

Paper Title: Hazard and risk assessment in the runout zone of rapid landslides

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Abstract:

The assessment of hazards connected with rapid, long-runout landslides involves two steps: Firstly, it is necessary to estimate the probability of occurrence and magnitude of initiating landslides. Various techniques of landslide susceptibility mapping are available. Their results should be presented in the form of a magnitude-cumulative frequency (MCF) relationship. Secondly, it is necessary to model the propagation (runout) of the landslides, in order to determine the potential distribution of hazard intensity in the runout zone, at various probability levels. The probability of damage is conditional on both occurrence and propagation. The calculation of combined probabilities can be a very complicated process. Existing tools for this type of studies will be reviewed.