AN ECLIPSING STAR IN SCUTUM

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Abstract

The period of the suspected β Lyrae type star FU Scuti is determined to be 1.66151 days.

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N. E. Kurochkin (1958) published a list of variable stars, five of which were discovered by him. One of these, FU Scuti, he listed as a β Lyrae type varying from 14.75 to fainter than 16.73. Examination of this star on over 500 available Nantucket plates from JD 2,424,027 to 2,443,747 revealed an eclipsing binary with sharp minima lasting only a few hours and a period of 1.66161 days (Figure 1). Using this period, a prediction was made for a minimum to occur on the night of August 26, 1978. Plates taken during that night showed clearly the predicted minimum.

![Composite light curve of FU Sct. Markers at intervals of 0.2 period. In addition to the points marked there were 20 observations indicating a magnitude of fainter than 15.2 and 9 indicating fainter than 16.2, all within the plotted minimum.](image)

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REFERENCE