

## **Limitations and Possibilities: Usage of the Avalanche Simulation Model SamosAT in the Planning of Dams**

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In Austria it becomes more and more common to use avalanche dynamic models as a tool to optimize the construction of dams. In this paper we will use the avalanche simulation model SamosAT to explore the limitations and possibilities of the effectiveness of a dam. Several studies have shown that avalanche simulation models still lack in accuracy, e.g. in regard to the flowing behavior of the snow, but there has only few work been done to verify the results when a dam is present.

Further we will outline on how the planner uses the simulation results in their work to optimize the location of the dam, the dam height and the angle of response. We will also give examples of some projects carried out over the past years where the planner made use of the simulation results. Finally we will discuss the future perspective use of SamosAT in construction companies in regard to the limitations outlined in the first part of this paper.