



Field measurements of the ambient ozone formation potential in Beijing during winter

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The air quality issues in Beijing have been well-documented, and the severe air pollution levels result in a unique chemical mix in the urban boundary layer, both in terms of concentration and composition. As many of the atmospheric chemical processes are non-linear and interlinked, this makes predictions difficult for species formed in atmosphere, such as ozone, requiring field measurements to understand these processes in order to guide mitigation efforts. To investigate the ozone formation potential of ambient air, we employed a custom built instrument to measure in near real time the potential for in situ ozone production, using an artificial light source. Our results are thus indicative of the ozone formation potential for the sampled ambient air mixture. Measurements were performed as part of the Air Pollution and Human Health (APHH) field campaign in November / December 2016 at a suburban site in central Beijing. We also conducted experiments to examine the ozone production sensitivity to NO_x . We will present preliminary results from ambient sampling and NO_x experiments demonstrating changes in the ozone production potential during clean and haze periods in Beijing.