

CPE with Agent Based Modeling

Kim Sol

School of Mathematics and Computing

August 25, 2022

Setting

The number of iterations is 135

Experiment transmission rate (10^{-5})										
β	1	2	3	4	5	6	7	8	9	10
patients	2.26	2.54	2.14	2.30	2.50	2.57	2.58	2.44	2.71	2.65

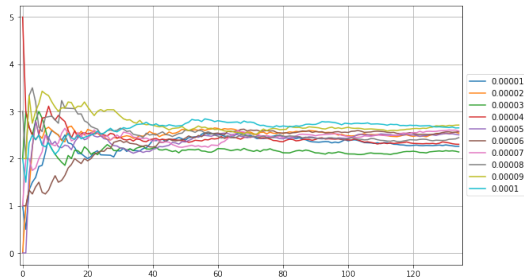


Figure 1: Cumulative Average number of sick patients

Result

The values between 10^{-5} and 10^{-4} were subdivided and tested.

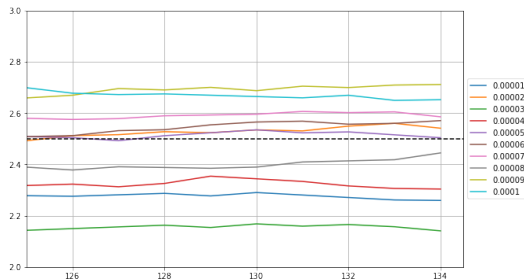


Figure 2: Cumulative Average number of sick patients

As a result, all values did not increase sequentially. The value at 3 was the lowest, the value at 2 was similar to the target value, and the value at 8 was surprisingly small. Excluding these, 1 and 4 showed relatively low average values, 5,6,7 showed intermediate values, and 9 and 10 showed high values.

Questions

- ▶ I wonder if it is appropriate to use 0.00005 as the *transmission probability*.