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

Number 2682

Konkoly Observatory
Budapest
11 March 1985

HU ISSN 0374 - 0676

LIGHT CURVE OF BV Dra

BV Dra, the brighter member of the interesting visual binary system ADS 9537, is an eclipsing binary of W UMa type.

Yamasaki (1979) observed the star in UBV between March 20, 1976 - May 16, 1977 and found some scatter in the composed light curve. He claimed that the origin of this scatter would be either the real scatter of the individual light curves or the hazy sky.

Geyer et al. (1982) did not report any light curve changes in the course of their UBV observations performed between 1976-1980. Their observed light curve was symmetrical.

Between August 1980 - May 1981 Rovithis and Rovithis-Livaniou (1982) made B and V observations of this star and found some scatter in the V light curve only.

BV Dra was observed in UBV colors on 3 nights (May 31, June 5, 8) in 1984 at Kottamia Observatory of the Helwan Institute for Astronomy and Geophysics. As comparison star BD + 61°1495 was chosen, its brightness and colors can be found in Table I of Geyer et al. (1981). The light curve is shown in the Figure. The magnitudes have been given in the instrumental system and the

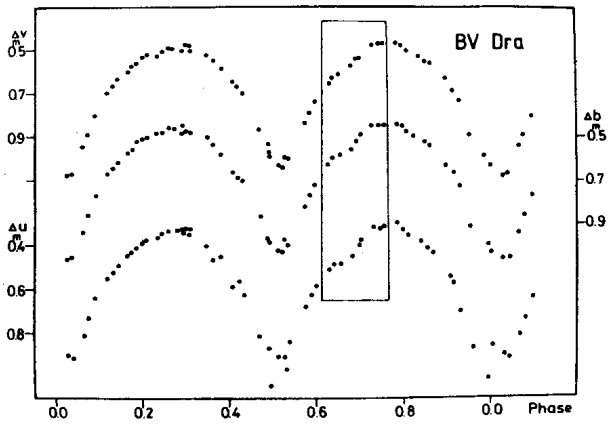

Figure 1

phases have been computed using Yamasaki's (1979) elements:

phase = J.D. hel. 2442858.06867 + 0.35006571 E

One primary and one secondary minimum was obtained:

Min.I.: J.D. hel. 2445860.2392

Min.II.: J.D. hel. 2445857.2622

In the light curve between the phase 0.6-0.7 an interesting hump appeared (see the Figure). The amplitudes (A) of the hump in the light curves are different: $A(\Delta u)>A(\Delta b)>A(\Delta v)$.

M. HAMDY

N.S. AWADALLA

A.B. MORCOS

Helwan Institute for Astronomy
and Geophysics, Helwan, Egypt

References:

Geyer, E.H., Hoffmann, M., Karimie, M.T., 1982, Astron.Astrophys. Suppl. 48, 85.
Rovithis, P., Rovithis-Livaniou, H., 1982,Ap.Sp.Sci., 82, 229.
Yamasaki, A., 1979, Ap.Sp.Sci., 60, 173.