Observer		MDF			R		Q	
	North	South	Total	Days	Total	Days	Total	Days
CUAS	0.80	0.70	1.50	13	21.00	13	-	-
E.H.Strach	0.69	0.37	1.06	16	14.91	16	2.13	16
W.F.Heyes	0.67	0.78	1.44	9	-	-	3.89	9
B. Hardie	0.86	0.52	1.38	21	20.40	21	-	-
K.J.Medway	0.65	0.45	1.10	20	-	-	-	-
M. Götz	_	_	0.53	17	13.70	17	-	-
T. Tanti	0.90	0.63	1.53	30	22.80	30	3.70	30
J.G.Gissing	1.11	0.44	1.55	9	-	-	3.67	9
MEANS	0.81	0.55	1.25	135	19.14	97	3.33	64

#### WHITE LIGHT SOLAR ACTIVITY

MDF = Mean Daily Frequency of active areas, R = sunspot number,  $Q = \text{mean quality estimate (JBAA } \underline{98}, 6, \text{pp282-286})$  $Table 1: Solar \ activity \ 1993 \ September$ 

#### **BAA/TA Comparison, 1993 August**

Month	Active	areas	Spot numbers		
	BAA	TA	BAA	TA	
1993 August	3.41	3.31	45.32	48.74	

Sunspot Activity, 1993 September

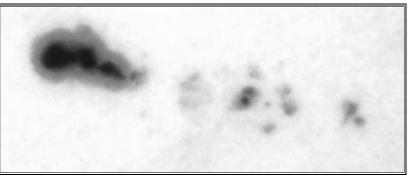
This month saw a major reduction in the level of solar activity but it ended with one of the largest spots in recent months visible on the disk. Many observers noted the particularly low activity and we have to look back to 1987 to find comparable levels.

A number of observers noted the disk to be spotless for the first time since 1988. The consensus is that the spotless period began on the 10th and continued on until the 13th when the CUAS and Tony Tanti observed a small spot in the N hemisphere. Another spotless day occurred on the 22nd.

Strach observed two *high latitude* spots. One at N21/320 was last seen on the 3rd and the other at S21/80 was

seen on the 17th. He also observed *polar faculae* on the 7th in the N. On the 11th two bright faculae

At the very end of the month one of the largest groups seen for some time became visible. Medway first saw it on the 30th and notes that, at that time, it had a large leading spot. He mentions that the appearance of such a



Large sunspot group. 1993 October 3, 1120UT. 60mm refractor, Nick James.

large spot at this time in the cycle shows that it pays to keep monitoring the Sun even during periods of otherwise low activity. I finally managed to photograph this group as it crossed the CM on October 3.

## MONOCHROMATIC SOLAR ACTIVITY

Observer	All Latitudes			0-40°			40-90°			
	North	South	Total	Days	North	South	Total	North	South	Total
E.H. Strach	2.64	1.93	4.57	14	1.64	1.79	3.43	1.00	0.14	1.14
K.J.Medway	2.09	2.09	4.18	11	1.55	1.54	3.09	0.54	0.55	1.09
B. Hardie	-	-	3.30	10	-	-	-	-	-	-

# $H\alpha$ Prominence Activity, 1993 September

Strach comments that most of the prominences that he observed were rather small. Some low arch formations were noted on the 1st around the W point, on the 8th on the E limb at N12 to N21 and on the 12th around the E point. On the 25th a low arch formation extended over a wide span from S4 to S16 on the W limb.

Medway notes that the highlight of his observations this month was a prominence eruption seen on the 26th between 1315-1340UT on the SE limb. This heralded the appearance of the large sunspot mentioned above.

The event was first seen moving above the limb and brightening in the form of a low arc.

## Flares, 1993 September

Date	Time	Lat	CMD	Type	Obs.
4	1335	N10	E34	SB	KJM
4	1343	N08	E34	Sf	KJM
5	1450-1510	N15	E21	Sn	KJM
18	0913	S13	E33	Sn	KJM
19	1428	S15	W33	Sf	KJM
25	1457	S06	W14	Sf	KJM