

Abstract Submitted  
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**Recent Progress of the Ball State University Short-Period Variable Star Program** ROBERT BERRINGTON, THOMAS JORDAN, Ball State Univ — The Ball State University (BSU) variable star program is a program designed to target variable stars with shorter periods ( $p \lesssim 1$  day) that have been discovered by large area sky surveys. These large area surveys like the Northern Variability Sky Survey (NSVS), and the All Sky Automated Survey (ASAS) have proven valuable in discovering numerous variable stars with visual magnitudes in the  $8 \lesssim V \lesssim 15$  range. What these surveys lack is temporal resolution on the order of orbital periods of the targeted systems. The BSU short-period variable star program will supplement these large surveys by providing the needed finely resolved, systematic temporal coverage and accurate photometric coverage needed to provide a comprehensive study of these systems. To date most targets are eclipsing variable stars of the W Ursae Majoris. Photometric measurements are obtained by the Cooper Science Rooftop Observatory, which includes a 0.4-meter and a 0.5-meter telescope located on the Ball State University campus, and the SARA-KP 1-meter, the SARA-CT 0.6-meter, and the SARA-RM 1-meter telescopes. The modular nature of the study makes this program ideal for graduate and undergraduate students to get involved at all stages of the program. I will summarize the most recent work that has been done.

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