

Title: **Analysis of genesis and activity of slope deformation Běleč in context of evolution of the Svratka river valley between Doubravník and Borač**

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Abstract

Submitted diploma thesis deals with genesis and activity of deep-seated slope deformation Běleč, situated in a deep fault valley of Křeptovský stream at the eastern boundary of Bohemian-Moravian upland. The study contributes to resolve a question of the failure Běleč impact on Vír water pipeline crash in 2005.

In the thesis, several research methods were adopted. For determination of the deformation genesis, geomorphologic analysis was used. According to this method, initiation of the slope movements on the failure zone can be classified as Middle Pleistocenic. In the research on neotectonic failure zones influence on the Běleč deformation creation, morphotectonic analysis was applied. In Křeptovský stream valley, presence of a longitudinal and transversal failure affecting the strength characteristics of the massif was demonstrated. The activity of the slope movements was studied between 1880 – 2007 by means of dendrogeomorphologic analysis. Applying the tree-ring analysis of *Fagus sylvatica* samples, no continual movements in whole range of the deformation were proved. Recent activity is characterized only by local episodic movements and had no direct impact on water pipeline defect.

Keywords: Deep-seated slope deformation, geomorphological map, morphotectonic analysis, dendrogeomorphology