ACINN Graduate Seminar, Innsbruck University
Location: Seminar Room on the 8th Floor of Bruno-Sander-Haus (60819SR)
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Ground-based DOAS-type measurements of tropospheric trace gases in Vienna

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As part of the VINDOBONA (VIenna horizontal aNd vertical Distribution OBservations Of Nitrogen dioxide and Aerosols) project, two MAX-DOAS instruments have been installed at two different locations in the northeast and northwest of Vienna. Since December 2016 and May 2017, measurements are obtained from the two instruments in the visible and UV part of the electromagnetic spectrum, respectively. The subsequent DOAS analysis delivers O_4, NO_2, CHOCHO, and HCHO differential slant column densities (DSCDs). Initial analyses of the data are focused on diurnal and seasonal variability, correlation of trace gas amounts between the different azimuthal viewing directions and comparison of DSCDs with in-situ NO_2 concentrations.

During the pre- and early project phases, car DOAS zenith-sky and tower DOAS off-axis measurements were performed on several days in order to gain first insights into the spatio-temporal distribution of NO_2 in Vienna.