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Impacts of Land Use Changes on Hydrological Processes and Modelling

Guest Editor:

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Deadline for manuscript submissions:

closed (30 June 2021)

Message from the Guest Editor

Dear Colleagues,

Impacts of land use and climate changes have severely modified hydrological processes and the runoff pattern, as well as erosion and sediment transport. The main task of this Special Issue is to collect a series of papers addressing the impact assessment on flow processes and residence times at different spatiotemporal scales. The following research questions could be addressed:

How can we discriminate among impacts originating from different drivers acting on the hydrological regime?

How can we estimate hydrological parameters utilizing additional information, such as biological, physical, and chemical data, characterizing land use patterns?

How can we handle the spatiotemporal heterogeneity of several layers of parameters in the modeling approach?

What are the basic requirements for a reasonable model structure to link land use with representative hydrological parameter layers?



