approximate_bayesian_computation

Parameters

cm_name: abc_60
dataframe_in: data_missing_60
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: 186135.82035708427
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	16.329205
1	2782.768614	16.248178
2	0.000000	16.045629
3	0.000000	16.261279
4	0.000000	15.786744
...	...	...
21843	0.000000	16.471991
21844	0.000000	15.892682
21845	0.000000	16.128724
21846	0.000000	16.182677
21847	0.000000	15.942538

[21848 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.767939	0.0

with an acceptance percentage of 0.008894225424143375%

approximate_bayesian_computation

Parameters

cm_name: abc_50
dataframe_in: data_missing_50
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: 186253.50348591805
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	16.214671
1	2782.768614	16.133233
2	0.000000	15.921753
3	0.000000	16.185340
4	0.000000	15.673859
...	...	...
22707	0.000000	16.366690
22708	0.000000	16.076577
22709	0.000000	16.319066
22710	0.000000	15.706049
22711	0.000000	15.995113

[22712 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.675909	0.0

with an acceptance percentage of 0.008894225424143375%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_60	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_60	186135.820 sec
abc_50	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_50	186253.503 sec