

# Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS  
SOLAR COMMITTEE

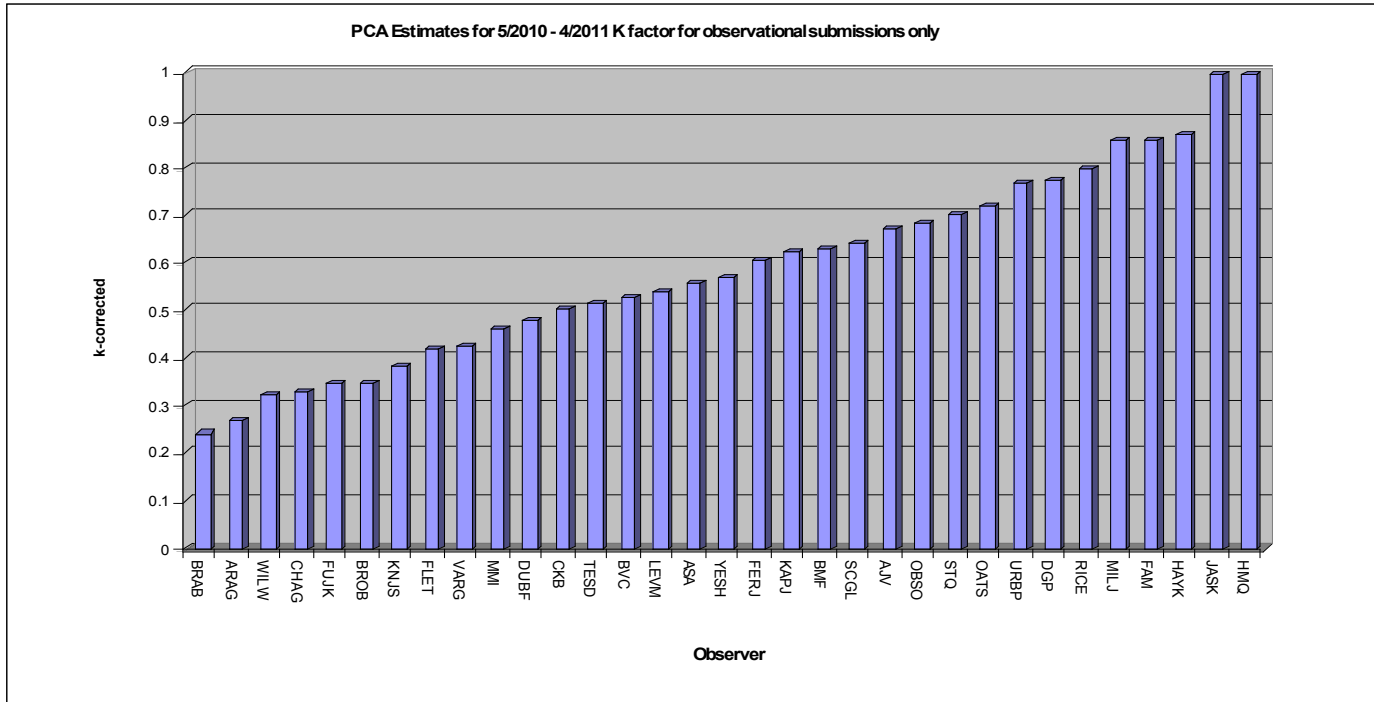


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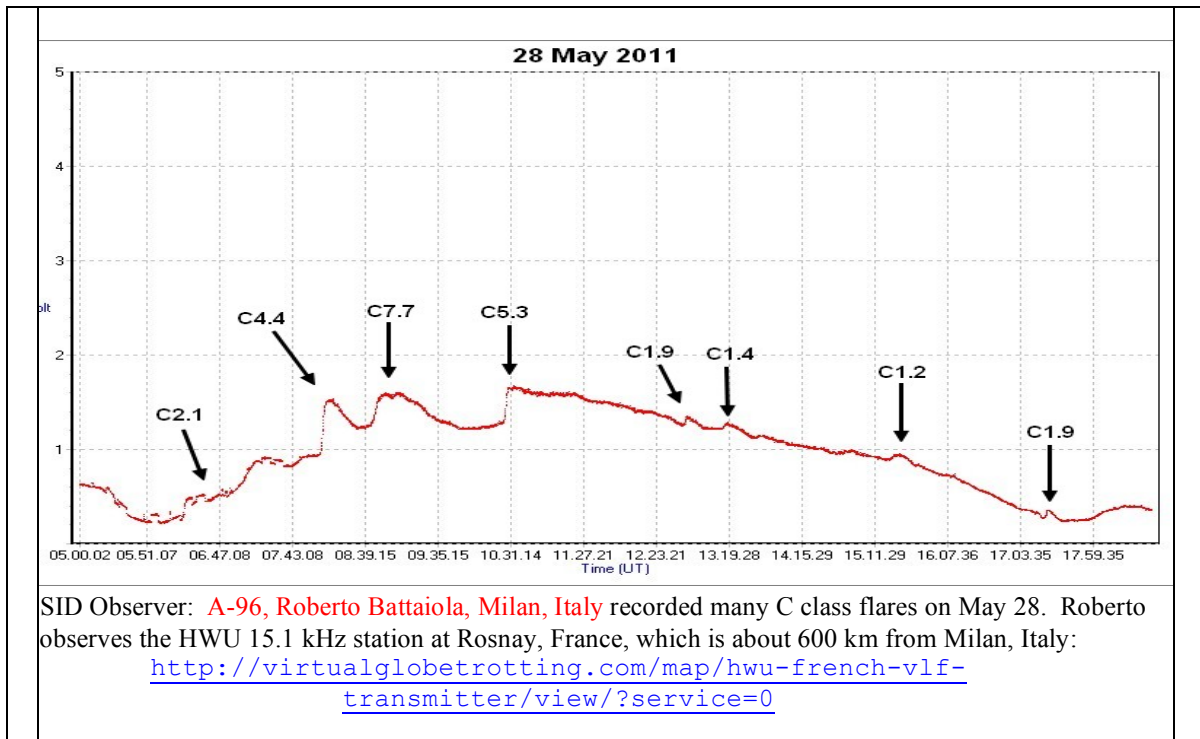


Here is a very preliminary look at the k-corrected values for our optical sunspot observers. We have 62 observers who have submitted data from May, 2010 thru April, 2011. For those observers with over 100 daily submissions 34 have a k-corrected value less than 1. As we progress along with updating our observer's k-corrected values these first estimates are likely to change. Here is a reference for understanding how these K factors are computed: <http://adsabs.harvard.edu/full/1993ApJ...411..909S>

## For our Sunspot viewers

Data quality is very important to us. Please make sure you complete your data entry configuration files for both SUNKEY and SolObs software. We need your data for telescope aperture and method of observing to be as accurate as possible.

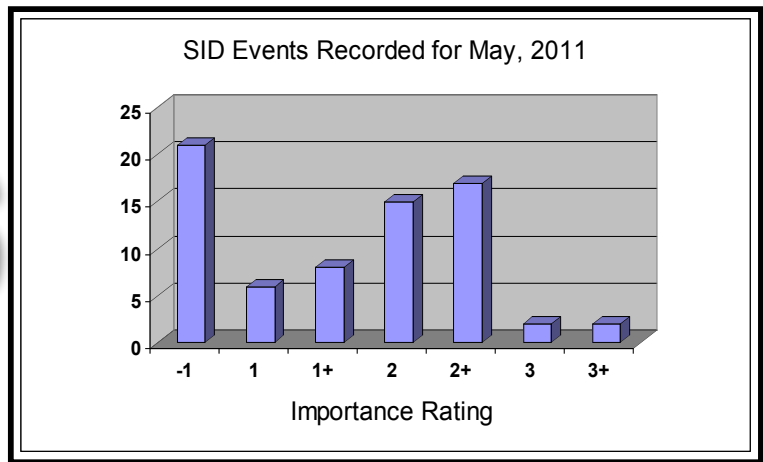
# Sudden Ionospheric Disturbance Report



## Sudden Ionospheric Disturbances (SID) Records During May, 2011

Date	Max	Imp	Date	Max	Imp
110501	0807	2+	110528	1030	2+
110501	0814	2	110528	1525	2+
110501	2334	2	110528	1724	1+
110502	1404	1	110528	1915	2
110503	1053	2	110528	1947	1-
110508	0544	1-	110528	2116	2+
110512	1231	3	110528	2256	1-
110514	0044	1-	110529	0150	2
110515	0747	2+	110529	0445	1-
110515	1424	2+	110529	0616	1
110515	2334	1+	110529	0716	1-
110517	2041	1-	110529	0730	1+
110518	1300	2+	110529	0822	3+
110525	0431	1-	110529	0835	2
110527	1452	2+	110529	0901	1-
110527	1644	2	110529	0925	1+
110527	1834	1-	110529	0947	1
110527	2302	1-	110529	1014	2+
110528	0225	2	110529	1024	2
110528	0340	2+	110529	1055	2+
110528	0622	2+	110529	1140	1+
110528	0711	2	110529	2116	2+
110528	0806	1+	110529	2345	2+
110528	0849	3	110530	0548	1+
110528	0856	2+	110530	0606	2
110528	0903	2	110530	1100	2+

# Solar Events

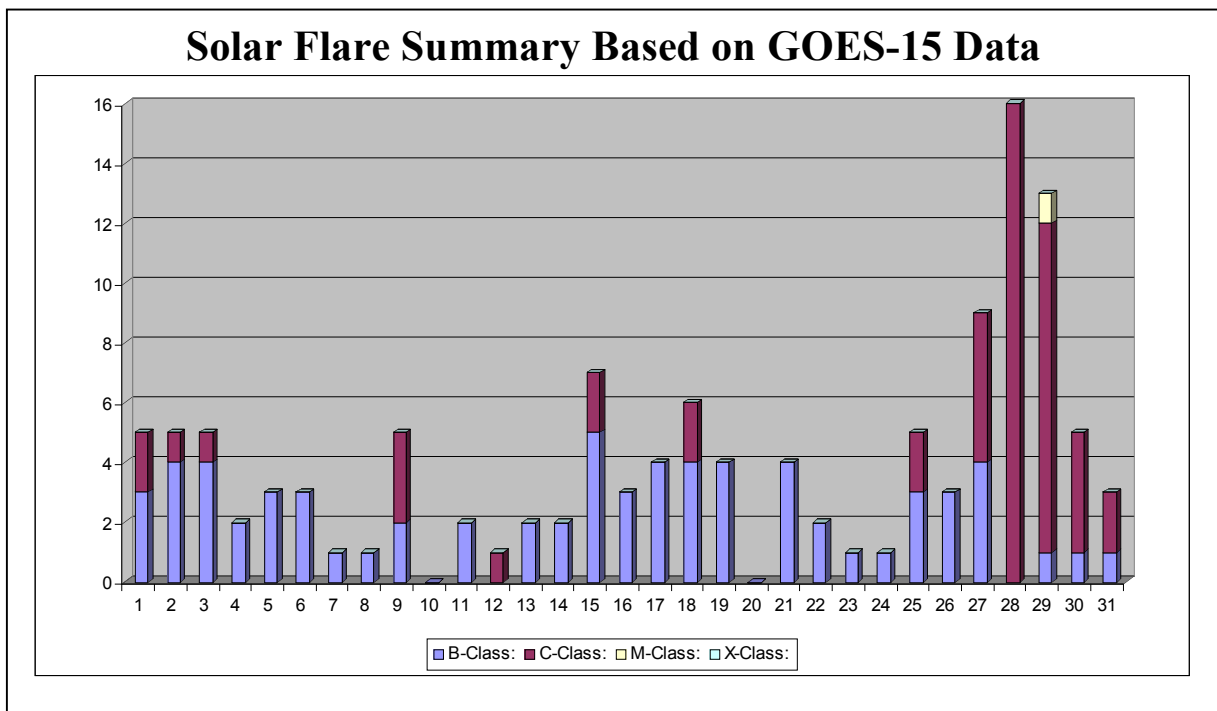


Importance rating: Duration (min)	1-: <19	1: 19-25	1+: 26-32	2: 33-45	2+: 46-85	3: 86-125	3+: >125
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## Sudden Ionospheric Disturbances (SID) Observers During May, 2011

Observer	Code	Station(s) monitored	And just as important are those who submitted a report with no data!	
R Battaiola	A96	HWU	A91	L. Anderson
F Steyn	A102	NAA NWC	A94	A.McWilliams
L Loudet	A118	GQD	A97	Jon Wallace
J Godet	A119	GBZ GQD ICV	A99	Michael King
R Howe	A121	NML	A120	Bob Terill
F Adamson	A122	NWC		
G Myers	A124	NLK		
S Oatney	A125	NML		

There were 123 solar flares measured by GOES-15 for May, 2011, 1 M class flares, 52 C class and 71 B class flares. Of the 13 AAVSO SID Observers who submitted reports; 8 recorded May events.



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

DAY	NumObs	RAW	Ra
1	25	51	39
2	26	53	37
3	26	56	41
4	33	69	49
5	35	59	42
6	36	40	29
7	36	41	28
8	38	60	42
9	36	76	52
10	31	79	56
11	24	50	33
12	23	34	23
13	25	39	28
14	24	51	38
15	23	58	41
16	28	57	39
17	27	47	31
18	26	38	26
19	28	33	24
20	34	33	23
21	37	33	25
22	34	37	25
23	33	23	17
24	30	14	<b>9</b>
25	33	20	14
26	32	41	29
27	22	64	43
28	31	69	49
29	31	99	72
30	40	109	<b>79</b>
31	41	106	74
<b>Averages</b>	<b>30.6</b>	<b>52.8</b>	<b>37.2</b>

**Total Observers: 58**

**Total Observations: 948**

Observer	#Obs	Name
AAP	13	A. Patrick Abbott
AAX	14	Alexandre Arorim
AJV	16	J. Alonso
ARAG	30	Gema Araujo
ASA	24	Salvador Aguirre
BARH	9	Howard Barnes
BATR	2	Roberto Battaiola
BEB	7	Ray Berg
BERJ	11	Jose Alberto Berdejo
BMF	5	Michael Boschat
BRAB	31	Brenda Branchett
BRAF	20	Raffaello Braga

BROB	24	Robert Brown
BXD	14	Alexandru Bruda German Chavas Morales
CHAG	30	
CKB	17	Brian Cudnik
CNT	11	Dean Chantiles
CVJ	21	Jose Carvajal
DELS	4	Susan Delaney
DEMF	5	Frank Dempsey
DGP	10	Gerald Dyck
DOGA	28	Ozkan Dogan
DUBF	30	Franky Dubois
FAM	13	Fabio Mariuzza
FERJ	21	Javier Ruiz Fernandez
FLET	22	Tom Fleming
FLF	17	Fredirico Luiz Funari
FUJK	18	K. Fujimori
HALB	13	Brian Halls
HAYK	10	Kim Hay
HMQ	10	Mark Harris
HOWR	19	Rodney Howe
HRUT	16	Timothy Hrutkay
JASK	23	Krystyna Wirkus
JJK	10	Jerry Klotz
KAPJ	21	John Kaplan
KNJS	17	James & Shirley Knight
KROL	8	Larry Krozel
LEVM	21	Monty Leventhal
LKR	12	Kristine Larsen
MARE	14	Enrico Mariani
MILJ	11	Jay Miller
MMI	27	Michael Moeller
MUDG	8	George Mudry
OATS	10	Susan Oatney
OBSO	18	IPS Observatory
OJMA	13	Juha Ojanpera
SCGL	27	Gerd-Lutz Schott
SIMC	11	Clyde Simpson
STQ	16	Nick Stoikidis
SUZM	22	Miyoshi Suzuki
TESD	28	David Teske
TJV	8	Javier Temprano
URBP	29	Piotr Urbanski
VARG	26	A.Gonzalo Vargas
VIDD	9	Daniel Vidican
WILW	23	William M. Wilson
WIRP	1	Piotr Wirkus

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