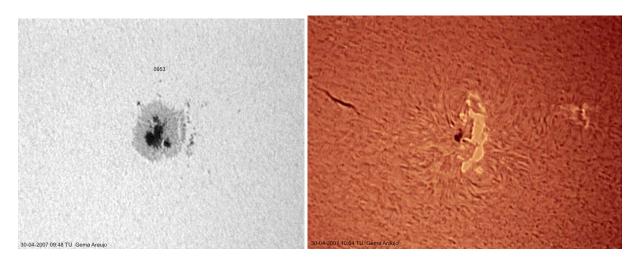
Solar Bulletin



THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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Gema Araujo took these images on April 30, 2007 at 09:48 and 10:04 UT of active region 10953.

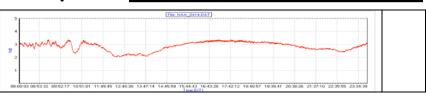
I would have liked to spring an April Fools joke on everyone and show a chart of solar max, but instead we saw the sunspot count dip a fraction lower than last month. On the good side we had more sunspot observations for the month and even a report of a SID.

I came across a binder with some of my old solar observations during 1975-1976 and noticed long stretches of observations with minimal and many zero counts from that cycle. It sure made for quick observations especially between university classes with the campus telescope. At some point I will follow Gema's lead and scan all these observation pages to store them online. It's probably a better way of preserving them for the future.

While activity in this part of the cycle may be low, the group leaders Dan Williams (sunspot observations), and Mike Hill (SID observations) are busy compiling your monthly observations for the bulletin and deserve a vote of thanks from all of us for their ongoing efforts.

Sudden Ionospheric Disturbance Report

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



Sudden Ionospheric Disturbances (SID) Recorded During April 2007

(Analysis performed by Michael Hill, SID Analyst)

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
070427	1439	2+						
		+					+	
			1				1	
		+					1	

Observer J Godet	<u>Code</u> A119	Station(s) monitored GBZ	<u>Observer</u>	Code	Station(s) monitored

1: 19-25

1+: 26-32

2: 33-45

1-: <19

The events listed above meet at least one of the following criteria

Importance rating: Duration (min)

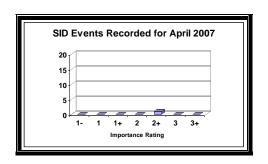
1) Event reported by two or more observers within ± 5 minutes

2+: 46-85

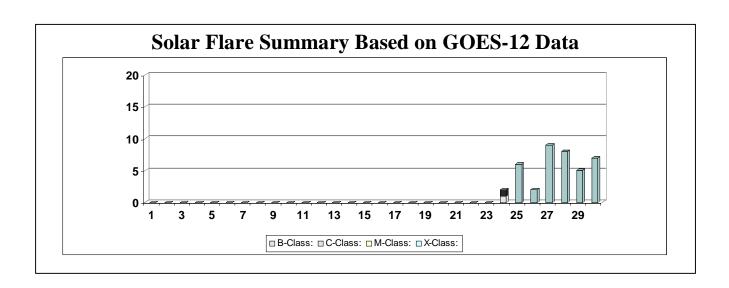
3: 86-125

- 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



April was another slow month for SID activity. I say slow instead of non-existent since we did have one observer with a correlated event. That was one more than last month's zero count however so quite an increase in activity by comparison. The GOES-12 satellite recorded only 39 X-Ray flares and of these only two were significant. One on the 24th which was a C2.8 event and the other on the 27th which was a B6.3 event. This is the one correlated event. As you can see from the graph below, activity was non-existent until the 24th when it did suddenly pick up quite a bit for the rest of the month. Thanks to all of you for submitting reports. You will all be noted in the SID Database report that appears in the AAVSO web site.



American Relative Sunspot Numbers (Ra) for April 2007 [**boldface = maximum, minimum**]

Day	N	Raw Mean	Ra
1	34	7	4
2	32	2	1
3	28	2	1
4	24	0	0
5	30	0	0
6	36	0	0
7	34	1	0
8	30	0	0
9	29	0	0
10	29	0	0
11	36	0	0
12	31	0	0
13	29	1	1
14	28	1	0
15	40	0	0
16	30	0	0
17	31	3	2
18	27	0	0
19	37	0	0
20	36	0	0
21	41	0	0
22	37	1	0
23	32	0	0
24	28	0	0
25	30	13	9
26	32	17	12
27	29	17	13
28	37	23	18
29	38	32	23
30	34	32	23

Means 32.3 5.1 3.6

No. of Observers: 58

Total No. of Observations: 969

Reporting Addresses:

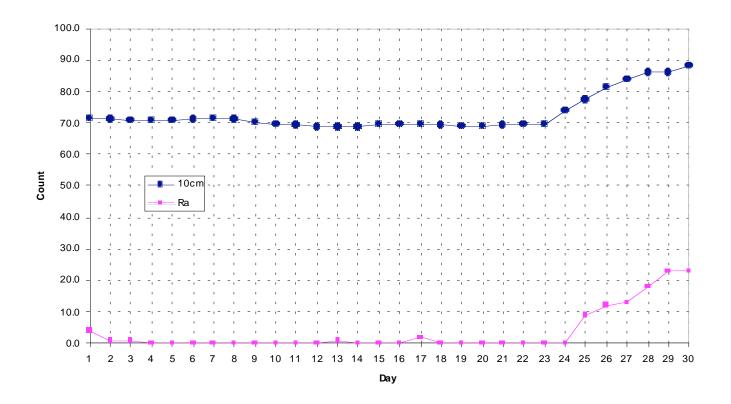
Sunspot Reports – Email: solar@aavso.org Postal Mail: AAVSO, 49 Bay State Rd. Cambridge, MA, 02138 Fax: 617-354-0665

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

April 2007 Sunspot Observers

AAP	A. Abbott	14
AJV	J. Alonso	15
ARAG	G. Araujo	30
BARH	H. Barnes	13
BATR	R. Battaiola	14
BEB	R. Berg	8
BERJ	J. Berdejo	11
BMF	M. Boschat	16
BRAB	B. Branchett	27
BRAD BRAM	D. Branchett M. Bradbury	20 1
BRAR	R. Branch	1 16
BROB	R. Brown	18
BVC	A. Buck	30
BYG	Y. Brovarets	34
CHAG	G. Morales	26
CKB	B. Cudnik	22
CLZ	L. Corp	12
COMT	T. Compton	11
DEJV	J. van Delft	15
DGP	G. Dyck	15
DUBF	F. Dubois	30
FLET	T. Fleming	22
GFT	F. Gobet	17
GOEM HALB	M. Goetz B. Halls	13 14
HAYK	K. Hay	10
JENS	S. Jenner	8
KAPJ	J. Kaplan	25
KNJS	J. & S. Knight	13
KQR	R. Kinne	2
KROL	L. Krozel	1
KUZM	M. Kuzmin	5
LARJ	J. Larriba	13
MARE	E. Mariani	17
MCE	E. Mochizuki	24
MCHL	L. McHenry	1 4
MEU MMI	E. Mason M. Moeller	4 25
OATS	S. Oatney	22
OBSO	IPS Observatory	12
PEKT	R. Pektas	28
RICE	E. C. Richardson	17
RITA	A. Ritchie	18
SCGL	G. Schott	30
SCHG	G. Scholl	5
SIMC	C. Simpson	12
STEF	G. Stefanopoulis	19
STEM	G. Stemmler	25
SUZM	M. Suzuki M. Szulc	22
SZUM TESD	M. Szulc D. Teske	21 28
TJV	J. Temprano	9
URBP	P. Urbanski	27
VARG	A. Vargas	23
VIDD	D. Vidican	7
WILW	W. Wilson	26
WRP	R. Wheeler	6

Solar Flux and American Relative Sunspot Numbers (Ra) for April 2007 10 cm source http://www.drao.nrc.ca



Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to October 2006 (Waldmeier Method)

