

# SIDC Space Weather Briefing

13 October 2019 - 20 October 2019

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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 2019-10-13 12:00 UT to 2019-10-20 12:00 UT

Active regions	None
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	None
CMEs	No Earth-directed CMEs
Proton Events	None

Solar wind and geomagnetic conditions from 2019-10-13 12:00 UT to 2019-10-20 12:00 UT

Coronal Holes	Two negative polarity coronal holes (at CM October 10 and 17)
ICME	None
SW Conditions	Nominal
K-indices	max K-index (Dourbes): 3 max Kp-index (NOAA): 3

All Quiet Alert until October 18, 12:30

# Solar Activity

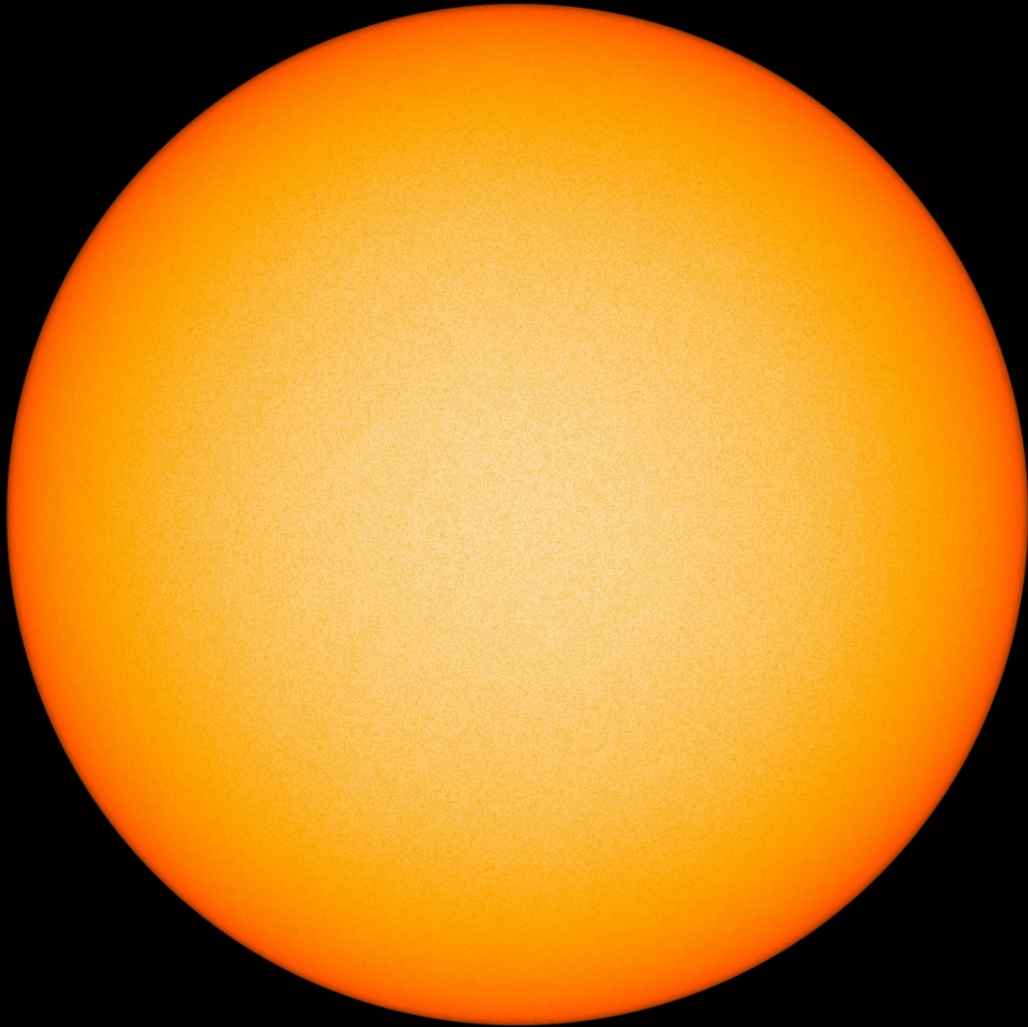


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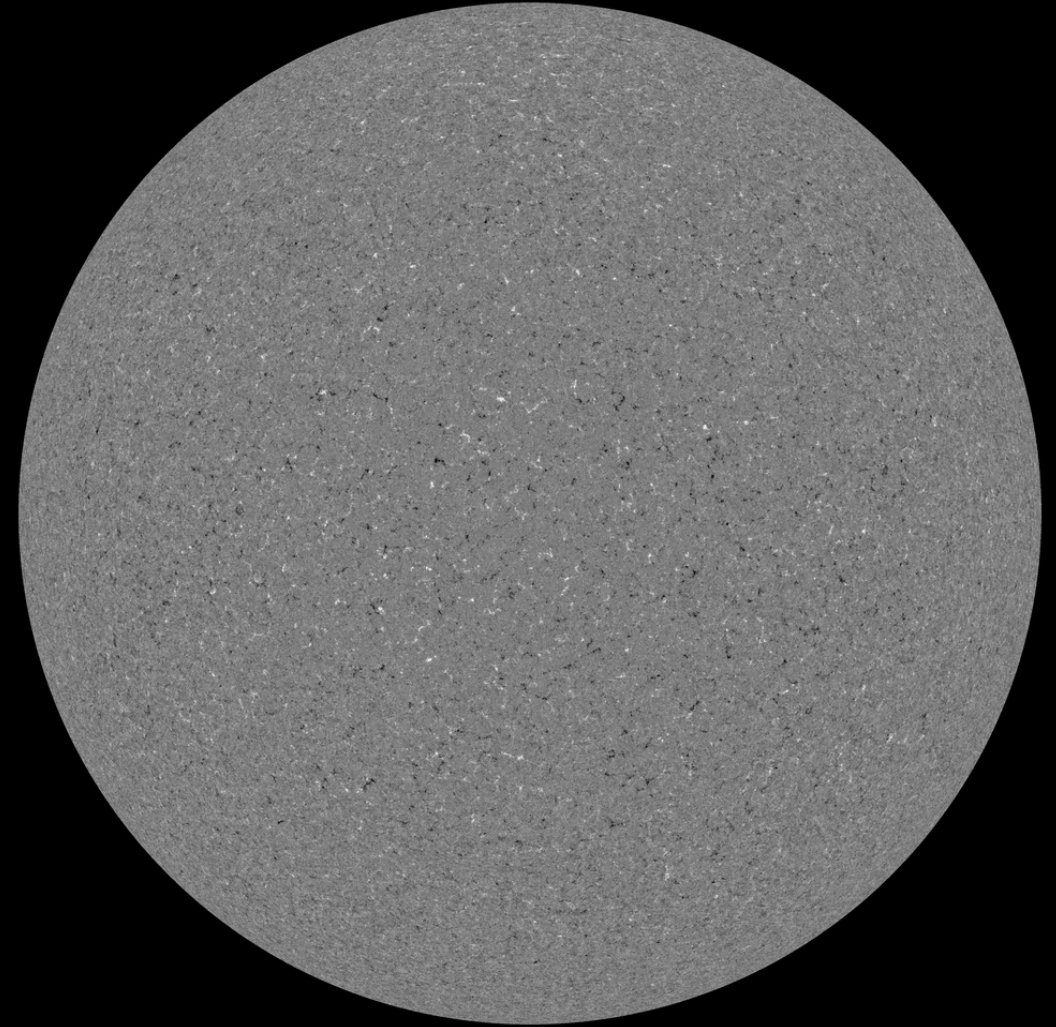
# Solar active region - start of the week

SDO/HMI White Light 2019-10-13



SDO/HMI Quick-Look Continuum: 20191013\_114500

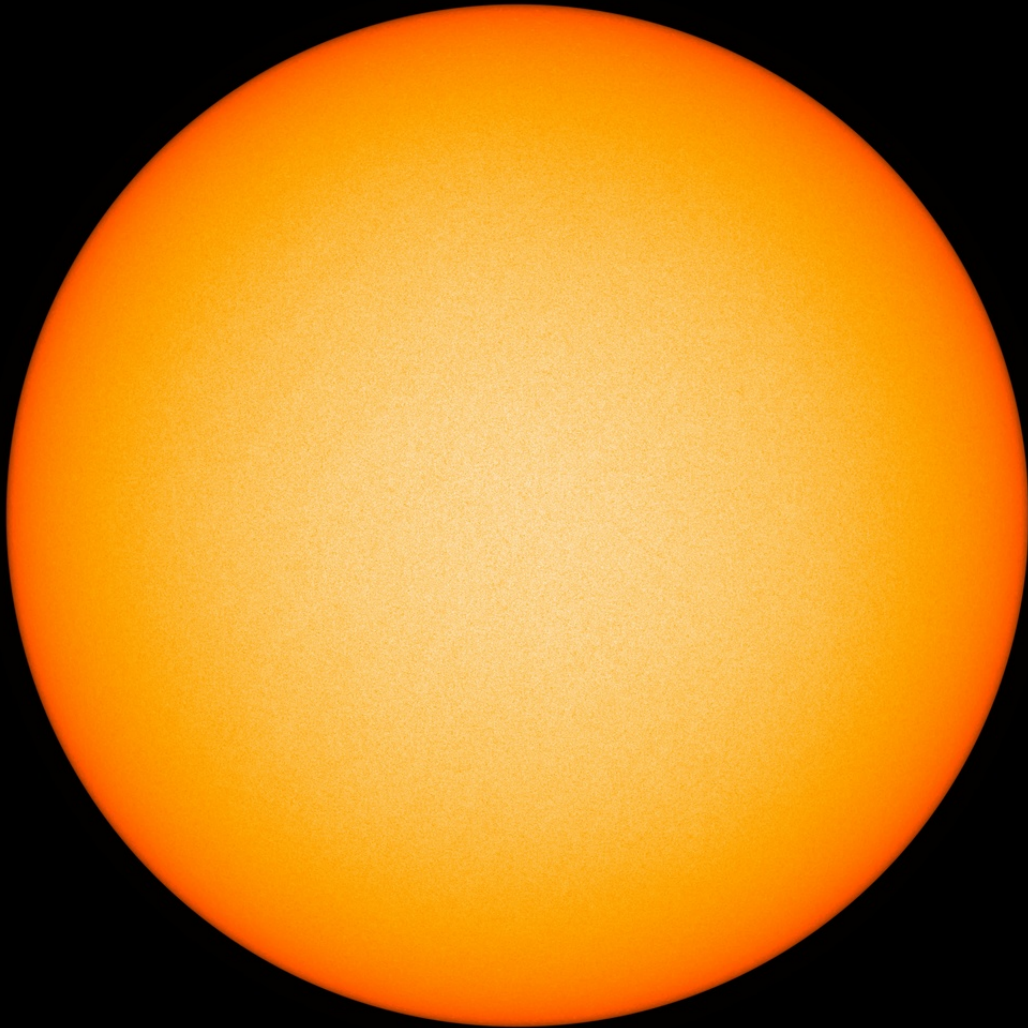
SDO/HMI Magnetogram 2019-10-13



SDO/HMI Quick-Look Magnetogram: 20191013\_114500

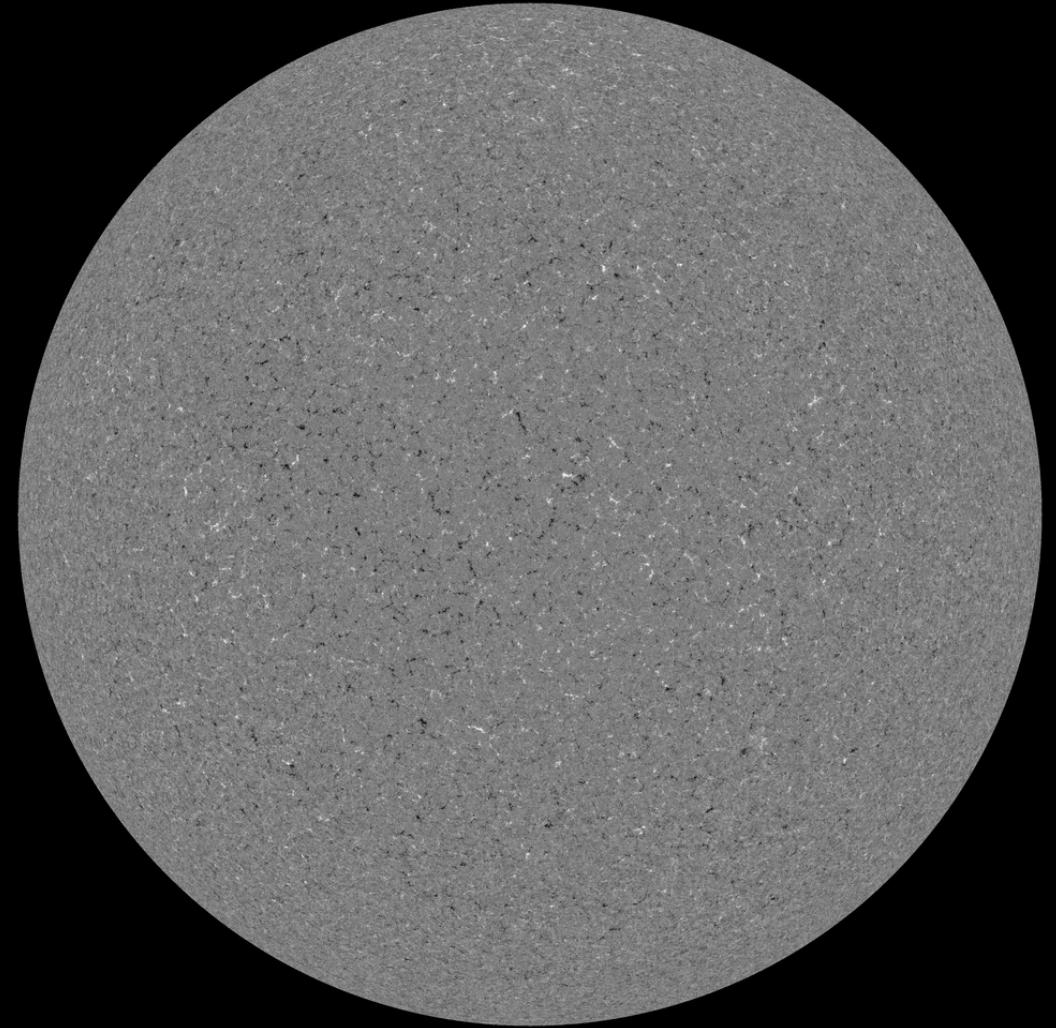
# Solar active region - middle of the week

SDO/HMI White Light 2019-10-16



SDO/HMI Quick-Look Continuum: 20191016\_120000

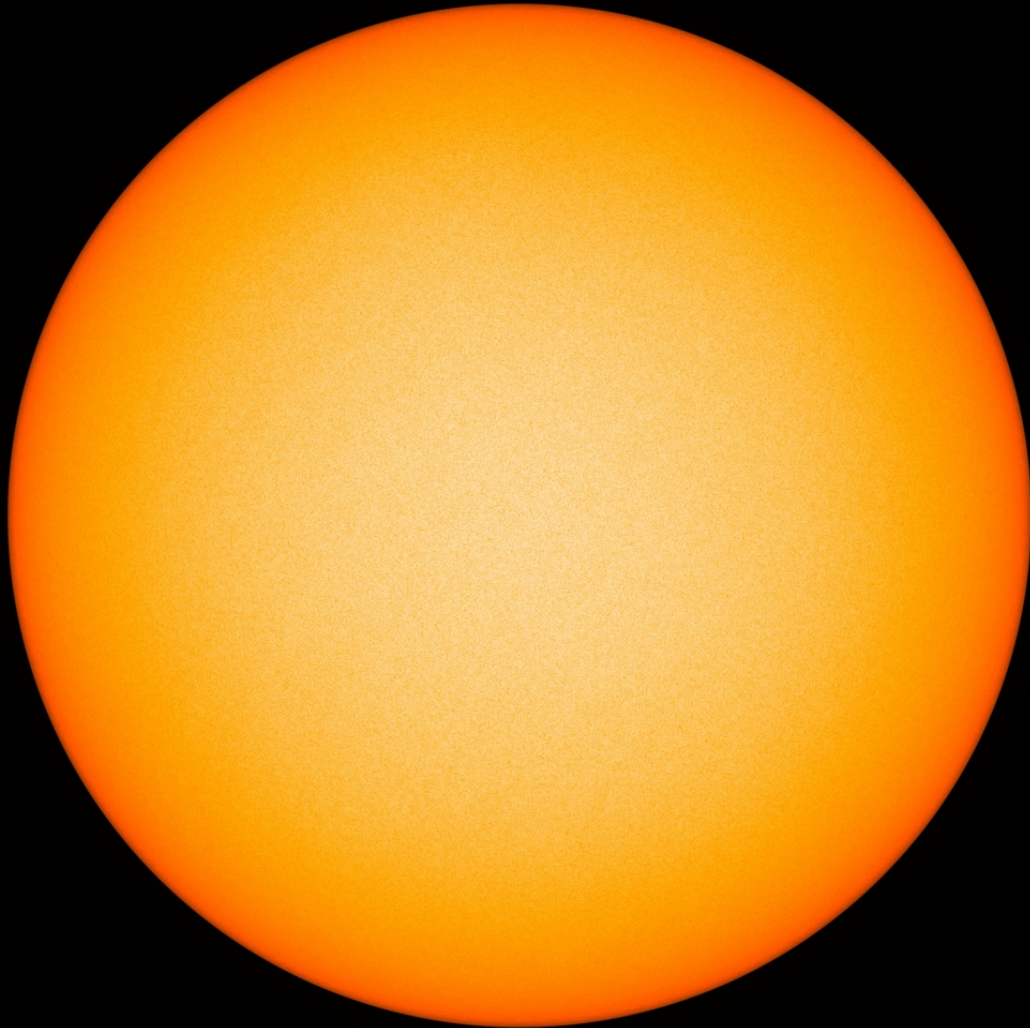
SDO/HMI Magnetogram 2019-10-16



SDO/HMI Quick-Look Magnetogram: 20191016\_114500

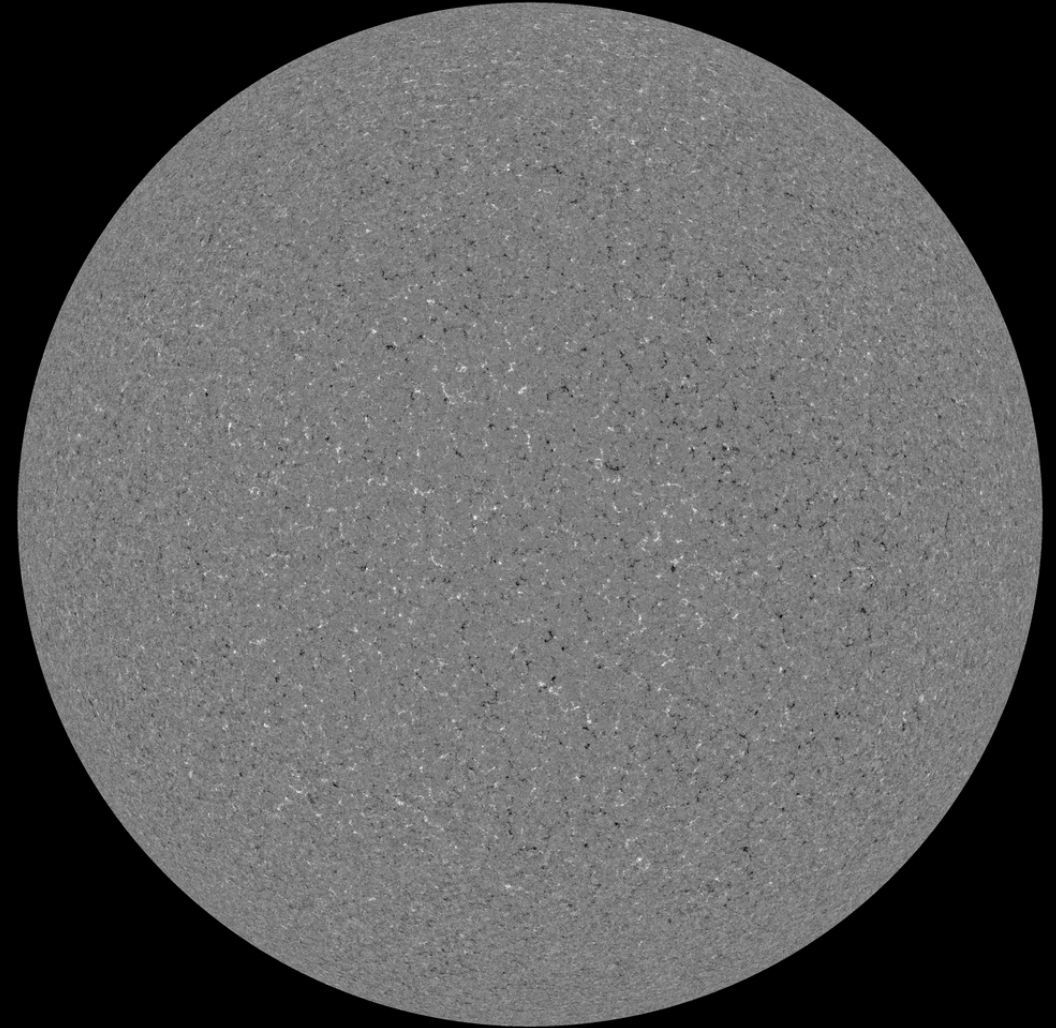
# Solar active region - end of the week

SDO/HMI White Light 2019-10-20



SDO/HMI Quick-Look Continuum: 20191020\_120000

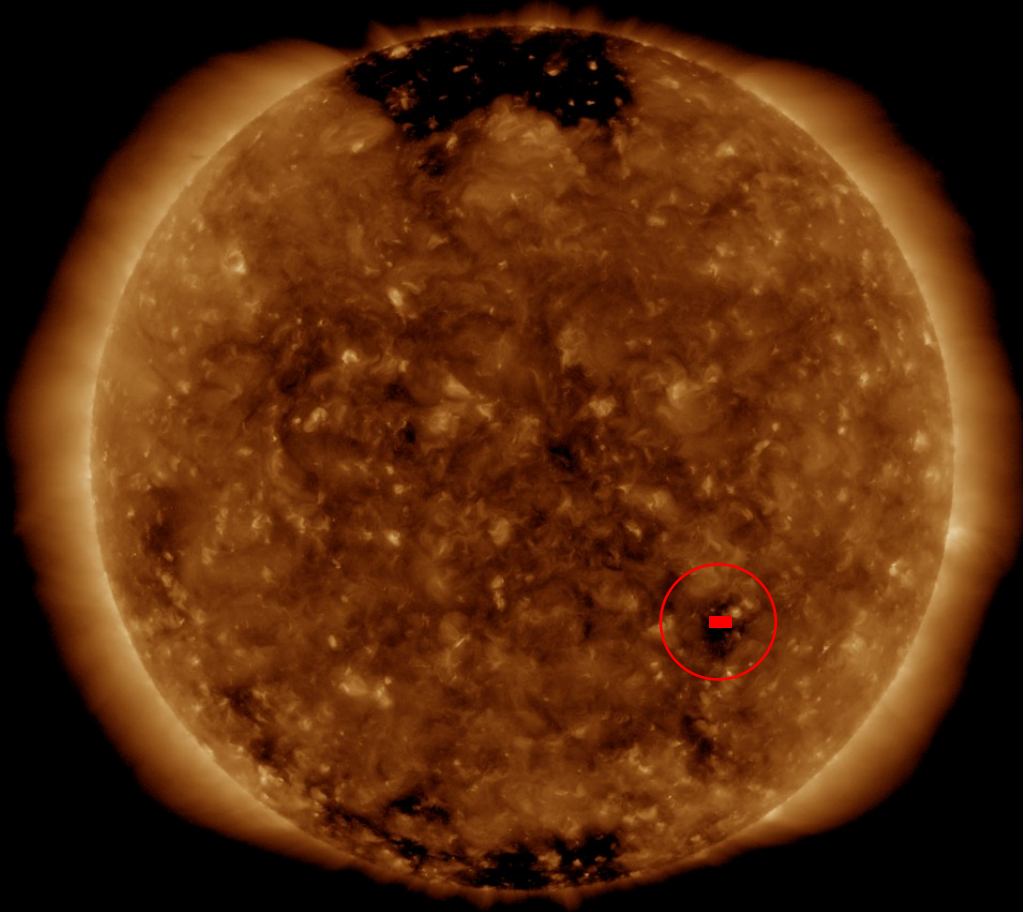
SDO/HMI Magnetogram 2019-10-20



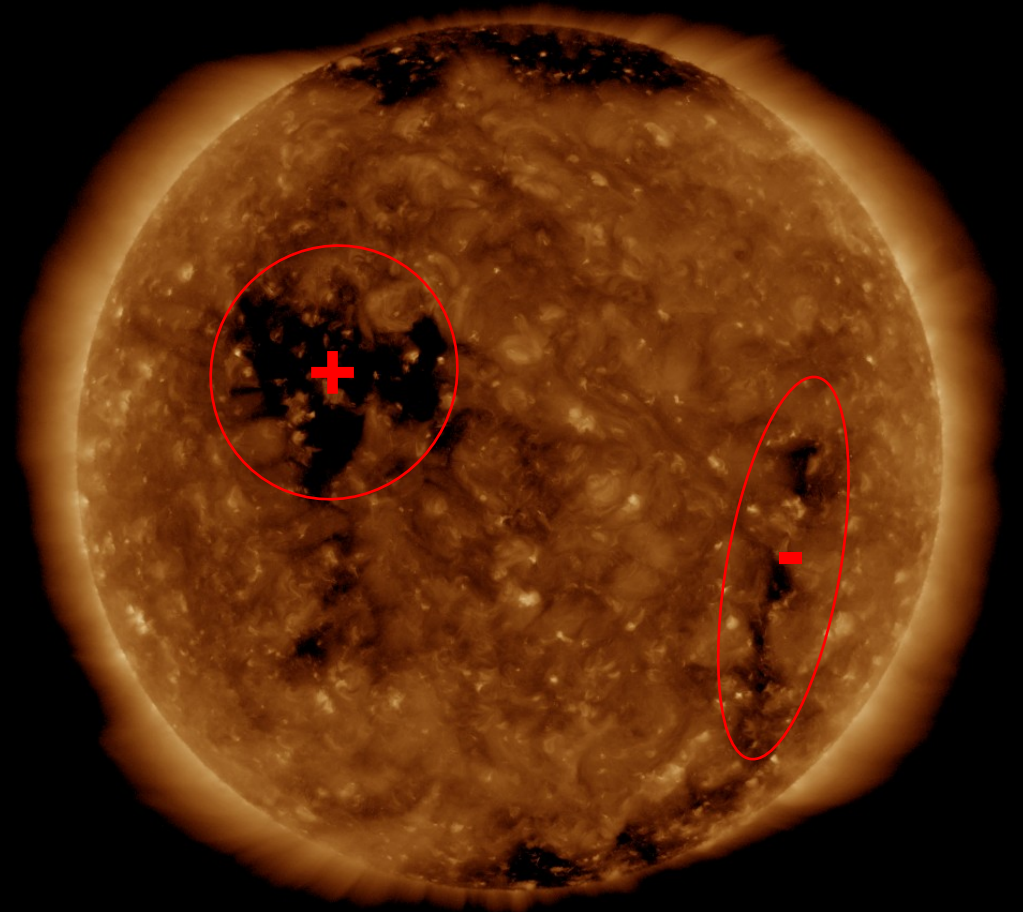
SDO/HMI Quick-Look Magnetogram: 20191020\_114500

# Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-10-13



SDO/AIA 19.3 nm 2019-10-20



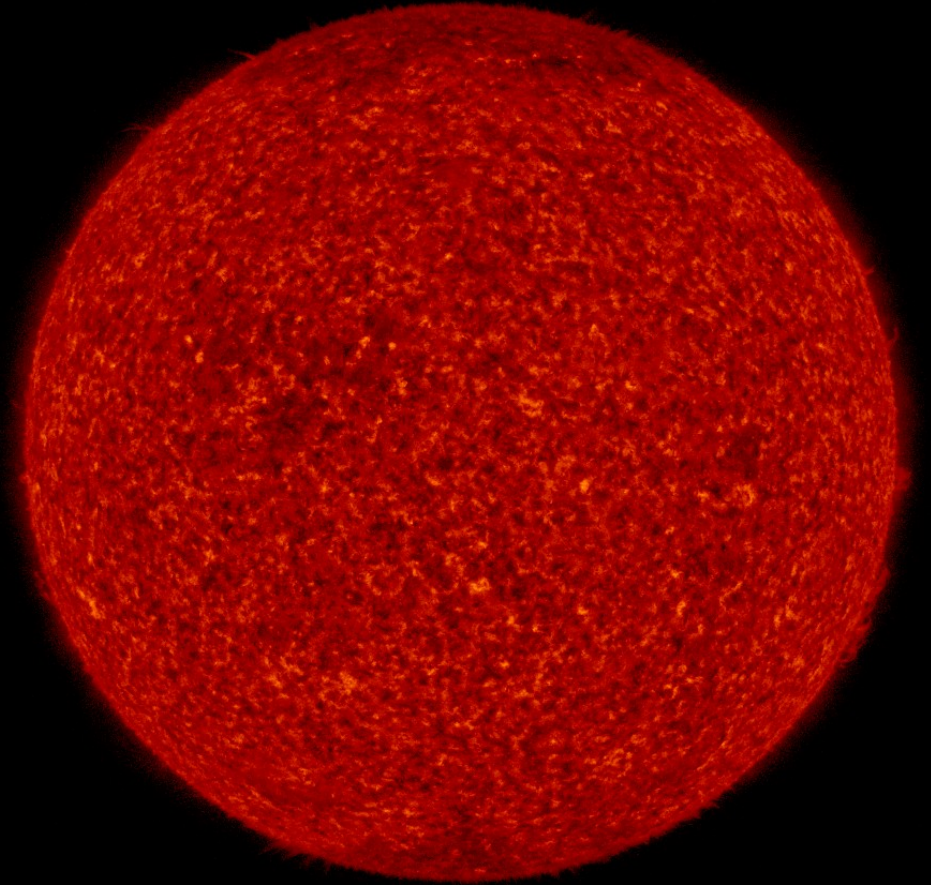
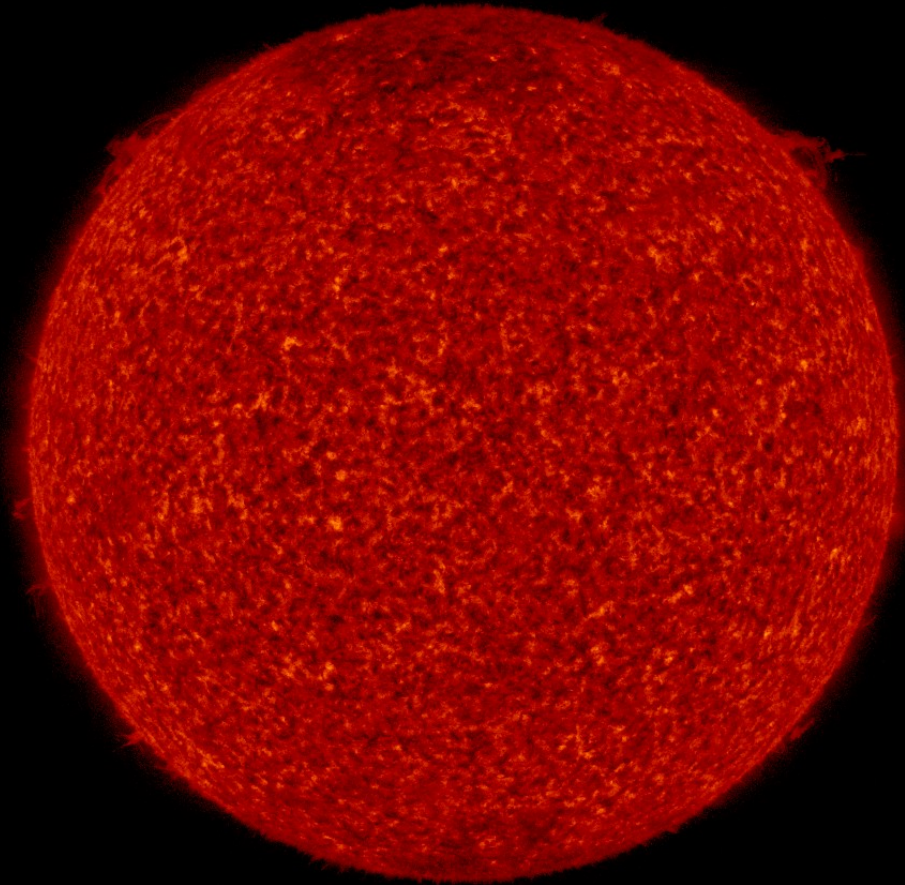
SDO/AIA 193 2019-10-13 12:10:41 UT

SDO/AIA 193 2019-10-20 12:11:29 UT

# Solar active region & Filament

SDO/AIA 30.4 nm 2019-10-13

SDO/AIA 30.4 nm 2019-10-20



SDO/AIA 304 2019-10-13 12:13:42 UT

SDO/AIA 304 2019-10-20 12:13:18 UT



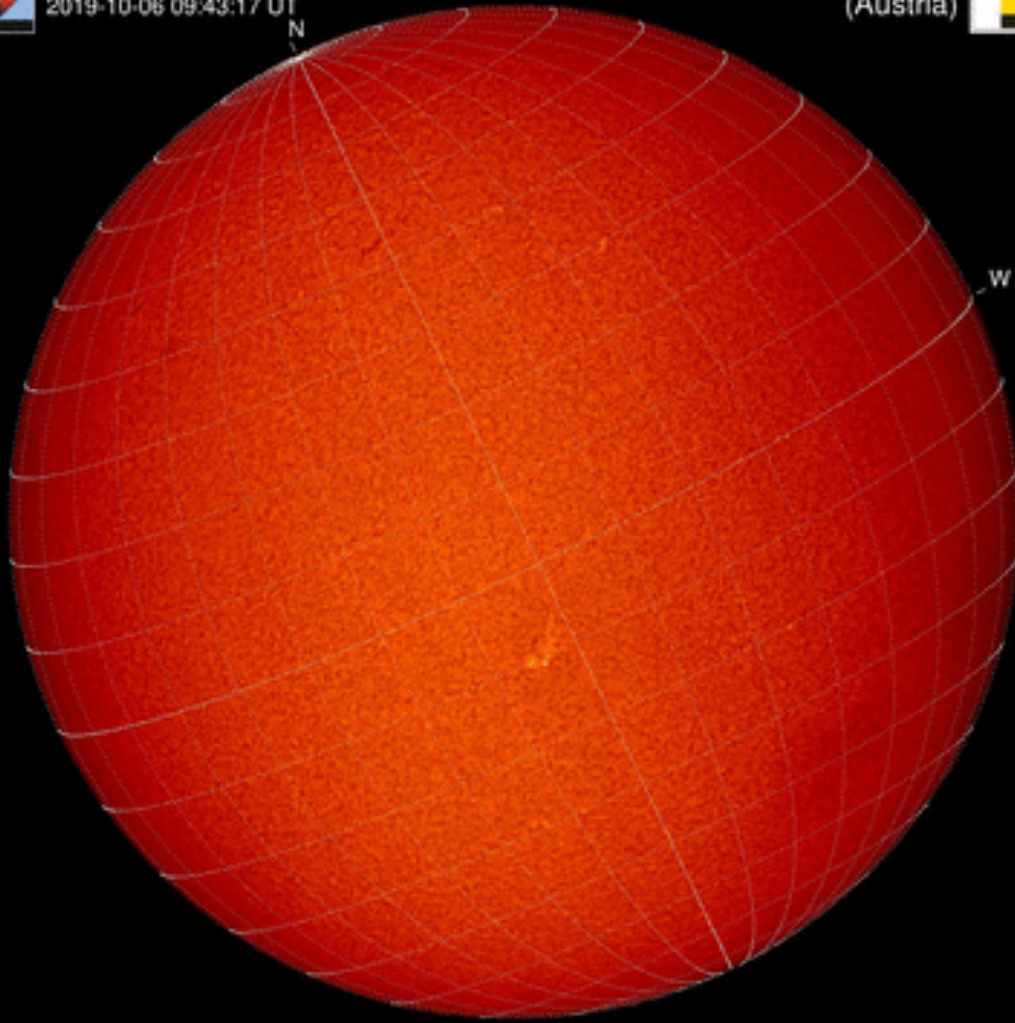
# Filament & Filament eruption

H-alpha 2019-10-13



Kanzelhöhe Observatory  
2019-10-06 09:43:17 UT

University of Graz  
(Austria)

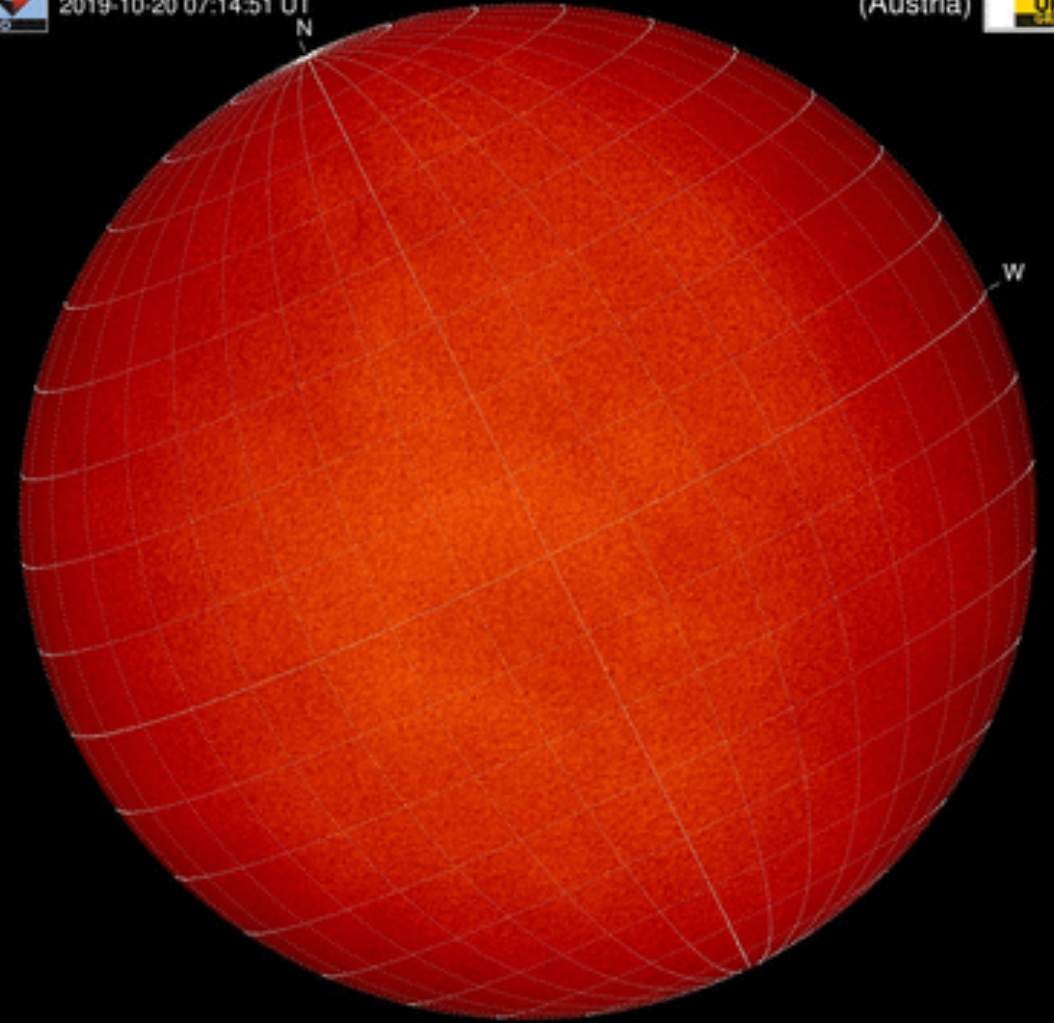


H-alpha 2019-10-20

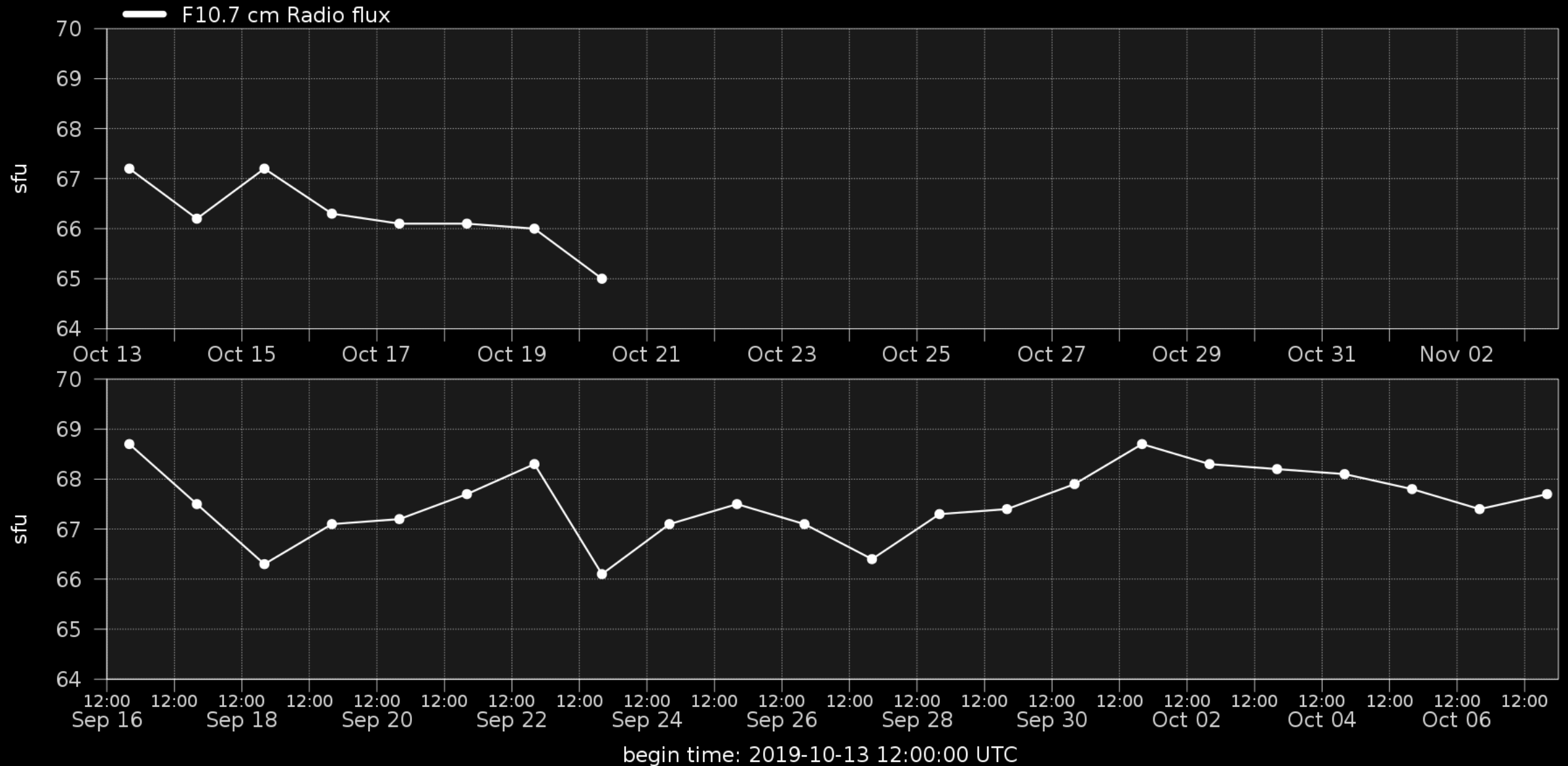


Kanzelhöhe Observatory  
2019-10-20 07:14:51 UT

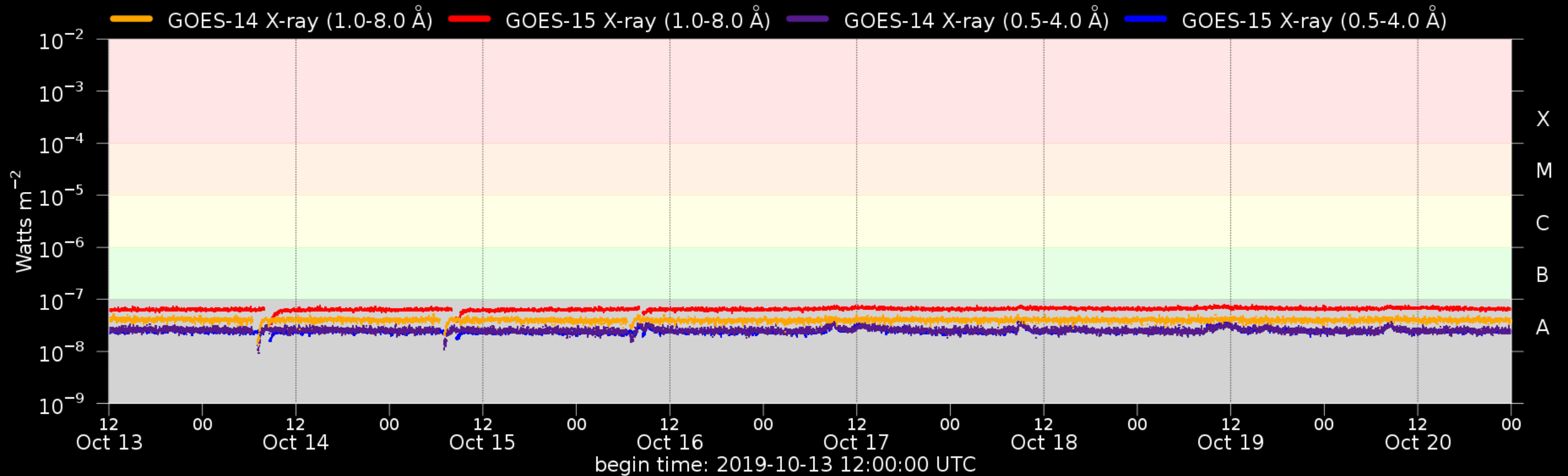
University of Graz  
(Austria)



# Solar F10.7cm radio flux



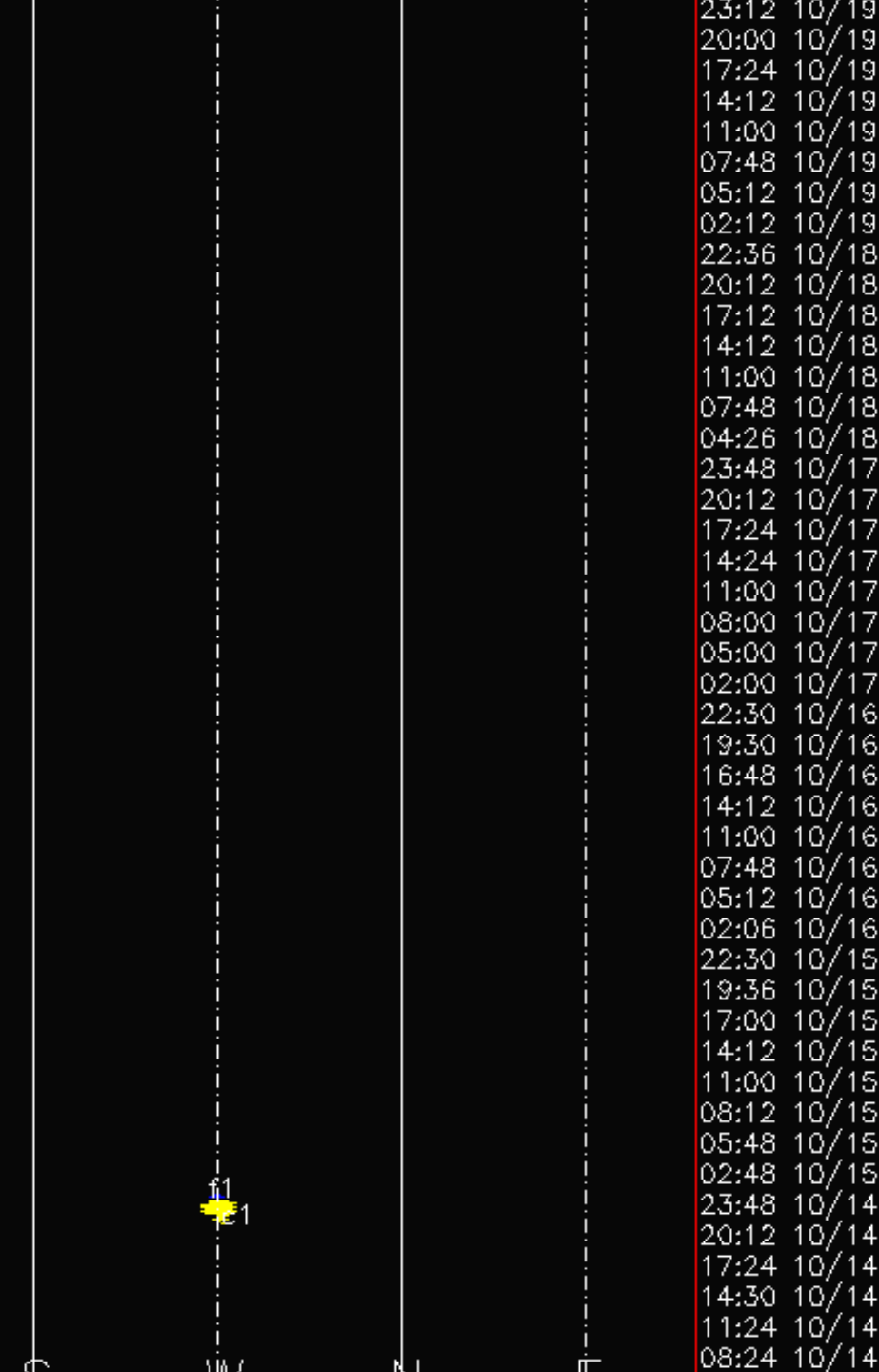
# Flaring activity



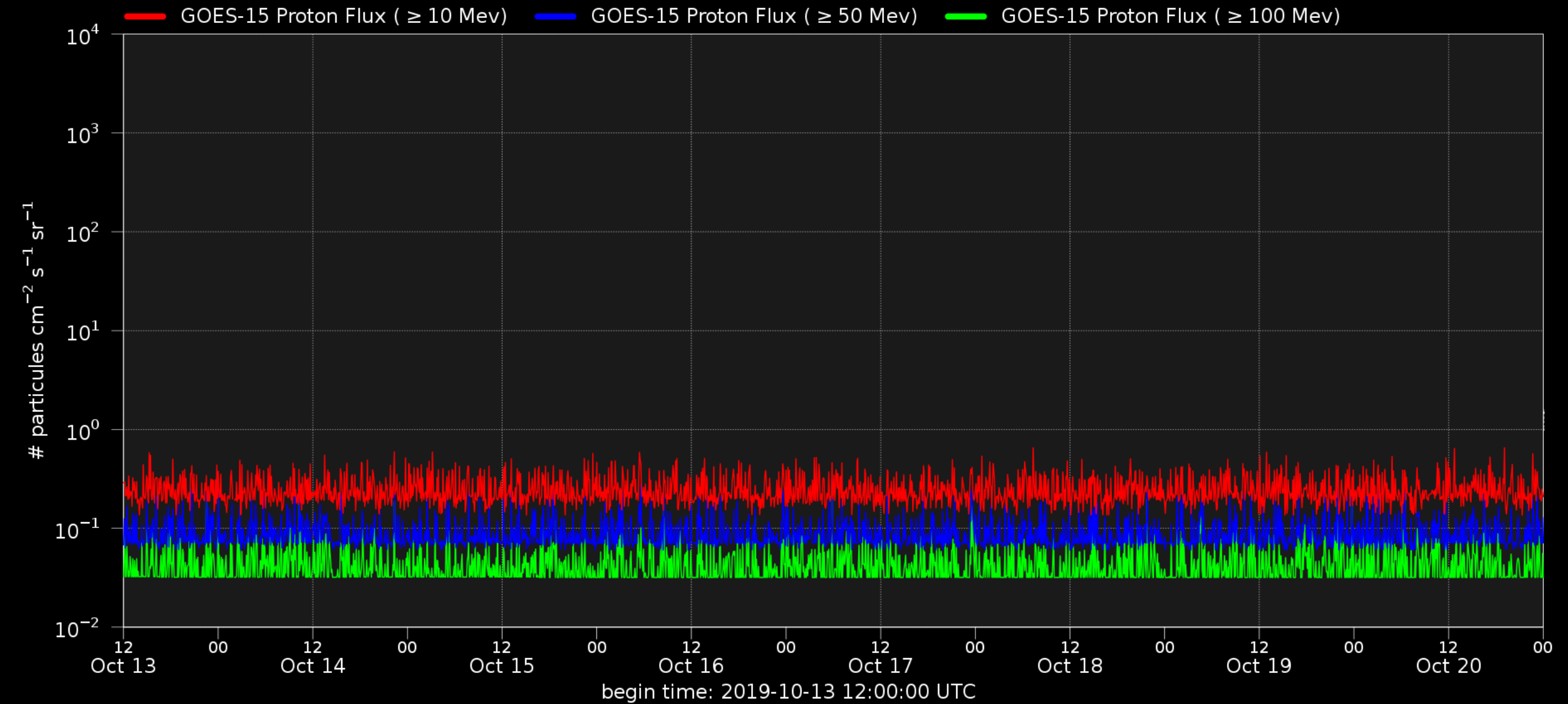
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2019-10-13	2019-10-14	2019-10-15	2019-10-16	2019-10-17	2019-10-18	2019-10-19	2019-10-20
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 Ejection



# Solar proton flux



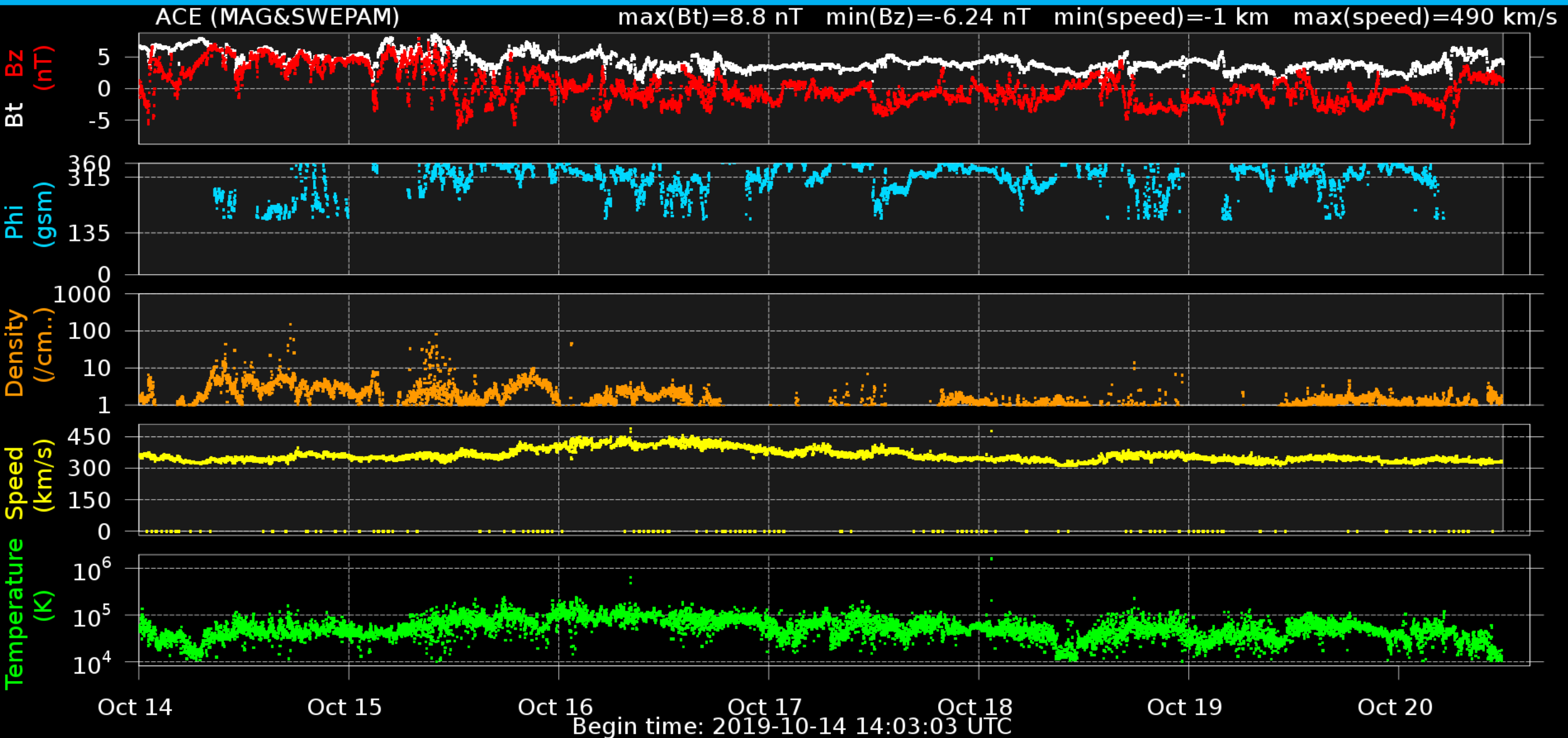
# Solar Wind and Geomagnetic Activity



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# Solar wind parameters (ACE data)







# Outlook

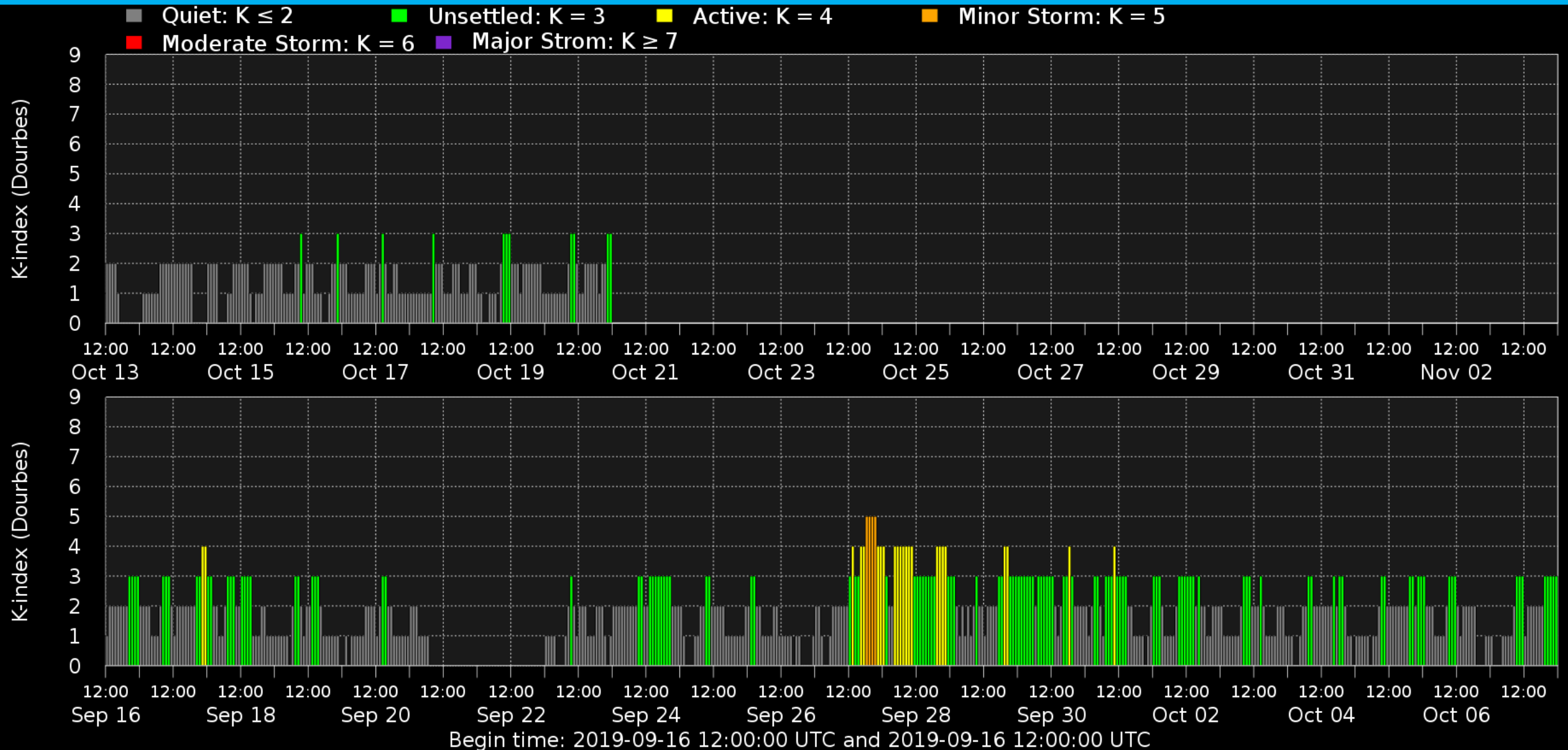


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# Outlook: Geomagnetic activity



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