[AK05] Supernova Remnants in the AKARI Large Scale Survey of the Large Magellanic Cloud

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We present the preliminary results of the study about supernova remnants (SNRs) in the AKARI Large Scale Survey of the Large Magellanic Cloud (LMC). The LMC has been observed with 5 filters (N3, S7, S11, L15, and L24) and the prism (NP) of the Infrared Camera (IRC). 13 SNRs were within the covered area, and 2 SNRs (SN 1987A and 0519-69.0) were clearly detected at 11, 15, and 24 μ m. There were also some features at 3 and 7 μ m corresponding to the bright knots at mid-IR bands. The AKARI results show that the IR fluxes of 1987A has changed since the previous observations, and we discuss the variation of IR properties. 0519-69.0 is one of four Balmer-dominated Type Ia SNRs in the LMC, and its images at 11 and 15 μ m were obtained for the first time. We discuss the origin of the IR emission from the SNR.

[AK06] AKARI observations of the Young Oxygen-Rich Supernova Remnant G292.0+1.8

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We present the preliminary results of infrared observations of the supernova remnant (SNR) G292.0+1.8 (MSH 11-54) using AKARI. G292.0+1.8 is one of the three known Galactic oxygen-rich SNRs which are the remnants of core-collapse SNe having massive stars as their progenitors. Its location at the high galactic latitude makes this SNR advantageous for the study of infrared emission from young oxgen-rich SNRs. Infrared emission associated with the remnant is clearly detected in the MIR-L (>=15um) images. The MIR distribution coincides with the X-ray distribution in general. There are some faint emission features in the shorter wavebands too. We compare the IR images with radio and X-ray images, and discuss the nature of the IR emission.