

P65a **AzTEC on ASTE: Wide Field Imaging of Nearby Star Forming Regions at $\lambda = 1.1$ mm. II. Chamaeleon I and II molecular cloud**

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We report the results of the first wide-field sensitive $\lambda=1.1$ mm imaging of Chamaeleon I/II molecular cloud with a 144-channel bolometer array AzTEC on ASTE. We obtained large maps with five and two square degrees for Cha I and II, respectively. The 4σ detection limits are 0.05-0.09 $M_{\odot}\text{beam}^{-1}$. We have employed the Clumpfind algorithm and identified 81/25 sources in Cha I/II. In Cha I, the sources lie along a long filament with a length of $1.5^{\circ}(4.2\text{ pc})$, meanwhile such large structures are not seen in Cha II. This distribution well agrees with A_V and *Spitzer* $160\mu\text{m}$ images. There are some previously unknown cores with high central condensation. No counterparts for these cores have been identified except for $160\mu\text{m}$, which indicates that they are in the very early stage of star formation. The core mass function (CMF) of Cha I samples well accorded with the stellar IMF for the region, which supports the idea that the dust cores are the direct progenitor of stars. The best fit to the CMF is $\gamma = 2.2$, ($dN/dM \propto M^{-\gamma}$) in $M > 0.2M_{\odot}$, which well agrees with the general IMF. Meanwhile, correlations between the mass and column density between our study and the results of $\text{C}^{18}\text{O } J=1-0$ observations are not good. The discrepancy implies the dust continuum has a sensitivity only for regions with a high concentration.