



Image : Ludovic Ravanel

Climate change in high mountain areas: rockwall permafrost and emerging risks

Conference of Dr. **Ludovic Ravanel**

Laboratory EDYTEM, University Savoie Mont Blanc, France

Invited Researcher, Interdisciplinary Centre for Mountain Research

CIRM (UNIL, Switzerland)

Wednesday, March 3rd, 2021 | 17:00-18:00 CET

online, on Zoom

Link: <https://unil.zoom.us/j/91965145529>

Details: <http://www.geomorph.org/international-geomorphology-week-2021/>

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Over the last three decades, rockfalls from high Alpine rockwalls are more and more numerous and voluminous, posing safety problems for practitioners, infrastructure and valleys. Hot summers are thus very favourable periods for collapses, while certain events can mobilise several million m³ of rock, such as the Piz Cengalo case (Grisons) in August 2017 (3.1 M m³). During the past 15 years or so, research has intensified in the Alps, especially by verifying the link between climate and rockfalls and by showing that permafrost degradation – warming of the permanently frozen ground – was a major triggering factor. Current research aims at investigating the hydro-thermo-mechanical processes responsible for destabilisation.