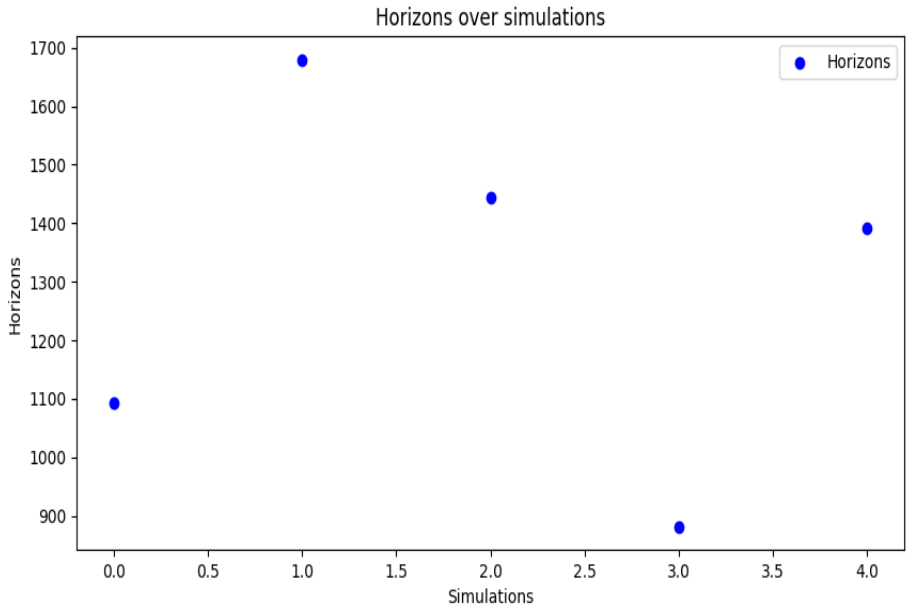
Test done 2025_06_26 at 12_01_32

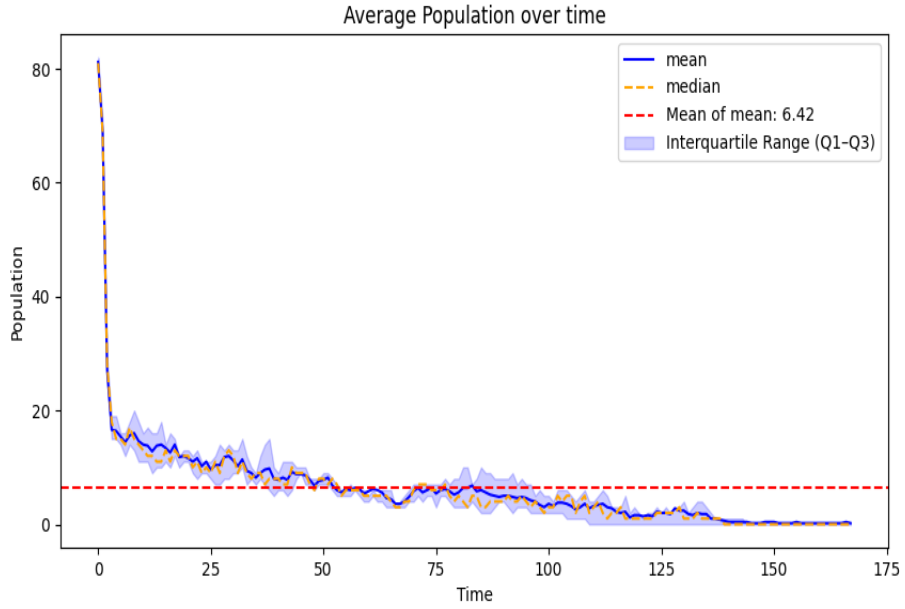
Number of simulation done : 5. The window time of the simulation is 10

Initial condition

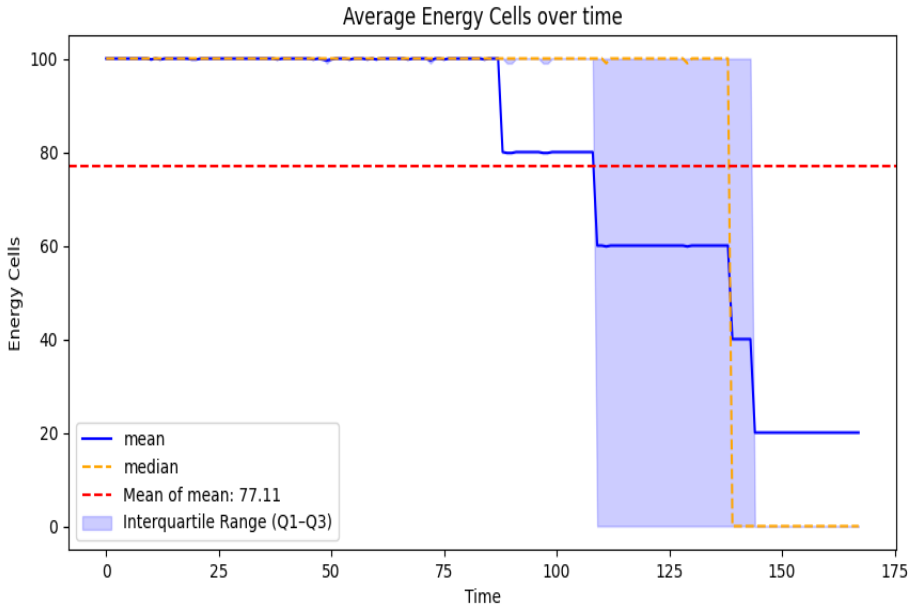
Size : 100
I_Energy : 120
I_Age : 100
I_Maturity : 20
I_Distr : Behaviors Corners
Radius : 4
Active : 100
C_Min : 15
C_Max : 150
C_Regen : 5
C_Distr : 4 Islands
Height : 100
Width : 100
P_Distr : Uniform
Move : 1
Eat : 2
Rest : 0
Reproduce : 5
N_Simulations : 5
Seed : 100
Energy Needed : 0.6
Extra Energy : 0.2
Energy Requeste : 0.5
Mutation Rate : 0.1



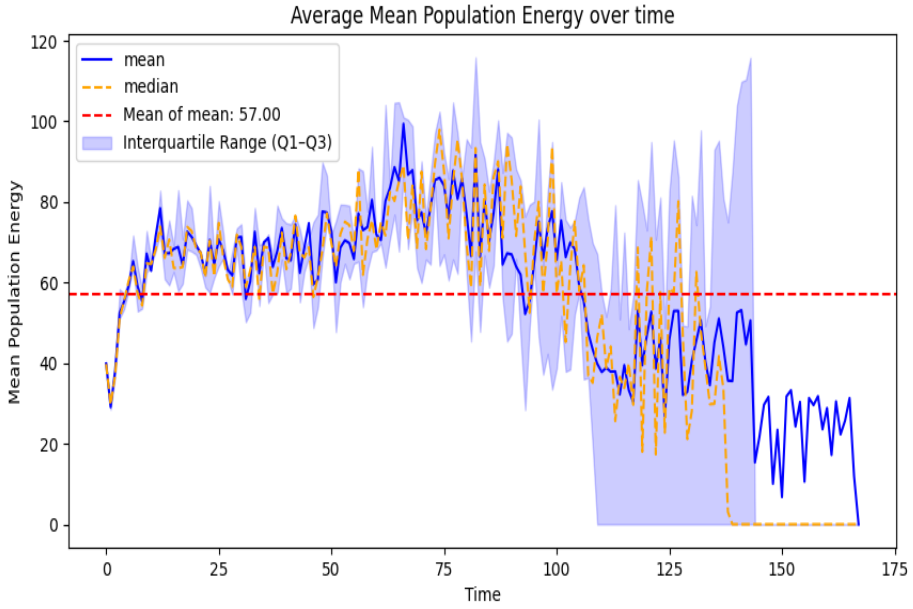
Mean : 1297.6
Variance : 78217.84



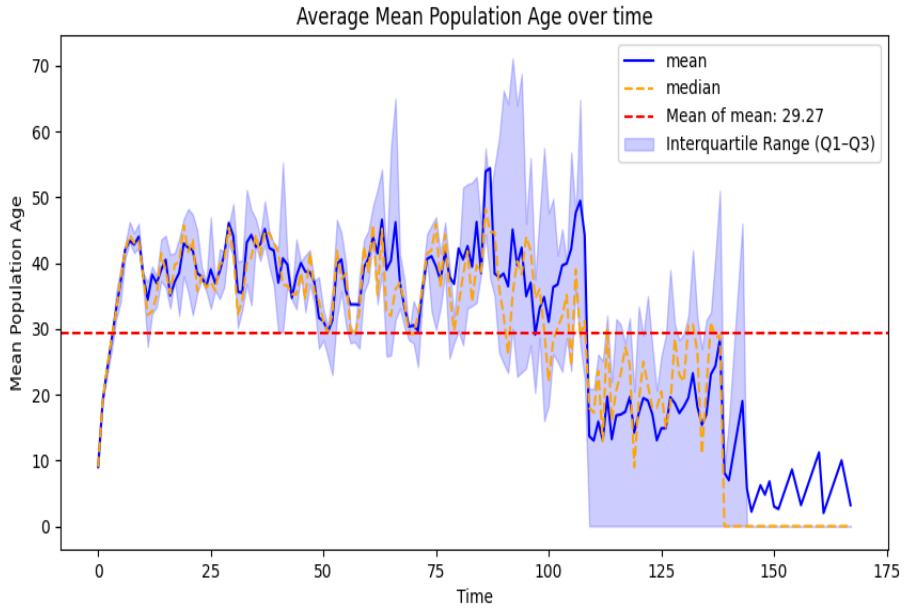
Mean : 6.417857142857143
Variance : 78.66134778911564



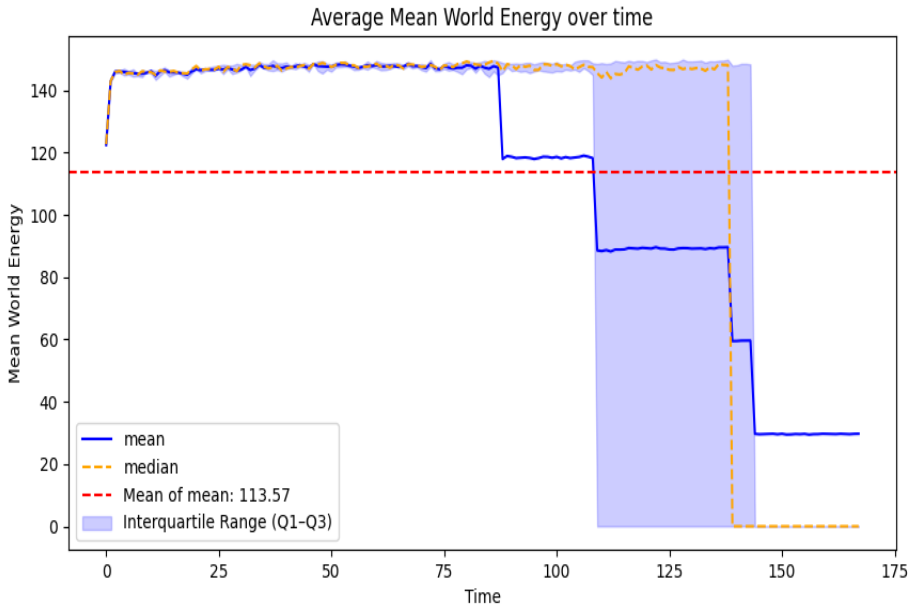
Mean : 77.11428571428571
Variance : 833.7745578231292



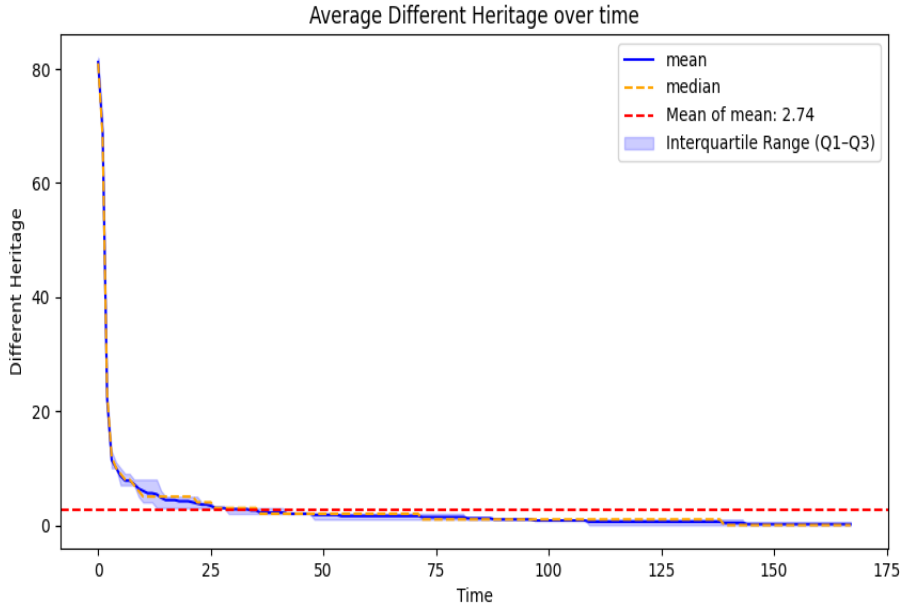
Mean : 57.00441205070425
Variance : 413.5751155215203



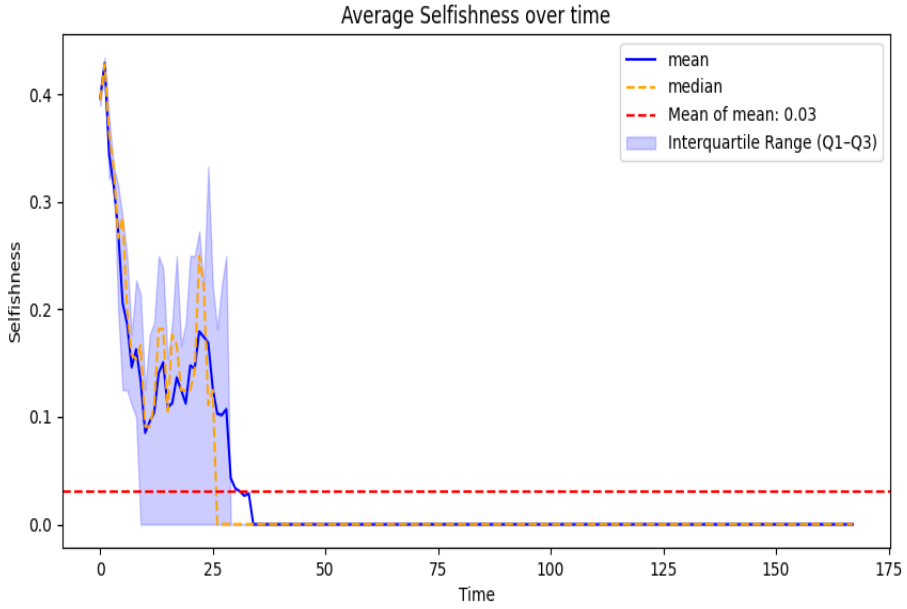
Mean : 29.2702572448595
Variance : 193.5272194578379



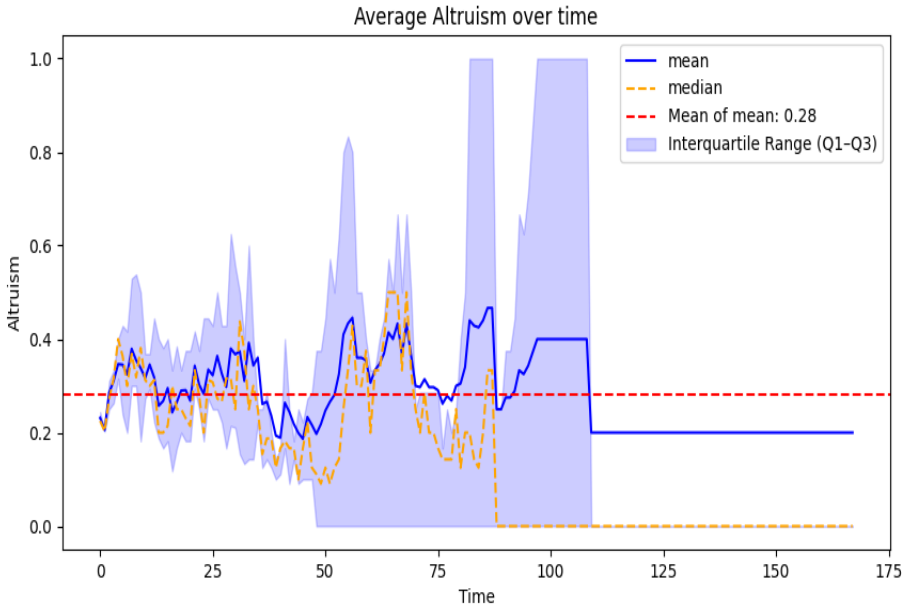
Mean : 113.5703297840225
Variance : 1783.682551052092



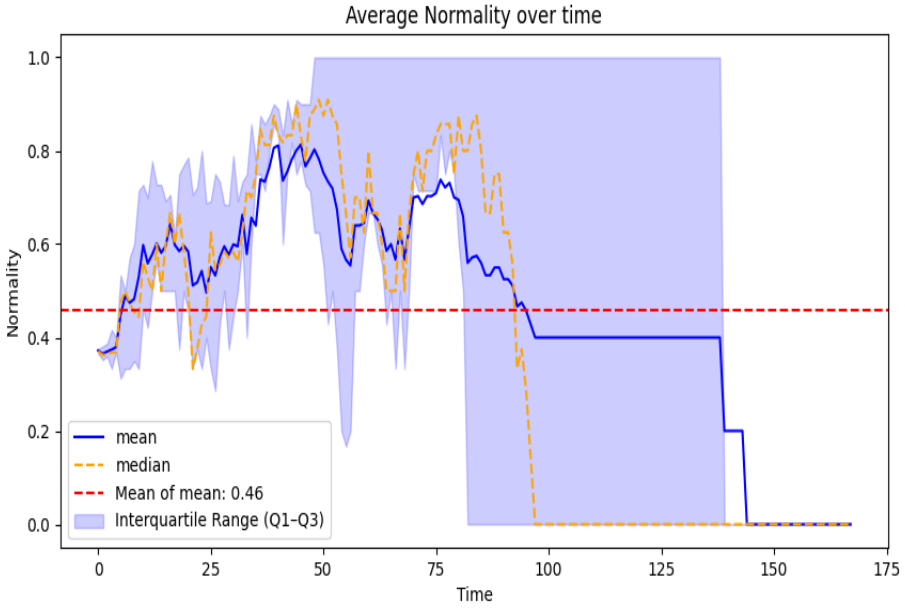
Mean : 2.7404761904761905
Variance : 69.36407596371882



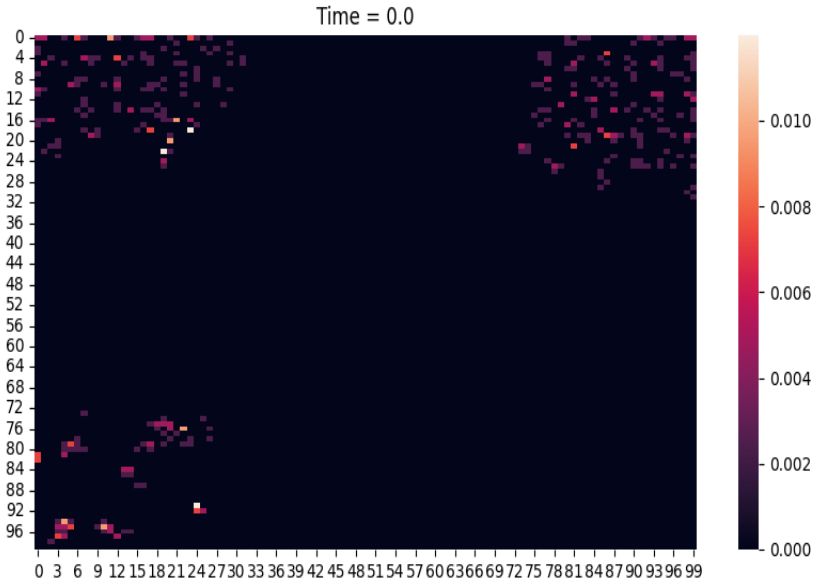
Mean : 0.030857136312165794
Variance : 0.005638978605106515

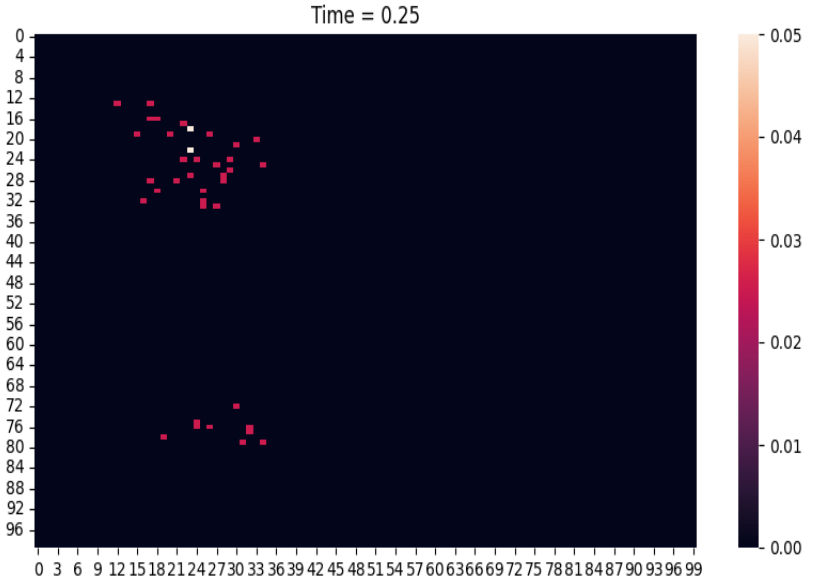


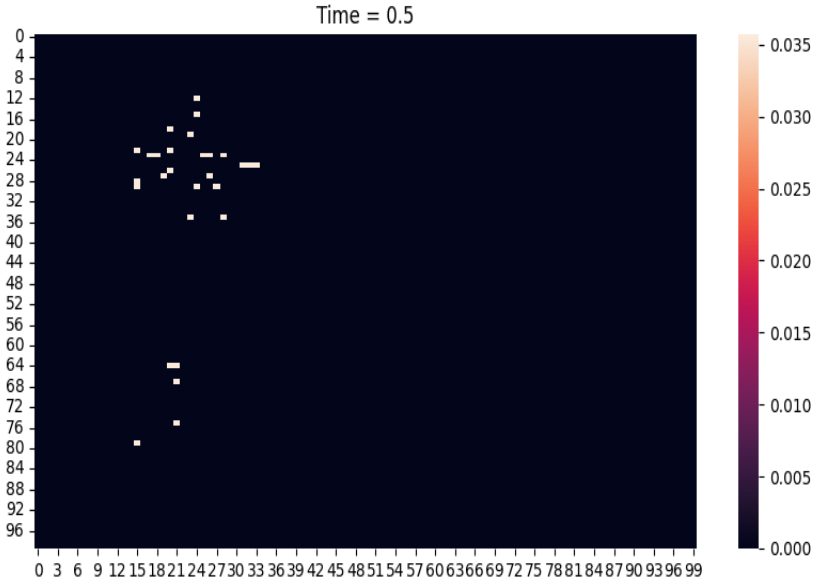
Mean : 0.28145378287692385
Variance : 0.006630420972156096

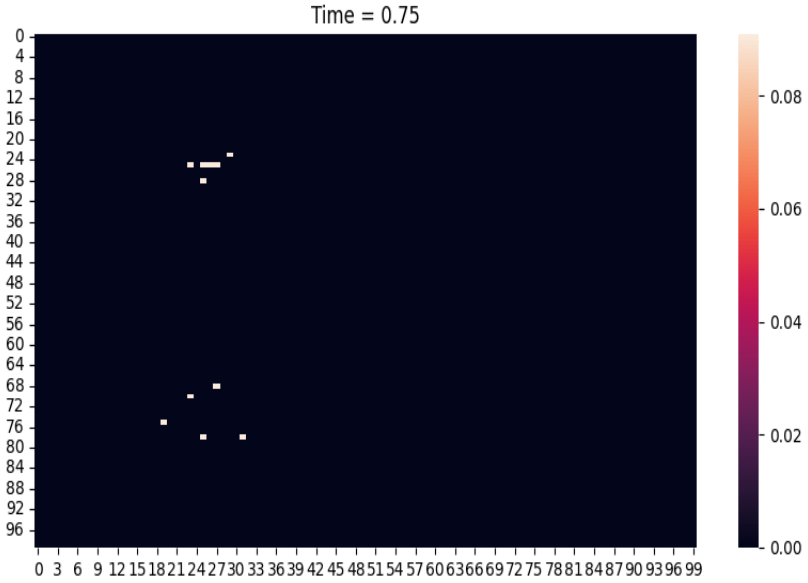


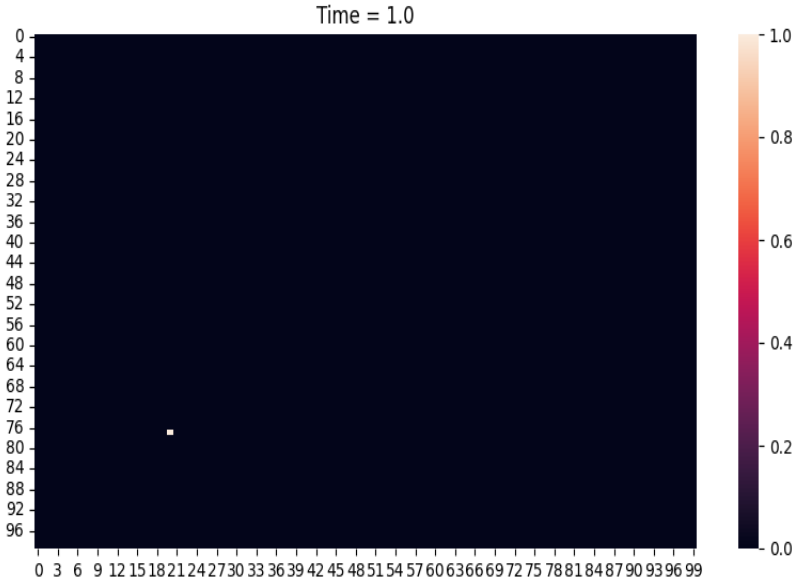
Mean : 0.45911765223948175
Variance : 0.053342154528841244
Spatial Distribution Density Heatmap




Time = 0.25
0 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96
0 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99
0.05
0.04
0.03
0.02
0.01
0.00


Time = 0.5
0 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96
0 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000





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Year : 2024/2025
This Project is done for the academic purpose of implementing the practical part of the Degree Thesis in Artificial Intelligence and Data Analytics.