



The MOSO project – Observations of mesoscale coastal flows in the vicinity of mountains

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During the summer of 2009, fine-scale observations of the atmosphere were carried out in limited areas in the complex terrain at the coast of SW-Iceland. The observations were made with the aid of 6 mobile and 15 more permanent automatic weather stations, unmanned model aircrafts, making profiles of the lower troposphere and 9 microbarographs. In addition, radiosoundings from Keflavik (WMO 04018) are available every 12 hours.

The MOSO dataset includes detailed observations of the sea breeze, downslope flow, blockings and wakes in four dimensions. Numerical simulations of the flows are carried out and it is shown how the observations and the simulations complement each other and how valuable such observations are for fine-scale simulations.