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: 6
report_parameters: {}
running_time: 183277.03578591347
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	23.170807
1	17525.218903	22.910770
2	17525.218903	21.983007
3	17525.218903	20.276354
4	0.000000	20.550871
...	...	...
11079	0.000000	19.933488
11080	0.000000	21.512209
11081	0.000000	20.422596
11082	0.000000	19.735285
11083	0.000000	20.407327

[11084 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	18.177476	0.0

with an acceptance percentage of 0.011117781780179222%

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: 6
report_parameters: {}
running_time: 183594.57691574097
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	22.051383
1	17525.218903	21.894576
2	17525.218903	21.072018
3	17525.218903	19.536164
4	0.000000	19.683892
...	...	...
17865	0.000000	19.711230
17866	0.000000	20.708004
17867	0.000000	21.133083
17868	0.000000	19.342176
17869	0.000000	18.878268

[17870 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	17.157248	0.0

with an acceptance percentage of 0.011117781780179222%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_80	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_80	183277.036 sec
abc_70	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_70	183594.577 sec