

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

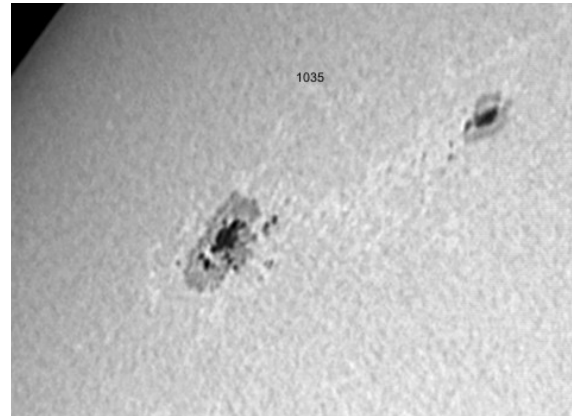
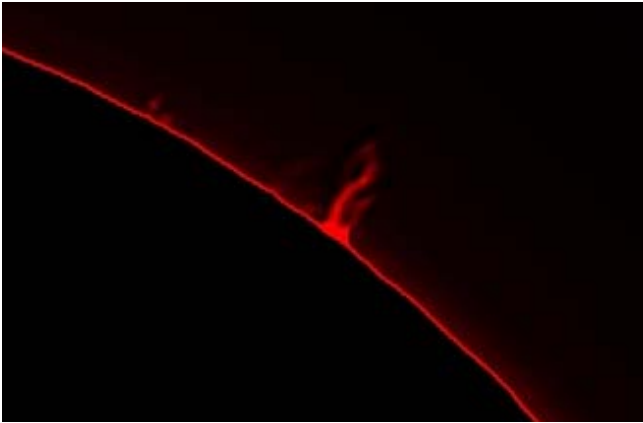


Paul Mortfield, Editor
c/o AAVSO, 49 Bay State Rd
Cambridge, MA 02138

Web: www.AAVSO.org
Email: solar.aavso@gmail.com
ISSN 0271-8480

Volume 65 Number 12

December 2009



These images were taken by Gema Araujo of Spain. The left image of prominences on December 11, 2009 at 11:59UT. The image to the right of active region 1035 taken on December 19, 2009 at 11:32UT. Finally some solar activity!!

We welcome Susan Oatney from Kansas, USA to our SID observers team.

Notice to all Sunspot Observers

Sunspot observations need to be submitted in the official format using the SolObs or the Sunkey programs (or manual entry in the proper text format). Having the solar team re-enter observations manually is time consuming and slows our process down. Using the programs helps us quickly compile all the data for processing and reporting. The programs are available at the following link.

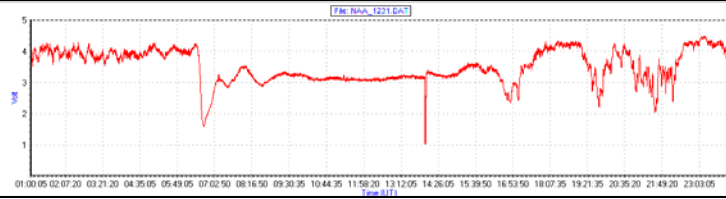
<http://www.aavso.org/observing/programs/solar/solarsoftware.shtml>

We appreciate you following these guidelines.

We will also be putting together a solar mailing list so we can make timely announcements to all our observers when important issues arise.

Sudden Ionospheric Disturbance Report

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



Sudden Ionospheric Disturbances (SID) Recorded During December 2010

(Analysis performed by Michael Hill, SID Analyst)

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
091210	1059	1						
091216	1259	2						
091221	0725	1-						
091221	0924	1						
091221	0935	1						
091222	0458	2						
091223	1017	1						

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

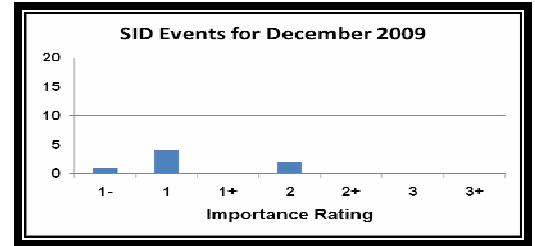
Observer	Code	Station(s) monitored
P King	A80	HWU
R Battaiola	A96	HWU
F Steyn	A102	NAA NWC
M Suhovecky	A115	NAA
L Loudet	A118	GQD
J Godet	A119	GBZ GQD ICV
F Adamson	A122	NWC
S Oatney	A125	NML

Observer	Code	Station(s) monitored

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



December turned out to be a very active month for SID activity compared to what we have been used to for quite some time now. There were 7 correlated SID events reported by observers. Most were of low importance rating. This corresponds to similar activity levels as observed by the GOES spacecraft. There were 128 flares recorded by GOES but most (104) were B Class events which, unless they are B5 or greater, are difficult for most observers to register. But this is a good sign that the activity level is picking up and I expect that 2010 will be more interesting for observers than 2008 and 2009. I would like to welcome a new observer, Susan Oatney (A125) from Kansas, USA. She sent in her first report this month after a good deal of work getting her system up and running. Congratulations Susan and welcome to the group.

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)

