

## **The Reduction and Reporting of Data on Proto-Planetary Nebulae from Two Observatories**

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I am documenting the light variability in a sample of proto-planetary nebulae (PPNs) observed from two observatories. PPNs are stars in the stage of evolution between the AGB and planetary nebula phases. I analyzed the digital images of the data taken on 34 nights from the SARA-South observatory located in Cerro Tololo, Chile along with data taken from the SARA-North Observatory located in Tucson, Arizona. This was done to obtain quantitative measurements of the brightness variations over time. Once I had this information for each object, I plotted light curves, which can be used to document the amplitudes and possible periods in the light intensity. These were posted along with other information, such as finding charts, on a private website for the use of our collaborators from East Tennessee State University, Ball State University, and Butler. This website will act as a central hub for the displaying of results of studies on these objects.

*Information about the Author:*

Wesley Cheek is a junior physics and philosophy major with a minor in mathematics. He has done research on proto-planetary nebulae for the past two summers, doing both observational and data work. He intends to attend graduate school in physics upon receiving his BS from Valpo.

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