

SIDC Space Weather Briefing

22 September 2019 - 29 September 2019

Matthew West and Elena Podladchikova
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
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Summary Report

Solar activity from 2019-09-22 12:00 UT to 2019-09-29 12:00 UT

Active regions	Text and Color to be adjusted
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	No filaments
CMEs	No Earth directed CMEs
Proton Events	Nominal Levels
Electron Flux	Above 2 MeV

Solar wind and geomagnetic conditions from 2019-09-22 12:00 UT to 2019-09-29 12:00 UT

Coronal Holes	Two low latitude coronal holes
ICME	No ICMEs
SW Conditions	SW speeds reached 700 km/s
K-indices	max K-index (Dourbes): 5.0 max Kp-index (NOAA): 5

All Quiet Alert: Text and Color to be included

Solar Activity

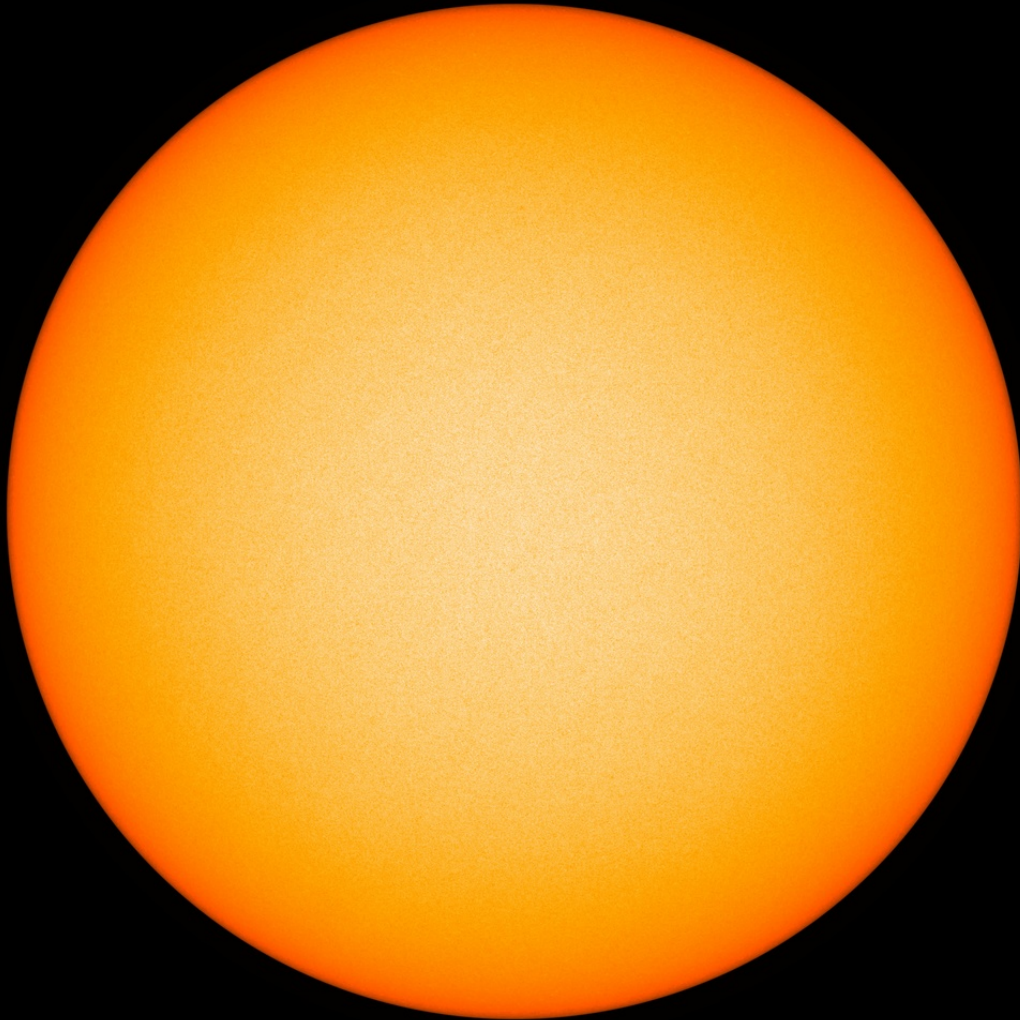


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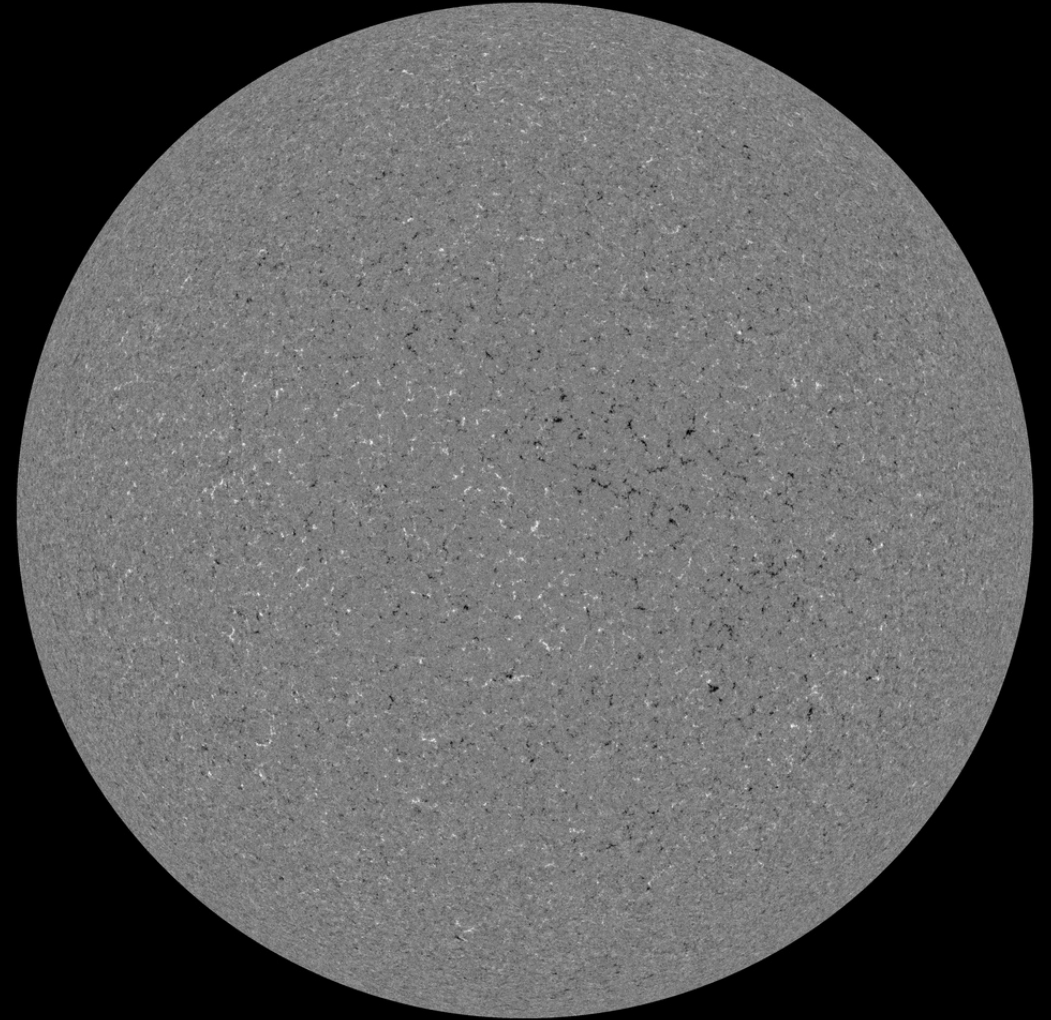
Solar active region - start of the week

SDO/HMI White Light 2019-09-22



SDO/HMI Quick-Look Continuum: 20190922_114500

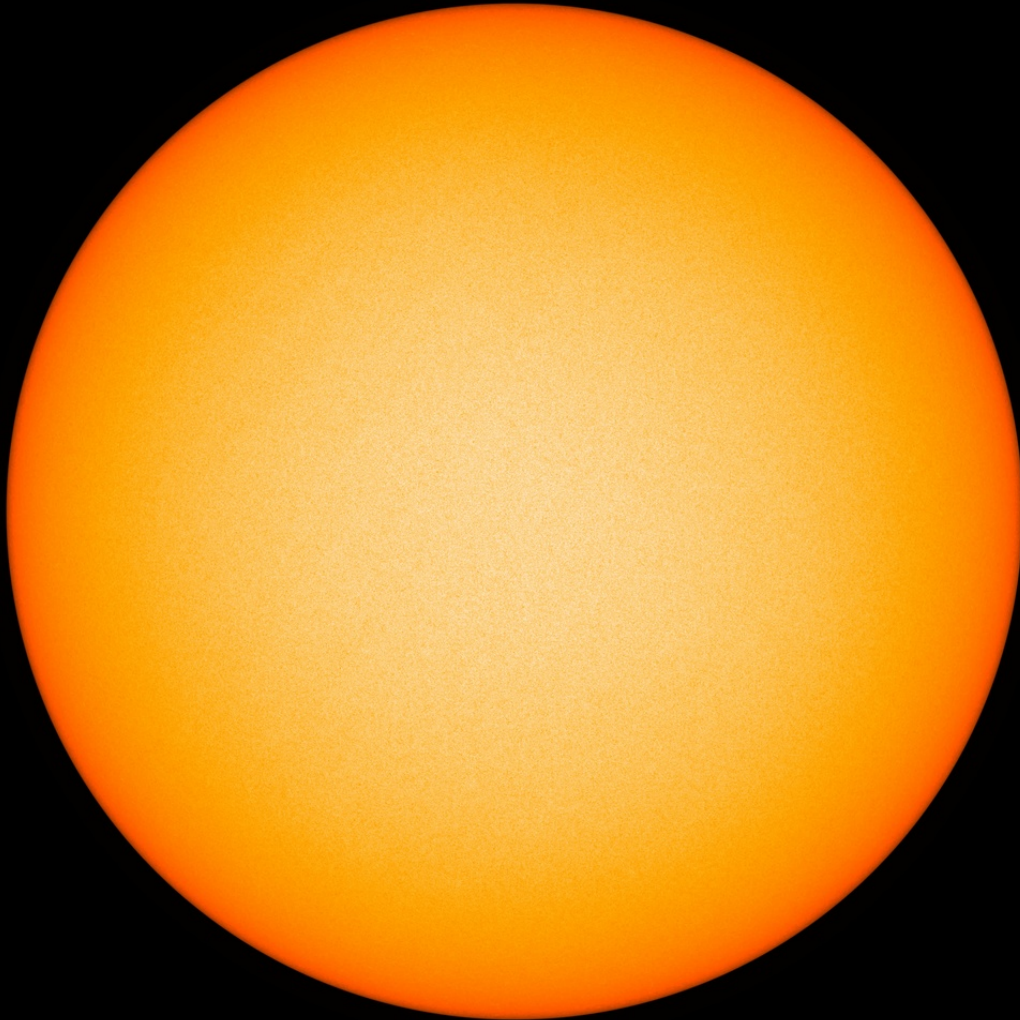
SDO/HMI Magnetogram 2019-09-22



SDO/HMI Quick-Look Magnetogram: 20190922_114500

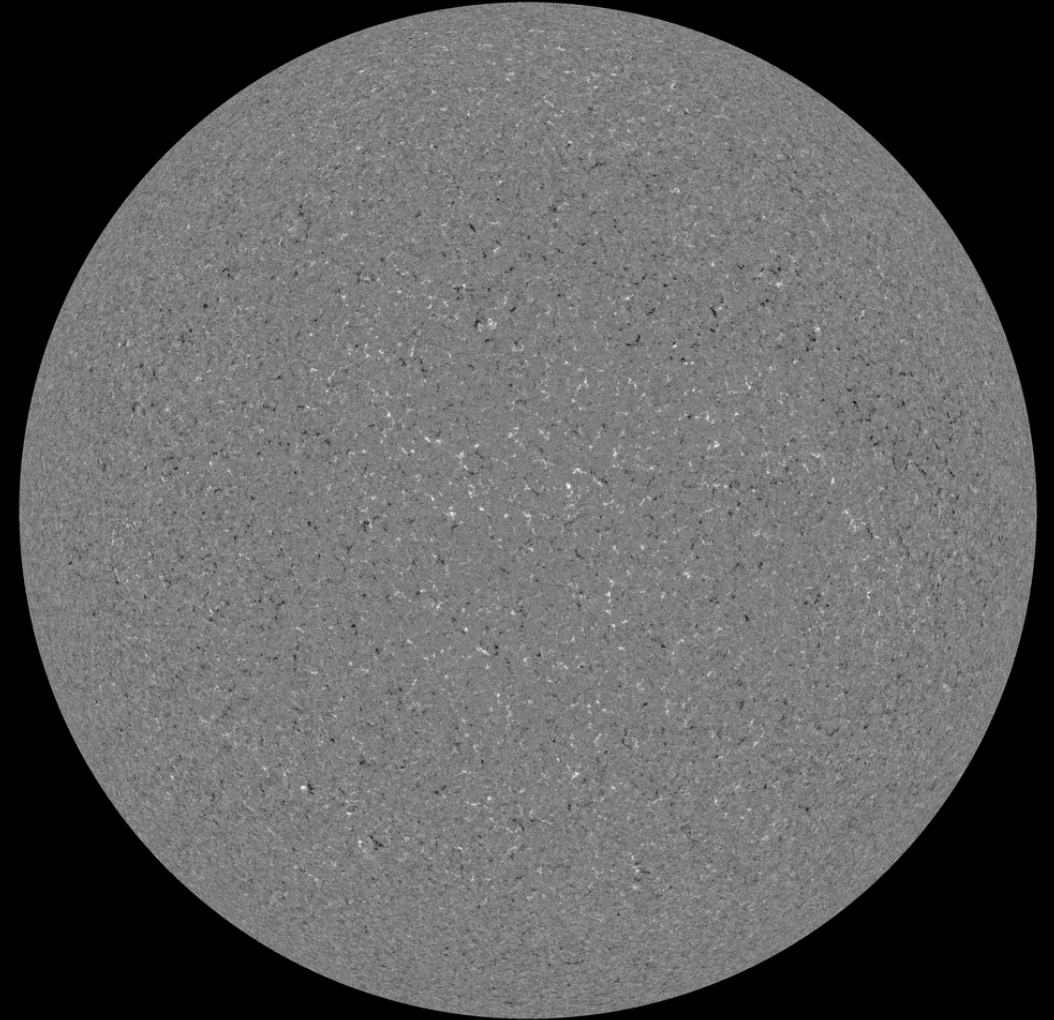
Solar active region - middle of the week

SDO/HMI White Light 2019-09-25



SDO/HMI Quick-Look Continuum: 20190925_120000

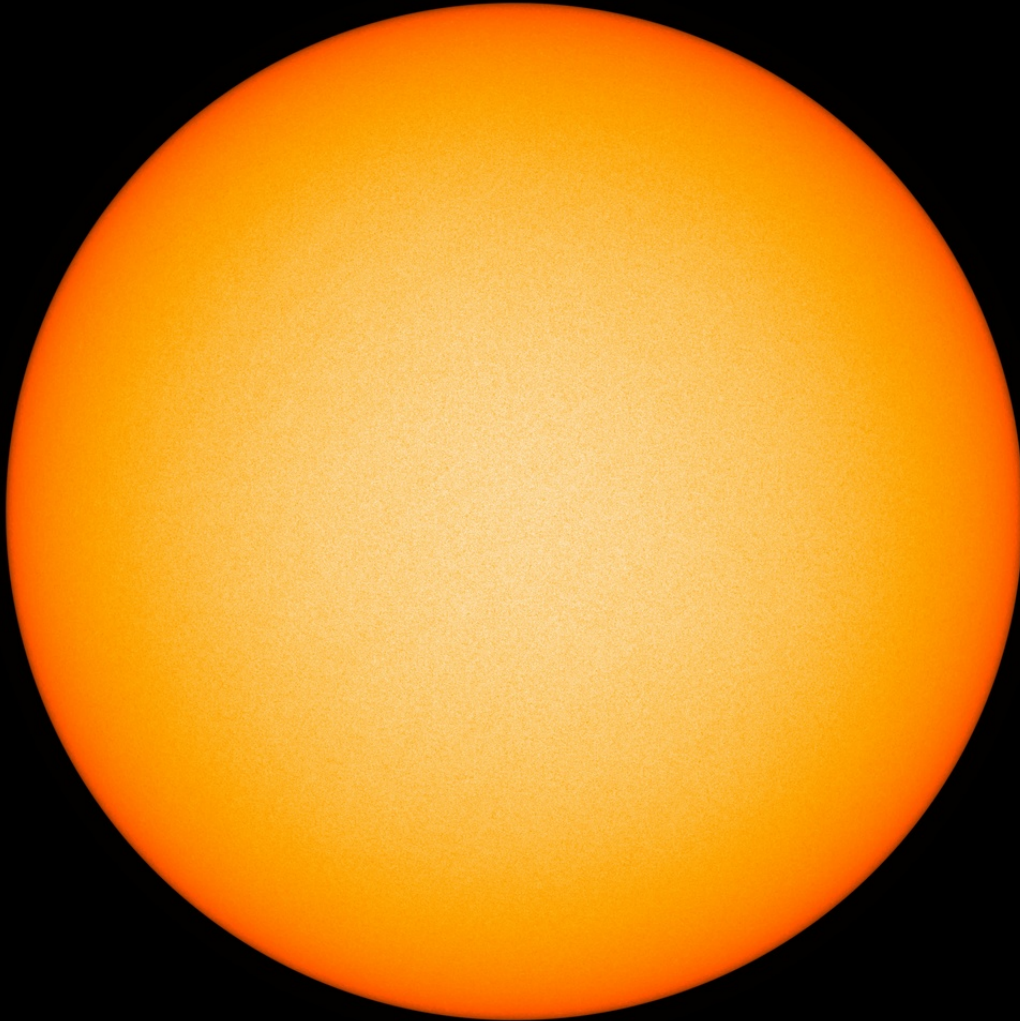
SDO/HMI Magnetogram 2019-09-25



SDO/HMI Quick-Look Magnetogram: 20190925_114500

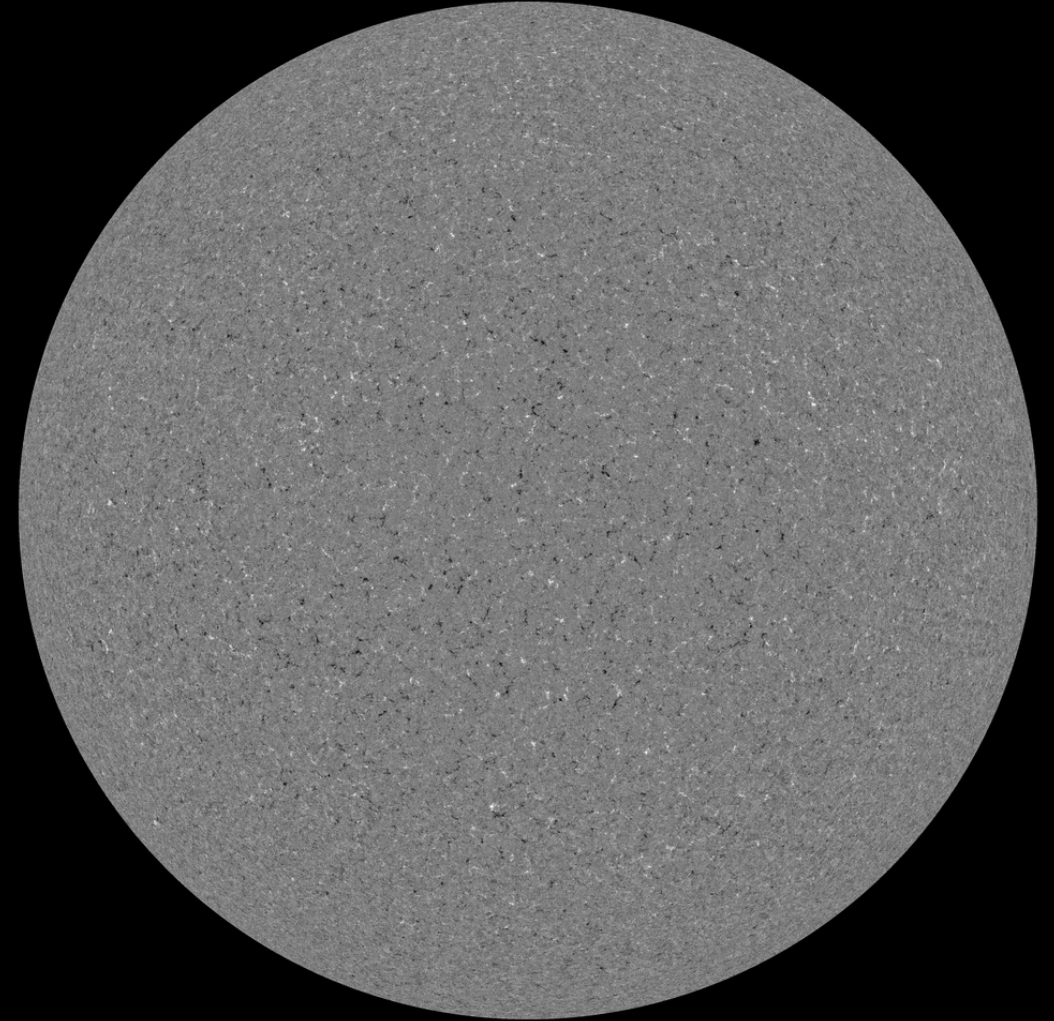
Solar active region - end of the week

SDO/HMI White Light 2019-09-29



SDO/HMI Quick-Look Continuum: 20190929_114500

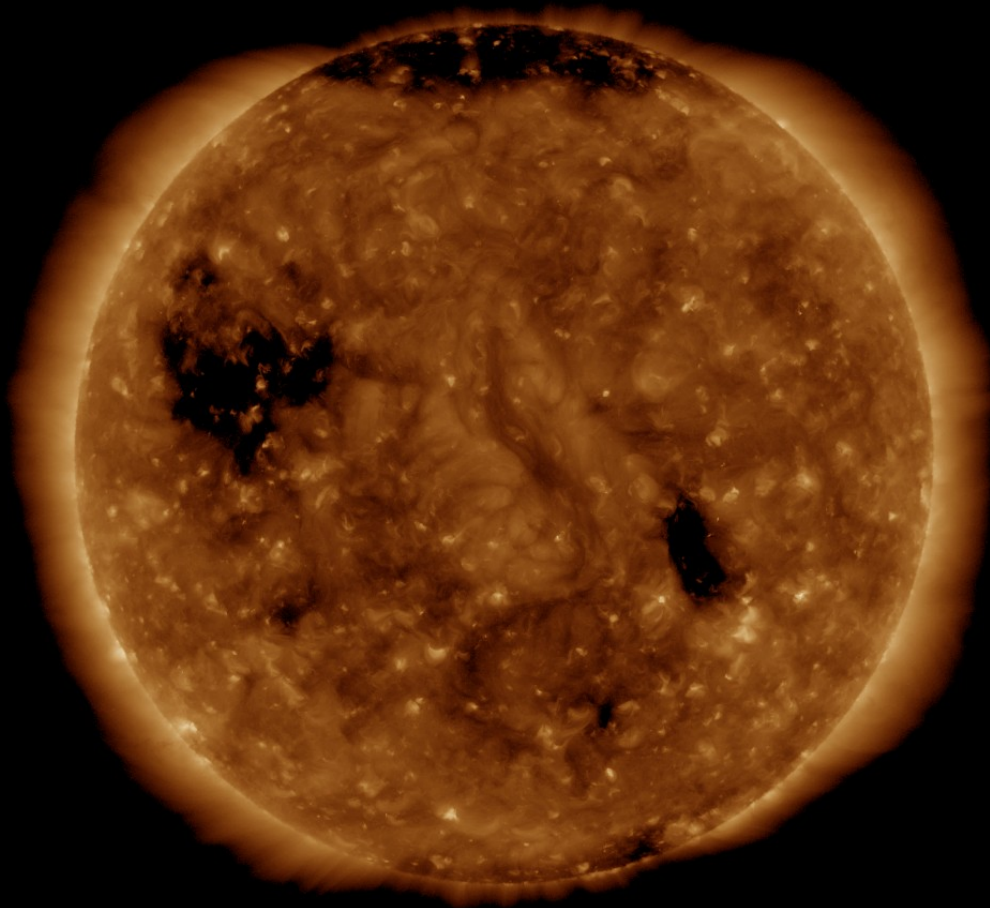
SDO/HMI Magnetogram 2019-09-29



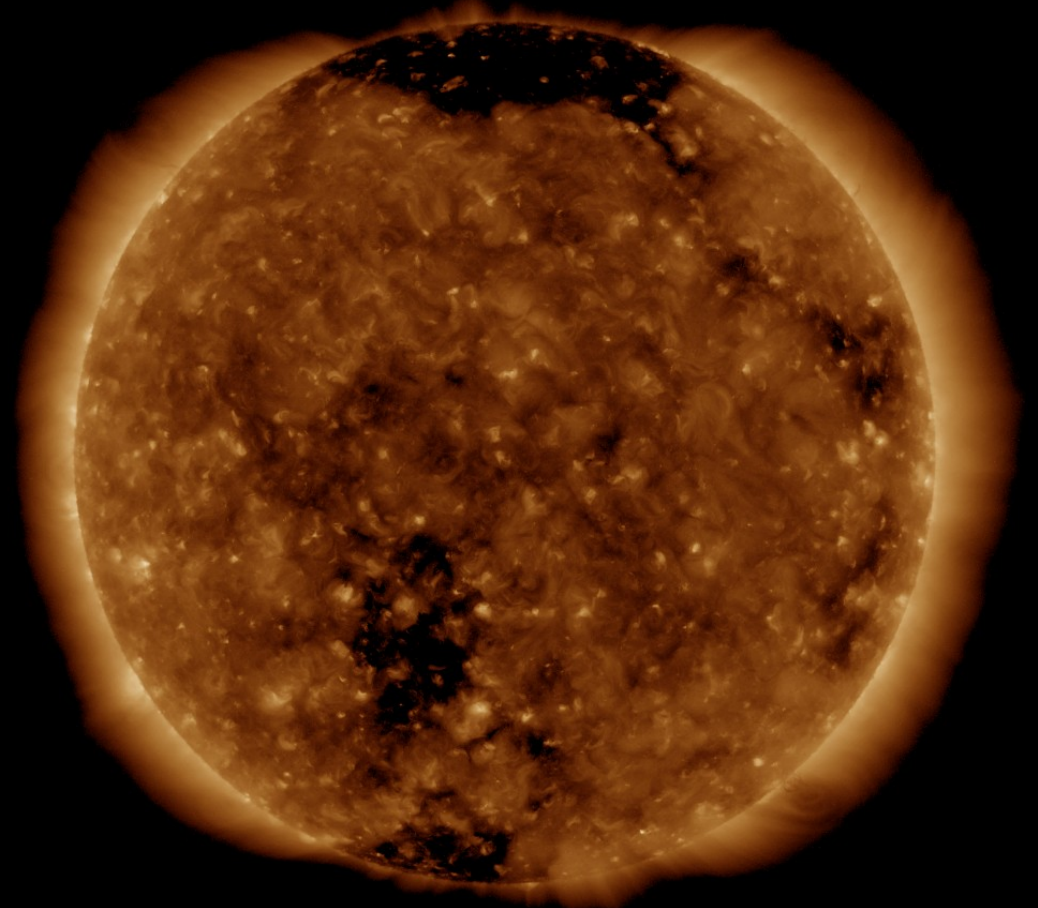
SDO/HMI Quick-Look Magnetogram: 20190929_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-09-22



SDO/AIA 19.3 nm 2019-09-29

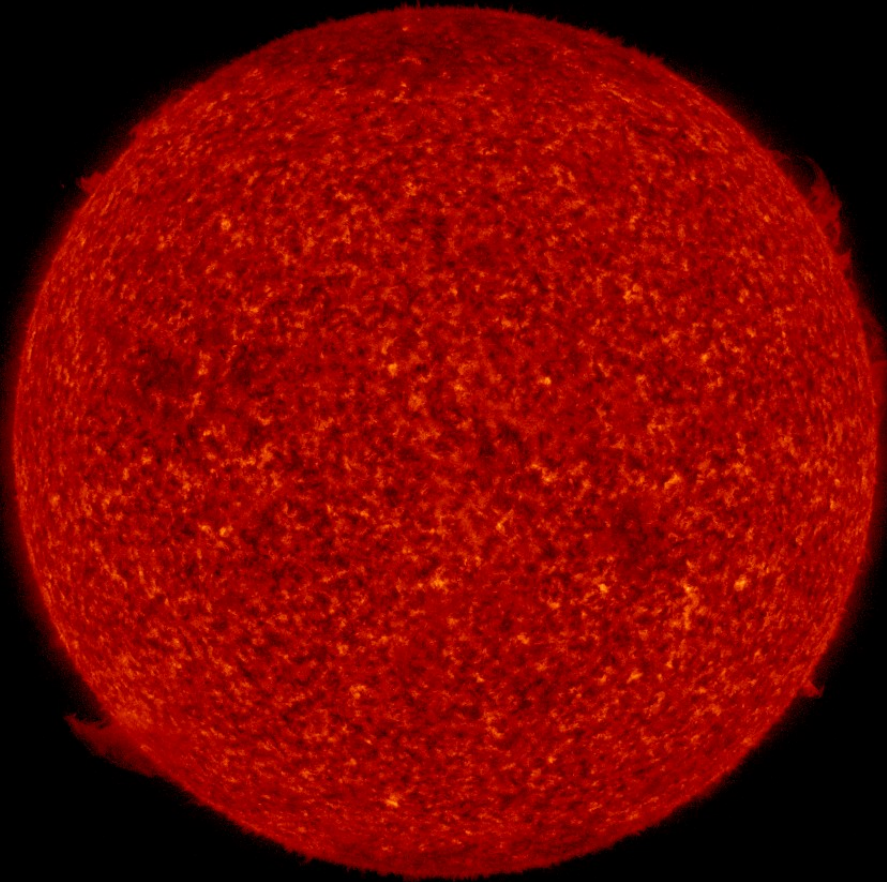


SDO/AIA 193 2019-09-22 12:10:53 UT

SDO/AIA 193 2019-09-29 12:10:53 UT

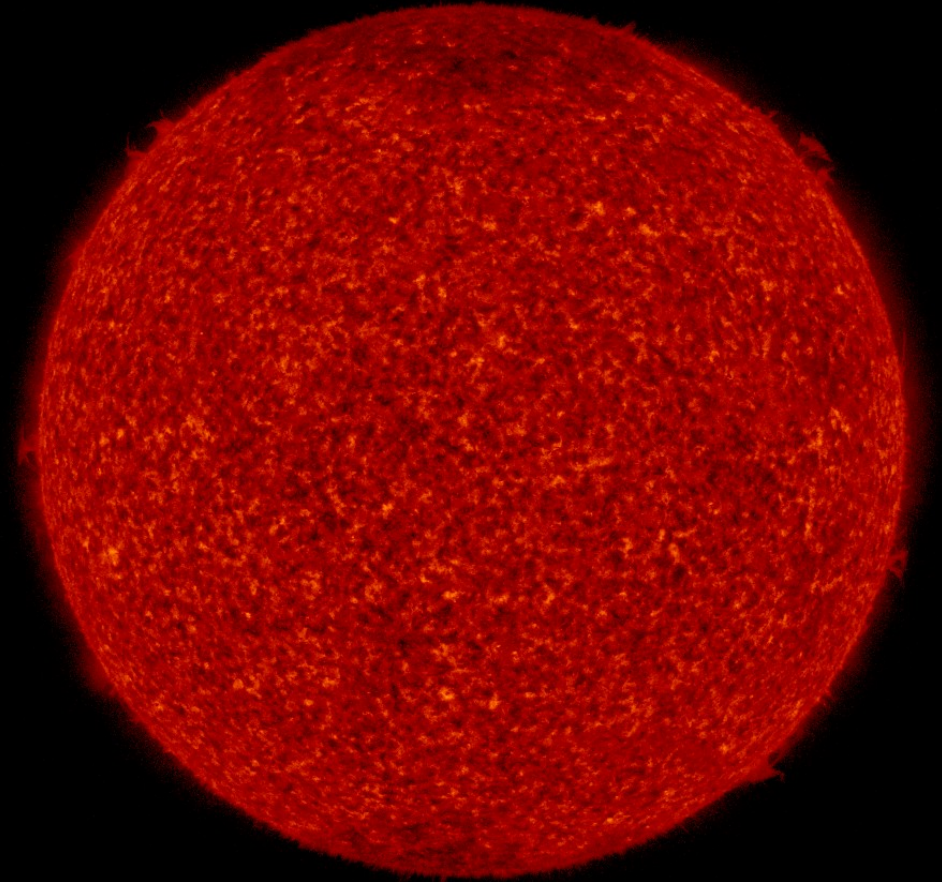
Solar active region & Filament

SDO/AIA 30.4 nm 2019-09-22



SDO/AIA 304 2019-09-22 12:14:18 UT

SDO/AIA 30.4 nm 2019-09-29



SDO/AIA 304 2019-09-29 12:14:42 UT

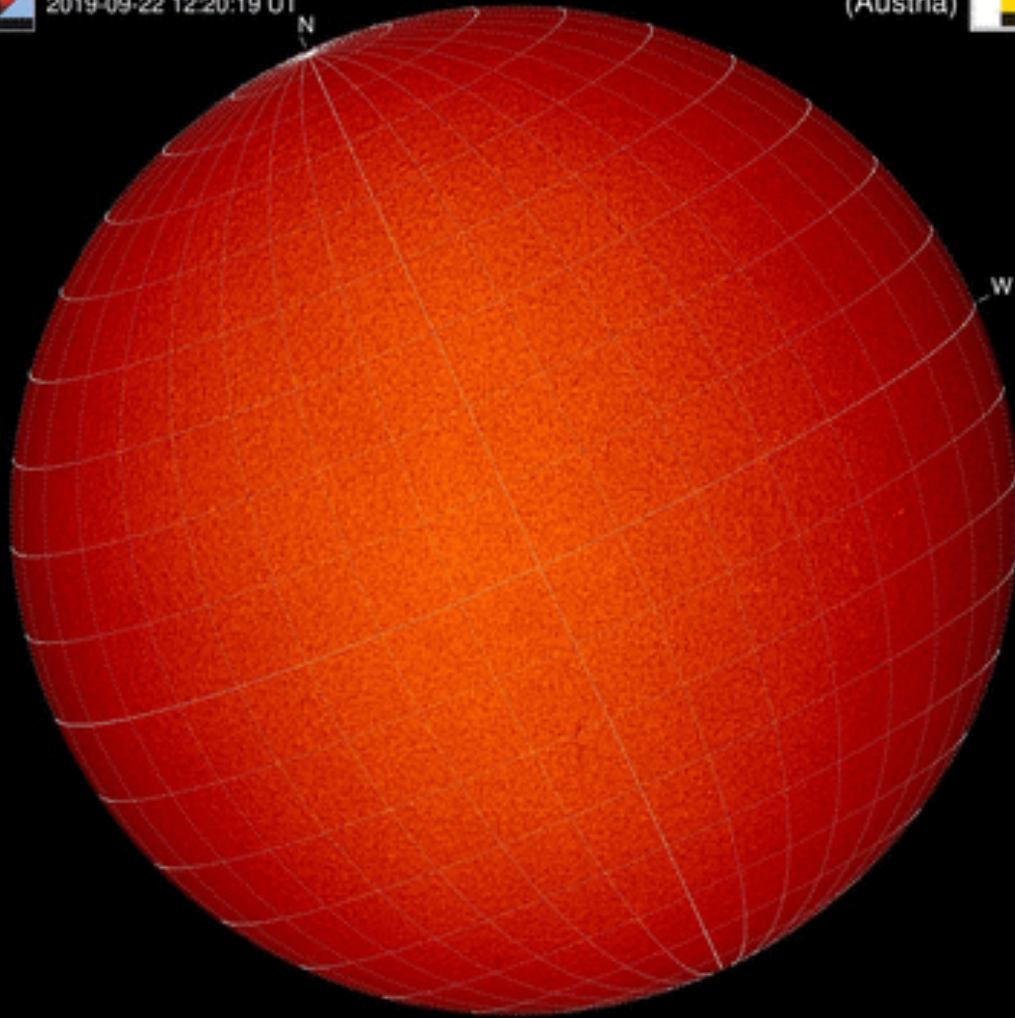
Filament & Filament eruption

H-alpha 2019-09-22



Kanzelhöhe Observatory
2019-09-22 12:20:19 UT

University of Graz
(Austria)

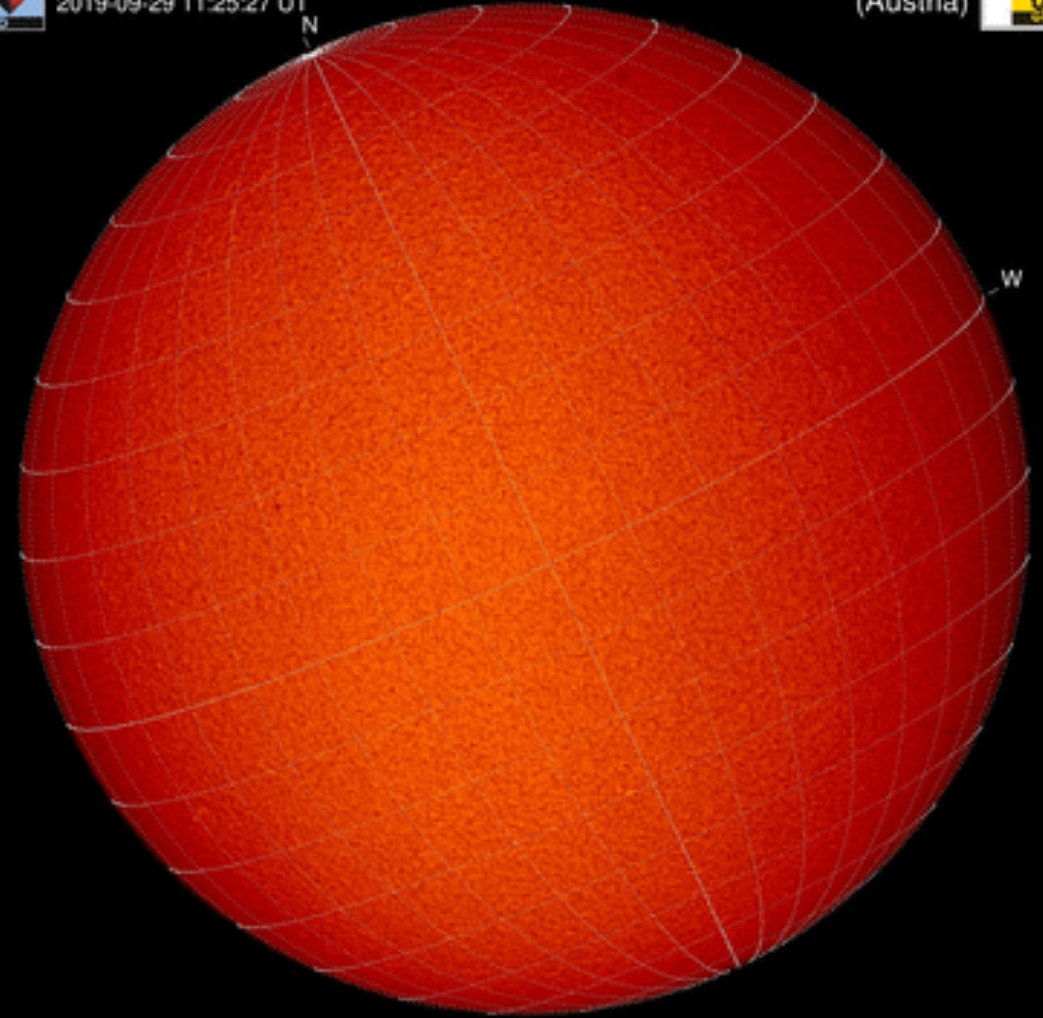


H-alpha 2019-09-29

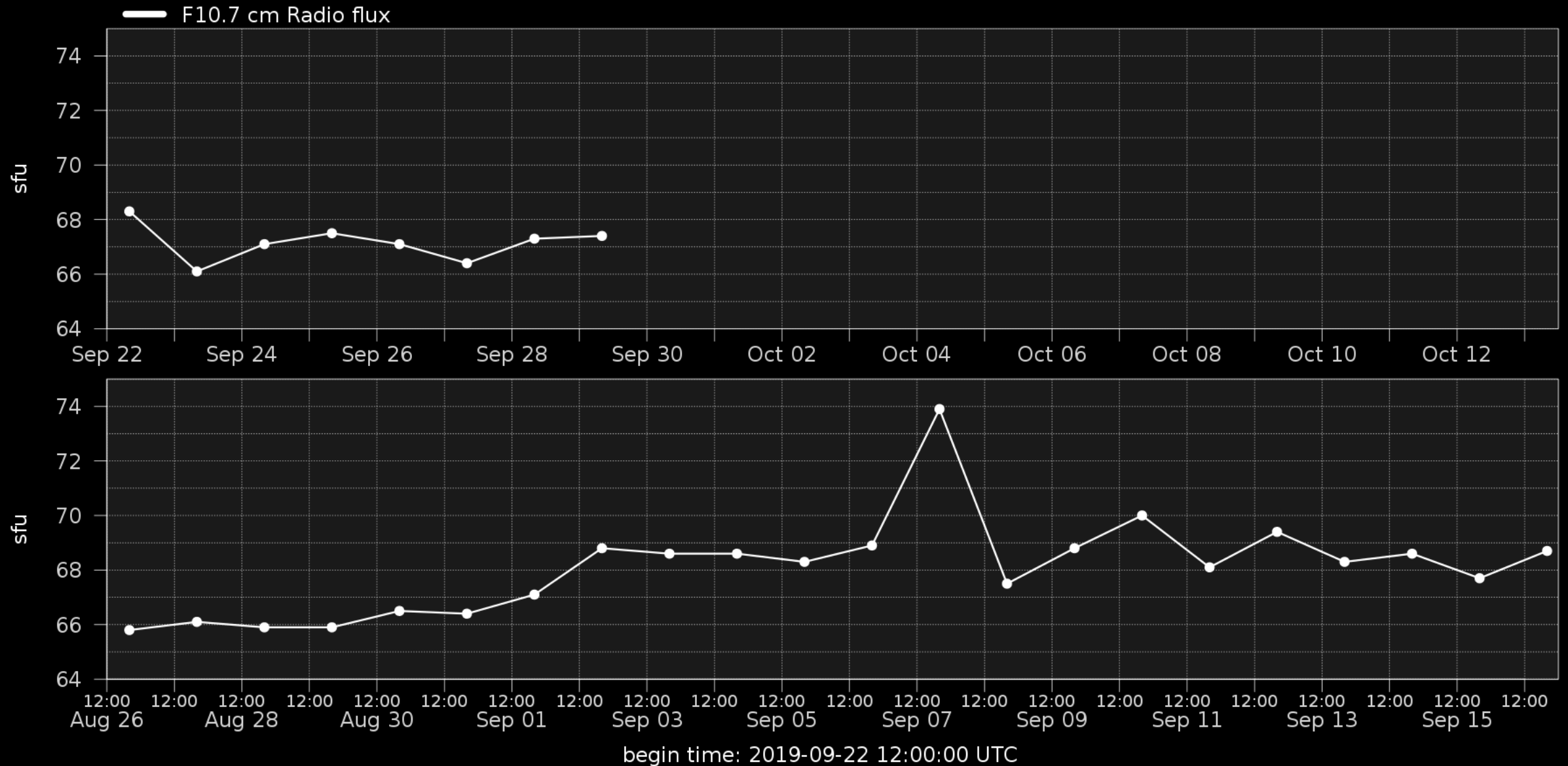


Kanzelhöhe Observatory
2019-09-29 11:25:27 UT

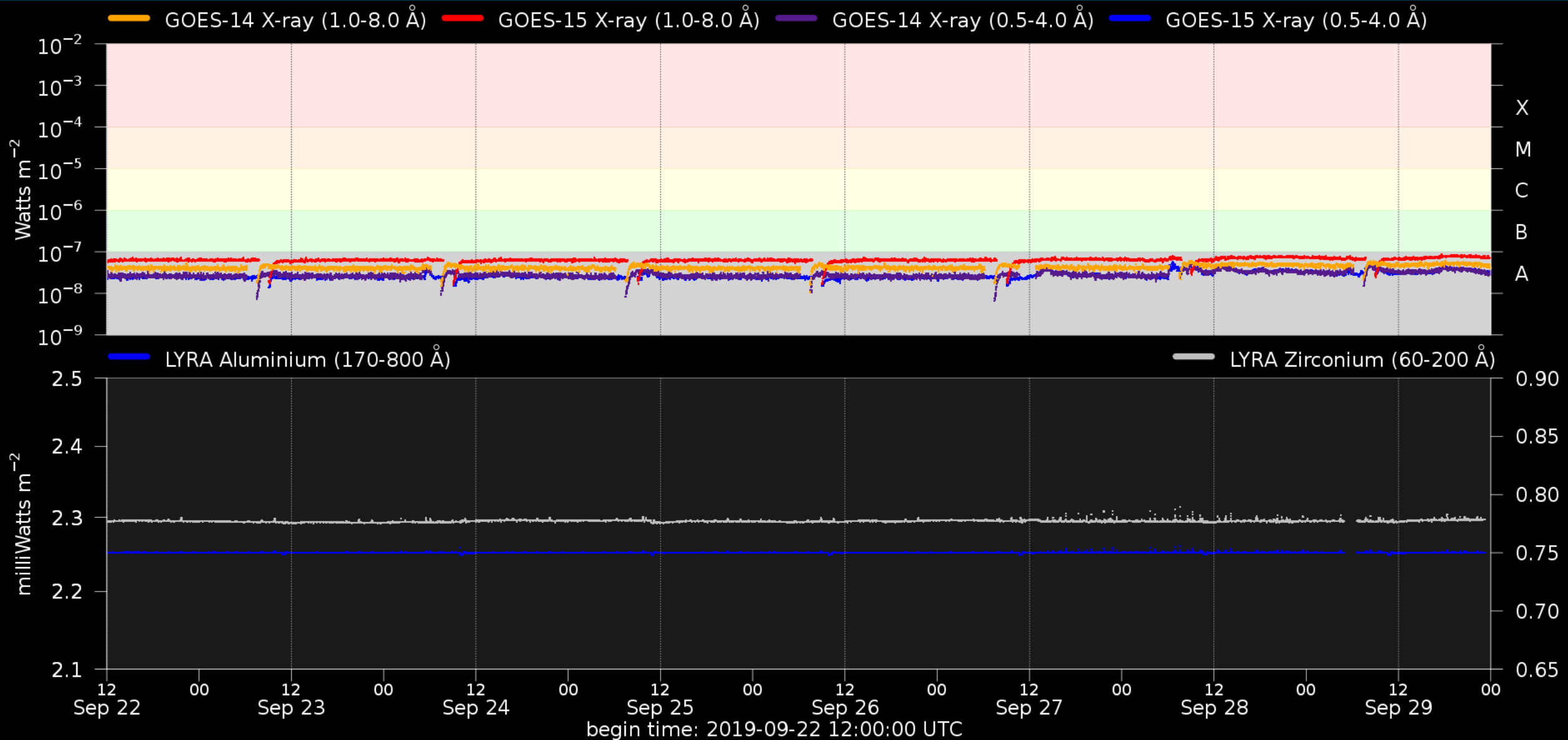
University of Graz
(Austria)



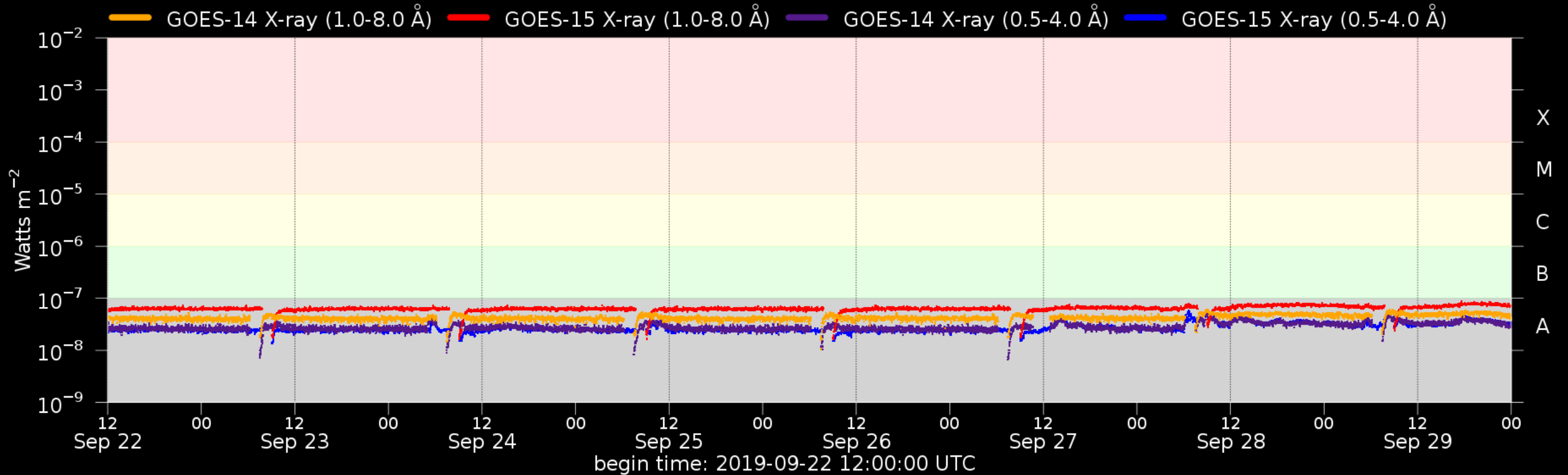
Solar F10.7cm radio flux



Solar X-Ray and UV flux



Flaring activity



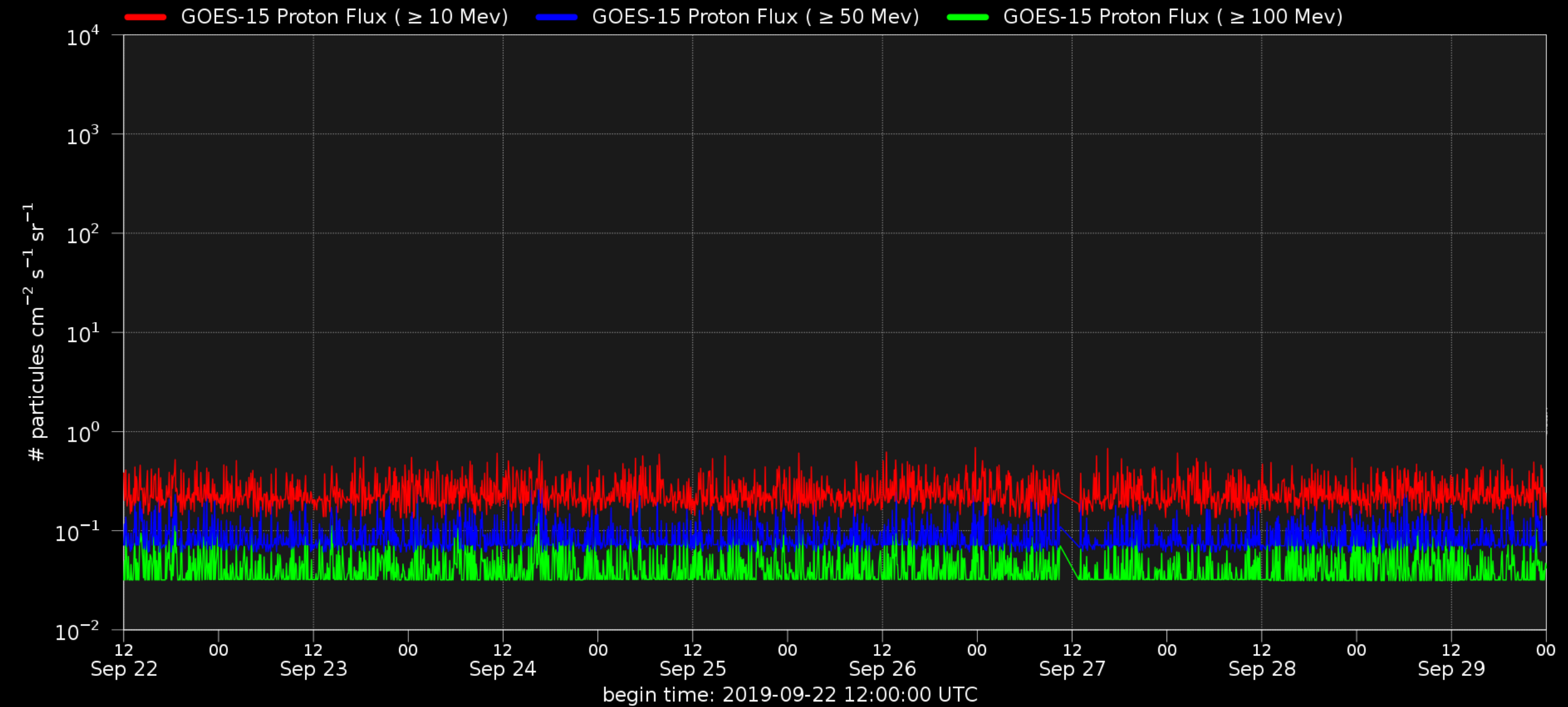
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2019-09-22	2019-09-23	2019-09-24	2019-09-25	2019-09-26	2019-09-27	2019-09-28	2019-09-29
Probability	--- 01 01 01	--- 01 00 00	--- 01 00 00	--- 01 00 00	--- 01 00 00	--- 01 00 00	--- 01 00 00	--- 01 00 00
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

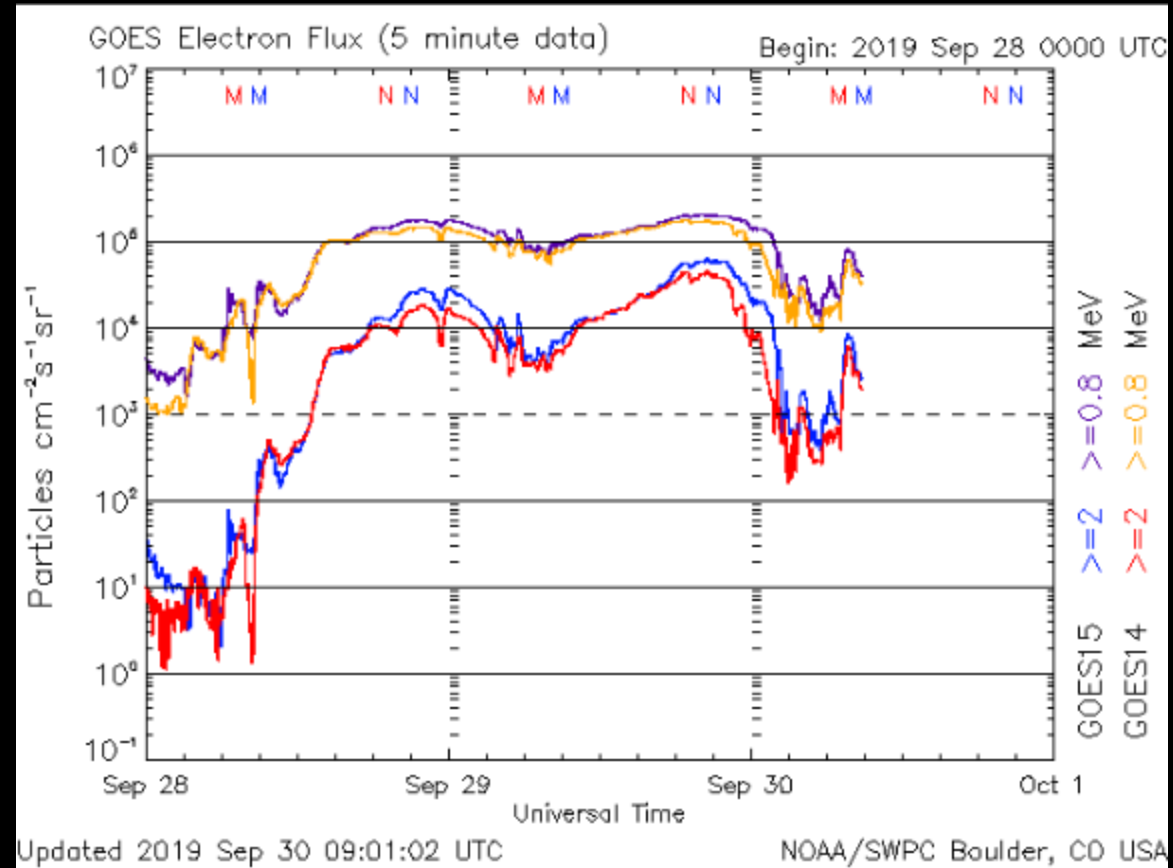
Coronal Mass Ejection

04:12 09/29
01:25 09/29
21:48 09/28
19:00 09/28
16:24 09/28
12:48 09/28
10:00 09/28
07:24 09/28
03:24 09/28
00:00 09/28
20:24 09/27
17:12 09/27
14:00 09/27
10:24 09/27
07:24 09/27
03:24 09/27
23:24 09/26
19:36 09/26
16:00 09/26
12:36 09/26
10:00 09/26
07:00 09/26
04:24 09/26
01:36 09/26
21:36 09/25
18:12 09/25
15:37 09/25
12:24 09/25
09:36 09/25
06:30 09/25
04:00 09/25
01:25 09/25
21:42 09/24
19:00 09/24
16:12 09/24
12:48 09/24
09:48 09/24
06:48 09/24
04:00 09/24
00:48 09/24
21:24 09/23
18:12 09/23
15:12 09/23
12:00 09/23
08:48 09/23

Solar proton flux



Solar electron flux



Solar Wind and Geomagnetic Activity

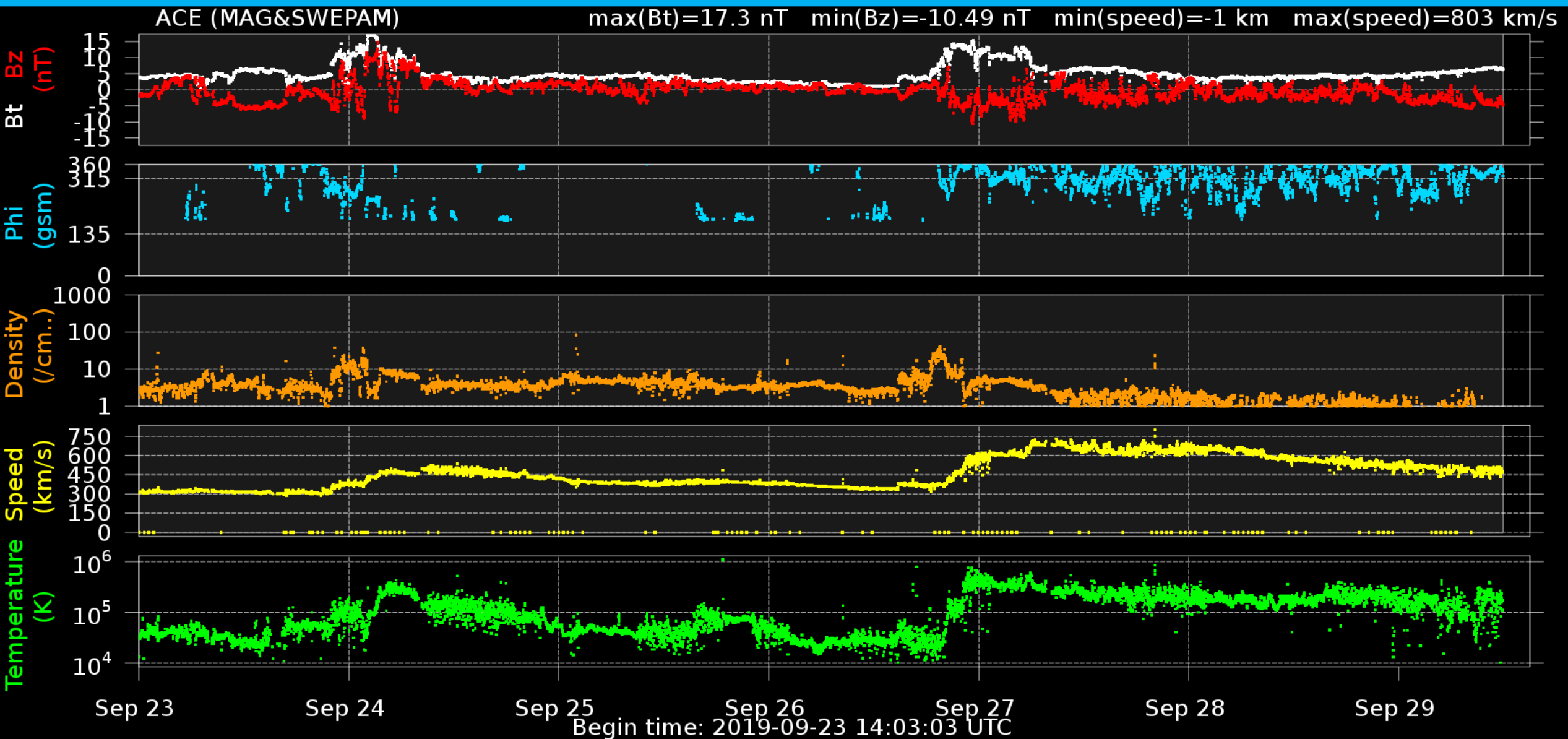


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Solar wind parameters (DSCOVR data)



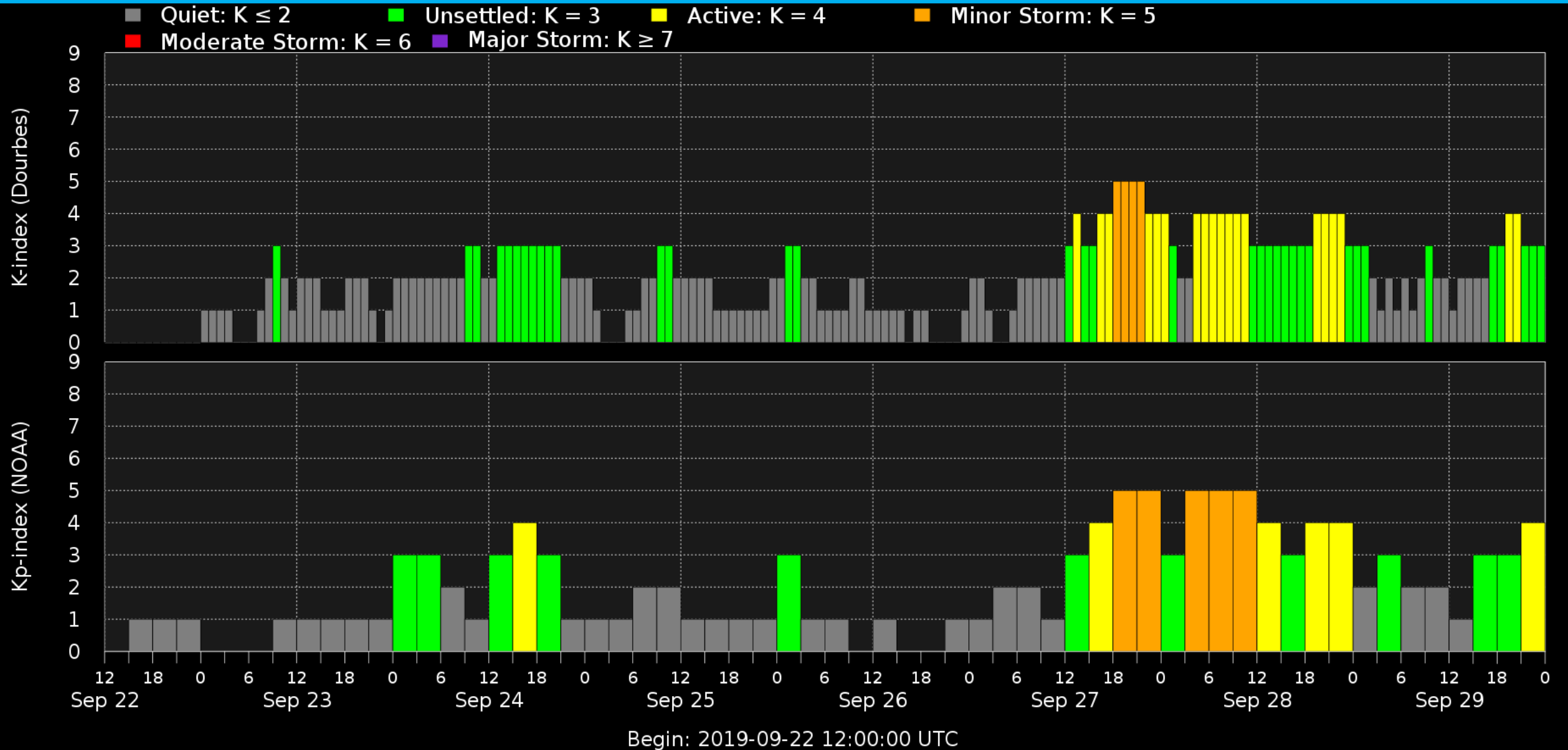
Solar wind parameters (ACE data)



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



Geomagnetic activity (K-indexes)



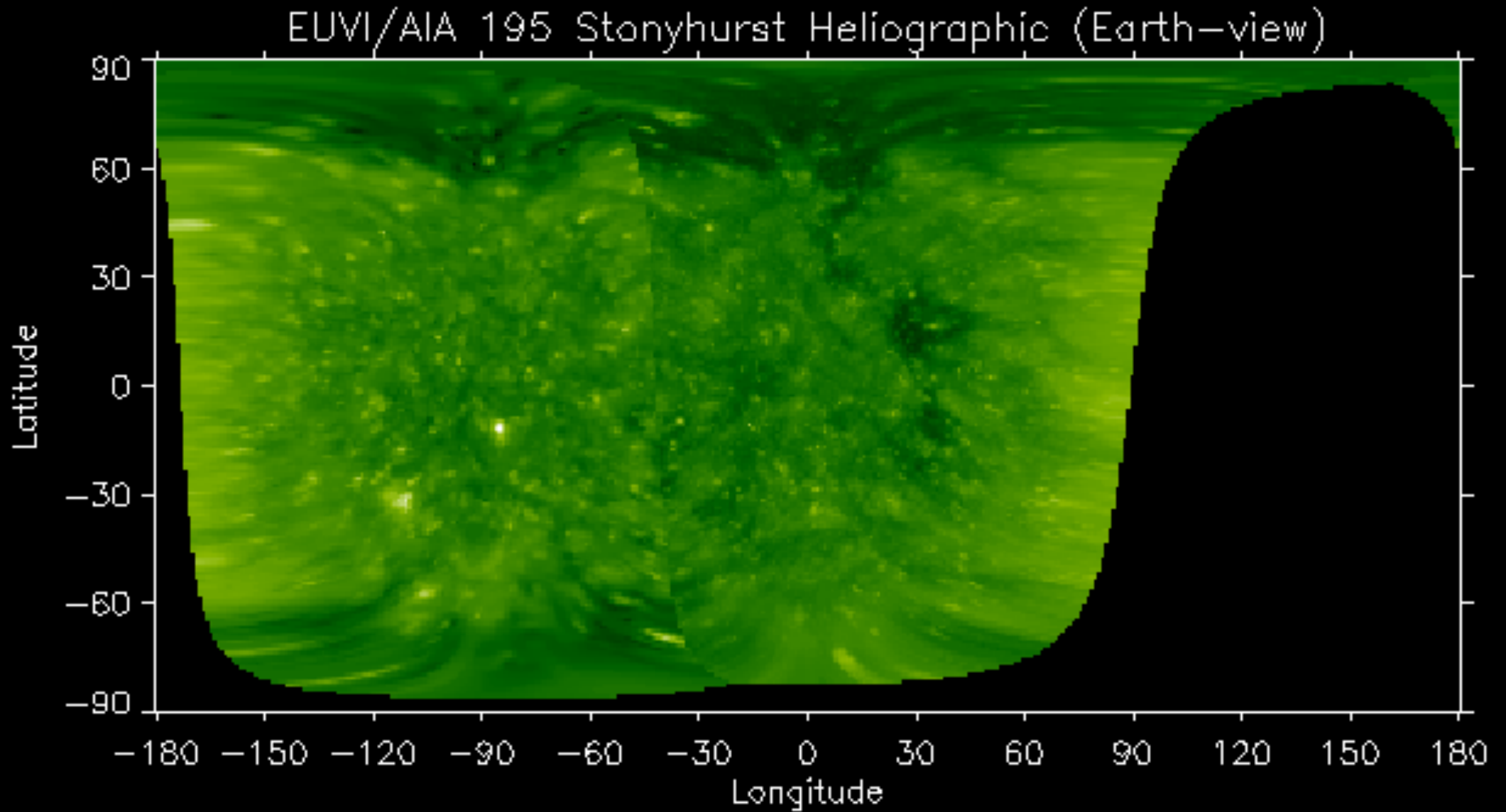
Outlook



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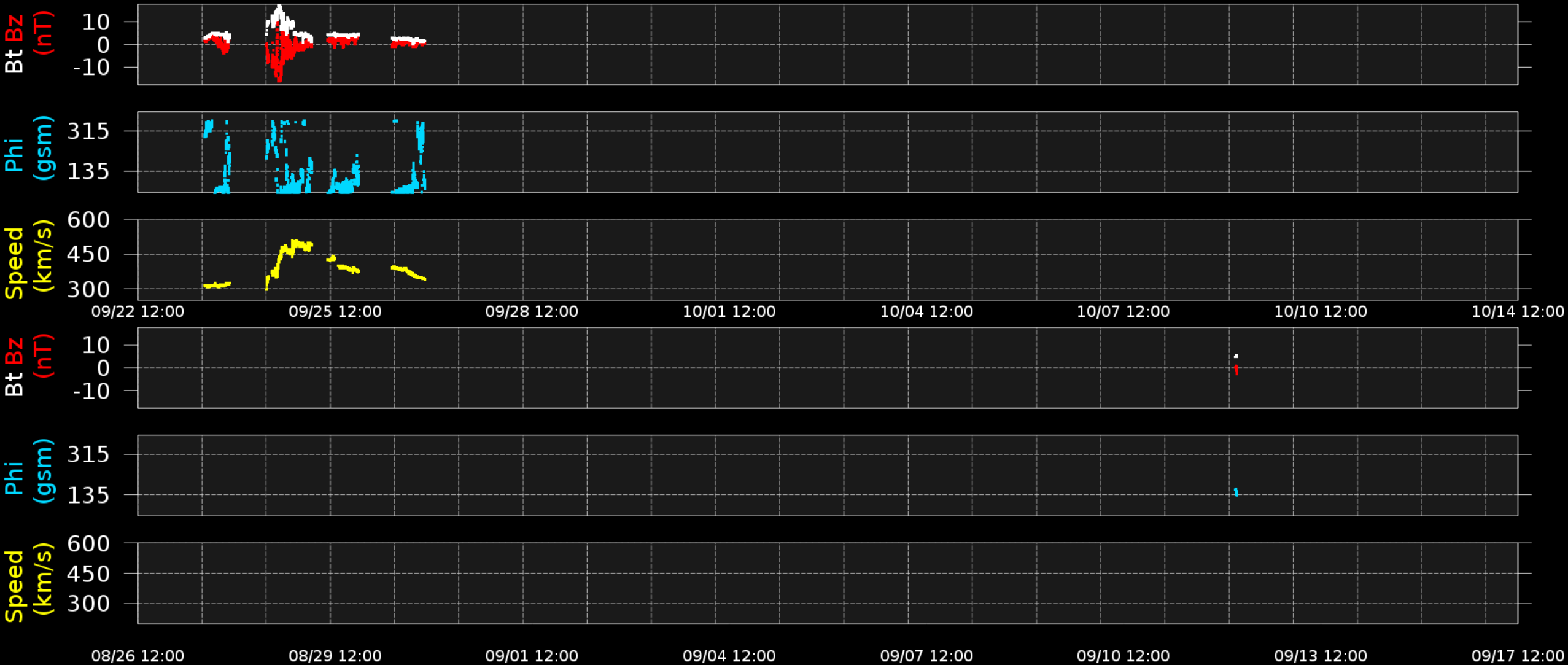
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Outlook: Solar activity



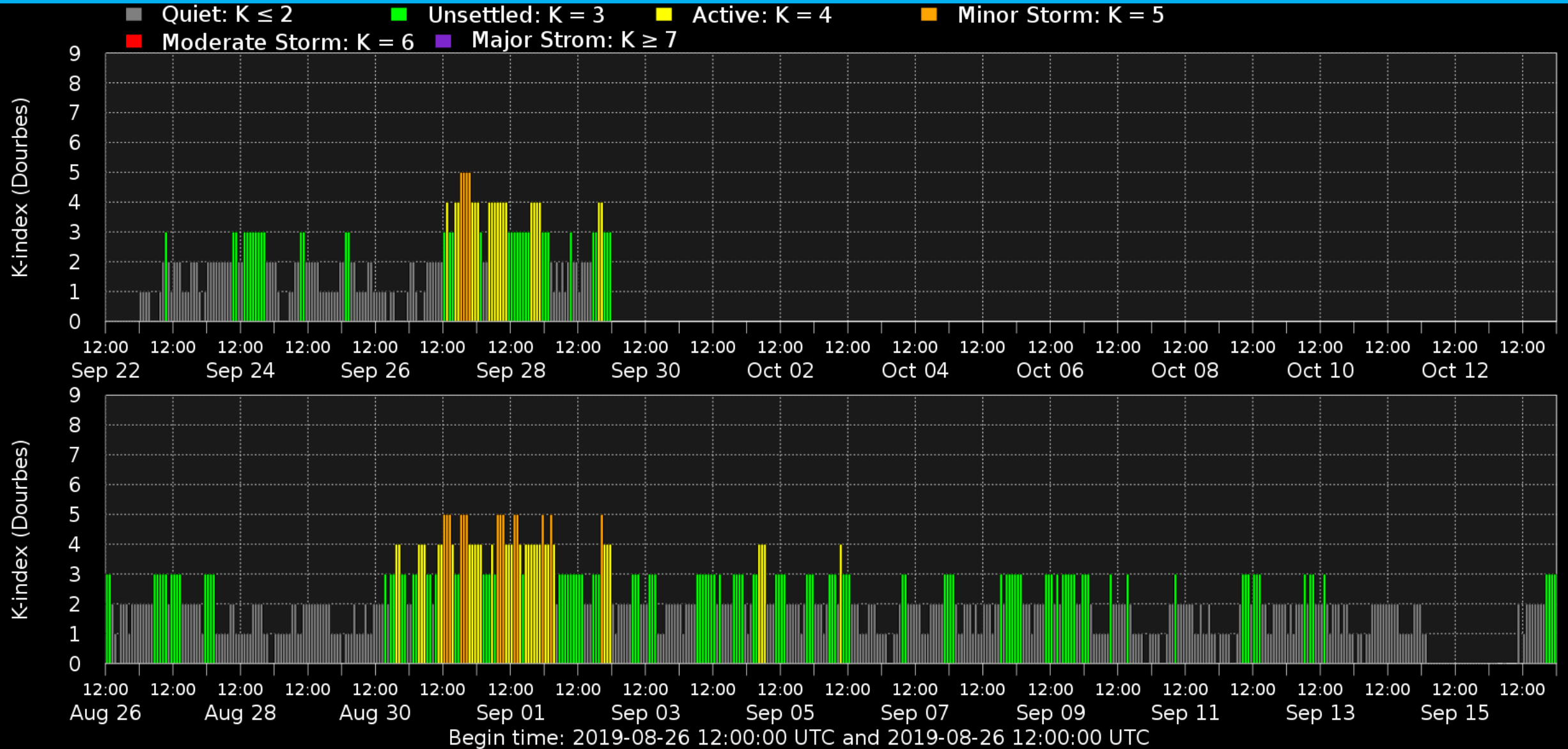
Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2019-08-26 12:00:00 UTC

Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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