

# SIDC Space Weather Briefing

06 - 13 September 2020

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& the SIDC forecaster team



Royal Observatory  
*of* Belgium

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

# Summary Report

Solar activity from 2020-09-06 to 2020-09-13

Active regions	No sunspot groups
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filament eruptions	No eruptions of large filaments observed
Coronal Holes	Narrow extension south polar CH at CM on 10 September

Proton flux	Nominal levels
Electron flux	High to moderate levels

Solar wind and geomagnetic conditions from 2020-09-06T12:00:00 to 2020-09-13T24:00:00

ICME	No ICMEs observed
SW Conditions	B : 0.28 – 8.35 nT // Bz: -7.39 nT to 5.58 nT // Speed: 264.2 - 447.6km/s
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 3

All Quiet Alert: ON since 3 September

# Solar Activity

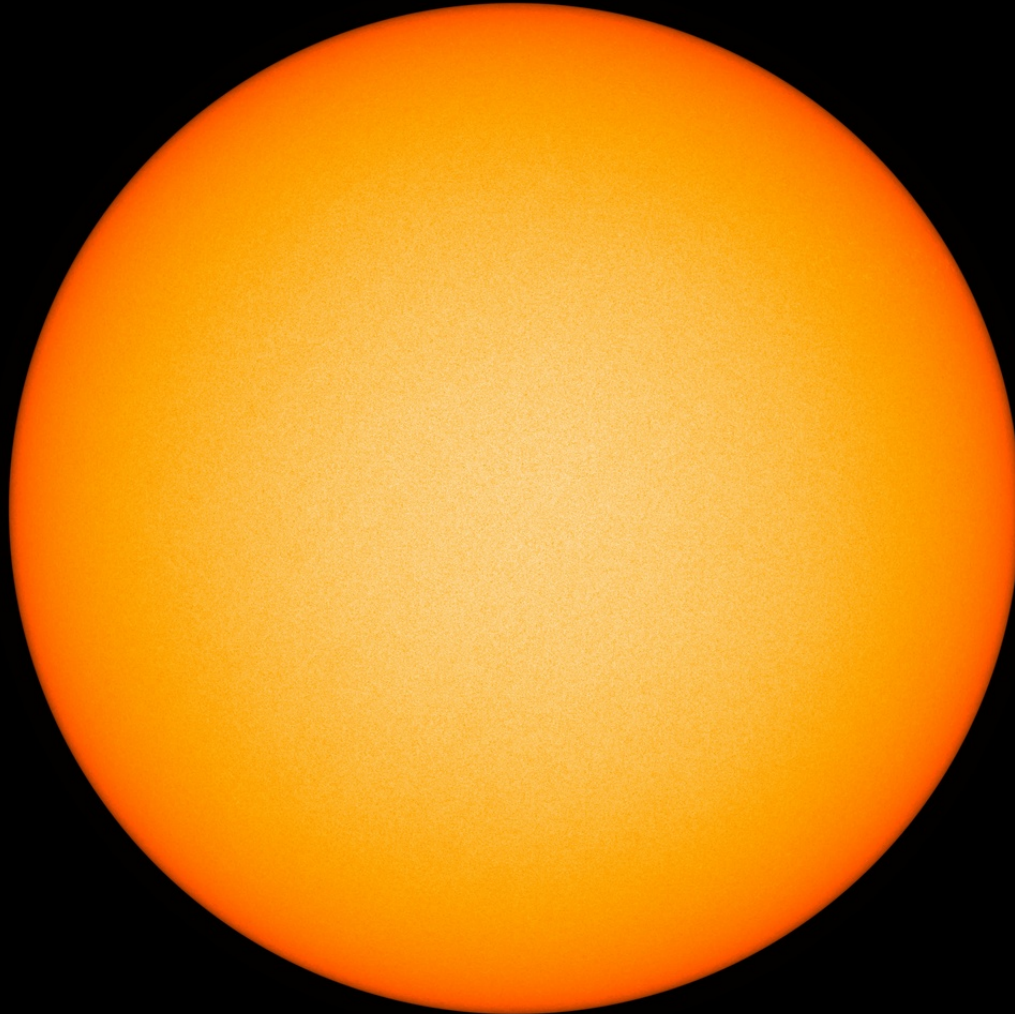


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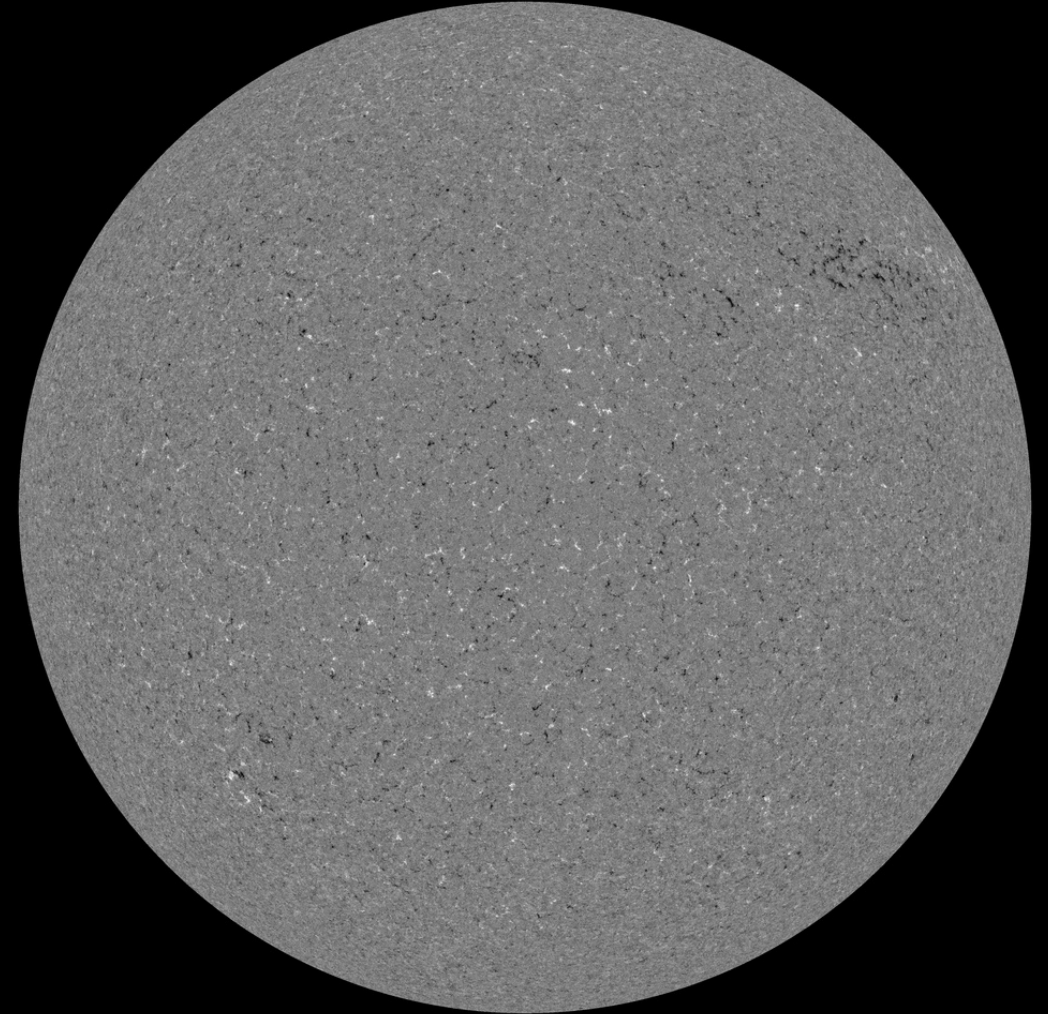
# Solar active regions - Beginning of week Sunday

SDO/HMI White Light 2020-09-06



SDO/HMI Quick-Look Continuum: 20200906\_114500

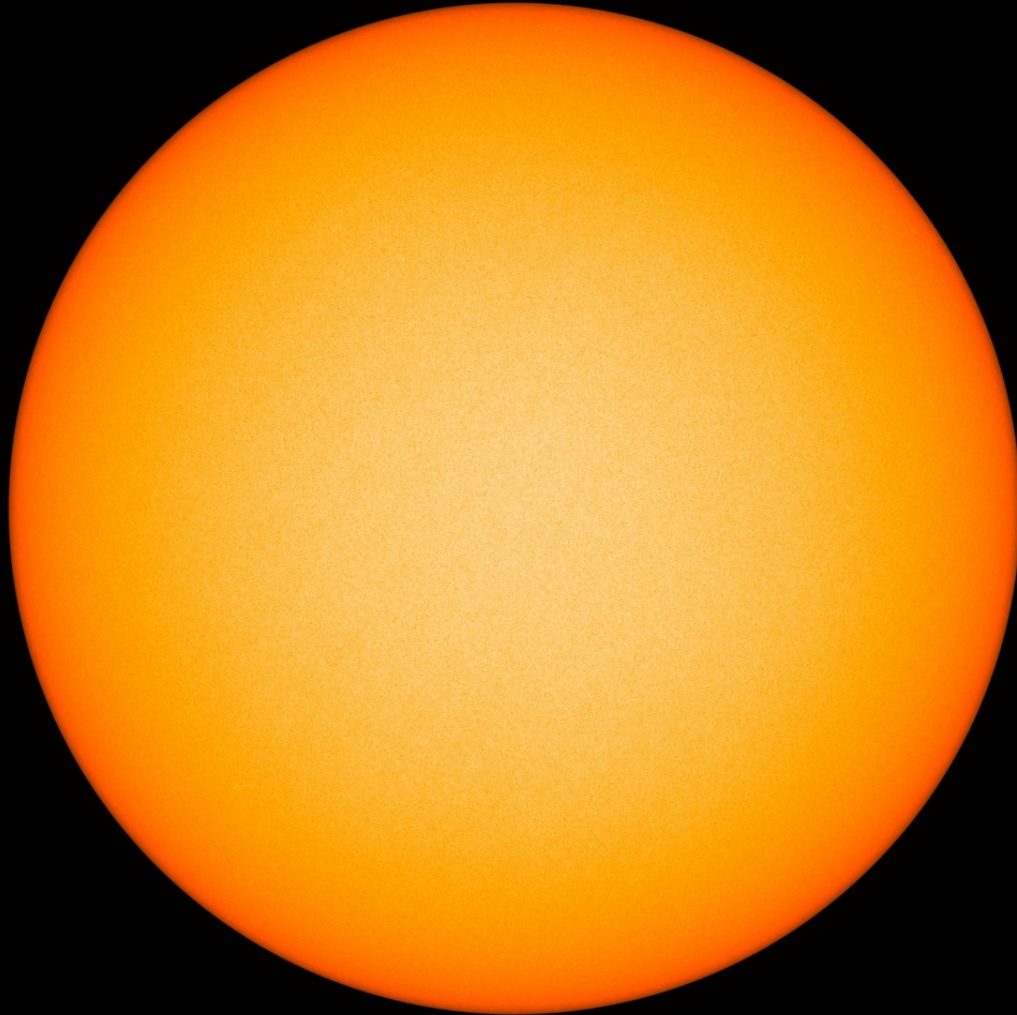
SDO/HMI Magnetogram 2020-09-06



SDO/HMI Quick-Look Magnetogram: 20200906\_114500

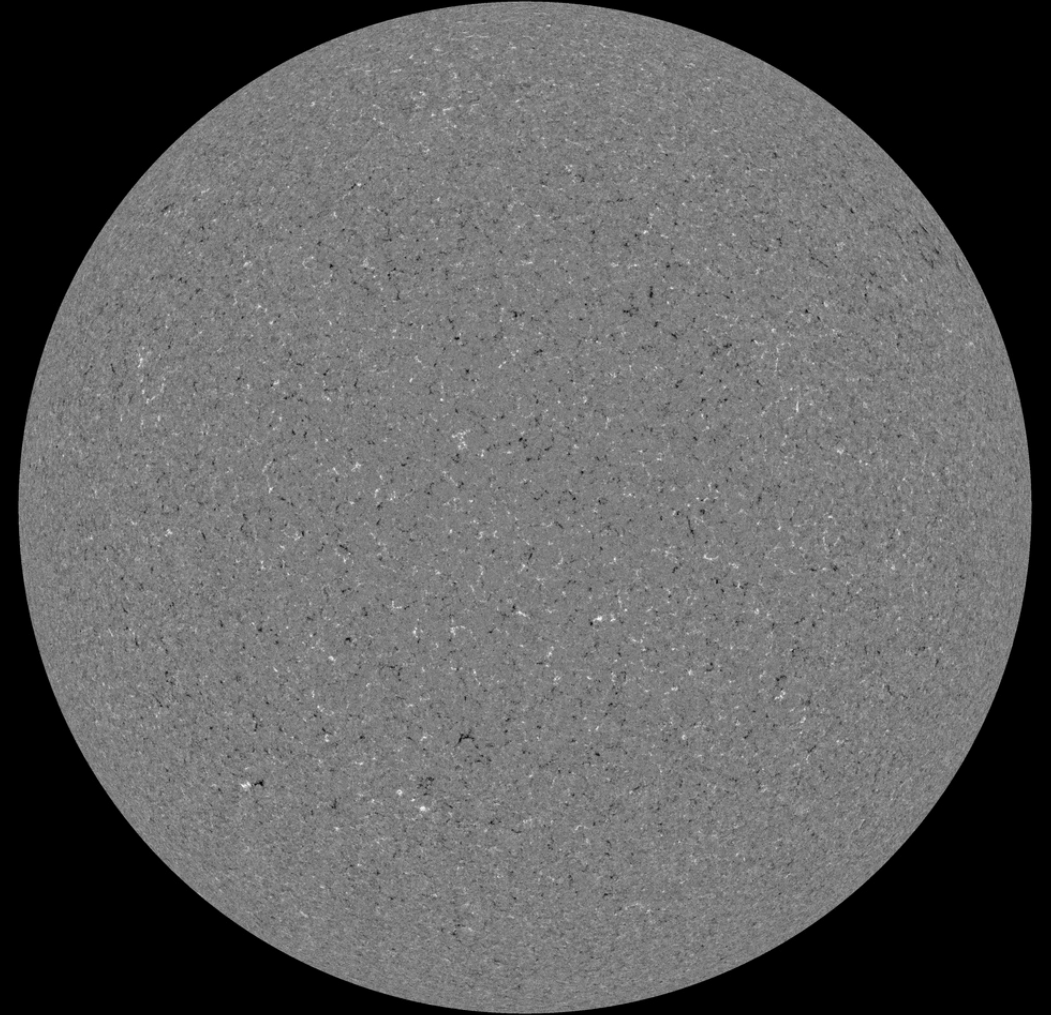
# Solar active regions - Tuesday

SDO/HMI White Light 2020-09-08



SDO/HMI Quick-Look Continuum: 20200908\_114500

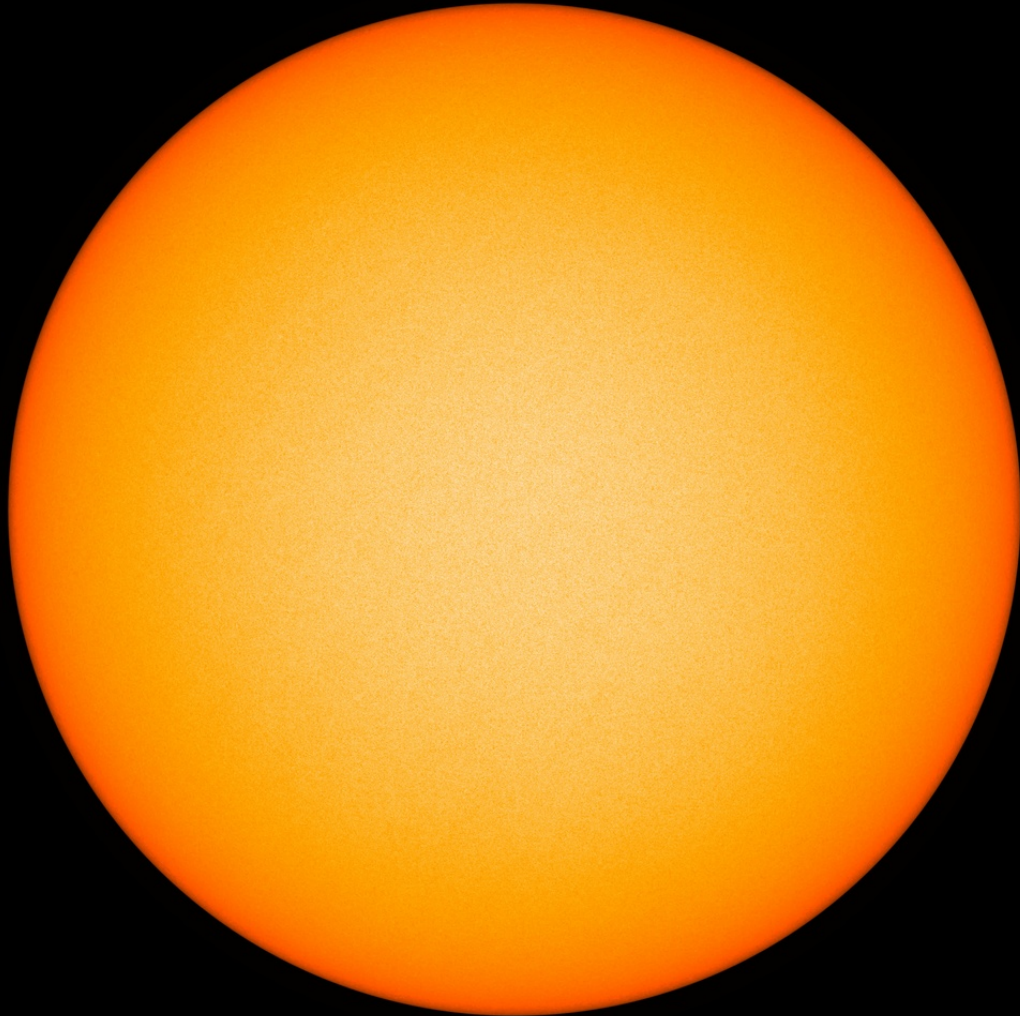
SDO/HMI Magnetogram 2020-09-08



SDO/HMI Quick-Look Magnetogram: 20200908\_114500

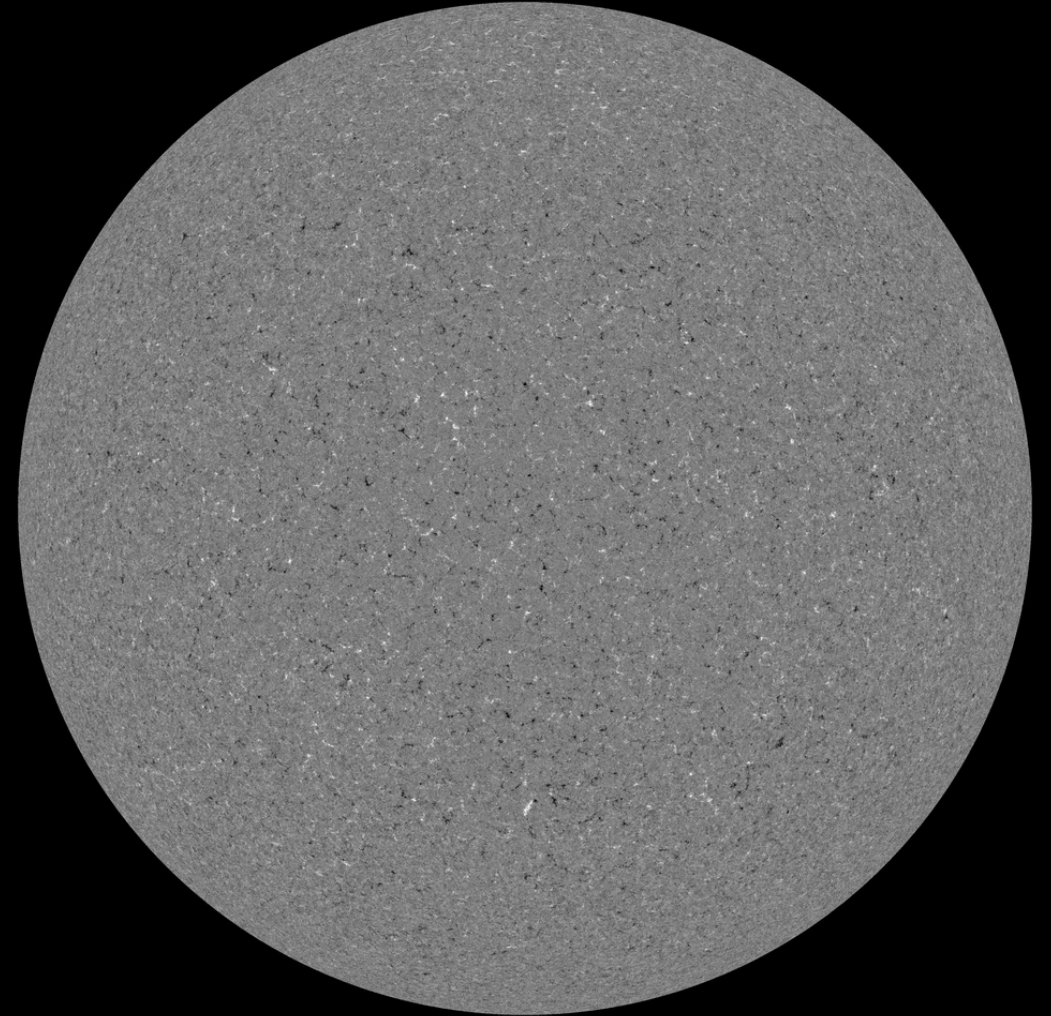
# Solar active regions - Friday

SDO/HMI White Light 2020-09-11



SDO/HMI Quick-Look Continuum: 20200911\_124500

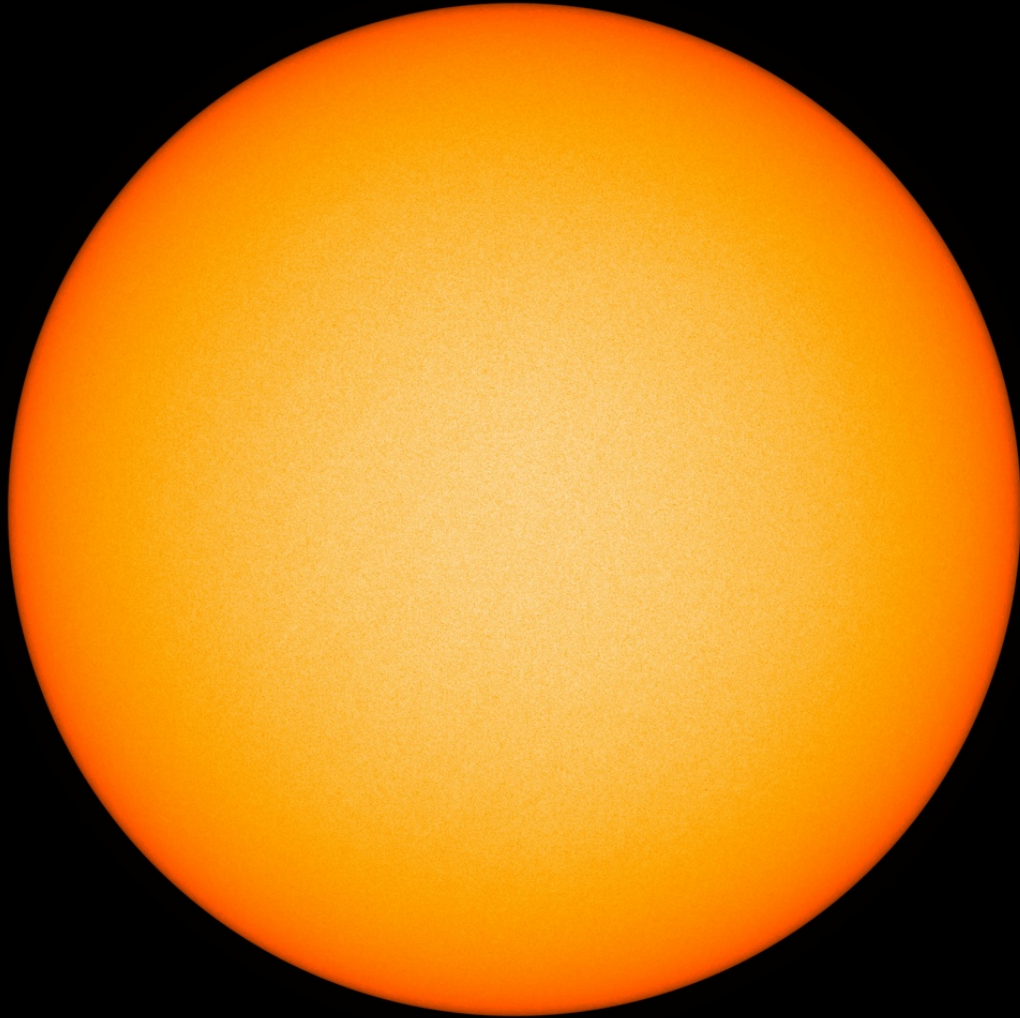
SDO/HMI Magnetogram 2020-09-11



SDO/HMI Quick-Look Magnetogram: 20200911\_124500

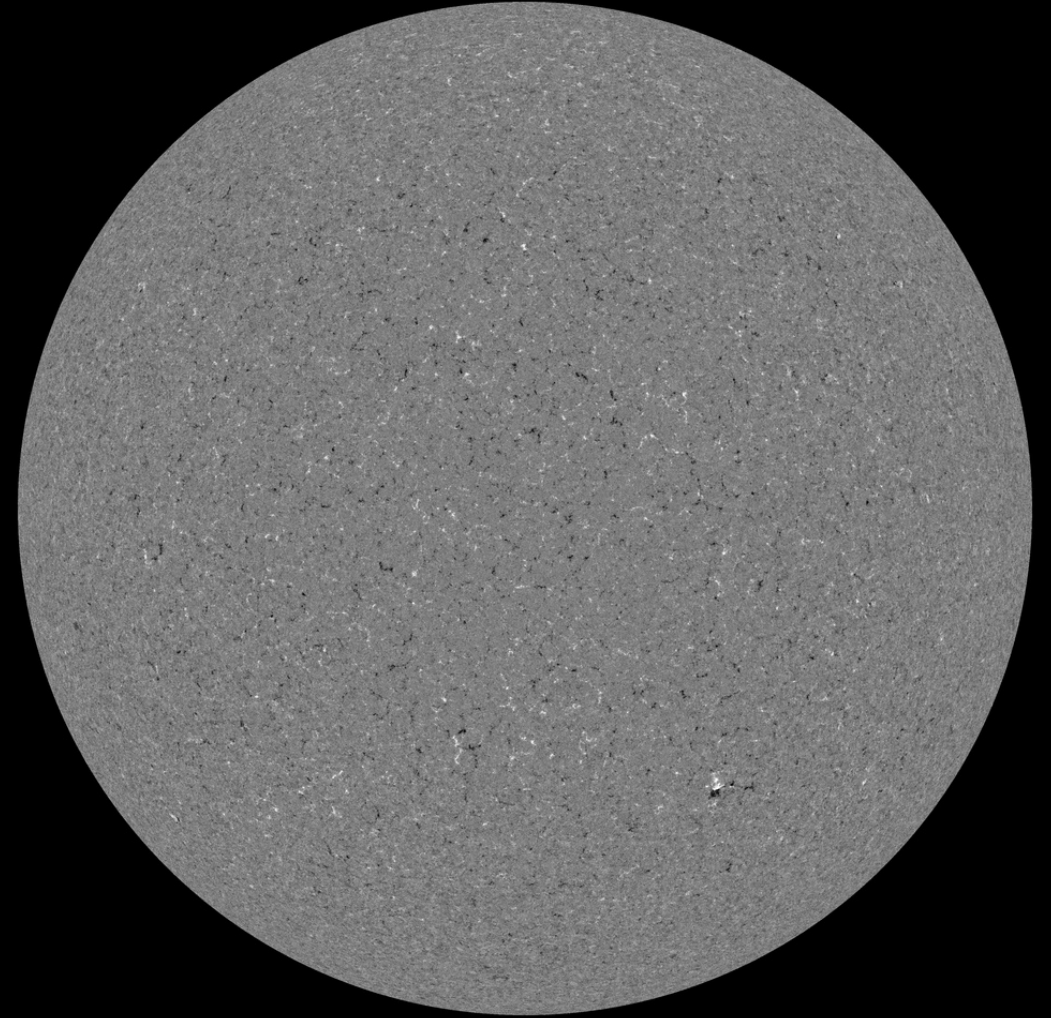
# Solar active regions - End of week Sunday

SDO/HMI White Light 2020-09-13



SDO/HMI Quick-Look Continuum: 20200913\_114500

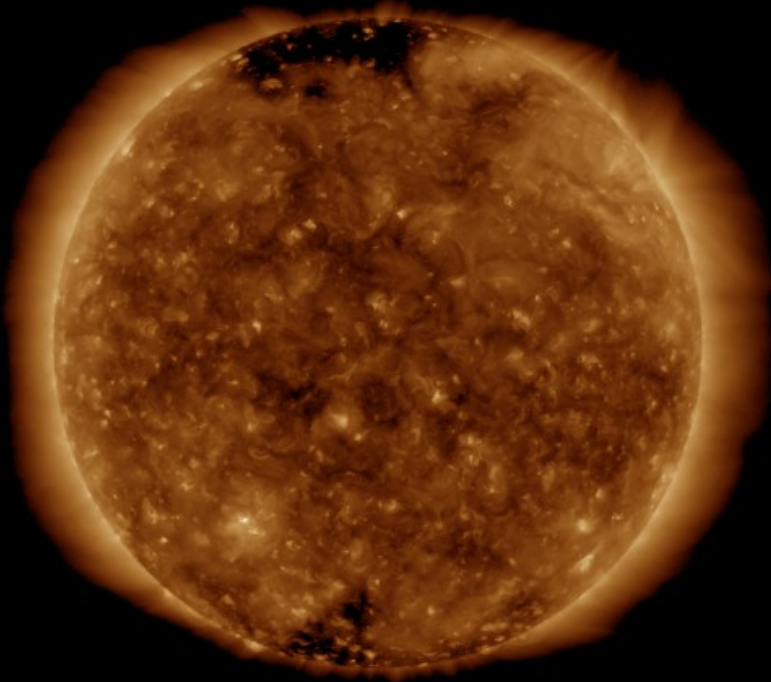
SDO/HMI Magnetogram 2020-09-13



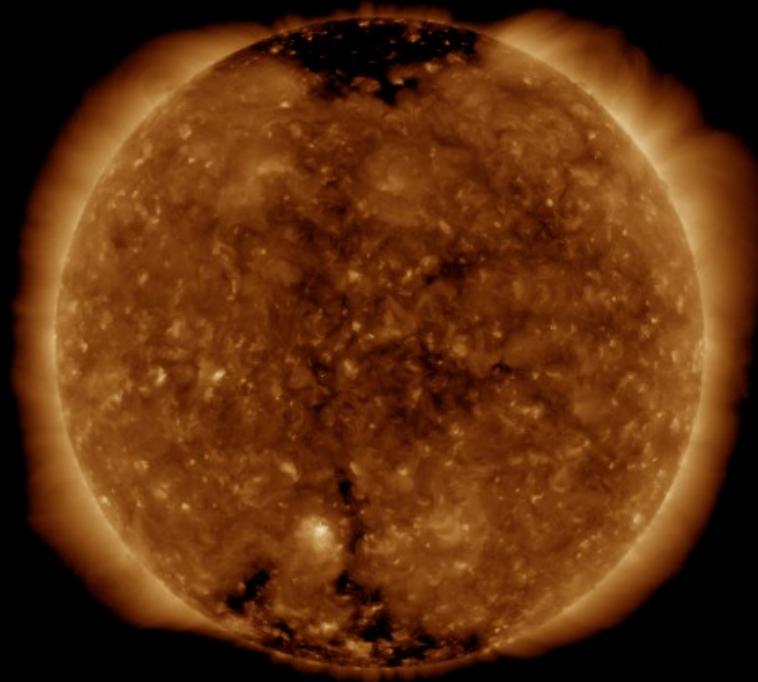
SDO/HMI Quick-Look Magnetogram: 20200913\_114500

# Solar active regions & Coronal holes

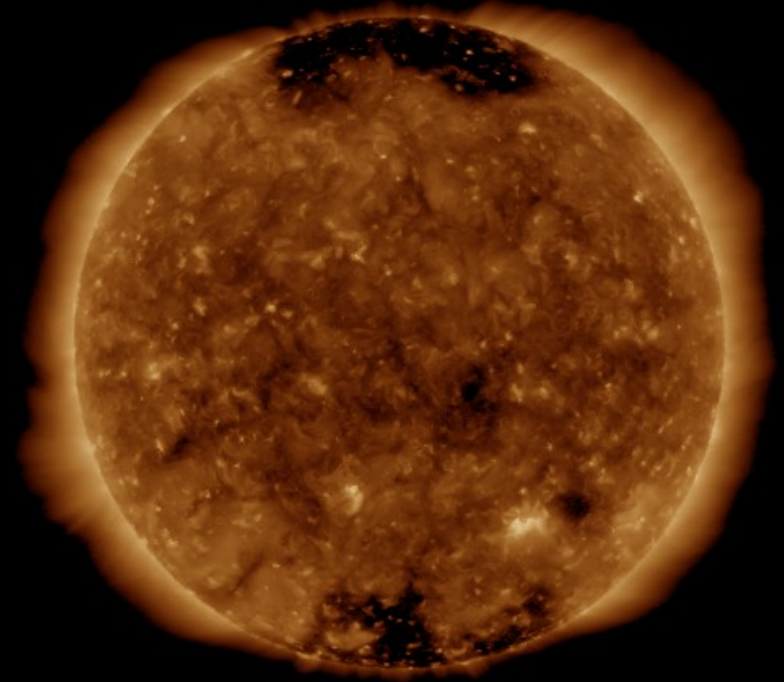
SDO/AIA 19.3 nm 2020-09-07



SDO/AIA 19.3 nm 2020-09-10



SDO/AIA 19.3 nm 2020-09-13



SDO/AIA 193 2020-09-07 10:37:29 UT

SDO/AIA 193 2020-09-10 12:08:05 UT

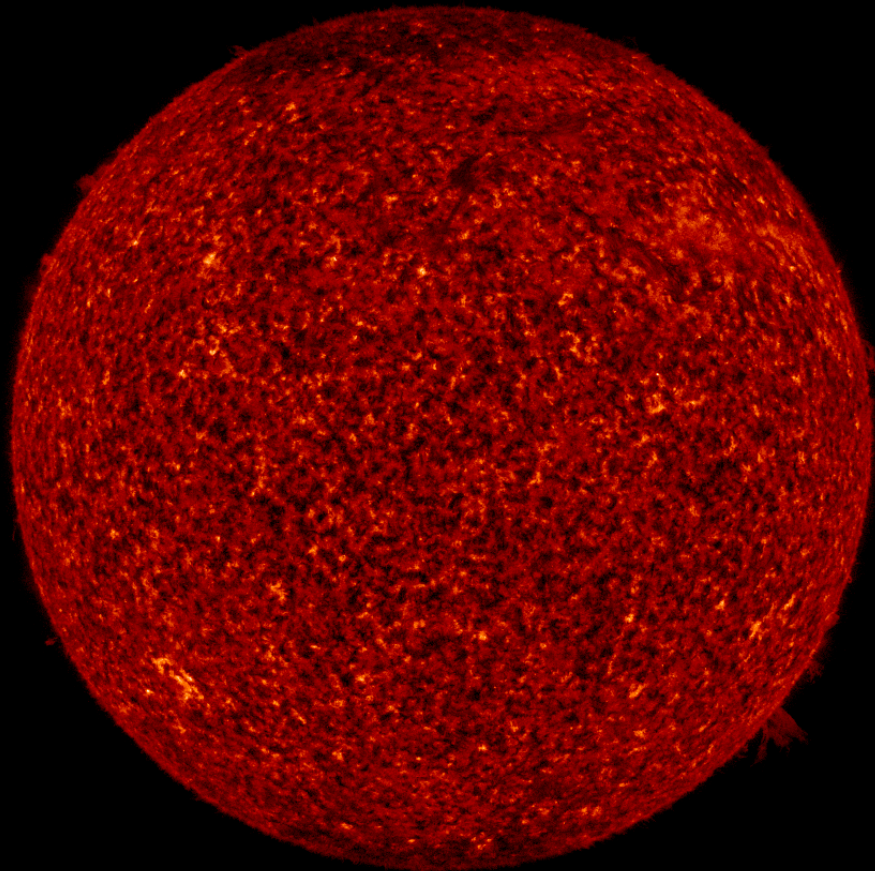
SDO/AIA 193 2020-09-13 10:47:05 UT



# Solar active regions & Filaments

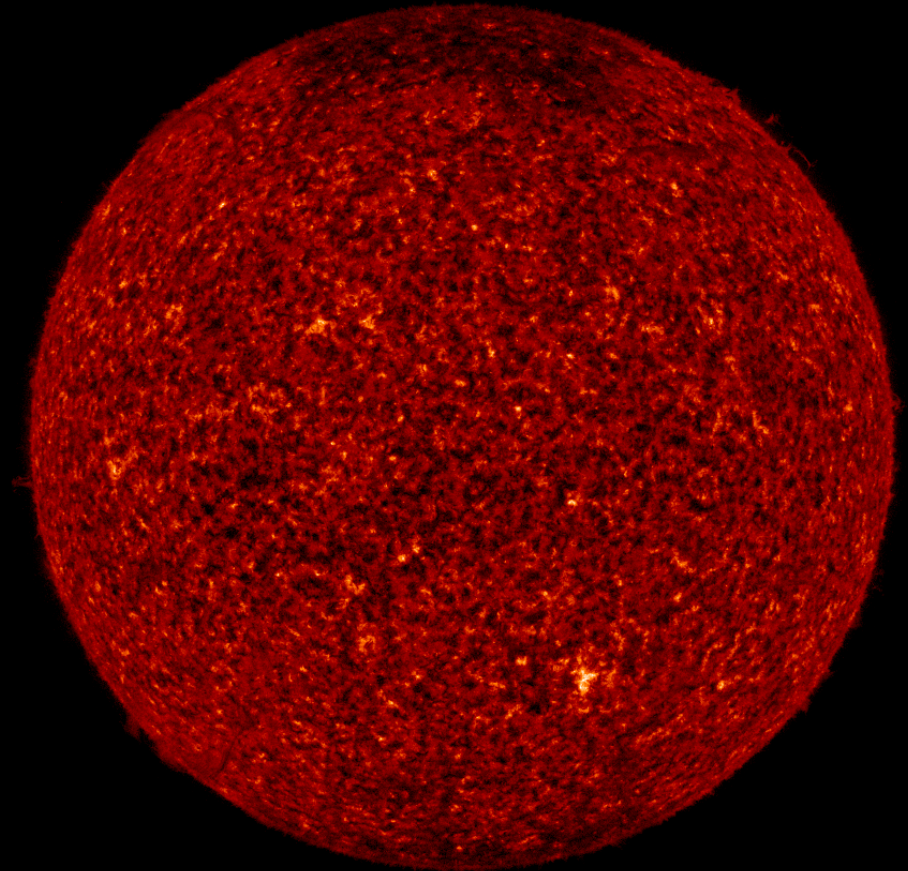
SDO/AIA 30.4 nm 2020-09-06

SDO/AIA AIA 304Å 2020-09-06T00:00:06.58



SDO/AIA 30.4 nm 2020-09-13

SDO/AIA AIA 304Å 2020-09-13T00:00:06.58



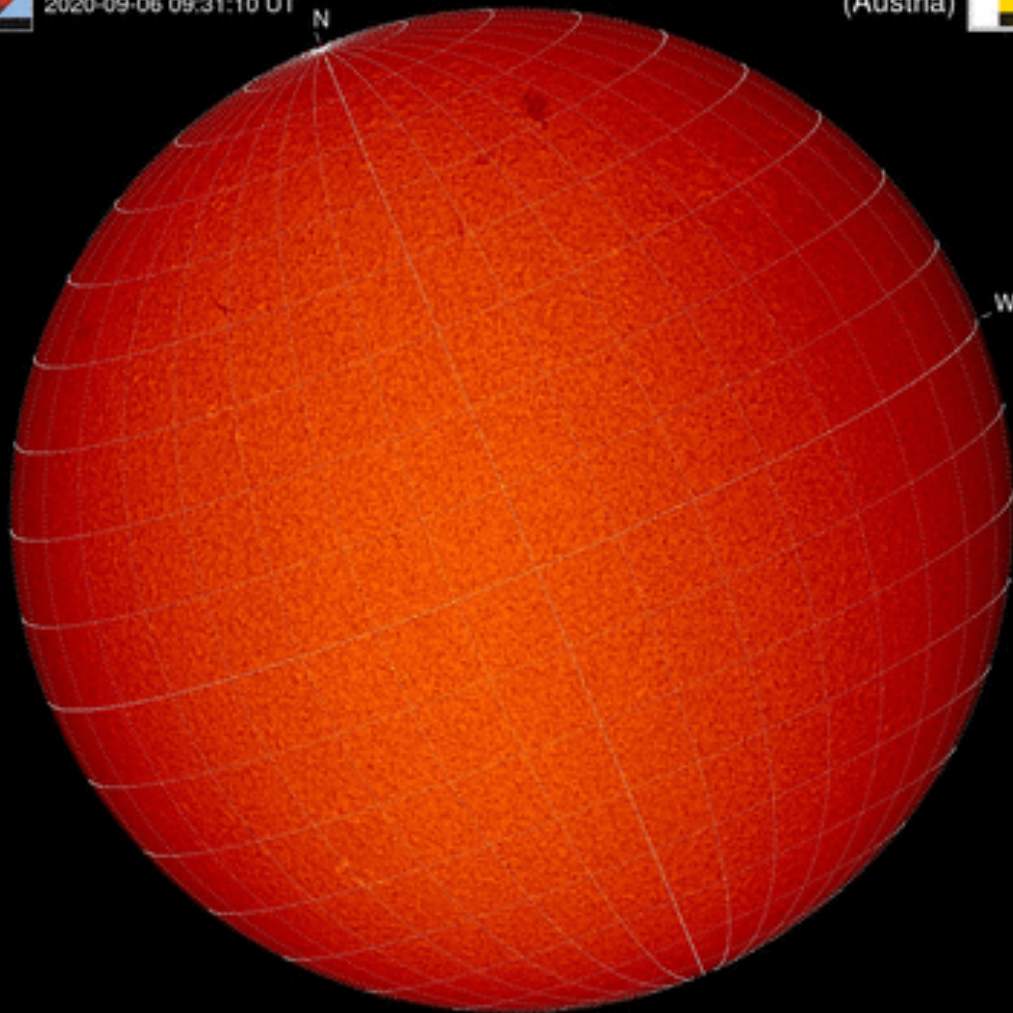
# Filaments & Filament eruptions

H-alpha 2020-09-06



Kanzelhöhe Observatory  
2020-09-06 09:31:10 UT

University of Graz  
(Austria)

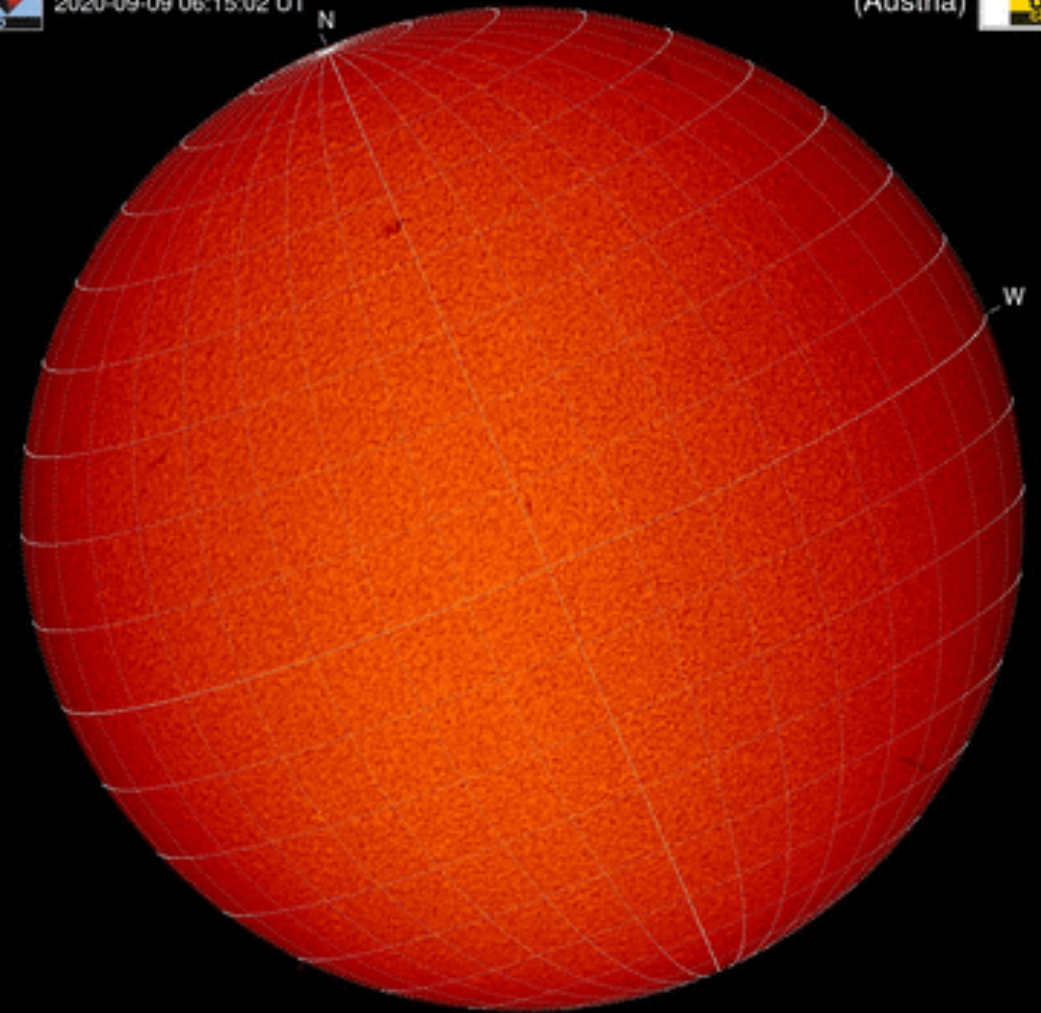


H-alpha 2020-09-09

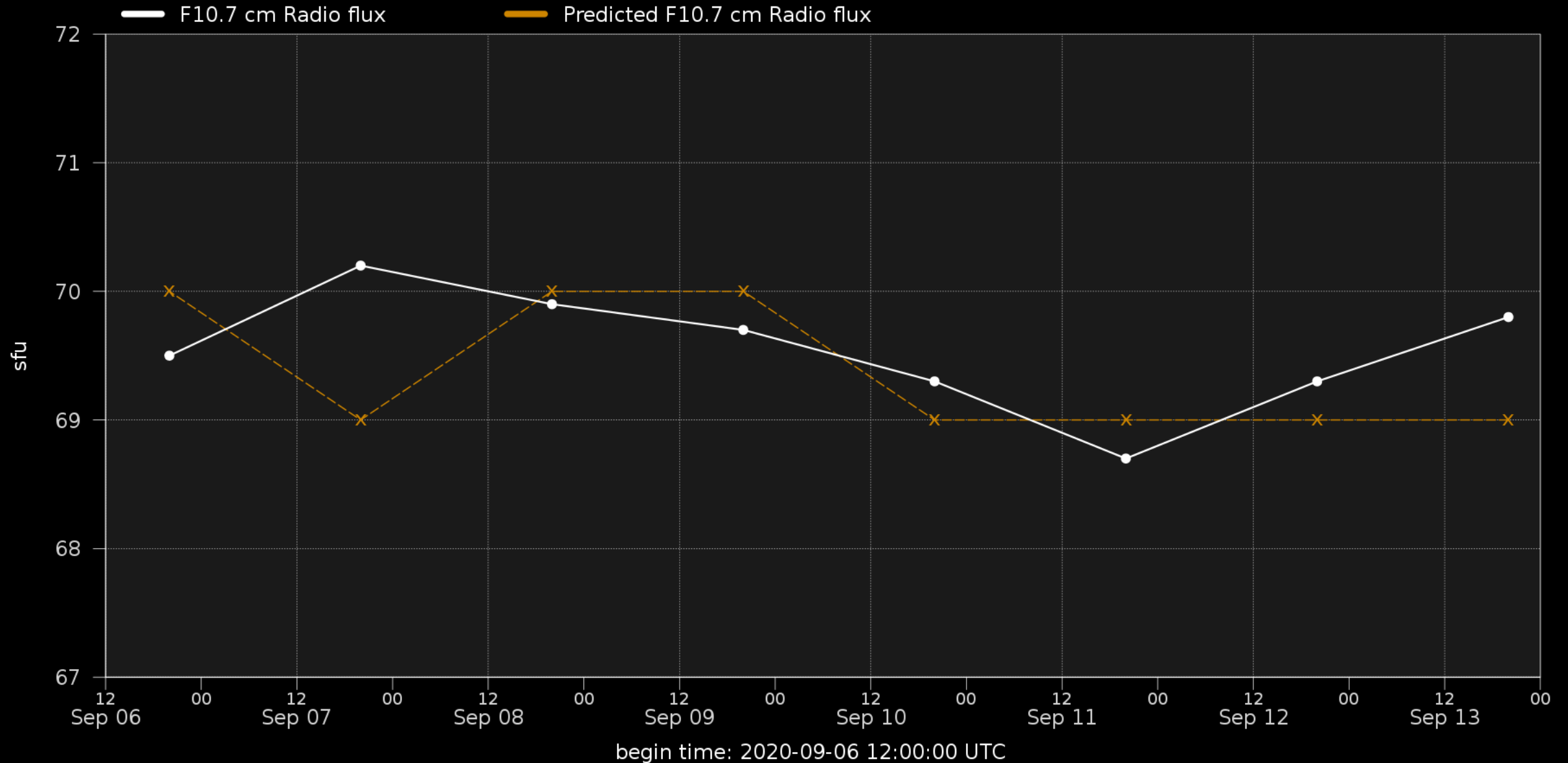


Kanzelhöhe Observatory  
2020-09-09 06:15:02 UT

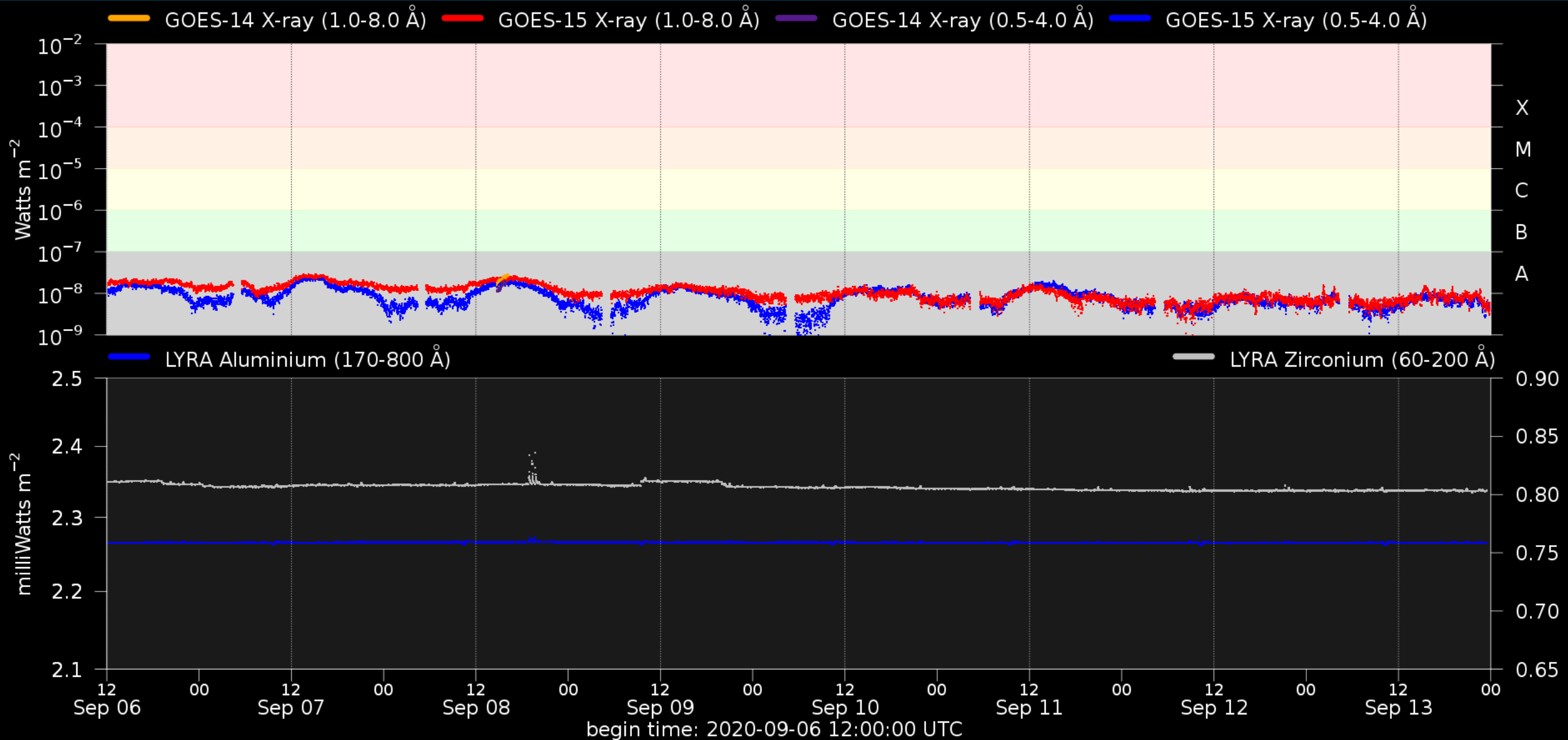
University of Graz  
(Austria)



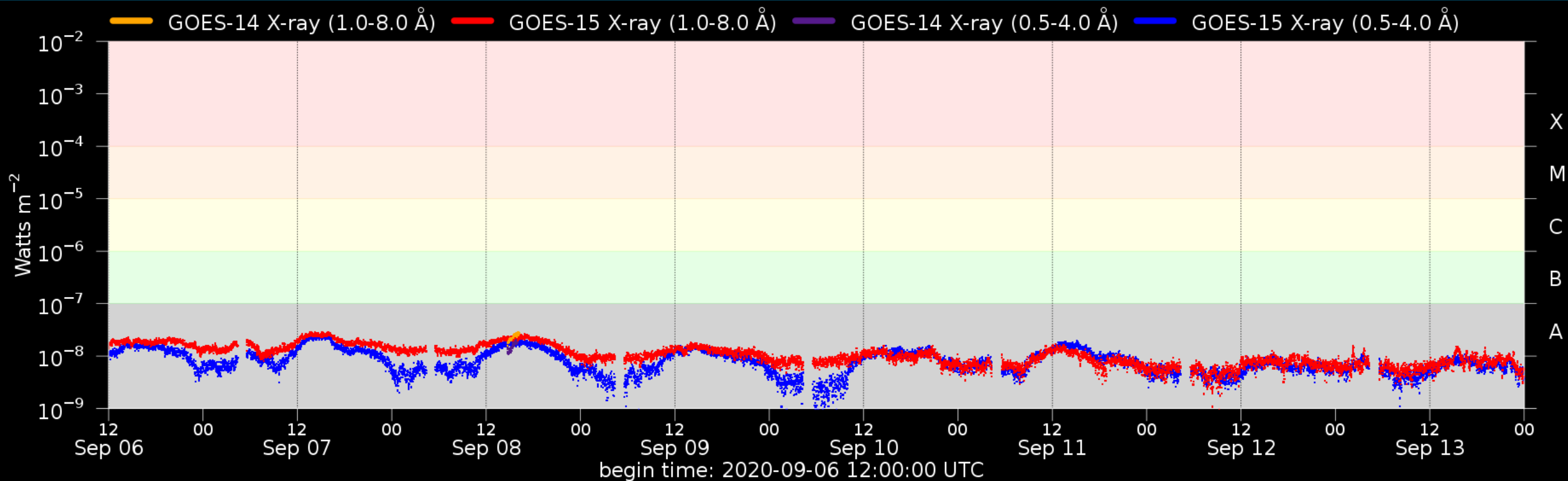
# Solar F10.7cm radio flux



# Solar X-Ray (GOES16) and UV flux (PROBA2/SWAP)



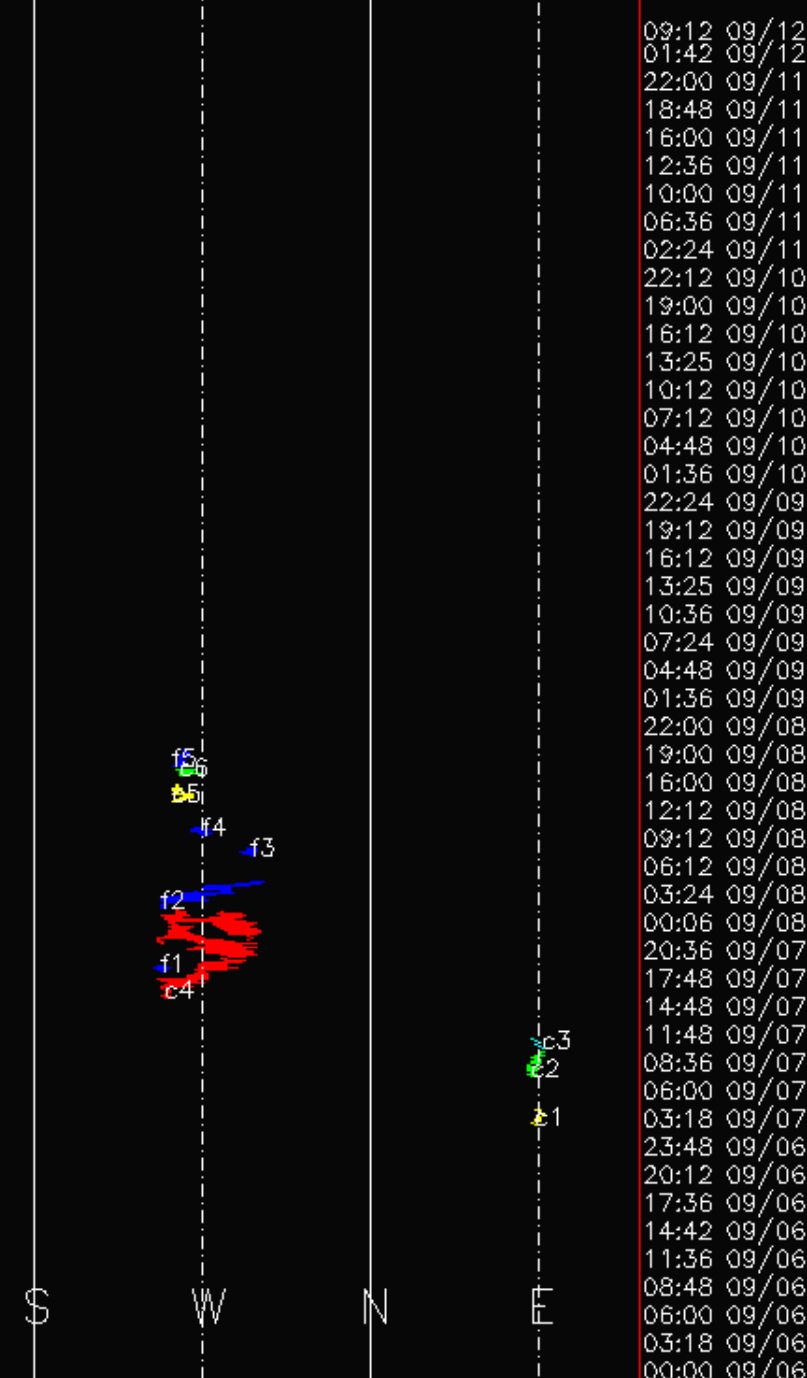
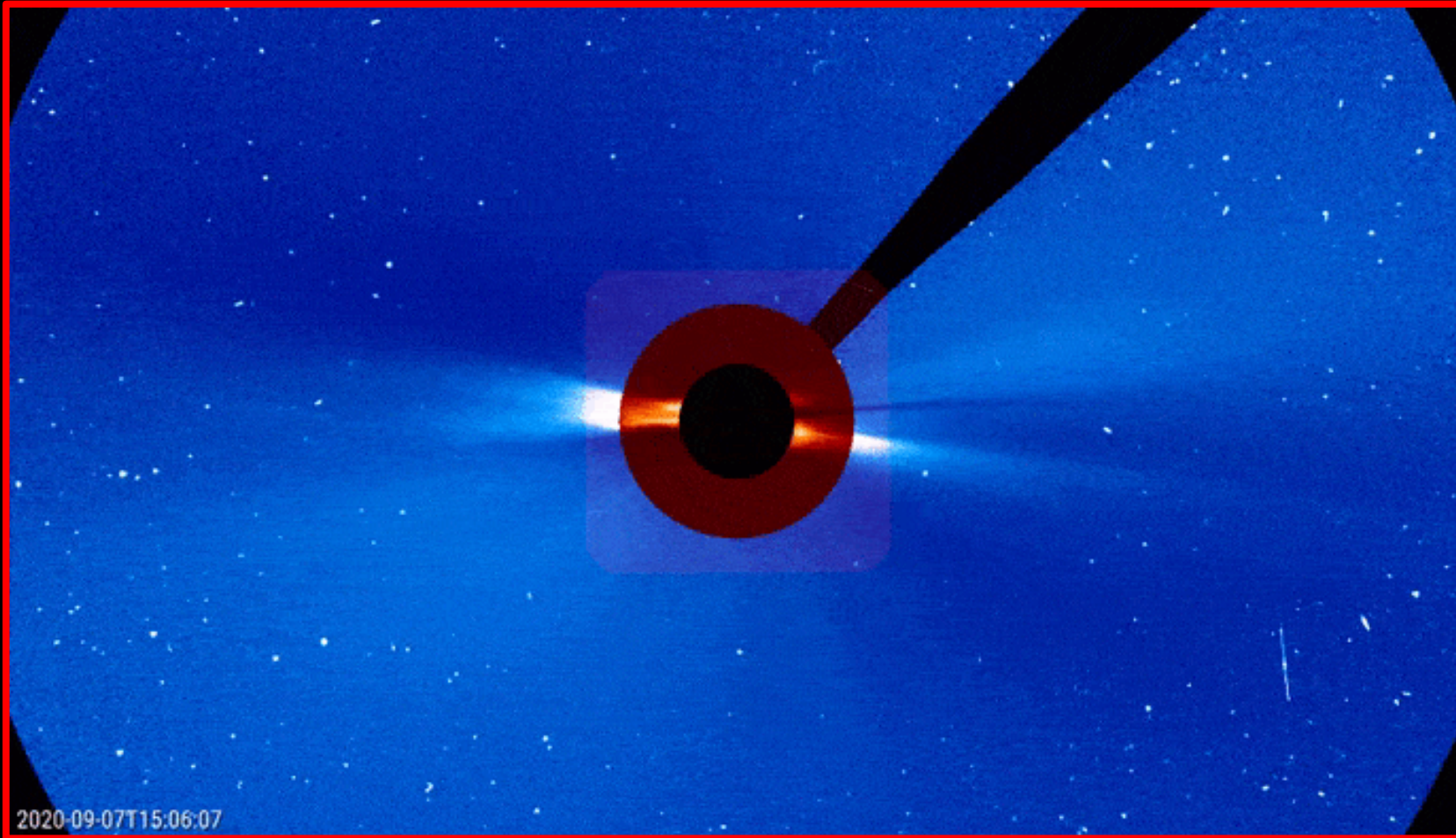
# Flaring activity (GOES16)



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

Issue date	2020-09-06	2020-09-07	2020-09-08	2020-09-09	2020-09-10	2020-09-11	2020-09-12	2020-09-13
Probability	--- 01 01 01	--- 01 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 Ejections



# Solar Wind and

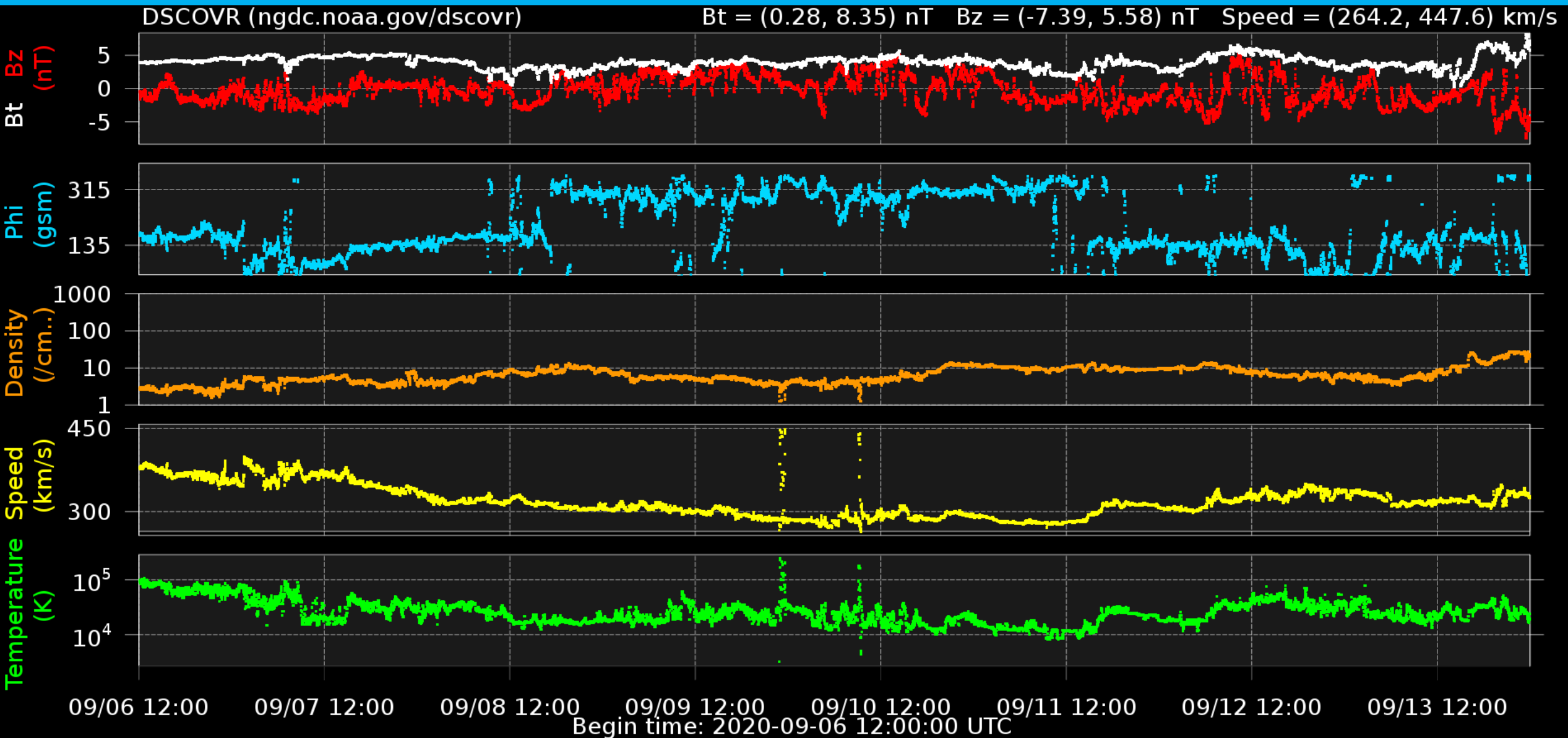
# Geomagnetic Activity



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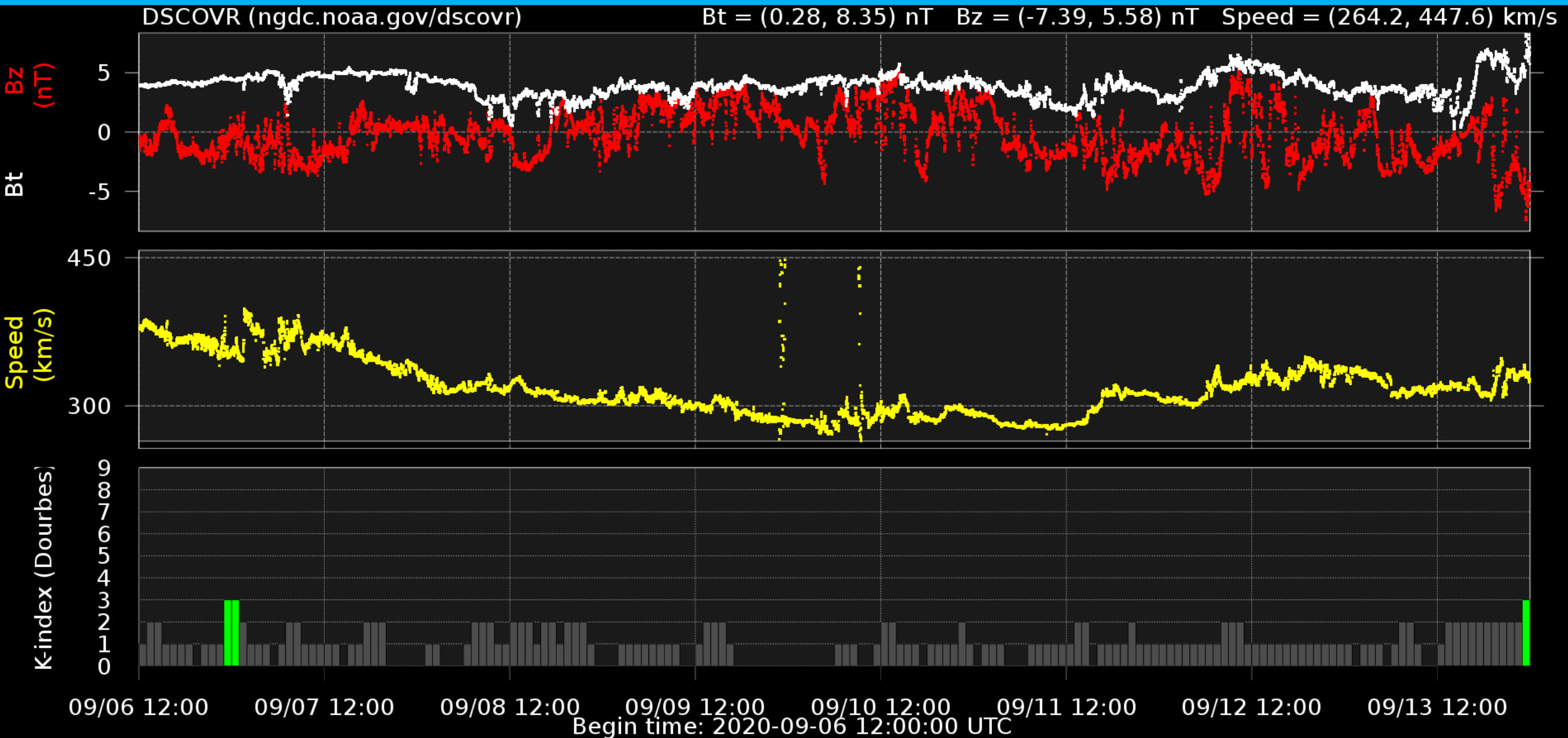
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# Solar wind parameters (DSCOVR data)

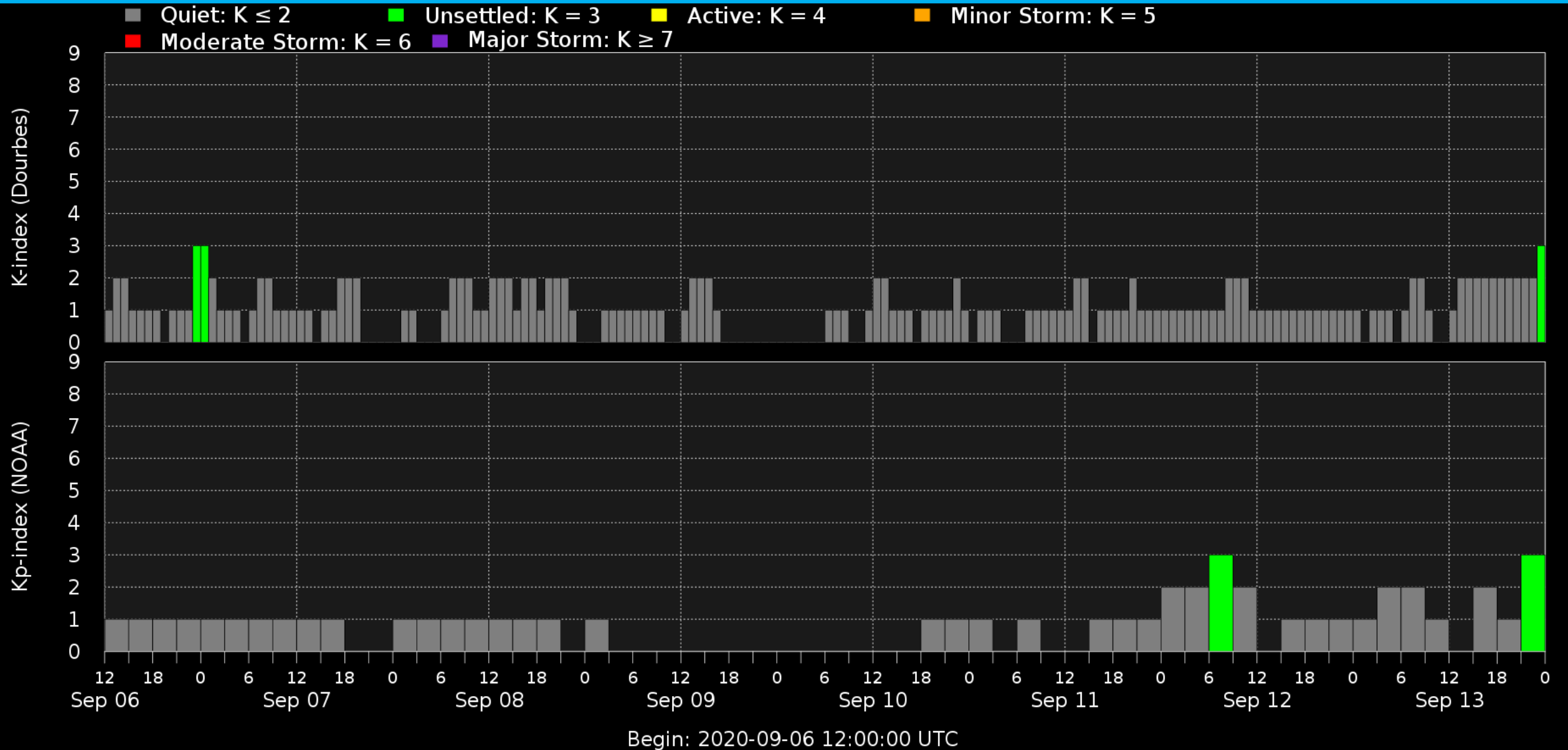




# Solar wind parameters & K-index (DSCOVR/Dourbes)



# Geomagnetic activity (K-indexes)



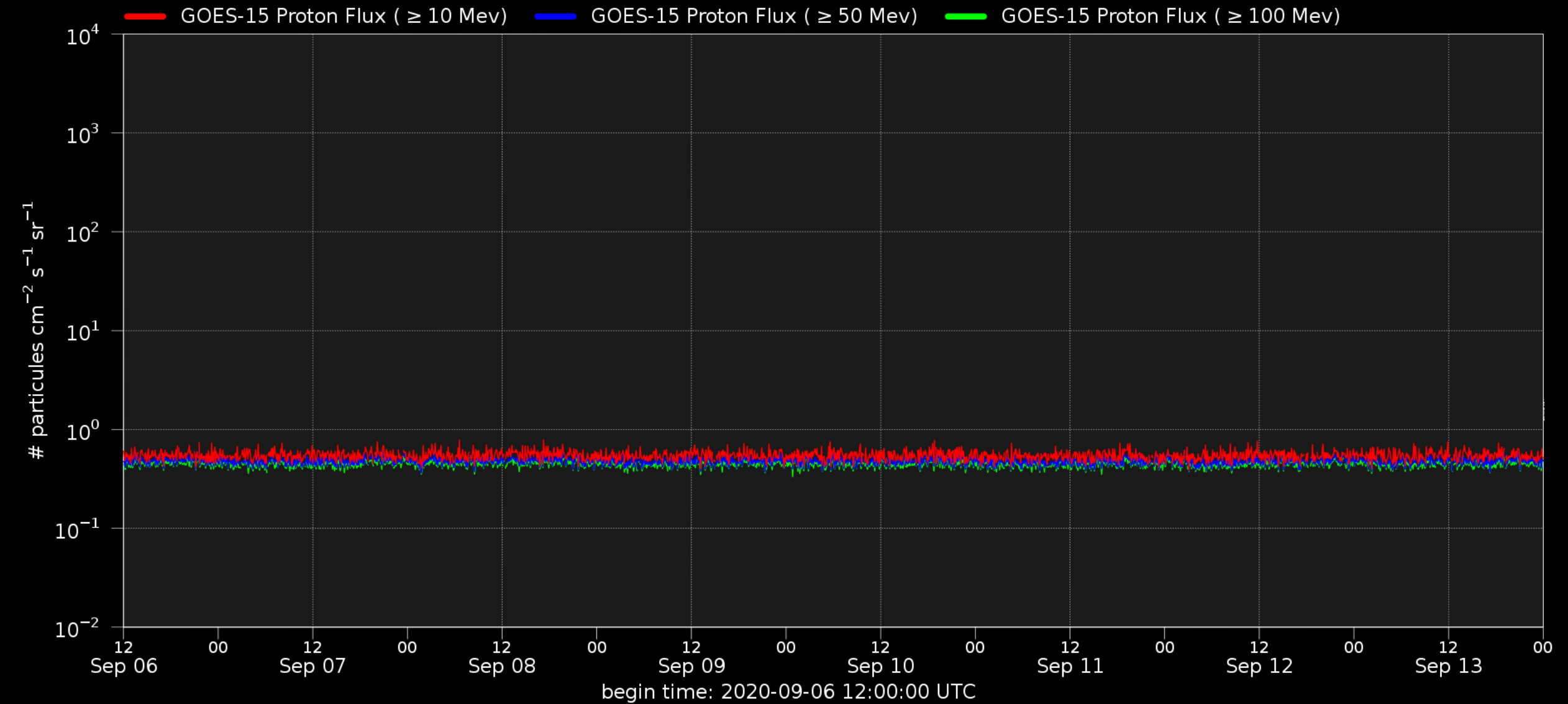
# Solar Energetic Particles



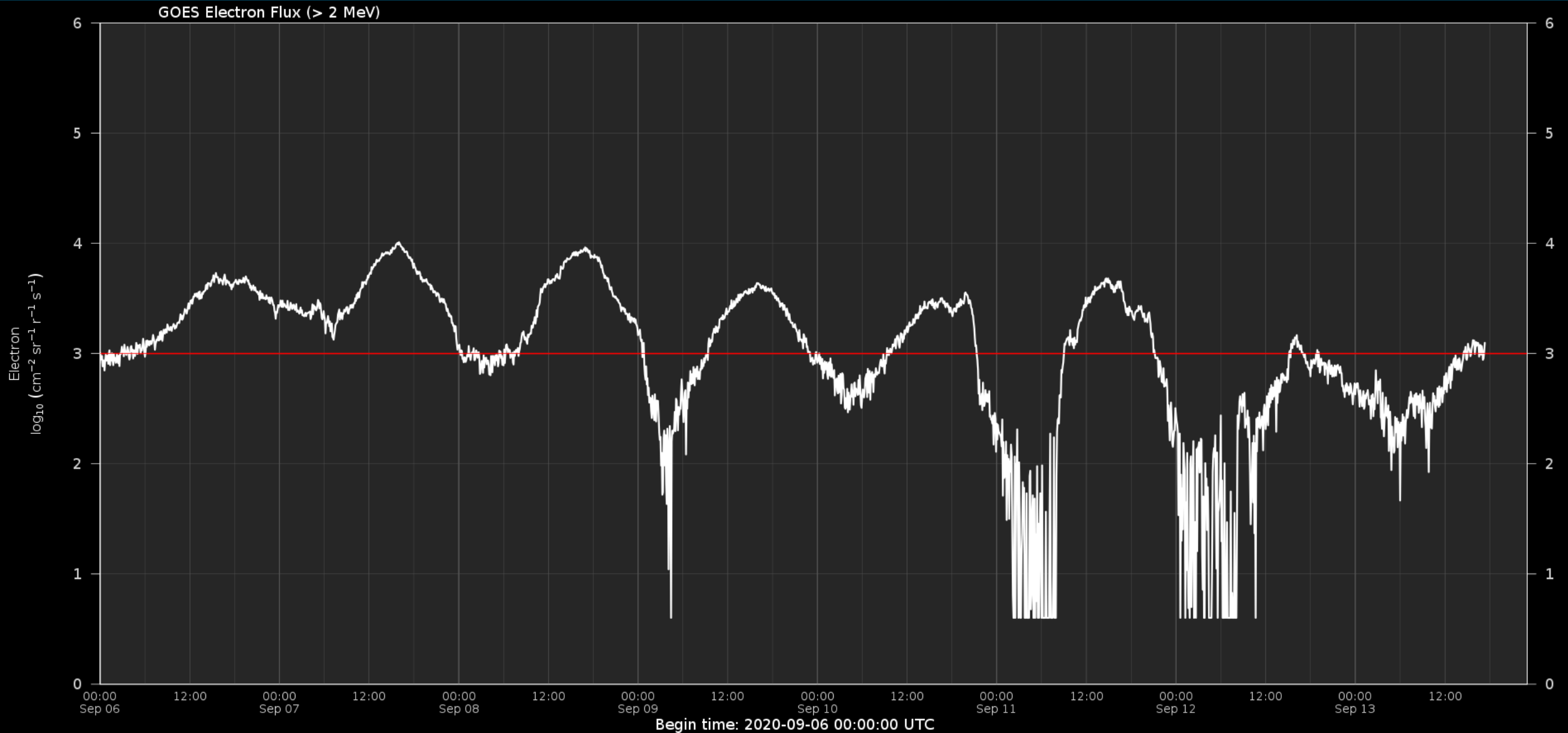
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# Solar proton flux (GOES-16)



# Solar electron flux (GOES-16)



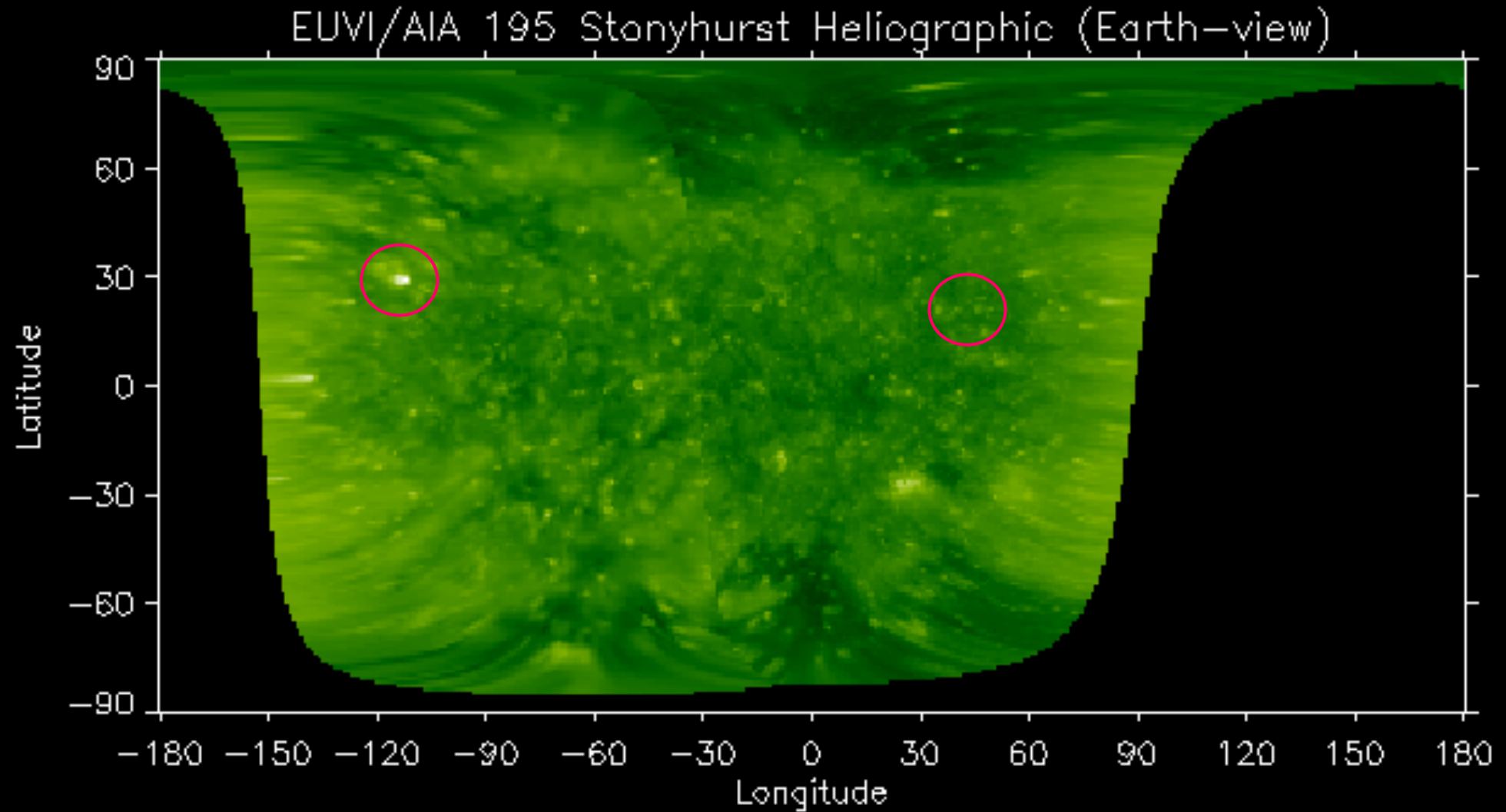
# Outlook



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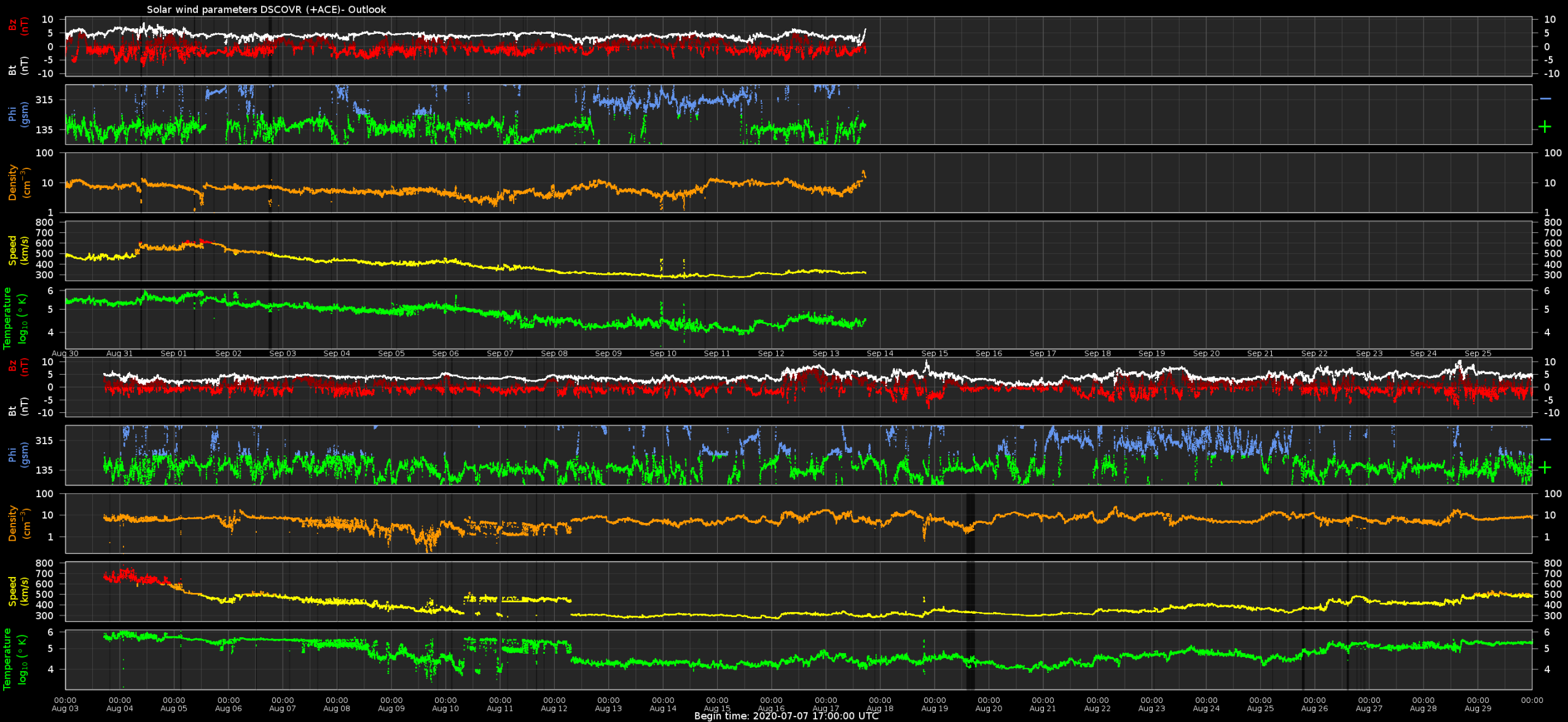
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# Outlook: Solar activity



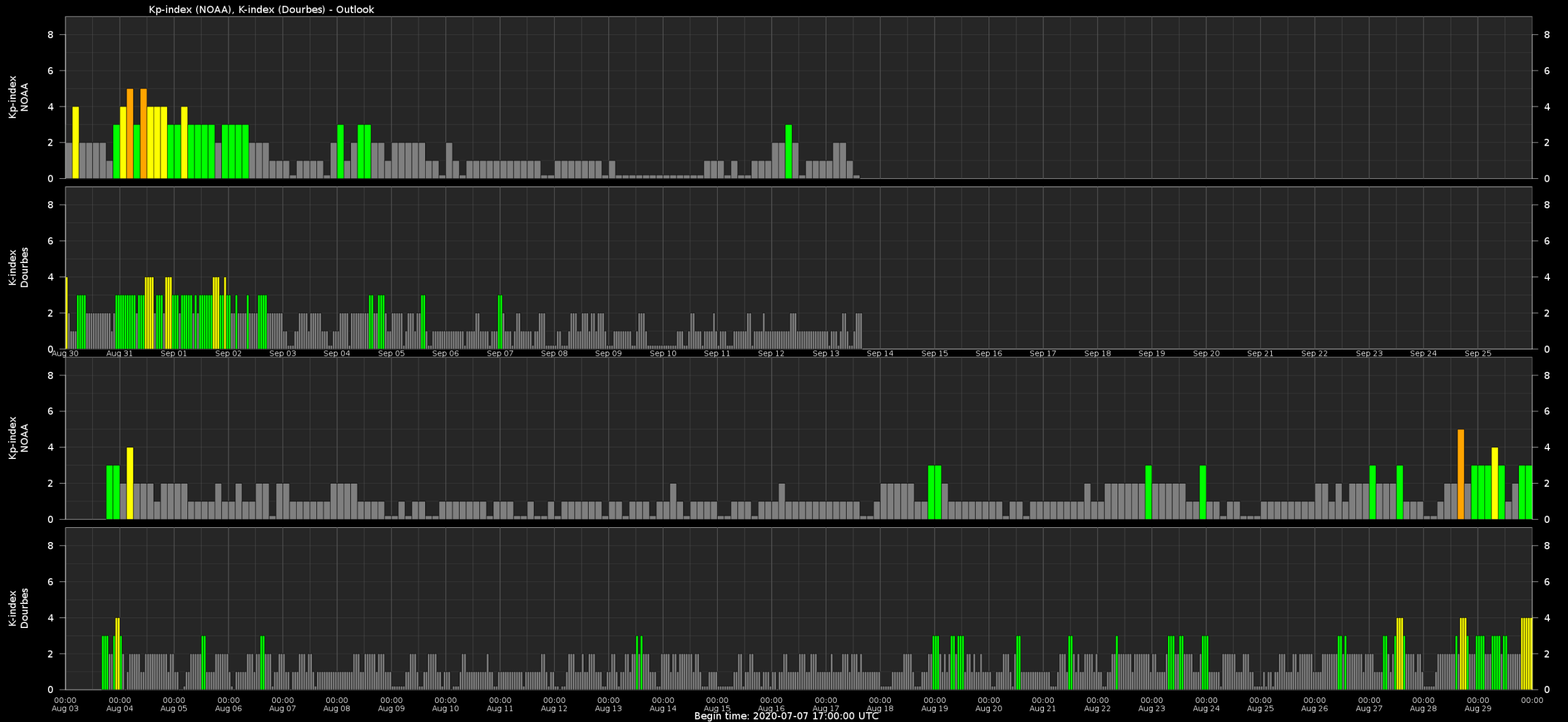
Observation date: 2020/09/13 11:45:30

# Outlook: Solar wind





# Outlook: Geomagnetic activity



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See you at our next briefing!

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