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Receptor-oriented air pollution modelling in the Austrian Wienerwald region

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Based on the Lagrangian particle dispersion model FLEXPART and meteorological fields from ECMWF analysis, receptor-oriented dispersion calculations have been performed for a period of two years and several monitoring sites in and around the Wienerwald, a low-mountain area near Vienna, Austria recently raised to the status of a UNESCO biosphere park. Source-receptor relationships calculated were combined with NOx emission inventories to simulate time series of NOx at these sites. Temporally and spatially disaggregated emission data improve the model performance. It will studied whether this approach enables the discrimination of the main sources of pollution in the different regions of the area.

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