

# SIDC Space Weather briefing

January 08 - 15, 2018

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&

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



Royal Observatory  
of Belgium

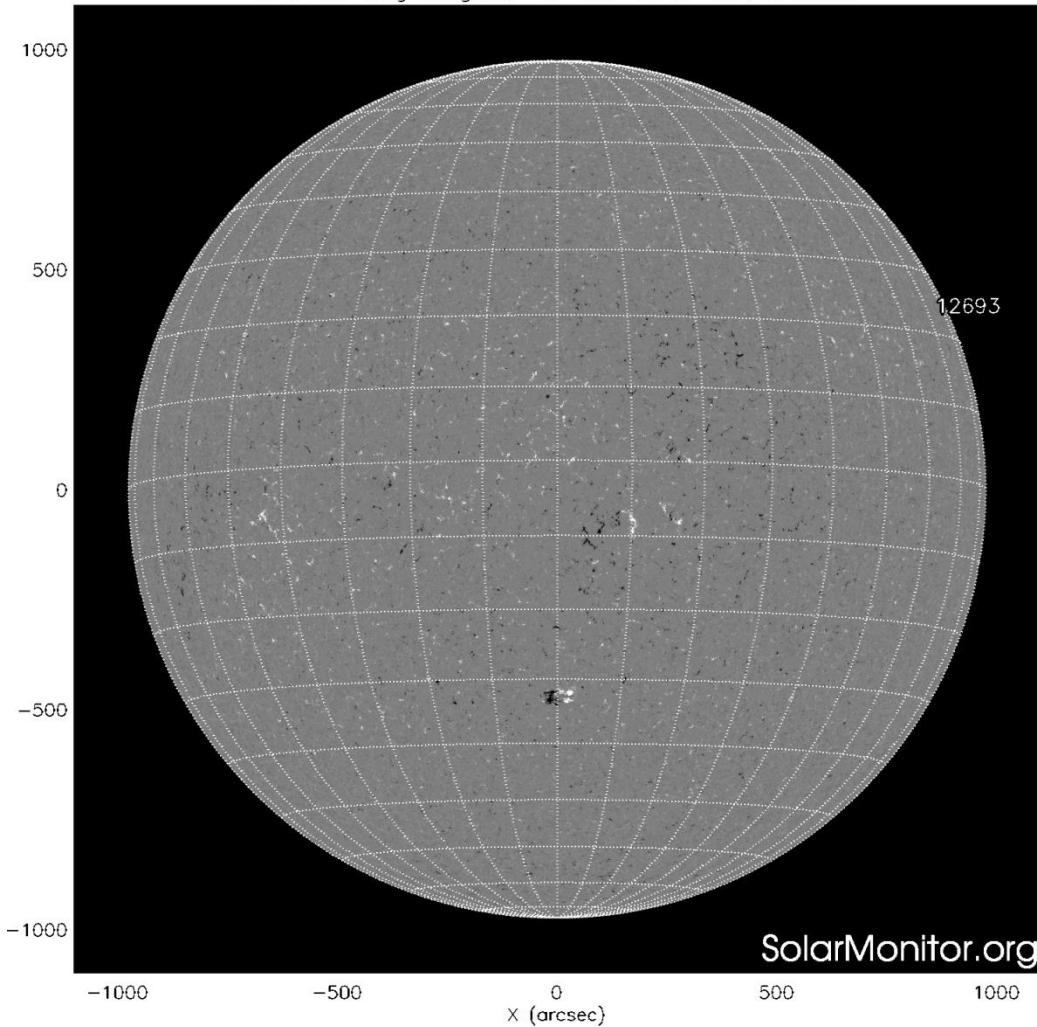
# Summary Report

Active Regions	NOAA ARs 2693, 2694, 2695
<i>Flaring</i>	<i>No</i>
<i>Wide CMEs</i>	<i>No</i>
<i>Large Filaments eruptions</i>	<i>No</i>
<i>Proton Events</i>	<i>No</i>

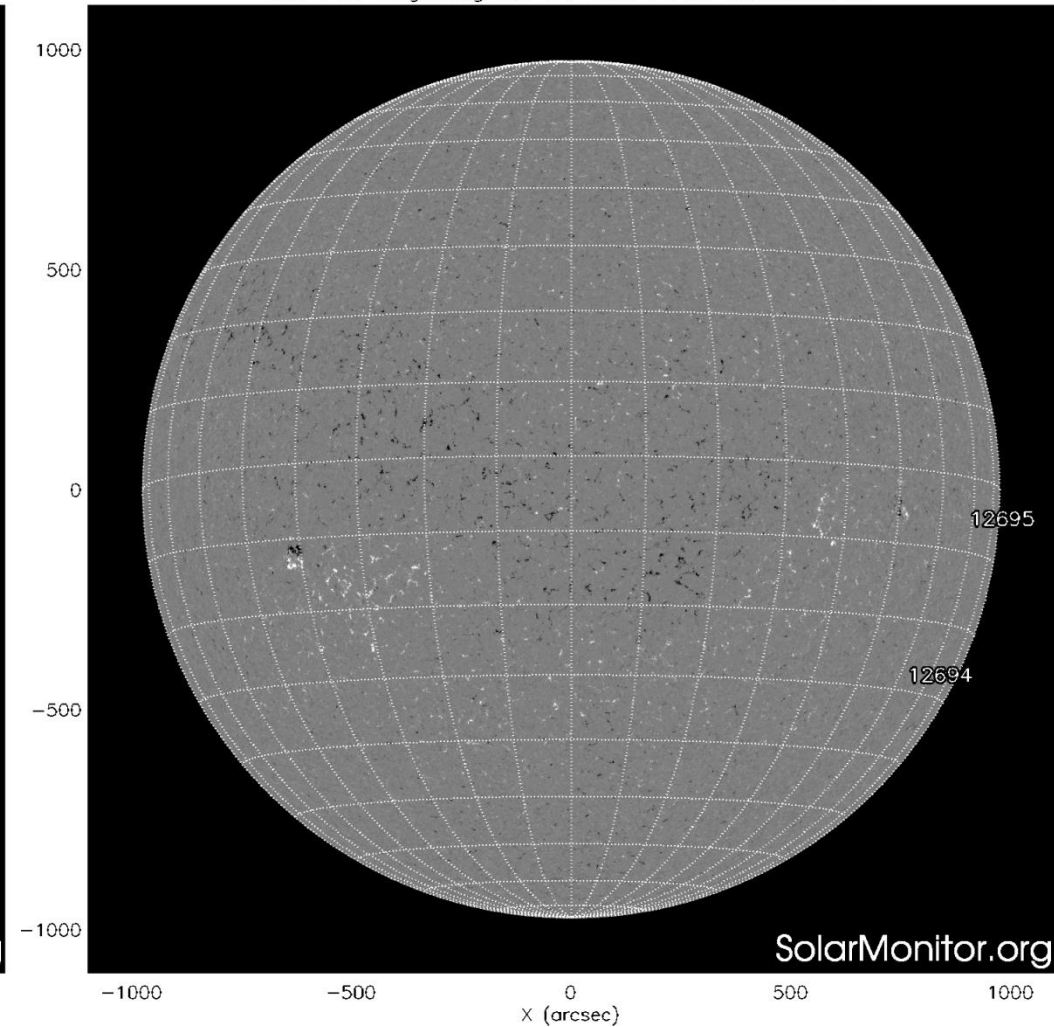
SW conditions	Max solar wind speed: 610 km/s
Coronal Holes	Equatorial coronal hole reached central meridian in the morning of January 09.
Shocks	Shock associated with the fast solar wind from the coronal hole which reached central meridian on January 04.
<i>ICME</i>	<i>No</i>
Kp index	Kp=5 and K-Dourbes=4

# Solar active region evolution

SDO HMI Magnetogram 8-Jan-2018 19:46:29.600



SDO HMI Magnetogram 14-Jan-2018 19:34:29.700

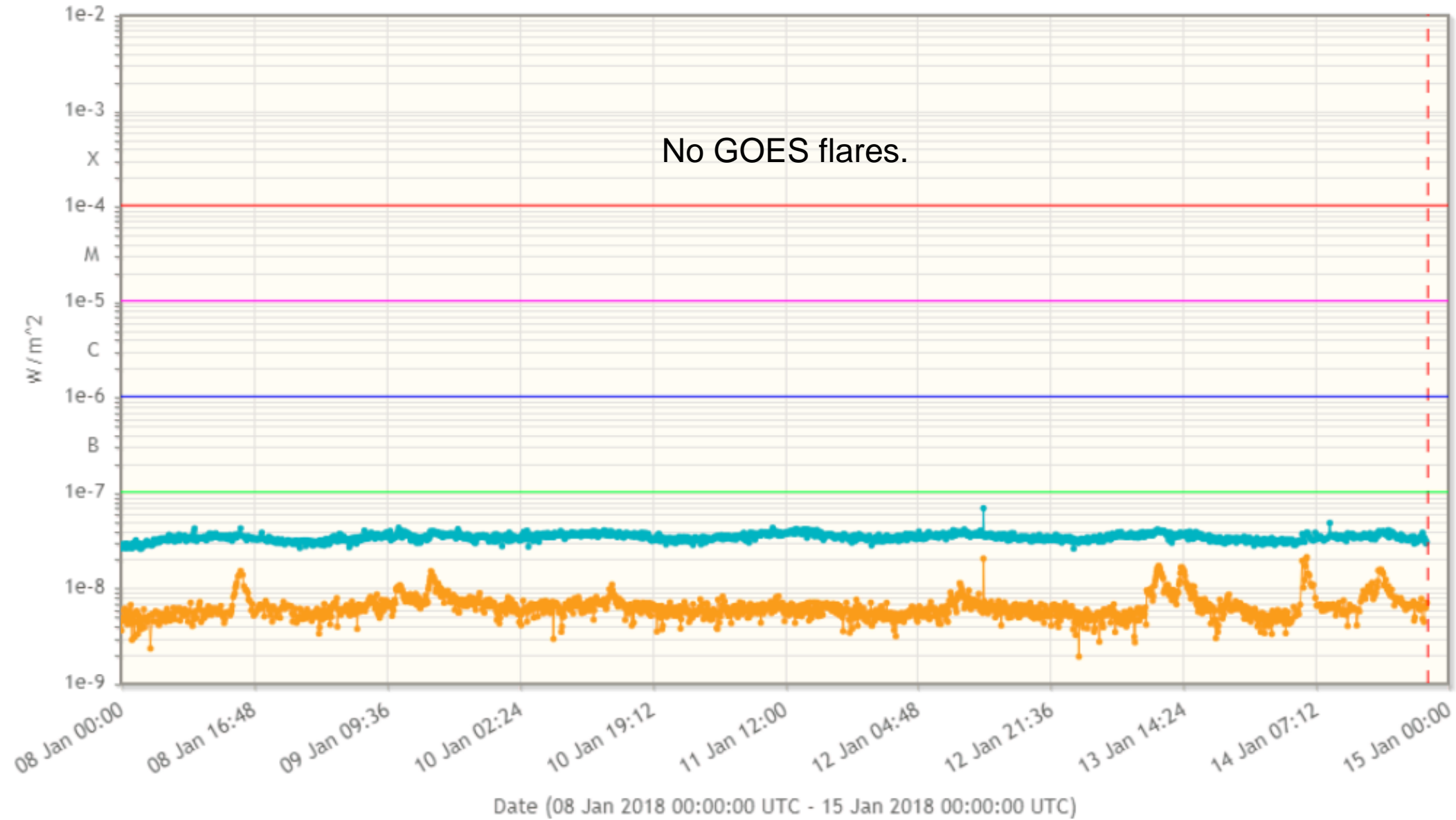


- Only three simple sunspot groups were observed on the visible side of the solar disc this week.

# Solar X-ray flux and flaring

Plot (08 Jan 2018 00:00:00 UTC - 15 Jan 2018 00:00:00 UTC)

- X-Ray - GOES X-Ray flux 0.1-0.8 nm (quicklook) - 1812 data points - (averaged - 5 minute data)
- X-Ray - GOES X-Ray flux 0.05-0.4 nm (quicklook) - 1812 data points - (averaged - 5 minute data)



# CMEs detected by Cactus

No CMEs reported.

18:12 01/14  
10:12 01/14  
07:36 01/14  
05:00 01/14  
01:48 01/14  
22:36 01/13  
19:36 01/13  
16:42 01/13  
13:48 01/13  
10:24 01/13  
07:48 01/13  
05:12 01/13  
02:12 01/13  
23:12 01/12  
17:48 01/12  
14:48 01/12  
11:24 01/12  
08:42 01/12  
05:00 01/12  
00:24 01/12  
21:12 01/11  
18:12 01/11  
15:12 01/11  
12:12 01/11  
09:24 01/11  
06:24 01/11  
03:42 01/11  
00:24 01/11  
21:17 01/10  
18:12 01/10  
15:30 01/10  
12:12 01/10  
09:12 01/10  
06:12 01/10  
03:48 01/10  
00:36 01/10  
21:24 01/09  
18:24 01/09  
15:36 01/09  
12:24 01/09  
09:24 01/09  
06:12 01/09  
03:24 01/09  
00:00 01/09  
20:36 01/08  
18:00 01/08  
14:48 01/08  
12:00 01/08  
08:48 01/08  
06:00 01/08  
02:48 01/08  
00:00 01/08

S

W

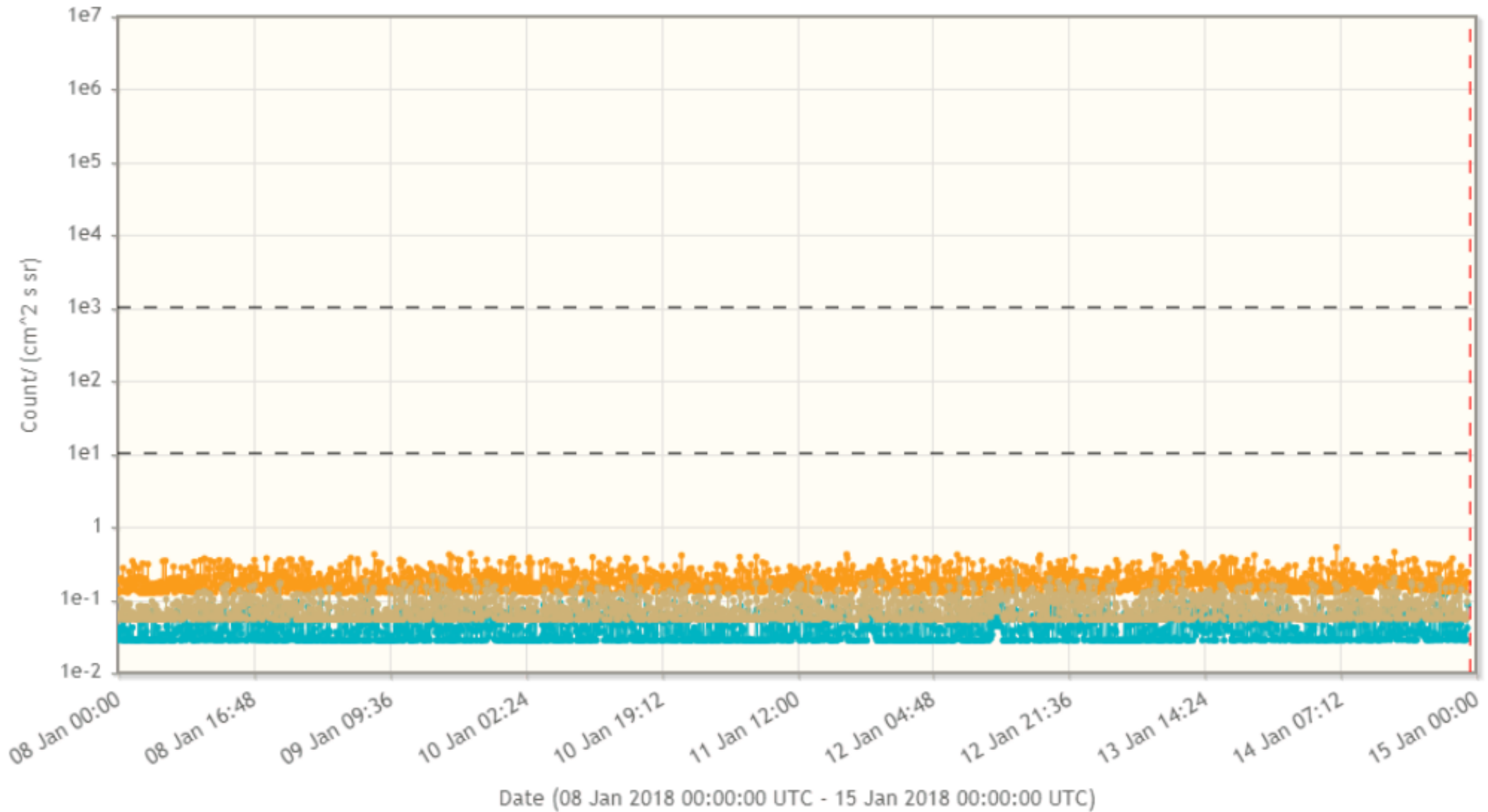
N

E

# Energetic particles

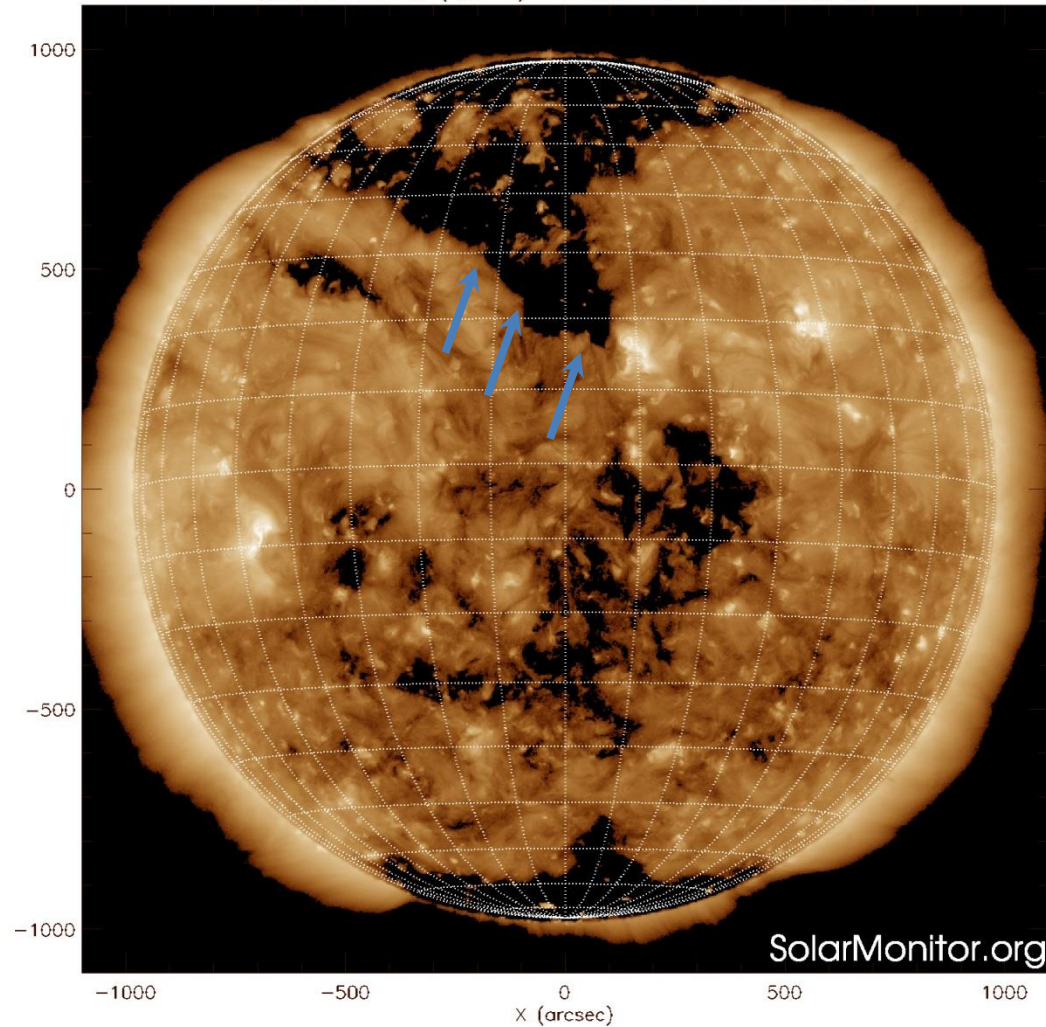
Plot (08 Jan 2018 00:00:00 UTC - 15 Jan 2018 00:00:00 UTC)

- Protons / Electrons - GOES Particles at > 100 Mev (quicklook) - 1979 data points - (raw - 5 minute data)
- Protons / Electrons - GOES Particles at > 10 Mev (quicklook) - 1979 data points - (raw - 5 minute data)
- Protons / Electrons - GOES Particles at > 50 Mev (quicklook) - 1979 data points - (raw - 5 minute data)



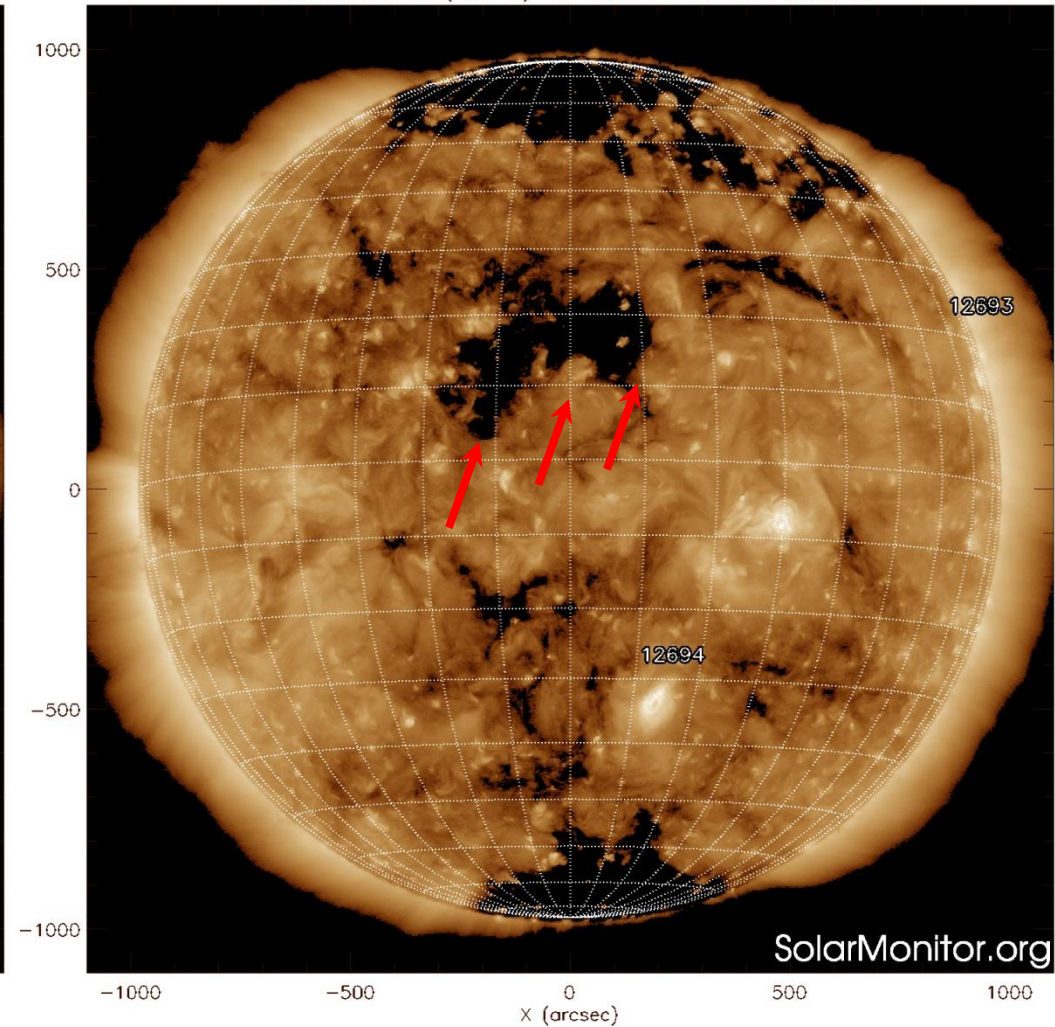
# Coronal holes

SDO AIA Fe XII (193 Å) 4-Jan-2018 20:25:04.840



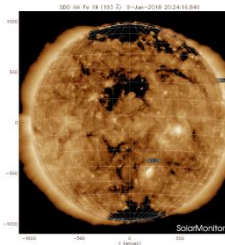
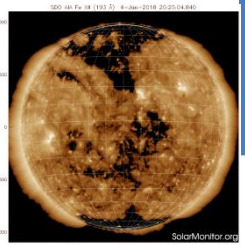
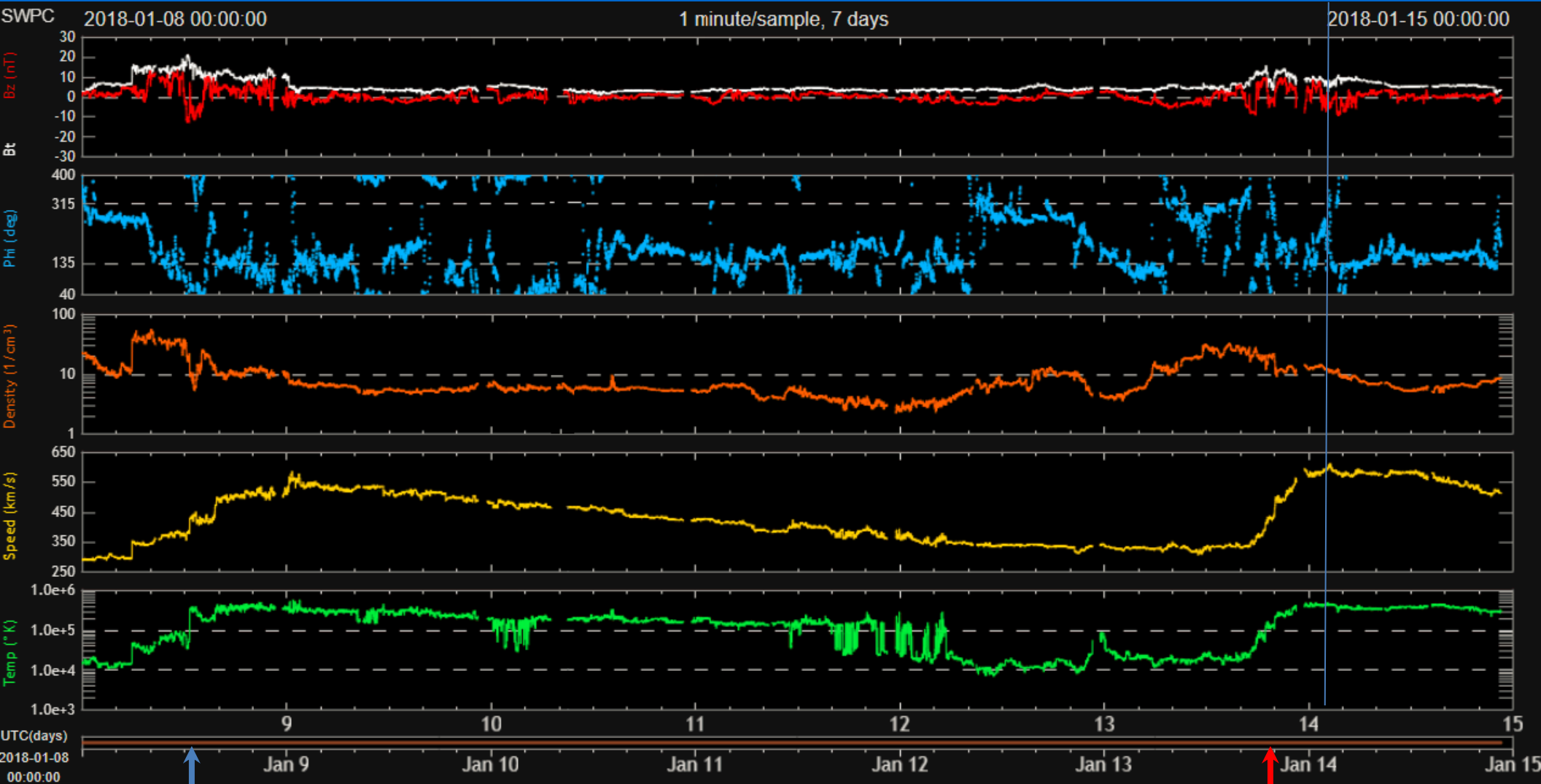
Low latitude extension of a northern polar coronal hole reached central meridian late on January 04, 2018 (previous week).

SDO AIA Fe XII (193 Å) 9-Jan-2018 20:24:16.840



Equatorial coronal hole reached central meridian in the early morning of January 09, 2018.

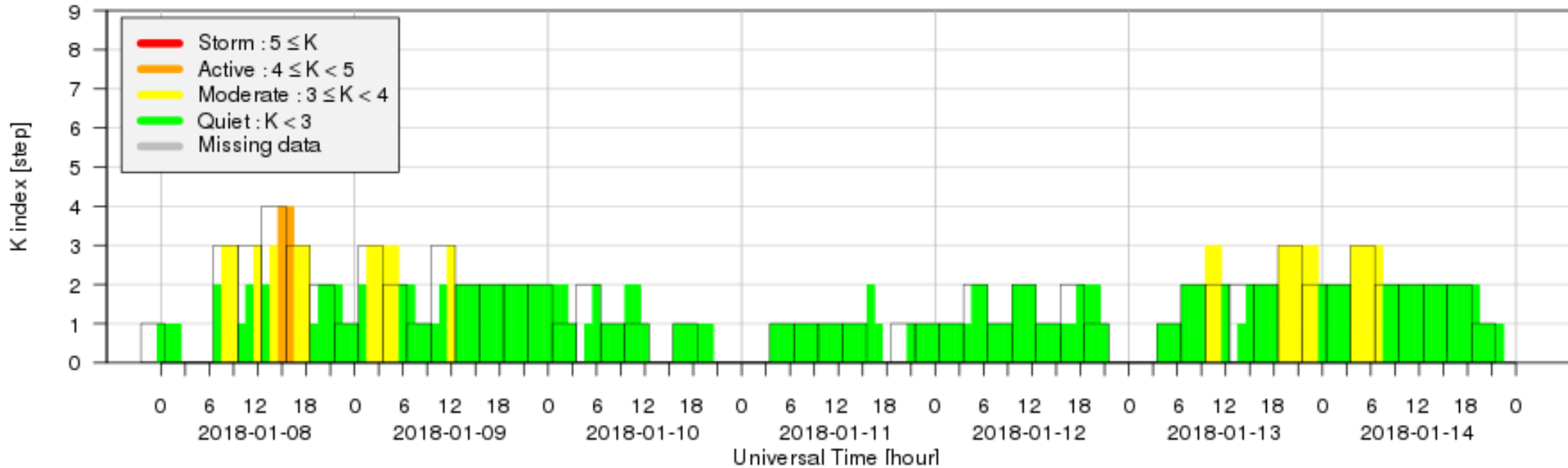
# Solar wind



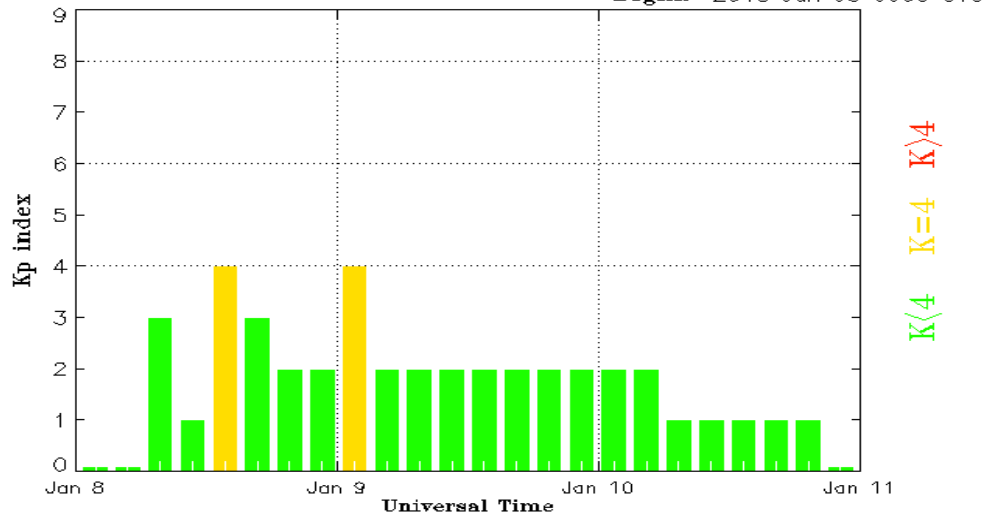


# Geomagnetism

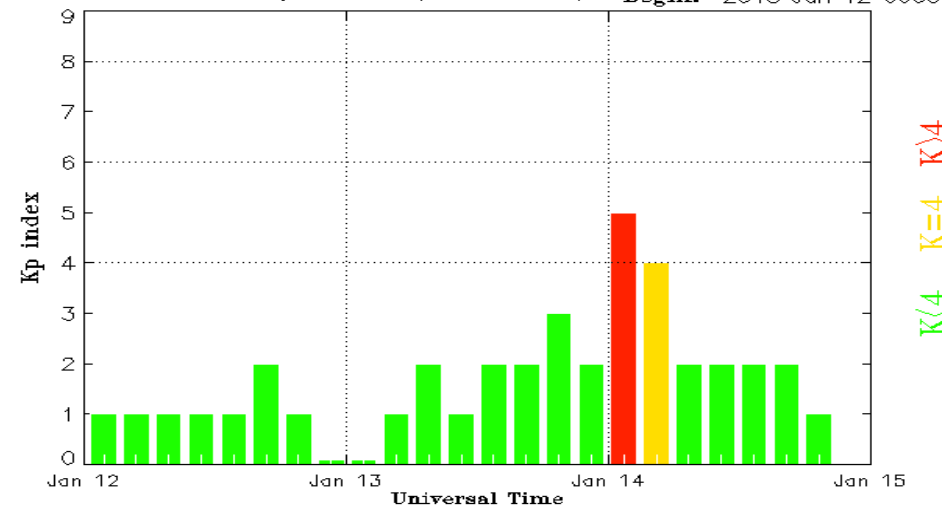
K-type index of local magnetic activity, Dourbes (50.1°N, 4.6°E)  
(copyright RMI)



Estimated Planetary K index (3 hour data) Begin: 2018 Jan 08 0000 UTC

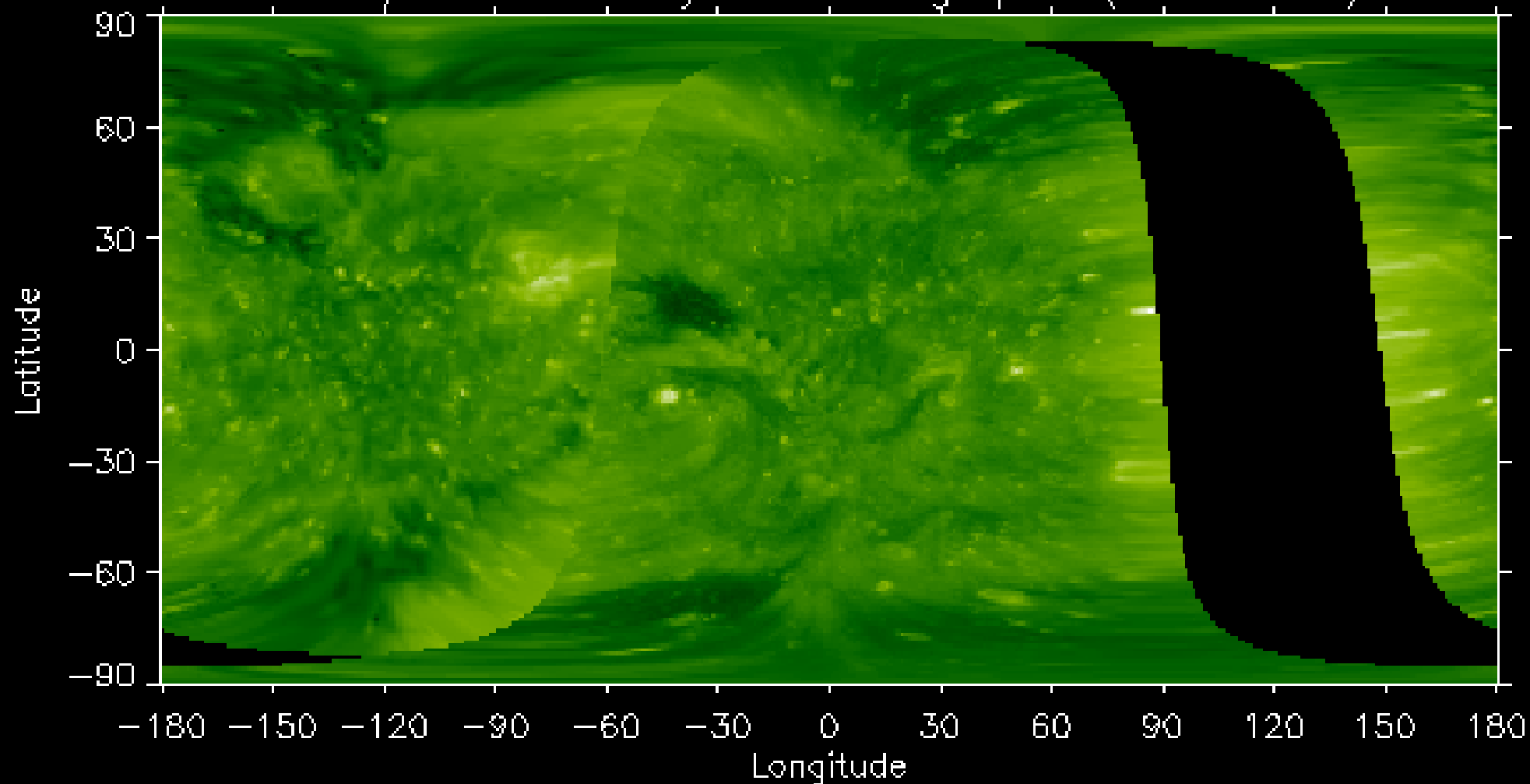


Estimated Planetary K index (3 hour data) Begin: 2018 Jan 12 0000



# Outlook

EUVI/AIA 195 Stonyhurst Heliographic (Earth-view)



Observation date: 2018/01/14 17:45:30