

I must apologize that last month's column contained enough typos to qualify for an Astronomy Now award. Somehow I managed to post the draft version to Guy rather than the final spell-checked version. I will be more careful this month!

WHITE LIGHT SOLAR ACTIVITY

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
E.H. Strach	1.10	0.42	1.52	21	20.00	21	3.90	21
K.J. Medway	0.87	0.21	1.08	24	-	-	-	-
W. Heyes	0.89	0.22	1.11	9	-	-	2.67	9
B. Hardie	1.14	0.00	1.14	14	16.28	14	-	-
J.G. Gissing	0.30	0.30	0.60	10	-	-	12.00	10
M. Götz	-	-	0.61	21	-	-	-	-
P.J. Meadows	1.21	0.36	1.57	14	20.10	14	-	-
MEANS	0.96	0.26	1.10	113	18.97	49	5.65	40

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

Table 1: Solar activity, 1994 May

BAA/TA Comparison

Month	Active areas		Spot numbers	
	BAA	TA	BAA	TA
1994 April	1.46	1.39	18.16	18.36

Sunspot Activity, 1994 May

Observers reported that Solar activity was low throughout May and most recorded a fall in activity over April. Strach notes that most spots were small, of type A and B, and often only lasting for a few days. Most observers suffered from the very dull weather experienced from the UK in the middle of the month.

On the 7th Strach first noted a small group at S7/228. On the following day this group had assumed a bipolar configuration but after CM passage on the 9th it faded and only a single spot was seen on the 10th. After that only bright Hydrogen remained in its position as seen in H α . This brightened on the 13th with the appearance of a short-lived filament and on the 14th at 0835 it became a flare of SF importance. The bright flocculus was last seen in this position on the W limb on the 17th.

The most significant spot group of the month was first seen near the E limb on 12th May with an average position of N7.5/122. Strach notes that it consisted of a pair of spots lined by penumbra and surrounded by a



*Spot group 1994 May 17, 1616UT.
60mm refractor, Nick James*

varying number of satellite spots. This configuration did not change much during its passage across the disk. Medway reports that the spot was visible to the naked eye on the 20th. Strach reported a faint follower at N9.5/108 but it was considered to be a separate group since it was more than 10° distant from the main group. This separate group formed a trio of small spots on the 17th and was no longer seen on the 19th.

Strach reports *polar faculae* in the S on May 3, 4, 6, 8, 9, 12, 13, 14, 26, 27 and 28 and in the N on May 12 and 13. His average *sunspot latitude* is 8° in the N and 9.5° in the S. Meadows also observed *polar faculae* in the S on the 1st and 2rd.

MONOCHROMATIC SOLAR ACTIVITY

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
E.H. Strach	2.00	0.94	2.94	19	1.84	0.68	2.53	0.16	0.26	0.42
K.J. Medway	3.69	4.50	8.19	16	2.94	3.25	6.19	0.75	1.25	2.00
B. Hardie			3.33	14						

H α Prominence Activity, 1994 May

Strach reports that his prominence MDF was the lowest since 1987 February. He notes that most prominences were small and on two days no countable prominences were observed. The only remarkable prominence seen by Strach during the month was observed on the 1st on the W limb from N3 to N22. It showed an almost



*Hedgerow prominence
1994 May 1, 0900UT
Eric Strach*

regular pattern of "roots" connecting to the main body of the chromosphere (see figure). He notes that a similar, but less well defined, prominence was seen on the E limb on the 14th extending from N13 to N26.

According to Medway, who observed in H α on 16 days, most prominence activity was confined to the spot zones ($\pm 40^\circ$). He notes that the most notable prominence of the month was seen on the 15th on the E limb from N12 to S27. This was joined after 1715 by the development of an eruptive prominence on the SE limb. He notes that unfortunately these

splendid prominences had disappeared by May 16th.

Other notable prominences observed during a very cloudy month were seen on the 1st, 12th, 22nd, 30th and 31st.

Medway reports that filaments were seen on all of the 16 days that he observed but that the seeing conditions were poor.

Flares, 1994 May

Date	Time	Lat	CMD	Type	Obs.
1	1430	N11	W22	Sf	KJM
2	1046	N7	W33	Sn	KJM
2	1110	N7	E35	Sn	KJM
2	1420	N7	W33	SB	KJM
8	0920	S11	E18	Sn	KJM
8	1443	S24	E45	Sf	KJM
8	1757	S22	E48	Sf	KJM
9	1750-1754	S10	E9	Sn	KJM
14	0700	N9	E24	Sf	EHS
14	0700	S8	W57	Sf	EHS
15	1045	N4	E34	Sf	KJM
15	1350	N5	E39	SB	KJM

Radio Activity, 1994 May

Strach recorded two radio bursts on the 13th. The first lasted from 1130 until 1300 and the second from 1410 until 1450. Three lesser bursts were observed on the 17th and one was recorded at 1410 on the 18th.