



Avalanches in past and future climate in Iceland

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The avalanche history of Iceland indicates that avalanches are less frequent during warm periods than during cold periods. This is particularly true for E-Iceland. By defining an index for high avalanche frequency based on meteorological parameters represented in a numerical model, the avalanche tendency in Iceland is investigated in a dynamic downscaling of the climate scenario for the 21st century. Unlike expected, the scenario predicts increased avalanche frequency in the northern part of Iceland, mainly due to increased precipitation. In S-Iceland (where avalanches are comparatively rare), there is on the other hand a reduction in the frequency of avalanches.