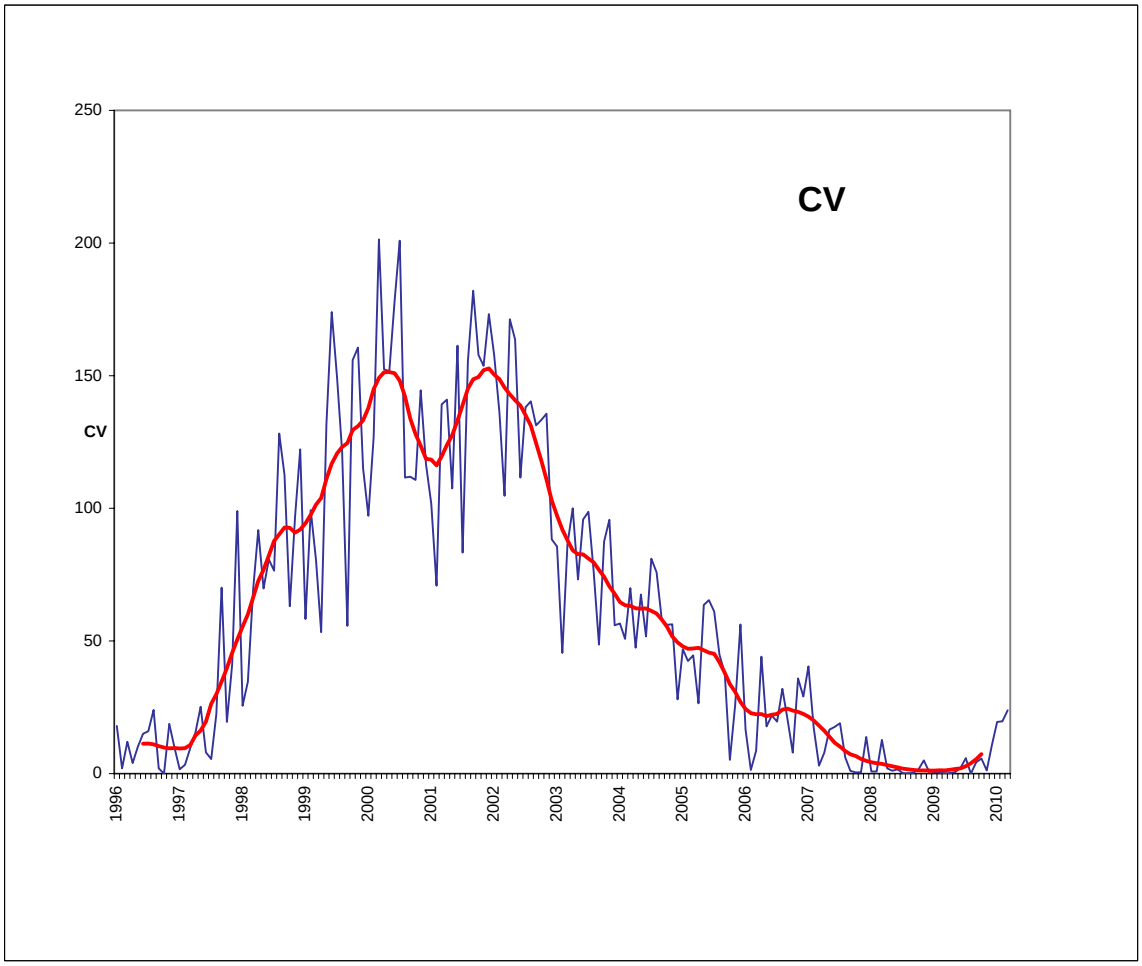
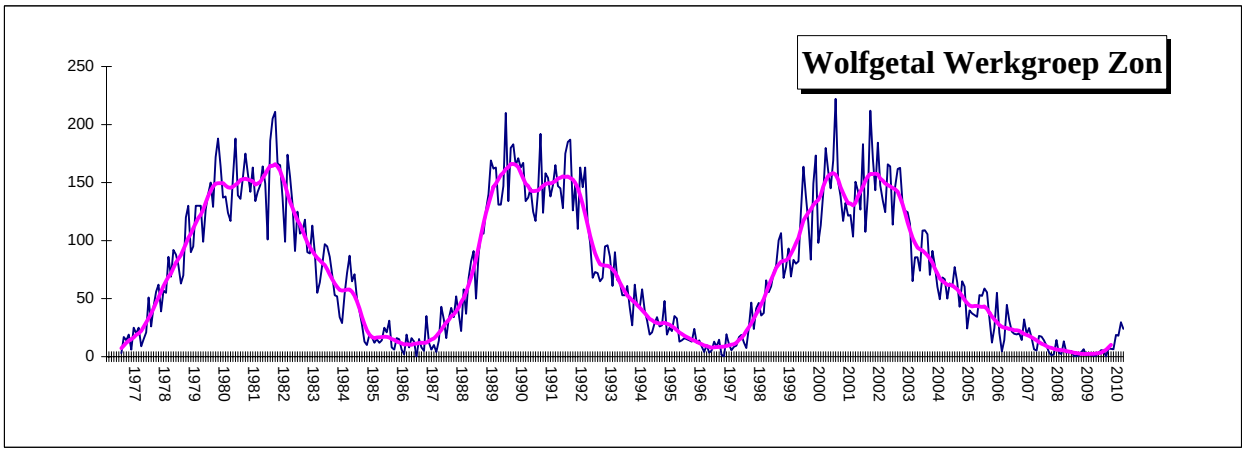
NIEUWSBRIEF V.V.S. WERKGROEP ZON

Waarnemingsresultaten en nieuws voor zonnewaarnemers	Jaargang :	15	Nummer:	169	Maart 2010

Franky Dubois Poelkapellestraat 39 langemark 8920

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





Gemiddelden werkgroep zon maart 2010

Groepen :	N	**1,26**	Wolfgetal :	N	**17,6**	RE'	**136,2**
	S	**0,61**		S	**6,5**	CV	**23,9**
	N+S	**1,87**		N+S	**24**		

454 waarnemingen 27 waarnemers

Wolfnumbers Belgian Solar Observers

Month: **March 2010**

Dag	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	R	
1	15										3	5	35	2	4	24	1	3	13										2	4	24	2	3	23	1
2	24	3	15	45				3	5	35	3	11	41	3	14	44	3	5	35	3	13	43	2	16	46	3	5	35	3	8	38	3	6	36	2
3	23	3	9	39							4	10	50	3	10	40	3	12	42	3	9	39	3	10	40	3	5	35				3	7	37	3
4	25				4	8	48				3	9	39	3	10	40	3	6	36	3	12	42	3	13	43	3	7	37				3	8	38	4
5	18							3	4	34	3	4	34	3	5	35	0	0	0							1	1	11	0	0	0	3	5	35	5
6	0	0	0	0							0	0	0	0	0	0	1	2	12							0	0	0	0	0	0	0	0	0	6
7	8	1	1	11	0	0	0				1	2	12	1	2	12	0	0	0	1	3	13	1	2	12	1	1	11	0	0	0	1	2	12	7
8	11										2	3	23	2	4	24	0	0	0							1	3	13				2	4	24	8
9	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	9
10	0	0	0	0				0	0	0	1	2	12	1	3	13	2	14	34							0	0	0	0	0	0	0	0	0	10
11	22										2	10	30	2	14	34										2	9	29				2	9	29	11
12	23										2	13	33	2	19	39	1	19	29										1	6	16				12
13	20										1	13	23																1	11	26	1	20	30	13
14	21										1	15	25	1	23	33	1	15	25							2	19	39				1	25	35	14
15	17	1	13	23				1	16	26	2	11	31	2	17	37	1	11	21	1	16	26	1	22	32	2	15	35	1	7	17	1	17	27	15
16	15										2	12	32	2	16	36	1	7	17				1	14	24	2	13	33	2	8	28	2	11	31	16
17	18	2	12	32				2	6	26	2	7	27	2	12	32	2	11	31	2	9	29	2	10	30	2	8	28	2	8	28	2	9	29	17
18	19				0	0	0				2	11	31	2	9	29							2	12	32	2	8	28	1	2	12	2	14	34	18
19	14																1	5	15				2	4	24	0	0	0	2	5	25	2	5	25	19
20	9										2	4	24	2	8	28				1	6	16	1	5	15	1	7	17	1	3	13	1	3	13	20
21	14										1	12	22	1	14	24	1	7	17																21
22	11										1	7	17	1	4	14	1	5	15	1	9	19	1	6	16	1	8	18	1	6	16	1	8	18	22
23	9										2	7	27	1	4	14	1	6	16							2	6	26	1	2	12	1	1	11	23
24	11										1	4	14	1	5	15	1	5	15				1	6	16	1	5	15				1	6	16	24
25	15	2	7	27				2	5	25	2	4	24	1	2	12							2	6	26	2	5	25	2	4	24	2	7	27	25
26	14	1	6	16							1	6	16	2	8	28	2	12	32							1	10	20	1	5	15	2	8	28	26
27	22										2	10	30	2	11	31	2	11	31	2	17	37	2	14	34	2	11	31	2	9	29	2	8	28	27
28	20	2	9	29							2	9	29	2	10	30	2	13	33				2	12	32	2	13	33	2	6	26	2	11	31	28
29	21										2	12	32	2	14	34	2	12	32							2	18	38				2	10	30	29
30	21										2	9	29	2	7	27	2	8	28				2	17	37	2	12	32	2	8	28	2	16	36	30
31	17	2	5	25							2	3	23	2	3	23							2	7	27	2	7	27	2	4	24	2	10	30	31
#	**15,4**			**20,6**			**16,0**			**24,3**			**25,5**			**25,9**			**21,2**			**26,4**			**28,6**			**22,8**			**17,4**			**24,6**	

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

Dag	SIDC	P.J.Dekelver			J. Bourgeois			KSB			Carels			G.Gubbels			J. Claes			E. De Ceuninck			R. Dezeure			B. Taillieu			K.Dewaele			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	R	
1	15				3	7	37	2	2	22	3	7	37							2	3	23	3	4	34	3	9	39							1
2	24				3	12	42	2	10	30	3	8	38	3	21	51	3	5	35	3	5	35	3	6	36	3	14	44				3	7	37	2
3	23							2	7	27				3	22	52	3	6	36													2	14	34	3
4	25				3	11	41	3	9	39	3	11	41	3	21	51	3	9	39	3	13	43	2	10	30	3	11	41				3	19	49	4
5	18	2	4	24	1	1	11	3	4	34				3	8	38				3	5	35			,							3	8	38	5
6	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	8	1	2	12	0	0	0	0	0	0	1	2	12	1	2	12	0	0	0	1	1	11	0	0	0	1	2	12				1	2	12	7
8	11																0	0	0	2	3	23	0	0	0							0	0	0	8
9	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	9
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	13	0	0	0	2	7	27							10
11	22				2	17	37	2	10	30	2	19	39							2	8	28	2	8	28										11
12	23				1	18	28													2	17	37													12
13	20										1	21	31	1	20	30							1	10	20										13
14	21													1	16	26				1	19	29				1	8	18							14
15	17	2	24	44				1	10	20				1	19	29				1	12	22	1	10	20	1	7	17				1	14	24	15
16	15							1	6	16				2	31	51	1	7	17	2	11	31	1	5	15										16
17	18	2	14	34				2	10	30				2	24	44				2	7	27										2	11	31	17
18	19	2	9	29				2	10	30				2	26	46				2	10	30													18
19	14							2	2	22																						2	6	26	19
20	9	1	6	16				1	3	13	1	6	16	1	6	16	1	8	18	2	4	24	1	3	13	1	5	15							20
21	14																			1	13	23													21
22	11	1	6	16				1	9	19	1	8	18	1	12	22	1	6	16	1	4	14				1	6	16				1	7	17	22
23	9	2	14	34				1	6	16										2	6	26	1	1	11										23
24	11	1	3	13				1	7	17	1	4	14	2	6	26				1	4	14	1	2	12	1	1	11				1	7	17	24
25	15							2	7	27				2	9	29	2	6	26	2	6	26	1	4	14	2	2	22				2	8	28	25
26	14							1	12	22				1	7	17				2	8	28	2	3	23							1	7	17	26
27	22	2	22	42				2	16	36				2	7	27	2	12	32	3	13	43										2	9	29	27
28	20	2	10	30				2	16	36	2	8	28	2	9	29	2	12	32	2	9	29										2	13	33	28
29	21	2	9	29				2	12	32				2	11	31				2	15	35	2	6	26							2	17	37	29
30	21							2	12	32				2	11	31				2	9	2	2	7	27							2	8	28	30
31	17							2	7	27				2	15	35	2	4	24				2	3	23							2	5	25	31
#	**15,4**			**23,1**			**19,6**			**22,2**			**21,1**			**28,9**			**19,6**			**24,1**			**16,6**			**21,8**			***#####***			**24,1**	

Dag	SIDC	J.Bonse			Verboven			J.Bavais			G.Vandenbulcke			F.Feys			D.V.Hessche																	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	R	
1	15										2	3	23	1	6	16																			1
2	24	2	4	24							3	9	39	2	8	28	3	5	35																2
3	23													3	7	37																			3
4	25	0	0	0	2	6	26				3	11	41																						4
5	18													3	9	39	3	4	34																5
6	0	0	0	0							0	0	0	1	1	11	0	0	0																6
7	8										1	2	12																						7
8	11																																		8
9	0										0	0	0	0	0	0	0	0	0																9
10	0																																		10
11	22										2	17	37	2	14	34																			11
12	23													1	18	28																			12
13	20										1	16	26	1	28	38	1	14	24																13
14	21													1	38	48																			14
15	17										1	17	27	1	18	28	1	14	24																15
16	15													1	11	21																			16
17	18													1	11	21	1	8	18																17
18	19										2	10	30	2	15	35																			18
19	14													2	8	28																			19
20	9				1	5	15							2	11	31																			20
21	14													2	19	39																			21
22	11													2	16	36																			22
23	9													1	11	21																			23
24	11													2	13	33																			24
25	15				1	7	17				2	3	23				1	2	12																25
26	14													1	8	18																			26
27	22	2	10	30	2	8	28							2	19	39	2	13	33																27
28	20				2	10	30							2	19	39	2	12	32																28
29	21													2	23	43																			29
30	21													2	25	45																			30
31	17													2	14	34																			31
#	**15,4**			**14**			**23,2**			***#####***			**23,5**			**30,4**			**21,2**			***#####***			***#####***			***#####***			***#####***			***#####***	

Sunspotnumbers VVS Belgium

Month: 'March 2010

	GROUPS			WOLFNUMBER					
Day	N	S	N+S	N	S	N+S	RE'	CV	OBS
1	1	2	3	12,9	14,8	**27,7**	71	8	13
2	1	2	3	10,8	26,2	**37,0**	88	13	24
3	1	2	3	12,8	25,7	**38,5**	58	8	14
4	1	2	3	10,4	28,1	**38,5**	64	10	21
5	1	2	3	8,1	21,1	**29,2**	33	10	15
6	0	0	0	0	0	**0**	0	0	19
7	1	0	1	8,5	0	**8,5**	11	1	22
8	2	0	2	11,9	0	**11,9**	10	2	9
9	0	0	0	0	0	**0**	0	0	20
10	1	0	1	4,0	0	**4,0**	4	1	17
11	1	1	2	18,2	14,2	**32,4**	118	24	12
12	1	1	2	22,3	7,8	**30,1**	270	23	7
13	1	0	1	27,7	0	**27,7**	346	37	10
14	1	0	1	31,6	0	**31,6**	507	48	8
15	2	0	2	26,7	0	**26,7**	333	32	20
16	2	0	2	27,4	0	**27,4**	247	25	13
17	2	0	2	28,4	0	**28,4**	96	13	17
18	2	0	2	28,4	0	**28,4**	69	12	14
19	2	0	2	21,4	0	**21,4**	16	1	7
20	1	1	2	15,5	2,1	**17,6**	33	5	18
21	1	1	2	22,6	4,4	**27,0**	104	9	4
22	1	0	1	18,2	0	**18,2**	56	10	17
23	2	0	2	19,4	0	**19,4**	46	12	11
24	2	0	2	16,6	0	**16,6**	113	41	15
25	2	0	2	22,6	0	**22,6**	95	45	19
26	2	0	2	20,7	0	**20,7**	132	48	12
27	1	1	2	22,6	10,3	**32,9**	265	65	19
28	1	1	2	20,1	11,0	**31,1**	210	65	18
29	1	1	2	22,4	10,9	**33,3**	359	67	12
30	1	1	2	18,8	10,9	**29,7**	283	58	13
31	1	1	2	13,4	13,3	**26,7**	189	47	14
	1,26	**0,61**	**1,87**	**17,6**	**6,5**	**24,0**	**136,3**	**23,9**	**454**

Monthly mean: **24,0** Covering: **31/31** Spotless days: **2**
Observations: **454** Number of observers: **27**

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 ; Deman ; Taillieu ; Carels ; Dewaele Meeus ; Steen ; KSB ; Gabriel ; Claeys ; Thooris ; J.Bonse ; P.De Reu Claes ; Verboven ; Van Loo ; Son ; Coeckelberghs ; Dekelver G.Gubbels ; J Bavais ; A. De Kerchove ; Van Hessche

VVS Belgian Solar Observers Prominence number Rp

Month : March 2010

Day	J. Janssens time	Q	W	H	e	PST Rp	F. Dubois time	Q	W	H	e	PST Rp	E. De Ceunick time	Q	W	H	e	PST Rp	L. Meeus time	Q	W	H	e	PST Rp	J. Hambsch time	Q	W	H	e	asm 60 Rp	G. Deman time	Q	W	H	e	Lille 20/20 Rp
1							8,31	3	2	3	9	39																								
2	8:30	4	2	1	1	11	15,22	3	2	2	3	23	10.15	3,5	2,5	1	1	11													10:15	4	1	3	4	34
3	8:35	3	2,5	2	5	25																									9:30	2	2	4	10	50
4	8:25	3	1,5	2	4	24	12,31	4	1	2	4	24	09.30	3,5	2,5	2	3	2													9:35	3	1	2	6	26
5																																				
6							13,36	4	1	3	5	35	10.10	3,5	3	4	5	45							13u00	3,5	2	10	10	110						
7	8:30	3	2	6	9	69							11.15	3,5	3	3	3	33													10:05	3	1	7	12	82
8																																				
9							10,06	3	1	5	8	58	10.00	4,0	2	5	5	55							12u20	3	2	9	12	102	9:45	3	1	7	12	82
10							13,35	4	1	7	10	80	10.30	4,0	1,5	8	9	89							10u40	3	2	9	11	101						
11							11,25	3	1,5	6	8	68	10.30	3,5	3	4	5	45																		
12							8,45	4	1	6	7	67	08.30	3,0	3,5	4	4	44																		
13																																				
14																																				
15							8,22	3	2	3	3	33	09.00	3,5	3,5	3	3	33													8:50	3	2	5	8	58
16							13,45	4	1	4	5	45	09.30	3,5	2,5	5	5	55							14u30	3,5	2	9	11	101						
17																															9:40	2	3	3	3	33
18																									12u15	3	3	5	6	56						
19																																				
20							12,19	3	1	5	7	57	11.00	4,0	0,3	2	4	24													12:45	3	1	6	8	68
21																																				
22							11,55	3	2	3	8	38													12u30	3	3	4	8	48	9:20	2	4	1	4	14
23							10,12	3	1,5	5	6	56																								
24							14,15	3	2,5	4	7	47																								
25							8,55	3	2	5	8	58	09.30	1,5	3	4	8	48																		
26							14,35	4	1	6	10	70	12.00	4,0	3	5	7	57																		
27	8:05	3	2	6	8	68	8,50	3	2	6	6	66	10.00	4,0	3	5	5	55							10u00	3	3	7	7	77	11:40	3	2	7	8	78
28							16,25	4	1,5	2	3	23																								
29							11,59	3,5	1,5	3	5	35																								
30							11,33	3	1,5	2	3	23	11.30	3,0	3	2	3	23																		
31																																				
	5	3,2	2	3,4	5,4	39,4	20	3,4	1,5	4,1	6,3	47,3	15	3,47	2,6	3,8	4,7	41,3		###	###	####	###	#####	7	3,1	2,4	7,6	9,3	85,0	10	2,8	1,8	4,5	7,5	52,5

Day	O. Steen time	Q	W	H	e	PST Rp	H. Coekelberghs time	Q	W	H	e	PST Rp	J. Claes time	Q	W	H	e	PST Rp	A Gabriel time	Q	W	H	e	asp 60 Rp	R.Blondeel time	Q	W	H	e	asp 60 Rp	G. Gubbels time	Q	W	H	e	PST Rp
1	13,50	3	2	5	7	57													8:50	3	2	5	8	58												
2	7,30	3,5	2	3	3	33							1130	4	2	2	4	24	8:10	4	2	2	4	24												
3	8,25	3,5	2,5	2	4	24							1000	4	2	2	10	30	8:10	3	2	4	8	48												
4	8,05	3,5	2	2	3	23	13:37	3	3	3	10	40	1400	3	2	3	6	36	8:30	3	2	3	7	37												
5	7,15	3	2	2	3	23													10:10	3	2	3	5	35												
6	8,05	3	2	4	6	46							1330	4	1	5	9	59	10:00	2	2	4	7	47												
7	8,15	3	2	8	8	88	12:55	3	2	5	8	58	0930	4	1	6	13	73	8:15	3	2	7	11	81								9.17	3.5	1.5	7	14	84
8	7,50	3	2	7	10	80							1430	4	1	6	12	72	8:00	3	2	7	12	82												
9	7,50	3,5	2	6	9	69													8:40	4	2	8	17	97								17.00	4	1	6	21	81
10	9,25	3,5	2	8	10	90	13:30	4	3	8	23	103	1330	4	1	8	14	94	8:00	3	1	10	20	120								15.50	3.5	1	9	22	112
11																			10:30	3	2	6	12	72												
12	7,35	3	2	5	5	55																														
13	7,35	3	2	5	5	55													9:25	3	2	3	7	37												
14																			16:00	3	2	5	9	59												
15	7,05	3,5	2	5	6	56													8:00	4	2	4	6	46												
16	9,45	3,5	2,5	5	6	56							1500	3	2	5	7	57	10:50	3	2	6	9	69								16.07	3	1.5	4	7	47
17	7,50	3,5	2,5	4	4	44													8:10	3	2	6	9	69												
18	13,50	3,5	3	3	3	33	14:08	3	1	4	5	45							8:50	4	2	5	7	57												
19																			8:30	3	2	7	10	70												
20	11,20	3	2	5	7	57							1330	4	1	4	7	47	13:35	4	2	6	8	68												
21																																				
22	8,55	3	2,5	2	4	24							1630	3	2	6	12	72	8:00	3	2	4	8	48												
23	12,40	3	2,5	5	6	56													8:35	3	2	5	8	58												
24	9,35	3,5	3	4	5	45													9:00	3	2	7	11	81												
25	8,50	4	2	7	11	81							1130	4	1	4	10	50	7:45	4	2	8	10	90												
26	15,05	3	2	5	5	55													13:30	3	2	6	8	68												
27	7,05	3,5	2	7	7	77							0930	4	1	7	8	78	7:40	4	2	6	9	69												
28	6,35	3,5	2	4	4	44							0930	3	3	3	8	38	7:45	2	2	5	8	58								8.04	3.5	2	4	9	49
29	12,00	3,5	2	3	5	35													7:50	3	2	5	7	57								14.30	3.5	1.5	4	9	49
30	14,05	3,5	2,5	3	3	33													7:50	3	2	6	11	71								16.49	3.5	2	5	13	63
31	8,50	3	2	6	9	69							0930	4	1	6	13	73	7:30	3	2	5	8	58												
		3,3	2,2	4,6	5,9	52,1	4	3,3	2,3	5	12	61,5	14	3,71	1,5	4,8	9,5	57,4	29	3,2	2,0	5,45	9	63,2		###	###	###	####	######	7	3,5	1,5	5,57	13,6	69,3

Day	T.Spaninks time	Q	W	H	e	PST Rp	F.Feys time	Q	W	H	e	LS60 Rp
1	10,53	4	1	8	14	94	8,22			5	11	61
2	11,04	4	1	4	4	44	8,15			4	7	47
3							13,50			3	5	35
4												
5							8,22			3	5	35
6	10,10	3	1	7	10	80	8,15			5	10	60
7	8,50	3	2	6	9	69						
8												
9	11,00	4	1	11	18	128	10,25			11	24	134
10	14.55	4	1	15	17	167						
11							9,50			4	7	47
12							9,25			3	6	36
13							8,05			3	11	41
14							7,35			5	6	56
15							10,50			3	7	37
16							10,55			4	8	48
17							8,00			4	4	44
18							14,10			3	3	33
19							8,20			6	9	69
20	14,20	4	2	3	8	38	7,50			4	9	49
21							7,45			8	12	92
22							8,00			3	5	35
23							7,06			4	7	47
24							8,00			7	17	87
25												
26							13,40			4	9	49
27							7,45			7	12	82
28												
29							7,20			5	9	59
30							6,50			2	2	22
31							8,30			6	8	68
	7	3,7	1,3	7,7	11	88,6	26	###	###	4,6	8,5	54,9

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: **March 2010**

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1	3,3	1,8		4,5	8,8	**53,8**	1	10	5
2	3,7	1,9		2,0	2,9	**22,9**	2	9,2	9
3	3,1	2,2		2,8	7	**35**		11,3	6
4	3,3	1,9		2,4	5,4	**29,4**		7,2	8
5	3	2		2,7	4,3	**31,3**		6,9	3
6	3,3	1,8+		4,2	7	**49**	2	9,4	8
7	3,1	1,7		6,5	10,5	**75,5**	1	10	9
8	3,3	1,7		6,7	11,3	**78,3**		5,3	3
9	3,6	1,5		6,2	12	**74**	3	16	9
10	3,6	1,6		8,1	14,1	**95,1**	2	10,6	9
11	3,2	2,2		5	8	**58**		14	4
12	3	2,8		4	5	**45**	1	9,5	4
13	3	2		3,7	7,7	**44,7**		9,5	3
14	3	2		5	7,5	**57,5**		2,1	2
15	3,3	2,4		3,8	5,4	**43,4**		12,5	5
16	3,3	2		4,7	6,7	**53,7**	1	8,2	8
17	2,8	2,8		3,7	3,7	**40,7**	1	6,4	4
18	3,4	2,3		4	4,8	**44,8**		11,8	5
19	3	2		6,5	9,5	**74,5**		0,7	2
20	3,5	1,5		4,7	7,7	**54,7**	1	11,1	8
21				8	12	**92**			1
22	3	2,4		3,2	6,6	**38,6**	2	10	7
23	3	2		4,8	6,8	**54,8**		4,9	4
24	3,2	2,5		5,5	10	**65**		22,1	4
25	3,1	2		5	9,3	**59,3**	1	15,1	5
26	3,5	2		5,2	7,8	**59,8**		8,9	5
27	3,4	2,1		6,4	7,8	**71,8**		8,5	9
28	3,5	2,1		3,3	6	**39**	1	11,3	5
29	3,3	1,8		4	7	**47**		11,6	5
30	3,2	2,3		2,3	2,8	**25,8**	2	5,2	6
31	3,3	1,7		5,8	9,5	**67,5**		6,4	4
	3,24	**2,04**		**4,7**	**7,6**	**54,3**	**21**	**9,5**	**169**

Monthly mean: **54,3** Covering: **31/31**
Observations: **169** Number of observers: **10**

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 ; Feys Hambsch ; 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*10+e
More info at : http://members.chello.be/j.janssens/

Different Relative Sunspotnumbers — Month : March 2010

CV

Date	F.Dubois	O.Steen	L.Meeus	J.Carels	J.Janssens	P.J. Dekelver	G.Gubbels	H.De Backer	D.Van Hessche	R.verboven		Mean
1	2	5		14								7,0
2	5	6	27	8	8		11	22	13			12,5
3	4	7	3		6		9	13				7,0
4	9	6		8	6		6	23		3		8,7
5	10	4				3	4	1	30			8,7
6	0	0	0	0			0	0	0			0,0
7	4	1	1	1	1	1	1	1				1,4
8	2	3						2				2,3
9	0	0	0	0		0	0	0	0			0,0
10	1	2	0	0		0	0	0				0,4
11	24	6		9				39				19,5
12	23	24										23,5
13		55		31			49		31			41,5
14	56	47					44	43				47,5
15	48	23	23			23	44	36	19			30,9
16	23	23					25	26				24,3
17	14	10	10			12	21	12	9			12,6
18	10	6				11	14	13				10,8
19								0				0,0
20	3	4		6		3	2	12		2		4,6
21	9	6										7,5
22	8	2		12		9	8	12				8,5
23	5	4				18		13				10,0
24	43	19		55		49	44	13				37,2
25	43	56	59				44	20	58	43		46,1
26	44	55	46				43	58				49,2
27	53	56			62	83	56	56	86	56		63,5
28	56	56	62	56		83	56	56	98	56		64,3
29	65	66				84	57	63				67,0
30	56	39					54	63				53,0
31	53	18	19				54	60				40,8
##	23,2	20,3	20,8	15,4	16,6	27,1	26,9	24,3	34,4	32,0		22,9

Pettisindex SN

Date	G.Gubbels	F.Dubois	P.J. Dekelver	O.Steen	J.Carels		Mean
1		2		5	34		13,7
2	29	14		11	8		15,5
3	30	10		10			16,7
4	21	17		9	20		16,8
5	8	23	4	4			9,8
6	0	0		0	0		0,0
7	2	11	2	2	2		3,8
8		4		3			3,5
9	0	0	0	0	0		0,0
10	0	3	0	2	0		1,0
11		31		10	27		22,7
12		30		27			28,5
13	41			35	41		39,0
14	40	43		27			36,7
15	45	30	35	27			34,3
16	66	37		35			46,0
17	56	28	19	15			29,5
18	43	18	27	11			24,8
19							
20	6	8	6	4	15		7,8
21		21		20			20,5
22	19	13	14	7	17		14,0
23		11	14	7			10,7
24	32	21	21	20	40		26,8
25	23	20		12			18,3
26	23	22		32			25,7
27	42	31	35	33			35,3
28	43	32	33	34	33		35,0
29	55	56	32	55			49,5
30	44	34		36			38,0
31	35	30		21			28,7
##	29,3	20,7	17,3	17,1	18,2		21,74

Intersol IS

Date	F.Dubois	J.Carels	G.Gubbels	P.J. Dekelver	Mean
1	5	9			7,0
2	17	10	24		17,0
3	12		25		18,5
4	11	13	24		16,0
5	7		10	6	7,7
6	0	0	0		0,0
7	2	2	3	2	2,3
8	5				5,0
9	0	0	0	0	0,0
10	4	0	0	0	1,0
11	16	21			18,5
12	21				21,0
13		22	21		21,5
14	24		17		20,5
15	18		20	25	21,0
16	18		33		25,5
17	15		26	15	18,7
18	11		28	11	16,7
19					
20	9	7	7	7	7,5
21	15				15,0
22	5	9	13	7	8,5
23	4			16	10,0
24	6	5	7	4	5,5
25	3		10		6,5
26	9		8		8,5
27	12		8	24	14,7
28	11	9	10	12	10,5
29	16		12	11	13,0
30	8		13		10,5
31	4		17		10,5
##	9,9	8,2	14,0	10,0	11,95

Becknumber

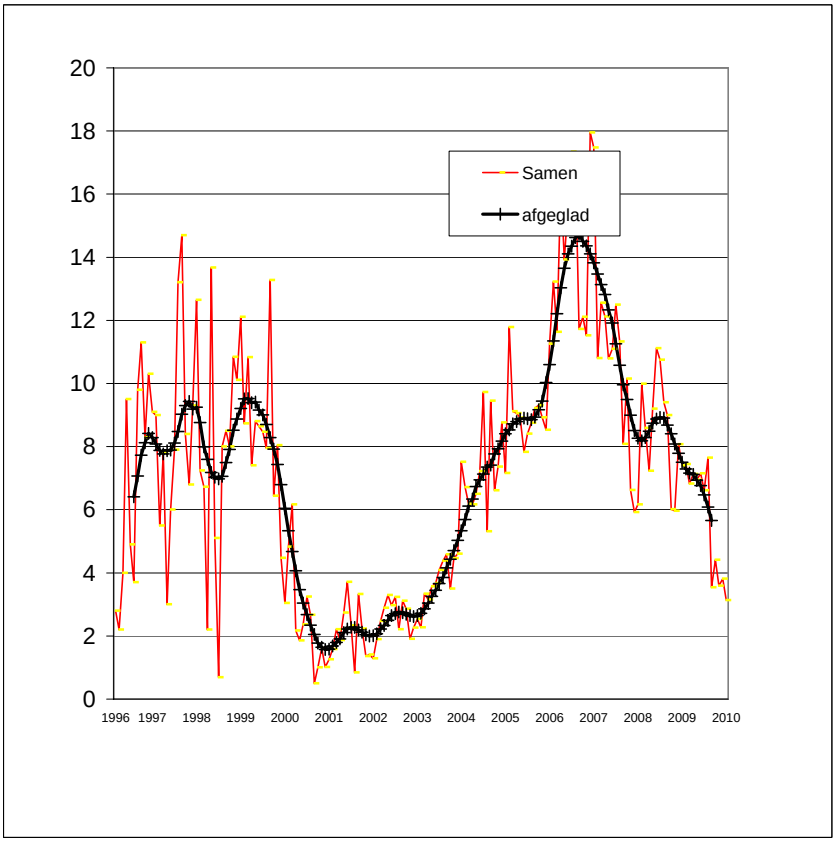
Date	F.Dubois	O.Steen	L.Meeus	P.J. Dekelver	J.Carels	G.Gubbels	E.De Ceuninck	D.Van Hessche	R.Verboven	F.Feys	A.T.Son	J.Bourgeois	H.Coeckelberghs	De Backer	Pbl Obs Mira	J.Claes						Mean	Date
1	16	20			85		12			222												71	1
2	56	44	120		98	244	20	86		131	64			86		20						88	2
3	40	40	36			100				127	40			53		24						58	3
4	64	36			68	84	52		24	0	32		168	77		36						58	4
5	61	16		16		32	20	77		36				4								33	5
6	0	0	0		0	0	0	0		4				0		0						0	6
7	74	8	4	8	8	8	4			0	8		0	4		0						11	7
8	16	12					12			0				12		0						9	8
9	0	0	0	0	0	0	0	0		0				0								0	9
10	12	8	0	0	0	0	12			0				0		0						3	10
11	182	40			128		116			112				132								118	11
12	300	192					264			324												270	12
13		234			378	360		252		504												346	13
14	575	375				400	342			925				424								507	14
15	404	184	325	404		475	216	252		324	396			354								333	15
16	260	188				649	184			198	112			206		175						247	16
17	96	52	88	100		292	48	64		88	76			60								96	17
18	52	44		60		208	56			88	64		0	52								69	18
19										32	16			0								16	19
20	32	16		24	48	24	16		20	44	20			56		64						33	20
21	112	96					104			104												104	21
22	32	28		48	64	96	32			112	48			56		48						56	22
23	32	28		112			24			44				36								46	23
24	90	72		54	72	94	72			206	264			90								113	24
25	36	58	112			148	40	36	126	0	224			76		94						86	25
26	130	108	108			126	130			144				180								132	26
27	217	199		569		152	266	260	170	380	238			217		242						265	27
28	199	181	188	269	163	188	208	242	206	380	41			217		242						210	28
29	290	312		332		294	358			452				474								359	29
30	145	237				332	191			488	264			324								283	30
31	73	53	40			508				286	320			183		52						189	31
	124	96,0	85,1	142,6	85,5	201	104	127	109	186	131	######	56	125	#####	71						135,8	

Belgian Solar Observers

Polar Faculae

Month: March 2010

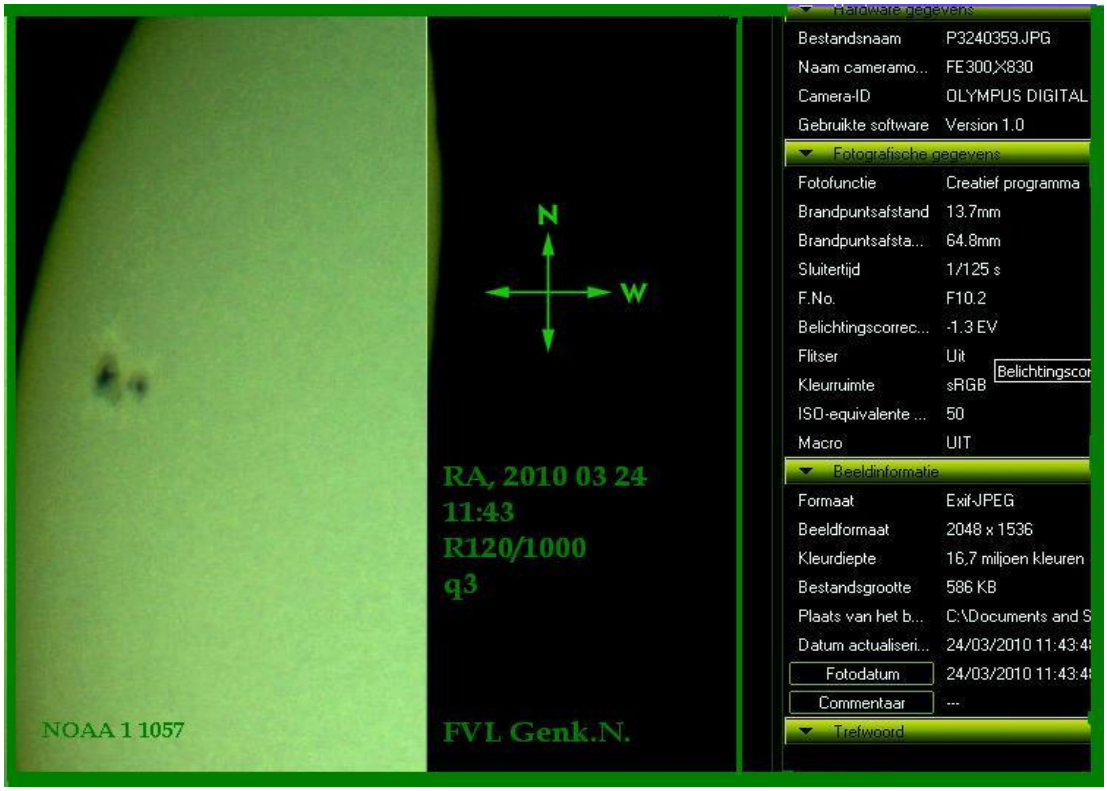
Date	Dubois 125mm F20			Steen 102mm F15			Deman 150mmF15			Gabriel 250 mm F20			Dekelver 150mm F8			Janssen 200mmF10			T.Spaninks 127mm F15			G.Gubbels 114mm F7,8			M. Szulc 60mm F15		
	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q
1	0	3	3																0	0	5						
2	0	5	4	1	2	3,5	0	9	4	1	11	4				0	1	4	0	1	4				4	9	1
3										2	10	3				0	3	3	0	4	4	2	3	4.5			
4	1	6	3	1	5	4,0				1	8	3				0	2	3				3	6	4	3	7	1
5	1	4	3							2	7	3	3	0	3,5							3	5	3.5	3	8	1
6				0	2	3,0						2							2	0	4	2	5	3.5	4	9	1
7				0	2	3,0	0	10	2	1	10	3	0	0	2,5	1	3	3	1	4	4	3	4	3.5	3	9	1
8				2	3	3,5				2	9	3															
9	1	4	3	2	5	4,0	2	9	3	1	11	4	0	2	4				0	0	4	1	3	4	4	12	1
10	0	4	3	1	2	3,0				0	8	3	0	0	4				0	1	4	2	3	3	4	9	1
11												3													5	6	1
12																											
13												3										2	3	3	4	5	1
14												3															
15	1	5	3	1	3	3,5				3	8	4	0	0	3,5				0	0	4						
16												3															
17				0	1	3,5				2	9	3	0	0	4,5							1	4	2.5			
18										2	10	4	0	0	2							5	8	4.5			
19												3													4	7	1
20				0	2	3,5						4	0	0	4				0	0	4						
21																											
22										2	9	3	0	0	2							2	4	3	8	7	1
23	0	6	4							2	10	3	0	0	3										8	7	1
24										3	11	3	0	0	2							2	4	3.5	4	8	1
25				2	3	3,0				3	13	4										2	3	3.5	4	13	1
26				0	1	3,0						3													5	10	1
27				1	3	4				4	10	4	0	0	4,5	0	2	3	0	0	4						
28				0	2	4				2	9	2	0	0	3,5				0	0	4	0	2	3.5	5	9	1
29	1	7	3	0	2	3,5				1	12	3	0	0	2							0	2	2.5	3	15	1
30				1	4	3,5				2	12	3										2	4	3.5	4	11	1
31										2	11	3										2	5	4	3	9	1
	0,56	4,89		0,75	2,63		0,7	9,3		1,9	9,9		0,21	0,14		0,20	2,20		0,27	0,91		2,00	4,00		4,32	8,95	

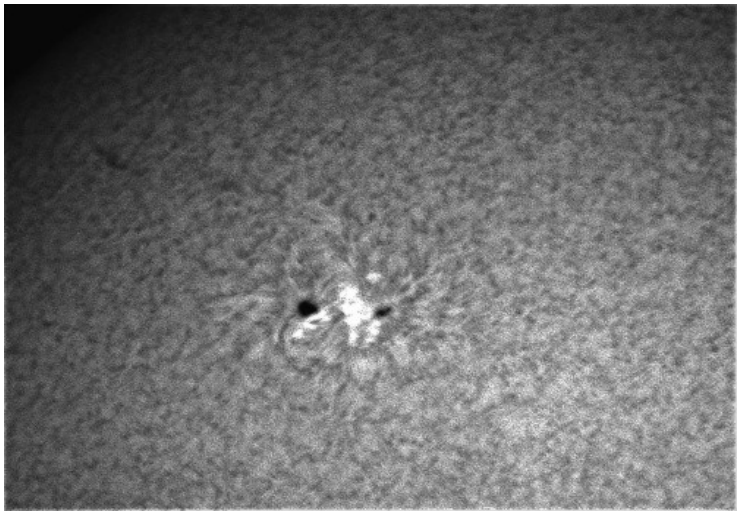


Sunspot activity from organisations all over de world

Month : **February 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	**31,0**													**84,7**	
SIDC	**18,6**	**13,9**	**4,7**												
Kanzelhöhe	**19,6**														
G.F.O.E.S France	**16**														**0,02**
BSO Belgium	**29,5**	**20,5**	**9**	**1,84**		**19,70**	**207,2**	**31,5**	**15,53**			**57,5**			
S.O.G.S.A.S. Switserland	**22,1**			**1,5**											
BAA	**25,3**			**1,59**							**2,96**		**1,28**		
GsRSI Italy	**29,8**											**47,5**			
CV Helios Network						**19,2**									
AAVSO	**26,8**														
Sonne Germany Preliminary	**21,9**	**16,3**	**5,6**	**1,30**			**295**								
O.A.A. Japan	**24,8**	**18,3**	**6,4**												
Solar Observer Society TOS Poland	**26,1**				**2,13**	**22**				**93,1**					
Astronomical League of the Philippines	**19,7**			**1,39**											





28/03/2010
André Gabriel

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 482 from 2010 Mar 22

SOLAR ACTIVITY
Solar activity was mostly quiet in the beginning of the week. Starting from March 27, activity picked up with several C-flares, originating from NOAA AR 1057. This NOAA AR 1057 (Catania 54) was the most prominent active region on the solar disk this week. The largest solar flare it launched was a C3.8 flare, peaking at 18h29 on March 27. A CME originating from the same location was detected by LASCO at 00h30 on March 24. STEREO-A data showed it was partially earth-directed. Because of this increased chance for C-flares and the possible geomagnetic disturbance of the CME, the SIDC all quiet alert was halted on March 24.
On March 26, another earth-directed CME was detected by both STEREO spacecrafts at 08h39.

GEOMAGNETIC ACTIVITY
There were no big geomagnetic disturbances during the week. The maximum level Kp reached was 3 and this happened during only one period on March 28. The solar wind speed was very low (~300 km/s) at the beginning of the week. On March 25, there was a jump in all solar wind parameters due to a sector crossing. The wind speed went up to ~430 km/s.
For the rest of the week, the geomagnetic conditions were quiet to unsettled, also due to the influence of a coronal hole that crossed the central meridian on March 23 and the arrival of the CME that was detected on March 24.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 483 from 2010 Mar 29

SOLAR ACTIVITY
Two sunspot groups were observed on the Sun during the last week: Catania numbers 54 and 56, NOAA ARs 1057 and 1059 respectively. The Catania sunspot group 54 did not produce any noticeable flaring activity.
Catania sunspot group 56 (NOAA AR 1059) situated at S15E40 was the source of the CME first detected by SOHO/LASCO C2 at 03:08 UT on March 30. The angular extent of the CME was around 110 degrees. It was accelerating to reach the speed of around 350 km/s in the LASCO C3 field of view. The CME was not associated with any reported flare. However, coronal dimmings and post-eruption loops were observed by SECCHI/EUVI onboard STEREO B starting from around 03:00 UT. The CME was the driver of the interplanetary shock wave detected on April 2 (see below).
A partial halo CME (angular width around 243 degrees) was detected on April 3. It was first seen at 10:33 UT (by LASCO) and at 09:54 UT (by SECCHI/COR2 onboard STEREO A). The CME was moving at a projected plane-of-the-sky speed of around 500 km/s (according to the LASCO data). The source region of the CME was the Catania sunspot group 56 (NOAA AR 1059) located at that moment around S25W05. The CME was accompanied by a filament disappearance, a post-eruption arcade, coronal dimmings, an EIT wave (as seen by SOHO/EIT) and a B7.4 flare peaking at 09:54 UT.
The arrival of the corresponding ICME (possibly an interplanetary flux rope) at the Earth was expected to occur late on April 5 - early on April 6 (the corresponding CME-driven shock wave actually arrived at 07:59 UT on April 5 according to the SOHO/CELIAS data). The flux rope orientation as inferred from the SOHO/EIT and SOHO/MDI data is ESW, although it may change during propagation. STEREO A and B data indicate that the bulk of the CME was propagating to the south of the ecliptic (according to the COR2 data). If the ICME will arrive, it may produce a major geomagnetic disturbance (peak Dst around -100 nT, peak K index around 6).
Another partial halo CME first observed by LASCO at 08:54 UT on March 29 was backsided according to the STEREO/SECCHI data.

GEOMAGNETIC ACTIVITY
During the whole week, the Earth was situated inside a slow solar wind flow with average interplanetary magnetic field (IMF) magnitude. An interplanetary sector boundary was crossed by ACE on March 29 around noon, but no faster solar wind stream followed.
An interplanetary shock wave was detected by ACE and SOHO/CELIAS at 06:45 UT on April 2. The solar source of this shock is probably the CME detected on March 30 (see above). Due to the position of the erupting active region away from the solar central meridian and non-halo appearance of the CME, the corresponding ICME missed the Earth and only a shock was detected. The IMF magnitude reached 7 nT in the post-shock sheath. However, the IMF north-south component was fluctuating, so the K index reached only 3 (as reported by IZMIRAN and NOAA). Quiet geomagnetic conditions (with isolated intervals of unsettled conditions with K = 4) were thus reported during the whole week.
The shock arrival was not associated with any solar energetic particle event.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 484 from 2010 Apr 05

SOLAR ACTIVITY
Solar activity was rather low during the week. A halo CME occurred on April 8, in conjunction with a B3.7 flare, which peaked at 0325 UT.
The source region was NOAA AR 1060, at that time about 20 degrees East of the central meridian. A southward EUV coronal wave was observed.

GEOMAGNETIC ACTIVITY
Geomagnetic activity was dominated from April 5 to 6 by a major geomagnetic storm (Kp=6), with brief periods of severe storm conditions (Kp=7) on April 5. Geomagnetic conditions were still at active levels (Kp=4) on April 7. The source of such disturbances is a halo CME, which occurred on April 3. A strong interplanetary shock was observed by the ACE spacecraft at 0756 UT on April 5. In addition, a fast solar wind stream linked to a coronal hole quickly followed the arrival of the shock and maintained at active levels an already disturbed situation. Conditions returned to quiet levels on April 8.
A weak interplanetary shock was observed by the ACE spacecraft on April 11 at 1215 UT, in relation with the halo CME of April 8. A brief period of active conditions (K=4) was observed at Dourbes station on that day between
18 and 21 UT, while planetary conditions remained at quiet levels.