## Solar Bulletin

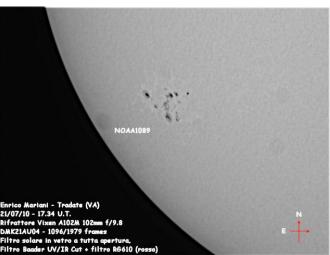


#### THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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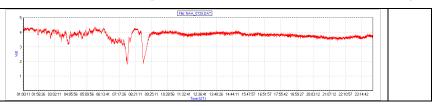
July images of solar activity include these pair by Enrico Mariani of Tradate, Italy. The image on left taken on July 12 at 16:32UT, and the image on right taken on July 21 at 17:30UT.

## **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.

## Sudden Ionospheric Disturbance Report

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## Sudden Ionospheric Disturbances (SID) Recorded During June 2010

Date	Max	Imp	Dat	:e	Max	In	ar	Date	Max	Imp
100709	0900	2			-					
100709	1948	2+								
100713	0837	1								
100713	1052	2+								
100717	1803	2+								
100720	1346	3								
100723	1523	2								
100727	0124	1-								
100728	2043	2								
			İ							

Observer	Code	Station(s) monitored	Observer	Code	Station(s) monitored
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			
·					

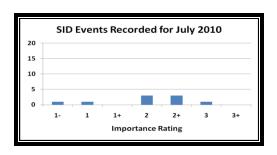
The events listed above meet at least one of the following criteria

<sup>1)</sup> Event reported by two or more observers within  $\pm 5$  minutes

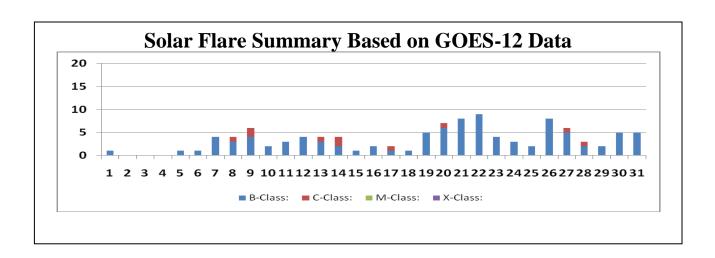
<sup>2)</sup> Event matched to GOES-8 XRA event to within  $\pm 15$  minutes and event time  $< 1000\ UT$ 

<sup>3)</sup> reported by observer with a quality rating > 8 (scale 1-10)

# Solar Events



July was a slow month for SIDs. There were only 9 correlated SID events recorded by observers, although as can be seen by the importance rating chart above some of them were long duration events. There were 107 X-Ray flares recorded by the GOES satellite 97 of them were B-Class events, and 10 of them were C-Class events. Thanks to all of you for submitting reports, even those that had no SID events to report. It is imortant that you keep monitoring because eventually the sun will come to life and you should be ready with working equipment and well tuned systems.



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

Day	N	Raw Mean	Ra
1	35	11	8
2	35	11	8
3	36	11	8
4	35	16	11
5	43	23	17
6	38	20	15
7	38	12	9
8	35	9	7
9	34	9	6
10	28	18	13
11	38	28	19
12	32	29	19
13	34	21	13
14	33	17	11
15	39	19	13
16	35	16	11
17	38	12	9
18	33	15	11
19	32	14	10
20	31	26	18
21	38	29	21
22	31	33	23
23	35	36	25
24	34	38	28
25	30	33	26
26	36	26	18
27	35	18	12
28	32	35	25
29	35	32	23
30	34	26	20
31	34	18	13
Means	34.7	21.4	15.3

Total Observers: 52 Total Observations: 1076

Initials	Name	# of Obs.
AAP	A.Abbott	19
AAX	A.Amorim	22
AJV	J.Alonso	24
ARAG	G.Araujo	31
ASA	S.Aguirre	27
BARH	H.Barnes	13
BEB	R.Berg	25

BERJ	J.Berdejo	15
BMF	M.Boschat	26
BRAB	B.Branchett	30
BROB	R.Brown	31
BVC	A.Buck	31
BXD	A.Burda	21
CHAG	G.Morales	31
CKB	B.Cudnik	24
CLZ	L.Corp	10
CNT	D.Chantiles	12
DELS	S.Delaney	14
DEMF	F.Dempsey	8
DGP	G.Dyck	29
DUBF	F.Dubois	26
FAM	F.Mariuzza	21
FERJ	J.Fernandez	22
FLET	T.Fleming	27
FUJK	K.Fujimori	21
HALB	B.Halls	11
HAYK	K.Hay	16
HMQ	M.Harris	26
JASK	K.Wirkus	21
KAPJ	J.Kaplan	21
KNJS	J.Knight	25
KROL	L.Krozel	1
LEVM	M.Leventhal	29
MARE	E.Mariani	19
MILJ	J.Miller	21
MMI	M.Moeller	25
OATS	S.Oatney	23
OBSO	IPS.Culgoora	12
RICE	E.Richardson	19
RO	J.Rousom	1
SCGL	G.Schott	19
SIMC	C.Simpson	11
STQ	N.Stoikidis	25
TESD	D.Teske	28
TJV	J.Temprano	9
URBP	P.Urbanski	24
VARG	A.Vargas	21
VIDD	D.Vidican	23
WILW	W.Wilson	30
WIRP	P.Wirkus	24
WRP	R.Wheeler	3
YESH	H.Yesilyaprak	29

### **Reporting Addresses:**

Sunspot Reports – Email: <a href="mailto:solar@aavso.org">solar@aavso.org</a> SID Flare Reports – email: <a href="mailto:noatak@aol.com">noatak@aol.com</a> Postal Mail: Mike Hill, 114 Prospect St., Marlboro, MA, 01752