

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS

Number 2010

Konkoly Observatory
Budapest
1981 August 28
HU ISSN 0374-0676

THE DELTA SCUTI STAR BETA LEONIS

The star Beta Leonis, included in Frolov's (1970) list of probable Delta Scuti stars, was observed photoelectrically in the nights February 7,8 and 24, 1980 with the photometer described by Piccioni (1972) mounted on the 60 cm telescope of the Bologna Observatory.

HR 4535 and HR 4531 were used as comparison stars, but the latter is probably a slowly variable star, because in all the colours the mean differences in magnitudes HR 4531-HR 4535 and HR 4531-Beta Leo are both variable with an amplitude of $0^m.03$, while the mean differences Beta Leo-HR 4535 are practically constant.

Blue and yellow instrumental differences of magnitudes, presented in the figures, show on February 8, 1980 fast light variations with an amplitude of about $0^m.025$ in a time scale of the order of $0^d.05$.

The spectral type A3V and $M_v=2.0$ given by Eggen (1963) put this star in the H-R diagram at the left border of the Delta Scuti instability strip (Breger 1979, Fig.2.).

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Figure 1

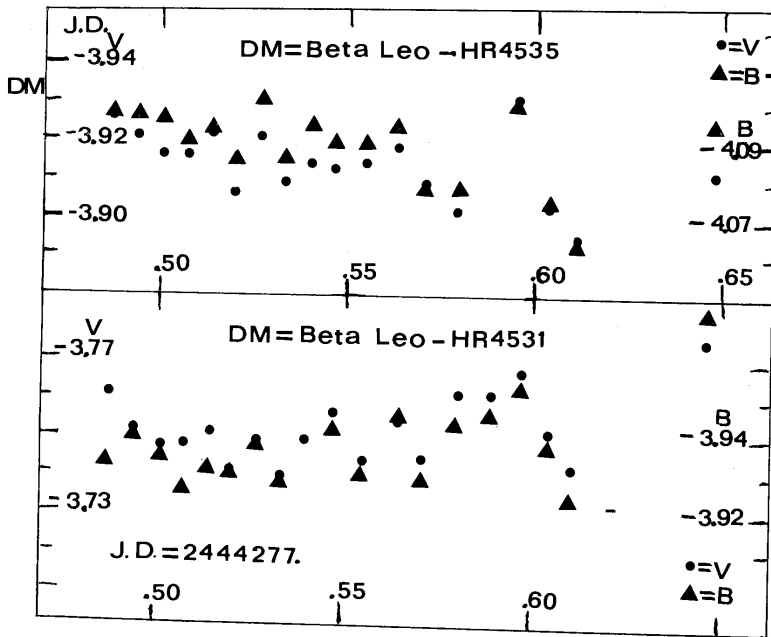


Figure 2

