

SIDC Space Weather briefing

January 15-21, 2018

SIDC forecaster team

Solar Influences
Data analysis Centre
www.sidc.be



Royal Observatory
of Belgium

M. J. WEST ☀️📅 22 JAN - 2018

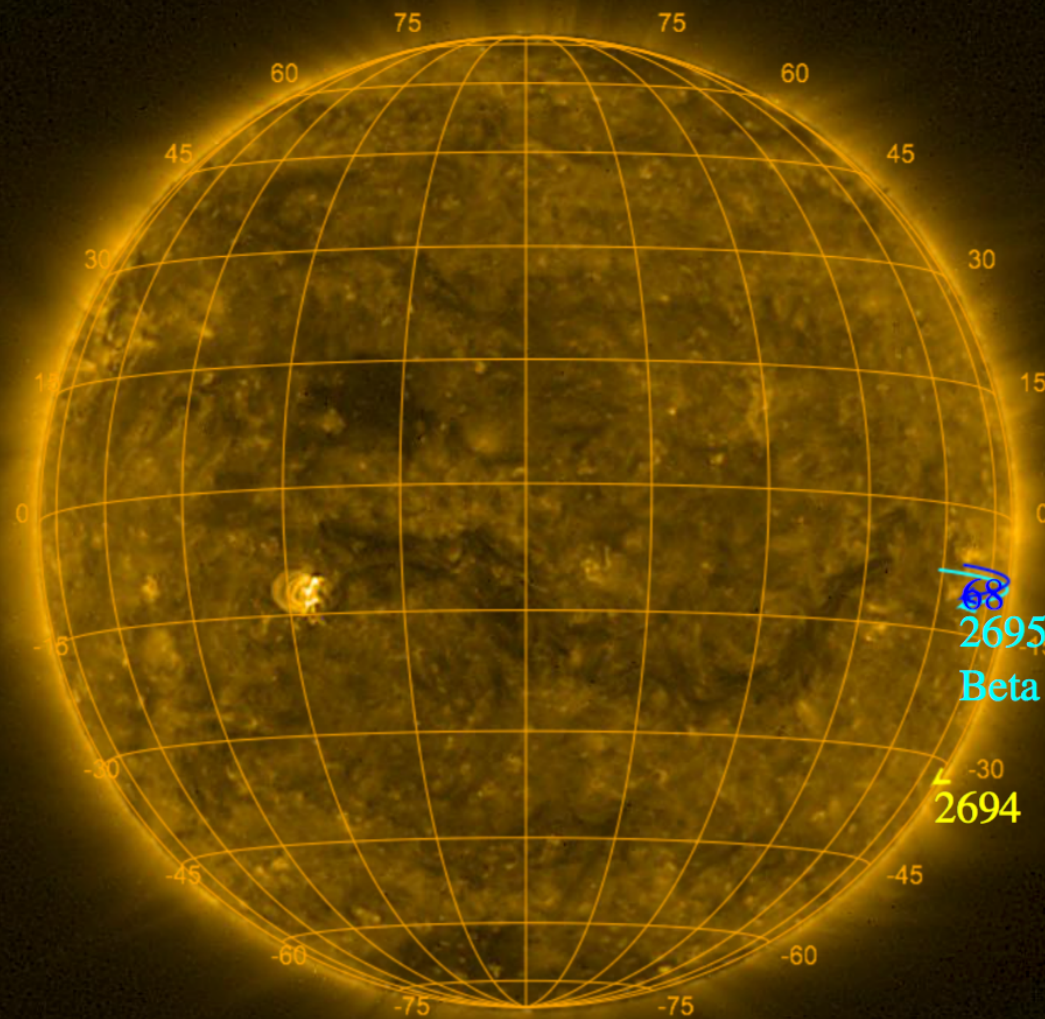
WEEKLY FORECASTING BRIEFING

15-JAN-2018 ☀️📏 SWAP 174

BEGINNING OF THE WEEK

Catania sunspot groups
2018-01-12 10:30:00

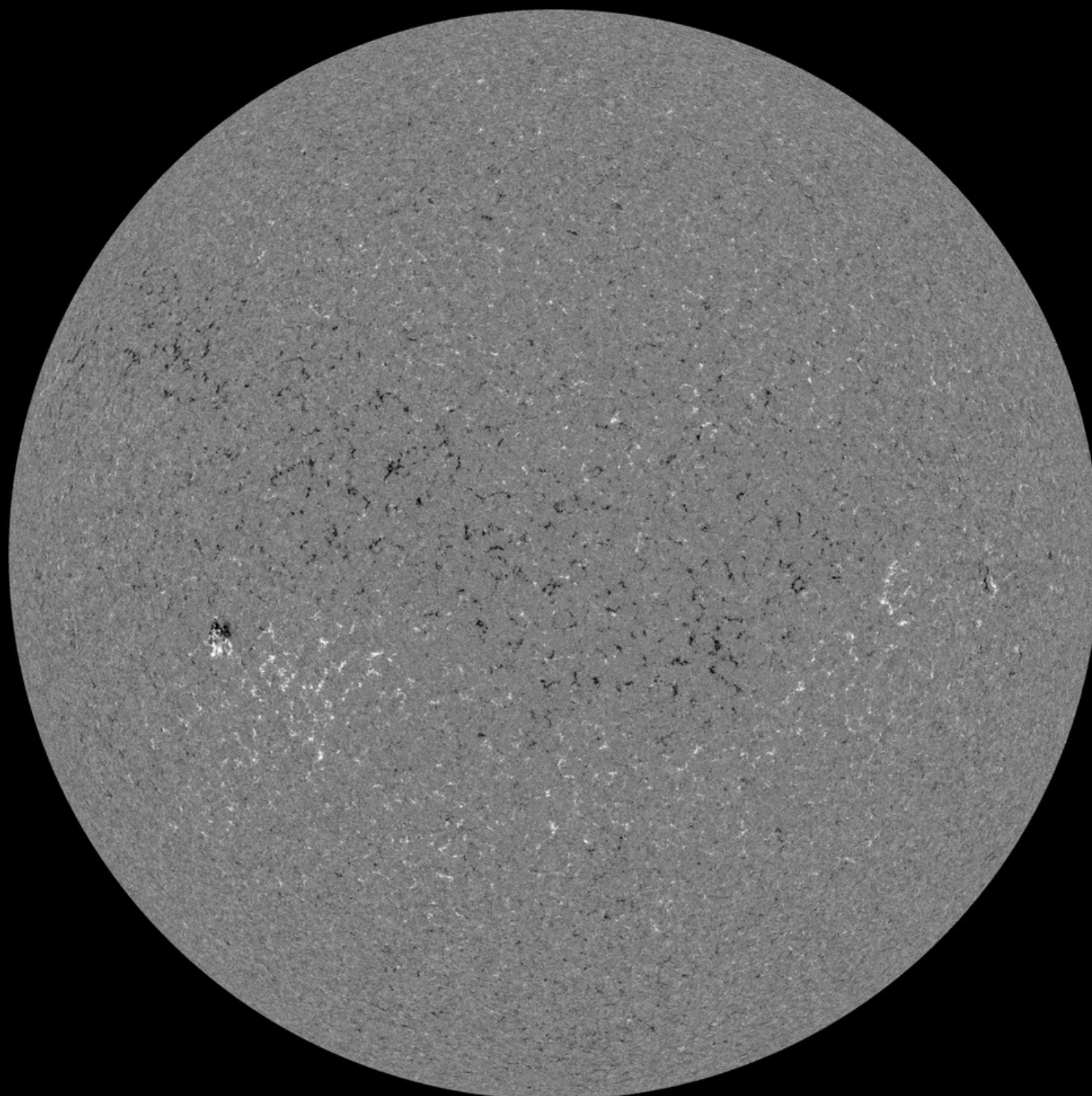
NOAA AR/sunspot
NOAA Halpha plage
NOAA expected region
2018-01-12 00:30:00



PROBA2/SWAP 17.4nm
2018-01-15T20:57:00.693

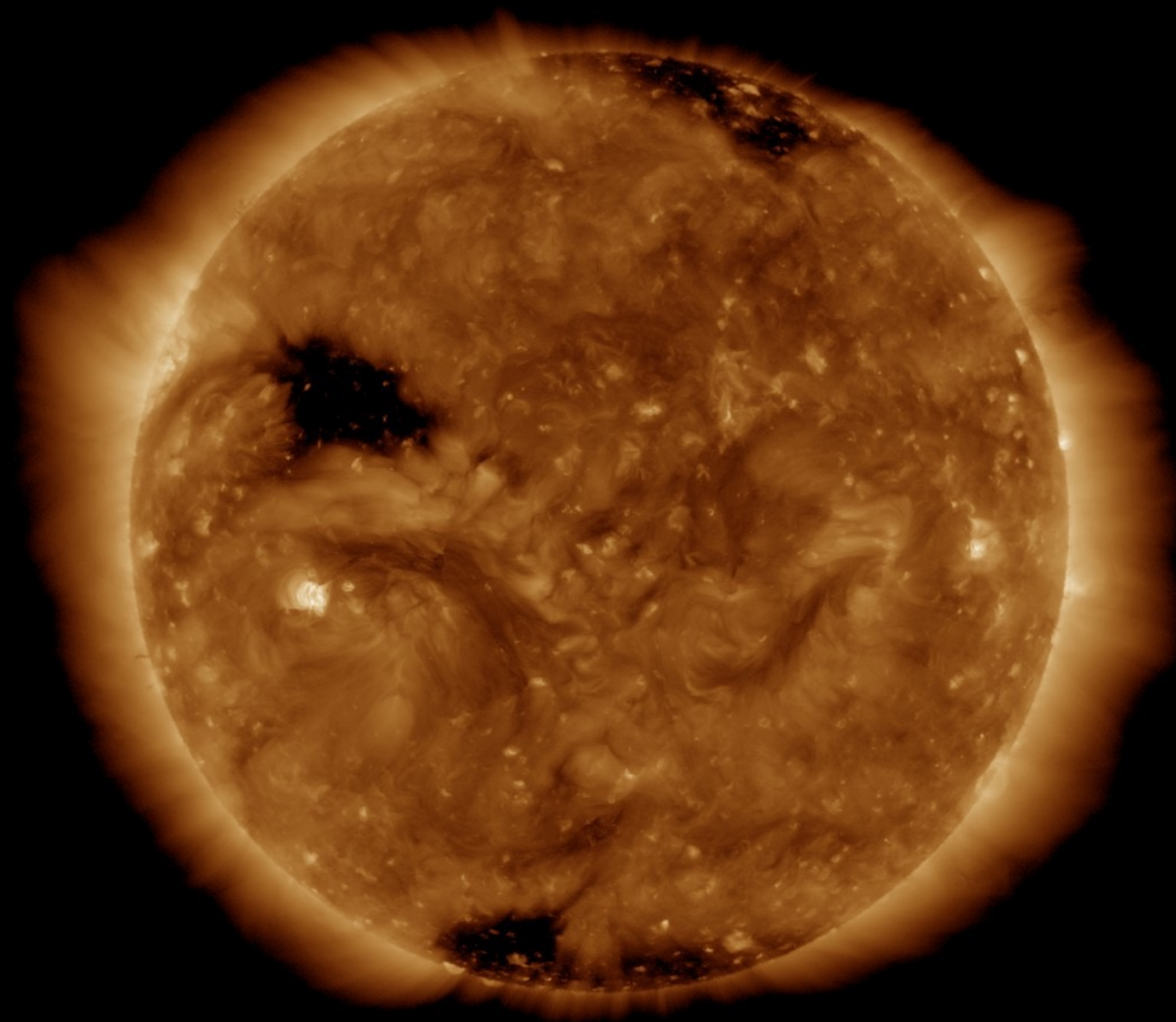
15-JAN-2018 ☀️ SDO HMI

BEGINNING OF THE WEEK



15-JAN-2018 ☼☐ SDO AIA 193Å

BEGINNING OF THE WEEK



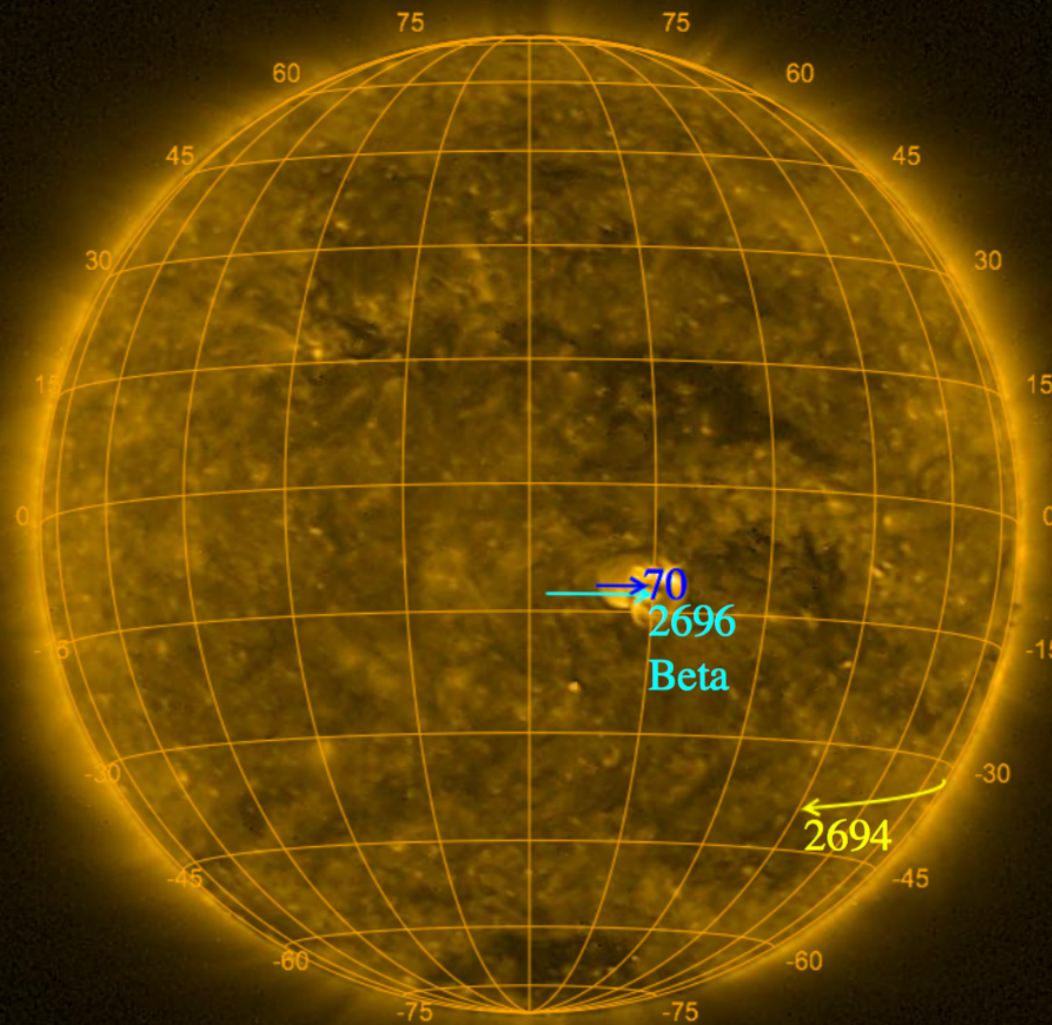
SDO/AIA 193 2018-01-15 00:10:53 UT

18-JAN-2018 ☀️ SWAP 174

MIDDLE OF THE WEEK

Catania sunspot groups
2018-01-18 11:30:00

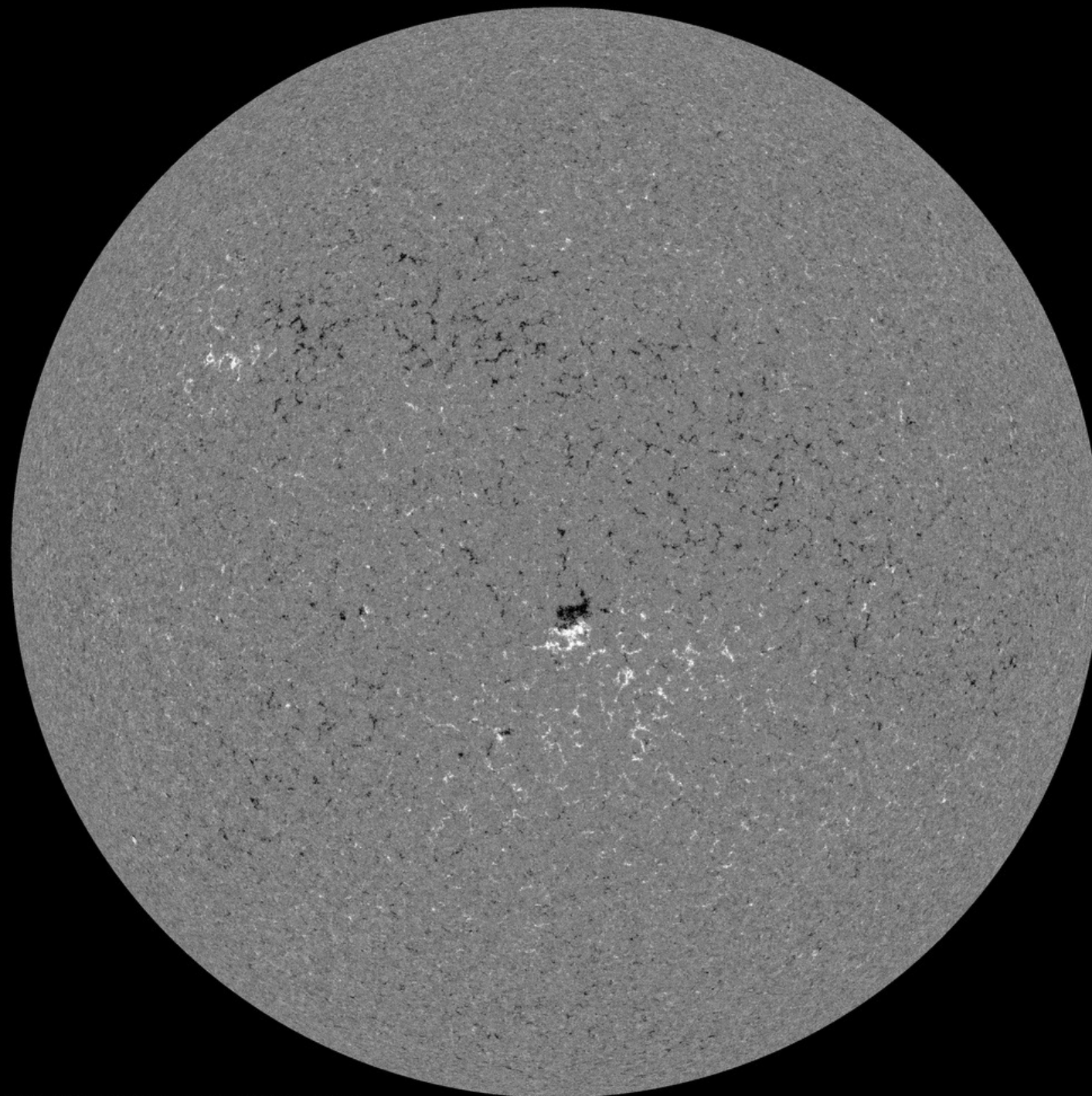
NOAA AR/sunspot
NOAA Halpha plage
NOAA expected region
2018-01-18 00:30:00



PROBA2/SWAP 17.4nm
2018-01-18T21:12:18.059

18-JAN-2018 ☀️☐ SDO HMI

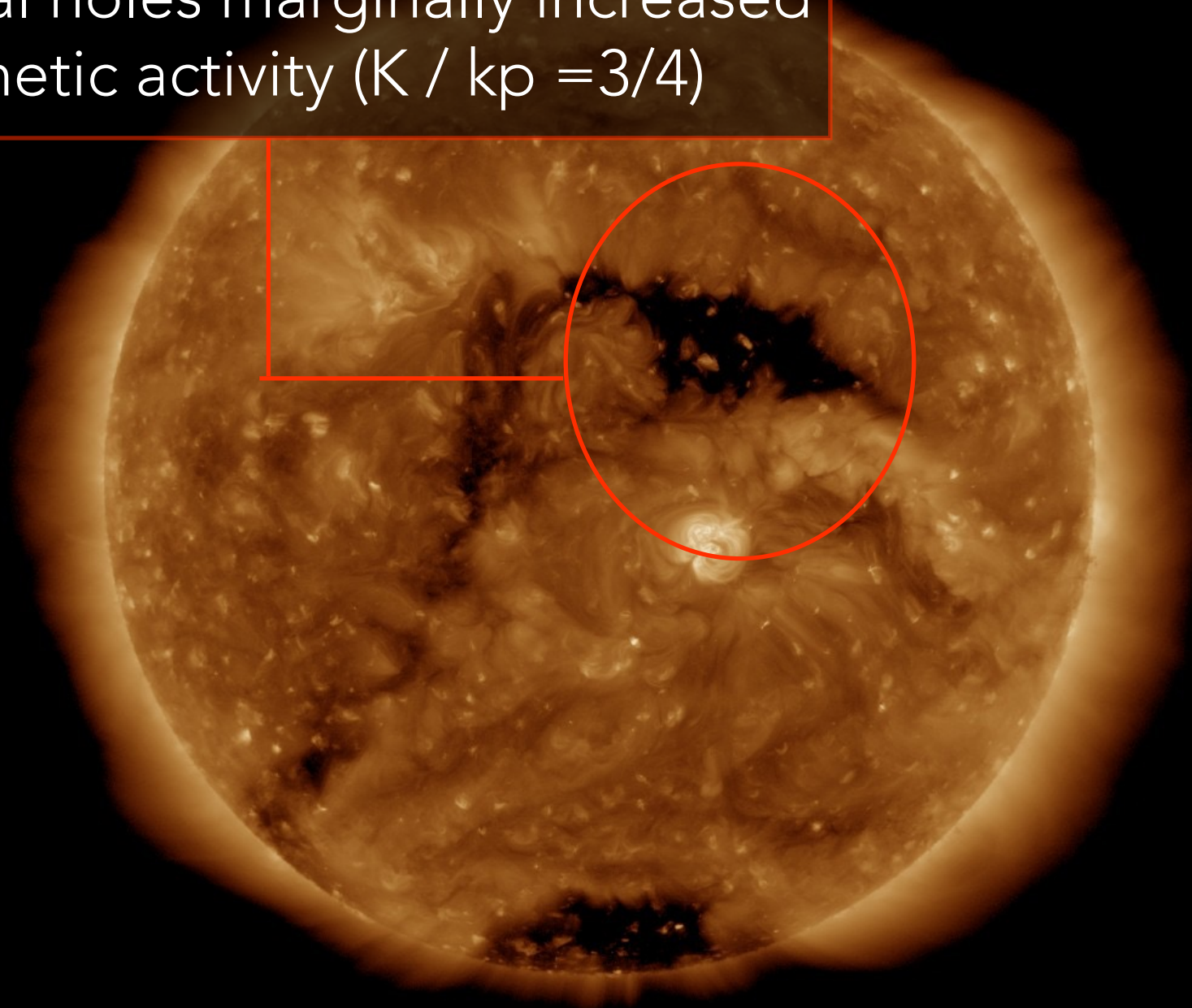
MIDDLE OF THE WEEK



18-JAN-2018 ☼☐ SDO AIA 193Å

MIDDLE OF THE WEEK

Small Coronal holes marginally increased
geomagnetic activity ($K / k_p = 3/4$)

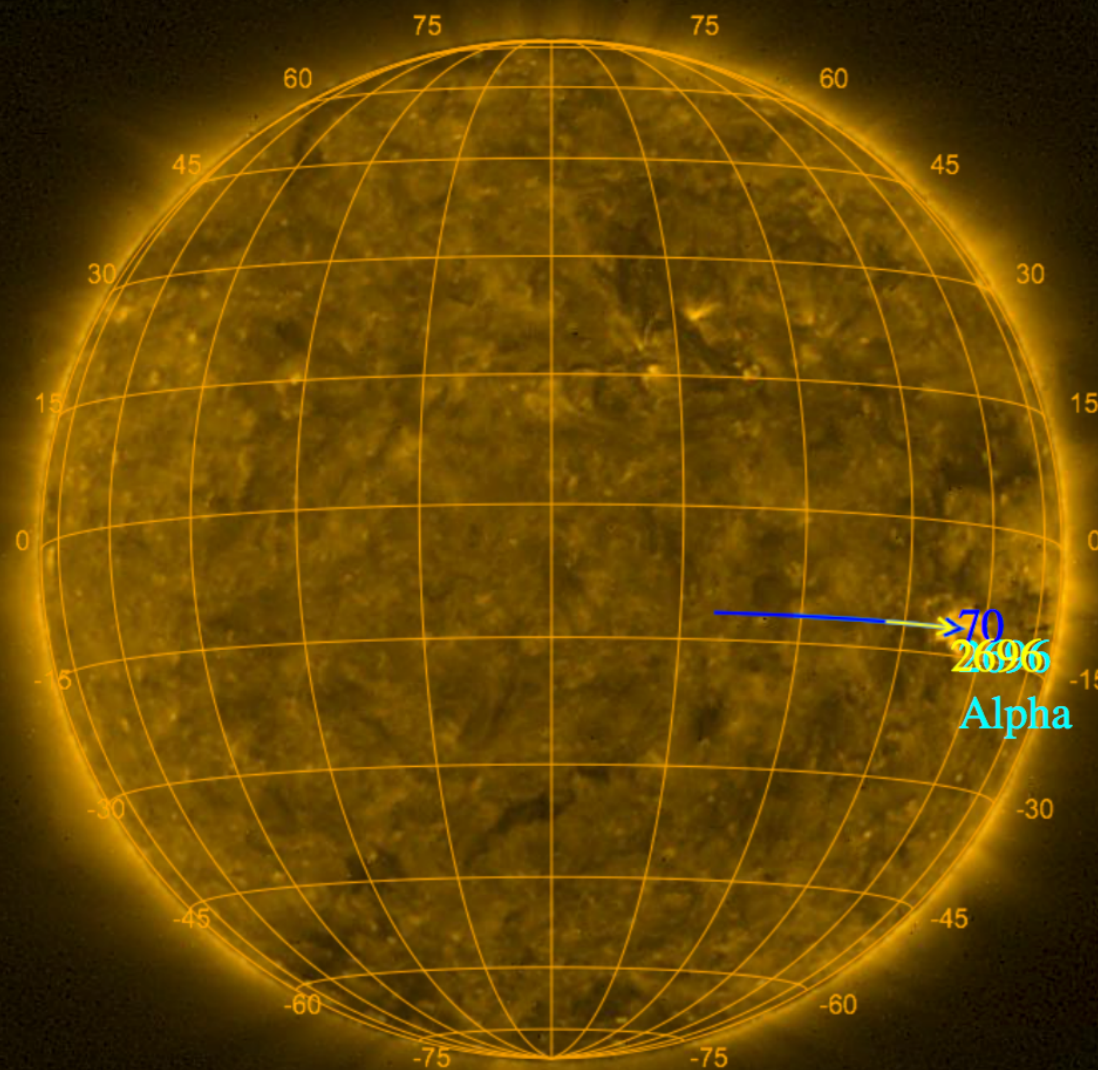


21-JAN-2018 ☀️ SWAP 174Å

END OF THE WEEK

Catania sunspot groups
2018-01-19 08:06:00

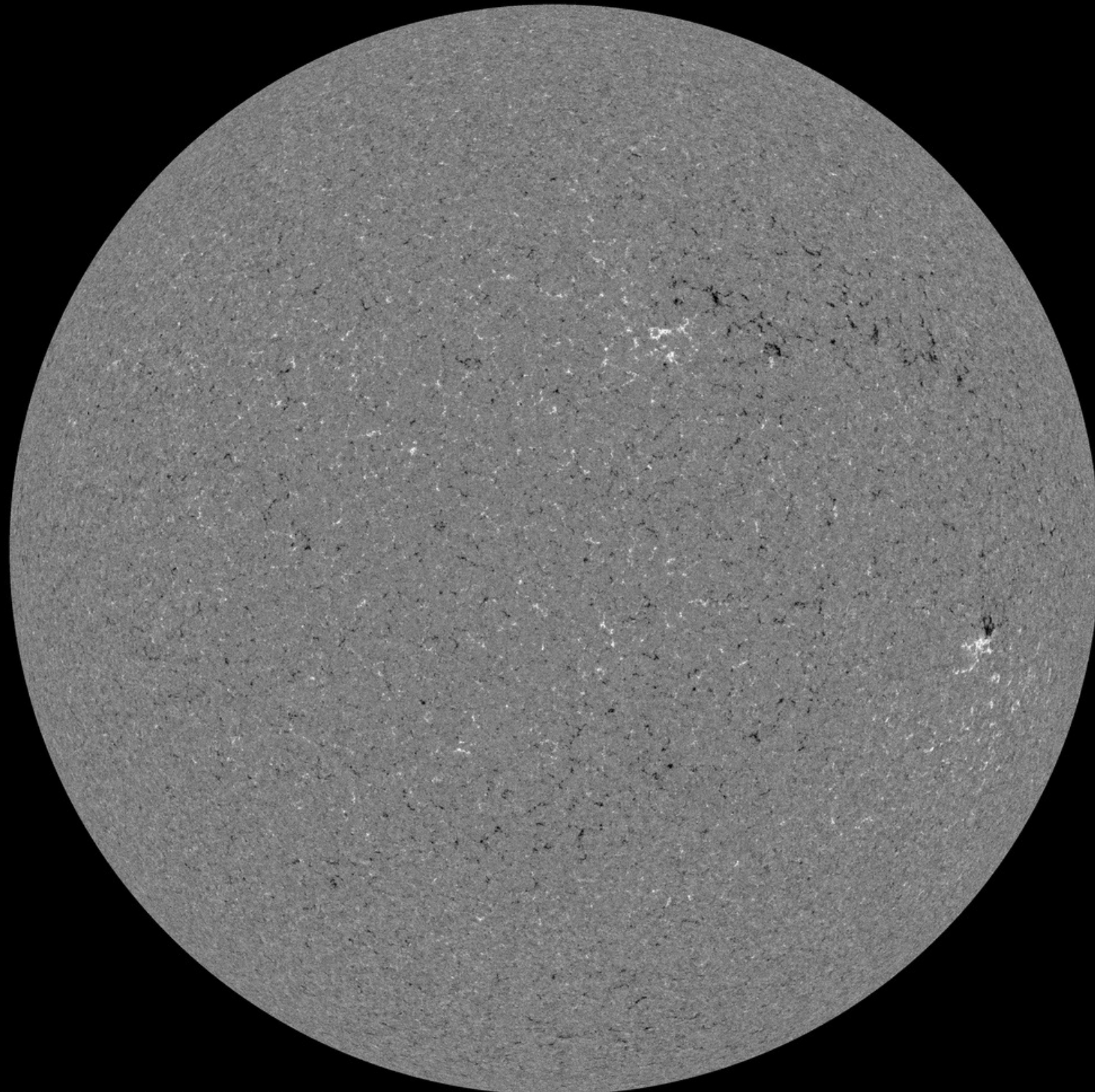
NOAA AR/sunspot
NOAA Halpha plage
NOAA expected region
2018-01-20 00:30:00



PROBA2/SWAP 17.4nm
2018-01-21T19:06:00.172

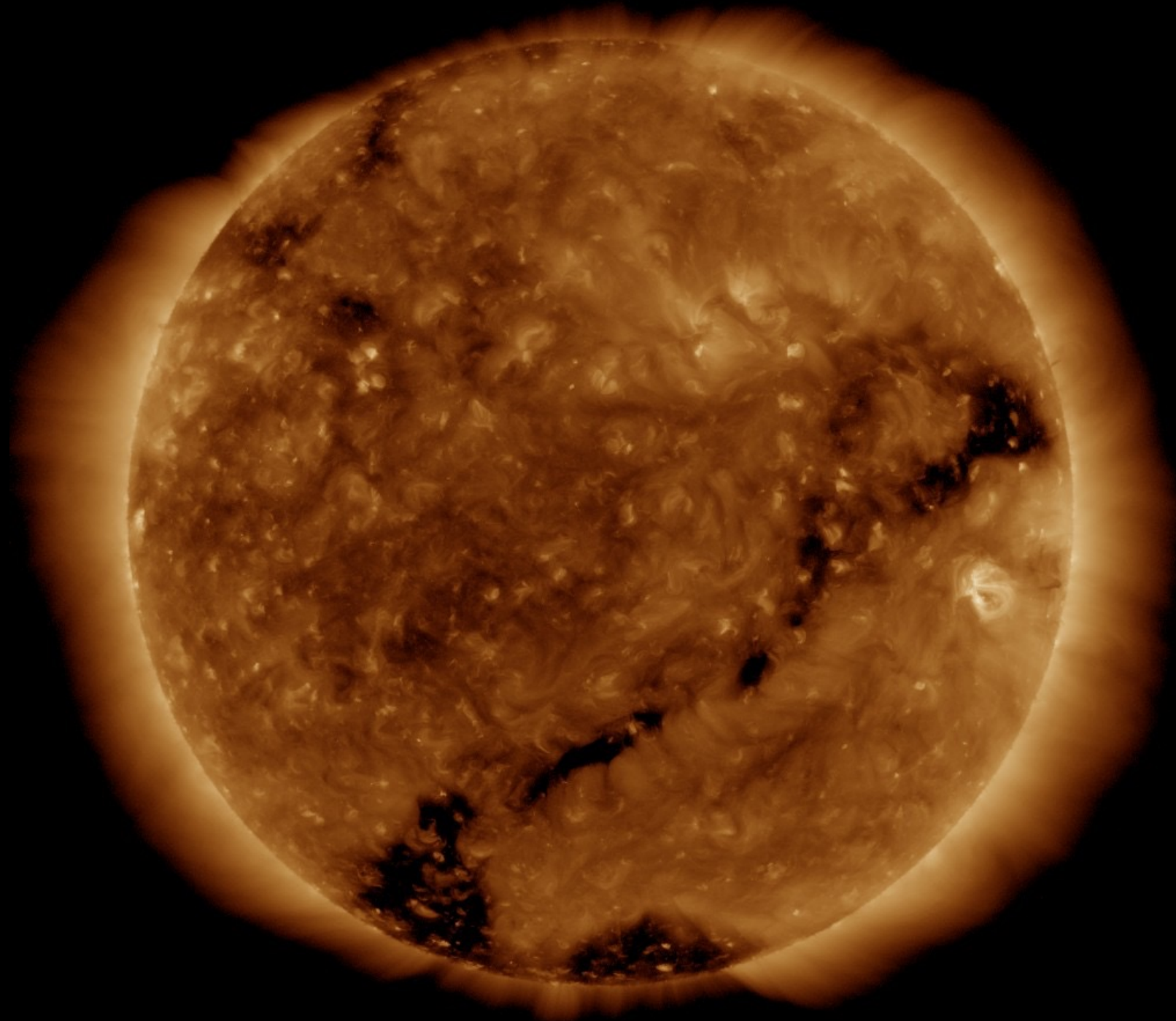
21-JAN-2018 ☀️☐ SDO HMI

END OF THE WEEK



21-JAN-2018 ☼☐ SDO AIA 193 Å

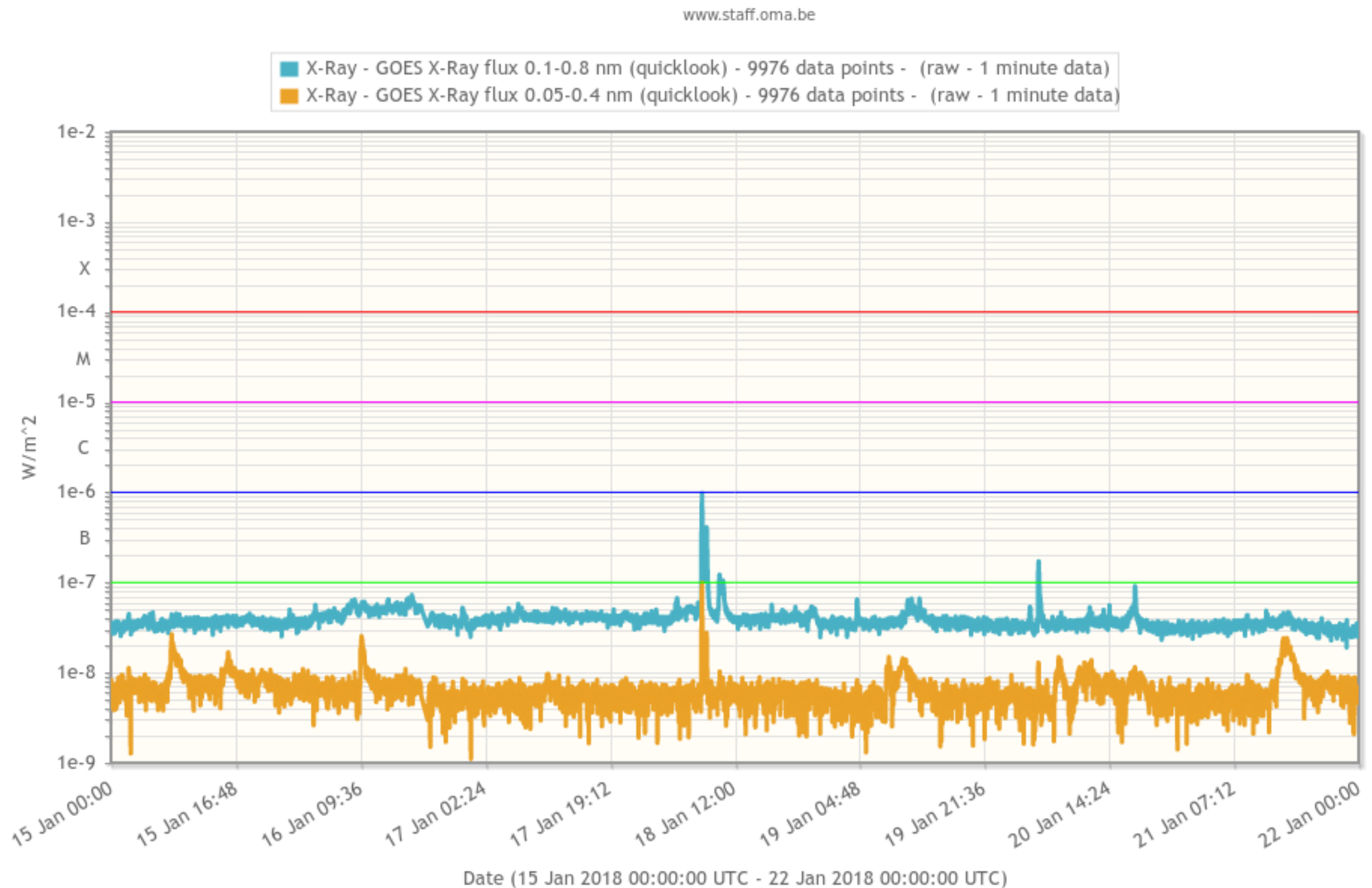
END OF THE WEEK



SDO/AIA 193 2018-01-21 21:10:41 UT

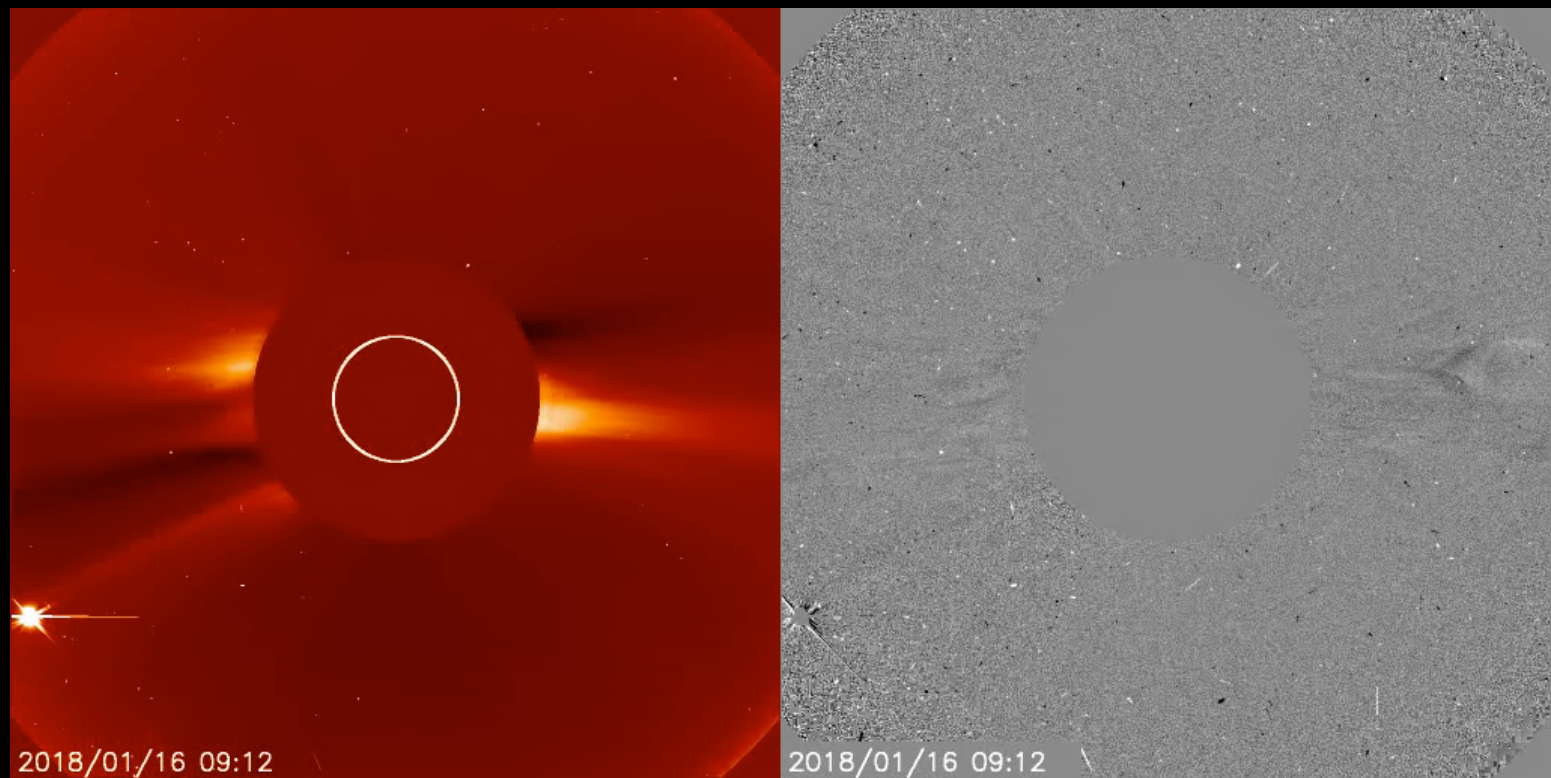
NO SIGNIFICANT FLARES LAST WEEK

FLARES



NO EARTH DIRECTED CMES

ERUPTIONS



S

W

N

E

f44
e3

d2
e1

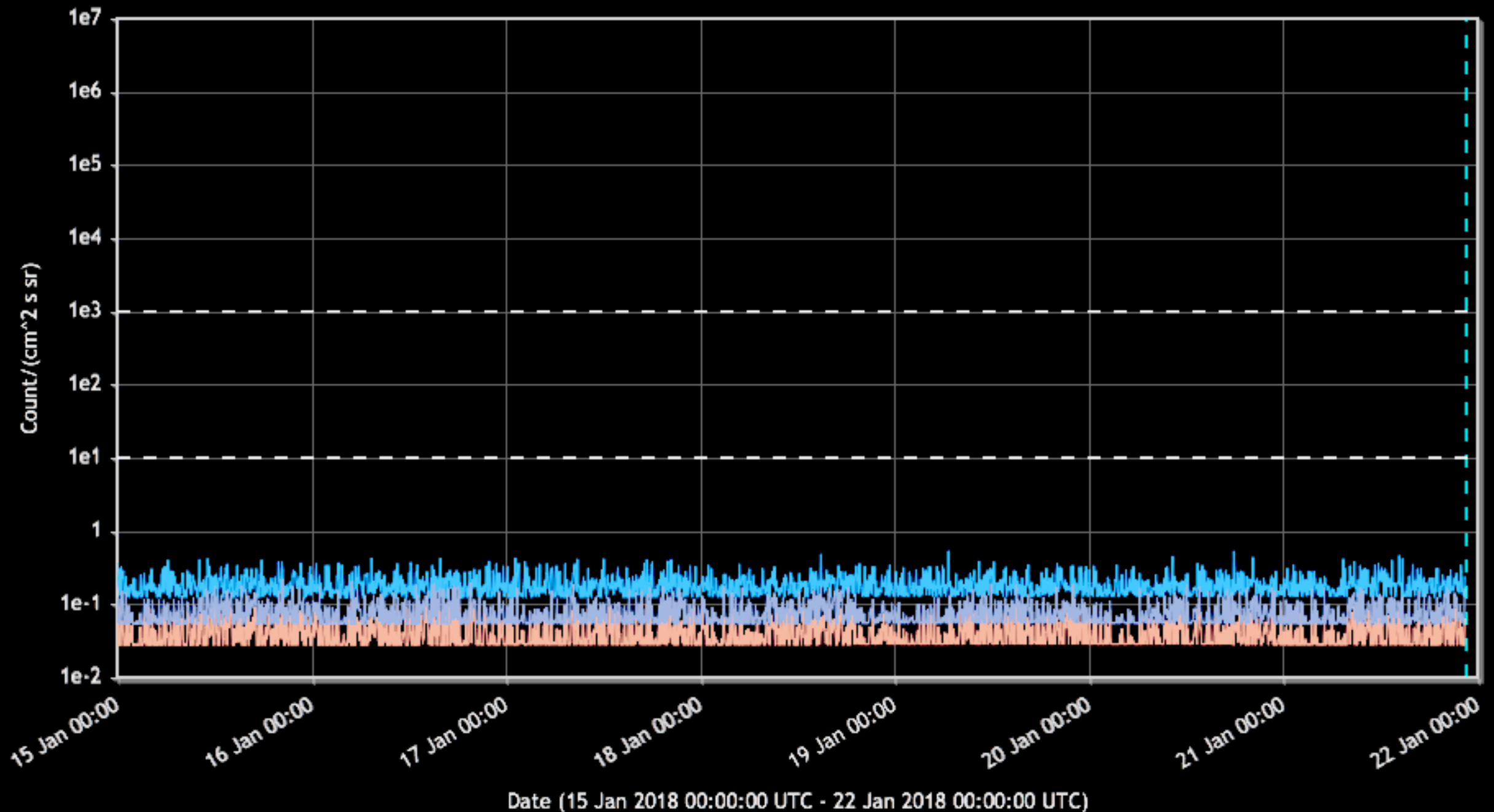
14:12 01/21
08:24 01/21
05:48 01/21
03:24 01/21
23:48 01/20
20:24 01/20
17:36 01/20
14:42 01/20
11:36 01/20
08:48 01/20
06:00 01/20
03:12 01/20
23:36 01/19
20:06 01/19
17:24 01/19
14:12 01/19
10:48 01/19
07:48 01/19
04:28 01/19
23:48 01/18
20:48 01/18
17:36 01/18
14:48 01/18
11:48 01/18
09:12 01/18
06:24 01/18
03:36 01/18
00:00 01/18
20:36 01/17
18:00 01/17
15:24 01/17
12:00 01/17
09:24 01/17
06:18 01/17
03:36 01/17
00:12 01/17
21:12 01/16
18:00 01/16
14:30 01/16
11:36 01/16
08:36 01/16
05:48 01/16
02:48 01/16
23:24 01/15
20:12 01/15
17:24 01/15
14:36 01/15
11:36 01/15
08:30 01/15
05:48 01/15
03:12 01/15
00:00 01/15

BACKGROUND LEVELS ALL WEEK

PROTONS

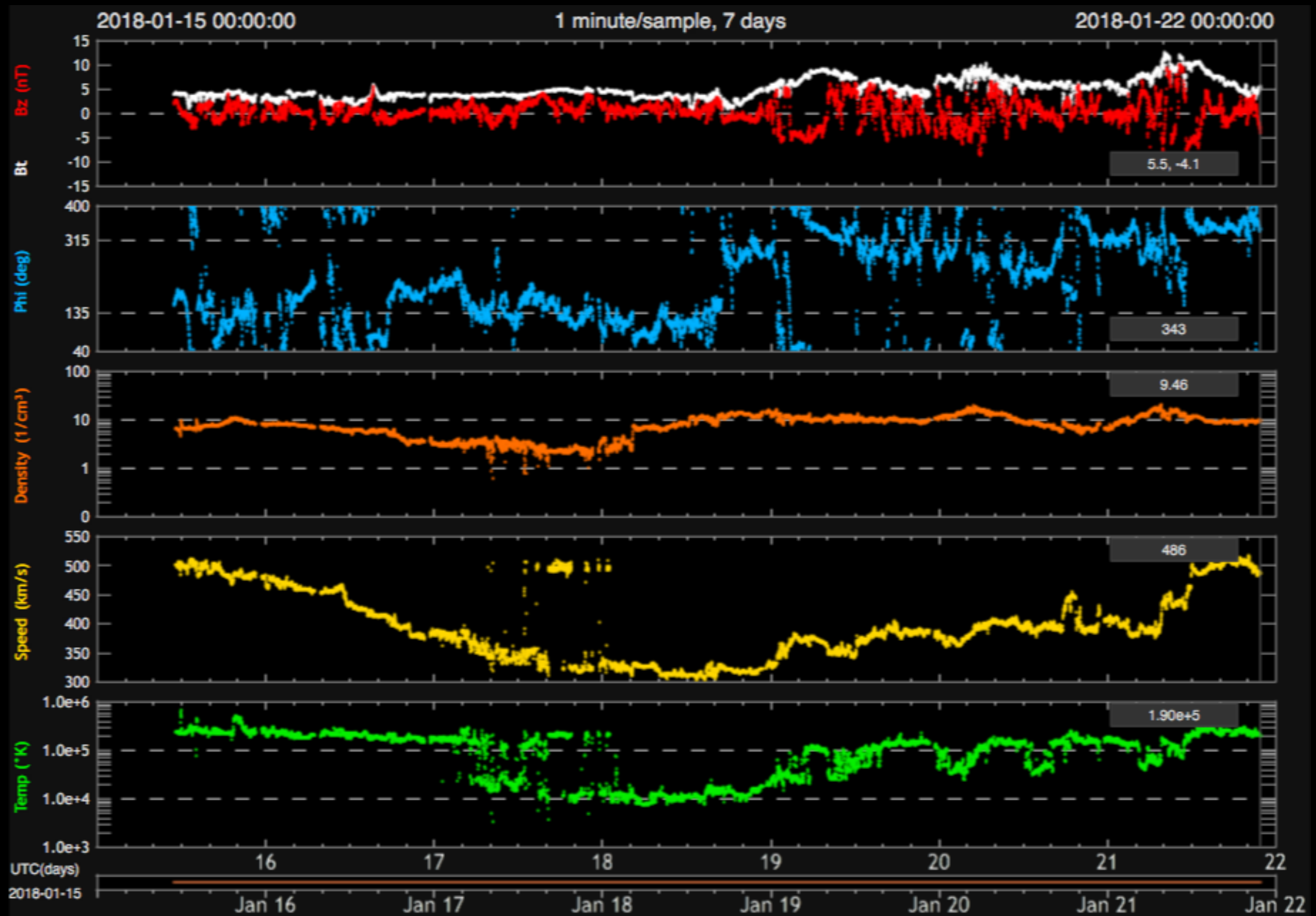
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Protons / Electrons - GOES Particles at > 100 Mev (quicklook) - 1971 data points - (raw - 5 minute data)
Protons / Electrons - GOES Particles at > 10 Mev (quicklook) - 1971 data points - (raw - 5 minute data)
Protons / Electrons - GOES Particles at > 50 Mev (quicklook) - 1971 data points - (raw - 5 minute data)



SW SPEED = 300 - 500 KM/S ☼☐ $B_T = 4-12$ nT ☼☐ $B_Z = -10-+10$ nT

SOLAR WIND

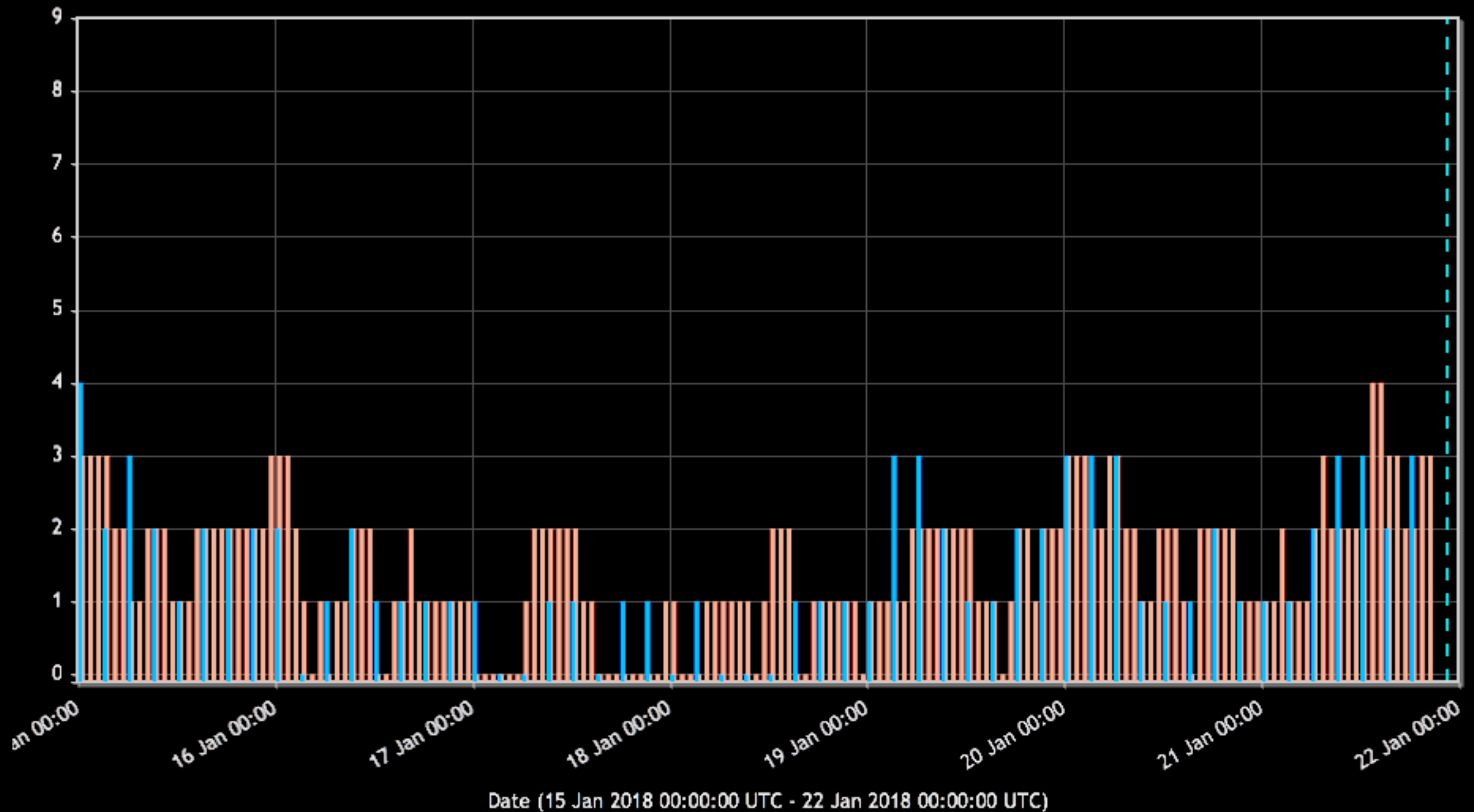


K(DOURBES):0-4 KP(NOAA):0-3 K

GEOMAGNETISM

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Geomagnetic - K (Dourbes) (quicklook) - 166 data points - (raw - 3 hour data)
Geomagnetic - Kp (NOAA) (quicklook) - 55 data points - (raw - 3 hour data)

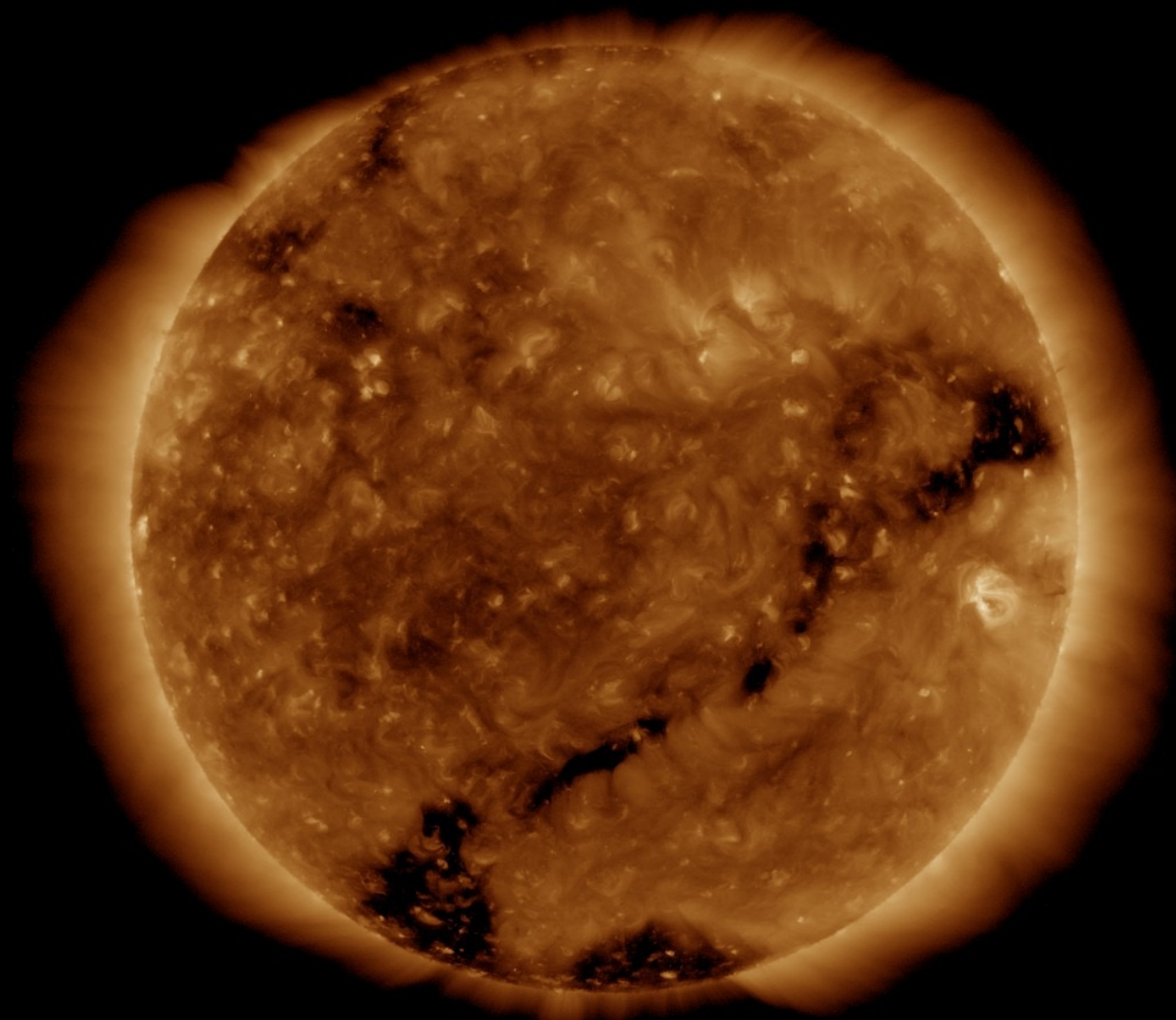
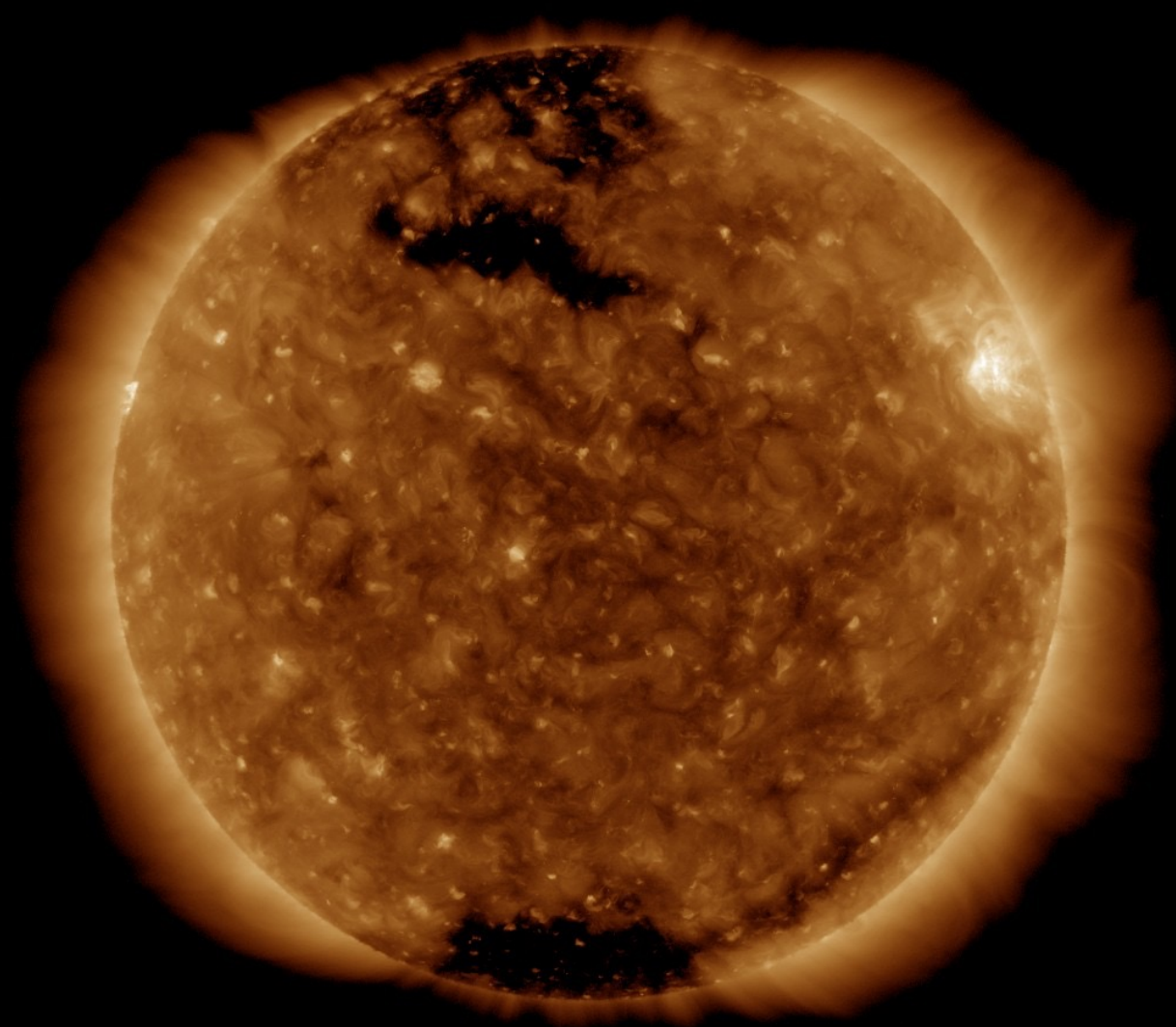


THE SUN THEN AND NOW (FLARES: B-CLASS LEVEL / K&KP UP TO 4 / PROTONS: BACKGROUND)

THE SUN NEXT WEEK

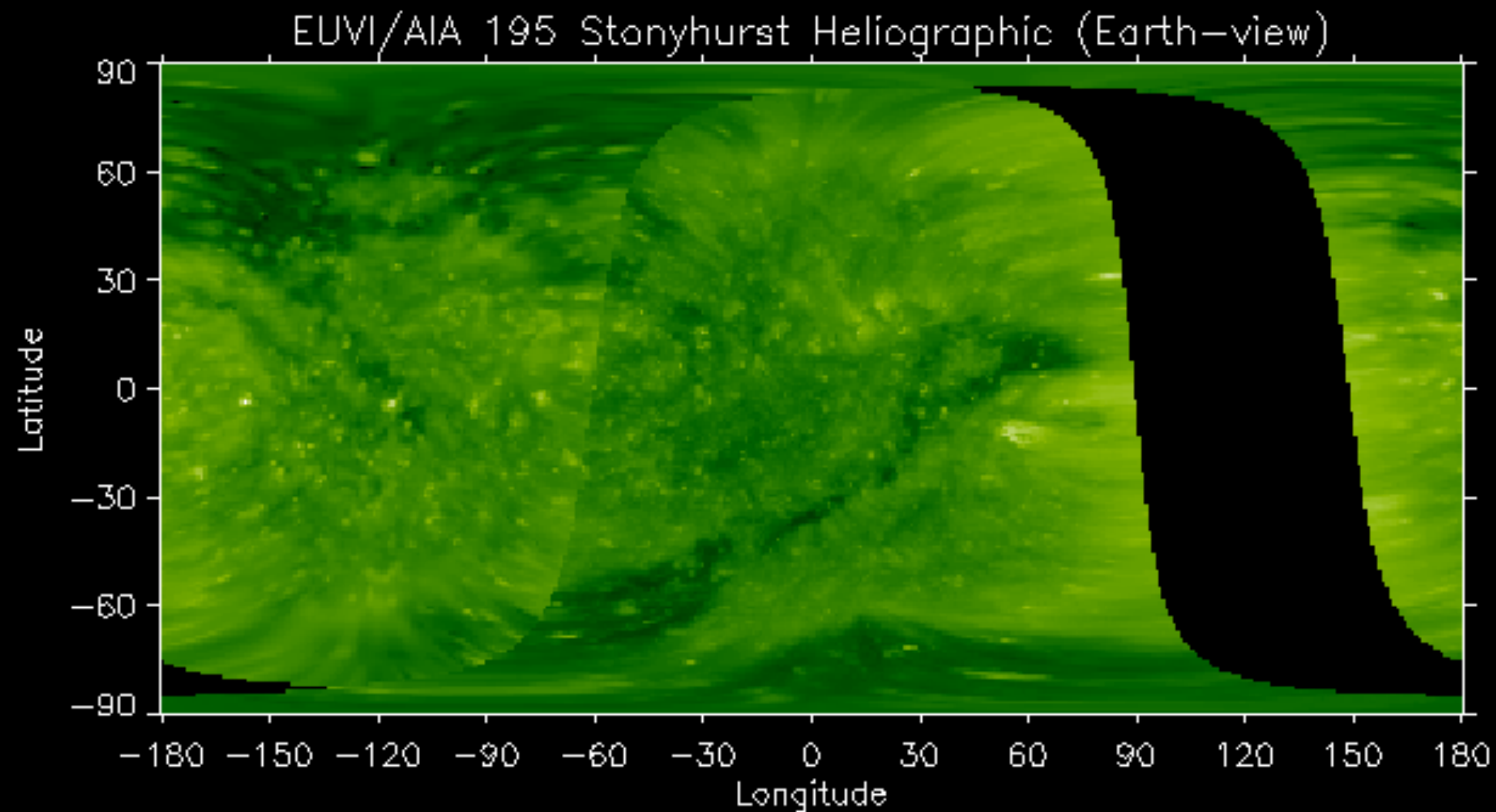
LAST CARRINGTON ROTATION
+ 4 DAYS

NOW



STEREO EUVI / SDO AIA STONYHURST HELIOGRAPHIC

THE SUN NEXT WEEK



Observation date: 2018/01/21 22:05:29

SUMMARY

- No significant flares were recorded
- There were no Earth directed CMEs.
- The greater than 10 MeV proton flux remained at background levels.
- Geo-activity was low.
- Next week should be quiet.

SIDC Space Weather briefing

See you at our next briefing!

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