

Desert Research Institute: Environmental Seminar Series

December 6th, 2010 11:00 AM

Reno: Stout A Conference Room

Las Vegas: Video link to Room 182

Lunch will be served

Survey of the activities under the MODIS-LACO aerosol team umbrella: Algorithms, instrument development and data analysis

Dr. Lorraine A. Remer

NASA Goddard Space Flight Center Laboratory for Atmospheres

The MODIS aerosol science team at NASA/GSFC and the Laboratory for Aerosol and Cloud Optics (LACO) at UMBC have teamed up to push aerosol and cloud characterization into the 21st century. I will use this opportunity to highlight the various work undertaken by this partnership today. This will entail a quick survey of the many projects under the MODIS-LACO aerosol team umbrella. Under algorithms, I will show recent comparison of the MODIS aerosol products with various ground truth, planned changes to be implemented in 2011, and new abilities to derive aerosol absorption from space. Under instrument development, there is the imaging nephelometer that measures the full polarized phase function, various manifestations of the cloud scanner that retrieves cloud microphysics from the sides of clouds and an imaging polarimeter proposed as a space mission. Finally under data analysis, I will show some recent results providing insight into cloud-aerosol interaction and the processes affecting climate. It's going to be a whirlwind tour, meant to set the stage for additional discussion and possibly future collaboration.

