



Sulfur dioxide measurements in the tropical troposphere: Deployment of an aircraft-based CIMS instrument with permanent in-flight calibration during the SCOUT-O3 tropical campaign.

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During the SCOUT-O3 tropical campaign which took place around Darwin (Australia) in November/December 2005 sulfur dioxide measurements have been performed using an aircraft-based chemical ionization mass spectrometer (CIMS) with permanent in-flight calibration. A total of 17 tropical flights have been carried out. The SO₂ concentrations were spatially highly variable, with high values in the boundary layer but also distinct signatures in the free troposphere and importantly even in the upper troposphere. This presentation will give an overview over the whole dataset and focus on some particularly interesting flights.