

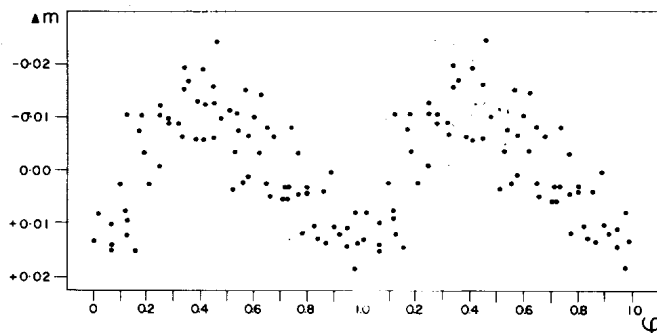
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SHORT PERIOD VARIABILITY OF HD 153747

HD 153747 was observed photoelectrically in B filter with the 61 cm telescope at the Abrahão de Moraes Observatory-USP. This star has been used as comparison (SAO 208337) for HD 153919 by Pacheco et al. (1974) who suggested that it could have small amplitude variations.

Two series of observations were taken, on 28/29 and 29/30 June 1978. On both nights, variations with amplitude $\Delta m \approx 0.02$ mag and 67 minutes period were present (see figure). HD 153919 was observed simultaneously and the random fluctuations were $\Delta m \approx 0.003$ mag.



Phase diagram for the data folded module 67 min.
Phase zero is JD 2443688.56.

The magnitude and colors observed by Pacheco et al. (1974) are: $V = 7.41$; $B-V = 0.05$; $U-B = -0.20$, consistent with catalog spectral type B9.

The interpretation for the observed variable behaviour is not clear. A plausible guess is that HD 153747 is a magnetic star. Some of these stars present short period, small amplitude variations (Bahner and Mavridis, 1957; Rakos, 1963; Kurtz, 1978) superposed on the main period (0.5 - 200 d). Furthermore, the

spectral type is compatible with this interpretation and with no other type of classical variable stars of binary systems with this period.

J.E. STEINER, F.J. JABLONSKI* and
C.D. GNEIDING*
Instituto Astronômico e Geofísico
Universidade de São Paulo
C.P. 30627 - São Paulo - SP.
Brasil

*Supported by CNPq

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