

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS
SOLAR COMMITTEE



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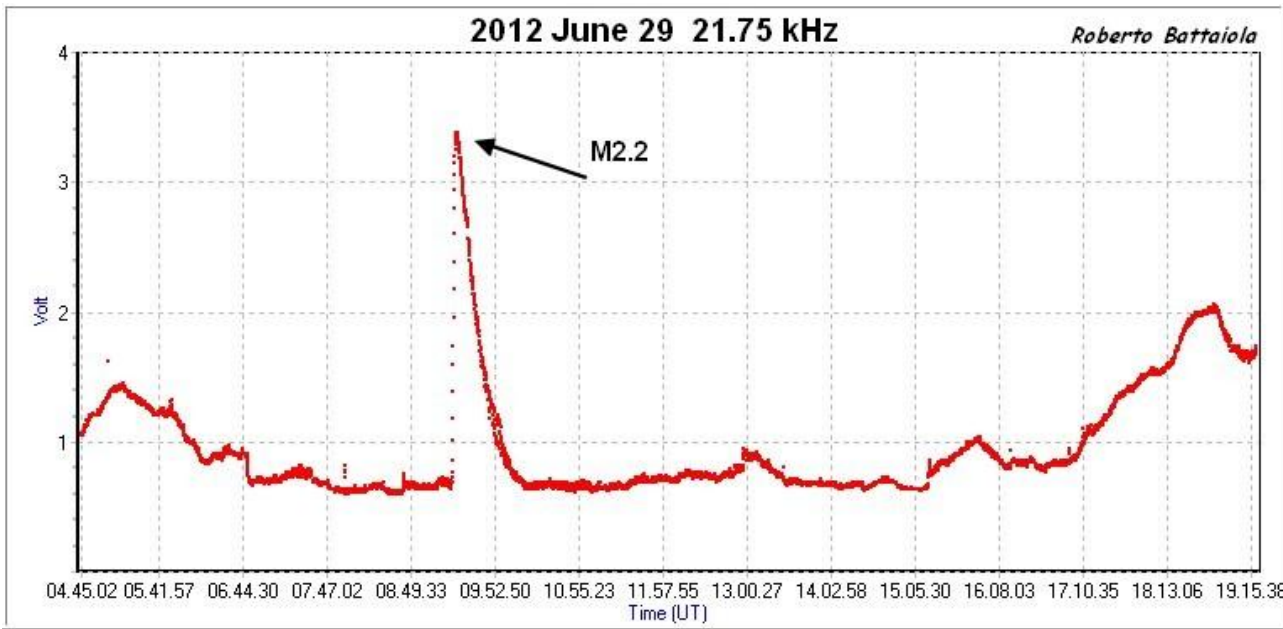
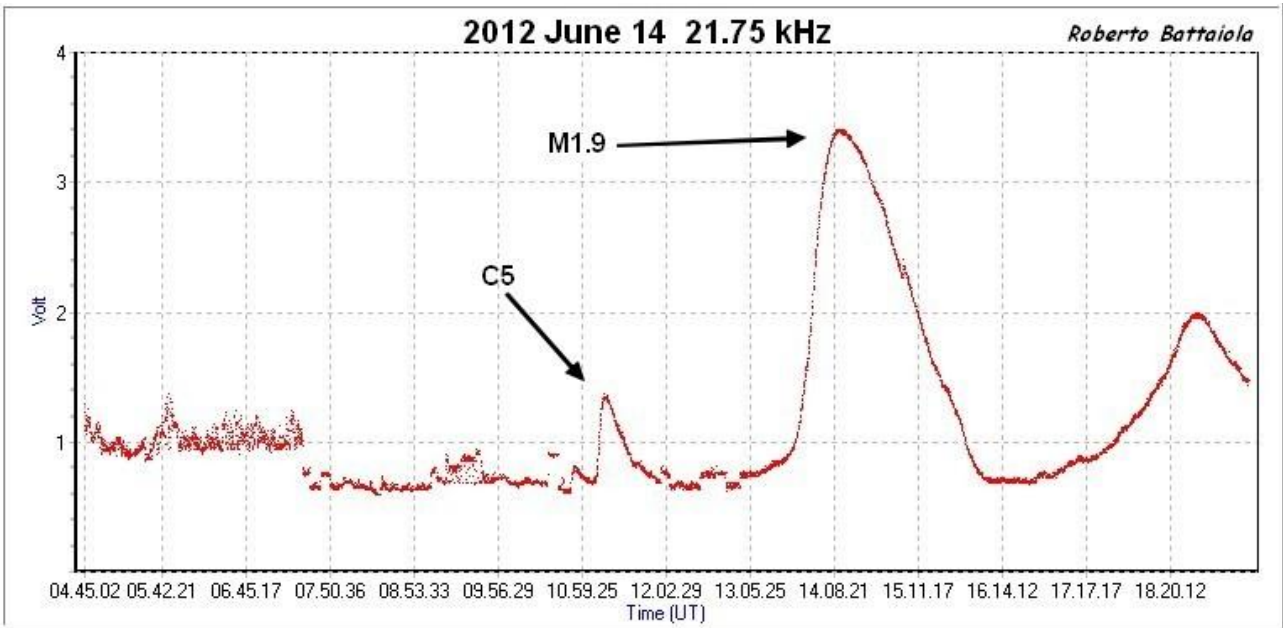
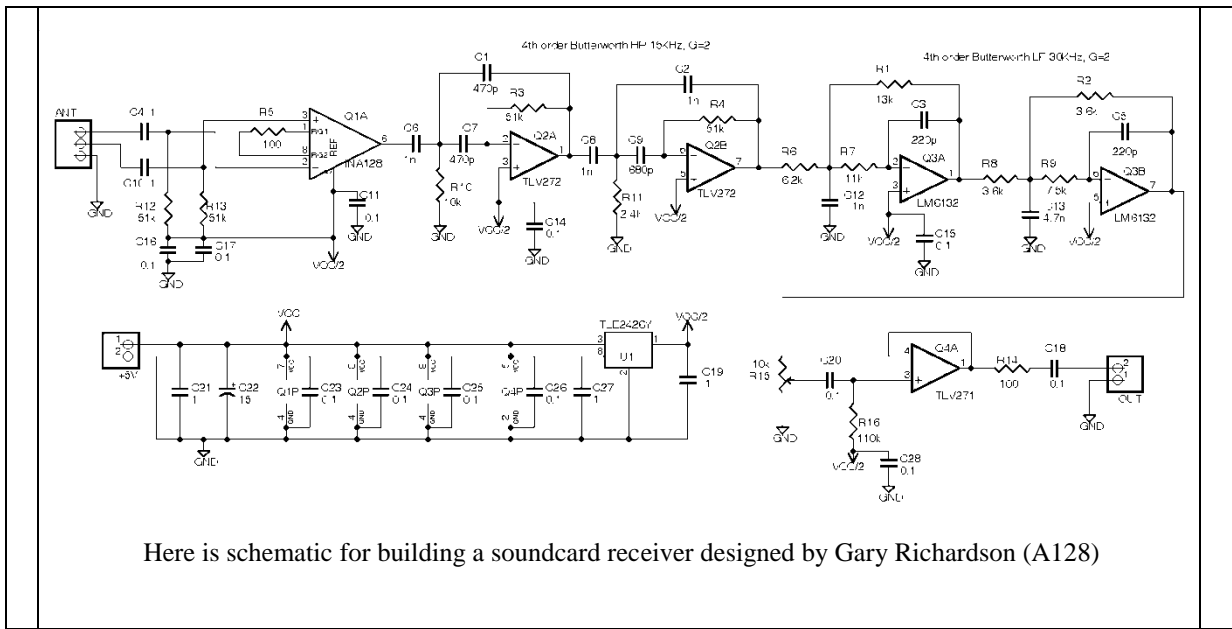
Sunset and Venus transit, June 5, 2012, near Yarker, Ontario, Canada, by Kim Hay

We got set up before 5:00 pm. I had the Solarmax 60, SCT with Thousand Oaks Type2+ filter and binoculars with Baader film. Camera used was a Canon Powershot A495. The picture of Venus was taken through an SCT 4" Bausch & Lomb using the Thousand Oaks and I hand held the camera. I also sketched several pictures.

This Solar Bulletin has the Sunspot numbers for November, December, 2009

Matt Templeton ran the numbers for November and December of 2009 using the K factors from 2009 September 25 -- presumably what was used for the October 2009 Bulletin.

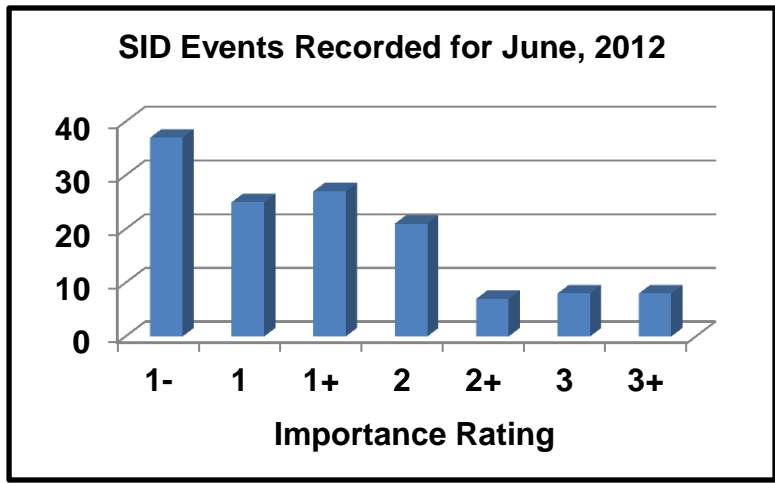
These American Relative numbers are on pages 6 - 7 of this Solar Bulletin, the numbers look about right, these numbers may seem a little low; however this was during the solar minimum. We had 28 people respond to our call for reports, and we were able to make reasonable reports.



Sudden Ionospheric Disturbances (SID) Records During June , 2012

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
120601	0532	1	120612	0910	1	120619	0559	2
120601	1342	2	120613	0315	1+	120619	1835	3+
120601	1711	1-	120613	0628	1-	120620	0557	1
120603	1756	2	120613	0919	1+	120620	1108	1-
120604	0935	1-	120613	0940	1-	120620	1629	2
120605	0755	1	120613	1135	1	120623	0735	3
120606	1408	1-	120613	1226	3+	120623	0804	3
120606	2006	2	120613	1259	3	120625	2057	2
120607	0036	1-	120613	1309	3	120627	0525	1+
120607	0205	1-	120613	1447	1	120627	0533	1+
120607	0326	1-	120613	1527	1+	120627	0807	2
120607	0558	1-	120613	1929	2+	120627	0815	2+
120607	1215	1	120614	0252	1-	120627	1106	1
120607	1428	1+	120614	0736	1+	120627	1239	2
120607	1439	2+	120614	0749	2	120628	0214	3+
120607	1544	2	120614	0806	1-	120628	0453	1-
120608	0313	2+	120614	1051	1-	120628	1612	2
120608	0718	1	120614	1112	1+	120628	2147	1-
120609	0309	1-	120614	1238	1-	120629	0127	1
120609	1032	1	120614	1354	3+	120629	0415	1
120609	1133	2	120614	1405	3+	120629	0602	1
120609	1528	1-	120614	1414	3	120629	0649	1+
120609	1653	2	120615	0053	1	120629	0823	1
120609	1831	1+	120615	1048	2	120629	0920	2
120610	0222	1+	120615	1321	2	120629	0928	3
120610	0451	1-	120615	1327	2	120630	0431	1+
120610	0646	2	120615	1813	1+	120630	0831	1+
120612	0213	1	120616	0126	1-	120630	0953	1
120612	0435	1+	120616	0627	1	120630	1056	1+
120612	0605	1	120616	1342	1-	120630	1251	1+
120612	0644	1	120616	1453	1+	120630	1833	1+
120612	0717	1-	120617	1740	1			

Solar Events

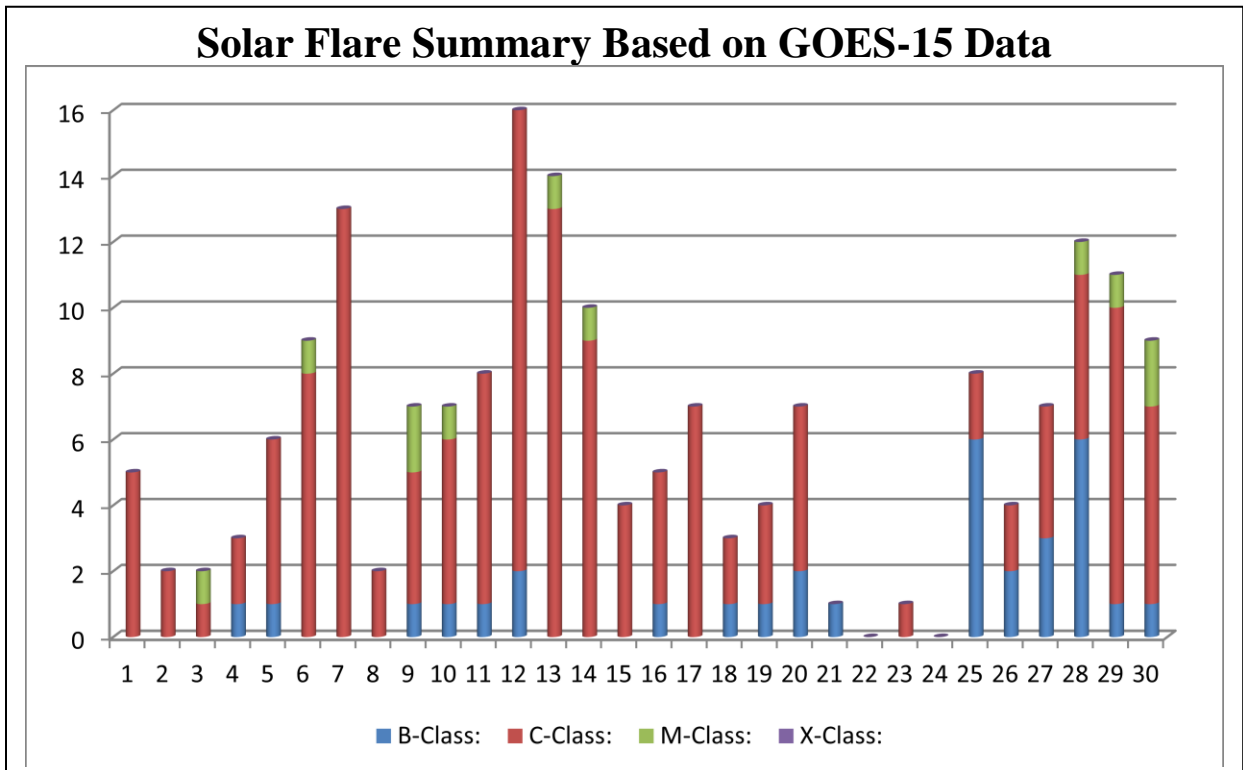


Importance rating: Duration (min)	1-: <19	1: 19-25	1+: 26-32	2: 33-45	2+: 46-85	3: 86-125	3+: >125
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Sudden Ionospheric Disturbances (SID) Observers During June , 2012

Observer	Code	Station(s) monitored	Observer	Code	Station(s) monitored
P King	A80	HWU	F Adamson	A122	NWC
A McWilliams	A94	NML	G Myers	A124	NLK
R Battaiola	A96	HWU	S Oatney	A125	NML
J Wallace	A97	NAA	K Cotar	A129	DHO GBZ
F Steyn	A102	NWC	J Karlovsky	A131	DHO ICV
L Loudet	A118	DCF GQD NAA	E Soubrouillar	A132	HWU
J Godet	A119	GBZ GQD	T Santo	A133	NWC
B Terrill	A120	NWC			

There were 187 solar flares measured by GOES-15 for June , 2012. There were 11 M class flares, 144 C class and 32 B class flares. The sun was somewhat less active compared to May, 2012. Fifteen AAVSO SID Observers submitted reports this month.



American Relative Sunspot Numbers (Ra) for
June, 2012 [**boldface** = **maximum, minimum**]

DAY	NumObs	RAW	Ra
1	30	119	83
2	29	141	97
3	34	129	93
4	30	135	94
5	32	132	99
6	31	128	87
7	34	113	79
8	33	92	67
9	29	93	69
10	31	115	84
11	26	115	84
12	23	111	76
13	35	103	74
14	41	113	83
15	36	110	82
16	39	92	69
17	42	72	53
18	27	51	37
19	29	43	31
20	32	22	16
21	33	16	12
22	35	15	11
23	42	14	10
24	40	11	8
25	40	19	14
26	36	40	28
27	36	65	44
28	41	87	63
29	42	99	72
30	41	102	72
Average	34.3	83.2	59.7

Observer	#Obs	Name
AAP	8	A. Patrick Abbott
AAX	15	Alexandre Amorim
AJV	12	J. Alonso
ARAG	30	Gema Araujo
ASA	8	Salvador Aguirre
BARH	9	Howard Barnes
BATR	4	Roberto Battaiola
BEB	25	Ray Berg
BERJ	11	Jose Alberto Berdejo
BMF	17	Michael Boschat

BRAB	27	Brenda Branchett
BRAF	26	Raffaello Braga
BROB	14	Robert Brown
CHAG	21	German Chavas Morales
CIOA	13	Ioannis Chouinavas
CKB	30	Brian Cudnik
CLZ	8	Laurent Corp
CNT	11	Dean Chantiles
CVJ	17	Jose Carvajal
DELS	8	Susan Delaney
DEMF	1	Frank Dempsey
DGP	19	Gerald Dyck
DJOB	6	Jorge del Rosario
DUBF	13	Franky Dubois
FAM	6	Fabio Mariuzza
FERJ	12	Javier Ruiz Fernandez
FLET	25	Tom Fleming
FLF	12	Fredirico Luiz Funari
FUJK	22	K. Fujimori
HALB	3	Brian Halls
HAYK	22	Kim Hay
HMQ	5	Mark Harris
HOWR	29	Rodney Howe
HRUT	27	Timothy Hrutkay
JASK	15	Krystyna Wirkus
JGE	10	Gerardo Jimenez Lopez
JJK	3	Jerry Klotz
KAND	30	Kandilli Observatory
KAPJ	24	John Kaplan
KNJS	20	James & Shirley Knight
KQR	1	Richard Kinne
KROL	14	Larry Krozel
LEVM	14	Monty Leventhal
LKR	18	Kristine Larsen
MARE	15	Enrico Mariani
MCE	17	Etsuiku Mochizuki
MILJ	16	Jay Miller
MJHA	21	John McCammon
MMI	27	Michael Moeller
MUDG	18	George Mudry
OATS	24	Susan Oatney
OBSO	15	IPS Observatory
RICE	14	E. C. Richardson
SCGL	24	Gerd-Lutz Schott
SDP	1	Dolores Sharples
SIMC	16	Clyde Simpson
SONA	13	Andries Son

STAB	24	Brian Gordon-States	22	14	4	3
SUZM	14	Miyoshi Suzuki	23	16	1	1
TESD	25	David Teske	24	13	0	0
URBP	23	Piotr Urbanski	25	16	0	0
VARG	26	A. Gonzalo Vargas	26	17	0	0
WILW	27	William M. Wilson	27	15	0	0
WRP	4	Russell Wheeler	28	24	0	0
			29	13	0	0
Total Observers	64		30	10	0	0
Total Observations	1029		Average	15.3	4.7	3.3

Reporting Addresses:

Sunspot Reports – Kim Hay

Email: solar.aavso@gmail.com

SID Solar Flare Reports – Rodney Howe

Email: ahowe@frii.com

Observer	# Obs	Name
AAP	13	A. Patrick Abbott
ARAG	29	Gema Araujo
BATR	2	Roberto Battaiaola
BERJ	9	Jose Alberto Berdejo
BRAB	25	Brenda Branchett
BROB	24	Robert Brown
CHAG	23	German Chavas Morales
CKB	25	Brian Cudnik
CLZ	6	Corp Laurent
CVJ	10	Jose Carvajal
DGP	7	Gerald Dyck
DUBF	23	Franky Dubois
FERJ	10	Javier Ruiz Fernandez
FLET	23	Tom Fleming
FUJK	19	K. Fujimori
HAYK	17	Kim Hay
KNJS	21	James & Shirley Knight
MCE	18	Etsuiku Mochizuki
MILJ	11	Jay Miller
MMI	9	Michael Moeller
OATS	15	Susan Oatney
SCGL	16	Gerd-Lutz Schott
SIMC	5	Clyde Simpson
STEM	14	Gerhard Stemmler
STQ	23	Nick Stoikidis
TESD	22	David Teske
VARG	21	A.Gonzalo Vargas
WILW	20	William M. Wilson

Total Observers 28

Total Observations 460

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

DAY	NumObs	RAW	Ra
1	21	0	0
2	19	0	0
3	19	0	0
4	15	0	0
5	16	10	7
6	13	12	8
7	17	1	1
8	14	0	0
9	15	11	8
10	15	11	8
11	11	6	4
12	15	1	1
13	13	4	2
14	11	6	4
15	17	7	5
16	12	6	4
17	15	2	1
18	15	13	9
19	18	19	14
20	15	14	10
21	16	12	8

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

DAY	NumObs	RAW	Ra
1	12	0	0
2	15	0	0
3	14	0	0
4	11	0	0
5	14	0	0
6	12	0	0
7	12	0	0
8	11	0	0
9	12	2	1
10	12	10	7
11	8	15	9
12	9	15	10
13	13	11	8
14	14	30	19
15	12	33	20
16	11	36	22
17	11	27	18
18	14	24	17
19	14	37	25
20	19	41	27
21	13	38	27
22	13	33	20
23	14	23	15
24	14	9	6
25	14	2	1
26	16	10	6
27	16	16	11
28	14	18	12
29	16	19	13
30	10	20	13
31	12	21	14
Average	13	15.8	10.4

DGP	3	Gerald Dyck
DUBF	21	Franky Dubois
FERJ	13	Javier Ruiz Fernandez
FLET	19	Tom Fleming
FUJK	24	K. Fujimori
HAYK	12	Kim Hay
KNJS	28	James & Shirley Knight
MCE	25	Etsuiku Mochizuki
MILJ	7	Jay Miller
MMI	11	Michael Moeller
OATS	7	Susan Oatney
SIMC	3	Clyde Simpson
STEF	2	George Stefanopoulos
STEM	11	Gerhard Stemmler
STQ	10	Nick Stoikidis
SUZM	27	Miyoshi Suzuki
TESD	15	David Teske
VARG	20	A.Gonzalo Vargas
WILW	15	William M. Wilson

Total Observers 28
Total Observations 402

Observer	# Obs	Name
AAP	6	A. Patrick Abbott
ARAG	27	Gema Araujo
BERJ	11	Jose Alberto Berdejo
BRAB	25	Brenda Branchett
BROB	15	Robert Brown
CHAG	22	German Chavas Morales
CKB	11	Brian Cudnik
CLZ	3	Corp Laurent
CVJ	9	Jose Carvajal