

ESWW14

SIDC & SeNMEs Space Weather briefing

29 November 2017

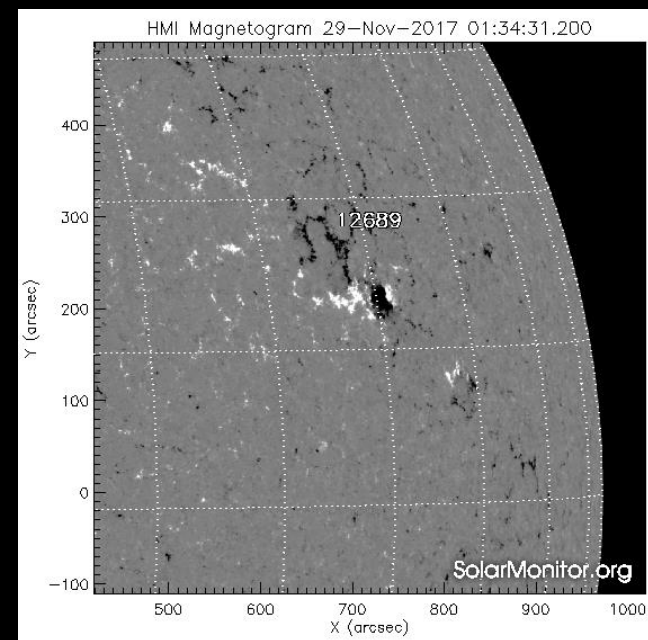
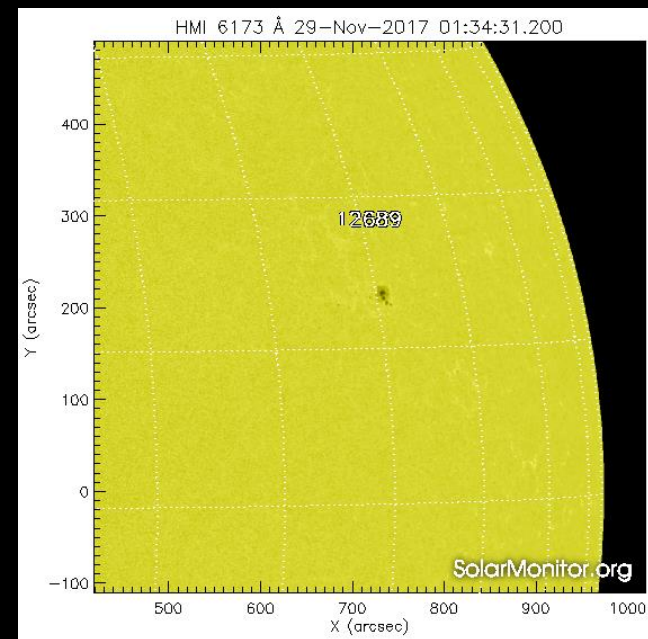
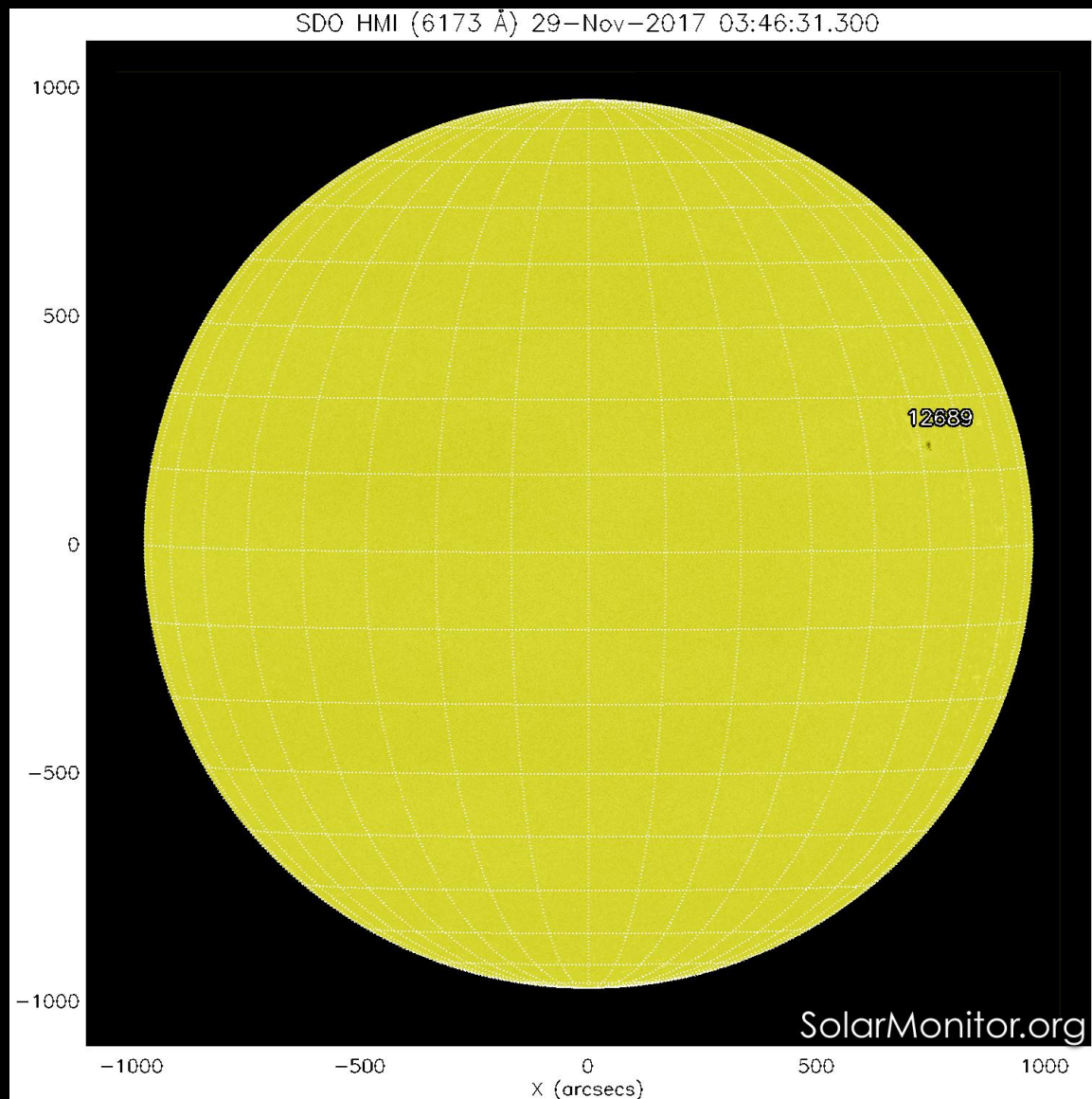
Jan Janssens (SIDC) & Consuelo Cid (SeNMEs)

Solar Influences
Data analysis Centre
www.sidc.be



Servicio Nacional de
Meteorología Espacial
www.senmes.es

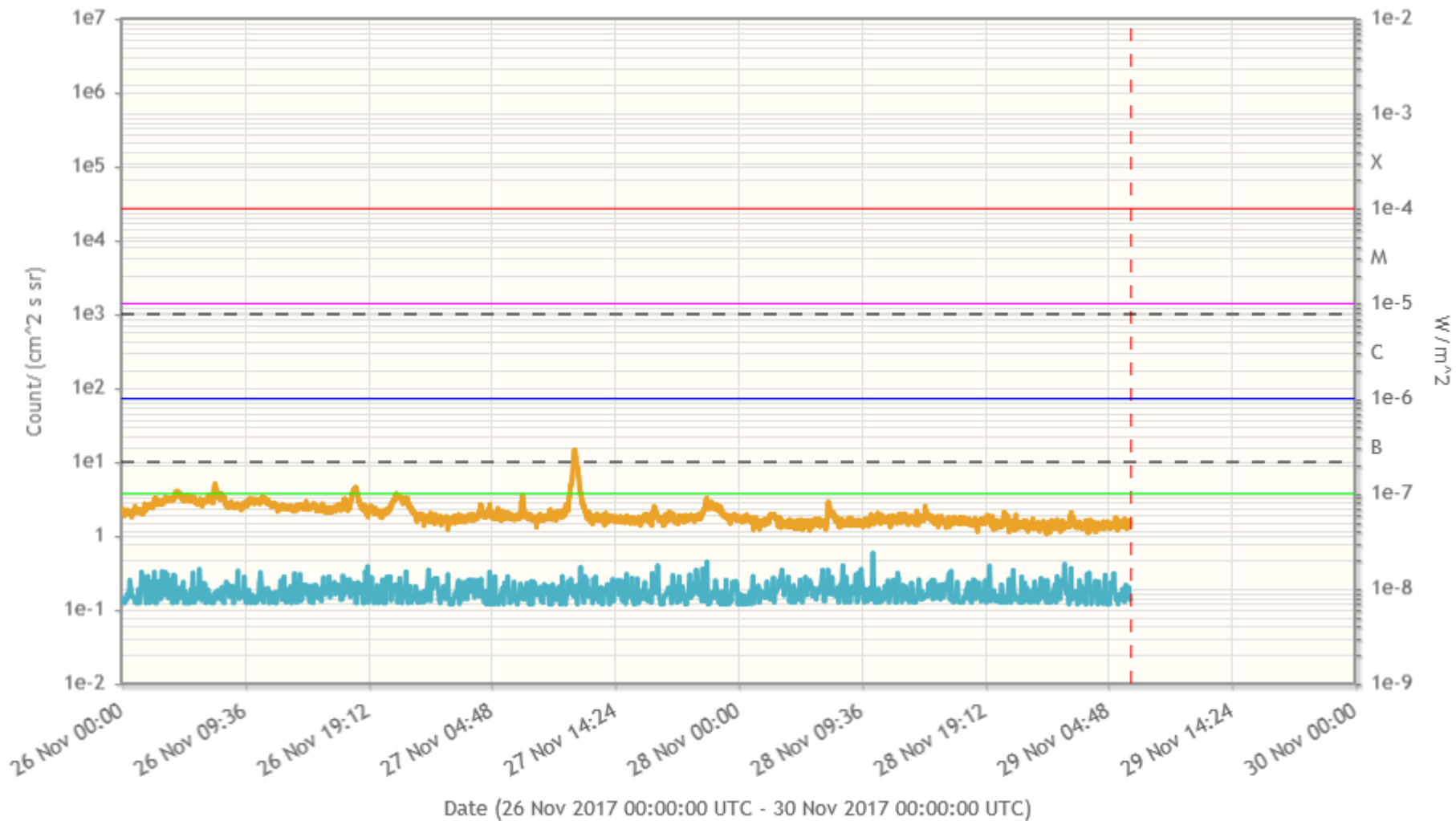
Solar active region evolution



GOES X-ray flux and Proton flux

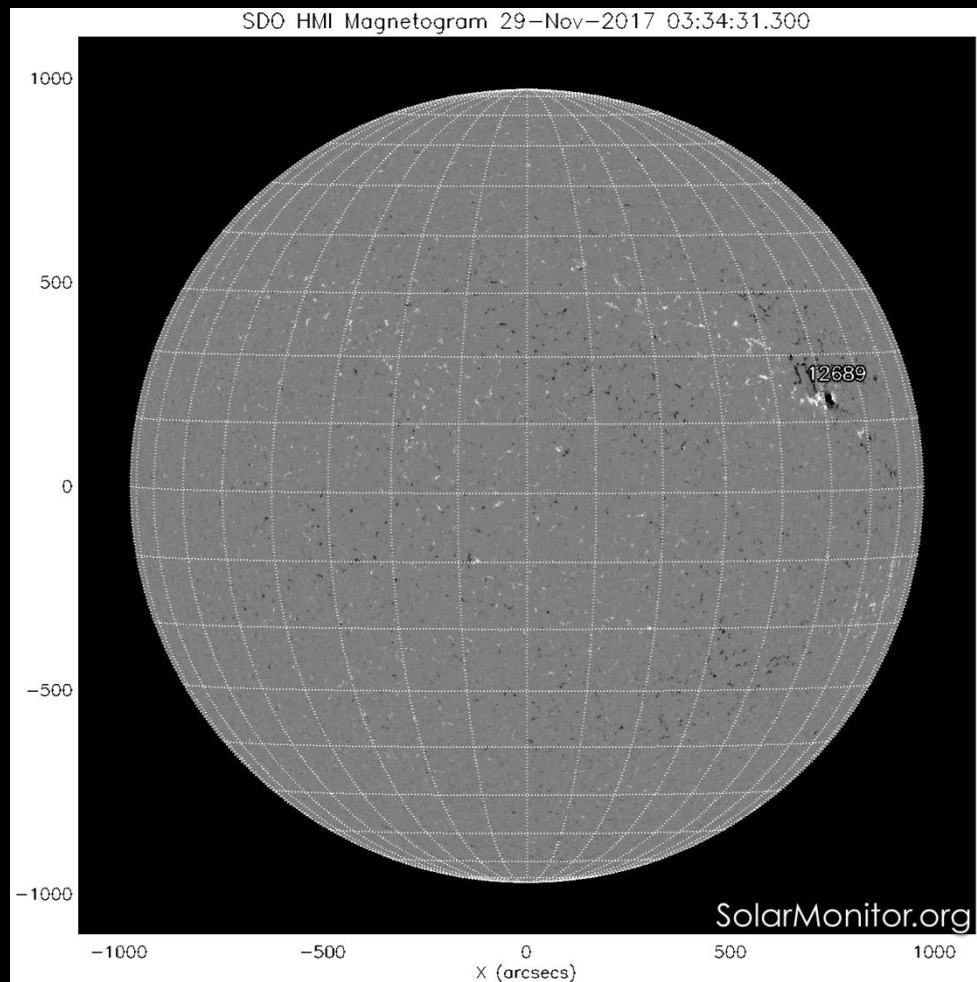
www.staff.oma.be

■ Protons / Electrons - GOES Particles at > 10 Mev (quicklook) - (raw - 5 minute data)
■ X-Ray - GOES X-Ray flux 0.1-0.8 nm (quicklook) - (raw - 1 minute data)

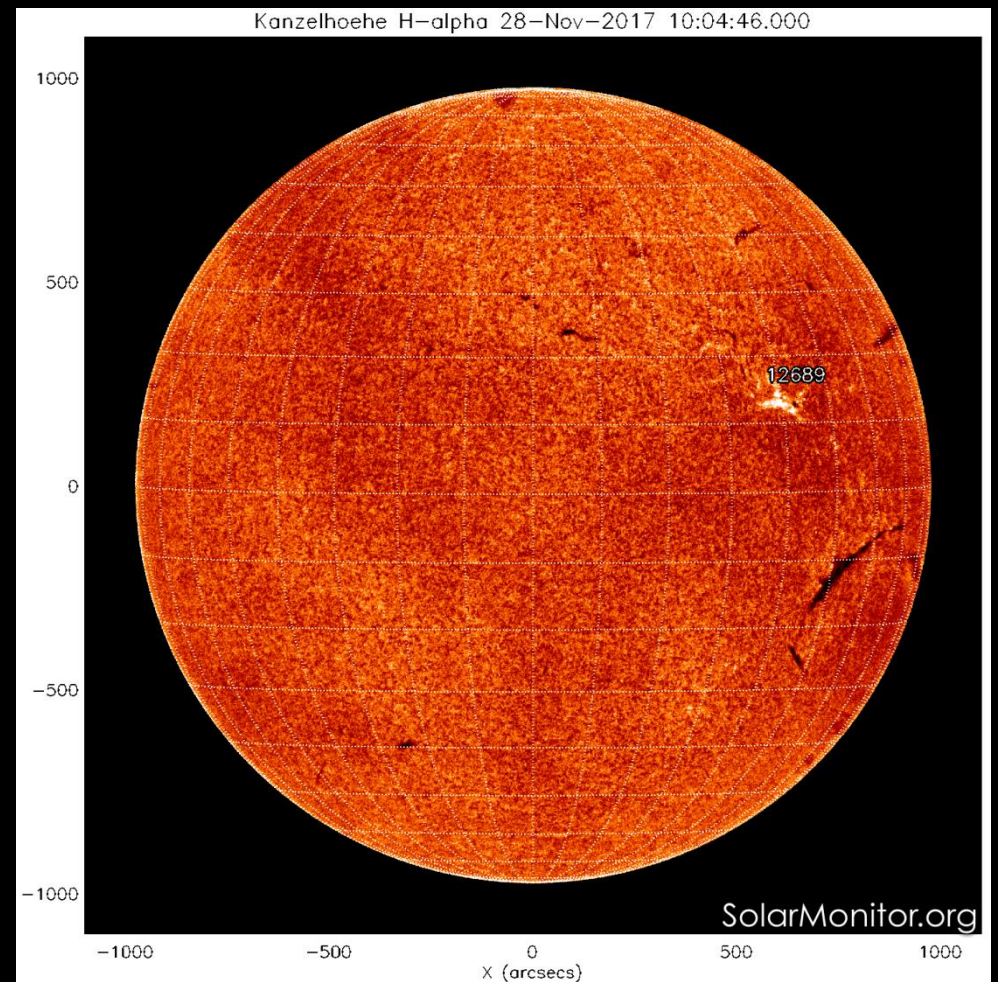


Filaments

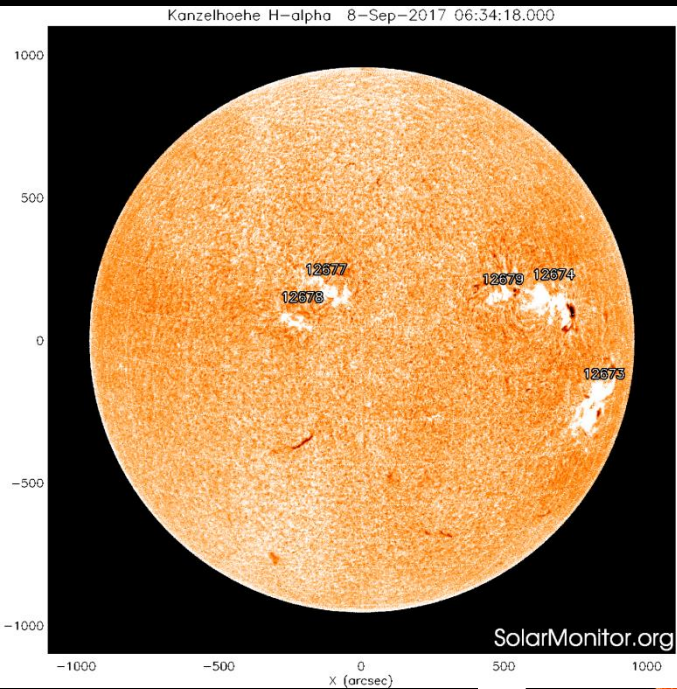
Magnetogram



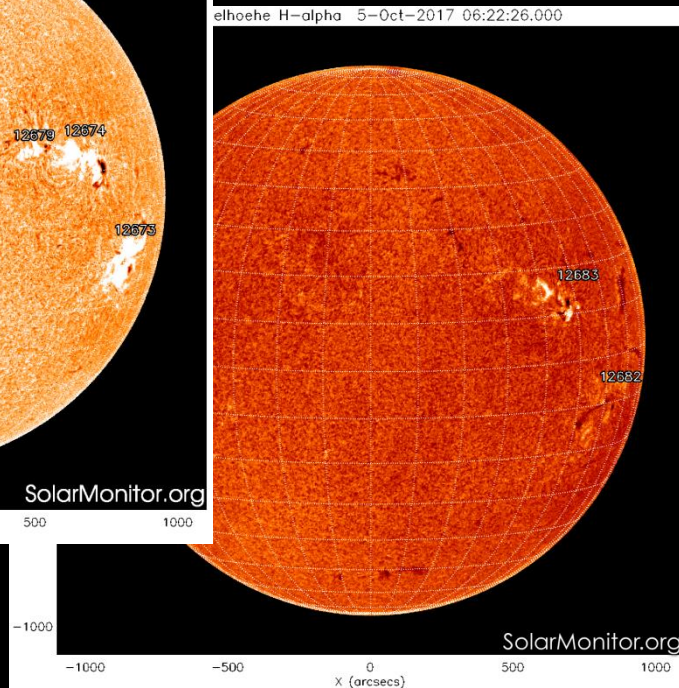
H-alpha



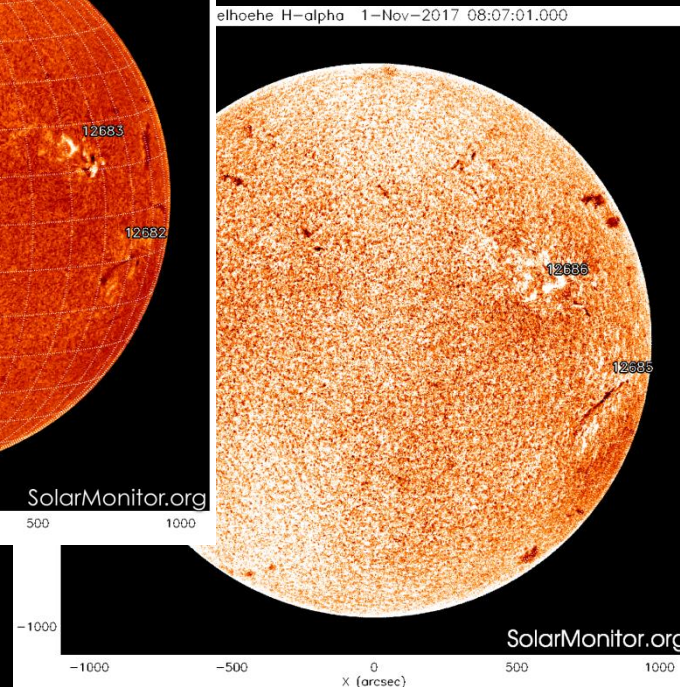
40° long filament near SW limb



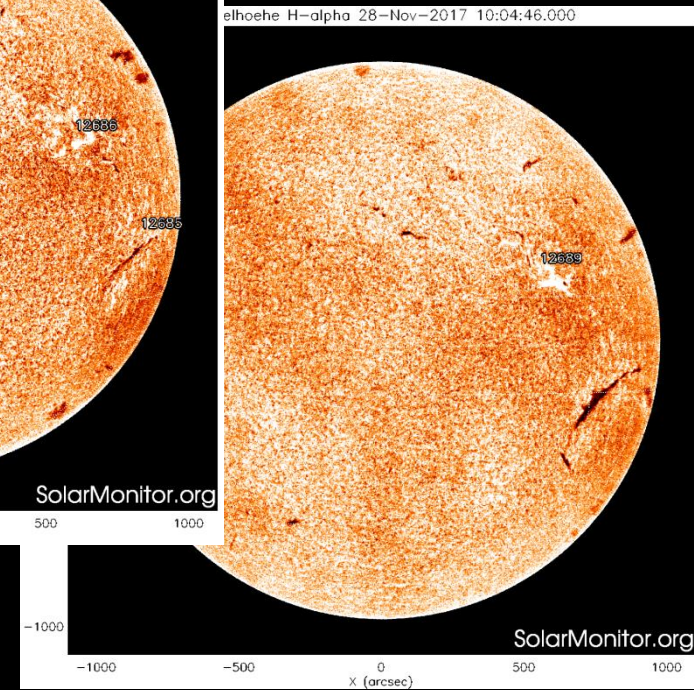
08 Sep 2017



05 Oct 2017



01 Nov 2017



28 Nov 2017

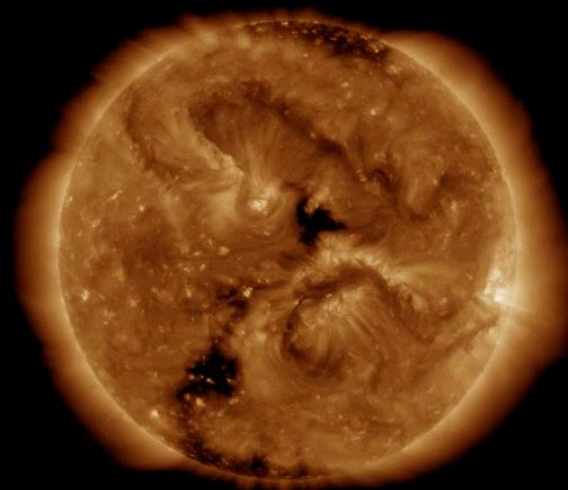
Evolution of Flare probability

Probability of full disk x-ray flare occurrence over 24h

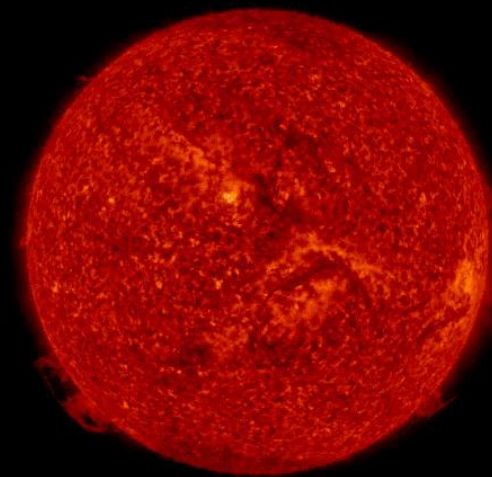
Issue time	P(C)	P(M)	P(X)	#C obs.	#M obs.	#X obs.
2017-11-26T12:30	0.05	0.01	0.01	0	0	0
2017-11-27T12:30	0.15	0.01	0.01	0	0	0
2017-11-28T12:30	0.15	0.01	0.01	0	0	0
<u>2017-11-29T12:30</u>	<u>0.10</u>	<u>0.01</u>	<u>0.01</u>			
2017-11-30T12:30	0.10	0.01	0.01			
2017-12-01T12:30	0.10	0.01	0.01			

CMEs

01:25 11/29
 21:49 11/28
 18:48 11/28
 16:12 11/28
 13:36 11/28
 10:36 11/28
 07:24 11/28
 04:36 11/28
 01:42 11/28
 22:24 11/27
 18:48 11/27
 16:00 11/27
 12:36 11/27
 09:48 11/27
 06:48 11/27
 04:24 11/27
 01:25 11/27
 22:00 11/26
 19:24 11/26
 16:36 11/26
 14:00 11/26
 10:36 11/26
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 05:00 11/26
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 13:36 11/25
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 05:18 11/25
 02:12 11/25
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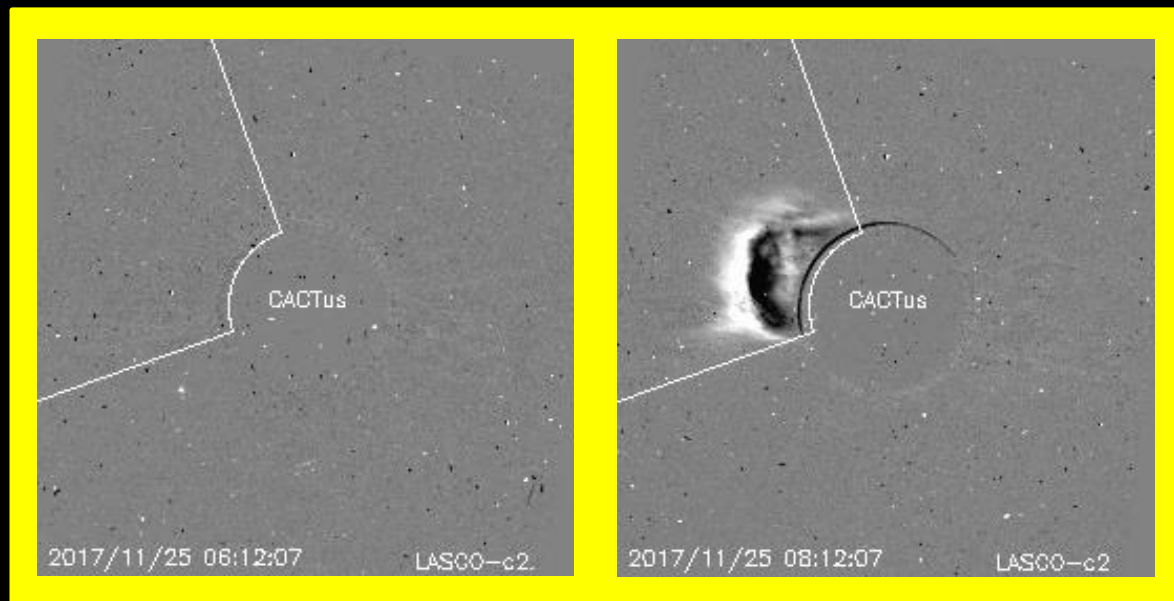


SDO/AA 193 2017-11-25 00:10:53 UT



SDO/AA 304 2017-11-25 00:14:18 UT

Jhelioviewer, <http://www.jhelioviewer.org/>

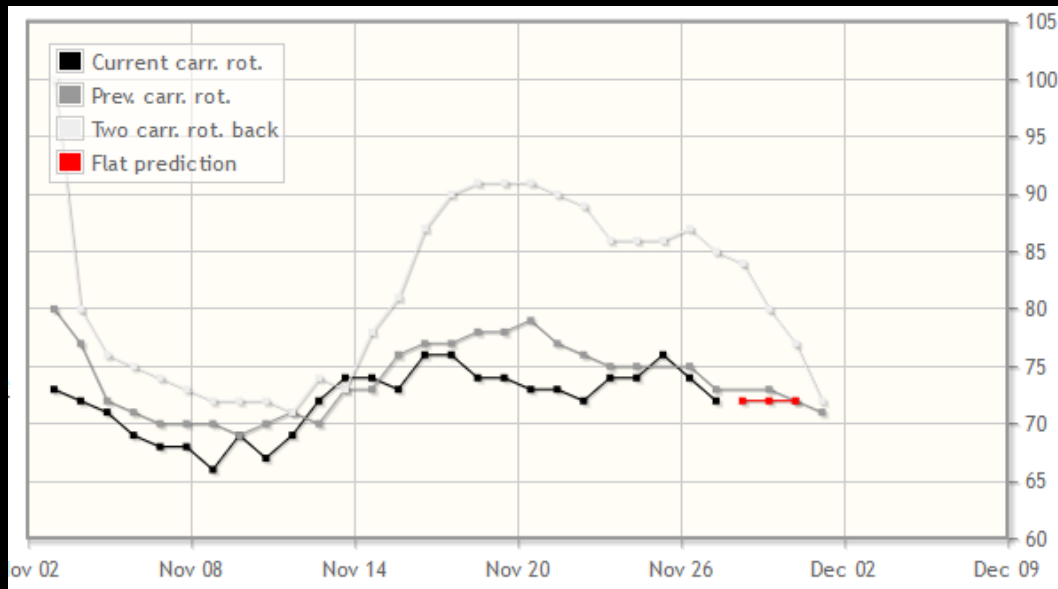


S W N E

CACTus, <http://www.sidc.oma.be/cactus/>

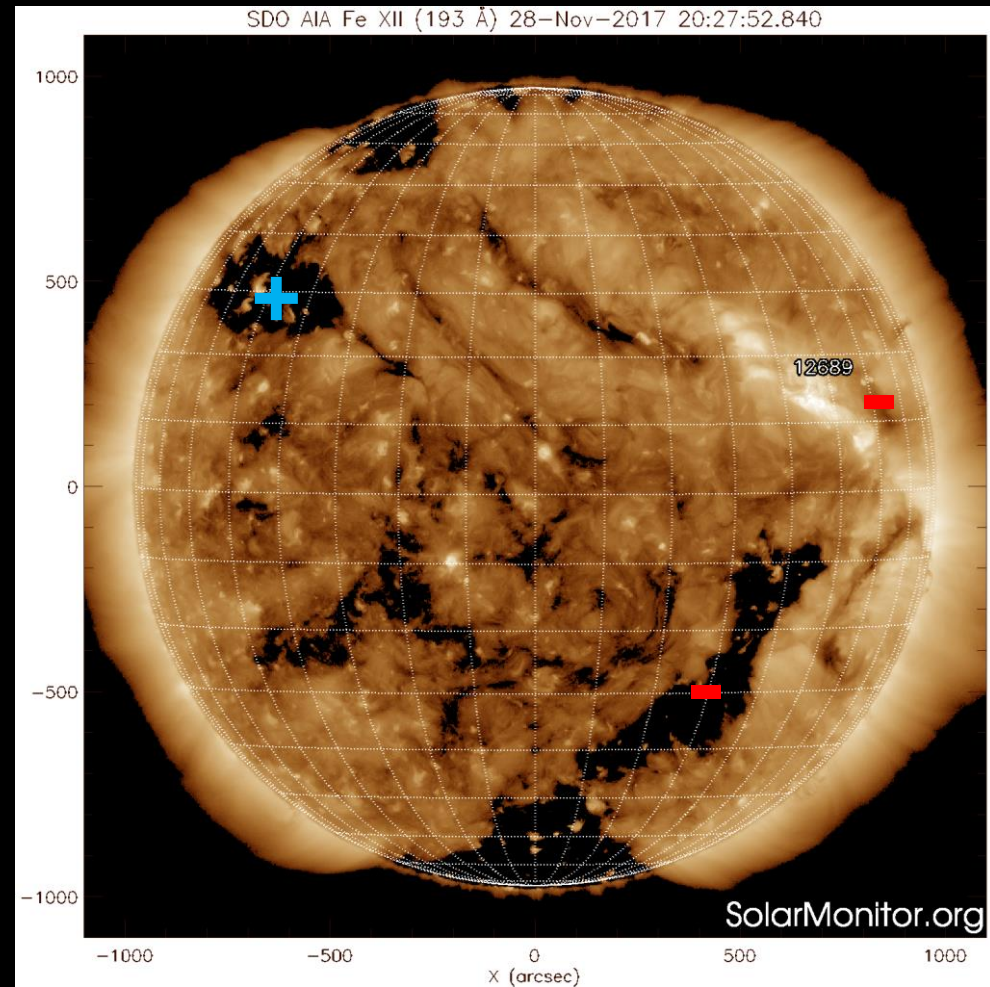
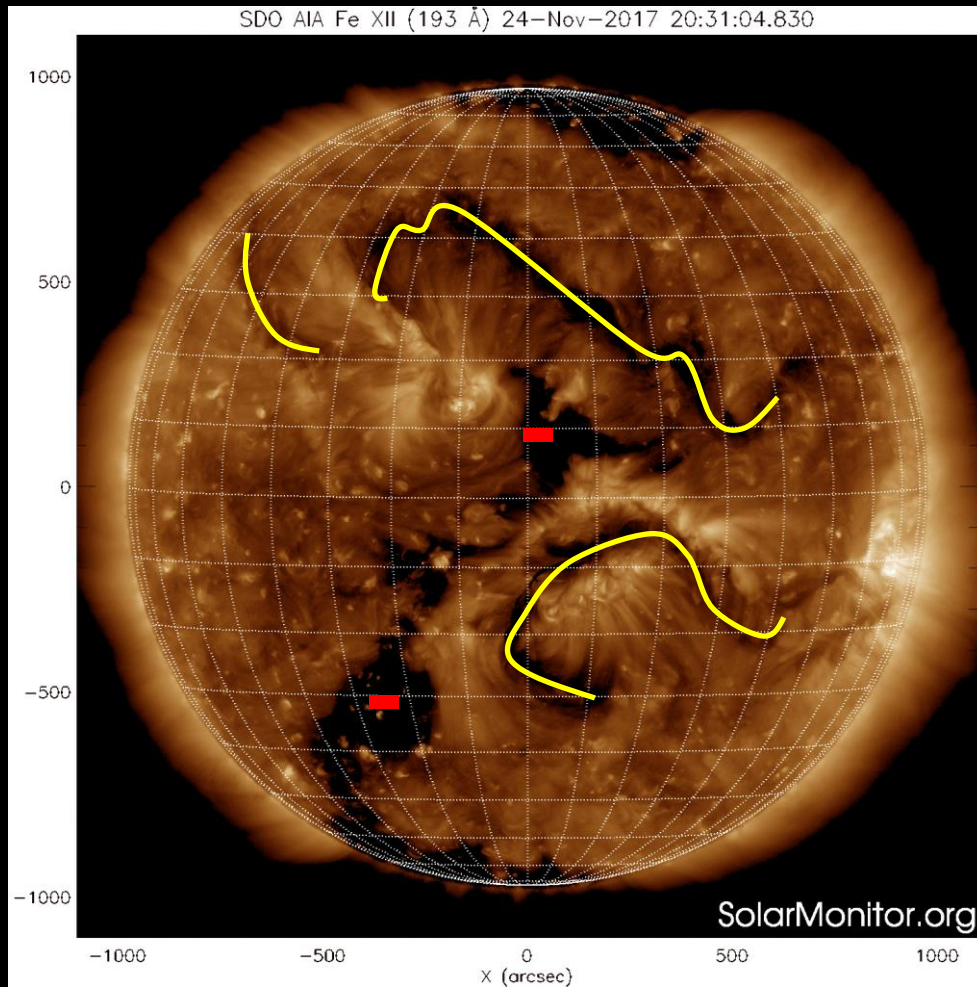
Evolution of 10.7cm Radio Flux

Predicted and observed 10.7cm Radio flux (sfu)

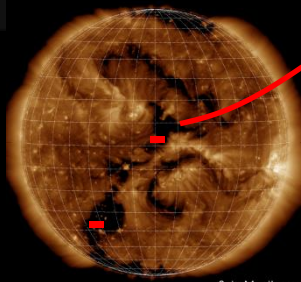
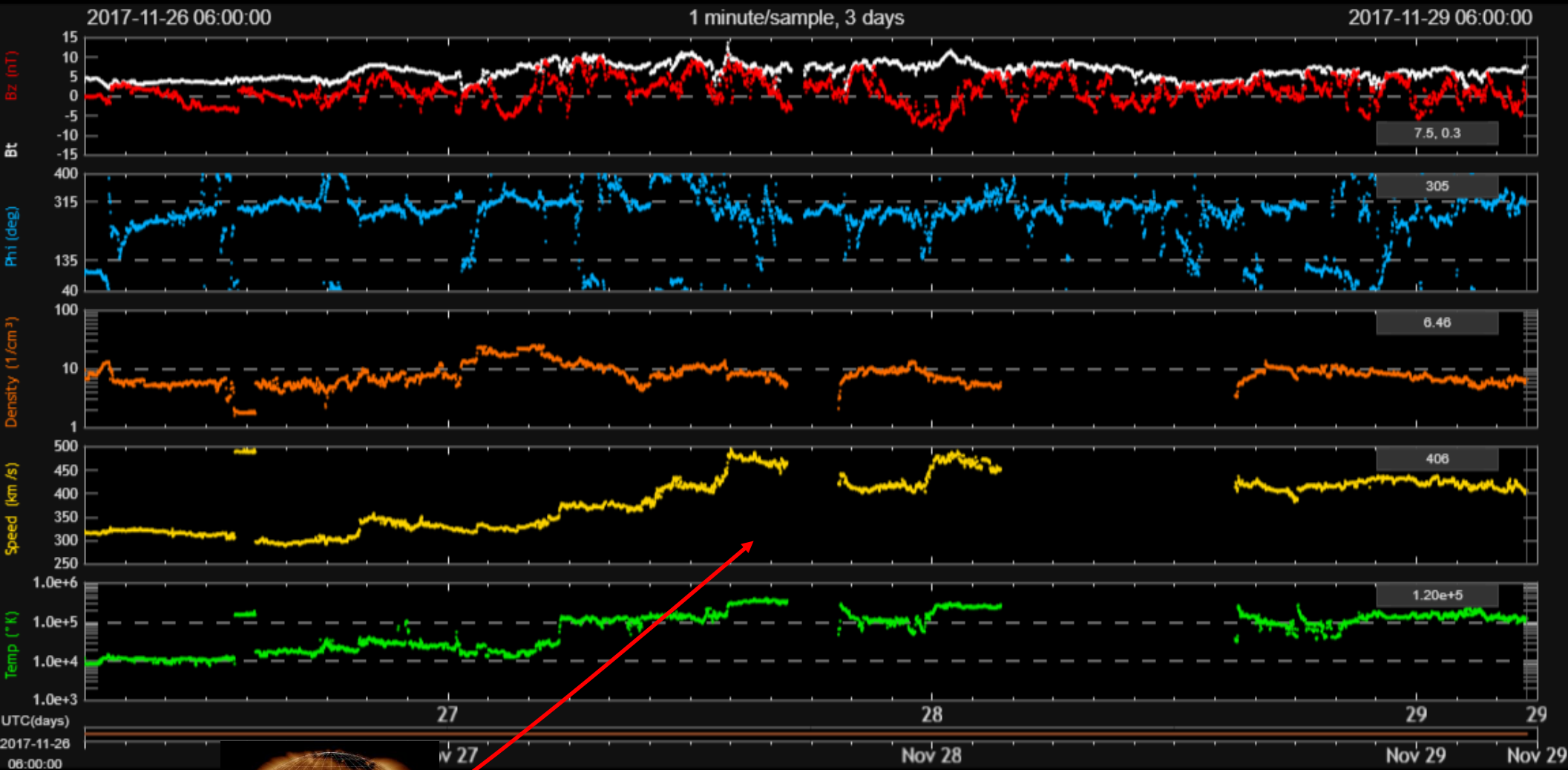


Issue time	Pred.	Obs.
2017-11-26T12:30	75	76
2017-11-27T12:30	75	74
2017-11-28T12:30	74	72
<u>2017-11-29T12:30</u>	<u>72</u>	
2017-11-30T12:30	71	
2017-12-01T12:30	70	

Coronal Holes



Solar wind

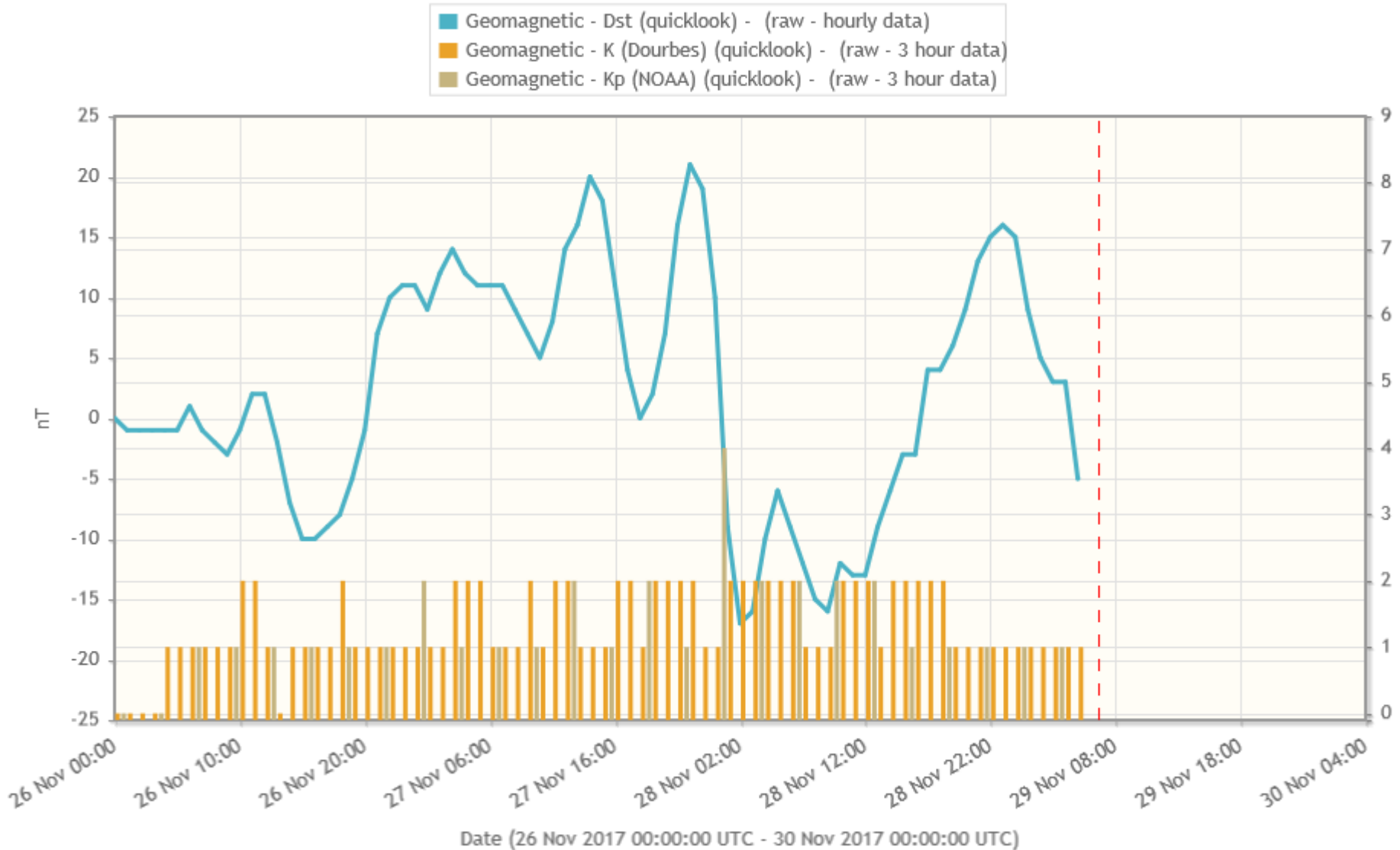


SolarMonitor.org

DSCOVR, <http://www.swpc.noaa.gov/products/real-time-solar-wind>

Geomagnetism

www.staff.oma.be

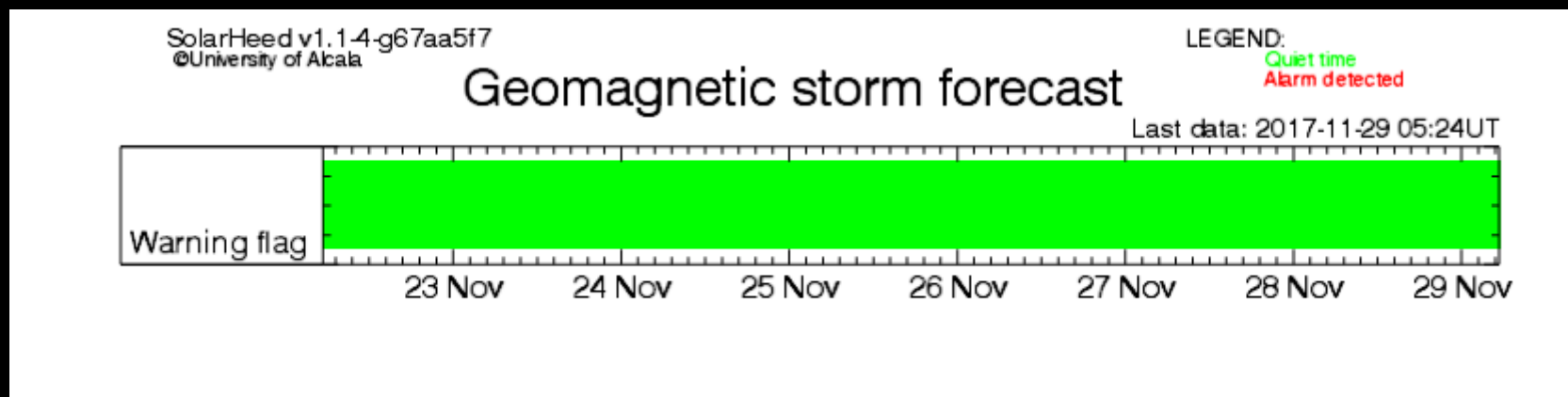


Summary Forecast

	Today	30 Nov	01 Dec
Solar activity	Very low	<i>Very low</i>	<i>Very low</i>
10.7 cm Radio flux (sfu)	72	71	70
Geomagnetic activity	Quiet to unsettled, with an active episode possible	<i>Quiet, with an unsettled episode possible</i>	<i>Quiet</i>

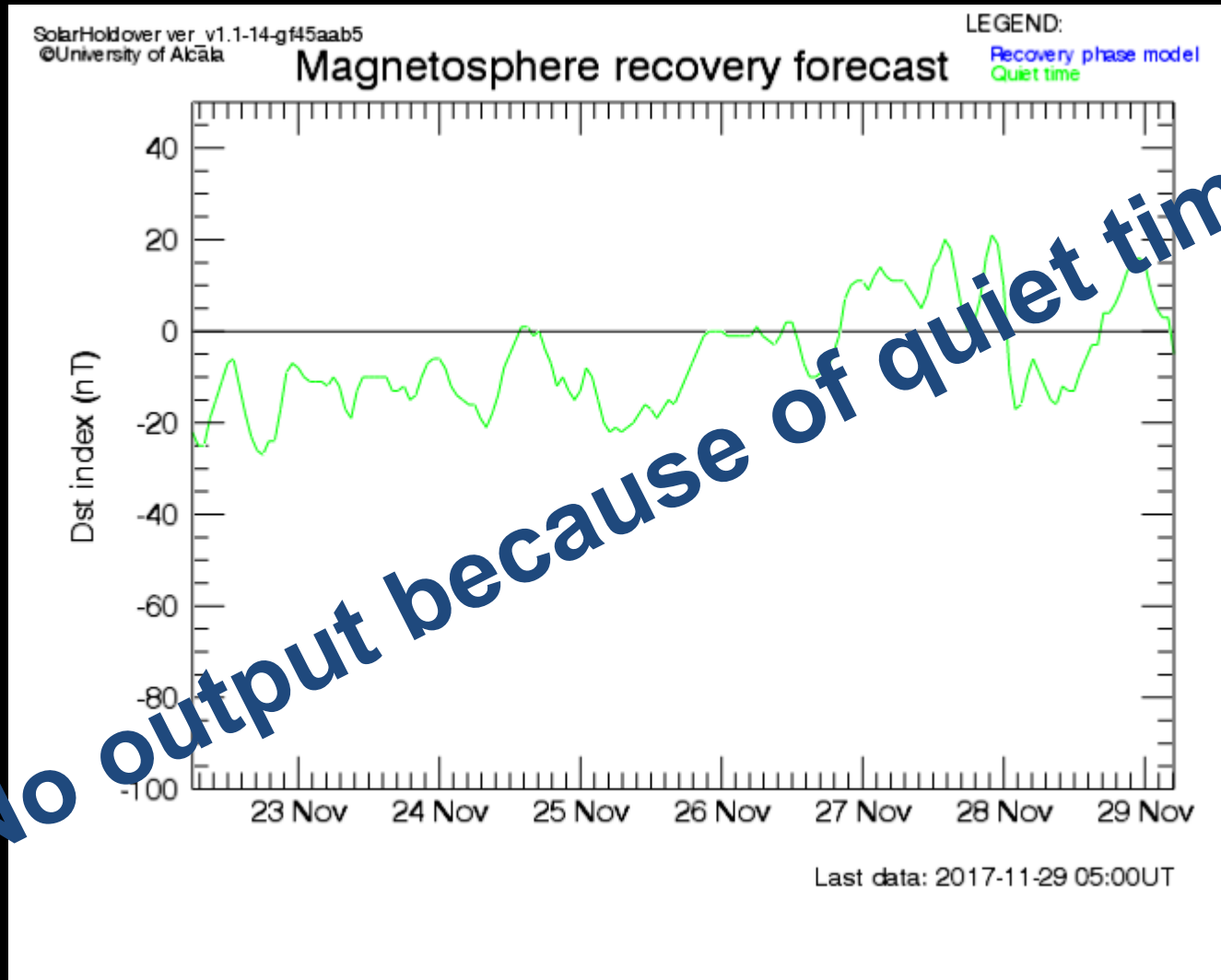


SolarHeed: forecasting large geomagnetic disturbances



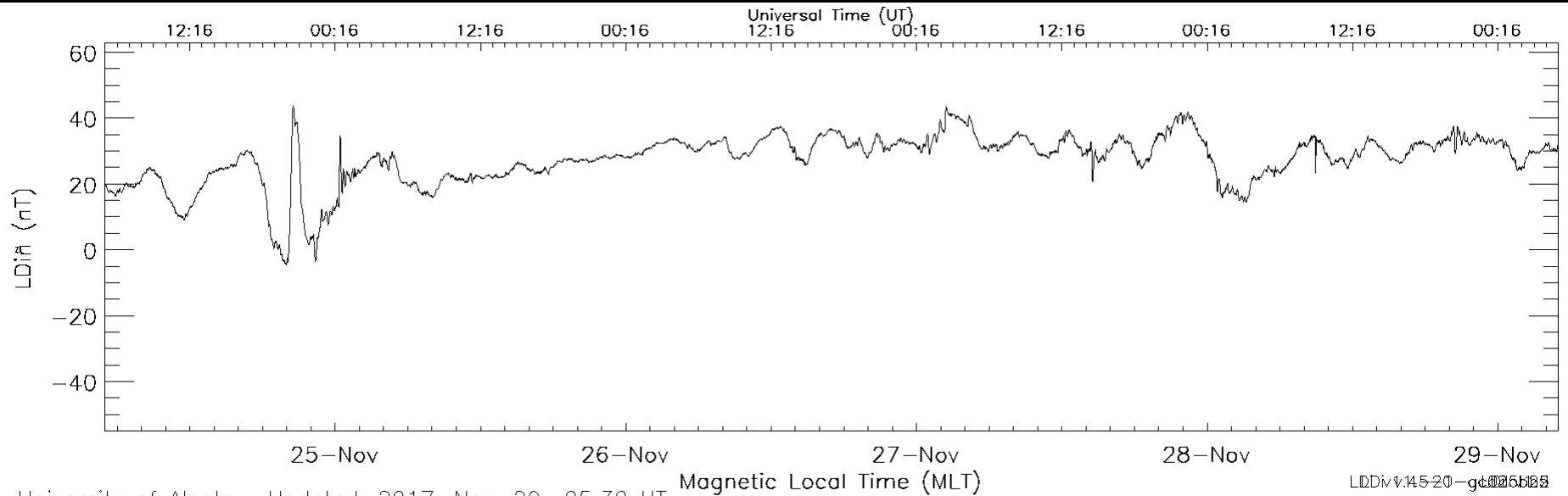


SolarHoldover: forecasting recovery of the Dst after an intense storm

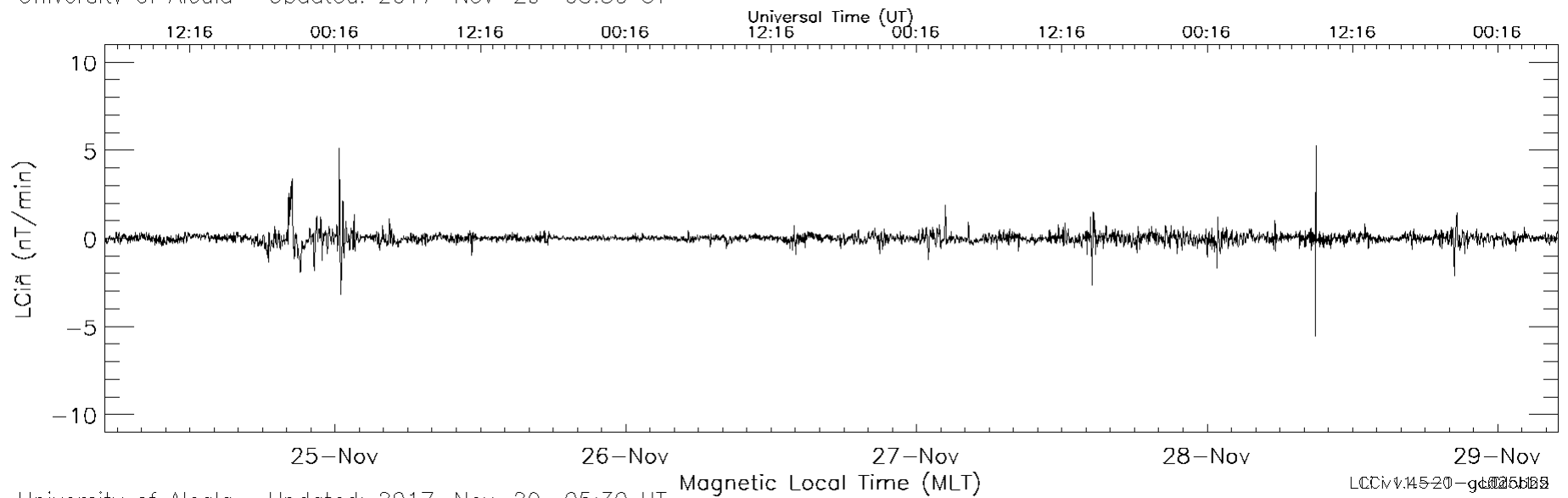




LDiñ and LCiñ geomagnetic indices



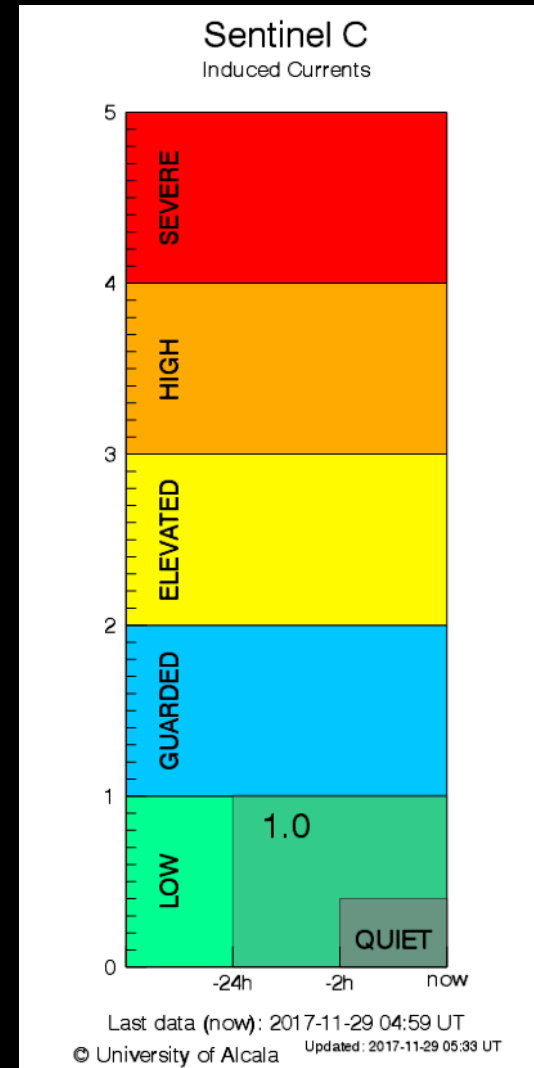
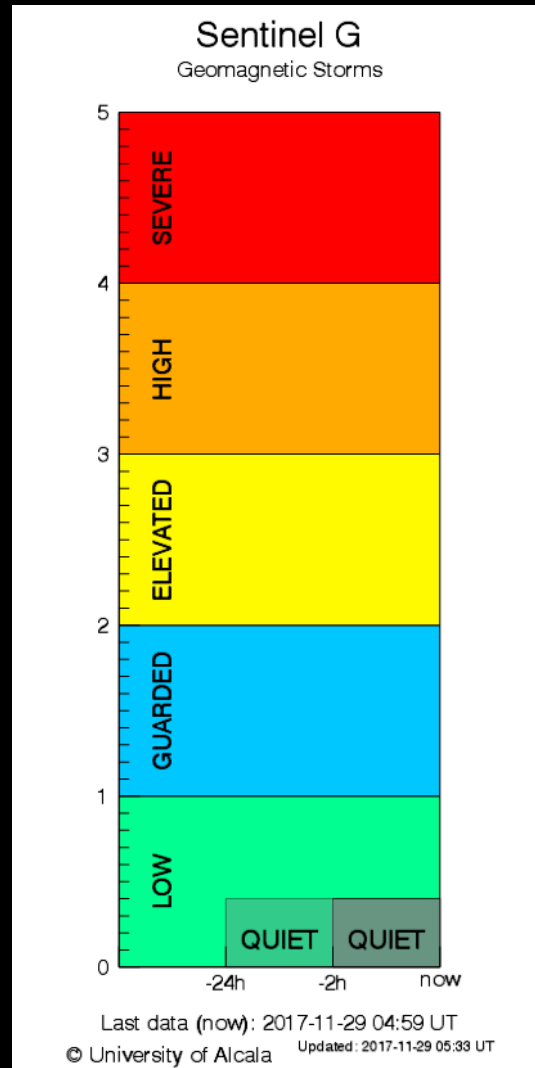
University of Alcalá Updated: 2017-Nov-29 05:30 UT



University of Alcalá Updated: 2017-Nov-29 05:30 UT



SeNMEs Sentinels



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Thank you for your attention!

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