

Watching Planetary Nebulae Grow with HST

Bruce Balick

Astronomy Department, Box 351580, University of Washington, Seattle, WA 98195-1580, USA

J. Huehnerhoff, M. Steffen, D. Schoenberner, A. Hajian, B.B. Behr

HST/WFPC2/PC images of PNe spanning over a decade allow secular changes in their sharp-edged structures to be monitored and compared to the predictions of hydrodynamical interacting winds models. We selected a sample of 18 simple, bright, and relatively nearby targets for second- or third-epoch observations in 2008 using the F502N ([OIII]) and F658N ([NII]) filters. All data sets were identically calibrated and compared using difference images. About 75% showed signs of expansion (by up to 1%) and changes in surface brightness (by up to $\pm 5\%$). In most cases the expansions were largely uniform. Exceptions tend to be found in ionization fronts at the perimeter of the ionized gas, though NGC6543 shows signs of nonuniform expansion in its interior as well. Results for NGC 2392, 3132, 3242, 3918, and 6543 were presented.



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