approximate_bayesian_computation

Parameters

cm_name: abc_30
dataframe_in: data_missing_30
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: 11
report_parameters: {}
running_time: 182932.21736431122
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	16.004656
1	0.000000e+00	15.105704
2	0.000000e+00	15.649258
3	0.000000e+00	16.815878
4	0.000000e+00	16.246185
...	...	...
27596	1.548267e-09	16.572607
27597	1.550017e-09	15.622200
27598	1.551766e-09	15.589585
27599	1.553516e-09	16.105579
27600	1.555265e-09	15.487412

[27601 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.496863	0.0

with an acceptance percentage of 37.30460498521335%

approximate_bayesian_computation

Parameters

cm_name: abc_40
dataframe_in: data_missing_40
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: 11
report_parameters: {}
running_time: 183107.84629416466
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	16.217934
1	0.000000e+00	15.240828
2	0.000000e+00	15.809167
3	0.000000e+00	16.894443
4	0.000000e+00	16.365025
...	...	...
25110	1.464889e-09	16.234067
25111	7.831976e-10	16.052460
25112	7.831976e-10	15.699546
25113	7.831976e-10	15.527553
25114	1.015059e-10	15.770026

[25115 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	2.995748e-07	14.656478	0.0

with an acceptance percentage of 27.62768772374536%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_40	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_40	183107.846 sec
abc_30	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_30	182932.217 sec