

Newsletter Belgian Solar Observers

Results and news for solar observers

Volume 15

Number 171

May 2010

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

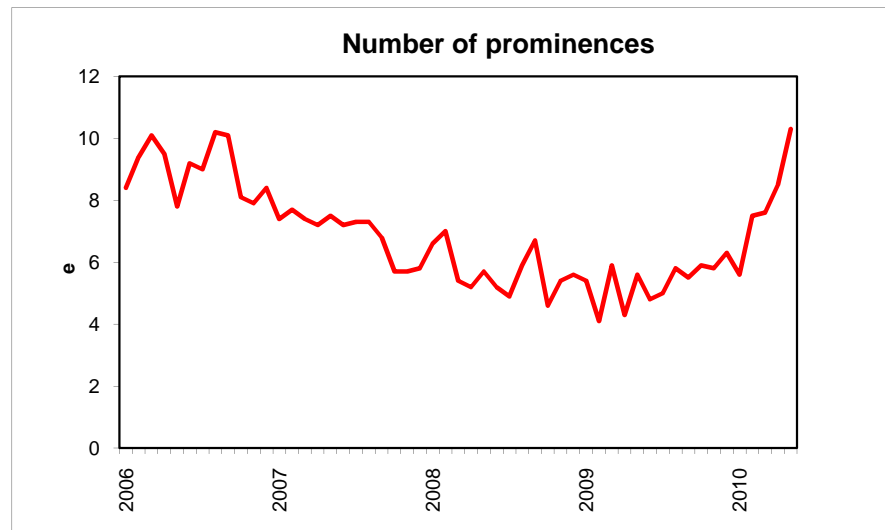
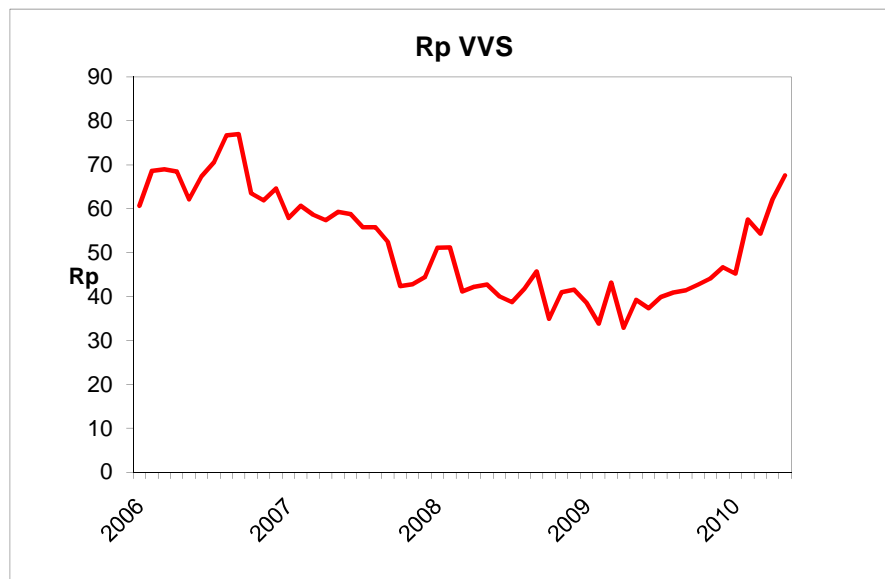
Monthly sunspot report

Polar faculae and CV numbers

Prominence numbers by the members

Monthly prominence report

Photo album and drawings



Mean of May observations

Groups :	N	0,65	Wolfnumb N	6,4	Beck :	39,5
	S	0,55	S	6,8	CV	6
	N+S	1,19	N+S	13,1		
387 observations	27 observers					

Sunspotnumbers VVS Belgium

Month: **May 2010**

Day	GROUPS			WOLFNUMBER			RE'	CV	OBS
	N	S	N+S	N	S	N+S			
1	2	0	2	18,8	0	18,8	15	3	16
2	1	0	1	11,9	0	11,9	17	3	14
3	1	1	2	23,0	18,6	41,6	62	8	5
4	3	2	5	29,6	24,6	54,2	88	18	17
5	4	0	4	38,1	4,9	43,0	186	30	15
6	1	1	2	18,6	6,3	24,9	182	24	12
7	2	1	3	17,7	3,9	21,6	38	5	5
8	1	0	1	6,7	0	6,7	20	1	3
9	0	0	0	0	0	0	0	0	12
10	0	0	0	0	0	0	0	0	13
11	0	0	0	0	0	0	0	0	6
12	0	0	0	0	0	0	0	0	5
13	0	0	0	0	0	0	0	0	4
14	0	0	0	0	0	0	0	0	10
15	0	0	0	0	0	0	0	0	13
16	0	0	0	0	0	0	0	0	14
17	0	0	0	0	0	0	0	0	15
18	0	0	0	0	0	0	0	0	17
19	0	0	0	0	0	0	0	0	16
20	0	0	0	0	0	0	0	0	16
21	0	1	1	0	19,9	19,9	26	4	18
22	0	1	1	0	18,8	18,8	81	10	19
23	0	1	1	0	21,8	21,8	172	20	22
24	0	1	1	0	19	19,0	82	13	22
25	0	2	2	0	17,8	17,8	71	9	18
26	0	1	1	0	11	11,0	37	10	2
27	0	1	1	0	12,4	12,4	47	10	11
28	0	1	1	0	11,4	11,4	44	7	16
29	1	2	3	7,0	10,1	17,1	24	5	18
30	2	1	3	14,0	8,8	22,8	26	4	11
31	2	0	2	12,0	0	12,0	8	1	2
	0,65	0,55	1,19	6,4	6,8	13,1	39,5	6,0	387

Monthly mean: **13,1** Covering: **31/31** Spotless days: **12**
 Observations: **387** Number of observers: **27**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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 B8920 Langemark
 Belgium
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Observers:

De Ceuninck ; Janssens ; Publ obs Mira ; Bourgeois ; R.Dezeure ; F.Feys
 De Backer ; Dubois ; Taillieu ; Carels ; Dewaele
 Meeus ; Steen ; KSB ; Claeys ; Thooris ; J.Bonse
 Claes ; Verboven ; Van Loo ; Son ; Coeckelberghs ; Dekelver
 G.Gubbels ; J Bavais ; Van Hessche

VVS Belgian Solar Observers Prominence number Rp

Month : May 2010											Lille	LS					asm																		
J. Janssens											F. Dubois	E. De Ceunick					F. Feys	J. Hamsch					G. Gubbels												
Day	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp					
1							13,10	3	1,5	5	5	55																							
2							10,14	4	1,5	3	3	33																							
3							15,28	3	2	3	4	34																							
4							8,27	4	1	4	8	48																							
5																																			
6							12,44	3	2	3	3	33																							
7							8,33	4	1,5	3	5	35																							
8																																			
9																																			
10	8:10	3,5	2	5	8	58																													
11	7:15	3	1,5	6	9	69	6,29	3	1,5	5	5	55	08.30	4,0	3	3	4	34																	
12																																			
13																																			
14							6,01	4	1	6	9	69	08.00	4,0	3	6	10	60																	
15																																			
16							15,38	3	2	4	5	45	11.30	3,5	2	5	6	56																	
17	7:00	3,5	2,5	4	7	47	11,56	3	1,5	7	11	81	08.30	4,0	3	4	4	44																	
18	7:25	4	2	3	6	36	7,17	4	1,5	6	12	72																							
19							6,36	4	1	5	12	62	09.00	3,5	3	8	8	88																	
20							6,25	4	1	7	9	79																							
21							7,14	3	2	7	12	82	11.20	3,5	3	8	8	88																	
22							7,00	3	1,5	6	8	68	11.00	3,5	3	3	3	33																	
23	9:00	3,5	2	4	7	47	7,40	4	1	5	7	57	09.15	4,0	2,5	5	7	57																	
24	7:15	3,5	2	7	13	83	6,50	3	1,5	4	6	46	09.00	4,5	2,5	4	4	44																	
25	7:50	3	3	3	3	33	7,02	4	1,5	3	4	34																							
26																																			
27							7,00	4	1	6	11	71																							
28							6,42	4	1	5	8	58	09.00	4,0	2,5	6	6	66																	
29							7,26	4	1	4	9	49	08.15	4,0	3	5	7	57																	
30							13,30	3	2	5	6	56	13.00	4,0	2	7	8	78																	
31																																			
7	3,4	2,1	4,6	7,6	53,3	22	5,2	1,4	4,8	7,4	55,5	16	3,9	2,8	4,8	5,7	52,6	27	1,1	3,9	6,41	12,9	77,0	###	###	###	###	###	###	21	3,8	1,4	6	17,2	77,2

Day	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp	time	Q	W	H	e	Rp			
1																																	
2	11,30	3,5	2	4	10	50							1000	4	1	7	13	83															
3	15,50	3,5	2	3	4	34							1530	4	1	5	10	60															
4	6,40	3,5	2,5	5	7	57							1600	4	1	6	13	73															
5	8,00	3,5	2	5	7	57																											
6	8,50	3,5	2,5	5	5	55																											
7	7,50	4	2	5	6	56																											
8																																	
9	13,40	3,5	2,5	4	5	45							0930	3	2	6	9	69															
10	8,40	3,5	2	6	8	68																											
11	6,40	3,5	2	5	5	55																											
12																																	
13																																	
14	6,35	4	2,5	7	9	79							1130	4	1	7	10	80															
15	6,30	4	2	7	8	78							1100	3	2	5	9	59															
16	13,30	4	2,5	5	5	55																											
17	11,25	3,5	2,5	6	9	69																											
18	6,05	4	2	6	9	69							1400	4	2	5	16	66															
19	5,55	4	2	8	13	93							0930	4	1	6	14	74															
20	6,35	4	2	7	9	79							1130	4	1	6	10	70															
21	8,35	3,5	2	8	11	91							1230	4	1	7	16	86															
22	7,35	3,5	2	5	6	56																											
23	7,55	3,5	2	7	8	78							1030	4	1	5	9	59															
24	6,40	4	2	5	5	55	9,30	4	3	4	7	47																					
25	8,40	3,5	2,5	5	6	56							1400	4	1	5	9	59															
26																																	
27	6,30	4	2	6	8	68																											
28	7,20	4	2	5	7	57							1030	3	2	4	9	49															
29	8,10	3,5	2	4	6	46							1130	4	1	4	10	50															
30	13,00	3	2	5	6	56																											
31																																	
25	3,7	2,1	5,52	7,3	62,5	1	4,0	3,0	4	7	47,0	14	3,8	1,3	5,6	11,2	66,9	7	3,4	1,7	9,29	13	105,9	###	###	###	###	###	###	###	###	###	###

Time : Beginning of observation

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*10+e

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

Prominence number Rp

Belgian solar observers

Month: May 2010

Day	Q	Wedel	H	e	Rp	el. Obs	Stdev	OBS
1	3	2	7,0	13,7	83,7	1	1,2	4
2	2,8	2,3	5,0	13,3	63,3	2	12,5	6
3	3,3	2,2	2,7	3,3	30,3	1	6,9	4
4	3,3	2,3	4,8	9,8	57,8		12	6
5	2,3	2,8	4,5	9,5	54,5	1	3,5	3
6	2,5	3	5	6,5	56,5	1	2,1	3
7	2,8	3	5,5	7,5	62,5	1	9,2	3
8	1	4	6	12	72			1
9	2,9	2	5	9	59		15,9	4
10	3,3	2	5,7	10,7	67,7	2	9	5
11	3,4	2	5	5,8	55,8	1	10,2	5
12	1	4,5	10	14	114			1
13	1	5	8	16	96			1
14	3,3	2,6	6,5	10	75		10	4
15	4	1,7	6,7	11	78		2,5	3
16	3,5	2,1	5	7,6	57,6	2	10,1	5
17	2,5	2,5	6,5	13,5	78,5	2	6,4	6
18	3,4	2	6,4	15,2	79,2	2	14,1	7
19	3,4	2,5	7	16,8	86,8	1	9,5	7
20	3,4	1,8	6,6	14,2	80,2	1	7,9	6
21	3,1	2	6,8	12,5	80,5	2	9,7	7
22	3,3	1,8	5,5	7	62		8,5	4
23	3,3	2	5,5	9,5	64,5		11,2	8
24	3,4	2,4	5,4	8,9	62,9		17,6	8
25	3,2	2,3	4,2	7,5	49,5		12,3	6
26								
27	3,7	1,5	5,3	9,3	62,3	1	11,9	4
28	3,8	1,9	5,4	8,6	62,6	2	12,9	7
29	3,9	1,8	4,3	8	51	2	4,7	6
30	3,3	2	5,5	8,3	63,3	1	10,4	5
31	1,5	3	5	11	61			1
	2,95	2,43	5,7	10,3	67,6	26	9,3	140

Monthly mean: **67,6** Covering:
Observations: **140** Number of observers: **9**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

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

Observers:

Steen ; Dubois ; De Ceuninck ; Coeckelberghs ; Janssens ; Feys
Hamsch ; Claes ; 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 : May 2010

CV													Pettisindex SN						Intersol IS						
Date	F. Dubois	O. Steen	L. Meeus	J. Carels	J. Janssens	P. J. Dekelver	G. Gubbels	H. De Backer	D. Van Hesseche	R. Verboven	Mean	G. Gubbels	F. Dubois	P. J. Dekelver	O. Steen	J. Carels	R. Verboven	Mean	F. Dubois	J. Carels	G. Gubbels	P. J. Dekelver	Mean		
1	2					3	3	3	2	2	2,5		5	4	6			5,0		5	7	8		6,7	
2	1	1		5		5	5	5	0	2	3,1		12	5	14	5	13	9,8		6	5	4	6	5,3	
3	11	5									8,0			22		8		15,0		16				16,0	
4	10	11	13	13		34	15	29			17,9		27	25	40	21	14	25,4		20	17	24	20	20,3	
5	25	23	33			34	29	34			29,7		27	26	35	28		29,0		12		21	16	16,3	
6	35	20		18				22			23,8			43		31	28	34,0		24	11			17,5	
7	7	3									5,0			18		5		11,5		12				12,0	
8																									
9	0	0					0	0		0	0,0		0	0		0	0	0,0		0		0		0,0	
10	0	0		0	1	0		0			0,2		0	0		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	0				0,0		0				0,0	
13		0									0,0							0,0						0,0	
14	0	0		0				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	0	0		0,0	
16	0	0		0		0	0	0		0	0,0		0	0		0	0	0,0		0	0	0	0	0,0	
17	0	0		0	0		0	0		0	0,0		0	0		0	0	0,0		0	0	0		0,0	
18	0	0		0	0	0	0	0		0	0,0		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	0	0,0		0	0	0	0	0,0	
20	0	0		0		0	0	0		0	0,0		0	0		0	0	0,0		0	0	0	0	0,0	
21	2	2		5		2	2	11		3	3,9		6	4	6	5	16	9	7,7		5	8	7	6	6,5
22	12	9		9		9	8	11		9	9,6		17	17	18	18	20	17	17,8		9	11	11	13	11,0
23	28	28		9	0	22	19	28	28	22	20,4		27	27	31	27	22	25	26,5		13	14	11	14	13,0
24	12	13		9	0	9	11	28	12	22	12,9		17	16	17	16	27	16	18,2		8	10	9	10	9,3
25	11	11		10	1		11	10			9,0		12	12		12	11	11,8		4	3	4		3,7	
26		10									10,0					10		10,0							
27	10	10		10			10	10			10,0		10	10		10	10	10,0		1	1	1		1,0	
28	10	7		4			4	10			7,0		11	10		10	10	10,3		1	1	3		1,7	
29	4	3		5			6	12	1	2	4,7		12	5		3	7	9,8		7	8	4		6,3	
30	6	2		5			6	0	4		3,8		9	8		2	6	6,3		11	8	12		10,3	
31								0			0,0														
##	6,9	5,6	23,0	5,1	0,3	9,1	6,5	8,9	6,7	4,6	6,0		9,6	9,3	12,8	7,5	9,2	7,4	8,89		5,7	4,9	5,9	7,2	5,81

Becknumber

Date	F. Dubois	O. Steen	L. Meeus	P. J. Dekelver	J. Carels	G. Gubbels	E. De Cauninck	D. Van Hesseche	R. Verboven	F. Feys	A. T. Son	J. Bourgeois	H. Coeckelberghs	De Backer	Pbl Obs Mira	J. Claes	Mean	Date	
1	12			24		20		12	12	16	12	12		16		12		15	1
2	20	20		40	32	24	16	0		12	8	0		24		12		17	2
3	76	32					28			112								62	3
4	80	84	88	188	76	120	44			100	32			109		48		88	4
5	138	160	180	200		262	98			292	170			171				186	5
6	290	224		229			126			360	56	28		144				182	6
7	52	20					88			32		0						38	7
8									40		0	0						20	8
9	0	0				0		0	0	0	0	0		0		0		0	9
10	0	0		0	0		0		0	0	0	0		0				0	10
11	0	0				0			0									0	11
12	0	0				0			0									0	12
13		0							0									0	13
14	0	0			0		0	0						0				0	14
15	0	0		0	0	0	0		0		0			0		0		0	15
16	0	0		0	0	0	0		0		0			0		0		0	16
17	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	18
19	0	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		0	20
21	16	20		24	56	24	32		36	40		20		16		0		26	21
22	64	80		96	88	80	72		56	96		96		80				81	22
23	216	198		234	104	180	128	180	234	168		144		216		64		172	23
24	56	52		72	72	64	80	80	80	128		64	90	144				82	24
25	78	78			74	78	111			80		36	44	111	88	8		71	25
26		37																37	26
27	37	37			37	37	37		82		74			37				47	27
28	37	37			37	74	37		86					37		4		44	28
29	20	12			28	45	24	8	16	60				24		0		24	29
30	32	8			24	36	16	28		80		8		0				26	30
31									16					0				8	31
	45,33	39,3	134	67,5	42,9	52	37	44	33	64	28	27	67	47	44	11		39,5	

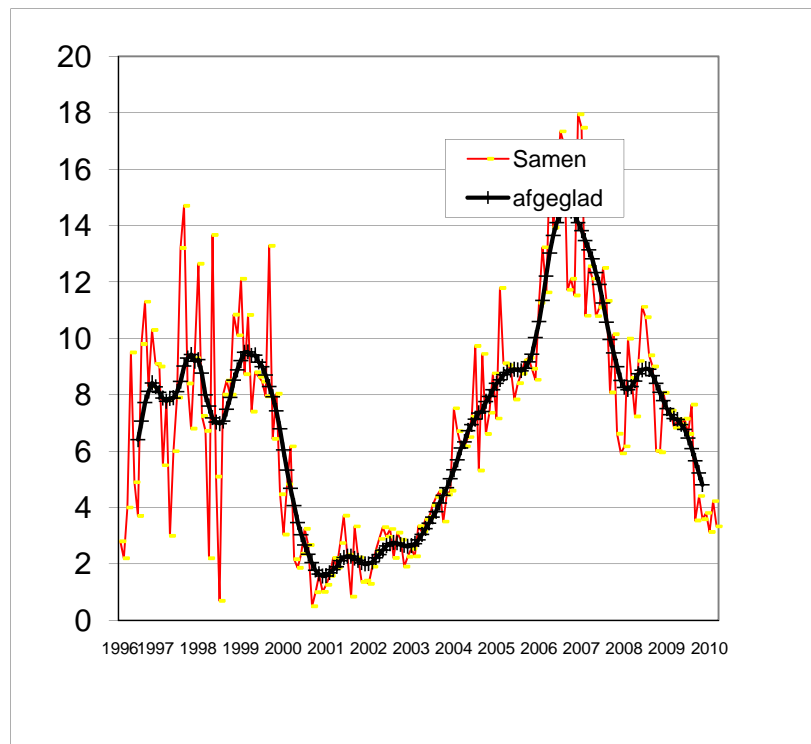
Belgian Solar Observers

Polar Faculae

Month: May 2010

Date	Dubois 125mm F20			Steen 102mm F15			T.Spaninks 127mm F15			G.Gubbels 114mm F7,8			Dekelver 150mm F8			Janssen 200mm F10			M. Szulc 60mm F15		
	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	0	0	3				1	7
2	1	5	3							2	5	3,5	0	0	3,5				2	9	
3	3	3	3																		
4	5	4	4	1	4	3,5	0	0	3				0	0	2						
5	2	3	4	0	4	3,5							0	0	3				0	7	
6				1	2	3,5															
7				0	5	4,0															
8																					
9										2	4	3,5							2	15	
10	2	5	3	1	2	3,5							0	0	3	0	0	4			
11				1	4	3,5										0	0	3			
12																			3	8	
13																					
14				2	3	4,0															
15				4	3	4,0				3	4	3									
16				1	3	4,0	0	0	3	3	5	3	0	0	2				1	6	
17				1	3	4,0										0	0	4			
18				2	1	4,0	0	0	4				0	0	2,5	0	0	4			
19				2	5	4,0	0	1	4	2	5	4	0	0	1,5				1	7	
20				2	2	4,0	1	0	4	3	5	4	0	0	2				4	4	
21				1	2	3,5	0	0	4	3	4	4	1	2	3				3	5	
22				1	1	3,5				3	4	4	0	0	4				1	7	
23				2	1	3,5	0	0	4	3	5	4	0	0	2,5	0	0	4	1	5	
24				2	4	4,5	1	1	4	3	3	4	0	0	2,5	0	2	4			
25				0	2	3,5				2	4	3,5				0	1	3	3	4	
26	1	1	3																		
27	4	0	4	1	3	4	0	0	4	2	3	2,5							1	3	
28				0	1	4	0	0	5	1	3	3,5							0	7	
29				1	1	3,5	0	0	4	1	3	3,5							2	4	
30										3	4	3									
31																					
	2,57	3,00		1,24	2,67		0,2	0,2		2,4	4,1		0,08	0,15		0,00	0,43		1,67	6,53	

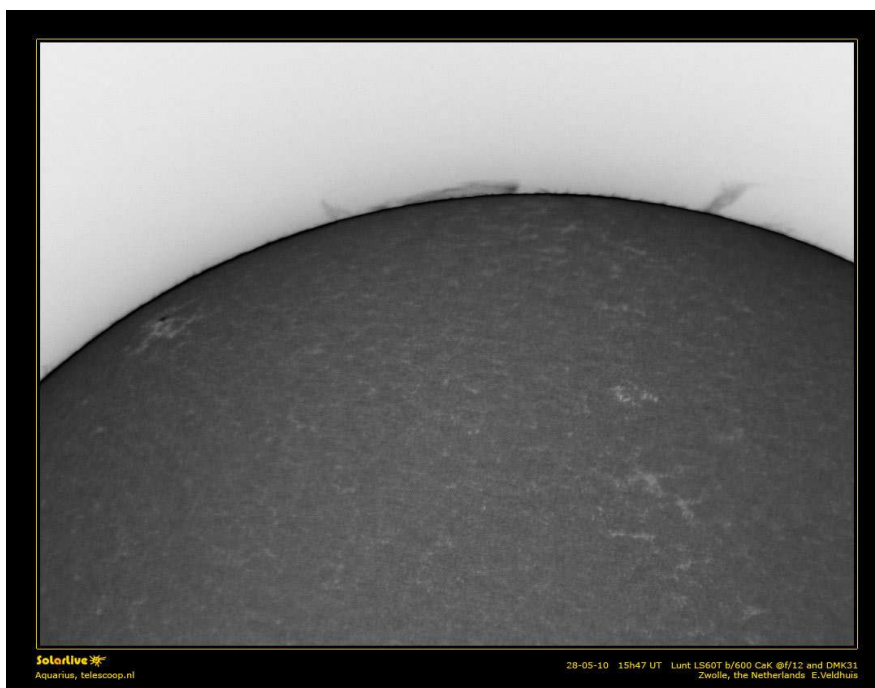
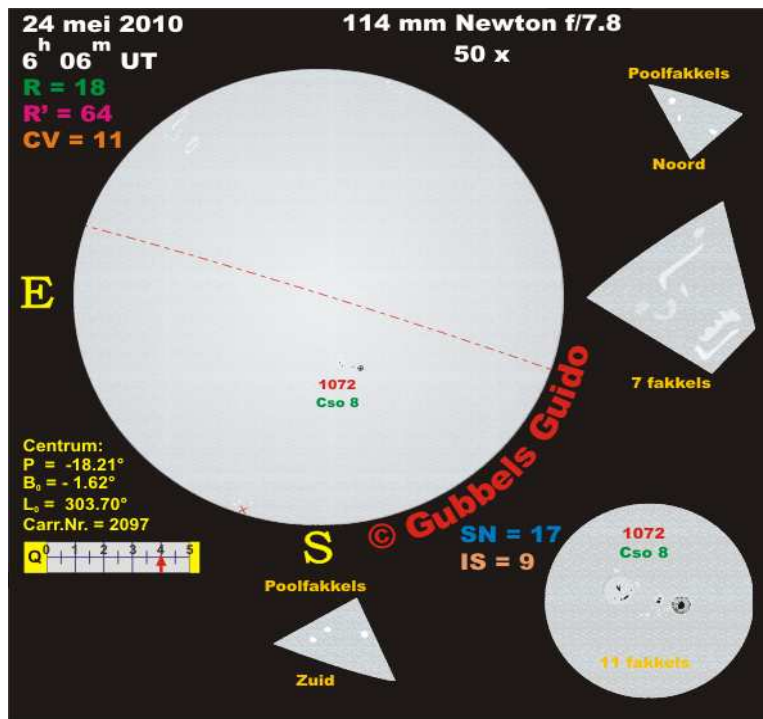
Observations of Mieczyslaw Szulc are not included in monthly average !



Sunspot activity from organisations all over de world

Month : **April 2010**

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
NOAA SWO	11,2													75,9	
SIDC	7,9	5,5	2,1												
Kanzelhöhe	8,2														
G.F.O.E.S France	5,8														0
BSO Belgium	11,0	7,6	3,4	1,1		8,30	44,5	7,81	3,62						
S.O.G.S.A.S. Switserland	11			0,8											
BAA	8,66			0,68							2,78		1,51		
GsRSI Italy	12,7											53,9			
CV Helios Network						6,52									
AAVSO (Raw mean)	9,7														
Sonne Germany Preliminary	8,1	5,7	2,5	0,60			72,0								
O.A.A. Japan	10,1	6,9	3,2												
Solar Observer Society TOS Poland	10,07				2,07	6,77				62,6					
Astronomical League of the Philippines															



SIDC Weekly bulletin on Solar and Geomagnetic WEEK 491 from 2010 May 24

SOLAR ACTIVITY

Four sunspot groups on the solar disk were reported during the week: Catania numbers 74, 76, 77 (NOAA numbers 1072, 1073, 1075 respectively) and the NOAA AR 1076 that did not have a Catania number. They did not produce any significant flaring activity. The strongest flare was the B6.5 flare peaking at 15:55 UT on May 26 in the Catania sunspot group 74.

A partial halo CME (angular width around 245 degrees) was detected by SOHO/LASCO C2 on May 24 starting at 14:06 UT. It was associated with the B1.1 flare peaking at 14:46 UT around N20W30 (in a filament channel not associated with any active region) and accompanied by coronal dimmings and post-eruption arcade observed by SOHO/EIT. The CME speed according to the LASCO data was around 350 km/s. The associated interplanetary disturbance arrived to the Earth on May 29-30 (see below). A low-latitude extension of the northern polar coronal hole reached the solar central meridian on May 28.

GEOMAGNETIC ACTIVITY

On May 24-28 the Earth was situated inside the slow solar wind flow with weak to average interplanetary magnetic field (IMF) magnitude. The geomagnetic conditions were quiet.

An interplanetary shock wave was detected by ACE and SOHO/CELIAS around 02:05 UT on May 28. The solar wind speed jumped from 300 to 380 km/s, and clear jumps in the solar wind density and temperature were registered as well. The discontinuity in the IMF magnitude was very weak, so the shock did not lead to increased north-south IMF component. The geomagnetic conditions remained quiet. An interplanetary magnetic cloud driving this shock arrived to the Earth in the evening of May 28. The magnetic field in the cloud quickly turned southward, and the magnitude of the north-south component reached -14 nT. However, the solar wind speed remained low (around 360 km/s), so only minor geomagnetic storm conditions resulted (K = 5 as reported by Dourbes, IZMIRAN and NOAA). The magnetic cloud was most probably associated with the full halo CME observed on the Sun on May 23.

Another solar wind discontinuity (possibly a weak shock wave) was detected by ACE and CELIAS around 21:20 UT on May 29. A shocked sheath plasma followed this discontinuity, and the interplanetary magnetic field became oscillating. The discontinuity also marked the end of the magnetic cloud. Some cold ICME-like material with slightly elevated IMF magnitude arrived on May 30. The solar wind speed was still low (400 - 450 km/s), so the sheath and the possible ICME produced only active to minor geomagnetic conditions (K = 4 as reported by Dourbes and IZMIRAN and K = 5 as reported by NOAA). The possible ICME structure was compressed from behind by the fast solar wind stream from a low-latitude extension of the northern polar coronal hole (see above). The possible ICME structure was associated with the partial halo CME on May 24.

SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 492 from 2010 May 31

SOLAR ACTIVITY

Solar activity gradually increased towards the middle of the period with the background solar X-ray levels peaking

on June 3 and sunspot number peaking on June 5. Nevertheless only B-flares were observed, originating from NOAA AR 11076.

GEOMAGNETIC ACTIVITY

The solar wind speed increased in the beginning of the period up to a maximum of about 600km/s on June 1, followed by a decline and sector boundary crossing late June 3. The geomagnetic activity was mostly quiet during the period with isolated Kp=4 levels and 1 exceptional Kp=5 level.

SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 493 from 2010 Jun 07

SOLAR ACTIVITY

This week was marked by a significant increase of the solar activity. Flaring activity remained first very low, despite the appearance of several new active regions, and then it became moderate on June 12 and 13.

The main active region was first Catania#81 (NOAA11078) which appeared on June 8, reached a maximum extension on June 10 (Type E, beta-gamma) and disappeared at the West limb on June 12. This region was peculiar, as it featured a reversed magnetic polarity. Then, the activity was dominated by active regions Catania#86 (NOAA11079) and Catania#87 (NOAA11081). Those active regions, which appeared in June 11, produced multiple C flares and CMEs from June 12 onwards, with also an M2.0 flare on June 12 00:30 UT from Catania#87 and a M1.0 flare on June 13 5:30 UT from Catania#86, each associated with a CME. The GOES X-ray background rose above the B1 level on June 12 and 13.

On June 13, a recurrent trans-equatorial coronal hole crossed the central meridian. This structure has grown significantly since the last solar rotation: two smaller mid-latitudes coronal holes have connected across the solar equator. It may produce significant geomagnetic disturbances on June 15 and 16.

GEOMAGNETIC ACTIVITY

Geomagnetic conditions were mostly quiet over the whole week, with only brief unsettled intervals on June 6, 10 and 13. These were due to weak solar wind streams that all remained below a maximum velocity of 450km/s.

SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 494 from 2010 Jun 14

SOLAR ACTIVITY

The period started right after intensive flaring from NOAA AR1081 (see previous bulletin). However, on the first day of the period (Monday June 14), NOAA AR 1081 was already on the solar west limb and could only produce one more C1.5 flare, peaking at 00:51. This was right away also the biggest flare of the whole period.

Towards the end of the period, NOAA AR 1082 increased in size and complexity, but only produced a B5-flare on Feb 17 (peaking at 10:33).

GEOMAGNETIC ACTIVITY

Geomagnetic activity was characterized during the period by the influence of high speed solar wind stream first detected by the ACE spacecraft on June 15 around 05:00UT. The solar wind speed was at an elevated level of about 500-600 km/s from June 16 till June 19.

Geomagnetic activity increased to Kp=3 levels on June 15 PM and Kp=4 levels on June 16.