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MAX-DOAS measurements of tropospheric NO_2 over San Salvador: preliminary results

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We present the first Multi-AXis-Differential Optical Absorption Spectroscopy (MAX-DOAS) measurements at San Salvador. MAX-DOAS observes spectra of scattered sun light taken at different elevation angles. From the spectra the so called slant column density (SCD, the integrated trace gas concentration along the atmospheric light path) is derived. We quantify the dSCD of NO_2 at different measurement conditions. From the measured NO_2 SCDs we calculate the tropospheric vertical column density using the so called geometric approximation. The preliminary results of this MAX DOAS observations and the diurnal variation of the retrieved trace gas dSCDs will be presented. We also use the MAX-DOAS results for the validation of satellite observations.