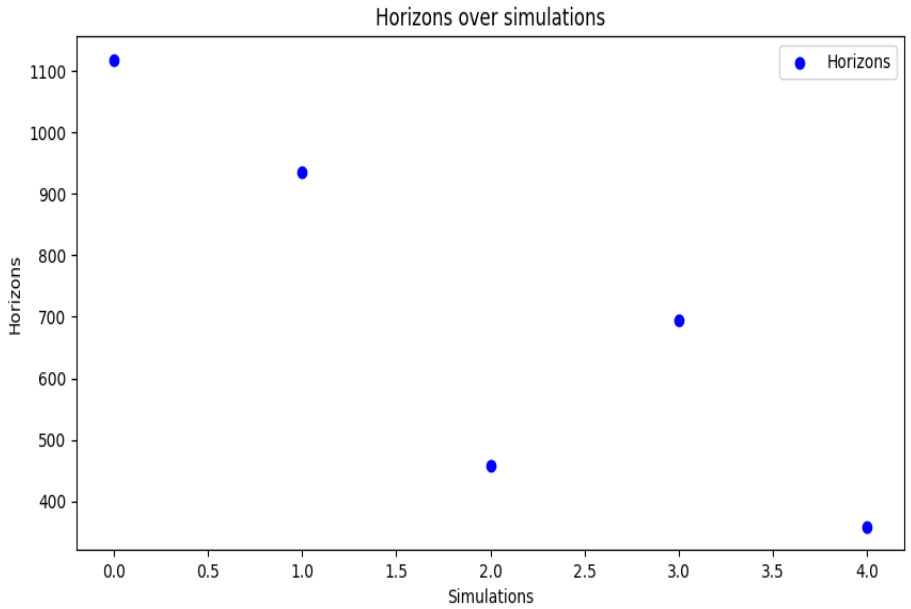
Test done 2025_06_26 at 16_43_31

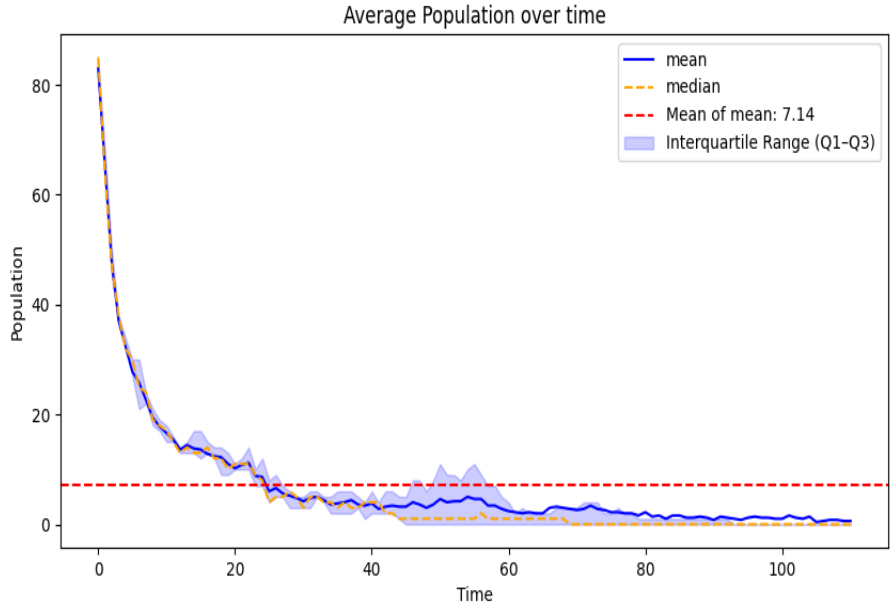
Number of simulation done : 5. The window time of the simulation is 10

Initial condition

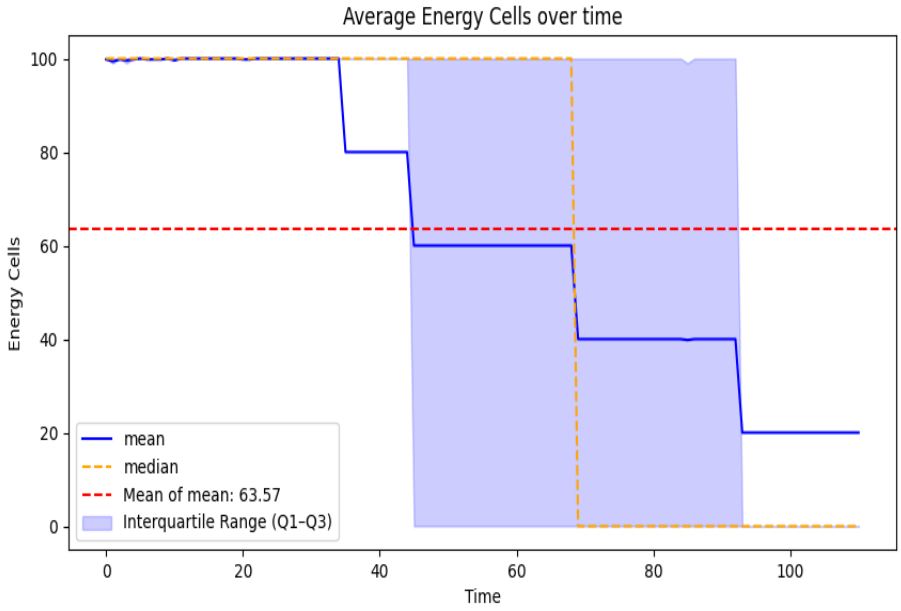
Size : 100
I_Energy : 120
I_Age : 100
I_Maturity : 20
I_Distr : First Quad
Radius : 4
Active : 100
C_Min : 15
C_Max : 150
C_Regen : 5
C_Distr : Uniform
Height : 100
Width : 100
P_Distr : Uniform
Move : 1
Eat : 2
Rest : 0
Reproduce : 5
N_Simulations : 5
Seed : 100
Energy Needed : 0.6
Extra Energy : 0.2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



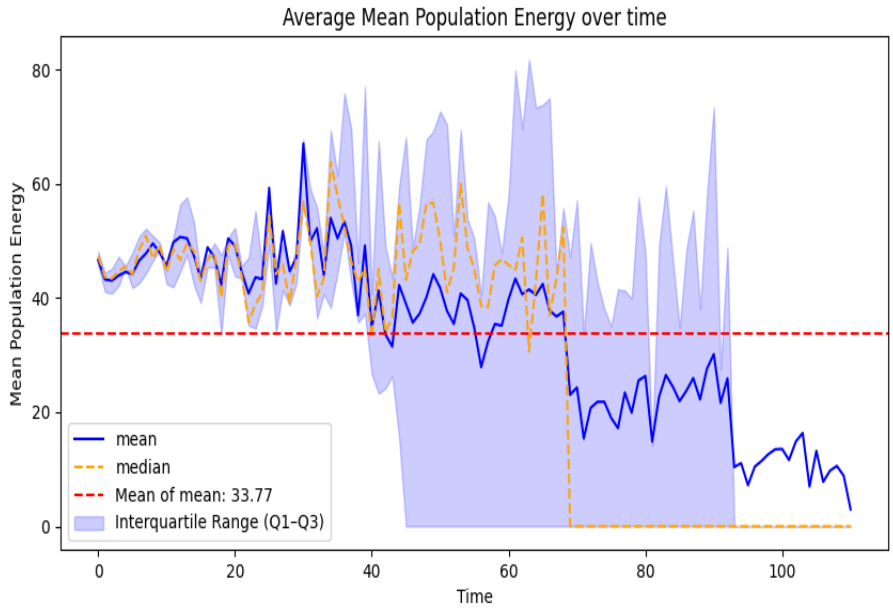
Mean : 713.2
Variance : 80956.95999999999



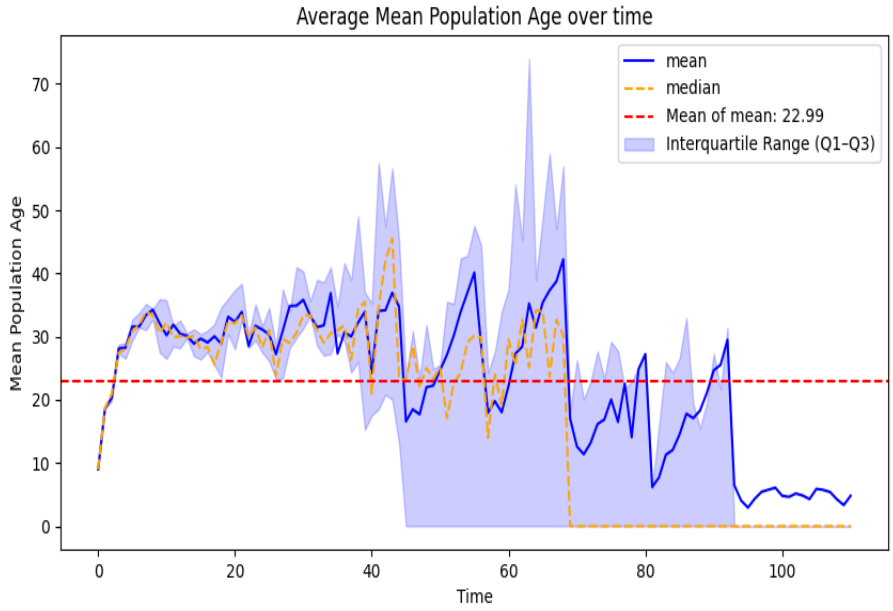
Mean : 7.136936936936936
Variance : 143.44791494196897



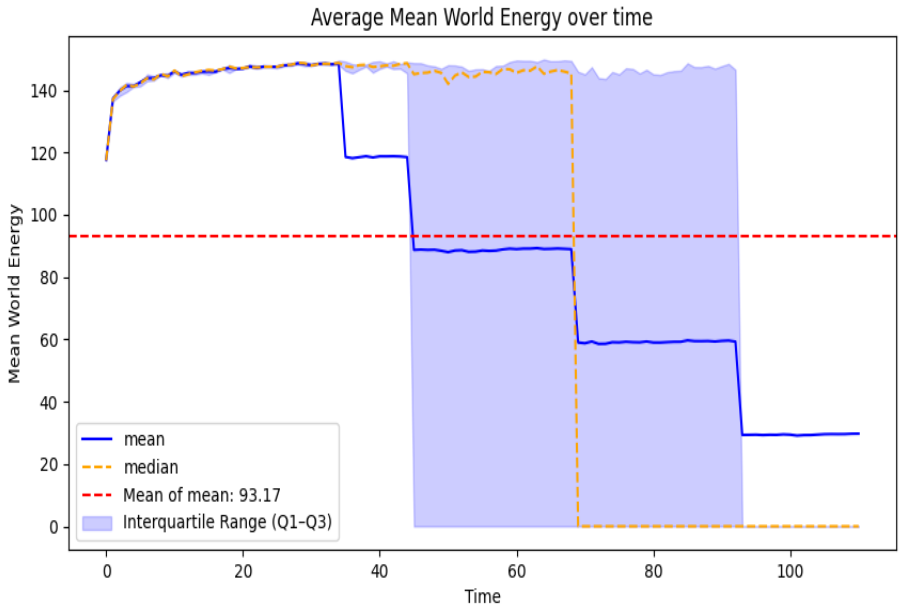
Mean : 63.57477477477477
Variance : 871.6267510754001



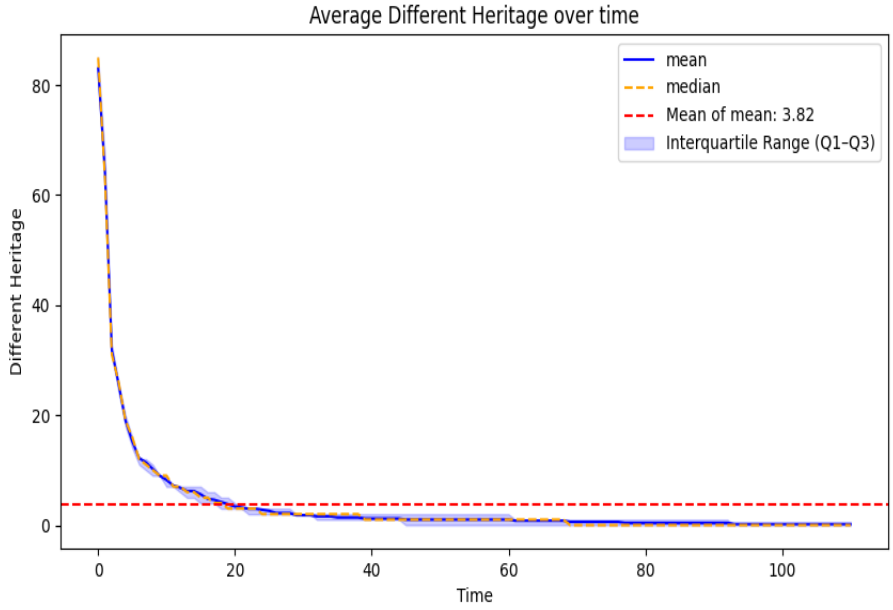
Mean : 33.77201761228173
Variance : 204.47337099136303



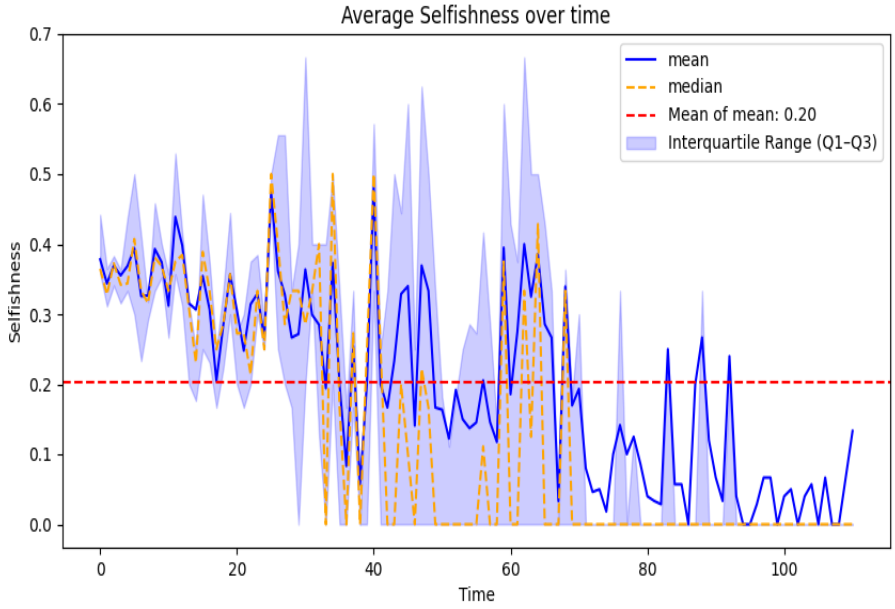
Mean : 22.988457148277472
Variance : 119.02412329555705



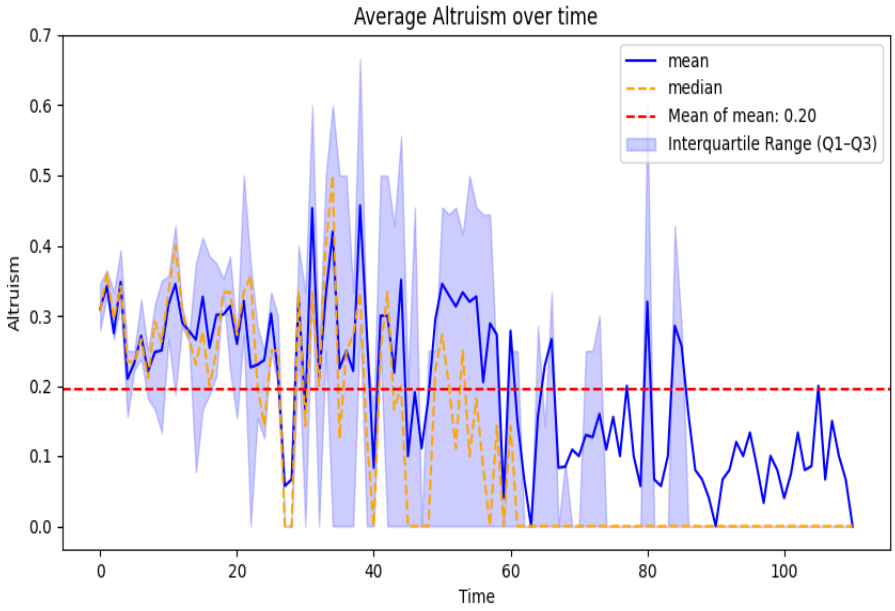
Mean : 93.1702696497003
Variance : 1828.3129688757626



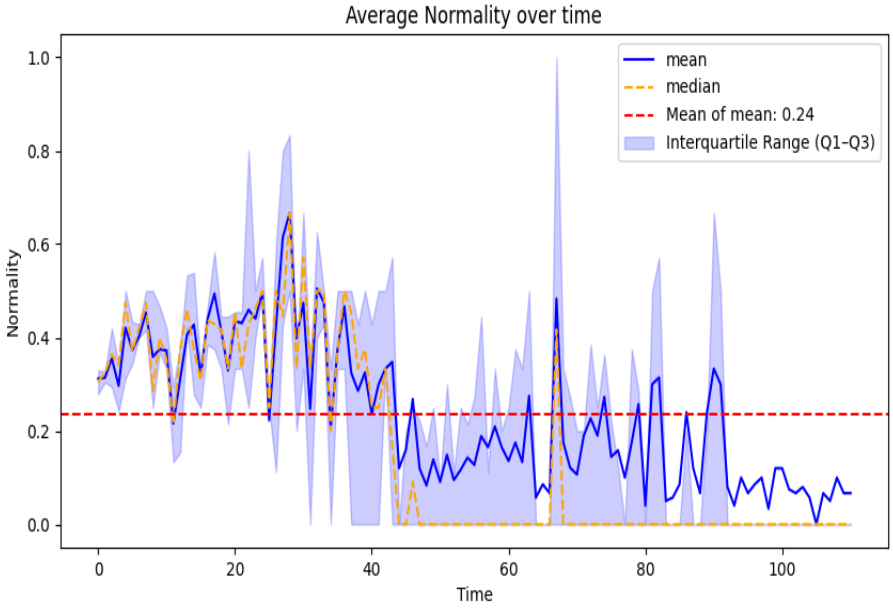
Mean : 3.818018018018017
Variance : 113.23715282850418



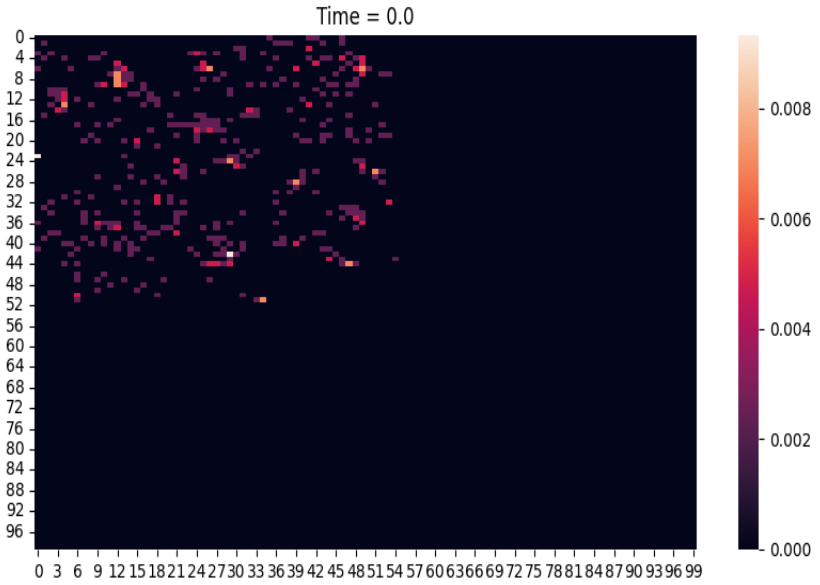
Mean : 0.20336362314859235
Variance : 0.01810684176595235

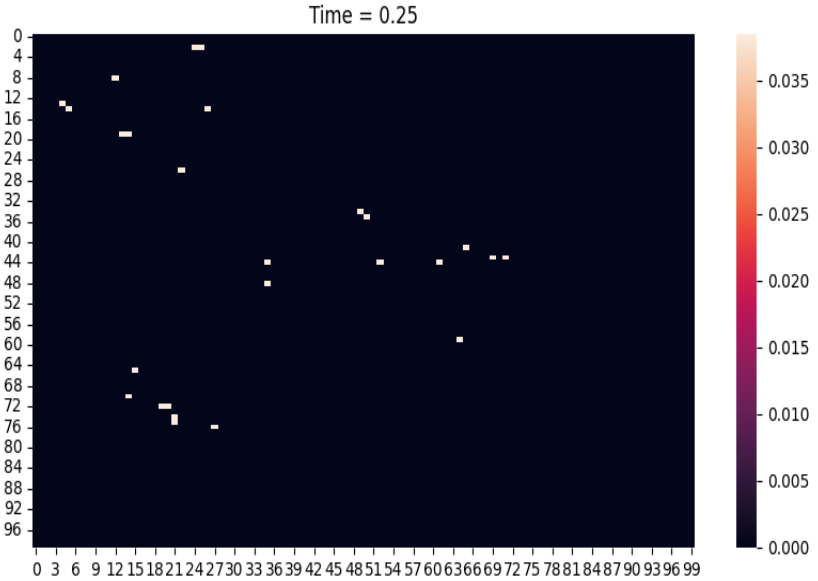


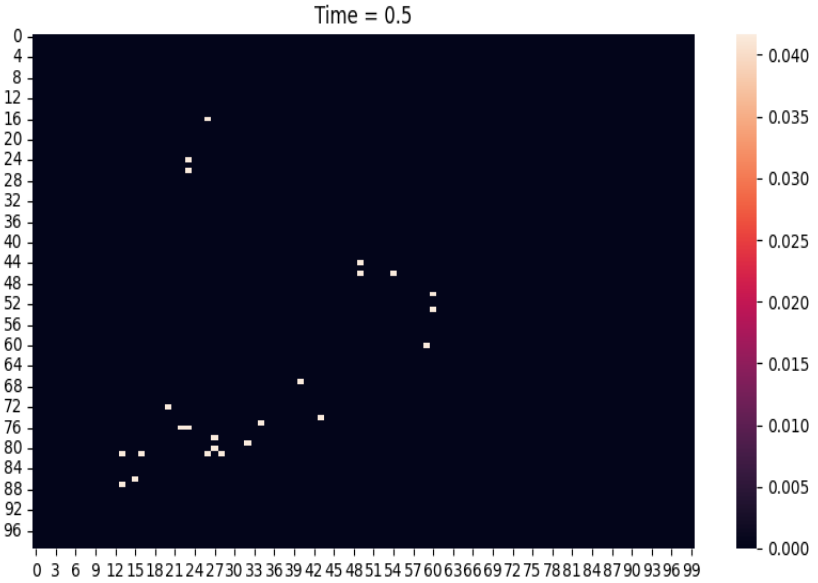
Mean : 0.19599575533620545
Variance : 0.011927250118808906

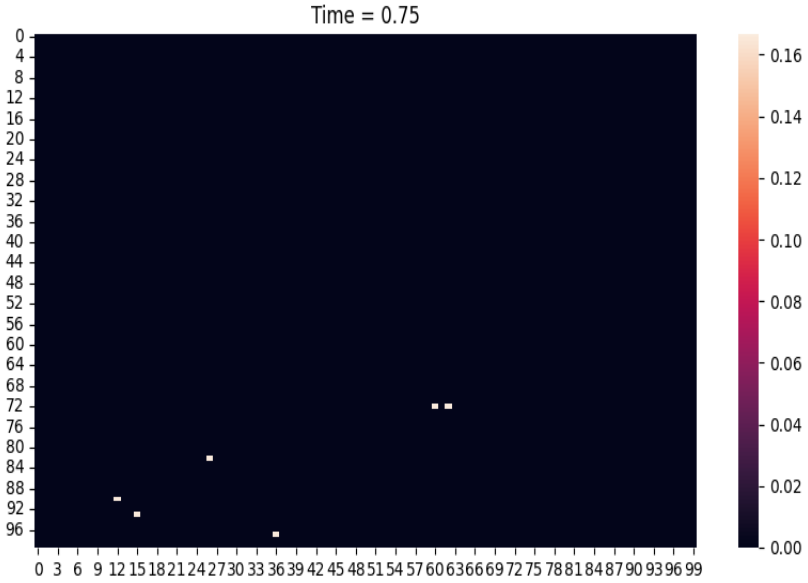


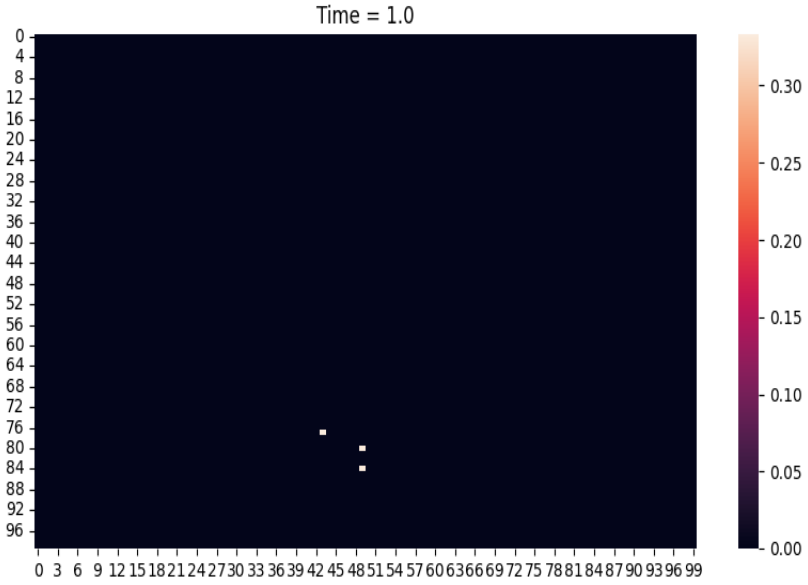
Mean : 0.23667665755123823
Variance : 0.02249545828614225
Spatial Distribution Density Heatmap




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
0.035 0.030 0.025 0.020 0.015 0.010 0.005 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
0.040 0.035 0.030 0.025 0.020 0.015 0.010 0.005 0.000





Author : Francesco Bredariol
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.