

approximate_bayesian_computation

Parameters

cm_name: abc_0
dataframe_in: data_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:
 - Manufacturing_Time
 n_chains: 3
 n_draws: 20000
 objectives:
 - Manufacturer
 - Export_Port
 - Transit_Port
 - Import_Port
 - Wholesales_Distributor
 - Retailer_Amsterdam
 - Retailer_Utrecht
 - Retailer_Venlo
 ranges_variables:
 - - 1
 - 10
 seed: 20
report_parameters: {}
running_time: 105085.70836615562
type: calibrationmodel
version: 1.0.0

Results

Summary CalibrationModel with solutions:

	Manufacturing_Time	Distance
0	6.293177	16.149169
1	1.517890	10.008494
2	1.517890	10.008494
3	1.517890	10.008494
4	1.517890	10.008494
...
3466	6.293177	16.149169
3467	1.000000	13.772067
3468	3.322172	9.860783
3469	1.000000	13.772067
3470	3.322176	9.860785

[3471 rows x 2 columns]

with the most optimal solution:

	Manufacturing_Time	Distance
0	2.327863	5.612591
1	2.327863	5.612591
2	2.327863	5.612591
3	2.327863	5.612591
4	2.327863	5.612591
..
97	2.327863	5.612591
98	2.327863	5.612591
99	2.327863	5.612591
100	2.327863	5.612591
101	2.327863	5.612591

[102 rows x 2 columns]

with an acceptance percentage of 5.781014565544951%

Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration	Solution Params
abc_0	approximate_bayesian_computation	0.98	manhattan_metrics	data_0	105085.708 sec	{'Manufacturing_Time': 2.3278625892304023}