

The planetary nebula IC 3568, suspected earlier of variability, showed essentially no variations of brightness to either method of observations.

The nebula NGC 6721, measured as a whole, also appeared to be constant during the observed seasons of 1968-1975.

The detailed results will be published in *Astr. Zh. U.S.S.R.*

References: 1. Kostyakova, E.B., Arhipova, V.P., and Savel'eva, M.V., *Mém. Soc. Roy. Sci. de Liège*, 6<sup>e</sup> sér. t.V, p. 473, 1973.

#### ULTRAVIOLET PHOTOMETRIC VARIATIONS IN THE CENTRAL STAR OF IC 418

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Ultraviolet photometric observations of IC 418 taken with the Netherlands Astronomical Satellite (ANS) indicate variability in the central star brightness. The variations occurring on the time scales of 5 hours are only 4% at 3300 Å but increase to about 15% at 1550 Å. The observations were not made frequently enough to determine a periodicity, if one exists. There are also 5-10% changes in brightness observed in A78 and NGC 6543, these are probably due to spectral changes in the central star spectra. About 10% type variations were found in VV 1-7 and He 2-131 but their interpretation is not clear.

A careful search failed to reveal any other variations (>10%) in the planetary nuclei observed with ANS.

#### THE EFFECTIVE TEMPERATURE OF THE CENTRAL STAR, AND A CRITERION FOR COMPLETE ABSORPTION OF HYDROGEN IONIZING PHOTONS BY THE NEBULA

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With the new measurements of the central star between 1500 Å and 3300 Å, practically the entire continuous emission has been measured or can be deduced if the nebula is optically thick for hydrogen and helium ionizing radiation. The effective temperature can then be found directly, if the ratio of the radius to the distance of the star is known. This latter quantity can be determined with different assumptions: that the