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: 182513.54288053513
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	21.932881
1	17525.218903	20.912418
2	17525.218903	20.174892
3	17525.218903	18.714660
4	0.000000	16.580851
...	...	...
22073	0.000000	15.824212
22074	0.000000	16.256662
22075	0.000000	15.781656
22076	0.000000	15.423448
22077	0.000000	15.765354

[22078 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.567229	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: 183550.98488926888
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	22.038770
1	17525.218903	20.997663
2	17525.218903	20.243505
3	17525.218903	18.755497
4	0.000000	16.473834
...	...	...
22063	0.000000	15.352397
22064	0.000000	15.678817
22065	0.000000	16.599118
22066	0.000000	16.340530
22067	0.000000	16.137299

[22068 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 0.011117781780179222%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_60	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_60	182513.543 sec
abc_50	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_50	183550.985 sec