Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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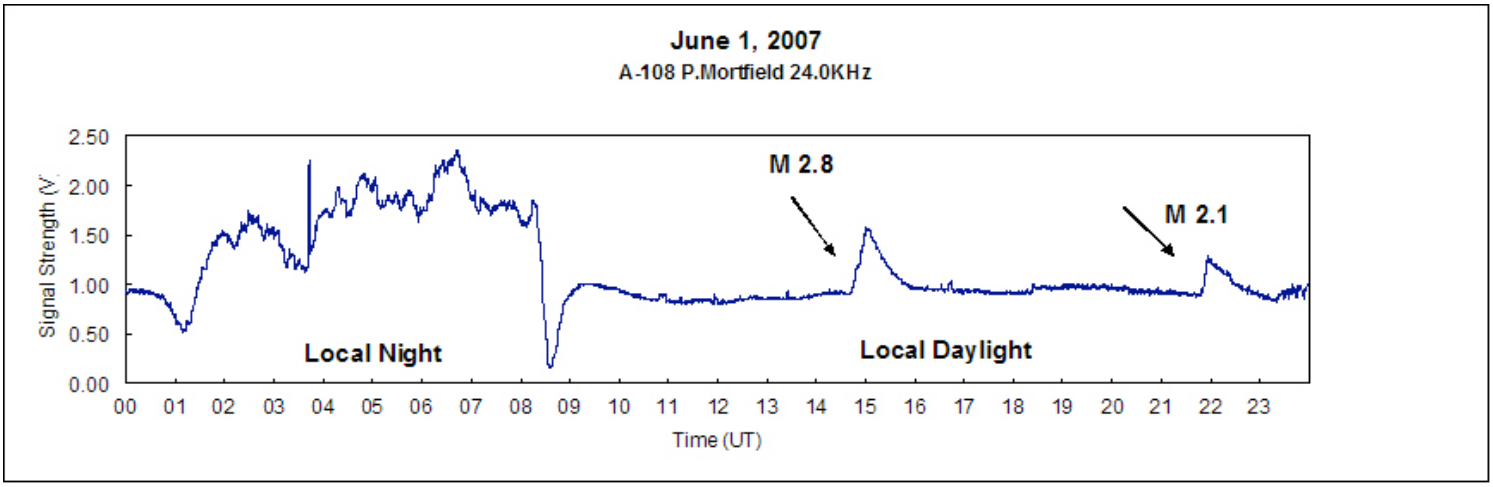
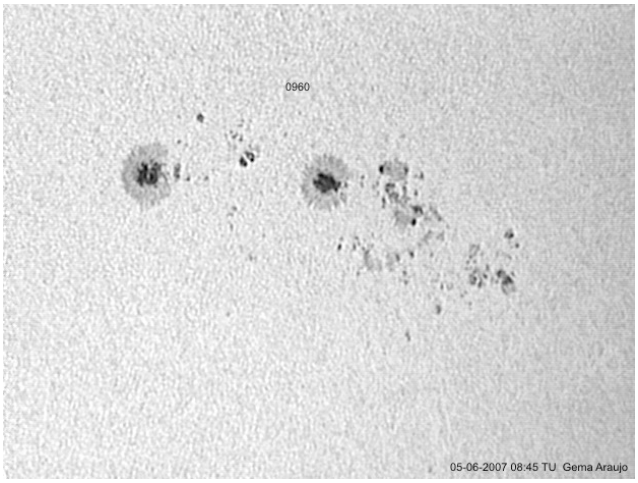


The above plot is from my SID receiver on June 1. Several observers were able to capture these M-class events.



Gema Araujo's solar image on June 5, 2007 at 08:45UT of AR 10960. The M-class flares recorded above came from this group when it was still on the solar limb. It developed into a great active region as it came around the disk as seen in this photograph.

Remember to send me any solar drawings, SID flares or photos for me to include here. There's one person who's been sending in solar photos, but unfortunately there's no name or contact info, so please let me know who you are so I can give due credit in the images.

Sudden Ionospheric Disturbance Report

Michael Hill, SID Analyst
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Marlborough, MA 01752 USA
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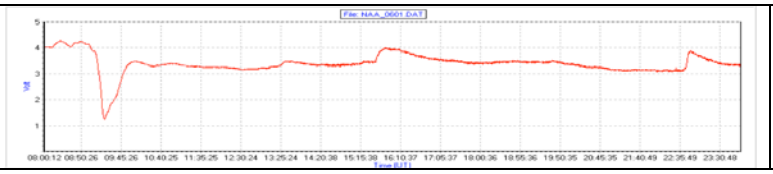


Sudden Ionospheric Disturbances (SID) Recorded During June 2007

(Analysis performed by Michael Hill, SID Analyst)

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
070601	0658	1						
070601	1233	2						
070601	1443	2+						
070601	1457	2+						
070601	2157	2						
070602	0611	2						
070602	1035	2						
070603	0641	2						
070603	0928	2						
070604	0514	2+						
070604	0946	1+						
070605	1613	2+						
070606	1726	2						
070607	0646	2						
070607	0802	1						
070607	1048	2						
070608	0844	2+						
070608	1238	1-						
070608	1432	2+						
070609	0942	2						
070609	1340	2+						
070609	1347	2+						
070610	1112	1+						

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

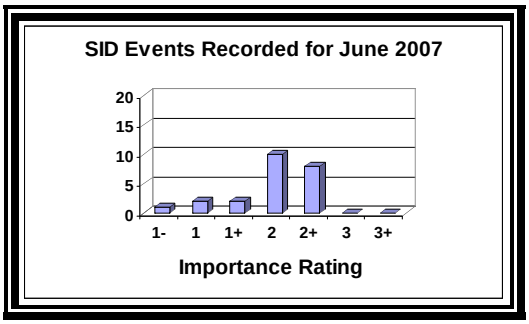
Observer	Code	Station(s) monitored
A Clerkin	A29	NAA
D Toldo	A52	FQE
M Hill	A87	NAA
G Di Filippo	A93	DHO
R Battaiola	A96	HWU
J Wallace	A97	NAA
P Campbell	A100	NLK
F Steyn	A102	NAA
L Observatory	A107	DHO
P Mortfield	A108	NAA

Observer	Code	Station(s) monitored
K Hubal	A117	NAA NML
L Loudet	A118	DHO
J Godet	A119	GQD HWU ICV

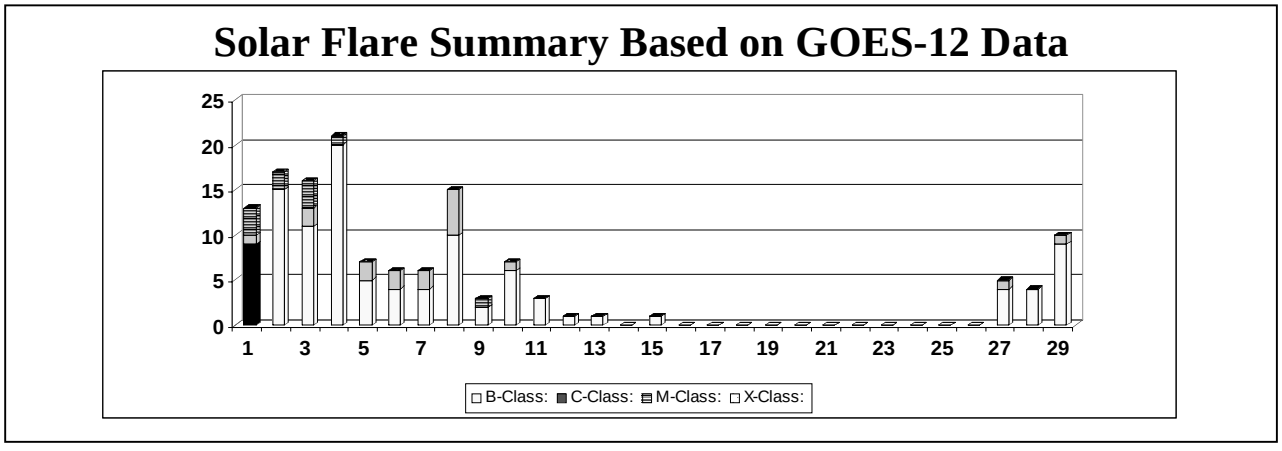
The events listed above meet at least one of the following criteria

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



June was really quite an active month for SID Monitoring. There were 23 Correlated SID events reported by observers and most of these were of medium importance rating. For the first time in many months I have a GOES-12 summary graph (below) that has a scale that goes beyond 20! Month to month I keep it at twenty as a minimum so that one can judge the activity level with just a glance. I increment in blocks of five as needed. June 4th was the most active of the days and was part of a week long surge of activity that lasted just beyond the first week of the month. By the numbers, there were 136 X-Ray flares recorded by the GOES 12 satellite. Of these, 17 were C Class and 9 were M Class. Although most of the month following the early burst of activity was very quiet, activity levels did begin to pick up again at the end.



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

Day	N	Raw Mean	Ra
1	32	30	20
2	28	41	28
3	28	47	35
4	35	44	33
5	34	53	38
6	29	51	36
7	35	58	**40**
8	34	42	29
9	29	19	14
10	34	16	11
11	33	14	10
12	32	13	9
13	34	10	8
14	25	1	1
15	39	0	**0**
16	29	0	**0**
17	35	0	**0**
18	30	0	**0**
19	34	0	**0**
20	33	0	**0**
21	35	0	**0**
22	32	1	**0**
23	33	0	**0**
24	35	0	**0**
25	33	10	7
26	39	12	8
27	34	13	9
28	31	18	12
29	32	27	18
30	32	27	19
Means	**32.6**	**18.2**	**12.8**

No. of Observers: 56

Total No. of Observations: 978

Reporting Addresses:

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

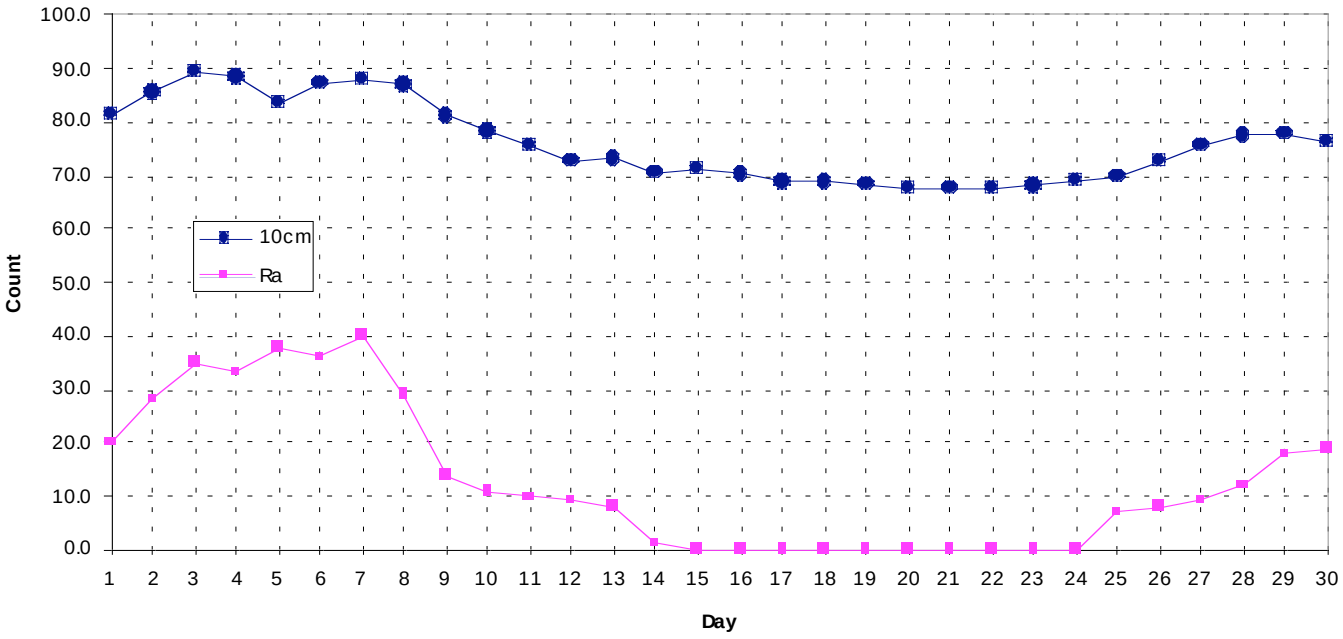
SID Flare Reports – email: noatak@aol.com Postal Mail: Mike Hill, 114 Prospect St., Marlboro, MA, 01752

June 2007 Sunspot Observers

AAP	A. Abbott	20
AJV	J. Alonso	19
ARAG	G. Araujo	29
BARH	H. Barnes	10
BATR	R. Battaiola	10
BERJ	J. Berdejo	16
BMF	M. Boschat	15
BRAB	B. Branchett	29
BRAD	D. Branchett	24
BRAM	M. Bradbury	1
BRAR	R. Branch	29
BROB	R. Brown	30
BVC	A. Buck	30
BYG	Y. Brovarets	31
CAMP	P. Campbell	1
CHAG	G. Morales	30
CKB	B. Cudnik	28
CLZ	L. Corp	9
COMT	T. Compton	19
DEJV	J. van Delft	15
DGP	G. Dyck	14
DUBF	F. Dubois	25
FERJ	J. Fernandez	22
FLET	T. Fleming	18
FUJK	K. Fujimori	21
GFT	F. Gobet	11
GOEM	M. Goetz	1
JENS	S. Jenner	1
KAPJ	J. Kaplan	26
KROL	L. Krozel	1
KUZM	M. Kuzmin	18
LARJ	J. Larriba	16
LERM	M. Lerman	10
MARE	E. Mariani	19
MCE	E. Mochizuki	21
MCHL	L. McHenry	4
MEU	E. Mason	2
MILJ	J. Miller	1
MMI	M. Moeller	24
OATS	S. Oatney	23
OBSO	IPS Observatory	16
PEKT	R. Pektas	28
RICE	E. C. Richardson	12
RITA	A. Ritchie	11
SCGL	G. Schott	23
SIMC	C. Simpson	15
STEF	G. Stefanopoulis	3
STQ	N. Stoikidis	27
SUZM	M. Suzuki	23
SZUM	M. Szulc	23
TESD	D. Teske	26
TJV	J. Temprano	17
URBP	P. Urbanski	27
VIDD	D. Vidican	23
WILW	W. Wilson	30
WRP	R. Wheeler	1

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

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



Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to December 2006
(Waldmeier Method)