approximate_bayesian_computation

Parameters

cm_name: abc_0_s26
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: 21000
  seed: 26
report_parameters: {}
running_time: 416683.98753118515
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	31597.533350	46.083670
1	31567.248932	42.564038
2	31536.964515	26.792851
3	10160.840331	14.574345
4	10160.840331	14.523198
...	...	...
16903	10.725462	15.087162
16904	10.725462	14.257665
16905	10.725462	14.300355
16906	10.725462	14.433548
16907	10.725462	14.095423

[16908 rows x 2 columns]
with the most optimal solution:

	graph_structure	Distance	round
0	10.725462	13.892132	11.0

with an acceptance percentage of 24.186194803124504%

approximate_bayesian_computation

Parameters

cm_name: abc_0_s21
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: 21000
  seed: 21
report_parameters: {}
running_time: 410995.1478688717
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	2782.768614	16.035347
1	2782.768614	15.865728
2	0.000000	15.712417
3	0.000000	15.980590
4	0.000000	15.272857
...	...	...
3582	0.000000	15.364455
3583	0.000000	15.758565
3584	0.000000	16.833216
3585	0.000000	17.067040
3586	0.000000	17.372762

[3587 rows x 2 columns]
with the most optimal solution:

	graph_structure	Distance	round
0	0.0	14.329889	0.0

with an acceptance percentage of 0.009564801530368245%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration
abc_0_s26	approximate_bayesian_computation	0.96	manhattan_metrics	data_transformed_0	416683.988 sec
abc_0_s21	approximate_bayesian_computation	0.96	manhattan_metrics	data_transformed_0	410995.148 sec