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Mapping precipitation in a windy and snowy climate by precipitation corrections based on snow observations

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Conventional precipitation observations are corrected using conventional estimation of wetting, evaporation and wind-loss of liquid precipitation. Snow observations on the ground are used for correcting precipitation that falls in the form of snow. The corrected precipitation is calculated for a number of locations in Iceland and the results are compared to non-corrected precipitation observations. Not unexpectedly, there are large differences in parts of Iceland where a substantial part of the precipitation is snow and winds are strong. The corrected precipitation corresponds much better with numerical simulations of the precipitation climate than non-corrected precipitation.