ACTIVITY AND SECONDARY MINIMUM OF RZ ERIDANI

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RZ Eridani is an eclipsing binary star with Algol-type light curve of rather long period of 39.28 days. As this star exhibits emission lines of Ca 11 H and K it was classified also as RS CVn type. RZ Eri has been occasionally observed with the GENEVA photometric system with 40cm and later 70cm Swiss telescope at La Silla, Chile, since 1977 mainly for obtaining a complete light curve and for detecting the secondary minimum. The observation showed, that the brightness outside minima really varies as the RS CVn stars usually do. The secondary minimum has been detected at the phase 0.67. Apart from that, the variation of the brightness outside the minima occasionally drops for a short time (about one day or even less). These drops may be due to rotation and uneven distribution of active regions on the surface of the secondary or by the gas streams between the two components. The variation of the light outside minima is certainly not caused by the primary component, because such jumps in the brightness were detected during the total eclipse, when the primary component is not visible. This star certainly deserves more both photometric and spectroscopic attention. Preliminary search for periodicities by G. Burki showed that apart from the orbital period no other periods within the range of days are present. Further details will be published later elsewhere.

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