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53 PISCUM - LARGER AMPLITUDE

53 Psc (HR 155, HD 3379, BD+14⁰76, AG Psc) is a bright star ordinarily classified as B3V or B2.5IV. A light variation of this star was first announced by Williams (1954 a,b). He found the small amplitude of 0.02 magnitude in yellow filter and derived a period of 0,09165 day. The short period of light variation and the spectral type of this star suggested that it might belong to the beta Canis Majoris star class.

On the other hand, Percy (1971) concluded that 53 Psc is not a variable star. Finally, J.-P. Sareyan et al. (1979) based on their photometric and spectroscopic studies classified this star as a member of the beta CMA variable star group. A small amplitude of 0,01 mag in UV filter and 0,002-0,003 mag in blue filter with the period of 0,08 day was obtained. From one night series of 11 spectra the radial-velocity in the range from -11 to -18 km/s was measured and line variations were detected.

In the year 1985 53 Psc was used as a zero point of comparison stars and primary flux standard for International Halley Watch Photometry and Polarimetry Net. A larger magnitude deviation of this star led to the independent photometric measurement. The 65 cm telescope of the Charles University at the Ondřejov Observatory was used. The comparison and check star was 34 Psc ($V=5.47$, B8V) and 66 Psc ($V=5.70$, A1V), respectively. The result of measurements in V colour of UBV system from October 3, 1985 is plotted in Fig 1. One can obtain approximately the amplitude of 0,035 magnitude and the period of 0,096 day. This significant change of the amplitude is possible explained as an interference between two different periods.

Further observations are required in order to confirm this amplitude progress and to understand the light variations of this star.

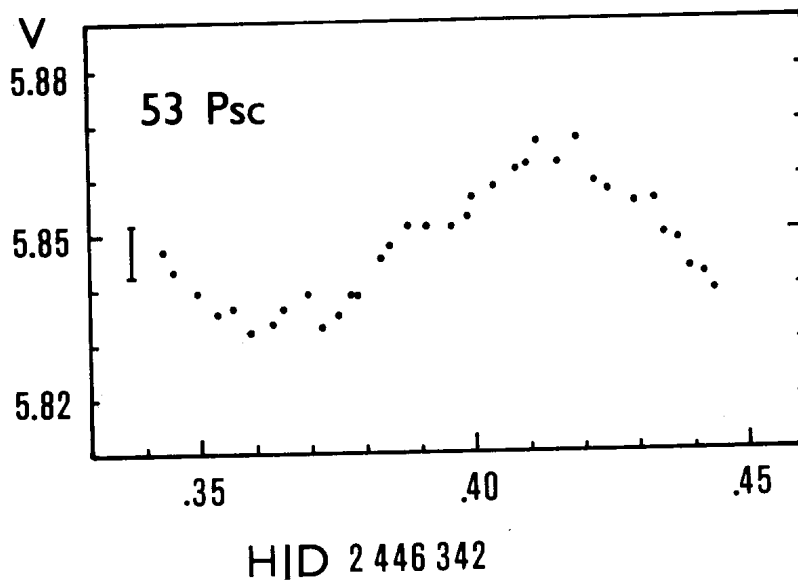


Figure 1. Light variations of 53 Psc in V colour. Standard error is indicated.

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