

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

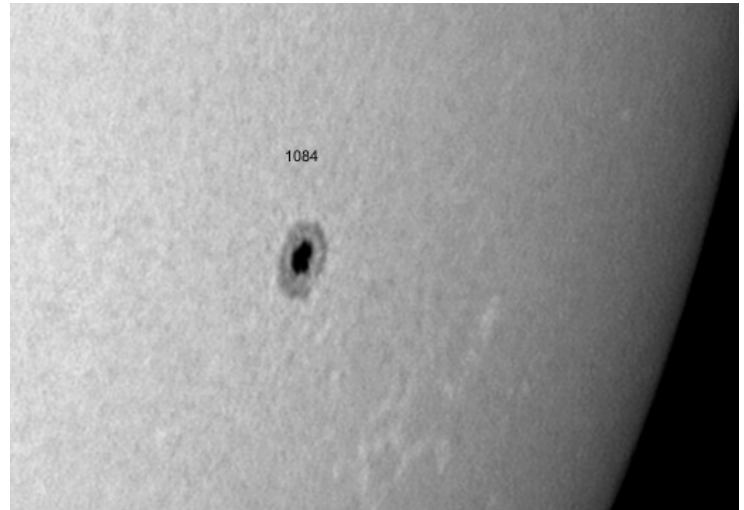
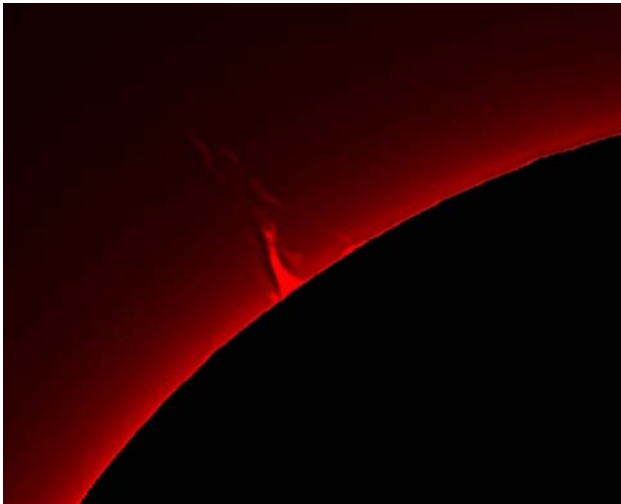


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June images of solar activity include these pair by Gema Araujo of Spain. The image on left taken on June 13 at 08:37UT, and the image on right taken on June 28 at 07:35UT.

Notice to all Sunspot Observers

The data that needs to be submitted to the AAVSO for computations need to be in the correct format, otherwise we are spending extra time re-entering your data into the correct format. Starting with the **July 2010** sunspot submissions, could all observers please use the correct AAVSO format so we can easily process your data. Otherwise, your data may not be included in the reports. Also, once your files are saved, please go in and see if the date in the file is the correct month. If you are a variable star and solar observer, your observing initials are different, please verify that you are using the correct one for your solar observations. If you cannot remember your sunspot observer code, please do not hesitate to contact me. Sunspot reports must be submitted by the **10th day** of the following month to be included in the analysis and Bulletin. Here are the programs that are used in the AAVSO Solar program.

SolObs

<http://www.aavso.org/observing/programs/solar/solarsoftware.shtml>

<http://www.aavso.org/data/software/solarform.txt> the format to be entered as a text file.

We really appreciate your observations and your assistance in reporting your data correctly. Let us know if there are any questions. Thank you for your assistance.

Kim Hay - AAVSO Solar Data Coordinator

Solar Section Chairperson Needed

It is with deep regret that after 4 years of being chair of this section I will have to step down due to increased business responsibilities and travel. A volunteer is needed to step forward and lead the combined solar group and be editor of the monthly solar bulletin. This section has a long history in contributing the monthly American Relative Sunspot Number (Ra) and the Sudden Ionospheric Disturbance (SID) solar flare radio reports. If you can spare 4 hours per month and wish to take on the leadership of this section, please contact me at Paul@theDDO.ca I will be available to assist in the transition over the next several months to get the new chairperson up to speed. Thank You.

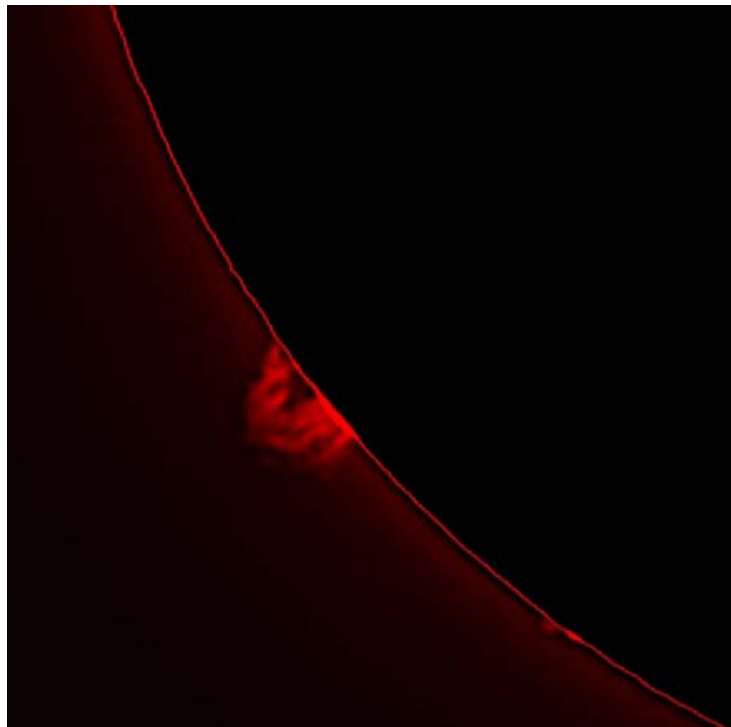
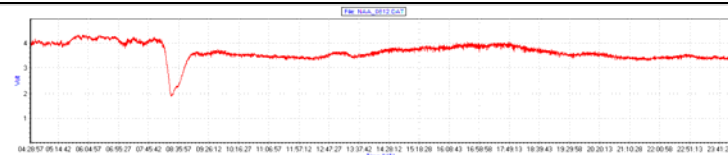


Photo taken by Gema Araujo of Spain on June 18 at 08:03UT

Sudden Ionospheric Disturbance Report

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



Sudden Ionospheric Disturbances (SID) Recorded During June 2010

(Analysis performed by Michael Hill, SID Analyst)

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
100612	0058	1-						
100612	0106	1+						
100612	0354	1-						
100612	0917	2						
100613	0539	2+						
100613	0710	1-						
100613	0811	1-						
100613	0940	2						
100613	0947	1+						
100613	1053	1+						

Importance rating:	Duration (min)	1-: <19	1: 19-25	1+: 26-32	2: 33-45	2+: 46-85	3: 86-125	3+: >125
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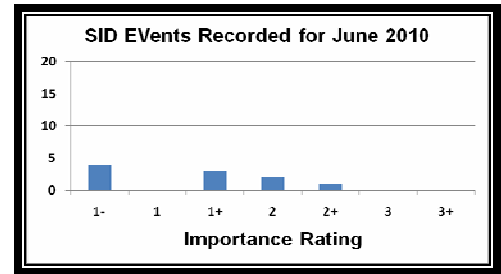
<u>Observer</u>	<u>Code</u>	<u>Station(s) monitored</u>
P King	A80	FTA
R Battaiola	A96	HWU
F Steyn	A102	NAA NWC
L Loudet	A118	ICV
J Godet	A119	GBZ GQD ICV
R Howe	A121	NML
F Adamson	A122	NWC
S Oatney	A125	NML
G Perry	A126	HWU

<u>Observer</u>	<u>Code</u>	<u>Station(s) monitored</u>

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

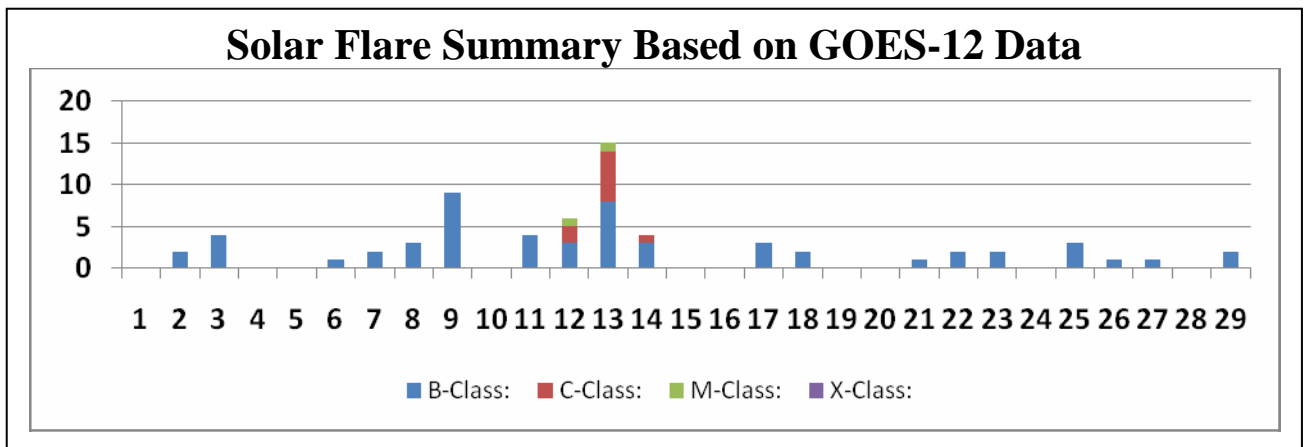
- 1) Event reported by two or more observers within ± 5 minutes
- 2) Event matched to GOES-8 XRA event to within ± 15 minutes and event time < 1000 UT
- 3) reported by observer with a quality rating > 8 (scale 1-10)

Solar Events



Another month and another disappointing round of solar activity. There were 9 Correlated SID events this month to match the unusually low number of X Ray flares. There were a total of 67 flares recorded by the GOES-12 spacecraft. 56 of these were C-Class events and 2 of them were M-Class. The peak of activity was just before Mid month.

All observers that sent in data for June received a request from me for someone to volunteer to take over the position as SID Analyst. Thanks to those of you who offered to take over for me. I am happy to say that we will have a new SID Analyst as of this coming October. I am in the process of training him and getting all the required software passed over and I know your data will be in good hands with a capable and knowledgeable analyst. I have been doing this for ten years now and given the new responsibilities I am taking on with my local astronomy club have decided it is time for me to pass on the task as AAVSO SID Analyst to someone else. I will wait until September to announce who the new Analyst will be so please stay tuned.



American Relative Sunspot Numbers (Ra) for
June 2010 [**boldface = maximum, minimum**]

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

Means **28.7** **15.5** **11.1**

No. of Observers: 50

Total No. of Observations: 862

Reporting Addresses:

Sunspot Reports – Email: solar@aavso.org

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

AAP	A.Abbott	14
AAX	A.Amorim	10
ARAG	G.Araujo	30
ASA	S.Aguirre	13
BARH	H.Barnes	11
BATR	R.Battaiola	10
BEB	R.Berg	12
BERJ	J.Berdejo	11
BMF	M.Boschat	20
BRAB	B.Branchett	30
BROB	R.Brown	25
BVC	A.Buck	30
BXD	A.Burda	11
CHAG	G.Morales	30
CKB	B.Cudnik	26
CLZ	L.Corp	10
CNT	D.Chantiles	9
CVJ	J.Carvajal	12
DELS	S.Delaney	8
DEMF	F.Dempsey	3
DGP	G.Dyck	15
DUBF	F.Dubois	18
FAM	F.Mariuzza	20
FLET	T.Fleming	25
FUJK	K.Fujimori	19
HAYK	K.Hay	18
HMQ	M.Harris	17
JASK	K.Wirkus	18
KAPJ	J.Kaplan	20
KNJS	J.Knight	21
KROL	L.Krozel	1
KUZM	M.Kuzmin	3
LEVM	M.Leventhal	21
MARE	E.Mariani	13
MILJ	J.Miller	22
MMI	M.Moeller	16
OATS	S.Oatney	22
OBSO	IPS.Culgoora	16
RICE	E.Richardson	20
SCGL	G.Schott	29
STQ	N.Stoikidis	23
TESD	D.Teske	27
TJV	J.Temprano	6
URBP	P.Urbanski	24
VARG	A.Vargas	30
VIDD	D.Vidican	10
WILW	W.Wilson	30
WIRP	P.Wirkus	7
WRP	R.Wheeler	1
YESH	H.Yesilyaprak	25