

I will be going away on holiday on August 5th this year. Could you please try to get your July observations to me by August 3rd at the latest so that I can prepare the report before my departure. Any observations that do not arrive before this deadline will be included in September's TA.

WHITE LIGHT SOLAR ACTIVITY

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
B. Hardie	0.50	1.05	1.55	20	22.45	20	-	-
W. Heyes	0.00	0.60	0.60	5	-	-	1.40	5
J.G. Gissing	0.42	0.58	1.00	12	-	-	4.00	10
CUAS	1.10	1.50	2.50	20	37.00	20	-	-
T. Tanti	0.68	1.29	1.96	28	25.50	27	4.40	28
P. Meadows	0.89	1.44	2.33	18	32.70	18	-	-
K.J. Medway	0.85	1.25	2.10	28	-	-	-	-
E.H. Strach	0.87	1.60	2.47	15	33.50	15	5.67	15
M. Götz	-	-	0.87	23	-	-	-	-
MEANS	0.75	1.25	1.83	169	29.69	100	4.40	58

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

Table 1: Solar activity, 1994 June

Observer	MDF				R		Q	
	North	South	Total	Days	Total	Days	Total	Days
CUAS	1.20	0.70	1.90	18	25.00	18	-	-
MEANS	1.00	0.33	1.21	131	20.59	67	5.65	40

Table 2: Solar activity, 1994 May, additional observation

BAA/TA Comparison

Month	Active areas		Spot numbers	
	BAA	TA	BAA	TA
1994 May	1.48	1.21	21.8	20.59

that all of the increased activity was in the S hemisphere although he notes that since he was away for the first 12 days of the month his results may be misleading.

Strach's average *spot latitudes* (possibly affected by his absence early in the month) are 7.33° in the N and 12.2° in the S.

Sunspot Activity, 1994 June

Most observers reported a small increase in activity this month although the Sun was spotless for the first five days of June. Strach reports that his observations show

Strach noted *polar faculae* on June 15, 16, 22, 24, 28 and 29 in the S and on the 28th in the N.

MONOCHROMATIC SOLAR ACTIVITY

Observer	All Latitudes				0-40°			40-90°		
	North	South	Total	Days	North	South	Total	North	South	Total
E.H. Strach	2.46	1.15	3.61	13	2.08	1.00	3.08	0.38	0.15	0.53
K.J. Medway	3.42	1.66	5.08	24	2.50	1.25	3.75	0.91	0.42	1.33
B. Hardie			4.00	7						

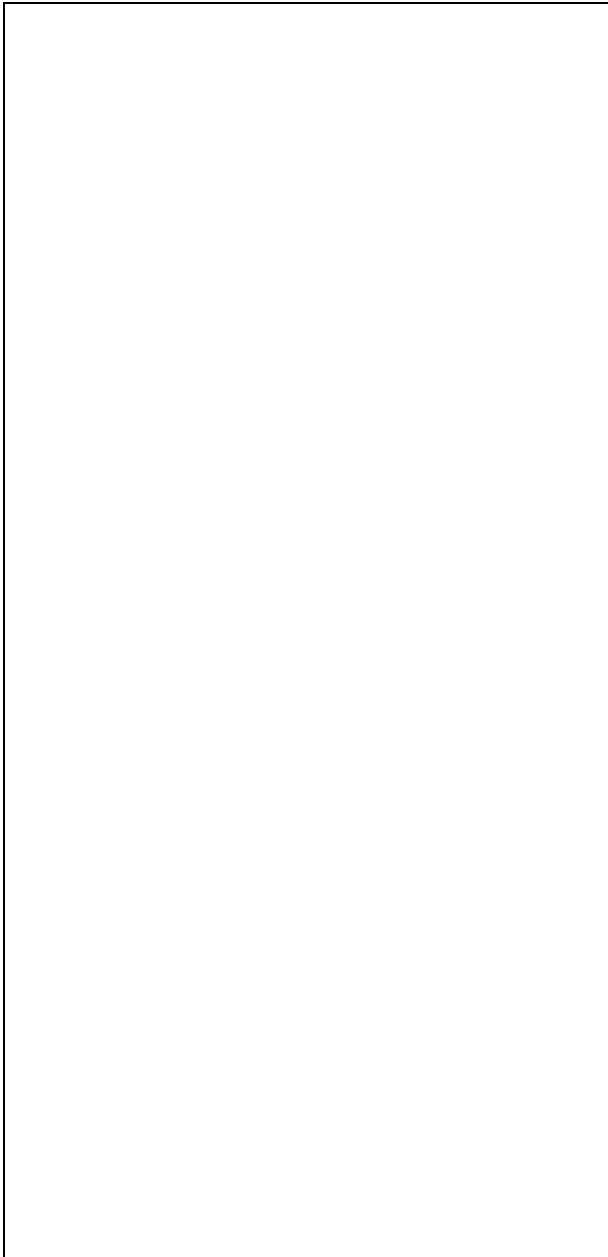
H α Prominence Activity, 1994 June

Medway reports that a greater variety of prominences were seen in June than in recent months. Arch prominences were seen on the NW limb on June 5, 6, 7 and 8, whilst on the 10th a hedgerow type was observed along the NE limb between N1 and N18. By the 11th this had broken up and was composed of three tall pillars.

An unusually high spicule was observed by Strach on the 15th. At 1020 it was situated at N81 on the E limb but it lasted only a few minutes.

An interesting grouping of "fountain" prominences was observed by Medway on the 16th. They were on the NW limb between N25 and N50 but they had gone by the 17th. By the 18th Medway reports that there was an impressive filament lying across the CM.

Medway followed a notable triangular prominence on the NE limb from the 27th through to the 30th. On the 28th this prominence resembled a yacht's sail. He also observed this prominence using a 4" Genesis refractor with a non-ovened 0.5Å H α filter.



*Ejection of a prominence on the NE limb.
1994 June 29, EHS*

According to Strach a most remarkable phenomenon was seen on the 29th when a previously innocent prominence was violently ejected. The prominence was first seen on the 27th as a high mound on the E limb at N8 to N12. On the following day its S base had lost its connection with the limb and part of the N portion had rotated on to the limb and was seen as a filament. At 0700 on the 29th the appearance was much the same except that the prominence was much higher and rather slender. By 0940 it had markedly increased in size and at 1140 its connection with the limb became very

tenuous and the associated filament also separated from the limb. At 1245 its furthest portion was twice as far from the limb compared to its initial appearance and it was last seen at 1410 when it was over 300,000km distant from the limb and had split in two. Sketches of this exciting event are attached and the following table gives the distance of the furthest part of the prominence from the limb and the estimated transverse ejection velocity.

Time	Distance/km	Velocity/km s ⁻¹
0700	91,000	
0940	111,000	2.4
1140	131,000	2.7
1245	172,000	10.5
1410	303,000	87.2

Strach noted that, surprisingly, another prominence was ejected the same day on the opposite limb. This prominence was seen on the W limb at S22 at 0700. By 0945 it had changed its configuration and further change was noted at 1245. By 1345 there was no trace of it.

Flares, 1994 June

Date	Time	Lat	CMD	Type	Obs.
6	1805-1837	S16	W65	Sn	KJM
7	1112	S15	W64	1B	BH
7	1740	S19	W65	Sf	KJM
7	1825	S19	W65	Sn	KJM
12	1045	S10	E35	1B	KJM
12	1740-44	N17	NW	limb	KJM
13	1735	N6	W32	Sf	KJM
14	1220	N11	W30	Sf	EHS ¹
18	1820	S16	E78	Sf	KJM
23	1435	0	E8	Sn	KJM
24	1028-1040	S13	W30	Sn	EHS ²
25	1830-1850	S20	W65	Sn	KJM
28	1737	S11	W37	Sf	KJM
29	0946-1111	S8	E50	Sn	BH ³
30	0810-0825	S10	E36	1B	EHS
30	1815	S12	E41	SB	KJM

Notes

1. Preceded by a filamentous surge.
2. Associated with a radio burst at 151MHz between 1030-1040 and 1105-1240.
3. Multiple flares S8/S11/45/E50, 0946-Sn, 1019-SB, 1111-Sn.

Radio Activity, 1994 June

Strach observed markedly increased radio activity on the 25th from 1250-1325 and 1520-1740 and on the 29th from 1640-1745.