

SIDC Space Weather Briefing

12 July 2020 - 19 July 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 2020-07-12 12:00 UT to 2020-07-19 12:00 UT

Active regions	No numbered active regions.
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	No Proton events.

Solar wind and geomagnetic conditions from 2020-07-12 12:00 UT to 2020-07-19 12:00 UT

Coronal Holes	Small extension to southern polar CH and patchy small positive CH began to traverse the central meridian on 16 July.
ICME	Potential signature of a glancing hit from a weak CME, combined with the presence of a weak high speed stream.
SW Conditions	Solar wind speed: 280 – 450 km/s
K-indices	max K-index (Dourbes): 4.0 max Kp-index (NOAA): 4

All Quiet Alert: On since 06 July

Solar Activity

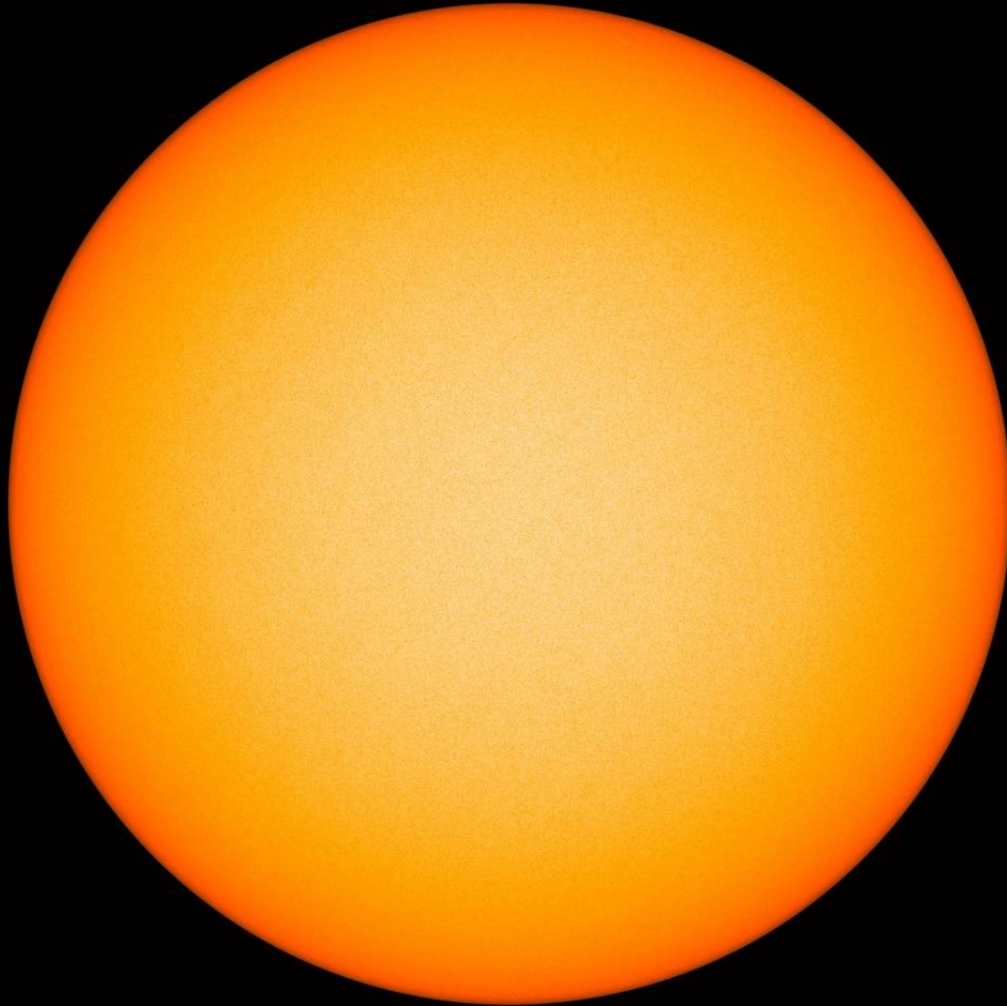


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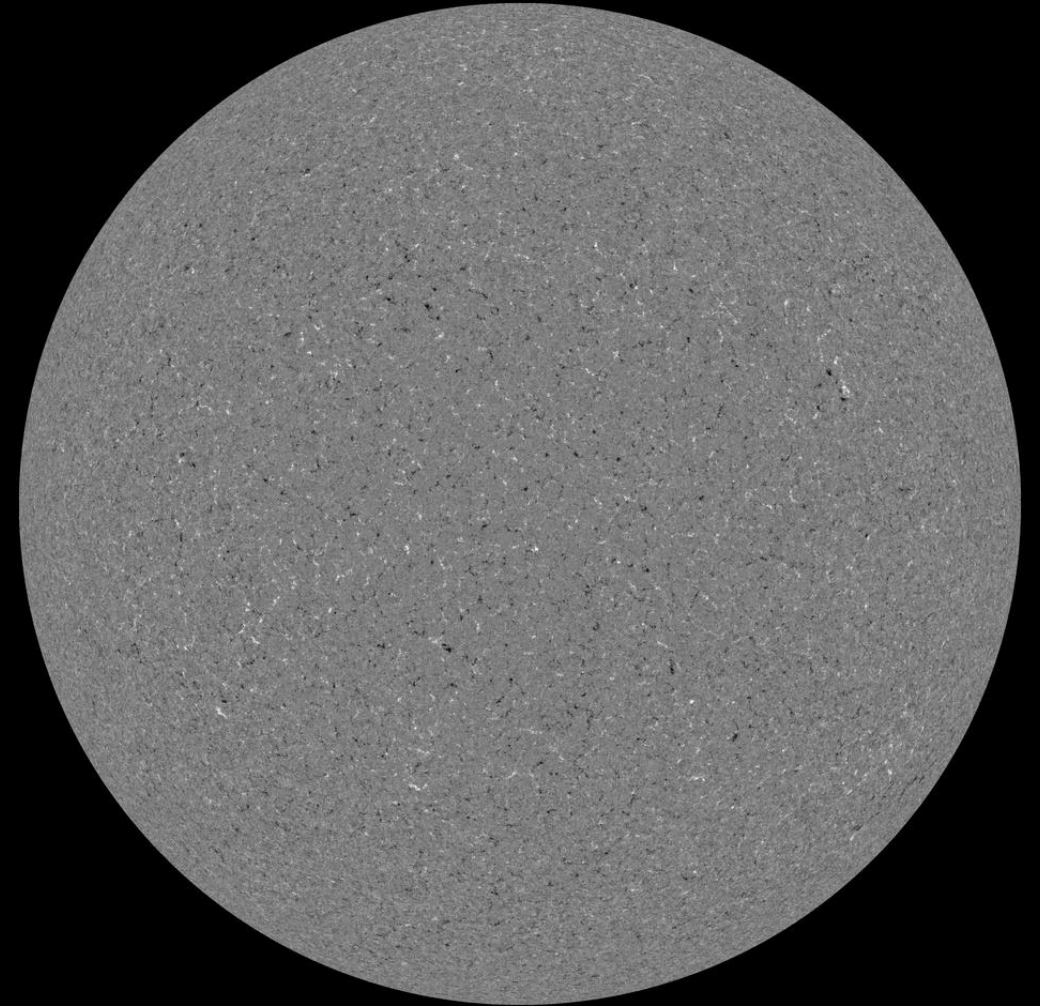
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Solar active region - start of the week

SDO/HMI White Light 2020-07-12



SDO/HMI Magnetogram 2020-07-12

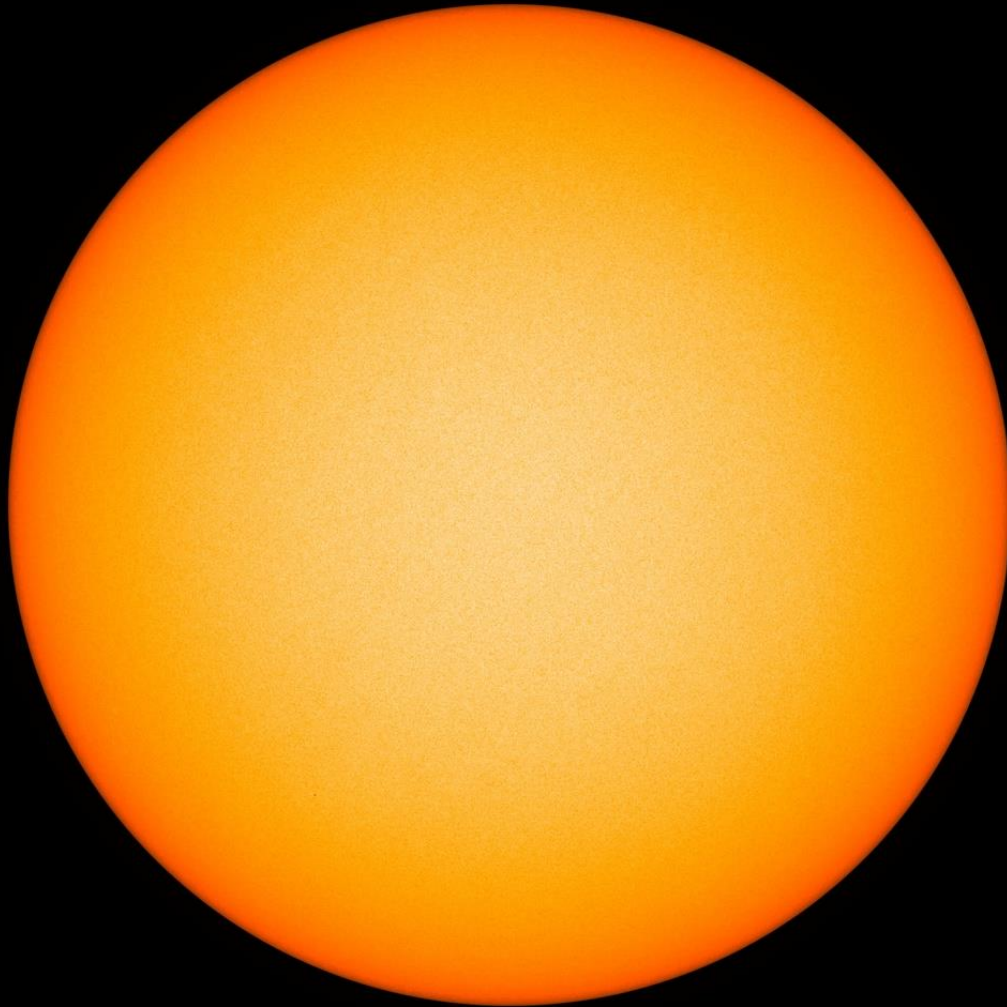


SDO/HMI Quick-Look Continuum: 20200712_114500

SDO/HMI Quick-Look Magnetogram: 20200712_114500

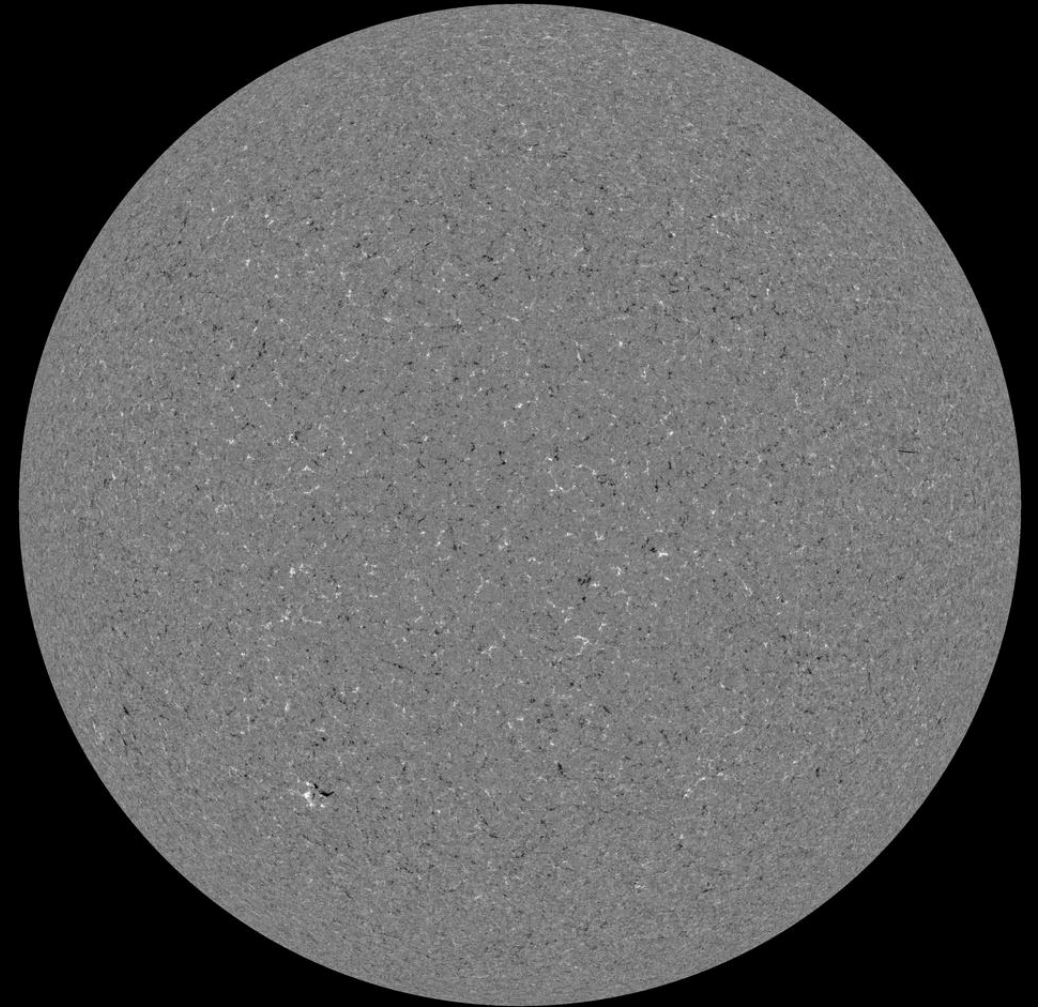
Solar active region - middle of the week

SDO/HMI White Light 2020-07-15



SDO/HMI Quick-Look Continuum: 20200715_114500

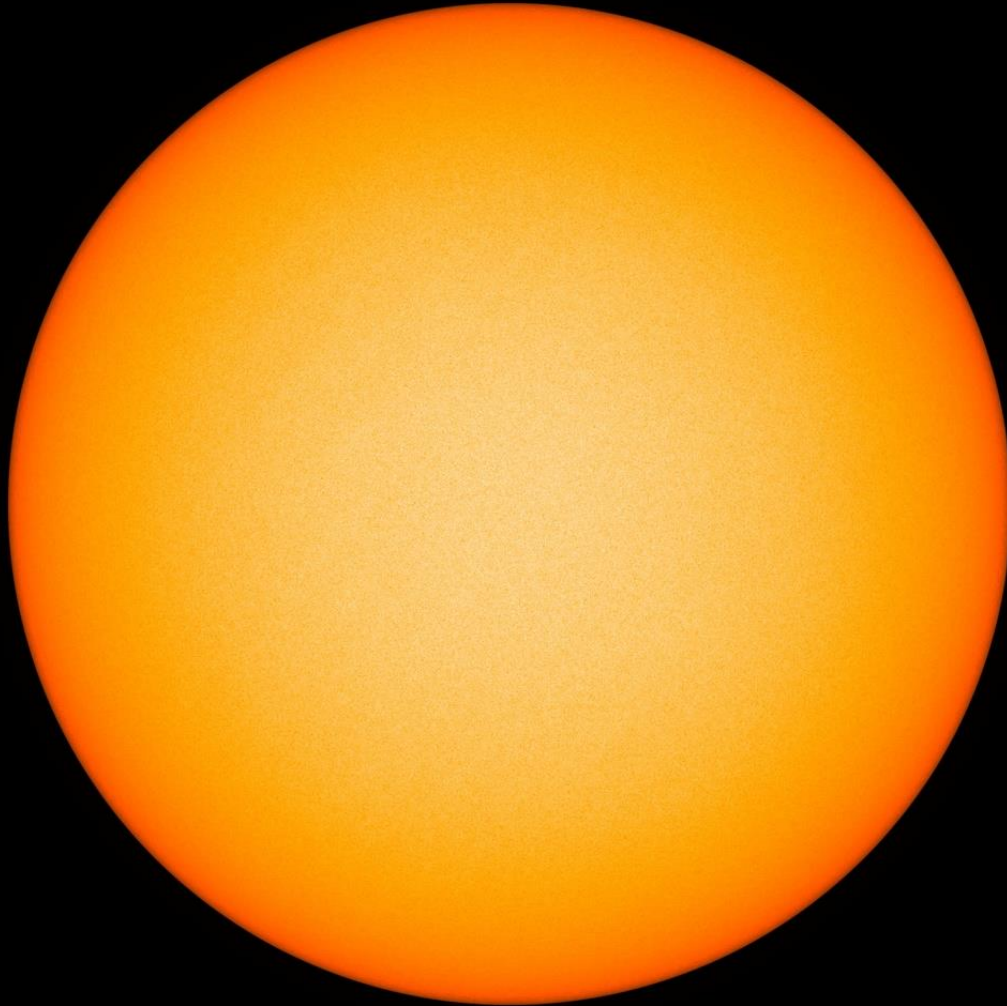
SDO/HMI Magnetogram 2020-07-15



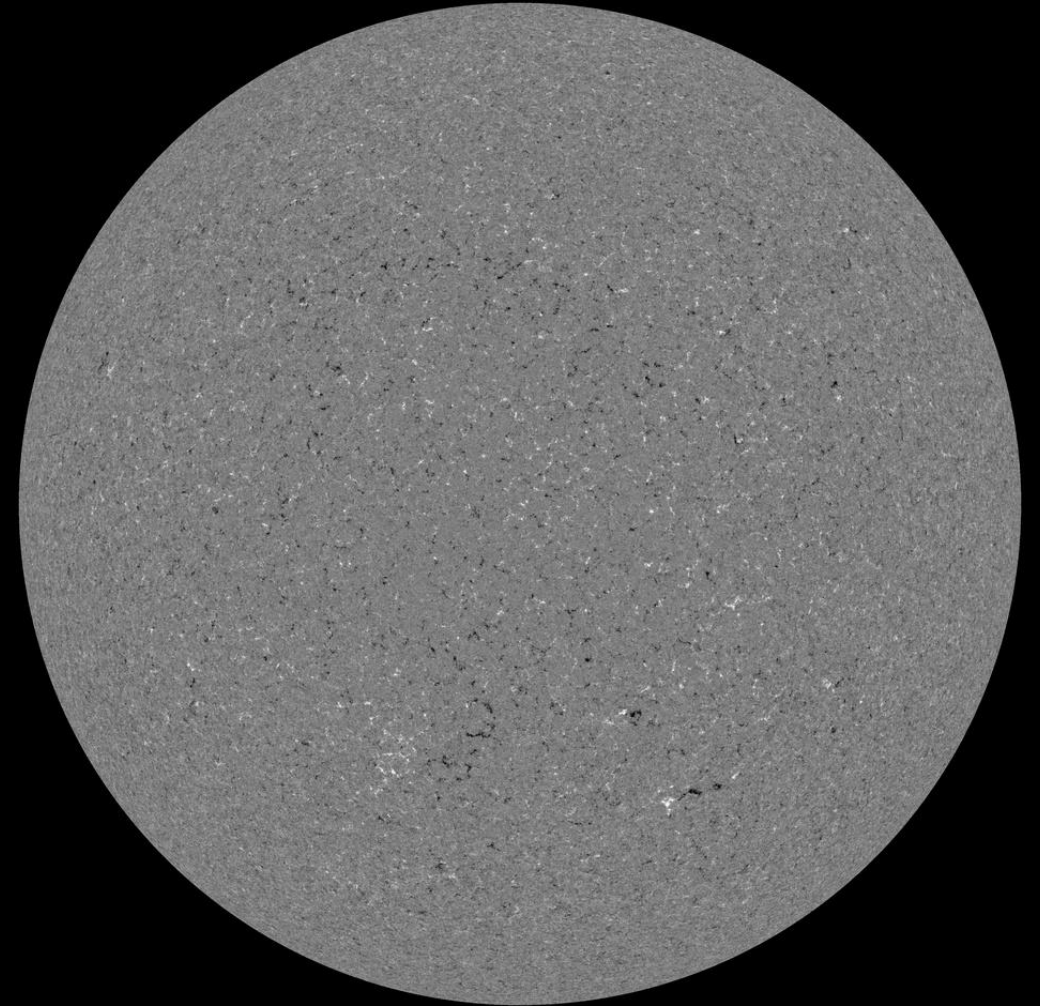
SDO/HMI Quick-Look Magnetogram: 20200715_114500

Solar active region - end of the week

SDO/HMI White Light 2020-07-19



SDO/HMI Magnetogram 2020-07-19

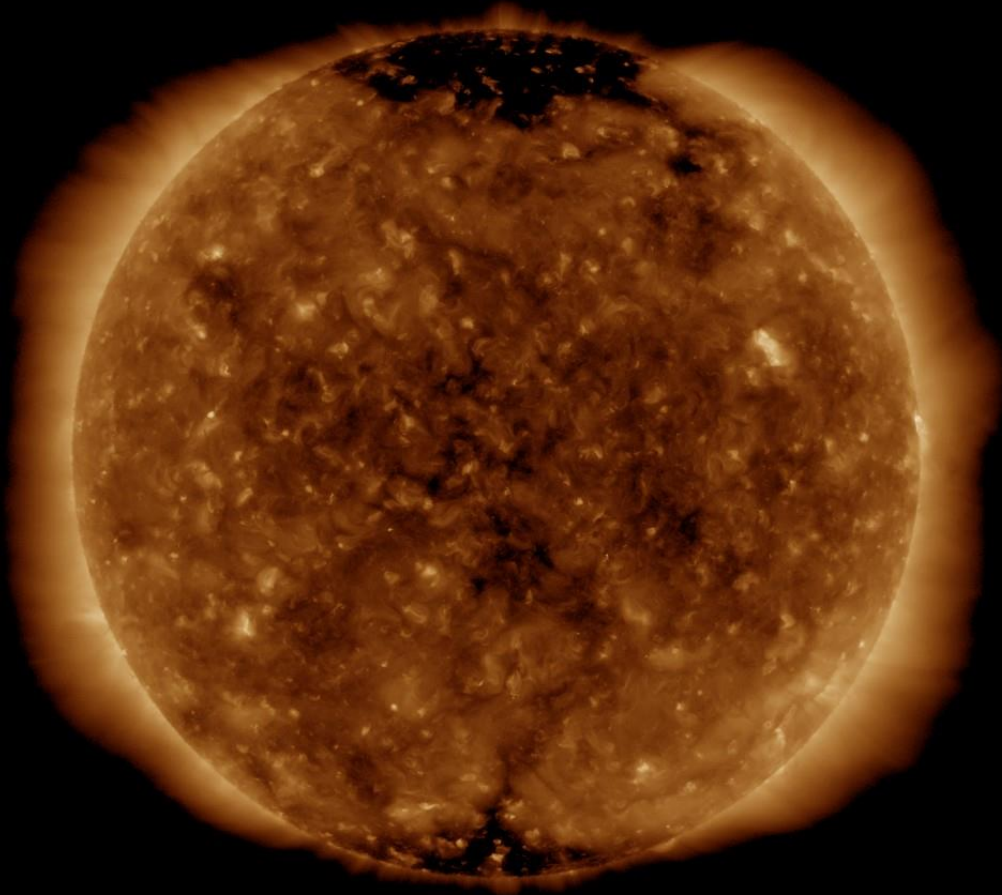


SDO/HMI Quick-Look Continuum: 20200719_114500

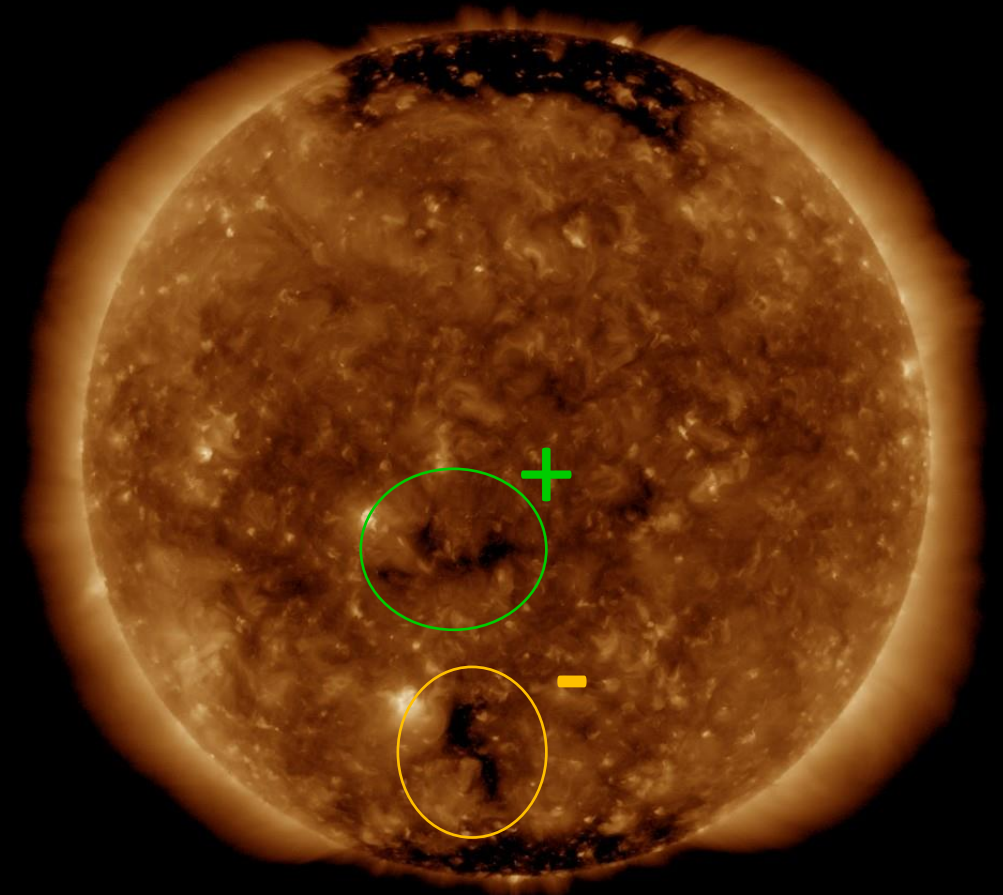
SDO/HMI Quick-Look Magnetogram: 20200719_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-07-12



SDO/AIA 19.3 nm 2020-07-16

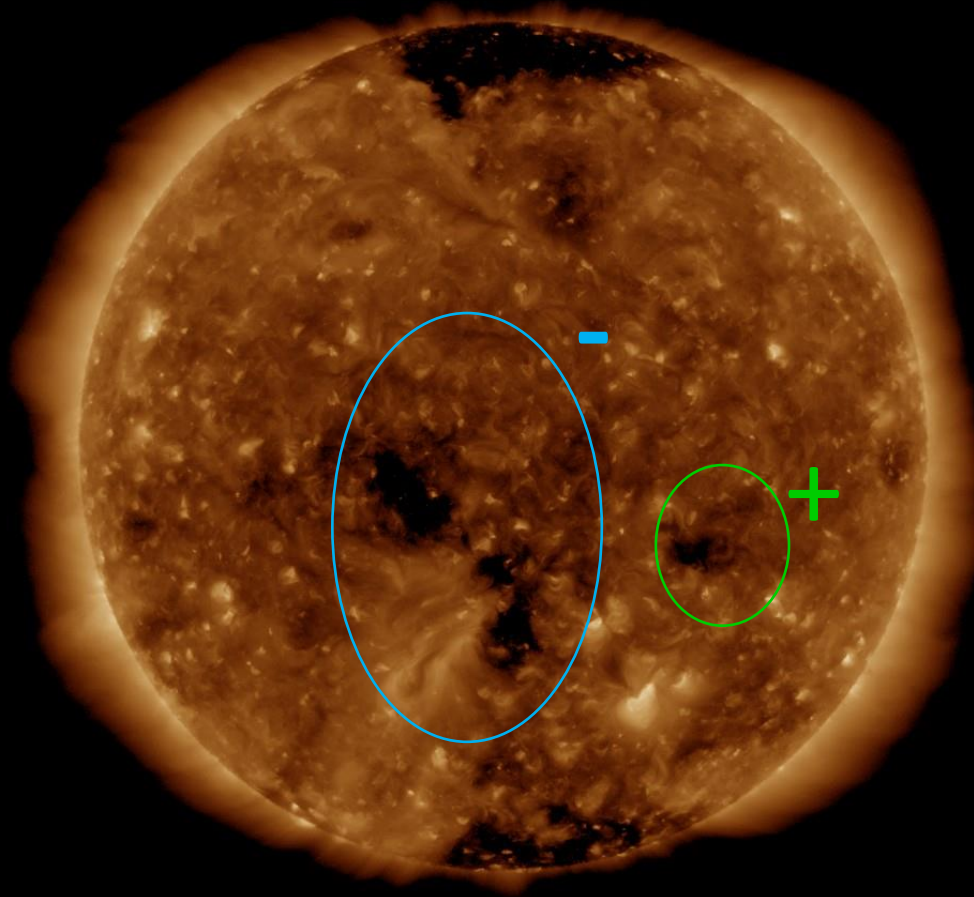


SDO/AIA 193 2020-07-12 12:17:53 UT

SDO/AIA 193 2020-07-16 12:17:29 UT

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-07-19



SDO/AIA 193 2020-07-19 12:18:05 UT

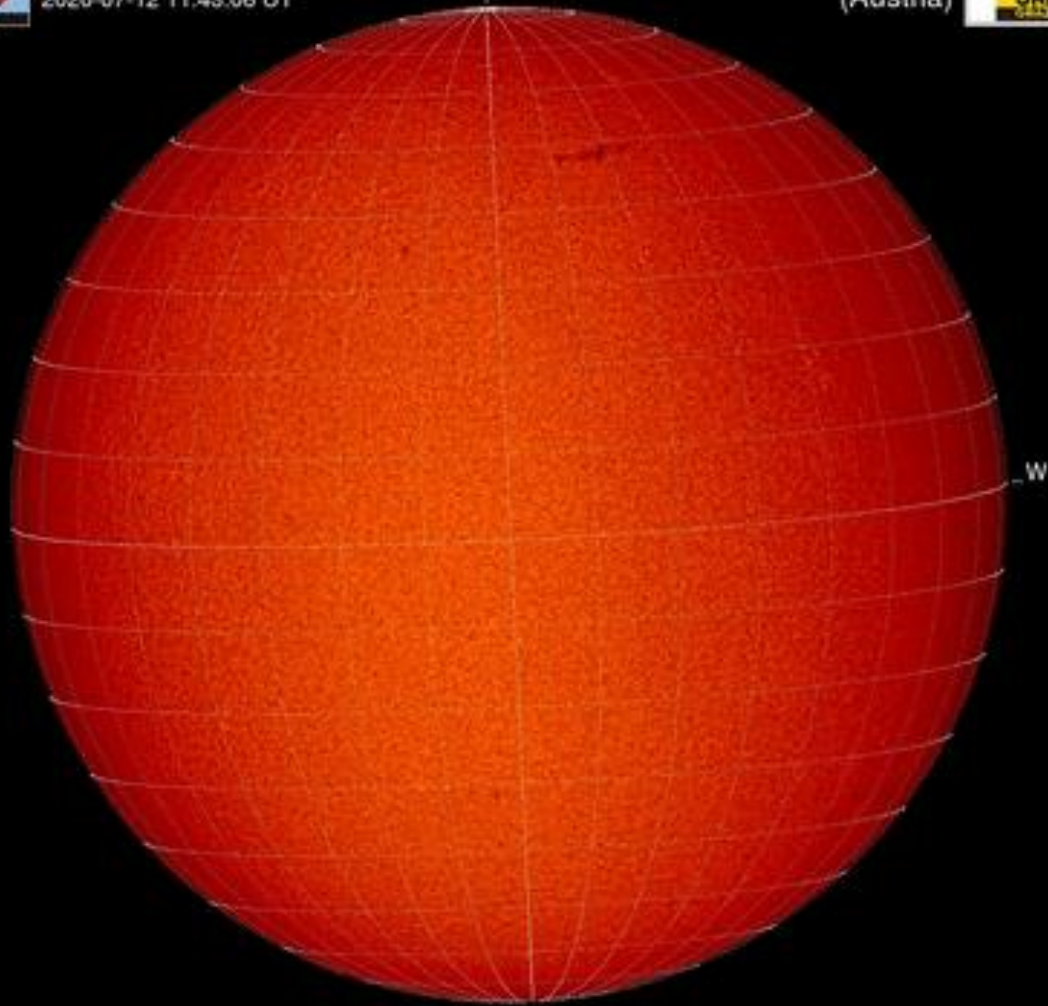
Filament & Filament eruption

H-alpha 2020-07-12



Kanzelhöhe Observatory
2020-07-12 11:43:06 UT

University of Graz
(Austria)

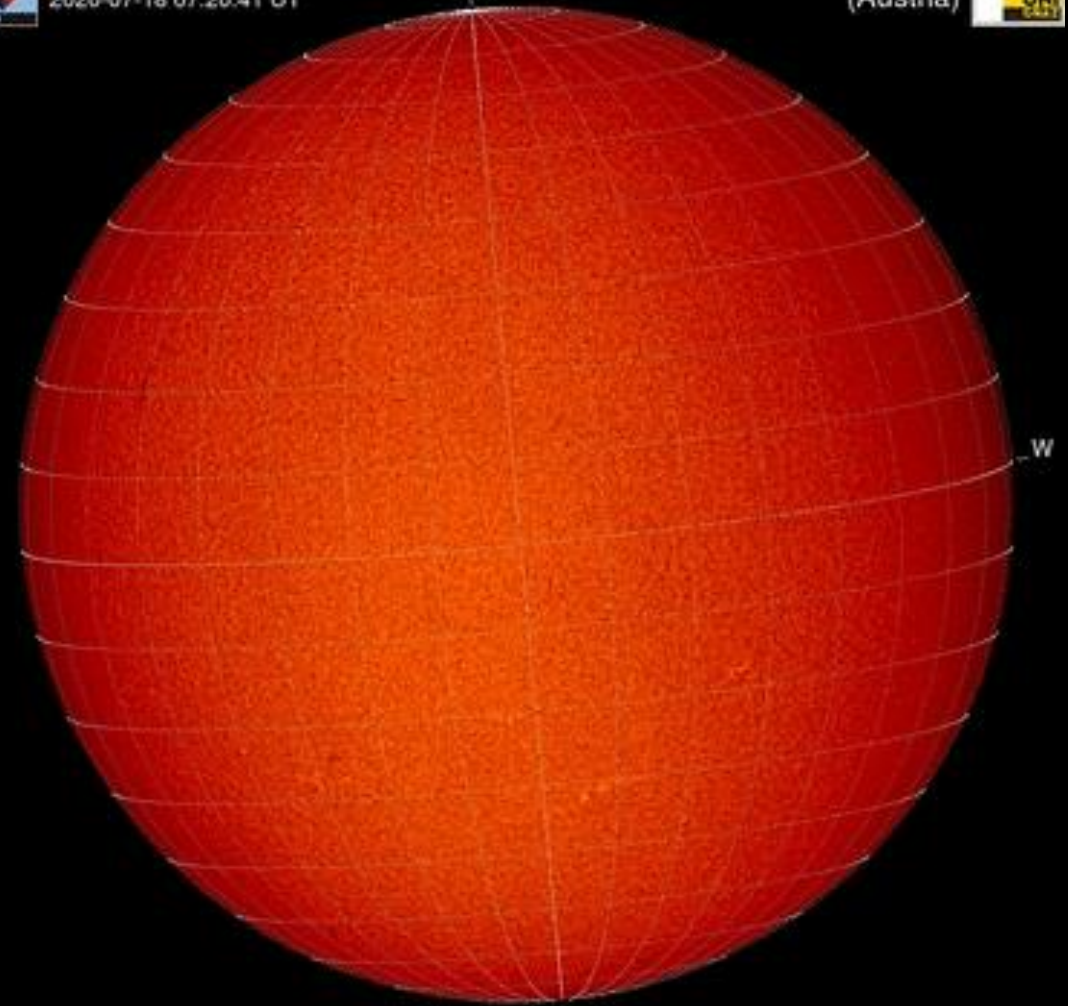


H-alpha 2020-07-19

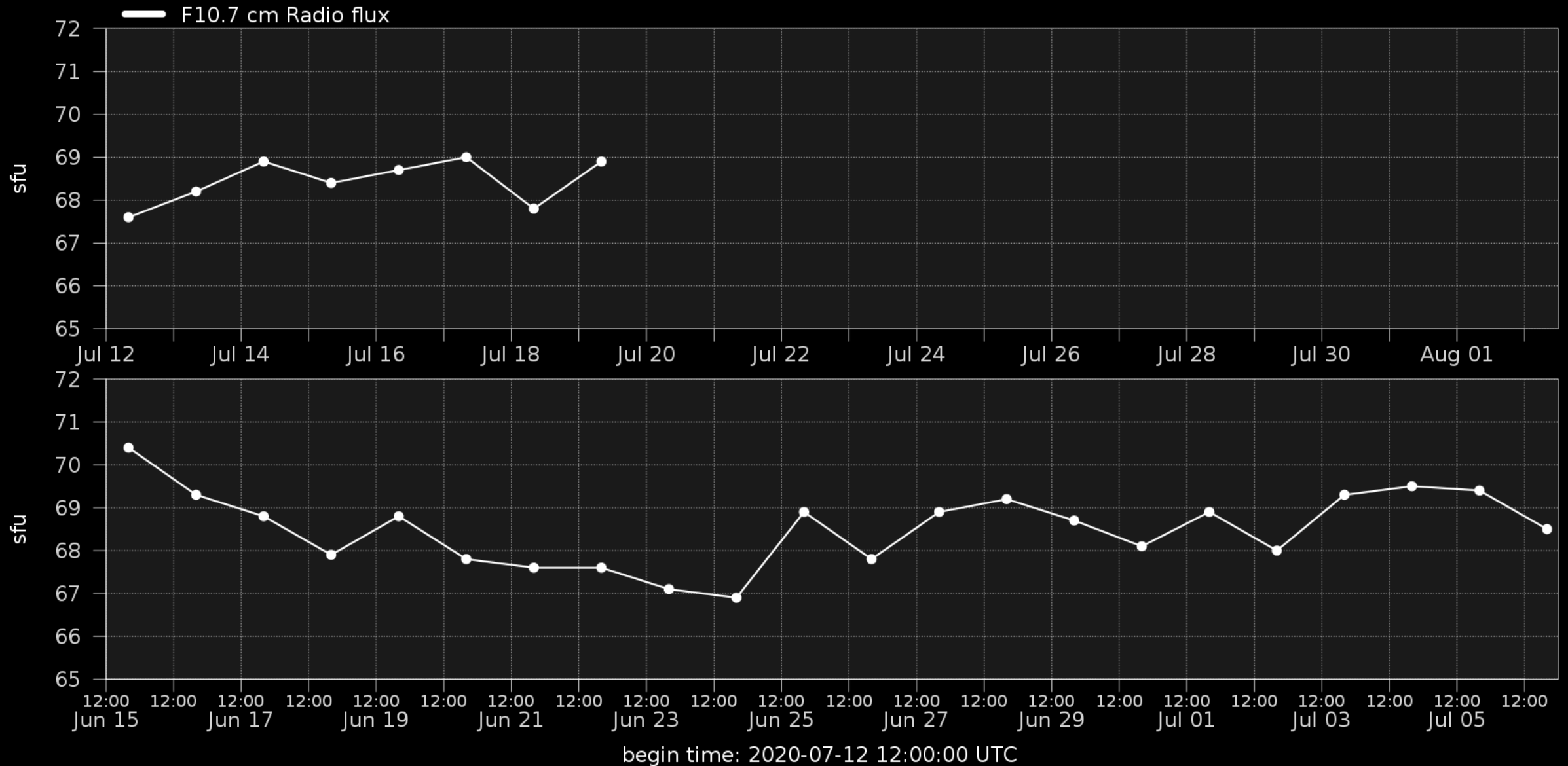


Kanzelhöhe Observatory
2020-07-18 07:20:41 UT

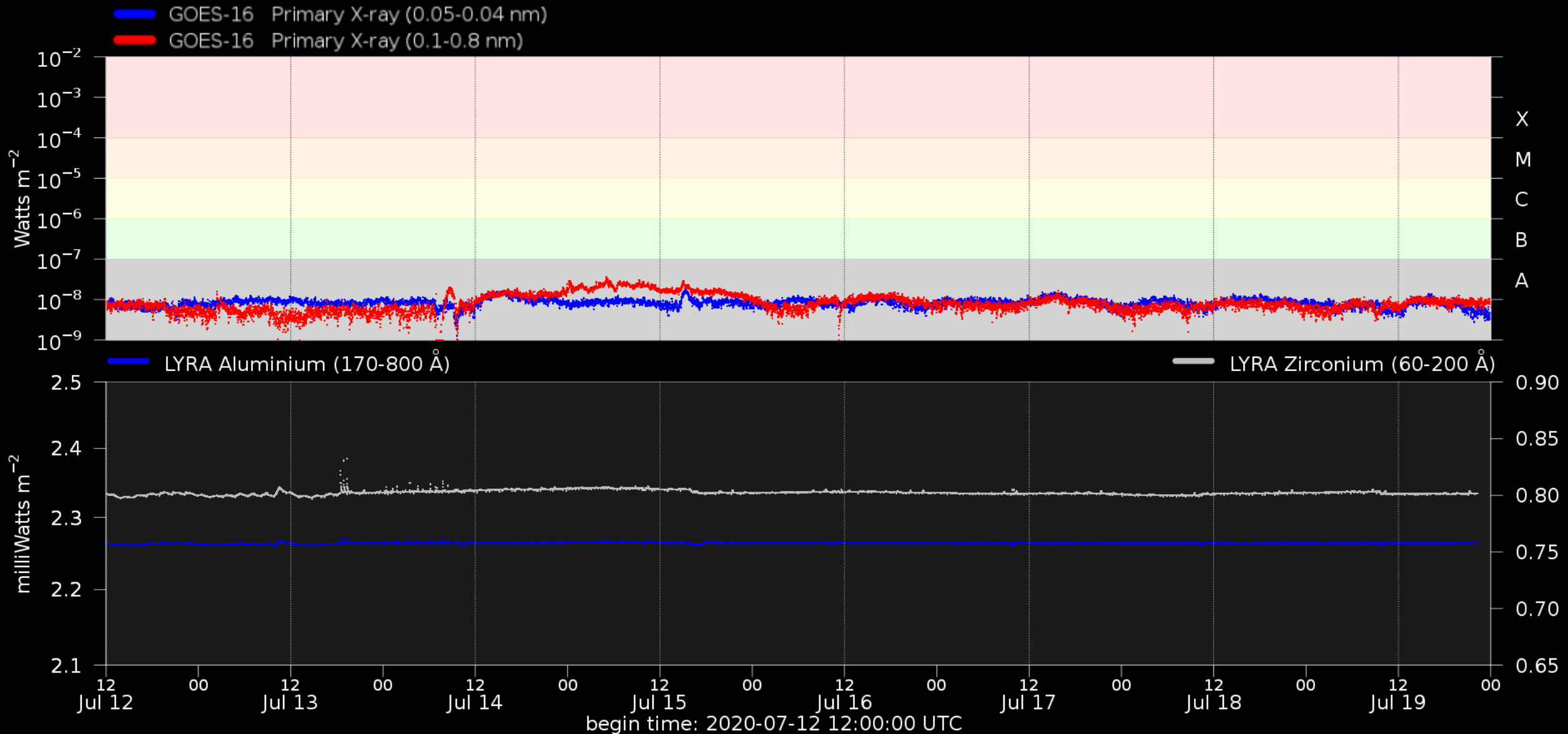
University of Graz
(Austria)



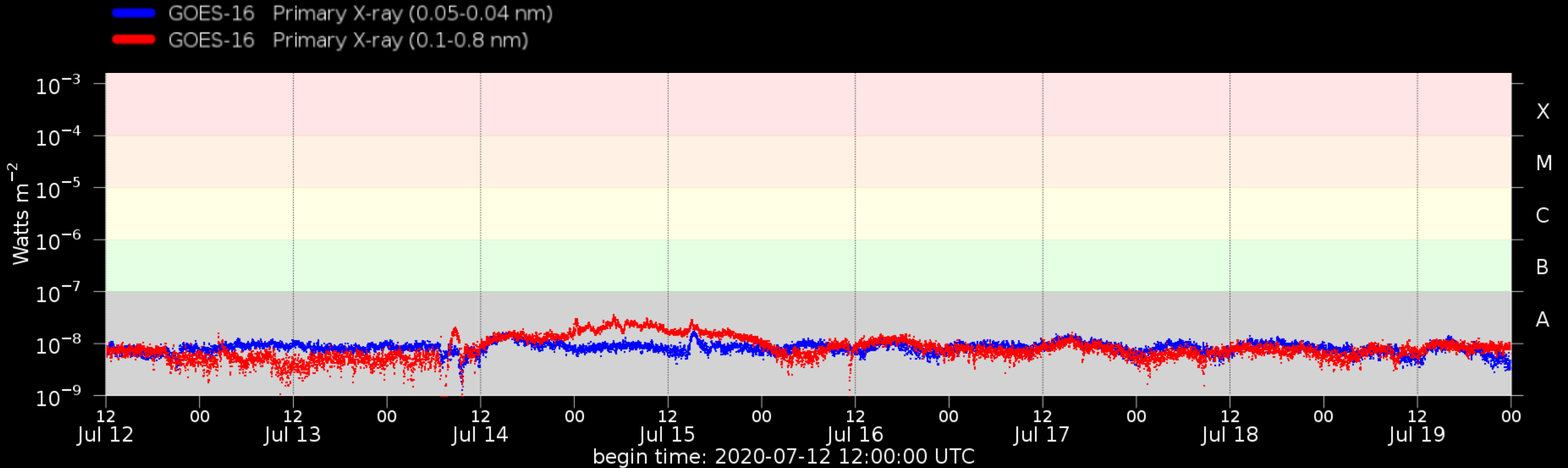
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity

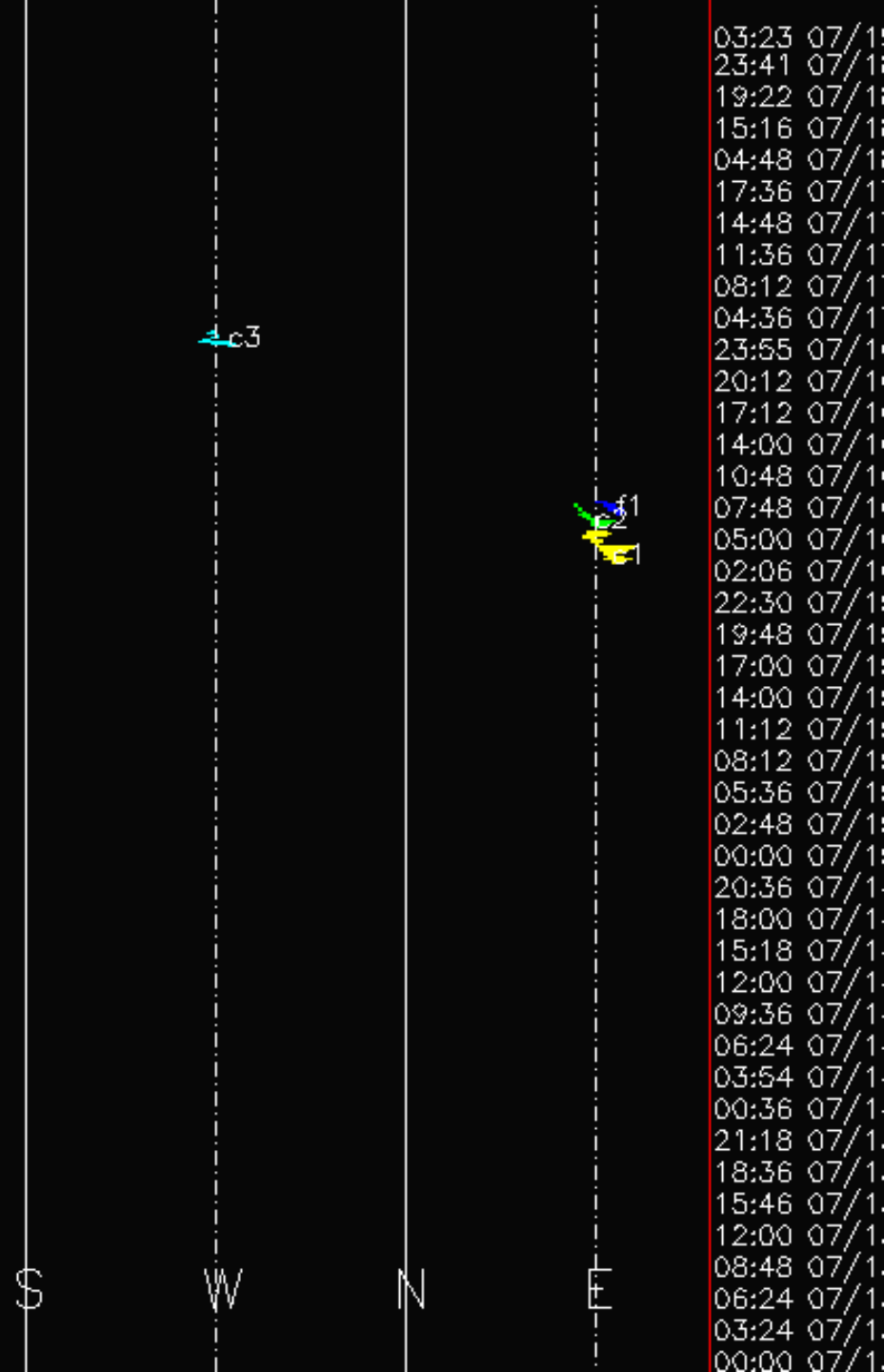


Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

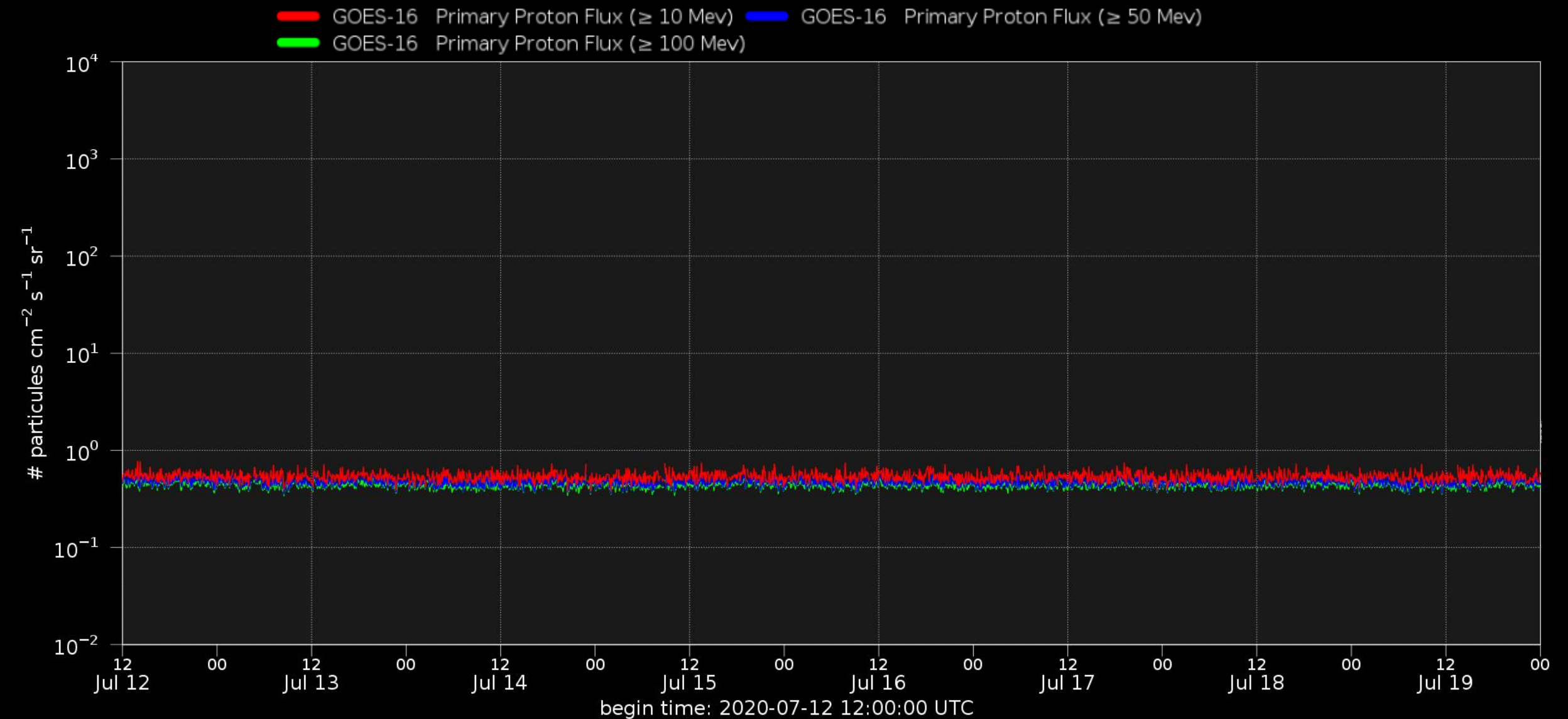
Issue date	2020-07-12	2020-07-13	2020-07-14	2020-07-15	2020-07-16	2020-07-17	2020-07-18	2020-07-19
Probability	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Coronal Mass Ejection

No Earth directed CMEs
observed in available
coronagraphic imagery



Solar proton flux

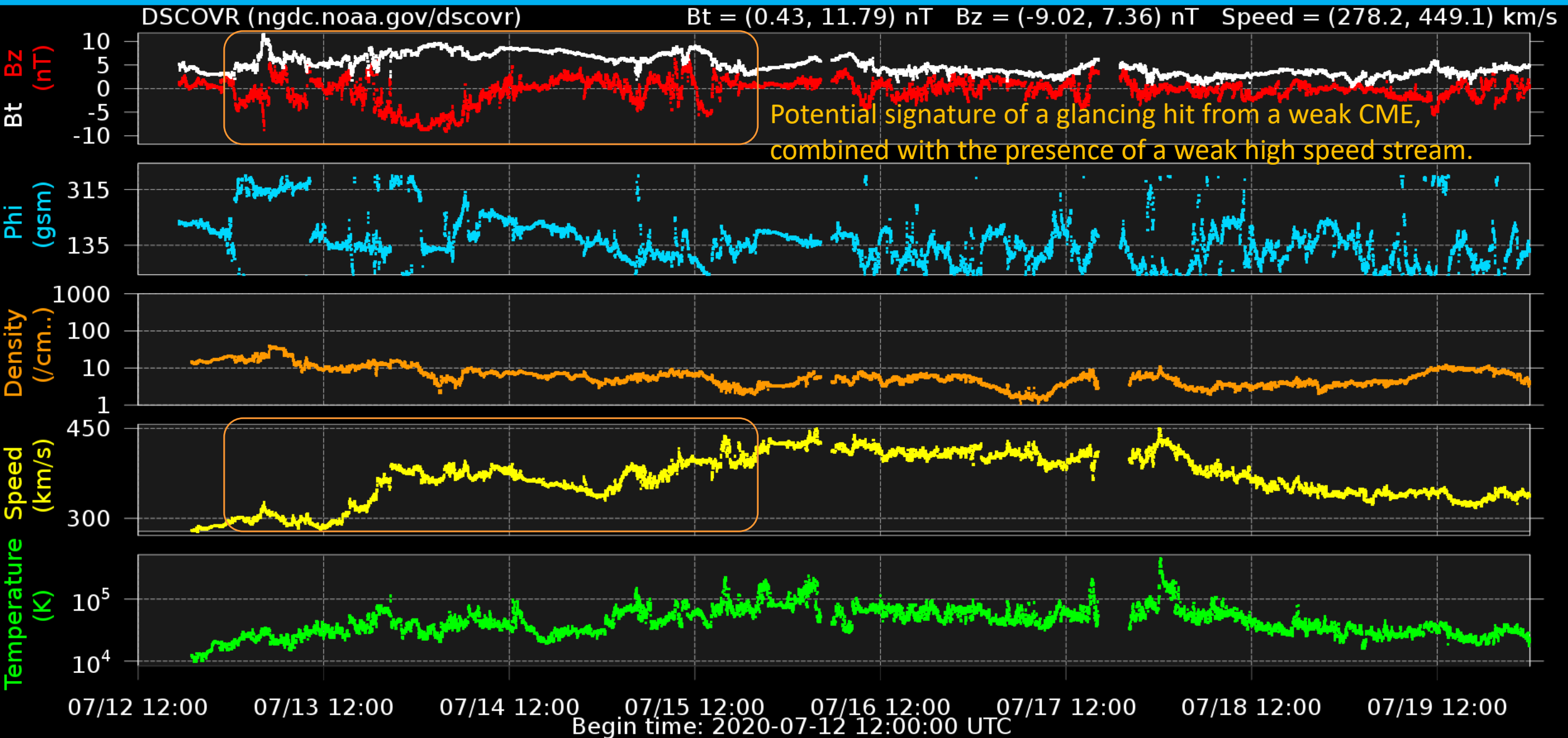


Solar Wind and Geomagnetic Activity



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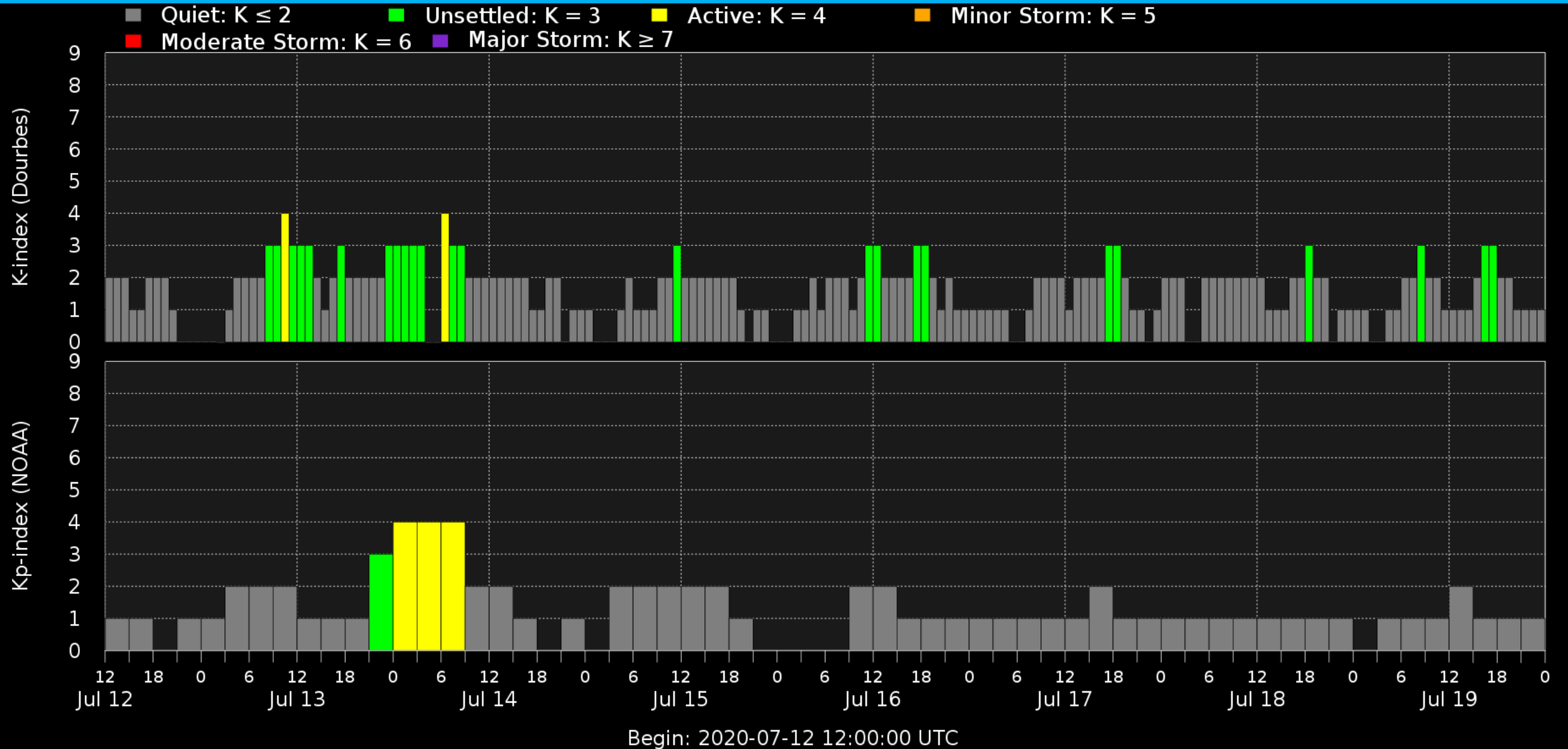
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



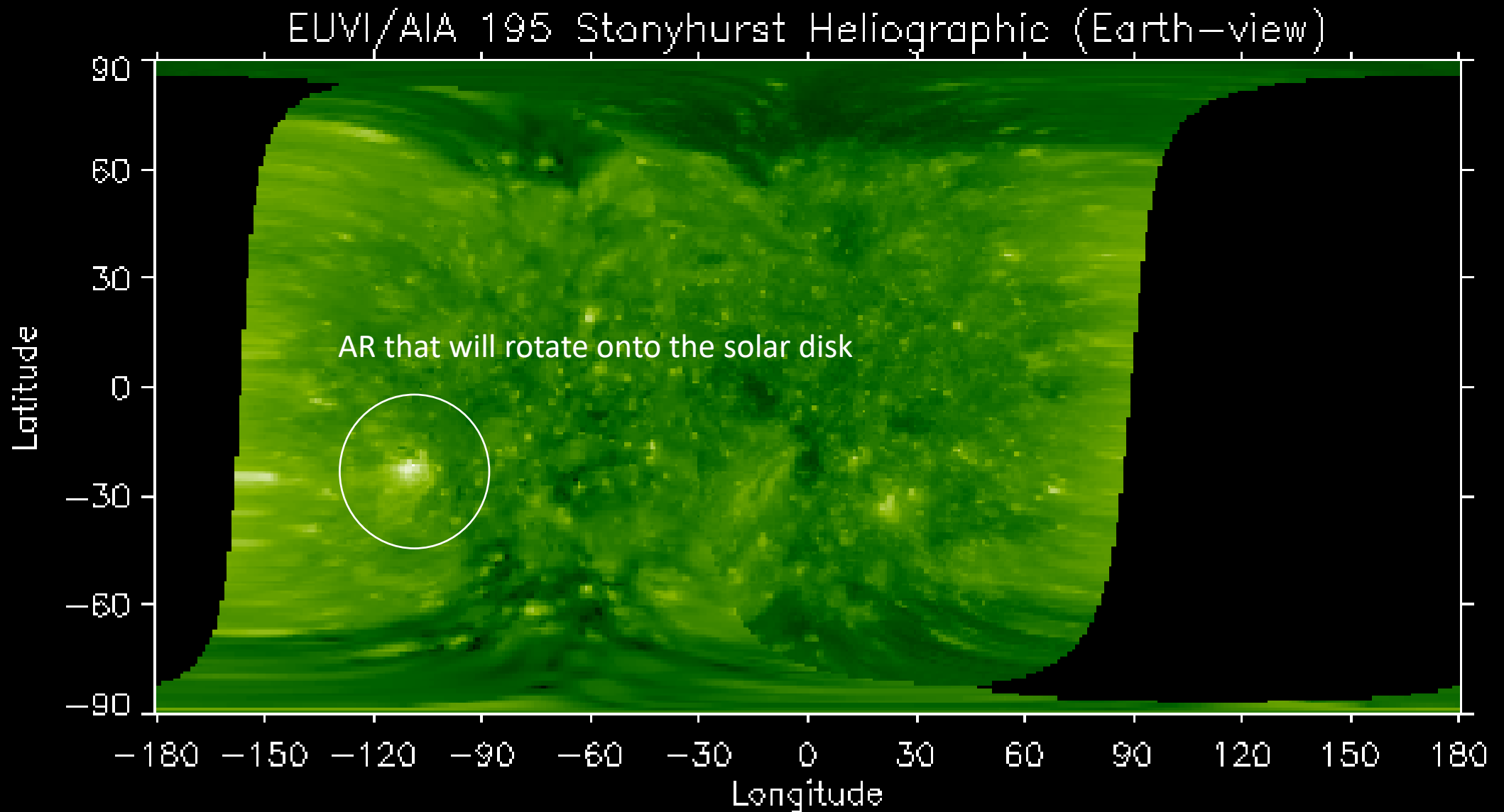
Outlook



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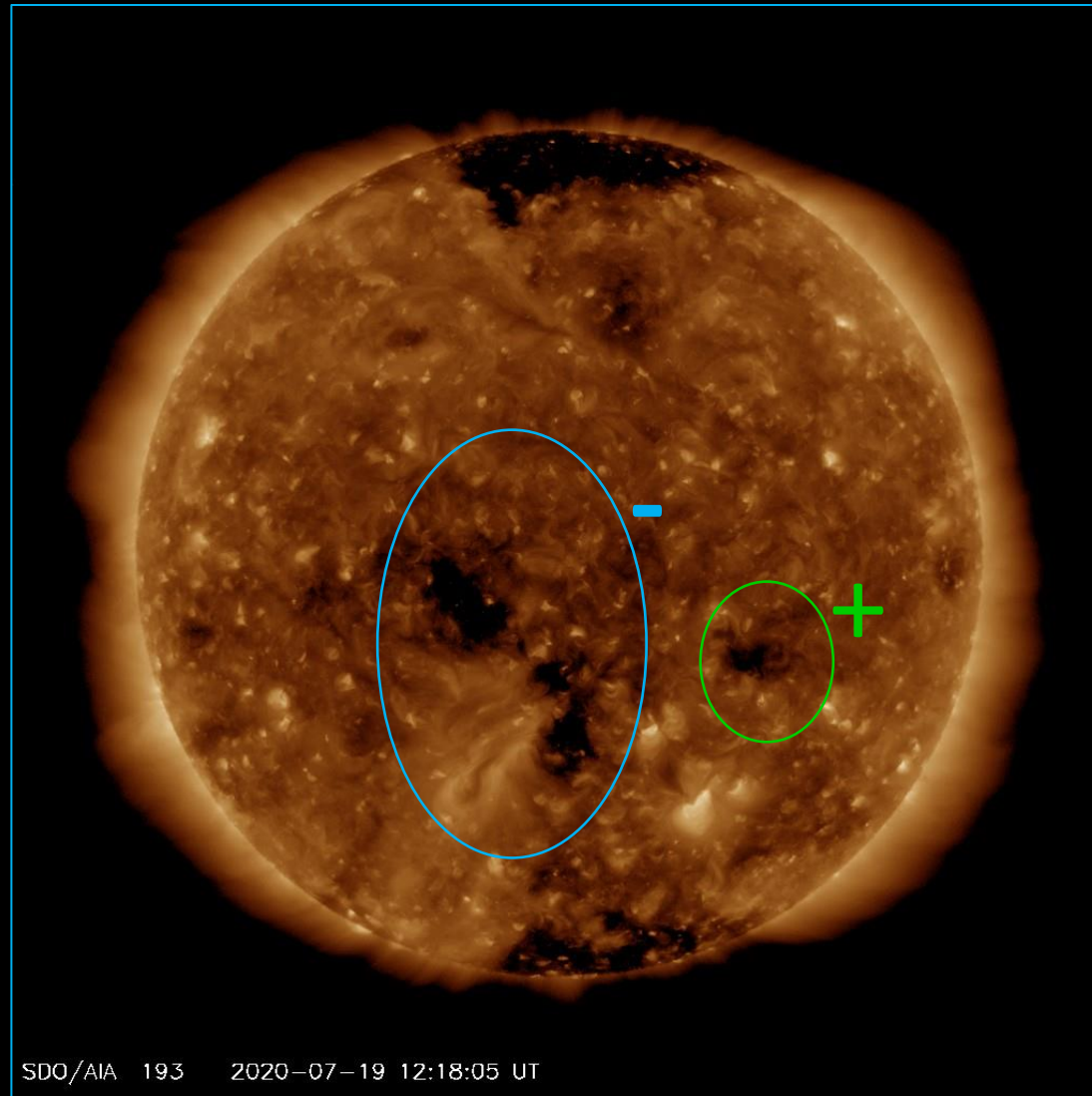
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Outlook: Solar activity

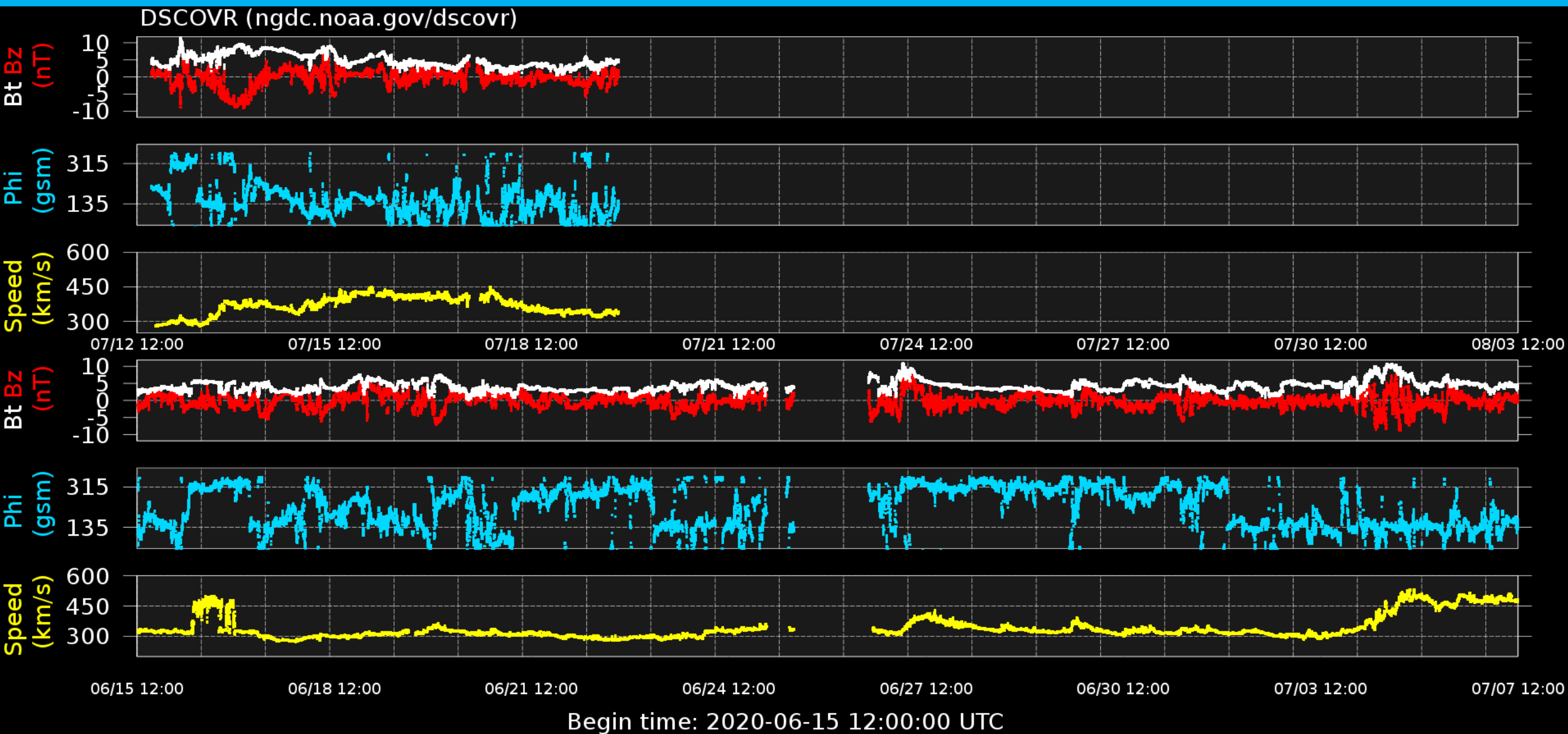


Outlook: Solar wind

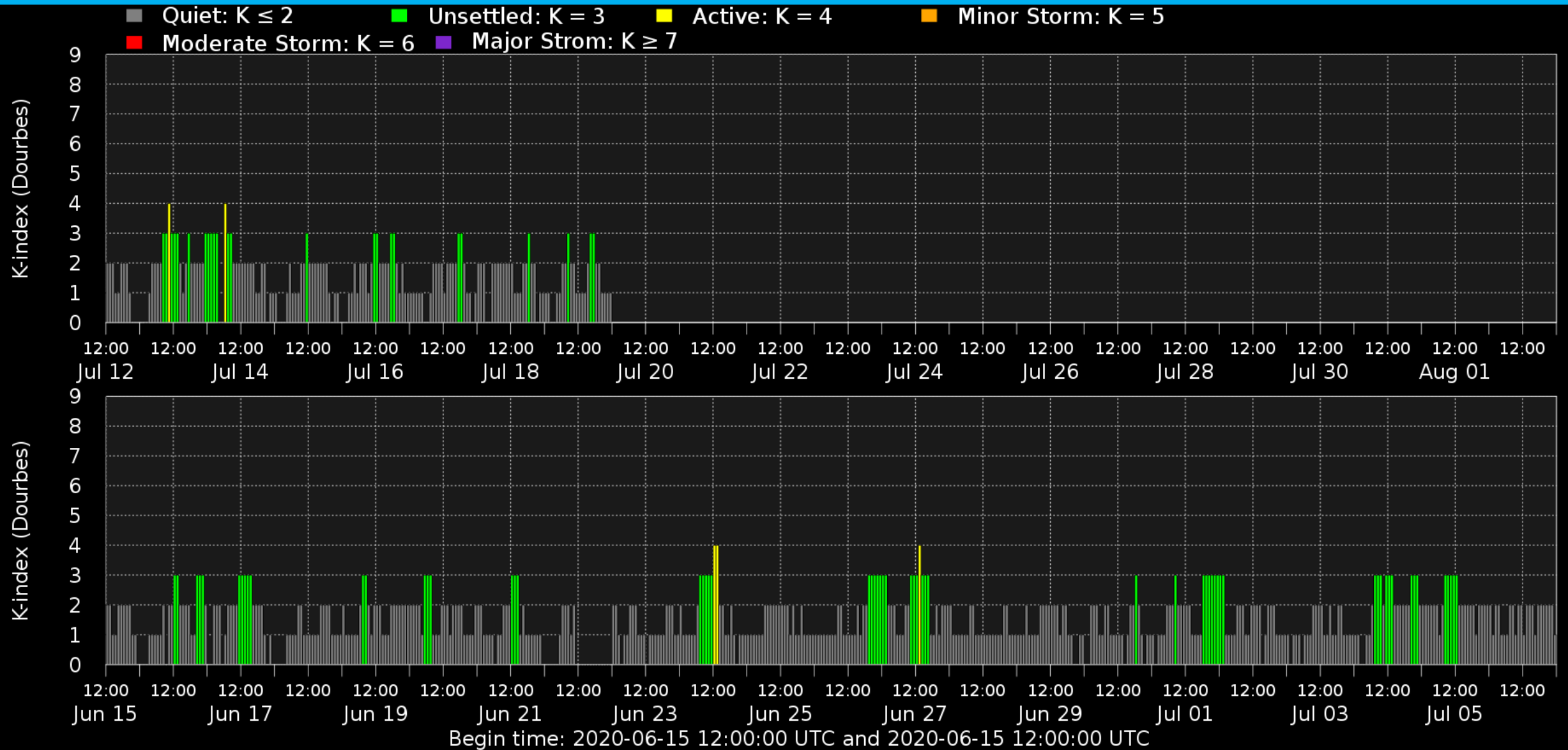
SDO/AIA 19.3 nm 2020-07-19



Outlook: Solar wind



Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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