

Climate change impact on flood hazard

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Abstract Climate changes have a high impact on river discharges and therefore on floods. There are a few different methods we can use to predict discharge changes in the future. In this paper we used the complex HBV model for the Vipava River and simple correlation between discharge and precipitation data for the Soča River. The discharge prediction is based on the E-OBS precipitation data for three future time periods (2011–2040, 2041–2070 and 2071–2100). Estimated discharges for those three future periods are presented for both rivers. But a special situation occurs at the confluence where the two rivers with rather different catchments unite, and this requires an additional probability analysis.

Key words climate changes impact; E-OBS; HBV model; flood discharge