THÜNEN

Research Project / Masterthesis:

Modelling the water balance of different forest stands

Research objectives:

- The experimental site 'Britz' near Eberswalde has a strong research focus on the effect of tree species composition on the forest water balance and groundwater recharge. With nine large-scale lysimeters, installed six meters into the soils, we are collecting data since the 1970s. The intensive and long-time measurements provides the great chance to model the water balance, calibrate, and validate the models in an intensive way.
- The models help to understand single processes in the water balance, to analyse the impact of changes in forest structure, tree composition and climate change to water balance, e.g. ground water recharge.

Methods:

- Data preparation
- Use of water balance model (e.g. BROOK90, WaSiM-ETH)
- Model parameterization
- Calibration, validation
- Comparison

Contact:

Marco Natkhin; 03334/3820-340; marco.natkhin@thuenen.de

Thünen-Institut für Waldökosysteme

Bundesforschungsinstitut für Ländliche Räume, Wald und Fischerei

Alfred-Möller-Straße 1

16225 Eberswalde