Solar Bulletin

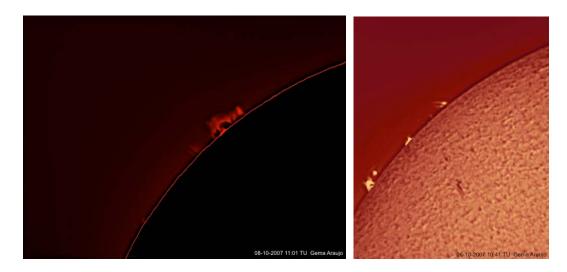


THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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Gema Araujo caught these wonderful solar prominences on October 8, 2007 11:01UT and October 6, 10:41 UT respectively. More of Gema's images can be seen at http://www.astrosurf.com/obsolar/

Solar activity continues to be very low and just when you thought we hit minimum, we continue with low sunspot counts and no SID events recorded. You can also see the X-ray and other flux values at their lowest on the NOAA Spaceweather page. http://www.swpc.noaa.gov/today.html

I got a chance to read a book by Stuart Clark entitled "The Sun Kings, The unexpected tragedy of Richard Carrington and the tale of how modern astronomy began". It is an interesting account of how solar observing played a part in changing our perception leading to the Sun-Earth connection. More intriguing was how several dedicated amateur solar observers were able to make discoveries about the sun and solar cycle. Gema's photo at left was taken just as Carrington rotation 2062 began. Rotation #1 began on November 9, 1853

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

Sudden Ionospheric Disturbance Report

Michael Hill, SID Analyst 114 Prospect St Marlborough, MA 01752 USA noatak@aol.com 02:44:14 04:38:29 06:32:44 08:26:59 10:21:14 12:15:29 14:09:29

Sudden Ionospheric Disturbances (SID) Recorded During October 2007

Date	Max	Imp	Date	Ν	Лах	Imp)	Date	Max	Imp
			1							
				_						
					NO					
				S	IDS					
				Det	ected					
ortance ra	ting: Duration	(min) 1-	: <19 1	: 19-25	1+:26	-32	2: 33-45	2+: 46-8	5 3: 86-125	3+:>
Observer	Code	Statio	n(s) monitor	ed	Obs	server	Cod	e	Station(s) mor	itored
Clerkin A29 NAA					L Loudet A118 DHO					
oldo	A52	NWC			J Gode		A11		GQD ICV	
ing	A80	NAA			1					

DHO P Mortfield A108 NAA The events listed above meet at least one of the following criteria

HWU

NAA

HWU NAA NWC

A96

A97

A99

A102

A107

R Battaiola

L Observatory

J Wallace

M King

F Steyn

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

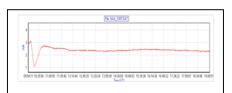
3) reported by observer with a quality rating > 8 (scale 1-10)

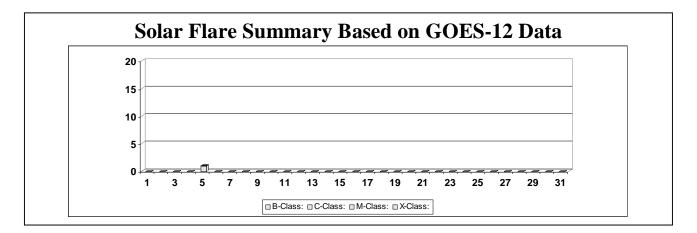


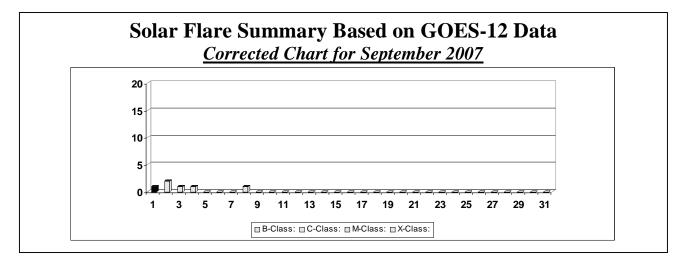
October was very very slow for SID events. There were no correlated events reported by observers and the GOES-12 satellite detected only one event. Do take note of the extra chart below. I somehow got the data for August mixed up with September and the chart was wrong last month. The one below is the correct chart for September 2007.

An odd thing happened to me this month. On October 7th I got a trace with three distinct SID events as can be seen on the upper graph to the right. To my amazement there were no X-Ray flares that day reported by GOES-12. I have no idea what may have caused these events. Maybe GRBs but I find this unlikely because they are so distinct and strong. Oddly enough, my other steup, as shown in the lower chart shows absolutely nothing. Granted this setup is not as sensitive as the other but odd that there is no correlation whatsoever. Any ideas would be appreciated.









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

Day	N	Raw Mean	Ra
1	27	4	3
2	28	1	1
3	25	0	0
4	30	0	0
5	29	4	2
6	33	15	10
7	35	14	10
8	26	2	1
9	29	0	0
10	26	0	0
11	27	0	0
12	31	0	0
13	36	0	0
14	30	0	0
15	36	0	0
16	37	0	0
17	31	1	1
18	32	0	0
19	35	0	0
20	37	0	0
21	38	0	0
22	21	0	0
23	24	0	0
24	24	0	0
25	23	0	0
26	24	0	0
27	26	0	0
28	35	0	0
29	28	0	0
30	30	0	0
31	34	0	0

Means 29.9

1.3

No. of Observers: 57

Total No. of Observations: 927

Reporting Addresses:

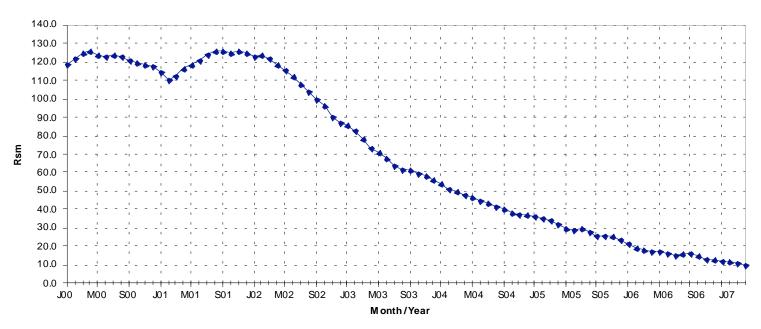
Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO, 49 Bay State Rd. Cambridge, MA, 02138 Fax: 617-354-0665

0.9

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

October 2007 Sunspot Observers

AJV ARAG BARH BATR BEB BEDJ BLAJ BMF BRAD BRAR BRAD BRAR BROB BVC BYG CHAG CKB CLZ CNT CVJ DEJV DGP FERJ FLET GFT HALB HAYK HMQ KAPJ KROL KUZM LARJ LERM MARJ MCE MEU MILJ MMI OATS OBSO RICE RITA	G. Araujo H. Barnes R. Battaiola R. Berg J. Bedient J. Blackwell M. Boschat B. Branchett D. Branchett D. Branchett R. Brown A. Buck Y. Brovarets G. Morales B. Cudnik L. Corp D. Chantiles T. Compton J. Carvajal J. van Delft G. Dyck J. Fernandez T. Fleming F. Gobet B. Halls K. Hay M. Harris J. Kaplan L. Krozel M. Kuzmin J. Larriba M. Lerman J. Maranon E. Mochizuki E. Mason J. Miller M. Moeller S. Oatney IPS Observatory E. C. Richardson A. Ritchie	$\begin{array}{c} 21\\ 30\\ 13\\ 5\\ 16\\ 22\\ 6\\ 21\\ 28\\ 12\\ 26\\ 28\\ 31\\ 18\\ 26\\ 25\\ 15\\ 8\\ 15\\ 22\\ 14\\ 11\\ 8\\ 28\\ 16\\ 7\\ 16\\ 3\\ 1\\ 15\\ 3\\ 31\\ 20\\ 7\\ 10\\ 12\\ 19\\ 15\\ 10\\ 11\\ \end{array}$
MEU	E. Mason	7
MILJ	J. Miller	10
OATS	S. Oatney	19
OBSO	IPS Observatory	15
RICE	E. C. Richardson	10



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



