

Photometric Analysis of the Close Binary RZ Cas

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Abstract

A total of 5199 photometric observations (1733 observations in each UBV) of close binary RZ Cas were made on 46 nights from November 1991 to February 1993 with the 35-cm Schmidt Cassegrain reflector at Chungbuk National University. We observed eight primary eclipses with flat bottom which indicate total eclipse. In recent years, Nakamura et al.(1991) recognized that there exist disagreements where the primary is the total eclipse or partial one. He estimated the its duration to be 14 minutes with a primary minimum. We determined the durations of the totality with twenty-seven different light curves which include earlier observations. It is found that the mean value of each duration is to be 17.1 minutes, corresponding to phase 0.01. And also an interpretation of the new light curves will be presented.

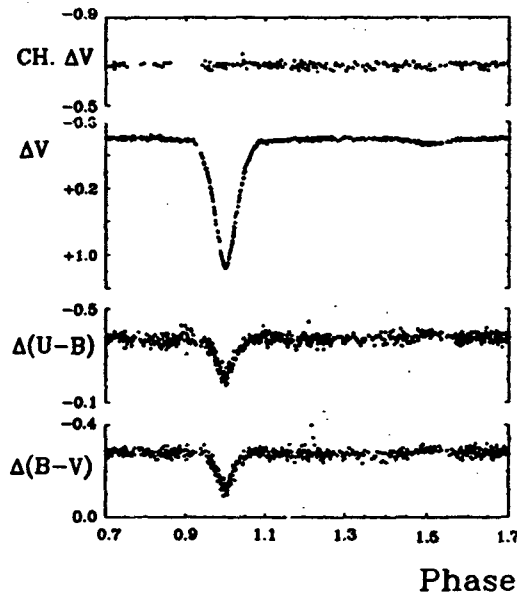


Figure 1. The light curves of RZ Cas (1991-1992)