

WHITE LIGHT SOLAR ACTIVITY

White light MDF, 1995 September

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
E.H. Strach	0.97	0.30	1.27	30	14.30	27	2.74	30
W. Heyes	0.63	0.00	0.63	8	-	-	1.25	8
G.F. Johnstone	0.63	0.13	0.75	8	9.13	8	-	-
J.G. Gissing	0.64	0.09	0.73	11	-	-	1.20	11
P. Meadows	1.08	0.31	1.38	13	17.50	13	3.23	13
T. Tanti	0.75	0.21	0.96	24	11.80	24	1.70	24
K.J. Medway	0.61	0.27	0.88	26	-	-	-	-
B. Hardie	1.00	0.26	1.26	23	16.60	23	-	-
CUAS	0.70	0.30	0.90	16	11.00	16	-	-
M. Gotz	-	-	0.27	15	5.49	15	-	-
MEANS	0.81	0.24	0.97	174	12.78	126	2.19	86

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 August	1.09	0.73	15.67	10.94

Sunspot Activity, 1995 September

Solar activity remains low with the N hemisphere dominant. Strach observed a total of seven groups during September with only two in the S hemisphere.

The largest single spot observed was situated at N4/24 and had been visible during the latter part of August. According to Strach it had an area of some 80 millionths. It approached the W limb as a single penumbral spot and Meadows last saw it on the 4th. At that time a single pore was also visible very close to the W limb at N5/53. Strach last saw the spot on the 6/7th as it crossed the W limb.

On the 19th an extensive spot group rotated on to the disk. According to Strach it was centred at N8/60. He comments that the group was quite active, both in the way that it developed and in H α . Meadows also saw this group and reports that two small groups of type C (at N8/64) and J (N4/51) were visible. These were joined by another J type group on the 22nd at S8/33. The penumbral spots of all three groups were fairly small and were last seen on the 24th. Strach followed the remaining small spot to the end of the month but comments that after the 28th it was very difficult to see. Indeed it could have been simply a contrast effect with the surrounding bright faculae.

Strach notes that the highest latitude spot that he observed during the month was seen on the 15th/16th at S17/255. His average *spot latitudes* were 6.4° in the N and 10.5° in the S.

Polar faculae were seen by Strach on September 4 (S), 10 (S), 14 (N&S), 15 (S), 18 (N&S), 19 (N), 20 (N), 23 (N), and 27 (N).

MONOCHROMATIC SOLAR ACTIVITY

Prominence MDF, 1995 September

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
B. Hardie			3.47	19						
K.J. Medway	1.76	1.00	2.76	13	1.00	0.76	1.76	0.76	0.24	1.00
E.H. Strach	1.52	1.00	2.52	25	0.92	0.68	1.60	0.60	0.32	0.92

Prominence activity, 1995 September

Medway reports that prominence activity was visible on all 13 of the days that he observed in H α during the month. Strach reports that prominences were unremarkable until the 15th when a whole series of small prominences littered the E limb from N8 to N31. Two further prominences were seen at N54 and S27.

The most interesting prominences that Medway observed during the month were the pyramid shaped structures seen on the SE limb on the 17th at 1100UT. These later developed into a complex loop structure with much detail visible around the loop. This prominence was also seen by Strach on the 18th who comments that it was a precursor to the spot at N9/60 which came around the limb on the following day.

On the 21st Strach reports that two prominences were visible on the E limb at S38 and S43. On the following day only a remnant was visible as a dense, detached cloud-like formation. On the 22nd Medway describes a prominence shaped like an Indian Mosque (! Ed.) which was visible on the SE limb at 0900UT near to S30. Finally, on the 29th a tall but spindly loop prominence was clearly noted on the NW limb at 0820UT. Throughout the day it showed subtle changes with Hydrogen filling in the loop and, after 1300, three separate pillars forming in close proximity.

Medway reports that filaments were seen on many days with no less than seven visible on the 22nd. The most impressive being a filament 10° E of the CM running from N36 to N50.

Flares, 1995 September

Date	Time	Lat	CMD	Type	Obs.
15	0937	S16	W65	SB	BH
20	1055-1102	N7	E69	1N	EHS ¹
20	1102-1109	N8	E65	1B	BH ²
22	1003-1029	N7	E34	1B	BH
22	1015-1025	8N	E35	Sf	EHS ³
23	1110	7N	E22	Sf	EHS ⁴
24	0947	N6	E9	Sn	BH

Notes

1. Associated with a filamentous surge.
2. Followed by a dark filamentous surge in the E.
3. Preceded by a filamentous surge seen off-band implying line-of-sight motion. A further surge followed the flare.
4. Surges preceded the spot from 0750 onwards changing shape constantly until the appearance of the flare.