

SIDC Space Weather Briefing

28 June 2020 - 05 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 2020-06-28 12:00 UT to 2020-07-05 12:00 UT

| | |
|----------------|---|
| Active regions | Catania sunspot group 33 & NOAA AR 2766 |
| Flaring | Only several A-class flares |
| Filaments | One large filament eruption |
| CMEs | Few narrow CMEs |
| Proton Events | None |

Solar wind and geomagnetic conditions from 2020-06-28 12:00 UT to 2020-07-05 12:00 UT

| | |
|---------------|---|
| Coronal Holes | Extension of the northern polar coronal hole |
| ICME | None |
| SW Conditions | Mostly quiet to unsettled |
| K-indices | max K-index (Dourbes): 3.0 max Kp-index (NOAA): 3 |

All Quiet Alert: canceled on Monday, June 29

Solar Activity

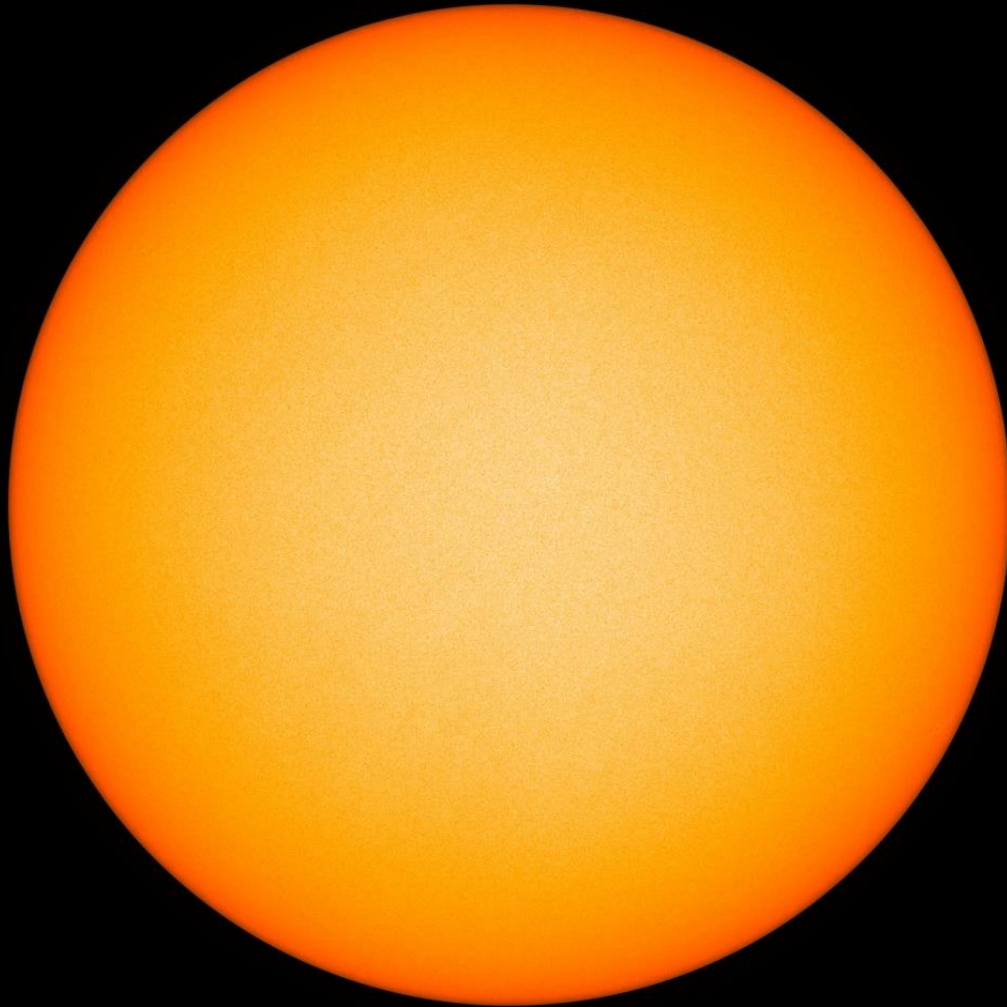


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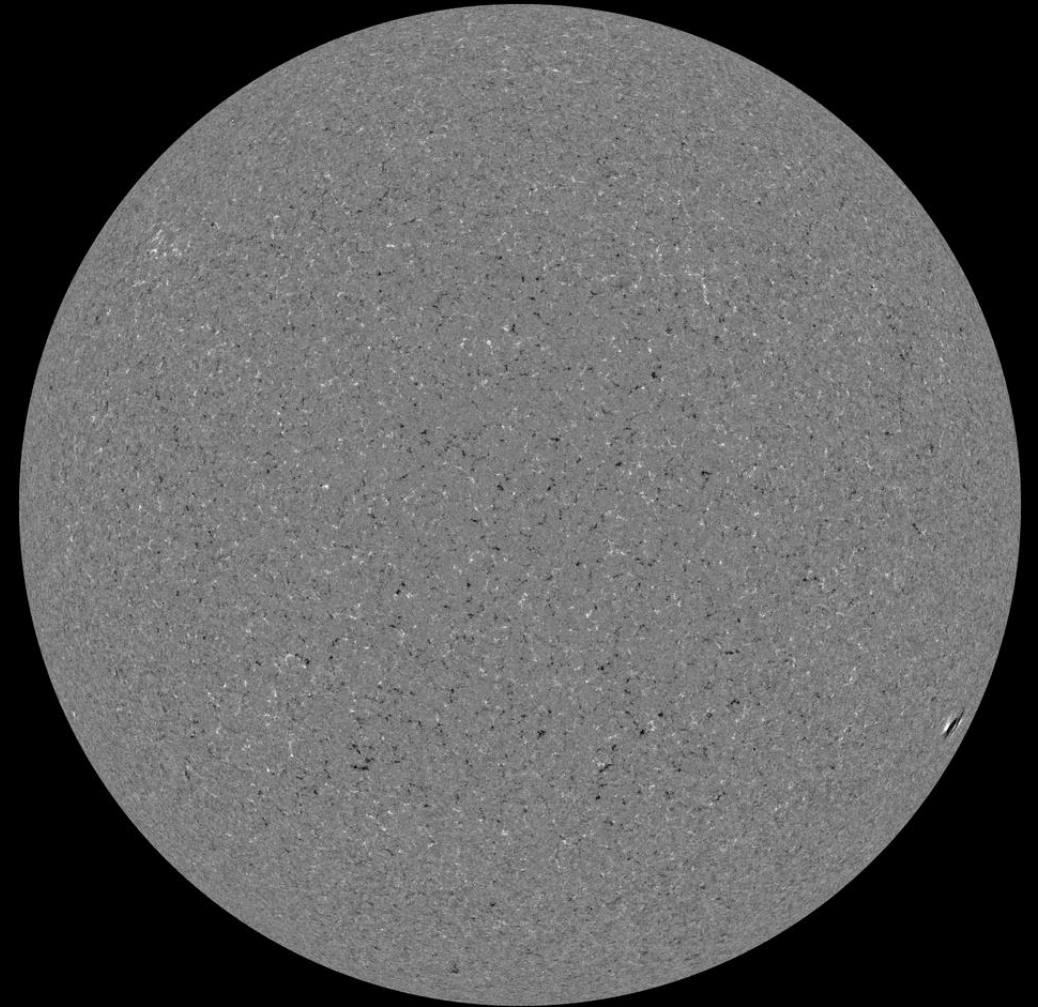
Solar active region - start of the week

SDO/HMI White Light 2020-06-28



SDO/HMI Quick-Look Continuum: 20200628_114500

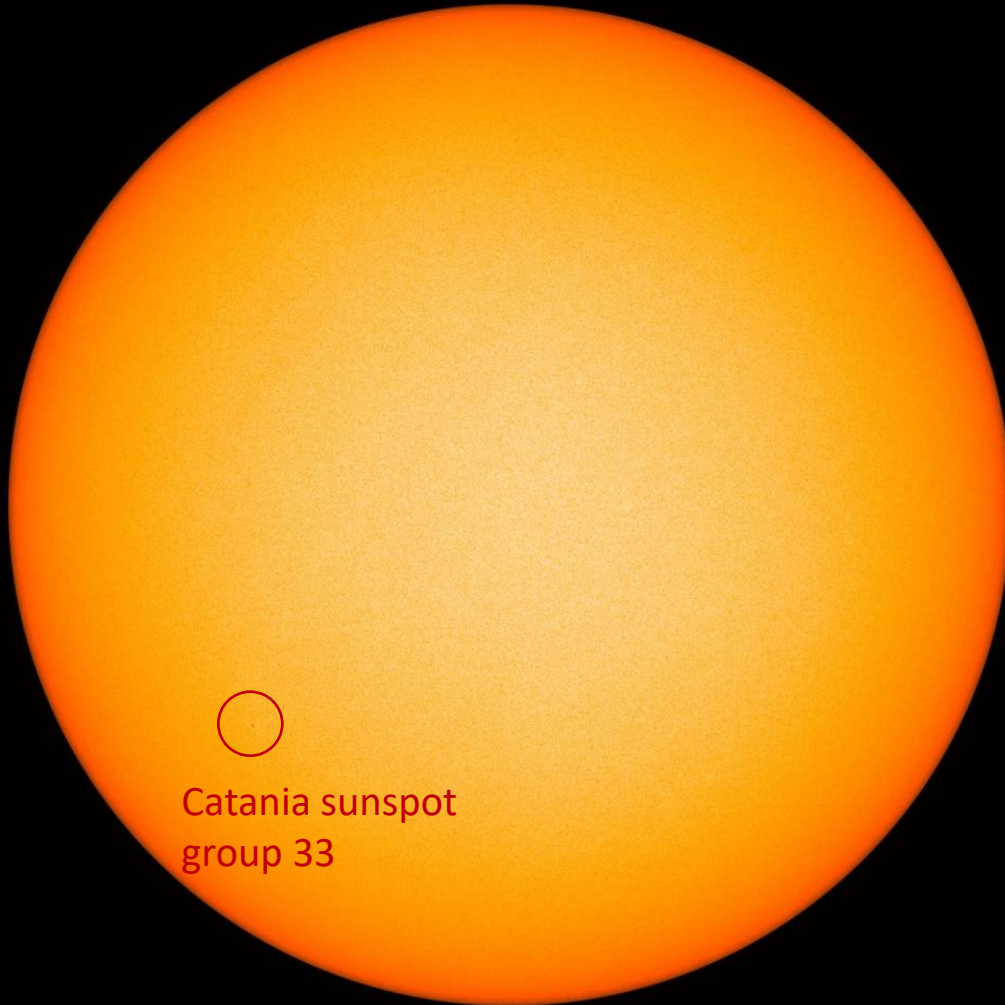
SDO/HMI Magnetogram 2020-06-28



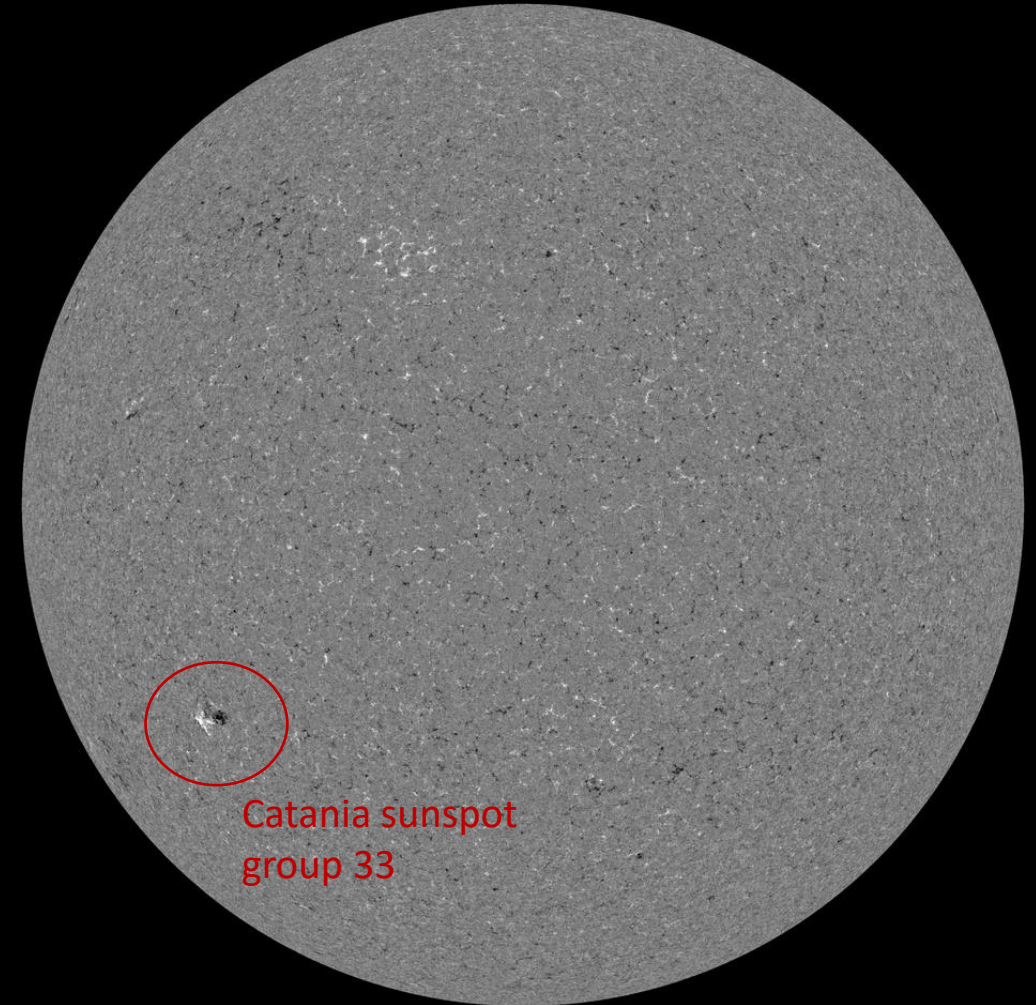
SDO/HMI Quick-Look Magnetogram: 20200628_114500

Solar active region - middle of the week

SDO/HMI White Light 2020-07-02

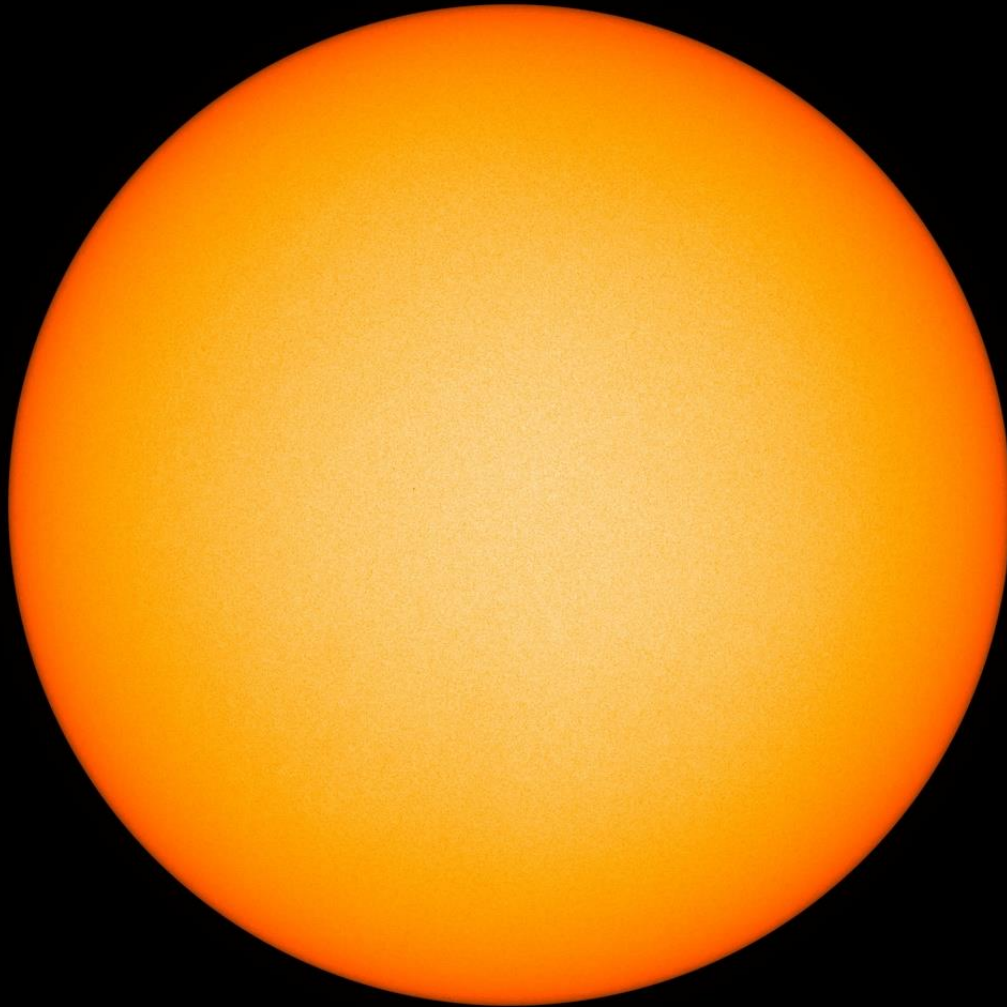


SDO/HMI Magnetogram 2020-07-01



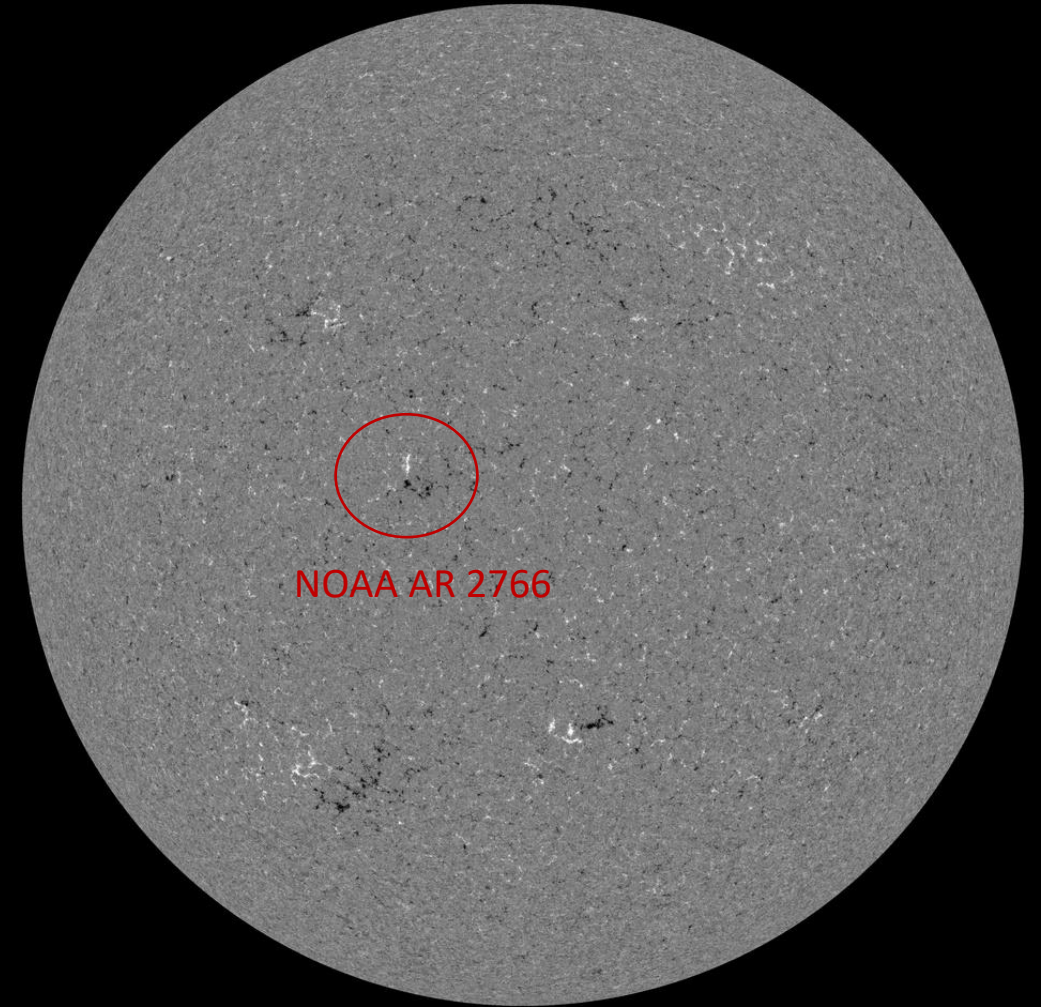
Solar active region - end of the week

SDO/HMI White Light 2020-07-05



SDO/HMI Quick-Look Continuum: 20200705_114500

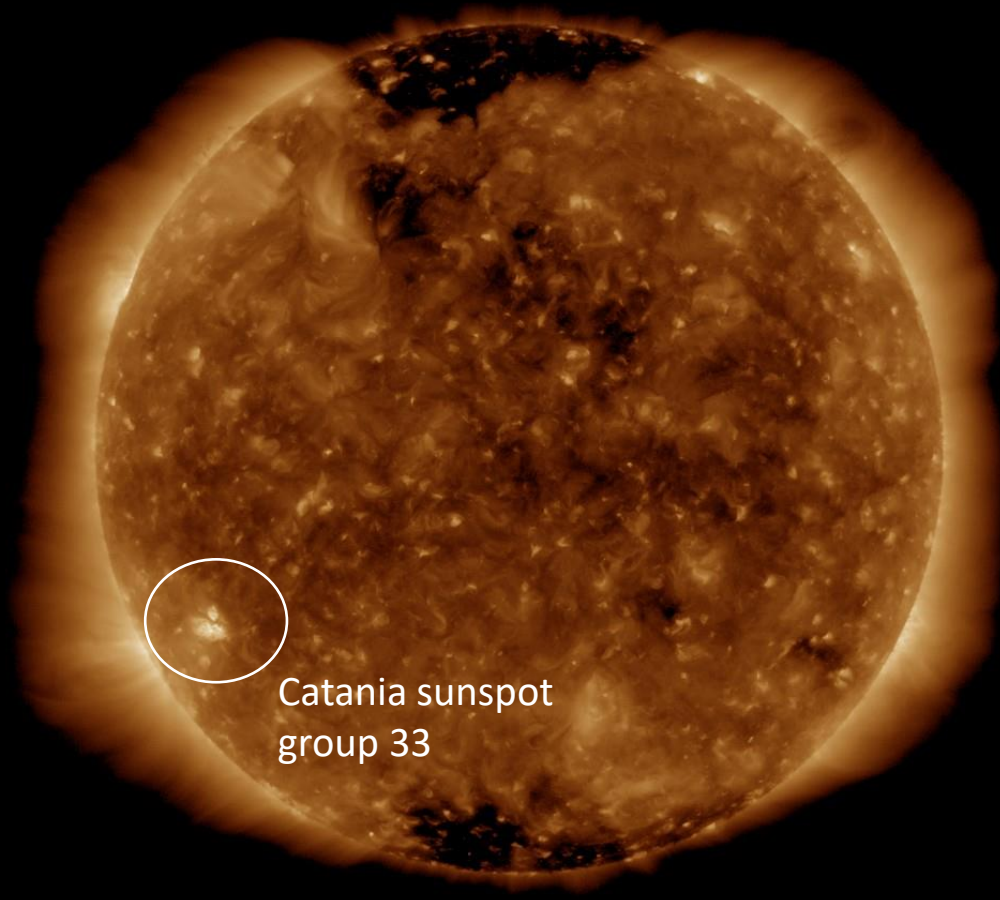
SDO/HMI Magnetogram 2020-07-05



SDO/HMI Quick-Look Magnetogram: 20200705_114500

Solar active region & Coronal hole

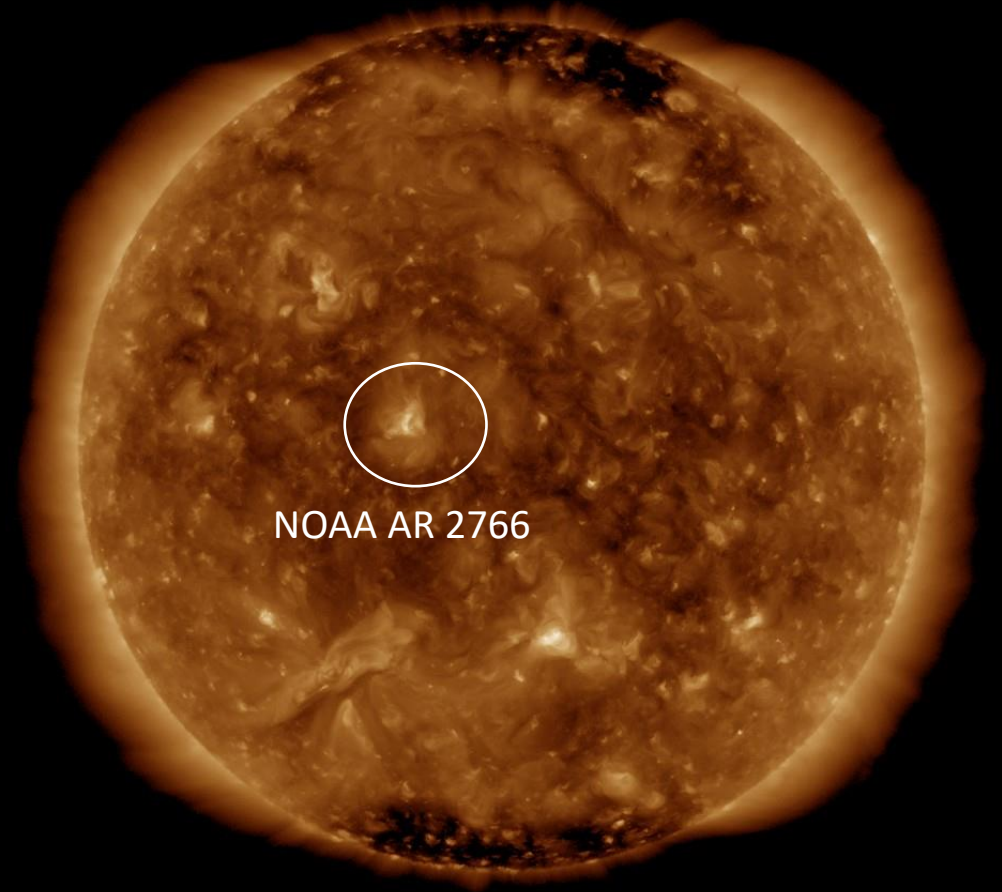
SDO/AIA 19.3 nm 2020-06-28



Catania sunspot
group 33

SDO/AIA 193 2020-06-30 23:47:53 UT

SDO/AIA 19.3 nm 2020-07-05



NOAA AR 2766

SDO/AIA 193 2020-07-05 12:17:53 UT

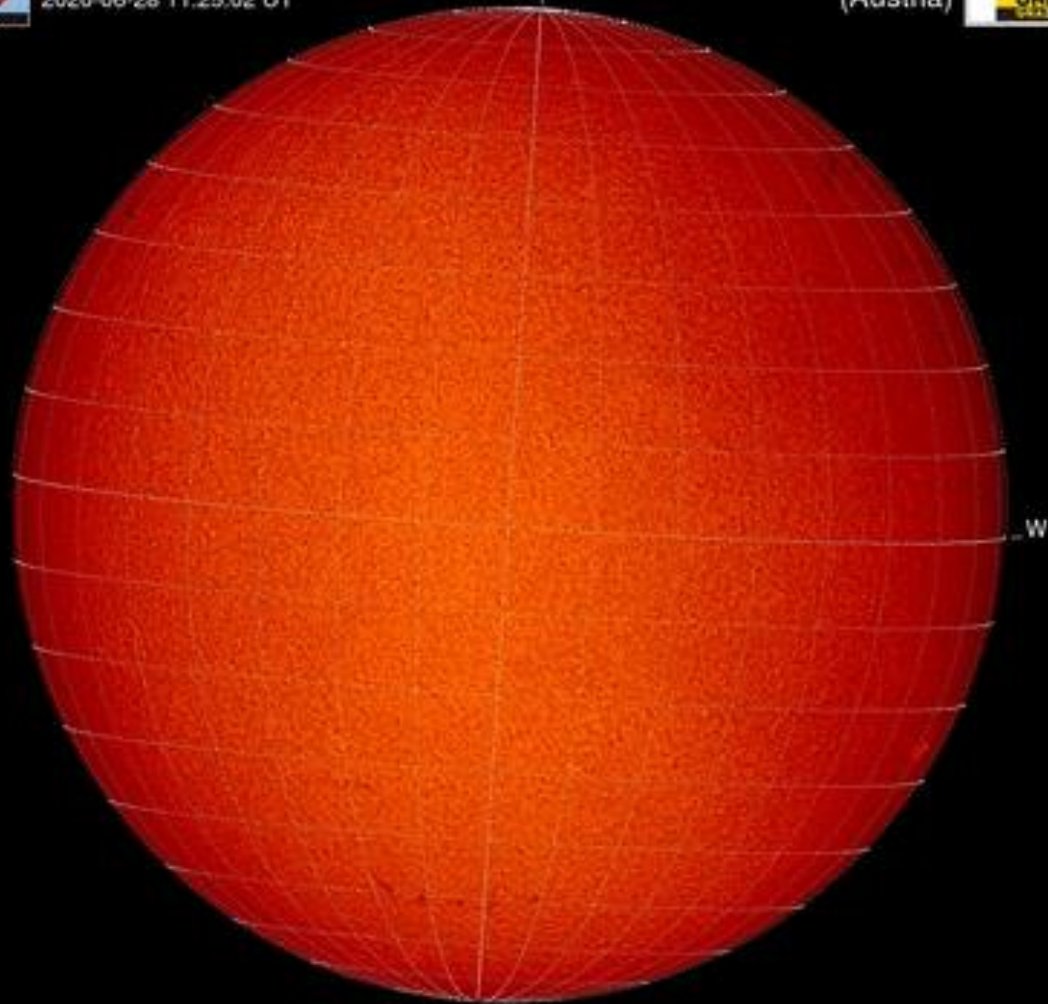
Filament & Filament eruption

H-alpha 2020-06-28



Kanzelhöhe Observatory
2020-06-28 11:25:02 UT

University of Graz
(Austria)

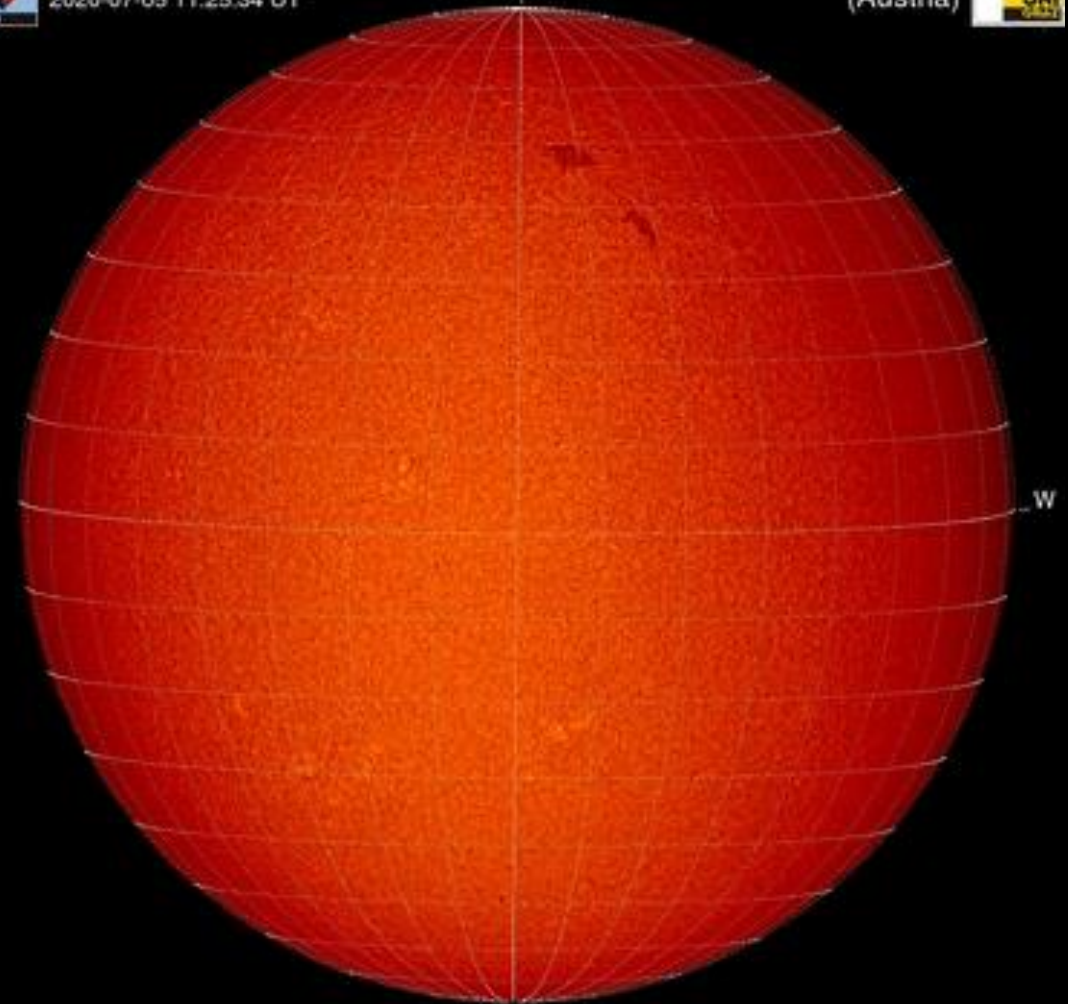


H-alpha 2020-07-05



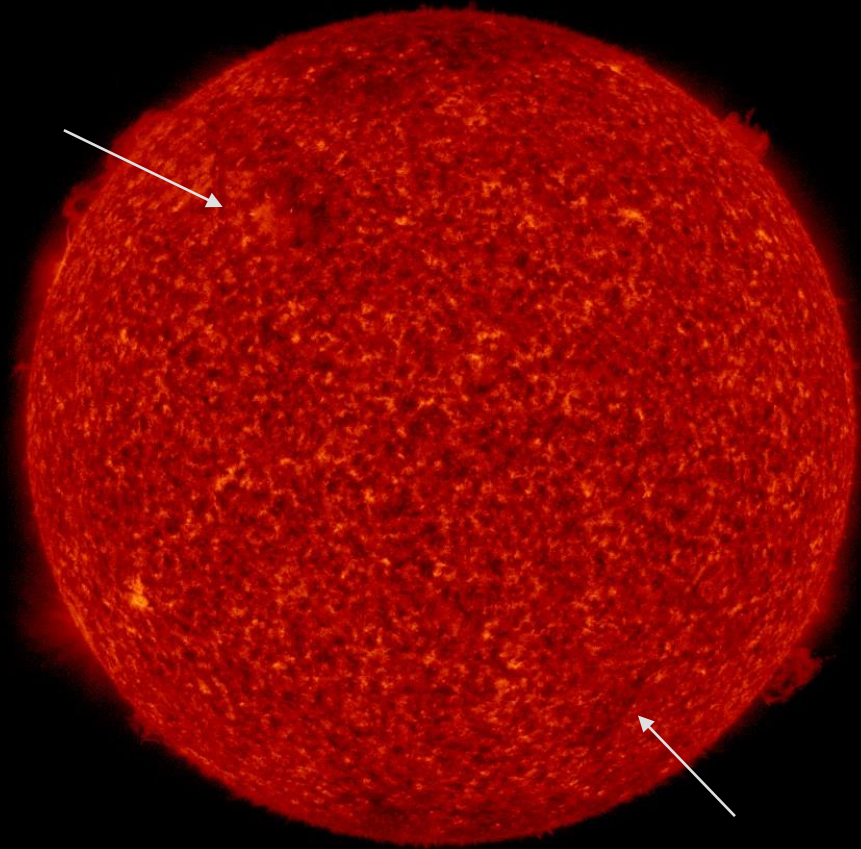
Kanzelhöhe Observatory
2020-07-05 11:25:34 UT

University of Graz
(Austria)



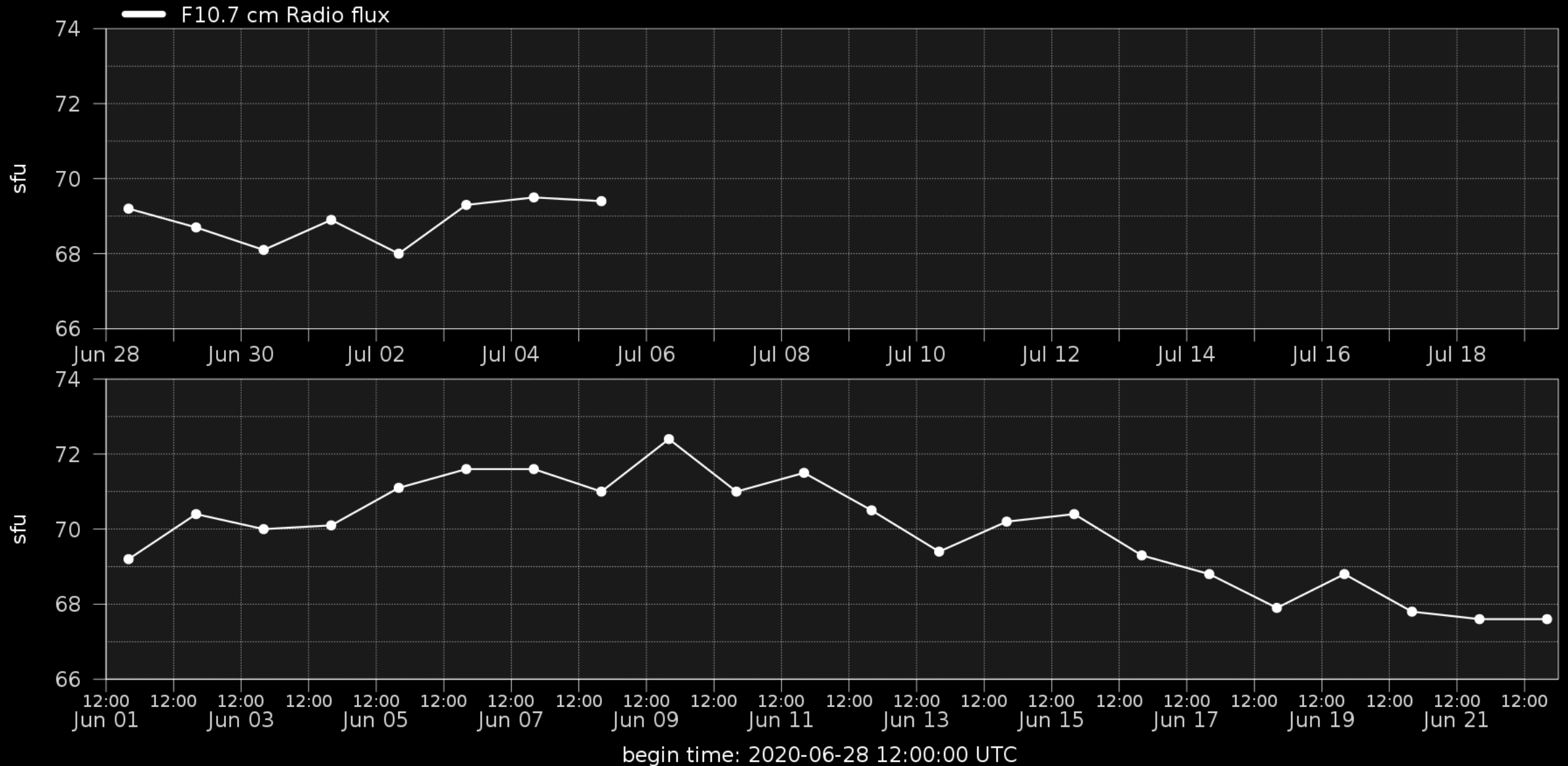
Filament eruptions

SDO/AIA 30.4 nm 2020-06-28

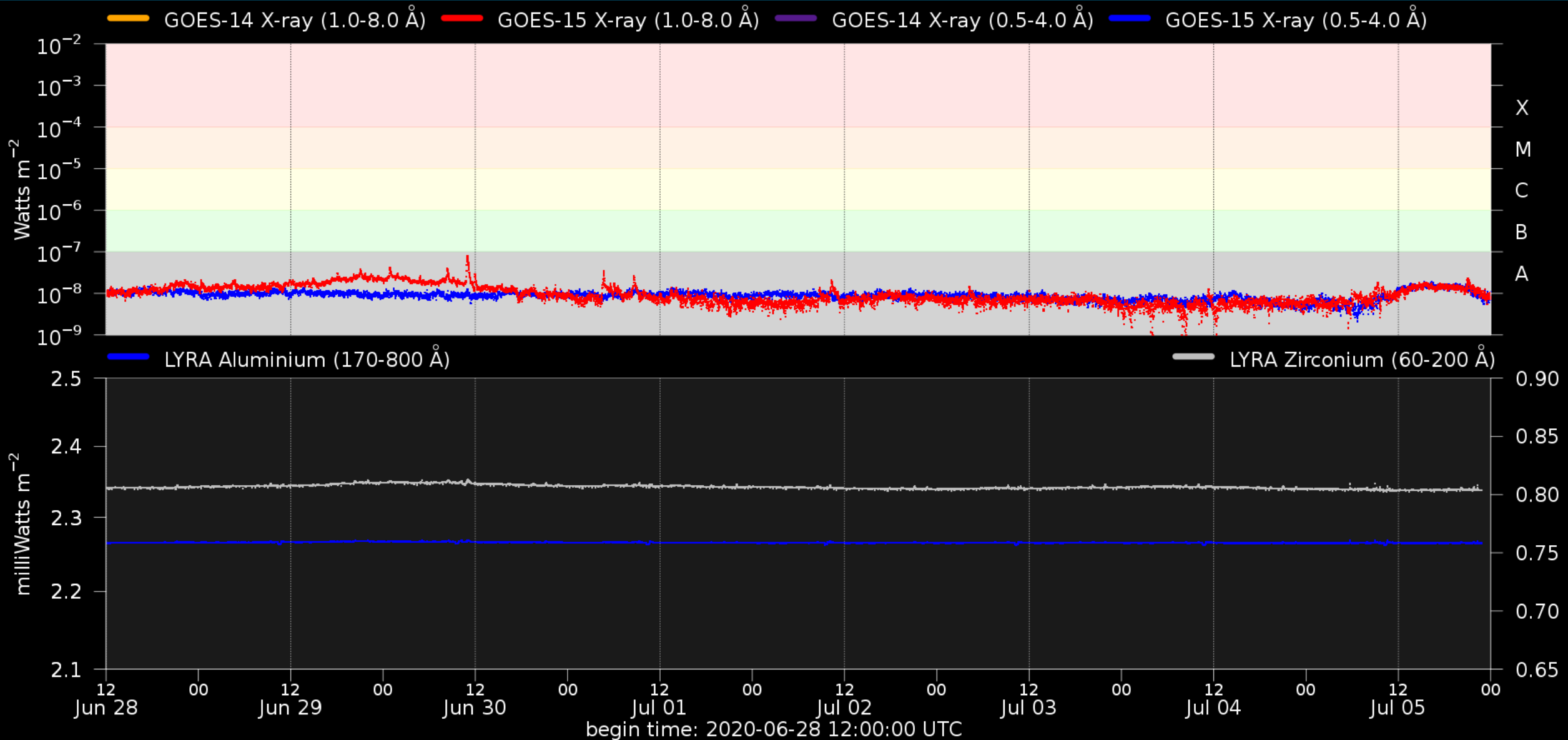


SDO/AIA 304 2020-06-30 21:28:18 UT

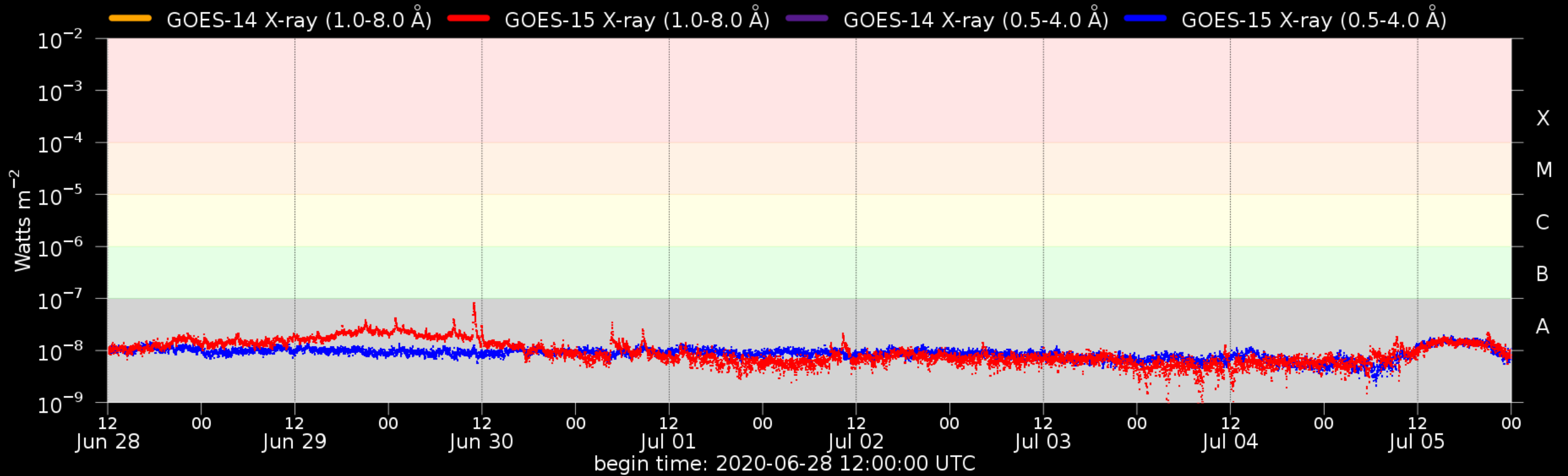
Solar F10.7cm radio flux



Solar X-Ray and UV flux



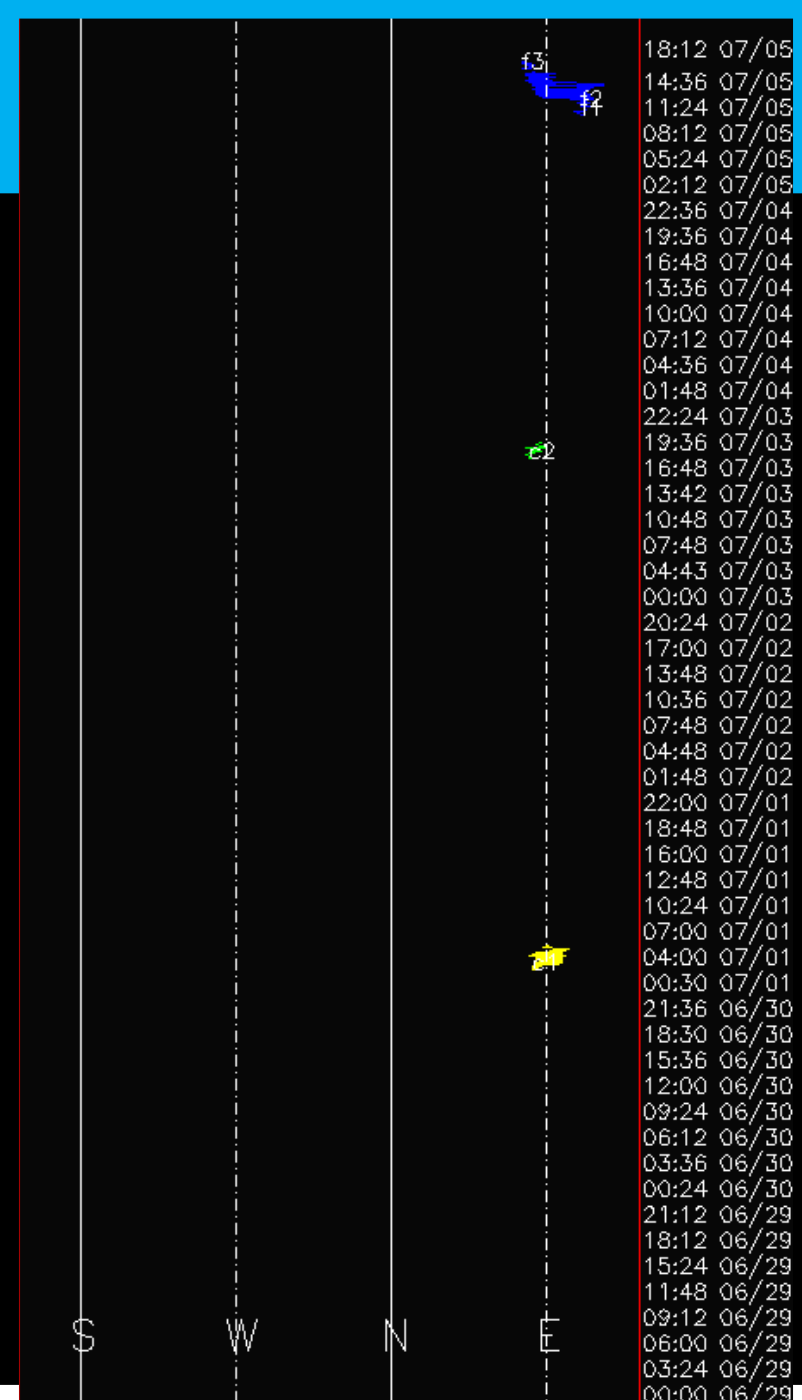
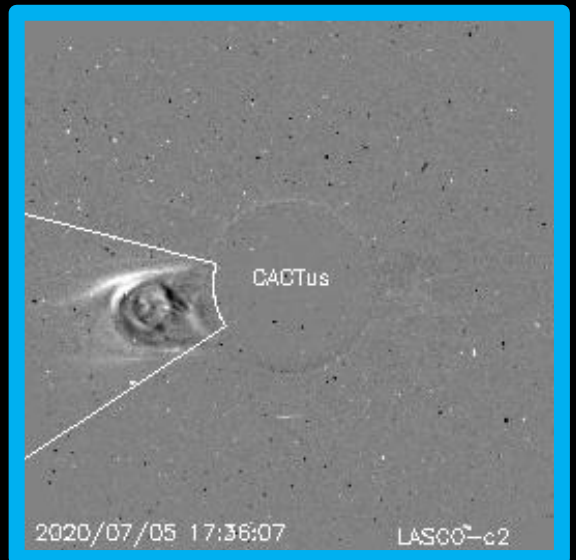
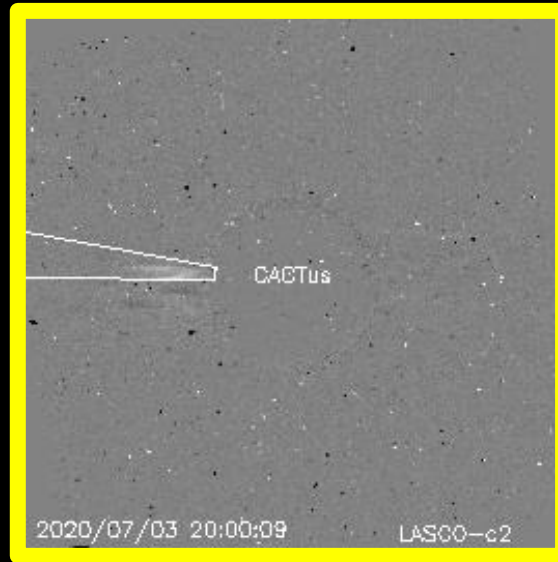
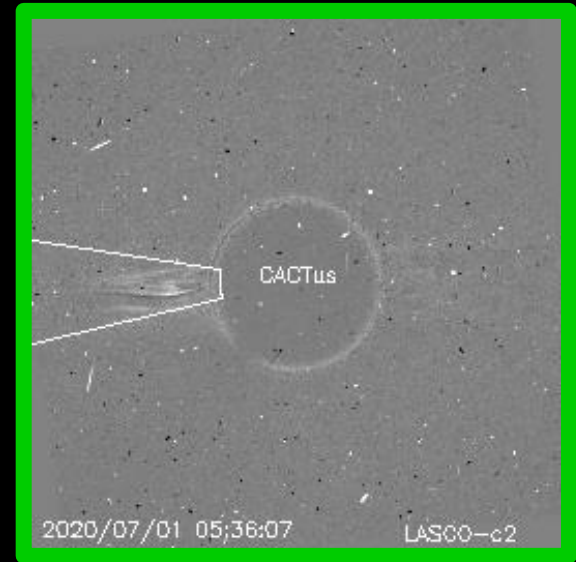
Flaring activity



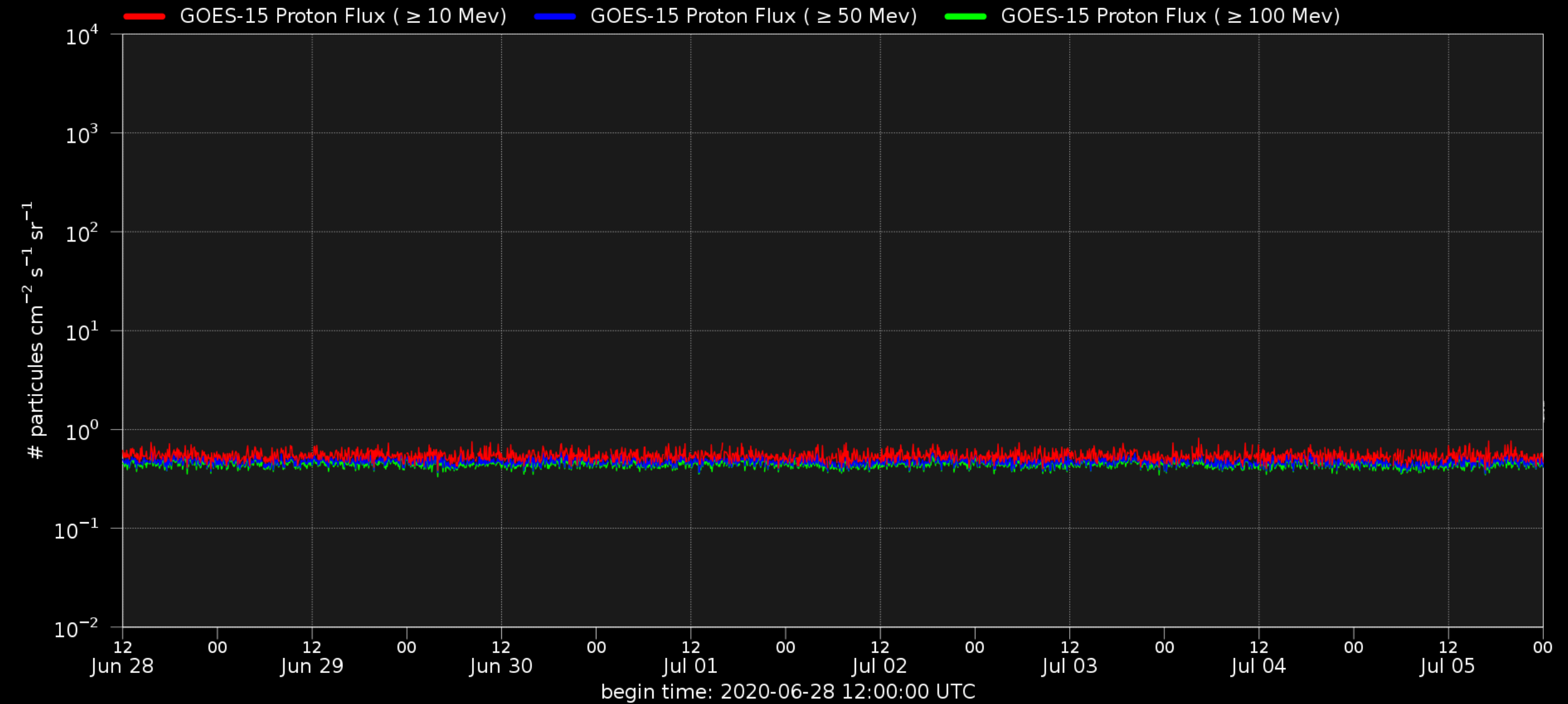
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

| Issue date | 2020-06-28 | 2020-06-29 | 2020-06-30 | 2020-07-01 | 2020-07-02 | 2020-07-03 | 2020-07-04 | 2020-07-05 |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Probability | --- 01 01 01 | --- 01 01 01 | --- 01 01 01 | --- 05 01 01 | --- 01 01 01 | --- 01 01 01 | --- 01 01 01 | --- 05 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



Solar proton flux



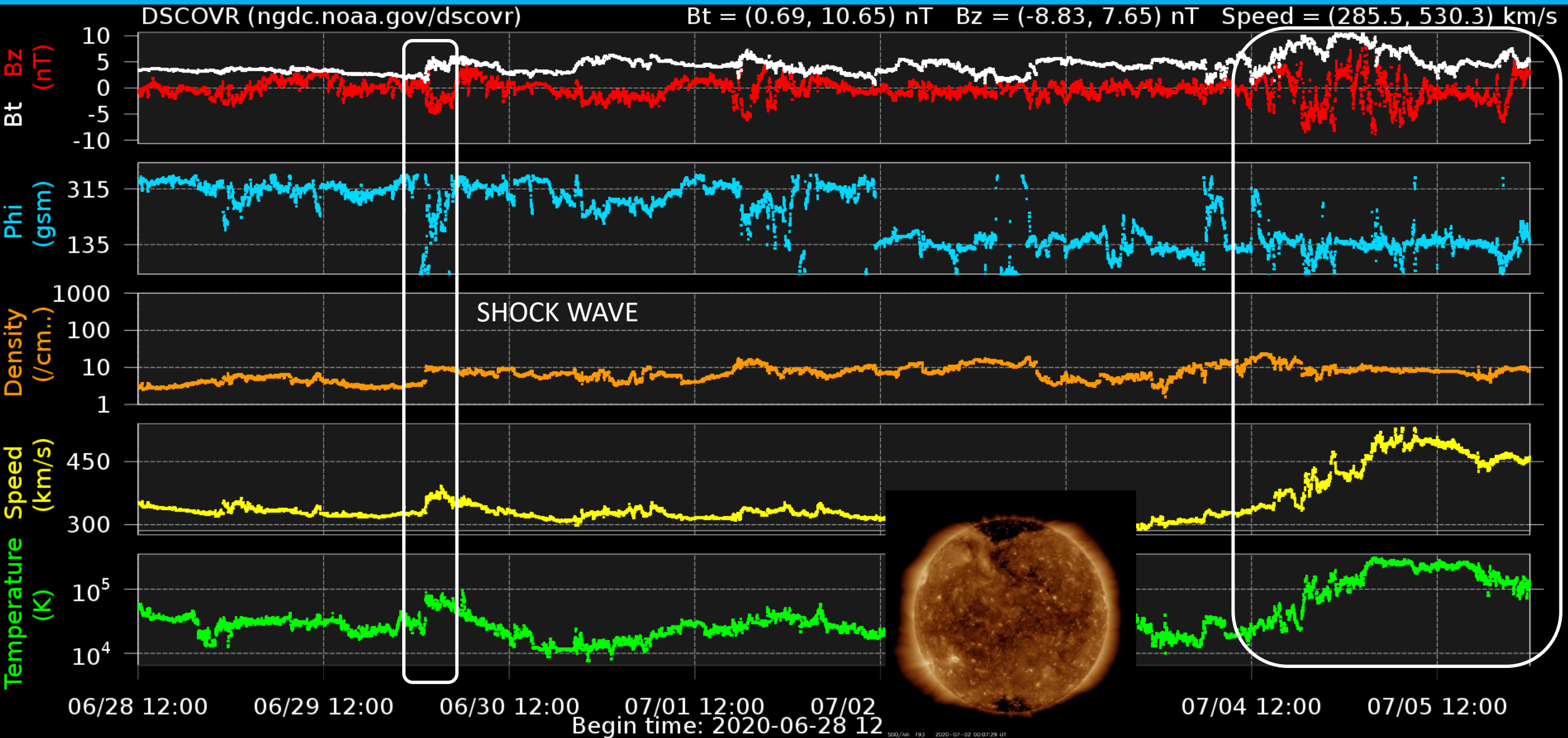
Solar Wind and Geomagnetic Activity



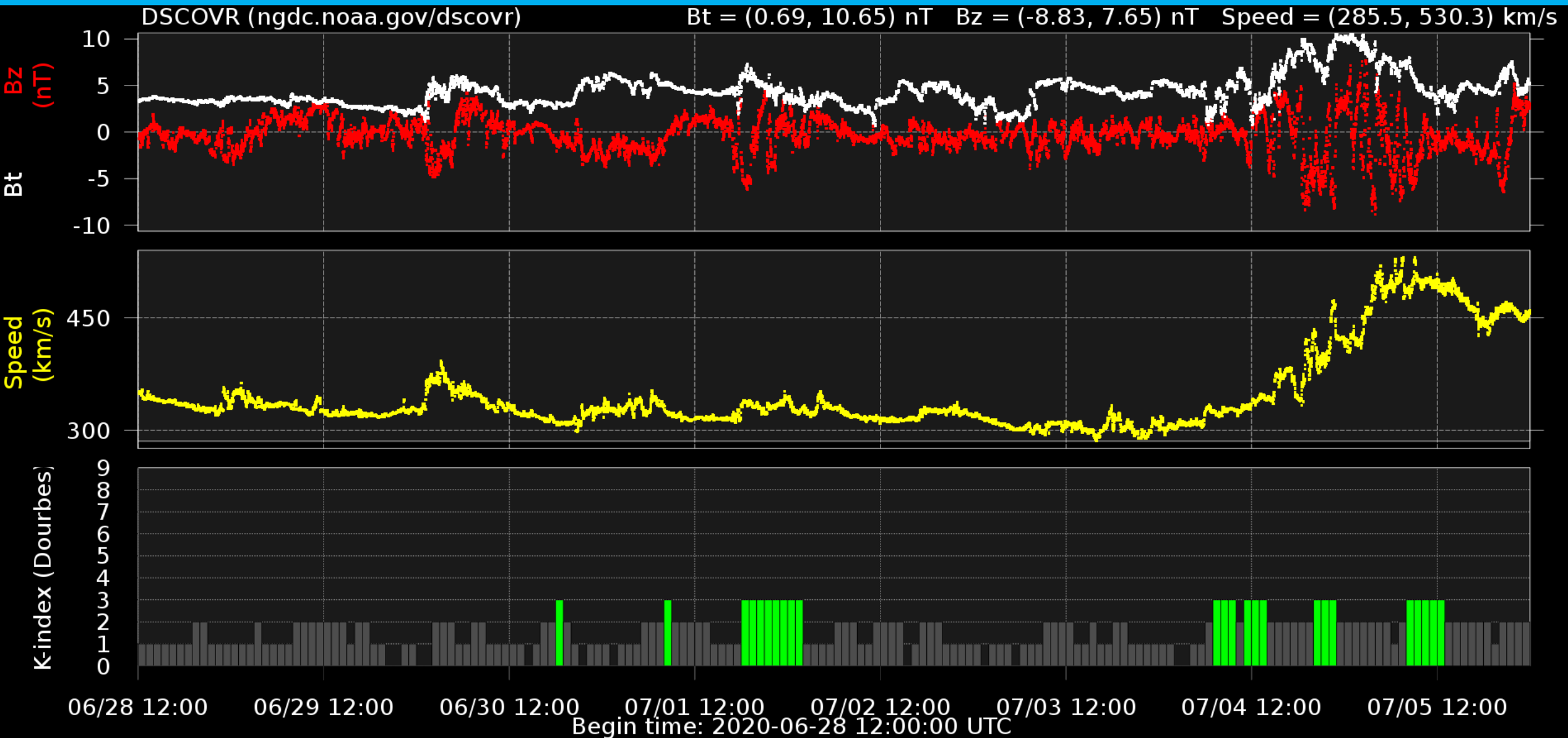
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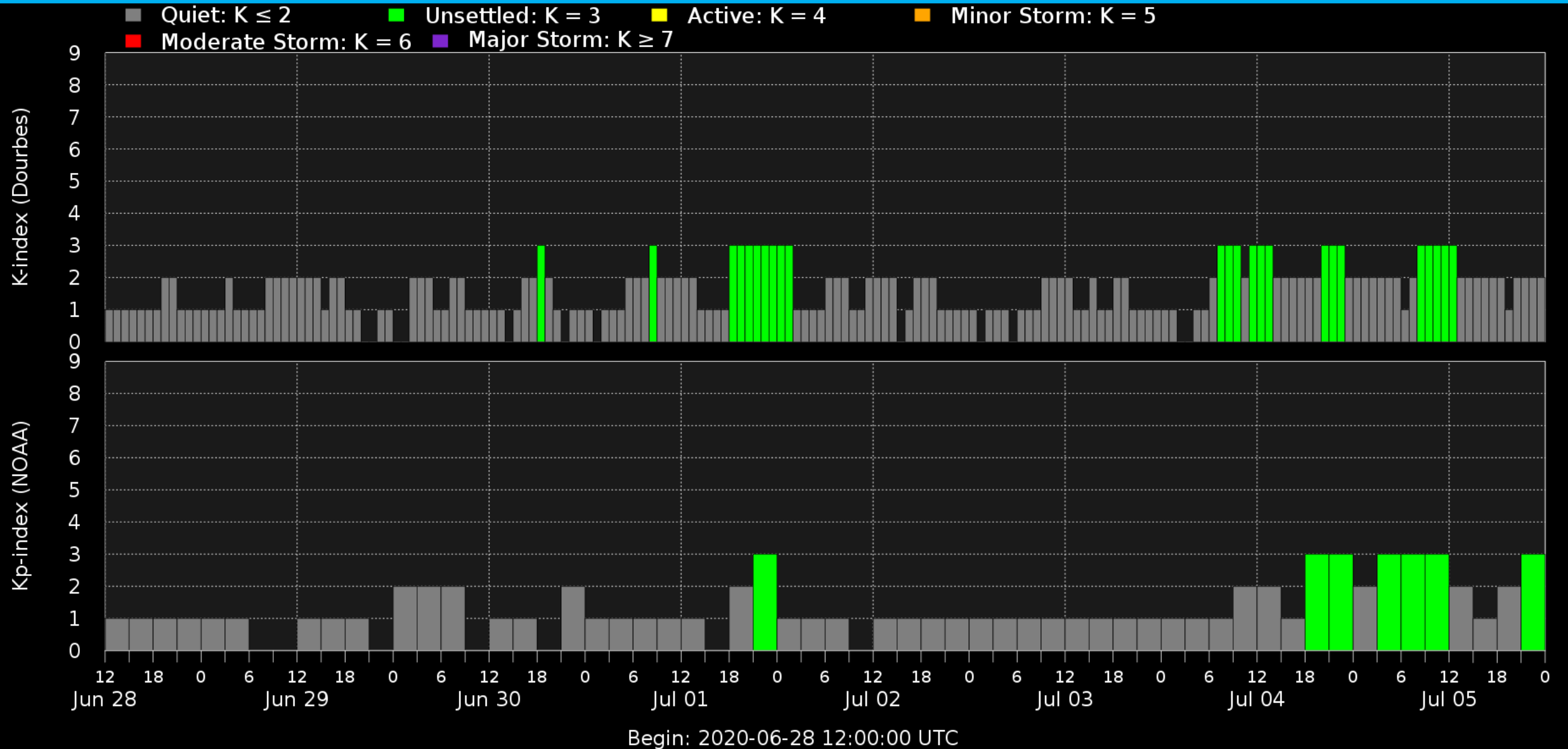
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



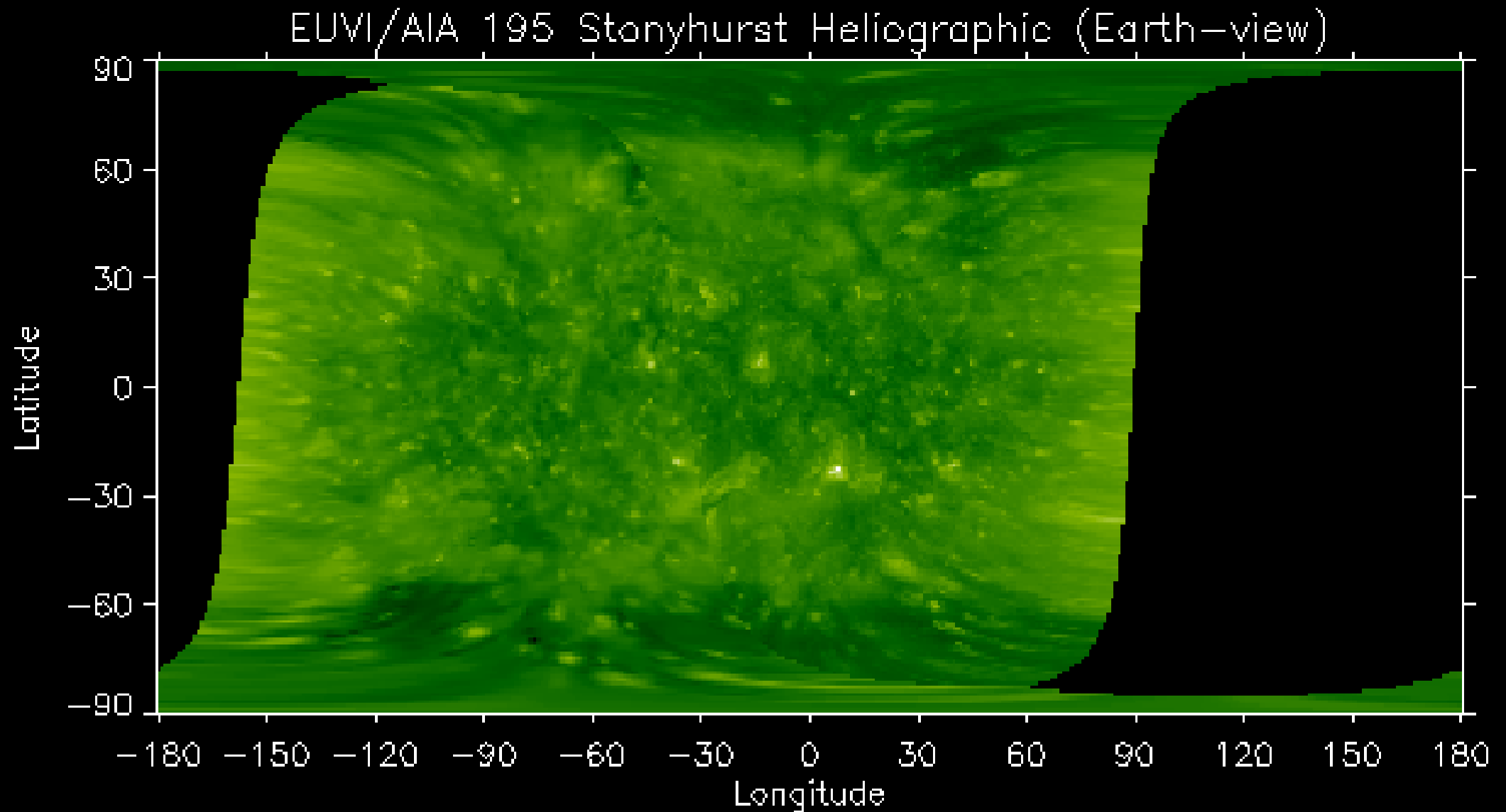
Outlook



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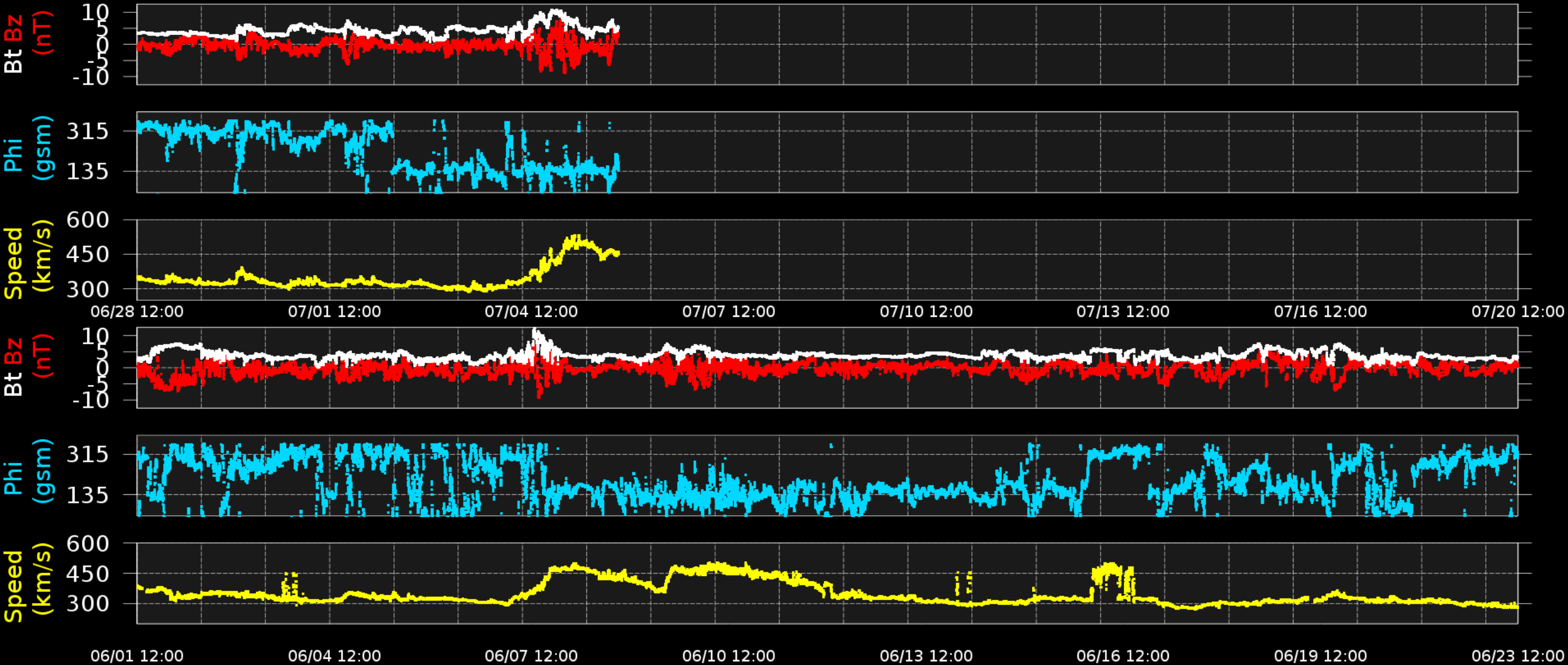
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Outlook: Solar activity



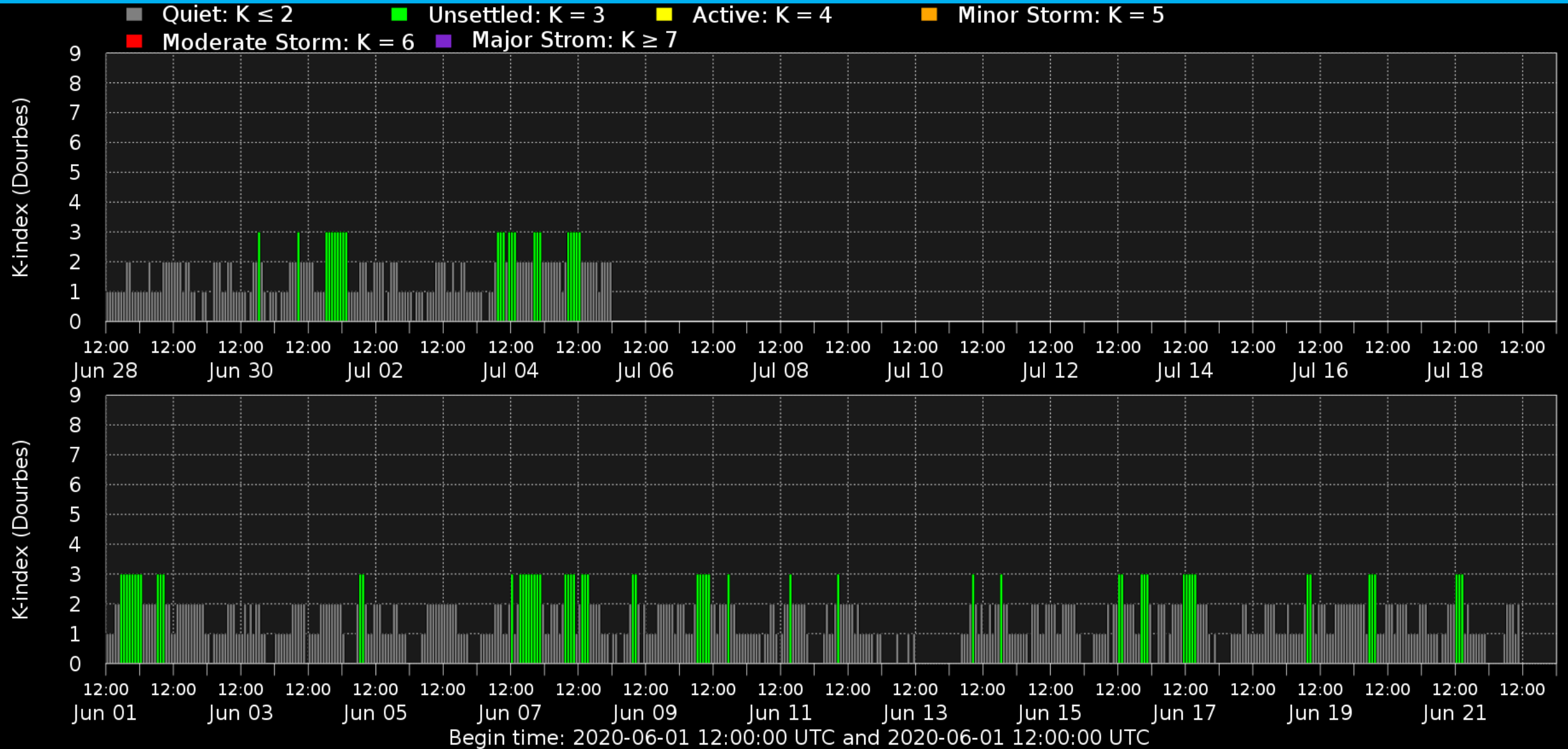
Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2020-06-01 12:00:00 UTC

Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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