

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 Tuscon, 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 Authors:

Wes Cheek is a Valpo student. Last summer he worked under Prof. Bruce Hrivnak doing astronomical observing at the observatory on campus. He studied these objects, Proto-Planetary Nebulae, and has continued this summer. He will be a Junior next semester as a physics and philosophy major.

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