ULTRAVIOLET IMAGING TELESCOPE (UIT) OBSERVATIONS OF GALAXIES

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Ultraviolet images of several galaxies were obtained during the ASTRO-1 shuttle mission in December, 1990. The images have a FWHM angular resolution of ~ 3 arcsecond and are of circular fields ~ 40 arcminutes in diameter.

Most galaxies were observed in at least two and sometimes as many as four broad bands:

B6 ($\lambda_{eff} = 1500 \text{ Å}$, $\Delta\lambda = 400 \text{ Å}$), B1 ($\lambda_{eff} = 1520 \text{ Å}$, $\Delta\lambda = 350 \text{ Å}$), B5 ($\lambda_{eff} = 1620 \text{ Å}$, $\Delta\lambda = 220 \text{ Å}$), and A1 ($\lambda_{eff} = 2490 \text{ Å}$, $\Delta\lambda = 1150 \text{ Å}$).

A very few fields were observed with narrower band filters.

The most basic result of these observations is that most systems *look* dramatically different in the UV from their well-known optical appearences. Preliminary results of

these studies will be presented.

Information will be available on fields observed by the UIT during the ASTRO 1 mission; when that data becomes public it can be obtained from the NSSDC. The ASTRO observatory is expected to fly again in 1994 with approximately half of the observing time from that mission devoted to guest observers. The Ultraviolet Imaging telescope is extremely well suited for galaxy studies, and the UIT team is interested in encouraging a wide range of scientific studies by guest observers.