Solar Bulletin



THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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Ode of the Solar Observers

At 4 million tons a second, You'd think that there might be, A little bit of action On the Solar disk to see.

But things are really slow-The view is mostly orange or white; And if it weren't for the chromospheres, It would be a boring sight.

We see Old Sol rise in the east And we check throughout the day; Thinking that a flare or spot Might be surfacing our way. Alas, no spots! Alack, no flares! The numbers mostly zeroes! Among the solar observing group – It doesn't make for many heroes!

Minimum WILL come and Minimum WILL go-But those 4 million tons of hydrogen, For 5 billion years could flow.

By Susan Oatney

March has been pretty quiet for activity. Nothing in SID flares recorded again. We had a 35% increase in the number of solar observations over February which is great to see from our observers. However, the solar activity presented for us, were small single digit values. So has minimum arrived? Should we hold a raffle? Please keep up the constant vigil as the sun is always full of surprises and may sprout some sudden activity.

The STEREO spacecraft just published its first set of 3D solar images. You can see them at: http://www.nasa.gov/mission_pages/stereo/news/stereo3D_press.html

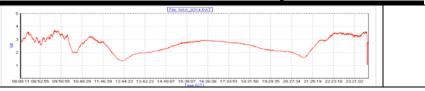
NOTE:

Just a reminder to please submit drawings or photos you would like to see included in the solar bulletin. Please ensure they're submitted as jpegs.

March 2007

Sudden Ionospheric Disturbance Report

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



Sudden Ionospheric Disturbances (SID) Recorded During March 2007

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
Duic	Max	inp	Duit	Max	imp	Duio	Max	iiip
				1 1				
				+ +				
				+				
				No				
				Events				
				Reported				
				1				
				+ +				

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

Observer

Code

Station(s) monitored

Observer Code

Station(s) monitored

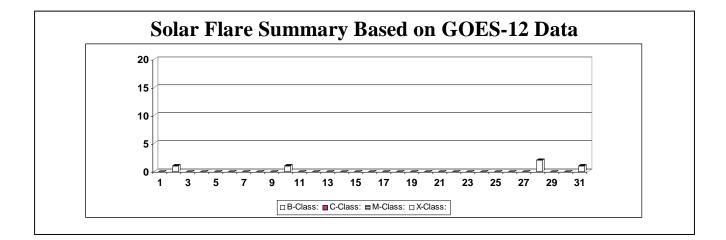
The events listed above meet at least one of the following criteria

 Event reported by two or more observers within ±5 minutes
 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)



March was a very slow month for SID activity. In fact there were no correlated SID events reported by any observers. Even the GOES–12 data was sparse. There were only 5 X-Ray flares recorded and all of these were only B-Class events.



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

Day	N	Raw Mean	Ra
1	28	14	9
2	24	17	11
3	28	12	8
4	30	14	9
5	34	20	13
6	27	9	6
7	35	2	2
8	35	0	0
9	29	0	0
10	34	1	0
11	40	11	8
12	34	8	5
13	32	2	1
14	32	0	0
15	25	0	0
16	26	0	0
17	29	0	0
18	30	1	0
19	28	1	1
20	23	0	0
21	30	1	1
22	28	0	0
23	28	8	6
24	31	7	4
25	32	2	1
26	32	12	8
27	31	4	3
28	32	10	6
29	27	9	6
30	25	9	6
31	23	3	2

March 2007 Sunspot Observers

29.7

5.7

3.7

No. of Observers: 59

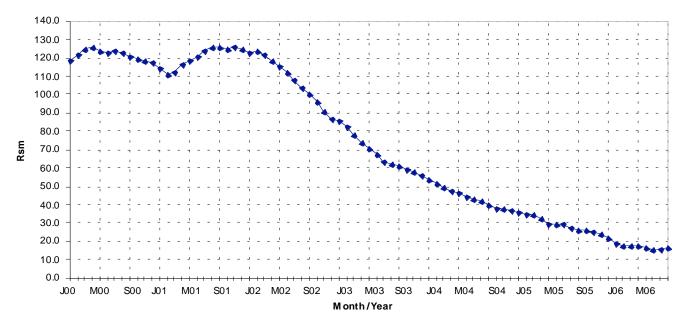
Total No. of Observations: 922

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

AAP AJV ARAG BARH BATR BBATR BBAJ BRAB BRAD BRAB BRAD BRAR BROB BYG CHAG CKB CLZ COMT CR DEJV DGP DUBF FERJ FLET FUJK GFT GOEM HALB HAYK KAPJ KNJS KOR KROL KUZM LARM MARE MARJ MARE MARJ MCE MCHL MARE MARJ CASSO FERJ FLET FUJK GFT GOEM HALB HAYK KAPJ SCOR KROL KUZM LARM MARE MARJ MCE MCHL MAI SOBSO PEKT RICE RITA SCGL SITA SCGL SITA SCUM TESD TJV URBP	A. Abbott J. Alonso G. Araujo H. Barnes R. Battaiola R. Berg J. Berdejo J. Blackwell M. Boschat B. Branchett D. Branchett D. Branchett R. Branch R. Brown Y. Brovarets G. Morales B. Cudnik L. Corp T. Compton T. Cragg J. van Delft G. Dyck F. Dubois J. Fernandez T. Fleming K. Fujimori F. Gobet M. Goetz B. Halls K. Hay J. Kaplan J. Kaplan J. & S. Knight R. Kinne L. Krozel M. Kuzmin J. Larriba M. Lerman E. Mariani J. Maranon E. Mochizuki L. McHenry E. Mason M. Moeller S. Oatney IPS Observatory R. Pektas E. C. Richardson A. Ritchie G. Schott C. Simpson G. Stefanopoulis N. Stoikidis M. Szulc D. Teske J. Temprano P. Urbanski	$\begin{array}{c} 19\\ 14\\ 31\\ 11\\ 6\\ 6\\ 15\\ 1\\ 9\\ 27\\ 22\\ 20\\ 32\\ 25\\ 23\\ 6\\ 7\\ 29\\ 11\\ 5\\ 27\\ 11\\ 23\\ 25\\ 11\\ 2\\ 13\\ 16\\ 18\\ 11\\ 9\\ 2\\ 5\\ 19\\ 1\\ 5\\ 12\\ 9\\ 2\\ 7\\ 24\\ 11\\ 18\\ 7\\ 25\\ 6\\ 7\\ 6\\ 21\\ 23\\ 0\\ 6\\ 22\\ \end{array}$
TJV	J. Temprano	6
WILW WRP	W. Wilson R. Wheeler	23 2



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

10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for March 2007 10 cm source http://w w w .drao.nrc.ca

