

## Central Bureau for Astronomical Telegrams

## INTERNATIONAL ASTRONOMICAL UNION

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## 1978 CA AND 1978 DA

J. and A. Surdej, European Southern Observatory, report that UBV photometry was done with the standard photometer on the 100-cm telescope during Mar. 1<sup>d</sup>02<sup>h</sup>-1<sup>d</sup>08<sup>h</sup> UT for 1978 CA and during Mar. 2<sup>d</sup>04<sup>h</sup>-2<sup>d</sup>09<sup>h</sup> UT for 1978 DA. 1978 CA was found to have a rotation period of  $3^{\text{h}}43^{\text{m}} \pm 3^{\text{m}}$  with a maximum amplitude in V of 0.8 magnitude; the mean V magnitude was  $13.26 \pm 0.02$ , and the color indices  $B-V = +0.90 \pm 0.05$  and  $U-B = +0.48 \pm 0.15$  showed no obvious variation. The observations of 1978 DA showed one clear symmetric maximum of  $V = 14.28$  at 6<sup>h</sup>00<sup>m</sup> UT and one clear minimum of  $V = 14.62$  at 7<sup>h</sup>50<sup>m</sup> UT; for this object  $B-V = +0.83 \pm 0.05$  and  $U-B = +0.41 \pm 0.15$ . Integration times were 15-20 seconds; diaphragm size was 22".

## COMET BRADFIELD (1978c)

D. Herald, Kambah, near Canberra, reports further precise positions as follows:

1978 UT	$\alpha_{1950}$	$\delta_{1950}$	$m_1$
Feb. 9.69375	18 <sup>h</sup> 54 <sup>m</sup> 21 <sup>s</sup> .07	-46°33'43".9	
9.70868	18 54 27.04	-46 33 00.6	
11.72153	19 07 42.20	-44 54 22.4	
11.73542	19 07 47.81	-44 53 40.8	
12.72257	19 14 12.63	-44 01 31.7	
12.72639	19 14 13.56	-44 01 24.4	
13.75036	19 20 48.98	-43 04 45.2	
13.75556	19 20 51.51	-43 04 26.9	
19.74375	19 58 06.89	-36 40 34.6	7.4
19.75035	19 58 09.17	-36 40 10.4	

There was a tail 5' long in p.a. 220° on Feb. 19.

The following total visual magnitude estimates have been reported: Feb. 20.75 UT,  $\sim 6$  (D. Seargent, The Entrance, New South Wales, 15 x 80 binoculars; probable tail in p.a. 215°); Mar. 4.50, 5.4 (P. Maley, San Antonio, Texas, 15-cm refractor; somewhat condensed, very low in twilight); 5.50, 5.3 (Maley).

UBV photometry by P. Bouchet and J. Surdej at the European Southern Observatory gives the following (uncertainty  $\pm 0.2$  magnitude, air mass  $\sim 3.5$ ): Mar. 1.392 UT,  $V = 6.2$ ,  $B-V = +0.4$ ,  $U-B = -0.6$ , diaphragm 88"; 1.399, 7.5, +0.6, -0.3, diaphragm 22".

1978 March 7

Brian G. Marsden