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: 6
report_parameters: {}
running_time: 183276.49854063988
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	21.009663
1	17525.218903	20.196906
2	17525.218903	19.379773
3	17525.218903	17.839526
4	0.000000	17.417962
...	...	...
18707	0.000000	17.498148
18708	0.000000	18.216738
18709	0.000000	17.921118
18710	0.000000	17.808054
18711	0.000000	17.674426

[18712 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	16.387353	0.0

with an acceptance percentage of 0.011117781780179222%

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: 6
report_parameters: {}
running_time: 184735.73254275322
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	21.989935
1	17525.218903	21.122435
2	17525.218903	20.208344
3	17525.218903	18.555925
4	0.000000	17.855407
...	...	...
20395	0.000000	18.384371
20396	0.000000	19.251225
20397	0.000000	18.906802
20398	0.000000	16.782330
20399	0.000000	17.003782

[20400 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	15.602208	0.0

with an acceptance percentage of 0.011117781780179222%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_20	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_20	184735.733 sec
abc_10	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_10	183276.499 sec