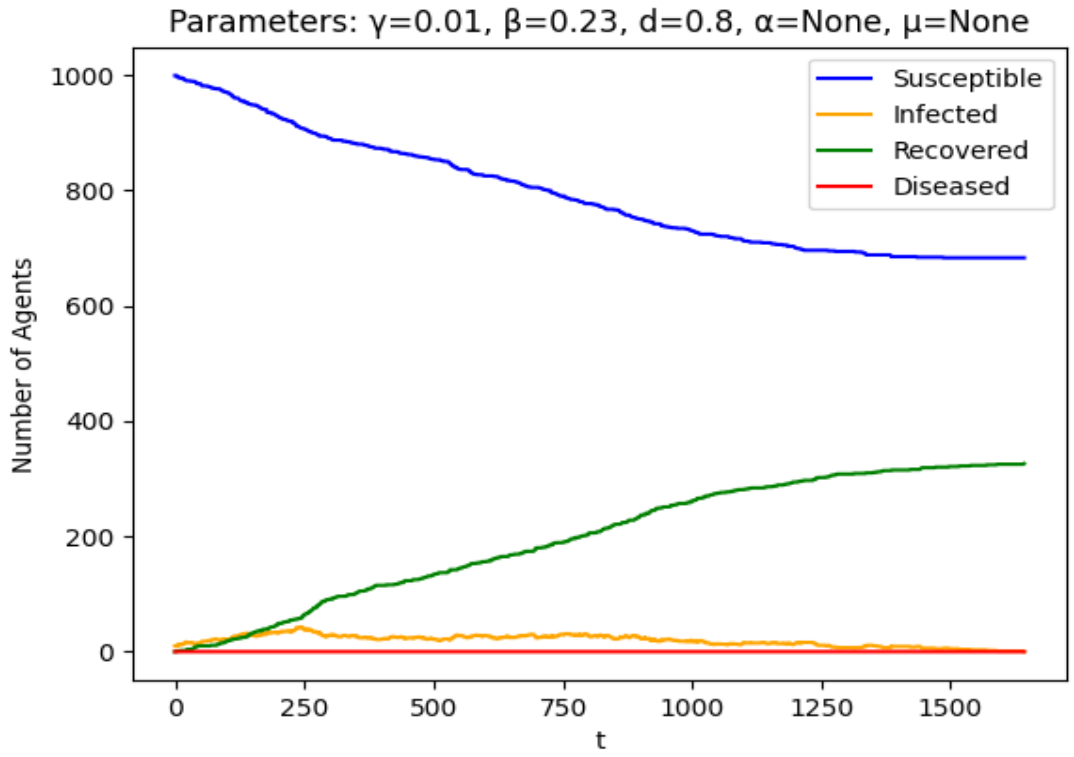
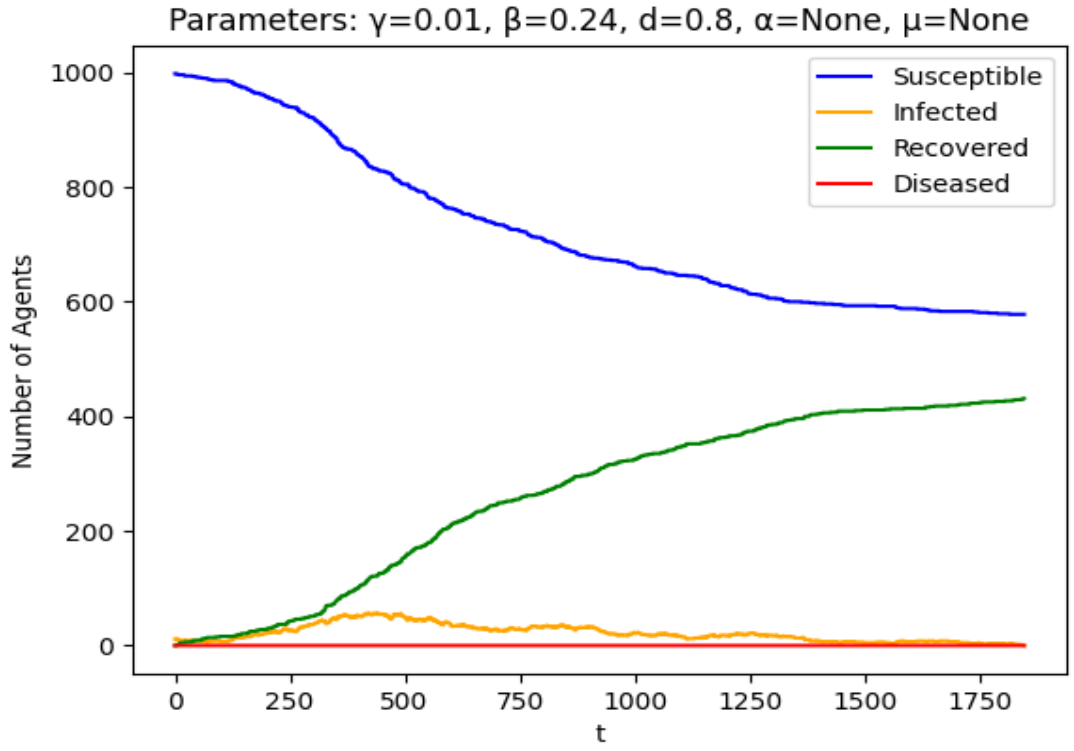
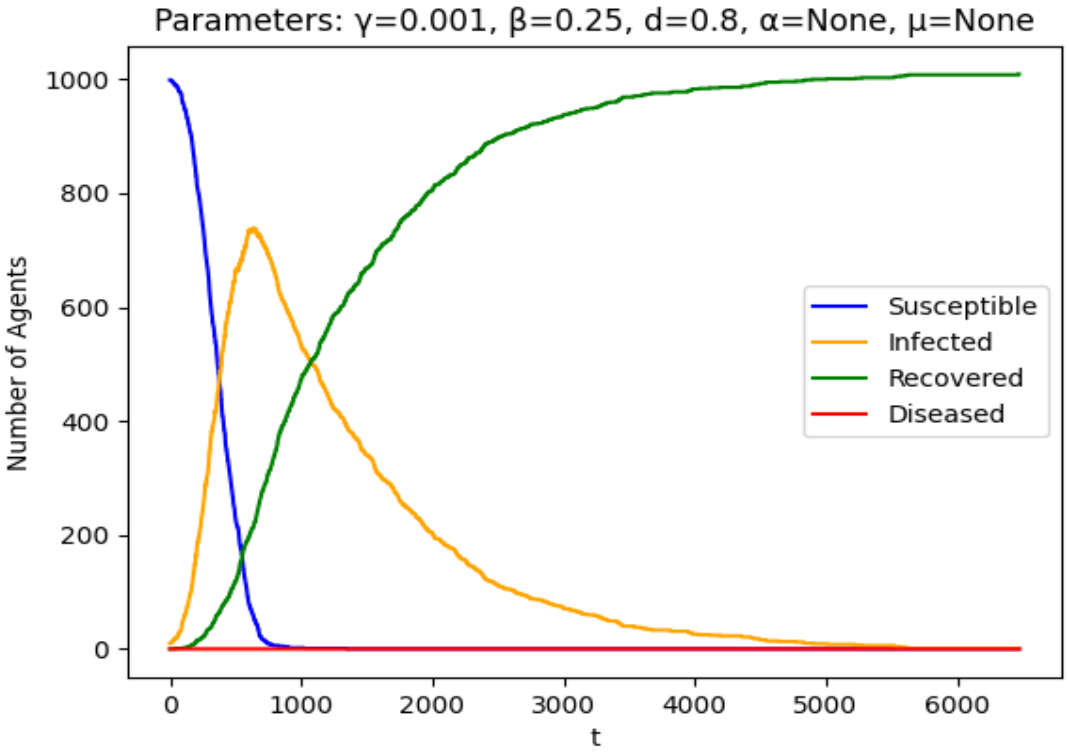
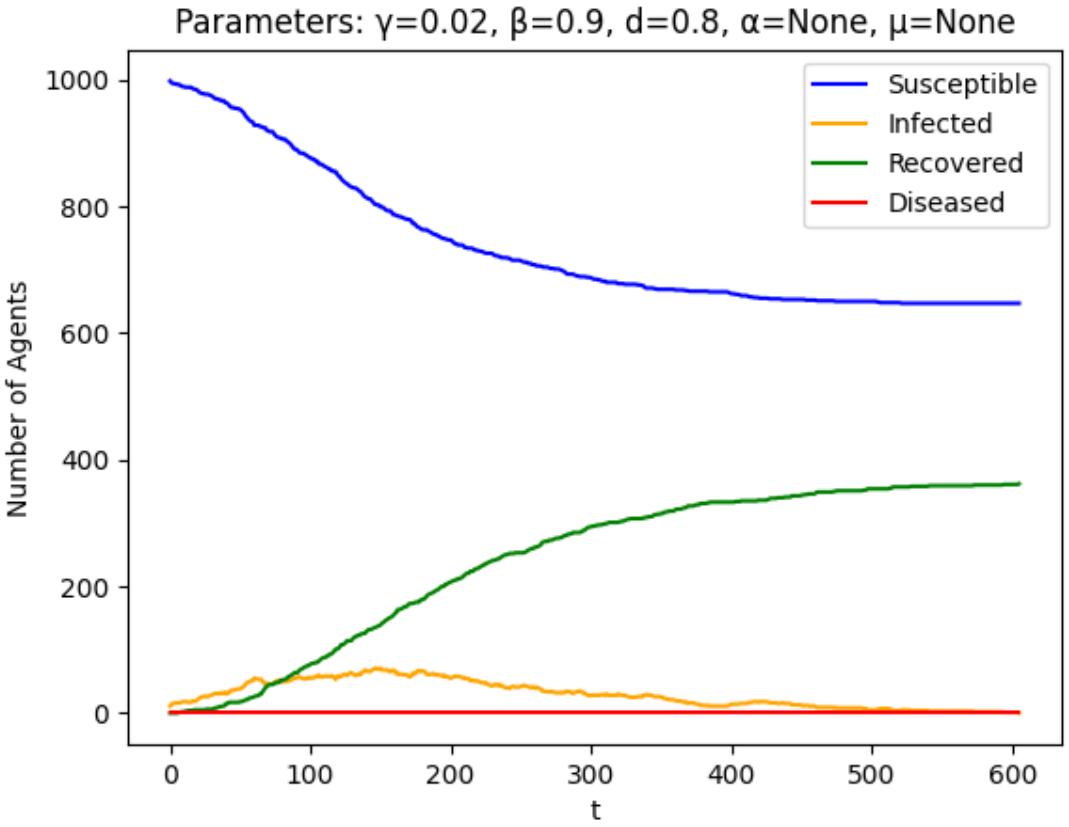
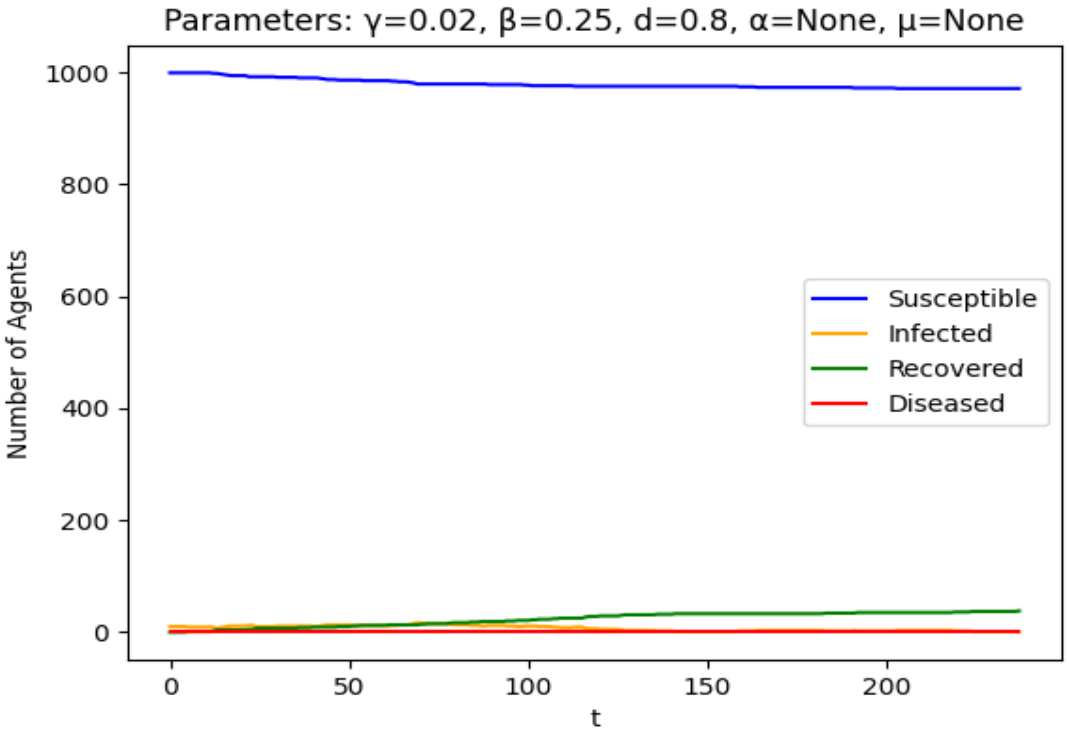
11.1


Parameters: γ=0.01, β=0.23, d=0.8, α=None, μ=None
Susceptible
Infected
Recovered
Diseased
Number of Agents
t
0
200
400
600
800
1000
0
250
500
750
1000
1250
1500

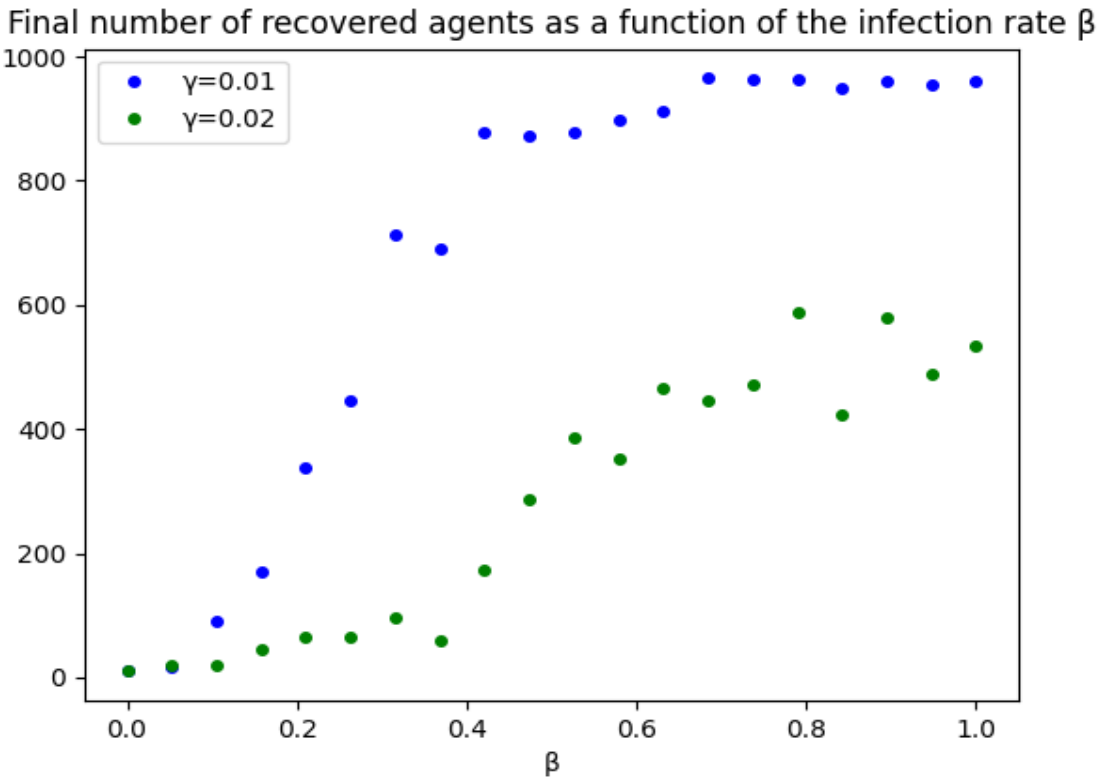

Parameters: γ=0.01, β=0.24, d=0.8, α=None, μ=None
Susceptible
Infected
Recovered
Diseased
Number of Agents
t
0
200
400
600
800
1000
0
250
500
750
1000
1250
1500
1750

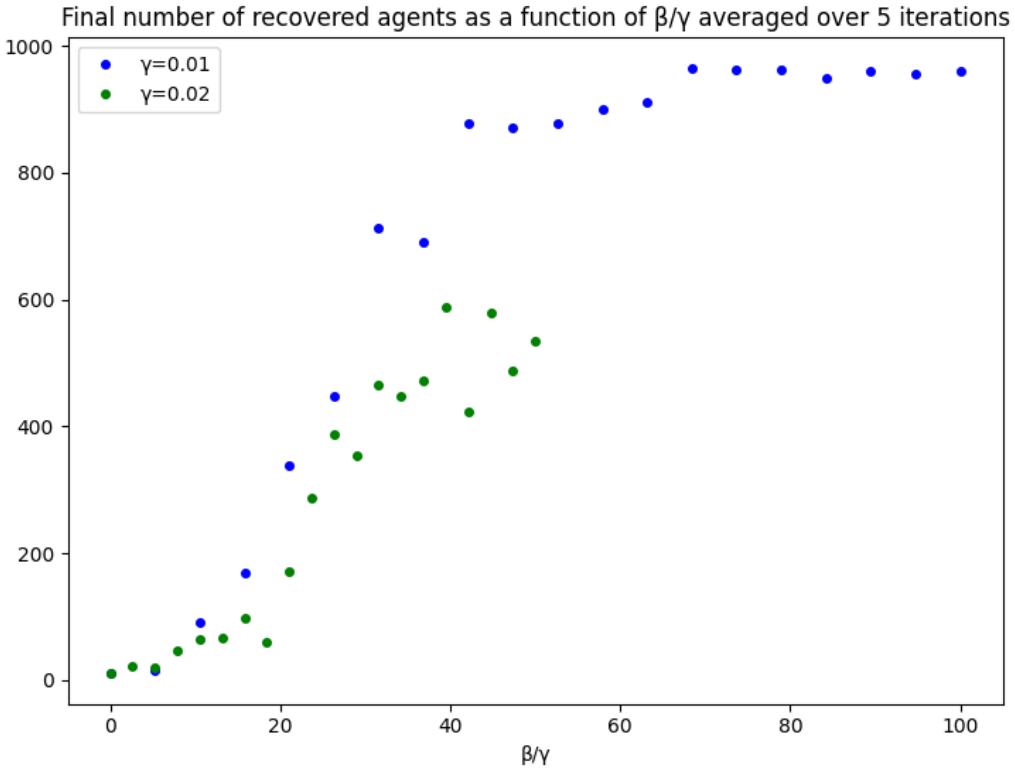

Parameters: γ=0.001, β=0.25, d=0.8, α=None, μ=None
Number of Agents
t
Susceptible
Infected
Recovered
Diseased
0
200
400
600
800
1000
0
1000
2000
3000
4000
5000
6000

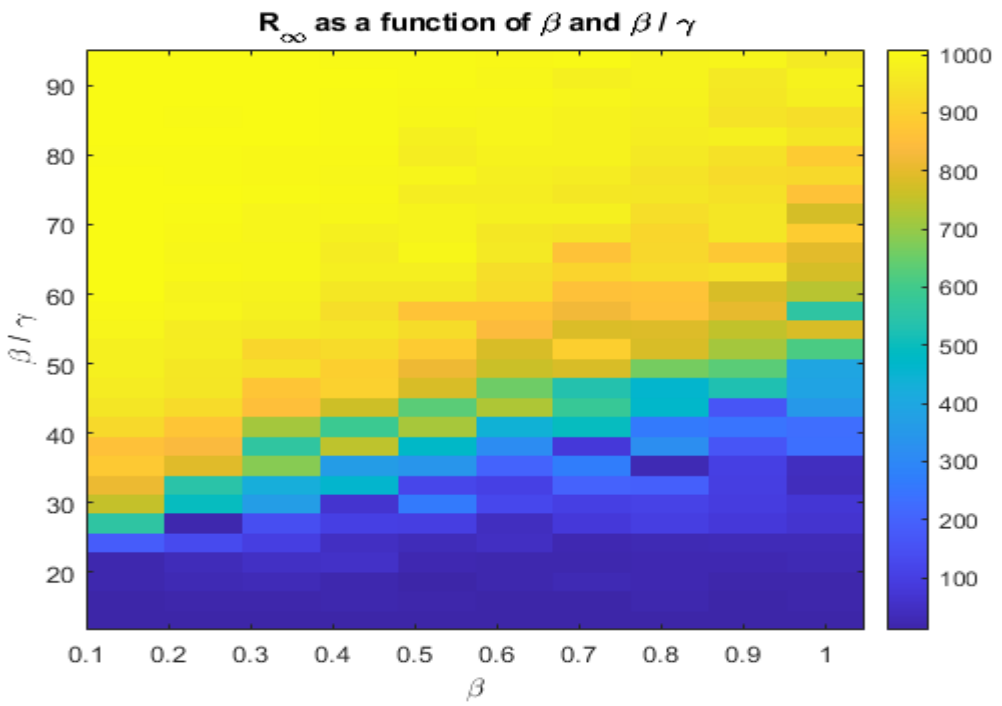

Parameters: γ=0.02, β=0.9, d=0.8, α=None, μ=None
Number of Agents
t
Susceptible
Infected
Recovered
Diseased
0
200
400
600
800
1000
0
100
200
300
400
500
600


Parameters: γ=0.02, β=0.25, d=0.8, α=None, μ=None
Number of Agents
1000
800
600
400
200
0
0
50
100
150
200
t
Susceptible
Infected
Recovered
Diseased

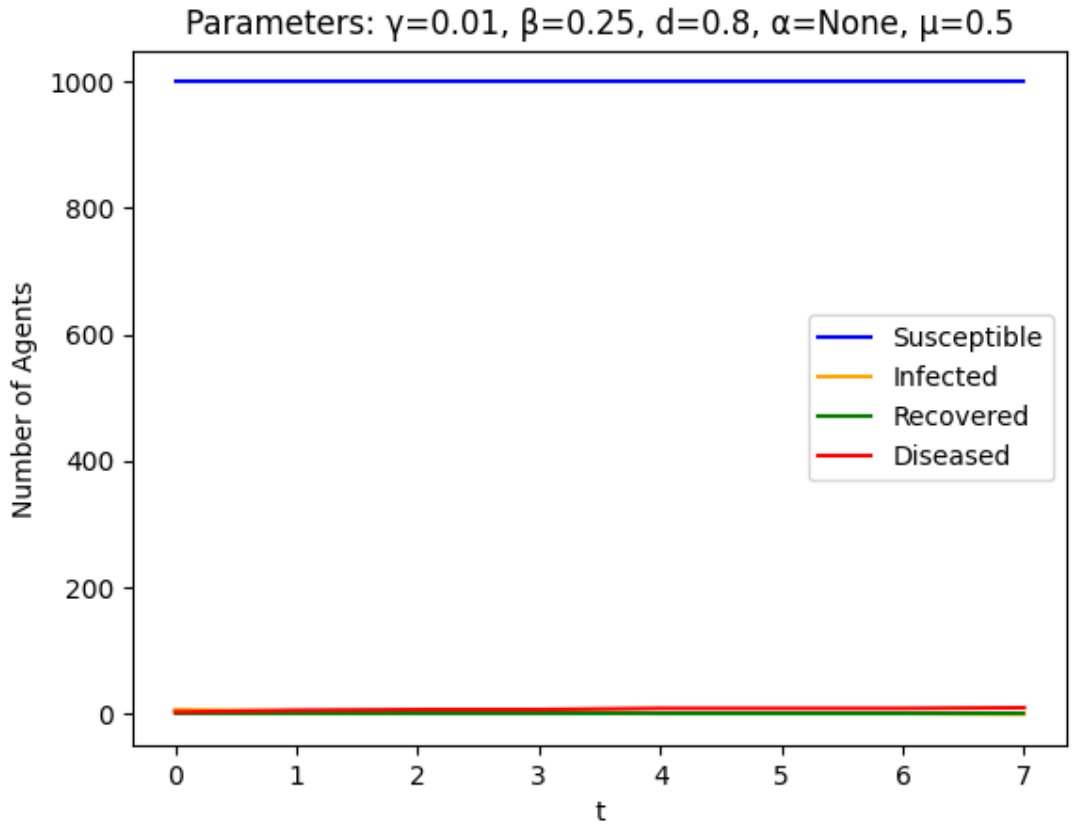
11.2

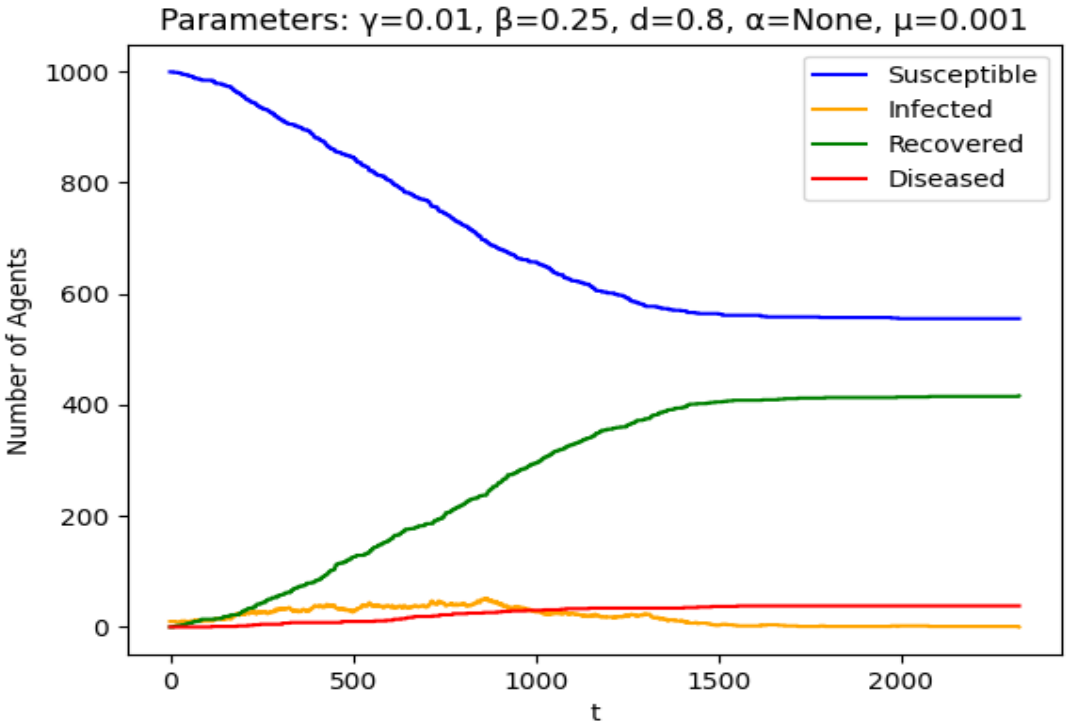

Final number of recovered agents as a function of the infection rate β
γ=0.01
γ=0.02
1000
800
600
400
200
0
0.0
0.2
0.4
0.6
0.8
1.0
β

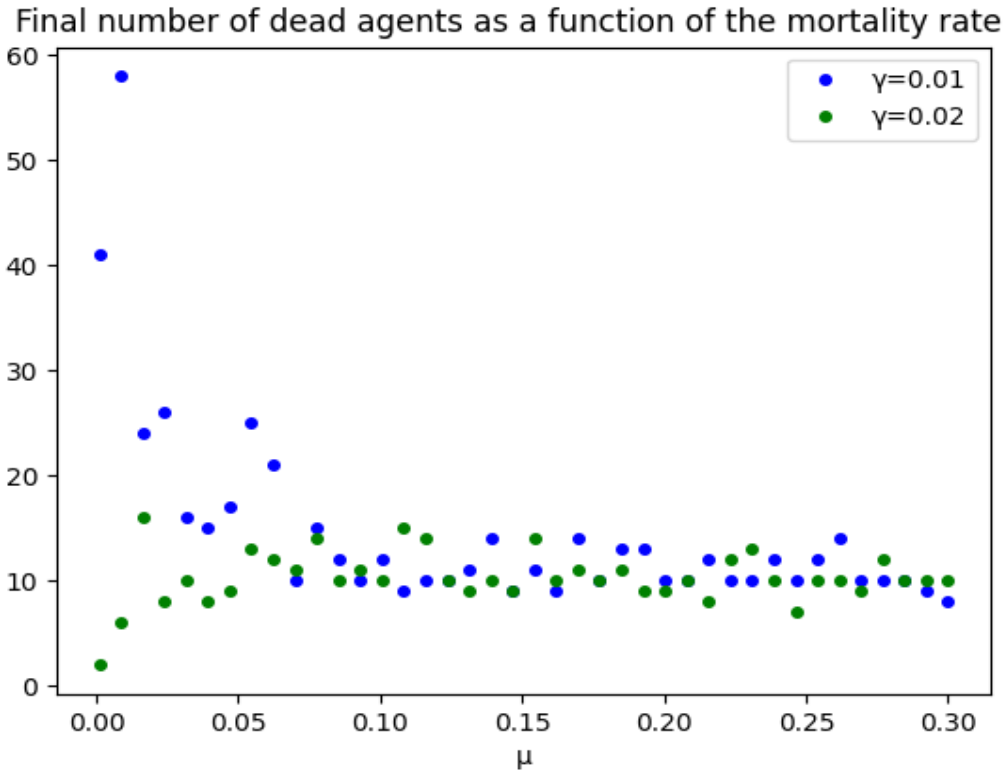

Final number of recovered agents as a function of β/γ averaged over 5 iterations
γ=0.01
γ=0.02
1000
800
600
400
200
0
0
20
40
60
80
100
β/γ

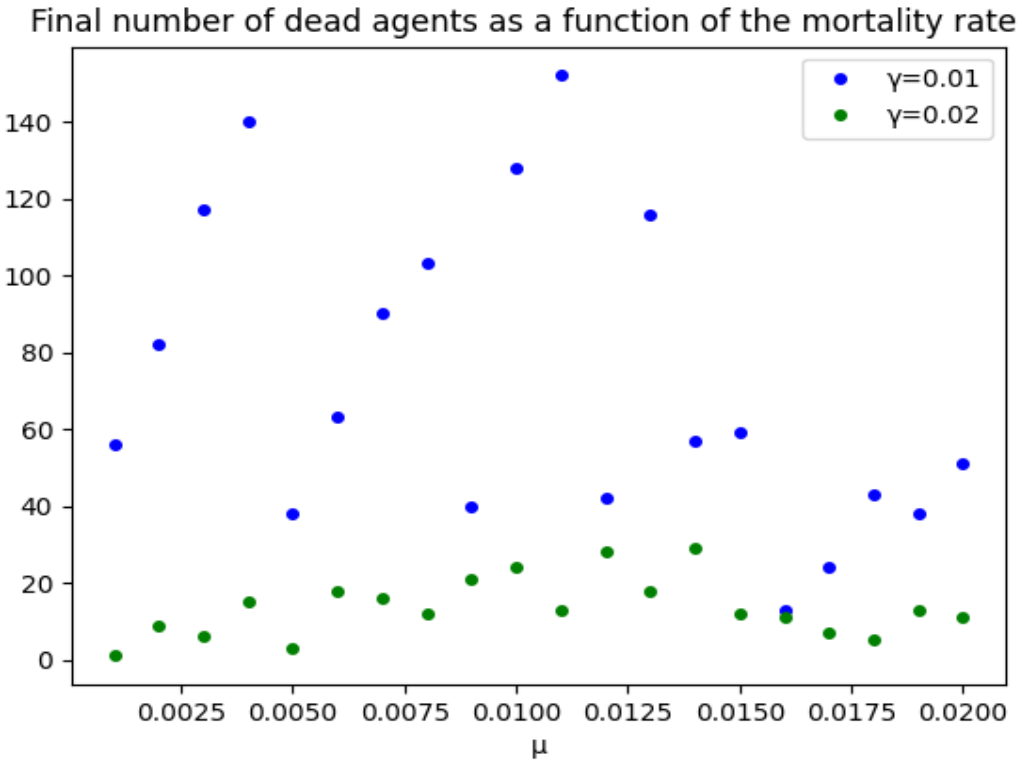

R∞ as a function of β and β / γ
β / γ
β
90
80
70
60
50
40
30
20
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1000
900
800
700
600
500
400
300
200
100

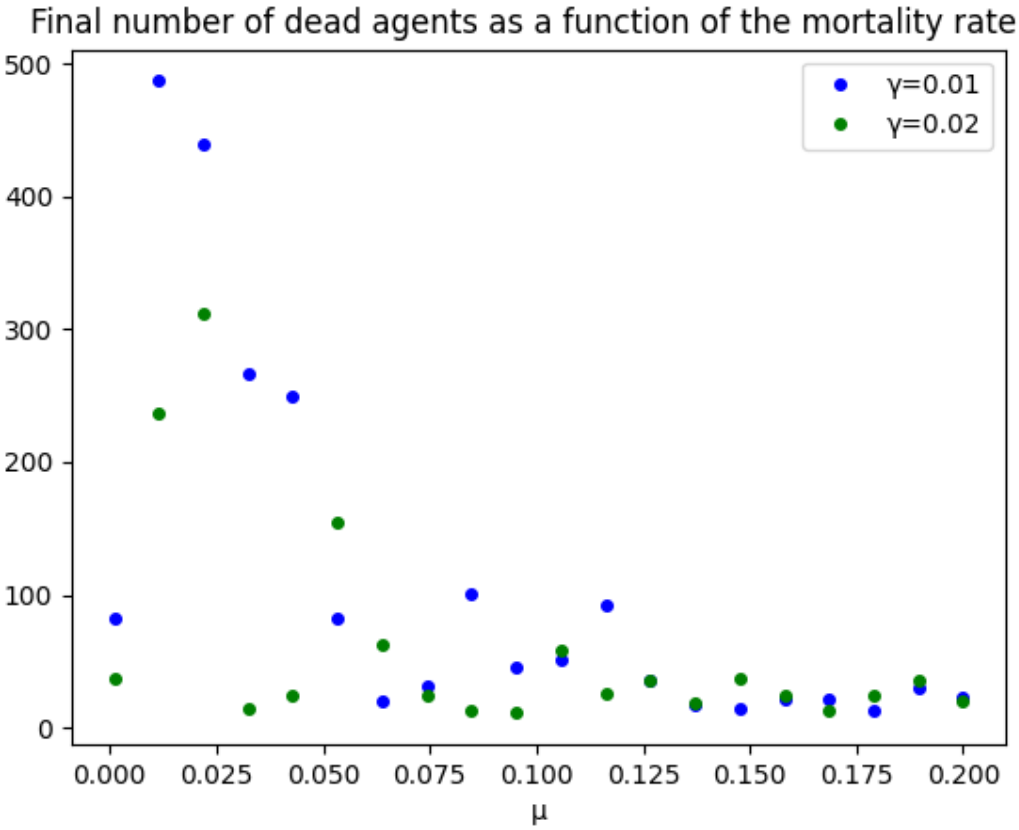
11.3

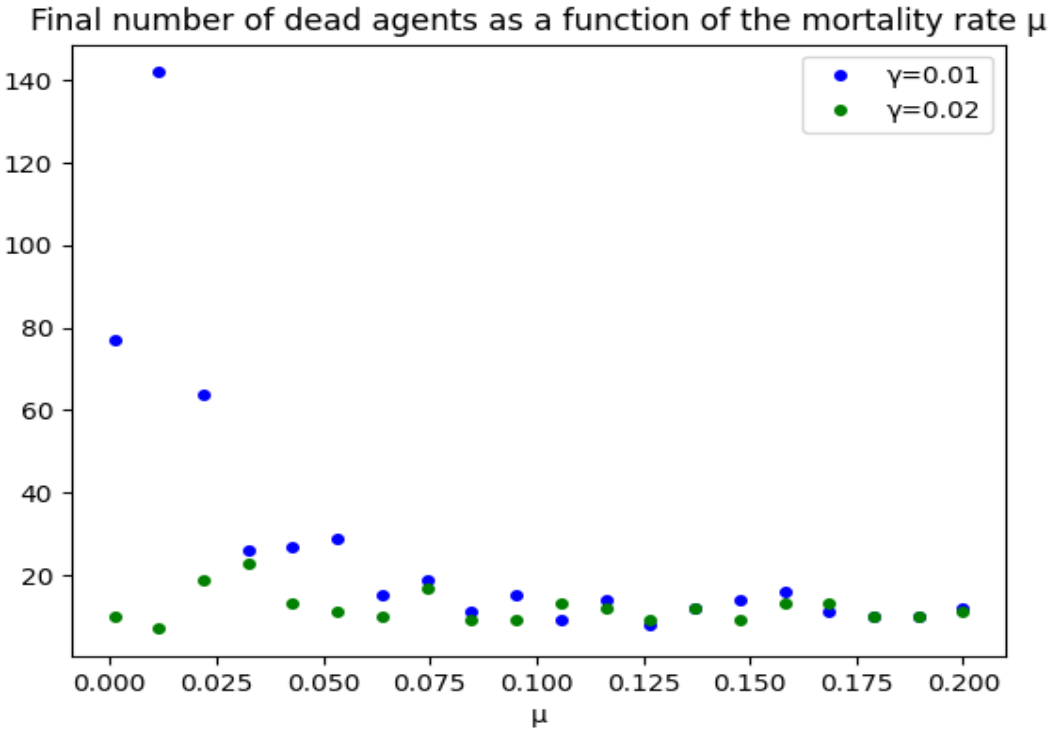

Parameters: γ=0.01, β=0.25, d=0.8, α=None, μ=0.5
Number of Agents
t
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
Susceptible
Infected
Recovered
Diseased

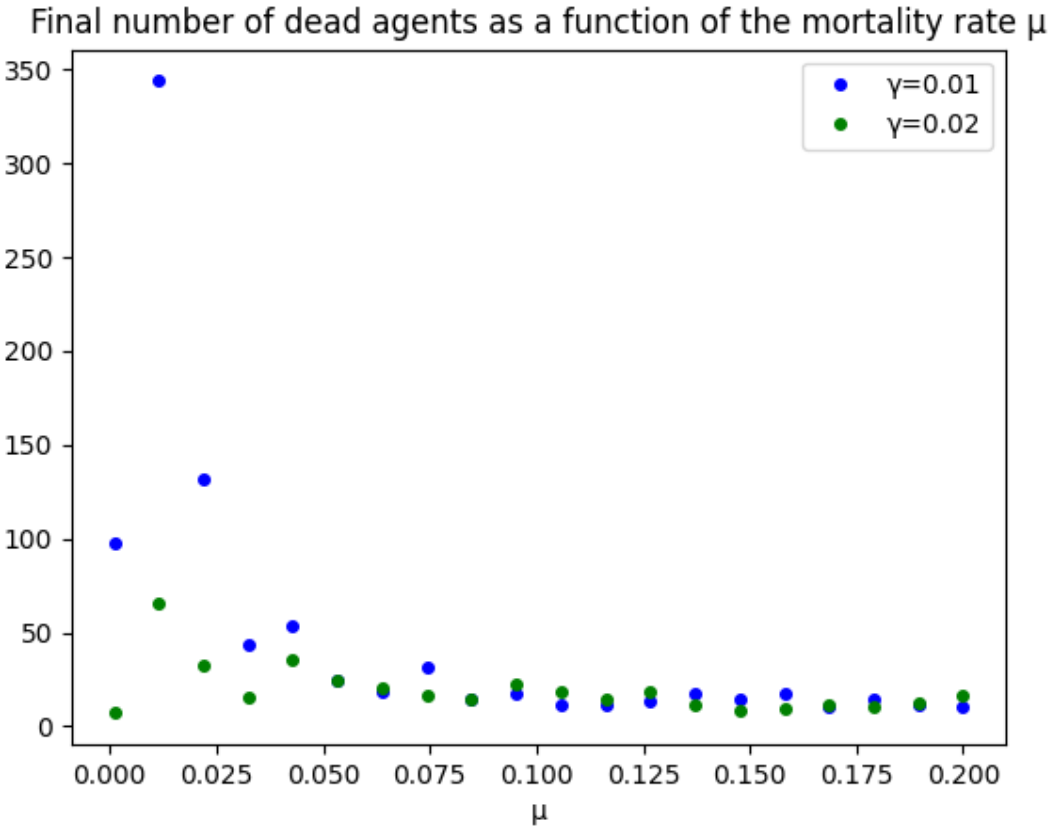

Parameters: γ=0.01, β=0.25, d=0.8, α=None, μ=0.001
Susceptible
Infected
Recovered
Diseased
Number of Agents
t
0
200
400
600
800
1000
0
500
1000
1500
2000


Final number of dead agents as a function of the mortality rate μ
γ=0.01
γ=0.02
μ
0
10
20
30
40
50
60
0.00
0.05
0.10
0.15
0.20
0.25
0.30

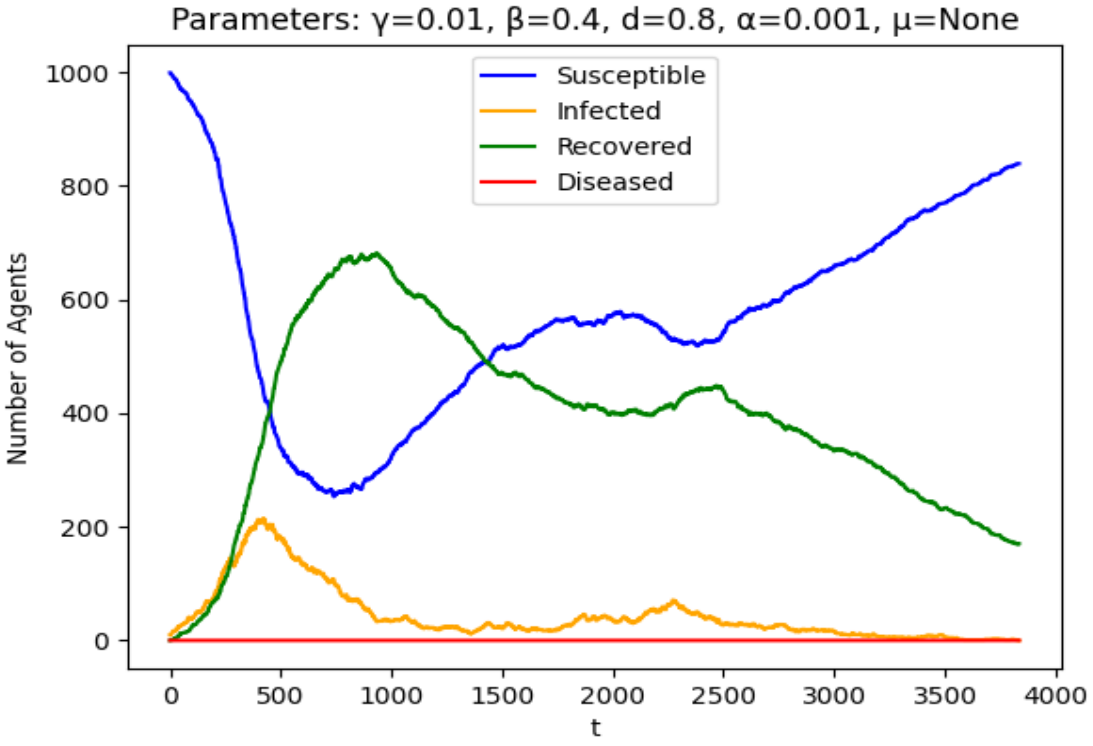

Final number of dead agents as a function of the mortality rate μ
γ=0.01
γ=0.02
0
20
40
60
80
100
120
140
0.0025
0.0050
0.0075
0.0100
0.0125
0.0150
0.0175
0.0200
μ

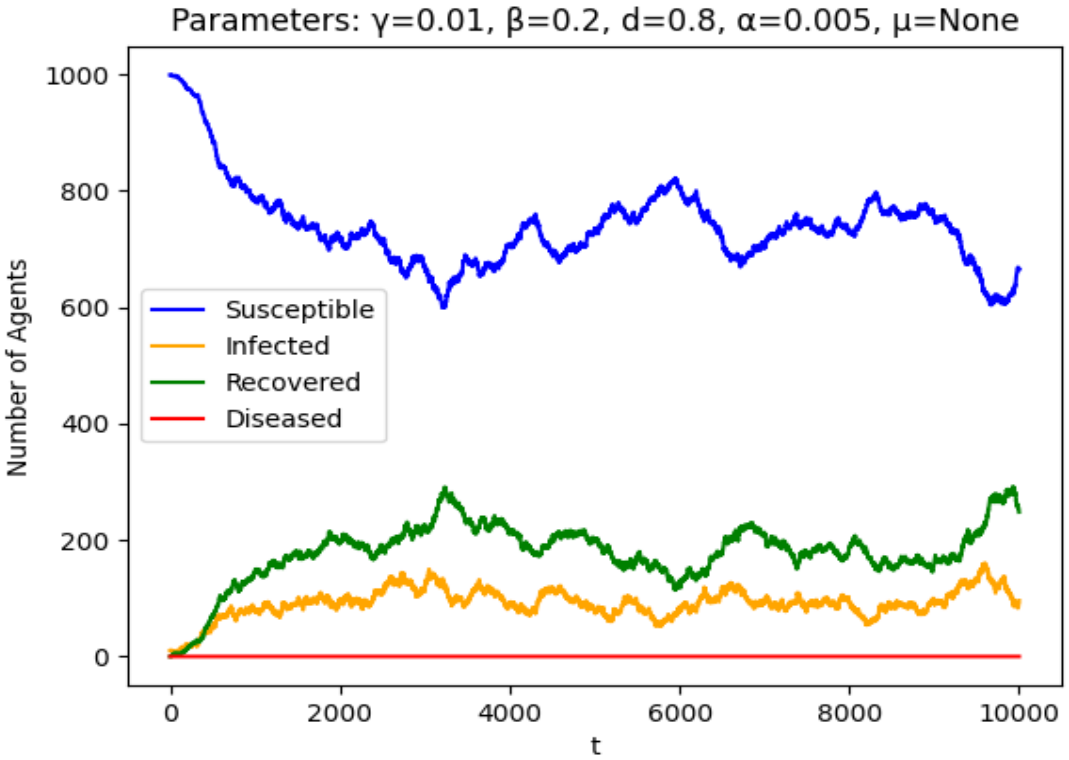

Final number of dead agents as a function of the mortality rate μ
γ=0.01
γ=0.02
0
100
200
300
400
500
0.000
0.025
0.050
0.075
0.100
0.125
0.150
0.175
0.200
μ

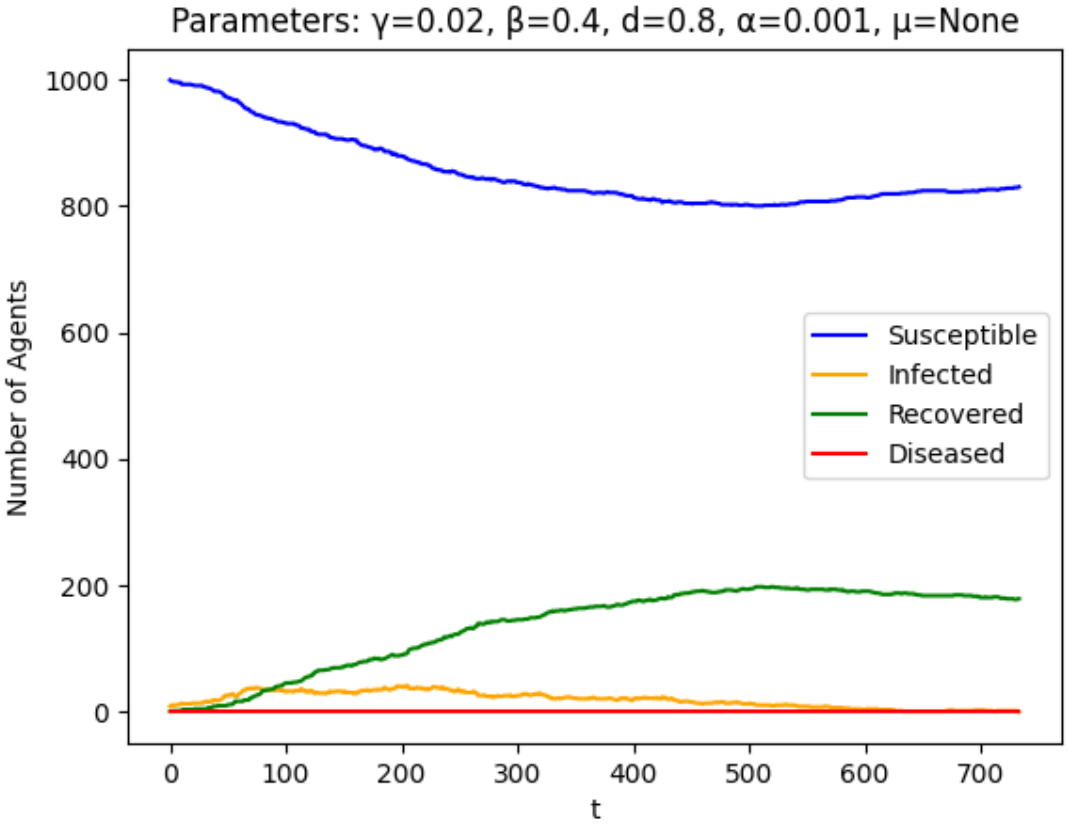

Final number of dead agents as a function of the mortality rate μ
γ=0.01
γ=0.02
140
120
100
80
60
40
20
0.000
0.025
0.050
0.075
0.100
0.125
0.150
0.175
0.200
μ


Final number of dead agents as a function of the mortality rate μ
γ=0.01
γ=0.02
350
300
250
200
150
100
50
0
0.000
0.025
0.050
0.075
0.100
0.125
0.150
0.175
0.200
μ

11.4


Parameters: γ=0.01, β=0.4, d=0.8, α=0.001, μ=None
Susceptible
Infected
Recovered
Diseased
Number of Agents
t
0
200
400
600
800
1000
0
500
1000
1500
2000
2500
3000
3500
4000


Parameters: γ=0.01, β=0.2, d=0.8, α=0.005, μ=None
Susceptible
Infected
Recovered
Diseased
Number of Agents
t
0
200
400
600
800
1000
0
2000
4000
6000
8000
10000


Parameters: γ=0.02, β=0.4, d=0.8, α=0.001, μ=None
Number of Agents
t
Susceptible
Infected
Recovered
Diseased
0
200
400
600
800
1000
0
100
200
300
400
500
600
700