

Comparison of the Hubble Deep Fields North and South

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The deepest exposures with the Hubble Space Telescope/WFPC2 were obtained for one field close to the north galactic pole in December, 1995: Hubble Deep Field North (Williams et al. 1996, AJ, 112, 1335), and for another field close to the south galactic pole in October, 1998: Hubble Deep Field South (Williams et al. 1999, in preparation) with WFPC2, STIS and NICMOS, and the resulting data were released to the entire astronomical society. These data provide us with invaluable sources for investigating the evolution of galaxies and the nature of faint stars in our Galaxy.

We present a progress report on a study of comparison of the Hubble Deep Fields North and South. We have analyzed the WFPC2/F300W, F450W, F606W and F814W data of each field using the same procedures, and have compared the results of each field in the color-magnitude diagrams, color-color diagrams, and luminosity functions.