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**CCD PHOTOMETRY OF SIX FAINT CATAclySMIC VARIABLES**

Photometric observations of several CV candidates were obtained using the CCD camera on the Danish 1.5m telescope at the European Southern Observatory in June/July 1988 (Table 1). Differential instrumental magnitudes were then derived relative to nearby comparison stars on the same CCD image. The major goals were to confirm or reject the CV nature of the targets and to search for orbital variability and eclipses. Detailed analysis of interesting systems is published separately. This notice presents results for six objects.

PG 1403–111

This object was classified as a CV showing a composite spectrum (Green et al., 1986). Recent spectrophotometric observations (Zwitter and Munari, 1994) revealed no emission lines or hot continuum. It may be that this object is a misidentification as a CV because the photometry also showed no evidence of any variability.

PG 1522+122

This object was also classified as a CV by Green et al. (1986). The photometry showed no indication of a typical CV light curve. There was only a small decline in brightness of about 0.04 mag within three hours. The small scatter of about 0.02 mag rules out flickering activity. The object is probably not a CV.

NSV 09208

Eggen (1969) lists this object (BPM 24960) as a probable variable white dwarf suspect. A possible CV nature is assigned in the NSV catalogue. The 1.5-hour light curve shows a slight increase in brightness by about 0.15 mag with superimposed flickering of about 0.1 mag. There is no indication for a periodic modulation. Nevertheless, the object is likely to be a CV.

NSV 14152

Haro and Luyten (1960) suggest this blue object (Var 7) to be an eruptive variable. It is listed as a possible CV in the NSV catalogue. The 0.8- and 4-hour runs show typical flickering activity with an amplitude of about 0.2 mag. Whereas during the first night the system remained nearly constant it brightened during the second steadily by about 0.25 mag. The mean magnitudes on the two nights differ by about 0.35 mag. A periodic variation longer than 4 hours is therefore expected.

CF Gru (2138-453)

Hawkins and Veron (1987) detected the variability of this blue object and classified it spectroscopically as a CV. CCD photometry by Howell et al. (1991) revealed hot-spot modulations with a period of  $93 \pm 11$  min and the presence of large flickering. The present data set shows generally the same behaviour, but can be better fitted with a period of  $100 \pm 11$  min (Figure 1).

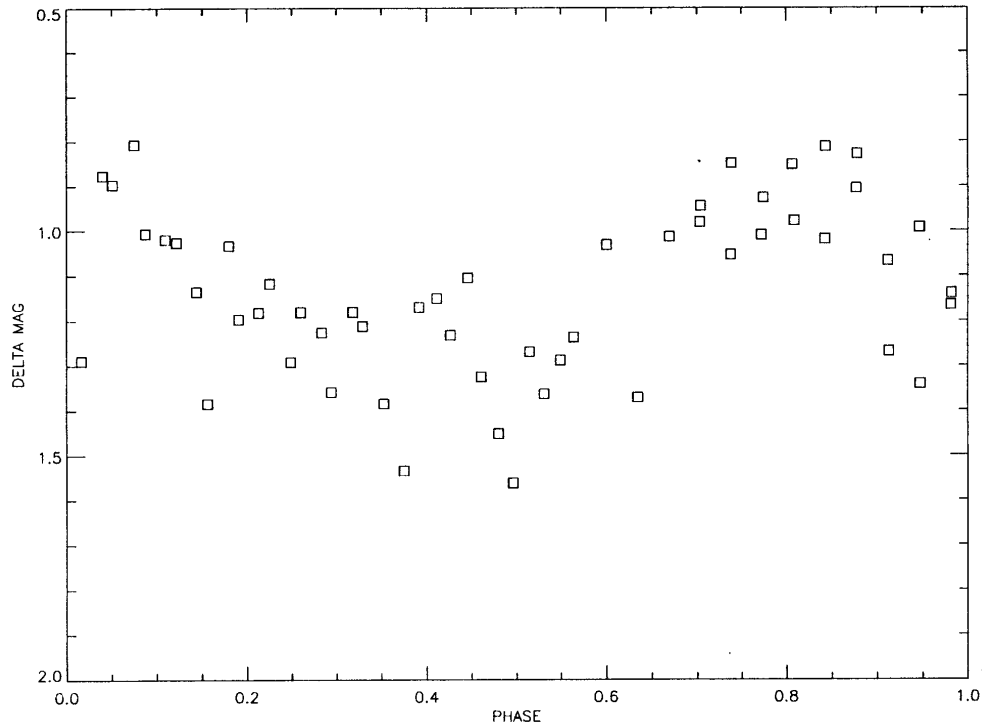


Figure 1: Differential light curve of CF Gru in integral light. The measurements taken on 1988 June 28 are folded with a period of 100 min (phase arbitrary). This period represents the present observation better than the 93 min given by Howell et al. (1991).

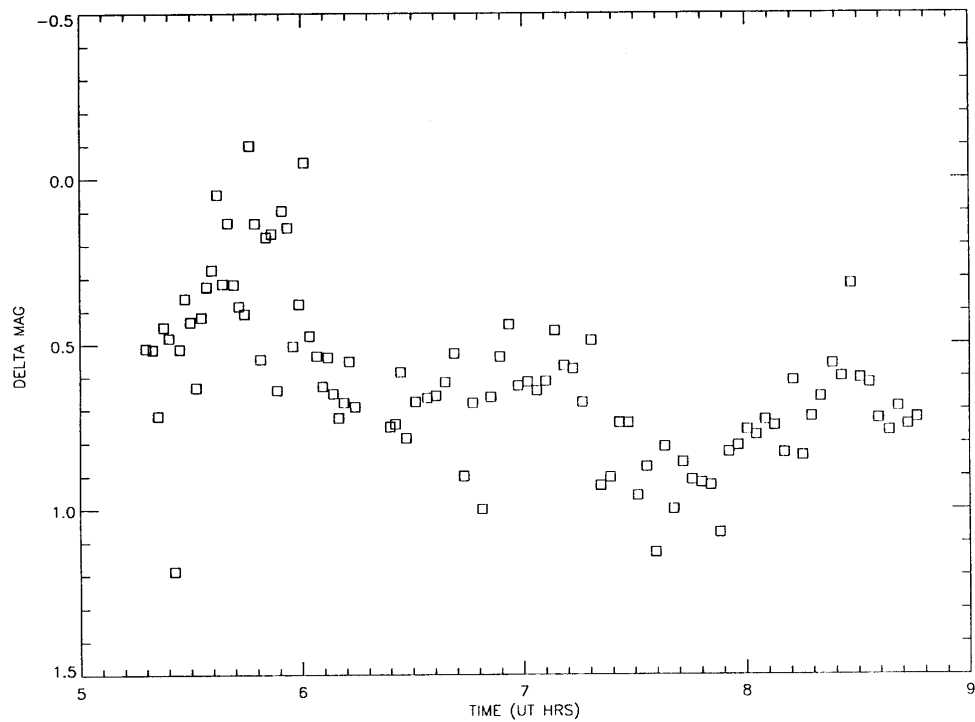


Figure 2: Differential photometry of Hawkins V6 obtained in integral light on 1988 July 01. A repeatable modulation with a period of 80 min is present. At 6:30 UT the integration time of 60 s was changed to 120 s.

Table 1: Observing log. Start is the time for the midpoint of the first exposure. The observation interval also includes gaps due to any interruption of the exposure series.

Magnitudes are in B except for the NSV objects where the values from the NSV catalogue are given. Observations were performed in integral light except for NSV 09208 where a Johnson B filter was used.

Object	Date (1988)	Start (UT)	Interval (h)	Int. Time (s)	Frames	Mag
PG 1403–111	Jun 29	01:27:59	2.05	45	94	16.0
PG 1522+122	Jul 01	00:21:36	3.00	120	73	16.1
NSV 09208	Jun 30	03:48:23	1.56	180	28	15.8
NSV 14152	Jun 29	10:02:04	0.84	120	21	20.2
	Jun 30	06:39:19	4.06	120	96	
CF Gru	Jun 28	07:42:06	3.08	180	53	20.4
Hawkins V6	Jul 01	05:17:48	3.47	60/120	98	18:5

#### Hawkins V6

Based on its outburst behaviour Hawkins (1981, 1983) classified this object as a CV. The 3.5-hour photometric run shows evidence for a periodic modulation masked by strong flickering activity (Figure 2). A periodogram analysis yielded a possible period of 80.7 min. Further, the light curve shows a steady decrease of about 0.4 mag over the entire run thus indicating that the system was probably observed during a decline from outburst.

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