

SIDC Space Weather Briefing

02 - 09 September 2018

Jan Janssens

& the SIDC forecaster team



Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

Summary Report

Solar activity from 2018-09-02 12:00 UT to 2018-09-09 12:00 UT

Active regions	NOAA 2721: small and inactive
Flaring	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filaments	Some small filaments; Some prominence eruptions
CMEs	Some weak and non-earth directed CMEs
Proton Events	None

Solar wind and geomagnetic conditions from 2018-09-02 12:00 UT to 2018-09-09 12:00 UT

Coronal Holes	One negative and one positive polarity equatorial CH
ICME	No obvious ICMEs
SW Conditions	SW speed variable between 330 and 520 km/s; Bz between -7 and + 11 nT
K-indices	max K-index (Dourbes): 4 max Kp-index (NOAA): 4

All Quiet Alert: No

Solar Activity

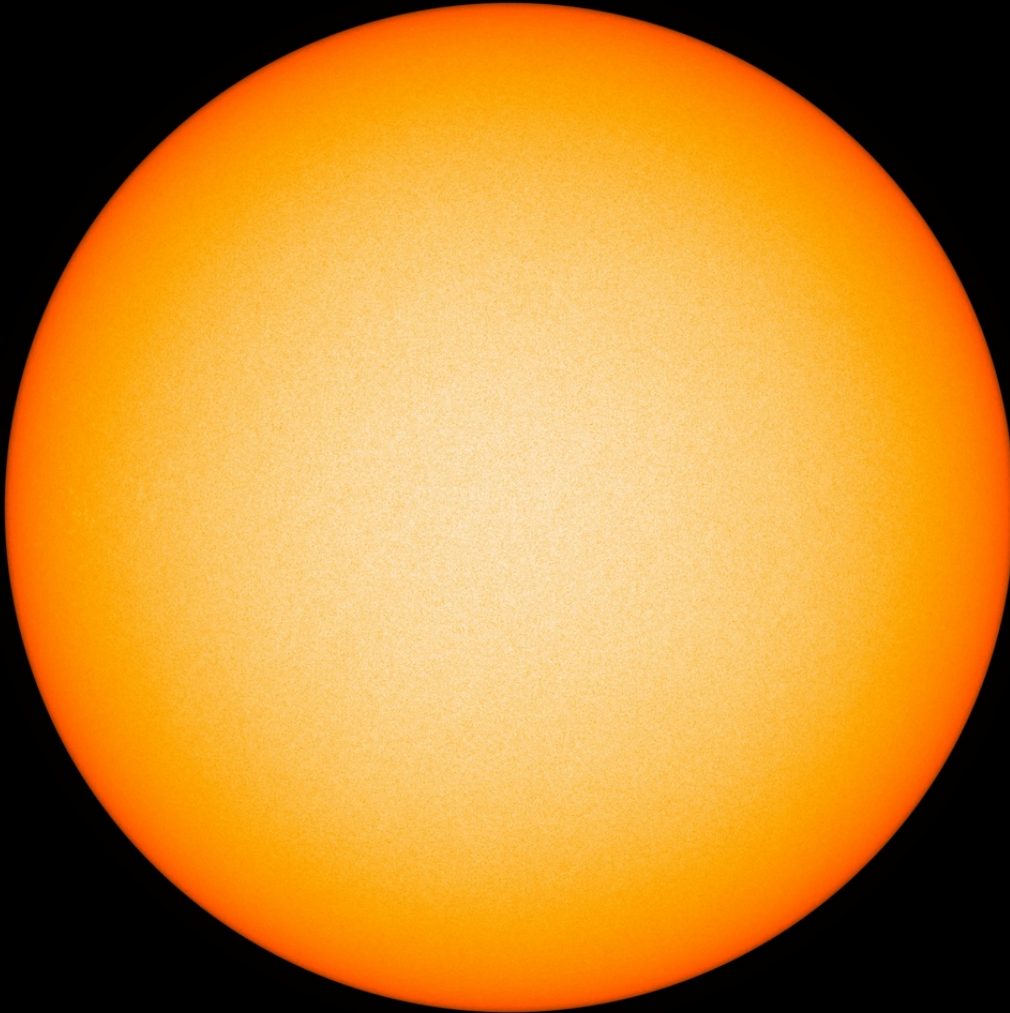


Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

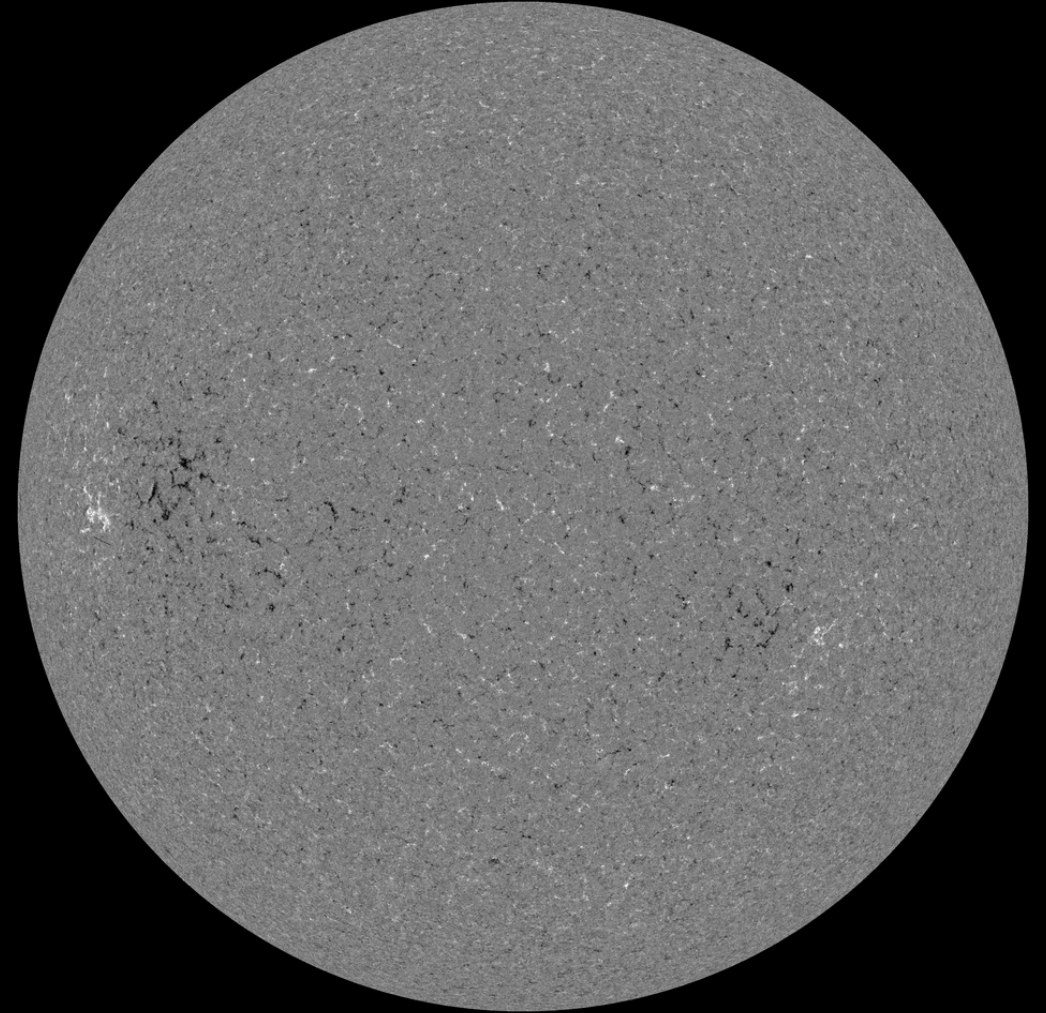
Solar active regions - start of the week

SDO/HMI White Light 2018-09-02



SDO/HMI Quick-Look Continuum: 20180902_114500

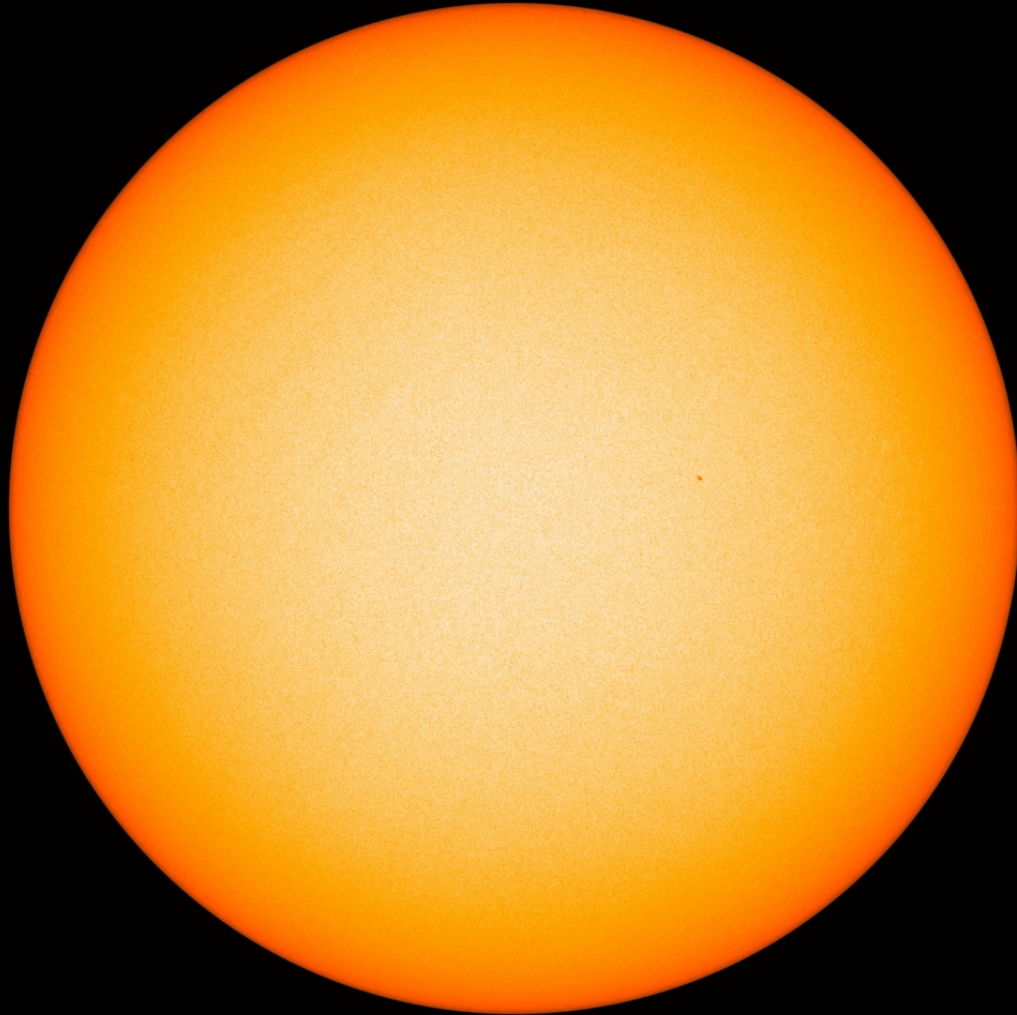
SDO/HMI Magnetogram 2018-09-02



SDO/HMI Quick-Look Magnetogram: 20180902_114500

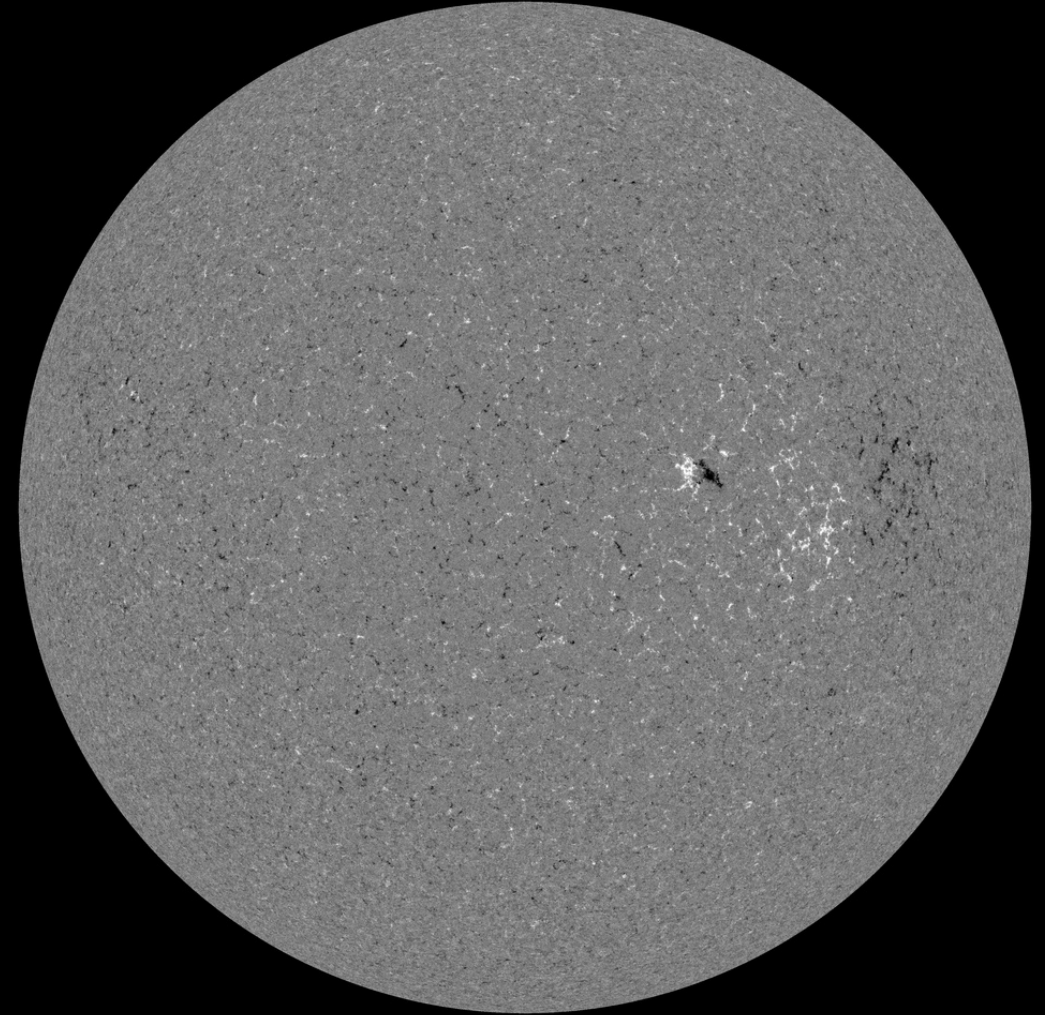
Solar active regions - end of the week

SDO/HMI White Light 2018-09-09



SDO/HMI Quick-Look Continuum: 20180909_114500

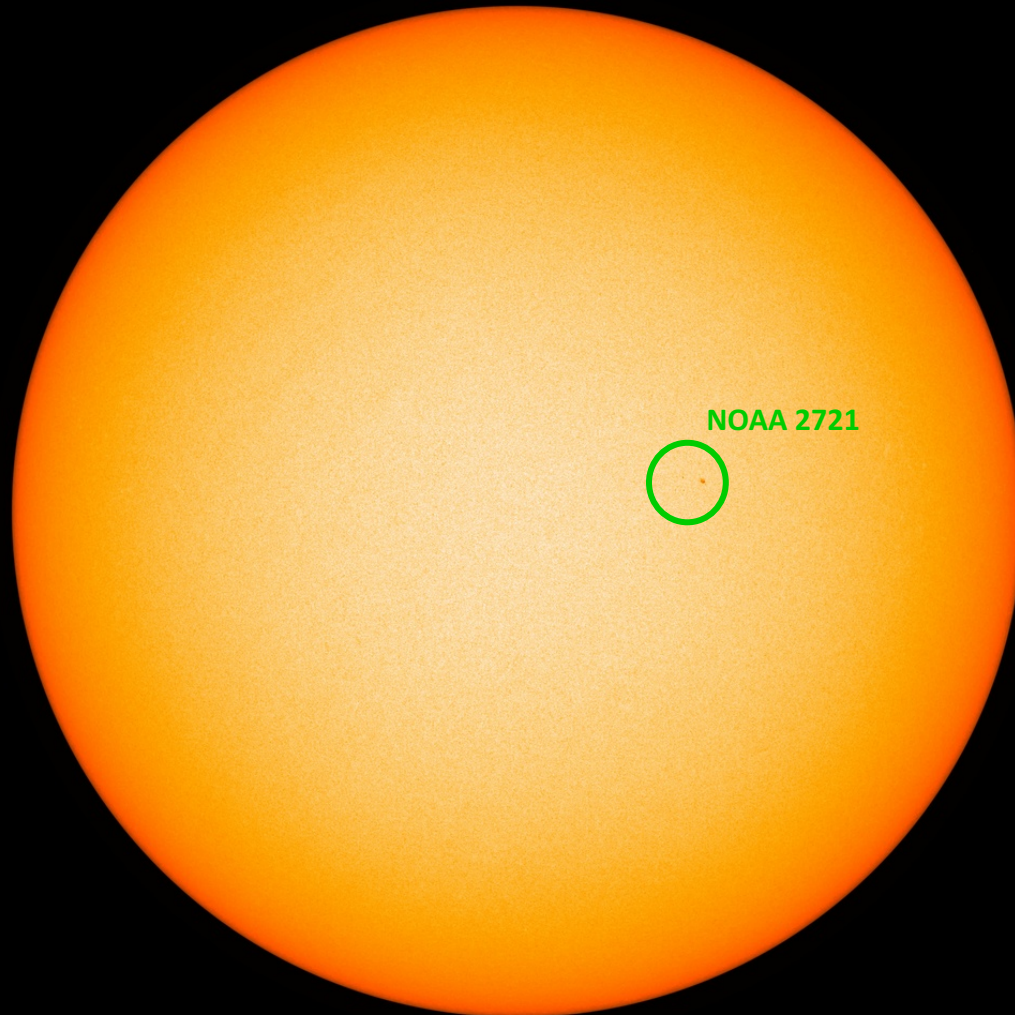
SDO/HMI Magnetogram 2018-09-09



SDO/HMI Quick-Look Magnetogram: 20180909_114500

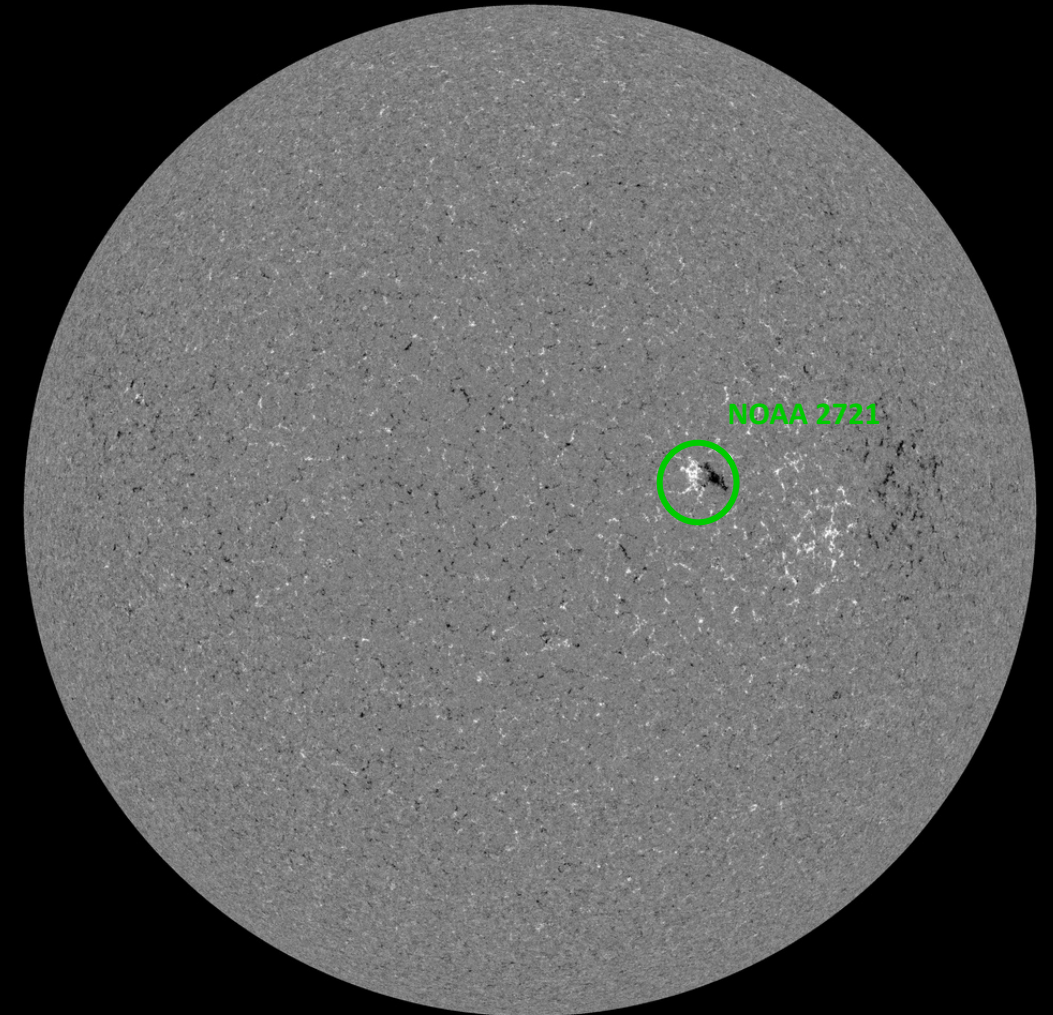
Solar active regions - end of the week

SDO/HMI White Light 2018-09-09



SDO/HMI Quick-Look Continuum: 20180909_114500

SDO/HMI Magnetogram 2018-09-09

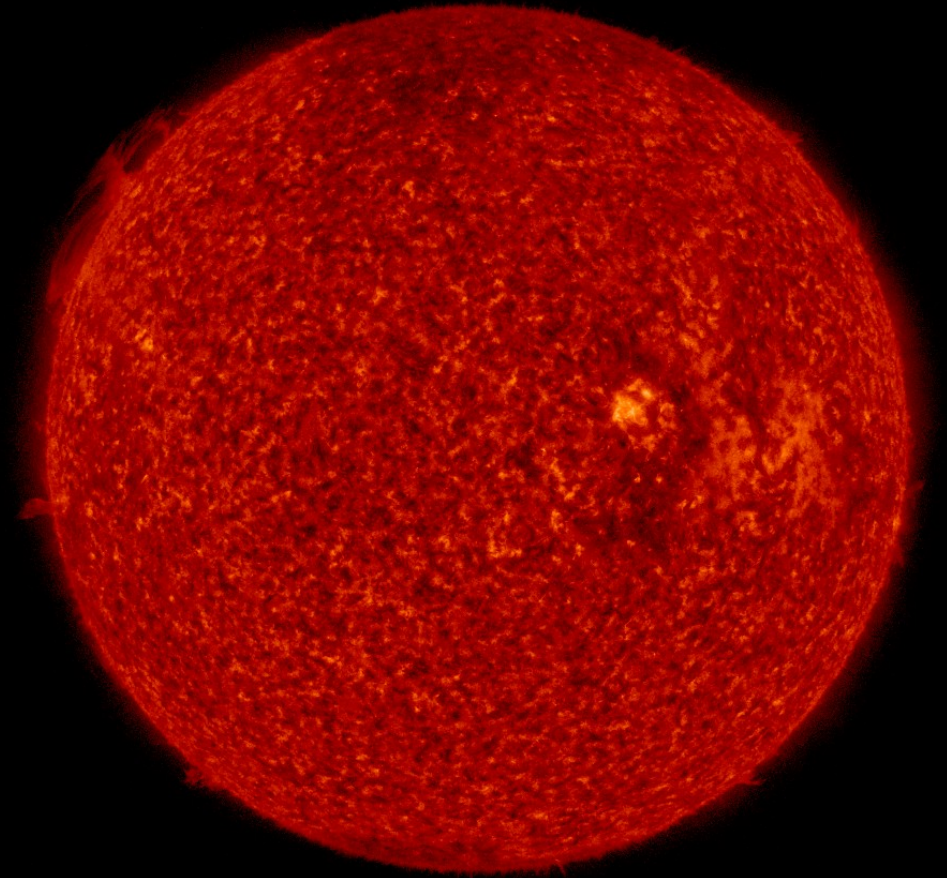
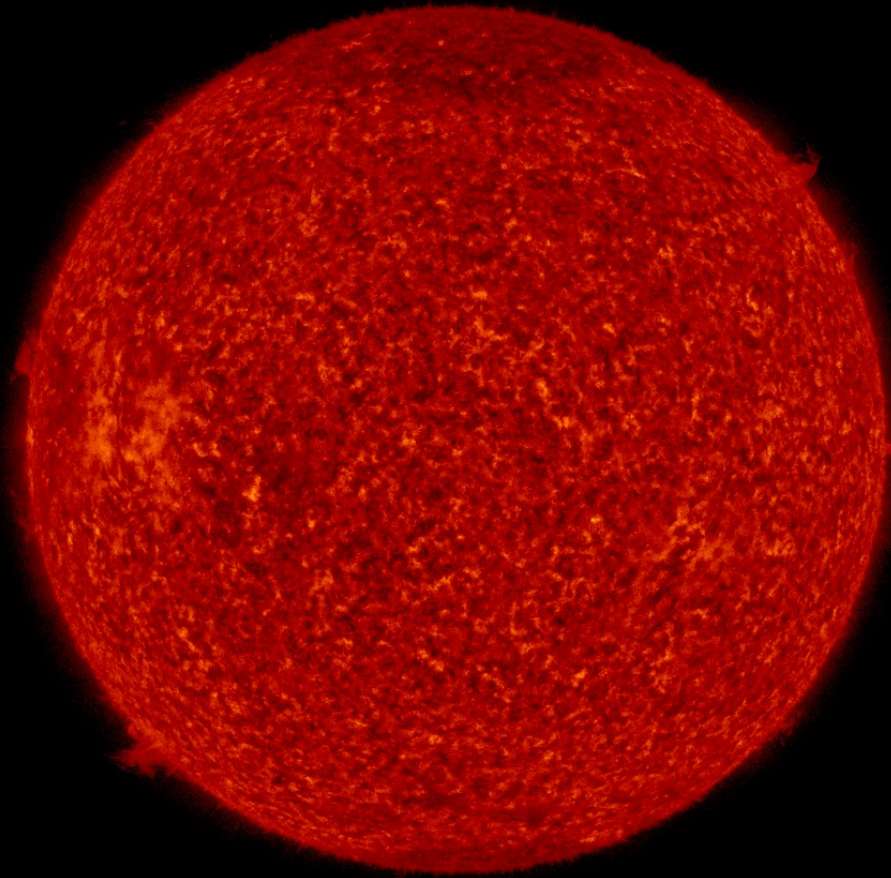


SDO/HMI Quick-Look Magnetogram: 20180909_114500

Solar active regions & Filaments

SDO/AIA 30.4 nm 2018-09-02

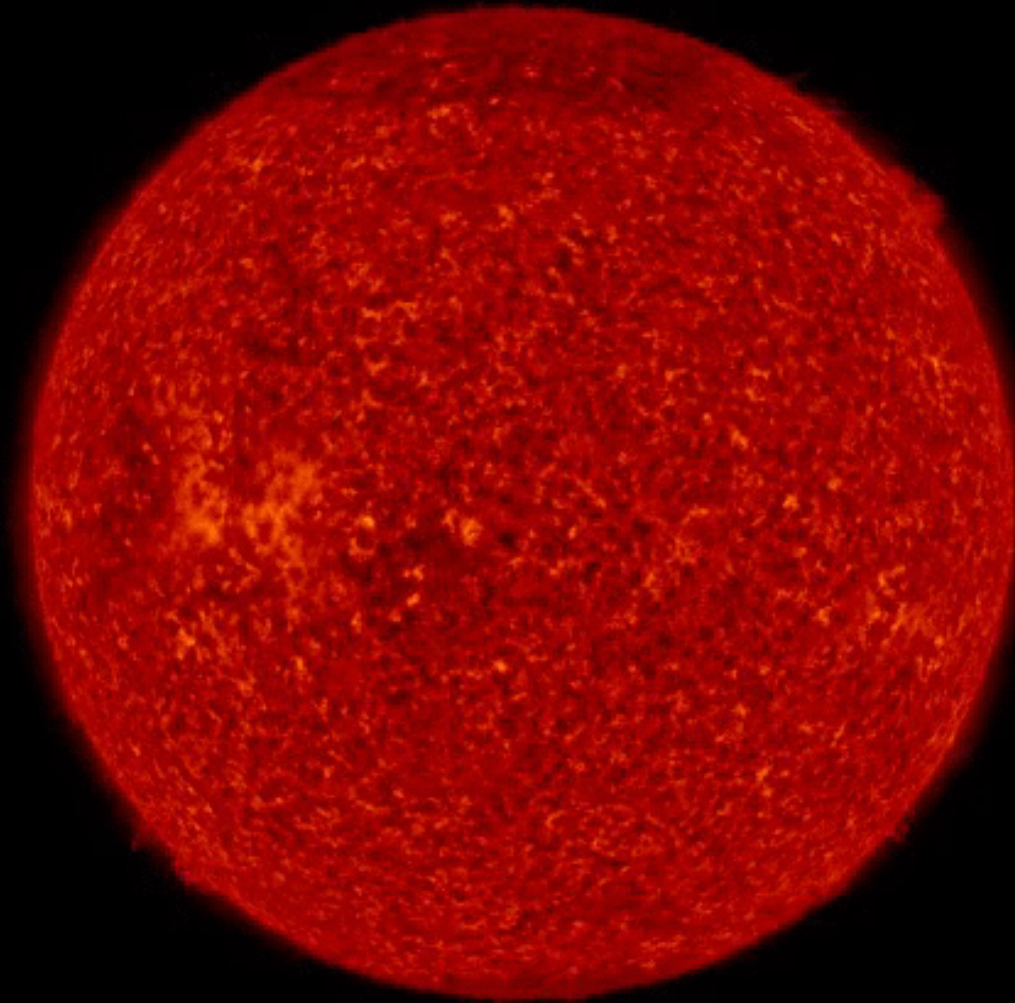
SDO/AIA 30.4 nm 2018-09-09



SDO/AIA 304 2018-09-02 12:13:42 UT

SDO/AIA 304 2018-09-09 12:12:42 UT

Prominence eruptions



SDO/AIA 304 2018-09-03 15:57:54 UT

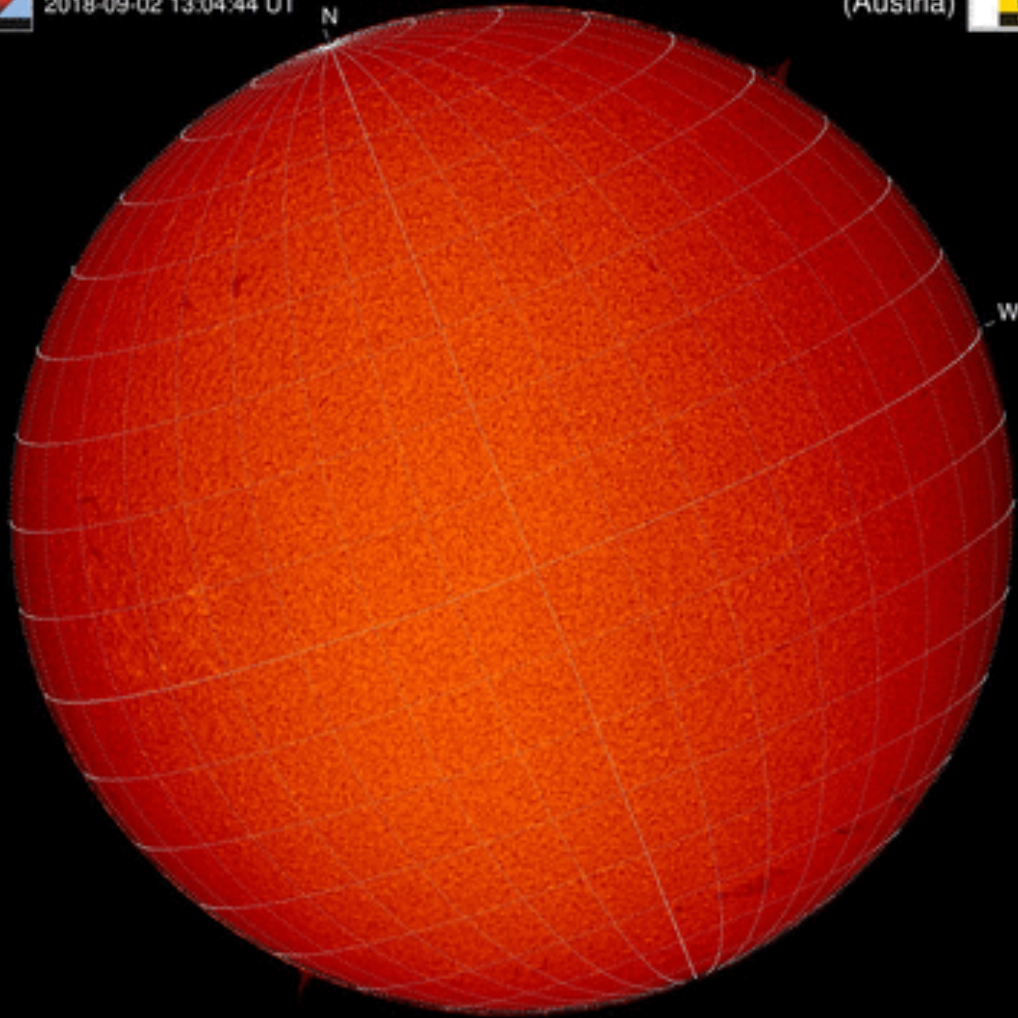
Filaments & Filament eruptions

H-alpha 2018-09-02



Kanzelhöhe Observatory
2018-09-02 13:04:44 UT

University of Graz
(Austria)

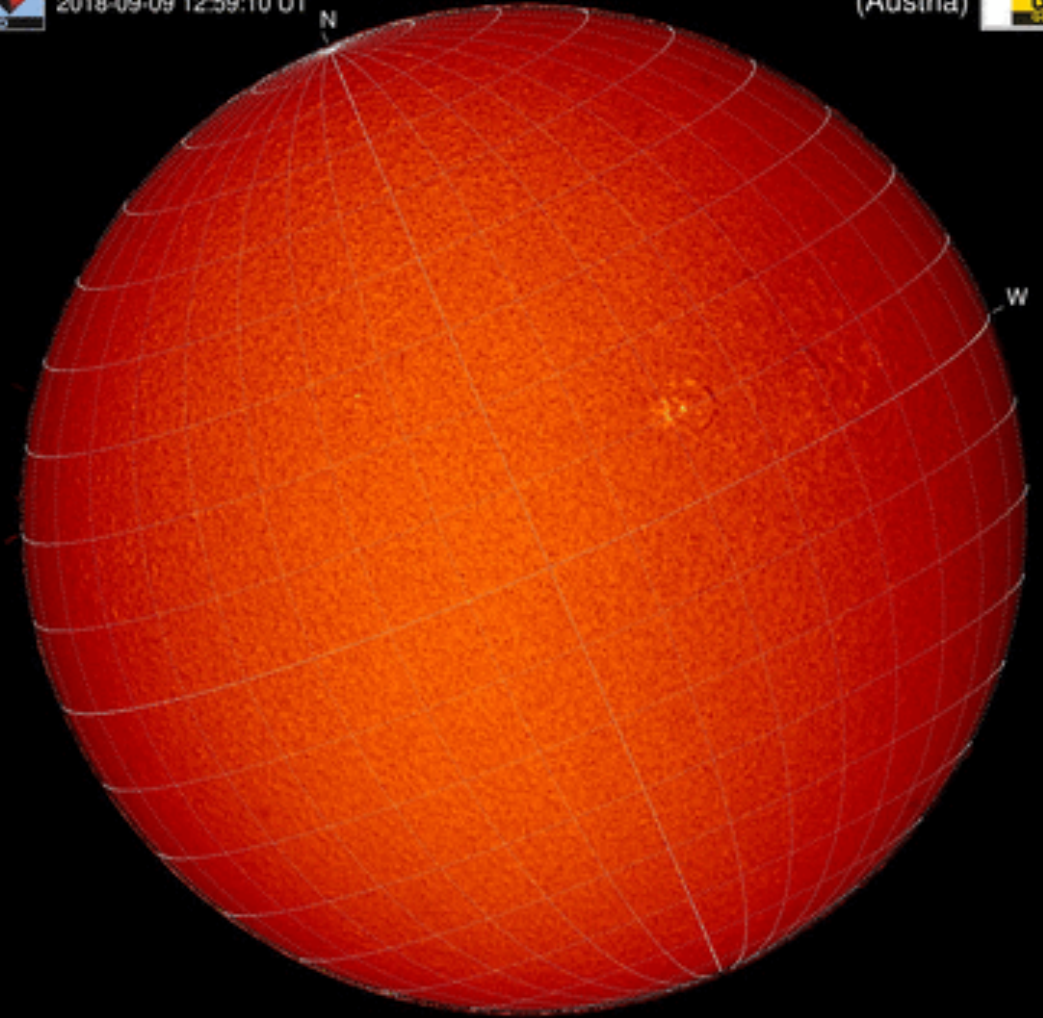


H-alpha 2018-09-09

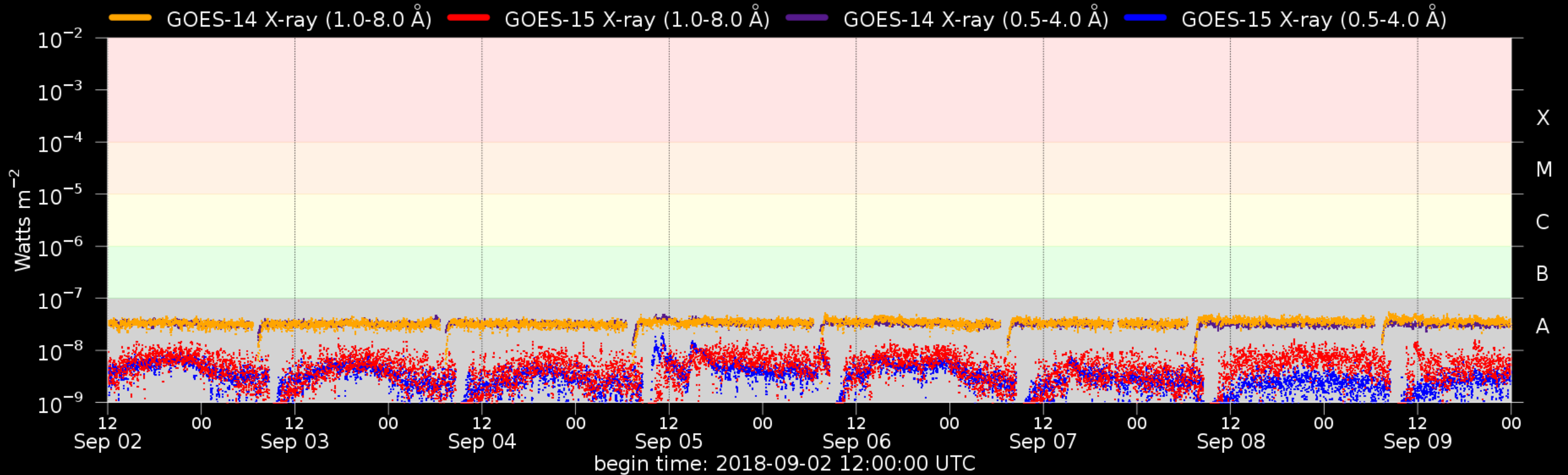


Kanzelhöhe Observatory
2018-09-09 12:59:10 UT

University of Graz
(Austria)



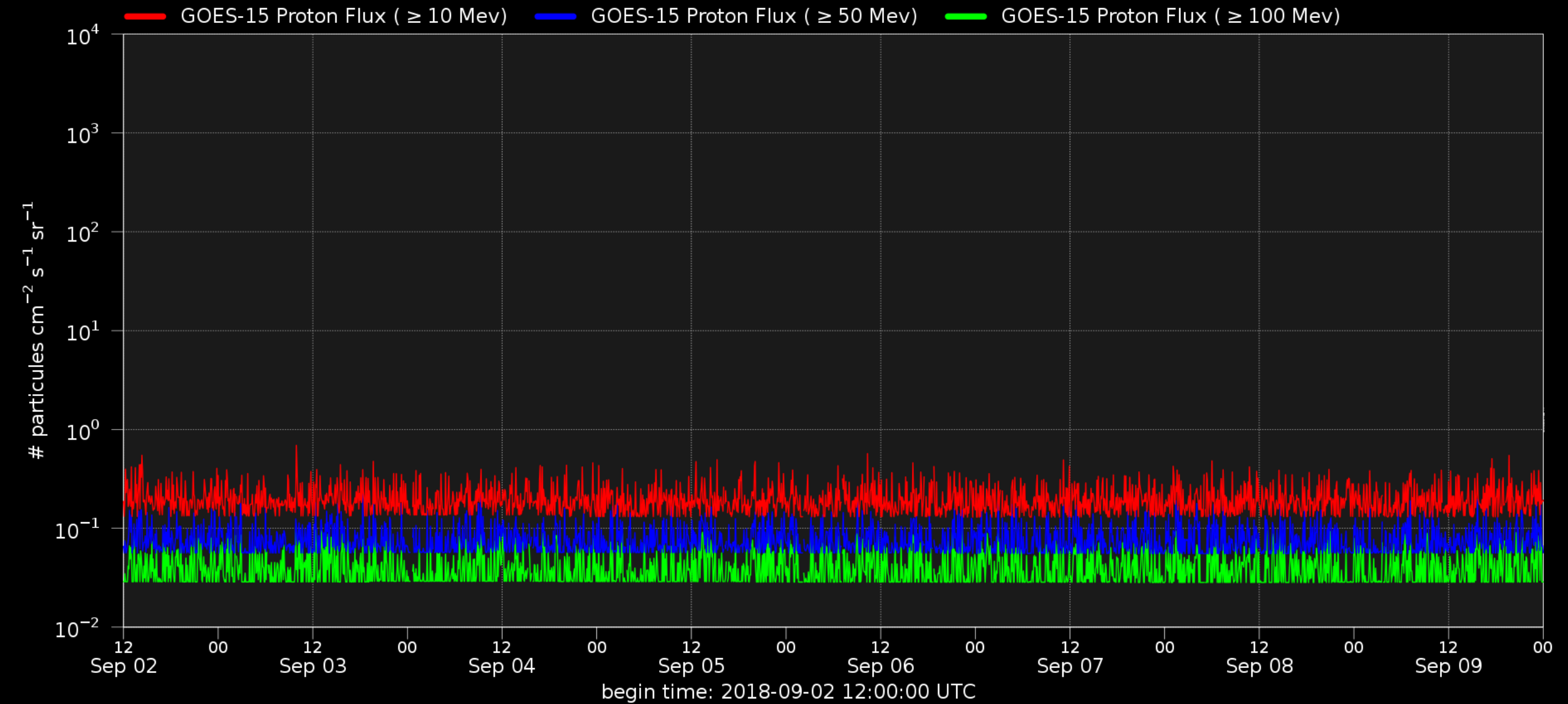
Flaring activity



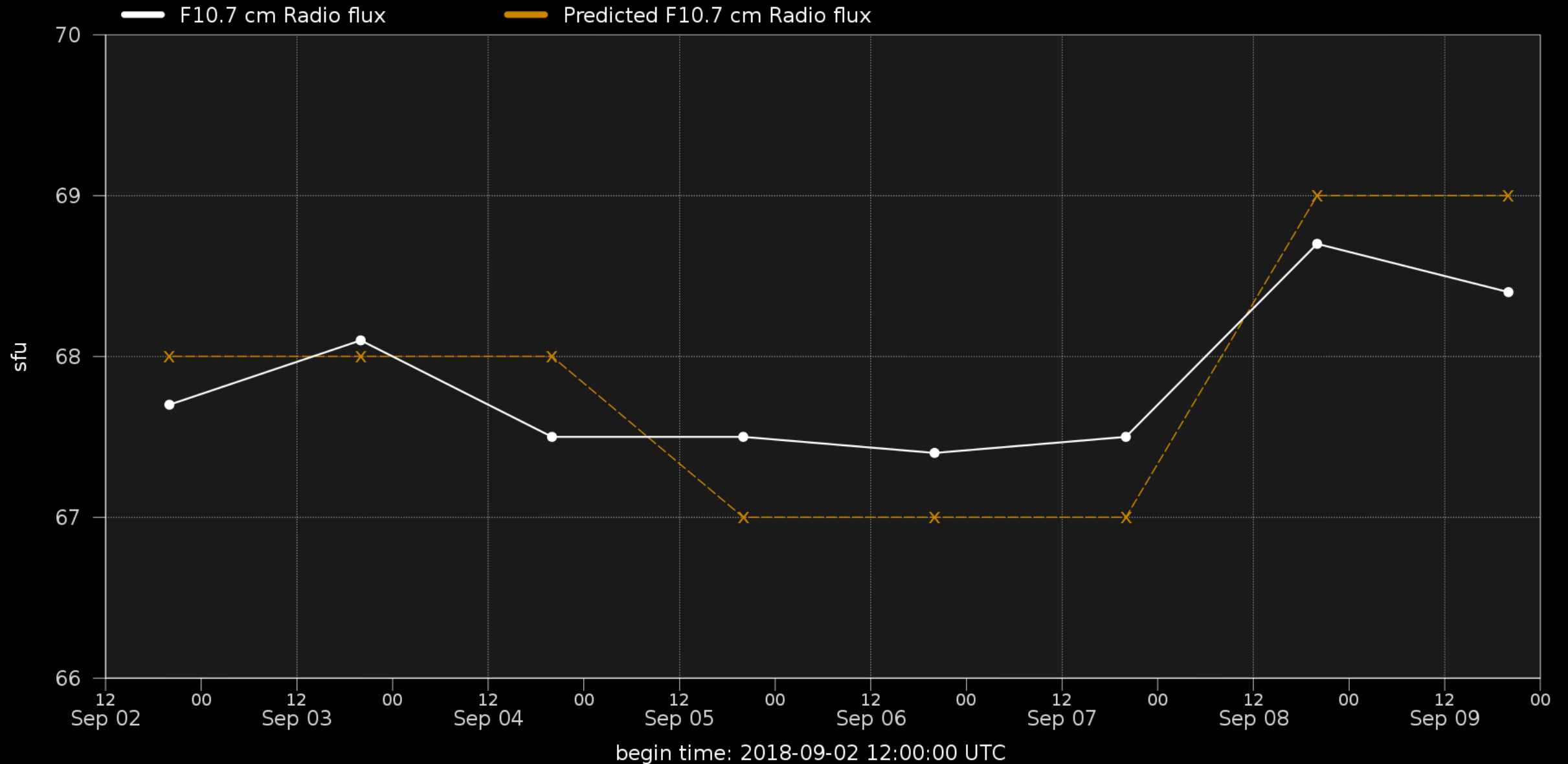
Probabilities (%) and occurrences (#) of B/C/M/X-flares issued at 12:30 and over the next 24h:

Issue date	2018-09-02	2018-09-03	2018-09-04	2018-09-05	2018-09-06	2018-09-07	2018-09-08	2018-09-09
Probability	--- 05 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 01 01 01	--- 05 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

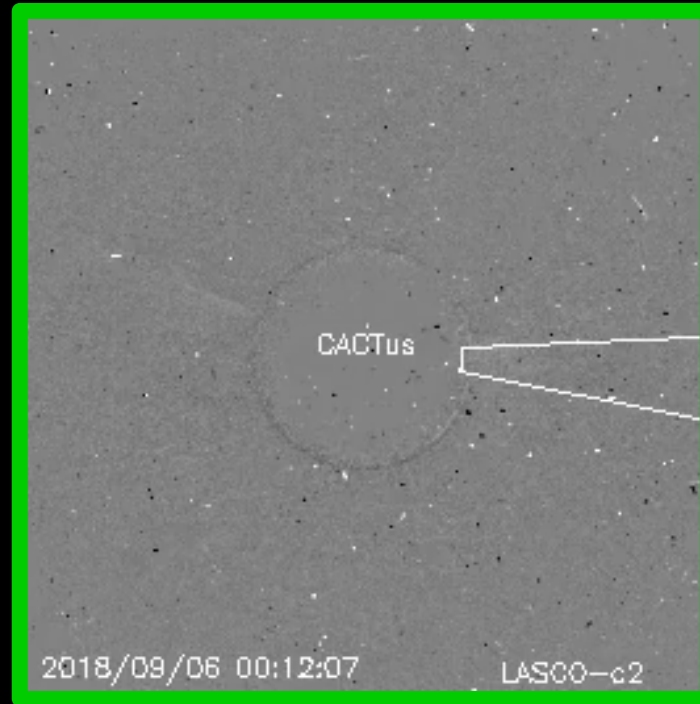
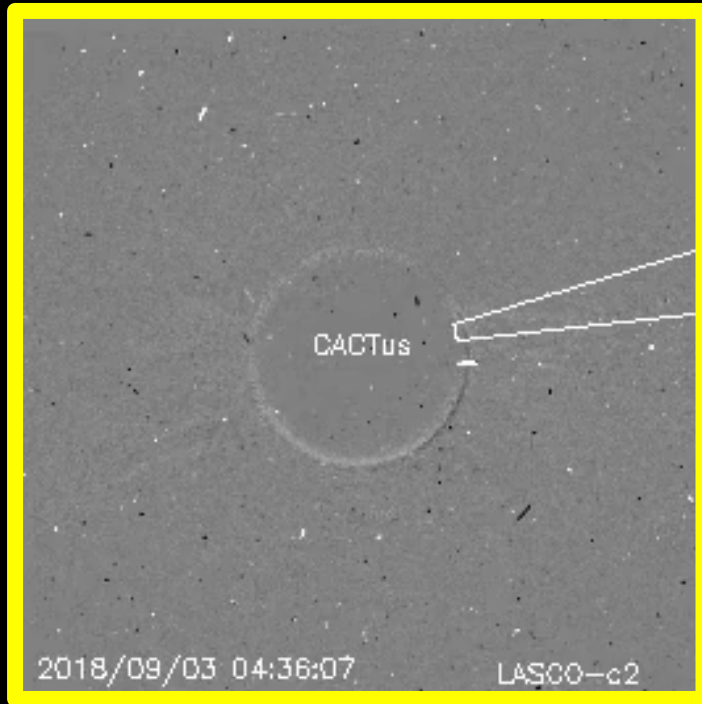
Solar proton flux



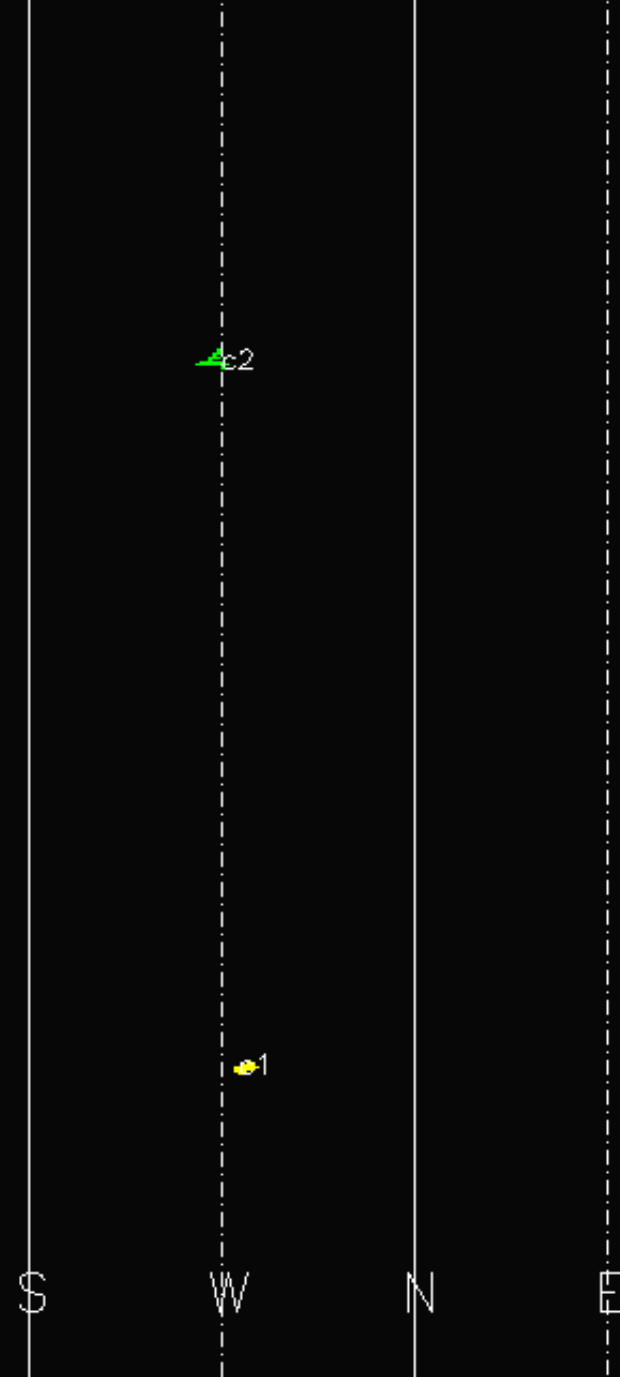
Solar F10.7cm radio flux



Coronal Mass Ejections



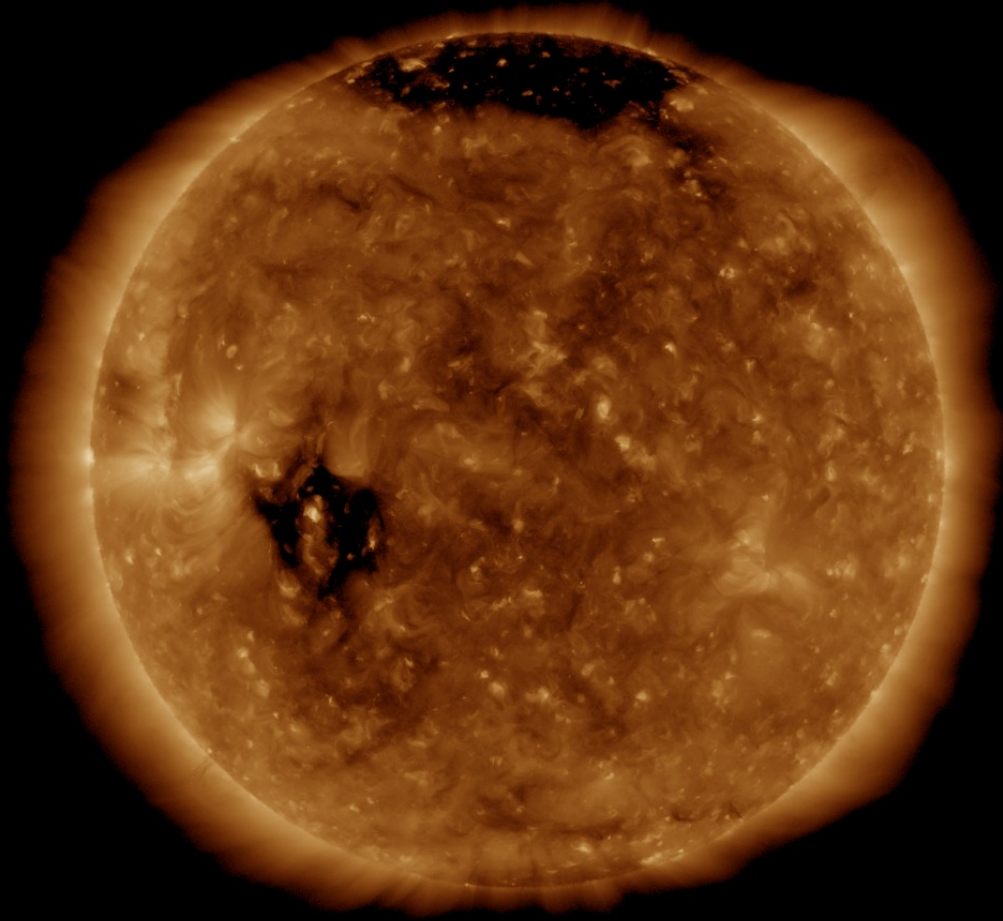
CME	t0	dt0	pa	da	v	dv	minv	maxv	halo?
0002	2018/09/06 00:48	02	266	014	0416	0221	0097	0803	
0001	2018/09/03 05:12	01	282	010	0248	0053	0205	0325	



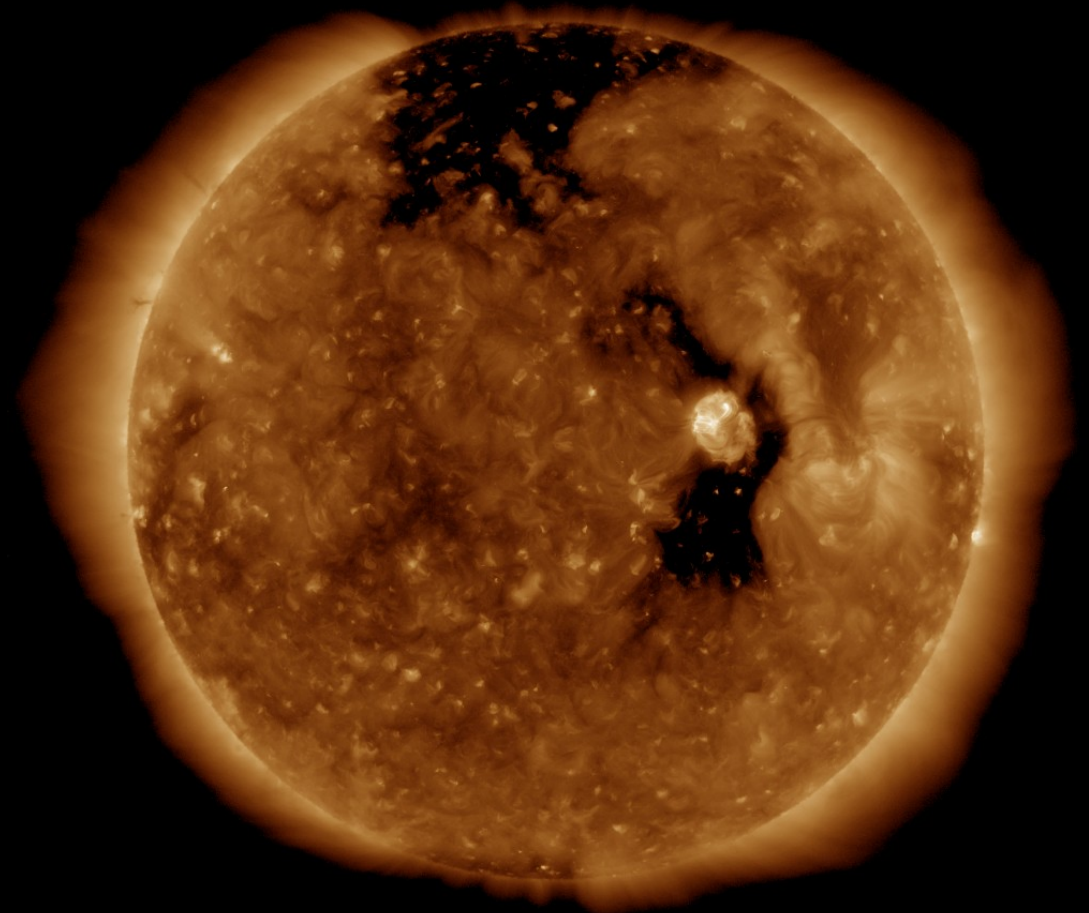
09:12	09/08
06:24	09/07
00:00	09/07
20:24	09/06
17:36	09/06
14:48	09/06
11:36	09/06
08:36	09/06
05:48	09/06
02:36	09/06
23:24	09/05
19:48	09/05
16:48	09/05
13:48	09/05
10:12	09/05
07:00	09/05
04:00	09/05
00:30	09/05
21:42	09/04
19:00	09/04
15:48	09/04
12:36	09/04
10:00	09/04
07:12	09/04
04:24	09/04
00:48	09/04
21:48	09/03
18:24	09/03
15:36	09/03
12:12	09/03
09:36	09/03
06:24	09/03
03:36	09/03
00:00	09/03
20:12	09/02
17:48	09/02
15:05	09/02
12:00	09/02
09:24	09/02
06:18	09/02
03:36	09/02
00:00	09/02

Solar active regions & Coronal holes

SDO/AIA 19.3 nm 2018-09-02



SDO/AIA 19.3 nm 2018-09-09

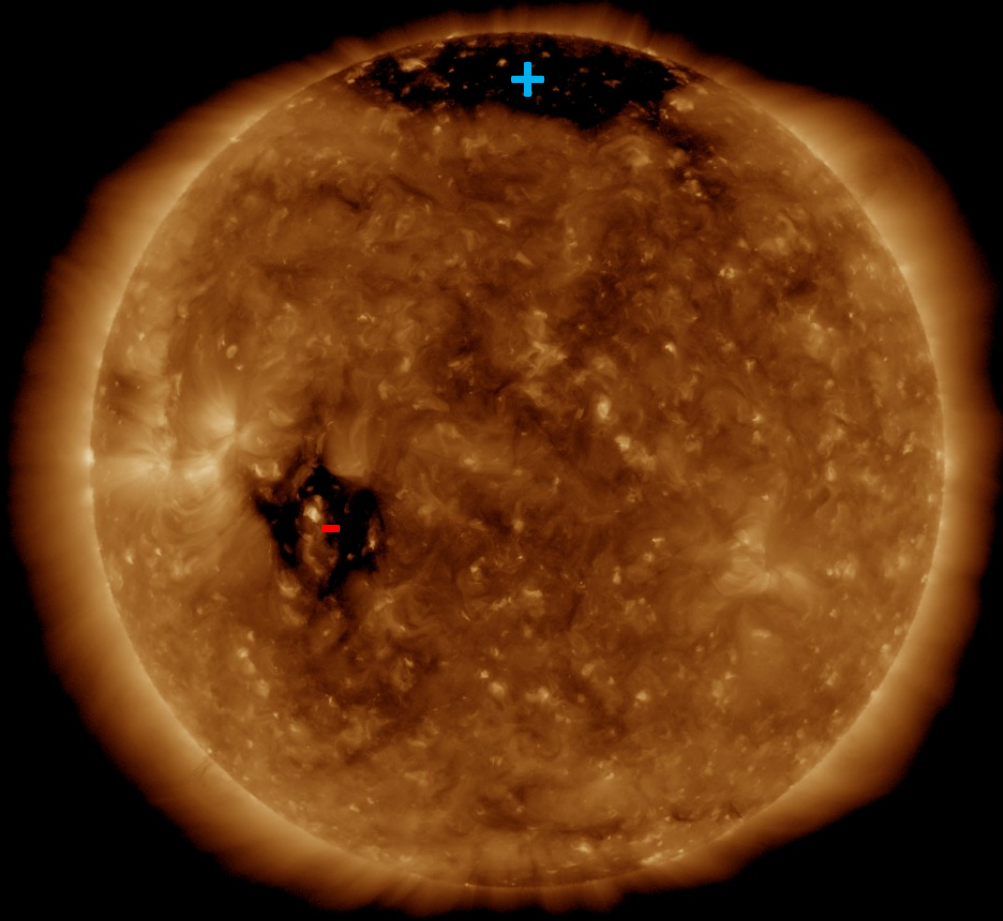


SDO/AIA 193 2018-09-02 12:11:05 UT

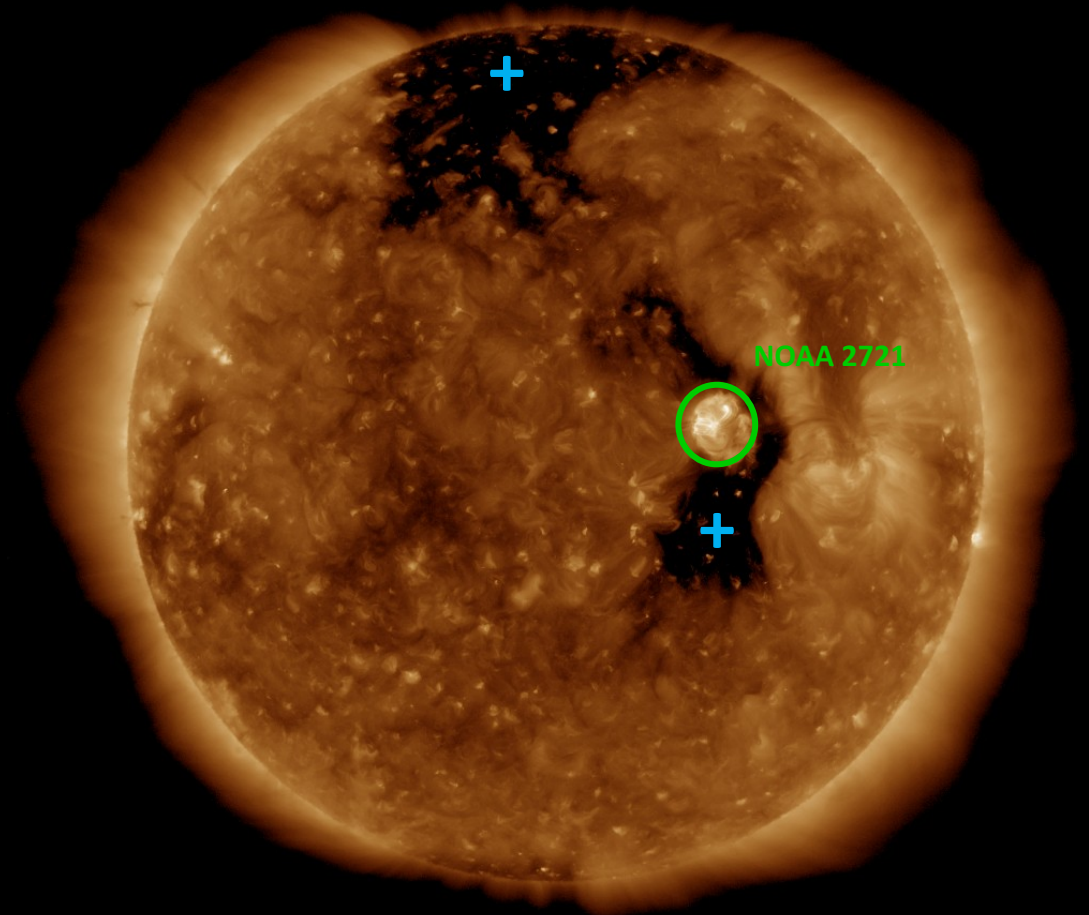
SDO/AIA 193 2018-09-09 12:10:53 UT

Solar active regions & Coronal holes

SDO/AIA 19.3 nm 2018-09-02



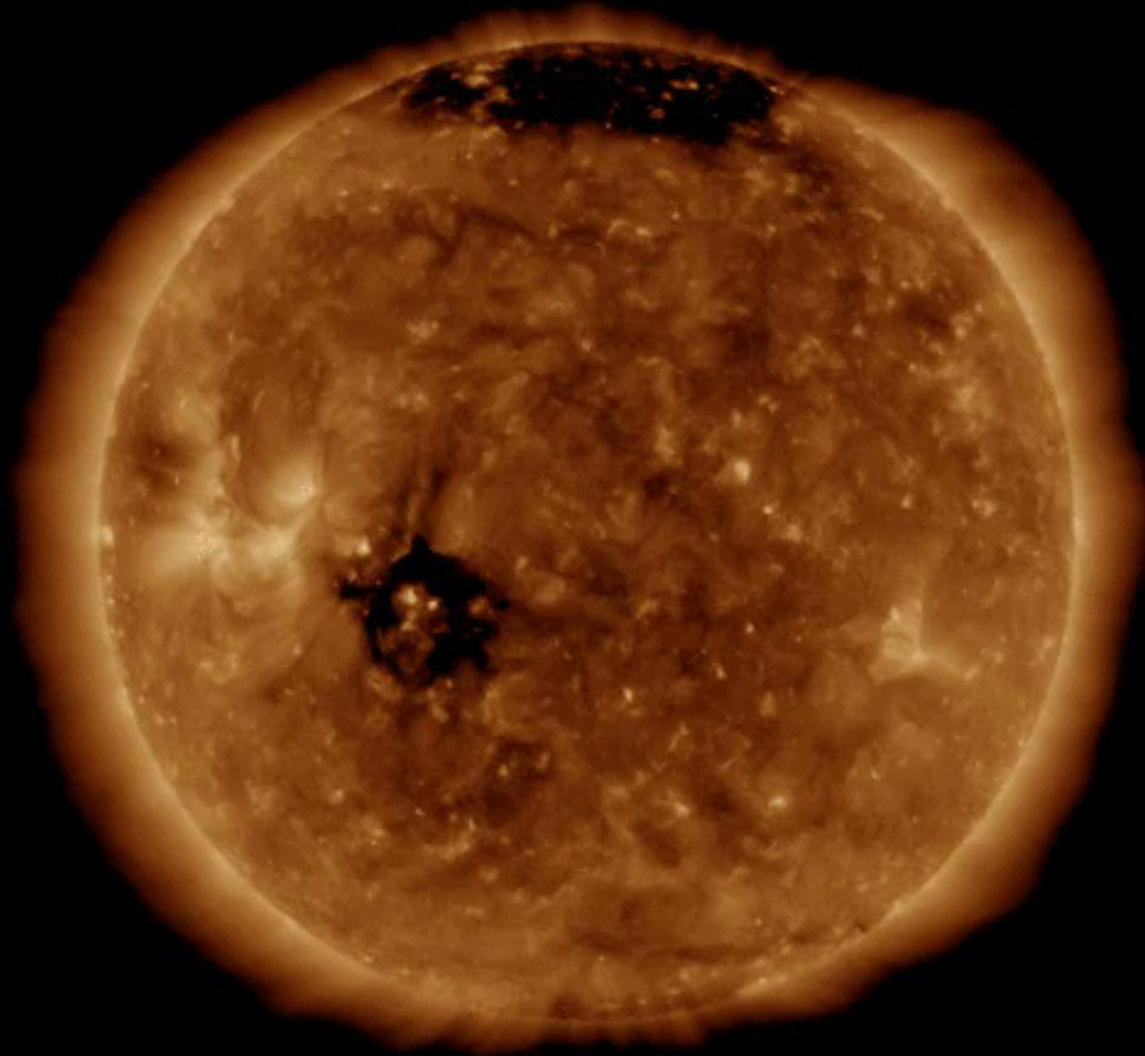
SDO/AIA 19.3 nm 2018-09-09



SDO/AIA 193 2018-09-02 12:11:05 UT

SDO/AIA 193 2018-09-09 12:10:53 UT

Solar active regions & Coronal holes



SDO/AIA 193 2018-09-03 00:55:41 UT

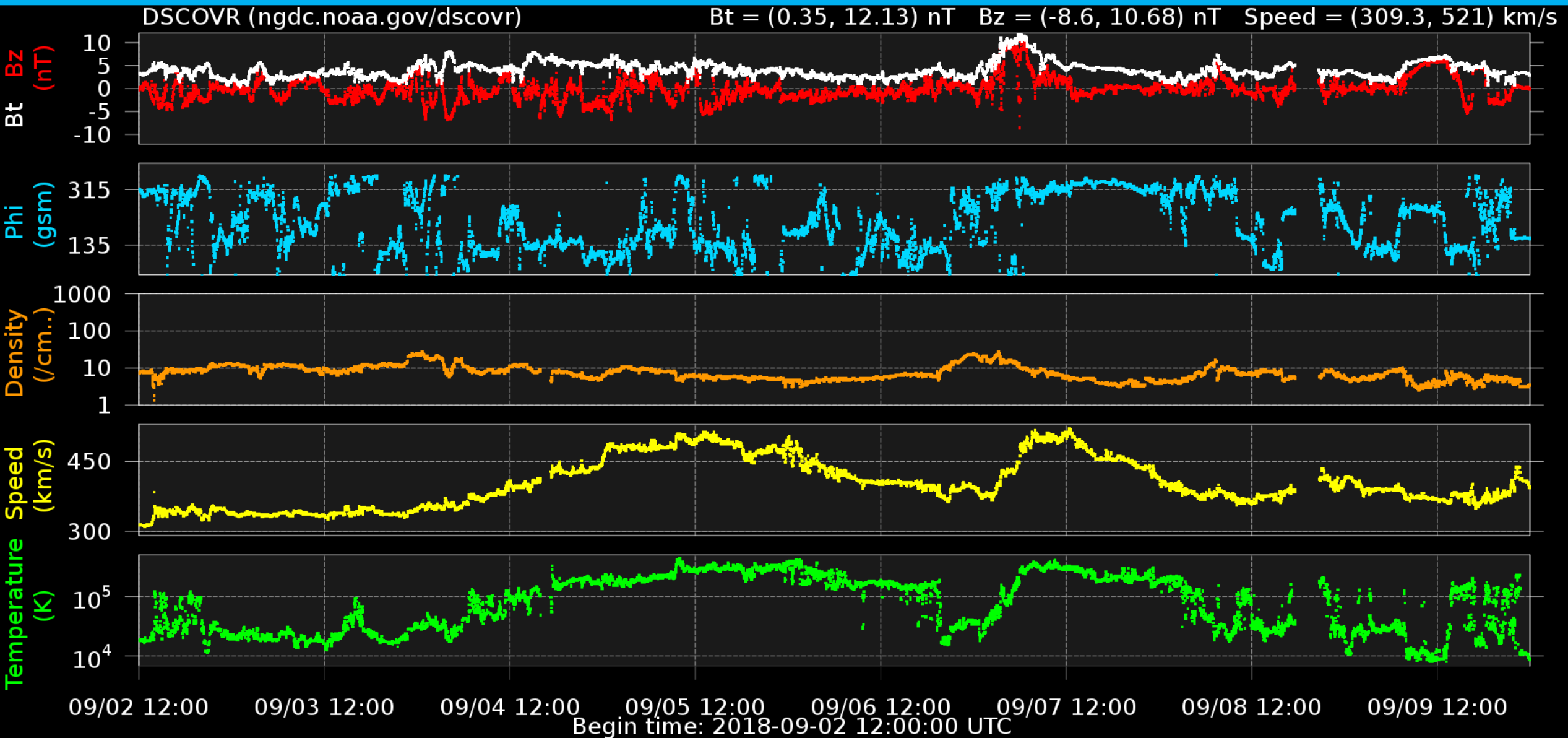
Solar Wind and Geomagnetic Activity



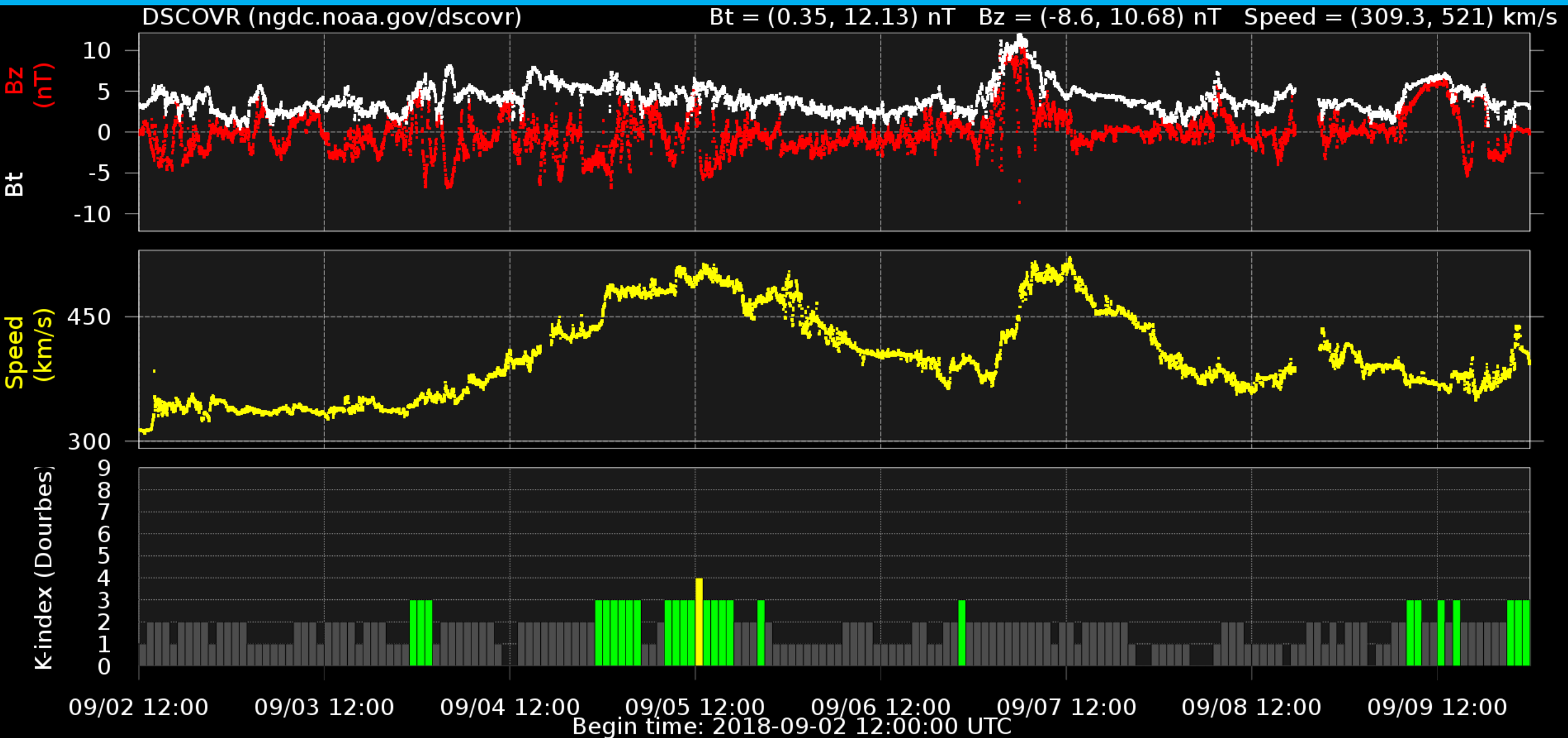
Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

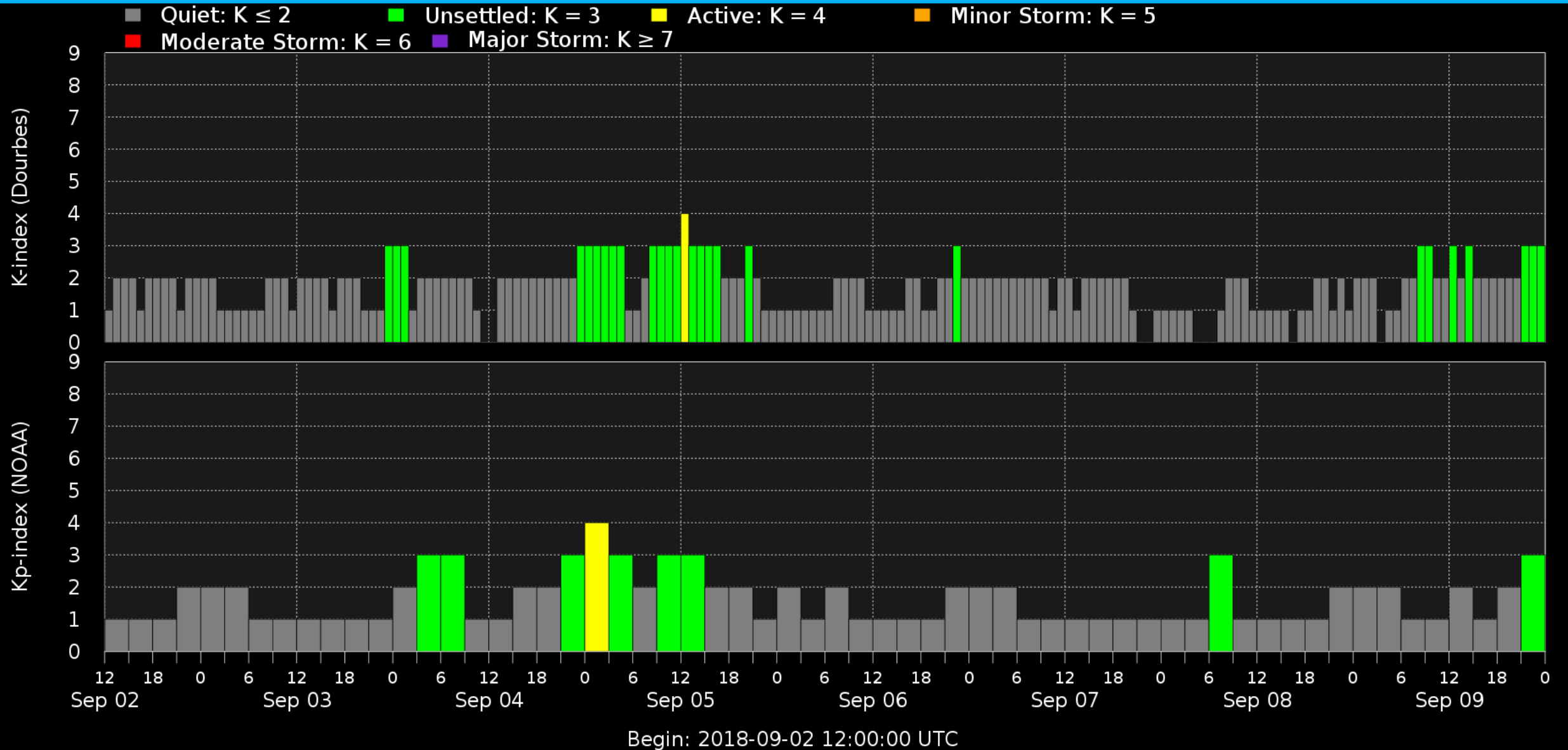
Solar wind parameters (DSCOVR data)



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



Geomagnetic activity (K-indexes)



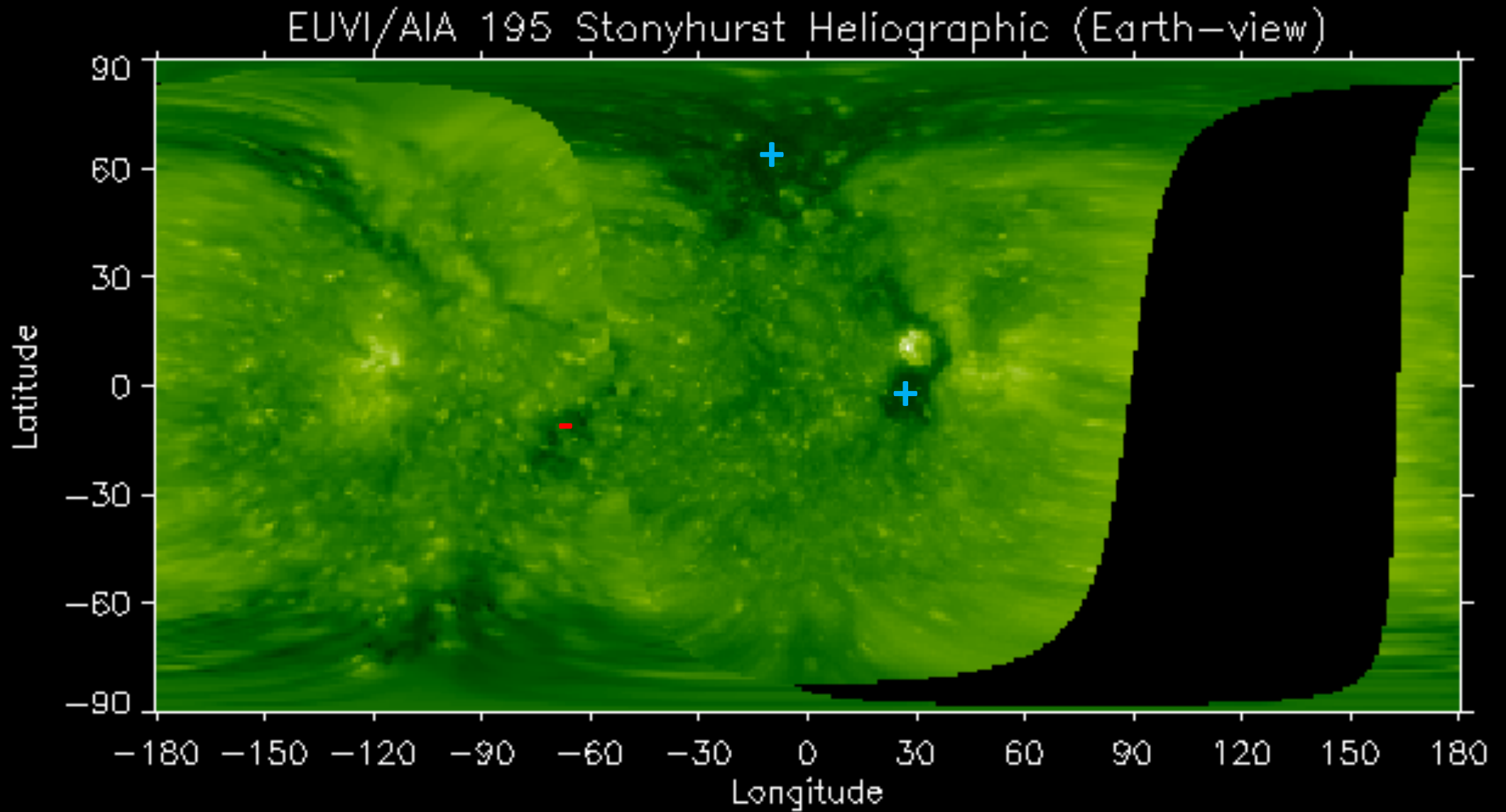
Outlook



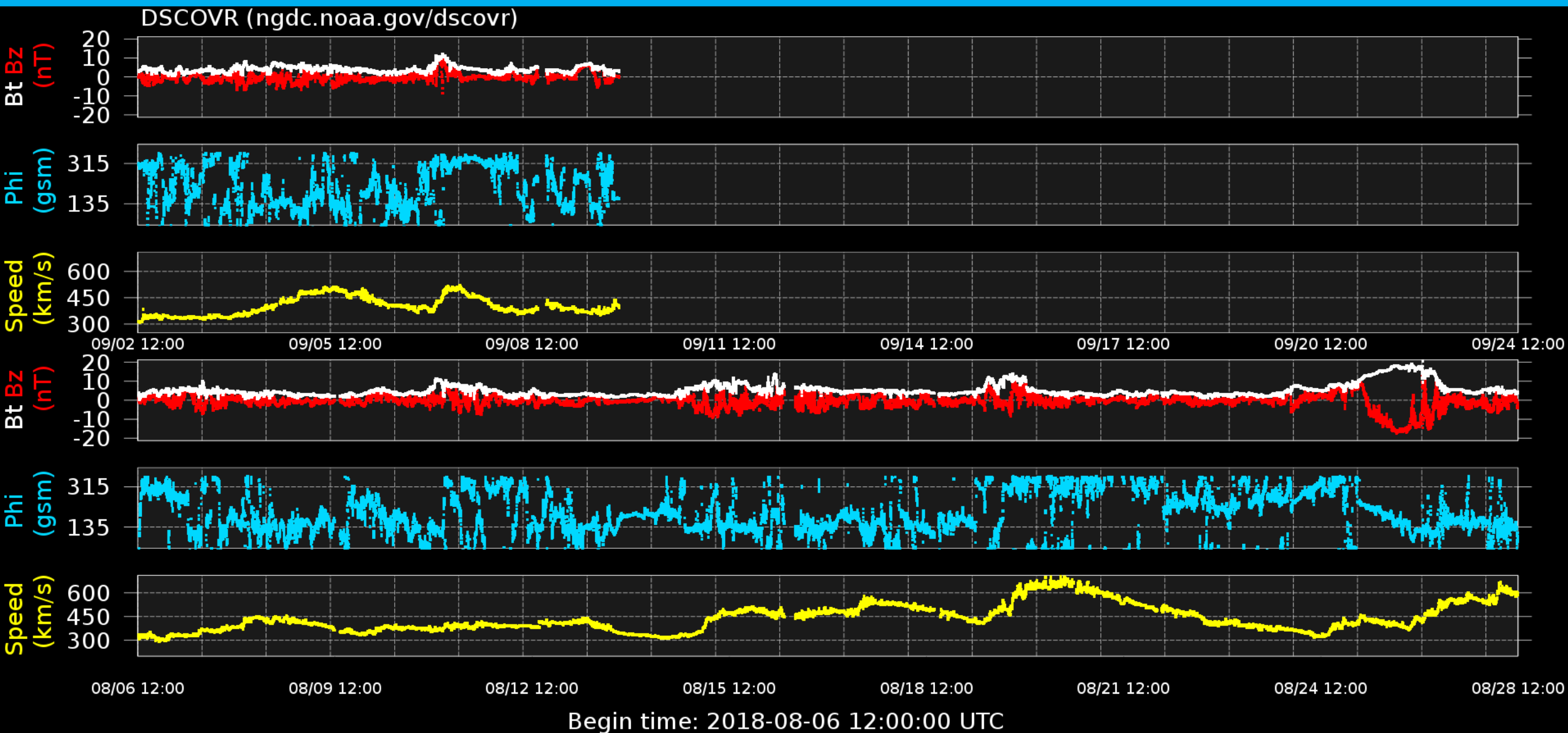
Royal Observatory
of Belgium

Solar Influences
Data analysis Centre
www.sidc.be

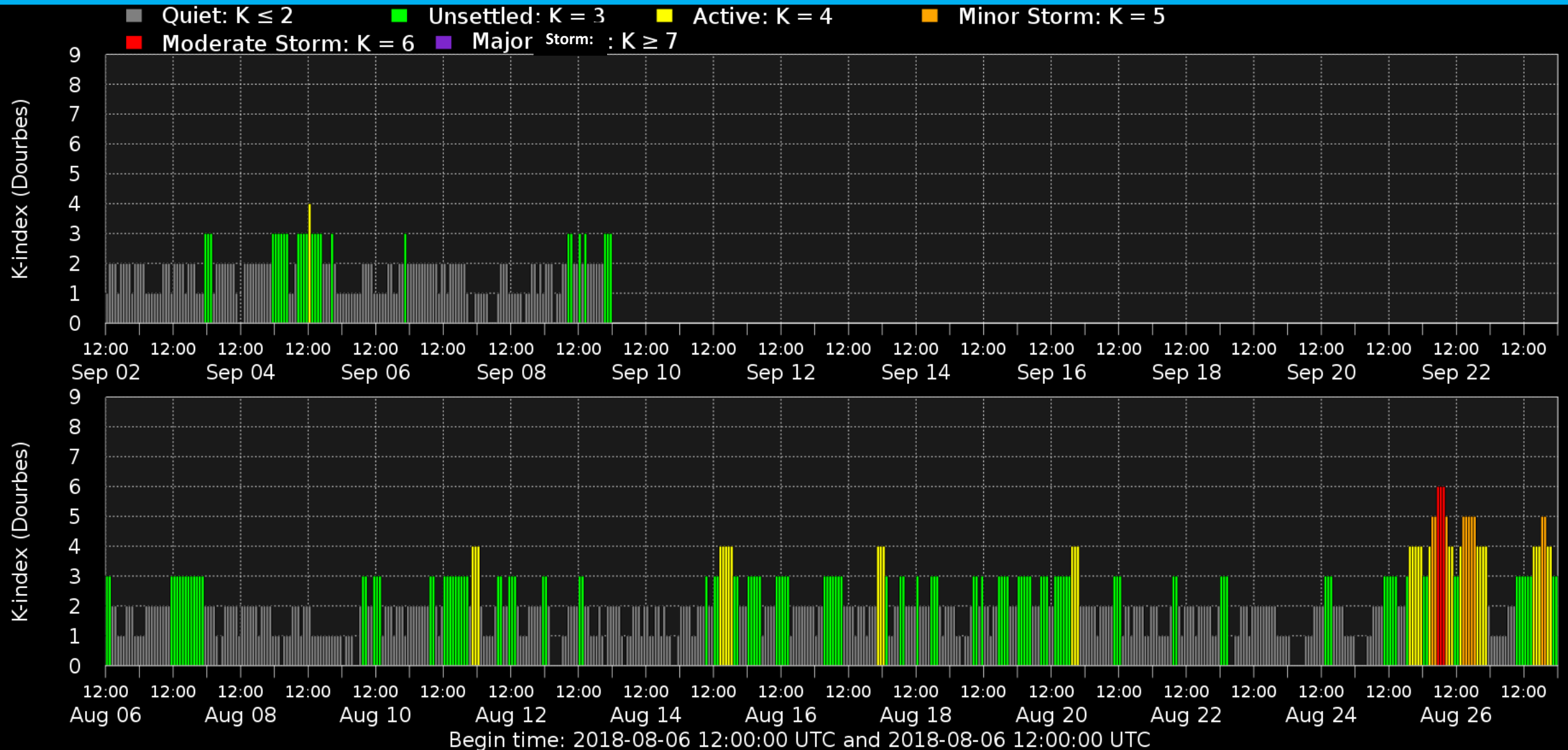
Outlook: Solar activity



Outlook: Solar wind



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