

P68a **AzTEC on ASTE: A Large Scale 1.1 mm Continuum Imaging toward the ρ Ophiuchi Dark Cloud**

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The ρ Ophiuchi dark cloud complex is well recognized as a typical nearby star forming region which involves several clouds with different star formation activities and different evolutionary stages. Various researches have revealed that the densest region, L1688 called " ρ Oph main body", has large star formation efficiency, although the filamentary cloud L1709 elongated from the main body northeastward shows less active star formation. Furthermore, we suggested that L1709 seems to have chemically elder age than L1688 by the submillimeter-wave [CI] line observation (Kamegai 2004). In order to investigate the connection between the differences of star formation activities, evolutionary stage of cloud and properties of dense cores as birthplace of star, a wide field ($\geq 2 \text{ deg}^2$), sensitive ($1\sigma \sim 13 \text{ mJy beam}^{-1}$) and homogeneous image in 1.1 mm dust continuum toward both of L1688 and L1709 was obtained with a 144 channel bolometer array AzTEC on ASTE 10 m telescope. The overall distribution is well consistent with that of dense gas tracer such as C^{18}O and H^{13}CO^+ . We identified numerous dense cores, diffuse filamentary structures and compact sources associated with YSOs including previously unknown sources. The physical properties such as shape, mass, size, and core mass function is compared between the two clouds in terms of the environment and the evolutionary stage of the clouds.