



Assessment of climate change impact on floods in the Upper Prut and Tisza River catchments (Ukraine)

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Changes in hydrological extremes become more significant in the climate change context. Due to the increasing trends of floods in recent decades in Ukraine and accompanied with high risk of social and economic losses, the potential changes in flood frequency are of high importance. The problem of climate change impact on hydrological extremes for Ukrainian region is not developed on sufficient level and more studies are needed.

The projections of changes in floods associate with high uncertainties and depend of climate scenarios. This study aims to evaluate the impact of climate change on hydrological extreme events, using a set of 7 climate scenarios under RCP4.5 and RCP8.5 based on GCMs that have been downscaled RCMs from IMPRESSIONS project, and detect the changes using the eco-hydrological model SWIM in Upper Prut and Tisza River catchments.