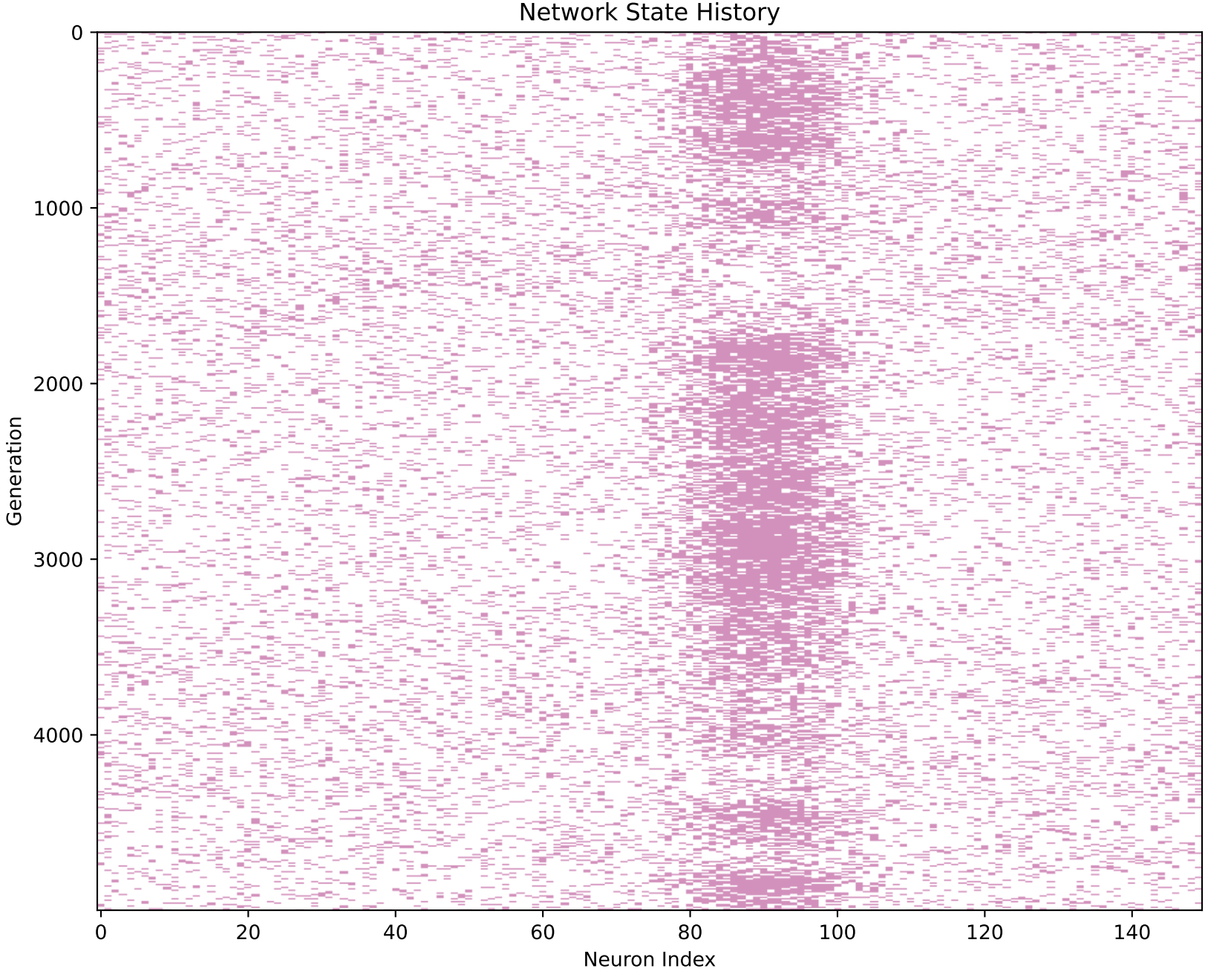
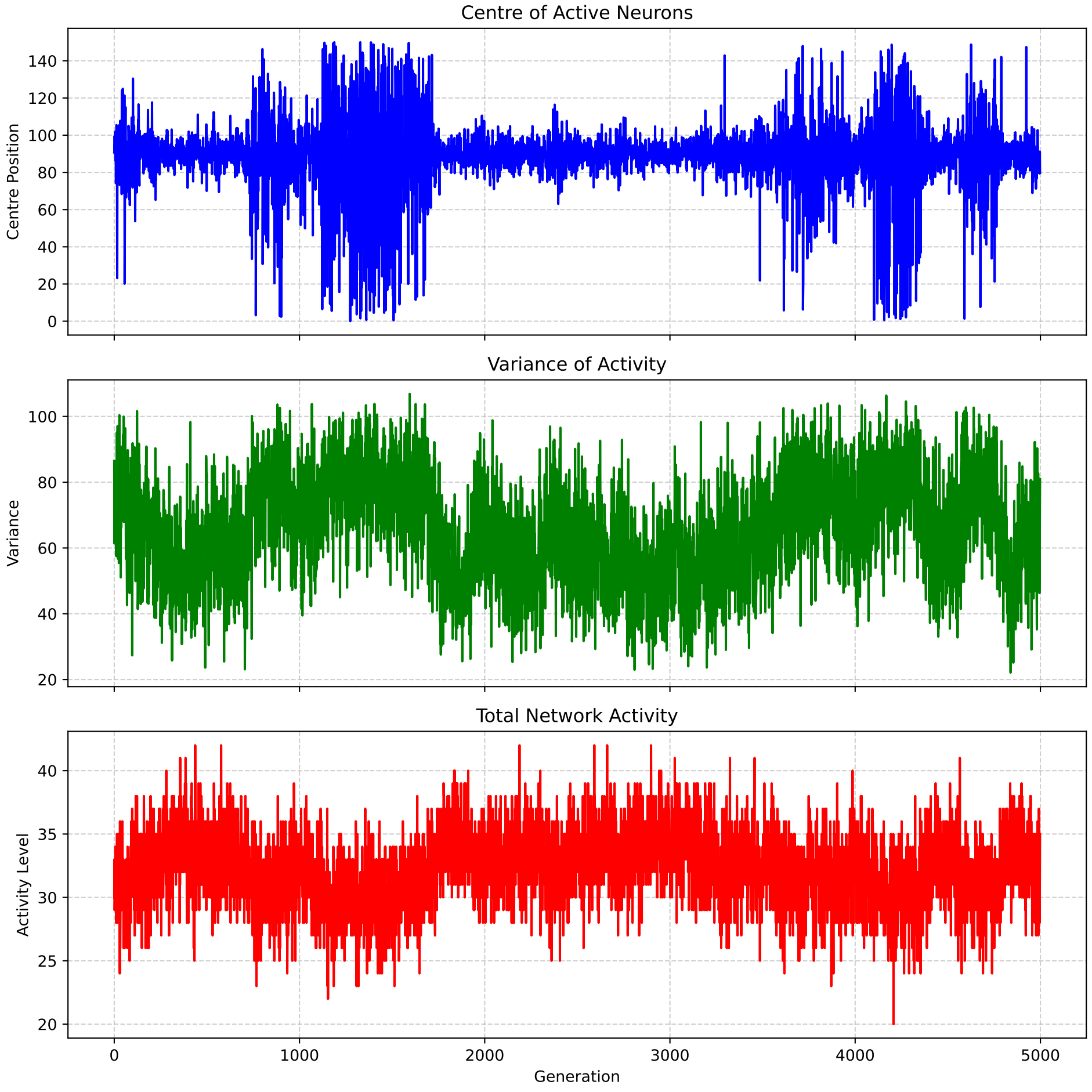
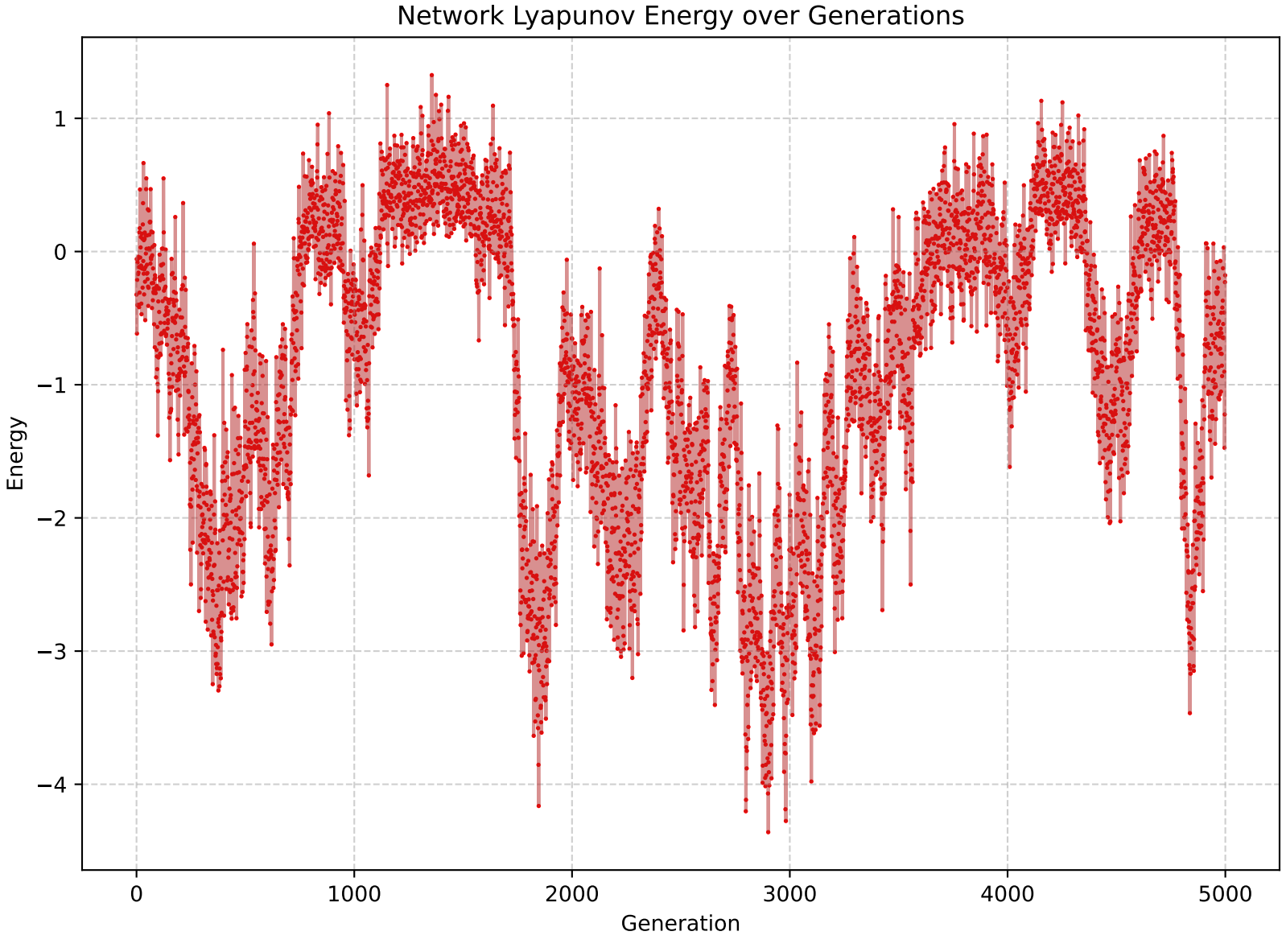
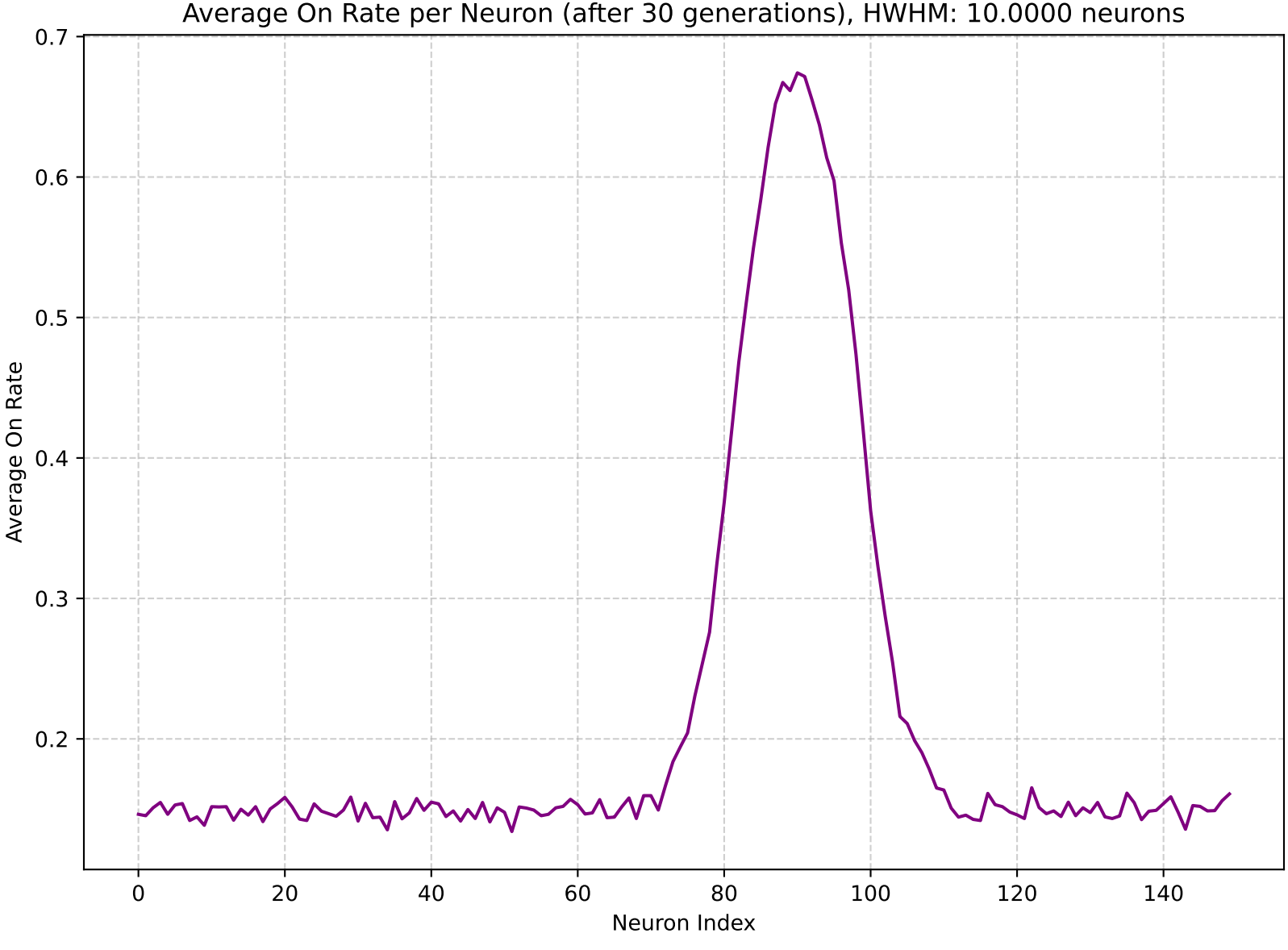

Network State History
Generation
Neuron Index
0
1000
2000
3000
4000
0
20
40
60
80
100
120
140

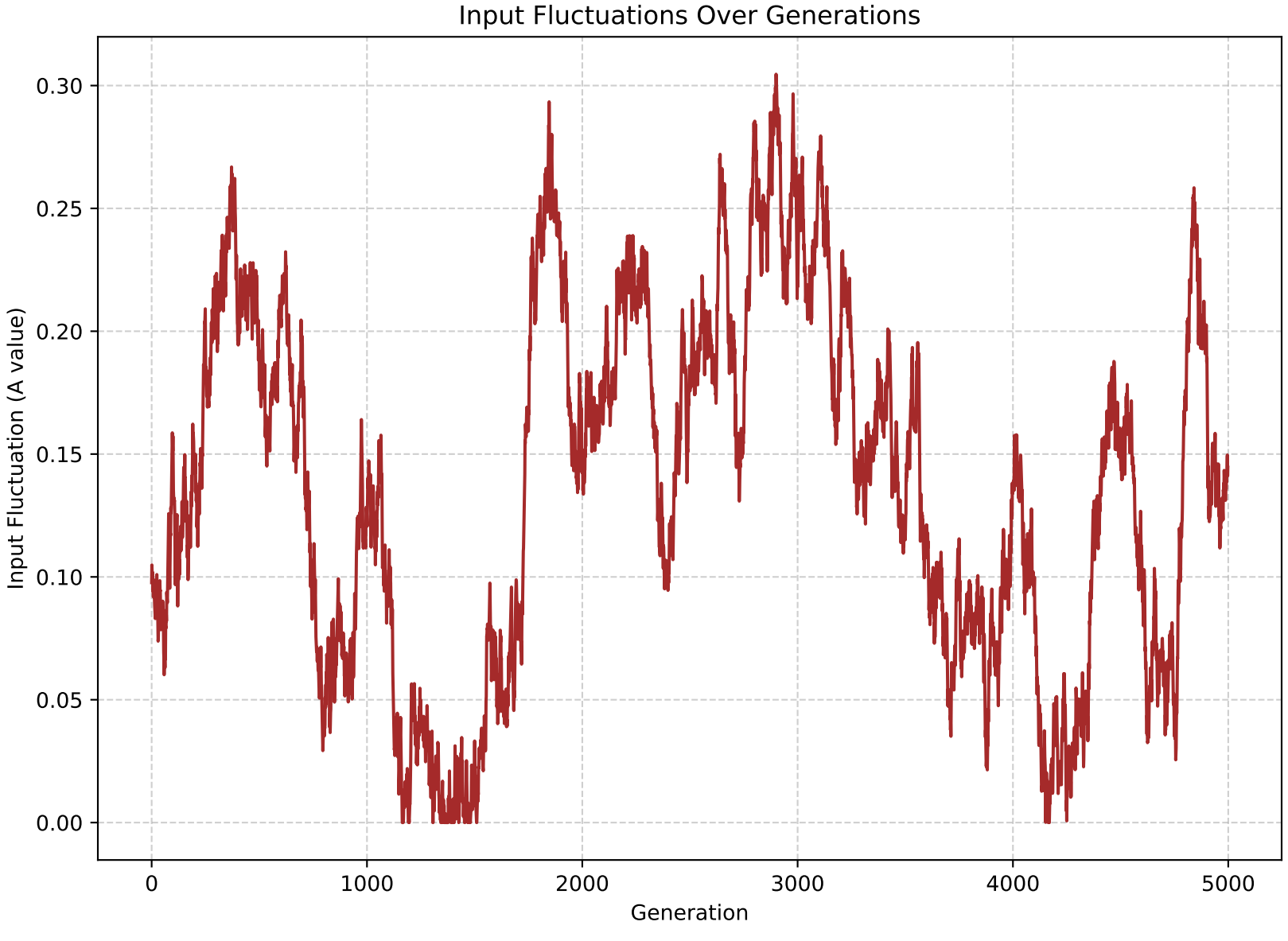

Centre of Active Neurons
Centre Position
0
20
40
60
80
100
120
140
Variance of Activity
Variance
20
40
60
80
100
Total Network Activity
Activity Level
20
25
30
35
40
0
1000
2000
3000
4000
5000
Generation

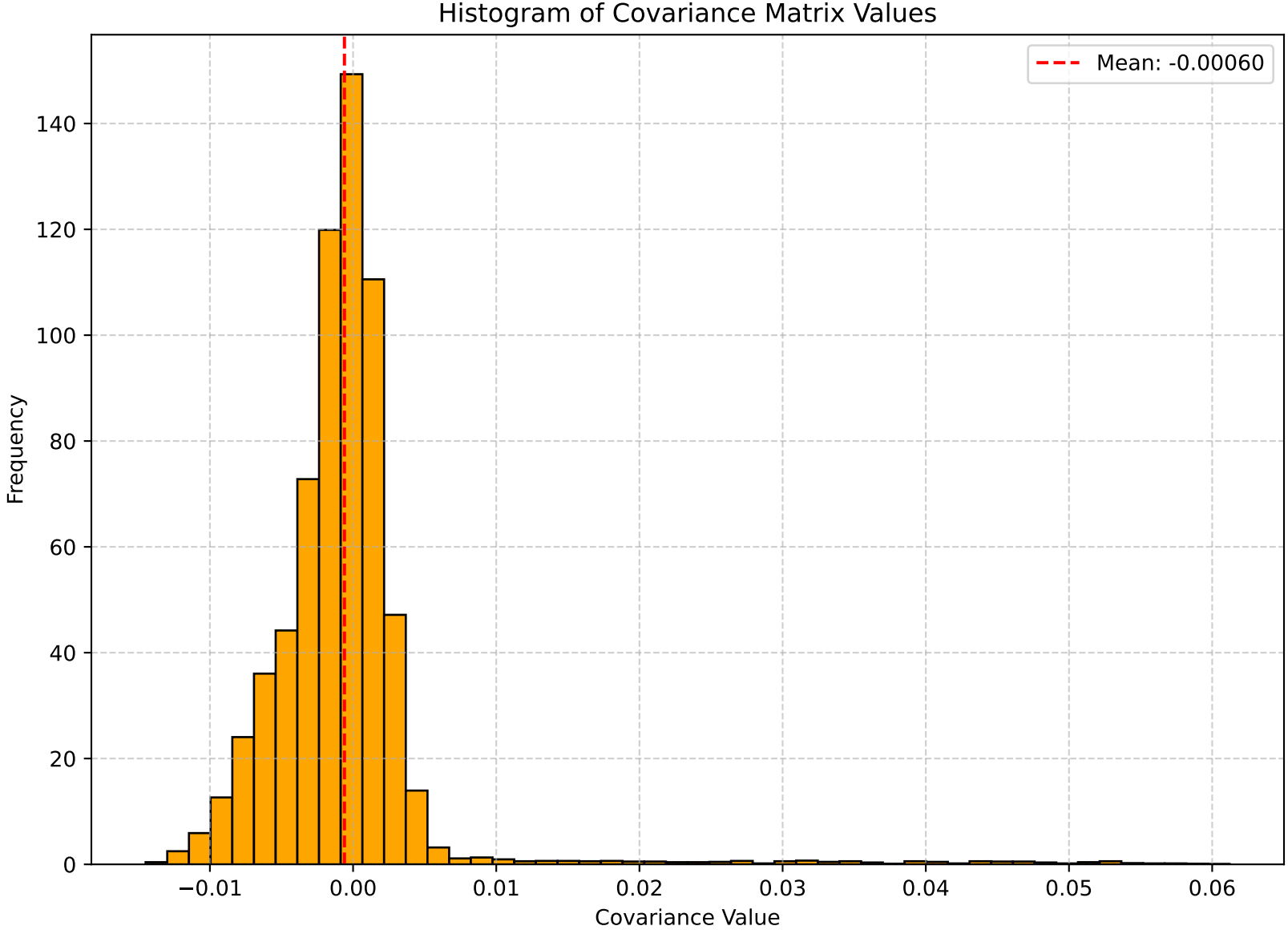

Network Lyapunov Energy over Generations
Energy
Generation
1
0
−1
−2
−3
−4
0
1000
2000
3000
4000
5000

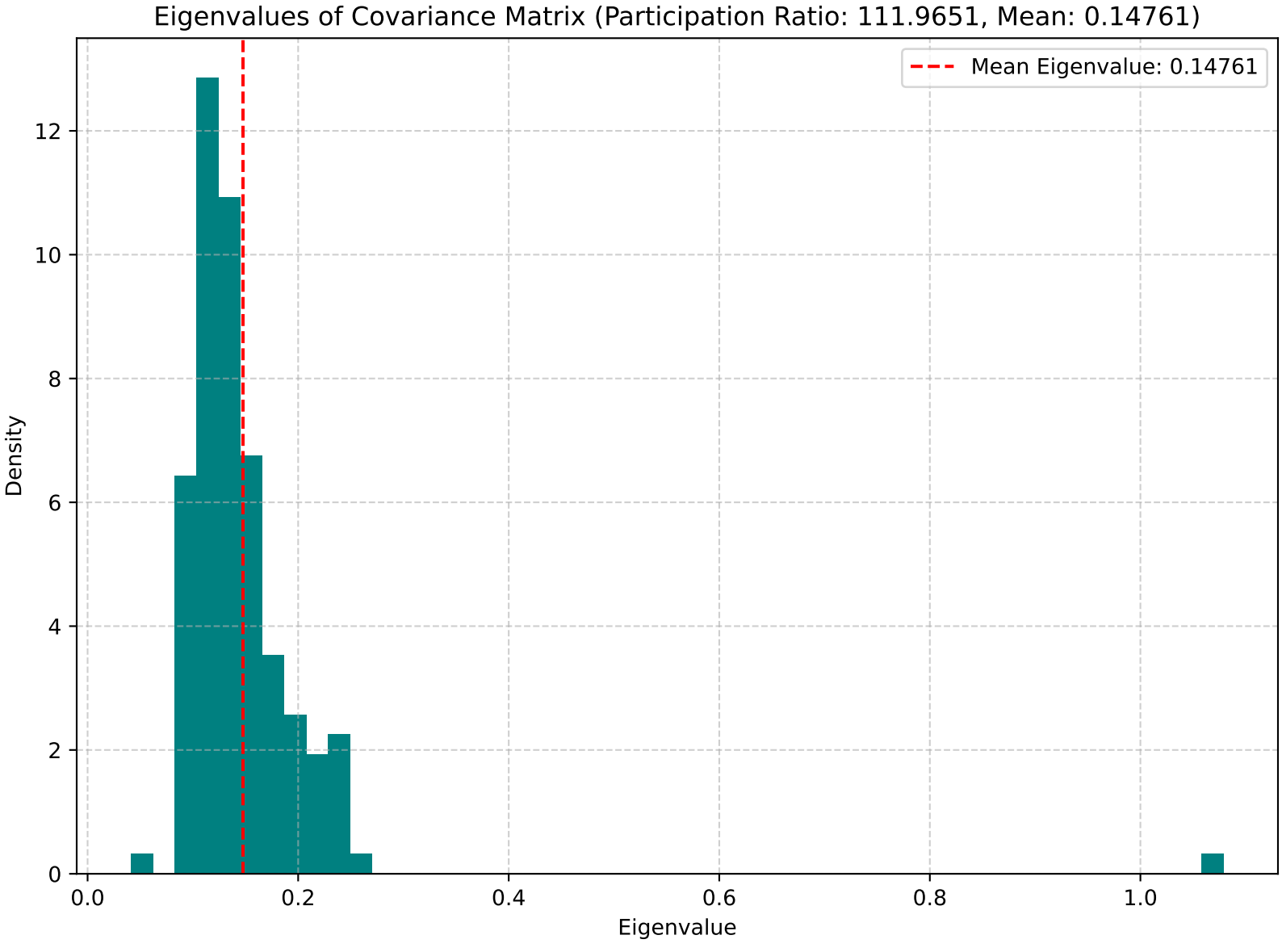
Network Parameters:

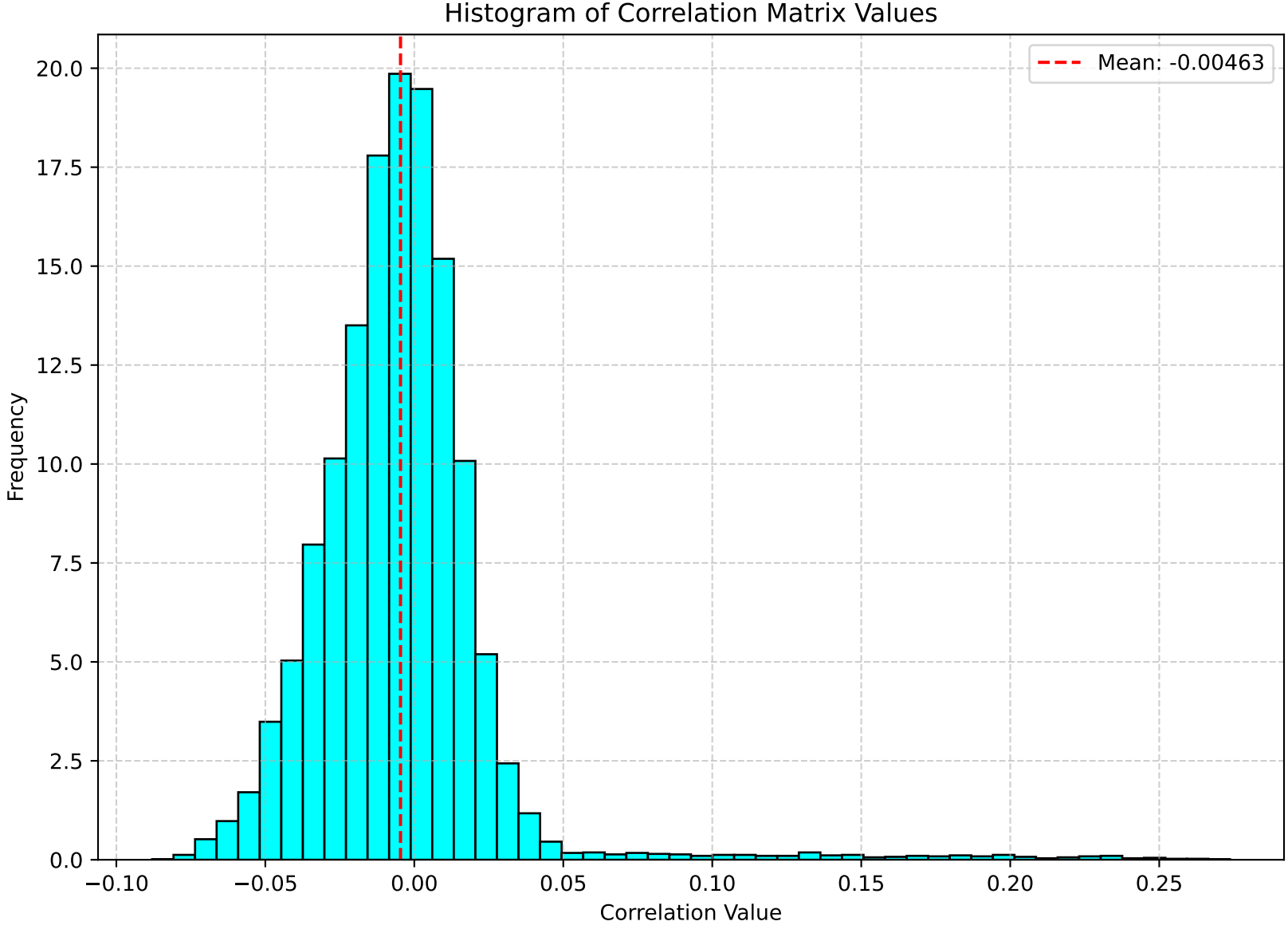
Number of Neurons: 150
Noise: 0.0
Field Width: 0.05
Synaptic Failure: 0.0
Spontaneous Release: 0.0
Constriction: 1.0
Fraction Active: 0.1
AMPA Conductance: 0.63
Input Resistance: 1.0

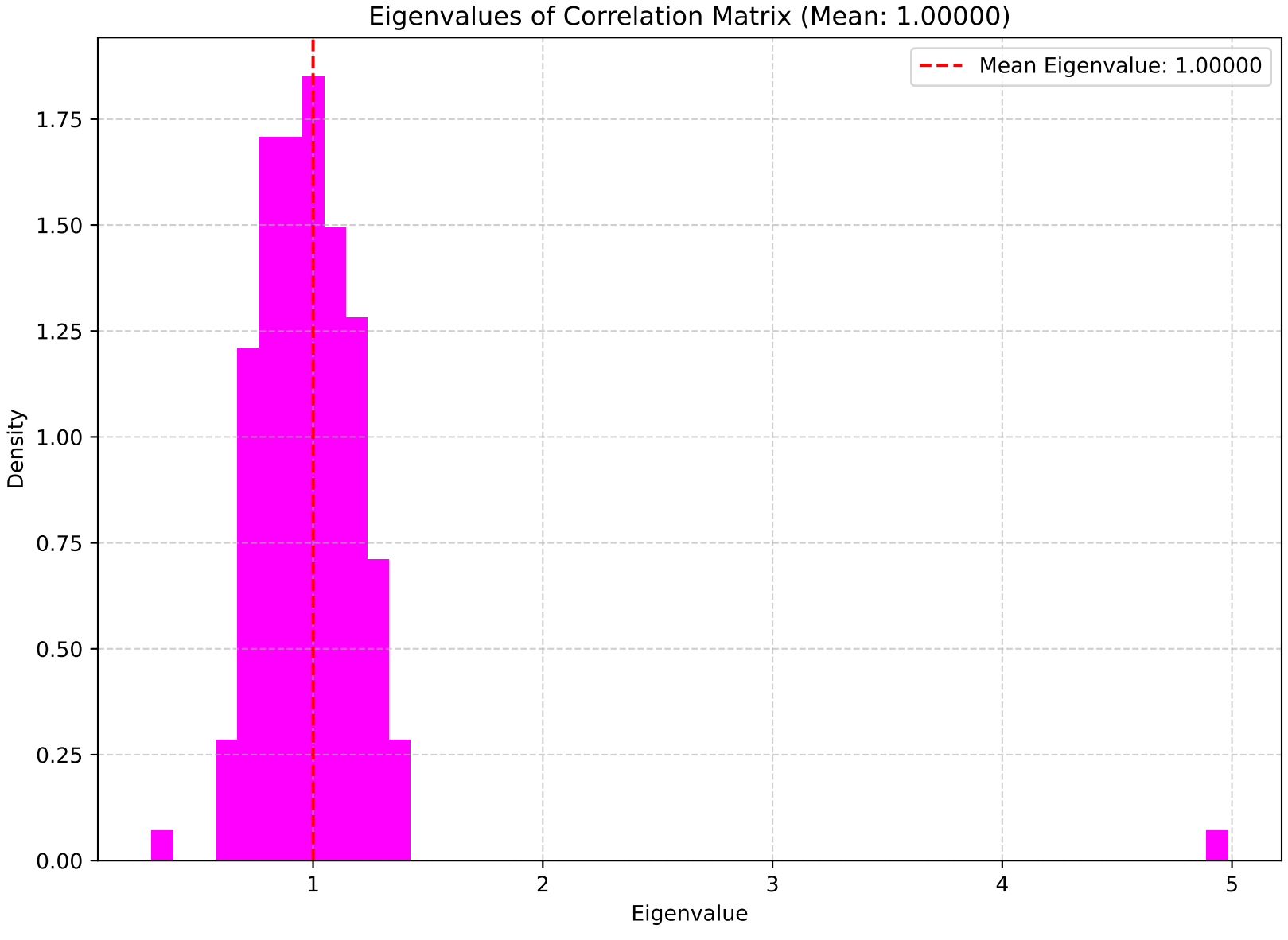

Average On Rate per Neuron (after 30 generations), HWHM: 10.0000 neurons
Average On Rate
Neuron Index
0.7
0.6
0.5
0.4
0.3
0.2
0
20
40
60
80
100
120
140


Input Fluctuations Over Generations
Input Fluctuation (A value)
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
1000
2000
3000
4000
5000
Generation


Histogram of Covariance Matrix Values
Mean: -0.00060
Frequency
Covariance Value
0
20
40
60
80
100
120
140
−0.01
0.00
0.01
0.02
0.03
0.04
0.05
0.06


Eigenvalues of Covariance Matrix (Participation Ratio: 111.9651, Mean: 0.14761)
Mean Eigenvalue: 0.14761
Density
Eigenvalue
0
2
4
6
8
10
12
0.0
0.2
0.4
0.6
0.8
1.0


Histogram of Correlation Matrix Values
Mean: -0.00463
Frequency
Correlation Value
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−0.10
−0.05
0.00
0.05
0.10
0.15
0.20
0.25


Eigenvalues of Correlation Matrix (Mean: 1.00000)
Mean Eigenvalue: 1.00000
Density
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
1
2
3
4
5
Eigenvalue