

# approximate\_bayesian\_computation

## Parameters

cm\_name: abc\_90\_s1  
dataframe\_in: data\_missing\_90  
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  
    decision\_variables:  
        keys:  
            - max\_keys  
    decision\_variables\_names:  
        - graph\_structure  
    epsilons:  
        - 1  
    ground\_truth\_topology:  
        keys:  
            - max\_keys  
    initial\_points: 100  
    n\_chains: 3  
    n\_draws: 15000  
    n\_iterations: 100  
    nfe: 15000  
    num\_pool: 1  
    population\_size: 100  
    seed: 1  
report\_parameters: {}  
running\_time: 213671.08933329582  
type: calibrationmodel  
version: 1.0.0

## Results

Summary CalibrationModel with solutions:

	graph_structure	Distance
0	1.676736e+04	103.315849
1	0.000000e+00	95.014947
2	0.000000e+00	95.084133
3	1.598822e+04	94.620677
4	1.598822e+04	92.475085
5	1.598822e+04	93.295638
6	1.598822e+04	89.398215
7	0.000000e+00	89.786136
8	0.000000e+00	86.411816
9	1.624345e-12	84.310052
10	3.248691e-12	80.975131
11	2.276053e-12	84.077358
12	1.303415e-12	81.713832

13	3.307767e-13	78.359089
14	0.000000e+00	121.897633
15	0.000000e+00	103.851658
16	0.000000e+00	102.345733
17	0.000000e+00	97.610358
18	0.000000e+00	94.415526
19	1.598822e+04	94.253377
20	1.598822e+04	91.061028
21	1.598822e+04	95.251500
22	1.598822e+04	95.392456
23	0.000000e+00	89.213308
24	0.000000e+00	88.458942
25	0.000000e+00	85.789292
26	1.624345e-12	83.483950
27	1.624345e-12	80.909892
28	6.517074e-13	84.077358
29	0.000000e+00	81.713832
30	0.000000e+00	78.359089
31	1.598822e+04	83.465405
32	1.598822e+04	82.464286
33	1.598822e+04	84.445138
34	1.598822e+04	82.025142
35	1.598822e+04	81.004644
36	1.598822e+04	80.459940
37	1.598822e+04	81.237774
38	1.598822e+04	80.616170
39	1.598822e+04	79.676603
40	1.598822e+04	78.099662
41	1.598822e+04	78.779854
42	1.598822e+04	77.283529
43	1.598822e+04	76.076133
44	1.598822e+04	76.580975
45	1.598822e+04	78.676989
46	1.598822e+04	78.535990
47	1.598822e+04	74.985614
48	1.598822e+04	77.275865
49	1.598822e+04	73.697108

with the most optimal solution:

graph\_structure Distance round

0 15988.217867 73.697108 15988.0

with an acceptance percentage of 0.05336535254486025%