

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
Number 1872

Konkoly Observatory
Budapest
1980 November 24
HU ISSN 0374-0676

ON THE PHOTOMETRIC ELEMENTS OF RX Her

In Popper's (1980) excellent review on the stellar masses proper emphasis has been placed on the importance of considering the spectroscopic estimates of the ratio of the light of binary components in order to avoid giving misleading solutions of eclipsing binary lightcurves. In particular, Popper (1980) considered the double-lined spectrum eclipsing binary RX Her (=HD170757; for the history of this star see, e.g., Popper (1980) and references cited therein) as an illustrative example of these kinds of problems connected with binary lightcurve analyses. He stated that Cester et al.'s (1978) reanalysis of Wood's (1948) lightcurve of RX Her is very questionable, since it leads to a too large light ratio ($L_h/L_c=2.44$) as compared with Petrie's (1950) spectroscopic estimate ($L_h/L_c=1.44$). But this conclusion is due to an unfortunate misunderstanding concerning the meaning of the entries L_h and L_c given in Table 2 of the paper by Cester et al. (we recognize that this point is somewhat unclear in the text); in fact, these entries are the normalized fractional luminosities integrated over 4π steradians and not the monochromatic (i.e. blue) fractional luminosities. For RX Her, the light ratio (in blue) computed by Cester et al. is indeed 2.12, whereas the surface flux ratio is $J_h/J_c=1.18$ (the ratio of the observed depths of minima is equal to 1.22). As a consequence, in view of the large uncertainties

affecting Petrie's estimate for the light ratio, Cester et al.'s photometric solution appears to be consistent with the available spectroscopic results.

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