

The ASTRO-F survey as inputs for the FIRST

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ASTRO-F is the first Japanese satellite dedicated for infrared astronomy, and will be launched into a sun-synchronous polar orbit by the Japanese M-V rocket in February 2004. ASTRO-F has a cooled 70 cm telescope with two focal plane instruments: one is the Far-Infrared Surveyor (FIS) and the other is the Infrared Camera (IRC).

The prime purpose of the FIS is to perform an all-sky survey with 4 photometric bands in wavelength of 50 - 200 μm . The big advantages of the FIS survey over the IRAS survey are (1) higher spatial resolution (30'' at 50-110 μm and 50'' at 110-200 μm) and (2) better sensitivity by one to two orders of magnitude. The FIS survey will provide next generation far-infrared survey catalogs, which will be ideal inputs for follow-up observations by FIRST.

The other instrument, IRC, will make imaging and low-resolution spectroscopic observations in the spectral range of 2-26 μm . It will make deep photometric and spectroscopic surveys for wide areas of the sky with its wide field of view ($10' \times 10'$). The IRC survey will be complementary with the FIRST observations at longer wavelengths.

We have just started the discussion with ESA on possible collaboration concerning the data analysis activity and supports of tracking stations for ASTRO-F, and some fraction of observing time is expected to be open for European community.