



Atmospheric trace gas measurements in the tropics by ground-based FTIR-spectrometry

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The tropics play a central role in global climate. Emissions within the tropics, especially from biomass burning, contribute substantially to the global budgets of many important trace gases. These pollutants significantly influence tropospheric and stratospheric chemistry. Solar absorption-FTIR measurements have been performed in Suriname (5.5°N, 55.1°W) to study the composition of the whole atmosphere, including the Tropical Tropopause Layer (TTL). Total columns of about 20 different trace gases can be retrieved from the spectra and for a few gases it is possible to retrieve vertical profiles up to 20-30 km. First results including tropospheric gases like CO, HCN and OCS are presented.