

COMMISSION 27 OF THE I. A. U
 INFORMATION BULLETIN ON VARIABLE STARS
 NUMBER 173

Konkoly Observatory
 Budapest
 29 December 1966

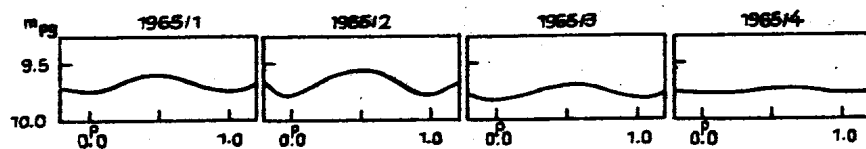
REMARK CONCERNING THE AMPLITUDE
 OF RU CAM DURING 1965

The strong decrease of the amplitude of RU Cam, discovered by DEMERS and FERNIE (ApJ 144, p. 440), can be traced continuously on plates of the Sonneberg Sky Patrol. In particular the outstanding behaviour, mentioned by the above quoted authors, of four U-observations on J.D. 243 8894 ... 8922 might be explained as follows.

At Sonneberg the observations of each three months were combined into one mean light curve. These curves show that in the second quarter of 1964 the amplitude of RU Cam in the photographic region (blue-sensitive emulsion ORWO ZU 2) was still $0^m.65$ but decreased during the third quarter to $0^m.15$. Also in the following time (1964/4 and 1965/1) the brightness showed a fluctuation of this amount only.

But in the second quarter of 1965 the amplitude became remarkably larger, $0^m.25$ photographically (see figure). It was then that the above mentioned four isolated photoelectric U-values of strong deviation appeared. One must take into account that in 1960 the period of RU Cam shortened to $22^d.073$, so that for the time of decreasing amplitude the following elements can be given:

$$\text{Min.} = 243\ 7114.0 + 22^d.073 \cdot E.$$



According to this formula we have for the quoted U-values the phases 0.66, 0.94, 0.98 and 0.93 (+ integers). Thus the observations show in the U-region a minimum of brightness with a range of about $0^m.8$ in accordance with the instantaneous elements.

From 1965/3 onward the variation of brightness flattened again, being not larger than about $0^m.1$ photographically till the end of 1966.

Our results confirm the conclusion from other photoelectric material that the decrease of the amplitude in the V-region is considerably stronger than in U, and m_{pg} takes a medium position. Furthermore the remark by DEMERS and FERNIE (1. c.) on the constancy of the mean intensity might be applied in general only to the bolometric magnitude.

A detailed description of the Sonneberg observations will be given by HUTH in a forthcoming number of MVS.

H. HUTH

W. WENZEL

Sternwarte Sonneberg
der
Deutschen Akademie der Wissenschaften