

Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 13

Number 143

January 2008

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Content Newsletter

Graphics and relative number for this month

Daily Wolfnumbers by the members

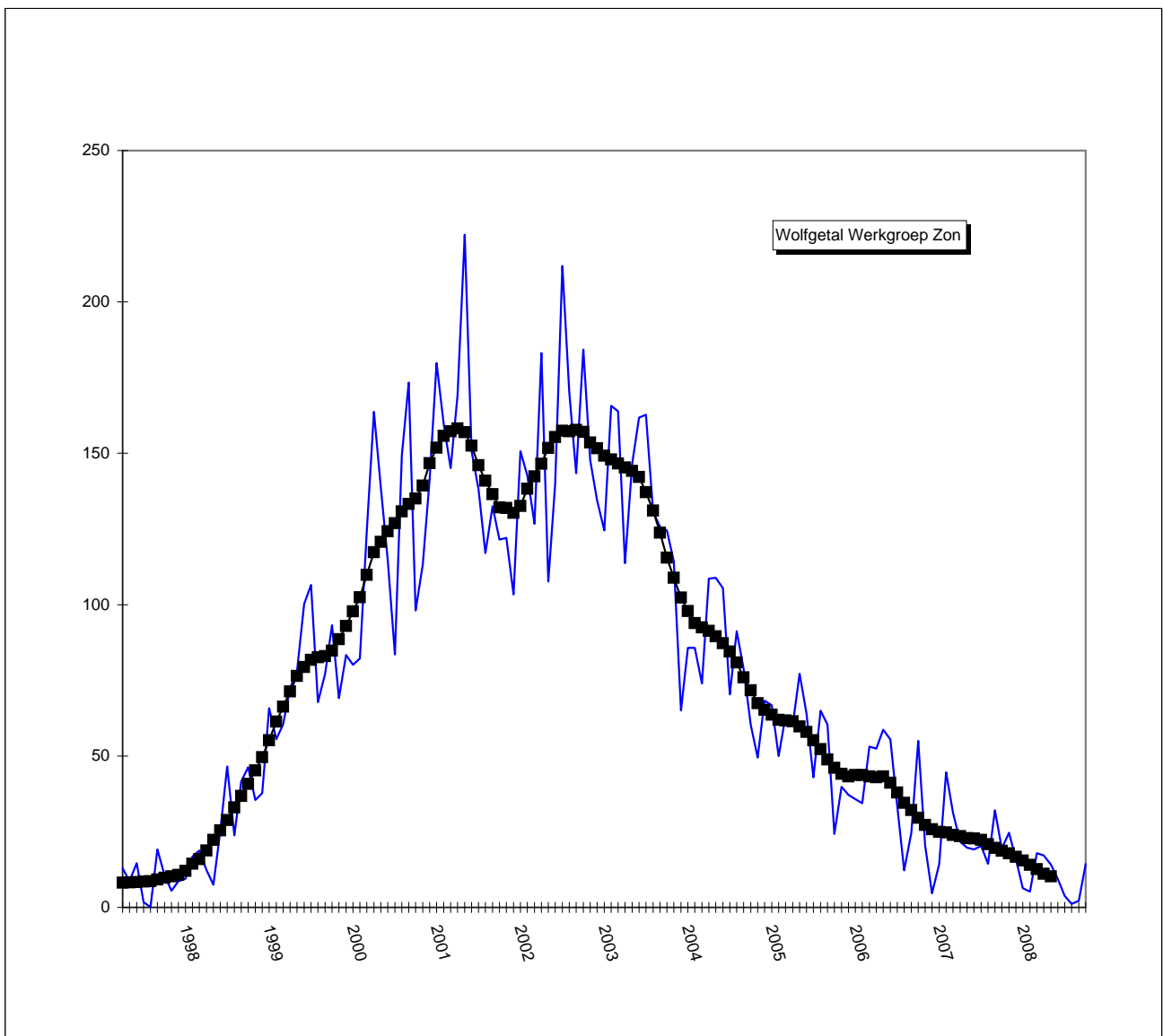
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



Mean of december observations

Groups :	N	0,07	Wolfnumb N	0,7	Beck :	4,3
	S	0,33	S	2,5	CV	0,8
	N+S	0,41	N+S	3,2		
266 observations	27 observers					

Wolfnumbers Belgian Solar Observers

Month: **January 2008**

SIDC	L. Meeus			H.Coeckelberghs			Publ Obs Mira			O. Steen			F. Dubois			L. Claeys			G. Deman			A.T.Son			H. De Backer			B. Thooris			A Gabriel			Dag
	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	
1	7																																1	
2	7	1	2	12	1	1	11	1	1	11	1	4	14	1	4	14				1	3	13			1	1	11	1	1	11	1	1	11	2
3	7																																	3
4	12										1	2	12												0	0	0			2	3	23		4
5	10										1	4	14							1	3	13			0	0	0	1	2	12	1	3	13	5
6	11	1	2	12	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	6	
7	11	1	4	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	7	
8	9	1	2	12							0	0	0											0	0	0			1	1	11		8	
9	0	0	0	0							0	0	0											0	0	0			0	0	0	0	0	9
10	8										0	0	0											0	0	0			0	0	0	0	0	10
11	8										0	0	0											0	0	0			0	0	0	0	0	11
12	0	0	0	0							0	0	0							0	0	0			0	0	0			0	0	0	0	12
13	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	14
15	0										0	0	0											0	0	0			0	0	0	0	0	15
16	0										0	0	0											0	0	0			0	0	0	0	0	16
17	0										0	0	0											0	0	0			0	0	0	0	0	17
18	0										0	0	0											0	0	0			0	0	0	0	0	18
19	0										0	0	0											0	0	0			0	0	0	0	0	19
20	0										0	0	0											0	0	0			0	0	0	0	0	20
21	0										0	0	0											0	0	0			0	0	0	0	0	21
22	0	0	0	0							0	0	0							0	0	0			0	0	0			0	0	0	0	22
23	0										0	0	0							0	0	0			0	0	0			0	0	0	0	23
24	0										0	0	0											0	0	0			0	0	0	0	0	24
25	0	0	0	0							0	0	0							0	0	0			0	0	0			0	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	26
27	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	28
29	0										0	0	0											0	0	0			0	0	0	0	0	29
30	8										1	9	19	1	8	18								1	6	16			1	5	15		30	
31	8										1	3	13	1	3	13								1	4	14	1	3	13	1	3	13		31
#	3,4			4,2			2,2			3,7			3,8			3,8			0,0			10,5		0,0		2,2		3,3			4,4			

Observations of the SIDC are not included in the Belgian monthly Wolfnumber.
Publ Obs Mira : observers : Francis Meeus , Guido Matheus and Marc Rayen

SIDC	J. Devriese			J. Bourgeois			KSB			Carels			G.Gubbels			J. Claes			E. De Ceuninck			S. Kleber			B. Taillieu			S. Dufour			F. van Loo			Dag	
	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f	R	g	f		
1	7																																	1	
2	7										1	1	11	1	3	13	1	1	11	1	1	11	1	2	12									2	
3	7																							0	0	0									3
4	12										0	0	0	1	2	12																			4
5	10										1	3	13											1	4	14			1	5	15	0	0	0	5
6	11										1	3	13	0	0	0	1	2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7	11										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	9										0	0	0										1	3	13			1	3	13	0	0	0	0	8
9	0										0	0	0										0	0	0			0	0	0	0	0	0	9	
10	8										0	0	0										0	0	0			0	0	0	0	0	0	10	
11	8										0	0	0							1	1	11									1	1	11	11	
12	0										0	0	0							0	0	0			0	0	0			0	0	0	0	12	
13	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	14	
15	0										0	0	0											0	0	0			0	0	0	0	0	15	
16	0										0	0	0											0	0	0			0	0	0	0	0	16	
17	0										0	0	0											0	0	0			0	0	0	0	0	17	
18	0										0	0	0											0	0	0			0	0	0	0	0	18	
19	0										0	0	0											0	0	0			0	0	0	0	0	19	
20	0										0	0	0											0	0	0			0	0	0	0	0	20	
21	0										0	0	0											0	0	0			0	0	0	0	0	21	
22	0										0	0	0											0	0	0			0	0	0	0	0	22	
23	0										0	0	0											0	0	0			0	0	0	0	0	23	
24	0										0	0	0											0	0	0			0	0	0	0	0	24	
25	0	0	0	0							0	0	0											0	0	0			0	0	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	26	
27	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	28	
29	0										0	0	0											0	0	0			0	0	0	0	0	29	
30	8										0	0	0	1	6	16								1	9	19								30	
31	8										0	0	0											1	9	19								31	
#	3,4			###			0,0			1,6		4,9		4,5																					

Sunspotnumbers VVS Belgium

Month: **January 2008**

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1									
2	0	1	1	0	11,8	11,8	28	7	16
3	0	1	1	0	5,5	5,5			2
4	1	0	1	6,7	0	6,7	8	2	7
5	1	0	1	10,9	0	10,9	11	3	11
6	0	1	1	0	2,6	2,6	2	0,4	24
7	0	1	1	0	3,8	3,8	3	0,3	21
8	0	1	1	0	5,8	5,8	2	0,3	8
9	0	0	0	0	0	0	0	0	9
10	0	1	1	0	3,1	3,1	1	0,3	7
11	0	1	1	0	5,5	5,5	2	1	4
12	0	0	0	0	0	0	0	0	23
13	0	0	0	0	0	0	0	0	8
14	0	0	0	0	0	0	0	0	16
15	0	0	0	0	0	0	0	0	1
16	0	0	0	0	0	0	0	0	11
17	0	0	0	0	0	0	0	0	3
18									
19									
20	0	0	0	0	0	0	0	0	2
21	0	0	0	0	0	0	0	0	1
22	0	0	0	0	0	0	0	0	17
23	0	0	0	0	0	0	0	0	3
24	0	0	0	0	0	0	0	0	1
25	0	0	0	0	0	0	0	0	14
26	0	0	0	0	0	0	0	0	23
27	0	0	0	0	0	0	0	0	16
28	0	0	0	0	0	0	0	0	1
29									
30	0	1	1	0	16,8	16,8	35	3,3	8
31	0	1	1	0	13,2	13,2	19	3,7	9
	0,07	0,33	0,41	0,7	2,5	3,2	4,3	0,8	266

Monthly mean: **3,2** Covering: **27/31** Spotless days: **16**
 Observations: **266** Number of observers: **27**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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 B8920 Langemark
 Belgium
 e-mail : astrosun@skynet.be

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. De Kerchove**

Prominence number Rp

Belgian solar observers

Month: **January 2008**

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1									
2	2,9	2,1		3,9	5,9	44,9	1	7,7	12
3									
4	2	2,5		2,5	5	30		7,1	2
5	2,2	2,5		3,6	5	41		6,5	5
6	2,9	2,1		3,8	5,3	43,3		9,5	13
7	2,8	2,2		3,6	6,3	42,3		9,4	7
8	2,4	2,8		2	2	22		12,7	4
9	2,5	2,3		5,5	7	62	1	9,9	3
10	2,5	3		3	4,5	34,5	1	0,7	3
11	3	2		6	9	69		15,6	2
12	3,1	2,1		3,8	5,5	43,5	2	12,5	10
13	3,1	1,9		5,3	8,8	61,8		12,7	4
14	2,4	2		8,8	13,5	101,5	1	8,4	5
15									
16	3,1	1,8		5	6,3	56,3		7,4	4
17	2	2		5	8	58			1
18									
19									
20									
21									
22	3	2,2		4,4	6,3	50,3	1	15,5	8
23									
24									
25	2,2	2,8		4	5,3	45,3		1,5	3
26	2,6	2,4		4,1	5,8	46,8	1	9	9
27	3	2,3		5,5	9	64	1	5,7	3
28	2	2		7	12	82			1
29									
30	3,3	2		3,5	4	39	1	7,5	3
31	2,5	3		3	5	35		1,4	2
	2,64	2,29		4,4	6,6	51,1	10	8,5	104

Monthly mean: **51,1** Covering: **21/31**
 Observations: **104** Number of observers: **11**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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 Belgium
 e-mail : astrosun@skynet.be

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 : $H \cdot 10^e$

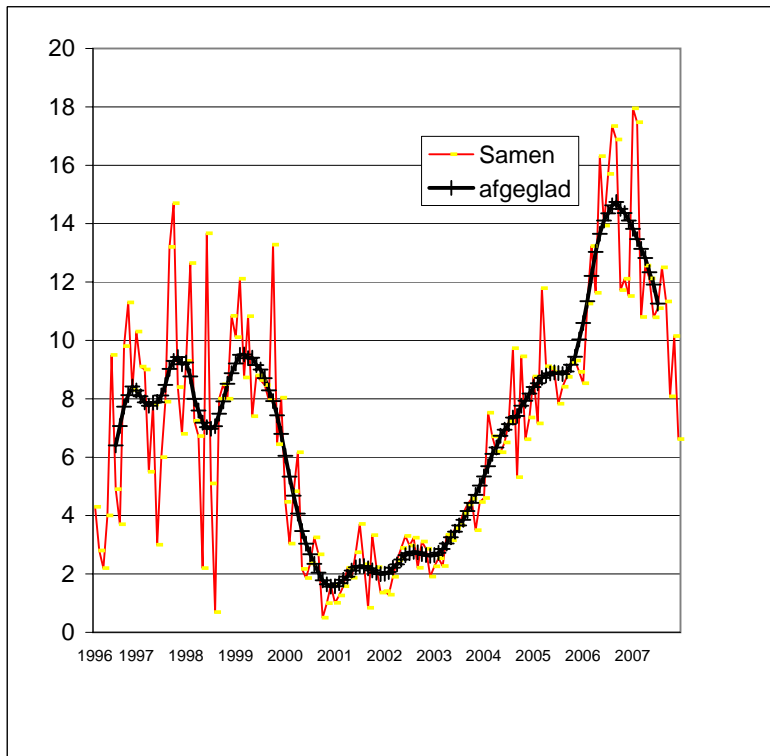
More info at : <http://members.chello.be/j.janssens/>

Belgian Solar Observers

Polar Faculae

Month: January 2008

Date	Dubois 125mm F20			Steen 102mm F15			Deman 150mmF15			Gabriel 250 mm F20			Carels 150mm F8			Janssen 200mmF10			T.Spaninks 127mm F15			G.Gubbels		
	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q
1																								
2	5	4	3	3	4	3												0	0	3	3	3		
3																								
4																								
5				2	2	3,0																3	5	
6	1	8	3	4	5	3,0	8	12	3				4	6	4			0	2	4	3	6		
7	7	4	3	4	3	3,0																1	1	
8				4	3	3,0																		
9	2	7	3																					
10																								
11																								
12	3	9	3	7	7	3,0												0	2	4	1	4		
13																								
14																								
15																								
16	5	8	3	4	5	3,0																		
17																								
18																								
19																								
20																								
21																								
22				6	4	3,0												0	3	4	4	4		
23																								
24																								
25																								
26				2	3	3,0																2	4	
27																		2	1	2,5				
28																								
29																								
30				3	7	3,5																		
31																								
	3,83	6,67		3,90	4,30		8,0	12,0		#####	#####		4,00	6,00		2,00	1,00		0,00	1,75		2,43	3,86	



Different Relative Sunspotnumbers

Month : January 2008

CV										Pettisindex SN				Intersol IS			Becknumber															
Date	F.Dubois	O.Steen	L.Meeus	J.Carels	J.Janssens	G.Gubbels	H.De Backer	S.Dufoer	Mean	G.Gubbels	F.Dubois	O.Steen	J.Carels	F.Dubois	J.Carels	G.Gubbels	F.Dubois	O.Steen	L.Meeus	J.Carels	G.Gubbels	S.Dufoer	A.T.Son	J.Bourgeois	H.Coeckelberghs	De Backer	Pbl Obs Mira	J.Claes	D.Van Hessche	Mean	Date	
1																																1
2	8	5	8	5		10	4		6,7	10	13	13	13	5	4	1	32	32	16	24	44				37	37	36	4	37	30	2	
3																																3
4		1		5		0			2,0			2	12		3			8		16					0					8	4	
5	2	1		3		11	0	0	2,8	12	3	4	3	4	4	4	12	16		12	24	0			0				11	5		
6	0	0	2	0	0	1	0	0	0,4	2	0	0	0	0	0	3	0	0	8	0	8	0			0	0	0	0	0	2	6	
7	0	0	2	0		0	0	0	0,3	0	0	0	0	0	0	0	0	0	16	0	0	0			0	0	0	12		3	7	
8	0	0	1			0			0,3	0	0			0			0	0	8						0					2	8	
9	0	0	0			0			0,0	0	0	0		0			0	0	0	0	0				0					0	9	
10	1	0				0			0,3	1	0			1			4	0							0					1	10	
11						0			0,0									0							0			4		2	11	
12	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	12	
13		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	14	
15																																15
16	0	0				0			0,0	0	0			0			0	0							0		0			0	16	
17	0								0,0	0				0			0														0	17
18																																18
19																																19
20	0								0,0		0			0			0													0	20	
21						0			0,0																	0				0	21	
22	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	22	
23		0							0,0			0						0													0	23
24																																24
25	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	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	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	27	
28																																28
29																																29
30	2	3		3		5			3,3		8	9	6	9	7		12	36		24					48				35	30		
31	2	3				6			3,7		3	3		4			12	12							32				19	31		
##	0,8	0,7	1,1	1,5	0,0	2,8	0,8	0,0	0,9	3,0	1,6	1,6	3,1	1,3	1,6	1,0	5,11	5	4	7	10	0	0	0	6	6	12	2	7	5		

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 368 from 2008 Jan 14

SOLAR ACTIVITY

The week from Jan 14 until Jan 20 was quiet: the X-ray radiation was again under the measurement level of the GOES satellite, the daily estimated International sunspot number was zero. No station from the ground based solar observation network reported a sunspot.

The only visible feature was a horizontally stretched southern coronal hole.

GEOMAGNETIC ACTIVITY

The first sign of the southern coronal was seen in ACE data on Jan 12 when the co-rotating interaction region pushed up the magnetic field strength measured. The solar wind speed was elevated the complete week. Only on Jan 12 and 14, two active periods were measured. For the rest of the week was the north-south component of the carried magnetic field not negative enough and lead mainly to unsettled conditions ($K_p = 3$).

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 369 from 2008 Jan 21

SOLAR CONDITIONS:

Solar conditions have been quiet during the entire week. The sun was spotless and without active regions. An all quiet alert was valid.

GEOMAGNETIC CONDITIONS:

Geomagnetic conditions were mostly at very quiet levels during the entire week. An interval of active conditions occurred on Jan 25 due to the passage of a small coronal hole.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 370 from 2008 Jan 28

SOLAR CONDITIONS:

Solar activity was very low during the whole week. A small bipolar active region which was on the east limb on Jan. 28th displayed sunspots on Jan. 30th and was thus officially referred as NOAA AR 0982. No significant flaring activity related to this region was noticed, except a B1 flare on Jan. 29th.

GEOMAGNETIC CONDITIONS:

Geomagnetic activity was very quiet until Jan. 31st, and then became unsettled to active on Feb. 1st and Feb. 2nd due to the effects of a recurrent coronal hole. Active to minor storm conditions were observed at planetary levels between Feb. 1st 15UT and Feb. 2nd 06UT.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 371 from 2008 Feb 04

SOLAR ACTIVITY

Solar activity was very low over the whole week. Except for a small B sunspot group on Feb.4, there were no more sunspots on the Sun for the rest of the week. The GOES X-ray flux remained below the A1 level.

As only event, a filament eruption took place near disk center on Feb.4 8:30UT and was followed by a faint and slow halo CME. This small event was too weak to be geoeffective. A recurrent coronal hole already present over 3 previous rotations was the source of a geomagnetic disturbance on Feb.10.

The same very low solar activity is expected to continue at least for next week.

GEOMAGNETIC ACTIVITY

The week started on the tail of a fast solar wind stream. The solar wind speed quickly decayed on Feb.4 and fell below 400 km/s.

As a result, the geomagnetic activity was quiet to unsettled from Feb.4 to Feb.7. Late on Feb.7, the Earth crossed a sector boundary in the interplanetary medium. This caused temporary active geomagnetic conditions before returning to quiet conditions on Feb.8 and 9. Then on Feb.10, a recurrent fast stream reached the Earth and the wind speed increased steeply to 650km/s. This induced active to minor storm conditions in the second part of Feb.10. Note that this recurrent coronal hole disturbance came 1 or 2 days later than on the past 2 solar rotations.

An all-quiet alert was issued between Feb.5 and Feb.7.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 372 from 2008 Feb 11

SOLAR ACTIVITY

During the whole week the solar activity was quiet. No sunspot groups were observed.

GEOMAGNETIC ACTIVITY

During the week the Earth was inside the fast flow from a low-latitude coronal hole in the southern hemisphere. The interplanetary magnetic field magnitude, however, was at an average level (4-5 nT). The geomagnetic conditions were thus mostly quiet with isolated intervals of $K = 4$ (one interval of $K = 5$ was reported by NOAA and IZMIRAN on February 14). On February 16 the solar wind speed started to decline, and at the end of February 17 the Earth entered the slow solar wind flow. The geomagnetic conditions remained quiet.

SIDC DEFINITIVE INTERNATIONAL AND HEMISPHERIC SUNSPOT NUMBERS FOR 2007

SEPTEMBER	JULY			AUGUST			SEPTEMBER		
	Date	Ri	Rn	Rs	Ri	Rn	Rs	Ri	Rn
1	19	0	19	0	0	0	14	0	14
2	11	0	11	0	0	0	8	0	8
3	9	0	9	7	0	7	8	0	8
4	9	0	9	7	0	7	8	0	8
5	9	0	9	7	0	7	8	0	8
6	9	0	9	8	0	8	0	0	0
7	8	0	8	8	0	8	0	0	0
8	10	0	10	9	0	9	0	0	0
9	14	0	14	9	0	9	0	0	0
10	17	0	17	9	0	9	0	0	0
11	17	0	17	8	0	8	0	0	0
12	15	0	15	8	4	4	0	0	0
13	26	0	26	8	4	4	0	0	0
14	27	0	27	0	0	0	0	0	0
15	25	0	25	0	0	0	0	0	0
16	20	0	20	0	0	0	0	0	0
17	11	0	11	0	0	0	0	0	0
18	9	0	9	0	0	0	0	0	0
19	8	0	8	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	9	0	9	0	0	0
22	0	0	0	8	0	8	0	0	0
23	0	0	0	8	0	8	0	0	0
24	0	0	0	8	0	8	0	0	0
25	0	0	0	8	0	8	0	0	0
26	0	0	0	8	0	8	0	0	0
27	0	0	0	8	0	8	0	0	0
28	9	0	9	8	0	8	9	5	4
29	9	0	9	8	0	8	9	5	4
30	9	0	9	8	0	8	9	5	4
31	0	0	0	17	0	17			
MEAN :	9.7	0.0	9.7	6.0	0.3	5.7	2.4	0.5	1.9