

Czech Hydrometeorological Institute

> Technische Universität Wien



September 8, 2021

An R language virtual (online) workshop focused on the field of hydrology, held as part of the XXIX Conference of the Danubian Countries in Brno, Czechia.

University of Ljubljana
Faculty of Civil and Geodetic
Engineering





Introduction for beginners

introduction to R, data input/output/manipulation/basic visualization, statistical models

Ondřej Ledvinka, Lovrenc Pavlin, Vojtěch Svoboda (visualizations), Klaudija Lebar (visualizations)



Analysis of hydrological time series

flood frequency analysis, copulas, nonstationary analysis, time series visualization

Miriam Bertola, Ross Pidoto, Mojca Šraj; Klaudija Lebar (visualizations), Vojtěch Svoboda (visualizations)



Spatial analysis

working with vector and raster data within R, spatial interpolation (e.g. different types of kriging), raster algebra, data extraction (for points and polygons), predictive modelling (machine learning), remote sensing images processing, map creation

Juraj Parajka, Ross Pidoto, Ondřej Ledvinka



Hydrological modelling

introduction to hydrological modelling in R, GR4J model, HBV model, hydrological model output/simulation aggregation, rainfall data disaggregation *Neic Bezak, Juraj Parajka, Laura Varga*

Please, register via the registration form at danubeconference.eu. Make sure to specify one or more sessions you want to participate in.

more info at:

www.danubeconference.eu