



Face of the Earth Keynote Lecture: Waters of the Earth (The face of terrestrial water: scales, feedbacks and the human factor)

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Hydrology is a multi-faceted science that investigates the state and flux of fresh water on land, the governing processes behind these and the patterns that result. This lecture explores the shape and form of terrestrial water, from its smallest occurrence in tiny pores to the vast amounts that create our world's rivers and are stored as groundwater below the surface. Examples are shown of feedbacks and tipping points that are instrumental in explaining patterns in hydro-ecosystems, the persistence of dry spells and how the shape and functioning of catchments relate to climate and geology. We will end with highlighting the human factor, showing that it is impossible to understand hydrologic change without it and that this understanding hinges on mutual interactions between water and society.