

Wide Field Imaging of the Molecular Interstellar Medium

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Wide field imaging of the interstellar medium is an essential tool to investigate the physical processes which operate within a range of size scales or densities. The ability to construct images with high spatial dynamic range at millimeter wavelengths has increased in recent years with focal plane arrays on single dish telescopes and routine mosaicing of interferometers. In this contribution, I will demonstrate the value of wide field imaging from images of the molecular interstellar medium obtained with focal plane arrays on the FCRAO 14 meter telescope. These include data from wide field surveys of the Galaxy, a ^{12}CO J=1-0 image of M31, and ^{13}CO J=1-0 major axis maps of several galaxies. The images enable investigations of the equilibrium state of the molecular gas, interstellar turbulence, and radial variations of molecular gas properties and emissivities.

Abstract submitted for Science with the Atacama Large Millimeter Array, 6 – 8 October 1999, Washington, D. C.