

Title: Clustering of dusty galaxies from the AKARI observations

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ABSTRACT

We present and discuss the measurements of the angular two-point correlation function for AKARI 90- μm point sources, detected outside of the Milky Way plane and other regions characterized by high Galactic extinction, and categorized as extragalactic sources according to our far-infrared-color based criterion (Pollo et al. 2010). The all-sky AKARI survey provides us the first opportunity to measure of the angular clustering of galaxies selected in the far-infrared after IRAS. We find a non-zero clustering signal in both hemispheres extending up to ~ 40 degrees, without any significant fluctuations at larger scales. The observed correlation function is well fitted by a power law function. We plan to discuss properties of this dusty galaxy population, the relation of the observed angular clustering properties to the underlying structure in three dimensions, and sub populations of galaxies contributing to this signal. We also discuss possible reasons for observed notable differences in measurements from a northern and southern hemisphere.