approximate_bayesian_computation

Parameters

cm_name: abc_10
dataframe_in: data_missing_10
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: 183414.79881978035
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	31597.533350	51.614414
1	31567.248932	47.692559
2	39999.000000	32.091241
3	39999.000000	30.841709
4	39999.000000	29.328774
...	...	...
16225	0.046929	16.326263
16226	0.046974	16.345230
16227	0.047019	18.530519
16228	0.047064	18.175265
16229	0.047108	17.816096

[16230 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.002821	14.587672	0.0
1	0.002428	14.587672	0.0
2	0.001429	14.587672	0.0

with an acceptance percentage of 21.45287172303382%

approximate_bayesian_computation

Parameters

cm_name: abc_20
dataframe_in: data_missing_20
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: 184761.96406459808
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	31597.533350	57.787634
1	31567.248932	53.445861
2	39999.000000	34.569757
3	39999.000000	33.178284
4	39999.000000	31.541440
...	...	...
15002	0.000000	18.308229
15003	0.000000	20.503393
15004	0.000000	19.247678
15005	0.000000	19.153011
15006	0.000000	19.421147

[15007 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	5.683803e-12	15.400644	0.0

with an acceptance percentage of 21.850888310764237%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_20	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_20	184761.964 sec
abc_10	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_10	183414.799 sec