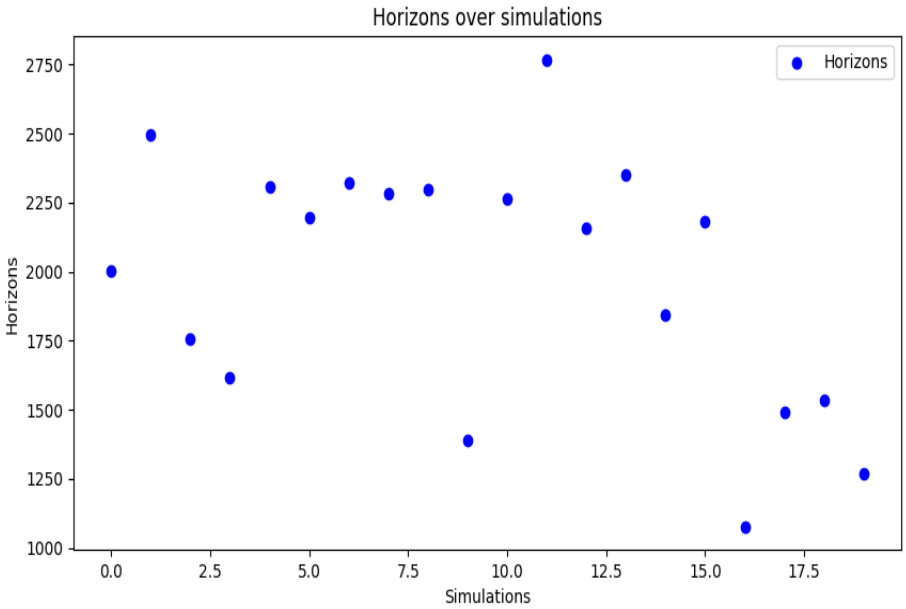
Test done 2025_04_22 at 18_47_25

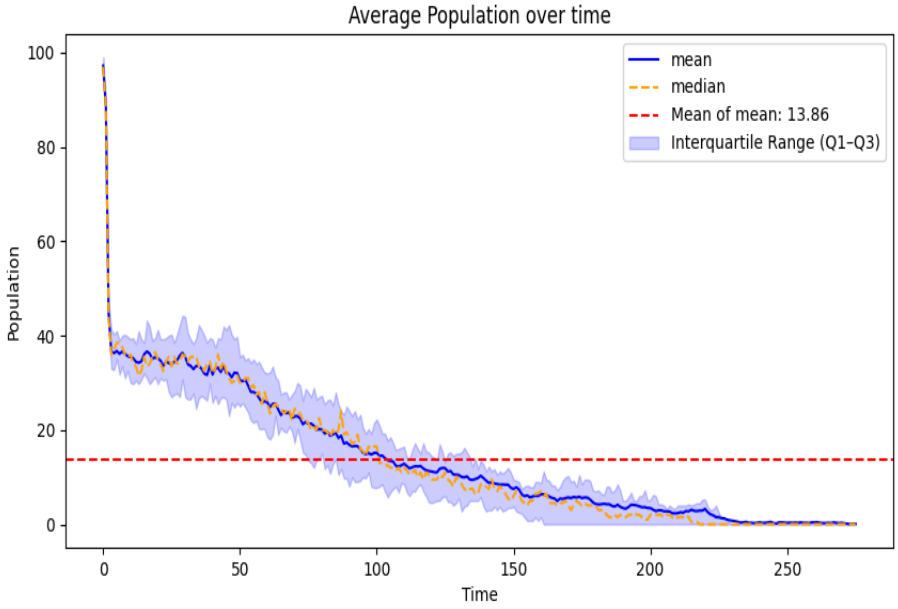
Number of simulation done : 20. The window time of the simulation is 10

Initial condition

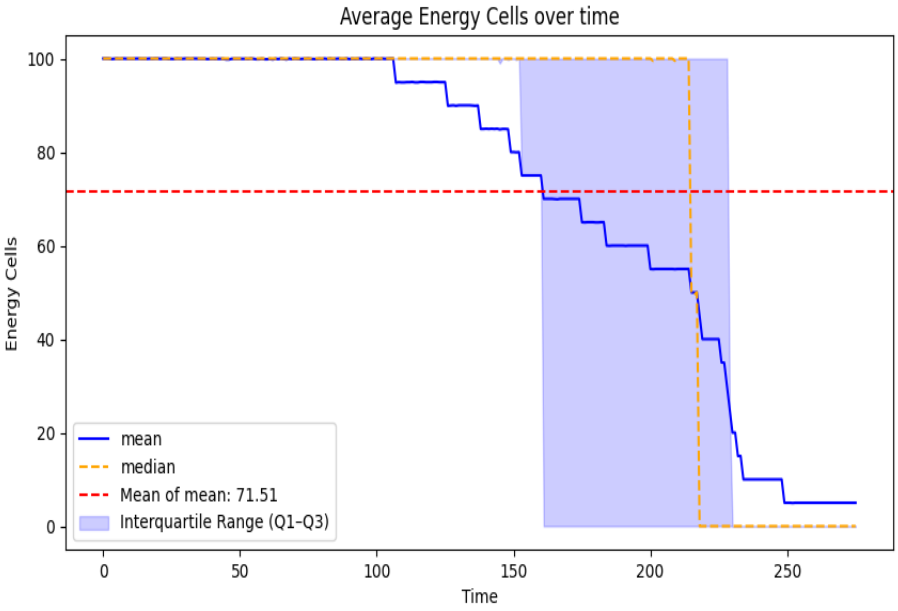
Size : 100
I_Energy : 100
I_Age : 100
I_Maturity : 18
I_Distr : Uniform
Radius : 4
Active : 100
C_Min : 10
C_Max : 120
C_Regen : 15
C_Distr : 4 Islands
Height : 100
Width : 100
P_Distr : Uniform
Move : 1
Eat : 1
Rest : 0
Reproduce : 15
N_Simulations : 20
Seed : 89
Energy Needed : 0.6
Extra Energy : 0.2
Energy Requeste : 0.5
Mutation Rate : 0.1



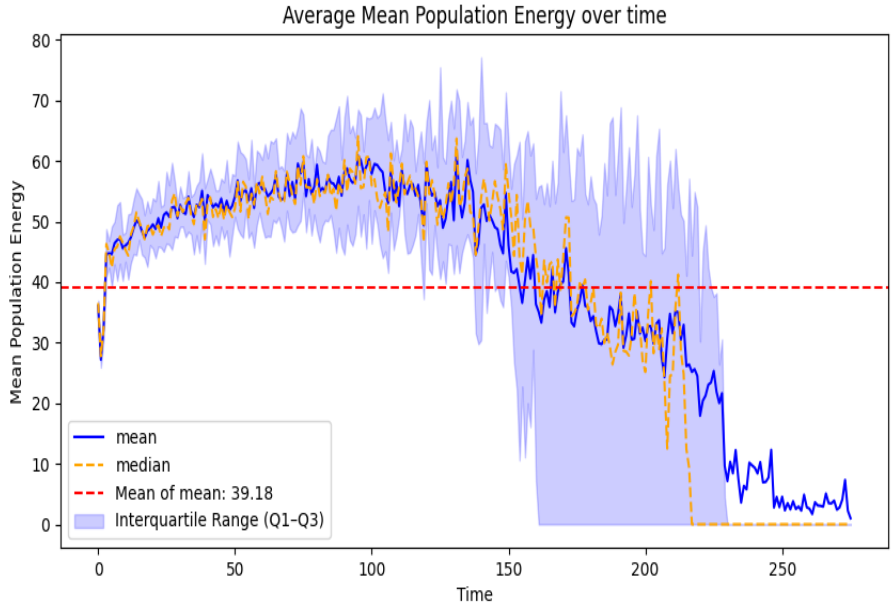
Mean : 1980.05
Variance : 197364.54749999996



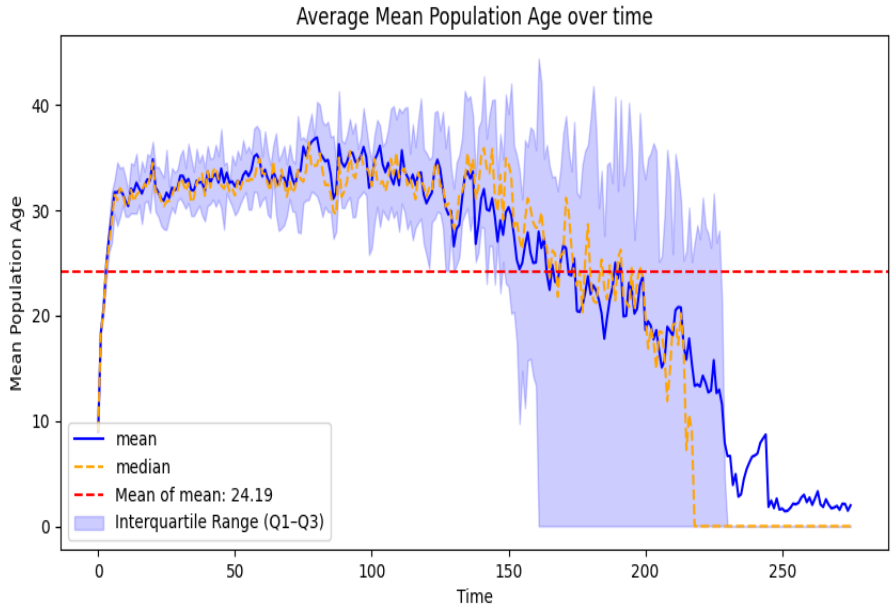
Mean : 13.858514492753622
Variance : 196.08611409761608



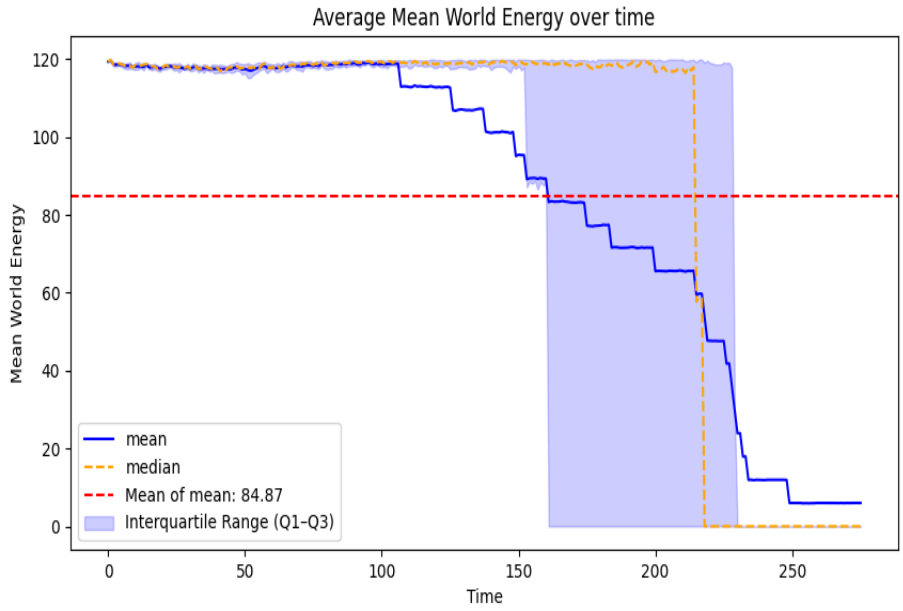
Mean : 71.50815217391305
Variance : 1135.9350150638



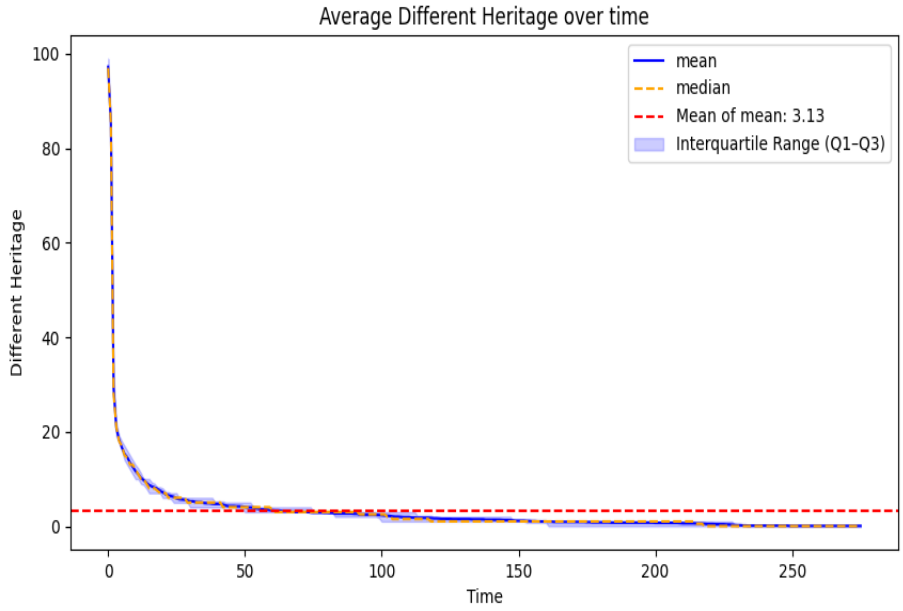
Mean : 39.18356515196215
Variance : 336.81433609194767



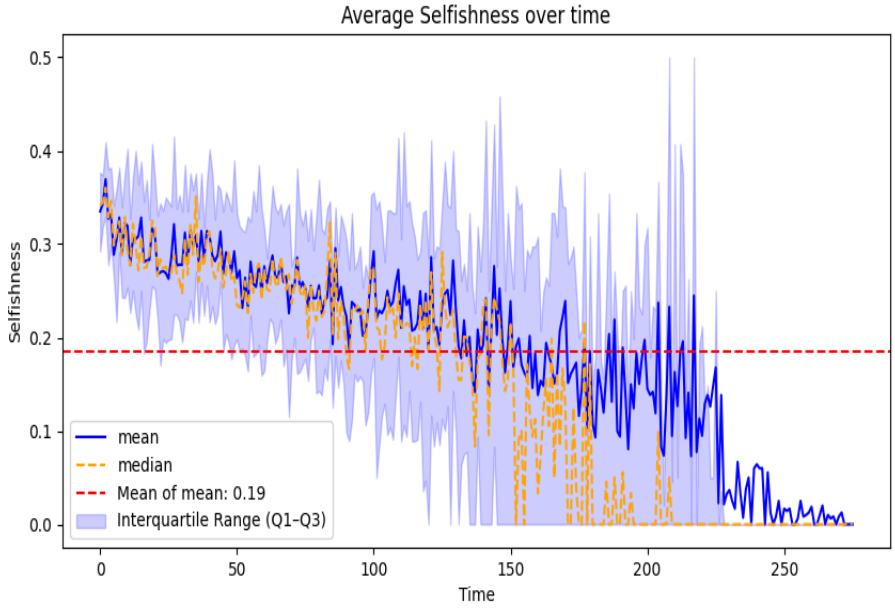
Mean : 24.185315732734423
Variance : 124.70960993835733



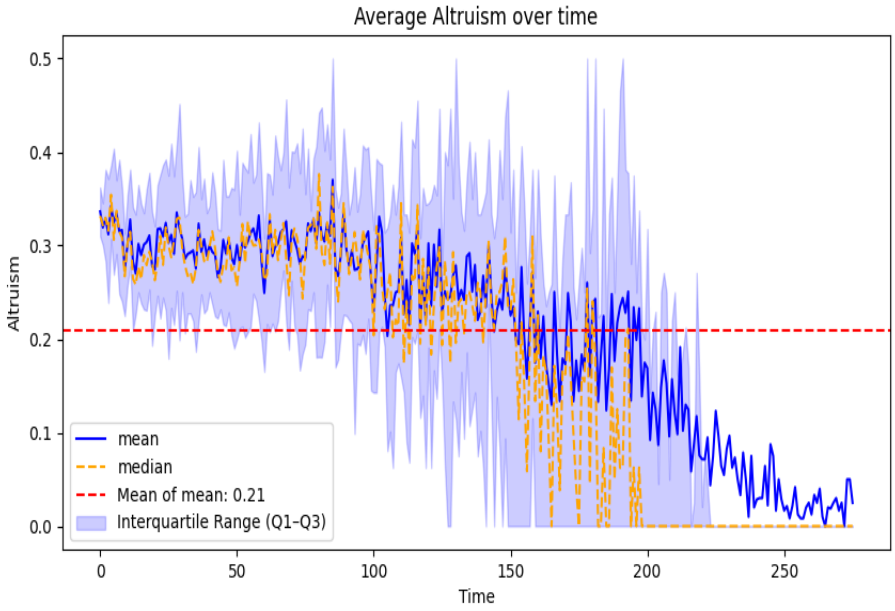
Mean : 84.87215679387728
Variance : 1588.6529451385566



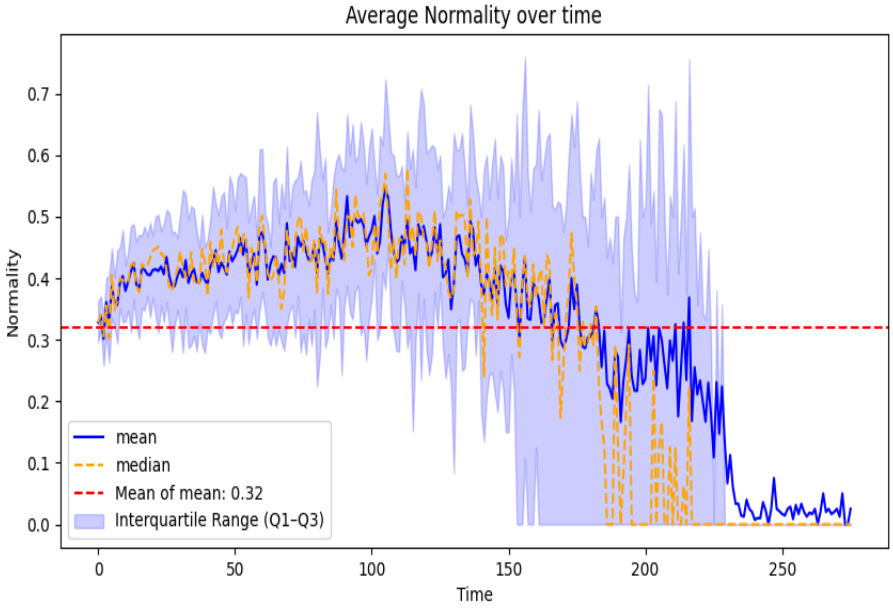
Mean : 3.134239130434783
Variance : 68.99744181238185



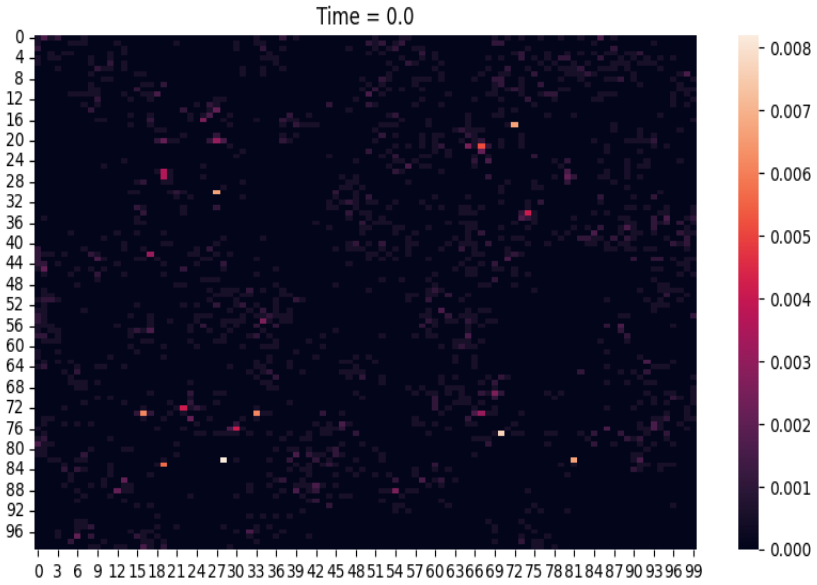
Mean : 0.18553110920189805
Variance : 0.009511418860602416

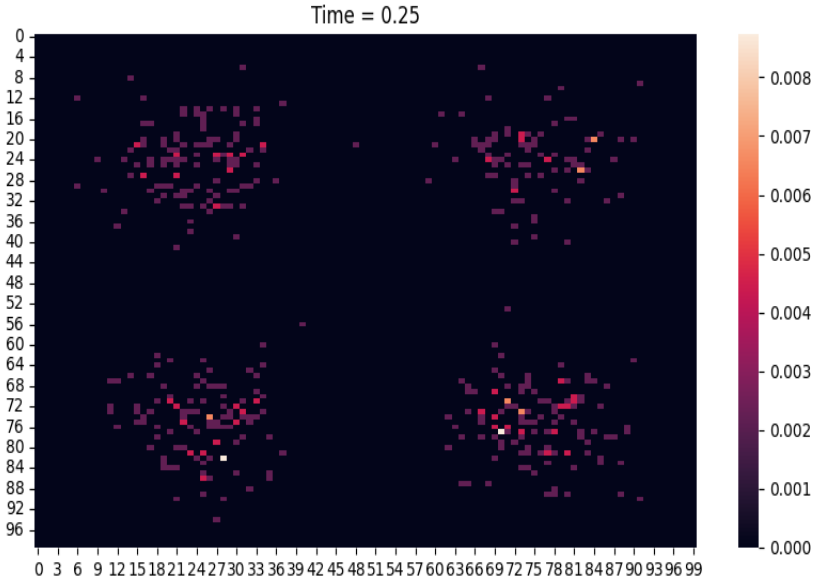


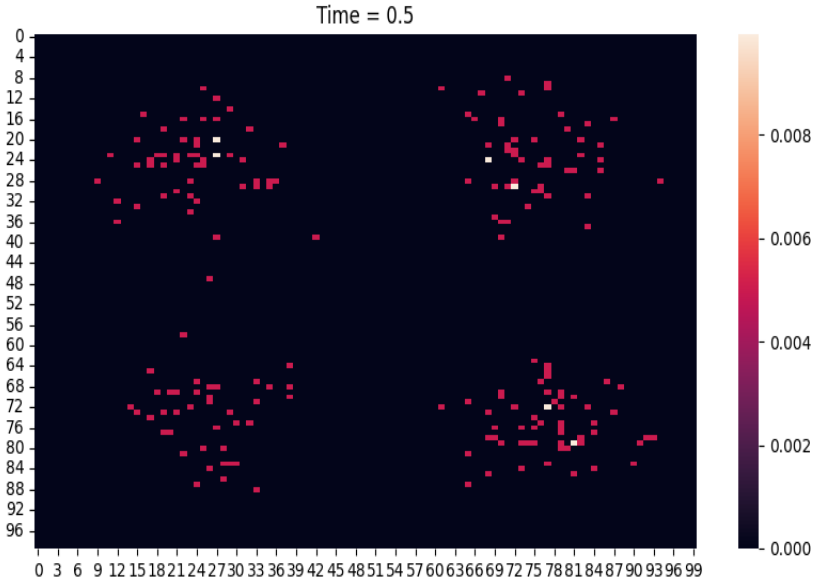
Mean : 0.2094228368698776
Variance : 0.01076495418590367

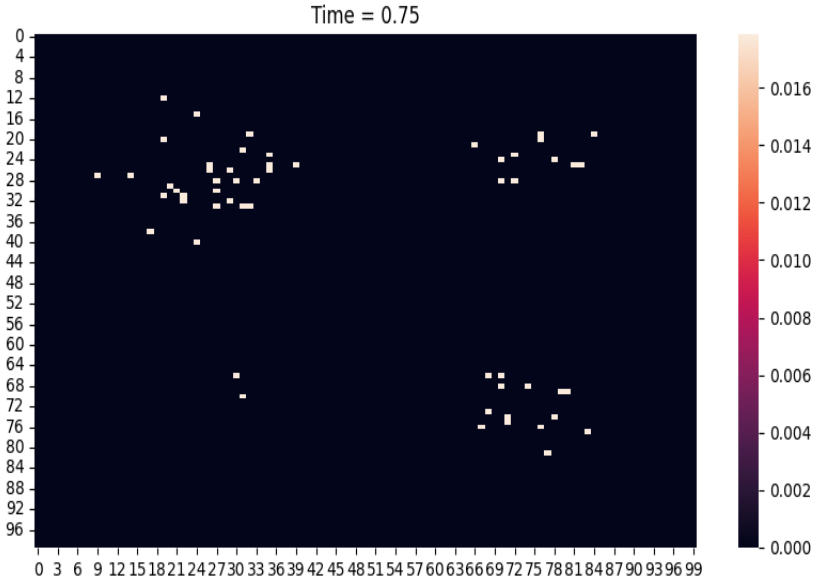


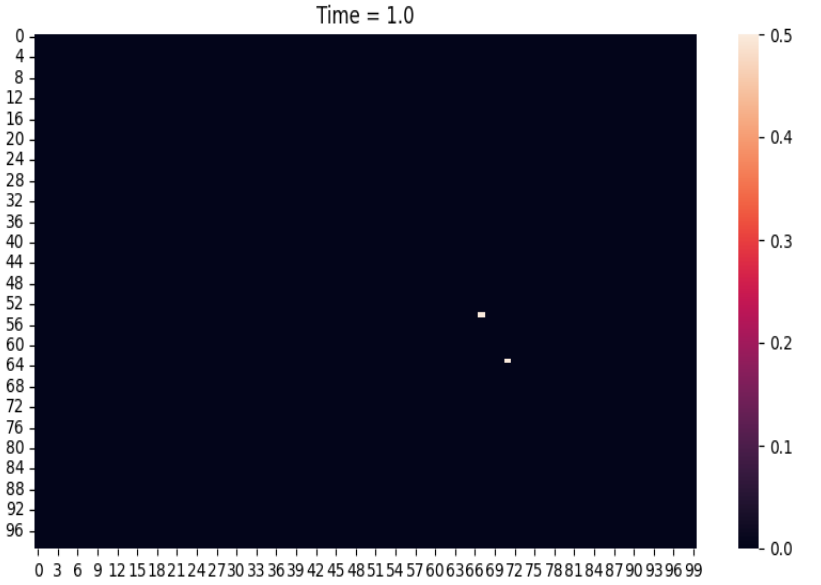
Mean : 0.320444604652862
Variance : 0.02375381489777343
Spatial Distribution Density Heatmap




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
0.008
0.007
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.