

**Observing Simulation of Far Infrared Surveyor (ASTRO-F/FIS):  
Generation of the Time-line Data**

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The Far-Infrared Surveyor (FIS) is one of the focal-plane instruments on the ASTRO-F satellite, which will be launched in early 2004. Based on the present hardware specifications and configurations of the FIS, we had developed a software that simulates the observations with this instrument. In the previous presentations, we used the simple patch with  $2.3^\circ \times 2.3^\circ$  area and artificial catalogues of point sources assuming  $N(>S) \propto S^{-\alpha}$  where  $N(>S)$  is the number of sources per unit solid angle brighter than flux  $S$  with  $\alpha$  being a constant.

In this poster, we present the time-line data through the virtual observation of the simulated sky. The simulated sky which covers  $360^\circ \times 1^\circ$  stripe area in the whole sky is composed of the extragalactic point sources generated from the luminosity function at  $60\mu\text{m}$ , the distribution of the redshift and the distribution of four types of galaxies. We considered the realistic effects during the real observation. We used the simplified instrumental and observational parameters for the cosmic ray hitting, the reset of detector and the drift motion of the detector in the cross-scan direction. We also improved the calculation speed of the program to simulate the large-scale stripe area.