

DEEP NARROW BAND INTERFERENCE FILTER PHOTOGRAPHS OF SELECTED
EXTENDED PLANETARY NEBULAE

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ABSTRACT. Narrow-band interference filter photographs in the light of $H\alpha$, [S II] ($\lambda = 6717$ and 6731 Å), [N II] ($\lambda = 6584$ Å) and [O III] ($\lambda = 4363$ Å) of four extended PNs are shown. These photographs were obtained with a focal reducer and a single-stage image tube attached to the 2.1 m Cassegrain focus telescope of the Observatorio Astronómico Nacional at San Pedro Mártir, B.C.N. The exposure times were of one hour. For each photograph we have obtained a calibration by means of a step density wedge.

The nebulae photographed this way were: Abell 13 and Abell 24 (from the list of Abell 1966), the nebula No. 1 in the list of Weinberger and Sabbadin (1981) (hereafter, WS1) and the nebula No. 5 in the list of Dengel *et al.* (1980) (hereafter DHW5). The latter two nebulae are only suspected PNs on the basis of their appearance -similar to that of a "typical" PN- in POSS plates and because they have a blue star near the center.

These photographs allow us to make a comparison between the emission of different ions. As a general trend, the morphology revealed by these photographs shows greater detail than the POSS and previous filter photographs of shorter exposures. The photographs at $\lambda = 4363$ Å are interesting because they allow us the identification of blue stars, interior to the nebulae, that could be proposed as the PN nuclei.

REFERENCES

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Dengel, J., Hartl, H., and Weinberger, R. 1980, *A.A.*, 85, 356.
Weinberger, R. and Sabbadin, F. 1981, *A.A.*, 100, 66.