



Simulating katabatic flow in Iceland

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Flow over Iceland is observed and simulated in a situation of weak large scale pressure gradient and katabatic flows. Most of the observed winds, including patterns where weak synoptic winds or katabatic flow interact with orography, are reproduced well. However, the simulated flow varies slowly in time, while the observations indicate more rapid changes in the flow. The study reveals that katabatic flows are frequent in Southern Iceland. The case in question can be characterized as low Froude number 'tranquil' flow and is expectedly representative for most katabatic flows in Iceland.