

Deep Surveys with SIRTf's Infrared Array Camera

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The Infrared Array Camera (IRAC) on NASA's Space Infrared Telescope Facility (SIRTf) will provide imaging at 3.6, 4.6, 5.8 and 8 microns. The four bands are imaged simultaneously in two adjacent 5 arcminute fields with 1.2 arcsecond pixels. The expected point source sensitivities in the four bands are 3, 4, 17, and 24 microJanskies (5 sigma in 200 seconds) for objects well away from the ecliptic. SIRTf Guaranteed Time Observers have specified field surveys to be carried out with IRAC with integration times per position ranging from 90 to over 10,000 seconds. I will describe the plans for these surveys and their application to the study of galaxy formation and evolution.

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