

Normal galaxies... in the infrared: AKARI Deep Field South data identifications and spectral energy distributions.

AKARI is the first satellite dedicated to survey the entire sky in near-, mid- and far- infrared wavelengths at the same time with an unprecedented angular resolution to investigate the evolution of star-forming galaxies, the large-scale structure of the Universe, and the cosmic infrared background radiation.

Our main goal is to identify the detected sources from the AKARI Deep Field South (one of the deep fields close to the Ecliptic Pole) in all available wavelengths to build a catalog and to construct spectral energy distributions (SEDs). The unique property of the ADFS is that the cirrus emission density is the lowest in the whole sky, i.e., the field is the most ideal sky area for far-infrared (FIR) extragalactic observations.

To find counterparts of AKARI sources we searched public databases (NED, SIMBAD and others). Checking 480 sources brighter than 500 Jy in the Wide-S band (90 μm), we found 114 sources with possible counterparts, among which 78 were known galaxies. We present these sources as well as our first attempt to construct SEDs for the most secure and most interesting sources among them, including all the known data together with the AKARI measurements in four bands.

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