

[GC08] Simulated Optical Images of High Redshift Galaxies using GALEX
Ultraviolet Images of Nearby Galaxies

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We present the simulated optical images of galaxies observed with the Hubble Space Telescope (HST) Advanced Camera for Surveys (ACS) at high redshifts using GALEX near-ultraviolet (NUV: $\sim 2271 \text{ \AA}$) and far-ultraviolet (FUV: $\sim 1528 \text{ \AA}$) images of nearby galaxies. Galaxy morphology plays an important role in the assessment of the evolutionary state of galaxies. In this respect, the prediction of optical-band morphologies at high redshifts requires UV images of local galaxies with various morphologies. We present simulated optical images at cosmological distances using more diverse and high-quality nearby galaxies obtained through the GALEX UV observations. We also describe the details of the algorithm of simulations.

[GC09] Panoramic GALEX Ultraviolet Photometry of M31

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We present near-ultraviolet (NUV) and far-ultraviolet (FUV) photometry obtained from mosaic images of M31 using the Galaxy Evolution Explorer (GALEX). The data consist of images of 23 different 1.25 degree circular fields. Our entire survey coverage is ~ 17 square degree, which includes most of disk regions currently active in forming massive stars and halo of M31. We provide cross-matching between UV photometry and most recent optical catalog (Massey et al. 2006), in order to study the UV/optical properties of massive early-type stars in M31. We also present the preliminary results on the detection of X-ray sources and planetary nebulae in UV images.