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First results on the subgrid scale variability of blowing snow

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Blowing snow is an important factor to understand snow depth variability as well as to forecast avalanches. In this presentation, observations of blowing snow monitored in the Val Ferret valley (Valias, Switzerland) using automated cameras and sonic anemometers are presented. This survey was undertaken during the entire winter of 2011 - 2012 to understand better the relationship between snow transport and wind turbulence intensity. The results of this field campaign will be compared with large eddy simulation cases where the blowing of the snow occurs in the typically subgrid region near the snow surface. First results are presented from this winter season.