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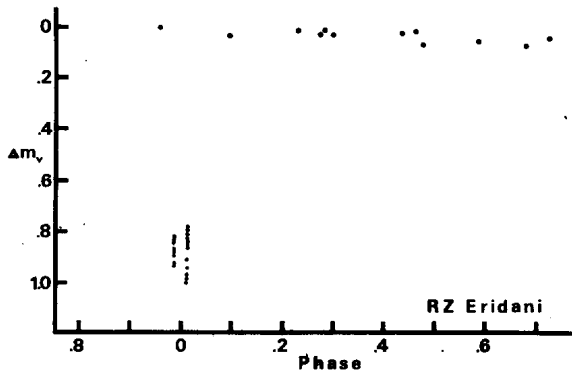
Konkoly Observatory
Budapest
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PHOTOMETRIC OBSERVATIONS OF RZ ERIDANI *

RZ Eridani (BD-10°993, R.A.(1970) 04^h42^m, Dec.(1970) -10°44', V = 7.70) has been included by Hall (1976) in his list of long-period RS CVn stars. Two characteristics often found in RS CVn stars are period changes and a distortion wave in the out-of-eclipse light curve. We report here on a search for these properties in the system RZ Eridani.

OBSERVATIONS: Observations were made in the winter of 1977/1978 using the 46 cm reflector at Rosemary Hill Observatory with a standard UBV Photometer. The comparison star was BD-10°977 and the check star was BD-10°982. The V-filter observations shown in the Figure are neither corrected for differential extinction nor transformed to the UBV system. The phases were computed from the ephemeris of Gadomski(1957),

J.D. 2423854.33 + 39.2826E.



DISCUSSION: Although both ingress and egress of the primary eclipse were observed, no observations were obtained during totality. No secondary eclipse was detected. There appears to be no significant distortion wave within the limits of the observational scatter. We note that there appears

* Contribution of the Department of Astronomy of the University of Florida No. 5

to be no significant change in period. Primary eclipse ingress and egress observations were of the same eclipse and yield a graphical solution for the time of minimum of

$$\text{J.D. } 2443574.083 \pm 0.005.$$

This minimum, combined with that of Gadomski, yields a revised period of

$$P = 39.28238 \pm 0.00005,$$

in agreement with the results of Gadomski.

We have continued observation of this system and we plan to tabulate all observations in a future paper.

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