

instrumented aircrafts. This methodology is based on the influence functions theory, and will be used during the FIRE campaign, which will take place in the end of 2004 dry season in Mato Grosso area.

At the first stage, high-resolution numeric weather forecasts will be run with BRAMS model. Before the campaign, the mean squared error (MSE) between the forecasts and the radiosonde measurements of wind velocity will be estimated. From these forecasts, considering the error, the STILT Lagrangean model, which allows the time-inverted integration, will be applied. STILT will be run from the 72-hour forecast at fixed points chosen from the concentration and flux measurement sites. This model outputs a trajectory plume as well as influence functions.

Preliminary sensitivity tests have been developed in order to verify how adequate this framework is to the FIRE region. A simulation over Mato Grosso in October 15th to 17th, 2002 will be presented. During this period, widespread convection was observed over the focused area. Results show that the air particles behaviour within the mixing layer and the vertical displacement due to the convective activity are well reproduced. When the MSE is considered, the influence function field becomes suggests a larger area, which is desirable when the flight over significant regions is planned.

#### **43.13-P: Características dos Sistemas Convectivos de Mesoescala Observados Sobre a Amazônia Durante o Experimento RACCI/LBA**

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Este trabalho analisa a convecção tropical através do acompanhamento de sistemas convectivos de mesoescala observados em imagens do canal infravermelho do satélite GOES-8, a cada meia hora, obtidas durante a campanha RACCI/LBA, realizada em Rondônia no período de Setembro a Novembro de 2002. A metodologia empregada baseia-se no emprego do software FORTRACC (Forecast and Tracking of Active Convective Cells) para detecção e acompanhamento do ciclo de vida dos sistemas convectivos. Este programa detecta e acompanha os sistemas convectivos durante o seu ciclo de vida descrevendo a evolução das características radiativas e morfológicas. Neste trabalho foram utilizados os limiares de 235K para a detecção de sistemas convectivos e 210K para células convectivas imersas no sistema convectivo. A mesma metodologia foi empregada aos dados do radar da TECTELCOM que operou durante o experimento a partir do CAPPI para alturas entre 2 e 18 km. Este estudo descreve as características dos sistemas convectivos do ponto de vista das nuvens (satélites) e da água líquida (radar) no período de transição entre a estação seca e chuvosa. Os resultados descrevem as distribuições de tamanho, horários de nascimento e dissipação, ciclo diurno e realiza um estudo de caso para alguns eventos extremos observados durante a campanha.

#### **43.14-P: Importance of the Low Level East East of the Andes (LLJ) and the moisture transport from the Amazon Basin to the la Plata Basin**

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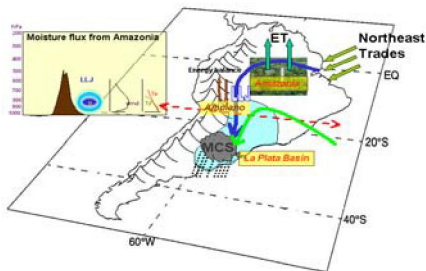
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The Low Level Jet East of the Andes (LLJ) represents a mesoscale circulation feature located to the East of the Andes, and which maximum speed is on the first 2 km in the vertical. The LLJ brings moisture from the Amazon basin into the La Plata basin, and seems to be stronger in summer, producing rainfall in the southeaster South American region. We present some results of the SALLJEX field Campaign of summer 2003, explaining some of the observed features of the LLJ, as well as upper and low-level circulation for seasonal means and SALLJ composites during the warm and cold seasons. On the circulation characteristics, SALLJ composites during the warm season show the enhanced low-level meridional moisture transport coming from equatorial South America as well as an upper level wave train emanating from the West Pacific propagating towards South America. The intensification of the warm season LLJ obeys to the establishment of an upper-level ridge over southern Brazil and a trough over most of Argentina. The circulation anomalies at upper and lower levels suggest that the intensification of the LLJ would lead to an intensification of the South Atlantic Convergence Zone SACZ later on, and to a penetration of cold fronts with an area of enhanced convection ahead at the exit region of the LLJ.



#### **43.15-P: Sobre a Participação do Avião Laboratório Para Pesquisas Atmosféricas (ALPA) no LBA**

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