## **SOLAR NOTES**

White light MDF, 1996 August

Observer	MDF			R		Q		
	North	South	Total	Days	Total	Days	Total	Days
J.G. Gissing	0.29	0.36	0.65	14	-	-	1.21	14
P. Meadows	0.50	0.56	1.06	18	15.94	18	2.72	18
G.F. Johnstone	0.46	0.20	0.66	15	9.10	15	-	-
W.F. Heyes	0.38	0.46	0.85	13	-	-	2.15	13
G. North	0.17	0.42	0.58	12	10.70	12	-	-
K. Medway	0.33	0.57	0.90	30	-	-	-	-
E.H. Strach	0.41	0.48	0.89	29	13.42	26	2.97	29
M. Götz	-	-	0.57	21	12.06	21	-	-
T. Tanti	0.53	0.53	1.07	30	16.00	30	2.50	30
CUAS	0.10	0.60	0.70	20	10.00	20	-	-
J. Isles	0.50	0.50	1.00	24	14.79	24	-	-
MEANS	0.38	0.49	0.85	226	13.19	166	2.45	104

## WHITE LIGHT SOLAR ACTIVITY

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

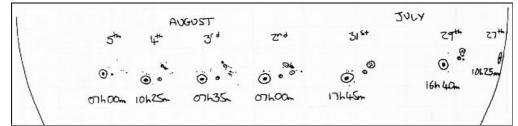
### **BAA/TA Comparison**

Month	Active a	areas	Spot numbers		
	BAA	TA	BAA	TA	
1996 July	0.54	0.36	9.96	6.84	

#### Sunspot Activity, 1996 August

This month saw a definite increase in solar activity over previous months. The large southern group mentioned last month passed the CM on the 2nd and gradually faded until it crossed the W limb on the 8th. Isles saw it with the naked eye between July 31st and August 3rd. On the 2nd Meadows estimated its area as 370 millionths. Medway also reports a naked eye sighting on the 3rd. On the 10th and 11th Meadows observed a small Dsi group at N10/170. He also reports two high latitude groups. One was seen on the 10th only at N24/134 and the other, of type Cro, was seen between the 14th and 18th at N29/74. Many other observers noted this spot and Strach reports his position for this new cycle group was N28/71.

Meadows reports that an Axx group was seen at N11/46 on the 20th and 21st just before the southern group described above made its reappearance around the E limb. This was its fifth rotation but it was now much smaller and it was dominated by a single penumbral spot of type Hsx. Meadows reports that the mean location of the leading spot was 11S/260.



Peter Meadows drew the large sunspot group seen in late July and August. The solar north pole is up.

# MONOCHROMATIC SOLAR ACTIVITY

#### **Prominence MDF, 1996 August**

Observer	All Latitudes			0-40°			40-90°			
	North	South	Total	Days	North	South	Total	North	South	Total
E.H. Strach	1.89	2.22	4.11	27	1.15	1.77	2.92	0.74	0.44	1.18
K. Medway	2.61	1.66	4.27	18	2.11	1.33	3.44	0.50	0.33	0.83

#### **Prominence activity, 1996 August**

Medway observed the Sun in H $\alpha$  on 18 days during August. He comments that activity seems to be increasing and that prominences were mainly confined within 25° of the equator.

Strach reports that an unusual prominence was seen at 1040 on the 7th extending from the W limb between S38 and S57. By 1055 the northern part had lifted off the limb and by 1128 this had reached a height of 115,000km. The ejected material was last seen at 1138.

Medway observed a low arch prominence on the NW limb on the 7th and further low pillars and arches were seen in the same area on the 14th. He reports that perhaps the most striking outbreak was late in the month when a row of low pillar prominences on the E limb heralded the return of long-lived spot group. Some of these exhibited eruptive activity, particularly at 1750 on the 21st.

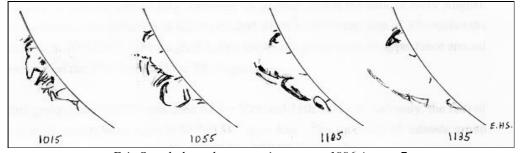
A curved, dark filament was seen  $8^{\circ}$  to the north of the returning spot group from the 24th. Both Medway and Strach recorded this feature. Strach reports that a new

dark filament developed on the 28th extending southwards from the active area and showing constant change. Both filaments persisted and at times Strach reports that there was a fine connection between the two to the east of the spot group.

On the 28th Strach observed a long northern filament just to the W on the CM running N-S from N30 to N18. He notes that it became very dense on the 30th but was not seen after that date.

	Flares,	1996	August
--	---------	------	--------

Date	Time	Lat	CMD	Туре	Obs.
3	1300	<b>S</b> 8	W16	Sf	EHS
4	1010	S9	W20	Sf	EHS
9	1030	N10	E03	Sf	EHS
26	0854	S17	E61	?	KJM
26	1230	S11	E44	Sf	EHS
28	0803	S13	E21	Sn	EHS



Eric Strach drew these prominences on 1996 August 7.