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ON THE PERIOD OF U CEPHEI

In a recent issue of this Bulletin Hall (IBVS No.847,1973) pointed out that U Cephei would have suffered a very large increase of its period, $\Delta P/P = 6 \times 10^{-4}$, if one of our observations made in August 1969 (Bakos and Tremko, Bull.Astr.Inst.Czech.24,298, 1973) is correct. He also showed that with the exclusion of this particular observation all the other photoelectric epochs of minima satisfy a quadratic formula for the ephemeris of U Cep. As an explanation of the discrepancy, among other possibilities, it was suggested that the epoch of our observation could have been in error by 0.01 days.

In order to satisfy ourselves that no error has crept in our observations we re-checked every step of the reduction procedure starting from the original strip-chart records. We also made a new determination of the epoch of minimum of August 6/7, 1969 and of its internal mean error. The result is the following:

Primary minimum = J.D. hel. 2440440.51946 \pm 0.00006,
the same as originally published.

It is, therefore, our conclusion that the observed increase of the period of U Cep at that particular time is real and we also do agree with the suggestion made by Batten (private communication) that the increase in the period is related to the distortion of the light curve at the time in question and to his observation of the emission in the spectrum of the star just a few weeks after our observation.

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