

# Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 13

Number 153

November 2008

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## Content Newsletter

Graphics and relative number for this month

Daily Wolfnumbers by the members

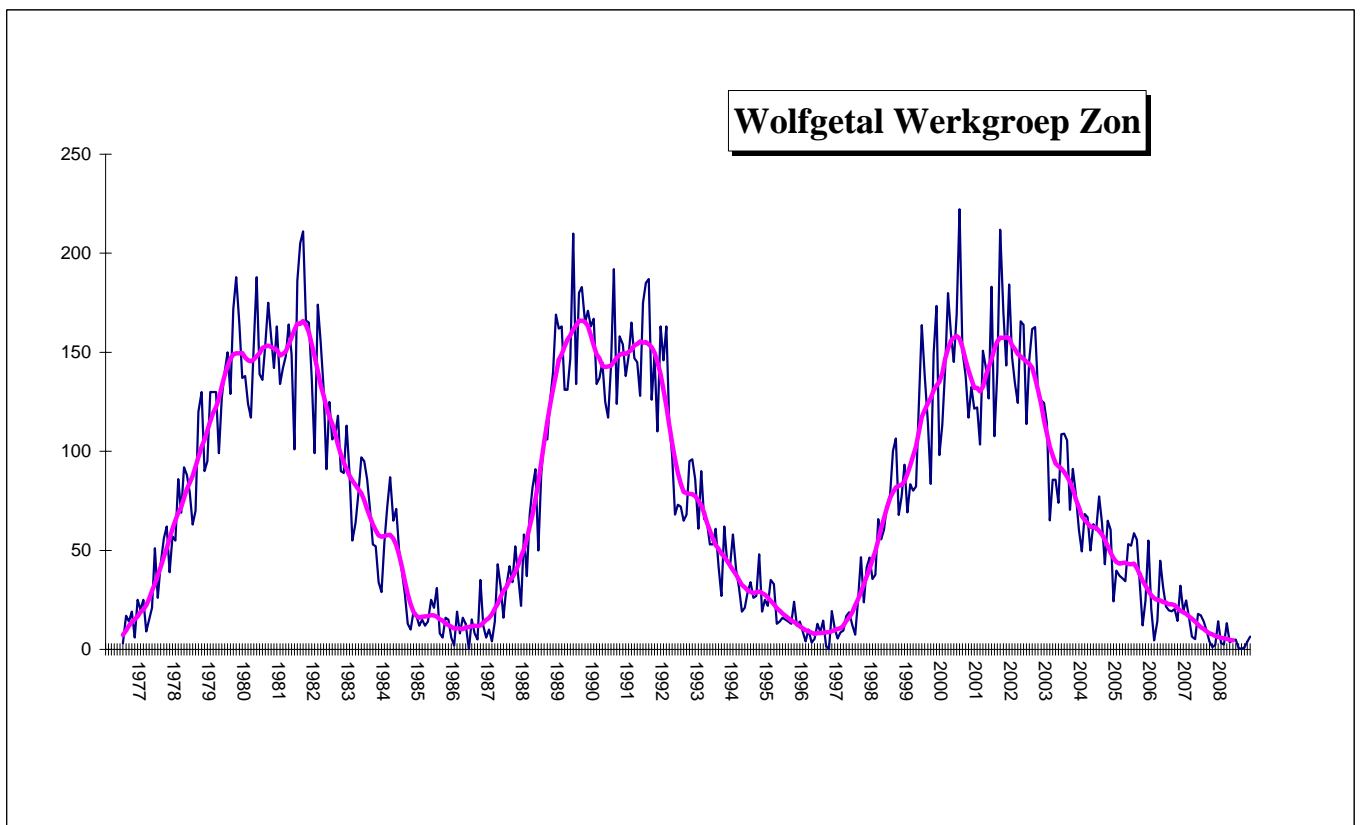
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



### Mean of November observations

Groups :	N	0,41	Wolfnumb N	6,5	Beck :	52,5
	S	0,00	S	0	CV	5
	N+S	0,41	N+S	6,5		
248 observations	28 observers					



# Sunspotnumbers VVS Belgium

Month: **November 2008**

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1	1	0	1	16	0	16			1
2	1	0	1	15,5	0	16	76	16,6	15
3	1	0	1	21,0	0	21	198		2
4	1	0	1	13,9	0	14	75	12,3	12
5	1	0	1	13,0	0	13	92		2
6	1	0	1	10,5	0	11	35	3,4	11
7	0	0	0	0	0	0	0	0	14
8	0	0	0	0	0	0	0	0	16
9	0	0	0	0	0	0	0	0	9
10	0	0	0	0	0	0	0	0	4
11	1	0	1	17,7	0	18	137	38,6	20
12	1	0	1	22,9	0	23	244	32	18
13	1	0	1	15,7	0	16	59	11,6	17
14	1	0	1	16,0	0	16	222		1
15	1	0	1	15,0	0	15	185		1
16	1	0	1	12,5	0	13	148		2
17	0	0	0	0	0	0	0	0	8
18	0	0	0	0	0	0	0	0	3
19	0	0	0	0	0	0	0	0	8
20	0	0	0	0	0	0	0	0	7
21	0	0	0	0	0	0	0	0	11
22	0	0	0	0	0	0	0	0	16
23	0	0	0	0	0	0	0	0	4
24	0	0	0	0	0	0	0	0	9
25	0	0	0	0	0	0	0	0	15
26	0	0	0	0	0	0	0	0	11
27									
28	0	0	0	0	0	0	0	0	3
29	0	0	0	0	0	0	0	0	6
30	0	0	0	0	0	0	0	0	2
	<b>0,41</b>	<b>0,00</b>	<b>0,41</b>	<b>6,5</b>	<b>0,0</b>	<b>6,5</b>	<b>52,5</b>	<b>5,0</b>	<b>248</b>

Monthly mean: **6,5**    Covering: **29/30**    Spotless days: **17**  
 Observations: **248**    Number of observers: **28**

**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 ; Dekelver ; Feys**



# Prominence number Rp

## Belgian solar observers

Month: November 2008

Day	Q	Wedel	H	e	Rp	el. Obs	Stdev	OBS
1								
2	3	2,3	4,6	5,6	51,6	1	6,1	6
3								
4	3	2	2,5	2,5	27,5	1	7,8	3
5								
6	3,5	2	4,5	6,5	51,5		7,8	2
7	3	2	6,3	9,3	72,3	1	11,2	4
8	2,7	2	3,3	4,7	37,7	1	6,1	4
9	3	2	4,5	5,5	50,5		6,4	2
10	3	3	3	4	34			1
11	2,9	2	3	5	35	1	10	6
12	3,4	2,5	3,4	4,6	38,6	1	6,8	6
13	3	2	4,3	6	49	2	9,6	6
14								
15								
16	3	2	4	4	44			1
17	3	2	3	5	35		18,4	2
18	3	2,5	2	2	22			1
19	3	2	4	7	47			1
20	2,5	2	3,3	4,3	37,3		6,4	3
21	3	1,8	2,7	3	30	1	6,7	4
22	2,3	2,2	3	5,8	35,8		9,9	5
23	2	2	3	6	36			1
24	3	2	2,5	4	29		7,1	2
25	3,1	1,9	3,6	6	42		6,6	5
26	3	2	3,5	4,5	39,5		6,4	2
27								
28	3	2	3	9	39			1
29	3	2	5	9	59			1
30								
	<b>2,93</b>	<b>2,10</b>	<b>3,6</b>	<b>5,4</b>	<b>41,0</b>	<b>9</b>	<b>8,3</b>	<b>69</b>

Monthly mean: **41,0** Covering: **23/30**  
 Observations: **69** Number of observers: **11**

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**Observers:**

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

**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/>**

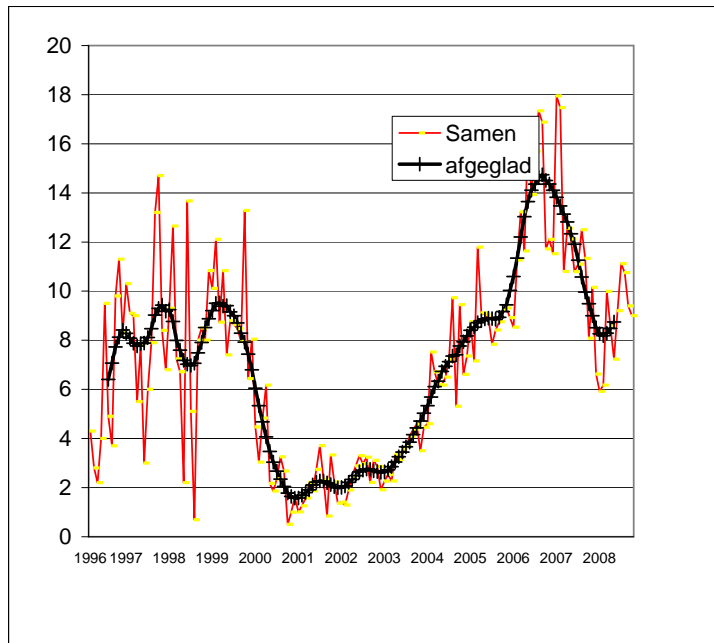


# Belgian Solar Observers

## Polar Faculae

Month: November 2008

Date	Dubois			Steen			Deman			Gabriel			Carels			Janssen			T.Spaninks			G.Gubbel	
	125mm F20			102mm F15			150mmF15			250 mm F20			150mm F8			200mmF10			127mm F15			North	South
	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12	10	9	4	10	5	3,5																	
13				4	4	3,0																	
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21	8	5	3																				
22																							
23																							
24																							
25				3	5	3,0																	
26				3	1	3,0																	
27																							
28																							
29																							
30																							
31																							
	9,00	7,00		5,00	3,75		####	#####		#####	#####		#####	#####		7,00	1,50		0,00	0,00		1,40	1,40



SIDC Weekly bulletin on Solar and Geomagnetic activity  
WEEK 411 from 2008 Nov 10

#### SOLAR ACTIVITY

Nov 10, a new sunspot group popped up near the central meridian. NOAA AR 1008 produced some B and A flares from Nov 10 until Nov 13. A faint coronal hole was present, but almost not visible in EIT.

#### GEOMAGNETIC ACTIVITY

Nov 14, the signature of a co-rotating interaction was visible in ACE data. The influence was limited since the Bz component of the interplanetary magnetic field was small.

On Nov 15, Earth was under the influence of a second co-rotating interaction (CIR) region announcing the fast solar wind emanating from a coronal hole. This CIR was dense and caused more disturbances compared with the previous CIR. But, the geomagnetic influence stayed beneath storm levels. The local K-index of Niemegh reached a few times the value of 3 on Nov 15 and 16, while the planetary index reached two times 4 on Nov 16.

SIDC Weekly bulletin on Solar and Geomagnetic activity  
WEEK 412 from 2008 Nov 17

#### SOLAR ACTIVITY

Very quiet conditions prevailed during the week with a Sun free of any active region.

#### GEOMAGNETIC ACTIVITY

Geomagnetic activity was extremely low during the whole week.

SIDC Weekly bulletin on Solar and Geomagnetic activity  
WEEK 413 from 2008 Nov 24

#### SOLAR ACTIVITY

There was no significant solar activity.

#### GEOMAGNETIC ACTIVITY

Geomagnetic activity was low in the beginning of the period but was boosted early on Nov 25 to Kp =2-3 levels by a recurrent coronal. This coronal hole pushed the solar wind speed up to nearly 700 km/s late on Nov 26. After that a slow decay of the wind speed was observed down to 400 km/s by the end of the period. Geomagnetic activity stayed at Kp=2-3 till late Nov 27.

SIDC Weekly bulletin on Solar and Geomagnetic activity  
WEEK 414 from 2008 Dec 01

#### SOLAR ACTIVITY

Solar activity was quiet during the whole week as there was no sunspot groups on the solar disc and the X-ray flux background stayed below the A level.

A low-latitude coronal hole of a complicated shape (several branches extended in different directions) has passed the solar central meridian on December 1-5. It has produced a fast solar wind stream (see below).

#### GEOMAGNETIC ACTIVITY

In the beginning of the week the Earth was situated inside the slow solar wind flow. The geomagnetic conditions were quiet.

The solar wind speed started to rise on December 3 as the interaction region between the slow and fast solar wind stream was arriving. The sector change in the interplanetary magnetic field polarity occurred on December 2-3. Due to the complicated shape of the coronal hole (that produced the fast stream), the interaction region (that passed the Earth on December 3-5) was long and had a complicated structure. After the first rise to around 500 km/s on December 4, the solar wind speed decreased to 350 km/s on December 5 and then rose again to reach almost 600 km/s on December 7. The interplanetary magnetic field magnitude on December 4-6 was elevated (6-10 nT). It was steadily southward on December 4-5, but not sufficiently strong (less than 5 nT during the most of the time) to produce a significant geomagnetic disturbance. The interplanetary magnetic field magnitude returned to average values on December 6, and on December 7 the solar wind speed started to decrease.

During the whole interval of disturbed solar wind, the geomagnetic situation remained quiet. The K index as reported by Dourbes and NOAA reached the value of 4 only once (on December 5). IZMIRAN reported K = 6 during an interval on the same day.



