

## WHITE LIGHT SOLAR ACTIVITY

I have now received most observers' annual reports for 1994. I hope to include these in a future edition as space permits.

### White light MDF, 1995 February

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
E.H. Strach	1.05	1.68	2.73	19	40.50	19	7.30	19
K.J. Medway	0.76	1.06	1.82	17	-	-	-	-
W. Heyes	-	-	1.80	5	-	-	4.20	5
B. Hardie	0.83	2.05	2.88	18	40.72	18	-	-
J.G. Gissing	0.33	1.44	1.78	9	-	-	3.55	9
M. Götz	-	-	1.39	23	-	-	-	-
D. Elias	0.88	1.50	2.38	26	-	-	-	-
MEANS	0.83	1.56	2.17	117	40.61	37	5.81	33

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

Table 1

### BAA/TA Comparison

Month	Active areas		Spot numbers	
	BAA	TA	BAA	TA
1994 January	1.64	1.27	25.38	23.88

### Sunspot Activity, 1995 February

One observer has commented that the White Light Activity table is slightly confusing in that the R and Q "total" columns actually contain the means and not the total counts. Total actually refers to the total disk (not N & S) as does the total in the MDF column.

The Sun is getting higher in the sky at UK latitudes and, weather permitting, observations should get a bit easier as we move into Spring. Wilfred Heyes notes that the Sun has now cleared trees at his observatory and he has been able to resume observations!

Strach reports that the N hemisphere was blank until the 5th when a near-equatorial spot-group was seen at N1/240. He notes that it was still visible on the next day having crossed the CM. The S hemisphere displayed four groups up to the 5th when a small group at S7/217 decayed. The most significant spot crossed the CM on the 5th and was located at S13/244.

From the 12th Strach reports that a unipolar group dominated the N hemisphere at N9/116. This faded after the 18th and it was last seen as an insignificant spot near the W limb on the 20th. On the 14th activity resumed in the S hemisphere with the appearance of a spot near the E limb at S14/43. This formed 10 tiny spots to the W of the follower and by the 18th the follower had formed two penumbral spots at S13/33 and S15/30. These were more than 10° from the leader at S14.5/44. The follower spots were subject to further development on the 19th and 20th and on the 21st, with the leader, an extensive chain of spots over 15° in longitude was visible. Strach then observed the complex group fade on the 23rd with only a single, insignificant spot left at S14.5/43 on the 25th. By the 26th the only trace of this active group was a strong facula.

On the 22nd Strach noted a spot which had rotated onto the disk at S13/299. This had a double umbra which dissolved into a twin spot on the 26th.

Strach's average *spot latitudes* for the month were 7° in the N (3 groups) and 11.5° in the S (8 groups). He observed *polar faculae* in the S on Feb 3, 6, 14, 16, 17, 20, 21, 23 and 26 and in the N on the 26th.

## MONOCHROMATIC SOLAR ACTIVITY

### Prominence MDF, 1995 February

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
E.H. Strach	2.35	2.23	4.58	17	1.88	1.65	3.53	0.47	0.59	1.06
K.J. Medway	2.20	1.60	3.80	5	1.80	0.80	2.60	0.40	0.80	1.20
B. Hardie			3.66	12						

## Prominence activity

Generally, prominence activity was low. Medway reports a low arch prominence was visible on the W limb on the 12th and a loop prominence was seen on the SW limb on the 18th. On the 17th Strach noted two converging pillars on the E limb at N24 and N26. By the next day they were two parallel jets of unequal size but continuous with a filament on the disk. Several other filaments were recorded by Strach. One followed the 40°N parallel and reached the W limb on the 6th.

On the 14th Strach noted a hedgerow prominence on the E limb between S19 and S27. By the 15th these connected with a filament and on the 16th a lone filament was seen on the disk in the same position. This became quite pronounced between the 18th and the 23rd but faded after that date.

Medway noted a group of tall pillars on the SE limb on the 25th between S35 and S53. He comments that they were quite striking.

## Flares, 1995 February

Date	Time	Lat	CMD	Type	Obs.
3	1107	S18	E80	SB	BH
4	1540-1600	S11	E14	2B	KJM
6	1059	S7	W32	SB	BH
15	1034-1043	S7	W90	SB	BH
18	0915	S11	E30	Sf	EHS
19	0945	S15	E29	1f	EHS
19	1032-1044	S13	E27	SB	BH
20	1234-1248	S13	E15	1B	BH
23	1040	S19	W36	1f	EHS
26	0915	S16	E59	Sf	EHS
26	0915	N10	W50	Sf	EHS