







Cloud Characteristics from Combined Imager and Sounder Measurements

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- 1. Motivation
- 2. Imager and Sounder collocation and cross-calibration
- 3. AIRS sub-pixel characterization of cloud cover and phase from MODIS
- 4. Cloud Top Height (CTH) Comparison to CALIOP
- 5. Combined AIRS and MODIS cloud characterization
- 6. Conclusions



We anticipate more accurate cloud property determination by using combined imager and sounder data from polar-orbiting satellites to take advantage of high spectral and high spatial resolution measurements.



AIRS and MODIS specifications

Instrument	AIRS	MODIS
platform	Aqua	Aqua
Number of channels/bands	2378	36
Spectral range	3.7 - 15.4 μm	0.4 - 14.5 μm
Spectral resolution	> 1200	
Spatial resolution	13.5 km (nadir)	250 m - 1000 m 5 km (L2 products)





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