## powell\_method Parameters

```
cm_name: powell_0_s21
dataframe in: data transformed 0
description: Powell Method for optimization of timeseries with simulation
diff_func_name: manhattan_metrics
diff_func_parameters: {}
model_method: powell_method
name: powell_method
parameters:
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  epsilons:
  - 1
  ground_truth_topology:
    keys:
    - max_keys
  initial_points: 100
  n_draws: 20000
  n_iterations: 100
  nfe: 2500
  num pool: 1
  population_size: 100
  seed: 21
report_parameters: {}
running_time: 6182.6506423950195
type: calibrationmodel
version: 1.0.0
```

#### Results

```
Summary CalibrationModel with most optimal solution:
graph_structure Distance round
0 16656.138591 2.798443 16656.0
```

## powell\_method Parameters

```
cm_name: powell_0_s16
dataframe in: data transformed 0
description: Powell Method for optimization of timeseries with simulation
diff_func_name: manhattan_metrics
diff_func_parameters: {}
model_method: powell_method
name: powell_method
parameters:
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  epsilons:
  - 1
  ground_truth_topology:
    keys:
    - max_keys
  initial_points: 100
  n_draws: 20000
  n_iterations: 100
  nfe: 2500
  num pool: 1
  population_size: 100
  seed: 16
report_parameters: {}
running_time: 3552.13121676445
type: calibrationmodel
version: 1.0.0
```

#### Results

```
Summary CalibrationModel with most optimal solution:
graph_structure Distance round
0 14105.206039 4.048516 14105.0
```

# powell\_method Parameters

```
cm_name: powell_0_s26
dataframe in: data transformed 0
description: Powell Method for optimization of timeseries with simulation
diff_func_name: manhattan_metrics
diff_func_parameters: {}
model_method: powell_method
name: powell_method
parameters:
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  epsilons:
  - 1
  ground_truth_topology:
    keys:
    - max_keys
  initial_points: 100
  n_draws: 20000
  n_iterations: 100
  nfe: 2500
  num pool: 1
  population_size: 100
  seed: 26
report_parameters: {}
running_time: 2794.1960833072662
type: calibrationmodel
version: 1.0.0
```

#### Results

```
Summary CalibrationModel with most optimal solution:
graph_structure Distance round
0 17505.118922 2.831183 17505.0
```

### Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
powell_0_s26	powell_method	0.97	manhattan_metrics	data_transformed_0	2794.196 sec
powell_0_s21	powell_method	0.97	manhattan_metrics	data_transformed_0	6182.651 sec
powell_0_s16	powell_method	0.96	manhattan_metrics	data_transformed_0	3552.131 sec