Aspects of wind mapping in current and future climate

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Results from high-resolution simulations of long term mean wind speed in Iceland are presented. There is large spatial and seasonal variability in the mean winds and this variability can be attributed to location of the storm track and interaction of the atmosphere with topography.

A simulation of future wind climate of Iceland indicates a small reduction in mean wind speed and in the frequency of windstorms. However, changes in the frequency of wind directions during windstorms are predicted and a result from a high-resolution simulation shows that such changes may have substantial impact on the local wind climate.