

## UP 10 Poster: Hydro- und Kryosphäre

Zeit: Dienstag 10:15–12:15

Raum: Poster TU HTF

UP 10.1 Di 10:15 Poster TU HTF

**GLOWA-Danube: Integrative hydrological simulations of the Upper Danube Catchment** — •FLORIAN SIEBEL, WOLFRAM MAUSER, RALF LUDWIG, and ULRICH STRASSER — Department of Earth and Environmental Sciences, University of Munich, Luisenstraße 37, D-80333 Munich

GLOWA-Danube ([www.glowa-danube.de](http://www.glowa-danube.de)) is a joint research initiative funded by the Federal Ministry of Education and Research (BMBF) to develop integrative techniques for analyzing the sustainability of water resources management alternatives in the Upper Danube watershed under Global Change conditions (e.g. climate change, demographic change). For this purpose the Global Change decision support system DANUBIA was developed which combines predictive models to simulate the relevant natural and socio-economic processes. DANUBIA includes submodels for meteorology, hydrology, hydrogeology, biology and glaciology as well as actors-based models for farming, economy, water supply, private water use and tourism. The first version of the system was developed by an interdisciplinary team of researchers from 10 different universities, 2 research institutions and 1 commission. DANUBIA is raster-based, implemented in Java and runs on a Linux-cluster. Related land surface and socio-economic processes are described at a spatial resolution of 1 km and a temporal resolution of 1 hour.