WHITE LIGHT SOLAR ACTIVITY

White light MDF, 1995 May

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
K.J. Medway	0.41	0.52	0.93	29	-	-	-	-
T. Tanti	0.40	0.48	0.88	25	15.50	25	2.60	25
J.G. Gissing	0.31	0.31	0.62	13	-	-	1.85	13
P. Meadows	0.38	0.46	0.83	24	12.60	24	2.08	24
E.H. Strach	0.42	0.46	0.88	26	12.60	22	2.73	26
W. Hayes	0.60	0.40	1.00	5	-	-	3.00	5
B. Hardie	0.48	0.52	1.00	25	17.08	25	-	-
CUAS	0.50	0.50	1.00	24	16.00	24	-	-
M. Götz	-	-	0.50	20	-	-	-	-
D.P. Elias	-	-	1.00	30	19.20	30	-	-
MEANS	0.43	0.47	0.88	221	15.69	150	2.42	93

White light MDF, 1995 June

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
K.J. Medway	0.96	0.14	1.10	28	-	-	-	-
W. Hayes	0.69	0.00	0.69	16	-	-	1.75	16
T. Tanti	0.76	0.17	0.93	29	15.70	29	2.60	29
B. Hardie	0.92	0.00	0.92	25	15.64	25	-	-
P. Meadows	1.00	0.00	1.00	12	17.60	12	3.00	12
J.G. Gissing	0.64	0.00	0.64	14	-	-	1.40	14
E.H. Strach	0.82	0.11	0.93	28	14.52	23	3.04	28
D.P. Elias	-	-	0.93	30	17.70	30	-	-
CUAS	0.90	0.00	0.90	15	14.00	15	-	-
M. Götz	-	-	0.50	22	11.15	22	-	-
MEANS	0.84	0.07	0.87	219	15.24	156	2.47	99

MDF = Mean Daily Frequency of active areas, R = sunspot number, Q = mean quality estimate (JBAA 98,6,pp282-286)

BAA/TA Comparison

Month	Active areas		Spot numbers	
	BAA	TA	BAA	TA
1995 April	0.86	0.84	16.63	16.67
1995 May	0.96	0.88	16.00	15.69

Sunspot Activity, 1995 May

Activity continued at the low levels of April and Medway reports that only a few small groups were seen. Strach reports that he observed a total of four groups during the month, two in the N and two in the S. The average latitude was 9.5° in the N and 9° in the S. Solar minimum may not now be far off.

On the 5th Meadows observed a short-lived B-type group approaching the W limb. By the 6th this group had disappeared and he notes that spotless conditions resumed.

On the 7th Meadows noted a single penumbral spot at S4/51 near to the E limb. By the 13th this spot had disintegrated into a collection of pores which had completely disappeared by the 15th.

Strach reports that the most interesting group was first seen on the 12th as two faint spots at N9/32. Meadows also reports this as a D-type group at N9/29 which appeared on the 13th near to the CM. As this neared the W limb the following penumbral spot increased in size to dominate the group. Strach reports that this group was associated with extensive flaring activity. This spot subsequently decayed prior to disappearing around the limb on the 19th.

Meadows noted a fast-developing group which was first seen on the 15th at S15/5 and which changed in three

days from type B to type D. Strach counted 17 spots in this group on the 18th. It crossed the W limb on the 22nd/23rd.

At the end of the month Strach and Meadows report the appearance of a small N spot on the 28th May. Strach's position for this spot is N10/162 on that date. The spot became bipolar on the following day but subsequently regressed to become a single spot.

Strach reports that *polar faculae* were observed in the S on May 10, 23, 24, 25, 26, 29 and 31 and that one polar facula was seen in the N on the 26th. He notes that the S polar facula observed on the 25th was one of the brightest that he had ever seen. At that time it lay on the CM at a latitude of -79°. Elias also observed polar faculae in the S on the 7th and 25th.

Sunspot Activity, 1995 June

Sunspot activity continued at low levels in June. Strach reports that he observed only five groups during the month, two of them lasting no longer than a day. These two consisted of a very faint Axx group seen on the 29th at N4/135 and a Bro group at N12.5/106. The remaining three groups lasted a little longer. According to Strach the most interesting one was an equatorial group which was first seen on the 4th at N0.5/130. By the 5th it had expanded into a complex bipolar group consisting of at least nine spots with two lying on the equator. On the 6th the leader had moved into the S hemisphere at S1/139 whilst the followers were in the N at N1/130. The leader remained in the S until it passed over the W limb on the 8th. Since this group straddled the equator it presumably should count for 0.5 group in either hemisphere as far as the MDF is concerned! (ed). Most observers have actually recorded it as a S hem. group once the leader moved S of the equator. It must be said that observer's estimates of the latitude of this group differed with some showing it in the N hemisphere and some in the S.

A single spot appeared on the disk on the 5th at N9.5/53. It developed into a bipolar group which crossed the CM on the 9th before passing over the W limb on the 14th. The only other group of note rotated onto the disk on the 18th at N4/210. As it came on to the disk it was a single spot but it soon developed into bipolar group. It died on the disk on the 29th leaving bright faculae in its place.

Strach reported *polar faculae* in the S on June 1, 8, 9, 15, 23, 29 and 30 and in the N on June 9, 18, 23, 27 and 29.

MONOCHROMATIC SOLAR ACTIVITY

Prominence MDF, 1995 May

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
K.J. Medway	2.09	2.50	4.59	22	1.41	1.77	3.08	0.68	0.73	1.41
B. Hardie			3.86	15						
E.H. Strach	1.73	2.45	4.18	22	1.05	1.91	2.95	0.68	0.55	1.23

Prominence MDF, 1995 June

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
K.J. Medway	2.33	2.39	4.72	18	1.66	1.72	3.38	0.66	0.67	1.38
B. Hardie			2.66	15						
E.H. Strach	1.12	1.42	2.54	24	0.58	1.13	1.71	0.54	0.29	0.83

Prominence activity, 1995 May

In contrast the white-light activity Medway reports that numerous prominences were seen on some days. The most impressive was a spectacular arch seen on the E limb on the 9th. This was recorded on video. This was also seen by Strach who described it as a "cloud" formation. He also observed a series of low arches on the 18th and 19th.

Prominence activity, 1995 June

On the 2nd Strach observed an arc on the E limb extending from S14 to S21. On the following day it had become an extensive hedgerow covering latitudes S16 to S29. Medway also saw this as an impressive multiple arch prominence on the 3rd. On that day further violent Hα activity was noted on the SE limb with the appearence of a low arch prominence.

A pyramidal shaped prominence was seen by Strach on the 21st. At 0630 it was situated at N42 in the E limb. Throughout the day it changed its configuration eventually extending in a S direction to a distance of 120,000km. On the 29th a similar active prominence was seen throughout the day. It was also on the E limb at N38.

Medway reports that prominences were evenly distributed in latitude during the month.

Flares, 1995 May

Date	Time	Lat	CMD	Type	Obs.
7	1015-1045	S4	E75	Sf	KJM
13	0735			1N	EHS
13	1246	N6	E15	1B	KJM
13	1237	N6	E15	Sn	KJM
13	1355	N6	E12	Sf	KJM
13	1801	N6	E15	Sn	KJM
14	1004	N9	1W	Sn	KJM
14	1028	N9	1W	rib'n	KJM
14	1053	N9	1W	rib'n	KJM
14	1100	N9	1W	Sn	KJM
14	1509	N9	2E	1B	KJM
15	1021	N9	W14	SB	BH
15	1026/1038	N10	W16	SB	BH
15	1024	N10	W18	SB	BH
15	1735	N9	W15	Sn	KJM
19	1746	N9	W70	Sn	KJM
28	1509	S12	W56	Sn	KJM
28	1029	N15	E49	Sn	KJM
28	1350	N5	E49	Sn	KJM
28	1454	N5	E49	Sf	KJM

The 1N flare observed by Strach on the 13th was in the large developing N group mentioned above. There were many interwoven filamentous surges in the area, some showing line-of-sight motion. Such motion leads to a shift in the wavelength and so is seen slightly off-band in the 0.6Å filter.

Flares, 1995 June

Date	Time	Lat	CMD	Type	Obs.
4	1310	S4	W15	Sf	KJM
5	1810	S1	W40	Sf	KJM
7	1831	N9	E14	Sn	KJM
12	1745	N6	W58	Sf	KJM
18	1212	S4	SE	limb	KJM
18	1730	S4	SE	Sf	KJM
21	1840	N12	E40	Sn	KJM
23	1735	N1	E26	SB	KJM
25	1425	N5	W5	Sf	KJM
25	1824	N6	W7	Sf	KJM
28	1822-1830	N22	NE	limb	KJM
30	0948-0950	N12	E23	SB	BH
30	0953	N13	E24	Sn/SB	BH
30	0958-0959	N12	E23	SB	BH
30	1806	N5	E70		KJM
30	1813-1830	N10	E75	rib'n	KJM

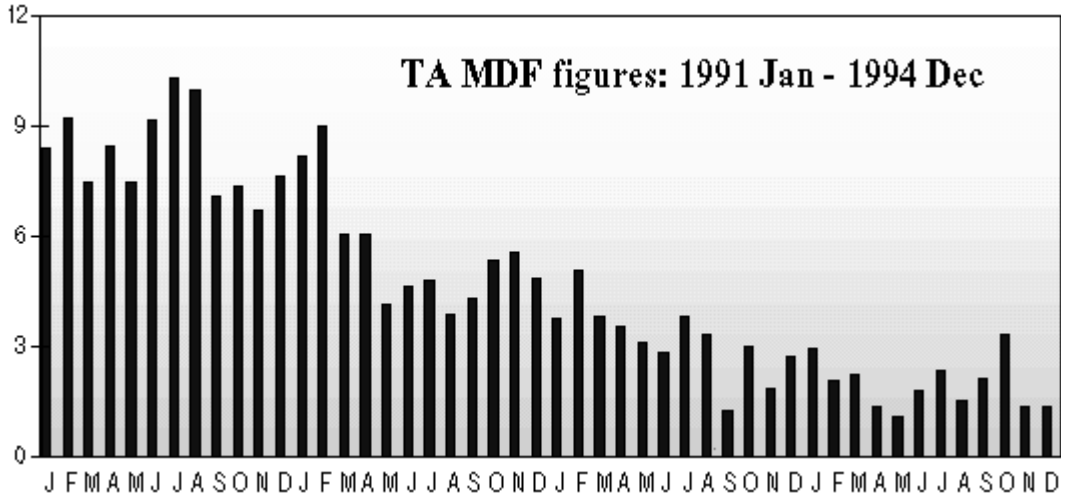
Solar Notes on the Web

Along with the rest of TA the Solar Notes column now has its own page on the World Wide Web at:

`http://www.demon.co.uk/astronomer/solar.html`

This page will contain information of interest to Solar observers but the data will be of a mainly archival nature. We will only be publishing very brief monthly summaries of activity on the Web pages and the detailed accounts will only appear in the magazine.

The graph below, showing MDF activity over the last four years, is an example of what will be found on the Solar page.



Monthly MDF figures from TA observers