

SIDC Space Weather Briefing

21 July 2019 - 28 July 2019

Judith de Patoul
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2019-07-21 12:00 UT to 2019-07-28 12:00 UT

Active regions	Small short duration bipolar sunspot (NOAA 2745, Catania sunspot group 21)
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	One stable filament
CMEs	None
Proton Events	None

Solar wind and geomagnetic conditions from 2019-07-21 12:00 UT to 2019-07-28 12:00 UT

Coronal Holes	Small equatorial coronal hole (negative polarity)
ICME	None
SW Conditions	Speed: 300-450 km/s Bt: max 10 nT
K-indices	max K-index (Dourbes): 4.0 max Kp-index (NOAA): 3

All Quiet Alert: All quiet over the entire week

Solar Activity

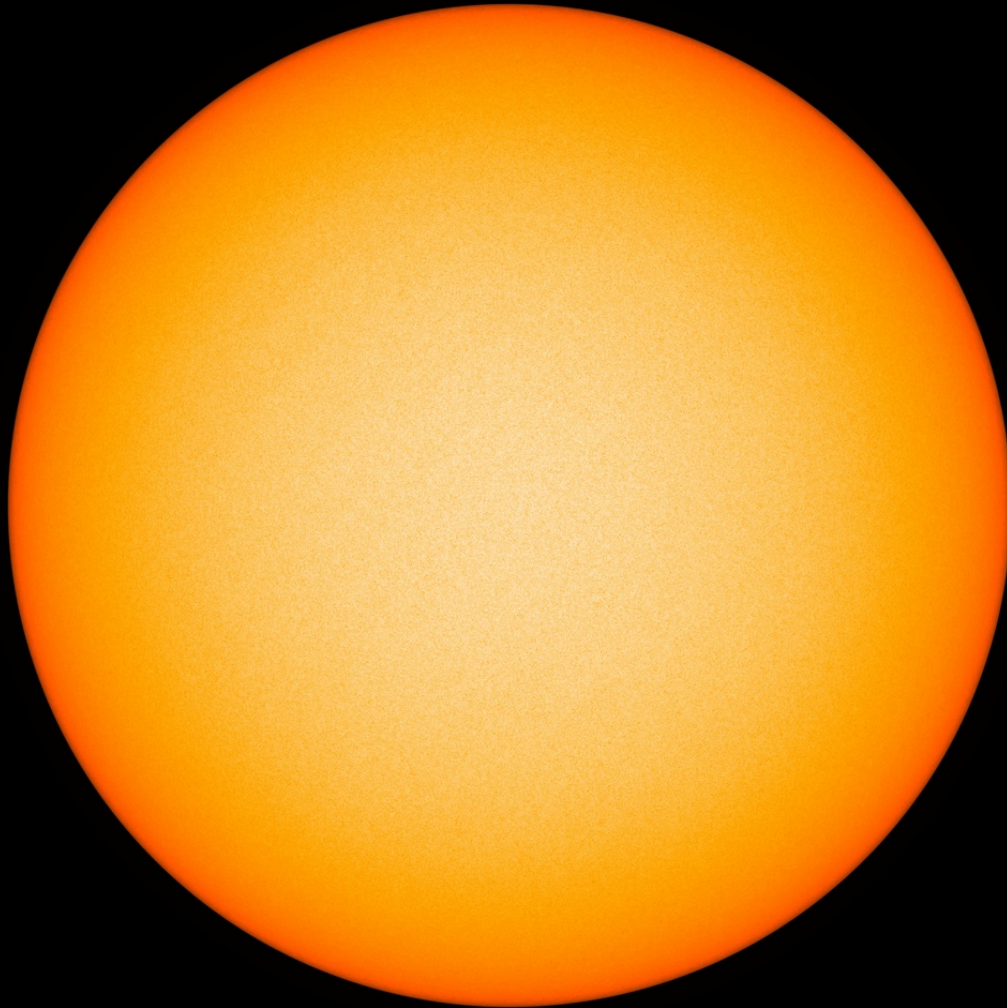


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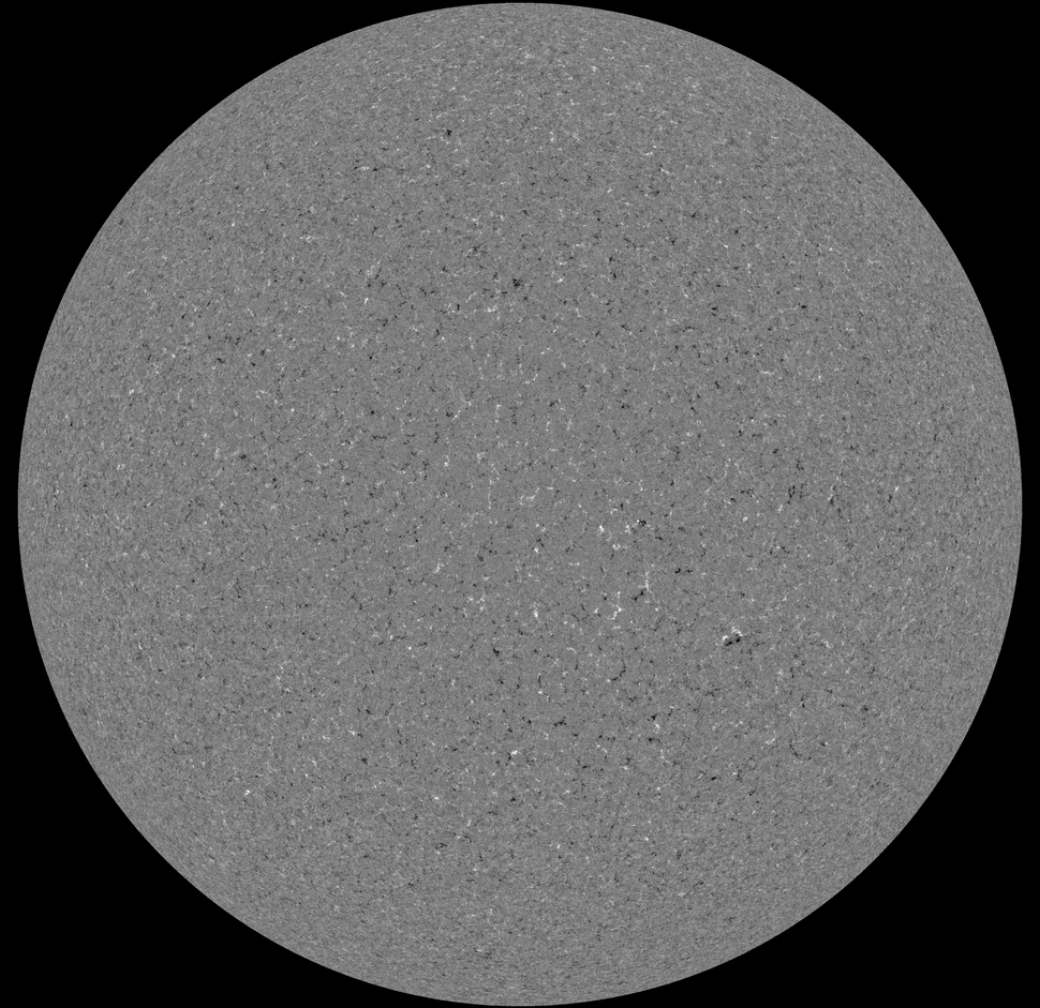
Solar active region - start of the week

SDO/HMI White Light 2019-07-21



SDO/HMI Quick-Look Continuum: 20190721_114500

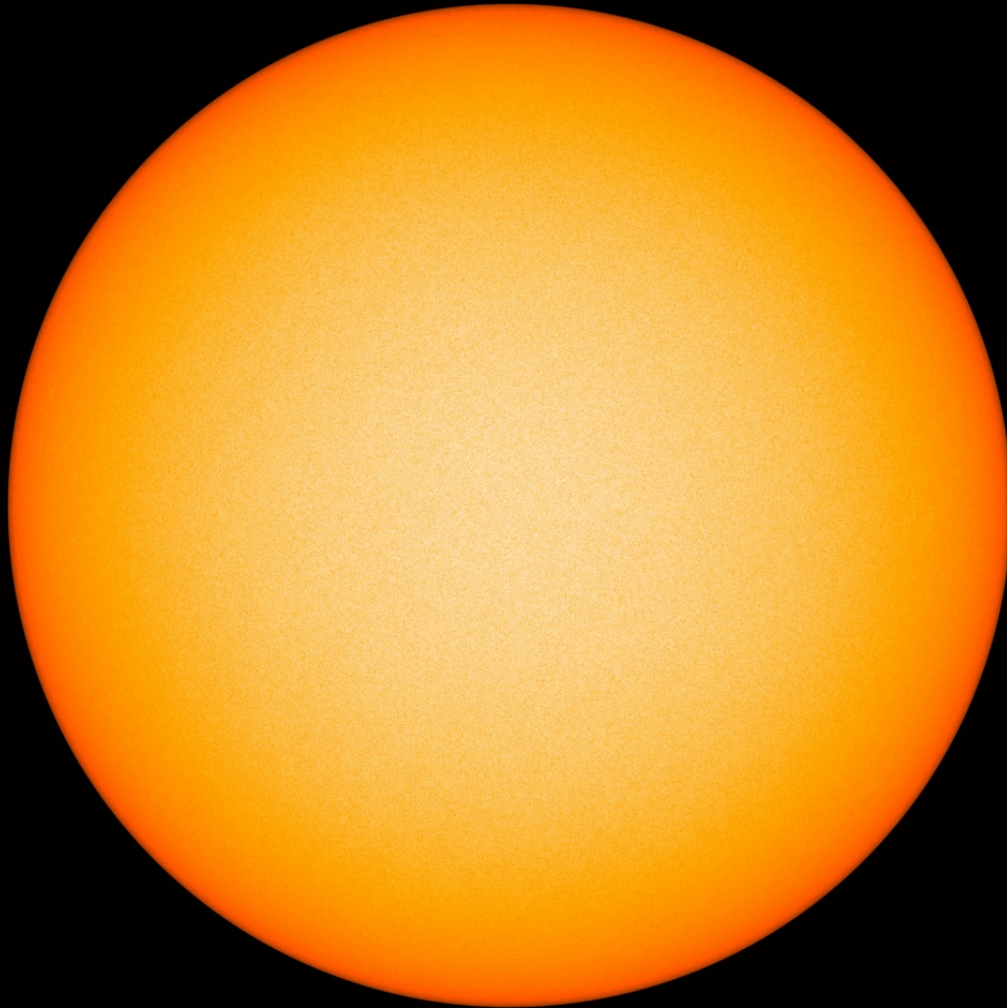
SDO/HMI Magnetogram 2019-07-21



SDO/HMI Quick-Look Magnetogram: 20190721_114500

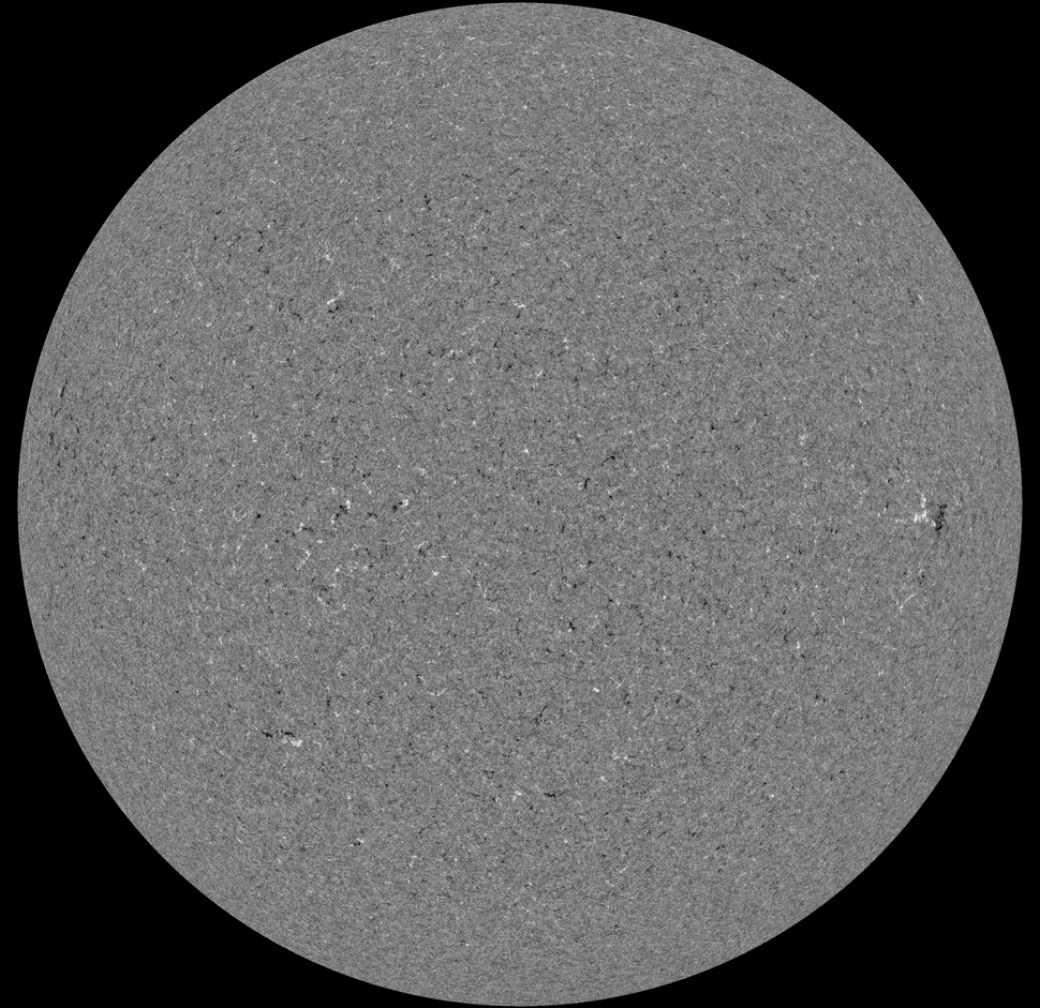
Solar active region - middle of the week

SDO/HMI White Light 2019-07-24



SDO/HMI Quick-Look Continuum: 20190724_110000

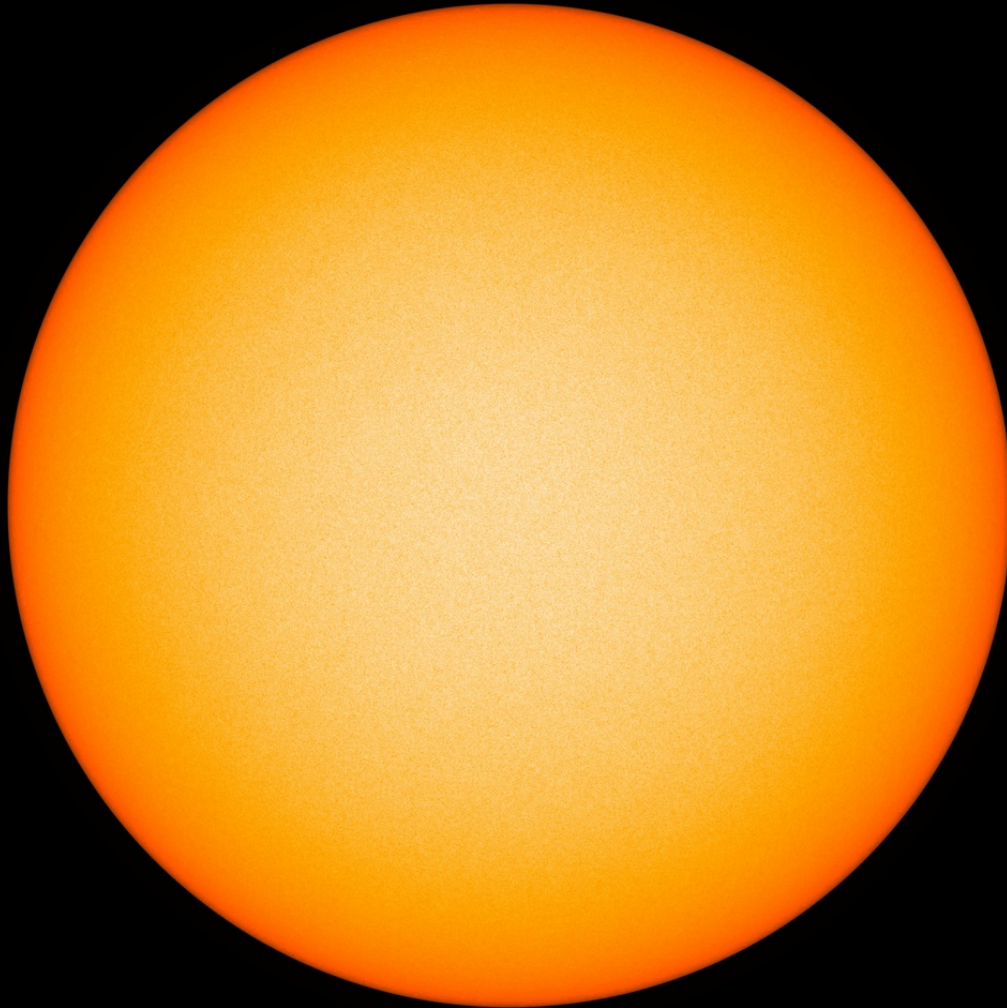
SDO/HMI Magnetogram 2019-07-24



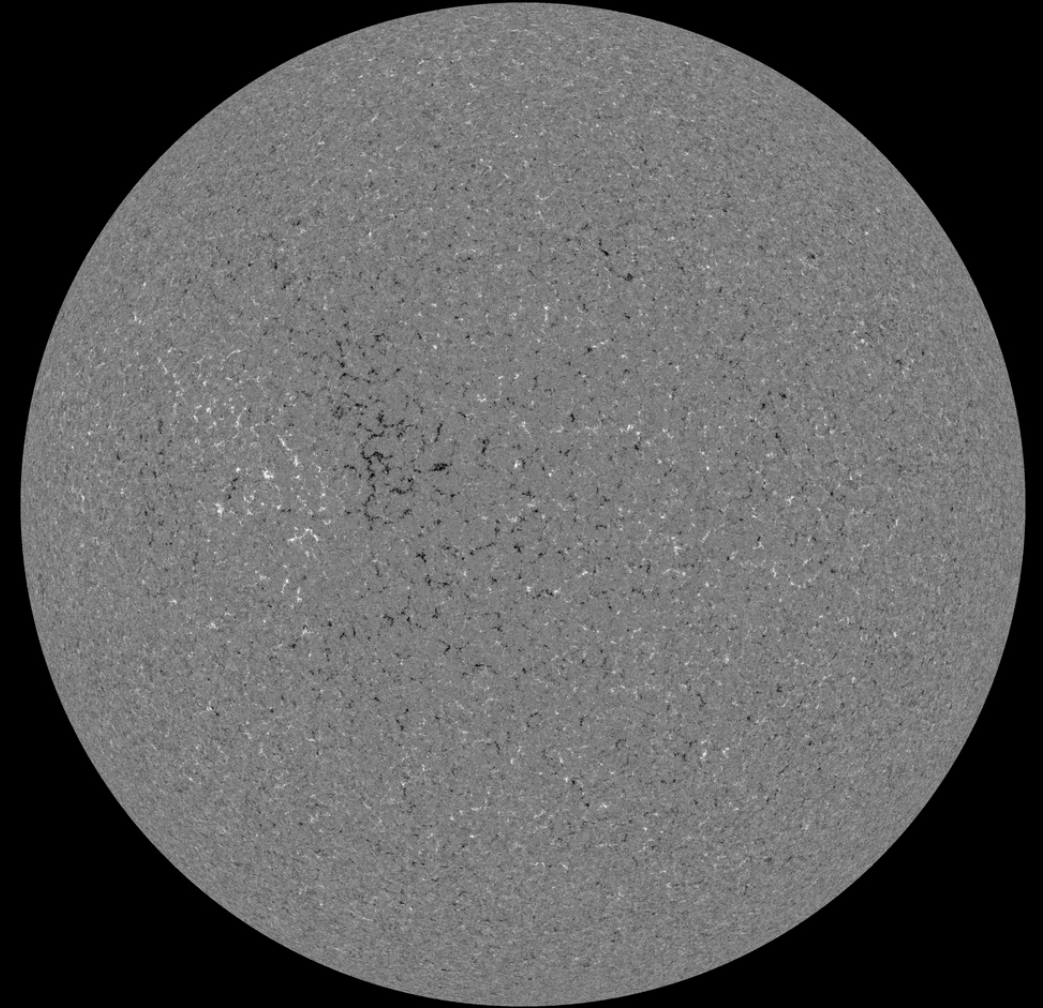
SDO/HMI Quick-Look Magnetogram: 20190724_110000

Solar active region - end of the week

SDO/HMI White Light 2019-07-28

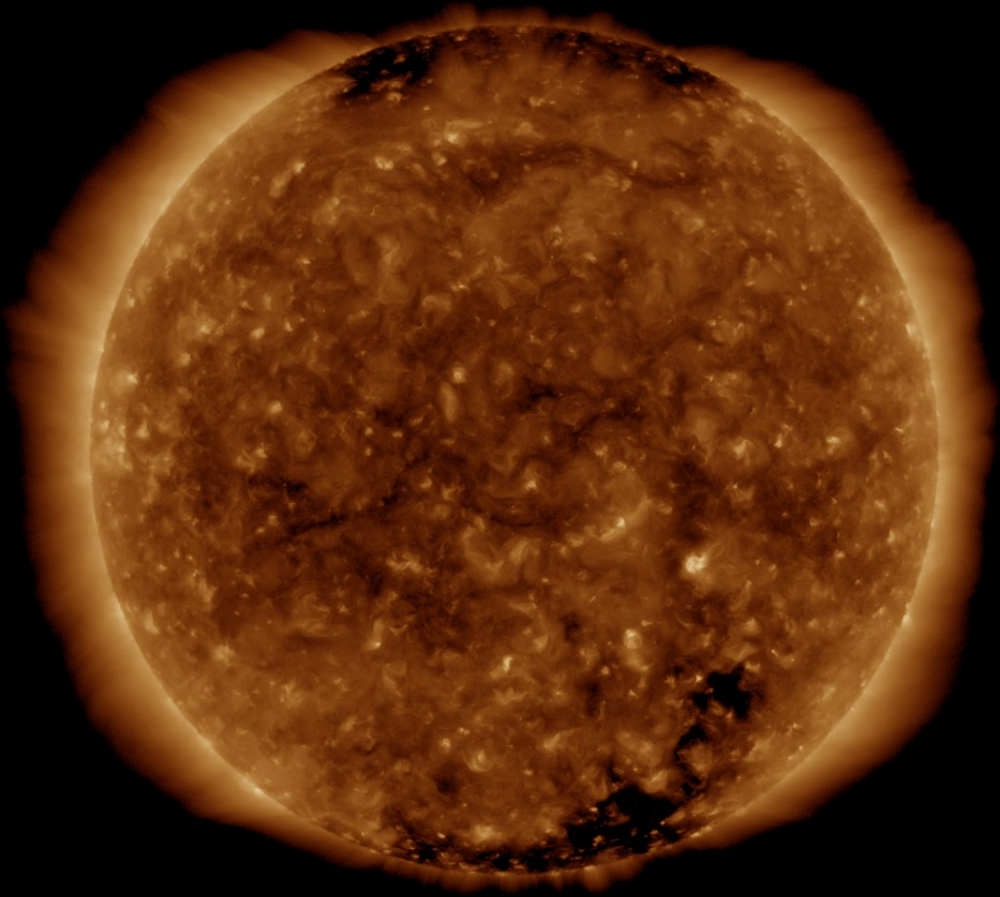


SDO/HMI Magnetogram 2019-07-28

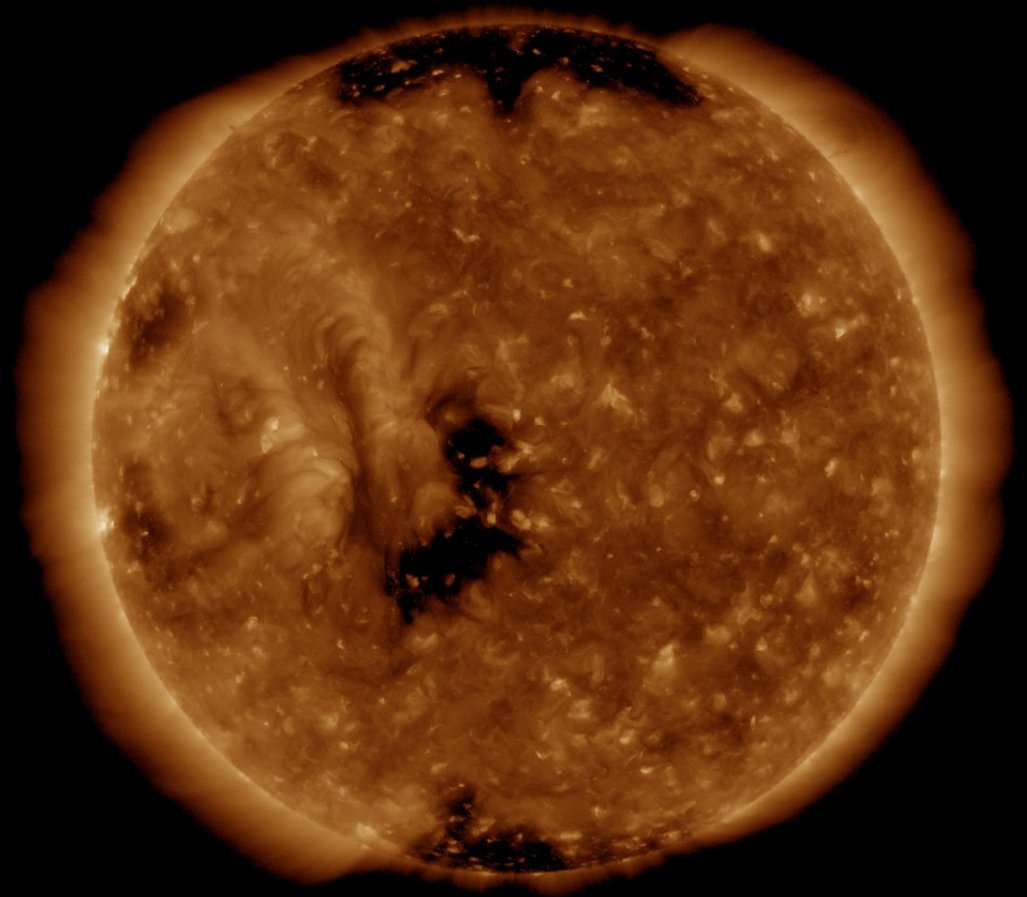


Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-07-21



SDO/AIA 19.3 nm 2019-07-28

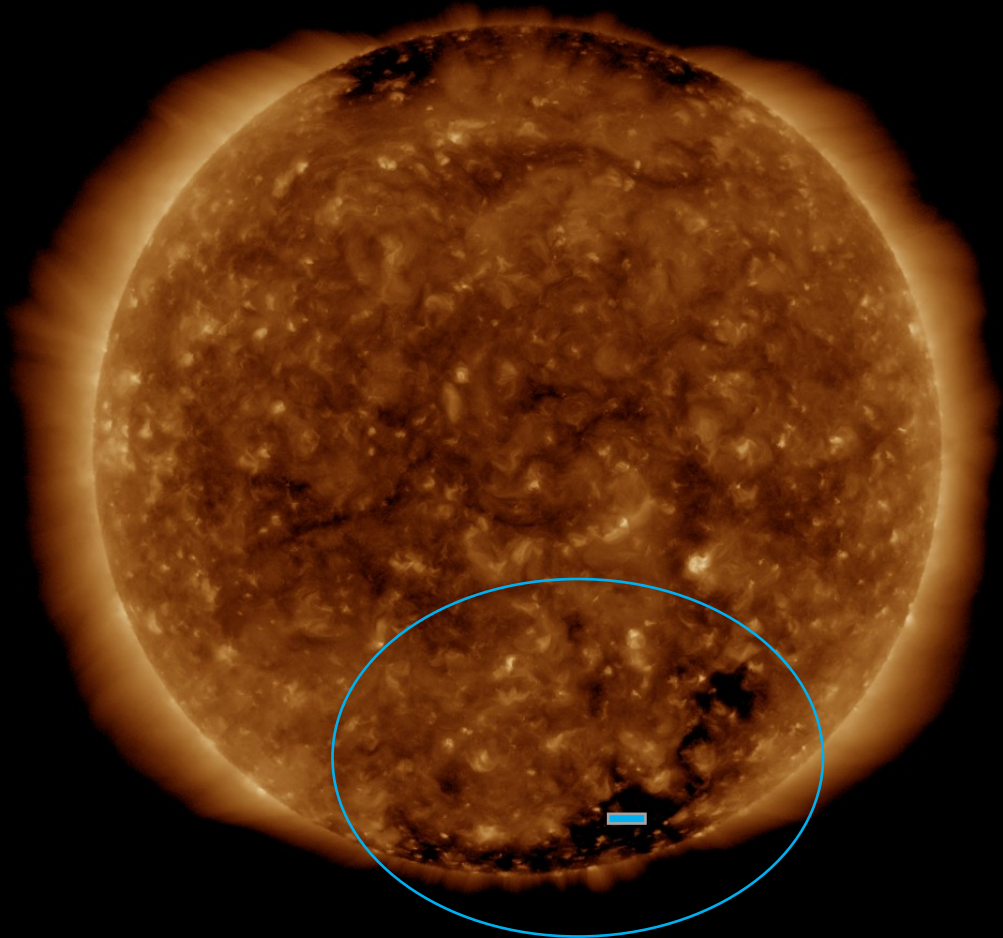


SDO/AIA 193 2019-07-21 12:10:05 UT

SDO/AIA 193 2019-07-28 12:10:41 UT

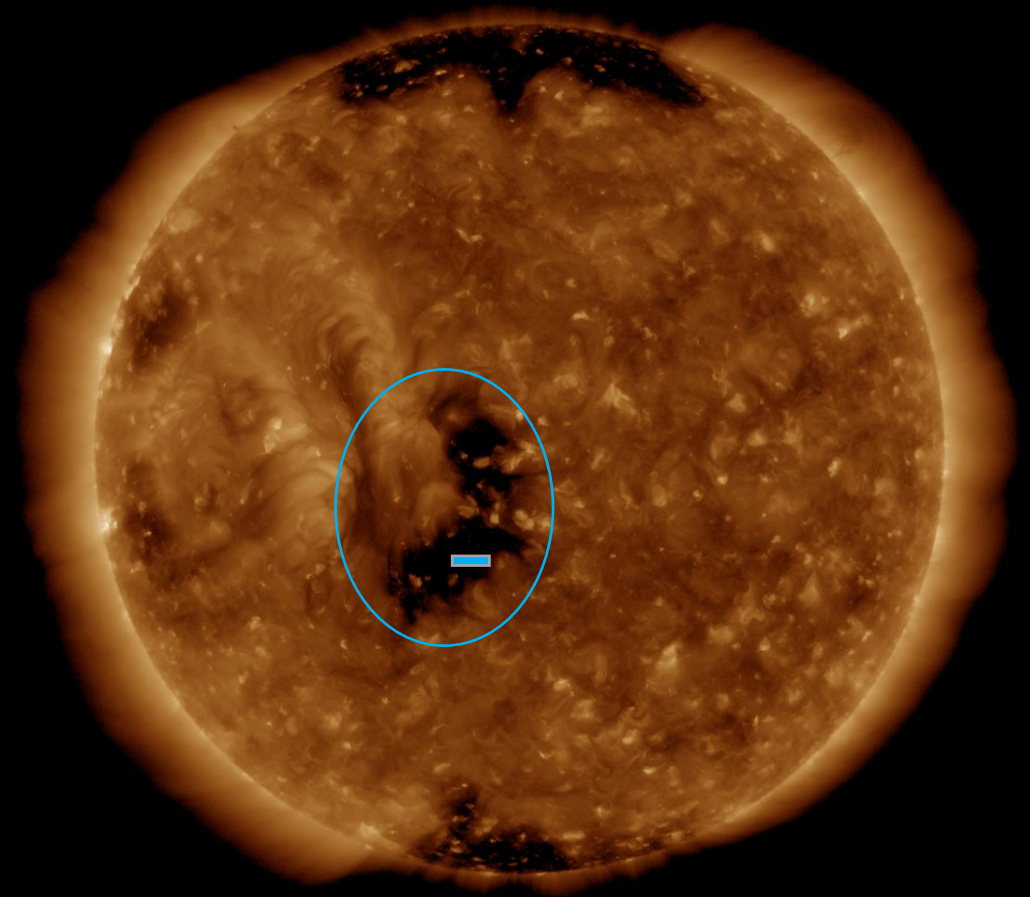
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-07-21



SDO/AIA 193 2019-07-21 12:10:05 UT

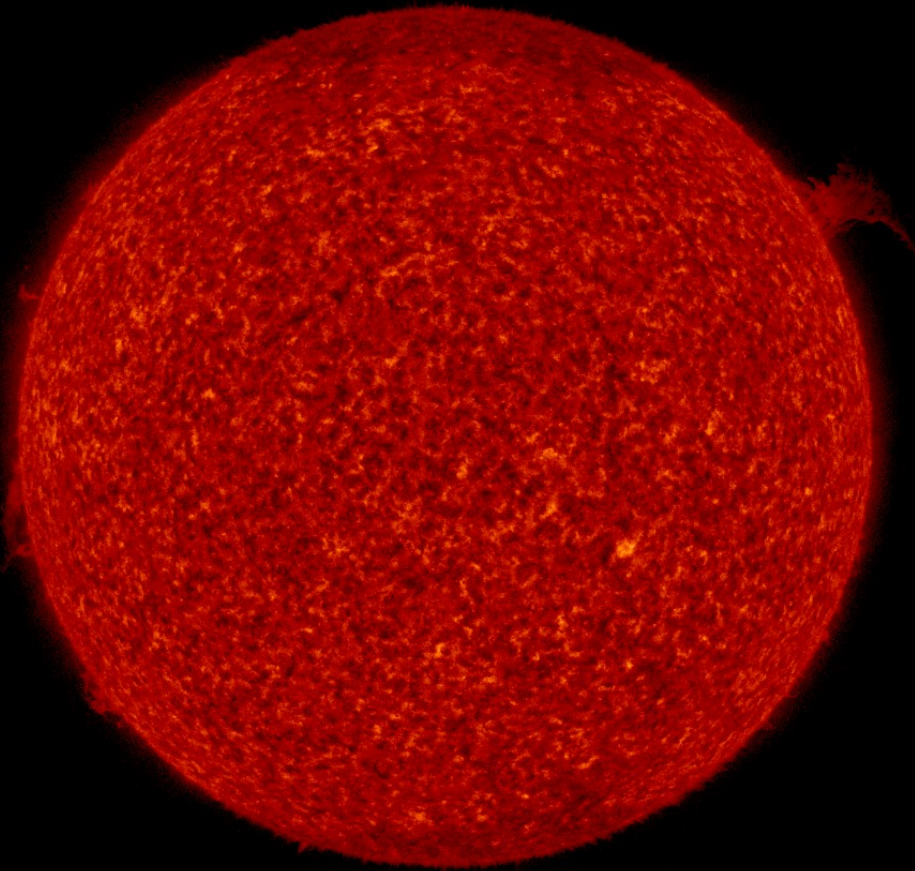
SDO/AIA 19.3 nm 2019-07-28



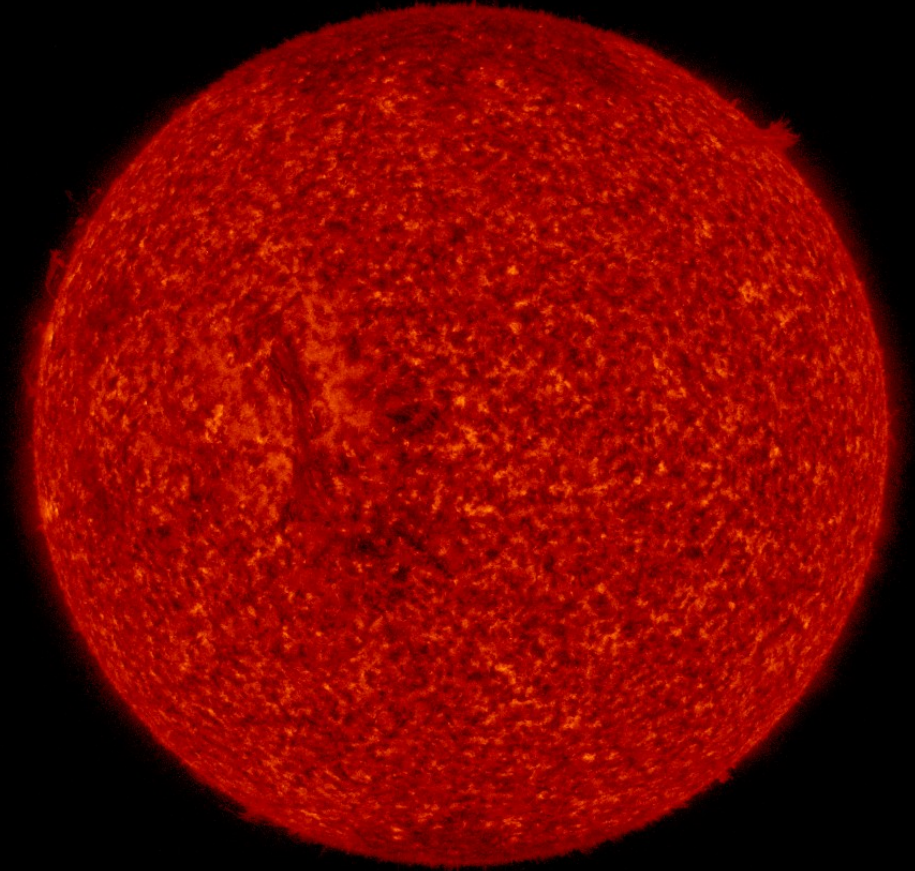
SDO/AIA 193 2019-07-28 12:10:41 UT

Solar active region & Filament

SDO/AIA 30.4 nm 2019-07-21



SDO/AIA 30.4 nm 2019-07-28

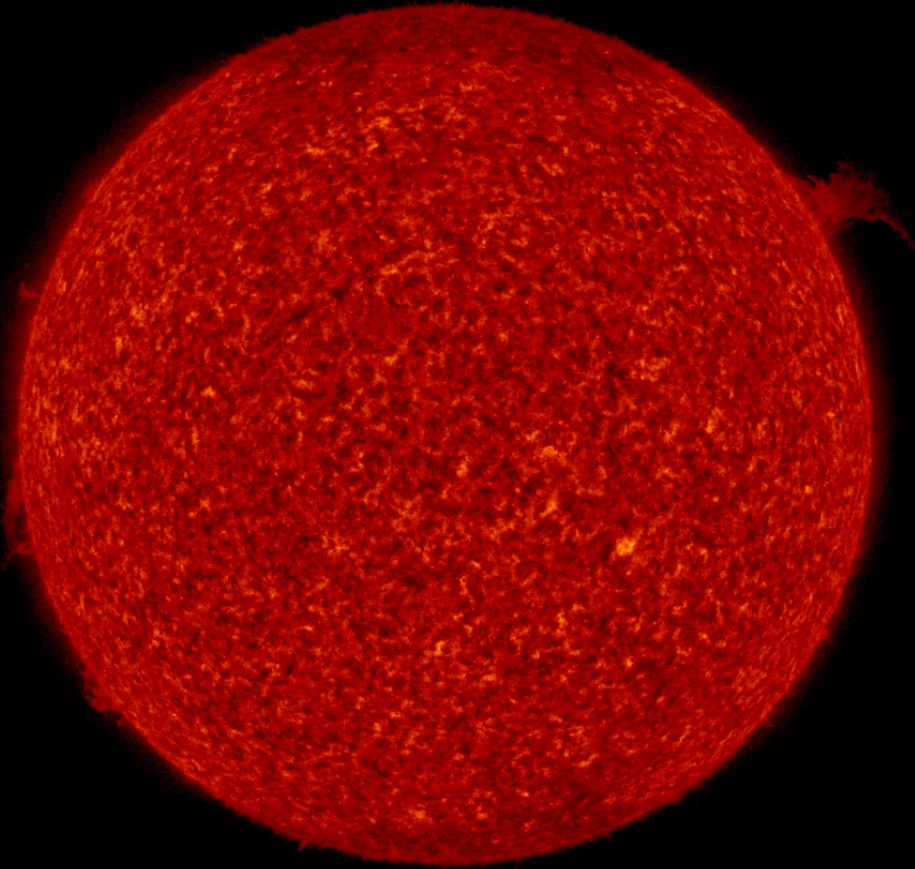


SDO/AIA 304 2019-07-21 12:14:18 UT

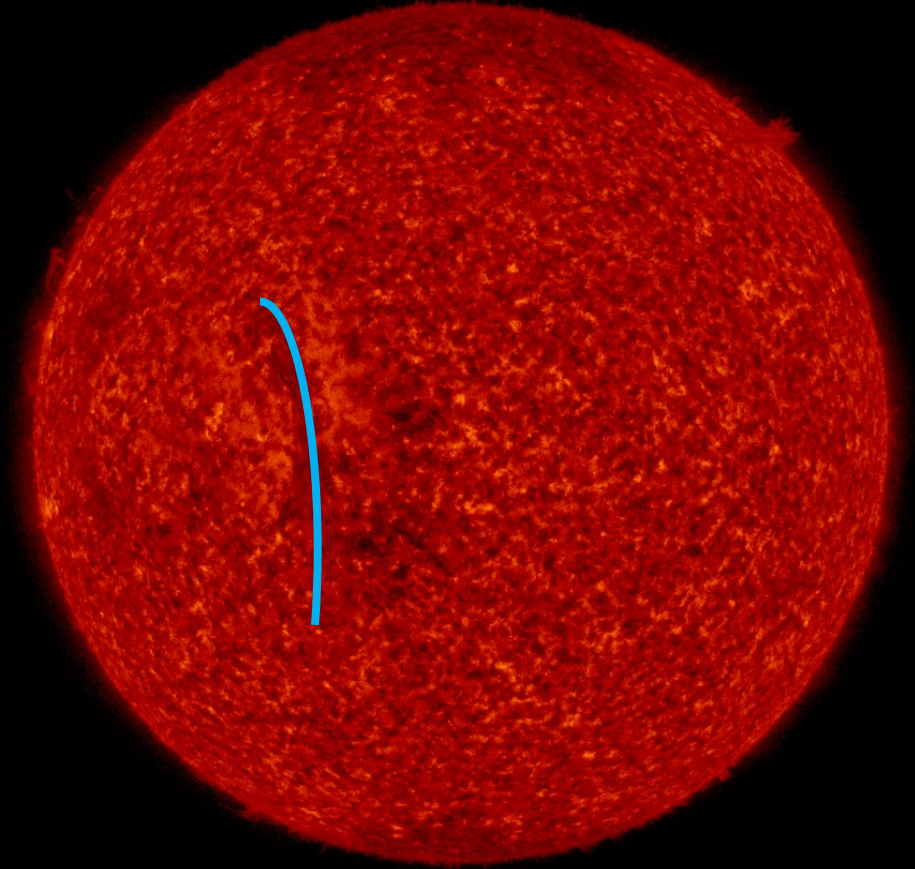
SDO/AIA 304 2019-07-28 12:13:06 UT

Solar active region & Filament

SDO/AIA 30.4 nm 2019-07-21



SDO/AIA 30.4 nm 2019-07-28



SDO/AIA 304 2019-07-21 12:14:18 UT

SDO/AIA 304 2019-07-28 12:13:06 UT

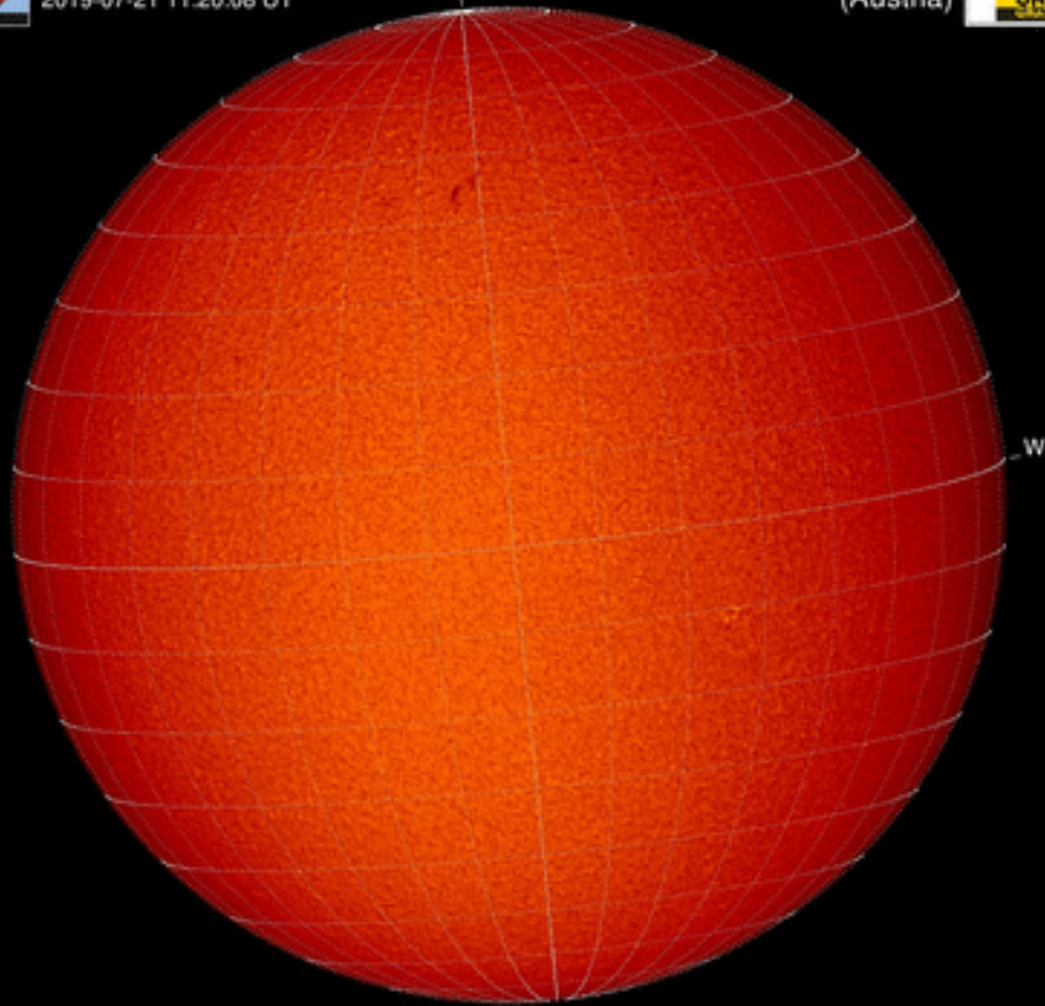
Filament & Filament eruption

H-alpha 2019-07-21



Kanzelhöhe Observatory
2019-07-21 11:20:08 UT

University of Graz
(Austria)

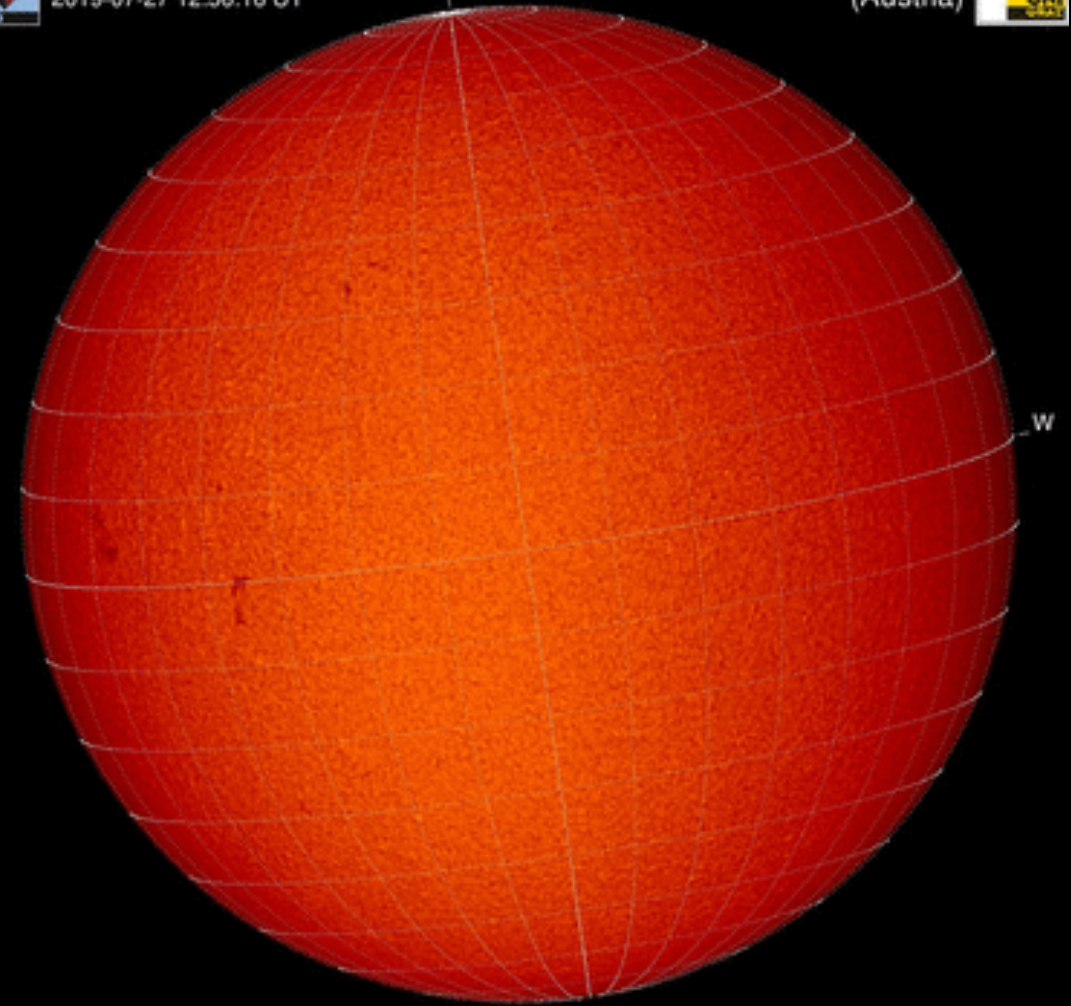


H-alpha 2019-07-28

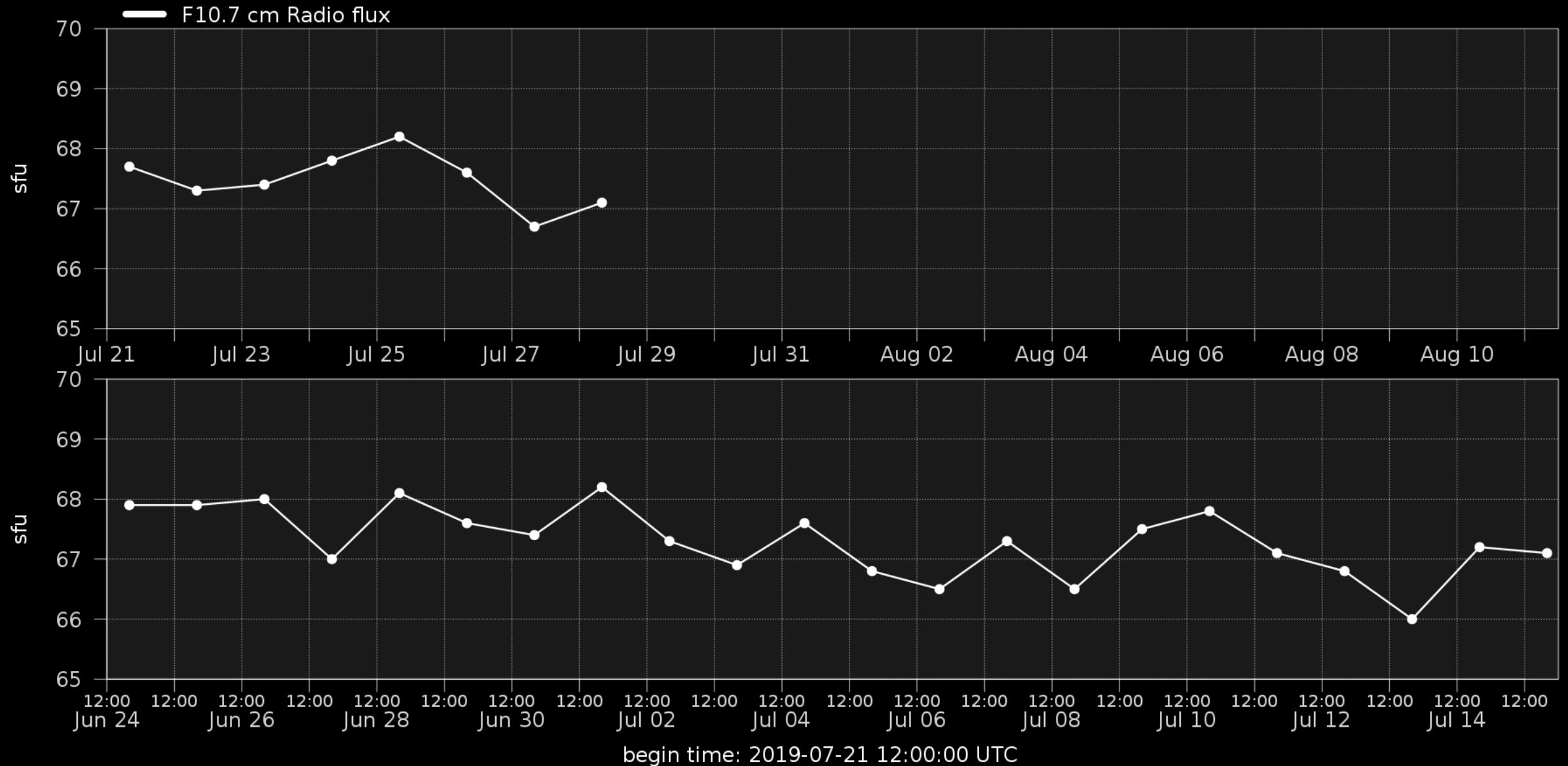


Kanzelhöhe Observatory
2019-07-27 12:56:16 UT

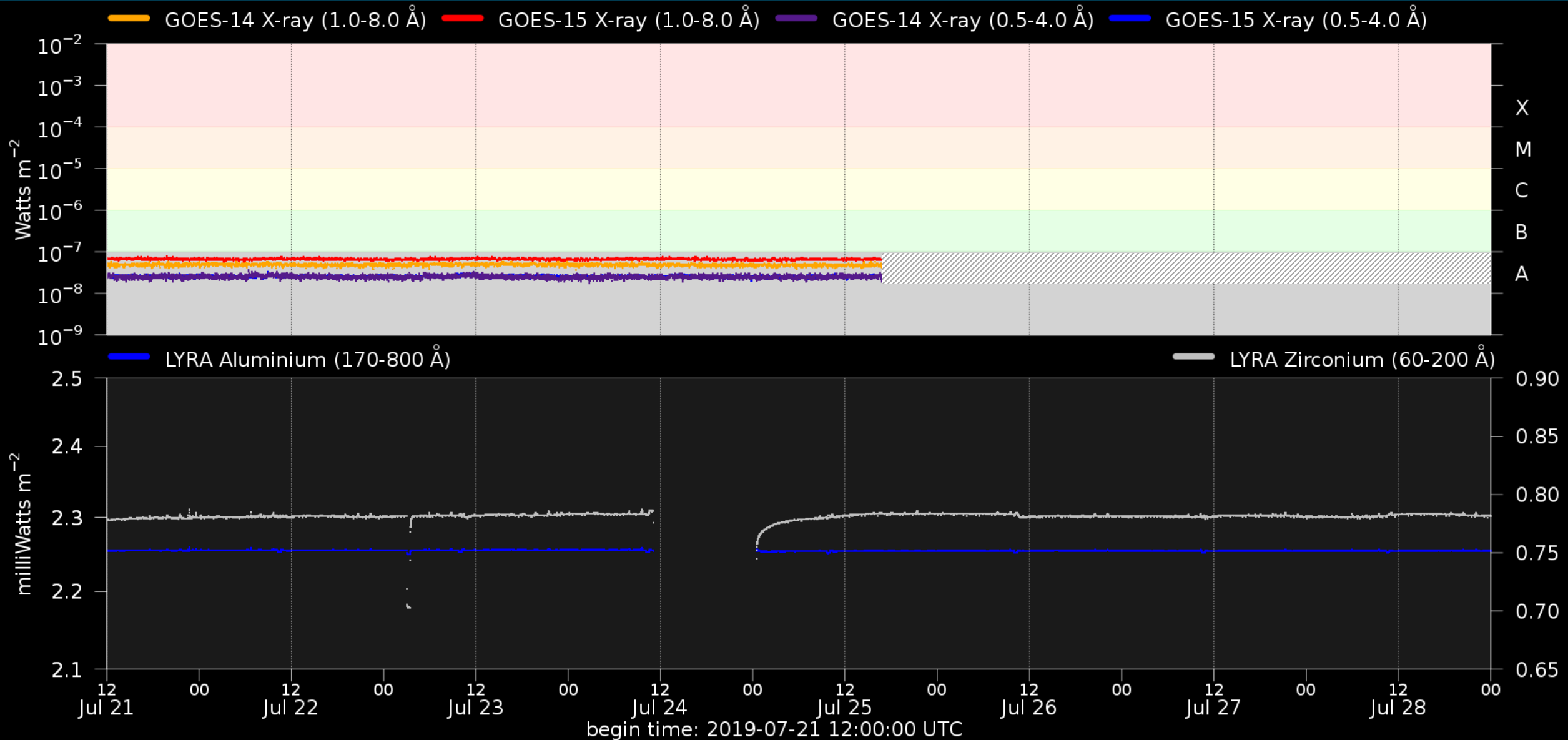
University of Graz
(Austria)



Solar F10.7cm radio flux

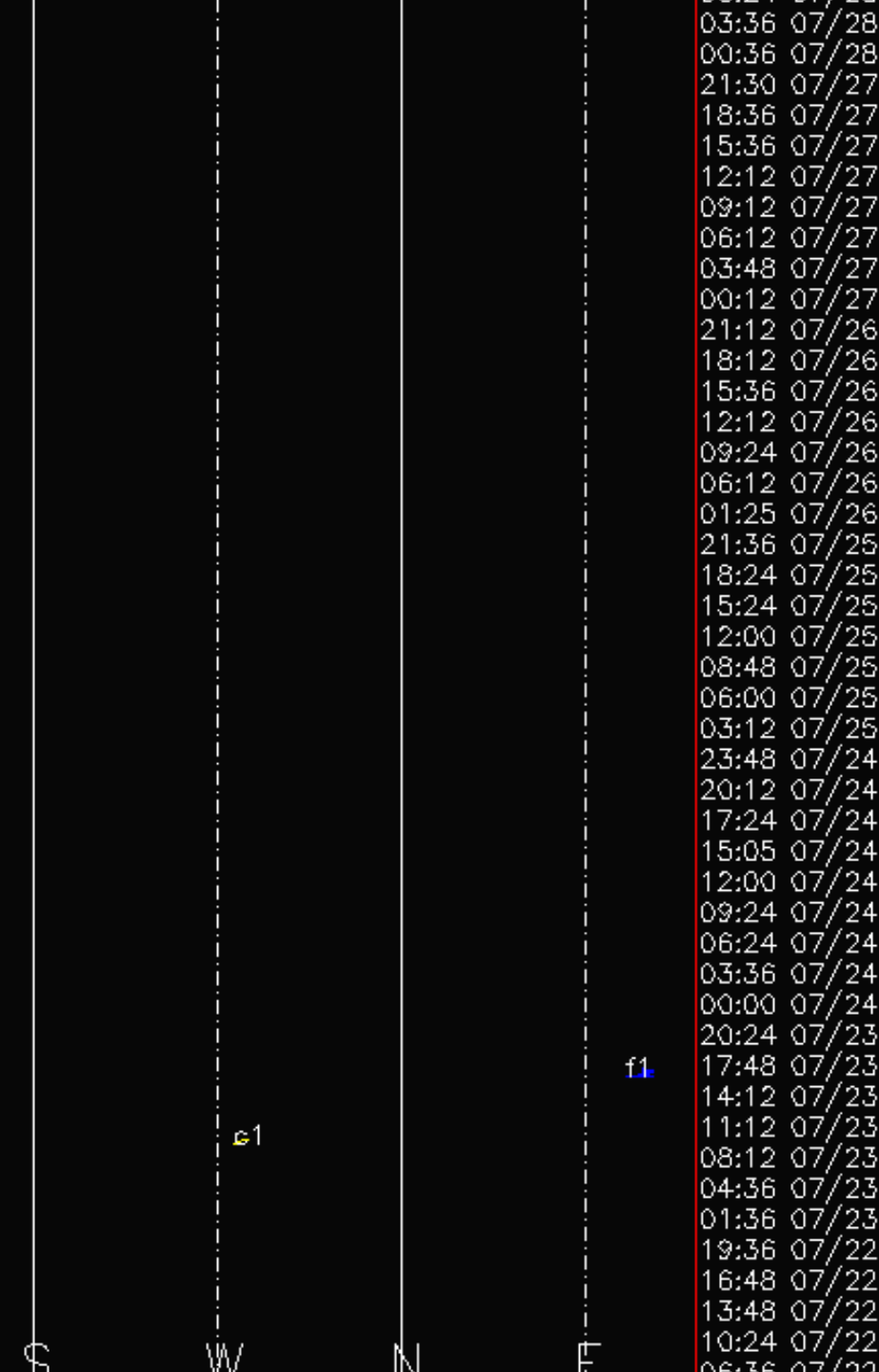


Solar X-Ray and UV flux

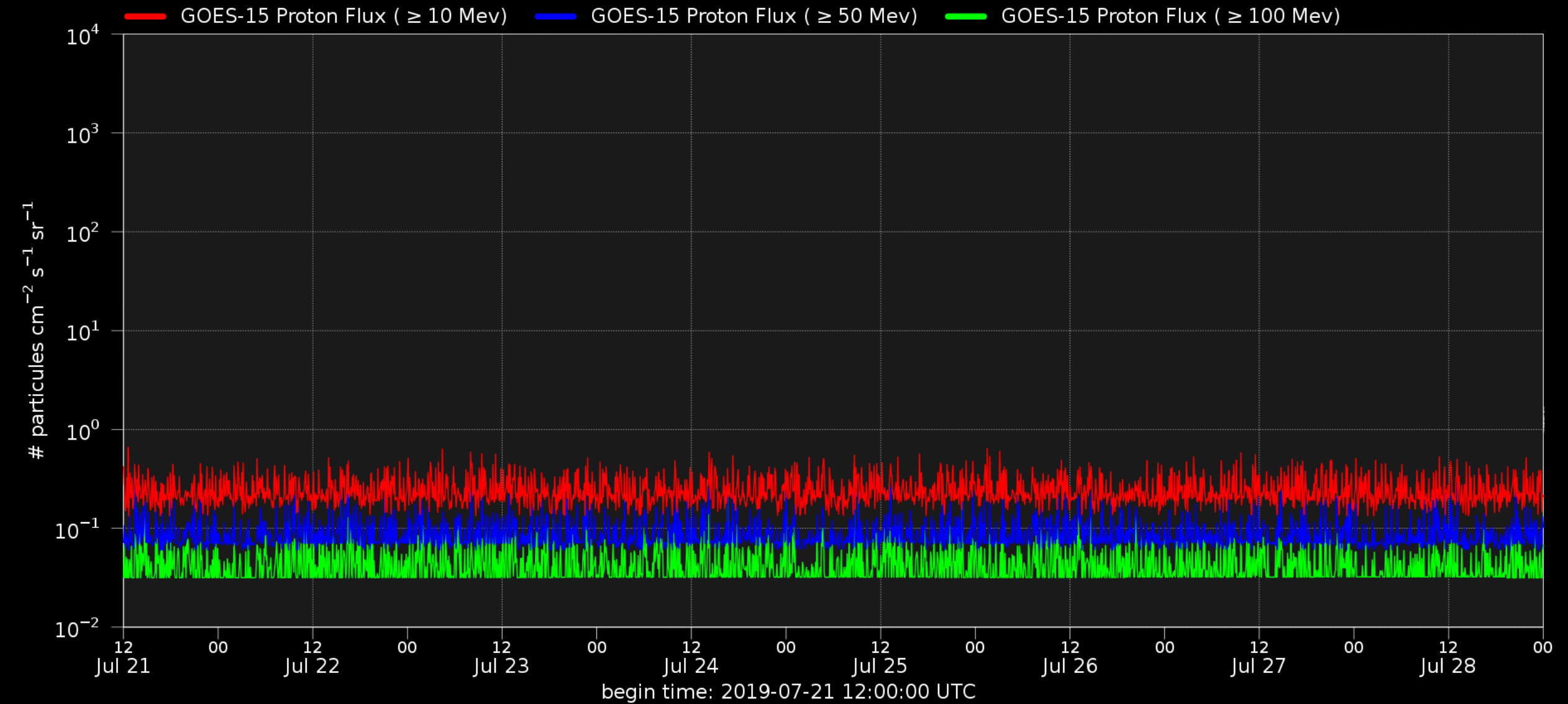


Coronal Mass Ejection

No Coronal Mass
Ejection
over the week



Solar proton flux



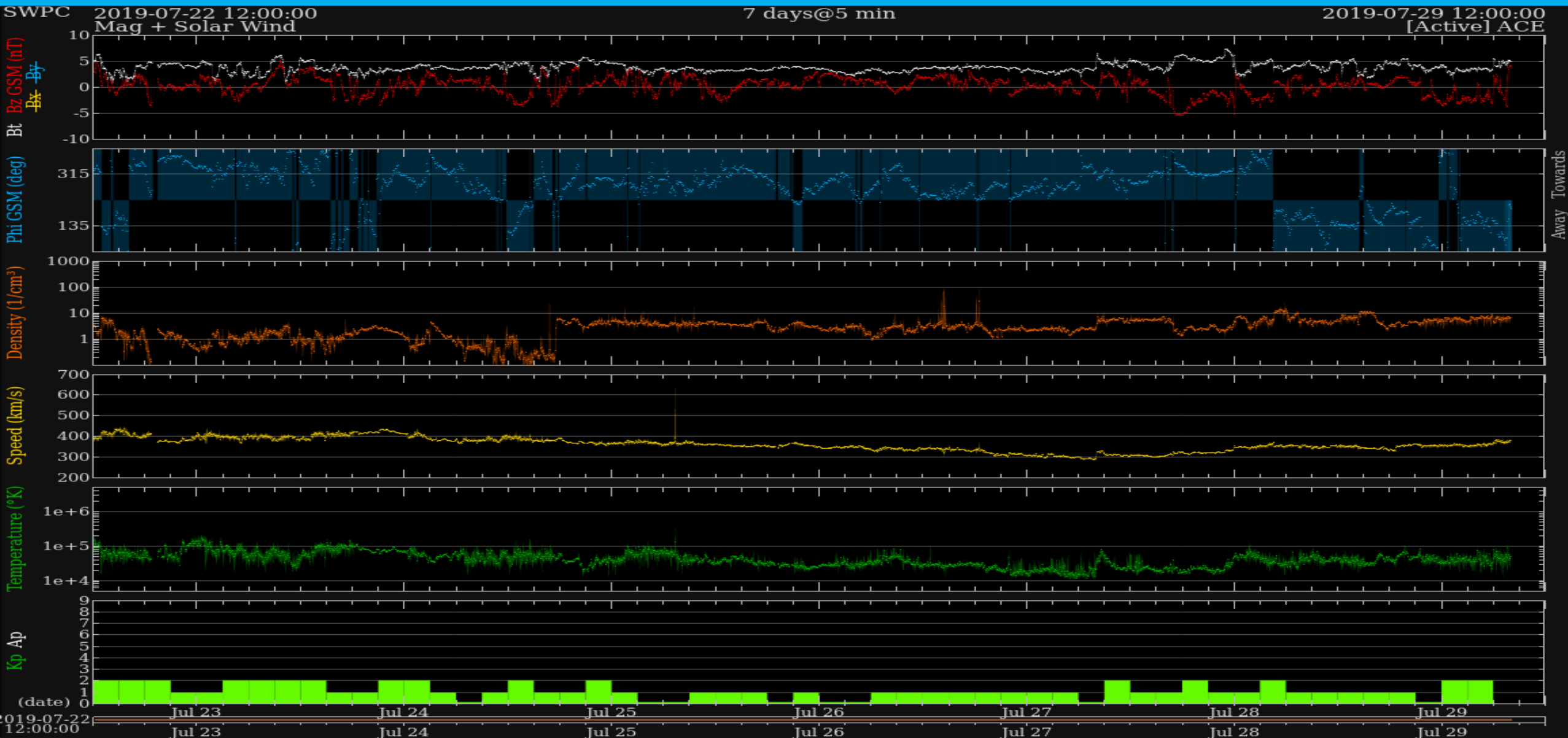
Solar Wind and Geomagnetic Activity



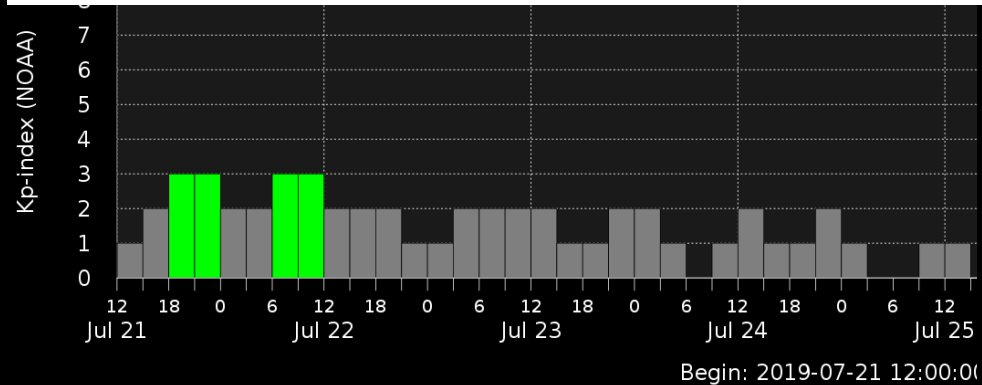
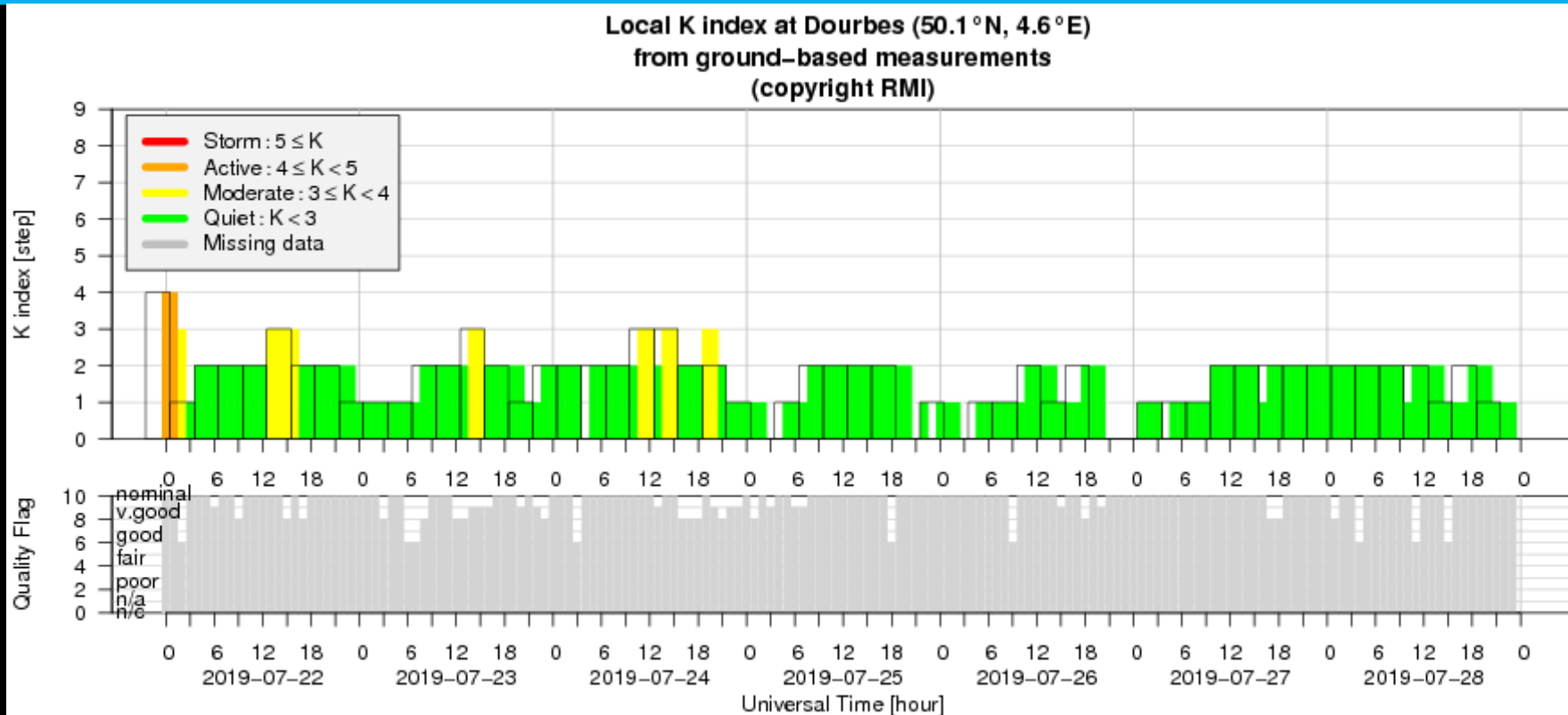
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Solar wind parameters (ACE data)



Geomagnetic activity (K-indexes)



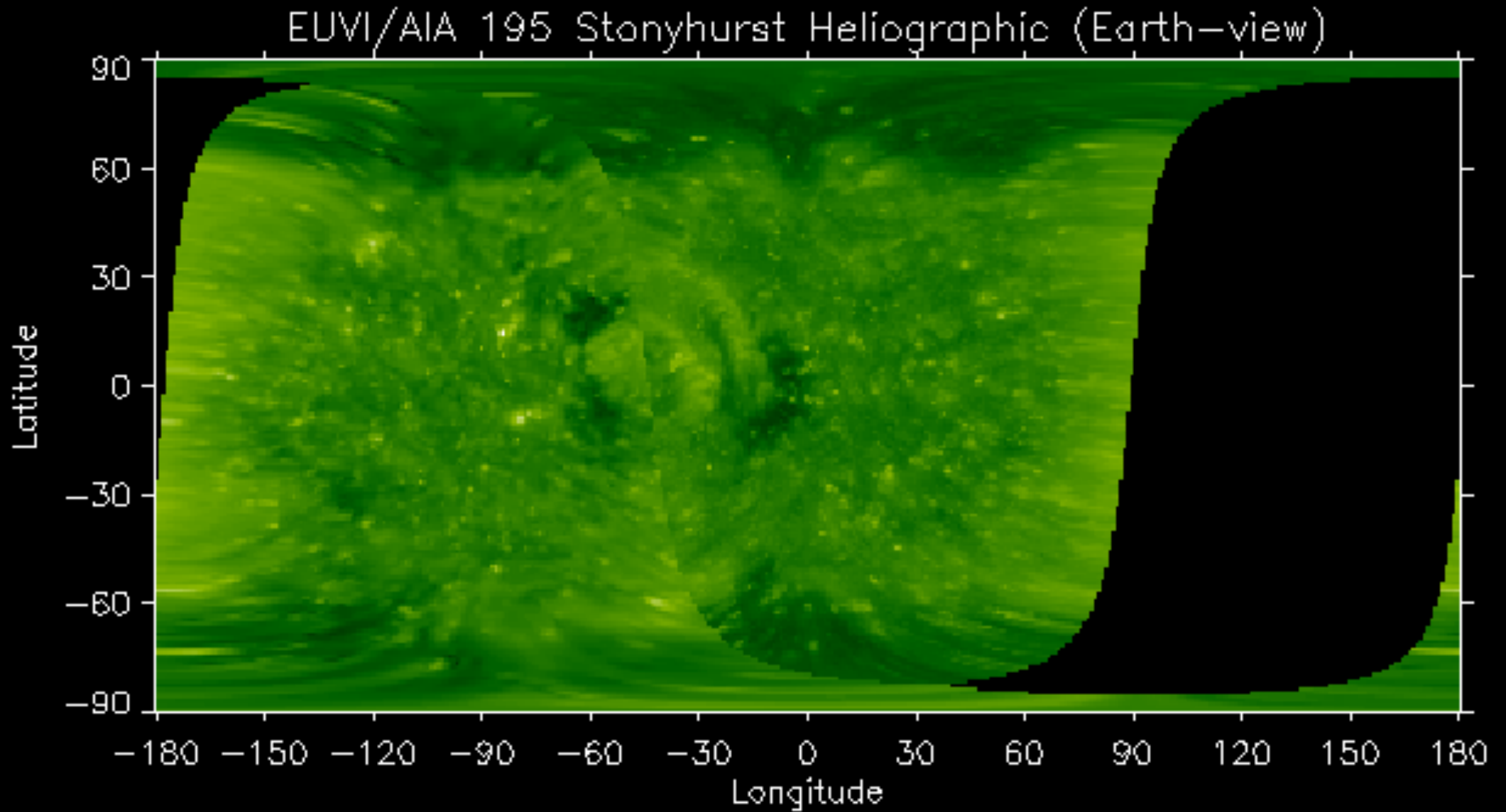
Outlook



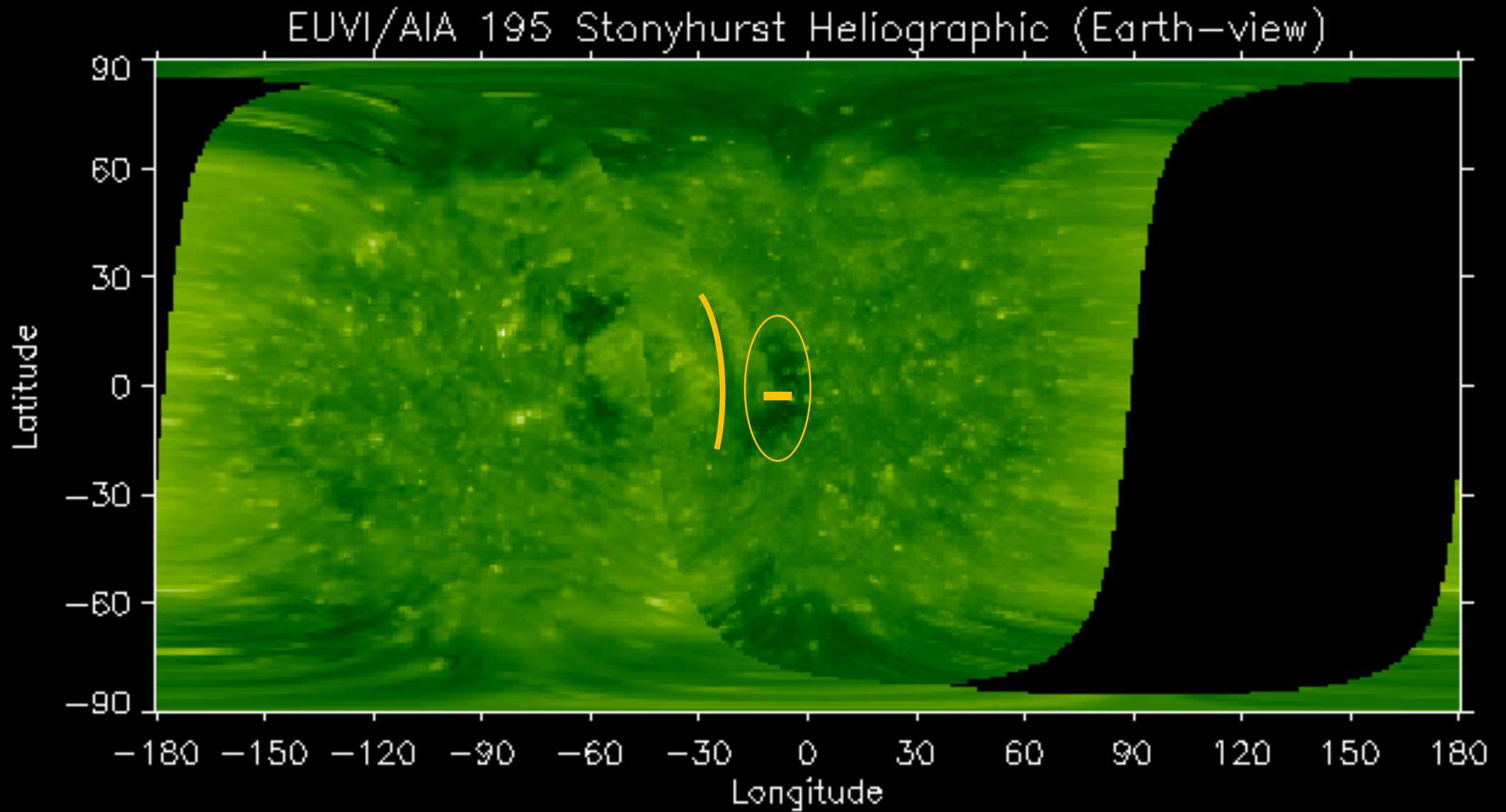
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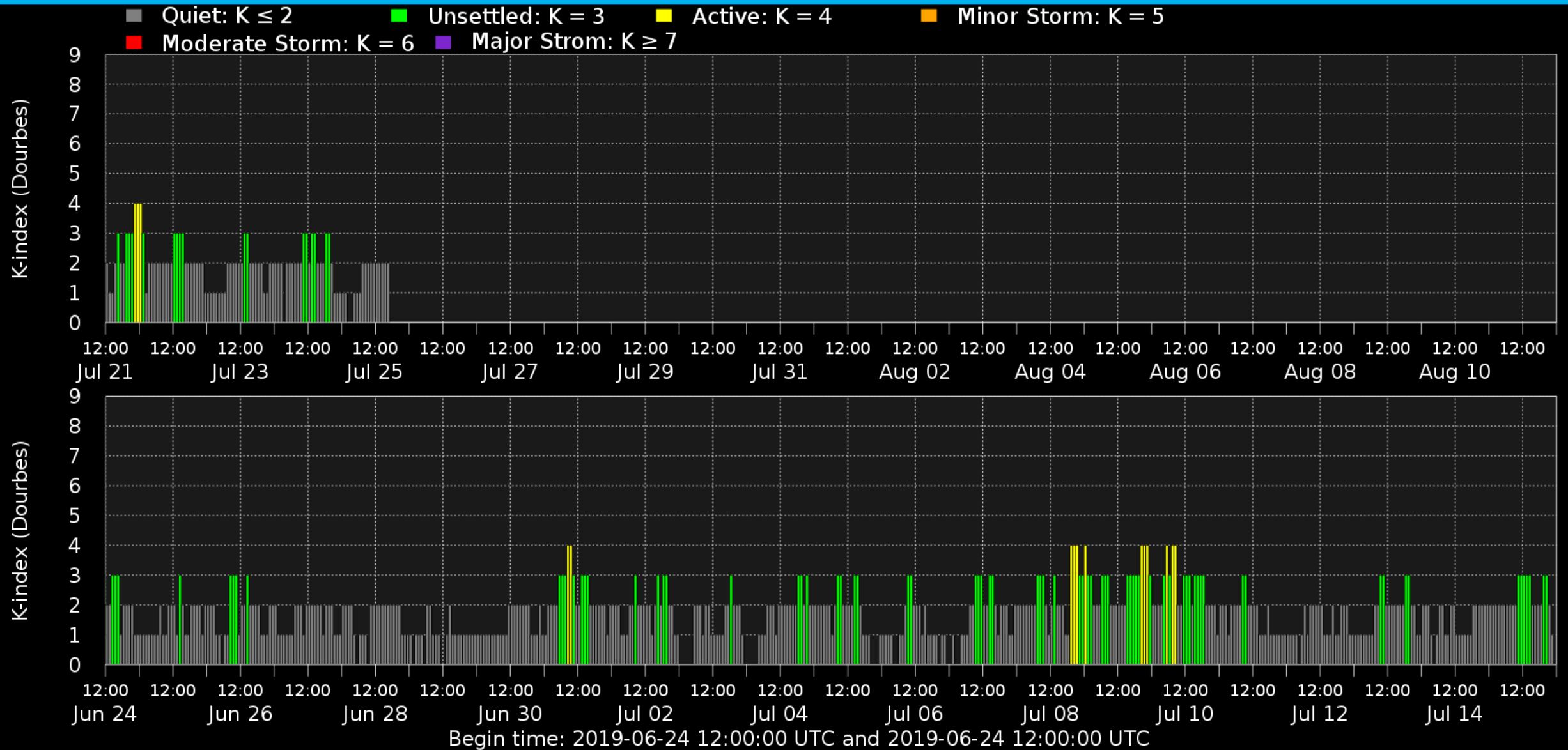
Outlook: Solar activity



Outlook: Solar activity



Outlook: Geomagnetic activity



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