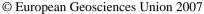
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Comparison of OMI NO₂ with air quality monitoring sites and modelled values

M. Jacob (1), J. Matschullat (1), E. Renner (2), R. Wolke (2)

(1) Interdisciplinary Environmental Research Centre, TU Bergakademie Freiberg, Germany, Institute for Tropospheric Research, Leipzig, Germany

As well as being an air pollutant in its own right, NO_2 is a key chemical species in the formation of ground-level ozone. A large number of air quality monitoring networks have been set up over the past few decades to monitor ground-level concentrations of, among other things, NO_2 . More recently, satellite-borne instruments have been deployed to measure atmospheric NO_2 . The latest such instrument, OMI (ozone monitoring instrument) can provide a once daily measurement of NO_2 tropospheric as well as total atmospheric column densities. A rough estimate of the NO_2 surface concentration can be calculated by dividing the column amount with the height of the boundary layer.

NO2 ground-level concentrations from 25 sites of the Saxon air quality measurement network are compared with tropospheric columns from OMI and the two are linked by simulations from a chemistry-meteorological model. This work discusses the significance of these comparisons.