approximate_bayesian_computation

Parameters

cm_name: abc_70
dataframe_in: data_missing_70
description: Approximate Bayesian Computation for Time Series
diff_func_name: manhattan_metrics
diff_func_parameters: {}
model_method: approximate_bayesian_computation
name: approximate_bayesian_computation
parameters:
  algorithm: pydream
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  epsilons:
  - 1
  ground_truth_topology:
    keys:
    - max_keys
  initial_points: 100
  n_chains: 3
  n_draws: 15000
  n_iterations: 100
  nfe: 15000
  num_pool: 1
  population_size: 100
  seed: 21
report_parameters: {}
running_time: 186129.32318520546
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	16.368356
1	2782.768614	16.281094
2	0.000000	16.066933
3	0.000000	16.254801
4	0.000000	15.797881
...	...	...
21895	0.000000	15.887559
21896	0.000000	16.134857
21897	0.000000	16.198545
21898	0.000000	15.940637
21899	0.000000	16.223537

[21900 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.762234	0.0

with an acceptance percentage of 0.008894225424143375%

approximate_bayesian_computation

Parameters

cm_name: abc_80
dataframe_in: data_missing_80
description: Approximate Bayesian Computation for Time Series
diff_func_name: manhattan_metrics
diff_func_parameters: {}
model_method: approximate_bayesian_computation
name: approximate_bayesian_computation
parameters:
  algorithm: pydream
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  epsilons:
  - 1
  ground_truth_topology:
    keys:
    - max_keys
  initial_points: 100
  n_chains: 3
  n_draws: 15000
  n_iterations: 100
  nfe: 15000
  num_pool: 1
  population_size: 100
  seed: 21
report_parameters: {}
running_time: 185607.2444820404
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	16.490316
1	2782.768614	16.409549
2	0.000000	16.134521
3	0.000000	16.659497
4	0.000000	15.583576
...	...	...
13670	0.000000	15.992390
13671	0.000000	16.874493
13672	0.000000	16.067629
13673	0.000000	16.444081
13674	0.000000	16.623384

[13675 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.91951	0.0

with an acceptance percentage of 0.008894225424143375%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_80	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_80	185607.244 sec
abc_70	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_70	186129.323 sec