FUV emissions of the Cygnus Loop

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We present far-ultraviolet spectral line maps of the entire Cygnus Loop region observed with the FIMS (Far ultraviolet IMaging Spectrograph; also known as SPEAR) onboard the first Korean Science and Technology SATellite, STSAT-1. The emission line maps of C IV λ 1550, He II λ 1640, and Si IV + O IV] λ 1405 have been made by fitting the spectra in each pixel with fixed line spread functions. The spectral maps are smoothed with an adaptive smoothing algorithm. The spatial distribution of FUV similar to optical and X-ray images, but not in detail. The global features of the line emissions and shock velocities are investigated with the unprecedented wide field of view and the relatively good spectral resolution of the FIMS. We compare the global features observed in FUV emission with those in optical and X-ray wavelength bands, noting individual regions of interest.