

Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 12

Number 139

September 2007

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Content Newsletter

Graphics and relative number for this month

Daily Wolfnumbers by the members

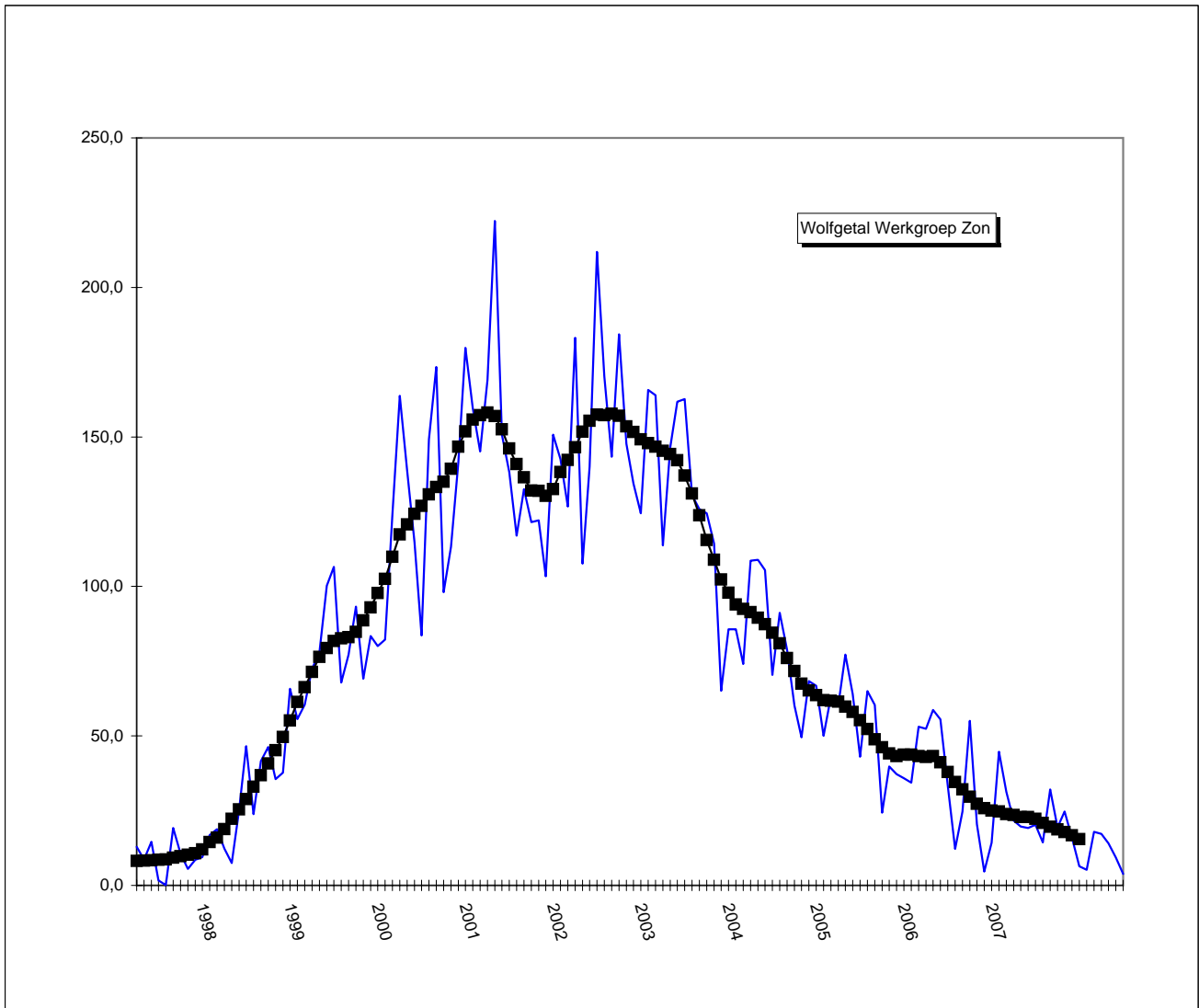
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



Mean of september observations

Groups :	N	0,10	Wolfnumb N	1,6	Beck :	2,3
	S	0,23	S	2,2	CV	1
	N+S	0,33	N+S	3,8		
433 observations	25 observers					

Sunspotnumbers VVS Belgium

Month: **September 2007**

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1	0	2	2	0	18,7	18,7	52	7	19
2	0	1	1	0	11,1	11,1	20	3	11
3	0	1	1	0	12,1	12,1	19	2	18
4	0	1	1	0	8,9	8,9	13	1	18
5	0	1	1	0	11,8	11,8	19	3	6
6	0	1	1	0	4,8	4,8	4	1	5
7	0	0	0	0	0	0	0	0	11
8	0	0	0	0	0	0	0	0	16
9	0	0	0	0	0	0	0	0	18
10	0	0	0	0	0	0	0	0	13
11	0	0	0	0	0	0	0	0	17
12	0	0	0	0	0	0	0	0	22
13	0	0	0	0	0	0	0	0	14
14	0	0	0	0	0	0	0	0	18
15	0	0	0	0	0	0	0	0	18
16	0	0	0	0	0	0	0	0	18
17	0	0	0	0	0	0	0	0	5
18	0	0	0	0	0	0	0	0	17
19	0	0	0	0	0	0	0	0	18
20	0	0	0	0	0	0	0	0	10
21	0	0	0	0	0	0	0	0	20
22	0	0	0	0	0	0	0	0	18
23	0	0	0	0	0	0	0	0	19
24	0	0	0	0	0	0	0	0	17
25	0	0	0	0	0	0	0	0	19
26	0	0	0	0	0	0	0	0	9
27	0	0	0	0	0	0	0	0	11
28	1	0	1	15,6	0	15,6	35	5	10
29	1	0	1	16	0	16	38	4	5
30	1	0	1	16,3	0	16,3	49	4	21
	0,10	0,23	0,33	1,6	2,2	3,8	8,3	1,0	441

Monthly mean: **3,8** Covering: **30/30** Spotless days: **21**
 Observations: **441** Number of observers: **26**

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Observers:

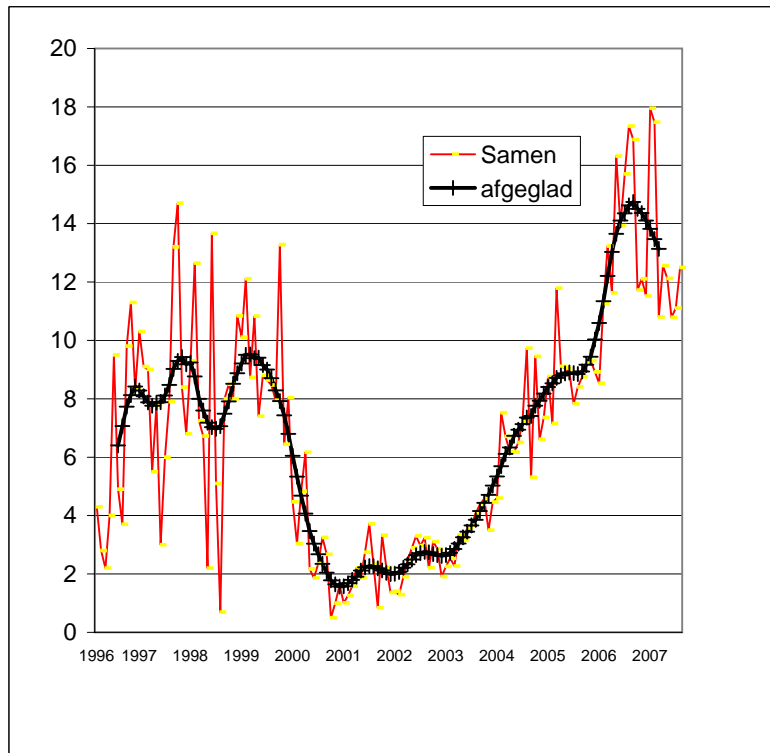
Devriese ; De Ceuninck ; Janssens ; Publ obs Mira ; Bourgeois ; Macharis
 De Backer; Dubois ; Gysel ; Kleber ; Deman ; Taillieu ; Carels ; Dewaele
 Meeus ; Steen ; KSB ; Gabriel ; Claeys ; Devriese ; Thooris ; Vanleenhove
 Claes ; Verboven ; Van Loo ; Son ; Coeckelberghs ; Gadyne
 S.Dufoer ; G.Gubbels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

Belgian Solar Observers

Polar Faculae

Month: September 2007

Date	Dubois 125mm F20			Steen 102mm F15			Deman 150mm F15			Gabriel 250 mm F20			Carels 150mm F8			Janssen 200mm F10			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				11	5	3,5				28	7	4				11	7	4	2	1	4	13	5	1
3	15	0	4	4	3	3,5				25	4	3							1	1	4	13	6	3
4	14	2	4	5	4	3,5	20	2	3	32	5	4							0	0	5	10	4	4
5	11	4	3	6	12	3,5																		
6	7	1	4																					
7																			2	0	4			
8	14	4	4	8	3	3,5							5	0	4				1	0	4	15	3	2
9										23	15	3										15	3	1,5
10	18	4	3																1	1	4			
11										35	10	3												
12	6	2	4	7	3	3,5				32	10	4												
13	11	5	4	7	3	3,5				33	8	4												
14	9	4	3	10	3	3,5				34	6	4												
15				13	4	4,0				41	9	3				7	2	3,0				11	4	3
16				6	2	3,5				45	21	5				16	0	4,0	0	0	4	16	6	3,5
17																								
18	16	3	4	11	5	3,5				37	14	3							1	7	4			
19	12	5	3	9	3	3,5													0	1	4			
20																								
21	8	4	4	11	4	3,5	25	5	3	32	8	4						0	0	4	12	6	2,5	
22				11	4	3,5				34	9	4	4	1	4	12	5	3,0	1	0	4	11	4	3,5
23	13	2	3	11	7	3,5	33	6	3	31	12	4				13	4	4,5	6	1	4	10	4	3
24				8	2	3,5																12	8	3
25				7	4	3,5				34	6	3										11	5	3,5
26										37	8	4												
27	10	3	2	9	4	3,0				31	11	3												
28																								
29				7	4	3,5																		
30										22	8	4	3	1	4	8	0	3,0				9	5	3
	11,71	3,07		8,47	4,16		26,0	4,3		32,6	9,5		4,00	0,67		11,17	3,00		1,15	0,92		12,15	4,85	



Prominence number Rp

Belgian solar observers

Month: **September 2007**

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1	2,8	2,6		4,7	6,6	53,6	1	12,6	8
2	3	2,2		3,3	4	37		6,7	3
3	2,8	2		6,1	9,1	70,1	1	8,5	9
4	3,1	2		5,6	8,3	64,3		13,1	9
5	3,5	1,9		3,8	6	44		11	4
6	2,3	2		3,7	6,7	43,7	1	6,4	4
7	2,8	2,1		4,8	6,3	54,3	1	11,4	4
8	2,5	2,5		3,3	3,7	36,7	1	6,9	4
9	2,5	2,2		5,7	10,3	67,3	2	6,3	9
10	2,6	2,3		5,4	8,6	62,6	1	6,1	9
11	2,1	2,3		4,3	5	48	2	6	8
12	2,9	2,2		2,9	4	33	1	9,9	8
13	3,2	2		5	6,7	56,7		6,8	7
14	3,2	2,4		6,3	9,5	72,5	1	16,2	7
15	2,8	2,6		5,3	11,3	64,3	1	9,2	7
16	3,3	1,8		7,6	13,2	89,2		15,7	9
17									
18	3,4	1,8		3,7	4,8	41,8		9,1	6
19	3	2,5		2,5	4	29	1	6,9	5
20	2,3	2,3		2,7	3	30	1	12,4	5
21	3,4	2,3		4,4	6,8	50,8		16,8	8
22	3	2,3		4,3	6,6	49,6	3	11,8	11
23	3,4	2,3		4	5,7	45,7	3	11,7	12
24	2,7	2,2		2,7	4	31	1	6,8	4
25	2,9	2,1		4	5,8	45,8	3	11,3	8
26	4	2,5		6	8	68	2	12,7	4
27	2,7	2,3		4,7	6,3	53,3	2	12,1	5
28	3	2		5	7	57			1
29	2,8	2,5		4	6	46		12	3
30	3,3	2,6		6,5	10,4	75,4	3	12,6	11
	2,94	2,23		4,6	6,8	52,4	20	10,3	192

Monthly mean: **52,4** Covering: **29/30**
Observations: **192** Number of observers: **13**

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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/>

Different Relative Sunspotnumbers

Month : September 2007

CV								Pettisindex	Intersol	Becknumber																						
Date	F.Dubois	O.Steen	L.Meeus	J.Carels	J.Janssens	G.Gubbels	S.Dufoer	Mean	G.Gubbels	F.Dubois	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 Hessehe	Mean	Date			
1	9	7		7	7	10	2	7,0		10	22	18		5	11	2																
2	5	2		2		2	2	2,8			12	5		4	6																	
3	2	3		2		3	0	2,0		4	6	4		7	5	5																
4	1	2		2		2	0	1,4		3	3	3		4	4	4																
5	2	3						2,5			4			5																		
6	1	0						0,5			2			3																		
7	0	0		0				0,0			0	0		0	0																	
8	0	0	0	0		0	0	0,0		0	0	0		0	0	0											0					
9	0	0	0	0		0		0,0		0	0	0		0	0	0																
10	0	0	0	0				0,0			0	0		0	0																	
11	0	0	0	0		0	0	0,0		0	0	0		0	0	0																
12	0	0	0	0		0	0	0,0		0	0	0		0	0	0																
13	0	0	0	0				0,0			0	0		0	0																	
14	0	0	0	0		0	0	0,0		0	0	0		0	0	0																
15	0	0	0	0	0	0	0	0,0		0	0	0		0	0	0																
16	0	0	0	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	0																
19	0	0		0		0		0,0		0	0	0		0	0	0																
20	0	0						0,0			0			0																		
21	0	0	0	0		0		0,0		0	0	0		0	0	0																
22	0	0		0	0	0	0	0,0		0	0	0		0	0	0																
23	0	0	0	0	0	0	0	0,0		0	0	0		0	0	0																
24	0	0	0	0		0		0,0		0	0	0		0	0	0																
25	0	0	0	0		0		0,0		0	0	0		0	0	0																
26		0	0					0,0																								
27	0	2	0	0				0,5			0	0		0	0																	
28	2	9	8	3			5	5,4			7	7		8	8																	
29		3					5	4,0																								
30	2	3	5	3	8	5	5	4,4		15	8	8		9	9	7																
##	0,9	1,2	0,8	0,8	2,5	1,1	1,2	1,1		1,8	2,4	1,9		1,7	1,8	1,0																

61	36		60	37	8		20	74	90		68	69	52	1
24	12		20		12				32				20	2
24	20		16	16	0		20		24	220	32		41	3
12	12		12	12	0		12	54	0				13	4
16	16						24						19	5
8	0												4	6
0	0		0										0	7
0	0	0	0	0	0		0						0	8
0	0	0	0	0	0								0	9
0	0	0	0										0	10
0	0	0	0	0	0		0	0					0	11
0	0	0	0	0	0		0	0	0	0	0		0	12
0	0	0	0										0	13
0	0	0	0	0	0		0	0	0	0	0		0	14
0	0	0	0	0	0	0	0	0	0	0	0		0	15
0	0	0	0	0	0	0	0	0	0	0	0		0	16
													0	17
0	0		0	0	0		0	0					0	18
0	0		0	0									0	19
0	0		0	0									0	20
0	0	0	0	0	0		0	0					0	21
0	0		0	0	0								0	22
0	0	0	0	0	0								0	23
0	0	0	0	0	0								0	24
0	0	0	0	0	0		0	0	0	0	0		0	25
	0	0											0	26
0	8	0	0										1	27
28	48	40	28		48		24		32				35	28
	20				56								38	29
32	32	72	32	48	48		20	90	48		72	40	49	30
8	7	7	7	6	10,8	0	5	15,6	21	28	11	18	9	



Telescopen setup van Patricia Cannaerts

Het heeft effen geduurd maar de zonnetelescopen kunnen nu allemaal op een plaat geplaatst worden wat heel erg handig is om in verschillend licht te werken .

Alleen heb ik nu nog wat problemen met de volgmotortjes maar daar gaat een elektronicus zich mee bezig houden hopelijk is dat ook snel opgelost .

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 350 from 2007 Sep 10

SOLAR ACTIVITY

The x-ray radiation solar flux measured by GOES was extremely low this week.

The curve was simply a straight line below the A-level. The only features present on the solar disk, were three coronal holes. A first one, clearly visible in EIT195 crossed the central meridian on Sep 10. The second one was trailing closely behind the first. The last hole, a faint one, crossed the central meridian on Sep 14.

GEOMAGNETIC ACTIVITY

Geomagnetic conditions were very quiet. The co-rotating compressed interaction region linked with the first clearly visible hole mentioned above, arrived late Sep 13 and induced only unsettled conditions on Sep 14. The maximum solar wind speed stayed under 450 km/s and Bz was predominantly positive.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 351 from 2007 Sep 17

SOLAR ACTIVITY

The x-ray radiation solar flux measured by GOES was extremely low this week.

The curve was simply a straight line below the A-level. The only features present on the solar disk, were three reoccurring coronal holes. The first one, visible in EIT195 crossed the central meridian on Sep 17, the second one was trailing closely behind the first. The last hole rotated on disk on Sep 20 and has yet to cross the central meridian.

GEOMAGNETIC ACTIVITY

Geomagnetic conditions were very quiet during beginning of week, with an all-quiet alert in place. The co-rotating compressed interaction region linked with the first clearly visible hole mentioned above, arrived midSep 20 and induced only unsettled conditions on Sep 20. The second region arrived late Sep 21 and again caused only unsettled conditions from Sep 21 till Sep 24. The maximum solar wind speed stayed under 700 km/s, while Bz was oscillating between -5nT and +5nT.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 352 from 2007 Sep 24

SOLAR ACTIVITY

The week was rather silent. The X-ray background radiation stayed well below the A-level, it was just a straight line without variation. The value for the 10cm flux stayed between 66 and 68 sfu (solar flux units). On Saturday Sep 25, a sunspot group suddenly appeared near the central meridian. It was not able to produce any flaring activity. A southern coronal hole was visible. It had a large U-shape. The first part, the darkest part, passed the central meridian on Monday Sep 24.

GEOMAGNETIC ACTIVITY

The first compressed co-rotating interaction region (CIR) associated with the coronal hole mentioned in the previous section arrived half Sep 27.

The maximum speed associated with this first part was 600 km/s. The CIR associated with the second part of the coronal hole arrived on Sep 28. The solar wind speed emanating from this part was almost 700 km/s. The strength of the interplanetary magnetic field was not utterly strong, but the long period over which the Bz was negative induced a minor geomagnetic

storm with several active periods from half Sep 27 until early Sep 30.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 353 from 2007 Oct 01

SOLAR ACTIVITY

Solar activity was extremely low during the week. Two small beta-type active regions were observed: NOAA AR 0971 and NOAA AR 0972, the latter one appearing on Oct. 5, close to the central meridian. The soft-Xray flux measured by the GOES spacecraft remained below the A level most of the week, with isolated small excursions into the A levels, due to sub-flaring activity from both active regions.

GEOMAGNETIC ACTIVITY

Geomagnetic activity was extremely low during the week, with isolated unsettled conditions observed at the planetary level (Kp indices of 4) on Oct. 3 and 4, due to the recurrence of a decaying coronal hole.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 354 from 2007 Oct 08

SOLAR ACTIVITY

Solar activity was at its lowest level during the entire week. There were no sunspots at all. The GOES X-ray background flux remained below A level, while the 10.7cm radio flux did not exceed 69 SFU.

Only two small CMEs were observed at the limb on Oct.8 and 11. A small trans-equatorial coronal hole crossed the central meridian of the Sun on Oct.8, but it was not geoeffective.

GEOMAGNETIC ACTIVITY

The geomagnetic field remained quiet during the whole week. On Oct.8, the solar wind speed was already slow (300km/s) and it declined even further to 250km/s on Oct.11, a quite exceptional value. Accordingly, the Kp index remained in the range 0-1 during 4 days. Then, on Oct.12, due to a recurrent weak solar wind stream, the wind speed rose again but to a mere 350km/s on Oct.13.

In response, the Earth magnetosphere just became slightly unsettled for a few hours late on Oct.12 (Kp=3). It then quickly returned to quiet conditions (Kp= 0 to 2) for the rest of the week, as this stream slowly declined.
