Abstract

This bachelor thesis analyzes the possibilities of several models that serve to find threshold values of rainfall to trigger landslides. It first describes these models and then tries to compare and apply them. It sorts the models both by the principle of their method of computation and by destination of use. The thesis also examines existing data from Jizerské hory. Model FLaIR is used for this research and the computed results are then compared with those taken from model API and with a display of hourly rainfall (derived from the same data set). Lastly, the thesis examines whether it is possible to use FLaIR model to find an accurate threshold value of rainfall that would serve as a trigger for a landslide. It comes to an end that it is not possible given available information.

Keywords: landslides, rainfall thresholds, FLaIR model, API