

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE



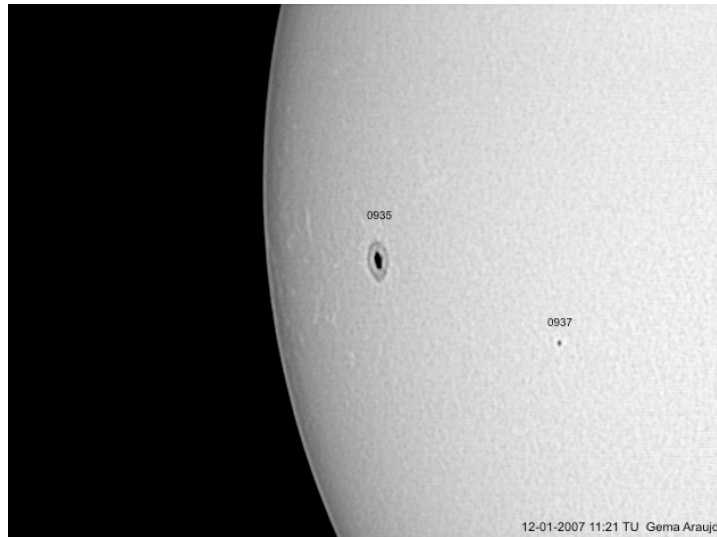
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The new year continues with minimal solar activity, both in sunspots and flares. I hope solar minimum comes soon so we can start up the curve to more solar activity.



Gema Araujo took this white light image on January 12, 2007 of active regions 10935 and 10937.

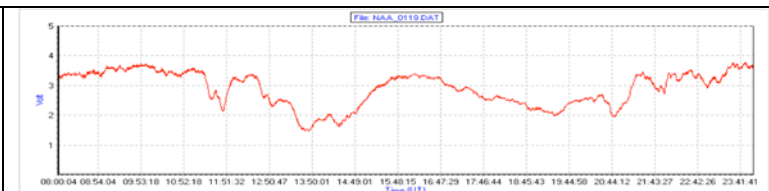
I'd like to bring your attention to the 96th Spring Meeting of the AAVSO from June 28- July 3 as part of "Astronomy Roundup 2007" in Calgary Alberta, Canada. This will be a joint gathering of the AAVSO, the Royal Astronomical Society of Canada (RASC) and the Association of Lunar and Planetary Observers (ALPO). We're planning on some joint presentations with the ALPO solar group as well. This will be an exciting gathering over the long weekend, so I encourage you to attend and meet your fellow observers.

2007 also marks the International Heliophysical Year (IHY) <http://ihy2007.org> which is an international collaboration of scientists studying the Sun, Earth and Heliosphere utilizing ground and space based resources. This also marks the 50th anniversary of the International Geophysical Year in 1957. You can track the many events and outreach opportunities on their website.

Also a heads up, International Astronomy Day is April 21. Most groups do night time activities for the public, however here's your opportunity to show people save views of the sun. Most have never seen the solar disk or prominences and will be amazed by these views of our nearest star.

Sudden Ionospheric Disturbance Report

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Sudden Ionospheric Disturbances (SID) Recorded During January 2007

(Analysis performed by Michael Hill, SID Analyst)

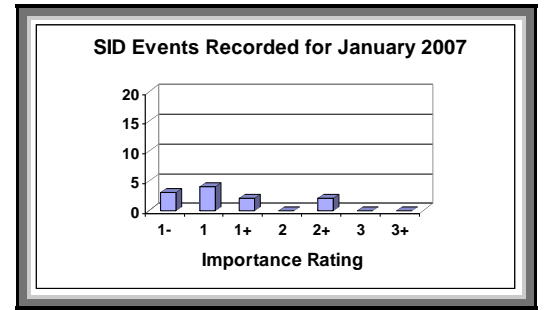
Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
070110	0850	2+						
070110	0915	1						
070110	0936	1						
070113	0625	1+						
070115	0753	1-						
070116	1610	1						
070121	0517	1						
070121	1311	1-						
070121	1317	1+						
070125	0702	2+						
070130	0736	1-						

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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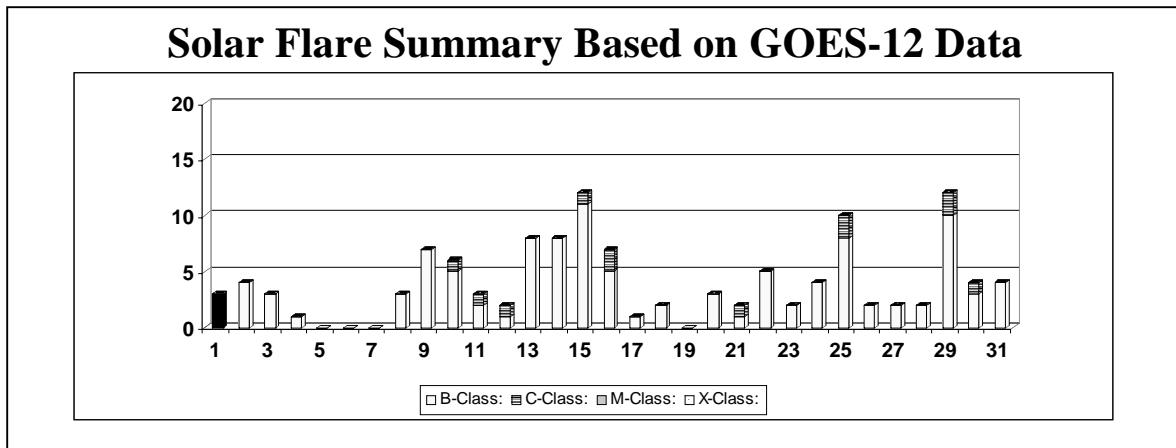
Observer	Code	Station(s) monitored	Observer	Code	Station(s) monitored
D Toldo	A52	NWC			
P King	A80	NAA			
M Hill	A87	NAA			
G Di Filippo	A93	DHO			
R Battaiola	A96	HWU			
F Steyn	A102	NAA NWC			
L Observatory	A107	DHO			
M Suhovecky	A115	NAA			
L Loudet	A118	DHO			
J Godet	A119	GBZ GQD ICV			

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



January was another slow month for SID's even though there were a number of interesting spots. One of the more interesting aspects of a pair of these spot during the second half of the month was their lack of activity due to their very simple magnetic structure. Just not enough twisting and turning to generate flares! There were 11 correlated SID events reported by observers this month. One of them, on the 10th and another on the 25th were long duration events compared to the rest of them, all of which had a relatively low importance rating. There were 118 X-Ray flares reported by the GOES-12 satellite. Not suprisingly all were B and C Class events. No big ones this month. The number of observers reporting events was low due to the low levels of activity but I continue to get the usual number of reports each month (around 18) and I thank all of you for keeping watch and reporting your results even if you don't record any actual events. Those reports count too.



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

Day	N	Raw Mean	Ra
1	34	34	25
2	33	38	29
3	31	41	30
4	30	40	30
5	20	47	32
6	26	39	28
7	25	38	28
8	25	46	32
9	32	43	31
10	26	40	30
11	27	36	25
12	21	28	20
13	26	26	19
14	29	20	15
15	22	17	12
16	19	16	11
17	25	13	10
18	16	22	15
19	24	15	11
20	30	19	13
21	28	19	14
22	28	19	14
23	27	19	13
24	25	17	13
25	33	4	3
26	28	9	6
27	33	12	9
28	33	17	13
29	36	33	24
30	27	30	22
31	23	34	26

Means 27.2 26.8 19.5

No. of Observers: 59

Total No. of Observations: 842

Reporting Addresses:

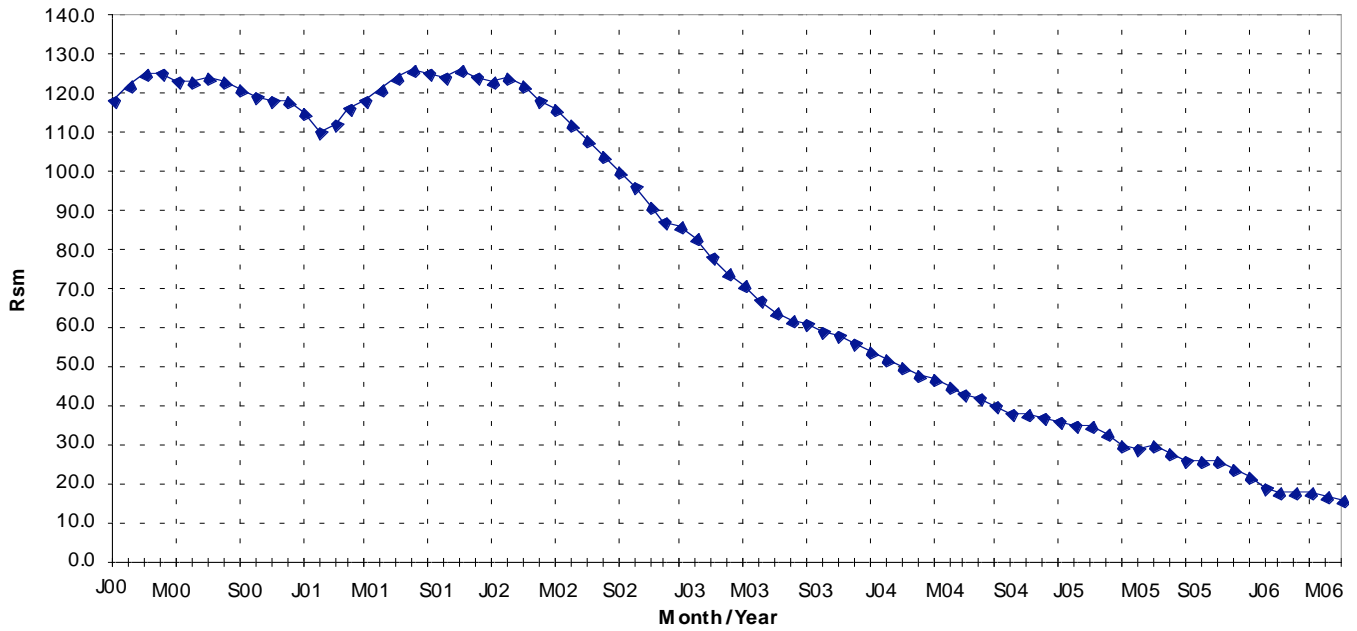
Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO,
25 Birch St. Cambridge, MA, 02138 Fax: 617-354-0665

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

January 2007 Sunspot Observers

AAP	A. Abbott	8
AJV	J. Alonso	8
ARAG	G. Araujo	26
BARH	H. Barnes	11
BATR	R. Battaiola	3
BEB	R. Berg	1
BEDJ	J. Bedient	10
BLAJ	J. Blackwell	5
BMF	M. Boschat	11
BOSB	B. Bose	12
BRAB	B. Branchett	29
BRAD	D. Branchett	13
BRAM	M. Bradbury	1
BRAR	R. Branch	25
BROB	R. Brown	28
BYG	Y. Brovarets	36
CHAG	G. Morales	26
CKB	B. Cudnik	10
CLZ	L. Corp	13
CR	T. Cragg	29
CVJ	J. Carvajal	16
DEJV	J. van Delft	13
DGP	G. Dyck	13
DUBF	F. Dubois	16
FERJ	J. Fernandez	12
FLET	T. Fleming	16
FUJK	K. Fujimori	26
GFT	F. Gobet	7
HALB	B. Halls	3
HAYK	K. Hay	14
KAPJ	J. Kaplan	19
KNJS	J. & S. Knight	26
KQR	R. Kinne	3
KROL	L. Krozel	2
LARJ	J. Larriba	16
LERM	M. Lerman	2
LEVM	M. Leventhal	24
MCE	E. Mochizuki	24
MEU	E. Mason	6
MMI	M. Moeller	15
OATS	S. Oatney	17
PEKT	R. Pektas	21
RICE	E. C. Richardson	13
RITA	A. Ritchie	19
SCGL	G. Schott	13
SCHG	G. Scholl	5
SIMC	C. Simpson	5
STEF	G. Stefanopoulos	4
STEM	G. Stemmler	12
STQ	N. Stoikidis	27
SUZM	M. Suzuki	26
SZUM	M. Szulc	20
TESD	D. Teske	16
TJV	J. Temprano	9
URBP	P. Urbanski	16
VARG	A. Vargas	16
VIDD	D. Vidican	9
WILW	W. Wilson	13
WRP	R. Wheeler	3

Smoothed Mean SunspotNumbers (Rsm) from January 2000 to July 2006
(Waldmeier Method)



10 cm Solar Flux and American Relative Sunspot Numbers (Ra) For January 2007
10 cm source: <http://www.drao.nrc.ca>

