The pedological contribution to assessment of geomorphological slope stability

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SOIL INDICATOR OF GEOMORPHOLOGICAL STABILITY

Soil is a resilient link in the geomorphic layer of the Earth's crust with specific properties that derive from the physical, chemical and biological transformations of the original rock. In characteristic, the morphological result of combined factors such as climate, morphogenetic processes and intense cover of plants. Soil can therefore provide a great deal of information on the geomorphology of an area, particularly on the environmental conditions existing at the time of its formation. The degree of soil evolution is closely linked to the opportunity for pedogenetic processes to be active more or less continuously over time, and for the intensity of these processes to shape the environment: morphogenetic processes, consequently, determine the moment of interruption in a morphogenetic process (deposition, hard or geoturbation), in a morphogenetic envelope: slope, alval, terraces, landslides, etc. Therefore, the soil of the Emilia Romagna (Emilia-Romagna region) plays an essential role in geomorphogenetic processes, because its geomorphogenetic processes tend to persist with time, depending on their intensity, may lead to the formation of the soil as its complete removal.

DATING OF LANDSLIDES ON A PEDOLOGICAL BASIS

Deposits with a gravitational origin can lead to the development of soils, distinct from what occurs with alluvial deposits, and are therefore readily suitable for the detection of landslides. The rate of soil evolution can be traced back to the time of the deposition of geomorphological processes. It is believed that the method used to identify geomorphological deposits can be used to evaluate the geomorphological stability of slopes and landslide hazard.

The development of the degree of soil evolution can be determined based on the degree of exposure of alluvial features or processes that shape the environment: morphogenetic processes. Consequently, it is possible to identify phases of soil evolution by comparing the degree of exposure of alluvial features or processes that shape the environment: morphogenetic processes. Consequently, it is possible to identify phases of soil evolution by comparing the degree of exposure of alluvial features or processes that shape the environment: morphogenetic processes. Consequently, it is possible to identify phases of soil evolution by comparing the degree of exposure of alluvial features or processes that shape the environment.