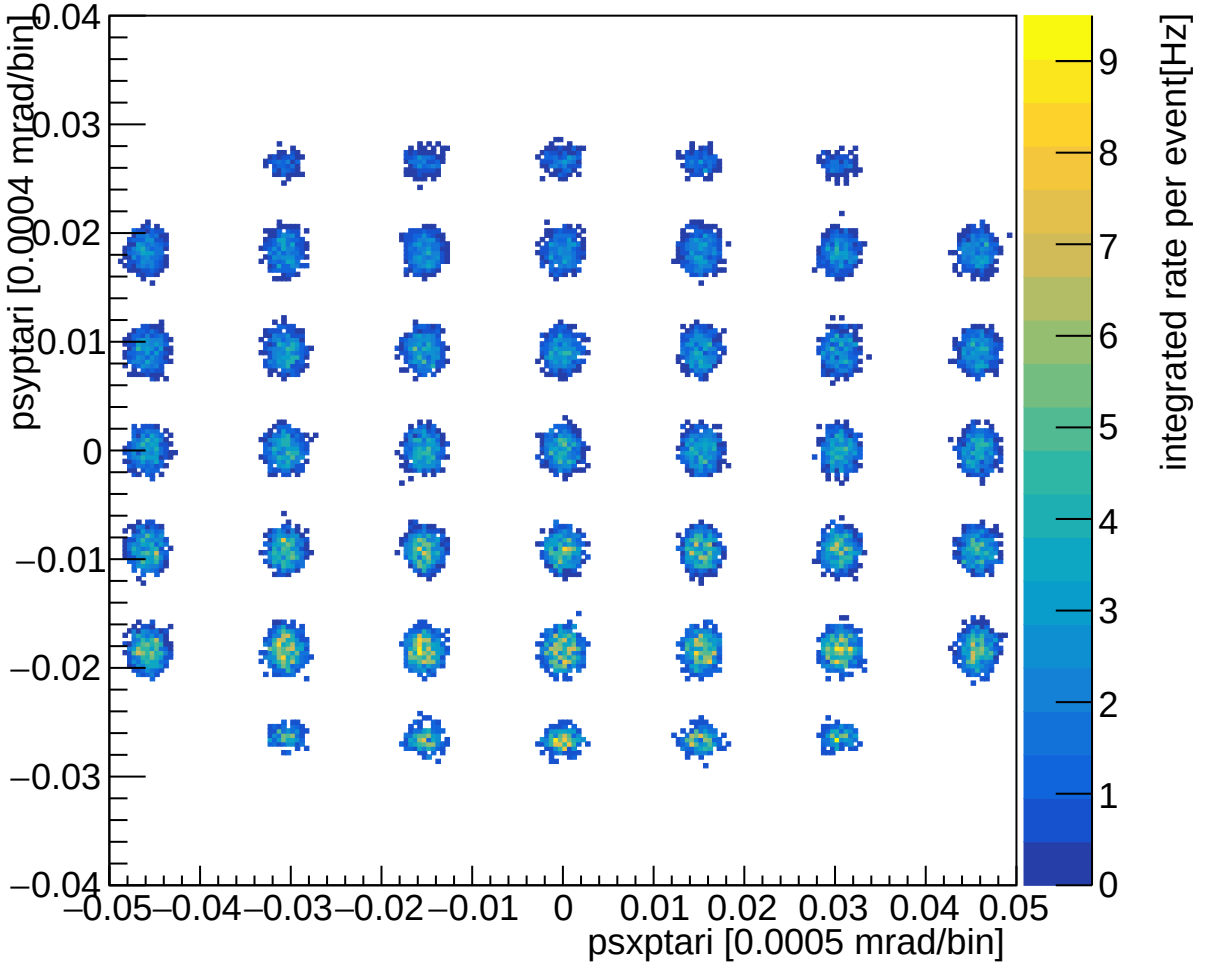
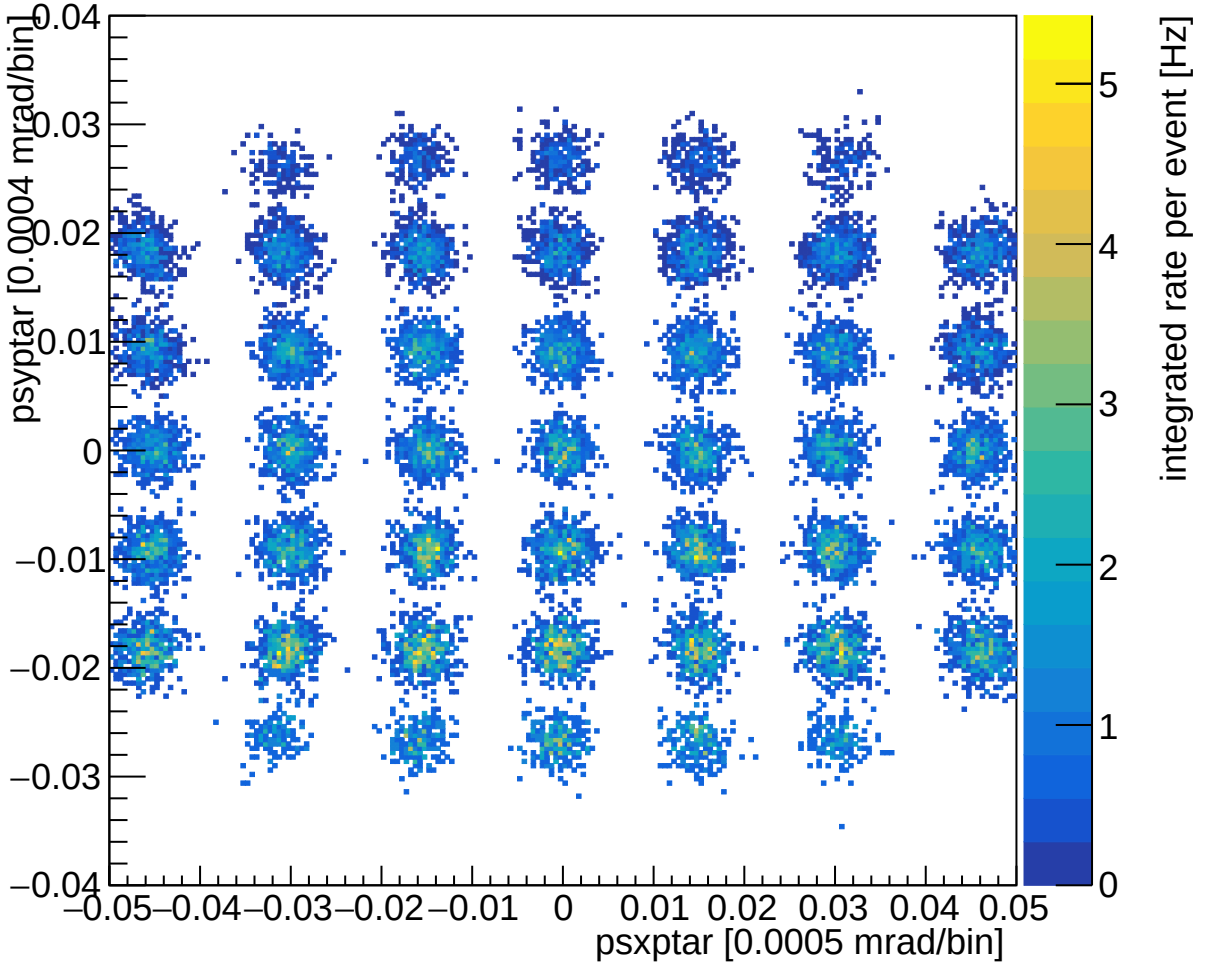
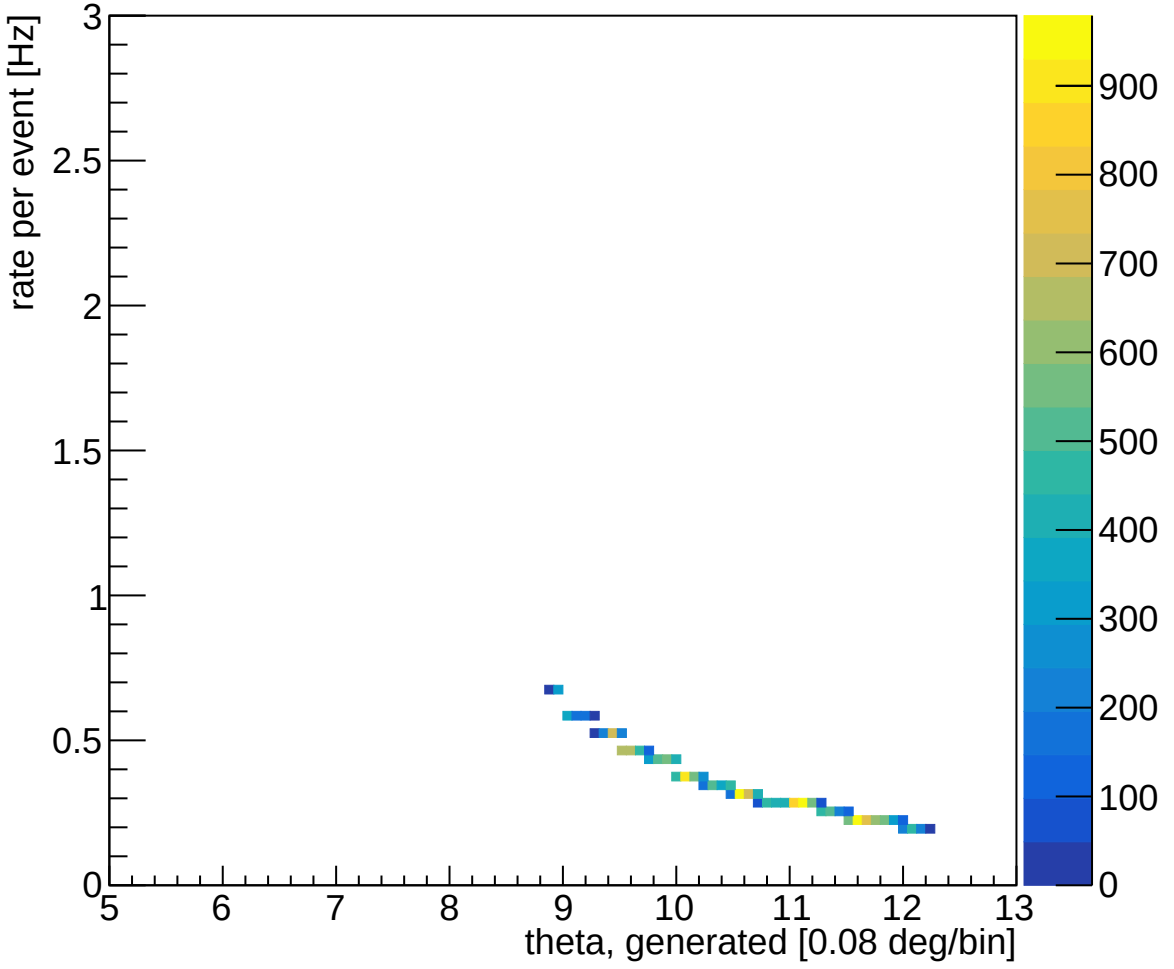
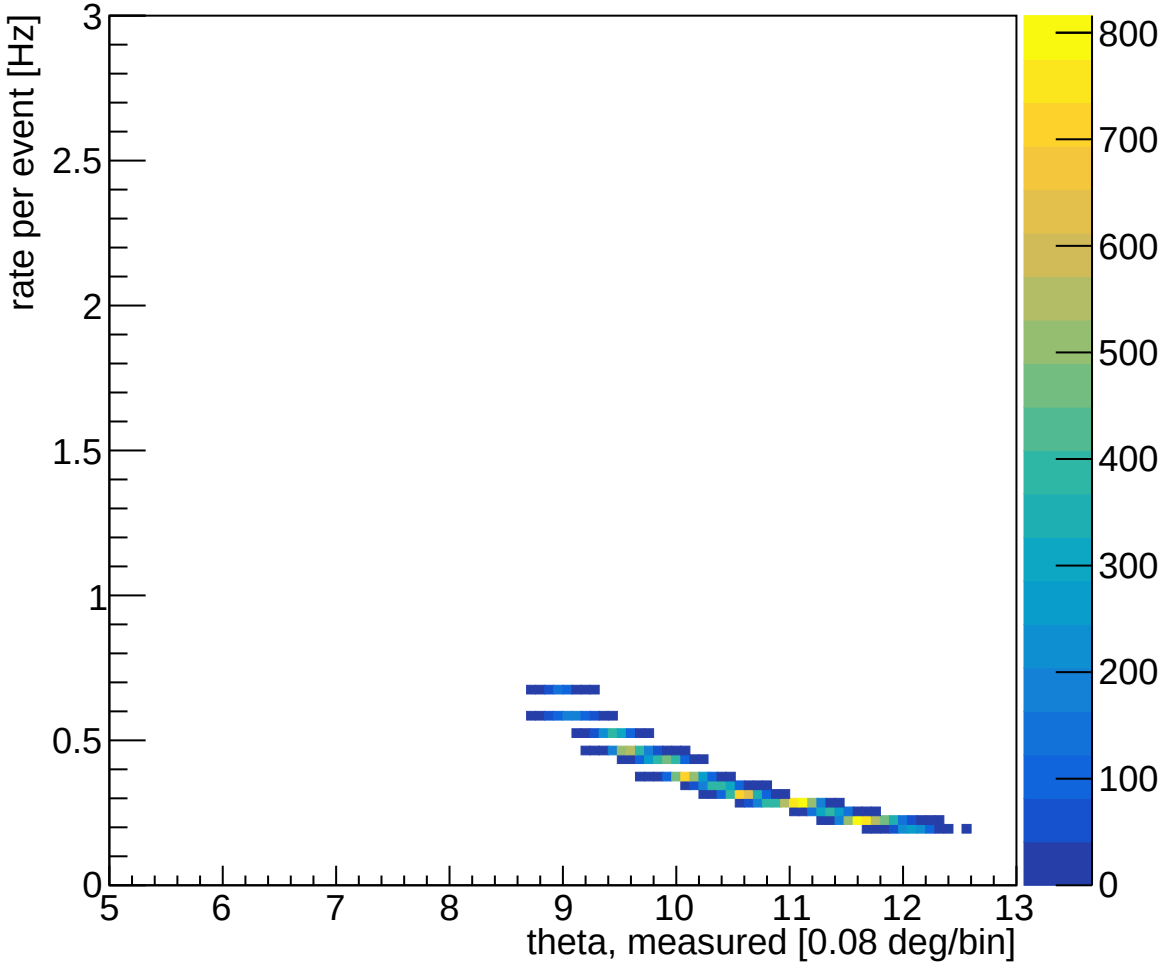
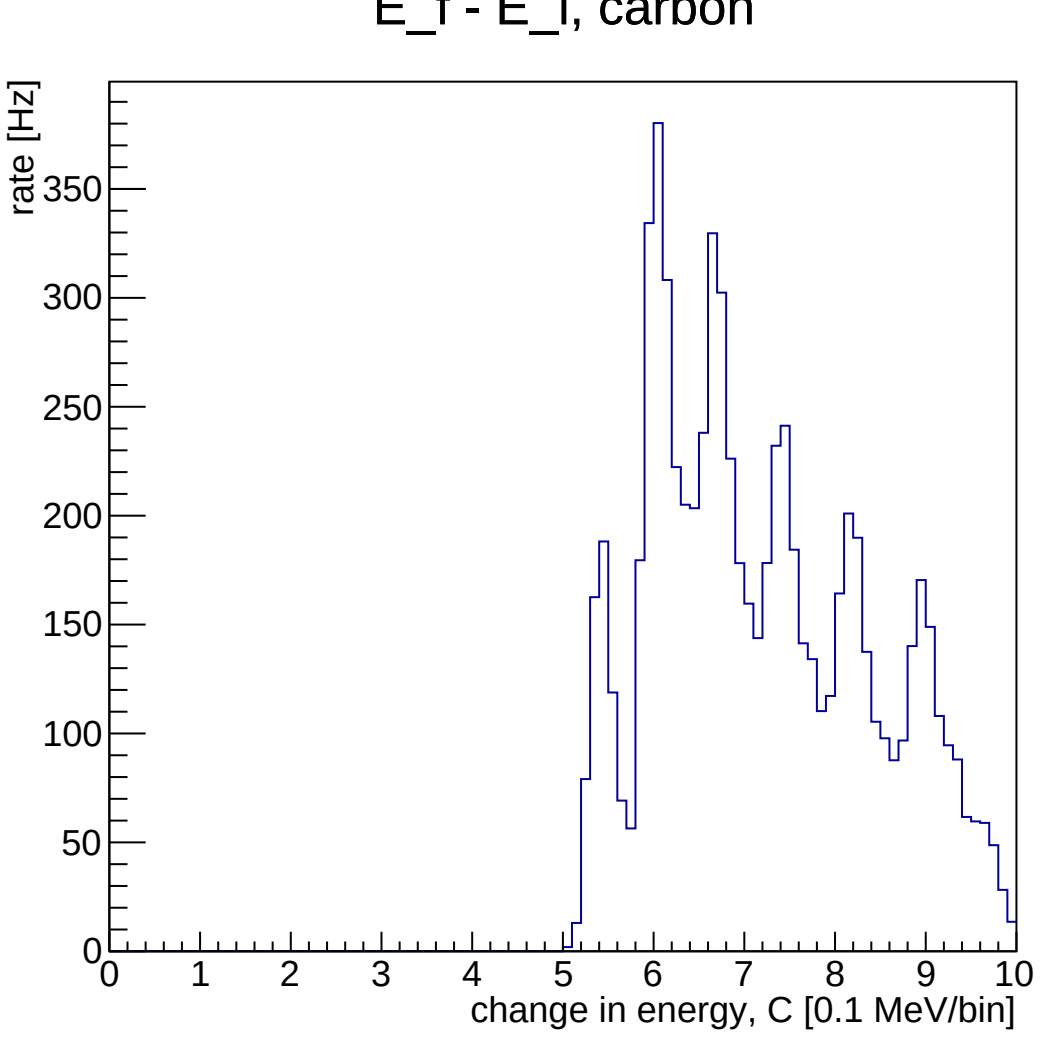

psyptari [0.0004 mrad/bin]
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.05 −0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04 0.05
psxptari [0.0005 mrad/bin]
integrated rate per event[Hz]
9
8
7
6
5
4
3
2
1
0

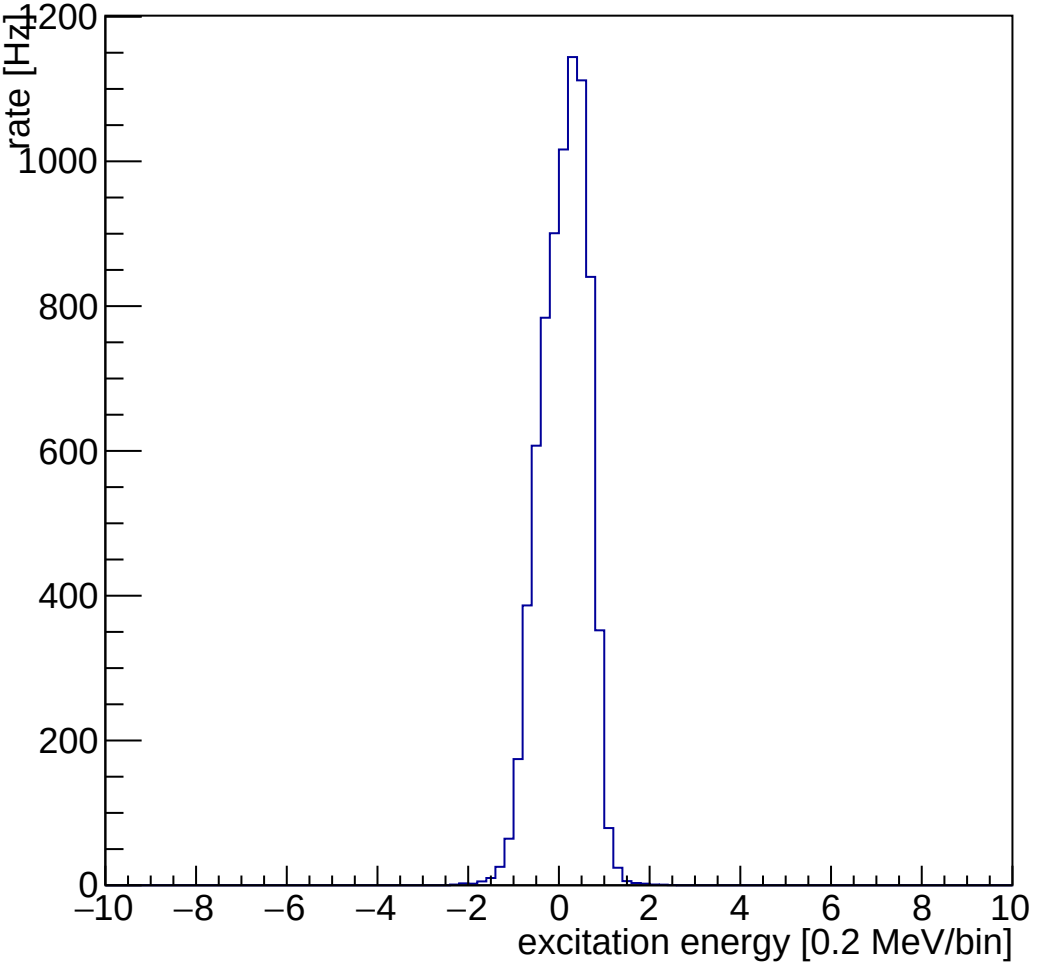

psyptar [0.0004 mrad/bin]
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.05 −0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04 0.05
psxptar [0.0005 mrad/bin]
integrated rate per event [Hz]
5
4
3
2
1
0

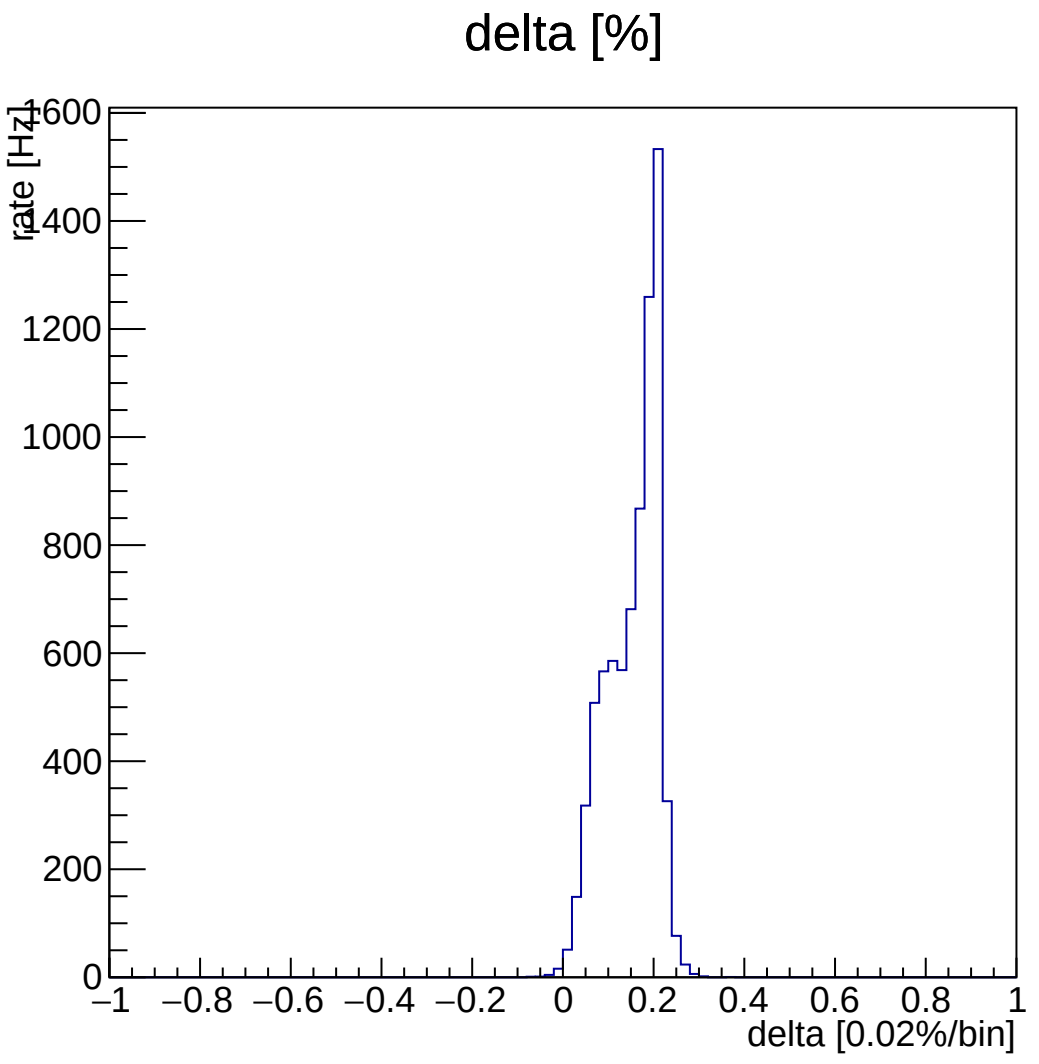

rate per event [Hz]
3
2.5
2
1.5
1
0.5
0
5
6
7
8
9
10
11
12
13
theta, generated [0.08 deg/bin]
900
800
700
600
500
400
300
200
100
0

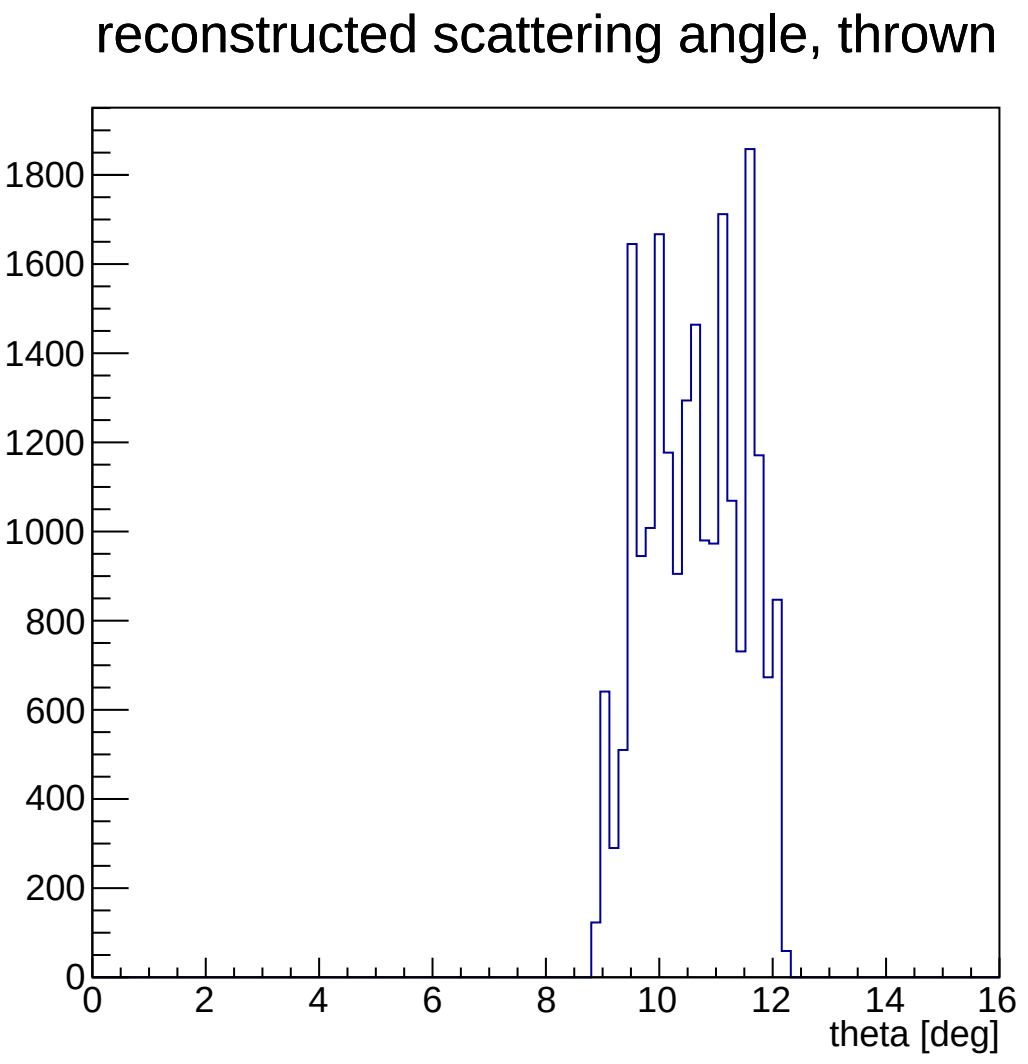

rate per event [Hz]
3
2.5
2
1.5
1
0.5
0
5
6
7
8
9
10
11
12
13
theta, measured [0.08 deg/bin]
800
700
600
500
400
300
200
100
0


E_f - E_i, carbon
rate [Hz]
0
50
100
150
200
250
300
350
0
1
2
3
4
5
6
7
8
9
10
change in energy, C [0.1 MeV/bin]

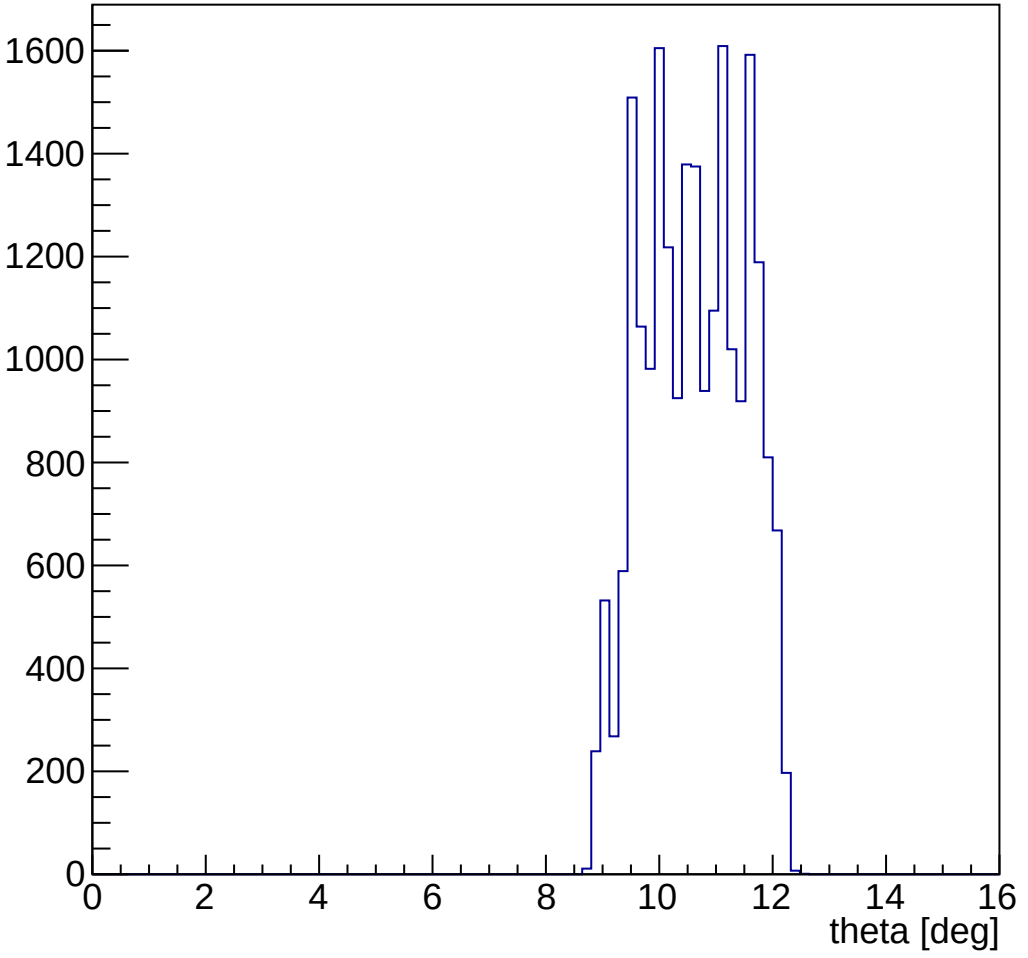
C excitation energy

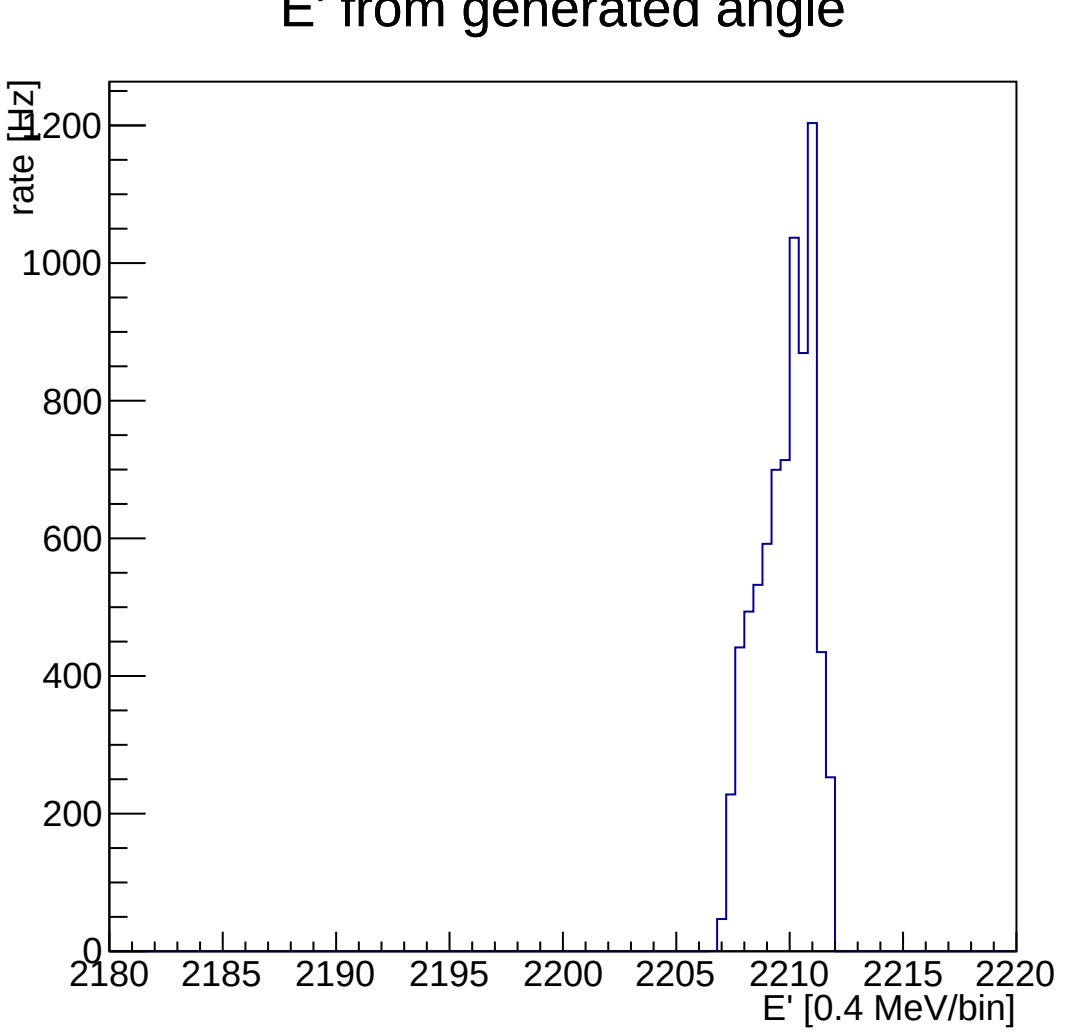


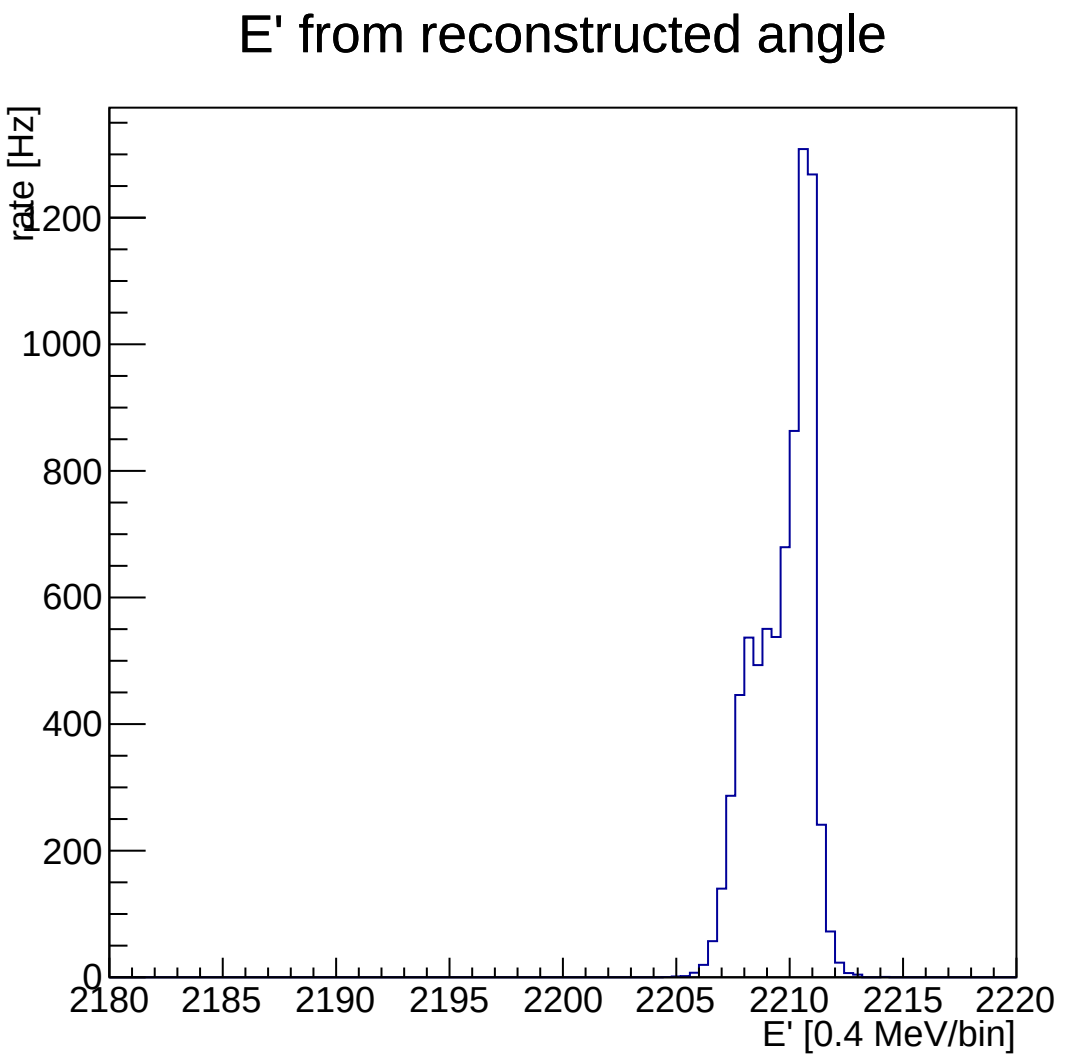

delta [%]
rate [Hz]
1600
1400
1200
1000
800
600
400
200
0
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
delta [0.02%/bin]

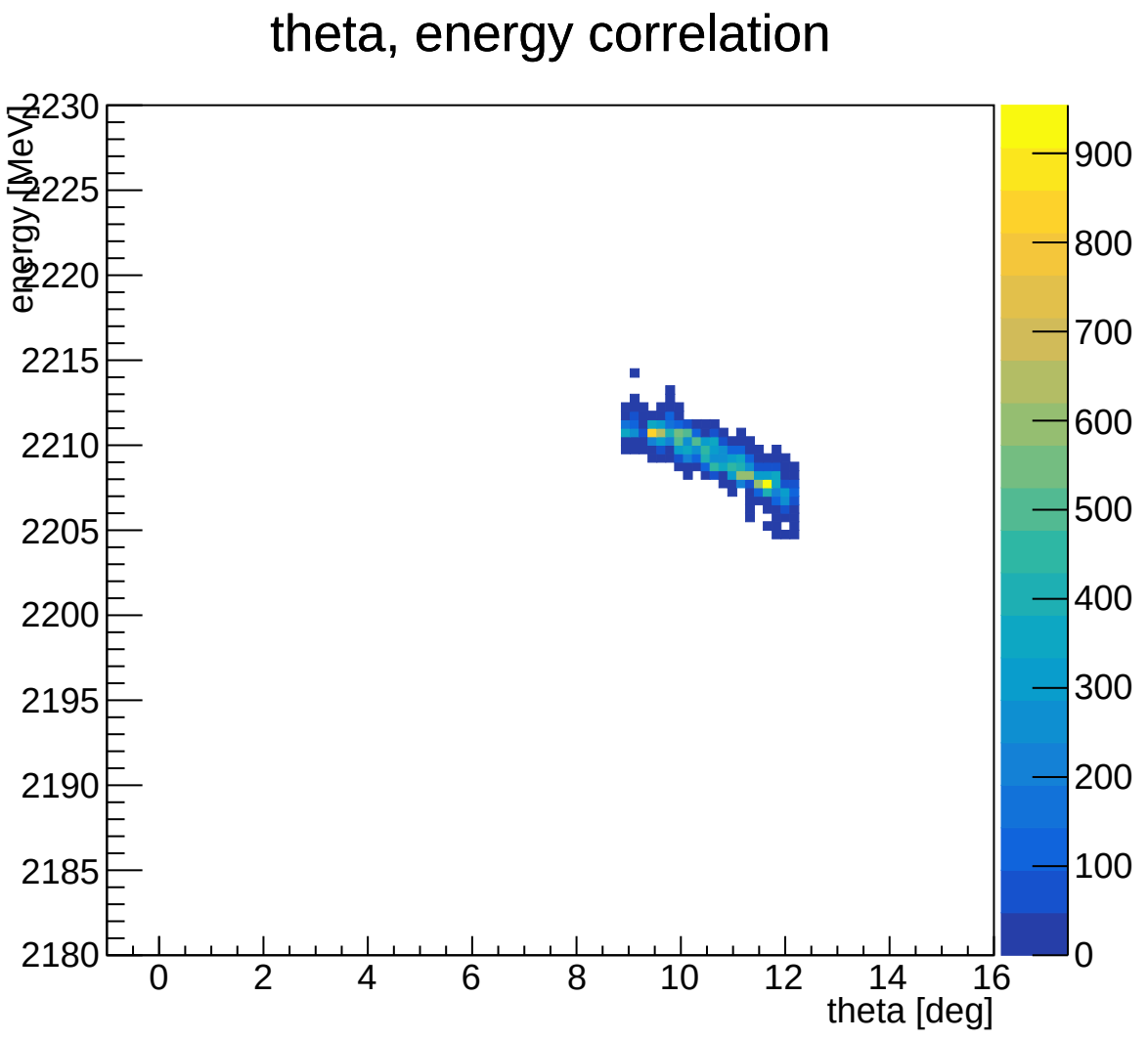

reconstructed scattering angle, thrown
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
theta [deg]

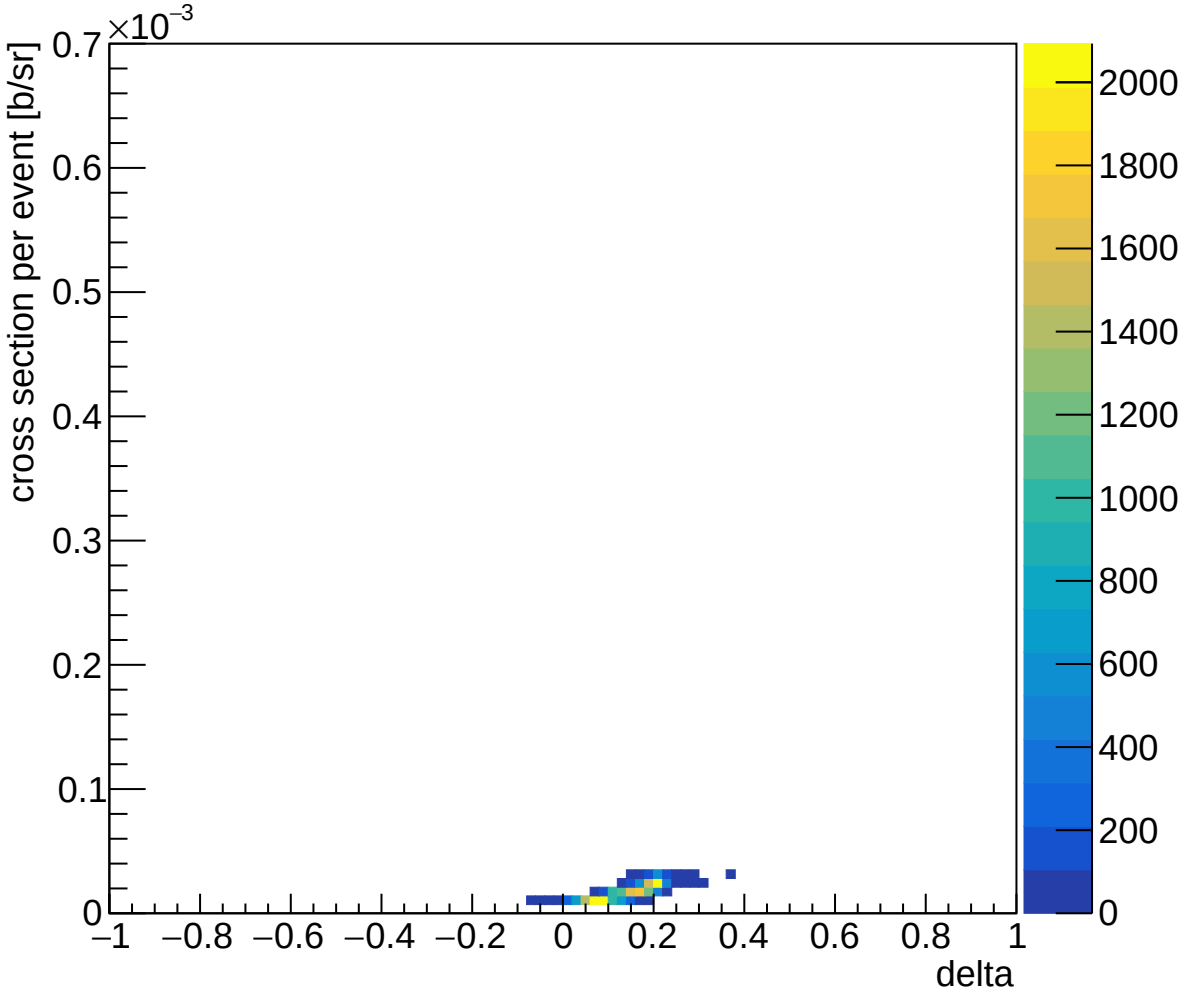
reconstructed scattering angle, measured




E' from generated angle
rate [Hz]
1200
1000
800
600
400
200
0
2180
2185
2190
2195
2200
2205
2210
2215
2220
E' [0.4 MeV/bin]


E' from reconstructed angle
rate [Hz]
1200
1000
800
600
400
200
0
2180
2185
2190
2195
2200
2205
2210
2215
2220
E' [0.4 MeV/bin]


theta, energy correlation
energy [MeV]
2230
2225
2220
2215
2210
2205
2200
2195
2190
2185
2180
0
2
4
6
8
10
12
14
16
theta [deg]
900
800
700
600
500
400
300
200
100
0


×10⁻³
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
cross section per event [b/sr]
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
delta
2000
1800
1600
1400
1200
1000
800
600
400
200
0