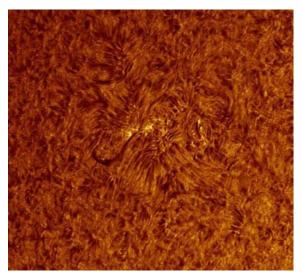
Solar Bulletin



THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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The wonderful H-alpha image at left was taken by Javier Ruiz from Observatorio Astronomico de Cantabria, Spain on Feb 13, 2009 at 14:35UT. He used a Coronado SM90 on a TSA102 with a DMK41 camera. The exciting image of solar prominences at right was taken on Jan 6, 2009 by Dr. Douglas Allen of Dordt College in Sioux Center, Iowa. He used a Coronado PST and SBIG STV camera. Shows that during times of minimal solar activity there is still some to capture by our dedicated imagers.

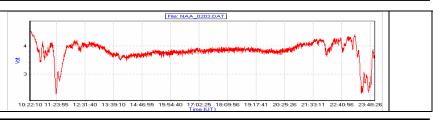
Thanks again to all the dedicated observers who continue to patrol the sun and submit reports. Your data still counts and reflects the current status of this cycle. Don't forget to submit your images, drawings and SID plots to include in the bulletin.

Still looking for web software volunteers

We're looking to update our sunspot data submission process, and provide more real-time feedback to all our solar observers via the AAVSO website. We'd also like to help improve our visibility to the astronomy community for IYA 2009. If you have the experience and expertise and have some time to help the solar group, please contact me via email above.

Sudden Ionospheric Disturbance Report

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



Sudden Ionospheric Disturbances (SID) Recorded During February 2009

		(Ana	lysis perf	ormed b	y Michae	l Hill,	SID Ana	alyst)		
Date	Max	Imp	Da	ite	Max	Im	пр	Date	Max	Imp
		•								
			_							
			_							
			_		NO					
					SID					
			-		Events					
			-							
			1							
			+							
Importance ra	ting: Duration	(min)	1-: <19	1: 19-2	25 1+: 2	6-32	2: 33-45	2+: 46-8	3: 86-125	5 3+:>12

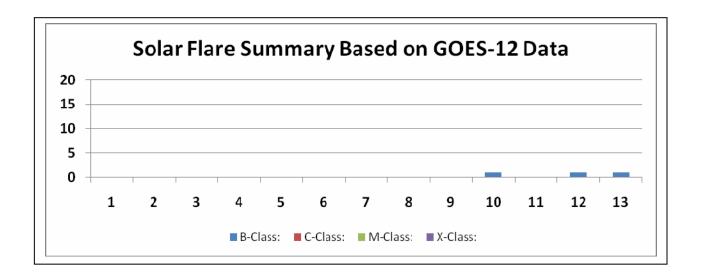
Observer	Code	Station(s) monitored	Observer	Code	Station(s) monitored
A Clerkin	A29		F Adamson	A122	
D Toldo	A52				
M Hill	A87				
L Anderson	A91				
R Battaiola	A96				
J Wallace	A97				
M King	A99				
L. Obs	A107				
P Mortfield	A108				
L Loudet	A118				

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

February was a very slow month again. There were 0 correlated SID events and the GOES-12 satellite only detected 3 B-Class flares betweem the 10th and the 13th of the month. Just about the same time as last month which is interesting. I wonder if it's the same underlying region of activity that keeps popping up spots? That's something to think about while we wish for more activity to grace our data charts. I would like to welcome new observer Gary Myers. Gary lives in Washington State and and is monitoring NML. His observer ID is A124. Welcome to the group Gary. As always thanks to all of you for your continued contributions.



American Relative Sunspot Numbers (Ra) for February 2009 [**boldface = maximum, minimum**]

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

Means 29.1 1.1 0.7

No. of Observers: 56

Total No. of Observations: 814

Reporting Addresses:

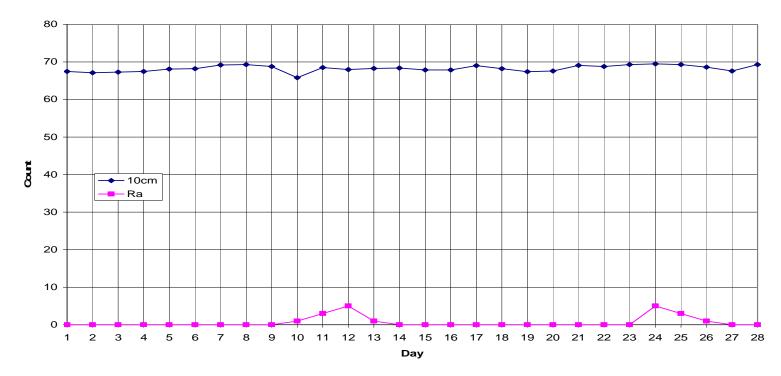
Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO, 49 Bay State Rd. Cambridge, MA, 02138 Fax: 617-354-0665

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

AAP	A. Abbott	16
AJV	J. Alonso	23
ANGR	R. Ang	13
ARAG	G. Araujo	28

BARH	H. Barnes	11
BEB	R. Berg	12
BEDJ	J. Bedient	9
BMF	M. Boschat	13
BRAB	B. Branchett	25
BROB	R. Brown	19
BVC	A. Buck	28
CHAG	G. Morales	20
CKB	B. Cudnik	24
CLZ	L. Corp	11
CNT	D. Chantiles	8
CVJ	J. Carvajal	16
DEKP	P. Dekelver	2
DGP	G. Dyck	3
DUBF	F. Dubois	19
FERJ	J. Fernandez	16
FLET	T. Fleming	21
FUJK	K. Fujimori	18
HAYK	K. Hay	17
HMQ	M. Harris	10
HRUT	T. Hrutkay	7
JASK	K. Jaskulska	8
KAPJ	J. Kaplan	15
KNJS	J. & S. Knight	23
KROL	L. Krozel	3
LARJ	J. Larriba	14
MARF	F. Mariuzza	20
MARJ	J. Maranon	26
MCE	E. Mochizuki	20
MEU	E. Mason	2
MILJ	J. Miller	12
MMI	M. Moeller	13
OATS	S. Oatney	19
OBSO	IPS Observatory	19
RICE	E. Richardson	14
RITA	A. Ritchie	8
SCGL	G. Schott	13
SIMC	C. Simpson	8
STEF	G. Stefanopoulis	3
STEM	G. Stemmler	12
STQ	N. Stoikidis	18
SUZM	M. Suzuki	24
SZUM	M. Szulc	14
TESD	D. Teske	21
		12
TJV	J. Temprano	11
URBP	P. Urbanski	
VARG	A. Vargas	17
VIDD	D. Vidican	12
WILW	W. Wilson	22
WIRP	P. Wirkus	1
WRP	R. Wheeler	5 14
YESH	H. Yesilyaprak	16

10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for February 2009 10 cm source: ftp://lynx.drao.nrc.ca/pub/solar/FLUX_DATA/fluxtablerolling.text



Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to August 2008 (Waldmeier Method)

