

SIDC Space Weather briefing

5 February – 11 February 2018

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Solar Influences
Data analysis Centre
www.sidc.be



Royal Observatory
of Belgium

Summary Report

Solar Activity:

Active Regions	NOAA 2699
Flaring	4 C-class flares, largest C8.1 flare (+ LDE C1 today)
Filaments	Filament eruption NW
CMEs	No Earth-directed CMEs
Proton Events	Background level

Solar wind and Geomagnetic conditions:

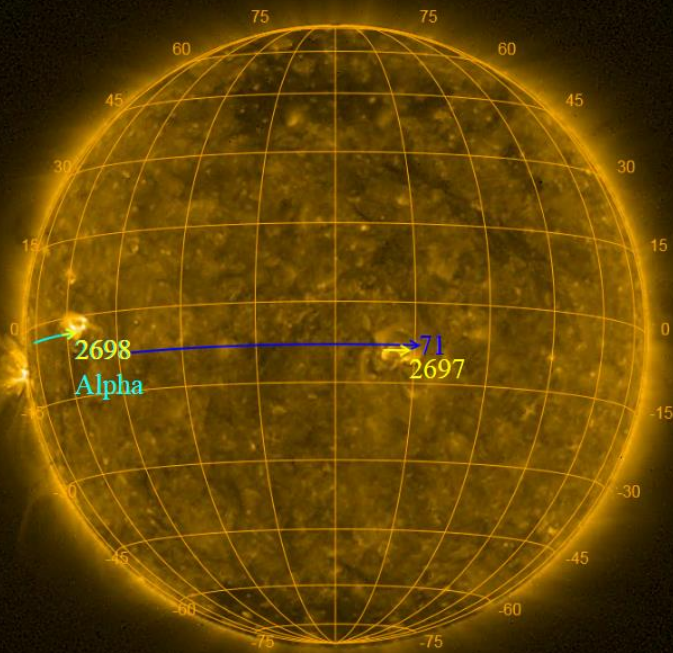
ICME	No Earth directed CME
Coronal Hole	Various small and transient features
SW conditions	Weak CH wind flows (max $v_{sw} \sim 430$ km/s)
Kp index	Quiet to unsettled

ALL QUIET ALERT on since 2 January 2018

Solar active region evolution

Catania sunspot groups
2018-01-31 10:00:00

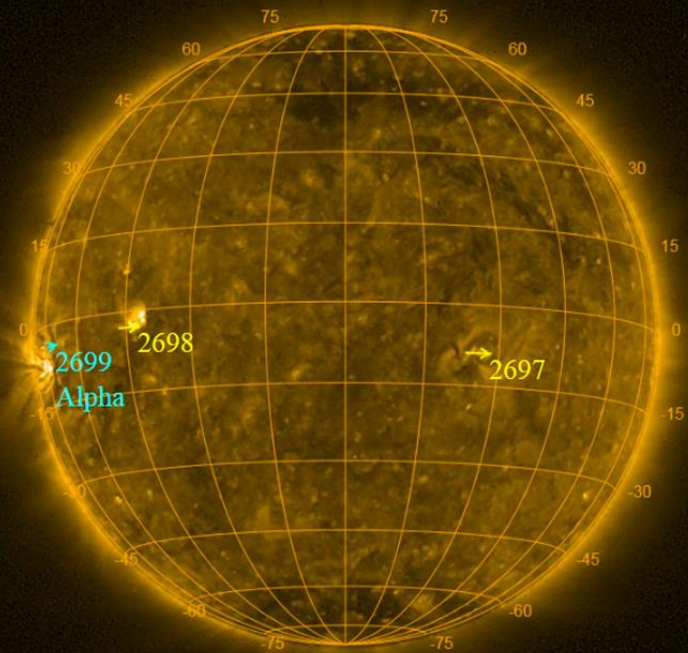
NOAA AR/sunspot
NOAA Halpha plage
NOAA expected region
2018-02-03 00:30:00



PROBA2/SWAP 17.4nm
2018-02-04T08:37:09.671

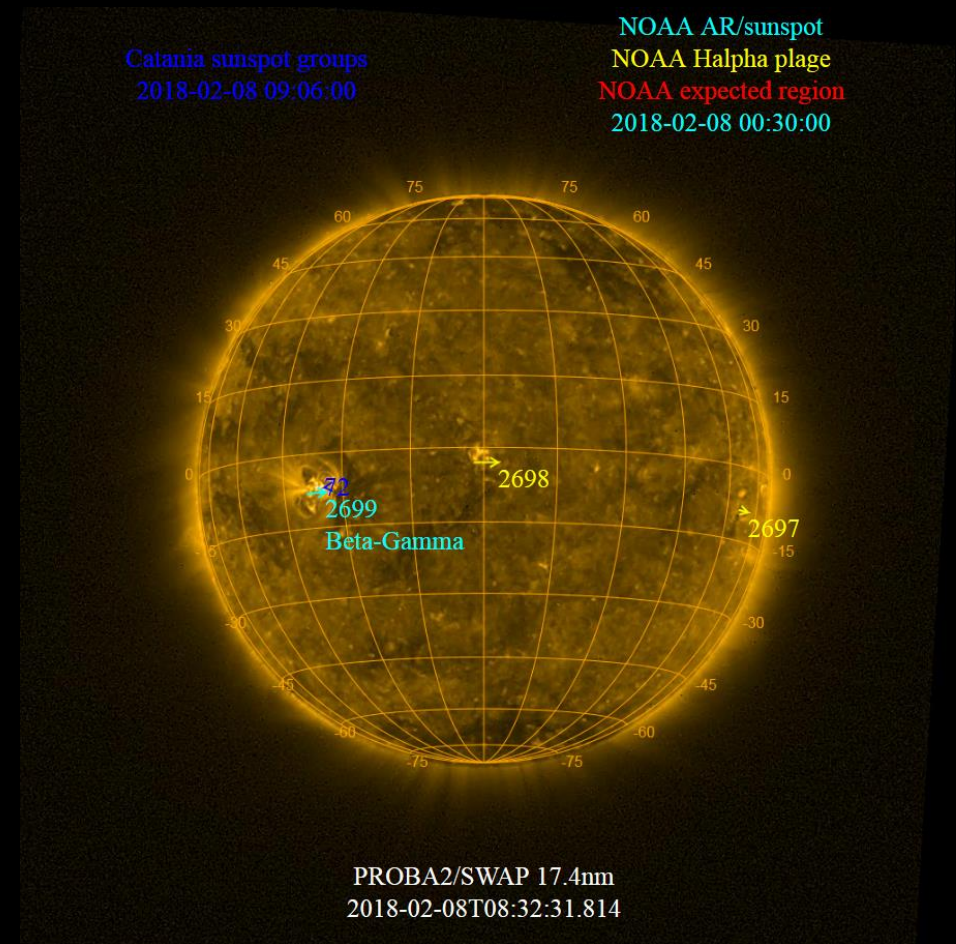
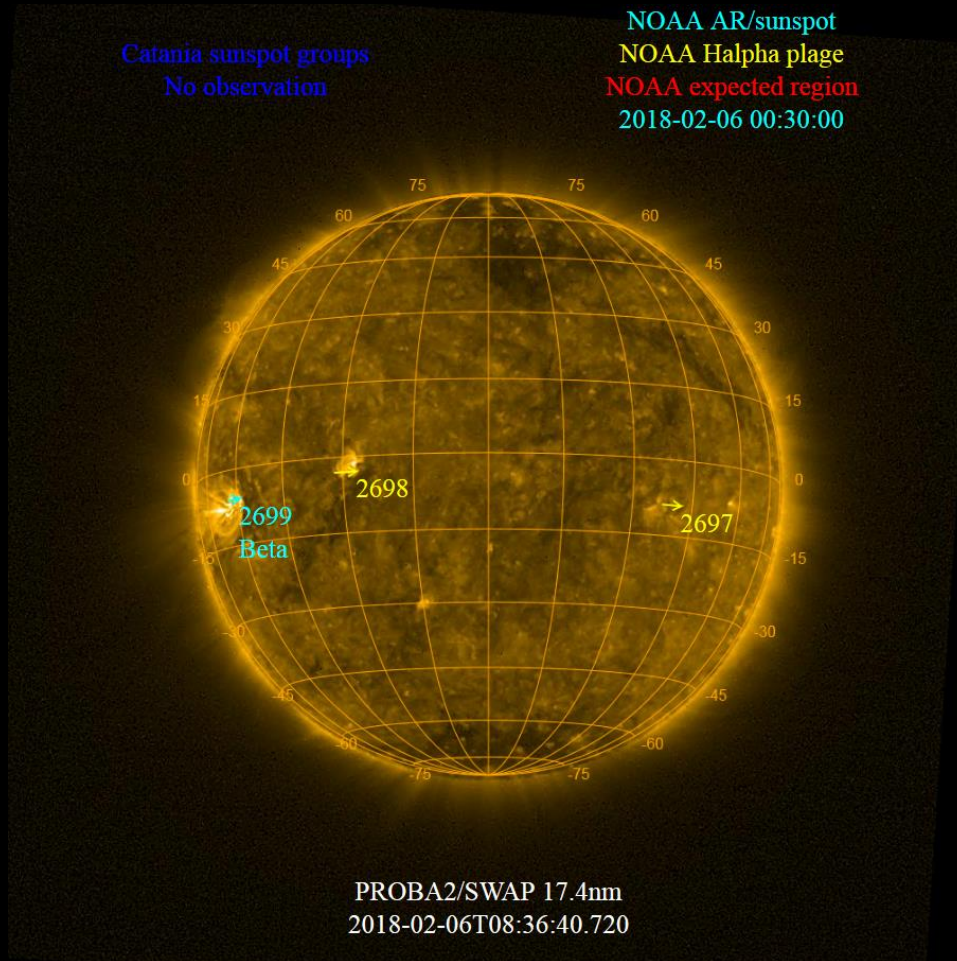
Catania sunspot groups
No observation

NOAA AR/sunspot
NOAA Halpha plage
NOAA expected region
2018-02-05 00:30:00

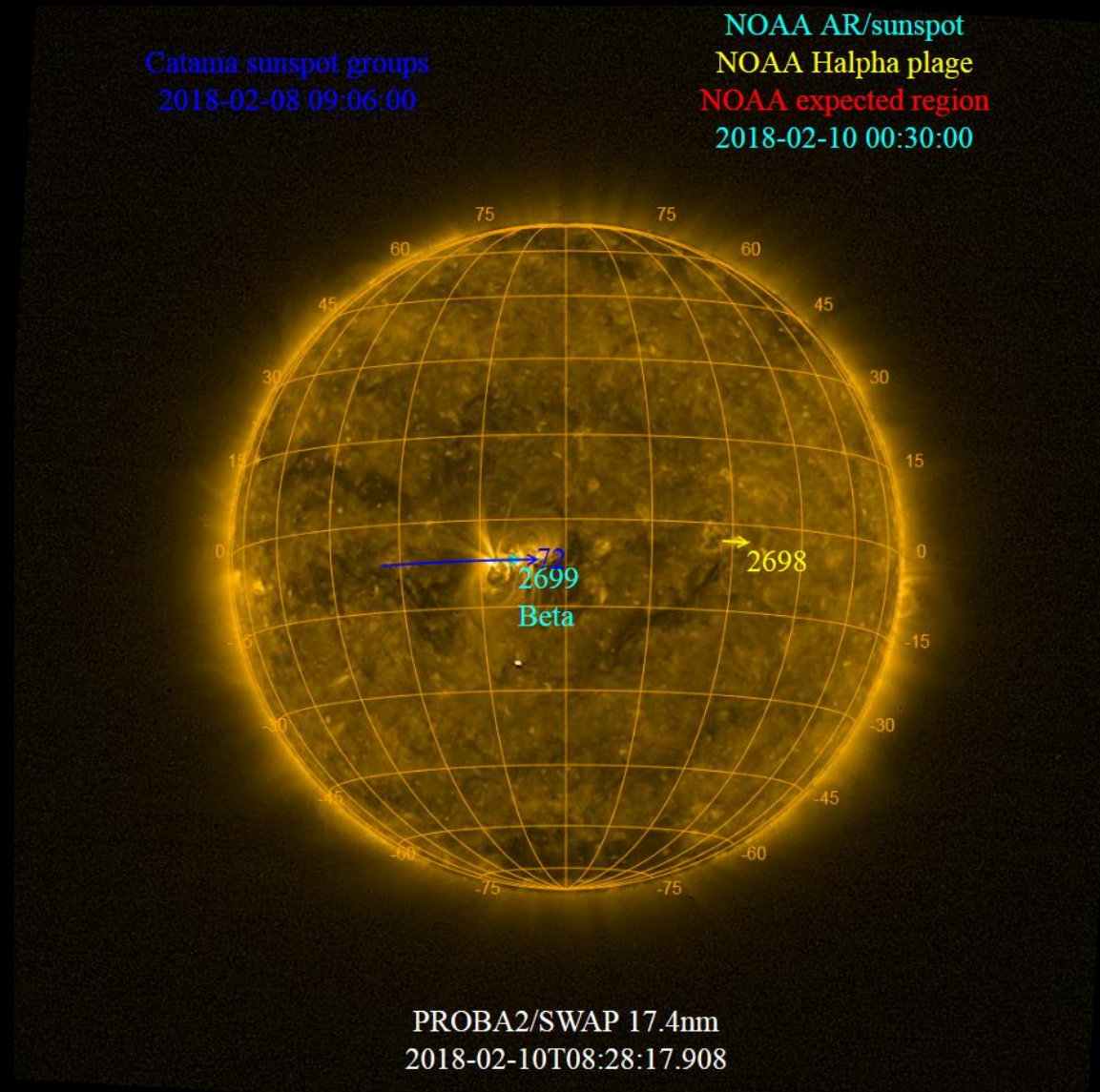


PROBA2/SWAP 17.4nm
2018-02-05T08:37:06.225

Solar active region evolution



Solar active region evolution



Solar active region evolution



Solar active region evolution

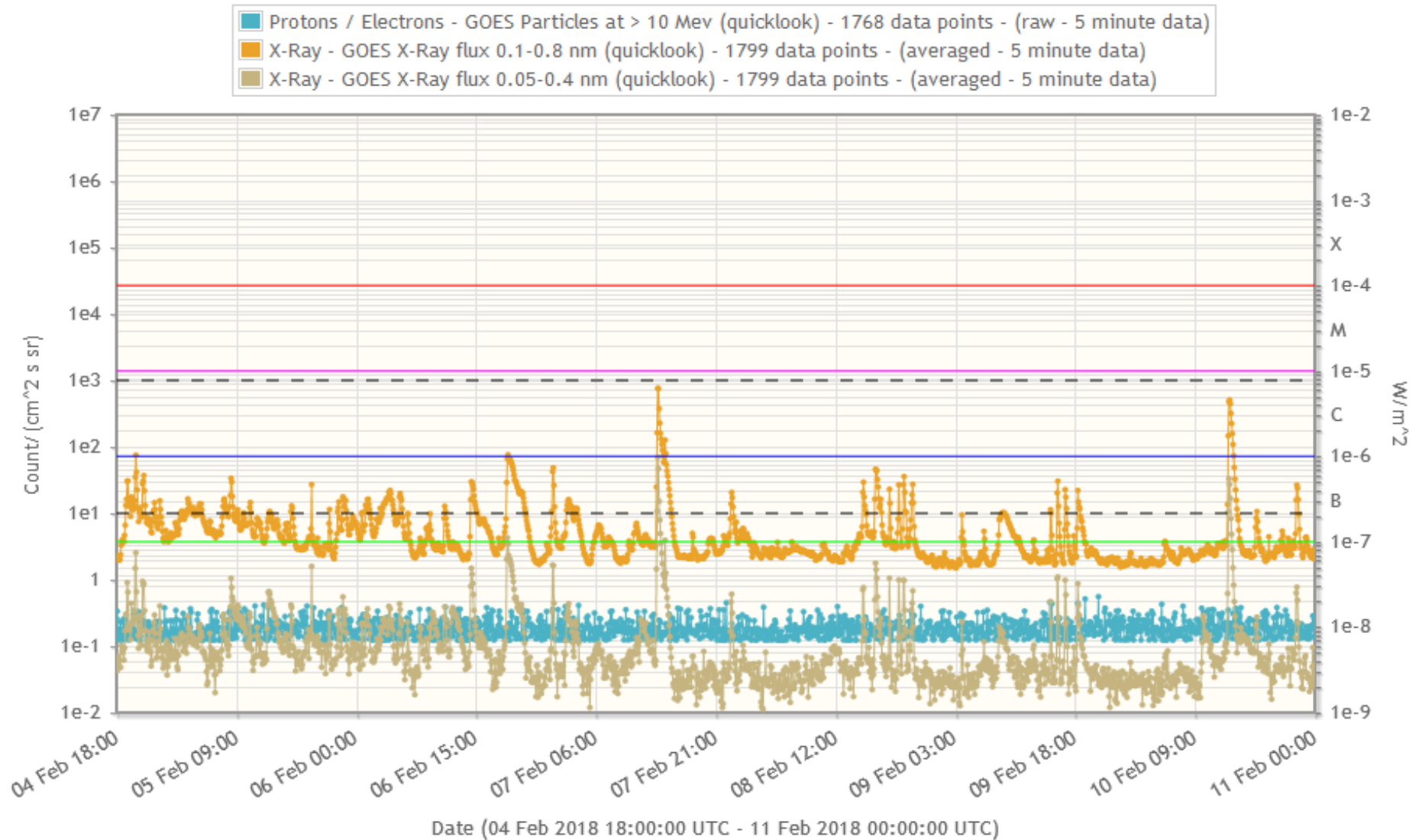


Solar X-Ray Flares

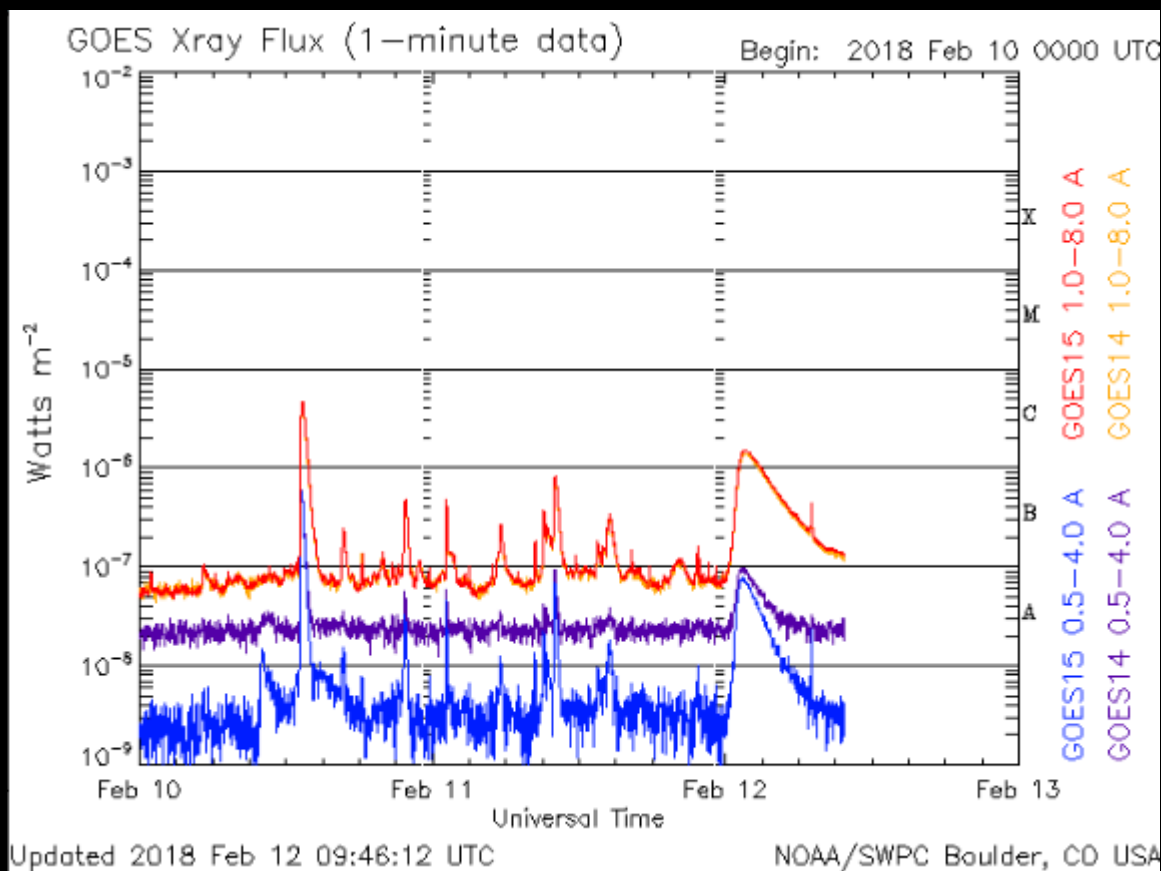
	PEAK	Flares	Pred.	NOAA AR 2699
2018-02-12	02:00 UT	C1.5	$\geq 50\%$	Beta
2018-02-10	13:21 UT	C4.6	$\geq 50\%$	Beta
2018-02-09		-		Beta-Gamma
2018-02-08		-		Beta-Gamma
2018-02-07	13:47 UT	C1.7	$\geq 50\%$	Beta
2018-02-07	14:49 UT	C8.1	$\geq 50\%$	Beta
2018-02-06	18:58 UT	C1.0	25 %	Beta
2018-02-04	20:24 UT	C1.1	25 %	Alpha

Solar X-ray flux and ≥ 10 MeV proton flux (GOES)

Plot (04 Feb 2018 18:00:00 UTC - 11 Feb 2018 00:00:00 UTC)



Solar X-ray flux (GOES)

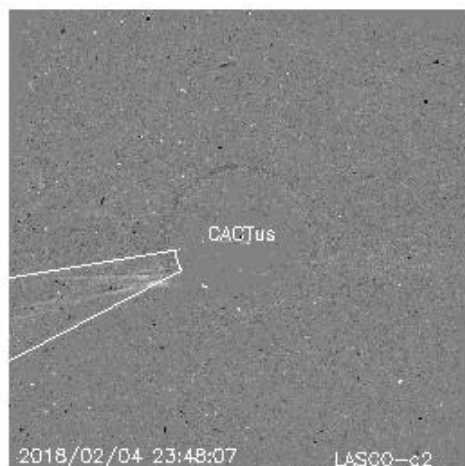


CMEs

Details and graphs for CME0001

#	CME	t0	dt0	pa	da	v	dv	minv	maxv	halo?
0001		2018/02/04 21:38	02	108	018	0294	0104	0112	0504	

CME Movie :: [Download](#) ::



S

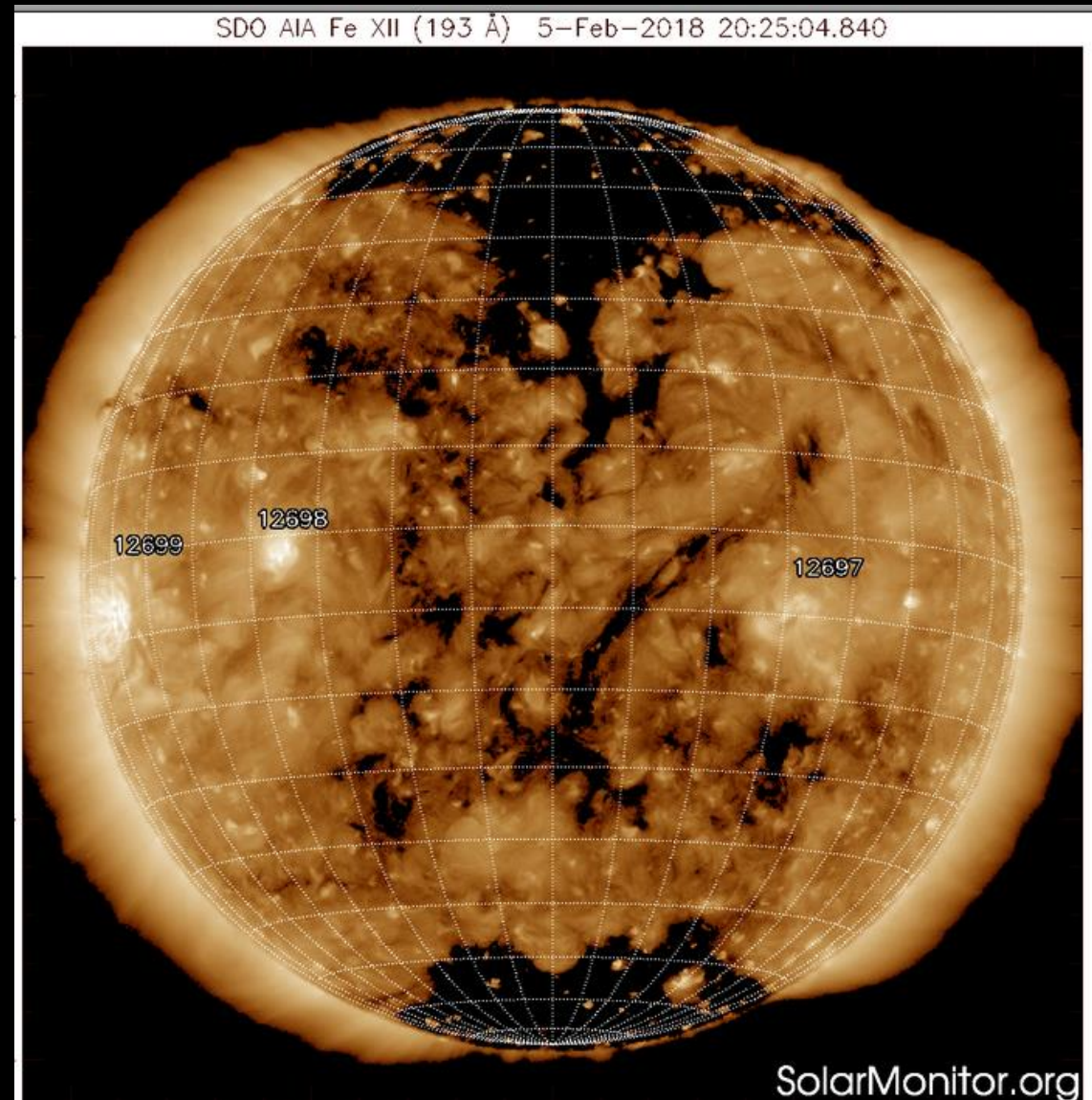
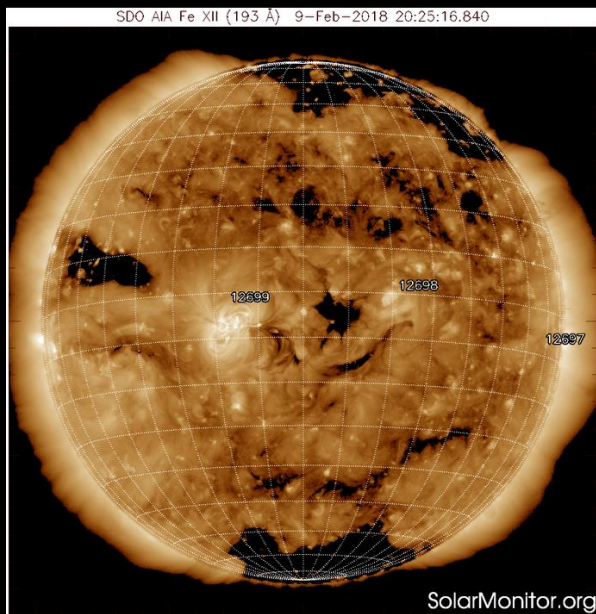
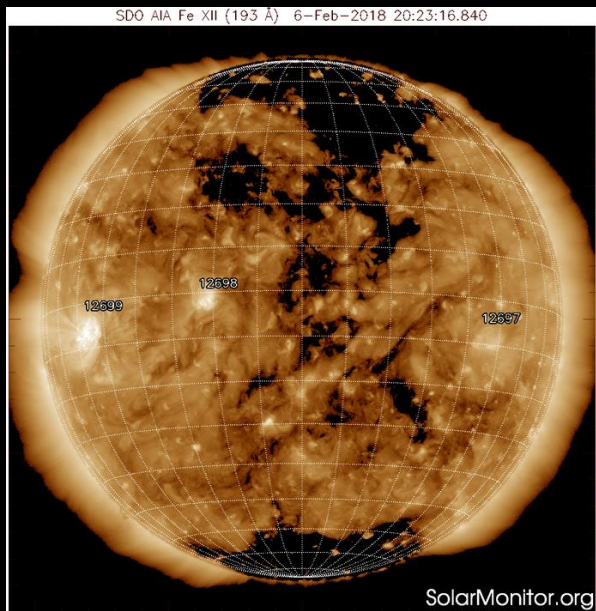
W

N

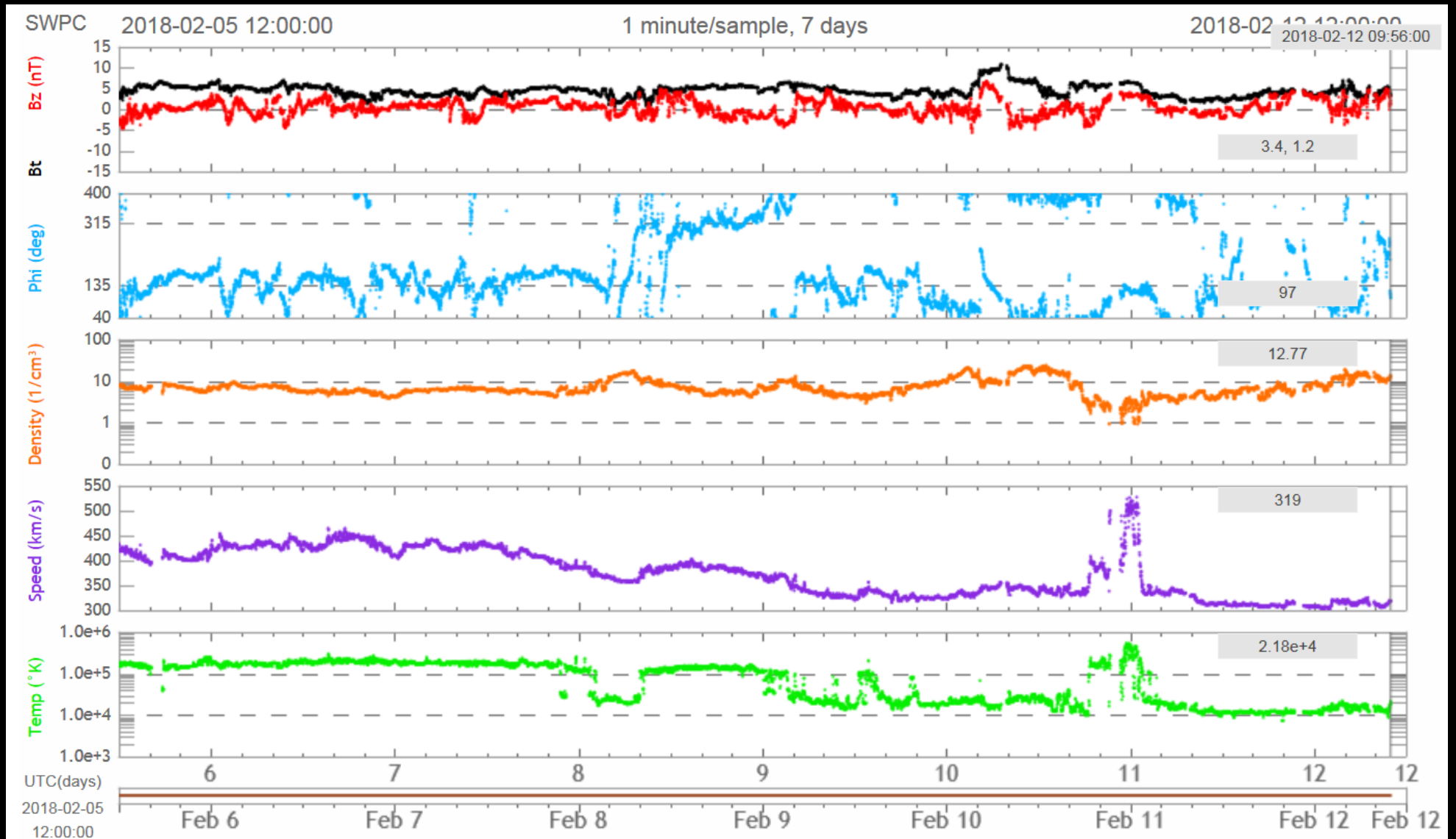
E

02:12 02/06
23:12 02/05
20:00 02/05
17:12 02/05
13:48 02/05
10:48 02/05
07:36 02/05
05:00 02/05
01:48 02/05
22:00 02/04
19:00 02/04
16:12 02/04
12:48 02/04
10:00 02/04
07:12 02/04
04:12 02/04
00:48 02/04
21:36 02/03
18:24 02/03
15:36 02/03
12:00 02/03
08:48 02/03
05:48 02/03
02:48 02/03
23:48 02/02
20:00 02/02
17:00 02/02
13:48 02/02
10:36 02/02
07:12 02/02
03:18 02/02
23:48 02/01
20:24 02/01
17:24 02/01
14:36 02/01
11:30 02/01
08:24 02/01
05:48 02/01
02:36 02/01
23:24 01/31
20:18 01/31
18:00 01/31
14:48 01/31
12:00 01/31
09:12 01/31
06:12 01/31
03:24 01/31
00:00 01/31

Coronal holes

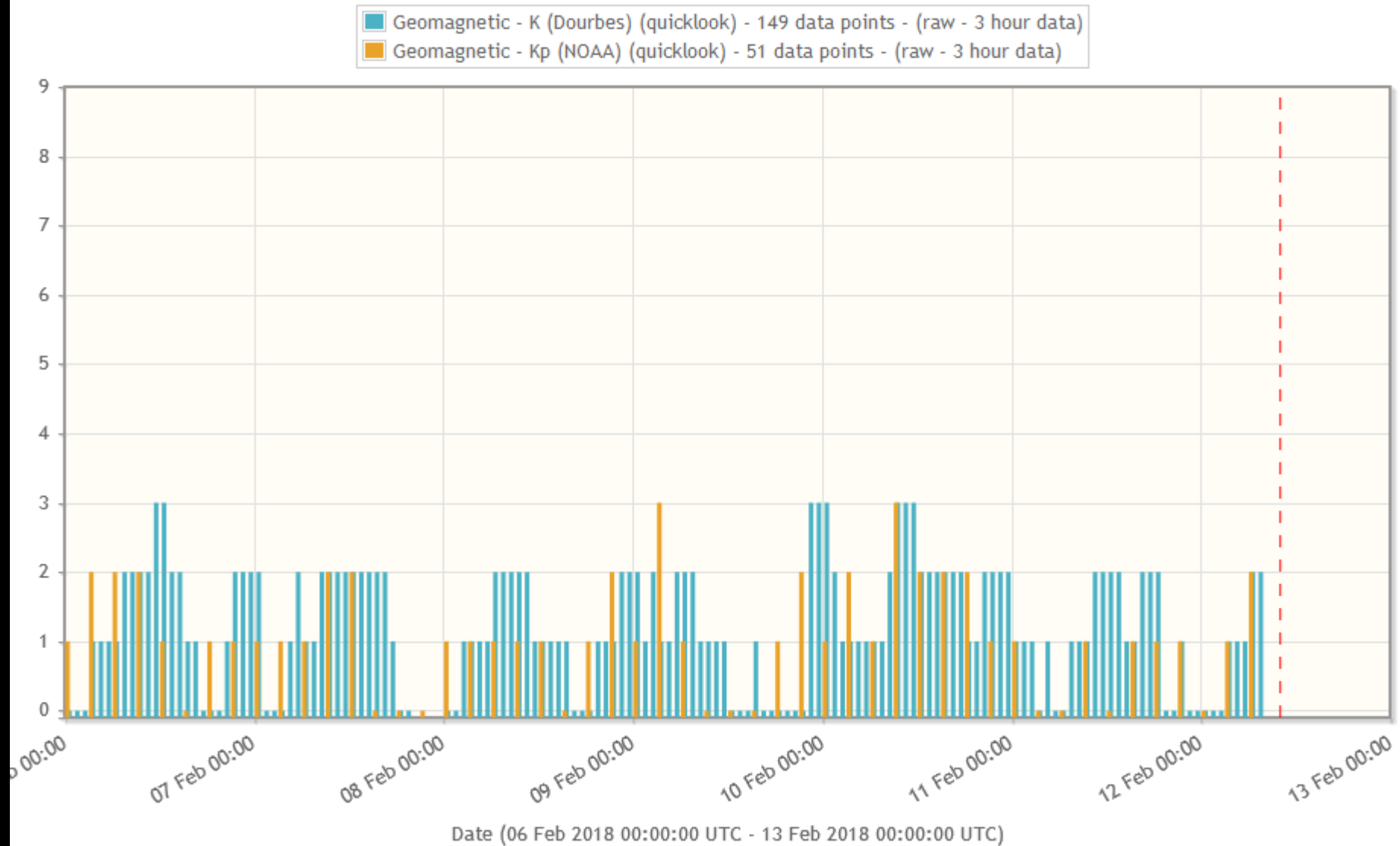


Solar wind

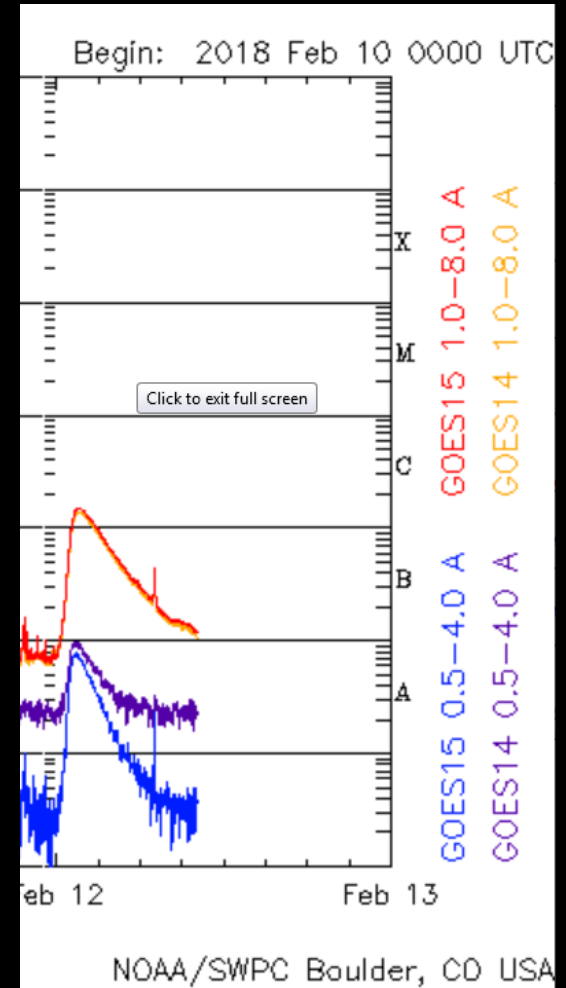
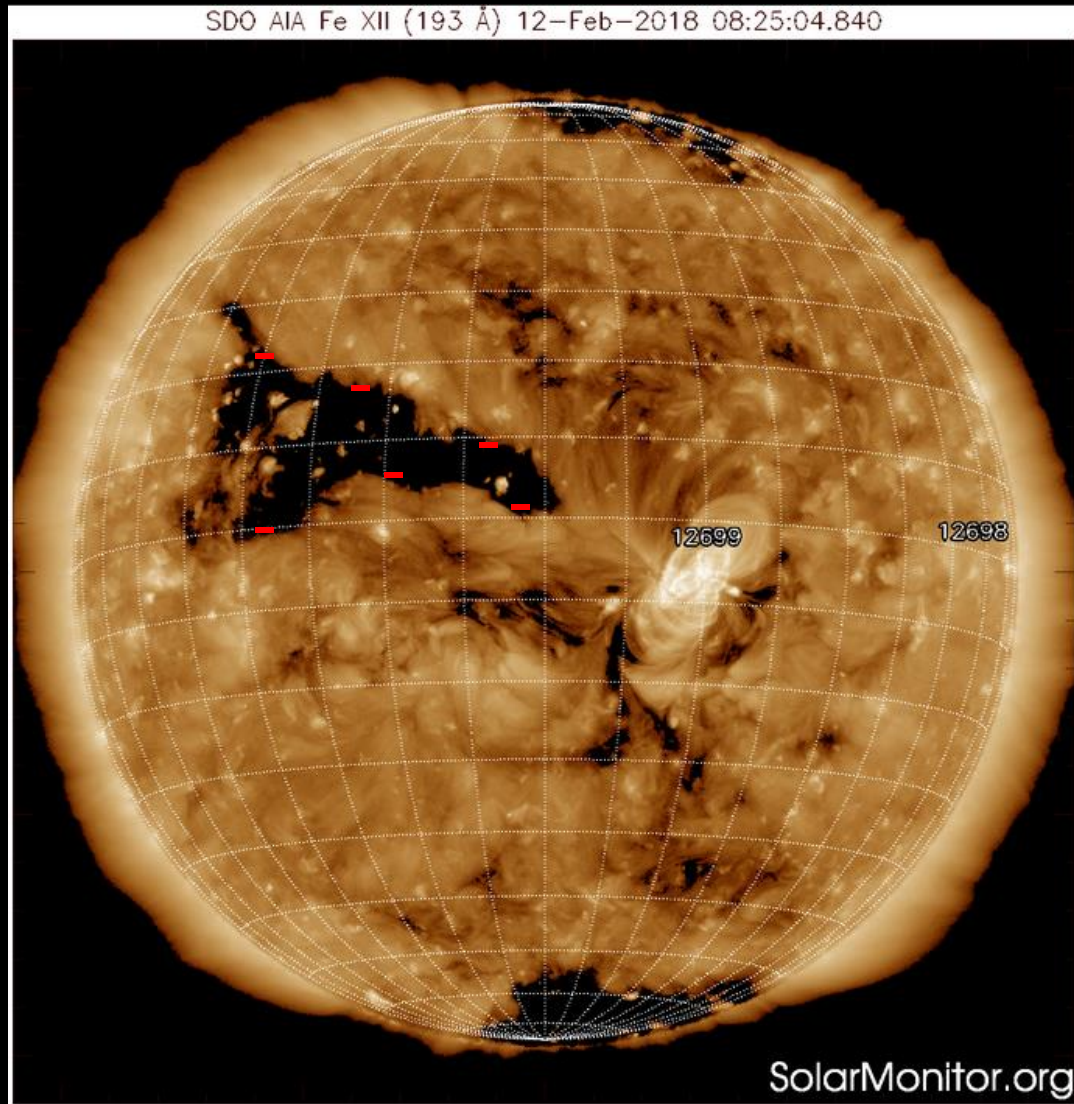


Geomagnetism

Plot (06 Feb 2018 00:00:00 UTC - 13 Feb 2018 00:00:00 UTC)



Outlook



SIDC Space Weather briefing

See you at our next briefing!

Or visit us at www.sidc.be

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