

Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 13

Number 154

December 2008

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Content Newsletter

Graphics and relative number for this month

Daily Wolfnumbers by the members

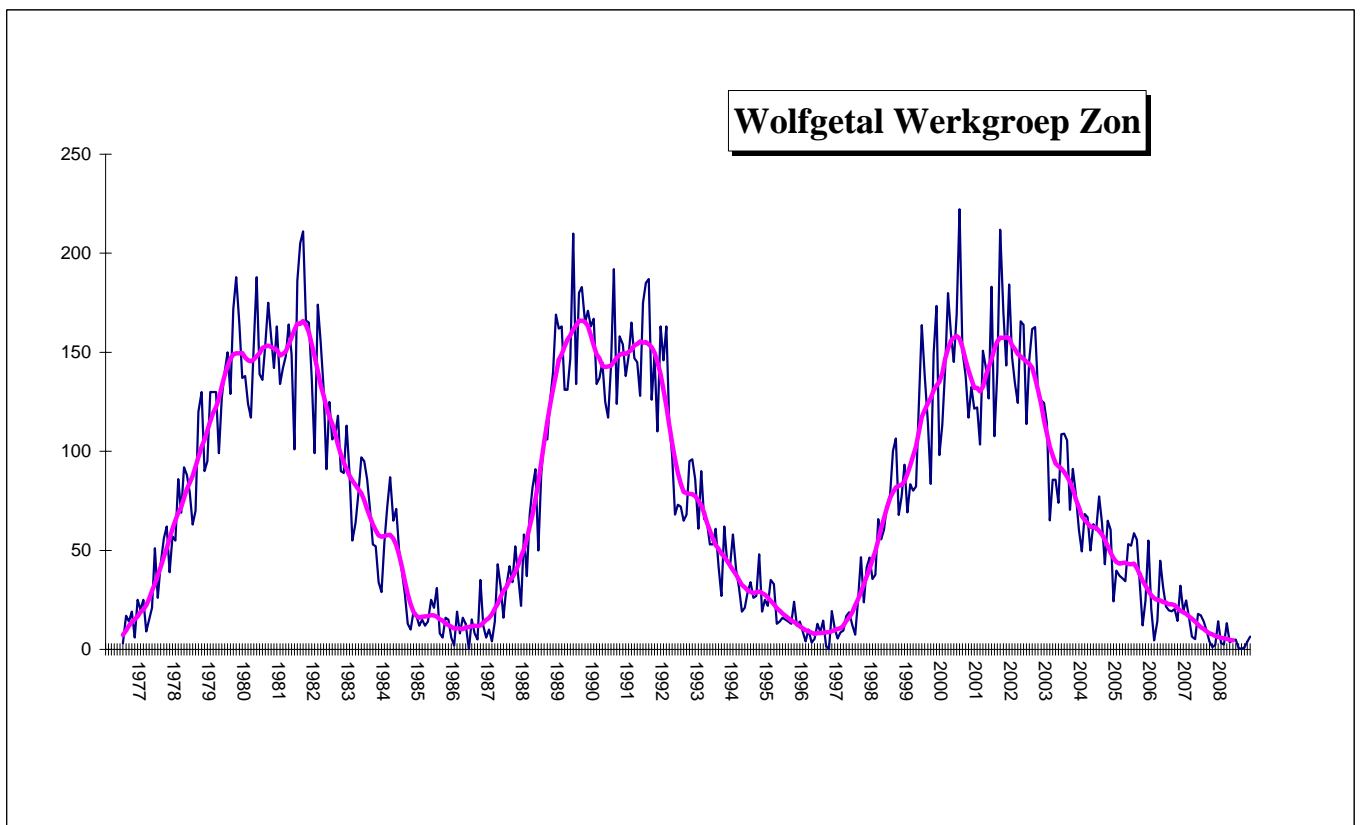
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



Mean of December observations

Groups :	N	0,00	Wolfnumb N	1	Beck :	3,6
	S	0,10	S	1,1	CV	0,8
	N+S	0,10	N+S	1,1		
318 observations	27 observers					

Sunspotnumbers VVS Belgium

Month: **December 2008**

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	13
3	0	0	0	0	0	0	0	0	12
4	0	0	0	0	0	0	0	0	6
5	0	0	0	0	0	0	0	0	7
6	0	0	0	0	0	0	0	0	17
7	0	0	0	0	0	0	0	0	24
8	0	0	0	0	0	0	0	0	5
9	0	0	0	0	0	0	0	0	5
10	0	1	1	0	9,5	9,5	10	2,3	8
11	0	1	1	0	12,3	12,3	32	12	15
12	0	1	1	0	11,5	11,5	67	10,8	6
13	0	0	0	0	0	0	0	0	19
14	0	0	0	0	0	0	0	0	12
15	0	0	0	0	0	0	0	0	1
16	0	0	0	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0	5
18	0	0	0	0	0	0	0	0	2
19	0	0	0	0	0	0	0	0	19
20	0	0	0	0	0	0	0	0	4
21	0	0	0	0	0	0	0	0	1
22	0	0	0	0	0	0	0	0	1
23	0	0	0	0	0	0	0	0	6
24									
25	0	0	0	0	0	0	0	0	5
26	0	0	0	0	0	0	0	0	24
27	0	0	0	0	0	0	0	0	24
28	0	0	0	0	0	0	0	0	20
29	0	0	0	0	0	0	0	0	20
30	0	0	0	0	0	0	0	0	20
31	0	0	0	0	0	0	0	0	14
	0,00	0,10	0,10	0,0	1,1	1,1	3,6	0,8	318

Monthly mean: **1,1** Covering: **30/31** Spotless days: **27**
 Observations: **318** Number of observers: **27**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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 Belgium
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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
 S.Dufoer ; G.Gubbels ; jeugdwerking Astrolab ; J Bavais ; A. De Kerchove

Prominence number Rp

Belgian solar observers

Month: December 2008

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1	2	3		3,0	6	36			1
2	2,9	2,1		4,0	6,2	46,2		11,8	5
3	3	2		3,5	5,8	40,8		6,7	4
4	2,5	2		3	4	34			1
5	2,5	2,3		3,5	6,5	41,5		10,6	2
6	2,4	2,3		4,3	6,5	49,5		17,1	4
7	3,1	1,8		2,6	6,4	32,4	3	11	10
8	2	2		5	7	57			1
9	2,6	2,1		3,8	5	43		4,4	4
10	3	2		2	2,5	22,5		8,5	2
11	2,4	2,3		3,6	5,4	41,4		6,6	5
12	3	2		4	7	47			1
13	2,4	2,1		3	4,8	34,8		8,3	4
14	3	2,5		4	5,5	45,5		16,3	2
15									
16									
17	2,6	2,1		2,3	2,3	25,3		5,5	4
18	2	2		3	7	37			1
19	2,3	2,6		4,3	6,2	49,2		9,2	6
20	3	2,5		4	4	44			1
21	3	2		3	4	34			1
22									
23	2,8	2,3		3	5,5	35,5		13,4	2
24									
25	2	3		5	8	58			1
26	2,2	2,1		3,6	5,9	41,9	2	9,7	11
27	2,3	2,3		4,2	5	47	2	10,8	11
28	2,5	2,3		6	9,7	69,7	2	13	9
29	2,5	1,6		3,7	4,7	41,7	2	9,3	8
30	2,9	2,1		2,6	4,4	30,4	2	8,1	10
31	2,3	1,8		3,3	5,7	38,7		9,3	7
	2,56	2,19		3,6	5,6	41,6	13	10,0	118

Monthly mean: **41,6** Covering: **27/31**
 Observations: **118** Number of observers: **11**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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 Belgium
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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 : $H \cdot 10 + e$

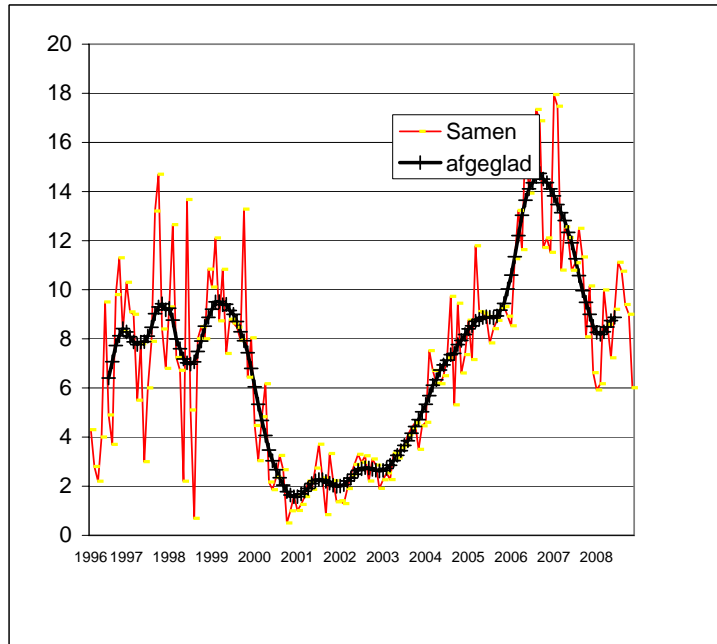
More info at : <http://members.chello.be/j.janssens/>

Belgian Solar Observers

Polar Faculae

Month: December 2008

Date	Dubois			Steen			Deman			Gabriel			Carels			Janssen			T.Spaninks			G.Gubbels				
	125mm F20			102mm F15			150mmF15			250 mm F20			150mm F8			200mmF10			127mm F15							
	North	South	Q	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	6	5	3	6	3	3	21	13	4																	
3	12	9	3	7	5	3,0																				
4																										
5																										
6																										
7				6	4	3,0									3	1	3,5	0	0	4	4	4	2,5			
8																										
9																										
10																										
11							9	14	3																	
12																										
13																							3	2	2	
14																						4	5	1		
15																										
16																										
17																										
18																										
19	4	2	2	2	2	3,0																				
20																										
21																										
22																										
23															1	1	3,0									
24																										
25																										
26																							5	6	2	
27															0	1	3,0					3	5	2		
28																						3	4	3,5		
29	5	7	3																			2	4	1,5		
30																						3	6	3		
31	1	5	3																			2	5	1,5		
	5,60	5,60		5,25	3,50		15,0	13,5		#####	#####		#####	#####		1,33	1,00		0,00	0,00		3,22	4,56			



Different Relative Sunspotnumbers

Month : December 2008

CV											Pettisindex SN				Intersol IS				Becknumber																				
Date	F.Dubois	O.Steen	L.Meeus	J.Carels	J.Janssens	P.J. Dekelver	G.Gubbels	H.De Backer	S.Dufoer	Mean	G.Gubbels	F.Dubois	P.J. Dekelver	O.Steen	J.Carels	F.Dubois	J.Carels	G.Gubbels	P.J. Dekelver	F.Dubois	O.Steen	L.Meeus	P.J. Dekelver	J.Carels	G.Gubbels	S.Dufoer	D.Van Hesseche	A.T. Son	J.Bourgeois	H.Coeckelberghs	De Backer	Pbl Obs Mira	J.Claes	F.Feys	Mean	Date			
1	0	0								0,0																											0	1	
2	0	0								0,0																											0	2	
3	0	0								0,0																												0	3
4	0	0								0,0																												0	4
5	0	0								0,0																												0	5
6	0	0								0,0																												0	6
7	0	0	0	0	0	0	0	0	0	0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
8	0	0	0							0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9	0	0								0,0																												0	9
10	2	2	5							2,3																											10	10	
11	19	5	5							12,0																												32	11
12	5	0					25	13		10,8	21	12		0		4		4																		222	67	12	
13	0	0	0	0						0,0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
14	0	0								0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
15										0,0																												0	15
16										0,0																												0	16
17	0	0								0,0																												0	17
18	0									0,0																												0	18
19	0	0	0	0						0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
20		0								0,0																												0	20
21		0								0,0																												0	21
22										0,0																												0	22
23			0							0,0																												0	23
24										0,0																												0	24
25										0,0																												0	25
26	0	0	0	0	0					0,0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
27	0	0	0	0	0					0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
28	0	0	0	0						0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
29	0	0	0	0						0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
30	0	0	0	0						0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
31	0	0								0,0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
##	1,2	0,3	0,8	0,0	0,0	0,0	2,5	1,5	0,0	0,9	2,1	1,8	0,0	0,6	0,0	0,7	0,0	0,4	0,0	5,33	1,4	3,3	0,0	0,0	5	0	0	0	0	0	0	5	16,0	0,0	31,7	3,8			

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 415 from 2008 Dec 08

SOLAR ACTIVITY

A sunspot group appeared on the south-west of the Sun on December 10, it became NOAA active region 1009 (Catania number 92). It produced a series of B flares (including one C flare on December 11) before disappearing behind the western solar limb on December 13.

A filament erupted on December 12 (close to 07:00 UT) on the northwest limb, leading to a slow CME which did not reach Earth.

A small high-latitude coronal hole passed the solar central meridian on December 7-9.

GEOMAGNETIC ACTIVITY

The Earth was immersed in slow solar wind during the full week. The coronal hole did not produce any geomagnetic disturbance, due to its northern location and its weakness. A sector boundary was seen at ACE on the night of 10 to 11 December.

The geomagnetic situation remained quiet during the whole week, with Kp never exceeding 2.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 416 from 2008 Dec 15

SOLAR ACTIVITY

Solar activity was extremely low during the whole week with a soft X-ray flux measured by the GOES spacecraft well below the A level.

GEOMAGNETIC ACTIVITY

Geomagnetic activity was extremely quiet during the week. Kp indices culminated at a value of 2 during a few hours on December 16th and 17th.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 417 from 2008 Dec 22

SOLAR ACTIVITY

There was no flaring activity on the Sun. There were no sunspots throughout the whole period.

GEOMAGNETIC ACTIVITY

Geomagnetic activity was exclusively triggered by the passage of a recurrent coronal hole that brought the solar wind up speed up to nearly 600 km/s on Dec 23. The subsequent rise in Kp was limited to Kp=3 values on Dec 23 and Dec 24.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 418 from 2008 Dec 29

SOLAR ACTIVITY

No flaring activity at all was noticed by GOES10. Two coronal holes were visible in EIT195.

GEOMAGNETIC ACTIVITY

The first coronal hole was situated near the equator. The more dense co-rotating interaction region (CIR) arrived late Dec 30. The plasma within the CIR, carried a strong magnetic field. Although, the influence on Earth was limited since the magnetic component responsible for the strongest reconnection was negative only during a short time. The Earth magnetic field was only slightly disturbed on Dec 31 and Jan 01: Kp became maximum 3. The second coronal hole was situated in the southern solar hemisphere.

The interplanetary solar wind data recorded by ACE, doesn't show much difference when transiting from the first to the second coronal hole. In the Kp-index, we

can distinguish the influence of both coronal holes. On Jan 03, Kp reached the value of 4, i.e. active conditions, during one three-hour interval.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 419 from 2009 Jan 05

SOLAR ACTIVITY

Solar activity was mostly quiet during the week. The most noticeable event was the appearance of a new active region on Jan. 09th (NOAA AR 1010) which produced weak flaring activity during 2 days: Jan. 09th and Jan. 10th. The biggest of these flares peaked at B4 level at 00:03 UT on Jan. 10th.

GEOMAGNETIC ACTIVITY

Geomagnetic activity was extremely quiet during the whole week.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 420 from 2009 Jan 12

SOLAR ACTIVITY

Three small peaks in the total solar X-ray flux curve were measured by GOES10. The highest was a A5.0 flare from active region 1010. A faint equatorial coronal hole reached the central meridian on Jan 14.

GEOMAGNETIC ACTIVITY

A magnetic sector crossing of Earth caused unsettled conditions from Jan 14-15. A co-rotating interaction region between a slow and fast solar wind arrived late Jan 18. It was the precursor of the fast solar wind emanating from the coronal hole. Early Jan 19, Kp reached once 4.