approximate_bayesian_computation

Parameters

cm_name: abc_0_s6
dataframe_in: data_transformed_0
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
  convergence_progress: true
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  ground_truth_topology:
    keys:
    - max_keys
  n_chains: 3
  n_draws: 22000
  seed: 6
report_parameters: {}
running_time: 271019.7634716034
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	17525.218903	22.096645
1	17525.218903	21.089041
2	17525.218903	20.088071
3	17525.218903	18.506693
4	0.000000	16.052051
...	...	...
3986	0.000000	15.395522
3987	0.000000	15.638602
3988	0.000000	15.570564
3989	0.000000	14.976805
3990	0.000000	15.459599

[3991 rows x 2 columns]
with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.40926	0.0

with an acceptance percentage of 0.007606876616461281%

approximate_bayesian_computation

Parameters

cm_name: abc_0_s1
dataframe_in: data_transformed_0
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
  convergence_progress: true
  decision_variables:
    keys:
    - max_keys
  decision_variables_names:
  - graph_structure
  ground_truth_topology:
    keys:
    - max_keys
  n_chains: 3
  n_draws: 22000
  seed: 1
report_parameters: {}
running_time: 277621.3814485073
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	1.676736e+04	14.045272
1	1.676736e+04	14.070398
2	1.676736e+04	14.228035
3	0.000000e+00	15.664316
4	0.000000e+00	16.537510
...	...	...
10741	1.867997e-09	17.001075
10742	1.869622e-09	16.724017
10743	1.871246e-09	16.444948
10744	1.872870e-09	16.320341
10745	1.874495e-09	15.668126

[10746 rows x 2 columns]
with the most optimal solution:

	graph_structure	Distance	round
0	15988.217867	13.613152	15988.0

with an acceptance percentage of 29.17085044880572%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_0_s6	approximate_bayesian_computation	0.96	manhattan_metrics	data_transformed_0	271019.763 sec
abc_0_s1	approximate_bayesian_computation	0.97	manhattan_metrics	data_transformed_0	277621.381 sec