

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE



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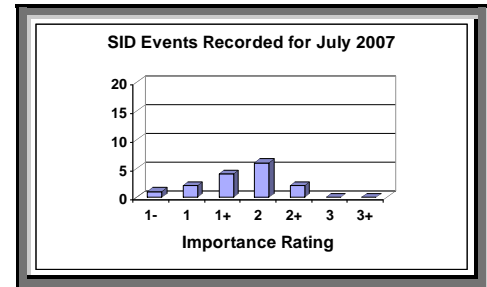
July 2007

In this issue of the bulletin, Mike Hill has contributed an eBook review as part of his SID report below. The book, “How to Build Your own Radio Telescope” should be of interest to those doing radio solar flare detection.

I received a wonderful letter and photos (yes, in the real mail) from Ernest Richardson of Swinton, England who was observing at the right time on July 10th with his Solar Max-40. He reports seeing several flares erupt. This was the first time he witnessed a new flare erupt during an observing session. Congrats Ernest.

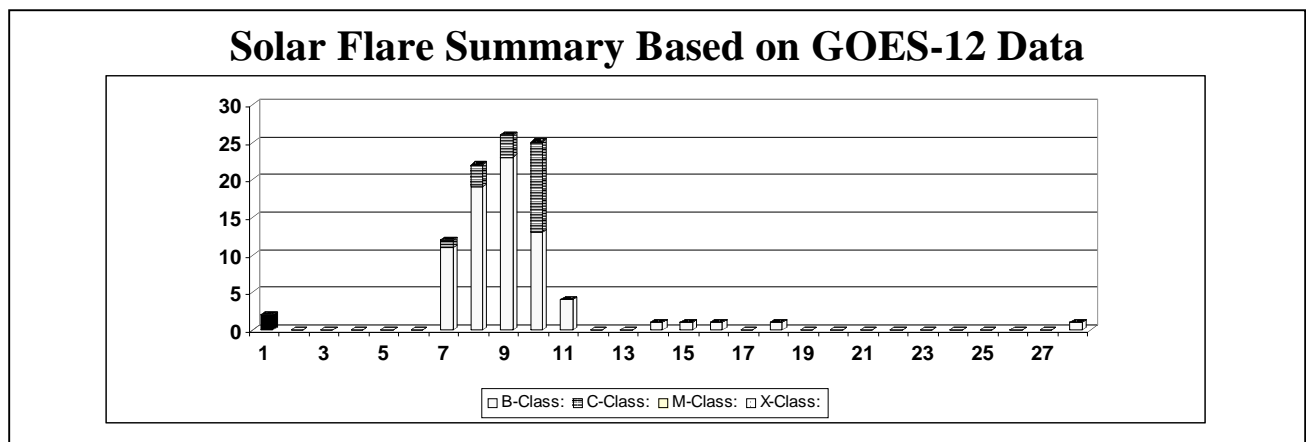
Remember to send me any solar drawings, SID flares or photos for me to include here.

Solar Events



July was a slow month for SID Activity characterized primarily by a burst of activity between the 7th and 11th of July due to sunspot region 963. There were 15 correlated SID events recorded by our observers (a thinner than usual group this month.) Correspondingly the GOES-12 satellite recorded only 96 X-Ray flares, all of them being B-Class or C-Class events. 89 of these occurred between the 7th and 11th.

Last month I was contacted by an individual who does SID monitoring and has written a great eBook on the subject. I have posted a link to his website on the AAVSO SID Program web page in the “Additional Resources” section. Soon after hearing about it I obtained a copy of this book, my first eBook, and I have been very impressed with it. The author has put together a comprehensive single source of information covering all the aspects of SID monitoring. It starts out with some basics about the sun, the causes of the activity we monitor, and how we are able to monitor it. Construction of a VLF receiver and matching loop antenna are covered very thoroughly complete with pictures, schematics and parts lists. Lastly he covers the measurement of signals using a freeware program called **Spectrum Lab** and goes into detail on how to use this with a standard sound card to act as your A/D input and data processor. There are a number of useful appendices including a set of instructions for customizing the operation of Spectrum Lab for generating files that will easily import into the shareware program **SIDGraph** which a number of observers use regularly. I do recommend the book. It is a great reference to have on hand and might even inspire you to do more in the area of Radio Astronomy which is, after all, the kind of astronomy we are doing. The link to the book can be found on the AAVSO SID page <http://www.aavso.org/observing/programs/solar/sid.shtml> under the heading of “Additional SID Resources”.



American Relative Sunspot Numbers (Ra) for
July 2007 [boldface = maximum, minimum]

Day	N	Raw Mean	Ra
1	35	22	16
2	29	15	11
3	26	14	10
4	25	13	10
5	28	13	10
6	31	13	9
7	30	10	8
8	34	15	10
9	26	21	15
10	21	25	19
11	27	24	18
12	30	26	19
13	28	37	28
14	29	36	27
15	35	34	26
16	36	28	20
17	36	16	12
18	30	14	10
19	31	10	7
20	27	0	0
21	29	0	0
22	35	0	0
23	29	0	0
24	36	0	0
25	35	0	0
26	31	0	0
27	33	0	0
28	31	13	9
29	31	13	9
30	28	12	9
31	35	2	1

Means 30.5 13.7 10.1

No. of Observers: 51

Total No. of Observations: 947

Reporting Addresses:

Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO,
49 Bay State Rd. Cambridge, MA, 02138 Fax: 617-354-0665

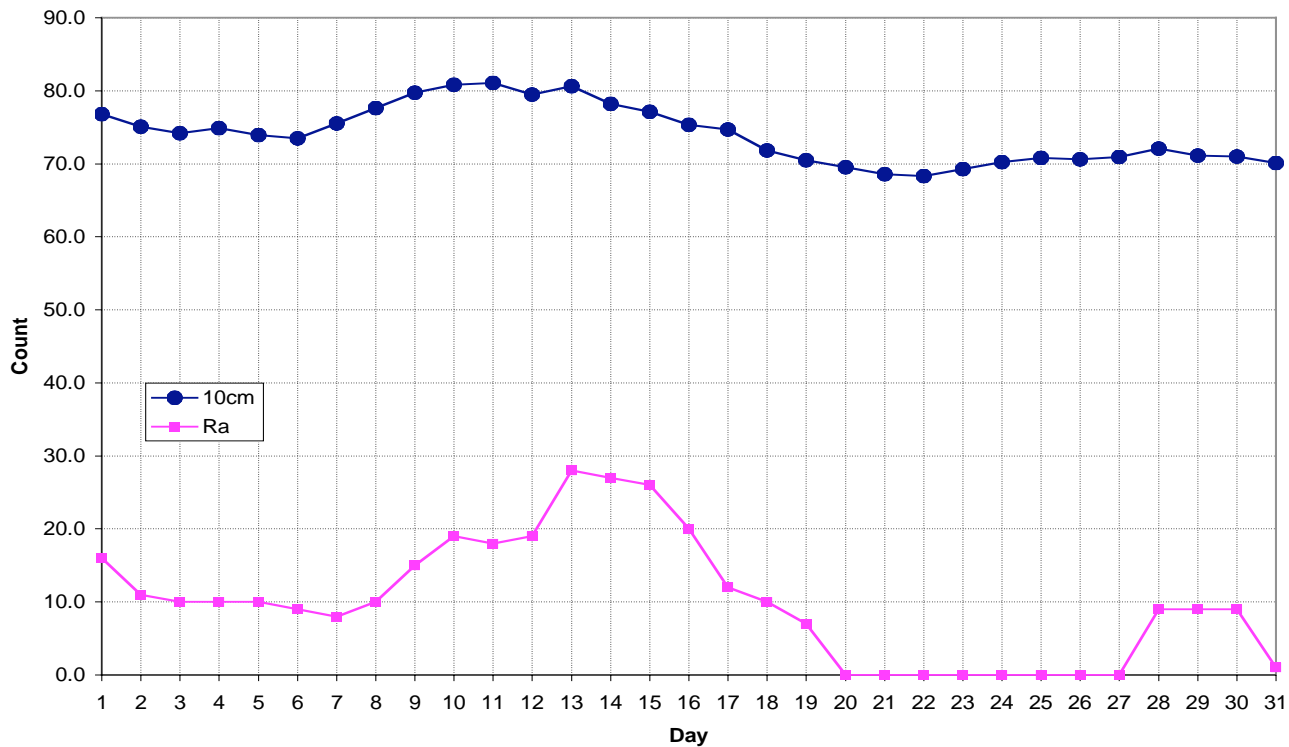
SID Flare Reports – email: noatak@aol.com Postal Mail: Mike Hill,
114 Prospect St., Marlboro, MA, 01752

July 2007 Sunspot Observers

AJV	J. Alonso	27
ARAG	G. Araujo	31
BARH	H. Barnes	14
BATR	R. Battaiola	21
BMF	M. Boschat	19
BRAR	R. Branch	31
BROB	R. Brown	29
BVC	A. Buck	31
CHAG	G. Morales	31
CKB	B. Cudnik	23
CLZ	L. Corp	11
CNT	D. Chantiles	10
COMT	T. Compton	18
DEJV	J. van Delft	21
DGP	G. Dyck	17
DUBF	F. Dubois	28
FLET	T. Fleming	25
FUJK	K. Fujimori	20
GFT	F. Gobet	6
HALB	B. Halls	6
HAYK	K. Hay	16
HMQ	M. Harris	6
JENS	S. Jenner	3
KAPJ	J. Kaplan	20
KNJS	J. & S. Knight	10
KROL	L. Krozel	1
KUZM	M. Kuzmin	13
LARJ	J. Larriba	20
LERM	M. Lerman	17
MCE	E. Mochizuki	16
MCHL	L. McHenry	4
MEU	E. Mason	7
MILJ	J. MILLER	20
OATS	S. Oatney	31
OBSO	IPS Observatory	15
PEKT	R. Pektas	31
RICE	E. C. Richardson	17
RITA	A. Ritchie	19
SCHG	G. Scholl	9
SIMC	C. Simpson	12
STEM	G. Stemmler	21
STQ	N. Stoikidis	31
SUZM	M. Suzuki	22
TAKH	H. Takuma	18
TESD	D. Teske	27
TJV	J. Temprano	17
URBP	P. Urbanski	28
VARG	A. Vargas	16
VIDD	D. Vidican	28
WILW	W. Wilson	28
WRP	R. Wheeler	5

10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for July 2007

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



Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to January 2007 (Waldmeier Method)

