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VARIABILITY OF 59 Aur AND 38 Cnc

The two stars 59 Aur and 38 Cnc which have been reported to show light variations in surveys by Danziger and Dickens (ApJ 149,55,1967) and Breger (ApJ 162, 597, 1970), were observed photoelectrically in B filter by the authors on the nights of 24 Nov., 1973 and 4 Jan, 1974 with the 38 cm reflector of this observatory, employing an unrefrigerated 1P21 photomultiplier. The light curves obtained show a variability with periods and amplitudes as follows:

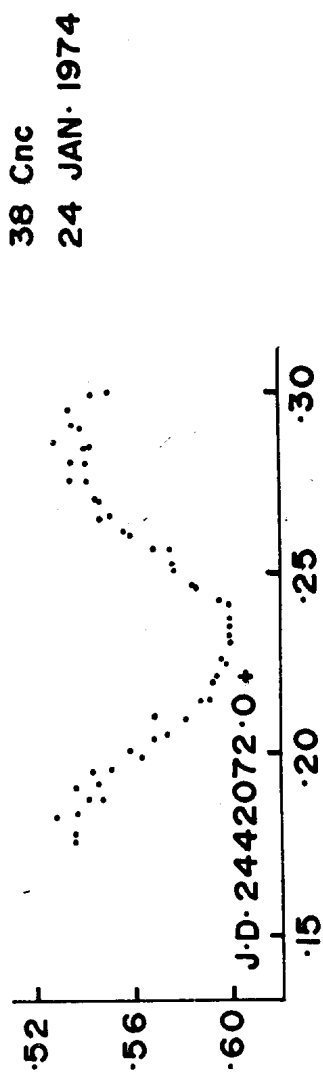
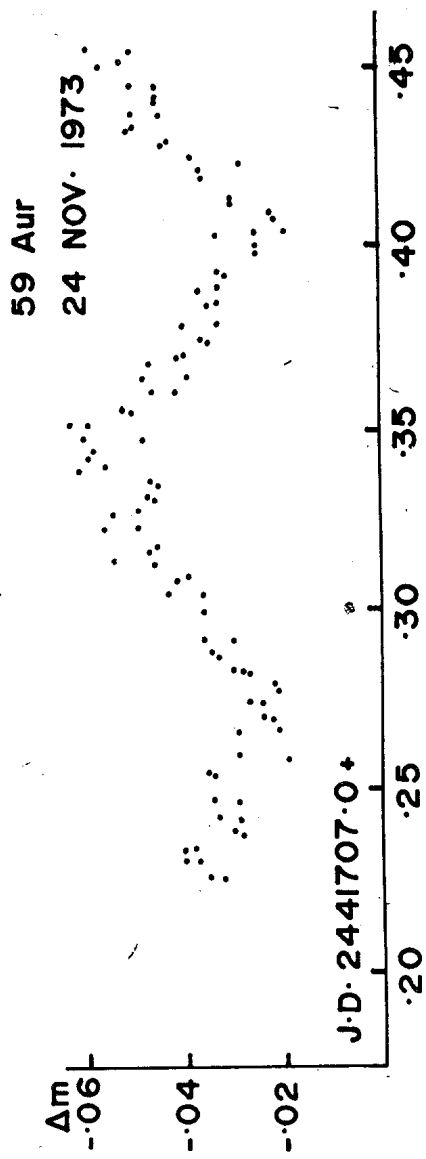
| Star   | HD    | Sp     | $M_V$ | P         | Amp.     |
|--------|-------|--------|-------|-----------|----------|
| 59 Aur | 50018 | A 7 n  | 1.33  | $0^d.136$ | $0^m.03$ |
| 38 Cnc | 73575 | F3 III | 0.66  | $0^d.108$ | $0^m.07$ |

The star 38 Cnc is a member of the Praesepe cluster and its absolute magnitude  $M_V$  is taken from Breger (ApJ 176, 273, 1972). The positions of these stars in the colour-magnitude diagram (Leung AJ 75, 643, 1970) as well as their periods fit well into the period-luminosity relationship for Delta Scuti stars given by Leung (loc.cit).

Further investigations for beating phenomenon and more accurate period determination are in progress.

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Light curves of 59 Aur and 38 Cnc.  $\Delta m$  is the difference of instrumental magnitudes of variable and comparison stars (v-c).