



Challenges for estimating climate-related triggering conditions and runout distance of landslides affecting urban areas

Jose Cepeda

Norwegian Geotechnical Institute - NGI, Oslo, Norway (jose.cepeda@ngi.no)

The assessment of landslide risk in urban settings has become a pressing issue over the years, as hazard varies due to changes in extreme climate, and exposure increases due to the expansion of built-up areas towards landslide-prone regions. This contribution presents the challenges in two particular aspects of risk assessment: estimation of climate-related thresholds and computation of run-out distance. In the first aspect, the focus is made on probabilistic models applied to hydro-meteorological variables. In the second aspect, the discussion consists on the consideration of calibration methods for both rheological parameters and models. Case studies from Norway and Central America are presented as examples.