

Workflow

1.

Series validation

- Error removal
- Consistency tests
- Far outlier removal
- TSM outlier removal
- Data categorisation**
 - Normal
 - Atypical
 - Discarded
 - Deep

2.

Series simulation

- Model fitting
- Series simulation

3.

Conversion to index

Input data

Groundwater heads
 P & ET_{ref}

Cleaned measurement series

Homogeneous simulated series

SGI data

Method evaluation

Performance of validation method

- Performance
- Parameter sensitivity

Performance of head simulations

- Performance
- Calibration period effects

SGI comparison to measurements