AKARI Contribution to the Dust Studies

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AKARI is the first Japanese satellite mission dedicated for the infrared astronomy. The satellite was launched in February 2006 and carried out an all-sky survey and more than five thousands of pointed observations in its liquid helium cooling phase until August 2007. In the following period from June 2008 to February 2010 *AKARI* made about 13 thousands of pointed observations in the near-IR wavelengths using the mechanical cryocooler. The satellite was turned off in November 24, 2011.

The *AKARI* All-Sky Survey was carried out at six bands in the mid- to far-IR wavelengths, namely at 9 & 18 μm by the IRC (Infrared Camera), and 65, 90, 140, & 160 μm by the FIS (Far-Infrared Surveyor). The wavelengths are most suitable probe of the thermal radiation from the dust in space. The point source catalogues from the All-Sky Survey have been in public since March 2010 and used broadly in the various astronomical fields. Better sensitivity and quality images as well as spectroscopic data were obtained for the selected target / region of the sky in the pointed observation mode. The raw data and reduction software toolkit are mostly in public.

The *AKARI* team has been reconfigured in April 2013 to dedicate data processing and archiving. The goal of the project is to provide *science-ready* processed data to the astronomical community to promote infrared astronomy with the *AKARI* data. The All-Sky Map in the mid- and far-IR bands, images and spectra from the pointed observations will be in public in a few years timescale. You are welcome to visit our web site: *http://www.ir.isas.jaxa.jp/AKARI/Observation/*.

We present scientific highlights of *AKARI,* current activity of the team and expected data to be in public, especially those may be useful for the dust studies.