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**NSV 03438, A NEW DETACHED ECLIPSING BINARY STAR  
IN CANIS MINOR**

Following the cooperation program between the Esteve Duran Observatory Foundation and the Grup d'Estudis Astronòmics, for the identification and study of poorly observed variable stars, NSV 03438 (= WR 032 = CSV 006558) was monitored in the V band for 23 nights using a CCD camera, from 19 January to 5 May 1996. Observations were carried out with the 0.6-m Cassegrain telescope at Esteve Duran Observatory in Seva (Spain) and the 0.4-m telescope at Mollet del Valles Observatory (Spain). GSC 0762.2164 and GSC 0762.2280 were used as comparison and check stars respectively. NSV 03438 could be unambiguously identified with GSC 0762.2022.

In the NSV catalogue (Kholopov, 1982), it is recorded that variability of NSV 03438 was first observed by Weber (1957), who reported that this star was a possible Cepheid with a photographic brightness variation from 10<sup>m</sup>8 to 11<sup>m</sup>7.

Our observations show that NSV 03438 is not a Cepheid but a detached eclipsing binary star, with a period over 1.5 days. Phase curve indicates that primary and secondary minima are 0<sup>m</sup>79 and 0<sup>m</sup>74 deep partial occultations respectively (Figure 1). The following ephemeris has been derived:

$$\text{Min. I} = \text{HJD } 2450122.48519 + 1^{\text{d}}535114 \times E \\ \pm 0.00029 \pm 0.000003$$

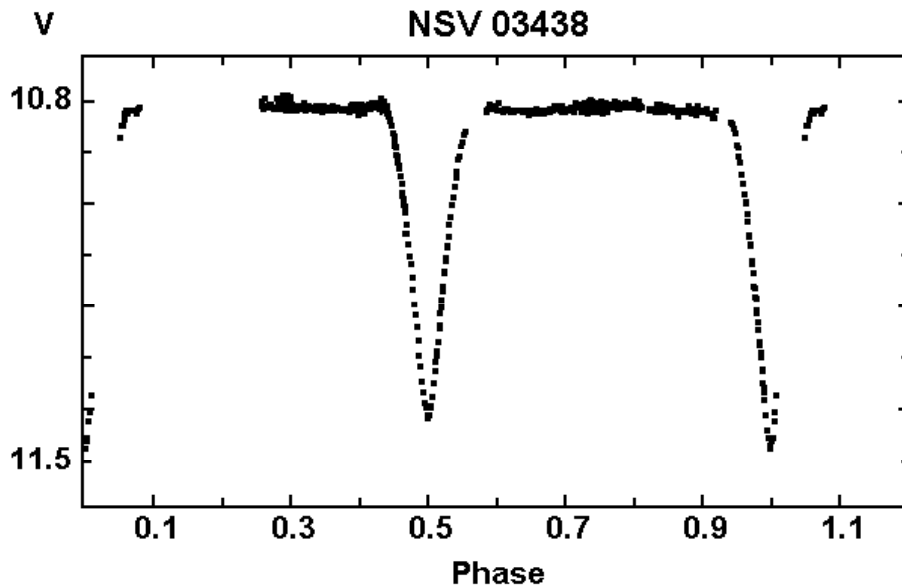


Figure 1

To determine the magnitude and B–V color index of NSV 03438 and its comparison star, these objects were also observed in the B and V bands using an Optec SSP-5A photoelectric photometer. HR 2647, HR 2710, and HR 2760 were used as comparison stars. As a result, it was obtained that NSV 03438 has a visual magnitude at maximum light of  $10.81 \pm 0.05$  and an observed color index of  $0.49 \pm 0.11$ .

Spectroscopic observations and multicolor photometry should be performed in order to obtain more accurate information about this new eclipsing binary star.

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