



# SOLAR BULLETIN

Astronomical Society of Southern Africa, Solar Section

Hi Solar friends,

**Hi Solar friends,**

As the emphasis in the ASSA group is on observations in the different sections, we in the solar group want to develop a professional platform for you the observer where you can participate in national and international solar observations.

Observations are used to calculate a monthly Southern African sunspot number and are published in the report section of this bulletin. A two monthly report on observations will be send to MNASSA for publication.

Solar observations are still an open field in Southern Africa amateur astronomy and we like to invite you to become part of the ASSA solar section.

Information on how to become involved in solar observations can be obtained from the solar section of ASSA at: [Jacques@bloemwater.co.za](mailto:Jacques@bloemwater.co.za)

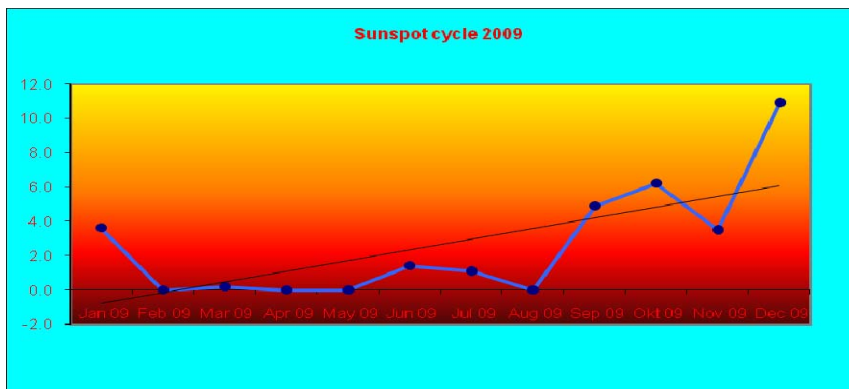
*Keep looking at the sunny side of life,  
It keeps the shadows behind you!*

Regards,

Jacques van Delft  
Director solar section  
ASSA, Southern Africa

Solar observations December2009

December 2009	DMF	DEVJ	KNJS	BARH	VERA	SCGL
1	0.0	0	0			0
2	0.0	0	0			
3	0.0		0			0
4	0.0		0	0		0
5	0.0		0	0	0	
6	0.0	0	0			
7	0.0	0		0	0	0
8	0.0		0	0		
9	0.0	0	0	0		0
10	0.0	0				0
11	2.8		14		0	
12	5.2		14	12		
13	3.0		15			0
14	11.0		35	20		
15	12.0		32	28		34
16	13.6		41	27		16
17	14.6	23		25	25	17
18	11.2		33		23	24
19	16.0	13	45		22	25
20	6.0		30			
21	15.8		50	29		0
22	9.6		48			0
23	7.4		37	0	0	26
24	0.0		0	0	0	0
25	0.0		0	0		
26	0.0		0			0
27	3.2		16			
28	7.2	15	21			22
29	10.0	17	20		13	14
30	7.8	15	24			
31	7.6	15	23			
<b>MMF=</b>	<b>10.9</b>	<b>8.2</b>	<b>17.8</b>	<b>10.1</b>	<b>9.2</b>	<b>9.4</b>



Month:	Space weather						
	BZ+	BZ-	Prot	Vel	X Ray	KP	Press
December							
2009							
	2	-1	1	275	A1	00000000	3
	0	-0	0.7	250	A1	00000000	5
	10	-7	7	400	A6	00101021	3
	5	-1	6	430	A0	21000000	3
	5-	-3	5	380	A0	10001011	4
	3	-1	2	320	A0	00000000	4
	2	-2	1	315	B2	00000000	5
	2	-2	2	285	C1	00001001	4
	4	-1	3	280	A0	00000000	2
	5	-3	6	300	A0	00000001	3
	-2	-3	5	280	B1	00111000	4
	5	-6	8	285	B3	03220100	4
	5	-4	3	290	B2	00000001	4
	5	-3	4	410	B8	00010100	5
	3	-2	3	380	B1	00000000	4
	6	-1	5	440	C5	00110000	5
	2	0	0.9	445	C1	00000000	6
	4	-3	4	400	B2	00001100	3
	3	-3	8	393	C3	00100001	5
	4	-2	10	417	C7	00000011	7
	3	-2	14	360	C7	01100001	8
	4	-1	5	440	A8	11000001	5
	2	-7	10	350	A9	00000122	4
	3	-3	4	420	B3	12100100	4
	3	-2	4	320	B6	00111100	7
	2	-2	4	360	A2	00010000	5
	1	-1	2	340	A8	00000000	5
	1	-1	2	280	B2	00000000	8
	3	-4	4	310	B2	00000000	4

Monthly Remarks:

The sun is definitely coming out of its long minimum cycle after this month sharp increase in the sunspot number. Solar flares also increase up to the higher C-class flares. The solar wind stayed to moderate speeds. Geo magnetic activities are decreasing slightly.

Clear skies,

Jacques van Delft  
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