PHOTOELECTRIC OBSERVATIONS OF THE LONG-PERIOD ECLIPSING BINARIES
AT YONSEI UNIVERSITY OBSERVATORY *

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ABSTRACT

A long-term project (ten-years; 1982-92) for the photoelectric observation in the UBV passbands of selected eclipsing binaries with \( p \geq 10 \) days has initiated at Yonsei University Observatory using 40-cm and 61-cm reflectors. The instrumentation used and the observation techniques and the reduction procedures applied to this investigation are described.

\[ \Delta V \]

\[ \text{Eps Aur} \]

\[ \text{JD 2445100} \]

\[ \text{200} \]

\[ \text{300} \]

\[ \text{400} \]

\[ \text{500} \]

\[ \text{600} \]

\[ \text{700} \]

\[ \text{800} \]

\[ \text{JD 2445305} \]

\[ \text{JD 2445733} \]

\textbf{Eps Aur}: The observed light curve of this star shows that the bottom of the eclipse is not flat as was expected. Two brightenings are clear; one is at the phase right after the second contact and the other just before the third contact. Moreover, the light curve had several flare phenomena, and one of them, marked with an open circle, had been reported elsewhere (Nha and Lee 1983). The dates for the second and third contacts are, respectively, JD2445305 and JD2445733, and therefore, the duration of the total eclipse is 428 days, which is longer than that of the 1955-57 eclipse by 34 days and that of 1928-30 by 98 days (Fig.3d).