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: 6
report_parameters: {}
running_time: 180827.0783109665
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	22.485442
1	17525.218903	21.993931
2	17525.218903	21.114241
3	17525.218903	19.563470
4	0.000000	19.041622
...	...	...
17933	0.000000	19.773435
17934	0.000000	19.683665
17935	0.000000	20.179568
17936	0.000000	20.558749
17937	0.000000	20.527643

[17938 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	18.14407	0.0

with an acceptance percentage of 0.011117781780179222%

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: 6
report_parameters: {}
running_time: 181617.32870554924
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	22.135081
1	17525.218903	21.860653
2	17525.218903	20.972500
3	17525.218903	19.328859
4	0.000000	18.672811
...	...	...
10260	0.000000	19.697679
10261	0.000000	20.387733
10262	0.000000	19.572947
10263	0.000000	18.520952
10264	0.000000	19.012362

[10265 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	16.403901	0.0

with an acceptance percentage of 0.011117781780179222%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_60	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_60	180827.078 sec
abc_50	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_50	181617.329 sec