



Sensitivity of Local Windstorms to Terrain Shape

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A severe windstorm in the complex terrain of NW-Iceland on 1-2 February 2002 is simulated. The windstorm is characterized by large horizontal variability in wind speed and vertically propagating gravity waves that break below 500 hPa. Several sensitivity tests with different topography are carried out and both the steepness of the slopes as well as valley width are modified. The local downslope windstorms are sensitive to both steepness of the slopes as well as valley width, but a big change in storm magnitude for a moderate change in topography is not found.