

## NEW ELEMENTS FOR BW CASSIOPEIAE

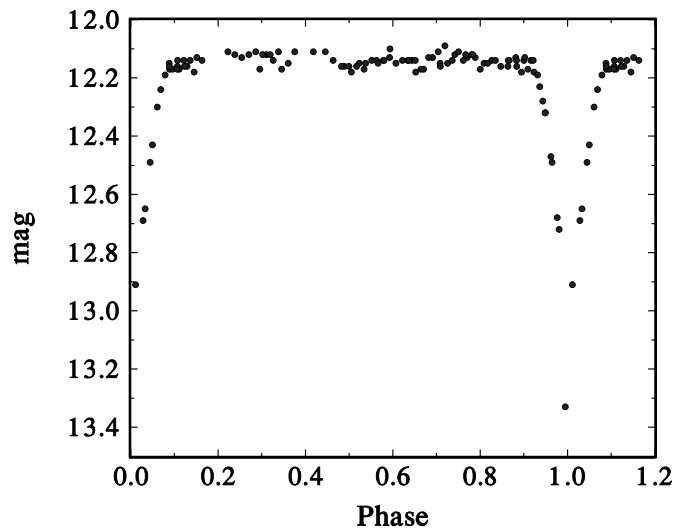
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Beljowsky (1933) reported the variability of the star BW Cassiopeiae = SVS 281 = AN 372.1931 = GSC 4035.00408 ( $\alpha_{J2000} : 01^{\text{h}}39^{\text{m}}29^{\text{s}}; \delta_{J2000} : +63^{\circ}26'10''$ ) and gave the uncertain elements:

$$\text{JD}(\text{min}, \text{hel}) = 2425999.26 + 1^{\text{d}}895 \times E \quad (1)$$

cited in the GCVS (Kholopov et al., 1985). No other source of information on the variability of BW Cas is known to the author.



**Figure 1.** Unfiltered CCD light curve of BW Cassiopeiae folded with the elements (2)

We started to observe this neglected eclipsing binary this observational season with the 35cm SC-reflector of R. Szafraniec Observatory, Metzerlen, Switzerland, equipped with a SBIG ST-6 CCD camera at its prime focus. The unfiltered CCD photometry soon showed that the GCVS elements are spurious. The 109 observations on 17 nights from JD 2450692

to JD 2450727 (comparison star: GSC 4035.00401; check star: GSC 4035.00212), folded with the newly deduced elements of variation

$$\text{JD}(\text{min}, \text{hel}) = 2450710.2973(2) + 1^{\text{d}}263 \times E \quad (2)$$

are shown in Figure 1.

The primary minimum is about 1.3 magnitudes deep (unfiltered CCD) and probably shows no sign of totality. The eclipse lasts for  $0^{\text{p}}14$  ( $0^{\text{d}}18$ ). A very shallow secondary minimum at phase  $0^{\text{p}}5$  with an amplitude of about  $0^{\text{m}}02$  can be discerned in our light curve. We will continue to observe minima of BW Cas in order to refine the elements (2) given above. Results of this work will be published in the BBSAG Bulletins.

This research has made use of the SIMBAD database operated by the CDS, Strasbourg, France. The author wishes to thank the “Emilia Guggenheim-Schnurr Foundation” for financial support.

#### References:

- Beljawsky, S., 1933, *Poulkovo Obs. Circ. No. 6*, 22  
 Kholopov, P. N. et al., 1985, *General Catalogue of Variable Stars*, Moscow