



Precipitation Downscaling versus Observational Network Dataset: Results for the West Coast of Norway

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High-resolution precipitation data has become an indispensable parameter in a changing climate. There is an increasing demand for high-temporally resolved precipitation information at the 10-min accumulated intensity, especially for climate impact assessment. Flooding situations in urban run-off water systems illustrates the importance of such data. A downscaling approach applying a full numerical model is tested against a high-frequency (10 min) precipitation observational network. The network is concentrated on a mountainous area (west coast of Norway) and the density of the network is comparable to model grid spacing (3 km).

The data analysis focuses on a 6-month period (3 months in 2005 and 3 months in 2006 during autumn). Two different micro-physical schemes representing different sophistication levels have been tested. The results from the model comparison and verification will be presented at the EGU 2009. Tests using different planetary boundary layer schemes are also performed and results will be presented.