

Working Group II: Parameter Estimation

Research Overview:

❑ Current “state of the art:”

- What are key motivations & research priorities?
- Does best practice / “industry standard” exist?
- What are the key challenges and barriers to use?

❑ What progress in analysis / estimation given:

- High dimension input / (temporal) output?
- Stochastic or extremal output?
- Complex / uncertain observations.
- (Semi) automated methods for climate problems?
- Multiple sources of information (multi-resolution)

❑ Motivating questions:

- To what extent can parameter investigation / estimation inform about the relationship between physical processes and output statistics (or model deficiency)?
- What is the relationship between parameter estimation, optimisation and UQ? (cf data assimilation)