

ORAL PRESENTATION

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Chemical Weather on Numerical Weather
Prediction and Climate Modelling"

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Nordic Network on Fine-scale Atmospheric Modelling

O-04. Ulrik Korsholm: On the importance of urban-aerosol-meteorology feedbacks in pollutant concentrations

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Enviro-HIRLAM (High Resolution Limited Area Model) is an online coupled model for both short- and long-term simulations of environmental meteorology. It has the ability to forecast both meteorological and chemical weather and includes feedbacks, in the form of direct aerosol effects and the first and second indirect effects, between air-pollutants and meteorology.

Enviro-HIRLAM has been employed in a case study of the importance of feedbacks on the transformation of pollutants. The metropolitan area of Paris was used as test-base during low wind conditions with precipitation development. With a horizontal resolution of approximately 5 km model simulations with feedbacks and urban characteristics were compared to a baseline run. Results will be presented and discussed.