

**WHITE LIGHT SOLAR ACTIVITY**

**White light MDF, 1994 December**

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
E.H. Strach	0.48	1.28	1.76	21	25.00	12	4.29	21
K.J. Medway	0.46	0.94	1.40	15	-	-	-	-
J.G. Gissing	0.25	1.25	1.50	4	-	-	3.80	4
B. Hardie	0.38	0.76	1.14	21	16.09	21	-	-
M. Götz	-	-	0.80	10	-	-	-	-
D. Elias	-	-	1.53	19	27.80	19	-	-
MEANS	0.43	1.02	1.39	90	22.42	52	4.21	25

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

Table 1

**BAA/TA Comparison**

Month	Active areas		Spot numbers	
	BAA	TA	BAA	TA
1994 November	1.63	1.37	21.06	23.21

**Sunspot Activity, 1994 December**

Again, the low Solar elevation and poor weather combined to reduce the coverage this month. Observers again reported a low level of activity. Activity in the S hemisphere far exceeded that in the N.

Strach reports that a small spot formed near the E limb on the 8th at S10/229. On the next day this spot had grown to become a group of at least nine spots and by the 14th it had developed into a large bi-polar group with numerous small spots between the large leader and follower. On this date, as it crossed the CM, Medway reports that it was visible with the naked eye using a Solar Skreen filter. The group reached its maximum extent between the 14th and the 16th when it covered 13° of longitude. Strach reports that by the time it approached the W limb it had faded and it was last seen on the 19th.

According to Strach the most interesting event of the month was the appearance of a near-equatorial spot just to the N of the equator and which was the only N spot seen during the month. He first saw it near to the E limb on the 17th at N0.5/105. On the next day there were two small follower spots which were definitely in the S hemisphere at S3/95. On the 20th Strach measured the position of the northern spot as N0.25/106.5 and the follower at S4/96.5. He notes that positional work at this time of the year is difficult due to the poor seeing and distortion of the disk.

Strach's mean *sunspot latitudes* were 0.5° in the N (1 group) and 8.7° in the S (6 groups). *Polar faculae* were observed on Dec 3, 6, 8, 21, 22, 23 and 28 in the S and Dec 3, 8 and 23 in the N.

A few solar observations were received from Jon Shanklin at Faraday Station, Antarctica but they have not been included above since they only covered the last week of the month. Since the Sun is above the horizon for most of the day from his location more observations are expected!

**MONOCHROMATIC SOLAR ACTIVITY**

**Prominence MDF, 1994 December**

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
B. Hardie			3.5	6						
K.J. Medway	4.75	0.50	5.25	4	3.00	0.25	3.25	1.75	0.25	2.00
E. Strach	1.92	1.38	3.31	13	1.53	1.15	2.69	0.38	0.23	0.62

**Prominence activity**

Medway reports that a few interesting prominences were seen during the month. A low arch prominence was noted on the 4th and hedgerow prominences were seen on the 18th. Strach reports that most of the prominences he observed were unremarkable. He also observed a minor eruption on the 4th at S6 associated with a spot at S8/281 which was rotating onto the disk.

Strach observed several small prominences around the 40° zone in the N between the 6th and 25th, first on the E limb and then the W. He notes that they were associated with a chain of filaments around 40N.

**Flares, 1994 December**

Date	Time	Lat	CMD	Type	Obs.
3	1235-1240	S18	E67	Sn	KJM
8	1155	S12	E72	SF	EHS

