A PHOTOMETRIC ANALYSIS OF X PERSEI = 3U 0352+30

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ABSTRACT:

2677 magnitudes of the hot massive variable star X Persei, the prime optical candidate for the X-ray source 3U 0352+30, have been obtained from blue plates in the Harvard collection taken between 1894.9 and 1975.1. We have analyzed these data for periods from 0.5 to 180 days and find no periodic component of brightness with full sinusoidal amplitude \geq 0.05 mag. Other period searches, from 550 to 618 days and from 10.75 to 11.75 hours, likewise gave negative results for full amplitudes of \geq 0.07 mag.

THE OCCULTATION OF κ GEMINORUM BY EROS
- A LEARNING EXPERIENCE

by

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ABSTRACT:

Observations of the occultation of January 25, 1975, are reviewed. The potential importance of numerous visual observations near the occultation track and astrometric observations with long-focus refractors near the time of occultation is stressed. The vicissitudes of the occultation predictions prepared by Marsden and by Herget indicate that accurate occultation predictions are difficult.

Additional unreported observations, positive or negative, from sites near the shadow trajectory are earnestly solicited. They may be communicated to AAVSO Headquarters.