

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

Carl E. Feehrer, Editor
9 Gleason Rd.
Bedford, MA 01730



Email: cfeehrer@hotmail.com

ISSN 0271-8480

Volume 61 Number 8

August 2005

Table I. American Relative Sunspot Numbers (Ra) for August 2005 [boldface = maximum, minimum]

Day	N	Raw Mean	Ra
1	38	89	68
2	40	91	67
3	41	70	51
4	35	66	51
5	42	63	47
6	41	53	40
7	39	57	43
8	42	55	42
9	31	49	36
10	37	27	21
11	31	29	22
12	33	33	25
13	29	28	20
14	36	37	27
15	35	38	28
16	38	33	25
17	39	27	20
18	39	32	25
19	37	63	46
20	37	65	45
21	39	63	47
22	38	55	41
23	31	59	44
24	41	56	42
25	32	61	45
26	29	55	41
27	31	67	51
28	40	62	47
29	36	59	45
30	31	45	34
31	29	38	28

Means: 36.0 52.4 39.2

Total No. of Observers: 60

Total No. of Observations: 1117

Table II. August 2005 Observers

17 AAP P.Abbott	1 KROL L.Krozel
27 ARAG G.Araujo	6 LARJ J.Larriba
4 ARE R.Allessi	4 LERM M.Lerman
14 BARH H.Barnes	25 LEVM M.Leventhal
18 BATR R.Battaiola	20 MARE E.Mariani
23 BEB Ray Berg	26 MCE E.Mochizuki
4 BERJ J.Berdejo	19 MENM M.Menegotto
6 BLAJ J.Blackwell	2 MEU M.Mason
17 BMF M.Boschat	27 MMI M.Moeller
6 BOSE B.Bose	29 OATS S.Oatney
28 BRAB B.Branchett	20 OBSO IPS Observatory
2 BRAM M.Bradbury	11 RICE E.Richardson
31 BRAR R.Branch	6 RIDC C.Ridgway
22 BROB R.Brown	28 RITA A.Ritchie
7 CAMP P.Campbell	30 SCGL G.Schott
29 CHAG G.Morales	17 SCHG G.Scholl
28 CKB B.Cudnik	12 SIMC C.Simpson
14 CLZ L.Corp	19 STEM G.Stemmler
18 COMT T.Compton	31 STQ N.Stoikidis
31 CR T.Cragg	26 SUZM M.Suzuki
27 DGP G.Dyck	24 SZUM M.Szulc
14 FEEC C.Feehrer	28 TESD D.Teske
24 FERJ J.Fernandez	10 THR R.Thompson
26 FLET T.Fleming	21 TJV J.Temprano
21 FUJK K.Fujimori	25 URBP P.Urbanski
10 GOEM M.Goetz	23 VARG A.Vargas
16 HAYK K.Hay	19 VIDD D.Vidican
10 JAMD D.James	29 WILW W.Wilson
6 JENJ J.Jenkins	30 YESH H.Yesilyaprak
25 KAPJ J.Kaplan	
24 KNJS J.Knight	

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 August 2005

Day	RG	S:G	Day	RG	S:G	Day	RG	S:G	Day	RG	S:G
1	5.0	7.8	9	3.8	3.0	17	1.8	4.9	25	3.3	8.7
2	4.5	10.3	10	2.2	2.0	18	2.3	3.8	26	3.0	8.2
3	3.6	9.3	11	2.5	1.8	19	3.9	5.9	27	3.9	7.2
4	3.4	9.3	12	2.3	4.0	20	3.8	7.2	28	4.0	5.4
5	3.2	9.4	13	1.6	7.5	21	3.3	9.2	29	4.2	4.2
6	3.2	6.3	14	1.8	10.7	22	2.3	14.2	30	2.7	6.4
7	3.8	5.1	15	2.0	9.1	23	2.4	14.9	31	2.5	5.2
8	4.0	3.6	16	1.8	8.0	24	3.1	8.2	Mn.	3.1	7.1

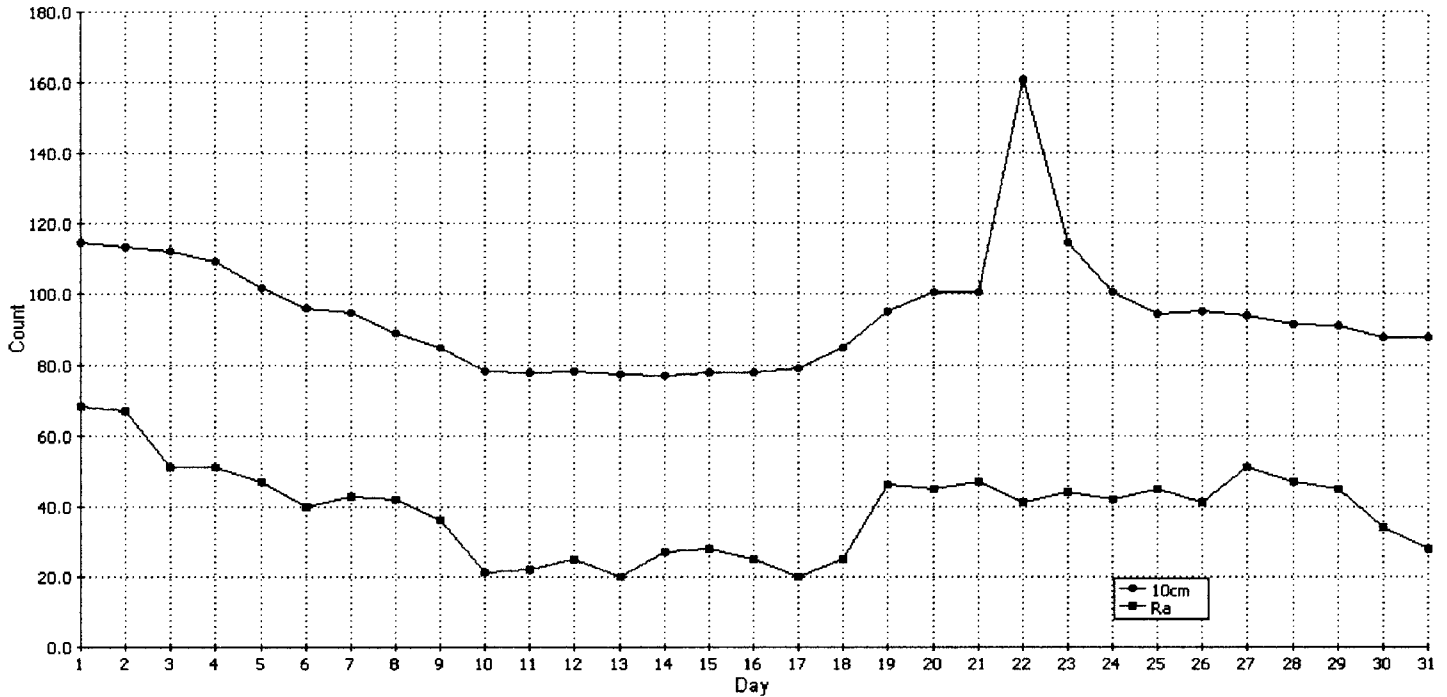


Fig. 1. 10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for August 2005.
10 cm source: <http://www.drao.nrc.ca/icarus>

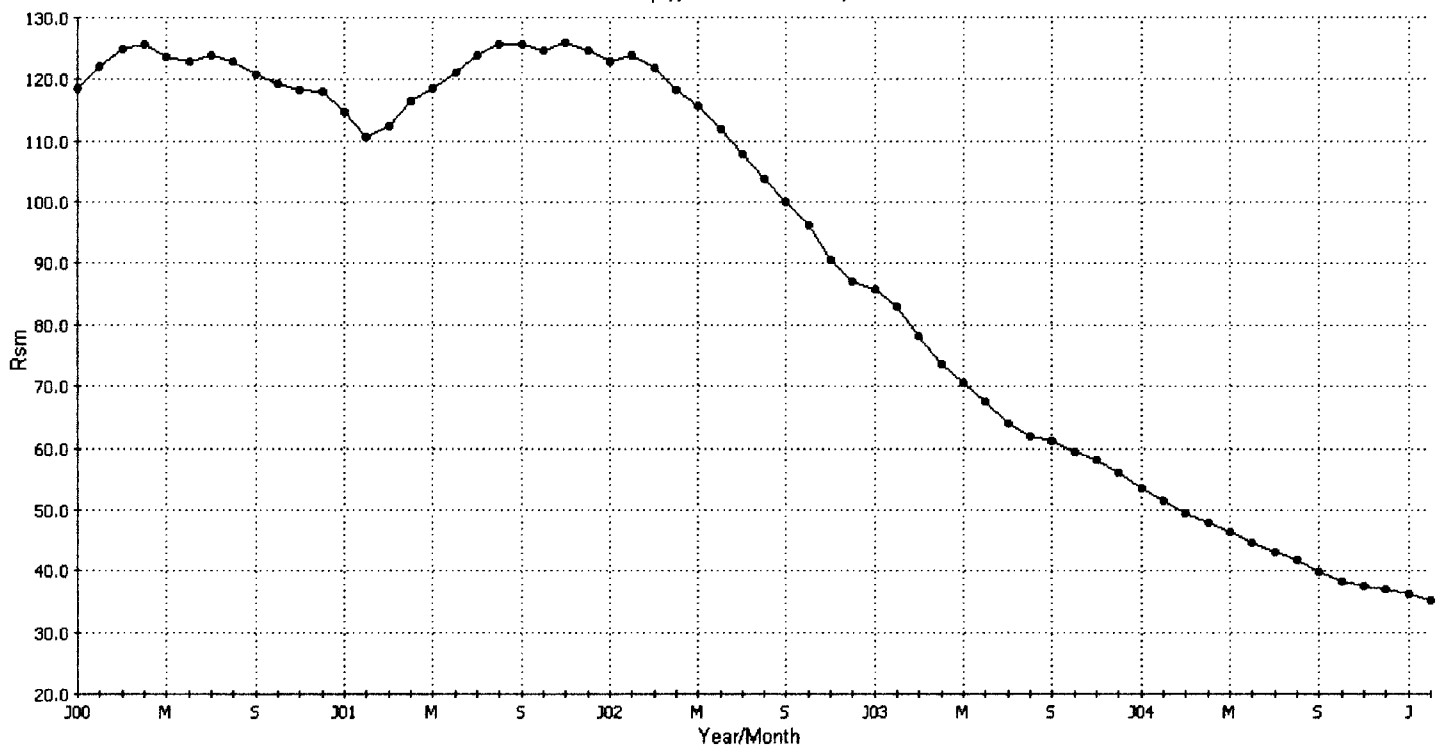
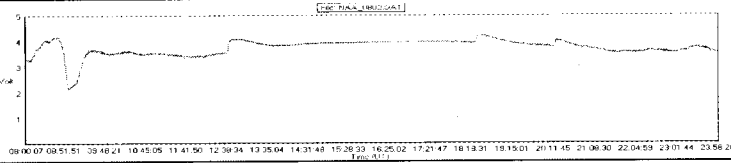


Fig. 2. Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to February 2005 (Waldmeier Method).

Sudden Ionospheric Disturbance Report

Michael Hill, SID Analyst
 114 Prospect St
 Marlborough, MA 01752 USA
 noatak@aol.com



Sudden Ionospheric Disturbances (SID) Recorded During August 2005

(Analysis performed by Michael Hill, SID Analyst)

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
050801	1222	1+	050831	1619	2			
050801	1333	1						
050801	1349	2+						
050802	0746	2						
050802	1247	2+						
050802	1831	2						
050802	2017	1+						
050803	0507	1+						
050803	1357	2						
050803	1405	2						
050803	2107	1						
050804	0559	2						
050804	0610	2+						
050821	1020	2						
050822	0114	2+						
050823	1431	2+						
050823	1437	1+						
050823	1445	2+						
050823	2206	1						
050824	0621	1-						
050824	0640	1						
050824	0706	1+						
050825	0442	1+						
050828	1026	2						
050829	2155	2+						

Importance rating: Duration (min) 1-: <19 1: 19-25 1+: 26-32 2: 33-45 2+: 46-85 3: 86-125 3+: >125

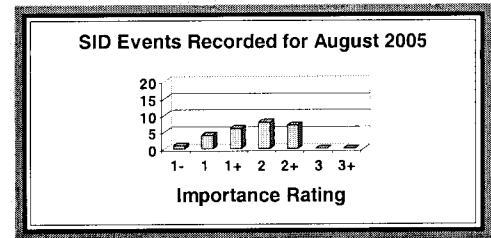
Observer	Code	Station(s) monitored
A Clerkin	A29	NAA NAU
J Winkler	A50	NAA NML NPM
D Toldo	A52	NWC XXX
J Ellerbe	A63	ICV
M Hill	A87	NAA
J Mandaville	A90	NPM
L Anderson	A91	NWC
G Di Filippo	A93	DHO HWU
T Poulos	A95	NAA
R Battaiola	A96	HWU

Observer	Code	Station(s) monitored
J Wallace	A97	NAA
M King	A99	HWU
P Campbell	A100	NLK
G Bressan	A101	HWU
F Steyn	A102	NAA NWC
L Observatory	A107	DHO
P Mortfield	A108	NAA
T Bjorndahl	A116	NML

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)

Solar Events



August was a fairly slow month for SID's. There were only 26 correlated SID events reported by observers and the GOES-12 X-Ray event count was also fairly low. There were 160 X-Ray events. Of these, eight were M-Class events and none were X-Class events. The first half of the month was very slow with a slight rise in activity towards the latter half. Thanks to all of you who submitted reports this month. Your data, as always, is appreciated. I'd like to welcome a new observer, Trent Bjorndahl from Edmonton, Canada. Trent is observer A116 and has just submitted his first report this month.

As I'm sure you will have noticed I have a new format for this report. I have changed the location of the various components so that there will be room for easy expansion in the future without a major disruption to the basic page format in cases where there are more than 75 SID events to report and/or the number of observers increases substantially. The first case will become an issue in a couple of years when we start rising back up to Solar Maximum and the second condition could become an issue anytime depending on the number of observers that submit data. My previous space allotment for the observer list was such that any more than 16 observers had me struggling to get all the names into one logical location. Now I can easily put in up to 28 names and still keep them all on one page.

Solar Flare Summary Based on GOES-12 Data

