THE 2 MICRON AL 1 SKY SURVEY (2MASS) INFRARED POINT SOURCES AND THE COSMIC BACKGROUND

Charles A. Reichman, Infrared Processing and Analysis Center, Jet Propulsion Laboratory, California Institute of Technology

The 2 Micron Al 1 Sky Survey (2MASS) is a NASA project to survey the entire sky at 3 infrared wavelengths (1.25, 1.65 and 2.2 um). The Northern survey will begin in April 1, 1997, using a 1.3 m telescope at Mt. Hopkins. The Southern Survey will begin approximately a year later from CTIO. The entire survey should be complete by the year 2000.

The results from 2MASS will include catalogs of almost 500 million point sources (down to K_s ~ 14.5 mag) and 1 million galaxies (down to K_s ~ 13.5 mag), and images of the entire sky. These data will have a broad range of astrophysical uses, and will be helpful in assessing the contribution of point sources to diffuse background studies such as the COBRAND RTS missions. I will present an update on the 2MASS survey based on prototype camera data and discuss models of the point source sky as they relate to COBRAND studies.