



## **Conditional probability of occurrence of floods and droughts on rivers in Serbia**

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Based on a recent research of floods and droughts in Serbia, this paper will deal with interrelation of both extreme floods and hydrologic droughts.

Territory of the Republic of Serbia is analyzed area, excluding the Province of Kosovo and Metohija. Gage stations, that control areas of catchments from 84 km<sup>2</sup> (Donja Satornja GS on the Jasenica River) to 525009 km<sup>2</sup> (Pancevo GS on the Danube River), form observation network of Hydro-meteorological Service. There are 144 gauge stations flow data available for analysis.

Taking outlier identification as the only indicator of extreme events, analysis will be performed for the data sets at gauge stations where outliers were identified in the series of annual minima, maxima and 30 days minima.

Outlier identification is performed by Pilot and Harvey test.

Identified gauge stations, possibly leading to regions prone to extreme flood, drought or both, and probability of occurrence of extreme events will be shown on maps.

Conditional probabilities of occurrence of studied events will be considered for variety of occurrence scenarios, and results presented in the graphic form.