

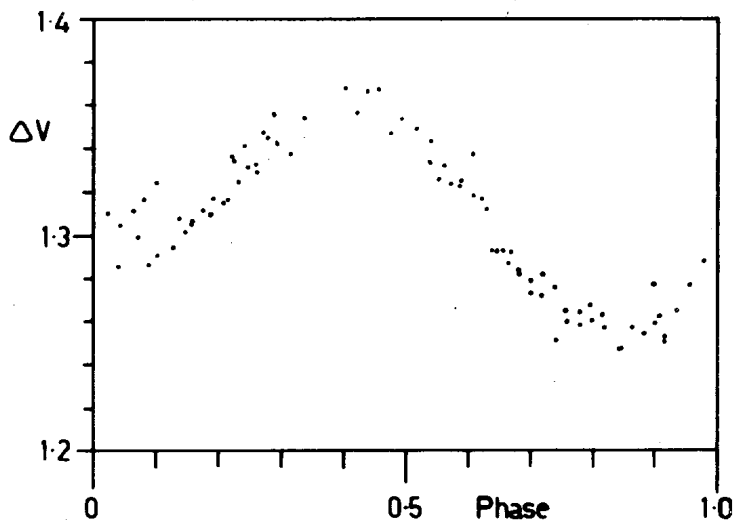
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OPTICAL VARIABILITY OF THE RS CVn CANDIDATE HD 174429

The star HD 174429 is included in the southern RS CVn systems candidate list of Weiler and Stencel (1979), and radial velocity measurements on it are given by Stacy et al. (1980).

Using a photoelectric photometer with Monash University's 40-cm Newtonian telescope we have measured 85 values of V for this star on 9 nights in the interval 1980, July 23 to September 16. We find that the star is a variable having an approximately sinusoidal light curve with a period 0.942 ± 0.002 day, and a magnitude range of 0.10 ± 0.02 .



Light curve of HD 174429. ΔV is relative to SAO 245894, and the phase is of the estimated period 0.942 day.

The graph below shows magnitude difference from the comparison star SAO 245894 versus phase of the estimated period, using primary epoch J.D. 2444443.0000. Check stars used were HD 172223 and SAO 245899. Incidentally our measurements indicate that HD 172223 was constant in V within the accuracy of our measurements (0.005 magnitude) during the period concerned, which does not support the suspicion of Cousins et al. (1966) that it is a variable with a range of about 0.05 magnitude in V.

We are preparing a fuller account of this work for publication elsewhere.

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