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AP AURIGAE — REQUEST FOR NEW OBSERVATIONS

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As it is known, the change in the orbital period of AP Aurigae was associated with slow mass transfer and an effect of an unseen third body (Zhang et al., 1993). At the same time Agerer and Splittgerber (1993) expressed the opinion that in the $O - C$ diagram used by Zhang et al. there are jumps of half a period.

Agerer and Splittgerber (1993) try to avoid the mentioned jumps and, by using a least squares fit, they have established a quadratic ephemeris formula. Nevertheless, from their list of observed minima, the existence of jumps may be postulated, as it is illustrated in Figure 1. Here the $O - C$ differences are referred to the linear formula

$$\text{Min I} = \text{HJD } 2448273.5736 + 0\overset{\text{d}}{.}5693375 \times E. \tag{1}$$

As it is suggested by Figure 1, the two suspected jumps occurred near the years 1927 and 1962 respectively.

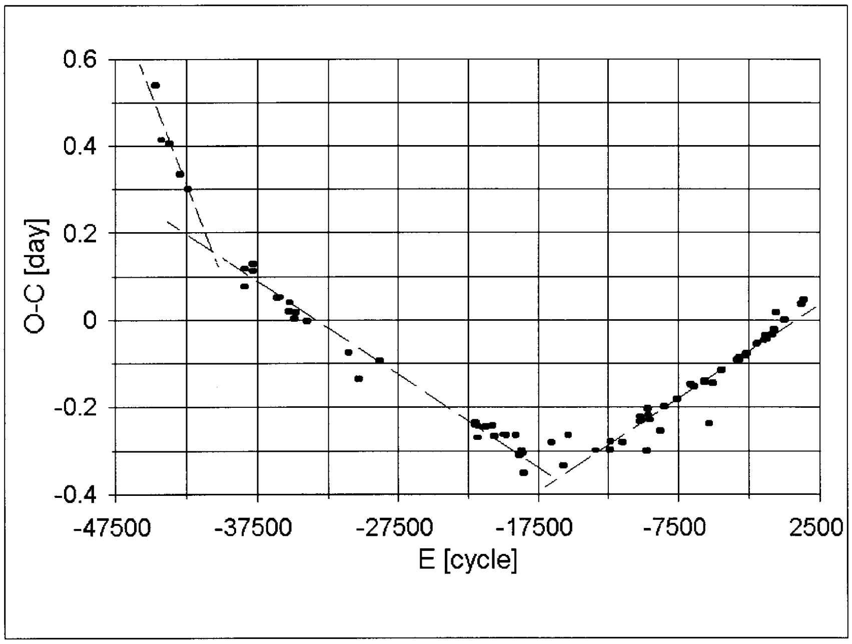

Figure 1.

Now, having in view the above mentioned contradictory results, it would be of great importance to obtain new series of observed minima. Anyhow, in our days, there are many observers who could contribute to the study of the enigmatic star AP Aurigae.

References:

Agerer, F., Splittgerber, E., 1993, Inf. Bull. Var. Stars, No. 3942
Zhang, R.-X., et al., 1993, ASP Conference Series, Vol. 38, 322