



The coming convergence of Big Data and socio-hydrology: implications, challenges and opportunities

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The connections between Big Data and the geosciences are becoming obvious and are being leveraged in the context of decision and policy making in water resource management, natural hazard and disaster planning and response, and general public sector decision making. Socio-hydrology, in its essence, is a transdisciplinary endeavor to which Big Data is frequently being applied as an overlay, with the development and provision of data on one side, to the receipt and application of the data on the other side. This convergence, which links data science interests, with hydrology and the policy sciences, represents a complex and challenging dimension in which decision makers are being asked to manage and engage. This PICO contribution will explore this convergence and consider such topics as:

Big Data and socio-hydrology as a transdisciplinary endeavor - how can we equitably balance the convergence?

Will Big Data contribute to or constrain the science and society nexus?

The Big Data impacts on water resource management

Will Big Data and data science overwhelm the “socio” in socio-hydrology?

Big Data for water resource management and decision making out of context

Opportunities for Big Data to increase modelling capacity and capability?

It is the intent of this contribution to be provocative and inspire dialogue and discussion in line with the objectives of HS 5.1.