

SIDC Space Weather Briefing

26 January 2020 - 02 February 2020

Yana Maneva
& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2020-01-26 12:00 UT to 2020-02-02 12:00 UT

Active regions	Catania sunspot group 28/NOAA Active Region 12757
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	No significant filaments on disc
CMEs	1 back-sided CME
Proton Events	No proton events observed

Solar wind and geomagnetic conditions from 2020-01-26 12:00 UT to 2020-02-02 12:00 UT

Coronal Holes	Negative polarity CH crossing
ICME	Away from Earth
SW Conditions	Away from Earth
K-indices	max K-index (Dourbes): 4.0 max Kp-index (NOAA): 4 on Jan 30th

All Quiet Alert: on for the whole week

Solar Activity

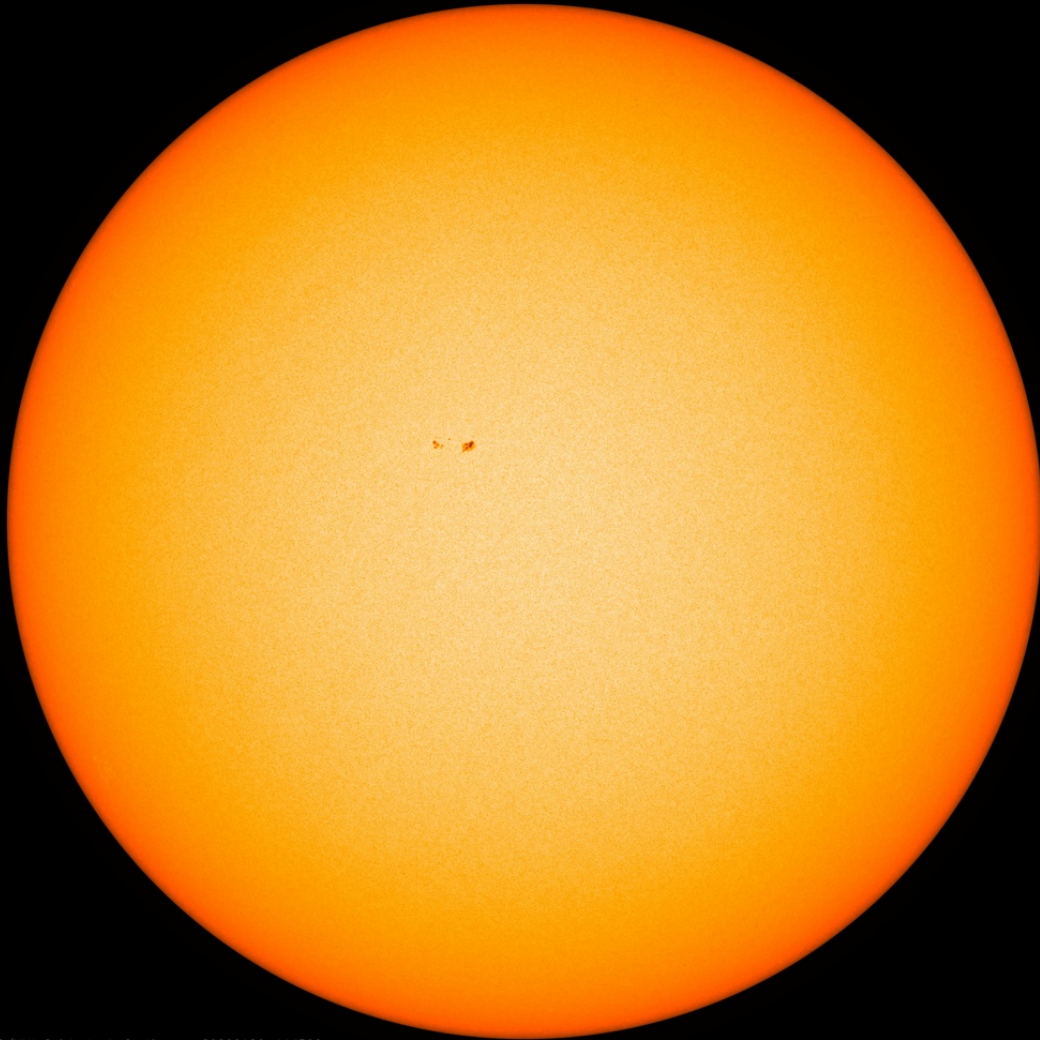


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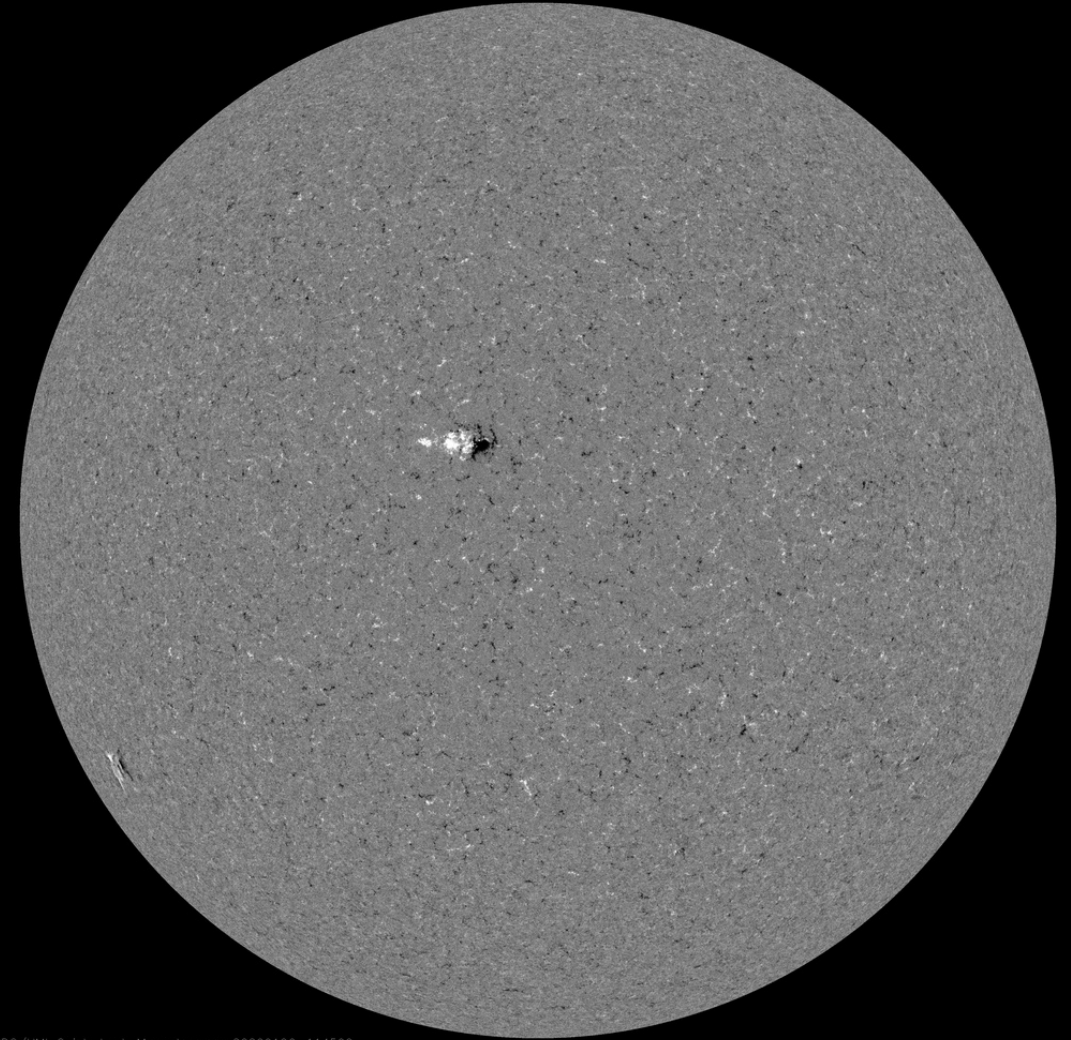
Solar active region - start of the week

SDO/HMI White Light 2020-01-26



SDO/HMI Quick-Look Continuum: 20200126_114500

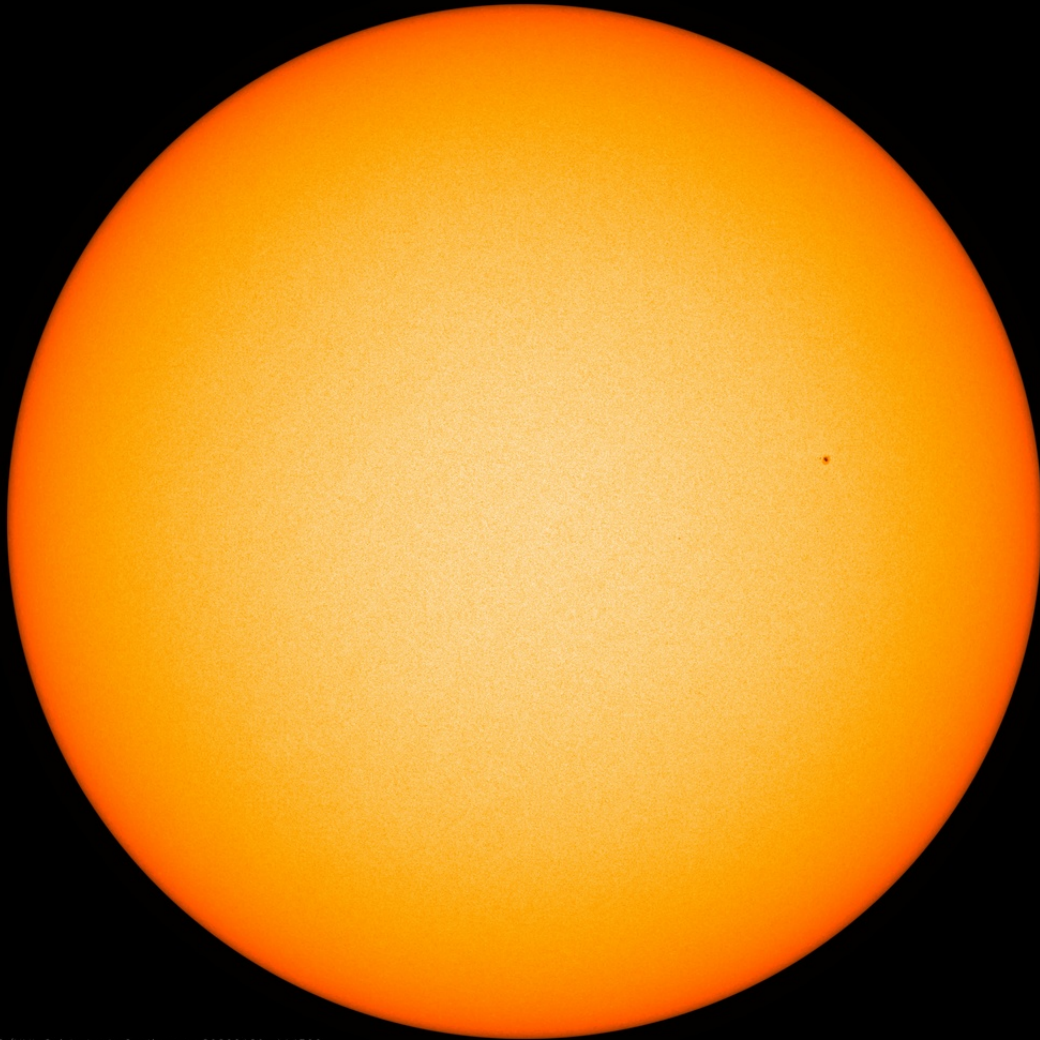
SDO/HMI Magnetogram 2020-01-26



SDO/HMI Quick-Look Magnetogram: 20200126_114500

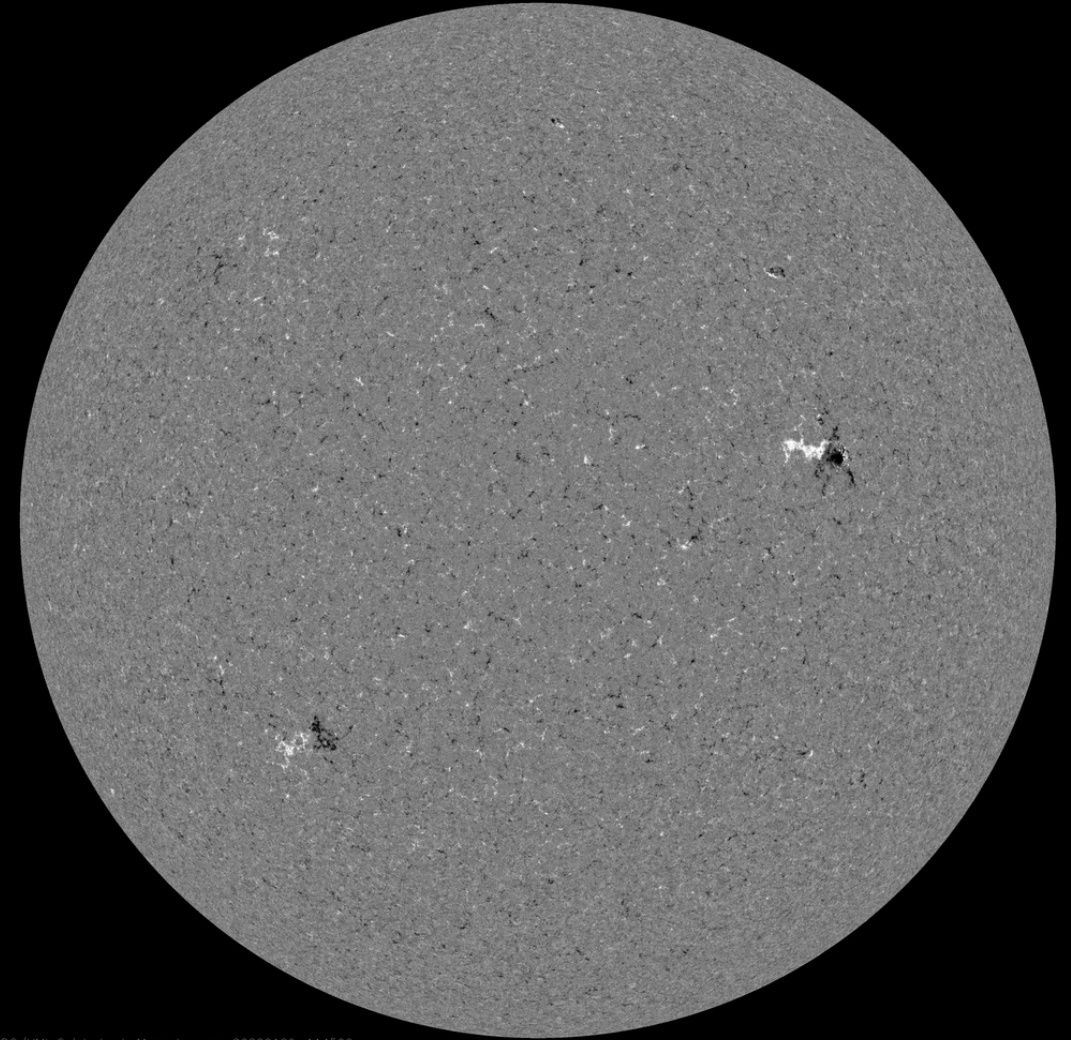
Solar active region - middle of the week

SDO/HMI White Light 2020-01-29



SDO/HMI Quick-Look Continuum: 20200129_114500

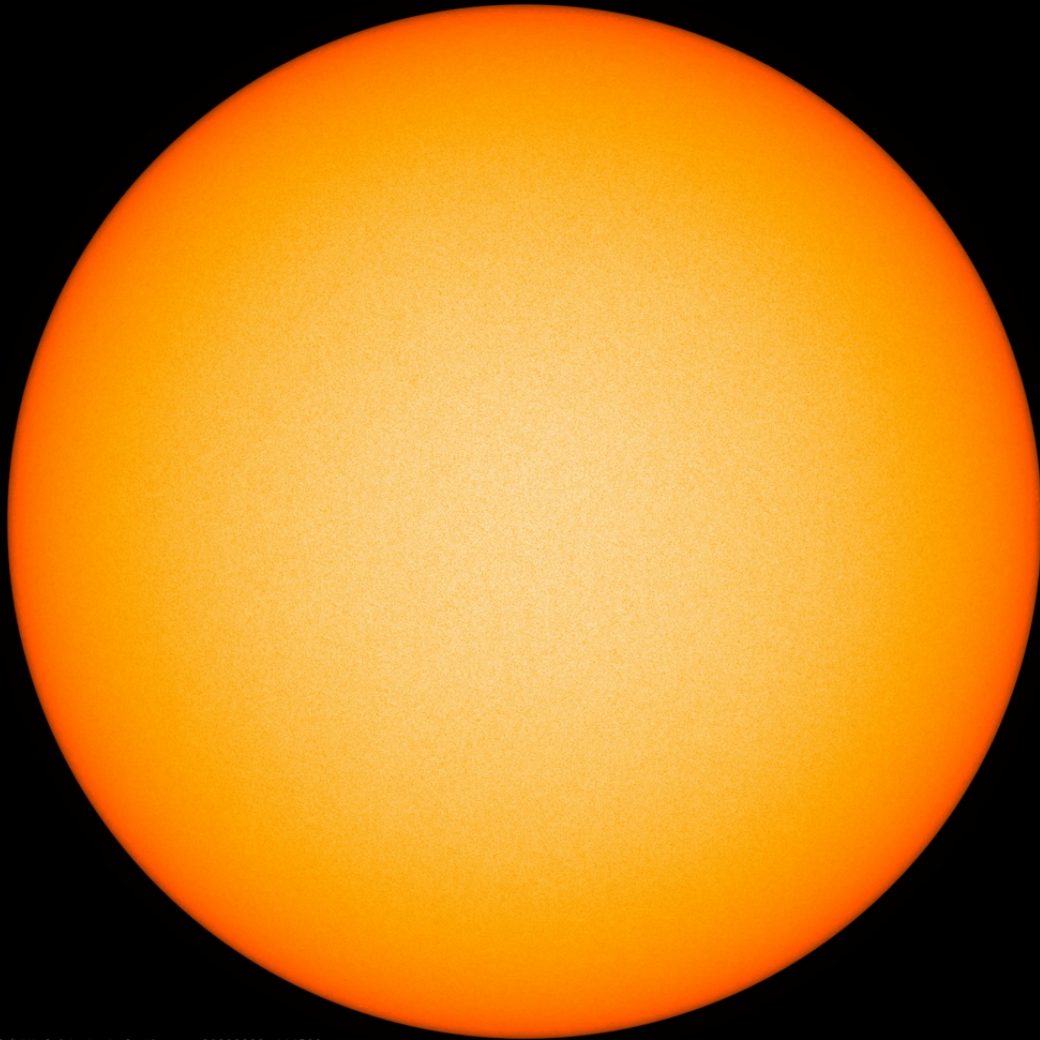
SDO/HMI Magnetogram 2020-01-29



SDO/HMI Quick-Look Magnetogram: 20200129_114500

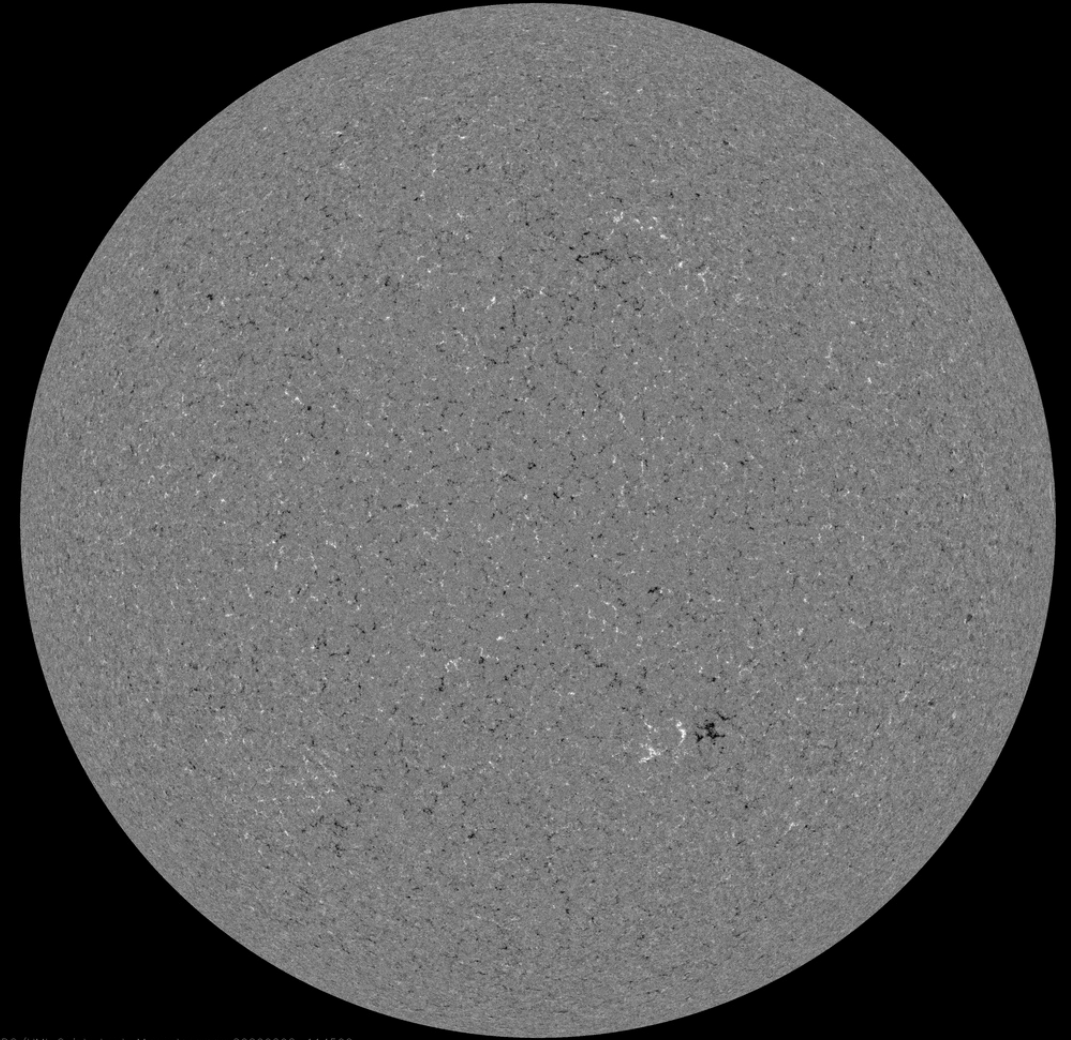
Solar active region - end of the week

SDO/HMI White Light 2020-02-02



SDO/HMI Quick-Look Continuum: 20200202_114500

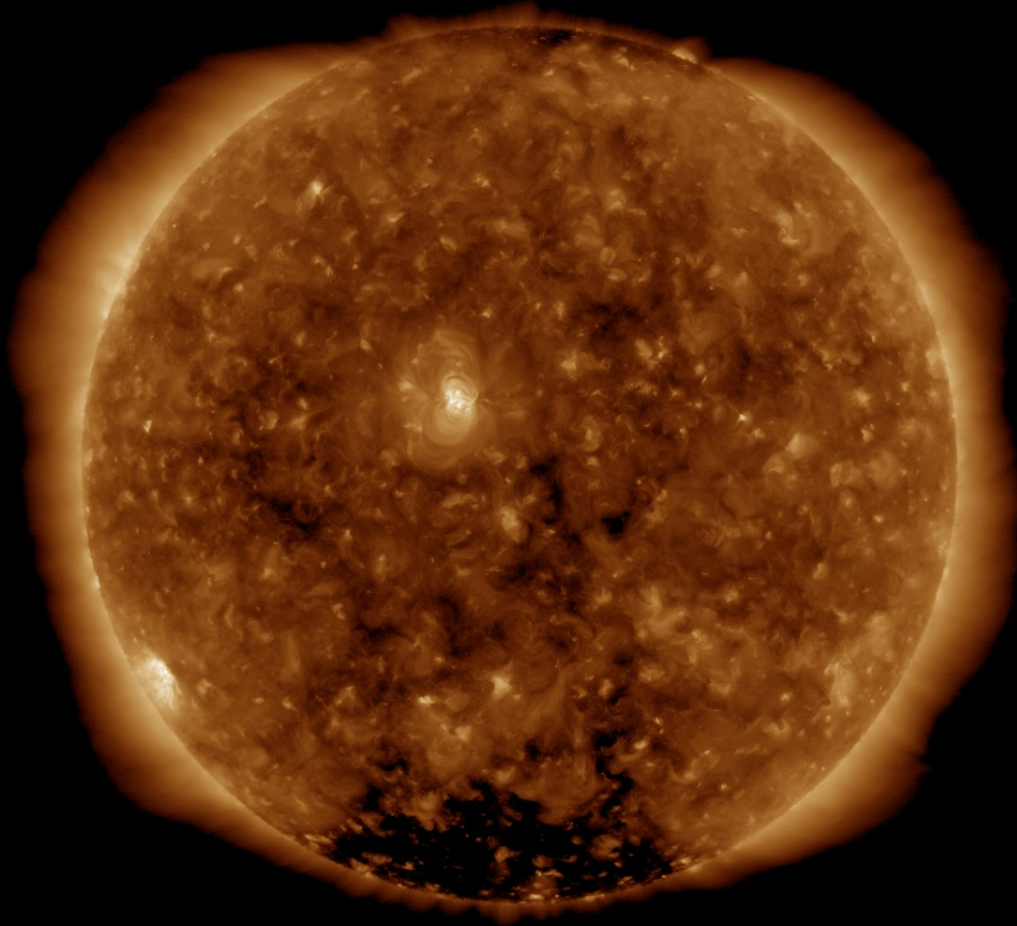
SDO/HMI Magnetogram 2020-02-02



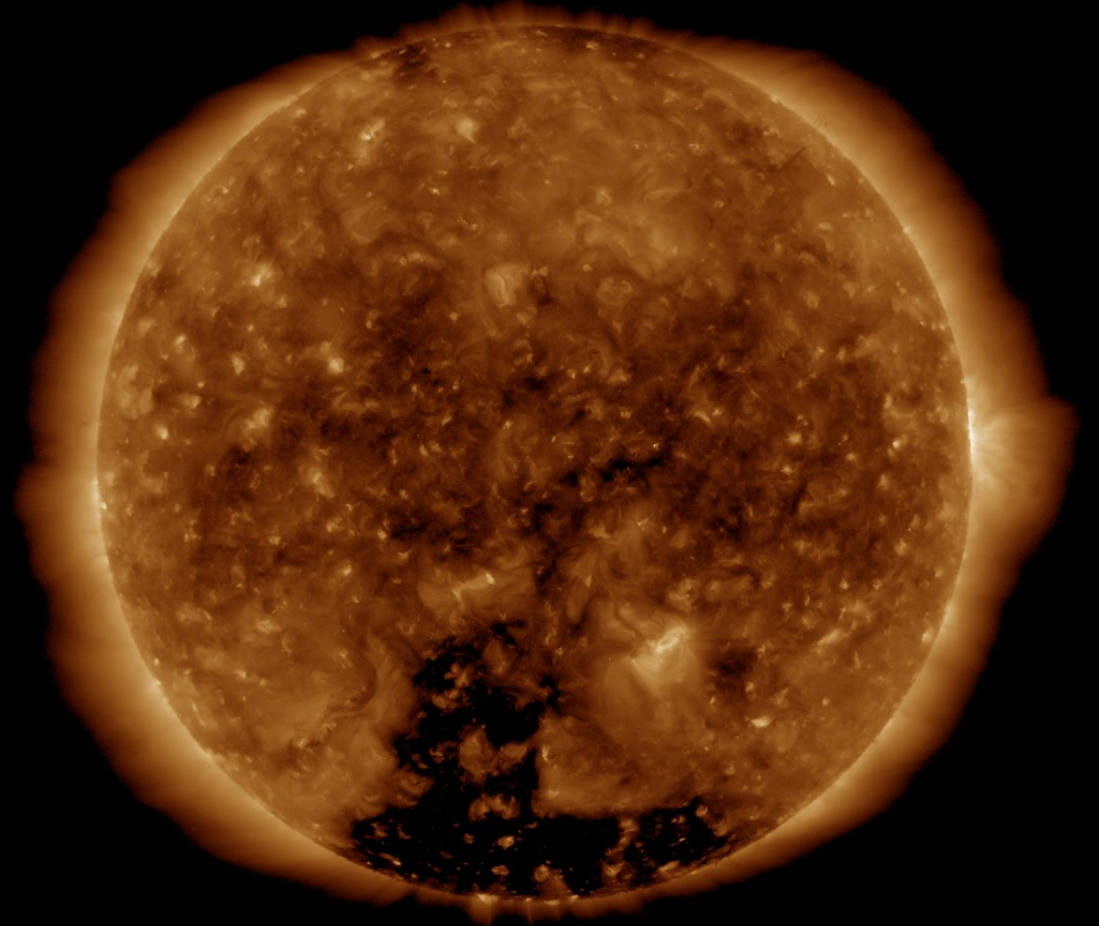
SDO/HMI Quick-Look Magnetogram: 20200202_114500

Solar active region & Coronal hole

SDO/AIA 19.3 nm 2020-01-26



SDO/AIA 19.3 nm 2020-02-02

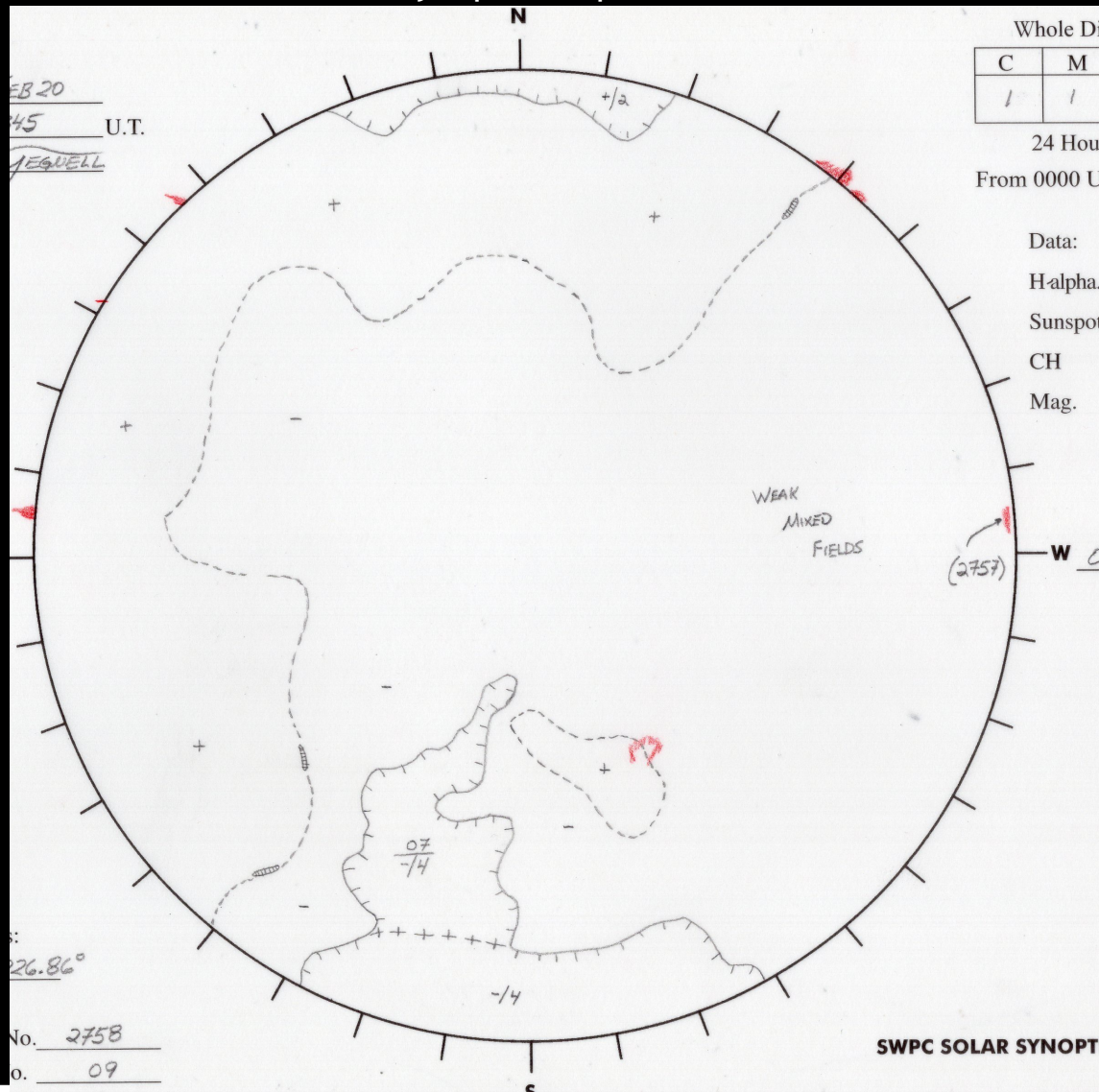


SDO/AIA 193 2020-01-26 12:10:41 UT

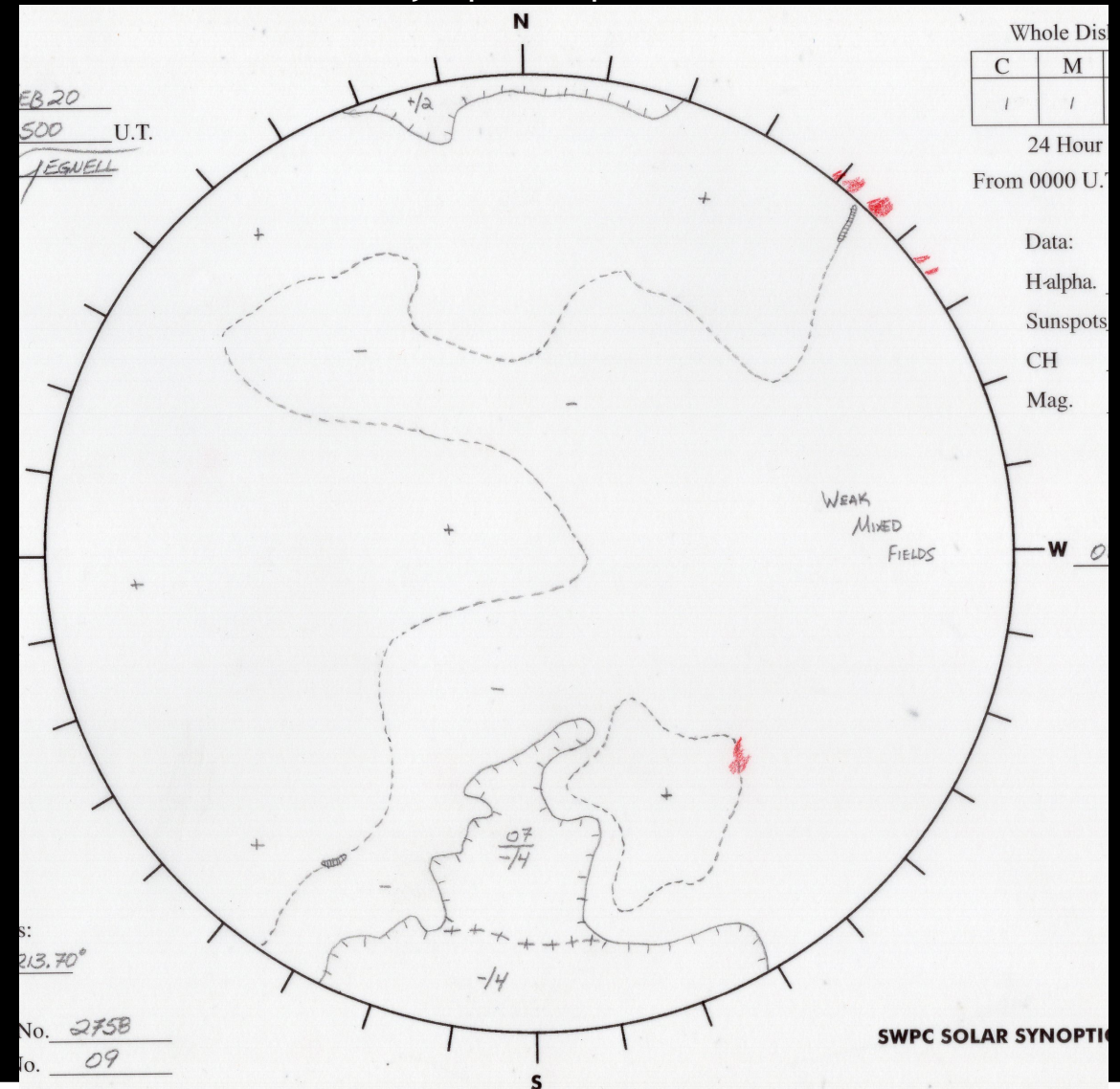
SDO/AIA 193 2020-02-02 12:10:41 UT

Solar active region & Coronal hole

NOAA synoptic map 2020-02-02



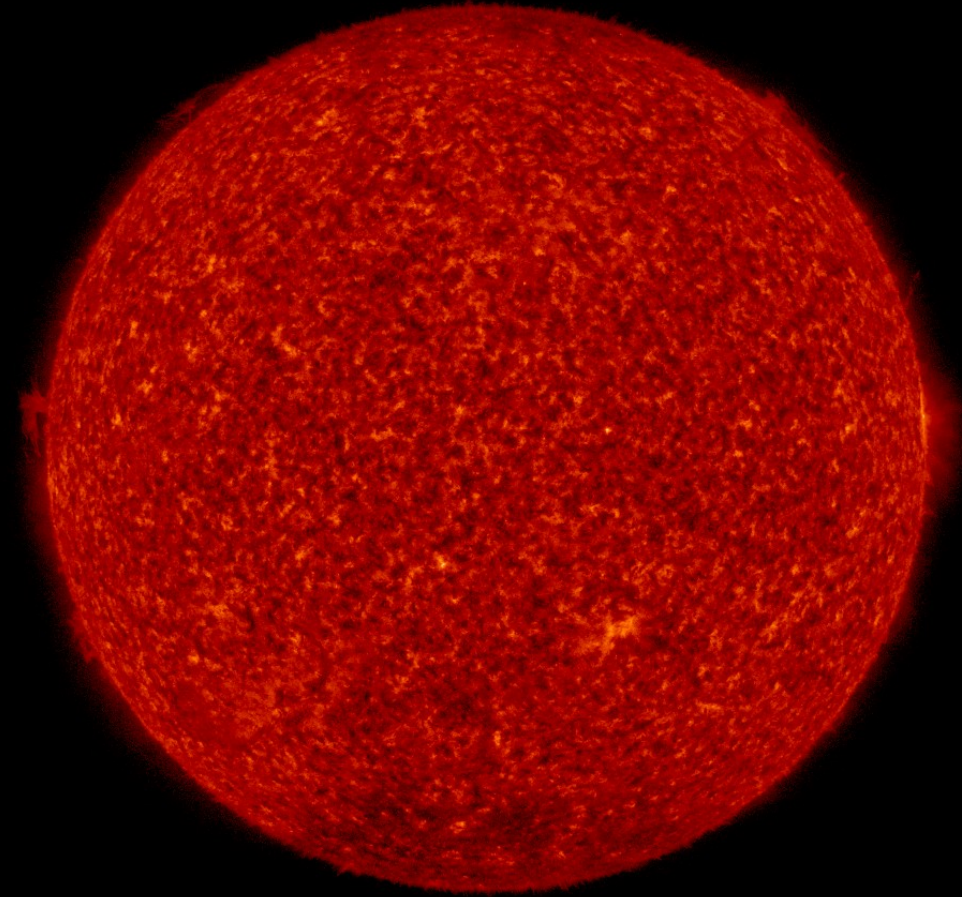
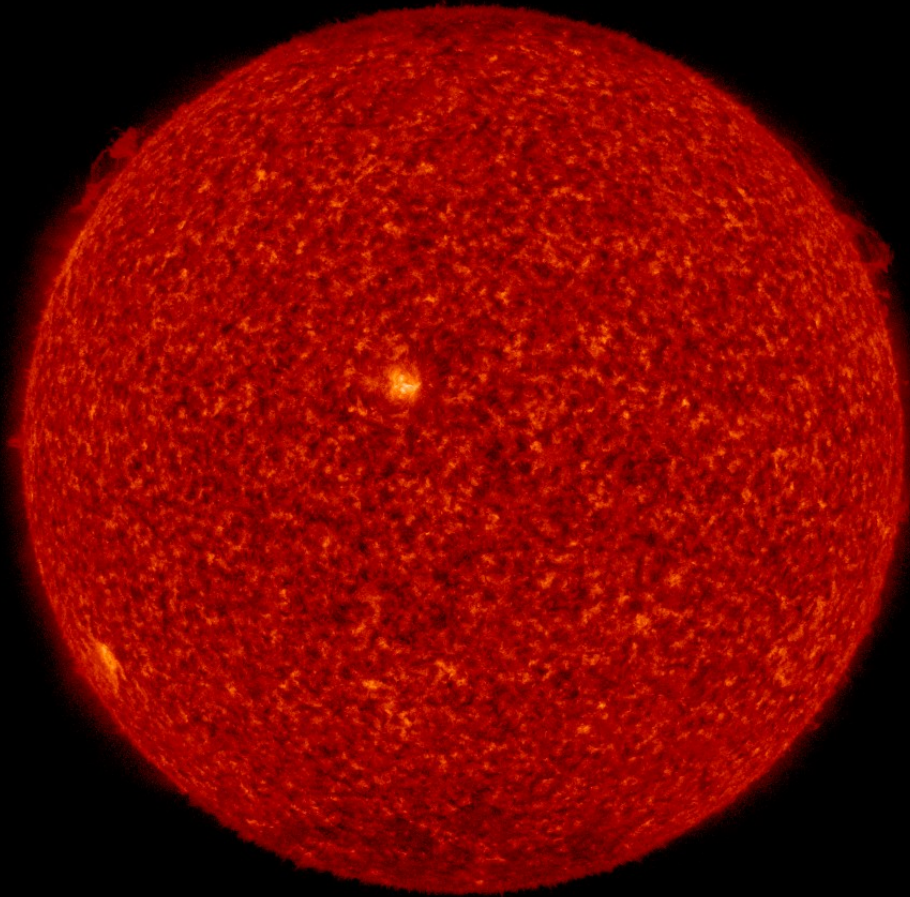
NOAA synoptic map 2020-02-03



Solar active region & Filament

SDO/AIA 30.4 nm 2020-01-26

SDO/AIA 30.4 nm 2020-02-02



SDO/AIA 304 2020-01-26 12:13:30 UT

SDO/AIA 304 2020-02-02 12:14:30 UT

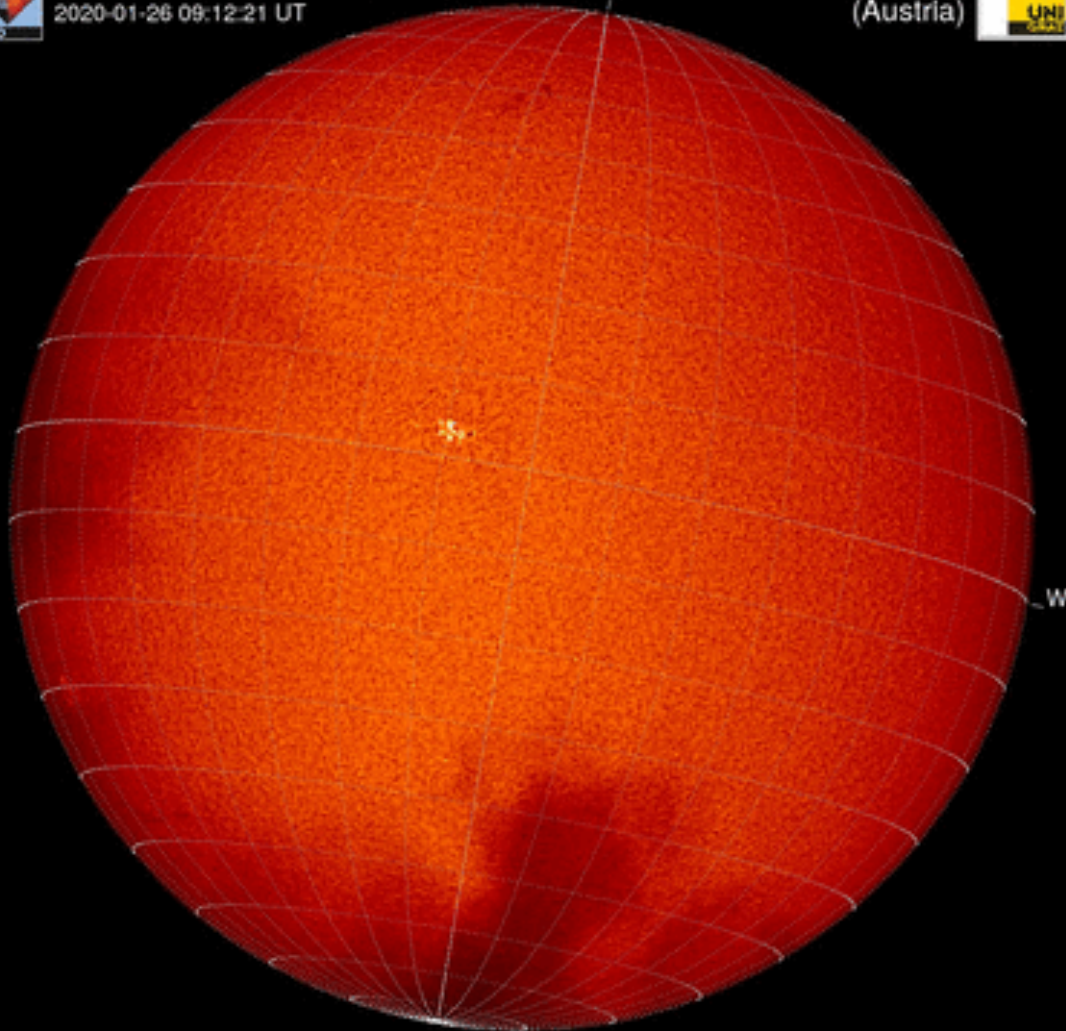
Filament & Filament eruption

H-alpha 2020-01-26



Kanzelhöhe Observatory
2020-01-26 09:12:21 UT

University of Graz
(Austria)

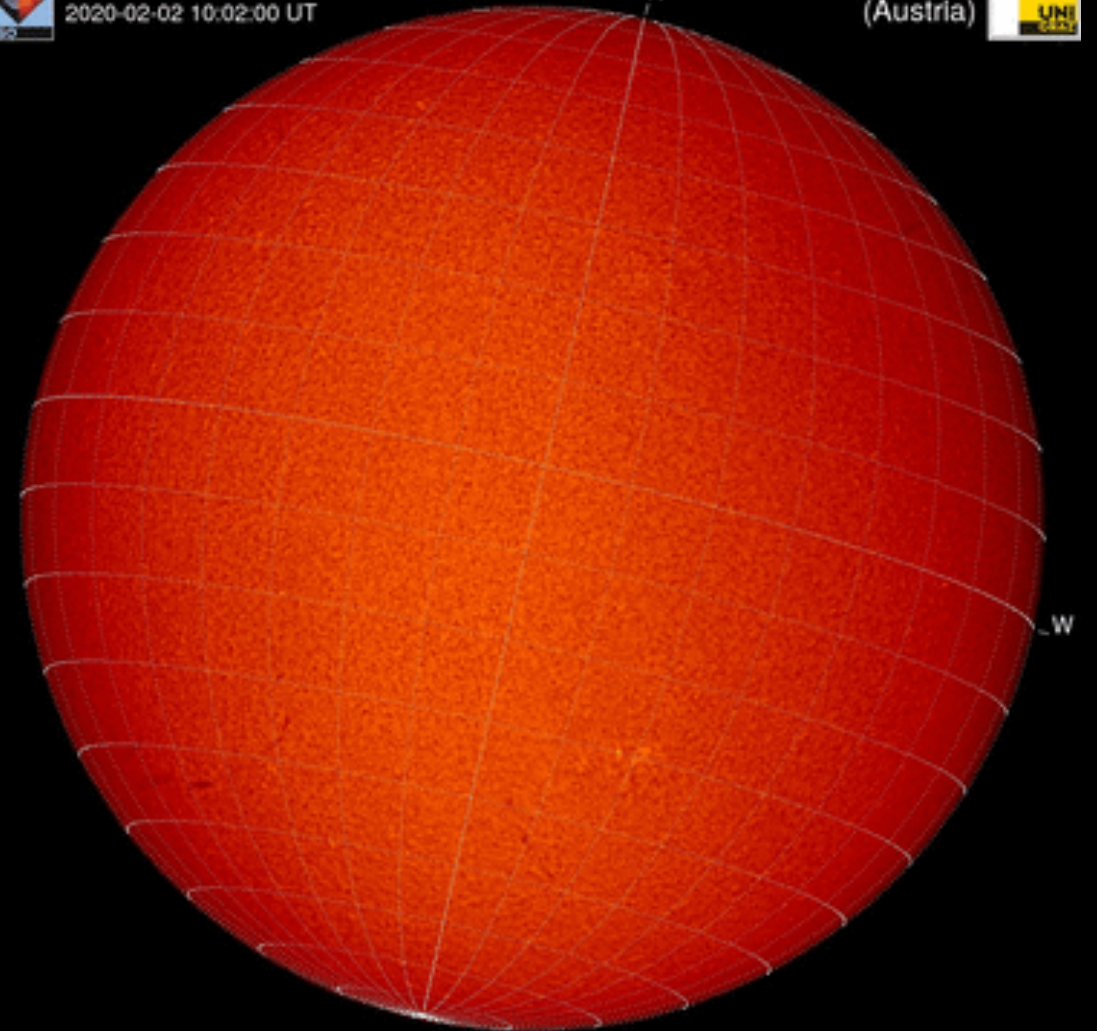


H-alpha 2020-02-02

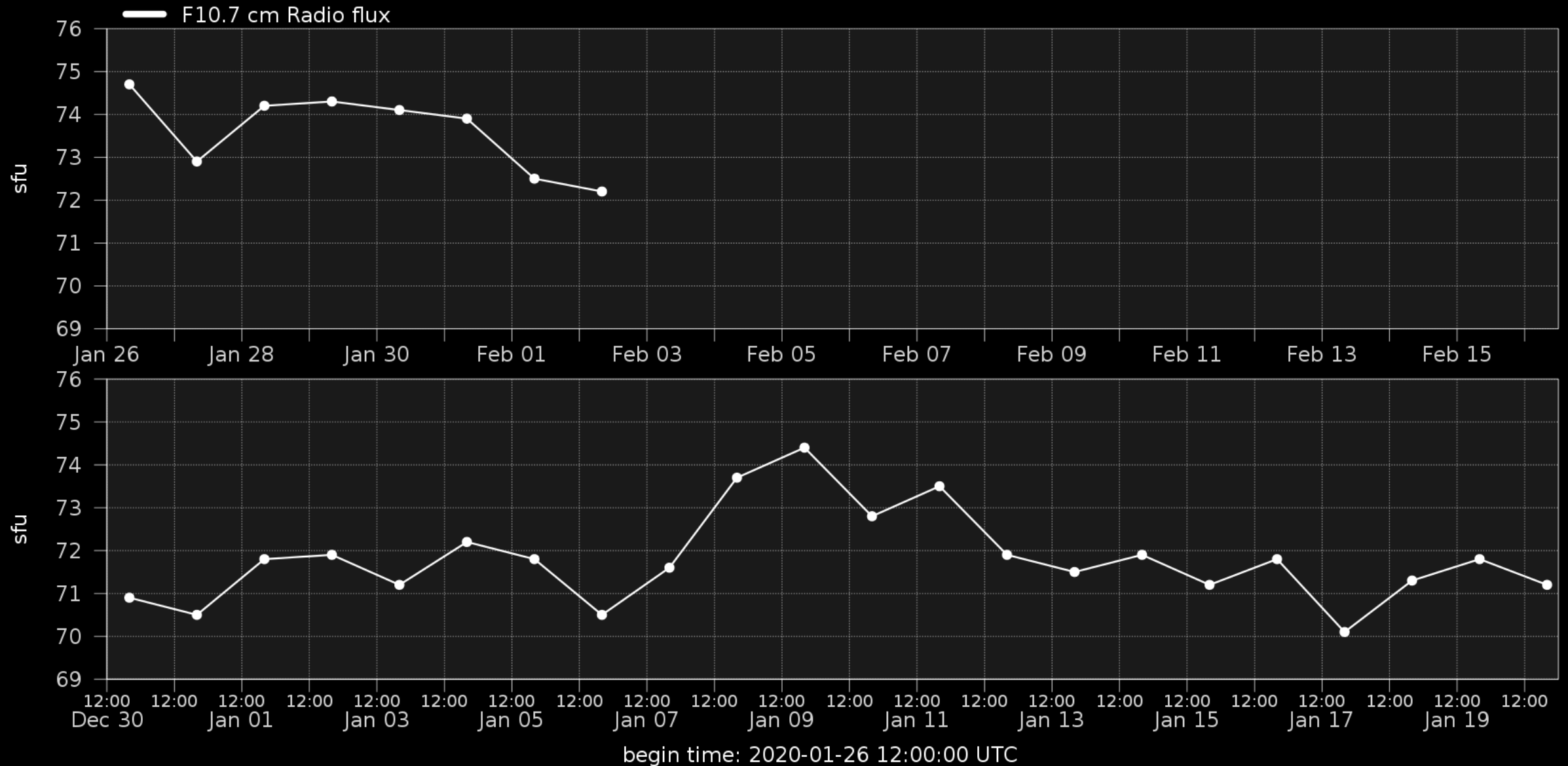


Kanzelhöhe Observatory
2020-02-02 10:02:00 UT

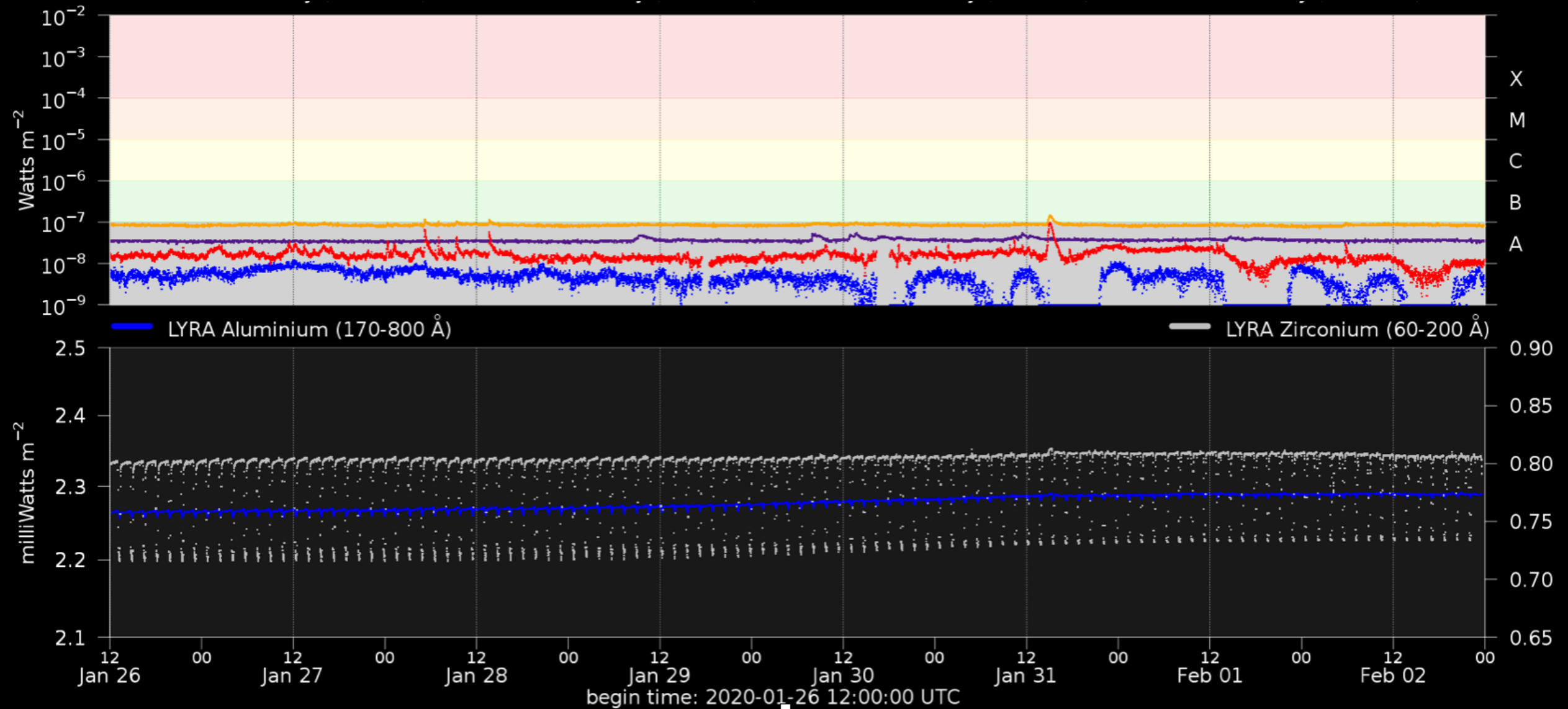
University of Graz
(Austria)



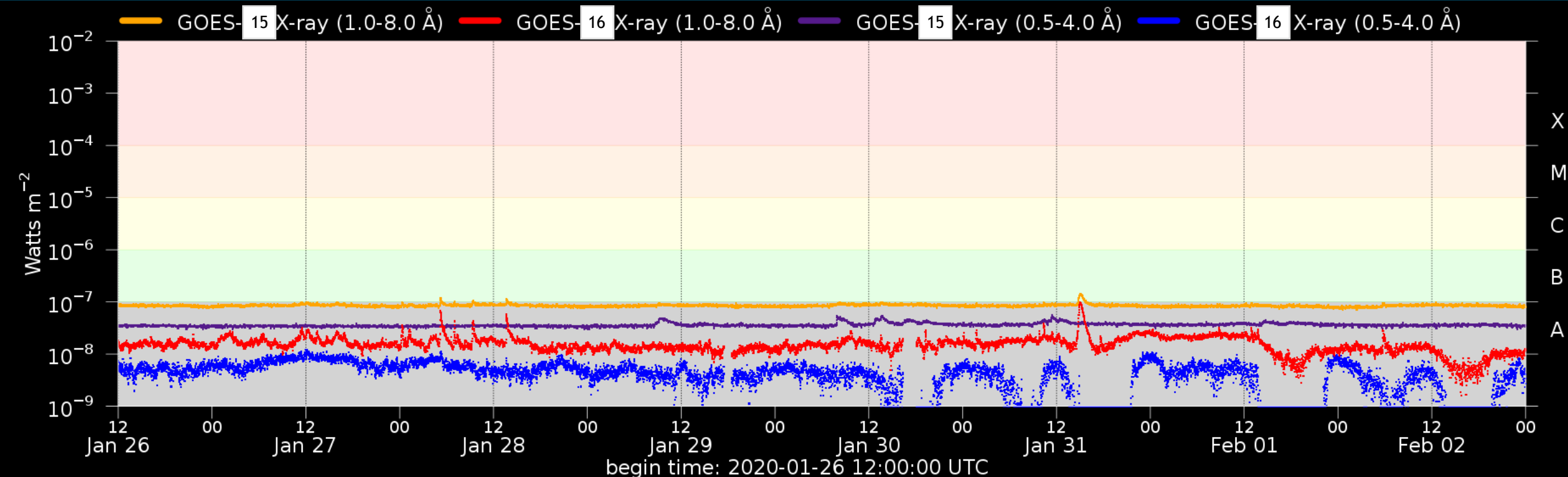
Solar F10.7cm radio flux



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	2020-01-26	2020-01-27	2020-01-28	2020-01-29	2020-01-30	2020-01-31	2020-02-01	2020-02-02
Probability	--- 15 01 01	--- 18 01 01	--- 05 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 Ejections



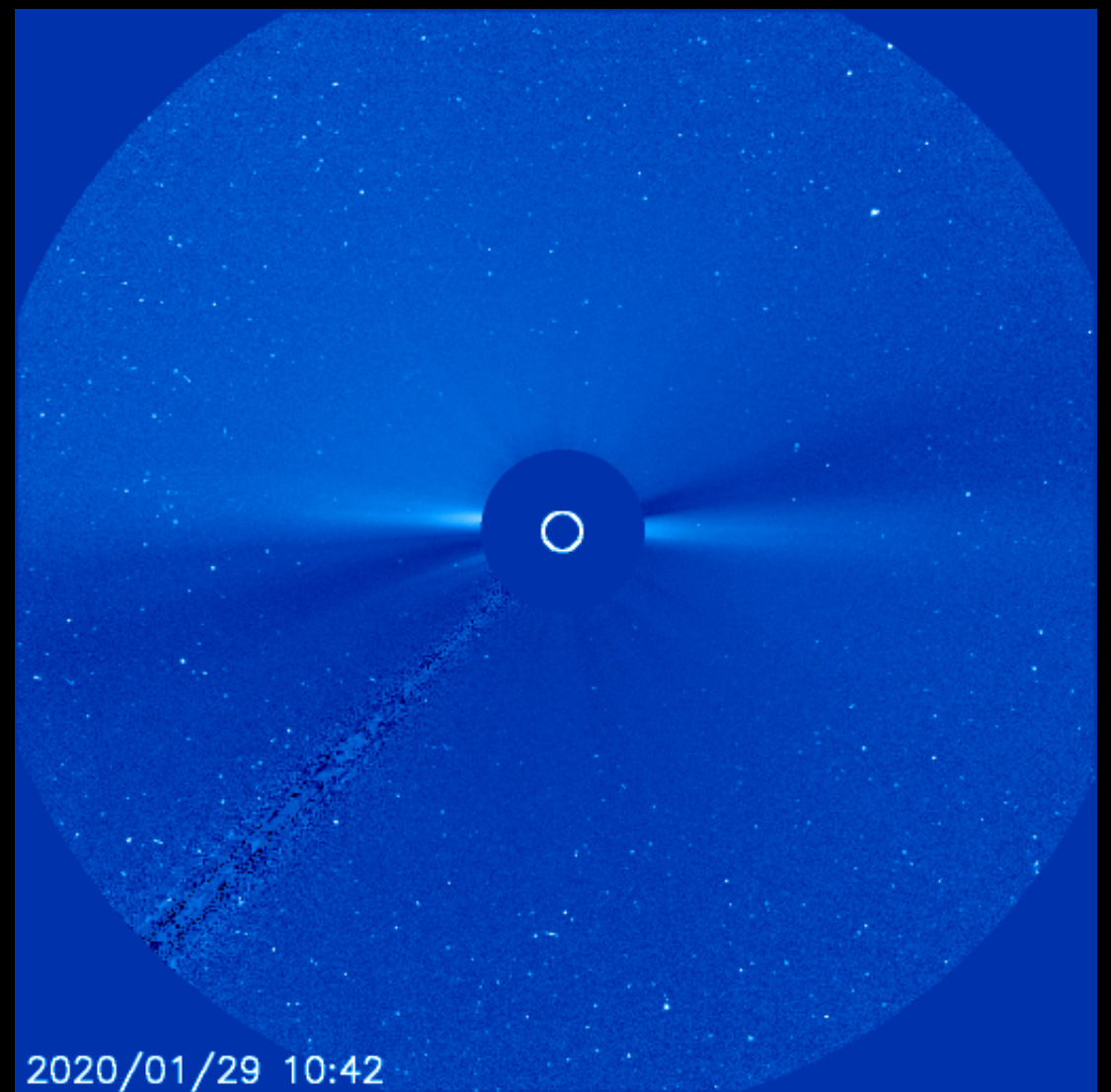
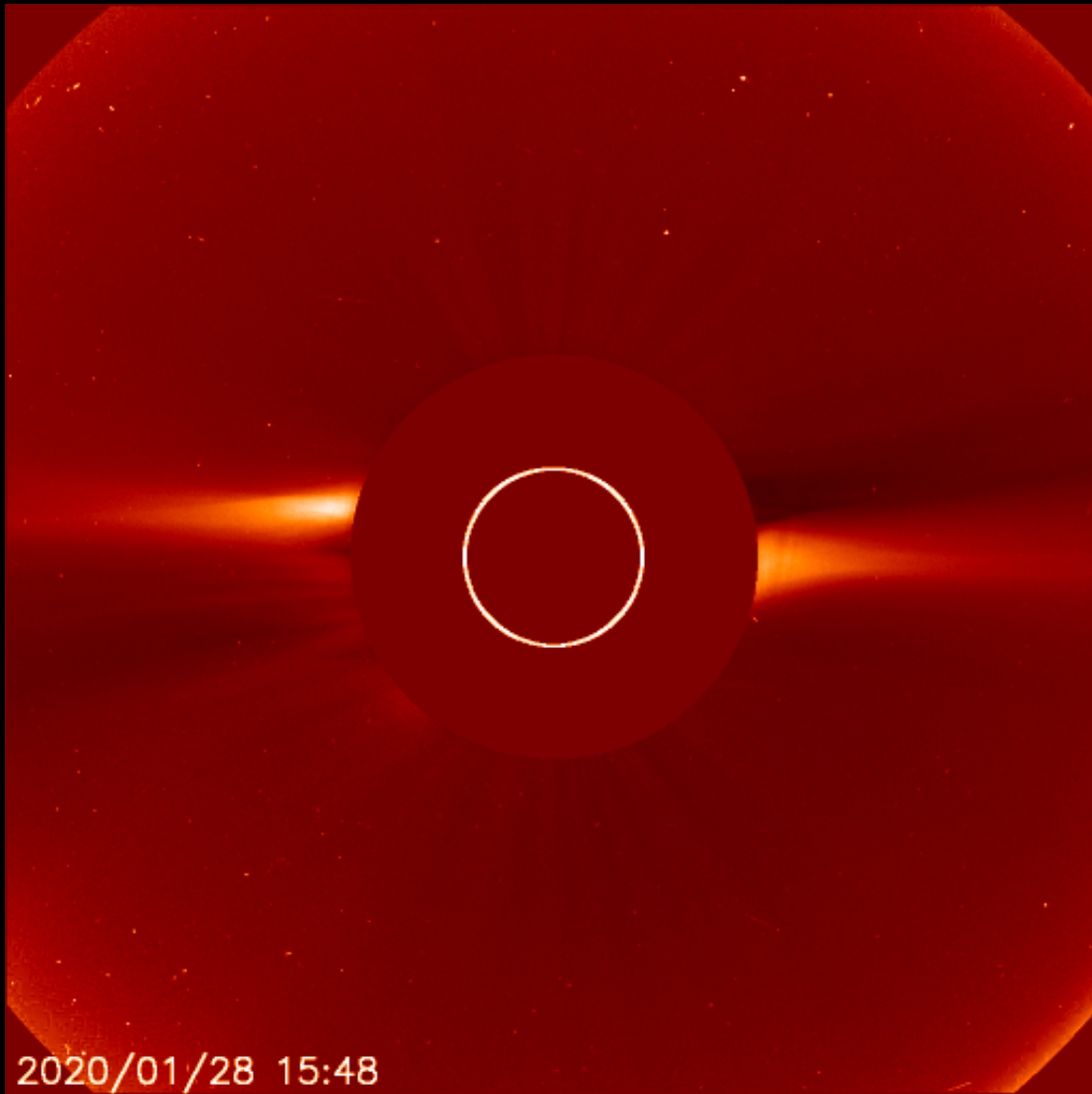
#	CME	t0	dt0	pa	da	v	dv	minv	maxv	halo?
0002		2020/01/29 09:48	00	092	006	0144	0079	0117	0300	
0001		2020/01/29 09:24	05	081	036	0164	0032	0104	0231	
#	Flow	t0	dt0	pa	da	v	dv	minv	maxv	halo?
	#EOF									

08:12 02
 05:36 02
 02:48 02
 23:36 02
 20:24 02
 13:12 02
 10:24 02
 07:12 02
 00:24 02
 21:24 01
 18:12 01
 15:24 01
 12:36 01
 09:36 01
 06:24 01
 03:12 01
 00:24 01
 20:48 01
 17:48 01
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 08:36 01
 06:00 01
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 00:00 01

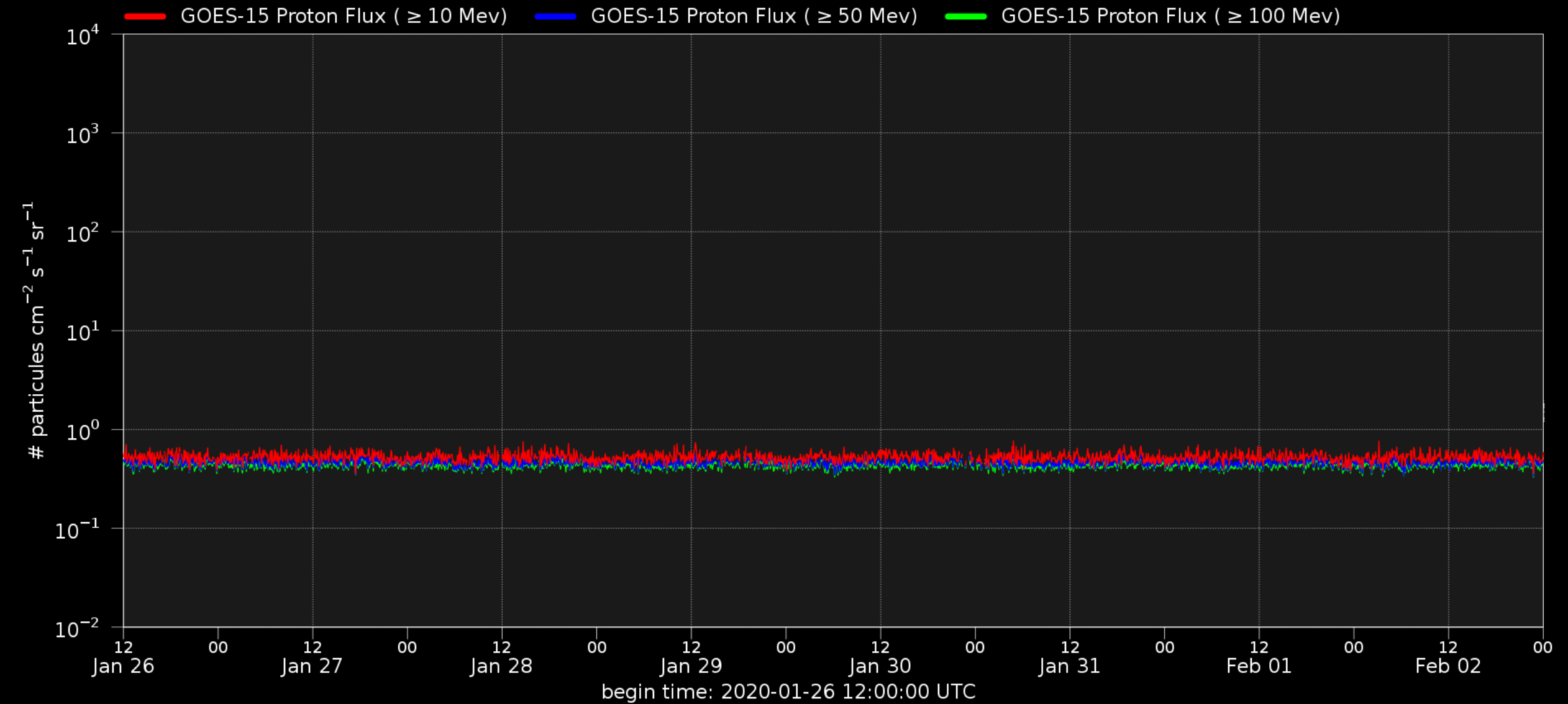


S W N E

Coronal Mass Ejections



Solar proton flux

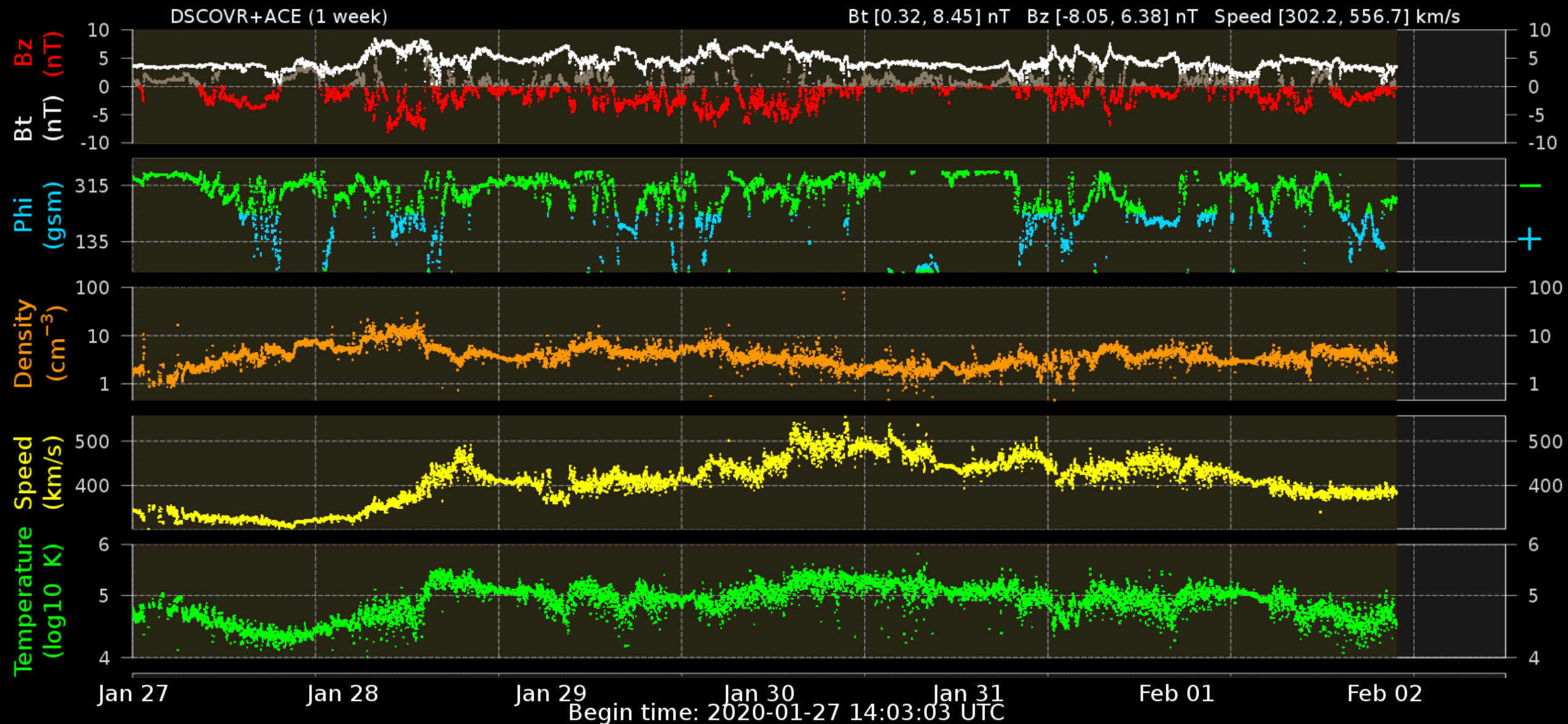


Solar Wind and Geomagnetic Activity

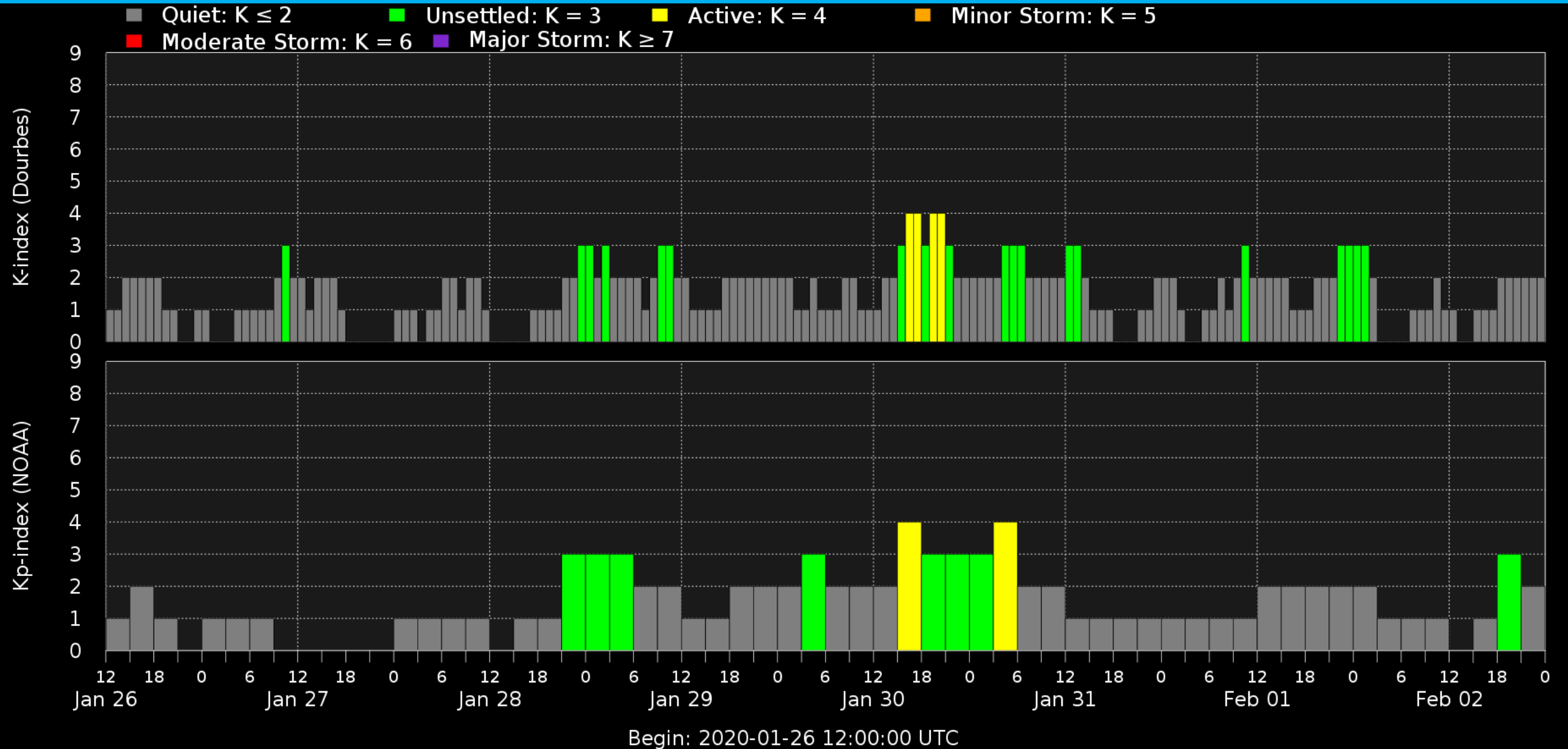


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Solar wind parameters (ACE data)



Geomagnetic activity (K-indexes)



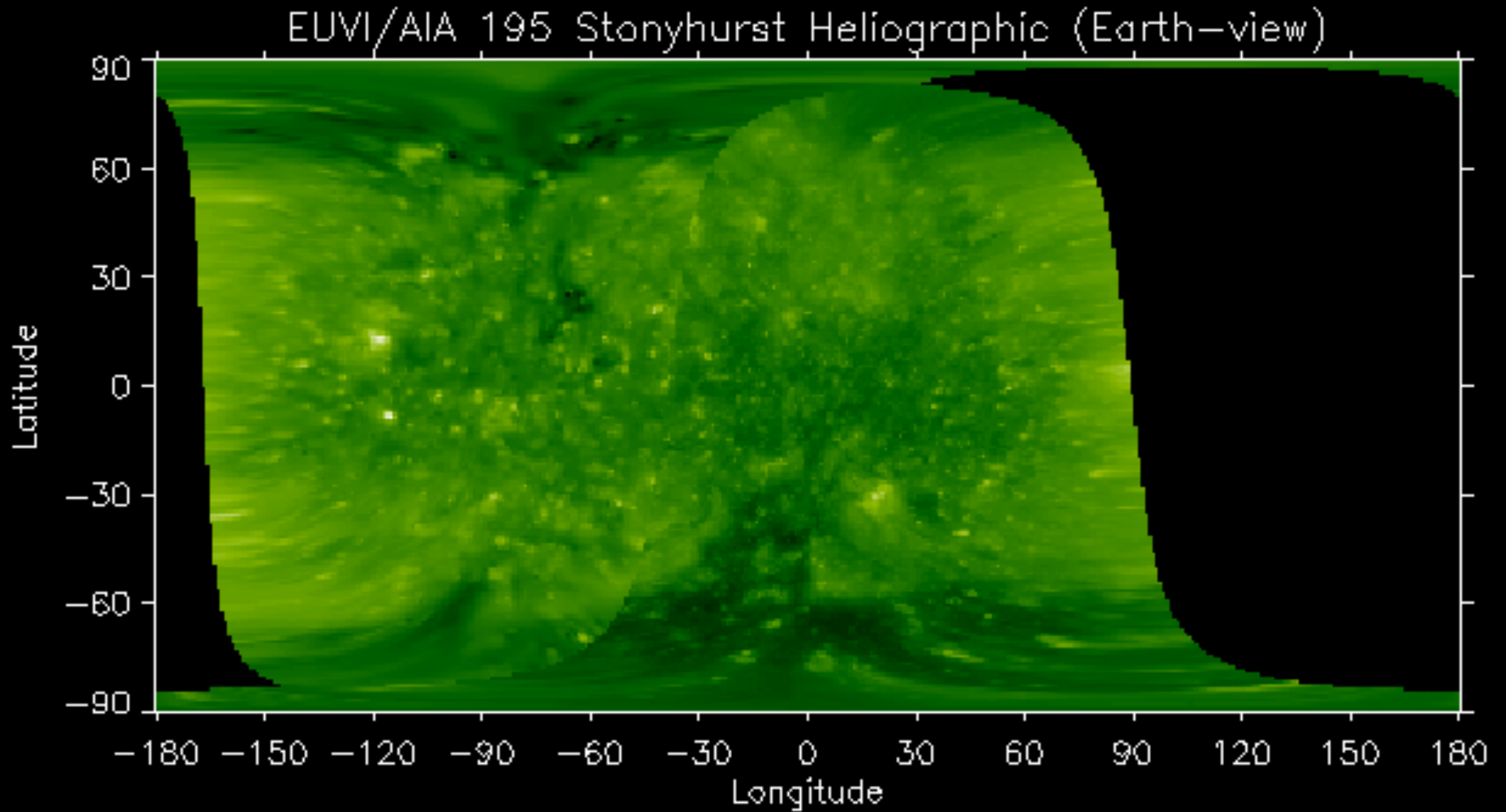
Outlook



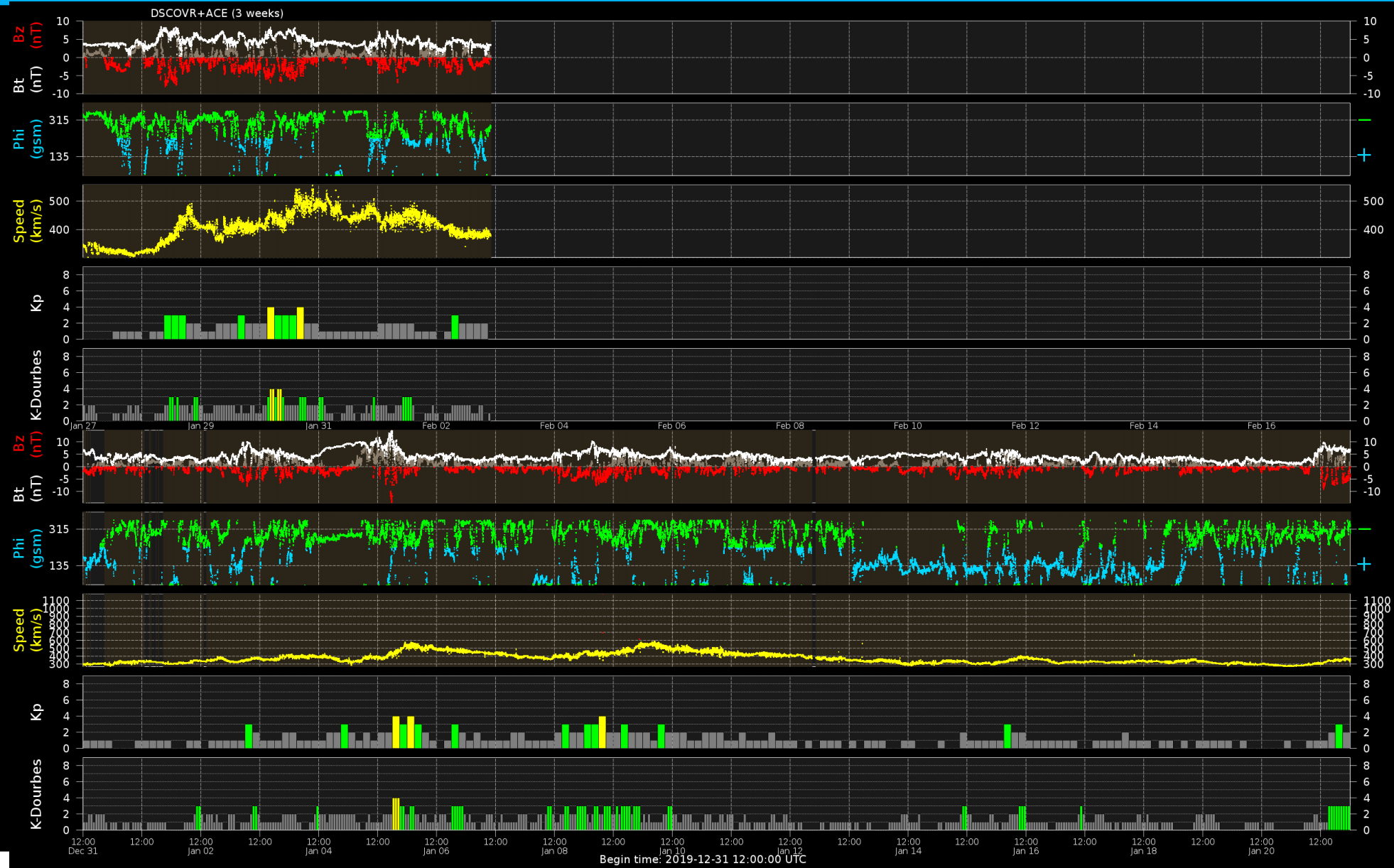
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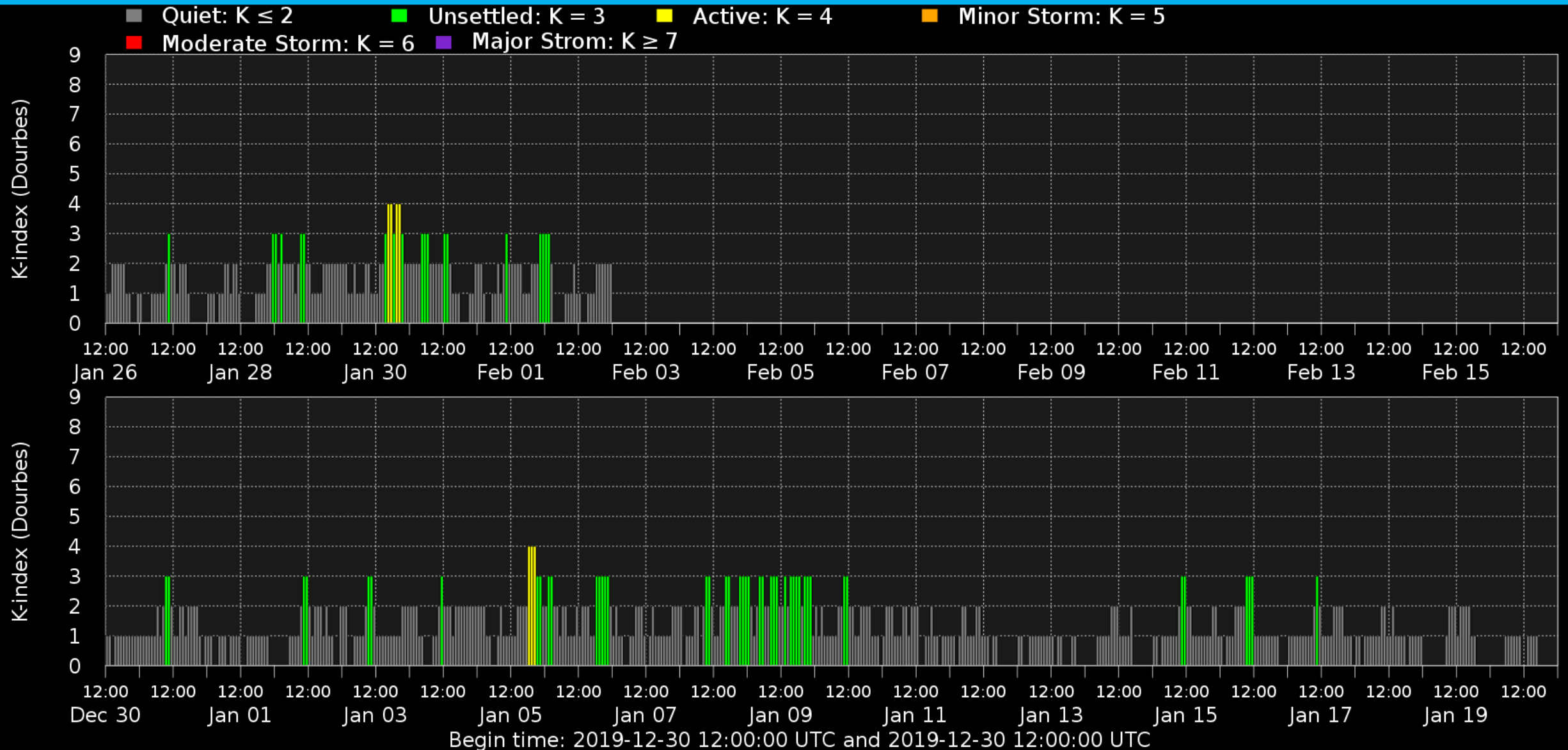
Outlook: Solar activity



Outlook: Solar wind



Outlook: Geomagnetic activity



SIDC Space Weather Briefing

See you at our next briefing!

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