

# **SOFIA - Stratospheric Observatory for Infrared Astronomy**

*L. Andrew Helton (USRA/SOFIA)*

The Stratospheric Observatory for Infrared Astronomy (SOFIA) is a 2.7-m telescope carried on board a Boeing 747-SP aircraft. Optimized for observations from infrared through sub-mm wavelengths, SOFIA observes from an altitude of 37,000 – 45,000 feet, above 99% of the atmospheric water vapor. The Observatory's complement of instruments exhibits a broad range of capabilities that are well suited for the observation of dusty astronomical sources. During its first year of preliminary operations, SOFIA has made a number of exciting observations, including the discovery of a new high-mass protostar in the Orion Nebula (IRc4), the first detection of OD outside our Solar System, the detection of interstellar mercapto radicals (SH), and some of the highest resolution mid-IR observations of the transient Galactic circumnuclear ring to date. Here I present a selection of the available instruments available on board SOFIA and discuss their potential for future studies of dust in the Universe.