



The Thorbex precipitation experiment

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During the autumn of 2014, precipitation was observed by a dense network of automatic raingauges covering a 243 m high and steep mountain, Þorbjörn, in the Reykjanes peninsula in SW-Iceland. The experiment is backed by continuous radar observations of winds and precipitation, radiosondes every 12 hours at the nearby Keflavik airport and a number of automatic weather stations.

Some of the key results are:

-The observations indicate that the average maximum rain over or close to the mountain maybe ~ 1.7 times the background rain.

-Although the precipitation is only liquid, there seems to be great observation errors, likely due to strong winds. This calls for revision of the climatology of precipitation in Iceland and in other windy places.

-The maximum wind loss and the spatial variability are of a similar magnitude. This complicates mapping of true precipitation.