



The fine scale structures of airflow over Bergen

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A large network of automatic weather stations is operated in the the complex terrain of Bergen City and its surroundings. This so-called Bergen School of Meteorology network is used to explore the fine scale structures of the atmosphere in a föhn case and evaluate how numerical simulations perform in reproducing the details of the flow. In general, the vertical profile is well reproduced, as well as many details in the wind field, as long as the resolution permits adequate representation of the topography. The intermittent nature of the flow remains however a problem. A step towards better local forecasts may lie in predicting not only the fundamental parameters such as wind and temperature, but their local temporal variability as well.