

Summary

The bachelor thesis deals with the largest slope movements on Earth – landslides on volcanic islands, with focus on the Hawaii archipelago. It summarizes the knowledge of their classification and evaluates their possible causes with respect to the specifics of the volcanic islands. After introduction, it focuses on a specific area of interest that is the Hawaiian Islands and describes landslides that have occurred during the geological history of these islands. A database of all known the 19 largest landslides is also made, where their location, classification, age and morphometric data such as volume, perimeter, area, length, width and height are recorded. This database will become a part of the database of the giant landslides on volcanic islands on Earth, which is being created at the Institute of Rock Structure and Mechanics of the Czech Academy of Sciences. The database is further explored in the statistical chapter, where the mathematical procedure for calculating the relative runout of the slope movement and the potential energy of the landslide is explained. Additionally, the box plots comparing the selected morphometric parameters are created. For illustrative nature, a map of the giant landslides is also included.