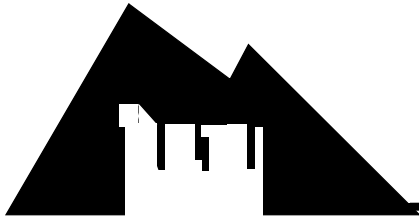


# *The RAP Seminar Series*



**NCAR**

## **CHARACTERIZATION OF STORM TYPES DURING A 30-HOUR PERIOD OF RADAR OBSERVATIONS DURING THE "DRY-TO-WET ATMOSPHERIC MESOSCALE CAMPAIGN" OF THE LBA IN 2002**

by

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*Wednesday, 29 September 2004  
Foothills Lab Building 2 Auditorium, Room 1022  
3:30 p.m.*

The presentation covers two days of continuous radar observations (7-8 October 2002) during which a variety of different storm types was observed by the S-band Doppler radar, located about 40 km south of Ouro Preto do Oeste (Rondônia).

Two severe storms, which occurred almost simultaneously, will be discussed. The first developed up to 20 km height within less than 30 min. Its echo core (and presumably its updraft) was upright, as of the vast majority of storms observed during the experiment. Another multicellular storm developed about 80 km to the east of it, but the two main cores were strongly tilted, did not exceed 15 km in height and were longer lasting. Radial velocities did not show any significant differences. Later, these two complexes and other smaller storms created a huge stratiform cloud cover, which resulted in occasional isolated showers and aided the development of new cells under its umbrella.

Later in the evening, a strong Microburst was observed near Ji Paraná. During the early hours of the following morning, very isolated cells developed at random some 300km east of the radar and consolidated quickly, forming a Mesoscale Convective System (MCS), which ultimately moved at about 45 km.h<sup>-1</sup> across the whole State of Rondônia. The leading edge was characterized by very strong and tall cells, with a steep gradient of reflectivity, trailing behind a large area of stratiform precipitation.