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CALL FOR SYSTEMATIC PHOTOELECTRIC OBSERVATIONS OF CX Dra

CX Dra (HD 174237, HR 7084, SAO 031165) is a bright Be star whose photometric variability was disclosed by Merlin (1975). Koubský (1976) found that the star is a single-line spectroscopic binary with a period of 6.69 days. In a detailed study, based on photoelectric UBV measurements of the star obtained in the period from 1964 to 1978, Koubský et al. (1980) showed that at least three different types of photometric variability are superimposed:

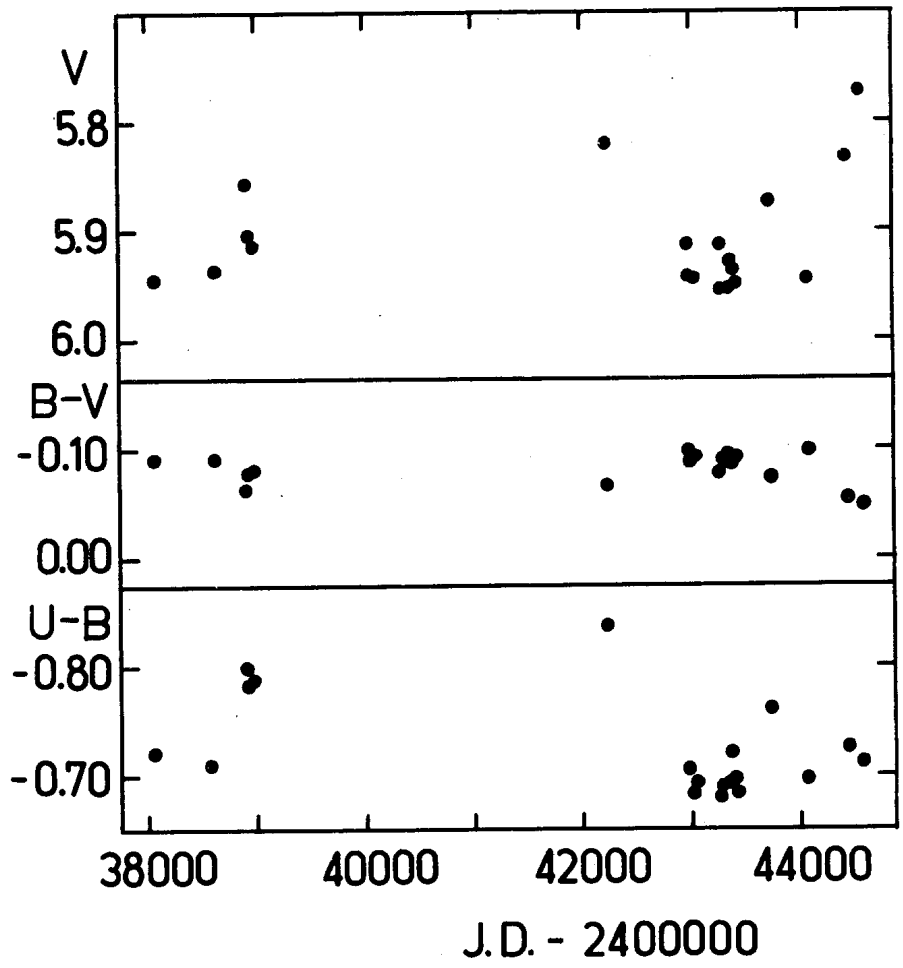
1. Long-term variability with a range of 0.2^m in V and B, and more than 0.3^m in U,
2. Periodic variations, with the orbital period of 6.696 days, and amplitudes around 0.03^m in all three colours, and
3. Occasional night-to-night variations (up to 0.1^m in V).

In summer and autumn 1980 we observed CX Dra at Hvar (Yugoslavia), Kryoneri (Greece) and Skalnaté Pleso (Czechoslovakia) observatories. We have detected very remarkable photometric behaviour of the star. Already in July (JD 2444433-40) the star was unusually bright (the V colour varying roughly between 5.8^m and 5.9^m). Such values were in the past detected only by Merlin (1975) during twelve days in July 1974 (JD 2442228-40). On August 24, 1980 (JD 2444476) the brightness of CX Dra increased to the following extreme values

$V = 5.68^m$, $B-V = -0.02^m$ and $U-B = -0.73^m$.

In the fall of 1980 we detected values around 5.77^m in V. The long-term behaviour of the star is illustrated in the Figure, where normal points (averaged over 10 to 50 days) are plotted.

A remarkable peculiarity of the brightening observed in 1980 is that the U-B values remained almost constant and did not follow the changes in the V colour as in all previously recorded cases.



We thus appeal to all colleagues interested in the Be-star photometry to secure as much photoelectric observations of CX Dra as possible. Clearly, even simultaneous observations of different kinds would be of a great value. The star will soon be well observable on the morning sky. We recommend to use HR 7060 ($V = 6.187^m$, $B-V = +0.080^m$, $U-B = +0.132^m$) as the comparison and HR 7028 ($V = 5.994^m$, $B-V = -0.069^m$, $U-B = -0.232^m$) as the check star, and to observe the check as frequently as variable.

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