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Multi-Band Ensemble Photometry of the Eclipsing Binary Star NSVS 4161544 TYLER REDFERN, ROBERT BERRINGTON, Ball State Univ — We report new multi-band ensemble aperture photometry for the Northern Sky Variability Survey (NSVS) eclipsing star candidate NSVS 4161544. All multi-band images were taken by the Ball State University Observatory 0.5-meter telescope in the Johnson B and V, and Cousins R band passes. All images were reduced using the codred image reduction package in the Image Reduction Analysis Facility (IRAF) software suite. Ensemble aperture photometry was performed with the AstroImageJ (AIJ) software package. Measured light curves are presented. The measured light curves are analyzed by the physics of eclipsing binaries (PHOEBE) software package, and best-fit orbital parameters and stellar models are reported.

Tyler Redfern Ball State Univ

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