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: 16
report_parameters: {}
running_time: 225618.9145257473
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	22546.691528	37.093268
1	33368.040374	35.498172
2	39999.000000	27.320624
3	39999.000000	26.963214
4	39999.000000	29.000151
...	...	...
19384	34589.479087	14.270271
19385	34589.479087	14.395927
19386	34589.479087	14.708064
19387	34589.479087	14.247017
19388	34589.479087	15.280141

[19389 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	34589.479087	13.64104	34589.0

with an acceptance percentage of 0.013341338136215063%

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: 16
report_parameters: {}
running_time: 282108.1547062397
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	22546.691528	37.443647
1	33368.040374	32.637268
2	39999.000000	27.187399
3	39999.000000	27.097538
4	39999.000000	27.272754
...	...	...
16066	34589.479087	15.408269
16067	34589.479087	14.782972
16068	34589.479087	14.879444
16069	34589.479087	14.372118
16070	34589.479087	13.993657

[16071 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	34589.479087	13.393948	34589.0

with an acceptance percentage of 0.013341338136215063%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_60	approximate_bayesian_computation	0.98	manhattan_metrics	data_missing_60	225618.915 sec
abc_50	approximate_bayesian_computation	0.98	manhattan_metrics	data_missing_50	282108.155 sec