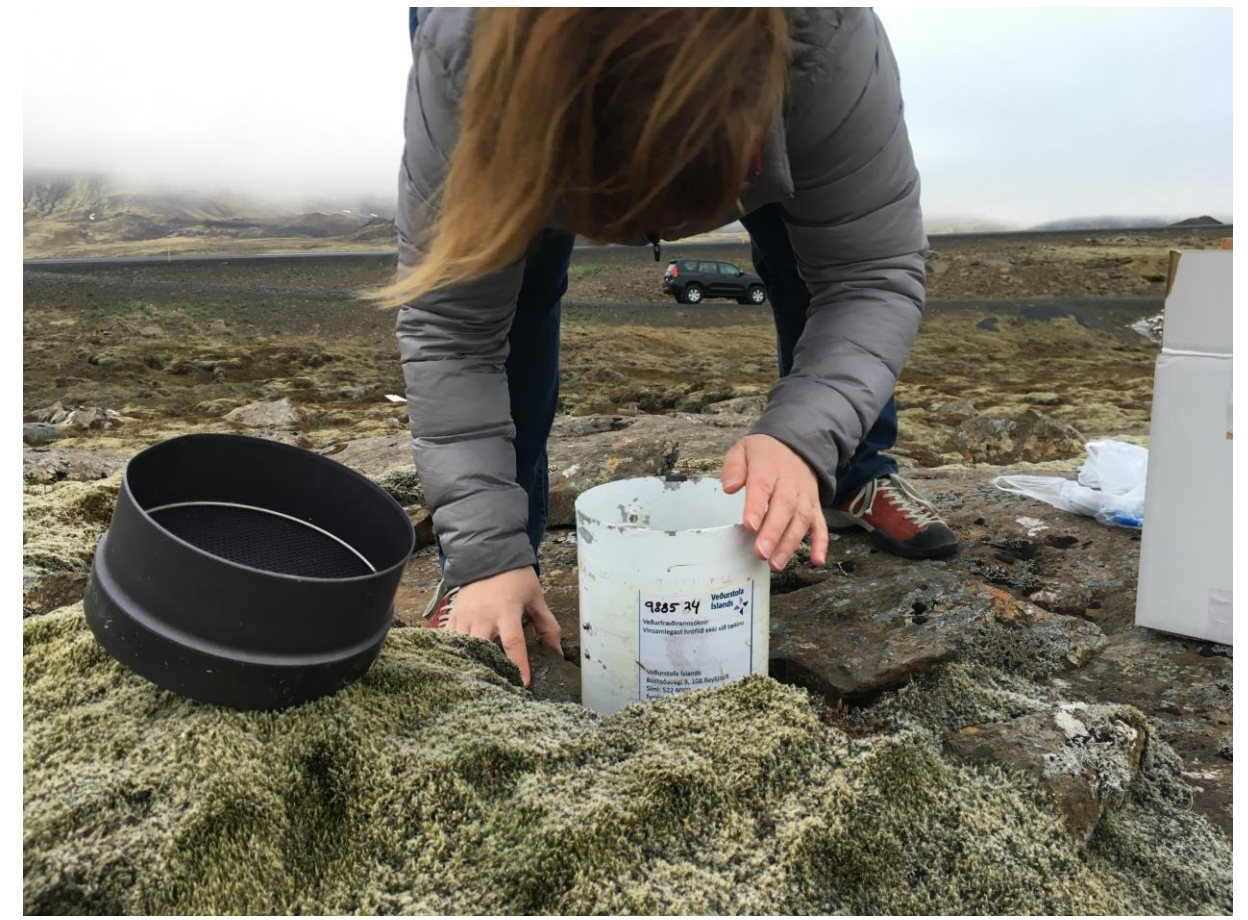


Precipitation pattern in the Reykjanes mountain ridge

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University of Iceland and the Icelandic Meteorological Office

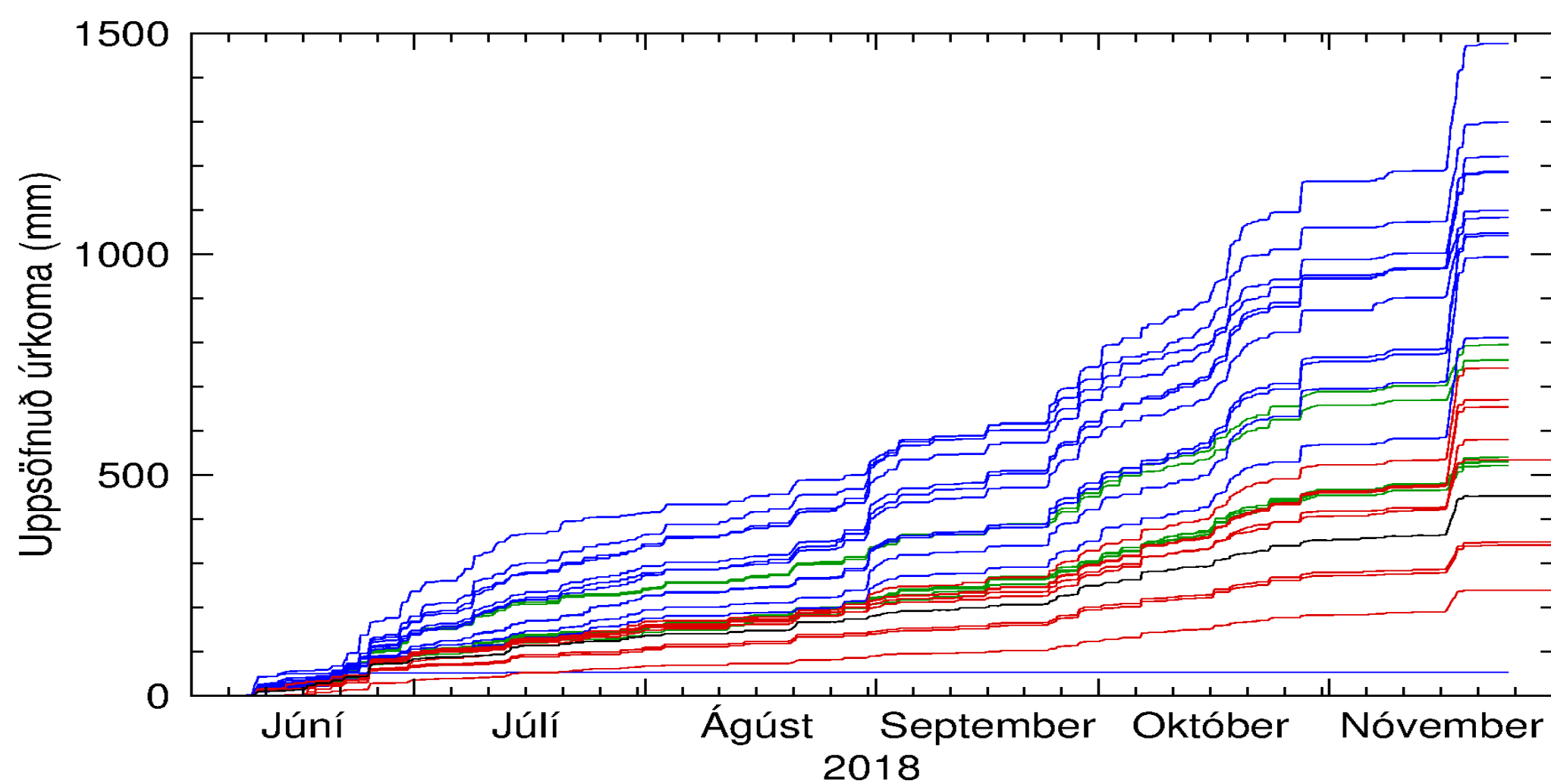
Forecasting accurately the magnitude and distribution of precipitation in the vicinity of Reykjavik is important for several reasons. In order to assess the quality of the numerical predictions and to establish general knowledge of the precipitation of the region, precipitation was observed with a large number of automatic raingauges in a section across the Reykjanes peninsula during the FLOSI campaign in 2018.



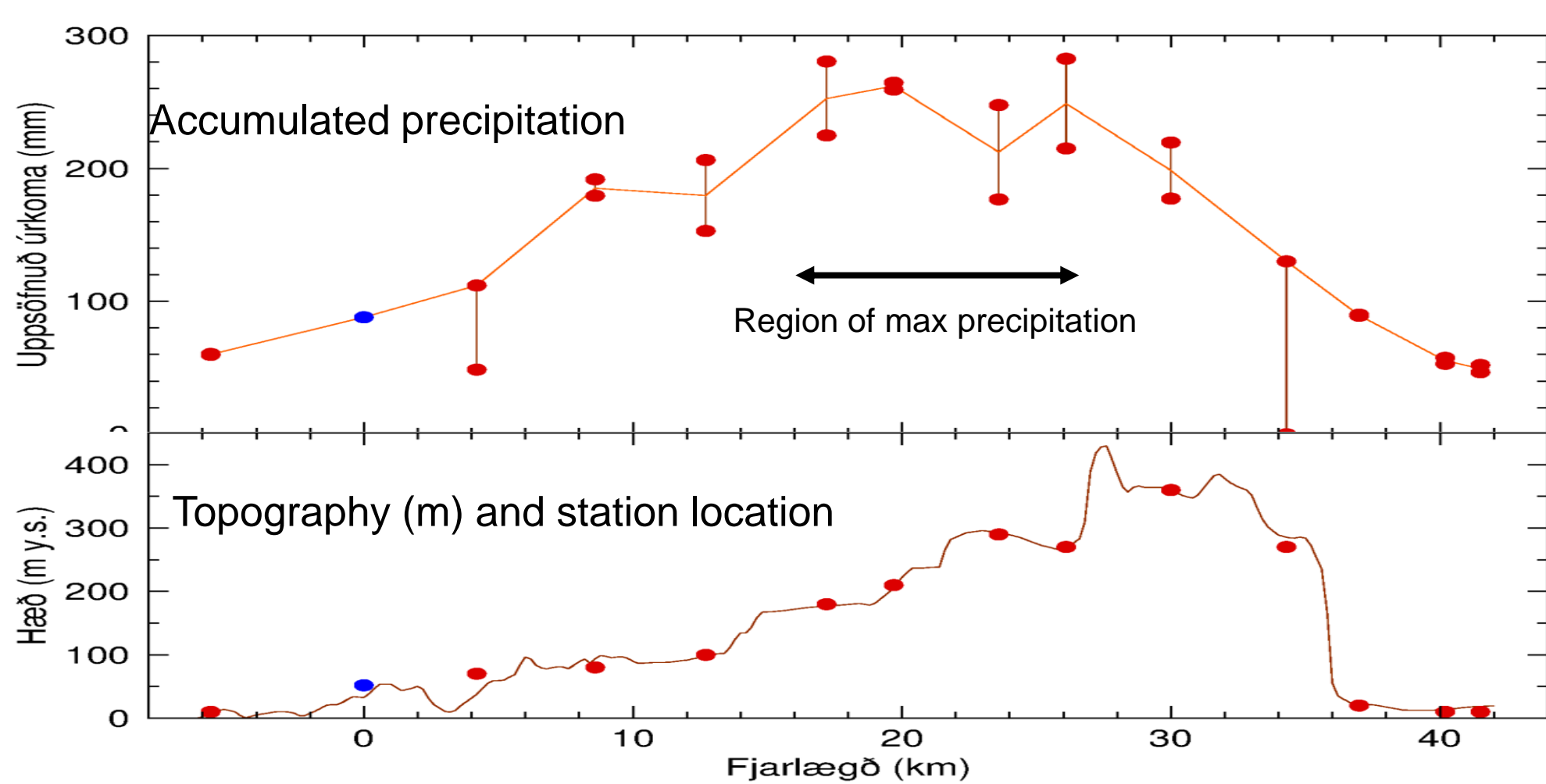
At each location, two rain buckets were placed, about 10-30 m apart, at ground level



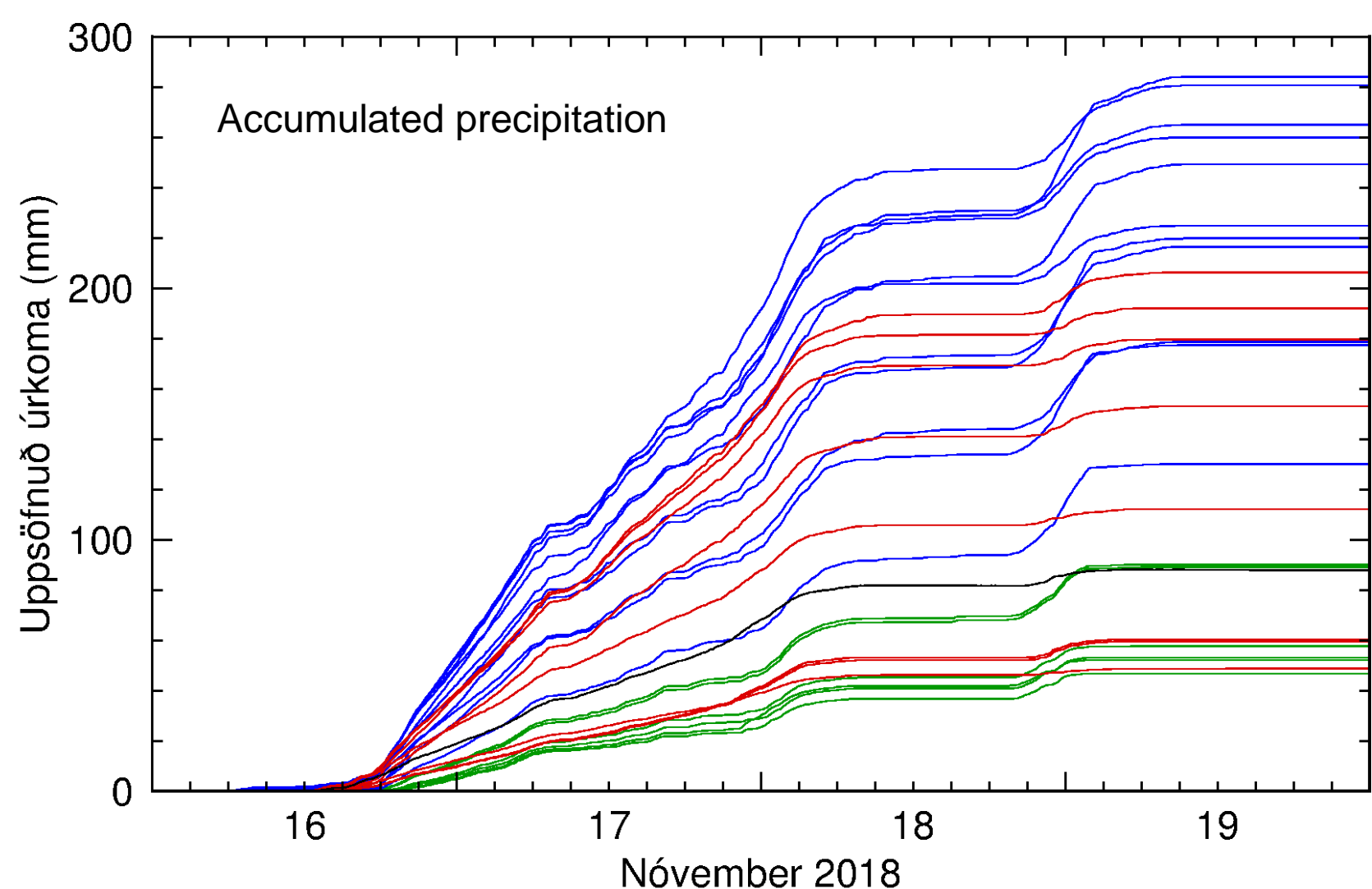
The observations were made along a section across the Reykjanes mountain ridge in SW-Iceland. Most of the precipitation falls in southerly winds, typically from the SE close to the ground and S above the mountain top level



Accumulated precipitation at individual stations. The accumulated precipitation in the region of maximum precipitation is roughly 4 times the upstream and downstream values

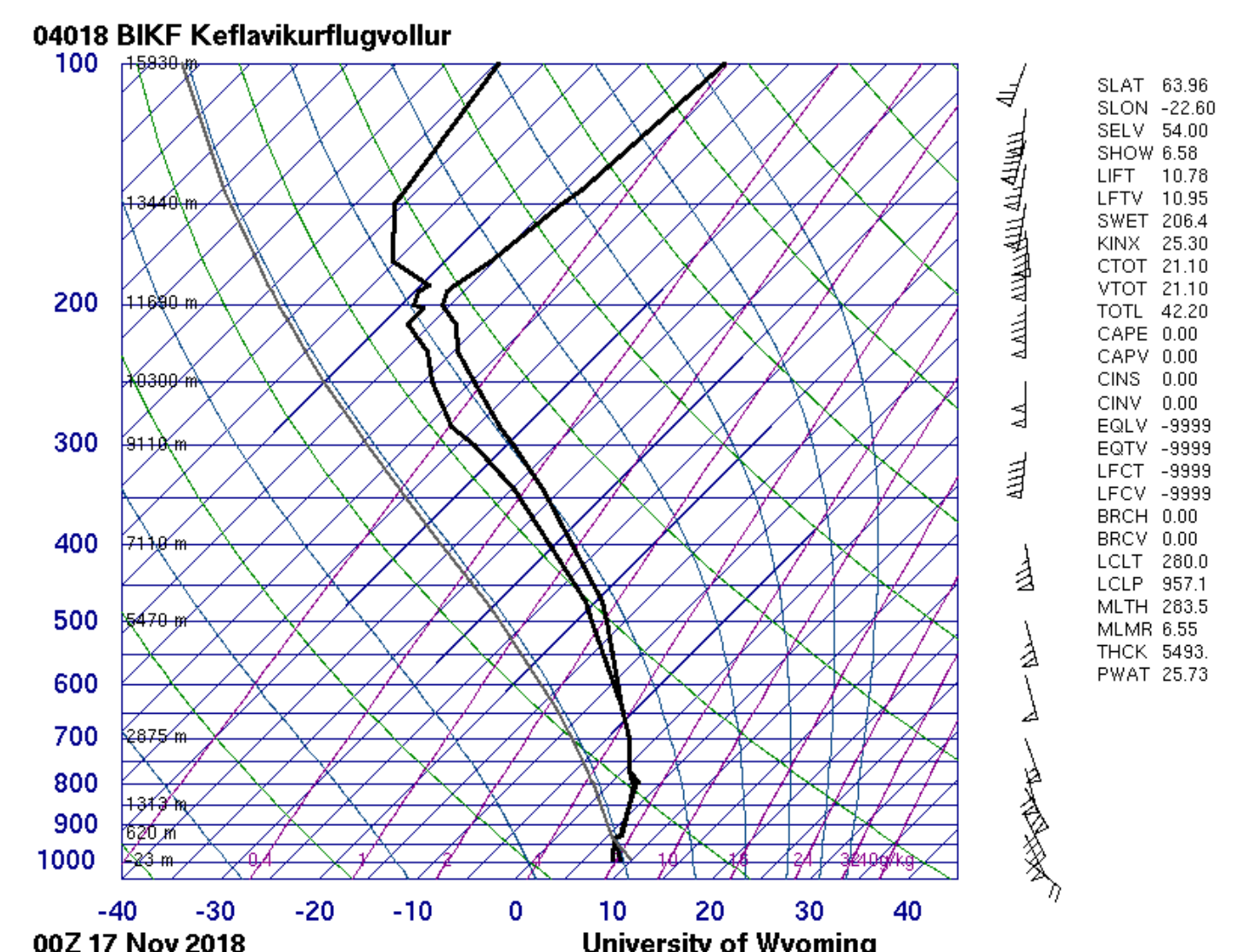


Precipitation during the 16-19 November event. The region of maximum precipitation extends some distance downstream of the crest. The accumulated precipitation in the crest region is 5 times the upstream and downstream precipitation.



During periods of the 16-19 November, there was a factor of 10 between the precipitation intensity upstream and in the crest region

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The periods with greatest difference between the lowland and the mountain precipitation are periods such as on 17 November when the low level winds are very strong (25-30 m/s) and blowing perpendicular to the mountain crest