

Abstract

In this thesis are based on the scientific literature defined selected hydropedologic characteristics and is described their impact on motion and amount of water in the soil and also on the runoff process. In this thesis are quoted methods that can be used for measuring motion and amount of water. Data obtained on several field campaigns and continuous measurement of soil moisture sensors Virrib was processed. Field campaign took place in catchments of Zbytinský and Tetřívčí stream, which are paired comparative experimental catchments. The continuous soil moisture was measured at three places, which differ in their vegetation and soil cover. Data Analysis was concentrate to evaluate soil moisture measured by Virrib, which were compared to soil moisture determined during field campaigns. The continuous soil moisture was measured at three places, which differ in their vegetation and soil cover. The results show that differences and similarities in the vegetation and soil cover greatly reflect on soil moisture. Subsequent comparison of two differently obtained soil moisture should show that the values obtained from Virrib are representative. But comparisons of values discover, that in Virrib measurement can be found some inaccuracies.

Keywords: hydropedological characteristics, runoff process, Virrib, soil moisture.