

SIDC Space Weather Briefing

16 June 2019 - 24 June 2019

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& the SIDC forecaster team



Royal Observatory
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Data analysis Centre
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Summary Report

Solar activity from 2019-06-16 12:00 UT to 2019-06-24 12:00 UT

Active regions	No numbered active regions on disk.
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	Some filaments visible on disk.
CMEs	No Earth Directed CMEs: Some back-sided CMEs and flows detected.
Proton Events	None.

Solar wind and geomagnetic conditions from 2019-06-16 12:00 UT to 2019-06-14 12:00 UT

Coronal Holes	Series of weak, fragmented, negative polarity coronal holes.
ICME	None.
SW Conditions	Quiet to unsettled conditions.
K-indices	max K-index (Dourbes): 3.0 max Kp-index (NOAA): 3

All Quiet Alert: On from 20 June to 23 June.

Solar Activity

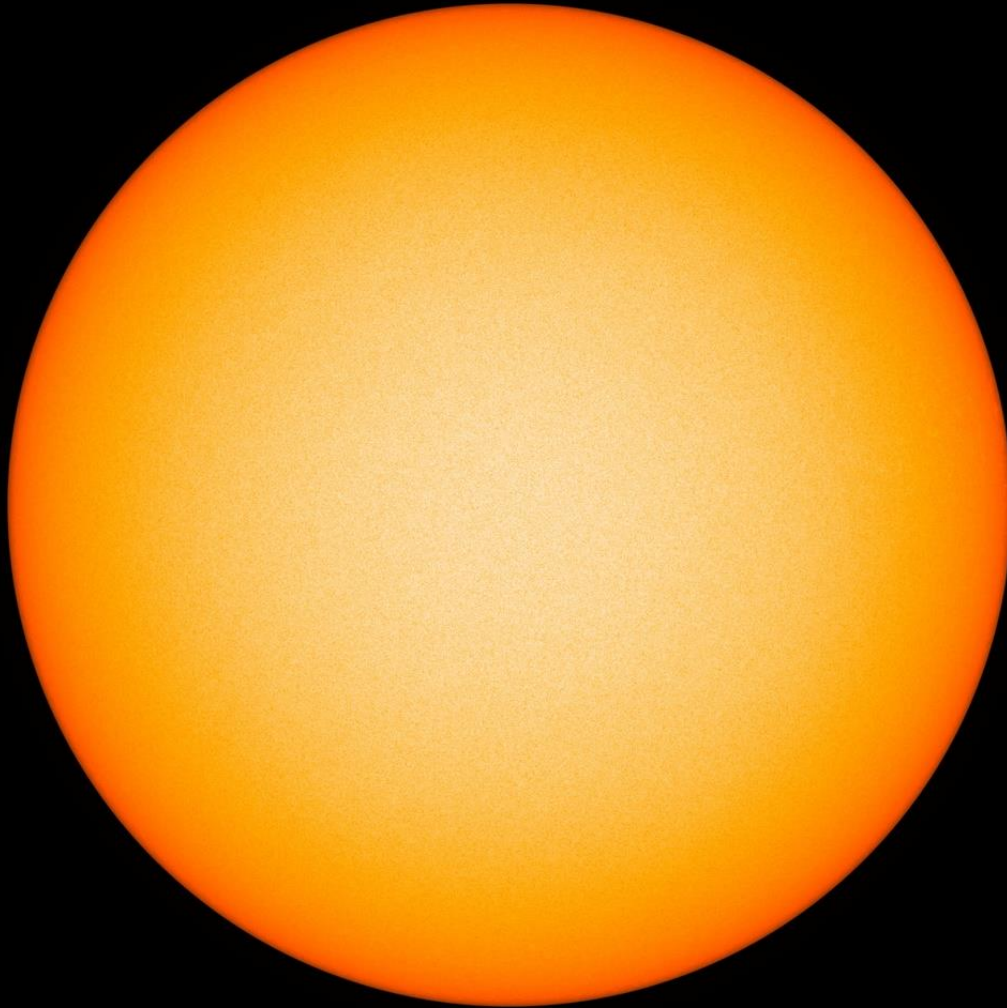


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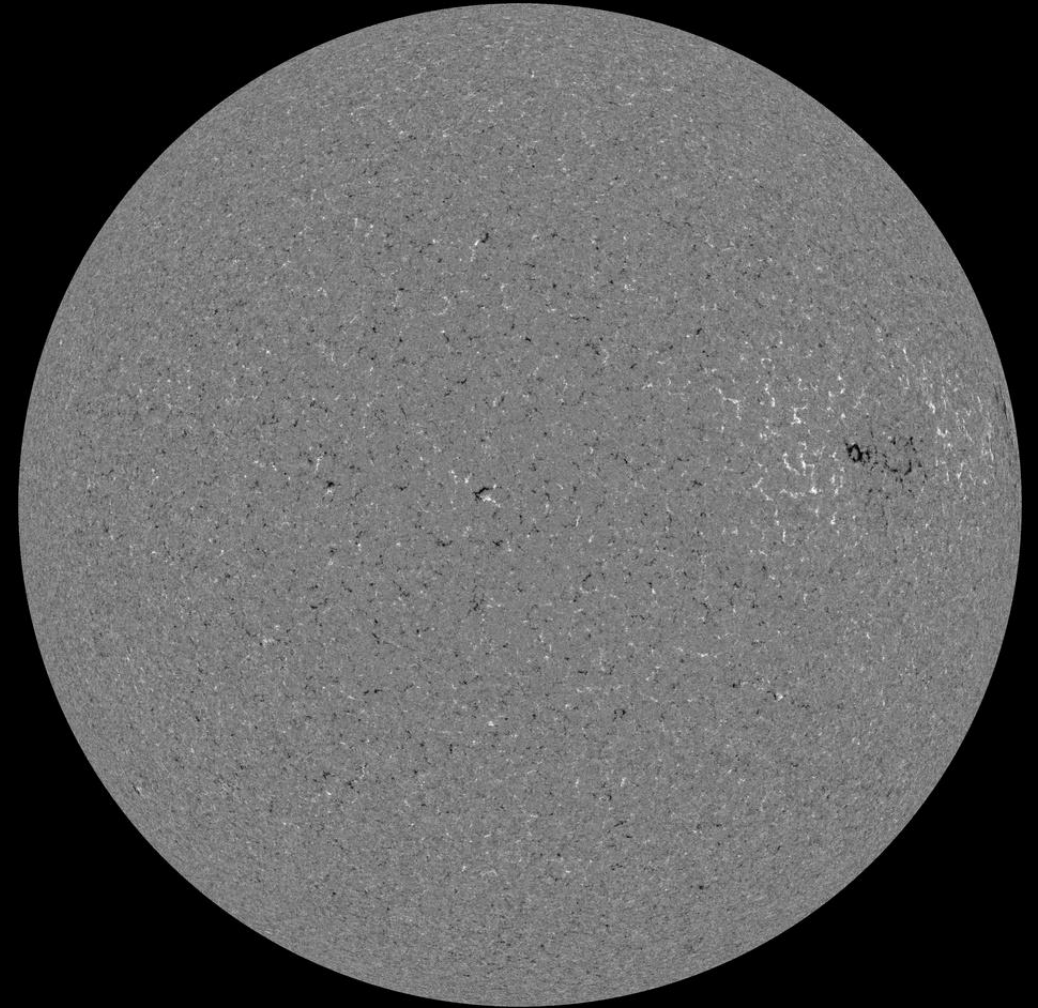
Solar active region - start of the week

SDO/HMI White Light 2019-06-16



SDO/HMI Quick-Look Continuum: 20190612_003000

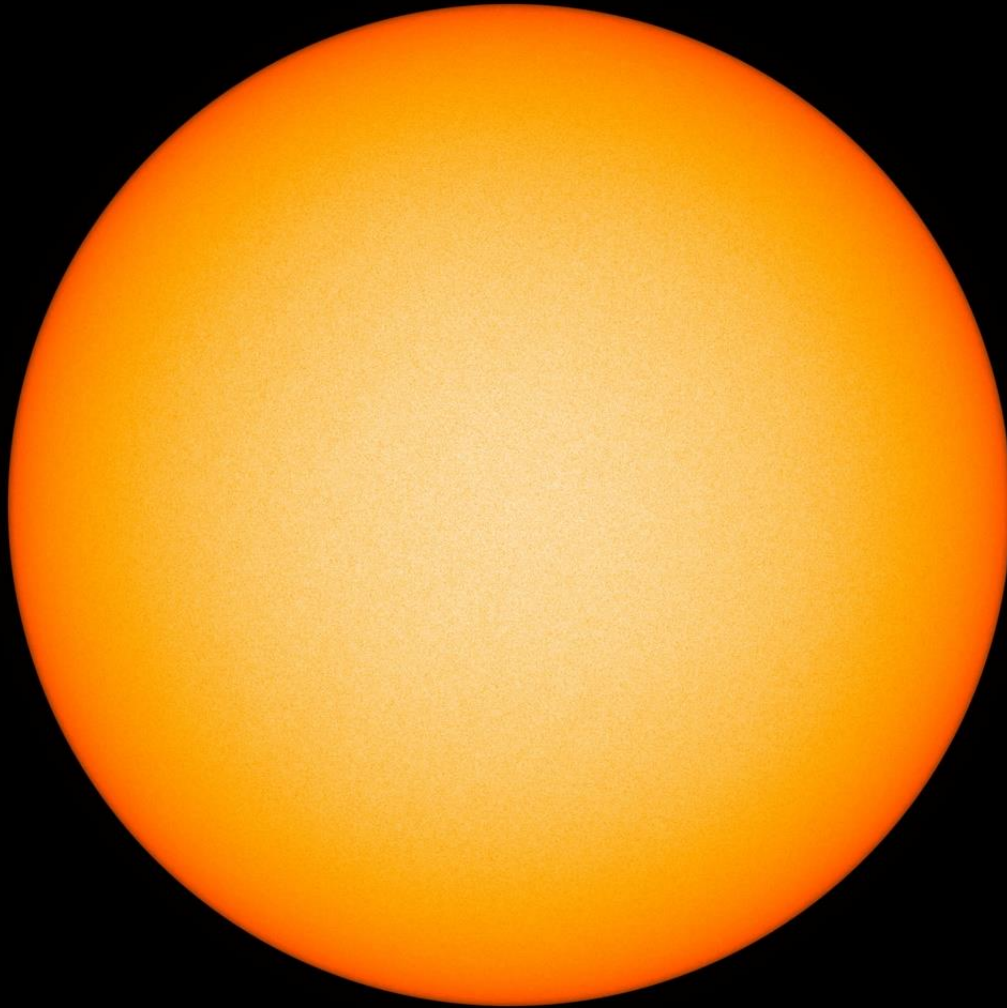
SDO/HMI Magnetogram 2019-06-16



SDO/HMI Quick-Look Magnetogram: 20190612_003000

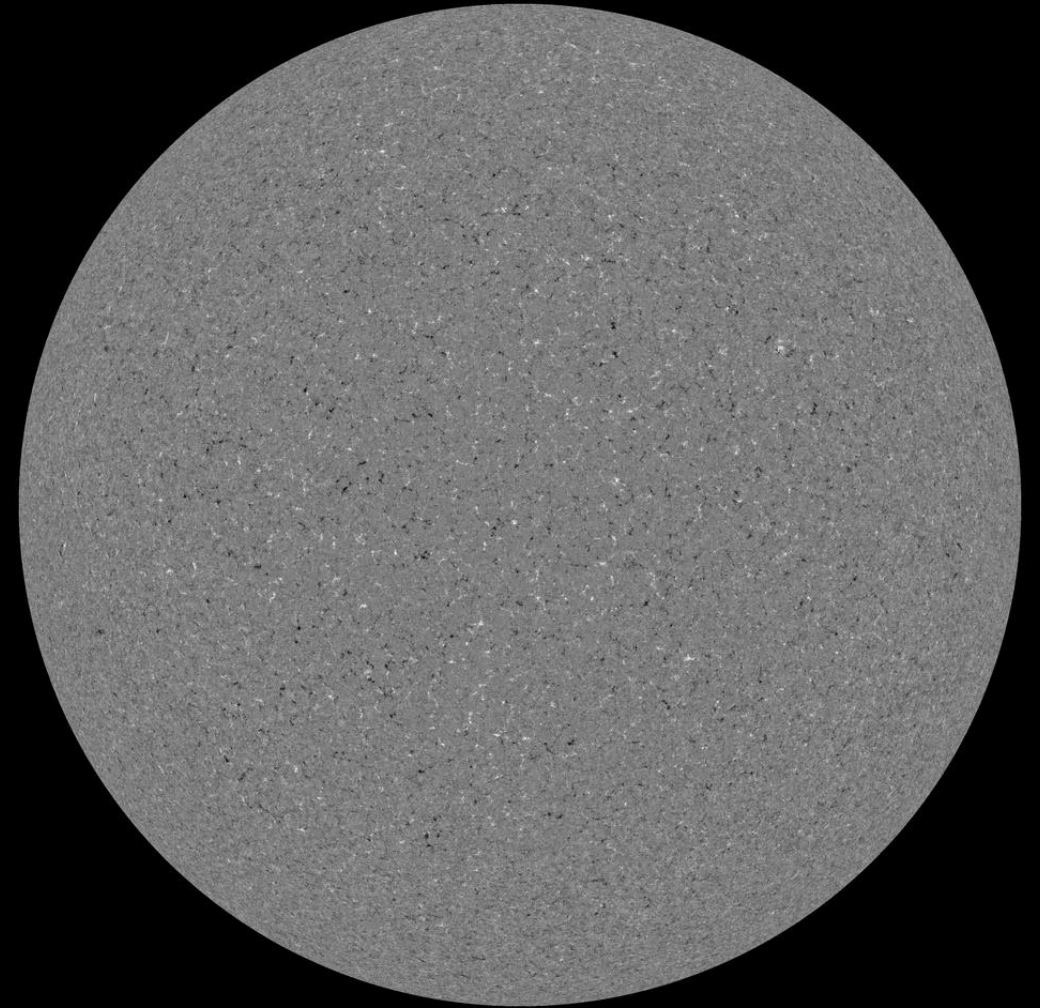
Solar active region - middle of the week

SDO/HMI White Light 2019-06-19



SDO/HMI Quick-Look Continuum: 20190619_114500

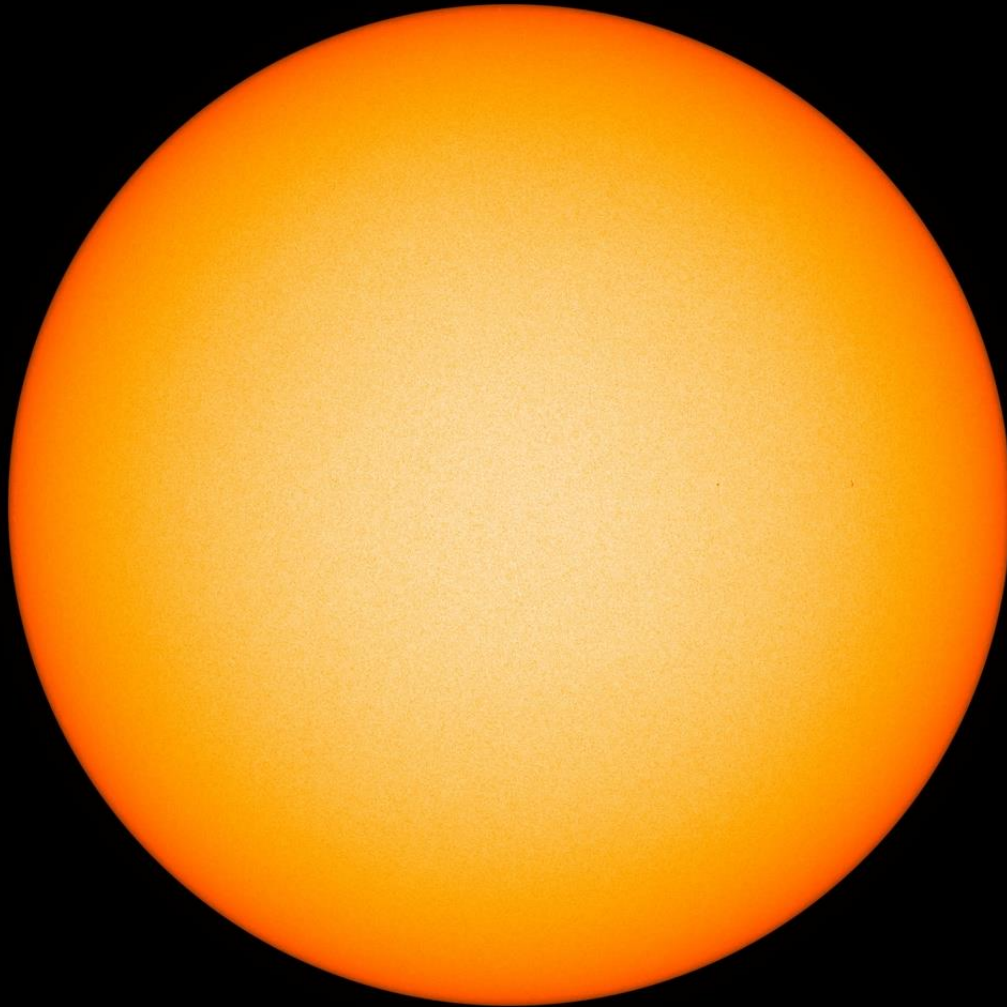
SDO/HMI Magnetogram 2019-06-19



SDO/HMI Quick-Look Magnetogram: 20190619_114500

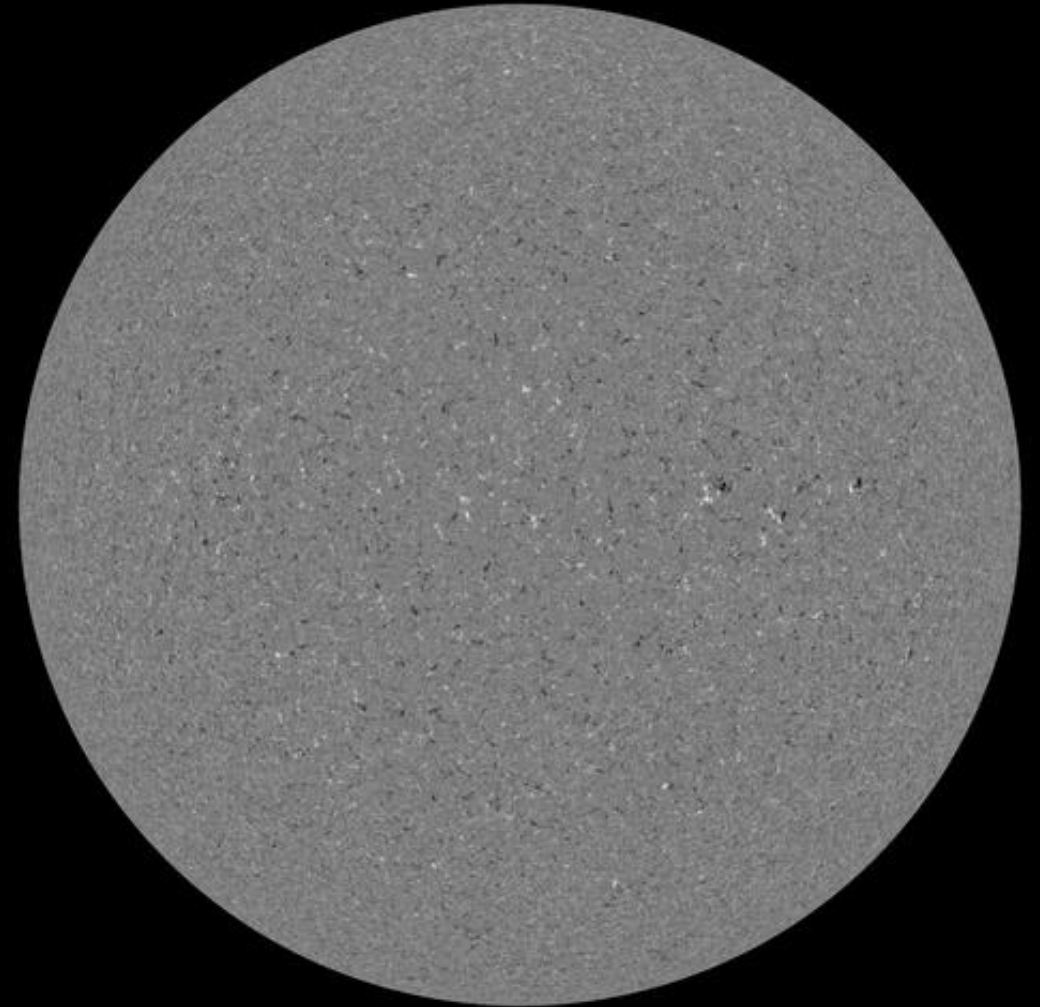
Solar active region - end of the week

SDO/HMI White Light 2019-06-24



SDO/HMI Quick-Look Continuum: 20190624_081500

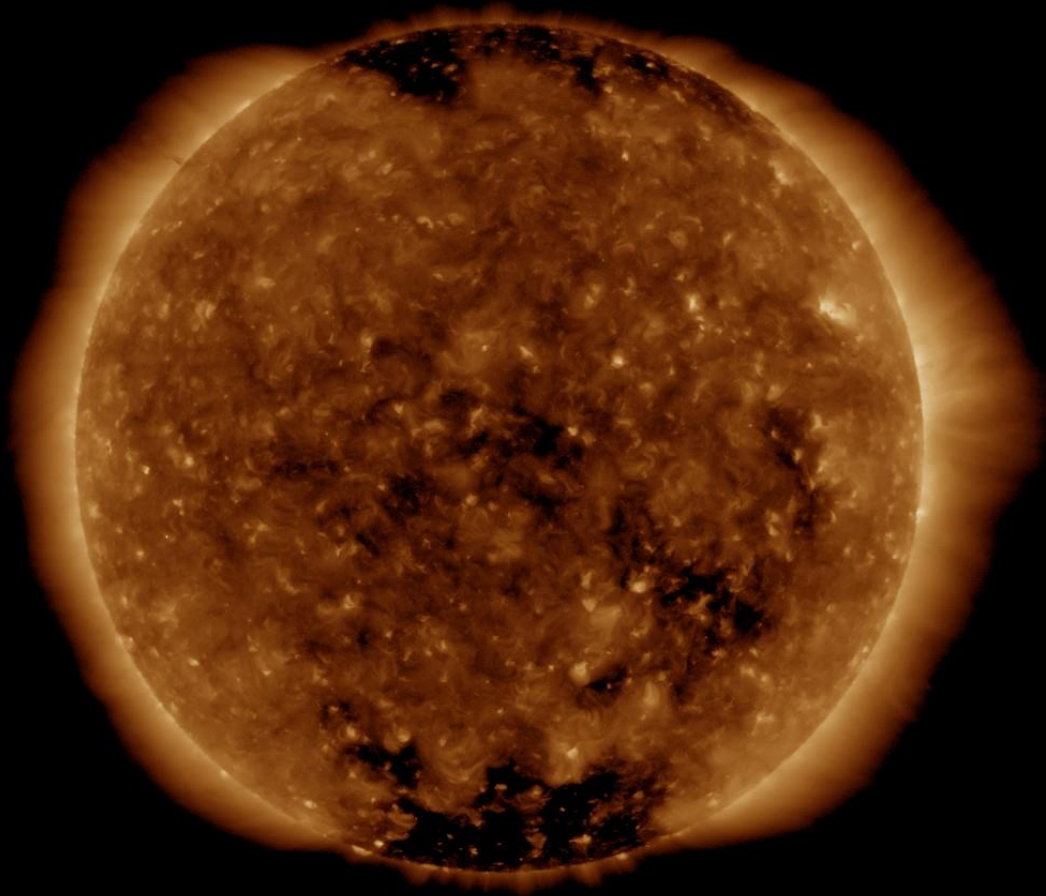
SDO/HMI Magnetogram 2019-06-24



SDO/HMI Quick-Look Magnetogram: 20190624_073000

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-06-16



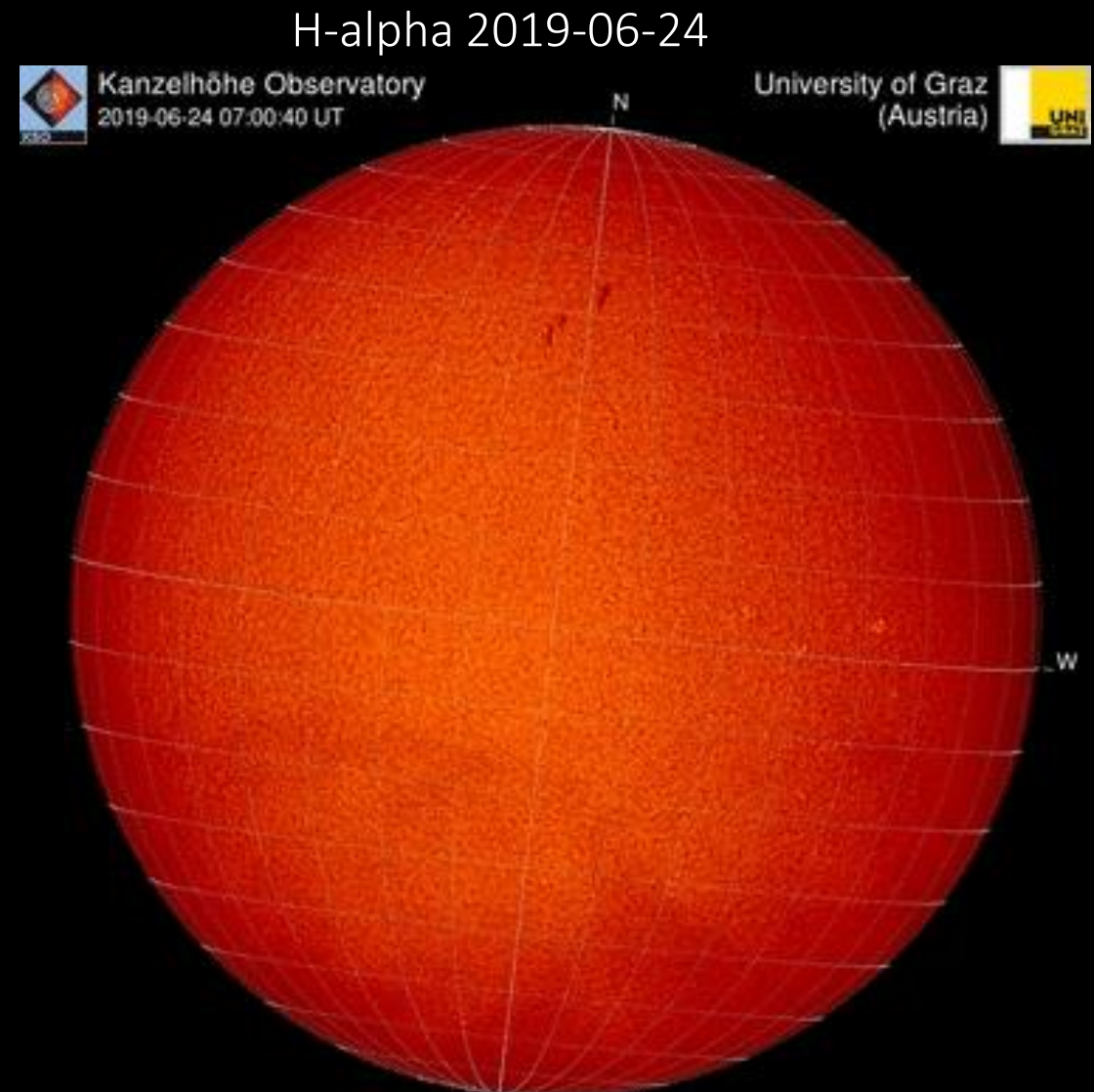
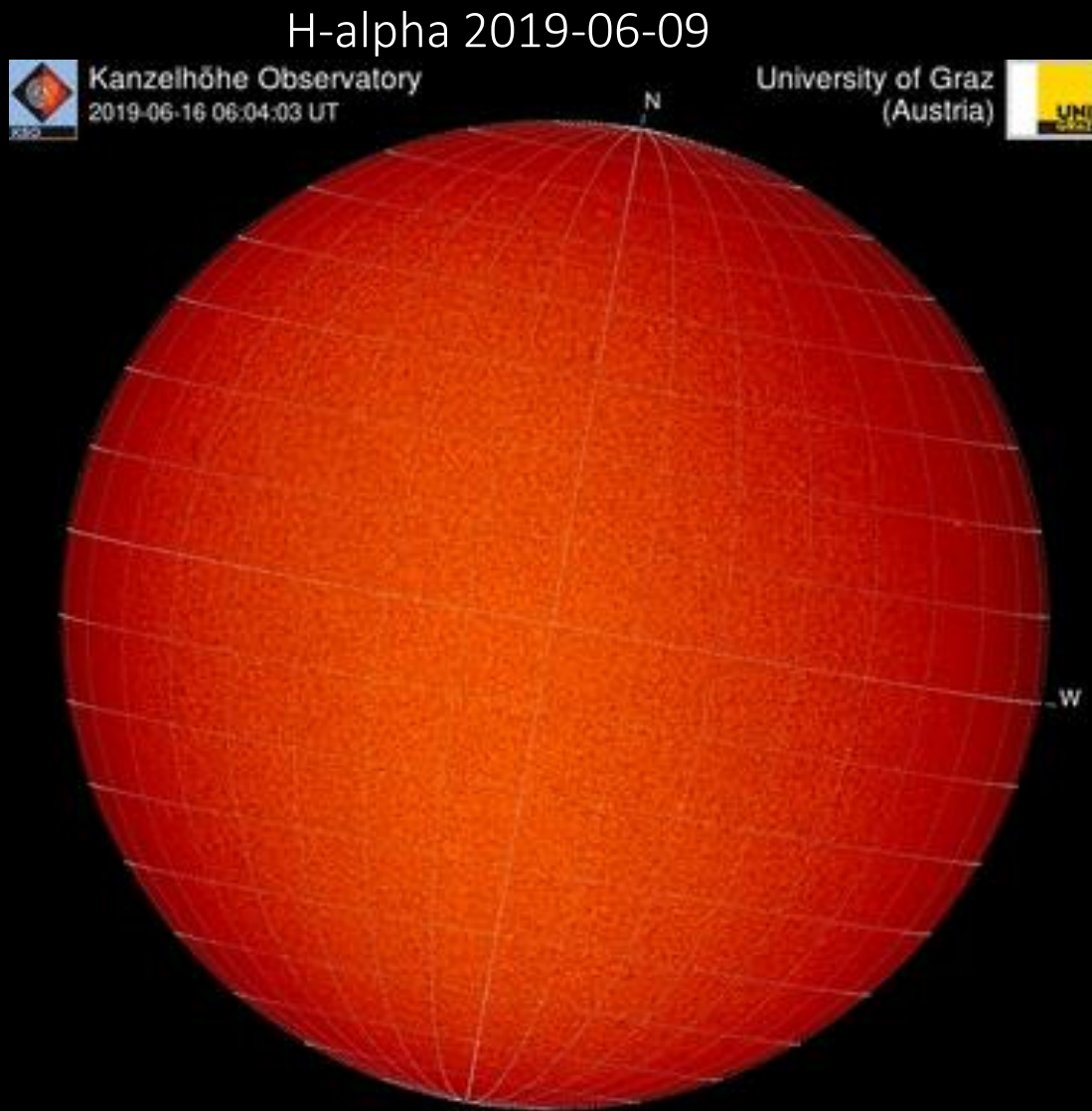
SDO/AIA 19.3 nm 2019-06-24



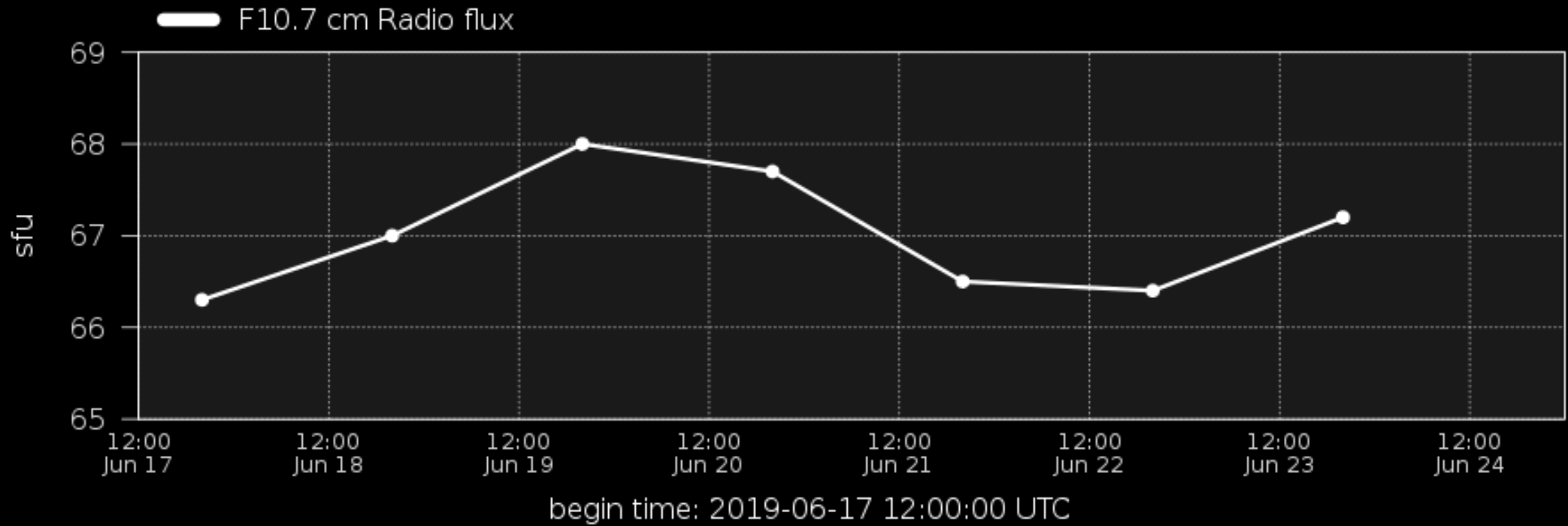
SDO/AIA 193 2019-06-16 06:59:53 UT

SDO/AIA 193 2019-06-24 07:55:41 UT

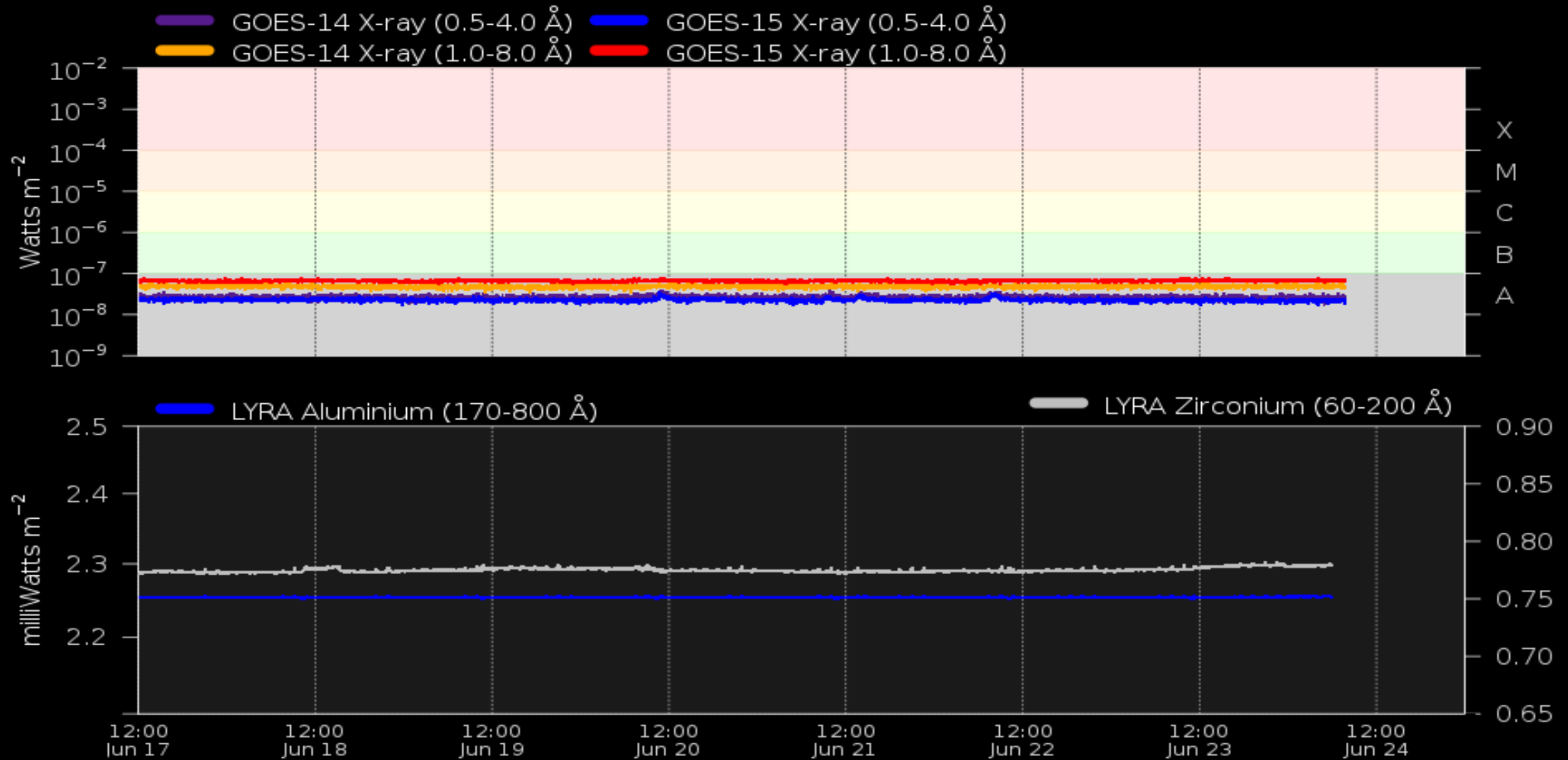
Filament & Filament eruption



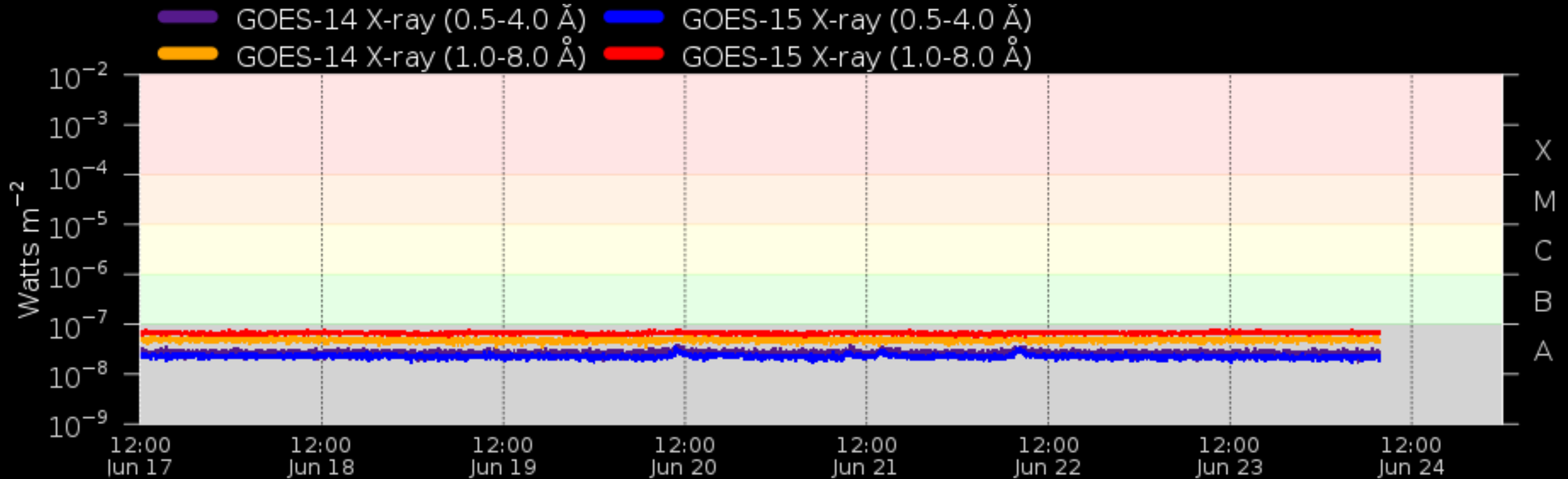
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity



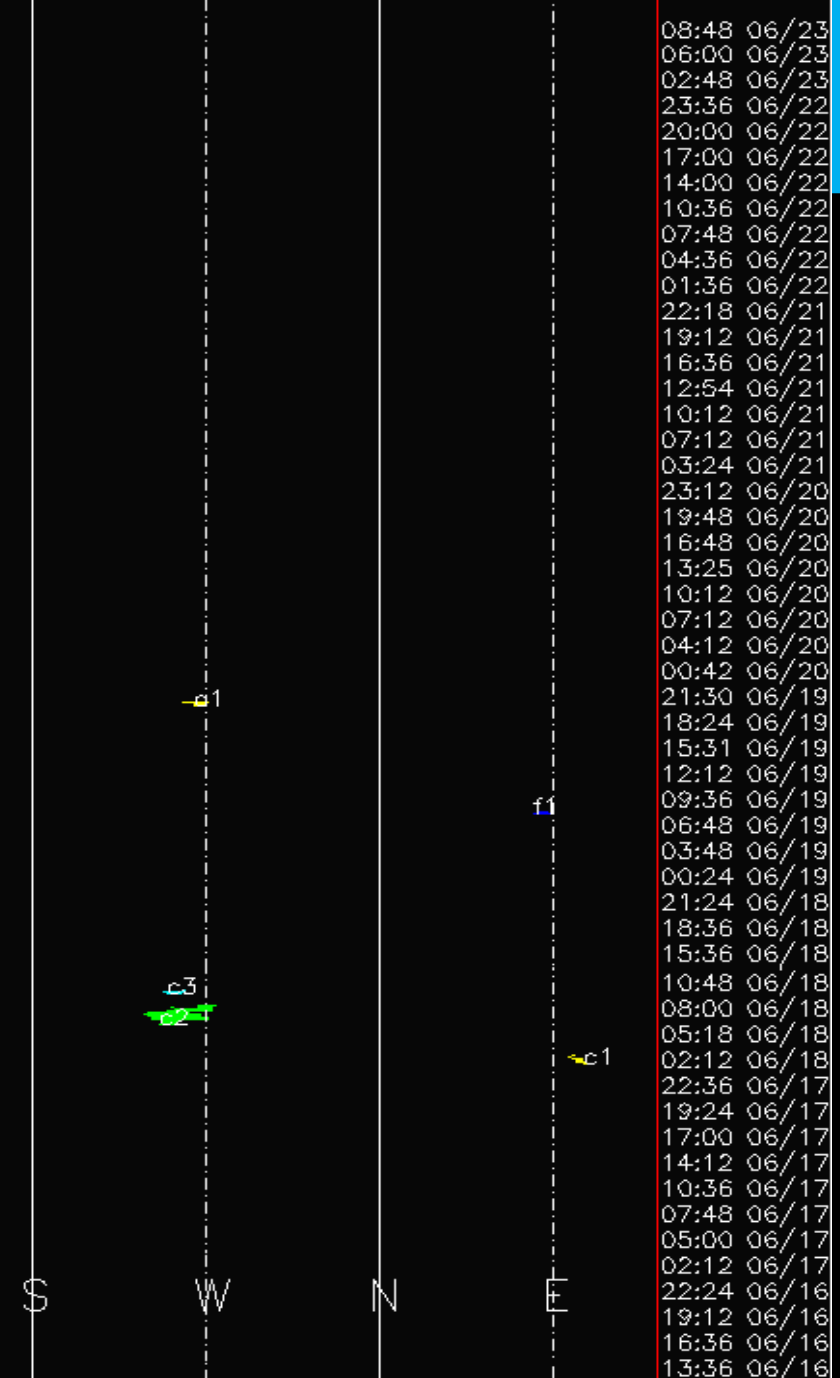
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2019-06-16	2019-06-17	2019-06-18	2019-06-19	2019-06-20	2019-06-21	2019-06-22	2019-06-23
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

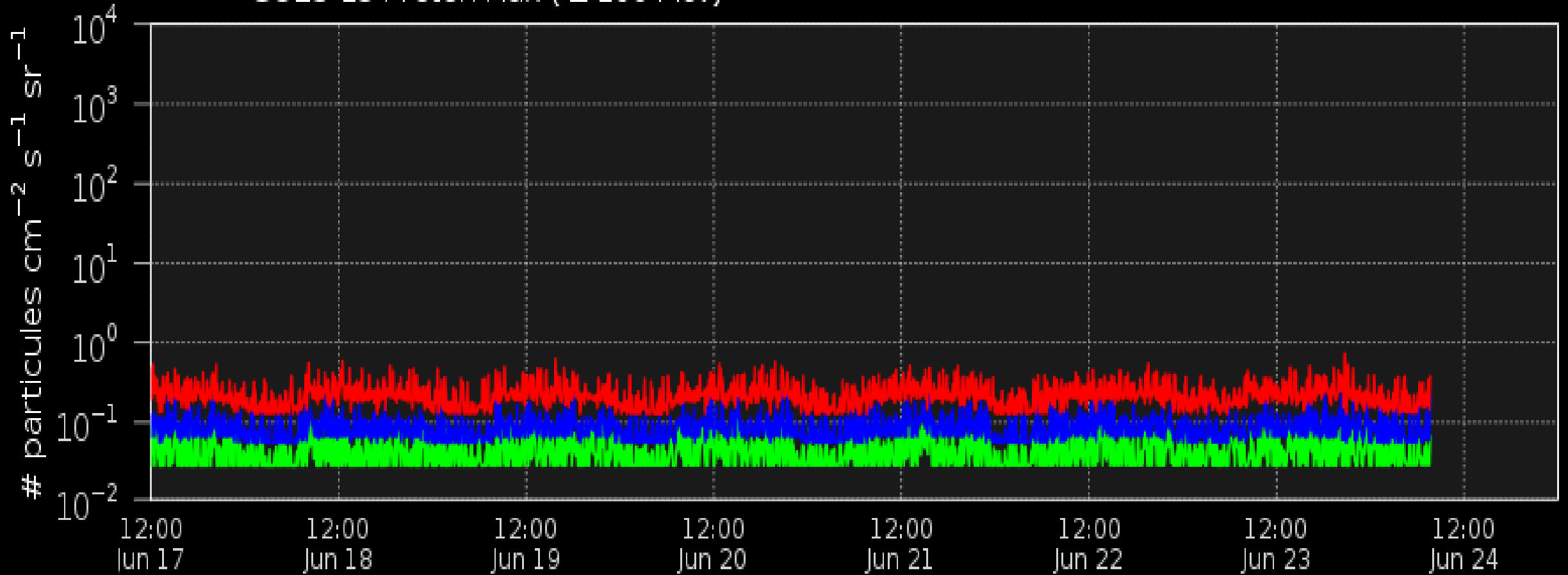


No Earth
directed
CMEs



Solar proton flux

GOES-15 Proton Flux (≥ 10 Mev) GOES-15 Proton Flux (≥ 50 Mev)
GOES-15 Proton Flux (≥ 100 Mev)

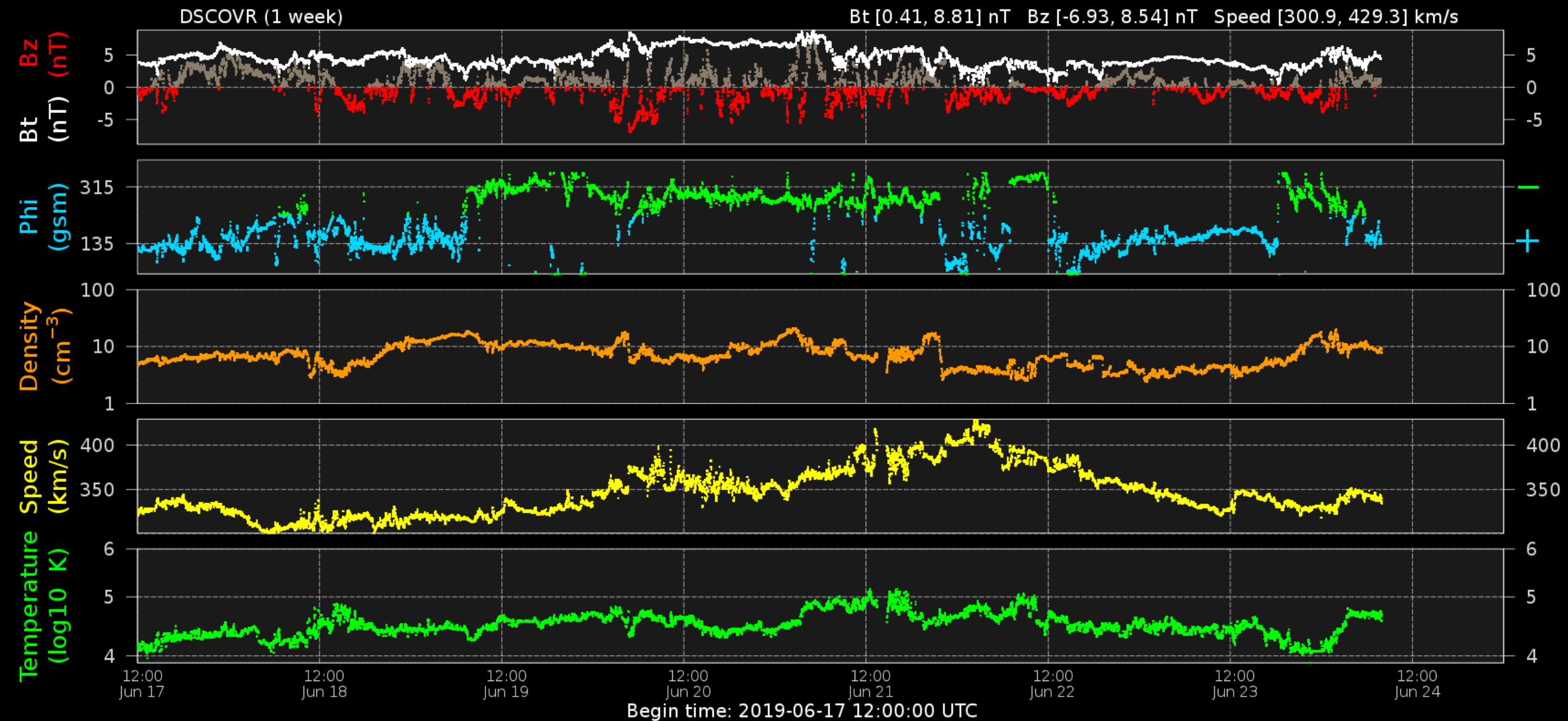


Solar Wind and Geomagnetic Activity

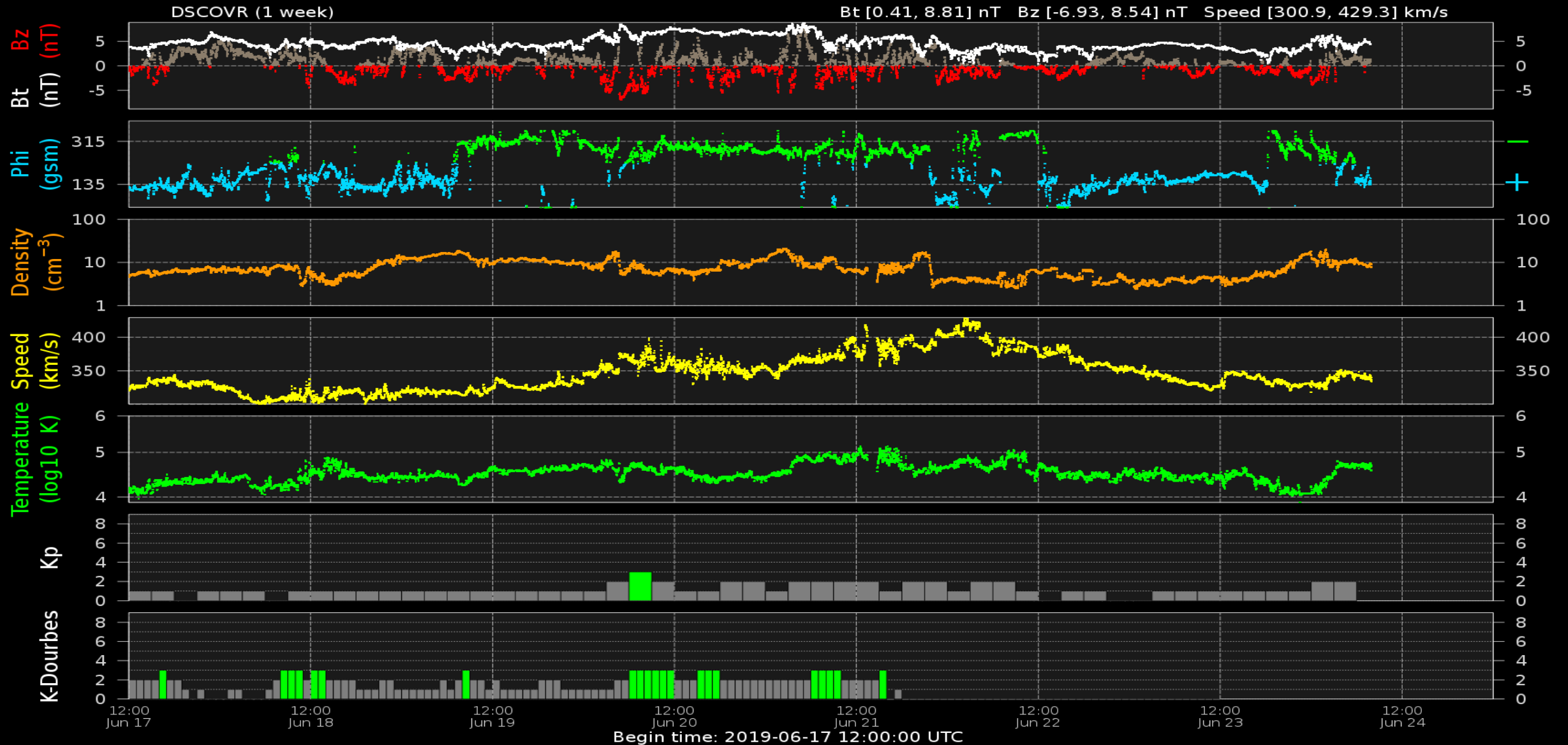


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Solar wind parameters (DSCOVR data)



Solar wind parameters & Geomagnetic conditions



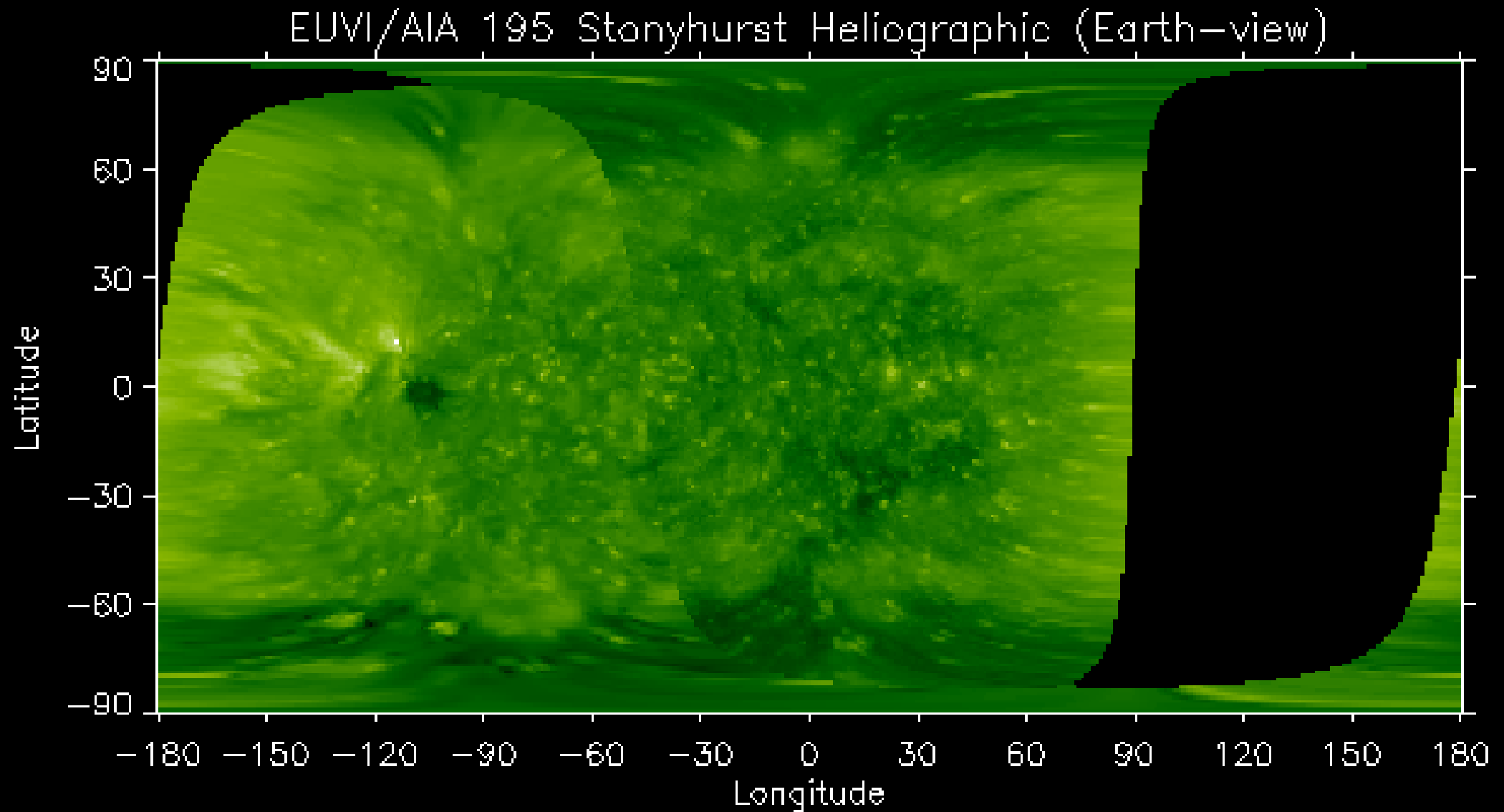
Outlook



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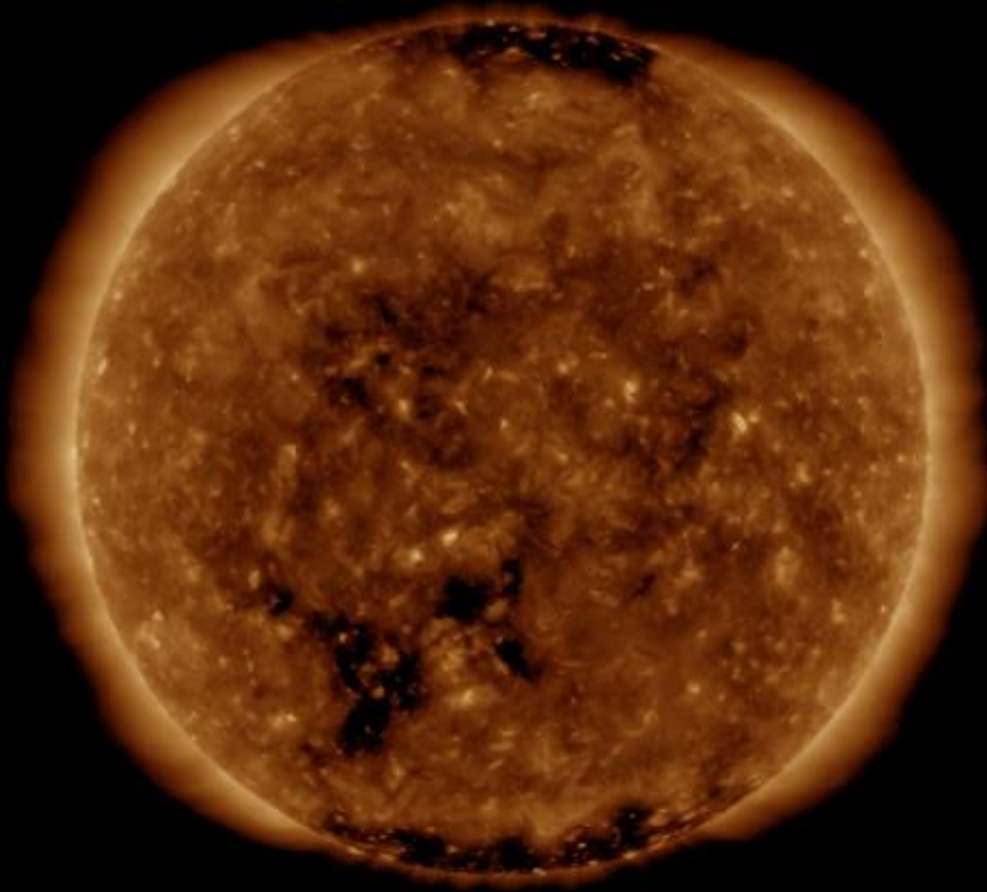
Outlook: Solar activity



Outlook: Solar wind

SDO/AIA 19.3 nm 2019-06-21

SDO/AIA 19.3 nm 2019-06-24



SDO/AIA 193 2019-06-21 06:40:53 UT

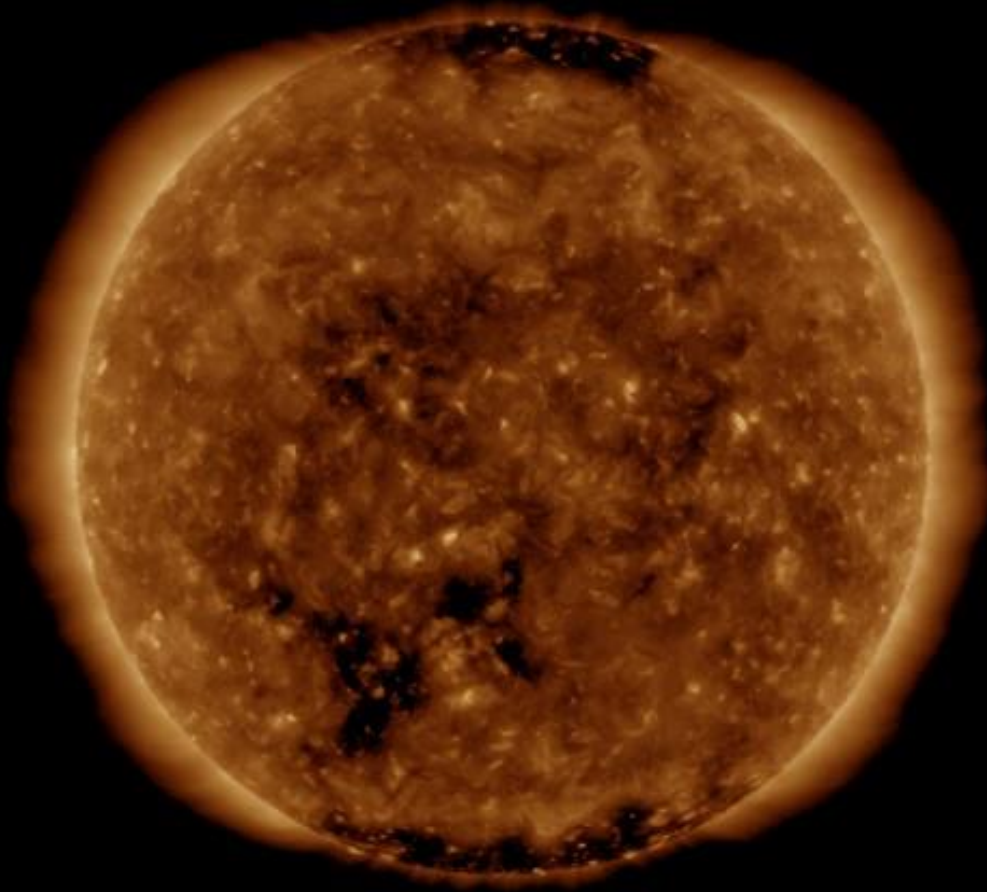
SDO/AIA 193 2019-06-24 07:55:41 UT

Outlook: Solar wind and geomagnetic conditions



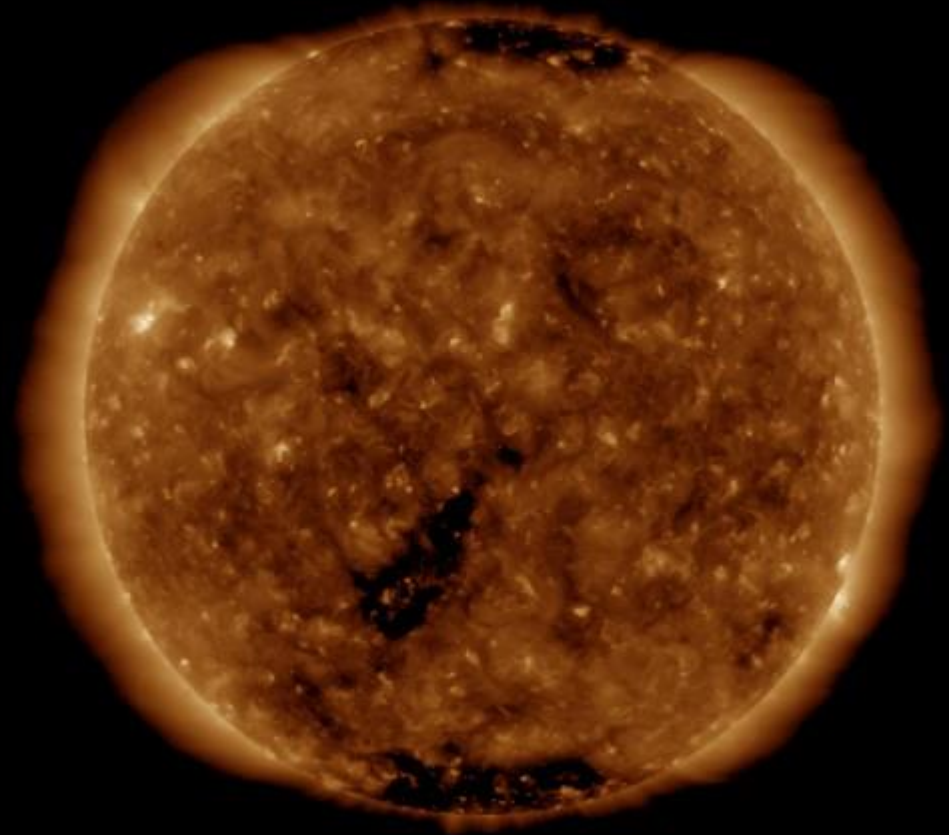
Outlook: Solar wind

SDO/AIA 19.3 nm 2019-06-21



SDO/AIA 193 2019-06-21 06:40:53 UT

SDO/AIA 19.3 nm 2019-05-24
(Previous Carrington rotation)



SDO/AIA 193 2019-05-24 21:56:17 UT

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See you at our next briefing!

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