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Analysis of the ROTSE I Data to Create an Unbiased Survey of Variable Stars¹ CAROLINE KUCZEK, John Carroll University — Eclipsing Binary systems are two stars orbiting around their center of mass at an angle such that the eclipse is visible from Earth. These systems can be used for distance measurements and are the only systems for which direct mass measurements can be made. This makes statistical analyses on these stars very valuable. In order to determine the location, orbit characteristics, and behavioral physics behind these systems through statistical analyses, an unbiased survey of variable stars seen by the ROTSE I telescope was constructed. This was done by filtering light curves and code development.

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