PRELIMINARY COMPARISONS BETWEEN THE CO RETRIEVALS FROM AIRS AND THE CO CATT-BRAMS MODEL ESTIMATIONS OVER THE AMAZON REGION DURING THE 2002 DRY-TO-WET SEASON

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The high concentration of aerosol particles and trace gases observed in the Amazon and Central Brazilian atmosphere during the dry season is associated with intense anthropogenic biomass burning activity. The biomass burning emissions have a strong impact on the tropospheric and stratospheric chemical composition and are an important agent of weather and climate change. Therefore, the estimation of the amounts inject into the atmosphere at regional as well as global scales is needed. During the past decade, trace gas abundance in the troposphere were obtained from sparsely distributed measurement sites, and observations were mostly confined to the surface. The advent of downward looking instruments to probe the troposphere from polar-orbiting satellites has increased our ability to access the impact of human activities on the chemical composition of the atmosphere and on the climate changes. In this work the CO retrievals from AIRS/AQUA are compared with estimations of CO using the Coupled Aerosol and Tracer Transport model to the Brazilian developments on the Regional Atmospheric Modeling System (CATT-BRAMS) for the dry-to-wet transition season of 2002 over the Amazon region. In general, the results showed a relatively good agreement between both estimates, particularly in the mid-troposphere.