

Anmeldung eines Themas für die Bachelorarbeit

Thema Datum	30-years of aerosol measurements at the TROPOS research station Melpitz: a climatology study 24.01.2024
Betreuer / Erstgutachter (Mit Kontaktdaten)	Prof. Dr. Hartmut Herrmann Leibniz-Institut für Troposphärenforschung (TROPOS) Abteilung Chemie Permoserstr. 15 04318 Leipzig Tel: 0341/27 17 7024, Email: herrmann@tropos.de
Kontaktperson	Dr. Laurent Poulain Leibniz-Institut für Troposphärenforschung (TROPOS) Tel: 0341/2717 7316, Email: poulain@tropos.de
Kurz- beschreibung:	<p>Atmospheric particles are a complex mixture of organic and inorganic compounds. their chemical composition depends on the sampling location and the history of the aerosol reaching the sampling place. Starting from 1993, TROPOS performs continuous size segregated aerosol chemical composition as well as trace gases, rain-water, and meteorological parameters. Following the improvement of the technology, technics the amount of measured parameters improved over the years. The Melpitz Research Station is a unique place in Europe to investigate the comprehensive size-segregated chemical-physical long-time characterization of the aerosol in the regional background under the influences of both Western and Eastern Europe.</p> <p>The focus of the present Bachelor work is focus on this dataset to investigate the changes and trends of the aerosol mass concentration and chemical composition over these 3 decades and to characterize the impact of the different air quality regulations and climate change at the station.</p>
Literatur:	[1] Spindler G. et al., J. Atmos. Chem 70, 165-195, 2013 [2] Stieger, B. et al., J. Atmos. Chem., 75, 33-70, 2018 [3] Collaud Coen, M., et al., Atmos. Meas. Tech., 13, 6945-6964, 2020 [4] Baray J.-L. et al., Atmos. Meas. Tech. 13, 3413-3445, 2020