MODIS Airborne Simulator

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Jeff Myers
SAIC, NASA Ames Research Center

RoseAnne Dominguez
SAIC, NASA Ames Research Center

The Moderate Resolution Imaging Spectroradiometer (MODIS) Airborne Simulator (MAS) collected data onboard NASA’s ER-2 during the Fourth Convection and Moisture Experiment (CAMEX-4) based in Jacksonville, Florida August-September 2001. It was part of a multiaircraft operation with a suite of airborne instruments studying the development, intensification, and tracking of tropical cyclones.

The 50 channel MAS provides multi-spectral data for purposes of developing and validating algorithms for the remote sensing of cloud, aerosol, water vapor and surface properties. Nineteen of the spectral bands correspond closely to comparable bands of Terra’s (EOS AM1) MODIS instrument.

MAS is described, and deployment coverage shown. Data processing status, format, volume and web-links are presented. Example imagery of Hurricane Erin, developed thunderheads as well as southern Florida study sites are presented and an overview of instrument performance is discussed.