approximate_bayesian_computation

Parameters

cm_name: abc_0_s16
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: 21500
  seed: 16
report_parameters: {}
running_time: 378114.0707128048
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	22546.691528	38.191989
1	33368.040374	33.786354
2	39999.000000	27.936849
3	39999.000000	27.638605
4	39999.000000	27.729260
...	...	...
5476	34589.479087	14.179196
5477	34589.479087	14.276863
5478	34589.479087	14.496377
5479	34589.479087	14.254742
5480	34589.479087	13.987927

[5481 rows x 2 columns]
with the most optimal solution:

	graph_structure	Distance	round
0	34589.479087	13.288065	34589.0

with an acceptance percentage of 0.009341429238673517%

approximate_bayesian_computation

Parameters

cm_name: abc_0_s11
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: 21500
  seed: 11
report_parameters: {}
running_time: 260687.14933347702
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	0.000000e+00	16.139815
1	0.000000e+00	15.455298
2	0.000000e+00	15.393592
3	0.000000e+00	16.595578
4	0.000000e+00	15.907652
...	...	...
16315	4.987568e-07	15.570461
16316	4.991674e-07	15.589135
16317	4.995781e-07	15.697644
16318	4.999887e-07	16.169422
16319	5.003994e-07	16.940229

[16320 rows x 2 columns]
with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.077607	0.0

with an acceptance percentage of 23.48435310602522%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_0_s16	approximate_bayesian_computation	0.98	manhattan_metrics	data_transformed_0	378114.071 sec
abc_0_s11	approximate_bayesian_computation	0.96	manhattan_metrics	data_transformed_0	260687.149 sec