

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS - SOLAR COMMITTEE

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Table I. American Relative Sunspot Numbers (Ra) for April 2006 [boldface = maximum, minimum]

Day	N	Raw Mean	Ra
1	28	51	38
2	32	58	43
3	24	68	49
4	28	81	56
5	20	79	56
6	27	76	58
7	32	67	50
8	35	57	41
9	31	48	35
10	25	54	42
11	29	60	43
12	29	61	44
13	32	58	43
14	34	43	32
15	34	29	21
16	25	17	13
17	33	13	10
18	33	11	8
19	32	3	2
20	29	17	12
21	20	13	9
22	28	3	2
23	26	11	8
24	31	21	15
25	26	41	30
26	35	54	40
27	31	64	46
28	31	58	42
29	23	49	37
30	31	59	42
31	---	---	---

Means : 29.1 44.1 32.2

Total No. of Observers: 55

Total No. of Observations: 874

Table II. April 2006 Observers

19 AAP P.Abbott	1 KROL L.Krozel
15 AJV J.Alonso	11 LARJ J.Larriba
28 ARAG G.Araujo	21 MCE E.Mochizuki
12 BARH H.Barnes	16 MENM M.Menegotto
11 BATR R.Battaiola	2 MEU E.Mason
12 BEB R.Berg	9 MMI M.Moeller
17 BERJ J.Berdejo	25 OATS S.Oatney
10 BLAJ J.Blackwell	21 PEKT R.Pektas
13 BMF M.Boschat	18 RICE E.Richardson
1 BRAM M.Bradbury	24 RITA A.Ritchie
19 BRAR R.Branch	27 SCGL G.Schott
12 BROB R.Brown	12 SCHG G.Scholl
24 CHAG G.Morales	3 SDP D.Sharples
29 CKB B.Cudnik	13 SIMC C.Simpson
11 CLZ L.Corp	17 STEM G.Stemmler
16 COMT T.Compton	21 STQ N.Stoikidis
27 CR T.Cragg	20 SUZM M.Suzuki
16 DEJV J.van Delft	24 SZUM M.Szulc
10 DEMF F.Dempsey	26 TESD D.Teske
17 DGP G.Dyck	14 TJV J.Temprano
20 FERJ J.Fernandez	20 URBP P.Urbanski
21 FLET T.Fleming	19 VARG A.Vargas
20 FUJK K.Fujimori	6 WILD D.Williams
6 GOEM M.Goetz	26 WILW W.Wilson
6 HALB B.Halls	5 WRP R.Wheeler
9 HAYK K.Hay	
17 JAMD D.James	
6 JENS S.Jenner	
23 KAPJ J.Kaplan	
26 KNJS J.Knight	

Reporting Addresses

Sunspot Reports -- email: solar@aavso.org
postal mail: AAVSO, 25 Birch St. Cambridge, MA 02138
FAX (AAVSO): (617) 354-0665

SID Solar Flare Reports -- email: noatak@aol.com
postal mail: Mike Hill
114 Prospect St. Marlboro, MA 01752

See Note on Page 3.

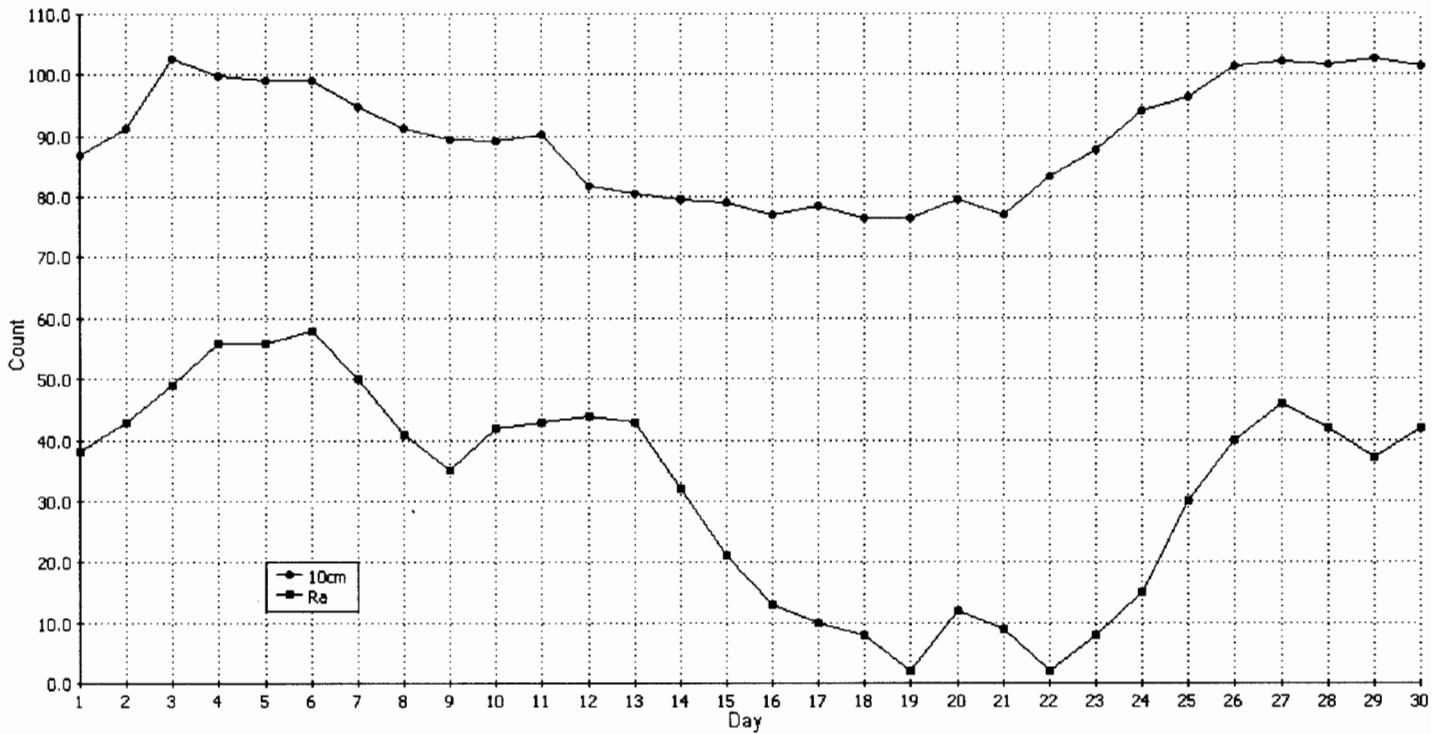


Fig. 1. 10 cm Solar Flux and American Relative Sunspot Numbers (Ra) for April 2006.
 10 cm source: <http://www.drao.nrc.ca/icarus>

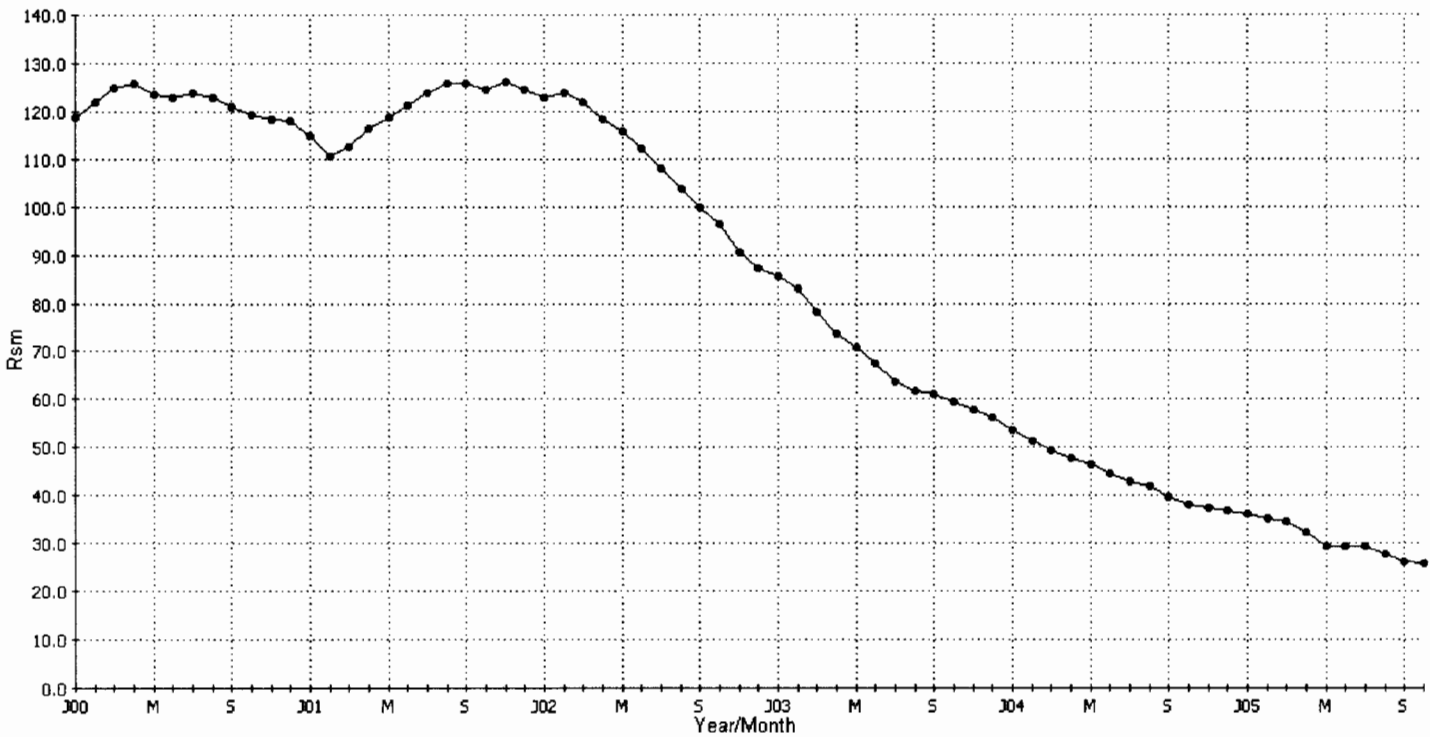


Fig. 2. Smoothed Mean Sunspot Numbers (Rsm) from January 2000 to October 2005 (Waldmeier Method).

Summary of AAVSO Solar Committee Activity for the Period October 2005 to March 2006

Presented at the Spring Meeting of the AAVSO, Rockland, IL May 5-7, 2006

Committee Chair and Sunspot Observing Group Leader: Carl E. Feehrer
Solar Flare/SID Observing Group Leader: Mike Hill

Observer Reporting

The progressive diminution in the sun's activity as solar minimum approaches has resulted in a reduced amount of reporting by the corps of sunspot and SID observers. During the period covered by this summary, a total of 333 sunspot reports containing 4611 observations were received, while a total of 102 SID reports were received. The sunspot and SID reports were contributed by 82 and 20 observers, respectively. As always, the contributions were made by an active, widely distributed group of observers from the United States, Canada, Europe, South America, South Africa, India and Australia.

Observer Awards

Three new observers have now met the criteria established for awarding of certificates that recognize significant contributions. SID observer Paul Campbell from Canada and sunspot observers Gerd-Lutz Schott from Germany and James Knight from South Africa have now joined the earlier group of 26 that have achieved this distinction. In accord with tradition, these new observers will be recognized and receive their certificates at the AAVSO's Fall meeting.

Website Activity

Contributions of photos continue to be received and posted to the AAVSO website, though at a much reduced level. Presumably this outcome, like the reduction in reports, is due to the relatively small amount of solar activity.

Reorganization of Solar Committee

Carl Feehrer, chair of the Solar Committee and Sunspot Group Leader since 2000 will step down from his responsibilities in May. Taking his place as chair of the Committee will be Paul Mortfield, a SID observer who lives in Canada. Paul participates in the SOHO program and is active in solar outreach efforts. Daniel Williams, a new volunteer interested in H-alpha and white-light sunspot observing lives in Nebraska and will take over as Sunspot Group Leader. Mike Hill, SID/Solar Flare Group Leader and SID analyst will continue in his present position.

The current chair wishes to thank observers and AAVSO staff all of those for their unstinting support during his tenure and expresses the hope that they will welcome the new team and help to make their service as interesting and enjoyable as they made his.

Acknowledgements

As always, the successful performance of the Solar Committee's work during the reporting period was due to the dedication and activities of our solar observers, AAVSO staff, and headquarters' volunteer Arthur Ritchie. We are grateful to this group for their extensive support.

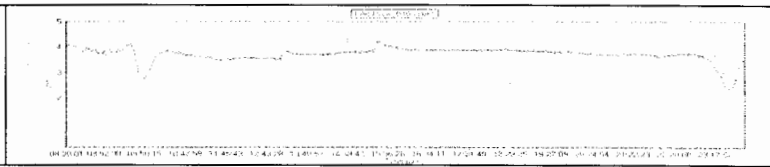
NOTE: As of May 15, I will no longer be able to guarantee that reports received by postal mail at my local address will be able to be forwarded to AAVSO headquarters in time for processing. Therefore, please be sure to send all regular mail reports and other communiques to the AAVSO headquarters address shown at the bottom of page 1.

Thank you.

-CEF

Sudden Ionospheric Disturbance Report

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 Marlborough, MA 01752 USA
 noatak@aol.com



Sudden Ionospheric Disturbances (SID) Recorded During April 2006

(Analysis performed by Michael Hill, SID Analyst)

Date	Max	Imp	Date	Max	Imp	Date	Max	Imp
060405	1310	1+						
060405	1522	1+						
060406	0535	1+						
060406	2042	2						
060407	0804	1+						
060411	1828	2						
060422	0843	1+						
060422	1640	1						
060426	0650	1+						
060426	0833	2						
060426	1227	1						
060426	1357	1+						
060426	1453	1+						
060426	1702	1+						
060426	1828	1						
060427	1552	2						
060428	0828	2+						
060429	1630	1+						
060430	0931	1+						

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

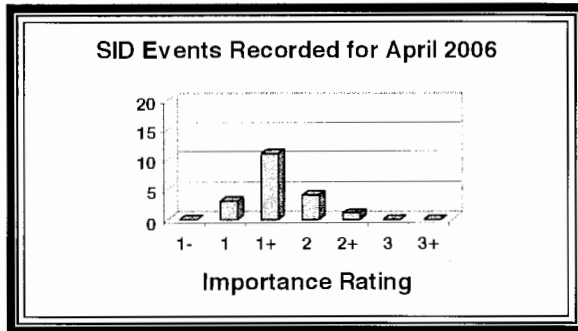
Observer	Code	Station(s) monitored
A Clerkin	A29	NAA
J Winkler	A50	NAA NML
P King	A80	HWU
M Hill	A87	NAA
J Mandaville	A90	NPM
G Di Filippo	A93	HWU
R Battaiola	A96	HWU
J Wallace	A97	NAA
M King	A99	HWU
F Steyn	A102	NAA NWC

Observer	Code	Station(s) monitored
L Observatory	A107	DHO
P Mortfield	A108	NAA
M Suhovecky	A115	NAA
K Hubal	A117	NAA

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



April was a slow month, but activity did pick up a bit from what we have had in the past few months. There were 19 correlated SID events reported by observers, most of them of low to medium importance rating. There were 132 X-Ray flares recorded by the GOES-12 satellite and of these, only four were M-Class, 24 were C-Class and the rest were B-Class. Thanks to all of you for reporting in. I didn't get as many NO SID reports which was nice to see.

