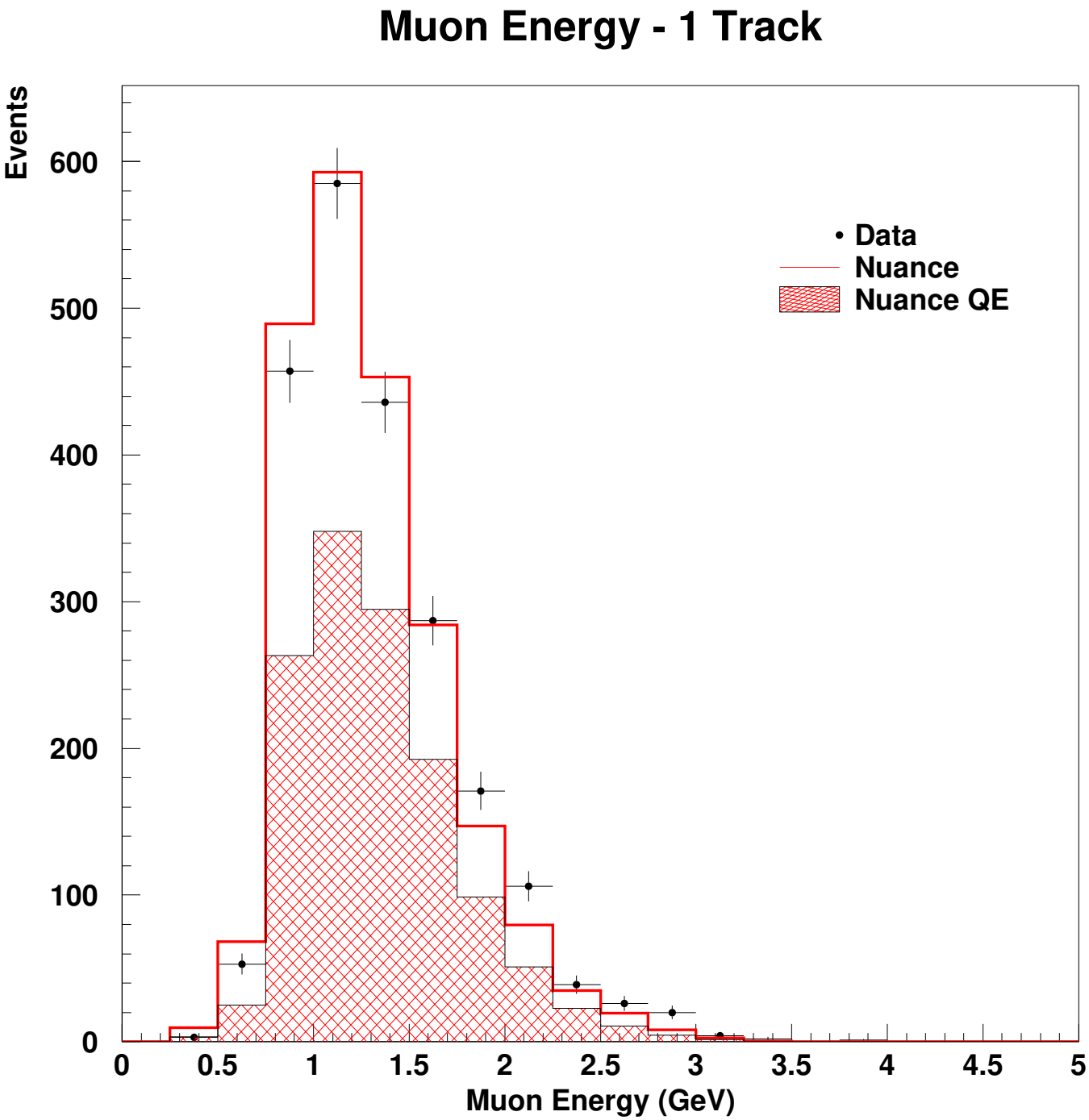
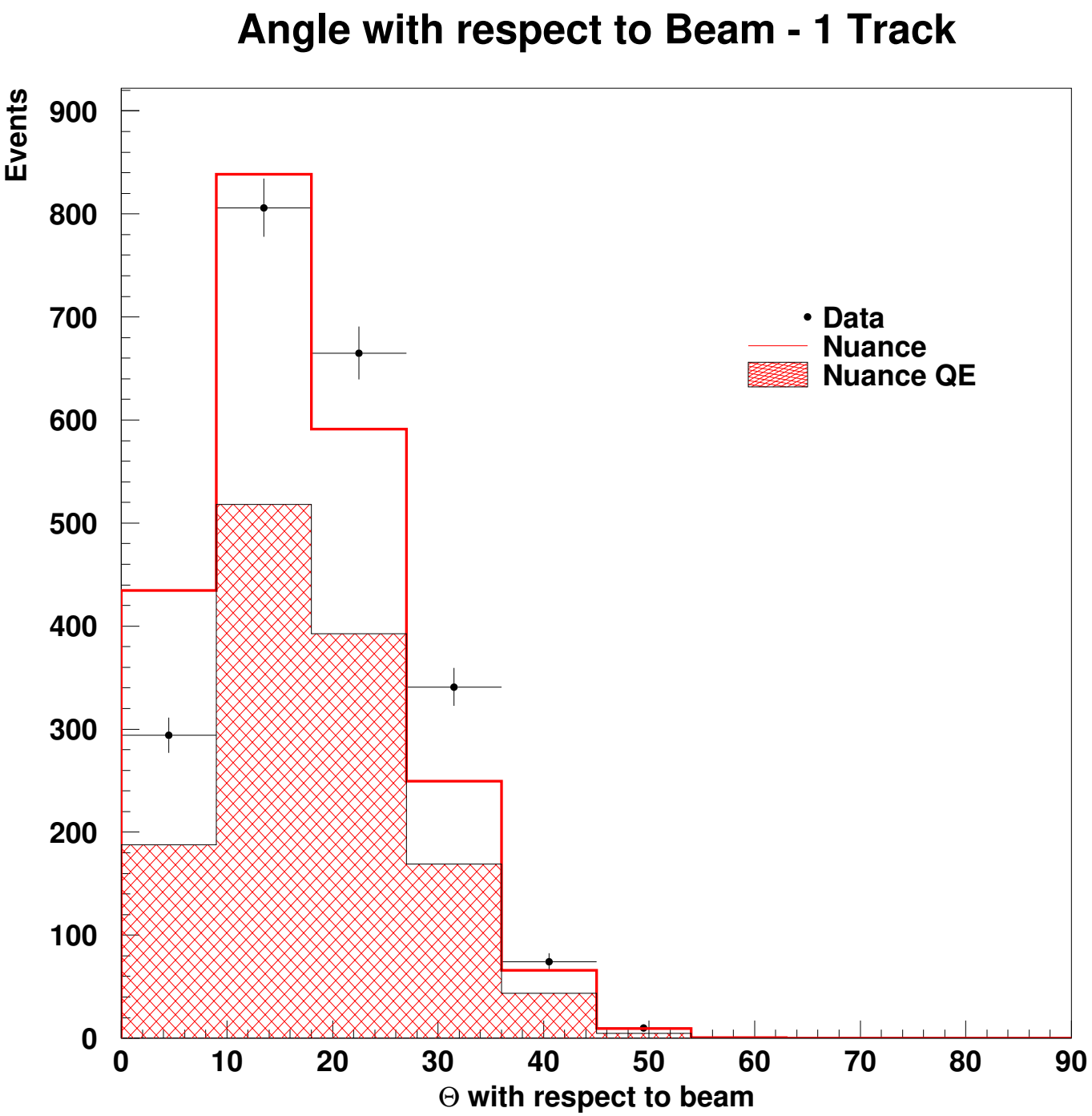
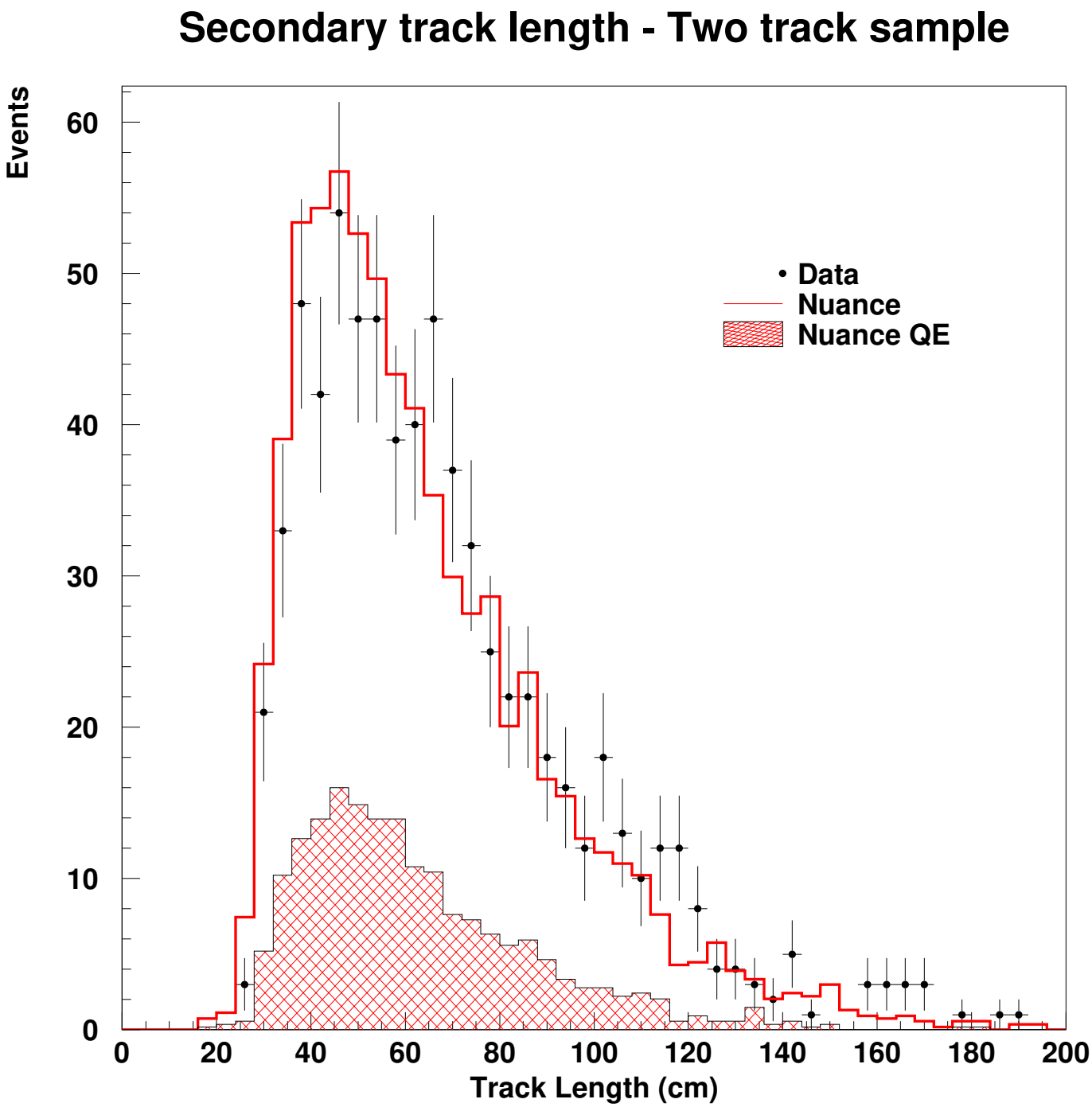
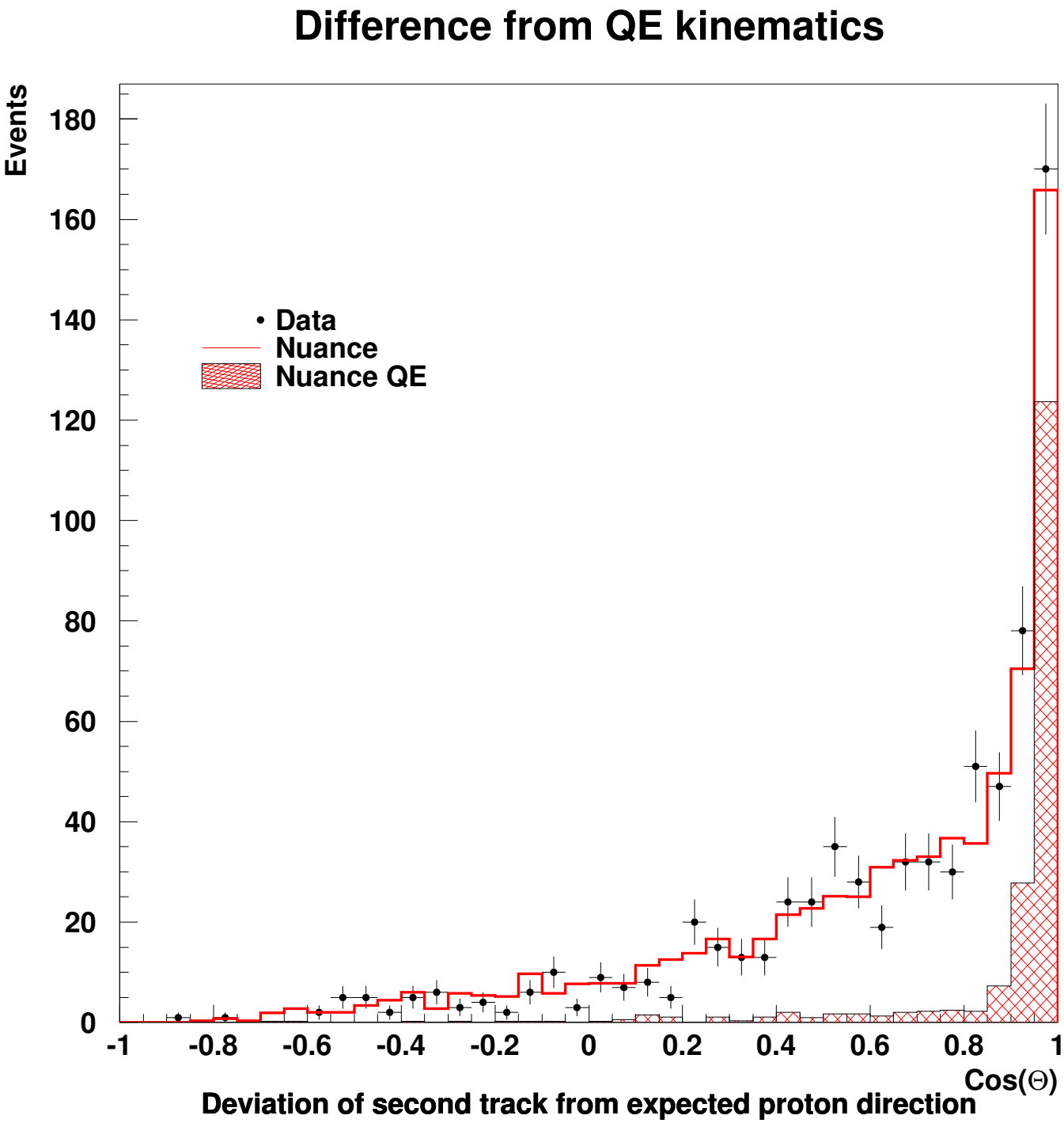
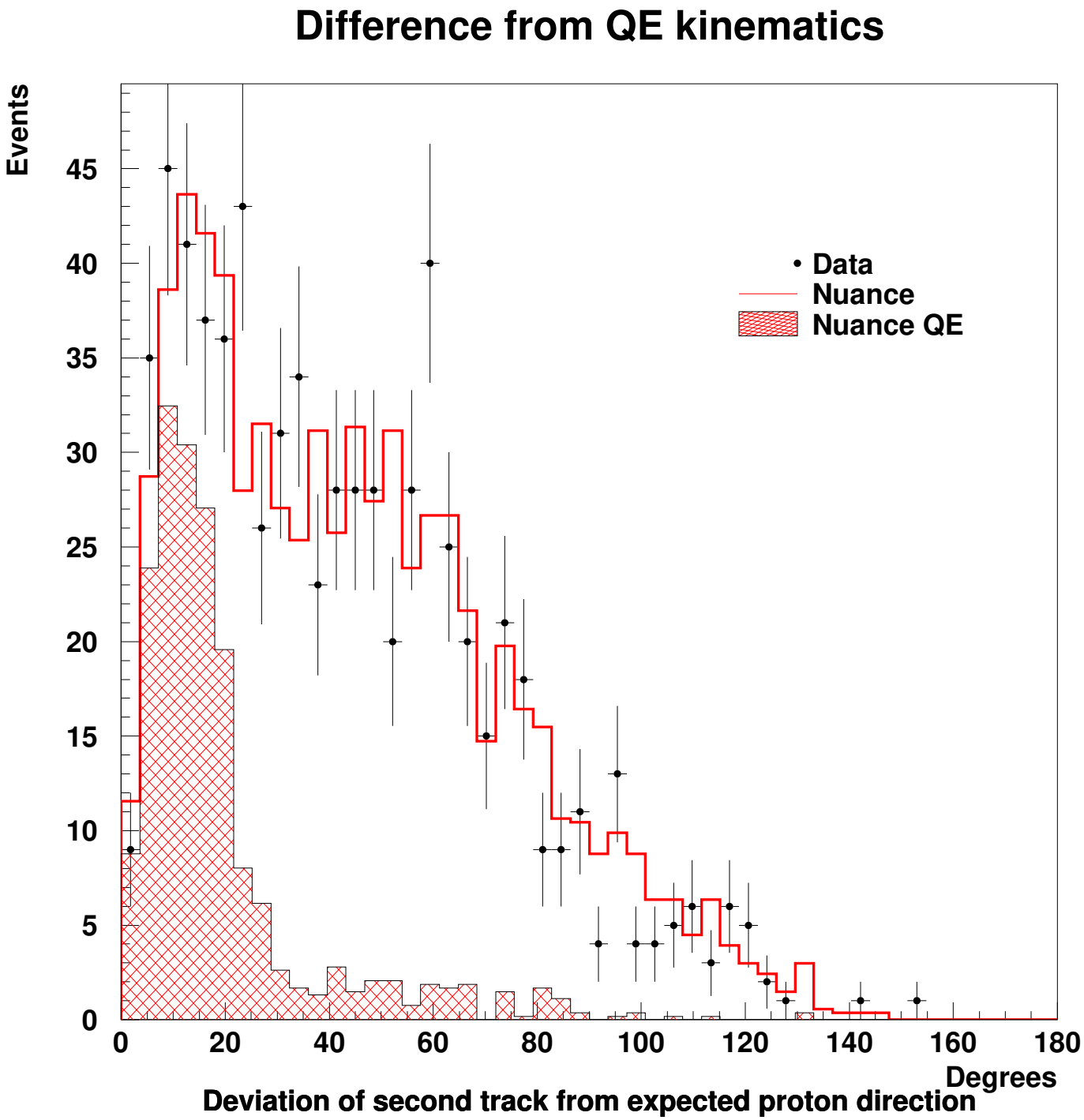
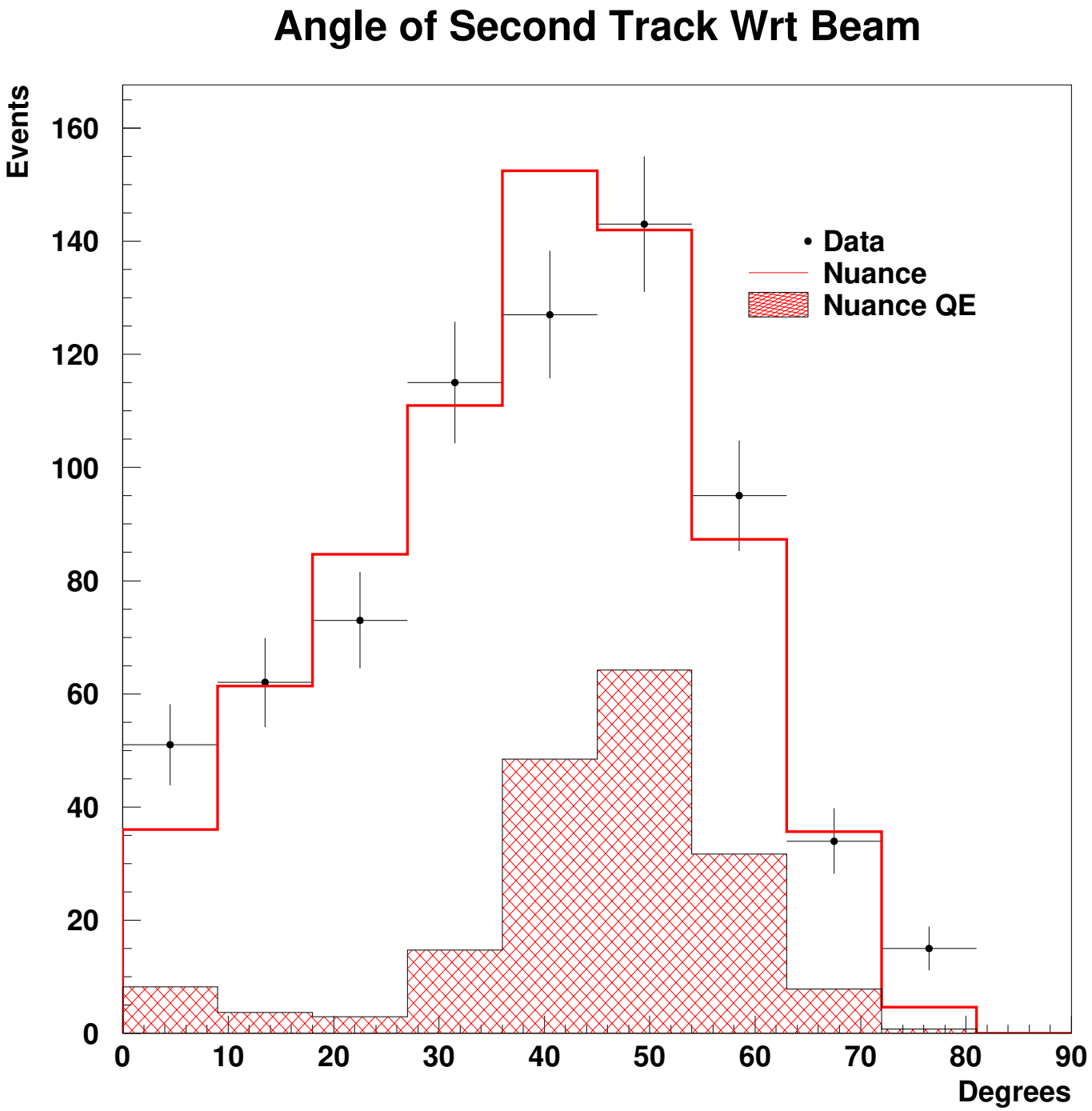

Muon Energy - 1 Track
Events
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
Muon Energy (GeV)
Data
Nuance
Nuance QE


Angle with respect to Beam - 1 Track
Events
900
800
700
600
500
400
300
200
100
0
0
10
20
30
40
50
60
70
80
90
Θ with respect to beam
Data
Nuance
Nuance QE


Secondary track length - Two track sample
Events
60
50
40
30
20
10
0
0
20
40
60
80
100
120
140
160
180
200
Track Length (cm)
Data
Nuance
Nuance QE


Difference from QE kinematics
Events
180
160
140
120
100
80
60
40
20
0
Data
Nuance
Nuance QE
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1
Cos(Θ)
Deviation of second track from expected proton direction


Difference from QE kinematics
Events
45
40
35
30
25
20
15
10
5
0
0
20
40
60
80
100
120
140
160
180
Degrees
Deviation of second track from expected proton direction
Data
Nuance
Nuance QE


Angle of Second Track Wrt Beam
Events
160
140
120
100
80
60
40
20
0
0
10
20
30
40
50
60
70
80
90
Degrees
Data
Nuance
Nuance QE