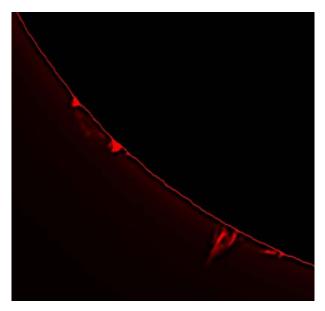
Solar Bulletin

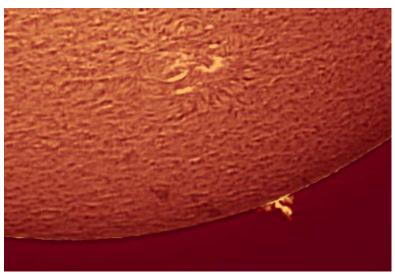


THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

Paul Mortfield, Editor c/o AAVSO, 49 Bay State Rd Cambridge, MA 02138 Web: www.AAVSO.org Email: Paul@IndustrialStars.com ISSN 0271-8480

Volume 65 Number 9 September 2009

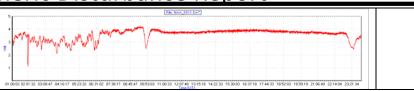




Both images were taken by Gema Araujo of Spain. The upper image taken on Sept 6, 2009 at 07:48UT, the lower image was taken on Sept 25, 2009 at 08:36UT.

Sudden Ionospheric Disturbance Report

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



Sudden Ionospheric Disturbances (SID) Recorded During August 2009

(Analysis performed by Michael Hill, SID Analyst)									
Date	Max	Imp	Date	e M	ax lı	mp	Date	Max	Imp
			1						
			1						
				N					
			-		ID				
			1	EVE	ents				
Importance ra	ting: Duration	(min) 1	-: <19	1: 19-25	1+: 26-32	2: 33-45	2+: 46-85	3: 86-125	3+: >125

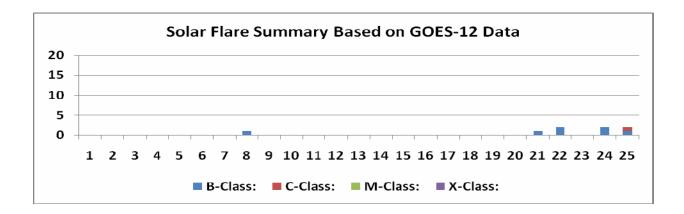
Code	Station(s) monitored	Observer	Code	Station(s) monitored
A29		K Hubal	A117	
A80		L Loudet	A118	
A87		JP Godet	A119	
A91		F Adamson	A122	
A96		G Myers	A124	
A97				
A99				
A107				
A108				
A115				
	A29 A80 A87 A91 A96 A97 A99 A107 A108	A29 A80 A87 A91 A96 A97 A99 A107 A108	A29 K Hubal A80 L Loudet A87 JP Godet A91 F Adamson A96 G Myers A97 A99 A107 A108	A29 K Hubal A117 A80 L Loudet A118 A87 JP Godet A119 A91 F Adamson A122 A96 G Myers A124 A97 A99 A107 A108

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

September was another slow month. There were 0 correlated SID events reported by observers which corresponds with the very low number of X-Ray flares detected by the GOES-12 satellite. There were only eight flare events. All were B-Class events except for one C-Class event.



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

Day	N	Raw Mean	Ra
1	40	7	4
2	39	0	0
3	38	0	0
4	46	0	0
5	40	0	0
6	38	0	0
7	33	0	0
8	36	0	0
9	36	0	0
10	35	0	0
11	35	0	0
12	34	0	0
13	30	0	0
14	31	0	0
15	31	0	0
16	33	0	0
17	32	0	0
18	30	0	0
19	41	1	0
20	45	0	0
21	35	9	6
22	33	25	17
23	34	29	21
24	40	29	21
25	32	24	17
26	39	16	12
27	34	11	7
28	32	17	13
29	32	12	9
30	30	10	7

Means 35.5 6.4 4.6

No. of Observers: 57

Total No. of Observations: 1064

Reporting Addresses:

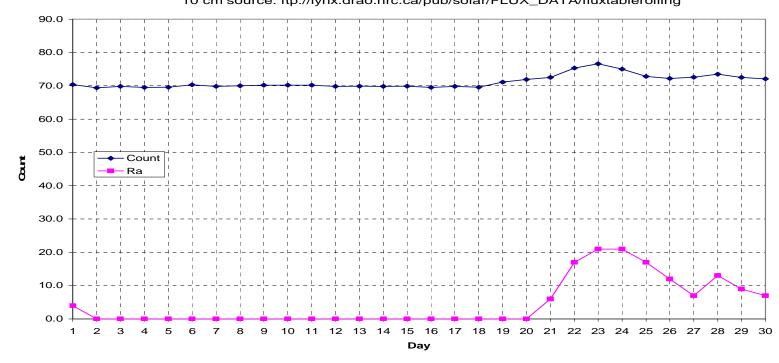
Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO, 49 Bay State Rd. Cambridge, MA, 02138 Fax: 617-354-0665

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

AAP	A. Abbott	11
AJV	J. Alonso	24
ANGR	R. Ang	10
ARAG	G. Araujo	30

BARH	H. Barnes	9
BEB	R. Berg	9
BERJ	J. Berdejo	20
BLAJ	J. Blackwell	6
BMF	M. Boschat	24
BRAB	B. Branchett	31
BROB		30
	R. Brown	
BVC	A. Buck	30
BXD	A. Burda	27
CHAG	G. Morales	30
CKB	B. Cudnik	25
CLZ	L. Corp	11
CNT	D. Chantiles	13
CA1	J. Carvajal	20
DEKP	P. Dekelver	21
DGP	G. Dyck	6
DUBF	F. Dubois	30
FERJ	J. Fernandez	18
FLET	T. Fleming	19
FUJK	K. Fujimori	21
HAYK	K. Hay	25
HMQ	M. Harris	19
JASK	K. Wirkus	24
KAPJ	J. Kaplan	30
KNJS	J. & S. Knight	17
KROL	L. Krozel	11
LEVM	M. Leventhal	23
MARF	F. Mariuzza	24
MEU	E. Mason	8
MILJ	J. Miller	16
MMI	M. Moeller	28
OATS	S. Oatney	18
OBSO	,	18
	IPS Observatory	
RICE	E. Richardson	16
RITA	A. Ritchie	10
RO	J. Rousum	3
SCGL	G. Schott	26
SDP	D. Sharples	1
SIMC	C. Simpson	14
STEF	G. Stefanopoulis	8
STEM	G. Stemmler	20
STQ	N. Stoikidis	21
SUZM	M. Suzuki	21
SZUM	M. Szulc	24
TESD	D. Teske	23
TJV	J. Temprano	20
URBP	P. Urbanski	28
VARG	A. Vargas	24
VIDD	D. Vidican	6
WILW	W. Wilson	22
WIRP	P. Wirkus	8
WRP	R. Wheeler	4
YESH	H. Yesilyaprak	29
	- •	

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



Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to March 2009 (Waldmeier Method)

