MODIS Airborne Simulator

Channels

Footprint

Swath

Spectral range

Scan rate

Pixels in scan line

Data system

50

2.5 mrad

45 m

±43°

34 km

 $0.55-14.2 \ \mu m$

6.25 scans/sec

716

12 channels – 8 bit



MODIS Airborne Simulator

- *MAS* was delivered to Ames on October 15 where it was integrated, calibrated, and flown in the FIRE Cirrus Experiment which began November 12.
 - 11 flights during cirrus experiment.
 - 3 flights thus far processed through Level-1B processing system (SDST).
 - Engineering assessment of instrument performance conducted to examine temperature sensitivity to calibration gain, rms noise by channel, and absolute calibration of 6 thermal infrared channels.



MODIS Airborne Simulator

- After FIRE campaign, the *MAS* was returned to Dædalus where it is currently being modified to a full 50 channel spectrometer for use in ASTEX, TOGA-COARE, Brazil, and later airborne field campaigns.
- Output Level-1B data will be produced by MODIS SDST and distributed in the netCDF format by anonymous FTP or 8 mm (Exabyte) cassette.
- Enhanced 50 channel, 12-16 bit data system discussed and viewed as an inportant near future development.

