## • insensitive parameters? • parameter values (see Sect. 2.1) converge/consistent? • parameters with constraints? (see Sect. 2.10) (see Sect. 2.2) • objective function values • data span orders of magnitude? converge/consistent? (see Sect. 2.10) (see Sect. 2.3) • simulation fits observations? • which data to use? Model (see Sect. 2.4) (see Sect. 2.10) revision • manual or automatic calibration? • independent trials consistent? (see Sect. 2.10) (see Sect. 2.5) Parameter screening Sensitivity analysis Uncertainty analysis $III.\ EXECUTE-During\ calibration$

III. CHECK - After calibration

I. PREPARE – Before calibration

- parameters: ranges too narrow/wide? converge to values within range? large spread between trials?
- (see Sect. 2.6)
- (see Sect. 2.7)
- objective function: fit looks like what you expected? important features of data matched?
- calibration algorithm: results converge? independent trials look similar? increase budget? (see Sect. 2.8)
- single-objective vs. multi-objective: pareto front degenerated? reduce number of objectives? multi-objective results consistent with single-objective references? (see Sect. 2.9)