

Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 14

Number 163

September 2009

Franky Dubois Poelkapellestraat 39 langemark 8920

Web site: <http://www.bso.vvs.be> e-mail astrosun@skynet.be

Content Newsletter

Graphics and relative number for this month

Daily Wolfnumbers by the members

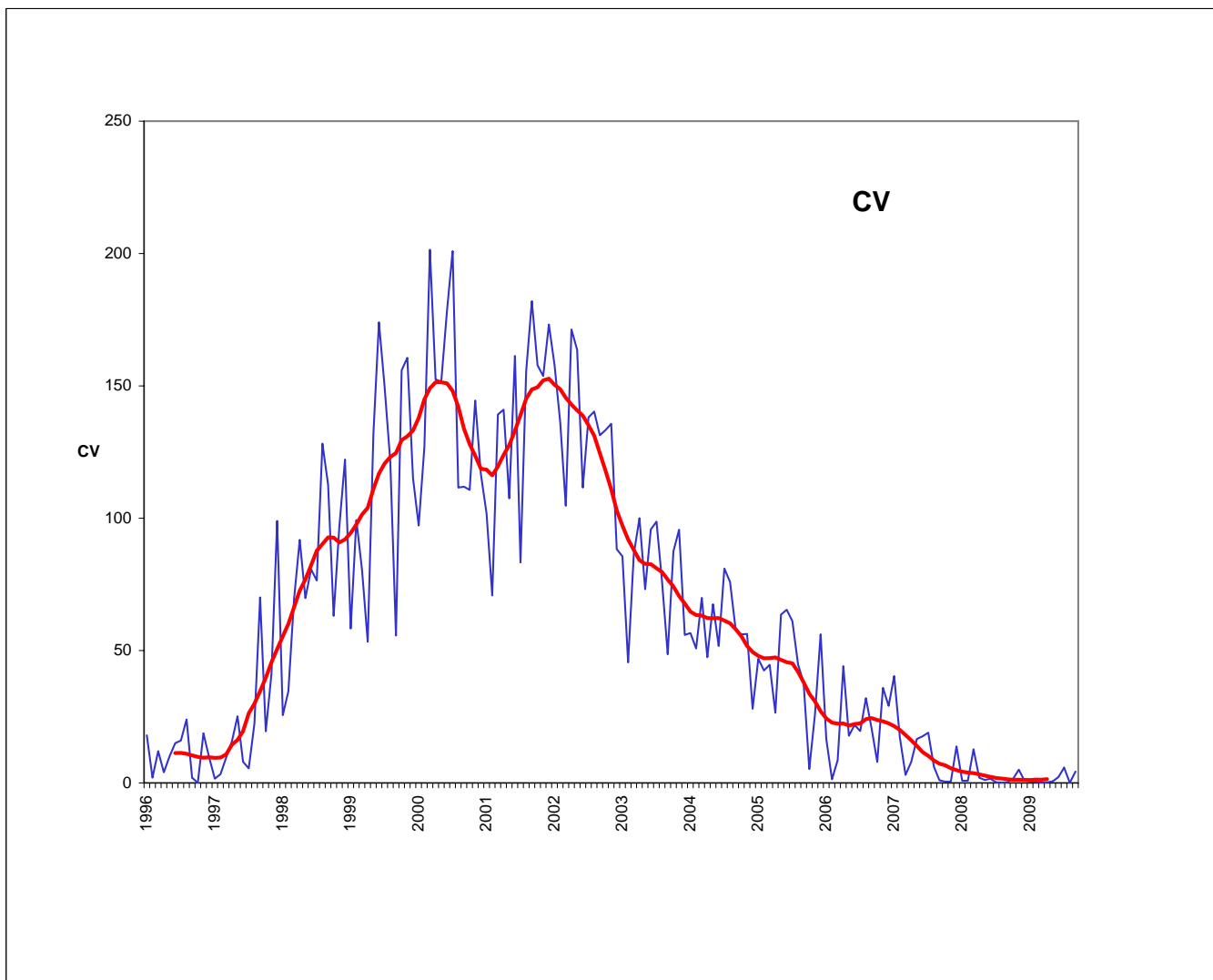
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



Mean of September observations

Groups :	N	0,33	Wolfnumb N	4,9	Beck :	31
	S	0,27	S	2,2	CV	4,3
	N+S	0,60	N+S	7,1		
488 observations	30 observers					

Sunspotnumbers VVS Belgium

Month: **September 2009**

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1	1	0	1	9	0	9,2	9	2	11
2	0	0	0	0	0	0	0	0	13
3	0	0	0	0	0	0	0	0	15
4	0	0	0	0	0	0	0	0	13
5	0	0	0	0	0	0	0	0	21
6	0	0	0	0	0	0	0	0	13
7	0	0	0	0	0	0	0	0	20
8	0	0	0	0	0	0	0	0	18
9	0	0	0	0	0	0	0	0	10
10	0	0	0	0	0	0	0	0	11
11	0	0	0	0	0	0	0	0	16
12	0	0	0	0	0	0	0	0	13
13	0	0	0	0	0	0	0	0	10
14	0	0	0	0	0	0	0	0	14
15	0	0	0	0	0	0	0	0	17
16	0	0	0	0	0	0	0	0	4
17	0	0	0	0	0	0	0	0	19
18	0	1	1	0	1,5	1,5	1	1	22
19	0	1	1	0	2,5	2,5	1	1	23
20	0	0	0	0	0	0	0	0	15
21	0	1	1	0	9,5	9,5	14	4	19
22	1	1	2	12,6	12,2	24,8	65	13	22
23	1	1	2	20,5	13,2	33,7	253	27	11
24	1	1	2	19	12,8	31,4	238	29	21
25	1	1	2	17	11,8	28,4	140	21	25
26	1	1	2	15	2	17,1	87	14	26
27	1	0	1	12	0	11,9	15	3	23
28	1	0	1	20	0	19,6	65	8	14
29	1	0	1	16	0	15,6	37	5	13
30	1	0	1	8	0	8,2	6	1	16
	0,33	0,27	0,60	4,9	2,2	7,1	31,0	4,3	488

Monthly mean: **7,1** Covering: **30/30** Spotless days: **17**
 Observations: **488** Number of observers: **30**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

Poekapellestraat 39
 B8920 Langemark
 Belgium
 e-mail : astrosun@skynet.be

Observers:

De Ceuninck ; Janssens ; Publ obs Mira ; Bourgeois ; R.Dezeure ; F.Feys
 De Backer; Dubois ; Gysel ; Kleber ; Deman ; Taillieu ; Carels ; Dewaele
 Meeus ; Steen ; KSB ; Gabriel ; Claeys ; Thooris ; J.Bonse ; P.De Reu
 Claes ; Verboven ; Van Loo ; Son ; Coeckelberghs ; Gadyne ; Dekelver
 S.Dufoer ; G.Gubbels ; J Bavais ; A. De Kerchove ; J.Bruijland ; Van Hessche

Prominence number Rp

Belgian solar observers

Month: **September 2009**

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1	3,5	1,5		3,5	5	40	1	9,9	3
2	2,6	2		3,3	3,5	36,5	1	10,5	5
3	3	2,3		3	3,7	33,7	1	1,2	4
4	3	2,3		2,7	4,3	31,3	1	6,9	3
5	3,3	1,7		4,3	7	50	4	11,1	8
6	3,5	2		6	8,5	68,5	1	16,3	4
7	3,3	1,7		2,7	3,7	30,7	1	9,4	8
8	3,4	2		4	5,6	45,6	2	11,3	7
9	3	2,3		2,5	2,5	27,5		7,8	2
10	3,2	2,2		3	4	34	1	11,5	4
11	3,5	1,8		2	3,7	23,7		12	3
12	3,3	1,7		4,7	5	52	2	6,7	5
13	3	2		4,5	7	52		9,9	2
14	3,3	1,9		4	7	47	1	11,6	6
15	3,8	1,5		3,3	7,3	40,3	2	6,3	6
16	3,5	3		1	3	13			1
17	3,4	1,6		3,8	6,2	44,2	1	13,6	6
18	2,8	1,9		1,2	1,3	13,3		8,5	6
19	3,7	1,8		3,7	5,5	42,5	1	11,6	7
20	3,3	2,3		4,3	6	49	1	14,2	4
21	3,1	1,8		3,5	4,7	39,7		6,6	6
22	3,3	2		4,9	7,6	56,6	1	8,2	9
23	3,6	1,8		5	7,3	57,3		10,3	4
24	3,4	1,9		4,4	7,6	51,6	1	9,6	8
25	3,4	1,9		3,6	6,3	42,3	1	9	8
26	3,9	1,8		5	9,4	59,4	1	5,4	9
27	4	1,6		3,7	6	43		8,5	7
28	3,9	2		2,8	4,8	32,8	1	10,9	5
29	3,3	1,9		4,2	6,2	48,2		4,1	5
30	2,7	2,5		3	5,3	35,3	2	9,5	5
	3,33	1,96		3,6	5,5	41,4	28	9,4	160

Monthly mean: **41,4** Covering: **30/30**
 Observations: **160** Number of observers: **11**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

Poekapellestraat 39
 B8920 Langemark
 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 : $H \cdot 10 + e$

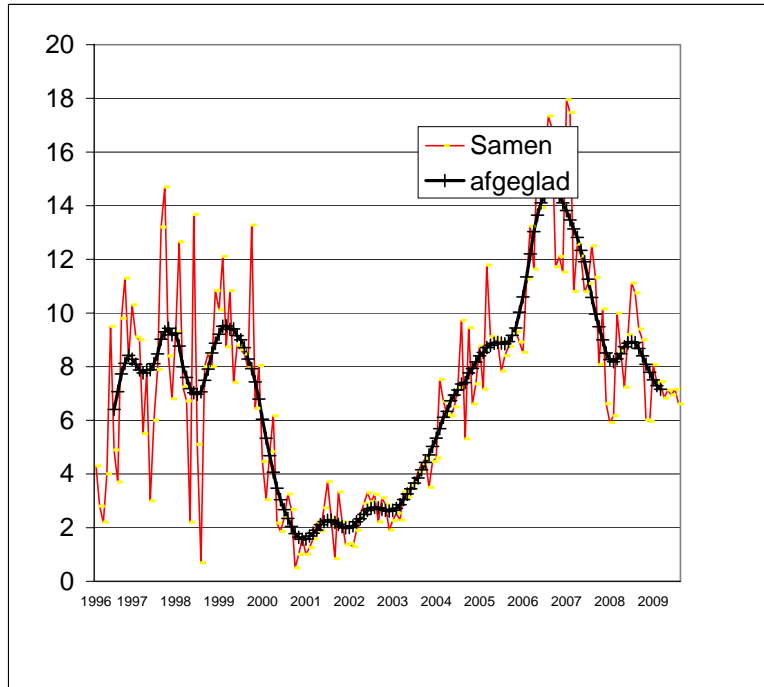
More info at : <http://members.chello.be/j.janssens/>

Belgian Solar Observers

Polar Faculae

Month: September 2009

Date	Dubois			Steen			Deman			Gabriel			Carels			Janssen			T.Spaninks			G.Gubbels									
	125mm F20			102mm F15			150mm F15			250 mm F20			150mm F8			200mm F10			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	Q				
1																															
2	2	1	2																		0	0	3	7	3	3.5					
3																					1	0	4	8	3	2.5					
4	3	2	3																												
5	4	1	3	5	3	3.5														8	3	4.0	0	1	4	7	3	3.5			
6																															
7				3	5	3.5															0	0	4	6	4	4					
8	6	1	4	5	3	3.5	12	3	4												0	0	4	6	3	3					
9																															
10				4	2	3.5																									
11	0	1	3	2	1	3.5																									
12				2	2	3.0															0	0	4								
13																															
14	4	3	3	4	2	3.5	13	3	4												2	1	4								
15	4	1	4	4	4	3.5																									
16																															
17	5	2	3	3	1	3.0	15	4	3																						
18	3	1	4	3	3	3.0															0	0	4								
19	2	1	4	4	0	3.5	9	1	4												5	0	4	0	0	4					
20	3	1	3	5	4	3.5															8	2	5.0	0	0	4					
21				1	1	3.0																									
22	2	1	4	5	3	3.0	11	2	4																						
23	1	1	3	5	0	3.5															1	0	4								
24	4	0	3				14	2	4												2	0	4								
25	2	1	4	3	2	3.0	12	1	4																						
26	2	2	4	2	1	3.5	9	3	4												4	0	3.5	0	0	5	4	0	4		
27	11	3	3	3	2	4															3	1	5	4	0	4.5					
28	10	2	3				10	1	4																						
29	5	1	3																												
30																															
	3,84 1,37			3,50 2,17			11,7 2,2			#####			1,80 0,60			5,80 1,00			0,43 0,14			6,11 2,67									



Sunspot activity from organisations all over de world

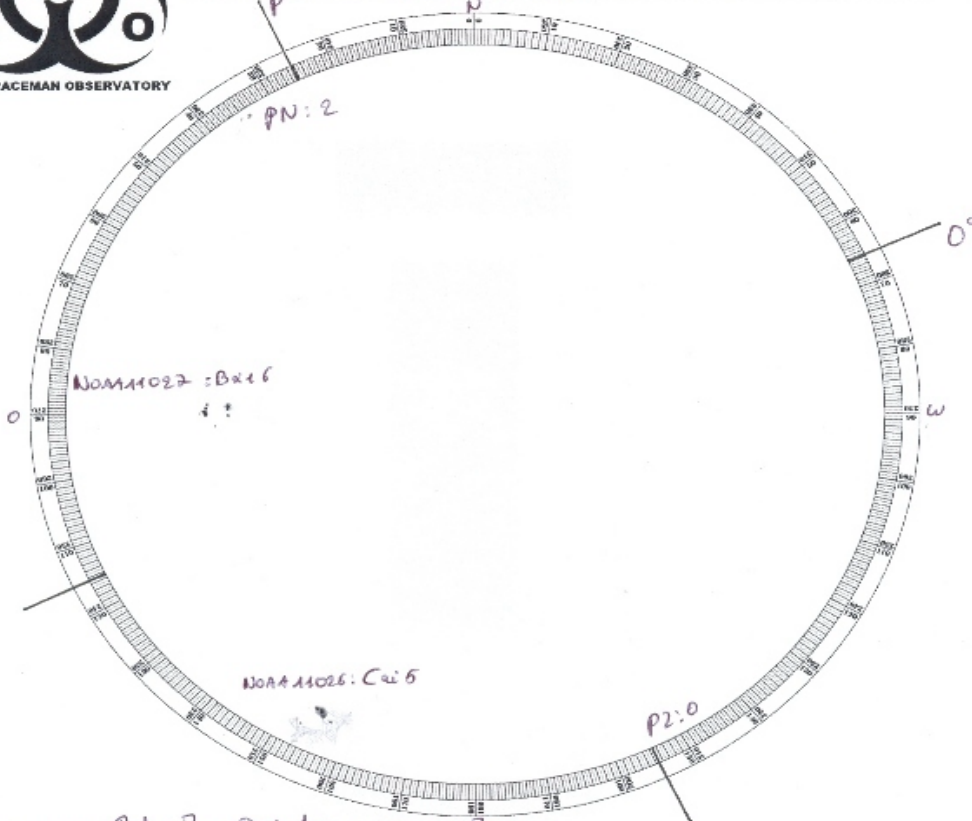
Month : **August 2009**

Organisation	Wolf Total	Wolf North	Wolf South	Groups	Faculae number	CV	Beck	Pettis index	Intersol	Area	prom MDF	prom Rp	Filam & plages	Radio flux	Naked eye	Polar Faculae
NOAA SWO	0,3													67,4		
SIDC	0,0	0	0													
Kanzelhöhe	0,0															
G.F.O.E.S France	0														0	
BSO Belgium	0,1	0,1	0	0,03		0,03	0,1	0,04	0,04			40,9				7,15
S.O.G.S.A.S. Switzerland	0,1			0												
BAA	0,11			0,01							2,16					
GsRSI Italy	0,18											43,1				
CV Helios Network						0,03										
AAVSO	0,1															
Sonne Germany Preliminary	No data															
O.A.A. Japan	0,0	0	0													
Solar Observer Society TOS Poland	0,39				0,13	0,06				0,45						
Astronomical League of the Philippines	0,0			0												



THE SPACEMAN OBSERVING LOG

DEEPSKY OBJECT: *De zon - visueel*



OBSERVER: *Peter-Jan Dekelver AKA SPACEMAN*

PLACE: *Groenbode, Belgium*

DATE: *22-09-2009* TIME (UT): *14:23:03*

INSTRUMENT: TYPE: *150 mm F5 (Rgh Sky-w) op vixen/FP Beekbach UV18 + LC Baskell prisma*
 F: *750* mm Ø: *150* mm

OCULAIR: TYPE: *3 mm schijf type 4 Televue*
 F: *3* mm FILTER: *Bausch ND1, 2 + ND6*

MAGNIFICATION: *33,3* BARLOW: *x* F.O.V.: *82°*

SEEING: *750* TRANSP.: *1* (1=goed, 5=slecht)

NOTE: *Postfociaal. Mond: 2, 2 maal 3*
Continuum U.F. 26, 18 180: 704/Lo: 256, 45/CR: 2088

- COMET: MM: Mag: Ref.: Coma: DC: Tail: Tail PA:
 - SUN: Q: 3.5G: 2 GN: 1 GS: 1 F: 11 FN: 6 FS: 5 R: 31 R': 64 CV: 12 IS: 18 SN: 26 QC: 5

OBJECT: _____ CONSTELLATION: _____
 A: _____ h _____ m _____ s Δ: _____ ° _____ ' _____ "

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 456 from 2009 Sep 21

SOLAR ACTIVITY

The Sun has been spotless since Jul 30. On Sep 21 however, a sunspot group in the southern hemisphere rotated on the solar disk: Catania 18, NOAA AR 1026. It was this sunspot group that was responsible for the increase of the X-ray background radiation above measurement level. On day later, another bright spot in EUV popped up. It became Catania 19, NOAA AR 1027. A small C-flare was measured on Sep 25. AR 1026 degraded to a plage on Sep 27. The northern polar coronal hole with extensions is still prominent present.

GEOMAGNETIC ACTIVITY

Sep 20, due to an extension of the northern polar coronal hole, a solar wind with a strong magnetic field arrived at Earth. The wind speed increased up to 480 km/s on Sep 21. The disturbance was only small and resulted in a Kp of 3 only. On Sep 26, the solar wind carried again a strong magnetic field. This could also be linked with an extension of the northern coronal hole. On that day, a small jump in the magnetic field parameters was seen. Although the solar wind speed stayed low, the geomagnetic Kp index reached once the value of 4 on Sep 28. At that moment, a southern coronal hole with a high latitude was present.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 457 from 2009 Sep 28

SOLAR ACTIVITY

Solar activity was very low over the entire week. The only active region was Catania#19 (NOAA11027), which declined steadily without producing more than a few B subflares. It finally disappeared at the West limb as a single A spot on October 2.

There was only a small recurrent coronal hole in the Northern hemisphere, which was in a geoeffective position around October 1 but did not produce any significant geoeffective disturbance. Except for 3 minor solar wind enhancements on Sept.28, Sept.30 and Oct.4, the solar wind was slow with speeds between 300 and 350 km/s. The wind had a very low density (< 1 part/cm³) on Oct.2, 3 and 5.

GEOMAGNETIC ACTIVITY

The magnetosphere was just temporarily unsettled to active early on Sept. 28 in response to a weak solar wind disturbance. It then remained at quiet levels during the rest of the week.

An All-quiet alert thus remained in effect from Sept. 29 onwards.

Given the absence of any other active region or coronal hole in the Eastern hemisphere (STEREO behind imagery), those all-quiet conditions should extend over the coming week, barring the emergence of a new active region on the solar disc.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 458 from 2009 Oct 05

SOLAR ACTIVITY

The sun has been very quiet during the past week. There were no sunspots or flares observed. A small coronal hole became visible on October 6. This caused an enhancement of the magnetic field and the solar wind on October 11.

GEOMAGNETIC ACTIVITY

There were no significant geomagnetic disturbances during this week. On October 11, the Kp index reached level 3 due

to due to an enhanced solar wind stream originating from a recurrent coronal hole.

The SIDC all quiet alert remained active during the whole week.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 459 from 2009 Oct 12

SOLAR ACTIVITY

Solar activity was quiet during the period. An SIDC ALL QUIET ALERT was active from Monday Oct 12 till Saturday Oct 17. An unnumbered active region in the Southern hemisphere, which approached central meridian towards the end of the period, produced two EIT waves/dimmings (Oct 16 16:00 and again around Oct 17 19:00). No significant flaring was associated with these events. LASCO images showed faint hints of (partial?) halo CMEs.

GEOMAGNETIC ACTIVITY

The above mentioned eruptions did not result in any effect on the solar wind, nor on the geomagnetic activity. A weak shock was seen in the solar wind on Oct 15, with a speed peaking up to 425 km/s. The rest of the period we saw a very gradual decrease down to 300 km/s. The estimated Kp index from NOAA did not go above Kp=2 during the period.