

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE



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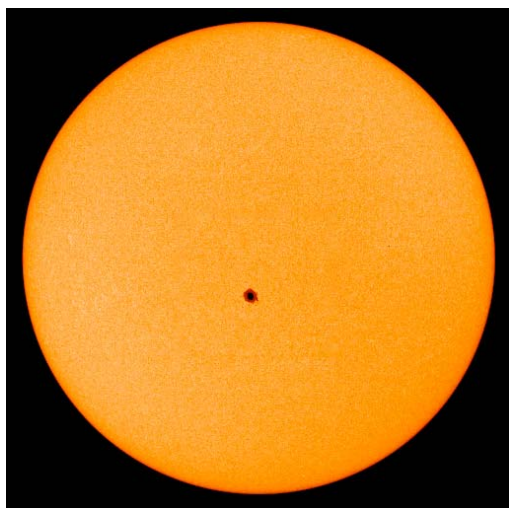
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June was a pretty quiet month for solar activity as will be the trend over the next while. When possible, I'd like to include some imagery produced by members in the bulletin, so I encourage you to send me solar images in white light, H-alpha, CaK, and even drawings. SID observers can also send me a flare plot from your receivers.

Over the upcoming months we'll be making attempts to update the solar group's web presence on the AAVSO site. Here is where we really need images/drawing that can be posted in a more timely fashion as solar events unfold. Also images of members' setups to show the wide range of equipment used from very different locales.



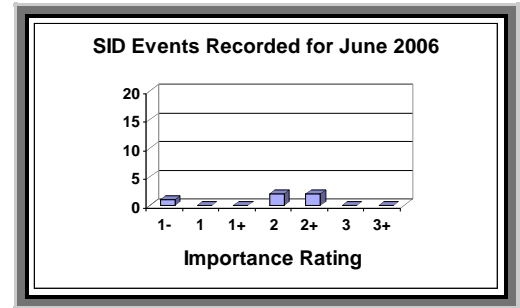
SUNSPOT: It may be hard to see in this full disk image, but just below center is a sunspot. It will be nice to have something to record during this month both visually and by radio with SID. This image is courtesy SOHO/MDI taken on July 3, 2006

Sharing the Sun – A Summertime Event.

With many people taking summer vacations, some of our observers find creative ways to take their scopes with them to continue recording observations. I encourage you travellers to take a moment when possible and share the solar views with members of the public in campgrounds and parks. Most people have never seen the sun or sunspots safely through a telescope. Besides sharing some science with people, you might possibly encourage someone to pursue a budding interest further.

Have a Happy and Safe Summer

Solar Events



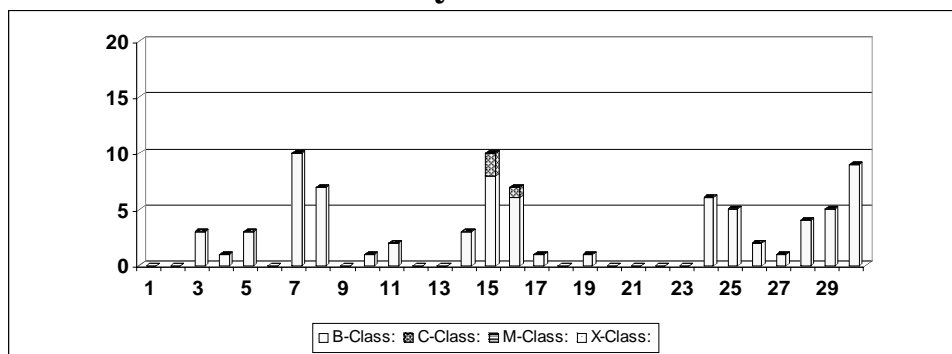
Another slow month but more active than last! We had 5 correlated SID events instead of three and all but one were in the medium importance category. There were only sixty nine X-Ray flares recorded by the GOES-12 satellite and of these only three were C Class events with the rest in the B Class. One can see from the data below that the activity peaked around the 7th, 15th and the 27th. There were no SID events recorded during the third period at the end of the month but although the event count was high for those days, none of the X-Ray flares recorded reached a level greater than B5. Thanks to all of you who reported in, including those whose names do not appear on the list above due to reports of “no activity.”

Do you sometimes wonder what the various classes of X-Ray flares really mean? Thanks to the glossary section from the spaceweather.com web site the following should make it a bit clearer. The Class rating relates to the power of the flare in watts per meter squared (W/Meter²)

X-Ray Solar Flare Classification

B	$P < 10^{-6}$
C	$10^{-6} \leq P < 10^{-5}$
M	$10^{-5} \leq P < 10^{-4}$
X	$10^{-4} < P$

Solar Flare Summary Based on GOES-12 Data



American Relative Sunspot Numbers (Ra) for
June 2006 [**boldface = maximum, minimum**]

June 2006 Sunspot Observers

Day	N	Raw Mean	Ra
1	31	7	4
2	19	1	0
3	25	3	2
4	35	17	12
5	30	24	16
6	33	31	23
7	32	55	38
8	28	49	34
9	26	43	31
10	31	41	30
11	30	30	23
12	28	25	18
13	26	24	17
14	28	17	11
15	24	17	11
16	28	8	5
17	30	12	8
18	32	16	11
19	29	18	13
20	26	19	13
21	29	6	5
22	24	1	0
23	28	0	0
24	26	1	0
25	22	14	9
26	23	16	11
27	27	25	18
28	25	38	26
29	31	38	28
30	32	37	25

Means **27.9** **21.1** **14.7**

Total No. of Observers: 52

Total No. of Observations: 838

Reporting Addresses:
Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO, 25 Birch St. Cambridge, MA, 02138 Fax: 617-354-0665
SID Flare Reports – email: noatak@aol.com Postal Mail: Mike Hill, 114 Prospect St., Marlboro, MA, 01752

ARAG	G. Araujo	28
BARH	H. Barnes	12
BATR	R. Battaiola	15
BEB	R. Berg	12
BERJ	J. Berdejo	11
BLAJ	J. Blackwell	3
BMF	M. Boschat	7
BRAB	B. Branchett	24
BRAD	D. Branchett	18
BRAM	M. Bradbury	2
BRAR	R. Branch	28
BROB	R. Brown	29
BYG	Y. Brovarets	23
CAMP	P. Campbell	6
CHAG	G. Morales	30
CKB	B. Cudnik	29
CLZ	L. Corp	18
COMT	T. Compton	16
DEMF	F. Dempsey	4
FERJ	J. Fernandez	19
FLET	T. Fleming	25
FUJK	K. Fujimori	19
GOEM	M. Goetz	14
HALB	B. Halls	9
HAYK	K. Hay	12
JAMD	D. James	18
KAPJ	J. Kaplan	26
KNJS	J.& S. Knight	28
KROL	L. Krozel	1
LARJ	J. Larriba	6
LERM	M. Lerman	6
MCE	E. Mochizuki	12
MENM	M. Menegotto	5
MEU	E. Mason	1
MMI	M. Moeller	23
OATS	S. Oatney	28
OBSO	IPS Observatory	17
PEKT	R. Pektas	26
RICE	E. Richardson	19

RITA	A. Ritchie	14	TESD	D. Teske	30
SIMC	C. Simpson	17	TJV	J. Temprano	10
STEF	G. Stefanopoulos	1	VARG	A. Vargas	25
STEM	G. Stemmler	25	VIDD	D. Vidican	11
STQ	N. Stoikidis	27	WILD	D. Williams	9
SUZM	M. Suzuki	20	WRP	R. Wheeler	7
SZUM	M. Szulc	13			

Fig. 1. 10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for June 2006
 10 cm source: <http://www.drao.nrc.ca/icarus>

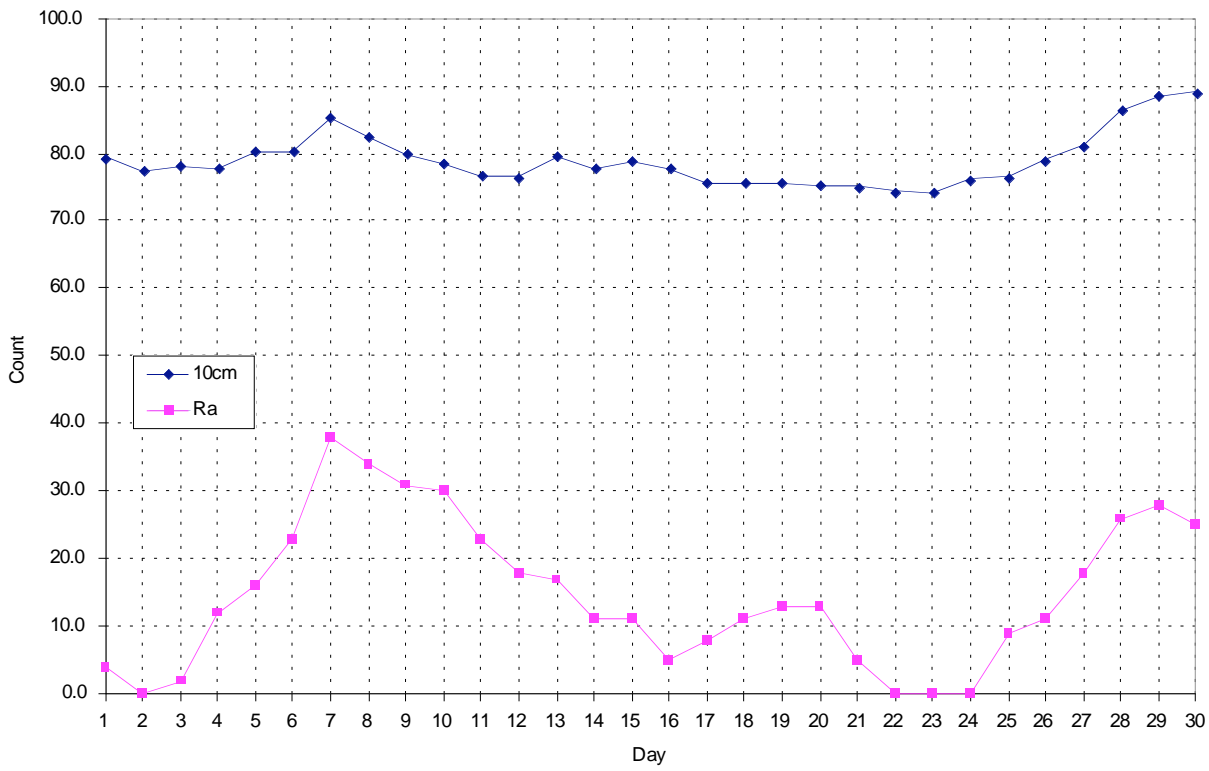


Fig. 2. Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to December 2005 (Waldmeier Method).

