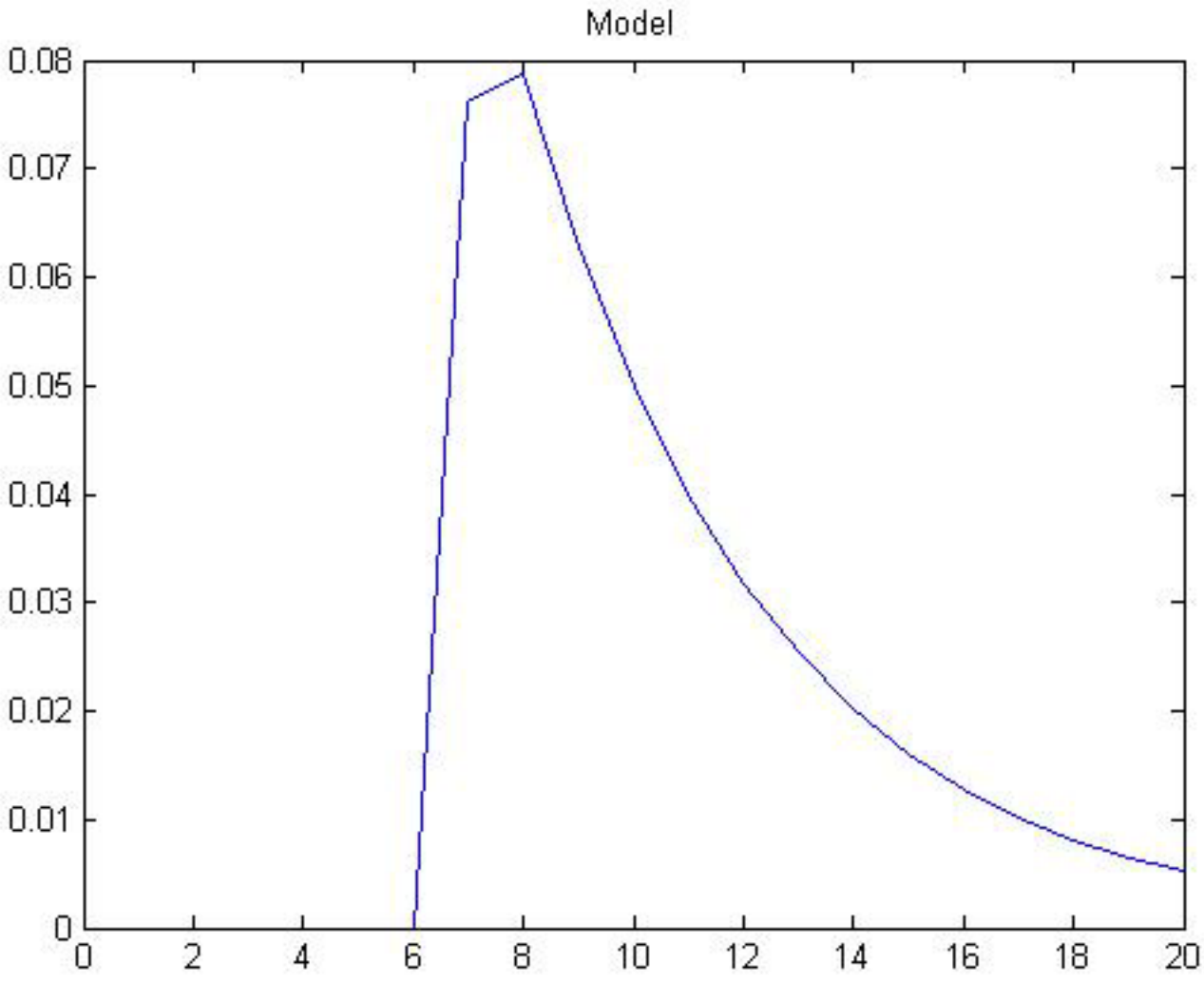
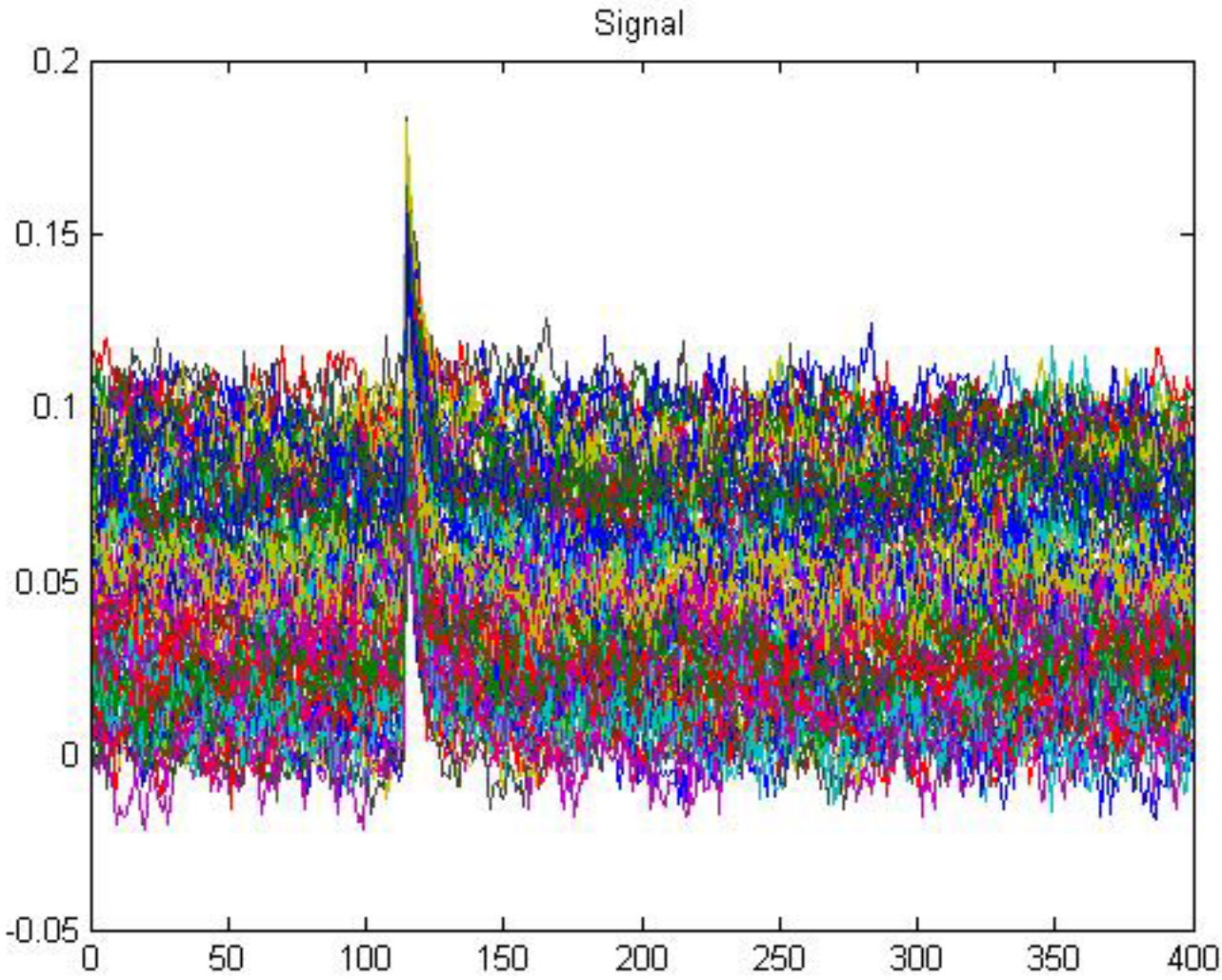
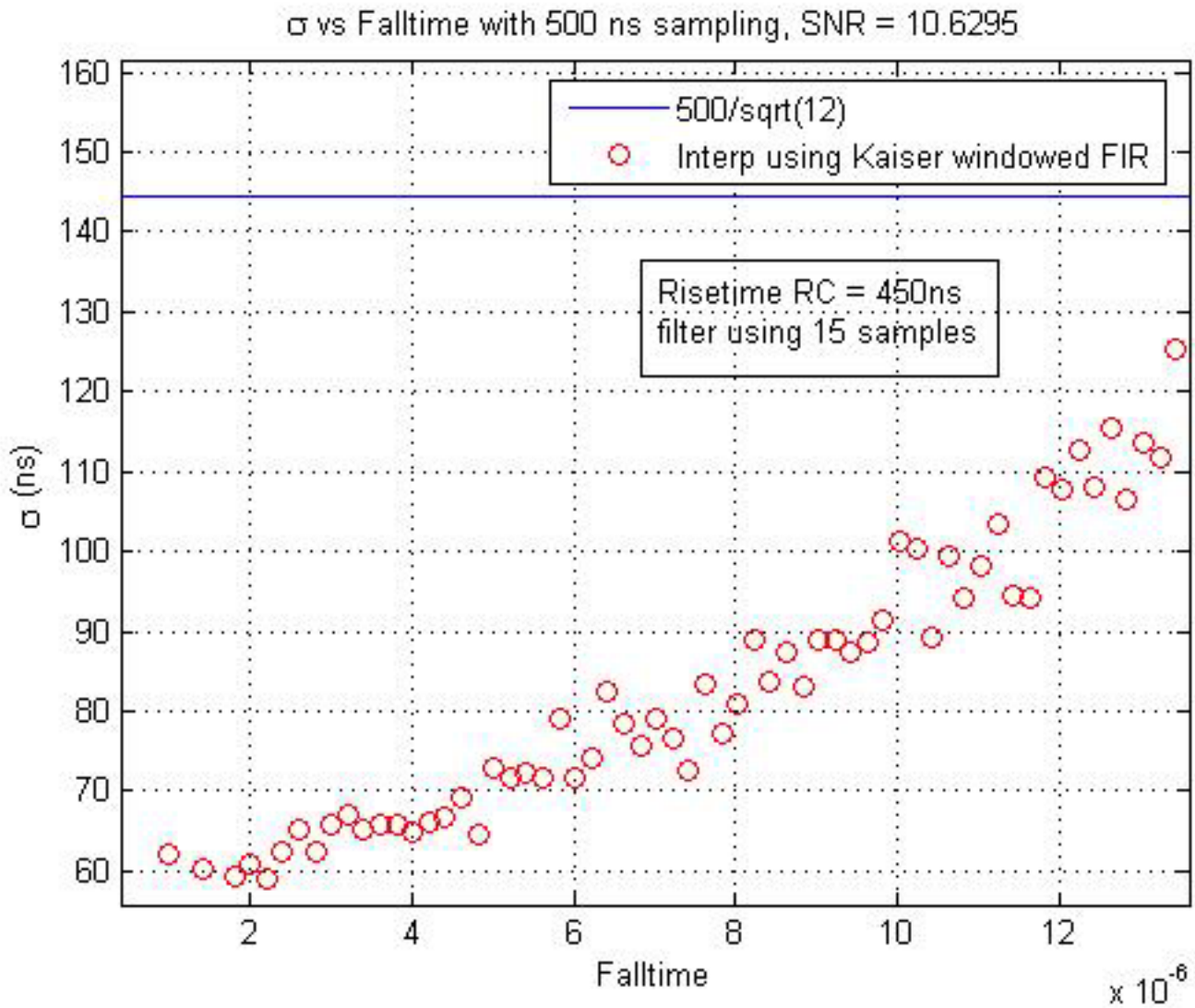
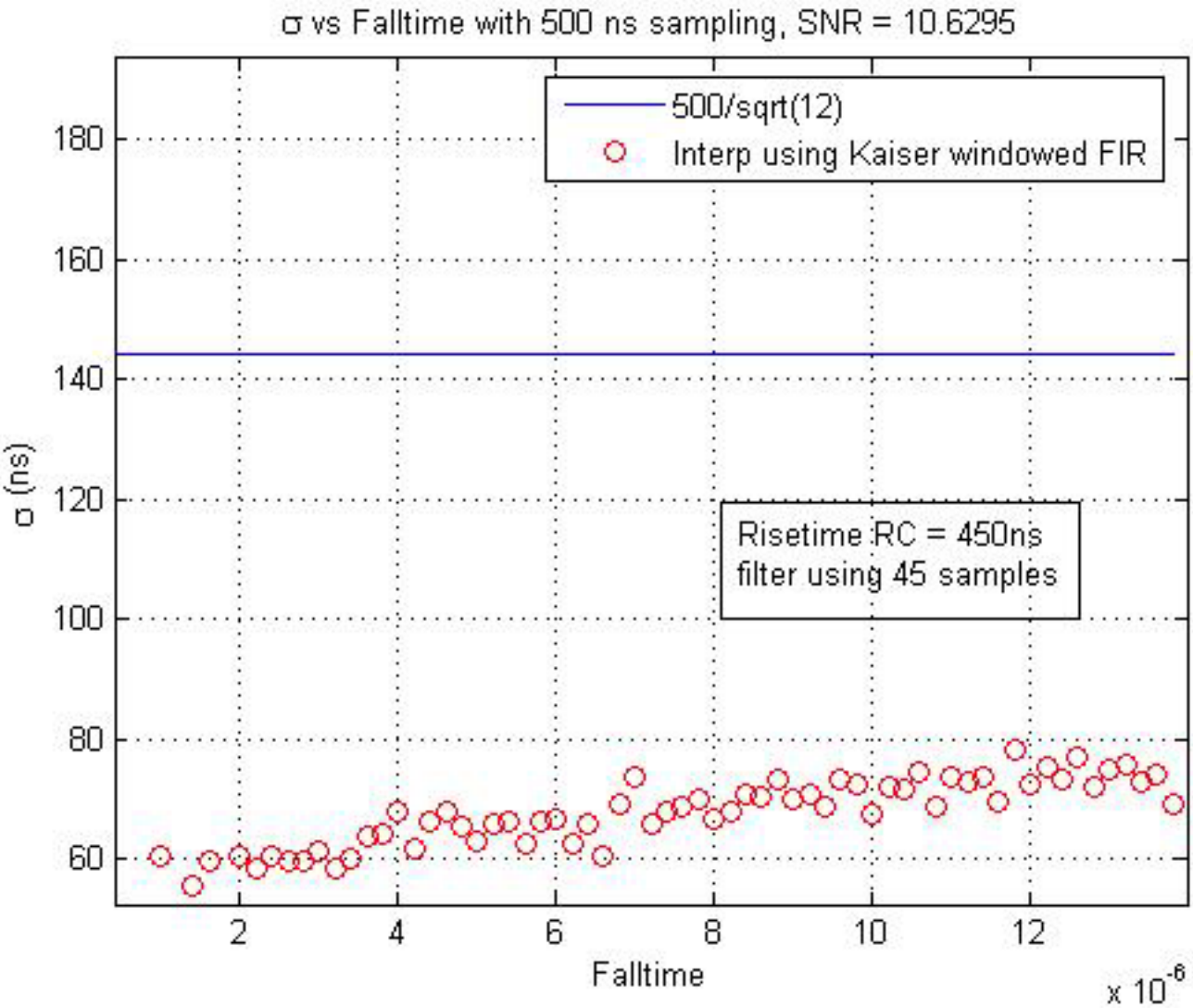
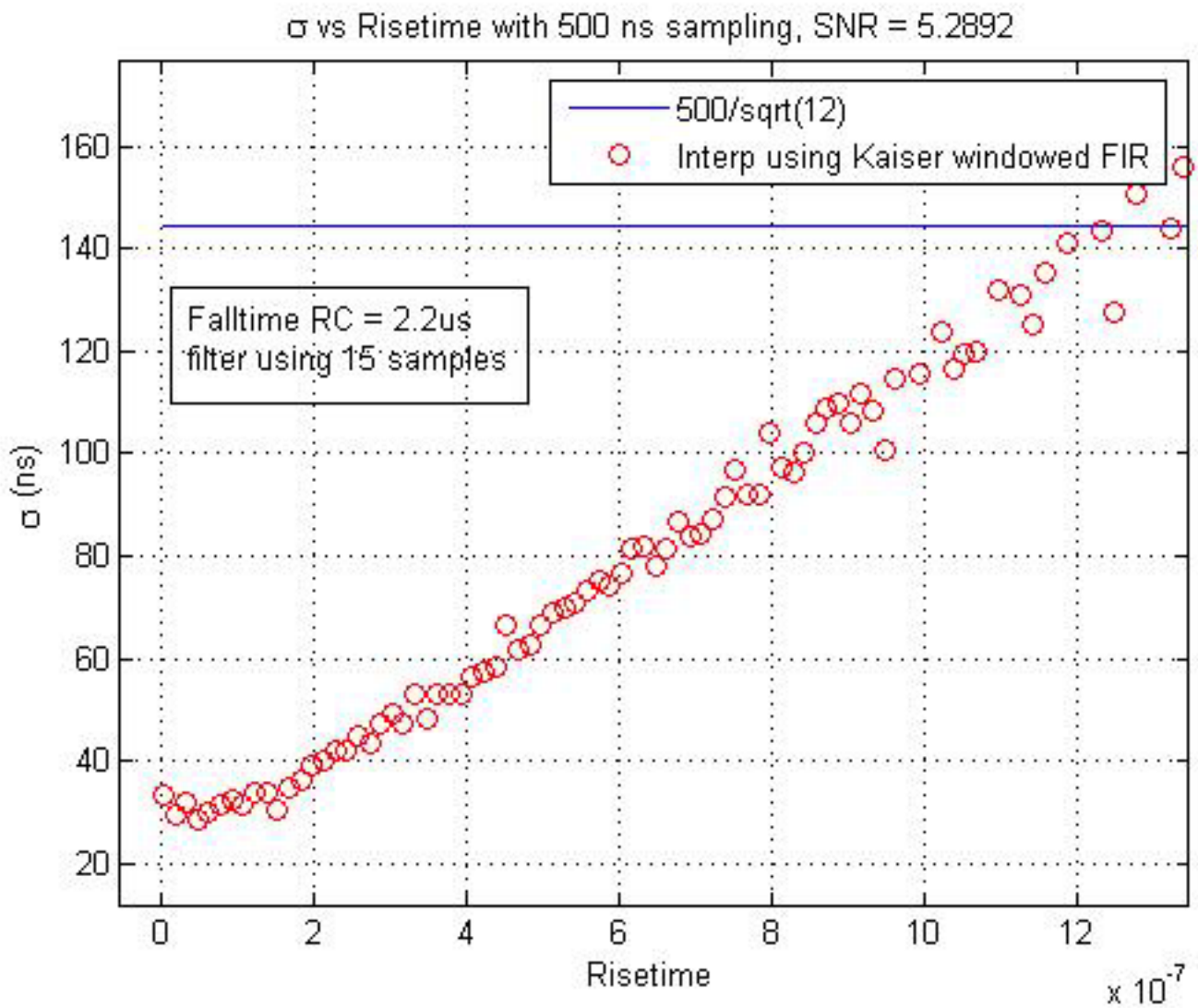
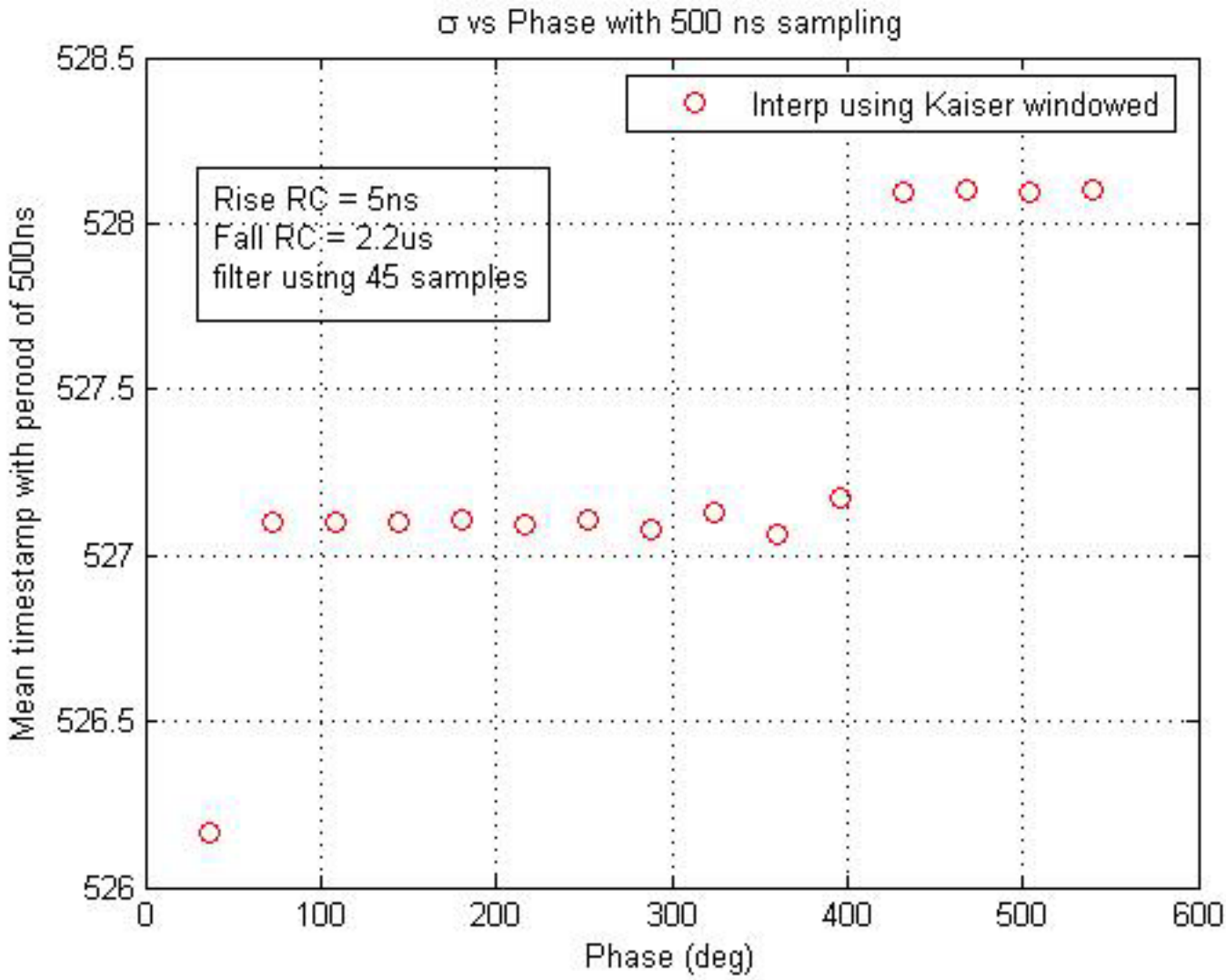

Model
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
2
4
6
8
10
12
14
16
18
20

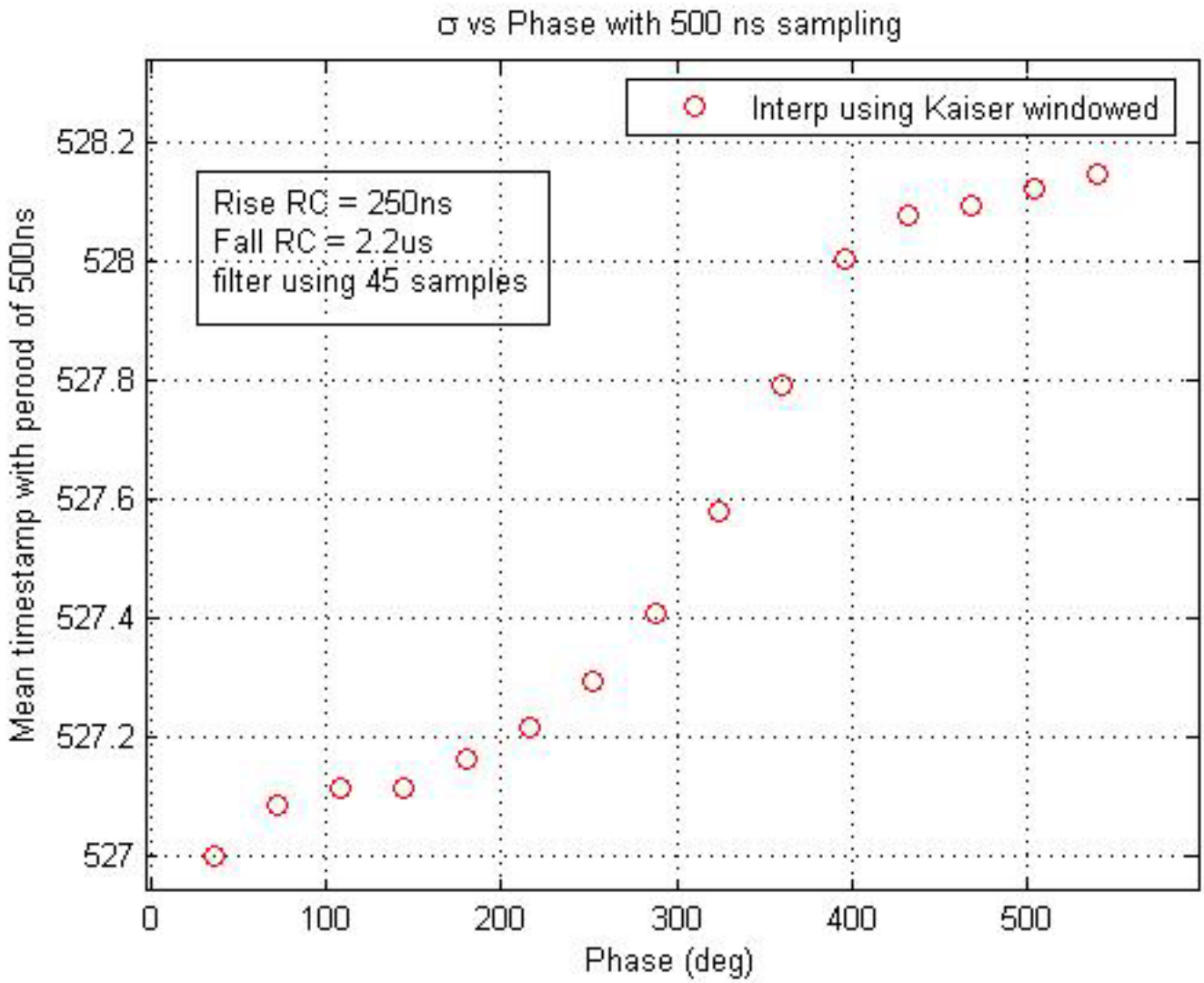

Signal
0.2
0.15
0.1
0.05
0
-0.05
0
50
100
150
200
250
300
350
400

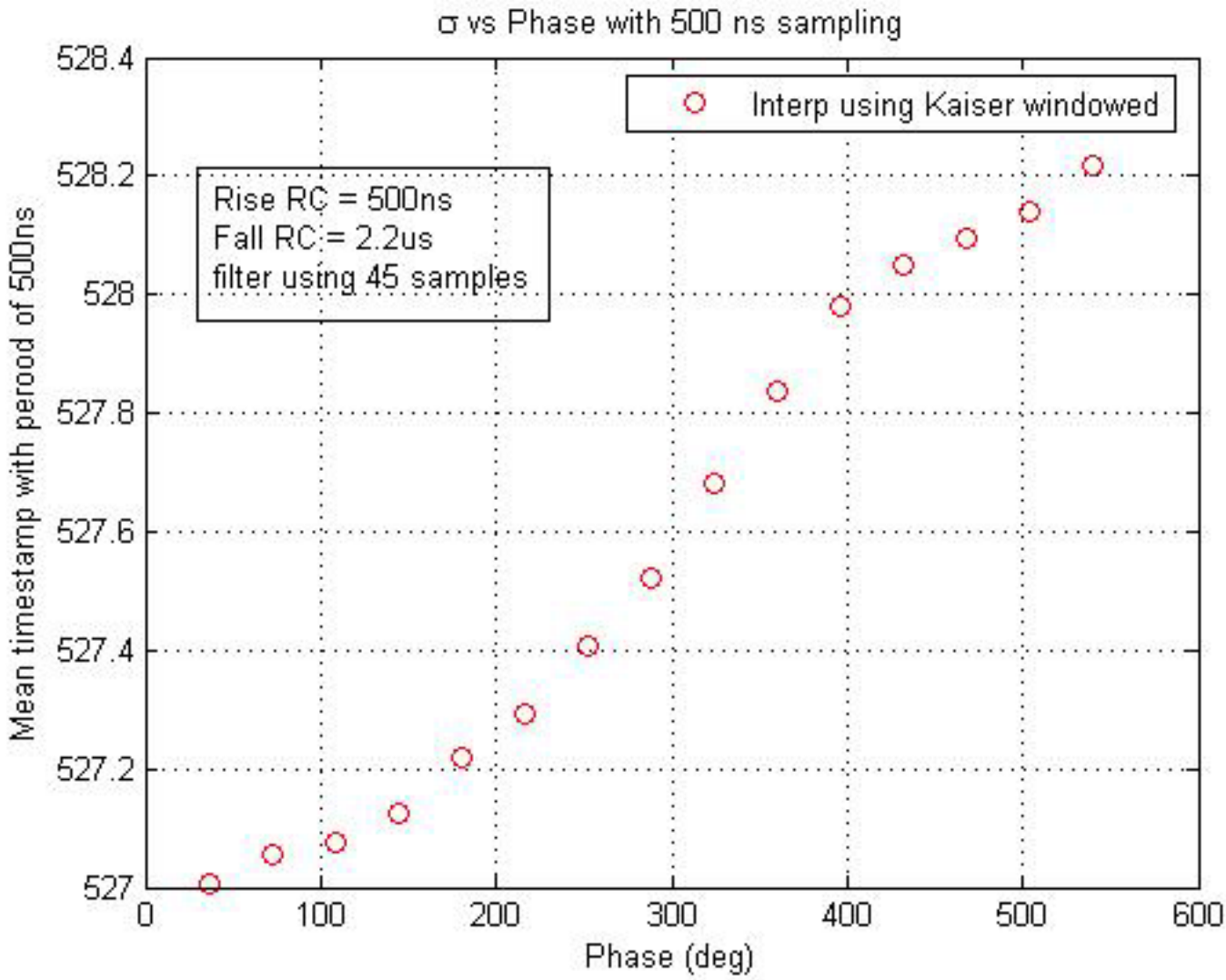

σ vs Falltime with 500 ns sampling, SNR = 10.6295
500/sqrt(12)
Interp using Kaiser windowed FIR
Risetime RC = 450ns
filter using 15 samples
σ (ns)
Falltime
x 10^-6
160
150
140
130
120
110
100
90
80
70
60
2
4
6
8
10
12


σ vs Falltime with 500 ns sampling, SNR = 10.6295
500/sqrt(12)
Interp using Kaiser windowed FIR
Risetime RC = 450ns
filter using 45 samples
σ (ns)
180
160
140
120
100
80
60
2
4
6
8
10
12
Falltime
x 10^-6


σ vs Risetime with 500 ns sampling, SNR = 5.2892
500/sqrt(12)
Interp using Kaiser windowed FIR
Falltime RC = 2.2us
filter using 15 samples
σ (ns)
Risetime
x 10^-7
160
140
120
100
80
60
40
20
0
2
4
6
8
10
12


σ vs Phase with 500 ns sampling
Interp using Kaiser windowed
Rise RC = 5ns
Fall RC = 2.2us
filter using 45 samples
Mean timestamp with perood of 500ns
Phase (deg)
528.5
528
527.5
527
526.5
526
0
100
200
300
400
500
600


σ vs Phase with 500 ns sampling
Interp using Kaiser windowed
Rise RC = 250ns
Fall RC = 2.2us
filter using 45 samples
Mean timestamp with perood of 500ns
528.2
528
527.8
527.6
527.4
527.2
527
0
100
200
300
400
500
Phase (deg)


σ vs Phase with 500 ns sampling
Interp using Kaiser windowed
Rise RC = 500ns
Fall RC = 2.2us
filter using 45 samples
Mean timestamp with perood of 500ns
Phase (deg)
528.4
528.2
528
527.8
527.6
527.4
527.2
527
0
100
200
300
400
500
600