

## **EVENT DOCUMENTATION OF THE DEBRIS FLOW EVENT AT SATTELKAR, OBERSULZBACHTAL, SBG.**

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In times of climatic change, debris flow events from potential periglacial environments are of special interest for engineering hazard assessment. In this contribution, we document and analyze a large debris flow event occurring on July 31<sup>st</sup>, 2014, in the Obersulzbach-valley, Sbg. The event originated after heavy rainfall from a cirque valley in the headwaters of the Obersulzbach, a region that probably is affected by discontinuous permafrost. Field investigations and comparison of pre- and post-digital elevation models show that around 70,000 m<sup>3</sup> of sediment were mobilized from the cirque and around 100,000 m<sup>3</sup> were eroded along the transit reach. Analysis of the aerial pictures from different periods of the last 13 years revealed an ongoing movement of material in the cirque. A measurement campaign was started to monitor temperature and changes of the topography. The results of this study shall contribute to an improved understanding of debris flow initiation in high alpine regions.