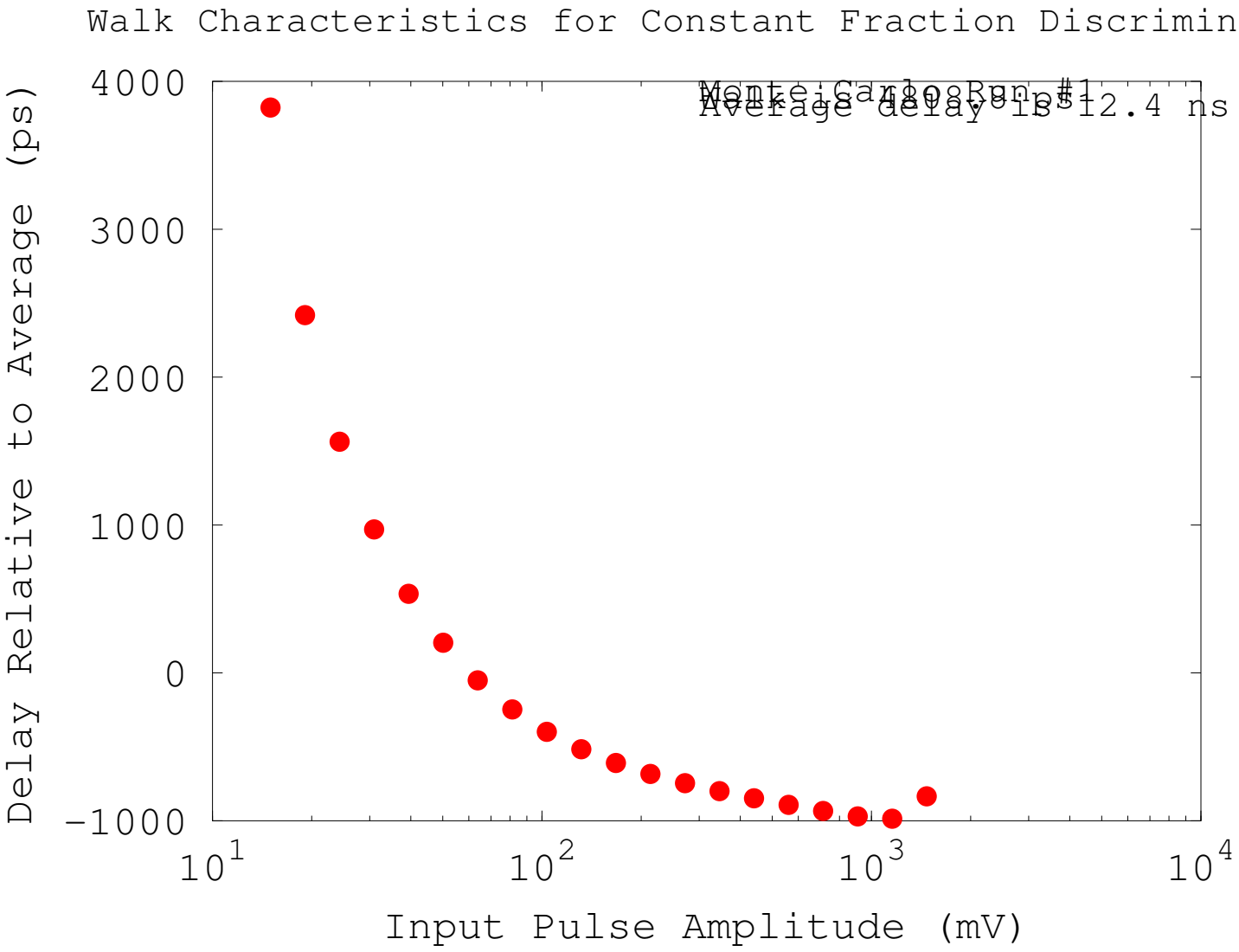
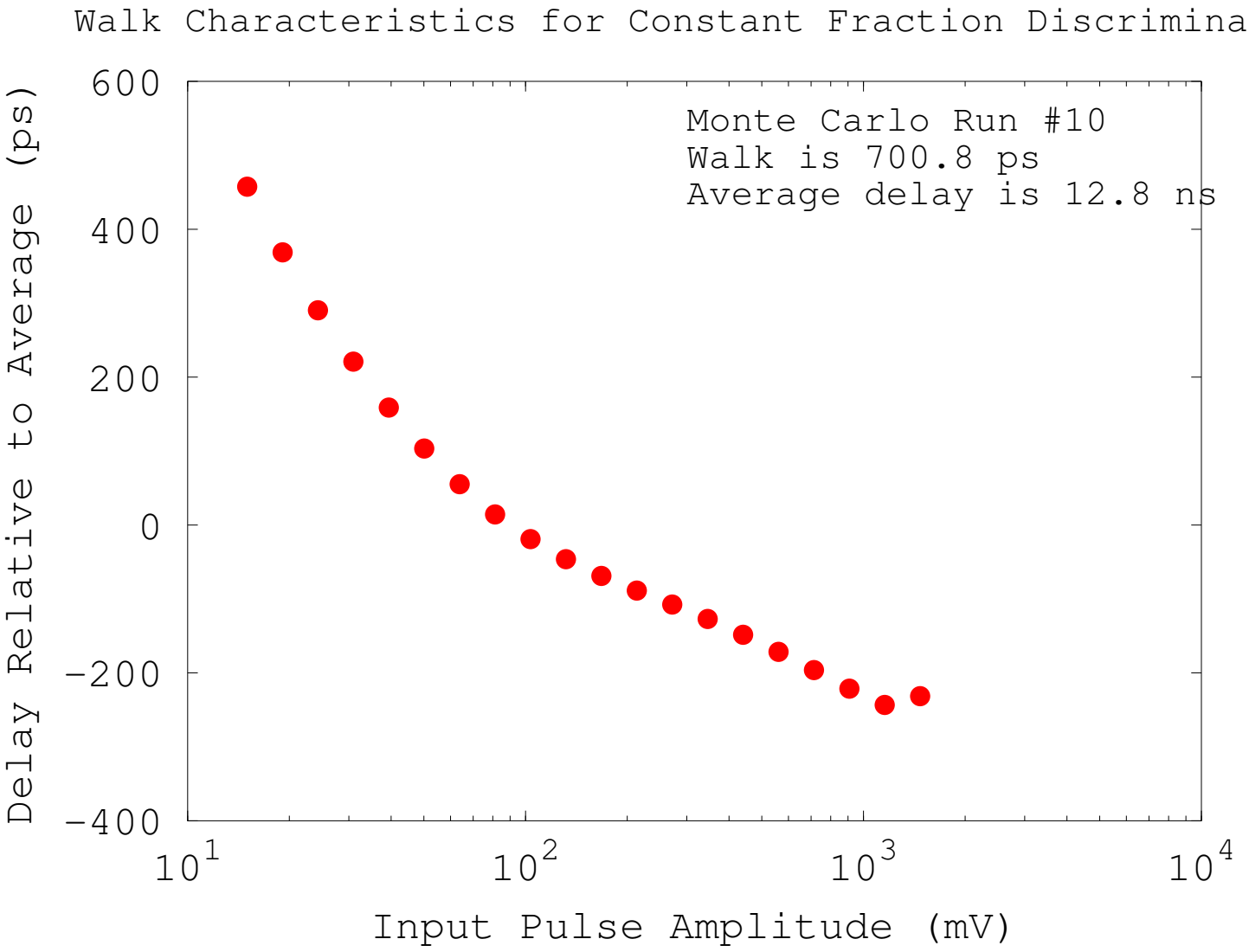
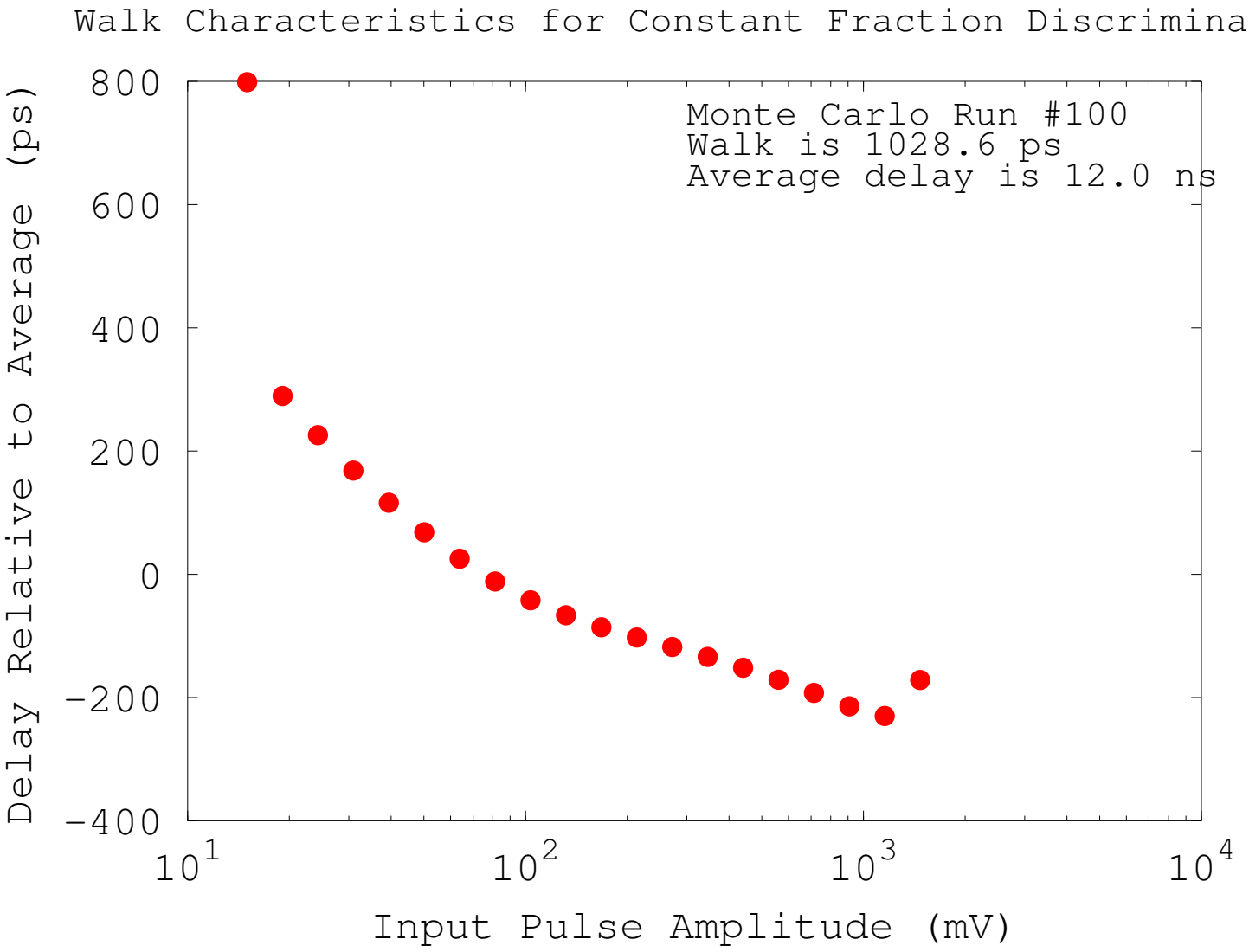
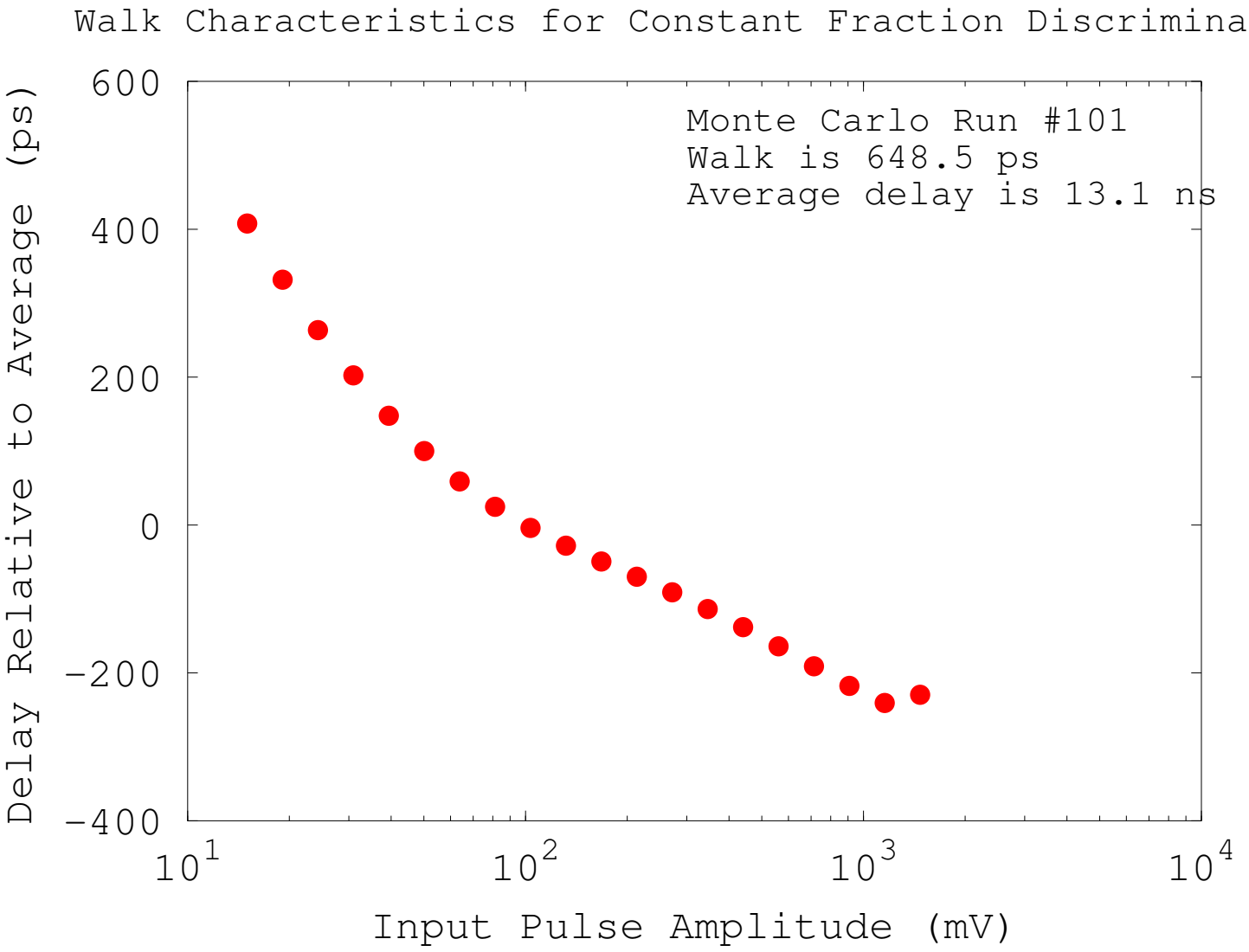
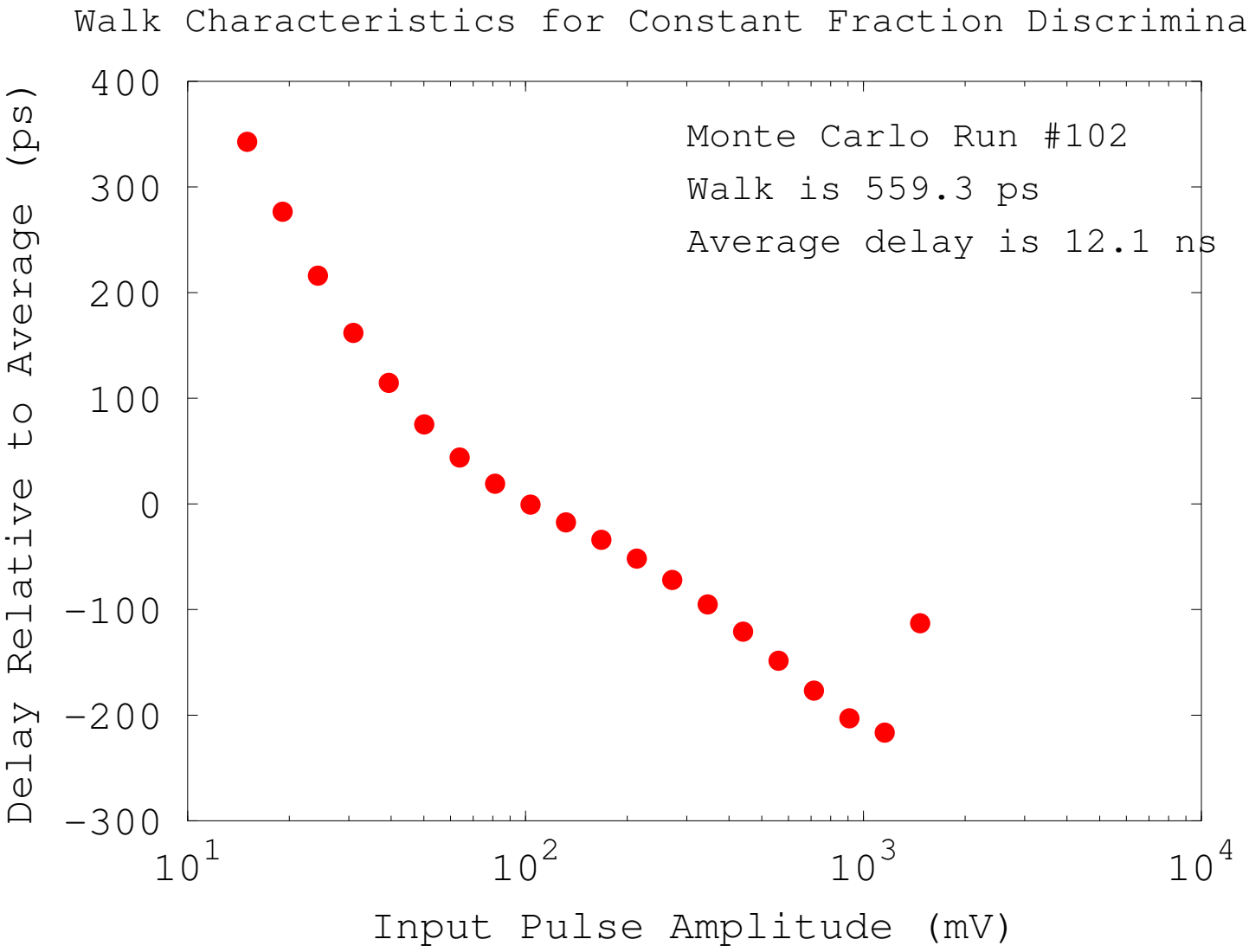
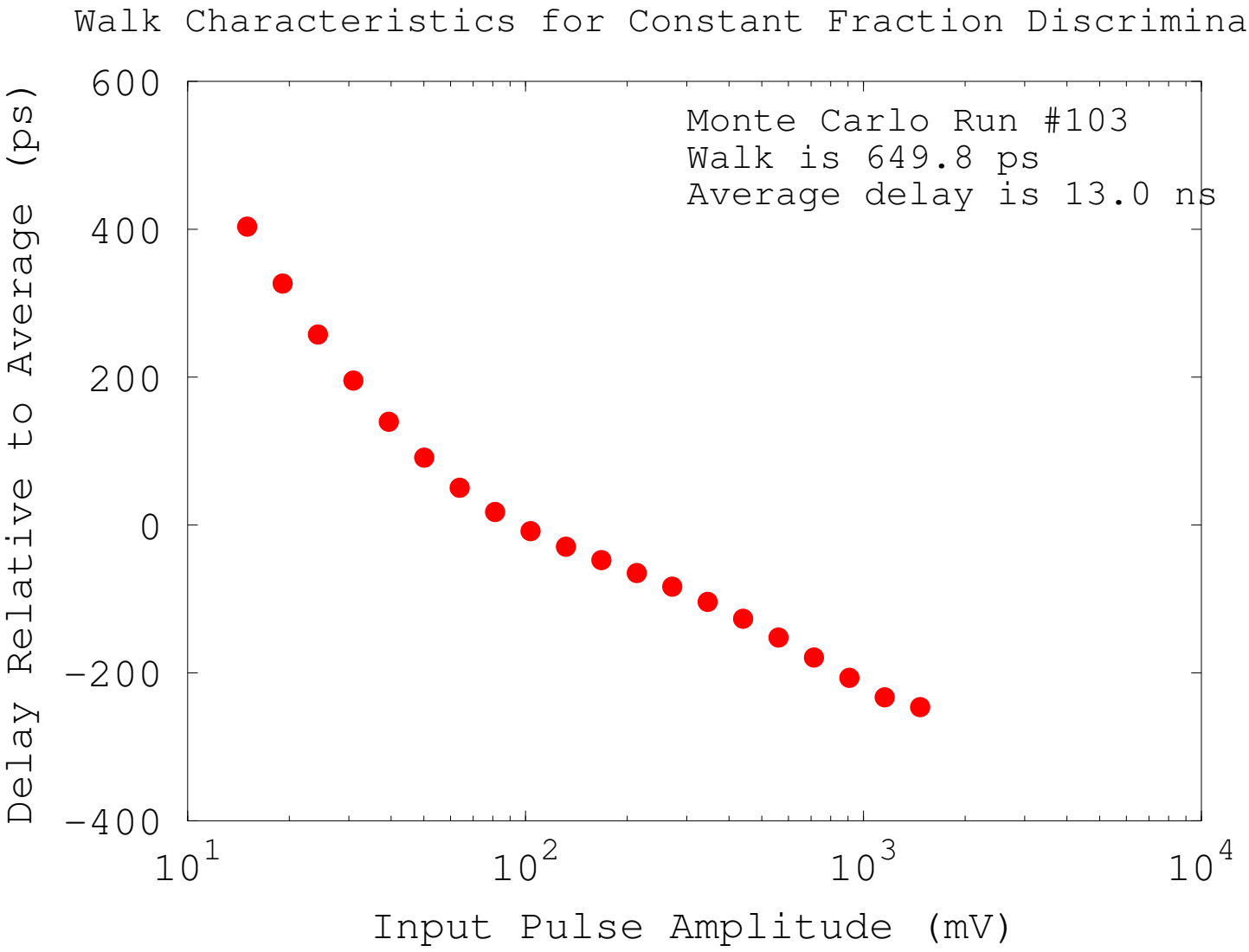

Walk Characteristics for Constant Fraction Discriminato
Monte Carlo Run #1
Average delay is 12.4 ns
Delay Relative to Average (ps)
4000
3000
2000
1000
0
-1000
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

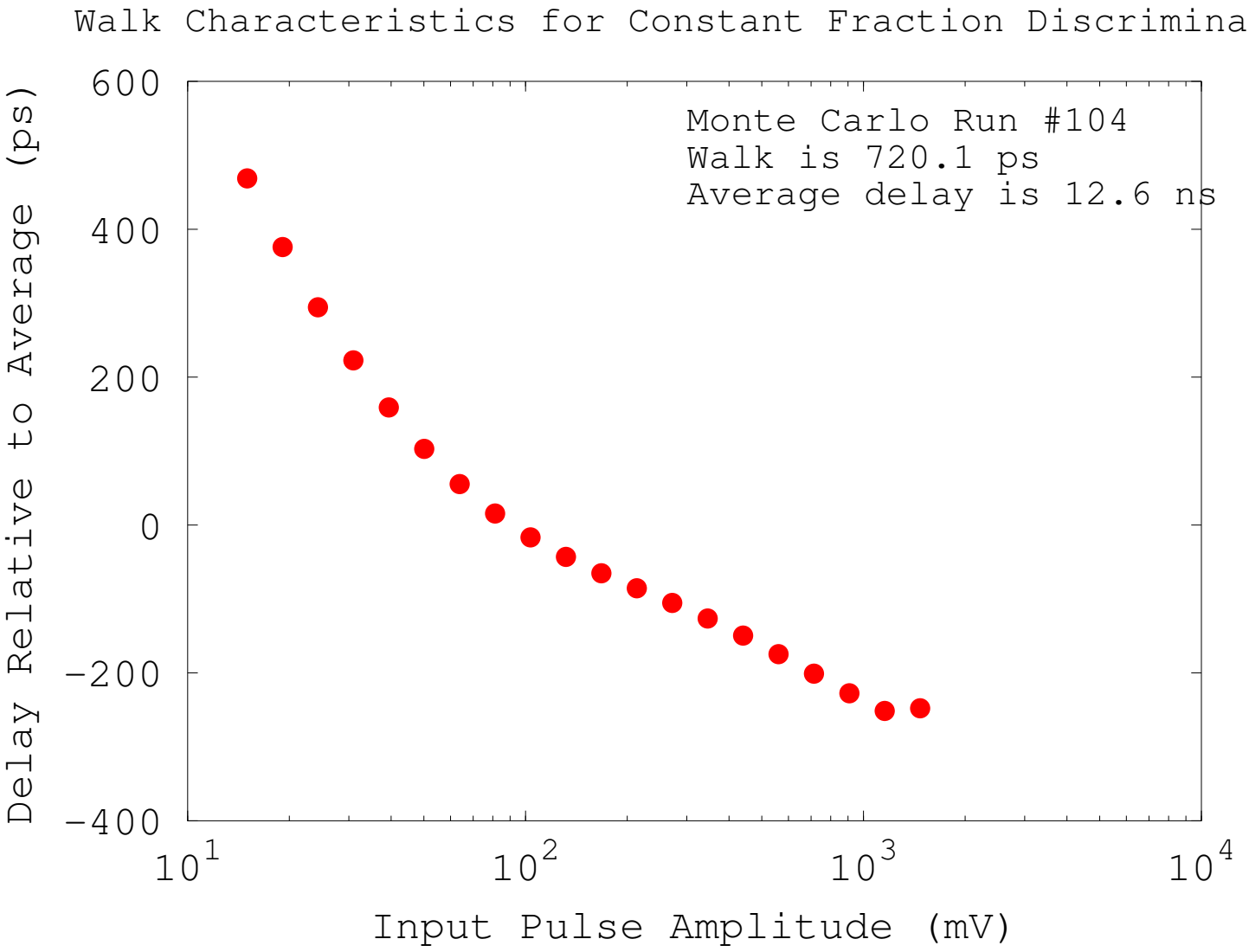

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #10
Walk is 700.8 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

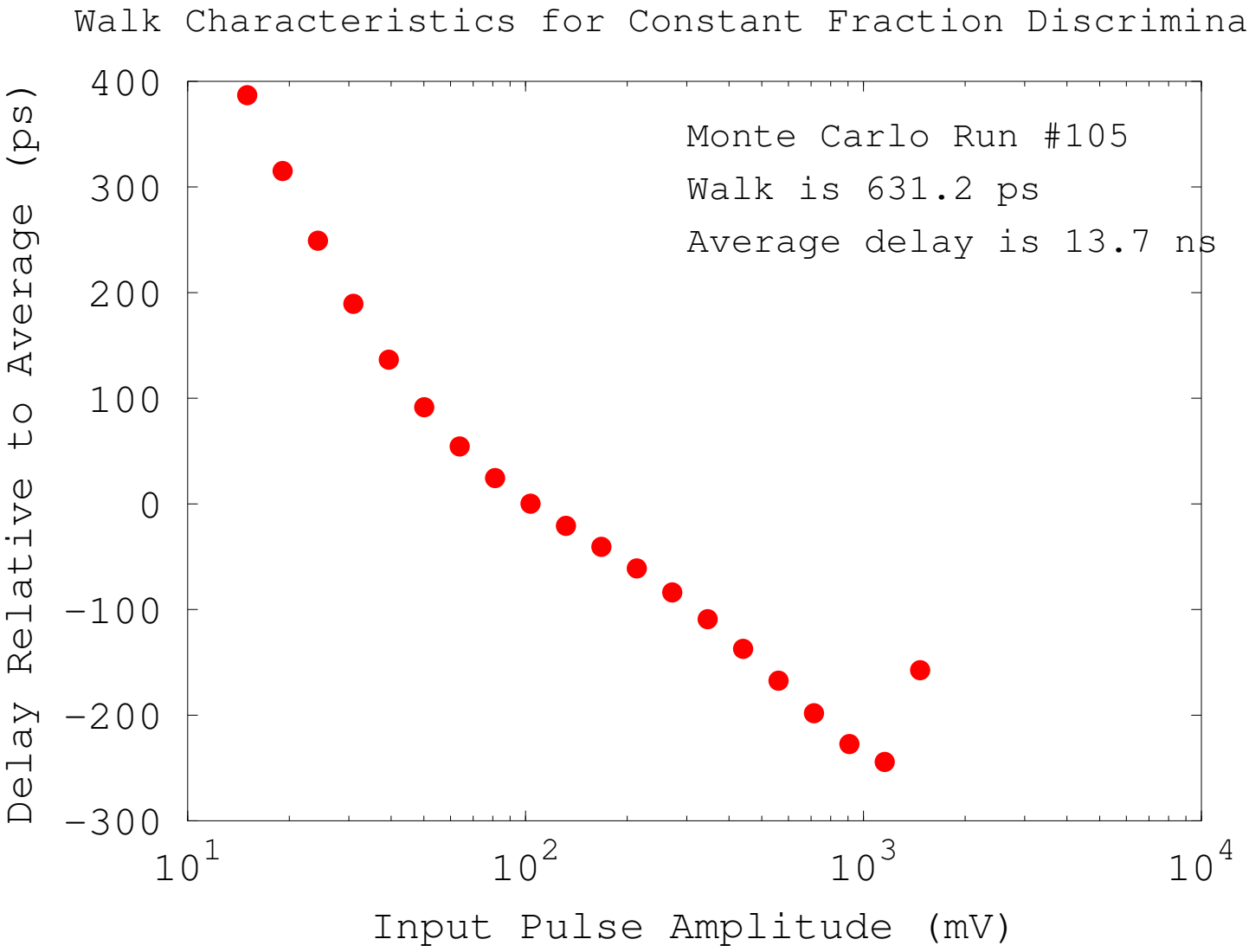

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #100
Walk is 1028.6 ps
Average delay is 12.0 ns
Delay Relative to Average (ps)
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

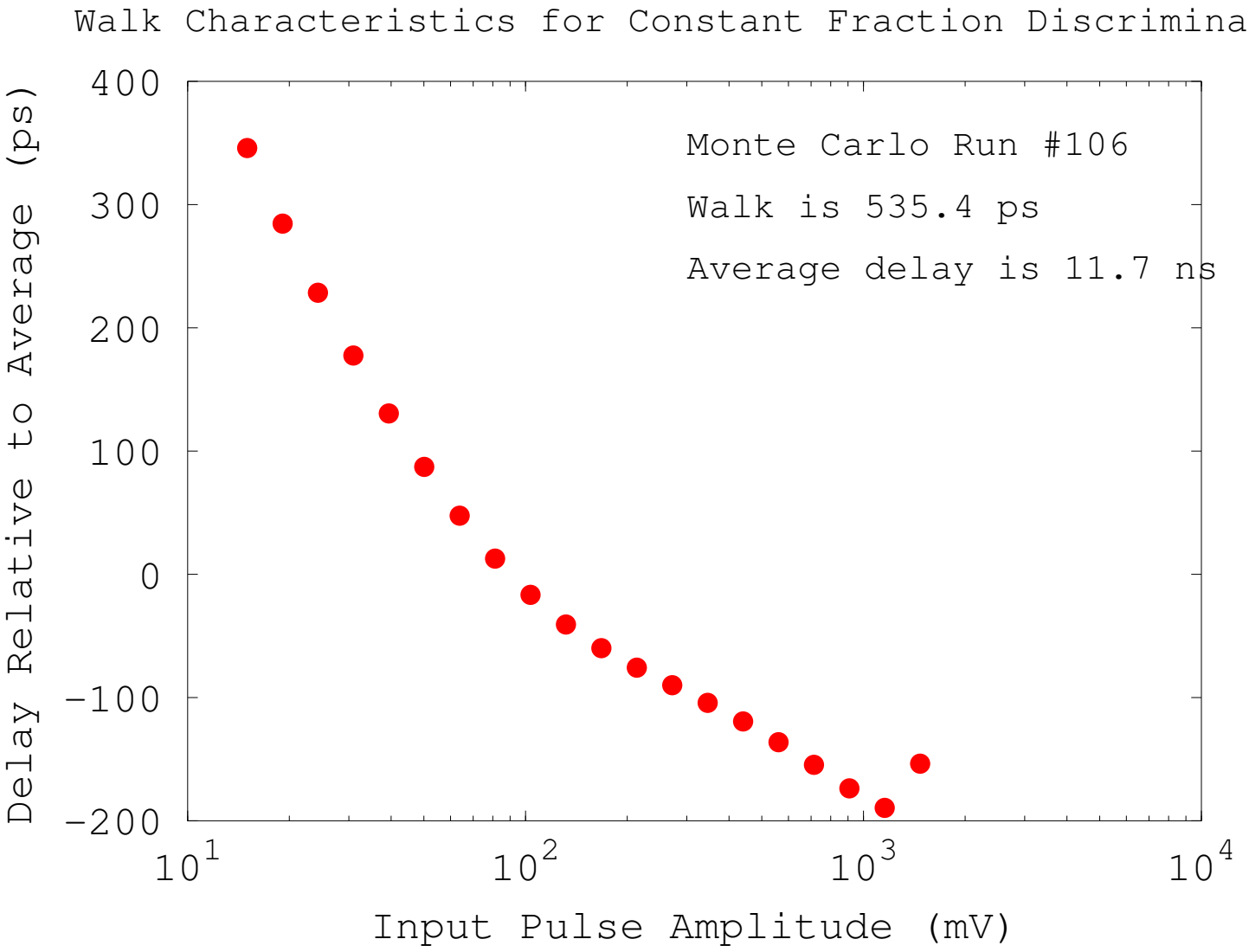

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #101
Walk is 648.5 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

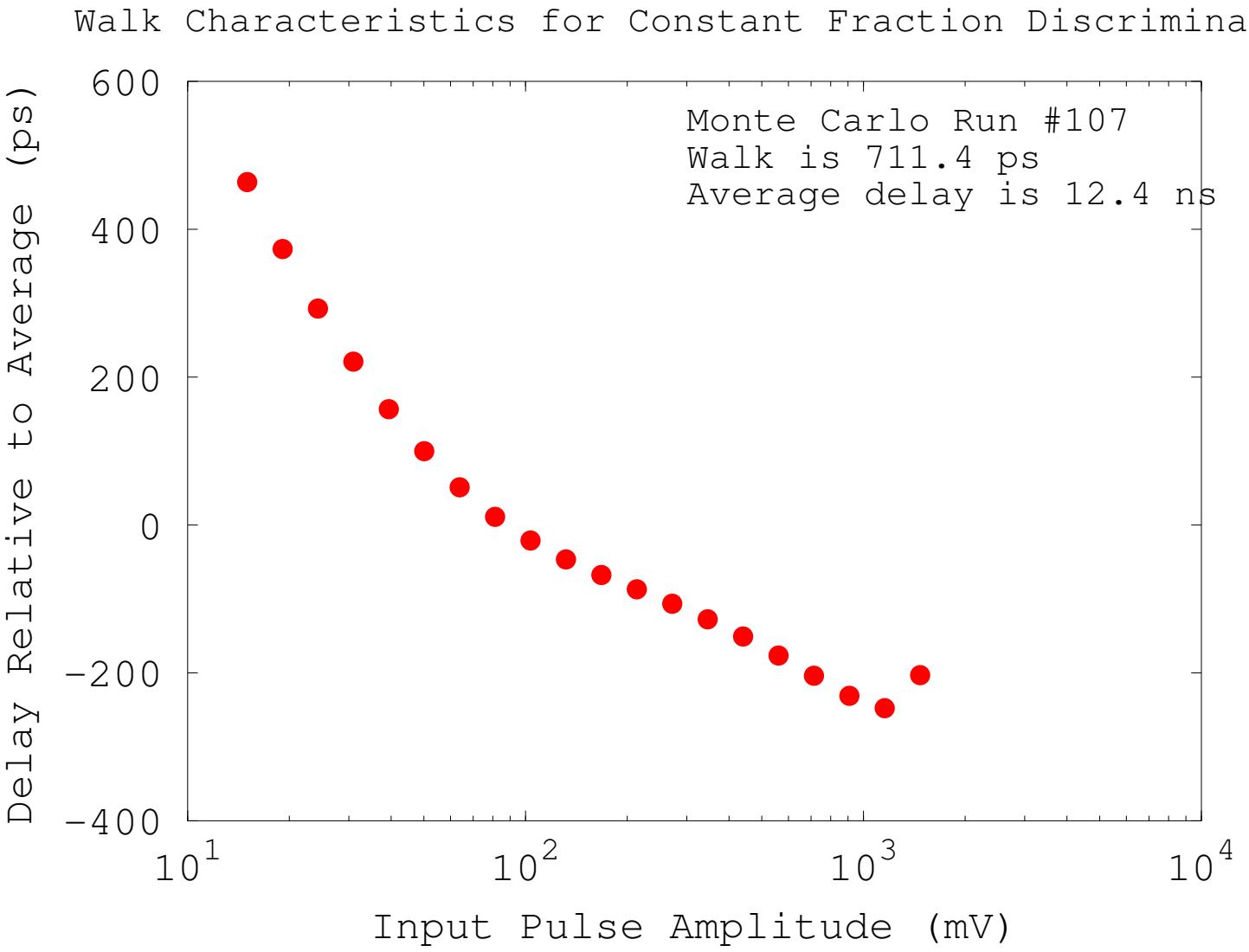

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #102
Walk is 559.3 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

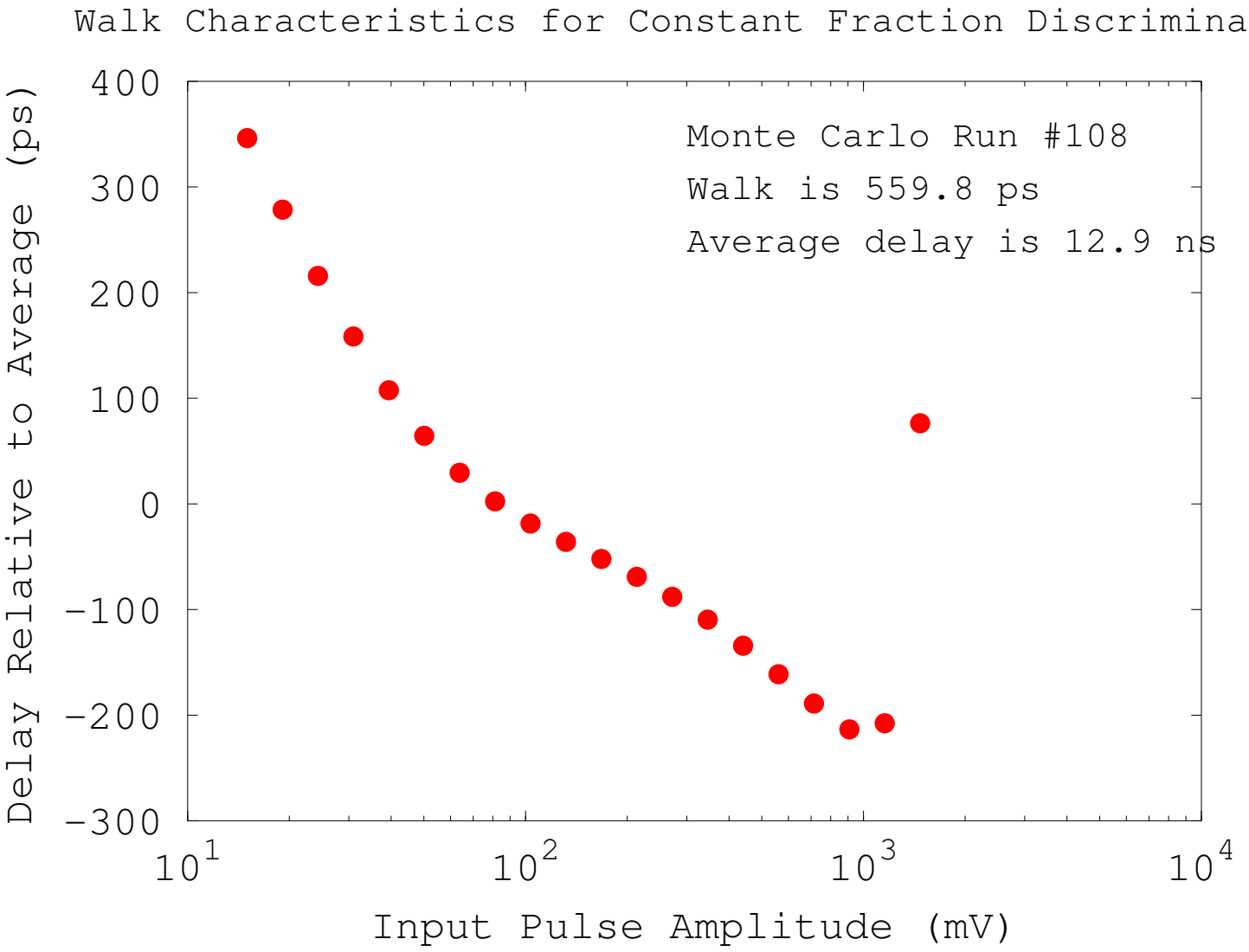

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #103
Walk is 649.8 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

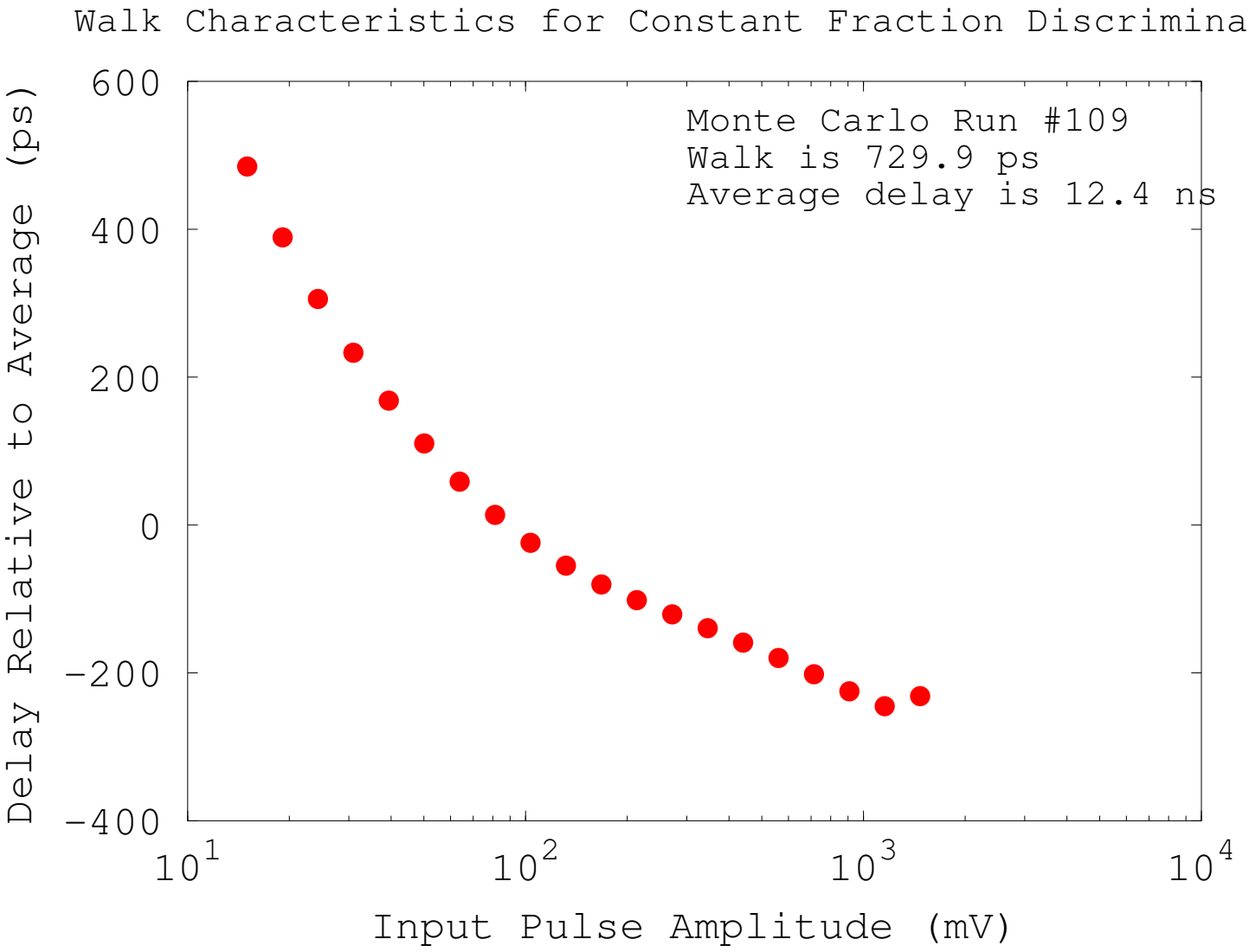

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #104
Walk is 720.1 ps
Average delay is 12.6 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

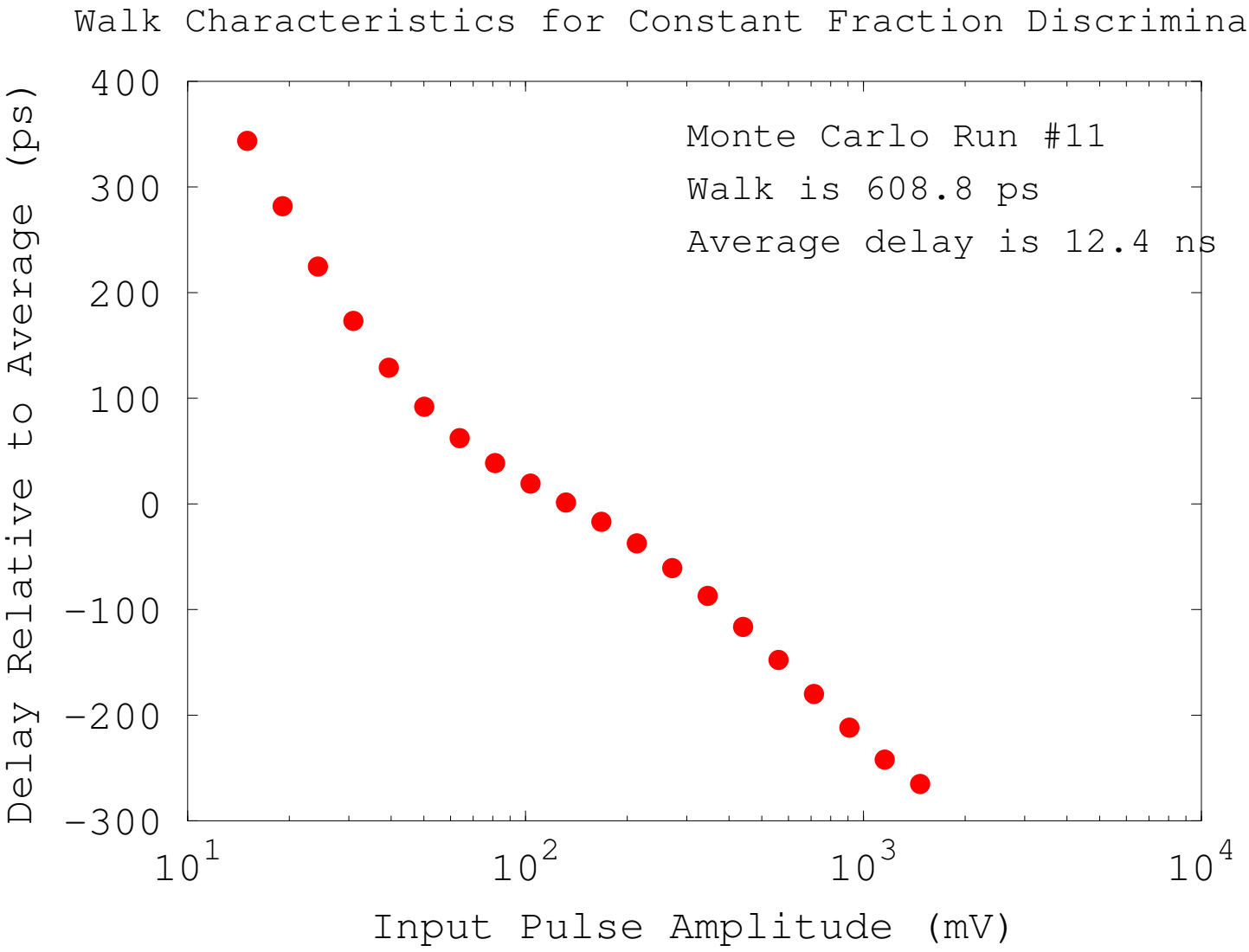

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #105
Walk is 631.2 ps
Average delay is 13.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

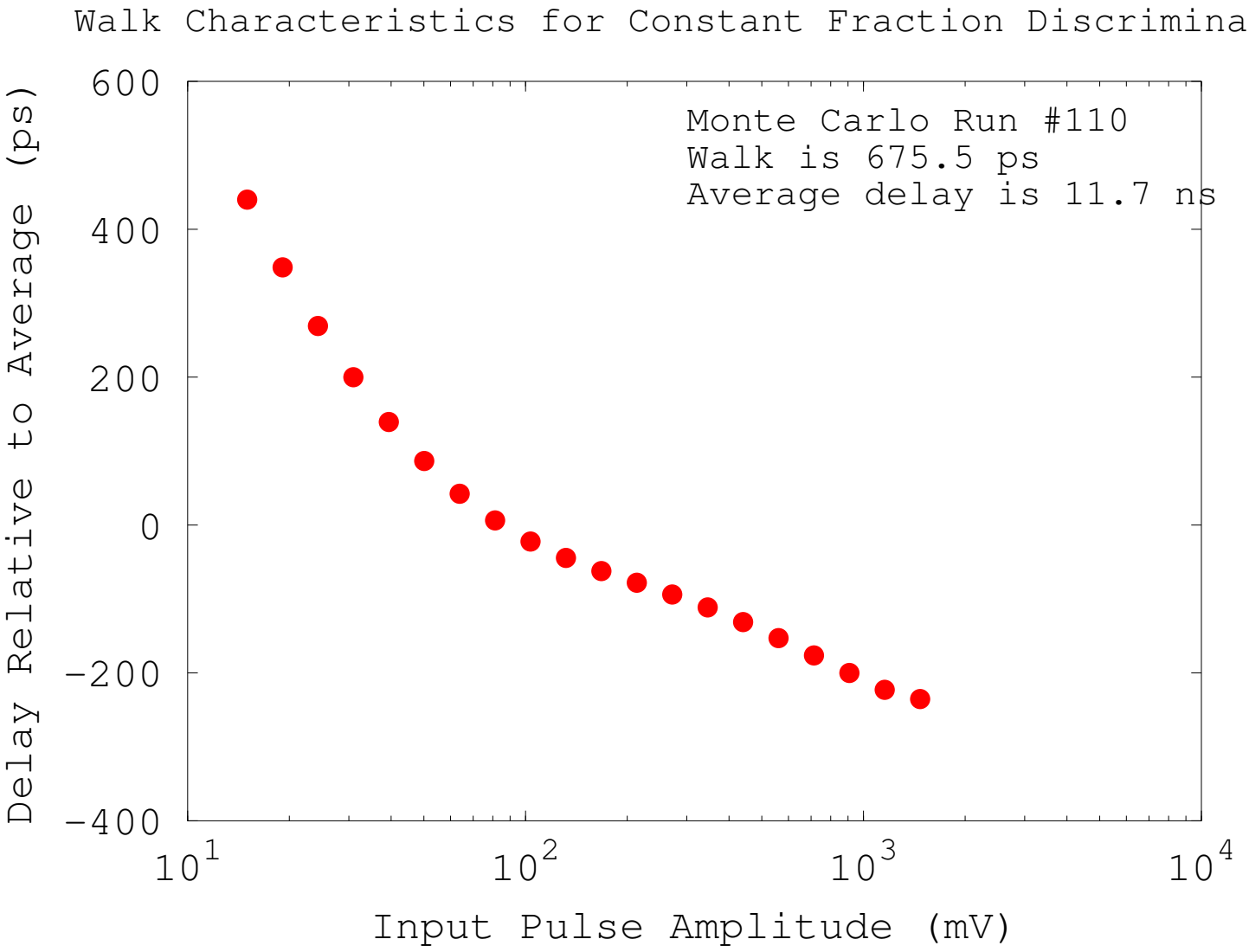

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #106
Walk is 535.4 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

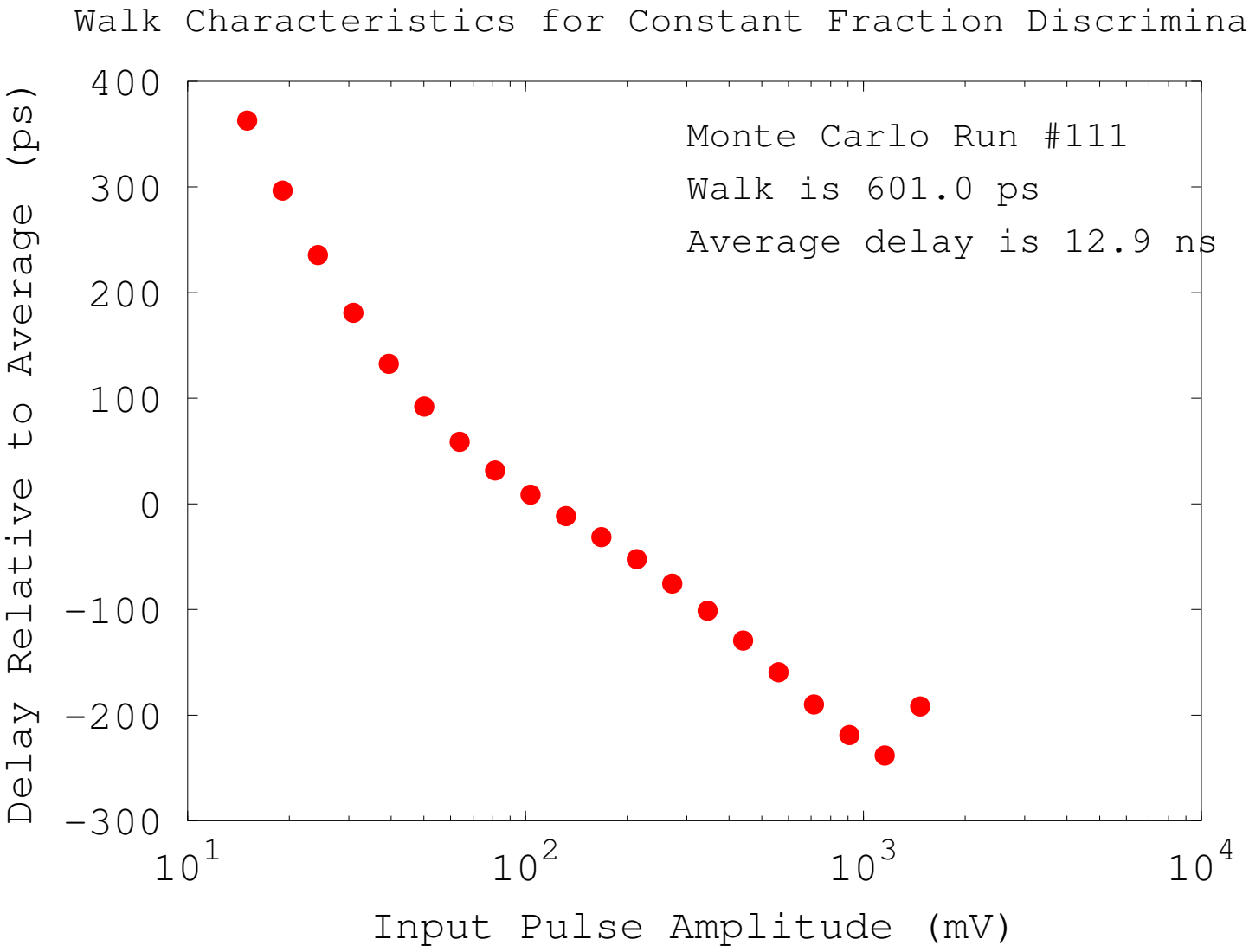

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #107
Walk is 711.4 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

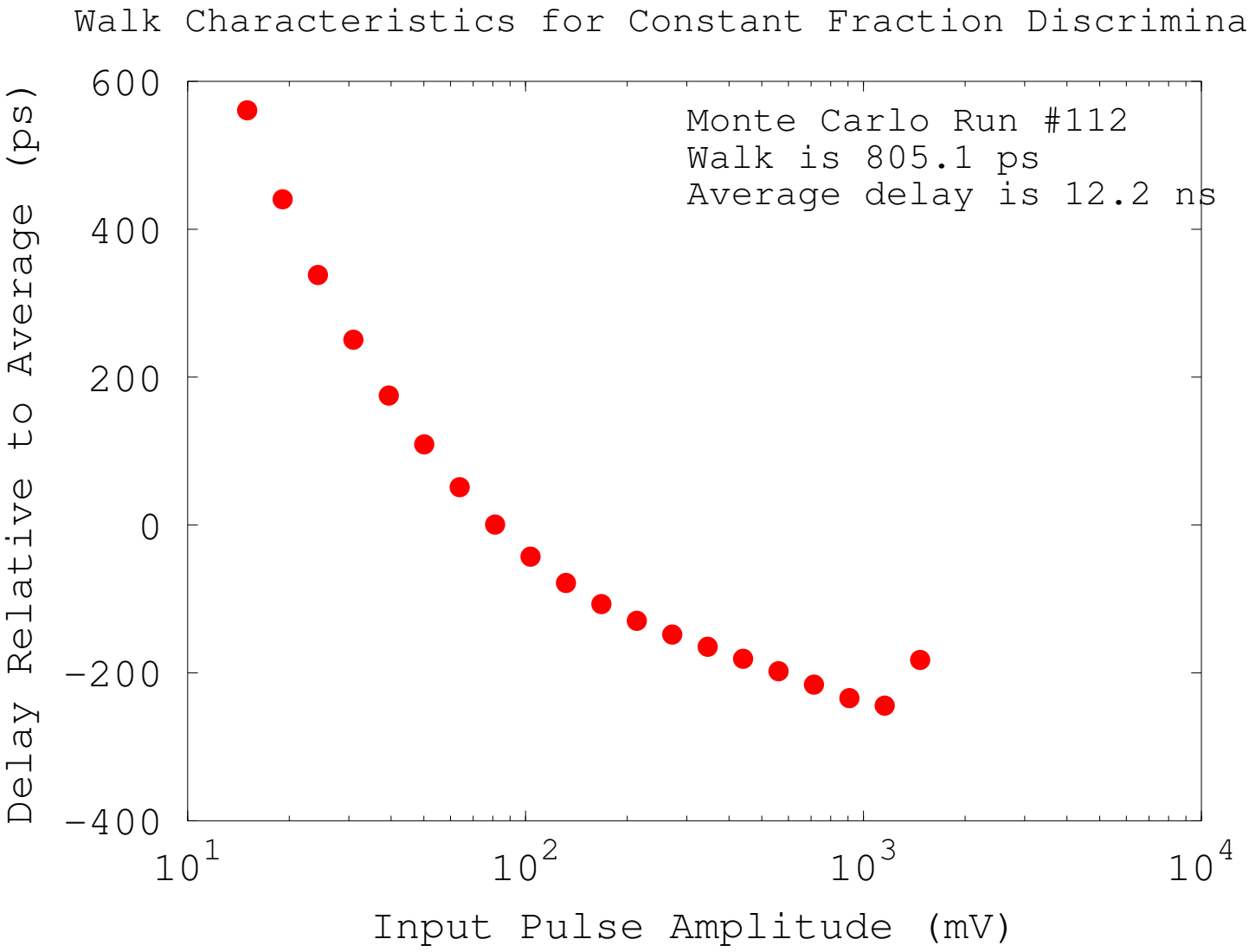

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #108
Walk is 559.8 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

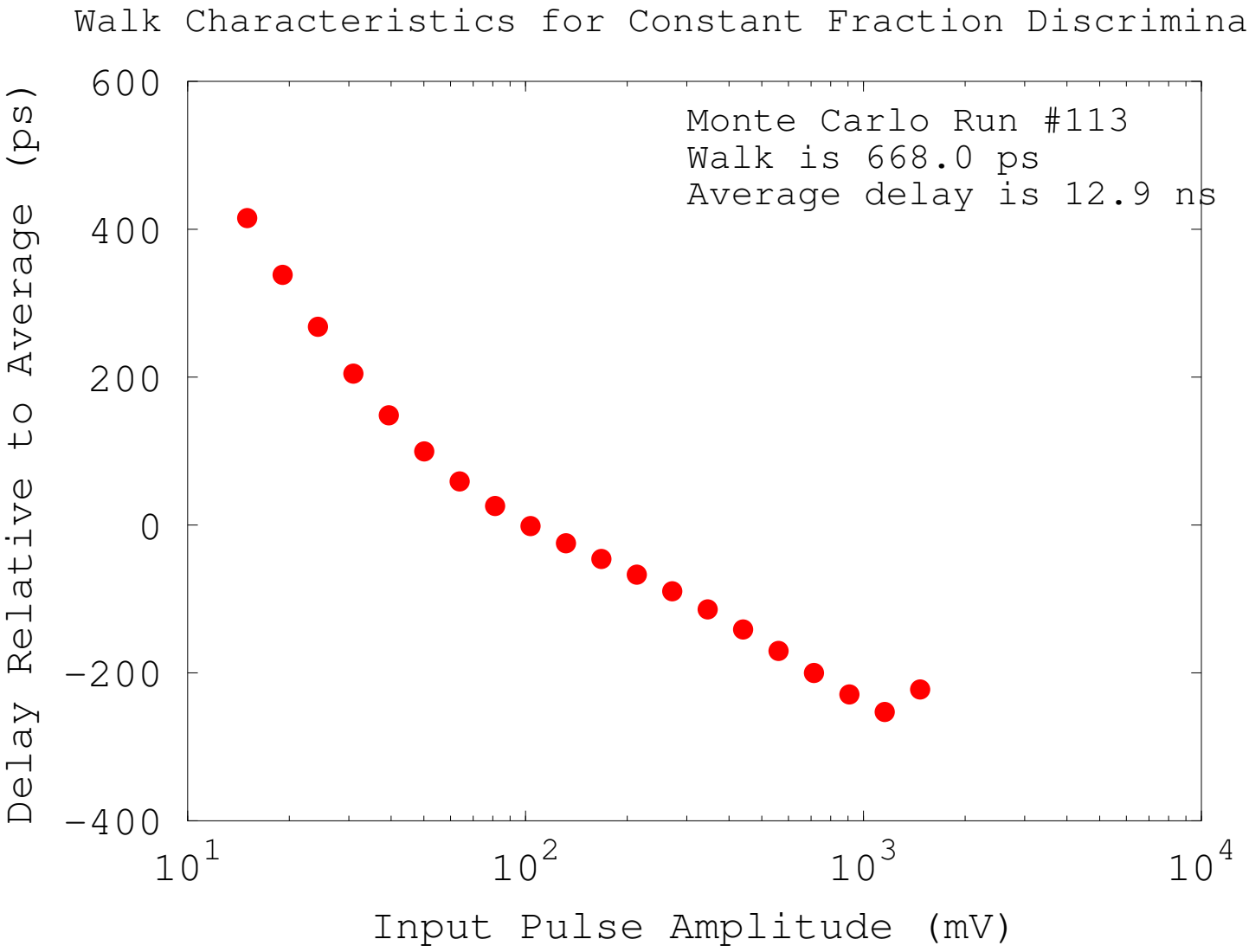

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #109
Walk is 729.9 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

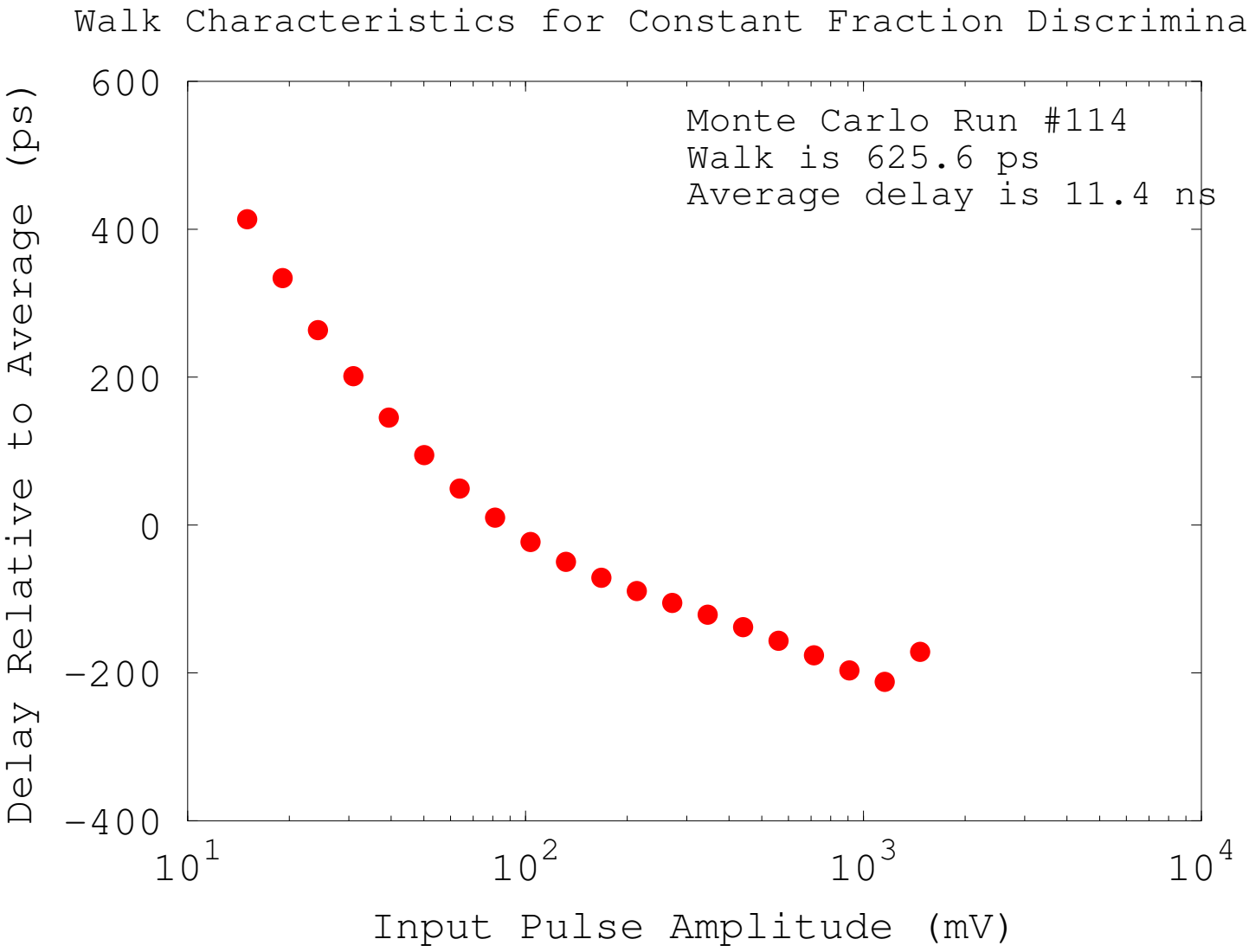

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #11
Walk is 608.8 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

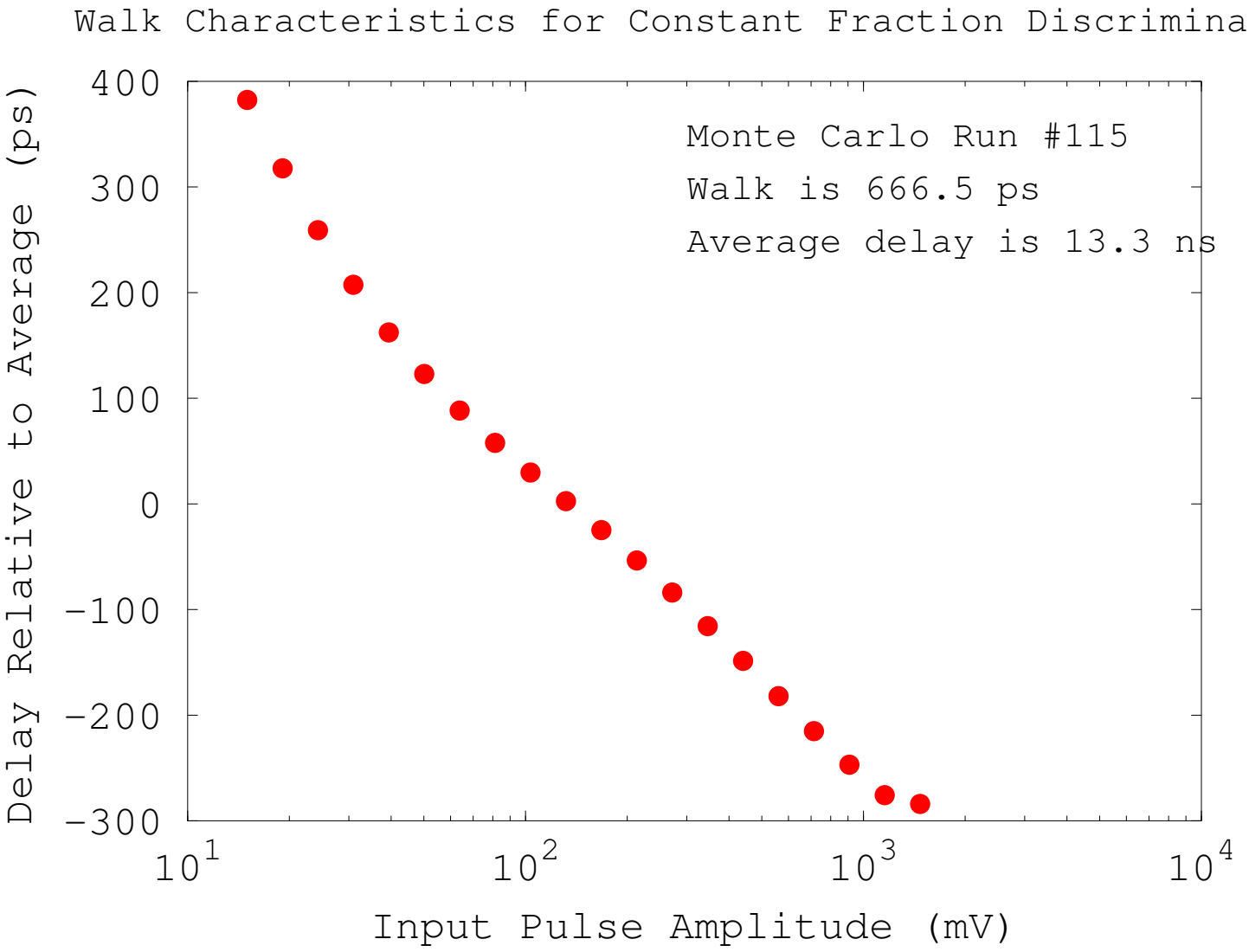

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #110
Walk is 675.5 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

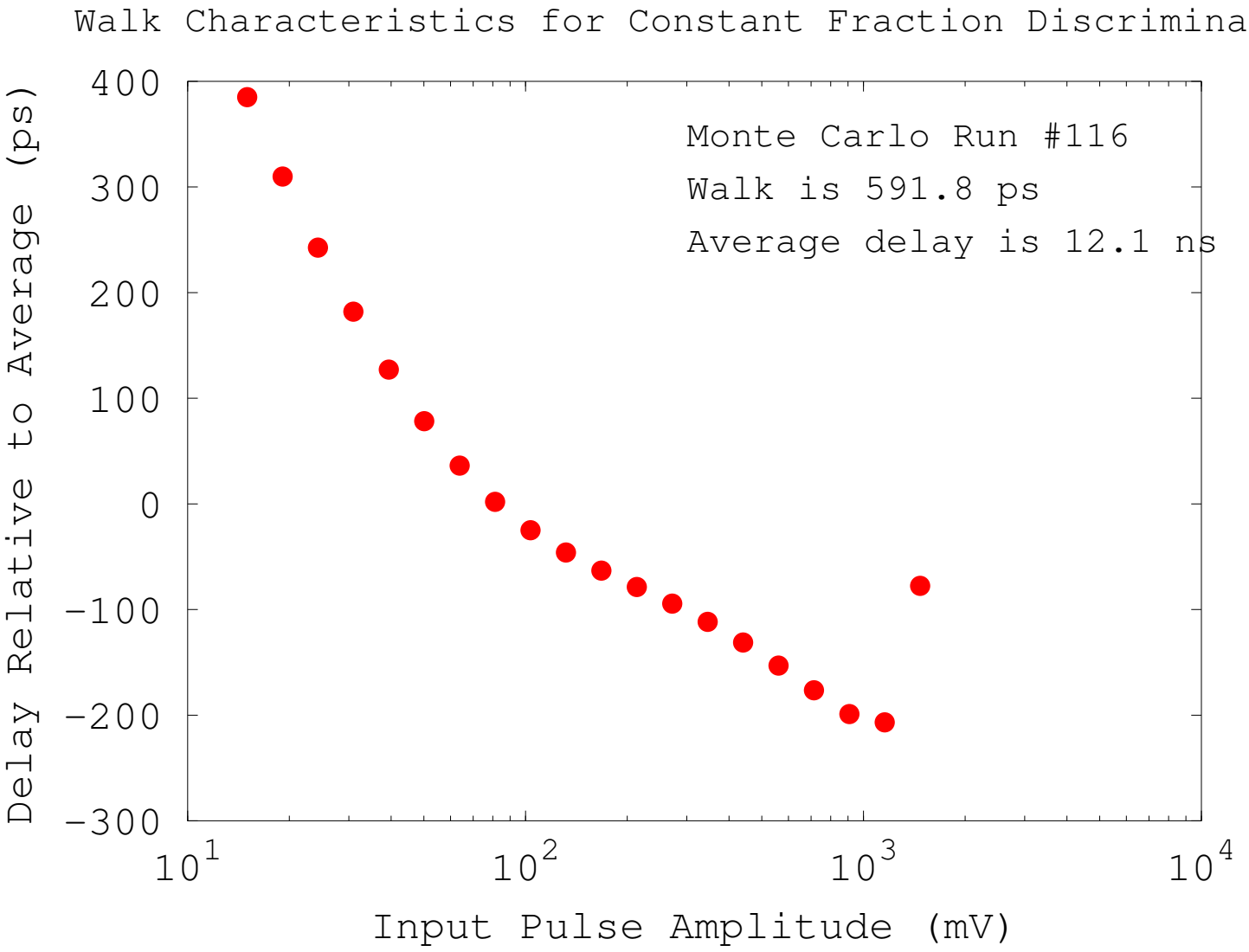

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #111
Walk is 601.0 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

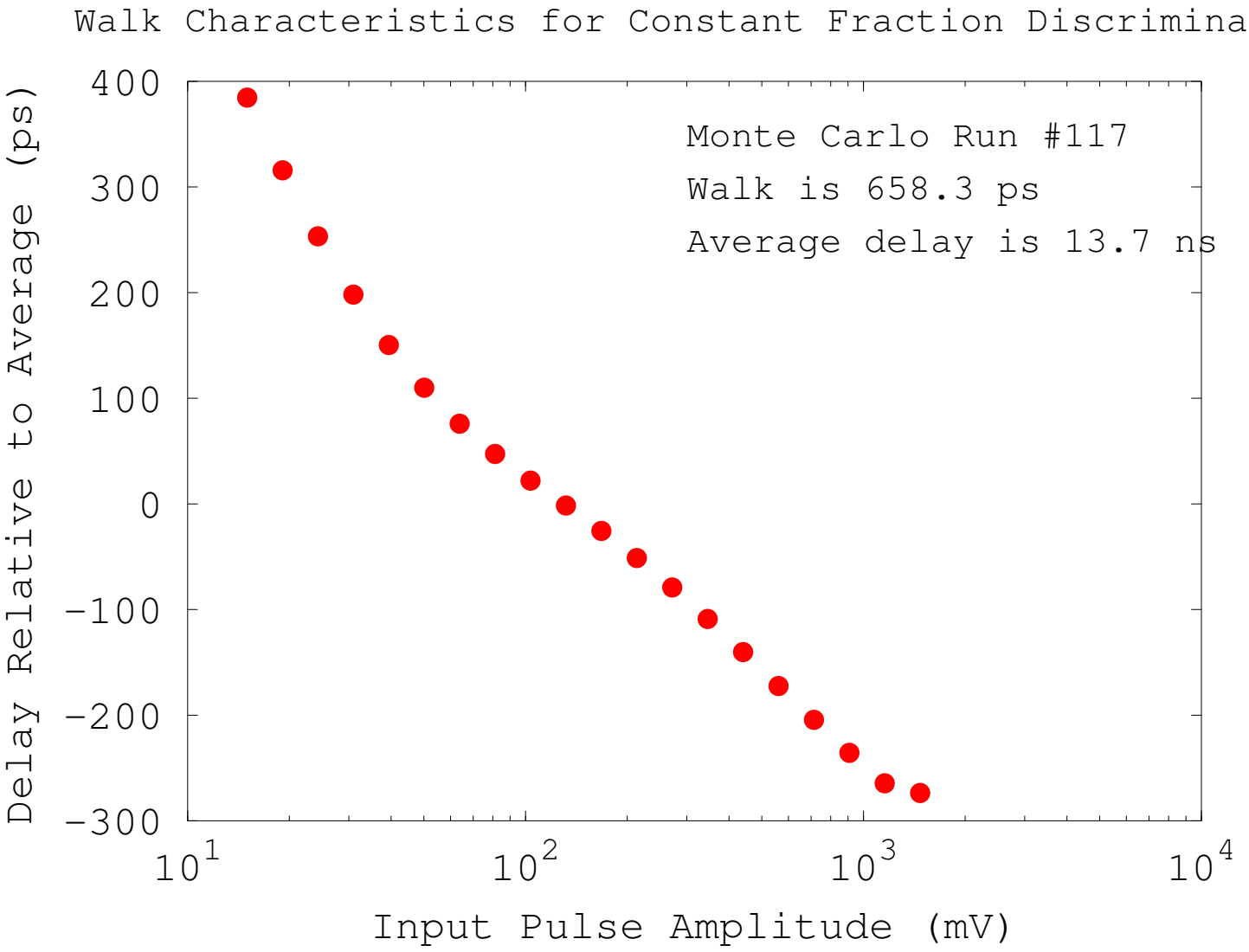

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #112
Walk is 805.1 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

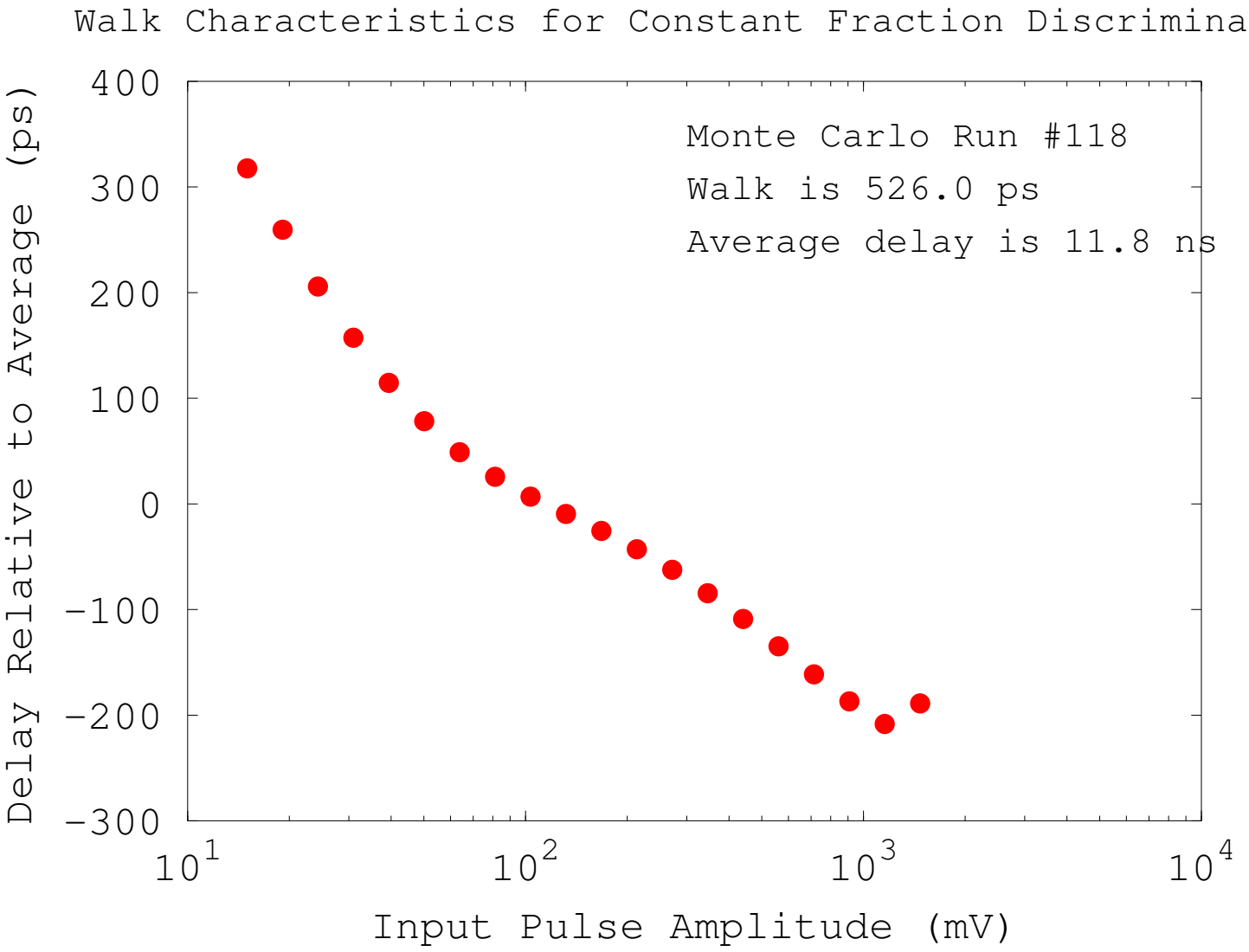

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #113
Walk is 668.0 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

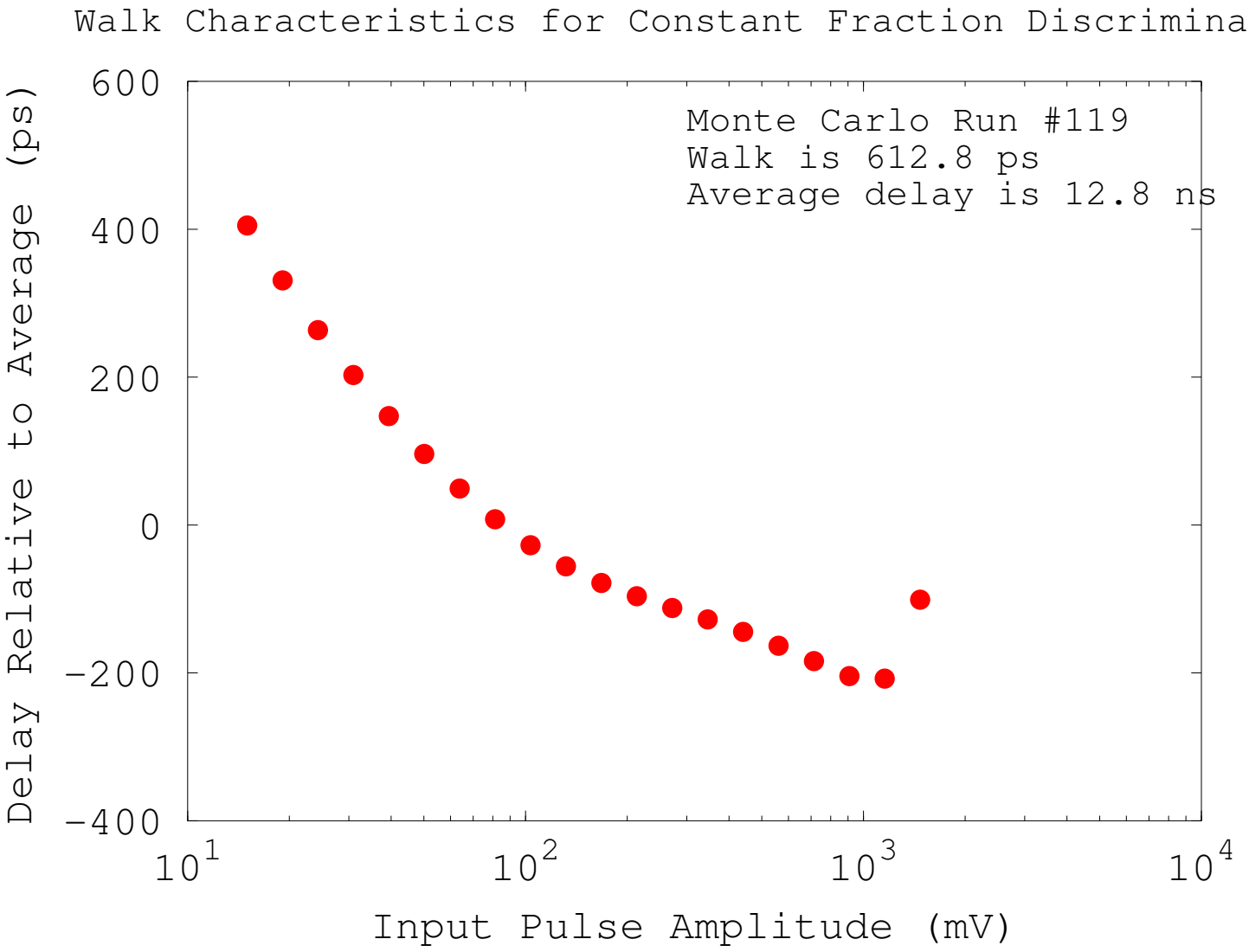

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #114
Walk is 625.6 ps
Average delay is 11.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

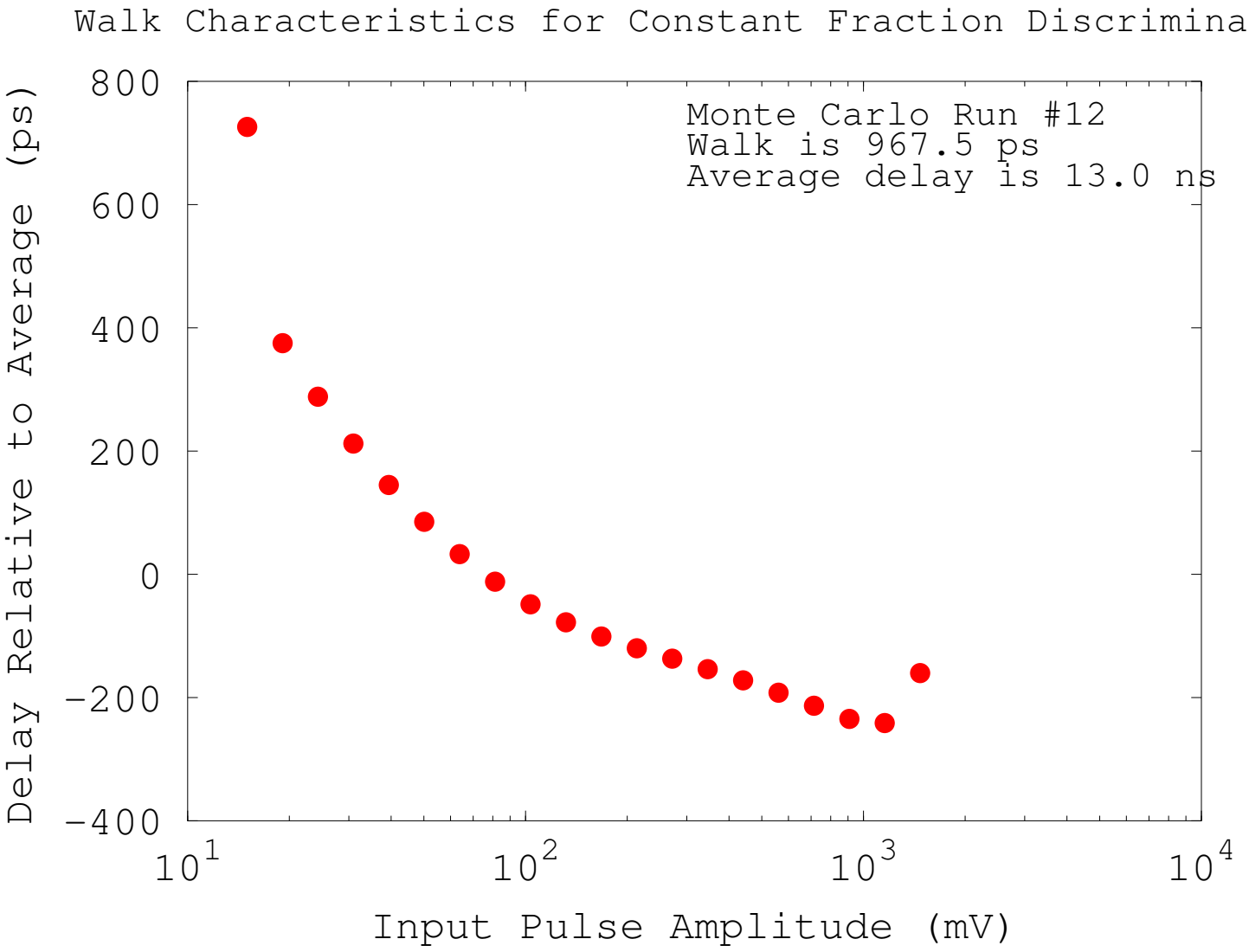

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #115
Walk is 666.5 ps
Average delay is 13.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

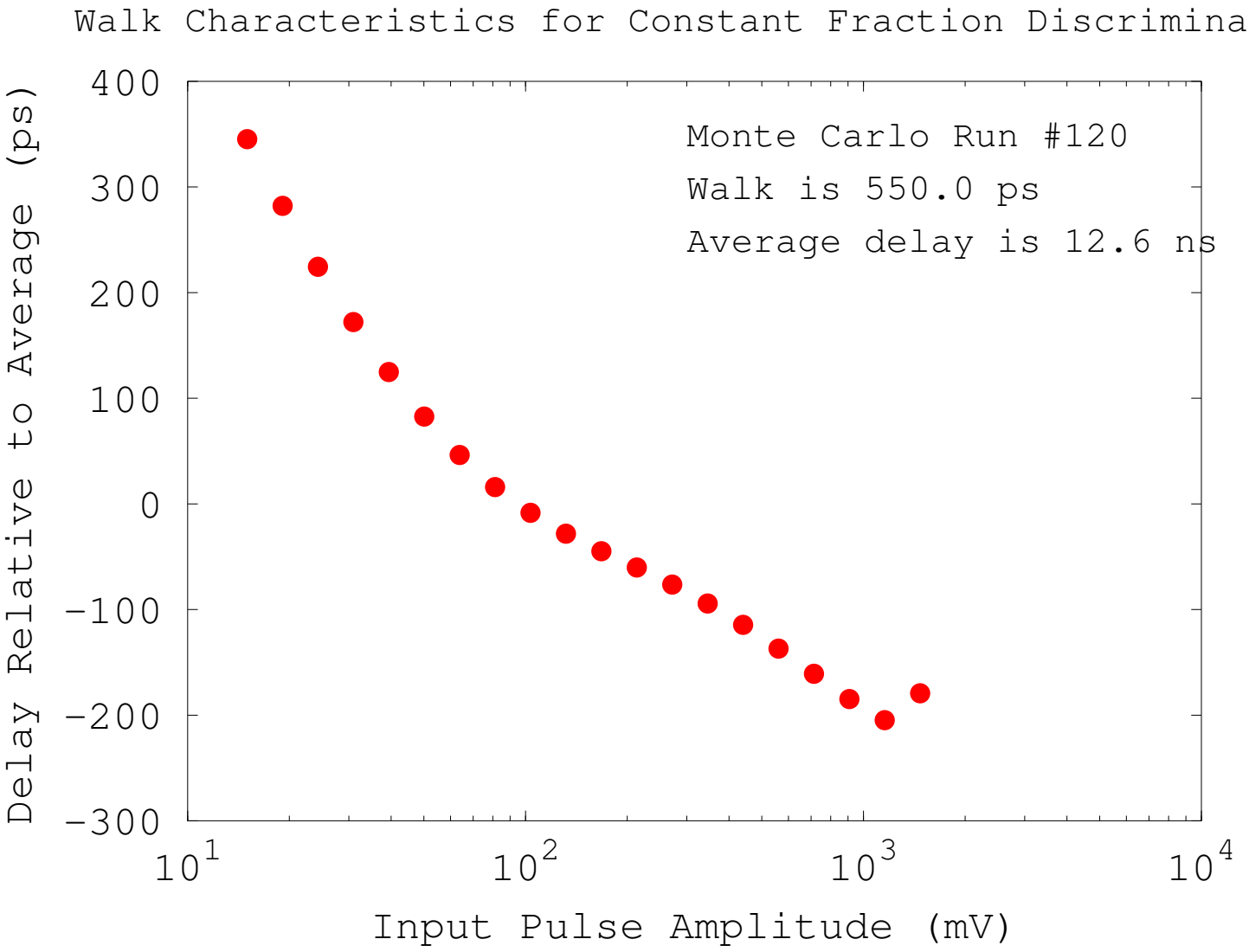

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #116
Walk is 591.8 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

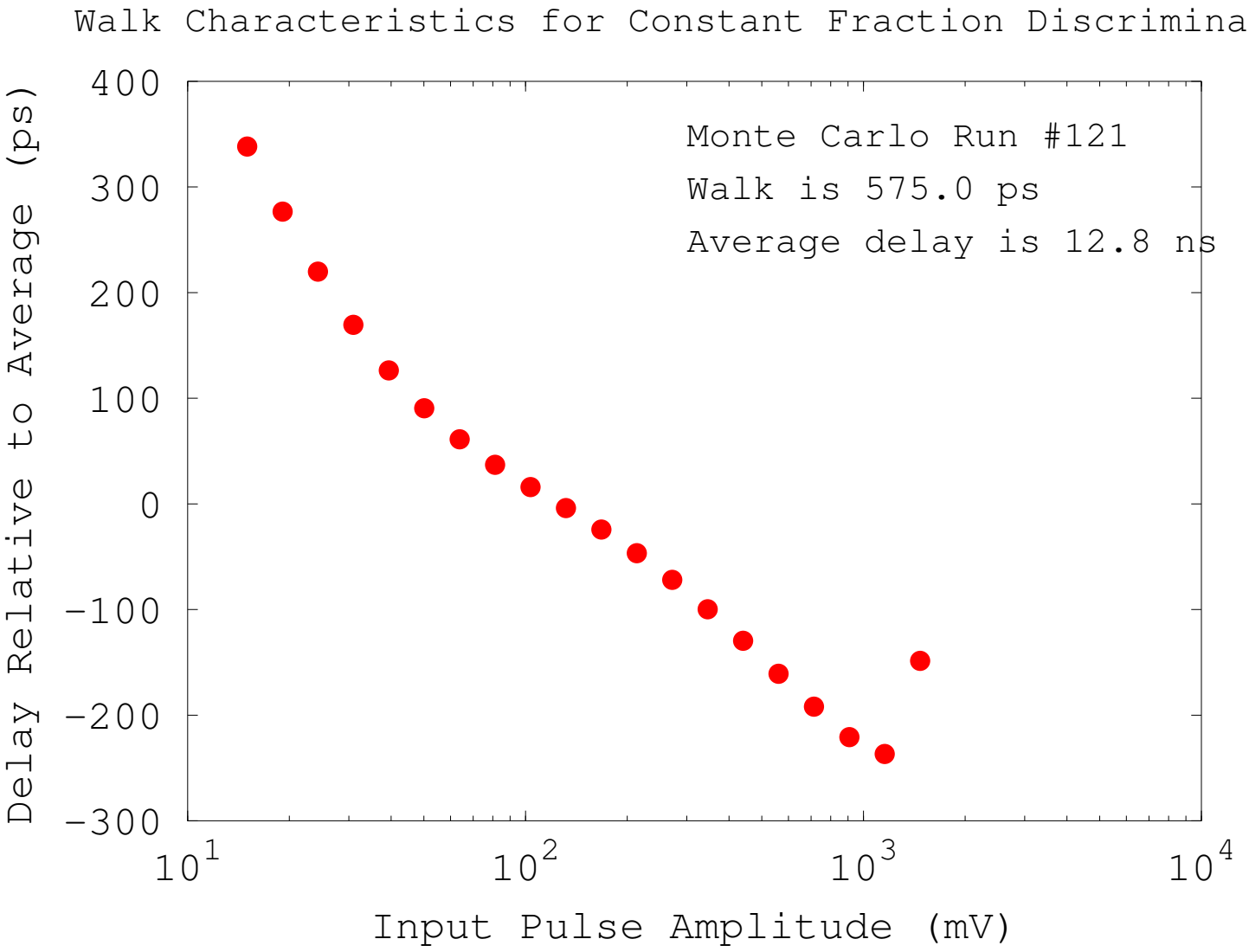

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #117
Walk is 658.3 ps
Average delay is 13.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

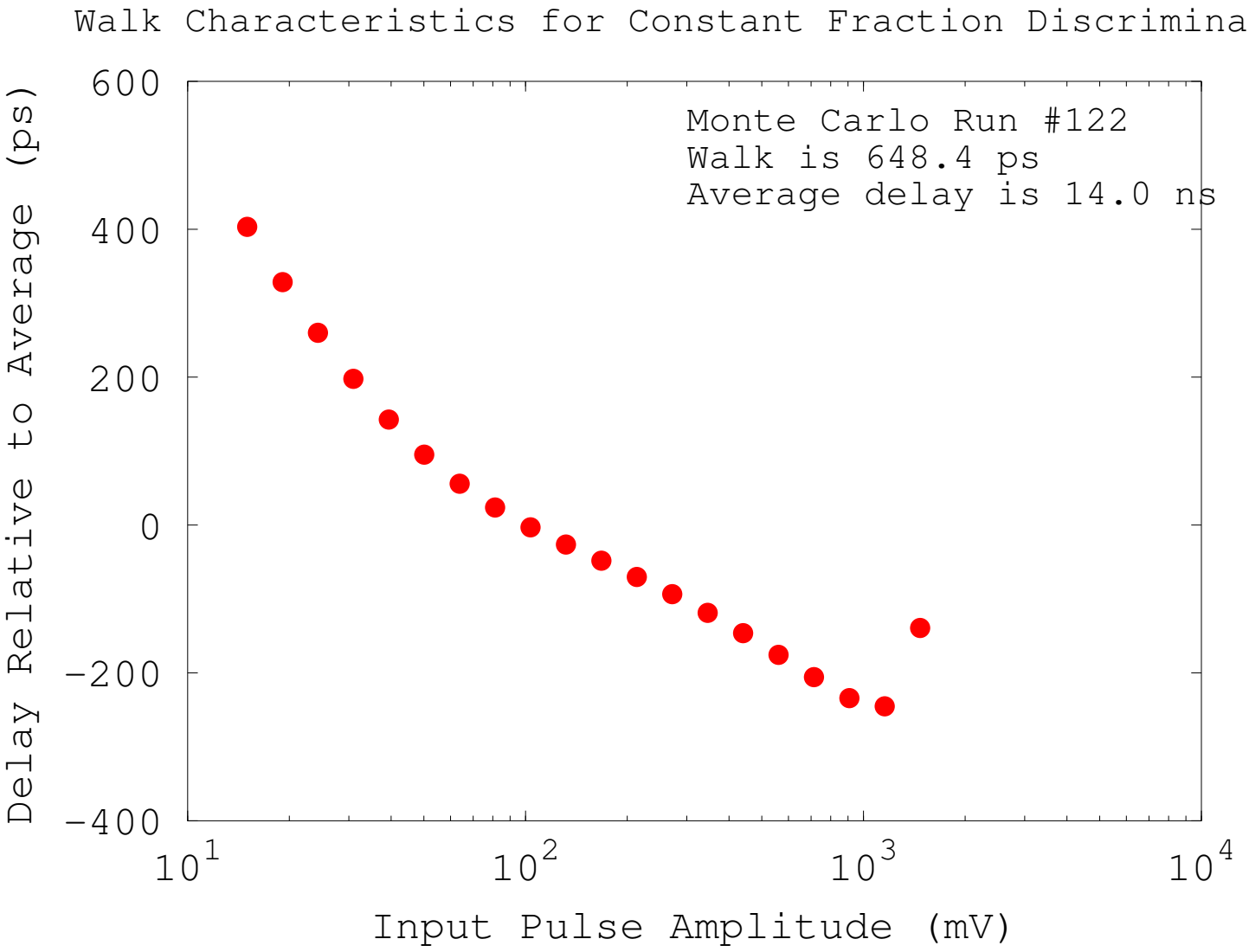

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #118
Walk is 526.0 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

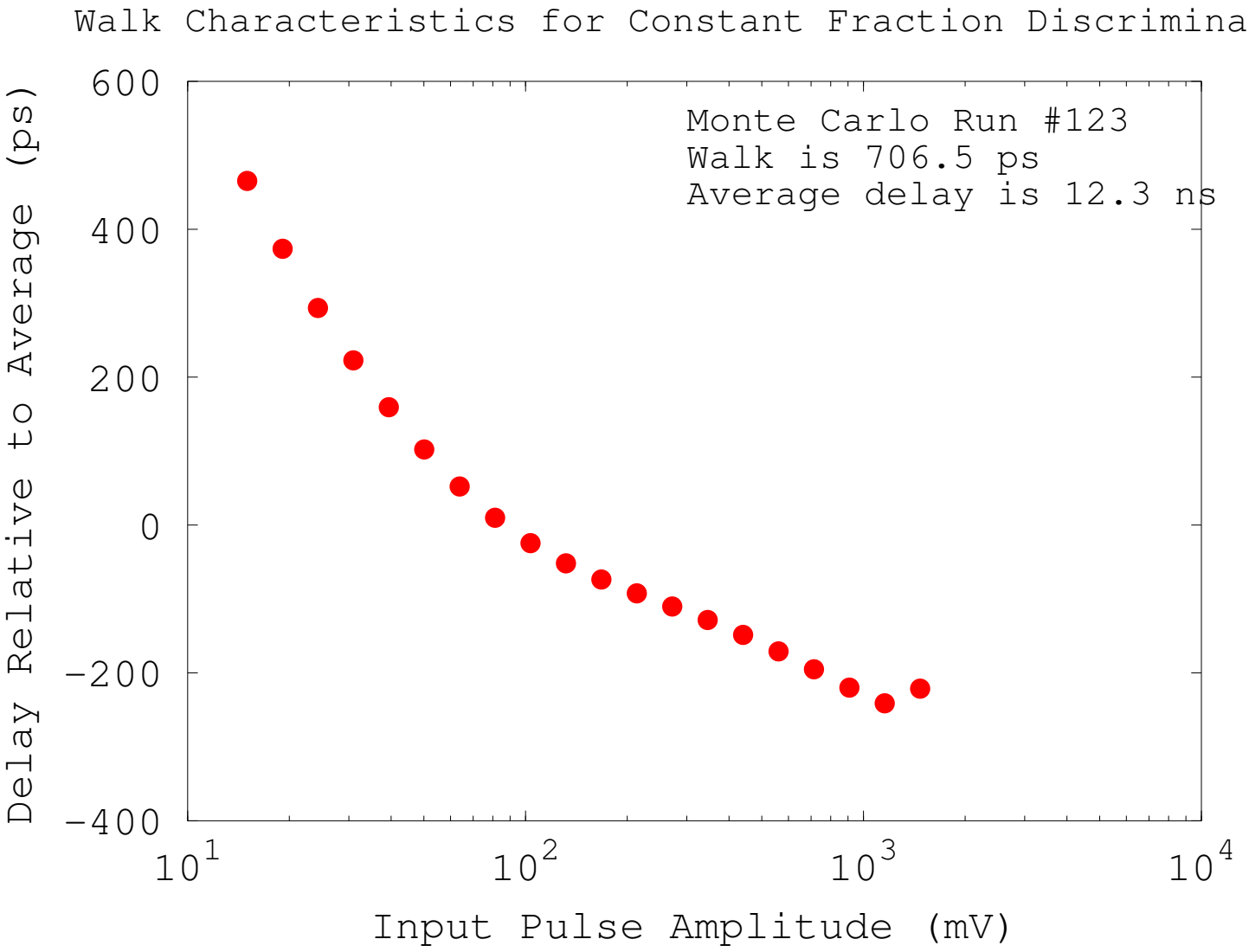

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #119
Walk is 612.8 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

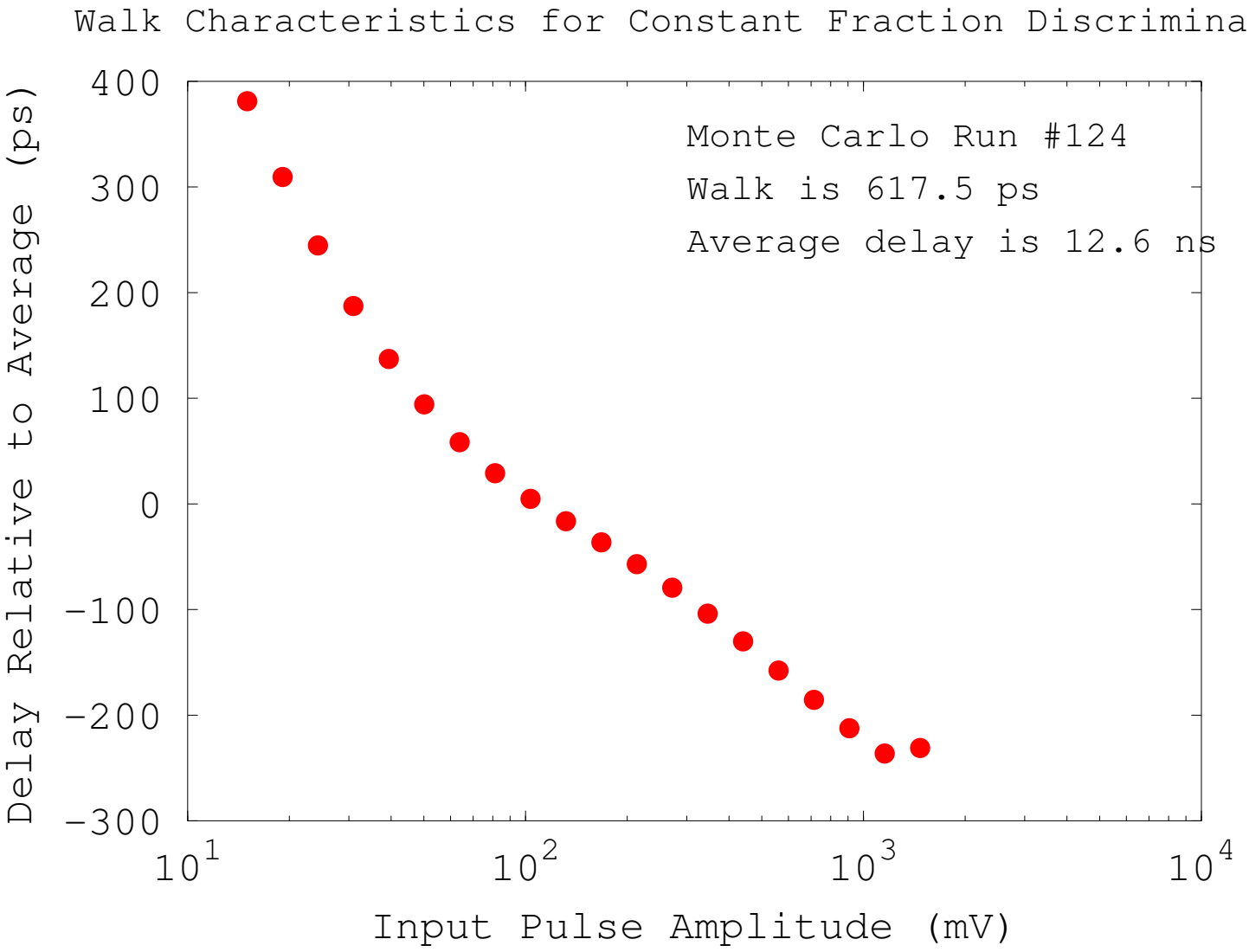

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #12
Walk is 967.5 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

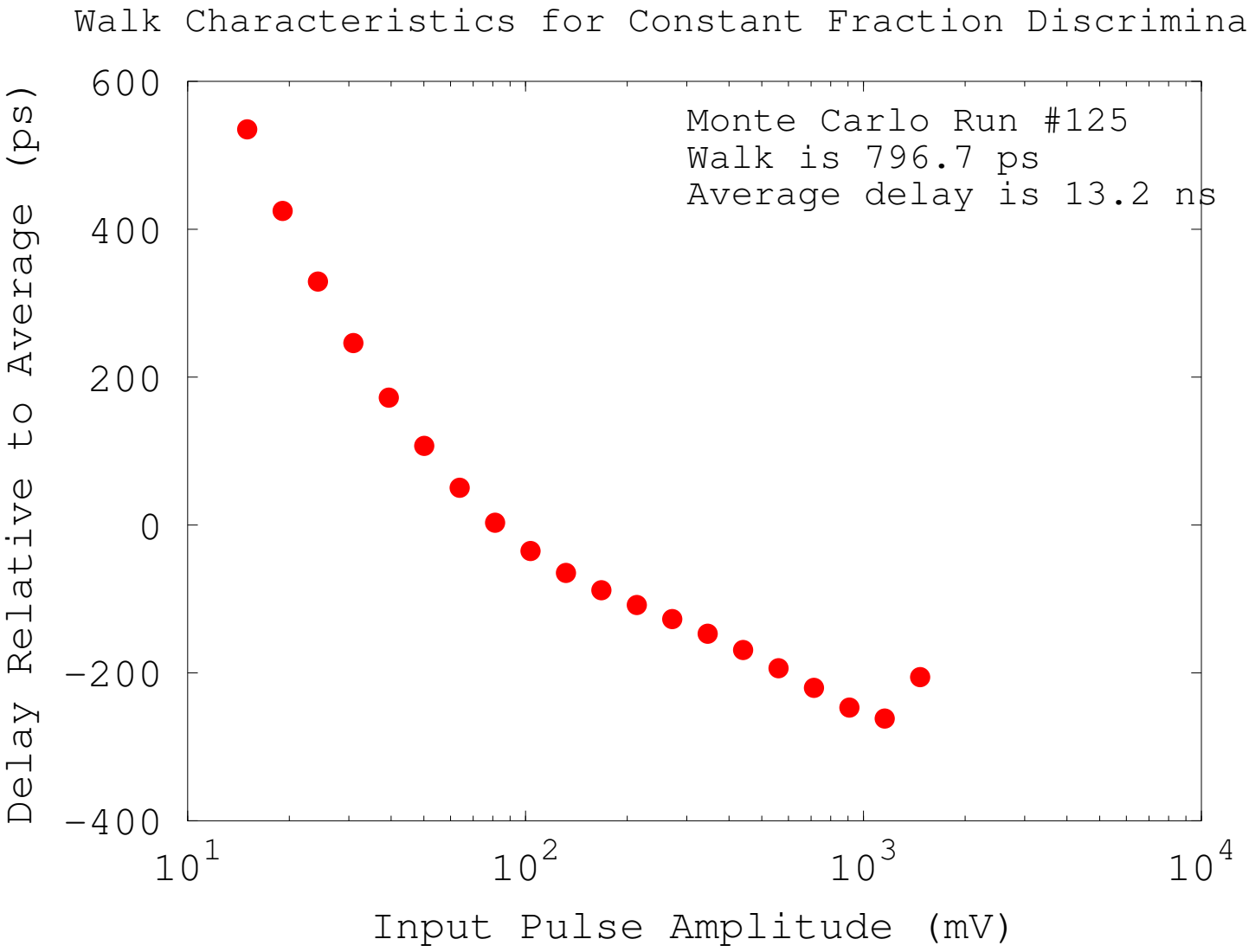

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #120
Walk is 550.0 ps
Average delay is 12.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

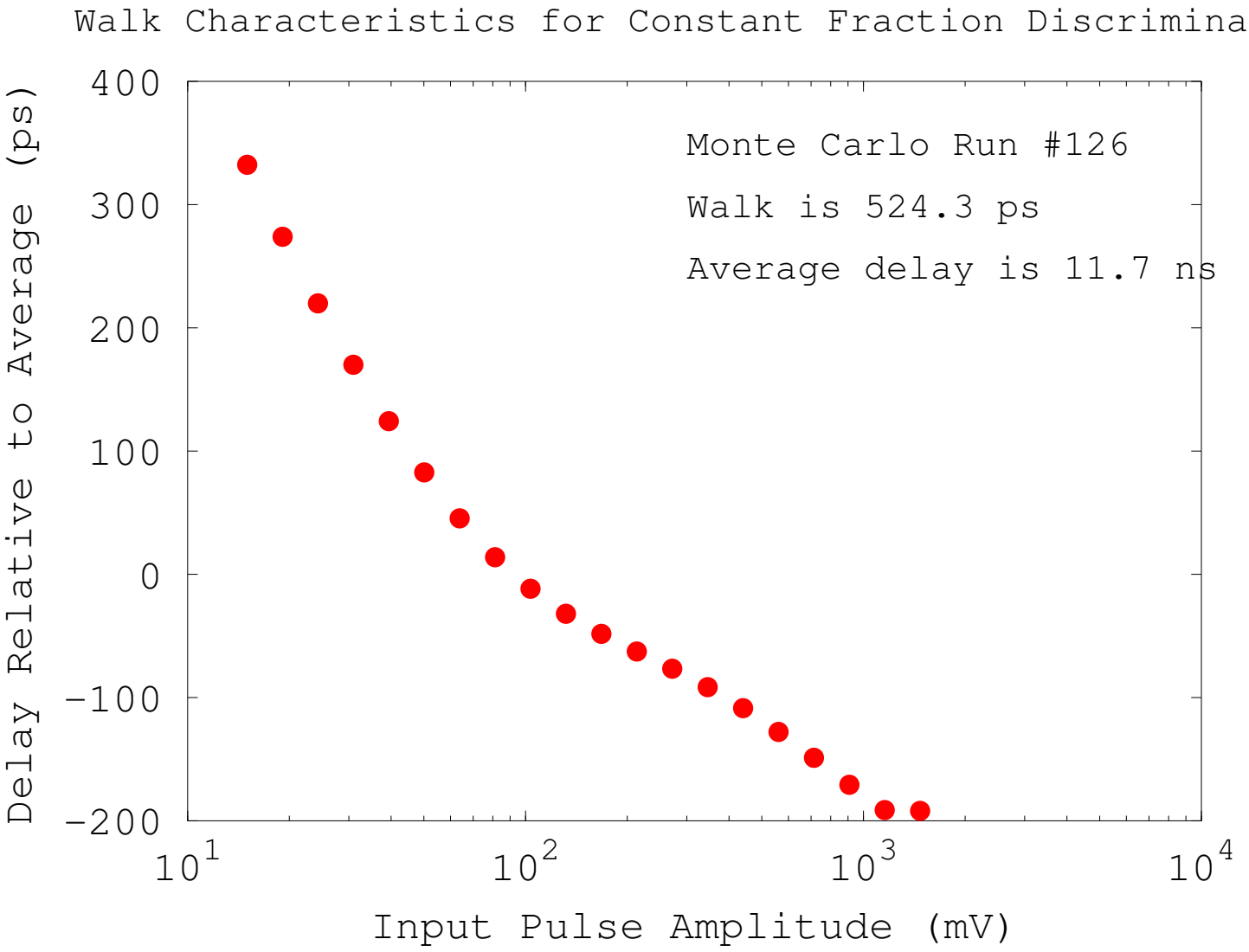

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #121
Walk is 575.0 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

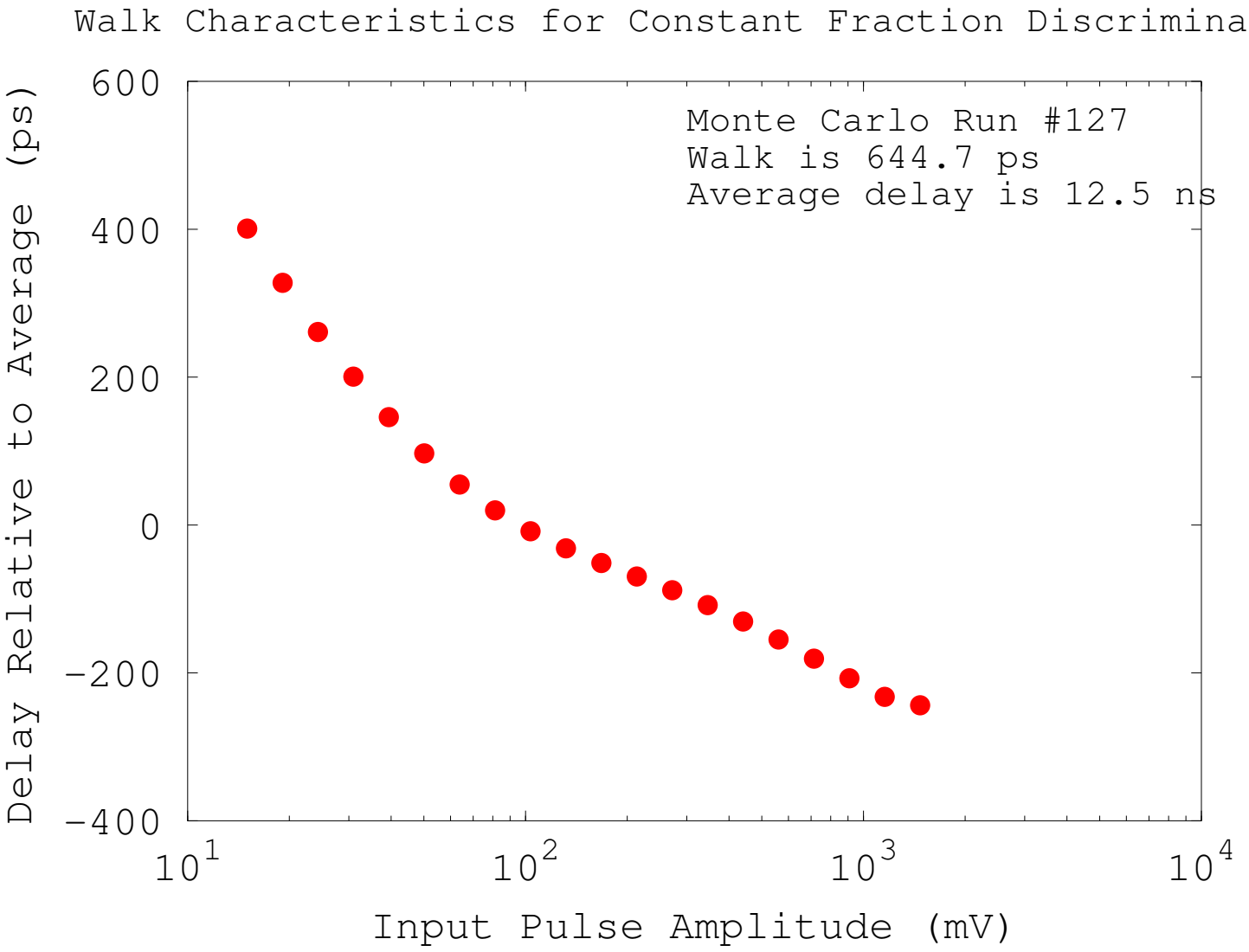

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #122
Walk is 648.4 ps
Average delay is 14.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

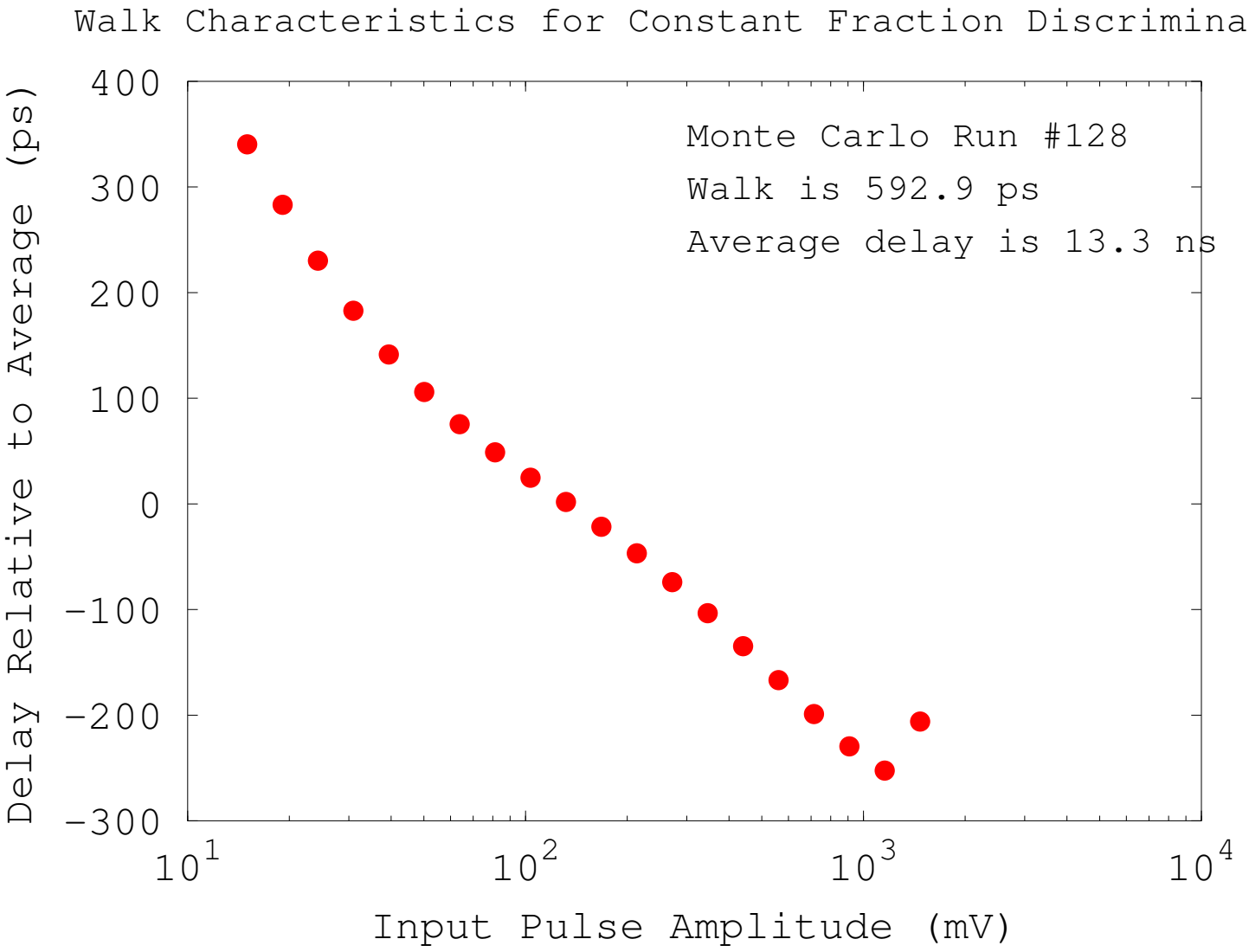

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #123
Walk is 706.5 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

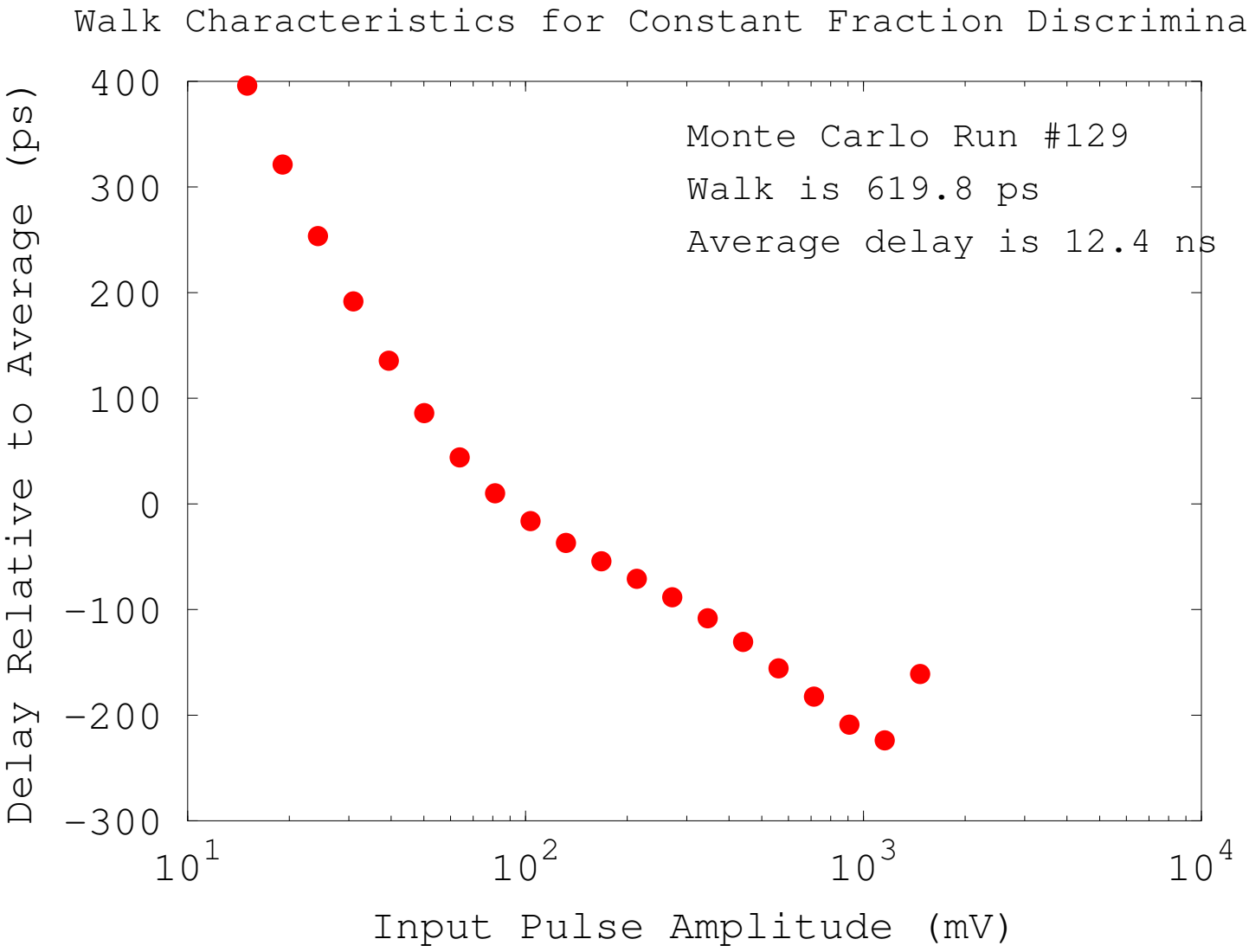

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #124
Walk is 617.5 ps
Average delay is 12.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

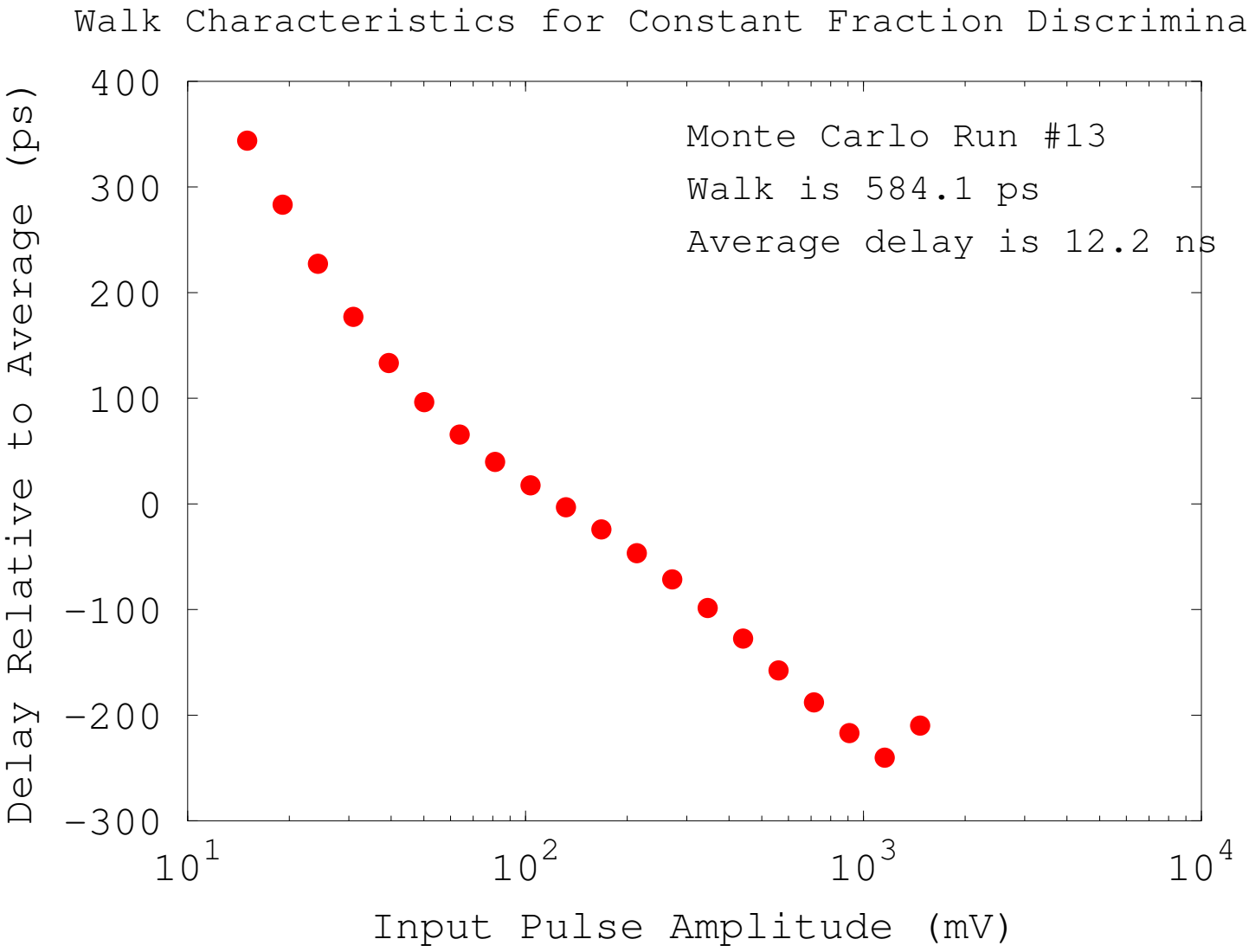

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #125
Walk is 796.7 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

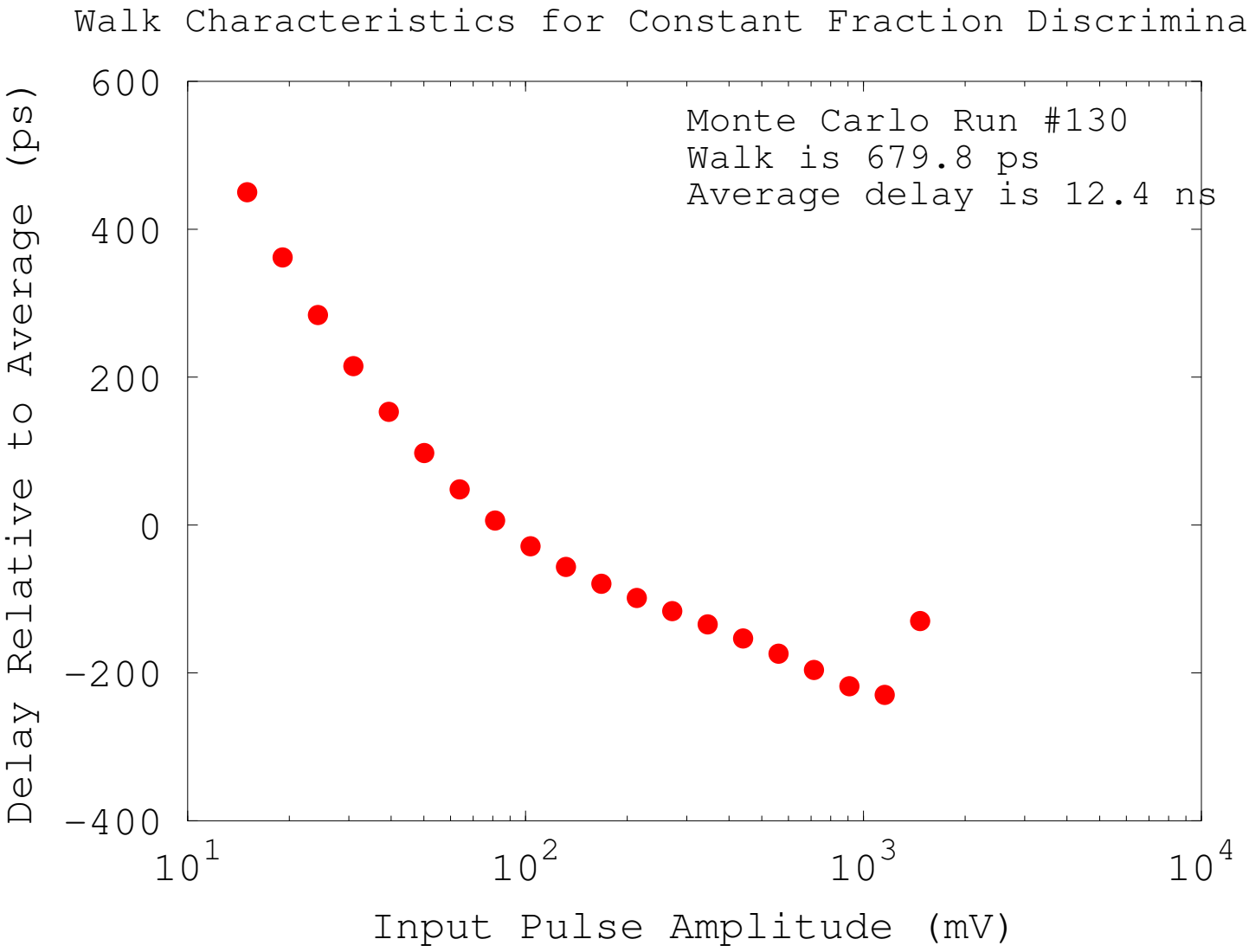

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #126
Walk is 524.3 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

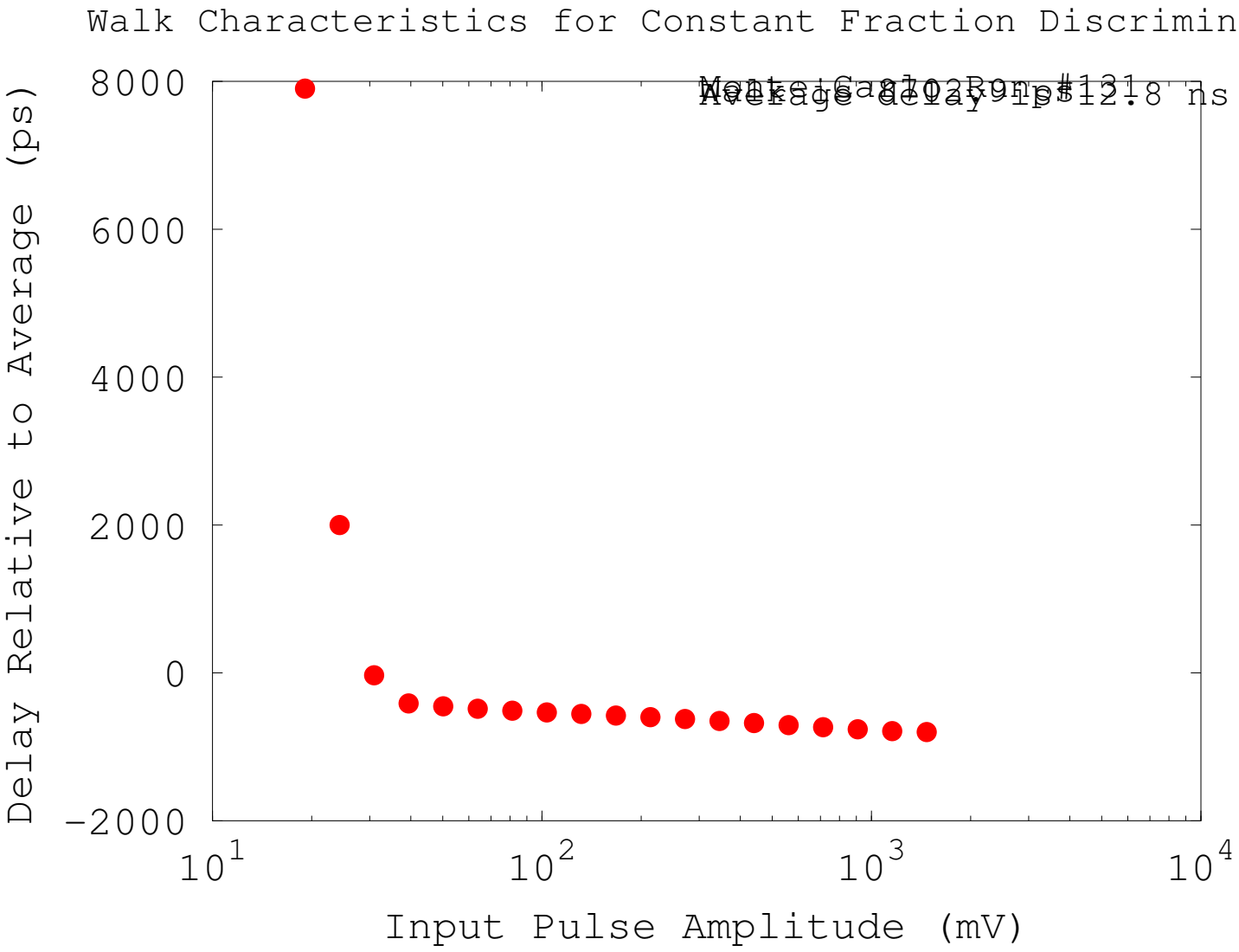

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #127
Walk is 644.7 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

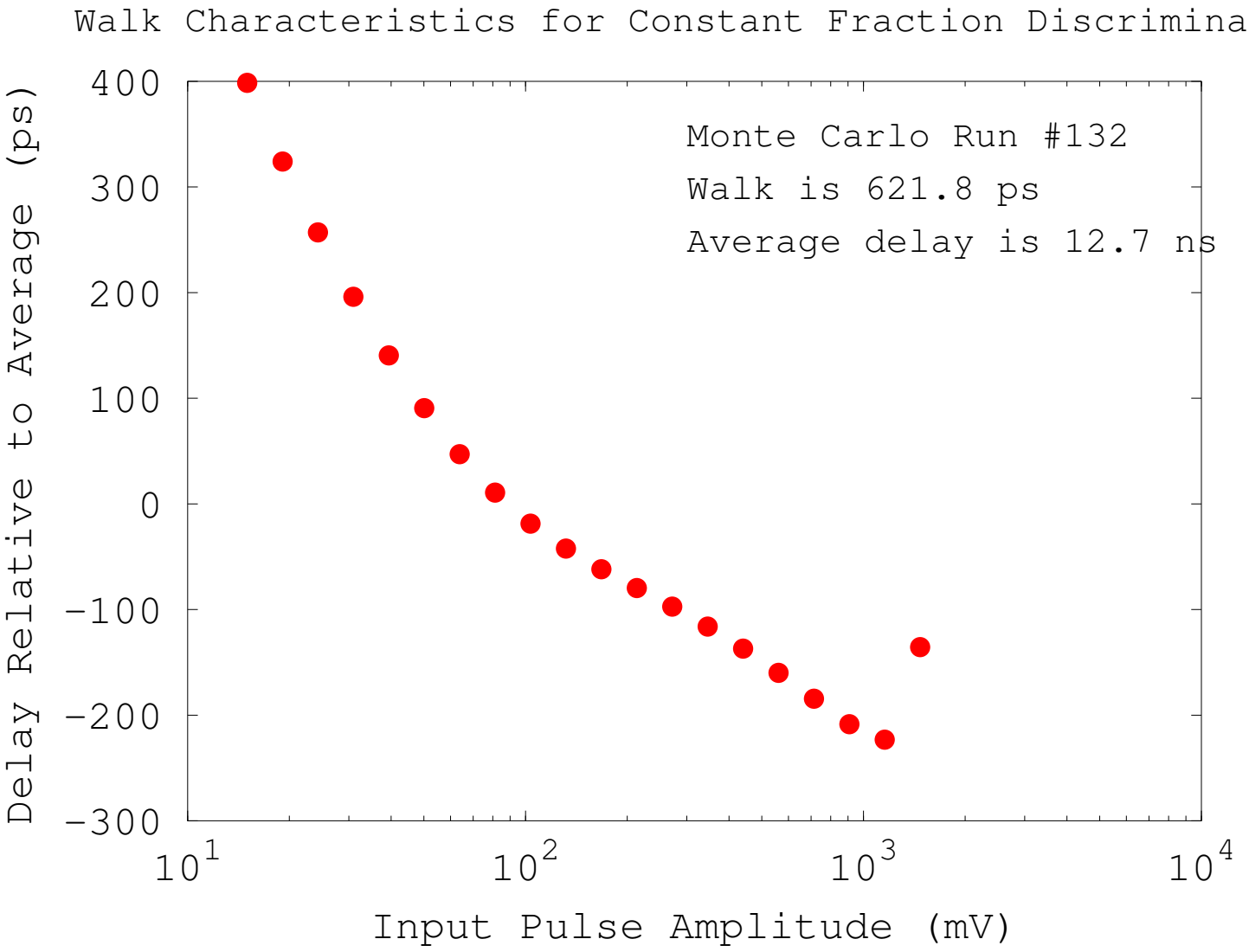

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #128
Walk is 592.9 ps
Average delay is 13.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

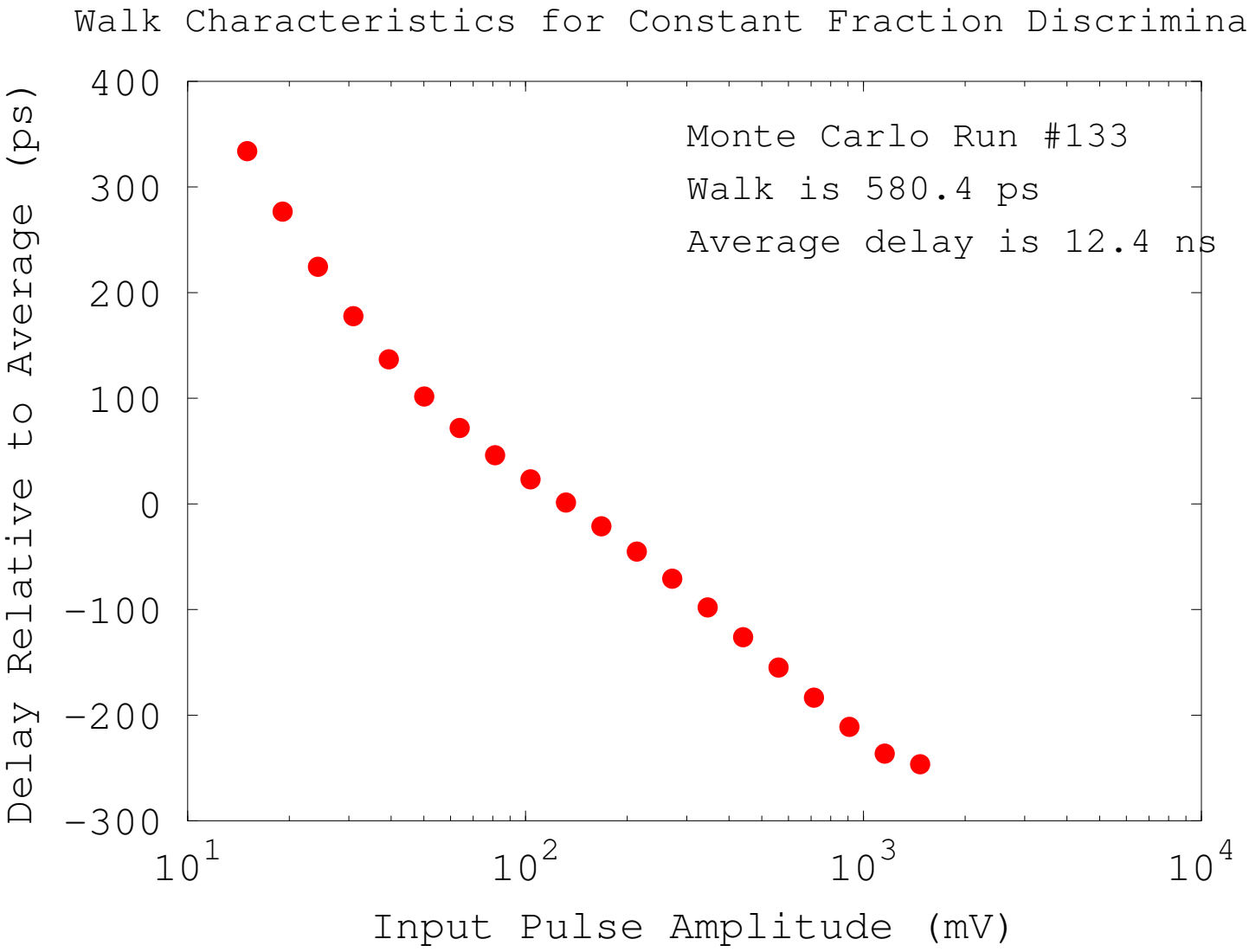

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #129
Walk is 619.8 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

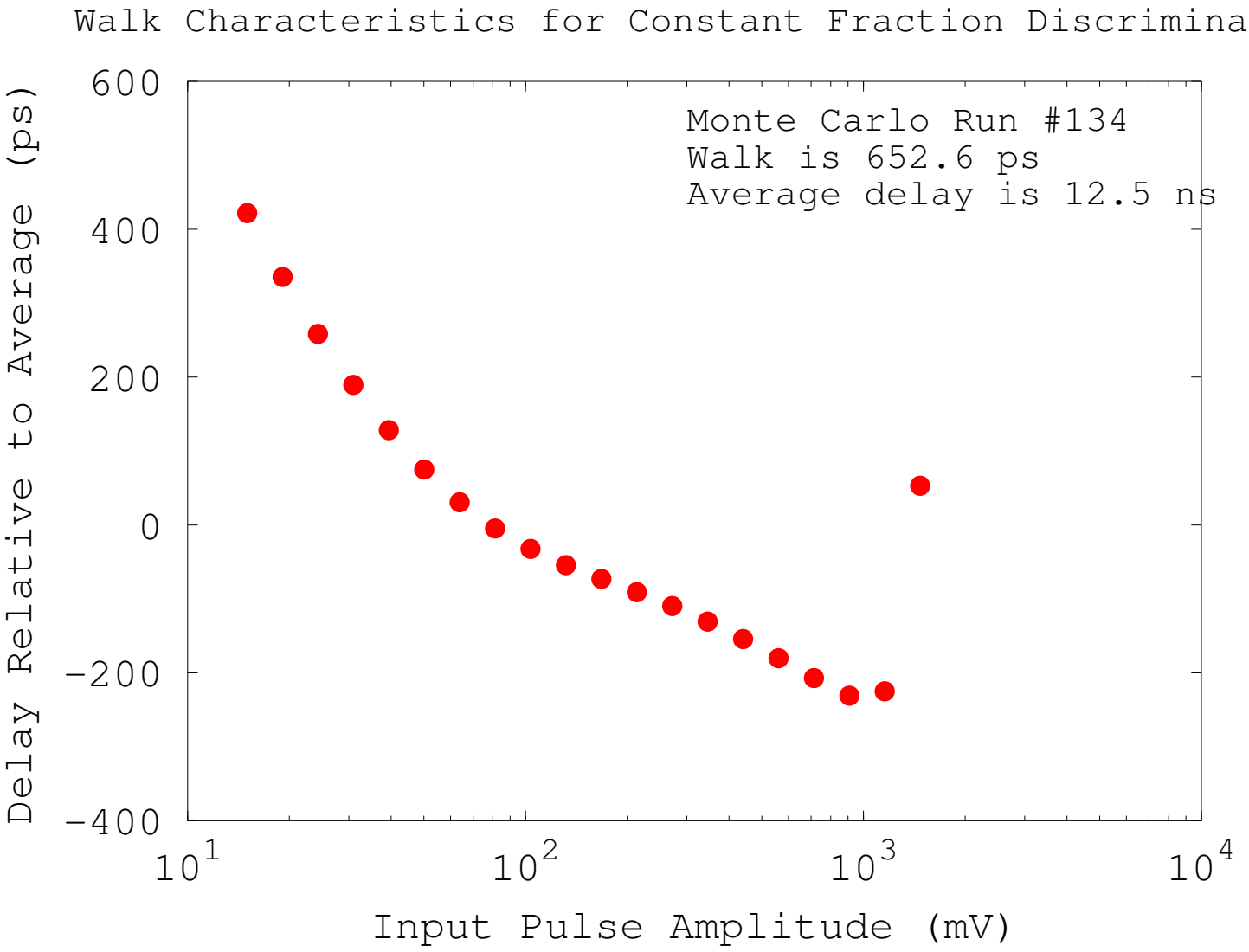

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #13
Walk is 584.1 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

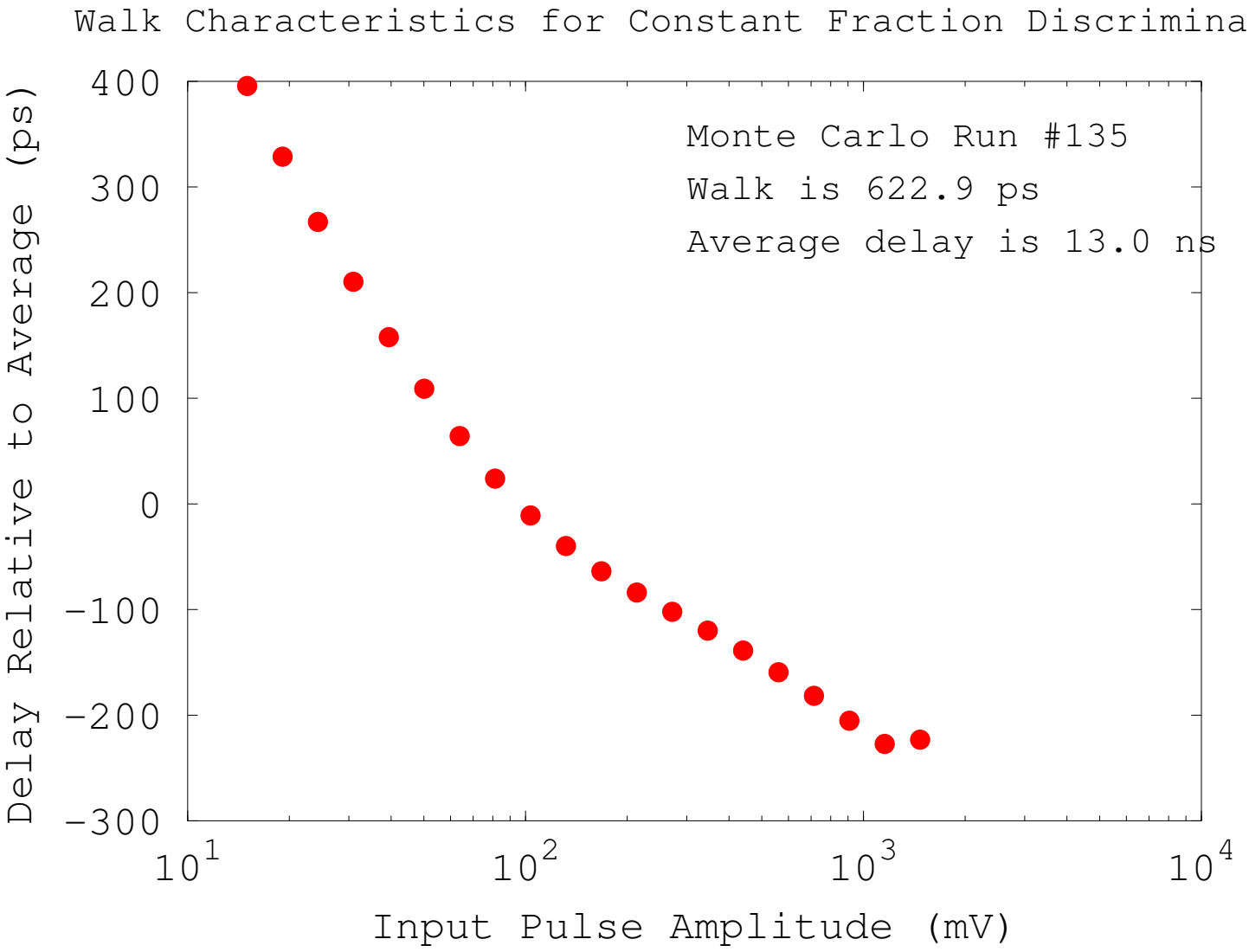

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #130
Walk is 679.8 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

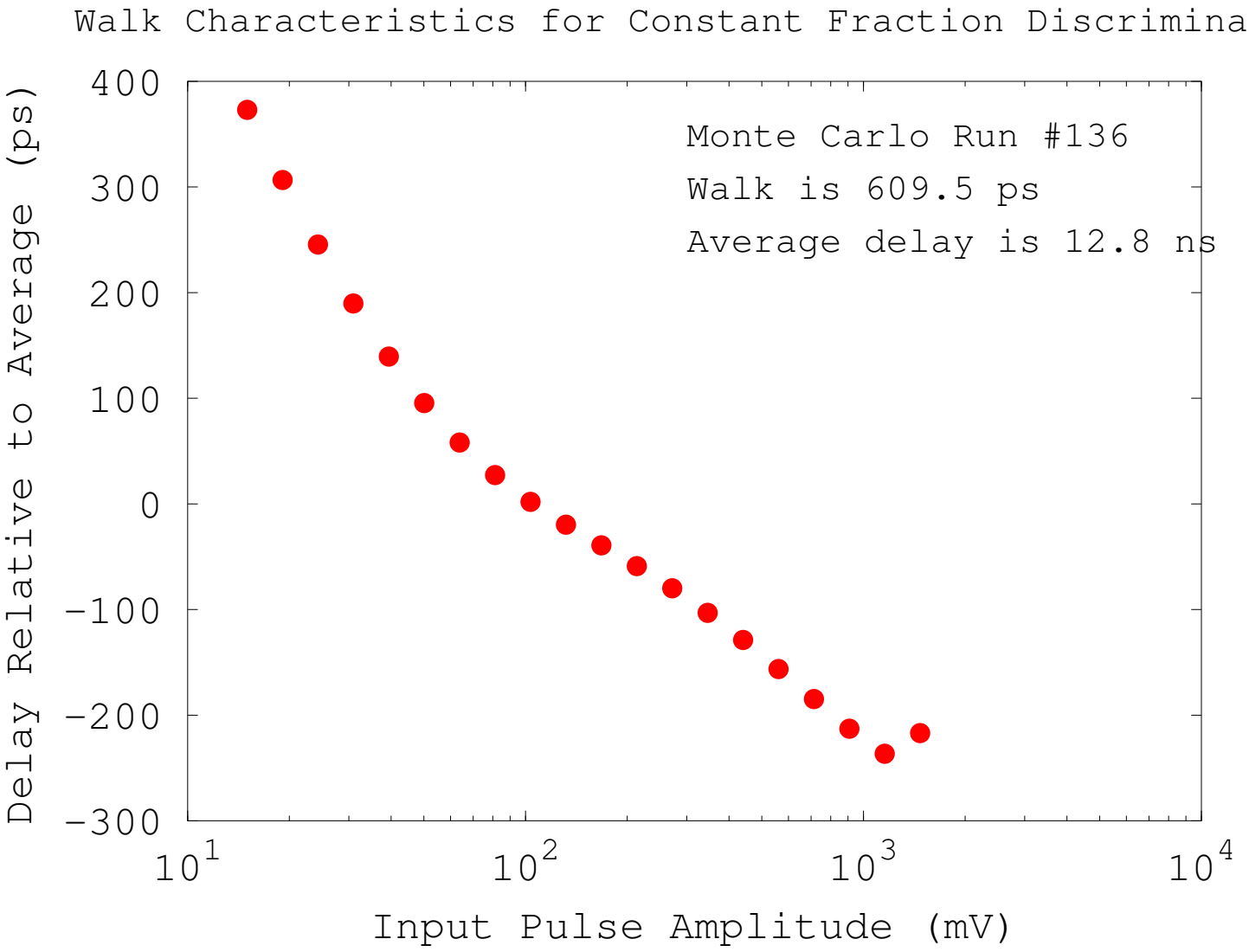

Walk Characteristics for Constant Fraction Discriminato
Monte Carlo Run #131
Average delay is 12.8 ns
Delay Relative to Average (ps)
8000
6000
4000
2000
0
-2000
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

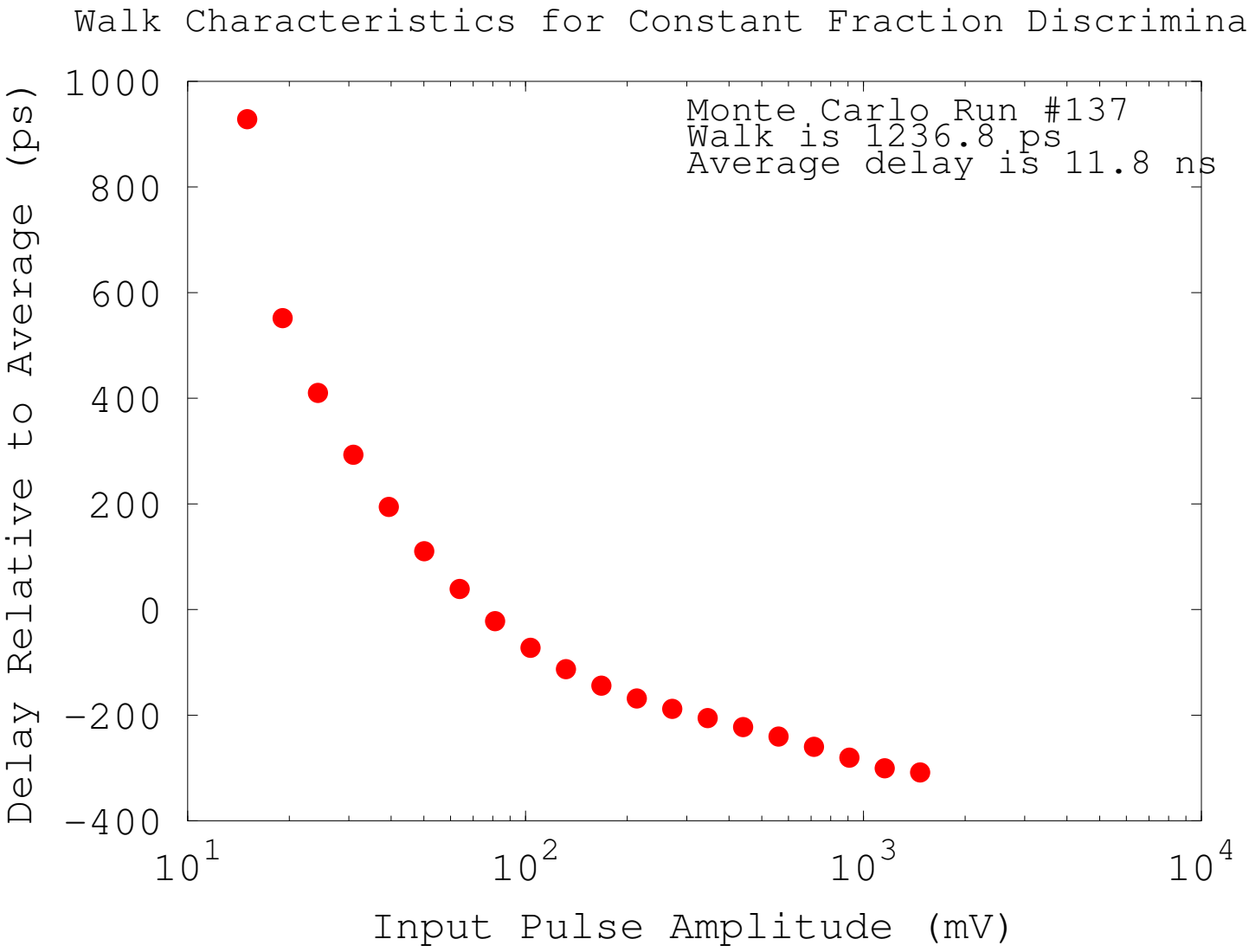

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #132
Walk is 621.8 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

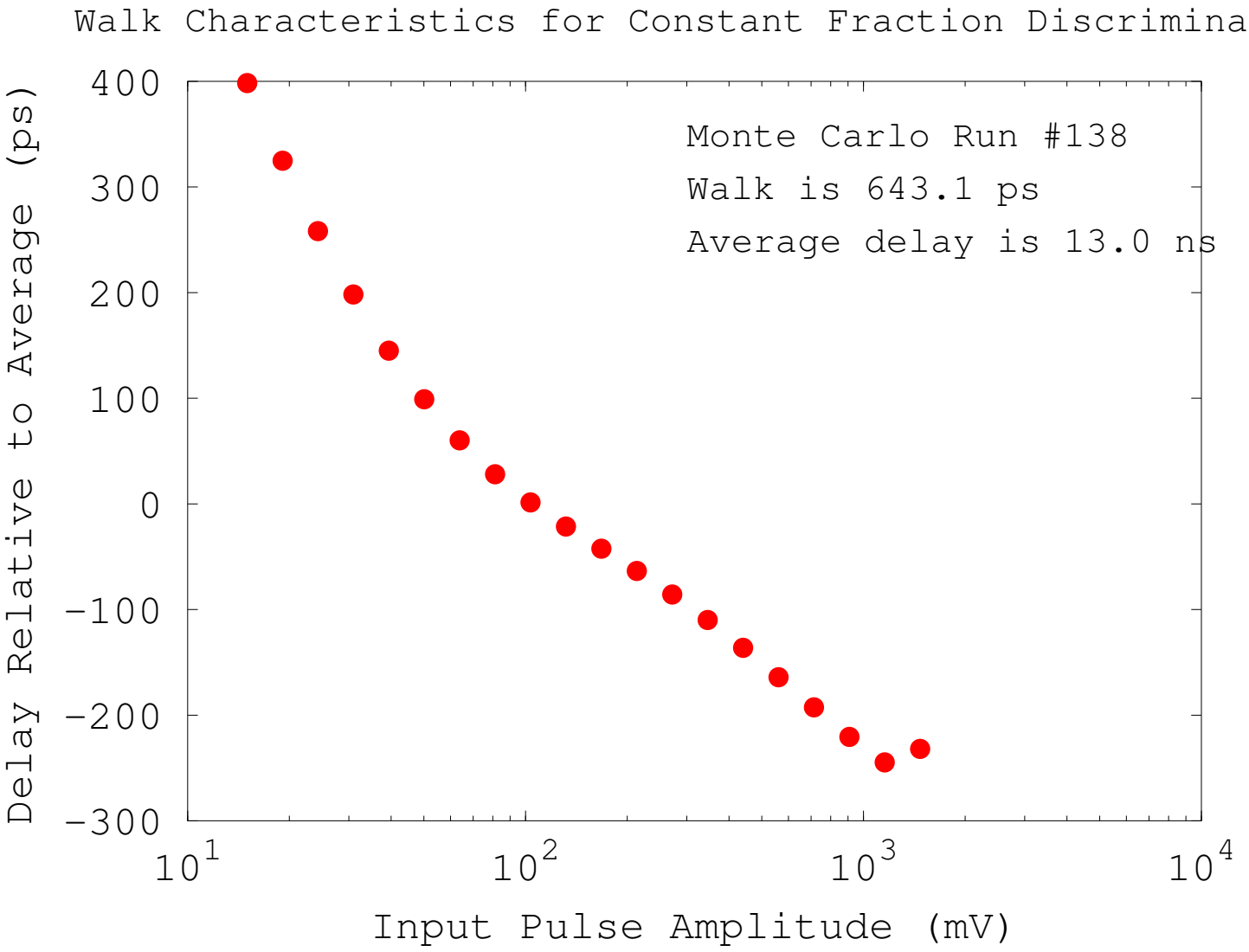

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #133
Walk is 580.4 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

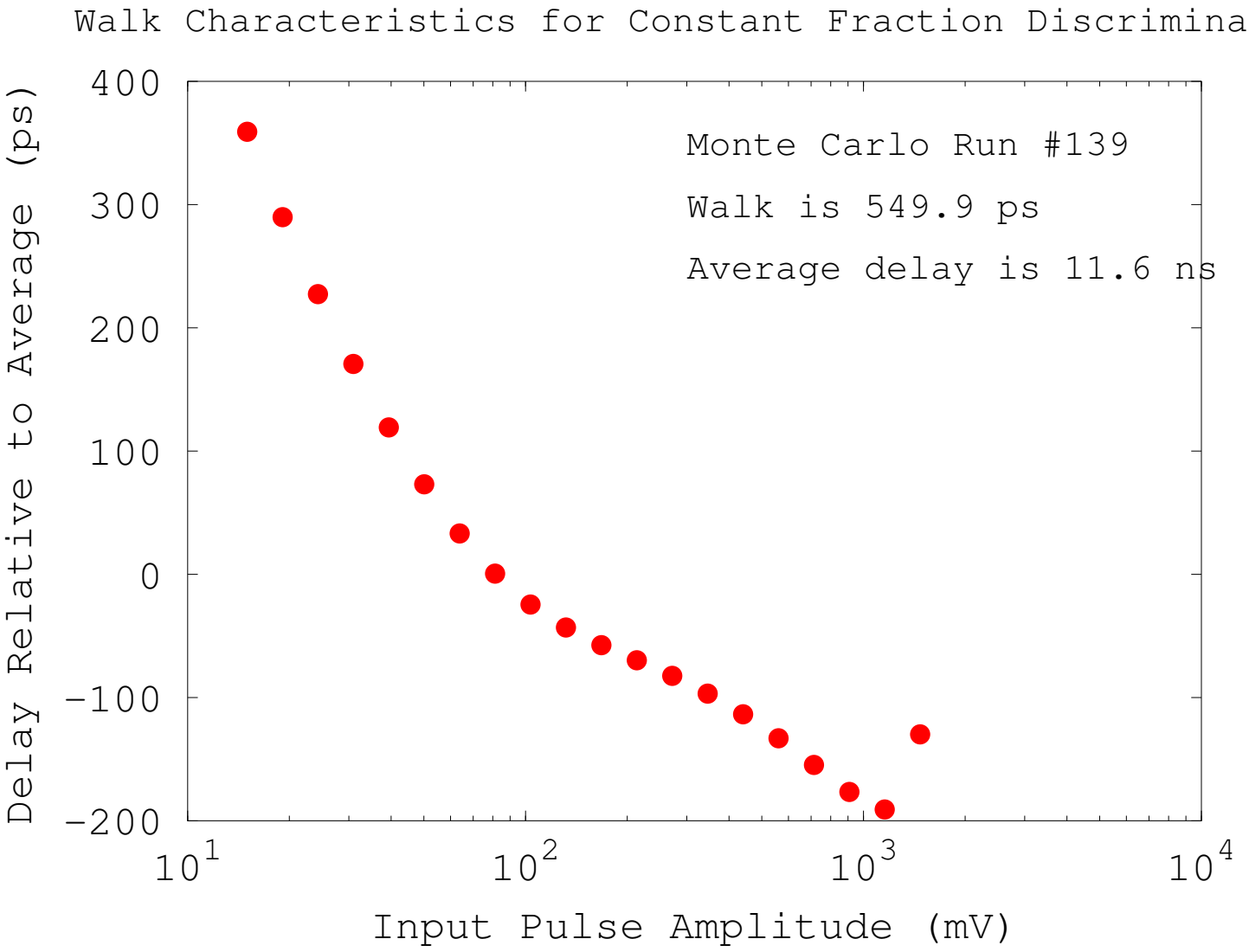

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #134
Walk is 652.6 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

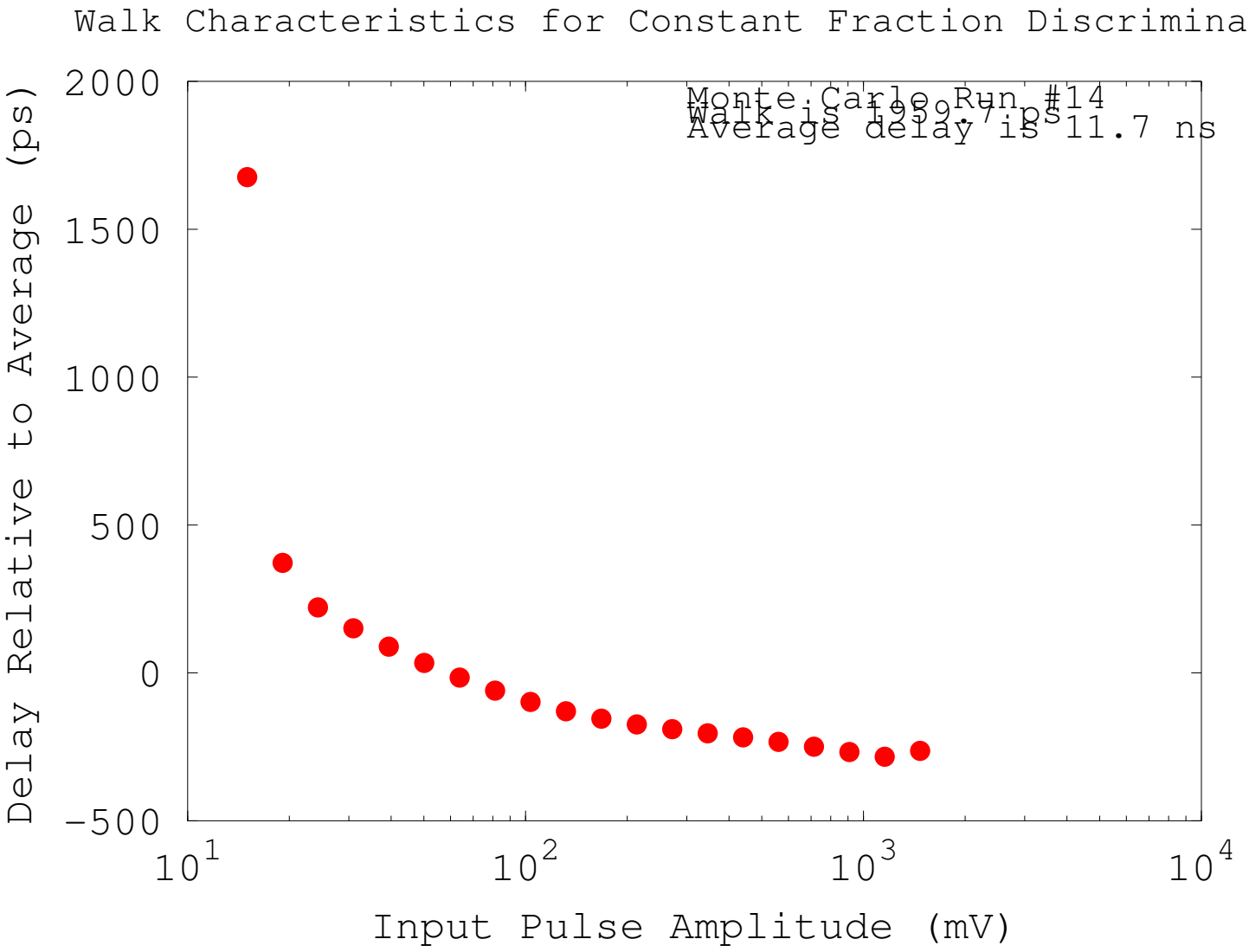

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #135
Walk is 622.9 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

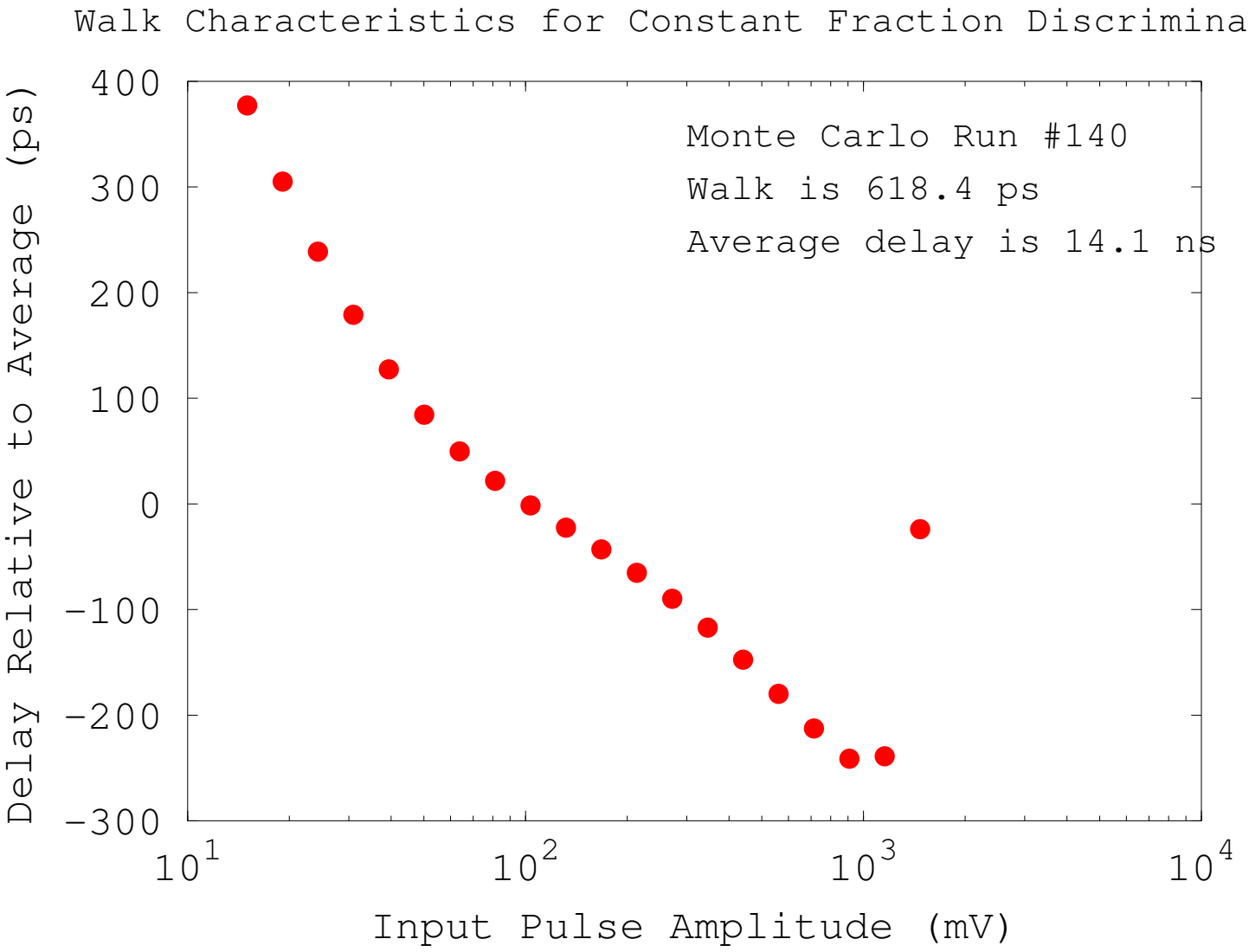

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #136
Walk is 609.5 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

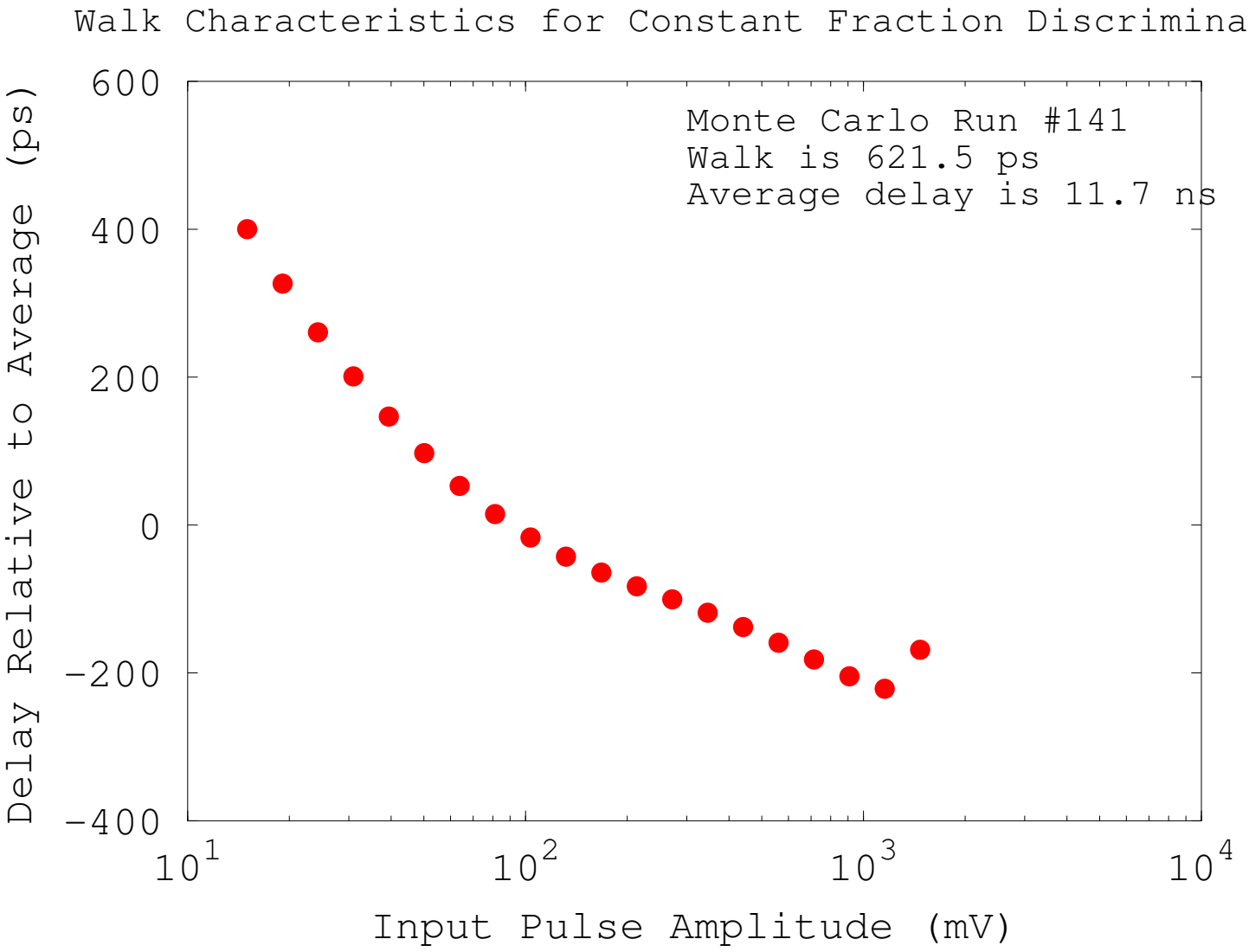

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #137
Walk is 1236.8 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
1000
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

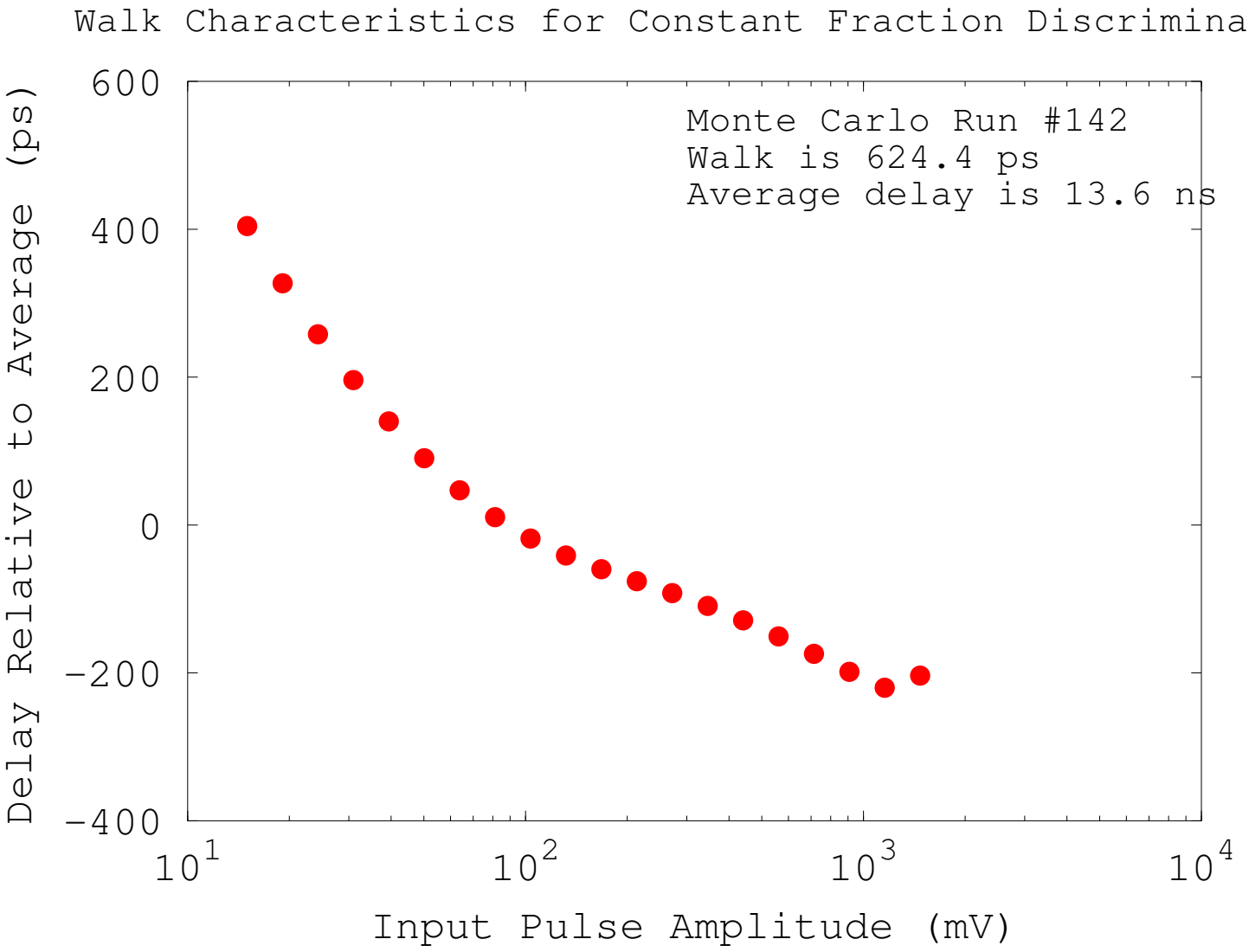

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #138
Walk is 643.1 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

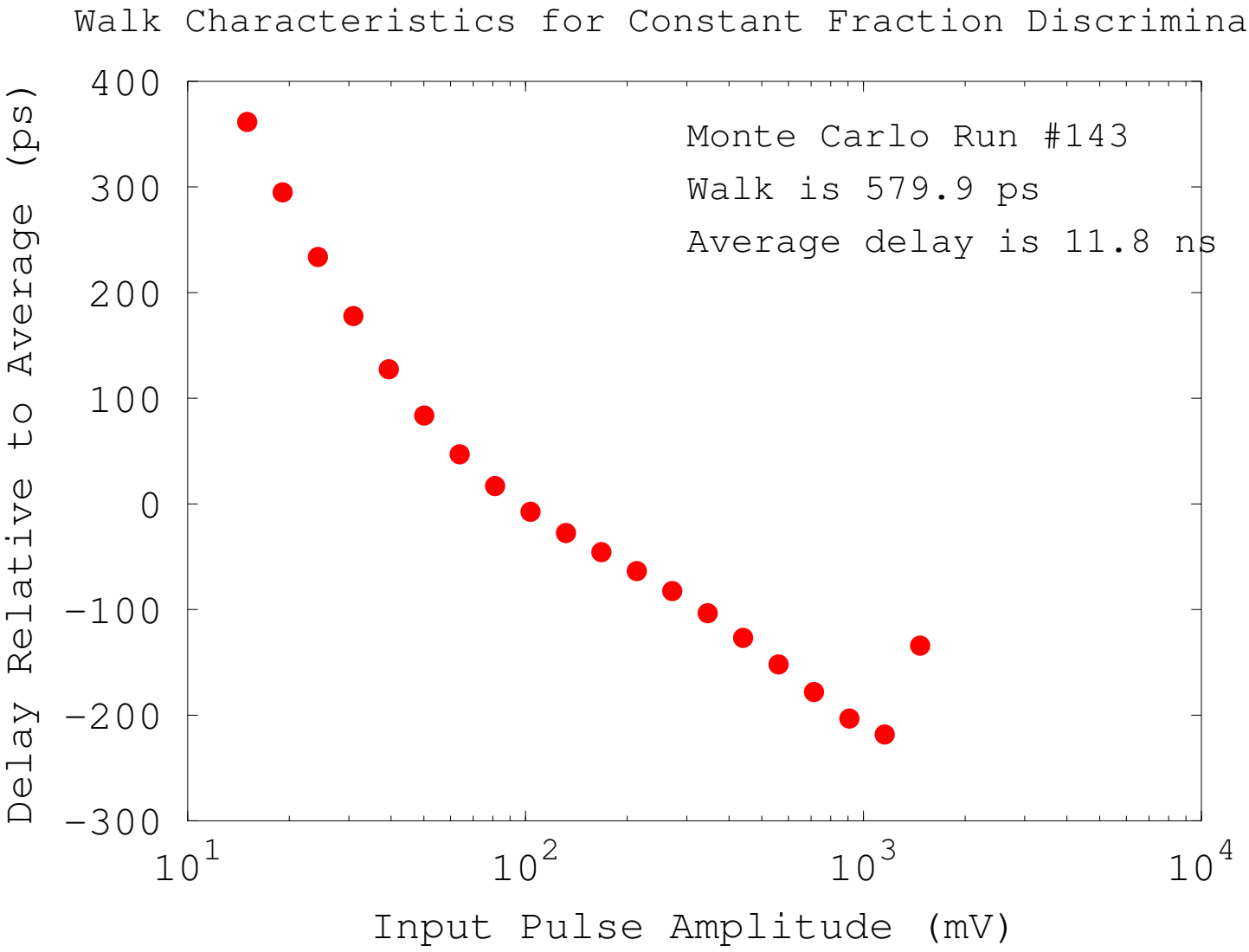

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #139
Walk is 549.9 ps
Average delay is 11.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

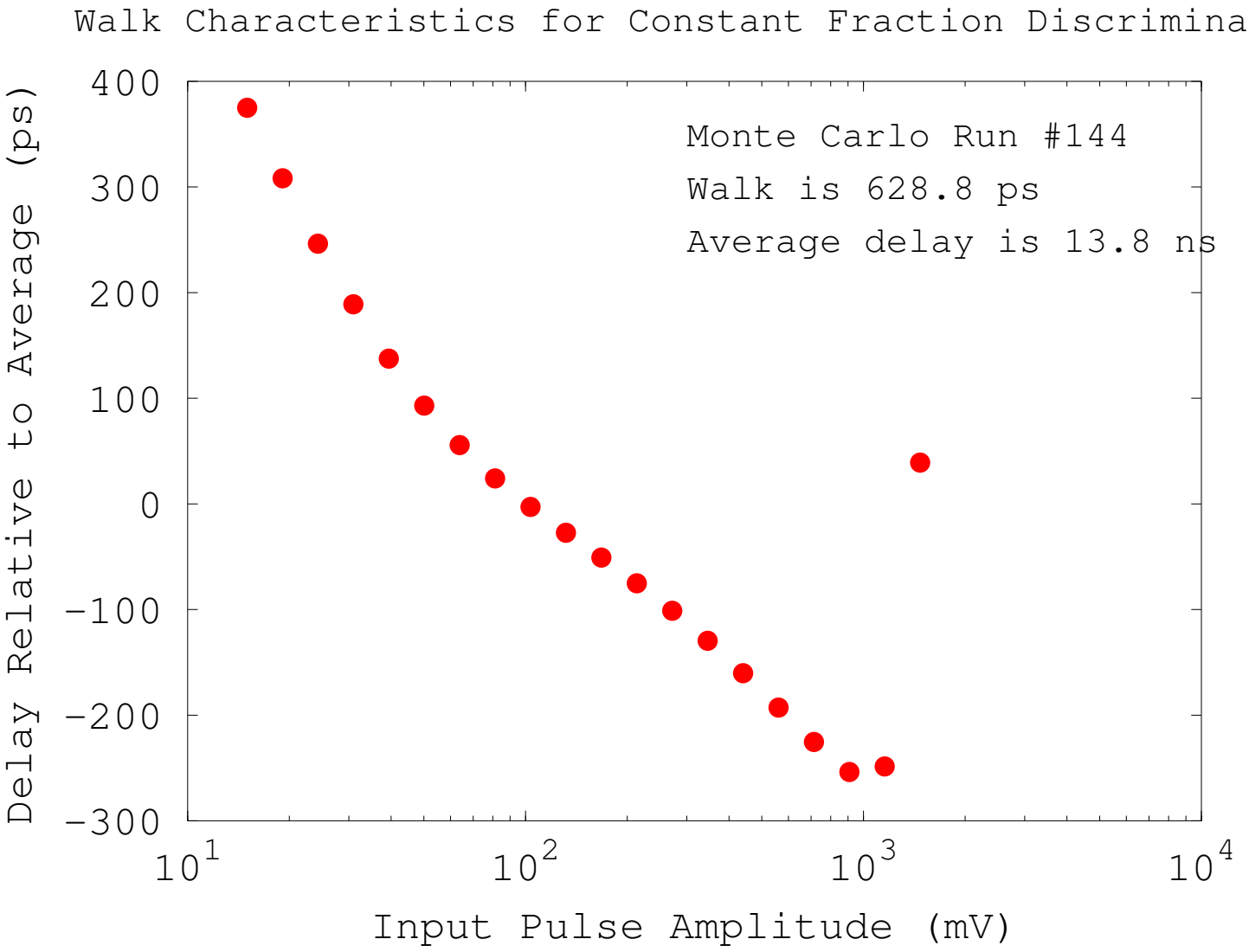

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #14
Walk is 1959.7 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

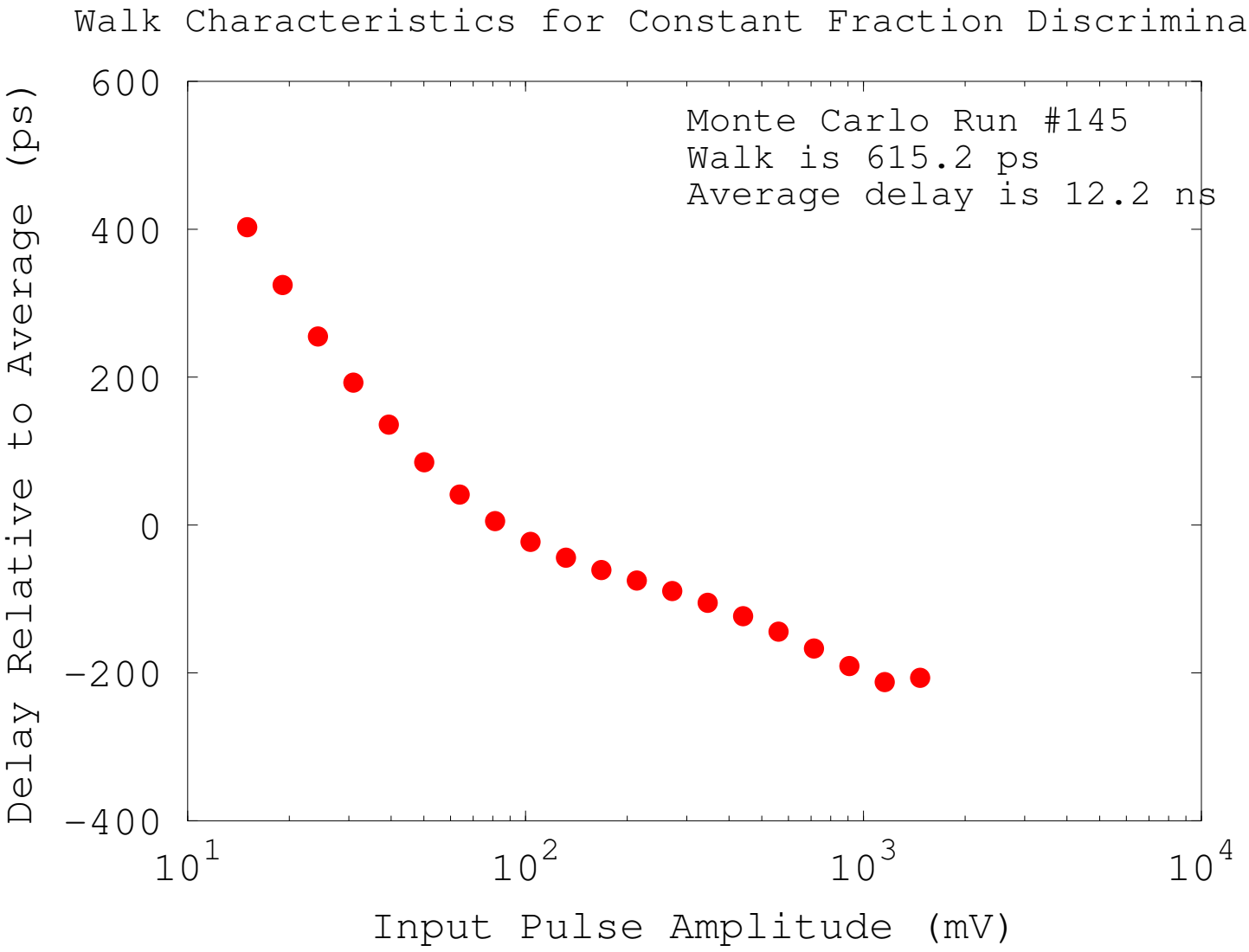

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #140
Walk is 618.4 ps
Average delay is 14.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

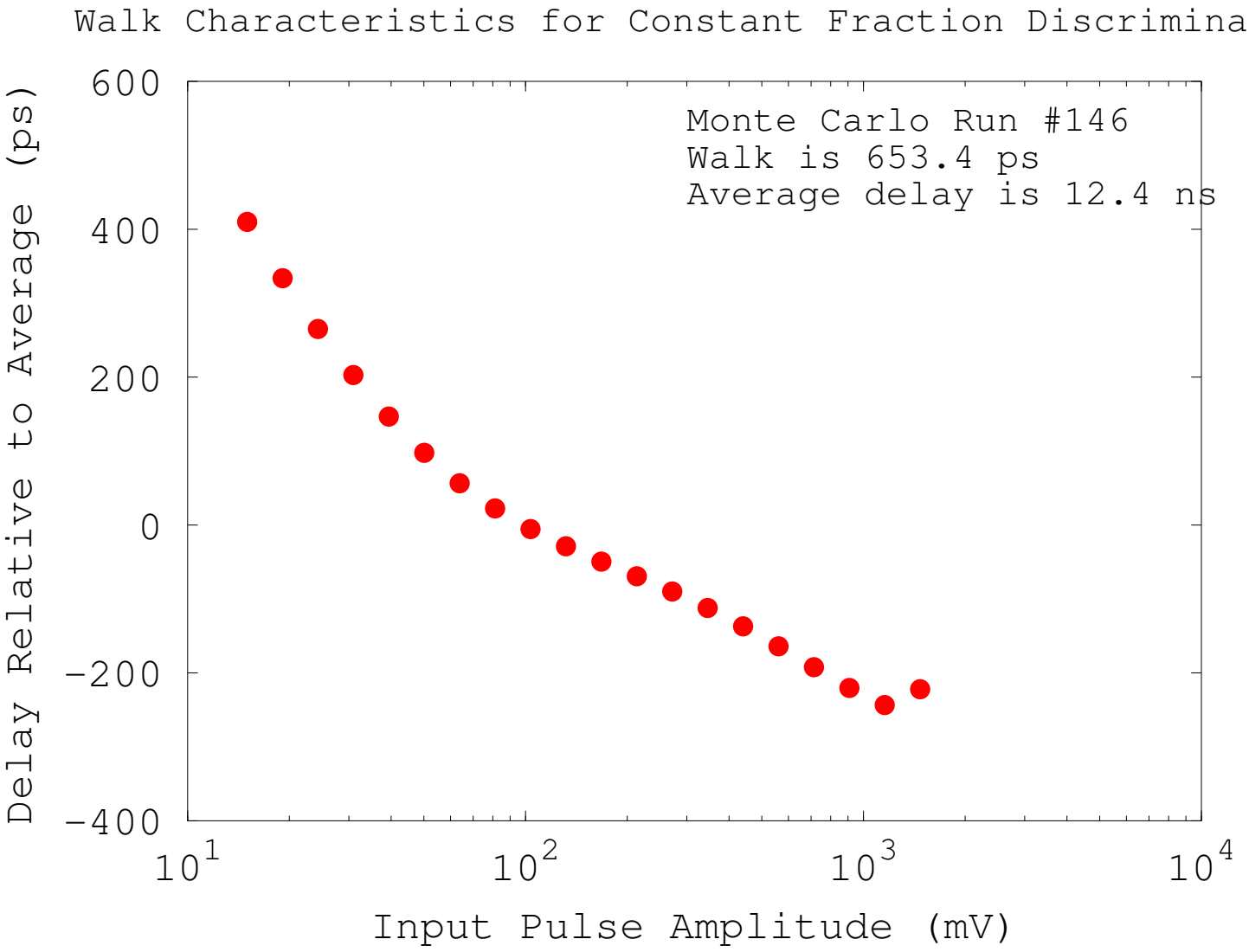

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #141
Walk is 621.5 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

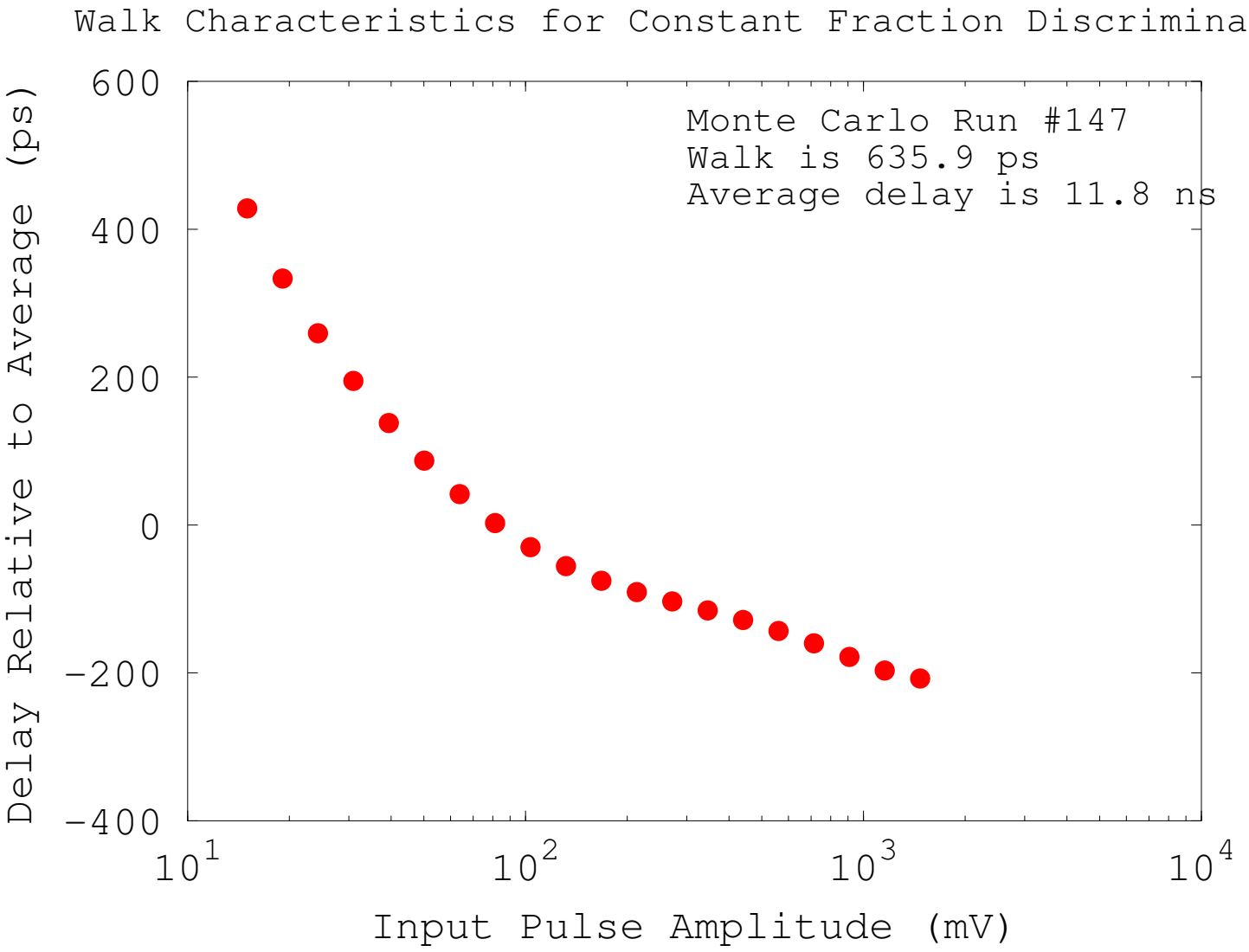

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #142
Walk is 624.4 ps
Average delay is 13.6 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

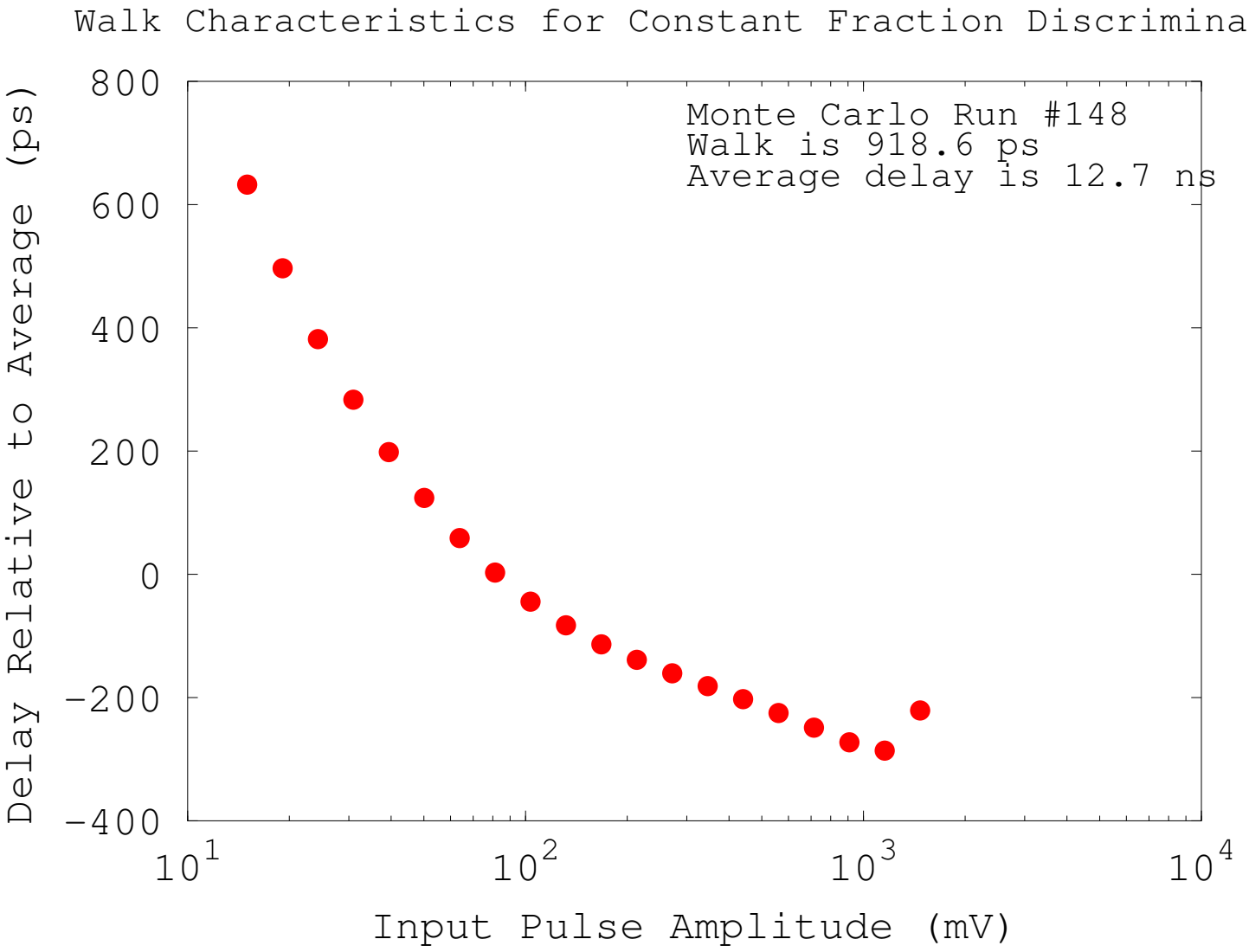

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #143
Walk is 579.9 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

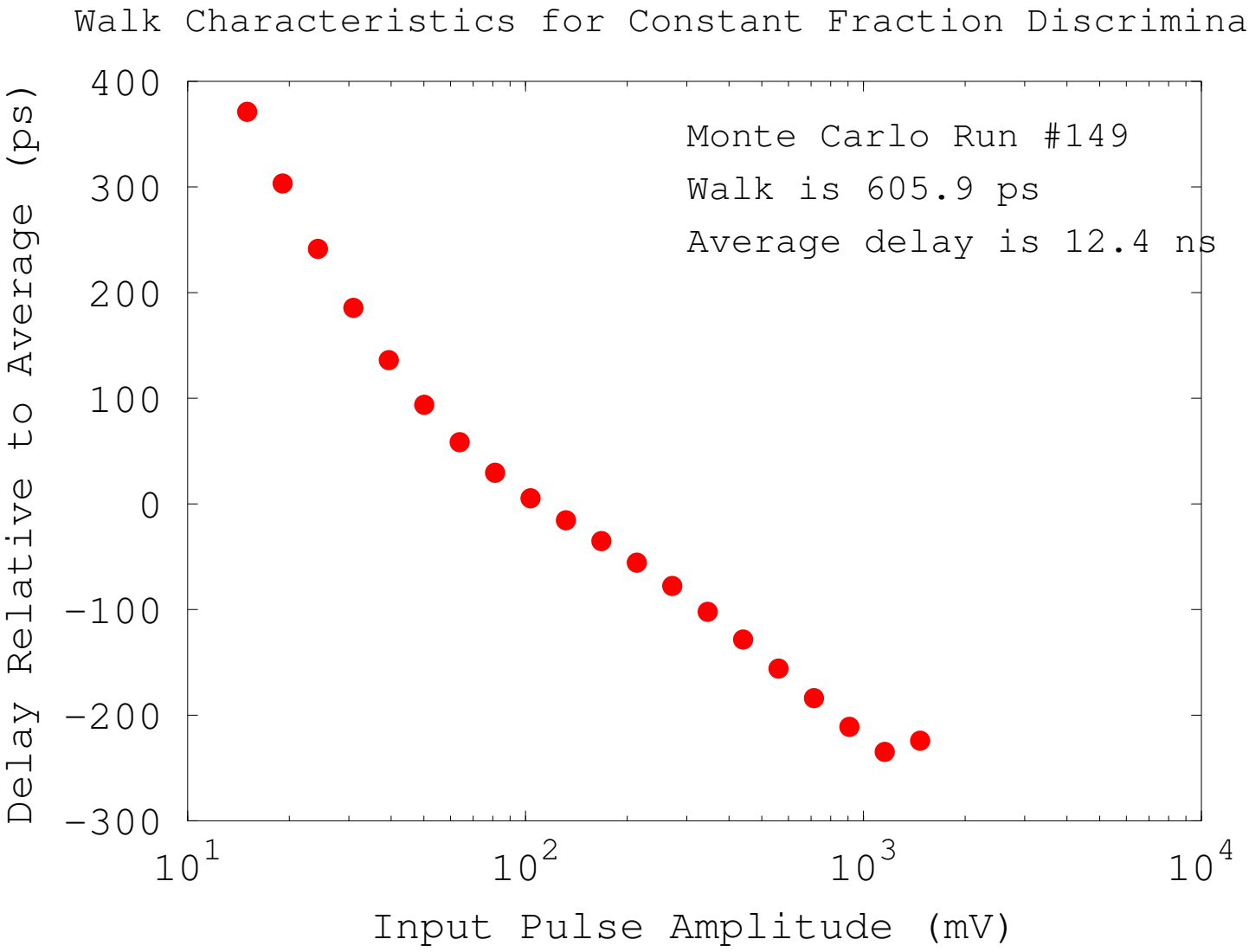

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #144
Walk is 628.8 ps
Average delay is 13.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

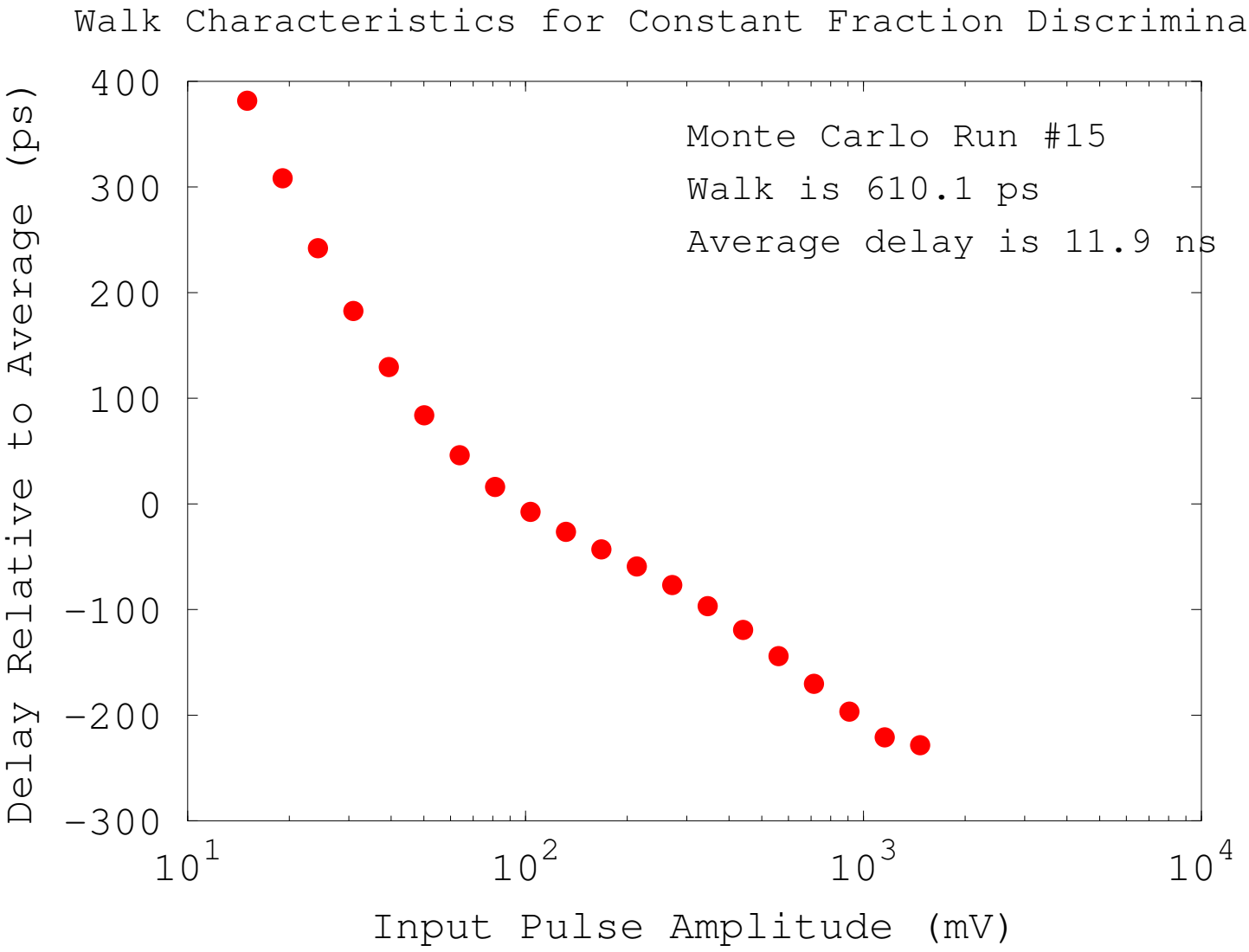

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #145
Walk is 615.2 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

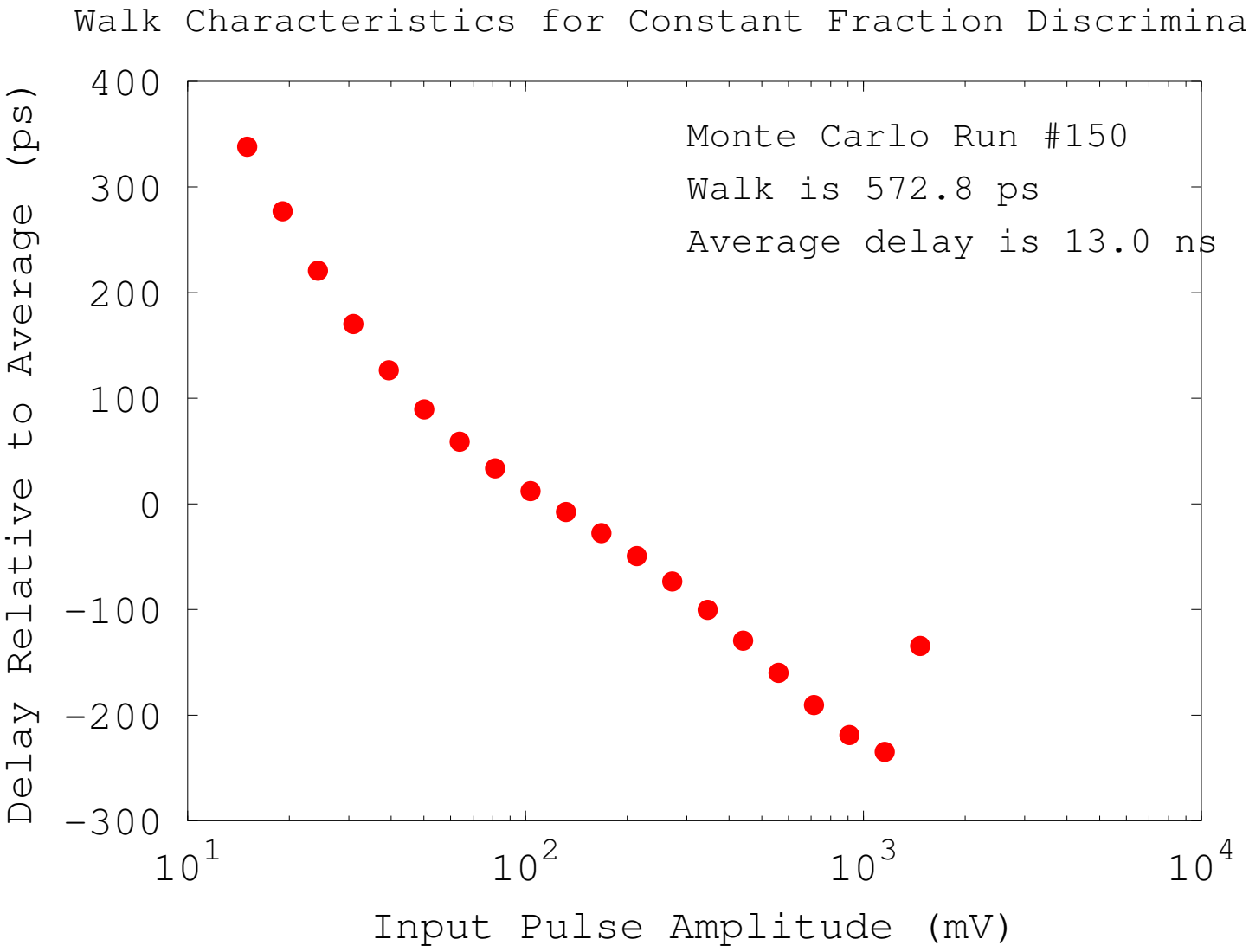

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #146
Walk is 653.4 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

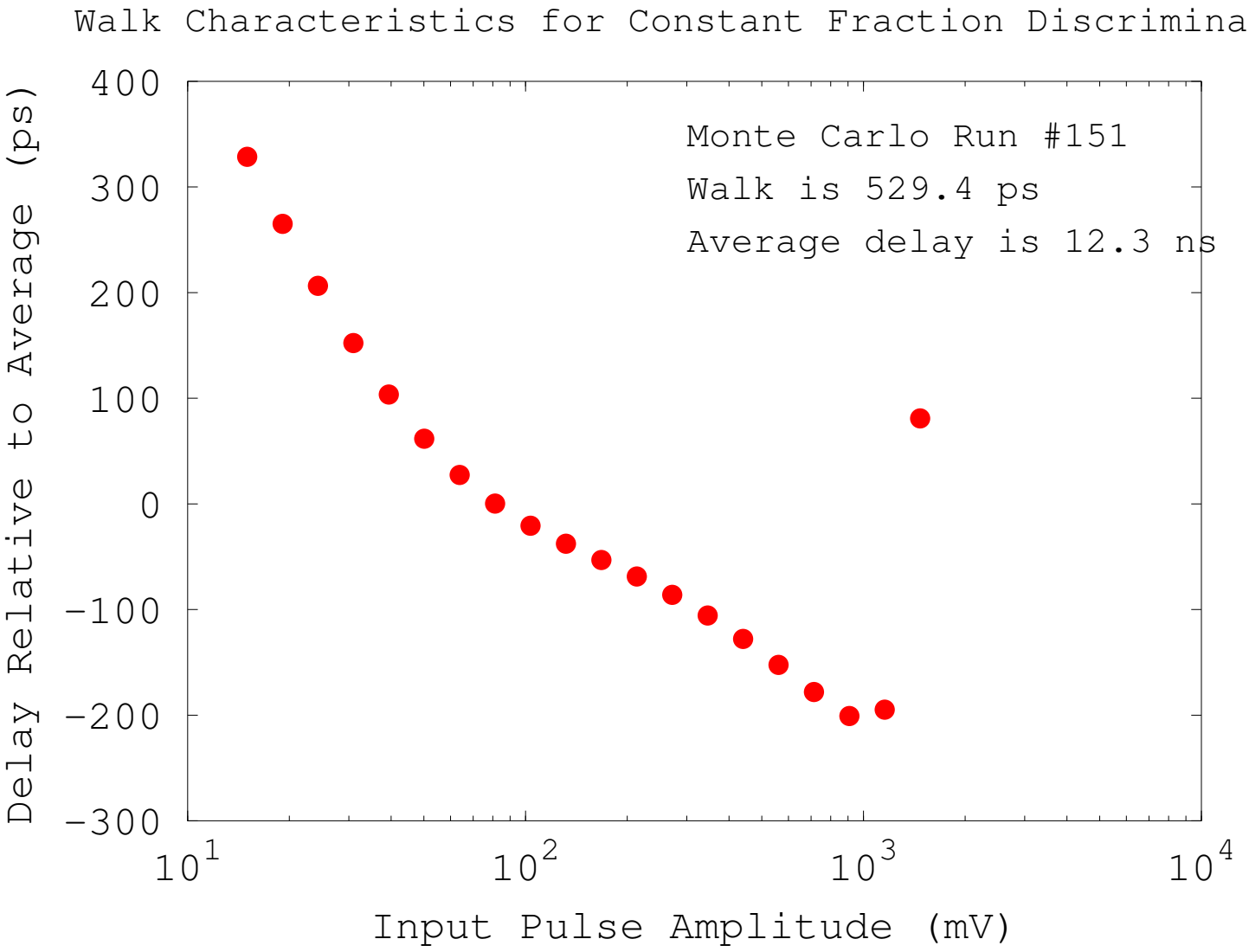

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #147
Walk is 635.9 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

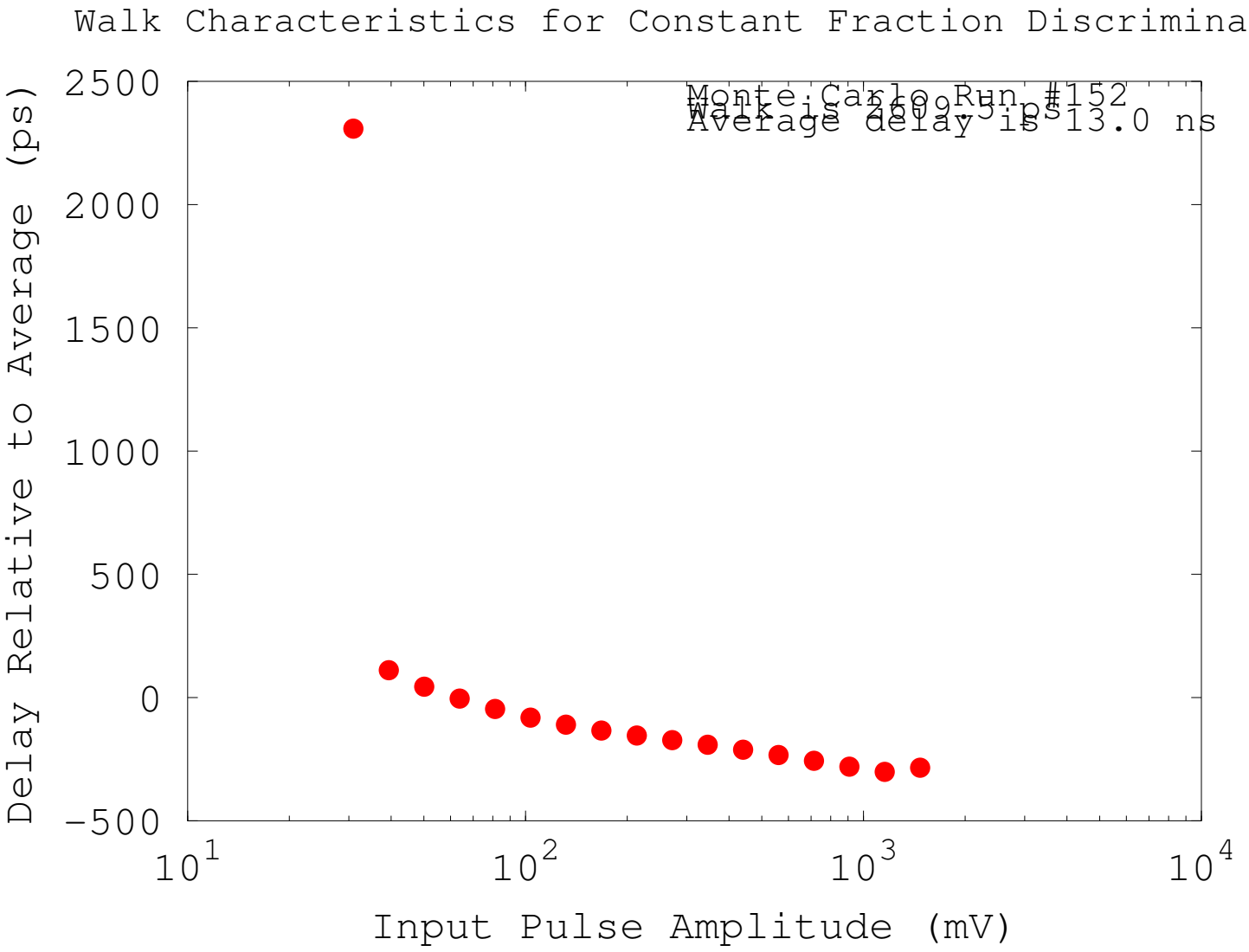

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #148
Walk is 918.6 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

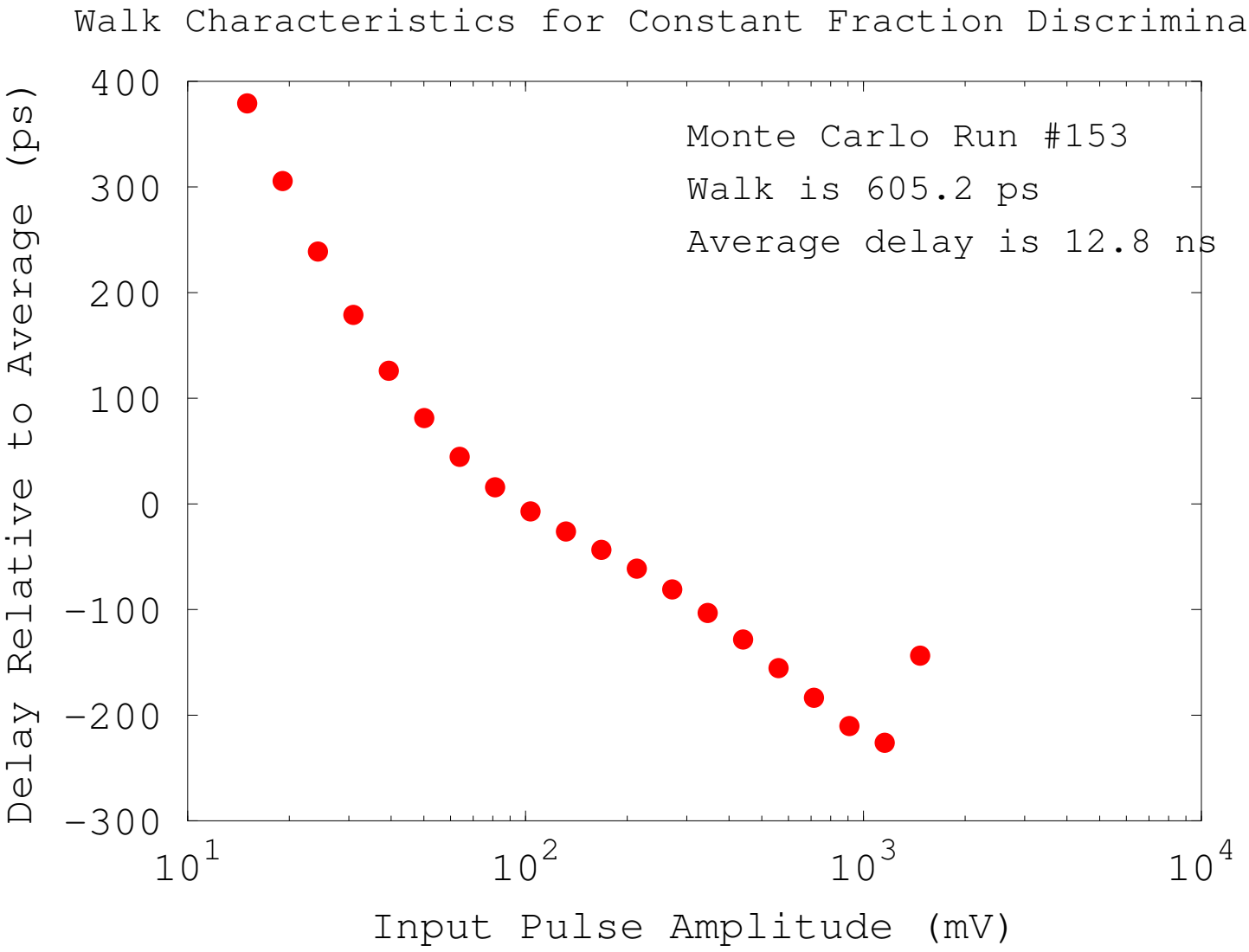

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #149
Walk is 605.9 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

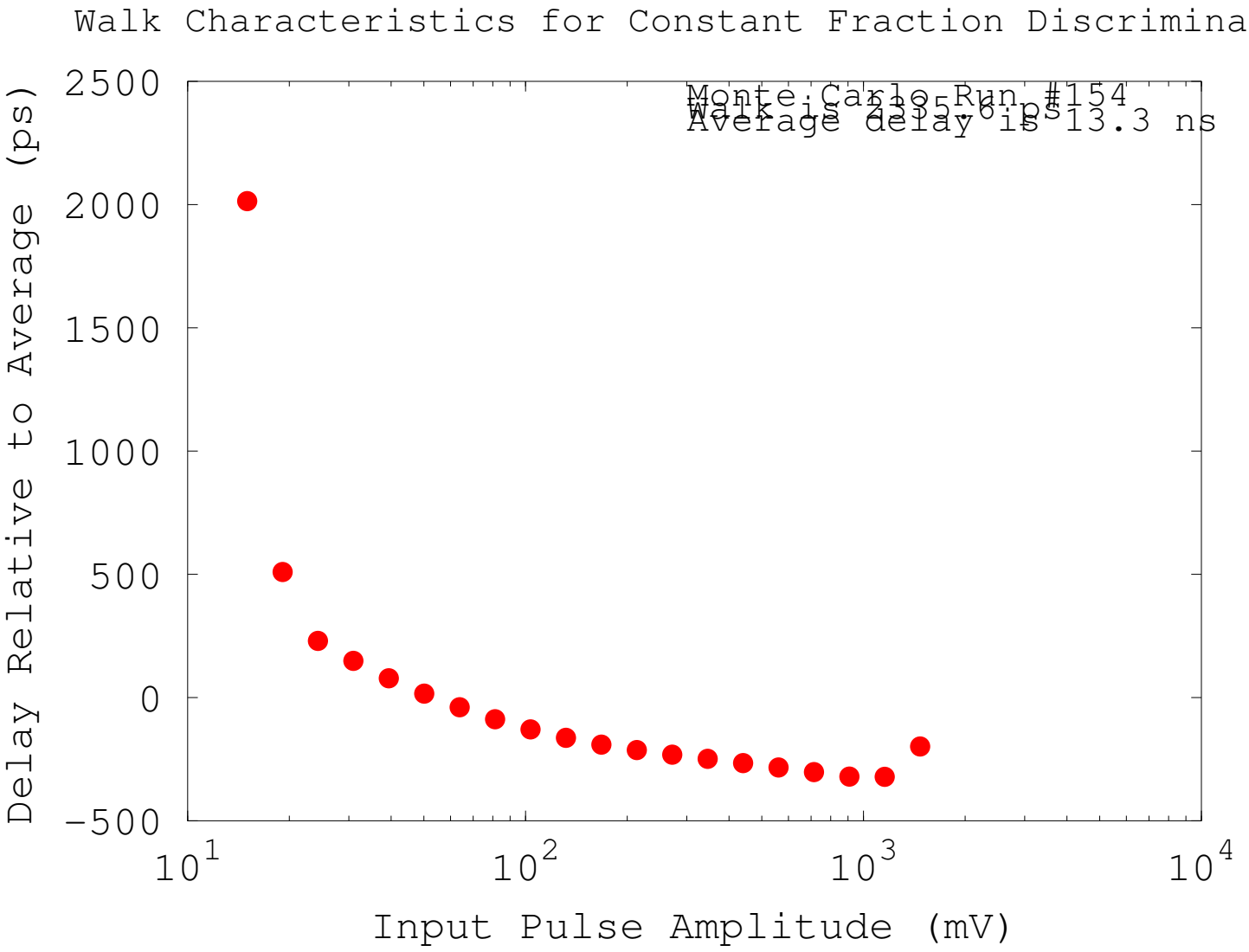

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #15
Walk is 610.1 ps
Average delay is 11.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

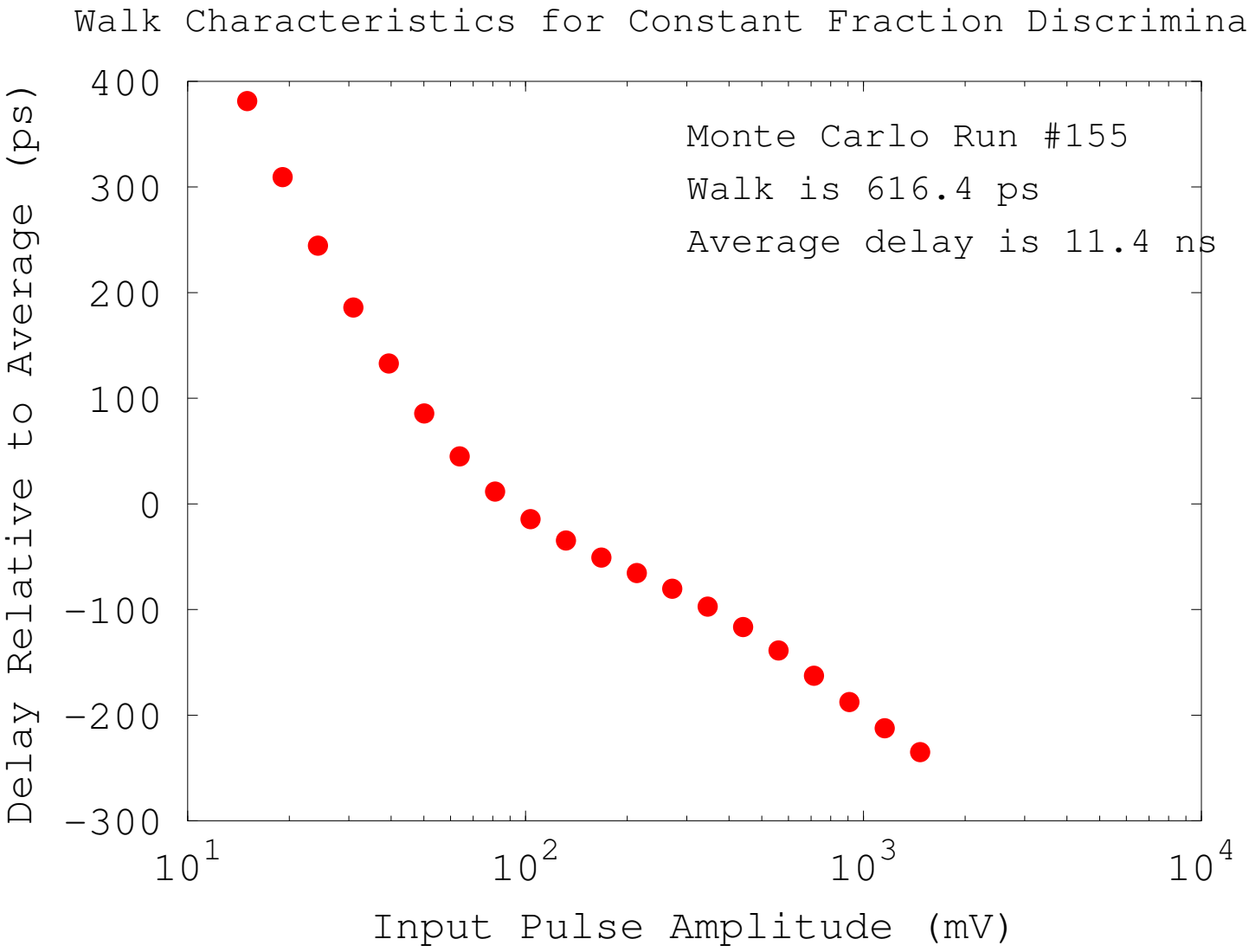

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #150
Walk is 572.8 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

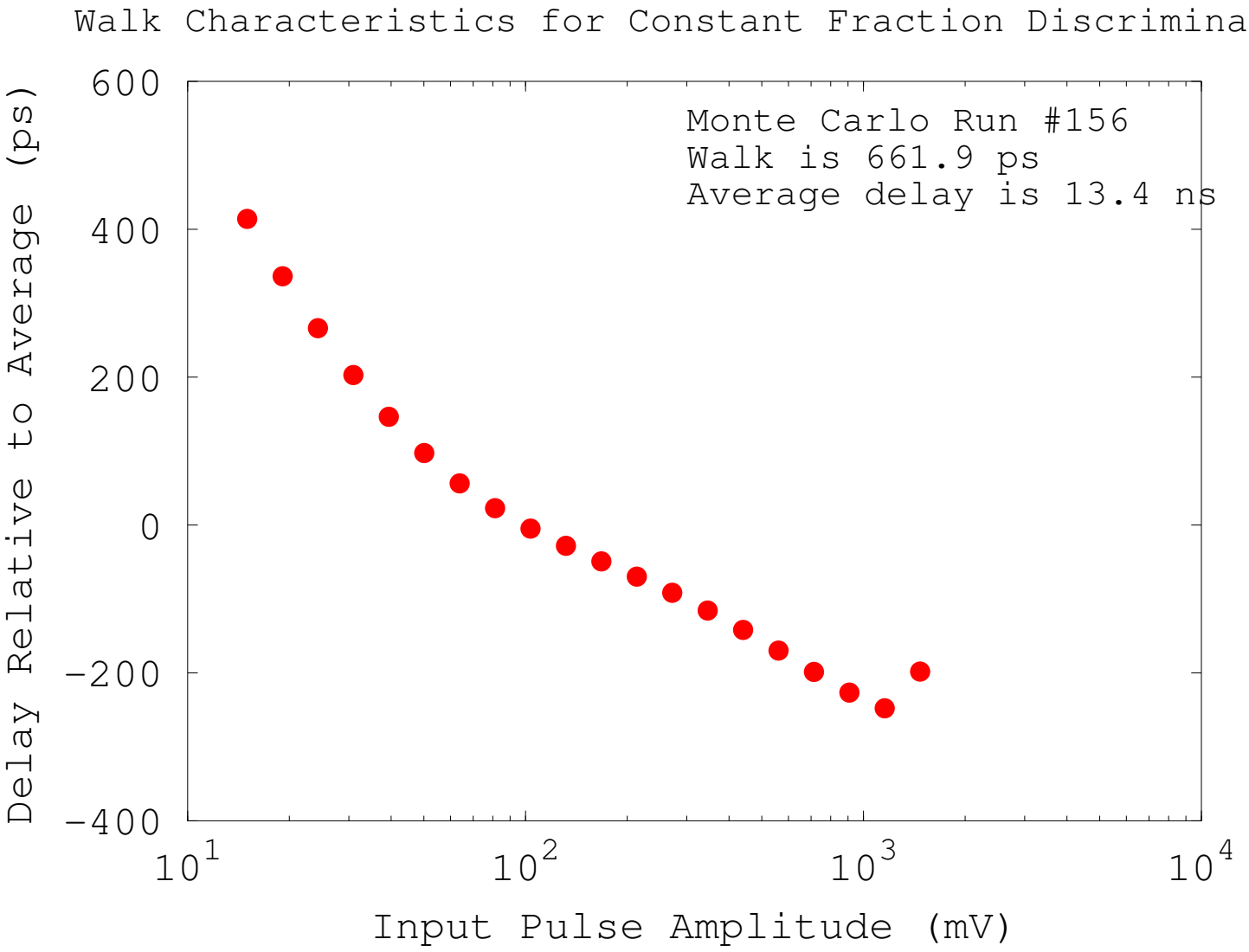

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #151
Walk is 529.4 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

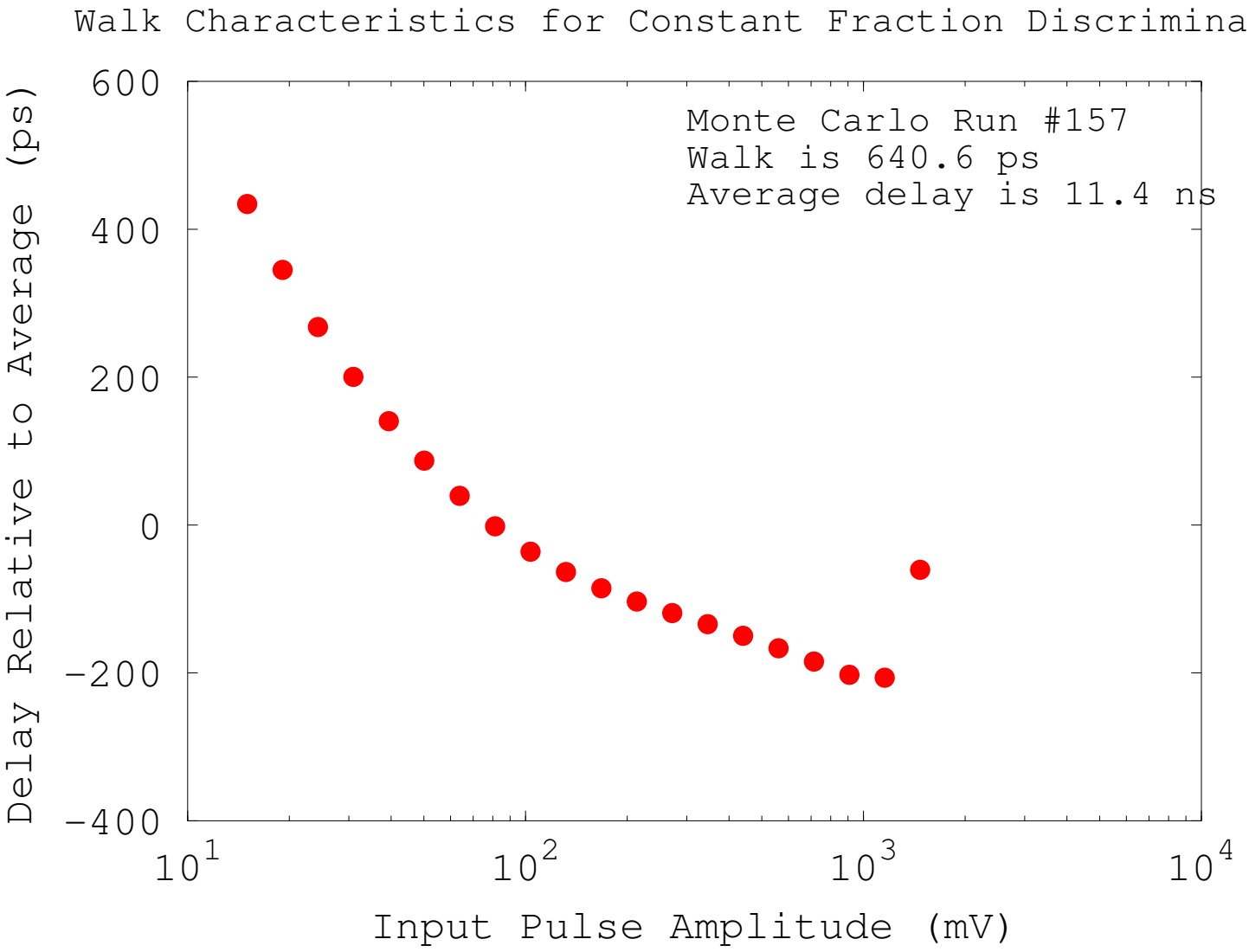

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #152
Walk is 2209.3 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
2500
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

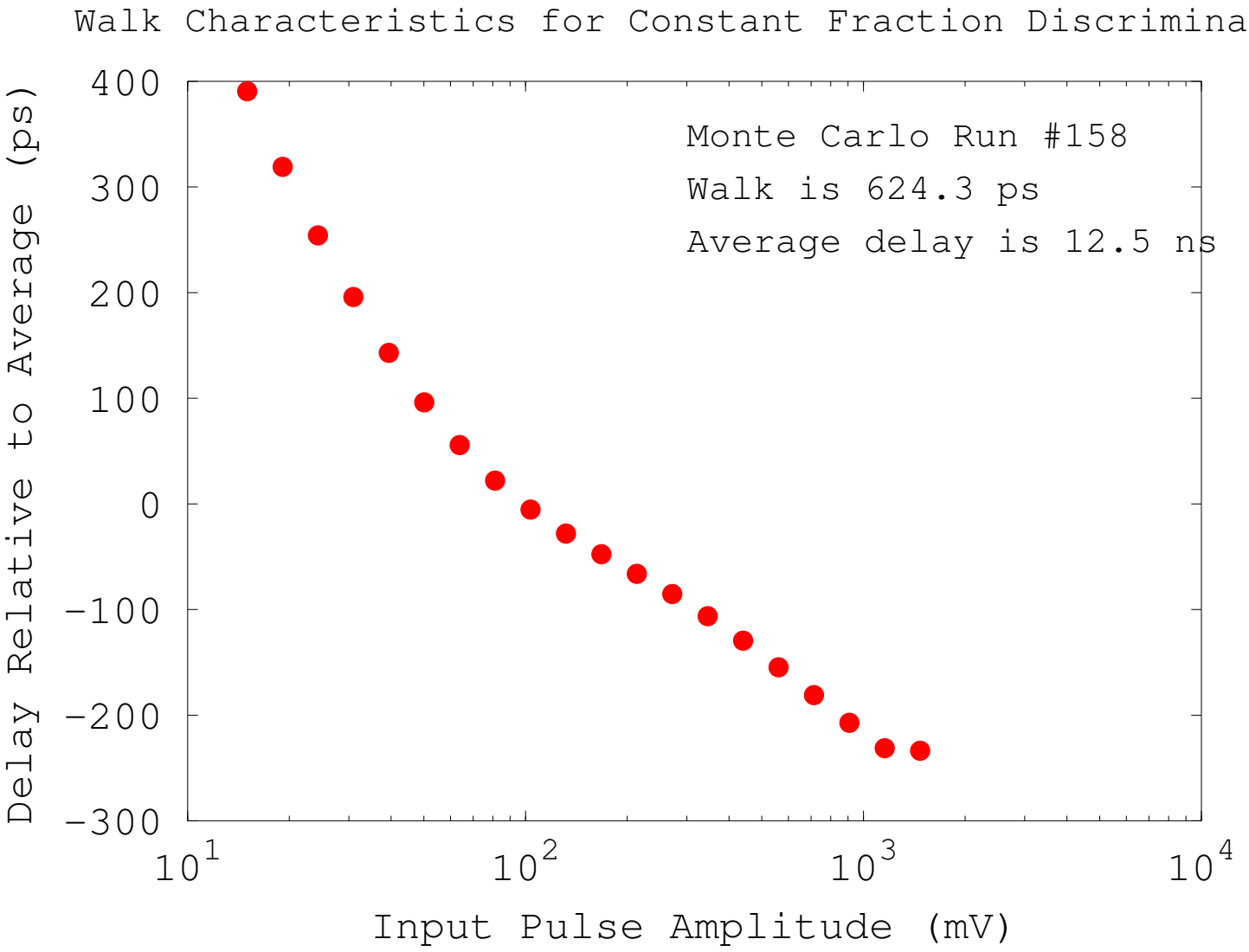

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #153
Walk is 605.2 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

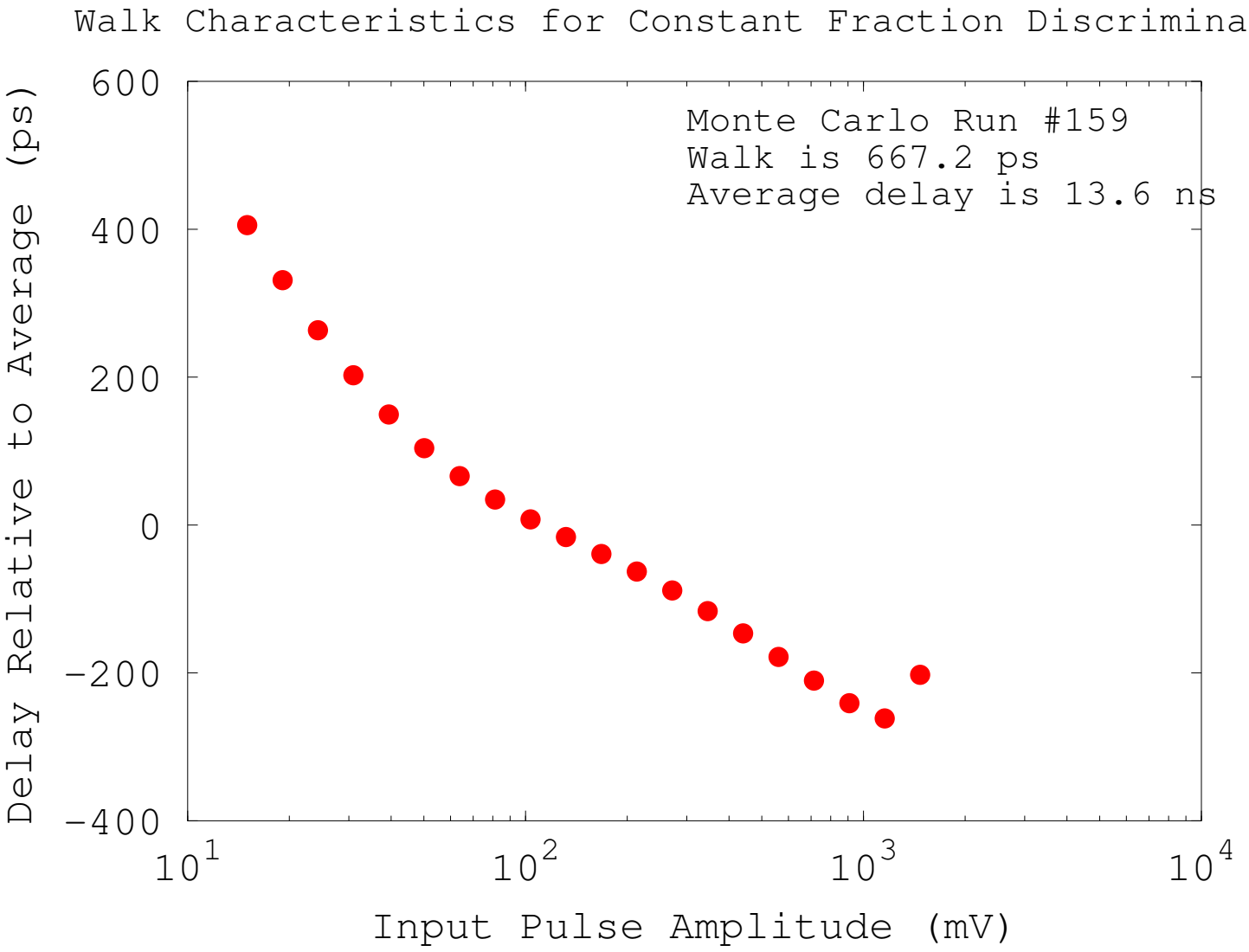

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #154
Walk is 2315.6 ps
Average delay is 13.3 ns
Delay Relative to Average (ps)
2500
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

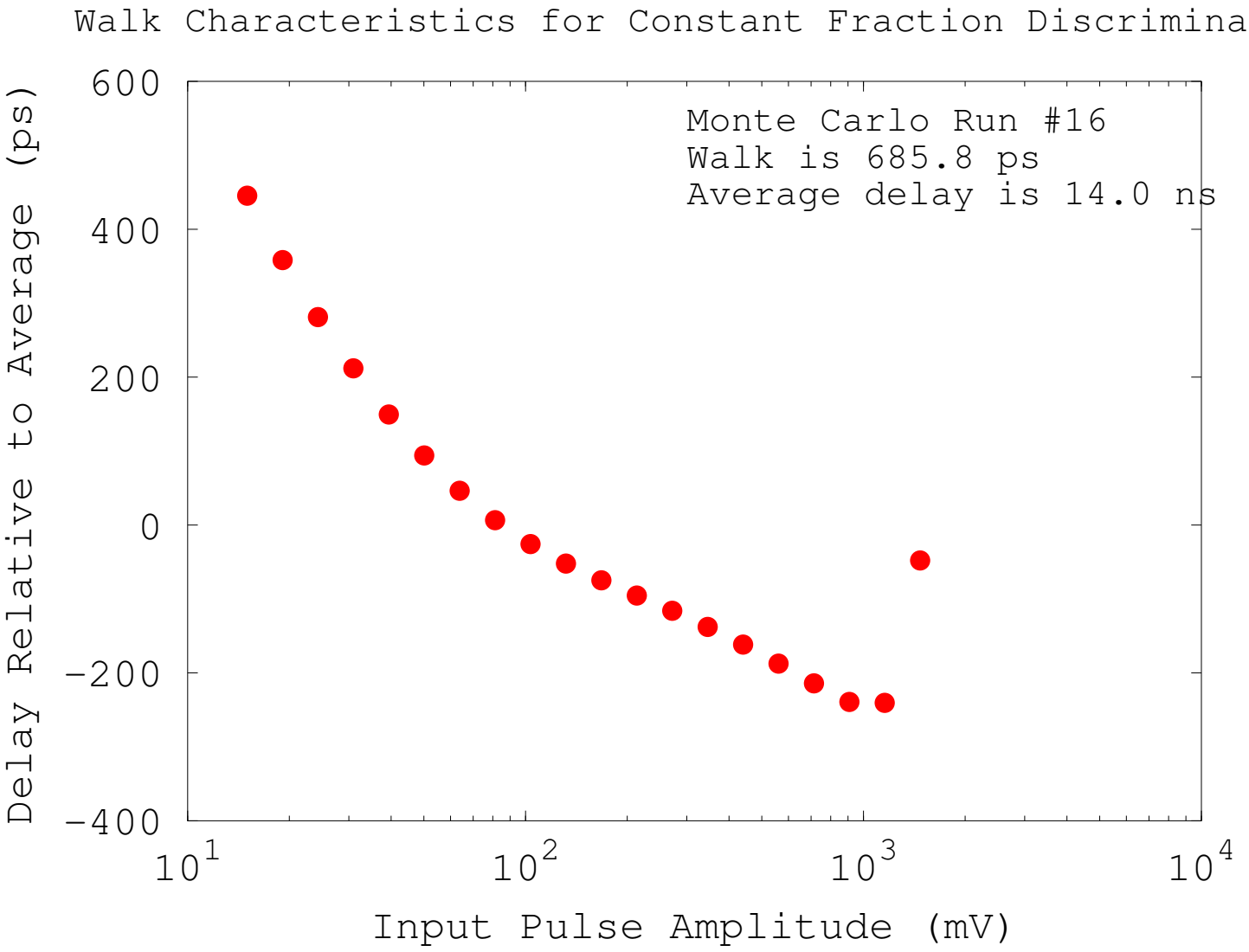

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #155
Walk is 616.4 ps
Average delay is 11.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

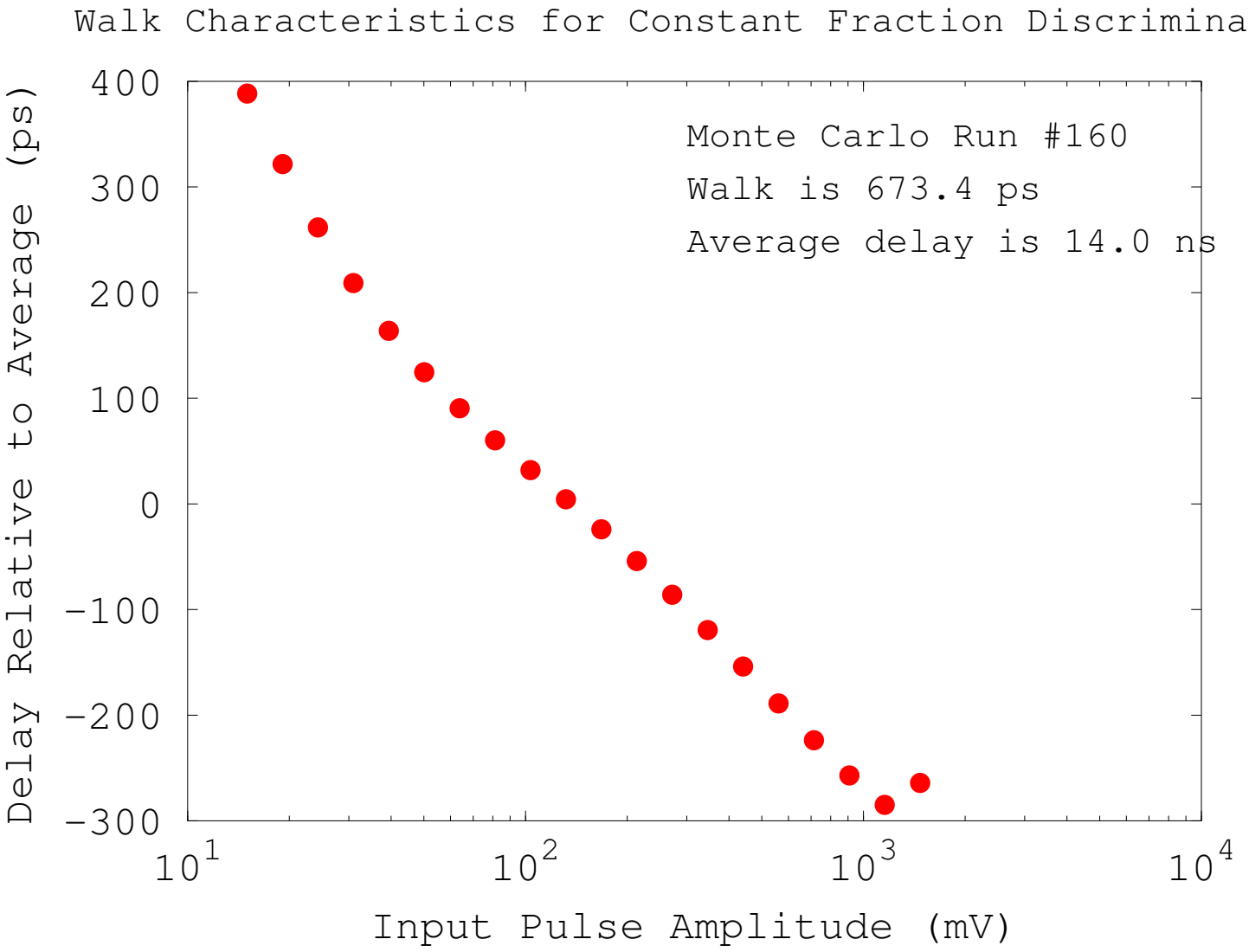

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #156
Walk is 661.9 ps
Average delay is 13.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

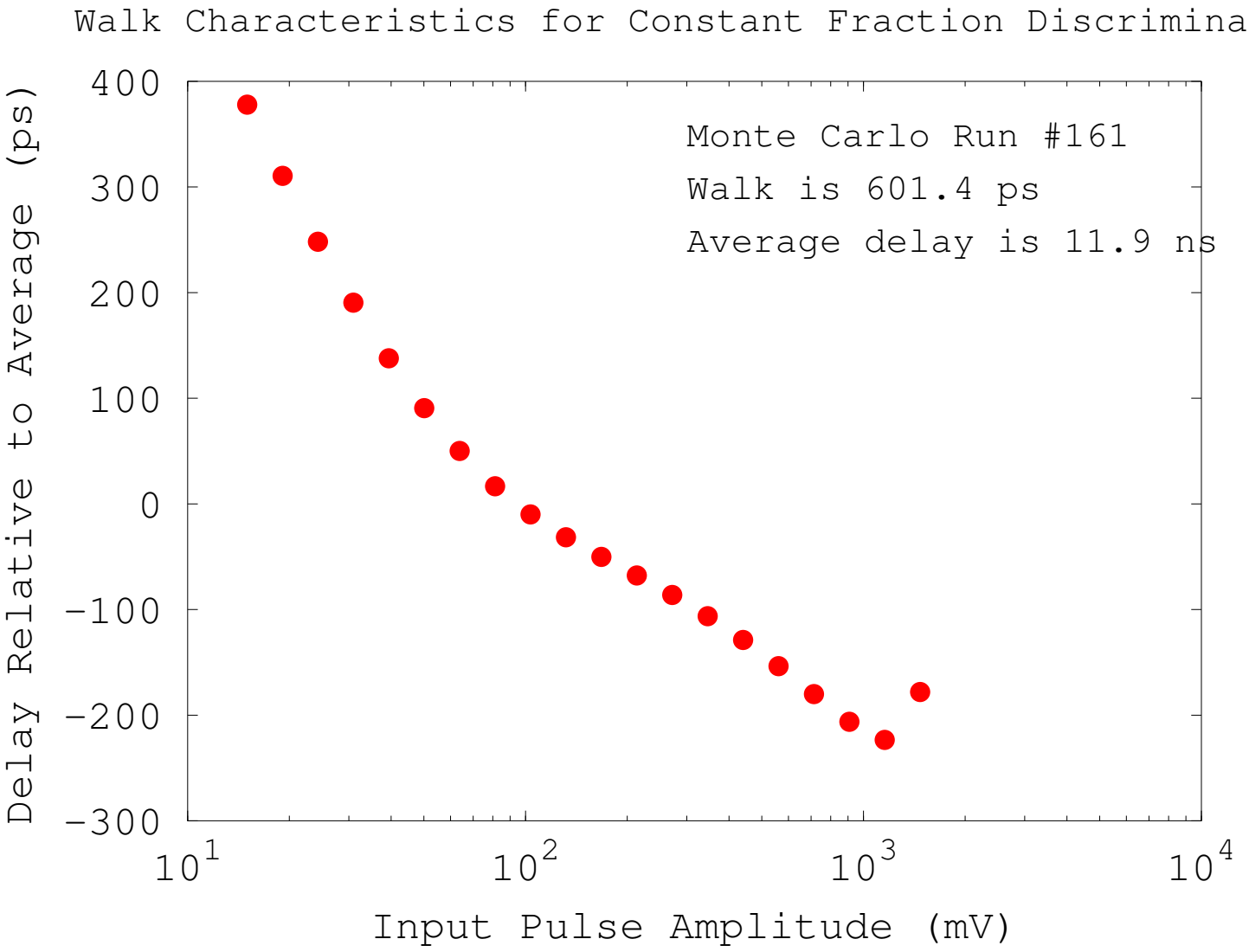

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #157
Walk is 640.6 ps
Average delay is 11.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

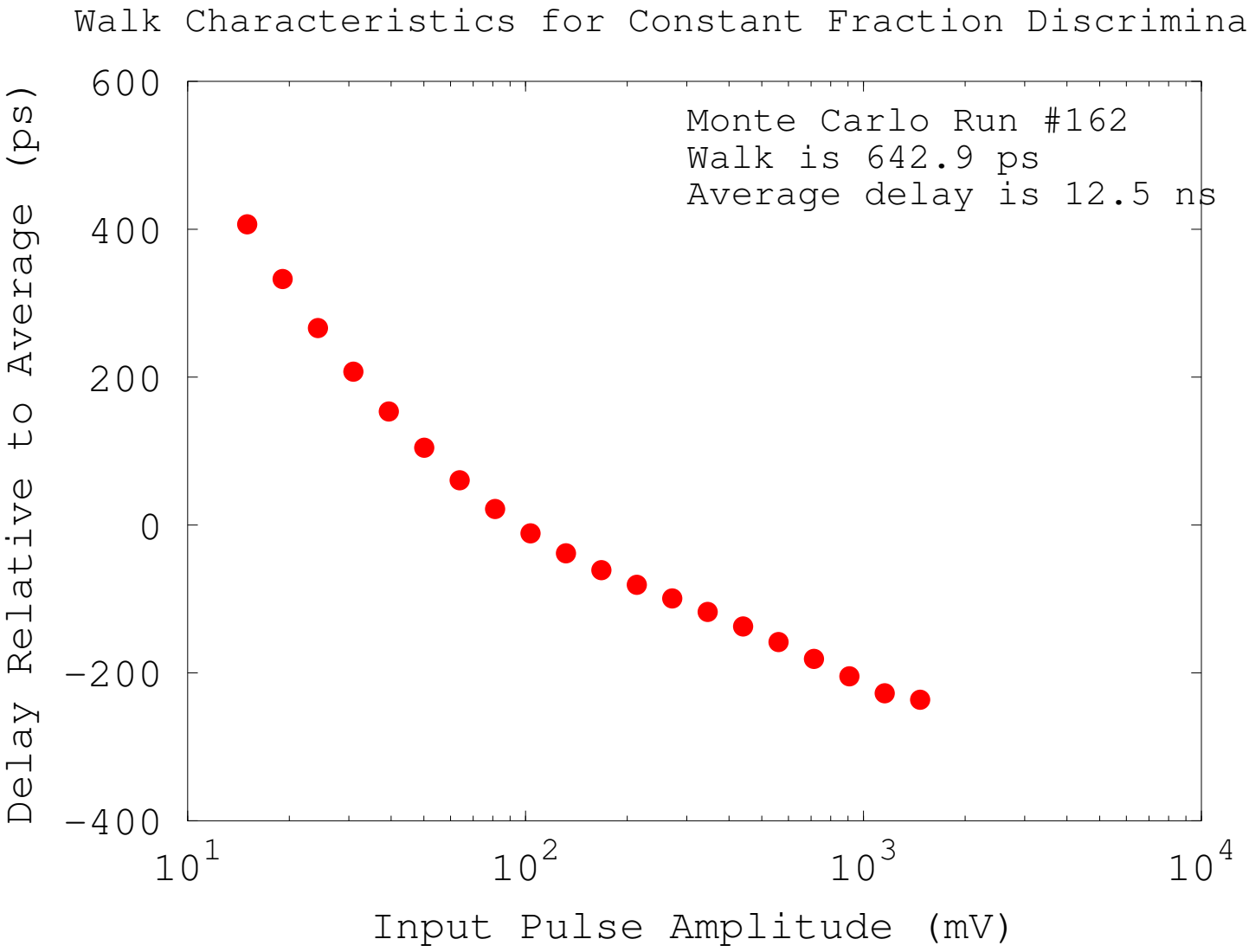

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #158
Walk is 624.3 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

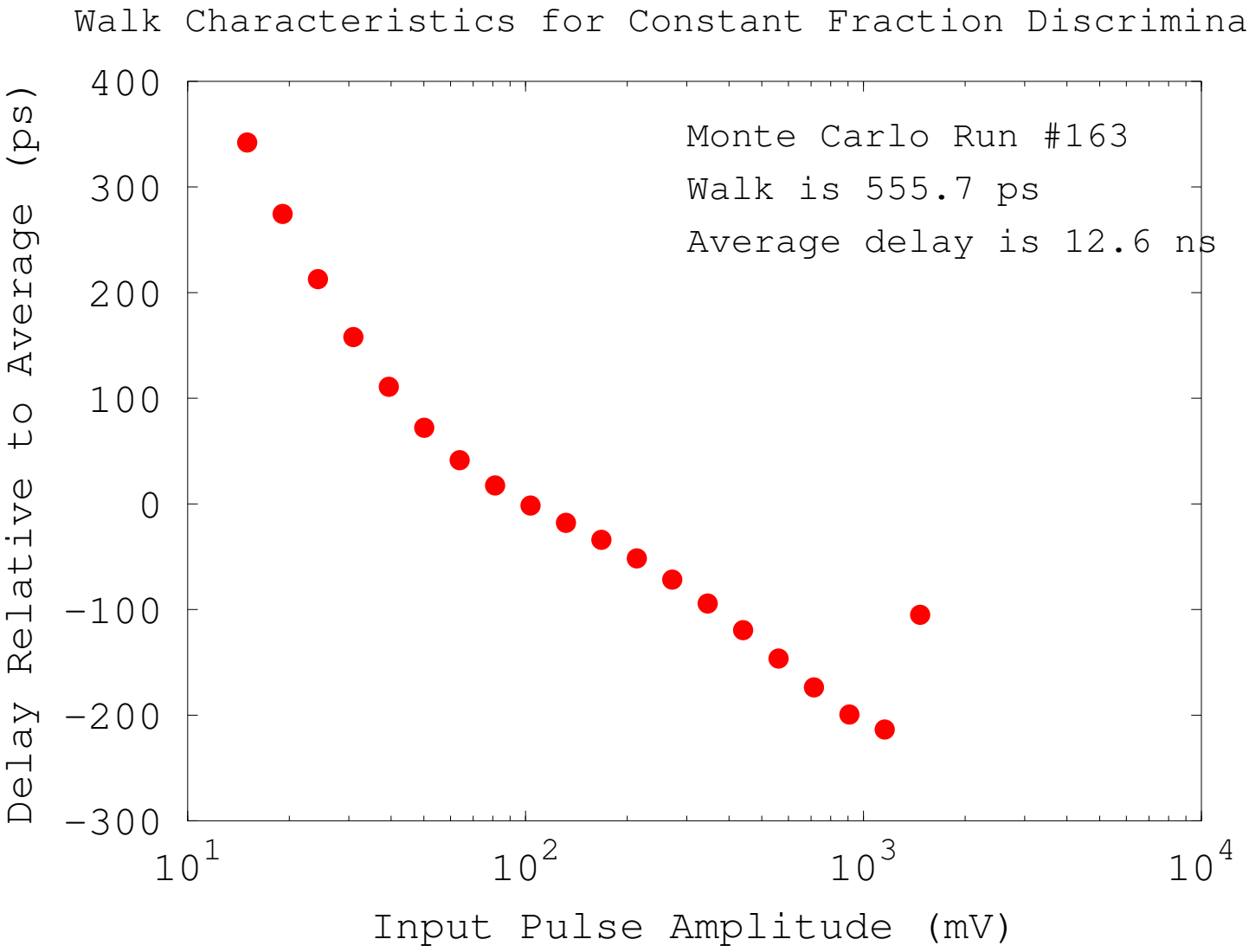

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #159
Walk is 667.2 ps
Average delay is 13.6 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

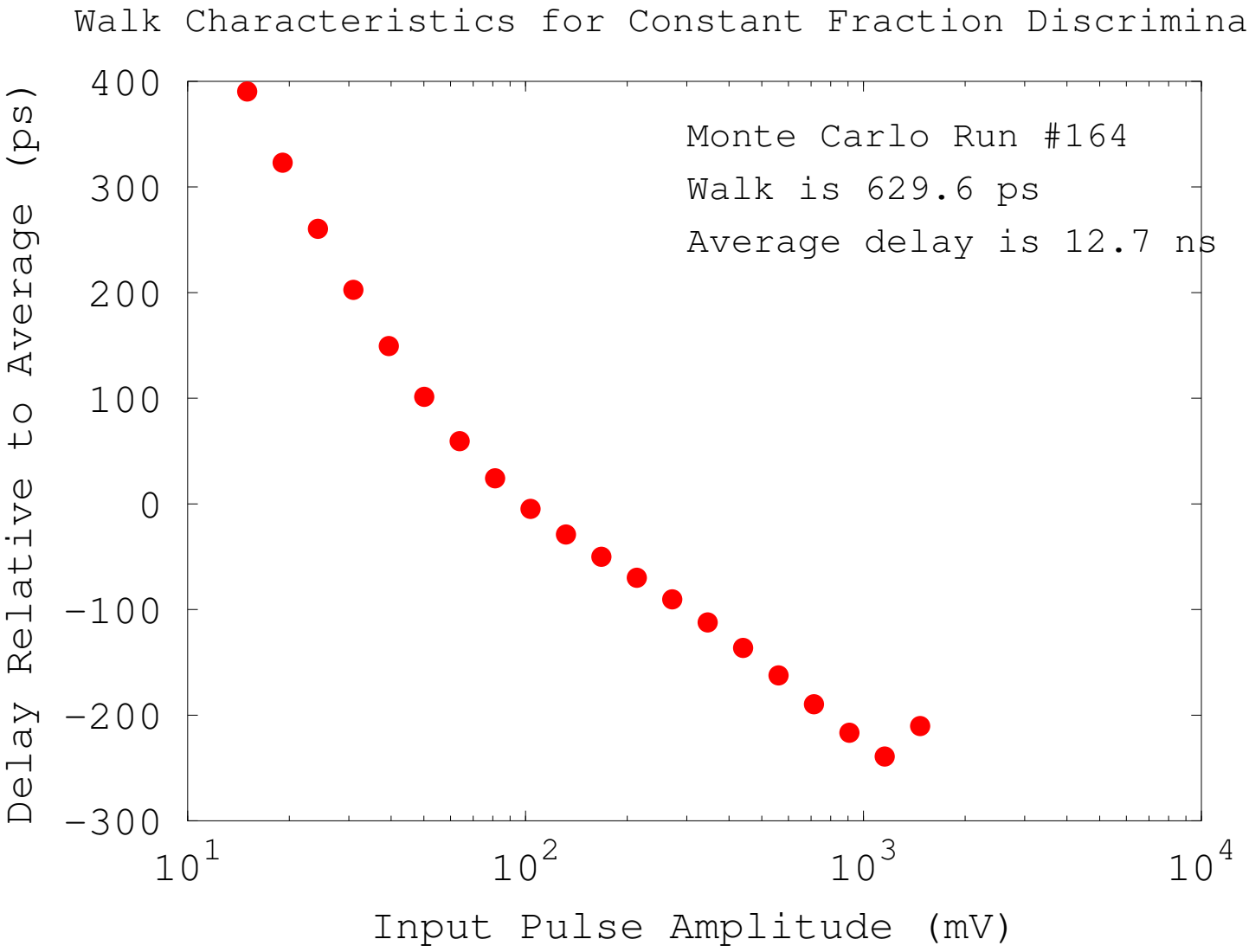

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #16
Walk is 685.8 ps
Average delay is 14.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

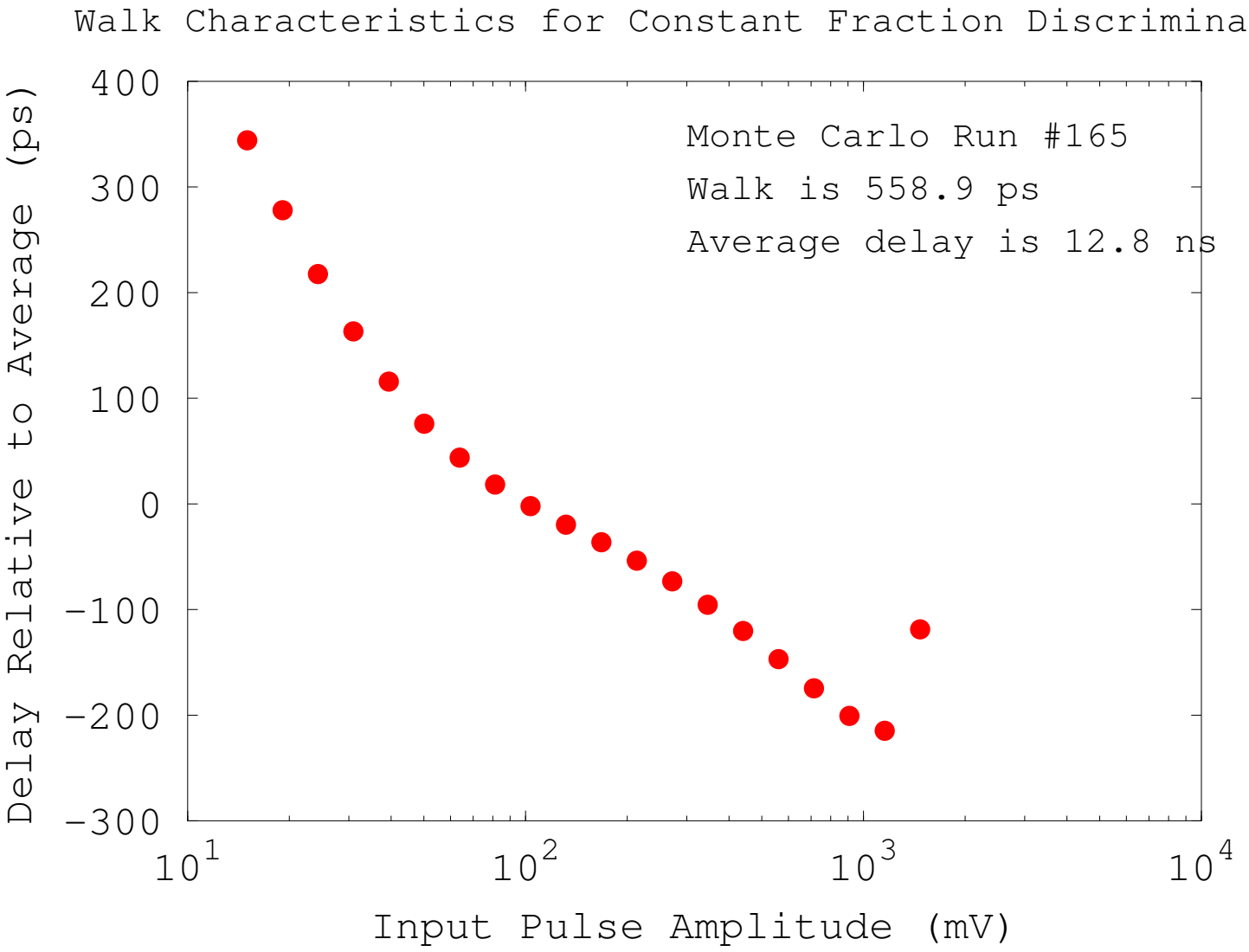

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #160
Walk is 673.4 ps
Average delay is 14.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

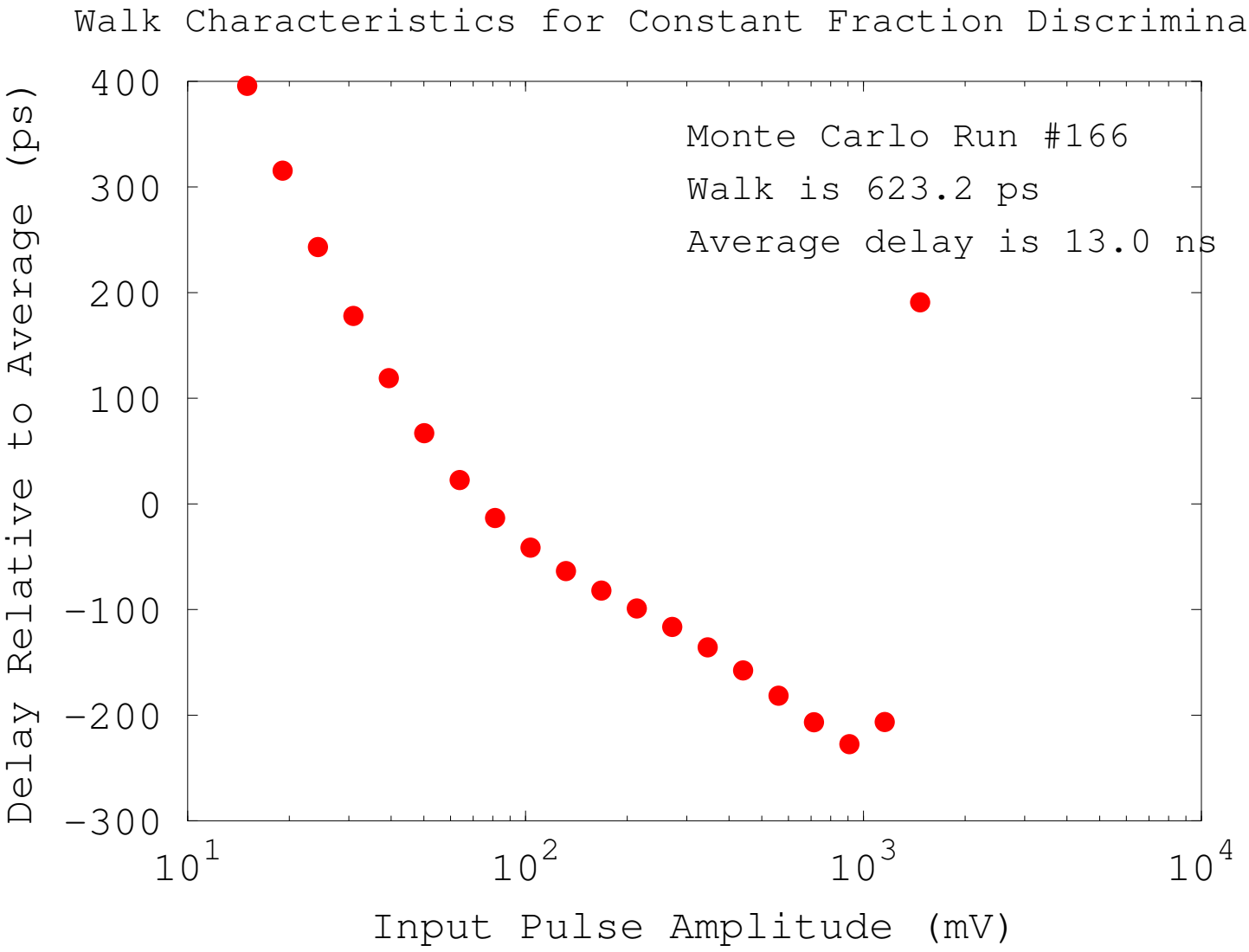

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #161
Walk is 601.4 ps
Average delay is 11.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

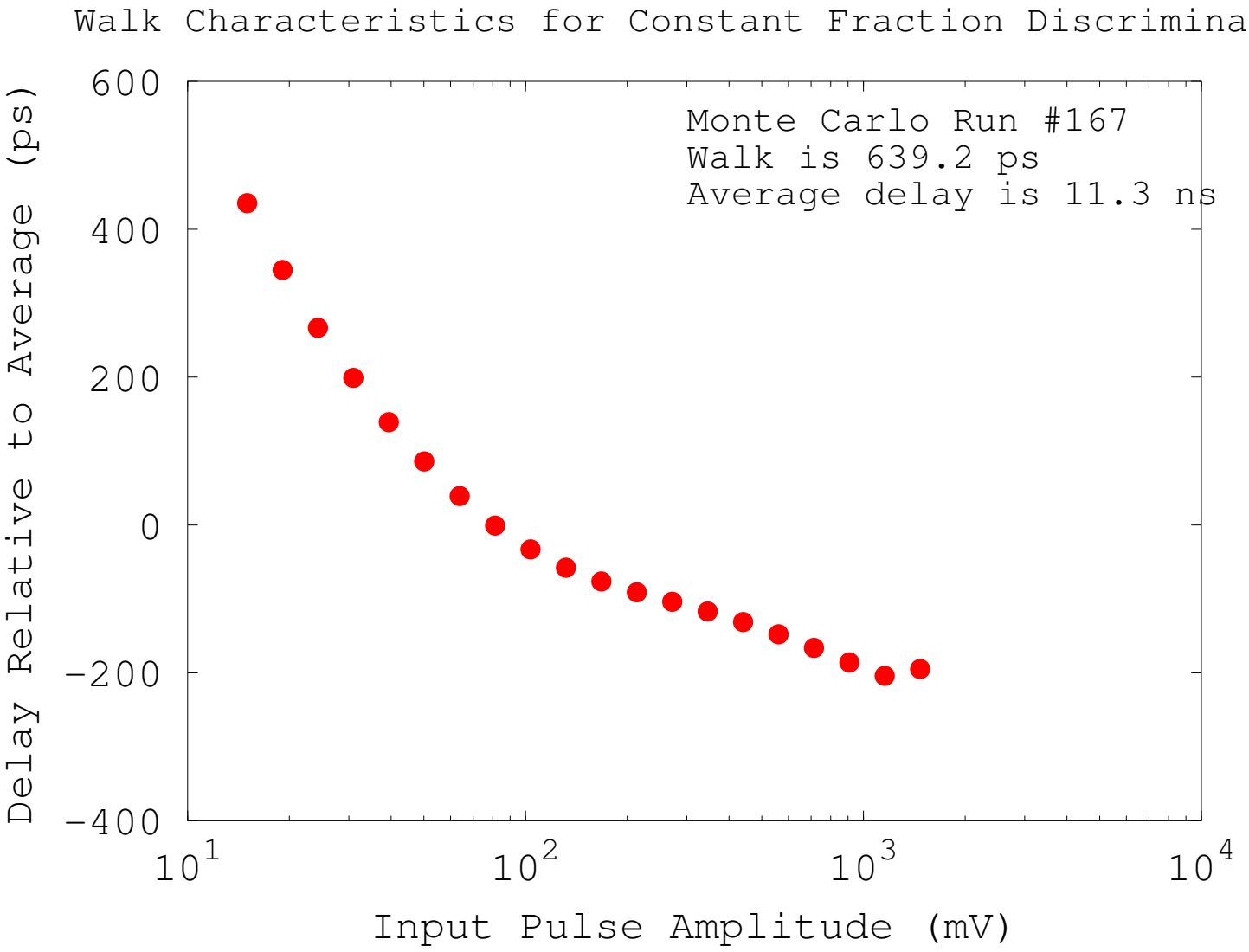

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #162
Walk is 642.9 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

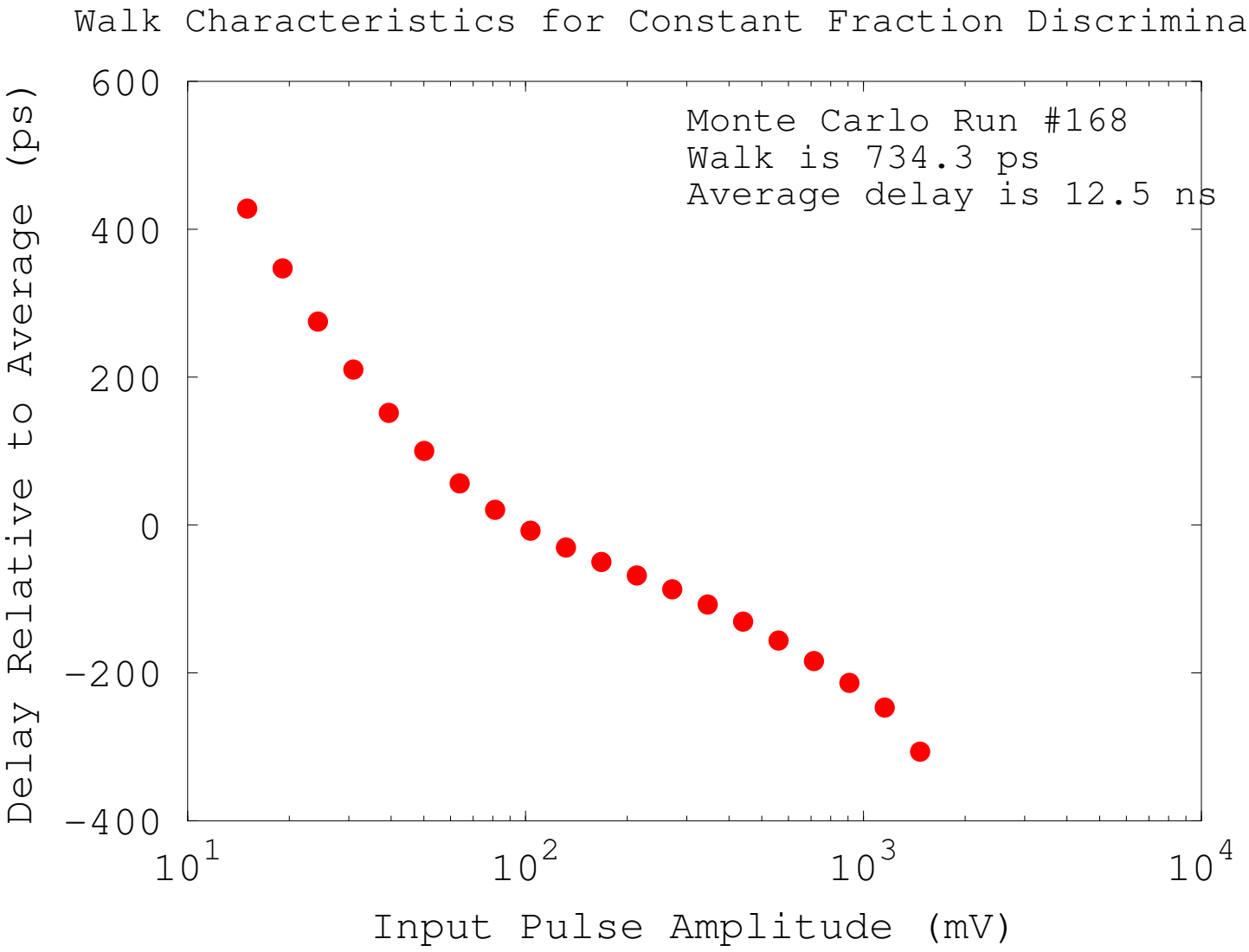

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #163
Walk is 555.7 ps
Average delay is 12.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

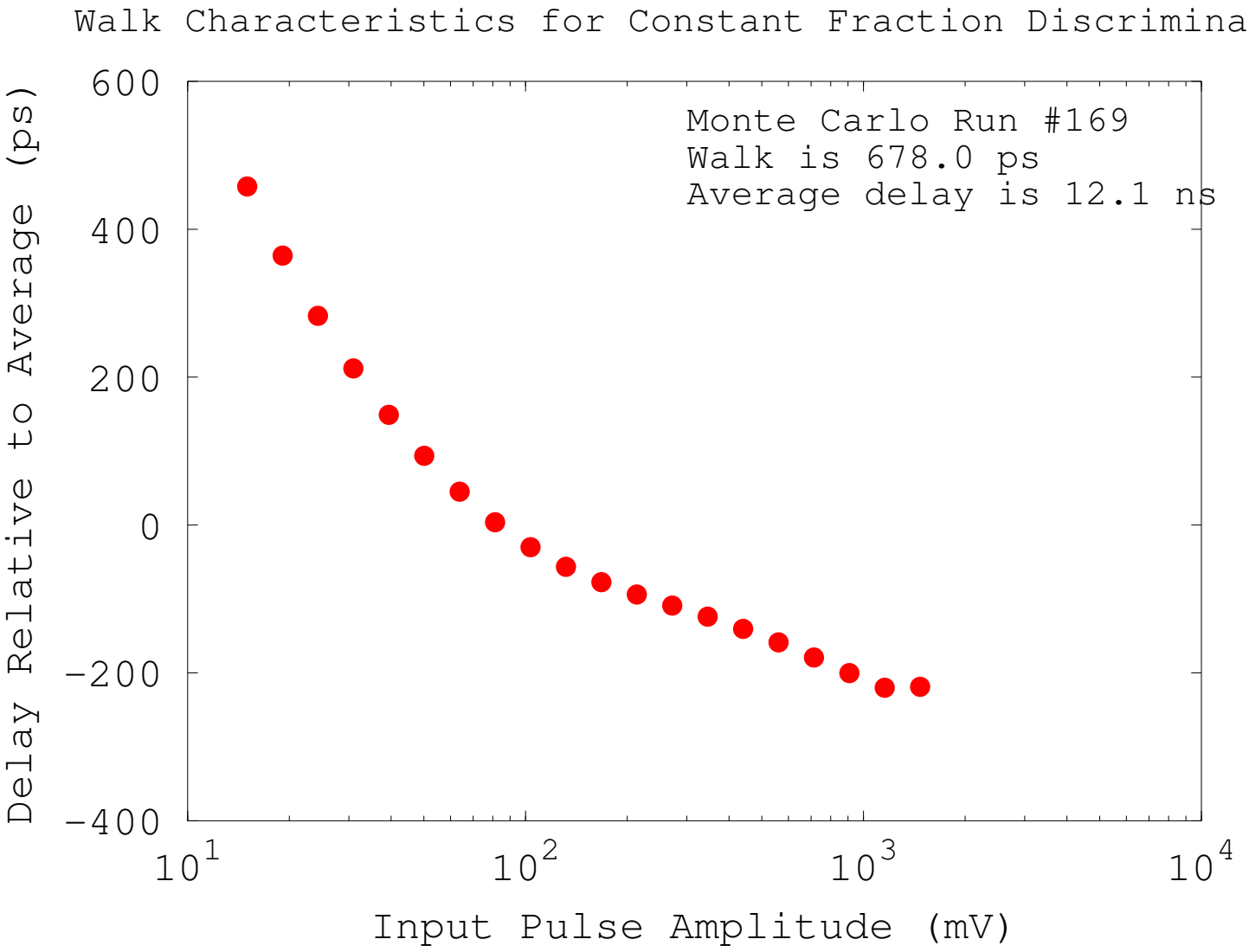

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #164
Walk is 629.6 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

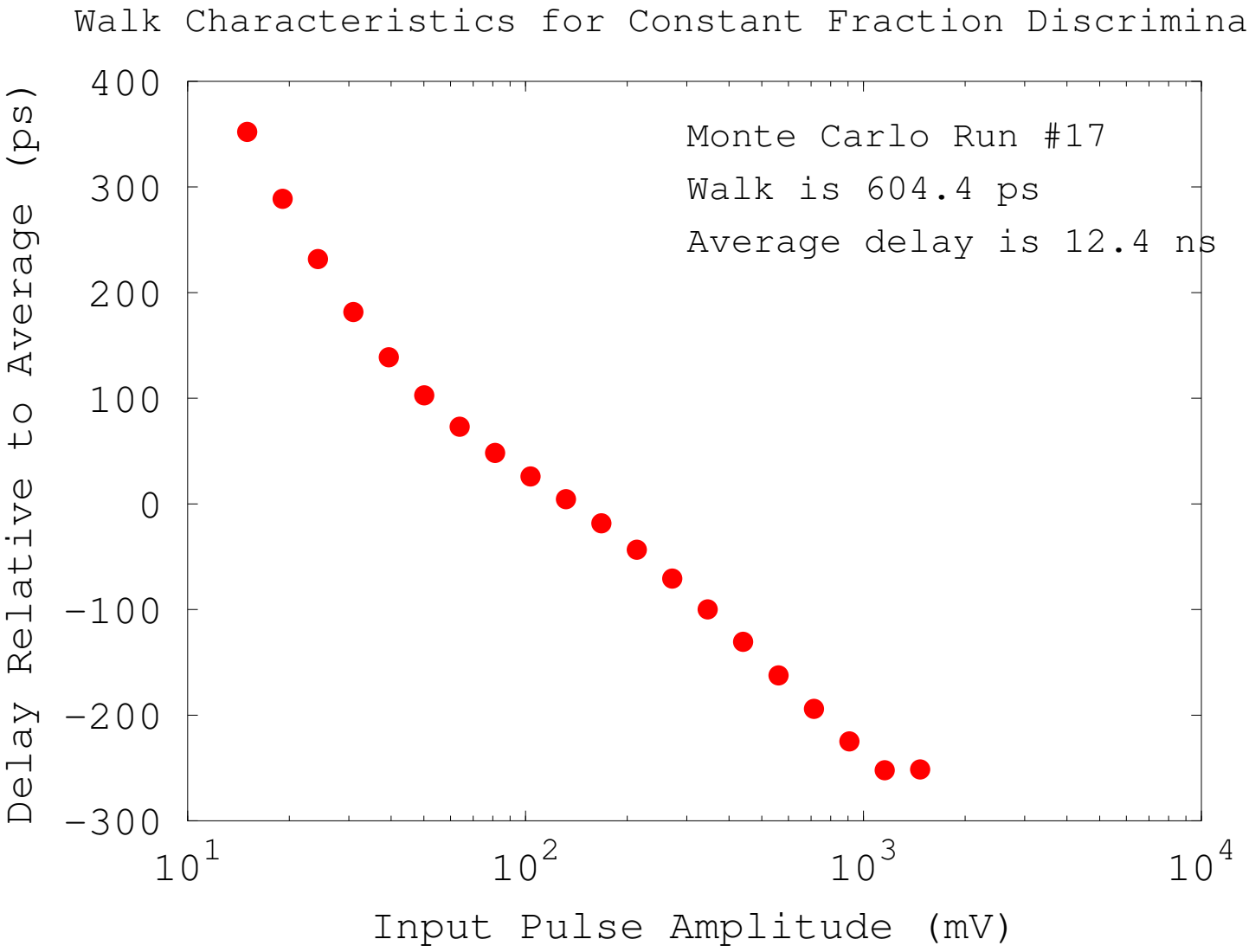

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #165
Walk is 558.9 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

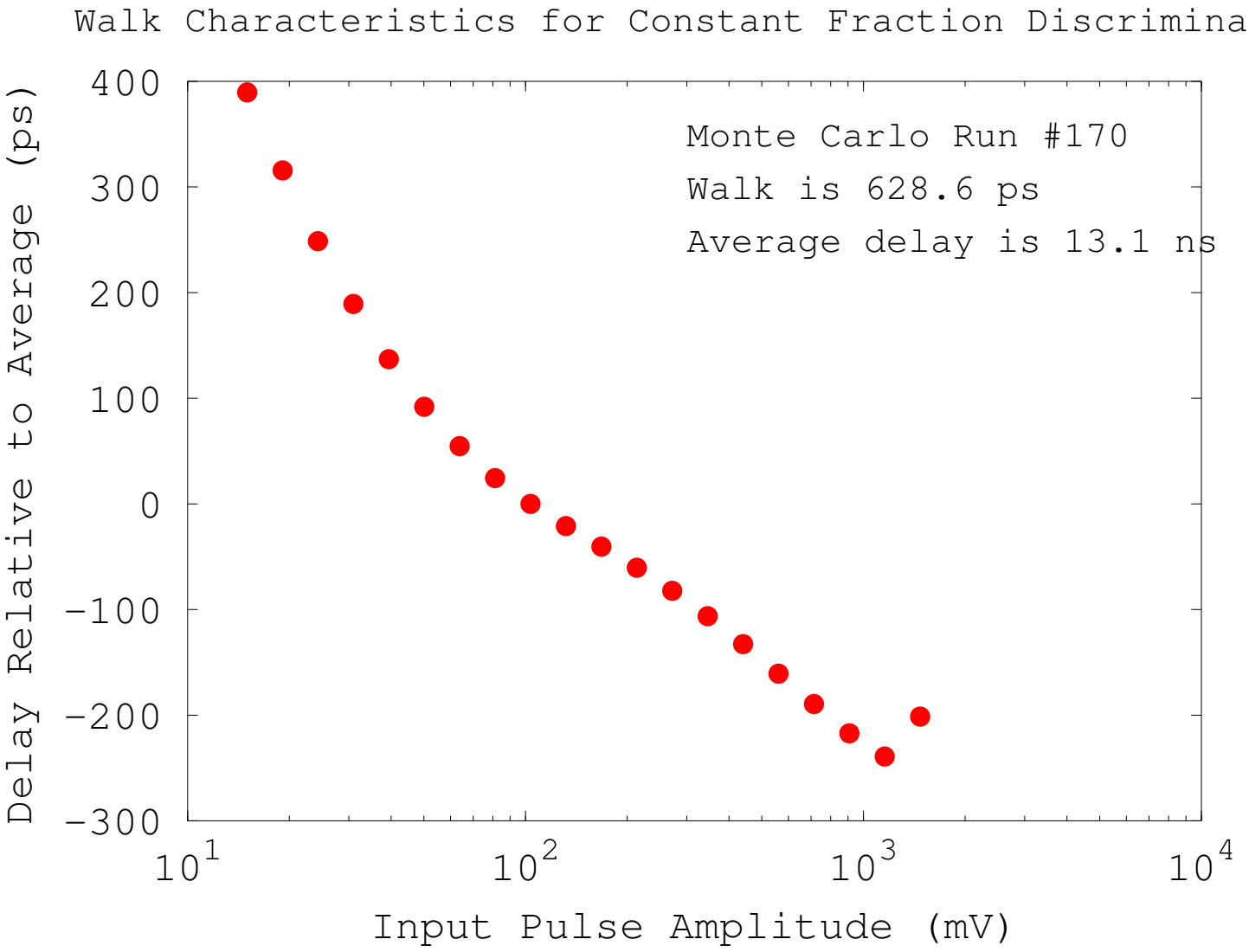

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #166
Walk is 623.2 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

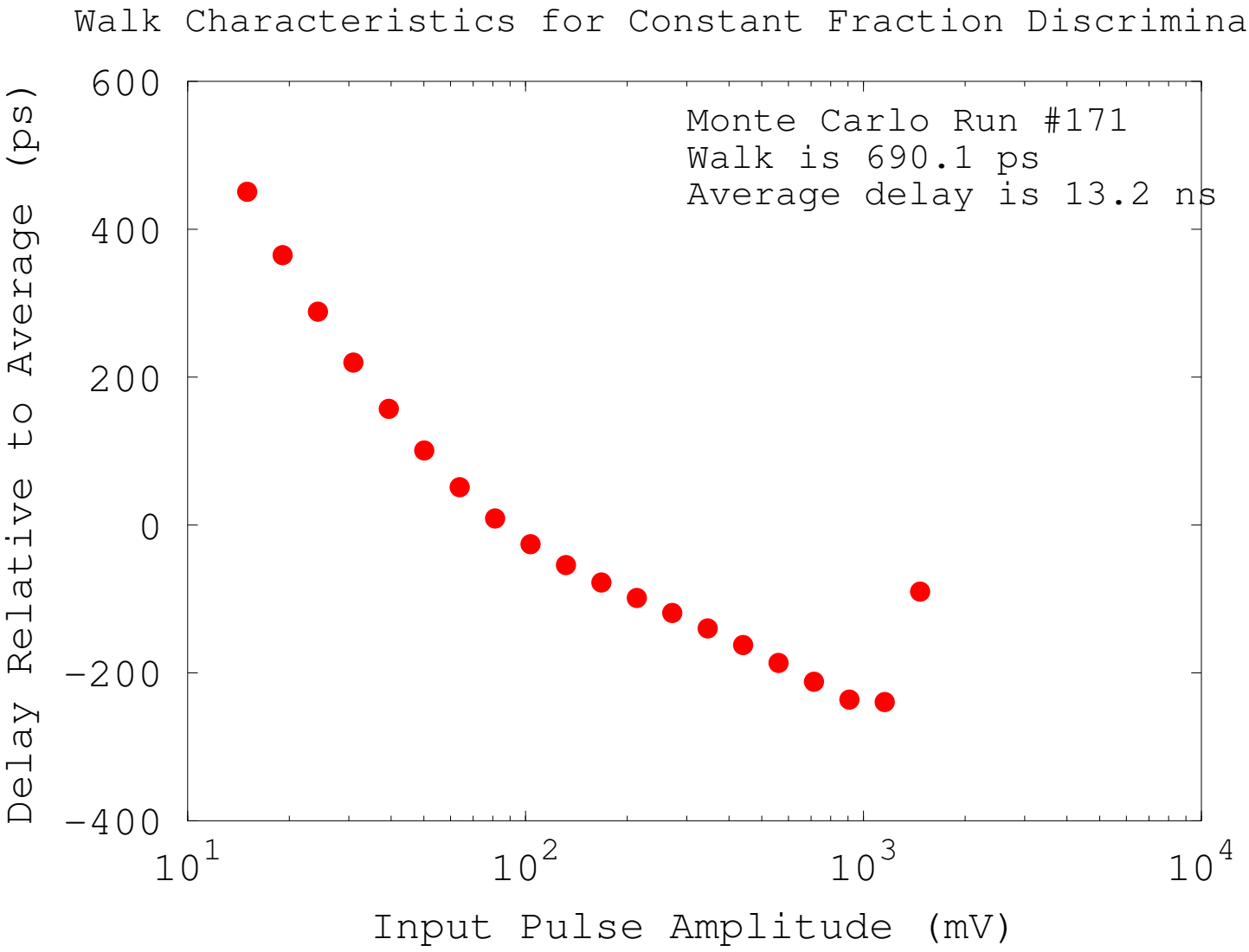

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #167
Walk is 639.2 ps
Average delay is 11.3 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

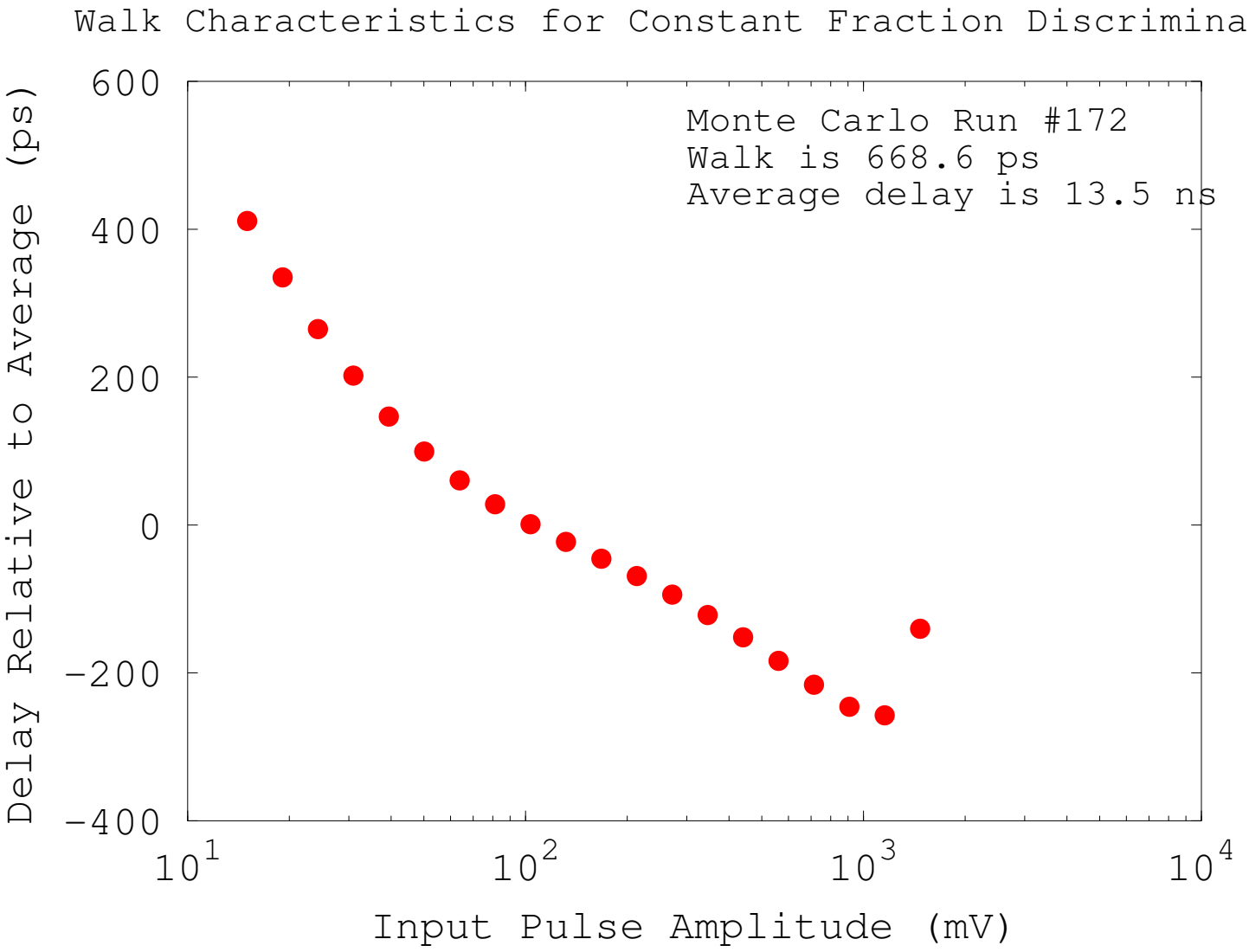

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #168
Walk is 734.3 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

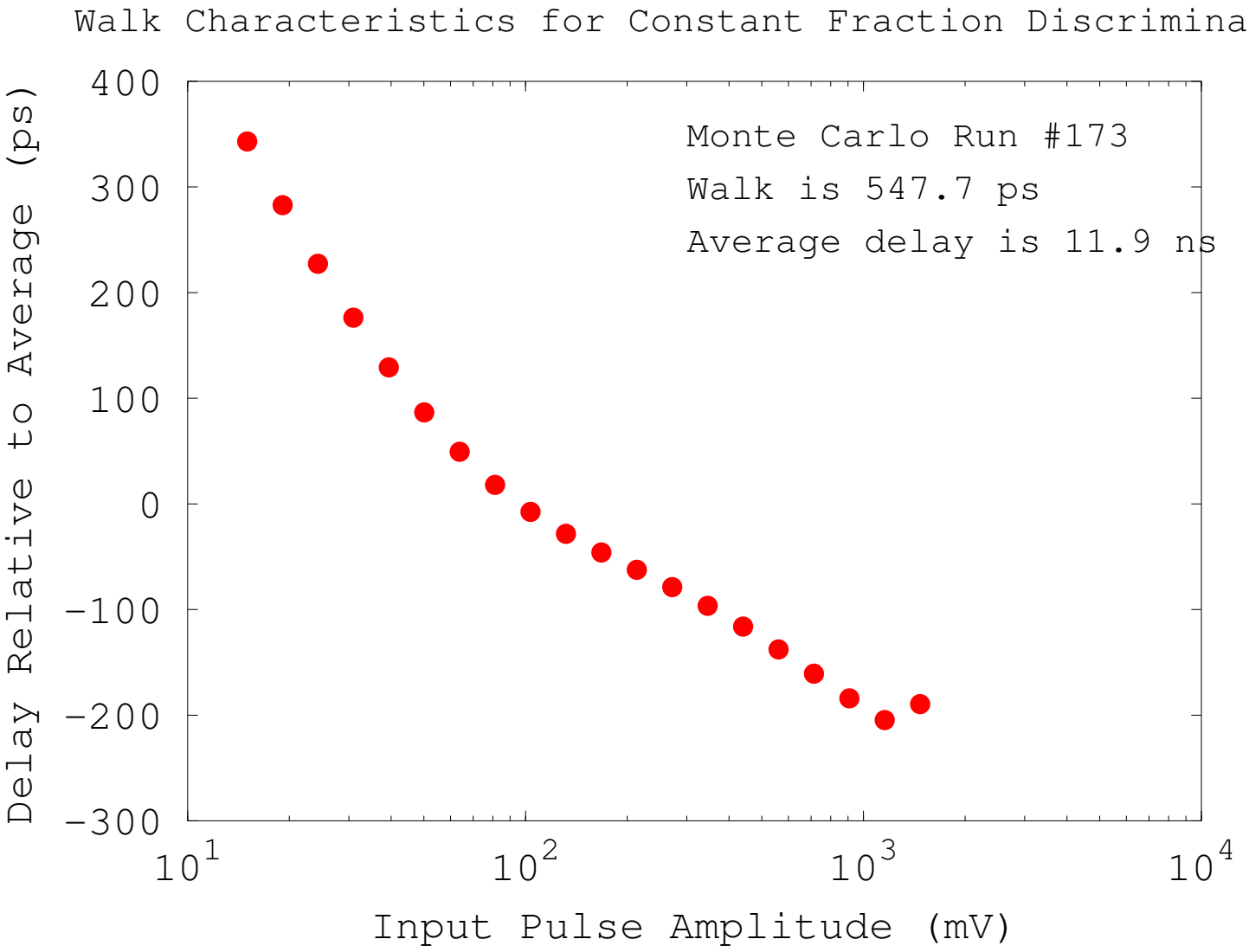

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #169
Walk is 678.0 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

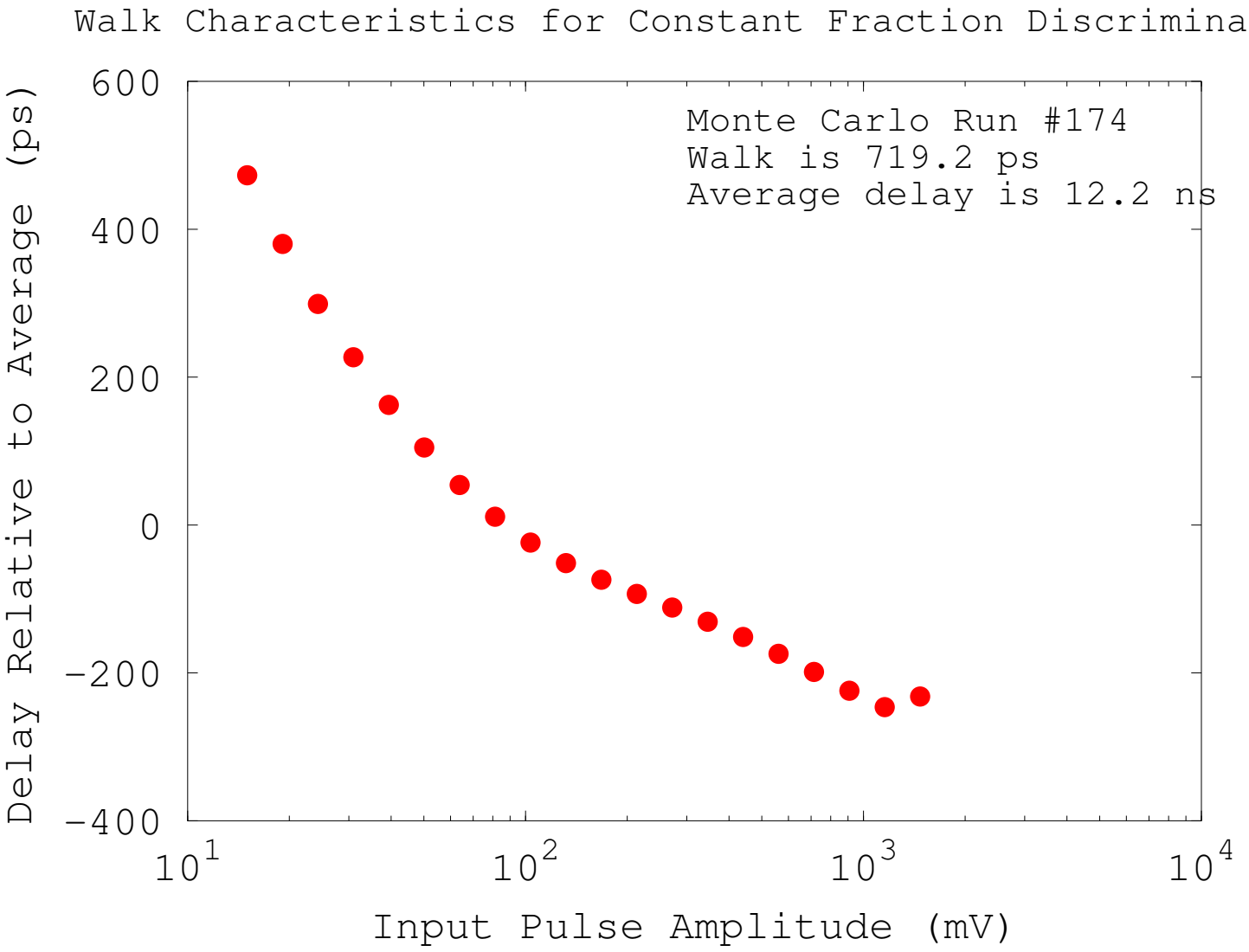

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #17
Walk is 604.4 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

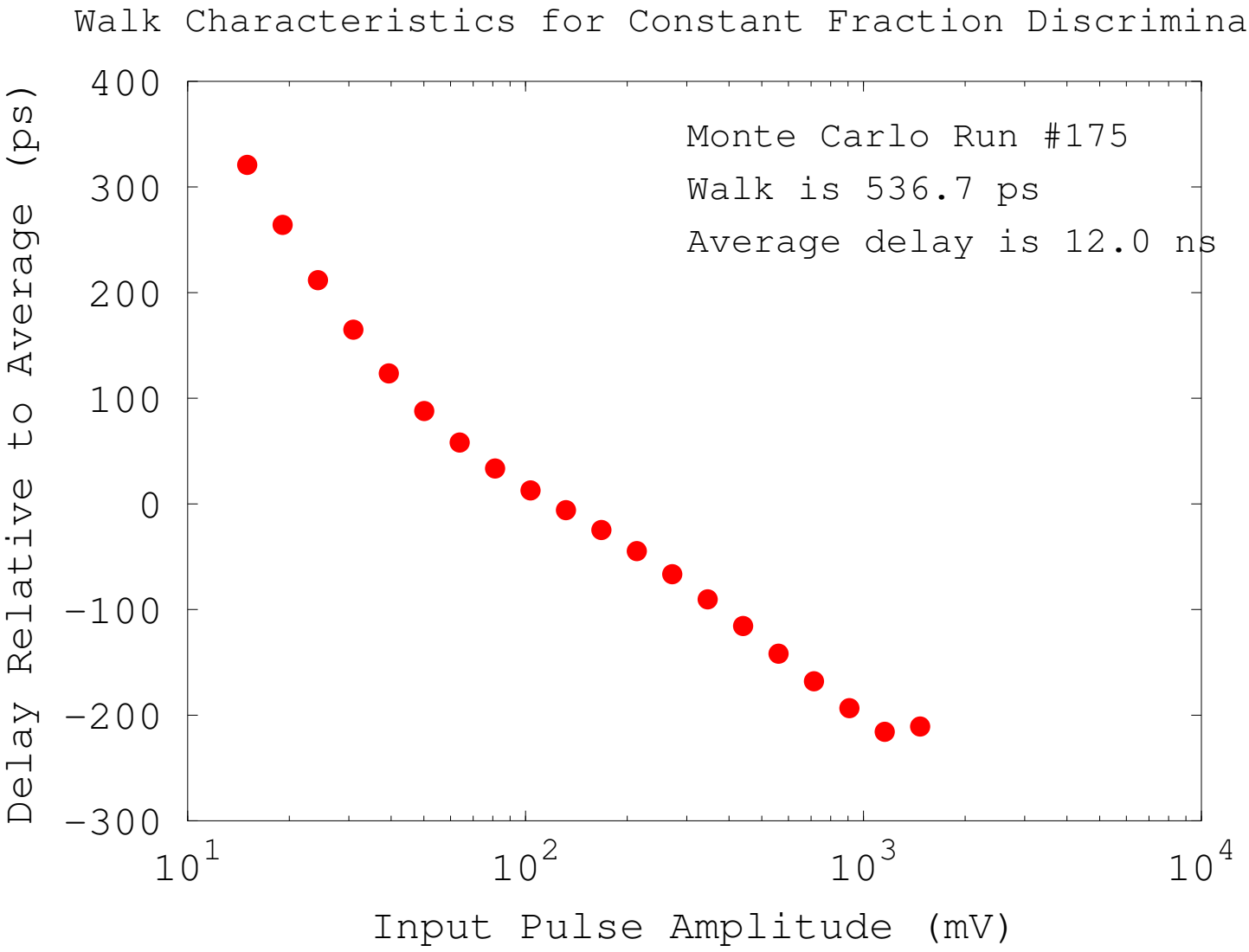

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #170
Walk is 628.6 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

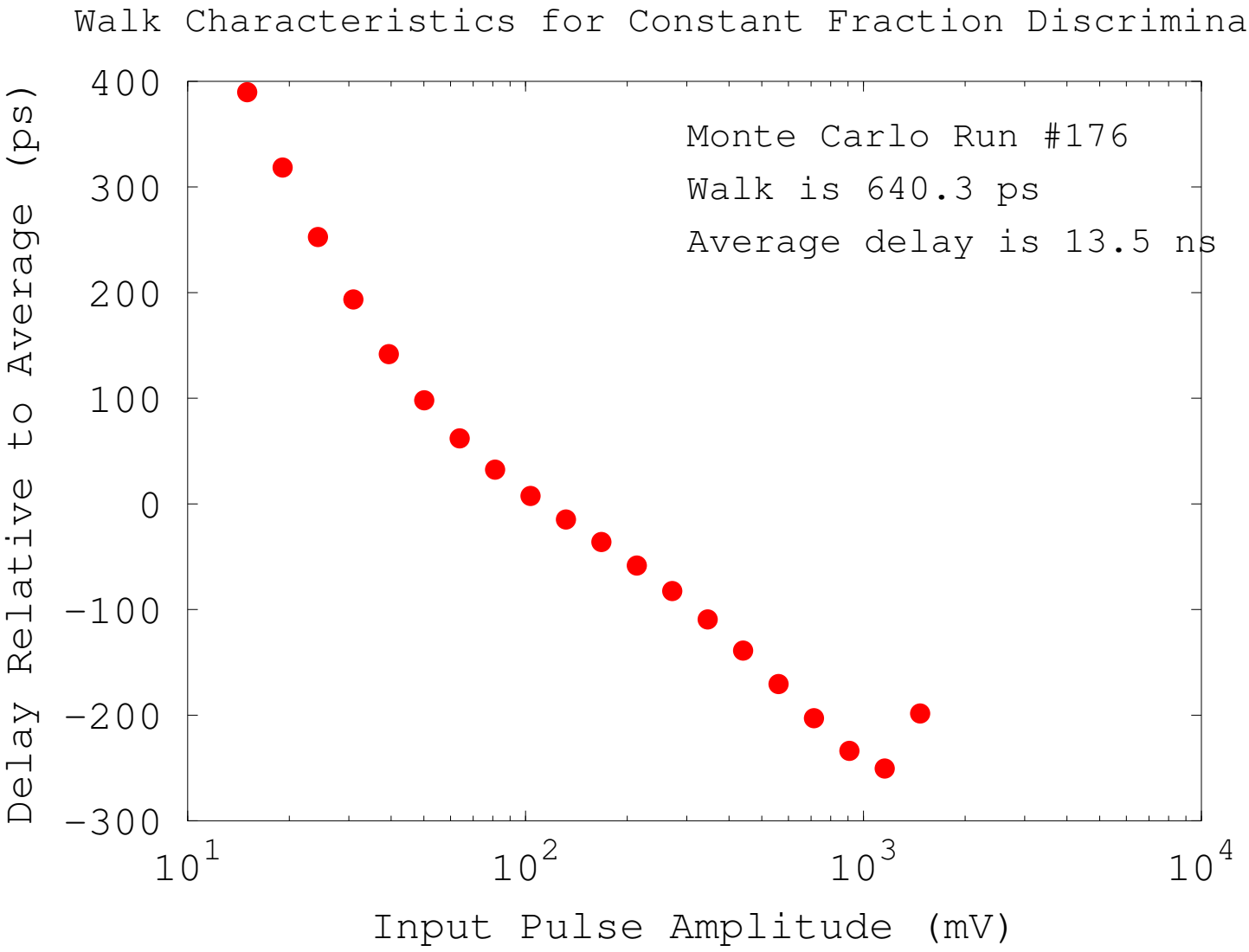

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #171
Walk is 690.1 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

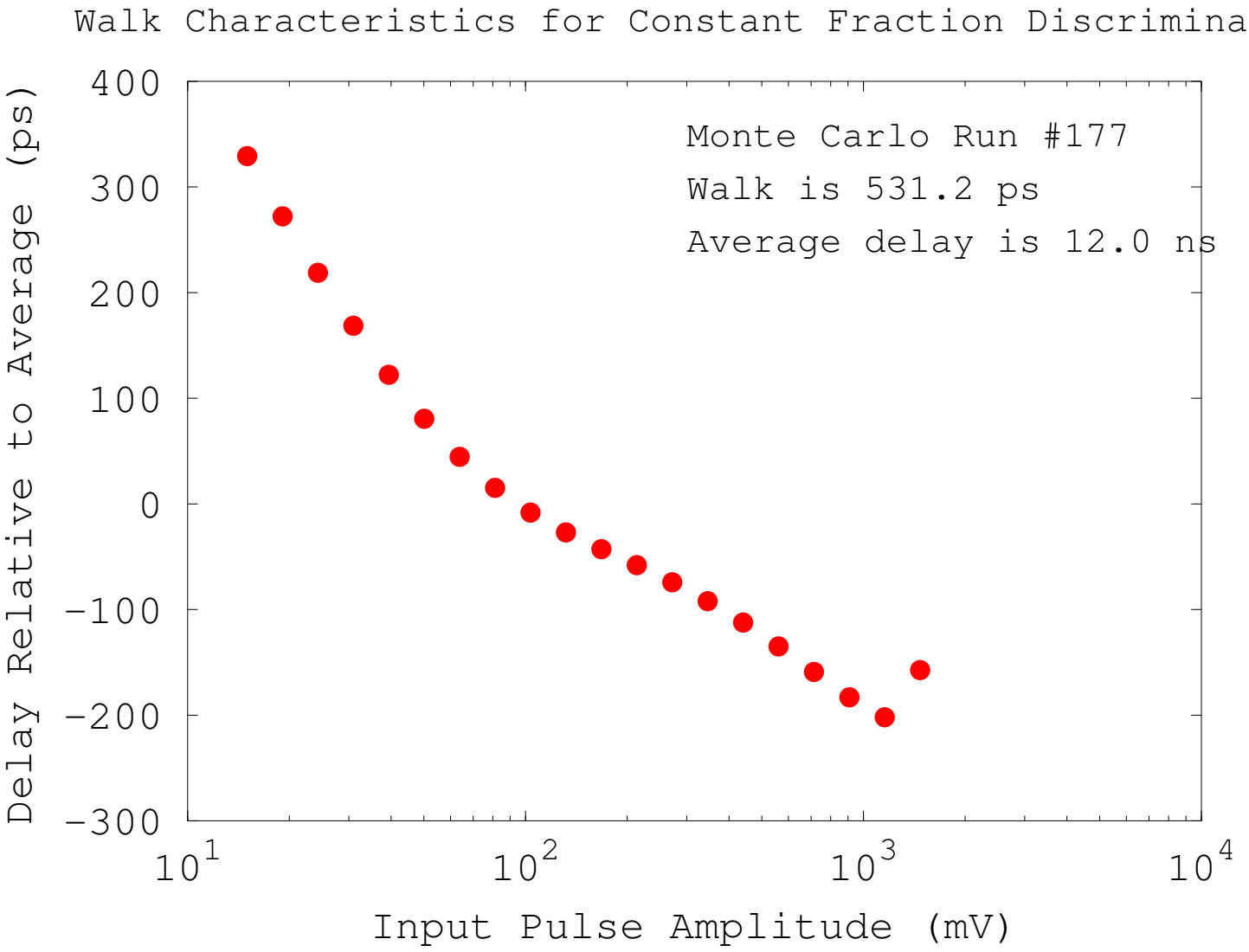

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #172
Walk is 668.6 ps
Average delay is 13.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

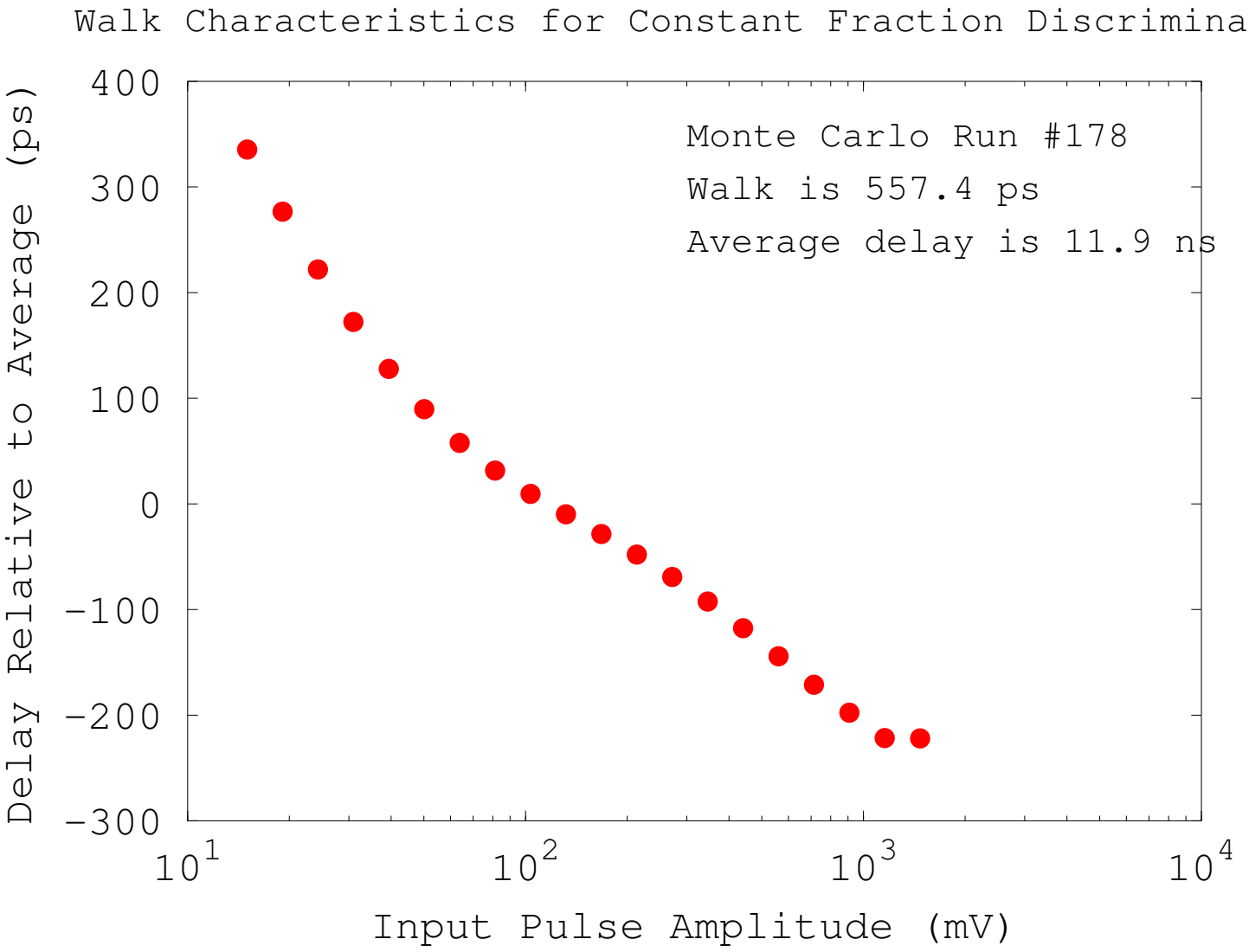

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #173
Walk is 547.7 ps
Average delay is 11.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

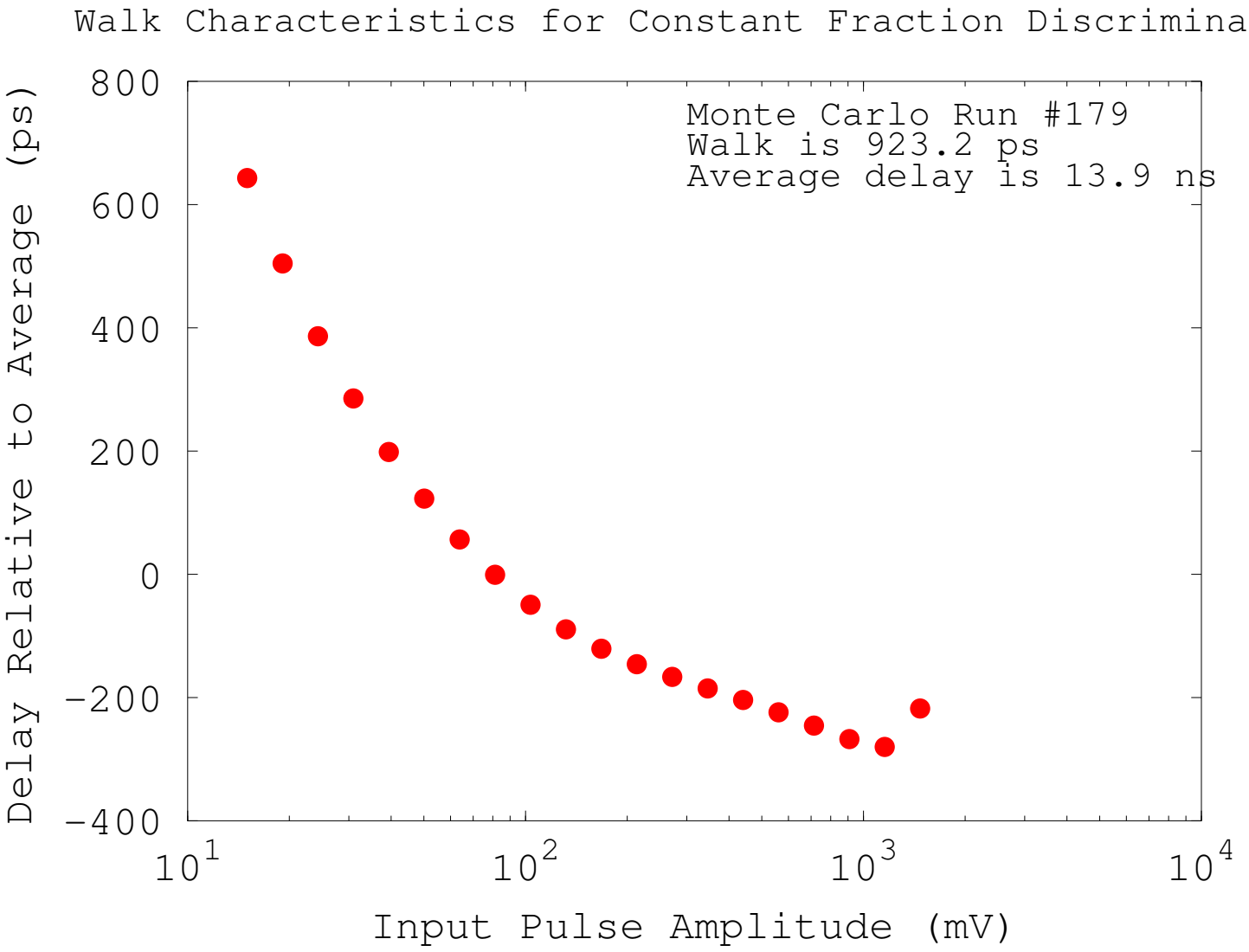

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #174
Walk is 719.2 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

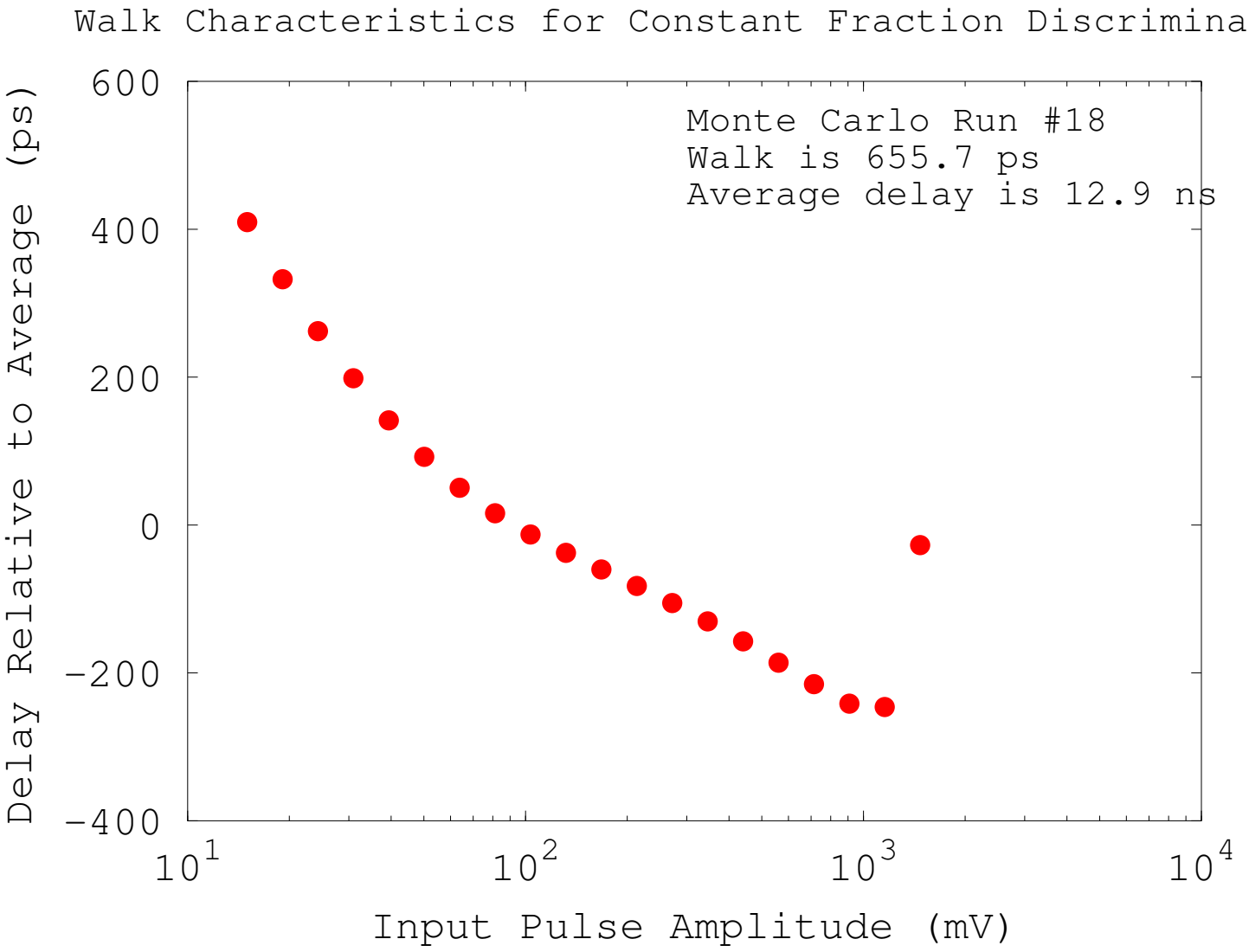

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #175
Walk is 536.7 ps
Average delay is 12.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

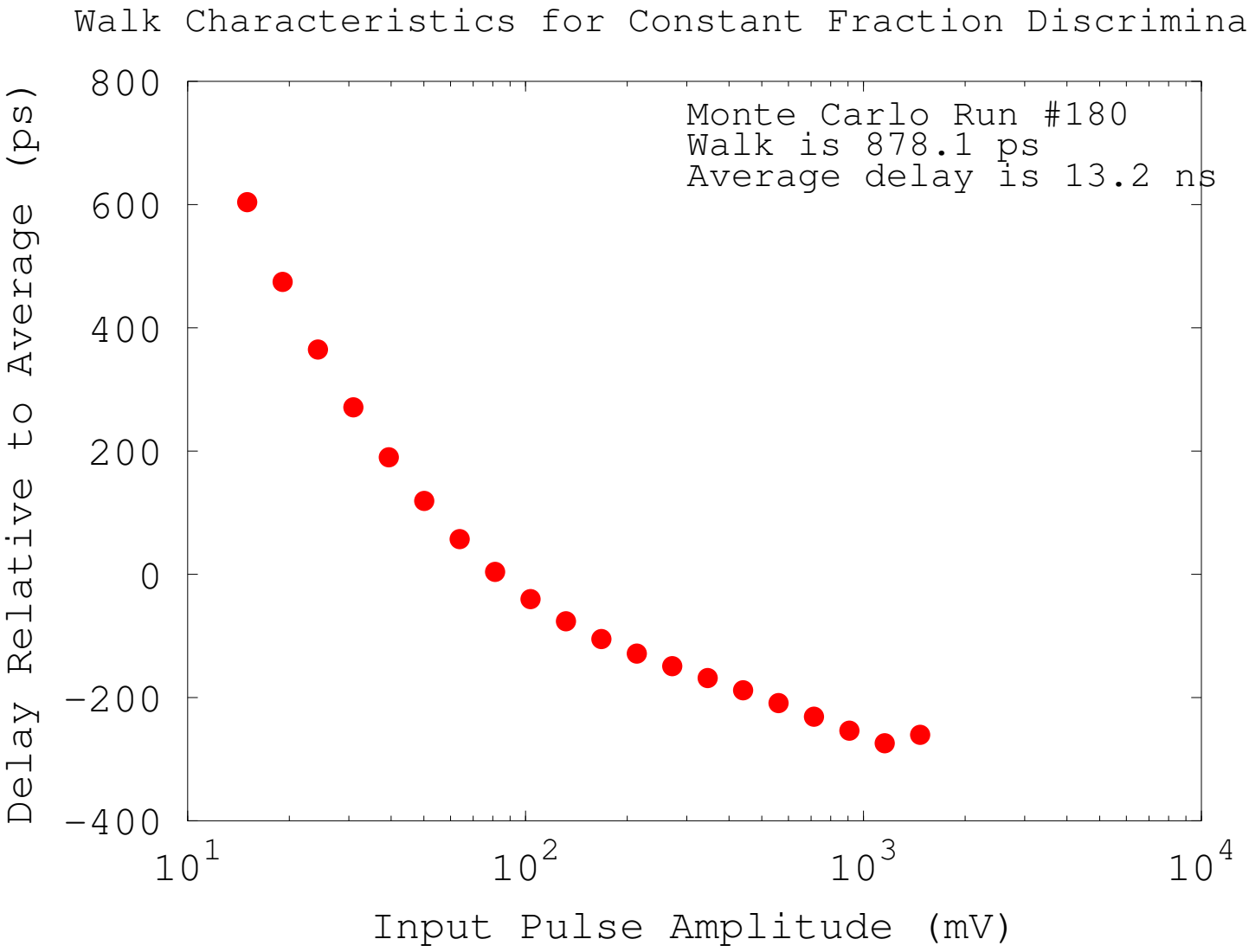

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #176
Walk is 640.3 ps
Average delay is 13.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

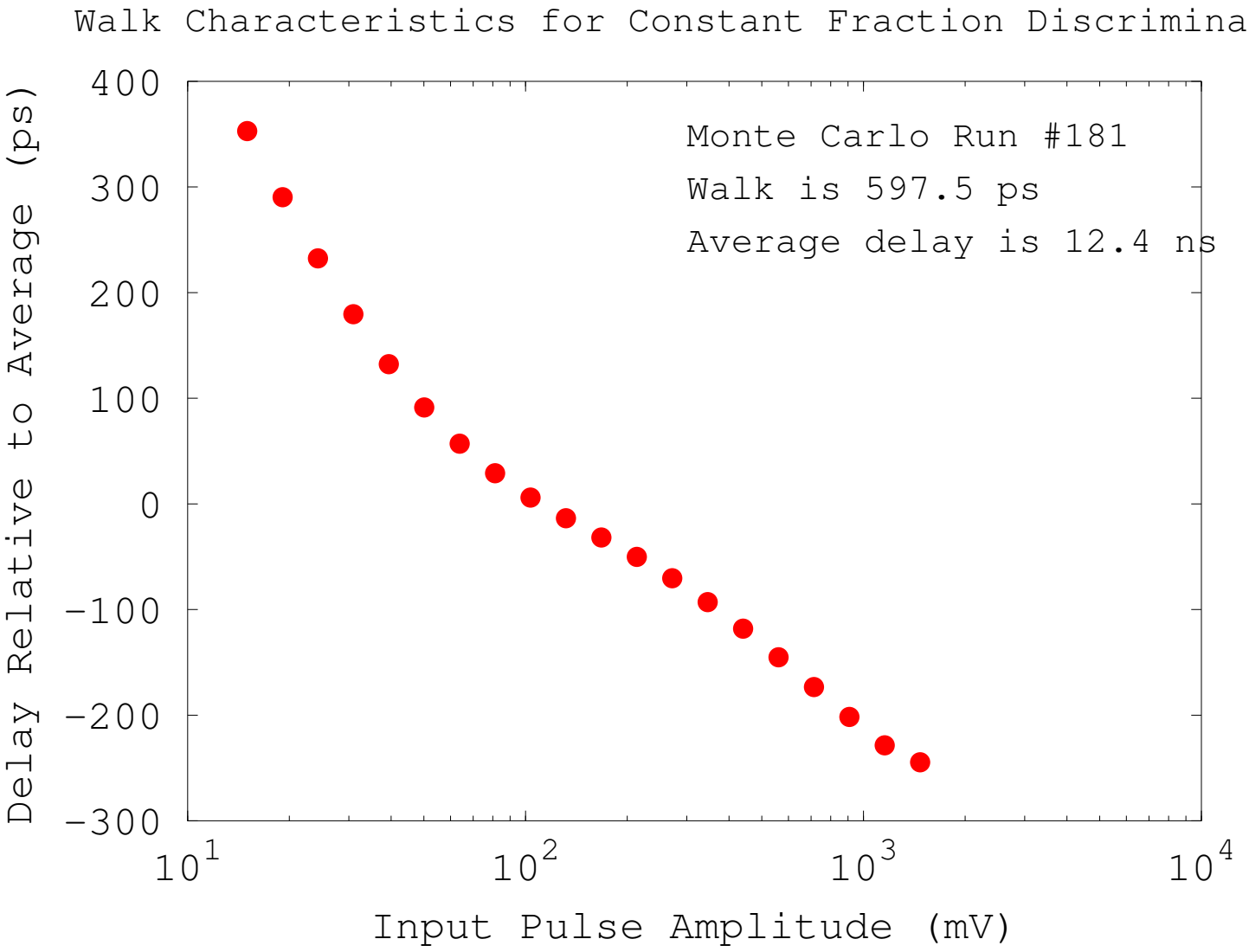

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #177
Walk is 531.2 ps
Average delay is 12.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

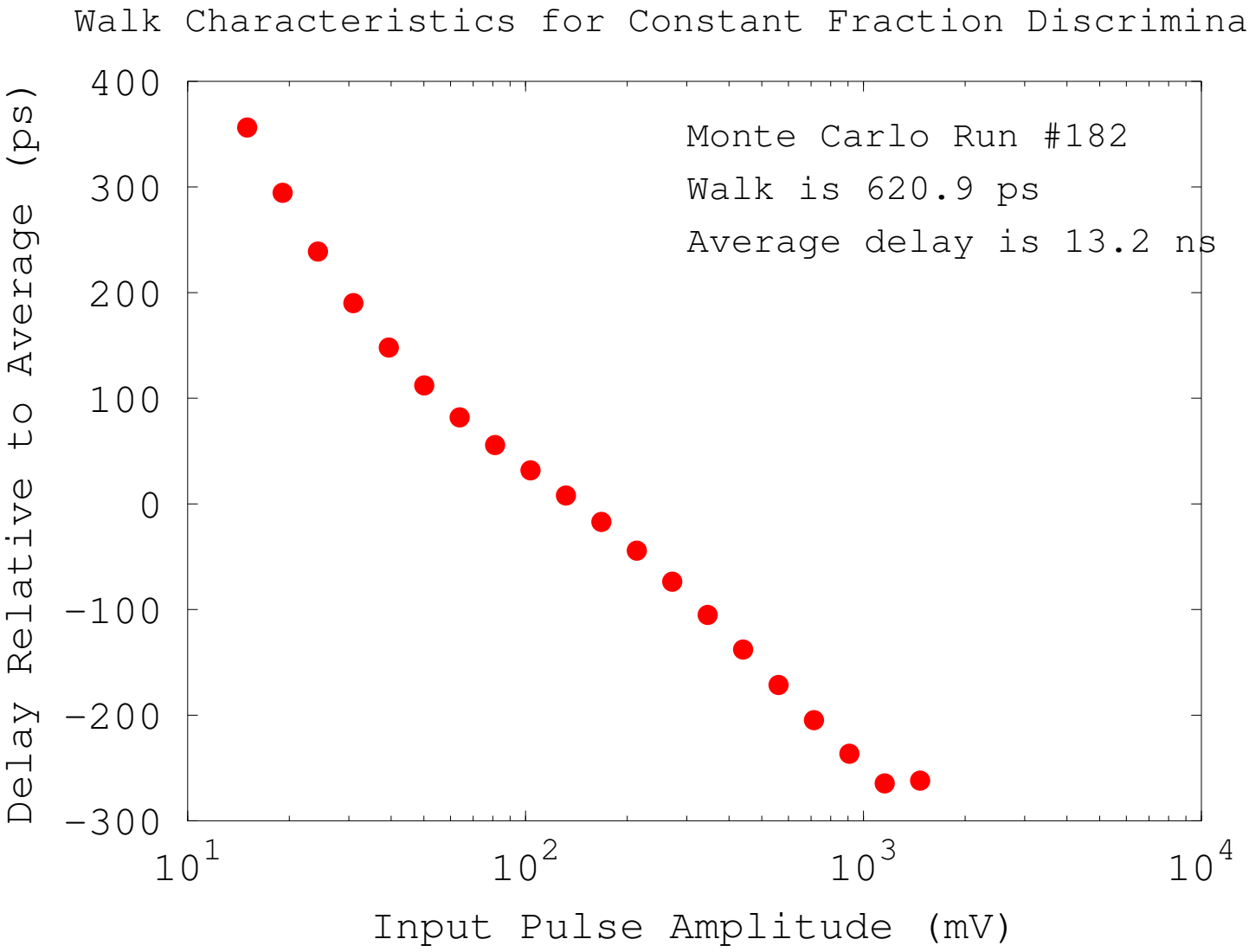

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #178
Walk is 557.4 ps
Average delay is 11.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

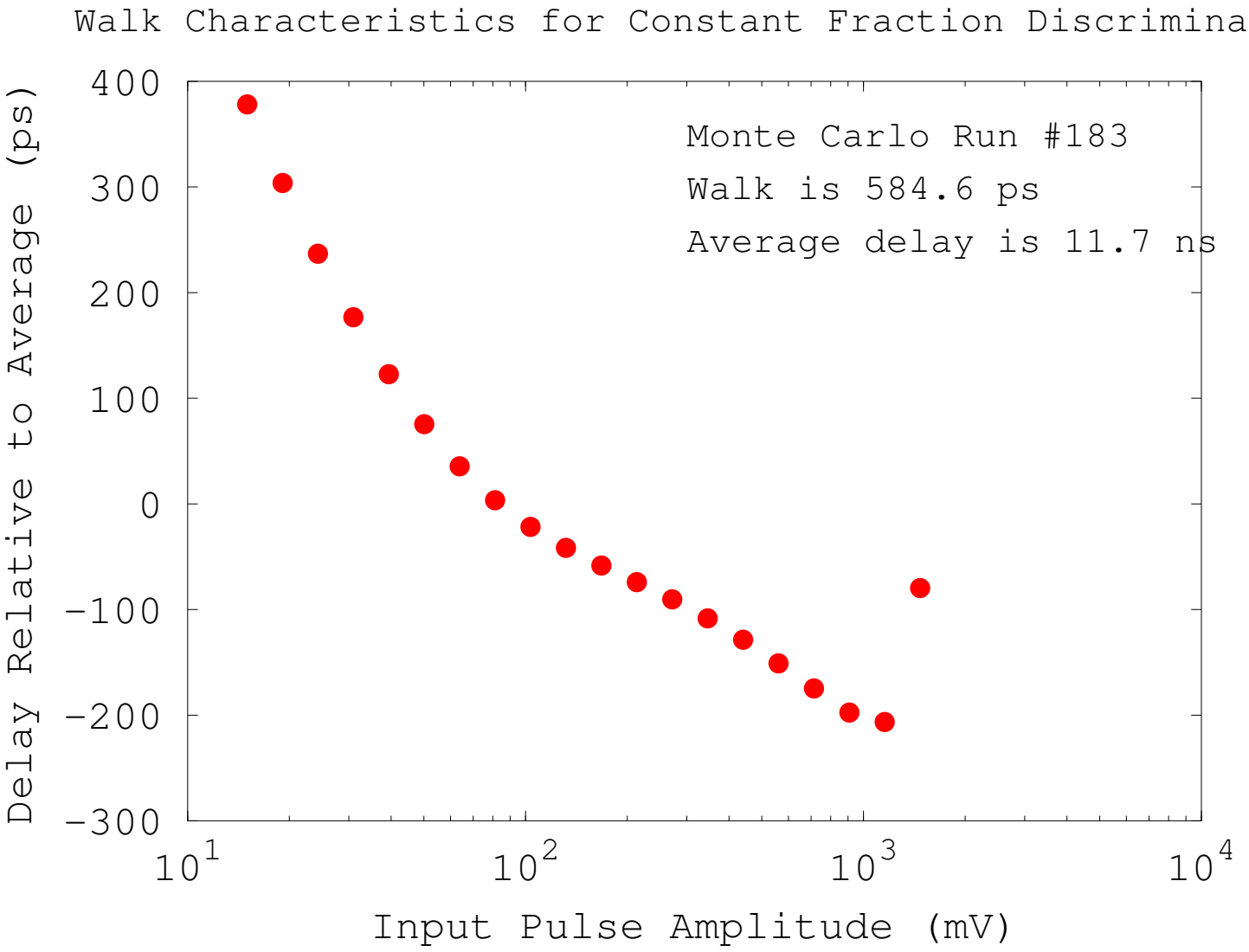

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #179
Walk is 923.2 ps
Average delay is 13.9 ns
Delay Relative to Average (ps)
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

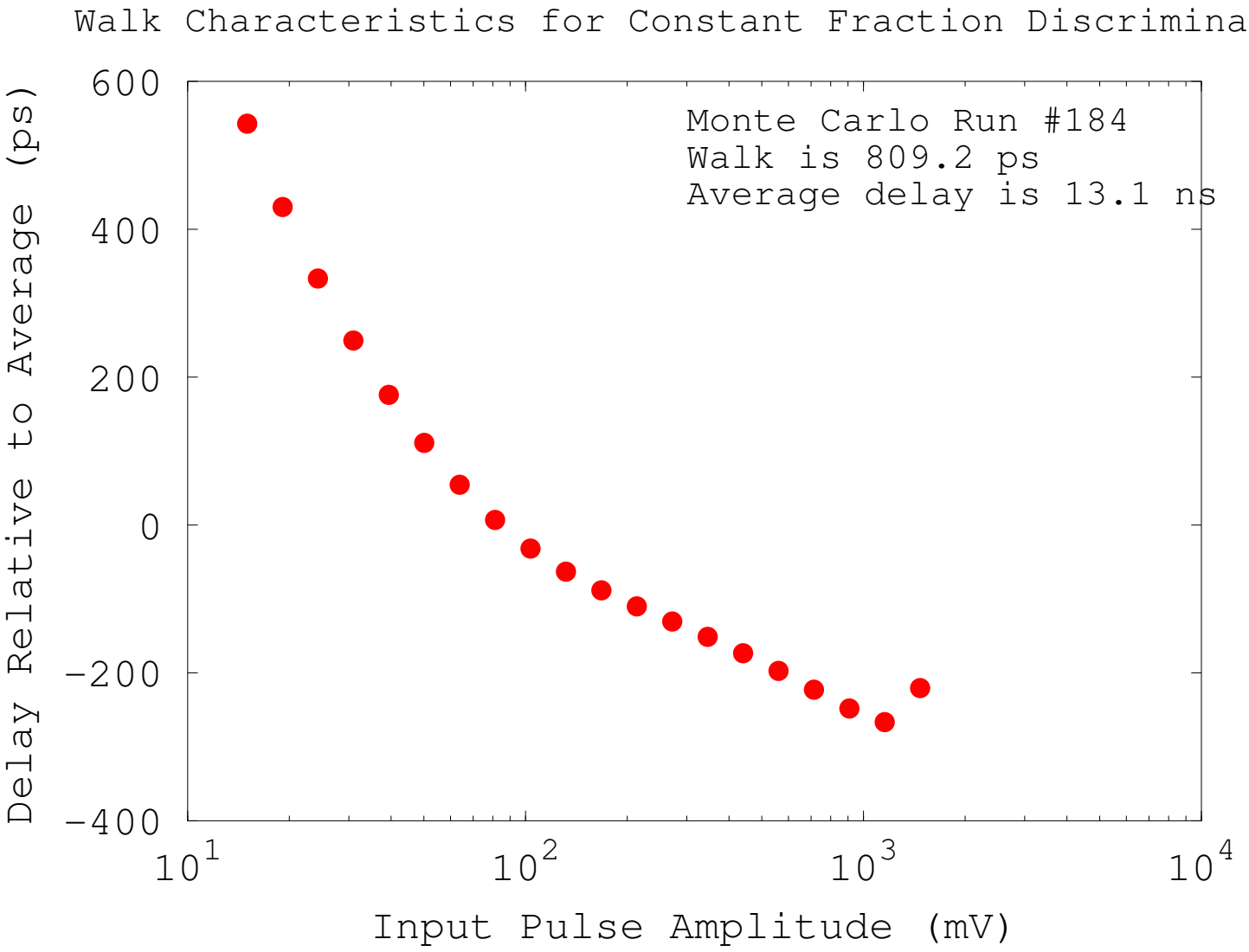

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #18
Walk is 655.7 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

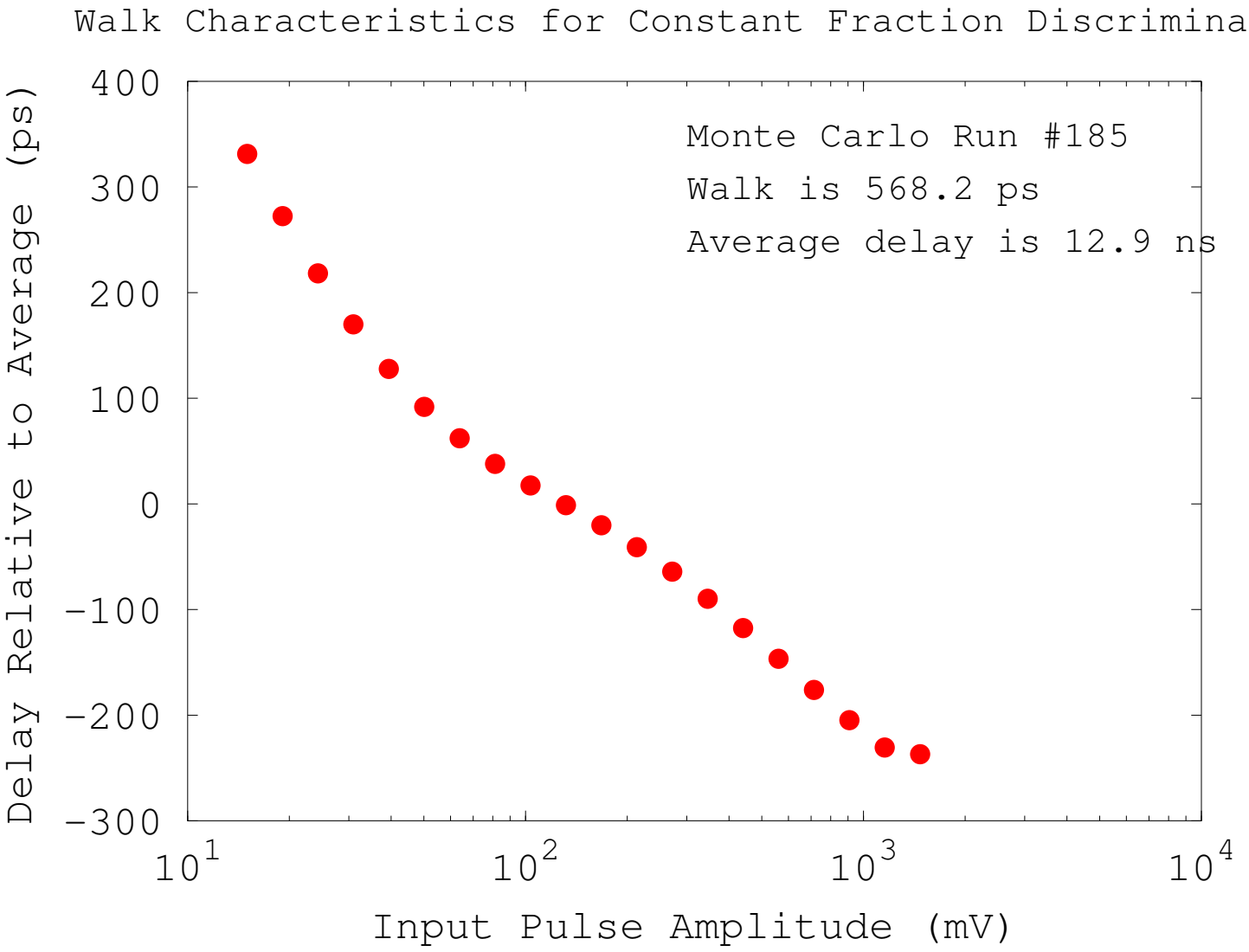

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #180
Walk is 878.1 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

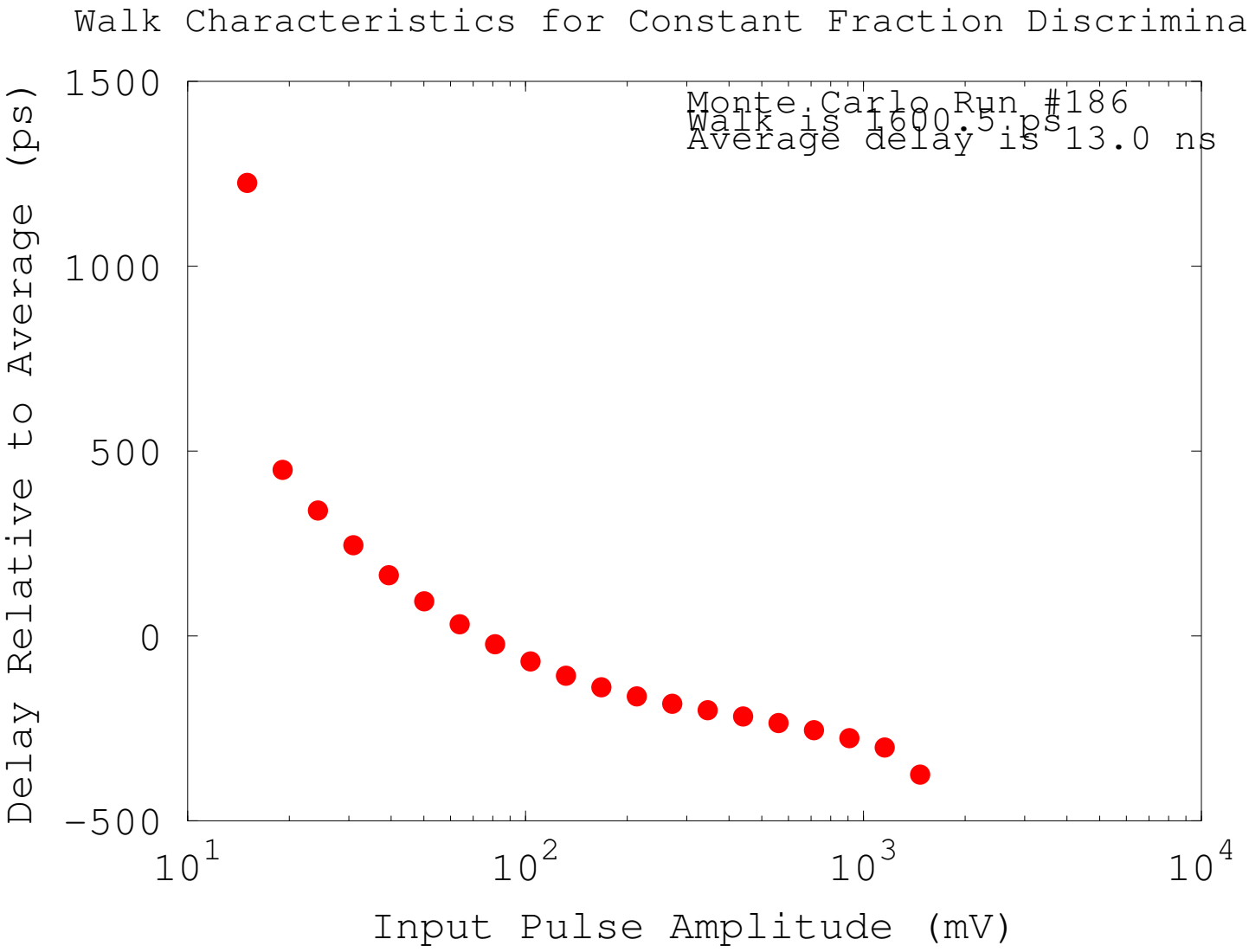

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #181
Walk is 597.5 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

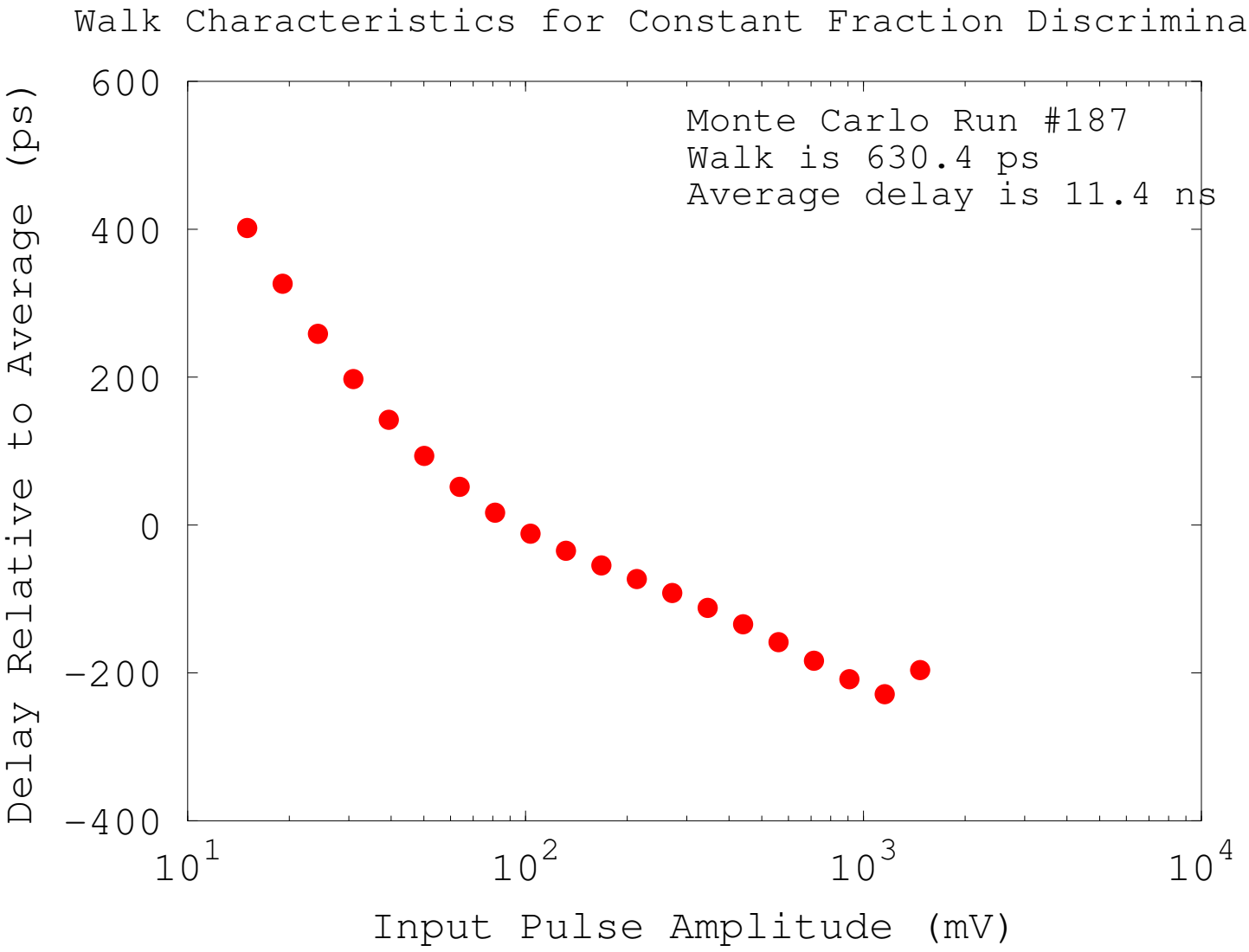

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #182
Walk is 620.9 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

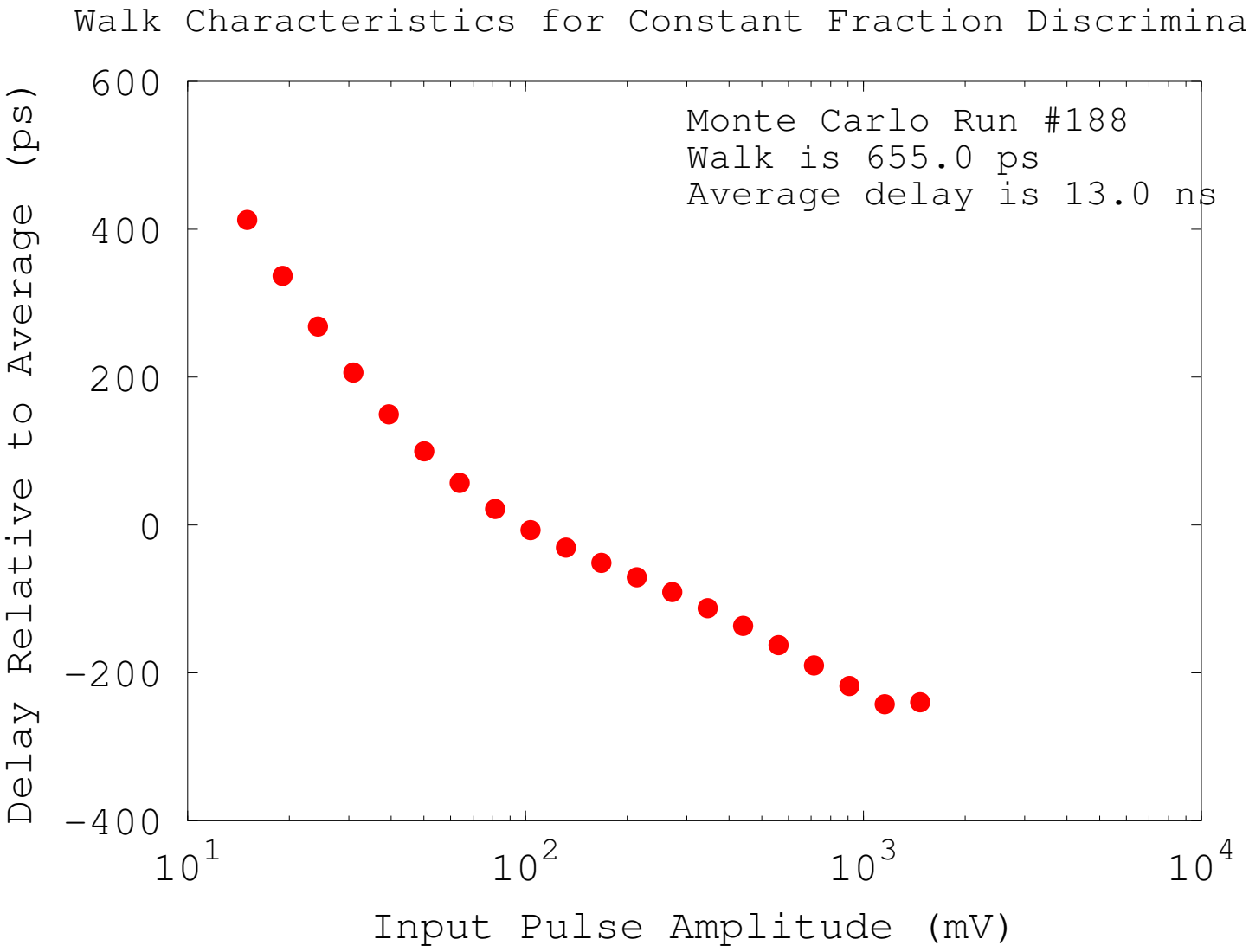

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #183
Walk is 584.6 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

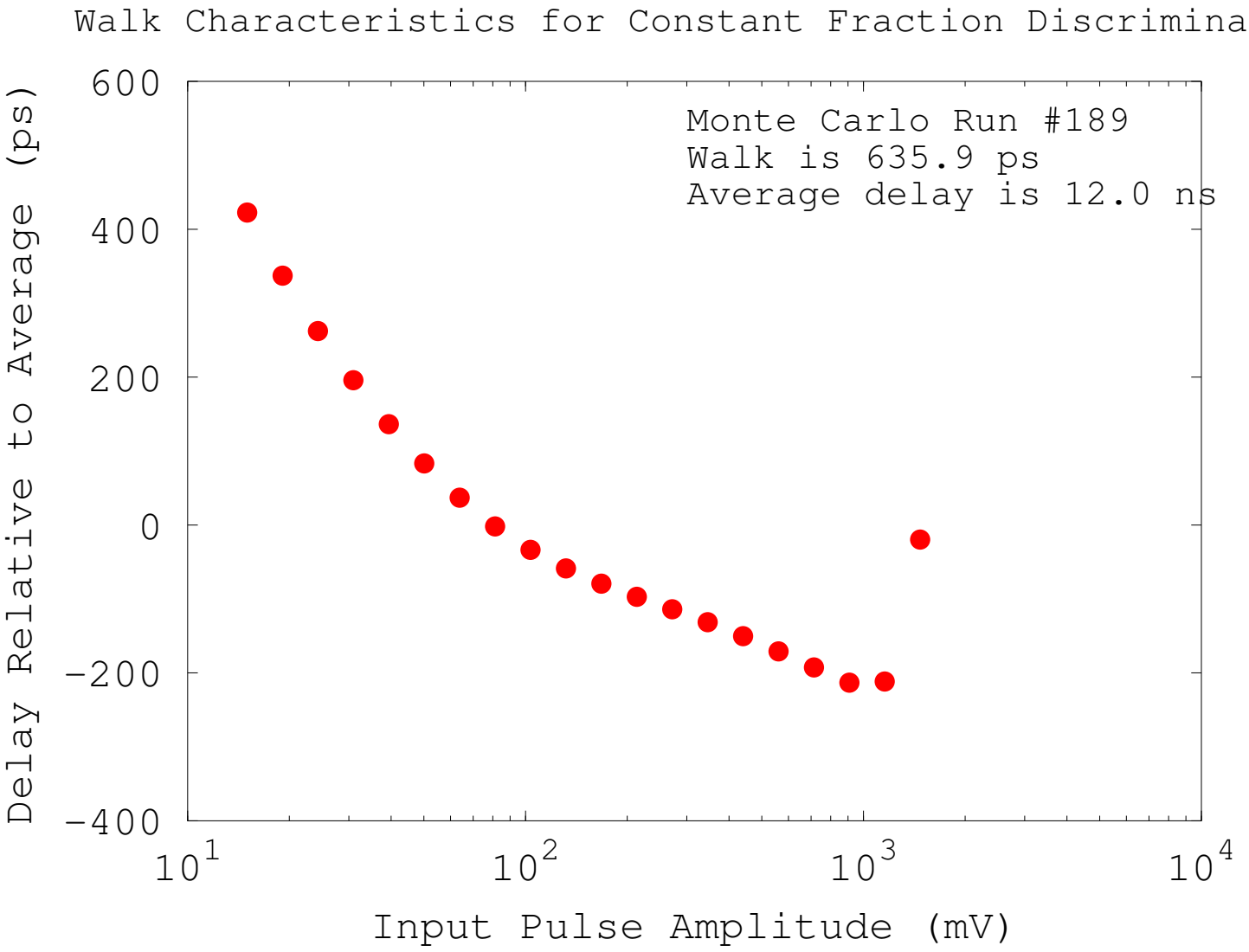

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #184
Walk is 809.2 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

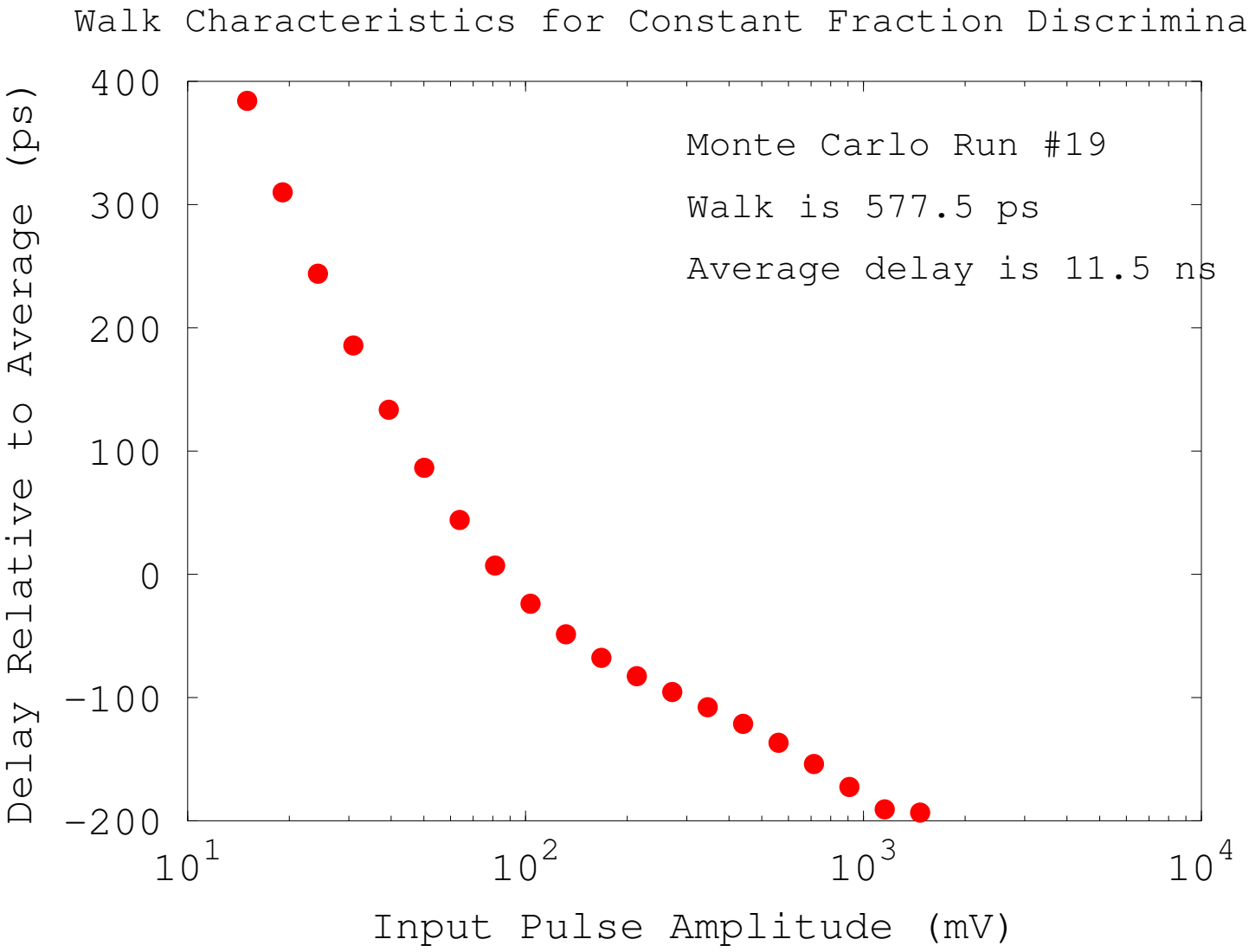

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #185
Walk is 568.2 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

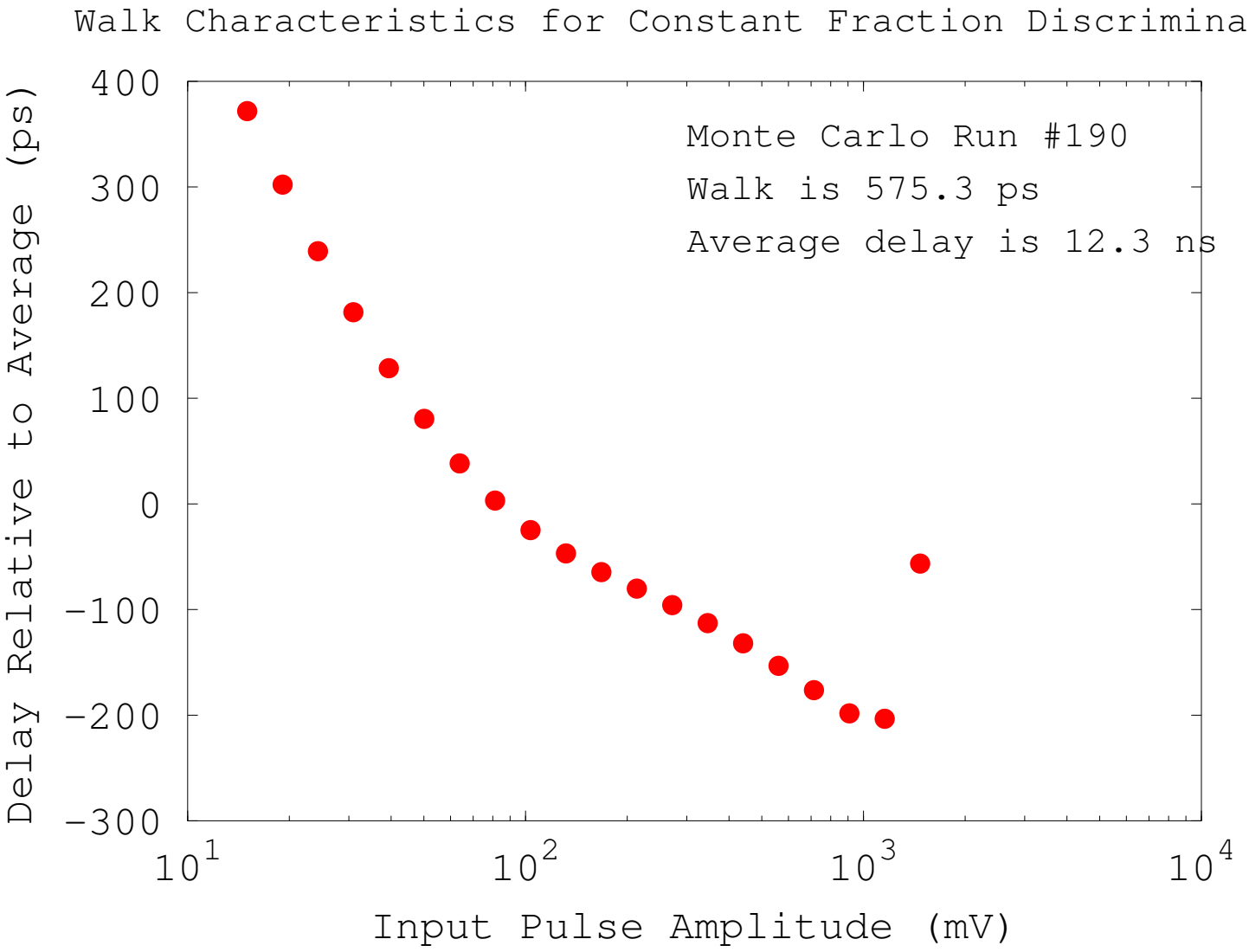

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #186
Walk is 1600.5 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

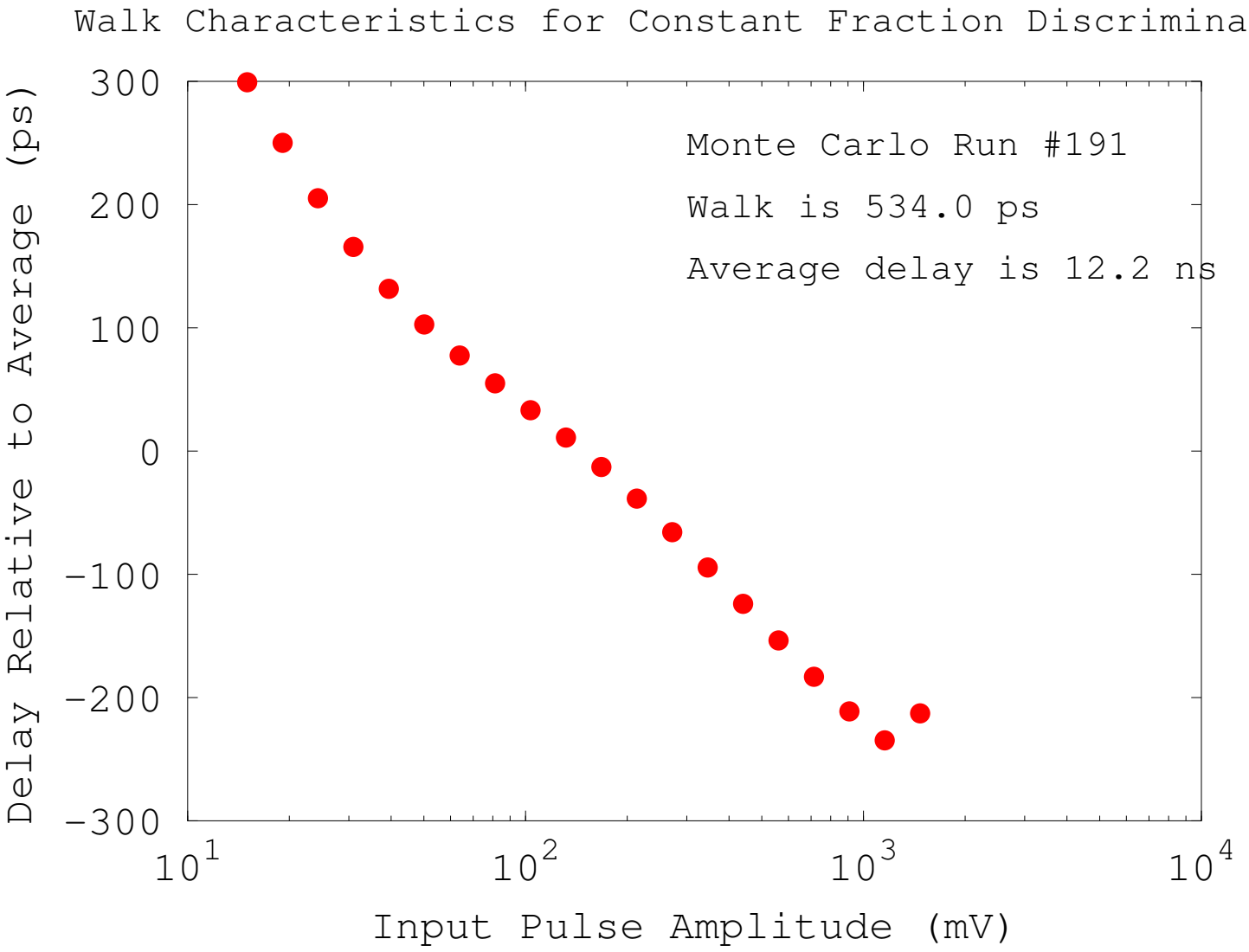

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #187
Walk is 630.4 ps
Average delay is 11.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

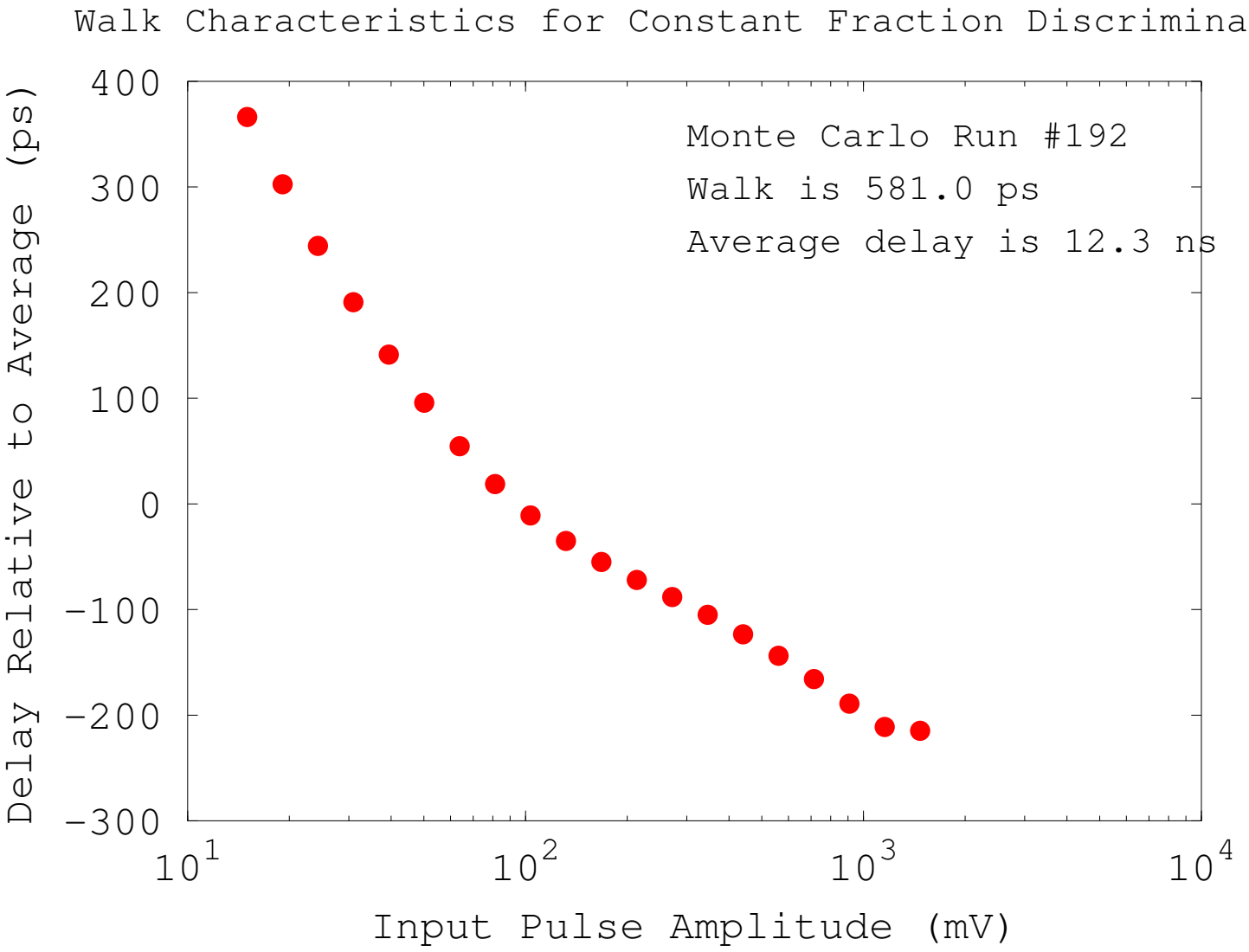

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #188
Walk is 655.0 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

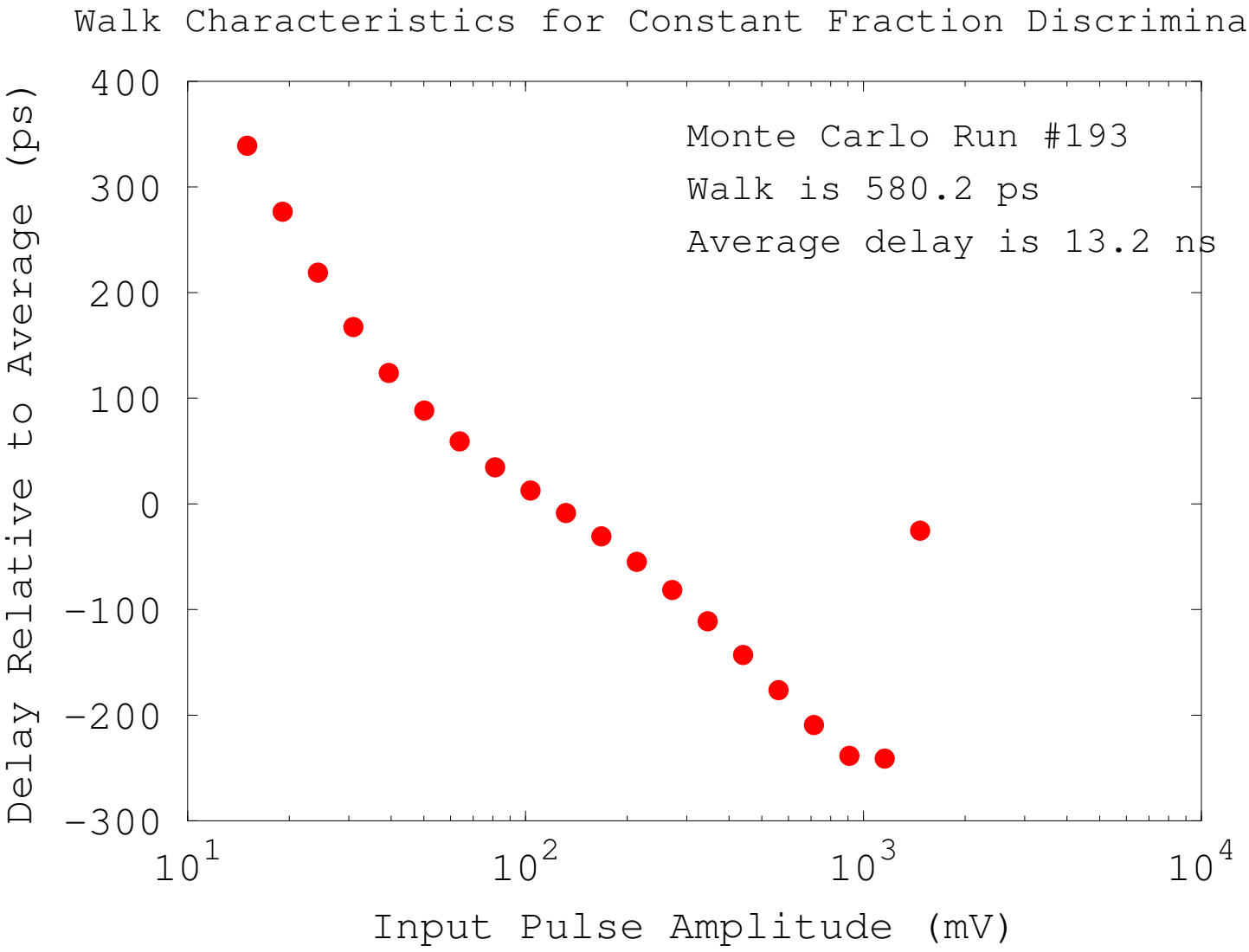

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #189
Walk is 635.9 ps
Average delay is 12.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

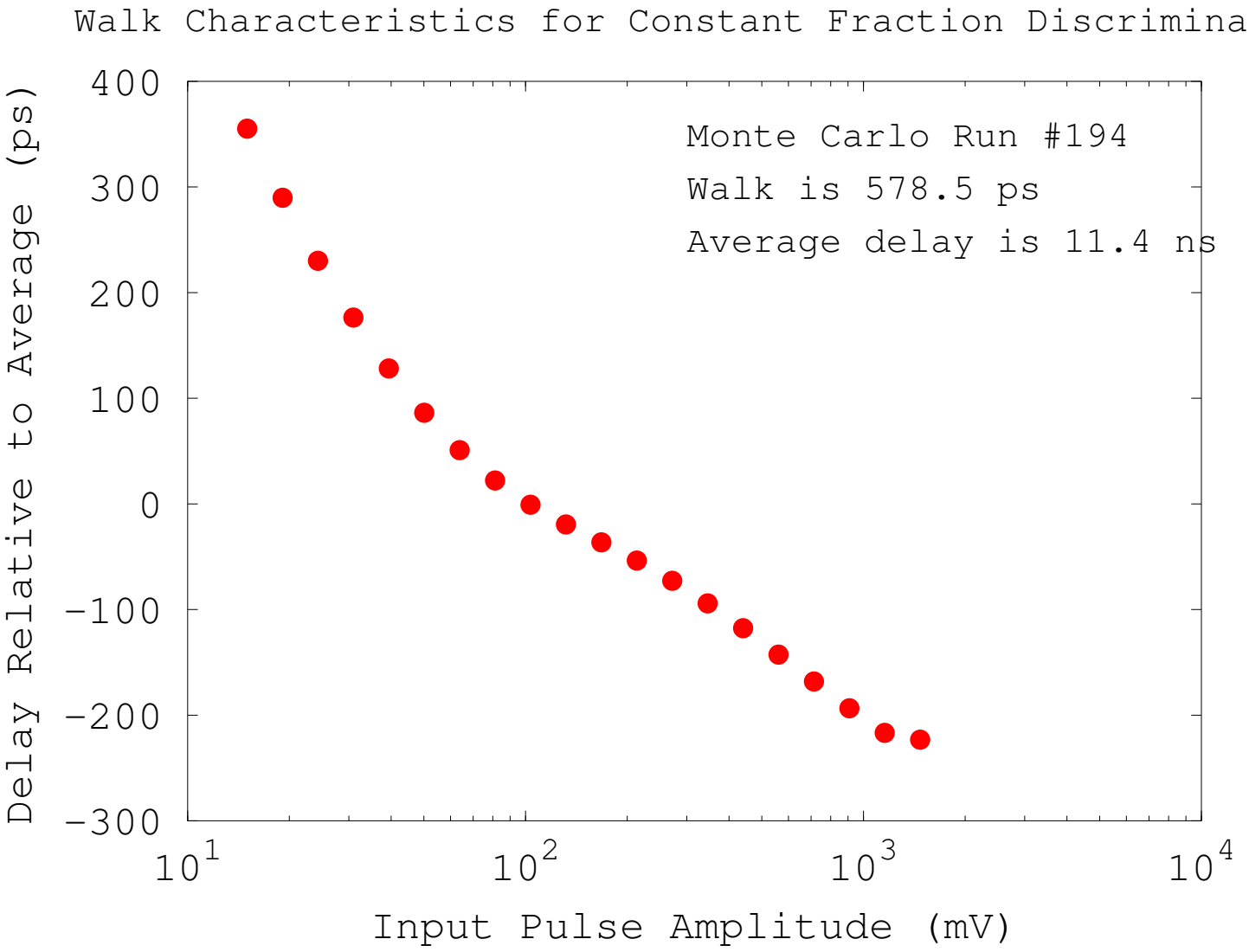

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #19
Walk is 577.5 ps
Average delay is 11.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

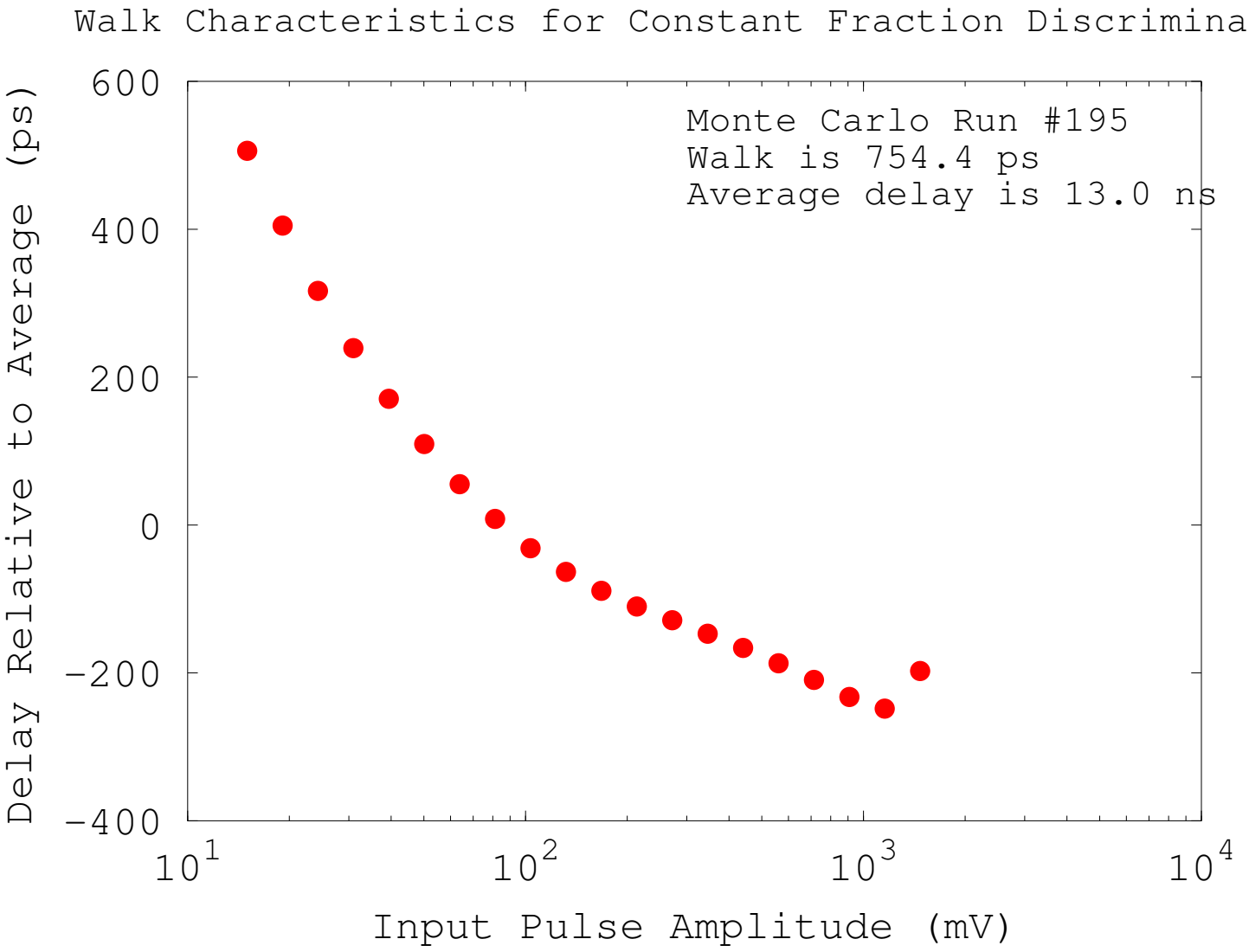

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #190
Walk is 575.3 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

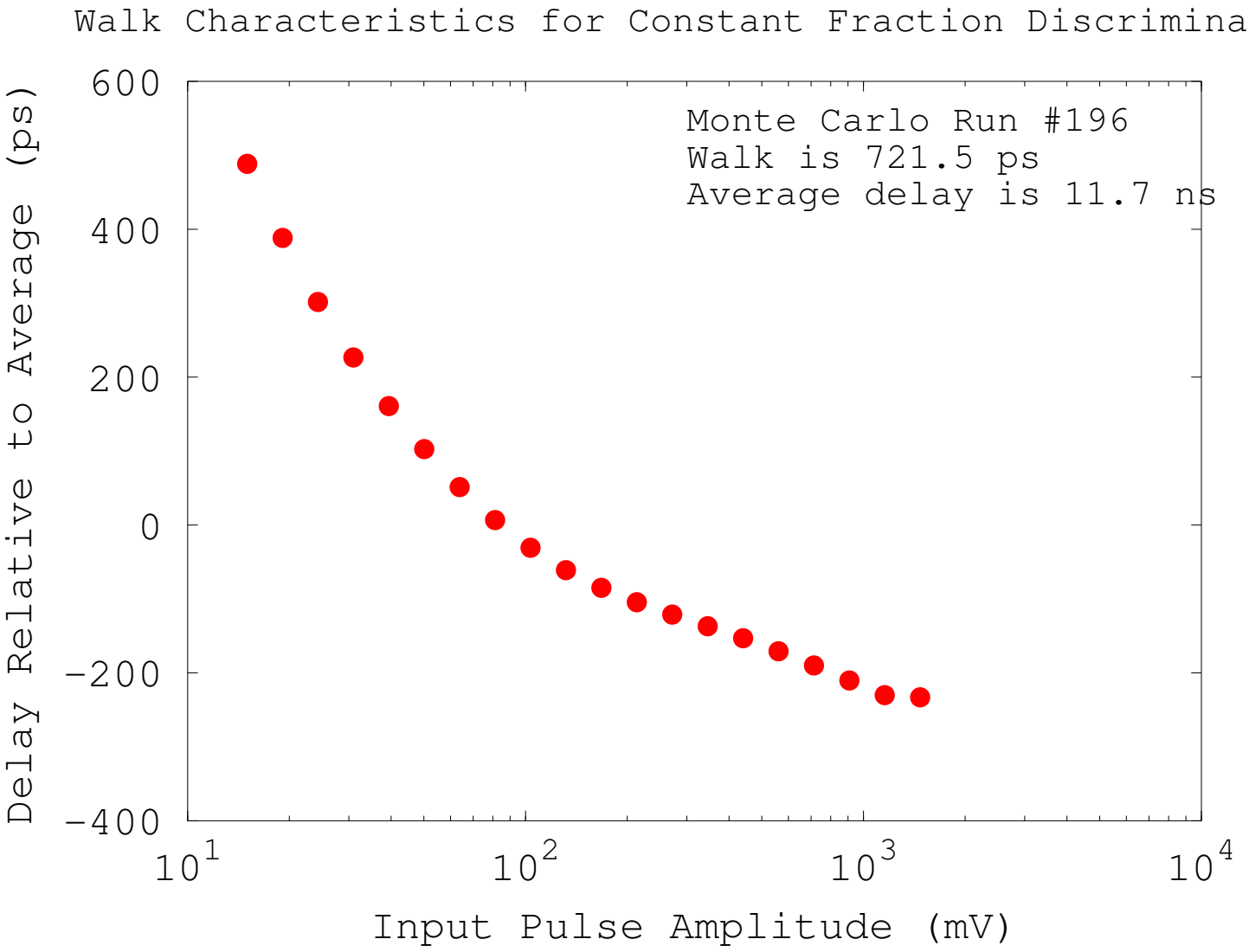

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #191
Walk is 534.0 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

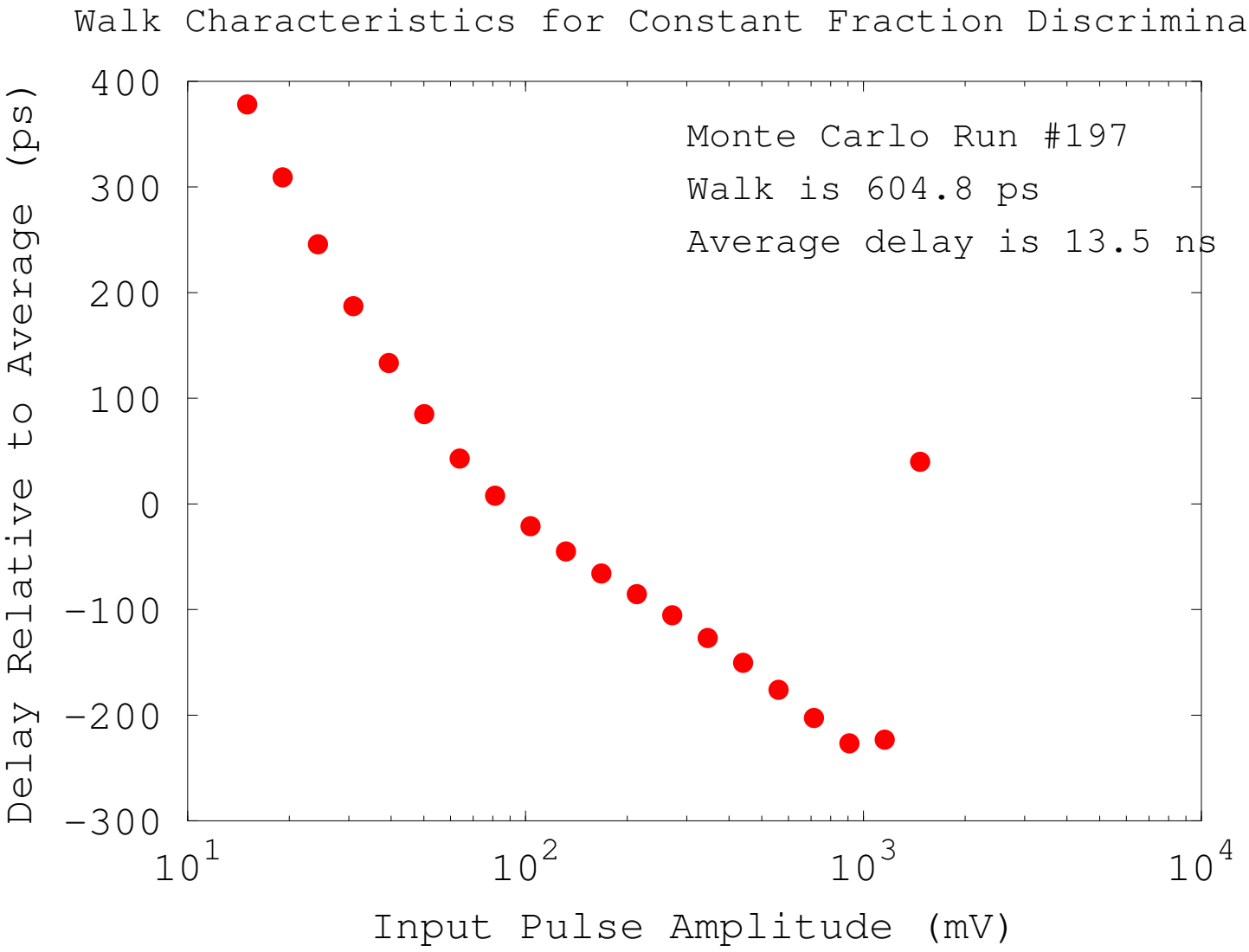

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #192
Walk is 581.0 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

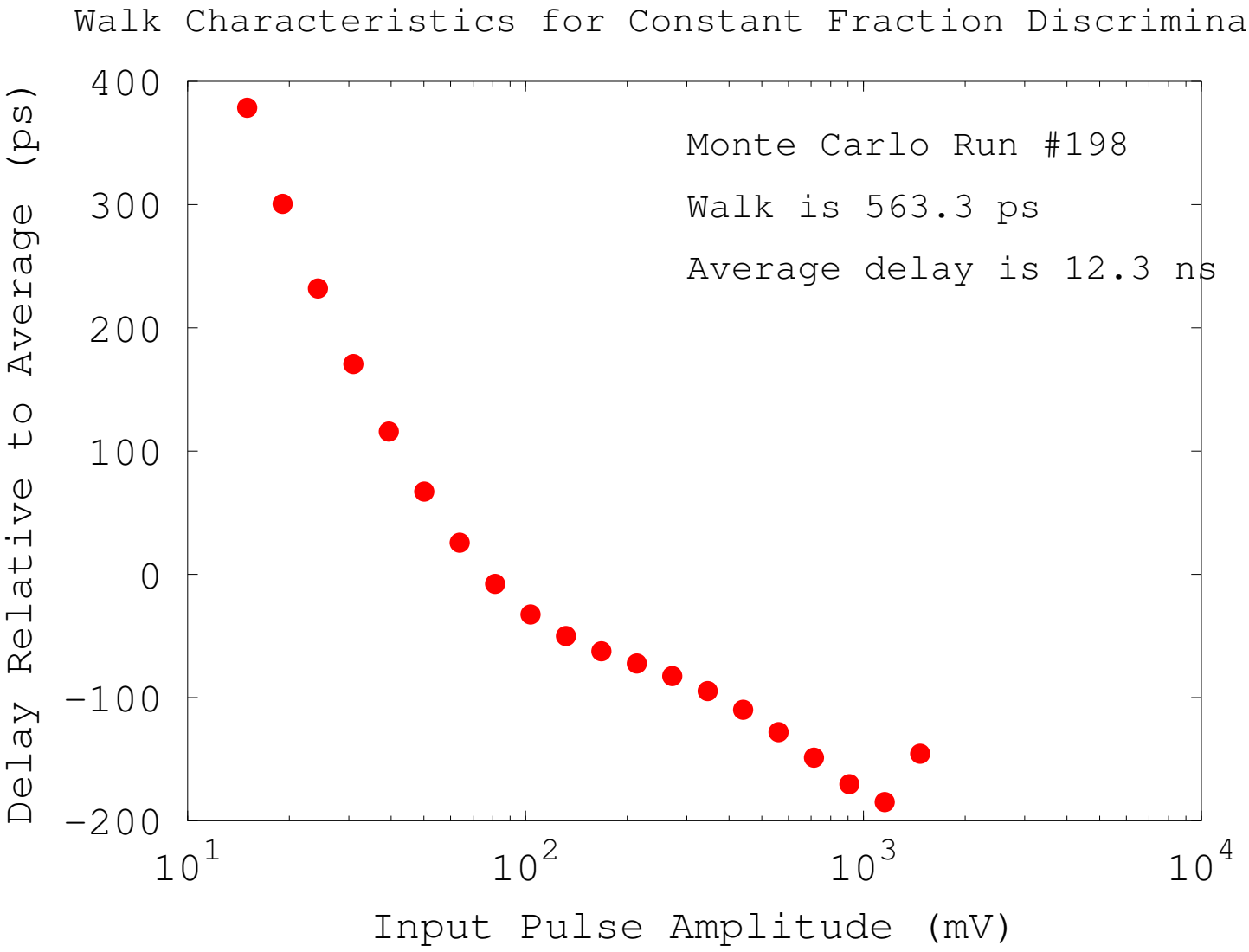

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #193
Walk is 580.2 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

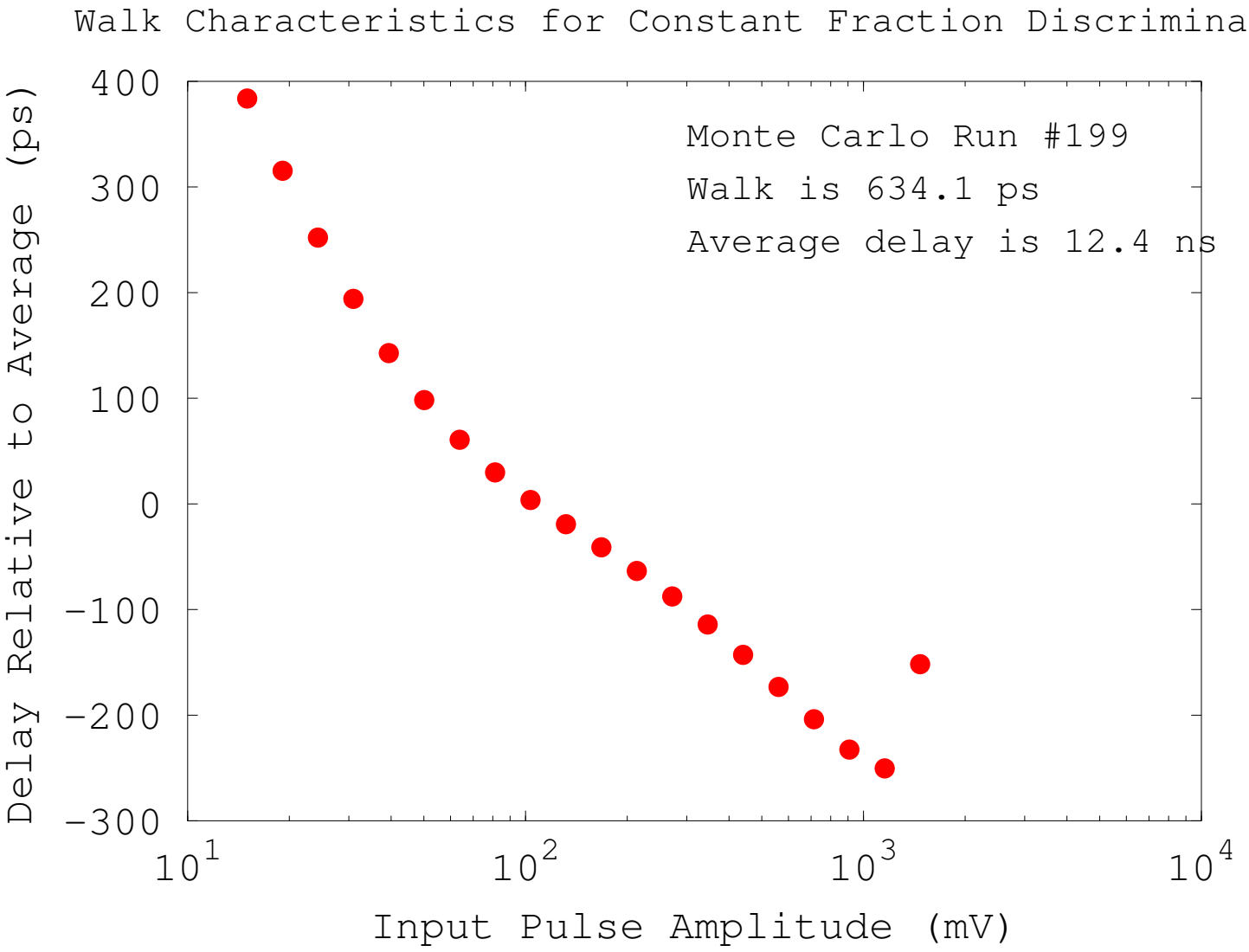

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #194
Walk is 578.5 ps
Average delay is 11.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

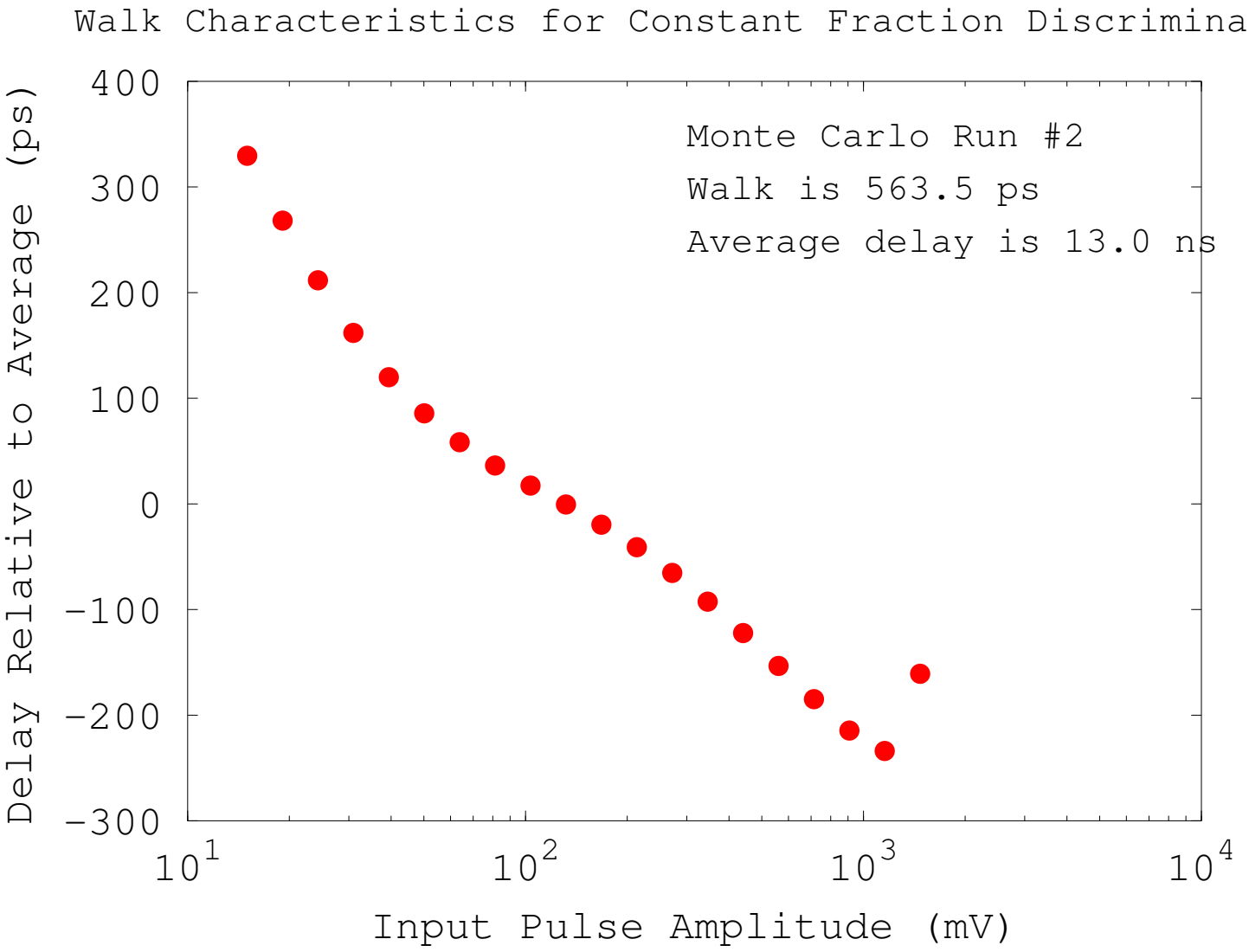

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #195
Walk is 754.4 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

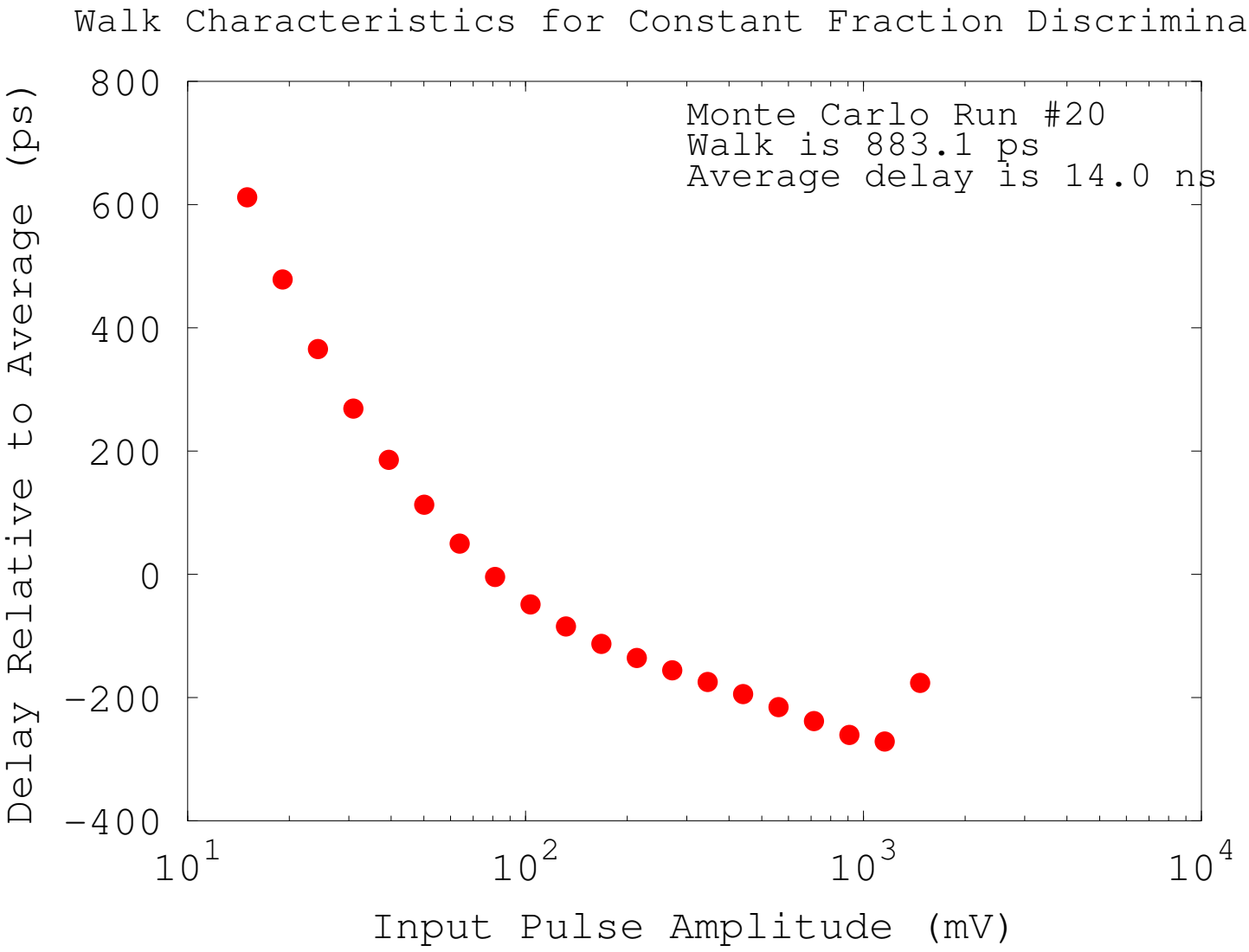

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #196
Walk is 721.5 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

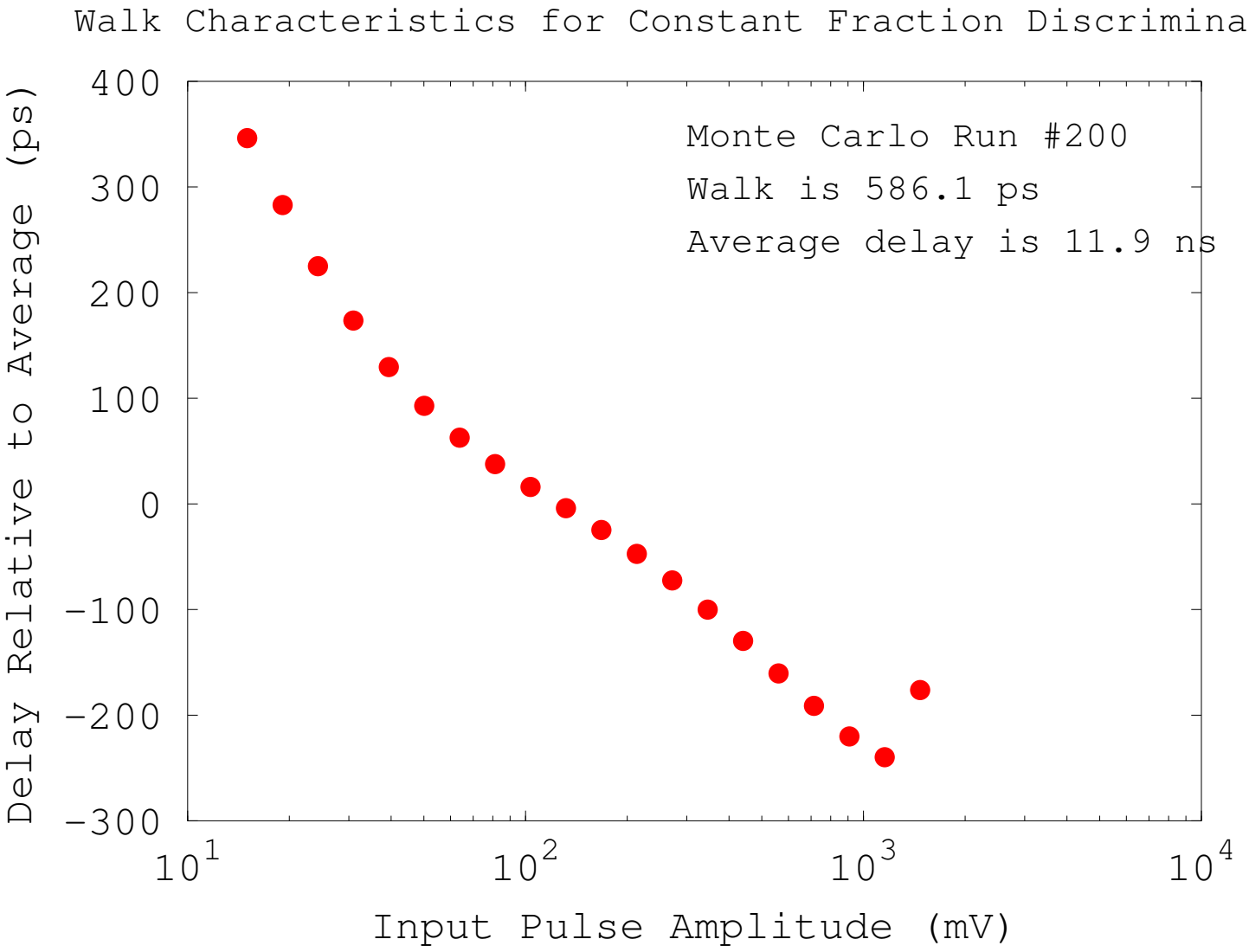

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #197
Walk is 604.8 ps
Average delay is 13.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

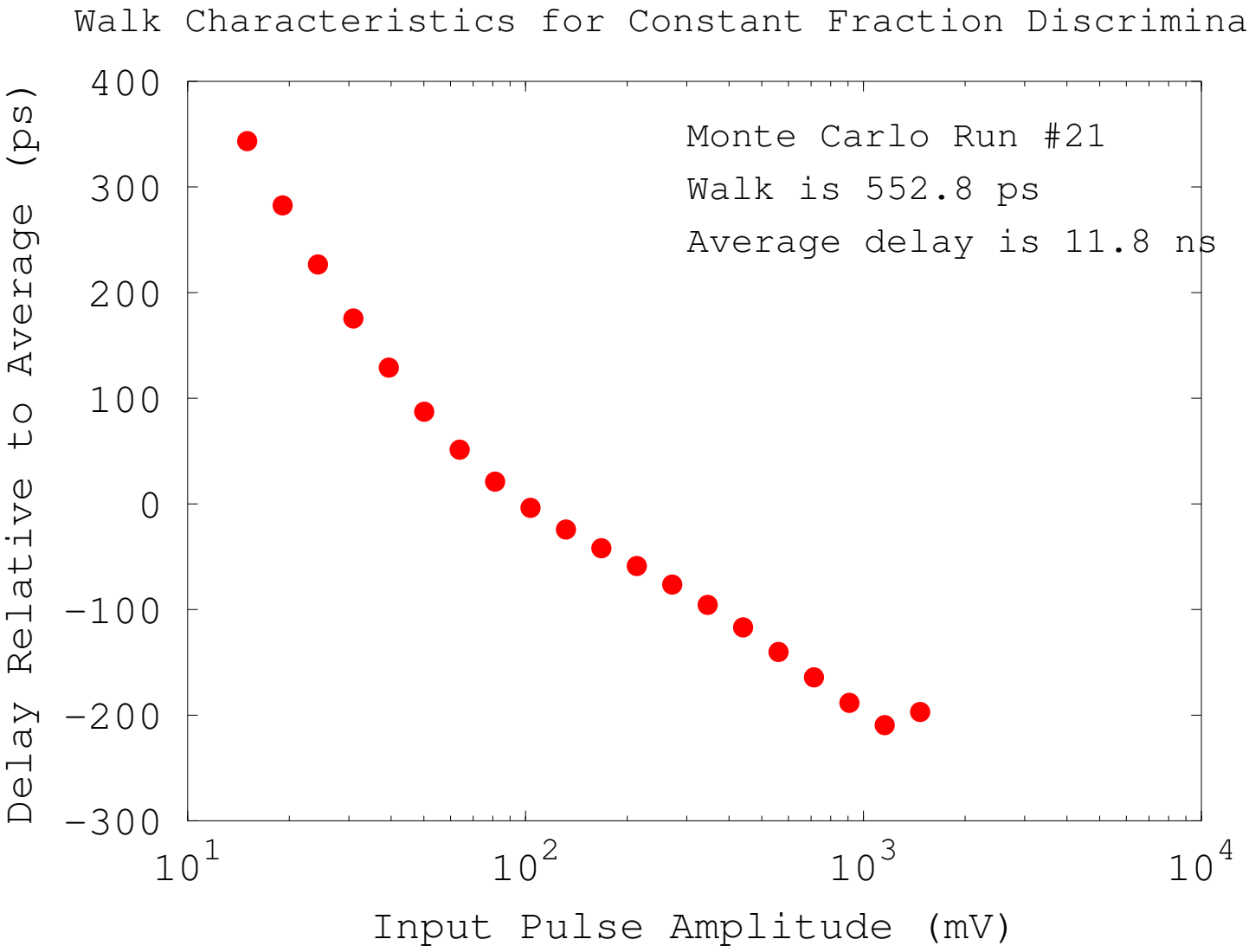

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #198
Walk is 563.3 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

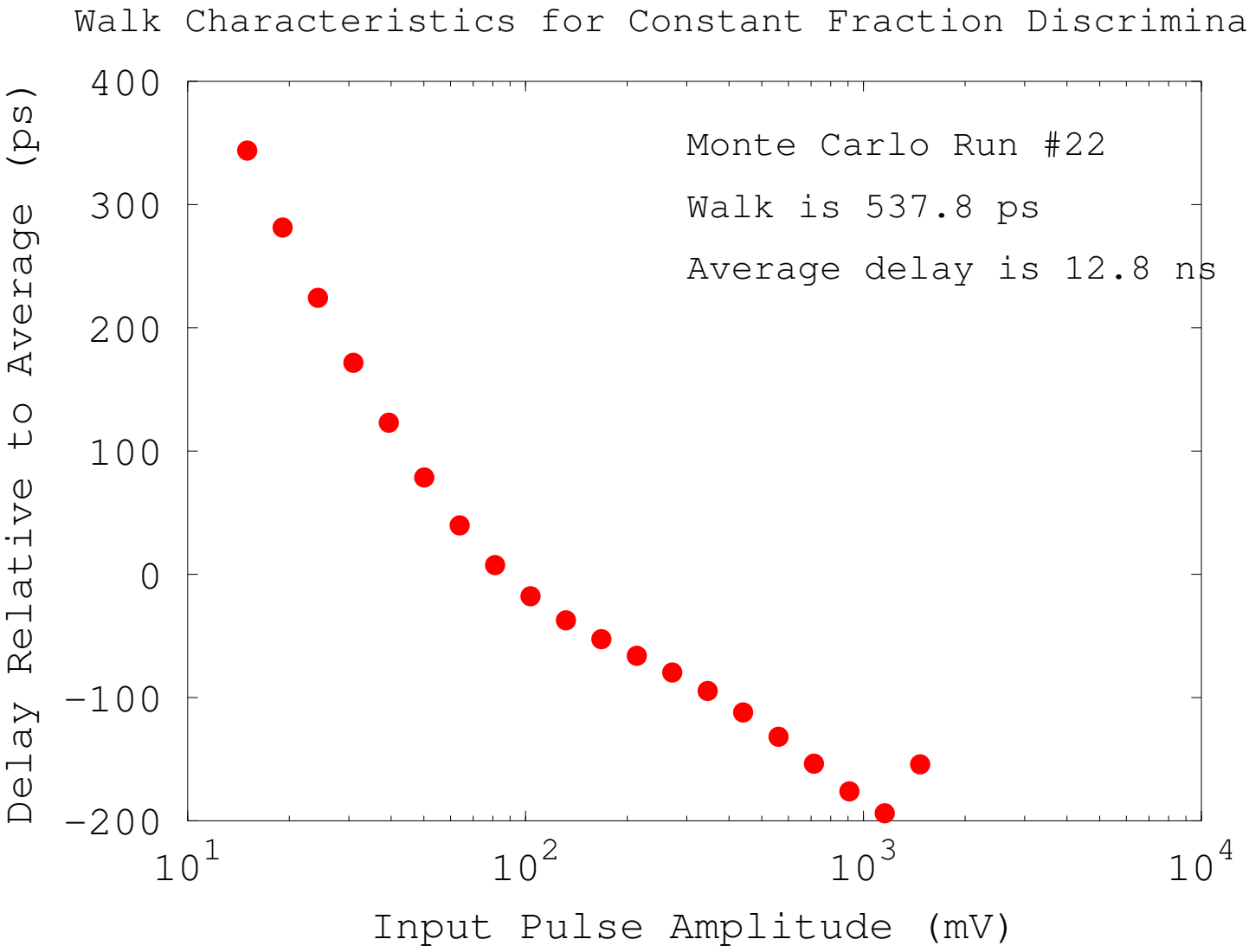

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #199
Walk is 634.1 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

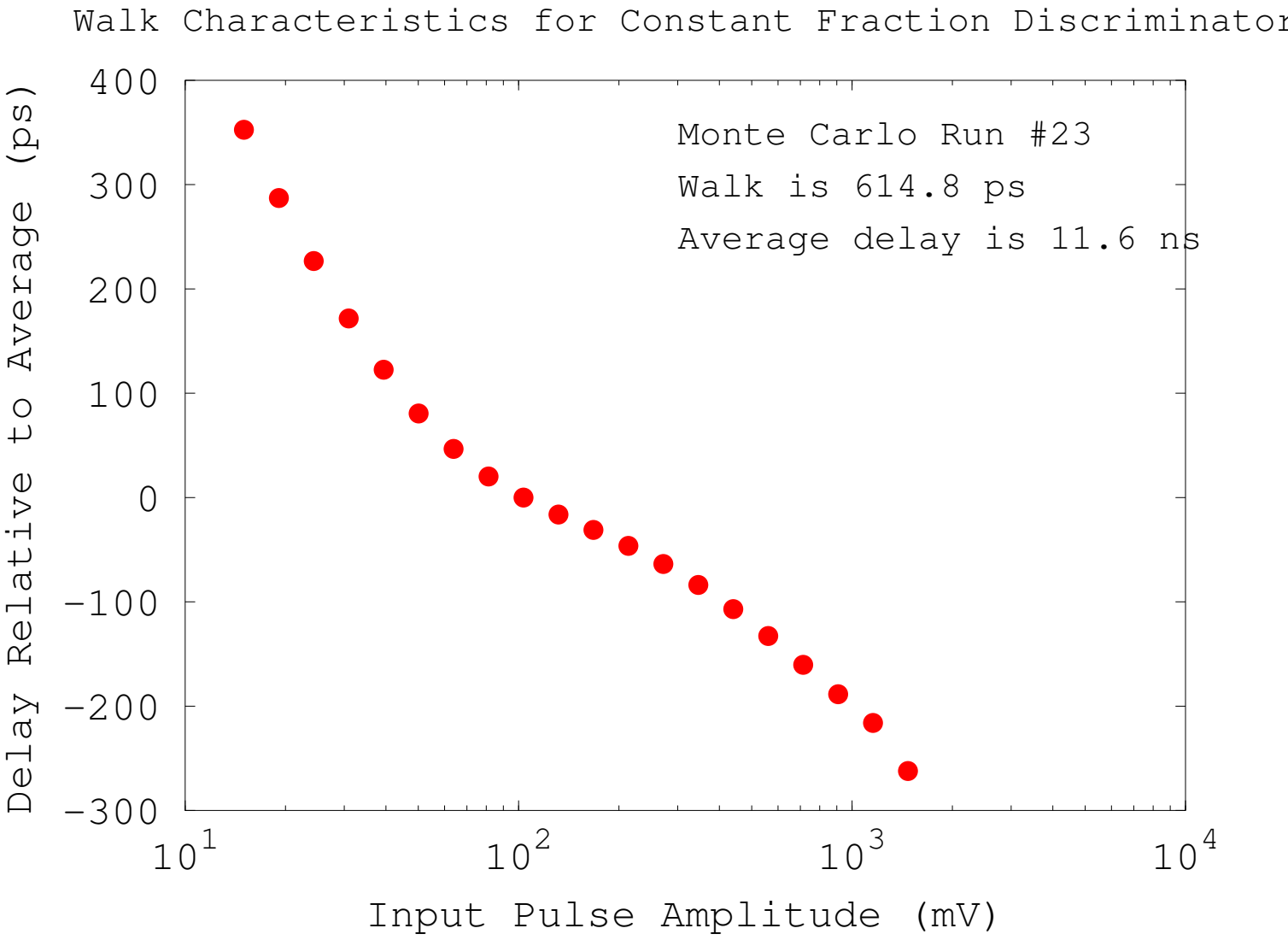

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #2
Walk is 563.5 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

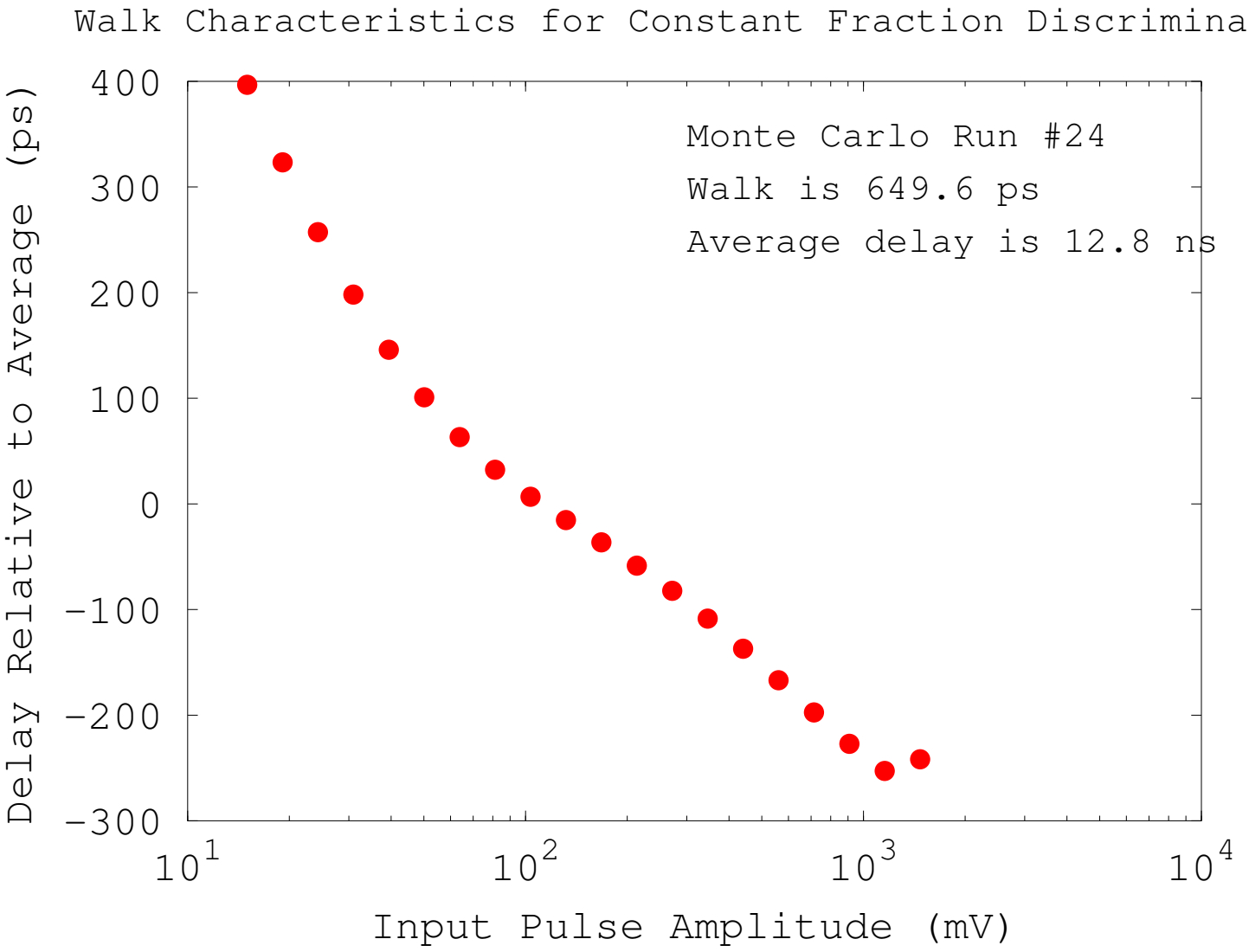

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #20
Walk is 883.1 ps
Average delay is 14.0 ns
Delay Relative to Average (ps)
800
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

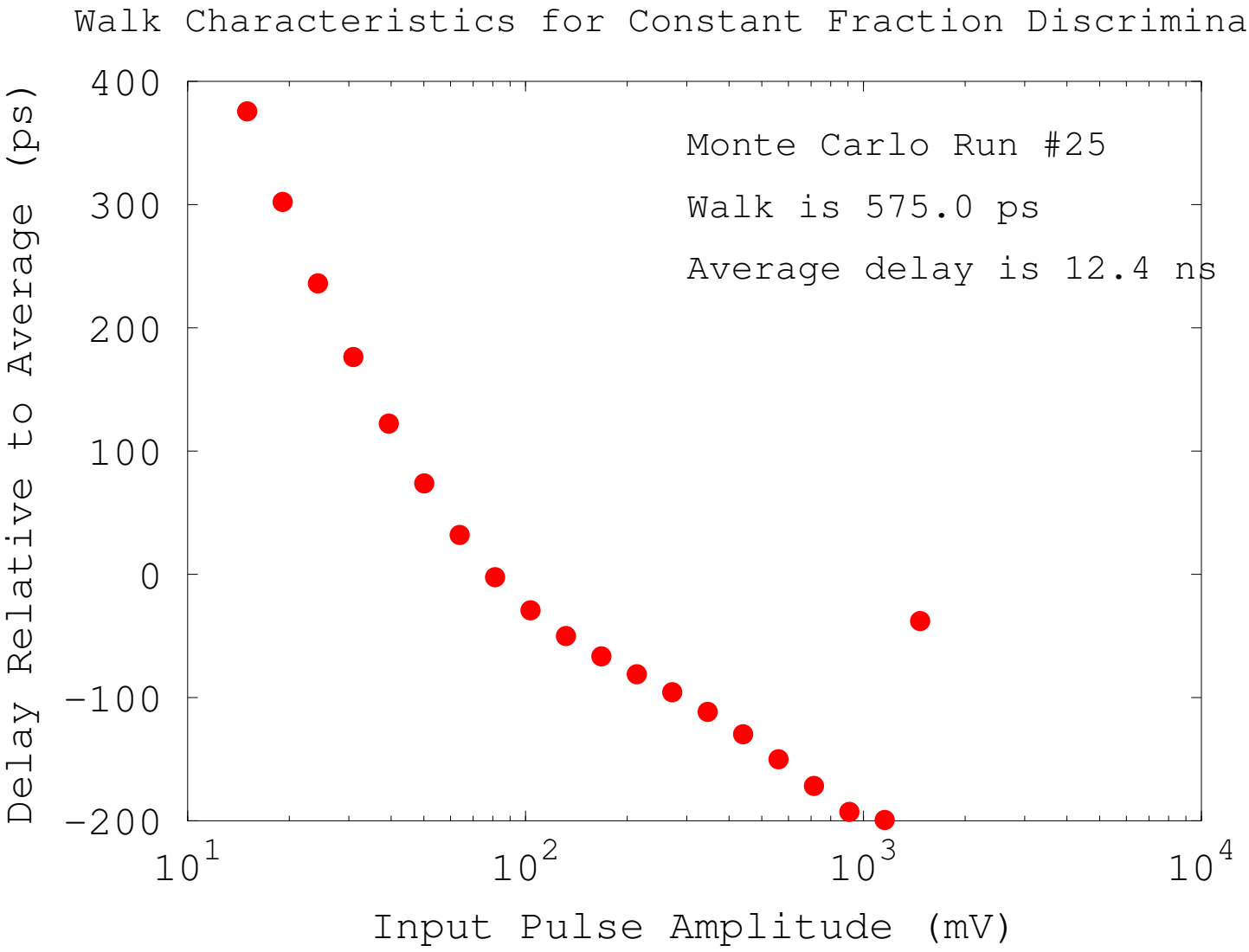

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #200
Walk is 586.1 ps
Average delay is 11.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

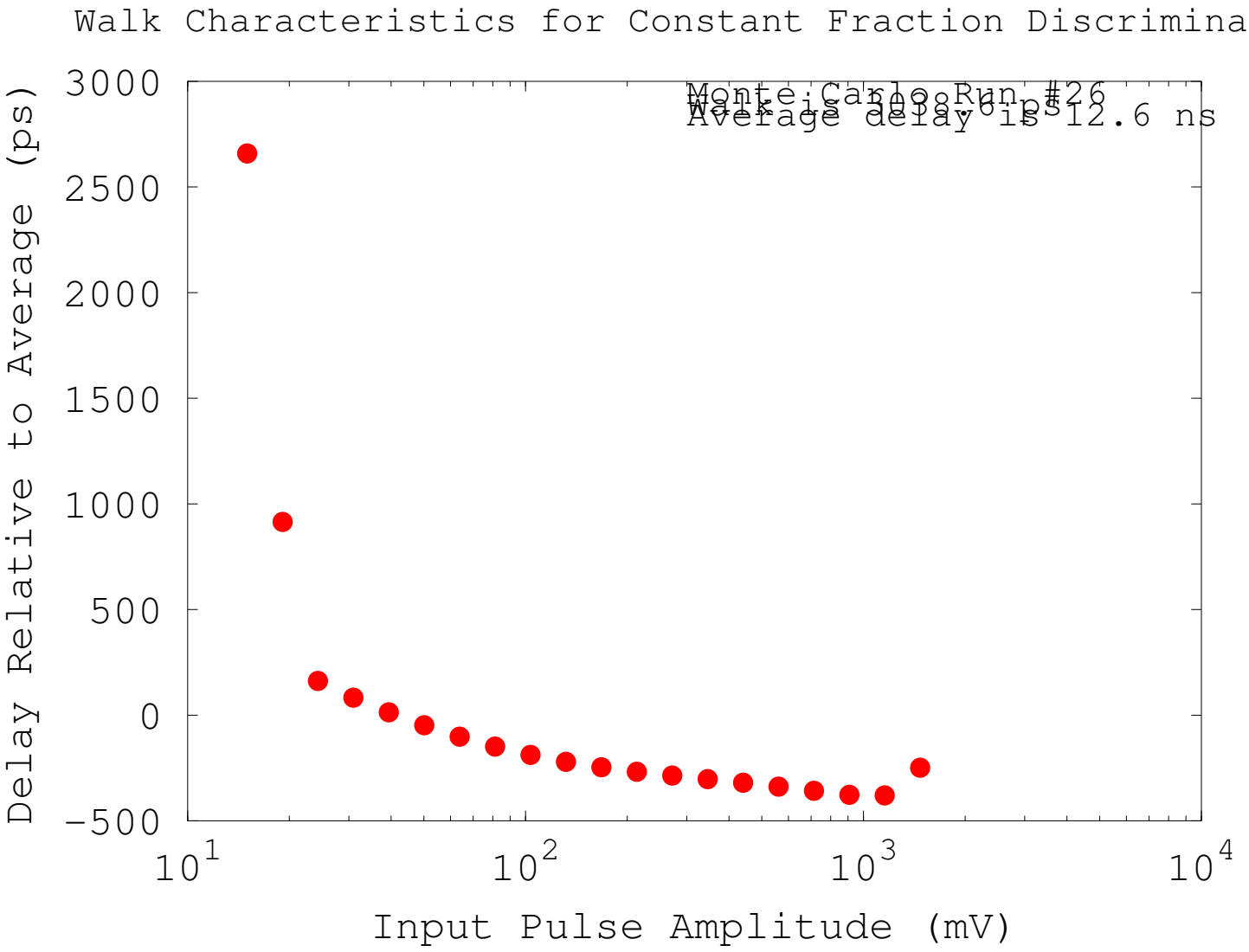

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #21
Walk is 552.8 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

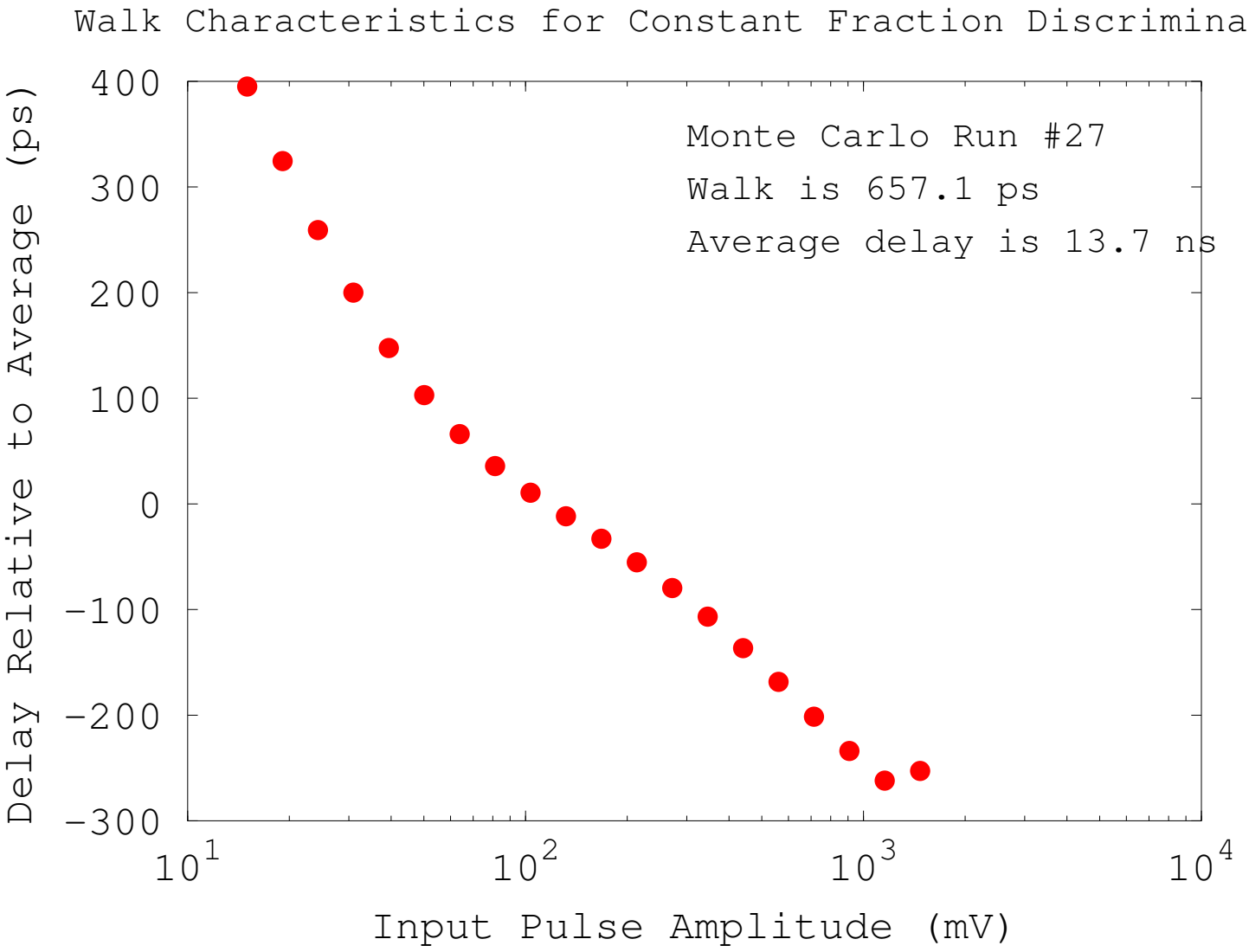

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #22
Walk is 537.8 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

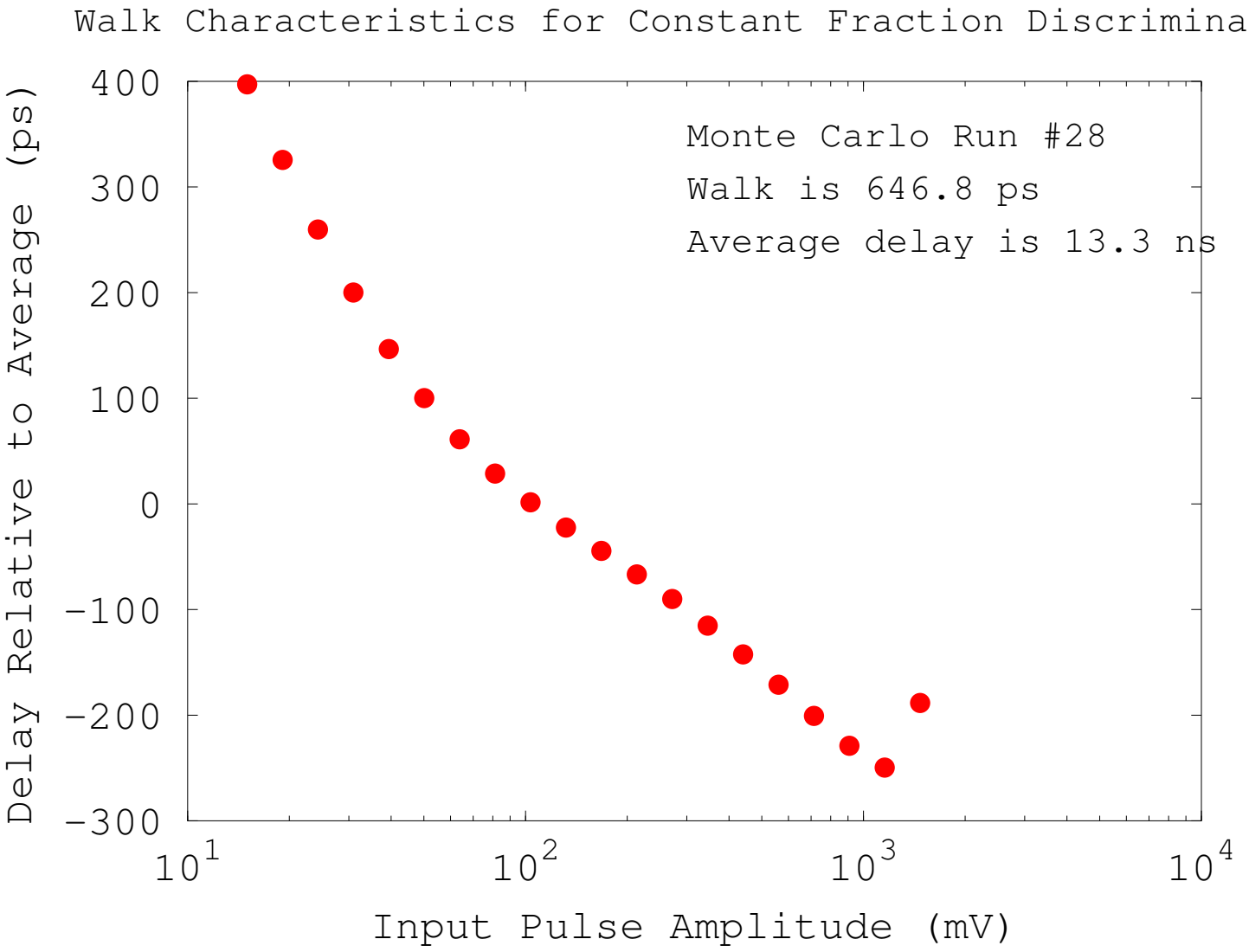

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #23
Walk is 614.8 ps
Average delay is 11.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

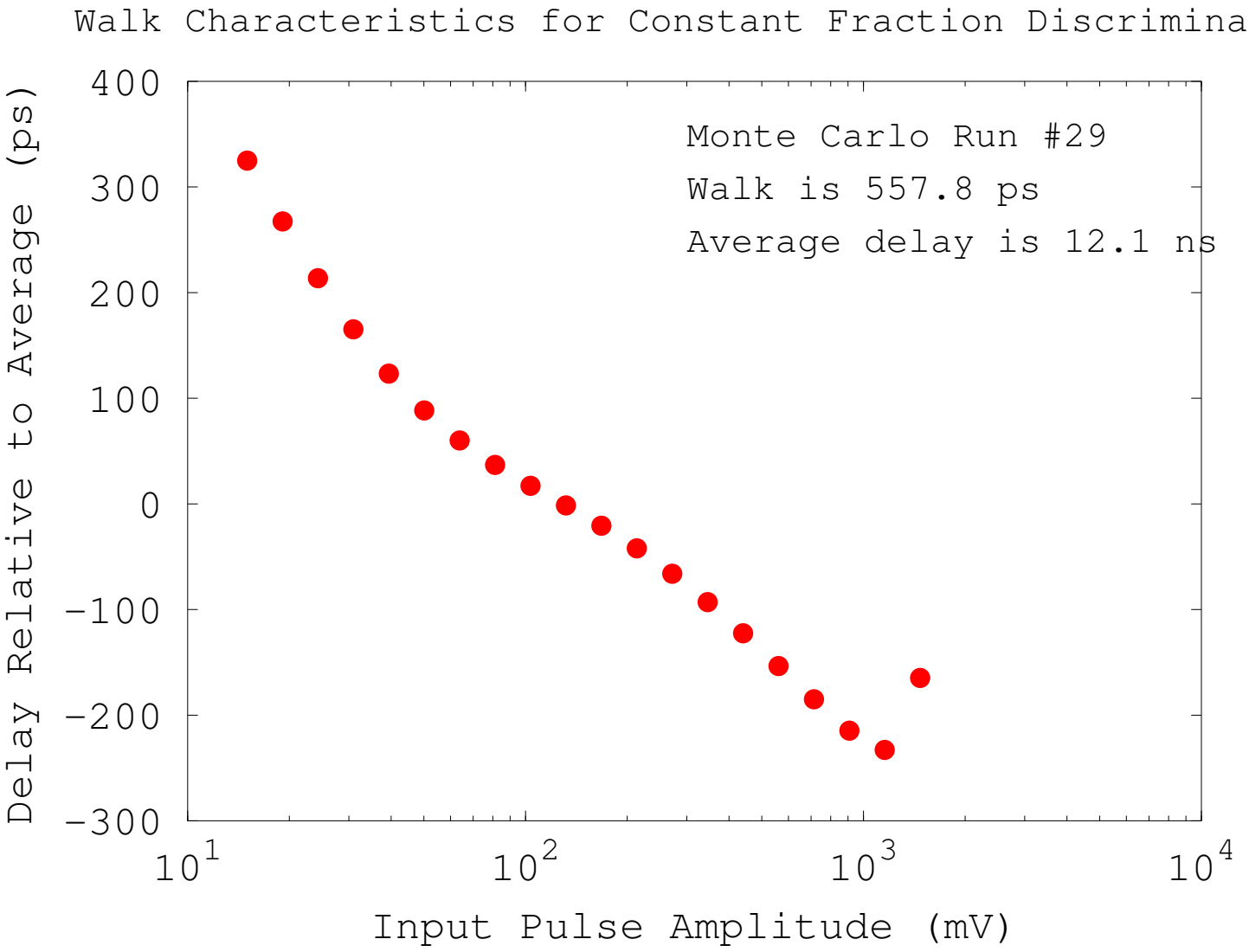

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #24
Walk is 649.6 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

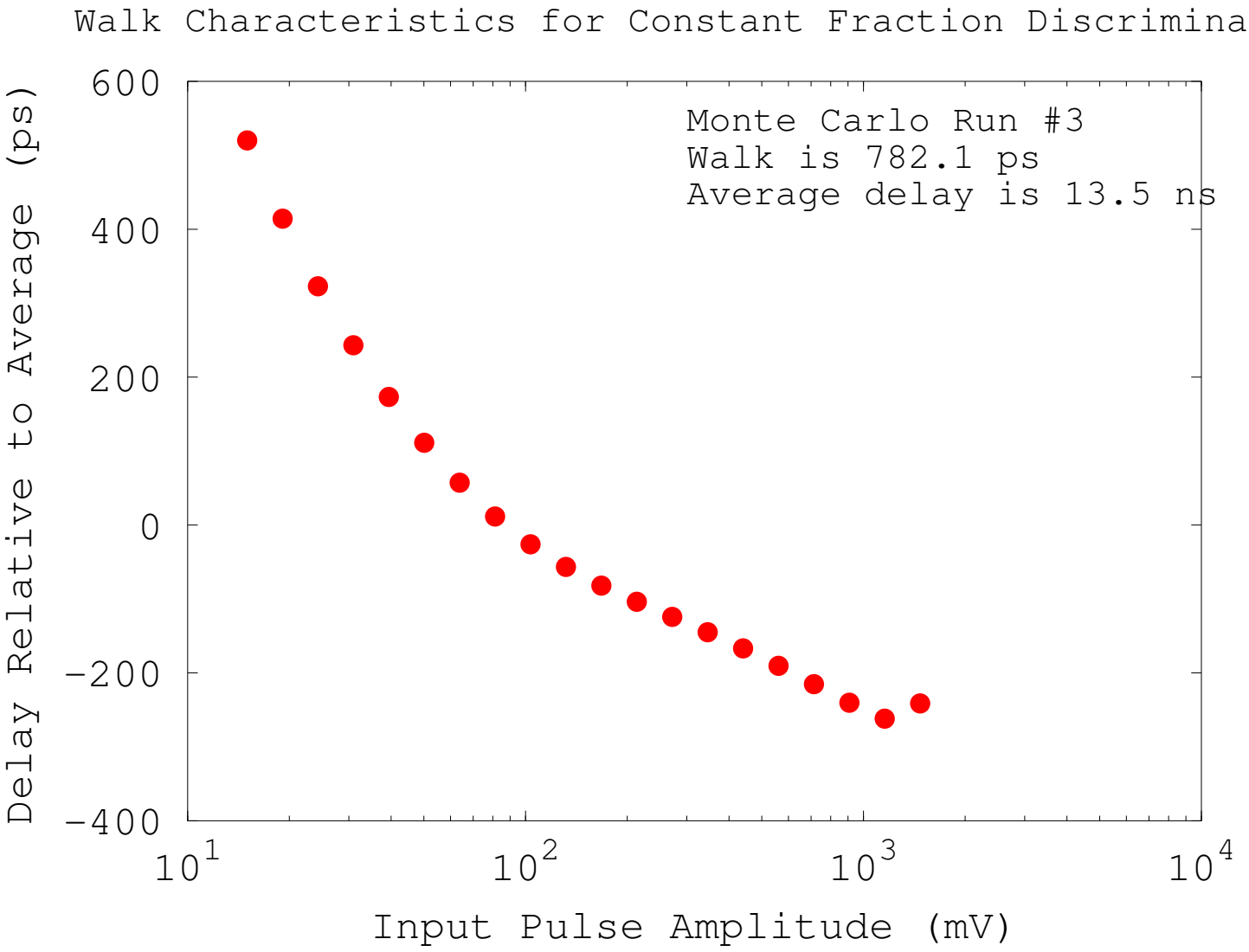

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #25
Walk is 575.0 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

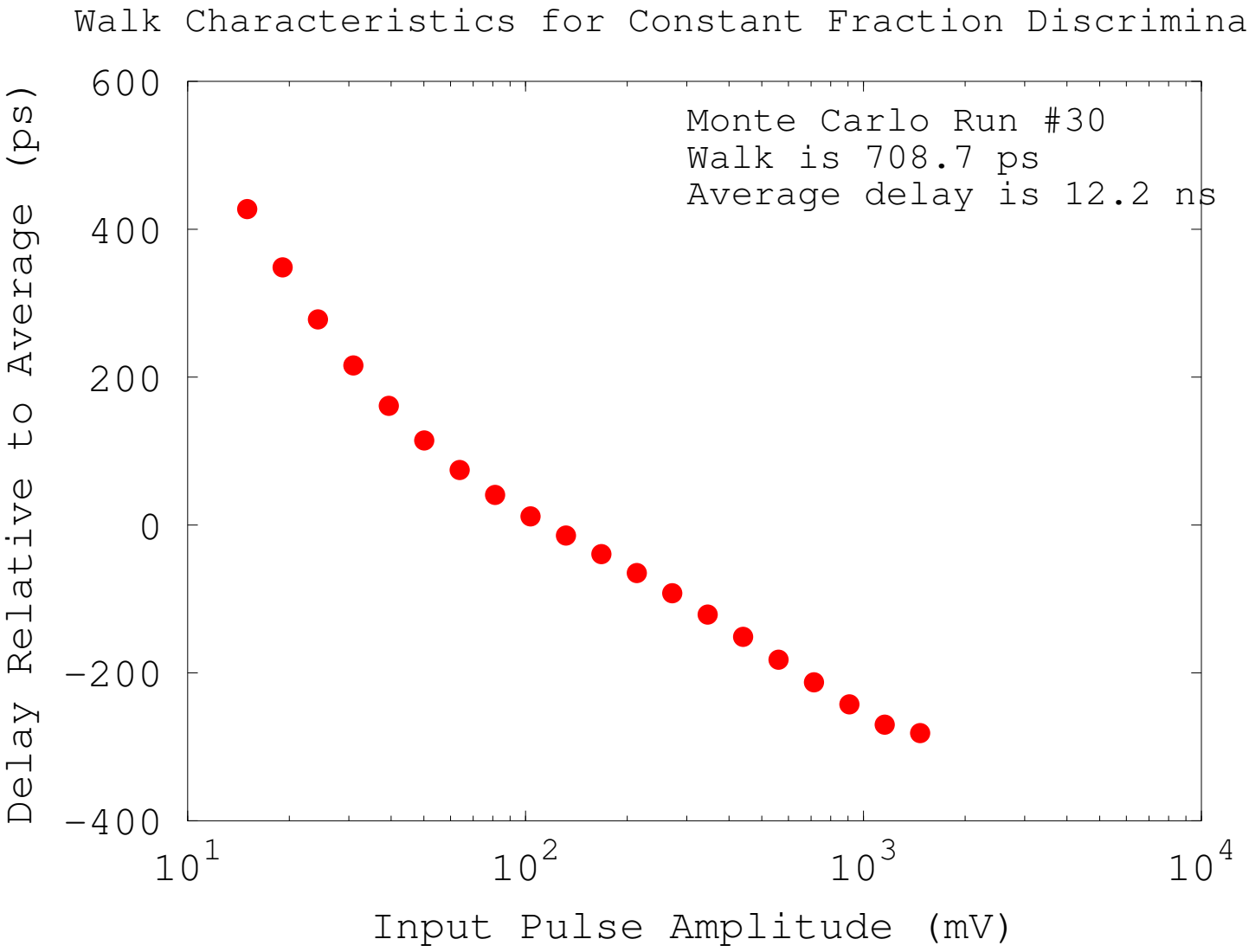

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #26
Walk is 3038.6 ps
Average delay is 12.6 ns
Delay Relative to Average (ps)
3000
2500
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

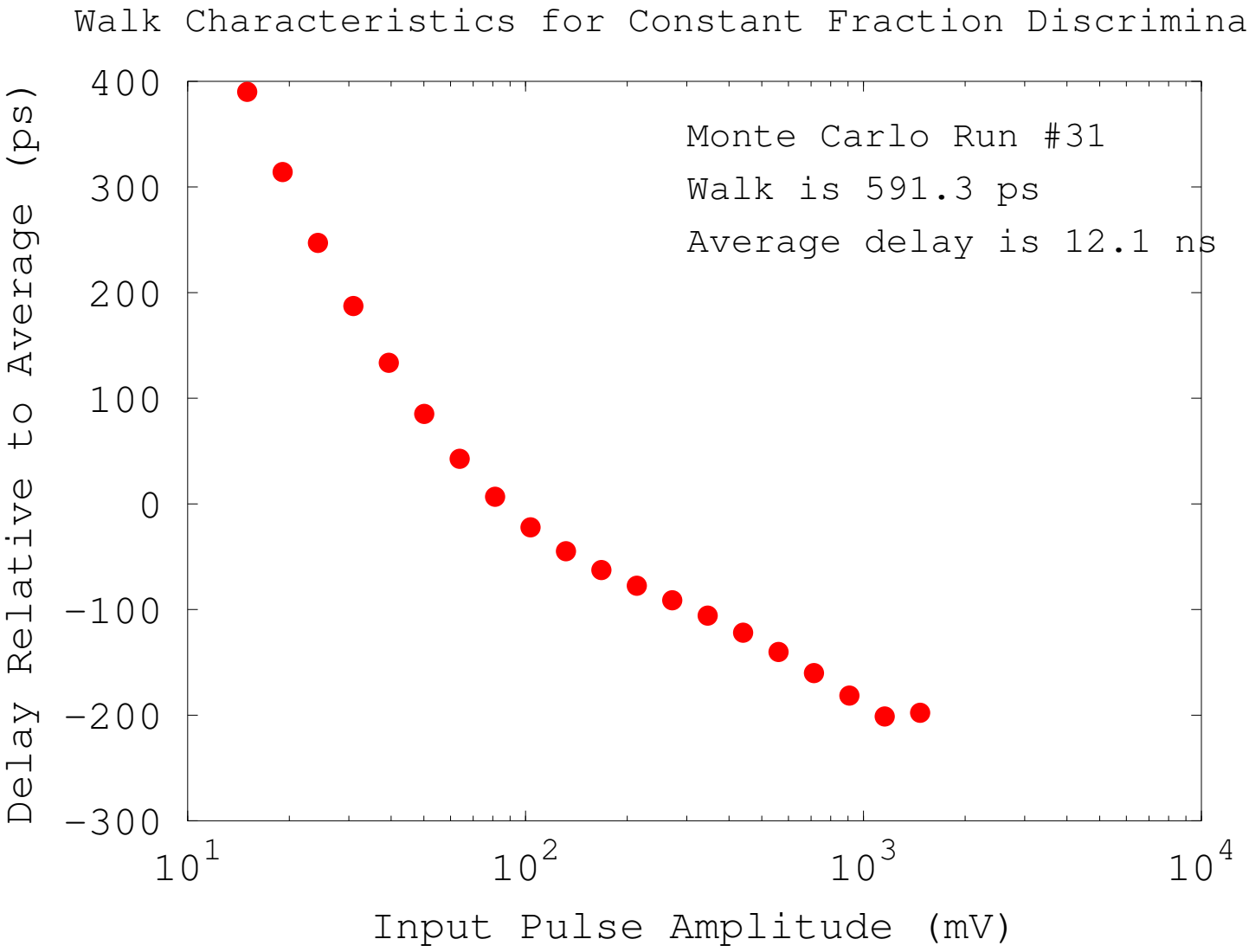

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #27
Walk is 657.1 ps
Average delay is 13.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

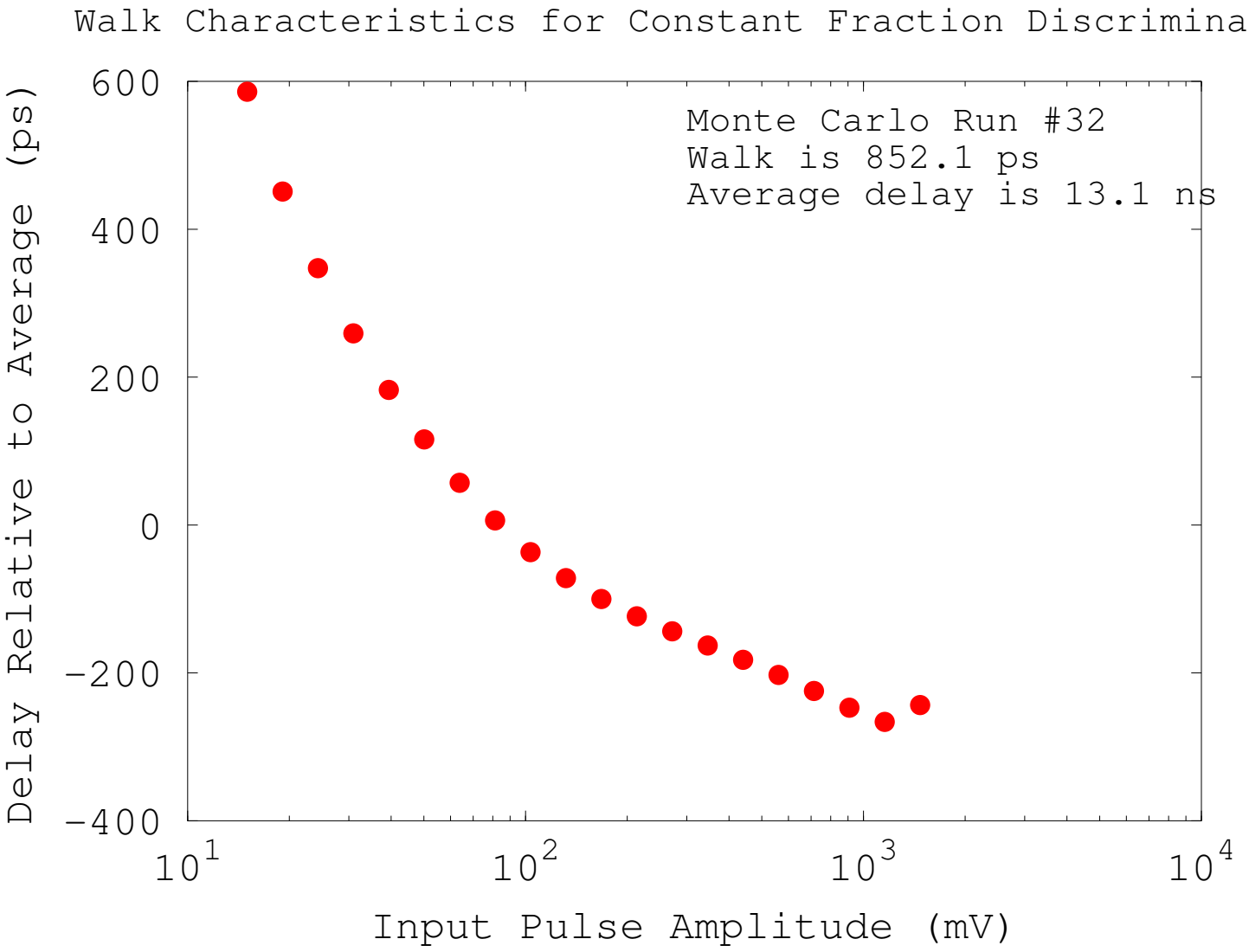

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #28
Walk is 646.8 ps
Average delay is 13.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

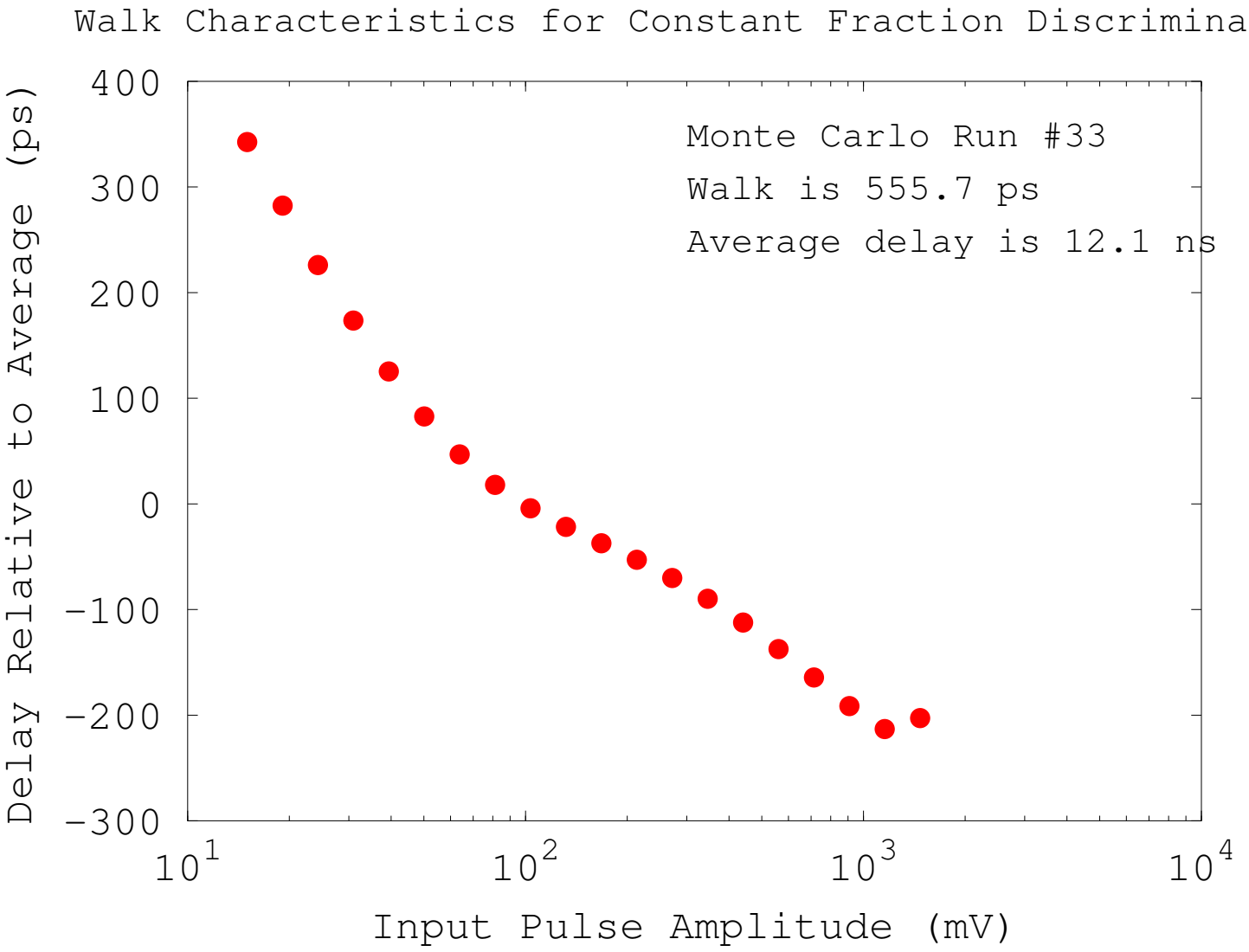

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #29
Walk is 557.8 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

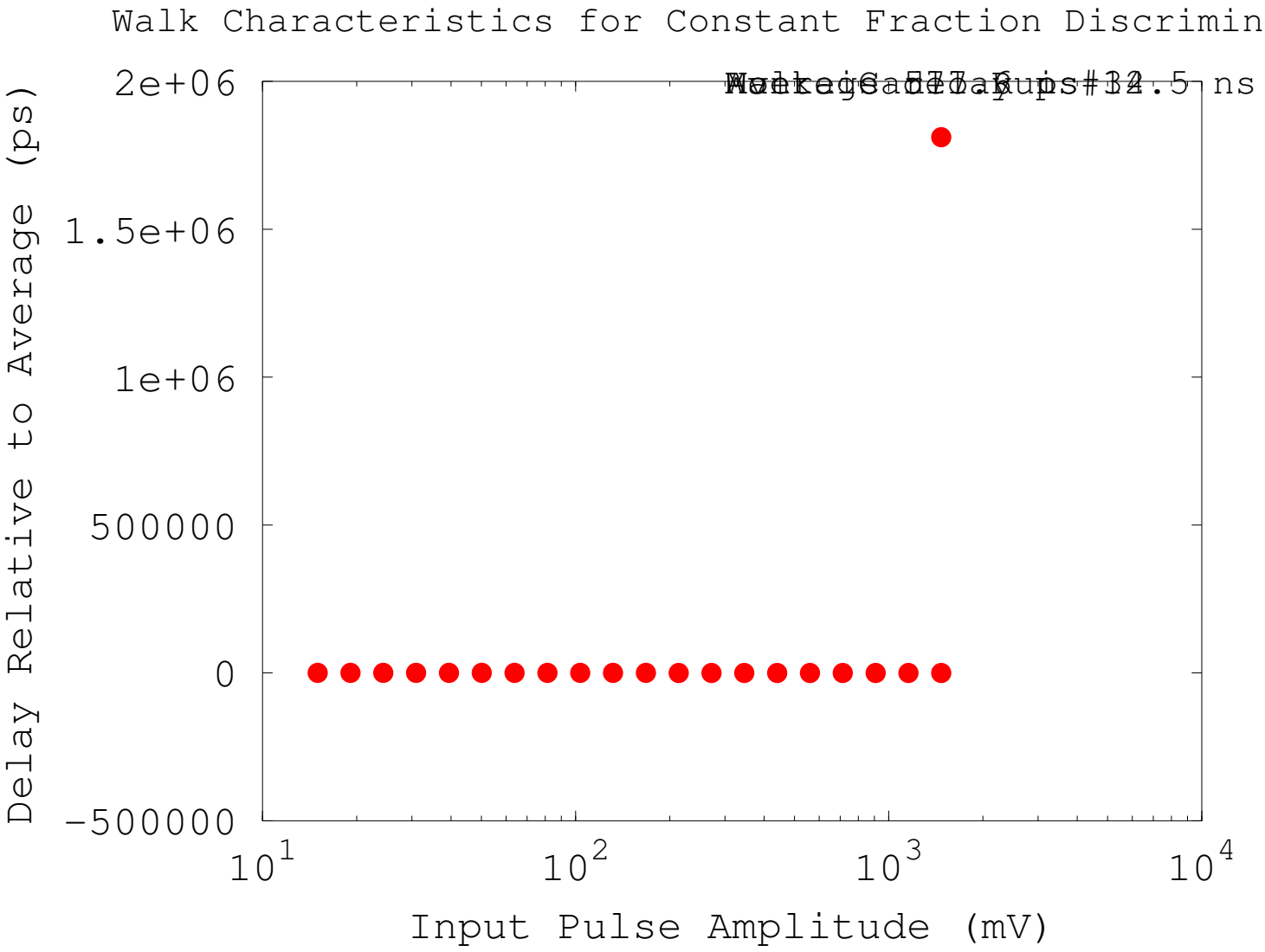

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #3
Walk is 782.1 ps
Average delay is 13.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

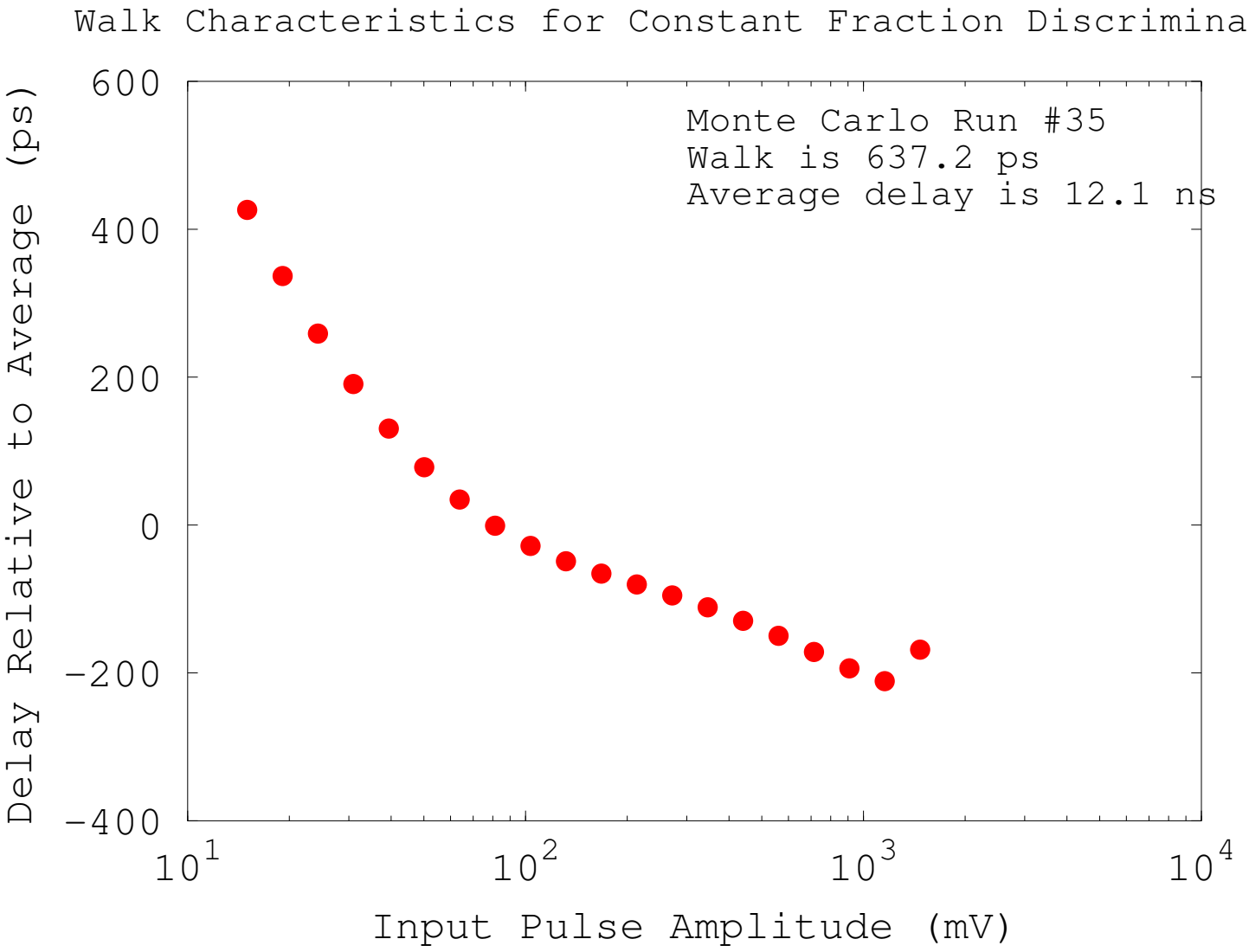

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #30
Walk is 708.7 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

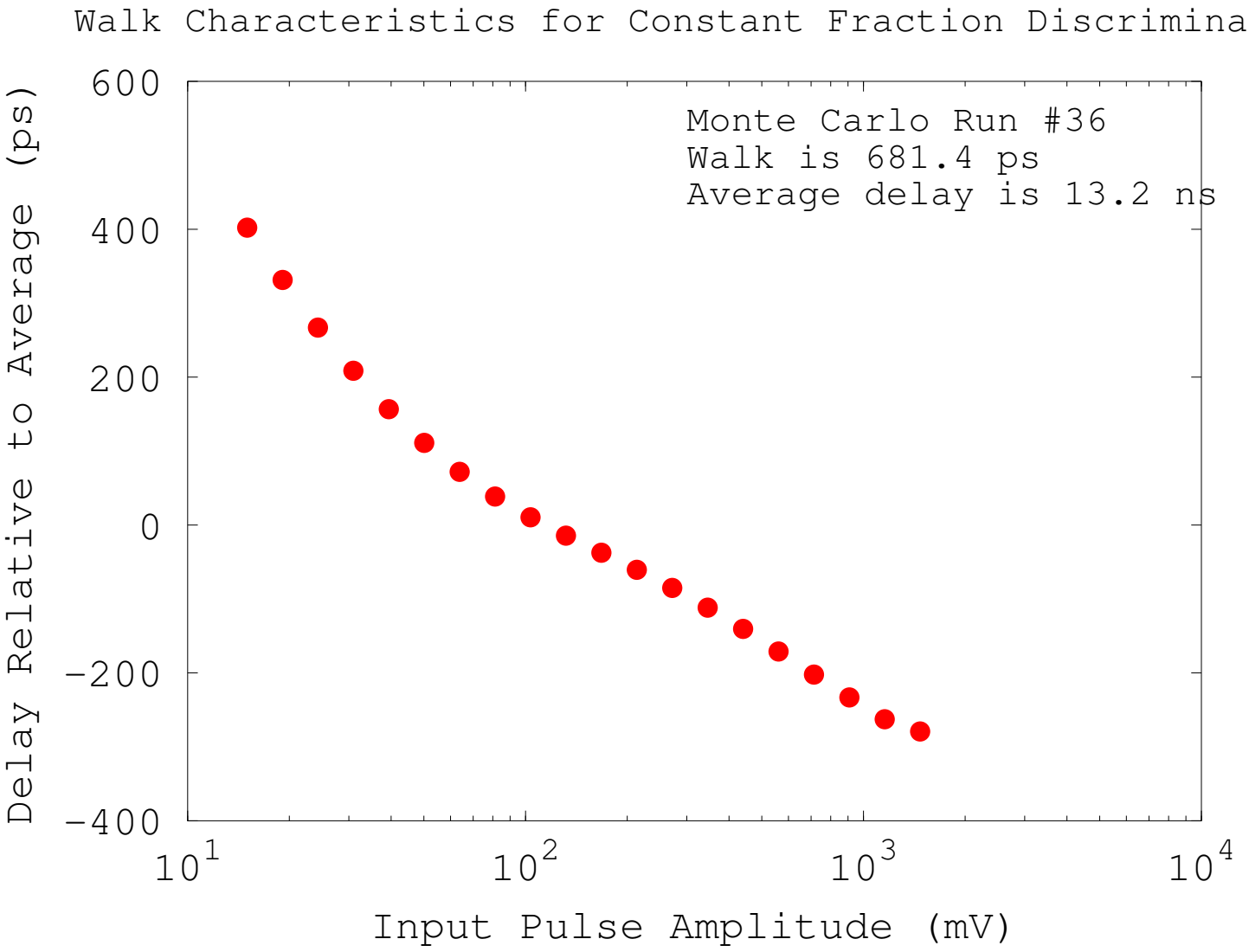

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #31
Walk is 591.3 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

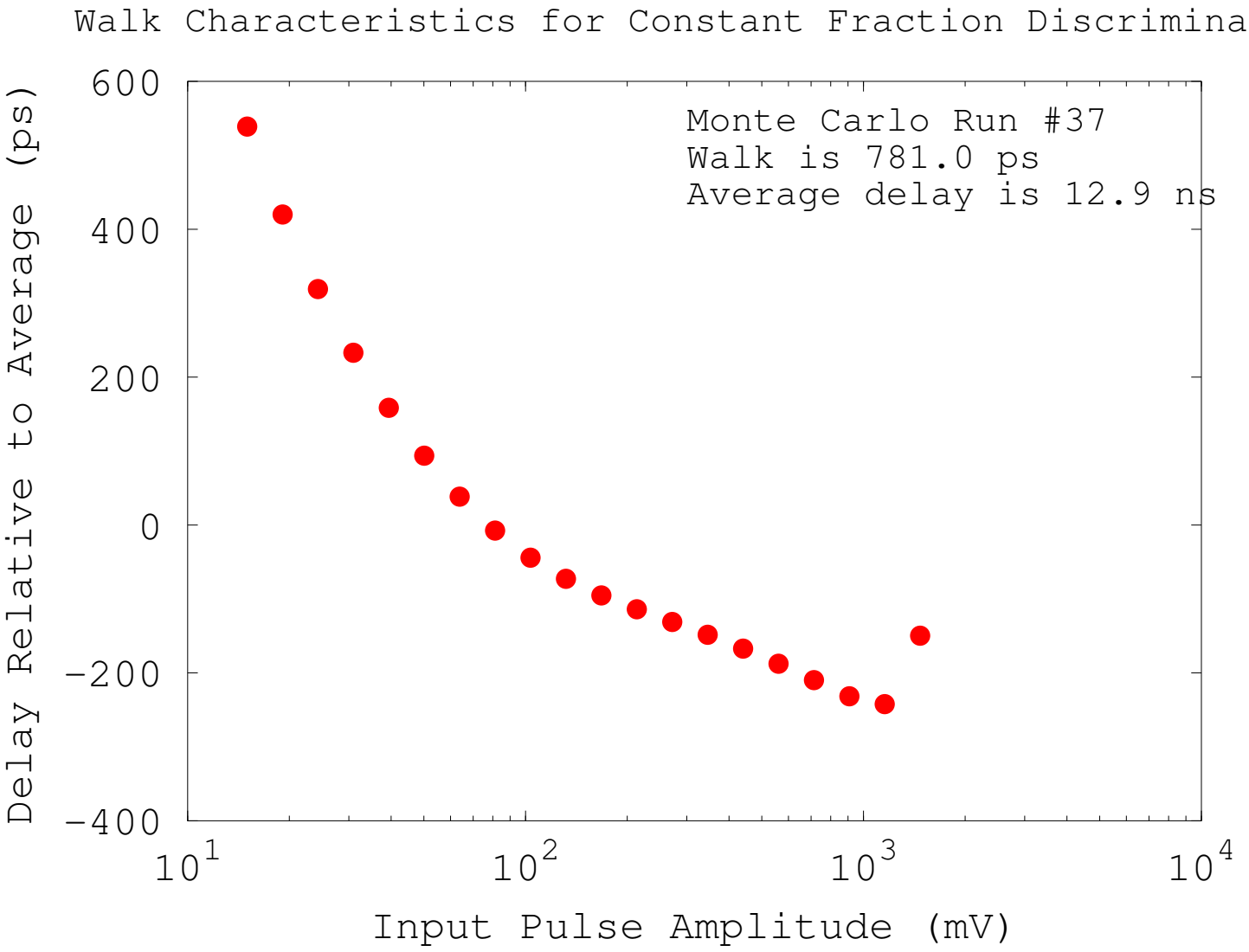

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #32
Walk is 852.1 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

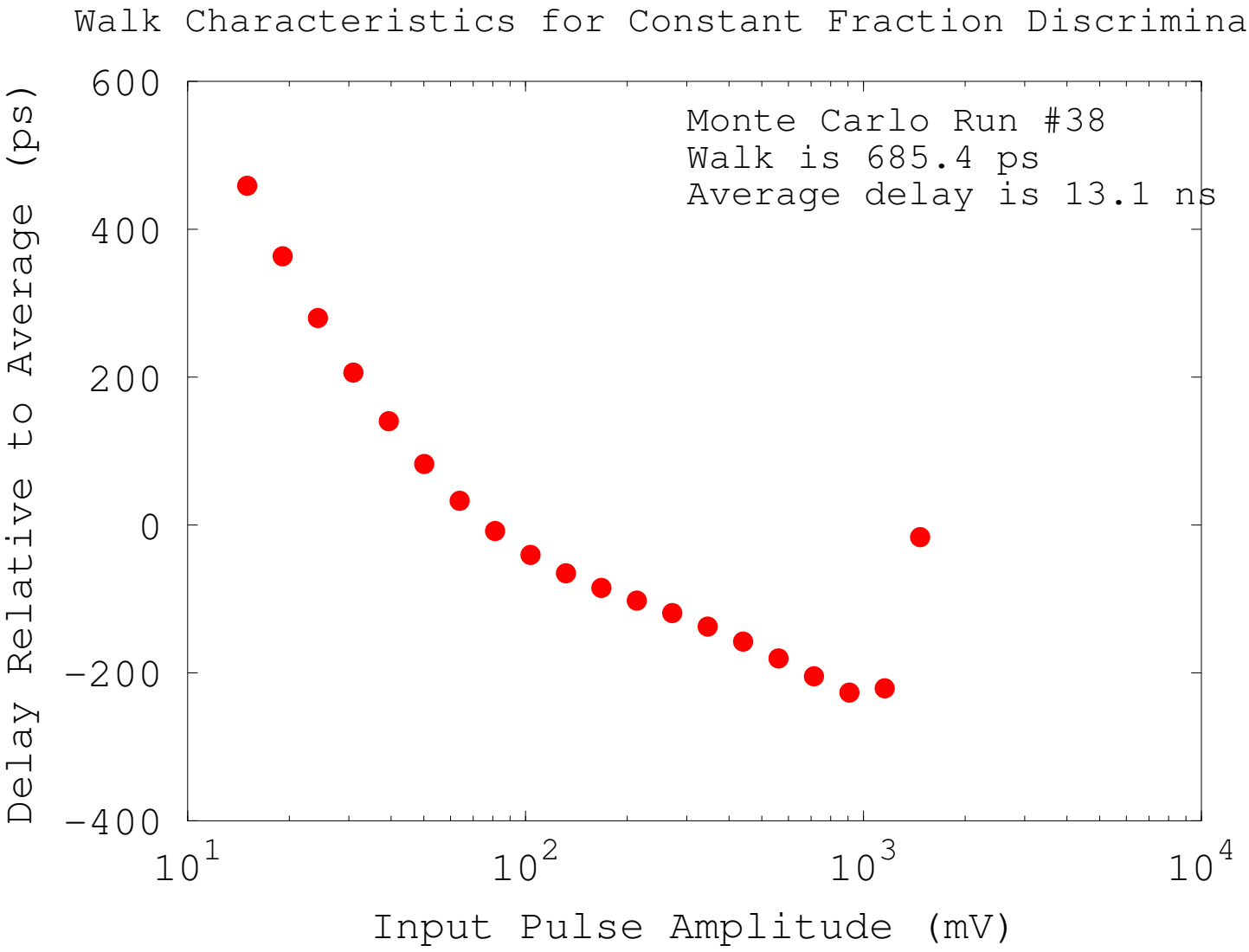

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #33
Walk is 555.7 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

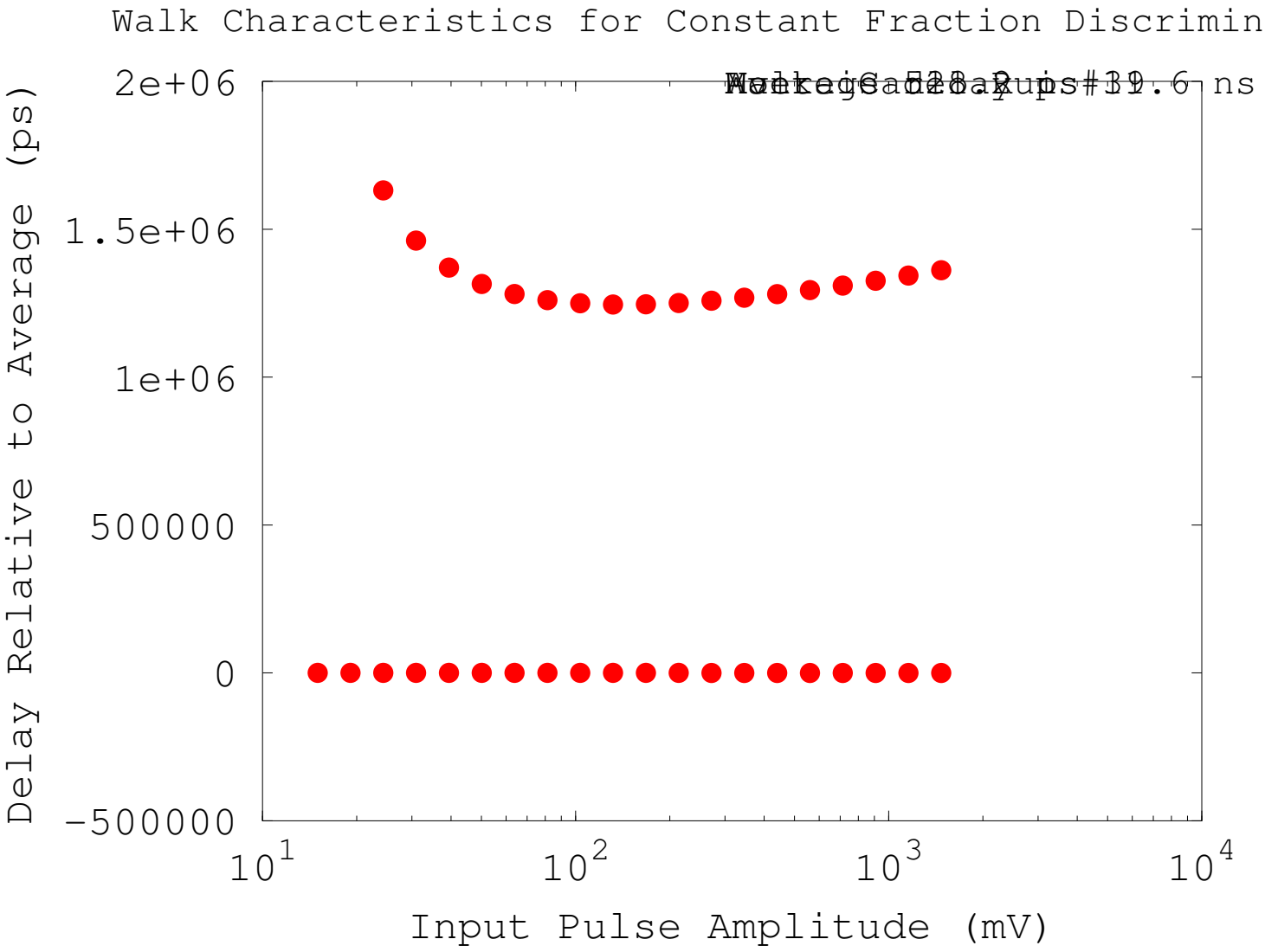

Walk Characteristics for Constant Fraction Discriminat
Delay Relative to Average (ps)
2e+06
1.5e+06
1e+06
500000
0
-500000
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

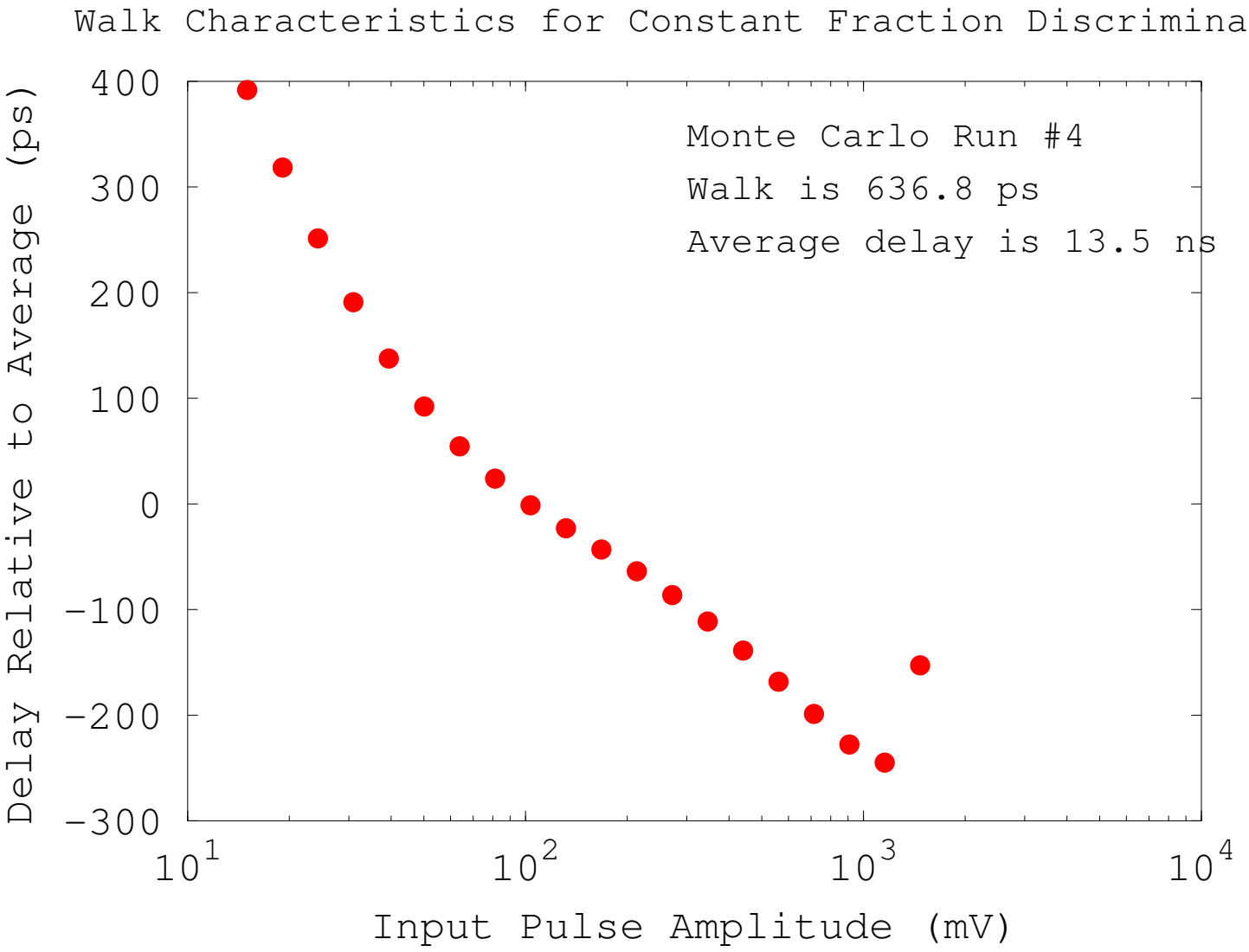

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #35
Walk is 637.2 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

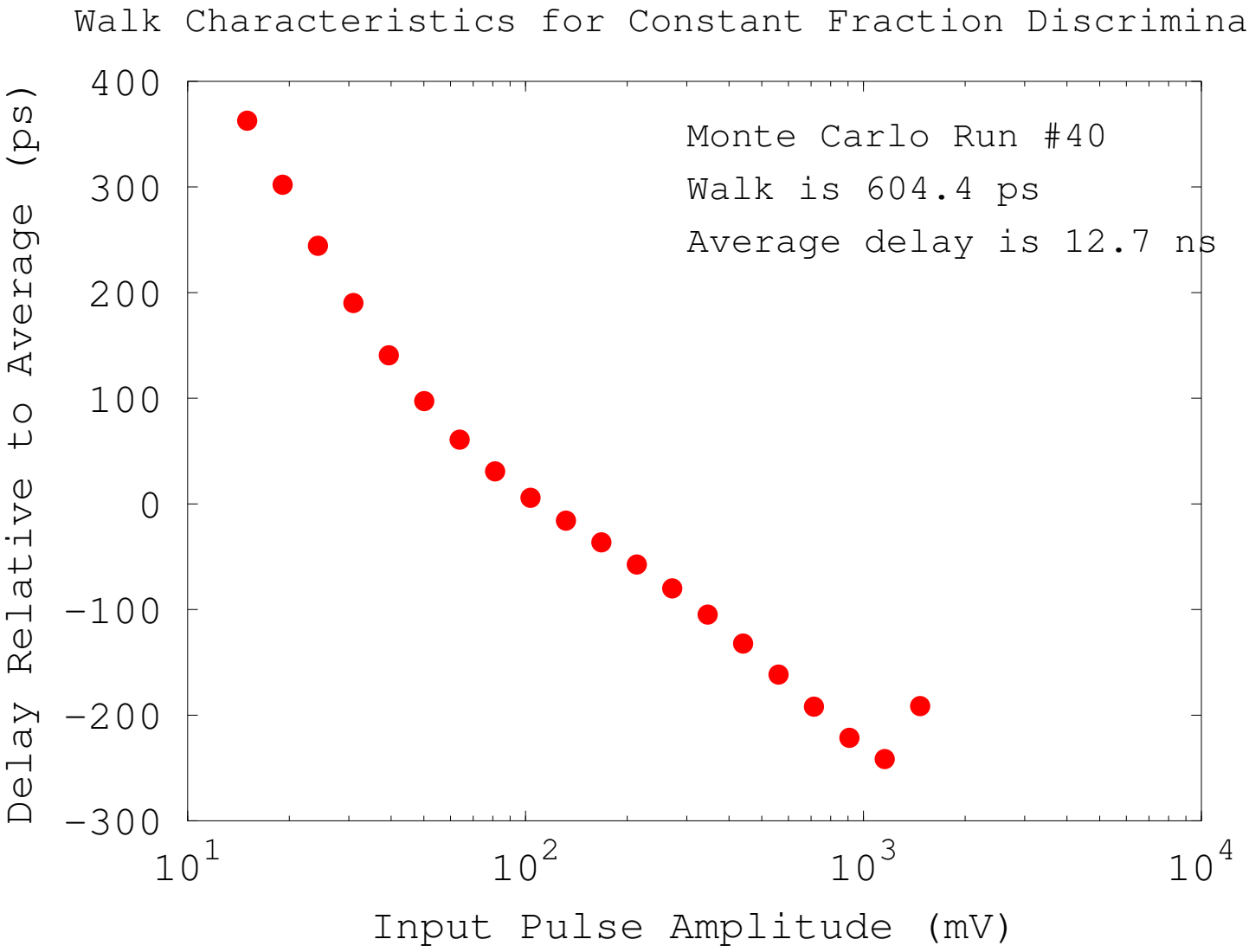

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #36
Walk is 681.4 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

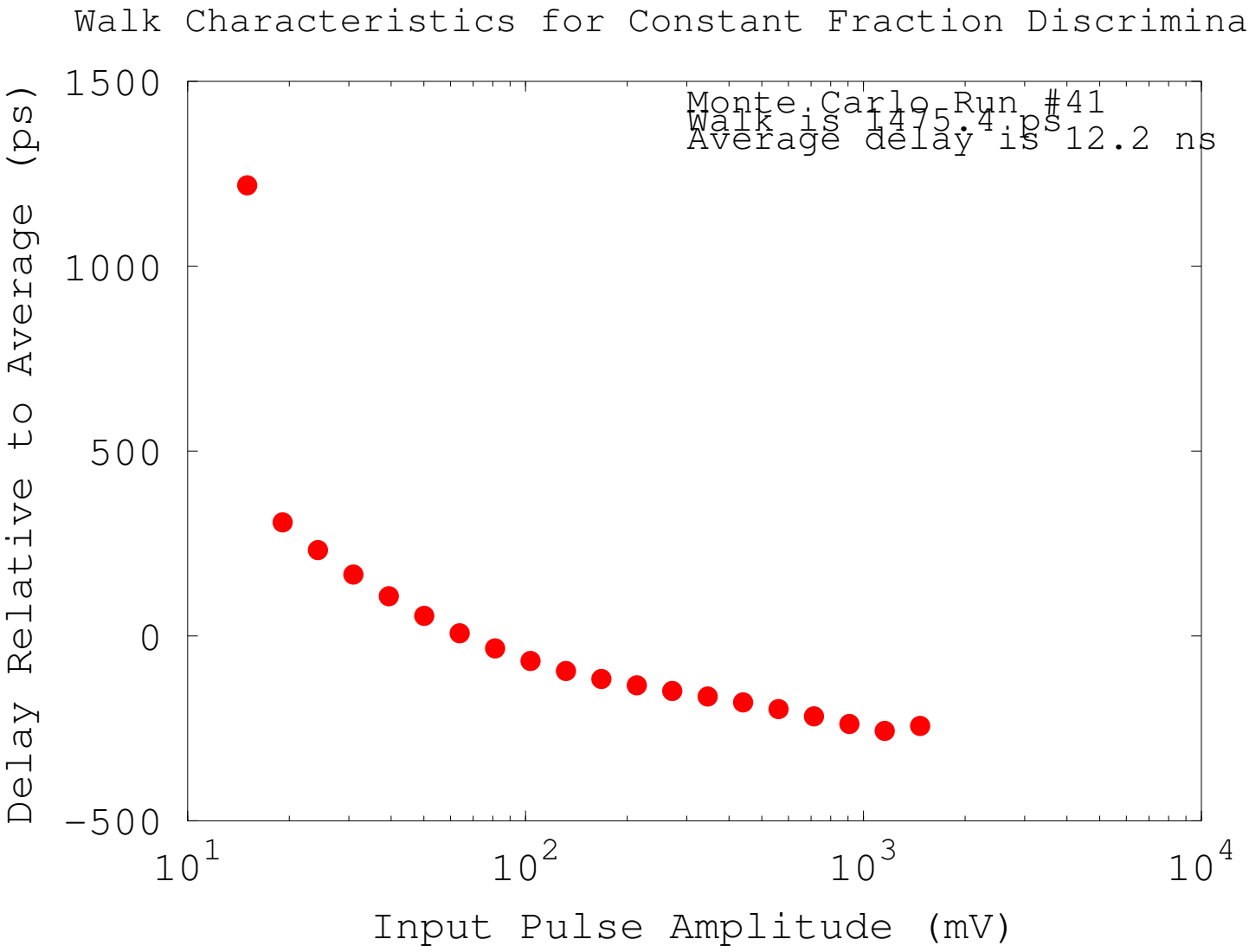

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #37
Walk is 781.0 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

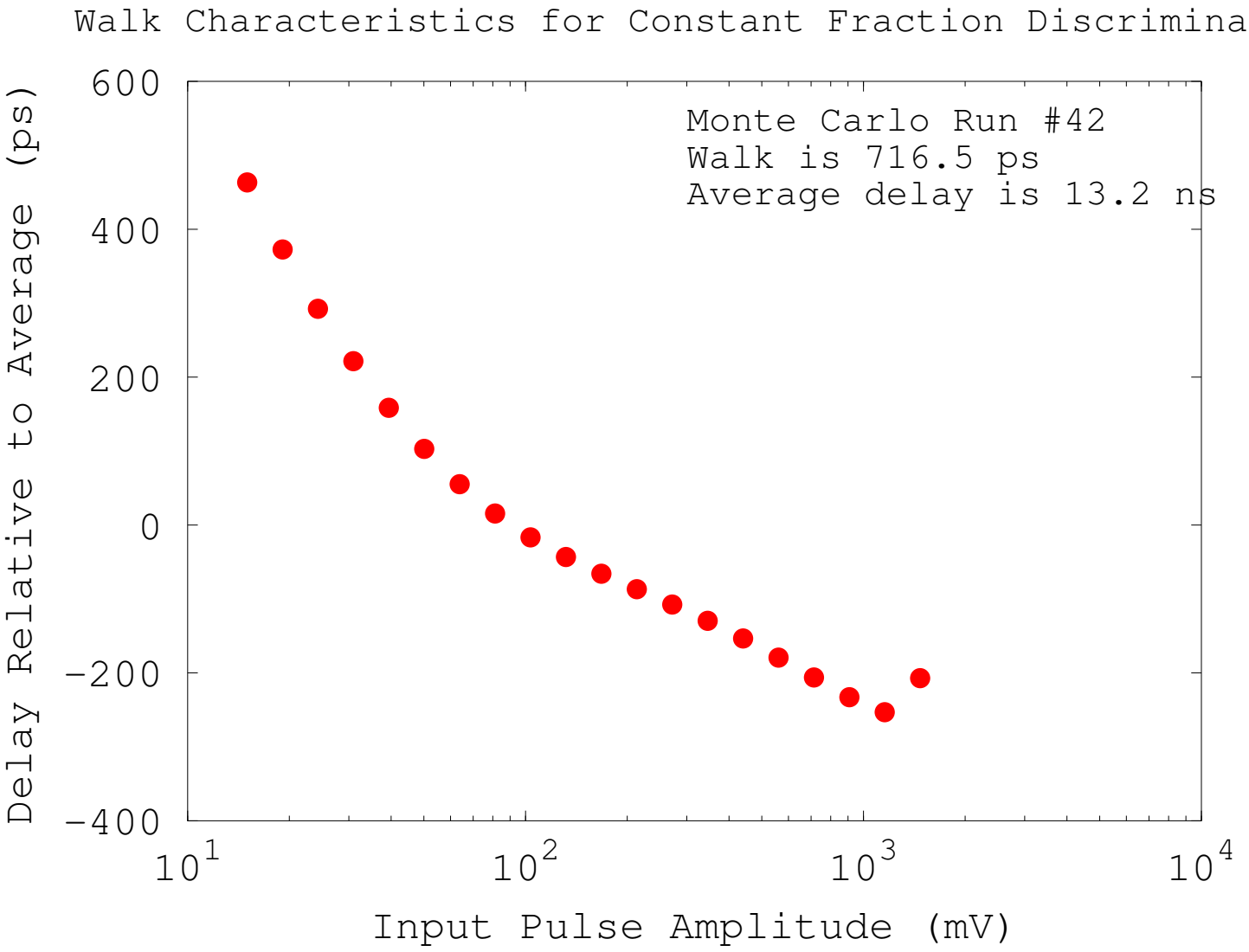

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #38
Walk is 685.4 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

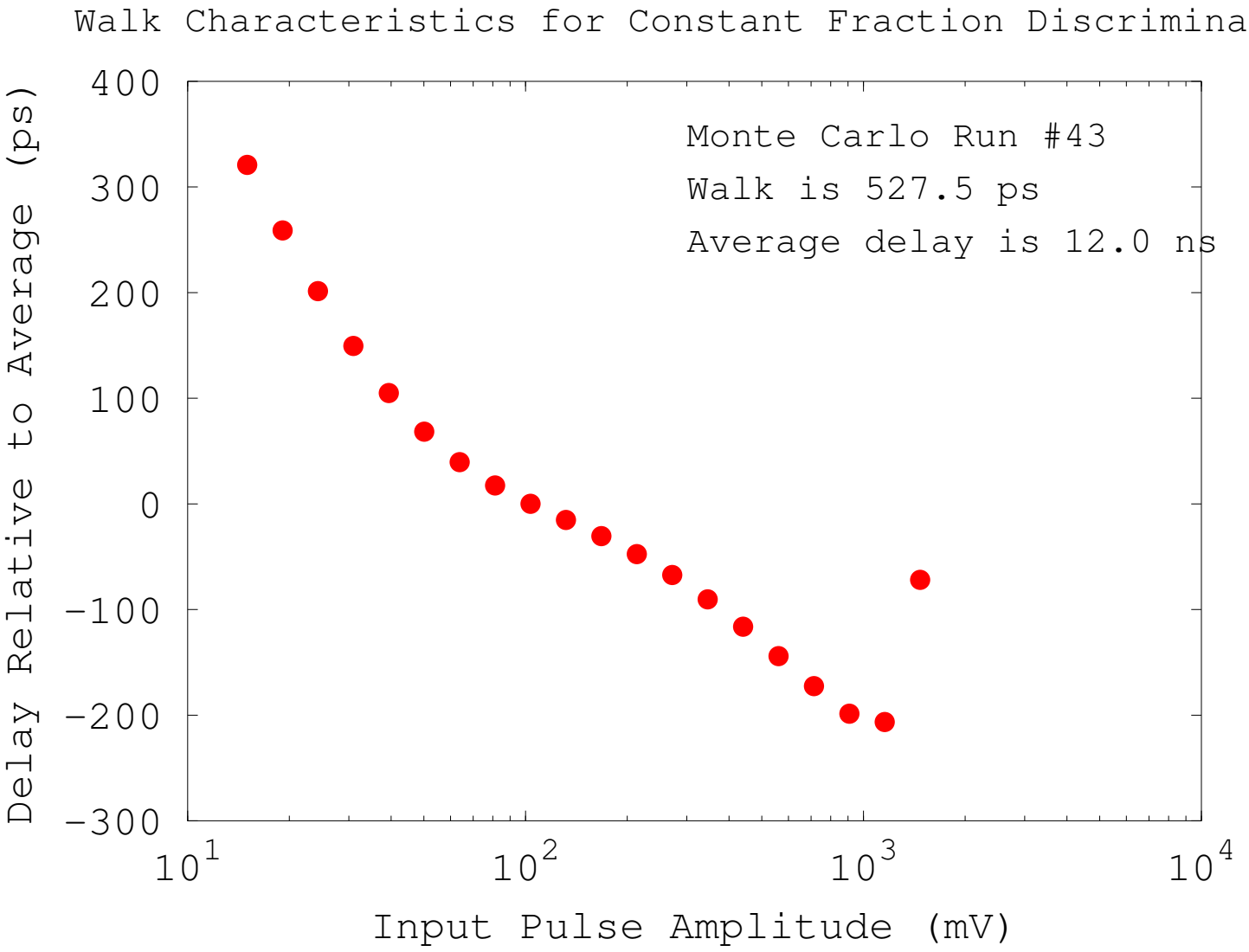

Walk Characteristics for Constant Fraction Discriminat
Delay Relative to Average (ps)
2e+06
1.5e+06
1e+06
500000
0
-500000
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

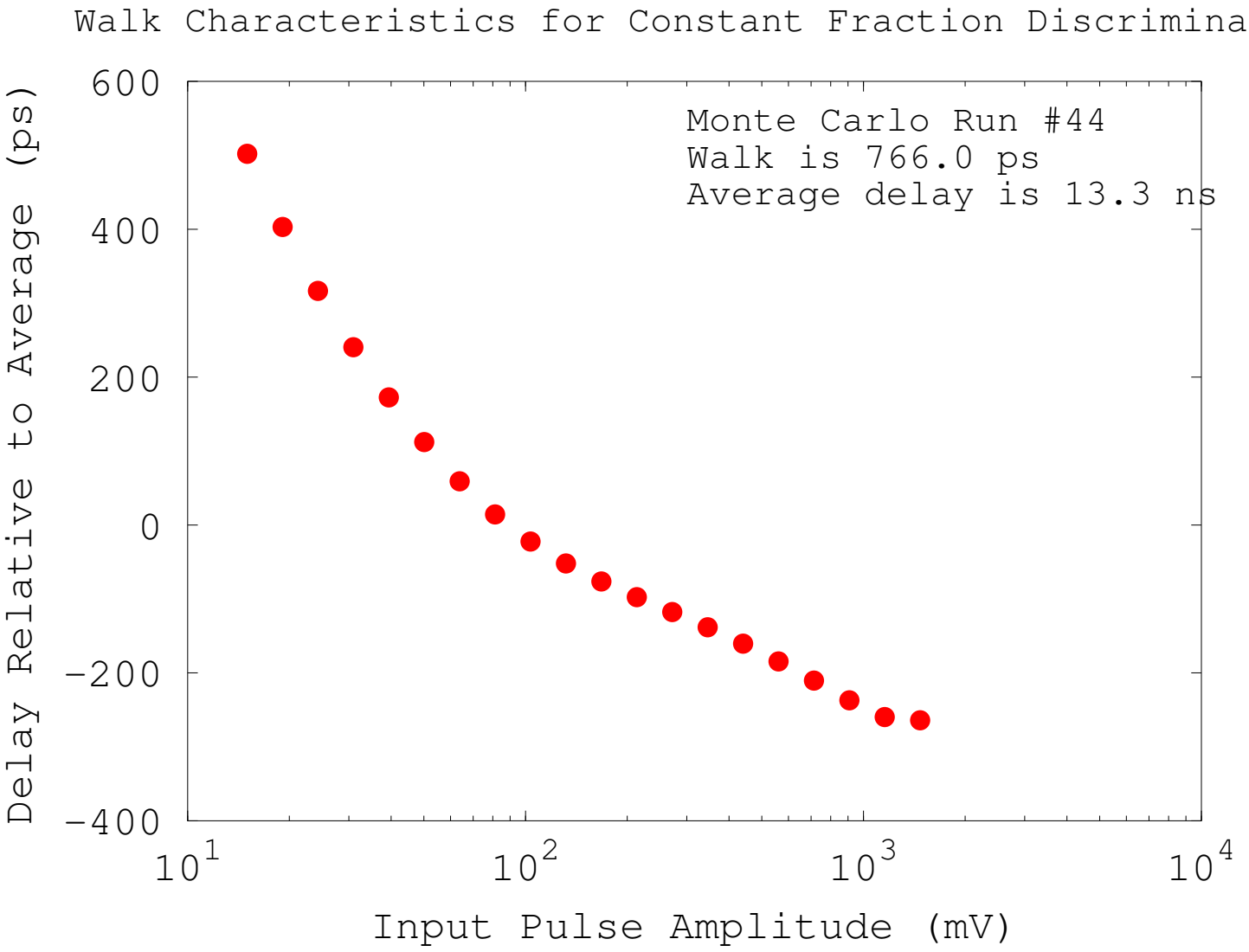

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #4
Walk is 636.8 ps
Average delay is 13.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

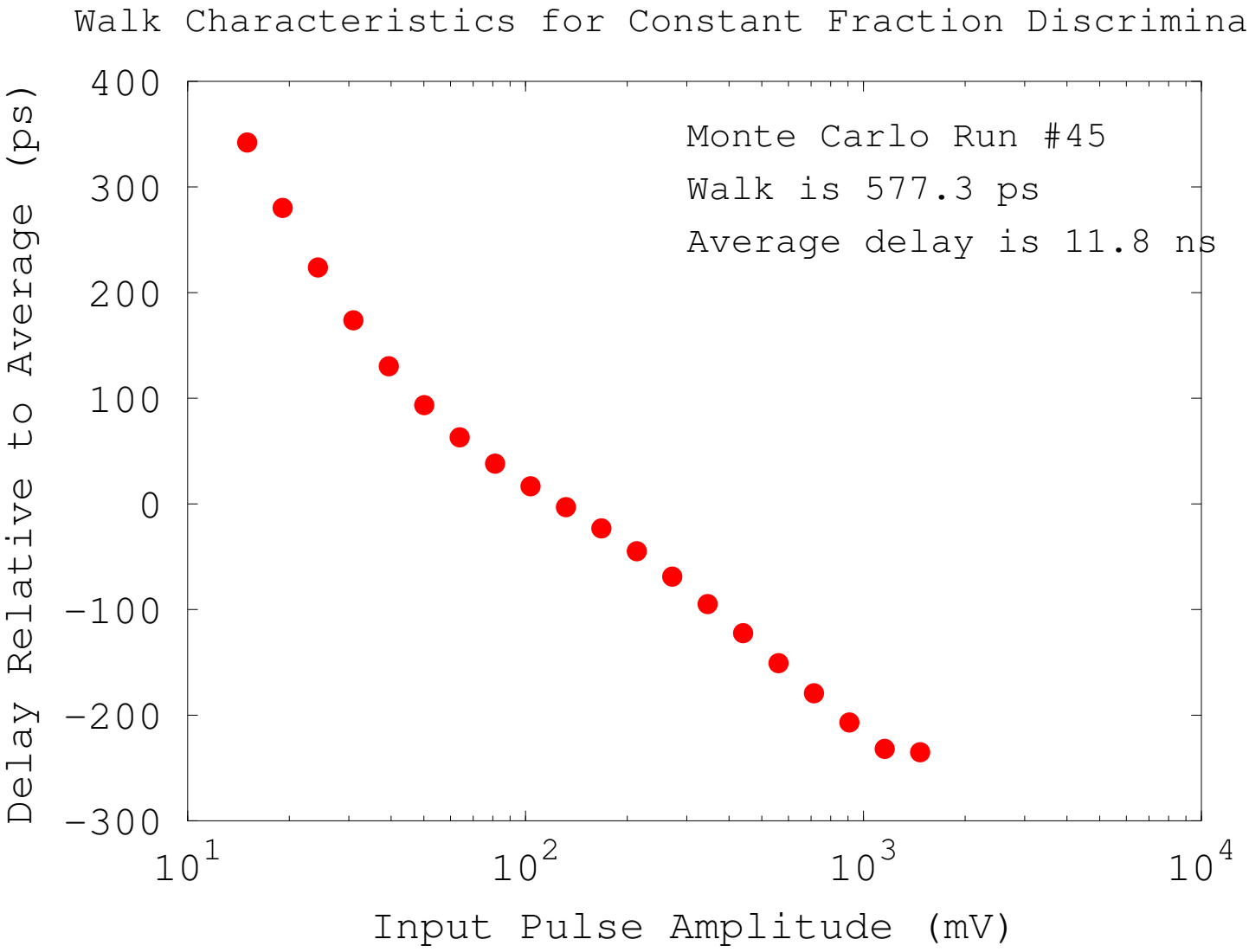

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #40
Walk is 604.4 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

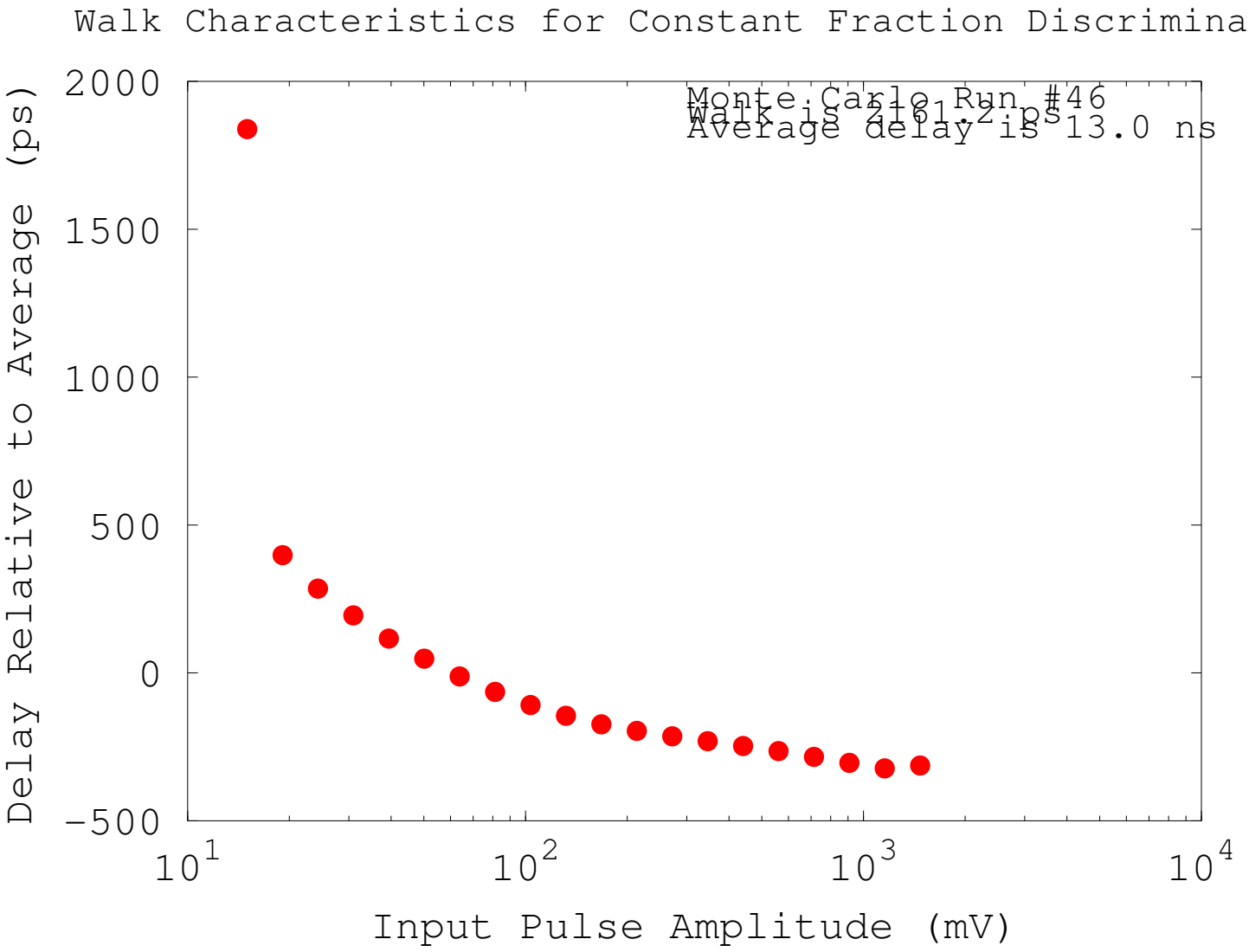

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #41
Walk is 1475.4 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

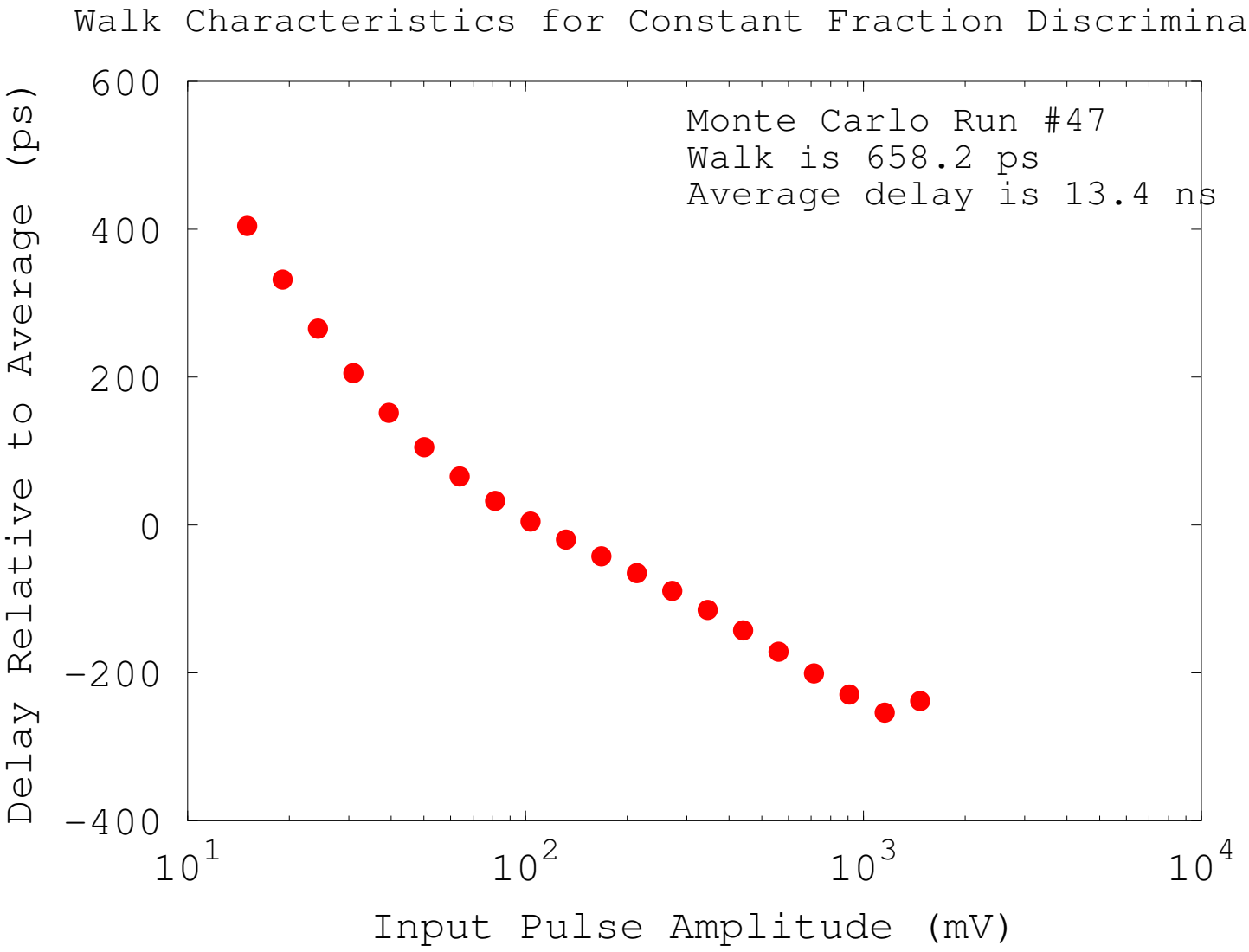

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #42
Walk is 716.5 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

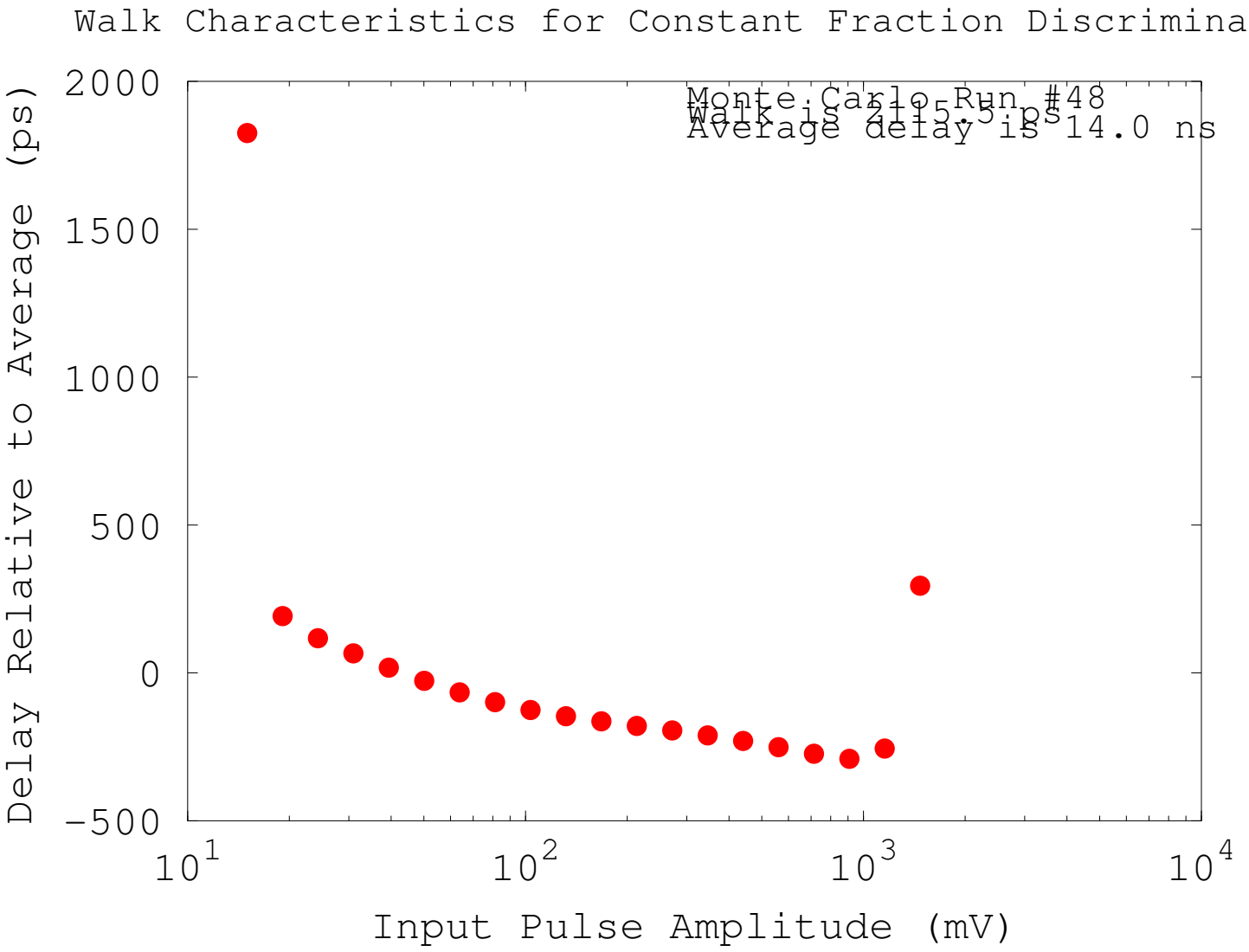

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #43
Walk is 527.5 ps
Average delay is 12.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

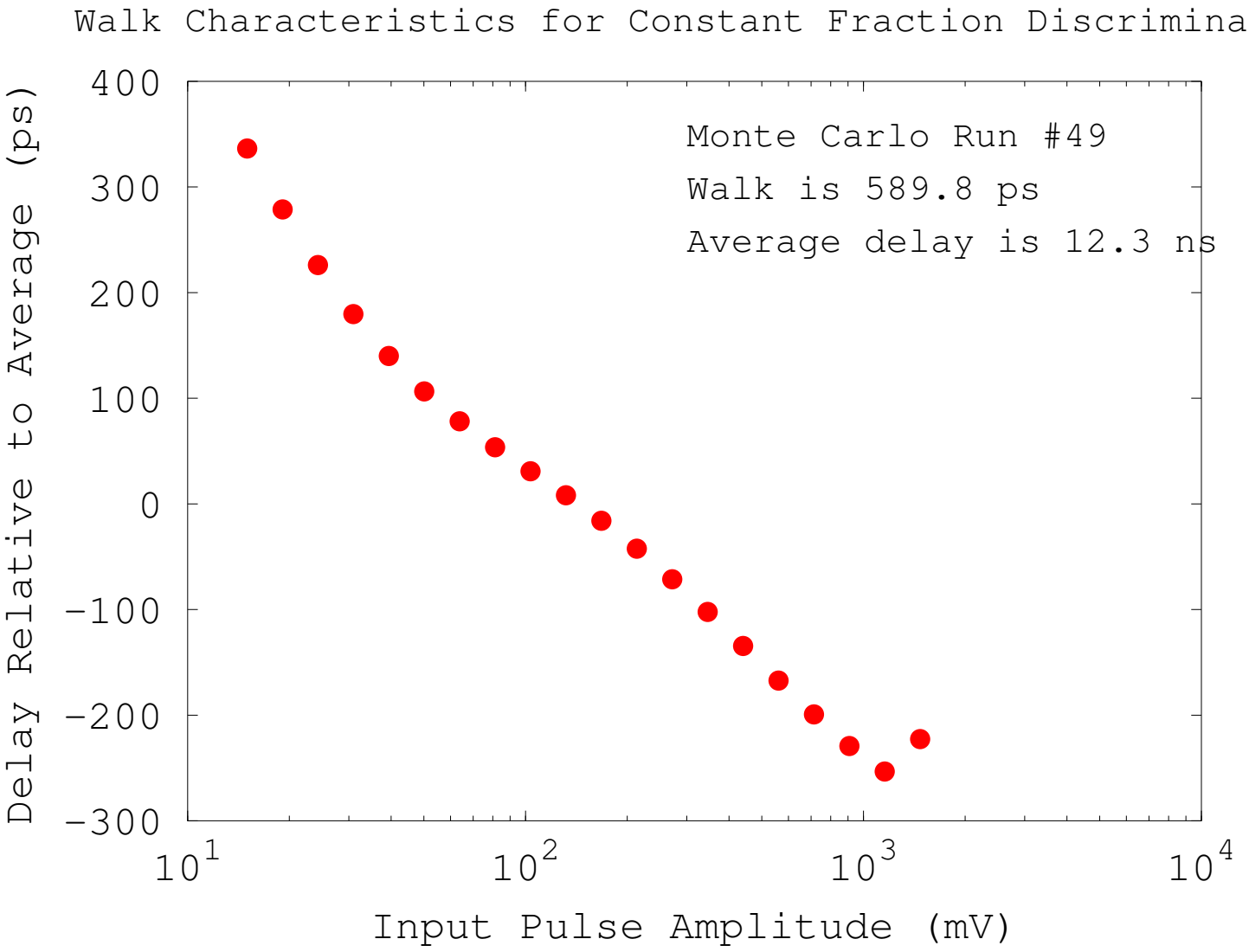

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #44
Walk is 766.0 ps
Average delay is 13.3 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

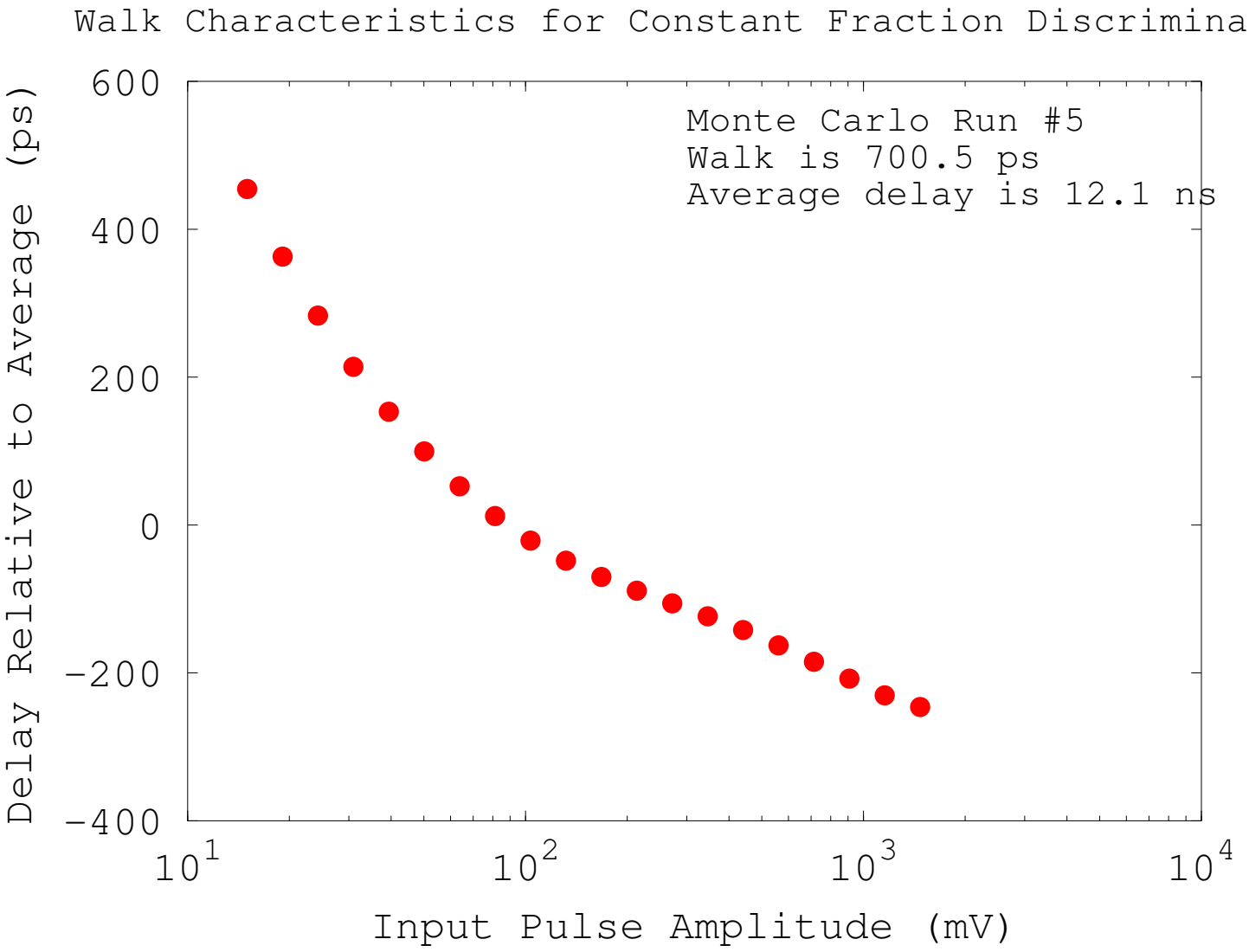

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #45
Walk is 577.3 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

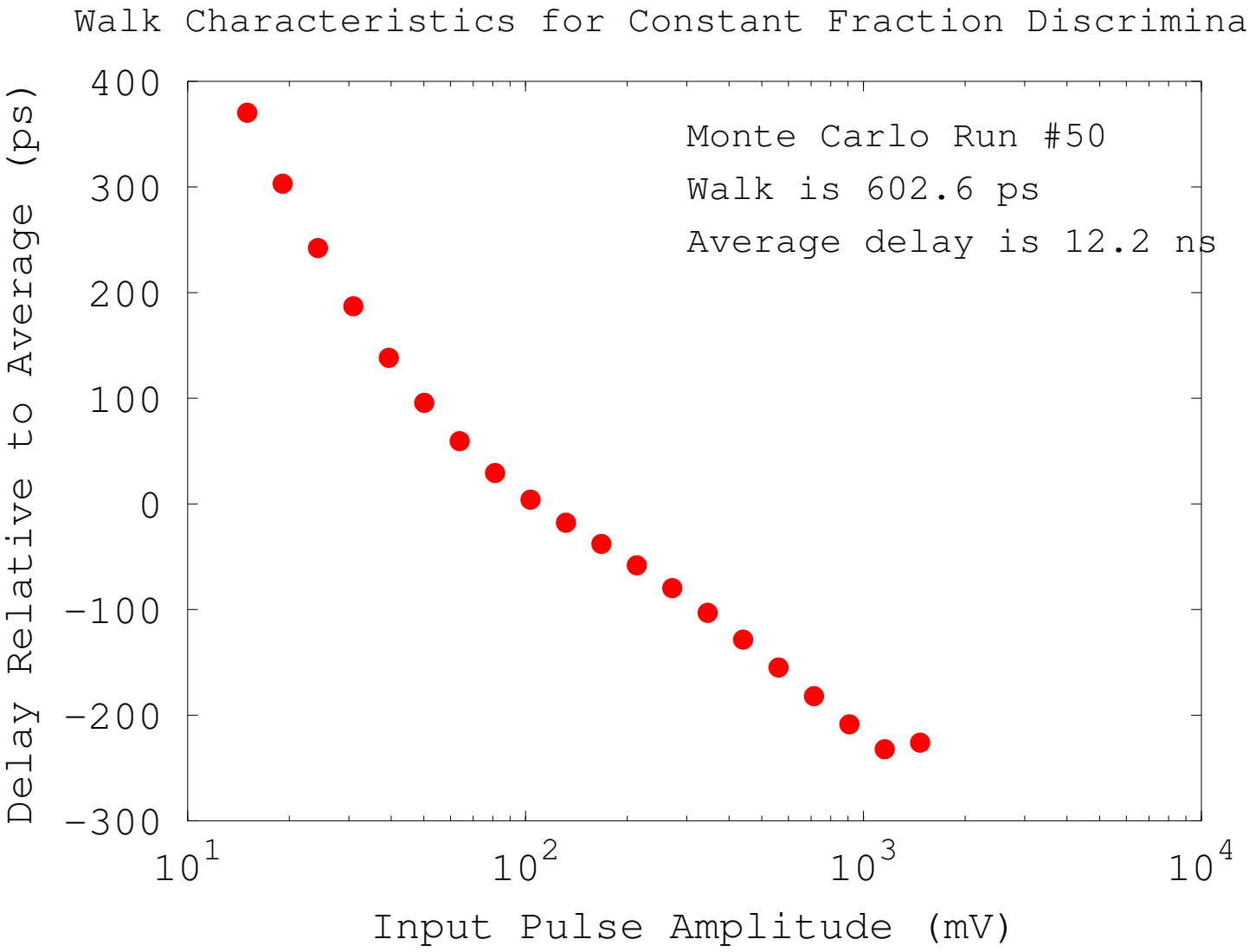

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #46
Walk is 2161.2 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

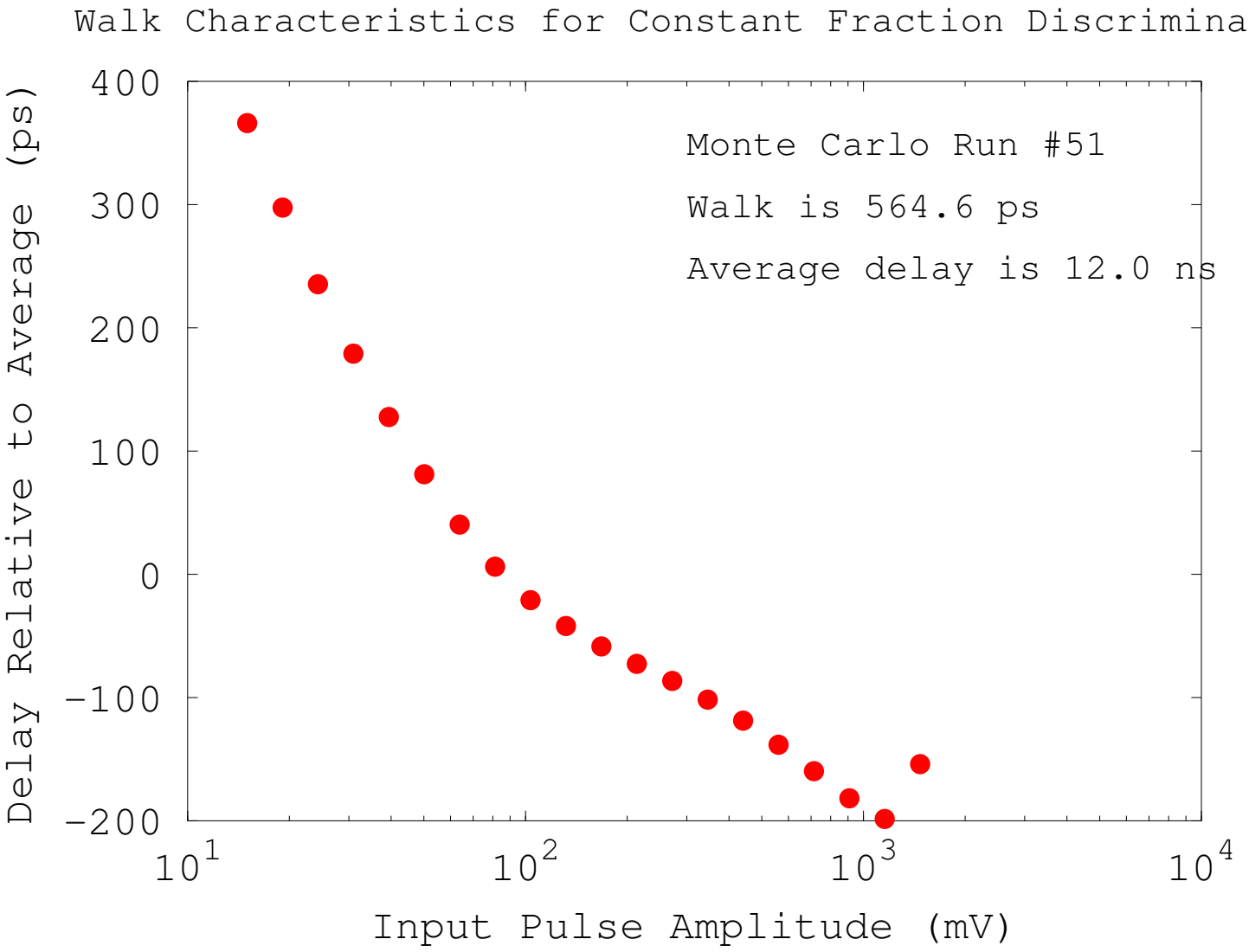

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #47
Walk is 658.2 ps
Average delay is 13.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

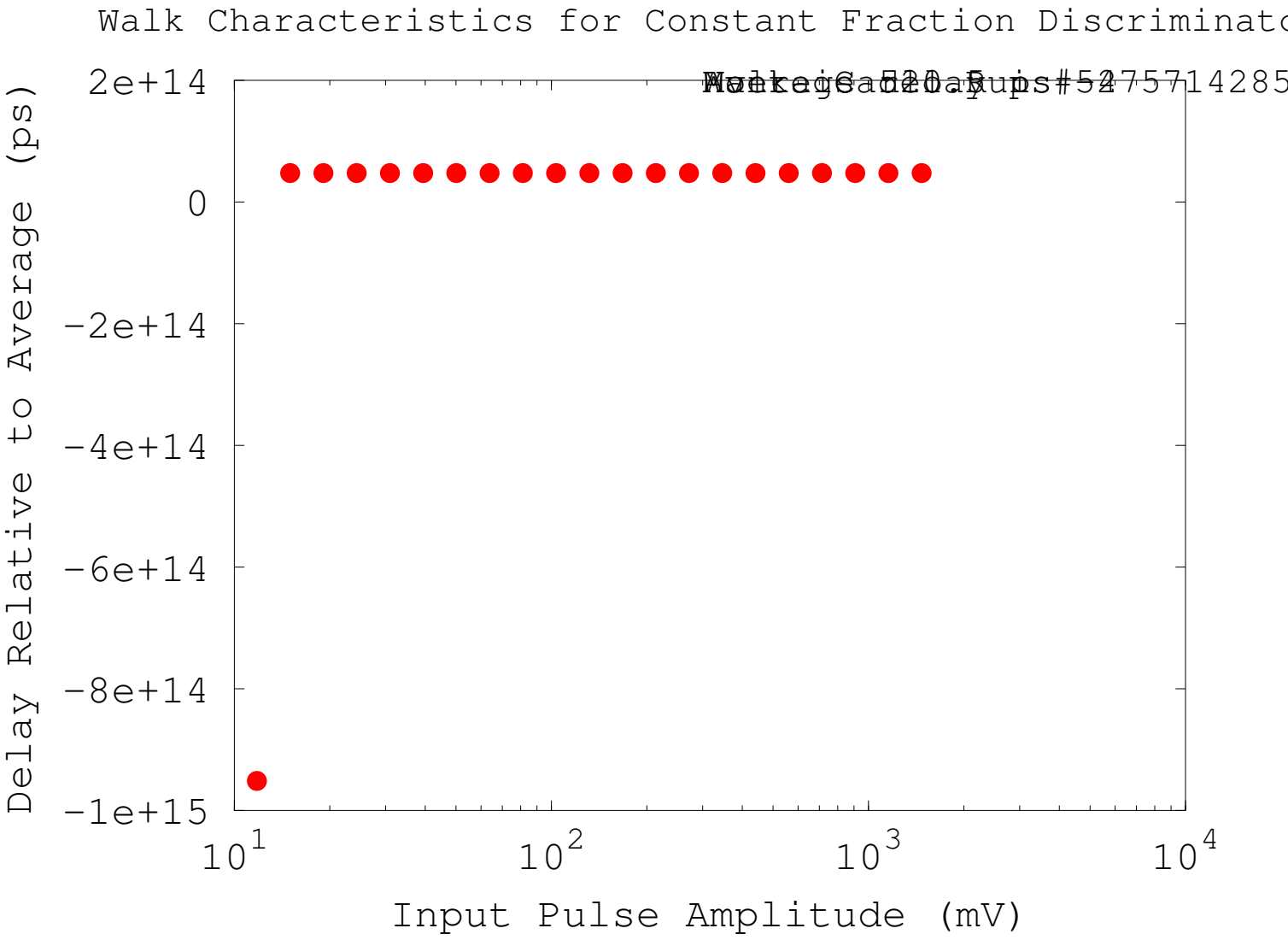

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #48
Walk is 2115.5 ps
Average delay is 14.0 ns
Delay Relative to Average (ps)
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

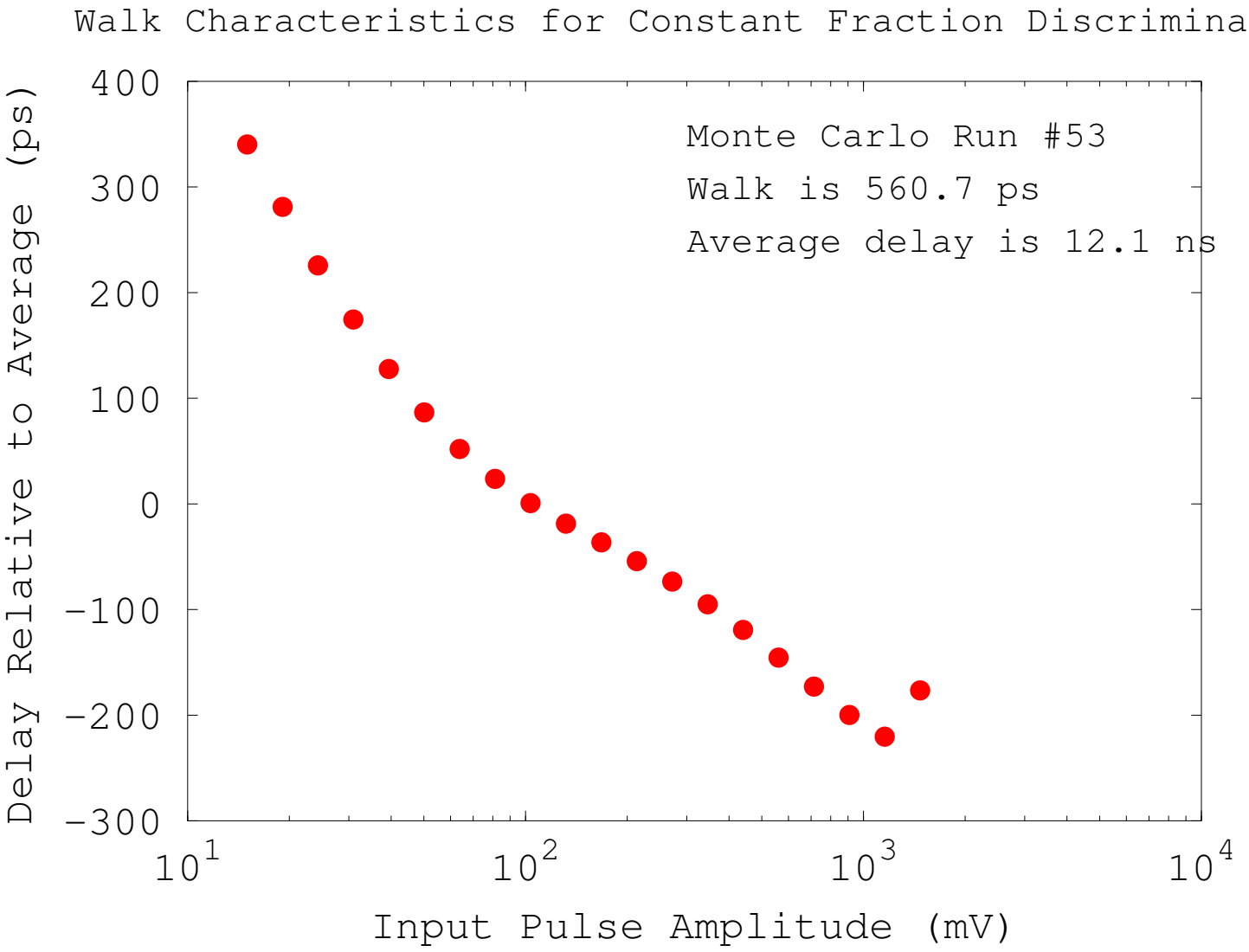

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #49
Walk is 589.8 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

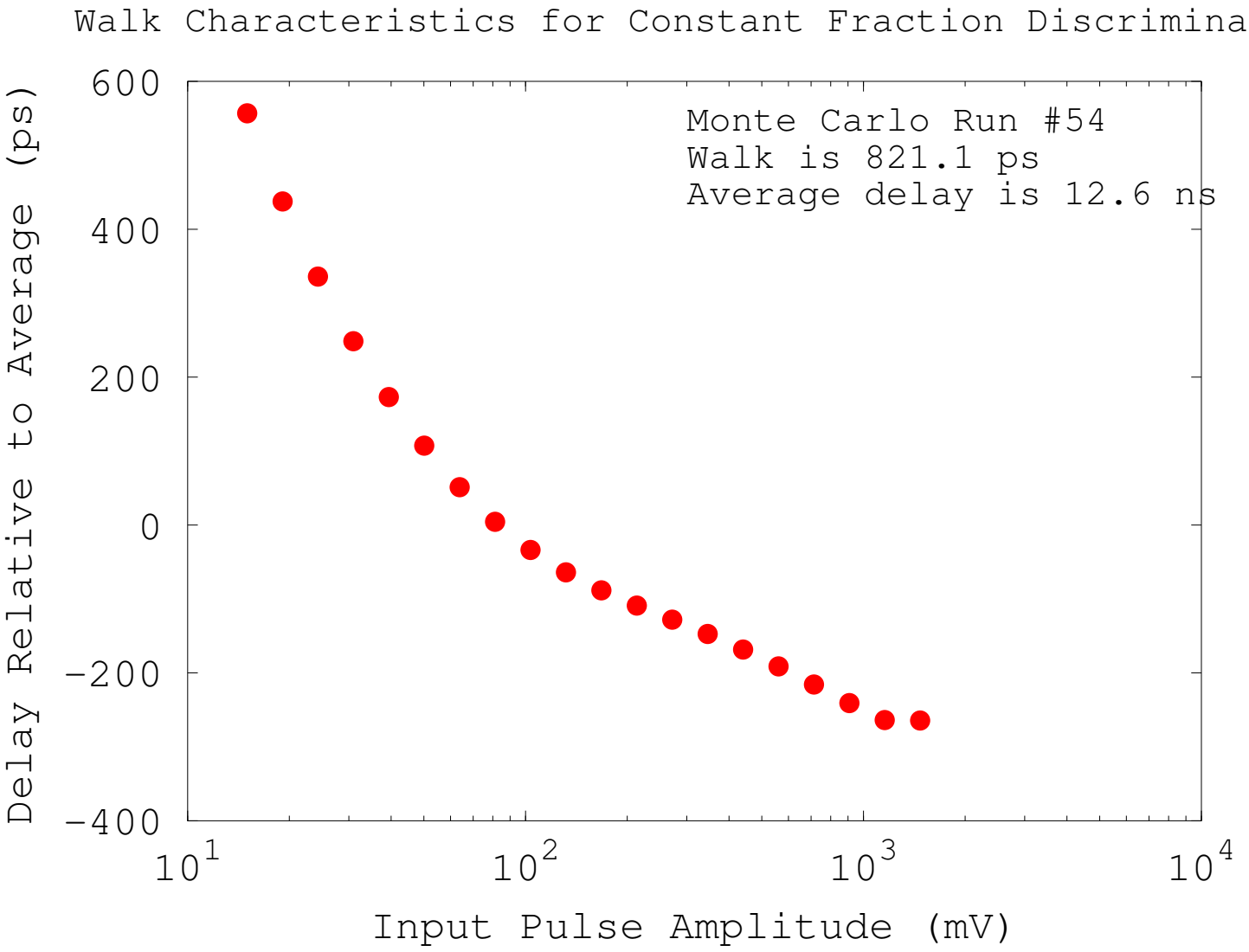

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #5
Walk is 700.5 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

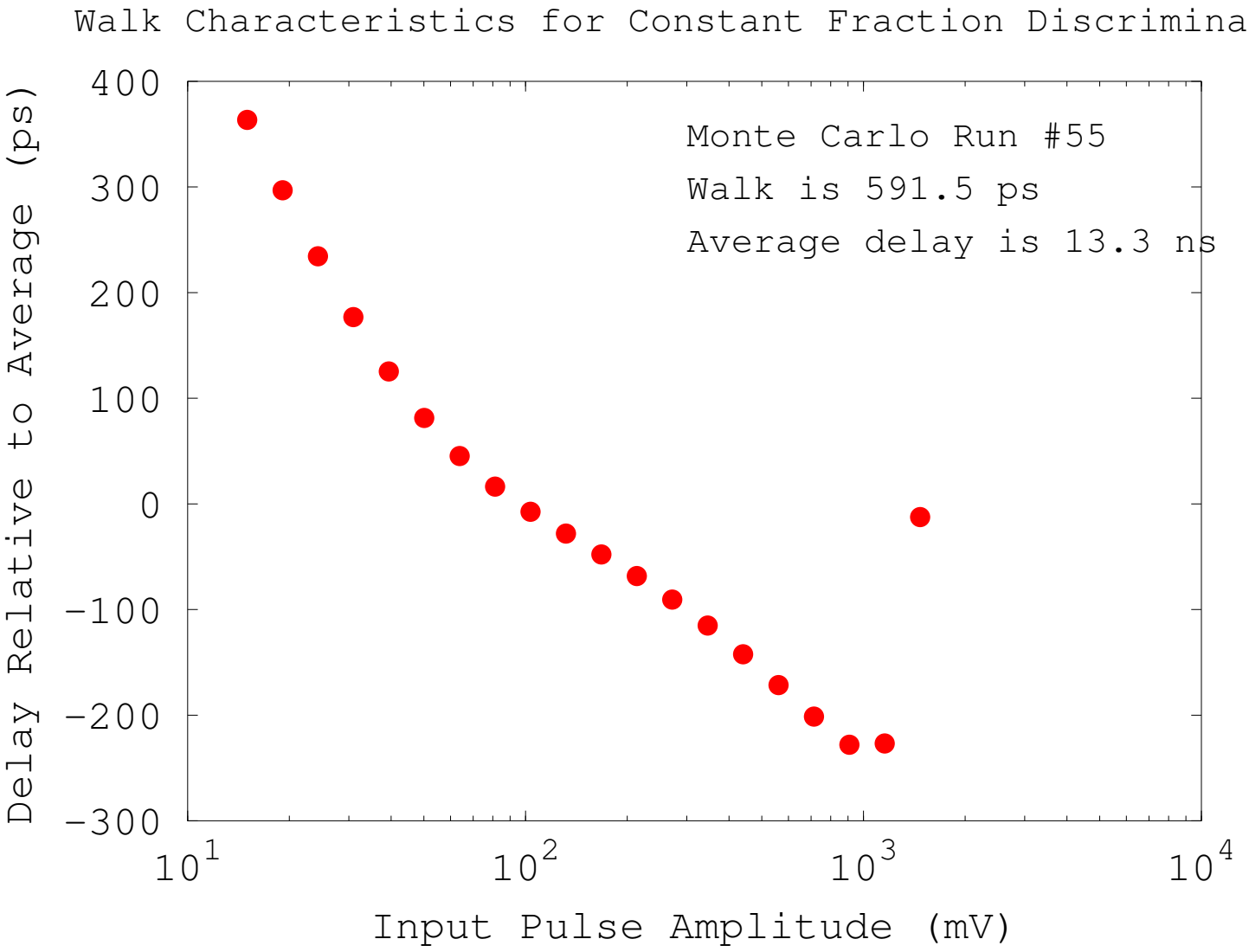

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #50
Walk is 602.6 ps
Average delay is 12.2 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

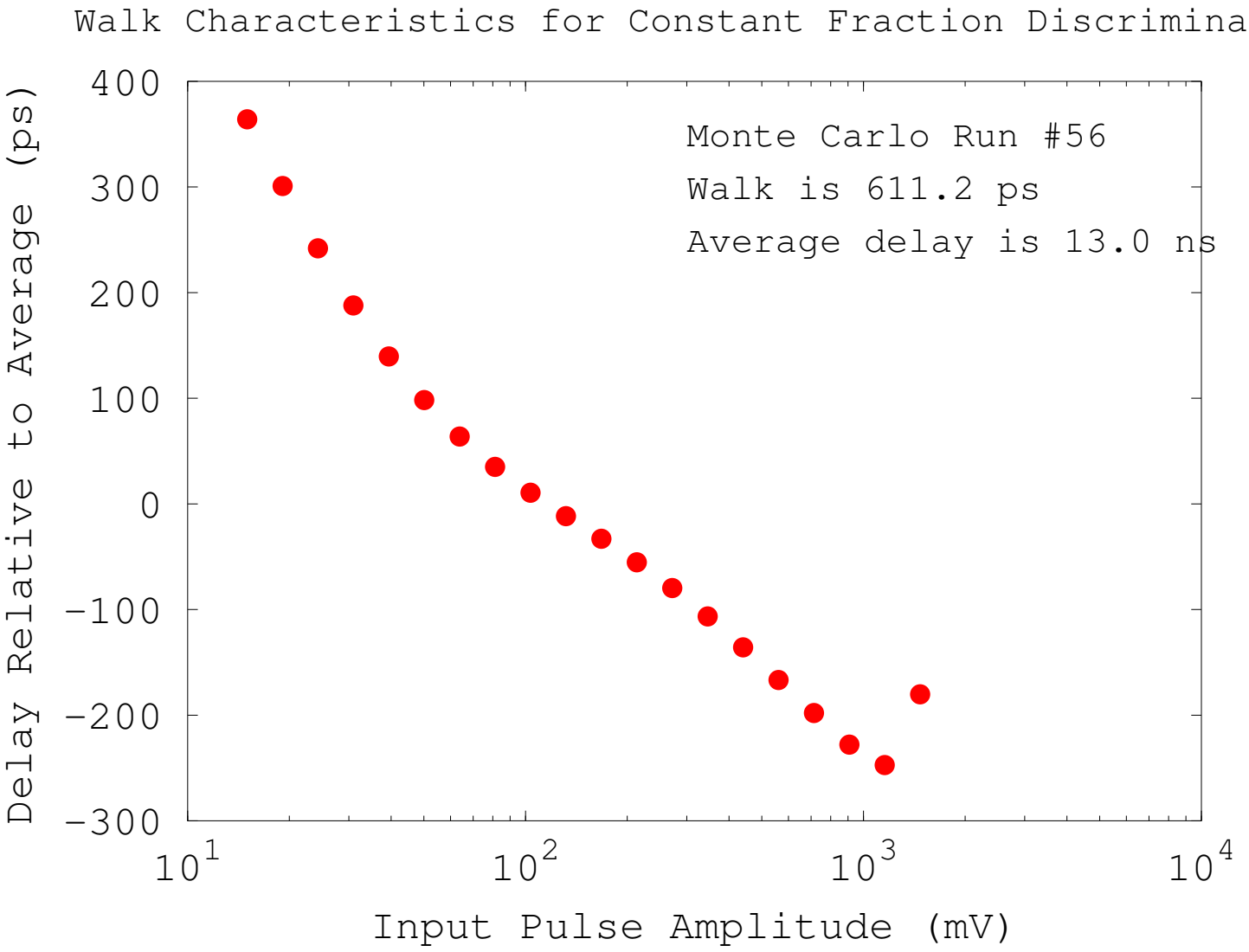

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #51
Walk is 564.6 ps
Average delay is 12.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

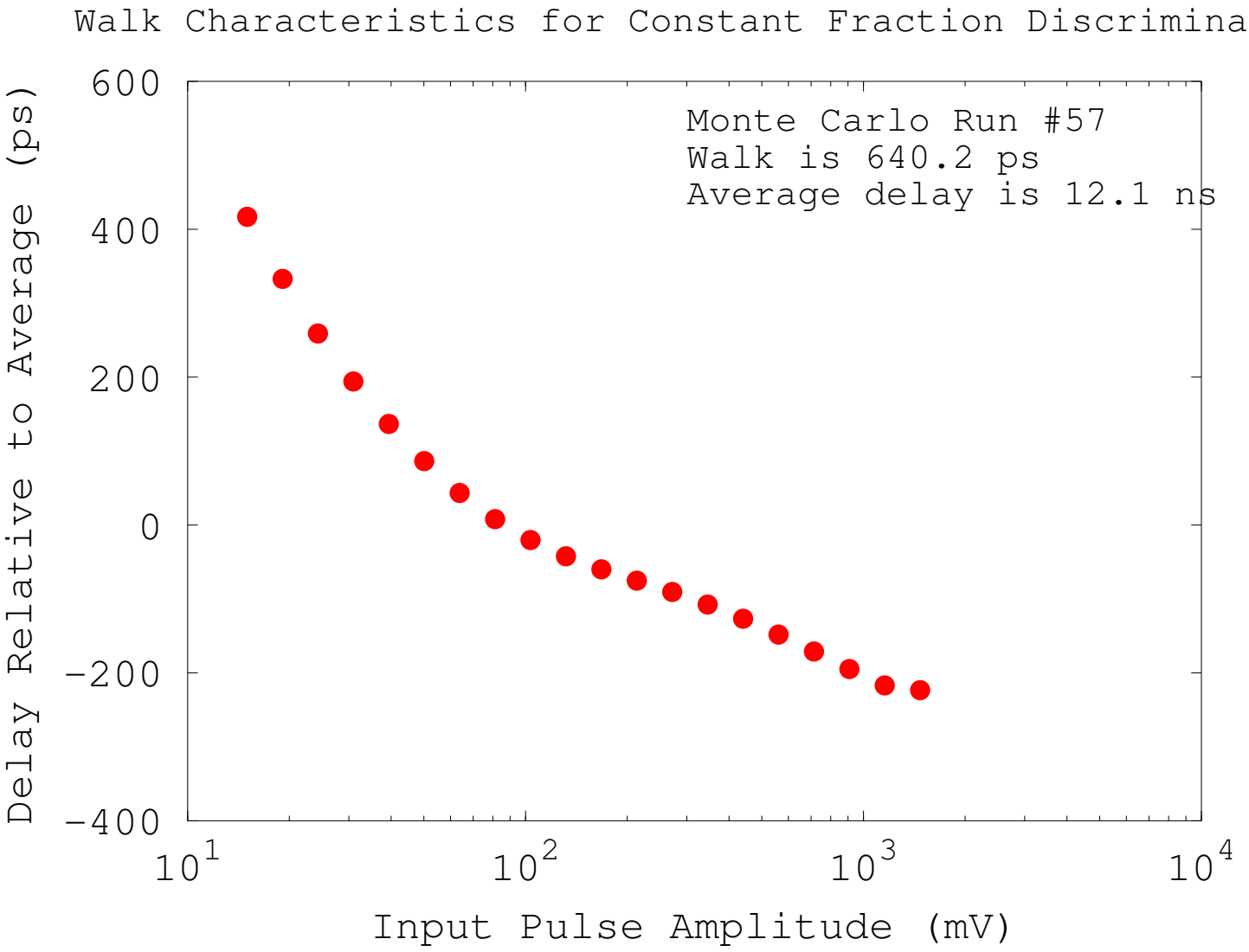

Walk Characteristics for Constant Fraction Discriminato
Delay Relative to Average (ps)
2e+14
0
-2e+14
-4e+14
-6e+14
-8e+14
-1e+15
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

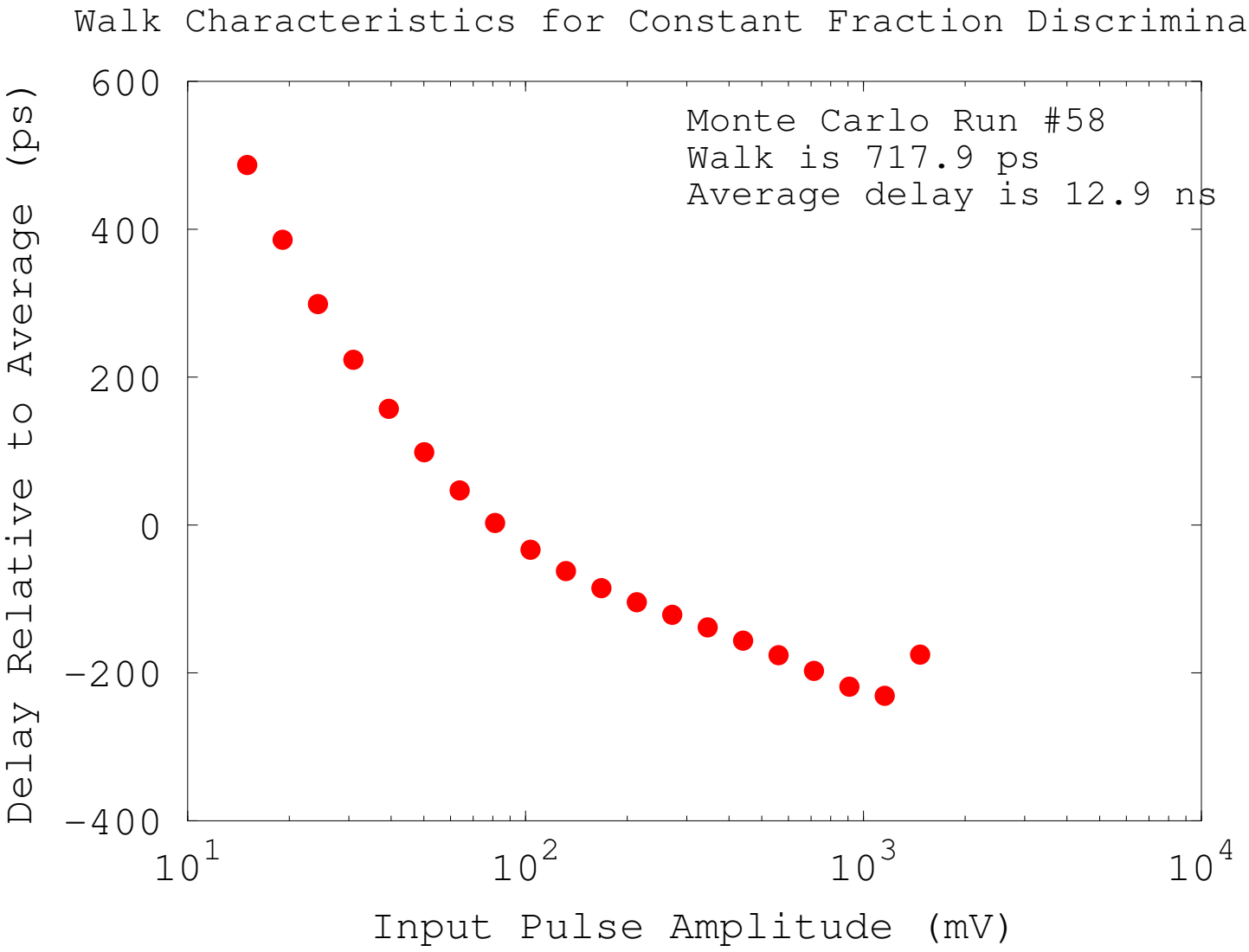

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #53
Walk is 560.7 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

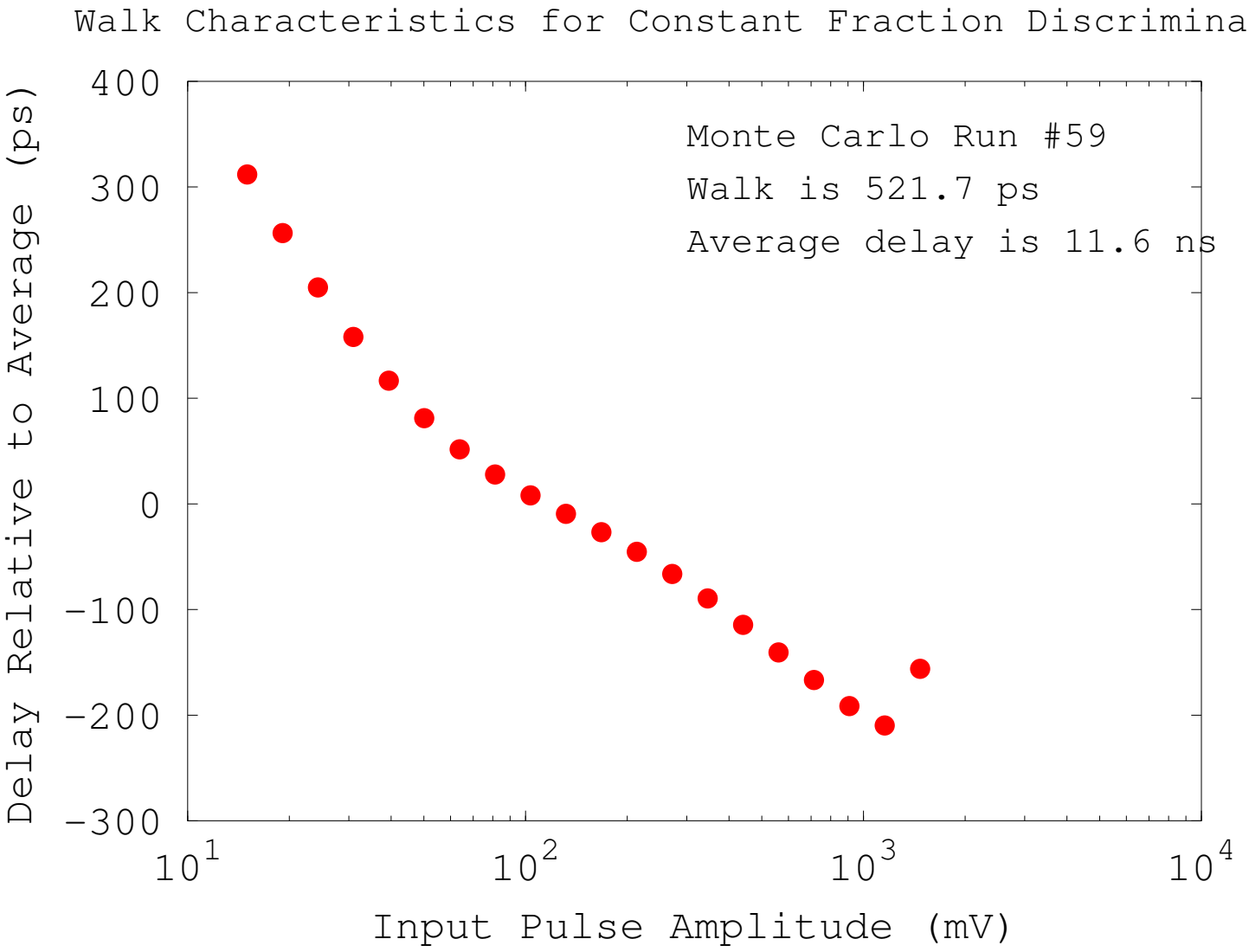

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #54
Walk is 821.1 ps
Average delay is 12.6 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

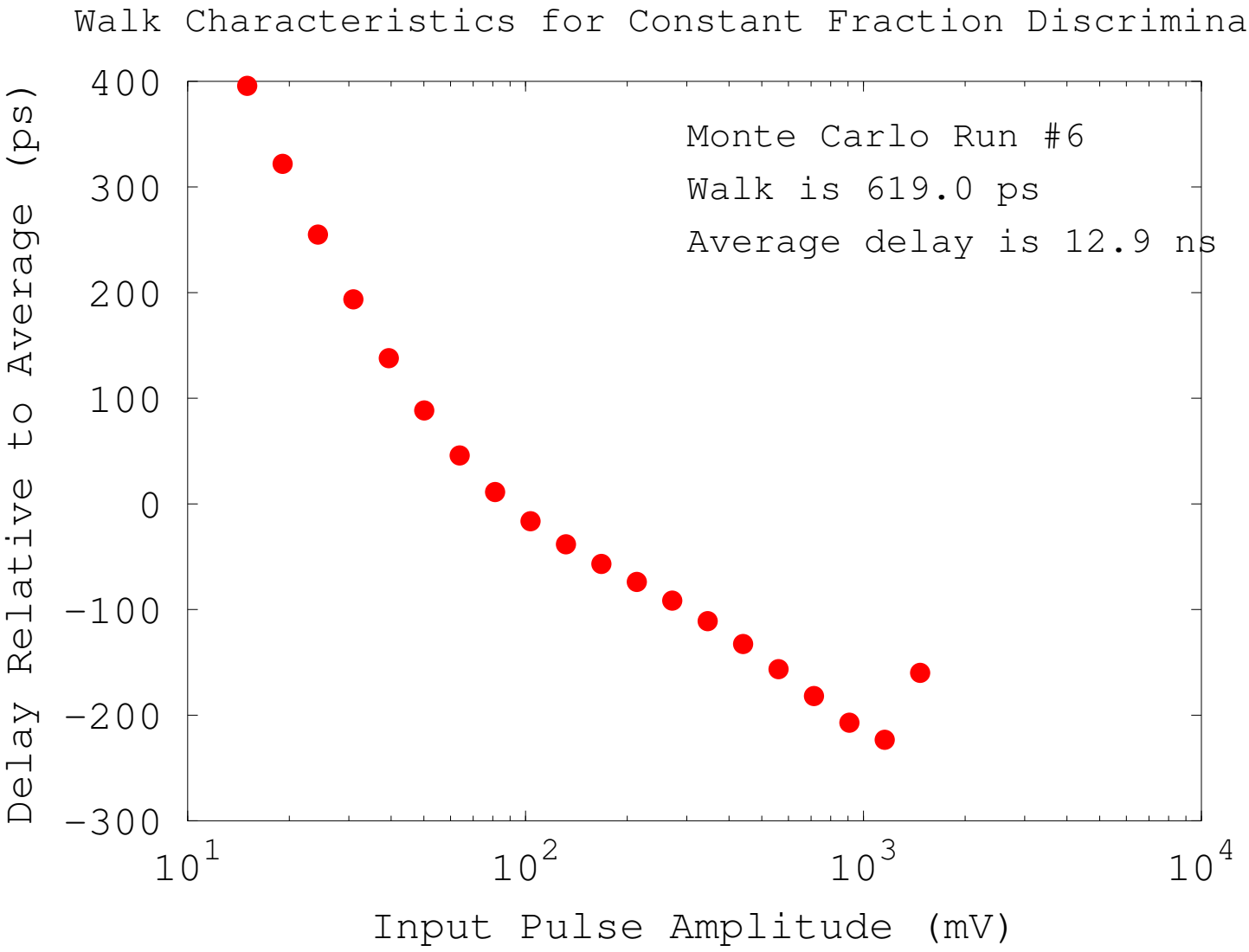

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #55
Walk is 591.5 ps
Average delay is 13.3 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

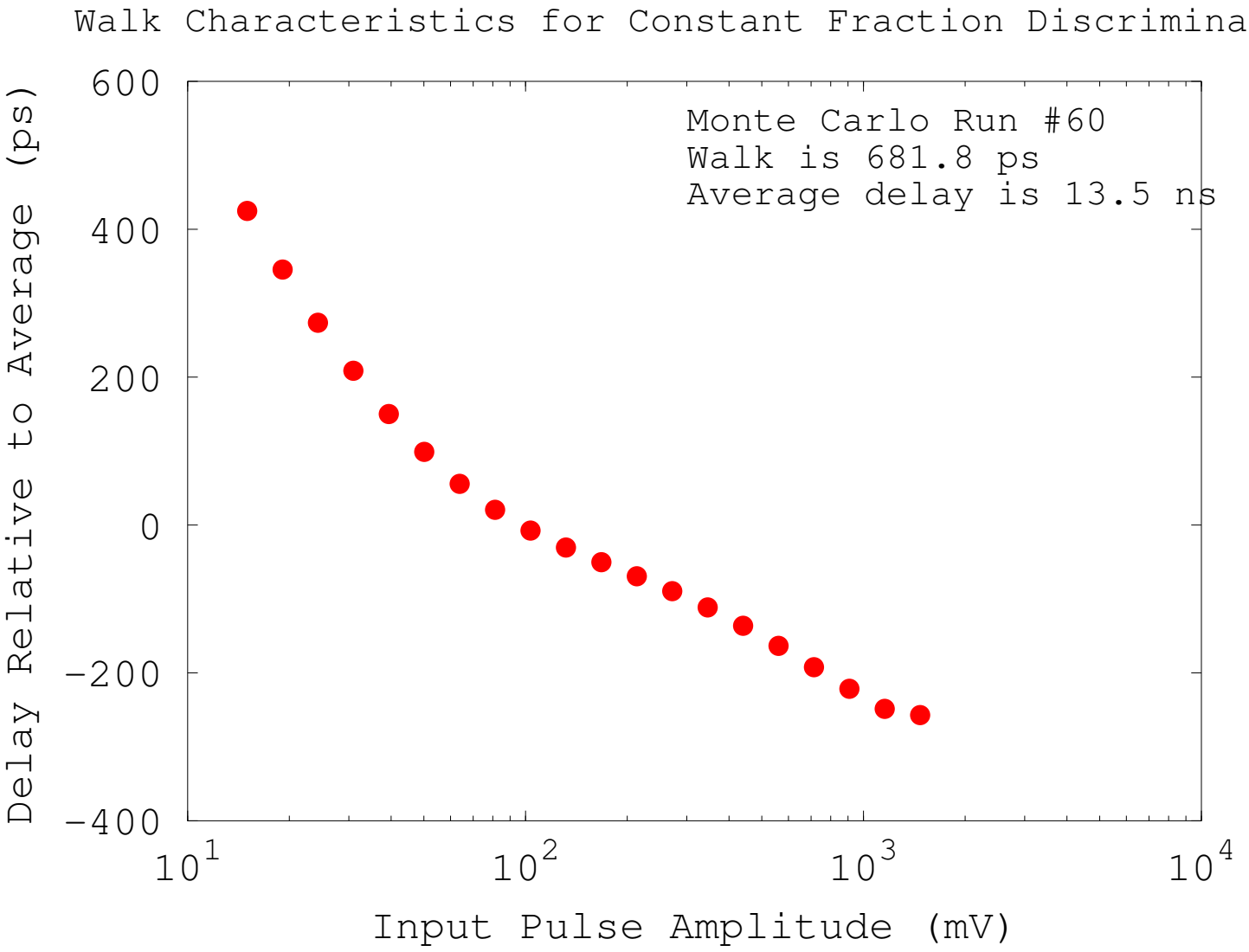

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #56
Walk is 611.2 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

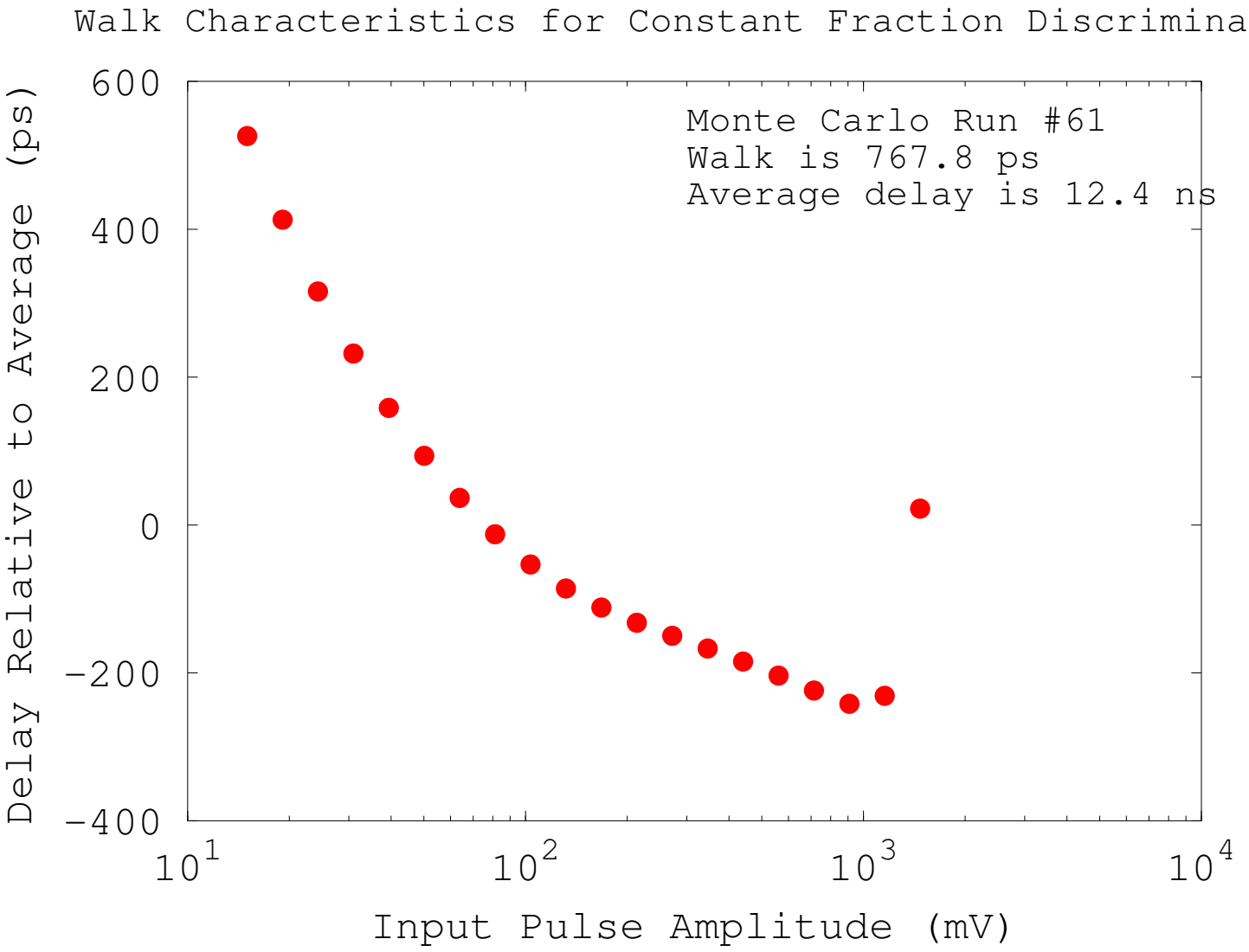

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #57
Walk is 640.2 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

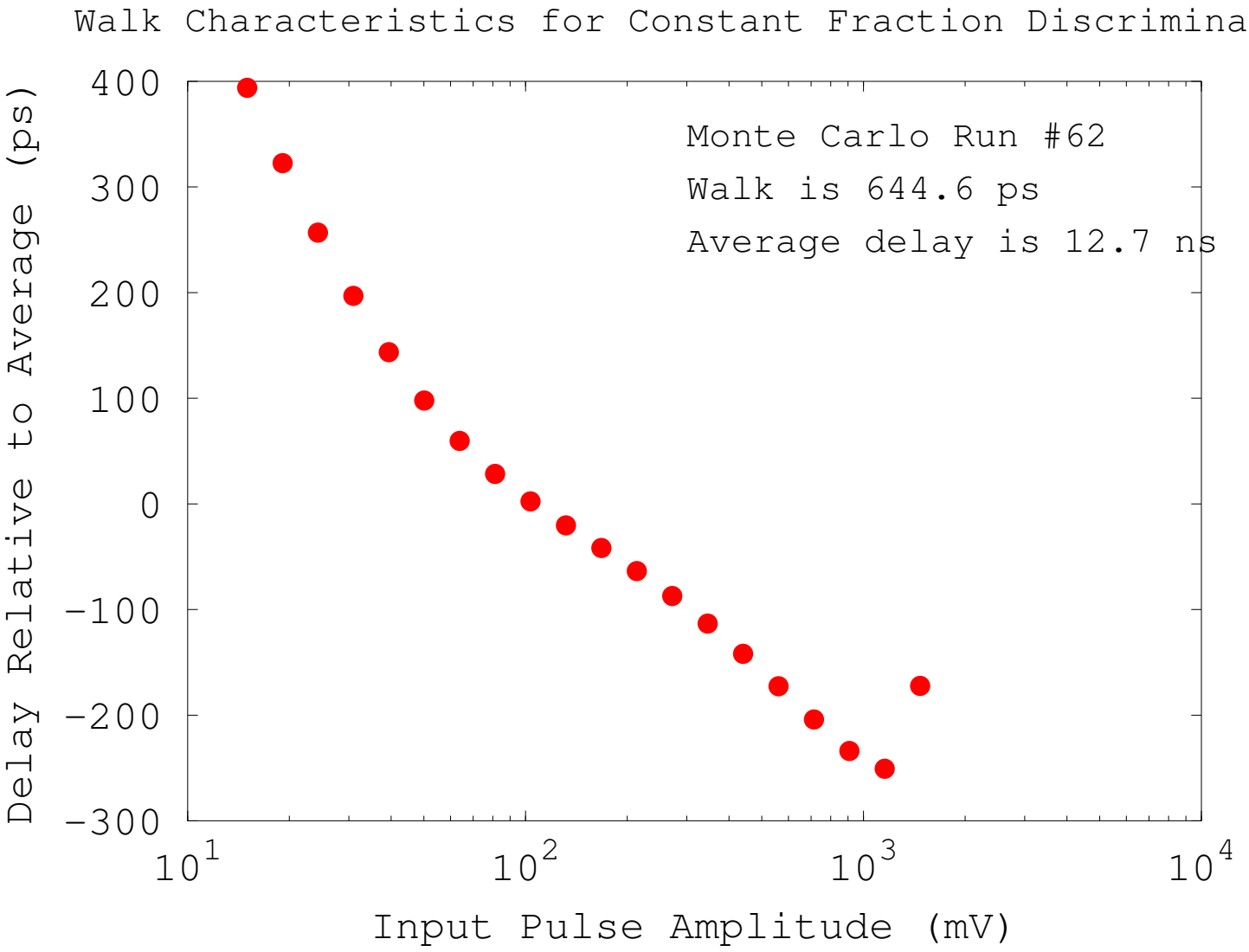

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #58
Walk is 717.9 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

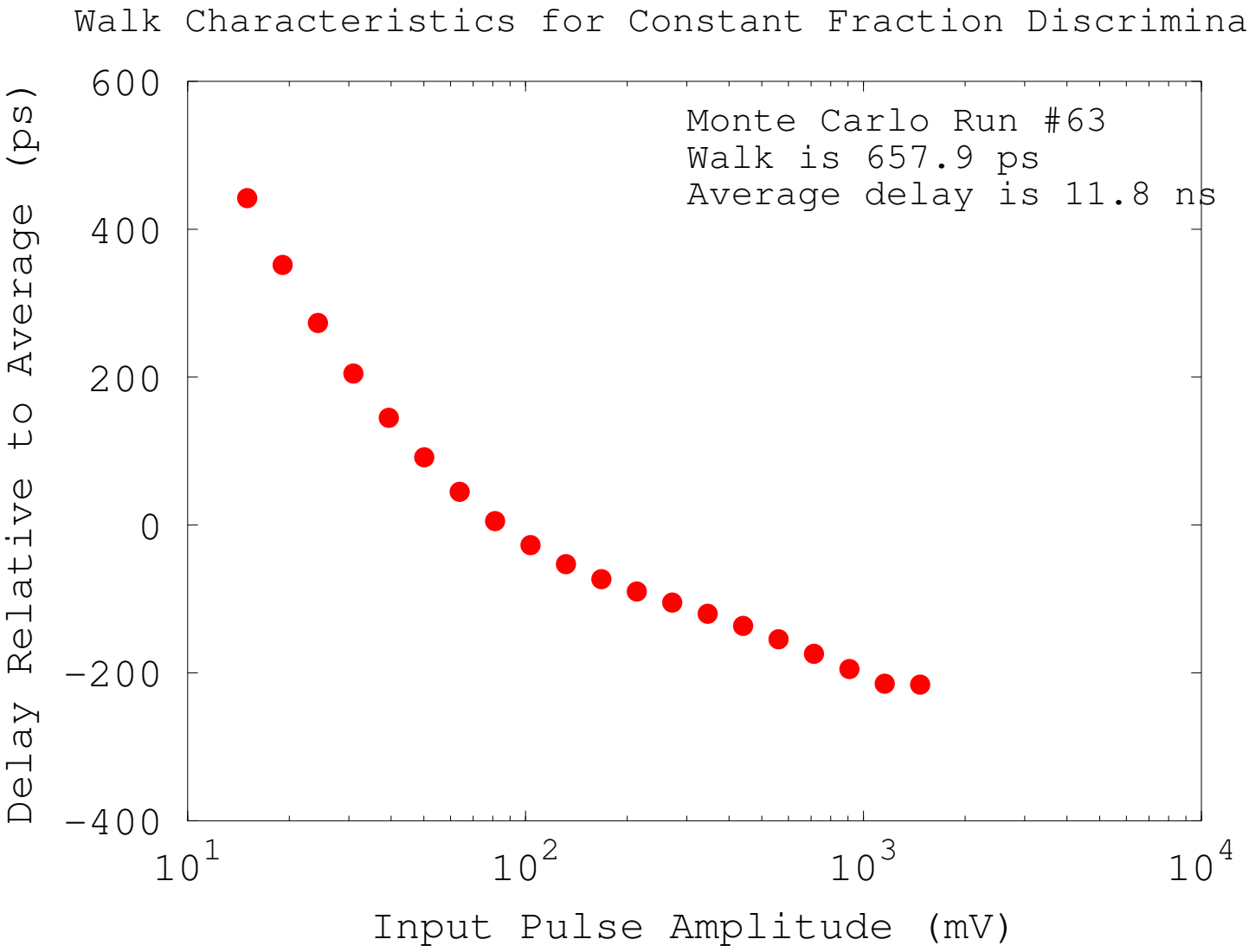

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #59
Walk is 521.7 ps
Average delay is 11.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

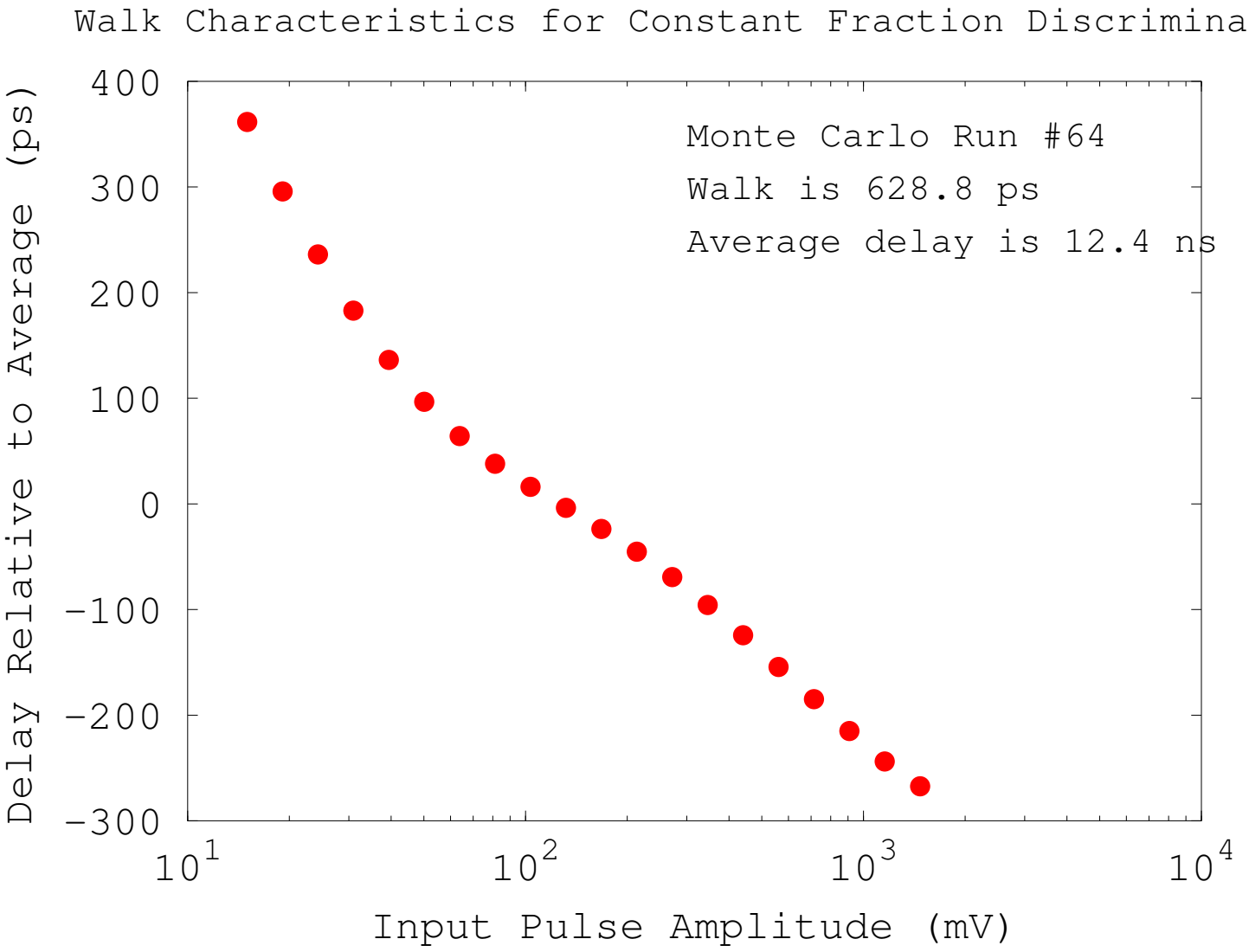

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #6
Walk is 619.0 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

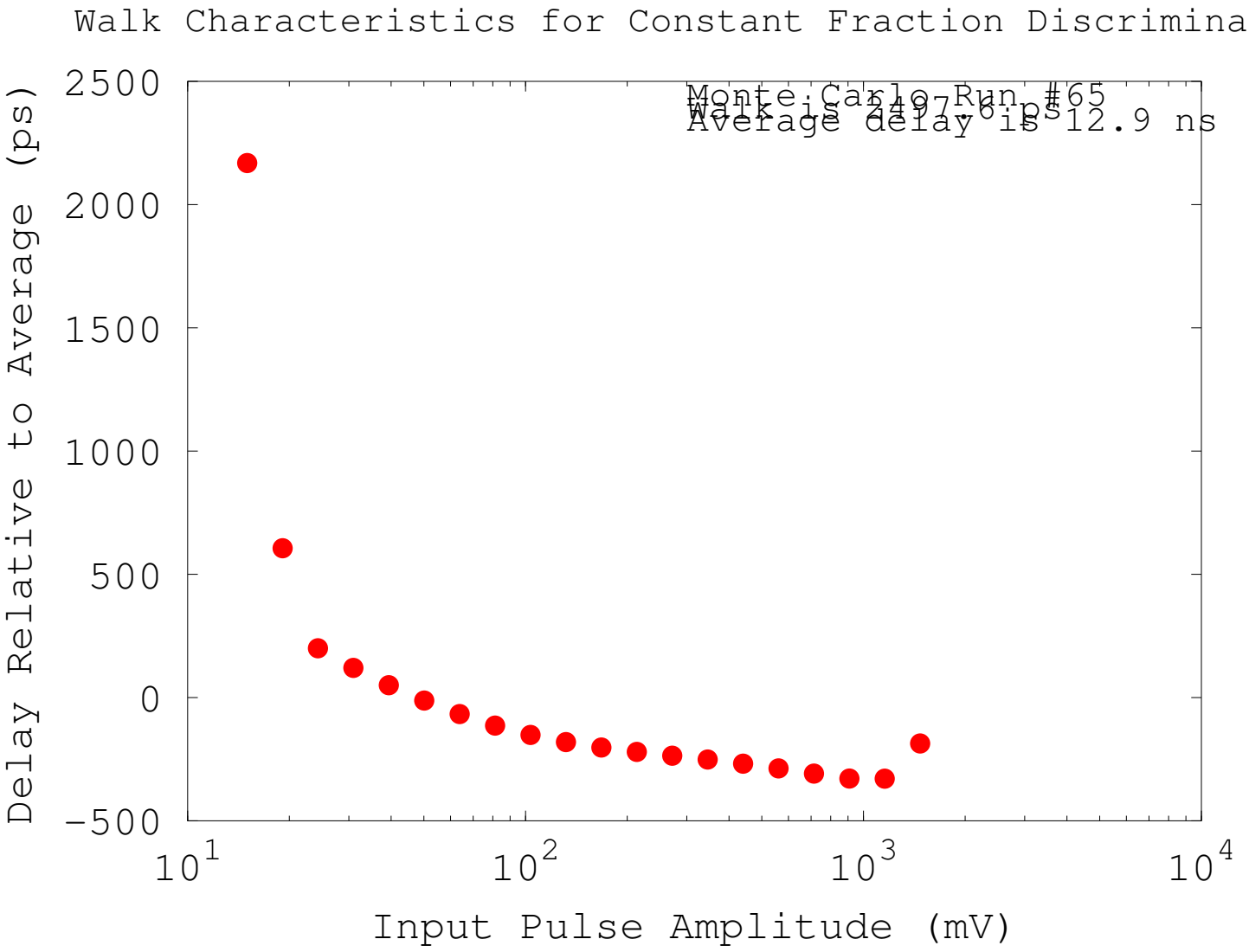

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #60
Walk is 681.8 ps
Average delay is 13.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

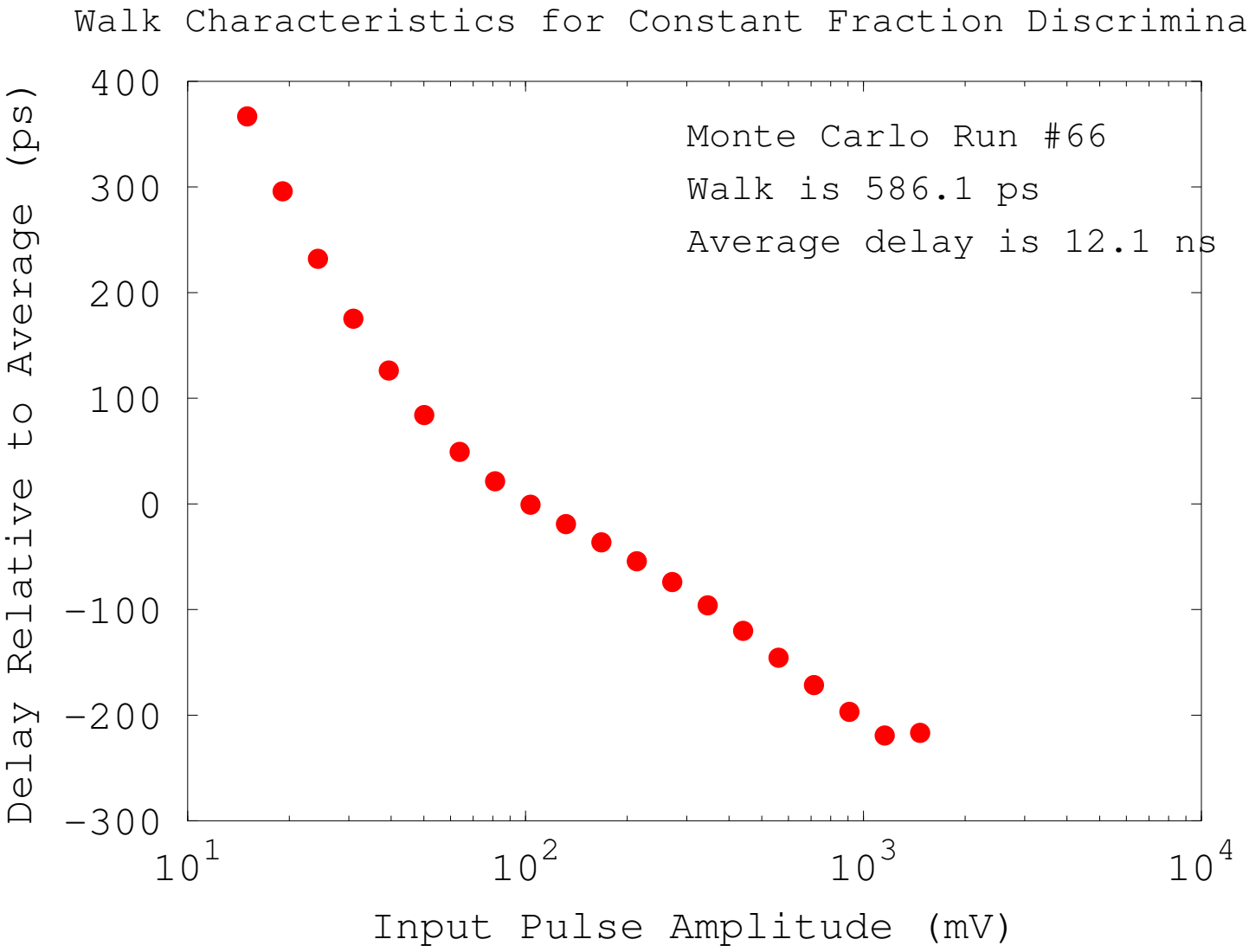

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #61
Walk is 767.8 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

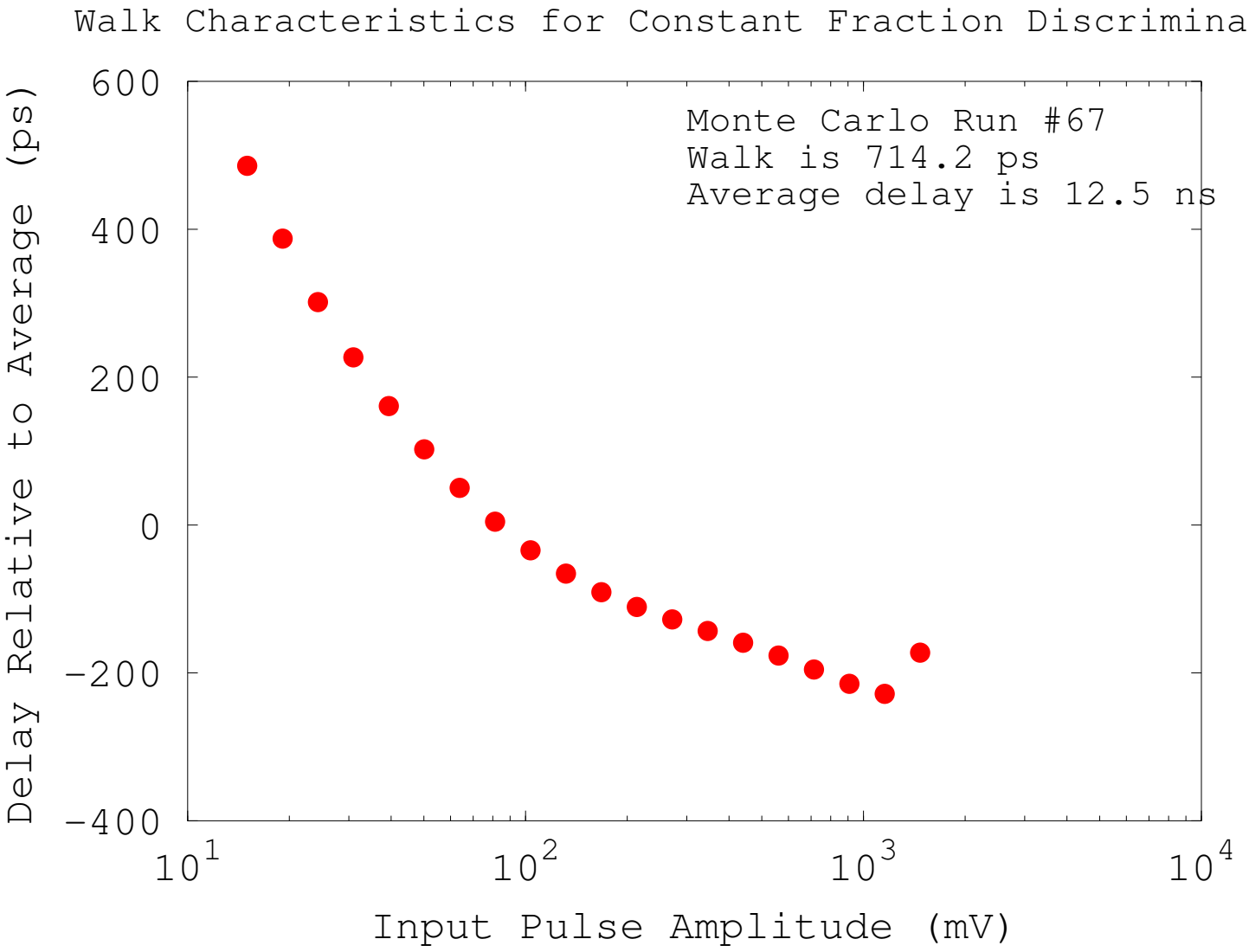

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #62
Walk is 644.6 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

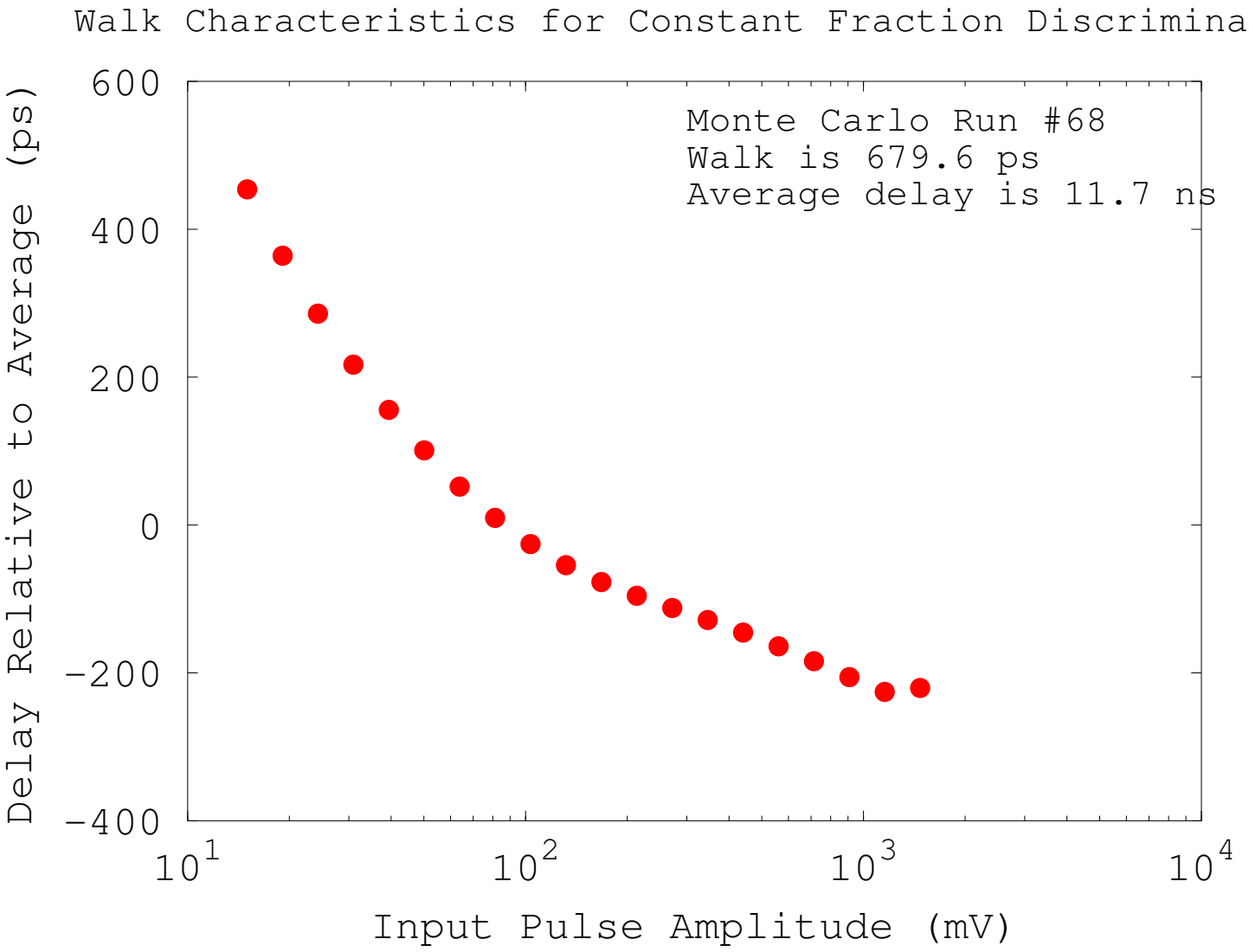

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #63
Walk is 657.9 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

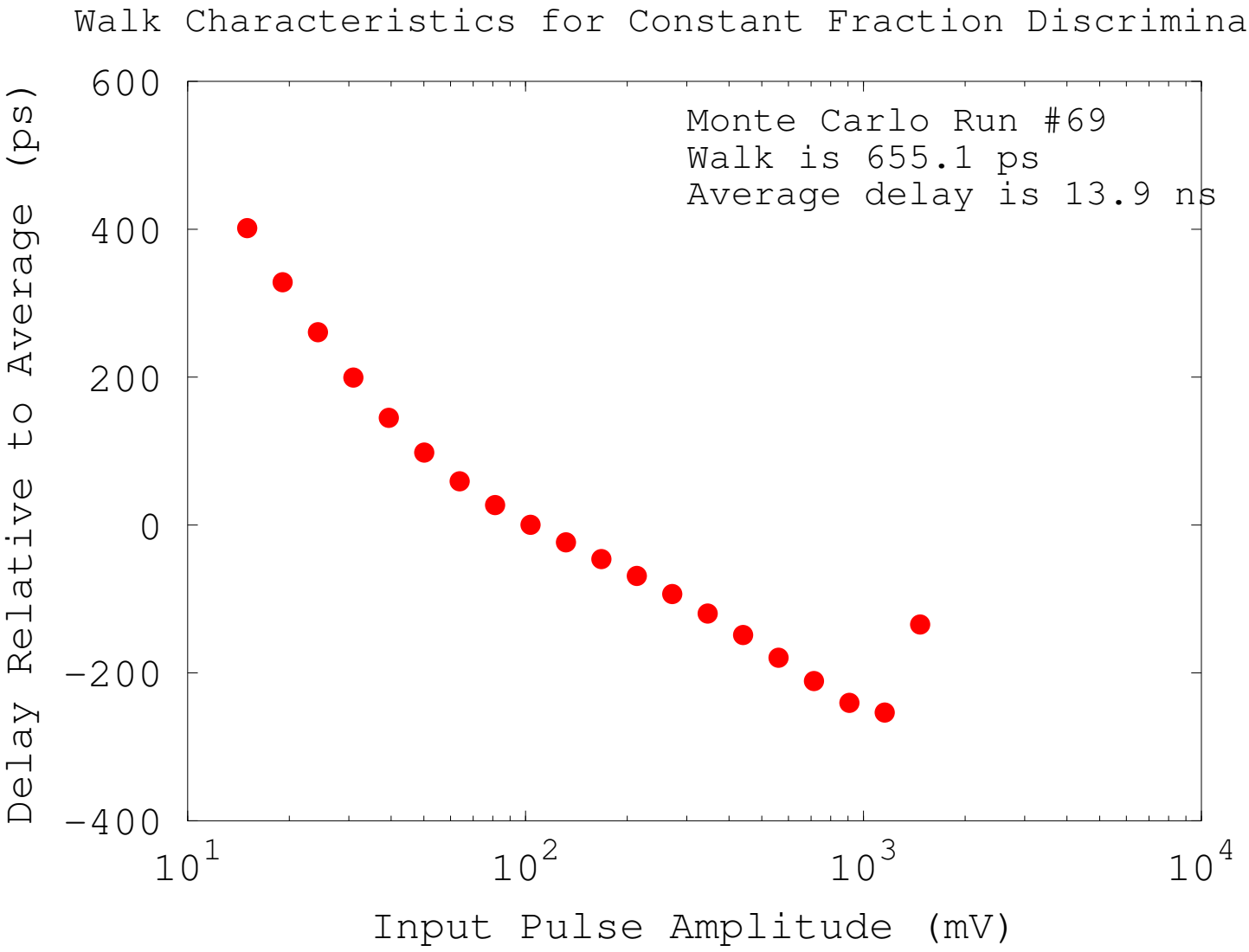

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #64
Walk is 628.8 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

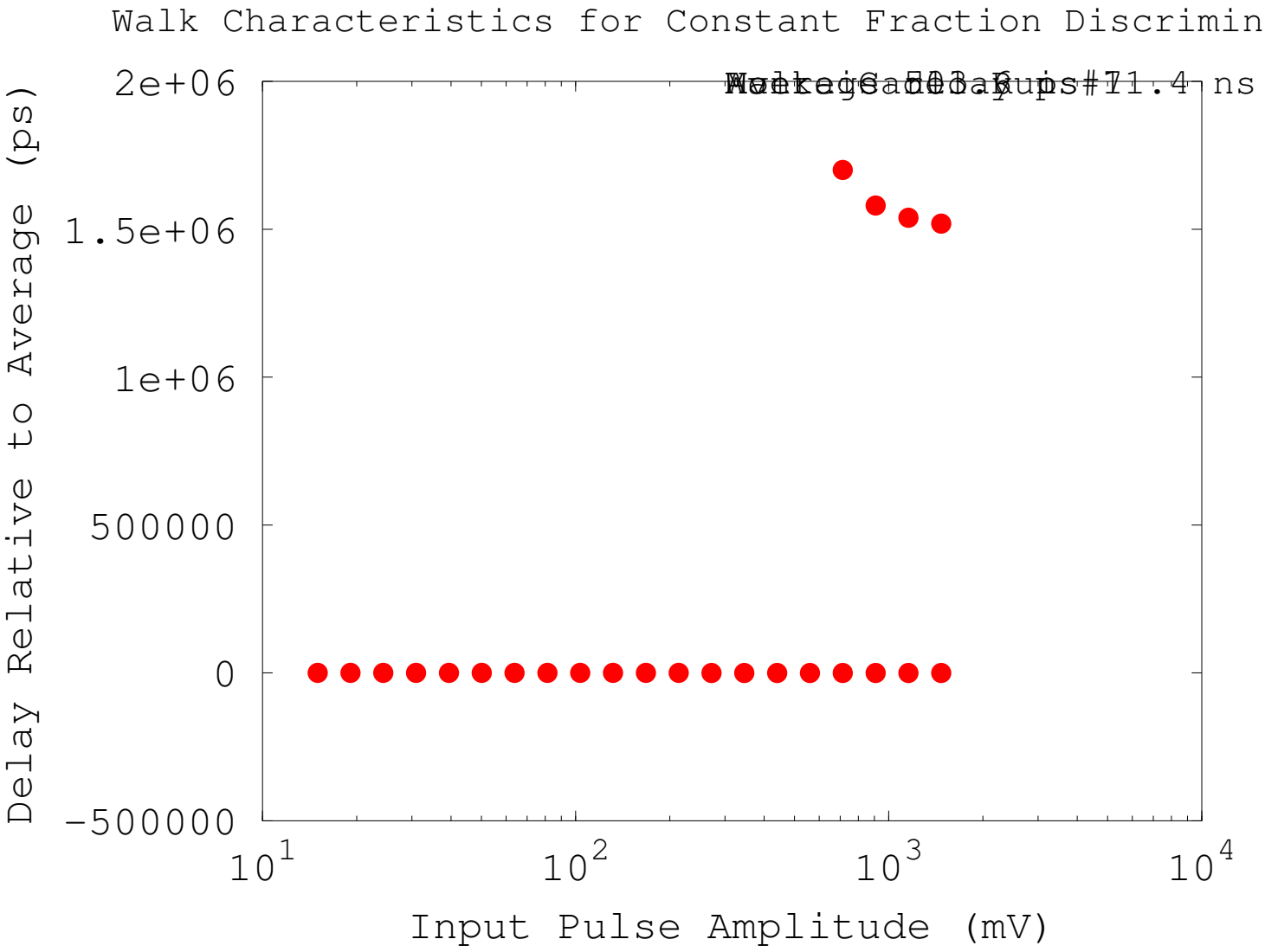

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #65
Walk is 2497.6 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
2500
2000
1500
1000
500
0
-500
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

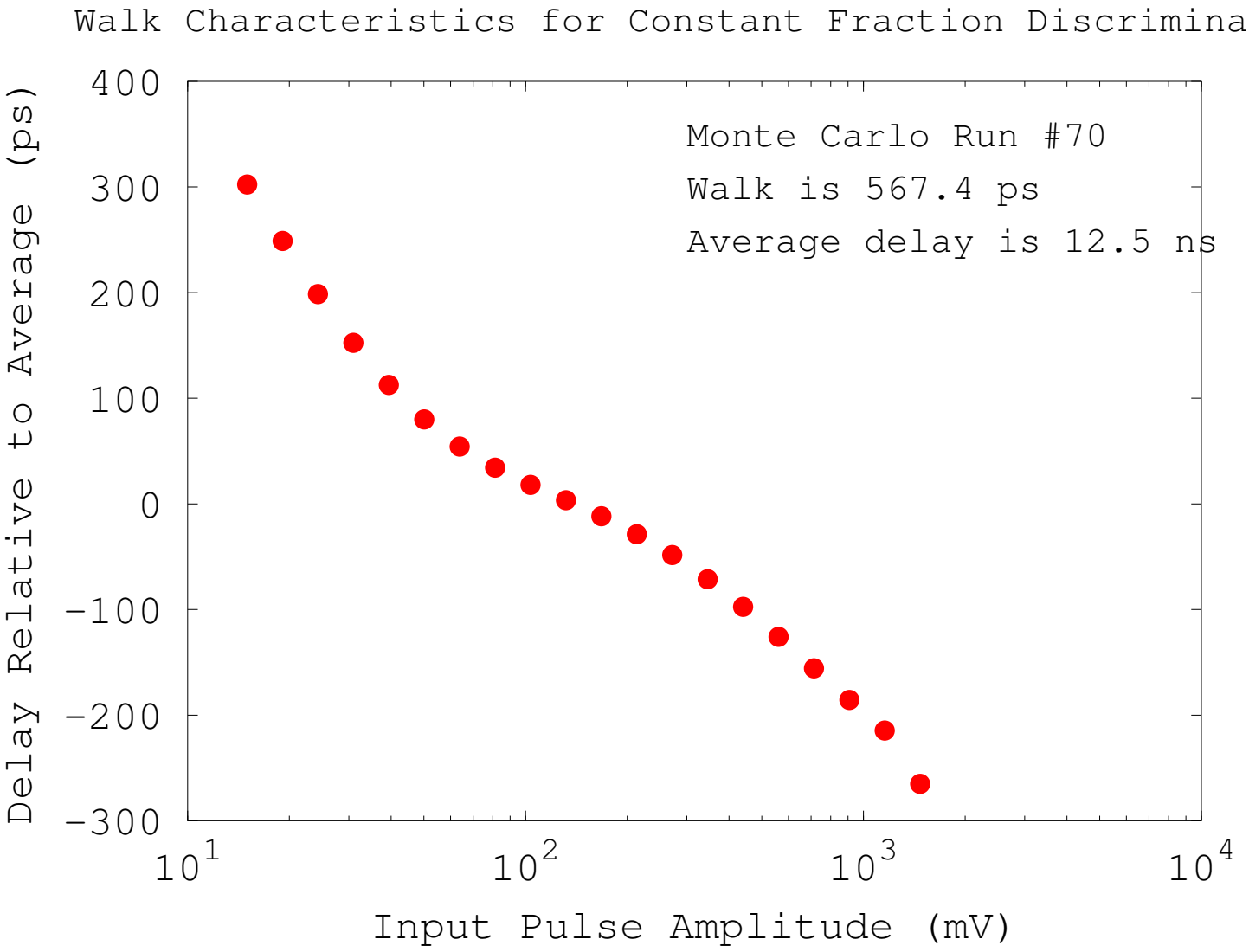

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #66
Walk is 586.1 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

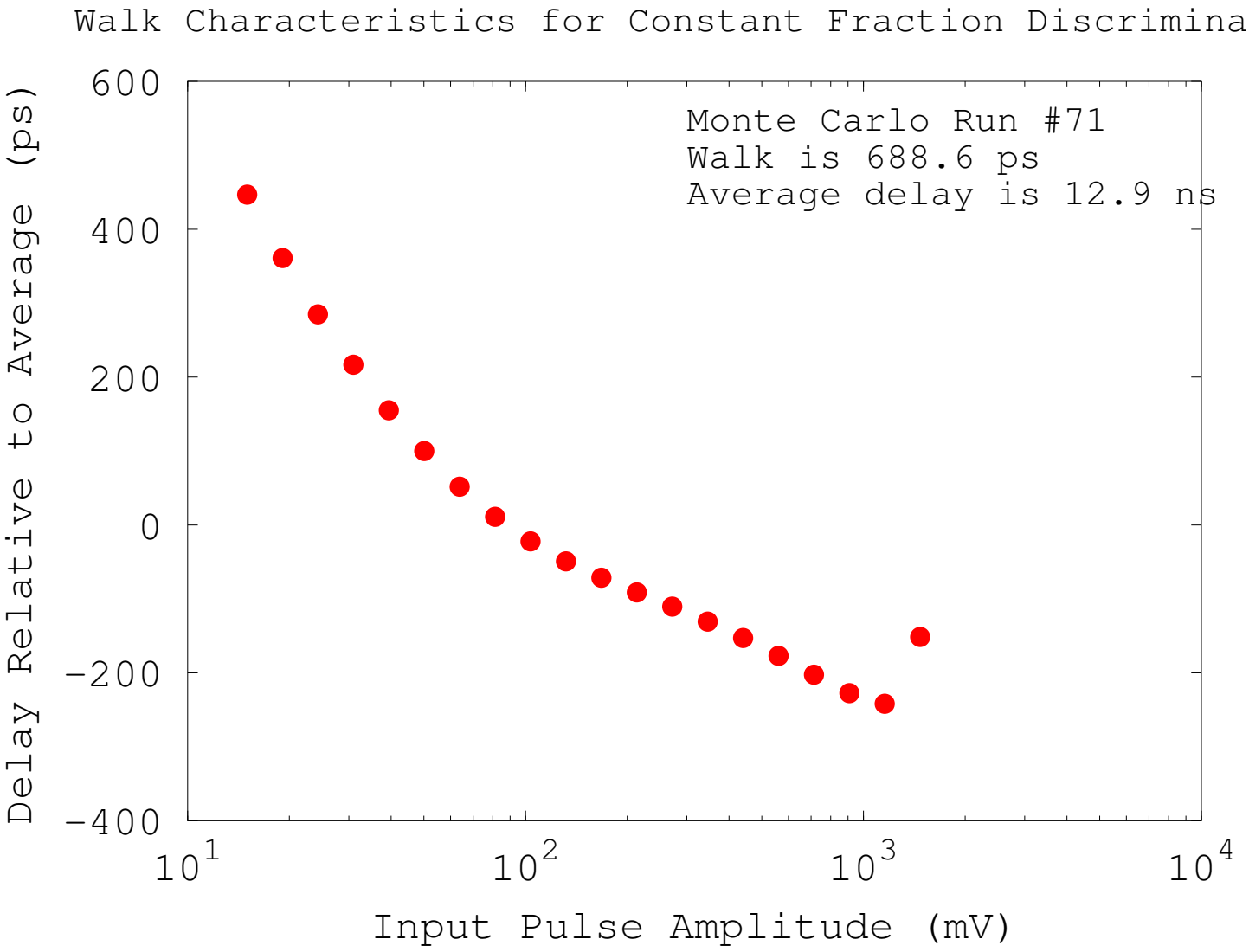

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #67
Walk is 714.2 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

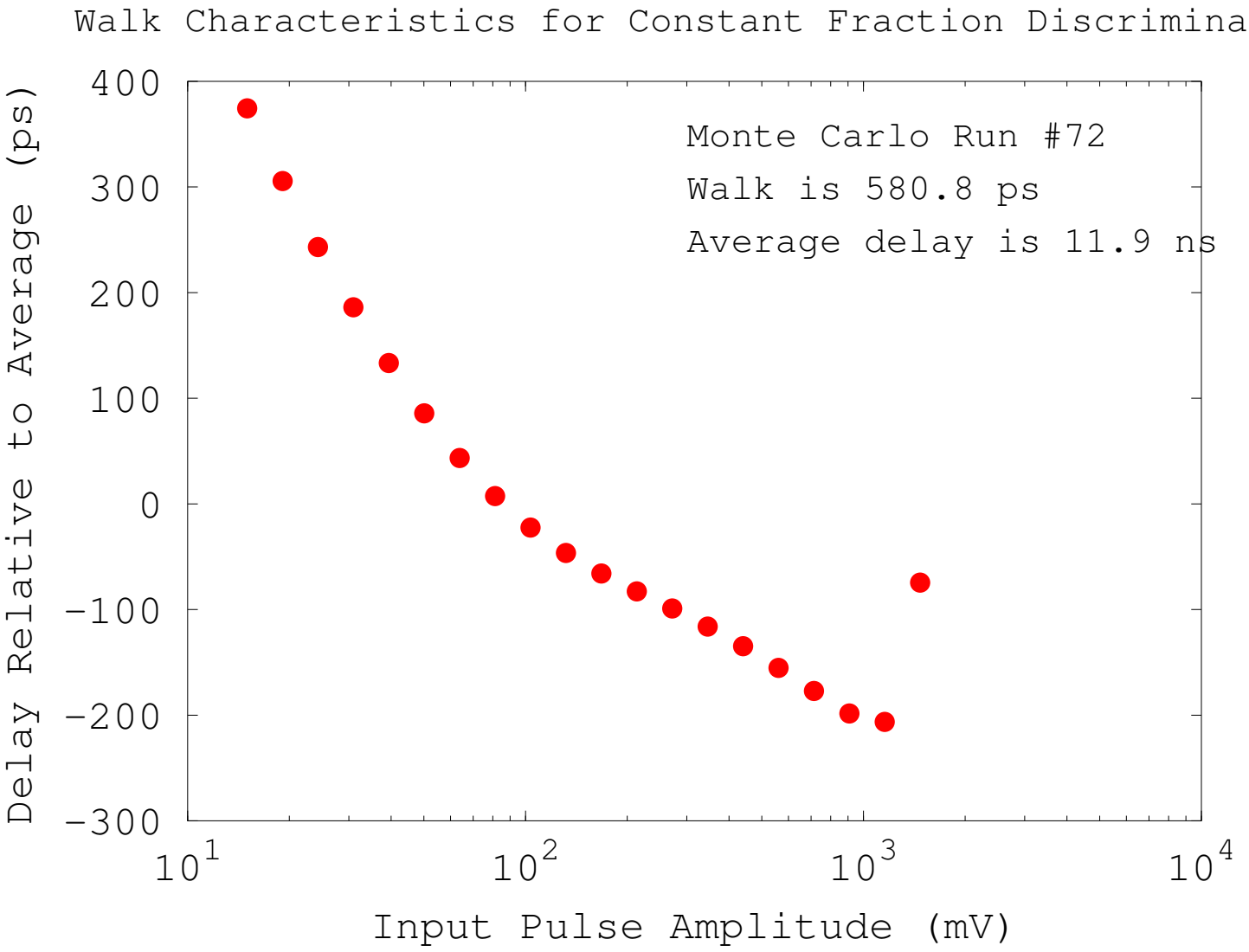

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #68
Walk is 679.6 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

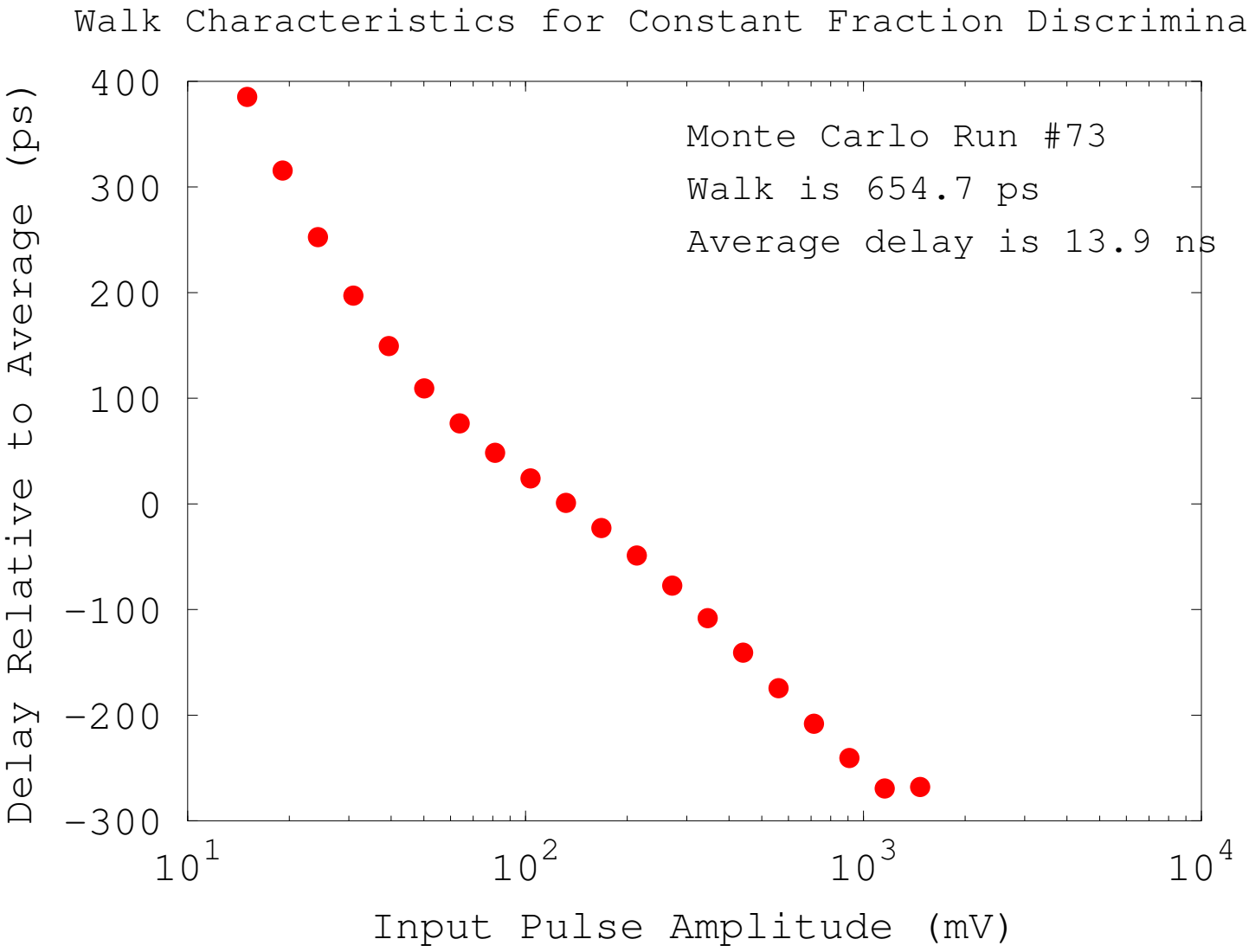

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #69
Walk is 655.1 ps
Average delay is 13.9 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

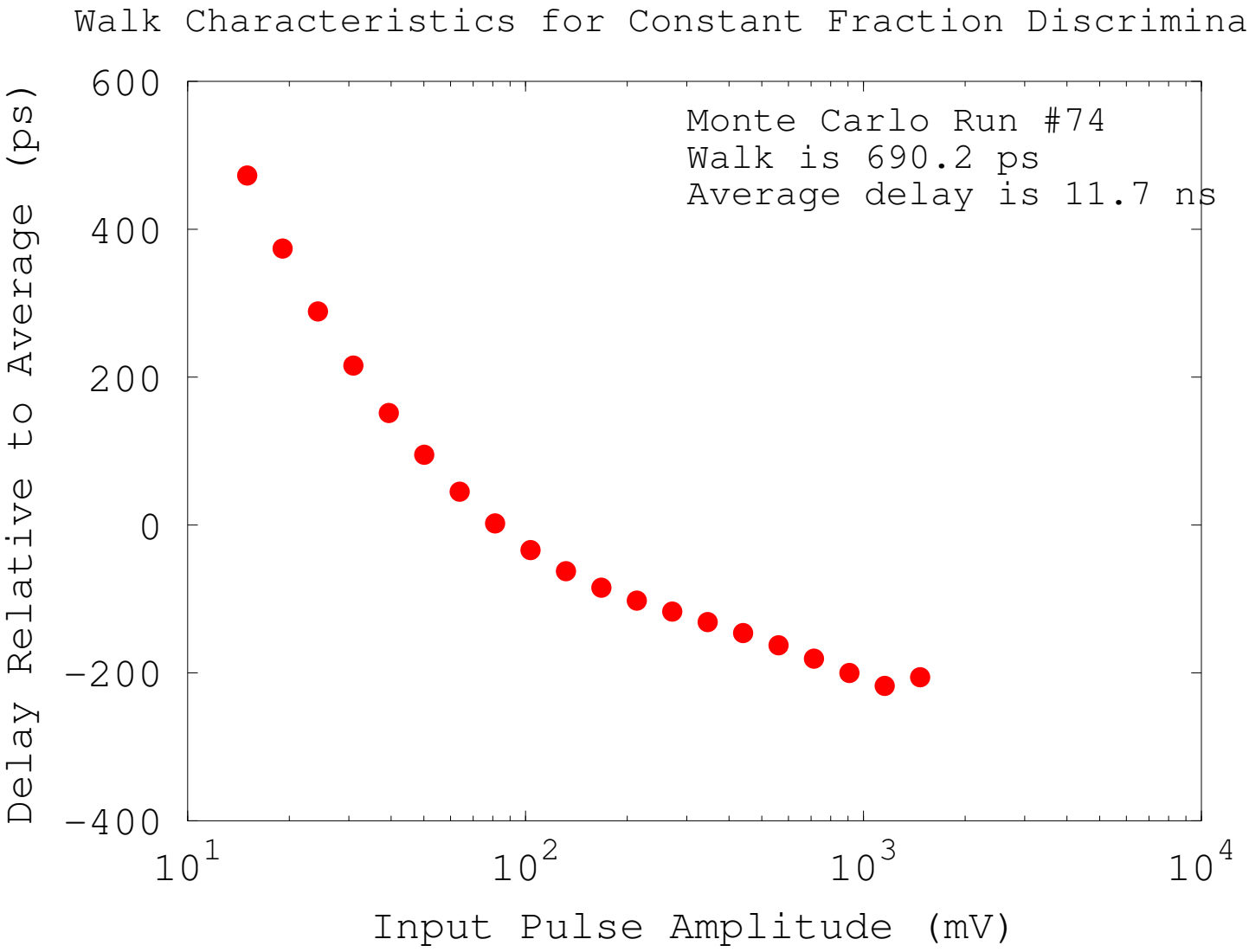

Walk Characteristics for Constant Fraction Discriminat
Delay Relative to Average (ps)
2e+06
1.5e+06
1e+06
500000
0
-500000
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

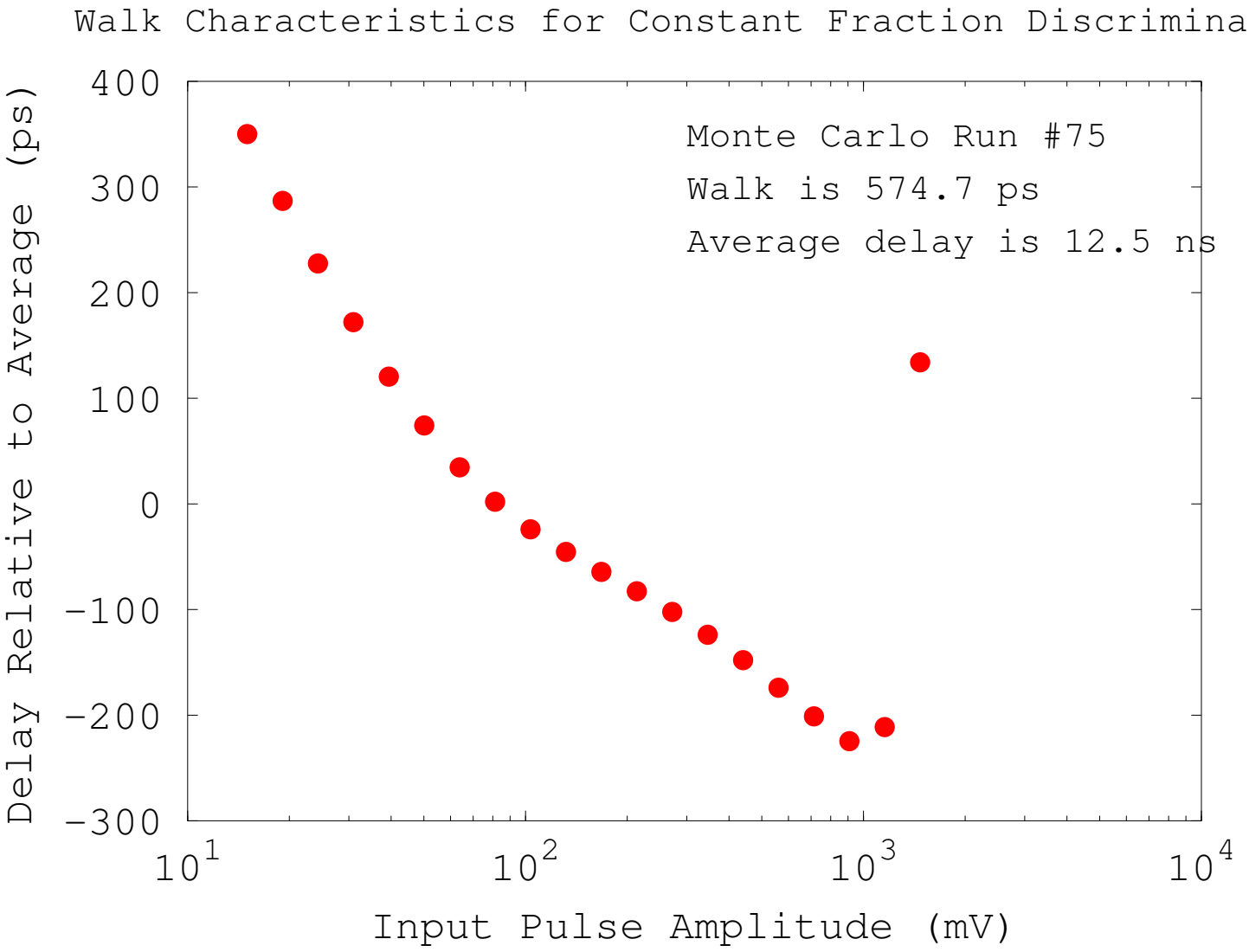

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #70
Walk is 567.4 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

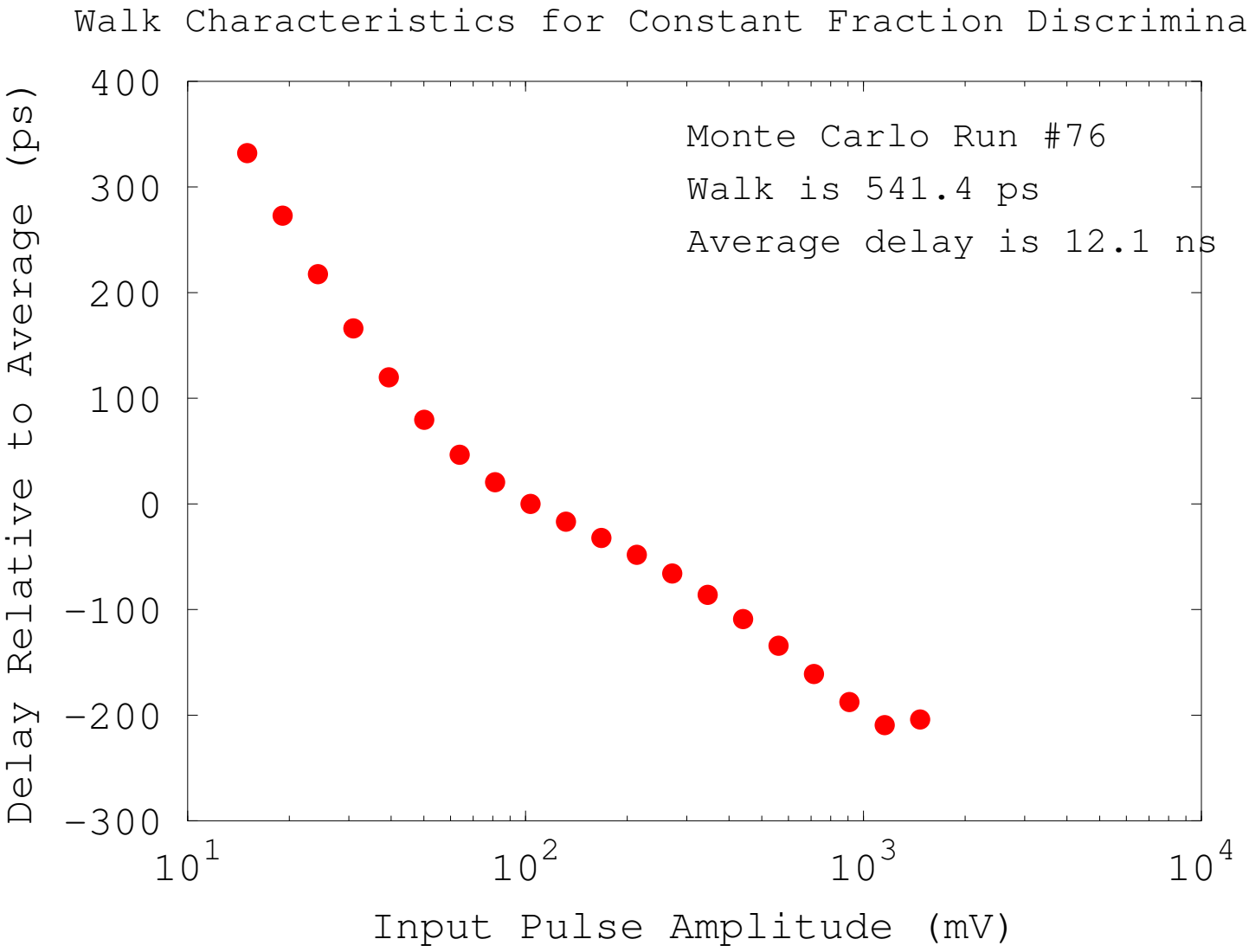

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #71
Walk is 688.6 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

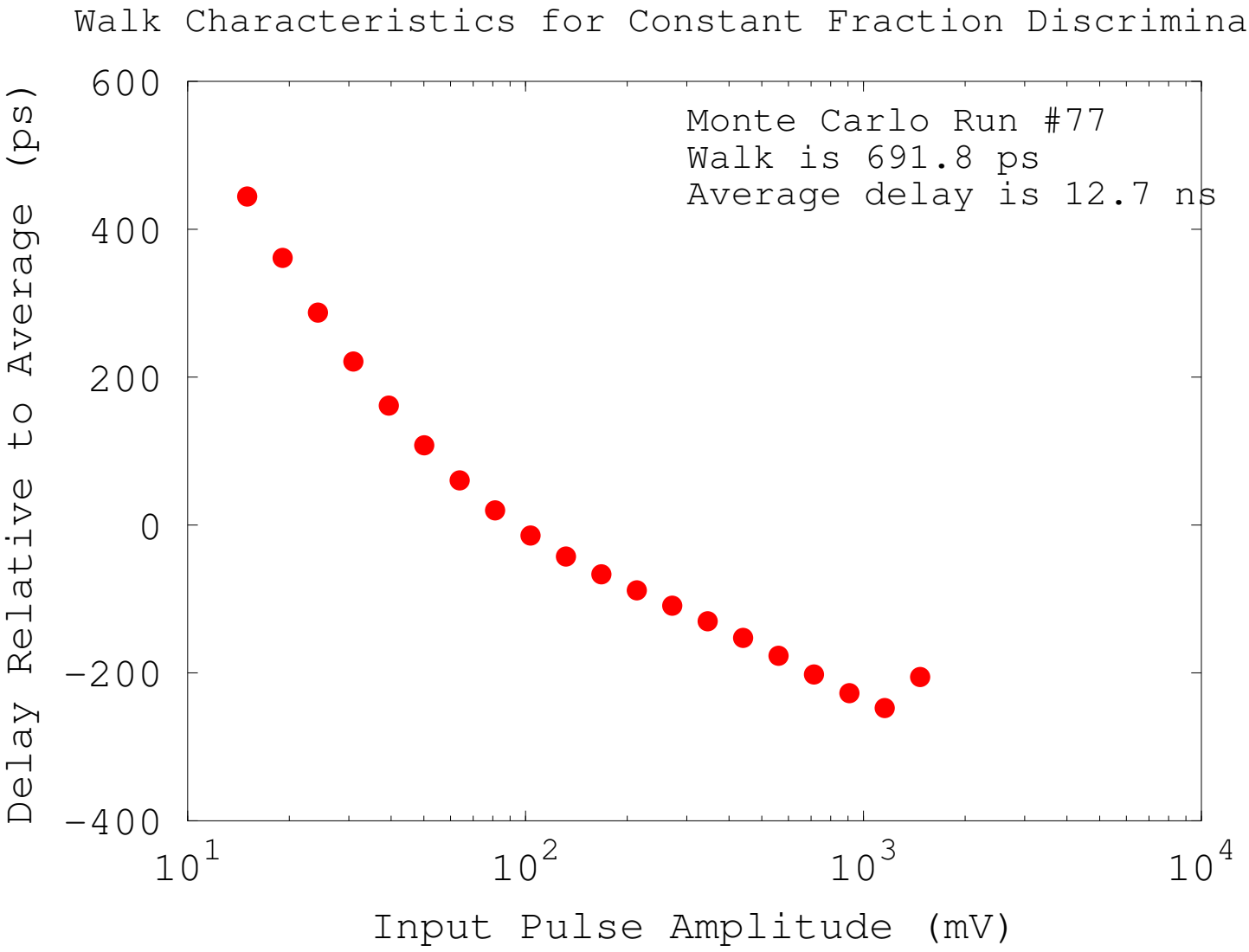

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #72
Walk is 580.8 ps
Average delay is 11.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

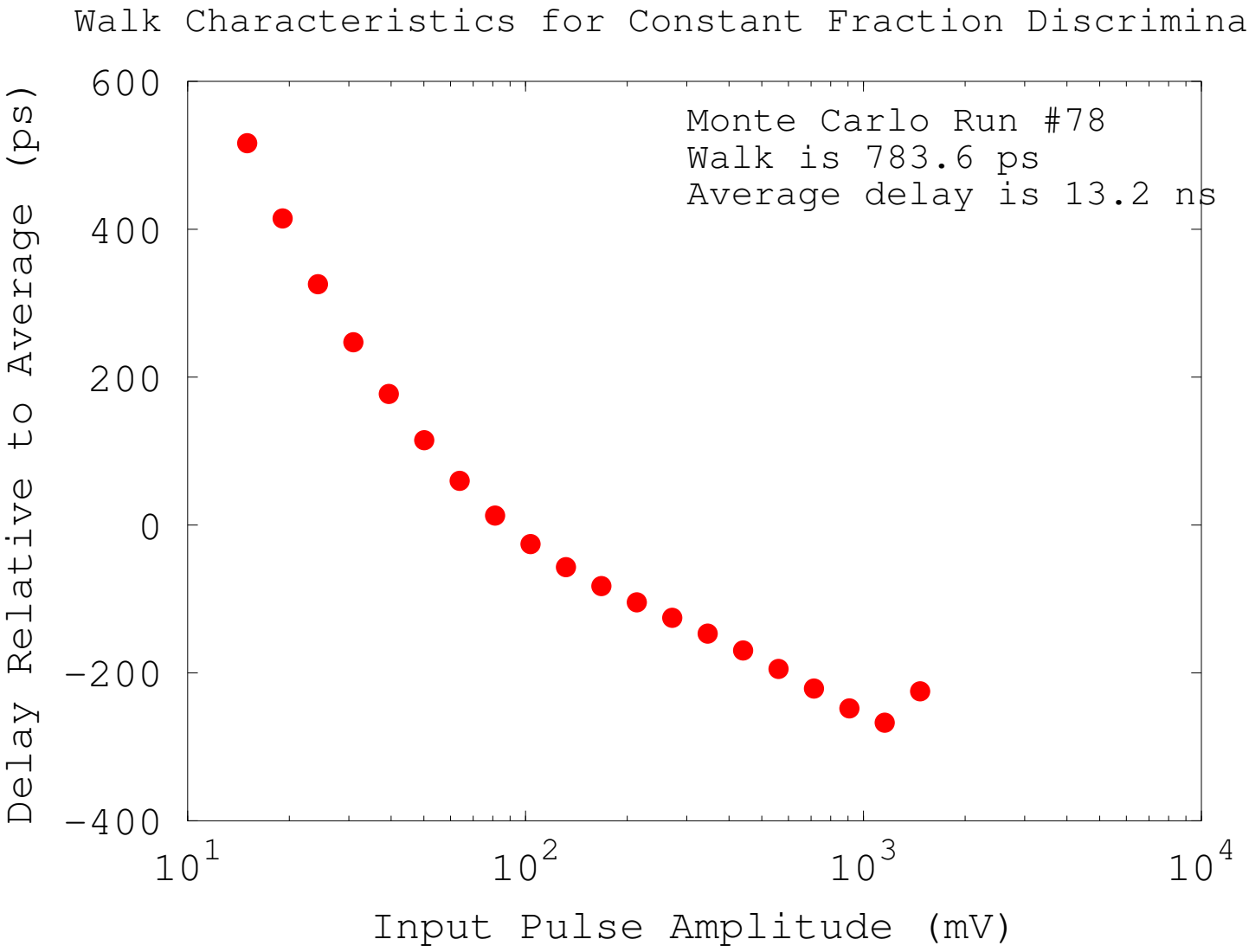

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #73
Walk is 654.7 ps
Average delay is 13.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

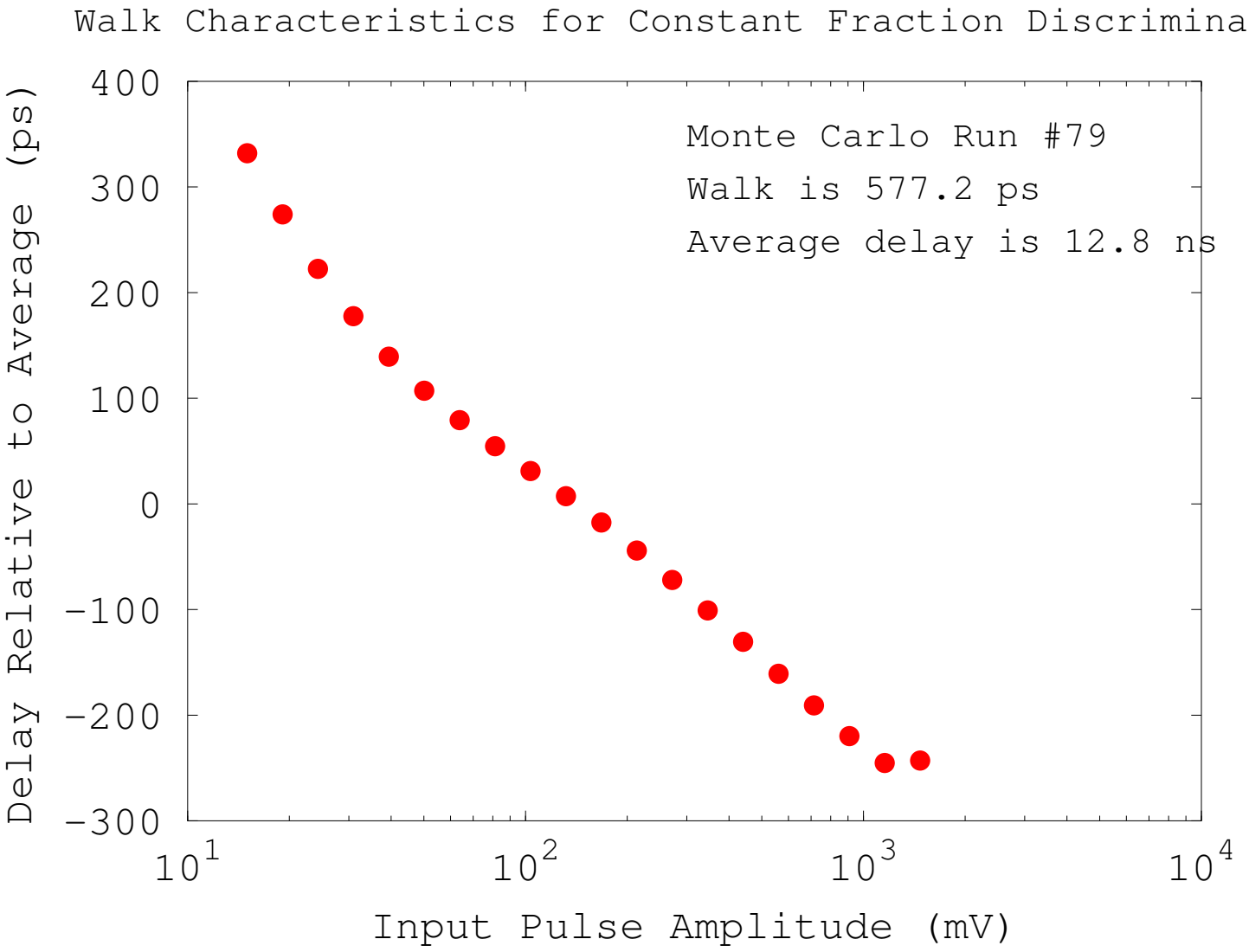

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #74
Walk is 690.2 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

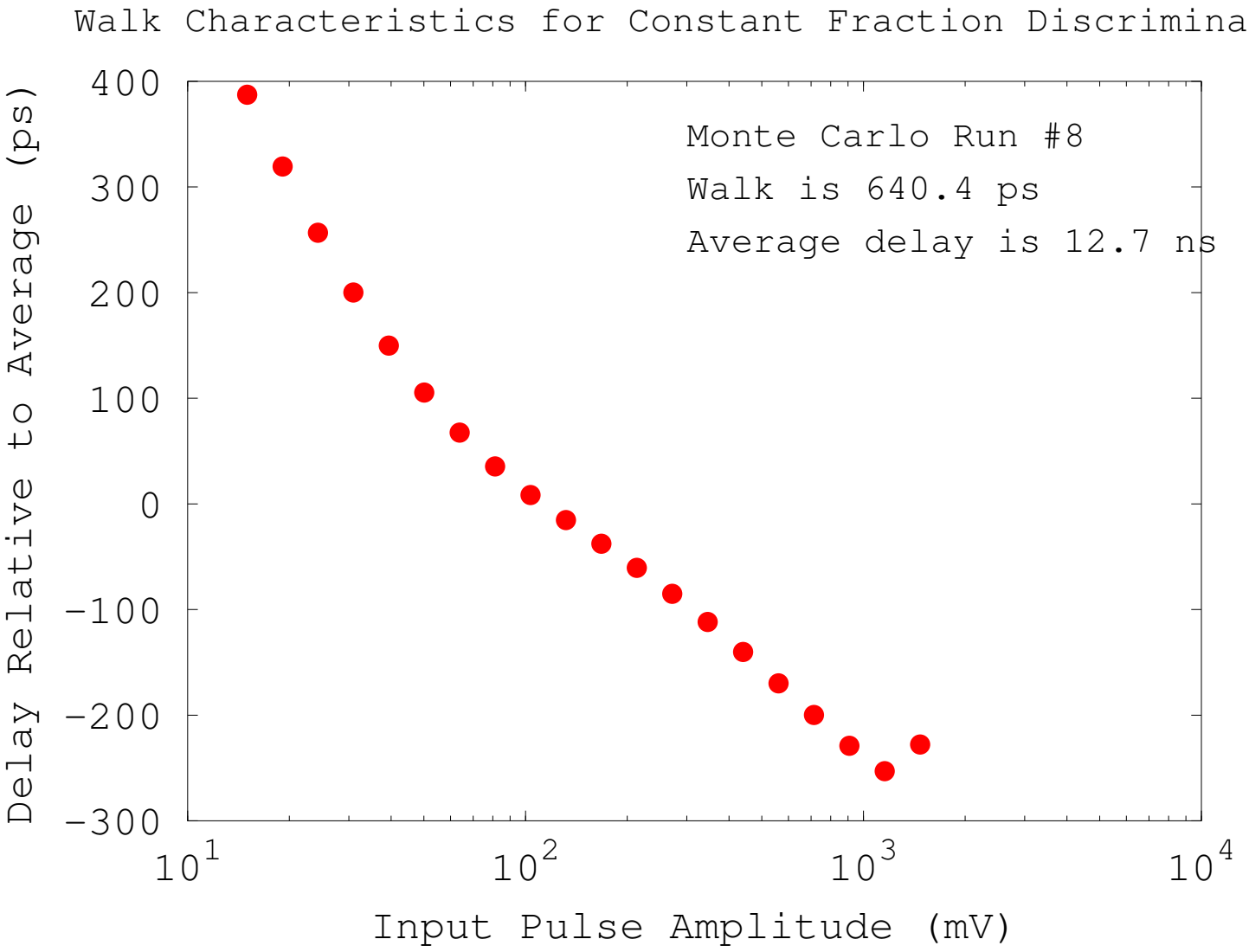

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #75
Walk is 574.7 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

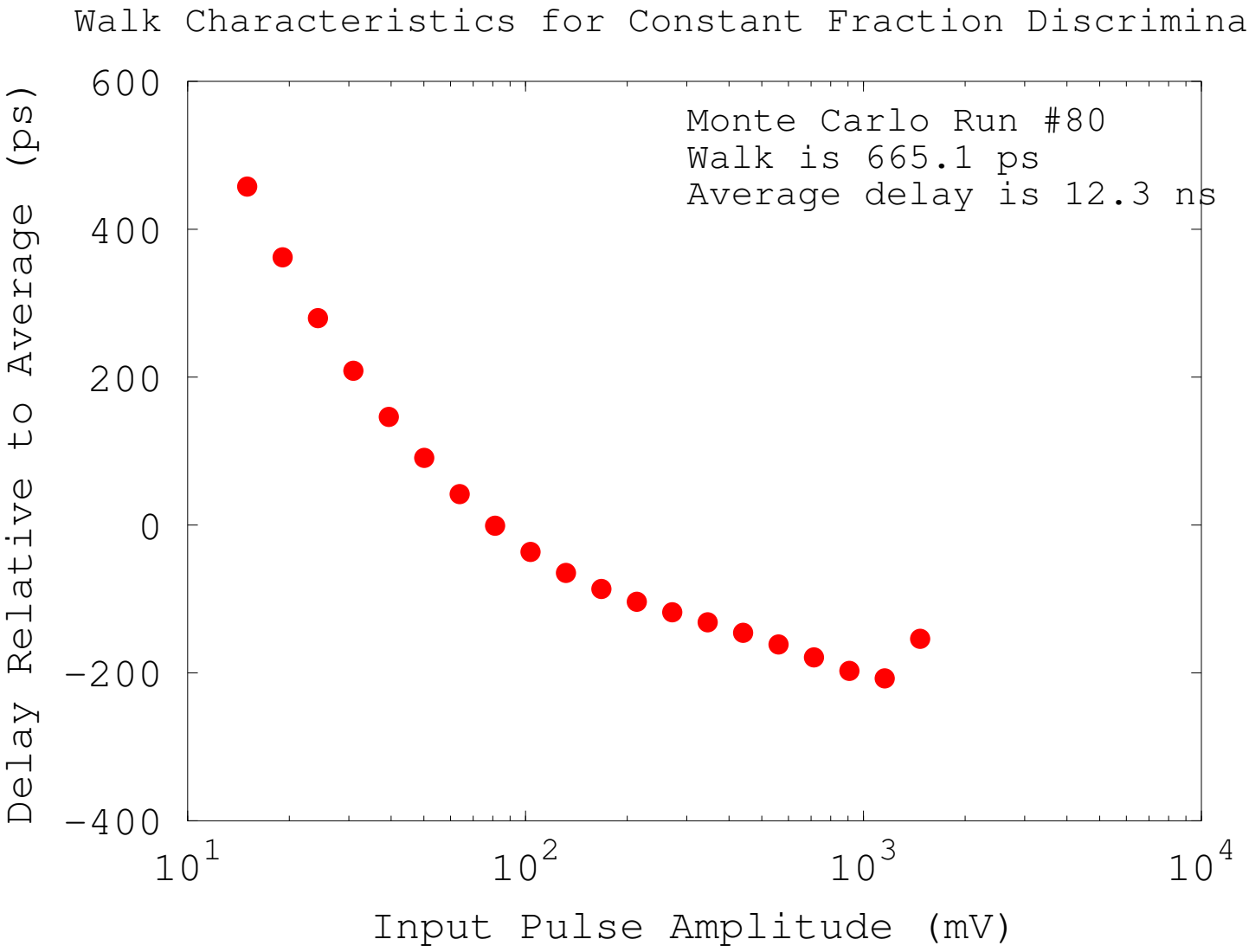

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #76
Walk is 541.4 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

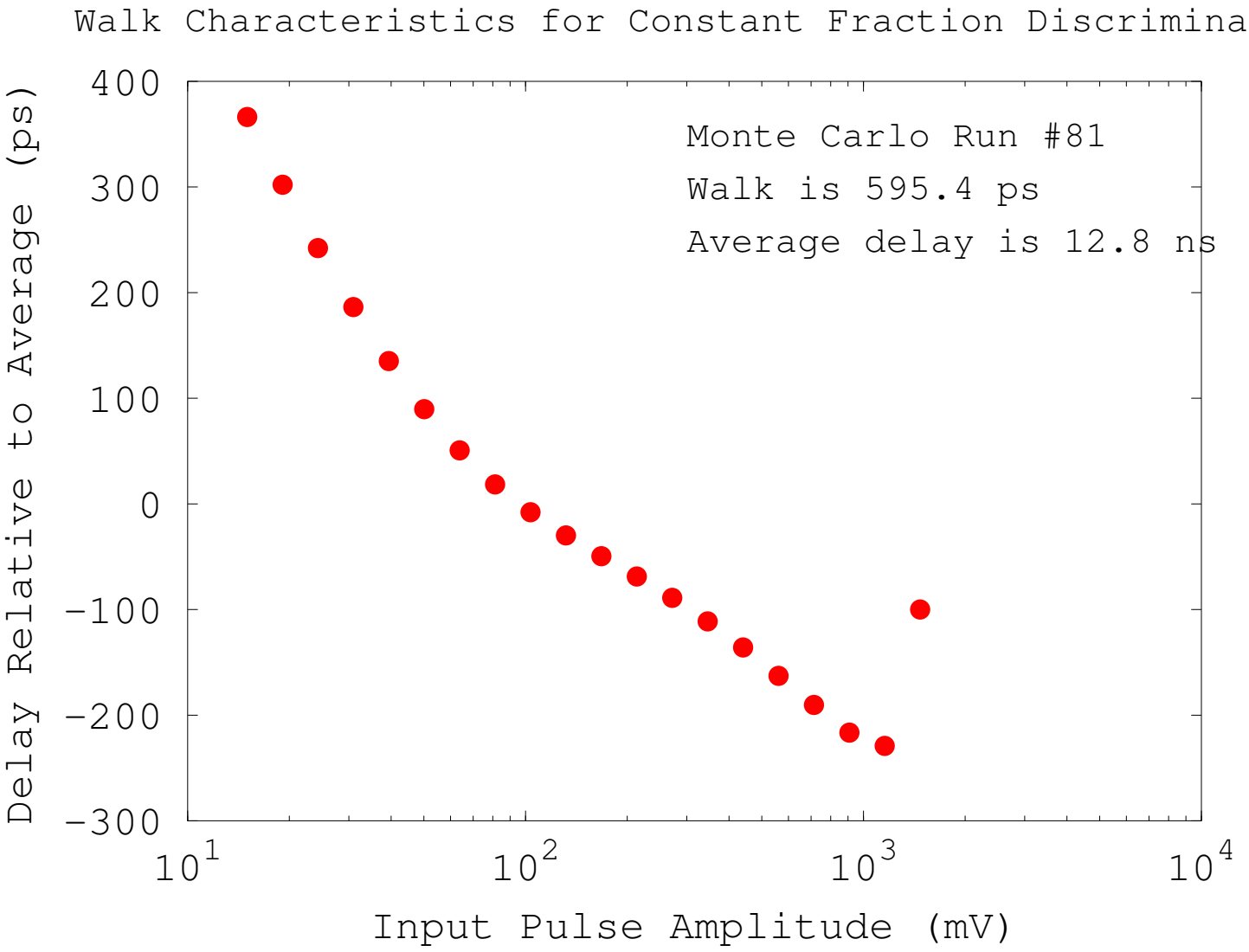

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #77
Walk is 691.8 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

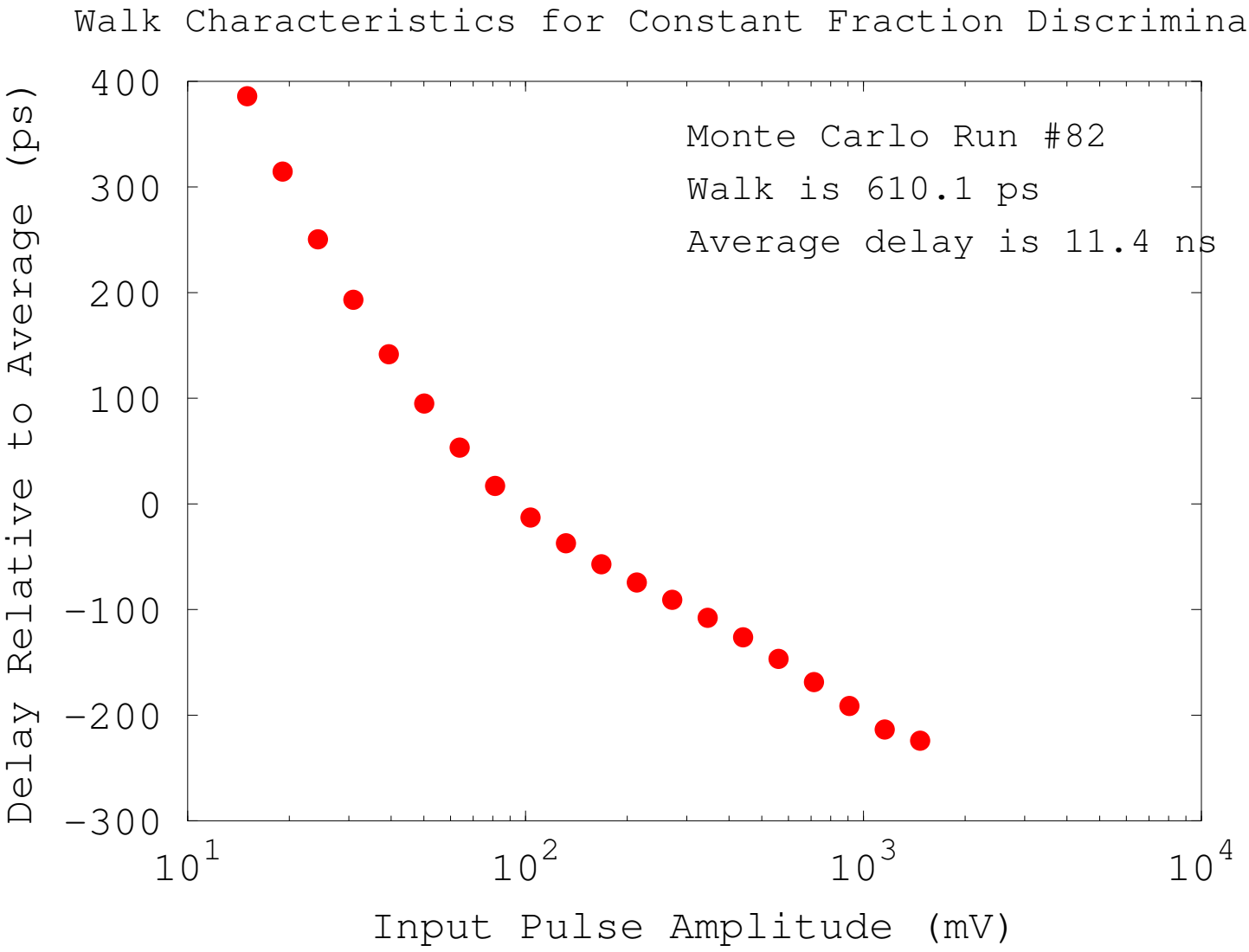

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #78
Walk is 783.6 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

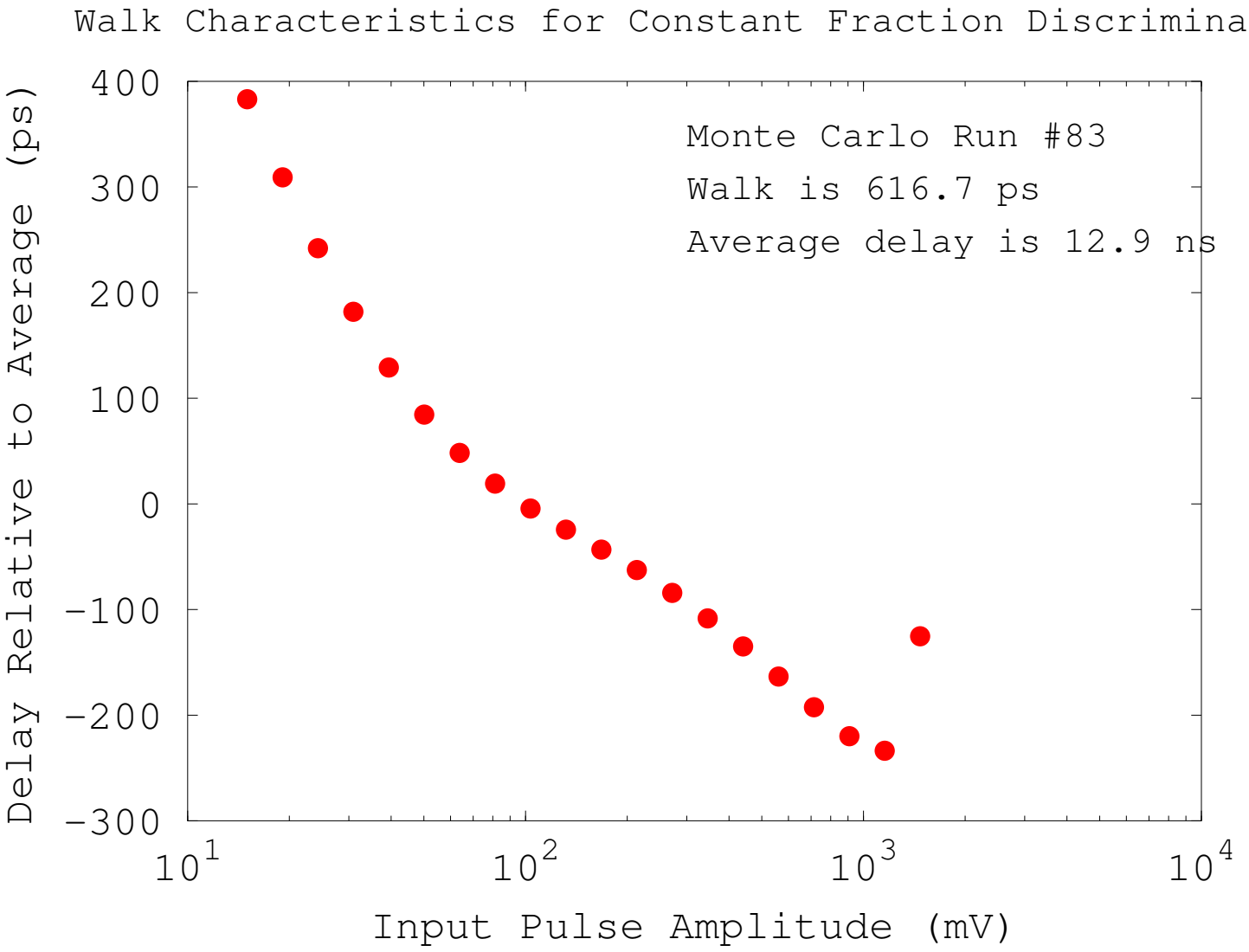

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #79
Walk is 577.2 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

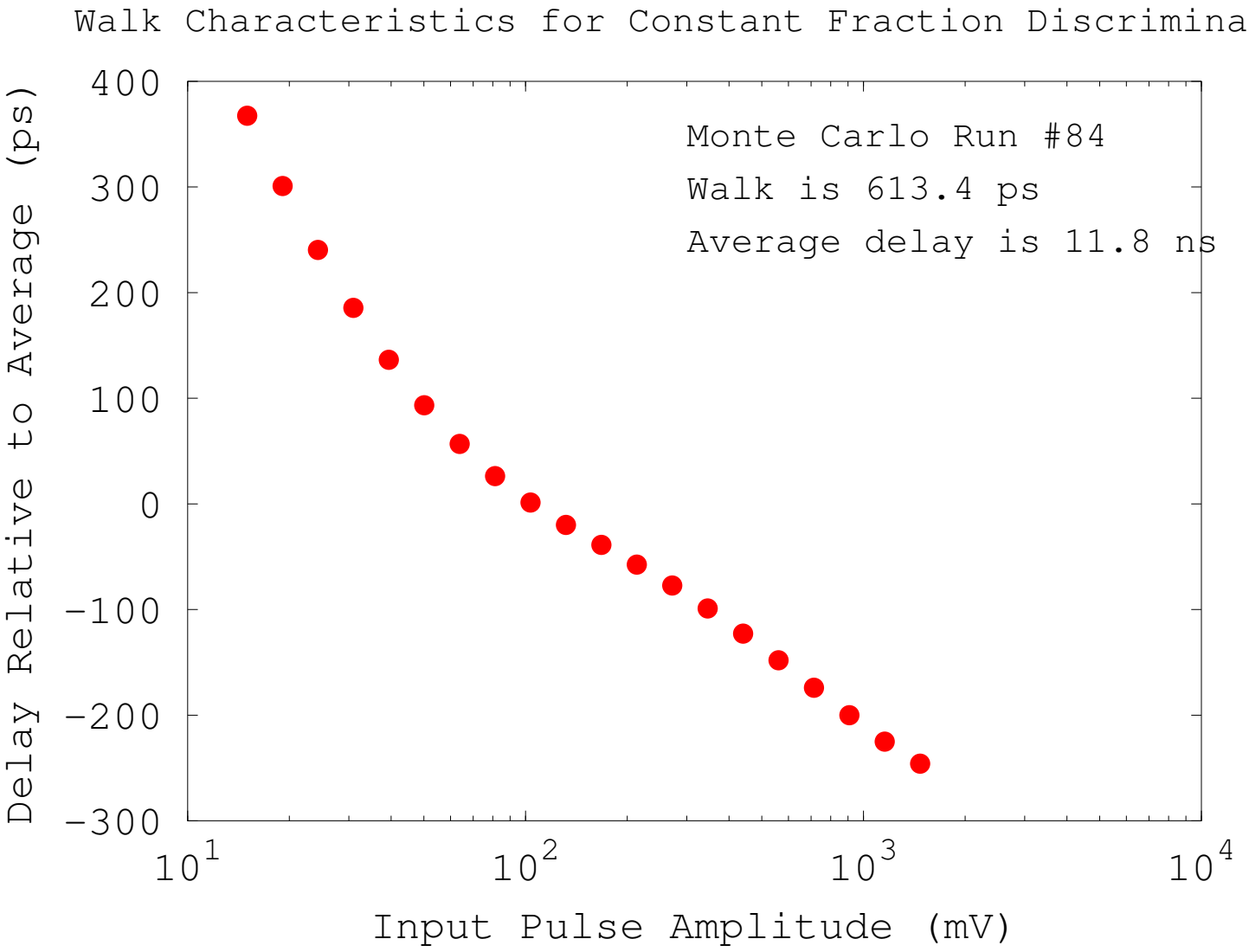

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #8
Walk is 640.4 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

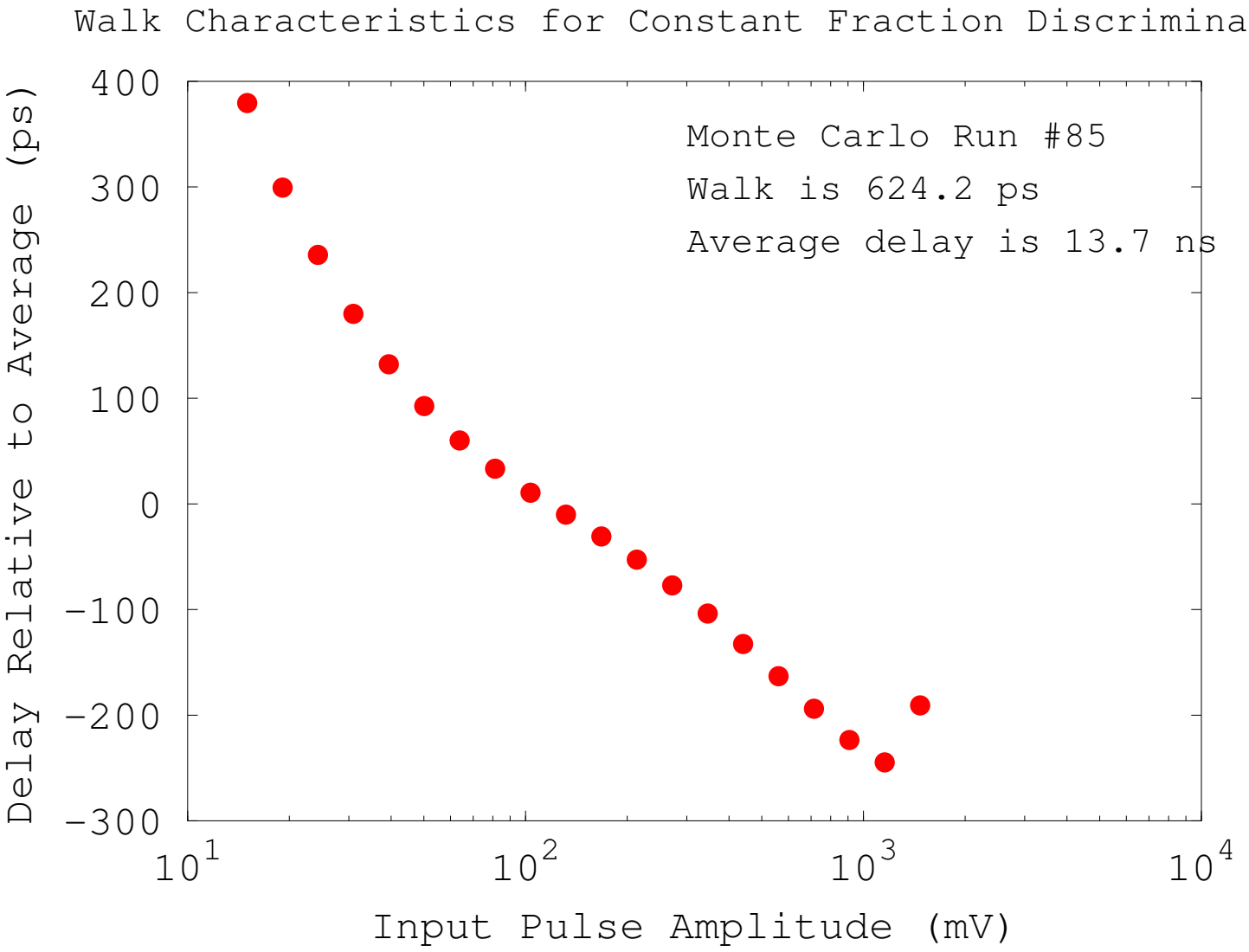

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #80
Walk is 665.1 ps
Average delay is 12.3 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

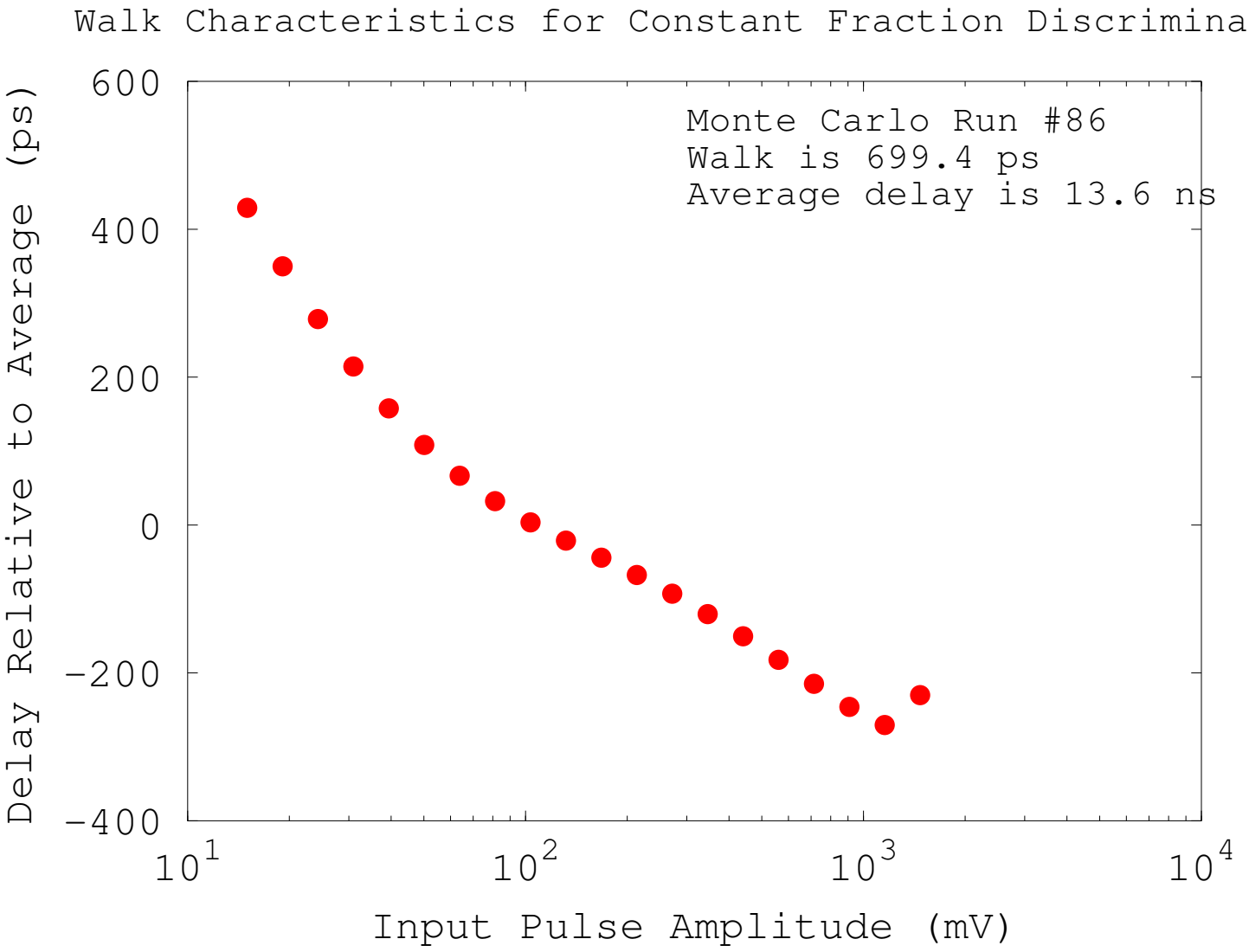

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #81
Walk is 595.4 ps
Average delay is 12.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

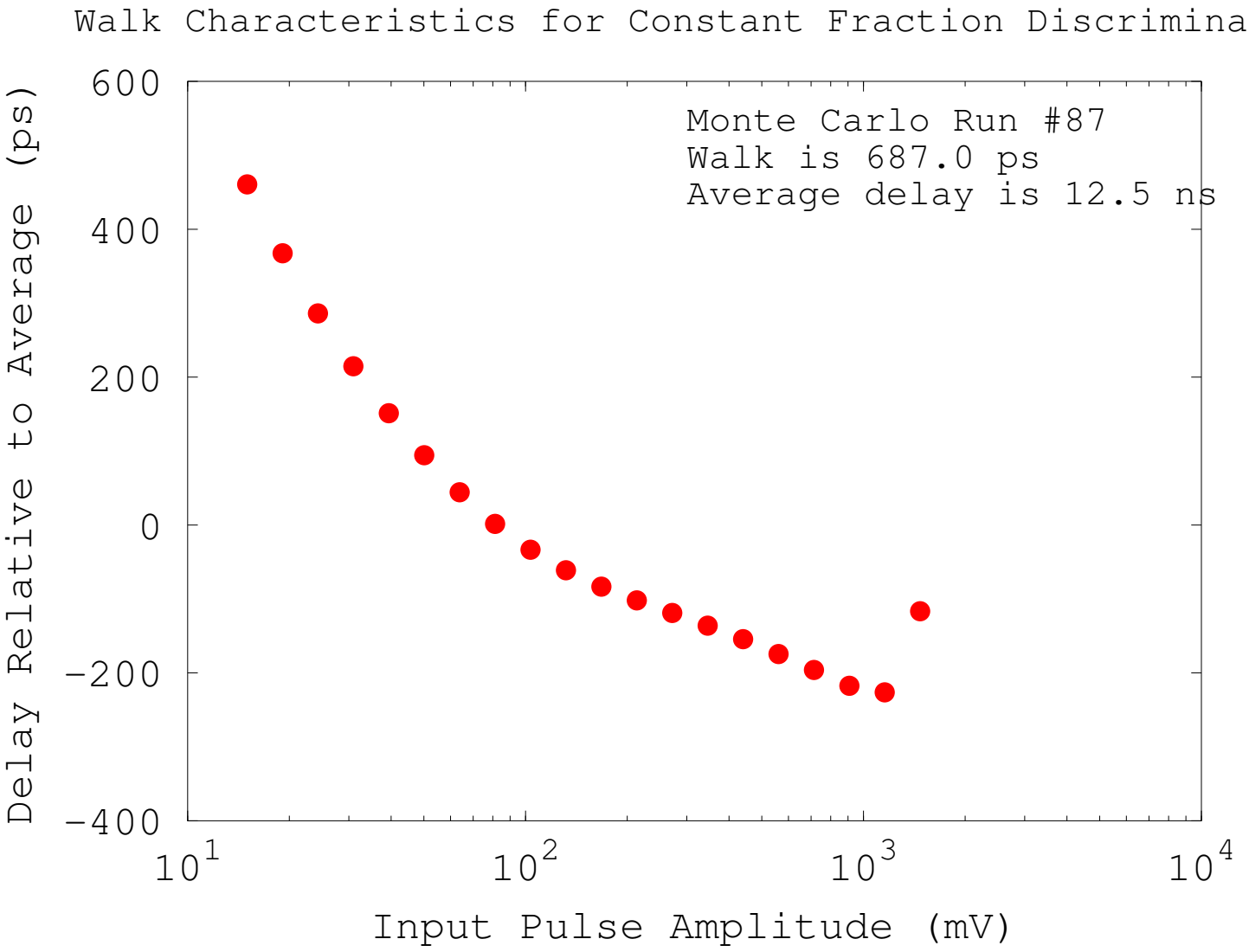

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #82
Walk is 610.1 ps
Average delay is 11.4 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

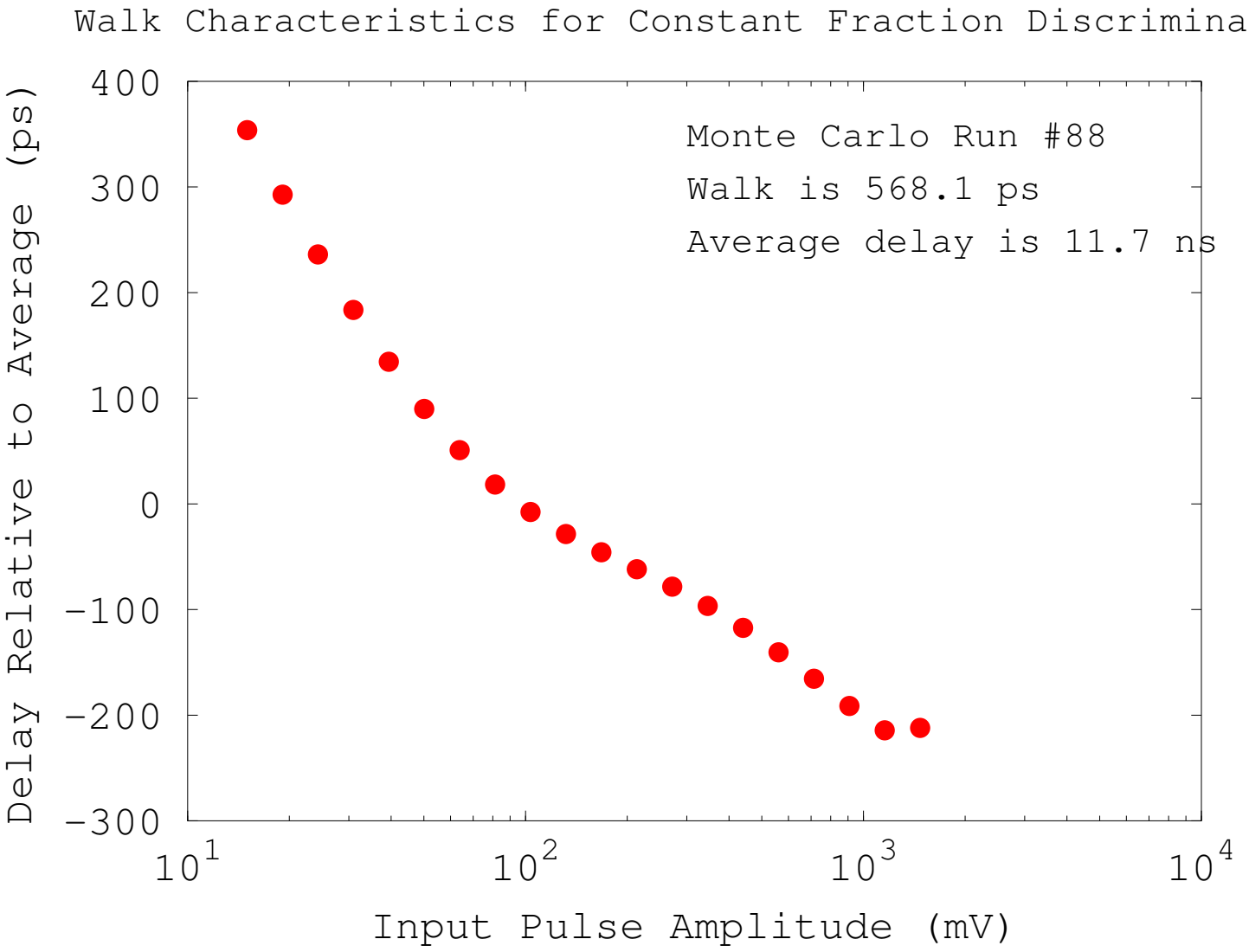

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #83
Walk is 616.7 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

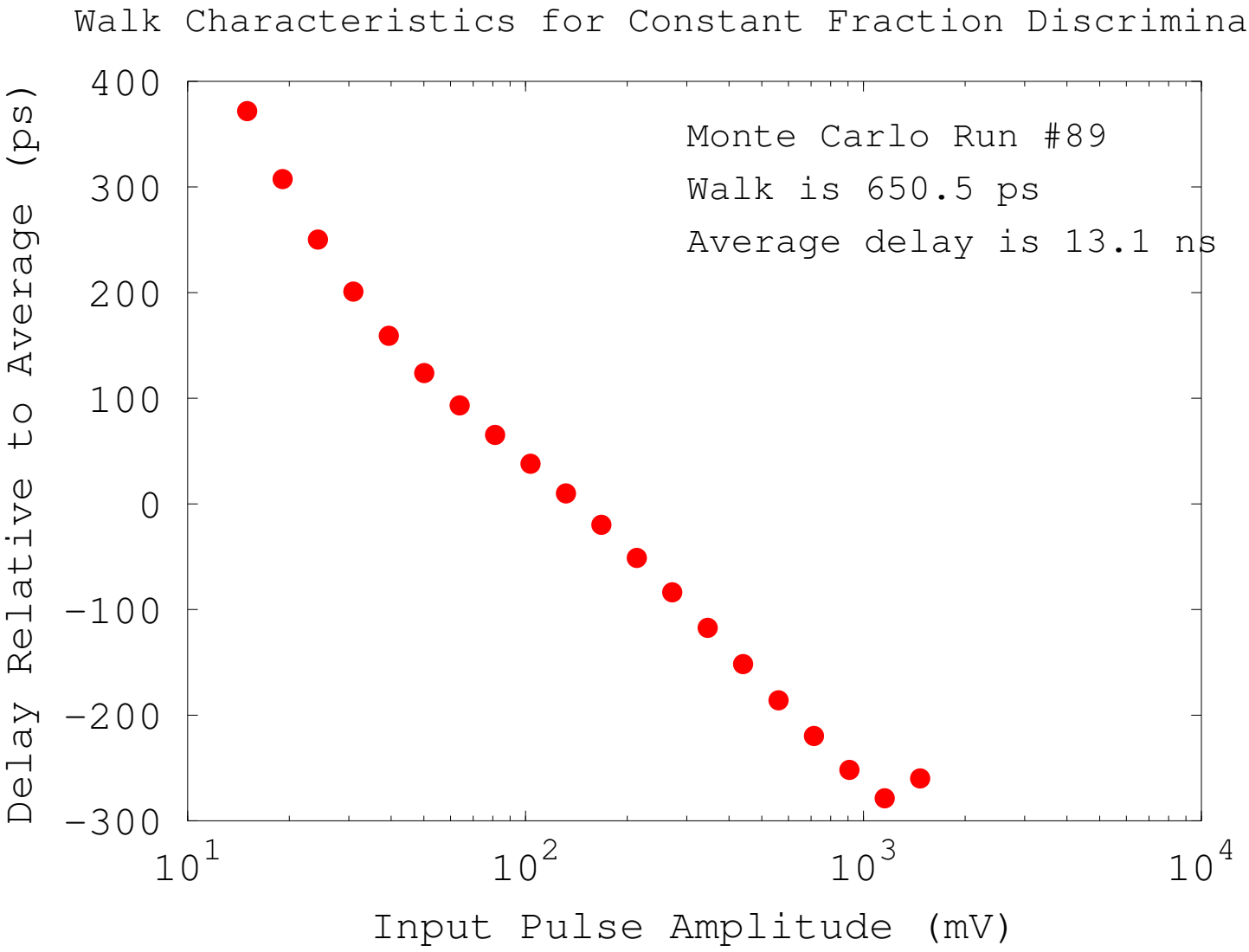

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #84
Walk is 613.4 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

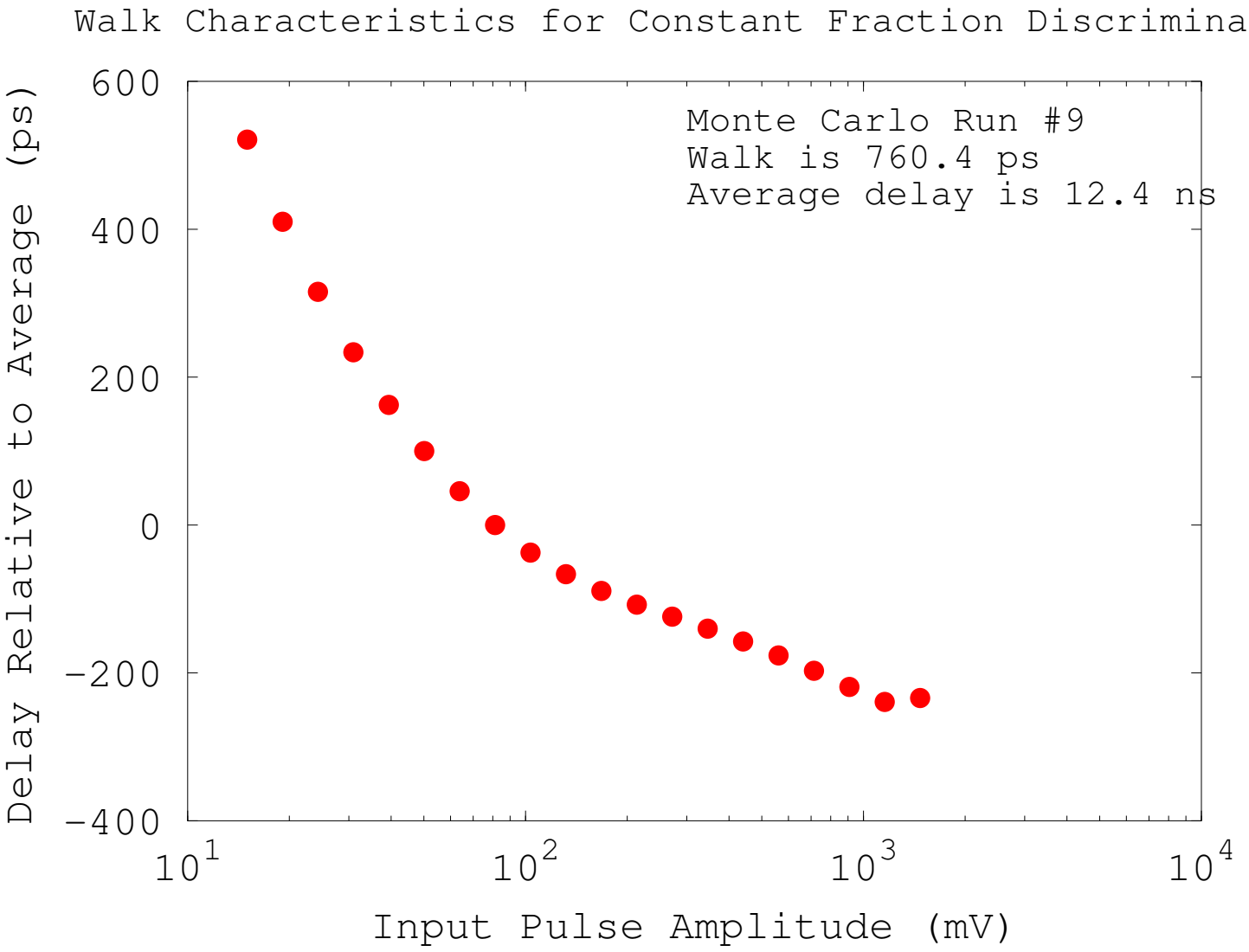

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #85
Walk is 624.2 ps
Average delay is 13.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

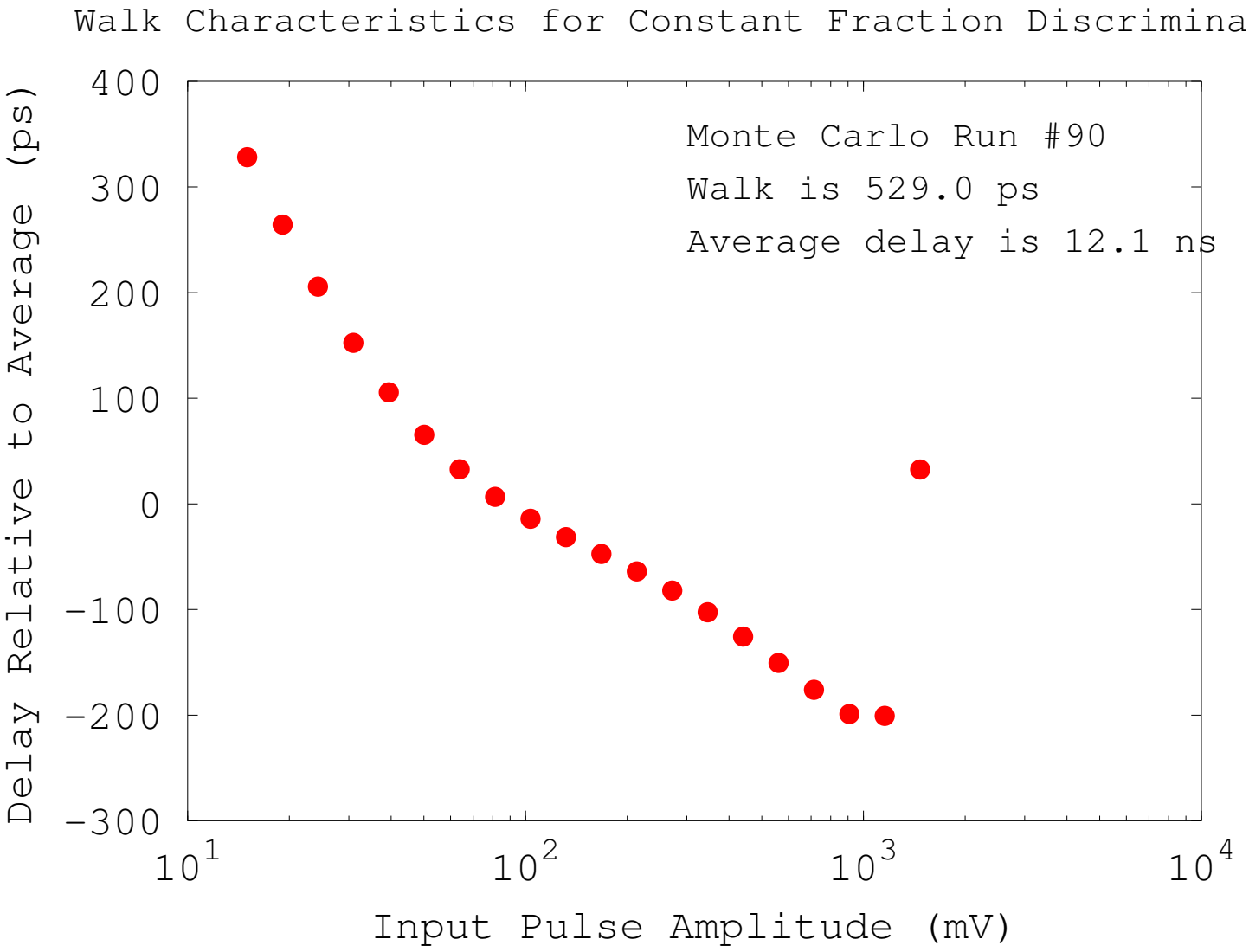

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #86
Walk is 699.4 ps
Average delay is 13.6 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

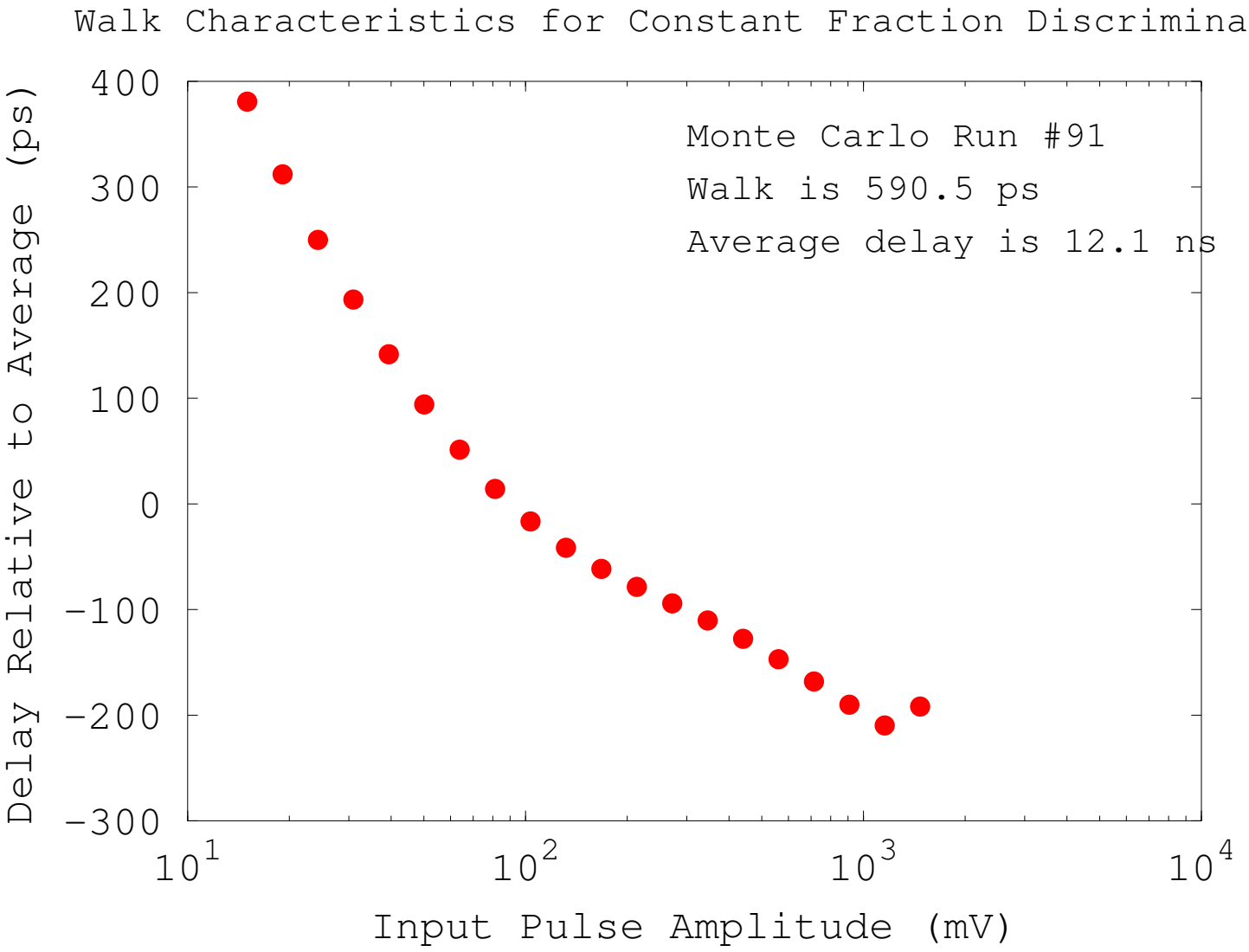

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #87
Walk is 687.0 ps
Average delay is 12.5 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

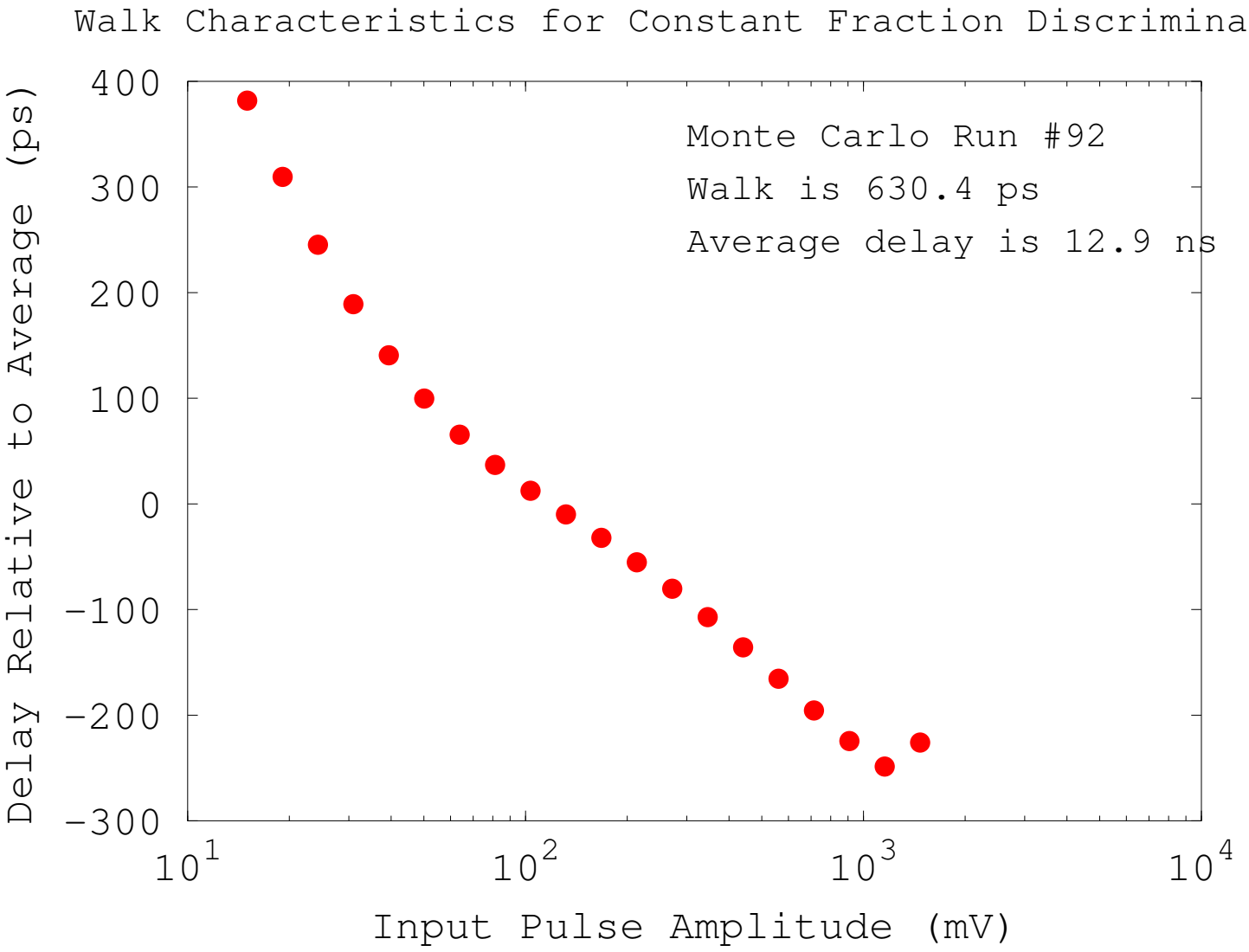

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #88
Walk is 568.1 ps
Average delay is 11.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

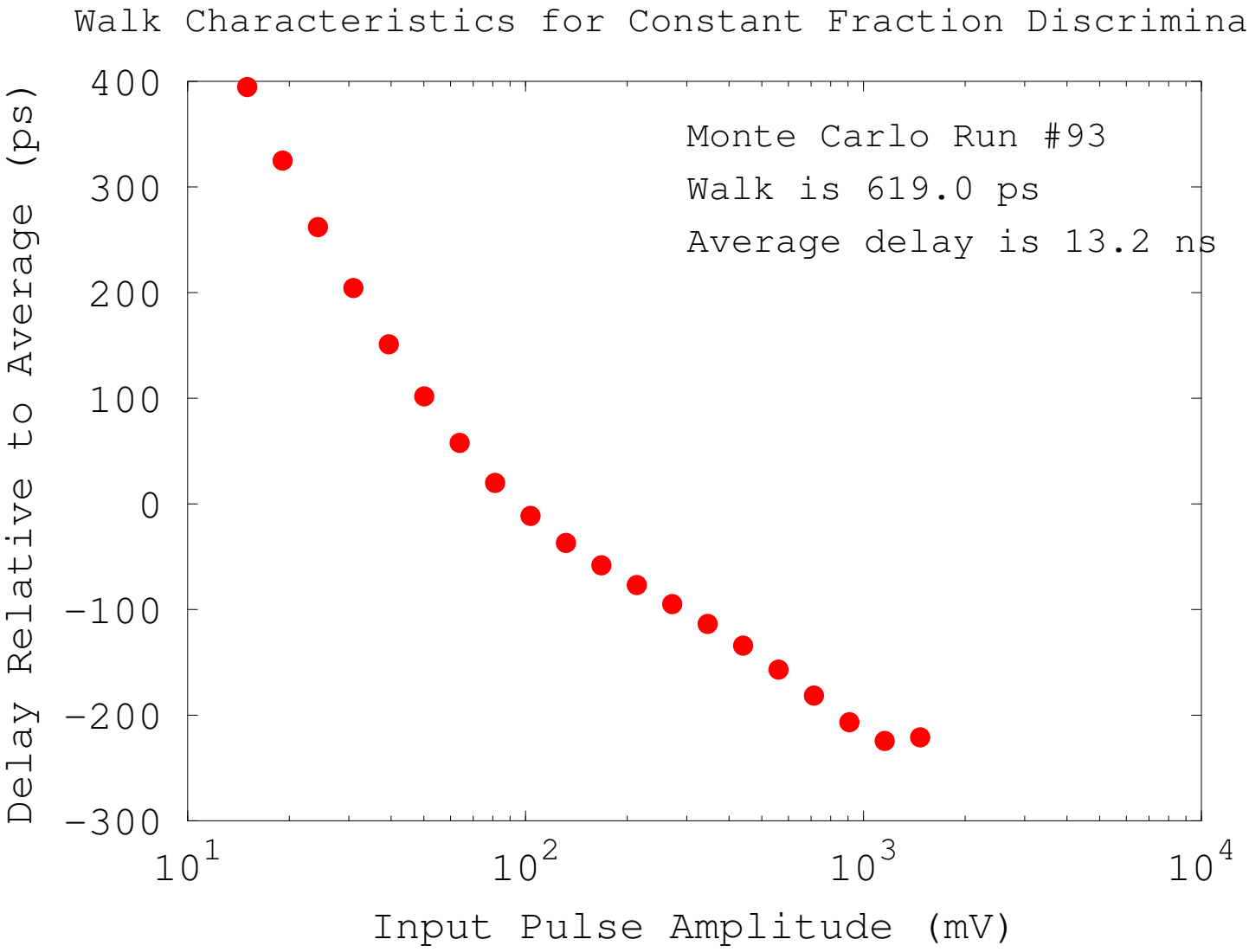

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #89
Walk is 650.5 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

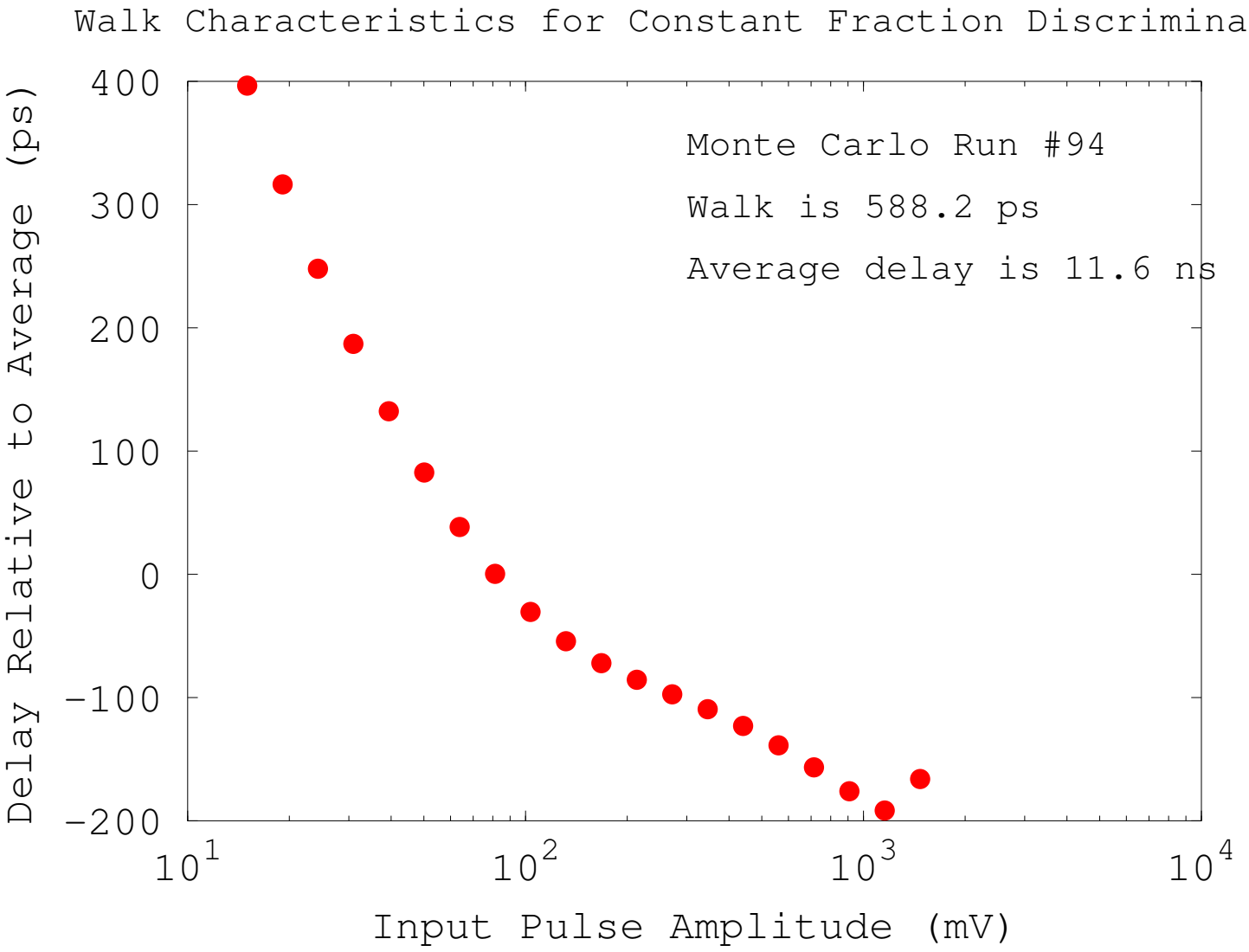

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #9
Walk is 760.4 ps
Average delay is 12.4 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

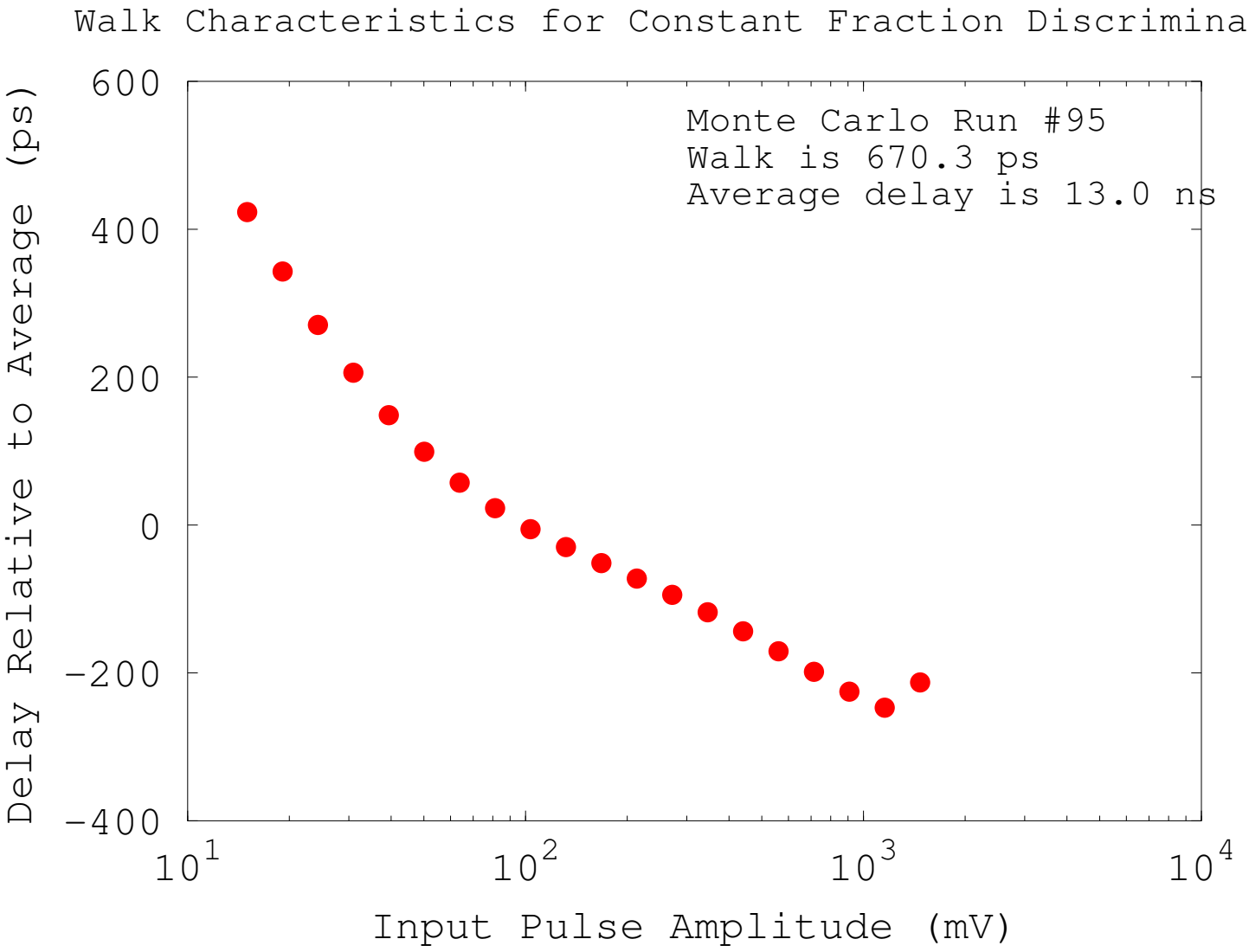

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #90
Walk is 529.0 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

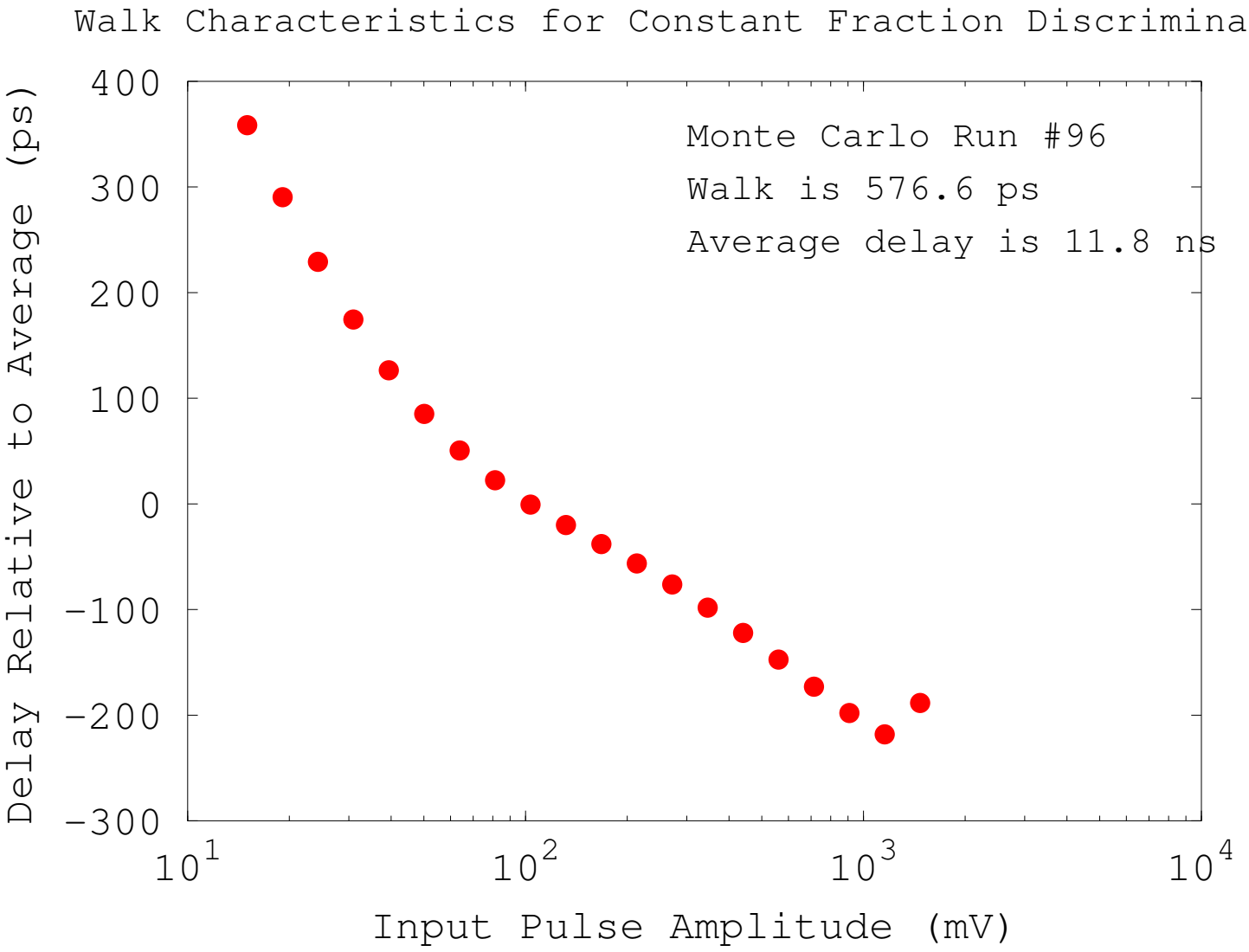

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #91
Walk is 590.5 ps
Average delay is 12.1 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

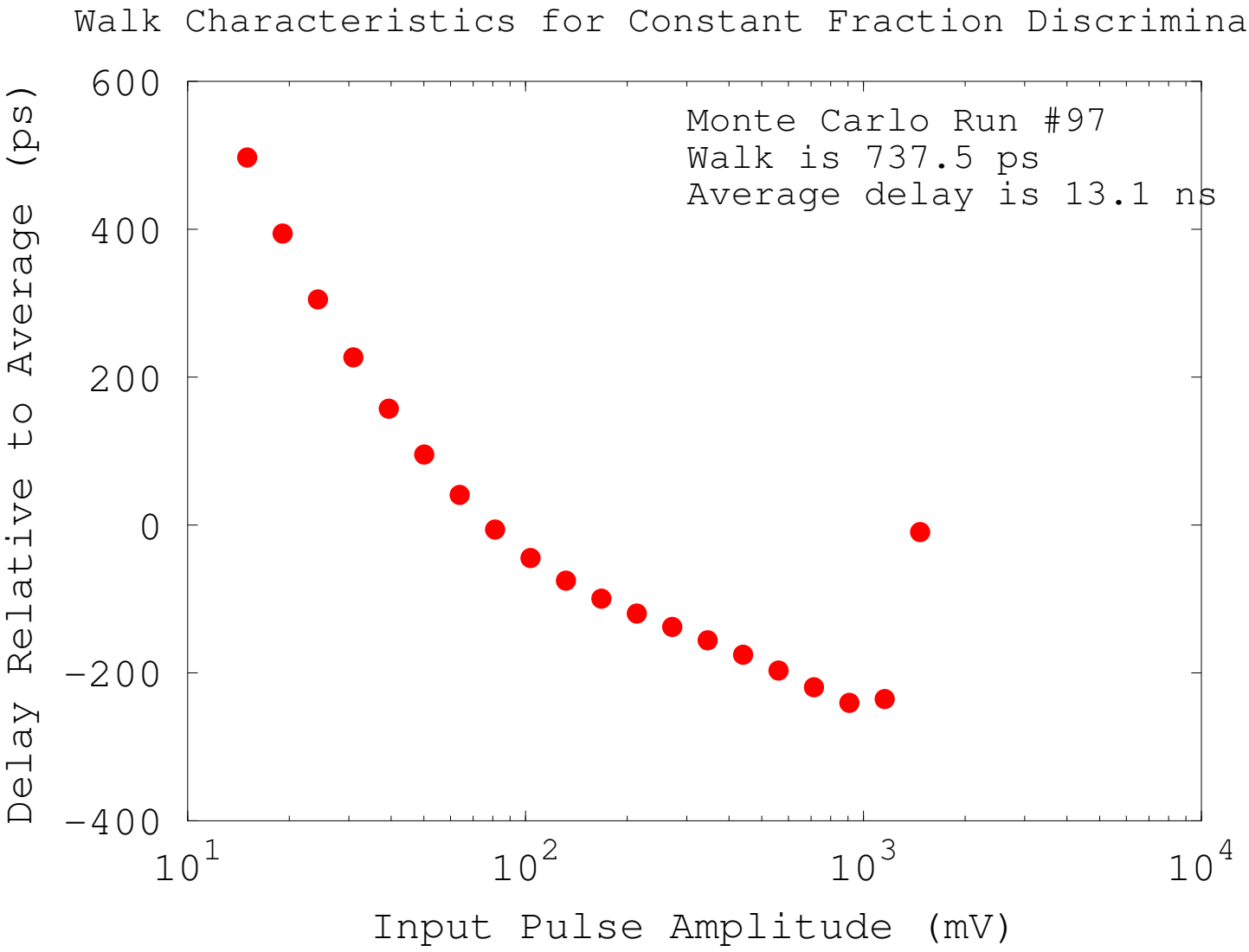

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #92
Walk is 630.4 ps
Average delay is 12.9 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

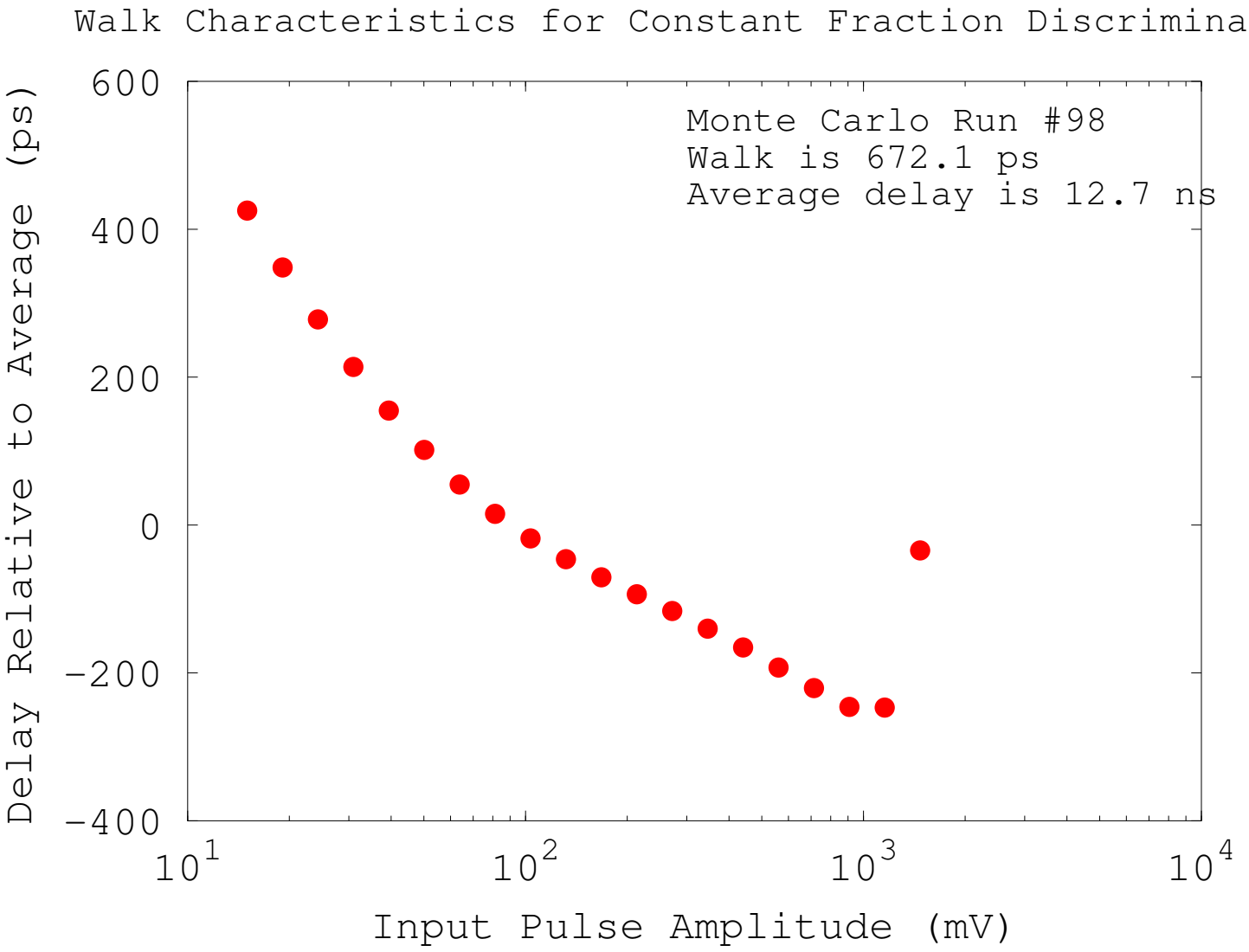

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #93
Walk is 619.0 ps
Average delay is 13.2 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

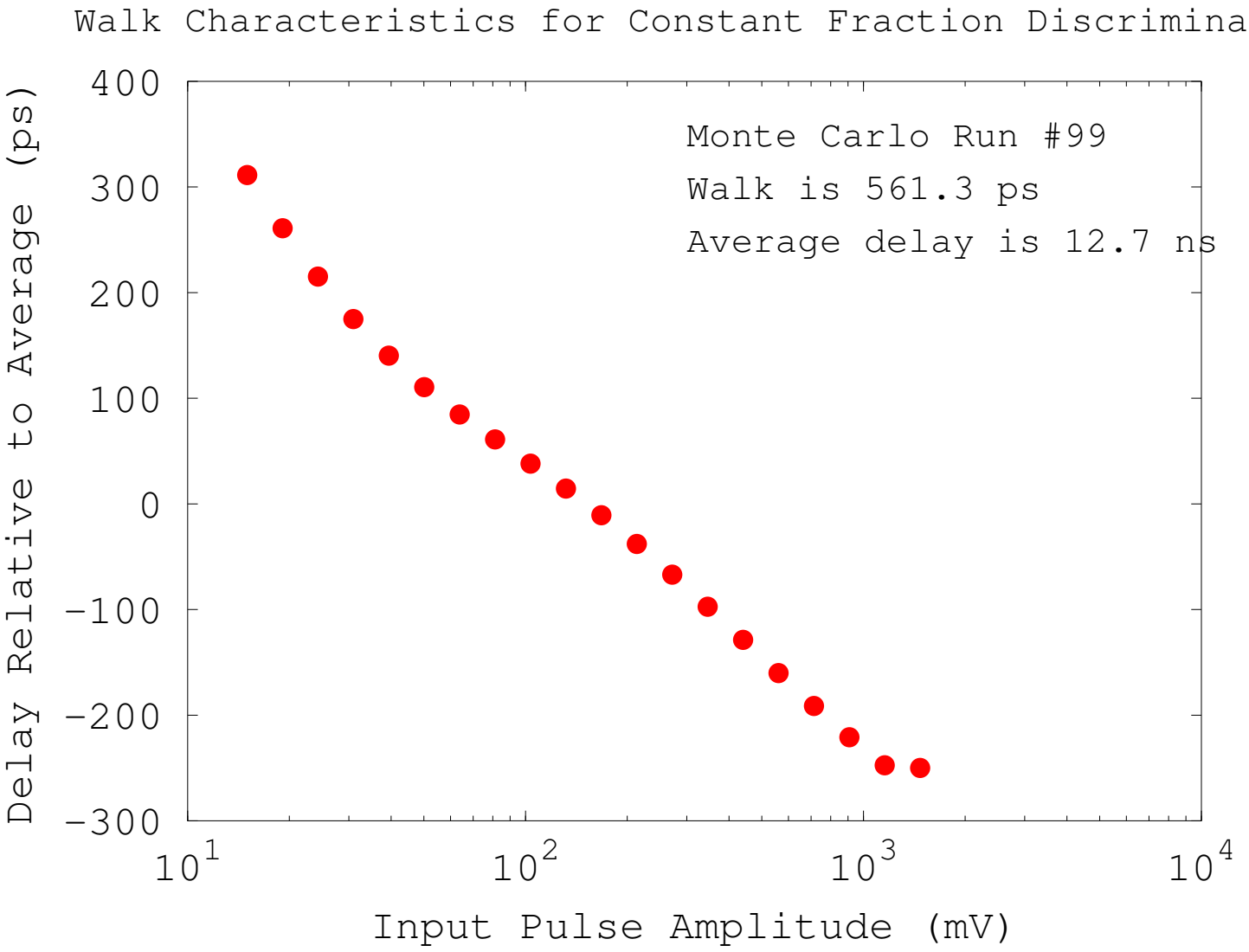

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #94
Walk is 588.2 ps
Average delay is 11.6 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

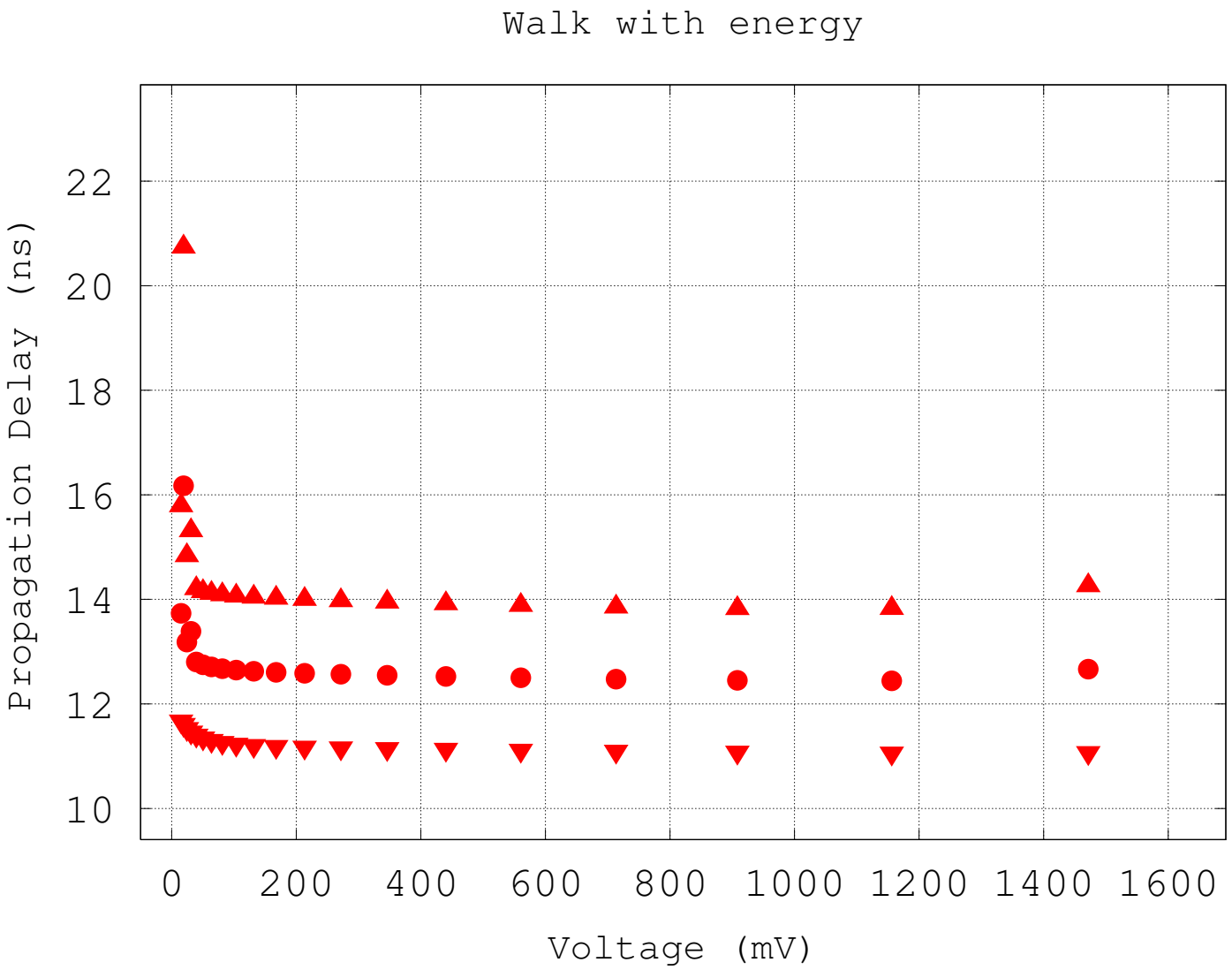

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #95
Walk is 670.3 ps
Average delay is 13.0 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)

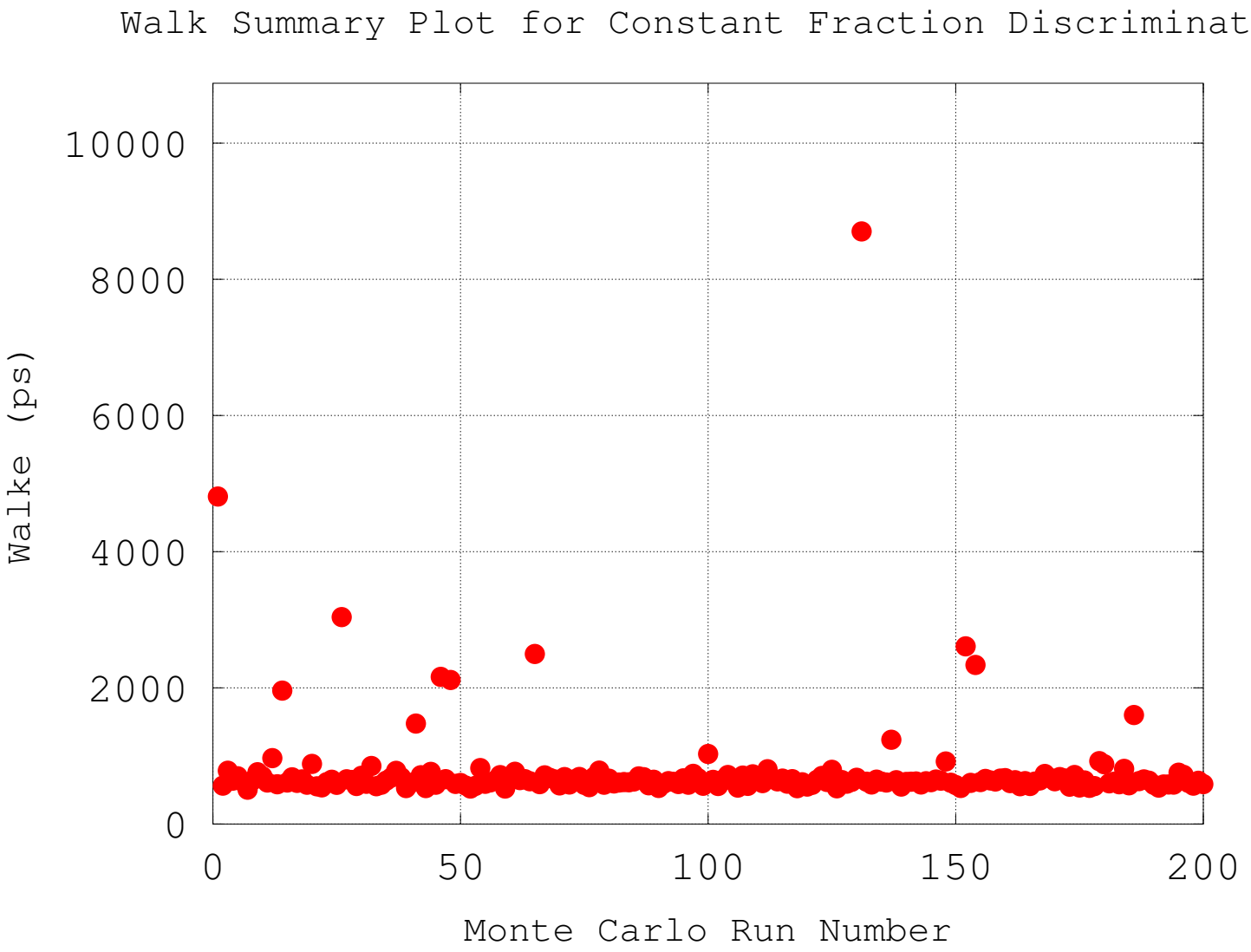

Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #96
Walk is 576.6 ps
Average delay is 11.8 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)


Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #97
Walk is 737.5 ps
Average delay is 13.1 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)


Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #98
Walk is 672.1 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
600
400
200
0
-200
-400
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)


Walk Characteristics for Constant Fraction Discriminator
Monte Carlo Run #99
Walk is 561.3 ps
Average delay is 12.7 ns
Delay Relative to Average (ps)
400
300
200
100
0
-100
-200
-300
10^1
10^2
10^3
10^4
Input Pulse Amplitude (mV)


Walk with energy
Propagation Delay (ns)
22
20
18
16
14
12
10
0
200
400
600
800
1000
1200
1400
1600
Voltage (mV)


Walk Summary Plot for Constant Fraction Discriminator
Walke (ps)
10000
8000
6000
4000
2000
0
0
50
100
150
200
Monte Carlo Run Number