

SIDC Space Weather Briefing

19 May 2019 - 26 May 2019

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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 2019-05-19 12:00 UT to 2019-05-26 12:00 UT

Active regions	No numbered regions.
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	None.
CMEs	One possible slow Earth directed CME on 22 May.
Proton Events	None.

Solar wind and geomagnetic conditions from 2019-05-19 12:00 UT to 2019-05-26 12:00 UT

Coronal Holes	Series of weak, negative polarity coronal holes.
ICME	Possible ICME: Disturbed solar wind at 21 UT, 26 May.
SW Conditions	Quiet to Unsettled.
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 3

All Quiet Alert: On from 2019-May-20

Solar Activity

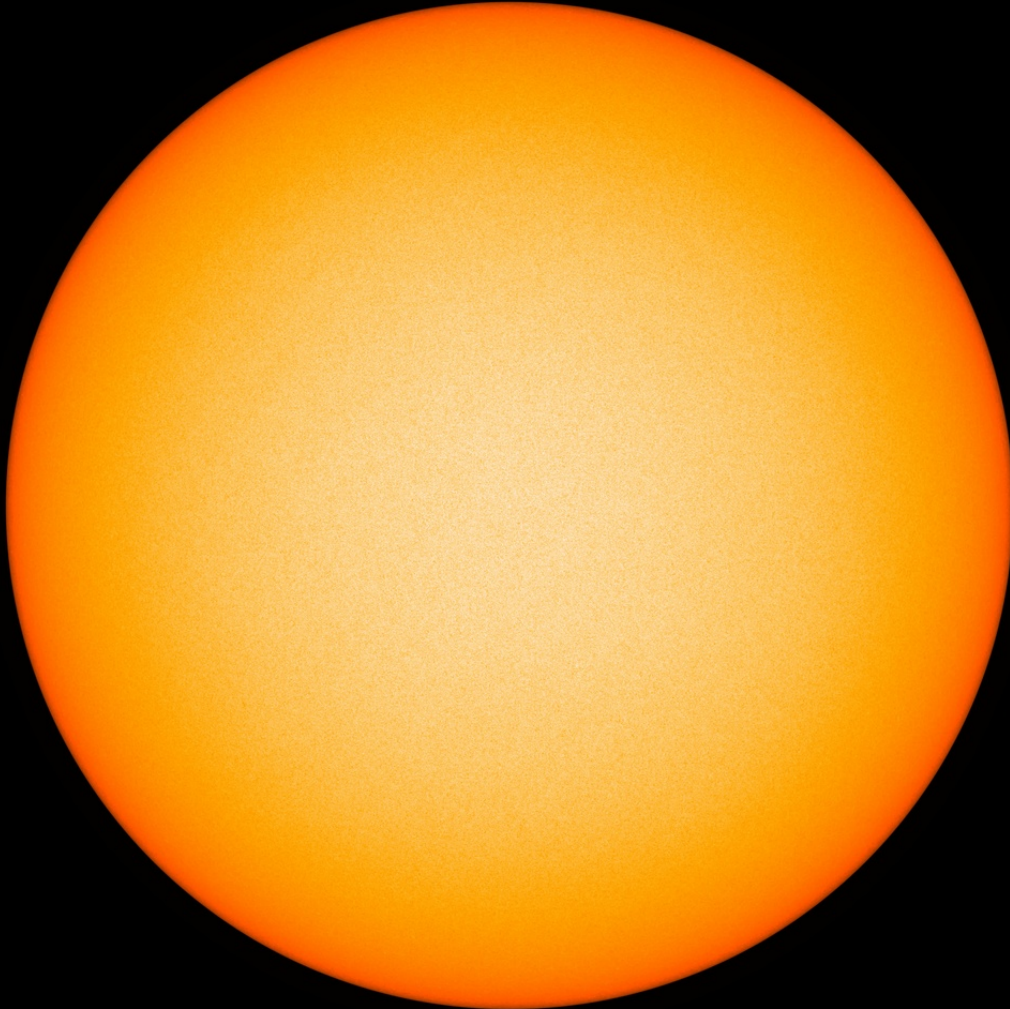


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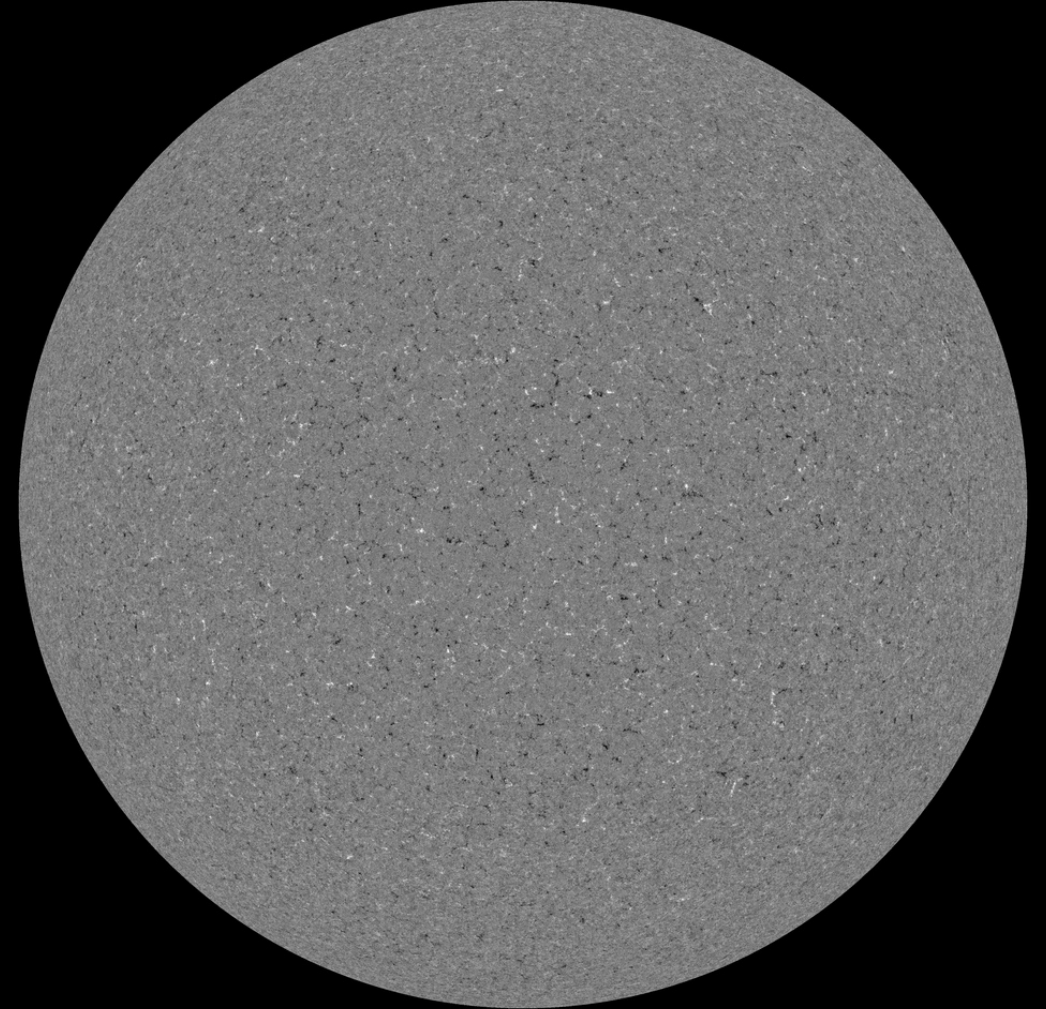
Solar active region - start of the week

SDO/HMI White Light 2019-05-20



SDO/HMI Quick-Look Continuum: 20190520_120000

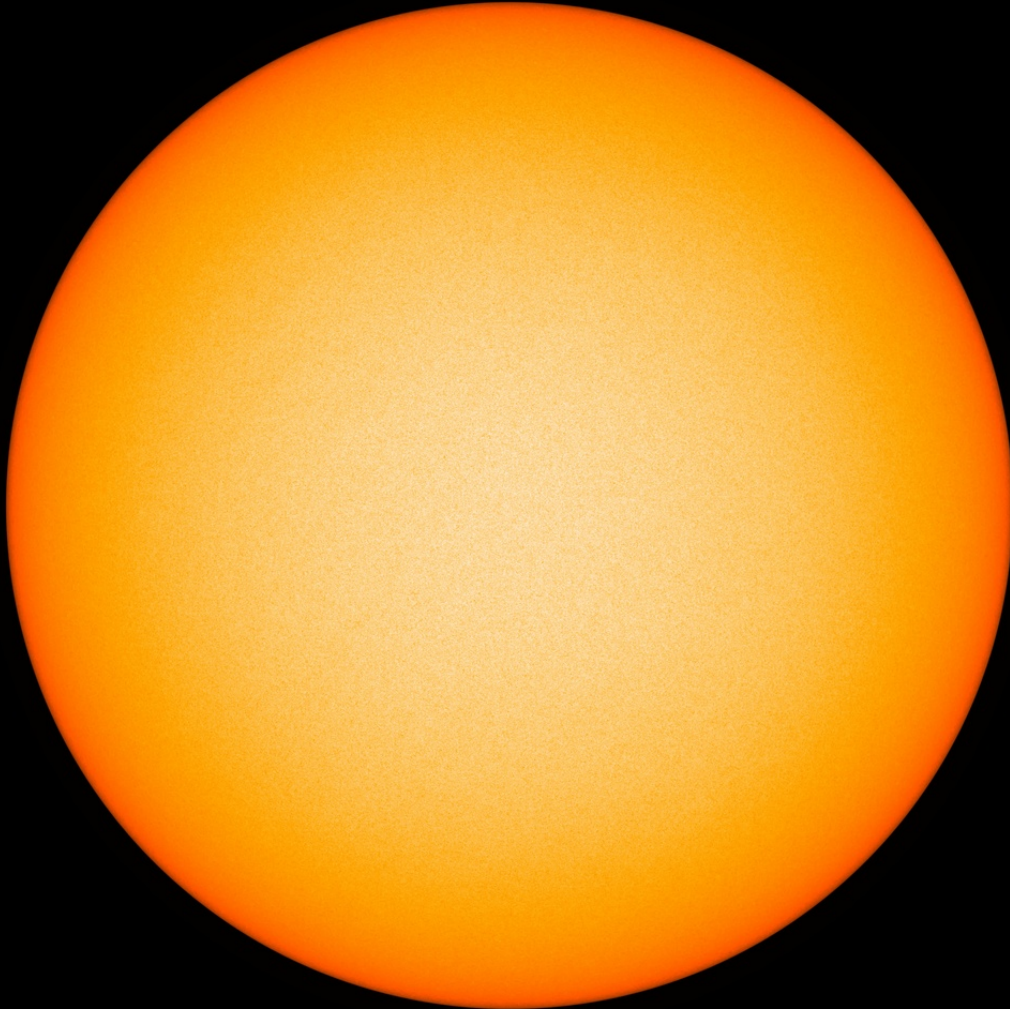
SDO/HMI Magnetogram 2019-05-20



SDO/HMI Quick-Look Magnetogram: 20190520_120000

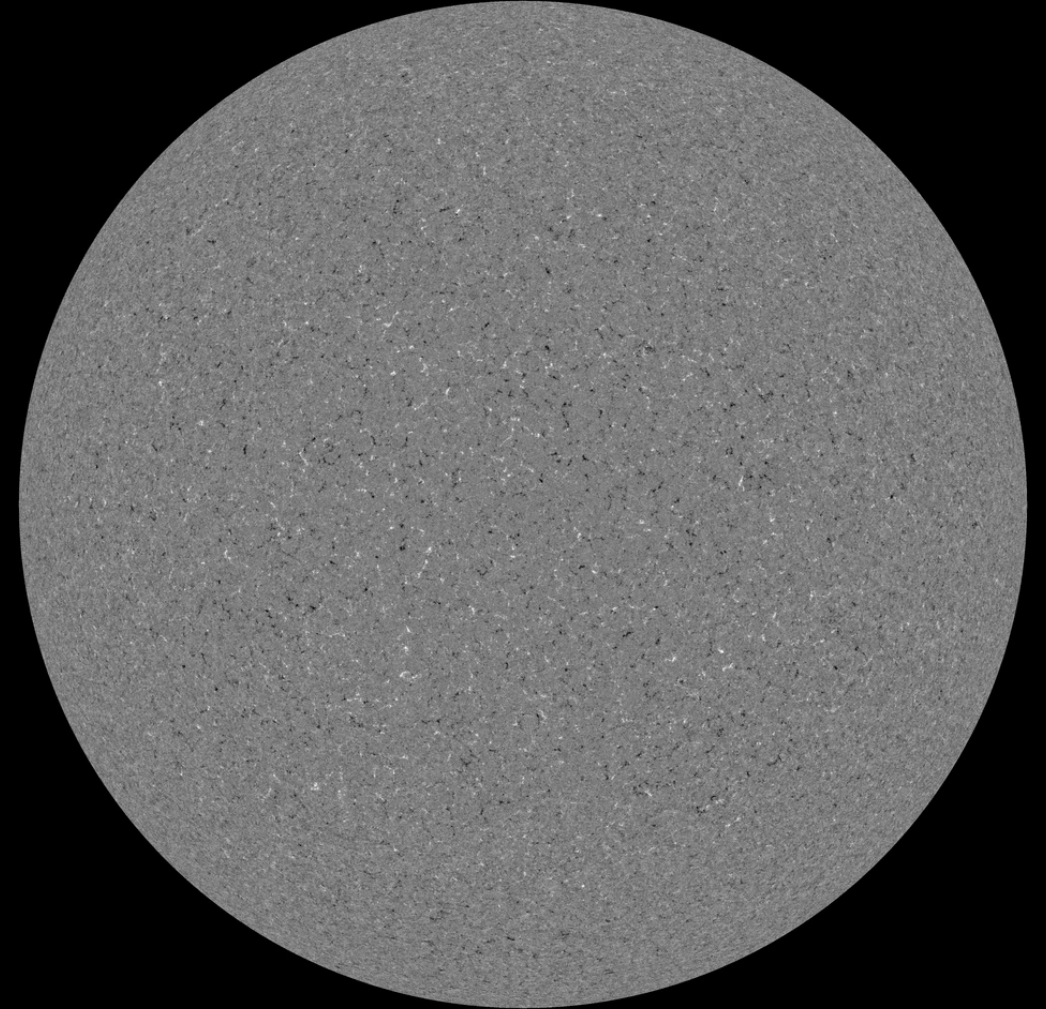
Solar active region - middle of the week

SDO/HMI White Light 2019-05-22



SDO/HMI Quick-Look Continuum: 20190522_120000

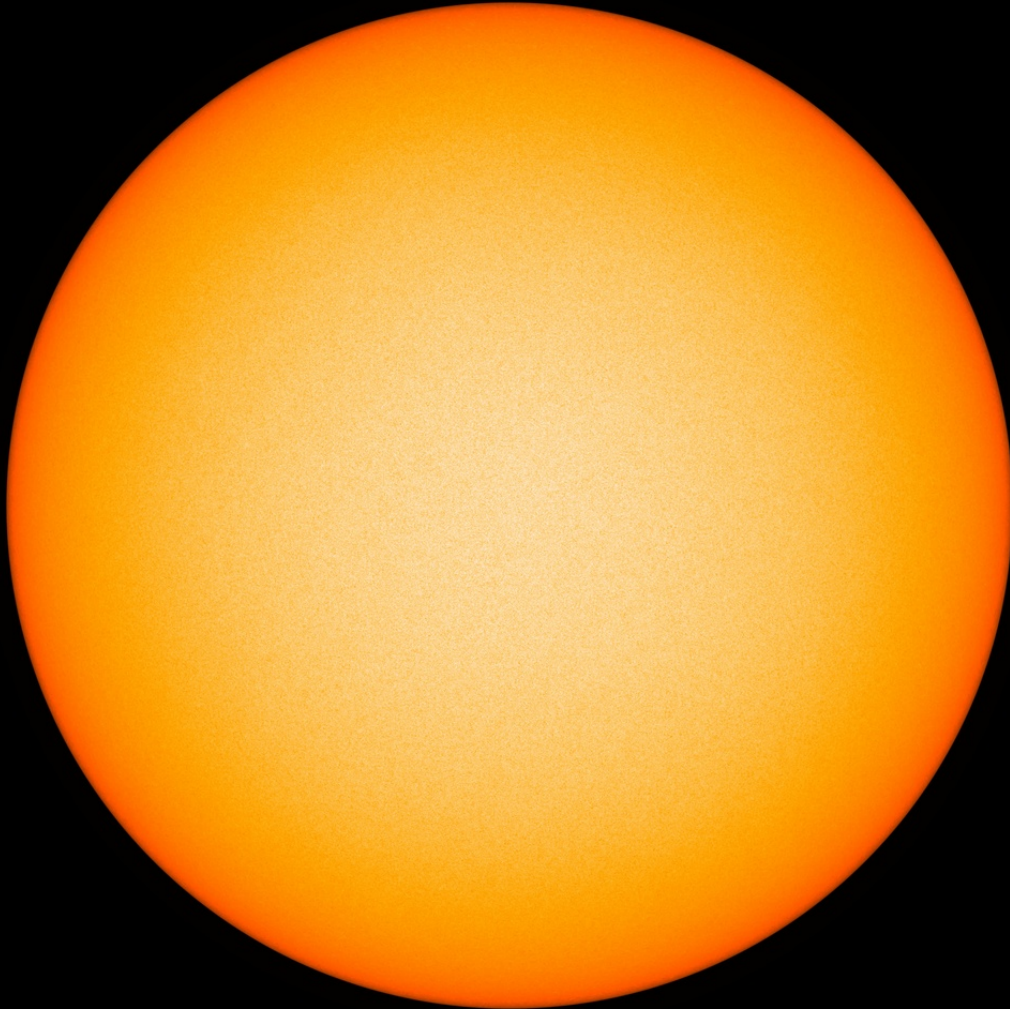
SDO/HMI Magnetogram 2019-05-22



SDO/HMI Quick-Look Magnetogram: 20190522_114500

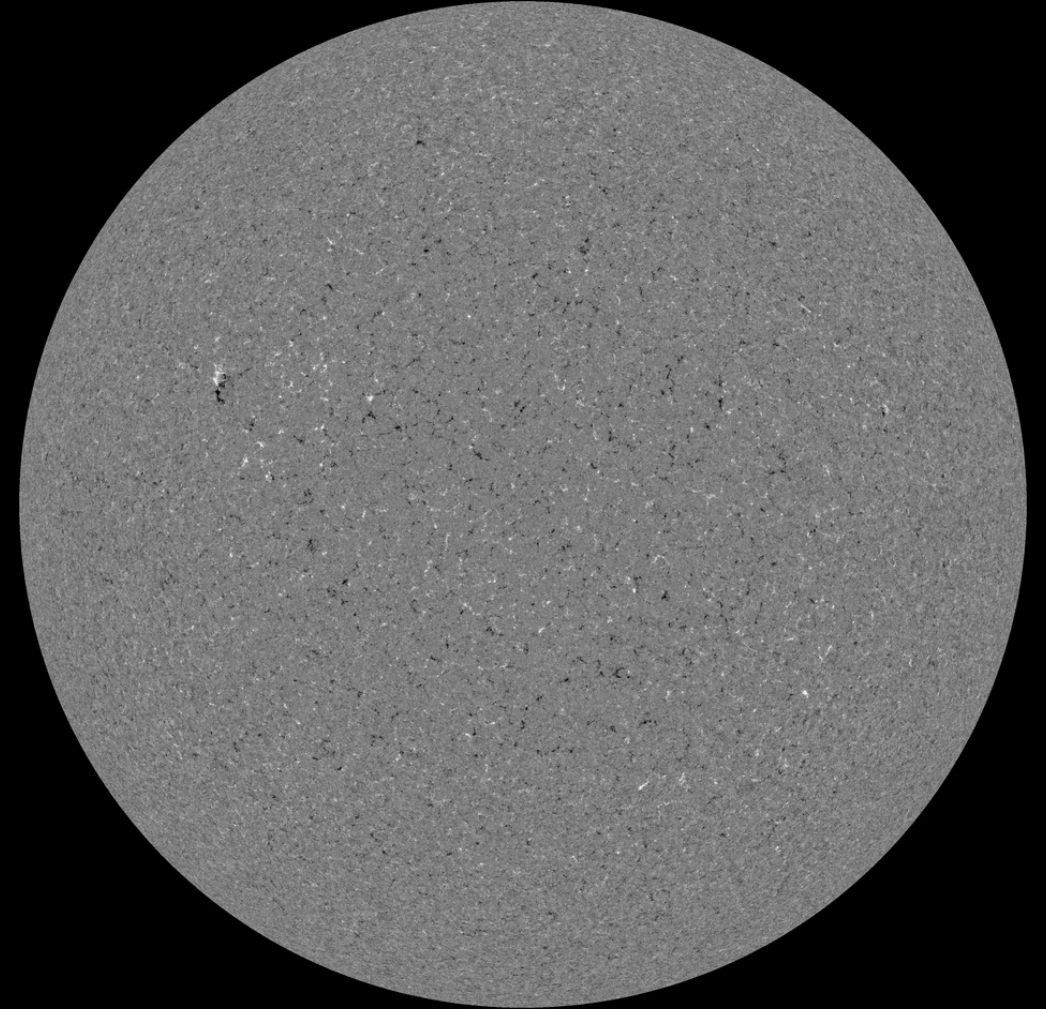
Solar active region - end of the week

SDO/HMI White Light 2019-05-26



SDO/HMI Quick-Look Continuum: 20190526_114500

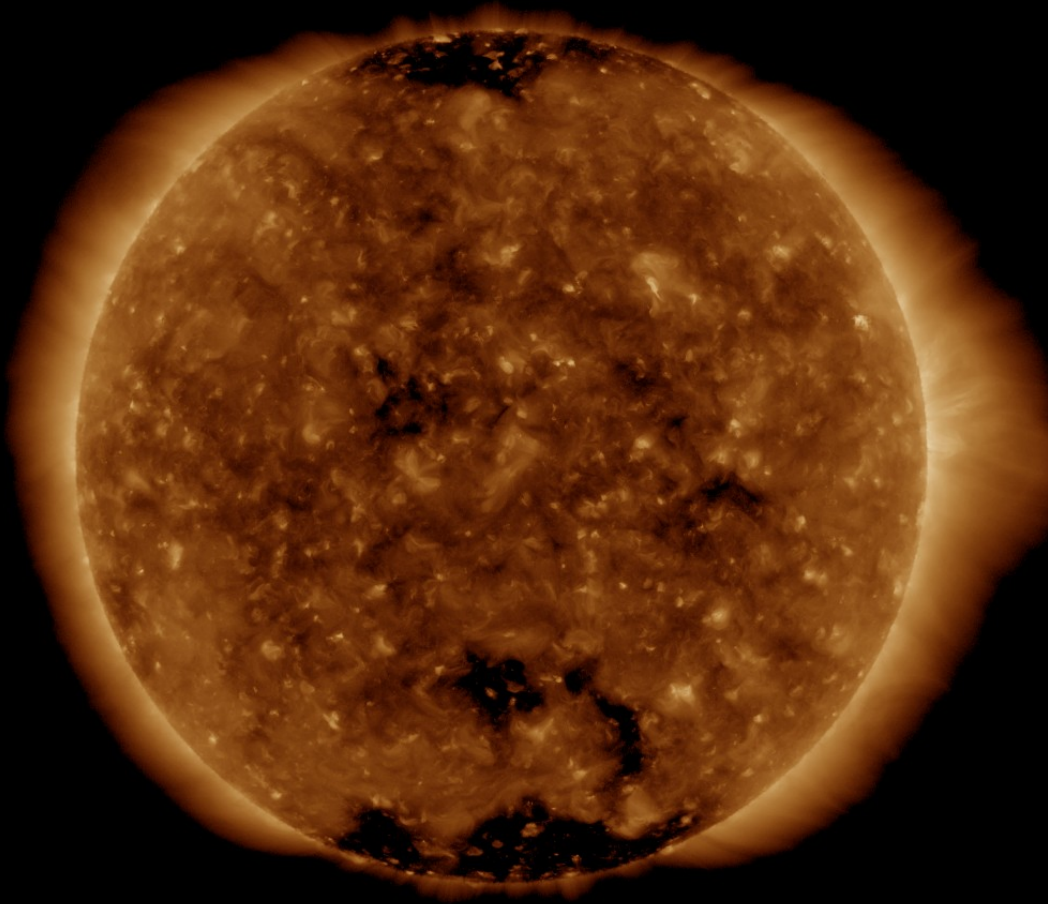
SDO/HMI Magnetogram 2019-05-26



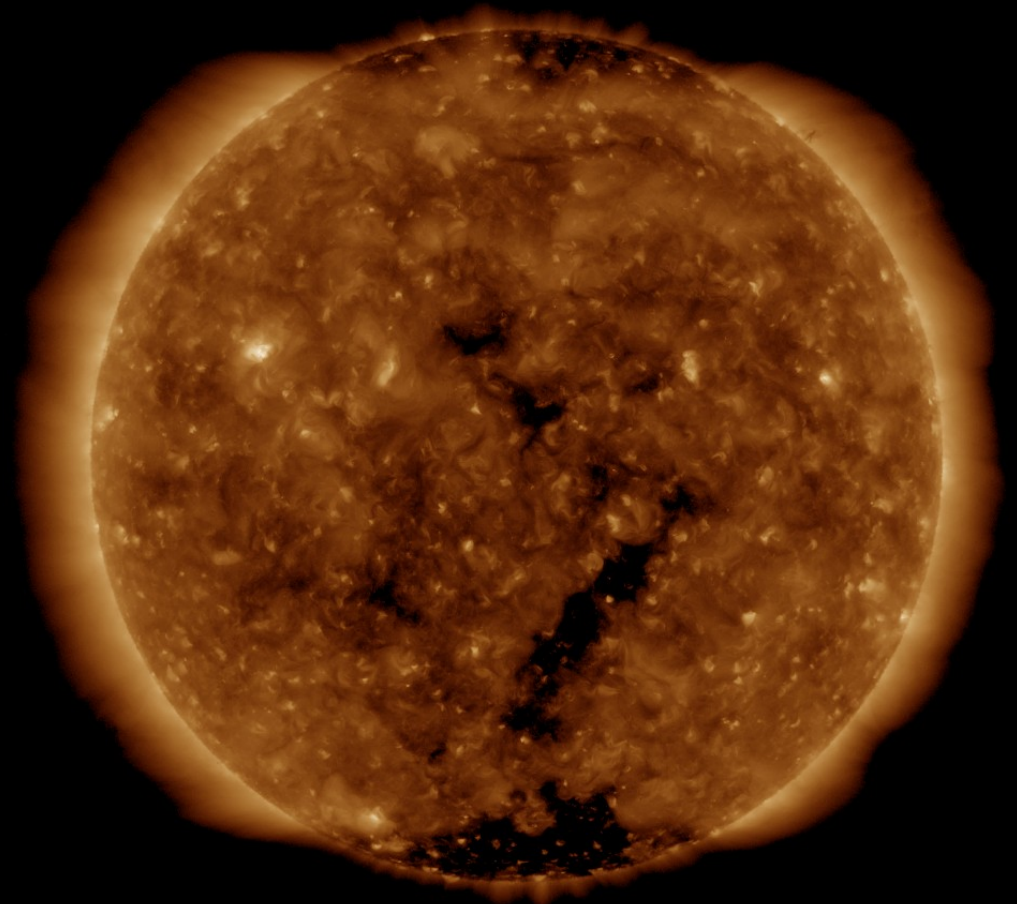
SDO/HMI Quick-Look Magnetogram: 20190526_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-05-20



SDO/AIA 19.3 nm 2019-05-26

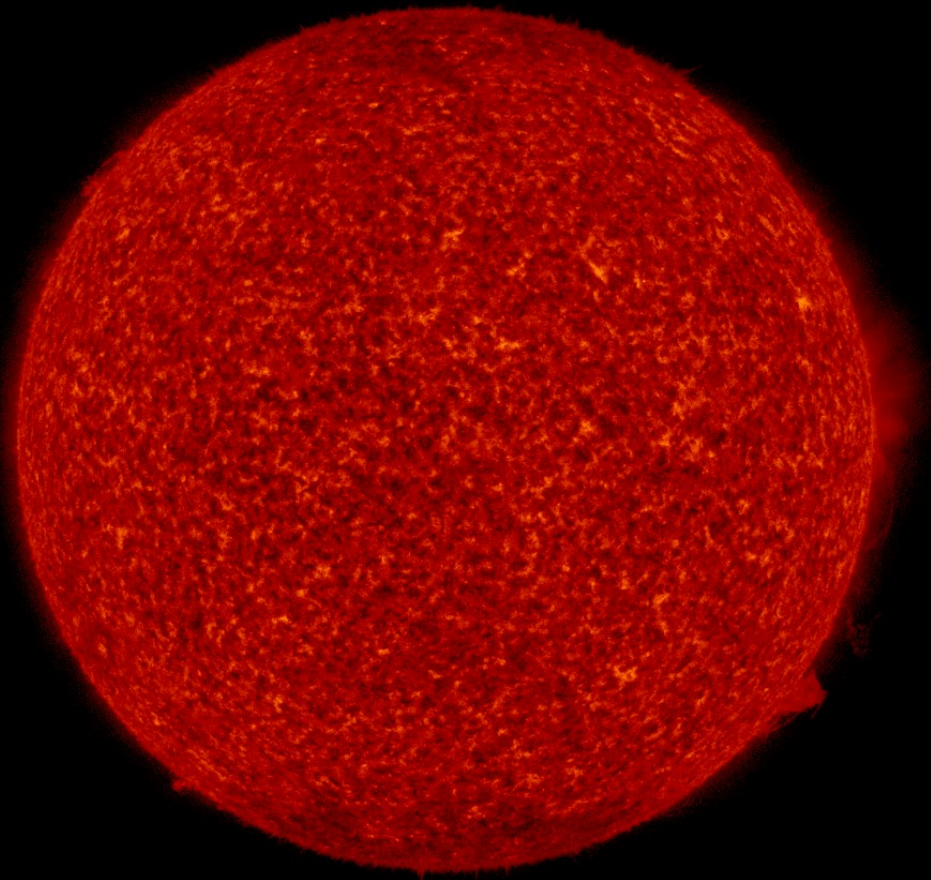


SDO/AIA 193 2019-05-20 12:10:29 UT

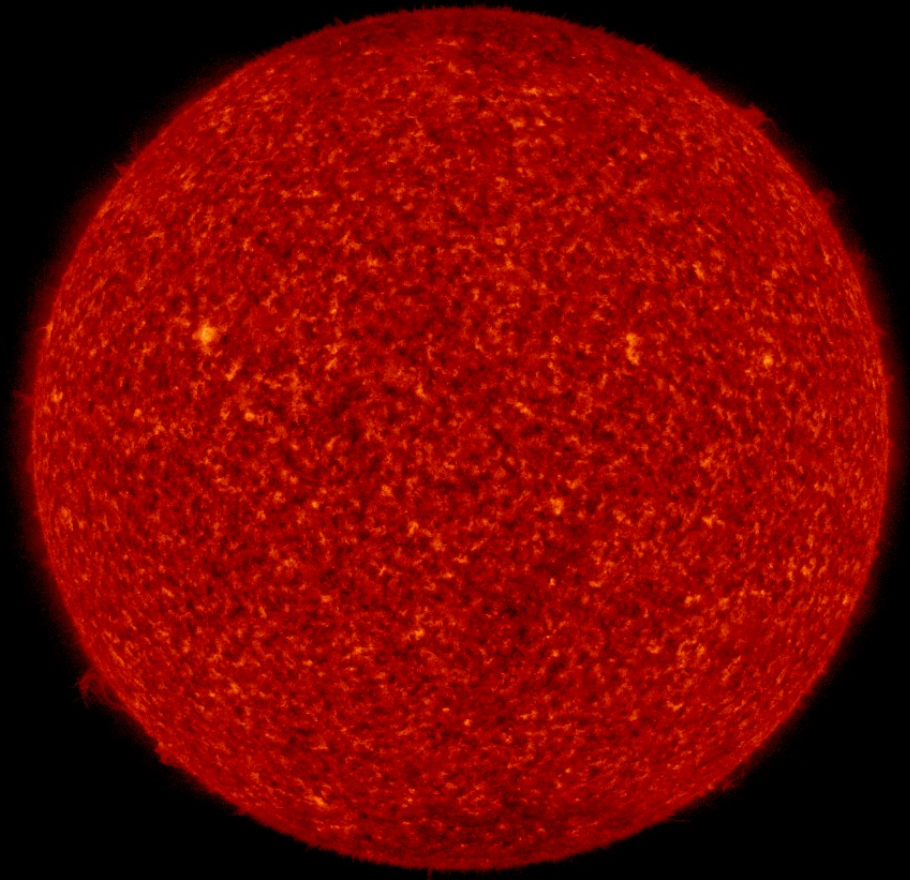
SDO/AIA 193 2019-05-26 12:10:05 UT

Solar active region & Filament

SDO/AIA 30.4 nm 2019-05-20



SDO/AIA 30.4 nm 2019-05-26



SDO/AIA 304 2019-05-20 12:13:42 UT

SDO/AIA 304 2019-05-26 12:14:18 UT

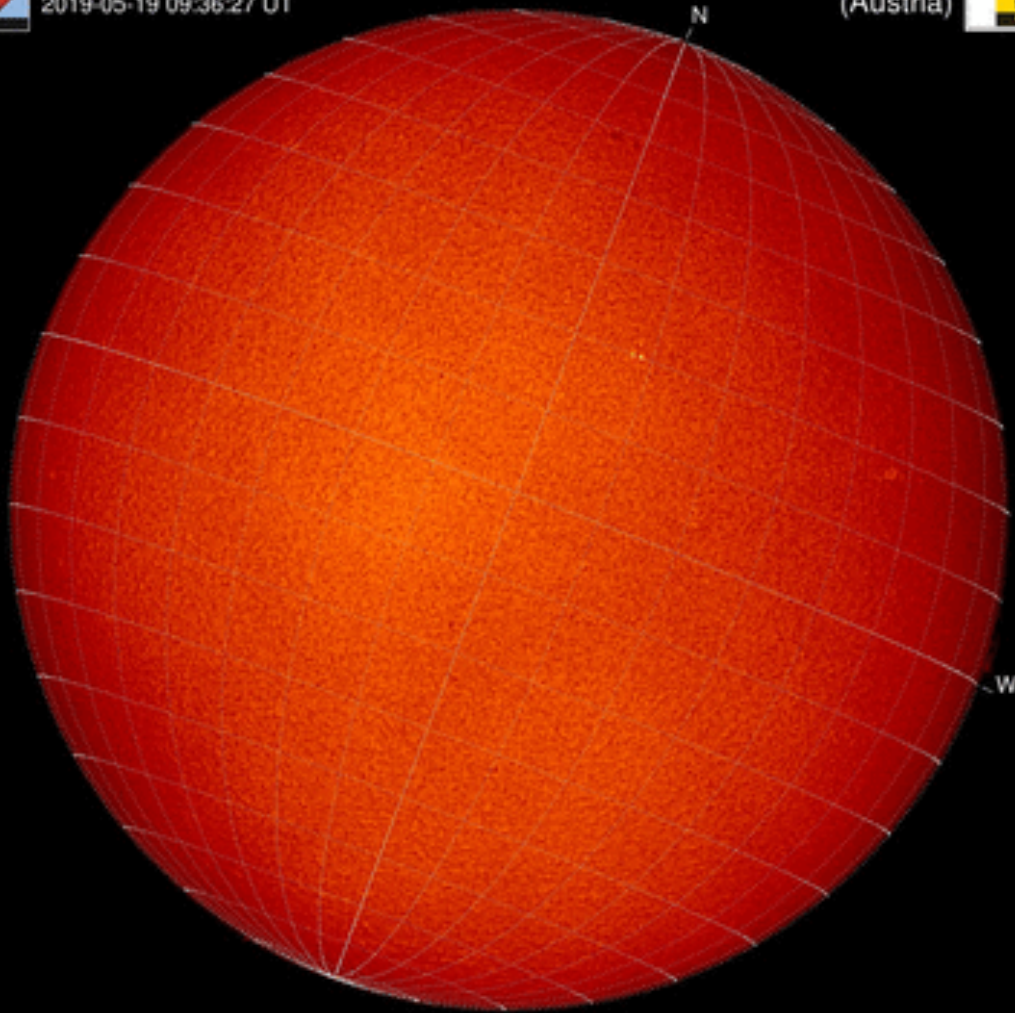
Filament & Filament eruption

H-alpha 2019-05-19



Kanzelhöhe Observatory
2019-05-19 09:36:27 UT

University of Graz
(Austria)

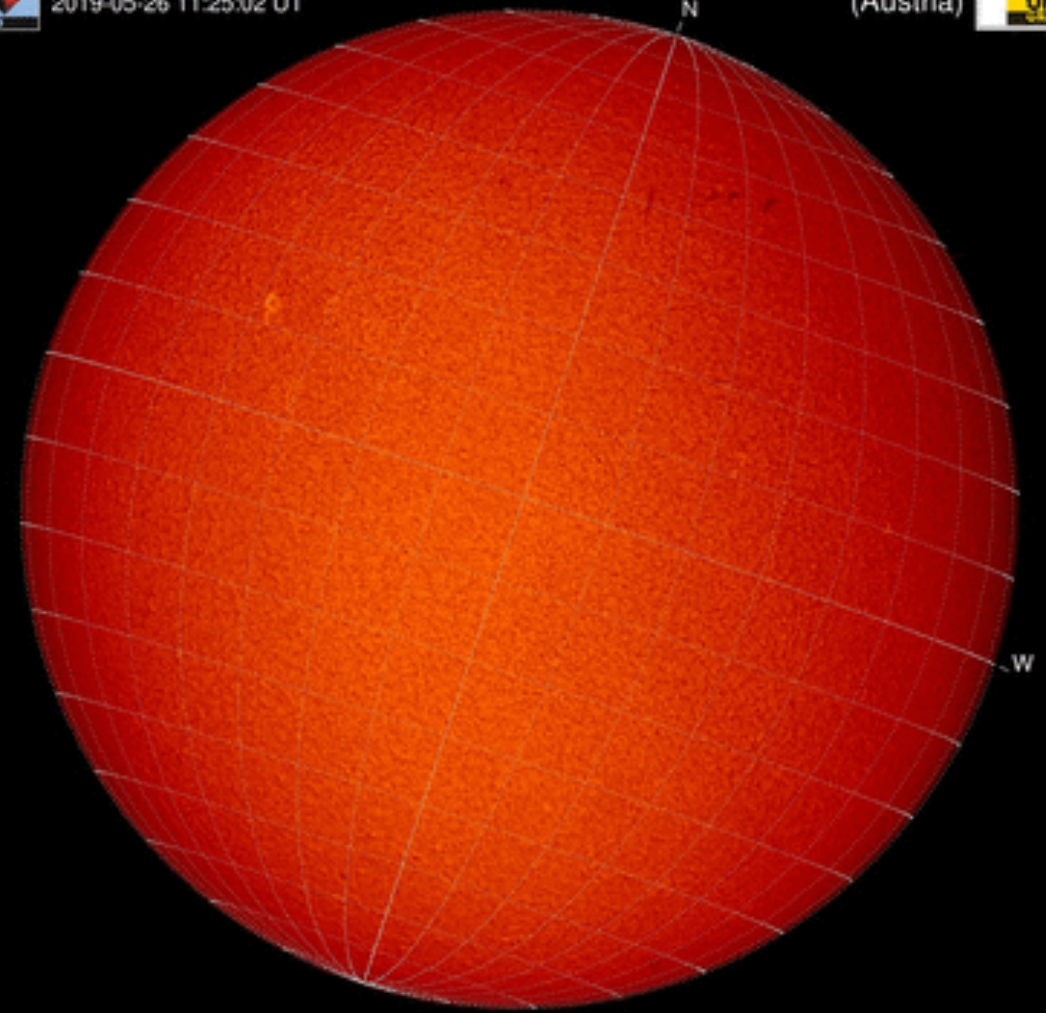


H-alpha 2019-05-26

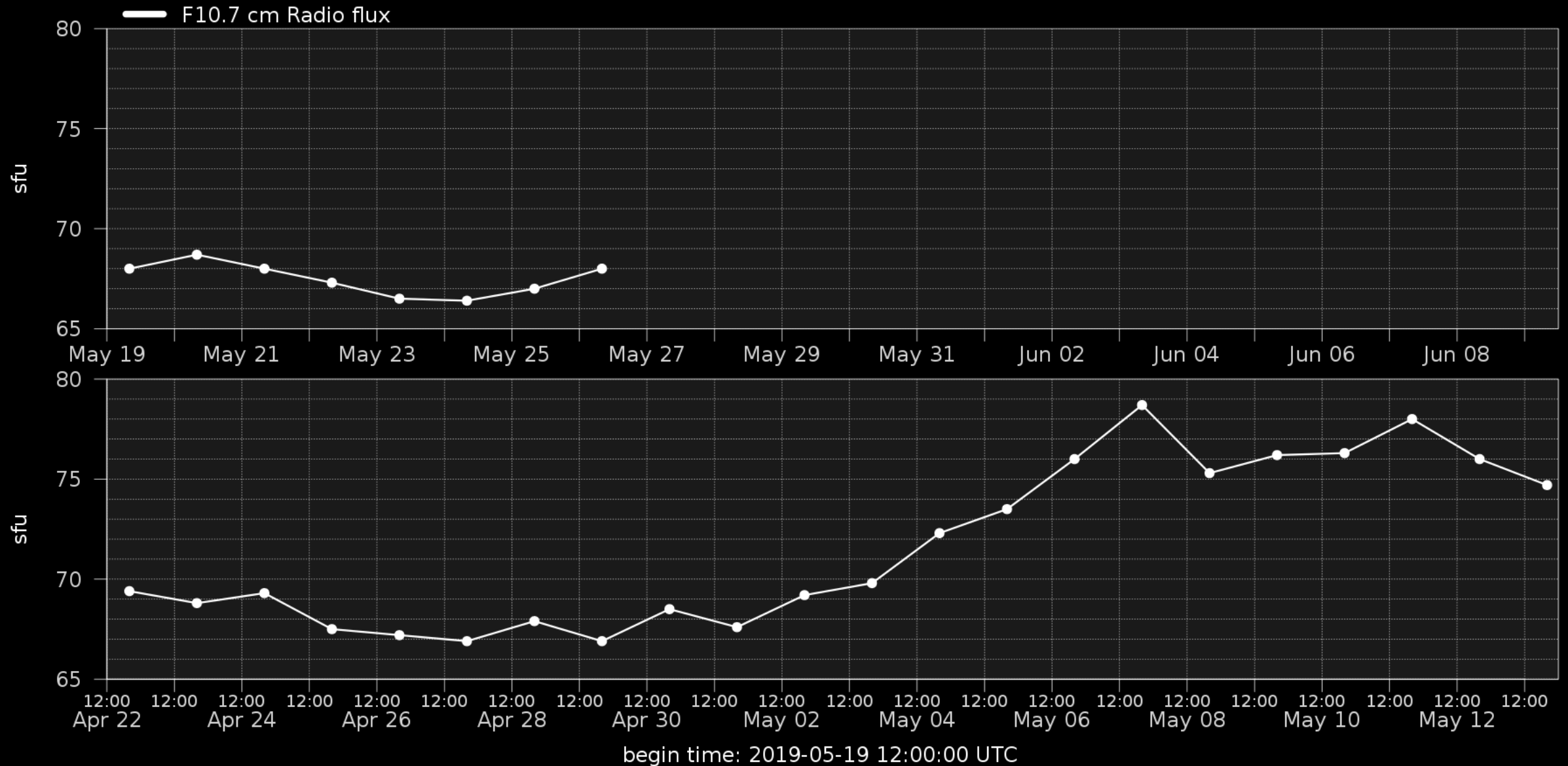


Kanzelhöhe Observatory
2019-05-26 11:25:02 UT

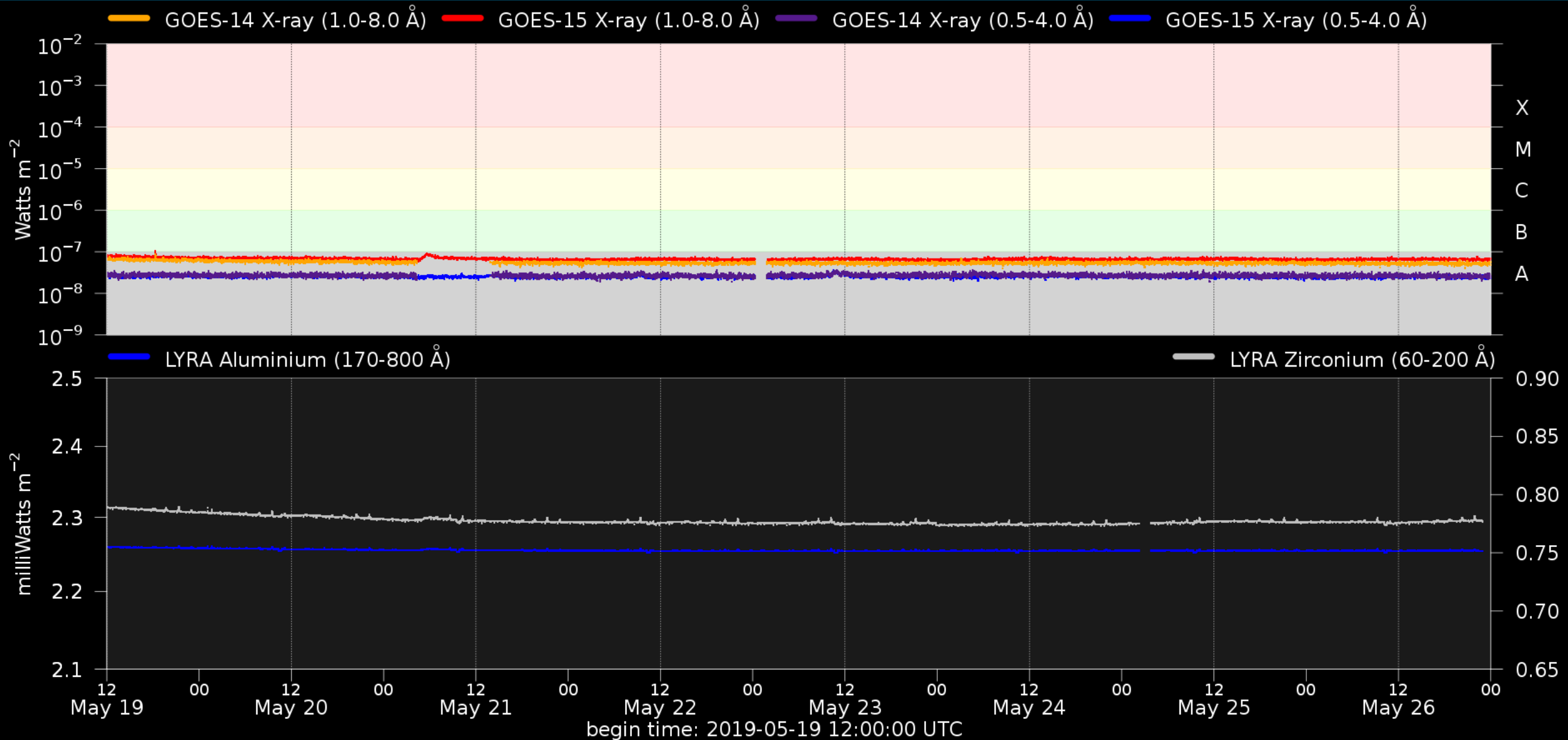
University of Graz
(Austria)



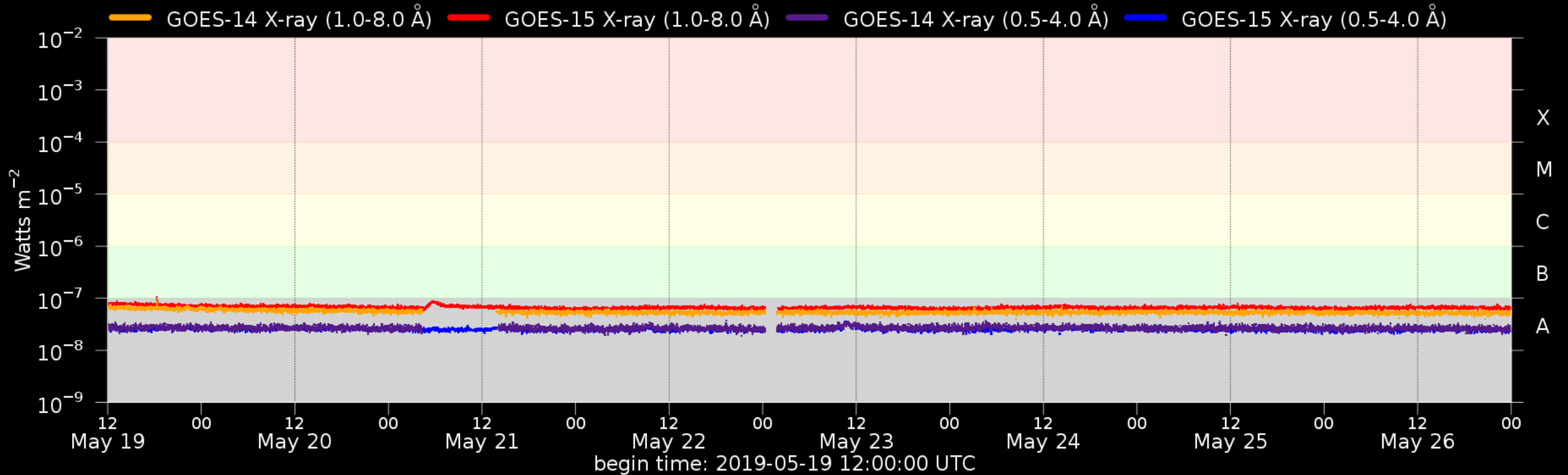
Solar F10.7cm radio flux



Solar X-Ray and UV flux



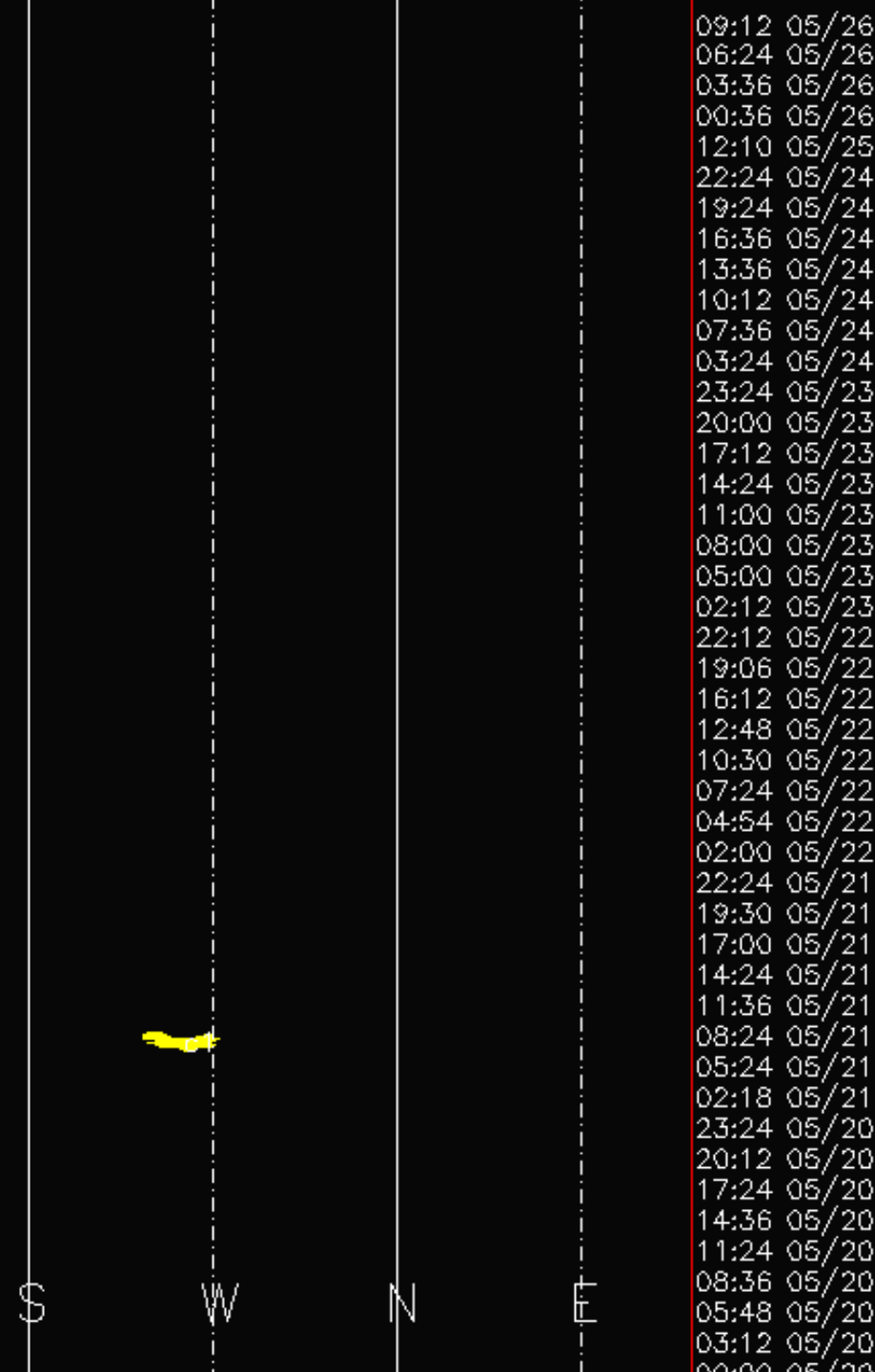
Flaring activity



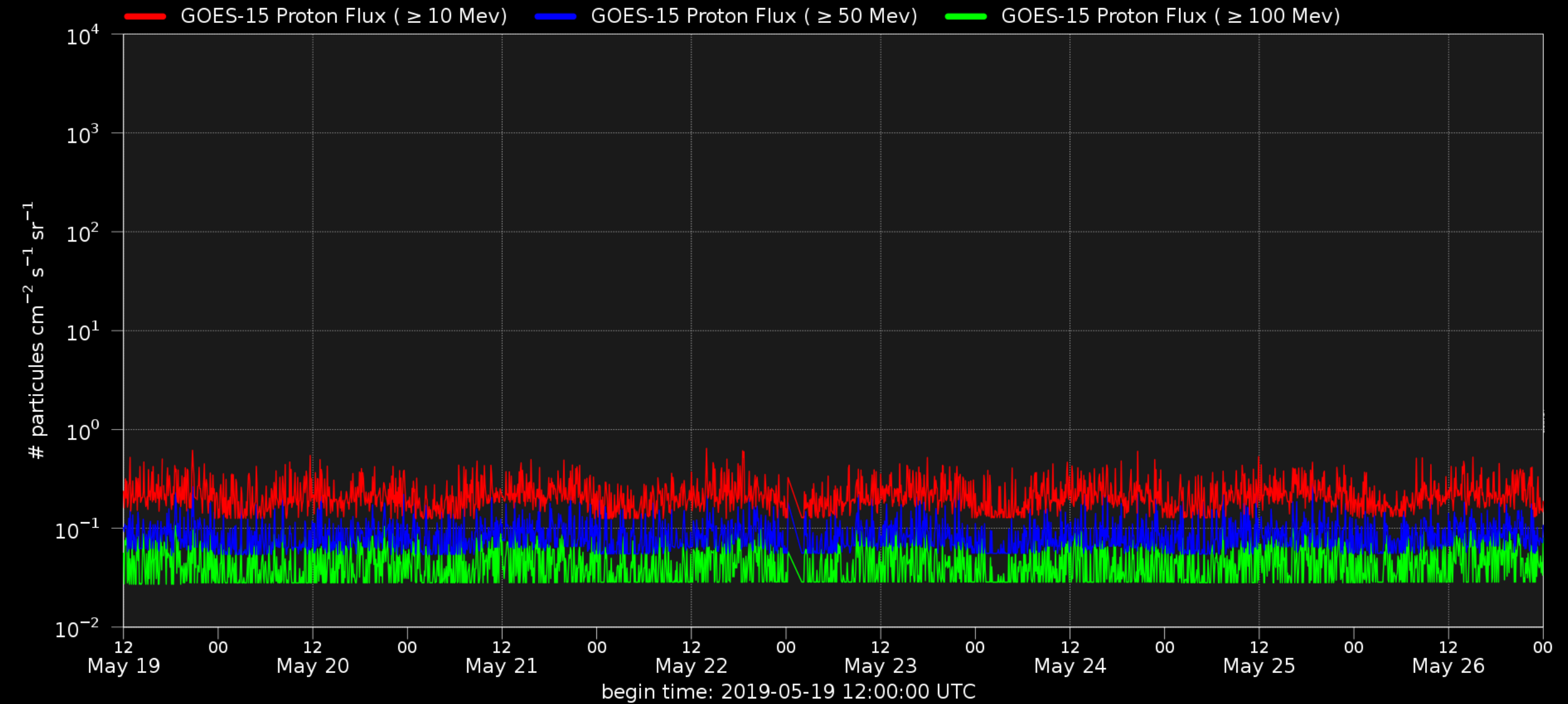
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2019-05-19	2019-05-20	2019-05-21	2019-05-22	2019-05-23	2019-05-24	2019-05-25	2019-05-26
Probability	--- 05 01 01	--- 05 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

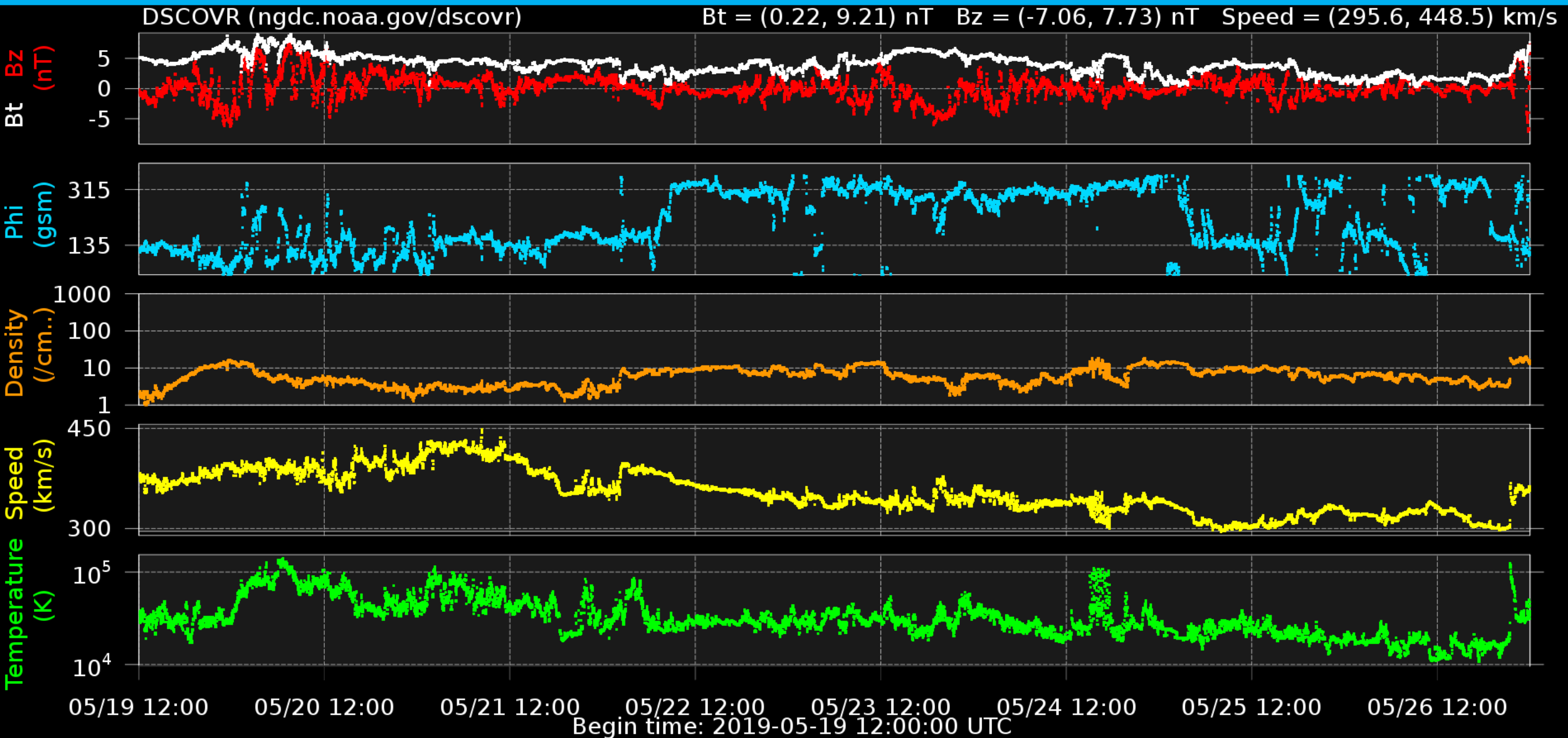


Solar Wind and Geomagnetic Activity

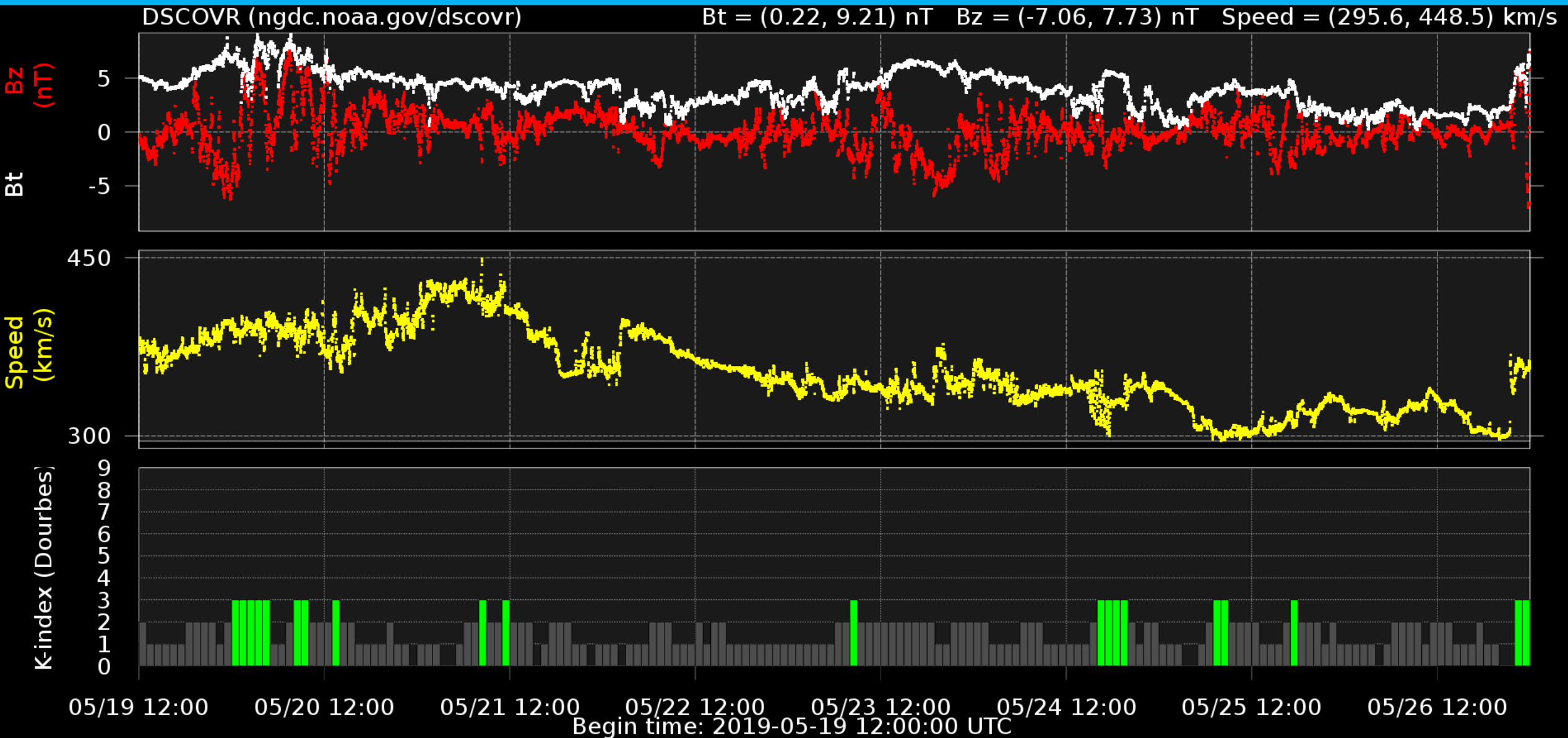


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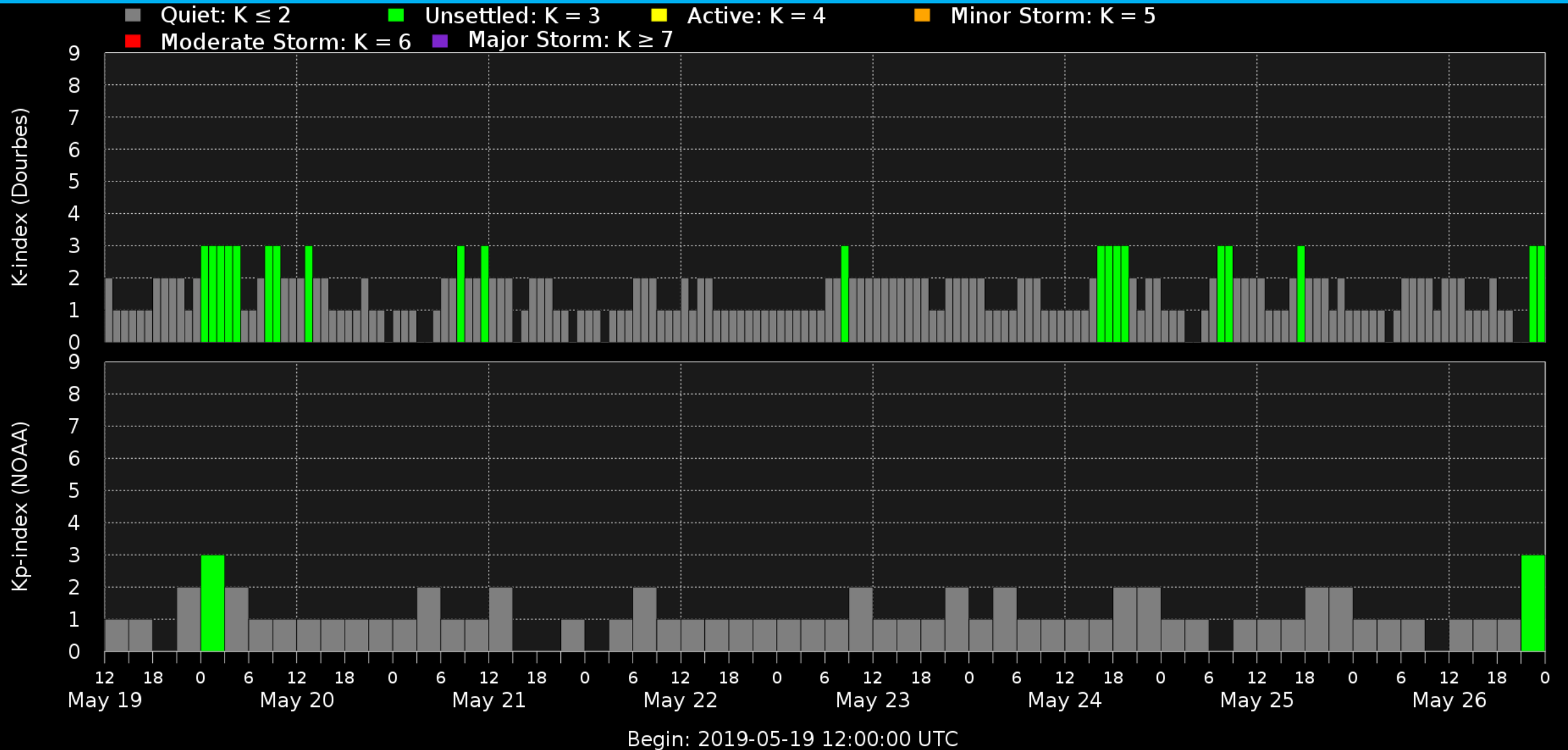
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



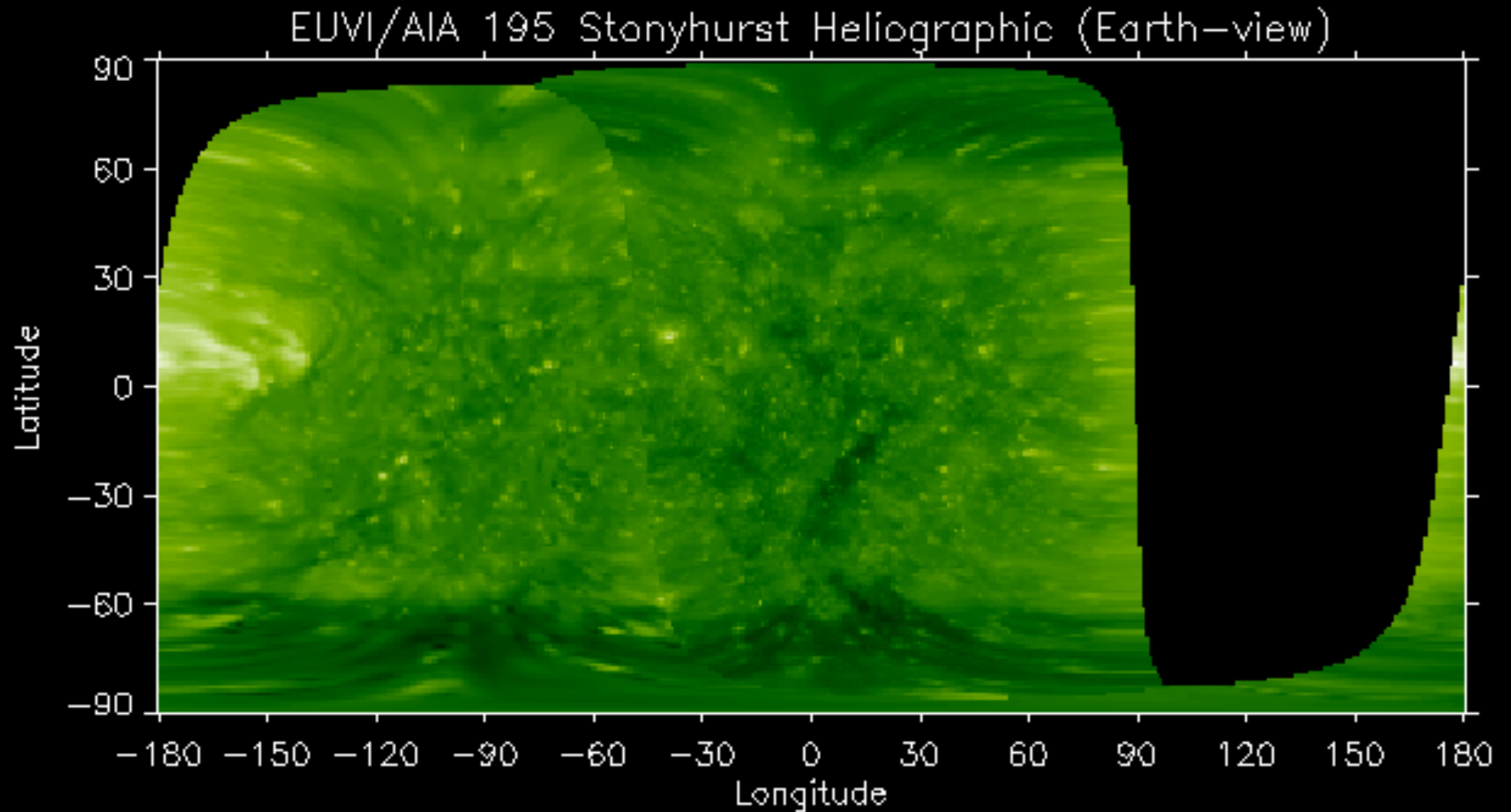
Outlook



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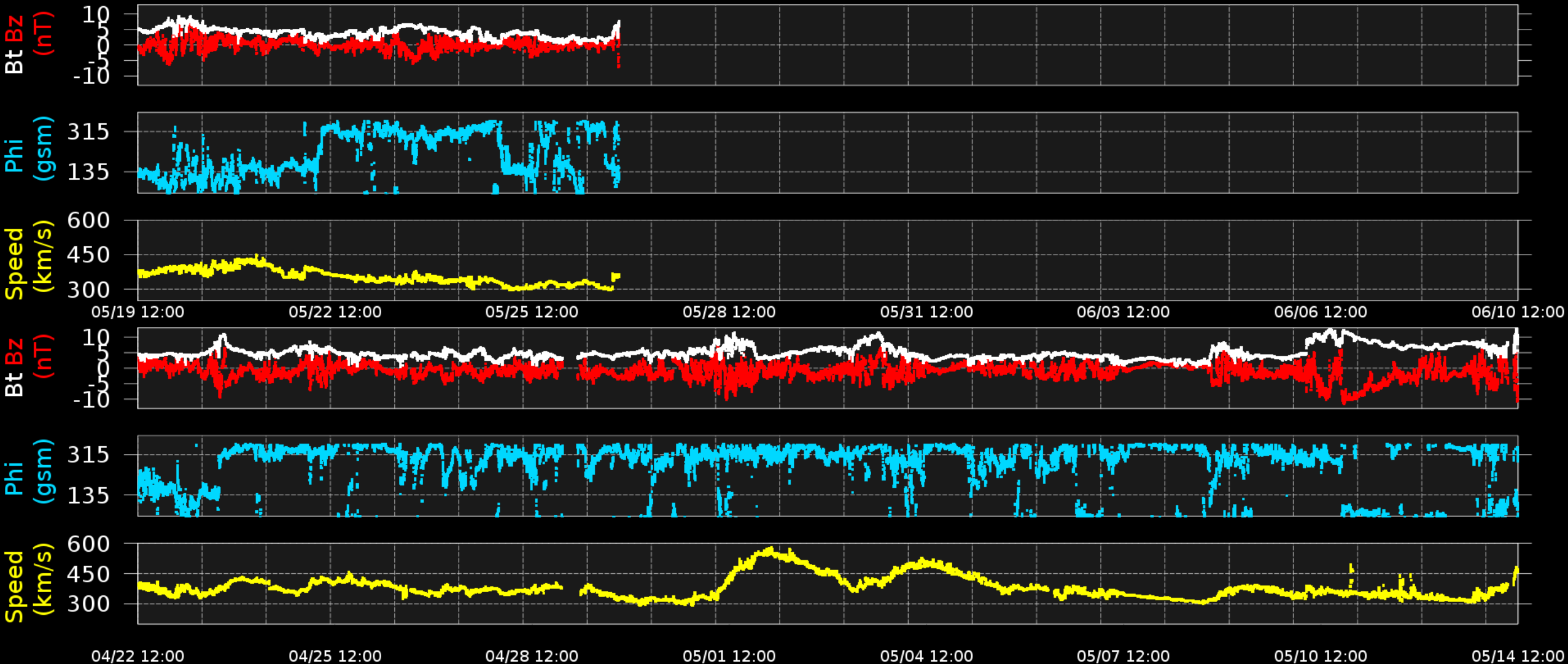
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Outlook: Solar activity



Outlook: Solar wind

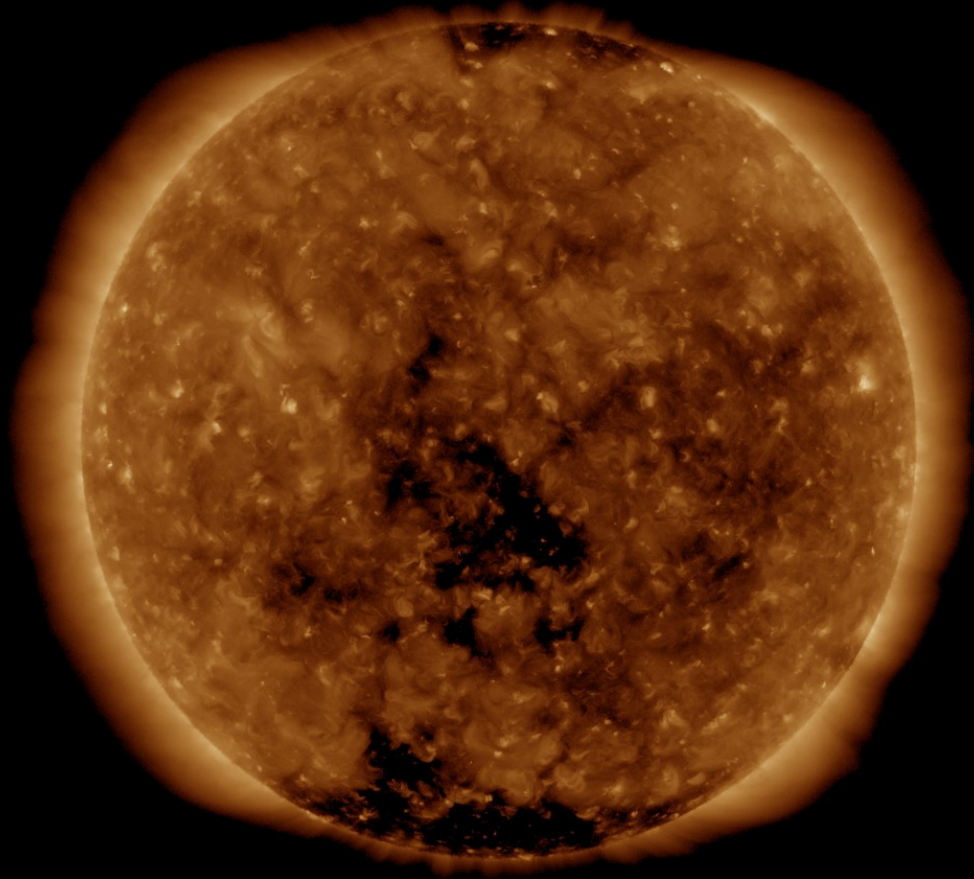
DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2019-04-22 12:00:00 UTC

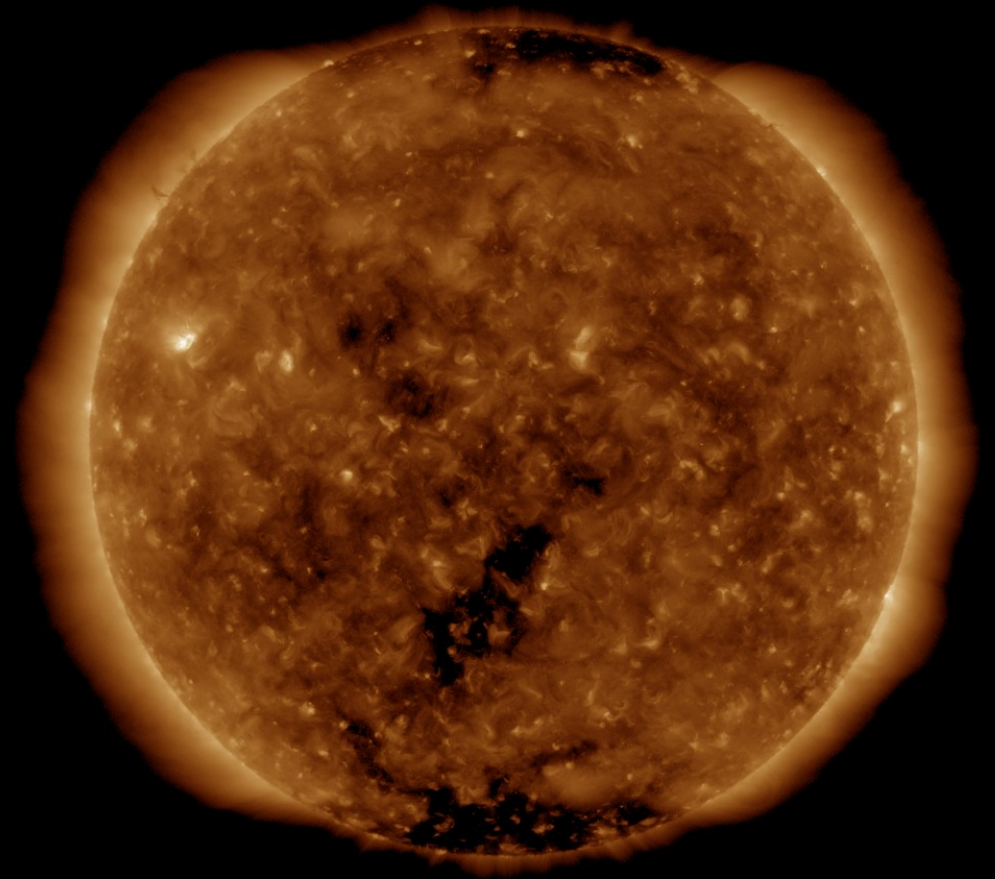
Outlook: Solar Wind

SDO/AIA 19.3 nm 2019-04-28 (Last rotation)



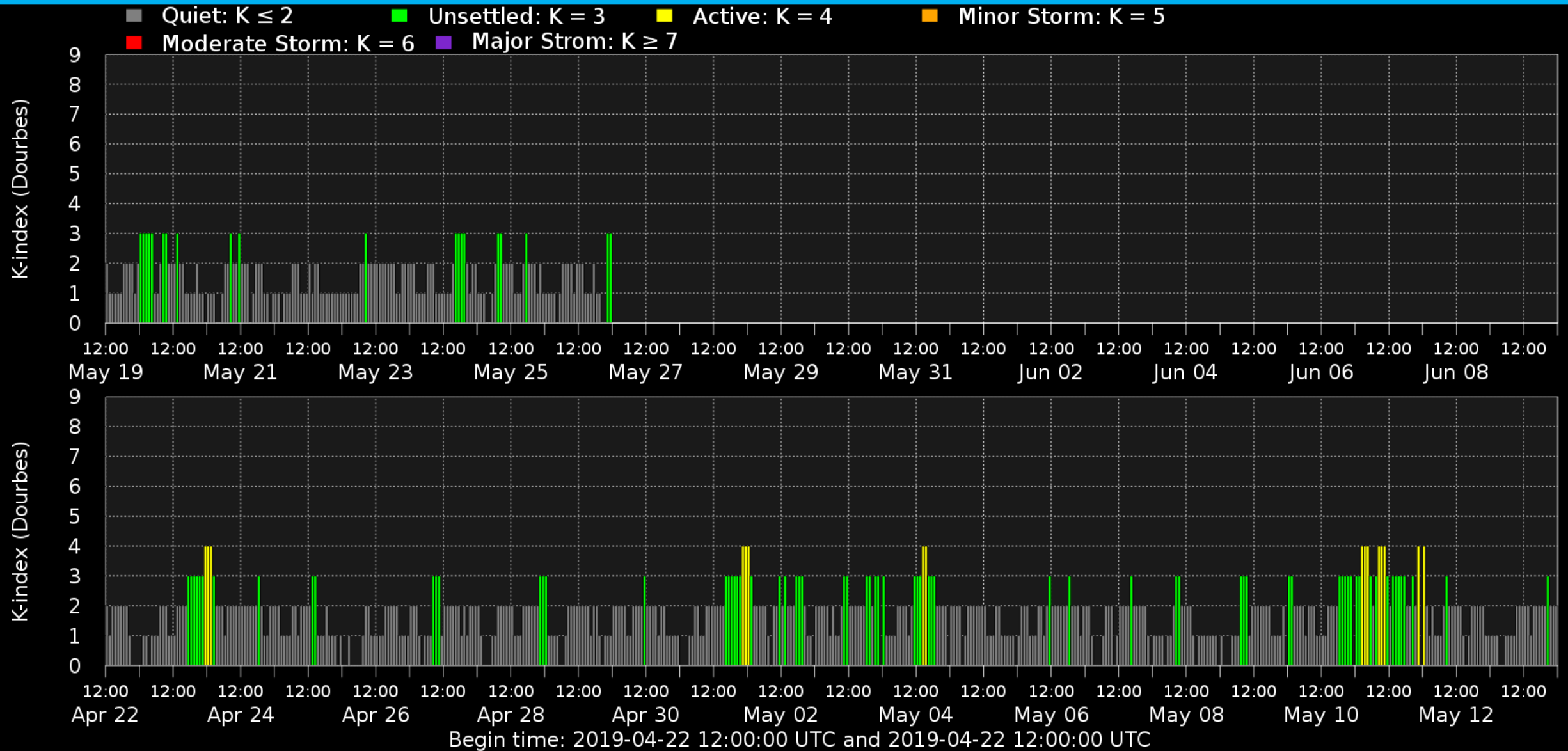
SDO/AIA 193 2019-04-28 12:11:17 UT

SDO/AIA 19.3 nm 2019-05-26 (present rotation)



SDO/AIA 193 2019-05-25 12:11:17 UT

Outlook: Geomagnetic activity



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