

## **Hydrological regionalization of Serbia using precipitation gradient**

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Precipitation gradient is a parameter which shows change in precipitation with the altitude. It depends on characteristics of humid air masses and relief, and varies throughout the year and over longer period of time.

In order to determine the rate of overland flow two factors are used: X-precipitation, and H-altitude. Using these parameters it is possible to select areas horizontally within the areas of drainage basins and categorize them using certain hydrological procedure.

Two regions are separated in Serbia and using regression analysis models the rate of overland flow has been estimated. Using case study of Josanicka River it has been shown how traditional methodology of drawing iso-lines connecting the same values of surface runoff could be unreliable, and therefore it has been suggested modern approach.

Key words: Serbia, overland flow, precipitation