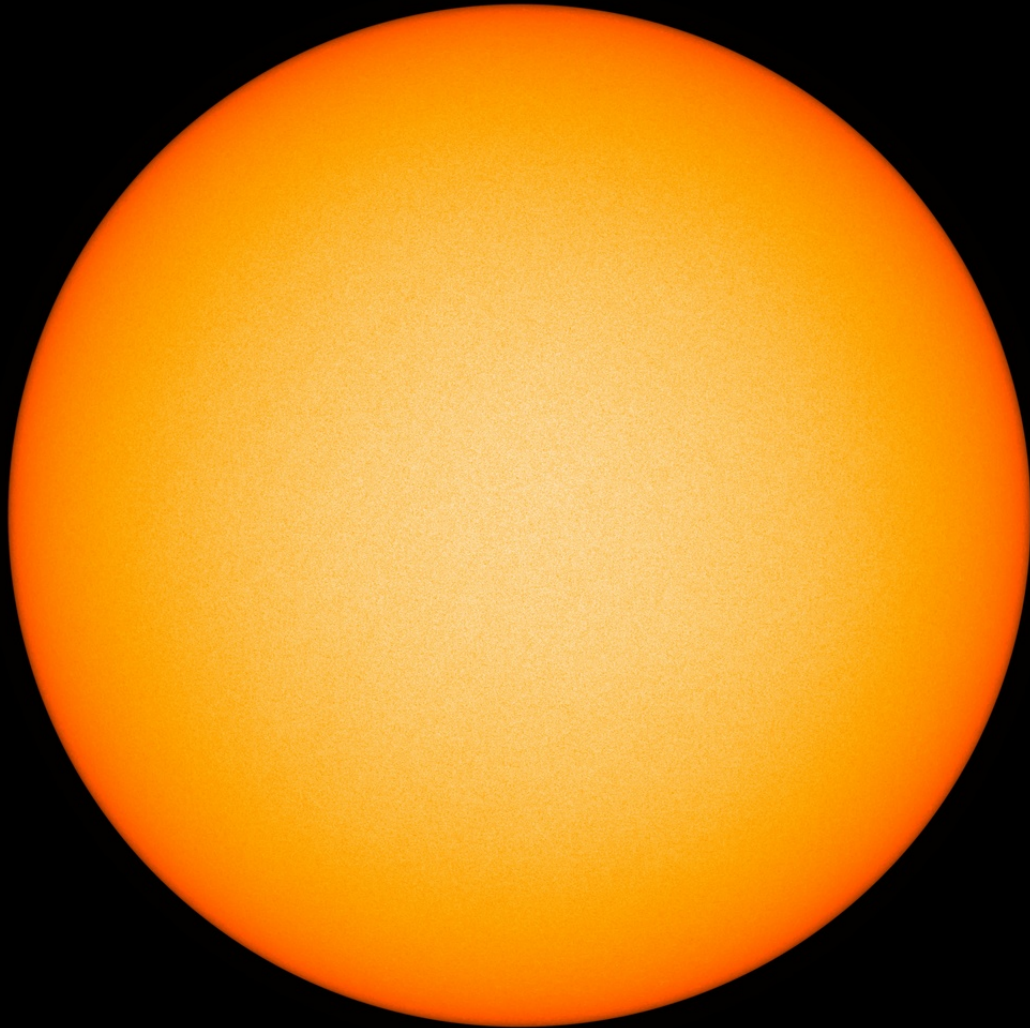
SDO/HMI Magnetogram 2020-03-18



SDO/HMI Quick-Look Magnetogram: 20200318_114500

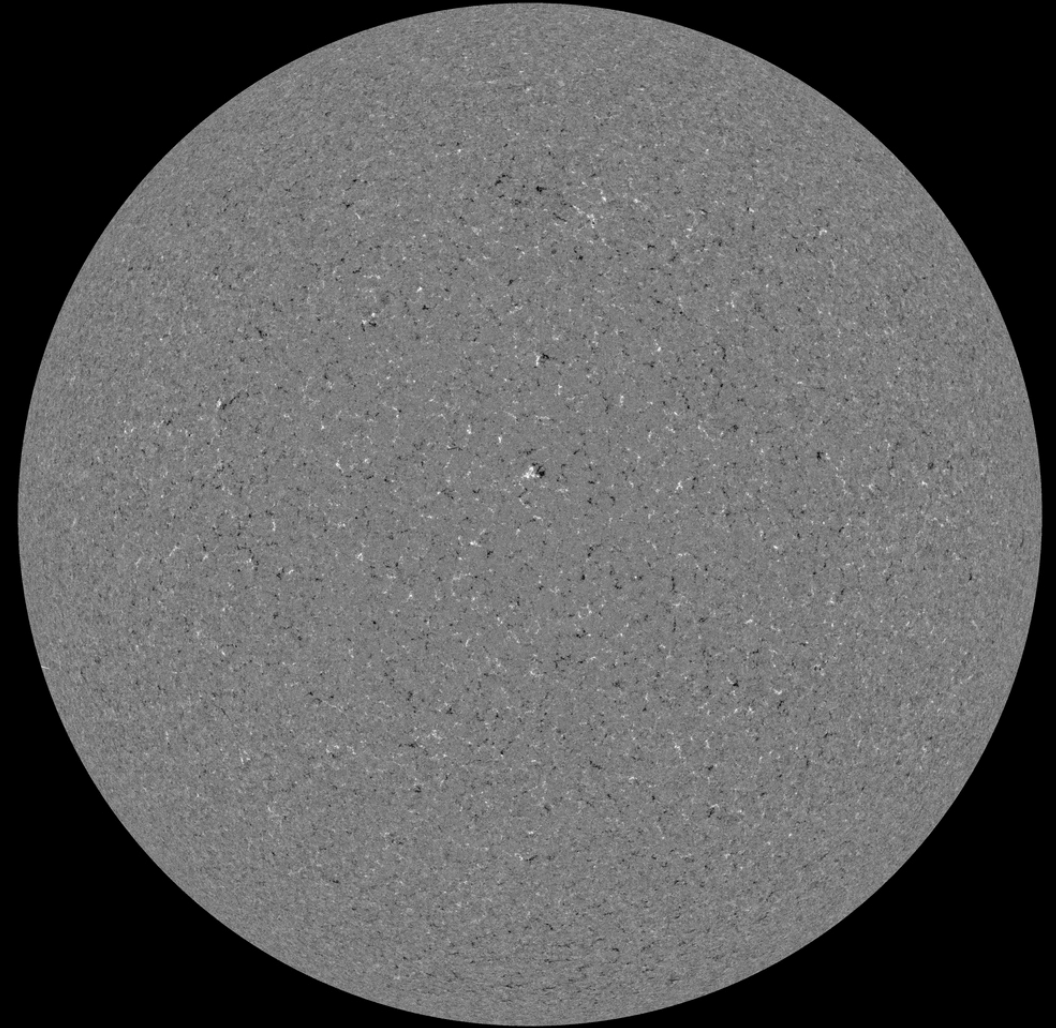
Solar active region - end of the week

SDO/HMI White Light 2020-03-22



SDO/HMI Quick-Look Continuum: 20200322_114500

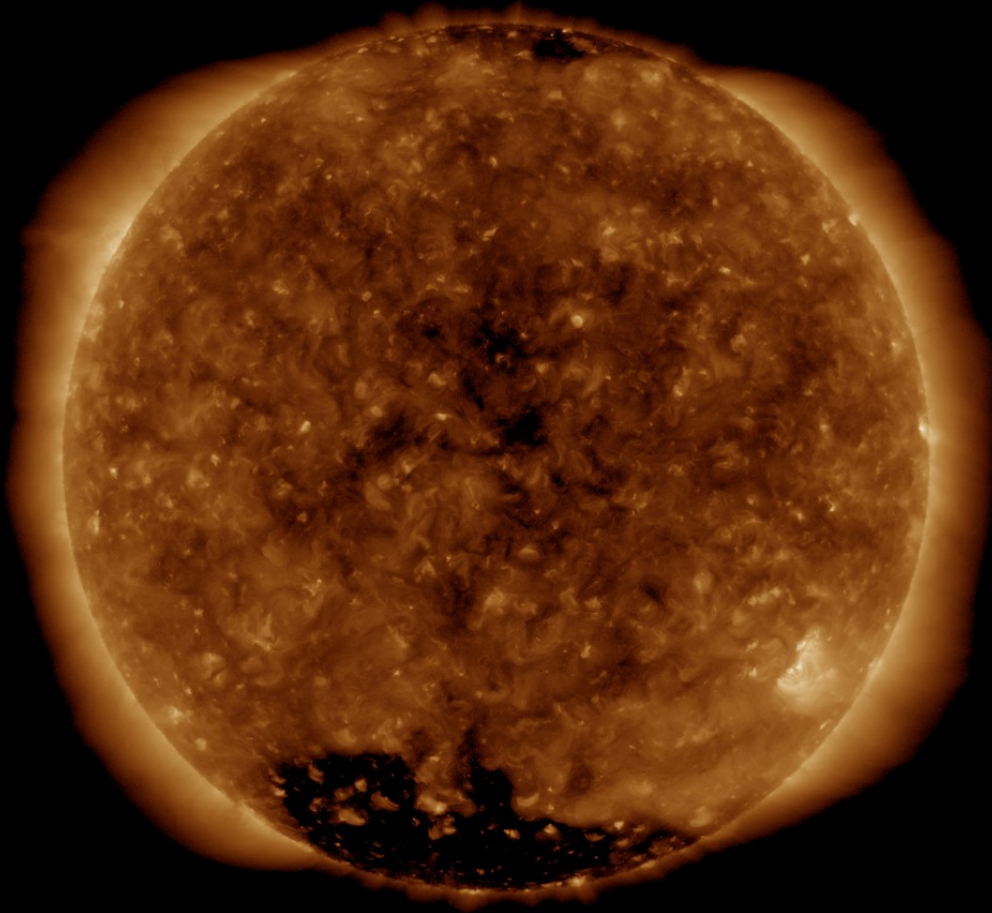
SDO/HMI Magnetogram 2020-03-22



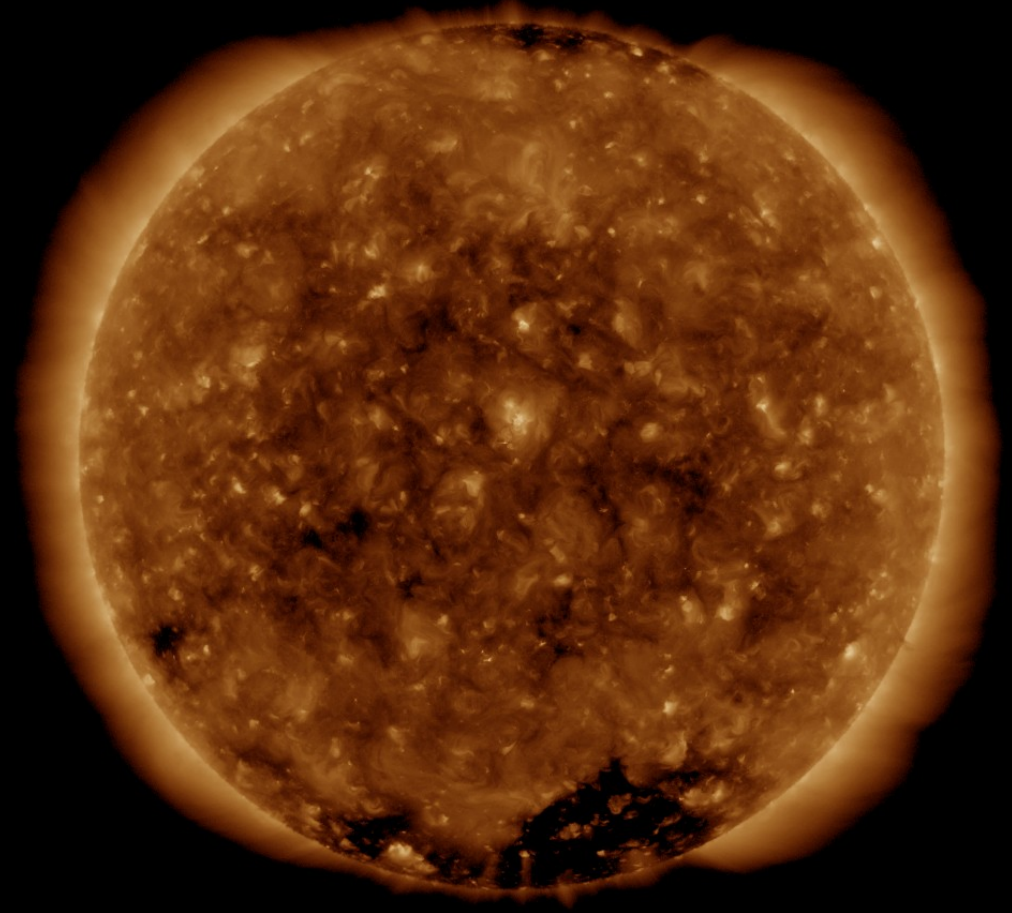
SDO/HMI Quick-Look Magnetogram: 20200322_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-03-15



SDO/AIA 19.3 nm 2020-03-22

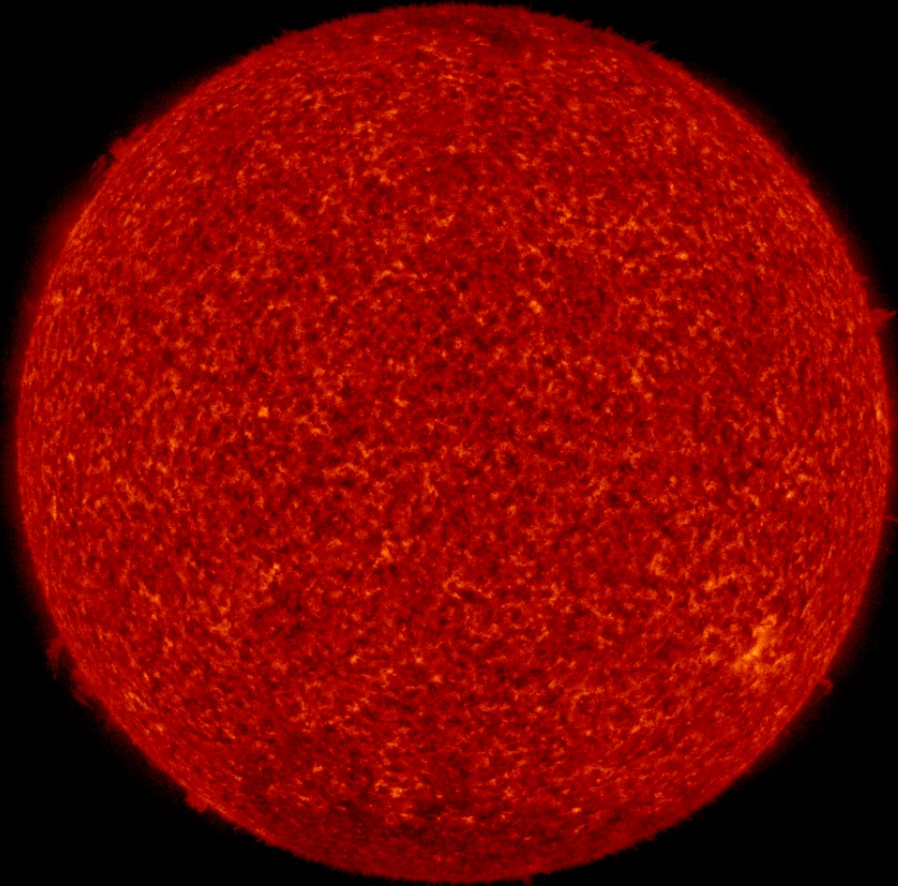


SDO/AIA 193 2020-03-15 12:10:17 UT

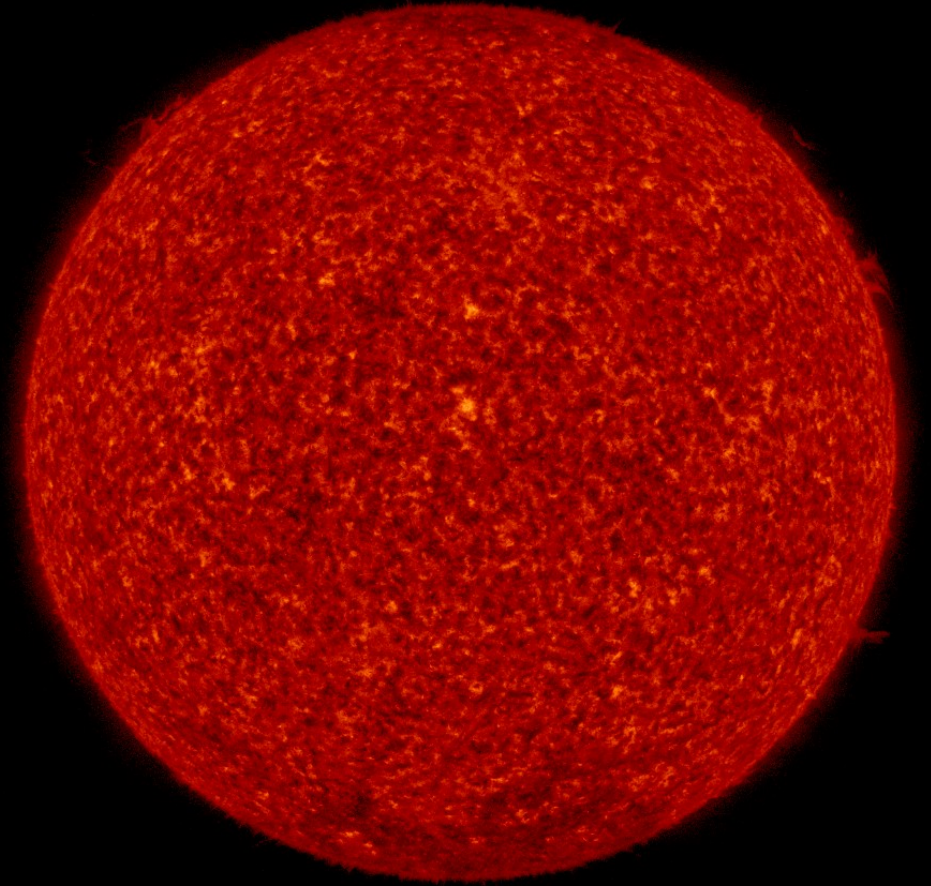
SDO/AIA 193 2020-03-22 12:10:29 UT

Solar active region & Filament

SDO/AIA 30.4 nm 2020-03-15



SDO/AIA 30.4 nm 2020-03-22



SDO/AIA 304 2020-03-15 12:13:54 UT

SDO/AIA 304 2020-03-22 12:13:18 UT

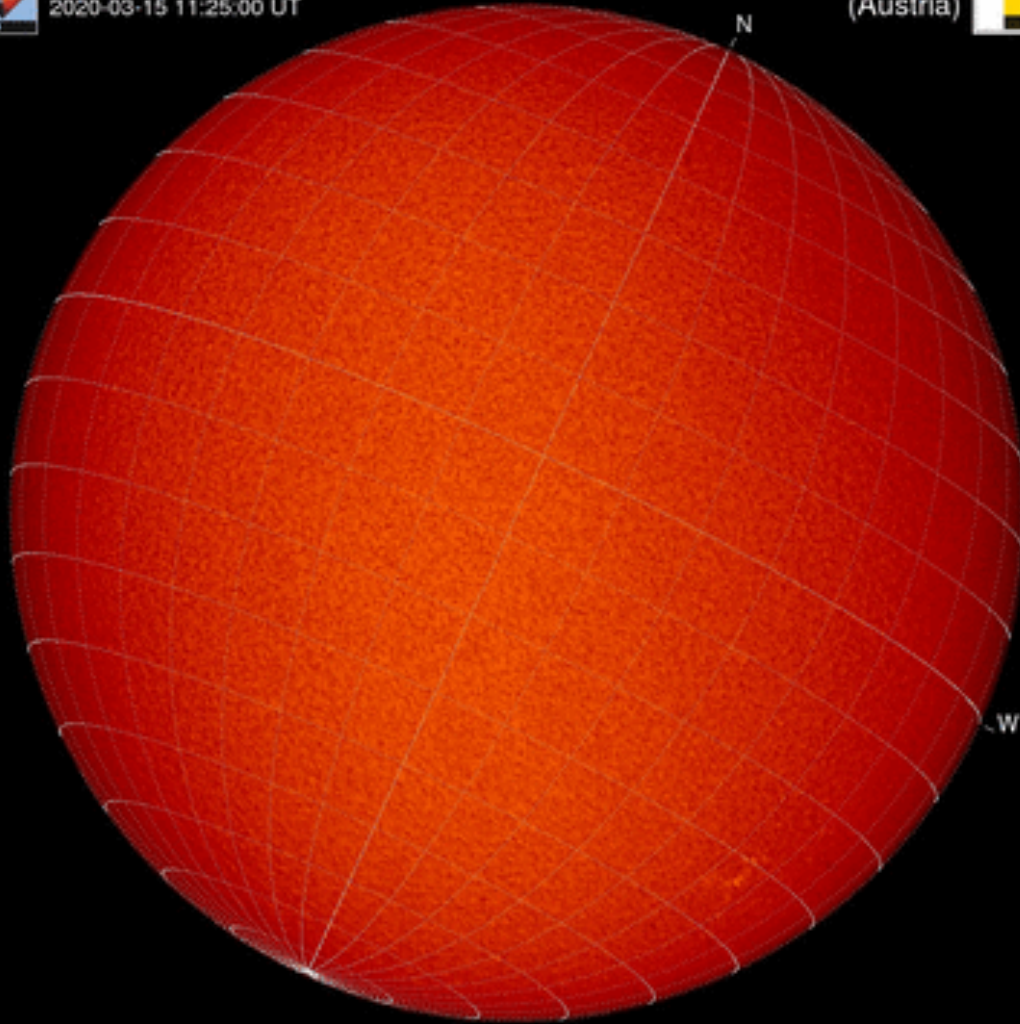
Filament & Filament eruption

H-alpha 2020-03-15



Kanzelhöhe Observatory
2020-03-15 11:25:00 UT

University of Graz
(Austria)

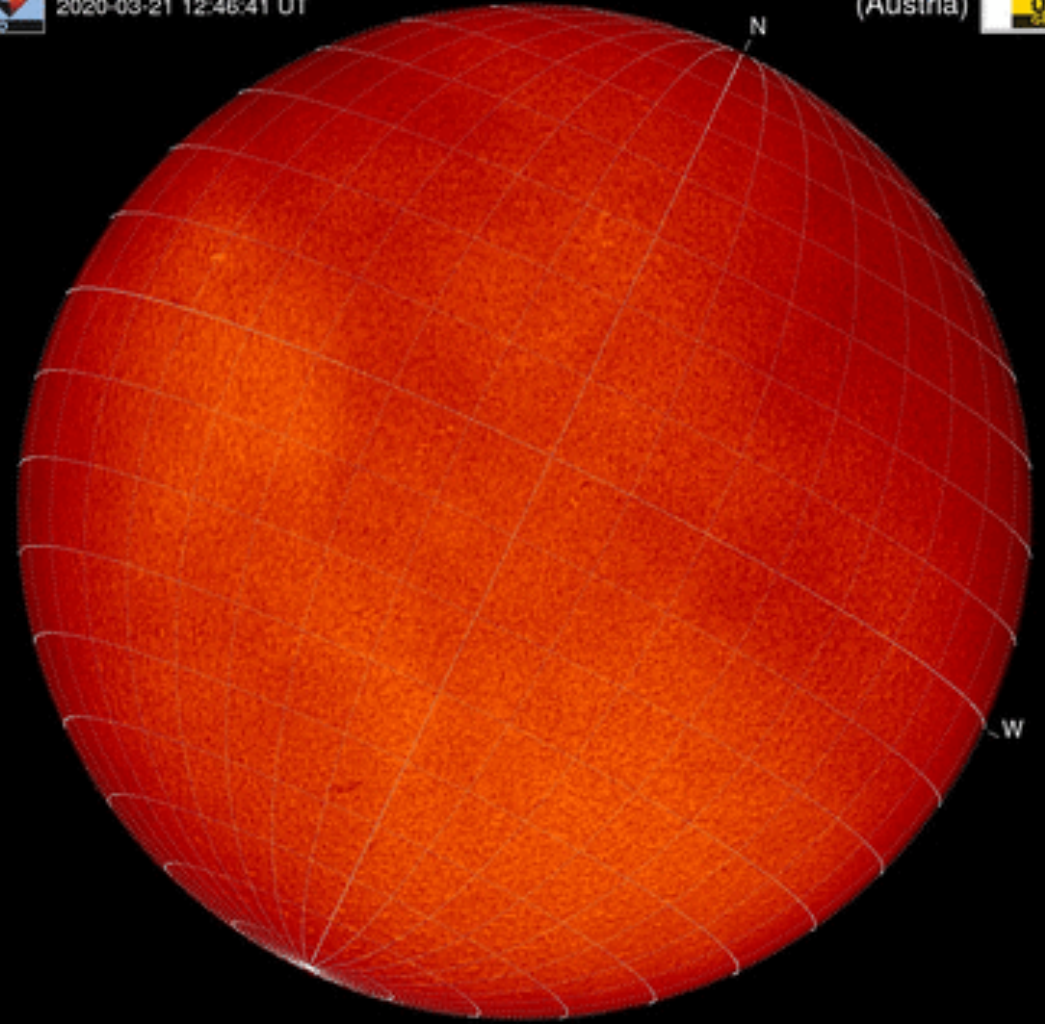


H-alpha 2020-03-22

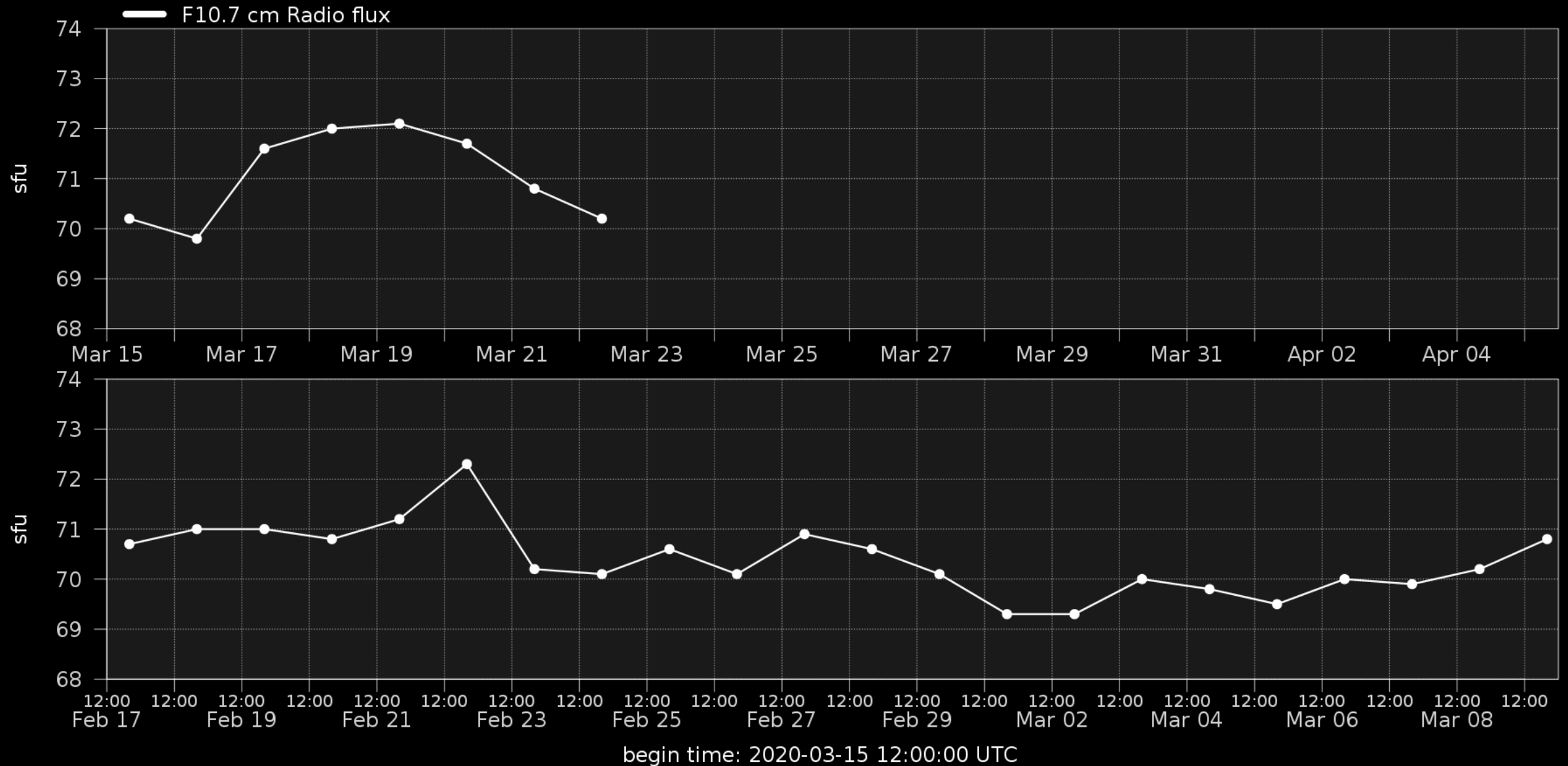


Kanzelhöhe Observatory
2020-03-21 12:46:41 UT

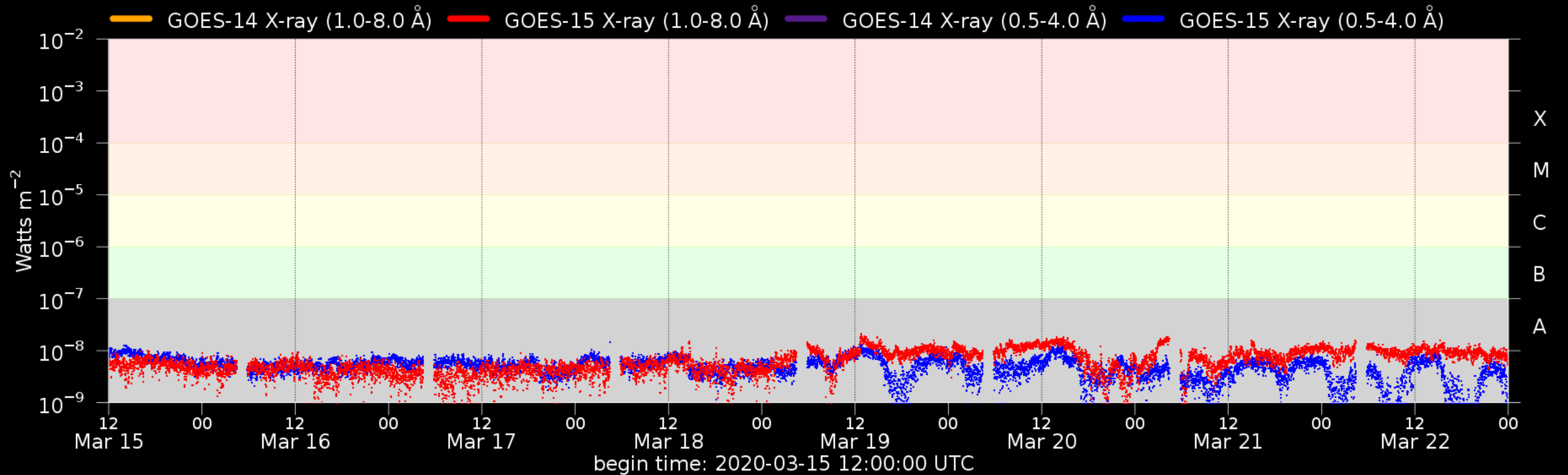
University of Graz
(Austria)



Solar F10.7cm radio flux



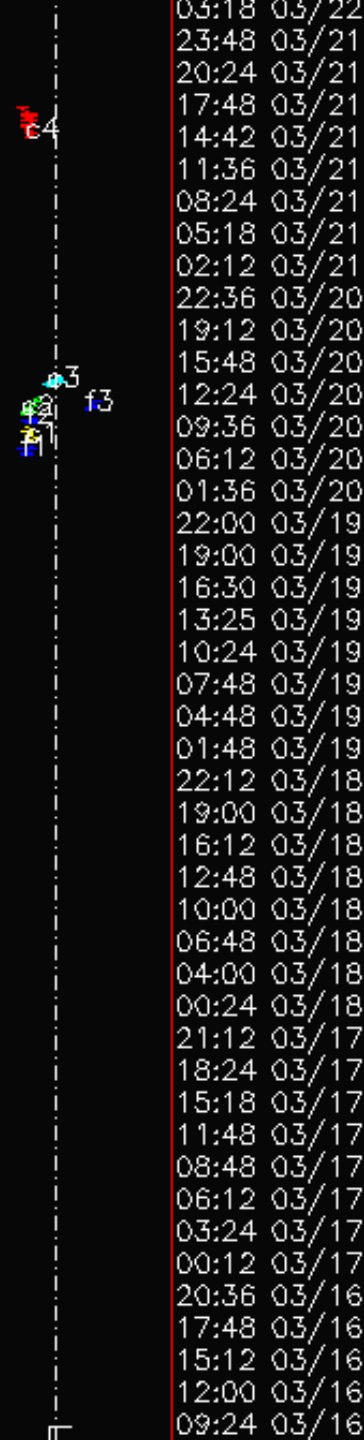
Flaring activity



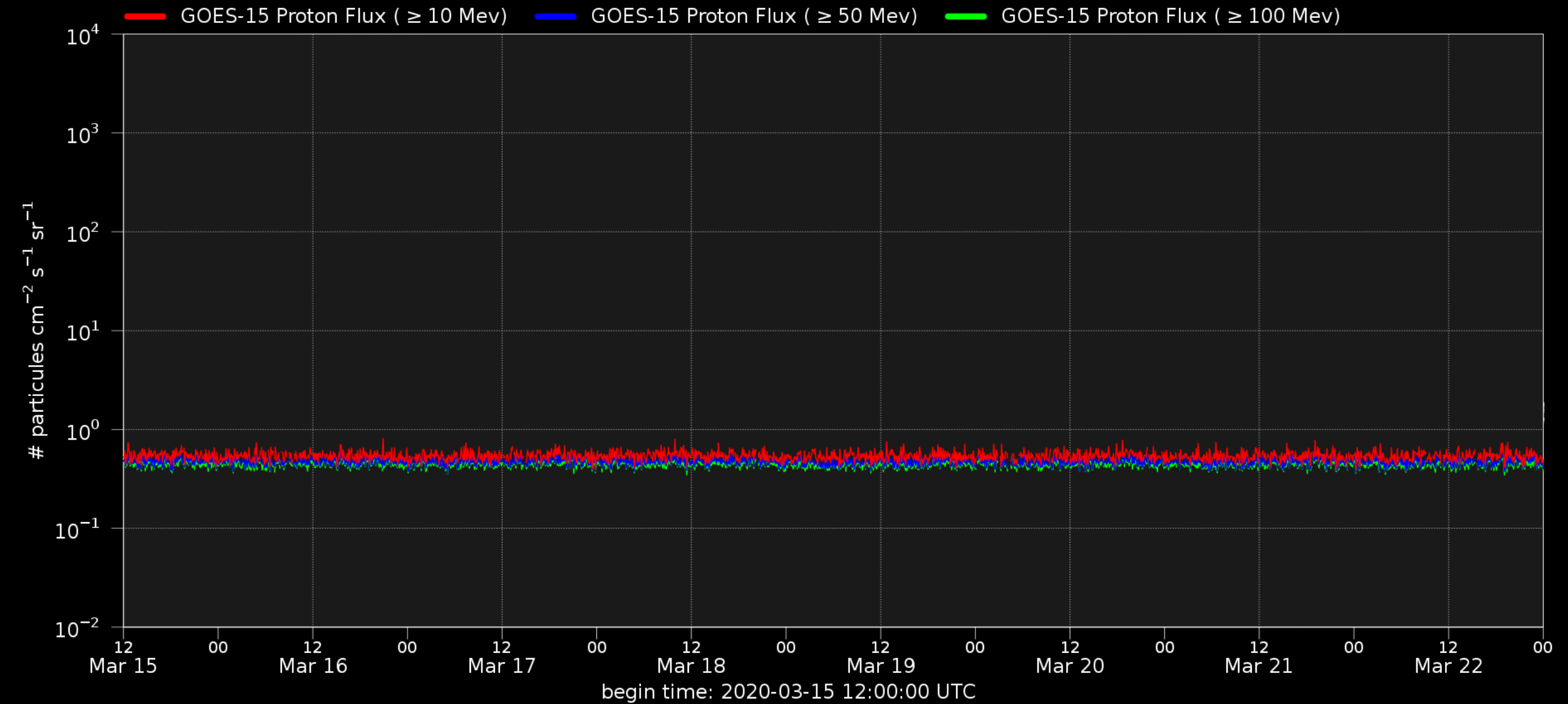
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2020-03-15	2020-03-16	2020-03-17	2020-03-18	2020-03-19	2020-03-20	2020-03-21	2020-03-22
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



Solar proton flux

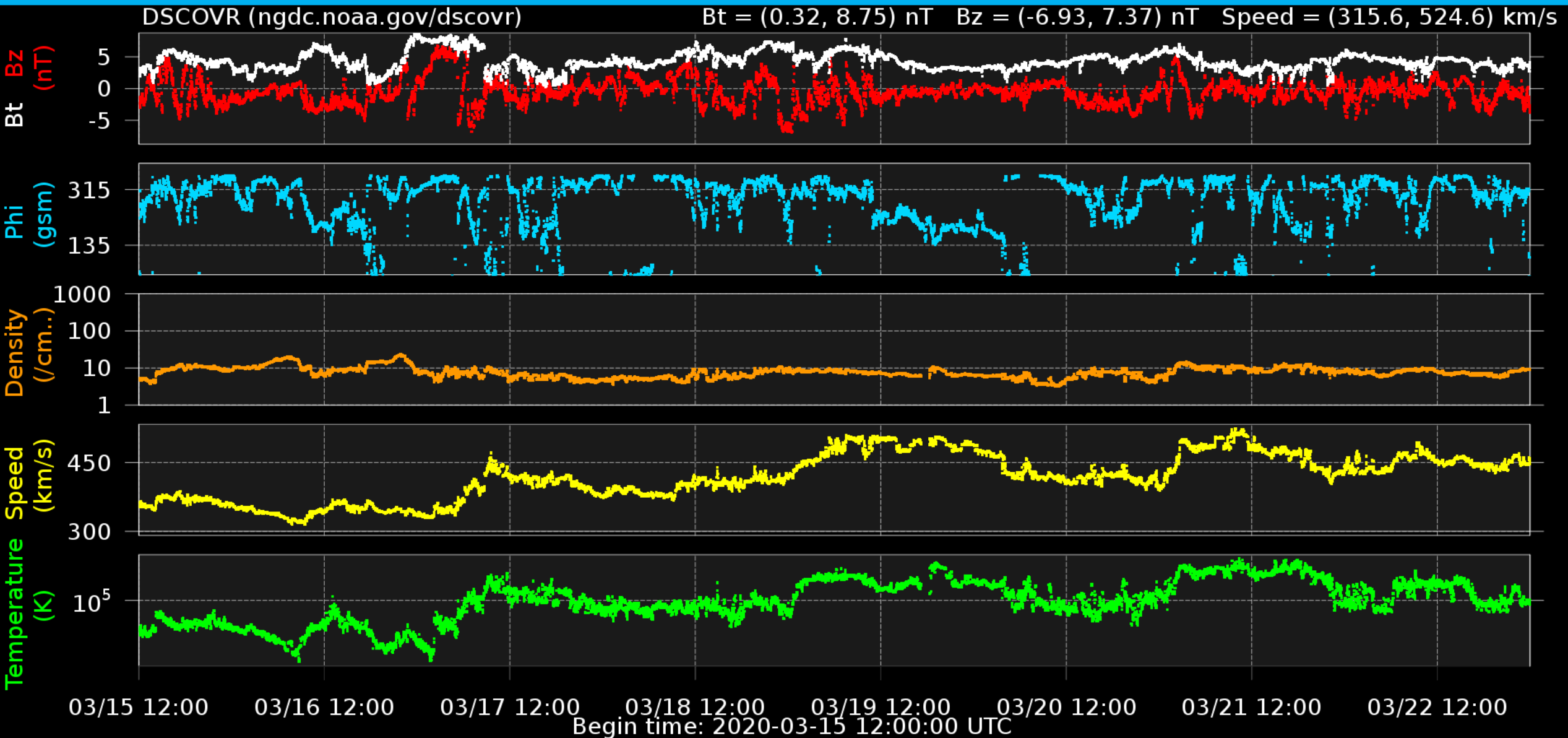


Solar Wind and Geomagnetic Activity

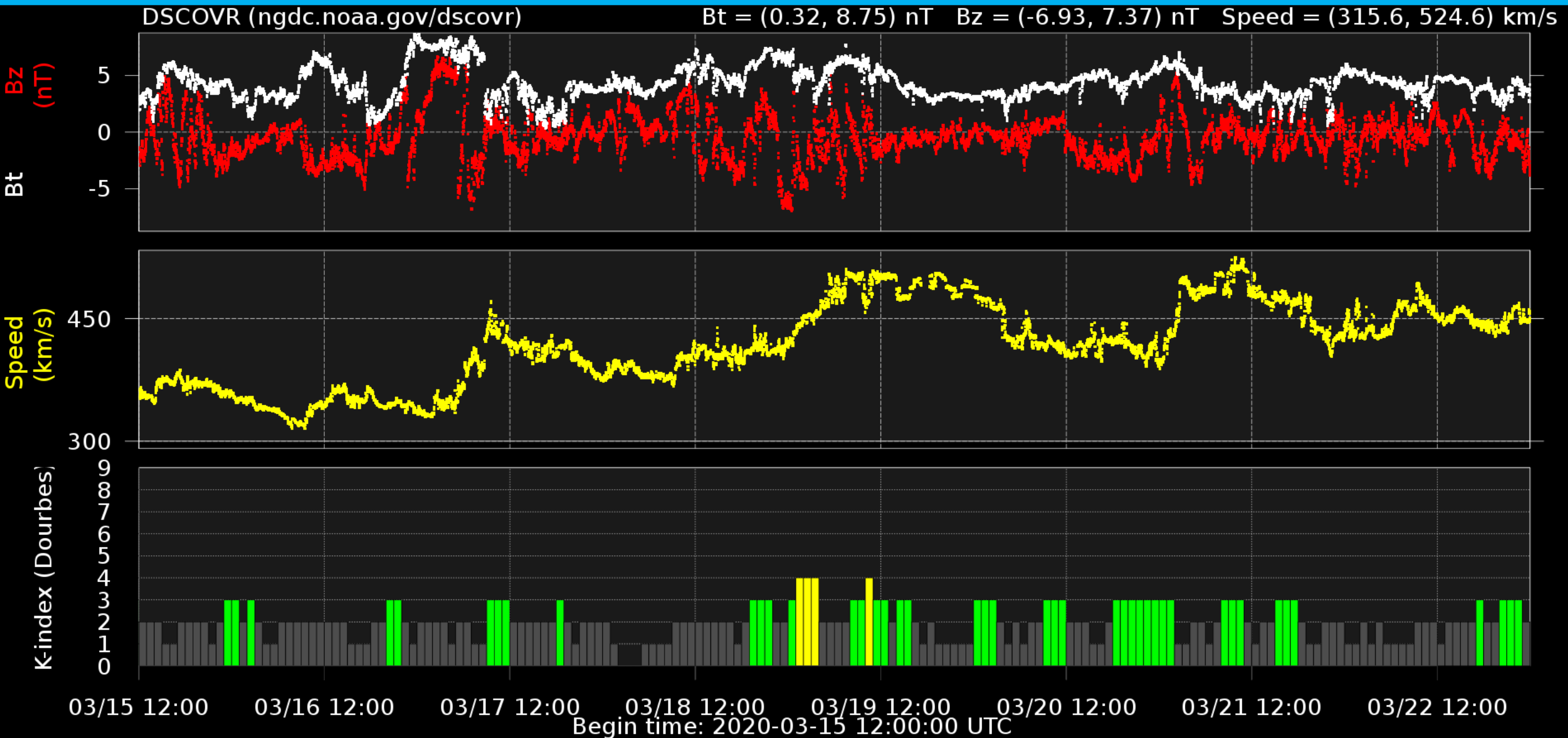


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Solar wind parameters (DSCOVR data)



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



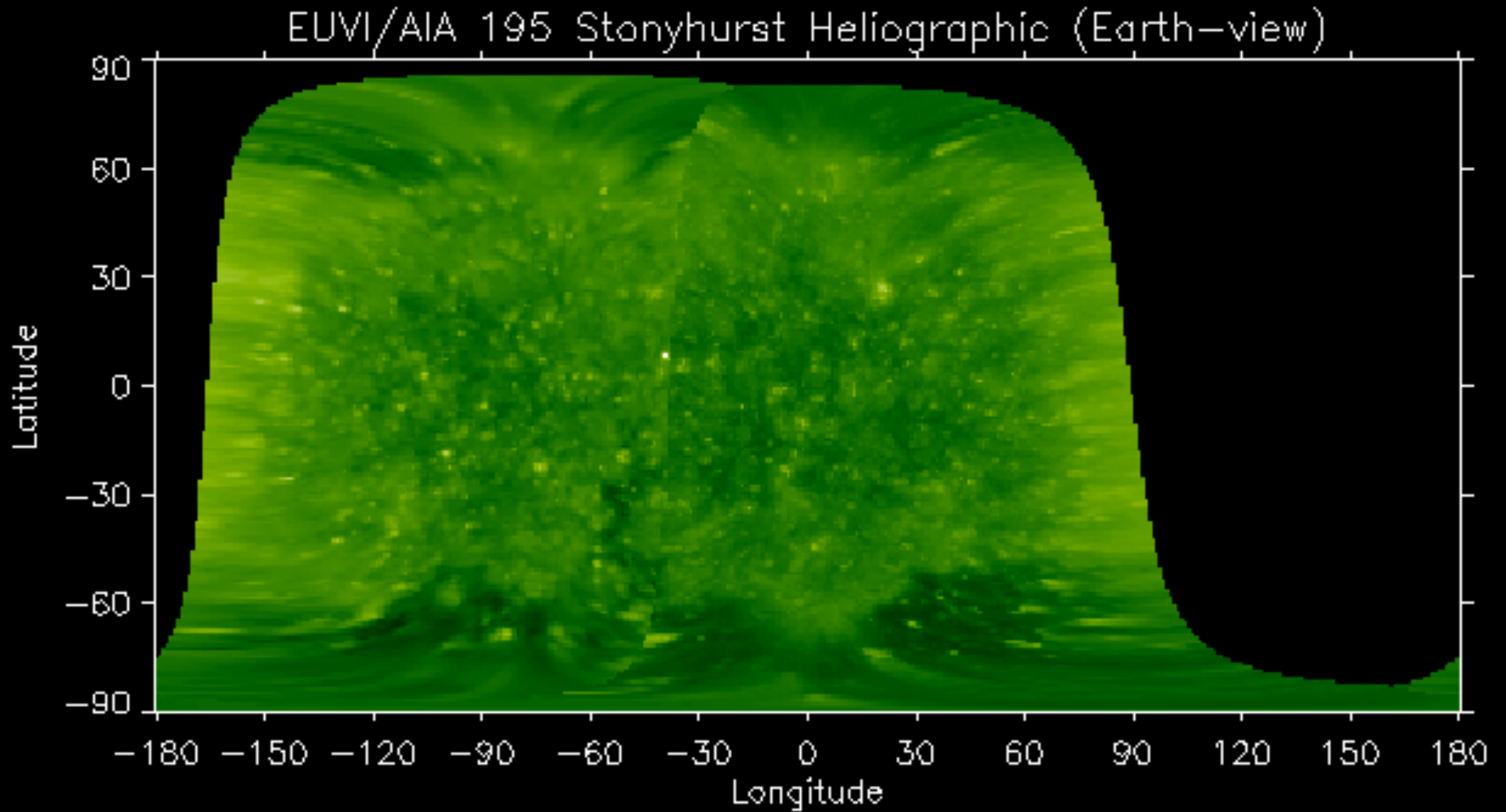
Outlook



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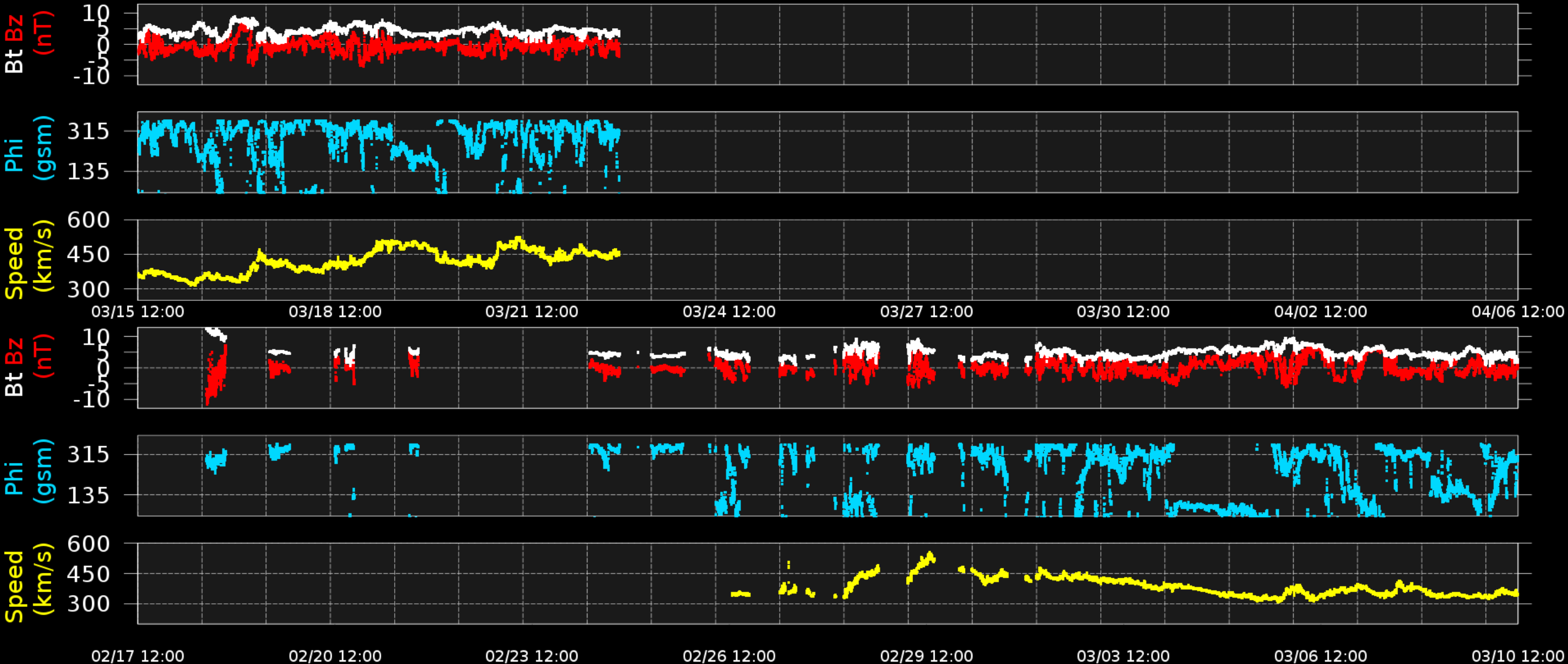
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Outlook: Solar activity



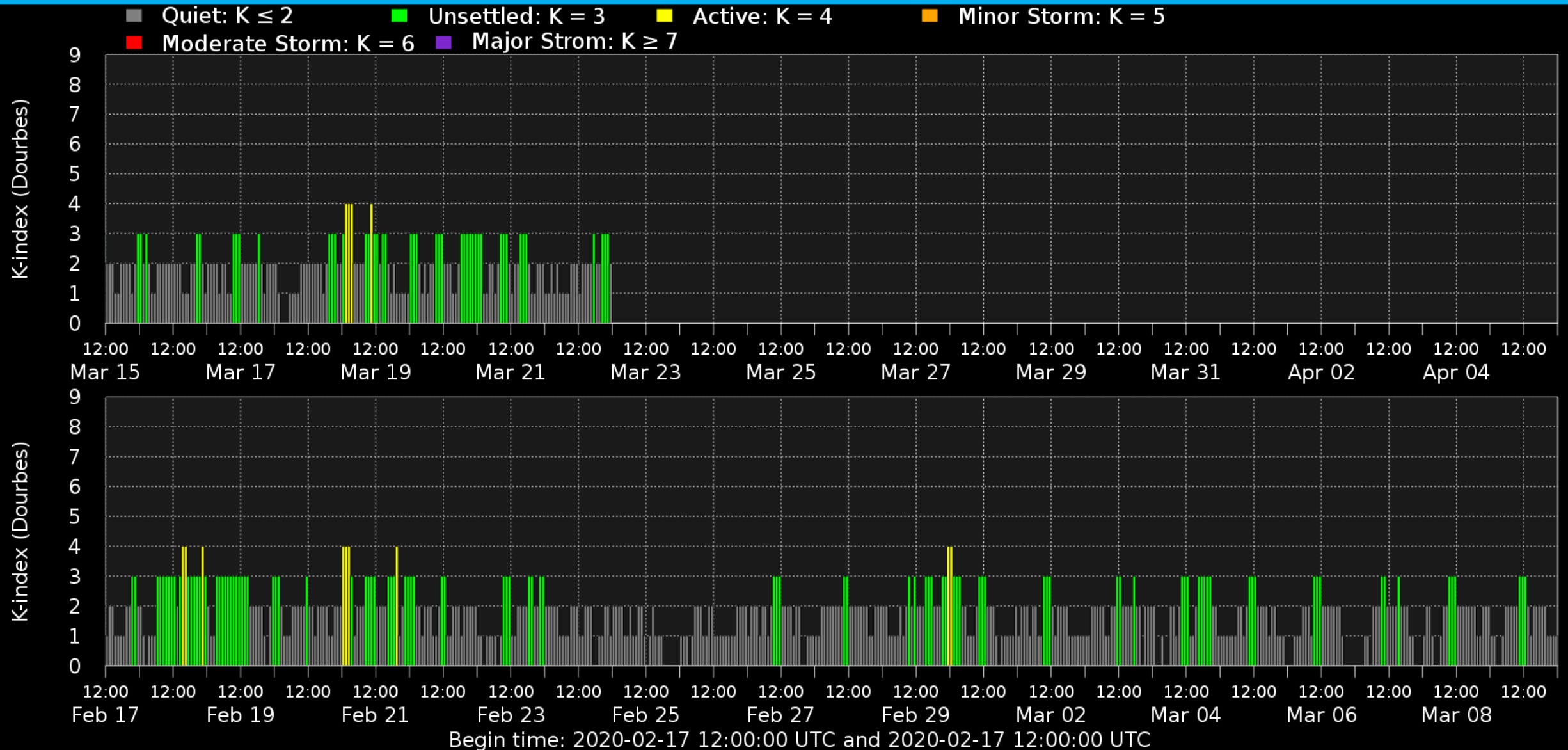
Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2020-02-17 12:00:00 UTC

Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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