

UPDATING THE PERIOD OF V COMAE BERENICES

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ABSTRACT: In AAVSO Abstracts, 19 October 1968, Jean Jackson pointed out that the period of V Com is changing. Since then additional observations have been acquired from Harvard, Nantucket, and Yale plates, and more published observations have been compiled. All this material was turned over to Janet Johnston for a re-evaluation of the period. Her results, based on some 450 miscellaneous observations, mainly between JD 18443 and 42188, indicate that the observed phases,  $\phi$ , are satisfactorily represented by the relation,

$$\phi + n = (JD - JD_0)P_0^{-1} + kn^2,$$

where  $JD_0 = 19000$

$$P_0^{-1} = 2.131567, \text{ or } P_0 = 0^d.469\ 1384$$

and  $k = 1.7 \times 10^{-10}$ .

It is noted that the basic period,  $P_0$ , agrees with the period as given in the General Catalogue of Variable Stars. The correction term implies a progressive shortening of the period ( $dP/dn = 2kP_0$ ) amounting to  $1.6 \times 10^{-10}$  day/cycle. This is reasonably consistent with the difference between the basic periods given in the GCVS and by Miss Jackman, which refer to different basic epochs,  $JD_0$ .

D.H.

THREE VARIABLE STARS IN CYGNUS

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ABSTRACT: Lucia Dexter, a summer undergraduate assistant at the Maria Mitchell Observatory, reported primarily on a new RR Lyrae type star at  $19^h36^m39^s+38^o44'.7$  (1900), discovered in 1973 by Bonnie Buratti. Step estimates of its brightness were made by Miss Dexter on some 900 Nantucket plates taken between JD 24695 and 42314. Over this long time interval she found the period to be constant at  $0^d.581\ 147$ .

A new eclipsing variable found by Miss Dexter at  $19^h24^m34^s+41^o20'.9$  has an approximate period of  $3^d.72$ , but she did not have time available to complete the estimates. More definitive results on both of these stars will be published later when further work on them has been completed.

The third star on which Miss Dexter reported was HQ Lyr, which she had rediscovered, and for which she found a provisional period of 290 days (see IBVS No. 950, Dec. 1974).

D.H.