

SIDC Space Weather Briefing

30 June 2019 - 07 July 2019

Cis Verbeeck
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2019-06-30 12:00 UT to 2019-07-07 12:00 UT

Active regions	Alpha region NOAA 2744
Flaring	# B-class flare: 5 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	Filament eruption 2019-07-02
CMEs	No earth-directed CMEs
Proton Events	None

Solar wind and geomagnetic conditions from 2019-06-30 12:00 UT to 2019-07-07 12:00 UT

Coronal Holes	Negative polarity equatorial CH @CM 2019-07-01, positive polarity CH @CM 2019-07-05
ICME	None
SW Conditions	Enhanced solar wind on July 5 due to arrival of solar wind stream from negative polarity CH
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 3

Solar Activity

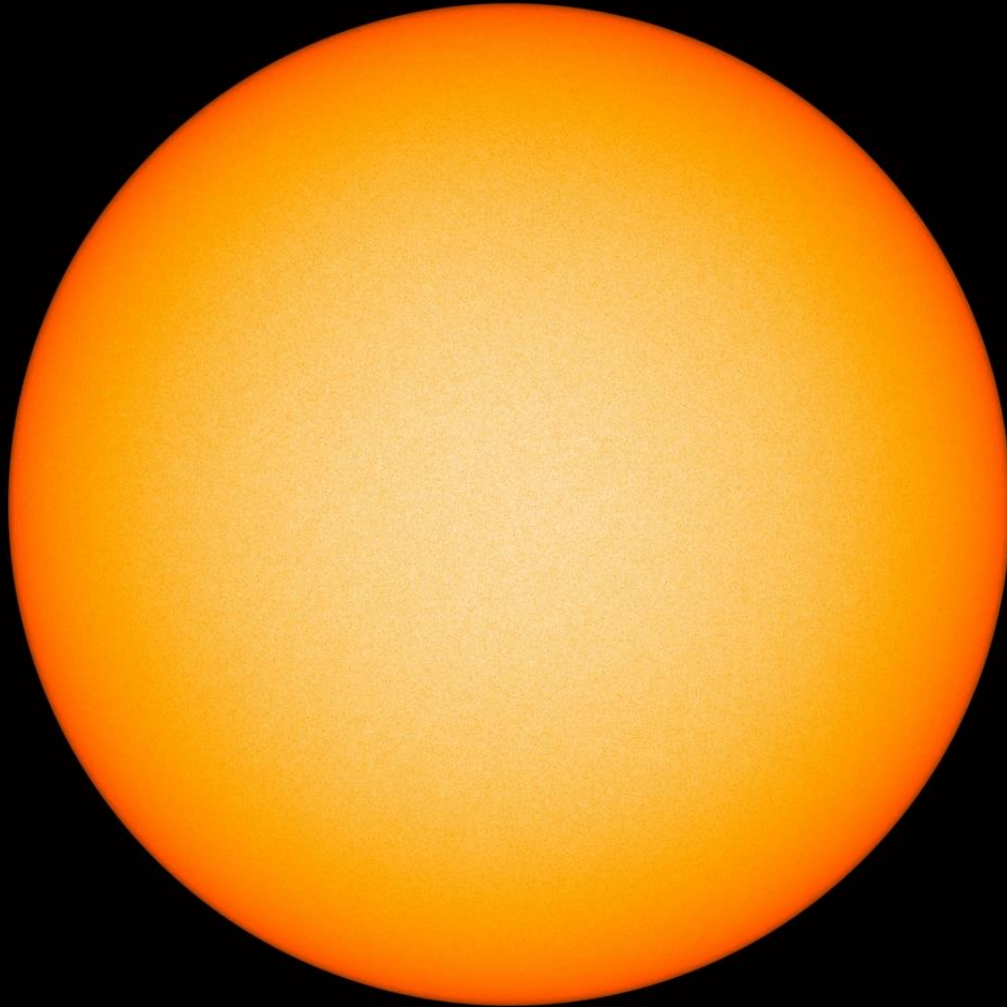


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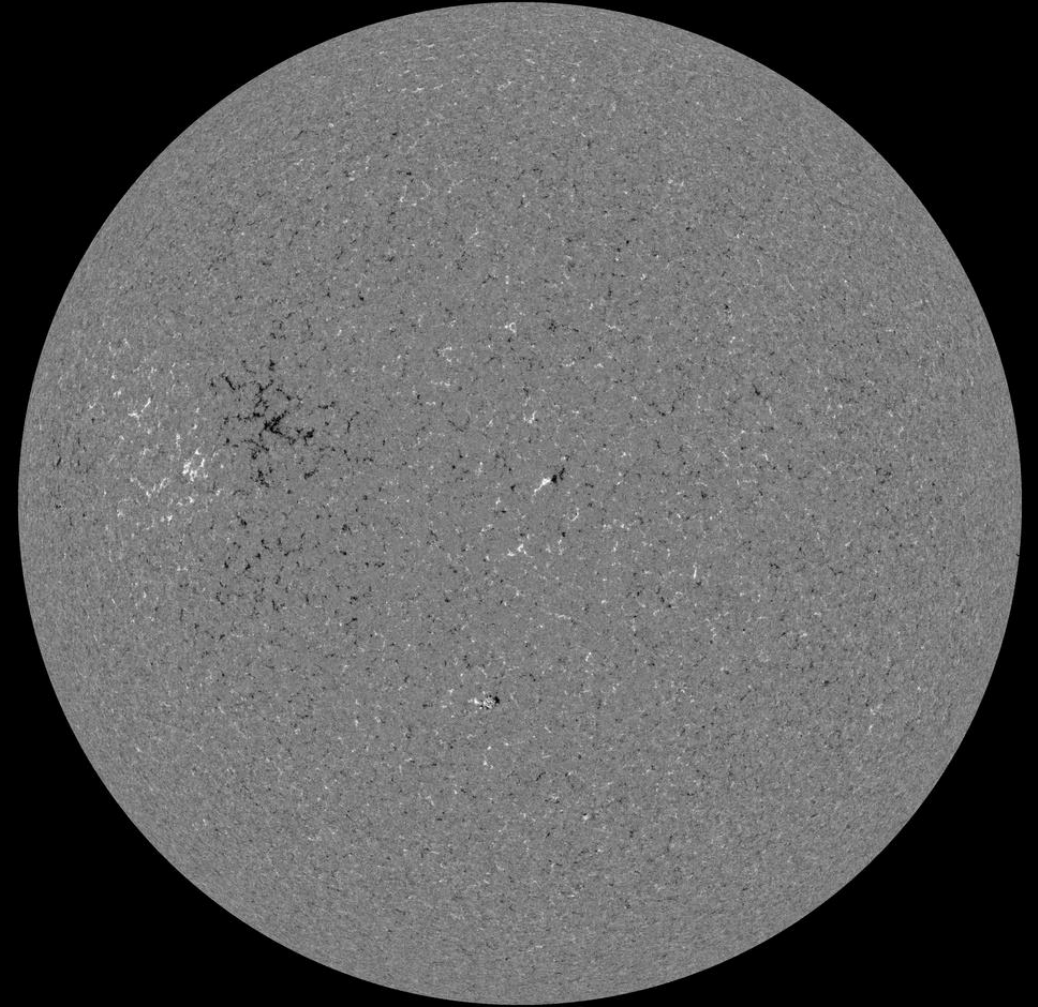
Solar active region - start of the week

SDO/HMI White Light 2019-06-30



SDO/HMI Quick-Look Continuum: 20190630_121500

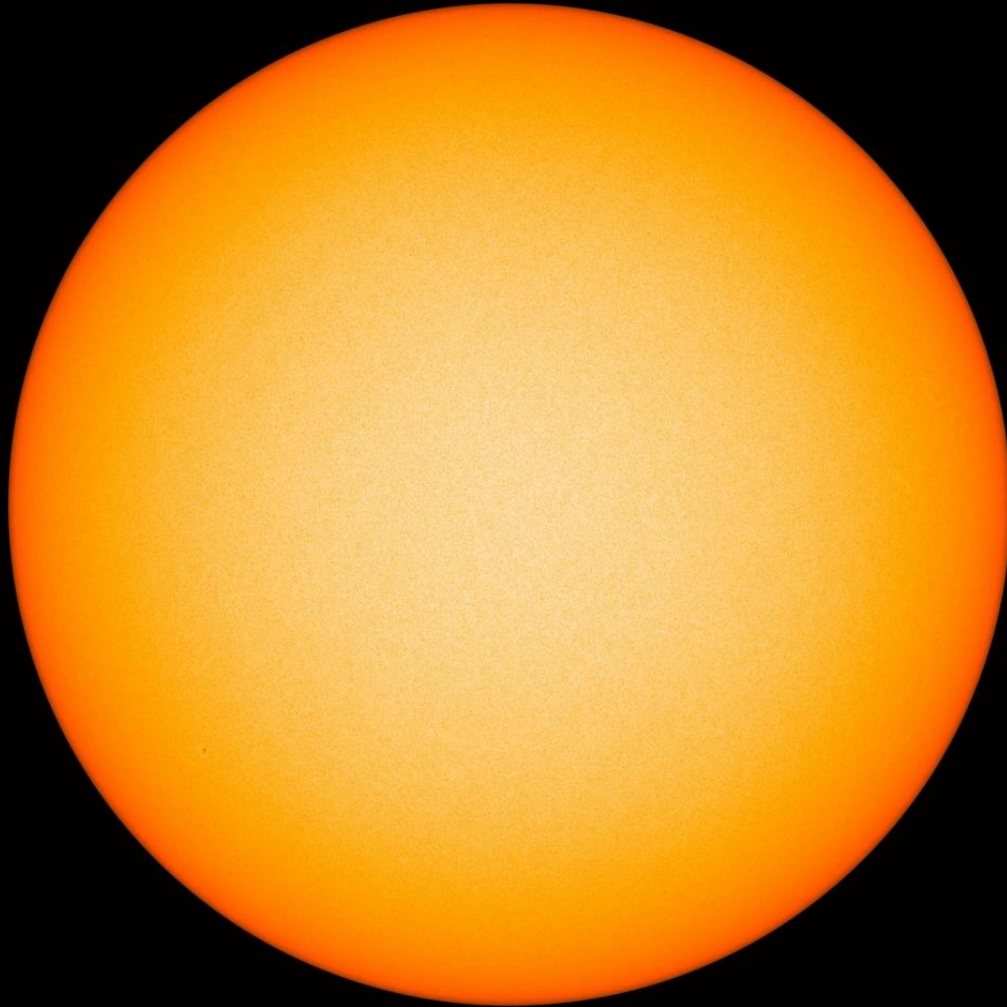
SDO/HMI Magnetogram 2019-06-30



SDO/HMI Quick-Look Magnetogram: 20190630_121500

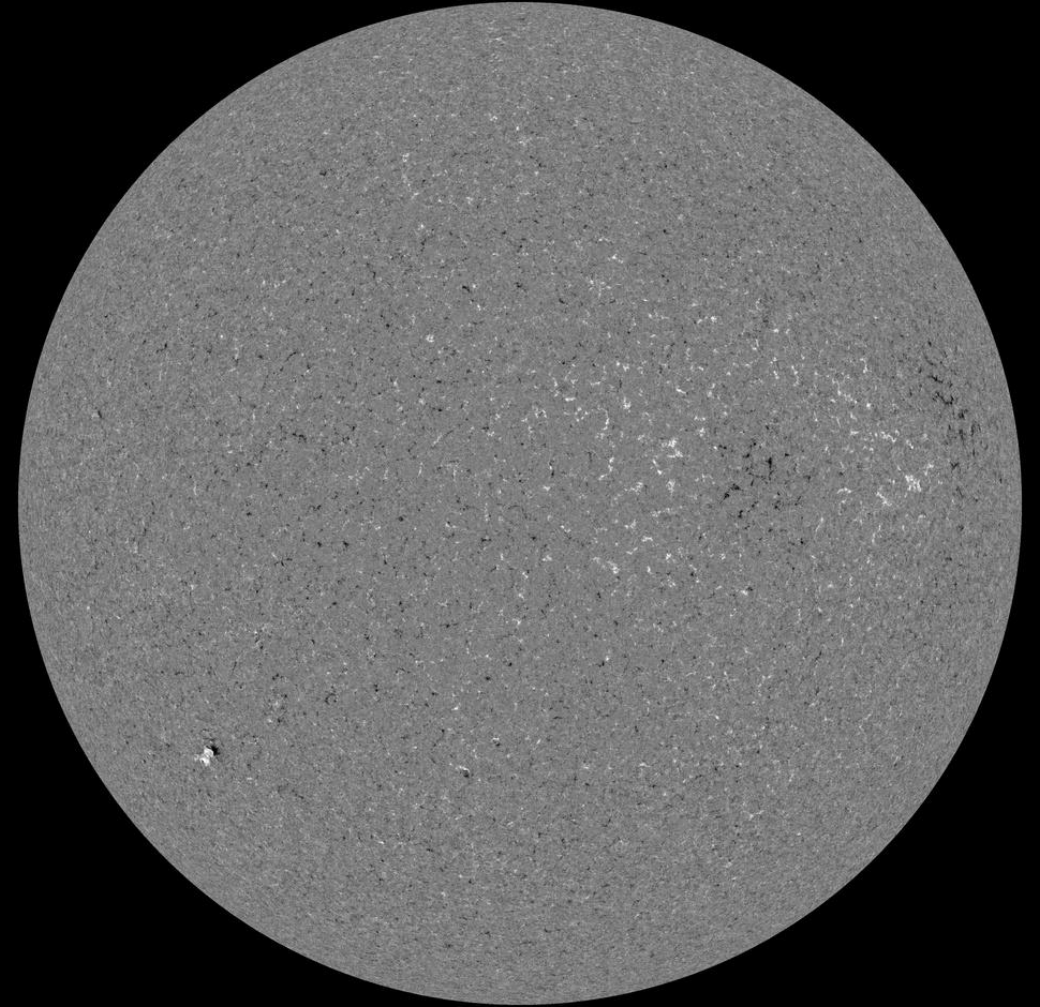
Solar active region - end of the week

SDO/HMI White Light 2019-07-07



SDO/HMI Quick-Look Continuum: 20190707_114500

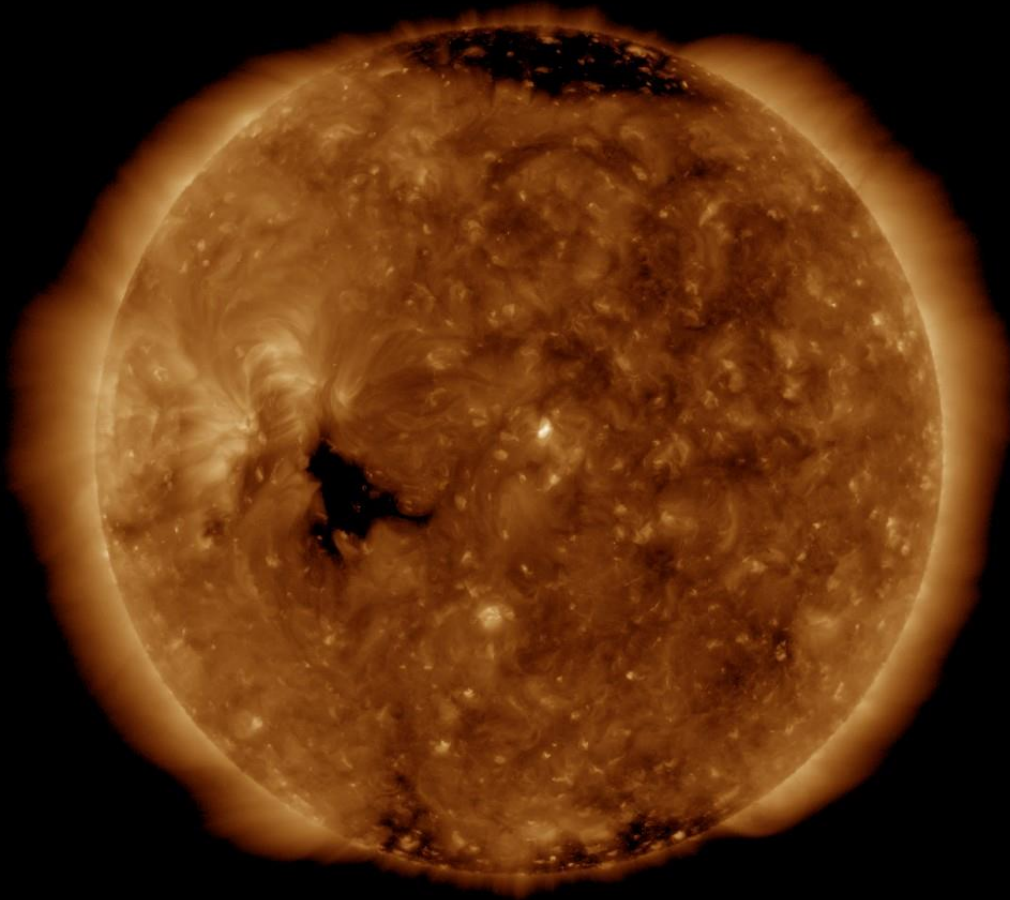
SDO/HMI Magnetogram 2019-07-07



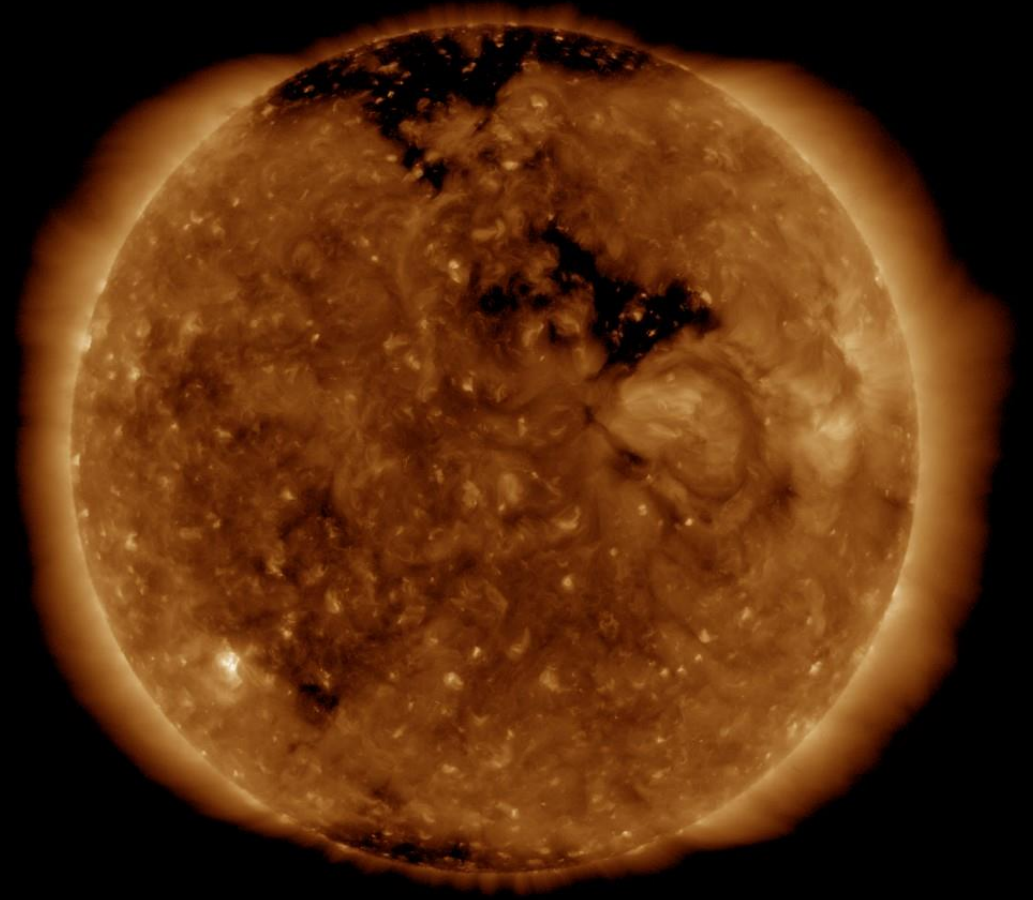
SDO/HMI Quick-Look Magnetogram: 20190707_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-06-30



SDO/AIA 19.3 nm 2019-07-07



SDO/AIA 193 2019-06-30 12:11:17 UT

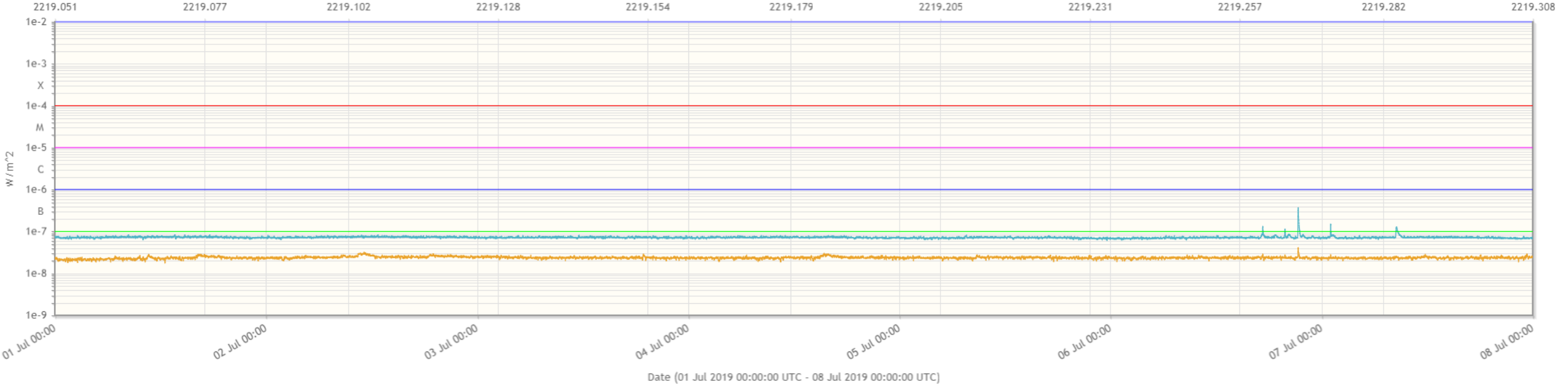
SDO/AIA 193 2019-07-07 11:55:17 UT

Solar X-Ray flux

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X-Ray - GOES X-Ray flux 0.1-0.8 nm (quicklook) - 10066 data points - (raw - 1 minute data)
X-Ray - GOES X-Ray flux 0.05-0.4 nm (quicklook) - 10066 data points - (raw - 1 minute data)

Carrington Rotations



Coronal Mass Ejection

S

W

N

FT

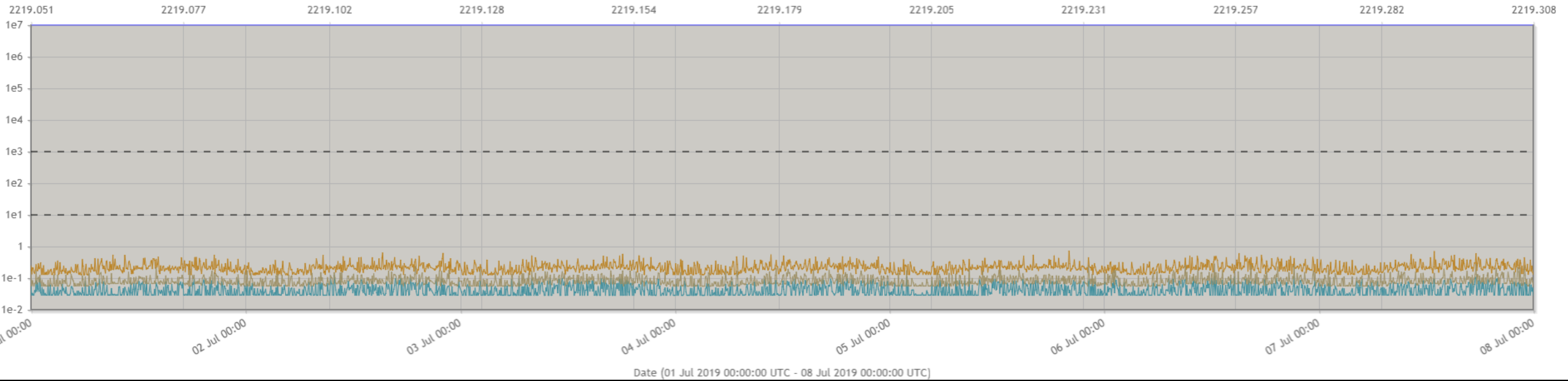
22:24 07/07
19:00 07/07
16:24 07/07
13:36 07/07
10:36 07/07
07:24 07/07
04:36 07/07
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22:00 07/06
19:00 07/06
16:12 07/06
12:54 07/06
10:24 07/06
07:36 07/06
04:36 07/06
01:36 07/06
22:12 07/05
19:12 07/05
16:24 07/05
12:36 07/05
09:42 07/05
05:48 07/05
02:24 07/05
22:24 07/04
19:12 07/04
16:24 07/04
13:25 07/04
10:12 07/04
07:00 07/04
04:00 07/04
00:36 07/04
21:50 07/03
18:12 07/03
14:48 07/03
11:36 07/03
09:12 07/03
06:12 07/03
02:48 07/03
23:12 07/02
19:54 07/02
18:12 07/02
12:48 07/02
09:48 07/02
06:36 07/02
03:24 07/02

Solar proton flux

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■ Particles - GOES Particles at > 100 Mev (quicklook) - 1968 data points - (raw - 5 minute data)
■ Particles - GOES Particles at > 10 Mev (quicklook) - 1968 data points - (raw - 5 minute data)
■ Particles - GOES Particles at > 50 Mev (quicklook) - 1968 data points - (raw - 5 minute data)

Carrington Rotations



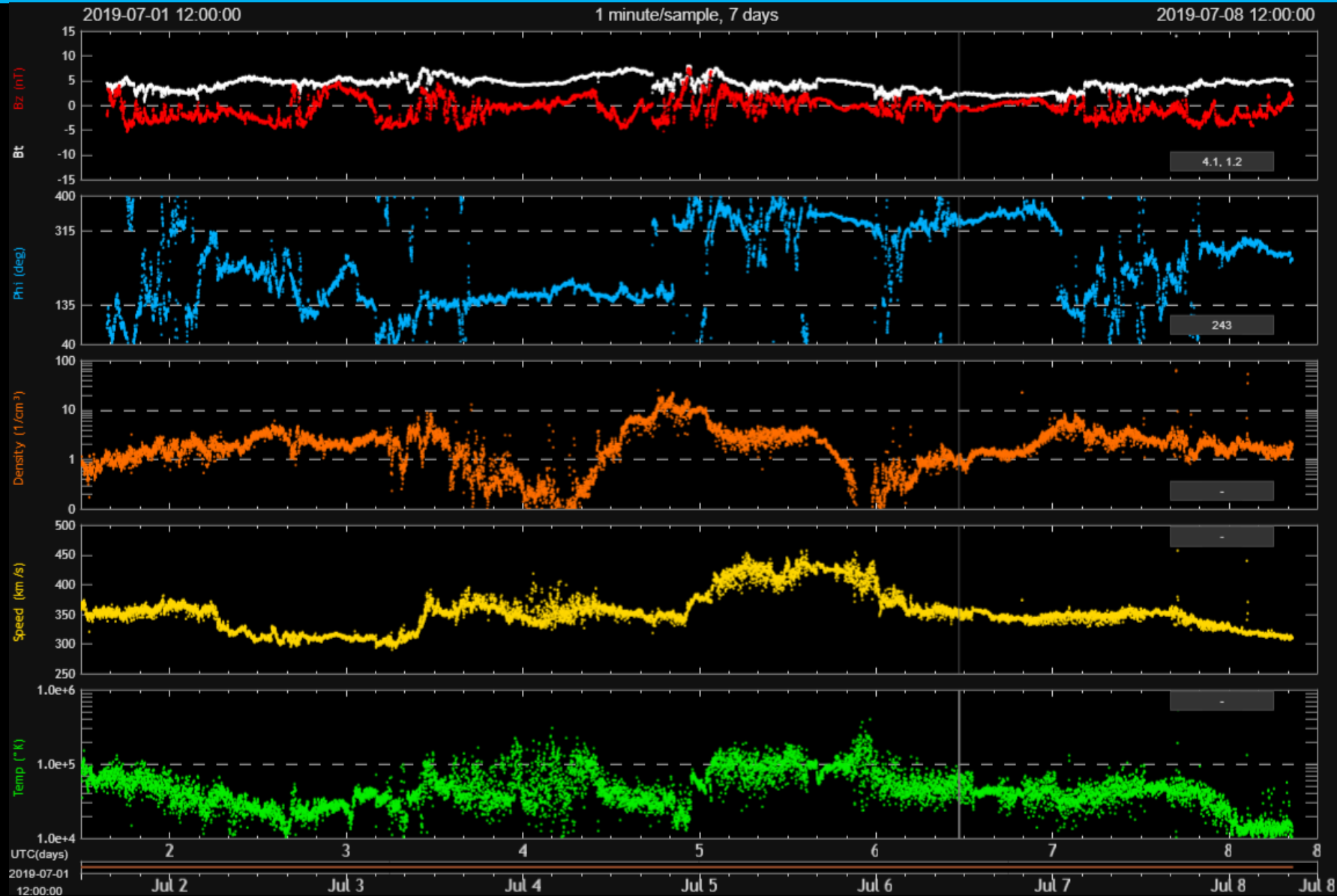
Solar Wind and Geomagnetic Activity



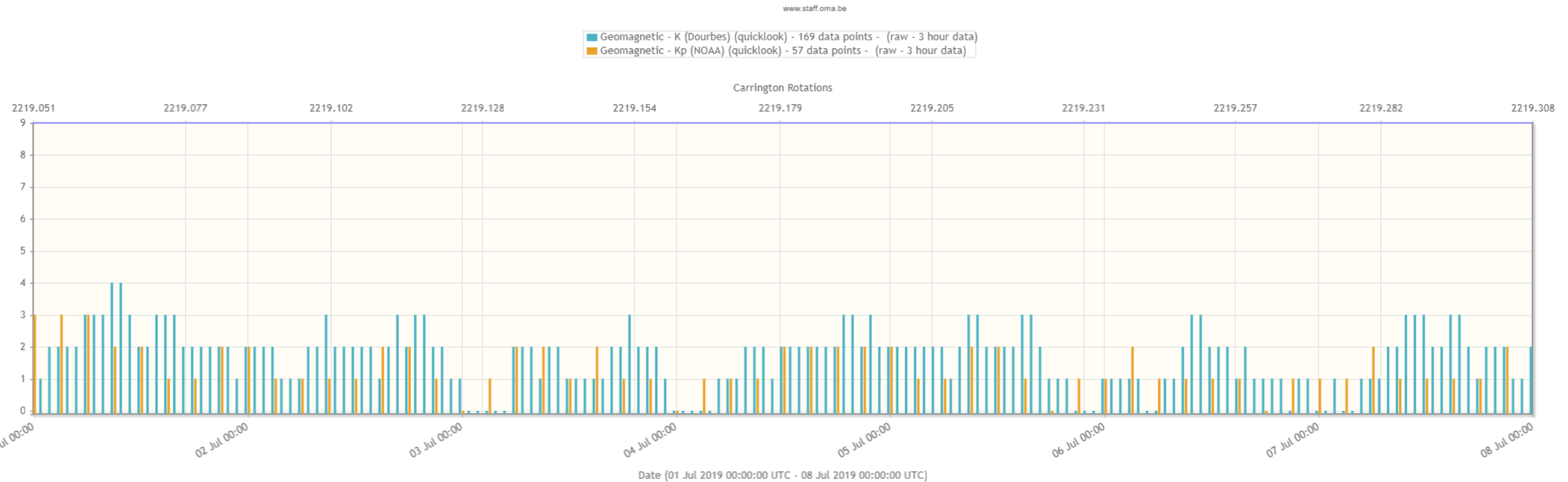
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Solar wind parameters (ACE data)



Geomagnetic



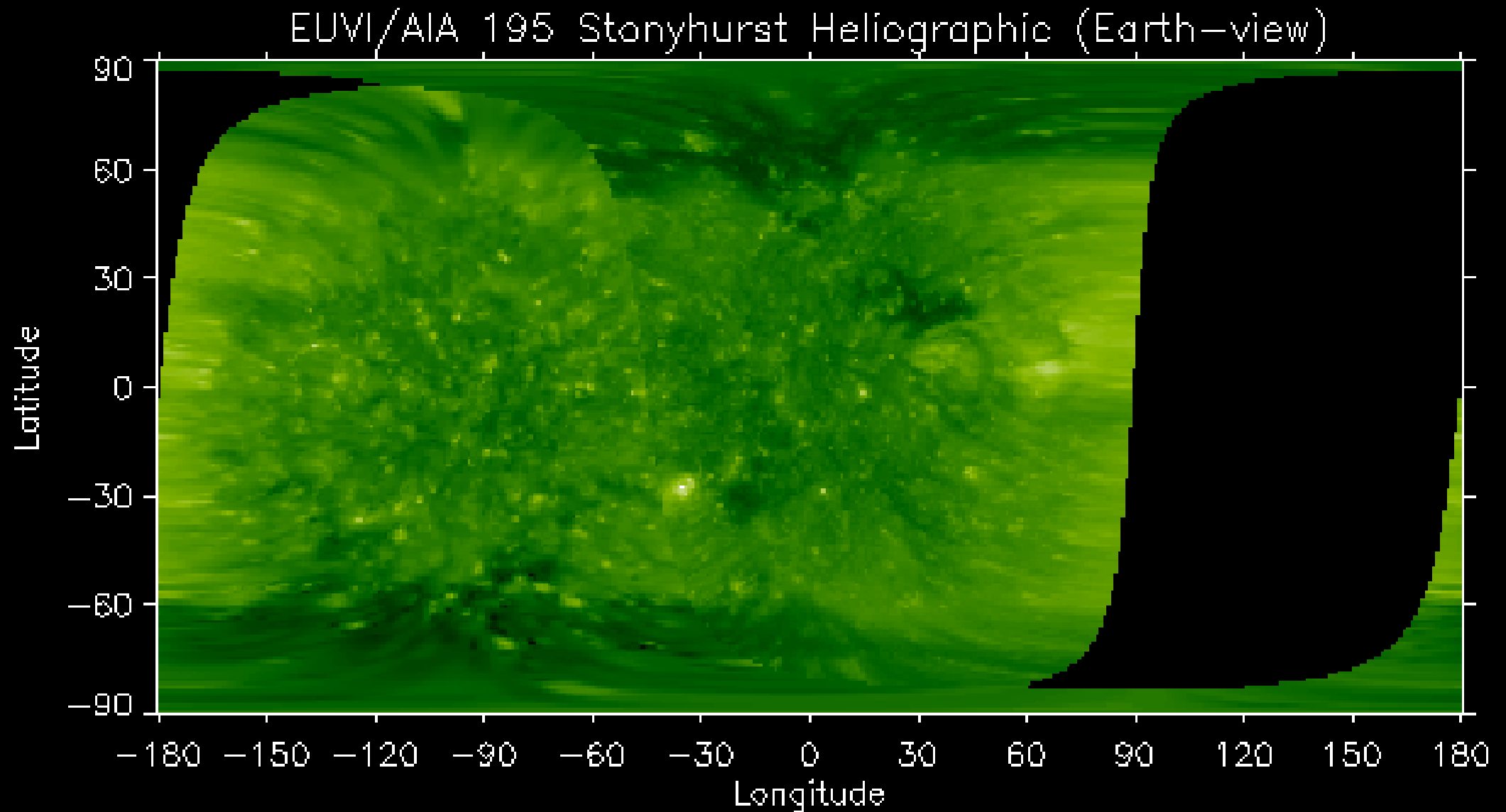
Outlook



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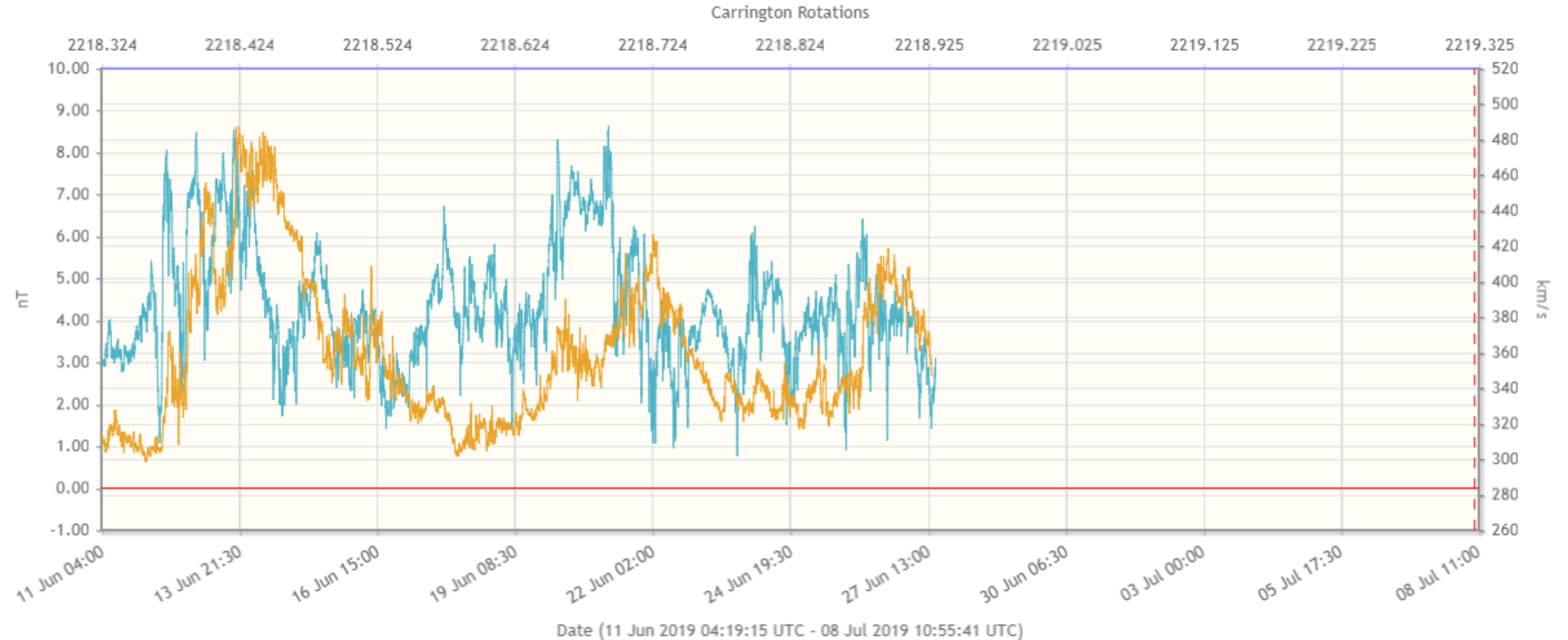
Outlook: Solar activity



Outlook: Solar windTBD

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IMF - DSCOVR IMF Bt (quicklook) - 4757 data points - (averaged - 5 minute data)
Solar Wind - DSCOVR Solar Wind Speed (quicklook) - 4722 data points - (averaged - 5 minute data)



SIDC Space Weather Briefing

See you at our next briefing!

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