

**WHITE LIGHT SOLAR ACTIVITY**

**White light MDF, 1996 July**

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
K. Medway	0.03	0.39	0.42	28	-	-	-	-
W. Heyes	0.00	0.08	0.08	12	-	-	0.25	12
G. North	0.00	0.29	0.29	17	5.47	17	-	-
J.G. Gissing	0.00	0.39	0.39	18	-	-	1.20	18
E. Strach	0.03	0.35	0.38	29	6.93	28	1.55	29
G.F. Johnstone	0.00	0.42	0.42	12	7.00	12	-	-
M. Gotz	-	-	0.31	13	7.30	13	-	-
CUAS	0.10	0.00	0.10	18	2.00	18	-	-
T. Tanti	0.13	0.40	0.53	30	9.80	30	1.70	30
P. Meadows	0.06	0.41	0.47	17	7.53	17	1.71	17
MEANS	0.05	0.32	0.36	194	6.84	135	1.41	106

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
1996 June	1.16	0.77	14.66	10.98

Meadows measured an area of 420 millionths. Whilst this group was on the averted hemisphere the disk was virtually spotless.

Strach observed *polar faculae* on July 13 (N & S), 15 (S), 18 (S), 20 (N & S), 21 (S), 23 (S), 25 (N&S) and 26 (S).

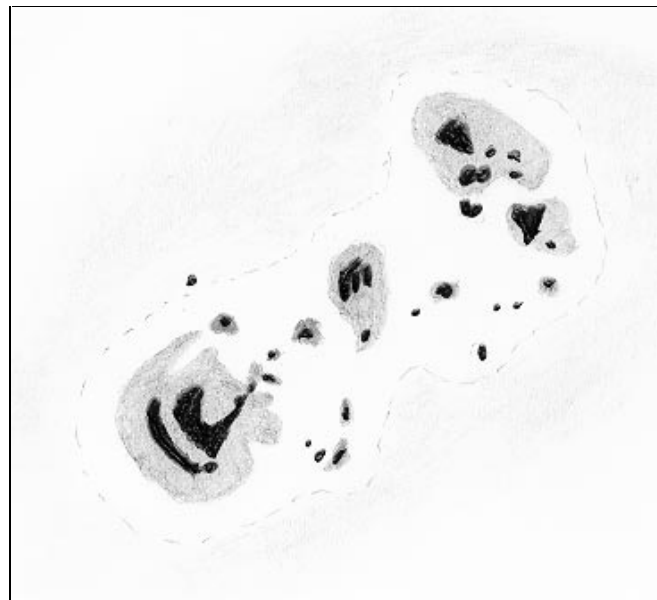
**Sunspot Activity, 1996 July**

Solar activity during the month was low and one group provided most of the interest.

Strach reports that he observed only three sunspot groups in July. A small northern group was seen at N4/291 on July 2 at 1740 but it was not seen earlier that day at 0615 or on the next day.

The southern hemisphere was more active and it presented two appearances of the same group. This had survived its passage on the averted hemisphere between the 14th and 26th. Strach reports that since he first observed this group on April 19 it has survived four rotations. It has faded several times but its latest incarnation started on July 7 when it was at S9.5/250, 8°W of the CM. Meadows saw it on the 10th and he reported it as an Esi group with an area of 400 millionths. On that date Thomson drew it under very good conditions.

The large group passed over the W limb on the 13th and by the time of its return on the 27th it spanned longitudes 252° to 262°. Gerald North drew it on the 28th and commented that extensive faculae were seen in the area. On the 31st Medway reports that it was just visible to the naked-eye and



*A drawing of the main group of the month. 1996 July 10, 1835. Eyepiece projection using the 5-inch Cooke refractor at Liverpool Observatory. Good seeing with granulation visible. D.A. Thomson.*

## MONOCHROMATIC SOLAR ACTIVITY

### Prominence MDF, 1996 July

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
E.H. Strach	1.96	2.04	4.00	27	1.26	1.56	2.82	0.70	0.48	1.18
K. Medway	1.71	2.08	3.79	24	1.17	1.71	2.88	0.54	0.37	0.91

### Prominence activity, 1996 July

Medway reports that there were several small filaments associated with the main spot group. He reports that his figures for prominence activity show a slight increase this month. Most notable was the large number of small mounds or large spicules down the E limb on the 26th.

Strach's prominence count is the highest that he has recorded since 1995 May. He reports that the NE limb presented ever changing prominences around N42 on the 17th and 18th July but on subsequent days no filaments were observed on the disk at this latitude. On the 24th

filaments were seen at N42, they crossed the CM on the next day and reached the W limb on the last day of the month producing a hedgerow prominence.

### Flares, 1996 July

Date	Time	Lat	CMD	Type	Obs.
8	1432-1443	S9	W20	Sf	EHS
10	1635	S10	W50	Sf	EHS
10	1810-1830	S13	W46	Sn	KJM
12	1510-1515	S8	W79	Sf	EHS
12	1512-1543	S10	W70	1N	EHS