



## **A revision of the Haiming rock avalanche (Eastern Alps)**

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The carbonate Haiming rock avalanche is directly neighbouring the larger Tschirgant rock avalanche deposit, both located in the upper Inn valley (Tyrol, Austria). Based on detailed morpho-lithologic mapping of the deposit, which has not been done at Haiming before, the sedimentology of the Holocene landslide debris is characterised. Structural-tectonic elements of the bedrock units at the scarp area are supplemented with borehole data from drillings at the source area giving valuable insights into the complex geological bedrock composition and structure. New source and runout reconstructions allow updated volumetric calculations, which are subsequently integrated into numerical runout modelling. Haiming is one of few topographically unobstructed rock avalanches, yet its morphology was greatly influenced by fluvial terraces, which are still discernible through the deposit on LiDAR hillshade images. We also address the influence of the rock avalanche on the valley floor and local river system as a short-lived dam and its interaction with fluvial incision. Finally, we discuss the Haiming rock avalanche in view of the other massive rock slope failures in the area (“Fernpass cluster”), their spatio-temporal distribution, and point out further highlights of this simple(?) rock avalanche deposit.