

Some morphological features of slope failures in granitic areas and property analyses considering rock weathering and soil formation

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Slope failures in granitic areas in Japan are sometimes catastrophic and cause loss of lives and considerable damages. Although many triggering factors might exist, it is important to understand rock weathering occurred in these areas. In order to know weathering characteristics, chemical and mineralogical analyses as well as physical and mechanical measurements of weathered rocks are necessary. On the other hand, topographical analyses are also important and convenient to know morphological features quantitatively. The present study investigates these characteristics in some granitic areas in Japan and tries to relate material characteristics and morphological features for slope stability analysis.

Keywords: Slope failure, Rock weathering, Chemical and mineralogical analyses, Physical and mechanical measurements, Granite