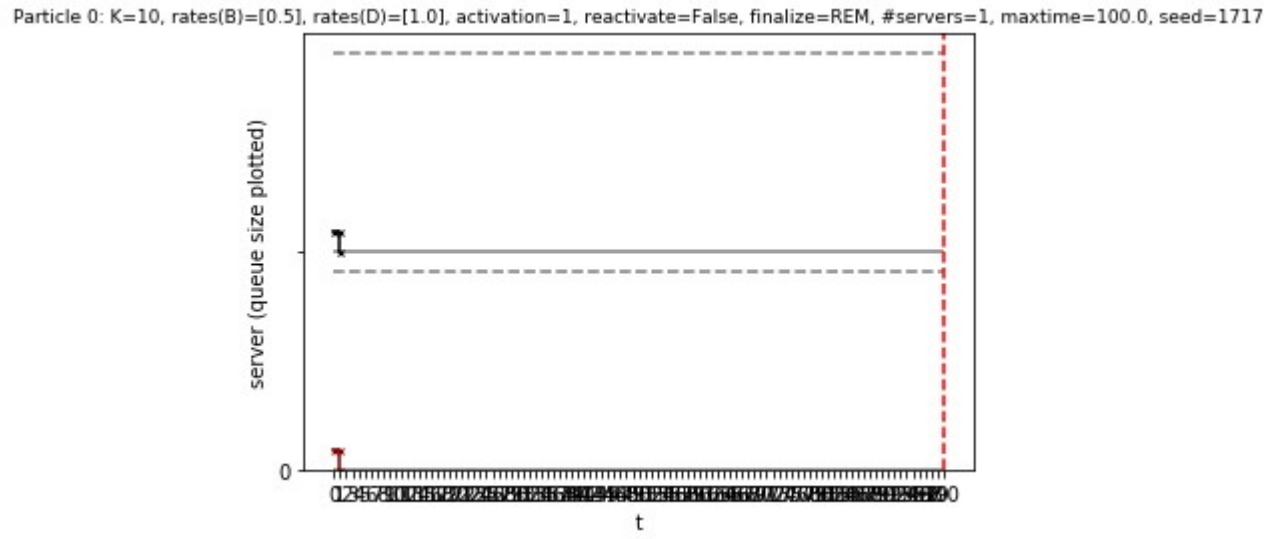
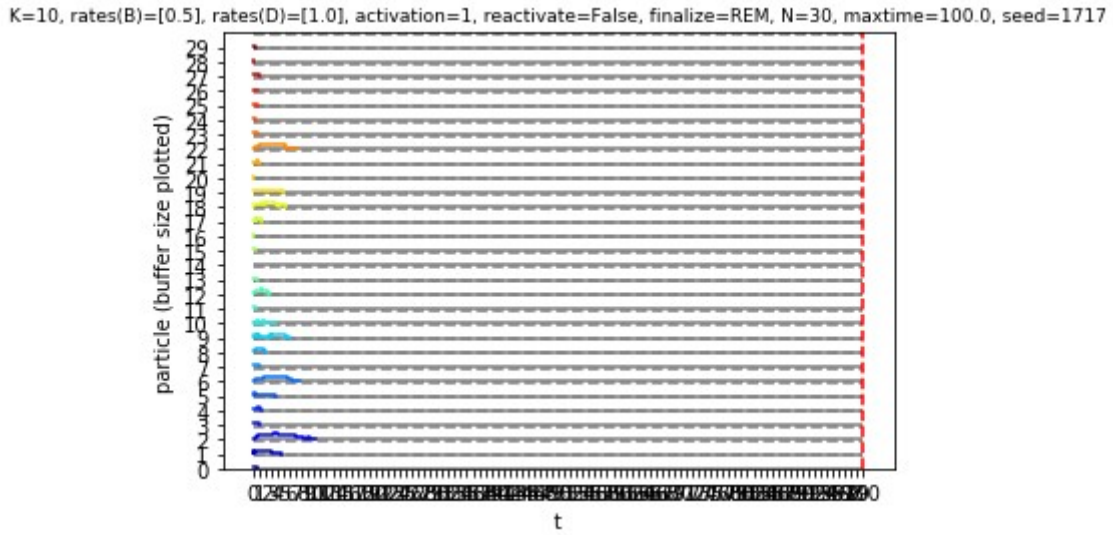
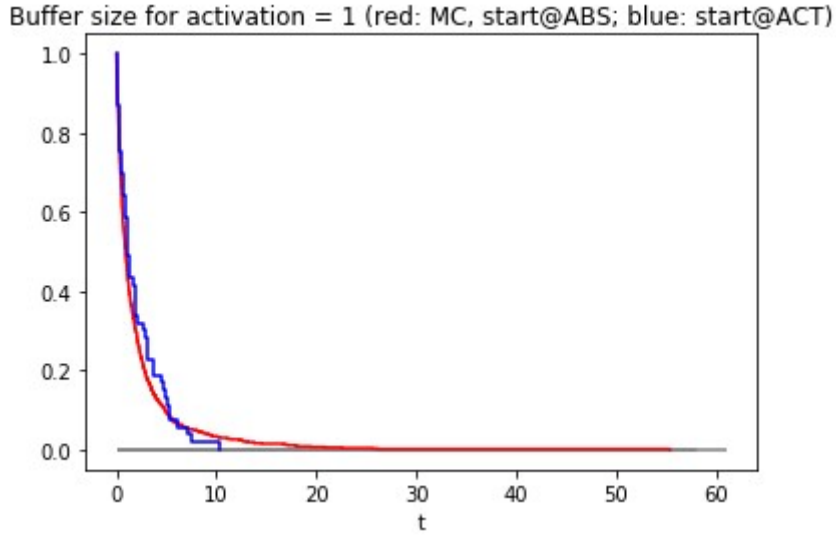
```
Python 3.6.4 |Anaconda custom (64-bit)| (default, Jan 16 2018, 10:22:32) [MSC v.1900 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 6.2.1 -- An enhanced Interactive Python.

Restarting kernel...
```

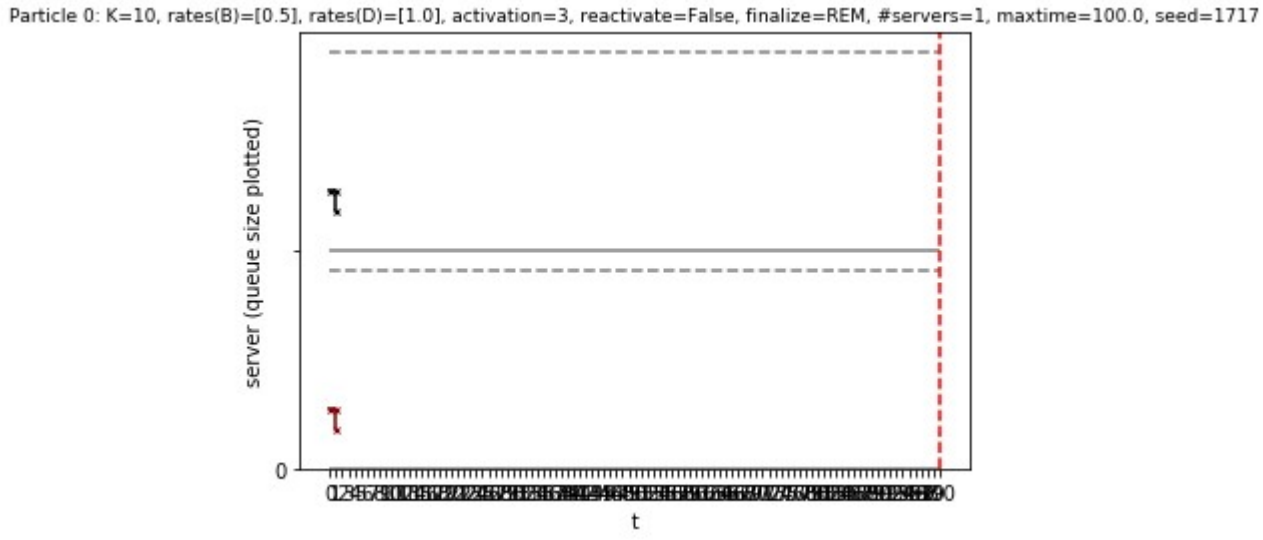
```
 runfile('E:/Daniel/Projects/PhD-RL-Toulouse/projects/Python/lib/estimators.py', wdir='E:/Daniel/
Projects/PhD-RL-Toulouse/projects/Python/lib')
Directory:
E:\Daniel\Projects\PhD-RL-Toulouse\projects
has been prepended to the module search path.
Test #2: simulate_survival() method

Running Monte-Carlo simulation on single-server system to estimate expected survival time for
buffer_size_activation=1 on N=20 particles and simulation time T=50x...
proba survival
None
# particles by start_state:
0: x=[1], p=1.0 --> N=30
Block of particle indices to simulate #0: [0, 29] (N=30)
# particles processed so far: 1
# particles processed so far: 2
# particles processed so far: 3
# particles processed so far: 4
# particles processed so far: 7
# particles processed so far: 10
# particles processed so far: 13
# particles processed so far: 16
# particles processed so far: 19
# particles processed so far: 22
# particles processed so far: 25
# particles processed so far: 28
```

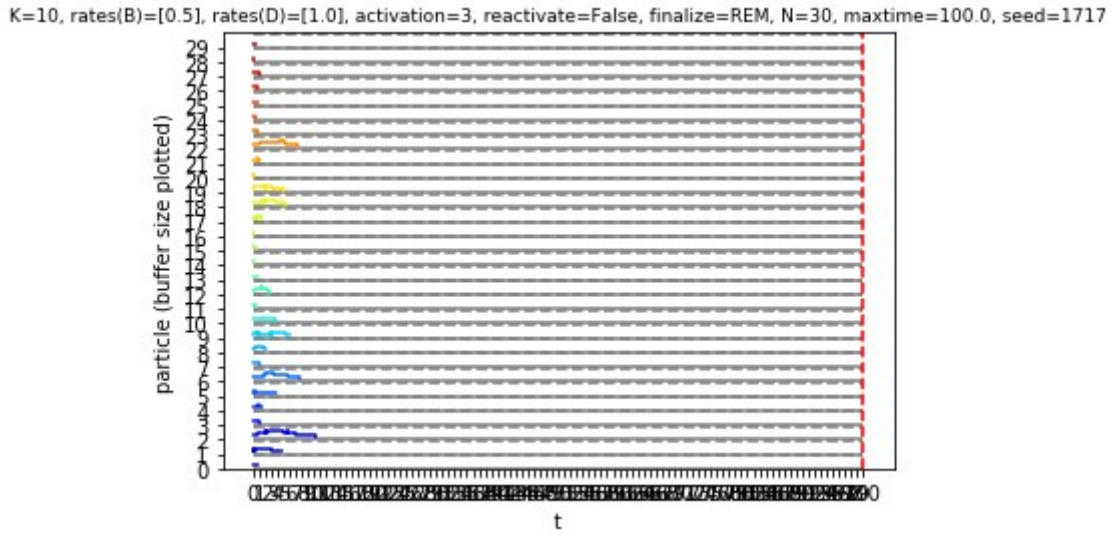




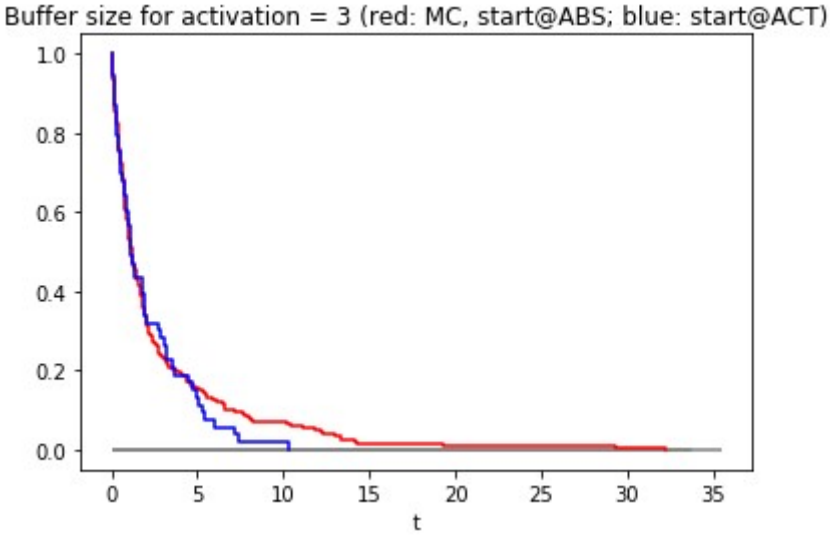

```
simulate_survival: Total simulation time: 0.0 min

proba survival
None
# particles processed so far: 1
Generating trajectories for each particle until END OF SIMULATION TIME (T=2000.0)...

Running Monte-Carlo simulation on single-server system to estimate expected survival time for
buffer_size_activation=3 on N=20 particles and simulation time T=50x...
proba survival
None
# particles by start_state:
0: x=[3], p=1.0 --> N=30
Block of particle indices to simulate #0: [0, 29] (N=30)
# particles processed so far: 1
# particles processed so far: 2
# particles processed so far: 3
# particles processed so far: 4
# particles processed so far: 7
# particles processed so far: 10
# particles processed so far: 13
# particles processed so far: 16
# particles processed so far: 19
# particles processed so far: 22
# particles processed so far: 25
# particles processed so far: 28
```

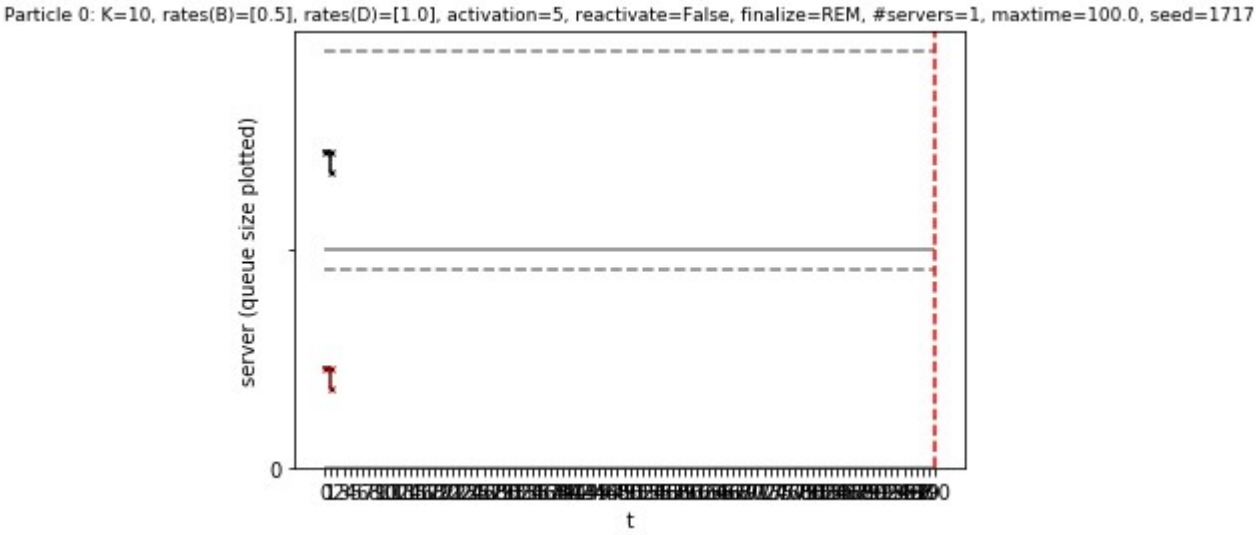


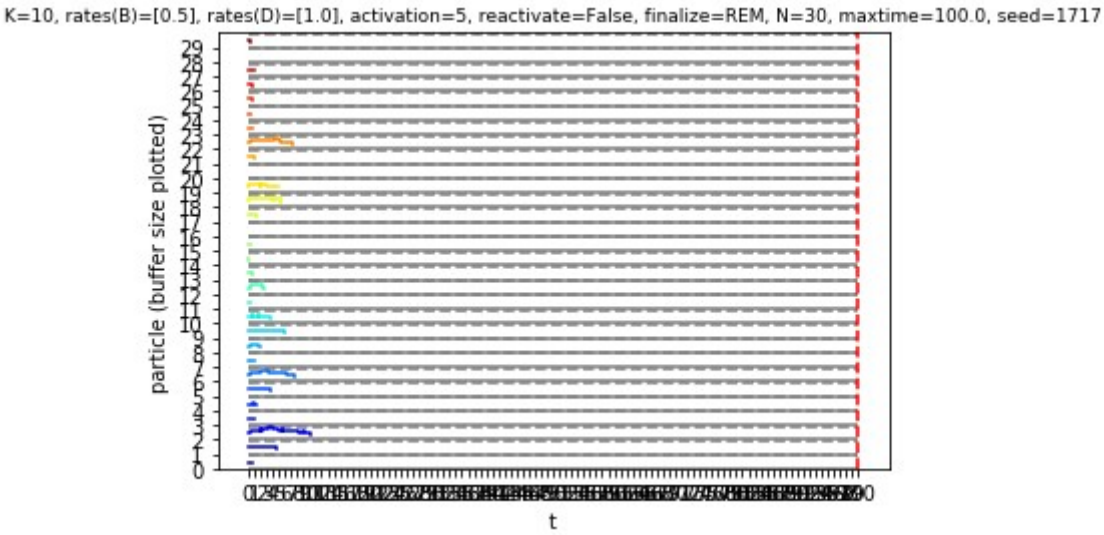




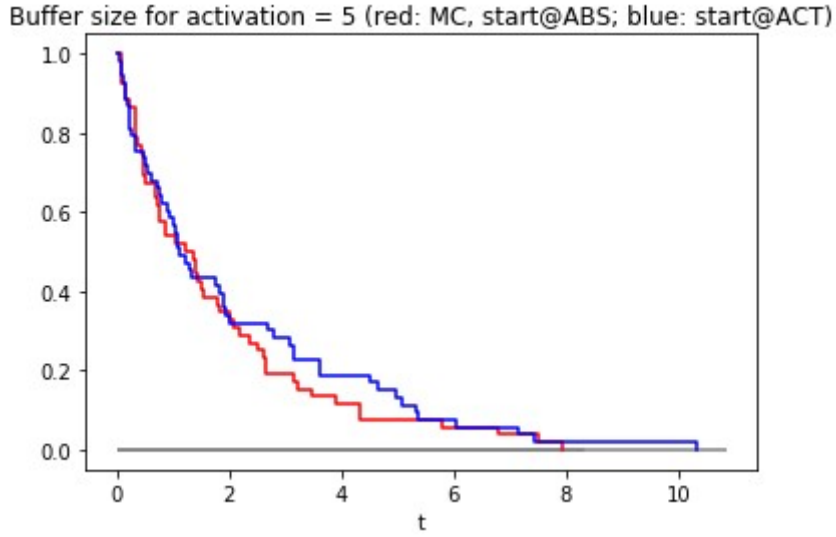

```
simulate_survival: Total simulation time: 0.0 min

proba survival
None
# particles processed so far: 1
Generating trajectories for each particle until END OF SIMULATION TIME (T=2000.0)...

Running Monte-Carlo simulation on single-server system to estimate expected survival time for
buffer_size_activation=5 on N=20 particles and simulation time T=50x...
proba survival
None
# particles by start_state:
0: x=[5], p=1.0 --> N=30
Block of particle indices to simulate #0: [0, 29] (N=30)
# particles processed so far: 1
# particles processed so far: 2
# particles processed so far: 3
# particles processed so far: 4
# particles processed so far: 7
# particles processed so far: 10
# particles processed so far: 13
# particles processed so far: 16
# particles processed so far: 19
# particles processed so far: 22
# particles processed so far: 25
# particles processed so far: 28
```








```
simulate_survival: Total simulation time: 0.0 min

proba survival
None
# particles processed so far: 1
Generating trajectories for each particle until END OF SIMULATION TIME (T=2000.0)...
```


Buffer size for activation = 5 (red: MC, start@ABS; blue: start@ACT)
1.0
0.8
0.6
0.4
0.2
0.0
0
2
4
6
8
10
t

In [1]:

In [2]: