

Obtaining an integrated comprehension of the functioning of sediment cascades by means of geomorphological connectivity

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Motivation



Sediment transport might increase due to glacier retreat, expected more frequent **storm events** and intensive **heat periods** in summer in the next decades and might **affect population / infrastructure**



Aim



Identification of **spatial and temporal** hot-spots as well as **triggering** factors of **sediment cascades** in the study area **Sulden river catchment** (Italian Alps)

Method overview



Mapping of
geomorphologic
al units and
sediment
pathways



Development of
different
scenarios

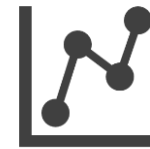


Identify sediment
(dis-)connectivity

Method overview



Analysis of DEMs
of Difference
(DoD) of different
time intervals
(months/years)



Direct and indirect
measurements of
suspended and
bedload
sediments

Preliminary results



Happy to present
preliminary results
during the poster
session