

SIDC Space Weather Briefing

13 January 2019 - 20 January 2019

Jesse andries
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2019-01-13 12:00 UT to 2019-01-20 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	None
Proton Events	None

Solar wind and geomagnetic conditions from 2019-01-13 12:00 UT to 2019-01-20 12:00 UT

Coronal Holes	Weak influences of negative polarity coronal holes in the southern hemisphere
ICME	None
SW Conditions	Slight enhancements due to coronal hole influences
K-indices	max K-index (Dourbes): 3.0 max Kp-index (NOAA): 3

All Quiet Alert: All quiet since noon 2019-01-16

Solar Activity

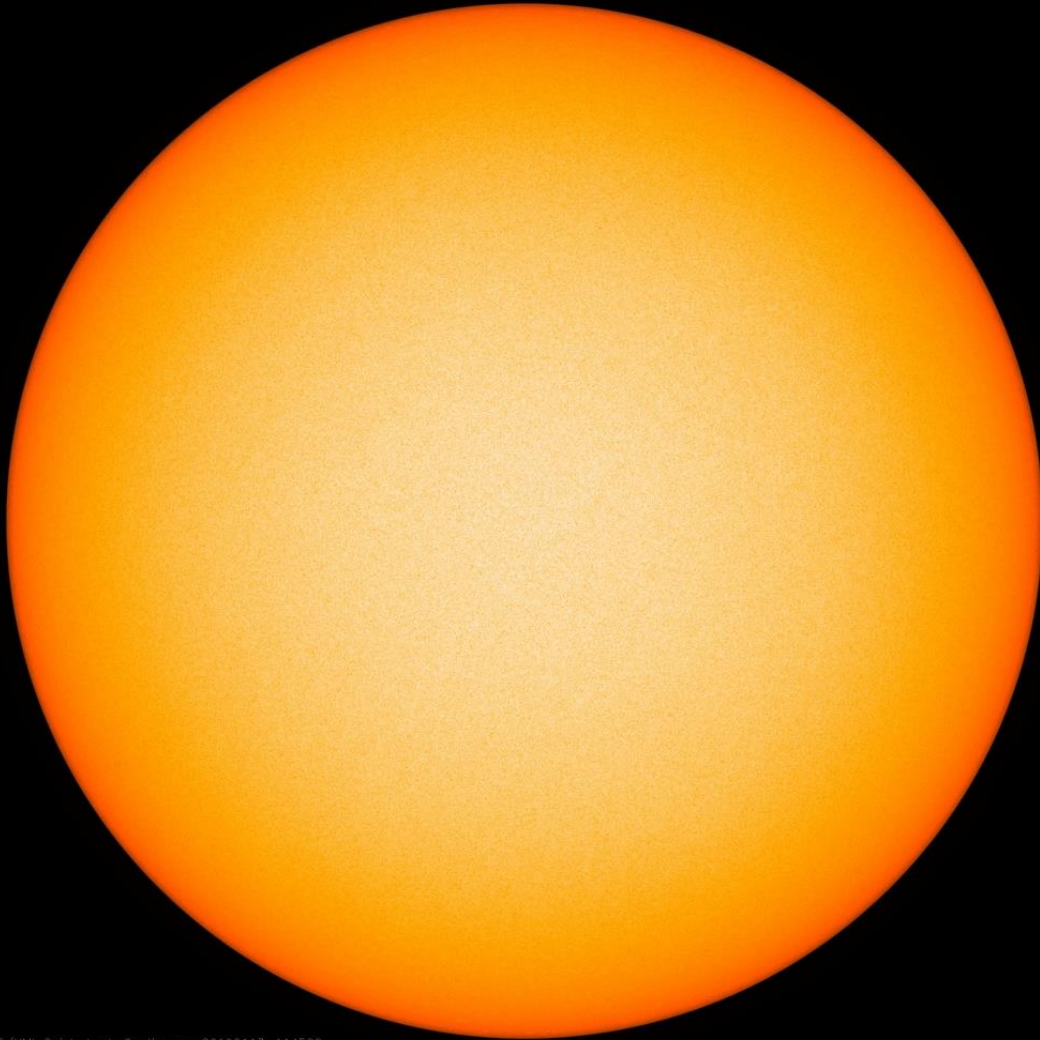


Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

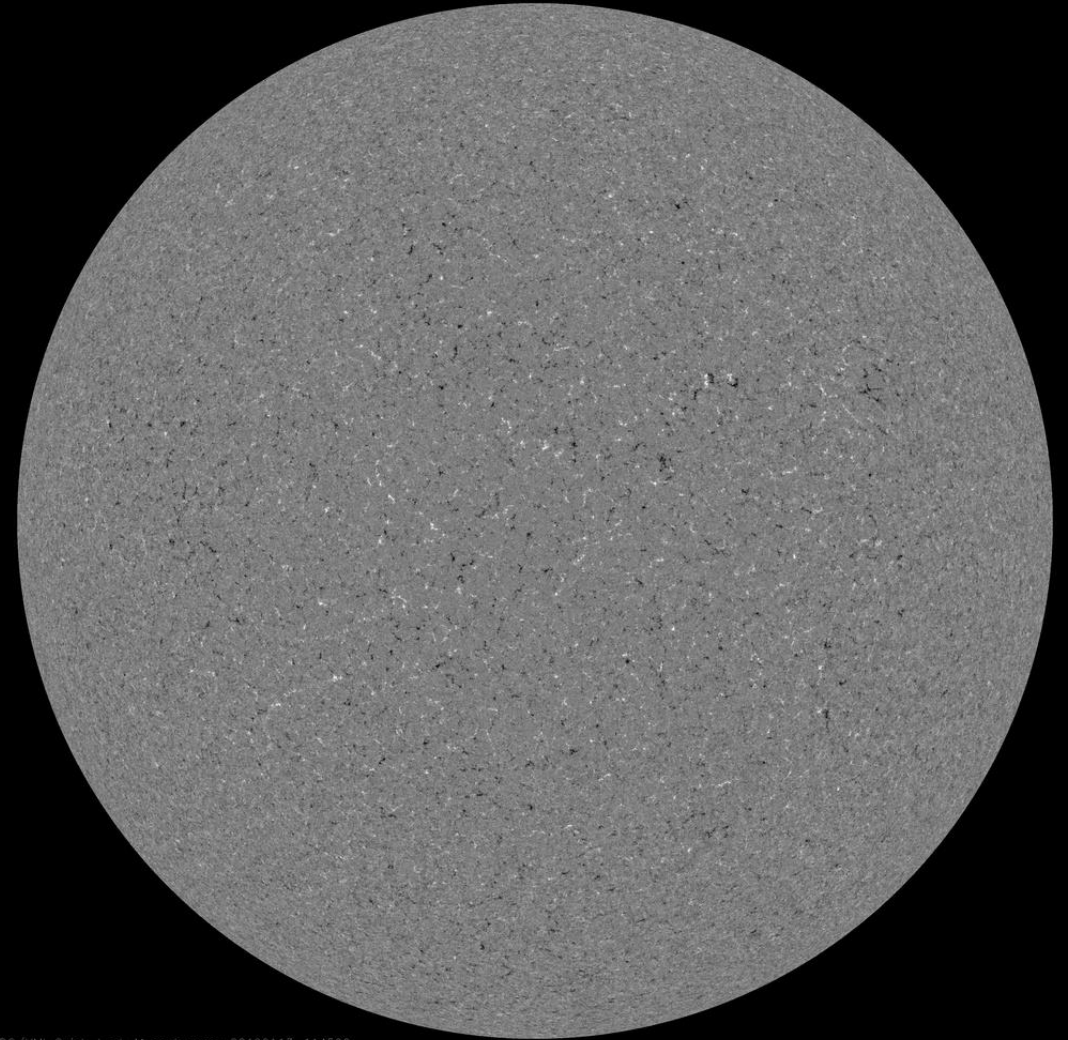
Solar active region - start of the week

SDO/HMI White Light 2019-01-13



SDO/HMI Quick-Look Continuum: 20190113_114500

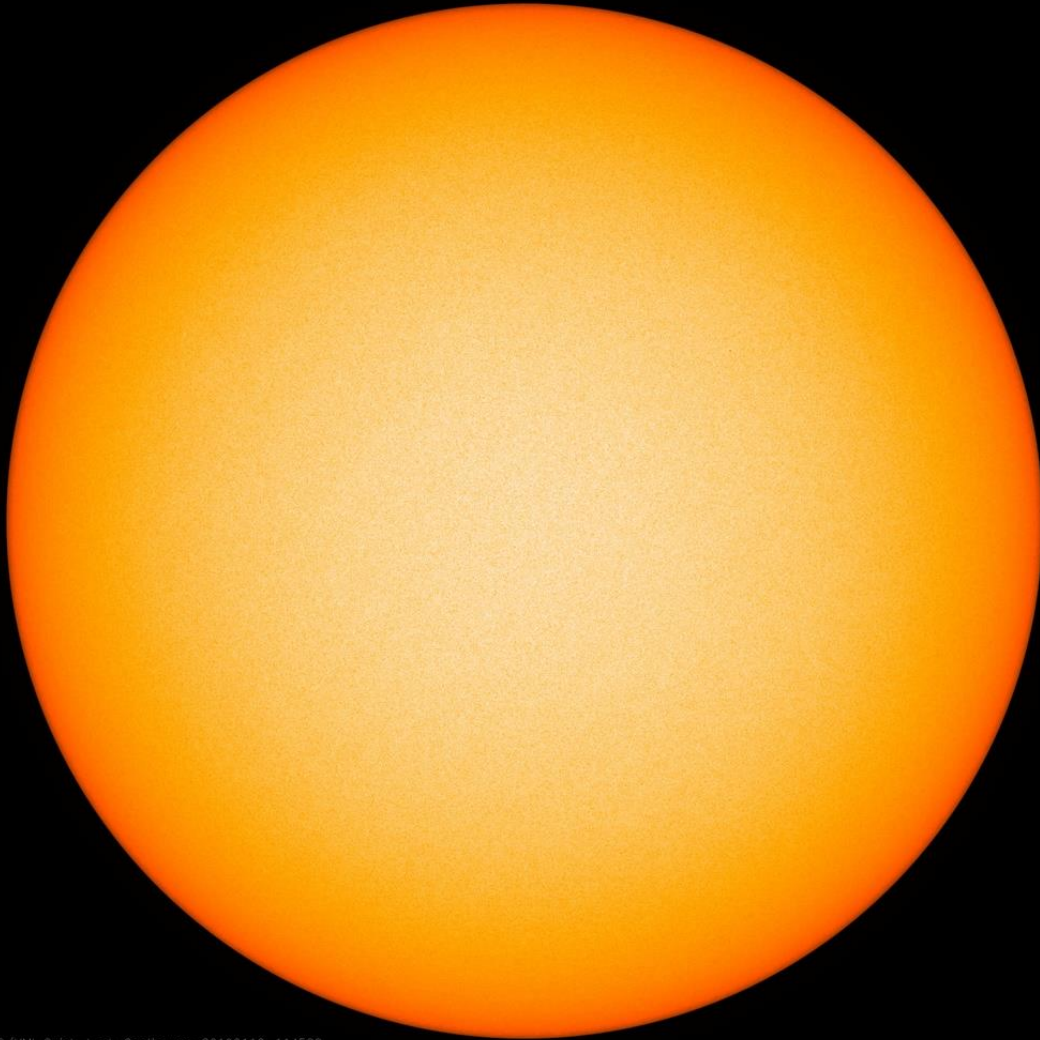
SDO/HMI Magnetogram 2019-01-13



SDO/HMI Quick-Look Magnetogram: 20190113_114500

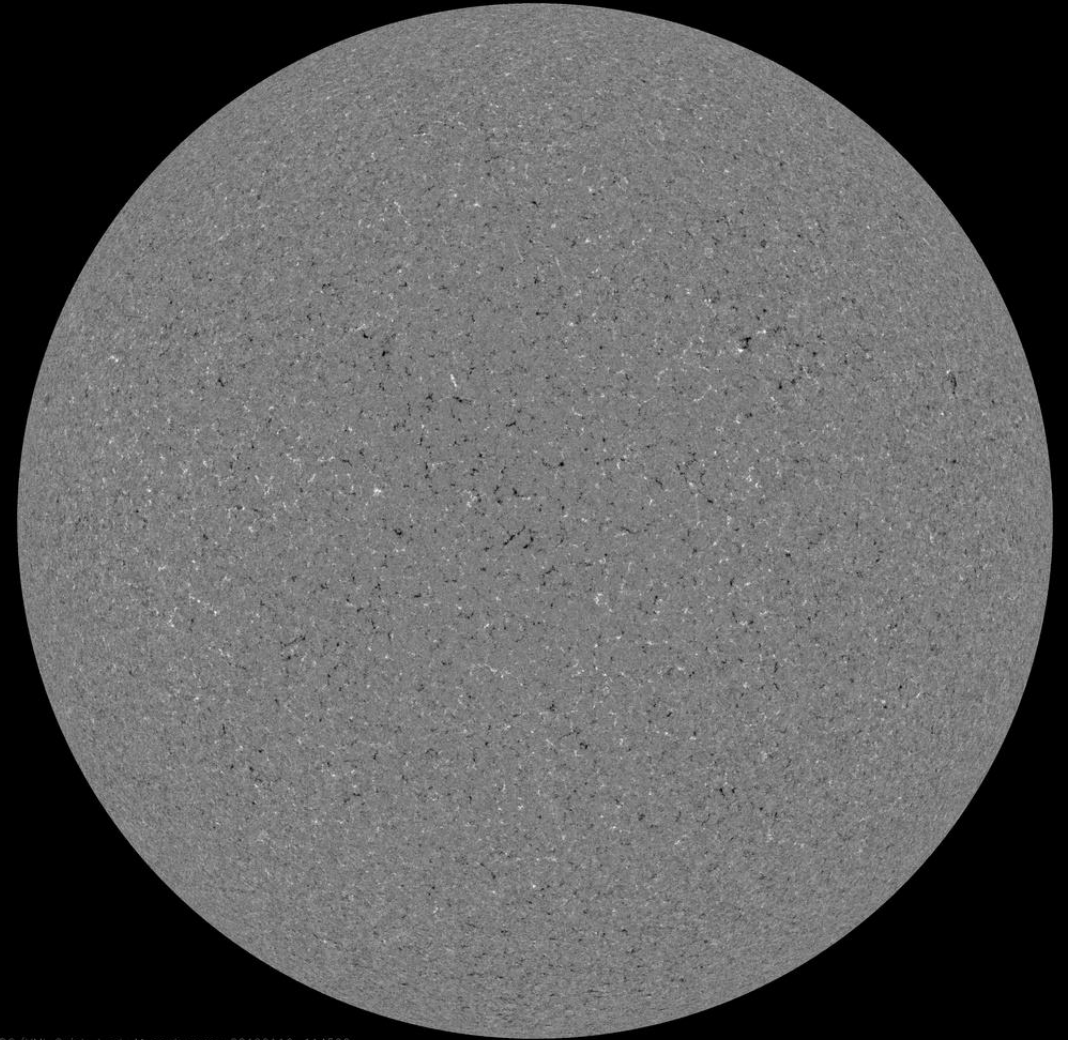
Solar active region - middle of the week

SDO/HMI White Light 2019-01-16



SDO/HMI Quick-Look Continuum: 20190116_114500

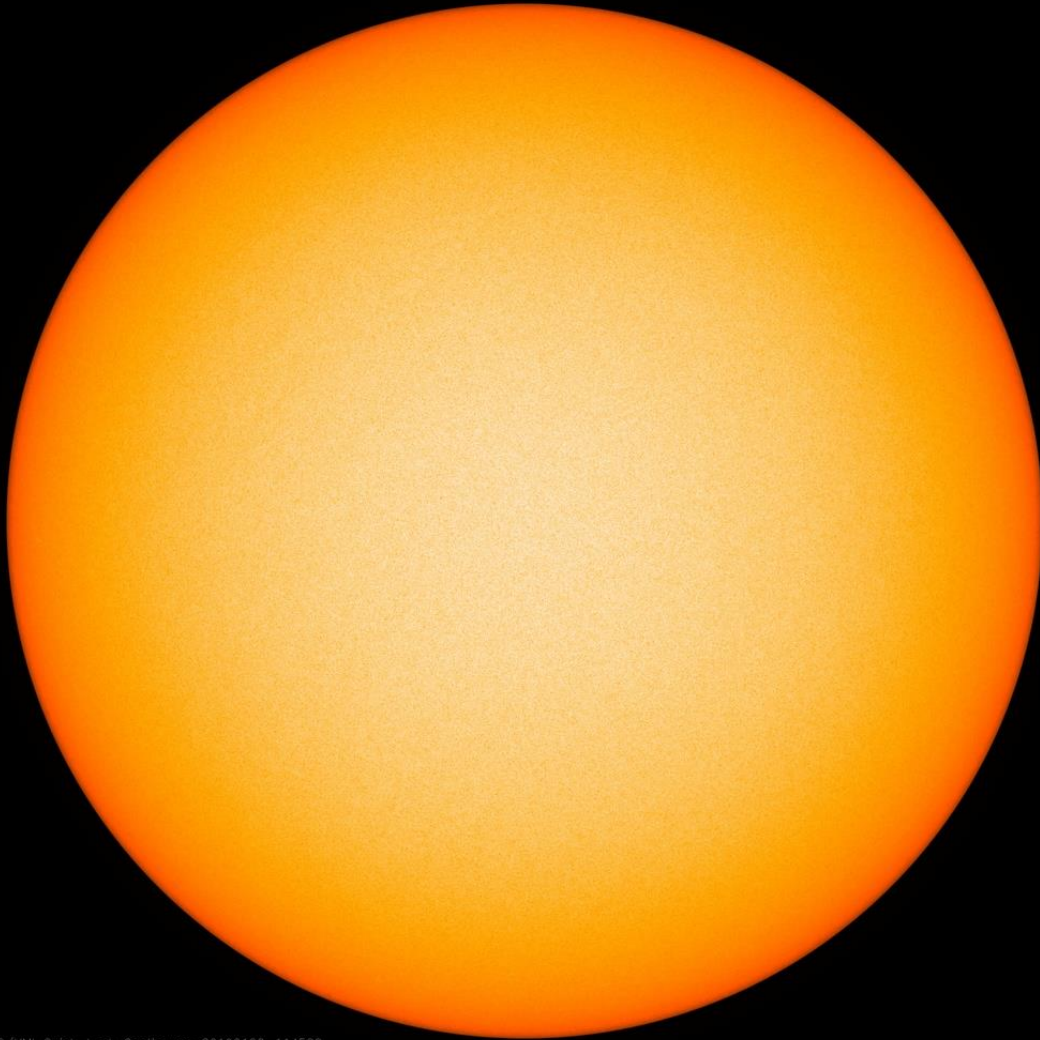
SDO/HMI Magnetogram 2019-01-16



SDO/HMI Quick-Look Magnetogram: 20190116_114500

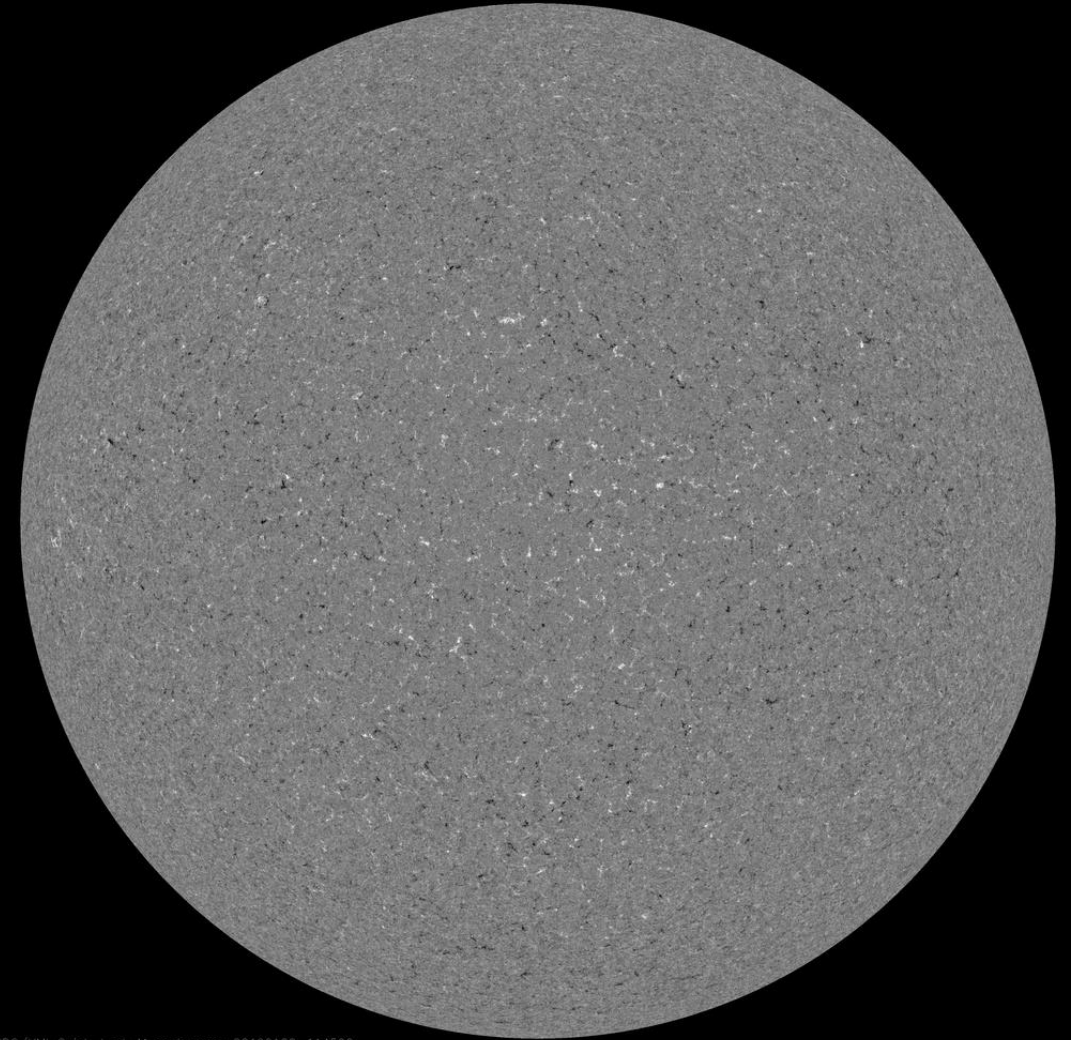
Solar active region - end of the week

SDO/HMI White Light 2019-01-20



SDO/HMI Quick-Look Continuum: 20190120_114500

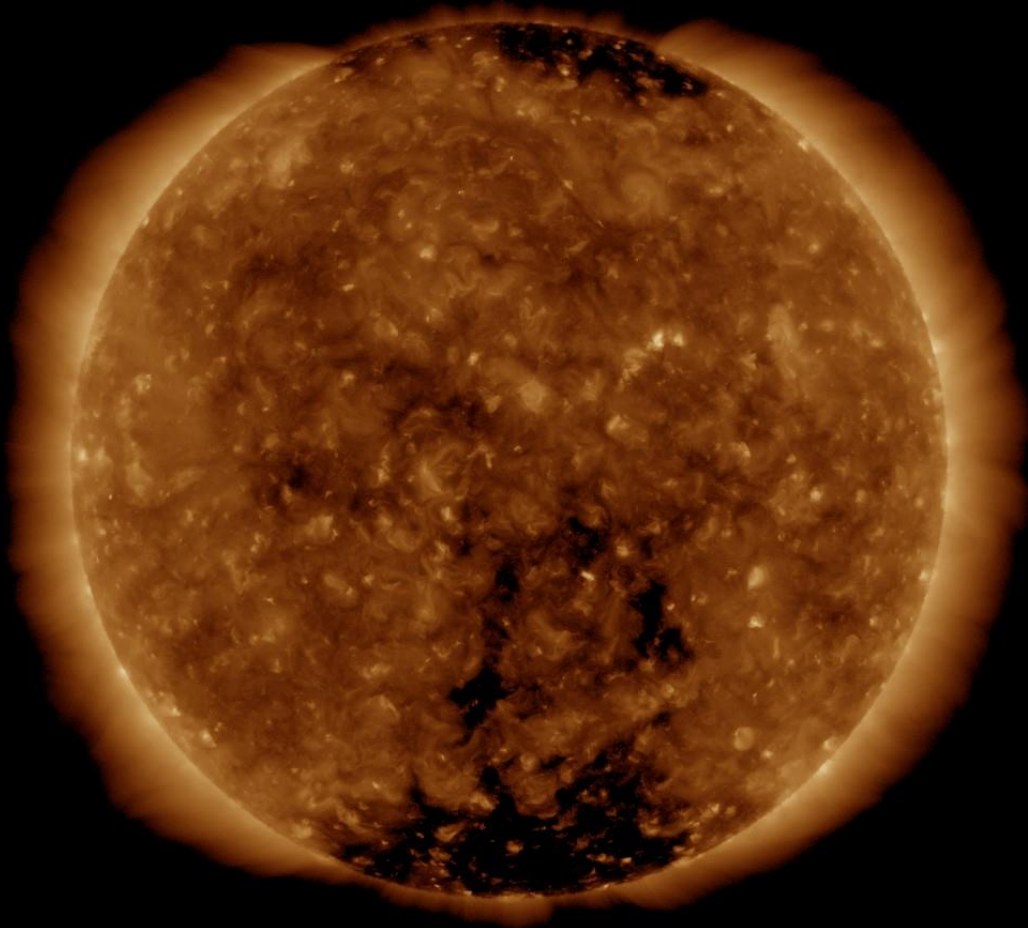
SDO/HMI Magnetogram 2019-01-20



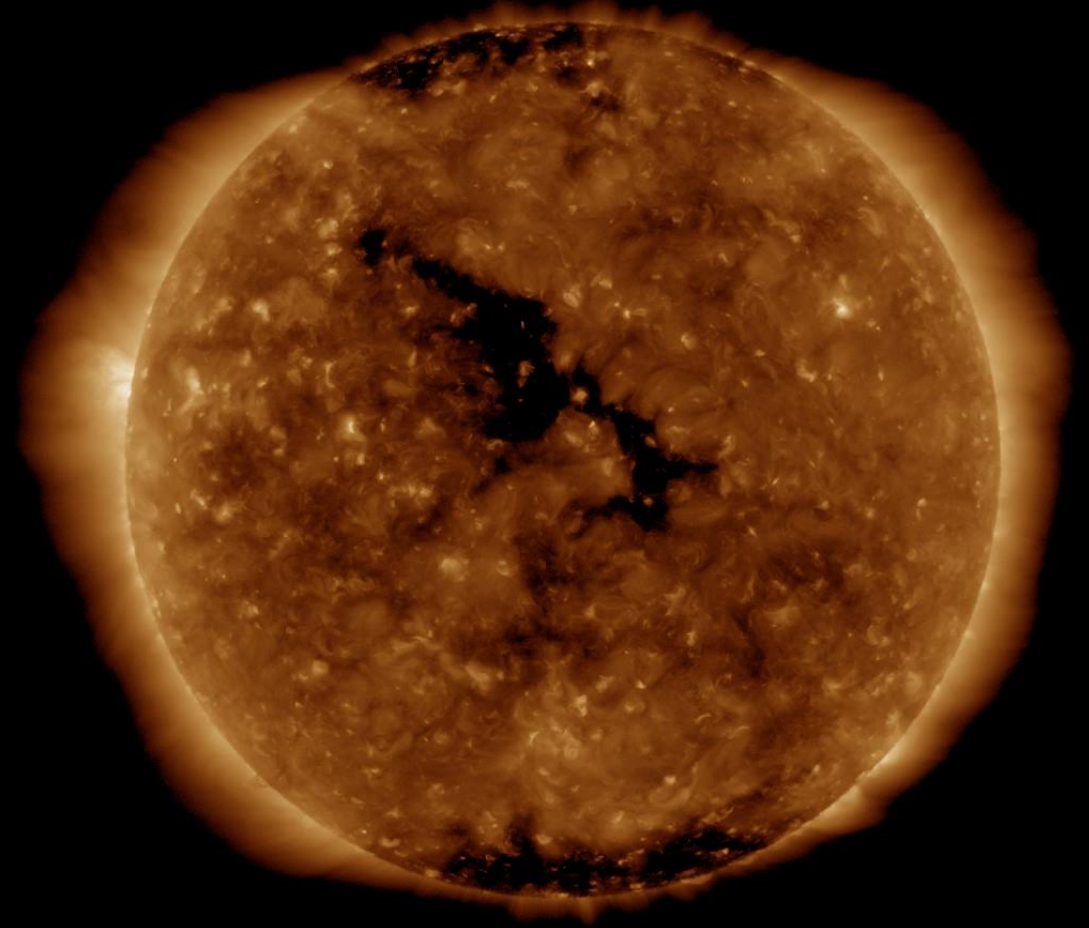
SDO/HMI Quick-Look Magnetogram: 20190120_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2019-01-13



SDO/AIA 19.3 nm 2019-01-20



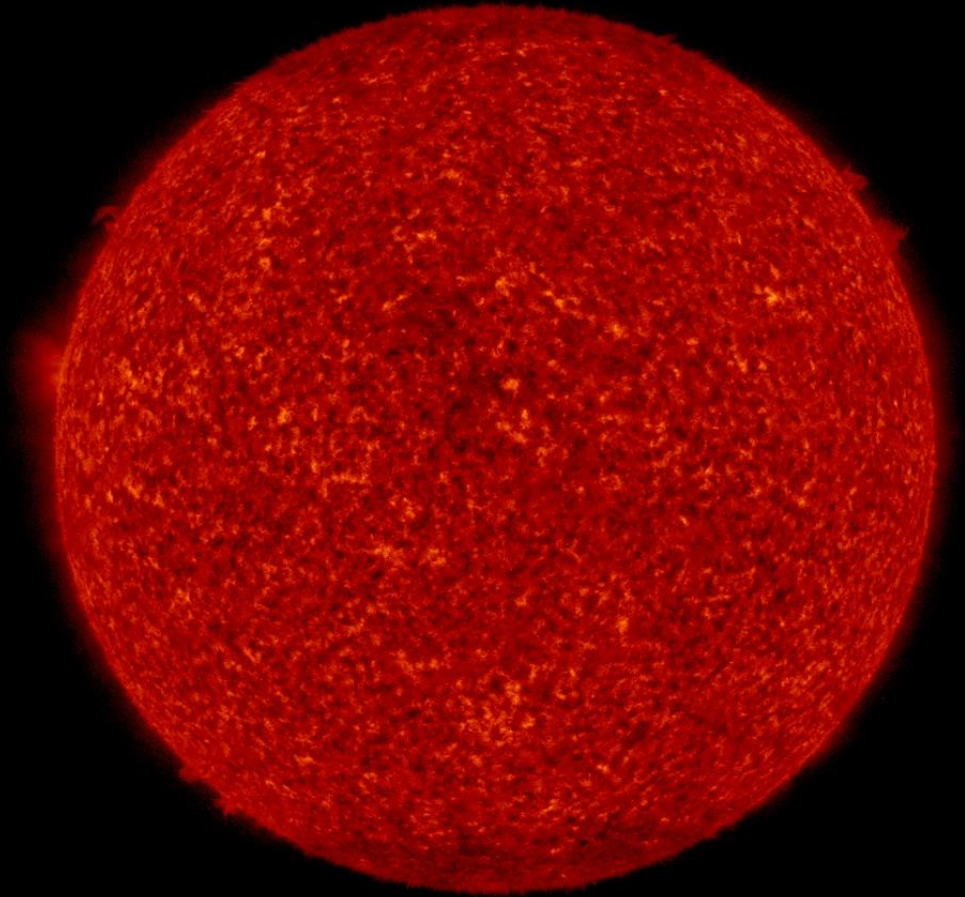
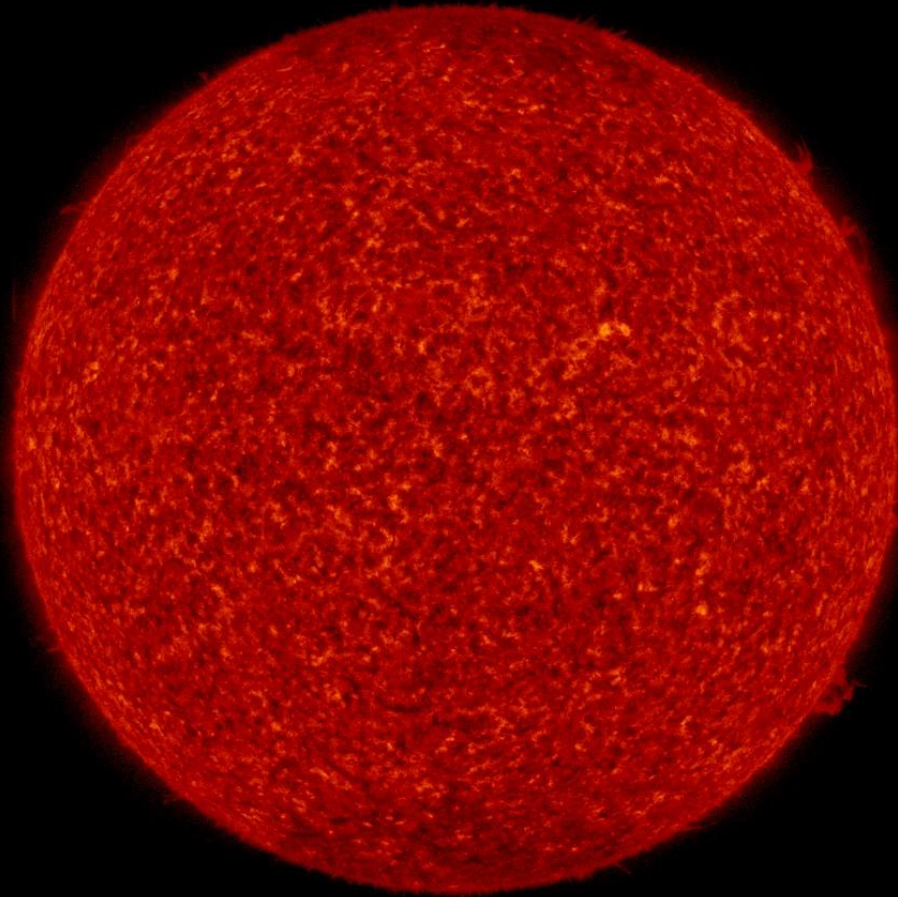
SDO/AIA 193 2019-01-13 12:10:41 UT

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

Solar active region & Filament

SDO/AIA 30.4 nm 2019-01-13

SDO/AIA 30.4 nm 2019-01-20



SDO/AIA 304 2019-01-13 12:13:54 UT

SDO/AIA 304 2019-01-20 12:13:18 UT

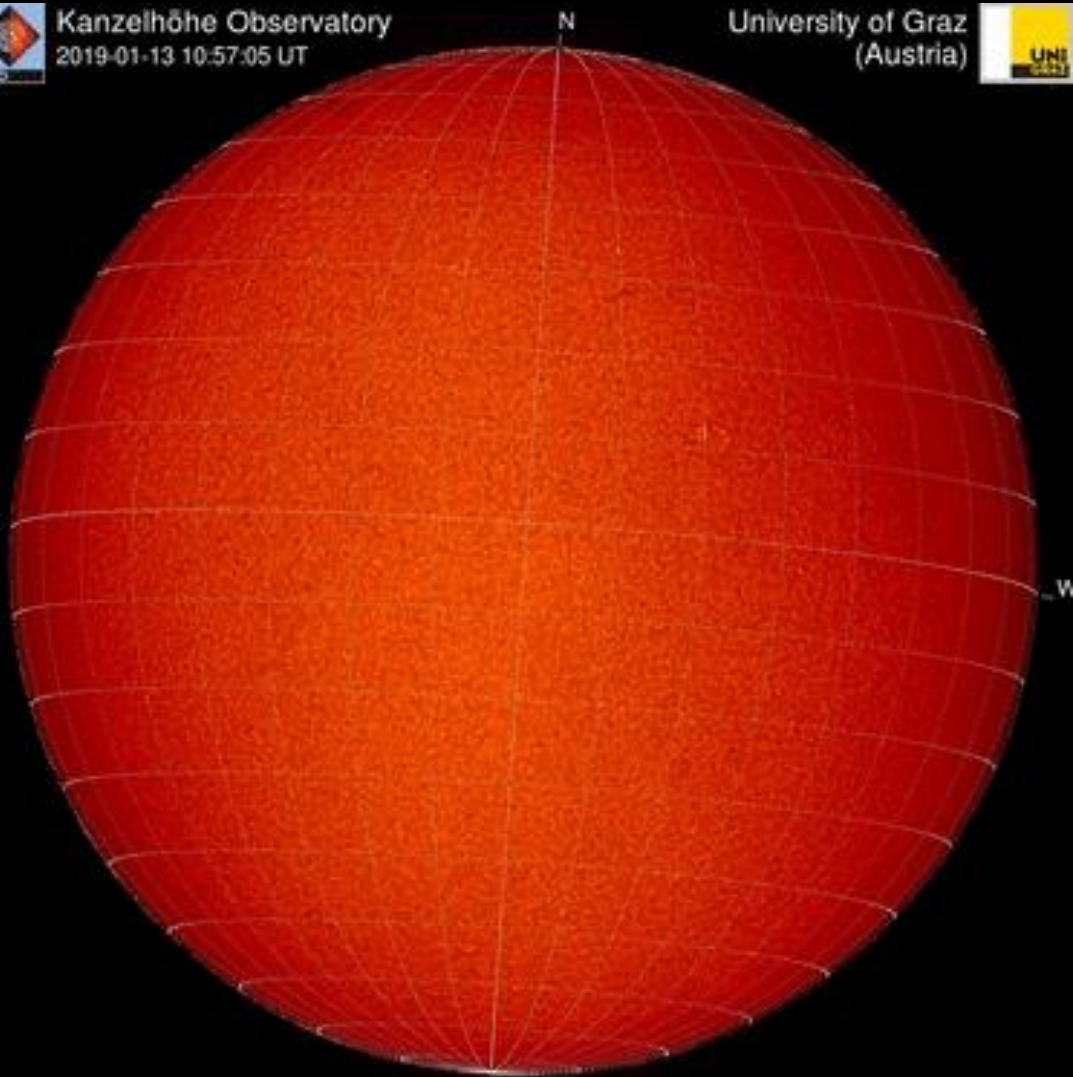
Filament & Filament eruption

H-alpha 2019-01-13



Kanzelhöhe Observatory
2019-01-13 10:57:05 UT

University of Graz
(Austria)

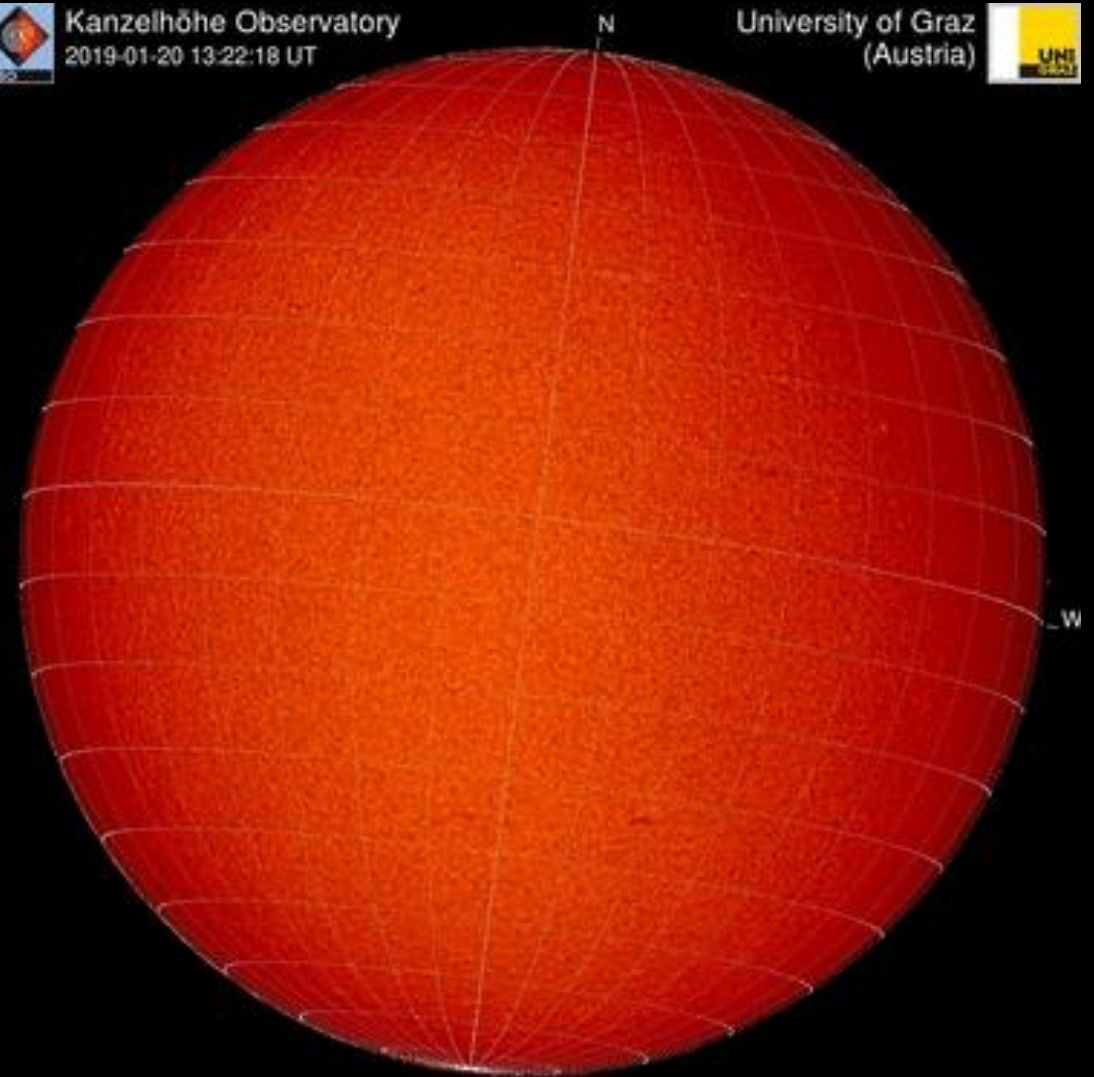


H-alpha 2019-01-20

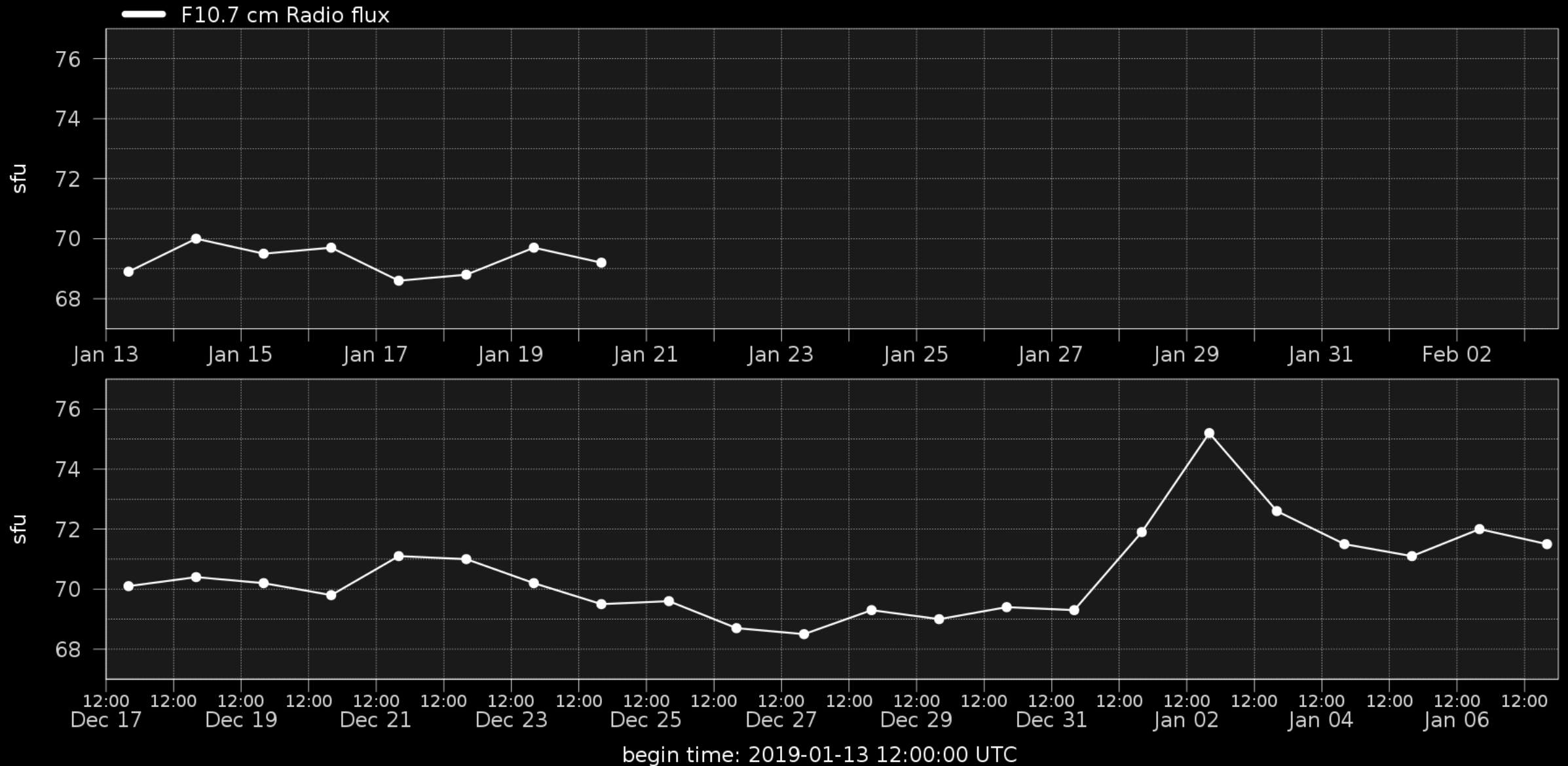


Kanzelhöhe Observatory
2019-01-20 13:22:18 UT

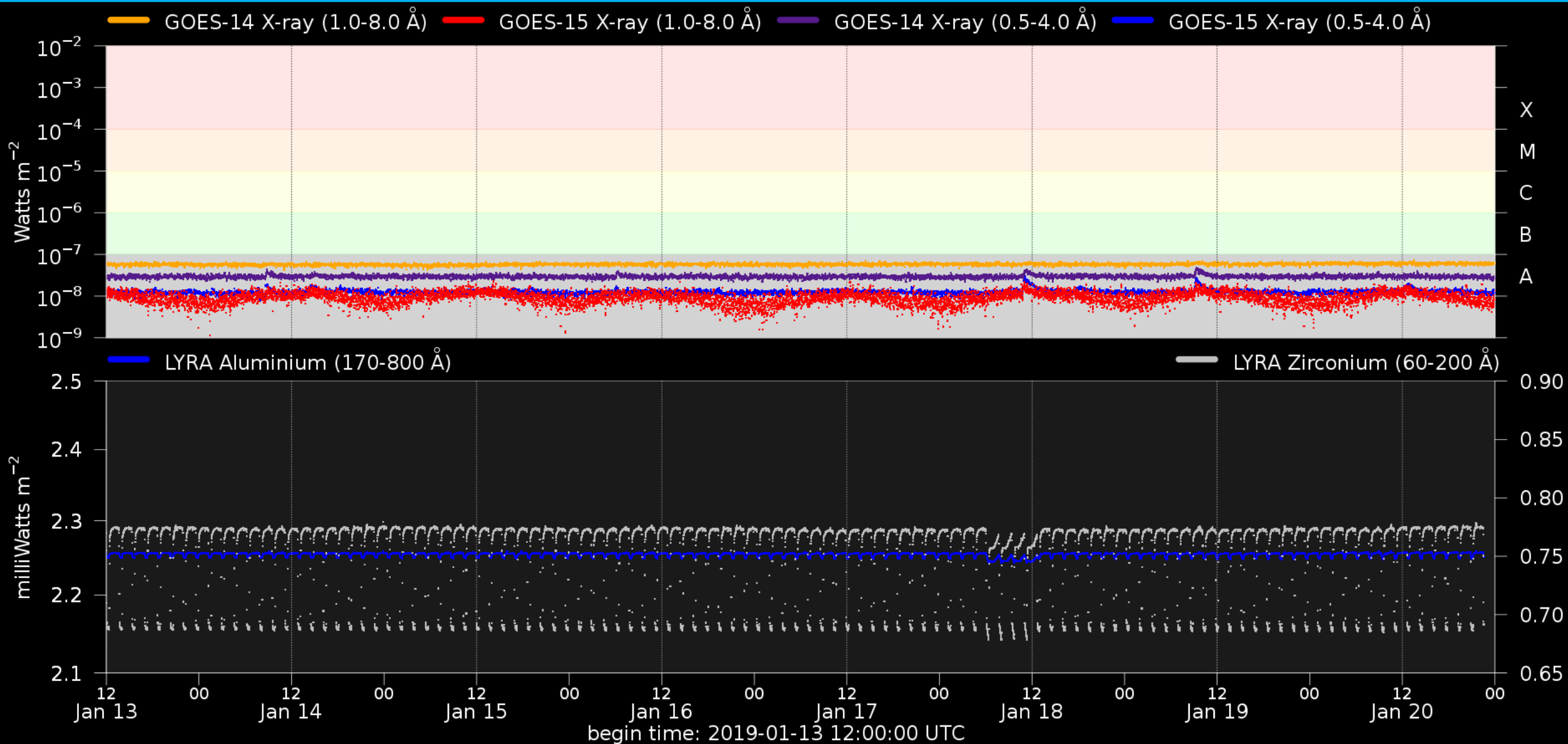
University of Graz
(Austria)



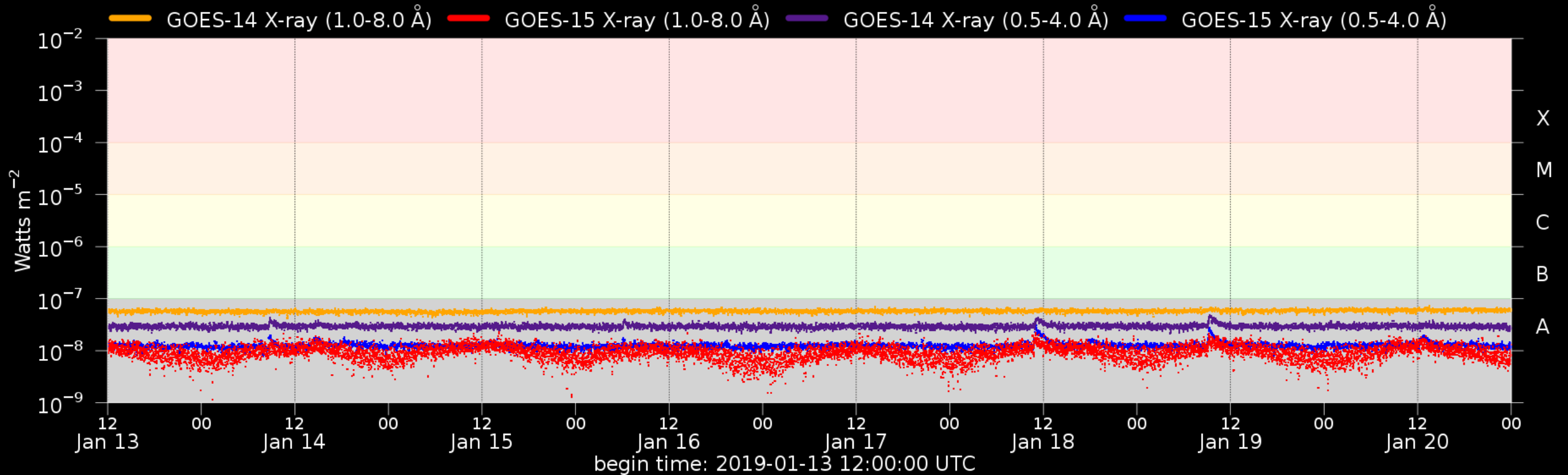
Solar F10.7cm radio flux



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:

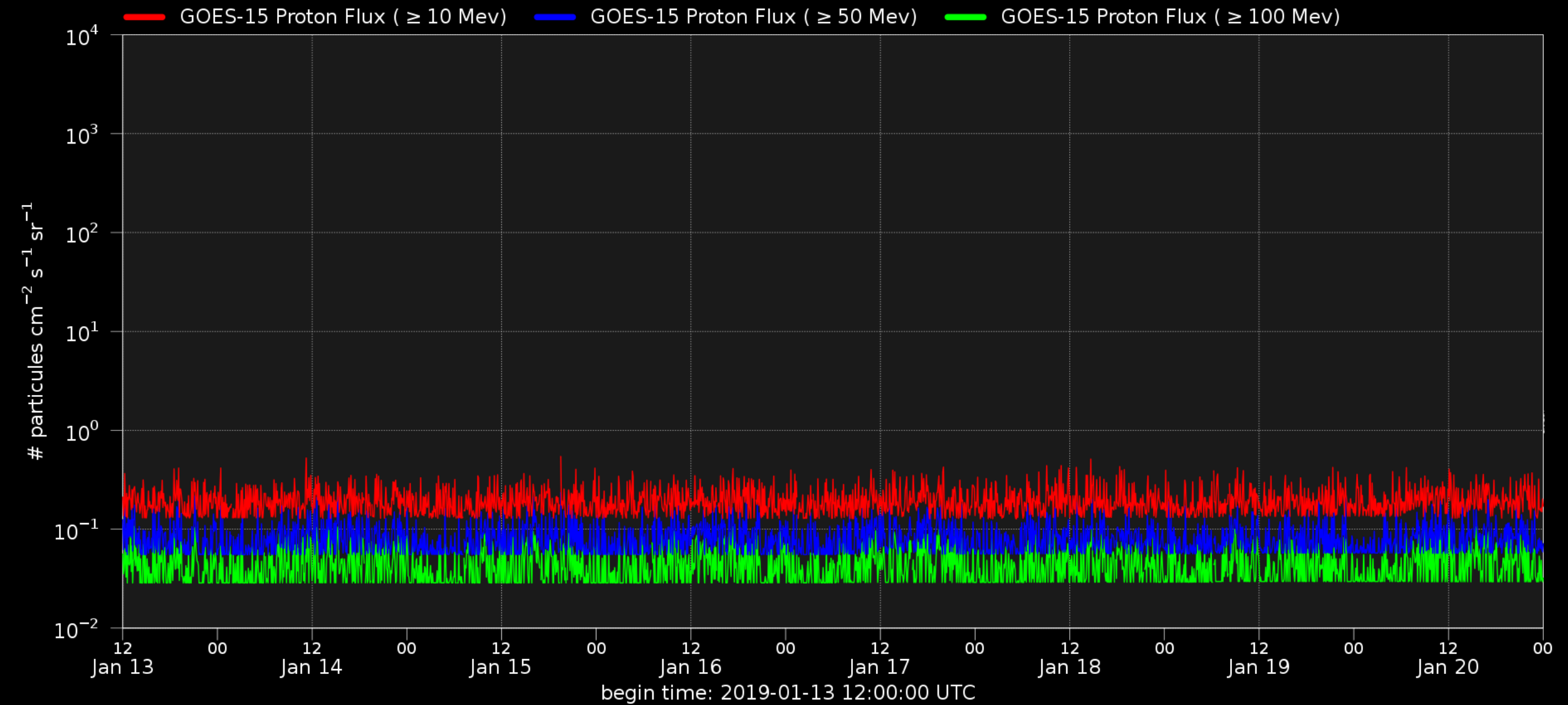
Issue date	2019-01-13	2019-01-14	2019-01-15	2019-01-16	2019-01-17	2019-01-18	2019-01-19	2019-01-20
Probability	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

Coronal Mass Ejection

Nothing to mention

02:00 01/20
22:24 01/19
19:24 01/19
16:36 01/19
13:25 01/19
10:12 01/19
07:24 01/19
04:24 01/19
00:48 01/19
21:48 01/18
18:48 01/18
16:00 01/18
12:06 01/18
09:36 01/18
06:12 01/18
01:36 01/18
21:48 01/17
18:36 01/17
16:00 01/17
12:48 01/17
10:24 01/17
07:12 01/17
04:24 01/17
01:36 01/17
22:00 01/16
18:36 01/16
15:48 01/16
12:24 01/16
09:48 01/16
07:00 01/16
04:06 01/16
00:48 01/16
21:30 01/15
19:00 01/15
16:18 01/15
12:48 01/15
10:00 01/15
07:12 01/15
04:30 01/15
01:36 01/15
22:00 01/14
19:00 01/14
15:24 01/14
12:00 01/14
09:12 01/14

Solar proton flux



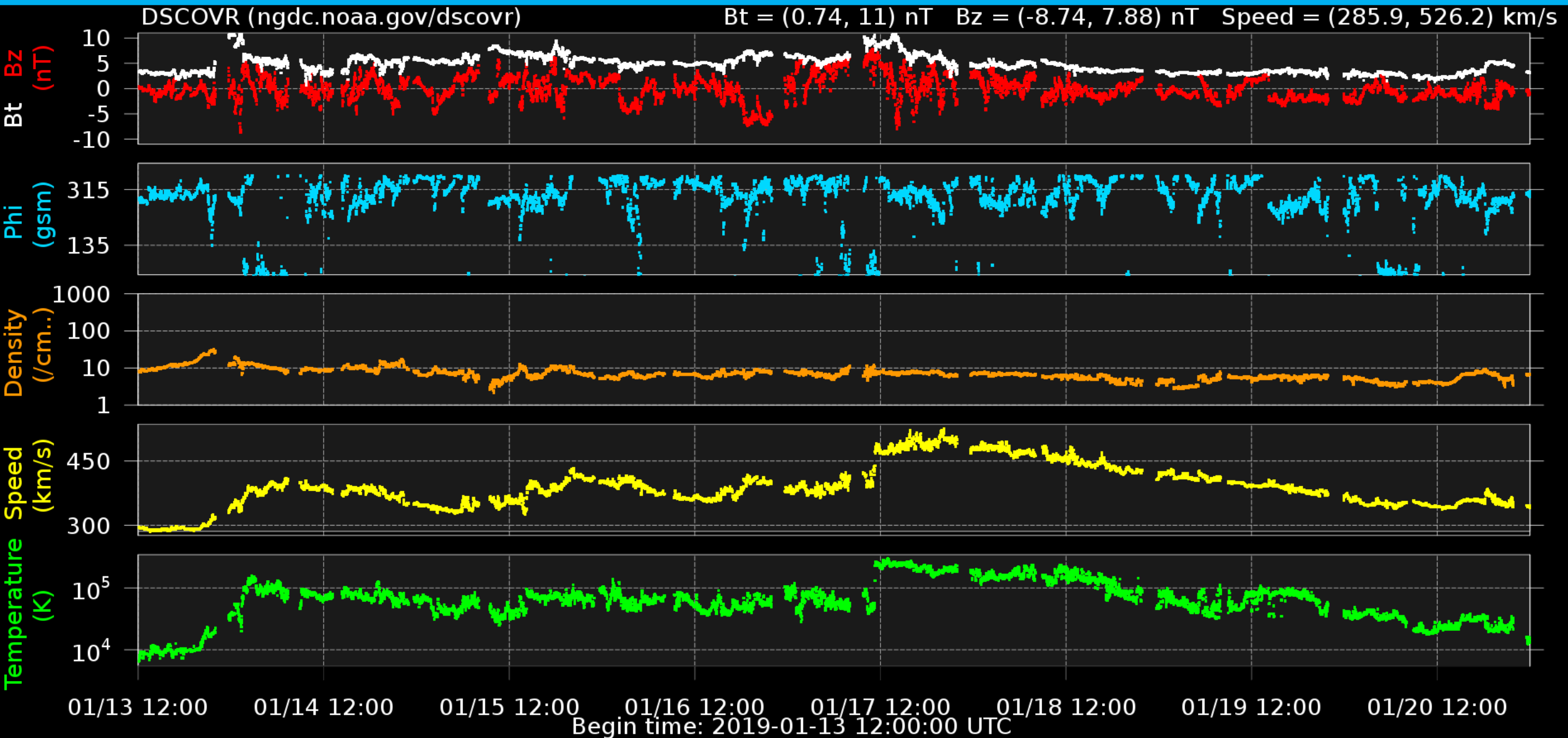
Solar Wind and Geomagnetic Activity



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

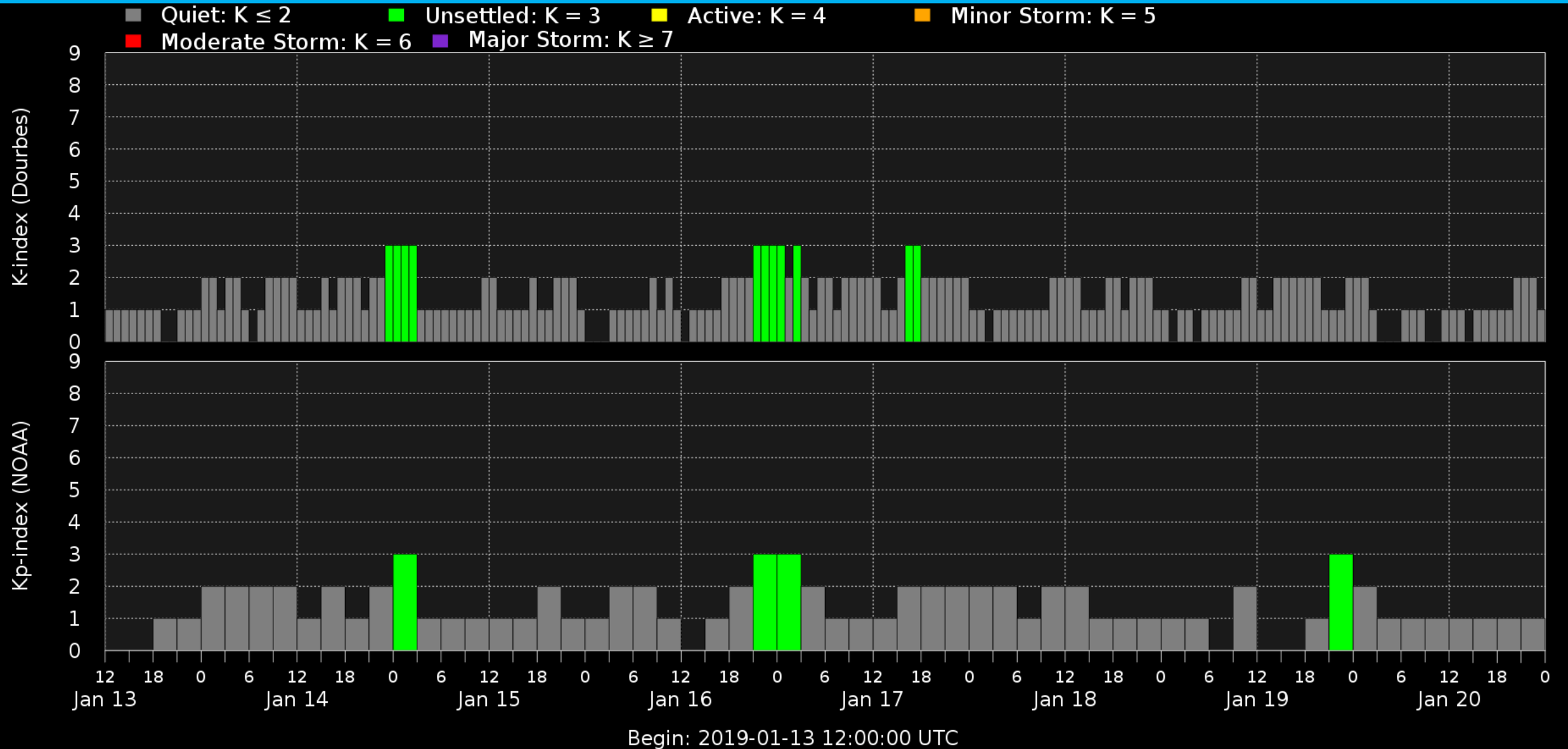
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



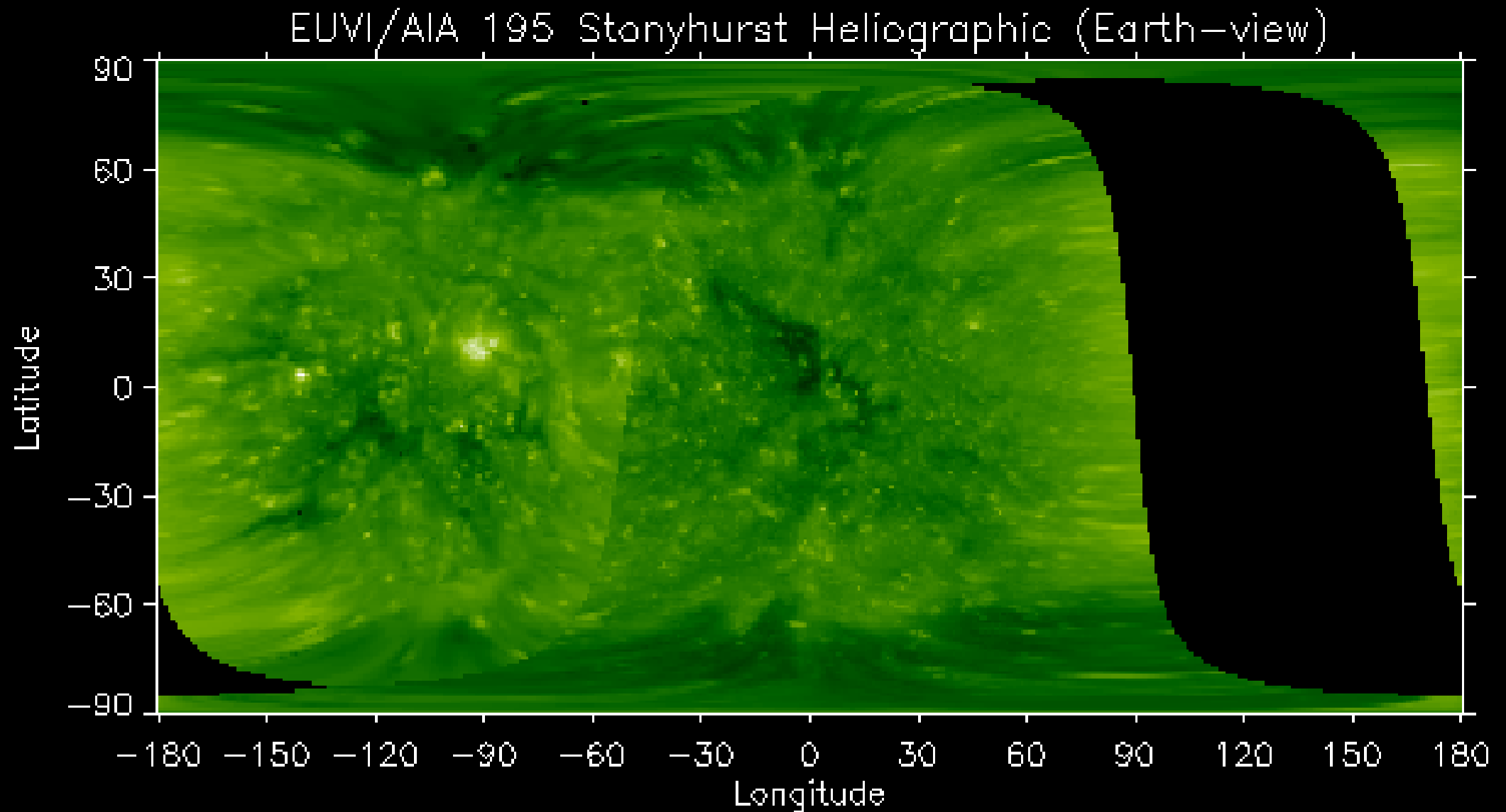
Outlook



Royal Observatory
of Belgium

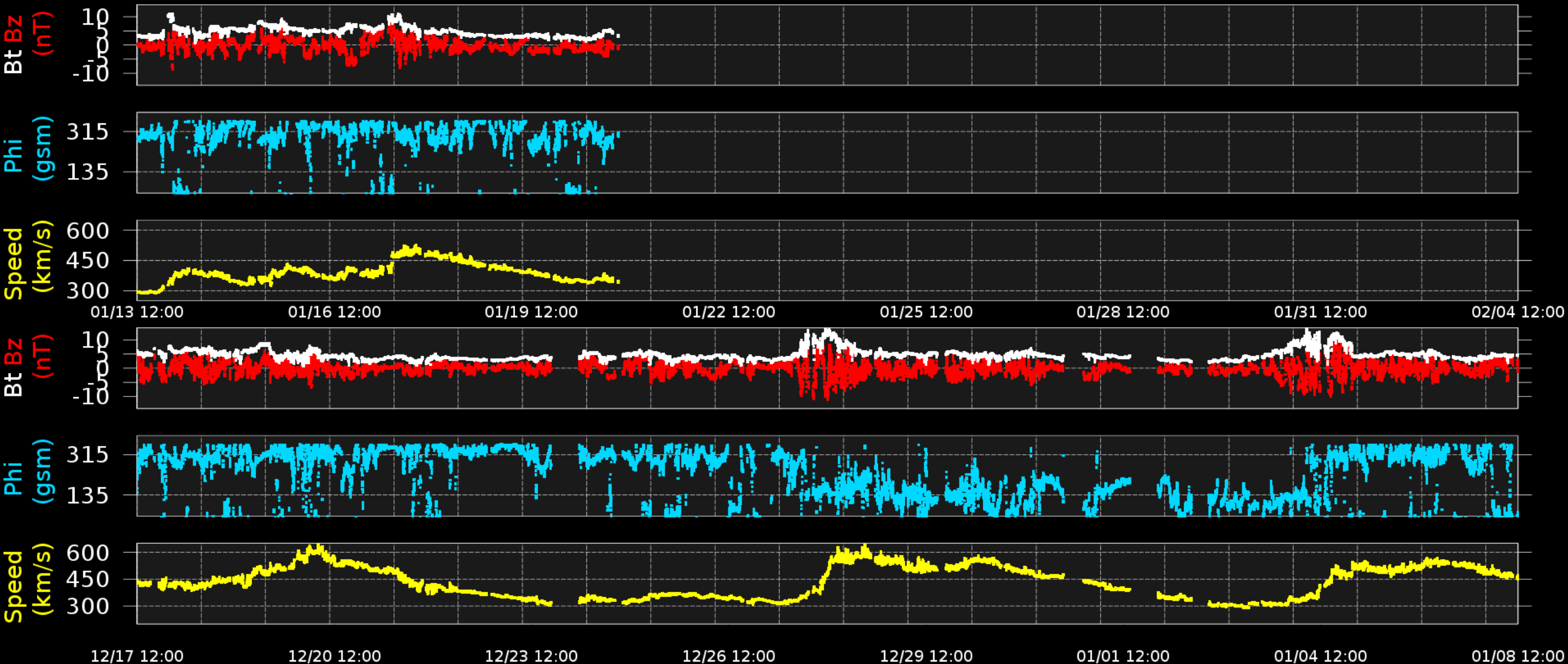
Solar Influences
Data analysis Centre
www.sidc.be

Outlook: Solar activity



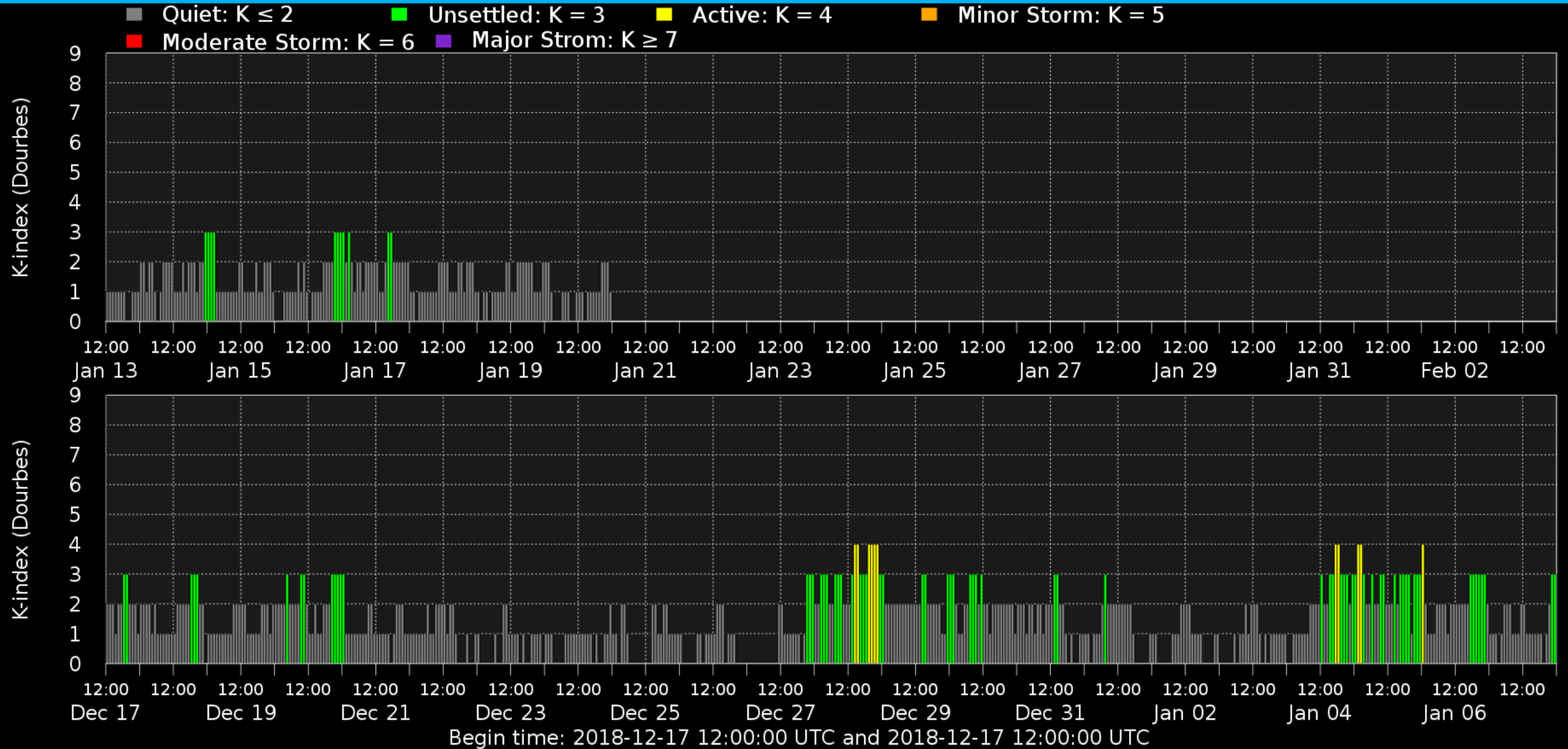
Outlook: Solar wind

DSCOVR (ngdc.noaa.gov/dscovr)



Begin time: 2018-12-17 12:00:00 UTC

Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

Or visit us at www.sidc.be



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be