Debates—Perspectives on sociohydrology: Sociohydrologic modeling—Tradeoffs, hypothesis testing, and validation

Apr 30, 2015

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Abstract

Socio-hydrology focuses on studying the dynamics and co-evolution of coupled human and water systems. Recently, several new socio-hydrologic models have been published that explore these dynamics, and these models offer unique opportunities to better understand these coupled systems and to understand how water problems evolve similarly in different regions. These models also offer challenges, as decisions need to be made by the modeler on trade-offs between generality, precision, and realism. In addition, traditional hydrologic model validation techniques, such as evaluating simulated streamflow, are insufficient, and new techniques must be developed. As socio-hydrology progresses, these models offer a robust, invaluable tool to test hypotheses about the relationships between aspects of the coupled human-water systems. They will allow us to explore multiple working hypotheses to greatly expand insights and understanding of coupled socio-hydrologic systems.

This resource can be accessed online at: http://dx.doi.org/10.1002/2015WR017046 [1]

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