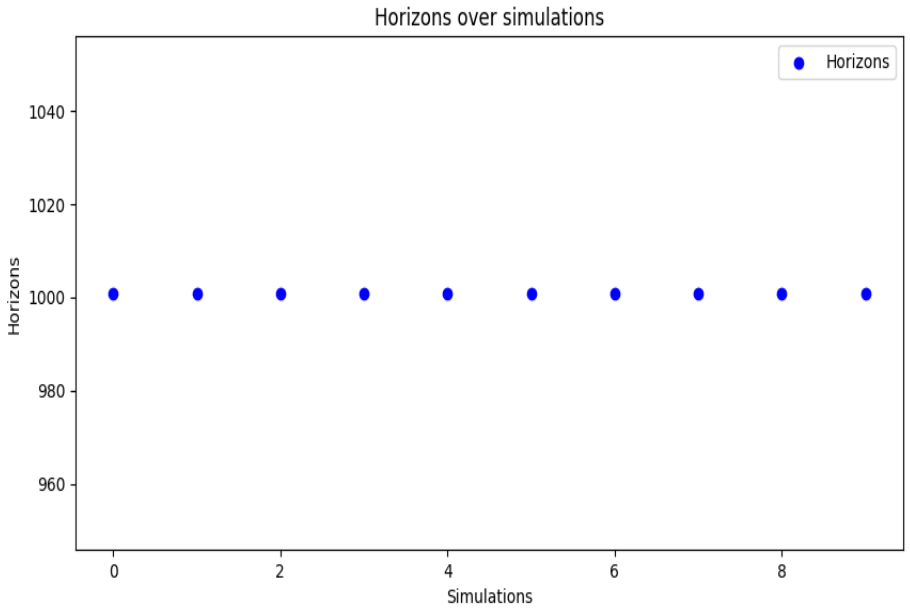
Test done 2025_04_13 at 19_09_36

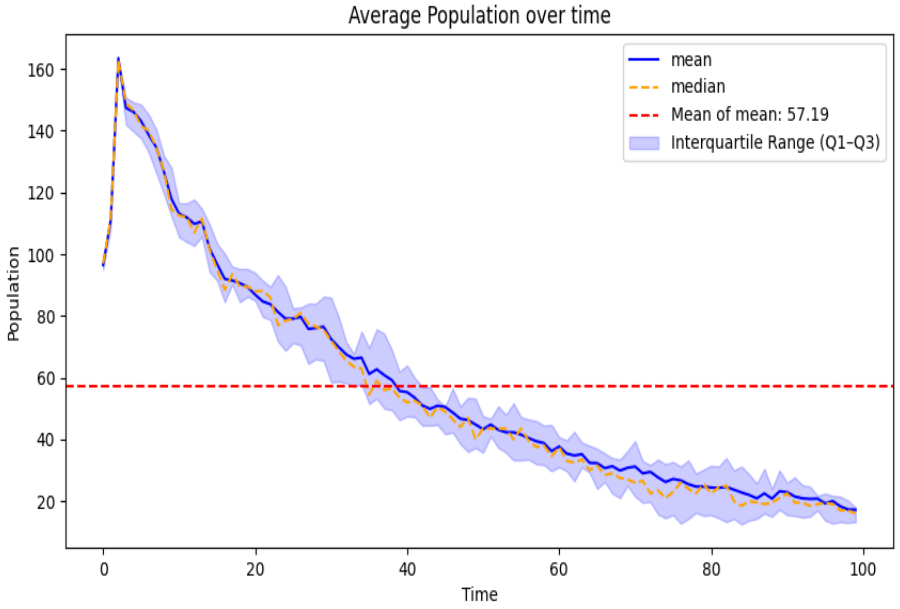
Number of simulation done : 10. The window time of the simulation is 10

Initial condition

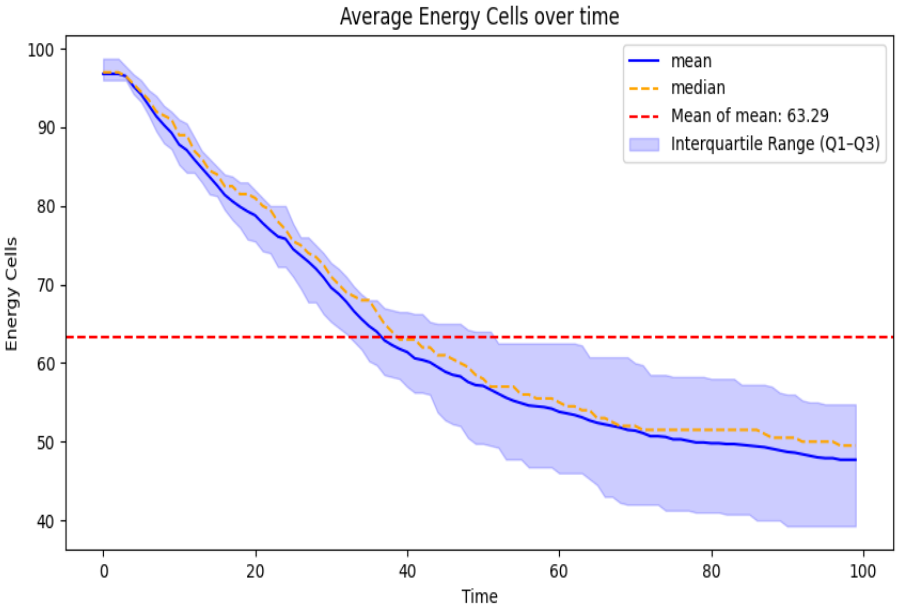
Size : 100
I_Energy : 100
I_Age : 100
I_Maturity : 18
I_Distr : Uniform
Radius : 4
Active : 100
C_Min : 10
C_Max : 120
C_Regen : 15
C_Distr : Uniform no regen
Height : 100
Width : 100
P_Distr : Uniform
Move : 1
Eat : 1
Rest : 0
Reproduce : 5
N_Simulations : 10
Seed : 50
Energy Needed : 0.6
Extra Energy : 0.2
Energy Requeste : 0.5
Mutation Rate : 0.1



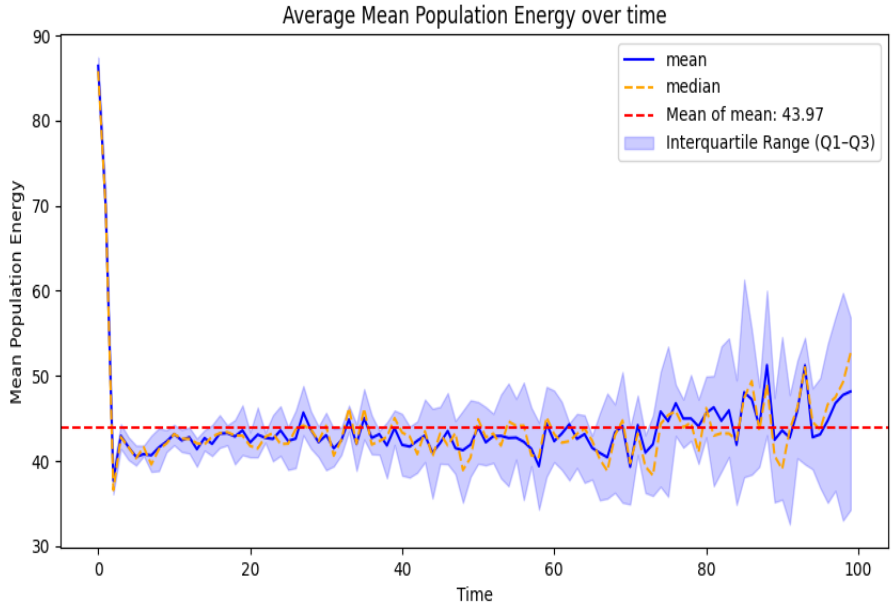
Mean : 1001.0
Variance : 0.0



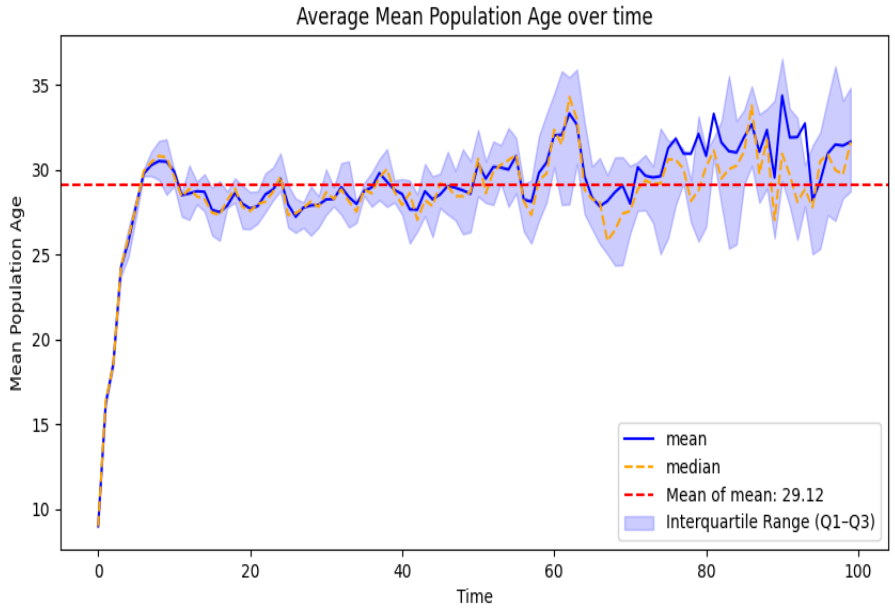
Mean : 57.18900000000001
Variance : 1302.3315790000001



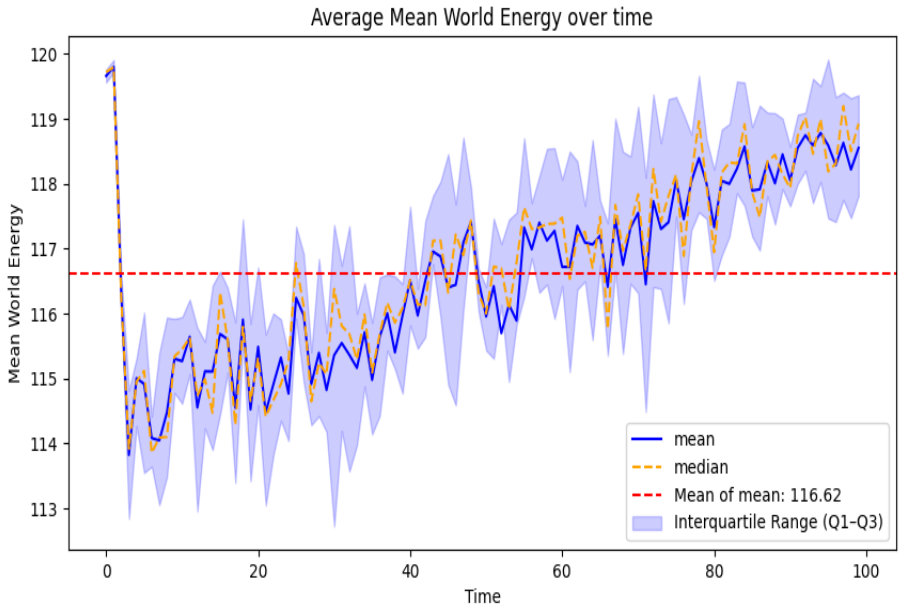
Mean : 63.29499999999999
Variance : 229.560275



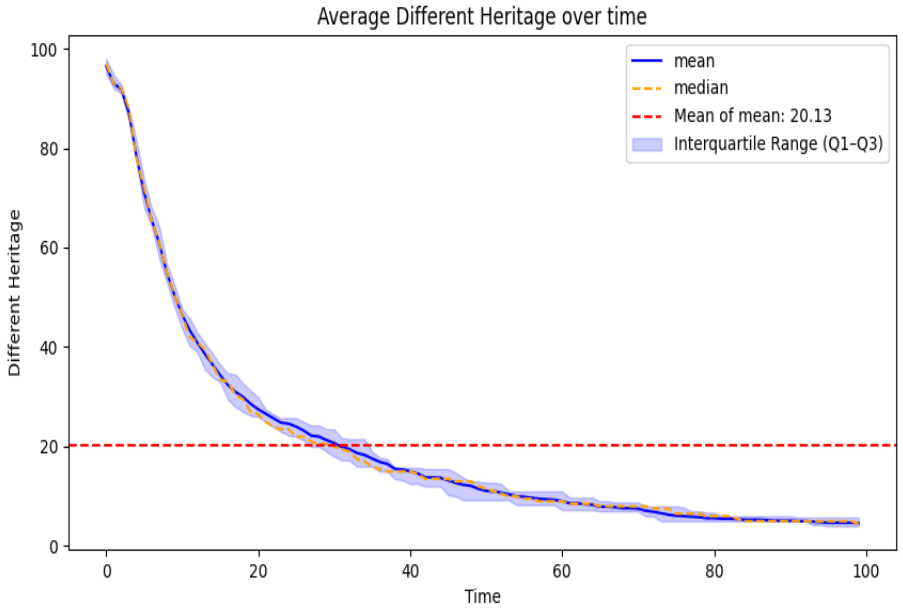
Mean : 43.970035830758526
Variance : 29.764192489034652



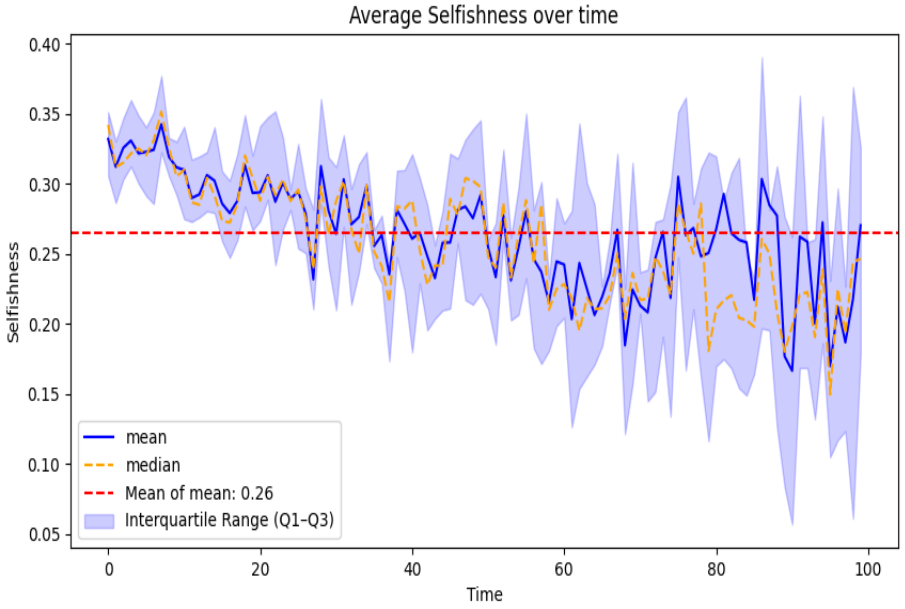
Mean : 29.118469060821283
Variance : 9.955684794692107



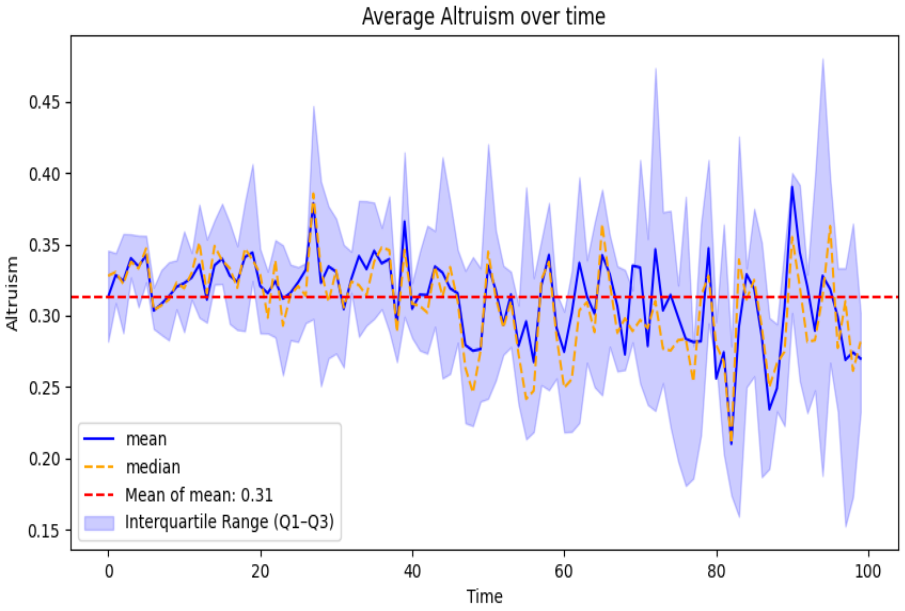
Mean : 116.61954806638096
Variance : 1.8951805073214762



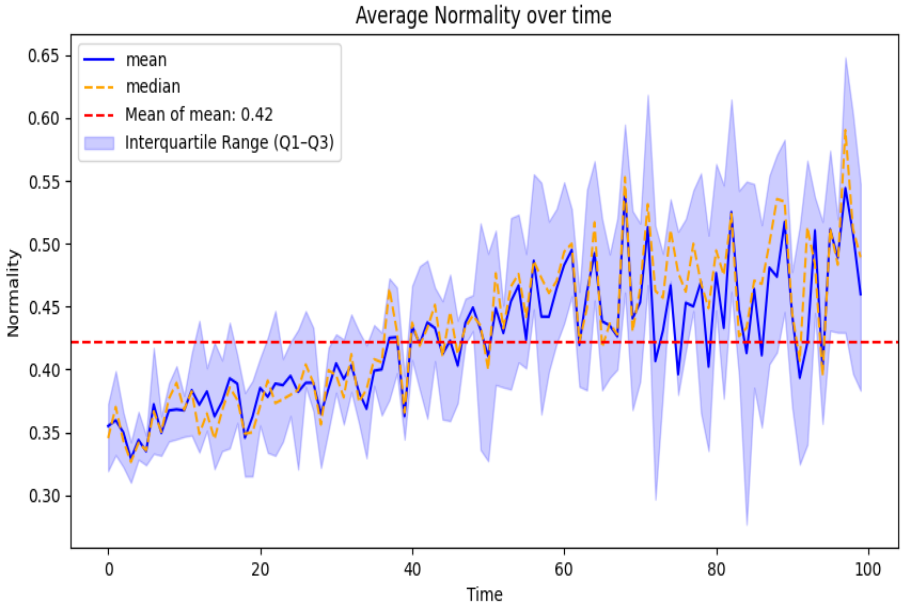
Mean : 20.133000000000003
Variance : 451.33821099999994



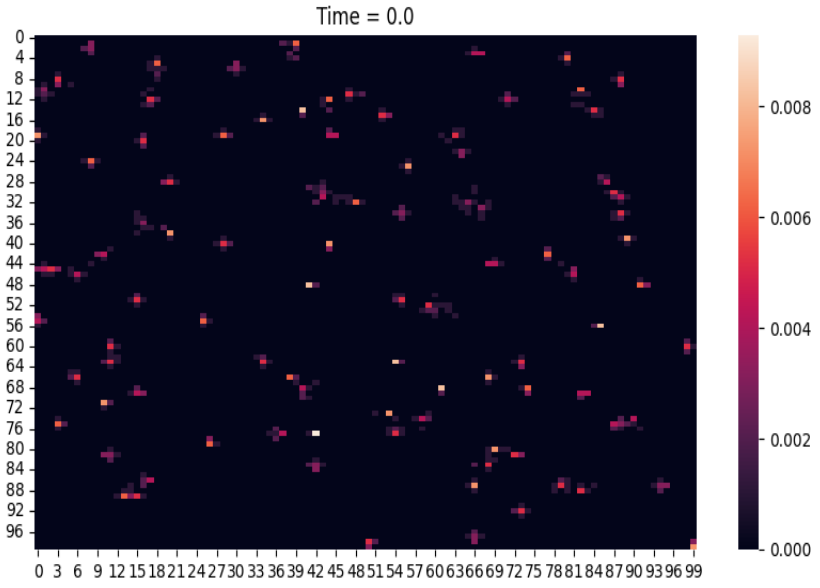
Mean : 0.2647733999222282
Variance : 0.0014846419520481075

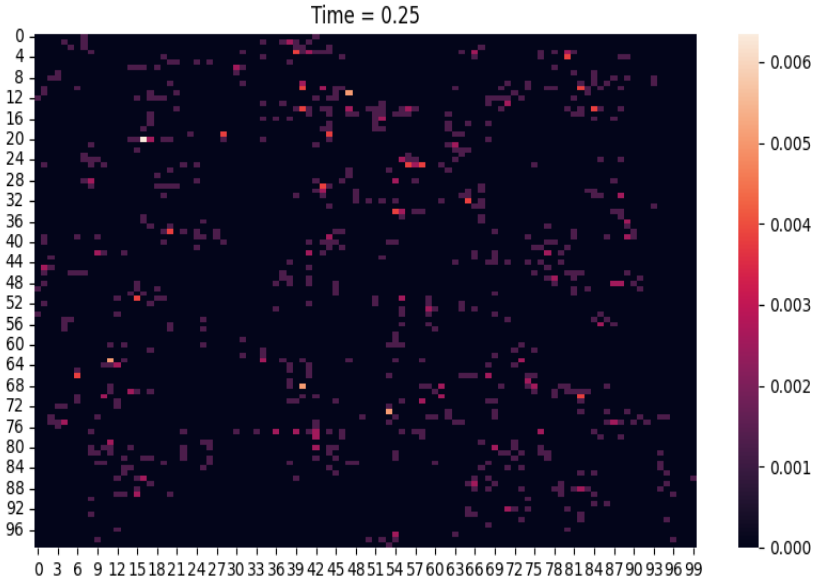


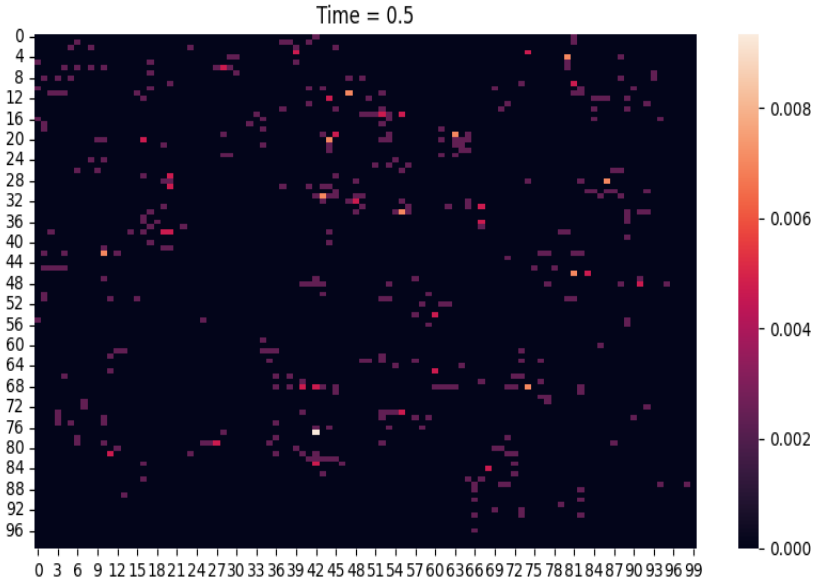
Mean : 0.3130557186358373
Variance : 0.0008319325212793532

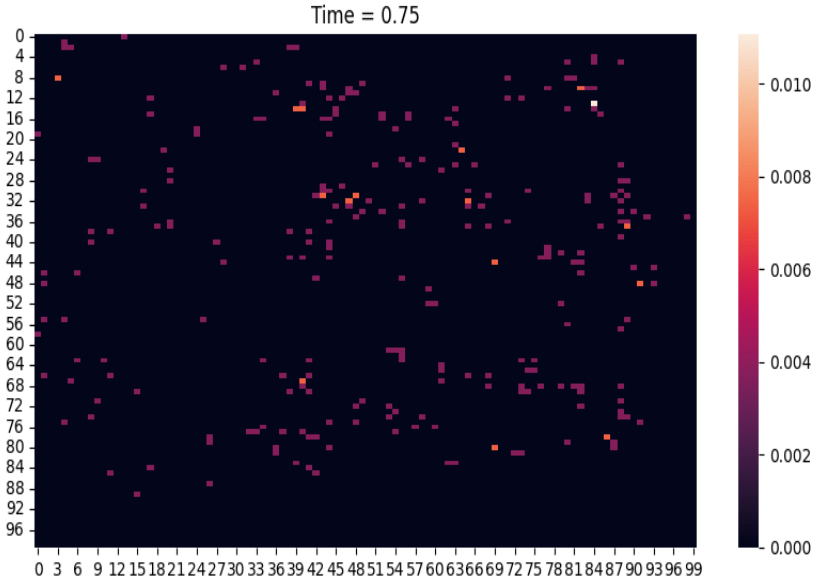


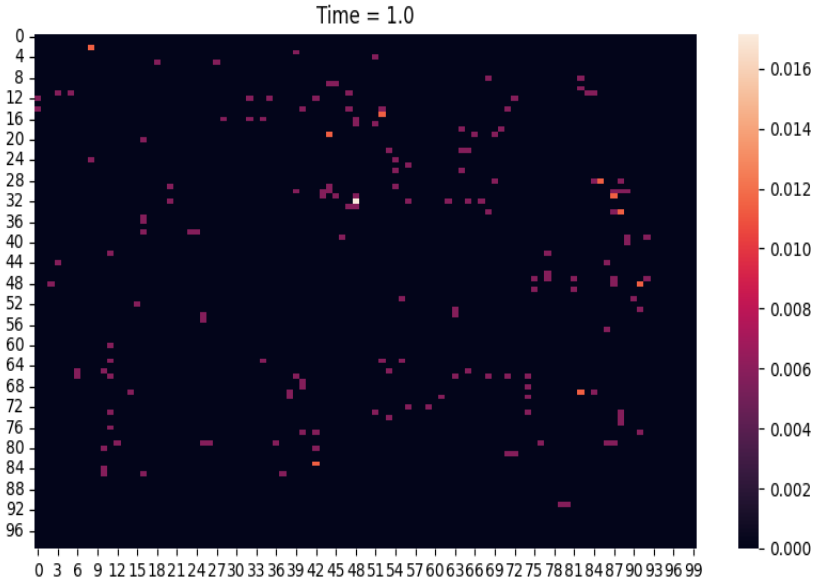
Mean : 0.4221708814419344
Variance : 0.002383177483392115
Spatial Distribution Density Heatmap




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
0.006
0.005
0.004
0.003
0.002
0.001
0.000


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
0.008
0.006
0.004
0.002
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.