

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

Number 1400

Konkoly Observatory
Budapest
1978 March 28

HD 11285 AND HD 14940: TWO NEW PULSATING VARIABLES

During the reduction of an observing run (Weiss, 1978) at the 50cm ESO photometric telescope at La Silla (Chile), two further candidates for pulsation variability have been found among the comparison stars. The equipment was the same as described in Weiss (1977).

HD 11285 (6.8^V) is classified as FO in the HD-catalogue. Figure 1 shows that this star is a short periodic variable with a period of approximately $1^h 50^m$ and an amplitude of about 0.02 mag (increasing brightness in V and magnitude in (B-V) are plotted in positive direction). To demonstrate the photometric accuracy, V magnitudes of the comparison star HD 11636 are also plotted in this figure. The phase of (B-V) is similar to that published by Struve (1953). Photometric indices in the Strömgren system should be available for this star to allow for discussion of its absolute magnitude (Breger and Bregman, 1975).

HD 14940 (6.6^V) is also classified as FO in the HD-catalogue and shows an extremely small amplitude. Additional observations of this star should be made to confirm its variability. The present observations were made during a night of good photometric stability, however, with a constant decrease of transparency. HD 14940 was observed together with HD 15144 and HD 15798. When the V - magnitudes for the last two stars were plotted, a systematic trend of 0.009 mag/hr and 0.011 mag/hr, respectively, became evident. In contrast, the corresponding slope for HD 14940 was 0.0026 mag/hr. Therefore the V - magnitudes were rectified by subtracting a slope of 0.001 mag/hr and the result is given in Figure 2.

The standard deviation for both light curves relative to the dotted line is 0.0016 mag in both cases. The amplitude of the V - magnitudes for HD 14940 is about 0.005 mag and the period could be between 5 and 6 hours. For this star there are no Strömgren indi-

ces available either.

Acknowledgements: The author thanks the Gen. Director of ESO, Dr. Woltjer, for making telescope time available for him as well as Dr. Muller for his continuous support at La Silla.

Note to I.B.V.S. No. 1364: In Figure 1, increasing magnitudes in V were plotted in positive direction.

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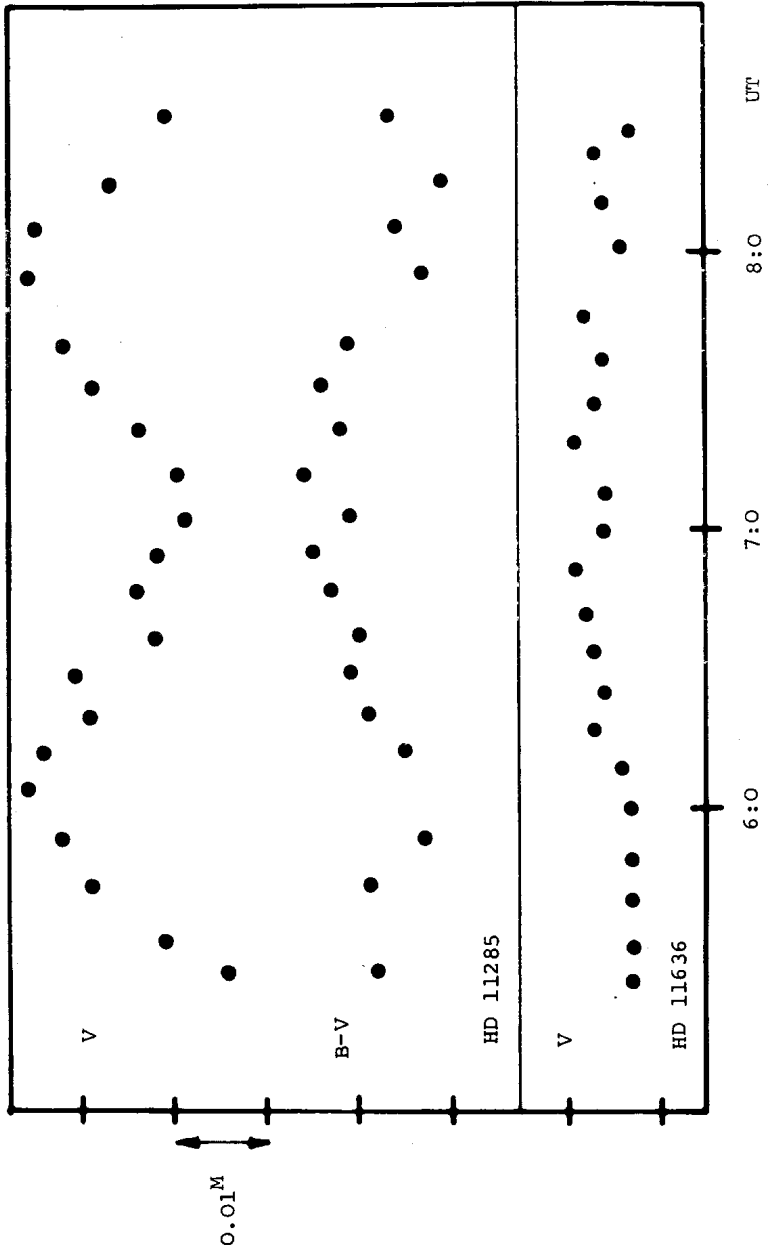


Figure 1: Variations in V and (B-V) during the night of 25 to 26 Sept. 1977.

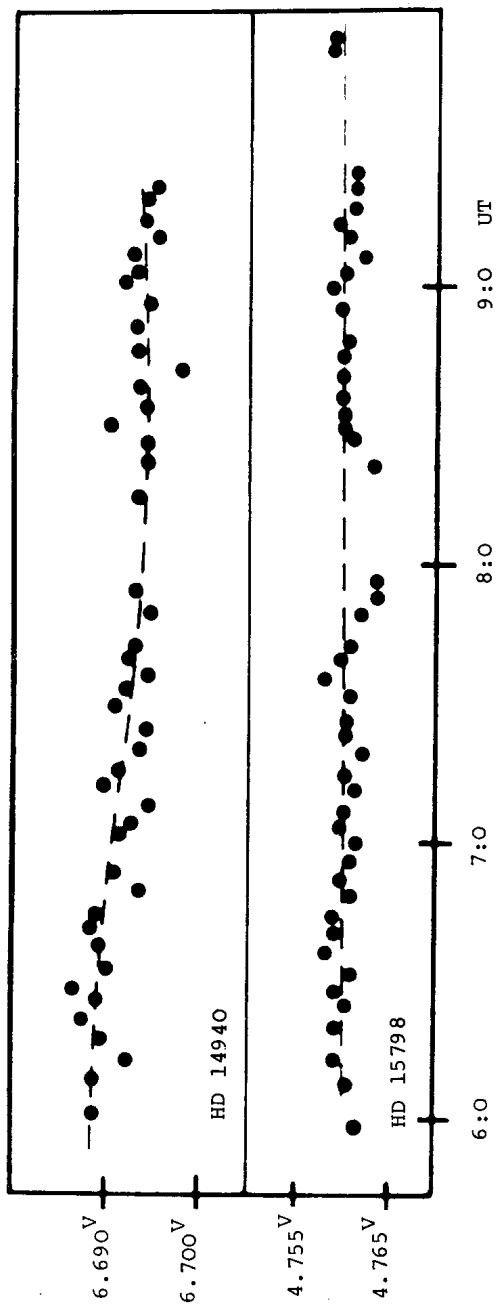


Figure 2: V measurements of HD 14940 and HD 15798 during the night of 10 to 11 Sept. 1977.