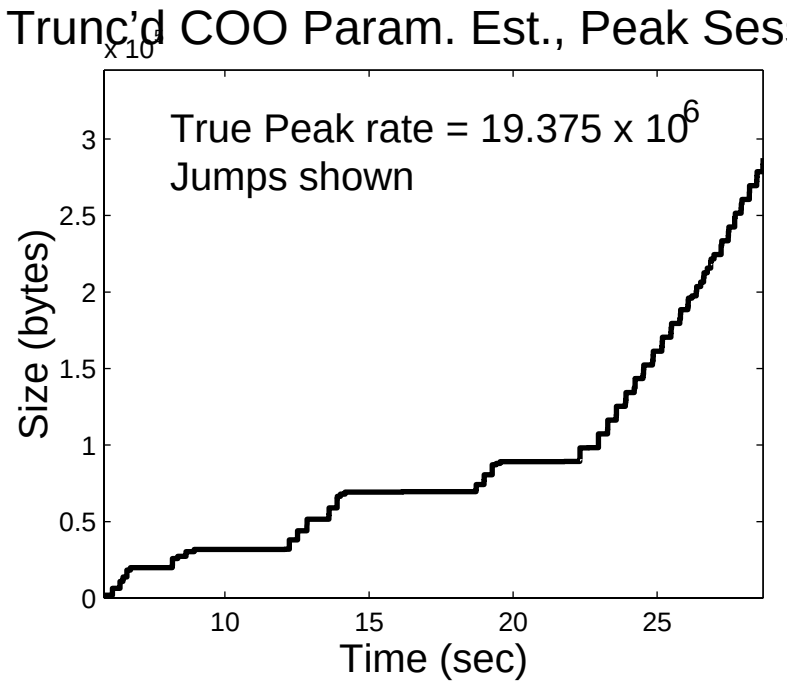
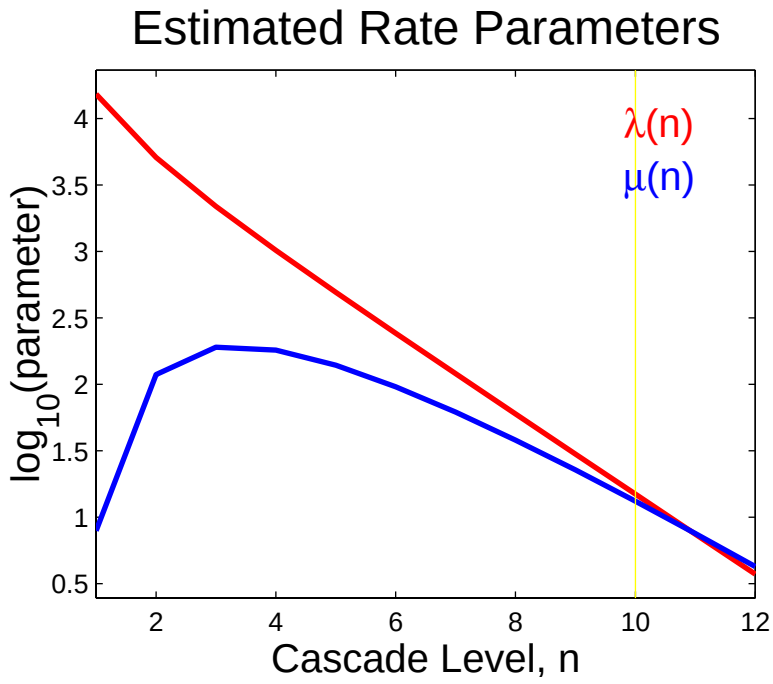
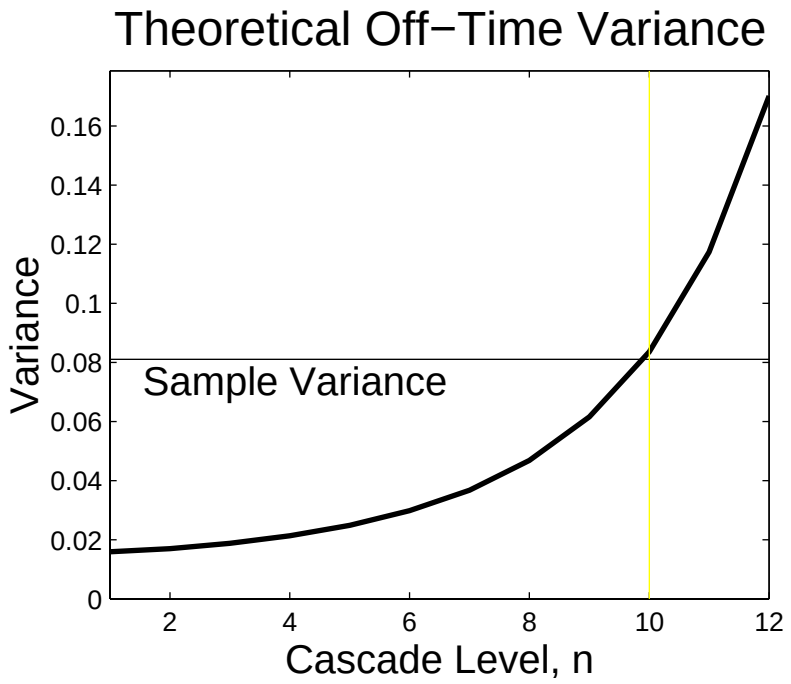
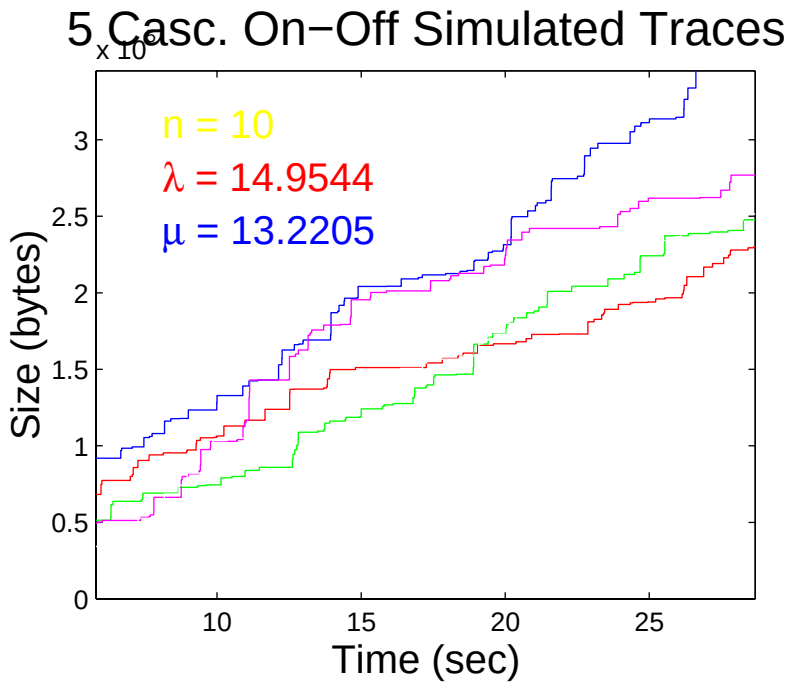
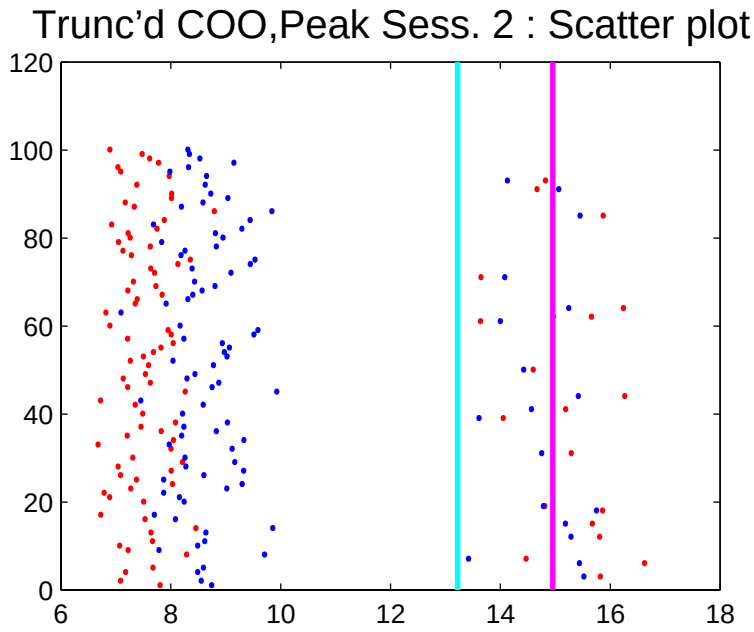
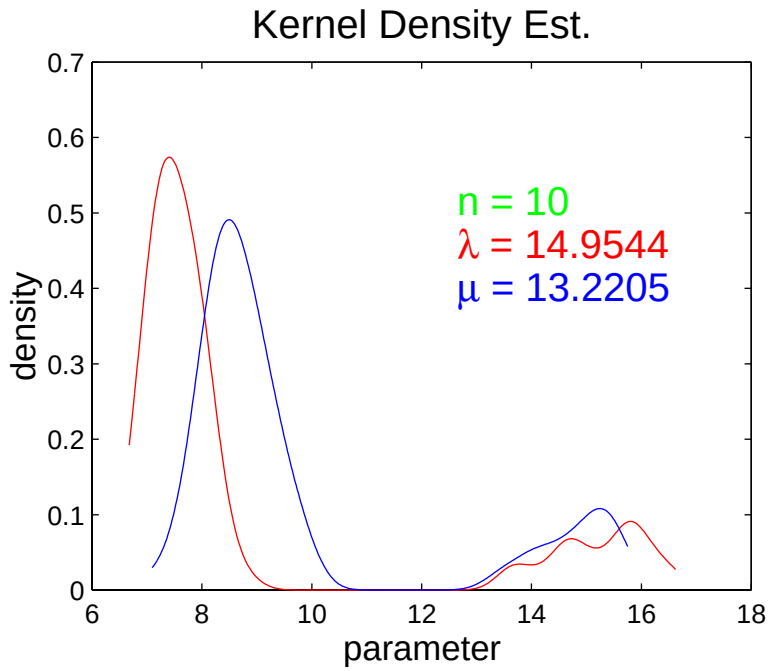

Trunc'd COO Param. Est., Peak Sess. 2
x 10^6
True Peak rate = 19.375 x 10^6
Jumps shown
Size (bytes)
Time (sec)
0
0.5
1
1.5
2
2.5
3
10
15
20
25

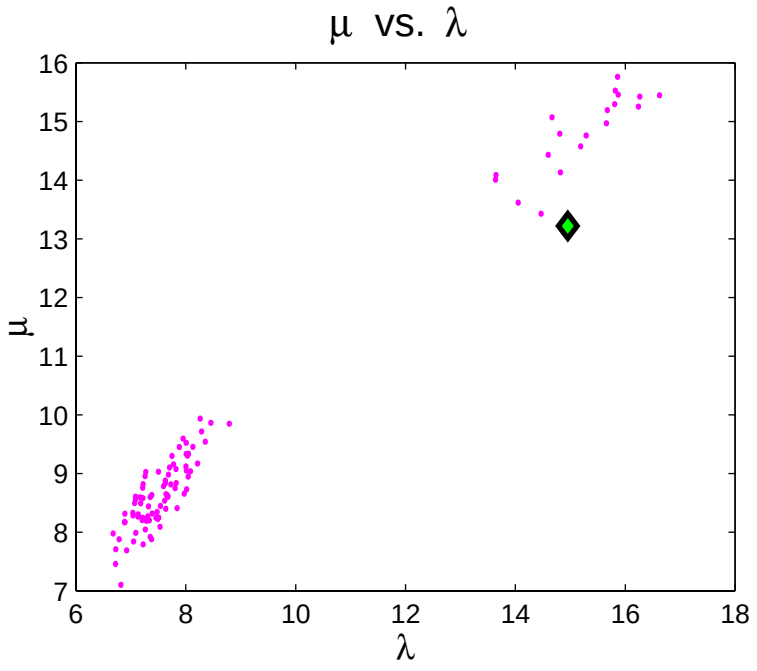

Estimated Rate Parameters
λ(n)
μ(n)
log10(parameter)
Cascade Level, n
0.5
1
1.5
2
2.5
3
3.5
4
2
4
6
8
10
12

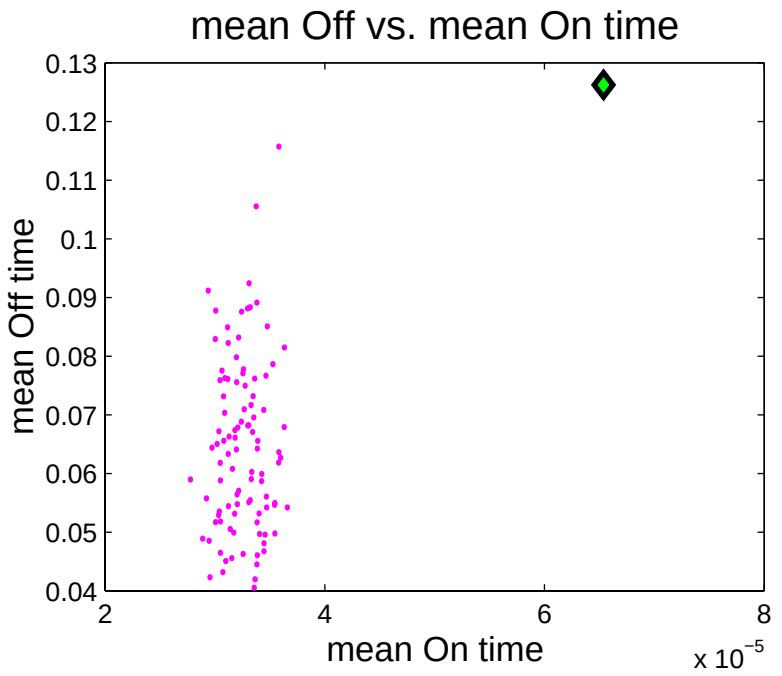

Theoretical Off−Time Variance
Sample Variance
Variance
Cascade Level, n
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
2
4
6
8
10
12

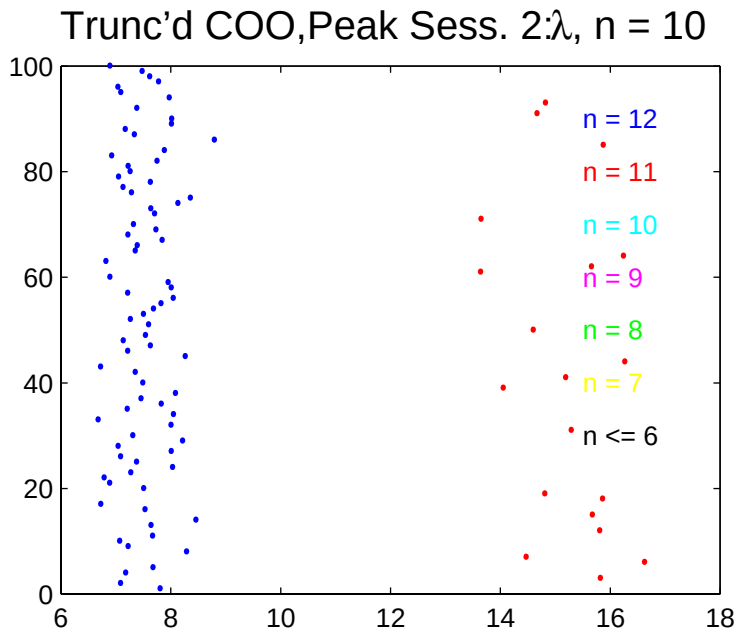

5 Casc. On−Off Simulated Traces
x 10^6
n = 10
λ = 14.9544
μ = 13.2205
Size (bytes)
Time (sec)
0
0.5
1
1.5
2
2.5
3
10
15
20
25

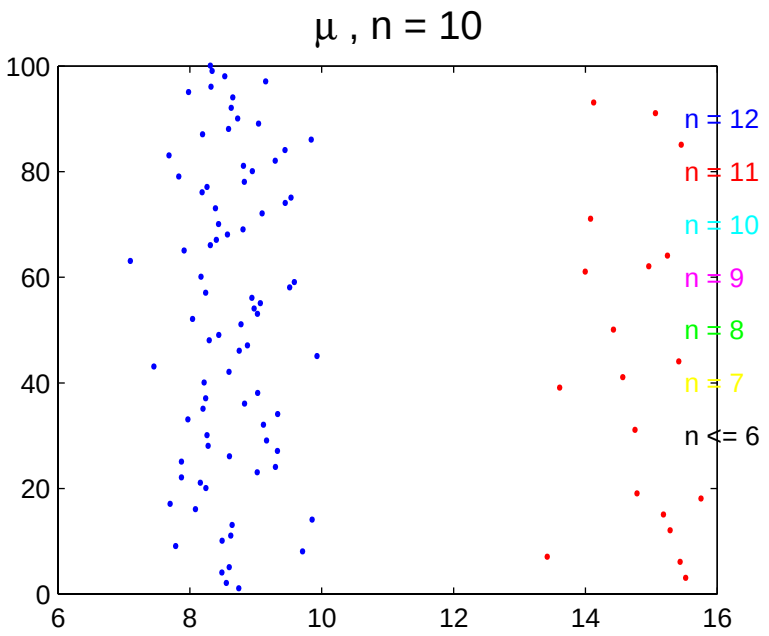

Trunc'd COO,Peak Sess. 2 : Scatter plot
120
100
80
60
40
20
0
6
8
10
12
14
16
18

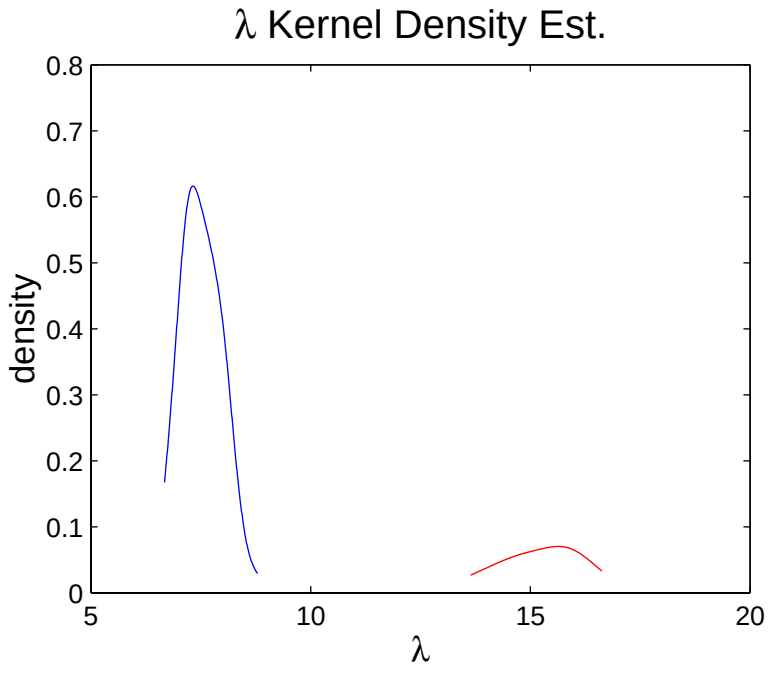

Kernel Density Est.
n = 10
λ = 14.9544
μ = 13.2205
density
parameter
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6
8
10
12
14
16
18

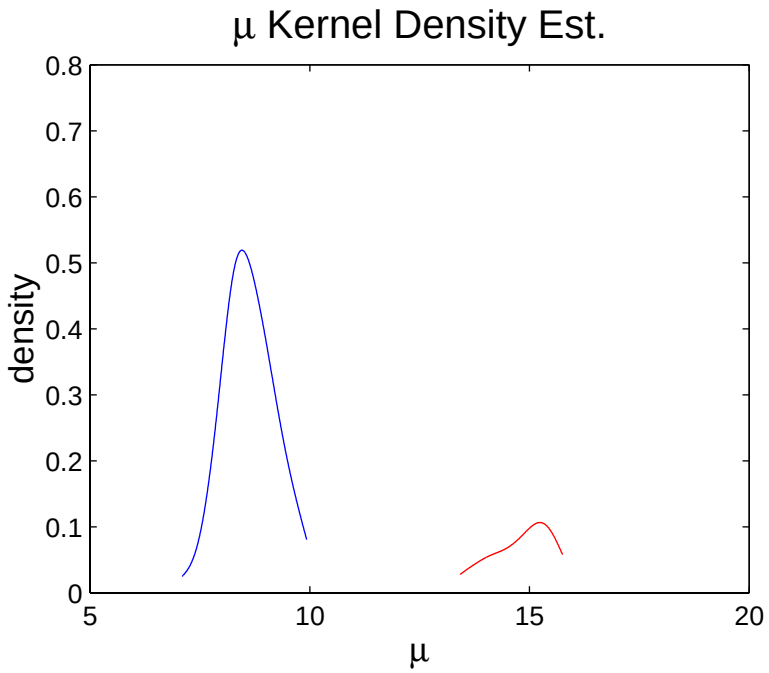

μ vs. λ
μ
λ
16
15
14
13
12
11
10
9
8
7
6
8
10
12
14
16
18

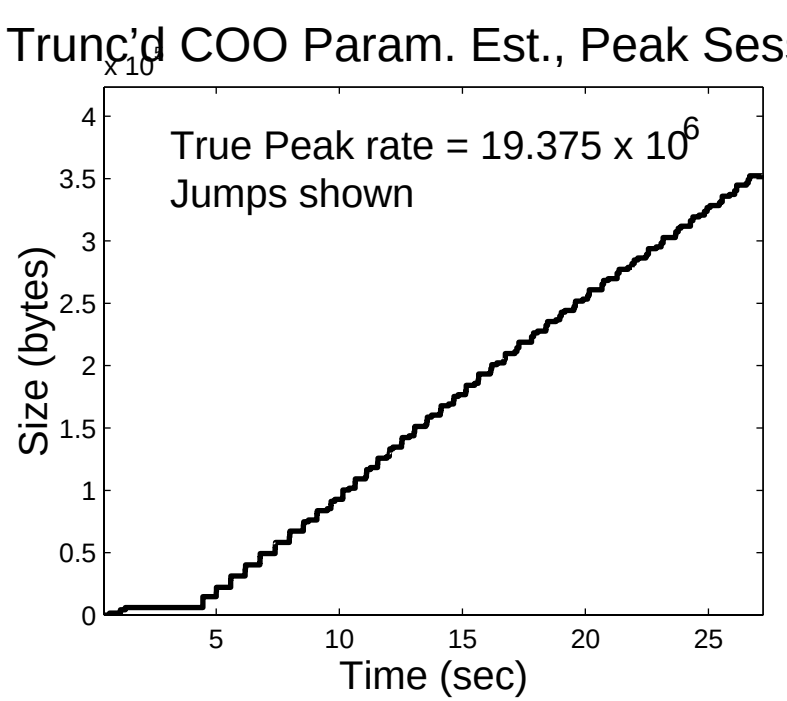

mean Off vs. mean On time
mean Off time
mean On time
x 10^-5
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
2
4
6
8

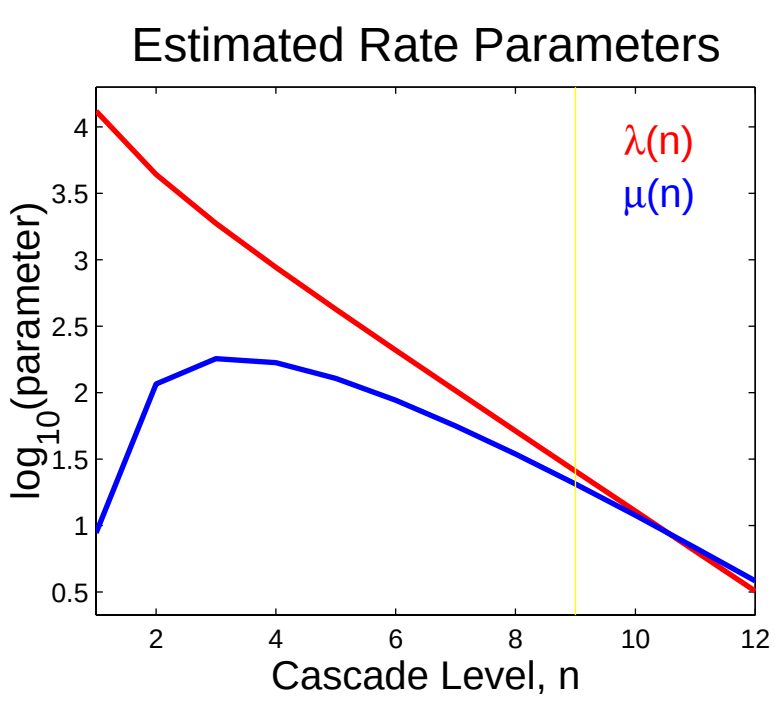

Trunc'd COO,Peak Sess. 2:λ, n = 10
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6

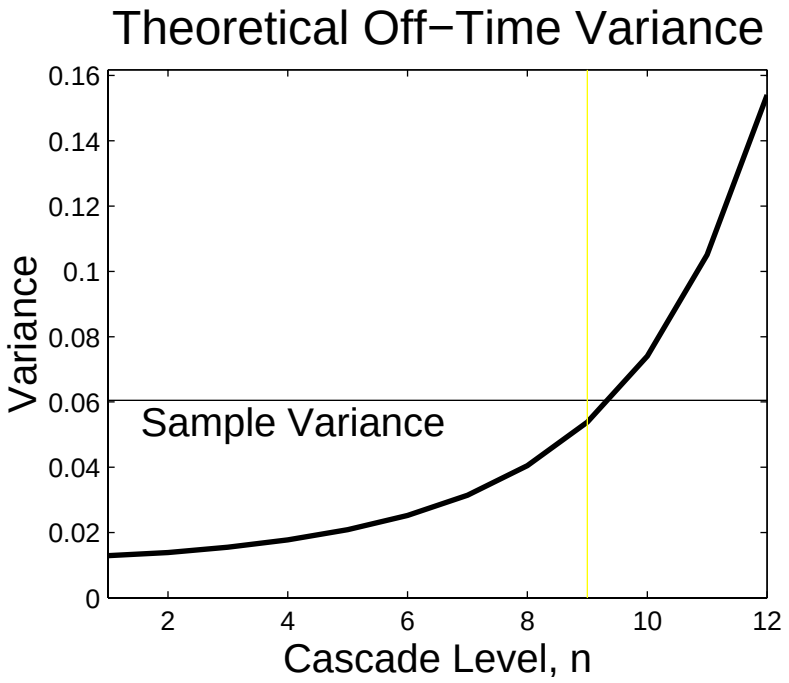

μ , n = 10
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6

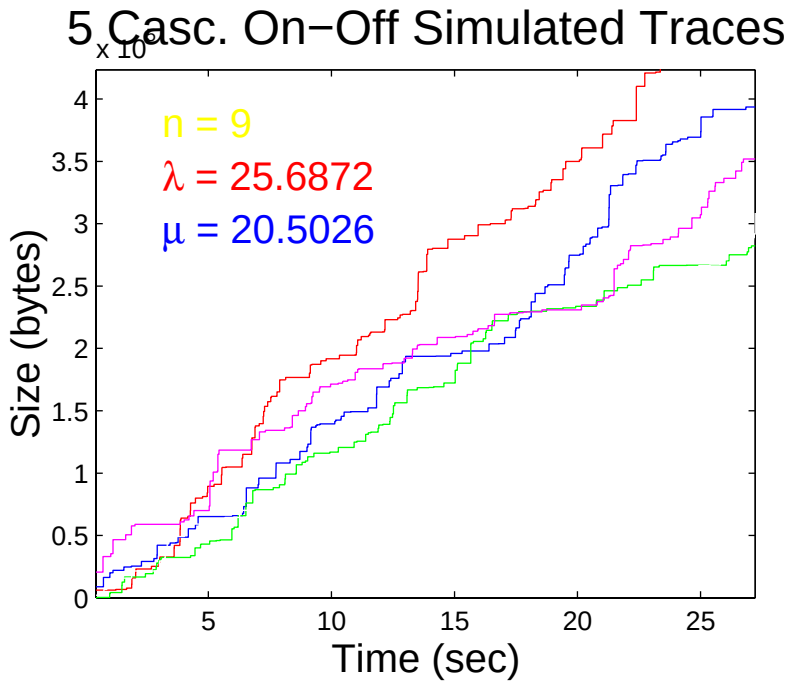

λ Kernel Density Est.
density
λ

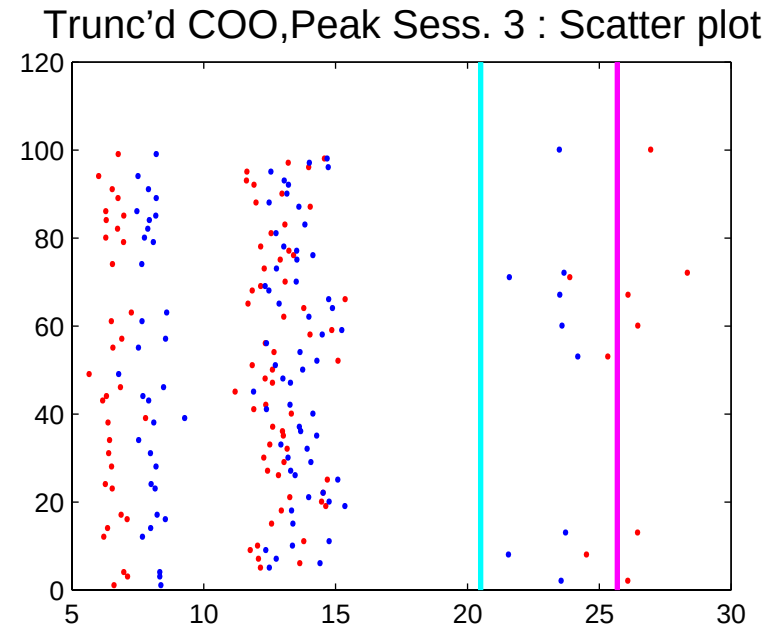

μ Kernel Density Est.
density
μ

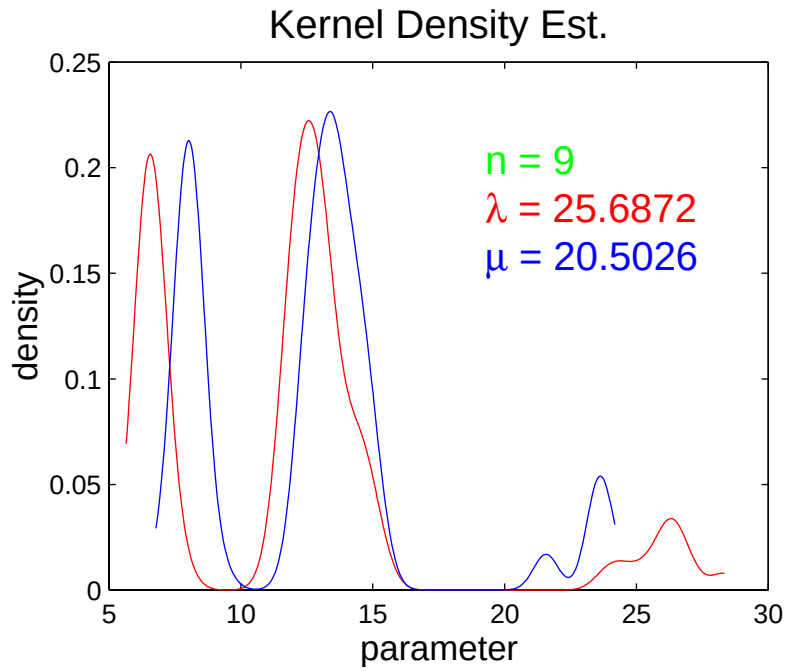

Trunc'd COO Param. Est., Peak Sess. 3
x 10^6
True Peak rate = 19.375 x 10^6
Jumps shown
Size (bytes)
Time (sec)

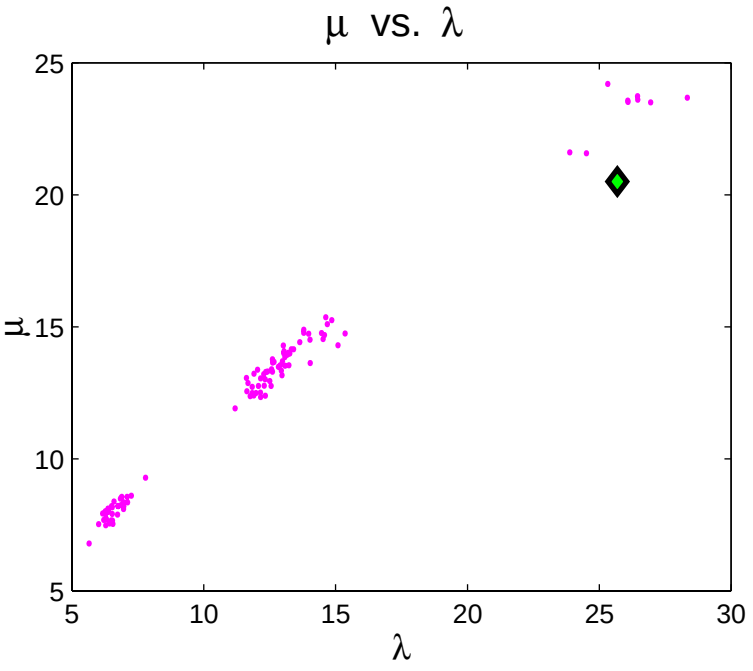

Estimated Rate Parameters
λ(n)
μ(n)
log10(parameter)
Cascade Level, n

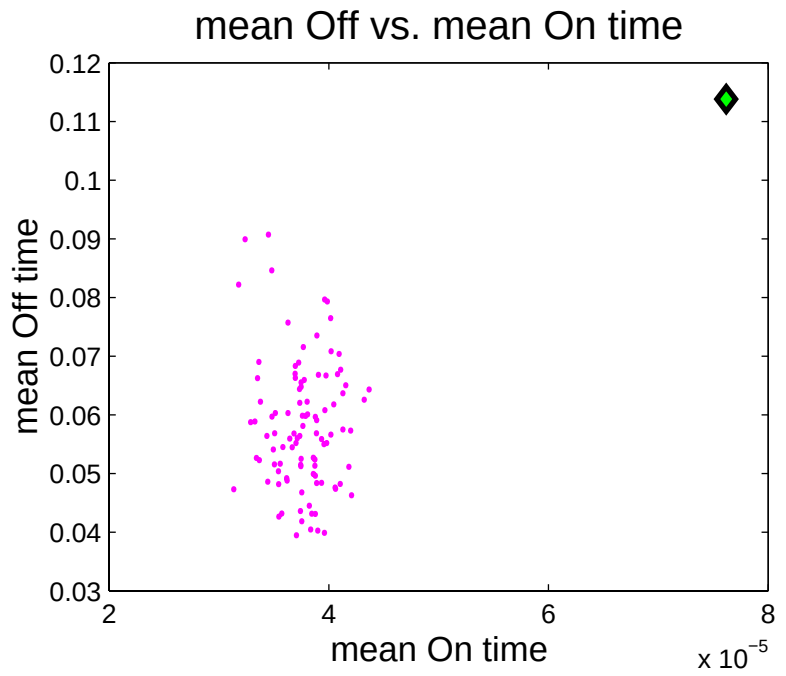

Theoretical Off−Time Variance
Sample Variance
Variance
Cascade Level, n

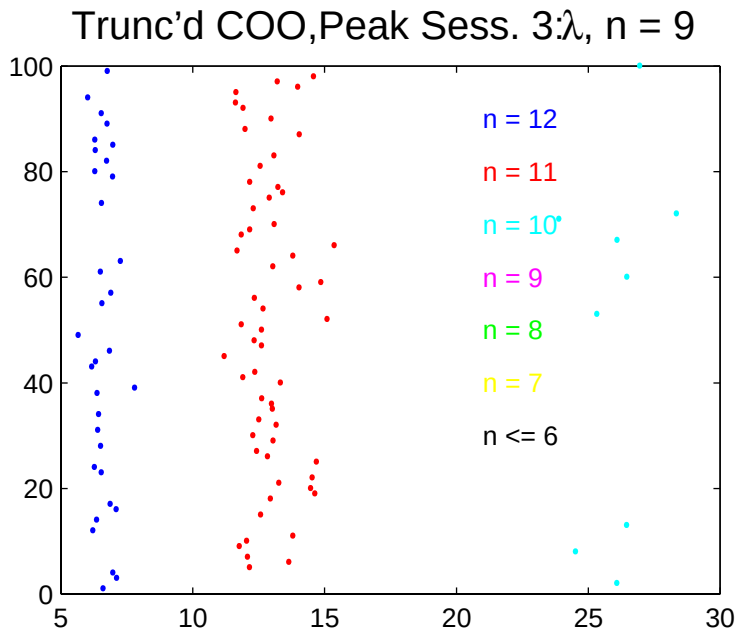

5 Casc. On−Off Simulated Traces
x 10^6
n = 9
λ = 25.6872
μ = 20.5026
Size (bytes)
Time (sec)

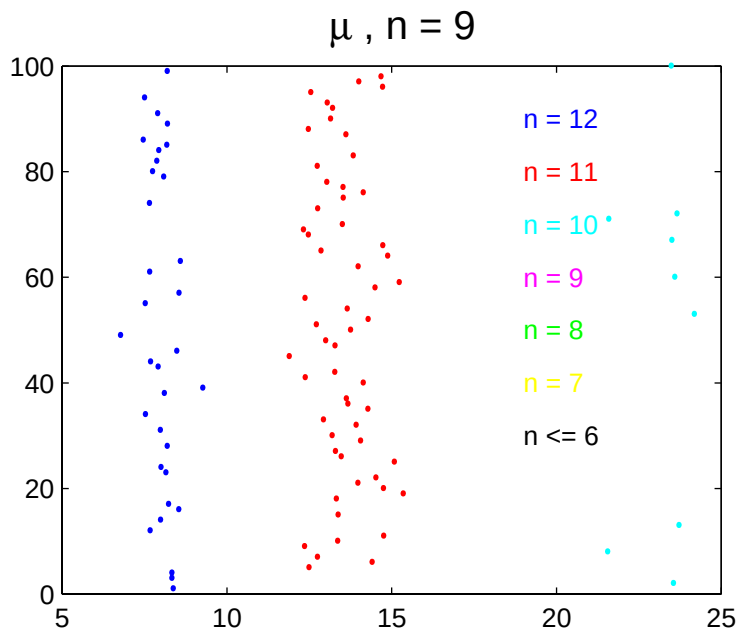

Trunc'd COO,Peak Sess. 3 : Scatter plot
120
100
80
60
40
20
0
5
10
15
20
25
30

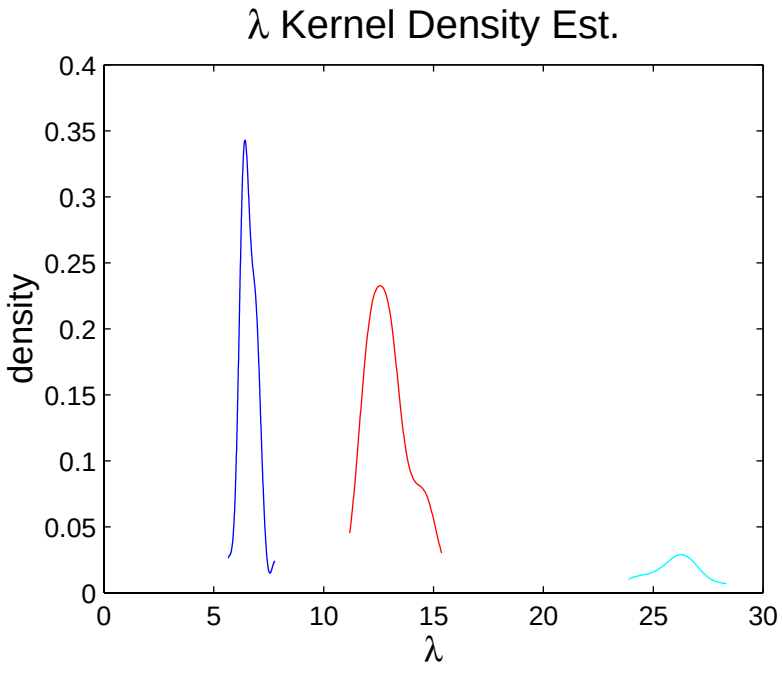

Kernel Density Est.
n = 9
λ = 25.6872
μ = 20.5026
density
parameter
0.25
0.2
0.15
0.1
0.05
0
5
10
15
20
25
30

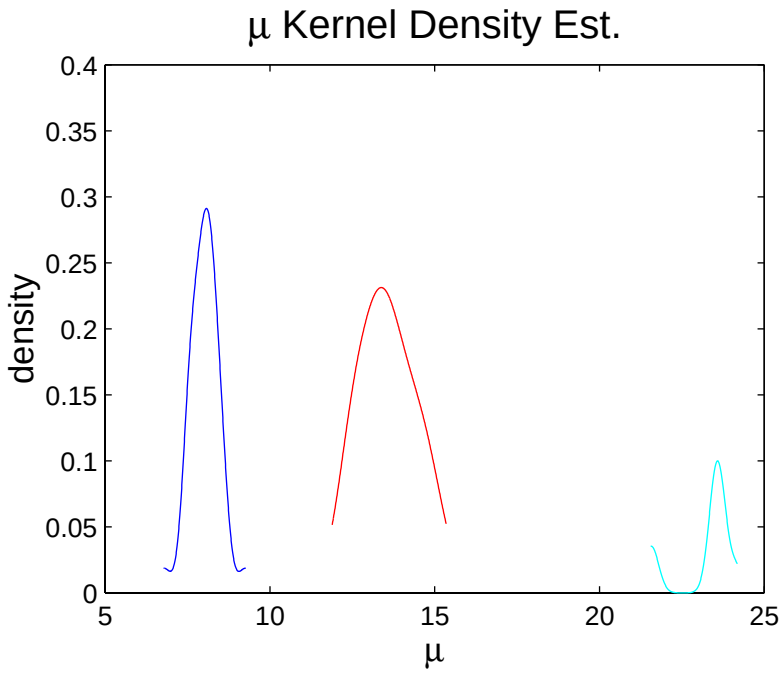

μ vs. λ
μ
λ
25
20
15
10
5
5
10
15
20
25
30

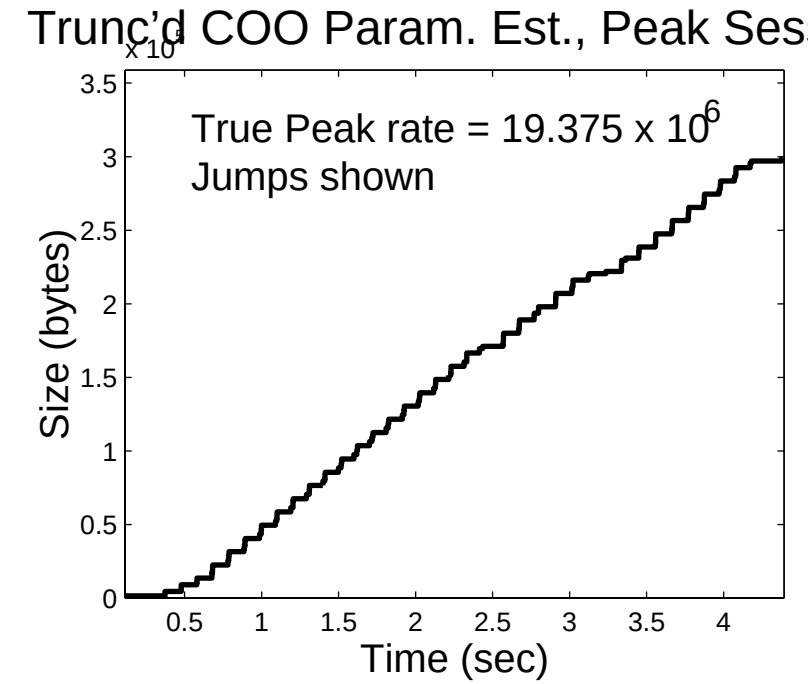

mean Off vs. mean On time
mean Off time
mean On time
x 10^-5
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
2
4
6
8

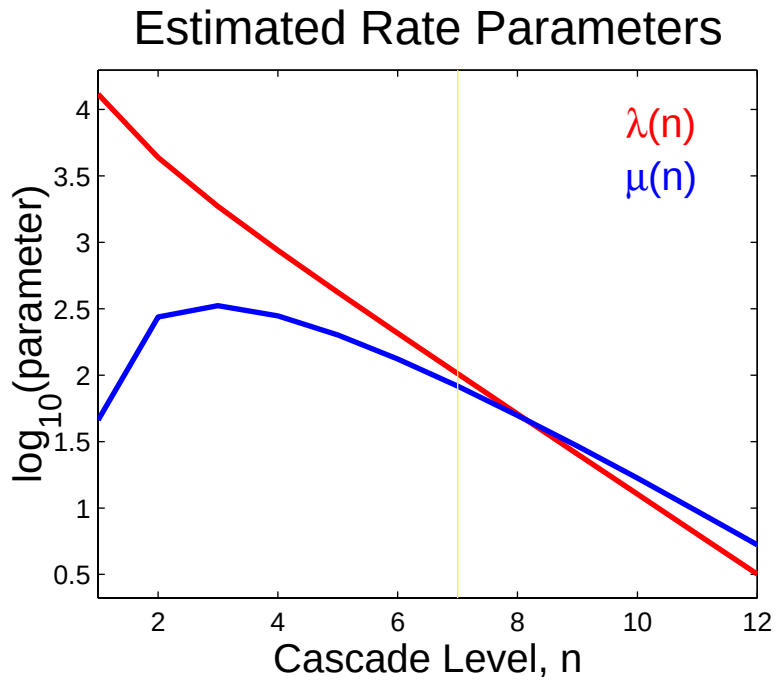

Trunc'd COO,Peak Sess. 3:λ, n = 9
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6

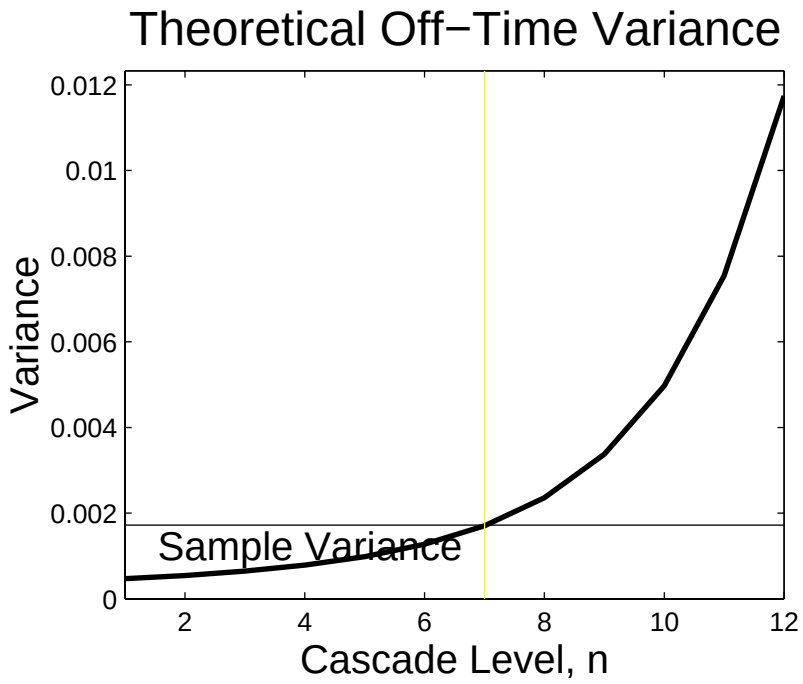

μ , n = 9
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6

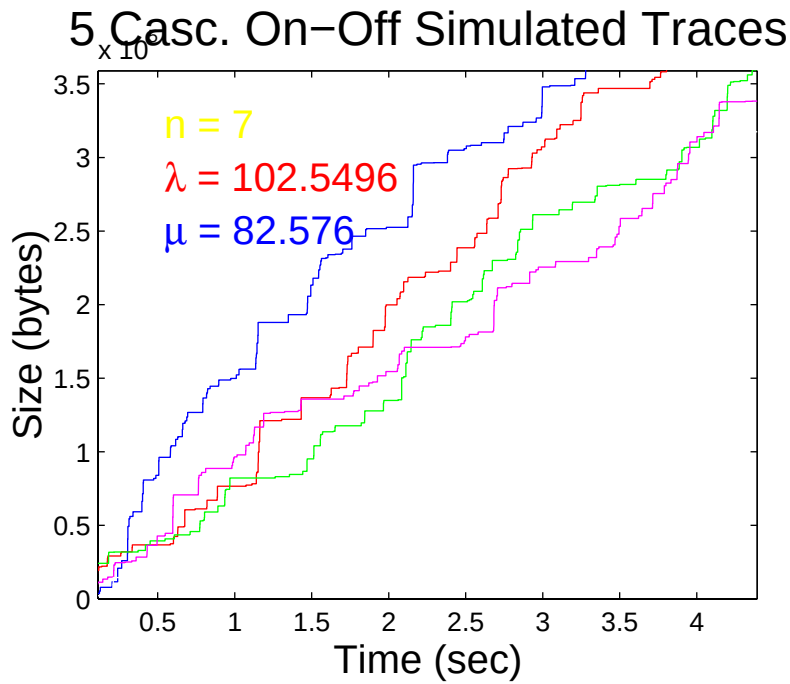

λ Kernel Density Est.
density
λ

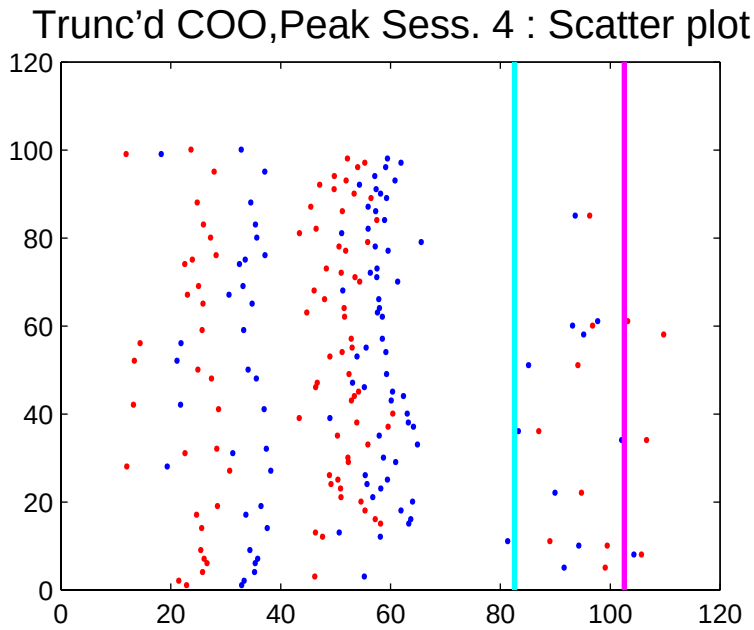

μ Kernel Density Est.
density
μ

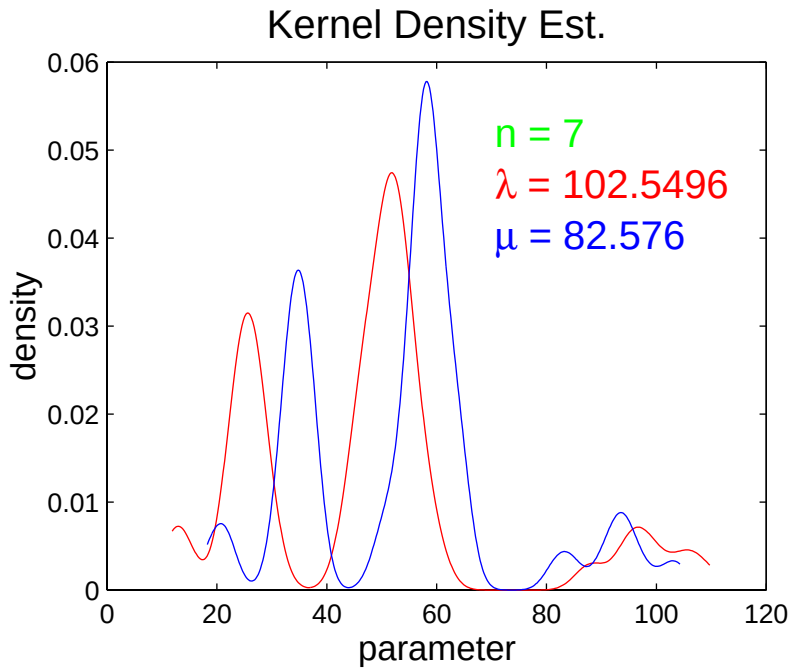

Trunc'd COO Param. Est., Peak Sess. 4
x 10^6
True Peak rate = 19.375 x 10^6
Jumps shown
Size (bytes)
Time (sec)

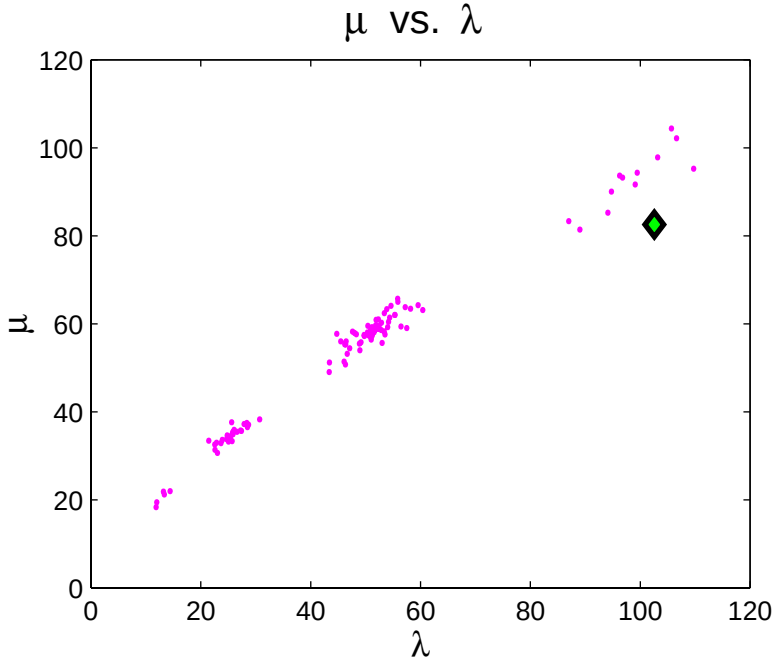

Estimated Rate Parameters
λ(n)
μ(n)
log10(parameter)
Cascade Level, n

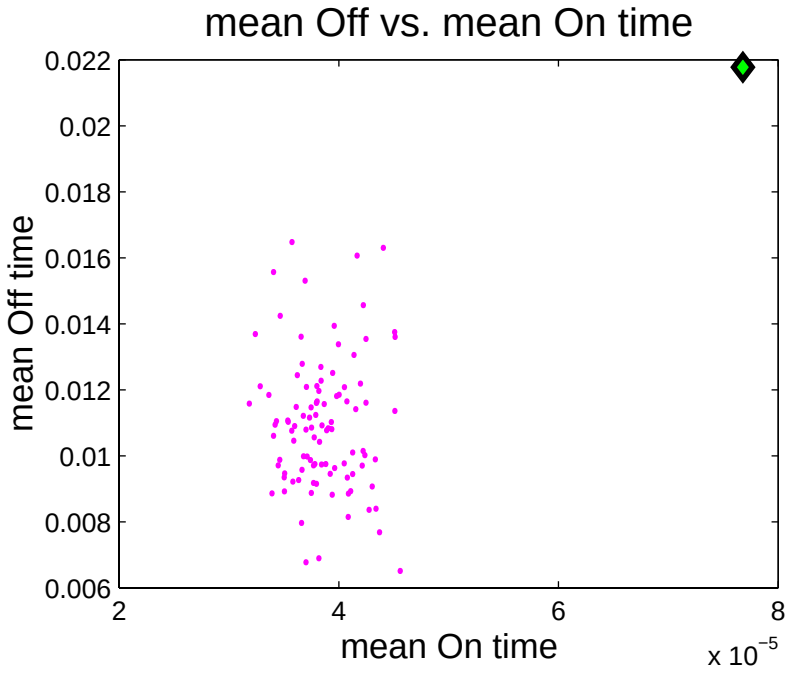

Theoretical Off−Time Variance
Sample Variance
Variance
Cascade Level, n

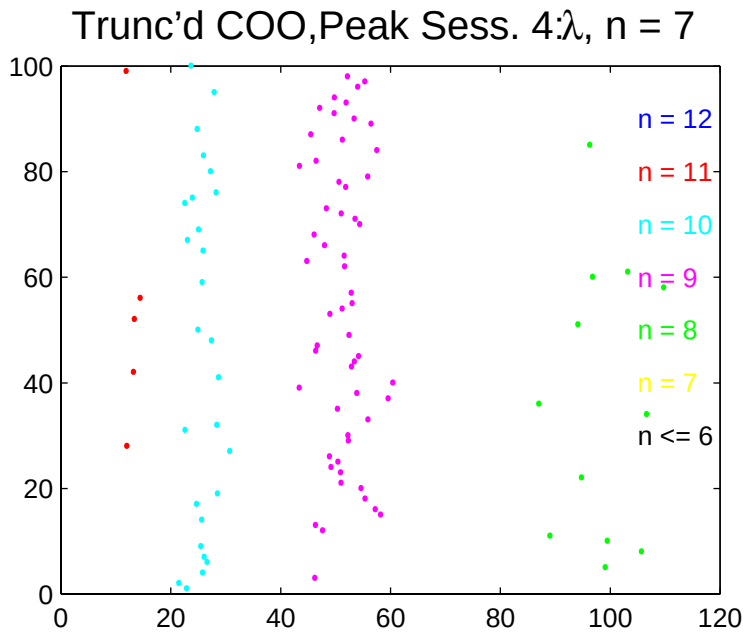

5 Casc. On−Off Simulated Traces
x 10^6
n = 7
λ = 102.5496
μ = 82.576
Size (bytes)
Time (sec)

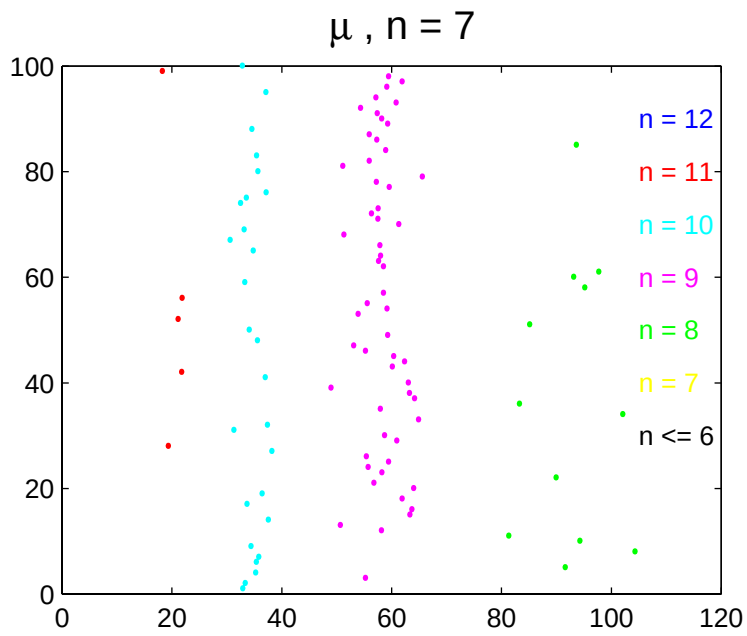

Trunc'd COO,Peak Sess. 4 : Scatter plot
120
100
80
60
40
20
0
0
20
40
60
80
100
120

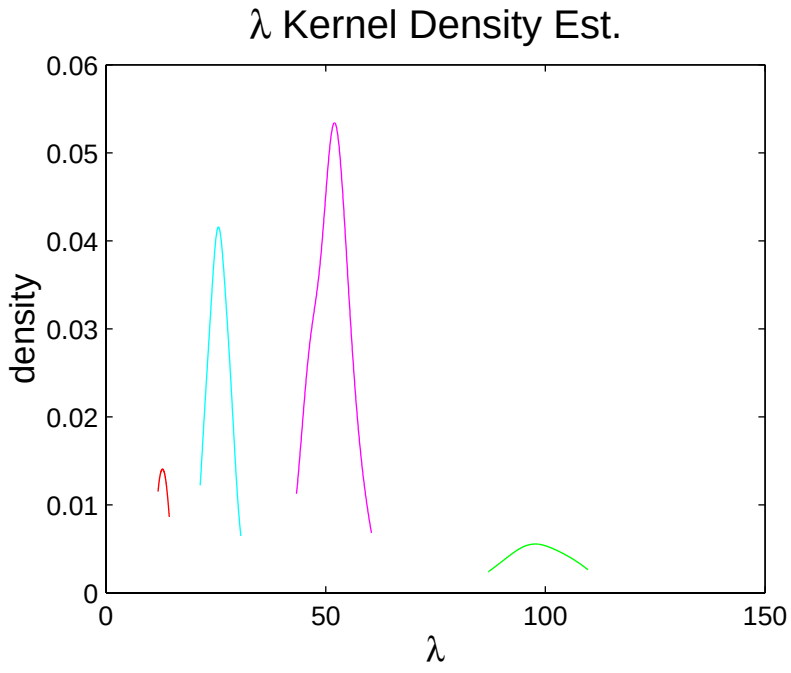

Kernel Density Est.
n = 7
λ = 102.5496
μ = 82.576
density
parameter
0.06
0.05
0.04
0.03
0.02
0.01
0
0
20
40
60
80
100
120

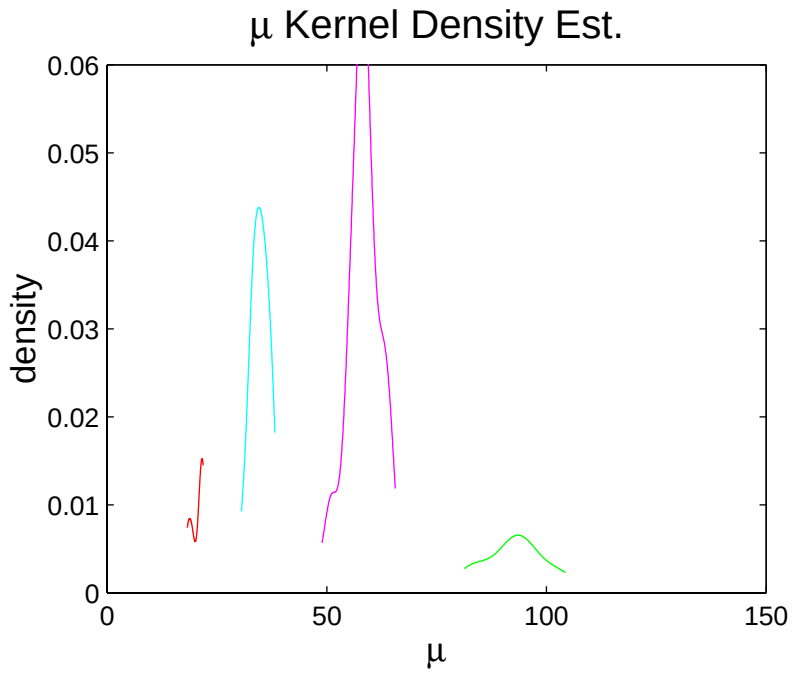

μ vs. λ
μ
λ
120
100
80
60
40
20
0
0
20
40
60
80
100
120


mean Off vs. mean On time
mean Off time
mean On time
x 10^-5
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
2
4
6
8

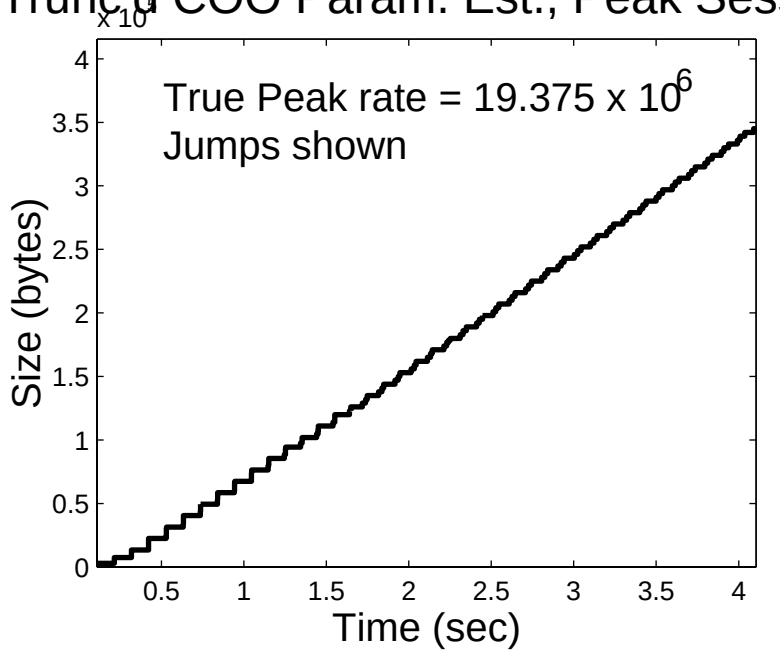

Trunc'd COO,Peak Sess. 4:λ, n = 7
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6
0
20
40
60
80
100
120


μ , n = 7
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6
0
20
40
60
80
100
120

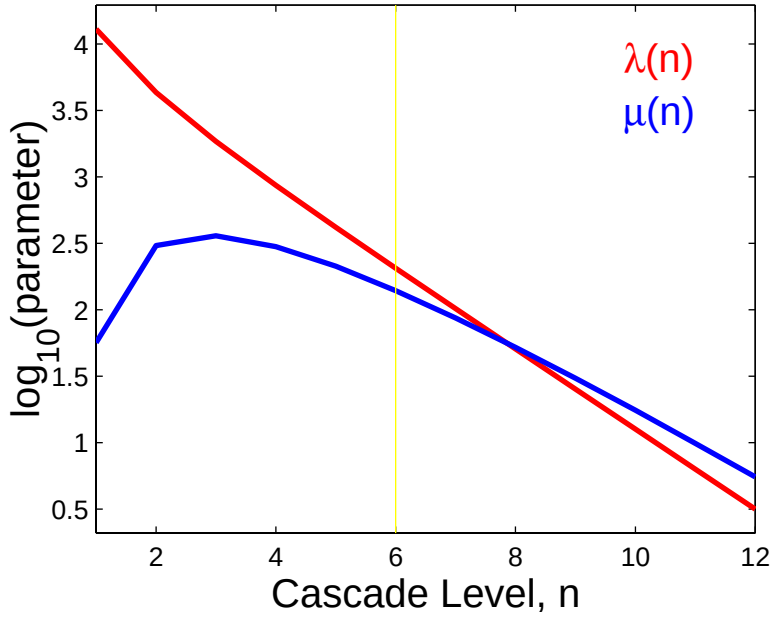

λ Kernel Density Est.
density
λ
0
0.01
0.02
0.03
0.04
0.05
0.06
0
50
100
150


μ Kernel Density Est.
density
μ
0
0.01
0.02
0.03
0.04
0.05
0.06
0
50
100
150

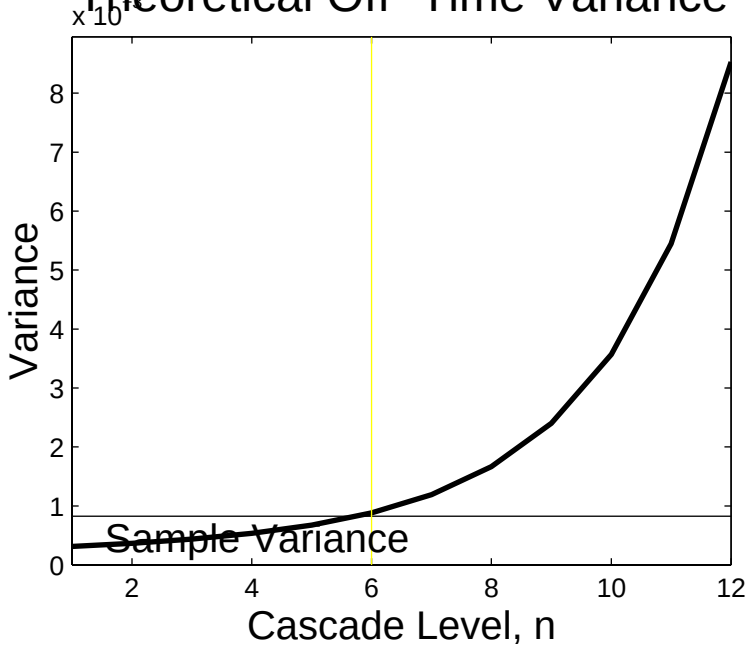
Trunc'd COO Param. Est., Peak Sess. 5



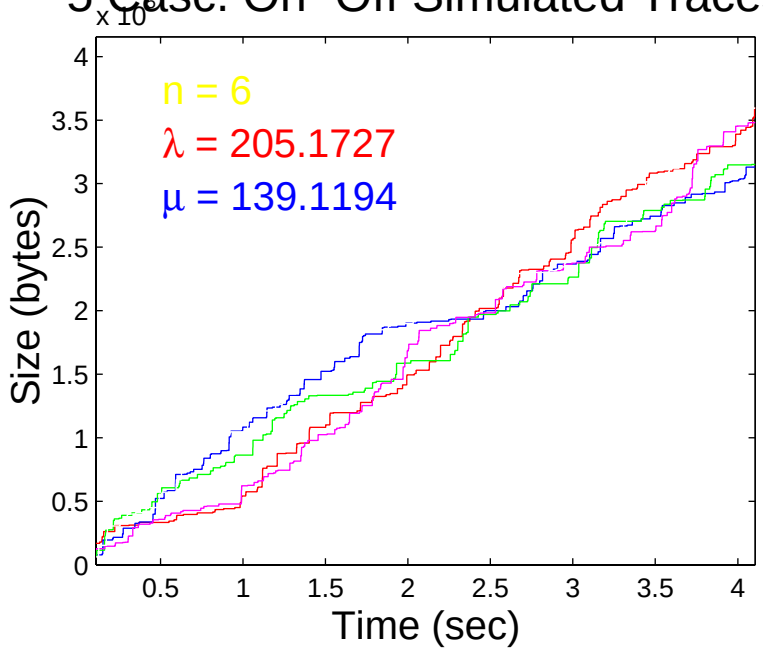
Estimated Rate Parameters

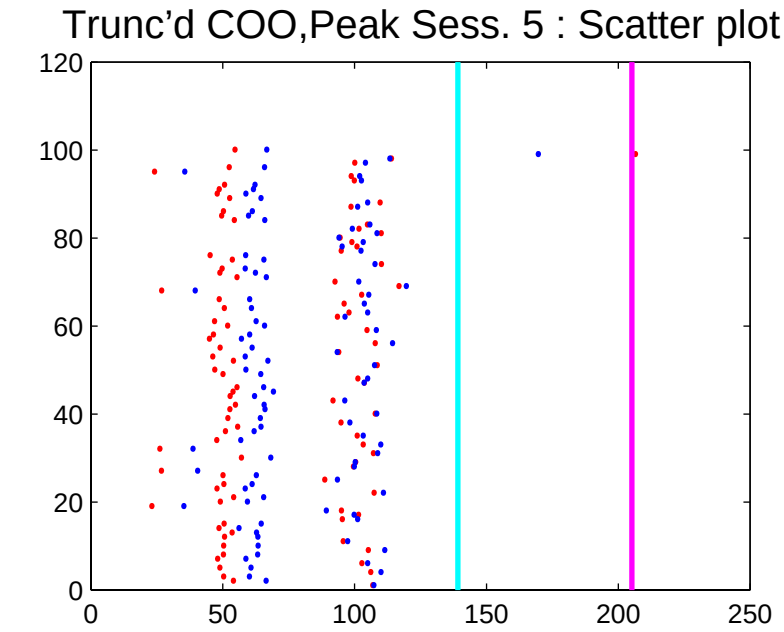


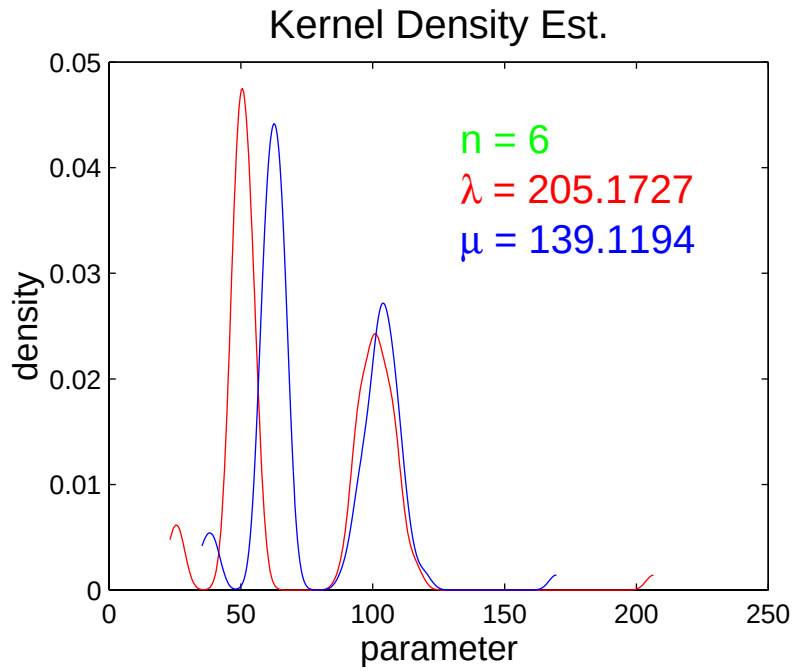
Theoretical Off−Time Variance

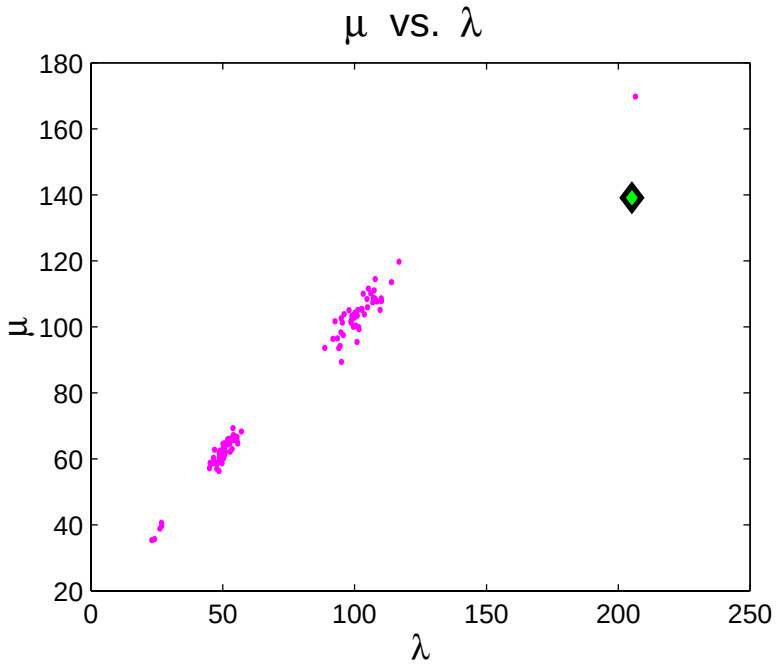


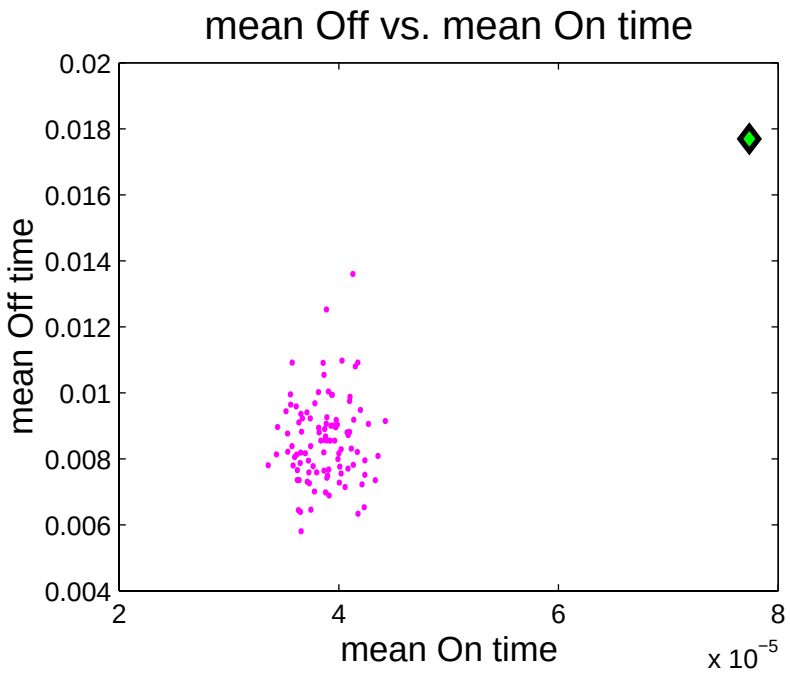
5 Casc. On−Off Simulated Traces

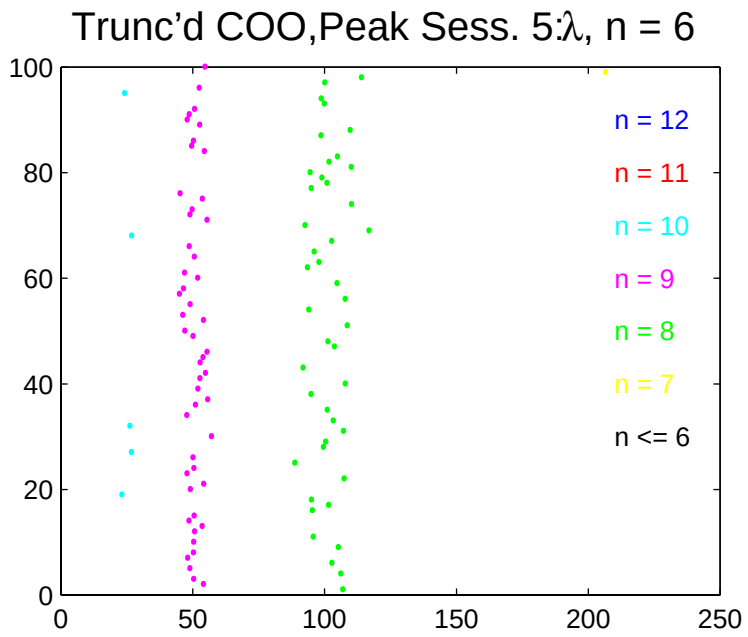


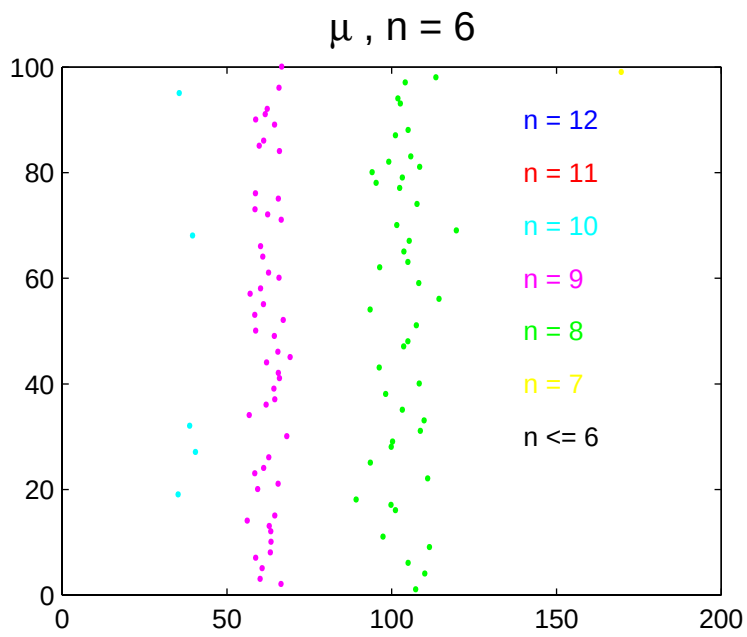

Trunc'd COO,Peak Sess. 5 : Scatter plot
120
100
80
60
40
20
0
0
50
100
150
200
250

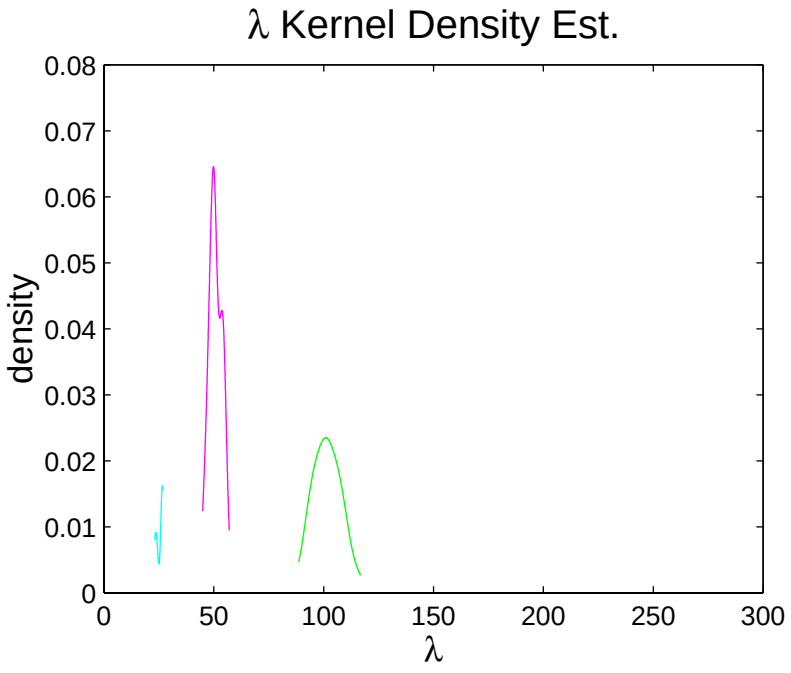

Kernel Density Est.
n = 6
λ = 205.1727
μ = 139.1194
density
parameter
0.05
0.04
0.03
0.02
0.01
0
0
50
100
150
200
250

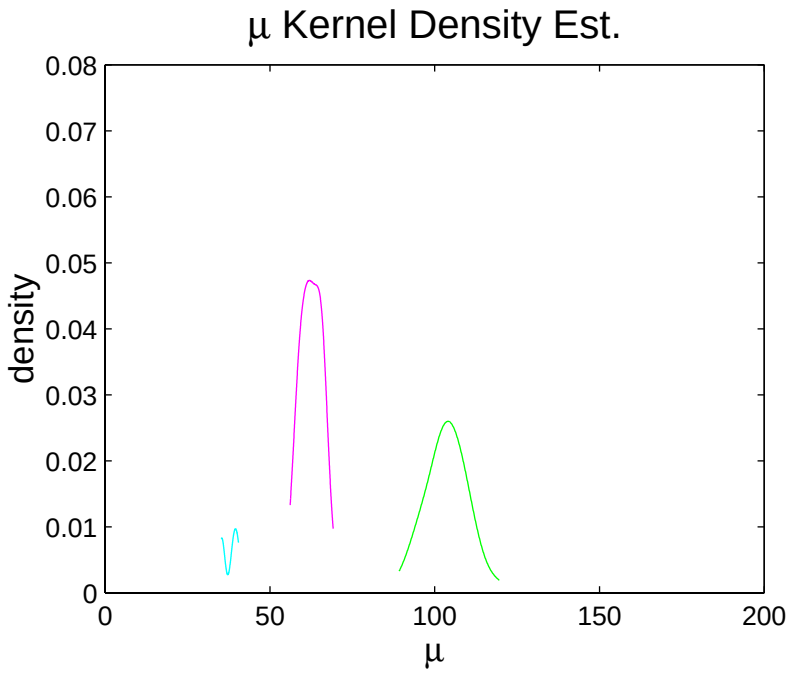

μ vs. λ
μ
λ
180
160
140
120
100
80
60
40
20
0
50
100
150
200
250


mean Off vs. mean On time
mean Off time
mean On time
x 10^-5
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
2
4
6
8


Trunc'd COO,Peak Sess. 5:λ, n = 6
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6
0
20
40
60
80
100
0
50
100
150
200
250


μ , n = 6
n = 12
n = 11
n = 10
n = 9
n = 8
n = 7
n <= 6
0
20
40
60
80
100
0
50
100
150
200


λ Kernel Density Est.
density
λ
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0
50
100
150
200
250
300


μ Kernel Density Est.
density
μ
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0
50
100
150
200