approximate_bayesian_computation

Parameters

cm_name: abc_30

dataframe_in: data_missing_30

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: 186947.72150087357

type: calibrationmodel

version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	19.502003
1	2782.768614	19.855489
2	0.000000	20.005211
3	0.000000	20.269722
4	0.000000	19.243768
...	...	...
7344	0.000000	19.066963
7345	0.000000	21.160549
7346	0.000000	21.948410
7347	0.000000	20.993784
7348	0.000000	19.271240

[7349 rows x 2 columns]

with the most optimal solution:
```
   graph_structure   Distance  round
0           0.0  16.621871   0.0
```
 with an acceptance percentage of 0.011117781780179222%

approximate_bayesian_computation

Parameters

cm_name: abc_40

dataframe_in: data_missing_40

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: 186701.28490042686

type: calibrationmodel

version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	21.829601
1	2782.768614	22.396325
2	0.000000	22.350602
3	0.000000	22.643426
4	0.000000	21.460750
...	...	...
11334	0.000000	21.929402
11335	0.000000	22.915852
11336	0.000000	23.084362
11337	0.000000	22.505556
11338	0.000000	23.040922

[11339 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
0	0.0	17.713633	0.0

with an acceptance percentage of 0.011117781780179222%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_40	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_40	186701.285 sec
abc_30	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_30	186947.722 sec