Q33a **AKARI** observations of supernova remnant **G292.0**+1.8

Ho-Gyu Lee (University of Tokyo), Bon-Chul Koo (Seoul National University), Dae-Sik Moon (University of Toronto), Woong-Seob Jeong (KASI), Itsuki Sakon, Takashi Onaka (University of Tokyo), Hidehiro Kaneda (Nagoya University)

We present the results of AKARI observations of the oxygen-rich supernova remnant G292.0+1.8. Because the remnant appears to have a well-defined boundary of ~ 4 arcmin radius, only the ~ 10 arcmin area was frequently investigated by the optical, radio, and X-ray observations. Our AKARI images pointed to the center of G292.0+1.8 clearly show the bright equatorial and elliptical shell structures between 11 and 90 μ m band. The equatorial structure is identified by two filamentary emission. There is good correlation between the infrared and X-ray emission, which reveals that the infrared emission is mostly originated from the collisionally heated dust by hot shocked gas. We also identify the infrared emission from the ejecta using the 15 μ m to 24 μ m ratio image. Its distribution is considerably different from both band images. The distinct high-ratio region is located at about half radius southeast from the center, which coincides with the distribution of optical line image. And there is another high-ratio region at northwest. The strong [Ne II] line is detected at the peak of high-ratio ejecta. Fortunately our AKARI observations covered the southeastern area too, and we found an interesting jet-like feature extended to more than twice the size of radius. From our infrared observations, we think that the jet-like feature may be a part of ejecta and its emission is significantly contributed by radiative lines. Based on the distribution of ejecta and the existence of jet-like feature, we suggest that the explosion of G292.0+1.8 is axisymmetric with disk-like circumstellar materials still remains along the equator.