

**Expert/knowledge-driven  
soil mapping**

**Data/technology-driven  
soil mapping**

<i>Target variables:</i>	Soil types (soil series)	Analytical soil properties
<i>Spatial data model:</i>	Discrete (soil bodies)	Continuous/hybrid (quantities / probabilities)
<i>Major inputs:</i>	Expert knowledge / soil profile description	Laboratory data / proximal soil sensing
<i>Important covariates:</i>	Soil delineations (photo-interpretation)	Remote sensing images, DEM-derivatives
<i>Spatial prediction model:</i>	Averaging per polygon	Automated (geo)statistics
<i>Accuracy assessment:</i>	Validation of soil mapping units (kappa)	Cross-validation (RMSE)
<i>Data representation:</i>	Polygon maps + attribute tables	Gridded maps + prediction error map
<i>Major technical aspect:</i>	Cartographic scale	Grid cell size
<i>Soil sampling strategies:</i>	Free survey (surveyor selects sampling)	Statistical (design/model-based) sampling)