

SIDC Space Weather Briefing

21 June 2020 - 28 June 2020

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& the SIDC forecaster team



Royal Observatory
of Belgium

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Summary Report

Solar activity from 2020-06-21 12:00 UT to 2020-06-28 12:00 UT

Active regions	3 small bipolar regions: 2 North (reported from Catania), 1 South
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	2 eruptions with no events associated
CMEs	1 narrow from SW and 1 with no apparent source
Proton Events	None

Solar wind and geomagnetic conditions from 2020-06-21 12:00 UT to 2020-06-28 12:00 UT

Coronal Holes	Negative CH crossing central meridian on June 23rd
ICME	None
SW Conditions	B 1-11nT Bz [-8, 9] v [280, 430]
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 3

All Quiet Alert: On all week

Solar Activity

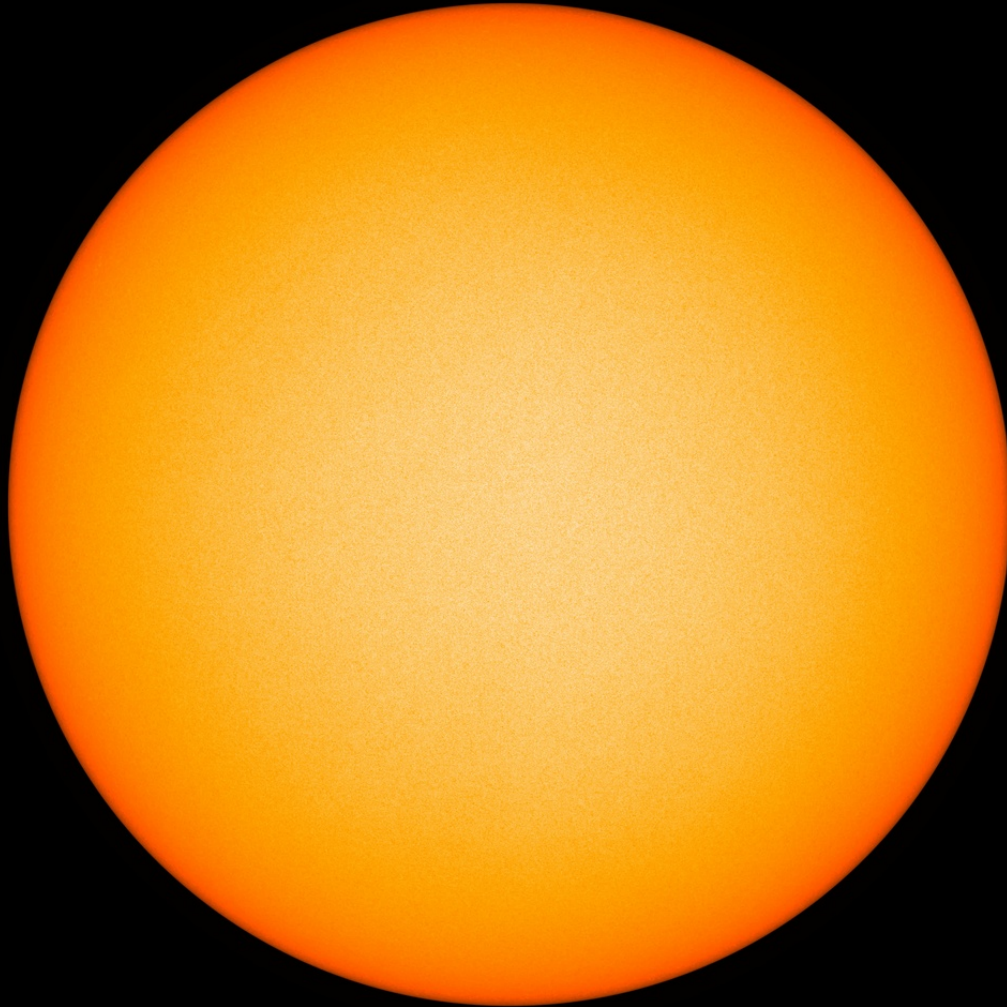


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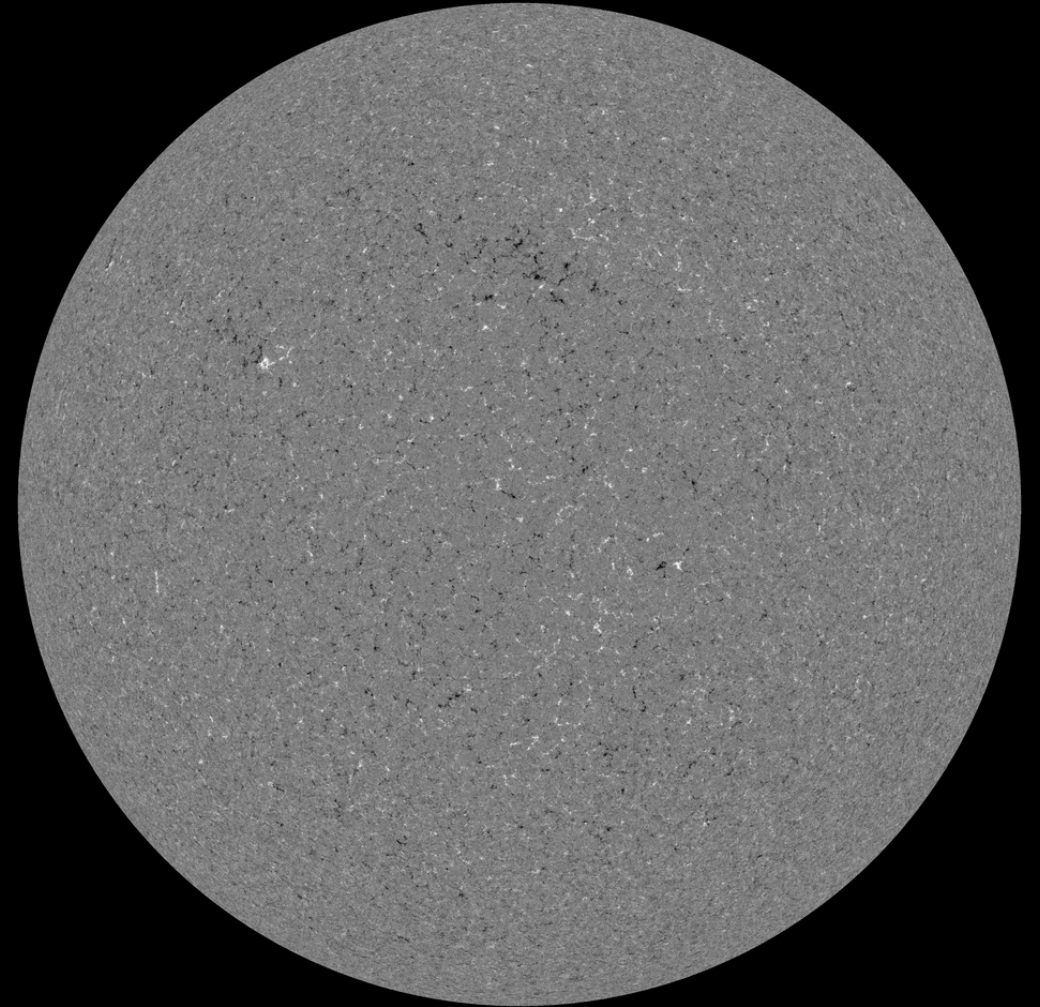
Solar active region - start of the week

SDO/HMI White Light 2020-06-21



SDO/HMI Quick-Look Continuum: 20200621_114500

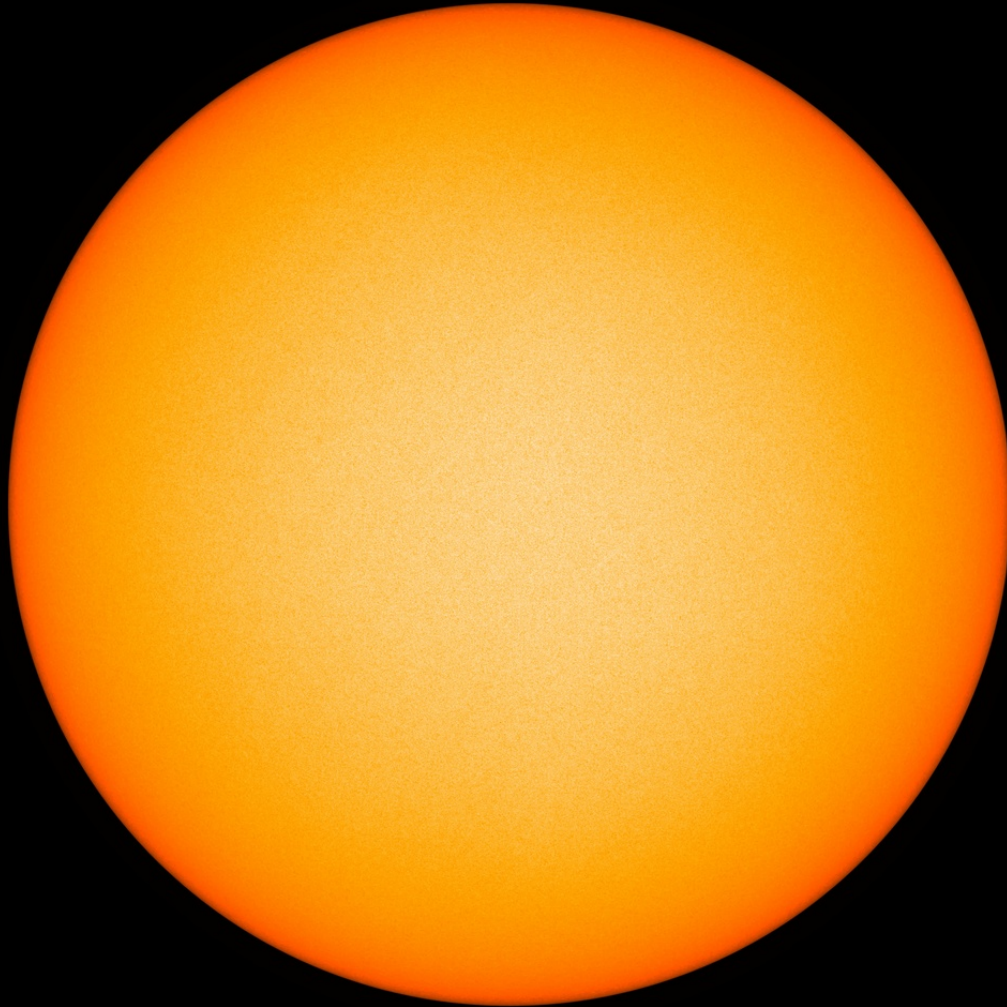
SDO/HMI Magnetogram 2020-06-21



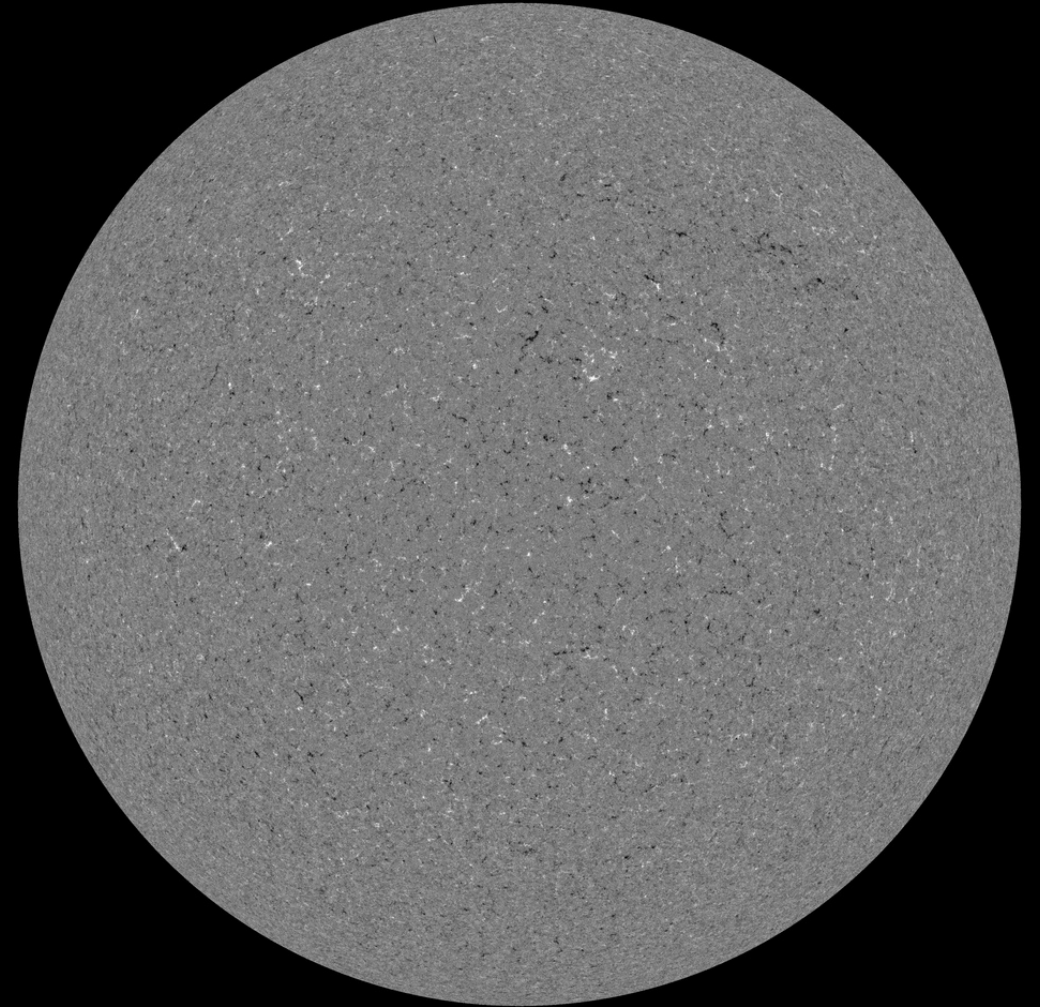
SDO/HMI Quick-Look Magnetogram: 20200621_114500

Solar active region - middle of the week

SDO/HMI White Light 2020-06-24

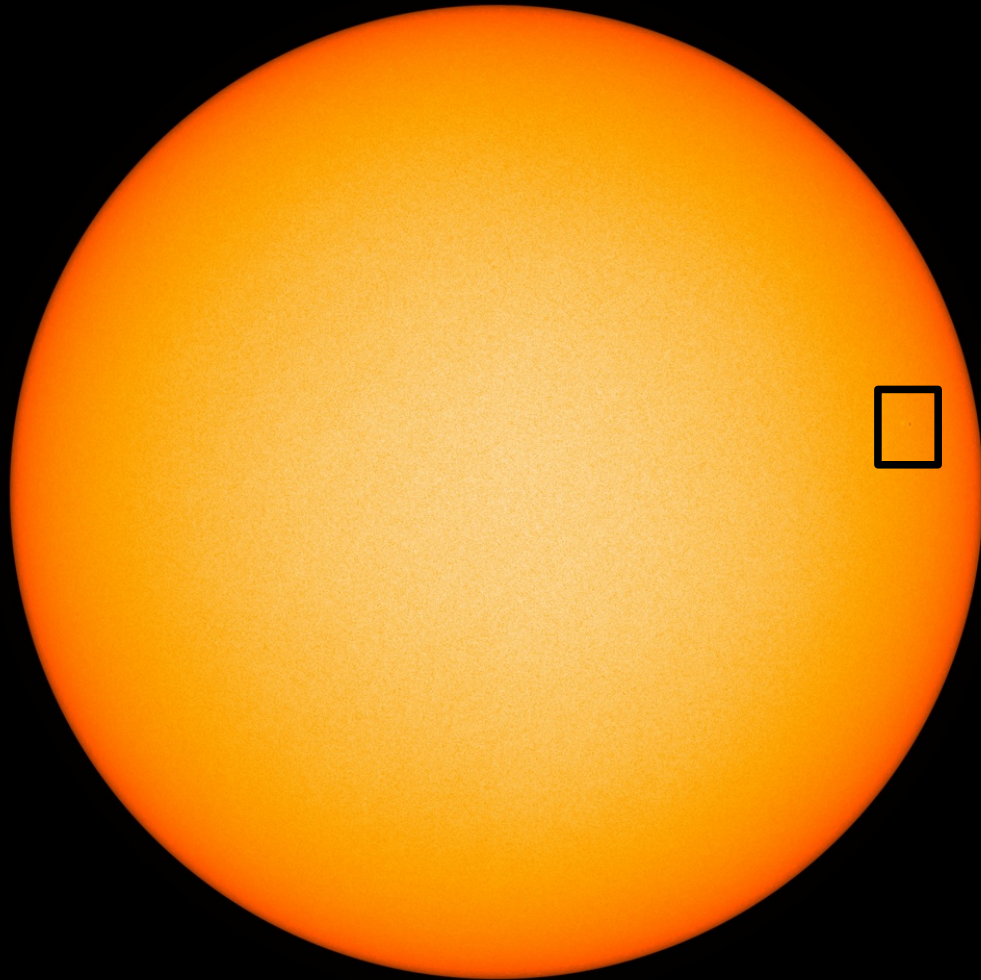


SDO/HMI Magnetogram 2020-06-24



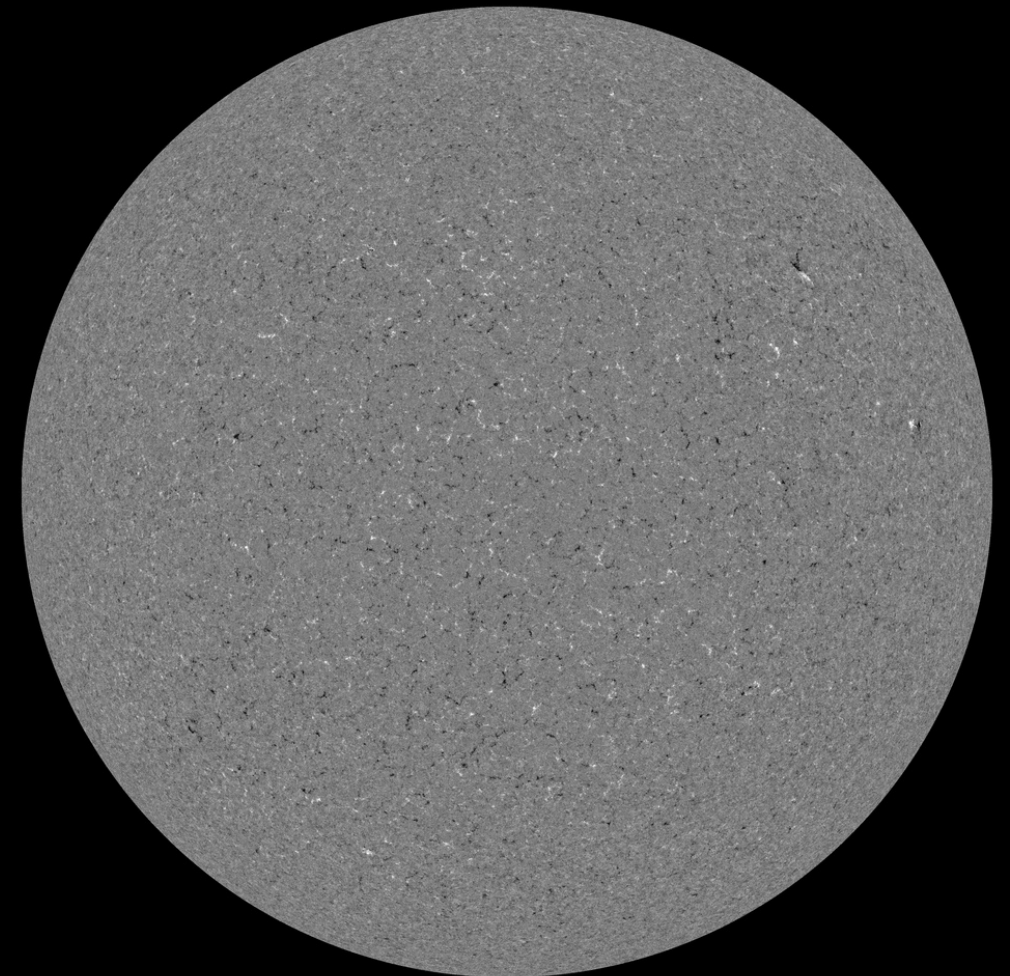
Solar active region - Friday

SDO/HMI White Light 2020-06-26



SDO/HMI Quick-Look Continuum: 20200626_114500

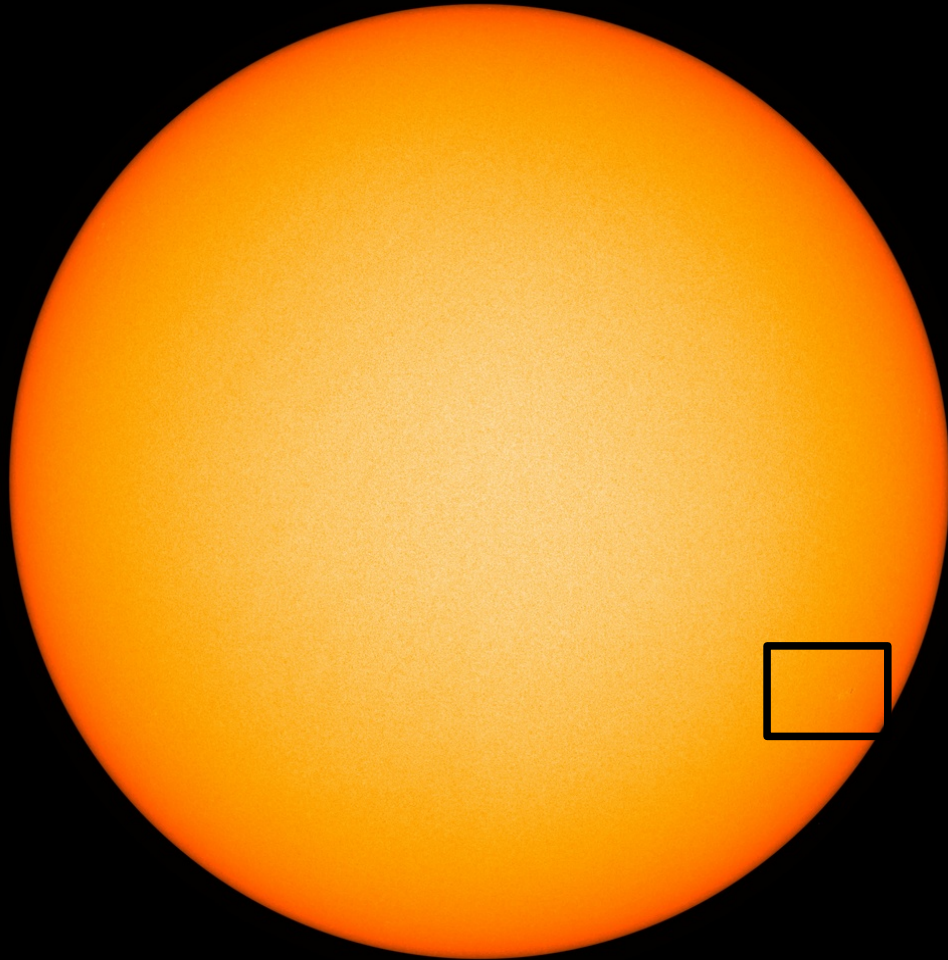
SDO/HMI Magnetogram 2020-06-26



SDO/HMI Quick-Look Magnetogram: 20200626_114500

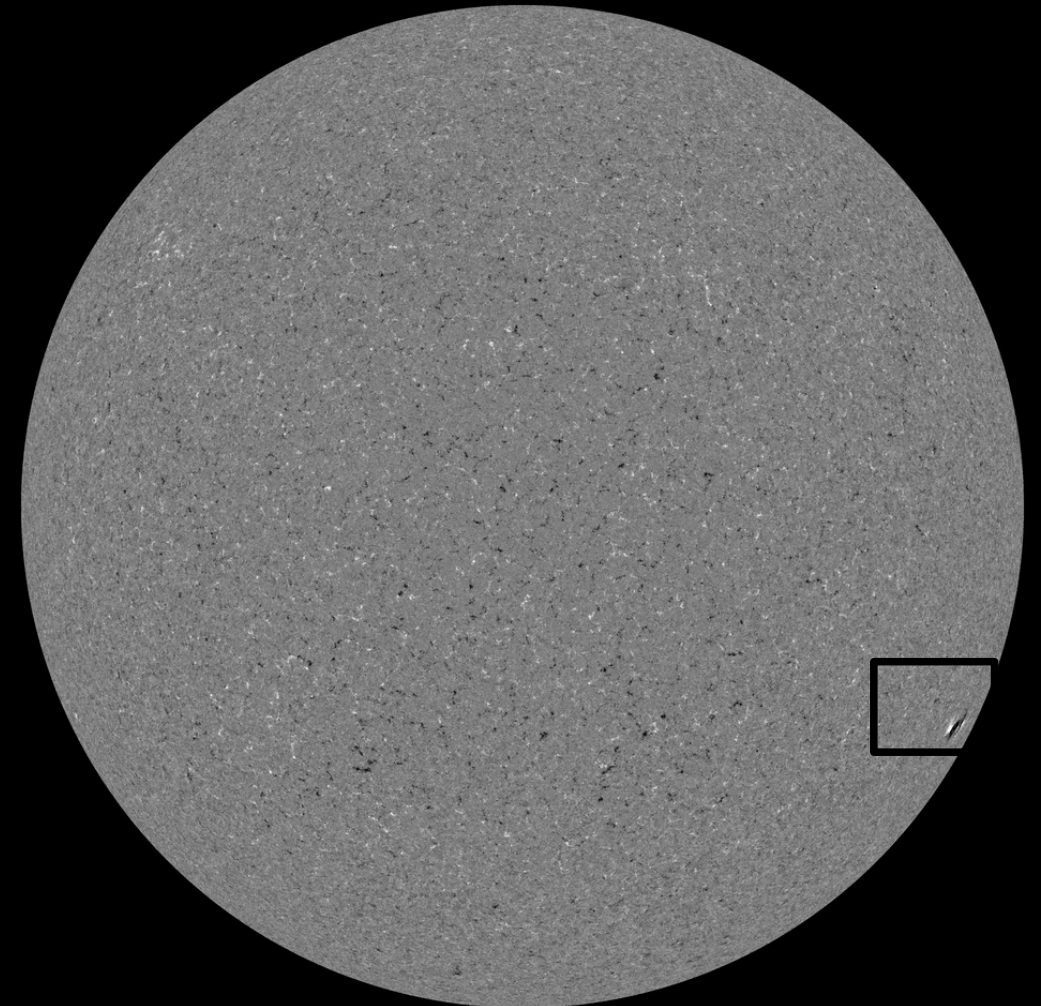
Solar active region – Sat- Sun

SDO/HMI White Light 2020-06-27



SDO/HMI Quick-Look Continuum: 20200627_114500

SDO/HMI Magnetogram 2020-06-28



SDO/HMI Quick-Look Magnetogram: 20200628_114500

Solar active region – Solar map

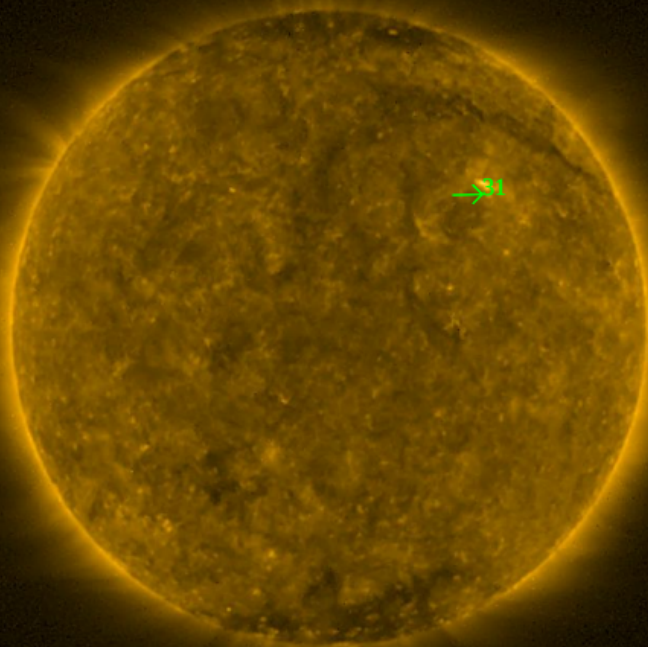
SDO/HMI White Light 2020-06-25

NOAA AR/sunspot
No observation

NOAA Halpha plage
No observation

NOAA expected region
No observation

Catania sunspot groups
2020-06-25 06:00:00



2020-06-25T18:13:02.911

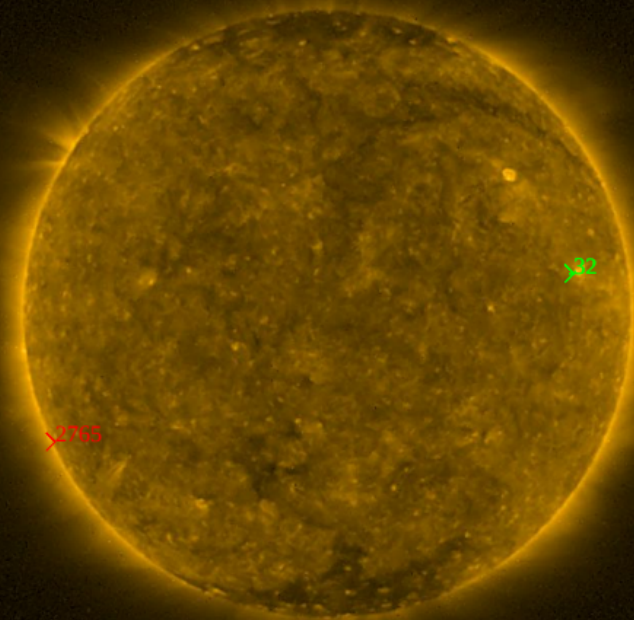
SDO/HMI Magnetogram 2020-06-26

NOAA AR/sunspot
No observation

NOAA Halpha plage
No observation

NOAA expected region
2020-06-26 00:30:00

Catania sunspot groups
2020-06-26 06:30:00

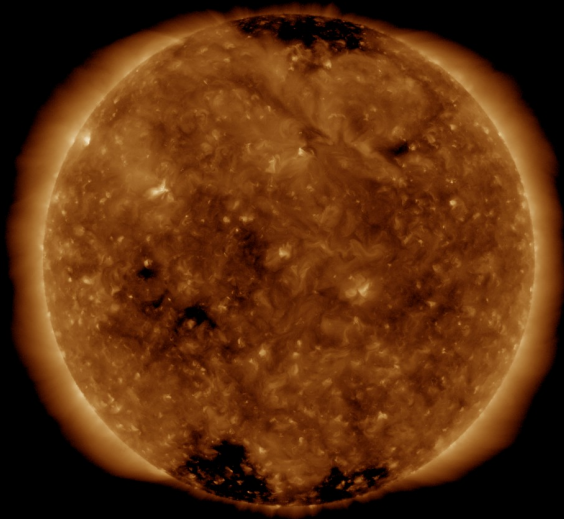


2020-06-26T09:15:03.852

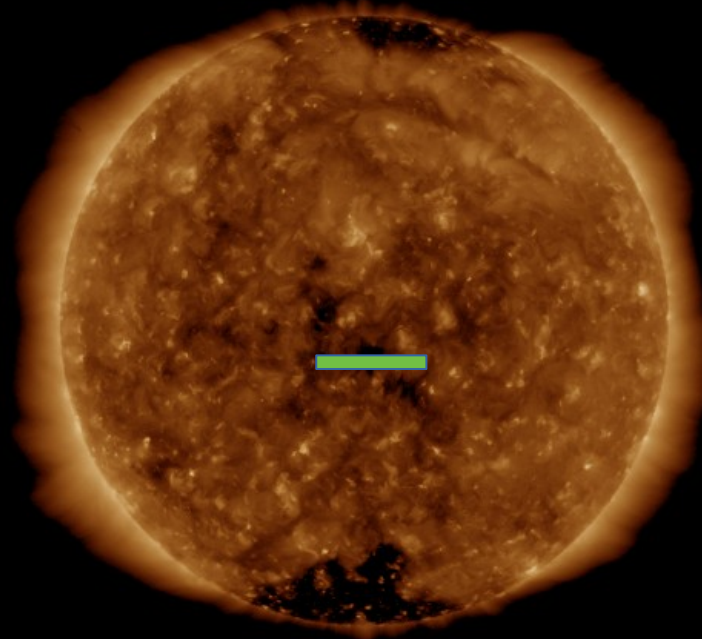
Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-06-21

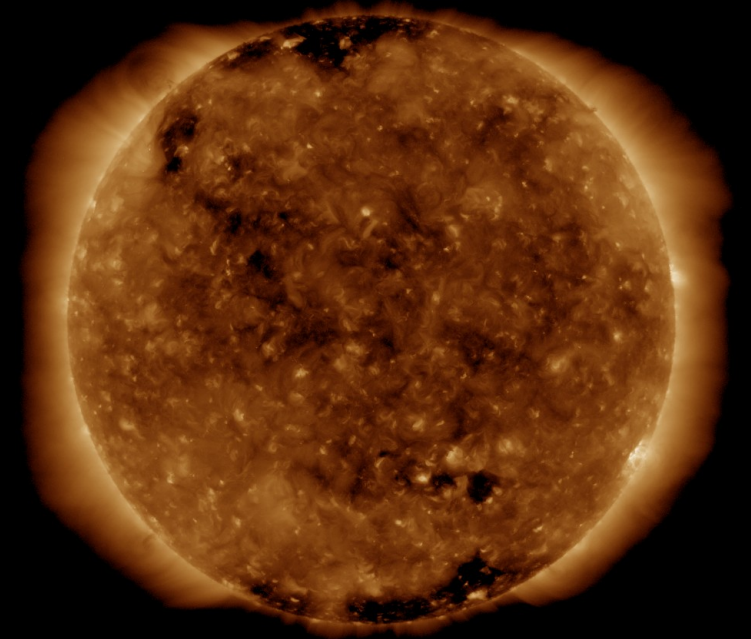
2020-06-28



SDO/AIA 193 2020-06-21 12:17:29 UT

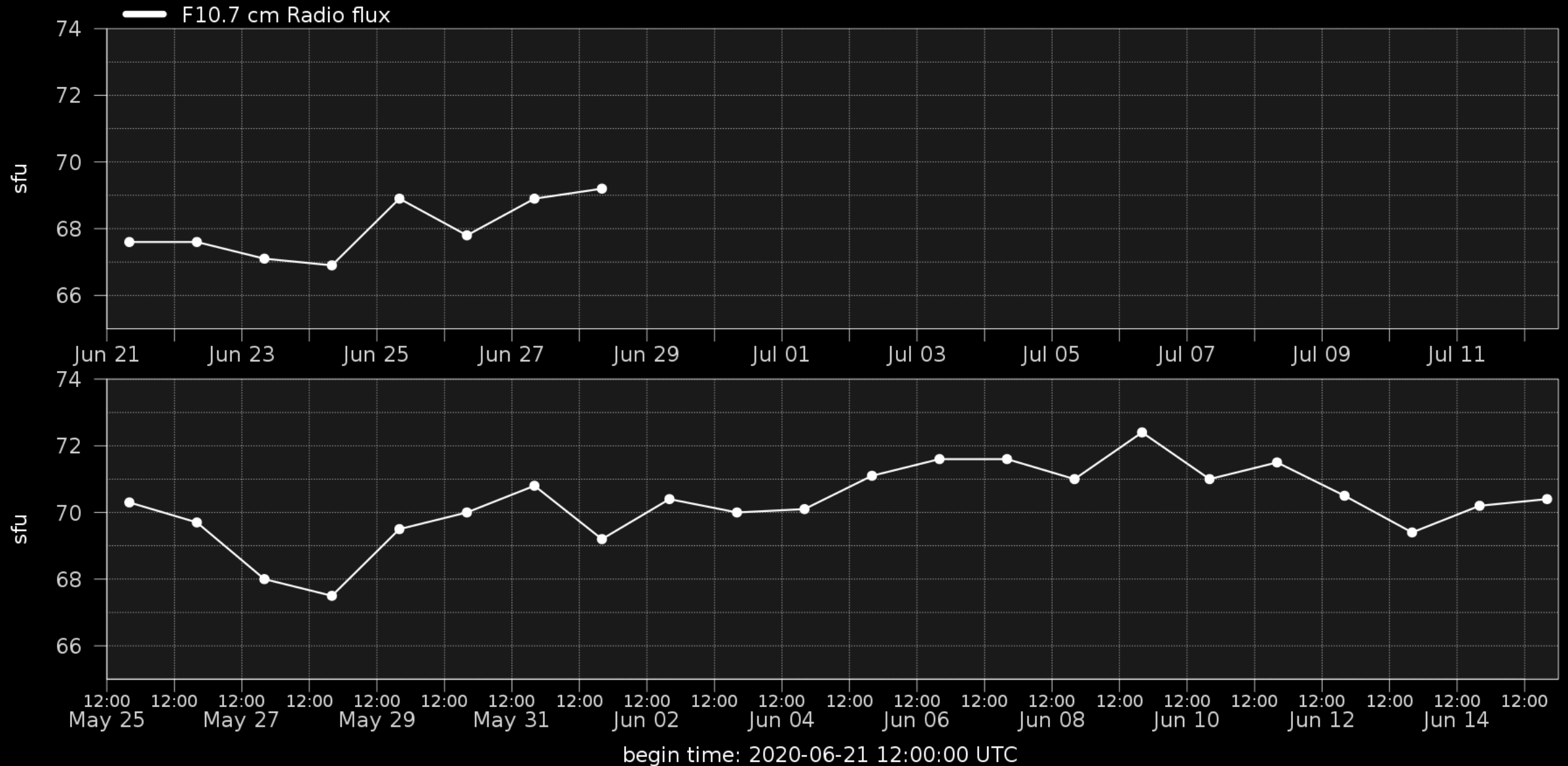


SDO/AIA 193 2020-06-23 19:57:29 UT

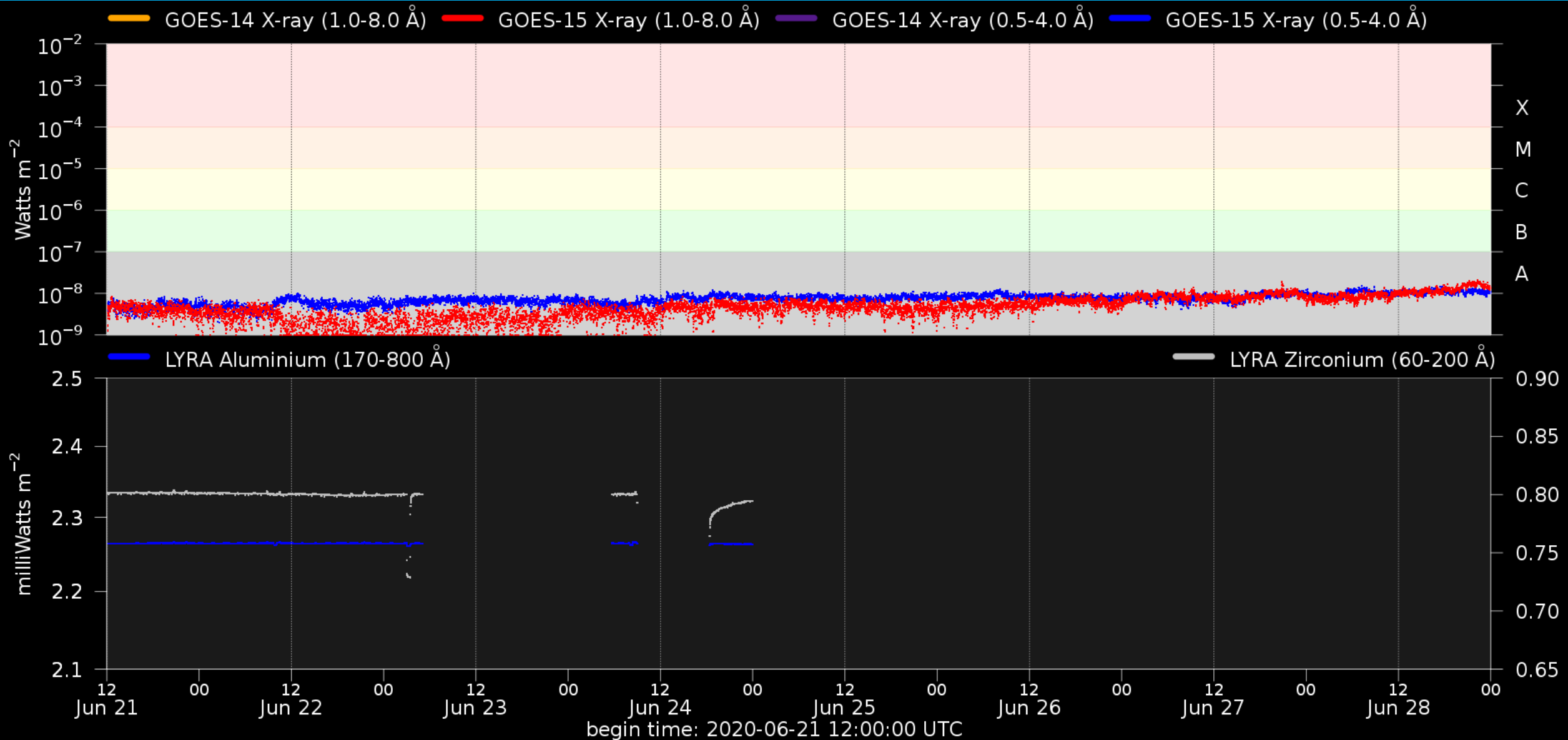


SDO/AIA 193 2020-06-28 12:16:53 UT

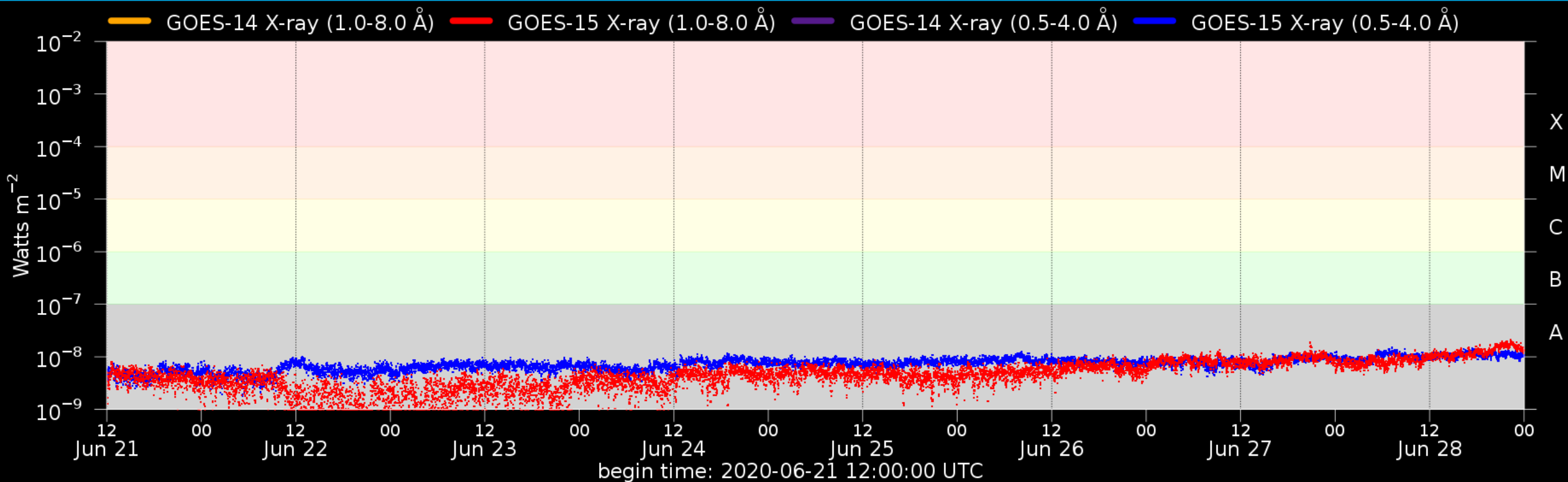
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity

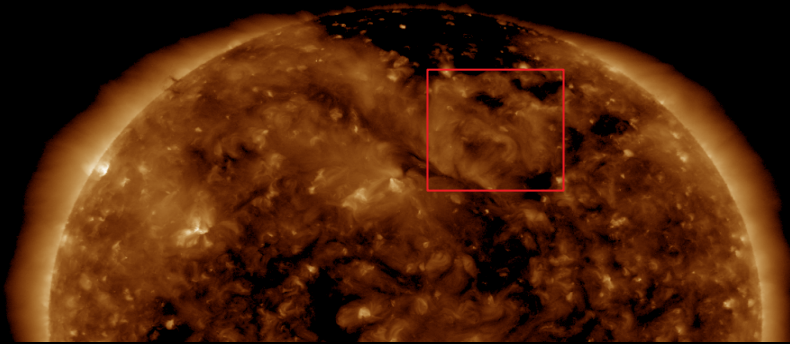


Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

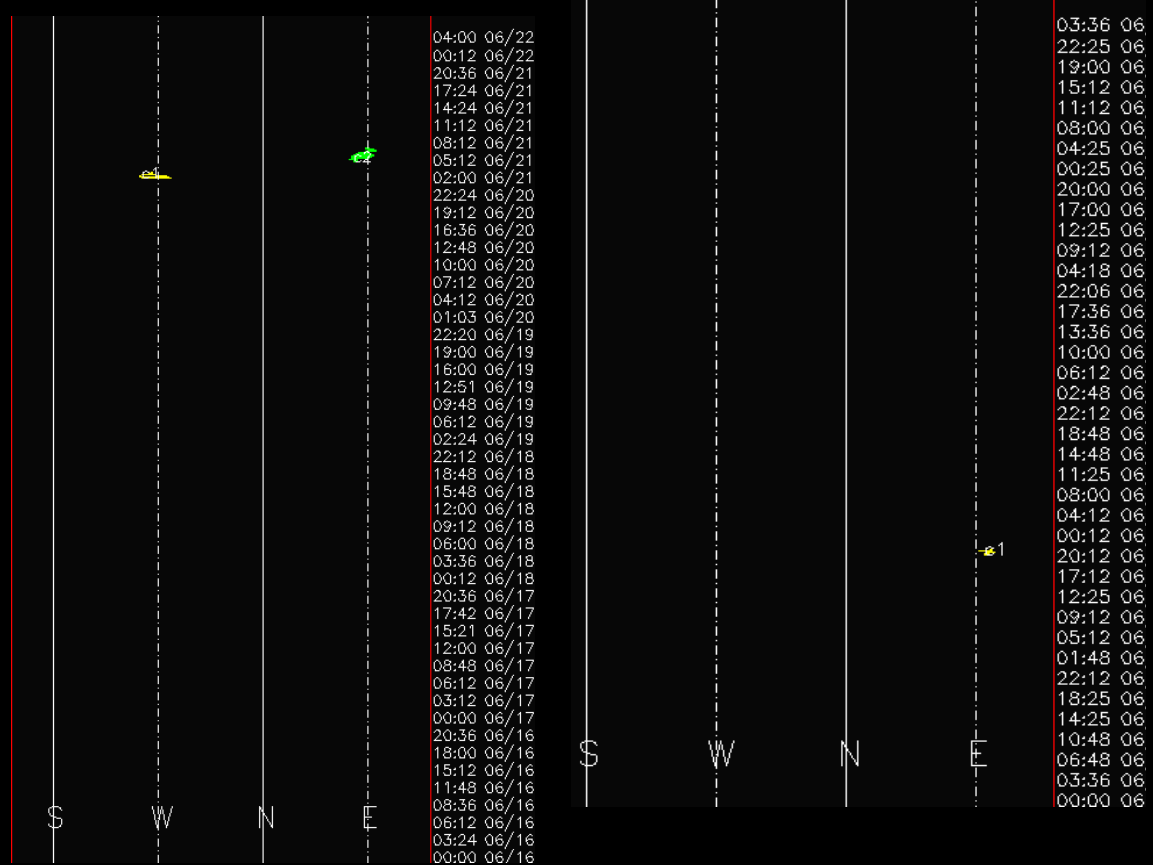
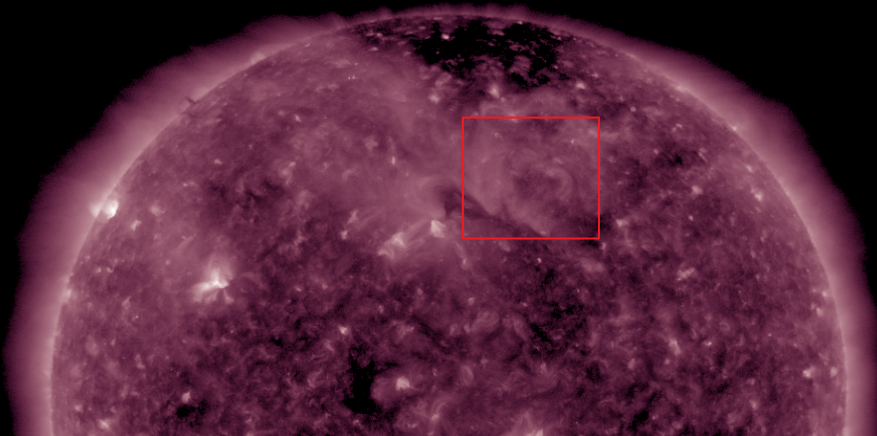
Issue date	2020-06-21	2020-06-22	2020-06-23	2020-06-24	2020-06-25	2020-06-26	2020-06-27	2020-06-28
Probability	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 05 01 01	--- 05 01 01	--- 01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Coronal Mass Ejection

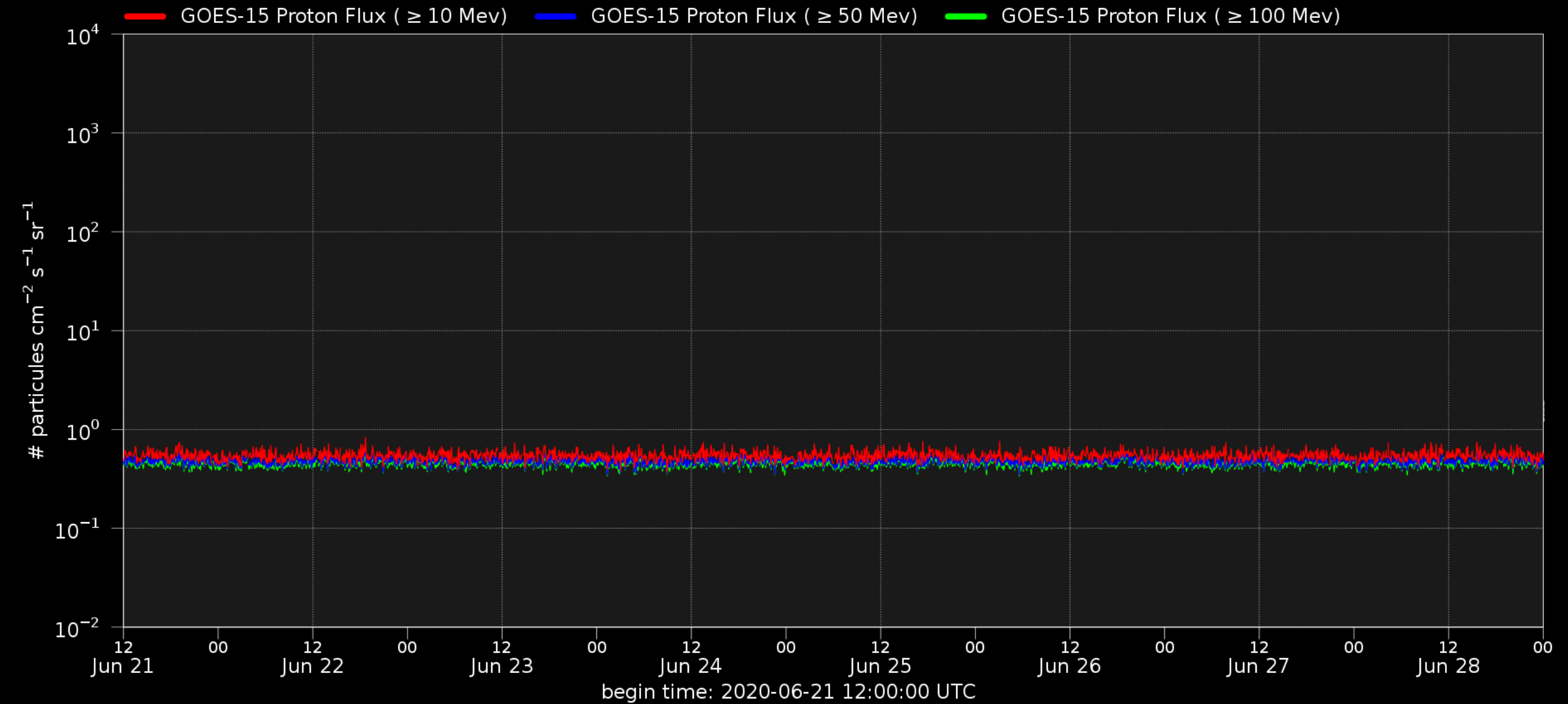
SDO/AIA AIA 193Å 2020-06-21T03:00:05.84



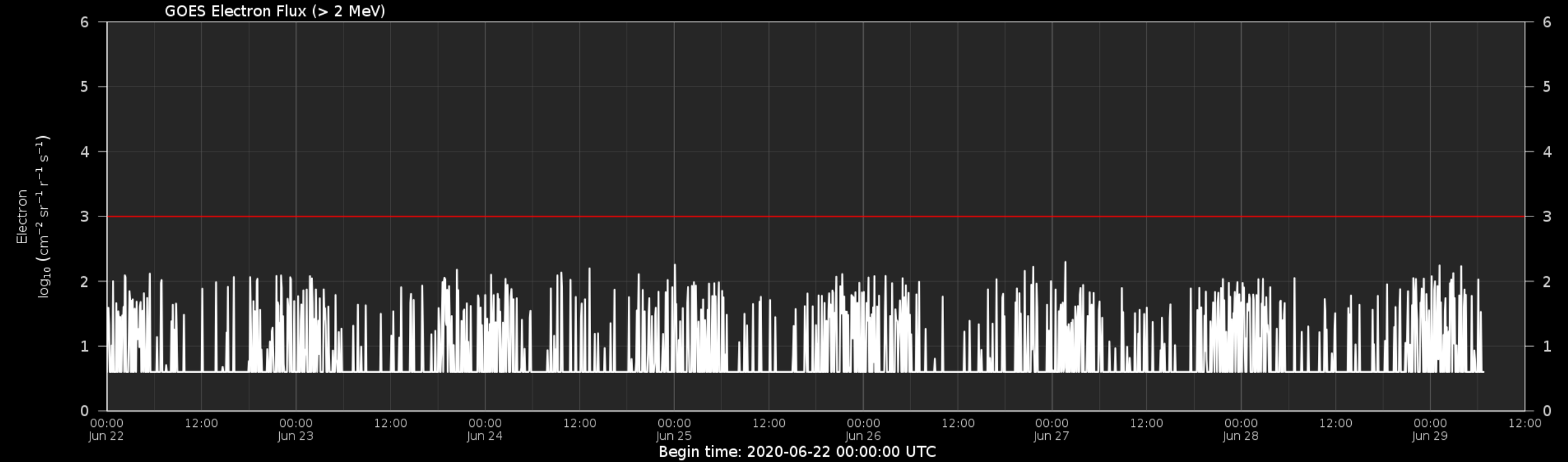
SDO/AIA AIA 211Å 2020-06-21T03:00:11.08



Solar proton flux



Solar electron flux



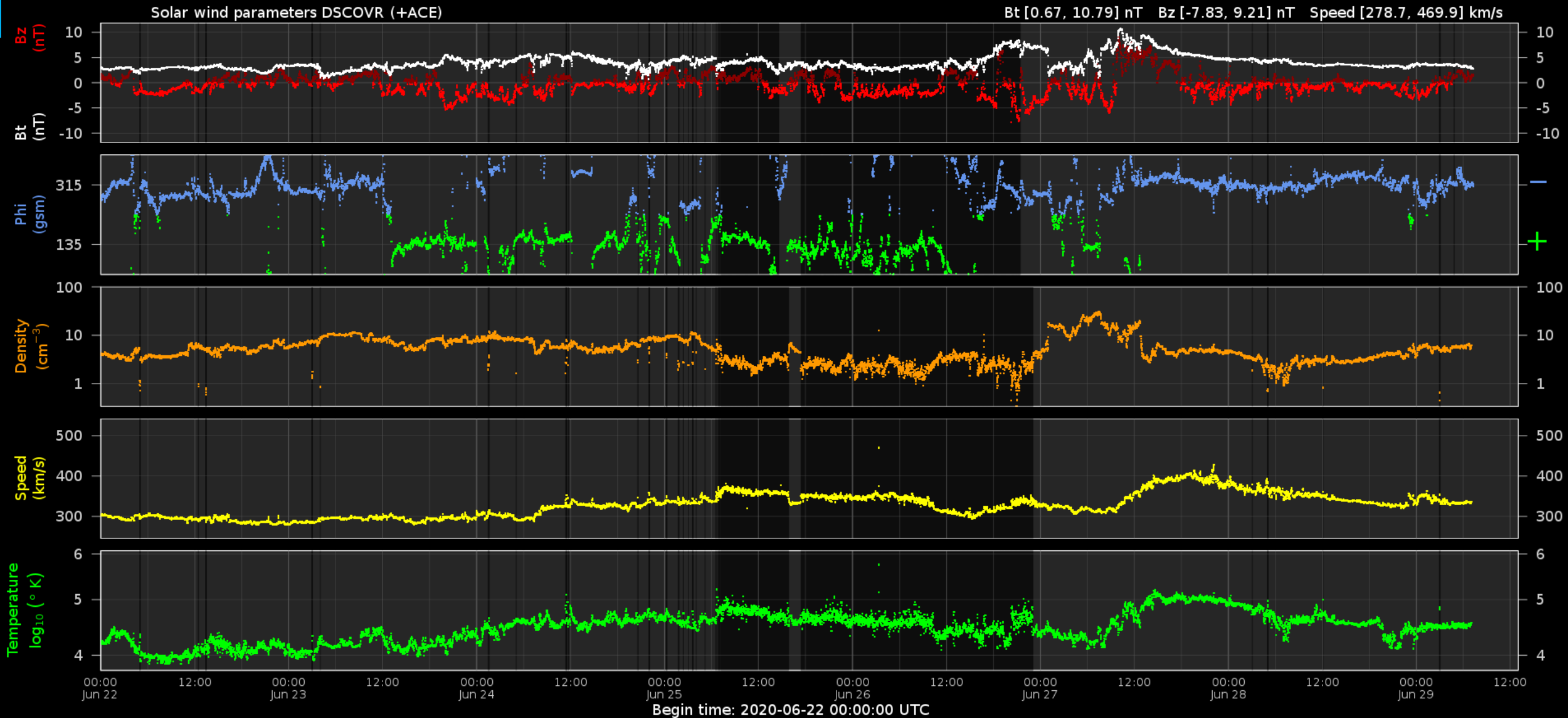
Solar Wind and Geomagnetic Activity

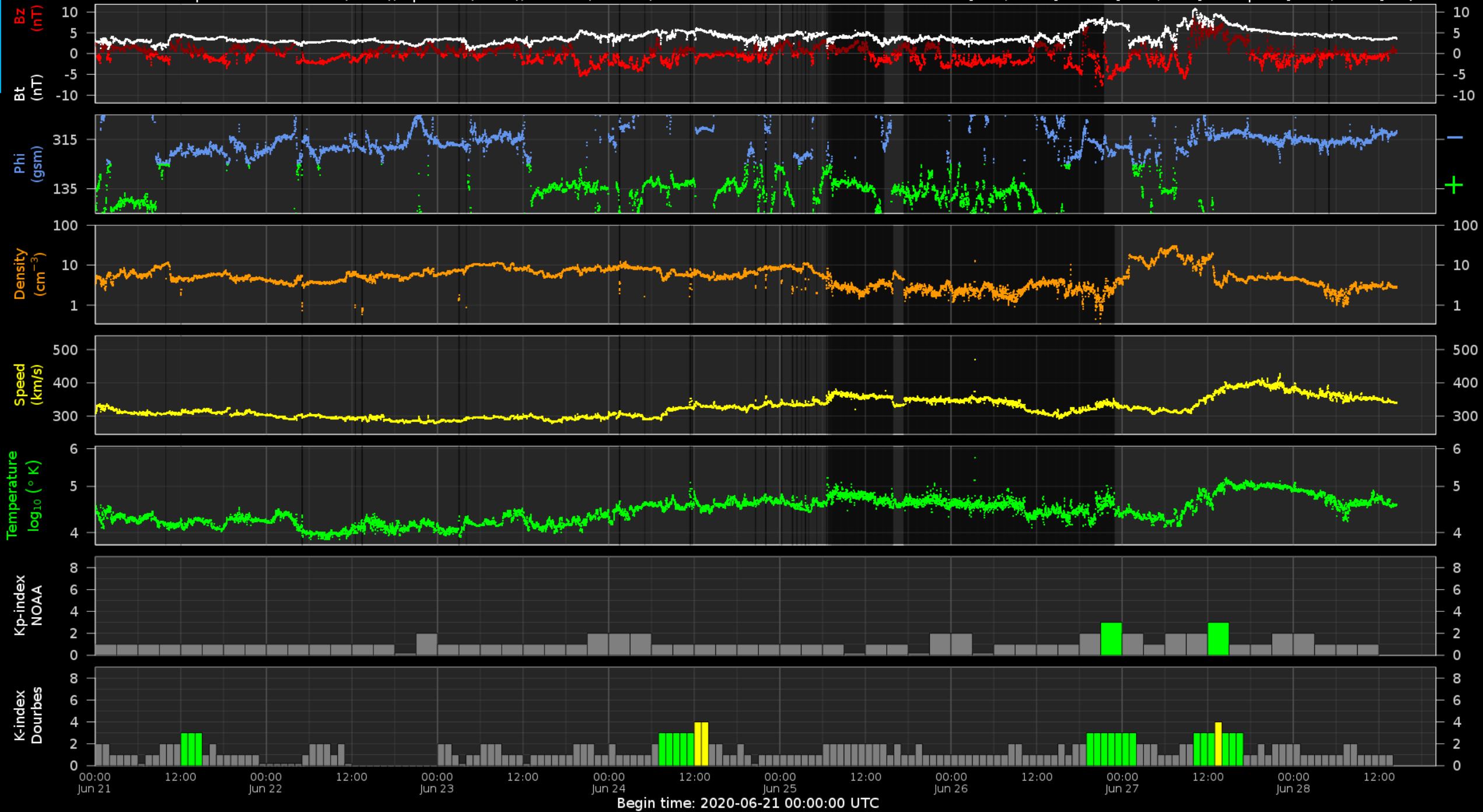


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Solar wind parameters (DSCOVR+ACE data)





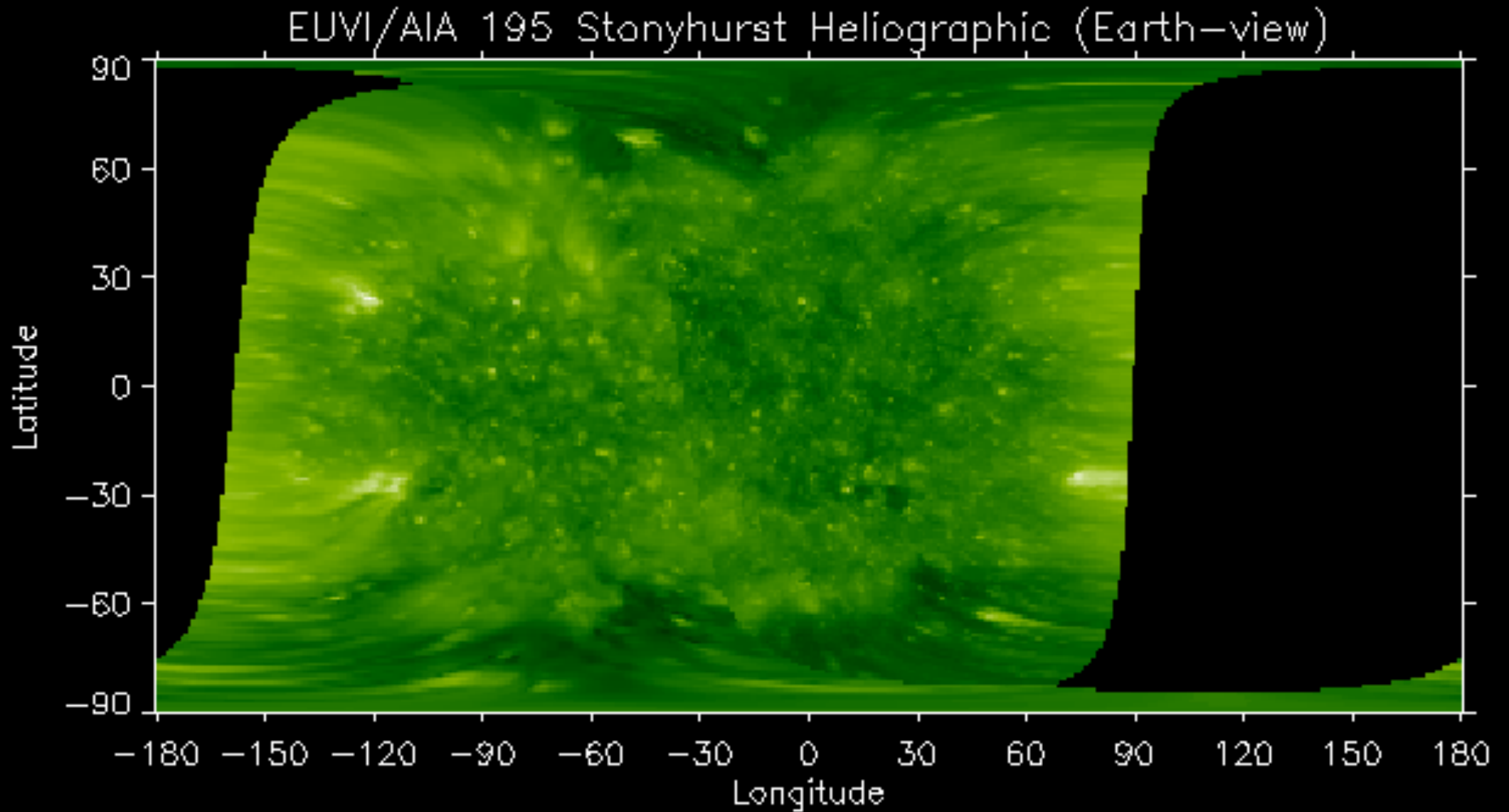
Outlook



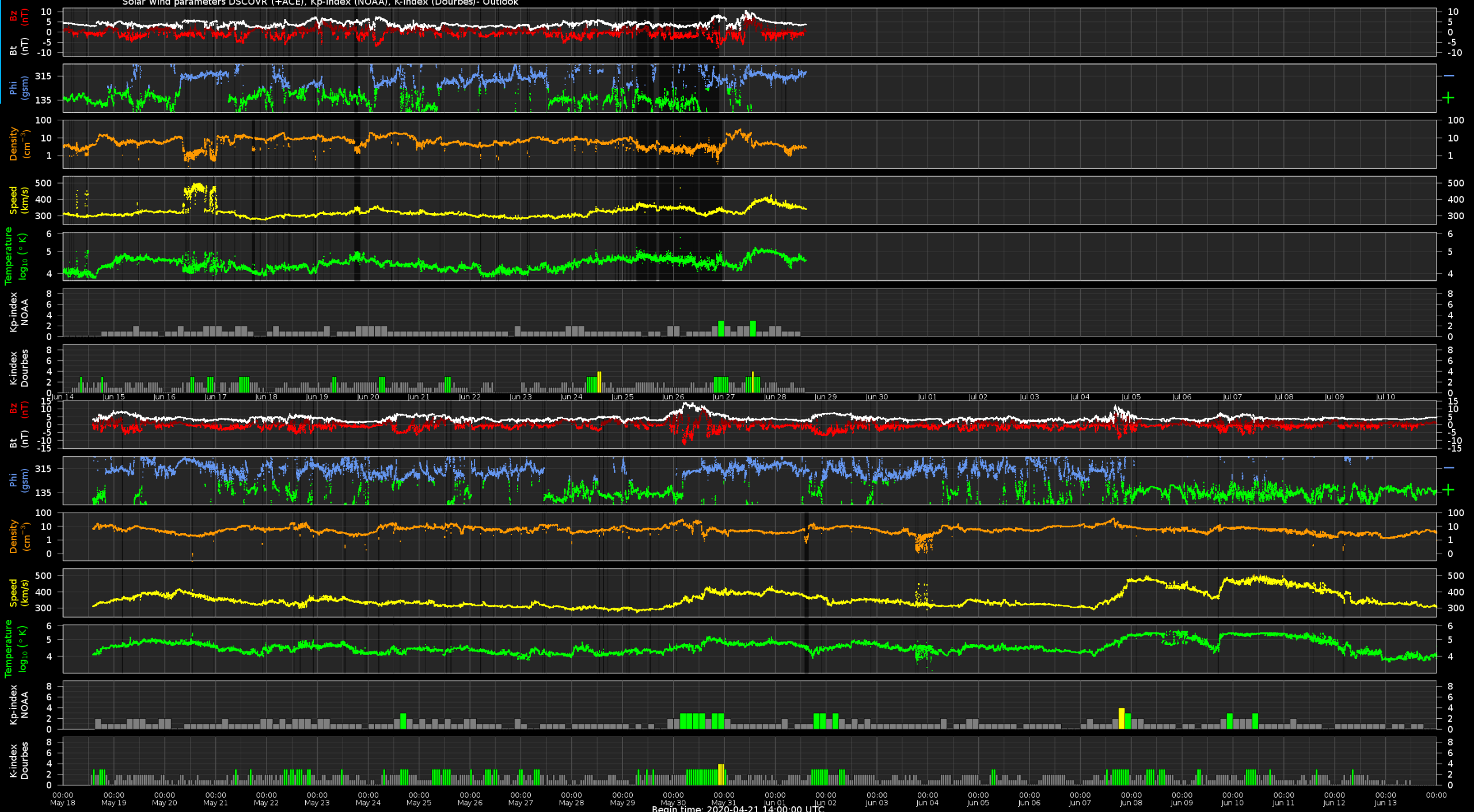
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Outlook: Solar activity



Solar wind parameters DSCOVR (+ACE), Kp-index (NOAA), K-index (Dourbes)- Outlook



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