approximate_bayesian_computation

Parameters

cm_name: abc_90_s1
dataframe_in: data_missing_90
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: 21
report_parameters: {}
running_time: 186400.04335570335
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	16.634364
1	2782.768614	16.554734
2	0.000000	16.286697
3	0.000000	16.528672
4	0.000000	15.992107
...	...	...
12581	0.000000	17.053158
12582	0.000000	16.528005
12583	0.000000	17.951065
12584	0.000000	16.095854
12585	0.000000	15.871547

[12586 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	15.042486	0.0

with an acceptance percentage of 0.006670669068107531 5%

approximate_bayesian_computation

Parameters

cm_name: abc_90_s6
dataframe_in: data_missing_90
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: 26
report_parameters: {}
running_time: 185731.39046382904
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	31597.533350	42.772943
1	31567.248932	39.492977
2	31536.964515	24.364739
3	10223.034214	15.903761
4	0.000000	15.703343
...	...	...
21312	0.240956	16.070817
21313	0.241125	16.301829
21314	0.241294	16.646904
21315	0.241294	17.211659
21316	0.241462	16.565303

[21317 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.774951	0.0

with an acceptance percentage of 29.181953616614415%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_90_s6	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_90	185731.390 sec
abc_90_s1	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_90	186400.043 sec