

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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Table I. American Relative Sunspot Numbers (Ra) for September 2004 [boldface = maximum, minimum]

Day	N	Raw Mean	Ra
1	47	16	12
2	38	16	12
3	41	27	21
4	41	33	26
5	37	50	39
6	41	54	40
7	42	70	51
8	34	71	52
9	34	82	60
10	39	72	55
11	34	63	47
12	43	64	49
13	44	69	49
14	29	62	43
15	38	65	46
16	32	59	43
17	36	59	44
18	34	52	39
19	46	45	34
20	39	42	31
21	36	36	26
22	41	26	19
23	35	20	15
24	35	14	11
25	34	20	15
26	36	22	17
27	37	21	16
28	32	16	12
29	29	36	28
30	32	45	32
31	---	---	---

Means: 37.2 44.3 32.8

Total No. of Observers: 61

Total No. of Observations: 1116

Table II. September 2004 Observers

13	AAP	P.Abbott
30	ARAG	G.Araujo
9	BARH	H.Barnes
4	BATR	R.Battaiola
18	BEB	R.Berg
15	BERJ	J.Berdejo
5	BLAJ	J.Blackwell
21	BMF	M.Boschat
12	BOSB	B.Bose
26	BRAB	B.Branchett
28	BRAR	R.Branch
20	BROB	R.Brown
4	CAMP	P.Cambell
30	CHAG	G.Morales
29	CKB	B.Cudnik
18	CLZ	C.Laurent
19	COMT	T.Compton
26	CR	T.Cragg
25	DEJV	J.van Delft
4	DELS	S.Delaney
12	DGP	G.Dyck
10	DPP	P.dePonthiere
27	DRAJ	J.Dragesco
24	DUBF	F.Dubois
13	FEEC	C.Feehrer
26	FLET	T.Fleming
21	FUJK	K.Fujimori
12	GOEM	M.Goetz
9	HALB	B.Halls
12	HAYK	K.Hay
19	HRUT	T.Hrutkay
12	JAMD	D.James
22	KAPJ	J.Kaplan
28	KNJS	J&S Knight
5	KQR	R.Kinne
12	KROL	L.Krozel
9	LARJ	J.Larriba
17	LERM	M.Lerman
19	LEVW	M.Leventhal
15	MARE	E.Mariani
29	MARJ	J.Maranon
22	MCE	E.Mochizuki
5	MEU	E.Mason
27	MMI	M.Moeller
16	OBSO	IPS Observatory
25	RITA	A.Ritchie
23	SCGL	G.Schott
3	SDP	D.Sharples
15	SIMC	C.Simpson
19	STEM	G.Stemmller
26	STQ	N.Stoikidis
25	SUZM	M.Suzuki
26	SZUM	M.Szulc
26	TESD	D.Teske
24	THR	R.Thompson
21	TJV	J.Temprano
26	URBP	P.Urbanski
20	VARG	A.Vargas
7	VELM	M.Velea
24	WILW	W.Wilson
27	YESH	H.Yesilyaprak

Reporting Addresses

Sunspot Reports -- email: solar@aavso.org
postal mail: AAVSO, 25 Birch St. Cambridge, MA 02138
FAX (AAVSO): (617) 354-0665

SID Solar Flare Reports -- email: noatak@aol.com
postal mail: Mike Hill
114 Prospect St. Marlboro, MA 01752

Table III. Means of Raw Group Counts (RG) and Ratios of Spots to Groups (S:G) in September 2004

Day	RG	S:G	Day	RG	S:G	Day	RG	S:G	Day	RG	S:G
1	1.3	1.9	9	4.4	8.7	17	2.5	14.0	25	1.7	2.2
2	1.3	2.0	10	4.0	7.9	18	2.4	11.4	26	2.0	1.3
3	2.0	3.4	11	3.5	8.1	19	2.5	8.5	27	1.8	1.4
4	2.3	4.0	12	3.3	9.1	20	2.2	9.1	28	1.4	1.6
5	3.5	4.2	13	2.9	13.6	21	2.0	7.9	29	3.0	1.9
6	3.3	6.2	14	2.0	20.9	22	1.4	9.3	30	3.7	2.4
7	3.6	9.5	15	2.6	15.1	23	1.3	5.2	31	---	---
8	3.3	11.4	16	2.3	15.7	24	1.2	2.3	Mn.	2.5	7.3

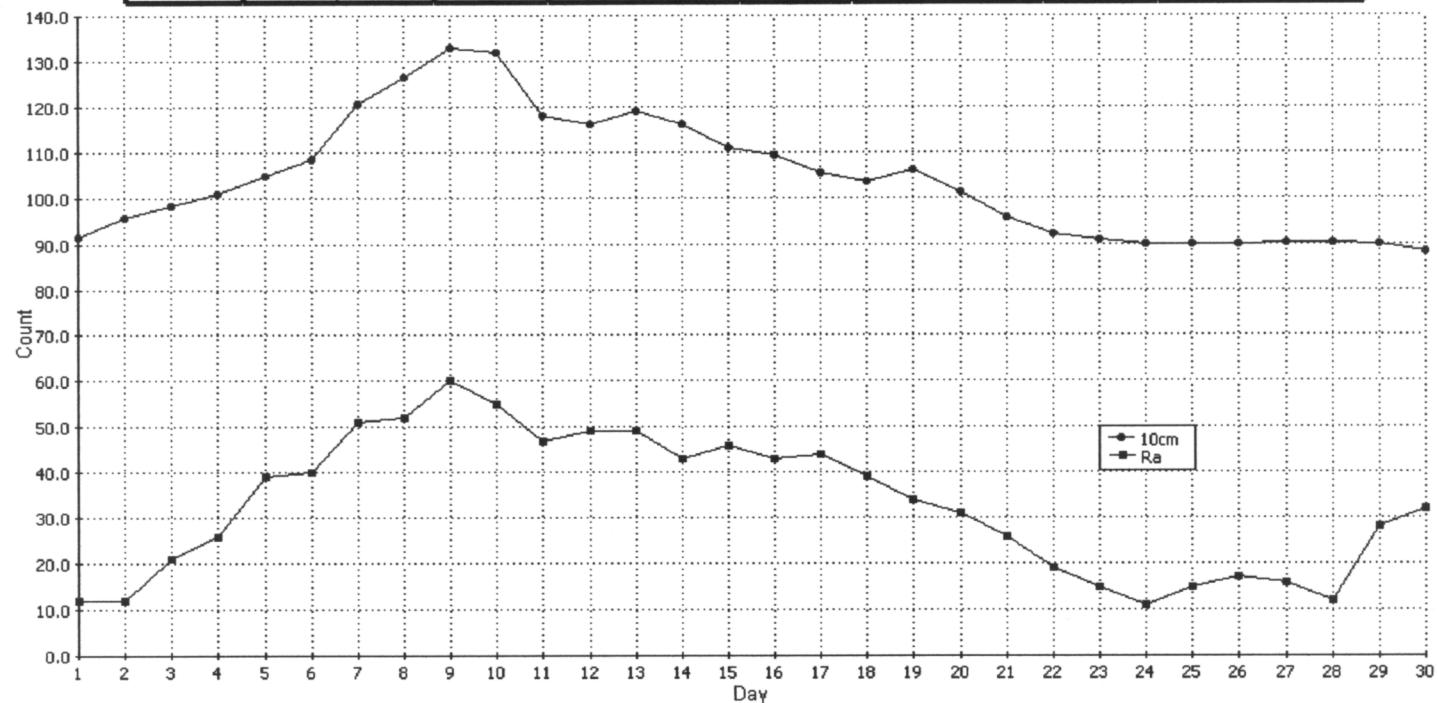


Fig. 1. 10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for September 2004

10 cm source: <http://www.drao.nrc.ca/icarus>

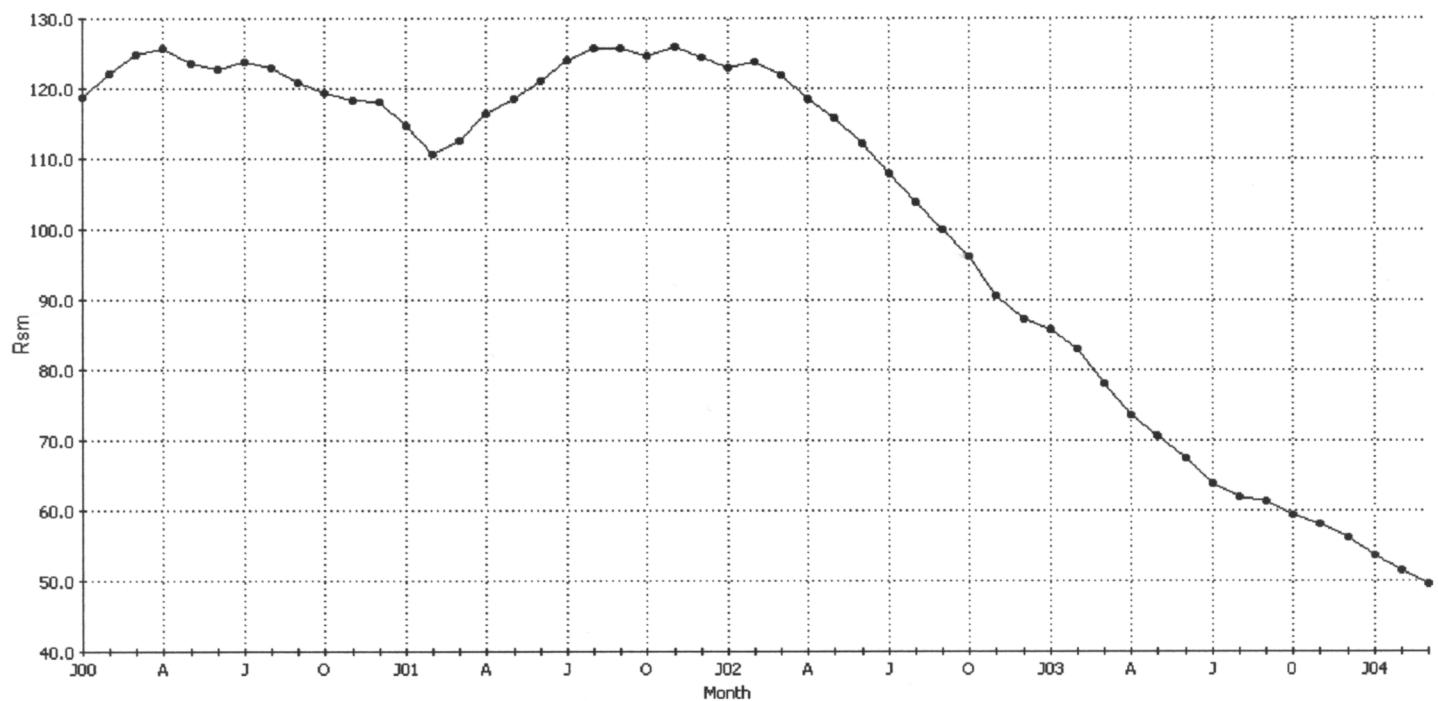
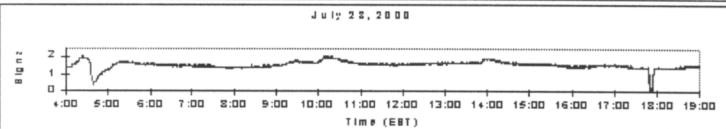


Fig. 2. Smoothed Mean Sunspot Numbers (Waldmeier method) from January 2000 to March 2004.

Sudden Ionospheric Disturbance Report

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Sudden Ionospheric Disturbances (SID) Recorded During September 2004

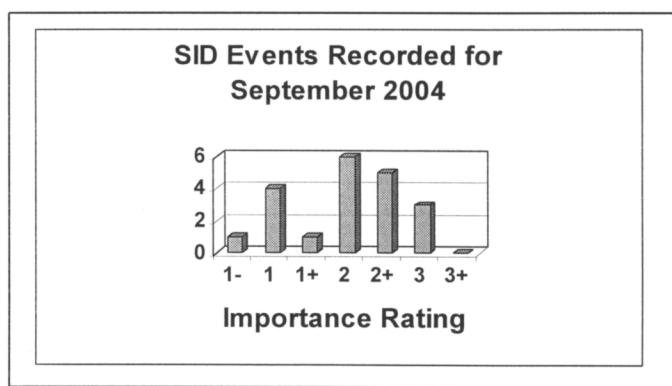
(Analysis performed by Michael Hill, SID Analyst)

Importance rating : Duration(min)

The events listed above meet at least one of the following criteria:

- 1) Event reported by two or more observers within ± 5 minutes
 - 2) Event matched to GOES-8 XRA event to within ± 15 minutes and event time < 1000 UT
 - 3) reported by observer with a quality rating ≥ 8 (scale 1-10)

<u>Observer</u>	<u>Code</u>	<u>Station(s) monitored</u>
A Clerkin	A29	NAA
J Winkler	A50	NAA NML NPM
J Ellerbe	A63	ICV
P King	A80	FTA
W Moos	A84	FTA
M Hill	A87	NAA
J Mandaville	A90	NPM
G DiFillipo	A93	DHO HWU
T Poulos	A95	NAA
R Battaiola	A96	HWU
J Wallace	A97	NAA
M King	A99	HWU
F Steyn	A102	NAA
P Mortfield	A108	NAA



Solar Events

September was a very slow month for SID Monitoring. A radical change from the last two months but more in line with what is to be expected in this part of the solar cycle. There were only 20 correlated SID events recorded this month. Many were longer duration events however with importance ratings falling primarily in the 2, 2+ and 3 range. The X-Ray flare count was low as well. As can be seen from the chart below there were far fewer flares recorded last month totalling only 111. Of these, only four were M-Class events and there were no X-Class events.

The observer count fell from the usual 18-19 observers down to 16 last month. Hopefully this trend will not continue as activity decreases but I know there are those of you I can count on to continue submitting reports, even if they are reports of non activity indicating you are still watching. Thank to all of you who have submitted.

This month observer awards are going to be issued to some of you for your continued efforts and dedication. The criteria for the awards has been determined by me to be the submission of data for 40 months which amounts to an average of 10/year for four years. Eight observers will receive awards this year. These awards will be given out each year for those that reach this milestone. There will certainly be more of you which will meet this criteria next year. Thanks again for all your efforts.

Solar Flare Summary Based on GOES-12 Data

