

# SIDC Space Weather Briefing

10 February 2019 - 17 February 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 2019-02-10 12:00 UT to 2019-02-17 12:00 UT

Active regions	No numbered active regions on the solar disk, some large plage regions were present.
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	A filament was observed on disk over a large plage region
CMEs	None detected
Proton Events	None

Solar wind and geomagnetic conditions from 2019-02-10 12:00 UT to 2019-02-17 12:00 UT

Coronal Holes	Weak coronal holes
ICME	None
SW Conditions	Min: 316km/s Max:530 km/s
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 4

All Quiet Alert: 11-12 and 16-17 February

# Solar Activity

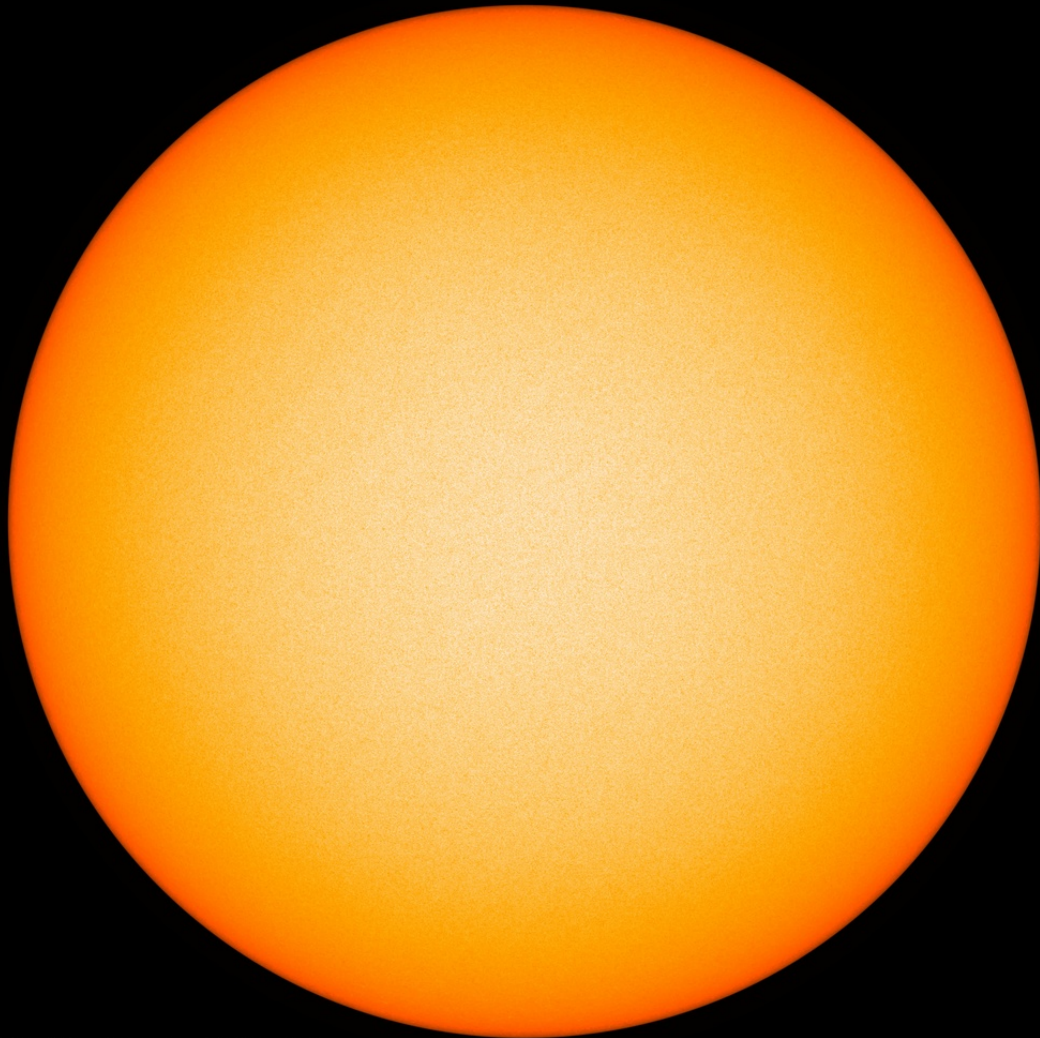


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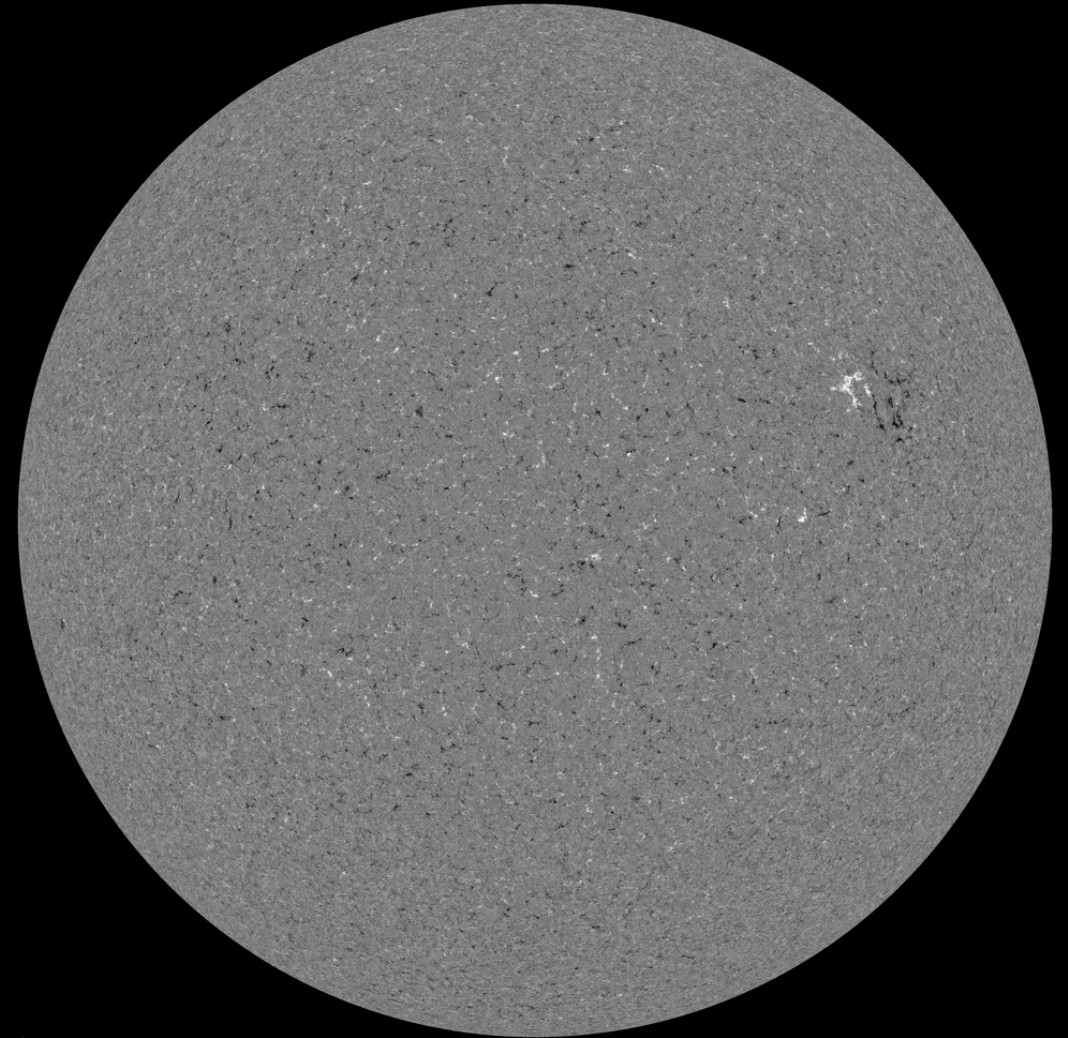
# Solar active region - start of the week

SDO/HMI White Light 2019-02-10



SDO/HMI Quick-Look Continuum: 20190210\_114500

SDO/HMI Magnetogram 2019-02-10

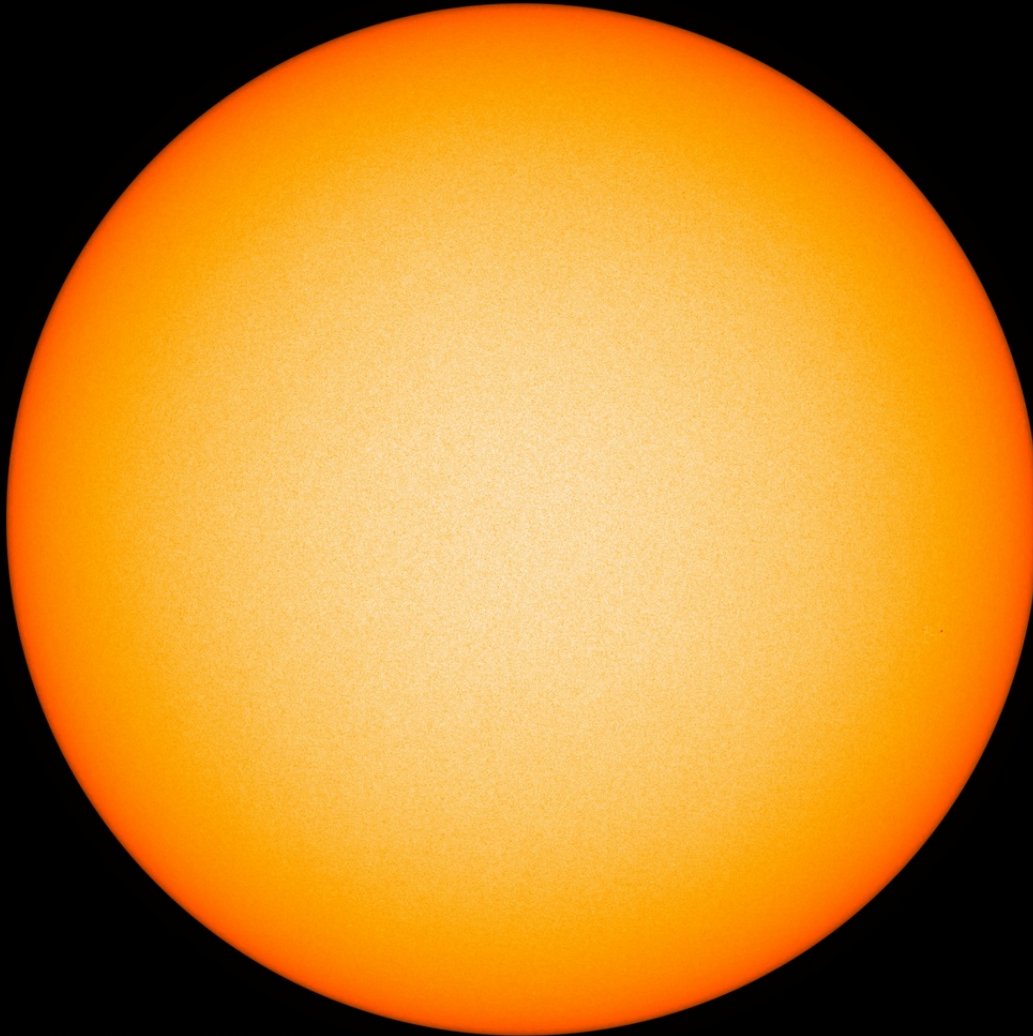


SDO/HMI Quick-Look Magnetogram: 20190210\_114500



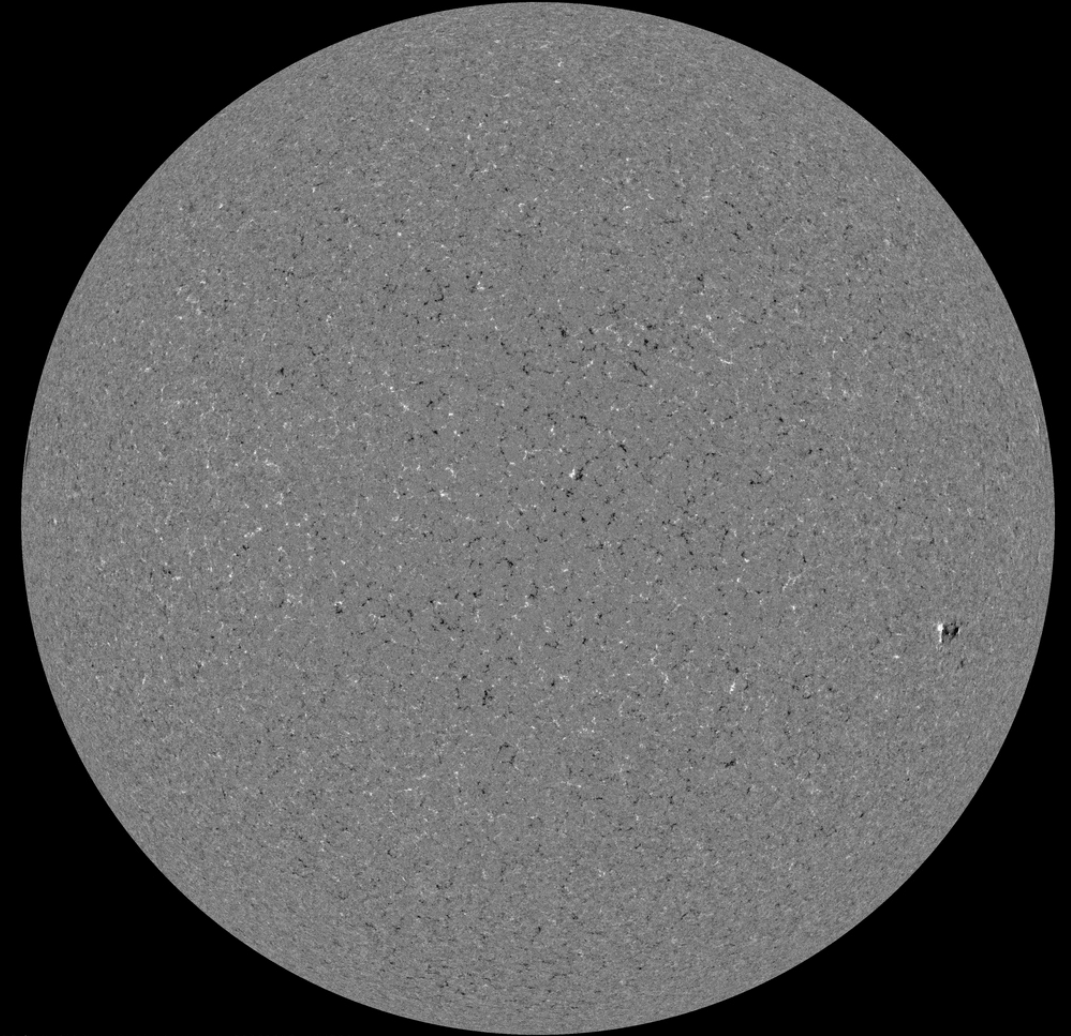
# Solar active region - middle of the week

SDO/HMI White Light 2019-02-13



SDO/HMI Quick-Look Continuum: 20190213\_114500

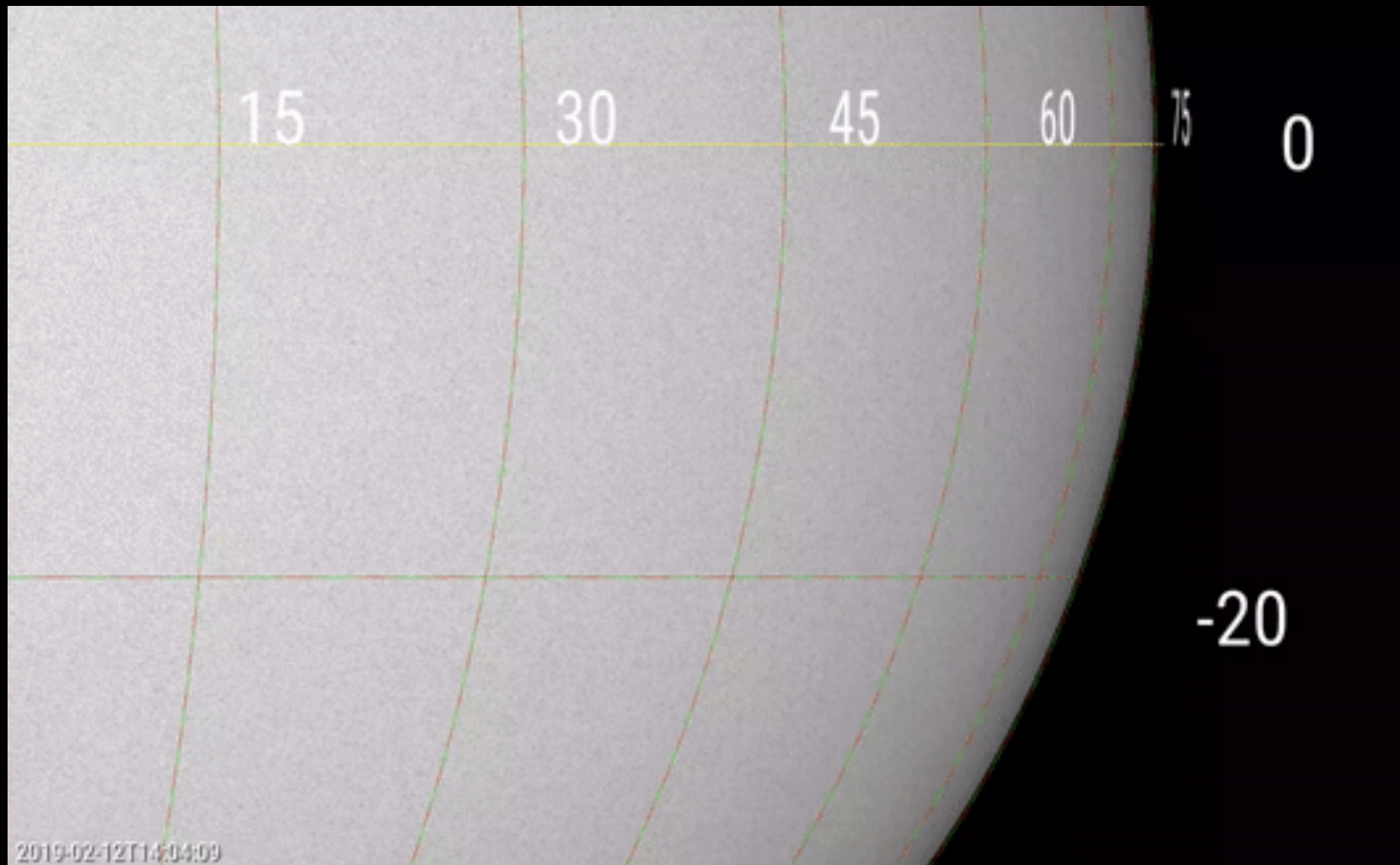
SDO/HMI Magnetogram 2019-02-13



SDO/HMI Quick-Look Magnetogram: 20190213\_114500

# Solar active region - middle of the week

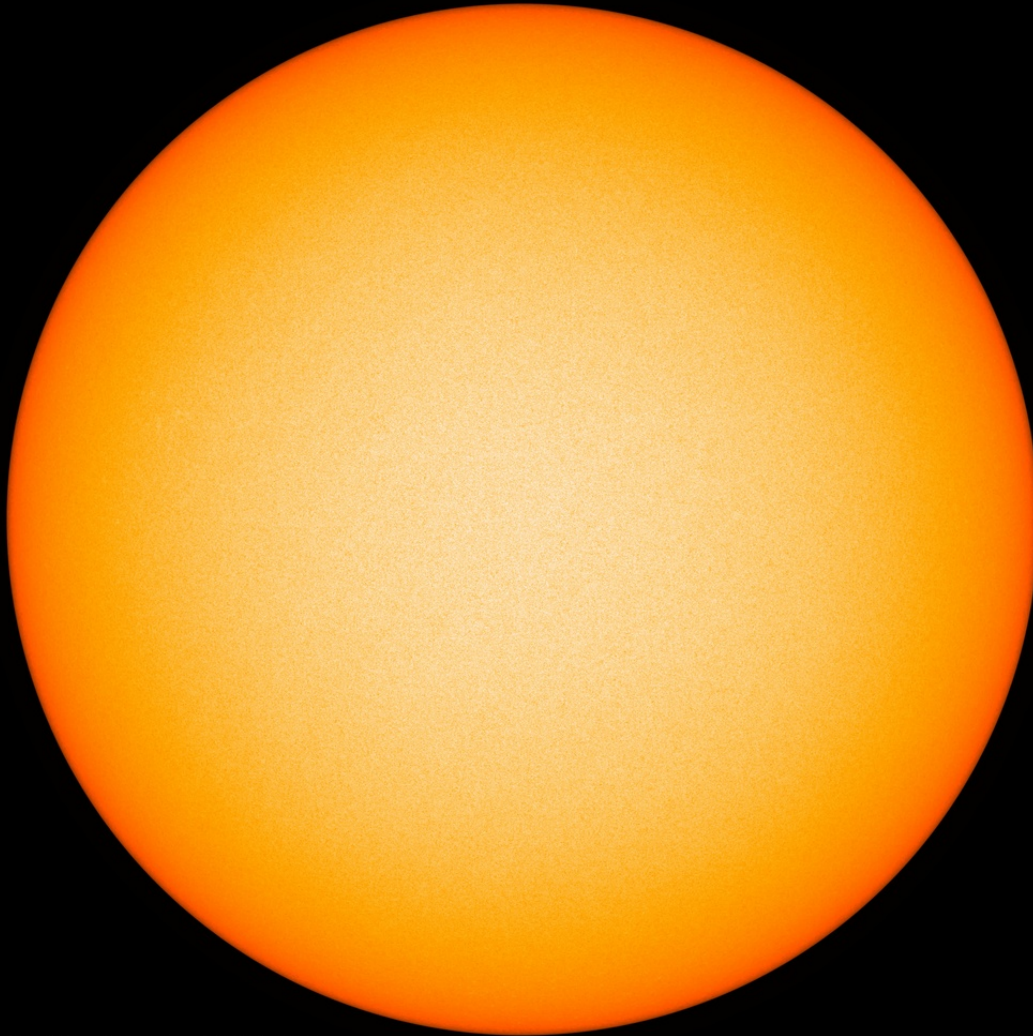
SDO/HMI White Light 2019-02-13





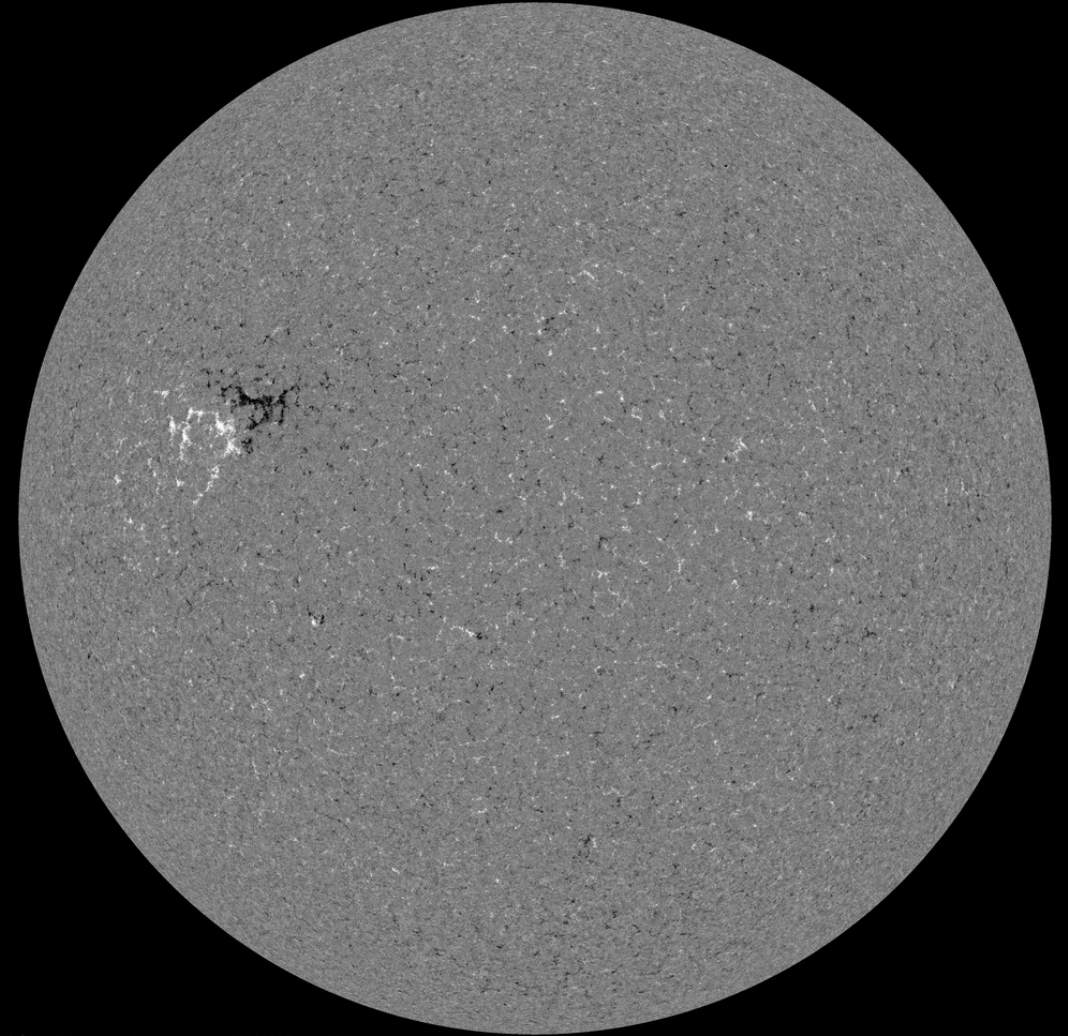
# Solar active region - end of the week

SDO/HMI White Light 2019-02-17



SDO/HMI Quick-Look Continuum: 20190217\_114500

SDO/HMI Magnetogram 2019-02-17

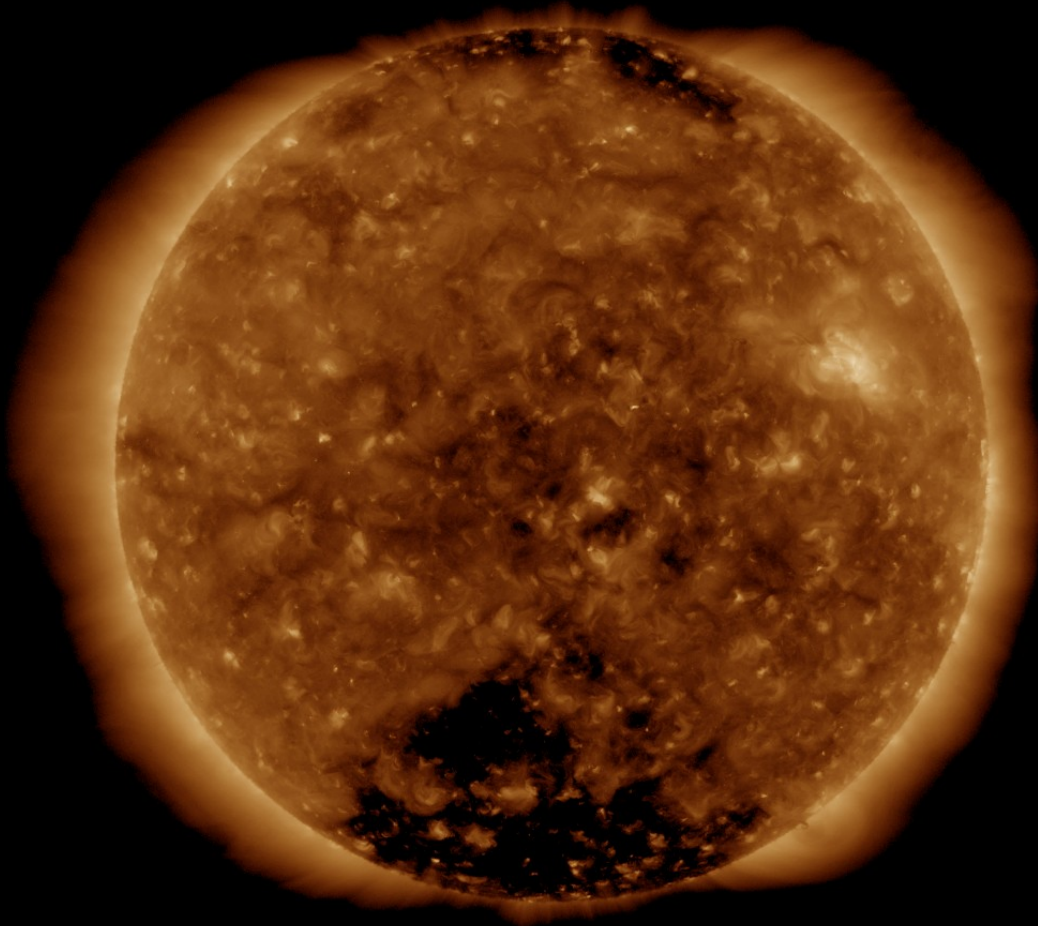


SDO/HMI Quick-Look Magnetogram: 20190217\_114500

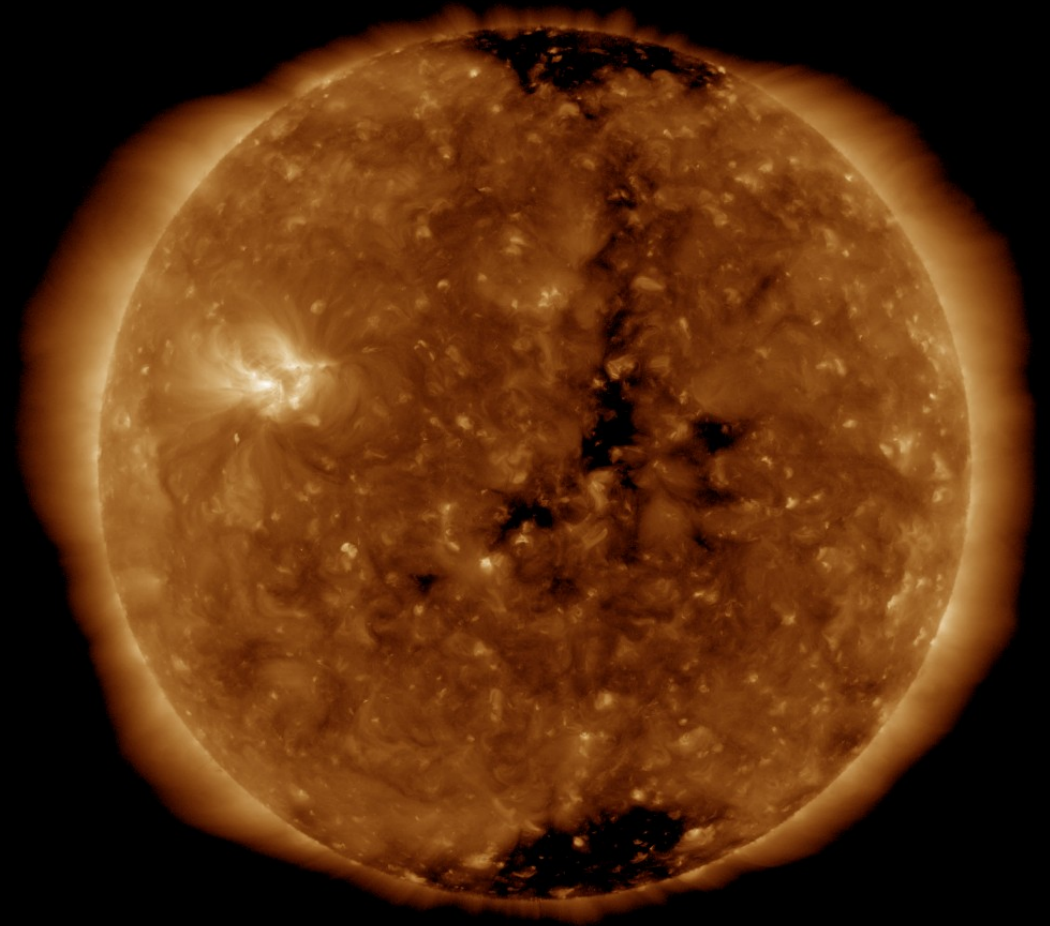


# Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-02-10



SDO/AIA 19.3 nm 2019-02-17



SDO/AIA 193 2019-02-10 12:10:05 UT

SDO/AIA 193 2019-02-17 12:11:05 UT



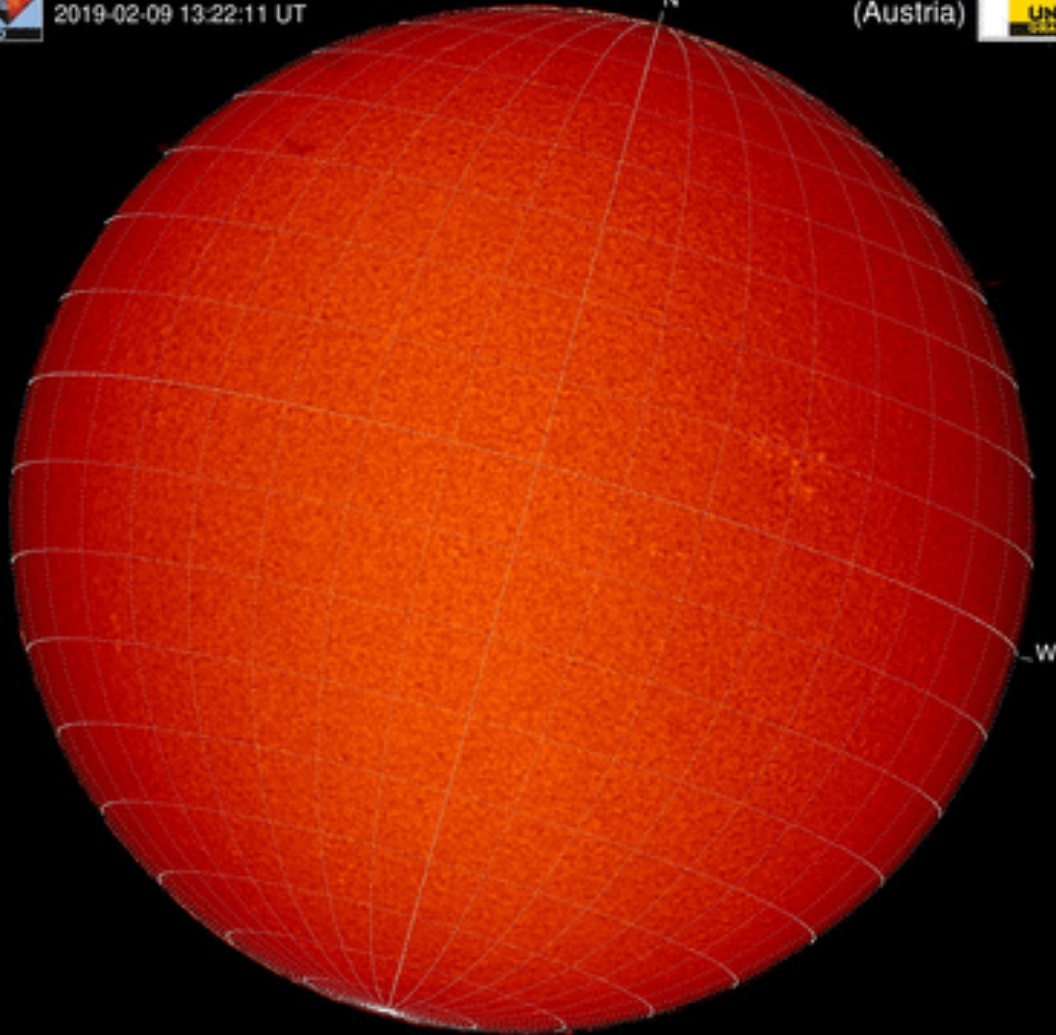
# Filament & Filament eruption

H-alpha 2019-02-10



Kanzelhöhe Observatory  
2019-02-09 13:22:11 UT

University of Graz  
(Austria)

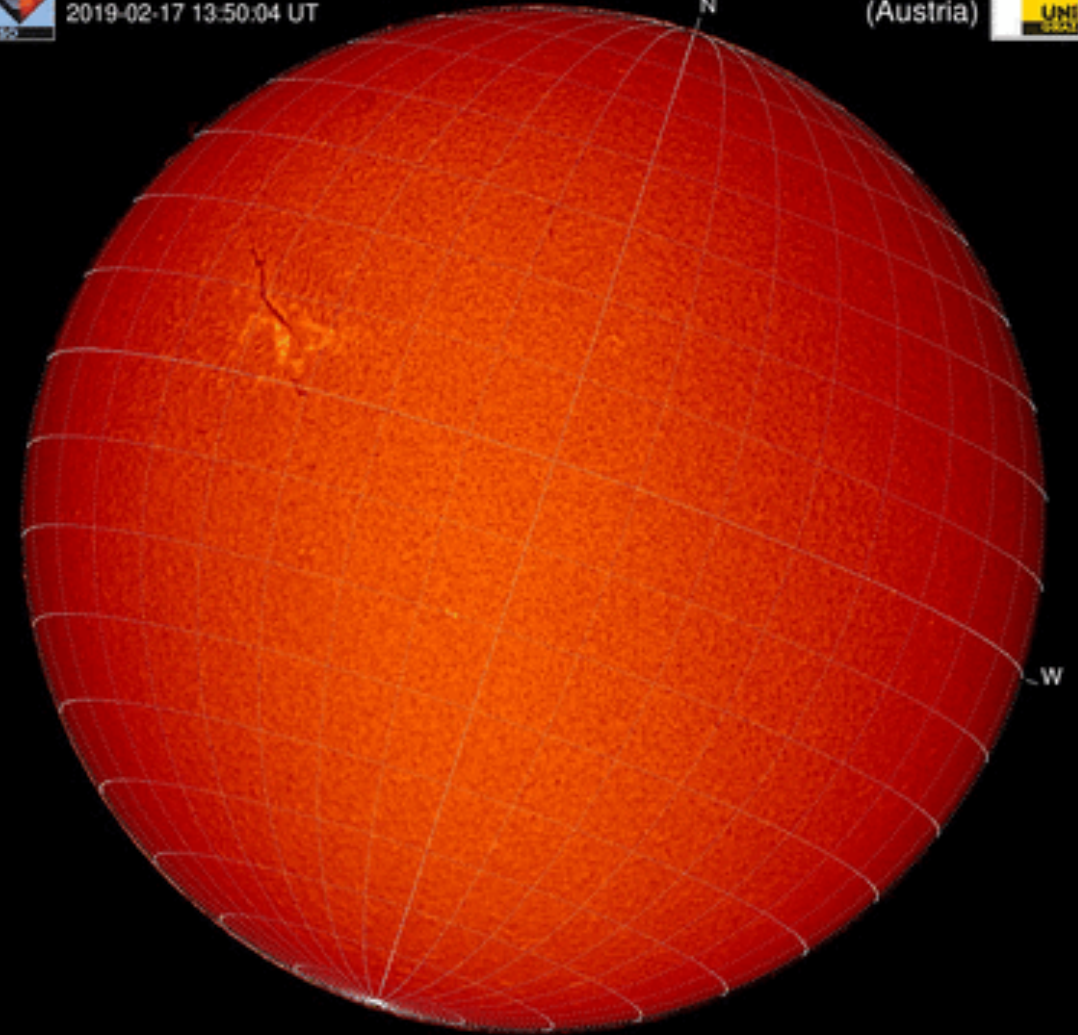


H-alpha 2019-02-17

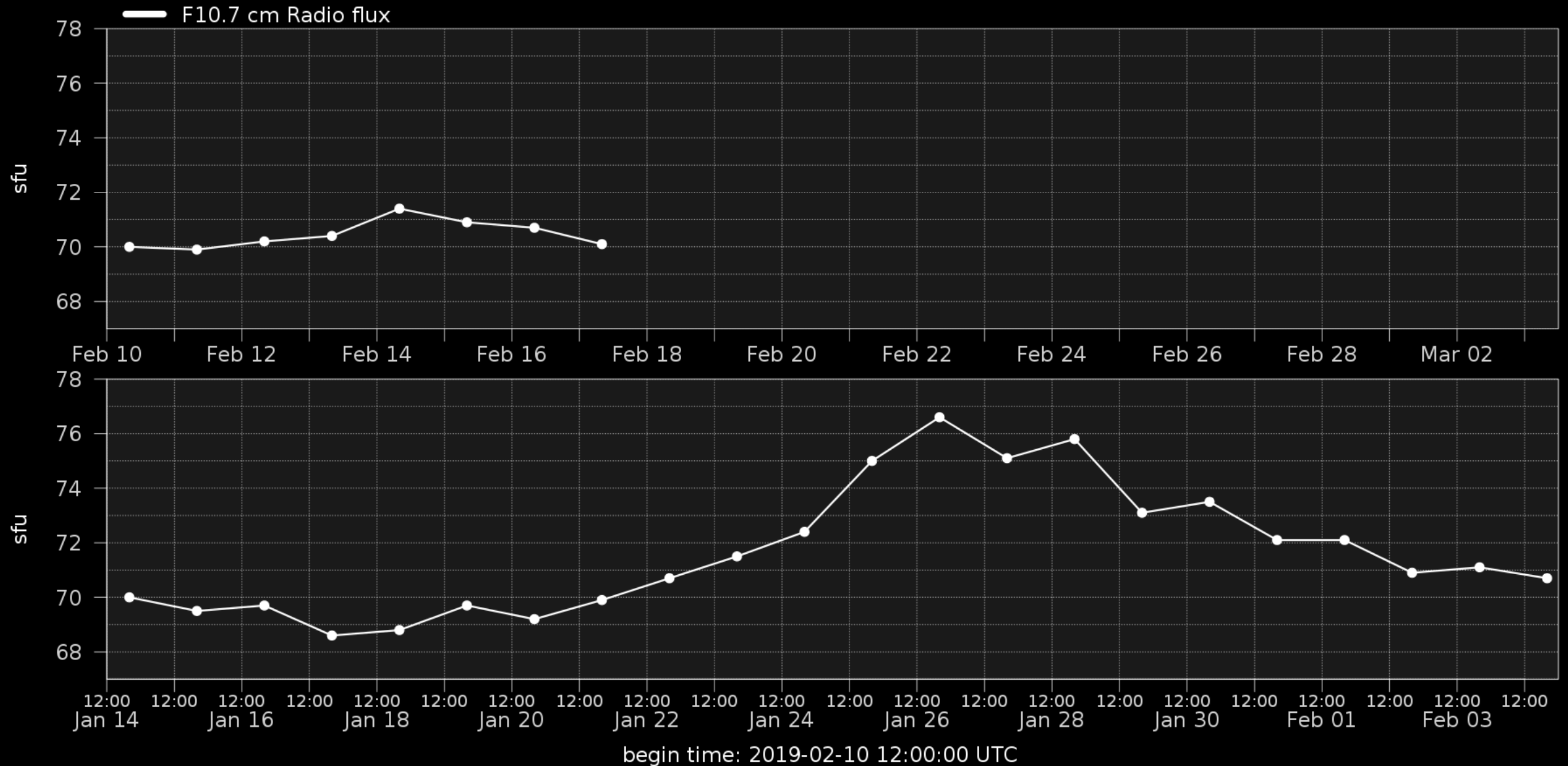


Kanzelhöhe Observatory  
2019-02-17 13:50:04 UT

University of Graz  
(Austria)

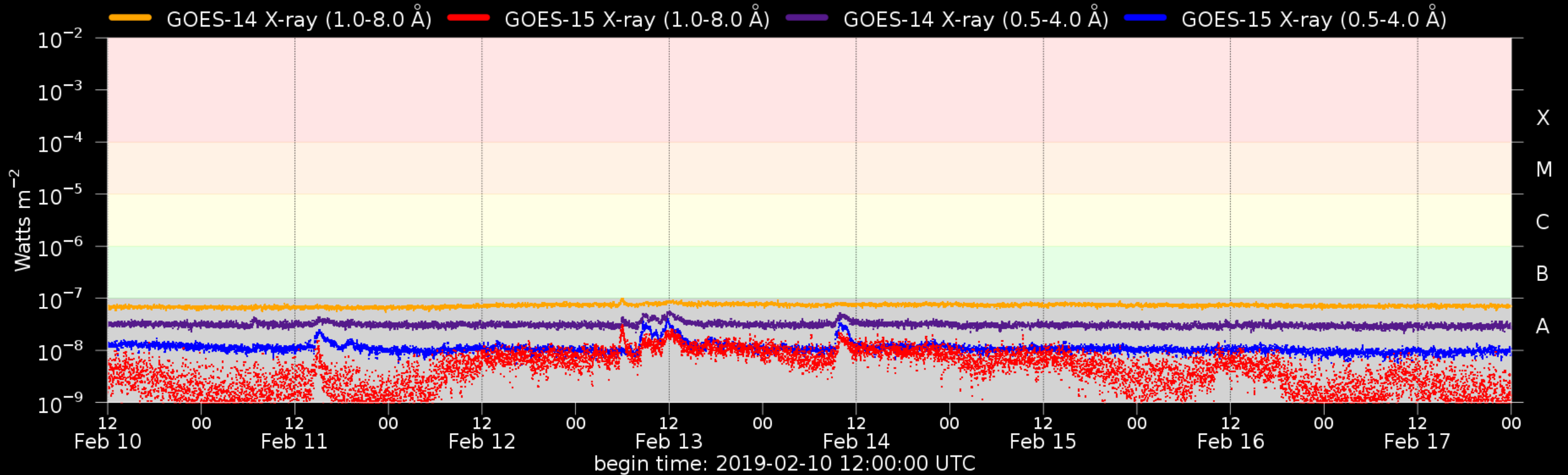


# Solar F10.7cm radio flux





# Flaring activity



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

Issue date	2019-02-10	2019-02-11	2019-02-12	2019-02-13	2019-02-14	2019-02-15	2019-02-16	2019-02-17
Probability	--- 01 01 01	--- 01 01 01	--- 05 01 01	--- 20 01 01	--- 05 01 01	--- 05 01 01	--- 03 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

No CMEs observed

09:12 02/17  
21:12 02/16  
18:24 02/16  
15:36 02/16  
12:12 02/16  
09:30 02/16  
06:24 02/16  
04:00 02/16  
00:36 02/16  
21:18 02/15  
18:12 02/15  
15:12 02/15  
11:48 02/15  
08:12 02/15  
03:24 02/15  
22:24 02/14  
19:24 02/14  
16:24 02/14  
12:48 02/14  
10:00 02/14  
06:48 02/14  
03:48 02/14  
00:12 02/14  
20:36 02/13  
17:48 02/13  
14:36 02/13  
11:12 02/13  
07:48 02/13  
04:48 02/13  
02:00 02/13  
22:24 02/12  
19:36 02/12  
16:48 02/12  
13:54 02/12  
11:00 02/12  
07:36 02/12  
05:00 02/12  
01:48 02/12  
22:12 02/11  
19:06 02/11  
15:48 02/11  
12:24 02/11  
09:36 02/11  
06:36 02/11  
03:48 02/11

S

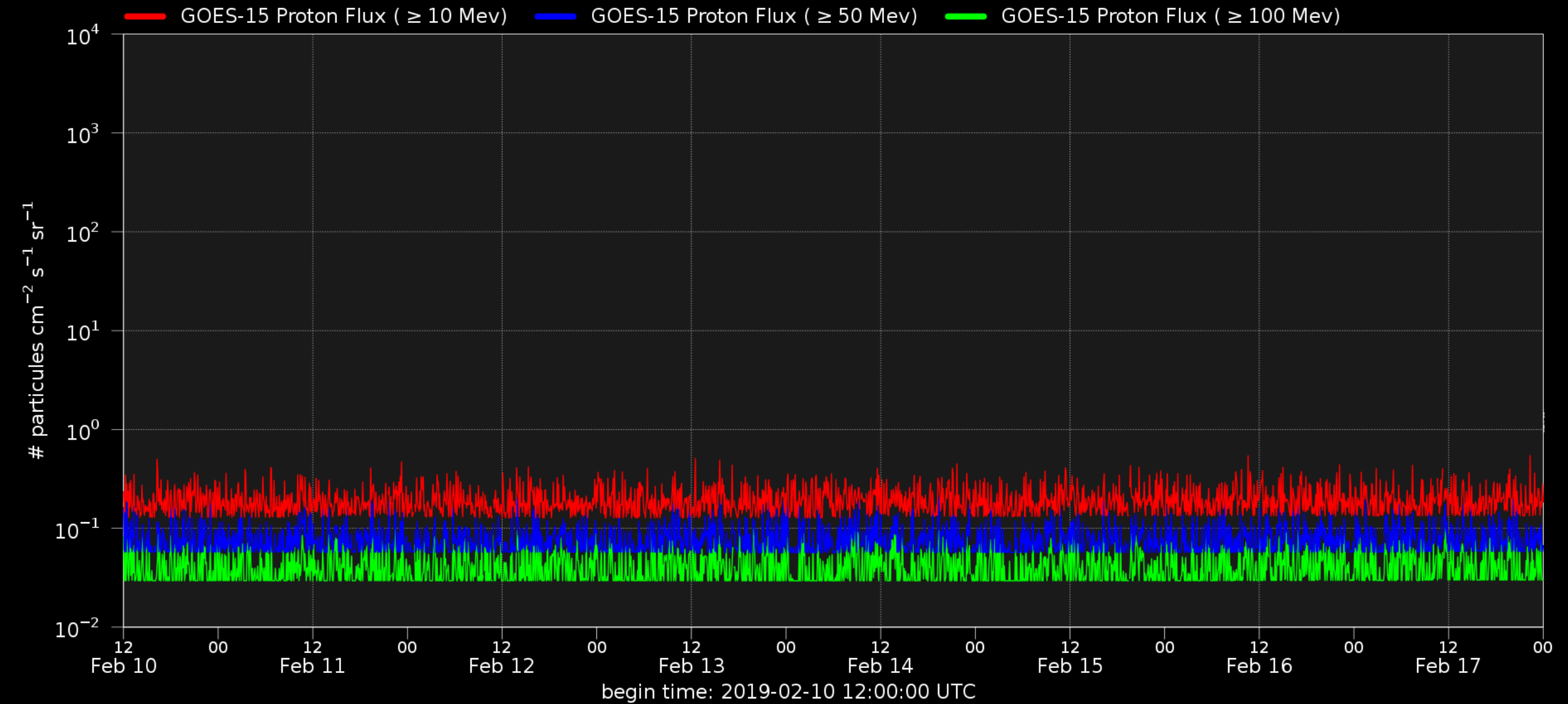
W

N

FF



# Solar proton flux



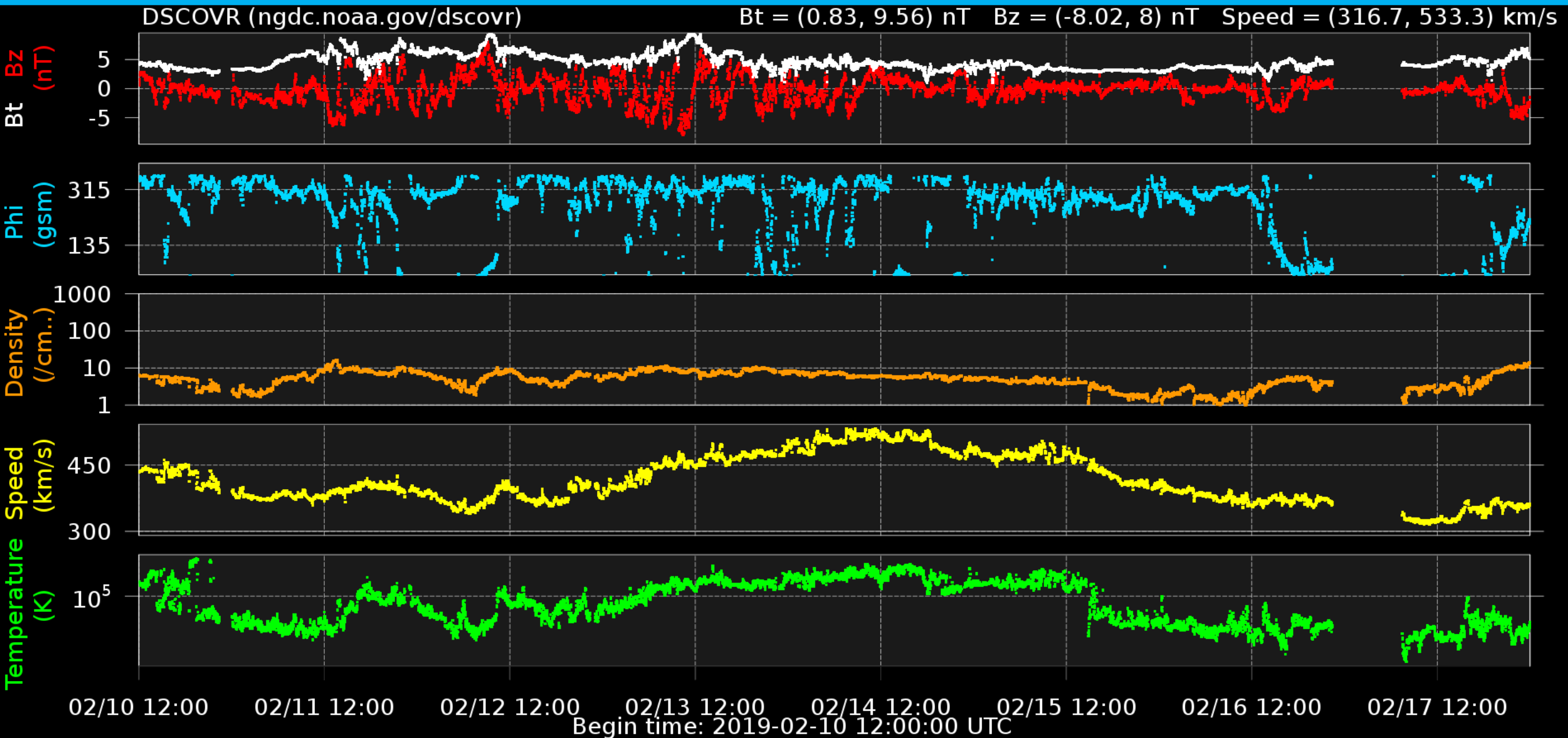
# Solar Wind and Geomagnetic Activity



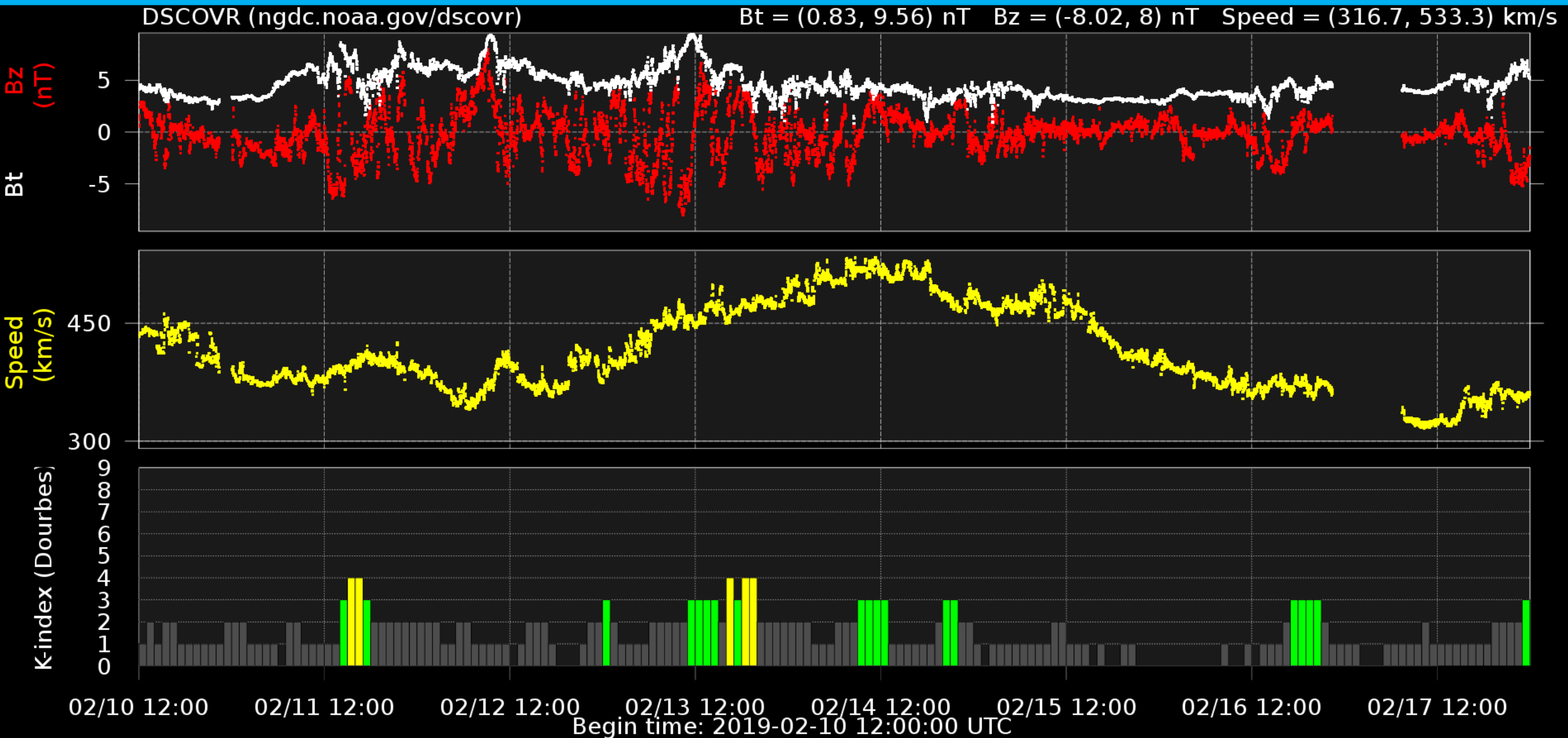
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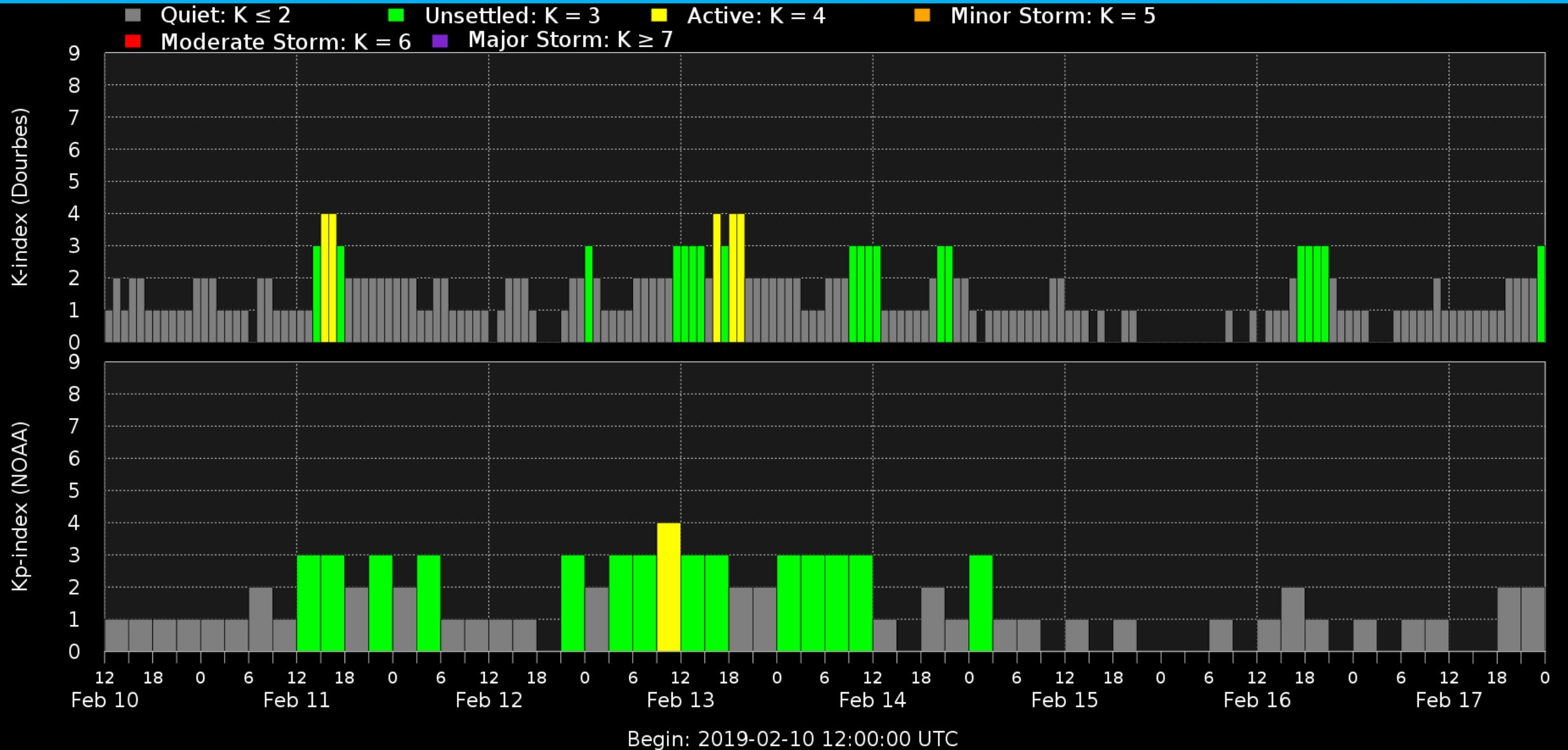
# Solar wind parameters (DSCOVR data)



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



# Geomagnetic activity (K-indexes)





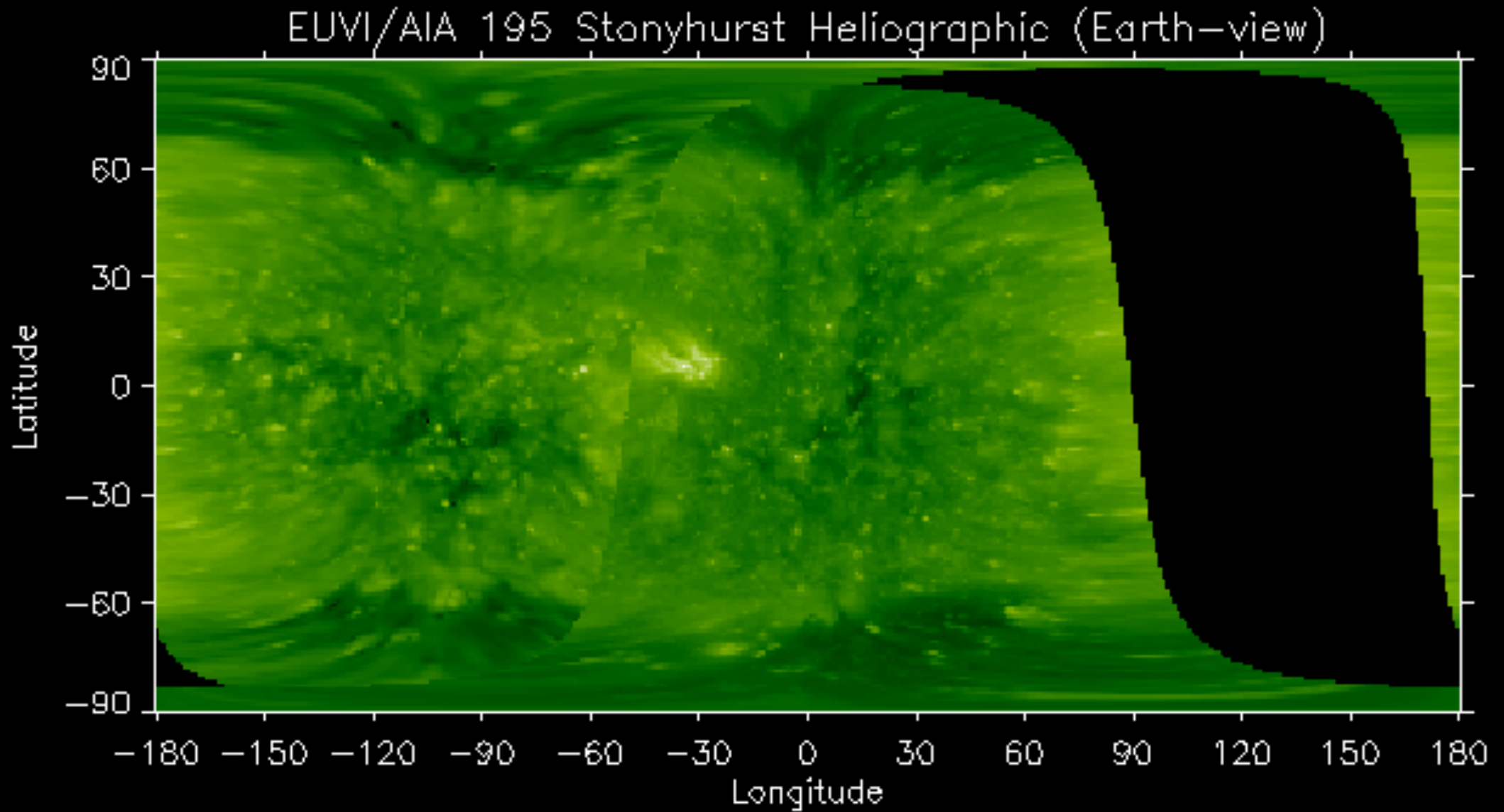
# Outlook



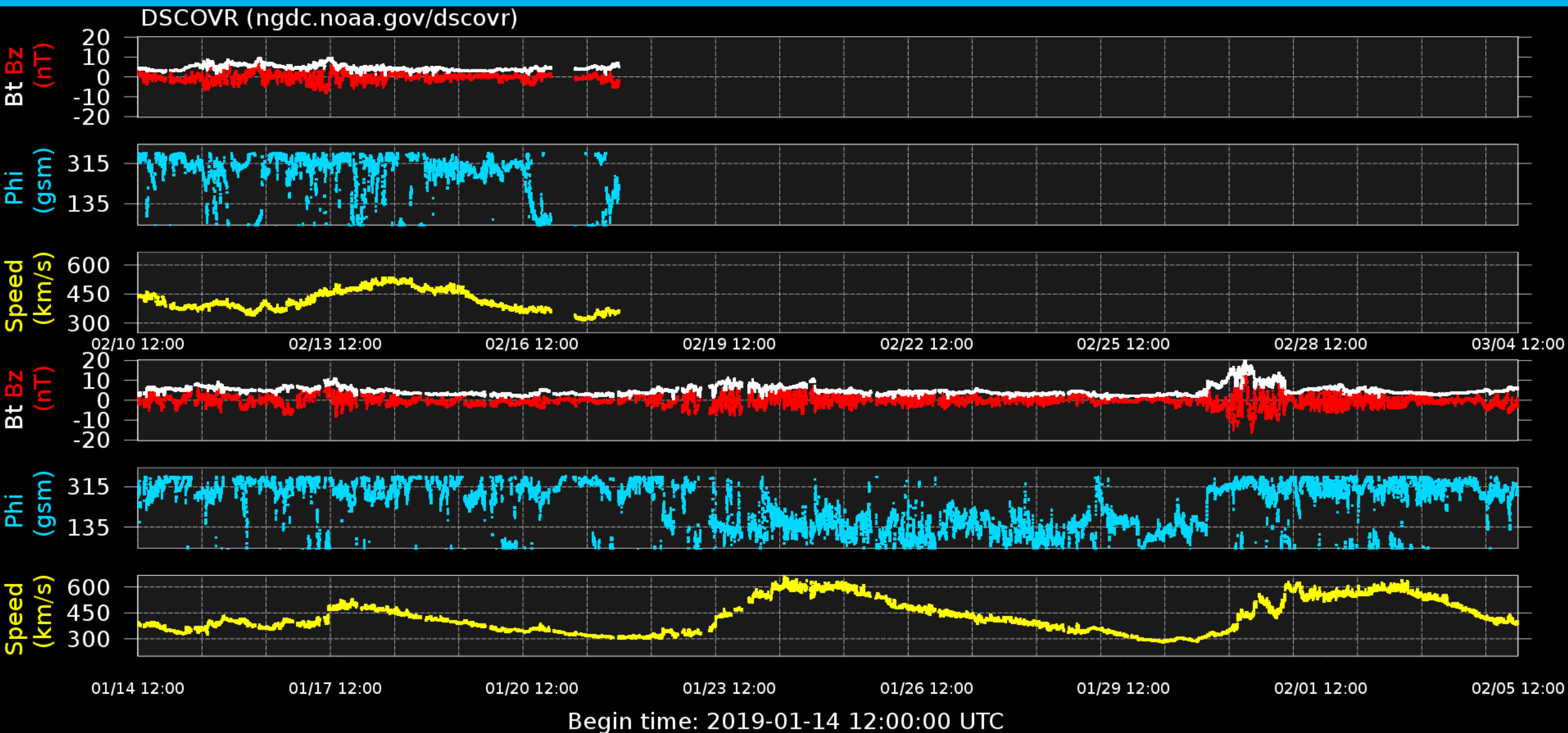
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# Outlook: Solar activity



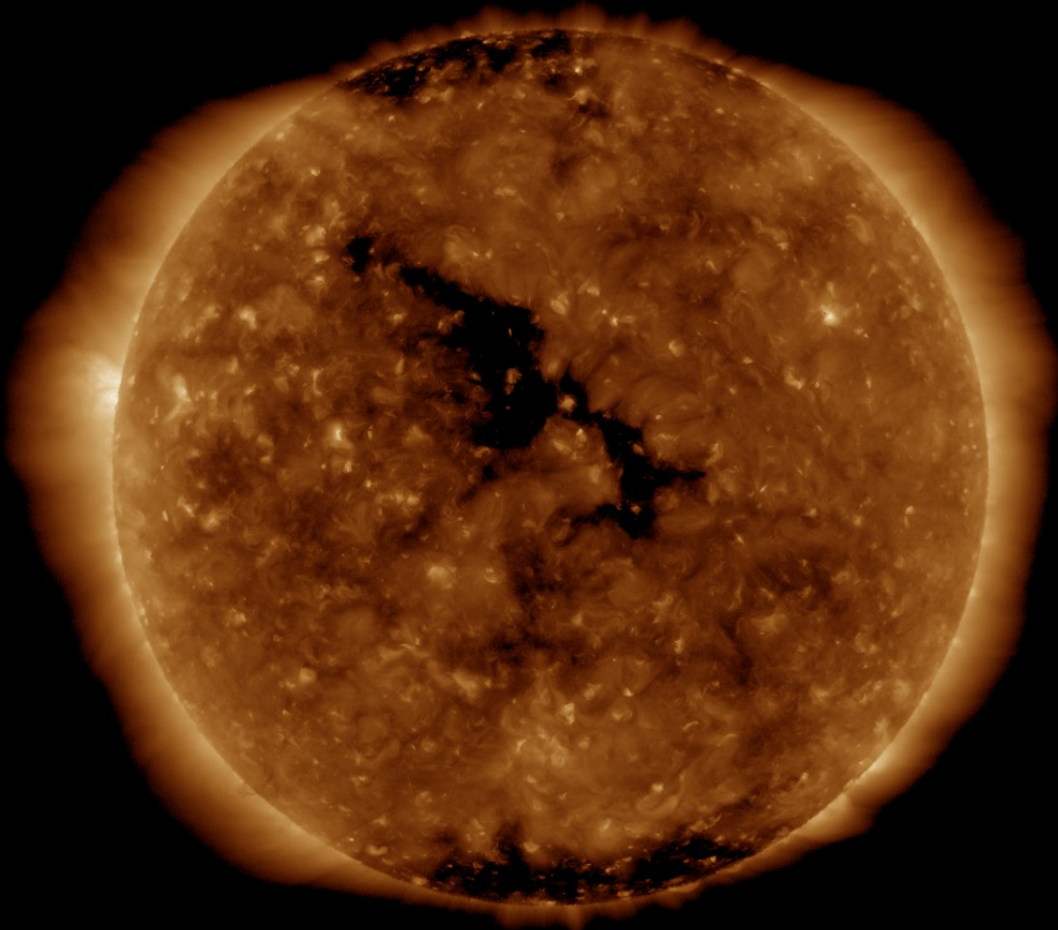
# Outlook: Solar wind



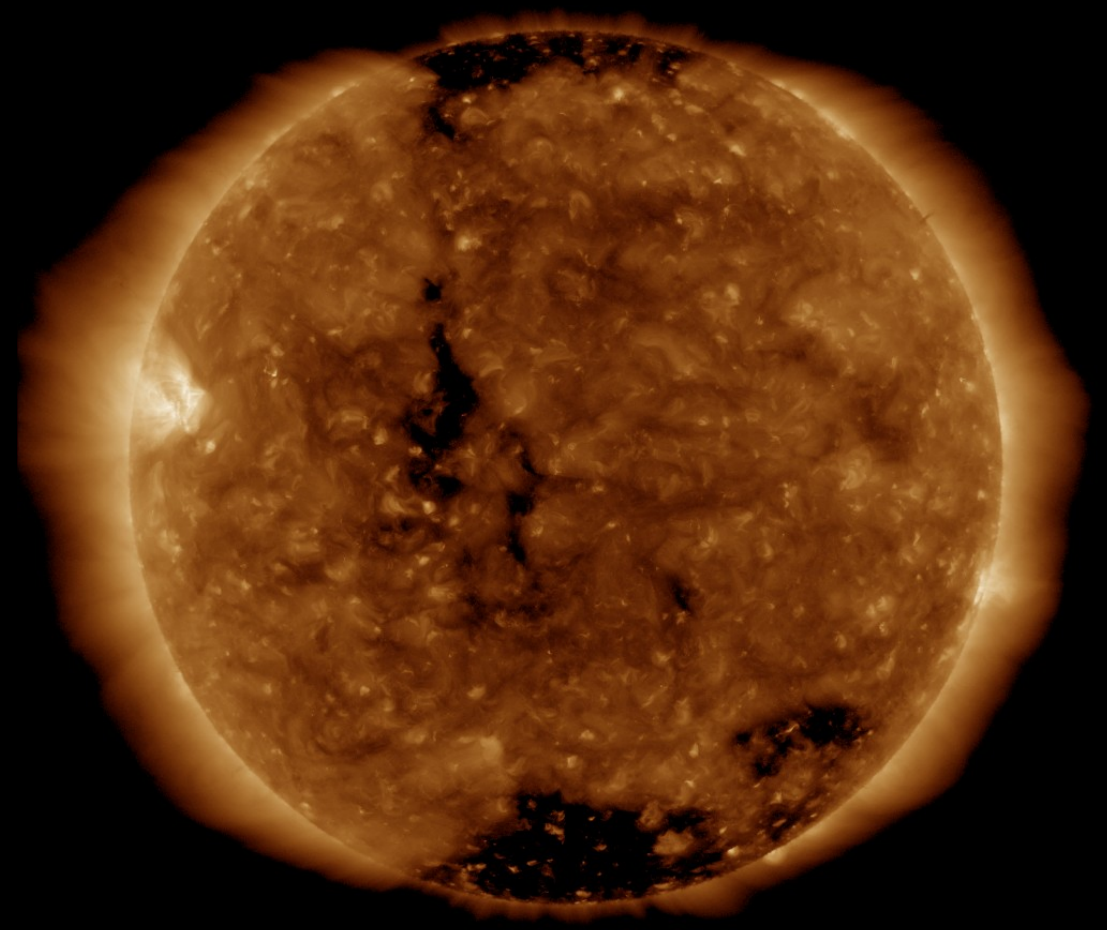


# Outlook: Solar wind

SDO/AIA 19.3 nm 2019-01-20



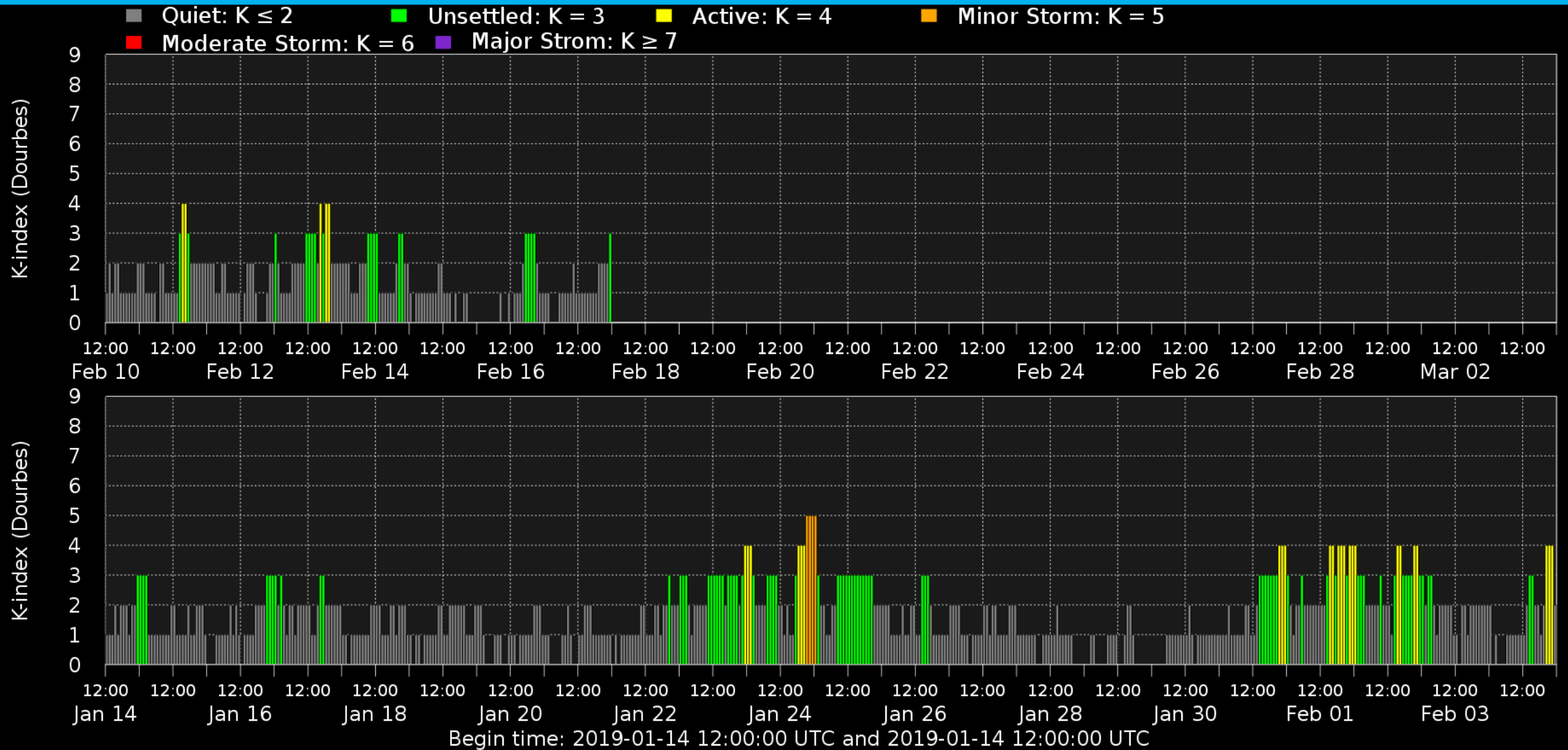
SDO/AIA 19.3 nm 2019-02-15



SDO/AIA 193 2019-01-20 12:11:17 UT

SDO/AIA 193 2019-02-15 12:10:41 UT

# Outlook: Geomagnetic activity



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See you at our next briefing!

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