

44) POSTER

Relationship between CAPE and Bolivian High during Wet-AMC-LBA

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ABSTRACT

Radiosonde data from the Wet Season Atmospheric Mesoscale Campaign of the Large Scale Biosphere Atmosphere Experiment in Amazônia (January and February 1999) held in Rondônia-Brazil, rainfall data sets as well as the global analysis from CPTEC were used in this study. Analysis of the transient variability of convective available potential energy (CAPE) and any possible relationship with Bolivian high and convective activity was carried out. Results show that there is a direct relationship between CAPE and vorticity field in 250 hPa, in the studied period. When CAPE increases, anticyclonic vorticity also increases, if CAPE decreases cyclonic vorticity appears in the region. This means that when CAPE is released for formation of the deep convection event, it will occur convergence in the low levels with rising motion and divergence in the upper troposphere favoring thus the formation of the Bolivian high.