

Abstract Submitted  
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**Analyzing Observations of NGC 7662 Taken with the University of Maryland Observatory 14-inch Celestron Telescope in the i' and g' Filters**<sup>1</sup> MORGAN CRAVER, AUSTEN FOURKAS, CONNOR CHURKO, RACHEL SCRANDIS, University of Maryland, College Park, TEAM ROCKET TEAM — NGC 7662, informally known as the “Blue Snowball Nebula”, is a planetary nebula located in the Andromeda constellation. It was observed at the University of Maryland Observatory with the 14-inch Celestron telescope through Sloan i' and g' filters, with the intent of comparing the nebula in the images for size and brightness. The images were collected and calibrated to correct for both additive and multiplicative noise, which could originate from the night sky or the CCD itself. The calibrated images were then analyzed for brightness in two ways: through direct ADU counts and by using a function to determine the flux of the nebula. The size was determined through pixel measurements. It was found that NGC 7662 was brighter in the g' filter, with the flux being  $7.61 \pm 0.03 \times 10^8$  e/px in the g' filter and  $2.75 \pm 0.05 \times 10^7$  e/px in the i' filter. As well, the nebula appeared larger in the g' filter, with measurements of 118x111 pixels in the g' filter and 99x107 pixels in the i' filter.

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