# **SOLAR NOTES**

This was the "mildest November since records began" in the UK. It seems also to have been one of the cloudiest months that I can remember. The number of Solar observations submitted to TA has suffered as a consequence.

WHITE LIGHT SOLAR ACTIV	<b>/IT</b> `	Y
-------------------------	--------------	---

### White light MDF, 1994 November

Observer		MDI	ĨŦ.		R		Q	
	North	South	Total	Days	Total	Days	Total	Days
E.H. Strach	0.73	1.00	1.73	15	21.33	9	3.67	15
K.J. Medway	0.25	0.37	0.62	8	-	-	-	-
B. Hardie	0.53	0.86	1.40	15	18.60	15	-	-
D.P. Elias	0.56	1.28	1.83	18	26.10	18	-	-
CUAS	0.70	1.30	2.00	9	27.00	9	-	-
M. Gotz	-	-	0.61	18	-	-	-	-
MEANS	0.57	1.01	1.37	83	23.21	51	3.67	15

MDF = Mean Daily Frequency of active areas, R = sunspot number, Q = mean quality estimate (JBAA <u>98</u>,6,pp282-286) *Table 1* 

# **BAA/TA** Comparison

Month	Active	Active areas		Spot numbers	
	BAA	TA	BAA	TA	
1994 October	3.38	3.31	52.45	56.81	

# Sunspot Activity, 1994 October

Due to his absence in South America Ken Medway's report arrived too late for inclusion in the November issue. He notes that he managed 25 days of observation in October which showed a slight increase in activity over September. He reports that the large spot at N8 mentioned last month was visible with the *naked eye* on October 17. Medway's average *spot latitudes* for October were  $\pm 10^{\circ}$ .4 in the N and  $\pm 8^{\circ}$ .8 in the S.

# Total Solar Eclipse, 1994 November 3

Martin Mobberley has already published his account in the last TA (31, <u>367</u>, p165). Medway reports that he observed the event from the Atacama Desert on the Tacna-Jarata Road. He was bothered by drifting cloud but luckily this cleared a minute after second contact. The corona was a classic minimum type (see last month) and two prominences were seen at the 11 o'clock position. The duration of totality was  $2^{\text{m}}$  59<sup>s</sup> as estimated from his Super-8 cine film. Several photos were taken on Ektachrome and we hope to publish these soon.

# Sunspot Activity, 1994 November

Coverage from the UK was very poor this month due to the weather. Medway reported spotless days on the 10th, 15th, 16th and 17th. Strach reports that activity was low throughout the month and particularly so in the second half. The three spot groups which dominated the disk at the end of last month were visible at the start of November but with much deminished activity. Strach notes that only small spots were seen from the 17th onwards. The only notable feature was a bipolar group seen at N17.5/101 covering 10°.5 of longitude. This group faded considerably during the following days.

Strach's average *spot latitudes* were  $+12^{\circ}$  in the N hemisphere (3 groups) and  $-13^{\circ}$  in the S (4 groups).

*Polar faculae* were observed by Strach on the 17th (N&S); 18th , 21st and 22nd (N); on the 24th (N&S) and the 28th in the N. The event of the 18th at N73/W25 was particularly prominent. Elias observed a polar facula in the N at N75/W16 on the 10th.

# MONOCHROMATIC SOLAR ACTIVITY

# Prominence MDF, 1994 November

Observer		All Lat	itudes			0-40°			40-90°	
	North	South	Total	Days	North	South	Total	North	South	Total
B. Hardie			5.57	7						
E.H.Strach	1.7	2.0	3.7	10	1.2	1.7	2.9	0.5	0.3	0.8

# **Prominence activity**

Strach reports that prominence activity was low throughout the month. On the 6th he saw a low prominence on the E limb at S26 directed obliquely southwards. This is not an unusual appearence but this prominence was connected to a long filament which continued in the same line but the opposite direction reaching a latitude of  $-10^{\circ}$  as illustrated in figure 1. Bad weather prevented monitoring of this feature on following days.

# Fig 1. 1994 Nov 6, 0930UT. EHS

A hedgerow prominence was seen on the 22nd, extending from S12 to S22. A 95,000 km high prominence was seen on the E limb on the 29th as shown in figure 2.

# Flares, 1994 October

No flares were observed in November. The following observations are for October.

Date	Time	Lat	CMD	Туре	Obs.
8	1209	<b>S</b> 1	W47	Sf	KJM
9	0855-0859	S20	W47	SB	KJM
9	1058-1107	S22	W42	SB	KJM
9	1404	S20	W47	SB	KJM
15	1344	S2	W44	Sf	KJM
23	1025	N15	W60	Sn	KJM <sup>1</sup>

# Notes

1. Ribbon flare extended to N7, W69.

Fig 2, 1994 Nov 29, 1145UT, EHS	