

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

Number 2102

Konkoly Observatory
Budapest
1982 March 8

HU ISSN 0374-0676

PHOTOELECTRIC OBSERVATION OF W UMA (BD + 56^O1400)

This short period ($0^d.33363808$) well known eclipsing variable has been observed numerous times by many observers. A complete set of photographic, visual and photoelectric data have been available for the last 79 years.

Since the system is well known for variations of period, the available data as far as 1903 were compiled and O-C variation were investigated.

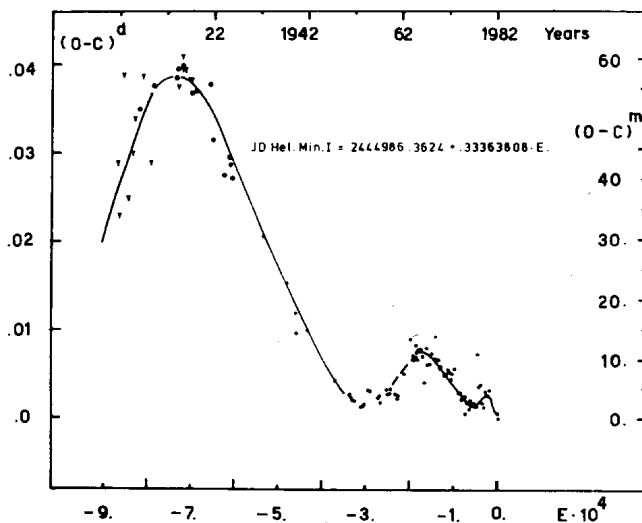


Fig.1: Compilation of O-C variation for various years. Triangles, open dots and filled dots refer to photographic, visual and photoelectric observations.

In Figure 1, we present O-C variation from 1903 to 1982 (110 points). The last two dots correspond to latest observations obtained at the Ege University Observatory with 48 cm Cassegrain telescope.

The star was photoelectrically observed and two accurate minimum times were determined according to the chord bisection method. These are,

JD Hel Min I = 244 4986.3624	January 16, 1982
JD Hel Min II = 244 4986.5290	"
JD Hel Min I = 244 4987.3639	January 17, 1982

We adopted JD Hel Min I = 244 4986.3624 (first minimum) as T_0 and 0.^d33363808 (Cester, 1973) as the period and all available 110 (photographic, visual and photoelectric) JD Min I values were recalculated and new O-C values obtained (see Figure 1).

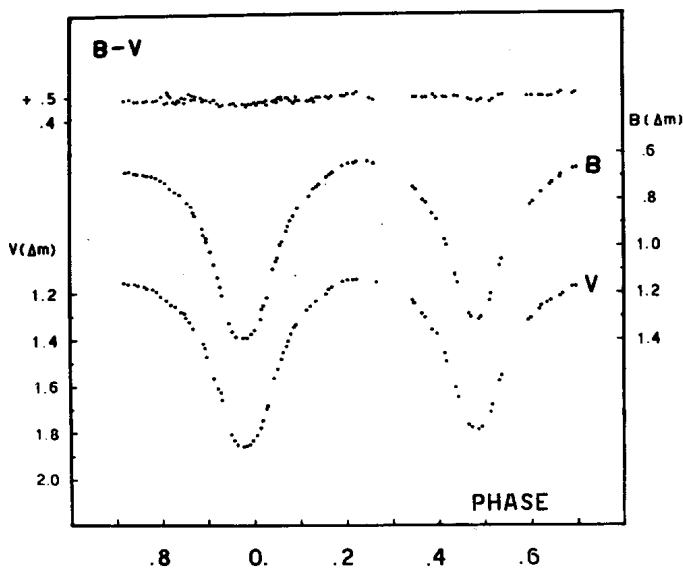


Fig. 2: The light curve of the star obtained on two nights (16, 17 January, 1982) consecutively.

In Figure 2 we present the average light curve obtained on 16 and 17 January 1982. The first night, a complete light curve was obtained, the second night only the primary minima repeated.

Acknowledgements:

We would like to thank to Mr. Kücükçak and to Mr. O. Tümer for their help.

E. HAMZAÖGLU
V. KESKIN
T. EKER

Ege University Observatory
Department of Astronomy
Izmir-Turkey

Reference:

Tunca, Z., Tümer, O., Evren, S., 1979 IBVS No. 1607.