

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
Number 1568

Konkoly Observatory
Budapest
1979 March 14

PERIODS AND LIGHT CURVES OF THE ECLIPSING BINARIES
BV ERIDANI AND BW ERIDANI

Since their discovery by Hoffmeister (1933, 1936), the eclipsing binaries BV and BW Eri have experienced little attention. Solov'yov (1954 a, b) published a few minima from plates of the Stalinabad sky patrol.

Photoelectric observations by Baade in 1976 and by Duerbeck in 1977 furnished complete light curves. The derived periods were improved by the use of photographic minima from Bamberg sky patrol plates, and by Solov'yov's early minima:

BV Eri: J.D.hel. (primary min.) = 2 443 449.7193 + 0.5076643 · E

BW Eri: J.D.hel. (primary min.) = 2 443 448.6840 + 0.6384773 · E

BV Eri is an EB system with a remarkably short period. The colour of the system corresponds to spectral type F2 V. The light curve shows an annular primary minimum and a total secondary minimum.

BW Eri is also an EB system. The colour corresponds to spectral type A3 V. The primary minimum is annular, the secondary is total.

Both light curves (in UBV) are shown in Figs. 1 and 2. A thorough investigation and an analysis of the light curves will be published later.

Acknowledgements. D.B. was a visiting astronomer at the Cerro Tololo Inter-American Observatory, which is operated by the Association of Universities for Research in Astronomy, Inc., under contract with the National Science Foundation. D.B. and H.W.D. were also visiting astronomers at the European Southern Observatory, La Silla. H.W.D. and M.T.K. thank Professor J. Rahe for the opportunity to use the Bamberg plate collection and for the hospitality during their stay at the Bamberg Observatory.

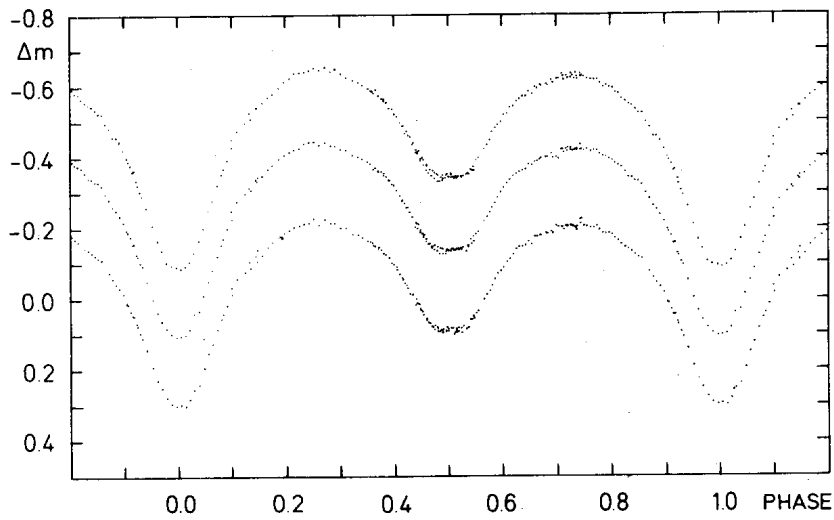


Fig. 1. (From above): UB V light curves of BV Eri, relative to SAO 149230.
 The scale is given for the B magnitudes; the U magnitudes are shifted by $-0^m.2$, the V magnitudes by $+0^m.1$.

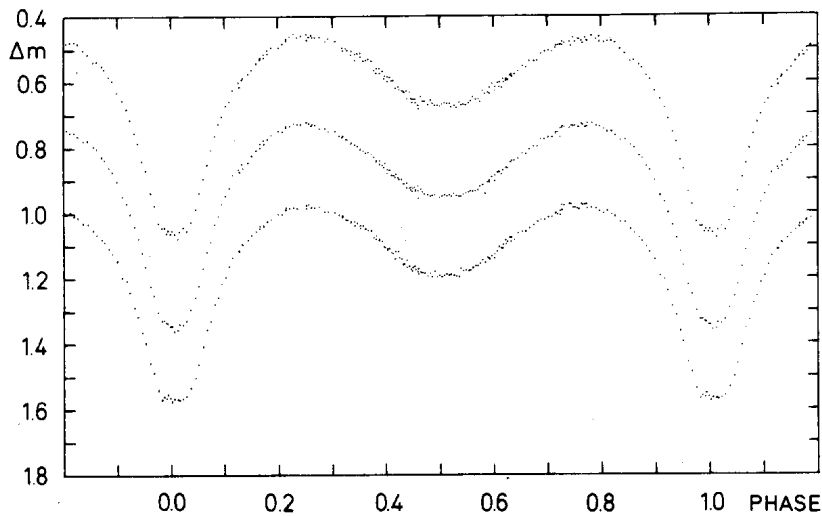


Fig. 2. (From above): UB V light curves of BW Eri, relative to SAO 169137.
 The scale is given for the B magnitudes; the U magnitudes are shifted by $+0^m.3$, the V magnitudes by $-0^m.3$.

D. BAADE
Astronomisches Institut der Universität
Steinfurter Strasse 107
4400 Münster, F.R.G.

H. W. DUERBECK and M. T. KARIMIE^{*}
Observatorium Hoher List
der Universitäts-Sternwarte Bonn
5568 Daun, F.R.G.

^{*} Stipendiat der Humboldt-Stiftung,
Bonn-Bad Godesberg, F.R.G.

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