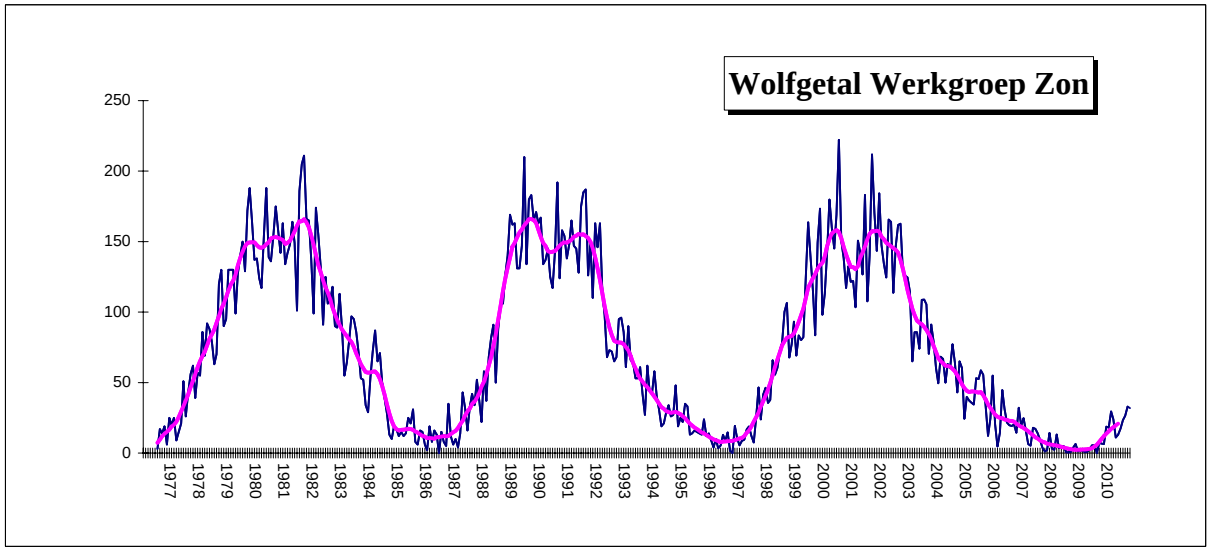
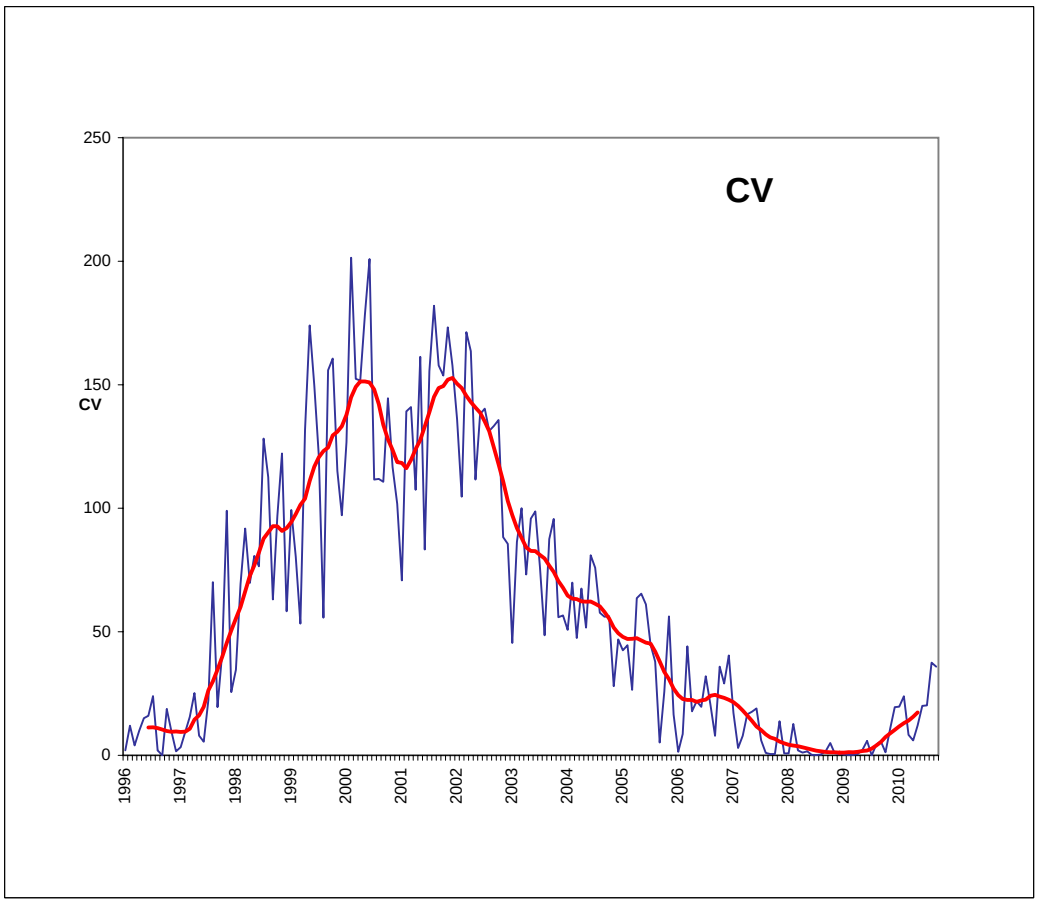
NIEUWSBRIEF V.V.S. WERKGROEP ZON

Waarnemingsresultaten en nieuws voor zonnewaarnemers	Jaargang : 15	Nummer: 176	Oktober 2010

Franky Dubois Poelkapellestraat 57 Langemark 8920

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





Gemiddelden werkgroep zon Oktober 2010

Groepen :	N	**1,68**	Wolfgetal :	N	**21,7**	RE'	**192,5**
	S	**0,81**		S	**10,2**	CV	**35,9**
	N+S	**2,48**		N+S	**31,9**		

343 waarnemingen 25 waarnemers

Wolfnumbers Belgian Solar Observers

Month: **October 2010**

	SIDC	L. Meeus			H.Coeckelberghs			Publ Obs Mira			O. Steen			F. Dubois			L. Claeys			J. Bourgeois			A.T.Son			H. De Backer			B. Thooris			J. Carels			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		3	14	44							3	9	39	3	8	38	3	14	44							3	12	42				3	11	41	1
2											2	6	26	2	13	33																		2
3					2	5	25				2	8	28	2	7	27	2	8	28							2	11	31	2	6	26				3
4											2	3	23	2	3	23	3	7	37							1	1	11							4
5		1	1	11							1	1	11	2	3	23	1	2	12	1	1	11	0	0	0	0	0	0	0	0	0	2	3	23	5
6																	0	0	0	0	0	0													6
7		0	0	0													0	0	0	0	0	0				0	0	0							7
8		0	0	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	8
9		1	1	11	1	1	11				2	3	23											0	0				0	0	0	1	1	11	9
10		1	3	13	1	2	12				2	4	24				1	2	12	1	4	14	0	0	0				1	2	12	1	4	14	10
11		1	3	13	1	1	11				1	3	13	1	2	12	1	2	12	1	3	13	0	0	0				1	1	11	1	2	12	11
12		1	2	12							1	2	12	2	4	24	1	3	13	1	3	13	1	2	12	1	2	12				1	2	12	12
13		2	5	25							1	1	11				2	3	23	2	5	25				2	2	22							13
14																				2	7	27													14
15		3	15	45										3	9	39	3	8	38							3	8	38							15
16											3	9	39	3	19	49	3	12	42							3	17	47				3	21	51	16
17											3	10	40	4	21	61										4	17	57				4	17	57	17
18		5	18	68							3	9	39	6	21	81				3	17	47				4	17	57				5	19	69	18
19											5	12	62	7	23	93	3	9	39	4	18	58				5	13	63				7	26	96	19
20											5	6	56	5	8	58	4	7	47	3	8	38	3	6	36	4	6	46				4	11	51	20
21		3	6	36	3	4	34				3	4	34	3	4	34	3	5	35	3	8	38	3	4	34	3	5	35				4	6	46	21
22											3	4	34	6	8	68	3	4	34	3	9	39				3	4	34							22
23											3	6	36	3	8	38	3	8	38							3	13	43							23
24					4	15	55				3	15	45	3	17	47	4	19	59	4	31	71	3	16	46	3	18	48	3	15	45	5	22	72	24
25		5	27	77							4	18	58	4	20	60	4	17	57	4	33	73	4	23	63	4	19	59				5	21	71	25
26											3	15	45	4	20	60	3	17	47							3	31	61				4	27	67	26
27		3	14	44							2	13	33				1	22	32	1	24	34				2	26	46							27
28											1	112	122	1	12	22										1	12	22							28
29		3	16	46							1	11	21	2	12	32	1	14	24	1	20	30													29
30		3	16	46	2	9	29				2	12	32	2	13	33	1	9	19													3	18	48	30
31		3	8	38							2	12	32				3	12	42	2	20	40	2	10	30							3	15	45	31
#	######			**31,1**			**25,3**			#####			**34,7**			**41,5**			**29,4**			**30,1**			**20,1**			**36,9**			**13,4**			**43,7**	

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

	SIDC	F.Feys			R.Verboven			KSB			D.V.Hessche			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								2	12	32	2	10	30	3	14	44	3	13	43	3	8	38	1	4	14										1
2																	2	7	27																2
3					2	9	29	2	9	29	2	8	28	2	10	30				2	7	27	1	1	11	2	8	28							3
4								0	0	0										2	3	23	1	1	11	3	6	36							4
5								0	0	0				3	7	37	1	3	13	1	1	11	0	0	0										5
6																																			6
7								0	0	0																									7
8								0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							8
9								0	0	0	0	0	0	0	0	0	0	0	0				1	1	11	1	3	13				1	1	11	9
10								1	2	12	1	3	13	1	4	14							1	2	12	1	2	12							10
11								1	1	11	1	2	12	1	5	15	1	3	13	1	2	12	1	1	11										11
12								1	2	12				1	3	13	1	3	13	1	2	12	1	2	12	0	0	0							12
13								1	1	11				3	5	35																			13
14																																			14
15								3	6	36																									15
16								3	16	46	3	17	47							3	14	44	3	8	38	3	12	42							16
17											4	20	60	4	21	61				4	19	59	4	12	52	4	14	54							17
18								4	15	55				5	30	80	4	15	55	5	21	71	4	14	54										18
19								6	18	78				7	29	99	5	19	69	7	23	93	4	11	51	4	11	51							19
20								3	4	34				5	15	65	4	7	47	5	6	56	4	7	47	3	3	33							20
21								3	4	34				4	10	50	3	4	34	3	4	34	3	4	34	3	3	33							21
22					3	6	36	3	4	34										3	4	34													22
23																							3	6	36										23
24								5	17	67	3	16	46	3	15	45				4	18	58	3	13	43	4	20	60							24
25								5	20	70				4	37	77	4	17	57	4	22	62	4	13	53	4	15	55							25
26								4	34	74	3	26	56	3	27	57																			26
27								2	20	40				1	21	31																			27
28								2	14	34										1	10	20	1	12	22										28
29								2	10	30				1	9	19																			29
30								3	11	41	2	12	32	2	12	32				2	18	38				2	11	31	2	12	32	2	6	26	30
31					2	9	29	3	8	38	2	7	27	2	15	35							2	7	27							2	8	28	31
#	######			#####			**31,3**			**31,5**			**31,9**			**40,0**			**30,9**			**38,4**			**27,0**			**32,0**			**32,0**			**21,7**	

	SIDC	J.Bonse			B.De Wit			J.Bavais			G.Vandenbulcke			W.De Meester			E.Neven									R.De Laet								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			
1																	3	12	42							1	5	15							1
2																	7	0	70																2
3											2	7	27																						3
4																																			4
5																	1	2	12																5
6																																			6
7																																			7
8											0	0	0				0	0	0							0	0	0							8
9																	0	0	0							1	2	12							9
10																										1	3	13							10
11																	1	2	12							1	2	12							11
12																	1	2	12							1	2	12							12
13																										2	3	23							13
14																																			14
15																																			15
16																																			16
17					3	4	34				4	18	58													4	18	58							17
18																	4	13	53							5	16	66							18
19																	4	12	52							5	12	62							19
20																	5	6	56																20
21					3	3	33										3	4	34							3	6	36							21
22																																			22
23																																			23
24					3	6	36																			4	16	56							24
25					3	6	36										4	15	55							4	16	56							25
26																																			26
27																																			27
28																																			28
29																																			29
30											1	15	25													2	14	34							30
31																										2	9	29							31
#	######			#####			**34,8**			#####			**27,5**			#####			**33,2**			#####			#####			**32,3**			#####			#####	

Observations R.DE Laet are made with a PST detuned !

Sunspotnumbers VVS Belgium

Month: 'October 2010

	GROUPS			WOLFNUMBER					
Day	N	S	N+S	N	S	N+S	RE'	CV	OBS
1	3	0	3	36,1	0	**36,1**	116	38	14
2	2	0	2	28,3	0	**28,3**	60	40	4
3	2	0	2	26,7	0	**26,7**	183	32	15
4	2	0	2	20,5	0	**20,5**	50	27	8
5	2	0	2	10,9	0	**10,9**	8	2	15
6	0	0	0	0	0	**0**	0	0	2
7	0	0	0	0	0	**0**	0	0	5
8	0	0	0	0	0	**0**	0	0	17
9	0	1	1	0	6,9	**6,9**	3	1	16
10	0	1	1	0	12,6	**12,6**	67	6	15
11	0	1	1	0	11,5	**11,5**	67	8	17
12	0	1	1	0	12,3	**12,3**	60	7	16
13	1	1	2	6,9	14,9	**21,8**	100	21	8
14	1	1	2	12,0	15	**27,0**	94		1
15	1	2	3	10,9	28,3	**39,2**	270	61	5
16	1	2	3	11,0	33,5	**44,5**	289	53	10
17	2	2	4	21,9	32,5	**54,4**	330	57	12
18	3	2	5	31,2	30	**61,2**	370	52	13
19	5	2	7	44,1	24,9	**69,0**	417	69	14
20	3	2	5	30,0	17,9	**47,9**	286	53	14
21	2	1	3	24,9	11,1	**36,0**	201	44	18
22	2	1	3	22,2	16,9	**39,1**	211	43	8
23	2	1	3	27,4	10,8	**38,2**	157	41	5
24	3	1	4	41,7	11,2	**52,9**	395	53	18
25	3	1	4	51,8	9,4	**61,2**	444	61	17
26	3	1	4	47,7	10,7	**58,4**	528	55	8
27	1	1	2	30,8	6,3	**37,1**	420	56	7
28	1	0	1	40,3	0	**40,3**	224	55	6
29	2	0	2	28,9	0	**28,9**	238	44	7
30	2	0	2	33,2	0	**33,2**	207	54	15
31	3	0	3	33,8	0	**33,8**	172	44	13
	1,68	**0,81**	**2,48**	**21,7**	**10,2**	**31,9**	**192,5**	**35,9**	**343**

Monthly mean: **31,9** Covering: **31/31** Spotless days: **3**
Observations: **343** Number of observers: **25**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS
Poekapellestraat 39
B8920 Langemark
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Observers:
E.De Ceuninck ; J.Janssens ; Publ obs Mira ; J.Bourgeois ; R.Dezeure ; F.Feys H. De Backer; F.Dubois ; B.Taillieu ; J.Carels ; K. Dewaele L.Meeus ; O.Steen ; KSB ; L.Claeys ; B.Thooris ; J.Bonse J.Claes ; R.Verboven ;F. Van Loo ; A.T.Son ; H.Coeckelberghs

VVS Belgian Solar Observers Prominence number Rp

Month : september 2010

Day	J. Janssens time	Q	W	H	e	PST Rp	F. Dubois time	Q	W	H	e	Lille 20/20 Rp	E. De Ceunick time	Q	W	H	e	PST Rp	F.Feys time	Q	W	H	e	Lunt 60 Rp	J. Hambsch time	Q	W	H	e	asm 60 Rp	G. Gubbels time	Q	W	H	e	Lunt 60 Rp
1							12,26	3	2	5	11	61	08.30	3,0	3,5	3	4	34	8,05	2,5	3,5	6	14	74	11u30	4	2,5	8	13	93	7.08	3.5	1	9	33	123
2																			6,35	1,5	4	8	17	97												
3	7:10	3	1,5	5	7	57	8,16	3	1,5	4	6	46							6,37	1	3,5	5	13	63	12u45	3	2	7	7	77	8.05	3.5	1.5	7	20	90
4							12,15	4	1	8	16	96							7,02	1	4	5	12	62												
5							8,12	4	1	4	4	44	08.30	3,5	3,5	2	2	22	13,00	1	4	7	9	79												
6																			9,28	1,5	4	6	11	71												
7																																				
8													10.00	4,0	3,5	7	10	80													15.00	3.5	1	8	25	105
9	7:45	3	2	5	12	62																			12u15	4	2	8	11	91	7.24	3	1.5	8	23	103
10	7:40	2	2	4	5	45													7,35	1,5	4	6	10	70							7.50	3	1	7	17	87
11							8,04	2	3	5	10	60	09.30	3,0	3,5	5	5	55	13,00	1	4,5	6	16	76	11u05	4	2	6	8	68	15.45	4	1.5	6	17	77
12							10,24	3	2	4	6	46	10.00	3,5	3,5	2	3	23							11u25	4	2	7	10	80	15.45	4	1.5	9	22	112
13																			7,45	2	4	6	16	76												
14																																				
15																																				
16							8,48	4	1,5	5	12	62	10.00	4,0	3	7	9	79	8,22	1	4,5	7	22	92												
17							8,50	4	1,5	7	13	83	12.00	4,0	3	6	6	66	6,30	1	5	10	18	118												
18							8,15	4	1	6	9	69	09.45	4,0	3,5	9	15	105																		
19							8,18	3	1	7	15	85	09.00	4,0	3,5	9	10	100	7,29	1	5	7	21	91	11u25	4	2	9	9	99						
20							10,39	3	2	5	8	58	10.00	4,0	3,5	7	7	77	6,20	1	5	11	18	128												
21							8,17	4	1	6	10	70	10.00	4,5	3	7	11	81	5,55	1	5	7	28	98	11u15	4	2	7	8	78	15.46	4	1.5	9	27	117
22							12,49	4	1	6	12	72	11.40	4,0	3,5	6	8	68	12,05	1	4	10	27	127												
23																			8,40	1	3	8	24	104												
24	7:45	3	2	3	4	34	9,06	3	1	4	8	48	11.15	4,5	3	6	7	67	7,45	1	4	10	17	117							8.45	3.5	1	7	17	87
25							8,25	4	1	5	6	56	09.30	4,0	3	7	7	77	6,20	1,5	5	6	22	82	11u25	4	2	5	6	56	15.45	3.5	1.5	7	23	93
26							10,58	4	1	3	3	33																			8.40	3	2	6	17	77
27																																				
28							12,42	3	2	4	8	48	12.30	4,0	3	6	9	69	8,32	1	4	8	30	110												
29																															10.00	3	2.5	6	12	72
30							11,58	3	1	7	14	84	10.30	4,0	3	8	11	91	12,40	2	3,5	11	18	128							13.55	3.5	1.5	6	20	80
31																			8,37	1	5	9	27	117							12.25	3.5	1	7	23	93
	4	2,8	1,9	4,3	7	49,5	18	3,4	1,4	5,3	9,5	62,3	16	3,88	3,3	6,1	7,8	68,4	21	1,3	4,2	7,57	18,6	94,3	8	3,9	2,1	7,1	9,0	80,3	14	3,4	1,2	7,29	21,1	94,0

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	Prom Viewer T.Spaninks time	Q	W	H	e	Rp	R.De Laet time	Q	W	H	e	PST Rp	Lunt L.Meeus time	Q	W	H	e	Rp
1	8,20	3	2	9	11	101							1000	3	2	6	11	71							10:15	3	1,5	8	18	98						
2													1030	4	1	3	8	38																		
3	7,35	3	2	5	6	56	0,39	4	3	9	14	104							8.36	3	3	7	9	79												
4	11,20	3	2	4	6	46																														
5	7,45	3	2	4	4	44							0930	4	1	3	5	35																		
6																																				
7																																				
8	7,25	3,5	2	9	9	99							1330	4	1	7	15	85							10:20	3	1,5	10	16	116						
9	10,15	3,5	2	8	10	90							1330	4	1	7	13	83							10:30	3	1,5	10	21	121	15.10	4	1	7	12	82
10	8,35	3,5	2	6	8	68													8.02	3	3	6	6	66	10:10	3	1,5	12	24	144	13.10	4	1,5	5	7	57
11	8,50	3	2	6	9	69							1000	4	1	7	12	82							10:30	2,5	1,5	10	19	119						
12	11,40,	3,5	2	7	10	80							1430	4	1	5	12	62							10:30	3	2	15	23	173						
13																			14.40	3	2	11	14	124	10:00	3	2	11	30	140	08.55	3	1,5	7	10	80
14																																				
15																																				
16	9,25	3	2	4	6	46																														
17	9,25	3	2	8	8	88													9.03	3	2	11	16	126	14:45	3	2	7	13	83						
18	9,15	3	2	9	11	101							1130	4	1	8	15	95							8:00	4	1,5	9	19	109						
19	8,40	3	2	7	9	79							1400	4	1	8	16	96	8.30	3	2	10	14	114	10:20	3	1,5	6	20	80						
20	9,50	3	2	7	7	77							1130	4	1	6	12	72							10:20	3	2,5	7	8	78						
21	8,50	3	2	6	6	66							1130	4	1	6	14	74							10:20	3	1,5	11	16	126						
22	11,10	3	2	9	10	100																														
23																																				
24	9,40	3	2	6	9	69																			9:00	3	1,5	7	13	83						
25	8,30	3	2	5	6	56							1000	4	1	5	10	60							10:35	3	1,5	7	10	80						
26	11,00	3	2,5	3	3	33																														
27																																				
28	9,40	3	2,5	4	5	45																														
29																																				
30	11,45	3,5	2	10	12	112																			15:00	3	1,5	8	18	98	13.55	4	2,5	8	9	89
31	12,45	3,5	2	5	5	55													13.53	3	2	6	11	71	12:30	3	1,5	8	16	96						
	22	3,1	2	6,41	7,7	71,8	1	4,0	3,0	9	14	104,0	12	3,92	1,1	5,9	11,9	71,1	6	3,0	2,3	8,5	12	96,7	16	3,0	1,7	9,1	17,8	109,0		3,8	1,6	6,75	9,5	77,0

Day	R.Blondeel time	Q	W	H	e	asm 60 Rp
1	09h40	2	2	8	8	88
2						
3	12h00	2	3	5	6	56
4						
5						
6						
7						
8	11h40	2	2	4	4	44
9						
10	08h30	3	1	3	3	33
11	08h20	2	1	3	4	34
12	11h45	2	1	2	2	22
13						
14						
15						
16	10h00	2	2	3	3	33
17	10h45	2	2	5	5	55
18	12h00	2	1	8	11	91
19	09h30	3	1	6	7	67
20						
21	09h40	2	2	5	6	56
22						
23						
24	10h00	3	1	4	6	46
25	09h10	3	1	4	4	44
26						
27	11h00	2	2	4	4	44
28						
29	09h20	2	2	3	4	34
30						
31	13h00	2	2	2	3	23
	16	2,3	1,6	4,31	5	48,1

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: October 2010

Day	Q	Wedel		H	e	Rp	el. Obs	Stdev	OBS
1	2,9	2,2		7,1	12,3	**83,3**	2	15,2	9
2	2,8	2,5		5,5	12,5	**67,5**			2
3	2,6	2,4		5,6	9,3	**65,3**	1	14,9	9
4	2	3		4,5	9	**54**	1	11,3	3
5	3,6	1,9		3,3	3,8	**36,8**	1	10,4	5
6	1,5	4		6	11	**71**			1
7									
8	3,8	1,9		7,8	14,8	**92,8**	2	11,7	6
9	3,6	1,6		7,2	13,5	**85,5**	1	13,6	7
10	2,8	2,3		5,7	8,8	**65,8**	2	14	8
11	3	2,7		5,9	11	**70**	2	9,6	9
12	3,6	1,8		5,8	9,5	**67,5**	4	16,4	8
13	2,5	2,8		6,5	13	**78**	2	2,8	4
14									
15									
16	3,7	2,2		5,3	9	**62**	2	16,5	5
17	3,2	2,1		6,6	9	**75**	2	13,9	7
18	3,5	1,7		8,2	13,3	**95,3**		14,3	6
19	3,1	2,1		7,7	13,4	**90,4**		14	9
20	3,4	2,2		6,4	8,4	**72,4**	1	8,4	6
21	3,2	2,3		6,3	11,9	**74,9**	2	13,2	9
22	3,7	2,2		7	10	**80**	1	17,4	4
23	1	3		8	24	**104**			1
24	3,4	1,7		6	10,8	**70,8**	3	15,4	8
25	3,3	2,1		5,7	10,4	**67,4**		16,2	9
26	3,5	1,8		3	3	**33**	1	0	3
27	2	2		4	4	**44**			1
28	3,3	2,5		4,7	7,3	**54,3**	1	13,1	4
29	2,5	2		4,5	8	**53**		26,9	2
30	3,5	2		7,8	14	**92**	1	11,4	7
31	3,2	1,6		6,5	13,8	**78,8**	2	19,4	6
	3,01	**2,24**		**6,0**	**10,7**	**70,9**	**34**	**13,3**	**158**

Monthly mean: **70,9** Covering: **28/31**
Observations: **158** Number of observers: **11**

V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS
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e-mail : astrosun@skynet.be

Observers:
Steen ; Dubois ; De Ceuninck ; Coeckelberghs ; Janssens ; Feys
Hambsch ; Claes ; G.Gubbels ; T.Spaninks ; R.Blondeel
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 : September 2010

CV

Date	F.Dubois	O.Steen	L.Meeus	J.Carels	J.Janssens	R.verboven	G.Gubbels	H.De Backer	D.Van Hessche			Mean
1	45	40	26	41			41	30	42			**37,9**
2	40	40										**40,0**
3	39	40			13	32	42	16	42			**32,0**
4	39	39						4				**27,3**
5	2	1	1	3			5	0				**2,0**
6												
7			0					0				**0,0**
8	0	0	0	0			0					**0,0**
9		2	1	1	0		0		0			**0,7**
10		9	5	5	7		4		5			**5,8**
11	10	7	11	4			10		4			**7,7**
12	8	7	5	4			7	10				**6,8**
13		1	15				48	20				**21,0**
14												
15	99		37					48				**61,3**
16	102	42		42				42	36			**52,8**
17	101	42		45			74	44	38			**57,3**
18	89	49	46	39			44	43				**51,7**
19	104	34		43			109	53				**68,6**
20	95	62		32			44	31				**52,8**
21	87	60	27	31			29	27				**43,5**
22	87	30				27		27				**42,8**
23	62	32						29				**41,0**
24	72	55		60	46		48	45	48			**53,4**
25	86	57	63	60			51	50				**61,2**
26	79	67		69			34	35	46			**55,0**
27		66	42				52	63				**55,8**
28	56	56						52				**54,7**
29	17	55	54				49					**43,8**
30	57	58	58	49			51		50			**53,8**
31		39	64	58		9	51		45			**44,3**
##	**60**	**36,7**	**27**	**32,6**	**17**	**22,7**	**38**	**32**	**32**			**37,1**

Pettisindex SN

Date	G.Gubbels	F.Dubois	O.Steen	J.Carels	R.Verboven	Mean
1	22	24	15	29		**22,5**
2		19	15			**17,0**
3	37	14	15		35	**25,3**
4		12	12			**12,0**
5	2	3	1	3		**2,3**
6						
7						
8	0	0	0	0		**0,0**
9	0		3	1		**1,3**
10	11		12	12		**11,7**
11	13	11	12	11		**11,8**
12	11	13	11	11		**11,5**
13	22		1			**11,5**
14						
15		45				**45,0**
16		51	45	51		**49,0**
17	63	60	45	59		**56,8**
18	78	48	54	52		**58,0**
19	87	66	38	60		**62,8**
20	65	43	32	35		**43,8**
21	35	30	30	32		**31,8**
22		31	30		30	**30,3**
23		34	33			**33,5**
24	60	53	59	60		**58,0**
25	103	80	60	57		**75,0**
26	82	63	45	68		**64,5**
27	56		58			**57,0**
28		45	45			**45,0**
29	45	54	35			**44,7**
30	39	20	39	35		**33,3**
31	42		30	41	27	**35,0**
##	**42**	**36**	**29**	**34**	**31**	**33,9**

Intersol IS

Date	F.Dubois	J.Carels	G.Gubbels	Mean
1	9	8	17	**11,3**
2	15			**15,0**
3	9		12	**10,5**
4	4			**4,0**
5	4	4	10	**6,0**
6				
7				
8	0	0	0	**0,0**
9		1	0	**0,5**
10		3	5	**4,0**
11	3	2	6	**3,7**
12	6	1	4	**3,7**
13			6	**6,0**
14				
15	10			**10,0**
16	20	17		**18,5**
17	23	17	25	**21,7**
18	23	17	34	**24,7**
19	29	19	35	**27,7**
20	8	8	19	**11,7**
21	3	5	13	**7,0**
22	5			**5,0**
23	8			**8,0**
24	18	13	16	**15,7**
25	22	14	39	**25,0**
26	22	24	29	**25,0**
27			22	**22,0**
28	13			**13,0**
29	14		10	**12,0**
30	15	12	14	**13,7**
31		11	17	**14,0**
##	**12,3**	**9,8**	**16**	**12,11**

Becknumber

Date	F.Dubois	O.Steen	L.Meeus	De Backer	J.Carels	G.Gubbels	E.De Ceuninck	D.Van Hessche	R.Verboven	F.Feys	A.T.Son	J.Bourgeois	H.Coeckelberghs	Pbl Obs Mira									Mean	Date
1	116	64	196	188	76	92	116	76															**116**	**1**
2	80	40																					**60**	**2**
3	148	152		268		224	164	152	240				112										**183**	**3**
4	52	52		44			52																**50**	**4**
5	12	4	4	0	12	28	4				0	4											**8**	**5**
6												0											**0**	**6**
7			0	0								0											**0**	**7**
8	0	0	0		0	0	0				0	0											**0**	**8**
9		12	4		4	0		0			0		4										**3**	**9**
10		82	24		32	148		24			0	148	74										**67**	**10**
11	74	111	24		37	185	16	74			0	111	37										**67**	**11**
12	82	74	16	74	37	111	16				16	111											**60**	**12**
13		4	69	81		159						185											**100**	**13**
14												94											**94**	**14**
15	214		399	196																			**270**	**15**
16	394	200		410	216		170	344															**289**	**16**
17	388	237		312	443	414	144	375															**330**	**17**
18	260	249	335	422	460	652	280					299											**370**	**18**
19	413	246		376	453	787	243					402											**417**	**19**
20	298	160		261	275	618	156				222	296											**286**	**20**
21	169	155	222	213	189	292	148				148	296	182										**201**	**21**
22	206	148		169			148		264			333											**211**	**22**
23	154	106		212																			**157**	**23**
24	347	399		402	444	315	334	326			326	611	444										**395**	**24**
25	385	432	503	366	412	655	388				490	368											**444**	**25**
26	484	366		745	669	456		445															**528**	**26**
27		337	290	662		378						432											**420**	**27**
28	300	300		216			80																**224**	**28**
29	174	198	297			162						360											**238**	**29**
30	164	174	267		273	174	48	202					356										**207**	**30**
31		248	123		199	172		164	236		110	124											**172**	**31**
	213,7	**169**	**163**	**267**	**235**	**287**	**139**	**198**	**247**	#####	**119**	**220**	**173**	#####									**192**	

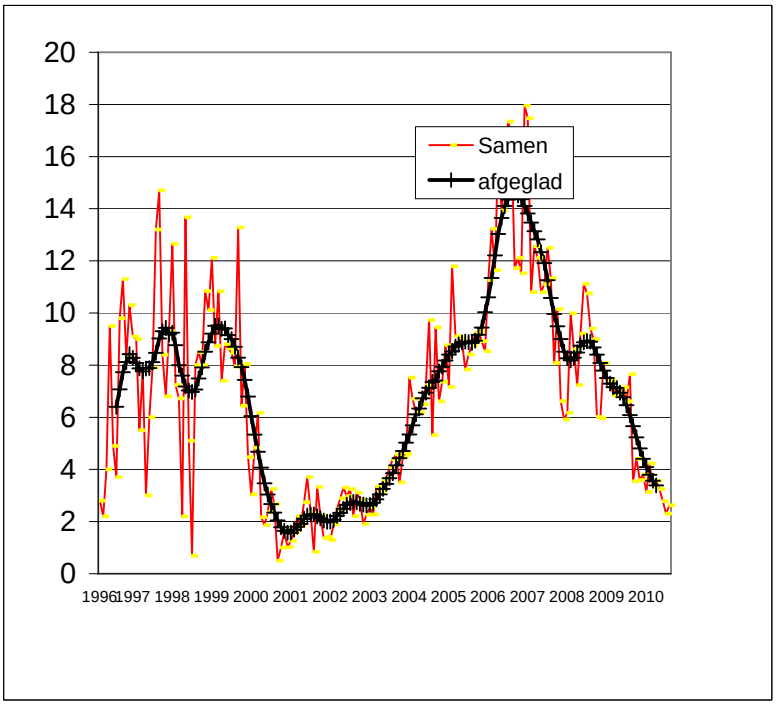
Belgian Solar Observers

Polar Faculae

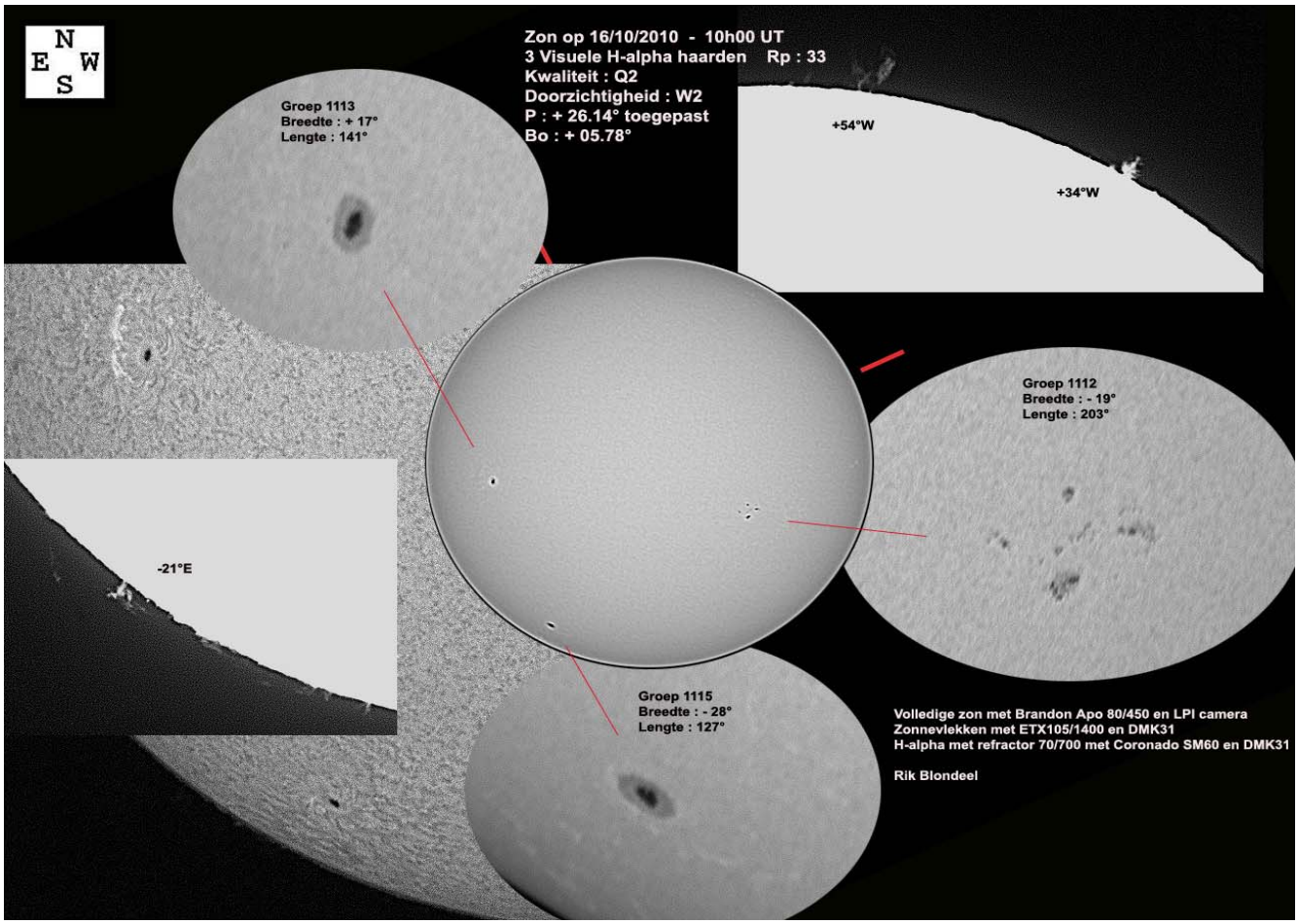
Month: October 2010

Date	Dubois 125mm F20			Steen 102mm F15			T.Spaninks 127mm F15			G.Gubbels 114mm F7,8			J.Carels			Janssen 200mmF10			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										4	1	3.5									
2																					
3				0	0	3,0	0	0	4	2	1	3.5				1	0	3	9	6	
4	3	0	3																		
5	3	1	3							5	1	4.5									
6																			6	2	
7																					
8				2	2	3,5				6	0	4.5							9	2	
9				3	2	3,5				5	2	3.5				0	0	3			
10				3	1	3,5	0	0	3	5	1	3						2	8	3	
11							0	0	3	3	0	2.5	0	0	3				13	3	
12				1	0	3,5	0	0	3	5	2	3.5	1	1	3				15	3	
13							0	0	4	4	2	2.5									
14																					
15																			11	2	
16							0	0	4												
17	6	3	3				3	1	4	4	0	3							9	2	
18	6	1	3							4	0	3							8	3	
19							0	0	4	5	0	4									
20										4	2	3.5									
21										3	1	4	2	0	4				13	7	
22																					
23																			6	3	
24	8	3	4							5	2	3.5				0	0	3			
25										3	1	3.5									
26										3	1	3									
27										5	1	3									
28																					
29										3	1	2.5									
30	1	3	3							3	0	3.5							6	6	
31				0	0	3,5	0	0	4	4,0	1,0	3.5							5	2	
	4,50	1,83		1,50	0,83		0,3	0,1		4,0	1,0		1,00	0,33		0,33	0,00		9,08	3,38	##

Obs of M.Szulc are not included in the monthly average !



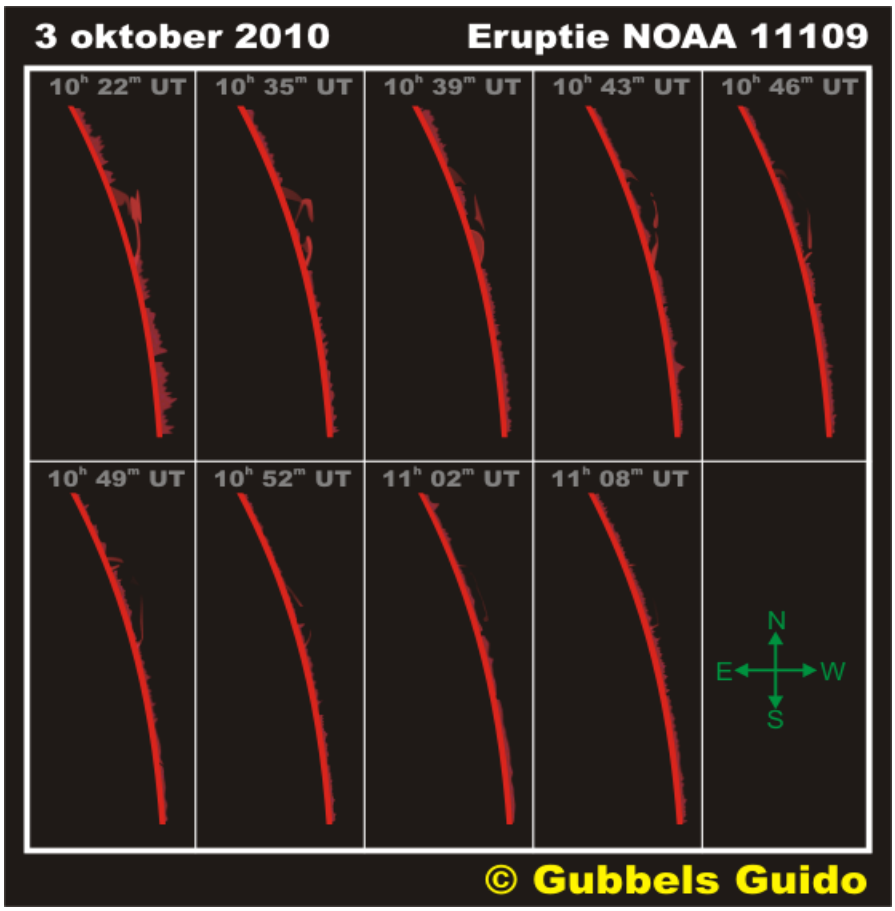
N.O.A.A.	ZICHTBAAR		N.O.A.A.		MAX	MAX	classificatie							
Regio	van	tot	breedte	lengte	AREA	LENGTE	Macintosh							
11112	09-10-10	20-10-10	S19	202	0180	12	HRX	CRO	DRO	DSI	EAI	CSO	HSX	
11113	13-10-10	26-10-10	N17	141	0160	04	HAX	HSX	CSO	HAV	HSX			
11114	14-10-10	15-10-10	S21	244	0010	02	AXX	BXO						
11115	15-10-10	27-10-10	S28	125	0190	05	HSX	CSO	HSX					
11116	17-10-10	18-10-10	N22	178	0020	02	BXO	AXX						
11117	19-10-10	01-11-10	N22	60	0550	11	HSX	CSO	DSO	DSI	EHI	DKC	DHO	CHO
11118	18-10-10	20-10-10	N16	78	0010	01	AXX							
11119	24-10-10	27-10-10	N24	97	0020	04	BXO	CRO	AXX					
11120	30-10-10	06-11-10	N40	282	0120	13	BXO	CRO	ESO	CAO	BXO	AXX		
11121	04-11-10	10-11-10	S20	207	0090	13	AXX	CRO	EAI	ESI	ERO	EAO	AXX	
11122	06-11-10	10-11-10	N14	262	0030	07	CSO	CAO	DRO	BXO	AXX			
11123	10-11-10	17-11-10	S23	190	0080	06	DRO	DAI	CRO	BXO	AXX			
11124	10-11-10	19-11-10	N14	171	0260	13	DRO	CAO	DAO	DSI	ESI	ESO		
11125	11-10-10	16-11-10	N19	160	0030	05	CRO	BXO	CRO	BXO				

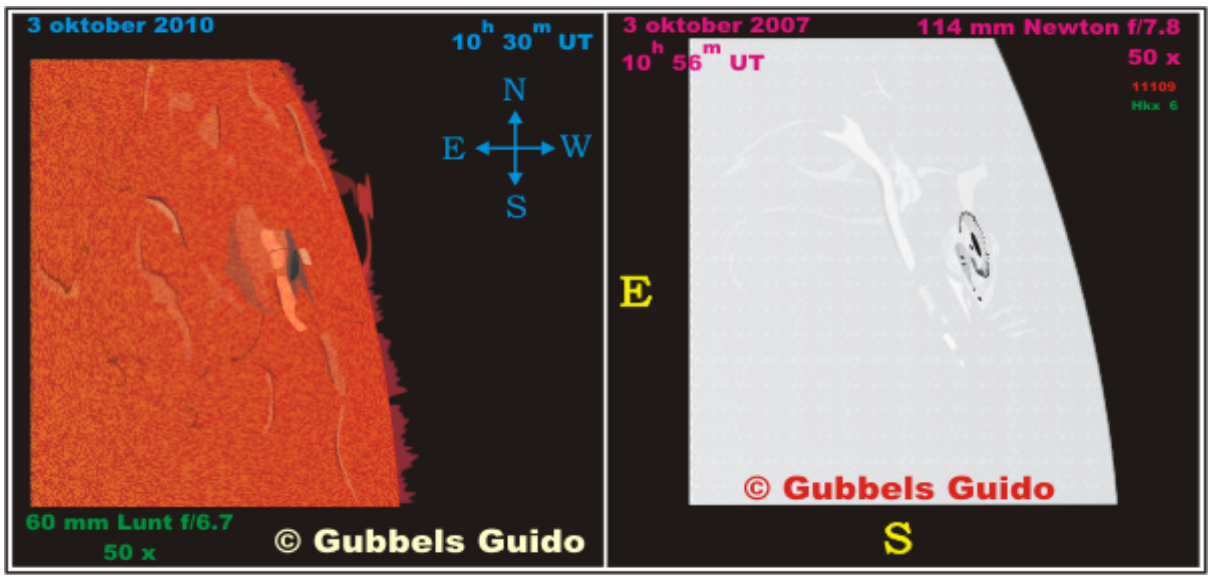


Sunspot activity from organisations all over de world

Month : September 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	**35,6**													**81,1**	
SIDC	**23,5**														
Kanzelhöhe	**21,7**														
G.F.O.E.S France	**21,8**														**0,21**
BSO Belgium	**32,9**	**19,2**	**13,7**	**2,5**		**37,5**	**276**	**34,9**	**15,9**			**78,4**			
S.O.G.S.A.S. Switserland	**29,5**			**2,0**											
BAA	**28,8**			**1,96**							**3,75**		**2,96**		
GsRSI Italy	**39,3**											**80,7**			
CV Helios Network						**34,6**									
AAVSO (Raw mean)															
Sonne Germany Preliminary	**25,2**			**1,80**			**321,0**								
O.A.A. Japan	**28,9**	**16**	**12,9**												
Solar Observer Society TOS Poland	**31,5**				**3,11**	**31,9**				**445**					





SIDC Weekly bulletin on Solar and Geomagnetic activity WEEK 512 from 2010 Oct 18

SOLAR ACTIVITY
Solar activity was low during the whole week.
Only 4 C-flares were produced by active region NOAA11112, mainly on Oct.18 and 19. Thereafter, this active region decayed until it disappeared at the West limb on Oct. 21. A few other H-type spots were present but without any significant flaring activity.
The only other noteworthy solar event was a filament ejection and associated semi-halo CME that took place near central meridian early on Oct. 22.
A trans-equatorial coronal hole passed the central meridian on oct.21 and was probably the source of a geomagnetic disturbance at the end of the week.

GEOMAGNETIC ACTIVITY
Geomagnetic activity was at quiet levels from Oct.18 until Oct.22. During that time period, the solar wind speed remained at a low speed of about 400km/s. Temporary negative excursions of the Bz component of the interplanetary magnetic field caused temporary unsettled conditions on Oct.19.
Then, in the second half of Oct.22, the solar wind speed jumped to 680 km/s, due to a fast solar wind stream associated with the above-mentioned coronal hole. This caused unsettled to active geomagnetic conditions during two days, on Oct. 23 and 24, with short minor geomagnetic storm intervals mainly on Oct. 23.
By the end of the week, the solar wind speed was slowly declining and the geomagnetic activity decreased to unsettled levels.

SIDC Weekly bulletin on Solar and Geomagnetic
WEEK 513 from 2010 Oct 25

SOLAR ACTIVITY
Solar activity was low during the whole week. NOAA AR 1117 was the most active, producing several C-class flares during the week, a C5.7 on Oct 31 was the strongest one. NOAA AR 1119 produced only a C 1.0 flare on Oct 26.
CMEs erupted from the Sun every day of the week, but only one was Earth directed, occurring on Oct 26.

GEOMAGNETIC ACTIVITY
Geomagnetic activity was at quiet to unsettled levels the full week. The CME of Oct 26 arrived on Oct 30 but did not produce any geomagnetic disturbance.

SIDC Weekly bulletin on Solar and Geomagnetic
WEEK 514 from 2010 Nov 01

SOLAR ACTIVITY
Several sunspot groups were observed on the solar disc during the week: Catania numbers 56, 58, 59, and 60 (NOAA ARs 1117, 1120, 1121, and 1122 respectively).
Catania sunspot group 56 (NOAA AR 1117) was observed at the west solar limb on November 1. The strongest flare it produced was a C1.1 flare peaking at 04:43 UT on that day. The sunspot group then disappeared behind the limb.
Catania sunspot group 58 (NOAA AR 1120) was observed throughout the week. It did not produce any flaring activity above the B-level.
Catania sunspot group 59 (NOAA AR 1121, NOAA AR 1112 during the previous rotation) produced the most of the flaring activity during the week: 10 C-flares and 3 M-flares. It emerged from behind the solar east limb on November 4, but it produced 3 C-class flares even before (on November 3), when still located behind the limb. The strongest flare that occurred in this active region was the M5.4 flare peaking at 15:36 UT on November 6. Due to the position of this sunspot group close to the east limb, CMEs associated with flaring activity from this group did not arrive at the Earth and were therefore not geoeffective.
Catania sunspot group 60 (NOAA AR 1122) emerged on November 6. It did not produce any flaring activity until the end of the week.
A filament eruption near the solar central meridian in the southern hemisphere (around S40E15) was observed by SDO/AIA between 01:00 UT and 02:00 UT on November 3. It was accompanied by coronal dimmings and a post-eruption arcade. The corresponding CME was detected by SECCHI COR1 and COR2 coronagraphs onboard STEREO (SOHO/LASCO had a data gap). The corresponding ICME arrived at the Earth on November 8.

SIDC Weekly bulletin on Solar and Geomagnetic
WEEK 515 from 2010 Nov 08

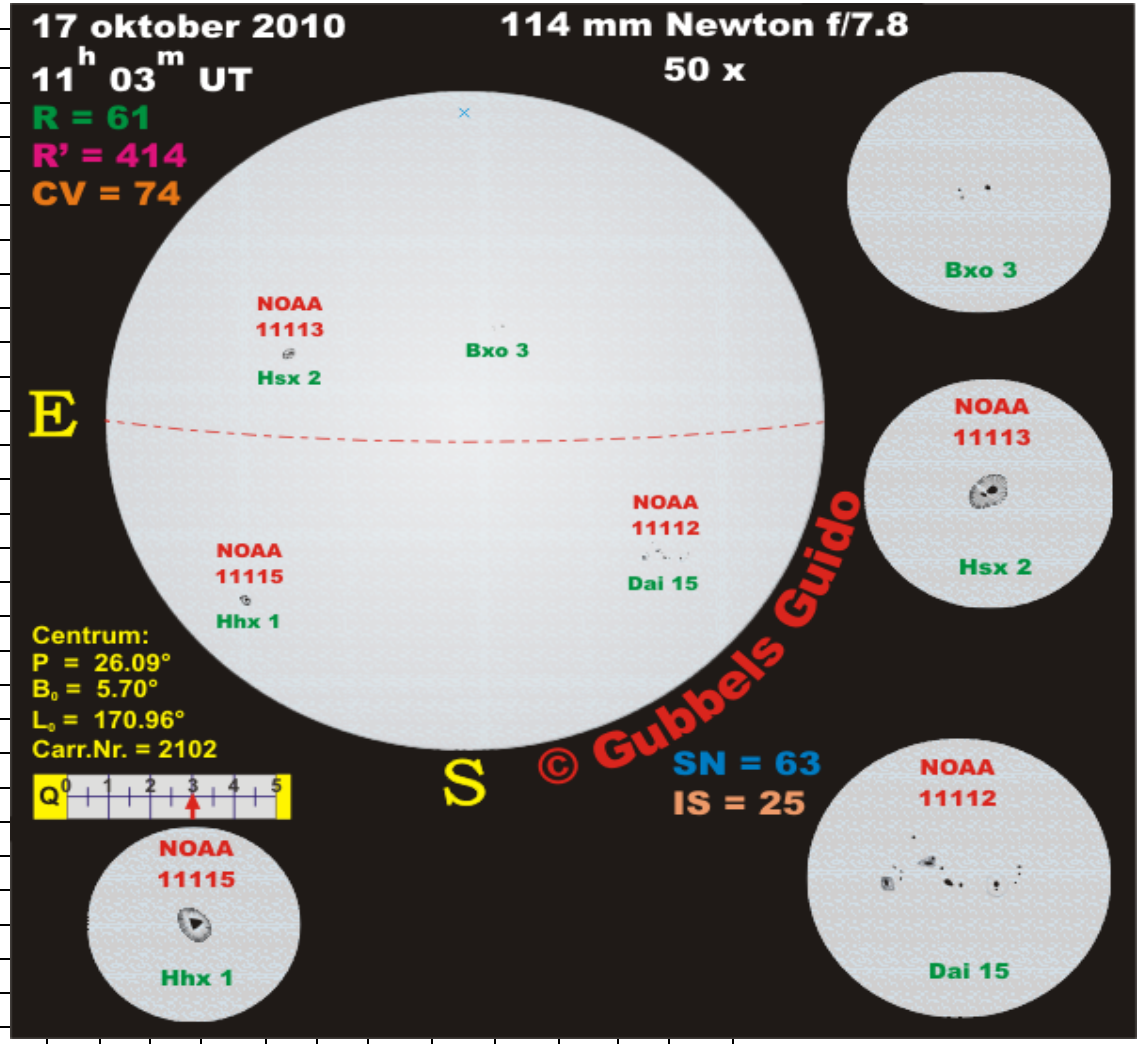
SOLAR CONDITIONS
Solar flaring activity was on B and C flaring level during this week. Two active regions in each others vicinity were responsible for most of this activity: Catania sunspot group 59 (NOAA AR 1121) and group 62 (NOAA AR 1123), which developed strongly on Nov 11 inside the western part of NOAA 1121. At this time GOES X-ray flux showed repeated B and C flares. This must have been related to the magnetic flux emergence as observed in magnetogram movies from HMI/SDO. STEREO images indicated that a halo CME was associated with this activity. This continuous flaring activity remained until noon Nov 13 when solar activity returned to very quiet conditions again.
There were two filament eruptions in the northern hemisphere this week. A filament erupted from the north-east on Aug 8 around 15 UT. The associated CME that is observed in LASCO is not expected to be geoeffective. Another filament erupted early on Nov 13 in the northern hemisphere at central meridian. At first glance the associated CME seems to be directed northward. We expect only a small influence at earth (if there is any influence at all) of this CME.

GEOMAGNETIC CONDITIONS
Geomagnetic conditions have been quiet with active intervals on Nov 11-12. This could have been due to the arrival of CMEs of past solar activity. The IMF oscillated between +10 and -10 nT and the wind speed reached values of around 500 km/s. At around noon Nov 14 the wind speed increased further to 650 km/s.

ACE	Advanced Composition Explorer	http://www.swpc.noaa.gov/ace/MAG_SWEPAM_3d.html
Ap	Equivalent amplitude geomagnetic activity index (0-400)	http://www.swpc.noaa.gov/info/glossary.html#a
AR	Active region	http://www.raben.com/maps/
B	Latitude	
B0	Heliographic latitude of the center of the solar disc	http://www.petermeadows.com/html/sunfromearth.html
BSO	Belgian Solar Observers	http://www.bso.vvs.be/index_en.php
Bz	Measure of the north/south orientation of the IMF perpendicular to the ecliptic plane	http://www.solarcycle24.com/solarwind.htm
C-flare	Small X-ray solar flare	http://spaceweather.com/glossary/flareclasses.html
CH	Coronal Hole	http://solarscience.msfc.nasa.gov/feature3.shtml
CME	Coronal Mass Ejection	http://solarscience.msfc.nasa.gov/CMEs.shtml
CV	Classification Value	http://www.cv-helios.net/
e	Individual prominence structures (“einzel”)	http://users.telenet.be/j.janssens/Halpha/Halfaeng.html#Haarden
E	East	
el.	eliminated	
EUV	Extreme Ultra-Violet	http://en.wikipedia.org/wiki/Electromagnetic_spectrum
f	Number of sunspots (“fleck”)	http://solarscience.msfc.nasa.gov/feature1.shtml#Sunspots
F	Focal ratio	http://en.wikipedia.org/wiki/F-number
g	Number of sunspot groups	http://www.nmm.ac.uk/explore/astronomy-and-time/astronomy-facts/solar-system/sunspots
G	Geomagnetic Storm (level 1-5)	http://www.swpc.noaa.gov/NOAAscales/#GeomagneticStorms
H	Prominence Hearths	http://users.telenet.be/j.janssens/Halpha/Halfaeng.html#Haarden
IMF	Interplanetary Magnetic Field	http://pluto.space.swri.edu/image/glossary/IMF.html
IS	Paderborn Intersol index	http://www.digilife.be/club/Franky.Dubois/sol.htm
ISN	International smoothed Sunspot Number	http://sidc.oma.be/news/106/sunspotnumberclarified.pdf
k-factor	Personal reduction coefficient	http://sidc.oma.be/news/106/sunspotnumberclarified.pdf
keV	Kilo electronvolt	http://nl.wikipedia.org/wiki/Elektronvolt
Km/s	Kilometers/second	
Kp	Geomagnetic activity index (0-9)	http://sidc.oma.be/educational/classification.php#geol http://www.spaceweather.com/glossary/kp.html
L	Longitude	
L0	Heliographic longitude of the apparent center of the sun	http://www.petermeadows.com/html/sunfromearth.html
L1	First Lagrangian Point	http://en.wikipedia.org/wiki/Lagrangian_point
M-flare	Moderate X-ray solar flare	http://spaceweather.com/glossary/flareclasses.html
MDF	Mean Daily Frequency	http://www.britastro.org/~solar/index.php?style=new
MeV	Mega electronVolt	http://nl.wikipedia.org/wiki/Elektronvolt
mm	millimeter	
N	North	
NOAA	National Oceanic and Atmospheric Administration	http://www.noaa.gov/
nT	nanoTesla	http://en.wikipedia.org/wiki/Tesla_(unit)
Obs	Number of Observations	
P	Position angle between the solar axis and the north-south direction in the sky	http://www.petermeadows.com/html/sunfromearth.html
PF	Polar Faculae	http://bso.vvs.be/joinus_en.php
pfu	Particle Flux Unit	http://www.swpc.noaa.gov/info/glossary.html#particleflux
PST	Personal Solar Telescope	
Q	Seeing (SIDC, Mount Wilson)	http://astro.ucla.edu/~obs/150_draw.html
R	Wolfnumber (=10.g + f)	http://en.wikipedia.org/wiki/Wolf_number
R	Radio Blackout (level 1-5)	http://www.swpc.noaa.gov/NOAAscales/#RadioBlackouts
RE’	Becknumber	http://www.digilife.be/club/Franky.Dubois/sol.htm
Rp	Prominence number (=10.H + e)	http://users.telenet.be/j.janssens/Halpha/Halfaeng.html#Getal
S	South	
S	Solar Radiation Storm (level 1-5)	http://www.swpc.noaa.gov/NOAAscales/#SolarRadiationStorms
SC	Solar Cycle	http://solarscience.msfc.nasa.gov/SunspotCycle.shtml
SDO	Solar Dynamics Observatory	http://sdo.gsfc.nasa.gov/data/
SN	Pettisindex	http://www.digilife.be/club/Franky.Dubois/sol.htm
SIDC	Solar Influences Data analysis Center	http://sidc.oma.be/
SOHO	SOlar and Heliospheric Observatory	http://sohowww.nascom.nasa.gov/data/realtime-images.html
StDev	Standard Deviation	http://en.wikipedia.org/wiki/Standard_deviation
STEREO	Solar TERrestrial RElations Observatory	http://stereo.gsfc.nasa.gov/
SWPC	Space Weather Prediction Center	http://www.swpc.noaa.gov/Data/index.html
UT	Universal Time	http://www.timeanddate.com/library/abbreviations/timezones/
VVS	Vereniging Voor Sterrenkunde	http://www.vvs.be/
W	West	
W	Wedel transparency scale	http://users.telenet.be/j.janssens/Halpha/Halfaeng.html#Beeld
X-flare	Strong X-ray solar flare	http://spaceweather.com/glossary/flareclasses.html

Oktober 2010

Groep	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Dag 1	A1	C7	A1											
2		C4	B2											
3		H3	B5											
4		H1	B2											
5			A1											
6														
7														
8	Vlekkenloos !													
9				A1	A2									
10				B2	J2									
11					J3									
12					J2									
13					A1									
14														
15														
16						D7	J1	J1						
17						D7	J1	J1						
18						E7	J1	J1						
19						B5	J2	J3	A1	J1				
20						A1	J2	H1	A1	J1				
21							J2	H1		J1				
22							J2	J1		J1				
23							J1	J1		C4				
24							J1	J1		E13				
25							J1	J1		E14	B2			
26								J1		E13	A1			
27								J1		E12				
28										E12				
29										D11				
30										D9		B3		
31										H5		B7		



Deze tabel is afkomstig van Octaaf Steen uit Ardooie en toont heel duidelijk het verloop van de aktiviteit doorheen de maand . Horizontaal zie je het aantal groepen per dag , de clasificatie van Waldmeier en het aantal vlekken . Vertikaal kan je de evolutie volgen die de groep doormaakt tijdens zijn passage op de zonneschijf.