

# 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: 15000  
    objectives:  
        - Manufacturer  
        - Export\_Port  
        - Transit\_Port  
        - Import\_Port  
        - Wholesales\_Distributor  
        - Retailer\_Amsterdam  
        - Retailer\_Utrecht  
        - Retailer\_Venlo  
    ranges\_variables:  
        - - 1  
        - 10  
    seed: 15  
report\_parameters: {}  
running\_time: 82800.47011327744  
type: calibrationmodel  
version: 1.0.0

## Results

Summary CalibrationModel with solutions:

	Manufacturing_Time	Distance
0	1.587817	14.768416
1	1.000000	13.772067
2	2.940960	8.492161
3	2.940960	8.492161
4	2.940960	8.492161
...	...	...
2495	2.207126	5.533317
2496	2.207126	5.533317
2497	2.207126	5.533317
2498	2.207126	5.533317
2499	2.207126	5.533317

[2500 rows x 2 columns]

with the most optimal solution:

	Manufacturing_Time	Distance
0	2.207126	5.533317
1	2.207126	5.533317
2	2.207126	5.533317
3	2.207126	5.533317
4	2.207126	5.533317
...	...	...
1537	2.207126	5.533317
1538	2.207126	5.533317
1539	2.207126	5.533317
1540	2.207126	5.533317
1541	2.207126	5.533317

[1542 rows x 2 columns]

with an acceptance percentage of 19.988821819807736%

# Summary

Model Name	Model Method	Score	Difference Function	Dataframe	Duration	Solution Params
abc_0	approximate_bayesian_computation	0.97	manhattan_metrics	data_0	82800.470 sec	{'Manufacturing_Time': 2.207126463672464}