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PHOTOELECTRIC OBSERVATIONS OF THE EW-VARIABLE VZ Psc

VZ Psc is a neglected EW binary system. Discovered by Moorhead (Wolff et al., 1965), this 10-th magnitude variable was observed by Eggen (1967), who gave a mean time of minimum and a period of 0.261 d. More recently VZ Psc was observed visually by European Groups BBSAG (Locher, 1977) and GEOS (Poretti, 1979): 16 visual minima were collected and a period between 0.261178 and 0.261195 d was proposed.

The star was observed photoelectrically during two nights at the 102 cm reflector of Merate Observatory, using a standard V filter, a Lallemand photomultiplier and a Gardiner type integrator (the integration time was set to 20 sec). The variable was observed differentially relative to Eggen's comparison star; the southern star of the couple lying near the comparison star was used as check star (see the chart published by Giclas et al., 1959).

On the night of September 3, 1983 VZ Psc was observed from 2445581.47 to 2445581.56 and no minimum was detected: the shape of the light curve suggests that minima occurred just before and just after the observations.

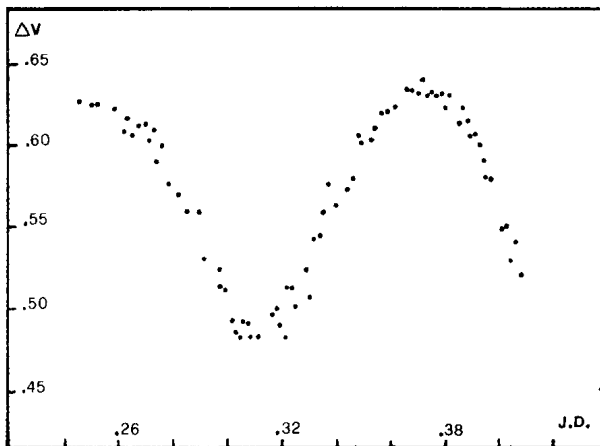


Figure 1. Light curve of VZ Psc on the night of JD 2445639.
 ΔV are in the sense "comparison minus variable".

On the night of October 31, 1983 the variable was observed for 0.19 d and a minimum was detected: it was calculated at J.D.hel. 2445639.3113 ($\sigma = 0.0002$) using Kwee and Van Woerden's method (1956). Figure 1 shows the light curve obtained.

It is very difficult to say if it is a primary or a secondary minimum. The maximum following the minimum seems to be brighter than the preceding one; the descending branch observed at the end of the night suggests a minimum fainter than the observed one. Having respect to the small-scale light curve published by Eggen (1967) it seems that the observed minimum is a secondary, but a great uncertainty exists.

Further observations of this short period eclipsing variable are requested.

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