



## **MAX-DOAS Measurements of HONO during MCMA-2006**

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During Mexico City Metropolitan Area-2006 (MCMA-2006) in March 2006 we performed Multiple Axis Differential Optical Absorption Spectroscopy (MAX-DOAS) measurements. MAX-DOAS instruments observe scattered sunlight from a variety of viewing directions to derive slant column densities (integrated concentration of different trace gases along the light path). This setup also allows to gain information on the vertical distribution of atmospheric trace gases under the assumption of a well mixed trace gas layer.

The measurements were conducted at different sites in and around Mexico City to constrain transport and physico-chemical transformation processes. Besides NO<sub>2</sub>, HCHO, CHOCHO, O<sub>4</sub> and SO<sub>2</sub>, slant column densities of HONO could be retrieved, which to our knowledge is the first example of HONO detection by passive DOAS in the atmosphere. Additionally, vertical column densities could be derived.

We present HONO time series and compare them with active DOAS measurements of the same measurement campaign which allows to estimate spatial distributions of HONO.