



Predictions of regional precipitation change in Iceland by dynamic downscaling from global climate simulations

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The climate of the period 2071-2100 has been simulated at high-resolution over Iceland, forced by boundaries from 2 global climate simulations from the Hadley Centre. The simulations give large regional differences in precipitation change. In the winter, there is 10-30% precipitation increase in NE-Iceland and almost equivalent precipitation reduction in SW- and W-Iceland. In summer, the regional variation is similar, while in the autumn, W-Iceland receives up to 40% increase in precipitation, while precipitation in E-Iceland is reduced. Overall, the simulations predict 0-15% increase in total precipitation. In the autumn and in the winter, the largest precipitation increase is proposed to be on the mountain slopes.