

[F-01] **Observation of the FUV Continuum Background with FIMS/SPEAR**

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Early attempts to measure the diffuse far-ultraviolet (FUV) background were initially motivated by the hope that a large fraction of the radiation in this waveband would prove to be extragalactic. We present a FUV (1370–1720Å) map over most of the sky, which has been obtained with the FIMS/SPEAR instrument, flown aboard the STSAT-1 satellite. We investigate the general properties of the FUV continuum background and compare with maps of N(H I), 100 μm, Ha, and soft X-ray (1/4 keV). We find that the continuum intensity is well correlated with the maps of N(H I), 100 μm, and Ha but anti-correlated with soft X-ray map. The strongest correlation is with the Ha emission. The correlation between the FUV continuum background with the TD-1 stellar flux is weaker than with the other maps. The diffuse FUV background has a rather large variance from nearby in-situ stellar flux, especially, in regions of low intensity. A correlation of the hardness ratio (1400–1510/1560–1660) with the FUV intensity at high intensity is found while an anti-correlation is shown at low intensity. At low intensity regions where in-situ stars are mostly late B- or A-types, both the large deviation of the diffuse FUV background from in-situ stellar flux and the anti-correlation between the hardness ratio and the FUV intensity likely indicates that the diffuse FUV background in these areas are predominantly by starlight emitted from distant earlier-type stars and then scattered by dust.

[F-02] **Search for the detection of C IV emission line from Galactic Supernova Remnants with FIMS/SPEAR**

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C IV(λλ1548, 1550 Å) line is one of the most prominent emission lines in the FUV, which are expected to detect in Supernova Remnants. This emission line has already been detected and analyzed in several large angular size Supernova Remnants, such as Cygnus Loop, Monogem Ring, Vela, Antlia, and Lupus Loop with the FIMS/SPEAR instrument. Then, we searched for the detection of C IV emission line from other smaller size Galactic Supernova Remnants with the same instrument and found it in several targets. Although it seems difficult to analyze them in detail due to small angular size of the targets compared with rough spacial resolution of the FIMS/SPEAR, we can conclude whether C IV emission line has been detected from each target or not. We present the results of searching and C IV emission line images and spectra for several targets