



Organic aerosols and their sources in Paris during the MEGAPOLI campaigns

Andre S. H. Prevot (1), Monica Crippa (1), Spyros Pandis (2), Matthias Beekmann (3), Urs Baltensperger (1), and the MEGAPOLI Team

(1) Paul Scherrer Institute, Gasphase and Aerosol Chemistry, Laboratory of Atmospheric Chemistry, Villigen, Switzerland (andre.prevot@psi.ch, +41-(0)56-3104525), (2) University of Patras, (3) Laboratoire InterUniversitaire des Systèmes Atmosphériques (LISA), Univ. Paris Est and 7, CNRS, Créteil, France

During the MEGAPOLI (Megacities: Emissions, urban, regional and Global Atmospheric POLLution and climate effects, and Integrated tools for assessment and mitigation) project, two field campaigns in summer (July 1- July 31 2009) and winter (January 15 - February 15, 2010) were performed including one of the most comprehensive organic aerosol assessment in Europe until this time. The stations were located in the city center and at the southwestern and northeastern edge of the city. The measurements include aerosol mass spectrometry, ^{14}C analyses, EC-OC, Aethalometer and off-line GC-MS measurements. This contribution will provide an overview of the ground based measurements discussing the concentration, composition, sources as well as local versus regional contributions. The results indicate that the organic aerosol concentrations are often very similar at the 3 sites indicating a strong regional pollution component, indicating that the postindustrial megacity Paris is not a huge source for organic aerosols anymore. Secondary organic aerosols are dominant at all sites and besides traffic, wood burning in winter and cooking in the city center are the most important primary sources. The presentation will emphasize the AMS and ^{14}C measurements and focus on the winter time.