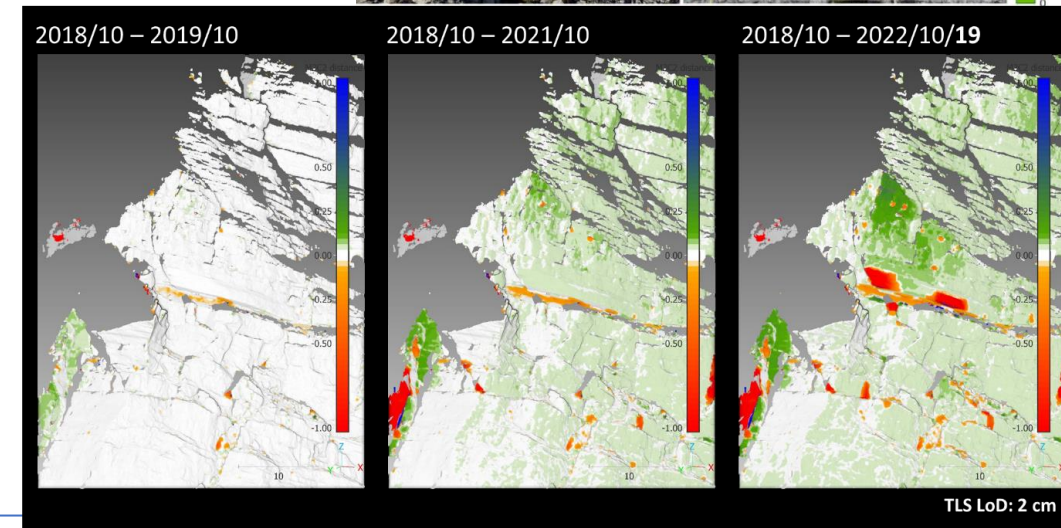
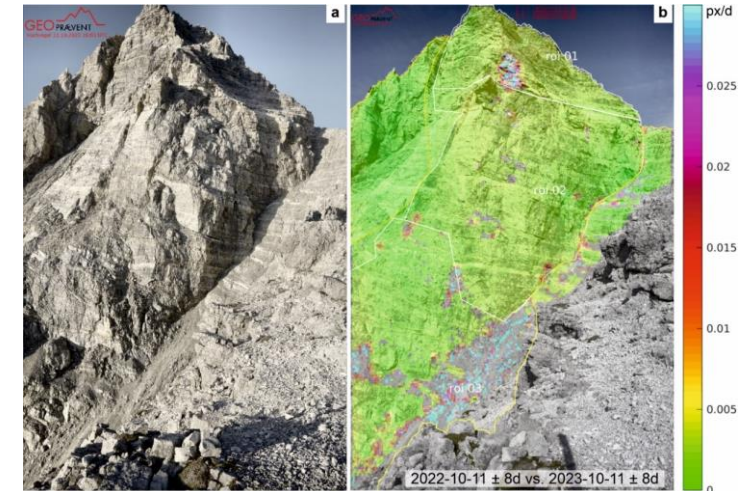


# Detecting precursory deformations of rockfalls (Hochvogel and Höllentalklamm) (1 MSc or BSc)

Language: German and English possible

We have monitored several rockfall events (1-1000 m<sup>3</sup>) in the steep flank of the active Hochvogel rock slope instability and in the rock walls of Alpine gorges (Höllentalklamm). Some of these events show precursory deformation that might be of use for early warning.

- Which events show precursors, which don't?
  - How big is the deformation and how much time before failure?
  - Dependencies on material/ size/ failure type/ triggers?
- Analysis of laser scans, deformation camera, monitoring data and geological settings...



Kontakt:

[johannes.leinauer@tum.de](mailto:johannes.leinauer@tum.de), [benjamin.jacobs@tum.de](mailto:benjamin.jacobs@tum.de)