Main aim of the thesis is to make an outline of possible indicators of runoff variability and options how to use these indicators to compare catchments of different attributes, based on literature review. Further is mentioned general information about experimental catchments and sorts of researchers which were made there. Applicative part aims at application of selected methods for central Šumava catchment (Ptačí creek, Rokytka river) and upper reaches of Blanice river (paired catchments of Tetřívčí and Zbytinský creek). Results of this part confirm some of previous research results made in the same locations.

Keywords: runoff variability, runoff regime, experimental catchment, Šumava Mountains