

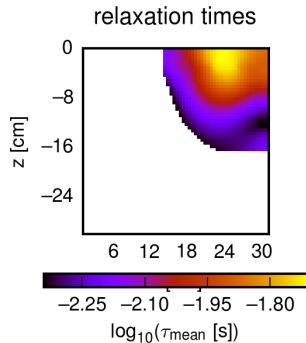
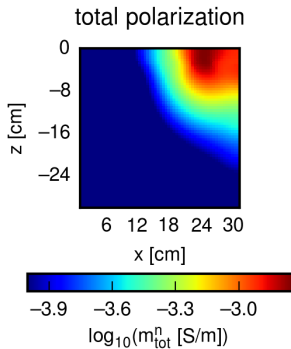
Current research topics

Characterizing crop root systems using SIP/EIT

Maximilian Weigand and Andreas Kemna

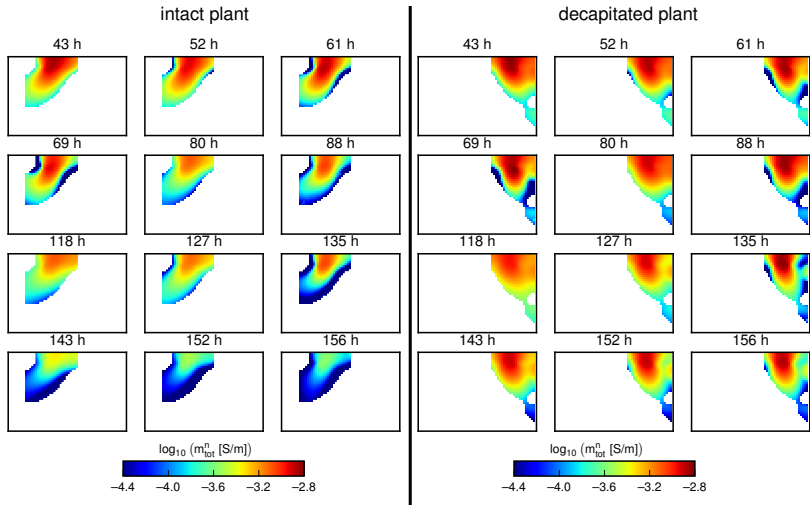
18. September 2017

¹ Steinmann Institute, Department of Geophysics, University of Bonn, Germany

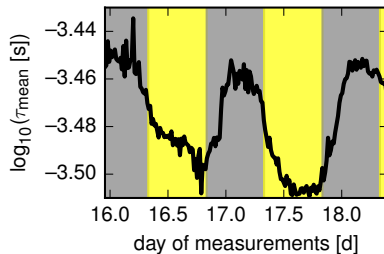
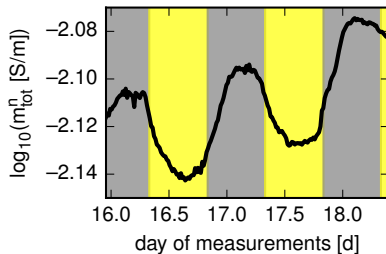


nutrient deprivation/decapitation





- Oilseed plant in nutrient solution
- measurement interval: ~ 7 minutes



Current activities

- Improving workflows and analysis procedures
- New laboratory experiments with soil
- Establishing the method on the field scale (for crop root characterization)



EDF - Electrical data format (working title)

- provide a pure-Python implementation of data structures that can hold various types of geoelectrical datasets (SIP, ERT; DCIP, sEIT)
- provide a tested set of import functions for the common measurement systems
- provide a tested set of output functions which export to common inversion/analysis programs
- provide a human-readable journal of data transformations (filters, transformations, etc.) → way towards reproducibility and accountability, and proper data management/long-term storage

with Florian Wagner

Is there interest in such a tool? Please get in touch:
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