

Master's Project (MP, 5 ECTS)

Sensitivity Analysis on Secondary Landslides triggered by Rock Fall Events

Description

Rock fall events can provide large amount of debris, which is in most cases deposited directly onto older deposits. This can either act as an additional load, which subsequently leads to slope instabilities and hence secondary landslides, or provide additional fines for mud slides.

Both processes are secondary landslide, caused primary by rock fall events and may pose a risk to infrastructure and population. Hence the processes of depositing, fragmentation and triggering as well as the characteristics of such sites shall be investigated. The research is a collaboration between the Graz University of Technology, the Geological Survey of Salzburg and the Geological Survey of Carinthia.

A specific site shall be modelled with the 2D FEM Programm Slide 2018(19) (©Rocscience, Inc.), considering the site geometry (slope angle, deposit area, deposited additional load) as well as the geotechnical ground parameters.

This project shall contribute to an improvement understanding of rock fall triggered slope instabilities.

Templates for the scientific report can be found on the institute's homepage. There is also a guideline for scientific writing free downloadable at the homepage, whose compliance is mandatory. The language for the report can either be in English or in German.

Supervisor	MSc Andreas Buyer <i>Graz University of Technology Institute of Rock Mechanics and Tunnelling</i>
Start	by appointment
Duration	ca. 125 h
Contact	MSc Andreas Buyer Tel.: +43 (0) 316 / 873 8615 E-Mail: a.buyer[at]tugraz.at