



Measurements of NO_x and CO during the ACTIVE campaigns

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Measurements of nitrogen oxides (NO and NO₂) and carbon monoxide (CO) were made aboard the Australian research aircraft EGRETT during the ACTIVE campaigns (Aerosol and Chemical Transport In Tropical conVEction) conducted in November/December 2005 (Hector period) and January/February 2006 (Monsoon period) from Darwin, Australia. The NO_x measurements were made with a revised version of the NO_y instrument that is being flown autonomously aboard passenger aircraft in MOZAIC (Measurement of ozone and water vapour by Airbus in-service aircraft). Modifications included the integration of a photolytic converter for specific NO_x detection and enhancements in sensitivity. The CO instrument was based on vacuum-UV resonance fluorescence.

The presentation will discuss the data obtained during the two ACTIVE intensives. The emphasis will be on the relative importance of NO_x production from lightning versus the convective uplifting of fire emissions.