Impact of forrest disturbance on the runoff in the central Šumava Mts.

ABSTRACT

The diploma thesis deals with the influence of forest disturbance, as for example wind and bark beetle calamities, to the runoff characteristics in the central Šumava Mountains. The analysis of five precipitation events and their runoff responses was applied to seven small experimental catchments with different stage of disturbance. Studied catchments were catchments fo Tmavý, Roklanský, Březnický, Javoří, Cikánský, Černohorský potok and Antýgl. Chosen precipitation events belong to the years 2009 and 2010 and to warm half year, when no snow cover can influence the runoff. Similarity of catchments was established by cluster analysis. For comparison of the reaction of single catchments to the same precipitation event was used simple comparison of precipitation and runoff data and waves.

Key words: forest disturbance, central Šumava Mountains, rainfall-flow conditions, cluster analysis