

COMMISSION 27 OF THE I. A. U
INFORMATION BULLETIN ON VARIABLE STARS
NUMBER 135

Konkoly Observatory
Budapest
16 May 1966

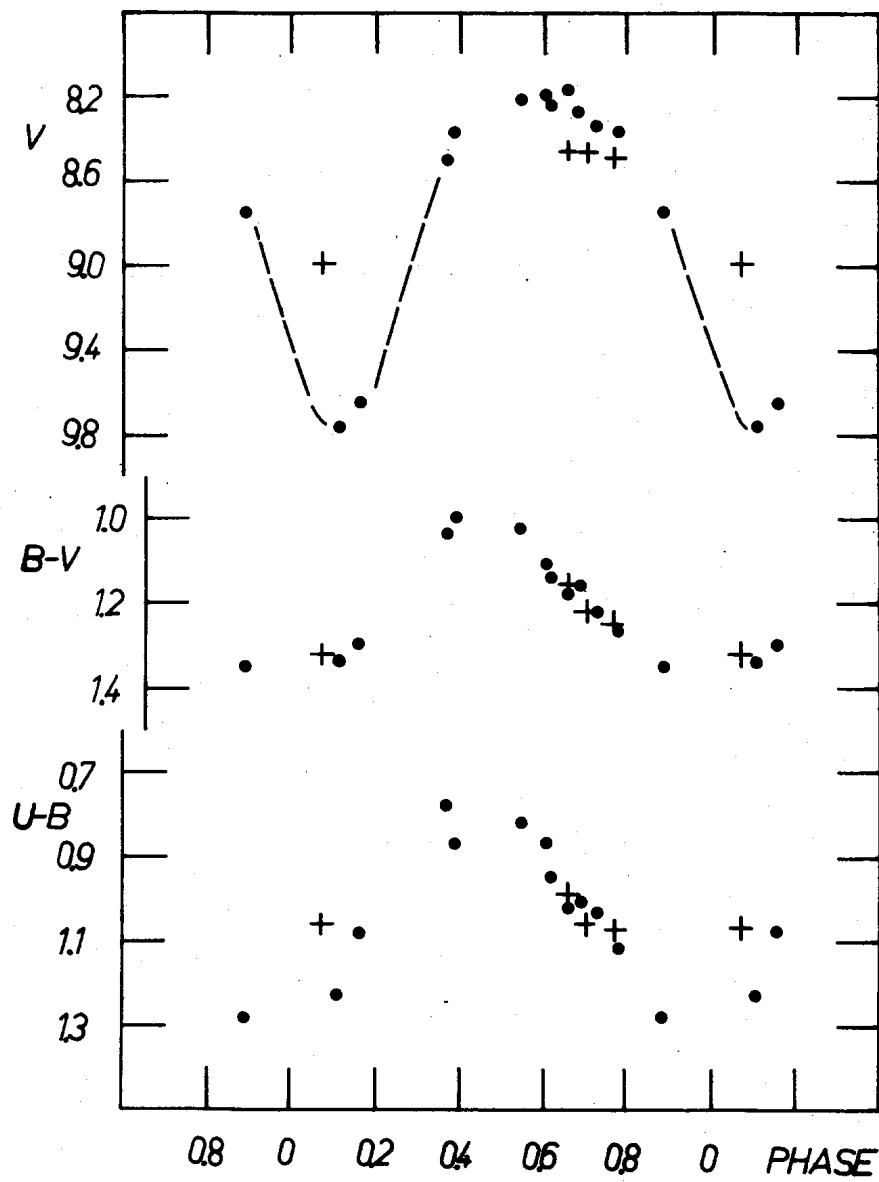
NOTE ON THE AMPLITUDE OF RU CAM

Fernie and Demers (Ap. J., in press, as reported by Wamsteker (1966) have reported recently that the light amplitude of RU Cam became very small during the season of 1965/66. It may be of interest to quote here some photometric results obtained for this star by the present writer during the two seasons of 1961/62 and 1963/64 (all the observations were made at the Lick Observatory).

In 1961/62 RU Cam showed an extremely large amplitude in V amounting to about 1.6 mag (see Michalowska-Smak and Smak 1965 for details). Photoelectric observations of various observers made in the 1950's showed that between JD 2434000 and JD 2435500 the visual amplitude was only about 1 mag, but around JD 2435900 Delsemme and Delsemme-Jehoulet (1958) reported $V_{\min} = 9.55$ which gave for the amplitude 1.3-1.4 mag. Therefore between JD 2435500 and JD 2437700 there was a systematic increase in the amplitude from 1.0 mag to 1.6 mag, primarily due to the decrease of the star's brightness at minimum.

In 1963/64 the writer obtained only four measurements of RU Cam; they are given in the table below. When plotted against phase and compared with the 1961/62 observations these data show that

- a) the visual light amplitude was only about 0.55 mag;
- b) the B-V variations were probably similar to those in 1961/62
- c) the U-B variations showed much smaller amplitude than those in 1961/62; and
- d) there was no significant phase shift between the two seasons.



RU Cam in 1961/62 (filled circles) and in 1963/64 (crosses).

Moreover, the 1963/64 data together with the new observations by Wamsteker (1966) show clearly that RU Cam became both - fainter at maximum and brighter at minimum - as compared to earlier observations.

Photoelectric observations of RU Cam in 1963/64

JD hel	Phase	V	B-V	U-B
2438365.74	0.77	8.49	1.26	1.07
429.68	0.66	8.45	1.16	0.99
430.66	0.70	8.46	1.22	1.06
438.72	0.07	8.99	1.32	1.06

Phases were computed from the elements given in the General Catalogue of Variable Stars.

Institute of Astronomy,
Polish Academy of Sciences,
Warsaw, Poland
May 2, 1966

J. SMAK

References

- Delsemme, A. H. and Delsemme-Jehoulet, D. 1958. *Mém. Soc. Roy. Sci. Liège, 4-e Série*, 20, 328.
- Michalowska-Smak, A., and Smak, J. 1965. *Acta Astron.*, 15, 333.
- Wamsteker, W. 1966. *IAU Information Bull. on Variable Stars*, No 128.