SOLAR NOTES

White light MDF, 1997 November

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
G. North	0.80	0.60	1.40	5	32.20	5	-	-
P. Meadows	2.00	0.80	2.80	10	49.60	10	8.00	10
K. Medway	0.92	0.69	1.61	13	-	-	-	-
W. Heyes	1.00	0.50	1.50	4	-	-	5.25	4
J.G.Gissing	1.13	0.50	1.63	8	-	-	3.80	8
G.F. Johnstone	1.00	0.66	1.66	3	-	-	-	-
CUAS	1.50	0.37	1.78	9	25.30	9	-	-
MEANS	1.26	0.60	1.85	52	36.86	24	5.97	22

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

BAA/TA Comparison

Month	Active a	areas	Spot numbers		
	BAA	TA	BAA	TA	
1997 October	2.06	1.63	29.54	24.34	

Sunspot Activity, 1997 November

The weather and low solar altitude conspired to reduce the total number of observations to one third of October's total.

The large group seen at the end of October (at S18/354) was still prominent at the beginning of November. Meadows reports that on the 1st it was an Eai group. His subsequent observations on the 2nd and 4th showed the group developing into types Eki and Fkc respectively. The area of the group increased from 270 millionths on the 1st to 720 millionths on the 4th with the following penumbral spot being the largest spot of the group. The axis of this group had a high inclination such that the preceding spot was 7° nearer to the equator than following spot. By the 8th the group was close to the W limb and only the large following penumbral spot could be seen. Medway reports that the group was easily visible to the naked eye on the 2nd.

Also on the 1st, the Cso group seen at the end of October had decayed into type Hrx (at N19/30). On the 2nd and 4th this group was of type Axx. On the 2nd a short lived Cso group was seen at N29/327 and was last seen on the 4th as type Axx.

Meadows reports that a collection of small spots were seen at N24/305 on the 4th - these subsequently developed into type Cso on the 8th and Dao on the 11th when the group was near the W limb. Also on the 8th a Hsx spot was seen at N28/208 together with a high latitude Bxo spots at S34/244. These two groups were not seen on the 11th. A small Cso group was seen on the 11th at N29/266.

On the 22nd Meadows reports the second Eai group of the month at N20/116. This group comprised three similarly sized penumbral spots at preceding, centre and following locations together with a few smaller spots. The area of this group was estimated at 370 millionths on the 22nd and 300 millionths on the 23rd. An Hsx spot at S17/95 and an Axx spot at N23/4 were seen on the 22nd and both developed into a Cso groups by the following day. A single Axx spot was seen near the E limb on the 23rd at S16/5.

On the 27th Meadows noted the third E type group of the month. This was of type Eko and it was seen near to the E limb at N21/312. This was the reappearance of the Dao group last seen on the 11th. By the 29th the asymmetric leading penumbral spot had split into two giving a symmetrical penumbral spot to the north and an irregular penumbral region to the south. The area of the group was estimated at 590 millionths on the 29th. Medway reports that he saw this group with the naked eye on the 28th, 29th and 30th.

Prominence MDF, 1997 November

Observer	All Lat	All Latitudes			0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
K. Medway	4.16	2.00	6.16	6	2.83	1.17	4.00	1.33	0.83	2.16

Prominence activity, 1997 November

Medway reports that the highlight of the month was a splendid "leaning arch" prominence seen on the NW limb on the 1st. This declined rapidly and by the 2nd only low arches and pillars remained. Filaments were common and on the 30th seven were seen. Medway

noted a 20° long example near the NW limb on the 29th and 30th.

Flares, 1997 November

Date	Time	Lat	CMD	Type	Obs.
30	1347-1350	N17	E21	Sf	KJM