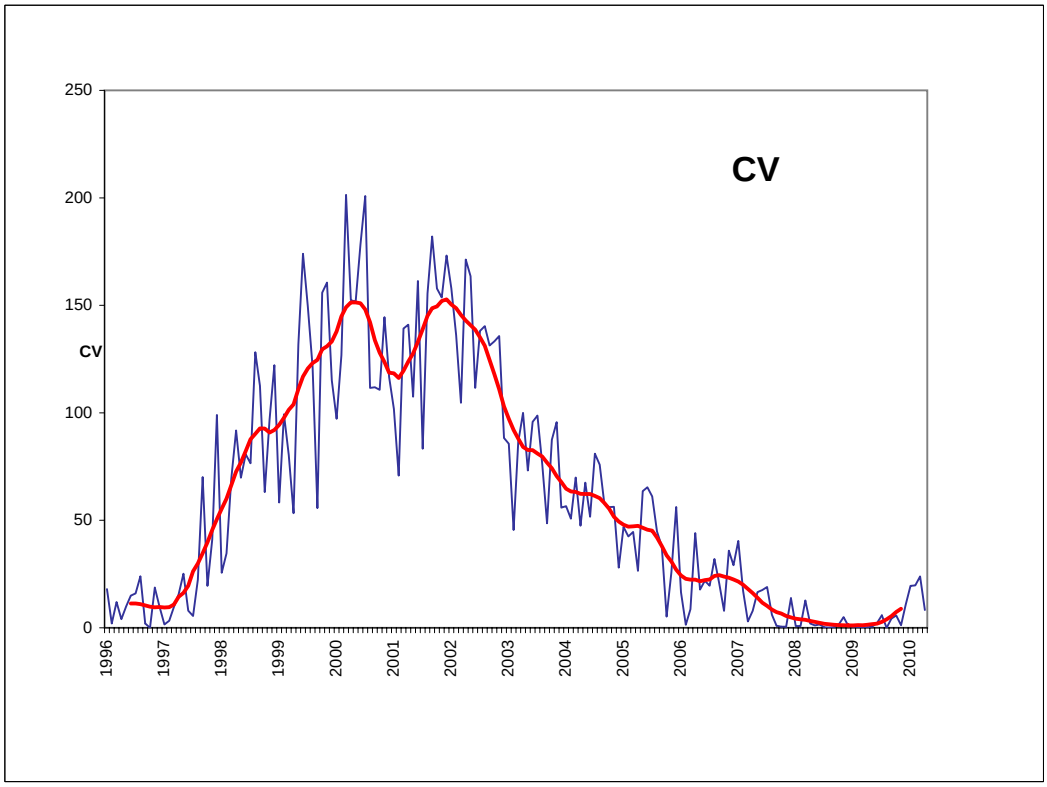
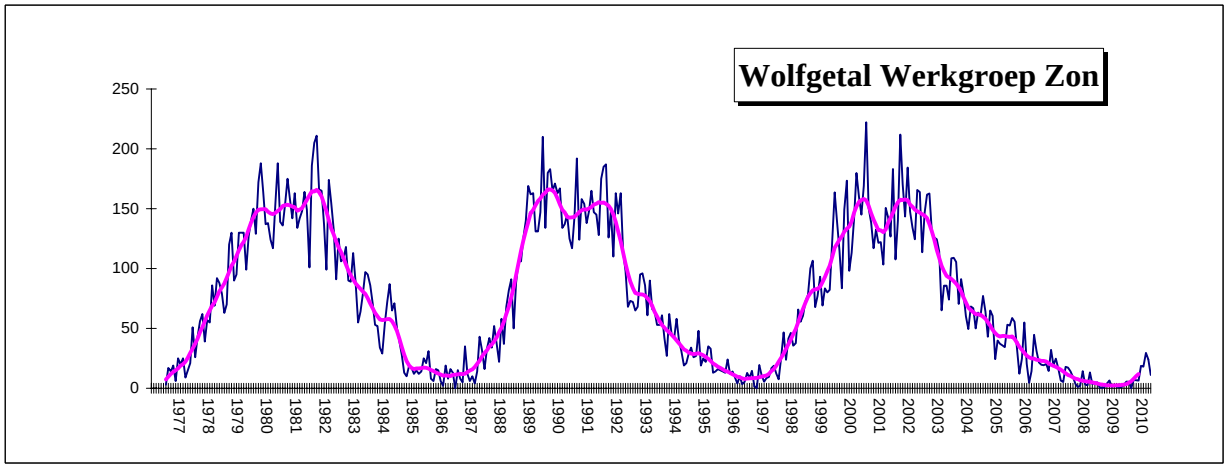
NIEUWSBRIEF V.V.S. WERKGROEP ZON

Waarnemingsresultaten en nieuws voor zonnewaarnemers	Jaargang : 15	Nummer: 170	April 2010

Franky Dubois Poelkapellestraat 39 langemark 8920

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





Gemiddelden werkgroep zon april 2010

Groepen :	N	**0,80**	Wolfgetal :	N	**7,6**	RE'	**44,5**
	S	**0,30**		S	**3,4**	CV	**8,3**
	N+S	**1,10**		N+S	**11,04**		

523 waarnemingen 27 waarnemers

Wolfnumbers Belgian Solar Observers

Month: **April 2010**

	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
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	17	2	6	26				2	11	31	2	3	23	2	6	26	2	6	26	2	8	28				2	10	30	2	4	24	2	8	28	1
2	17	2	8	28							2	5	25	2	7	27	2	7	27	2	12	32	2	8	28	2	7	27	2	3	23	2	10	30	2
3	18										2	9	29	2	8	28				2	10	30							2	11	31	2	9	29	3
4	25										3	13	43	3	10	40	2	5	25													3	14	44	4
5	24										3	10	40	3	14	44	2	6	26				1	3	13				1	1	11	2	9	19	5
6	19							2	8	28	3	9	39	3	11	41	2	9	29	2	10	30	2	12	32				2	8	28	3	13	43	6
7	16										2	5	25	4	7	47				2	4	24	2	5	25				2	4	24	2	8	28	7
8	22										1	3	13	3	7	37	1	1	11	3	7	37							1	1	11	3	8	38	8
9	7				1	1	11				1	1	11	1	1	11	1	1	11	1	1	11	1	2	12				1	1	11	1	2	12	9
10	8										1	1	11	2	3	23	1	1	11	1	1	11							1	1	11	1	2	12	10
11	8										0	0	0	0	0	0	0	0	0				0	0	0	0	0	0				0	0	0	11
12	8	2	6	26							2	4	24	1	6	16	1	3	13	2	6	26	1	6	16	1	1	11	0	0	0	2	5	25	12
13	7	1	1	11	0	0	0				1	5	15	1	1	11	1	6	16	1	2	12	1	1	11	1	1	11	0	0	0	1	1	11	13
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	14
15	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	15
16	0										0	0	0	0	0	0	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	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	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	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
21	7	1	1	11							1	1	11	1	1	11	0	0	0				1	1	11	0	0	0				1	1	11	21
22	7	1	1	11	0	0	0				1	2	12	1	3	13	0	0	0	1	2	12	1	1	11	1	1	11	0	0	0	1	2	12	22
23	0	0	0	0							1	1	11	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25	12										1	3	13	0	0	0	0	0	0	1	2	12	0	0	0	0	0	0	0	0	0	1	3	13	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	26
27	0	0	0	0							0	0	0	0	0	0	0	0	0	0	0	0				0	0	0				0	0	0	27
28	8	1	2	12							1	1	11	1	1	11	1	2	12	0	0	0	0	0	0				0	0	0	1	1	11	28
29	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	29
30	7										1	3	13	1	2	12	0	0	0	1	1	11				1	1	11	1	2	12	0	0	0	30
#	**7,9**			**8,9**			**2,2**			**29,5**			**12,3**			**13,3**			**7,4**			**11,5**			**8,0**			**4,6**			**7,2**			**12,2**	

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

	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
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	17	2	6	26				2	11	31	2	3	23	2	16	36	2	7	27	2	6	26	2	3	23							2	7	27	1
2	17							2	6	26				2	8	28	2	9	29	2	9	29	2	3	23							2	7	27	2
3	18							2	9	29	2	8	28	2	7	27				2	11	31	2	3	23										3
4	25							4	14	54	3	9	39	4	12	52				4	15	55	2	4	24	4	16	56							4
5	24	3	10	40							3	7	37	3	8	38				3	11	41	3	5	35	3	14	44				2	10	30	5
6	19	3	15	45	2	12	32	3	12	42	2	8	28	3	16	46	2	10	30	3	11	41	2	5	25	3	9	39				3	9	39	6
7	16	3	9	39				2	5	25	2	4	24							3	5	35	2	4	24										7
8	22							2	6	26	3	5	35	1	1	11				2	4	24	2	2	22	2	3	23							8
9	7	1	2	12	1	2	12	2	3	23	1	1	11	1	2	12	1	2	12	1	1	11	1	1	11	1	1	11				1	1	11	9
10	8	1	1	11	0	0	0	1	1	11	1	1	11	1	1	11	1	1	11	2	3	23	1	1	11	1	1	11				1	1	11	10
11	8	0	0	0				1	2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	12				0	0	0	11
12	8	1	11	21	1	3	13	1	1	11	2	5	25	2	7	27	1	4	14	1	1	11	1	2	12	1	6	16							12
13	7	1	5	15	1	1	11	1	1	11	1	1	11	1	5	15	1	2	12	1	1	11	0	0	0	1	1	11				0	0	0	13
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	14
15	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	0	15
16	0							0	0	0	0	0	0	0	0	0	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	0	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	0	0	0	0	0	0	0	0	0							18
19	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	19
20	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	0	20
21	7	1	1	11				0	0	0	1	1	11	1	2	12				1	1	11	0	0	0										21
22	7	0	0	0	0	0	0	0	0	0	1	1	11	1	2	12	0	0	0	1	1	11	0	0	0	1	1	11				0	0	0	22
23	0							0	0	0	0	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	0	0	0	0	0	0	0	0	0	0							24
25	12	0	0	0	0	0	0	0	0	0	1	3	13	0	0	0				0	0	0				1	3	13							25
26	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	2	2	22	0	0	0	0	0	0	0	0	0	0	0	0							0	0	0	27
28	8							0	0	0	1	1	11	2	3	23	0	0	0	1	2	12	0	0	0										28
29	0							0	0	0	0	0	0							0	0	0				1	1	11				0	0	0	29
30	7							1	1	11							0	0	0	1	1	11	0	0	0	1	2	12							30
#	**7,9**			**13,8**			**4,9**			**10,8**			**12,6**			**13,0**			**7,1**			**12,8**			**8,6**			**12,9**			**#####**			**9,1**	

	SIDC	J.Bonse			Verboven			J.Bavais			G.Vandenbulcke			F.Feys			D.V.Hessche																	Dag
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	17																2	6	26																1
2	17				2	7	27							2	11	31																			2
3	18				2	7	27							2	8	28																			3
4	25													3	11	41																			4
5	24													2	15	35																			5
6	19				2	9	29							3	17	47	3	8	38																6
7	16													2	9	29																			7
8	22				1	1	11				1	1	11	2	9	29	1	1	11																8
9	7				1	1	11							1	2	12	1	1	11																9
10	8				1	1	11										0	0	0																10
11	8													1	3	13																			11
12	8													1	5	15																			12
13	7	0	0	0	1	5	15							1	3	13																			13
14	0													1	4	14	0	0	0																14
15	0													0	0	0	0	0	0																15
16	0													0	0	0																			16
17	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0																17
18	0				0	0	0							0	0	0																			18
19	0																																		19
20	0	0	0	0	0	0	0							0	0	0																			20
21	7				1	1	11							1	5	15	0	0	0																21
22	7	0	0	0	1	1	11							1	4	14																			22
23	0				0	0	0				0	0	0	0	0	0																			23
24	0													0	0	0	0	0	0																24
25	12				0	0	0							2	6	26																			25
26	0													0	0	0																			26
27	0										0	0	0	1	2	12																			27
28	8													0	0	0																			28
29	0													3	7	37																			29
30	7													1	3	13																			30
#	**7,9**			**0**			**10,9**			**#####**			**2,8**			**15,7**			**8,6**			**#####**			**#####**			**#####**			**#####**			**#####**	

Sunspotnumbers VVS Belgium

Month: 'April 2010

	GROUPS			WOLFNUMBER					
Day	N	S	N+S	N	S	N+S	RE'	CV	OBS
1	1	1	2	13,8	13,2	**27,0**	218	32	18
2	1	1	2	14,1	13,4	**27,5**	275	42	17
3	1	1	2	13,4	14,9	**28,3**	226	42	12
4	3	1	4	29,2	13,8	**43,0**	156	34	11
5	2	1	3	21,5	10,9	**32,4**	56	14	14
6	2	1	3	26,5	9,3	**35,8**	147	29	21
7	3	0	3	29,1	0	**29,1**	87	21	12
8	3	0	3	21,9	0	**21,9**	38	10	16
9	1	0	1	11,9	0	**11,9**	43	9	21
10	1	0	1	11,2	0	**11,2**	19	4	19
11	0	0	0	0	0	**0**	0	0	18
12	0	2	2	0	16,9	**16,9**	31	5	19
13	0	1	1	0	9,7	**9,7**	12	2	23
14	0	0	0	0	0	**0**	0	0	18
15	0	0	0	0	0	**0**	0	0	20
16	0	0	0	0	0	**0**	0	0	14
17	0	0	0	0	0	**0**	0	0	22
18	0	0	0	0	0	**0**	0	0	18
19	0	0	0	0	0	**0**	0	0	17
20	0	0	0	0	0	**0**	0	0	22
21	1	0	1	7,9	0	**7,9**	5	1	16
22	1	0	1	6,6	0	**6,6**	5	1	23
23	0	0	0	0	0	**0**	0	0	19
24	0	0	0	0	0	**0**	0	0	19
25	1	0	1	5	0	**5,3**	4	1	18
26	0	0	0	0	0	**0**	0	0	16
27	1	0	1	2,0	0	**2,0**	2	1	17
28	1	0	1	6,4	0	**6,4**	4	1	16
29	0	0	0	0	0	**0**	0	0	14
30	1	0	1	8	0	**8,2**	7	1	13
	0,80	**0,30**	**1,10**	**7,6**	**3,4**	**11,04**	**44,5**	**8,3**	**523**

Monthly mean: **11,0** Covering: **30/30** Spotless days: **12**
Observations: **523** 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 ; 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.Bruyland ; Van Hessche

Prominence number Rp

Belgian solar observers

Month: April 2010

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1	3,4	1,9		5,5	7,5	**62,5**	1	10,7	7
2	2,8	2,4		5,0	8	**58**		10,1	8
3	3,4	1,7		4,5	6,3	**51,3**		7,1	6
4	3,3	1,6		5,5	6,8	**61,8**	1	10,2	5
5	3,5	2		4,3	6	**49**	1	5,8	4
6	3,5	1,6		7	13,7	**83,7**	2	8	8
7	3,3	1,7		7	11,3	**81,3**	1	2,1	4
8	3,3	1,4		7,5	10,7	**85,7**	2	12,9	8
9	3,8	1,7		6,2	11,7	**73,7**	2	11,9	8
10	3,6	1,8		4,6	6,3	**52,3**	2	13,3	9
11	3,4	1,6		5,1	9,1	**60,1**	2	10,8	9
12	3,1	1,9		5,7	14,1	**71,1**		11	7
13	3,8	2,1		5,7	8	**65**		16,1	9
14	3,4	2,1		4,8	7,5	**55,5**	1	11,1	7
15	3,6	1,8		3,7	6,4	**43,4**		12,3	9
16	3,4	2		5	7,2	**57,2**		11	9
17	3,5	1,7		5,3	8,3	**61,3**	2	16,1	9
18	3,8	1,5		5,1	8,6	**59,6**	2	20	9
19	3	2,5		5,5	7,8	**62,8**	2	11,3	6
20	3,2	2,1		5,4	8,6	**62,6**		12,2	8
21	3,5	1,7		6,5	9	**74**	2	5,1	6
22	3,3	2,1		5,4	7,3	**61,3**	1	8,5	10
23	3,4	2,1		5,5	8,1	**63,1**	2	12,2	10
24	3,2	2,2		6,5	9,3	**74,3**	3	16,9	9
25	3,5	2		5,3	7,9	**60,9**	1	12,8	8
26	4	2		6	9	**69**	2	12	7
27	4,1	1,5		5,5	10,2	**65,2**	3	11,8	8
28	3,3	2		4,3	8,4	**51,4**	1	7	8
29	3,7	2,4		3	5,3	**35,3**	1	9,5	5
30	3,3	1,8		4,2	7,8	**49,8**	1	6,2	6
	3,45	**1,90**		**5,4**	**8,5**	**62,1**	**38**	**10,9**	**226**

Monthly mean: **62,1** Covering: **30/30**
Observations: **226** 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/

VVS Belgian Solar Observers Prominence number Rp

Month : April 2010

	J. Janssens					PST	F. Dubois					PST	E. De Ceunick					PST	F.Feys (LS 60)						J. Hambsch (asm 60)						G. Deman (Lille 20/20)					
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	time	Q	W	H	e	Rp
1							7,35	3	2	4	7	47	08.00	4,0	2,5	7	7	77													8:05	3	2	6	9	69
2							8,08	3	2	4	5	45	09.30	3,5	3	6	6	66	11,05	1,5	5	7		57							8:40	2	3	4	7	47
3													11.00	4,5	2	4	4	44	6,22	1	5	6		56							12:40	3	2	5	8	58
4							16,46	3	1	5	7	57	09.30	4,0	2	7	7	77	6,55	1,5	5	6		56												
5							14,27	4	1	4	6	46							7,20	1	7	14		84												
6							7,35	3	1,5	6	12	72	09.30	4,0	2	7	8	78	7,40	1	9	19		109							7:35	3	2	7	17	87
7							7,06	4	1	7	12	82																			7:45	3	2	7	13	83
8							10,18	3	1	7	10	80	09.30	4,0	5	5	6	56	8,47	1,5	8	12		92							10:20	3	1	6	11	71
9							8,35	4	1	5	12	62	08.00	4,5	2,5	4	5	45	12,45	1	5	10		60							9:15	3	2	8	12	92
10	8:10	3,5	2	5	8	58	10,17	3	1,5	4	4	44	10.00	4,0	3	4	4	44													9:10	3	2	5	6	56
11	7:15	3	1,5	6	9	69	8,15	3	1,5	4	5	45	09.00	3,0	3	5	5	55	14,20	1	5	13		63												
12							7,32	3	1,5	6	12	72	10.30	3,5	3	5	10	60	10,55	1	4	18		58							7:50	3	2	6	13	73
13							9,25	4	1,5	5	7	57	09.30	3,0	3	5	5	55	11,00	1	5	7		57							8:35	3	2	5	8	58
14							11,22	3	2	3	5	35	11.00	3,5	3,5	5	5	55	7,10	1	5	6		56							10:50	3	2	5	8	58
15							8,50	3,5	1,5	3	5	35	09.30	3,5	3	4	4	44	6,55	1	4	9		49							8:05	3	1	4	7	47
16							13,56	4	1,5	4	5	45	10.00	3,5	3	4	4	44	6,45	1	4	6		46							8:35	3	2	5	7	57
17	7:00	3,5	2,5	4	7	47	6,56	4	1,5	3	4	34	08.00	3,5	3	7	8	78	8,40	1	3	6		36												
18	7:25	4	2	3	6	36	7,40	3	2	5	6	56	09.30	4,0	2,5	7	7	77	6,55	1	3	10		40												
19							7,22	3	2	6	9	69	10.30	3,0	3,5	6	6	66													12:05	3	2	4	6	46
20							10,44	3	2	4	6	46	09.00	3,0	3	5	6	56	7,00	1	6	10		70							8:45	3	2	4	7	47
21							7,30	2,5	2	4	4	44	08.30	3,5	2,5	4	4	44	9,25	1	7	8		78												
22							7,04	4	1	6	6	66	09.30	4,0	3	6	6	66	6,50	1	9	12		102							8:20	2	3	5	6	56
23	9:00	3,5	2	4	7	47	12,54	2,5	2	4	7	47	09.30	3,0	3	5	5	55	13,20	1,5	7	12		82							8:35	3	2	5	9	59
24	7:15	3,5	2	7	13	83	10,47	3	2	5	6	56	09.40	3,0	3	5	5	55	13,55	1,5	3	4		34							10:40	2	2	8	13	93
25	7:50	3	3	3	3	33	16,22	4	1	5	6	56							6,15	1,5	4	7		47							7:25	2	3	4	4	44
26							7,15	3,5	2	5	7	57	08.00	4,0	3	5	6	56	6,40	1,5	9	15		105							7:00	5	1	6	12	72
27							7,17	3	2	3	4	34	09.00	4,0	3	3	3	33	11,30	1	4	10		50							7:35	5	1	5	9	59
28							7,07	3	2	4	9	49	08.00	3,0	3,5	3	4	34	8,20	1,5	4	11		51							6:45	4	1	4	8	48
29							7,13	3	2	1	2	12							6,45	1	2	5		25							8:20	3	3	3	4	34
30							13,22	4	1	4	8	48							6,20	1,5	7	14		84							9:45	3	2	4	8	48
	7	3,4	2,1	4,6	7,6	53,3	29	3,3	1,6	4,5	6,8	51,7	25	3,62	2,9	5,1	5,6	56,8	26	###	1,2	5,35	9,9	63,3		###	###	###	####	######	24	3,0	2,0	5,21	8,8	60,9

	O. Steen					PST	H. Coekelberghs					PST	J. Claes					PST	A Gabriel (asp 60)						T.Spaninks					PST	G. Gubbels					PST
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	time	Q	W	H	e	Rp
1	7,45	3,5	2	5	5	55							1530	4	1	5	10	60	7:40	3	2	6	7	67	15,09	4	1	7	12	82						
2	8,20	3,5	2,5	5	6	56							1130	3	2	6	12	72	7:40	2	3	6	9	69							9.40	3.5	1.5	4	12	52
3	11,30	3,5	2	4	4	44													6:50	2	2	4	7	47	14,10	4	1	5	9	59						
4																			8:20	3	2	5	7	57							13.06	3.5	1.5	7	14	84
5	15,30	3,5	2	5	6	56													7:30	3	3	4	6	46												
6	7,30	3	2	8	15	95							11230	4	1	7	13	83	7:40	4	1	7	17	87	8,55	4	2	10	18	118						
7	6,50	3	2	7	9	79													7:25	3	2	9	16	106												
8	11,25	3,5	2	6	8	68													14:50	3	2	8	12	92	16,19	4	1	9	13	103	17.12	4	1	10	11	111
9	7,30	4	2	7	10	80	12:20	4	3	6	11	71	1330	4	1	6	15	75	7:30	4	2	9	14	104												
10	8,05	3,5	2	4	5	45							1000	4	1	6	9	69	8:00	4	2	7	10	80	11,41	3	2	8	11	91	7.36	4	1	6	10	70
11	6,50	4	2	5	6	56							1000	4	1	6	10	70	7:20	3	2	5	7	57	7,34	3	2	10	18	118	8.55	3.5	1	6	18	78
12	8,10	3	2	7	12	82							1430	3	2	5	16	66	7:35	3	2	7	18	88												
13	8,25	3,5	2,5	4	7	47	12:45	5	4	8	9	89	1430	4	1	7	12	82	7:30	4	2	7	11	81							16.48	3.5	2	5	6	56
14	11,40	3,5	2	9	12	102													7:30	4	2	6	9	69							9.55	3.5	1.5	5	12	62
15	7,00	4	2	3	4	34							1630	3	2	2	5	25	7:20	5	1	6	8	68	16,02	3	3	3	7	37	6.07	3.5	1.5	4	9	49
16	16,30	3	2,5	5	5	55							0930	4	1	5	7	57	7:30	3	2	5	8	58	17,07	3	3	7	9	79	6.05	4	1.5	6	14	74
17	8,20	4	2	4	6	46							1000	4	1	4	7	47	7:20	4	1	5	10	60	11,28	2	3	7	7	77	6.46	3.5	1	7	14	84
18	14,00	3,5	2	4	5	45							1030	4	1	4	7	47	7:30	4	1	5	9	59	9,14	3	3	9	10	100	6.42	4	1	8	16	96
19	6,35	3,5	2	3	4	34													7:24	3	2	6	10	70							16.42	3	2	3	10	40
20	8,15	4	2,5	6	10	70							1030	3	2	6	10	70	7:10	3	2	7	10	80							6.10	2.5	1.5	5	10	60
21	7,45	4	2	6	7	67													8:30	3	2	6	8	68							17.00	3.5	1.5	7	13	83
22	6,30	3,5	2	5	5	55	0,65	3	3	6	9	69	1400	4	1	4	6	46	7:10	3	3	5	8	58	16,26	3	2	6	8	68	16.43	4.5	1	6	12	72
23	6,10	4	2,5	6	6	66							1330	4	1	5	9	59	7:15	4	2	5	7	57	15,08	3	3	7	10	80	14.10	3.5	1.5	9	13	103
24	6,30	4	2	8	12	92							1230	3	2	7	10	80	7:20	4	2	6	10	70							6.39	4	1.5	13	23	153
25	6,05	4	2,5	5	6	56													7:15	4	2	7	12	82	8,37	3	2	6	6	66	8.33	4	1.5	6	14	74
26	7,50	3,5	2	7	8	78													7:30	4	2	7	12	82							17.11	2.5	3	3	9	39
27	6,25	3,5	2	6	8	68							1200	4	1	4	7	47	7:30	4	2	6	11	71	8,19	3	2	9	14	104	16.38	3.5	2	8	16	96
28	6,25	3,5	2	5	7	57							1200	3	4	7	14	84	7:10	3	2	4	10	50							15.27	3.5	2	6	10	70
29	7,50	4	2,5	3	4	34													7:15	4	3	4	8	48												
30	13,40	3,5	2	5	5	55							1330	3	2	3	8	38	11:35	3	2	5	10	50												
	29	3,6	2,1	5,4	7,1	61,3	3	4,0	3,3	6,7	9,7	76,3	19	3,63	1,5	5,2	9,8	61,9	30	3,4	2,0	5,97	10	69,4	14	3,2	2,1	7,4	10,9	84,4	21	3,9	1,5	6,38	12,7	76,5

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/

Different Relative Sunspotnumbers — Month : April 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 Hesscke	R.verboven		Mean	G.Gubbels	F.Dubois	P.J. Dekelver	O.Steen	J.Carels		Mean	F.Dubois	J.Carels	G.Gubbels	P.J. Dekelver	Mean
1	47	14	21	8		77	45	44	47			**37,9**		23	24	24	21	20		**22,4**	7	3	18	8	**9,0**
2	46	17	48				47	44		47		**41,5**		23	22		21			**22,0**	9		10		**9,5**
3	45	19		51			50			47		**42,4**		23	22		25	24		**23,5**	10	9	9		**9,3**
4	50	11		11			63					**33,8**		37	35		21	25		**29,5**	13	10	15		**12,7**
5	10	9		14		5	23					**12,2**		26	23	10	19	16		**18,8**	17	9	11	13	**12,5**
6	26	22		24		33	41		30	32		**29,7**		50	36	40	26	34		**37,2**	14	10	19	18	**15,3**
7	29	12		23		64						**32,0**			25	34	22	30		**27,8**	10	6		12	**9,3**
8	14	11		7			10		10	10		**10,3**		10	16		12	14		**13,0**	8	6	1		**5,0**
9	10	10		4		19	10		10	10		**10,4**		10	10	11	10	10		**10,2**	1	1	3	3	**2,0**
10	5	1		1	1	7	10		0	10		**4,4**		10	12	10	1	1		**6,8**	4	1	1	2	**2,0**
11	0	0		0	0	0	0	0				**0,0**		0	0	0	0	0		**0,0**	0	0	0	0	**0,0**
12	2	3	6	3		9	6	10				**5,6**		15	6	19	4	5		**9,8**	7	6	9	12	**8,5**
13	1	3	1	1		9	2	1		5		**2,9**		5	1	13	5	1		**5,0**	1	1	6	6	**3,5**
14	0	0				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	0	**0,0**
16	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	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**
19	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	**0,0**
21	1	1	1	1		1	1	0	0	1		**0,8**		2	1	1	1	1		**1,2**	1	1	3	1	**1,5**
22	2	2	1	1		0	1	1		1		**1,1**		2	3	0	3	1		**1,8**	4	1	3	0	**2,0**
23	0	1	0	0	0		0	0		0		**0,1**		0	0		1	0		**0,3**	0	0	0		**0,0**
24	0	0	0	0	0		0	0	0			**0,0**		0	0		0	0		**0,0**	0	0	0		**0,0**
25	0	1		1	1	0	0	0		0		**0,4**		0	0	0	2	3		**1,0**	0	3	0	0	**0,8**
26	0	0	0	0			0	0				**0,0**		0	0		0	0		**0,0**	0	0	0		**0,0**
27	0	0	0	2			0	0				**0,3**		0	0		0	2		**0,5**	0	2	0		**0,7**
28	1	1	2	1			2	0				**1,2**		3	1		1	1		**1,5**	1	1	4		**2,0**
29	0	0		0				0				**0,0**			0		0	0		**0,0**	0	0			**0,0**
30	1	1						1				**1,0**			2		2			**2,0**	3				**3,0**
##	**9,7**	**4,6**	**5,7**	**5,7**	**0,3**	**14,0**	**11,5**	**4,6**	**9,7**	**11,6**		**8,9**		**8,9**	**8,0**	**10,1**	**6,6**	**7,0**		**7,81**	**3,7**	**2,6**	**4,1**	**4,7**	**3,62**

Becknumber

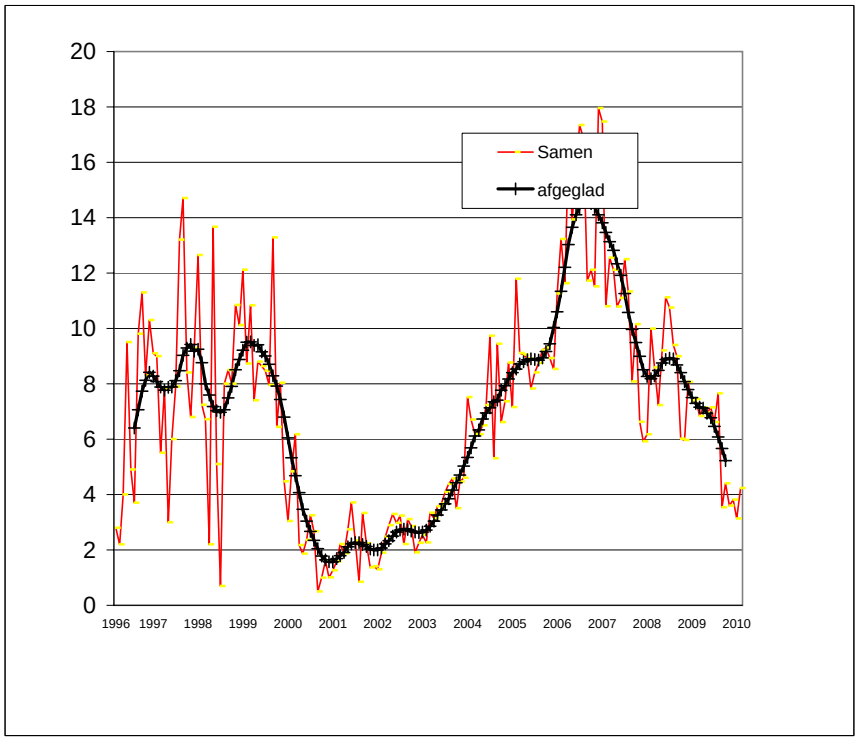
Date	F.Dubois	O.Steen	L.Meeus	P.J. Dekelver	J.Carels	G.Gubbels	E.De Ceuninck	D.Van Hesscke	R.Verboven	F.Feys	A.T.Son	J.Bourgeois	H.Coeckelberghs	De Backer	Pbl Obs Mira	J.Claes					Mean	Date
1	229	111	192	264	81	380	48	250						412	484	208					**242**	**1**
2	287	185	208			324	72		280	456	384			287		269					**275**	**2**
3	172	188			172	280	88		280	405											**226**	**3**
4	188	72			168	200	62			244											**156**	**4**
5	76	56		40	40	106	44			60	24										**56**	**5**
6	108	92		174	104	198	100	128	142	190	160	80			352	80					**147**	**6**
7	52	36		132	91		44			219	36										**87**	**7**
8	48	24			32	37	28	37	37	60											**38**	**8**
9	37	37		16	37	74	8	37	37	74	74	74	44			16					**43**	**9**
10	45	4		44	4	37	16	0	37							4					**21**	**10**
11	0	0		0	0	0	0			12	0			0		0					**1**	**11**
12	24	16	44	88	20	48	4			20	24	12		37		32					**31**	**12**
13	4	20	4	40	4	20	4		40	12	4	4	0	4		8					**12**	**13**
14	0	0		0		0	0	0		16	0	0		0							**2**	**14**
15	0	0		0	0	0	0	0		0	0	0		0		0					**0**	**15**
16	0	0			0	0	0			0				0		0					**0**	**16**
17	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**	**18**
19	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					**0**	**20**
21	4	4	4	4	4	8	4	0	4	20	4			0							**5**	**21**
22	12	8	4	0	4	8	4		4	16	4	0	0	4		0					**5**	**22**
23	0	4	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	12		0	12	0	0		0	24	0	0		0							**4**	**25**
26	0	0	0		0	0	0			0	0	0		0							**0**	**26**
27	0	0	0		8	0	0			8		0		0		0					**2**	**27**
28	4	4	8		4	12	8			0	0			0		0					**4**	**28**
29	0	0			0		0			28	0			0							**4**	**29**
30	8	12					4			12				4		0					**7**	**30**
	43,27	**29,5**	**33,1**	**50,1**	**29,1**	**64**	**18**	**45**	**62**	**69**	**36**	**13**	**9**	**34**	**418**	**32**					**45,6**	

Belgian Solar Observers

Polar Faculae

Month: April 2010

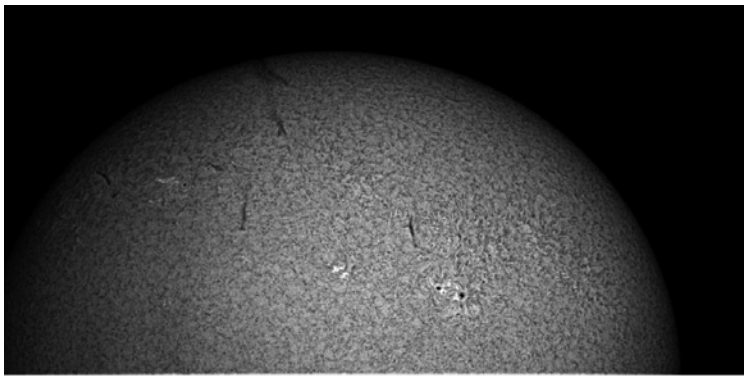
Date	Dubois 125mm F20			Steen 102mm F15			Deman 150mmF15			Gabriel 250 mm F20			Dekelver 150mm F8			Janssen 200mmF10			T.Spaninks 127mm F15			G.Gubbels 114mm F7,8			M. Szulc 60mm F15		
	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q	North	South	Q
1	1	7	4	1	3	3,5	2	8	3	2	10	3	0	0	4				1	1	4	2	4	3.5	2	10	
2										3	12	2															
3				0	3	3,5				3	10	2							0	0	4	1	3	1.5			
4	4	6	3							2	10	3										2	4	3	2	8	
5										2	8	3	0	0	2,5							1	3	1.5	3	11	
6				0	3	3,5				2	8	4	0	0	2				0	0	4	3	4	4	4	11	
7	0	6	4	1	2	3,5				1	7	3	0	0	2,5										3	9	
8				1	2	3,5				1	7	3							0	0	4	0	2	4			
9	2	7	4	2	3	4,0	3	4	3	4	8	4	0	6	2,5				0	0	4	1	4	4			
10				2	2	4,0	0	5	4	2	7	4	0	0	3	0	0	4	1	0	4	2	4	3.5	2	10	
11	1	5	4	2	4	4,0				1	8	3	0	0	3	0	0	3	0	0	4	1	3	3.5	3	7	
12										1	6	3	3	1	2							2	5	3	4	7	
13	0	5	4	0	4	3,5				1	5	4	0	0	2,5				0	2	4	1	4	3.5	4	14	
14							6	4	4	3	6	4	0	0	2							2	4	4	2	5	
15	1	6	4	2	3	4,0	2	5	3	2	6	5	0	0	2,5				0	0	4	1	3	3.5	1	4	
16							3	6	3	3	6	3							0	0	4	1	5	4	1	5	
17	2	5	4	3	4	4,0				1	7	4	0	0	2,5	0	0	4	0	0	3	1	3	3.5	3	7	
18				3	5	4,0				1	5	4				0	0	4	0	0	4	0	3	4	3	7	
19	4	7	4	2	2	3,5				0	5	3										2	5	2	2	9	
20	1	4	4	1	2	3,5	1	4	3	1	6	3	0	0	2				2	0	4	2	4	2.5	1	13	
21	1	5	3	1	3	3,5				0	3	3	0	0	4							1	3	3.5	3	6	
22				2	4	3,5				1	6	3	0	0	3				0	0	3	2	4	3.5	2	8	
23				3	2	4,0	3	4	3	0	5	4				0	0	4	0	0	3	2	5	3.5	2	9	
24	3	5	3	2	3	4,0				2	6	4				0	2	4	0	0	4	2	3	4	2	5	
25				0	2	3,5				2	5	4	0	0	2	0	1	3	0	1	4	1	3	3.5	2	9	
26	1	4	3	1	4	3,5	2	5	3	3	4	4													3	5	
27	3	4	4	2	2	4	4	4	3	4	6	4							1	0	4	3	5	4			
28	0	3	4	1	1	4	3	4	3	3	5	3							0	0	4	3	5	4	2	8	
29	4	6	3	2	3	4,0				2	4	4															
30										2	4	3													1	9	
31																											
	1,75	5,31		1,48	2,87		2,6	4,8		1,8	6,5		0,19	0,44		0,00	0,43		0,26	0,21		1,56	3,80		2,38	8,17	



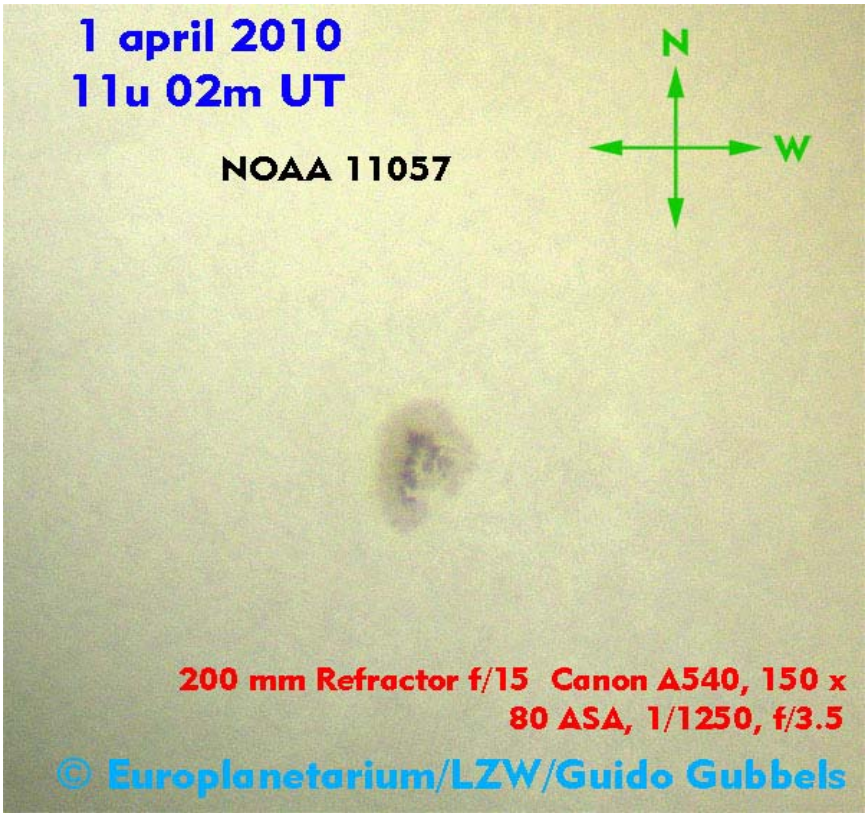
Sunspot activity from organisations all over de world

Month : **March 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	**24,7**													**83,3**	
SIDC	**15,4**	**11,6**	**3,8**												
Kanzelhöhe	**17,40**														
G.F.O.E.S France	**12,9**														**0,15**
BSO Belgium	**24,0**	**17,6**	**6,5**	**1,87**		**23,90**	**136,3**								
S.O.G.S.A.S. Switserland	**19,3**			**1,4**											
BAA	**19,4**			**1,29**							**2,81**		**2,48**		
GsRSI Italy	**25,1**											**44,4**			
CV Helios Network						**19,3**									
AAVSO (Raw Mean)	**21,6**														
Sonne Germany Preliminary	**17,5**	**13,3**	**4,3**	**1,10**			**196,0**								**0,14**
O.A.A. Japan	**18,9**	**14,2**	**4,6**												
Solar Observer Society TOS Poland															
Astronomical League of the Philippines	**16**			**1,17**											



6 april 2010 A.Gabriel



N.O.A.A.	ZICHTBAAR		N.O.A.A.		MAX	MAX	classificatie							
Regio	van	tot	breedte	lengte	AREA	LENGTE	Macintosh							
11020	08-06-09	12-06-09	N25	223	0020	03	BXO							
11021	17-06-09	17-06-09	S16	184	0010	01	AXX							
11022	21-06-09	22-06-09	S27	45	0020	03	BXO	AXX						
11023	22-06-09	24-06-09	S23	20	0040	07	CSO							
11024	03-07-09	10-07-09	S26	247	0230	14	DSO	DSI	EAI	EAO	ESO			
11025	31-08-09	01-09-09	N17	170	0010	03	BXO							
11026	21-09-09	25-09-09	S30	213	0070	09	AXX	CSO	HSX	AXX				
11027	22-09-09	01-10-09	N24	240	0110	08	DRO	DSC	DAO	CAO	BXO	AXX	DAO	AXX
11028	20-10-09	23-10-09	N27	206	0010	01	AXX							
11029	23-10-09	30-10-09	N16	211	0380	11	DSI	CAI	DSI	DAI	DSC	EKO	DSO	
11030	05-11-09	12-11-09	N25	46	0050	06	CRO	BXO	AXX	BXO	AXX			
11031	15-11-09	16-11-09	N30	258	0010	01	AXX	BXO						
11032	18-11-09	20-11-09	N16	218	0010	02	BXO							
11033	18-11-09	22-11-09	N18	191	0010	06	BXO							
11034	09-12-06	15-12-09	N20	254	0010	04	BXO							
11035	14-12-09	21-12-09	N30	248	0310	18	BXO	DAI	EAC	ESI	EHO	FSO		
11036	19-12-09	23-12-09	S29	210	0070	07	BXO	DSO	CSO					
11037	19-12-09	19-12-09	N18	137	0010	06	BXO							
11038	20-12-09	24-12-09	N16	204	0020	04	AXX	CSO	BXO	AXX				
11039	26-12-09	05-01-10	S27	54	0220	09	BXO	DSO	DAO	DSO	DRO			
11040	07-01-10	18-01-10	N30	243	0380	15	BXO	CRI	EAO	DHC	EKI	CKI	DSO	DHO
11041	20-01-10	30-01-10	S24	53	0200	14	CSO	CAO	ESO	EAI	DSI	DSO	HSX	BXO
11042	22-01-10	26-01-10	N22	130	0190	07	CSO	CAO	DAI	CRO				
11043	30-01-10	07-02-10	N26	322	0070	07	BXO	DSO	CSO	HSX				
11044	05-02-10	05-02-10	N18	314	0010	01	AXX							
11045	06-02-10	14-02-10	N23	253	0420	22	DKC	FKC	FAI	FSO	BXO			
11046	07-02-10	17-02-10	N24	185	0190	12	DSO	EAC	ESC	CSO	CAO	CRO		
11047	08-02-10	10-02-10	S18	170	0010	02	AXX							
11048	14-02-10	17-02-10	N20	97	0010	05	BXO	AXX						
11049	17-02-10	24-02-10	S19	119	0060	10	DSO	DAO	DSI	CSO	BXO			
11050	23-02-10	26-02-10	S19	54	0030	06	BXO	AXX						
11051	24-02-10	05-03-10	N16	324	0100	09	CAO	BXO	CSO	CAO	HSX	AXX		
11052	01-03-10	05-03-10	S17	352	0040	08	BXO	CSO	CRO	AXX				
11053	01-03-10	05-03-10	S22	360	0040	08	BXO	CSO	CRO	AXX				
11054	10-03-10	20-03-10	N15	149	0240	14	BXO	DSO	DAO	ESC	ESI	DAI	CRO	AXX
11055	11-03-10	12-03-10	S23	204	0030	03	CSO							
11056	17-03-10	24-03-10	N18	65	0070	07	CRO	BXO	CSI	BXO				
11057	23-03-10	04-04-10	N16	322	0400	11	BXO	DAC	DHC	EKI	DHI	CAO	HSX	
11058	25-03-10	26-03-10	N25	12	0000	01	AXX							
11059	27-04-10	06-04-10	S22	264	0150	04	HSX	CSO	HSX	AXX				
11060	04-04-10	08-04-10	N25	181	0090	07	DRO	CRO	AXX					
11061	05-04-10	10-04-10	N13	232	0110	07	DSO	CSO	HSX	AXX				
11062	12-04-10	14-04-10	S18	134	0020	04	BXO	CRO	BXO					
11063	28-04-10	05-05-10	N18	264	0010	03	BXO							
11064	30-04-10	03-05-10	N16	223	0020	03	BXO	CRO	AXX					
11065	02-05-10	03-05-10	S32	241	0000	01	AXX							
11066	02-05-10	05-05-10	S27	209	0020	06	AXX	CRO	BXO	AXX				
11067	02-05-10	06-05-10	N23	168	0020	06	BXO	CSO	DRO	BXO				
11068	03-05-10	07-05-10	S19	130	0010	03	AXX	BXO	AXX					
11069	04-05-10	08-05-10	N42	225	0170	12	DAI	ESI	CSO					
11070	05-05-10	05-05-10	N21	192	0010	02	BXO							
11071	08-05-10	08-05-10	S20	187	0000	01	AXX							

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 485 from 2010 Apr 12

SOLAR ACTIVITY
Solar activity was low during the whole week with no significant flares. The main point to notice is a CME which occurred on April 13. It was linked to a rather spectacular polar crown filament eruption observed by a ground based Halpha coronagraph and different EUV space born telescopes. The CME was partially halo as seen from Earth but in the end, it did not trigger any geomagnetic disturbances.

GEOMAGNETIC ACTIVITY
Geomagnetic activity was moderate during the week, with a brief period of major storm conditions observed at planetary (Kp=6) and local (K=7 at Dourbes) levels on April 12. The cause of this was the halo CME of April 8, whose associated interplanetary shock reached the ACE spacecraft on April 11.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 486 from 2010 Apr 19

SOLAR ACTIVITY
Flaring activity was low. The X-ray background flux stayed in the A-level.
There was only one sunspot, Catania 62 present.
Two small high latitude coronal holes were present: one in the Northern and one in the Southern hemisphere. They reached almost at the same time a geoeffective position.

GEOMAGNETIC ACTIVITY
The geomagnetic conditions reached one period on Apr 23 the minor storm level.
This was due to the solar wind emanating from a coronal hole carried a relatively strong Bz component of the interplanetary magnetic field.
The rest of the week was quiet.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 487 from 2010 Apr 26

SOLAR ACTIVITY
The visible solar disk was spotless until April 29 when sunspot group NOAA number
11063 (Catania 66) was reported. On May 1 sunspot group NOAA 11064 appeared, but these sunspot groups didn\\\'t produce any flare beyond the B level.
Flaring activity was low the whole week, on April 30 - May 1 there were two C-class flares associated with an unnumbered active region rotating into the solar disk.
There was an important coronal hole facing the Earth on April 30.

GEOMAGNETIC ACTIVITY
The geomagnetic conditions were quiet until April 29 when unsettled periods were observed due to a weak coronal hole solar wind stream. On May 2 the fast solar wind from another coronal hole arrived to the Earth. This solar wind stream arrived earlier and stronger than predicted and caused a major geomagnetic storm with Kp reaching 6 and lasting over a day.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 488 from 2010 May 03

SOLAR ACTIVITY
Solar activity was characterized by the passage of NOAA AR 11069 from central meridian to the NW solar limb.
The region had a beta-gamma configuration on May 5 (Dai) and produced, besides a number of large C-flares, an M1.2 flare at 17:19 on May 5.

GEOMAGNETIC ACTIVITY
The week started with high geomagnetic activity (Kp ~ 5) as a consequence of a high speed wind stream that had arrived the day before the start of the period (May 2). Solar wind speed gradually dropped from 700km/s in the beginning of the week down to 400 km/s at the end of the period. Meanwhile geogmagnetic activity decayed down to Kp=2-3 from May 4 PM onwards.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 489 from 2010 May 10

SOLAR ACTIVITY

Solar activity was very low during the week, with no significant flaring activity.
The 10.7 cm flux decreased to the low 70s by the middle of the week.

GEOMAGNETIC ACTIVITY
Geomagnetic activity was very low during the whole week.

SIDC Weekly bulletin on Solar and Geomagnetic activity
WEEK 490 from 2010 May 17

SOLAR ACTIVITY
There was a filament disappearance between May 21 and May 22 in the northern hemisphere.
This is evident from H-alpha images from Kanzelhoehe solar observatory (Austria). The on disk signatures in SOHO/EIT were faint. STEREO.B/SECCHI COR2 show a cloud ejected to the NW from the point of view of STEREO.B, this is well above the ecliptic.
A B1.4 long duration flare peaked at 18:01UT on May 23. A coronal dimming and post-flare loops are visible in the neighbourhood where the filament disappeared on May 21-22. A halo CME came into view of SOHO/C3 at 19:42 UT. STEREO.B/SECCHI COR2 indicates that the cloud intersects with the ecliptic. It is a slow CME however, with an projected estimated speed of 220 km/s.
The source region was not identified as a sunspot or active region. On May 23, the source region was situated near the central meridian.
A coronal hole in the nothern and the southern hemisphere was visible. The central meridian was reached on May 15 by the northern one and on May 16 by the southern one.

GEOMAGNETIC ACTIVITY
The co-rotating interaction region associated with the coronal hole in the northern hemisphere arrived on May 19. The Kp reached once 4, early May 20. The presence of the southern coronal hole could not be determined from ACE-data. The influence of those coronal holes was limited. The conditions became again quiet on May 21.
The partial halo CME might arrive on May 26-27.