



Variability across scales – exploring methods for predicting soil properties from multiple sources



Hanna Zeitfogel, Moritz Feigl & Karsten Schulz

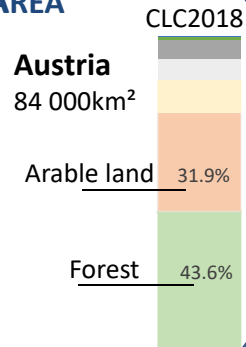
Institute for Hydrology and Water Management, University of Natural Resources and Life Sciences Vienna

GOAL

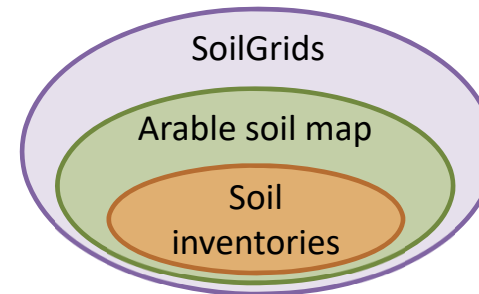
Groundwater recharge
on a regional scale

- **spatially distributed soil information**

STUDY AREA



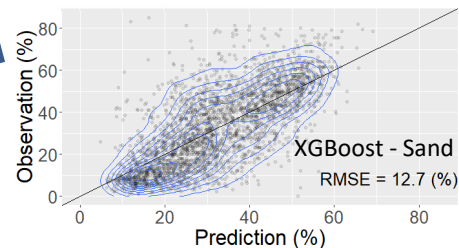
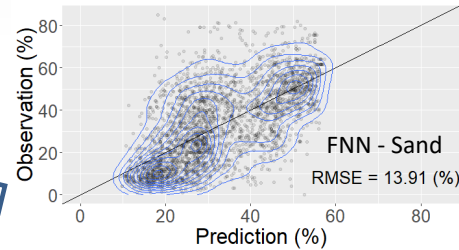
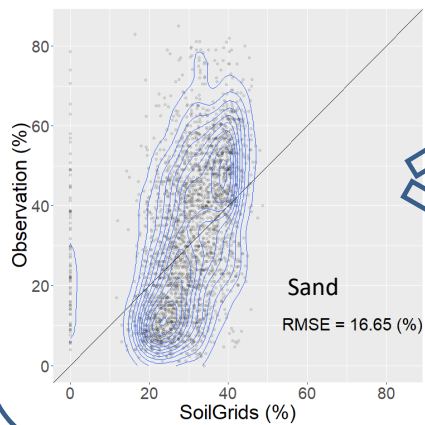
SOIL DATA



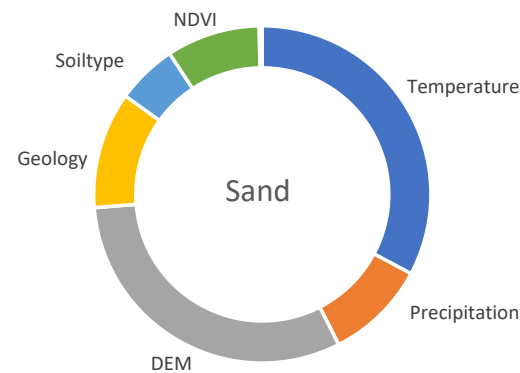
MACHINE LEARNING MODELS

- eXtreme Gradient Boosting (XGBoost)
- Feedforward Neural Networks (FNN)

RESULTS



XGBoost Feature Importance



Austrian Soil Texture Triangle

