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OMI Nitrogen Dioxide and Aerosol Observations During the DANDELIONS Campaign

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OMI NO₂ and aerosol observations are of interest for studies of tropospheric pollutants, their sources and transport. To assess the quality of these satellite data, a 9-week campaign within the DANDELIONS (Dutch Aerosol and Nitrogen Dioxide Experiments for vaLidation of OMI and SCIAMACHY) project took place.

We will show results of:

- NO₂ column intercomparisons between the ground instruments (including five MAXDOAS instruments, one nitrogen dioxide lidar, ground in situ NO₂ observations)
- Validation of OMI and SCIAMACHY overpass data with the campaign results, also discussing the homogeneity of the tropospheric NO₂ field, and, quantitatively, the influence of the assumed NO₂ profile shape on the OMI retrievals.
- Closure-type studies on a selected number of golden days during the campaign.