



Sediment transport modelling of the Drava River confluence

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Drava River confluence is characterized by specific morphodynamic processes under which significant sediment deposition is occurring at the Drava River mouth, impeding fairway conditions. Morphodynamic analysis requires long-term hydraulic and sediment transport regime data as input for estimation of equilibrium conditions, taking into account baseline conditions of both rivers. This paper presents results of detail investigations of morphodynamic changes at the Drava River confluence during the 2-year period. Quantification of morphodynamic processes is conducted indirectly through interpretation of ADCP transects surveyed over wider confluence zone, estimation of sediment transport intensity and bathymetric surveys. Purpose of the conducted analysis was to estimate morphodynamic development of the riverbed based on the 1D numerical model results. Numerical model is calibrated using flow velocity field and sediment transport pattern for range of hydrological events. Validation of sediment transport method is done through comparison of morphological changes on characteristic profiles between two consecutive surveys.