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: 26
report_parameters: {}
running_time: 183788.4392373562
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	31597.533350	44.031366
1	31567.248932	40.482377
2	10191.124749	37.885211
3	21260.288346	39.396496
4	10498.755033	15.054830
...	...	...
22151	0.200583	16.264844
22152	0.200724	16.149572
22153	0.200865	17.481425
22154	0.201005	16.982069
22155	0.201146	16.383774

[22156 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.567229	0.0

with an acceptance percentage of 29.288684321704135%

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: 26
report_parameters: {}
running_time: 184385.56558990479
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	31597.533350	44.376582
1	31567.248932	40.784417
2	10191.124749	38.127930
3	21260.288346	39.668106
4	10498.755033	14.981495
...	...	...
21306	0.000000	15.700815
21307	0.000000	15.009579
21308	0.000000	16.538287
21309	0.000000	15.740884
21310	0.000000	16.028925

[21311 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.458594	0.0

with an acceptance percentage of 29.34427323060503%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_60	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_60	183788.439 sec
abc_50	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_50	184385.566 sec