

BREAKOUT SESSION 3: TOOLS, PROJECTS AND TEAMS

Objectives

- Evaluate specific traits of interest.
- Assess the suitability of measurement techniques to evaluating traits of interest
- Determine the current technological readiness of the approaches.

Characteristic/ Technique	MRI	XRAY	Optical Endoscope	Acoustic	GPR	ERT	Other
Depth							
Resolution							
Completeness							
Destructiveness							
Capital cost							
Operating cost							
Speed							
Power requirements							
Amount of data generated, and its value							
Robust in field conditions?							
Limitations with soil type/water content?							

Heuristically, we are also filling out a table like this.
 → Matching measurement strategies to quality traits

How to measure the trait.

- What measurement techniques could address it?
- What are the essential tradeoffs for measuring this trait?
- How plastic is this trait to soil and environmental variation?

Consider a Particular Technique

- How much work is required to adapt to the field?
- How sensitive is this tool to environmental variations?

Teams

- What is the “optimal” team composition?
- How do you practically develop a well-functioning, highly interdisciplinary team?

