

ATS/CIRA Colloquium

Atmospheric Science 50th Anniversary Speaker

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CSU ATS Masters 1985 and Ph.D. 1992

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Observations of high resolution liquid water structure and mid-level cloud microphysics from an Advanced Pulsed Doppler Radar

Hosted by Sonia Kreidenweis

Thursday, December 1, 2011

**ATS room 101; Discussion will begin at 3:30pm
Refreshments will be served at 3:00pm in the coffee lounge**

I will discuss a set of unique Doppler radar observations which show detailed structure of cloud microphysics and high resolution structure of mid-level clouds. The results are based on CAPE2010 and CAPE2009 field experiments organized by Naval Research Laboratory and other agencies. The experiment has been conducted in the Kennedy Space Center near the Cape Canaveral, Florida area in an effort to measure the properties of various cloud systems using a variety of surface-based sensors and in situ aircraft measurements. I will show how such information can be used to derive radiative transfer parameterizations for large eddy simulations of mid-level and upper level clouds.