

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: 11
report_parameters: {}
running_time: 182995.66256546974
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	22.743995
1	0.000000e+00	21.655133
2	0.000000e+00	21.421378
3	0.000000e+00	22.204962
4	0.000000e+00	20.018758
...
9386	9.971892e-10	21.932648
9387	7.536008e-10	23.503620
9388	5.100124e-10	23.412448
9389	2.664240e-10	23.597567
9390	2.283565e-11	23.905296

[9391 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
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0	0.0	18.385728	0.0
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with an acceptance percentage of 13.345785248927136%

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: 11
report_parameters: {}
running_time: 181625.97116470337
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	20.422615
1	0.000000e+00	19.453279
2	0.000000e+00	19.243826
3	0.000000e+00	21.102504
4	0.000000e+00	19.942591
...
13198	4.406957e-07	19.881609
13199	4.409779e-07	17.880591
13200	4.412600e-07	20.449934
13201	4.415422e-07	19.281238
13202	3.323964e-11	19.101176

[13203 rows x 2 columns]

with the most optimal solution:

	graph_structure	Distance	round
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0	0.0	16.584847	0.0
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with an acceptance percentage of 22.3511884908723%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_40	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_40	182995.663 sec
abc_30	approximate_bayesian_computation	0.96	manhattan_metrics	data_missing_30	181625.971 sec