



## **Attributes of mesoscale convective storms in West Africa**

**J.D. Fuentes** (1), P.A. Kucera (2), E. Joseph (3), J. Gerlach (4), G. Jenkins (3), A. Gaye (5), and M. Ndiaye

(1) University of Virginia, USA, (2) National Center for Atmospheric Research (NCAR), USA, (3) Howard University, USA, (4) NASA, USA, (5) Cheik Diop University of Senegal, Senegal

This presentation will report on the findings related to a field campaign that took during 15 August to 20 September 2006 in West Africa to understand the precipitation processes and their associated linkages to tropical cyclogenesis. The field observations included surface fluxes of water vapor; energy and momentum; thermodynamic and dynamic attributes of the troposphere; and vertical structure, rainfall amounts, and storm intensities using a Polarimetric Doppler radar and a network of rain gauges. The antecedent atmospheric thermodynamic and dynamic conditions associated with the formation of mesoscale convective storms will be presented and discussed. In addition, the attributes of two mesoscale systems that became tropical storms will be presented and discussed. These attributes will entail the characterization of the thermodynamic and kinematic storm conditions as storms migrated from continental to oceanic environments.