# powell\_method Parameters

```
cm_name: powell_20
dataframe in: data missing 20
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: 1500
  num pool: 1
  population_size: 100
  seed: 16
report_parameters: {}
running_time: 2596.9604547023773
type: calibrationmodel
version: 1.0.0
```

#### Results

```
Summary CalibrationModel with most optimal solution:
graph_structure Distance round
0 16656.3146 4.422589 16656.0
```

## powell\_method Parameters

```
cm_name: powell_30
dataframe in: data missing 30
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: 1500
  num pool: 1
  population_size: 100
  seed: 1
report_parameters: {}
running_time: 1288.1520478725433
type: calibrationmodel
version: 1.0.0
```

#### Results

```
Summary CalibrationModel with most optimal solution:
graph_structure Distance round
0 15278.64045 7.161265 15279.0
```

## powell\_method Parameters

```
cm_name: powell_10
dataframe in: data missing 10
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: 1500
  num pool: 1
  population_size: 100
  seed: 16
report_parameters: {}
running_time: 2941.0391590595245
type: calibrationmodel
version: 1.0.0
```

#### Results

```
Summary CalibrationModel with most optimal solution:
graph_structure Distance round
0 16655.820203 4.335748 16656.0
```

### Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
powell_30	powell_method	0.96	manhattan_metrics	data_missing_30	1288.152 sec
powell_20	powell_method	0.97	manhattan_metrics	data_missing_20	2596.960 sec
powell_10	powell_method	0.97	manhattan_metrics	data_missing_10	2941.039 sec