

## Hands-on tutorial SWAP model

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### Description:

The SWAP (Soil Water Atmosphere Plant) model integrates current knowledge of soil physics, plant growth, evapotranspiration and drainage. Important applications are water and salinity stress of agricultural crops under various climatic and water management conditions, optimal irrigation and drainage, amounts of groundwater recharge, and ecohydrological gradients in a landscape. SWAP may function as a development platform to test innovative ideas on flow and transport in the biosphere. For instance, currently SWAP is used to explore the potential of microscopic root water uptake concepts with respect to traditional macroscopic root water uptake concepts. In this master class, we will show main features of SWAP, discuss topical applications, and let you work with typical examples.

**Theme:** Advances in measuring and modelling soil processes

**Keywords:** transport, biosphere, drought, evapotranspiration, water management

**Type of masterclass:** Tutorial

