Changes in surface ozone abundances in Austria

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In this study we analyze changes in surface ozone in Austria for the time period from 1990 – 2016. We focus on the daily maximum 8 hour average (MDA8) ozone concentrations available from 109 sites as well as nitrogen oxide concentrations, that were recorded simultaneously at the individual ozone monitoring sites. For selected monitoring sites (urban, suburban, and rural) we study whether ozone production is limited by NO\textsubscript{x} or NMVOC. Furthermore, we include information on global radiation and temperature as covariates to analyze the influence of ambient meteorology to ozone formation and extreme ozone episodes. We investigate trends in MDA8 ozone across the national monitoring network and evaluate changes in the frequency of exceedances of the national target level for ozone and the occurrence frequency of extreme ozone episodes.