

Abstract Submitted
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Infrared Observations of Massive Star Forming Regions SARAH WILLIS, MASSIMO MARENGO, Iowa State University, LORI ALLEN, NOAO, GIOVANNI FAZIO, SAO, JOHN BALLY, University of Colorado, LEO BRONFMAN, University of Chile, SEAN CAREY, Spitzer Science Center, LUIS CHAVARRIA, Observatory of Bordeaux, ROB GUTERMUTH, University of Massachusetts, Smith College, TOM MEGEATH, University of Toledo, RON PROBST, NOAO, GUY STRINGFELLOW, University of Colorado — We have observed NGC 6334 with NASA's Spitzer Space Telescope, using the IRAC infrared imager at wavelengths of 3.6 - 8.0 microns, and NEWFIRM, a ground based near-infrared imager at wavelengths of 1.1 - 2.4 microns. NGC 6334 is a giant molecular cloud with a complex history of star formation located approximately 1.6 kpc away in the plane of the Milky Way Galaxy. NGC 6334's high cloud mass ($>10^5 M_\odot$) and bright far-infrared luminosity identify it as a local analog to the unresolved sites of star formation found in other galaxies. Observing high mass Galactic regions such as NGC 6334 will provide the missing link necessary to match empirical relations between the efficiency / rate of star formation and the global properties of the molecular cloud derived from nearby, lower mass star forming regions to results from external galaxies. Our preliminary results reveal that NGC 6334 contains several hundred Class I YSOs and several thousand Class II (older) YSOs concentrated at multiple sites of star formation across the molecular cloud complex.

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