

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE



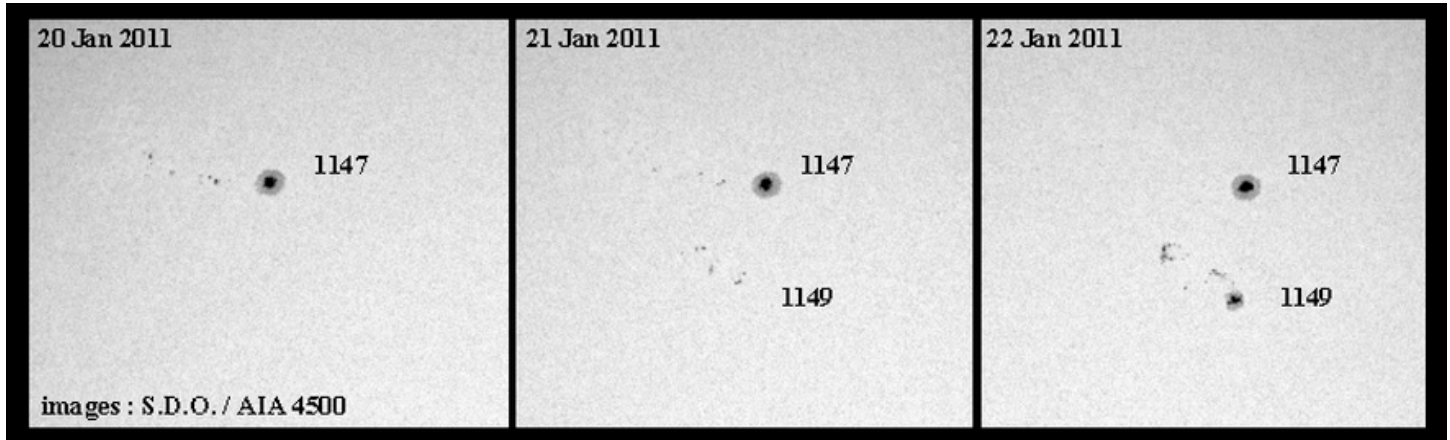
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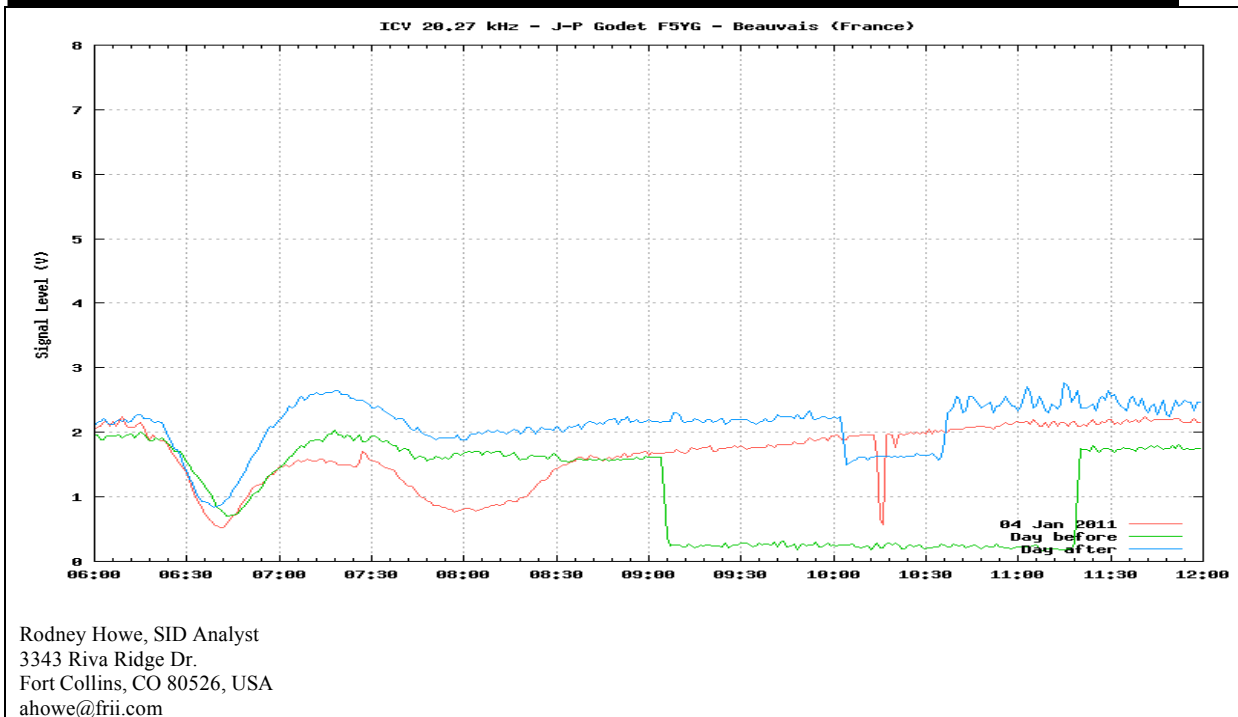
In the Above sequence you can see the evolution of Active Regions 1147 and 1149 at a 3 day period. The interesting part here is that the Eastern component of AR: 1147 has started to fade during the appearance of AR: 1149. AR: 1147 was a bipolar group with a major Spot and a weak component that finally disappeared converting this system to a single polarity Spot, AR: 1149 on the other hand is a bipolar group with strong magnetic forces to bind all of the components, this is why AR: 1149 has produced such a number of flares from 21 to 22 of January. <http://dailysolar.weebly.com/22-january-2011-solar-activity.html>

A few reminder tips on sunspot count data entry:

For those solar observers using the SUNKEY and SolObs data entry programs, please review your files before submissions and Note these 3 items:

- 1) Please check the first line in the SUNKEY file, as it needs to have the program name in it. (Many SUNKEY files have blanks in the first few lines of the header).
- 2) Please try to fill out all information in the configuration or profile file for the headers, both SolObs and SUNKEY users, respectively: Name, Address, City, Country, Zip Code, Phone, email, Instrument, Aperture, etc. These are important pieces of information.

Sudden Ionospheric Disturbance Report



This is a graph from Lionel Loudet recording the January, 4th solar eclipse in Europe.

Sudden Ionospheric Disturbances (SID) Recorded During January, 2011

(Analysis performed by Rodney Howe, SID Analyst)

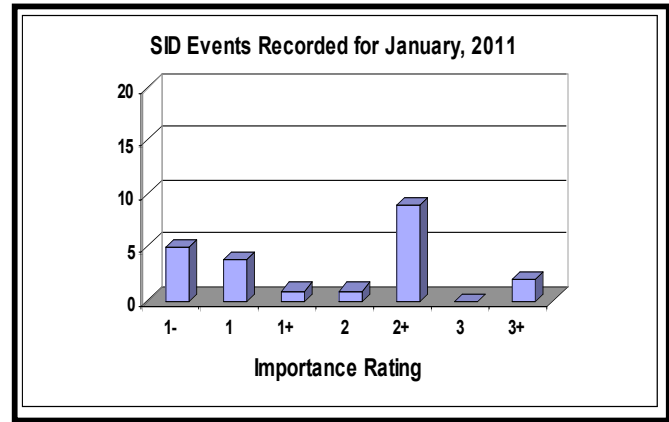
Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
110104	0327	1	110125	0338	2+			
110104	0605	1-	110126	0400	2+			
110114	1301	2+	110128	0100	1-			
110117	1603	2+	110128	0423	1+			
110117	2321	2+	110128	1009	1-			
110121	0418	2						
110121	0701	1						
110121	1215	2+						
110121	1712	2+						
110121	1910	2+						
110122	0827	2+						
110122	0830	3+						
110124	0615	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
P King	A80	HWU
L Anderson	A91	NWC
R Battaiola	A96	HWU
F Steyn	A102	NAA NWC
L Loudet	A118	DHO NAA
J Godet	A119	GBZ GQD ICV
R Howe	A121	NML

Observer	Code	Station(s) monitored
F Adamson	A122	NWC
G Myers	A124	NLK
S Oatney	A125	NML
G.Richardson	A128	NPM

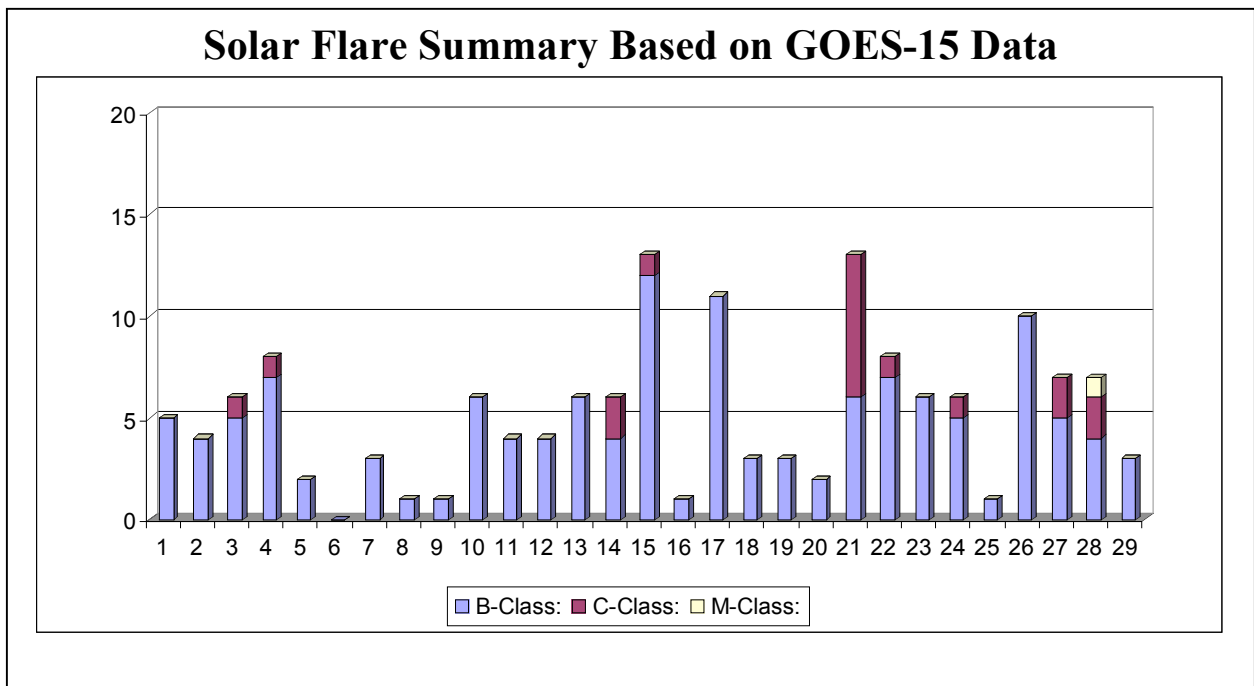
Solar Events



There were 151 solar flares measured by GOES-15 for January, 2011, with one M class flare and 18 C class flares. Of the 12 AAVSO SID observers who submitted reports, 11 recorded January events.

There were 132 B class flares compared with 66 B class flares for December. January shows a big rise in flare activity compared to December, 2010.

Lionel Loudet recorded the early morning SID drop on January, 4th. He wrote a detailed article about the event, which has been posted on the AAVSO web site (Solar News): http://www.aavso.org/sites/default/files/solar/eclipse-2011-01-04-VLF_v2.pdf



American Relative Sunspot Numbers (Ra) for January, 2011 [**boldface = maximum, minimum**]

Day	N	Raw Mean	Ra
1	22	46	34
2	17	41	31
3	22	39	28
4	22	44	31
5	21	35	27
6	22	29	20
7	21	36	25
8	27	29	19
9	17	27	21
10	20	22	16
11	16	25	17
12	17	15	10
13	19	4	3
14	15	0	0
15	27	7	4
16	25	15	10
17	28	21	15
18	21	31	21
19	21	23	16
20	23	24	17
21	22	31	22
22	22	32	23
23	20	33	23
24	21	30	21
25	21	29	20
26	23	25	17
27	22	14	10
28	23	11	8
29	18	19	12
30	23	21	15
31	22	20	14
Means	21.3	25.1	17.6

Total Observers: 44
Total Observations: 660

Initials	Name	# of Obs
AAP	A. Patrick Abbott	3
AAX	Alexandre Arorim	13
AJV	J. Alonso	13
ARAG	Gema Araujo	28
ASA	Salvador Aguirre	26
BARH	Howard Barnes	11

BEB	Ray Berg	2
BERJ	Jose Alberto Berdejo	11
BLAJ	John A. Blackwell	5
BMF	Michael Boschat	16
BOSB	Biswajit Bose	25
BRAB	Brenda Branchett	28
BROB	Robert Brown	25
CHAG	German Chavas Morales	28
CKB	Brian Cudnik	17
CLZ	Corp Laurent	6
CNT	Dean Chantiles	6
DGP	Gerald Dyck	11
DUBF	Franky Dubois	15
FAM	Fabio Mariuzza	6
FERJ	Javier Ruiz Fernandez	12
FLET	Tom Fleming	16
FUJK	K. Fujimori	27
HALB	Brian Halls	3
HAYK	Kim Hay	11
HMQ	Mark Harris	12
HOWR	Rodney Howard	31
KAPJ	John Kaplan	15
KNJS	James & Shirley Knight	26
MARE	Enrico Mariani	4
MILJ	Jay Miller	9
MMI	Michael Moeller	14
OATS	Susan Oatney	7
OBSO	IPS Observatory	16
RICE	E. C. Richardson	31
SIMC	Clyde Simpson	5
SOOS	Miyoshi Suzuki	31
STQ	Nick Stoikidis	11
TESD	David Teske	19
URBP	Piotr Urbanski	9
VARG	A.Gonzalo Vargas	20
WILW	William M. Wilson	14
WIRP	Piotr Wirkus	1
YESH	Hulya Yesilyaprak	21

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