



Recent extreme snow-avalanche events tracked through tree-ring analysis - a case-study from Western Norway

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The study is carried out in the valleys Erdalen and Bødalen, in the Nordfjord area, Western Norway, thanks to the SedyMONT project. This location offers good potentiality to track recent snow-avalanche activity by applying a dendrogeomorphological approach. Both valleys benefit from well developed stands of birch (*Betula pubescens*) and alder (*Alnus*) that cover large parts of the extreme runout zone of snow avalanches. Potentially, these trees did record the recent history of this geomorphic process through their tree-ring patterns. Therefore, dendrogeomorphology analyses provide crucial information on the magnitude, frequency, and spatial distribution of snow-avalanche events during the tree lifespan. Although the investigated valleys are quite remote during the winter time, the knowledge of the recent snow-avalanche history there supplies a picture of the potential activity that can be awaited elsewhere in the district, and especially (i) in the inhabited areas; (ii) along the transportation corridors that do not benefit from such a record.