

Mineralisationen im Permoskyth der Nördlichen Kalkalpen (Werfener Serie) spiegeln sich in den Gewässersedimenten wider, wie z.B. erhöhte Quecksilbergehalte am Fuße des Tennengebirges. Wie sich schon in vorangegangene Untersuchungen in den Bundesländern Niederösterreich und Oberösterreich zeigte, sind auch im Bundesland Salzburg geogen bedingt in gewissen

Jura/Kreidesedimenten (z. B. Gosauschichten) der Nördlichen Kalkalpen erhöhte Gehalte an Cr und Ni festzustellen (bis >500 mg/kg Cr). Bei einigen wenigen Beprobungspunkten ist mit hoher Wahrscheinlichkeit auf eine technogene Kontamination der Gewässersedimente zu schließen.

Blaubach Landslide: slope stability analysis based on field mapping and GIS – analysis

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Goals of this study are the identification of the causes of the Blaubach landslide. For this purpose the results of the field work were digitized for the analysis using a Geographic Information System (GIS).

The research area is situated in the west of Pinzgau near the village Krimml/ Salzburg/ Austria. The active landslide site is to the west of the „Gerlos Alpenstrasse“, south of the „Plattenkogel“ and east of the ridge „Schmalscharte - Breitscharte“.

Most landslides are controlled by several influences like geology, tectonics, hydrology and vegetation. Each of them has a distinct impact on the slope stability. Thus these influence factors have been recorded by an extensive field program during the years 2000 and 2001. The research area includes zones of fragmented rocks and clayey fault gouge material („Salzachtalstörung“) which is one of the prime factors of this active landslide. The water content has another significant impact of

displacement. Intensity of deposit, infiltration, matrix flow and saturated runoff have a straight influence on the sliding process. Soil erosion is accelerated by the bare surface areas and facilitates erosion activated predominated by water. The site area includes regions of sliding, flowing and falling processes of rock and soil material.

For a first analysis, information layers like lithology, faults, hydrology/ hydrogeology, vegetation and slope are created. Due to the limited resolution of the Digital Elevation Model, the size of the smallest testing unit is 25 meters. Because of the lack of measurements of the displacements and detailed laboratory investigations of the rock and soil parameters the model „indexoverlay“ was selected. Five layers are quantified using internal and external coefficients before blending. Of course, the result and the numerical values are still influenced by the subjective nature of the original information.