

SIDC Space Weather Briefing

28 July 2019 – 4 August 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 2019-07-28 12:00 UT to 2019-08-04 12:00 UT

Active regions	None
Flaring	None
CMEs	None Earth directed
Proton Events	None

Solar wind and geomagnetic conditions from 2019-07-28 12:00 UT to 2019-08-04 12:00 UT

Coronal Holes	2: 1 -, 1+
ICME	None
SW Conditions	V > 600 km/s
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 3

All Quiet Alert: Off

Solar Activity

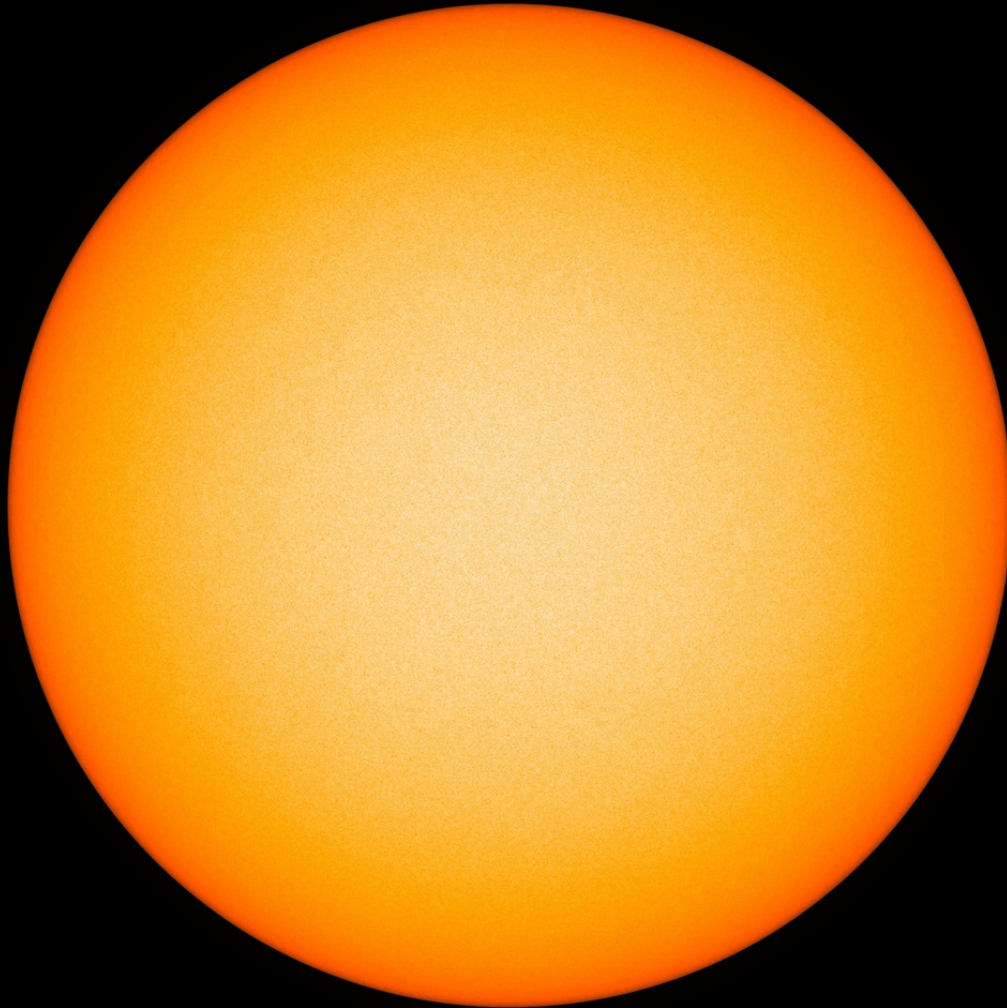


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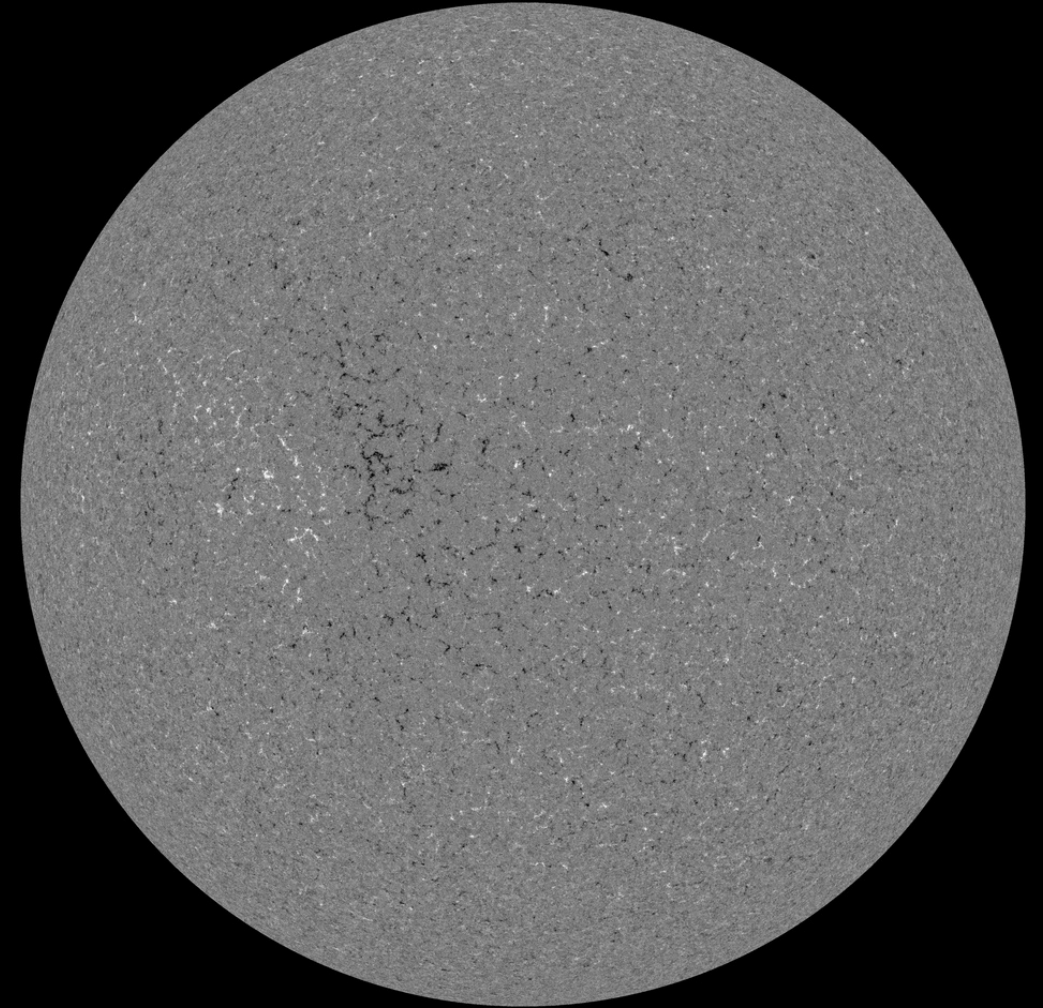
Solar active region - start of the week

SDO/HMI White Light 2019-07-28



SDO/HMI Quick-Look Continuum: 20190728_114500

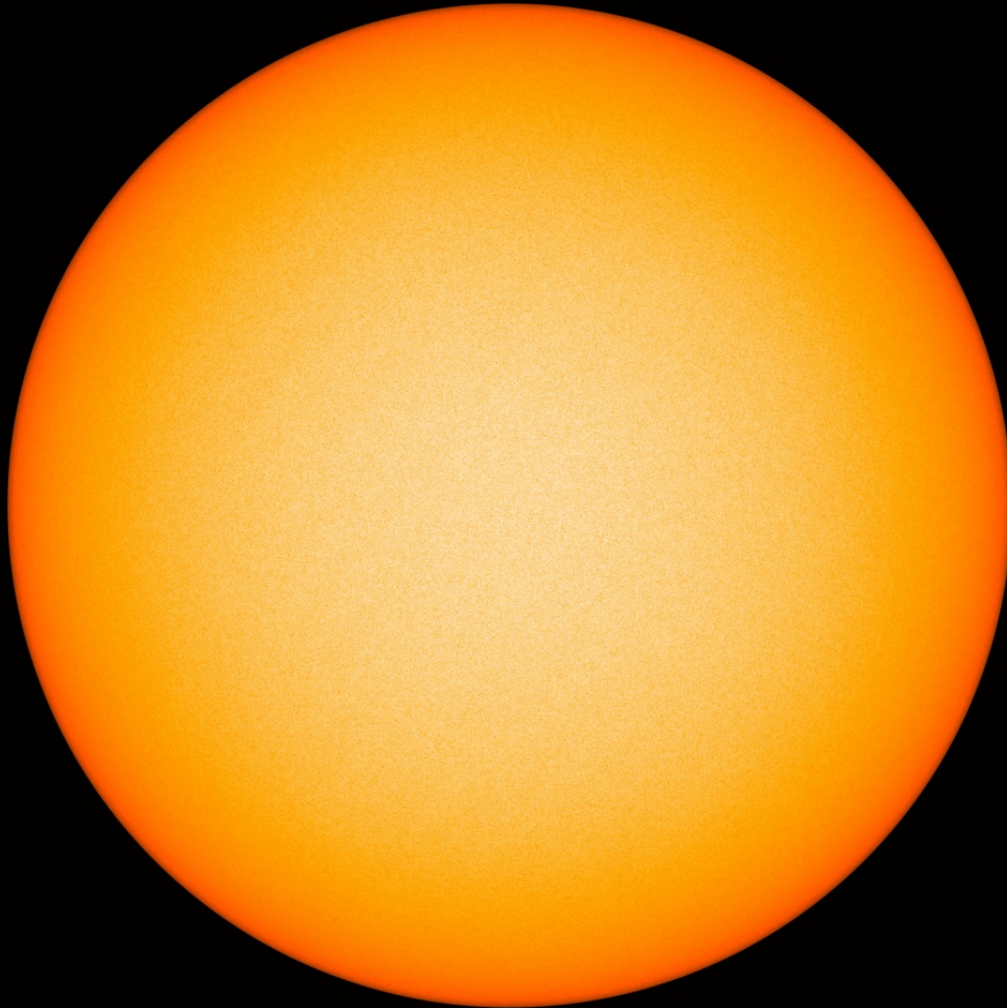
SDO/HMI Magnetogram 2019-07-28



SDO/HMI Quick-Look Magnetogram: 20190728_114500

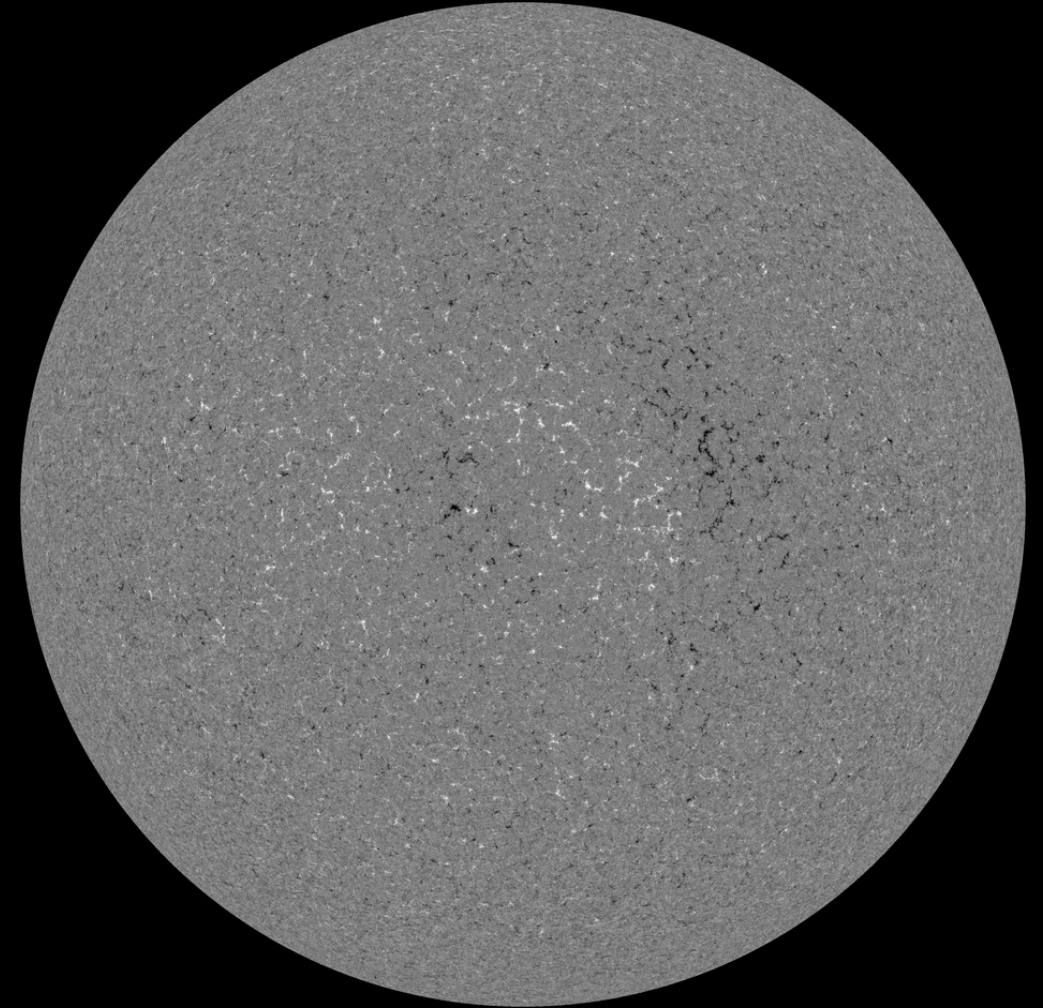
Solar active region - middle of the week

SDO/HMI White Light 2019-07-31



SDO/HMI Quick-Look Continuum: 20190731_114500

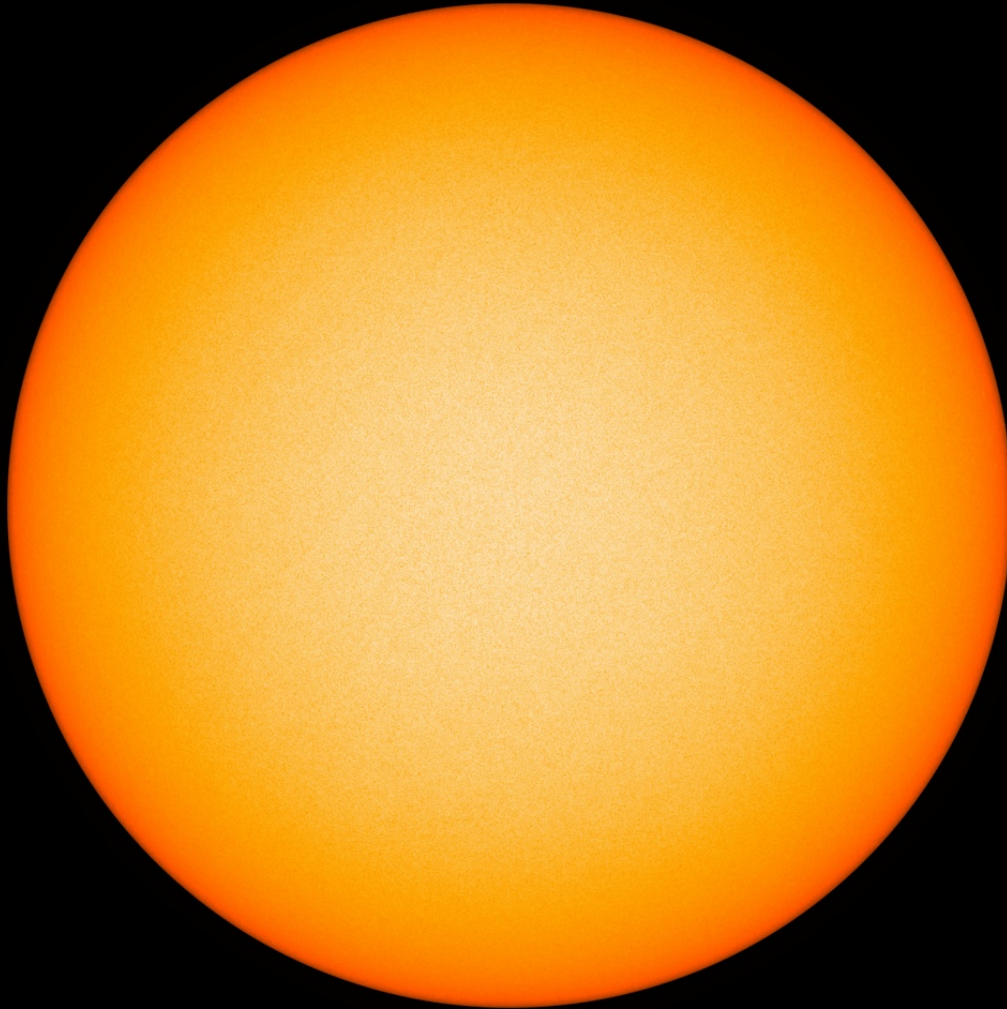
SDO/HMI Magnetogram 2019-07-31



SDO/HMI Quick-Look Magnetogram: 20190731_114500

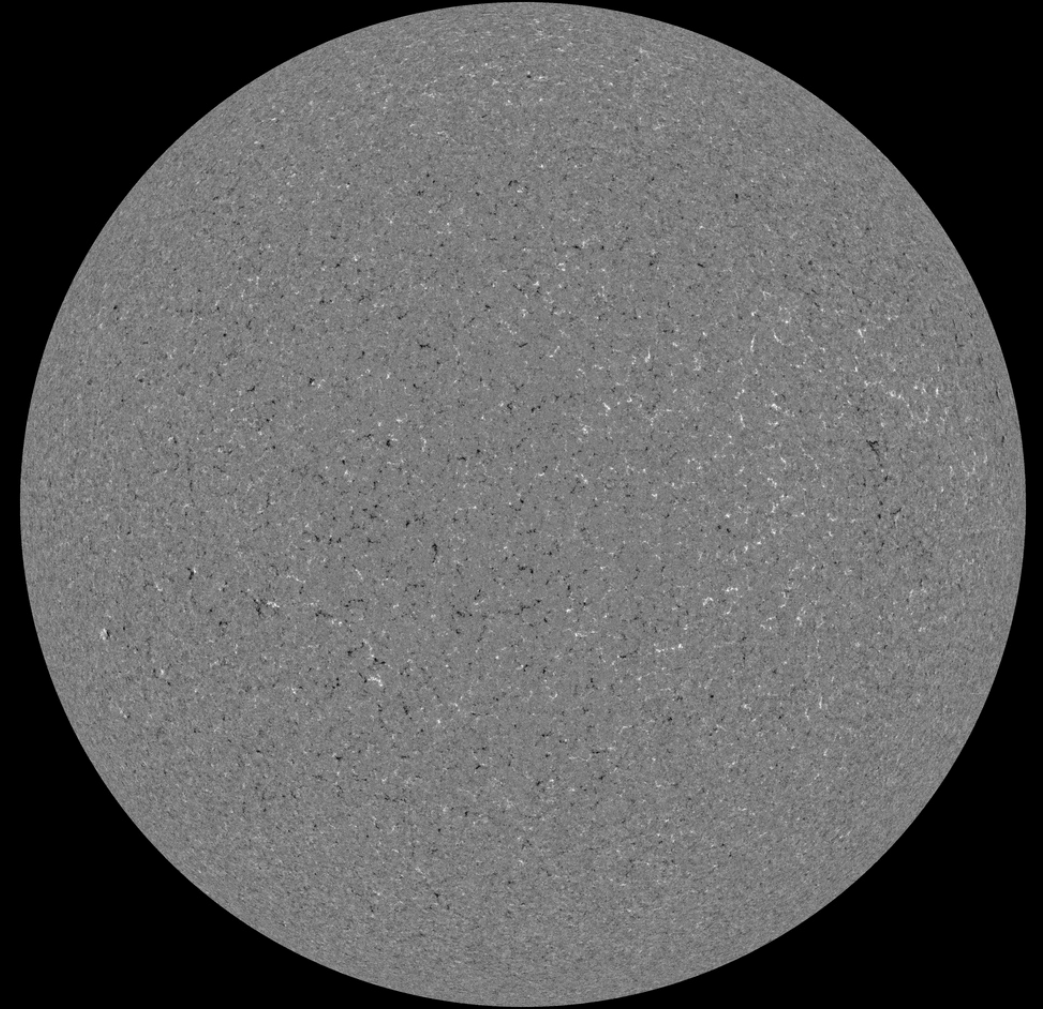
Solar active region - end of the week

SDO/HMI White Light 2019-08-04



SDO/HMI Quick-Look Continuum: 20190804_114500

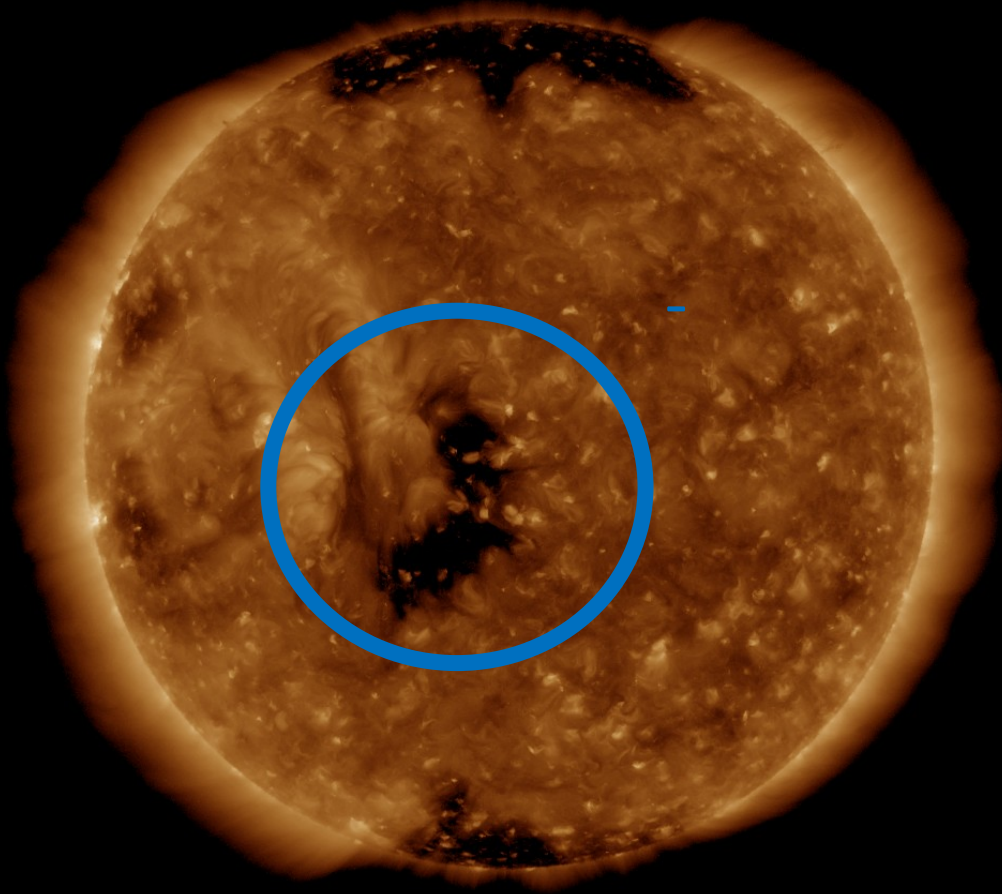
SDO/HMI Magnetogram 2019-08-04



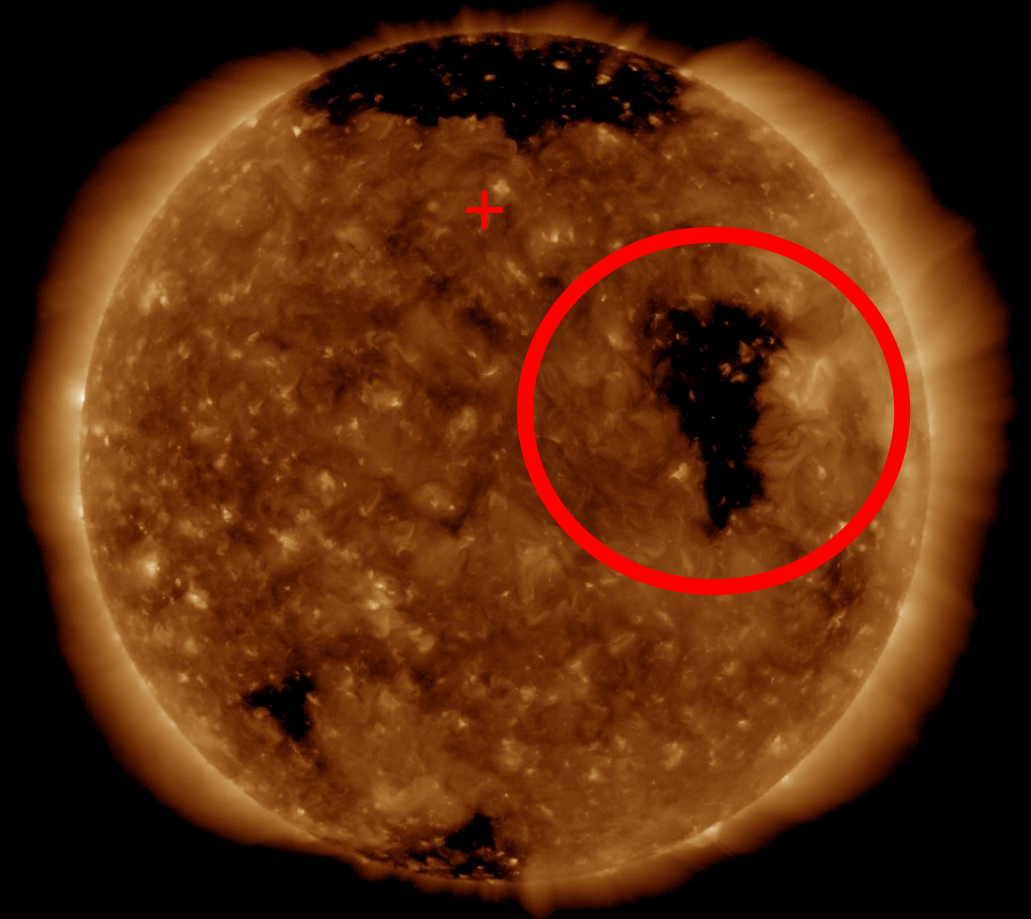
SDO/HMI Quick-Look Magnetogram: 20190804_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-07-28



SDO/AIA 19.3 nm 2019-08-04

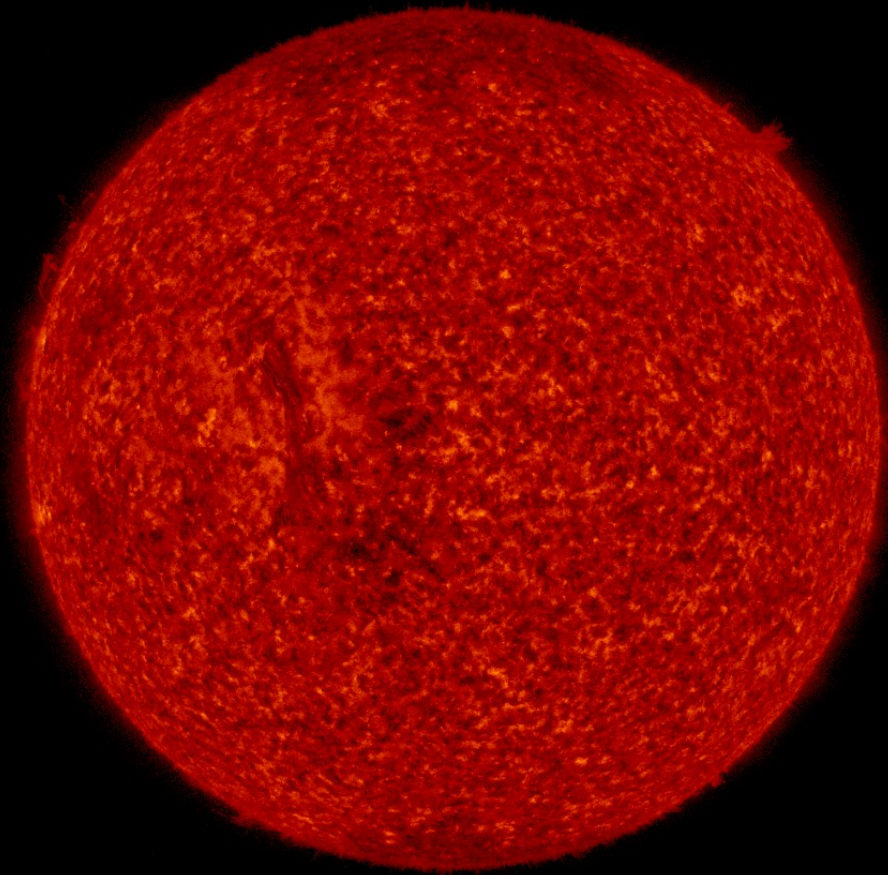


SDO/AIA 193 2019-07-28 12:10:41 UT

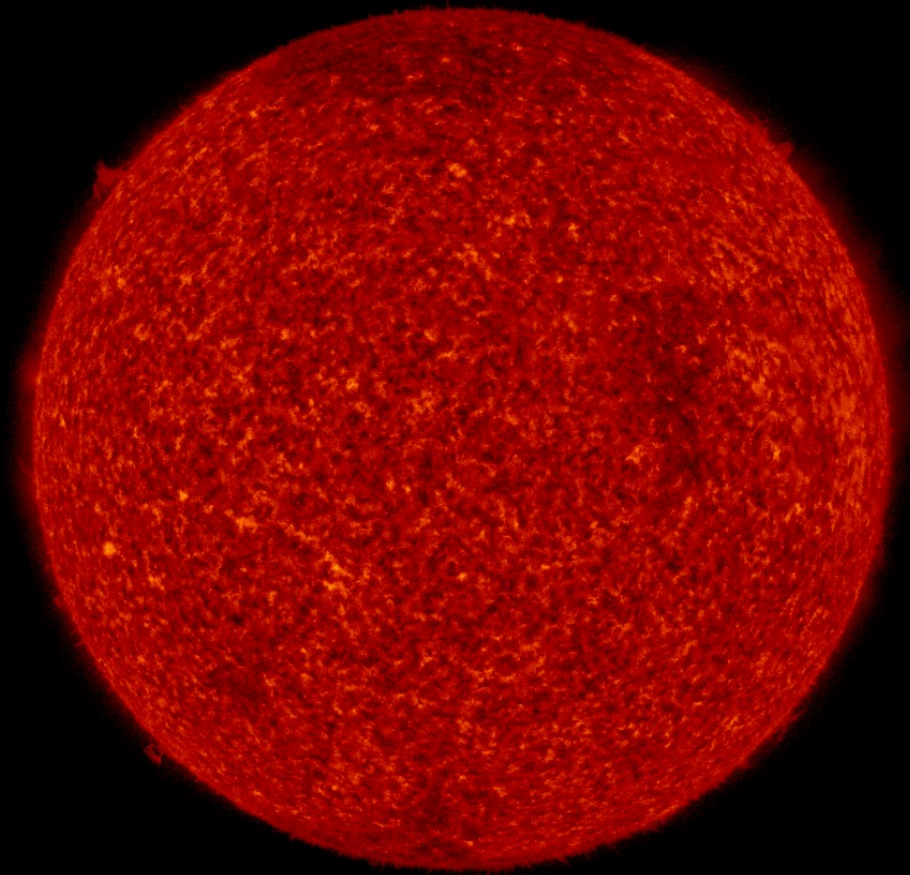
SDO/AIA 193 2019-08-04 12:11:05 UT

Solar active region & Filament

SDO/AIA 30.4 nm 2019-07-28



SDO/AIA 30.4 nm 2019-08-04



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

SDO/AIA 304 2019-08-04 12:13:18 UT

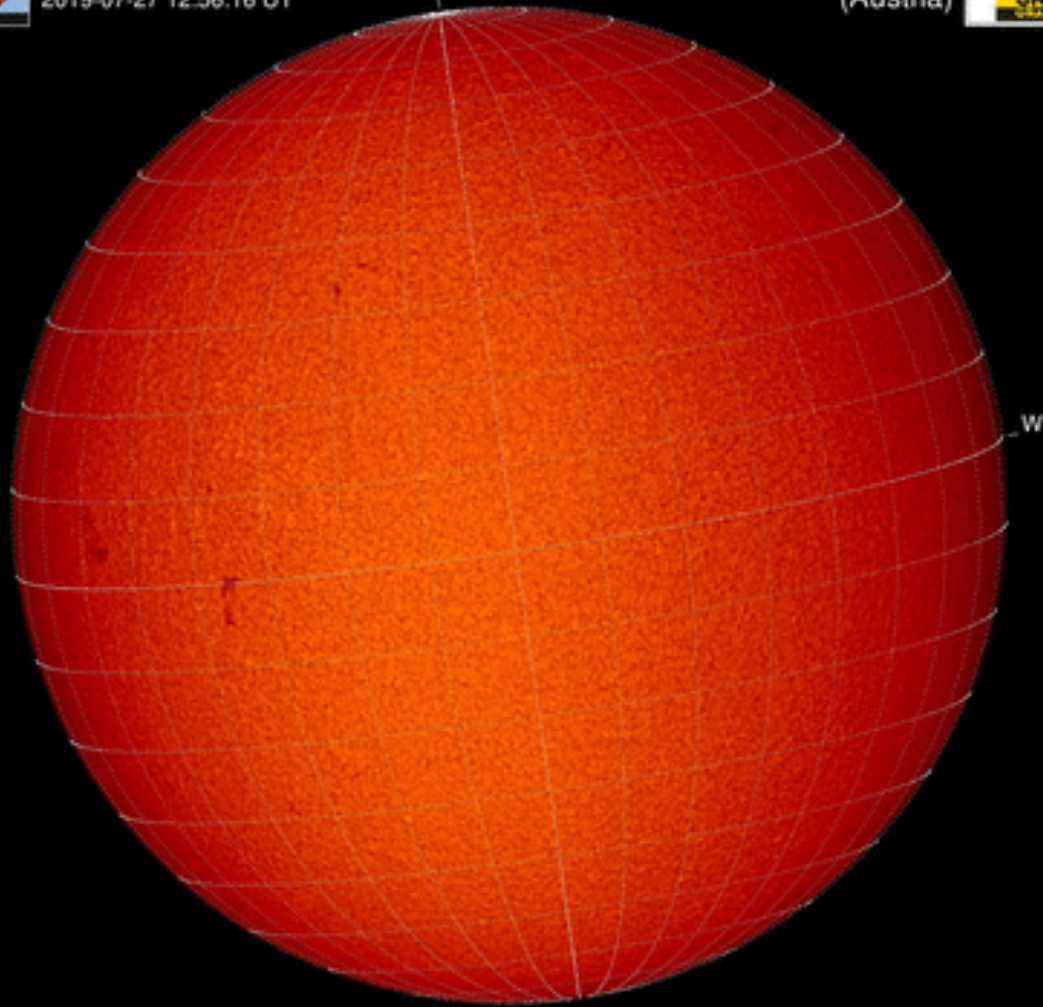
Filament & Filament eruption

H-alpha 2019-07-28



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

University of Graz
(Austria)

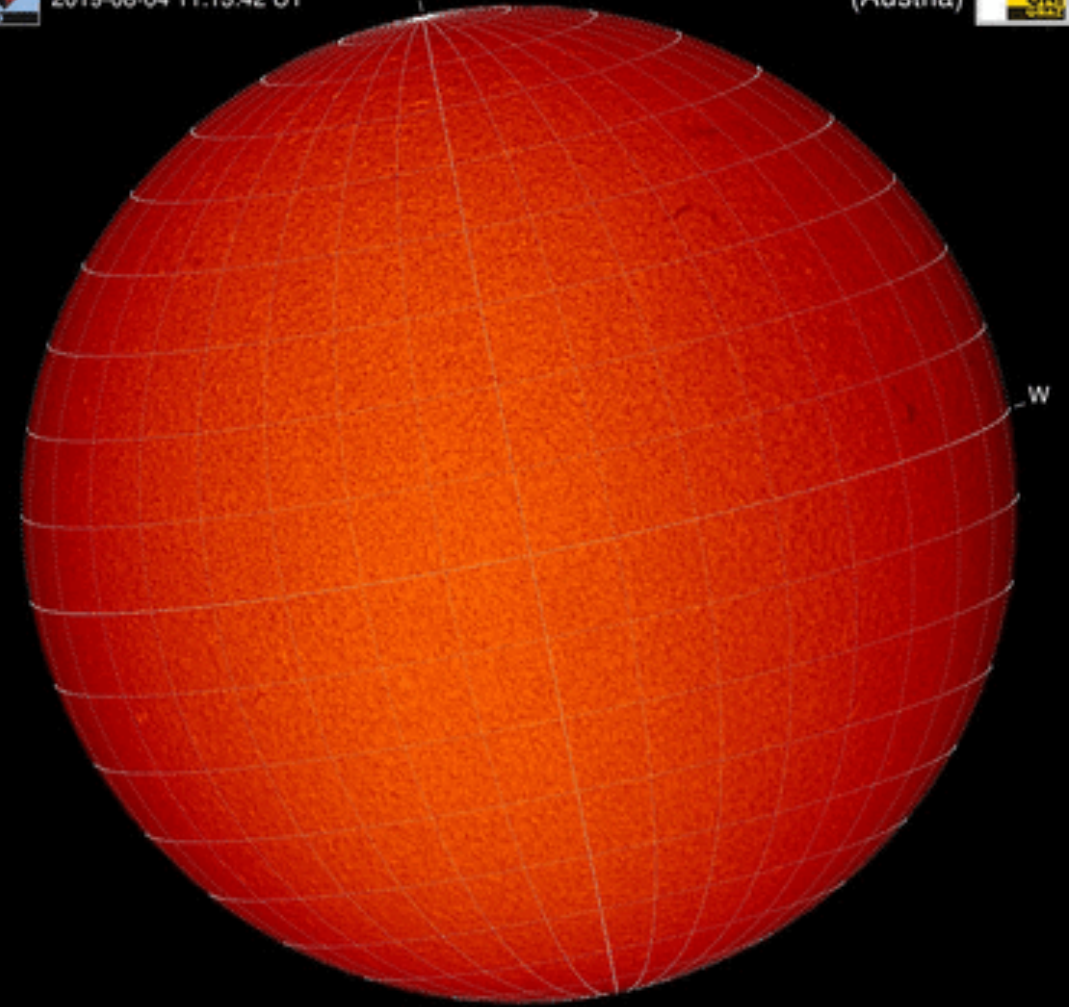


H-alpha 2019-08-04

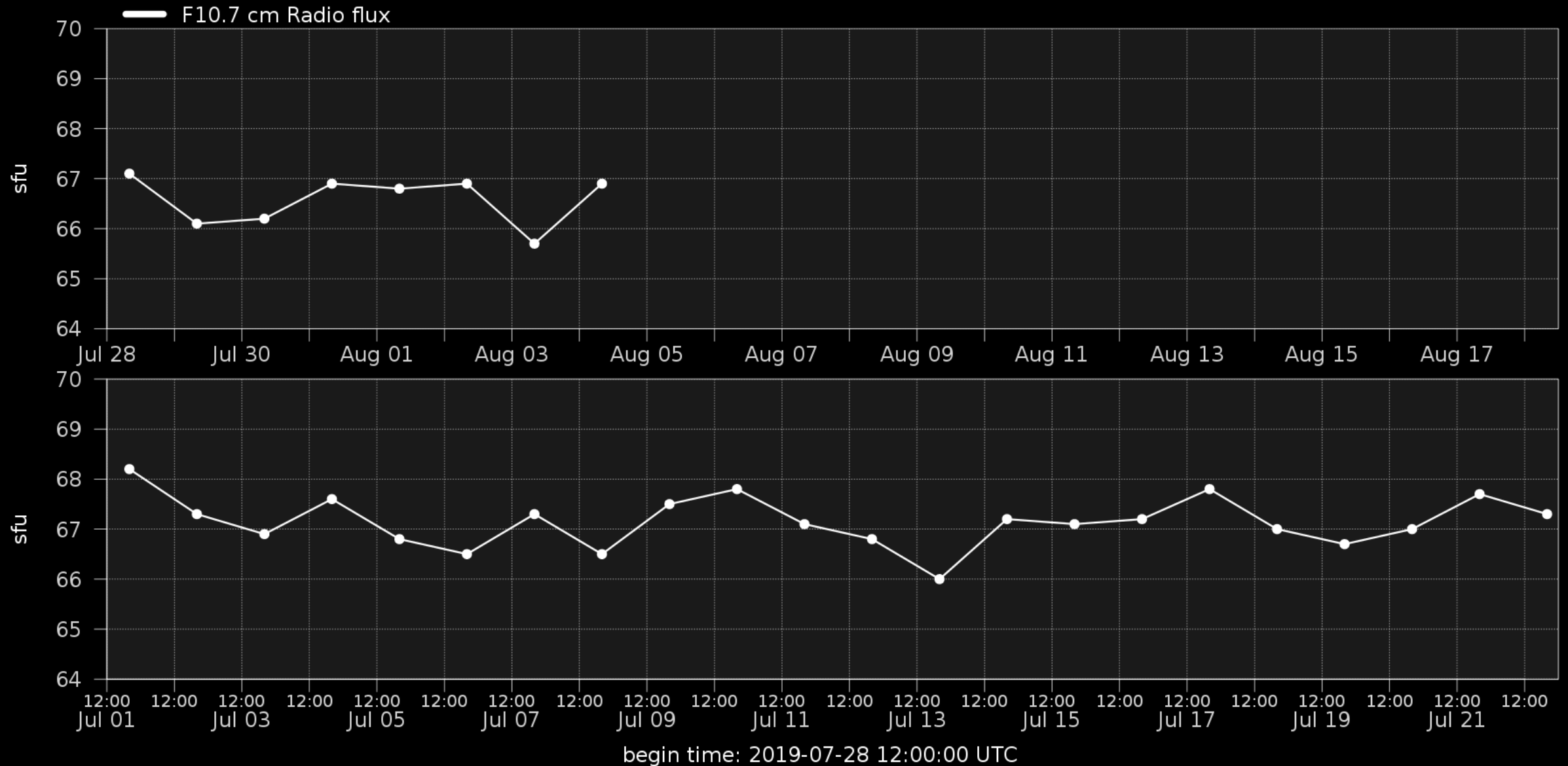


Kanzelhöhe Observatory
2019-08-04 11:13:42 UT

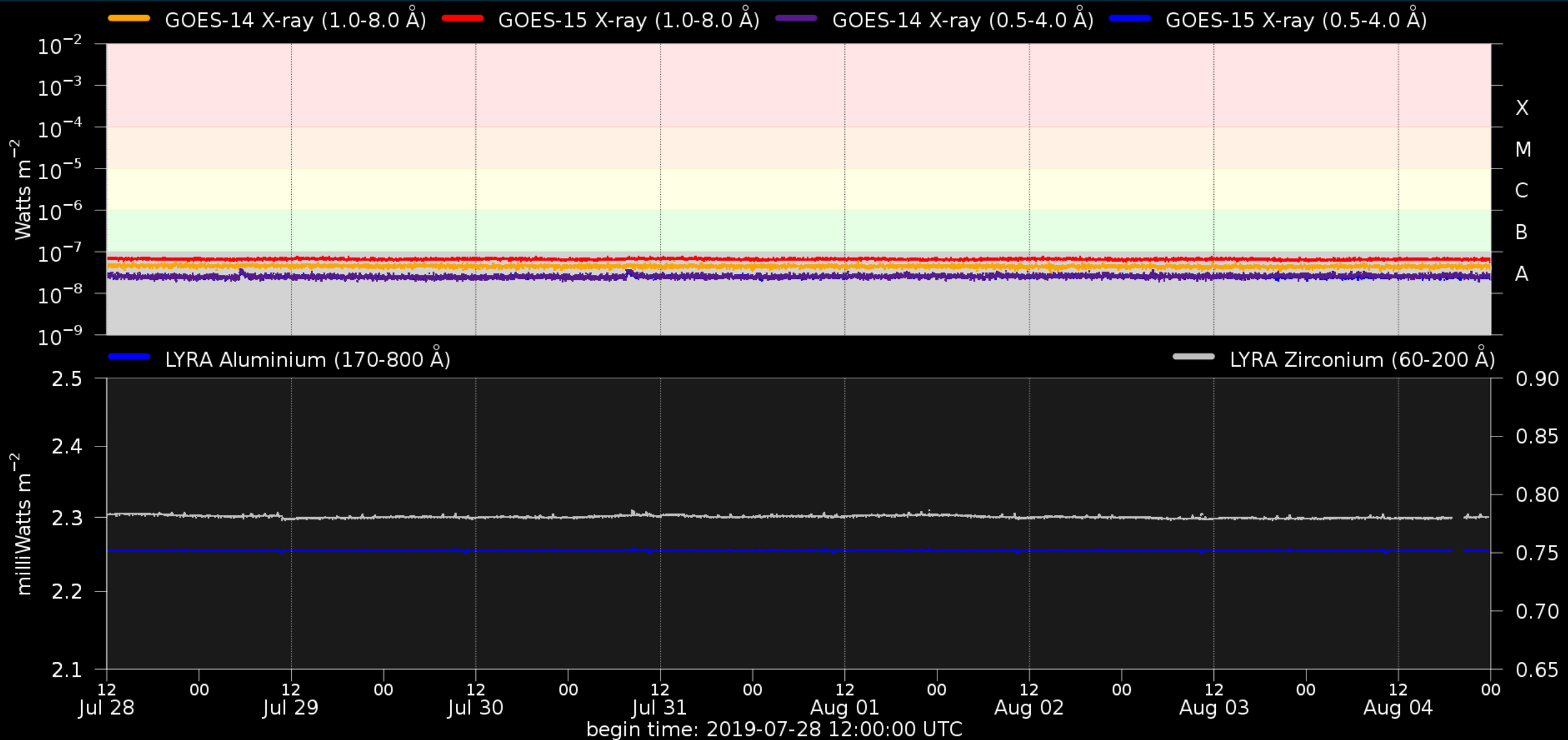
University of Graz
(Austria)



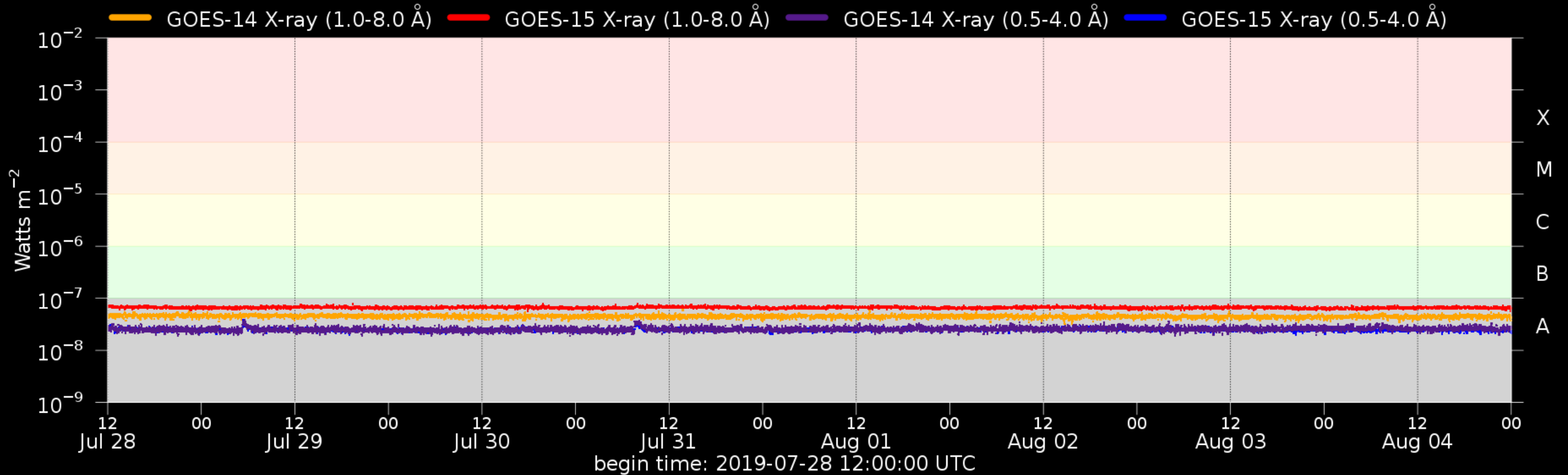
Solar F10.7cm radio flux



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:

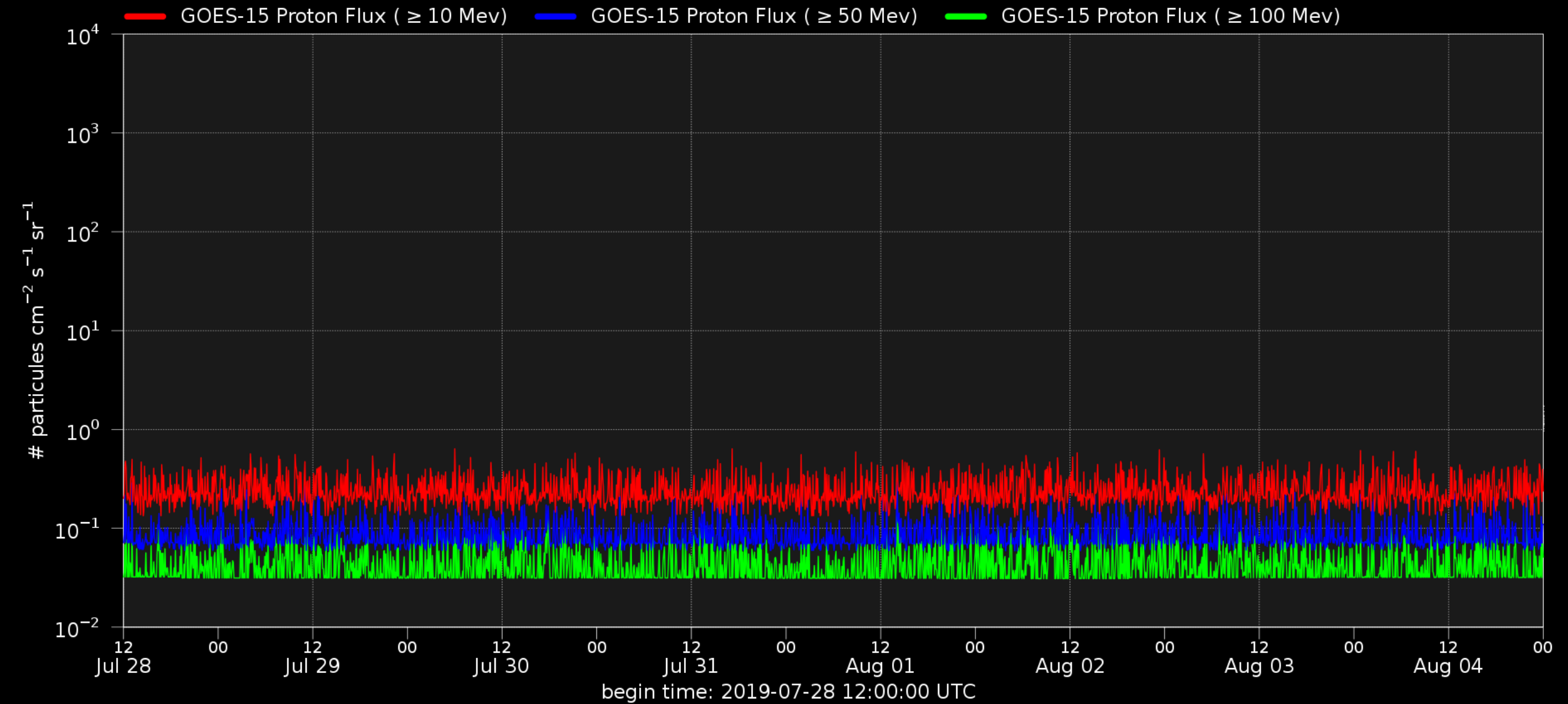
Issue date	2019-07-28	2019-07-29	2019-07-30	2019-07-31	2019-08-01	2019-08-02	2019-08-03	2019-08-04
Probability	--- 01 01 01	--- 05 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Coronal Mass Ejection

NO CMES



Solar proton flux



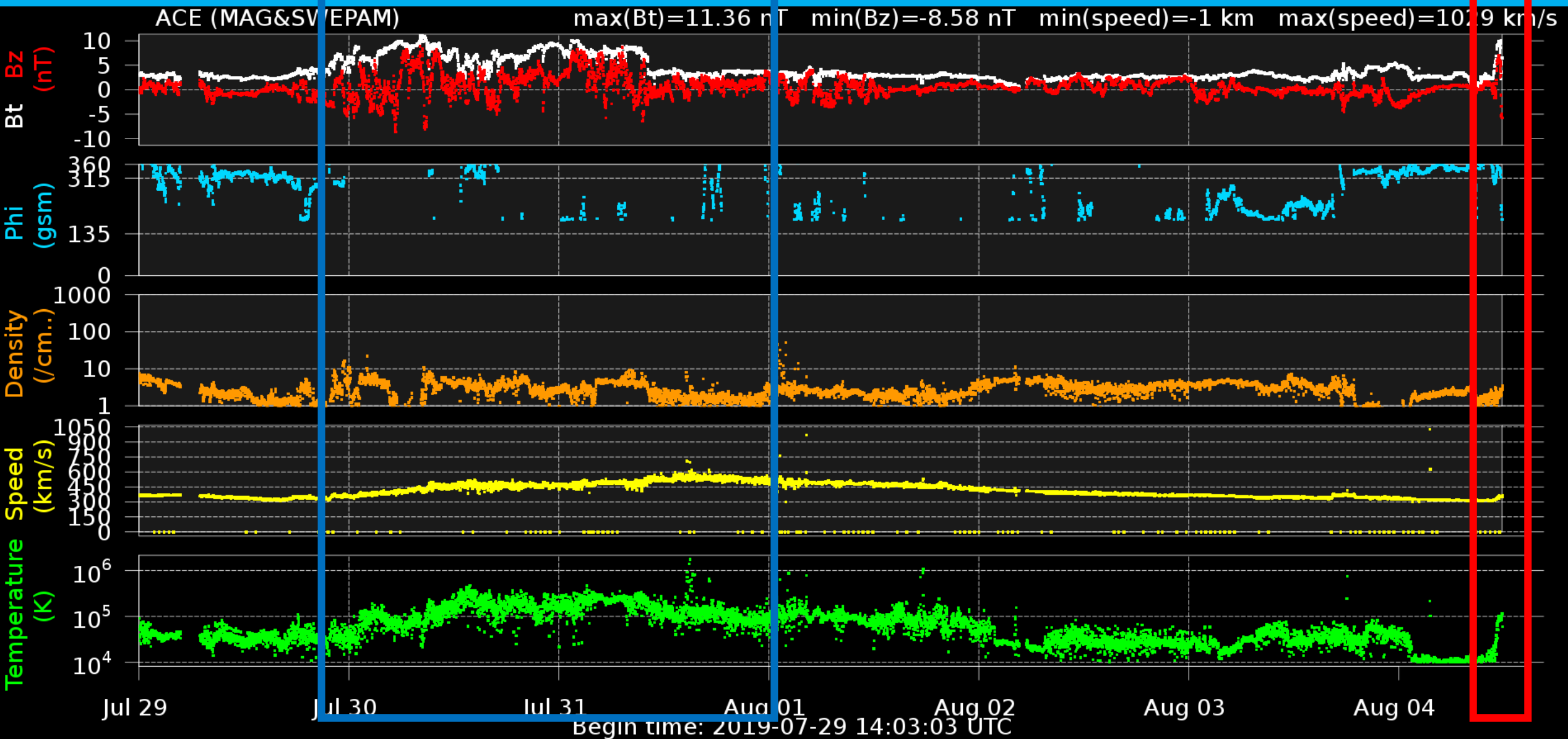
Solar Wind and Geomagnetic Activity



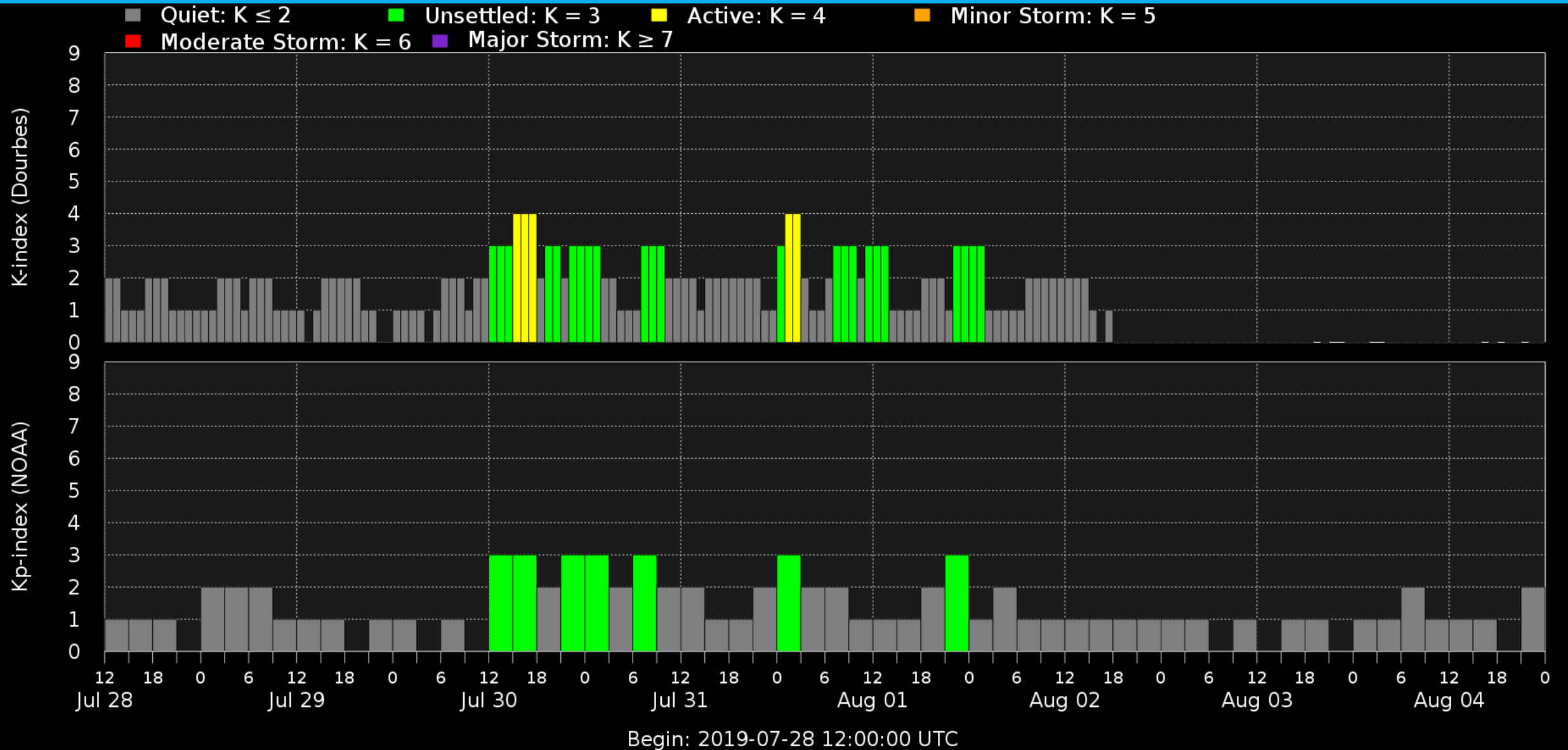
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Solar wind parameters (ACE data)



Geomagnetic activity (K-indexes)



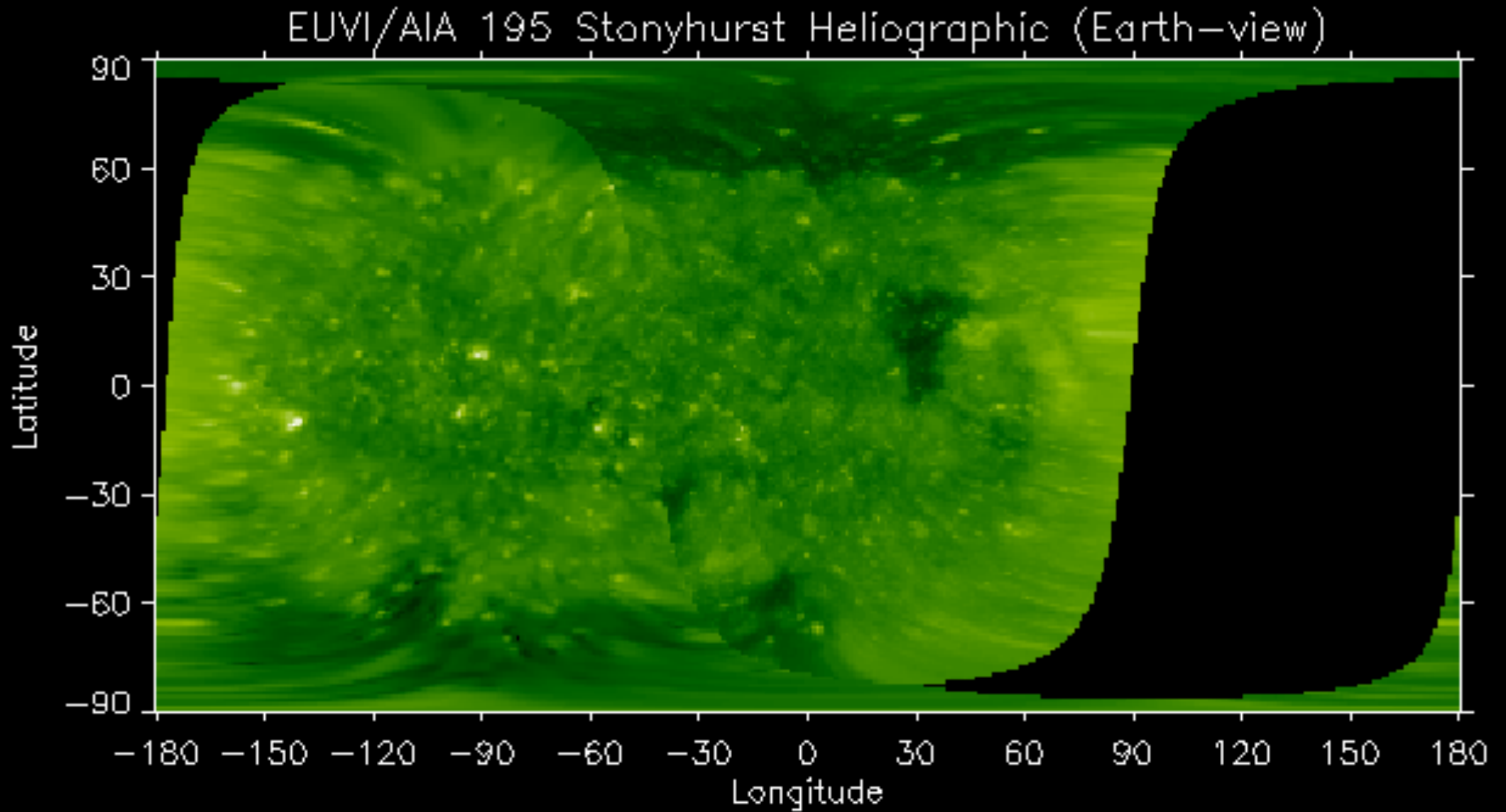
Outlook



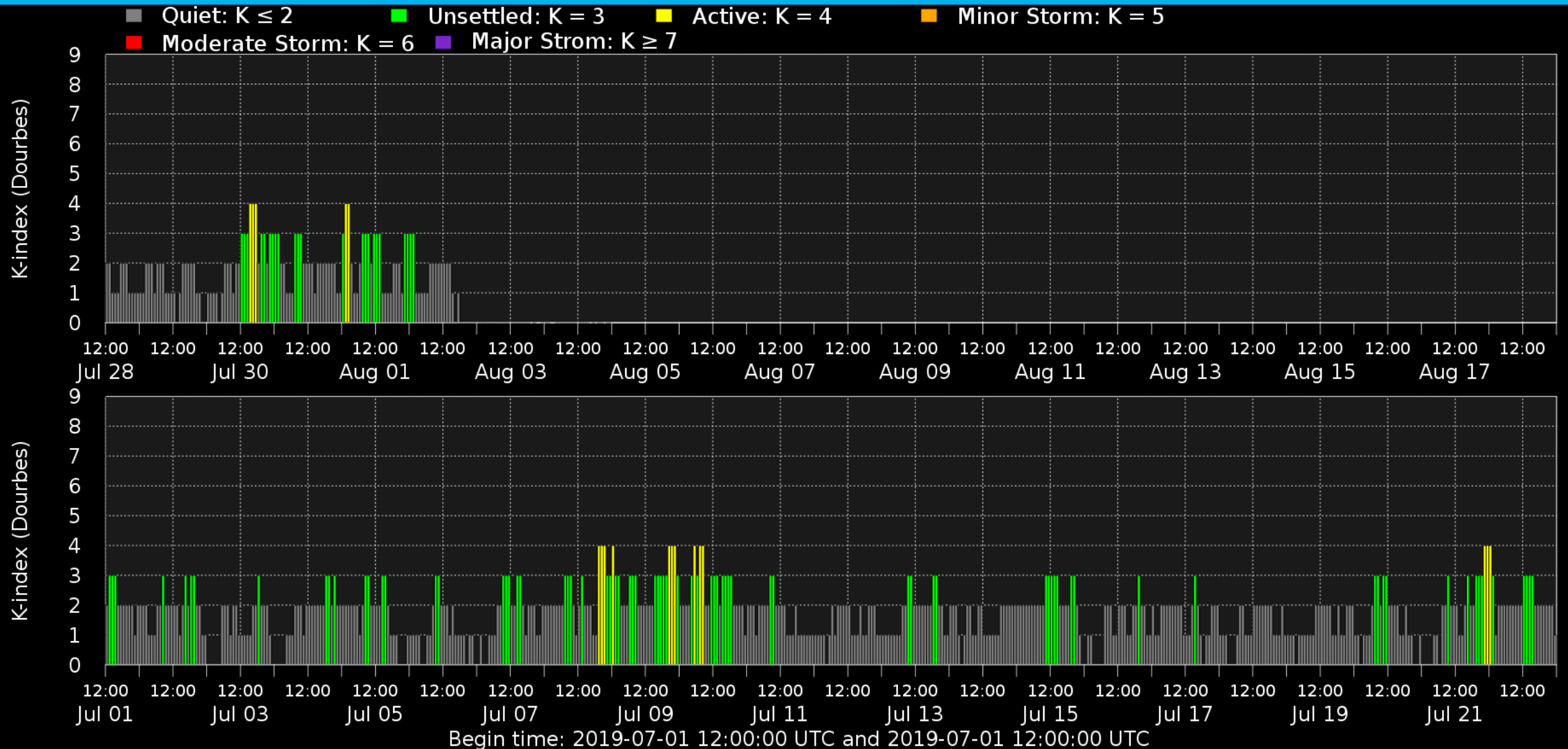
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Outlook: Solar activity



Outlook: Geomagnetic activity



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