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IS BN Ori STARTING AGAIN?

In this paper we are calling attention of the variable stars observers to the very interesting variable star BN Ori. This star has been classified by the General Catalogue of Variable Stars (Kholopov et al., 1985) as an object belonging to the rapid irregular variables with unpredictable algol-like minima. A serious and complete analysis of main peculiarities in variability of BN Ori has been made by Dragomiretskaya (1965). According to her, the star is characterised by rather prolonged (3000^d + 4000^d) intervals of constant brightness (normal state). These periods are changed by intervals ($1000^d \div 1500^d$ in length) of "stormy" photometric activity. But during the last 45 years BN Ori had a constant brightness $V=9^m.63\pm0^m.03$ in V (Shevchenko, 1989).

BN Ori has been observed as a part of our current study of irregular variables in the regions of active star formation. All the UBVR observations were obtained with the 0.5 m reflector on the High-Mountain Observational Station "Terskol" (Caucasus, h=3100 m) using a single channel photon counting photometer with an unrefrigerated PRM-79 tube and conventional UBVR filters.

During 38 observational nights 58 observations were obtained. The light curve in V (Figure 1) clearly shows the features observed for irregular variables with non-periodic algol-like minima - i.e. very flat maximum (normal

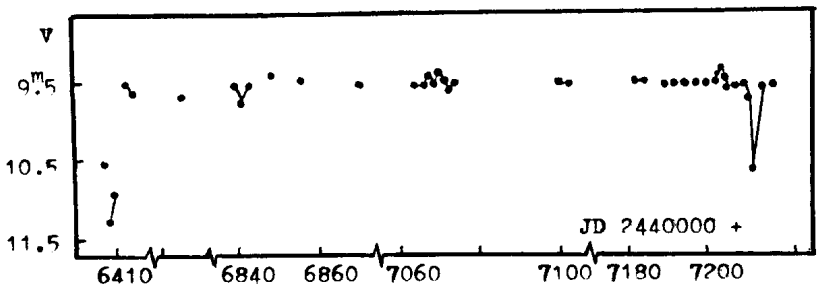

Figure 1

state with $\sigma_v = 0^m.05$) and three light depressions with a maximum amplitude of $\Delta V = 1^m.5$ and maximum duration $\sim 2^d$.

In our opinion, BN Ori is beginning a new period of its "stormy" photometric activity - which has been waited for more than 45 years.

G.U. KOVALCHUCK

Main Astronomical Observatory,
252127, Kiev, Ukrainian SSR

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