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: 11
report_parameters: {}
running_time: 182097.0187010765
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	19.460276
1	0.000000e+00	18.123413
2	0.000000e+00	17.821065
3	0.000000e+00	18.850744
4	0.000000e+00	17.992831
...	...	...
21002	1.707468e-09	18.428809
21003	1.709217e-09	17.234582
21004	1.167719e-09	17.397078
21005	6.262200e-10	18.640252
21006	8.472140e-11	18.386461

[21007 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	9.272110e-11	16.403901	0.0
1	1.399564e-11	16.403901	0.0

with an acceptance percentage of 21.68189802770551%

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: 11
report_parameters: {}
running_time: 183513.027810812
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	20.938043
1	0.000000e+00	19.601860
2	0.000000e+00	19.346507
3	0.000000e+00	20.438829
4	0.000000e+00	19.670942
...	...	...
21378	1.194480e-09	20.683853
21379	6.150120e-10	20.581366
21380	3.554437e-11	19.957698
21381	3.554437e-11	20.760772
21382	3.554437e-11	20.730308

[21383 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	17.969006	0.0

with an acceptance percentage of 22.262246236630865%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_60	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_60	183513.028 sec
abc_50	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_50	182097.019 sec