

Abstract Submitted  
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**Multiband photometry of the eclipsing binary star NSVS 5754586**

ERIN TUHEY, ROBERT BERRINGTON, Ball State University — We report new multiband aperture differential photometry for the Northern Sky Variability Survey (NSVS) eclipsing star candidate star NSVS 5754586. All multiband images were taken by the Ball State University Observatory 0.4-meter telescope in the Johnson B and V, and Cousins R band passes. All images were bias and dark current subtracted, and flat field corrected using the ccdred image reduction package in the Image Reduction and Analysis Facility (IRAF) software suite. Differential aperture photometry was performed with the AIP4WIN software package. We compare our measured light curves with the unfiltered CCD photometry reported by the NSVS. 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.

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