

Far-Ultraviolet Characteristics of Lupus Loop Region Observed with FIMS

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We present the first global far-ultraviolet (FUV) observation toward Lupus Loop, which was performed by Far-ultraviolet Imaging Spectrograph (FIMS; also known as SPEAR) aboard the first Korean science satellite, STSAT-1. We divided the observed region into several subregions referring other band-pass maps. We detected C IV, Al II, Si II, and H₂ fluorescent emission-lines in a few subregions. Generally, subregional FUV spectra showed consistent spectral characteristic with those of other band-pass map. C IV emission was more concentrated on Lupus Loop relative to other subregions. We analyzed H₂ fluorescent emission-lines with Sternberg's (1989) model, and obtain the upper limit of 1 pc for the length scale of fluorescent zone.