

Statistical distribution of
hydraulic property parameters
and soil depth

Synthetic hydrological
simulations

Water content (θ) and solute
concentration (C) synthetic
distributions

Lab calibration
 C - σ_w and θ - σ_w - σ_b

Synthetic σ_b
distributions

Forward EMI
model

Synthetic σ_a
distributions

- **Identifying Regularization Parameters for EMI model inversion**
- **Understanding the physical system for EMI response interpretation**

Field experiment
 σ_a measurements

Time-lapse
EMI inversion

σ_b
distributions