

Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 12

Number 136

June 2007

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Content Newsletter

Graphics and relative number for this month

Daily Wolfnumbers by the members

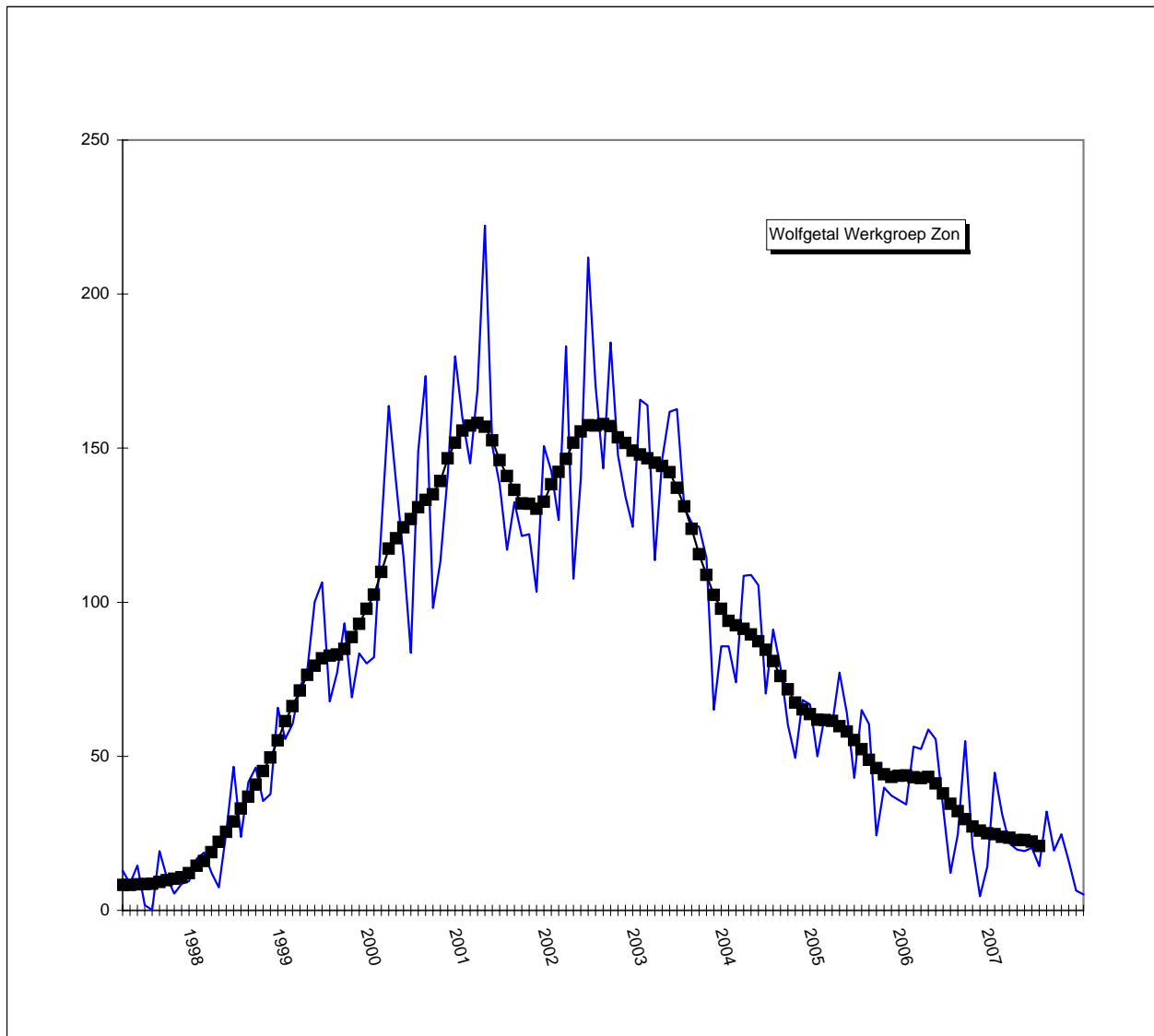
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



Mean of june observations

Groups :	N	0,00	Wolfnumb	N	0	Beck :	187,6
	S	1,27		S	17,2	CV	17,6
	N+S	1,27		N+S	17,2		
418 observations	27 observers						

Sunspotnumbers VVS Belgium

Month: June 2007

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1	0	3	3	0	24,3	24,3	78	57	12
2	0	3	3	0	38,2	38,2	354	49	22
3	0	3	3	0	43,4	43,4	552	55	19
4	0	2	2	0	45,3	45,3	993	49	19
5	0	2	2	0	49,4	49,4	912	43	20
6	0	2	2	0	44	44	856	33	16
7	0	3	3	0	52,9	52,9	564	42	16
8	0	3	3	0	48,7	48,7	379	33	11
9	0	2	2	0	17	17	121	30	6
10	0	2	2	0	14,4	14,4	68	26	5
11	0	2	2	0	13,9	13,9	73	21	14
12	0	1	1	0	11,9	11,9	37	11	12
13	0	1	1	0	11,3	11,3	48	10	16
14	0	0	0	0	0	0	0	0	12
15	0	0	0	0	0	0	0	0	14
16	0	0	0	0	0	0	0	0	12
17	0	0	0	0	0	0	0	0	16
18	0	0	0	0	0	0	0	0	19
19	0	0	0	0	0	0	0	0	22
20	0	0	0	0	0	0	0	0	14
21	0	0	0	0	0	0	0	0	15
22	0	0	0	0	0	0	0	0	13
23	0	0	0	0	0	0	0	0	13
24	0	0	0	0	0	0	0	0	6
25	0	1	1	0	10,2	10,2	40	10	13
26	0	1	1	0	11	11	37	10	8
27	0	1	1	0	11,9	11,9	41	11	14
28	0	2	2	0	22,6	22,6	114	12	17
29	0	2	2	0	24,4	24,4	156	13	12
30	0	2	2	0	22,6	22,6	205	13	10
	0,00	1,27	1,27	0,0	17,2	17,2	187,6	17,6	418

Monthly mean: **17,2** Covering: **30/30** Spotless days: **11**
 Observations: **418** Number of observers: **27**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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Observers:

Devriese ; De Ceuninck ; Janssens ; Publ obs Mira ; Bourgeois ; Macharis
 De Backer; Dubois ; Gysel ; Kleber ; Deman ; Taillieu ; Carels ; Dewaele
 Meeus ; Steen ; KSB ; Gabriel ; Claeys ; Devriese ; Thooris ; Vanleenhove
 Claes ; Verboven ; Van Loo ; Son ; Coeckelberghs ; Gadyne
 S.Dufoer ; G.Gubbels ; jeugdwerking Astrolab ; J Bavais ; A. Kerchove

Prominence number Rp

Belgian solar observers

Month: June 2007

Day	Q	Wedel	H	e	Rp	el. Obs	Stdev	OBS
1	3	2,5	5,0	7,5	57,5		14,8	2
2	3,6	1,9	7,4	11	87,2	3	12,5	8
3	3,7	1,8	5,3	8,3	61,7	1	5,8	7
4	3,3	2,2	6	9,5	69,5	2	6,6	9
5	2,9	2,4	5,2	8,8	60,8	2	7,8	7
6	3,4	2,4	4,5	5,8	50,8	2	7,3	6
7	3	2,5	5	9	59	2	13,5	5
8	2,6	2,4	5,8	8,8	69,2	1	12,5	6
9	3	3	5	6	56			1
10	3,5	1,8	5,3	7,3	60,7	1	13,6	4
11	3	2	6,5	11	76	2	8,5	4
12	3,2	2,2	4	5,3	45,3	1	11,1	4
13	2,9	2,4	4,4	6,9	54,1		9,5	9
14	3,2	2,8	5,3	6	59,3	2	6,7	5
15	3,1	2,3	5,5	7,8	62,8	1	6,9	7
16	3,4	2,1	6	8,2	68,2		7,3	6
17	3,3	1,9	6,4	9,6	78,6	1	10,3	8
18	3,8	2,1	6	7,8	67,8	1	10,8	7
19	2,8	2,4	2,8	3,2	35,5	1	8,2	7
20	3,1	2	2,9	3	31,6		7,7	7
21	2,8	2,3	2,7	3,3	33,7	2	1,2	5
22	3,3	2,5	0,3	4,7	46,3	2	10,1	5
23	3,1	2,5	4	5,3	45,3	2	13	6
24	3,3	2,5	4	4,5	44,5		14,8	2
25	3,3	2,1	6,8	11,4	84	1	8,7	6
26	3	2,2	7	9,7	79,7		2,1	3
27	3,3	1,8	5	7,3	57,3	2	11,2	5
28	3,7	1,5	4,7	6,3	65,3	2	11,8	5
29	2,7	2,8	5,3	9,3	62,7	2	4,7	5
30	3,5	3	3	3	33			1
	3,19	2,28	4,9	7,2	58,8	35	9,3	162

Monthly mean: **58,8** Covering: **30/30**
Observations: **162** Number of observers: **12**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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Observers:

Steen ; Dubois ; Meeus ; De Ceuninck ; Coeckelberghs ; Janssens
Hamsch ; Claes ; Gabriel ; Blondeel ; Deman ; G.Gubbels

Q : Seeing scale SIDC

W : transparency scale of Wedel , see <http://members.chello.be/j.janssens/>

H : number of prominence groups at the limb

e : total of individual prominences at the limb

Rp : $H \cdot 10 + e$

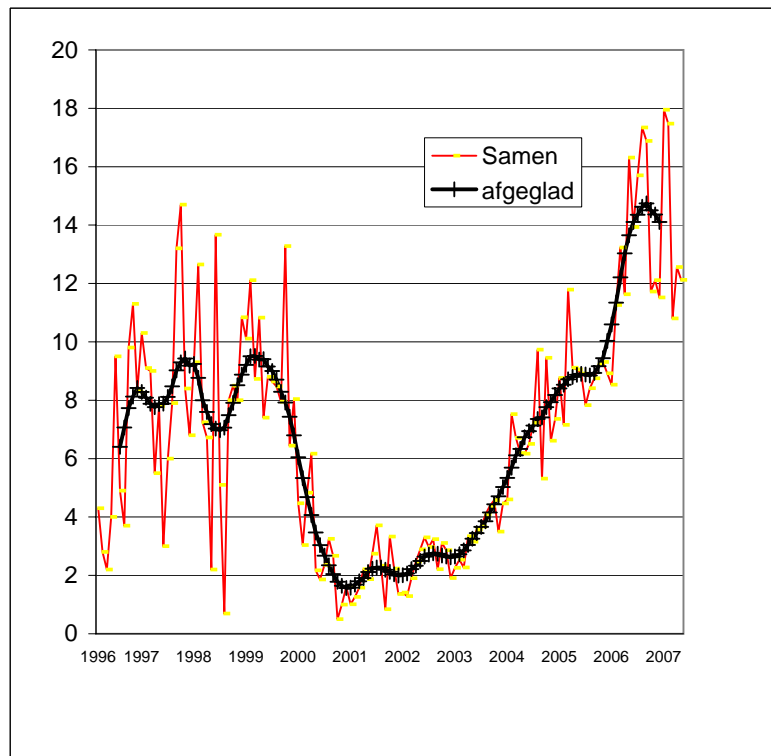
More info at : <http://members.chello.be/j.janssens/>

Belgian Solar Observers

Polar Faculae

Month: June 2007

Date	Dubois 125mm F20			Steen 102mm F15			Deman 150mmF15			Gabriel 250 mm F20			Carels 150mm F8			Janssen 200mmF10			T.Spaninks 127mm F15			
	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	
1																						
2				10	13	4				21	26	4	5	10	4	2	6	3,0	1	0	5	
3				9	11	3,5	22	19	5	22	35	4	3	12	4	3	8	4,0				
4	9	7	3	7	5	3,5				22	29	5	5	0	3				7	3	4	
5	12	10	3	8	5	3,5				17	24	3										
6																5	4	3,5				
7				6	4	3,5				18	19	4										
8										18	16	3										
9																						
10																						
11				5	3	3,5				21	16	3							0	0	4	
12				7	4	3,5																
13				5	4	3,5				17	15	4							0	1	4	
14				4	2	4				15	9	4							2	3	4	
15																						
16	1	6	4																			
17	9	4	3	6	5	3,0				17	7	3							0	0	4	
18	8	5	4	6	5	4				23	9	5										
19	5	7	3	6	4	3,5	23	18	3	25	10	5	9	4	3				0	0	4	
20	5	7	3	7	9	3,5				19	7	4										
21																						
22										23	12	4							0	1	4	
23							23	13	4	27	12	4				5	5	3,0				
24																			2	3	4	
25																						
26	4	5	3							24	10	3							0	0	4	
27										26	11	4							1	1	4	
28				13	7	3,5				23	14	5							0	0	4	
29	11	5	3	5	3	3,5													1	1	4	
30																						
	7,11	6,22		6,93	5,60		22,7	16,7		21,0	15,6		5,50	6,50		3,75	5,75		1,08	1,00		



SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 336 from 2007 Jun 04
SOLAR ACTIVITY

Like previous week, solar activity was dominated by NOAA active region 0960. The associated Catania sunspot group number was 43. The flares were less intensive and less frequent. An M8.9 flare occurred on Jun 04 and an M1.0 flare was fired off on Jun 09. From Jun 06, the active region was on its detour to a less mixed magnetic configuration. The 12 C-flares spread over this week originated from this group or from the vicinity of it. The sunspot group did not have further consequences for space weather.

A faint coronal hole was seen in EIT195 passing the central meridian on Jun 06.

GEOMAGNETIC ACTIVITY

The beginning of the week, we were in the aftermath of a moderate coronal wind emanating from a recurrent coronal hole which was responsible for unsettled conditions and one active period between Jun 02 and 05. The co-rotating interaction region had already arrived on May 31. This period was followed by quiet conditions. On Jun 08, the coronal hole mentioned above introduced unsettled conditions lasting until Jun 10.

The geo-effect of this hole was minor.

SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 337 from 2007 Jun 11
SOLAR ACTIVITY

The solar activity was very low during the entire week, with only 5 B sub-flares. All of these came from the only observed sunspot group (Active region NOAA0960). This group, which had contributed to significant activity on the previous week, decayed steadily until it disappeared at the East limb on June 14. The Sun was then spotless until the end of the week. The background X-ray flux stayed in the A range during the whole period.

A large recurrent coronal hole rotated into geoeffective position in the middle of the week.

GEOMAGNETIC ACTIVITY

The week started with quiet geomagnetic conditions associated with a slow solar wind. On June 13, the Earth crossed a sector boundary and entered a recurrent fast solar wind stream, which peaked at 600 km/s late on June 14. This weak disturbance induced active geomagnetic conditions mainly on June 14, with occasional minor geo storms recorded at high latitude stations. From June 15 until the end of the week, the solar wind speed declined very slowly down to 500 km/s. In this context, the geomagnetic field returned to quiet to unsettled conditions during the last 3 days of the week.

SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 338 from 2007 Jun 18
SOLAR ACTIVITY

Flaring activity was extremely low. The curve denoting the GOES11 X-ray radiation was one flat line situated in the A-band with only 2 peaks reaching the A-level on June 24. No sunspots were detected this week.

A recurrent southern coronal hole was visible in SOHO/EUV-images of the Sun. The tilted coronal hole was stretched over almost 60° East-West and 30° North-South. The front part reached the central meridian on June 17.

GEOMAGNETIC ACTIVITY

The most prominent feature of this week was the coronal hole mentioned in the previous section. The co-rotating interaction region (CIR) with a compressed and stronger magnetic field carried by the solar wind arrived on June 21. A CIR is the forerunner of the actual high speed solar wind emanating from the coronal hole. Active conditions were estimated by NOAA, Boulder late June 21 and on June 22.

The other days of the week, geomagnetic conditions were quiet to unsettled.

SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 339 from 2007 Jun 25
SOLAR ACTIVITY

The second part of the week, returning sunspot groups 47 and 48 (NOAA AR 0961 and 0962) made the global X-ray radiation increase. >From June 27 until June 29, 2 C-flares occurred. Previous rotation, the groups fired off several M-flares. From June 30, the X-ray output decreased again to minimum levels. A southern recurrent coronal hole was clearly visible and passed the central meridian on June 25. A small, newly emerged equatorial coronal hole was visible from June 29 onwards.

GEOMAGNETIC ACTIVITY

Late June 28, a sign of a co-rotating interaction region (CIR) was visible in ACE-data. On June 29, a second strong perturbation in ACE-data was visible. Two times, the density of the solar wind plasma increased denoting the forerunner, a CIR of a coronal hole. Possibly earth glided from the influence region of one coronal hole to the other. The B-z component was mainly positive. At the moment the largest perturbation on June 29 arrived, Kp became once 5. The rest of the week, geomagnetic conditions were quiet, slightly unsettled.

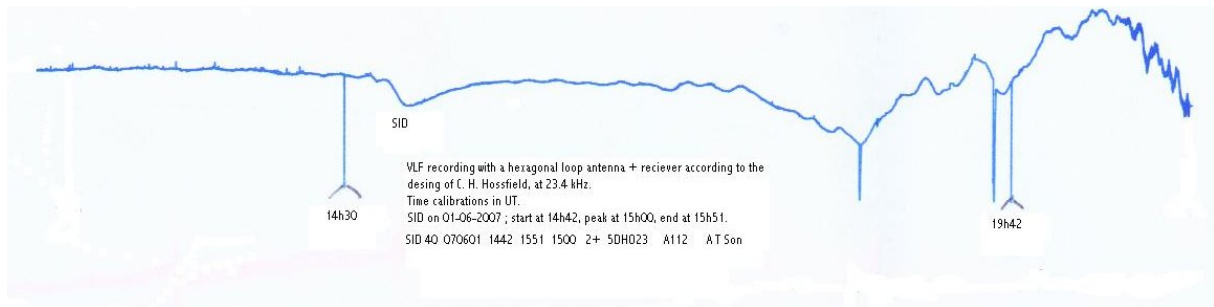
SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 340 from 2007 Jul 02
SOLAR ACTIVITY

The GOES X-ray background level was below the B1 level from the beginning of the period up till July 7. The SIDC "all quiet alert" was active during the same period. From July 7, a new active region (Catania Sunspot group 49, NOAA AR 963) crossed the solar east limb and produced a minor C-flare on July 7 noon, the biggest event of the period.

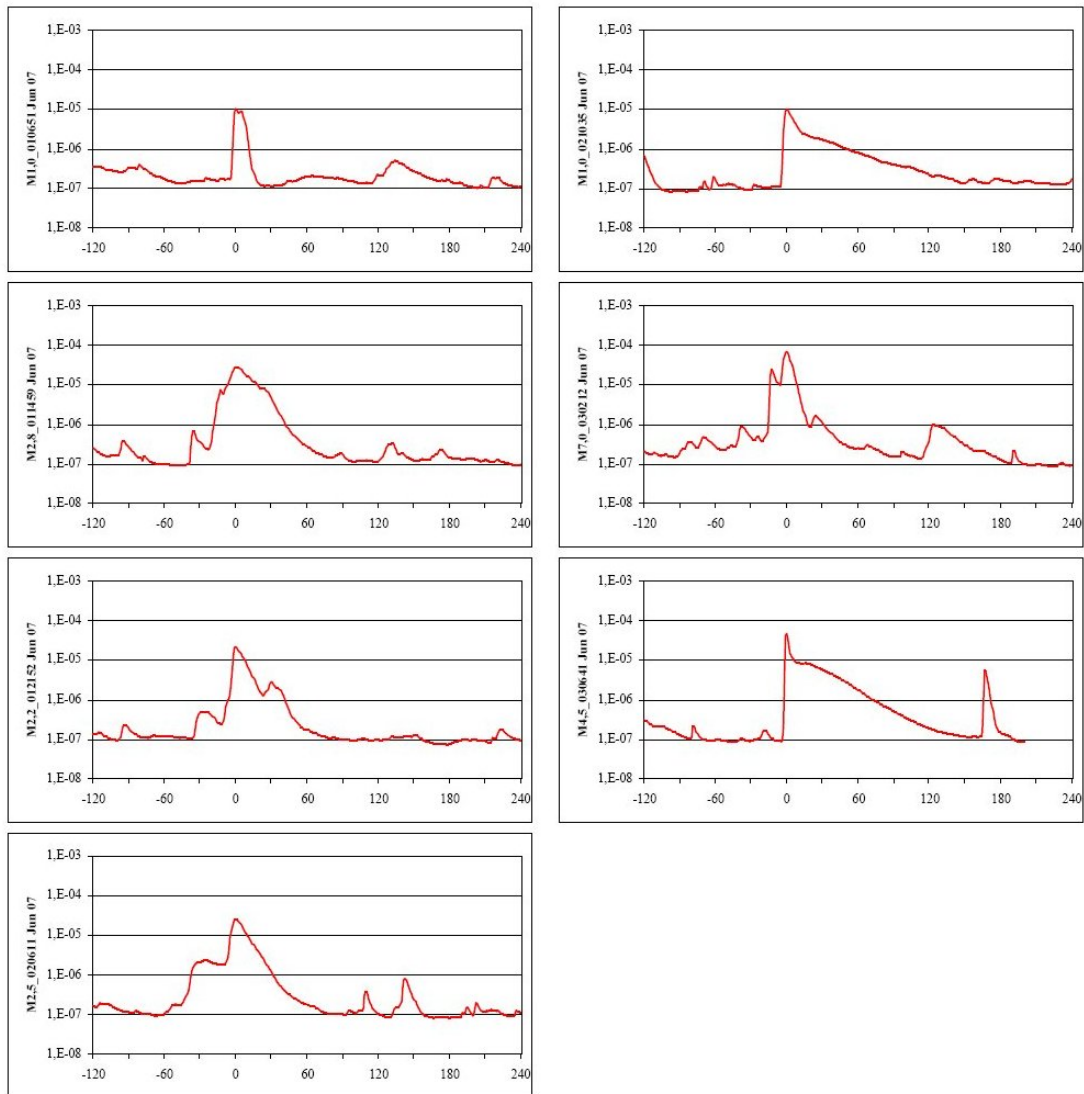
GEOMAGNETIC ACTIVITY

The solar wind speed was at 400 km/s in the beginning and at the end of the period. In between it was characterized by a coronal hole outflow boosting the solar wind speed from noon July 3 onwards and reaching a peak of about 650 km/s early July 4. In association to this, the interplanetary magnetic field made a short southward excursion on July 3 afternoon. The geomagnetic activity responded with Kp=4 episodes on July 4 morning. After July 4, the solar wind and geomagnetic conditions returned slowly to quiet conditions at the end of the period.





M-flares in NOAA 0960 010000-031200 Jun 07



Zonactiviteit 20.1 MHz op 04-07-2007

:Product: 20070704events.txt
 :Created: 2007 Jul 08 2332 UT
 :Date: 2007 07 04

Prepared by the U.S. Dept. of Commerce, NOAA, Space Environment Center.
 # Please send comments and suggestions to SEC.Webmaster@noaa.gov

 # Missing data: ////
 # Updated every 30 minutes.

Edited Events for 2007 Jul 04

#Event	Begin	Max	End	Obs	Q	Type	Loc/Frq	Particulars	Reg#
4190	1845	////	1846	SAG	C	RSP	030-180	III/1	
4200	1919	////	1919	PAL	C	RSP	025-137	III/1	
4210	1932	////	1932	SAG	C	RSP	030-060	III/1	

Ook al was het al laat op de dag, toch hebben we de uitbarsting van de zon geregistreerd op Urania.

In bijlage de registratie op Urania en confirmatie op Radio Jove Data Archive.

Jean Op de Beeck

Uitbarsting Zon 04-07-2007 VOLKSSTERRENWACHT URANIA

