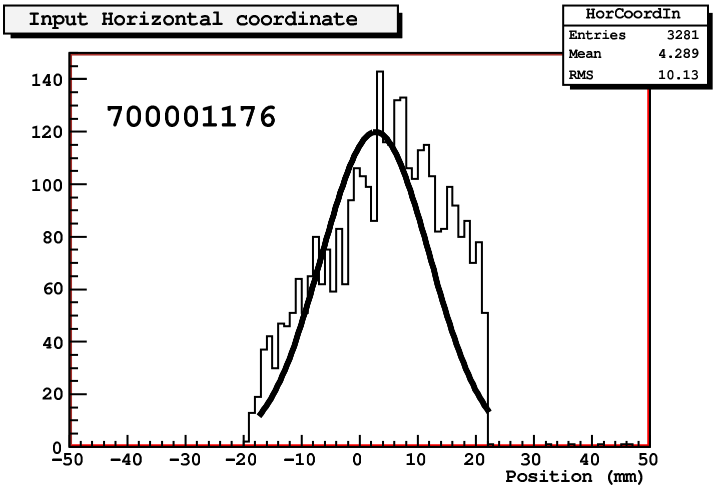
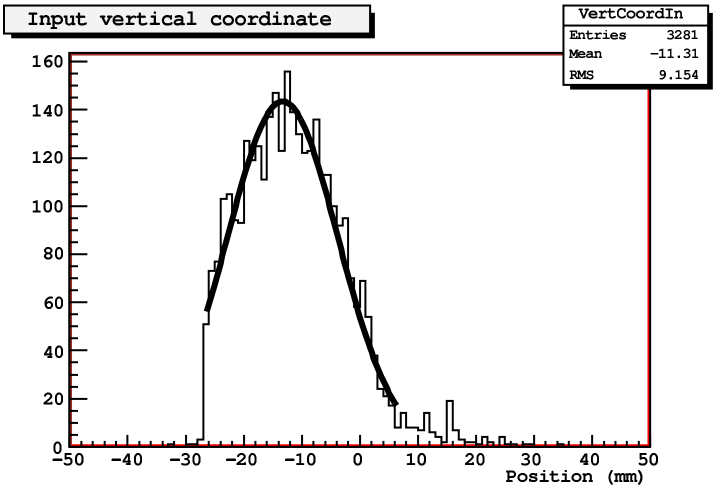
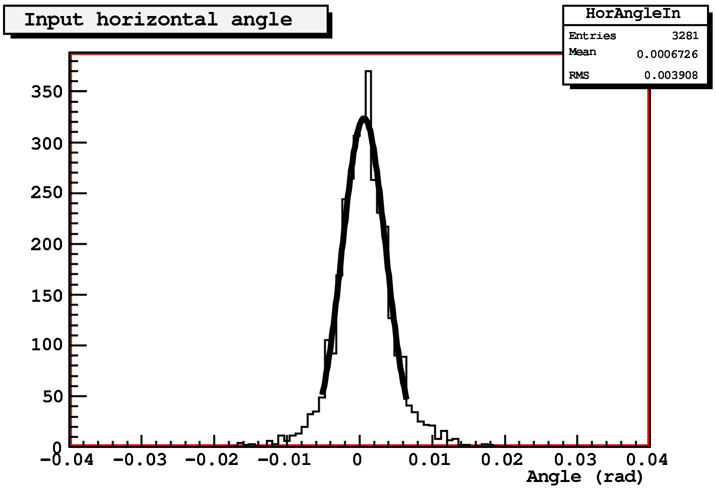
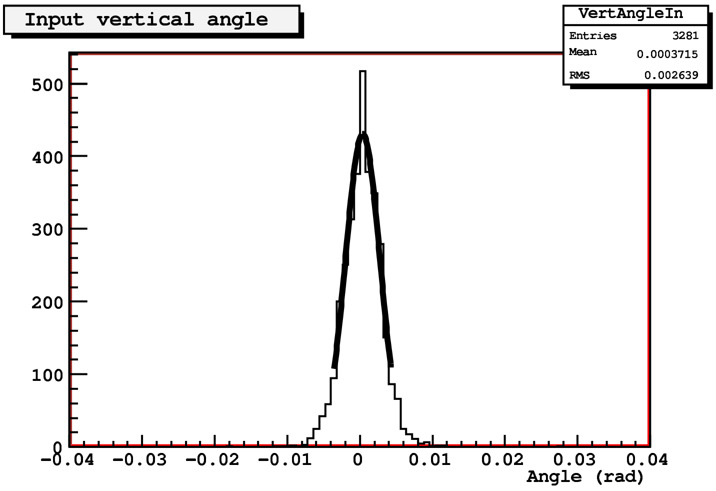
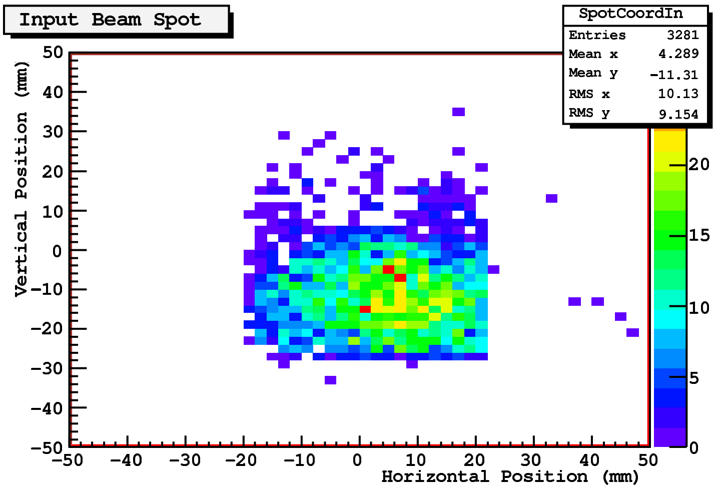
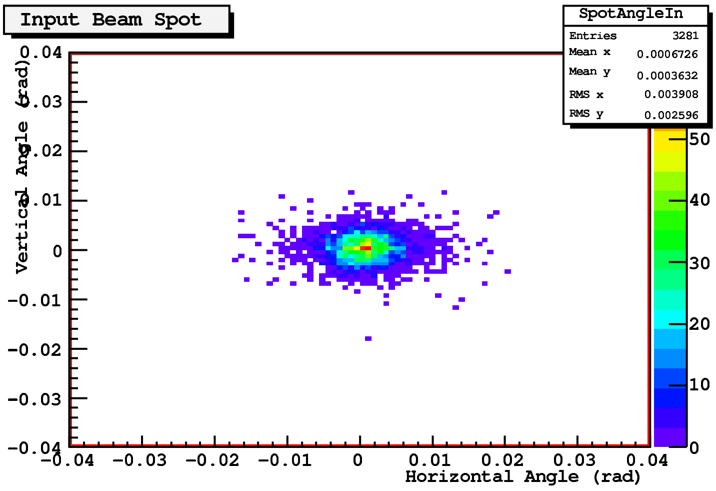

Input Horizontal coordinate
HorCoordIn
Entries 3281
Mean 4.289
RMS 10.13
700001176
0
20
40
60
80
100
120
140
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

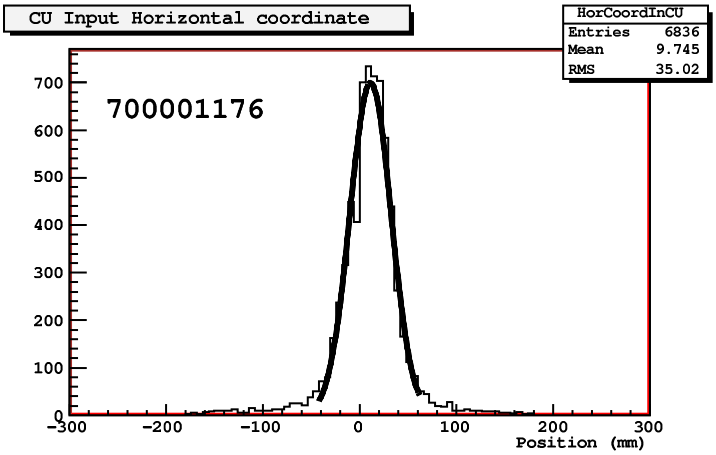

Input vertical coordinate
VertCoordIn
Entries 3281
Mean −11.31
RMS 9.154
0
20
40
60
80
100
120
140
160
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

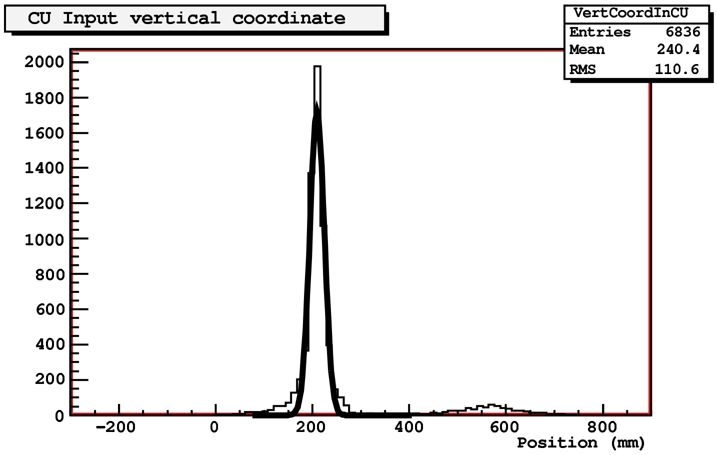

Input horizontal angle
HorAngleIn
Entries 3281
Mean 0.0006726
RMS 0.003908
0
50
100
150
200
250
300
350
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

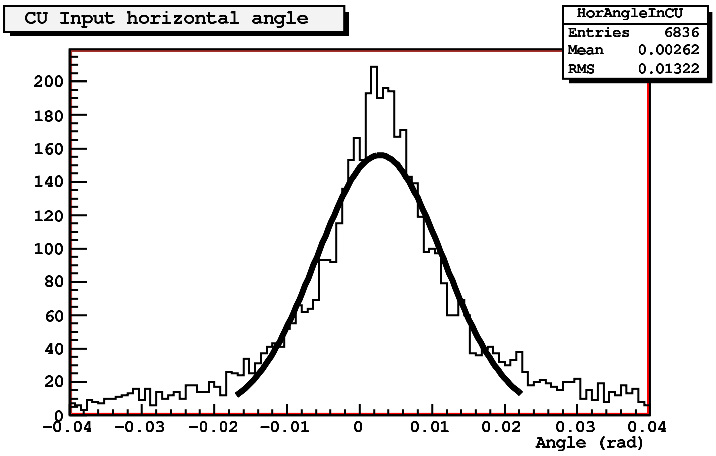

Input vertical angle
VertAngleIn
Entries 3281
Mean 0.0003715
RMS 0.002639
0
100
200
300
400
500
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

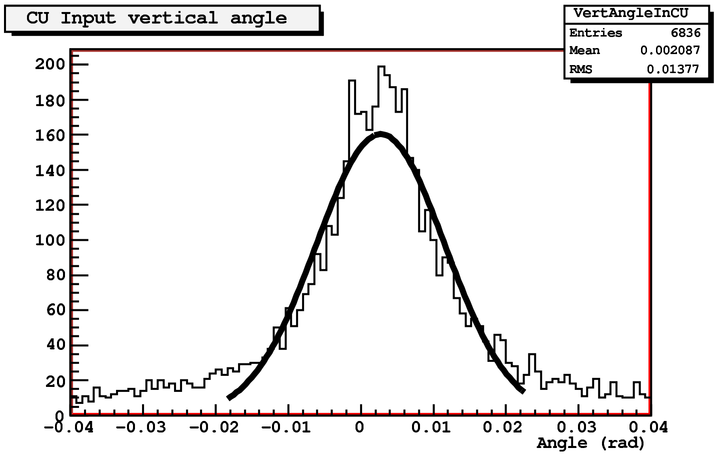

Input Beam Spot
SpotCoordIn
Entries 3281
Mean x 4.289
Mean y −11.31
RMS x 10.13
RMS y 9.154
Vertical Position (mm)
−50 −40 −30 −20 −10 0 10 20 30 40 50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
0 5 10 15 20

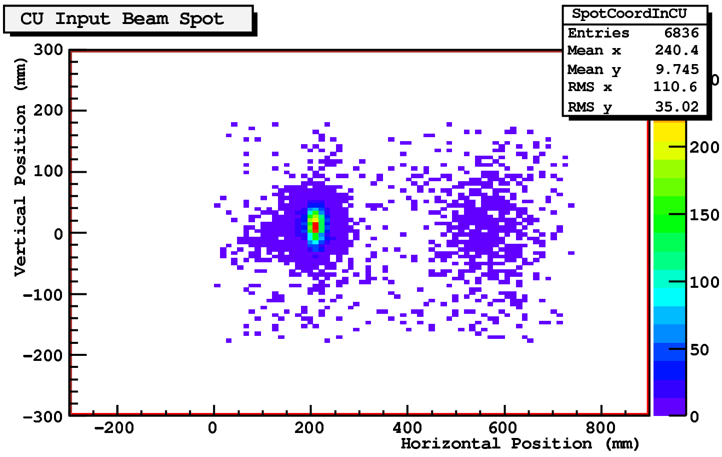

Input Beam Spot
SpotAngleIn
Entries 3281
Mean x 0.0006726
Mean y 0.0003632
RMS x 0.003908
RMS y 0.002596
Vertical Angle (rad)
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
0 10 20 30 40 50

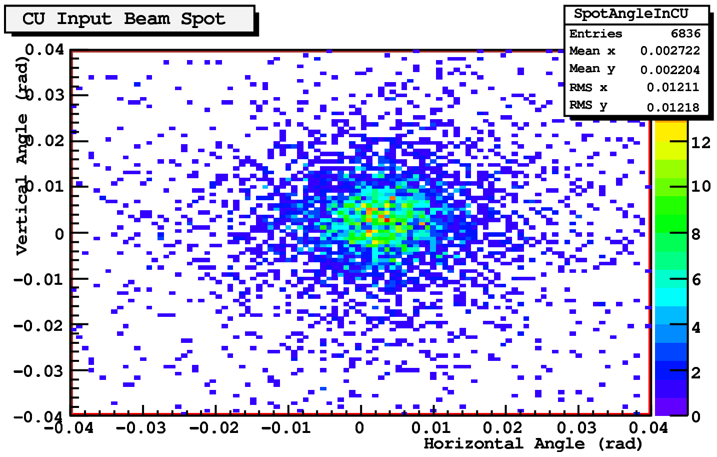

CU Input Horizontal coordinate
HorCoordInCU
Entries 6836
Mean 9.745
RMS 35.02
700001176
0
100
200
300
400
500
600
700
−300
−200
−100
0
100
200
300
Position (mm)

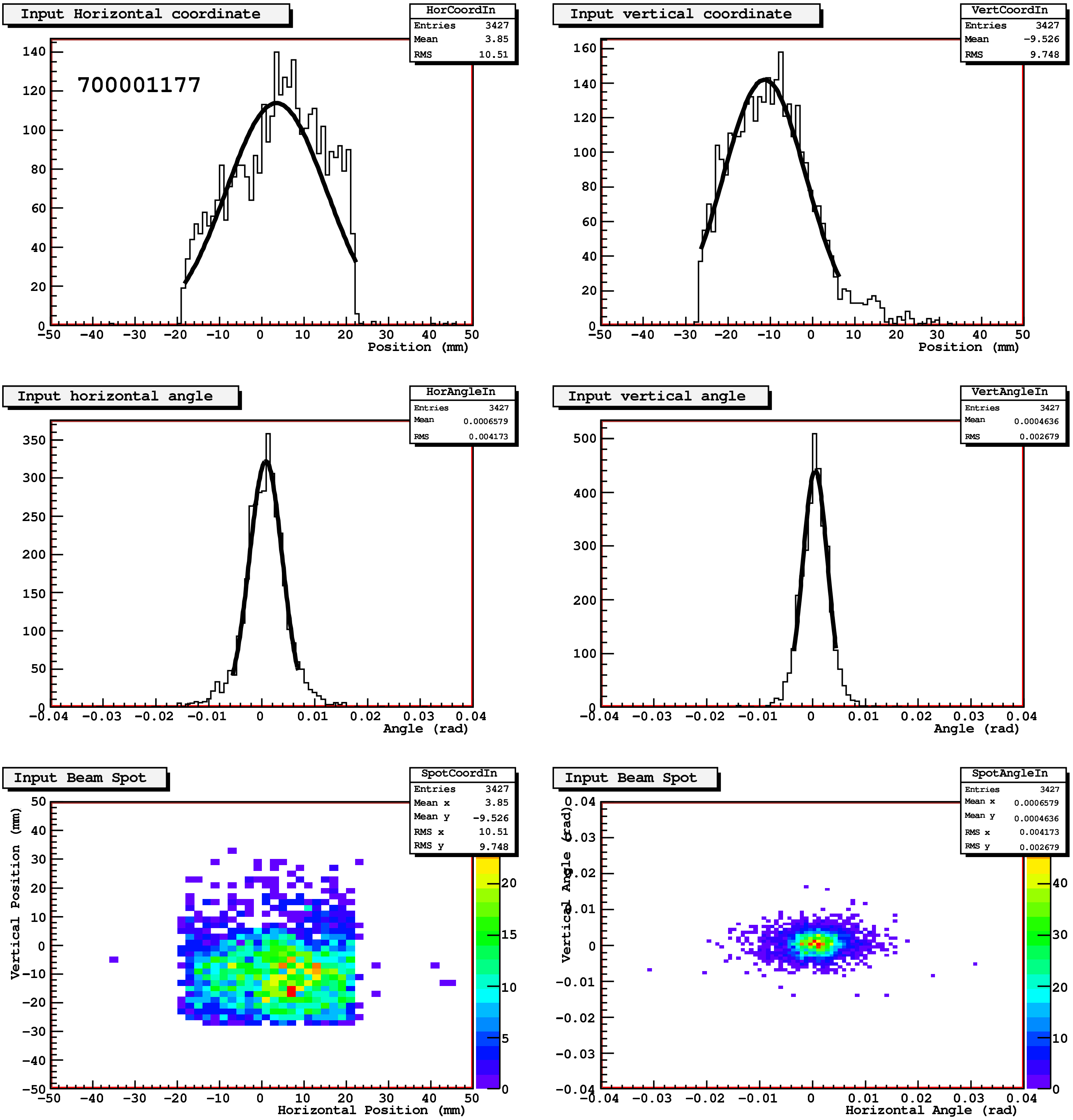

CU Input vertical coordinate
VertCoordInCU
Entries 6836
Mean 240.4
RMS 110.6
0
200
400
600
800
1000
1200
1400
1600
1800
2000
−200
0
200
400
600
800
Position (mm)

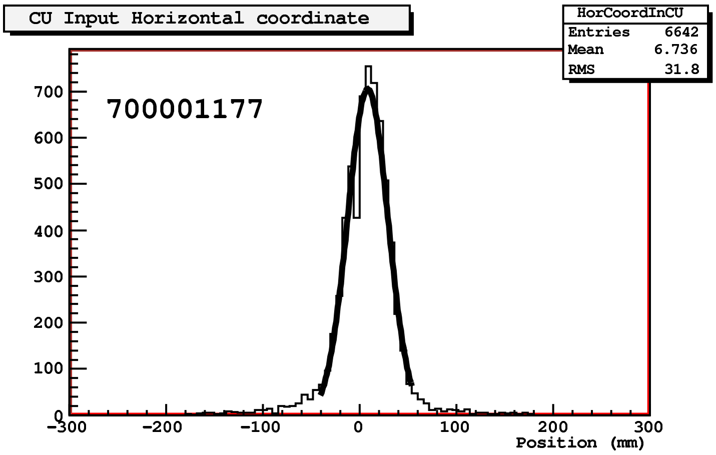

CU Input horizontal angle
HorAngleInCU
Entries 6836
Mean 0.00262
RMS 0.01322
0
20
40
60
80
100
120
140
160
180
200
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

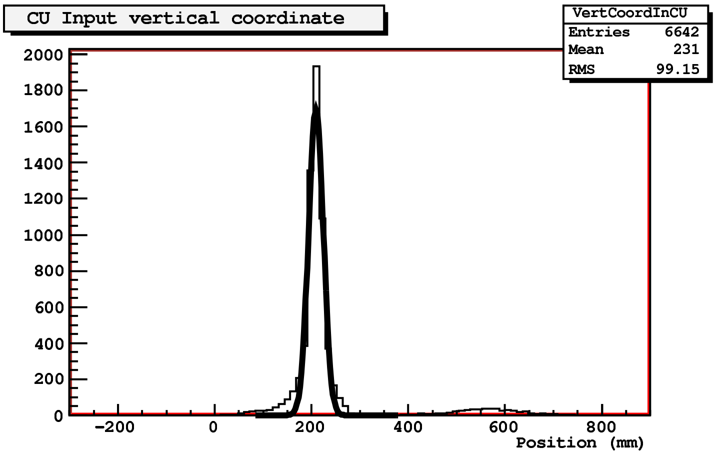

CU Input vertical angle
VertAngleInCU
Entries 6836
Mean 0.002087
RMS 0.01377
0
20
40
60
80
100
120
140
160
180
200
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

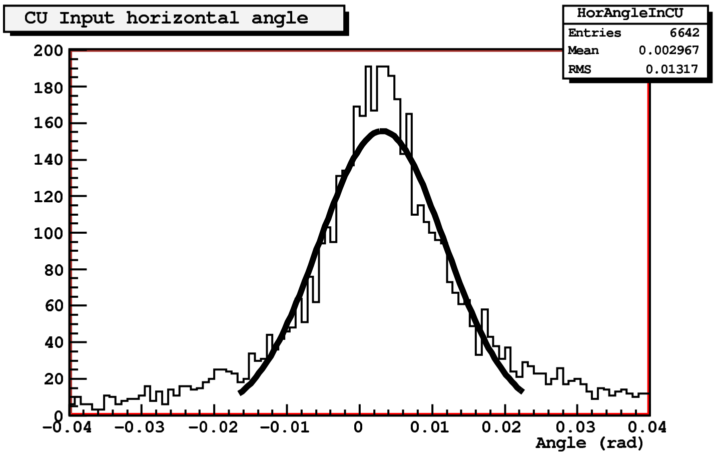

CU Input Beam Spot
SpotCoordInCU
Entries 6836
Mean x 240.4
Mean y 9.745
RMS x 110.6
RMS y 35.02
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
50
100
150
200

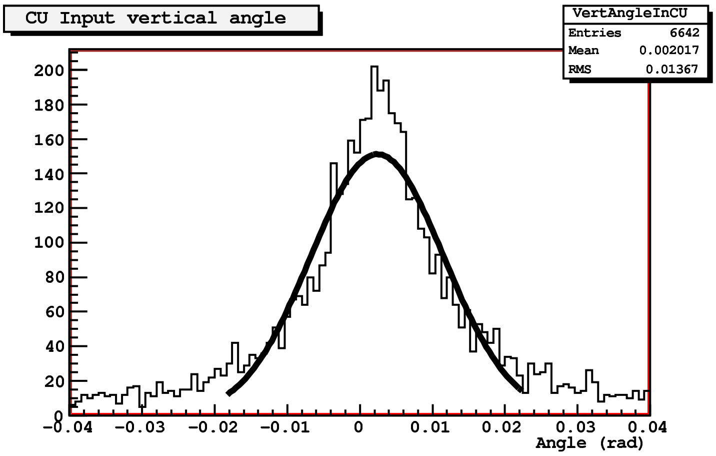

CU Input Beam Spot
SpotAngleInCU
Entries 6836
Mean x 0.002722
Mean y 0.002204
RMS x 0.01211
RMS y 0.01218
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12

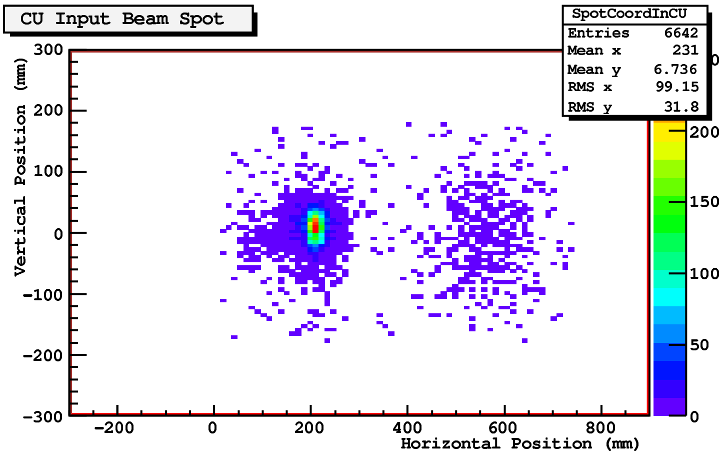

Input Horizontal coordinate
HorCoordIn
Entries 3427
Mean 3.85
RMS 10.51
700001177
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)
Input vertical coordinate
VertCoordIn
Entries 3427
Mean −9.526
RMS 9.748
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)
Input horizontal angle
HorAngleIn
Entries 3427
Mean 0.0006579
RMS 0.004173
0
50
100
150
200
250
300
350
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
Input vertical angle
VertAngleIn
Entries 3427
Mean 0.0004636
RMS 0.002679
0
100
200
300
400
500
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
Input Beam Spot
SpotCoordIn
Entries 3427
Mean x 3.85
Mean y −9.526
RMS x 10.51
RMS y 9.748
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
Input Beam Spot
SpotAngleIn
Entries 3427
Mean x 0.0006579
Mean y 0.0004636
RMS x 0.004173
RMS y 0.002679
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
10
20
30
40

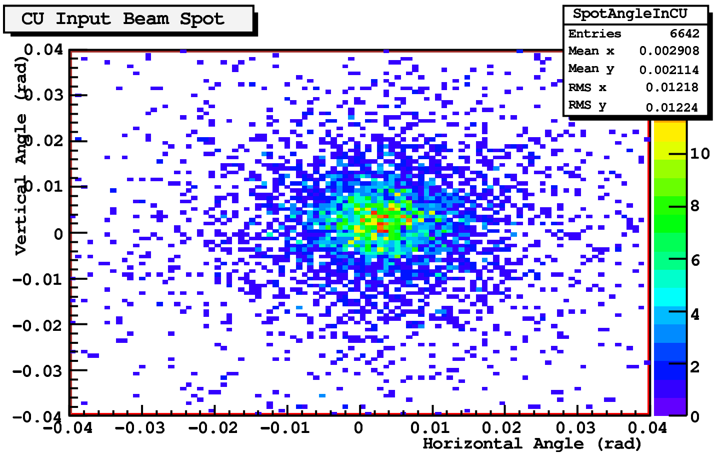

CU Input Horizontal coordinate

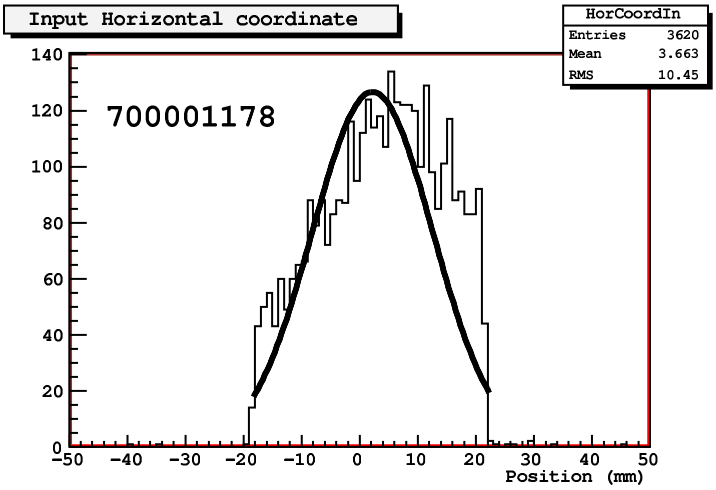

CU Input vertical coordinate

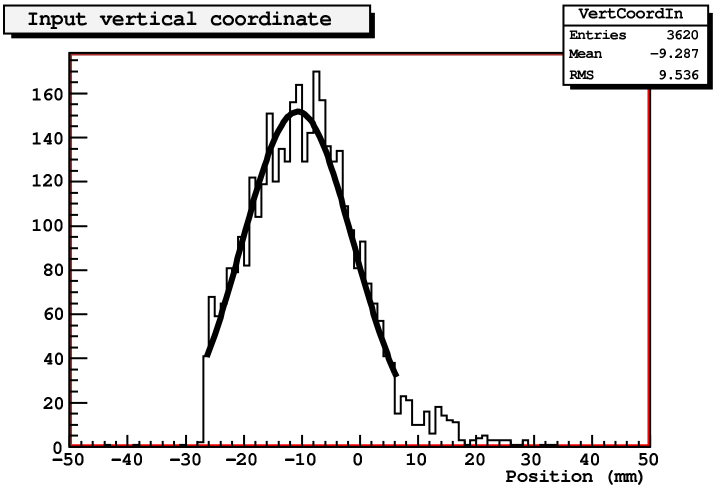

CU Input horizontal angle

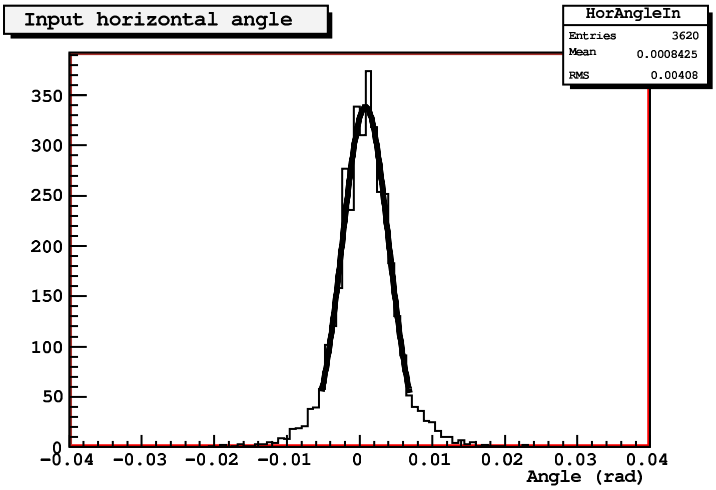

CU Input vertical angle

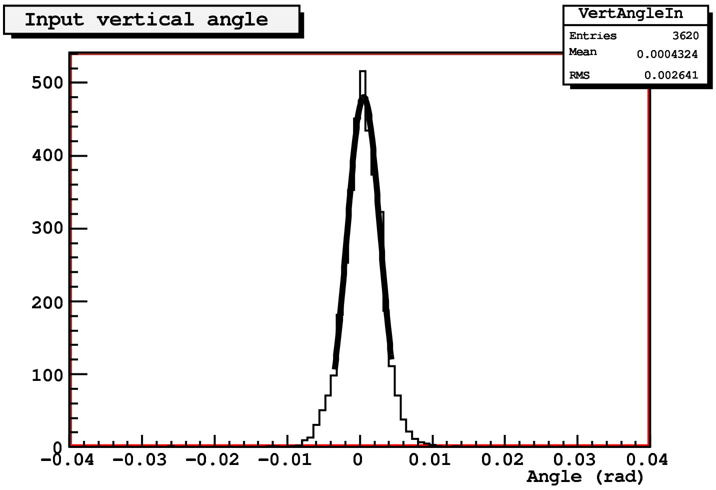

CU Input Beam Spot

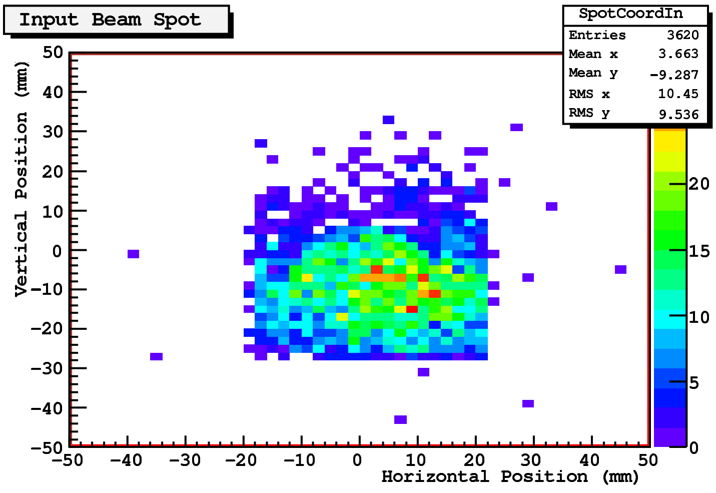

CU Input Beam Spot

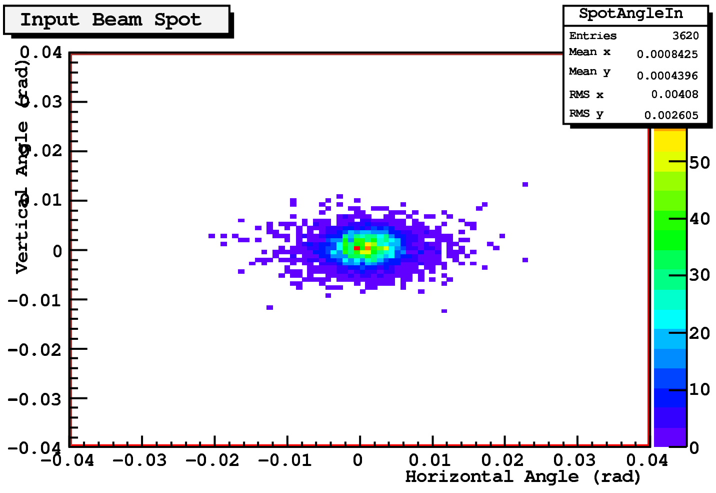

Input Horizontal coordinate
HorCoordIn
Entries 3620
Mean 3.663
RMS 10.45
700001178
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

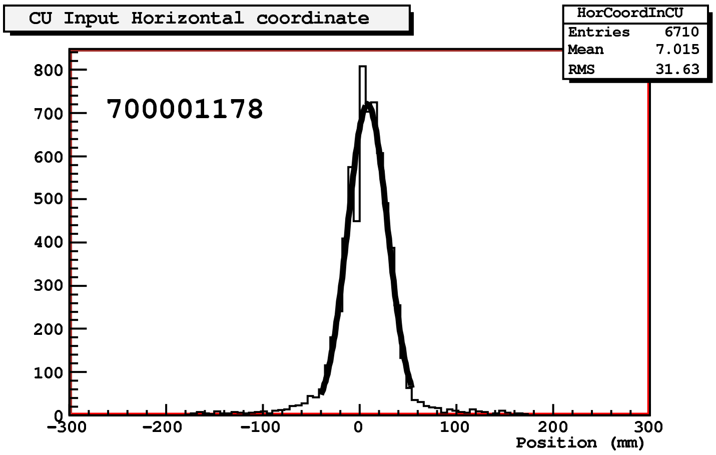

Input vertical coordinate
VertCoordIn
Entries 3620
Mean −9.287
RMS 9.536
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

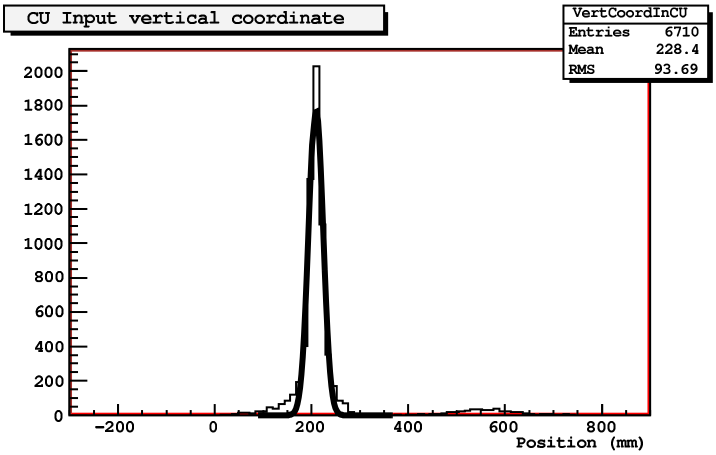

Input horizontal angle
HorAngleIn
Entries 3620
Mean 0.0008425
RMS 0.00408
0
50
100
150
200
250
300
350
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

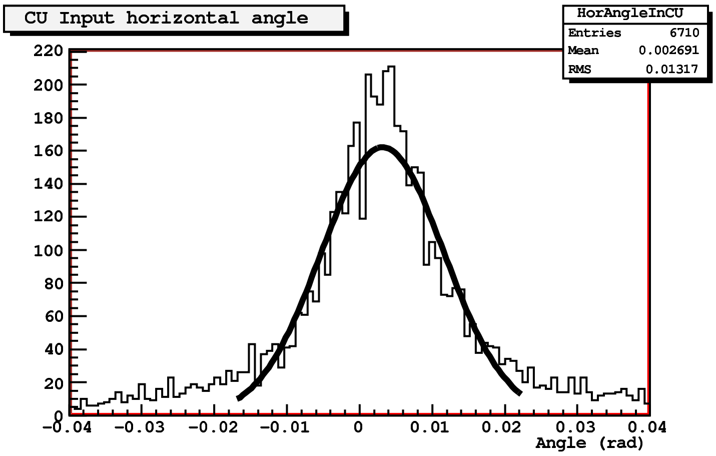

Input vertical angle
VertAngleIn
Entries 3620
Mean 0.0004324
RMS 0.002641
0
100
200
300
400
500
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

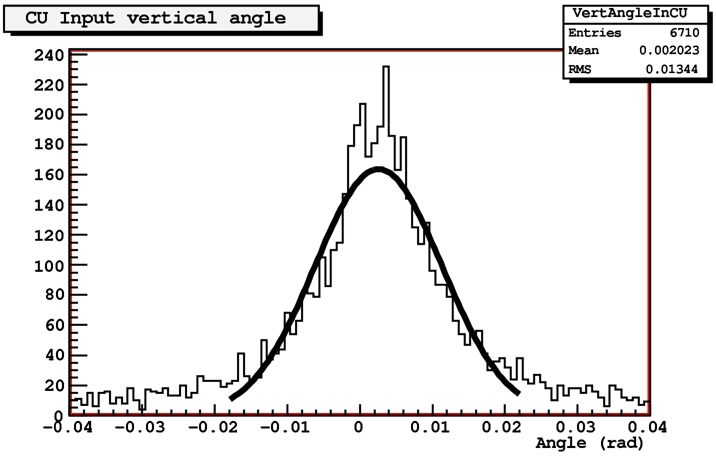

Input Beam Spot
SpotCoordIn
Entries 3620
Mean x 3.663
Mean y −9.287
RMS x 10.45
RMS y 9.536
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

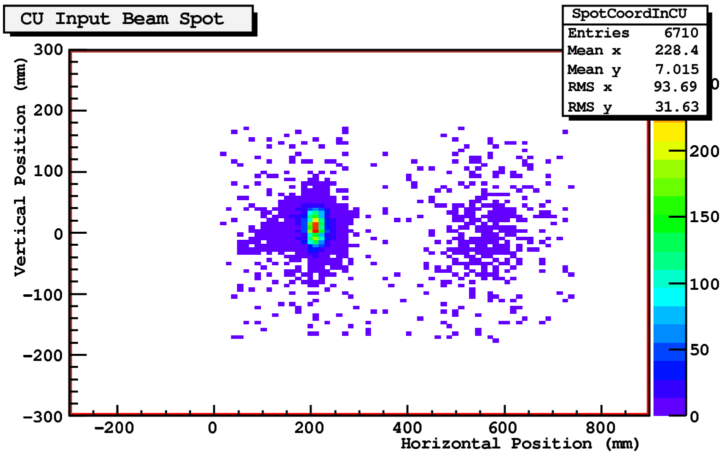

Input Beam Spot
SpotAngleIn
Entries 3620
Mean x 0.0008425
Mean y 0.0004396
RMS x 0.00408
RMS y 0.002605
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
10
20
30
40
50

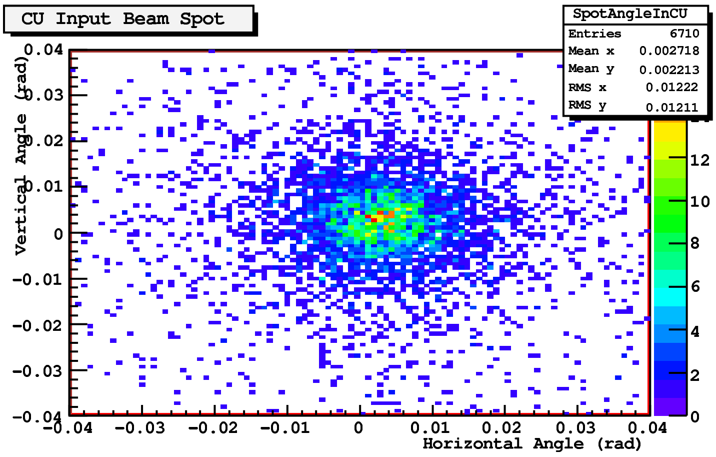

CU Input Horizontal coordinate
HorCoordInCU
Entries 6710
Mean 7.015
RMS 31.63
700001178
800
700
600
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

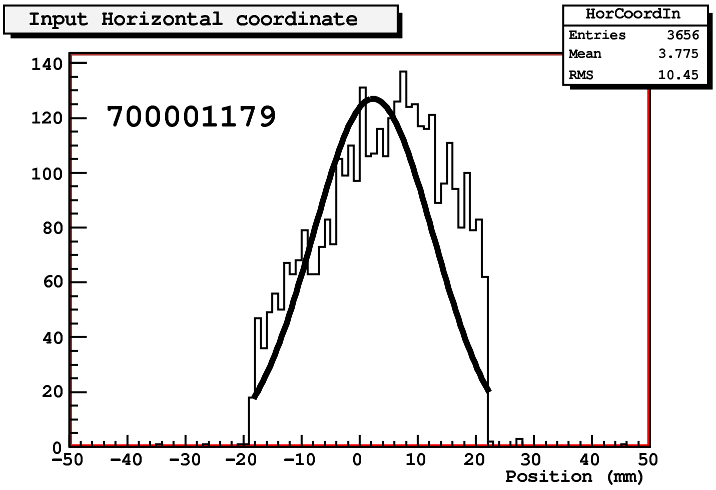

CU Input vertical coordinate
VertCoordInCU
Entries 6710
Mean 228.4
RMS 93.69
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−200
0
200
400
600
800
Position (mm)

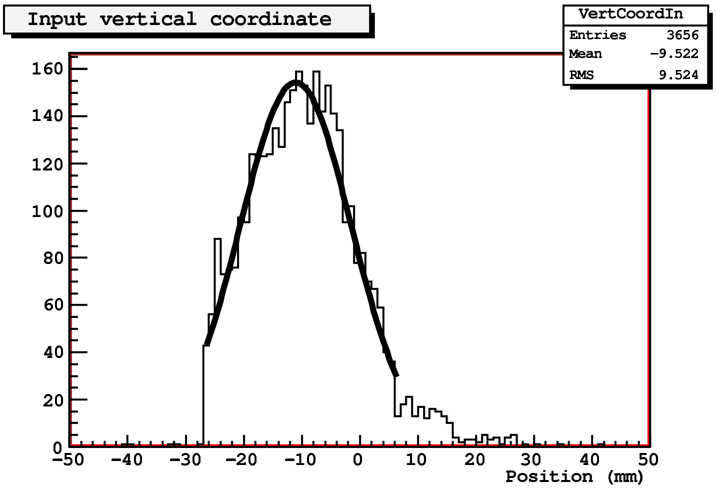

CU Input horizontal angle
HorAngleInCU
Entries 6710
Mean 0.002691
RMS 0.01317
220
200
180
160
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

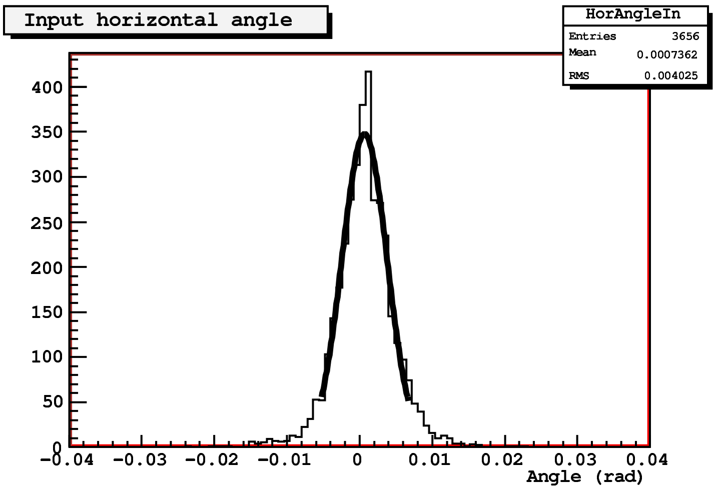

CU Input vertical angle
VertAngleInCU
Entries 6710
Mean 0.002023
RMS 0.01344
240
220
200
180
160
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

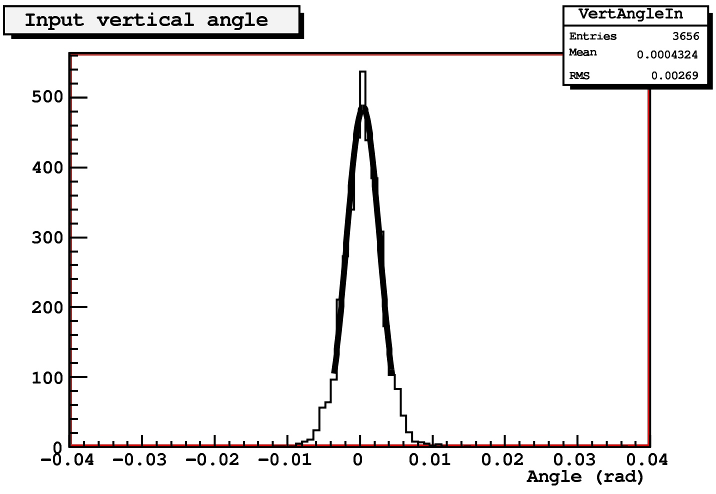

CU Input Beam Spot
SpotCoordInCU
Entries 6710
Mean x 228.4
Mean y 7.015
RMS x 93.69
RMS y 31.63
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
200
150
100
50
0

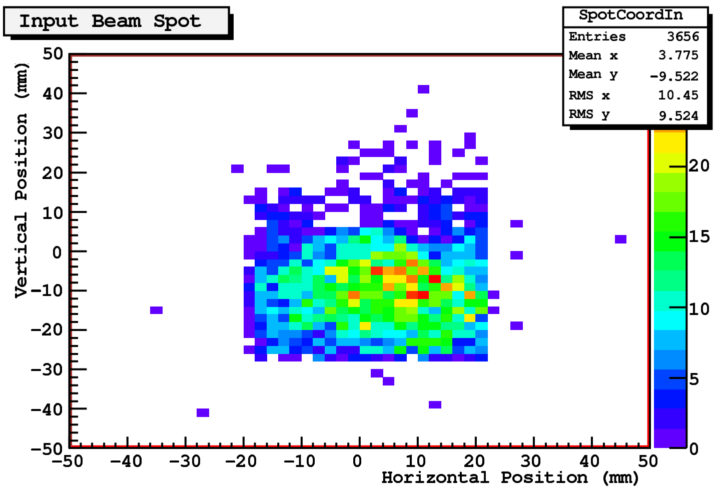

CU Input Beam Spot
SpotAngleInCU
Entries 6710
Mean x 0.002718
Mean y 0.002213
RMS x 0.01222
RMS y 0.01211
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
12
10
8
6
4
2
0

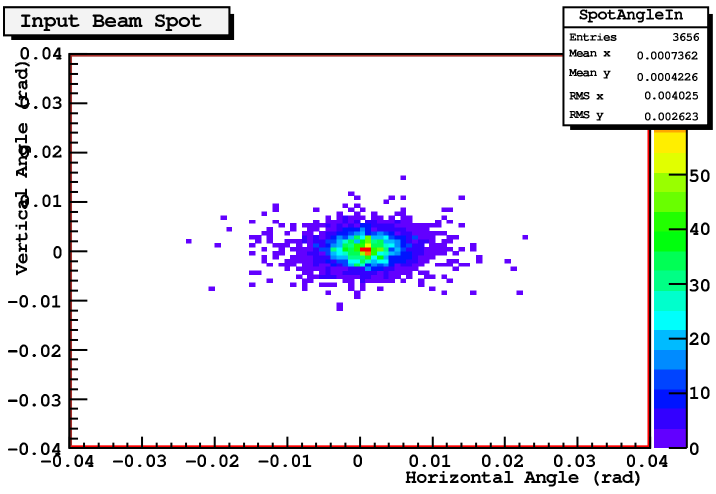

Input Horizontal coordinate
HorCoordIn
Entries 3656
Mean 3.775
RMS 10.45
700001179
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

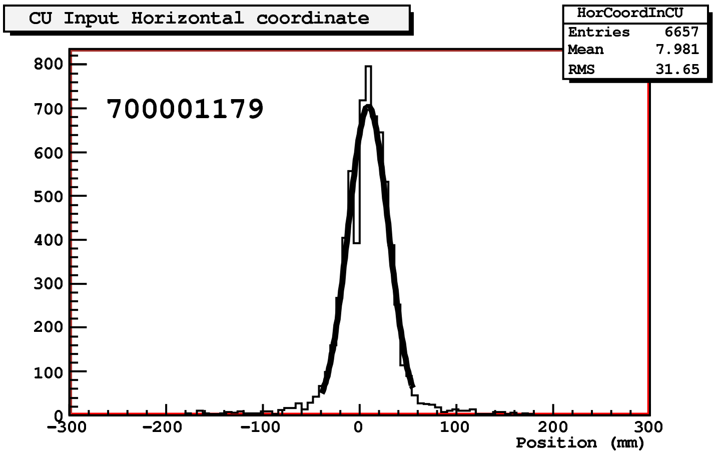

Input vertical coordinate
VertCoordIn
Entries 3656
Mean −9.522
RMS 9.524
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

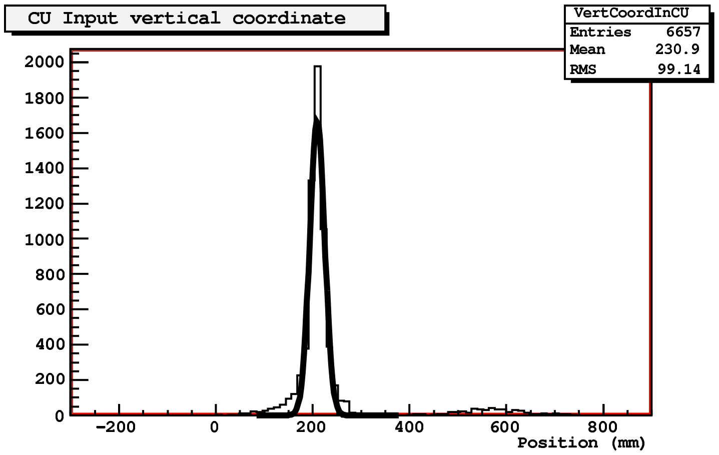

Input horizontal angle
HorAngleIn
Entries 3656
Mean 0.0007362
RMS 0.004025
0
50
100
150
200
250
300
350
400
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

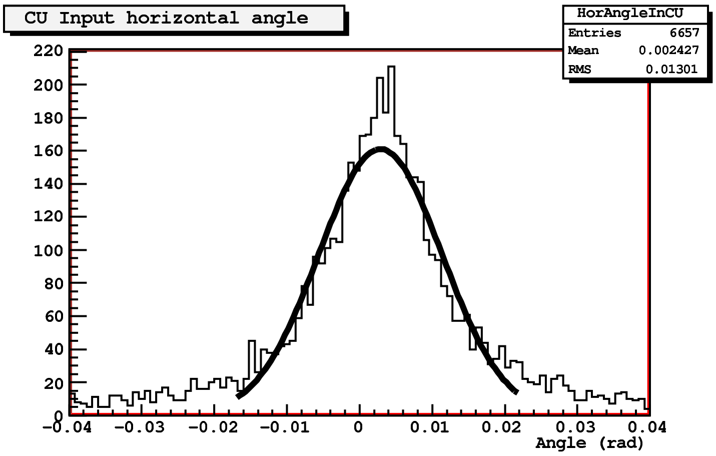

Input vertical angle
VertAngleIn
Entries 3656
Mean 0.0004324
RMS 0.00269
0
100
200
300
400
500
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

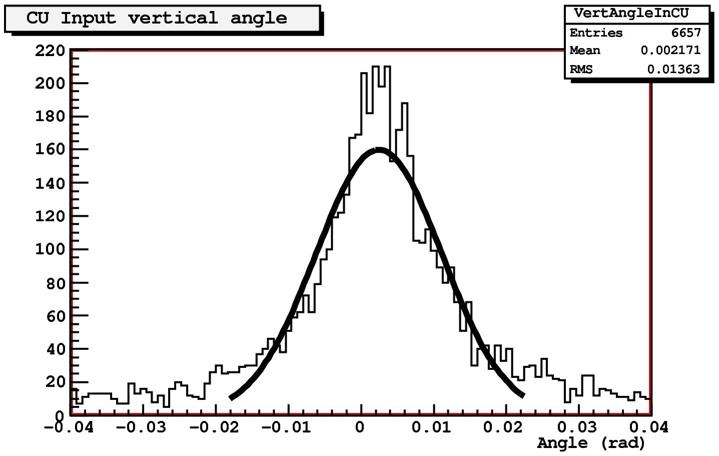

Input Beam Spot
SpotCoordIn
Entries 3656
Mean x 3.775
Mean y −9.522
RMS x 10.45
RMS y 9.524
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

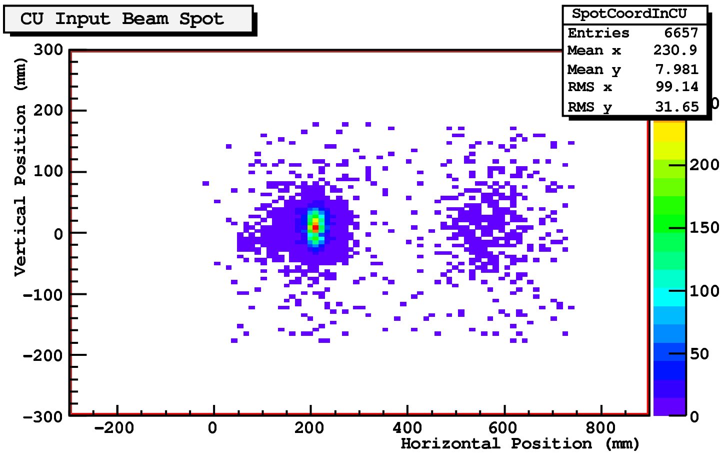

Input Beam Spot
SpotAngleIn
Entries 3656
Mean x 0.0007362
Mean y 0.0004226
RMS x 0.004025
RMS y 0.002623
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
10
20
30
40
50

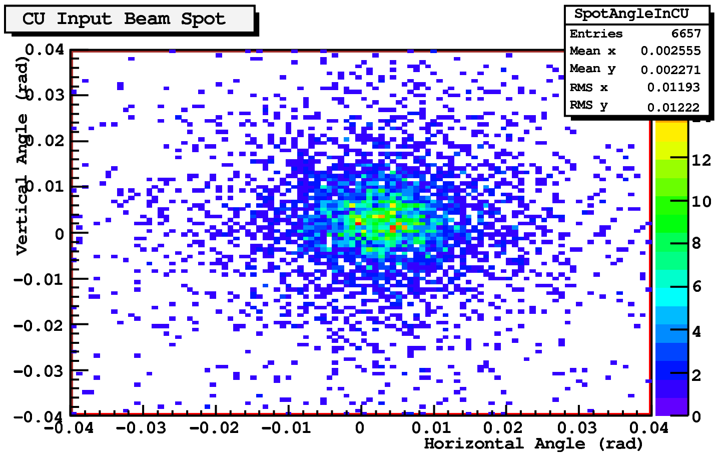

CU Input Horizontal coordinate
HorCoordInCU
Entries 6657
Mean 7.981
RMS 31.65
700001179
800
700
600
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

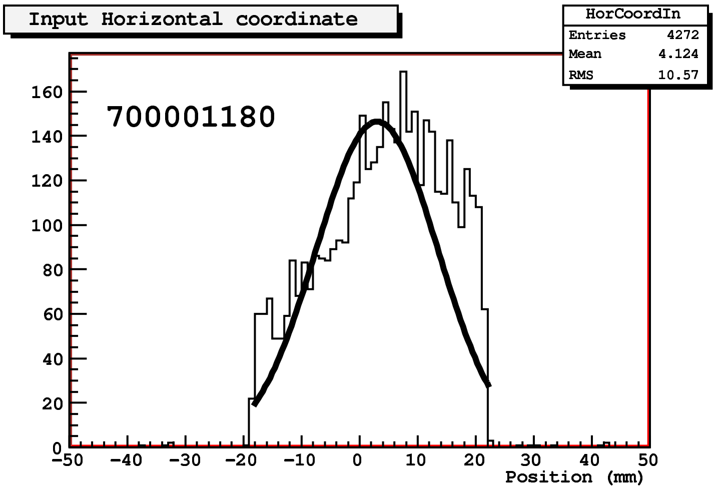

CU Input vertical coordinate
VertCoordInCU
Entries 6657
Mean 230.9
RMS 99.14
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−200
0
200
400
600
800
Position (mm)

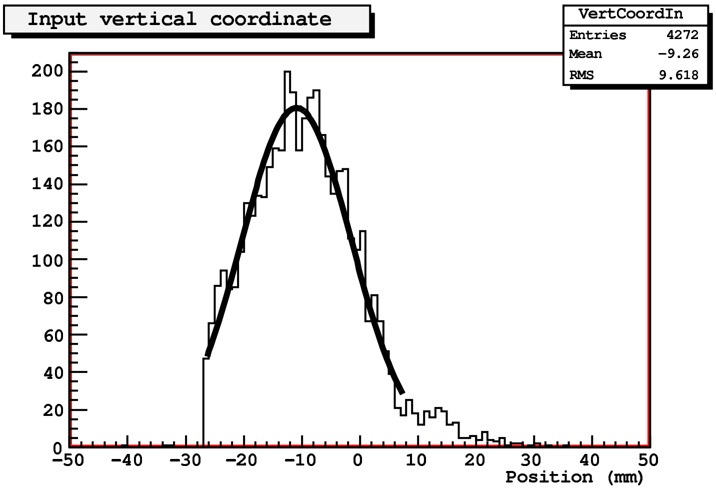

CU Input horizontal angle
HorAngleInCU
Entries 6657
Mean 0.002427
RMS 0.01301
220
200
180
160
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

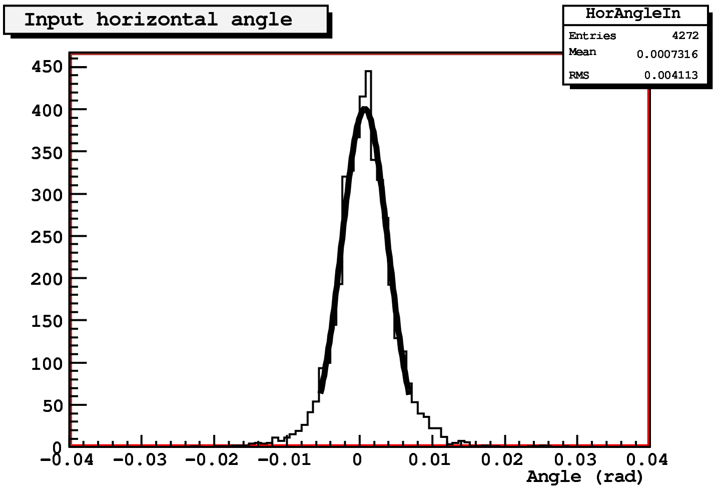

CU Input vertical angle
VertAngleInCU
Entries 6657
Mean 0.002171
RMS 0.01363
220
200
180
160
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

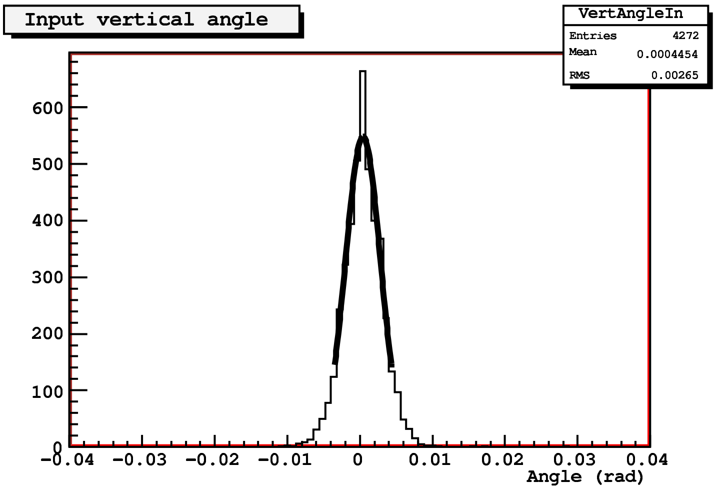

CU Input Beam Spot
SpotCoordInCU
Entries 6657
Mean x 230.9
Mean y 7.981
RMS x 99.14
RMS y 31.65
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
0
200
150
100
50
0

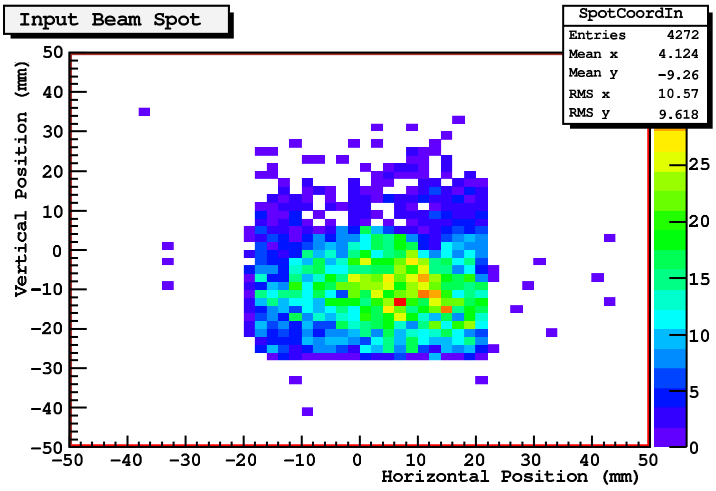

CU Input Beam Spot
SpotAngleInCU
Entries 6657
Mean x 0.002555
Mean y 0.002271
RMS x 0.01193
RMS y 0.01222
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
12
10
8
6
4
2
0

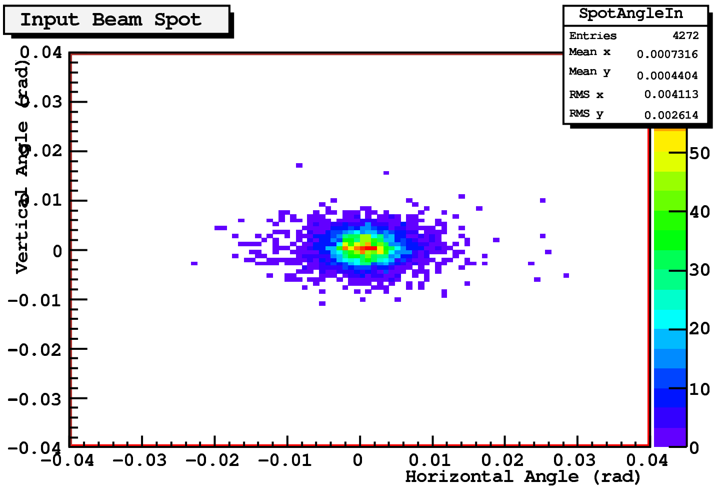

Input Horizontal coordinate
HorCoordIn
Entries 4272
Mean 4.124
RMS 10.57
700001180
0
20
40
60
80
100
120
140
160
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

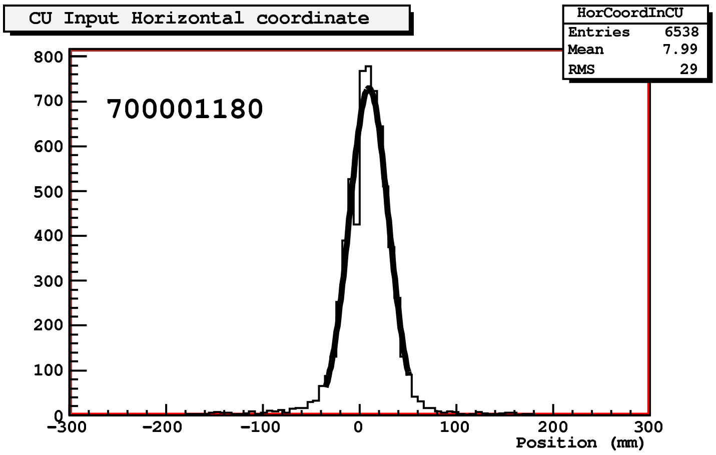

Input vertical coordinate
VertCoordIn
Entries 4272
Mean −9.26
RMS 9.618
0
20
40
60
80
100
120
140
160
180
200
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

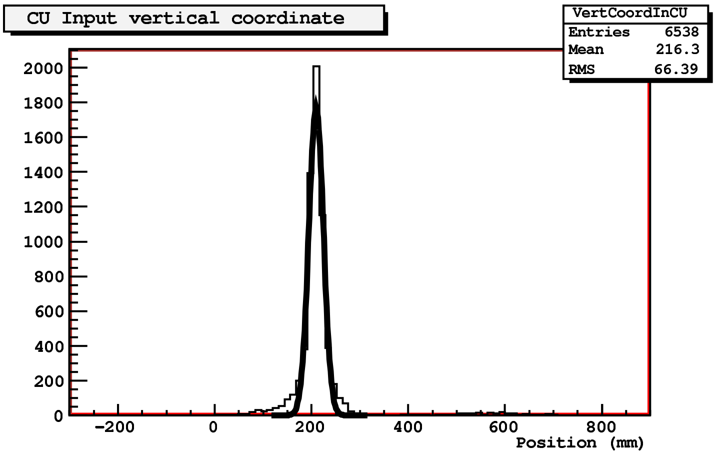

Input horizontal angle
HorAngleIn
Entries 4272
Mean 0.0007316
RMS 0.004113
0
50
100
150
200
250
300
350
400
450
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

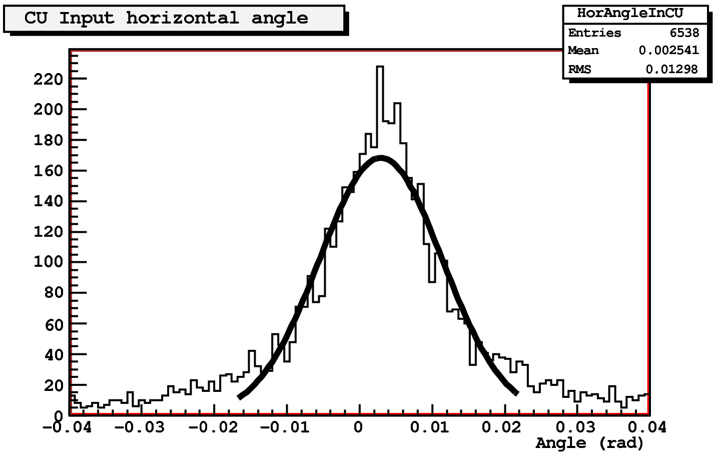

Input vertical angle
VertAngleIn
Entries 4272
Mean 0.0004454
RMS 0.00265
0
100
200
300
400
500
600
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

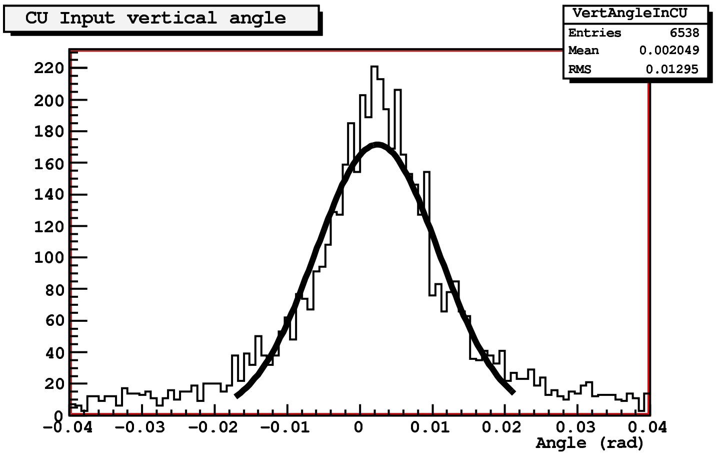

Input Beam Spot
SpotCoordIn
Entries 4272
Mean x 4.124
Mean y −9.26
RMS x 10.57
RMS y 9.618
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
0
5
10
15
20
25

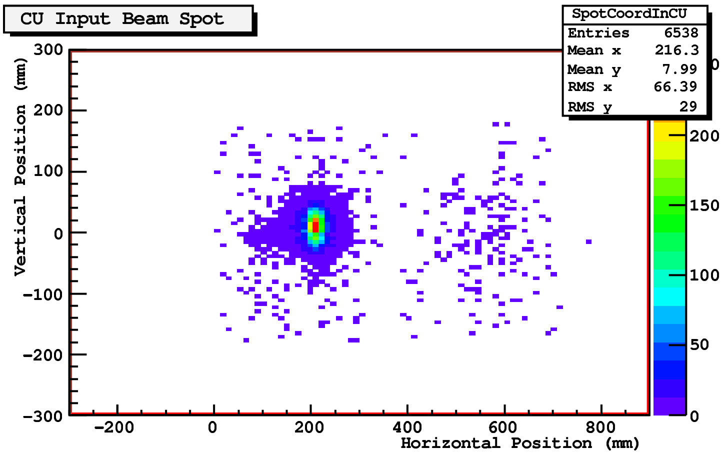

Input Beam Spot
SpotAngleIn
Entries 4272
Mean x 0.0007316
Mean y 0.0004404
RMS x 0.004113
RMS y 0.002614
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
0
10
20
30
40
50

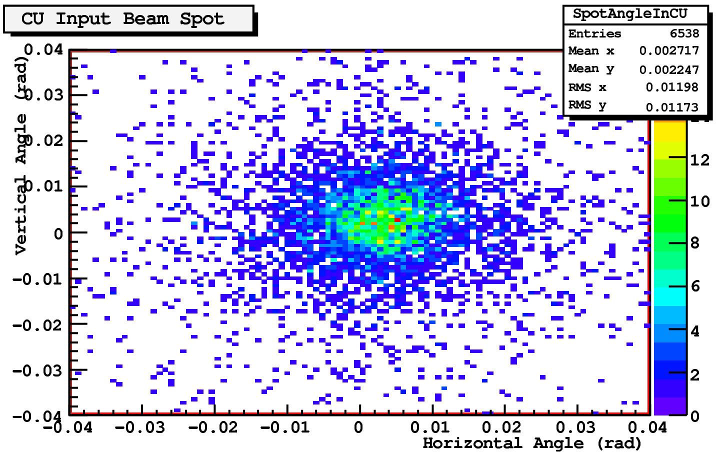

CU Input Horizontal coordinate
HorCoordInCU
Entries 6538
Mean 7.99
RMS 29
700001180
800
700
600
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

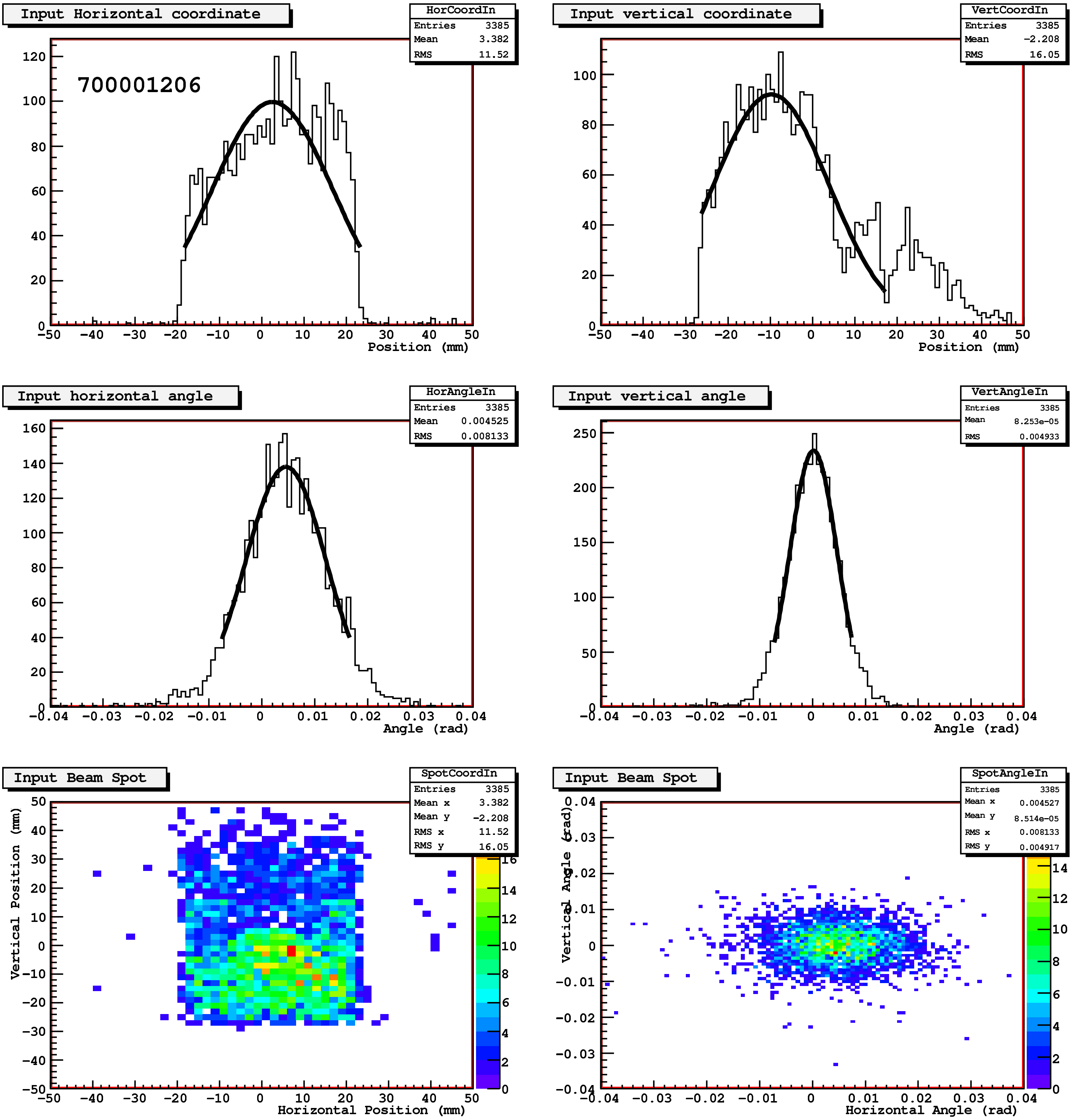

CU Input vertical coordinate
VertCoordInCU
Entries 6538
Mean 216.3
RMS 66.39
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−200
0
200
400
600
800
Position (mm)

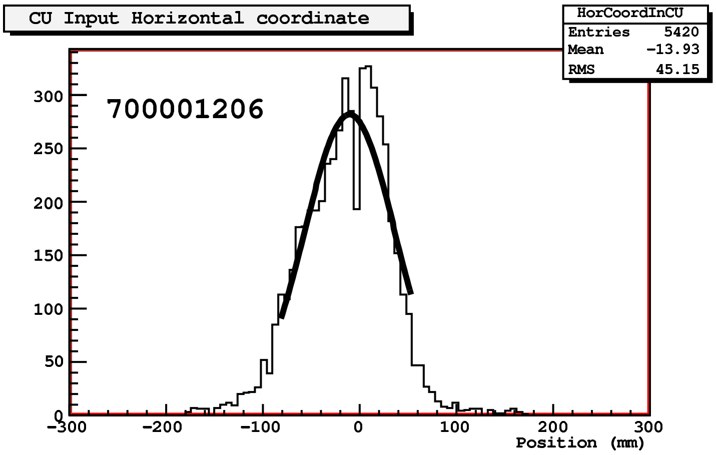

CU Input horizontal angle
HorAngleInCU
Entries 6538
Mean 0.002541
RMS 0.01298
220
200
180
160
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

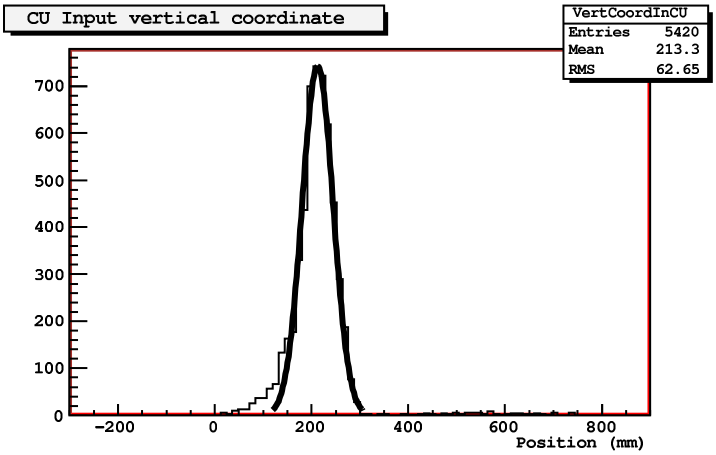

CU Input vertical angle
VertAngleInCU
Entries 6538
Mean 0.002049
RMS 0.01295
220
200
180
160
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

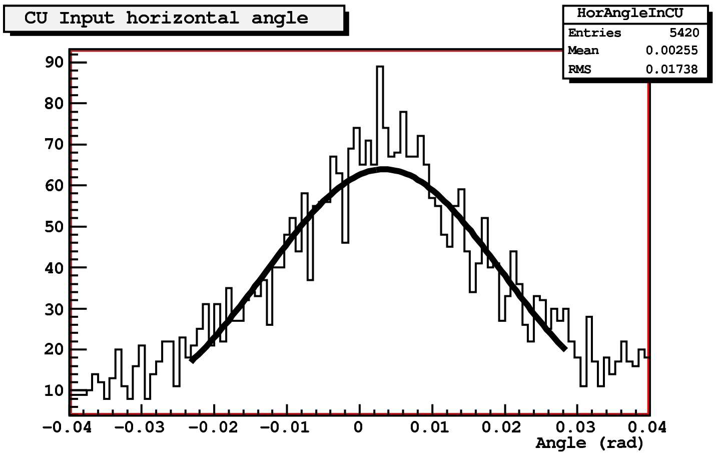

CU Input Beam Spot
SpotCoordInCU
Entries 6538
Mean x 216.3
Mean y 7.99
RMS x 66.39
RMS y 29
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
200
150
100
50
0

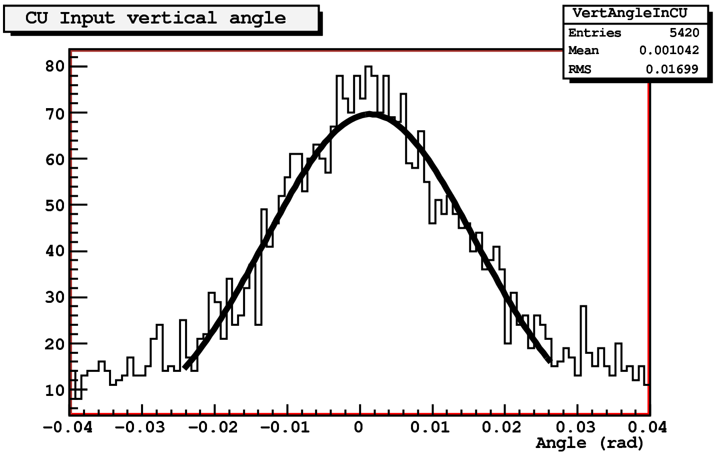

CU Input Beam Spot
SpotAngleInCU
Entries 6538
Mean x 0.002717
Mean y 0.002247
RMS x 0.01198
RMS y 0.01173
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
12
10
8
6
4
2
0

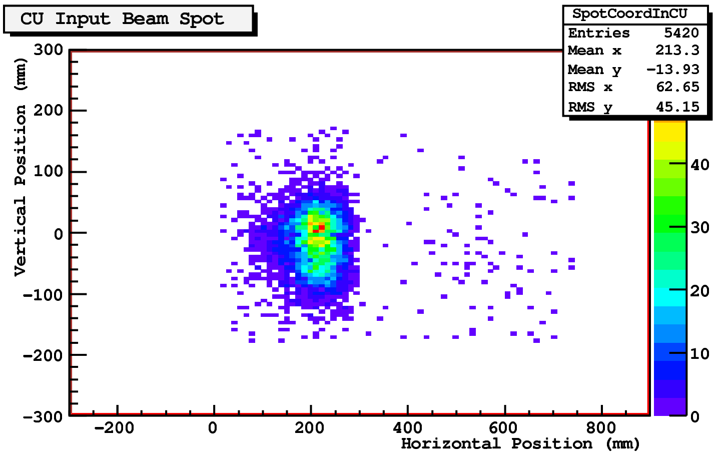

Input Horizontal coordinate
HorCoordIn
Entries 3385
Mean 3.382
RMS 11.52
700001206
Position (mm)
Input vertical coordinate
VertCoordIn
Entries 3385
Mean -2.208
RMS 16.05
Position (mm)
Input horizontal angle
HorAngleIn
Entries 3385
Mean 0.004525
RMS 0.008133
Angle (rad)
Input vertical angle
VertAngleIn
Entries 3385
Mean 8.253e-05
RMS 0.004933
Angle (rad)
Input Beam Spot
SpotCoordIn
Entries 3385
Mean x 3.382
Mean y -2.208
RMS x 11.52
RMS y 16.05
Vertical Position (mm)
Horizontal Position (mm)
Input Beam Spot
SpotAngleIn
Entries 3385
Mean x 0.004527
Mean y 8.514e-05
RMS x 0.008133
RMS y 0.004917
Vertical Angle (rad)
Horizontal Angle (rad)

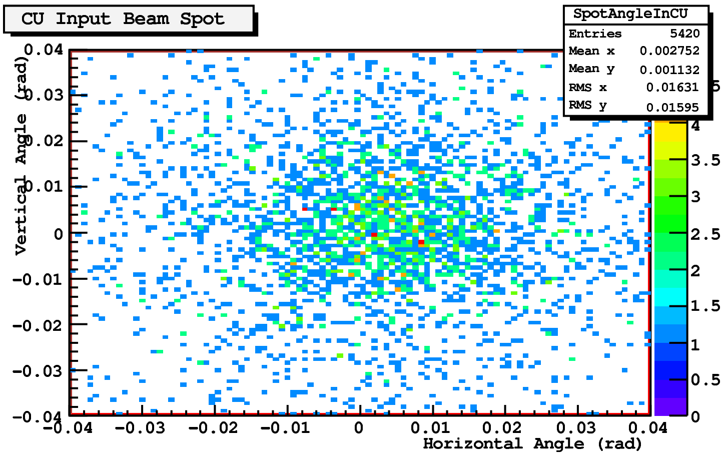

CU Input Horizontal coordinate
HorCoordInCU
Entries 5420
Mean -13.93
RMS 45.15
700001206
300
250
200
150
100
50
0
−300
−200
−100
0
100
200
300
Position (mm)

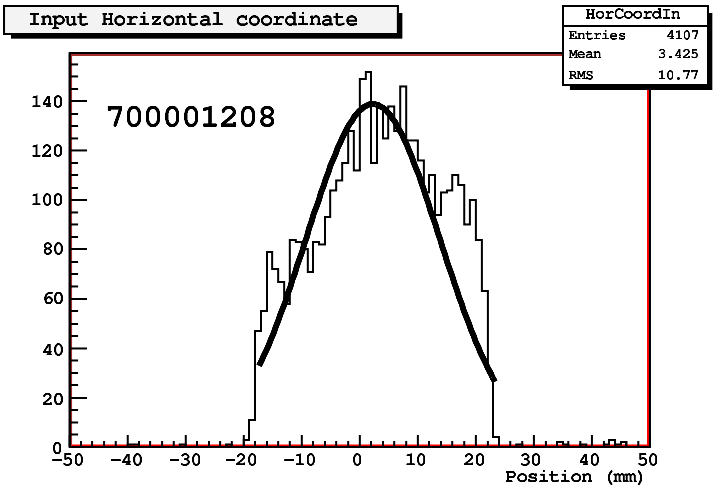

CU Input vertical coordinate
VertCoordInCU
Entries 5420
Mean 213.3
RMS 62.65
700
600
500
400
300
200
100
0
−200
0
200
400
600
800
Position (mm)

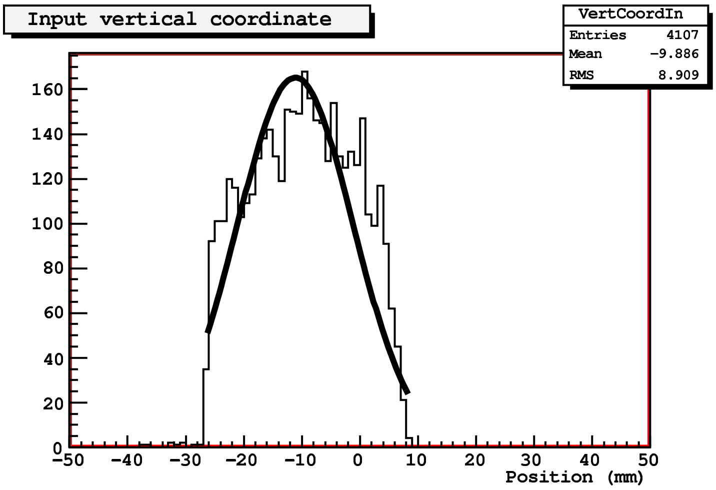

CU Input horizontal angle
HorAngleInCU
Entries 5420
Mean 0.00255
RMS 0.01738
90
80
70
60
50
40
30
20
10
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

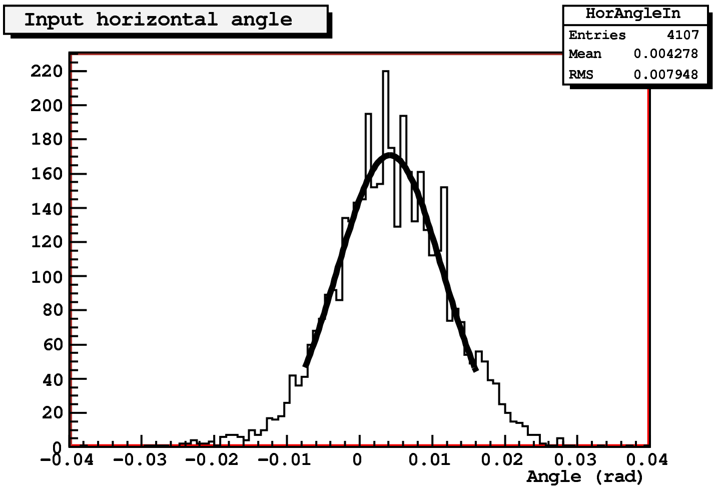

CU Input vertical angle
VertAngleInCU
Entries 5420
Mean 0.001042
RMS 0.01699
80
70
60
50
40
30
20
10
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

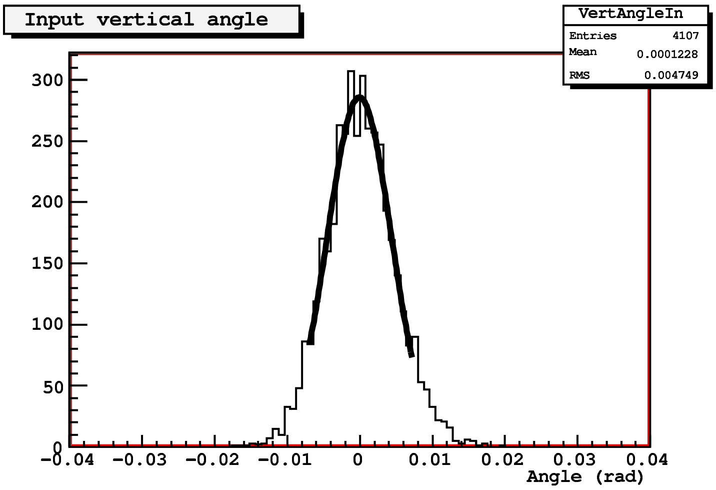

CU Input Beam Spot
SpotCoordInCU
Entries 5420
Mean x 213.3
Mean y -13.93
RMS x 62.65
RMS y 45.15
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
40
30
20
10
0

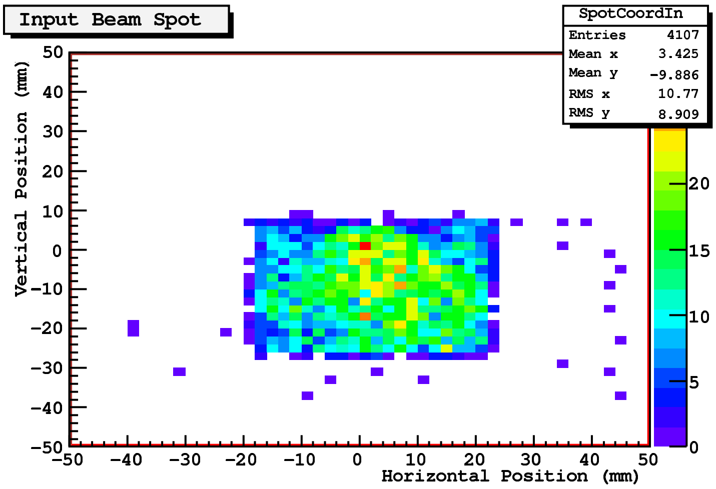

CU Input Beam Spot
SpotAngleInCU
Entries 5420
Mean x 0.002752
Mean y 0.001132
RMS x 0.01631
RMS y 0.01595
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
4
3.5
3
2.5
2
1.5
1
0.5
0

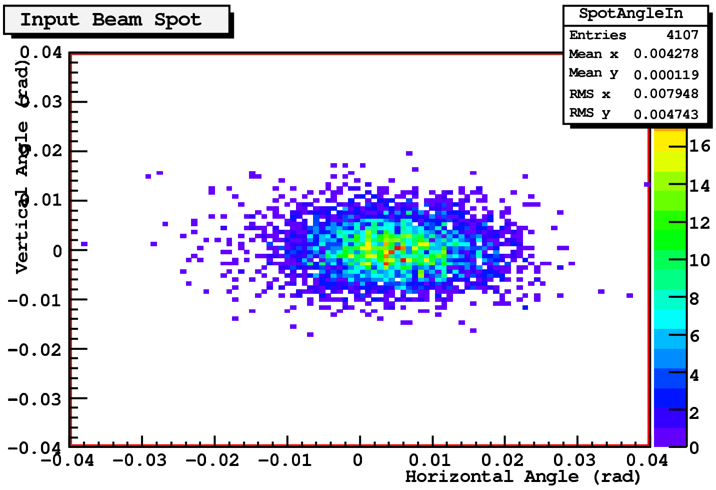

Input Horizontal coordinate

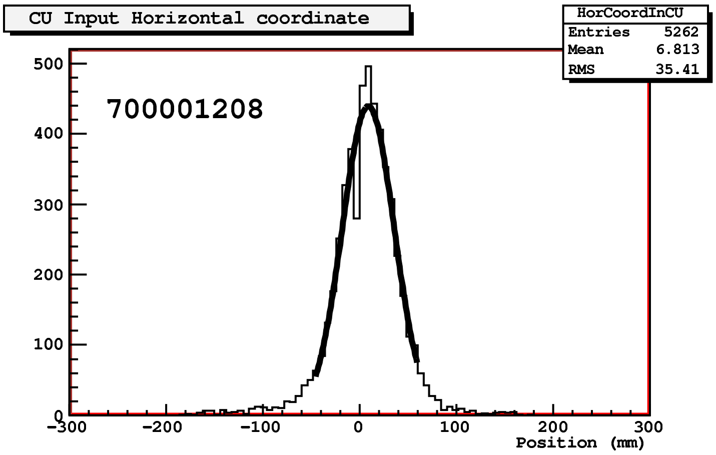

Input vertical coordinate

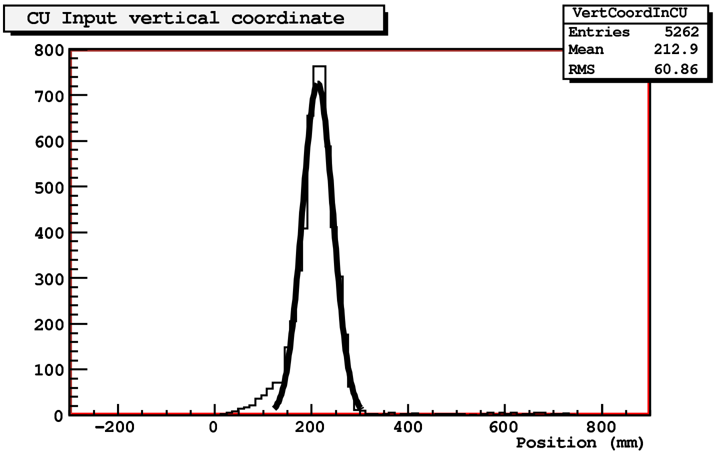

Input horizontal angle

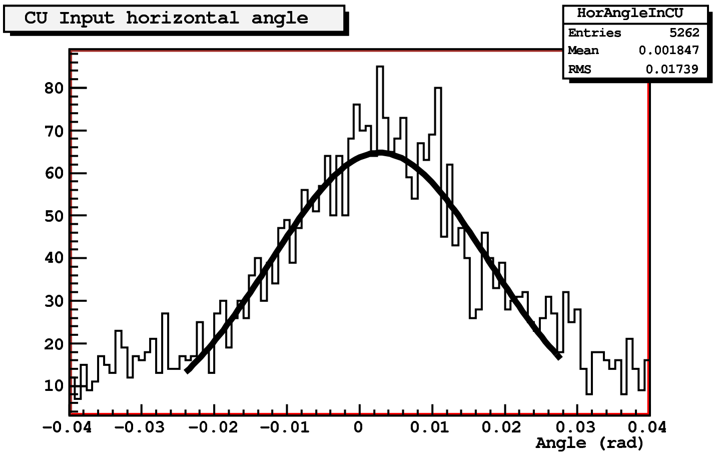

Input vertical angle

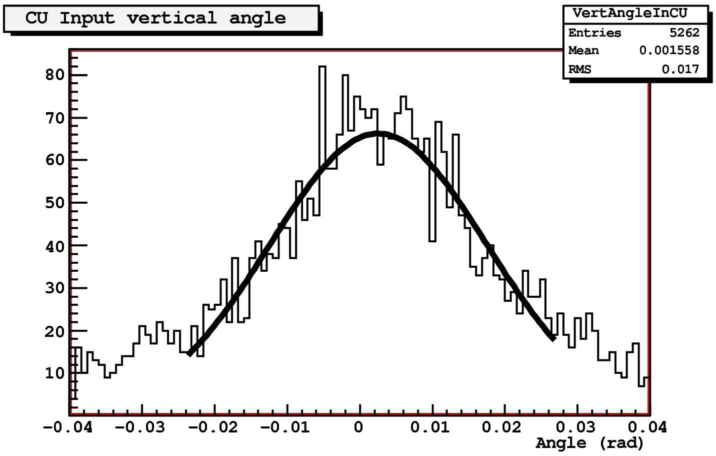

Input Beam Spot

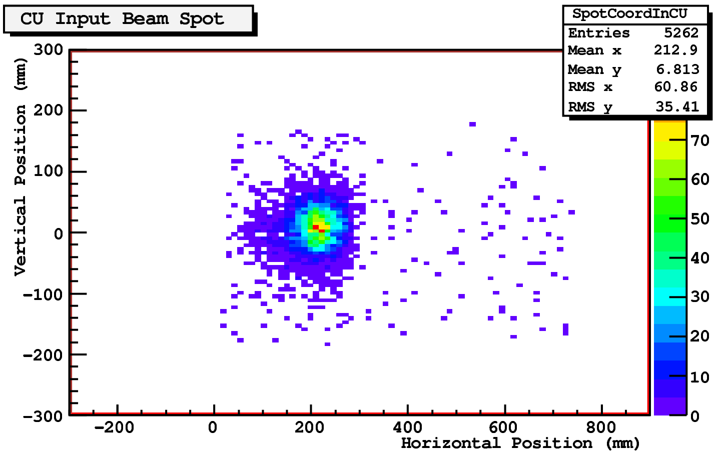

Input Beam Spot

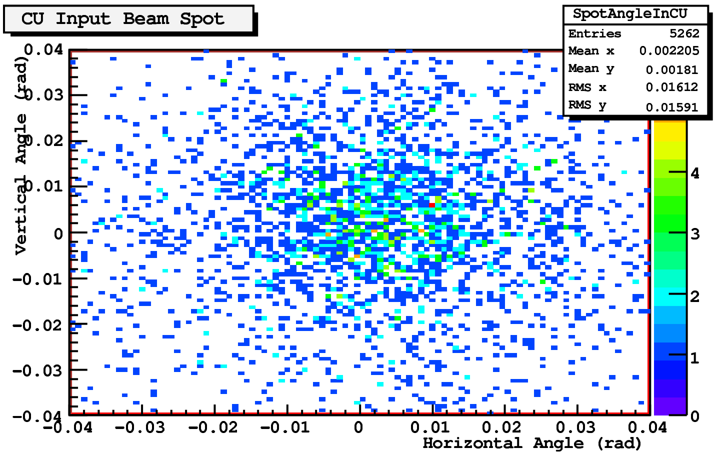

CU Input Horizontal coordinate
HorCoordInCU
Entries 5262
Mean 6.813
RMS 35.41
700001208
0
100
200
300
400
500
−300
−200
−100
0
100
200
300
Position (mm)

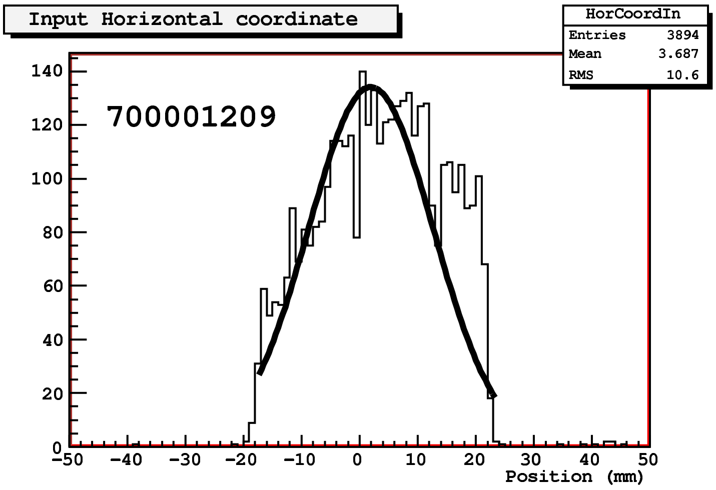

CU Input vertical coordinate
VertCoordInCU
Entries 5262
Mean 212.9
RMS 60.86
0
100
200
300
400
500
600
700
800
−200
0
200
400
600
800
Position (mm)

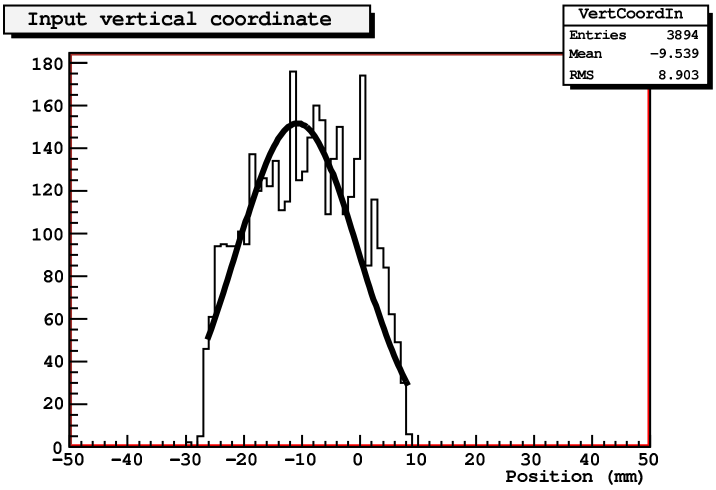

CU Input horizontal angle
HorAngleInCU
Entries 5262
Mean 0.001847
RMS 0.01739
10
20
30
40
50
60
70
80
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

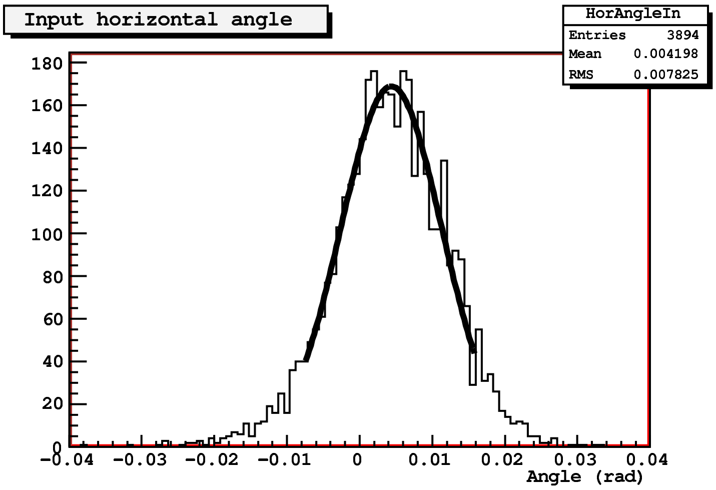

CU Input vertical angle
VertAngleInCU
Entries 5262
Mean 0.001558
RMS 0.017
10
20
30
40
50
60
70
80
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

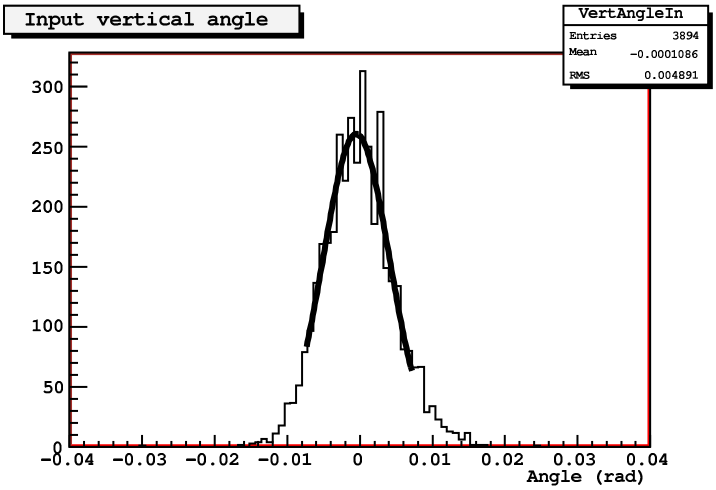

CU Input Beam Spot
SpotCoordInCU
Entries 5262
Mean x 212.9
Mean y 6.813
RMS x 60.86
RMS y 35.41
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
70
60
50
40
30
20
10
0

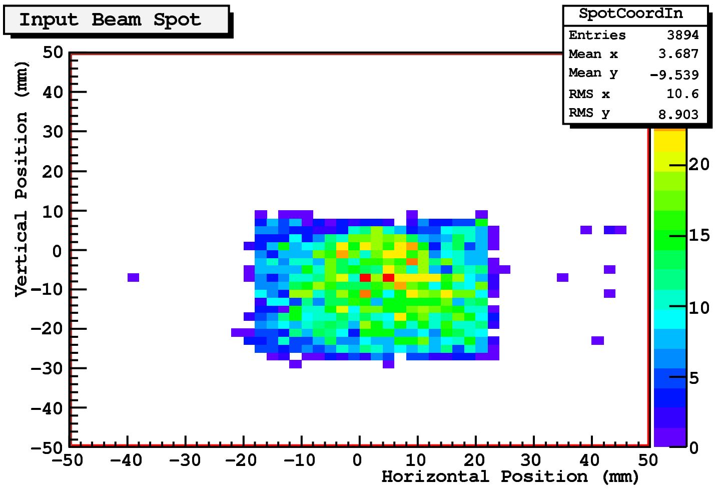

CU Input Beam Spot
SpotAngleInCU
Entries 5262
Mean x 0.002205
Mean y 0.00181
RMS x 0.01612
RMS y 0.01591
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
4
3
2
1
0

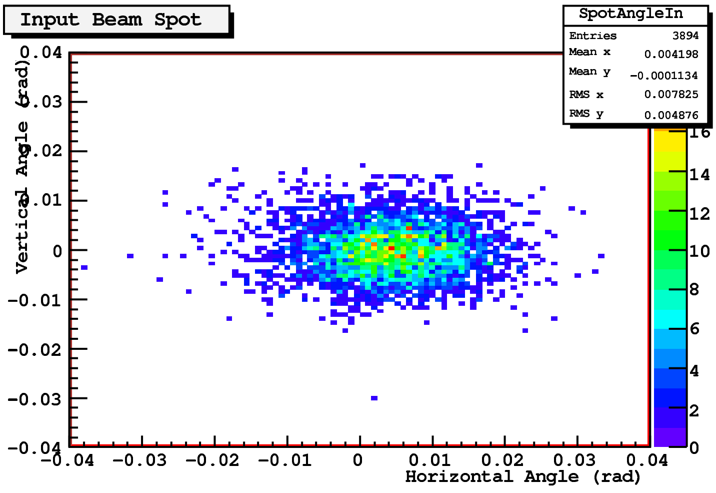

Input Horizontal coordinate
HorCoordIn
Entries 3894
Mean 3.687
RMS 10.6
700001209
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

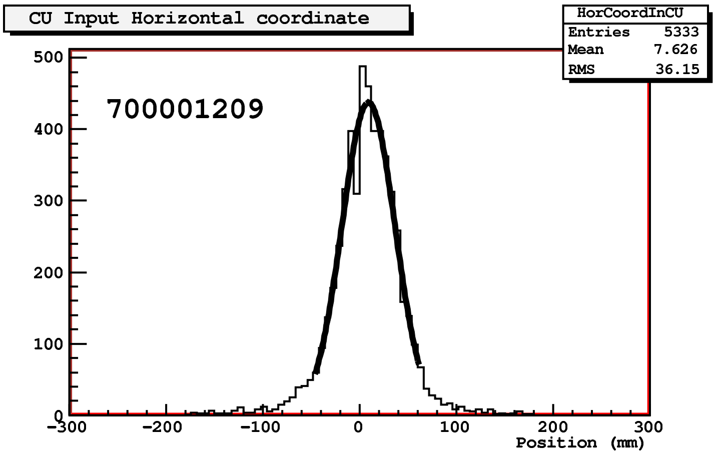

Input vertical coordinate
VertCoordIn
Entries 3894
Mean −9.539
RMS 8.903
180
160
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

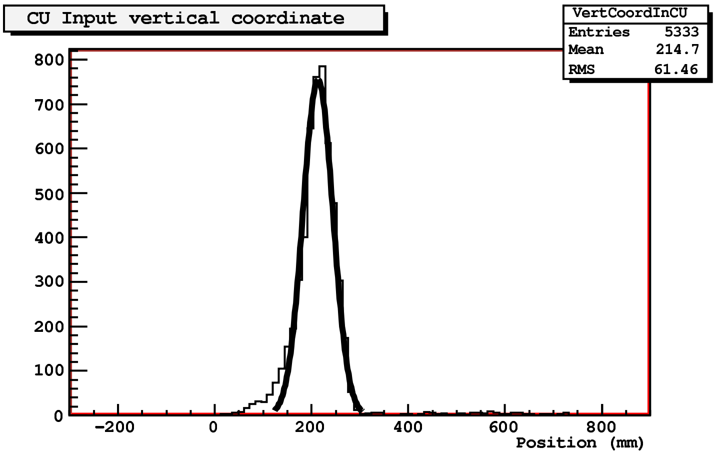

Input horizontal angle
HorAngleIn
Entries 3894
Mean 0.004198
RMS 0.007825
180
160
140
120
100
80
60
40
20
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

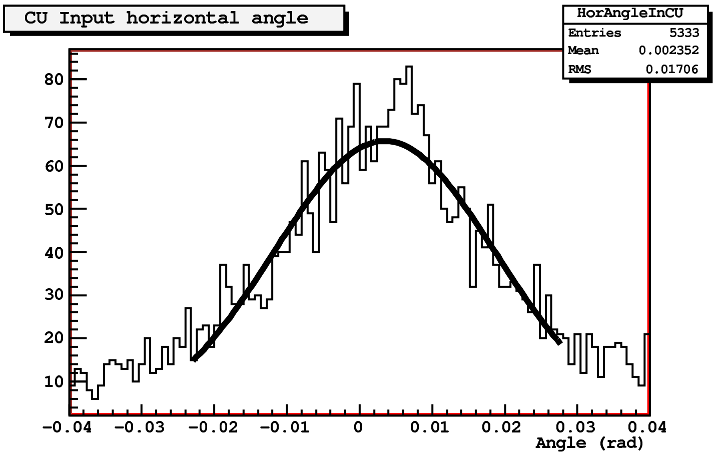

Input vertical angle
VertAngleIn
Entries 3894
Mean −0.0001086
RMS 0.004891
300
250
200
150
100
50
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

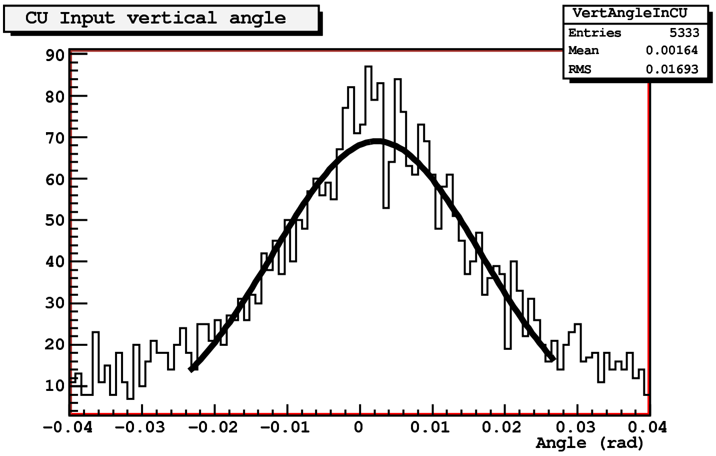

Input Beam Spot
SpotCoordIn
Entries 3894
Mean x 3.687
Mean y −9.539
RMS x 10.6
RMS y 8.903
Vertical Position (mm)
50 40 30 20 10 0 −10 −20 −30 −40 −50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
20
15
10
5
0

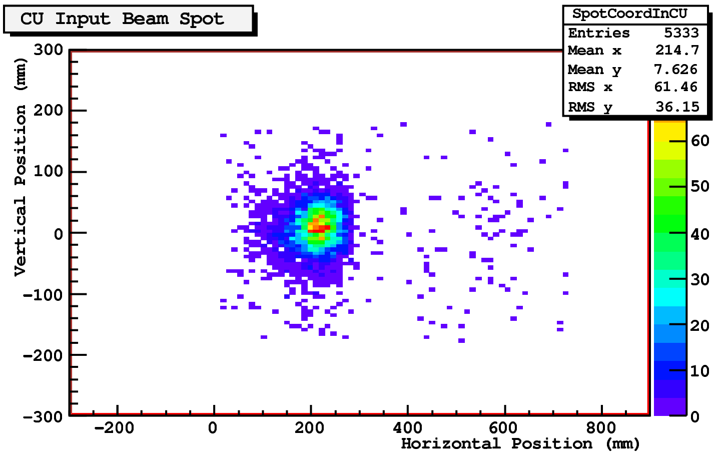

Input Beam Spot
SpotAngleIn
Entries 3894
Mean x 0.004198
Mean y −0.0001134
RMS x 0.007825
RMS y 0.004876
Vertical Angle (rad)
0.04 0.03 0.02 0.01 0 −0.01 −0.02 −0.03 −0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
16
14
12
10
8
6
4
2
0

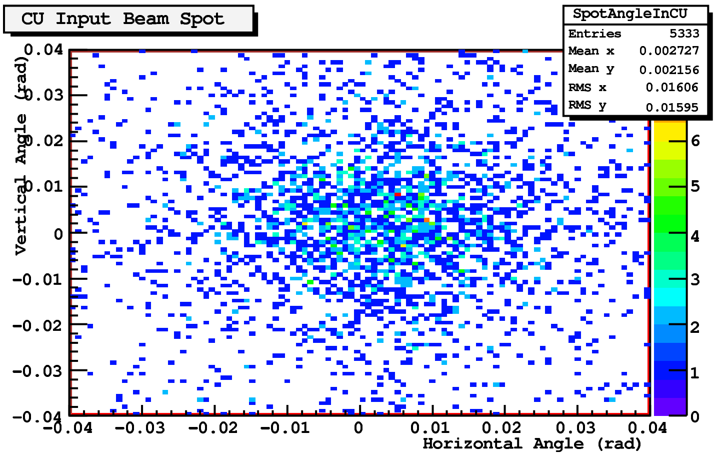

CU Input Horizontal coordinate
HorCoordInCU
Entries 5333
Mean 7.626
RMS 36.15
700001209
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

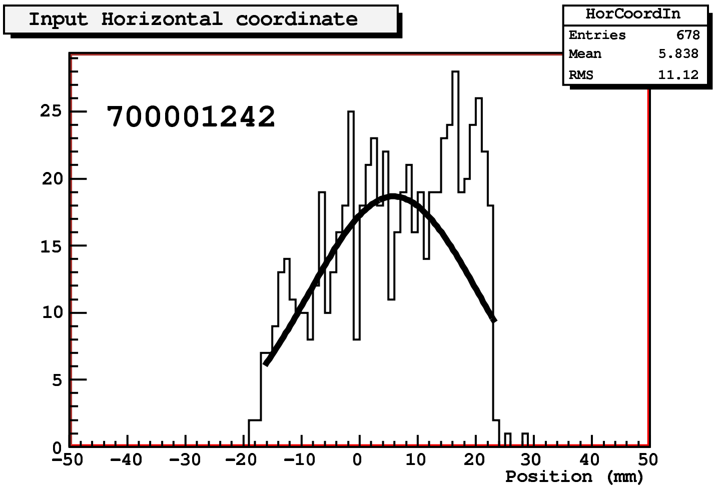

CU Input vertical coordinate
VertCoordInCU
Entries 5333
Mean 214.7
RMS 61.46
800
700
600
500
400
300
200
100
0
−200
0
200
400
600
800
Position (mm)

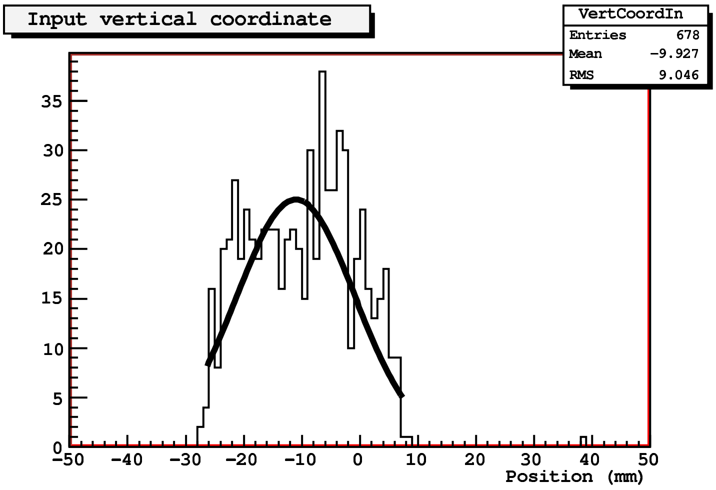

CU Input horizontal angle
HorAngleInCU
Entries 5333
Mean 0.002352
RMS 0.01706
80
70
60
50
40
30
20
10
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

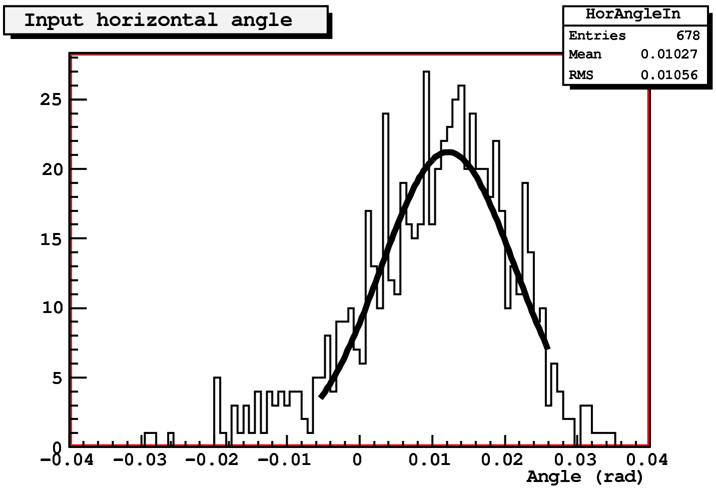

CU Input vertical angle
VertAngleInCU
Entries 5333
Mean 0.00164
RMS 0.01693
90
80
70
60
50
40
30
20
10
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

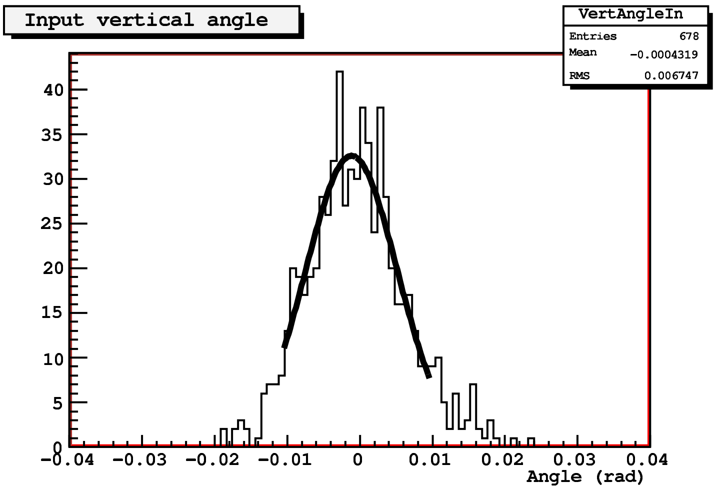

CU Input Beam Spot
SpotCoordInCU
Entries 5333
Mean x 214.7
Mean y 7.626
RMS x 61.46
RMS y 36.15
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
60
50
40
30
20
10
0

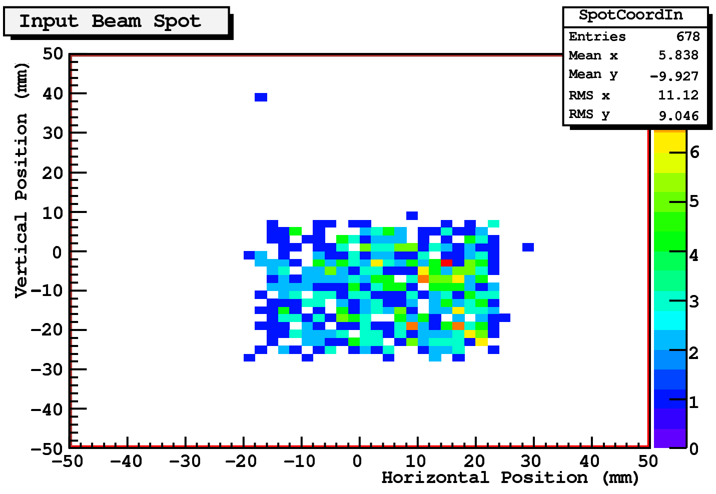

CU Input Beam Spot
SpotAngleInCU
Entries 5333
Mean x 0.002727
Mean y 0.002156
RMS x 0.01606
RMS y 0.01595
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
6
5
4
3
2
1
0

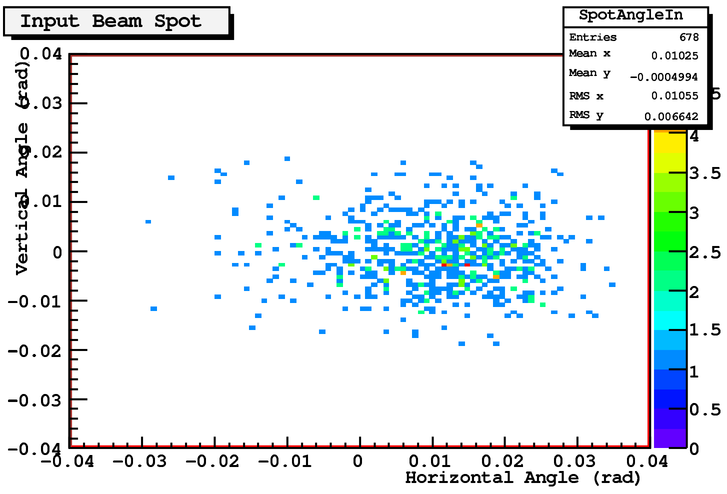

Input Horizontal coordinate
HorCoordIn
Entries 678
Mean 5.838
RMS 11.12
700001242
0
5
10
15
20
25
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

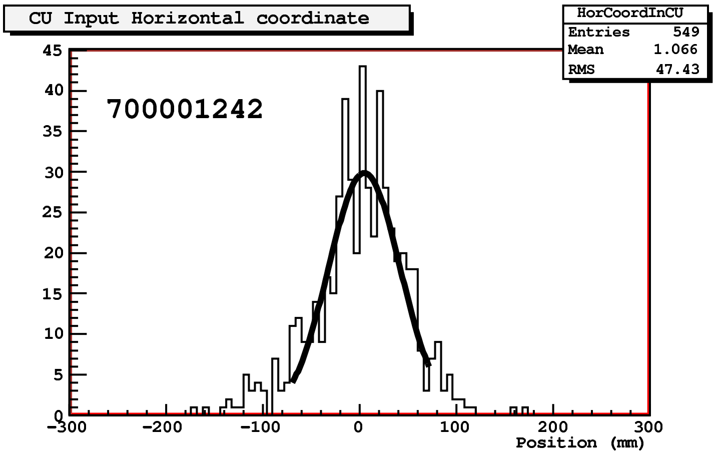

Input vertical coordinate
VertCoordIn
Entries 678
Mean −9.927
RMS 9.046
0
5
10
15
20
25
30
35
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

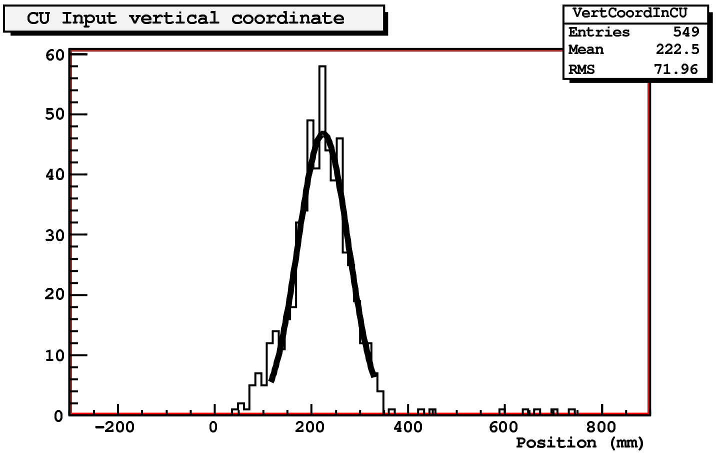

Input horizontal angle
HorAngleIn
Entries 678
Mean 0.01027
RMS 0.01056
0
5
10
15
20
25
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

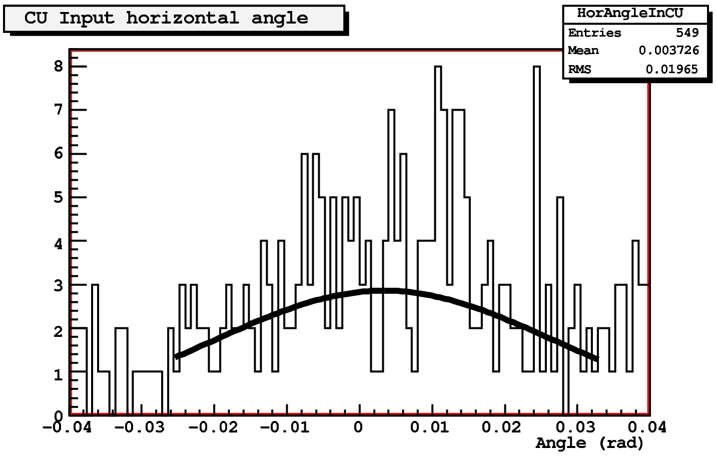

Input vertical angle
VertAngleIn
Entries 678
Mean −0.0004319
RMS 0.006747
0
5
10
15
20
25
30
35
40
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

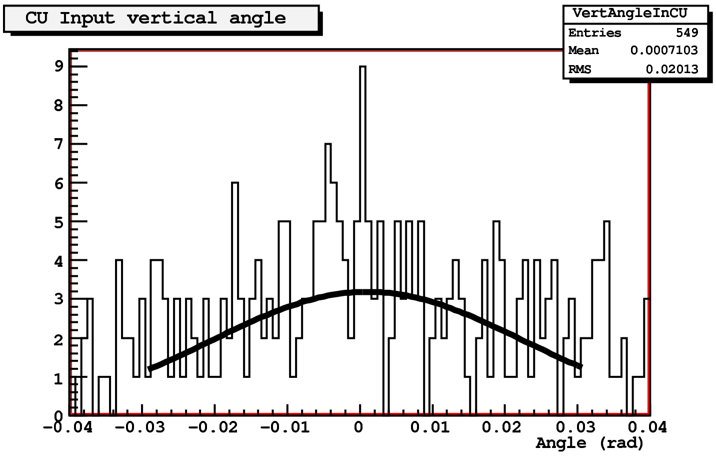

Input Beam Spot
SpotCoordIn
Entries 678
Mean x 5.838
Mean y −9.927
RMS x 11.12
RMS y 9.046
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
1
2
3
4
5
6

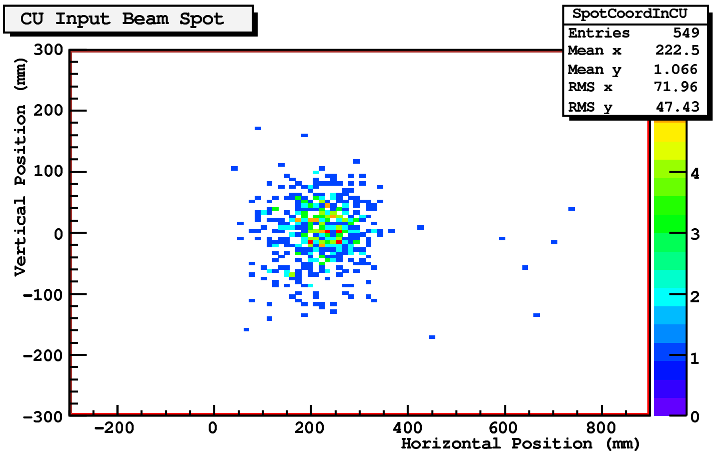

Input Beam Spot
SpotAngleIn
Entries 678
Mean x 0.01025
Mean y −0.0004994
RMS x 0.01055
RMS y 0.006642
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
2.5
3
3.5
4

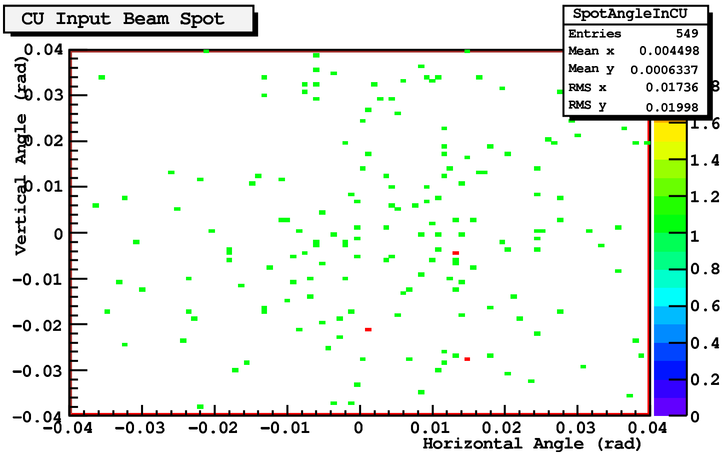

CU Input Horizontal coordinate
HorCoordInCU
Entries 549
Mean 1.066
RMS 47.43
700001242
0
5
10
15
20
25
30
35
40
45
−300
−200
−100
0
100
200
300
Position (mm)

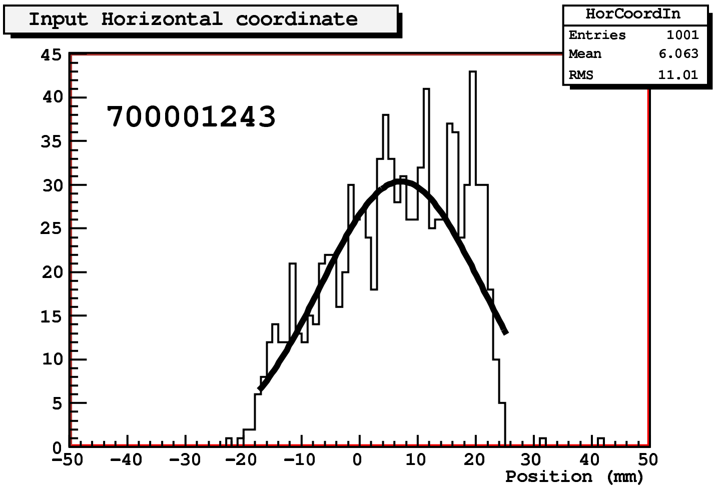

CU Input vertical coordinate
VertCoordInCU
Entries 549
Mean 222.5
RMS 71.96
0
10
20
30
40
50
60
−200
0
200
400
600
800
Position (mm)

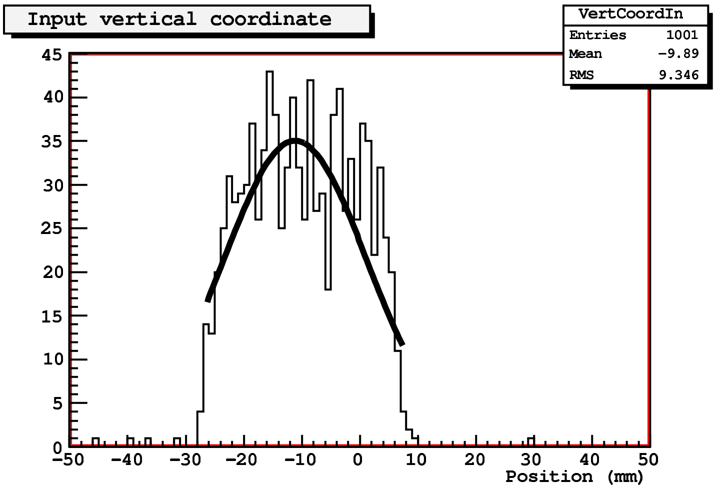

CU Input horizontal angle
HorAngleInCU
Entries 549
Mean 0.003726
RMS 0.01965
0
1
2
3
4
5
6
7
8
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

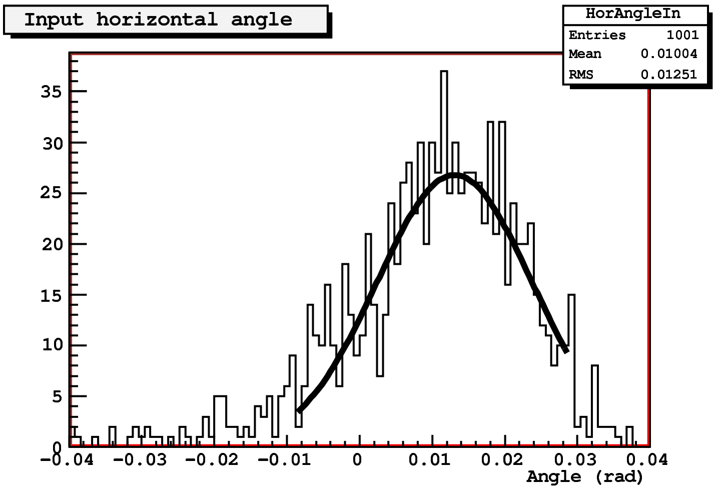

CU Input vertical angle
VertAngleInCU
Entries 549
Mean 0.0007103
RMS 0.02013
0
1
2
3
4
5
6
7
8
9
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

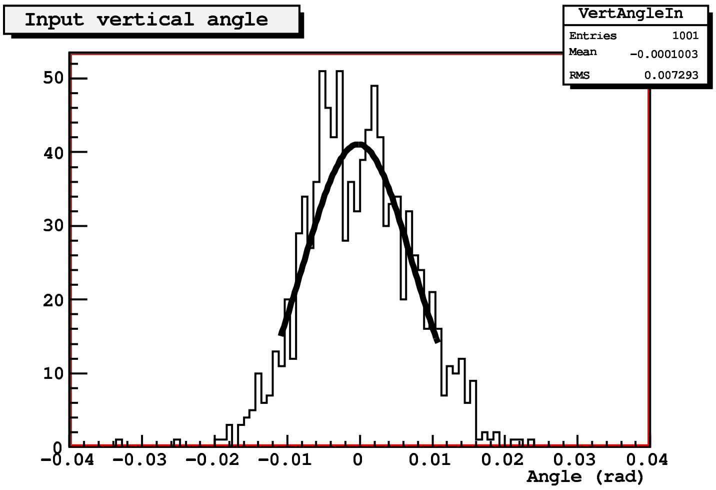

CU Input Beam Spot
SpotCoordInCU
Entries 549
Mean x 222.5
Mean y 1.066
RMS x 71.96
RMS y 47.43
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
1
2
3
4

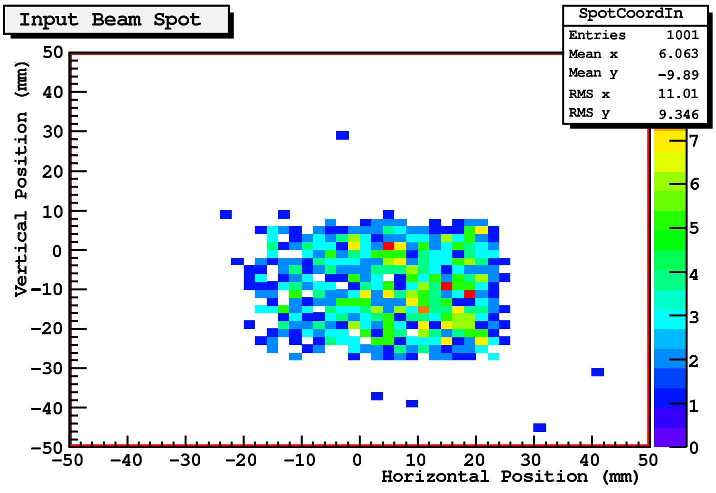

CU Input Beam Spot
SpotAngleInCU
Entries 549
Mean x 0.004498
Mean y 0.0006337
RMS x 0.01736
RMS y 0.01998
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
8

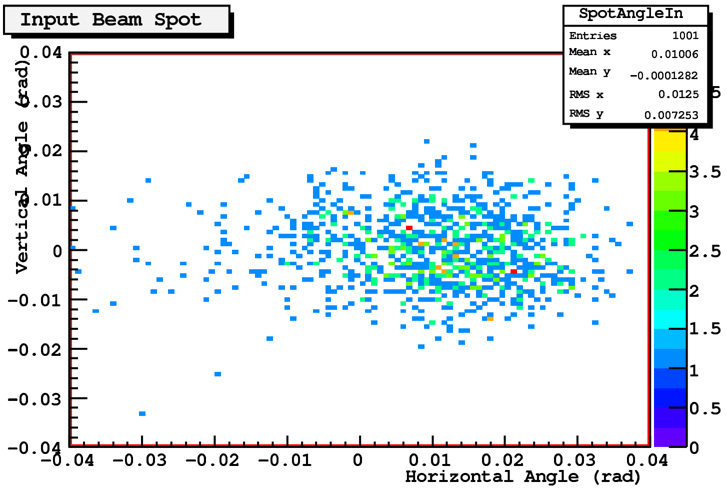

Input Horizontal coordinate
HorCoordIn
Entries 1001
Mean 6.063
RMS 11.01
700001243
0
5
10
15
20
25
30
35
40
45
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

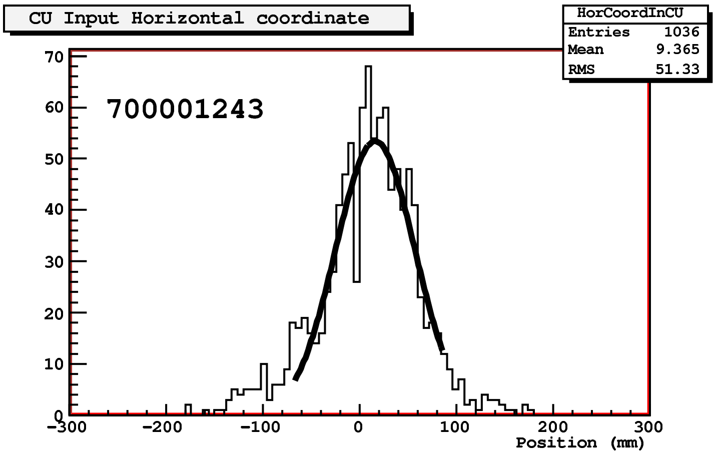

Input vertical coordinate
VertCoordIn
Entries 1001
Mean −9.89
RMS 9.346
0
5
10
15
20
25
30
35
40
45
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)


Input horizontal angle
HorAngleIn
Entries 1001
Mean 0.01004
RMS 0.01251
0
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

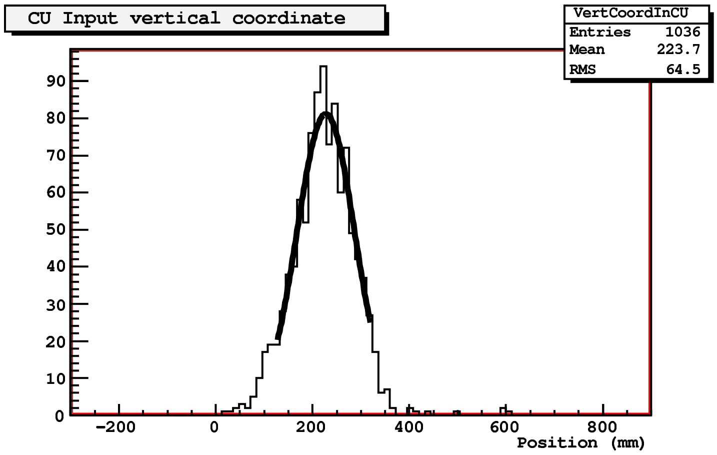

Input vertical angle
VertAngleIn
Entries 1001
Mean −0.0001003
RMS 0.007293
0
10
20
30
40
50
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)


Input Beam Spot
SpotCoordIn
Entries 1001
Mean x 6.063
Mean y −9.89
RMS x 11.01
RMS y 9.346
Vertical Position (mm)
Horizontal Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
0
1
2
3
4
5
6
7

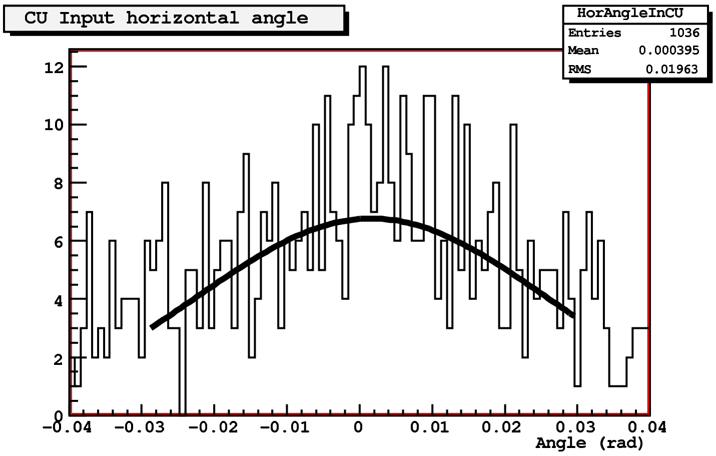

Input Beam Spot
SpotAngleIn
Entries 1001
Mean x 0.01006
Mean y −0.0001282
RMS x 0.0125
RMS y 0.007253
Vertical Angle (rad)
Horizontal Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
0
0.5
1
1.5
2
2.5
3
3.5
4



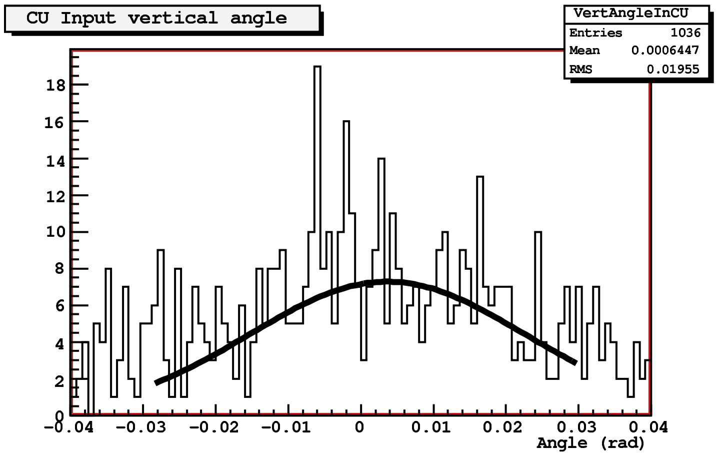
CU Input Horizontal coordinate
HorCoordInCU
Entries 1036
Mean 9.365
RMS 51.33
700001243
0
10
20
30
40
50
60
70
−300
−200
−100
0
100
200
300
Position (mm)



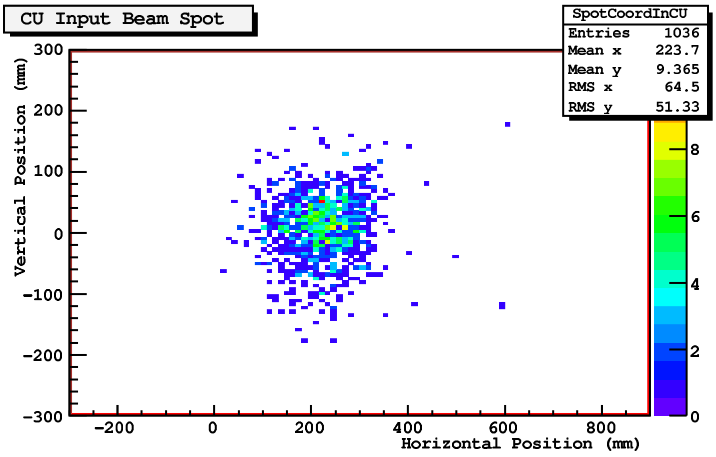
CU Input vertical coordinate
VertCoordInCU
Entries 1036
Mean 223.7
RMS 64.5
0
10
20
30
40
50
60
70
80
90
−200
0
200
400
600
800
Position (mm)



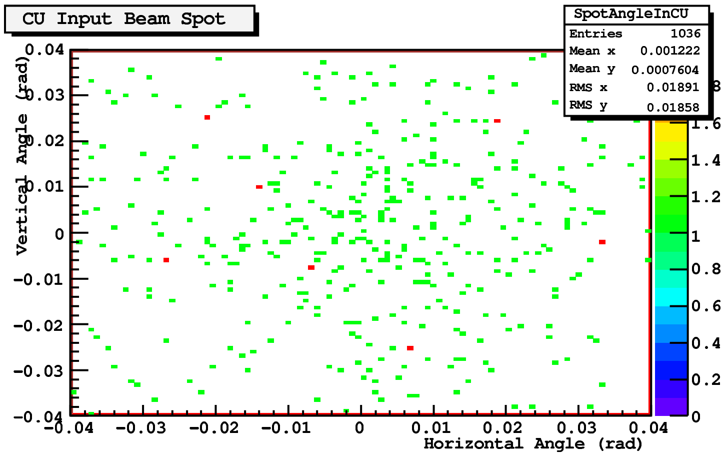
CU Input horizontal angle
HorAngleInCU
Entries 1036
Mean 0.000395
RMS 0.01963
0
2
4
6
8
10
12
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)



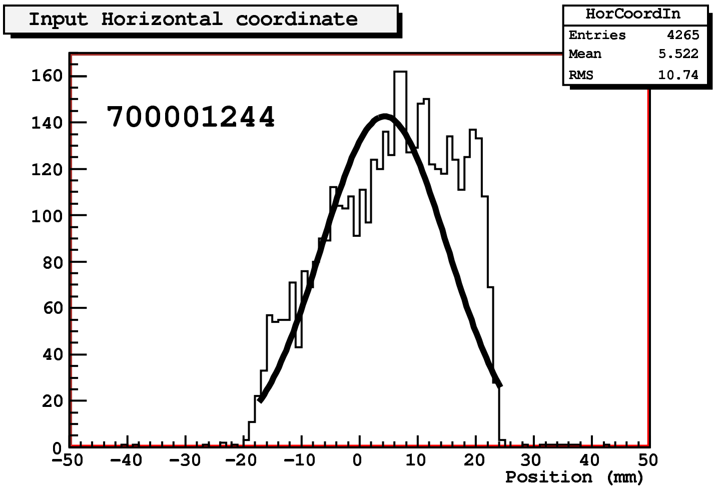
CU Input vertical angle
VertAngleInCU
Entries 1036
Mean 0.0006447
RMS 0.01955
0
2
4
6
8
10
12
14
16
18
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

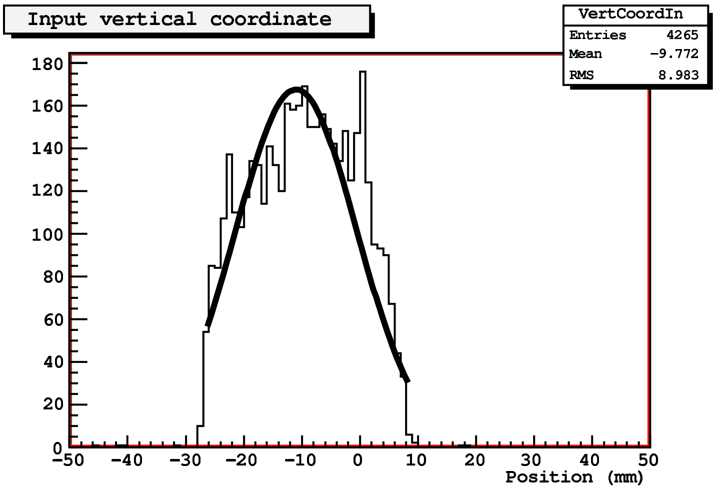


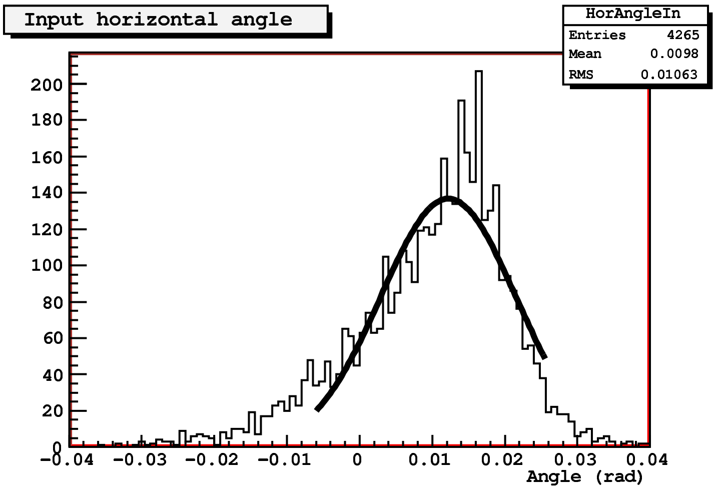
CU Input Beam Spot
SpotCoordInCU
Entries 1036
Mean x 223.7
Mean y 9.365
RMS x 64.5
RMS y 51.33
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
8
6
4
2
0

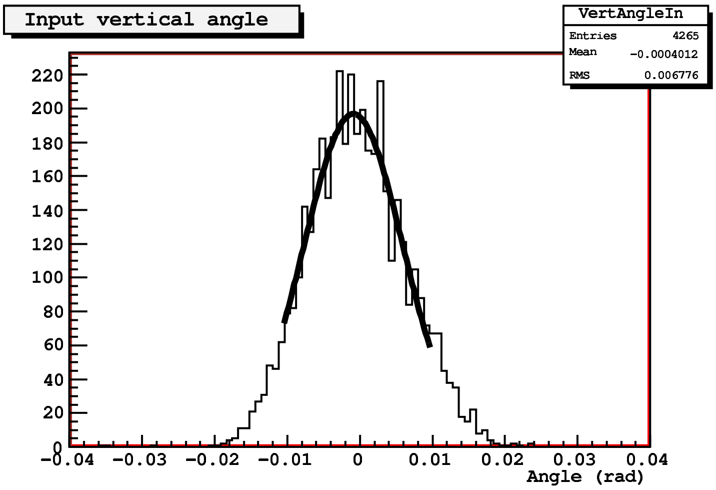


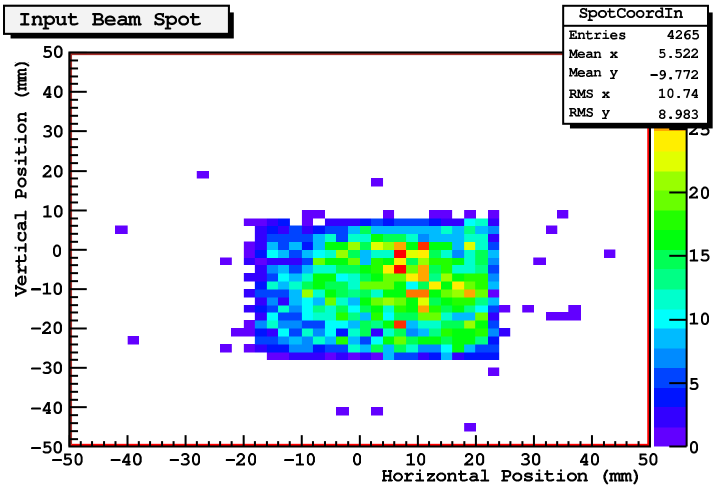
CU Input Beam Spot
SpotAngleInCU
Entries 1036
Mean x 0.001222
Mean y 0.0007604
RMS x 0.01891
RMS y 0.01858
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

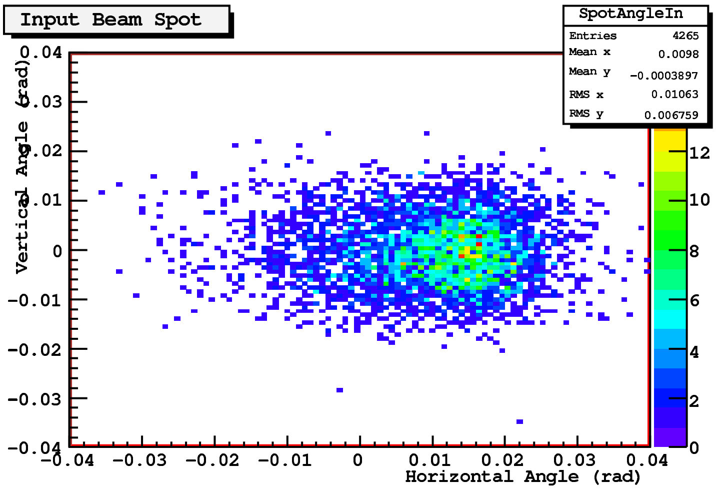

Input Horizontal coordinate
HorCoordIn
Entries 4265
Mean 5.522
RMS 10.74
700001244
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

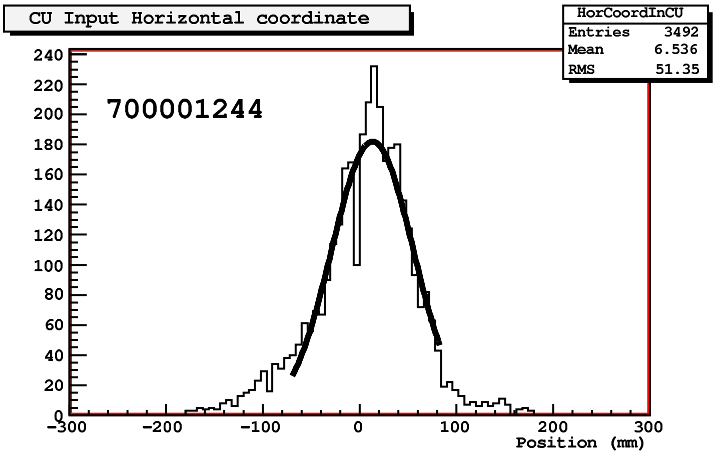

Input vertical coordinate
VertCoordIn
Entries 4265
Mean −9.772
RMS 8.983
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

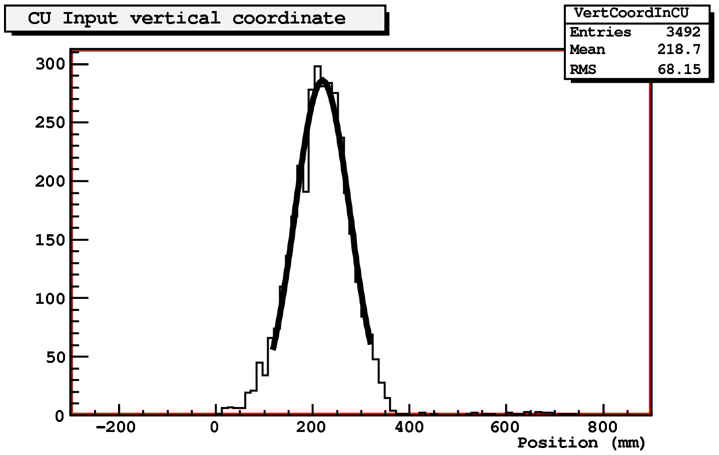

Input horizontal angle
HorAngleIn
Entries 4265
Mean 0.0098
RMS 0.01063
0
20
40
60
80
100
120
140
160
180
200
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

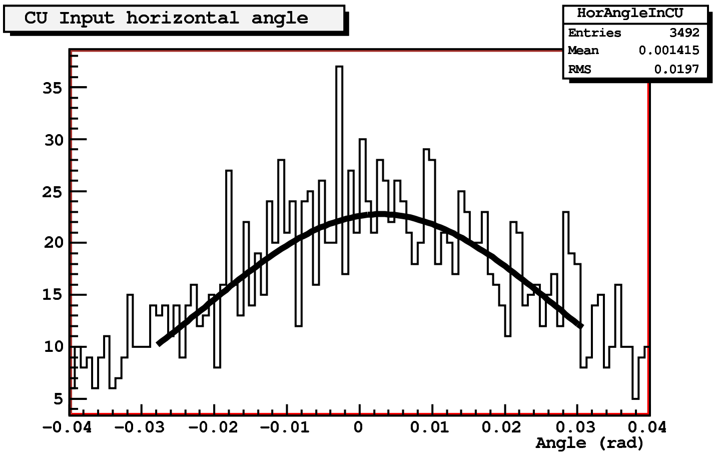

Input vertical angle
VertAngleIn
Entries 4265
Mean −0.0004012
RMS 0.006776
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

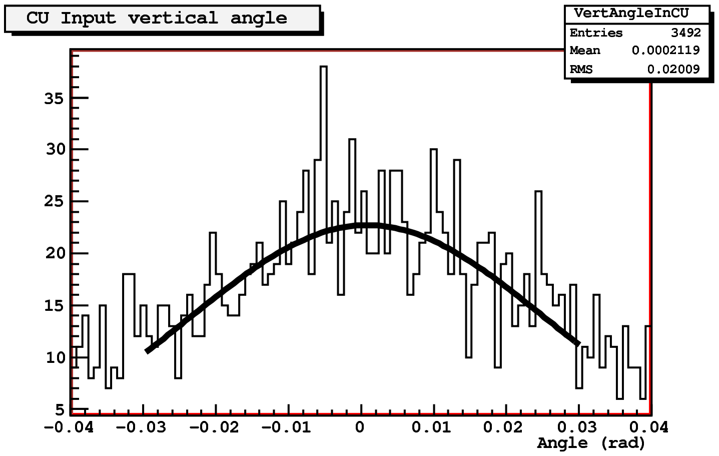

Input Beam Spot
SpotCoordIn
Entries 4265
Mean x 5.522
Mean y −9.772
RMS x 10.74
RMS y 8.983
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
25
20
15
10
5
0

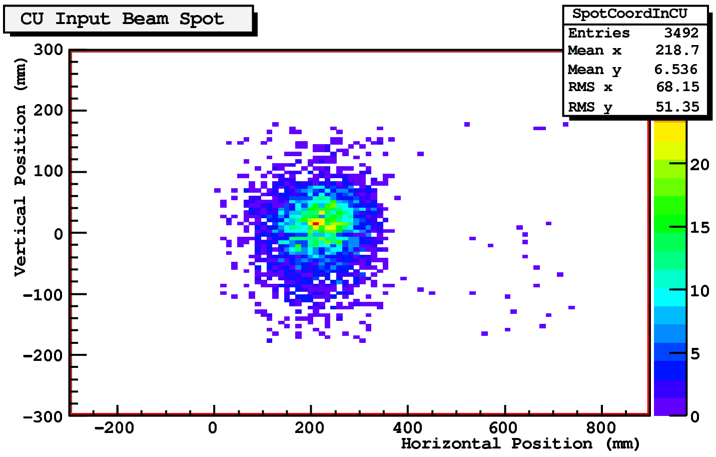

Input Beam Spot
SpotAngleIn
Entries 4265
Mean x 0.0098
Mean y −0.0003897
RMS x 0.01063
RMS y 0.006759
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
12
10
8
6
4
2
0

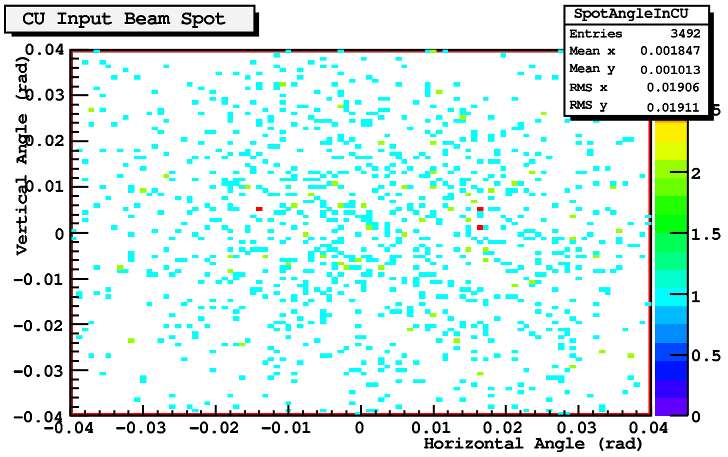

CU Input Horizontal coordinate
HorCoordInCU
Entries 3492
Mean 6.536
RMS 51.35
700001244
0
20
40
60
80
100
120
140
160
180
200
220
240
−300
−200
−100
0
100
200
300
Position (mm)

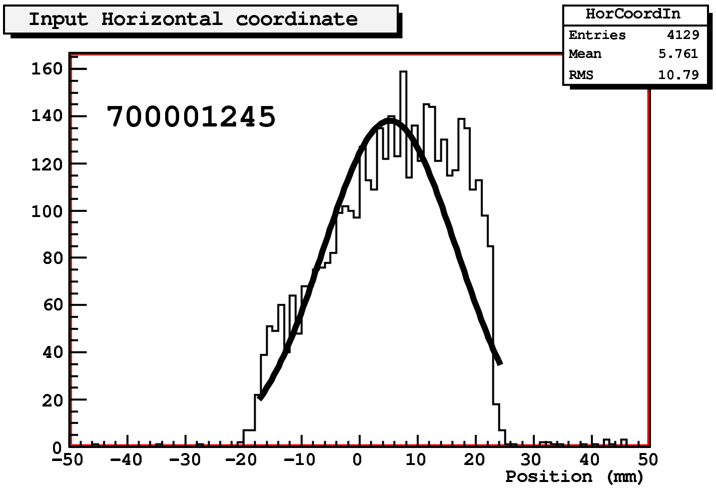

CU Input vertical coordinate
VertCoordInCU
Entries 3492
Mean 218.7
RMS 68.15
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)

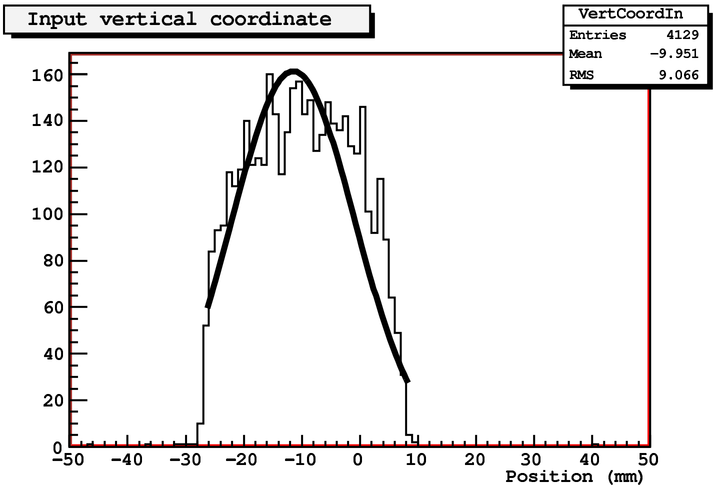

CU Input horizontal angle
HorAngleInCU
Entries 3492
Mean 0.001415
RMS 0.0197
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

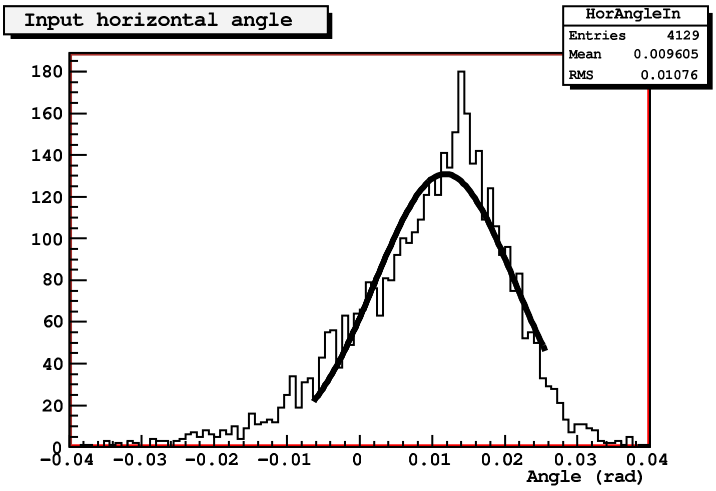

CU Input vertical angle
VertAngleInCU
Entries 3492
Mean 0.0002119
RMS 0.02009
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

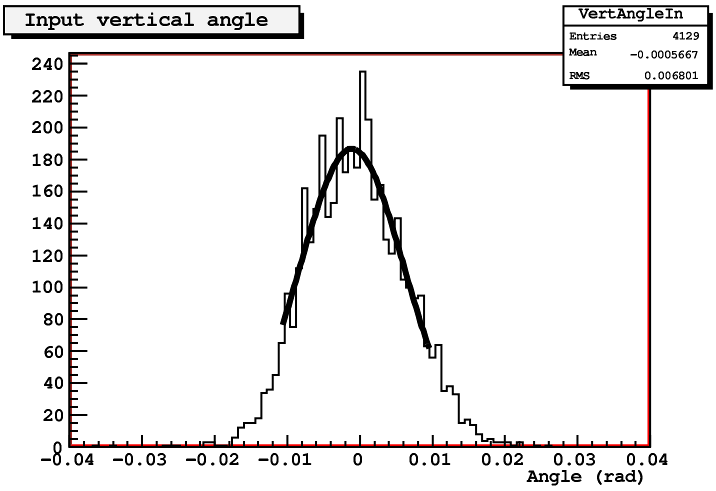

CU Input Beam Spot
SpotCoordInCU
Entries 3492
Mean x 218.7
Mean y 6.536
RMS x 68.15
RMS y 51.35
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
5
10
15
20

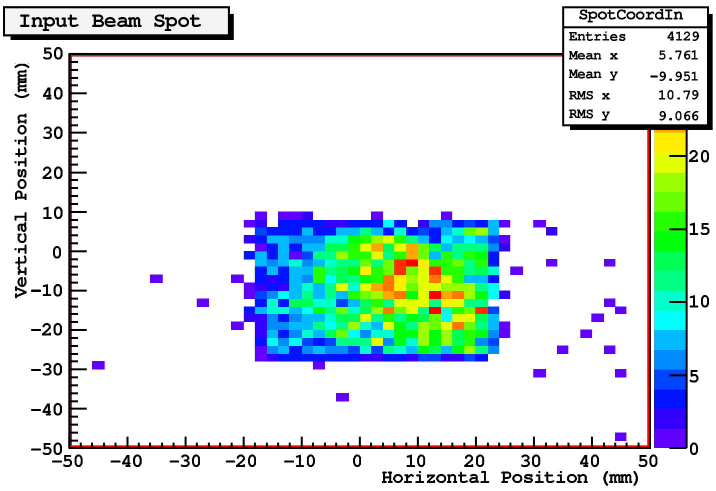

CU Input Beam Spot
SpotAngleInCU
Entries 3492
Mean x 0.001847
Mean y 0.001013
RMS x 0.01906
RMS y 0.01911
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
2.5

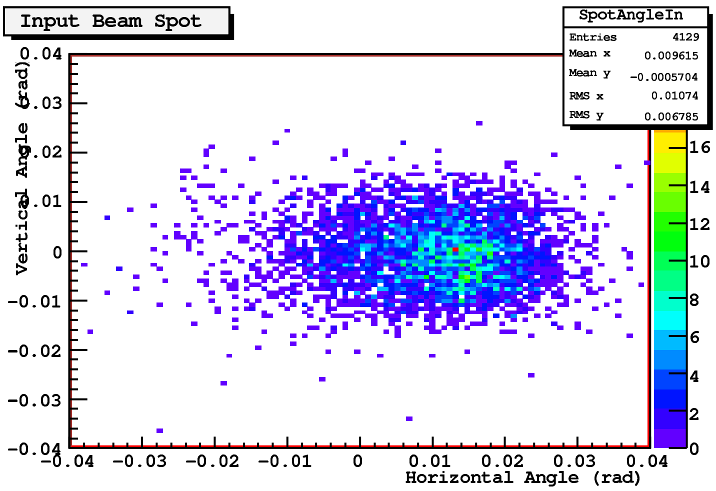

Input Horizontal coordinate
HorCoordIn
Entries 4129
Mean 5.761
RMS 10.79
700001245
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

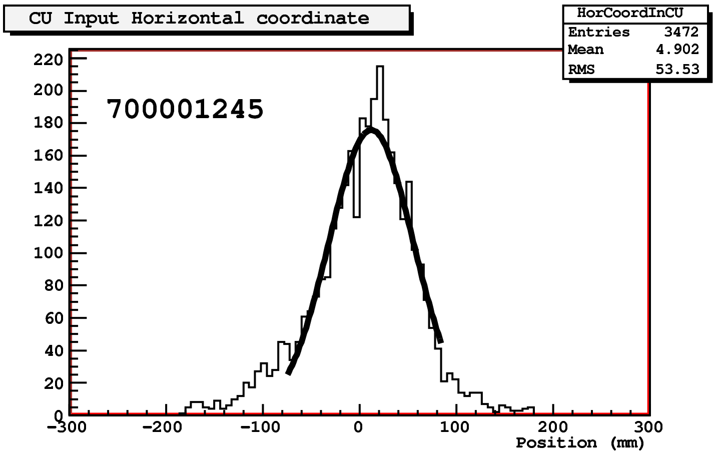

Input vertical coordinate
VertCoordIn
Entries 4129
Mean −9.951
RMS 9.066
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

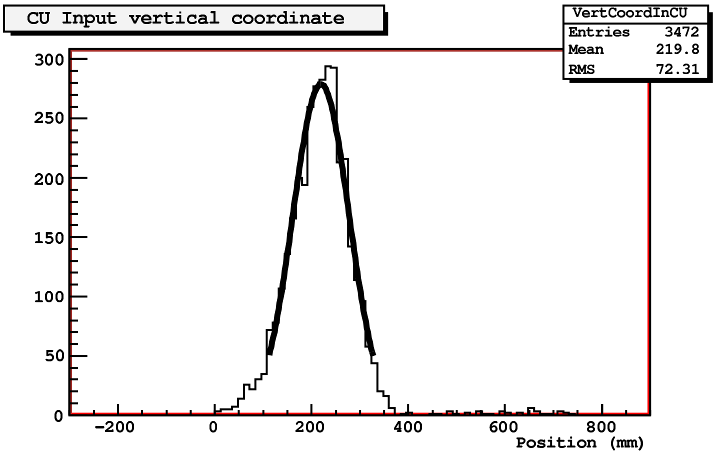

Input horizontal angle
HorAngleIn
Entries 4129
Mean 0.009605
RMS 0.01076
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

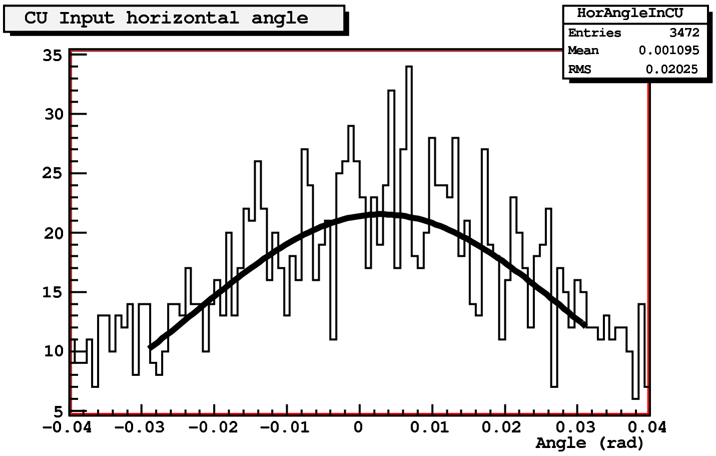

Input vertical angle
VertAngleIn
Entries 4129
Mean −0.0005667
RMS 0.006801
0
20
40
60
80
100
120
140
160
180
200
220
240
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

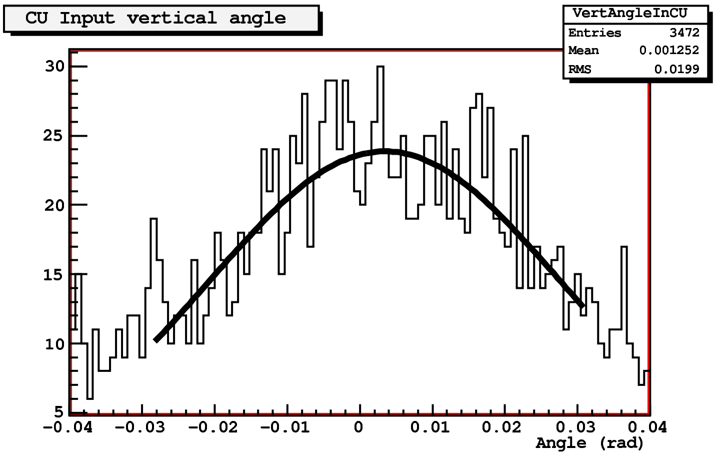

Input Beam Spot
SpotCoordIn
Entries 4129
Mean x 5.761
Mean y −9.951
RMS x 10.79
RMS y 9.066
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

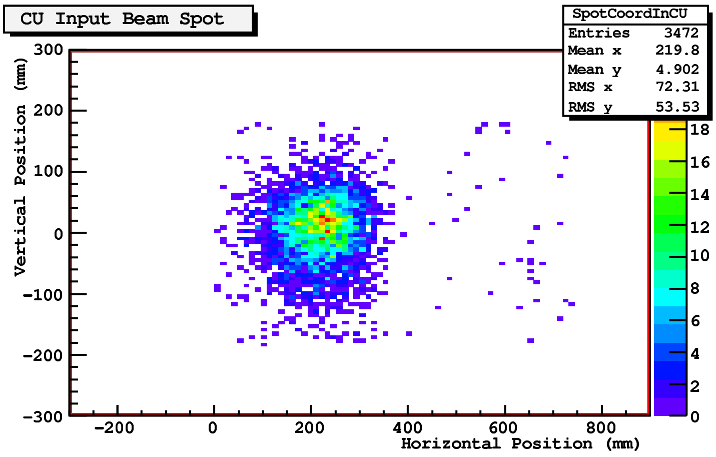

Input Beam Spot
SpotAngleIn
Entries 4129
Mean x 0.009615
Mean y −0.0005704
RMS x 0.01074
RMS y 0.006785
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14
16

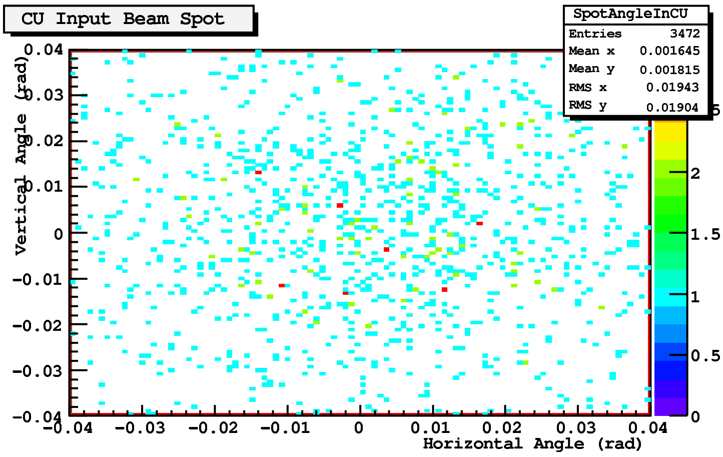

CU Input Horizontal coordinate

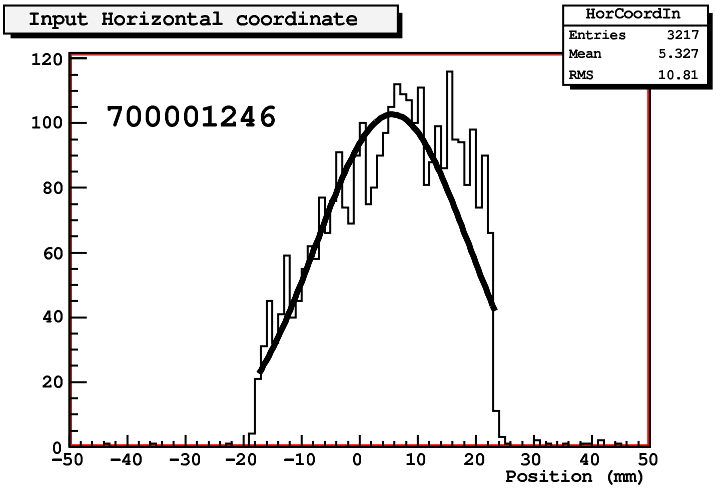

CU Input vertical coordinate

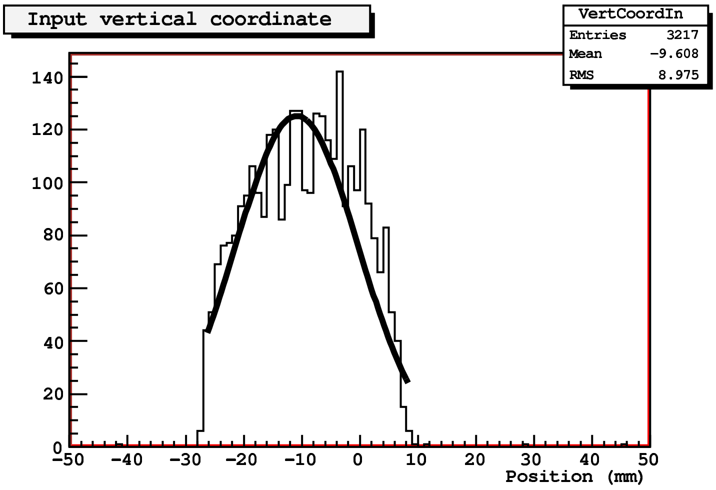

CU Input horizontal angle

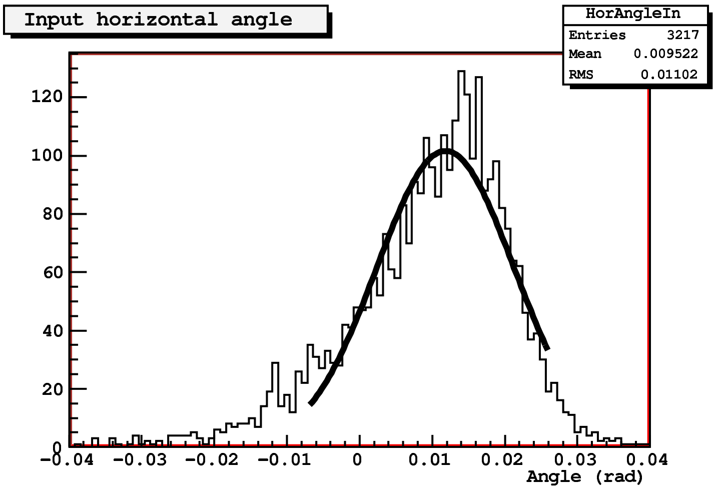

CU Input vertical angle

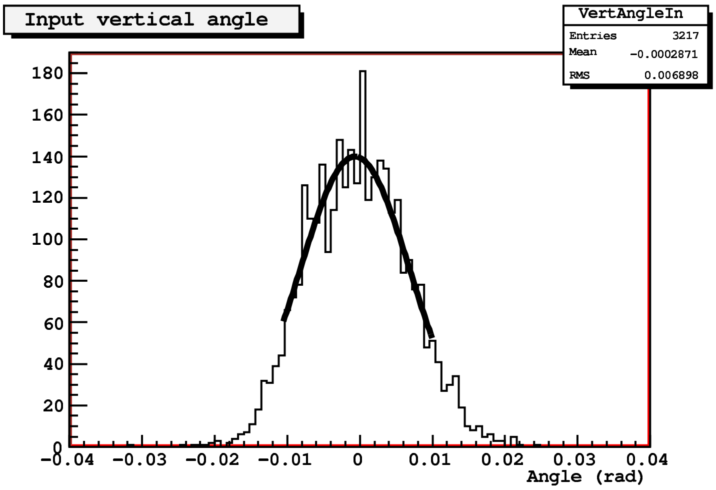

CU Input Beam Spot

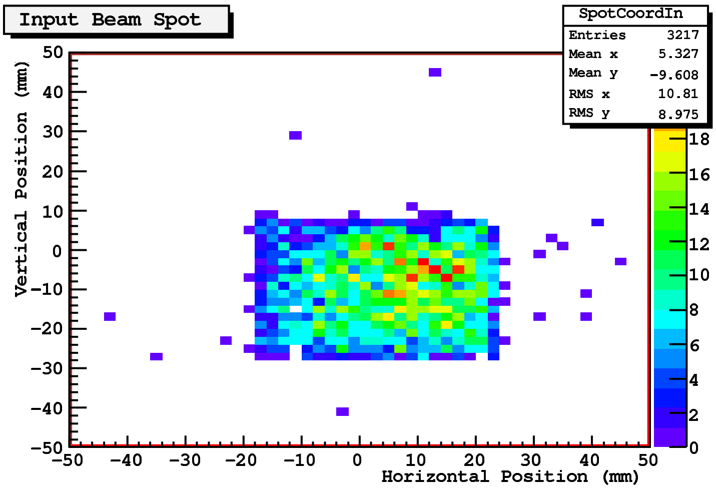

CU Input Beam Spot

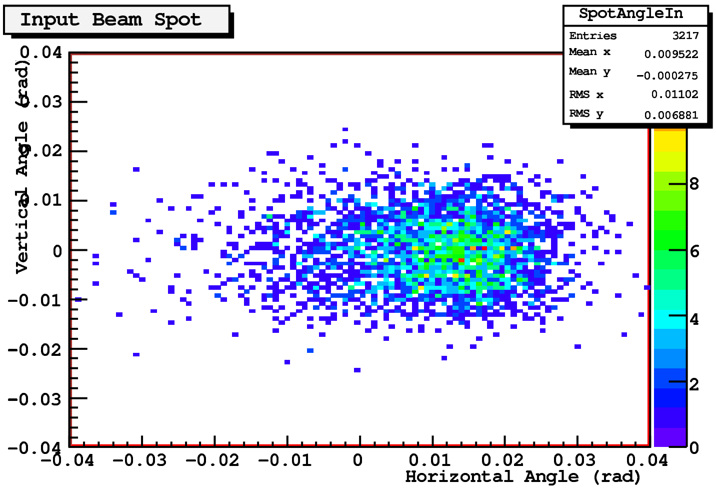

Input Horizontal coordinate
HorCoordIn
Entries 3217
Mean 5.327
RMS 10.81
700001246
0
20
40
60
80
100
120
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

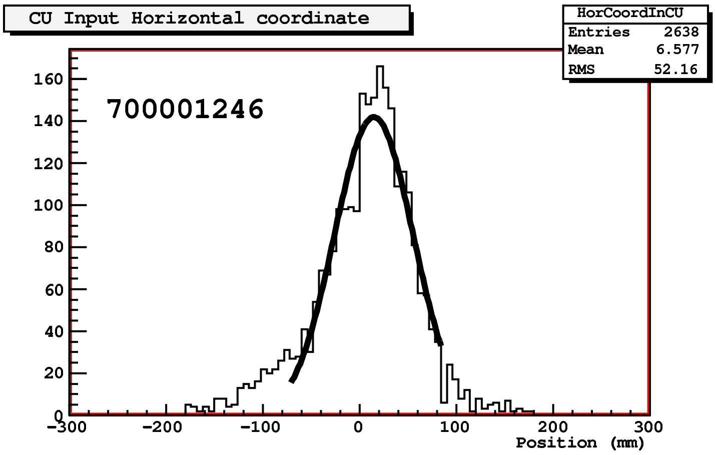

Input vertical coordinate
VertCoordIn
Entries 3217
Mean −9.608
RMS 8.975
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

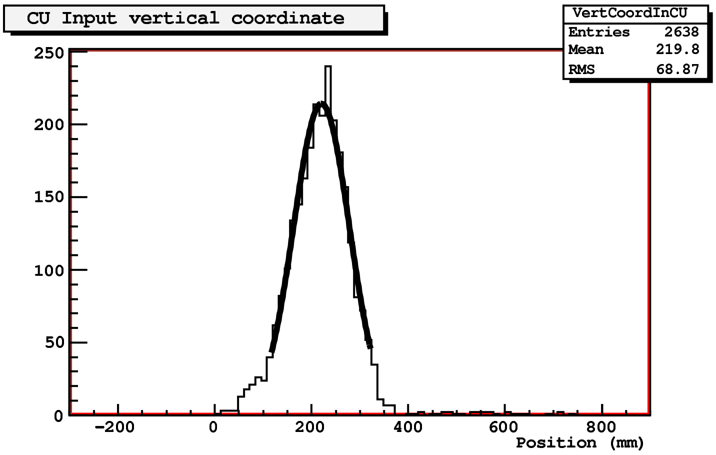

Input horizontal angle
HorAngleIn
Entries 3217
Mean 0.009522
RMS 0.01102
0
20
40
60
80
100
120
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

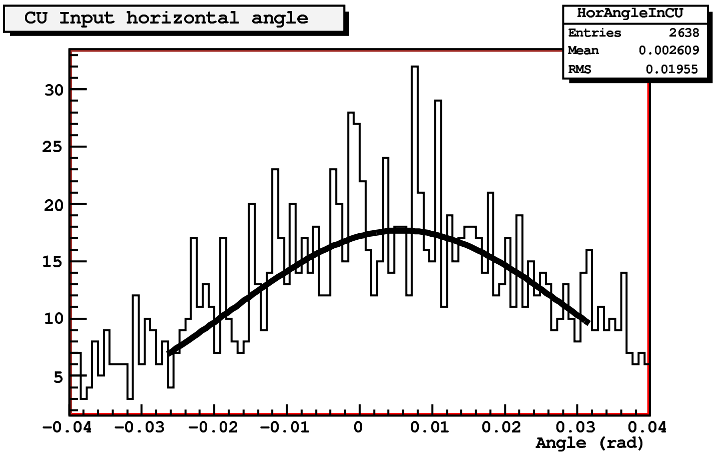

Input vertical angle
VertAngleIn
Entries 3217
Mean −0.0002871
RMS 0.006898
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

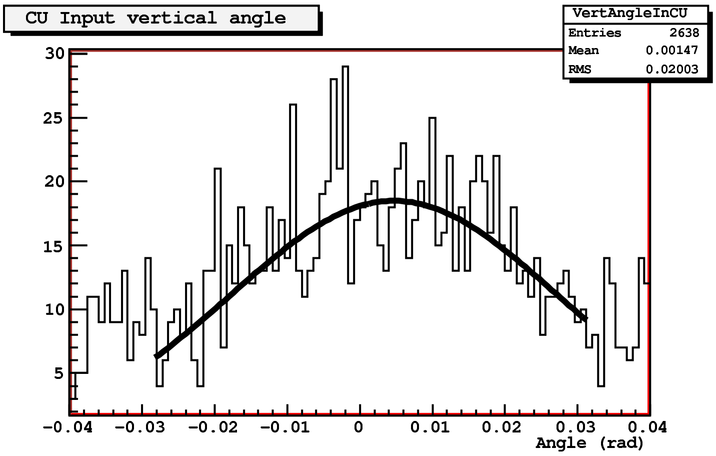

Input Beam Spot
SpotCoordIn
Entries 3217
Mean x 5.327
Mean y −9.608
RMS x 10.81
RMS y 8.975
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
2
4
6
8
10
12
14
16
18

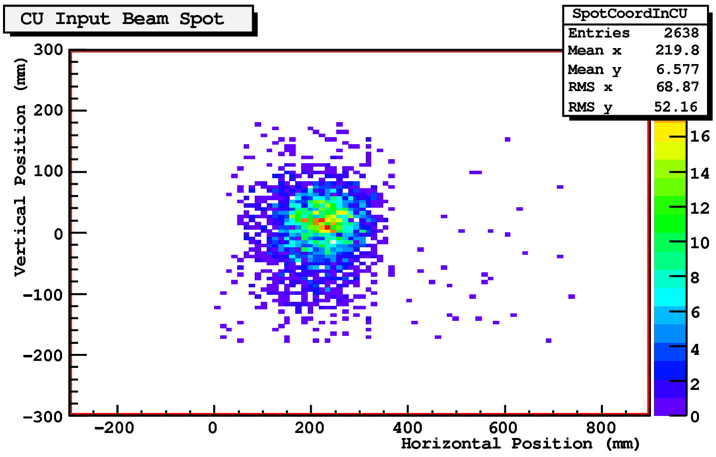

Input Beam Spot
SpotAngleIn
Entries 3217
Mean x 0.009522
Mean y −0.000275
RMS x 0.01102
RMS y 0.006881
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8

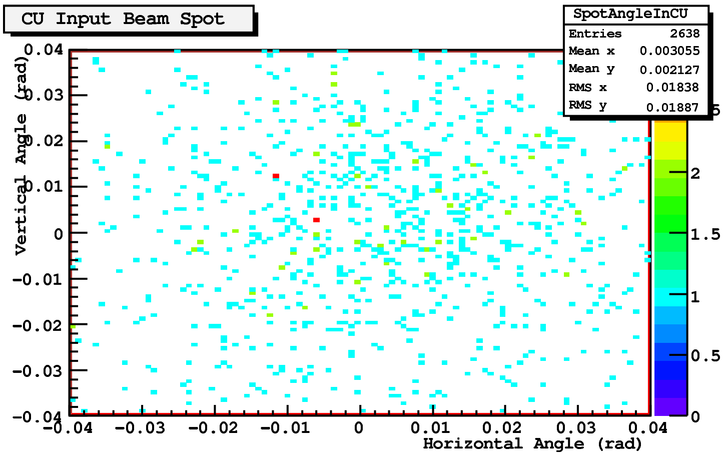

CU Input Horizontal coordinate
HorCoordInCU
Entries 2638
Mean 6.577
RMS 52.16
700001246
0
20
40
60
80
100
120
140
160
−300
−200
−100
0
100
200
300
Position (mm)

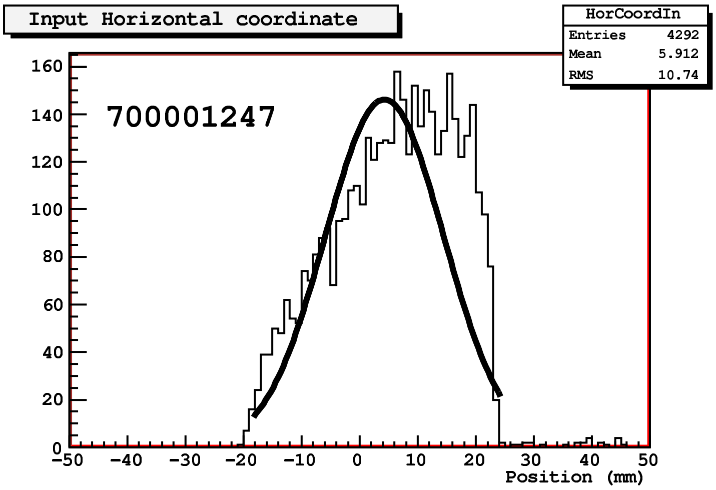

CU Input vertical coordinate
VertCoordInCU
Entries 2638
Mean 219.8
RMS 68.87
0
50
100
150
200
250
−200
0
200
400
600
800
Position (mm)

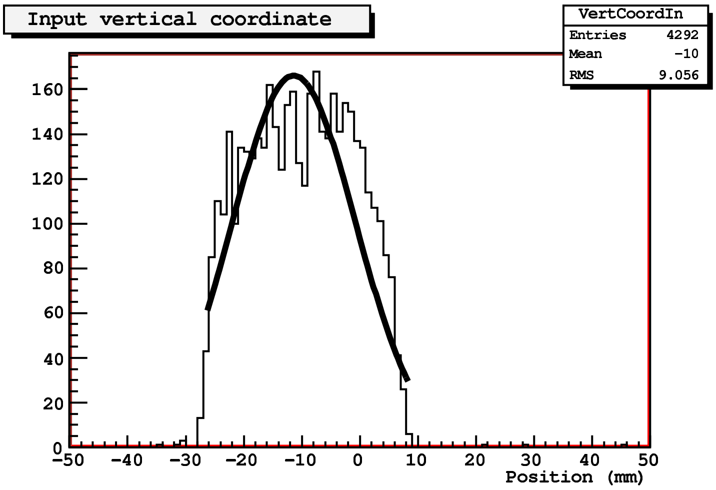

CU Input horizontal angle
HorAngleInCU
Entries 2638
Mean 0.002609
RMS 0.01955
5
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

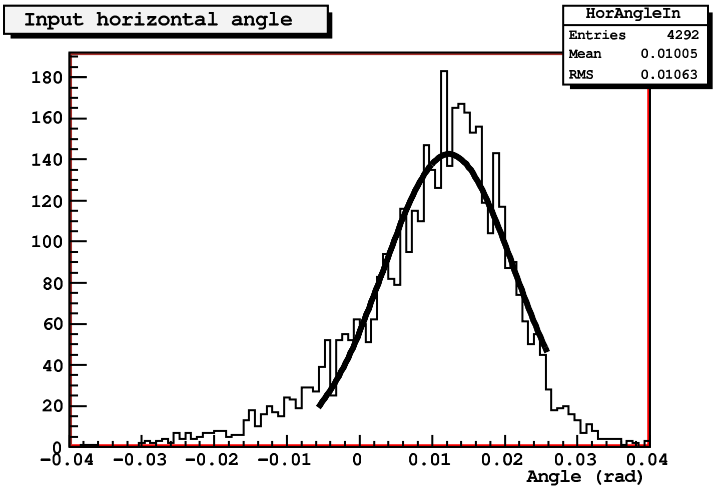

CU Input vertical angle
VertAngleInCU
Entries 2638
Mean 0.00147
RMS 0.02003
5
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

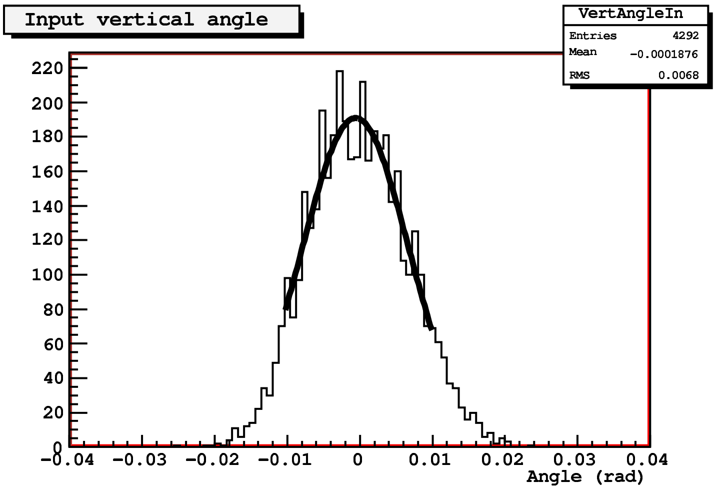

CU Input Beam Spot
SpotCoordInCU
Entries 2638
Mean x 219.8
Mean y 6.577
RMS x 68.87
RMS y 52.16
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
2
4
6
8
10
12
14
16

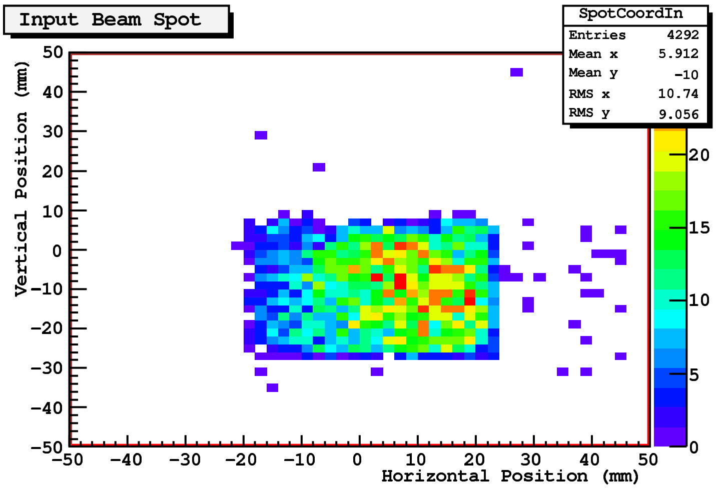

CU Input Beam Spot
SpotAngleInCU
Entries 2638
Mean x 0.003055
Mean y 0.002127
RMS x 0.01838
RMS y 0.01887
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
.5

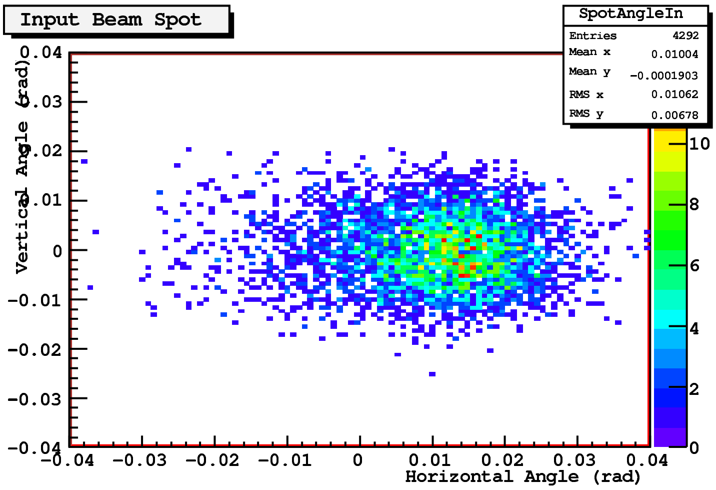

Input Horizontal coordinate
700001247
HorCoordIn
Entries 4292
Mean 5.912
RMS 10.74
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

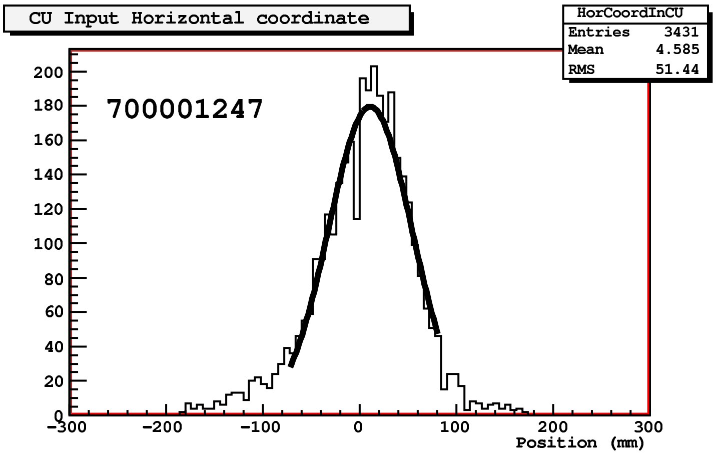

Input vertical coordinate
VertCoordIn
Entries 4292
Mean −10
RMS 9.056
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

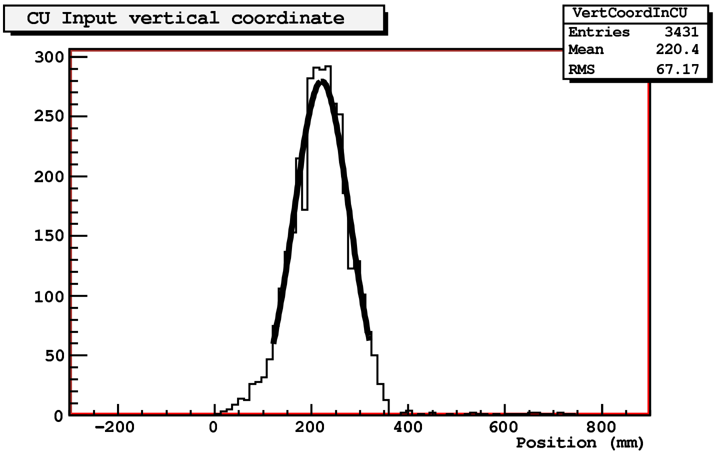

Input horizontal angle
HorAngleIn
Entries 4292
Mean 0.01005
RMS 0.01063
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

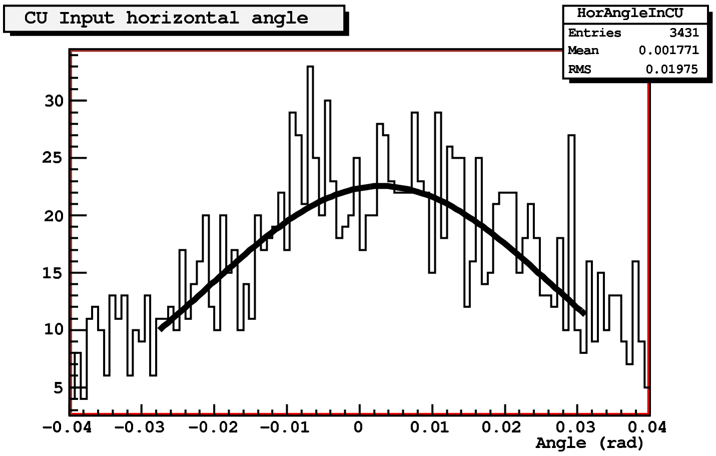

Input vertical angle
VertAngleIn
Entries 4292
Mean −0.0001876
RMS 0.0068
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

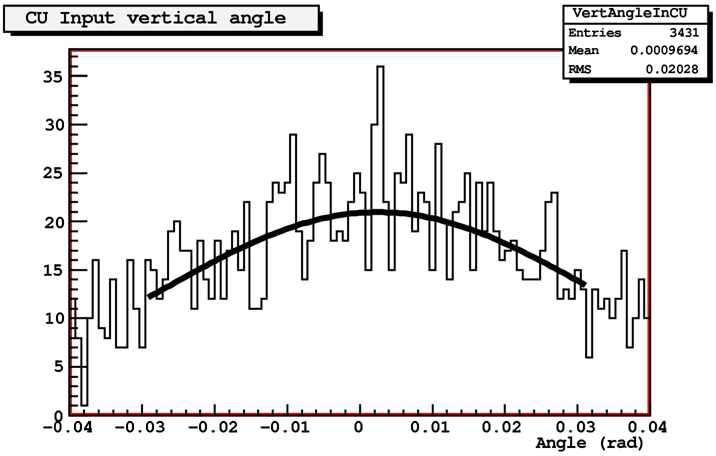

Input Beam Spot
SpotCoordIn
Entries 4292
Mean x 5.912
Mean y −10
RMS x 10.74
RMS y 9.056
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

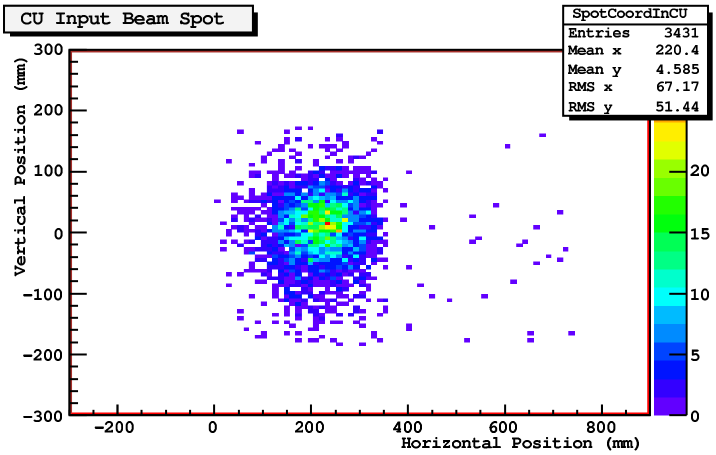

Input Beam Spot
SpotAngleIn
Entries 4292
Mean x 0.01004
Mean y −0.0001903
RMS x 0.01062
RMS y 0.00678
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

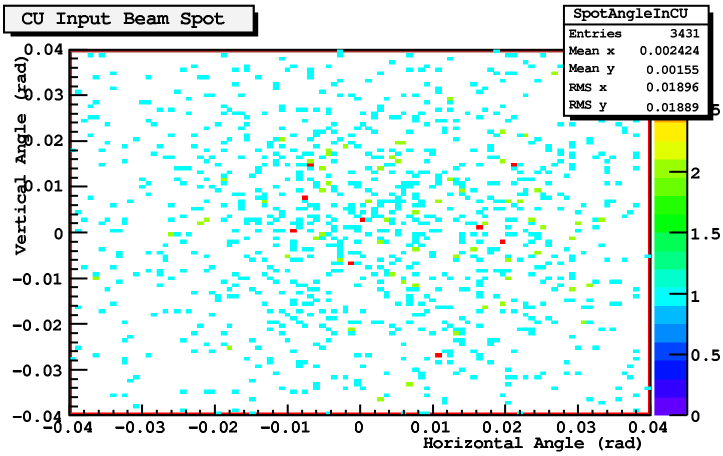

CU Input Horizontal coordinate
HorCoordInCU
Entries 3431
Mean 4.585
RMS 51.44
700001247
0
20
40
60
80
100
120
140
160
180
200
−300
−200
−100
0
100
200
300
Position (mm)

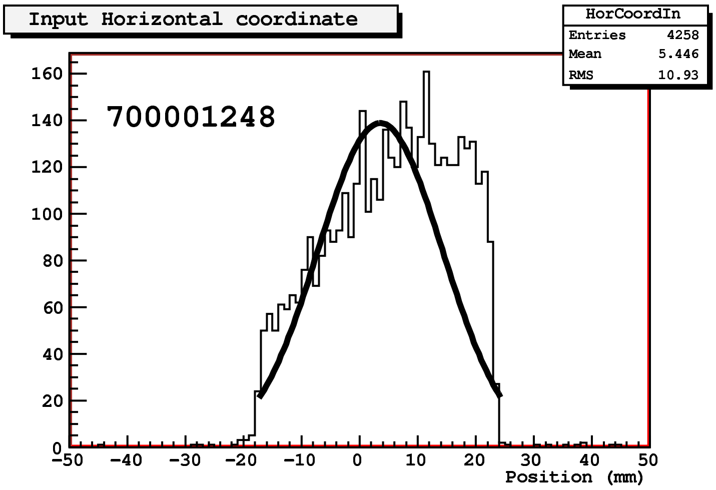

CU Input vertical coordinate
VertCoordInCU
Entries 3431
Mean 220.4
RMS 67.17
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)

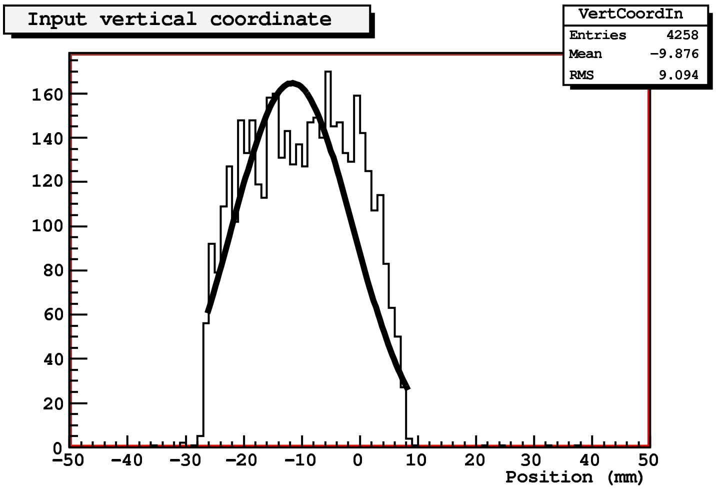

CU Input horizontal angle
HorAngleInCU
Entries 3431
Mean 0.001771
RMS 0.01975
5
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

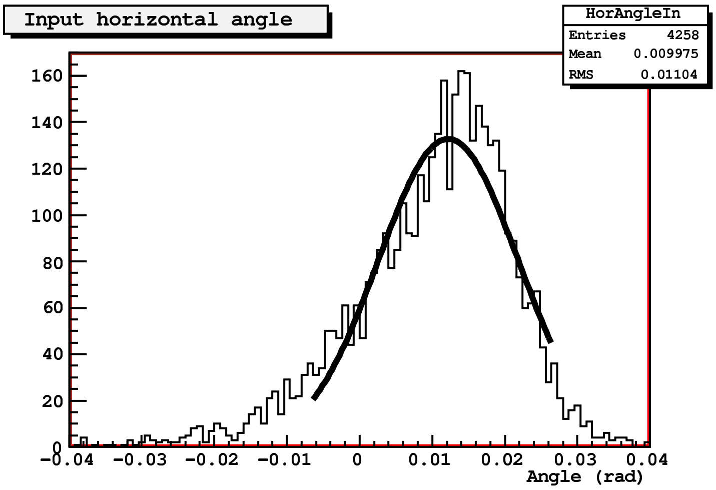

CU Input vertical angle
VertAngleInCU
Entries 3431
Mean 0.0009694
RMS 0.02028
0
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

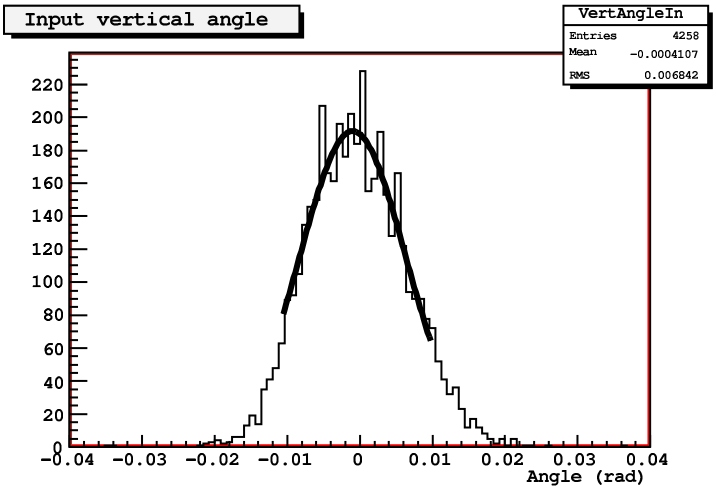

CU Input Beam Spot
SpotCoordInCU
Entries 3431
Mean x 220.4
Mean y 4.585
RMS x 67.17
RMS y 51.44
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
5
10
15
20

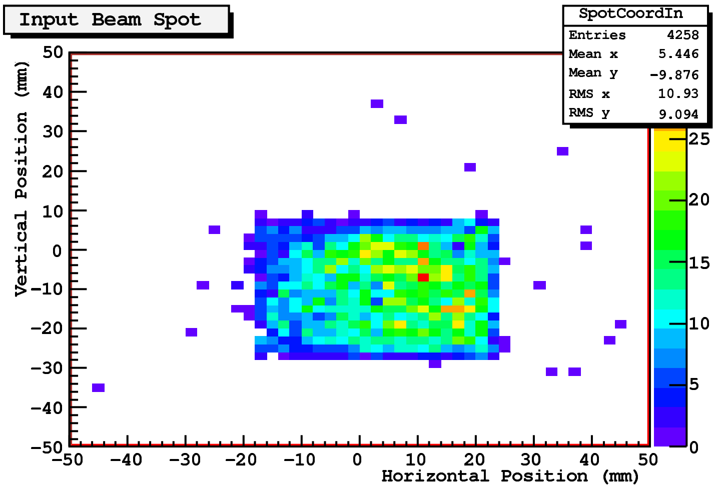

CU Input Beam Spot
SpotAngleInCU
Entries 3431
Mean x 0.002424
Mean y 0.00155
RMS x 0.01896
RMS y 0.01889
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2

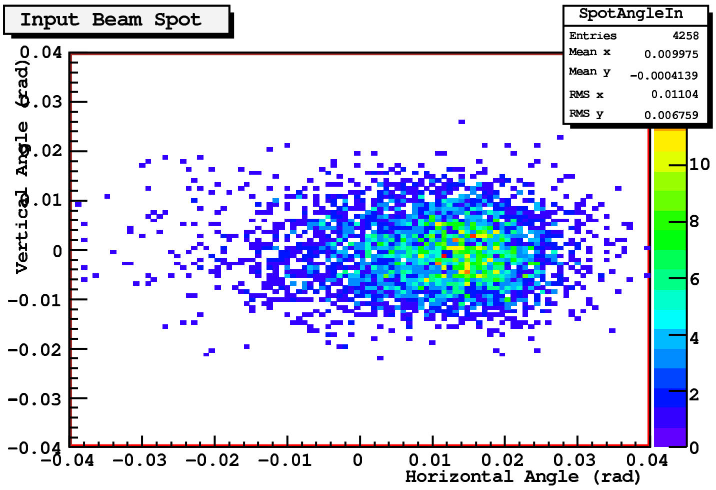

Input Horizontal coordinate
HorCoordIn
Entries 4258
Mean 5.446
RMS 10.93
700001248
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

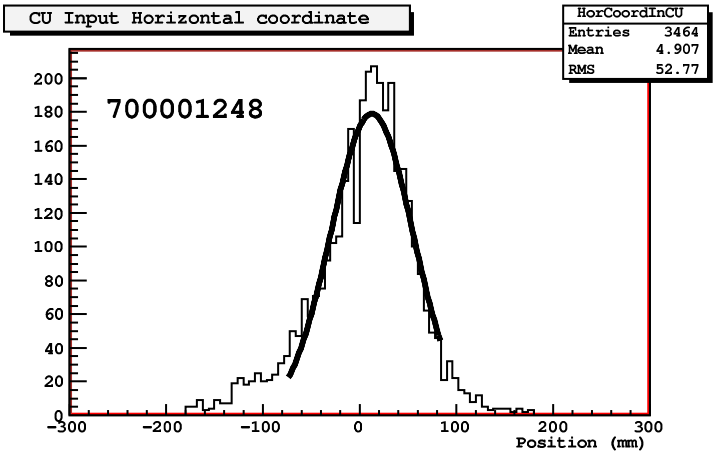

Input vertical coordinate
VertCoordIn
Entries 4258
Mean −9.876
RMS 9.094
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

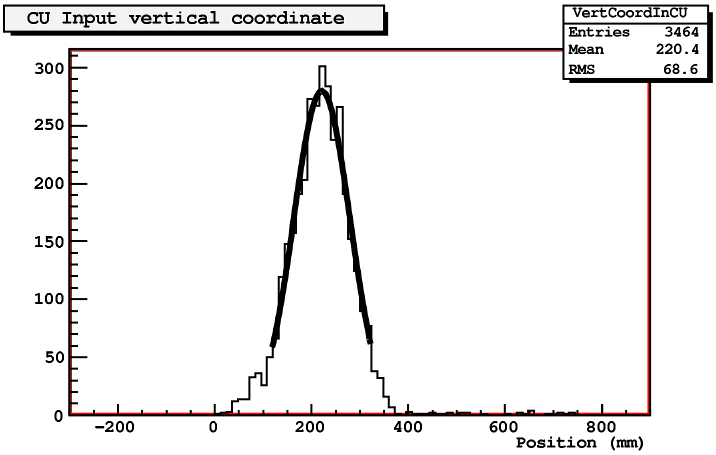

Input horizontal angle
HorAngleIn
Entries 4258
Mean 0.009975
RMS 0.01104
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

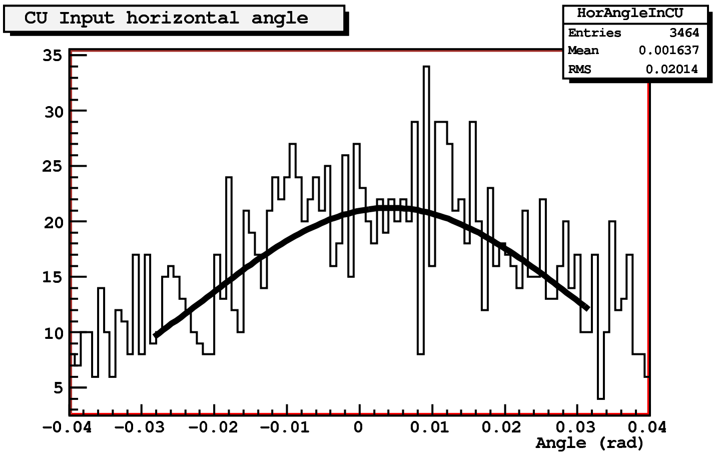

Input vertical angle
VertAngleIn
Entries 4258
Mean −0.0004107
RMS 0.006842
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

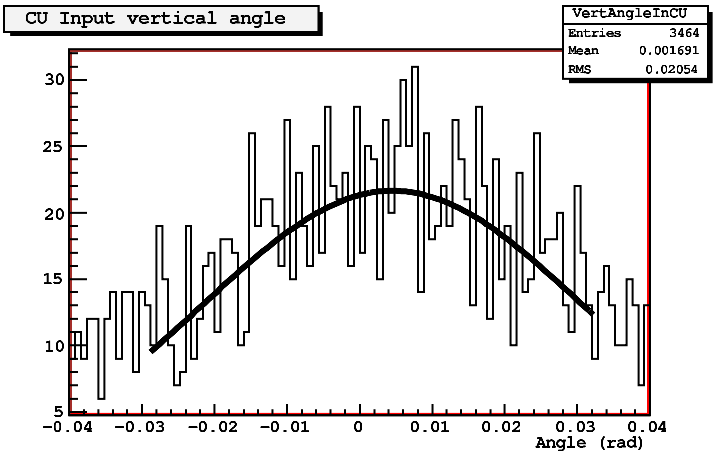

Input Beam Spot
SpotCoordIn
Entries 4258
Mean x 5.446
Mean y −9.876
RMS x 10.93
RMS y 9.094
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
25
20
15
10
5
0

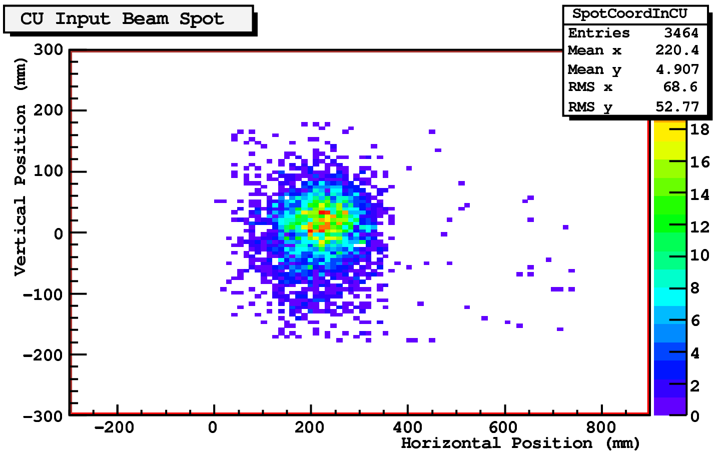

Input Beam Spot
SpotAngleIn
Entries 4258
Mean x 0.009975
Mean y −0.0004139
RMS x 0.01104
RMS y 0.006759
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
10
8
6
4
2
0

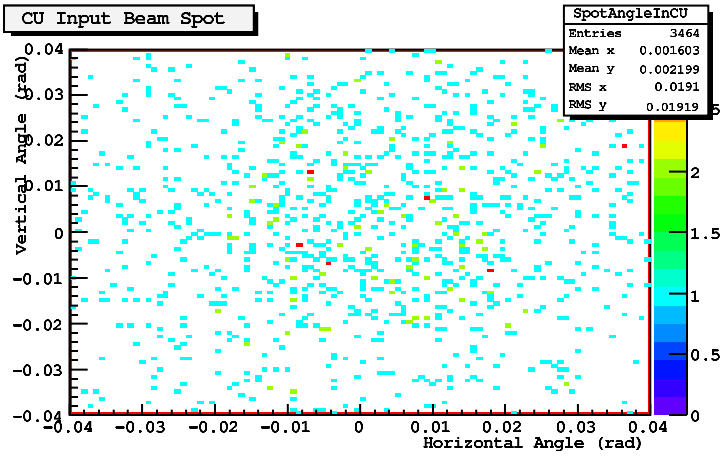

CU Input Horizontal coordinate

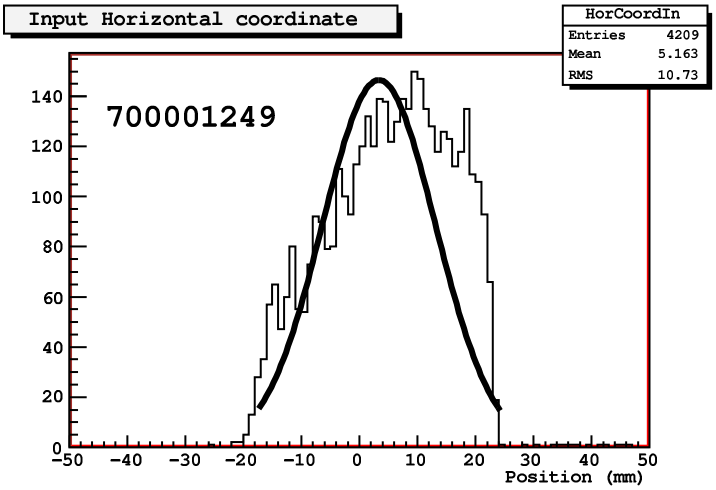

CU Input vertical coordinate

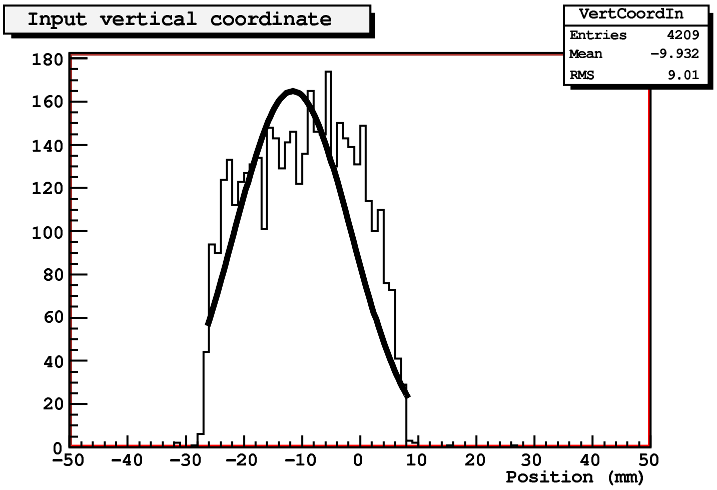

CU Input horizontal angle

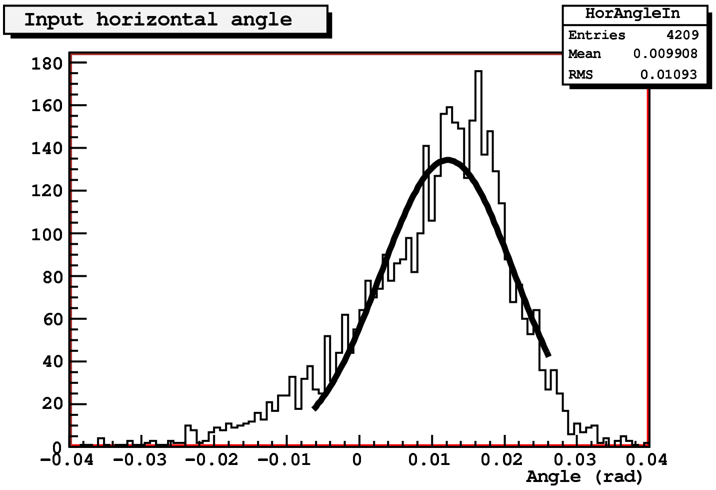

CU Input vertical angle

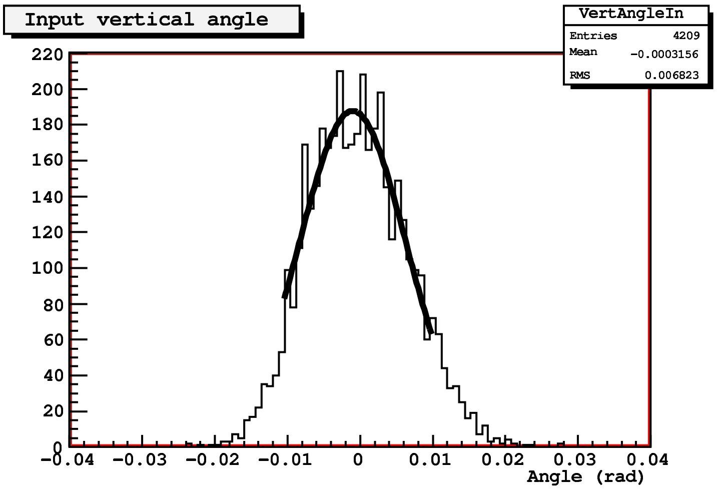

CU Input Beam Spot

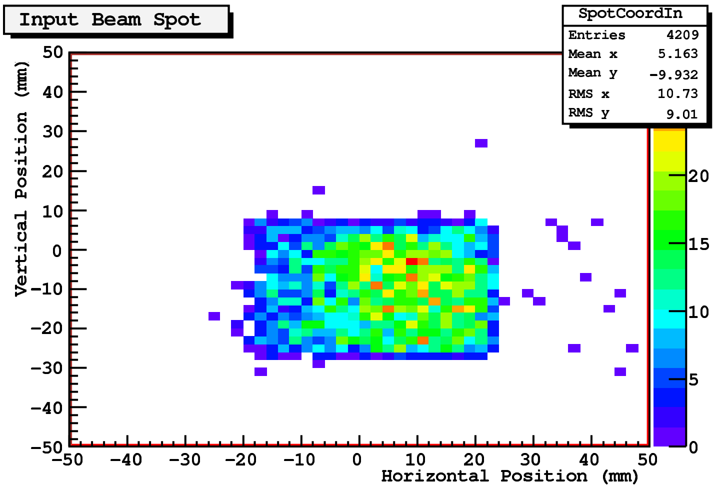

CU Input Beam Spot

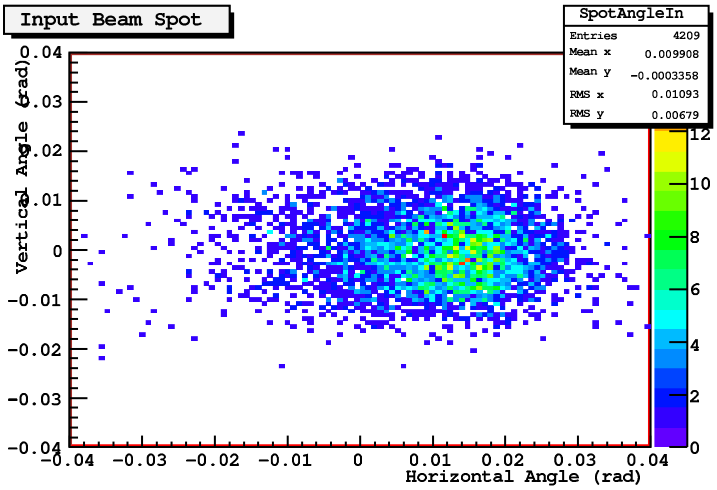

Input Horizontal coordinate
HorCoordIn
Entries 4209
Mean 5.163
RMS 10.73
700001249
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

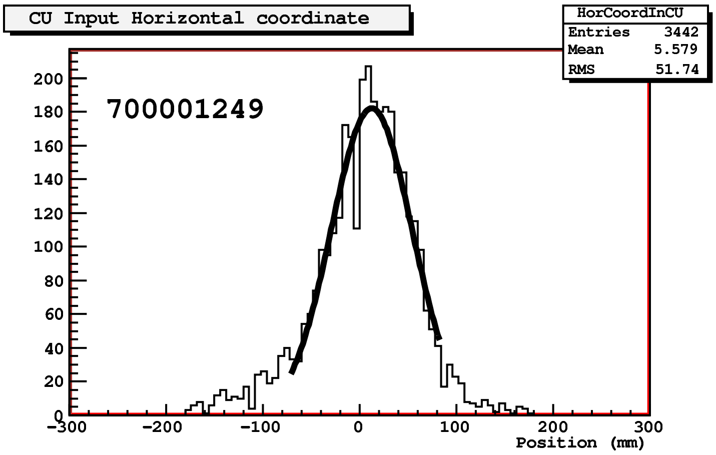

Input vertical coordinate
VertCoordIn
Entries 4209
Mean −9.932
RMS 9.01
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

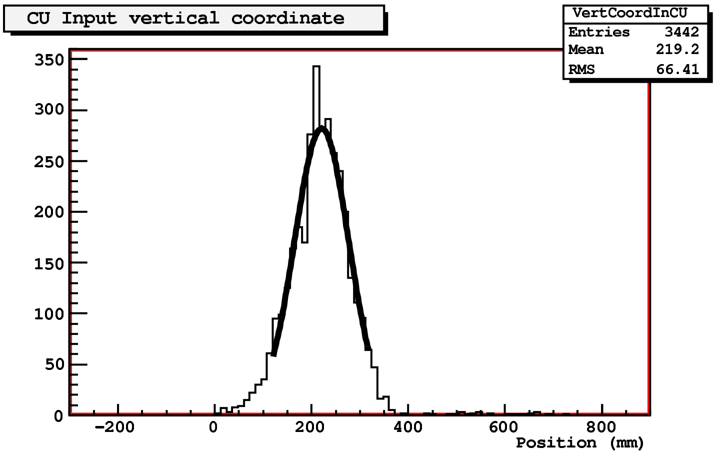

Input horizontal angle
HorAngleIn
Entries 4209
Mean 0.009908
RMS 0.01093
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

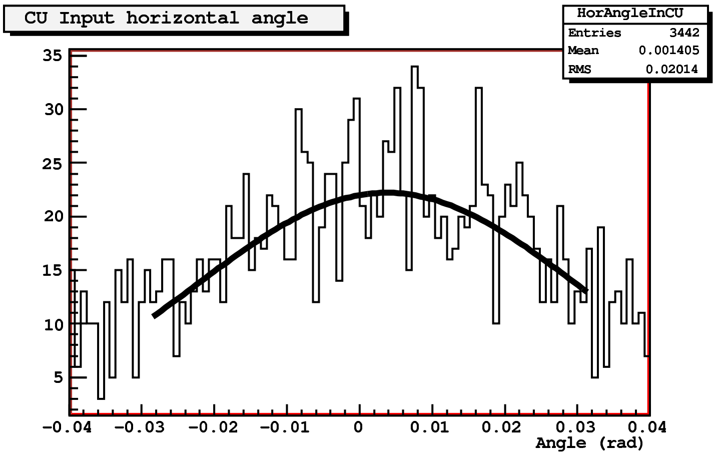

Input vertical angle
VertAngleIn
Entries 4209
Mean −0.0003156
RMS 0.006823
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

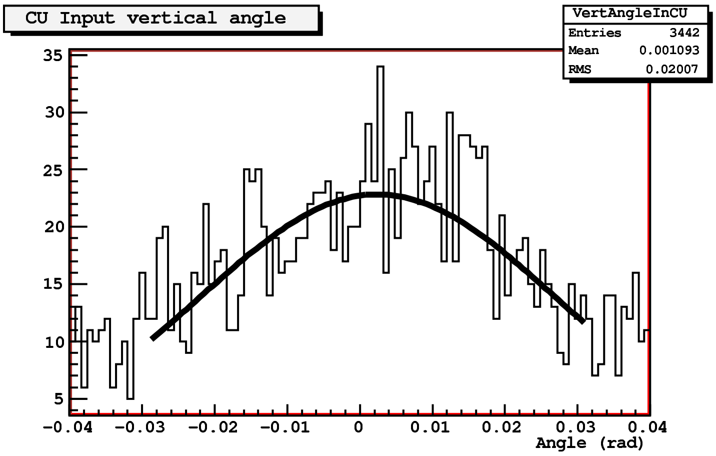

Input Beam Spot
SpotCoordIn
Entries 4209
Mean x 5.163
Mean y −9.932
RMS x 10.73
RMS y 9.01
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

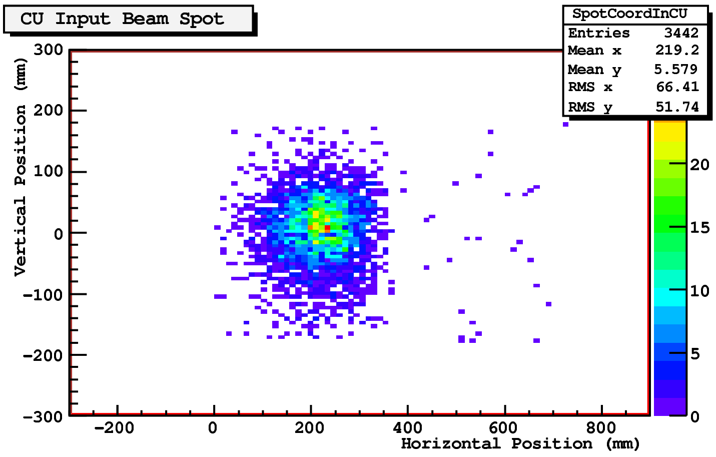

Input Beam Spot
SpotAngleIn
Entries 4209
Mean x 0.009908
Mean y −0.0003358
RMS x 0.01093
RMS y 0.00679
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12

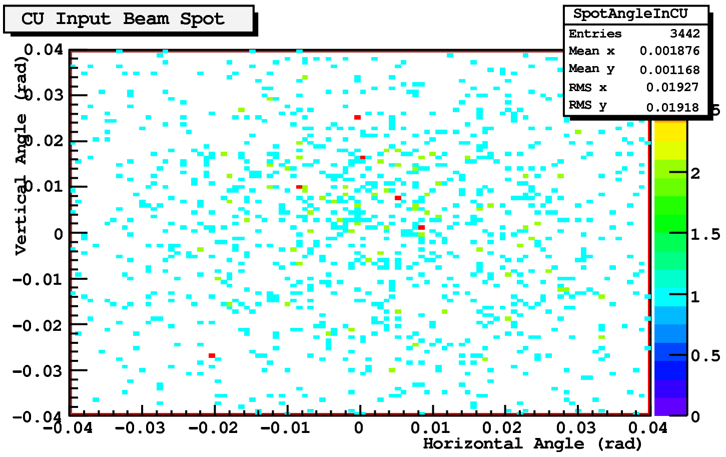

CU Input Horizontal coordinate
HorCoordInCU
Entries 3442
Mean 5.579
RMS 51.74
700001249
0
20
40
60
80
100
120
140
160
180
200
−300
−200
−100
0
100
200
300
Position (mm)

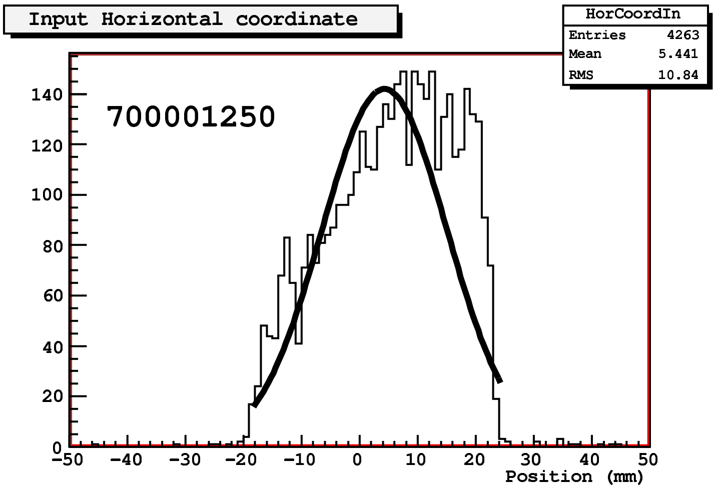

CU Input vertical coordinate
VertCoordInCU
Entries 3442
Mean 219.2
RMS 66.41
0
50
100
150
200
250
300
350
−200
0
200
400
600
800
Position (mm)

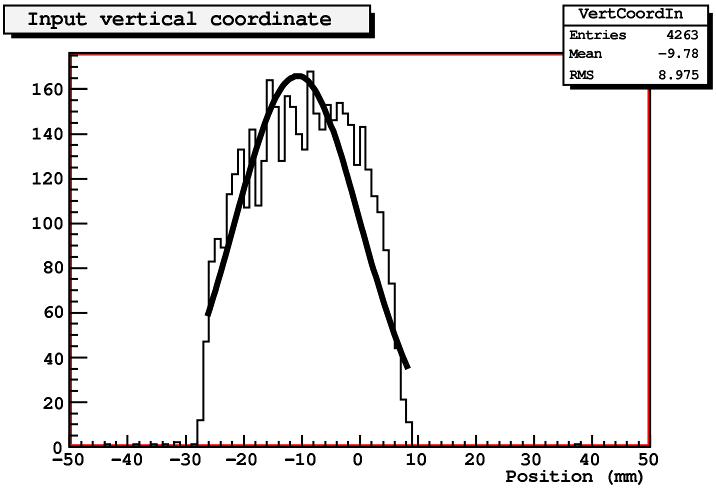

CU Input horizontal angle
HorAngleInCU
Entries 3442
Mean 0.001405
RMS 0.02014
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

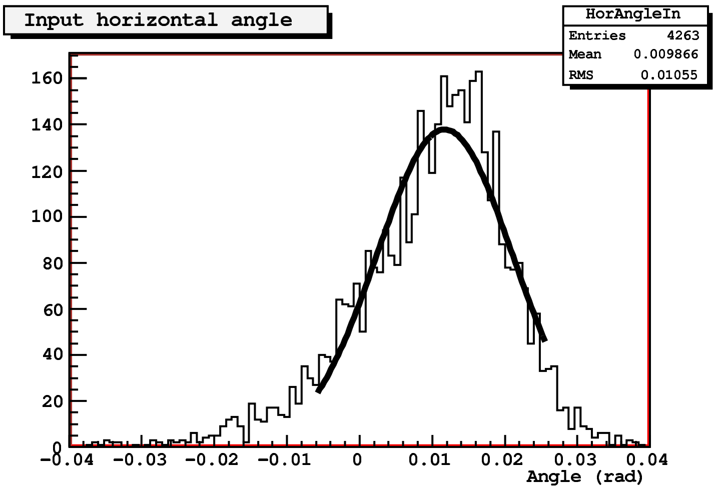

CU Input vertical angle
VertAngleInCU
Entries 3442
Mean 0.001093
RMS 0.02007
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

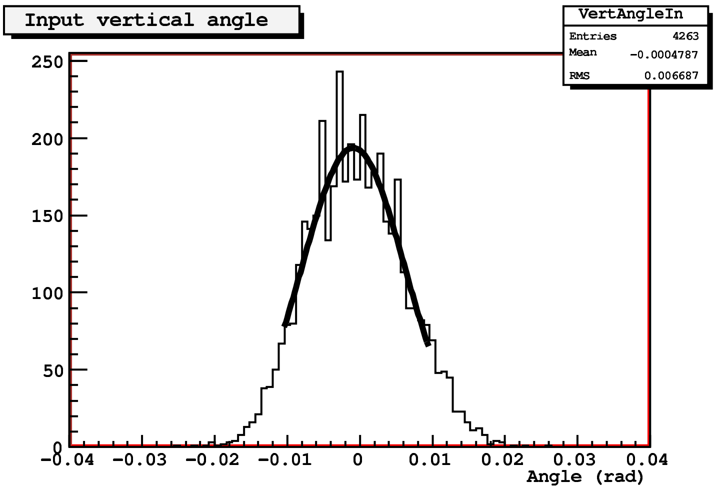

CU Input Beam Spot
SpotCoordInCU
Entries 3442
Mean x 219.2
Mean y 5.579
RMS x 66.41
RMS y 51.74
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
5
10
15
20

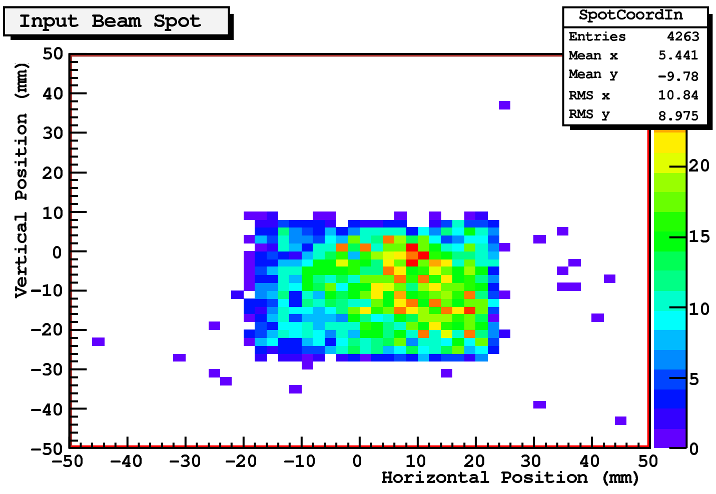

CU Input Beam Spot
SpotAngleInCU
Entries 3442
Mean x 0.001876
Mean y 0.001168
RMS x 0.01927
RMS y 0.01918
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2

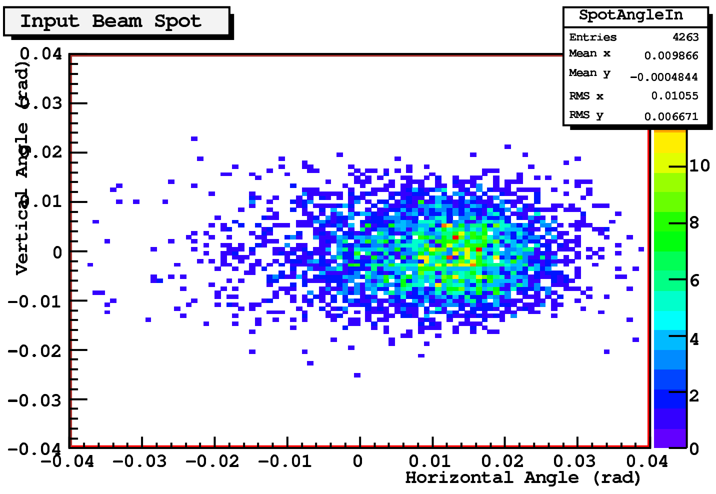

Input Horizontal coordinate
HorCoordIn
Entries 4263
Mean 5.441
RMS 10.84
700001250
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

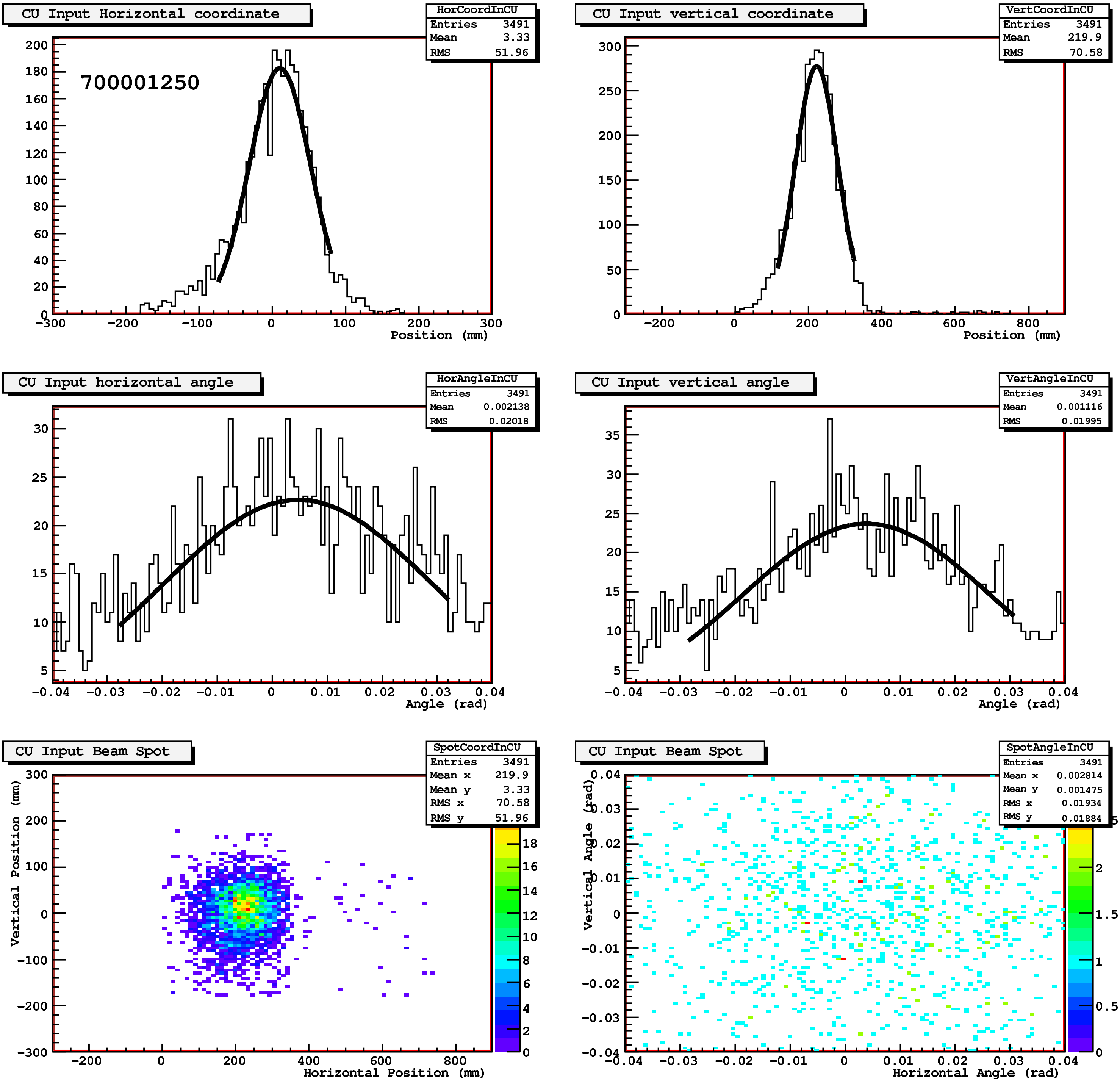

Input vertical coordinate
VertCoordIn
Entries 4263
Mean −9.78
RMS 8.975
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

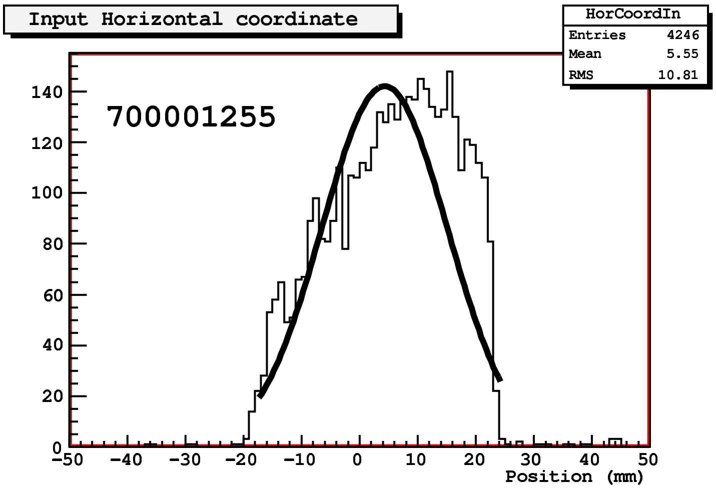

Input horizontal angle
HorAngleIn
Entries 4263
Mean 0.009866
RMS 0.01055
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

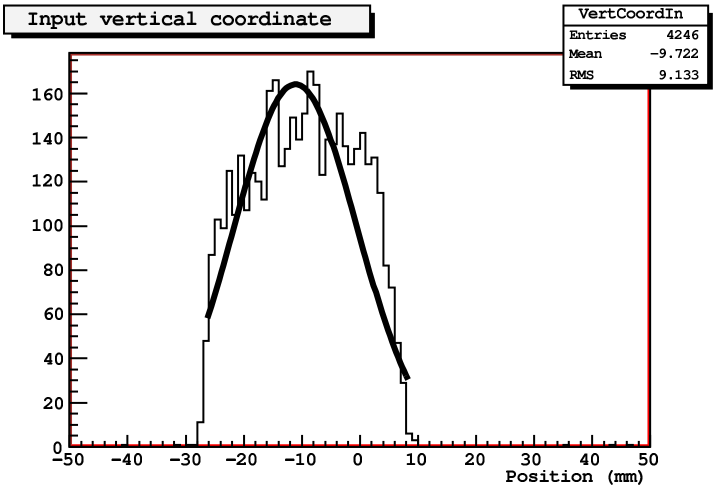

Input vertical angle
VertAngleIn
Entries 4263
Mean −0.0004787
RMS 0.006687
0
50
100
150
200
250
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

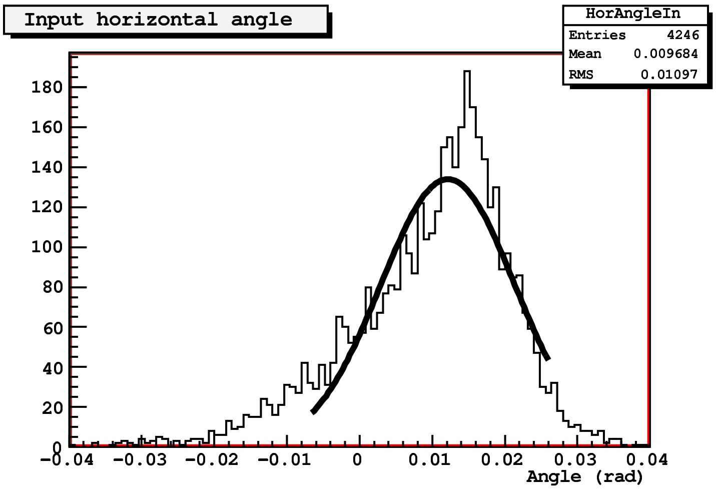

Input Beam Spot
SpotCoordIn
Entries 4263
Mean x 5.441
Mean y −9.78
RMS x 10.84
RMS y 8.975
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

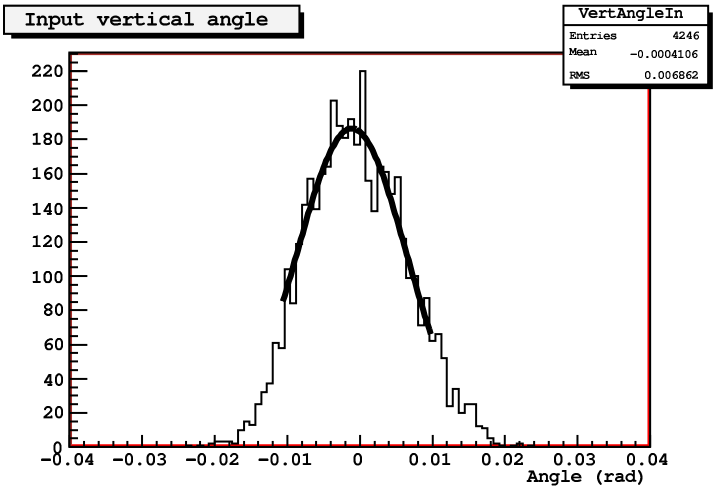

Input Beam Spot
SpotAngleIn
Entries 4263
Mean x 0.009866
Mean y −0.0004844
RMS x 0.01055
RMS y 0.006671
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

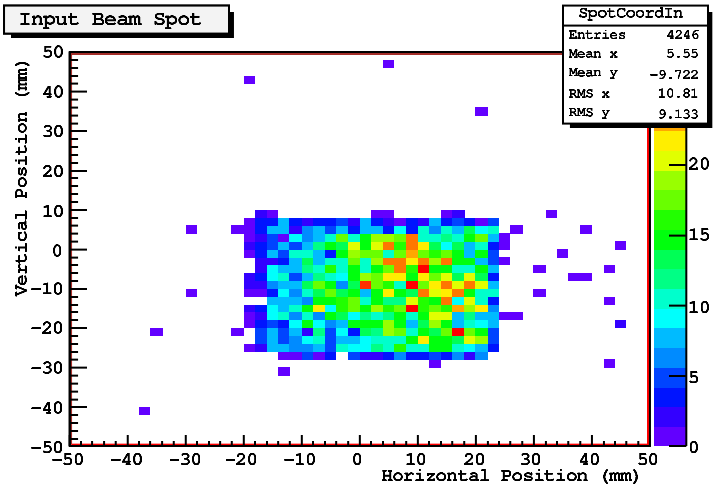

CU Input Horizontal coordinate
HorCoordInCU
Entries 3491
Mean 3.33
RMS 51.96
700001250
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 3491
Mean 219.9
RMS 70.58
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 3491
Mean 0.002138
RMS 0.02018
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 3491
Mean 0.001116
RMS 0.01995
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 3491
Mean x 219.9
Mean y 3.33
RMS x 70.58
RMS y 51.96
Horizontal Position (mm)
Vertical Position (mm)
CU Input Beam Spot
SpotAngleInCU
Entries 3491
Mean x 0.002814
Mean y 0.001475
RMS x 0.01934
RMS y 0.01884
Horizontal Angle (rad)
Vertical Angle (rad)

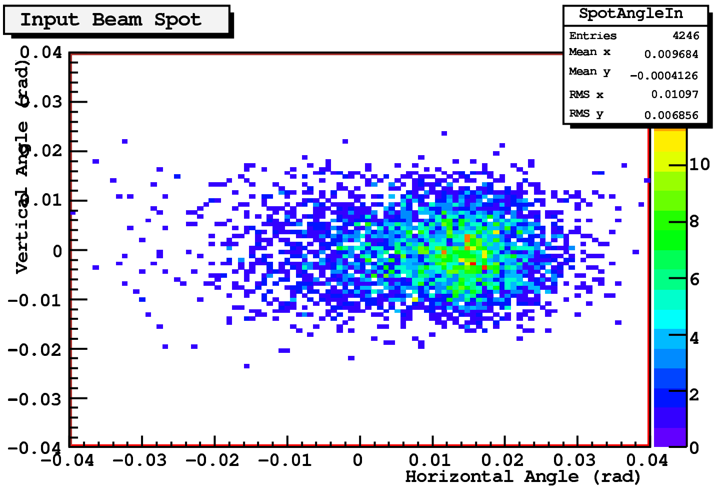

Input Horizontal coordinate
HorCoordIn
Entries 4246
Mean 5.55
RMS 10.81
700001255
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

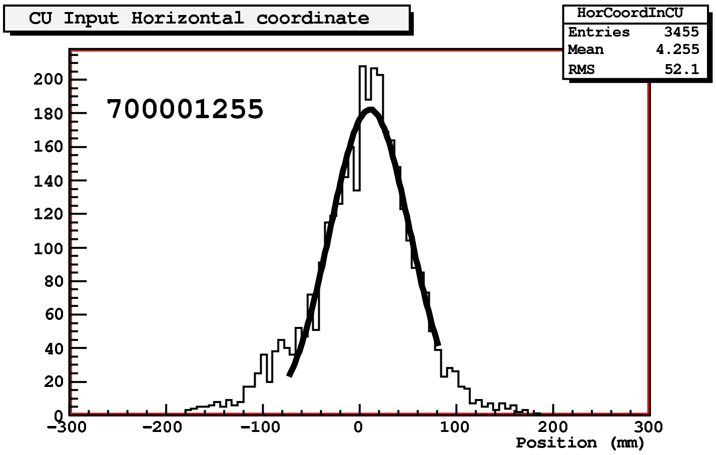

Input vertical coordinate
VertCoordIn
Entries 4246
Mean −9.722
RMS 9.133
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

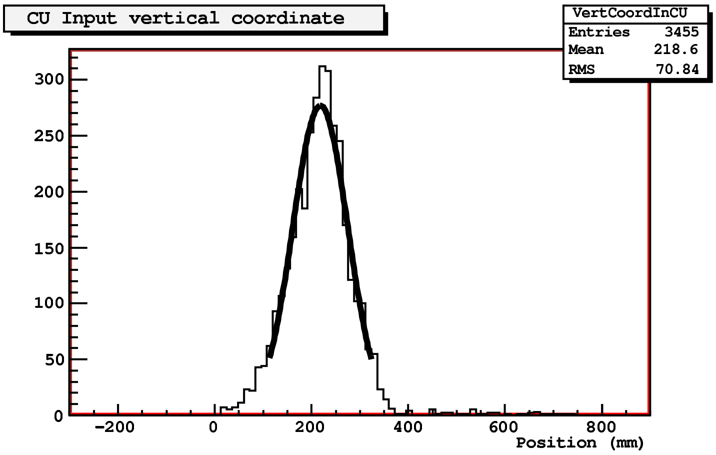

Input horizontal angle
HorAngleIn
Entries 4246
Mean 0.009684
RMS 0.01097
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

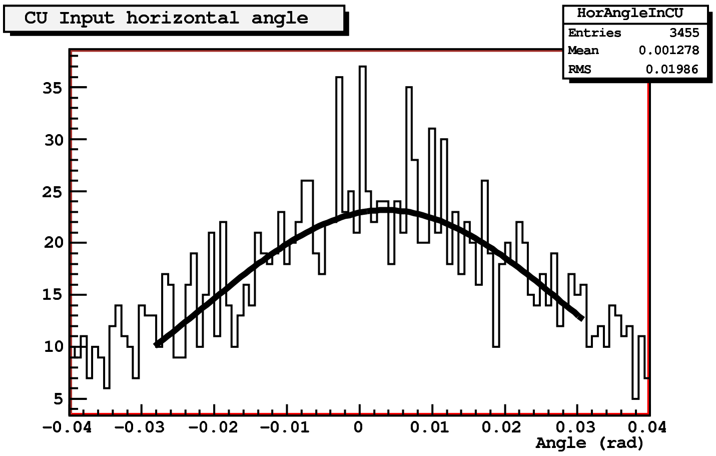

Input vertical angle
VertAngleIn
Entries 4246
Mean −0.0004106
RMS 0.006862
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

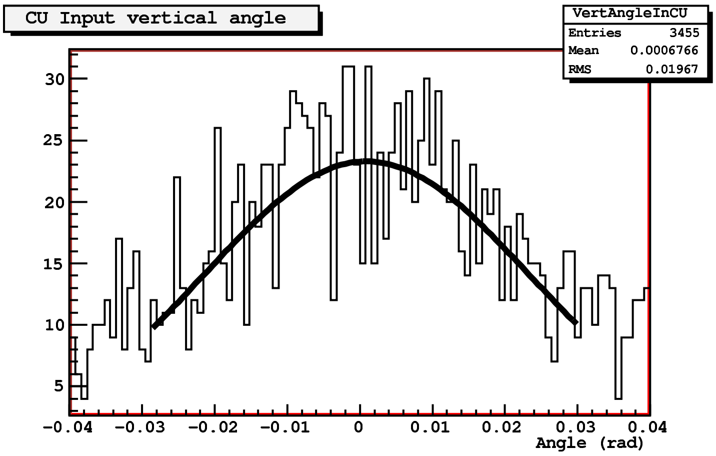

Input Beam Spot
SpotCoordIn
Entries 4246
Mean x 5.55
Mean y −9.722
RMS x 10.81
RMS y 9.133
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

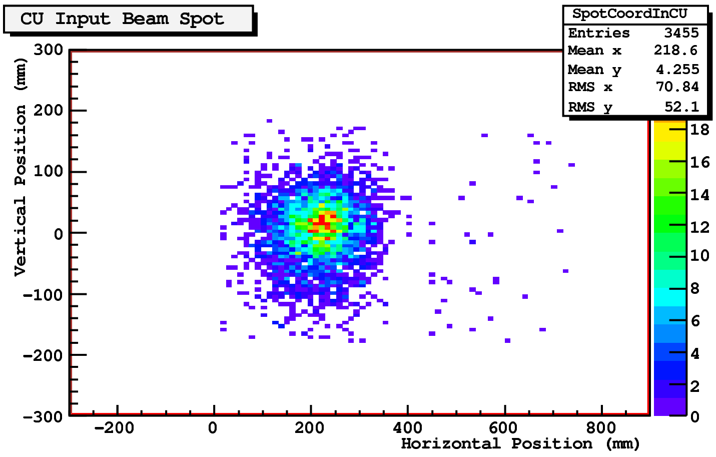

Input Beam Spot
SpotAngleIn
Entries 4246
Mean x 0.009684
Mean y −0.0004126
RMS x 0.01097
RMS y 0.006856
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

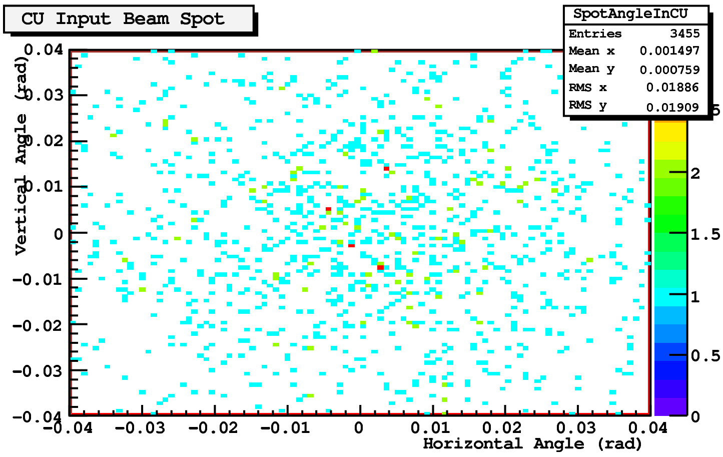

CU Input Horizontal coordinate
HorCoordInCU
Entries 3455
Mean 4.255
RMS 52.1
700001255
0
20
40
60
80
100
120
140
160
180
200
−300
−200
−100
0
100
200
300
Position (mm)

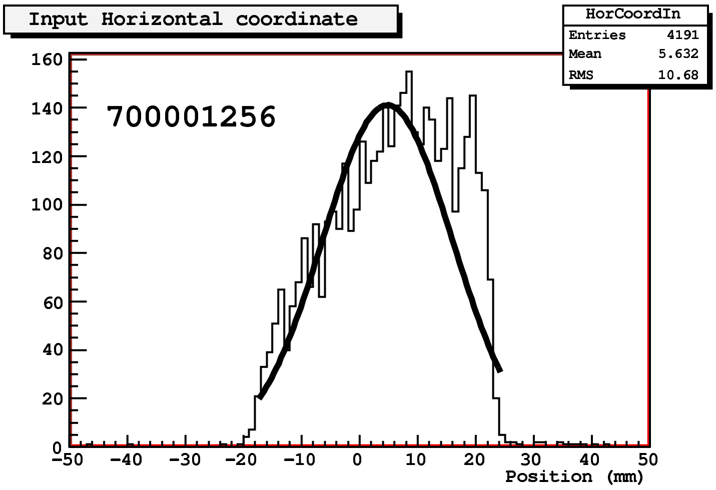

CU Input vertical coordinate
VertCoordInCU
Entries 3455
Mean 218.6
RMS 70.84
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)


CU Input horizontal angle
HorAngleInCU
Entries 3455
Mean 0.001278
RMS 0.01986
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

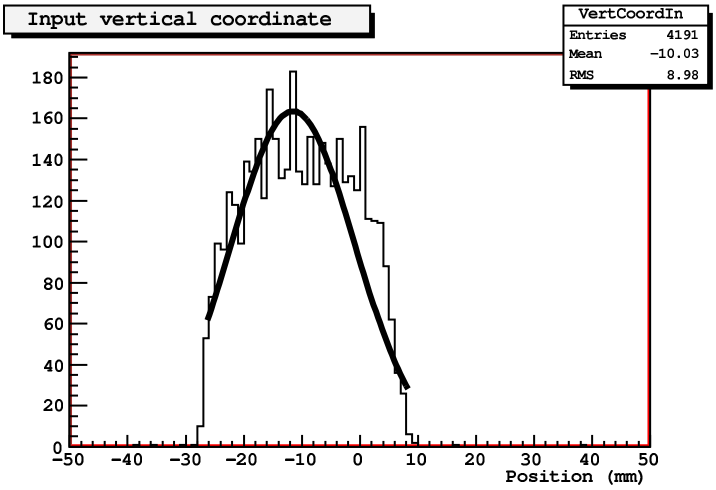

CU Input vertical angle
VertAngleInCU
Entries 3455
Mean 0.0006766
RMS 0.01967
5
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)


CU Input Beam Spot
SpotCoordInCU
Entries 3455
Mean x 218.6
Mean y 4.255
RMS x 70.84
RMS y 52.1
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
18
16
14
12
10
8
6
4
2
0

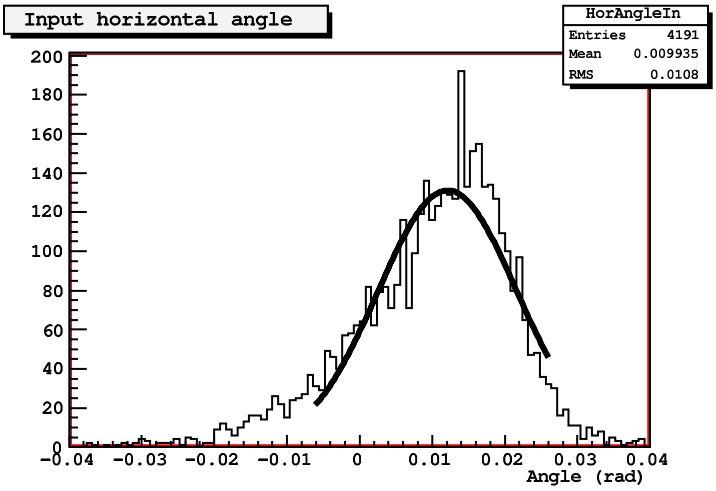

CU Input Beam Spot
SpotAngleInCU
Entries 3455
Mean x 0.001497
Mean y 0.000759
RMS x 0.01886
RMS y 0.01909
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0



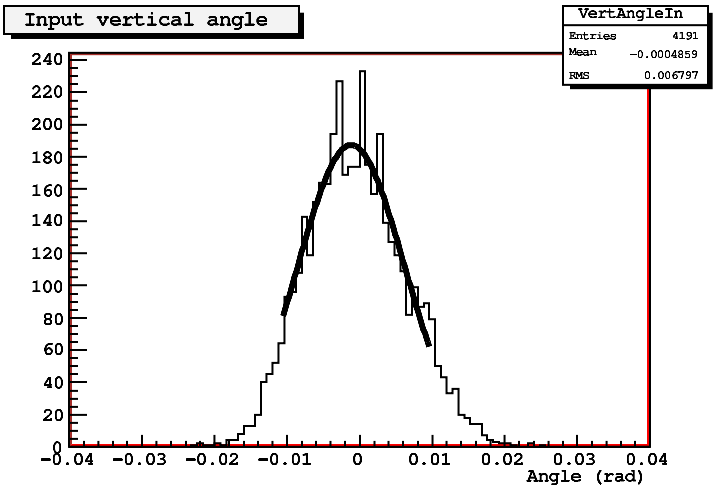
Input Horizontal coordinate



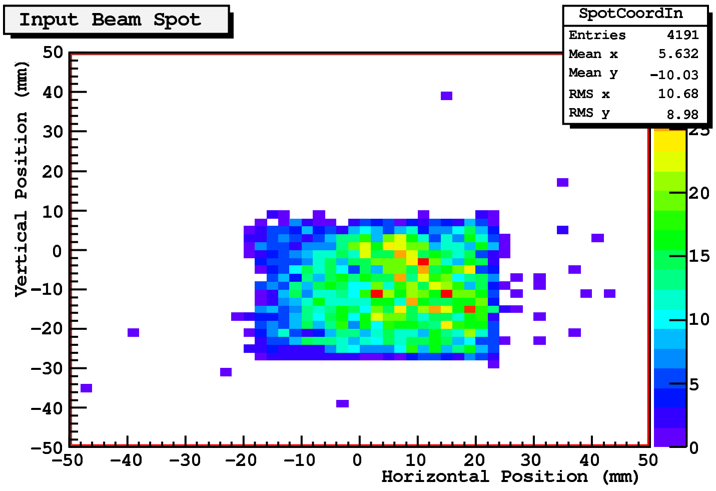
Input vertical coordinate



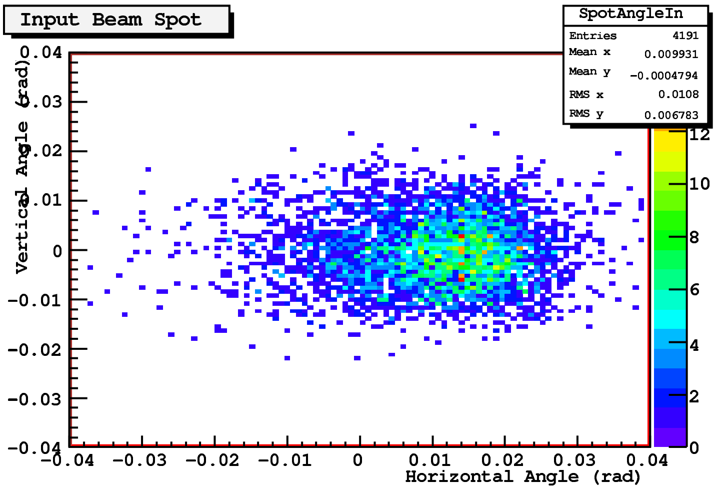
Input horizontal angle



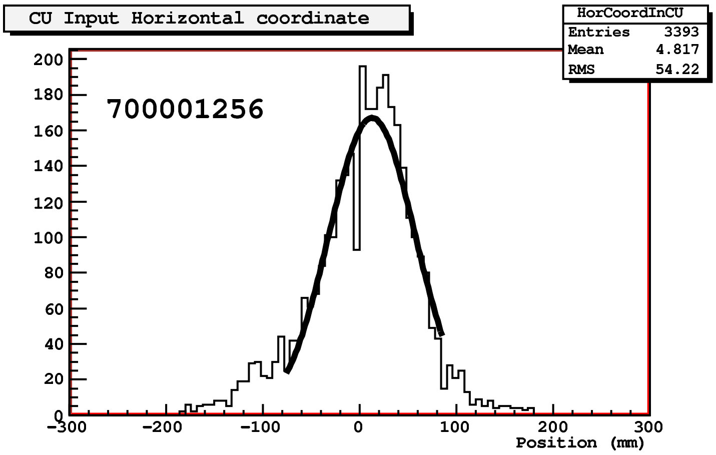
Input vertical angle

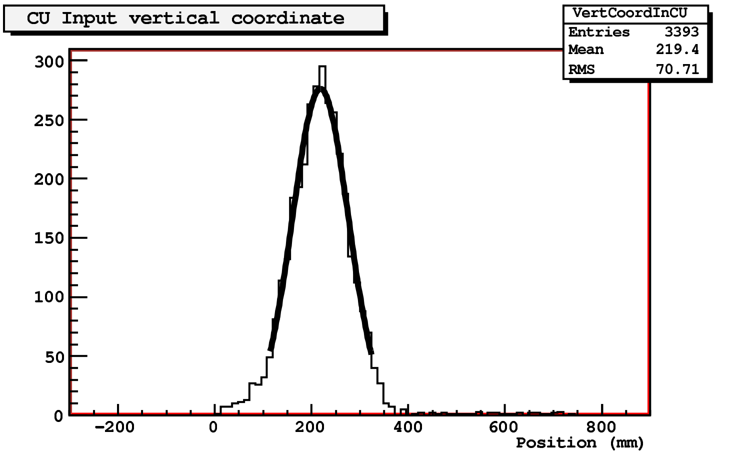


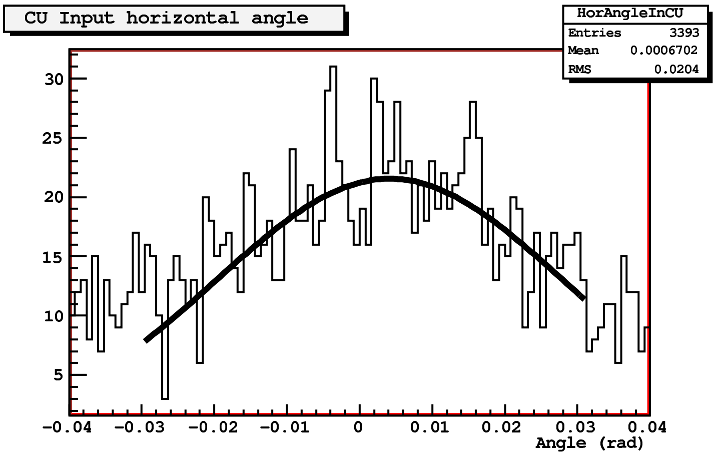
Input Beam Spot

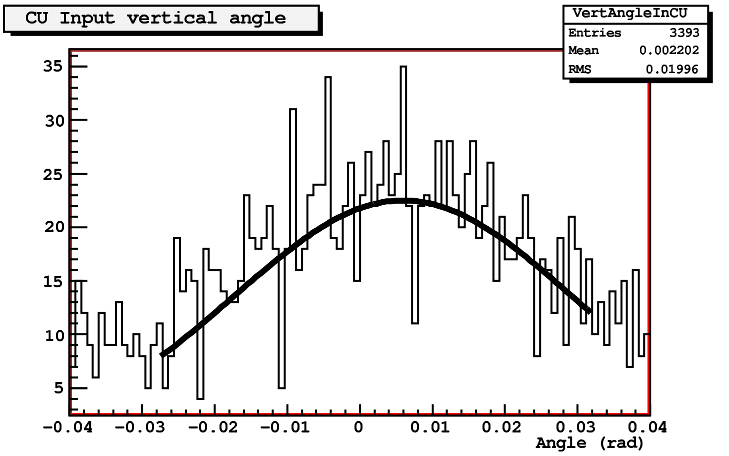


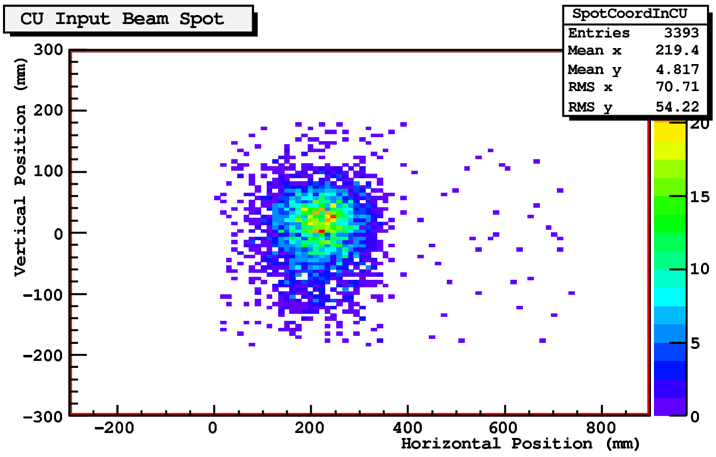
Input Beam Spot

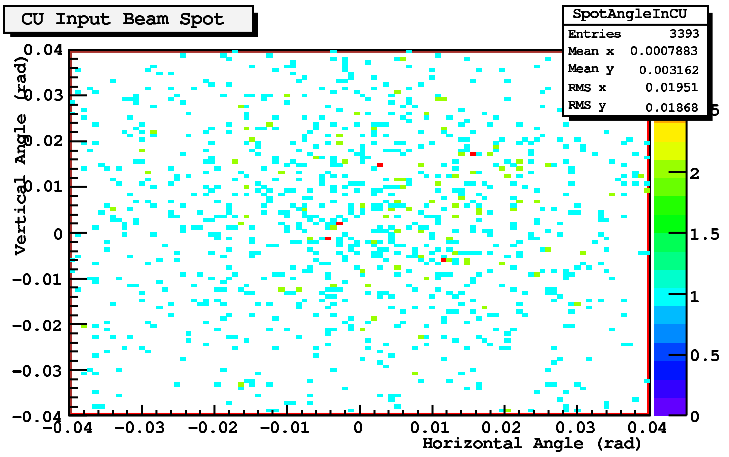

CU Input Horizontal coordinate
HorCoordInCU
Entries 3393
Mean 4.817
RMS 54.22
700001256
0 20 40 60 80 100 120 140 160 180 200
−300 −200 −100 0 100 200 300
Position (mm)

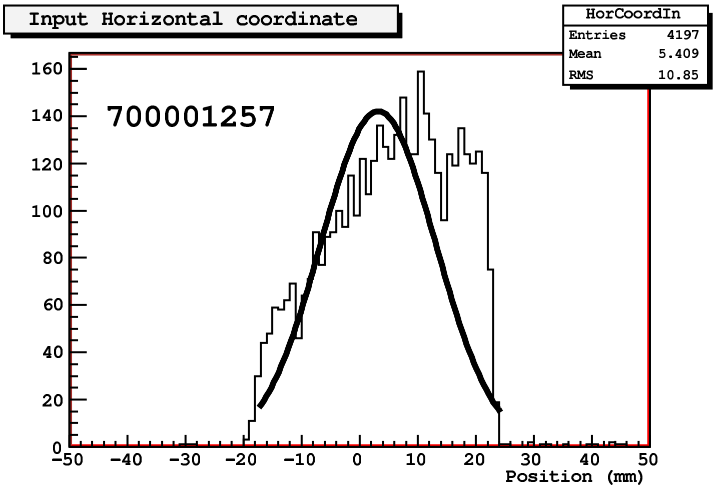

CU Input vertical coordinate
VertCoordInCU
Entries 3393
Mean 219.4
RMS 70.71
0 50 100 150 200 250 300
−200 0 200 400 600 800
Position (mm)

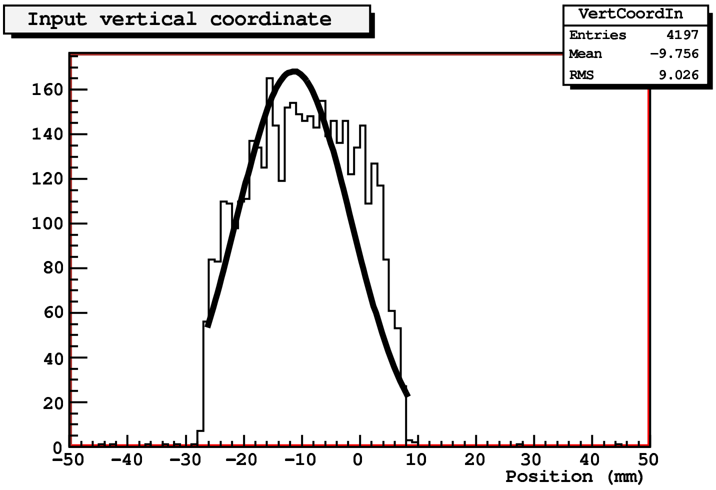

CU Input horizontal angle
HorAngleInCU
Entries 3393
Mean 0.0006702
RMS 0.0204
5 10 15 20 25 30
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

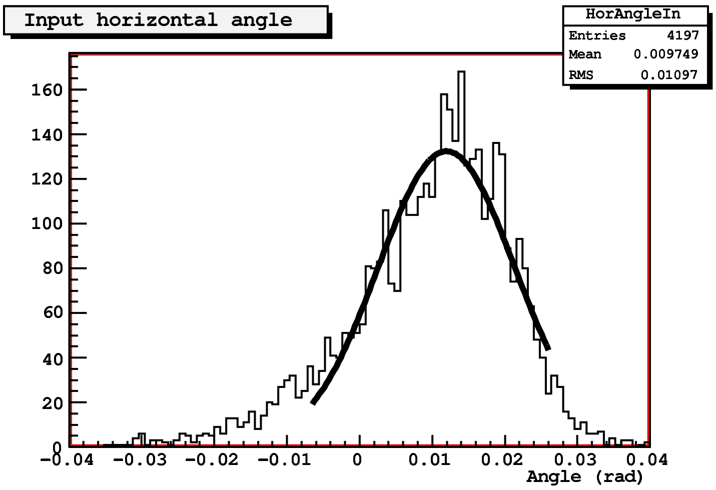

CU Input vertical angle
VertAngleInCU
Entries 3393
Mean 0.002202
RMS 0.01996
5 10 15 20 25 30 35
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

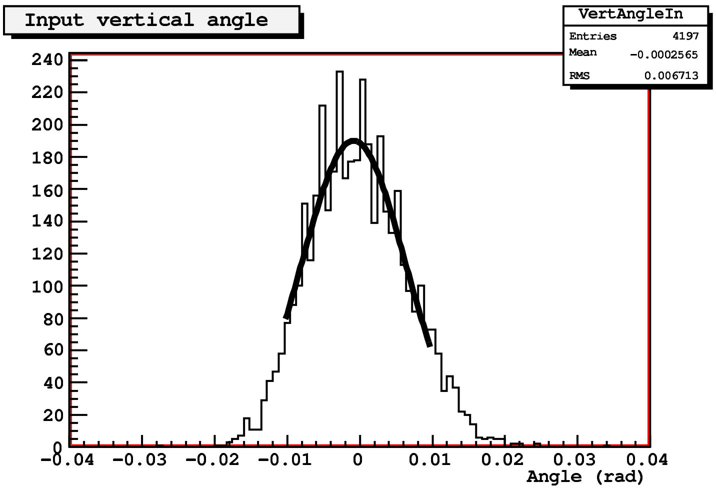

CU Input Beam Spot
SpotCoordInCU
Entries 3393
Mean x 219.4
Mean y 4.817
RMS x 70.71
RMS y 54.22
Vertical Position (mm)
−300 −200 −100 0 100 200 300
−200 0 200 400 600 800
Horizontal Position (mm)
0 5 10 15 20

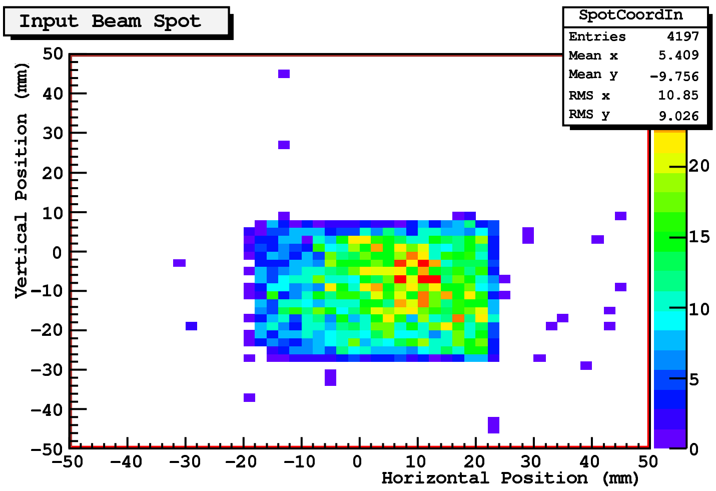

CU Input Beam Spot
SpotAngleInCU
Entries 3393
Mean x 0.0007883
Mean y 0.003162
RMS x 0.01951
RMS y 0.01868
Vertical Angle (rad)
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
0 0.5 1 1.5 2

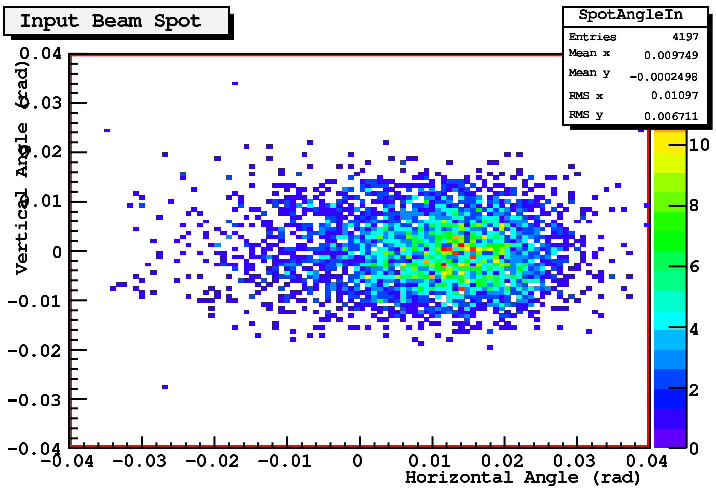

Input Horizontal coordinate

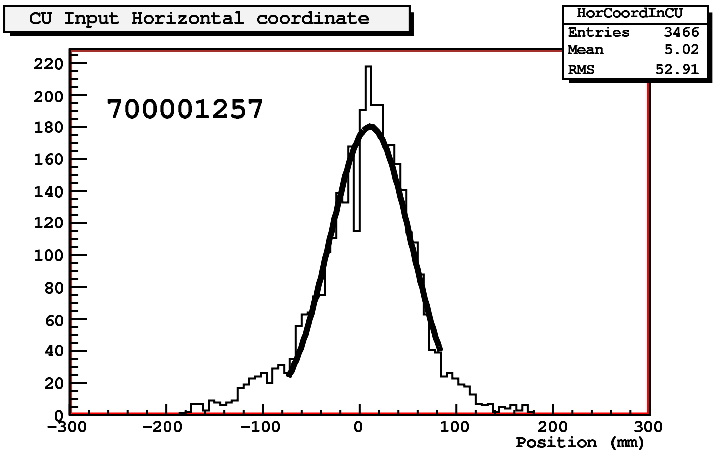

Input vertical coordinate

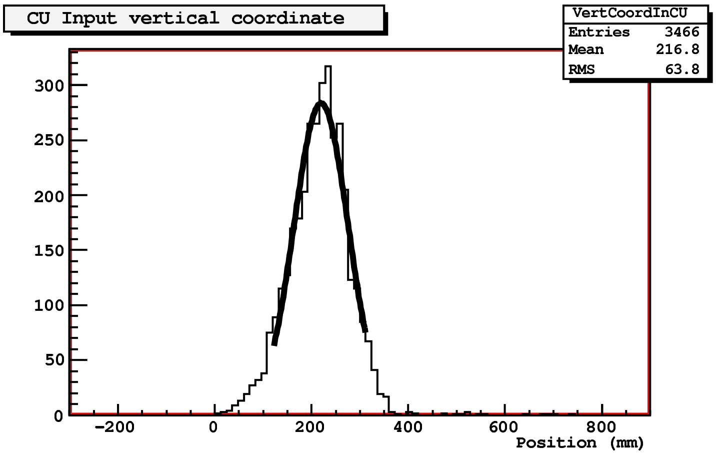

Input horizontal angle

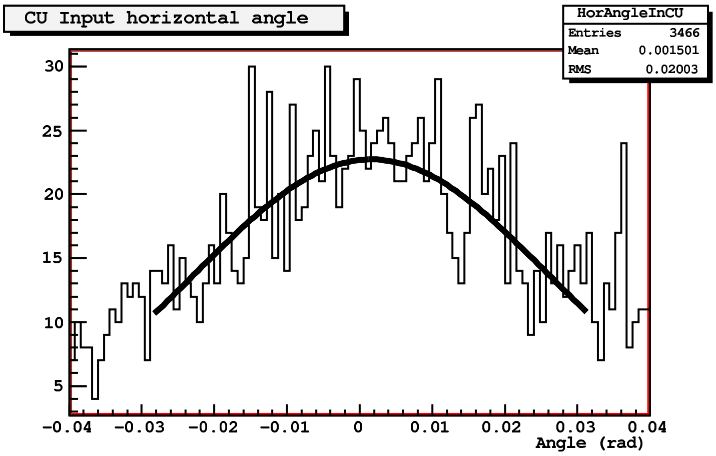

Input vertical angle

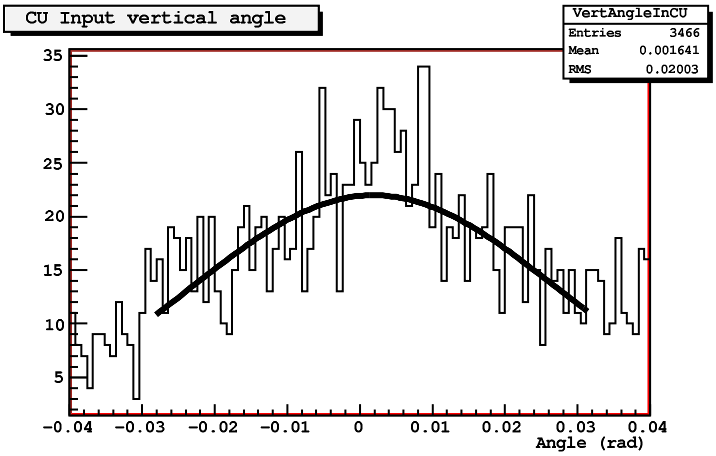

Input Beam Spot

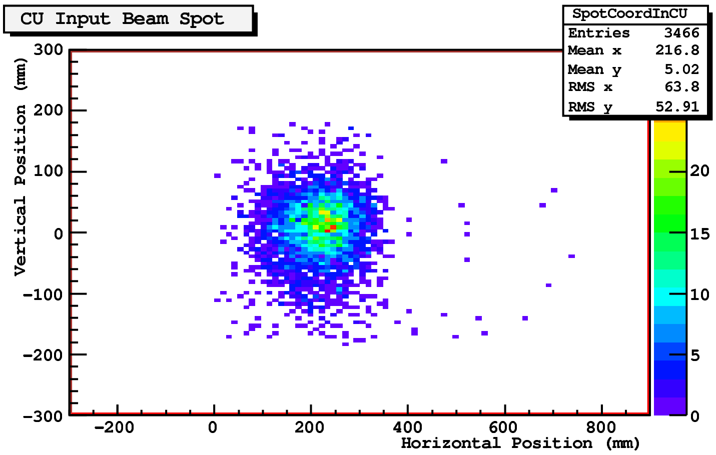

Input Beam Spot

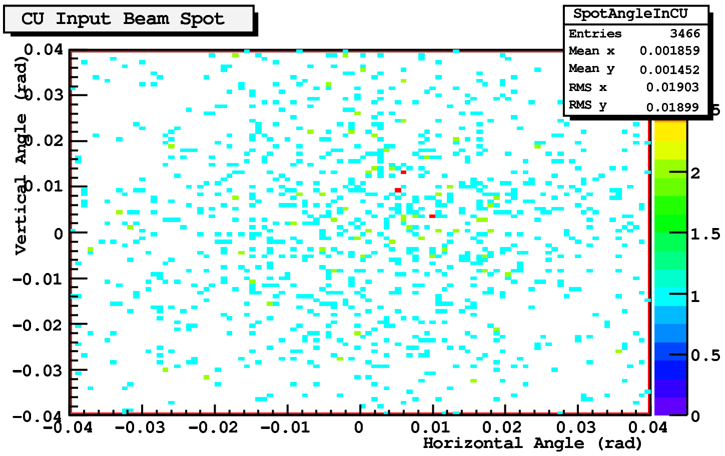

CU Input Horizontal coordinate

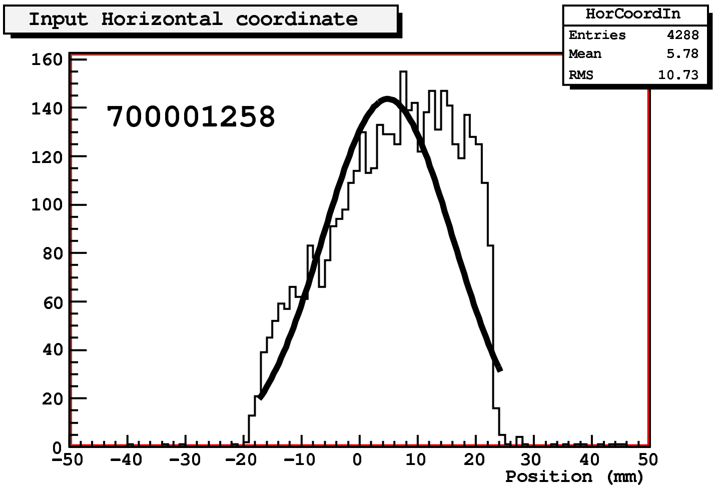

CU Input vertical coordinate

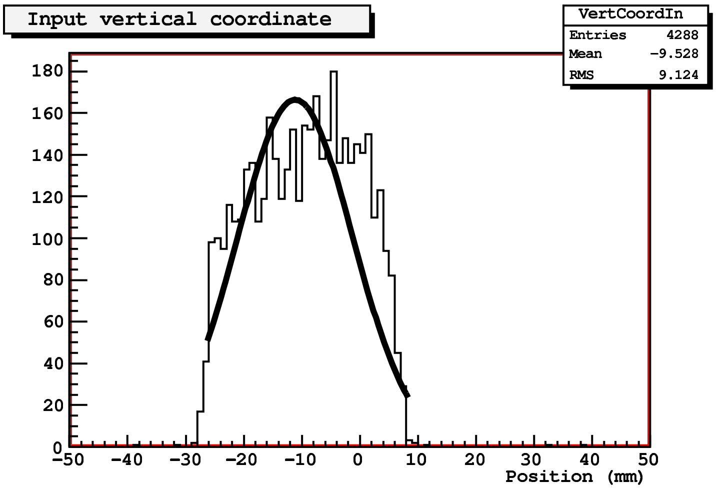

CU Input horizontal angle

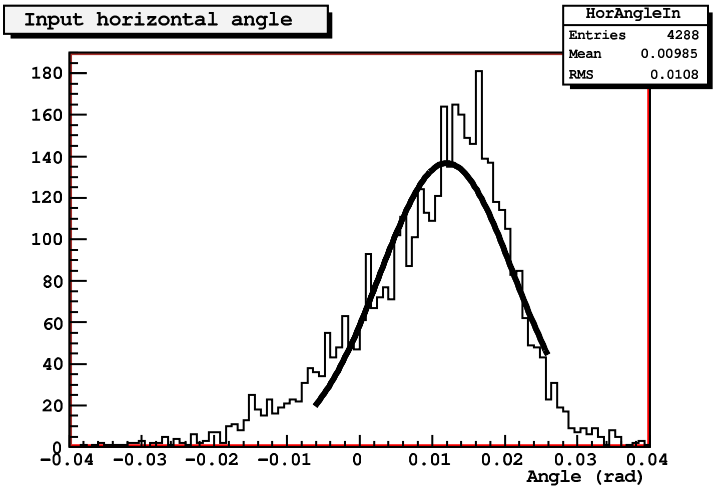

CU Input vertical angle

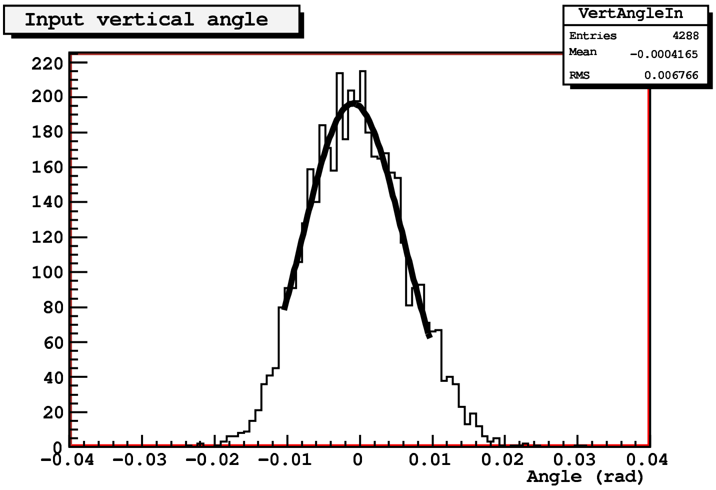

CU Input Beam Spot

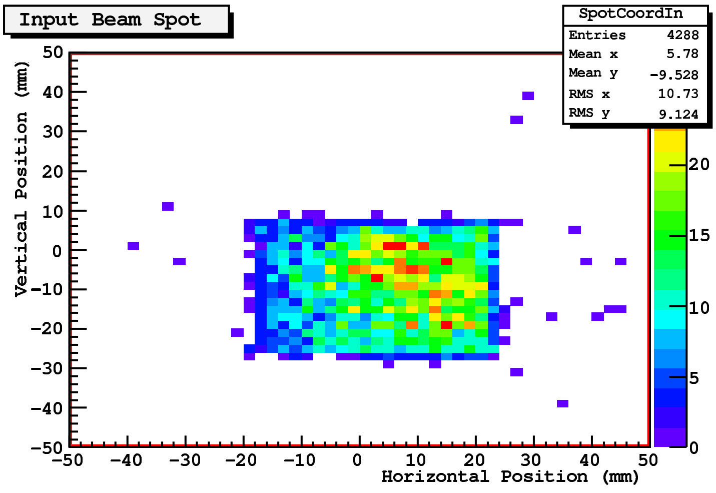

CU Input Beam Spot

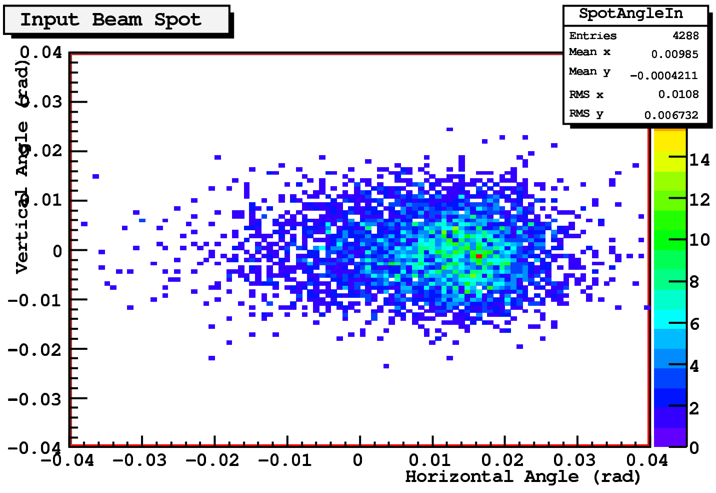

Input Horizontal coordinate
HorCoordIn
Entries 4288
Mean 5.78
RMS 10.73
700001258
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

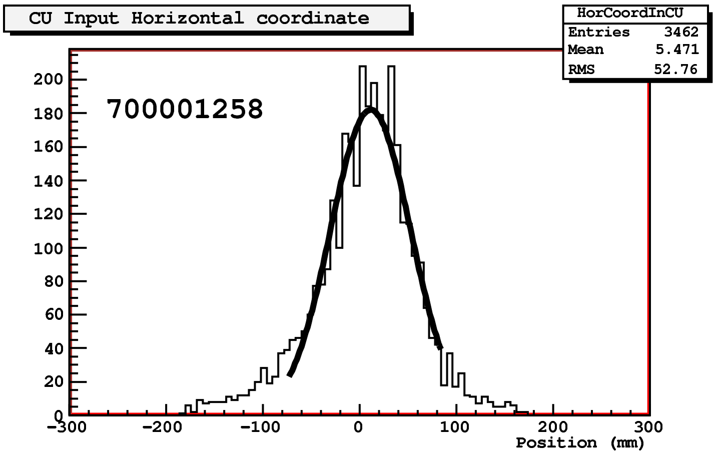

Input vertical coordinate
VertCoordIn
Entries 4288
Mean −9.528
RMS 9.124
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

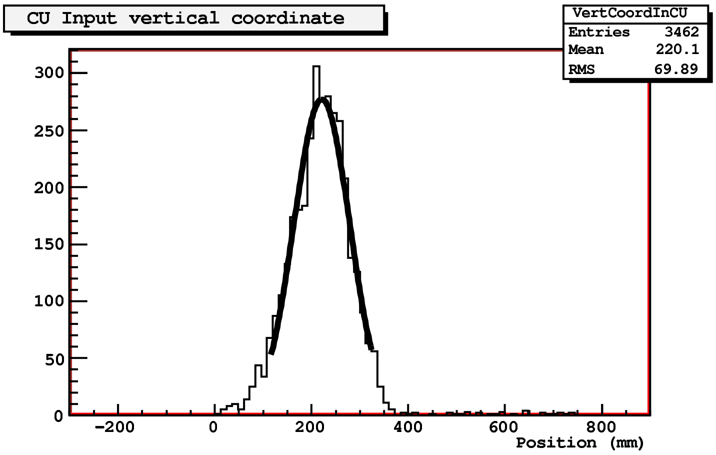

Input horizontal angle
HorAngleIn
Entries 4288
Mean 0.00985
RMS 0.0108
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

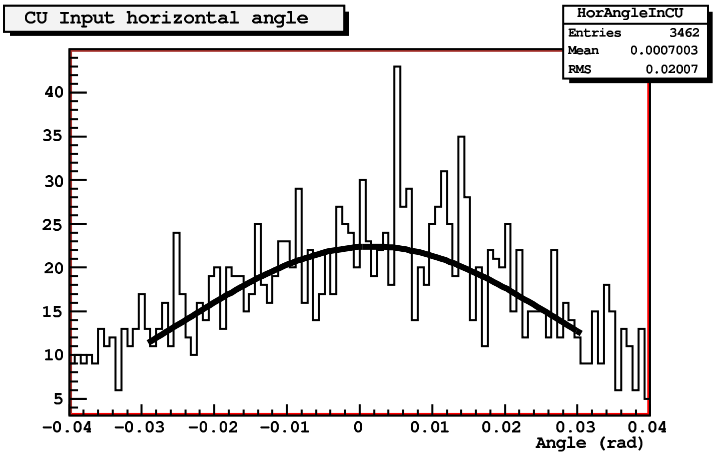

Input vertical angle
VertAngleIn
Entries 4288
Mean −0.0004165
RMS 0.006766
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

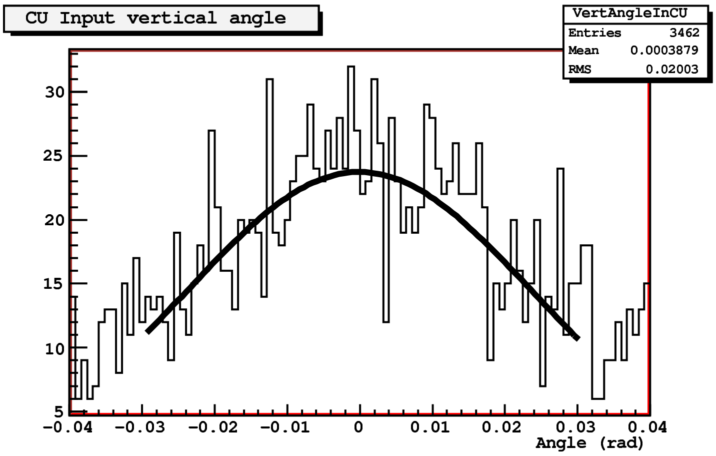

Input Beam Spot
SpotCoordIn
Entries 4288
Mean x 5.78
Mean y −9.528
RMS x 10.73
RMS y 9.124
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
20
15
10
5
0

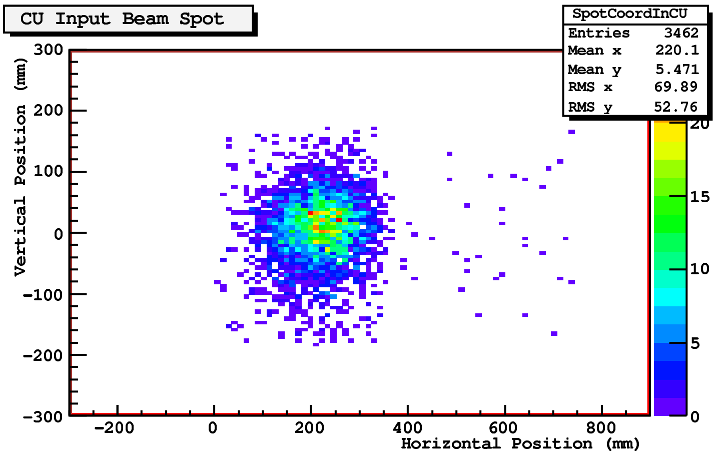

Input Beam Spot
SpotAngleIn
Entries 4288
Mean x 0.00985
Mean y −0.0004211
RMS x 0.0108
RMS y 0.006732
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
14
12
10
8
6
4
2
0

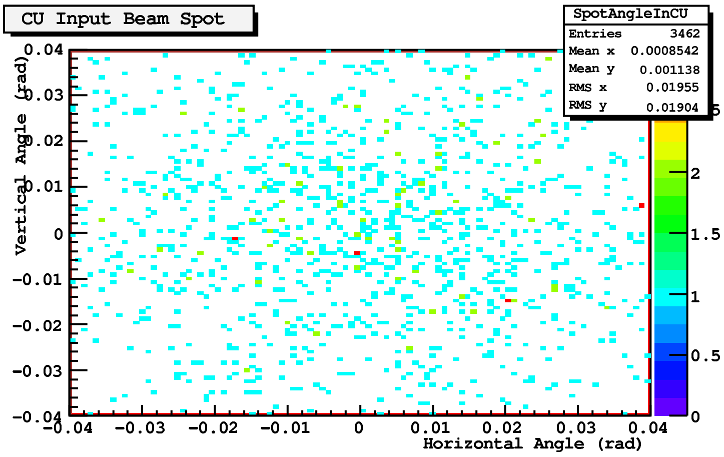

CU Input Horizontal coordinate
HorCoordInCU
Entries 3462
Mean 5.471
RMS 52.76
700001258
0
20
40
60
80
100
120
140
160
180
200
−300
−200
−100
0
100
200
300
Position (mm)

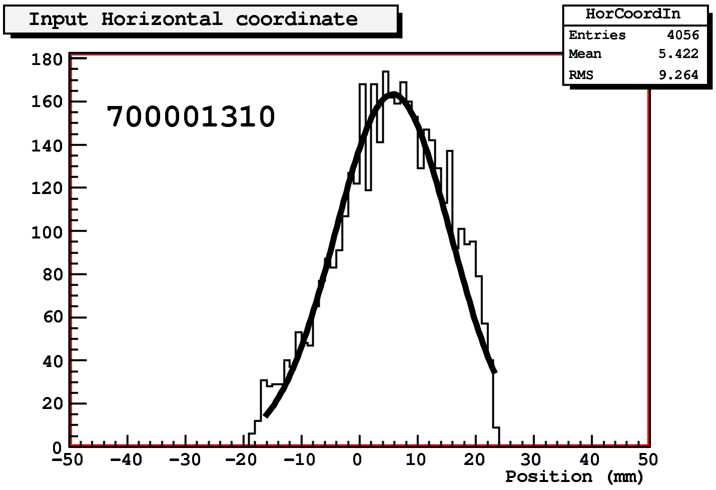

CU Input vertical coordinate
VertCoordInCU
Entries 3462
Mean 220.1
RMS 69.89
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)

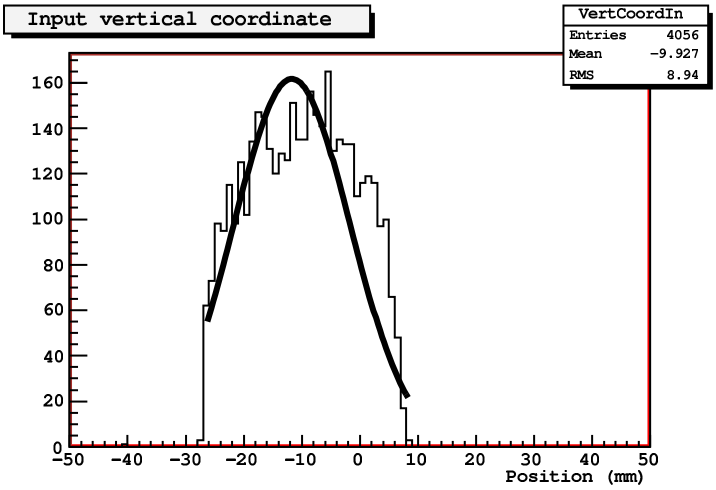

CU Input horizontal angle
HorAngleInCU
Entries 3462
Mean 0.0007003
RMS 0.02007
5
10
15
20
25
30
35
40
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

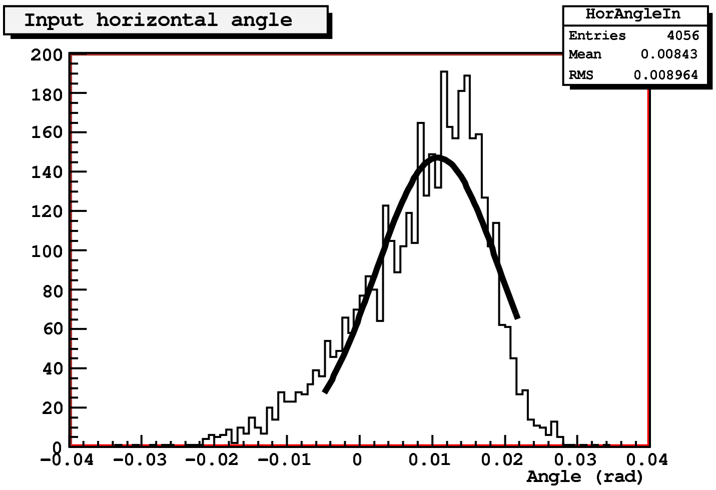

CU Input vertical angle
VertAngleInCU
Entries 3462
Mean 0.0003879
RMS 0.02003
5
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

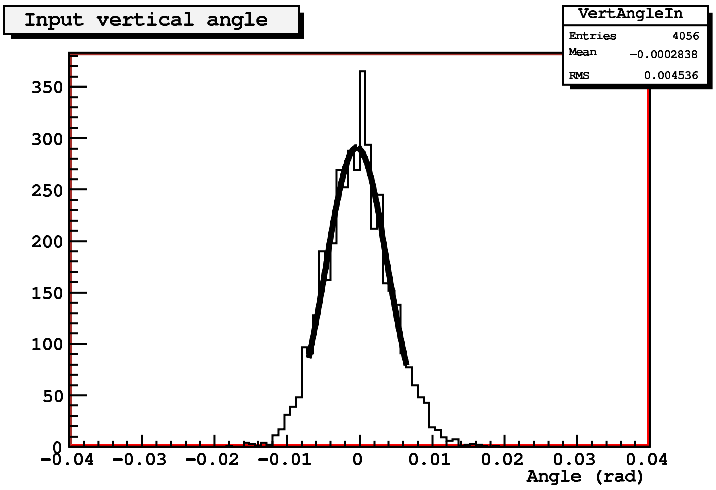

CU Input Beam Spot
SpotCoordInCU
Entries 3462
Mean x 220.1
Mean y 5.471
RMS x 69.89
RMS y 52.76
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
20
15
10
5
0

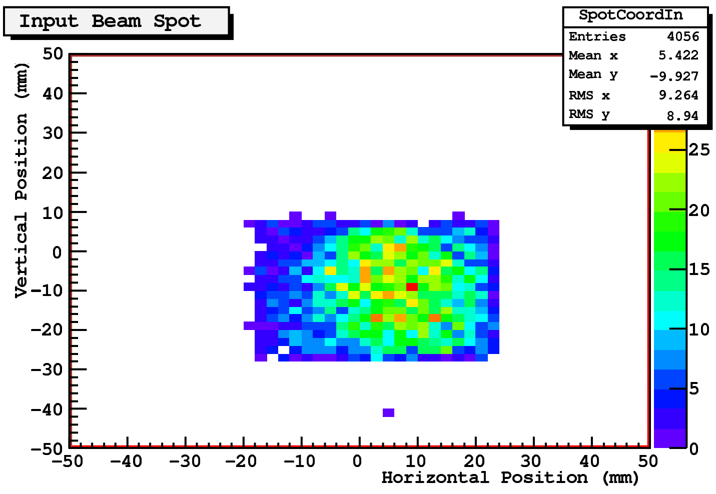

CU Input Beam Spot
SpotAngleInCU
Entries 3462
Mean x 0.0008542
Mean y 0.001138
RMS x 0.01955
RMS y 0.01904
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0

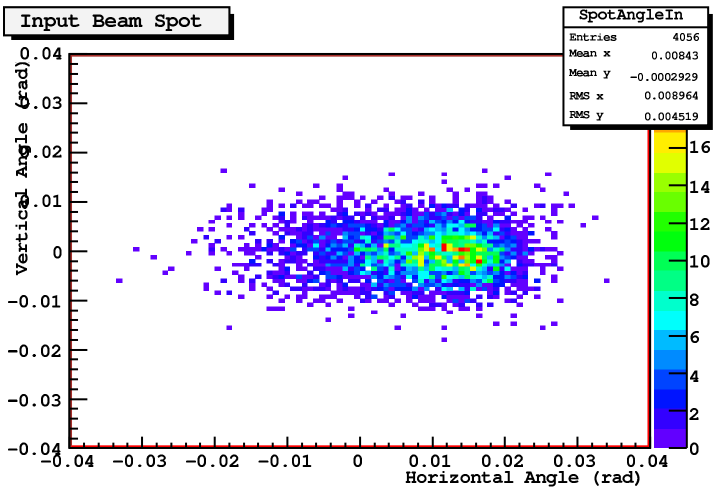

Input Horizontal coordinate
HorCoordIn
Entries 4056
Mean 5.422
RMS 9.264
700001310
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

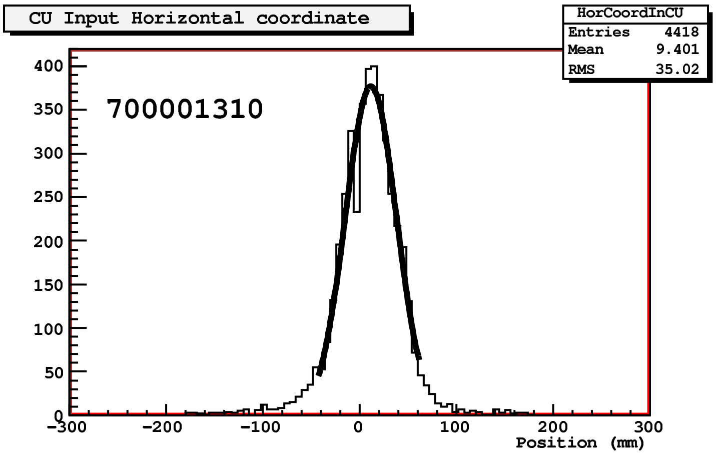

Input vertical coordinate
VertCoordIn
Entries 4056
Mean −9.927
RMS 8.94
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

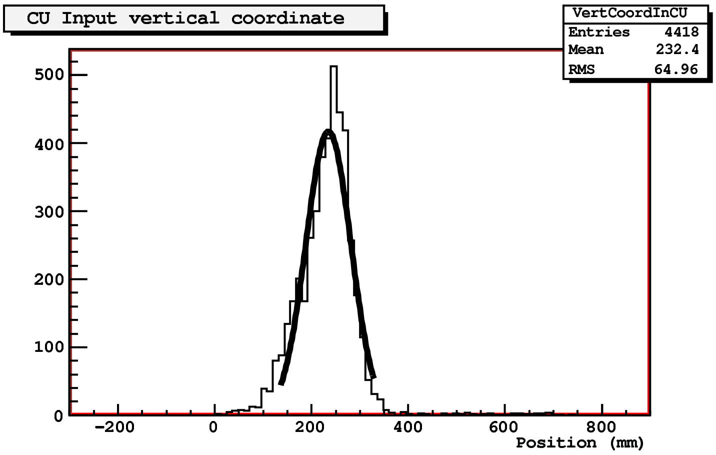

Input horizontal angle
HorAngleIn
Entries 4056
Mean 0.00843
RMS 0.008964
0
20
40
60
80
100
120
140
160
180
200
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

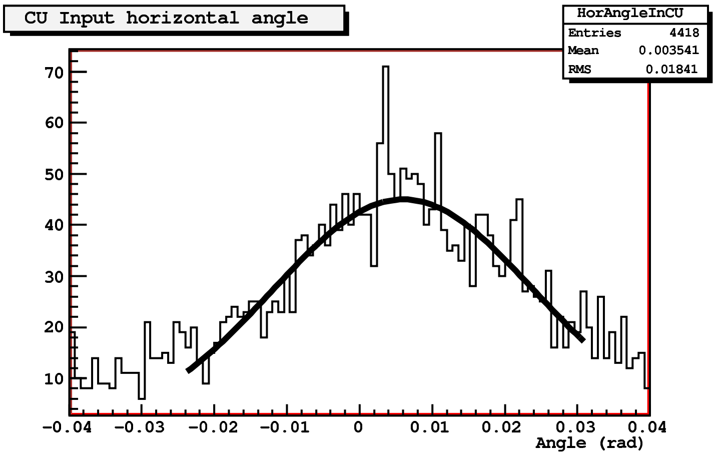

Input vertical angle
VertAngleIn
Entries 4056
Mean −0.0002838
RMS 0.004536
0
50
100
150
200
250
300
350
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

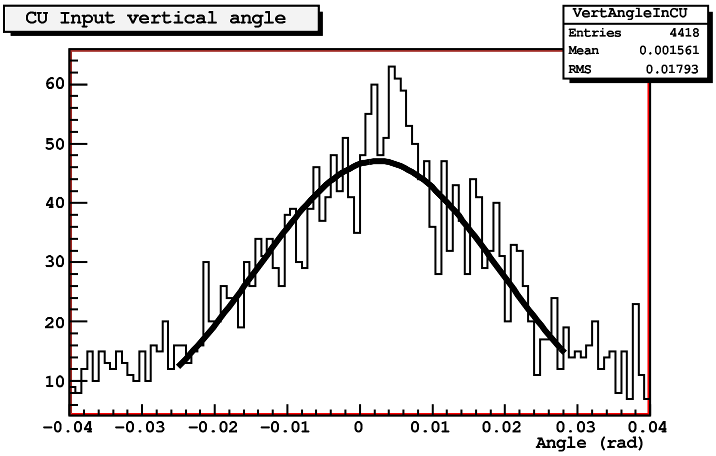

Input Beam Spot
SpotCoordIn
Entries 4056
Mean x 5.422
Mean y −9.927
RMS x 9.264
RMS y 8.94
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

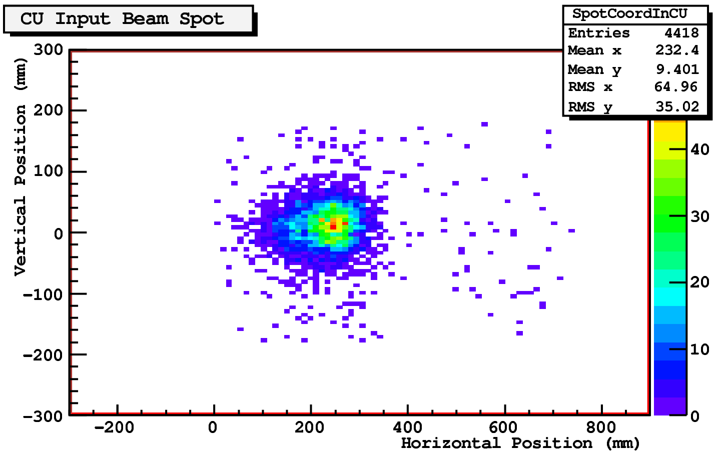

Input Beam Spot
SpotAngleIn
Entries 4056
Mean x 0.00843
Mean y −0.0002929
RMS x 0.008964
RMS y 0.004519
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14
16

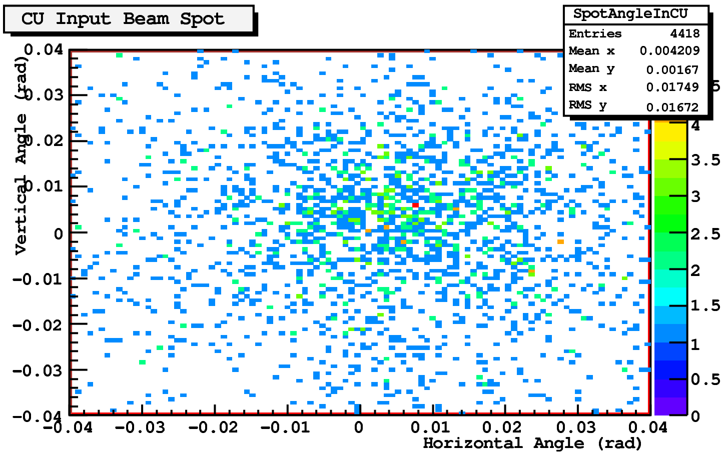

CU Input Horizontal coordinate

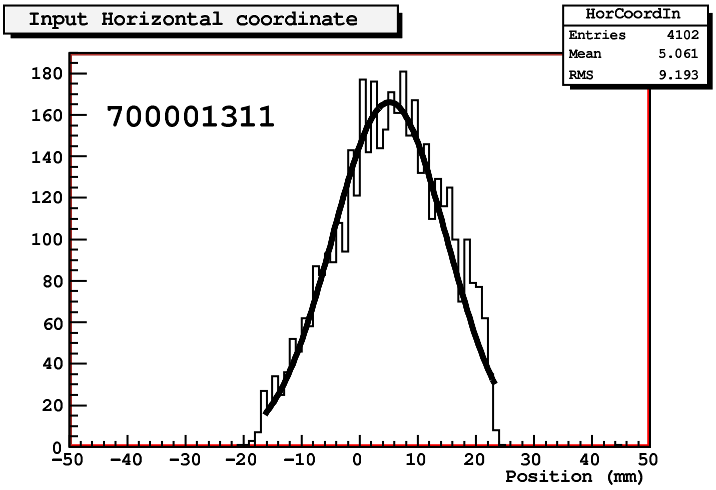

CU Input vertical coordinate

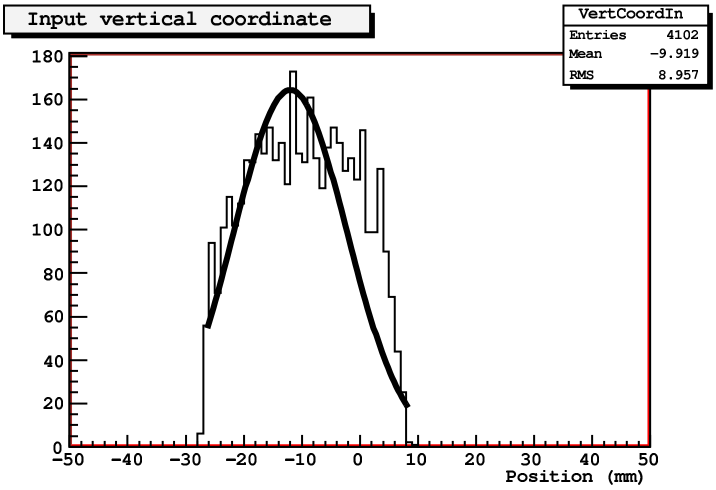

CU Input horizontal angle

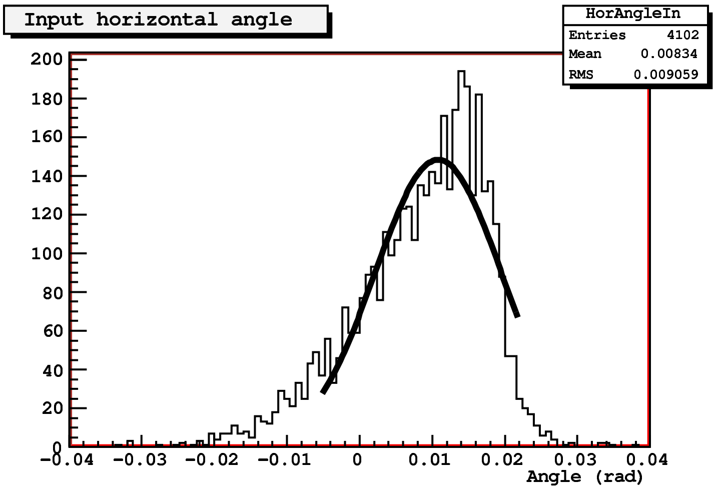

CU Input vertical angle

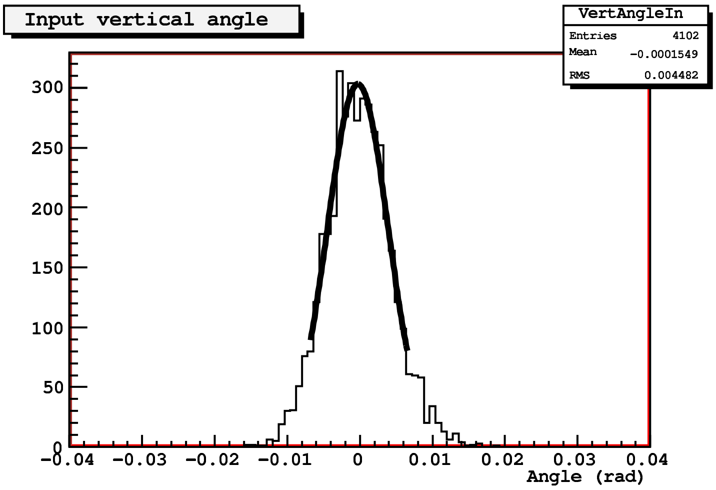

CU Input Beam Spot

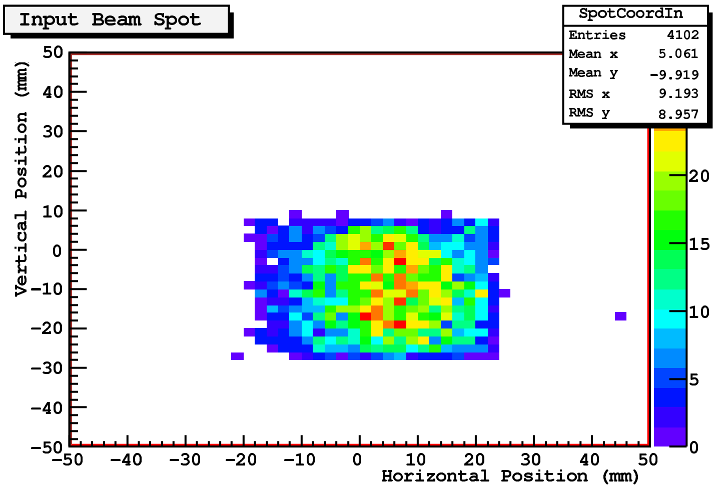

CU Input Beam Spot

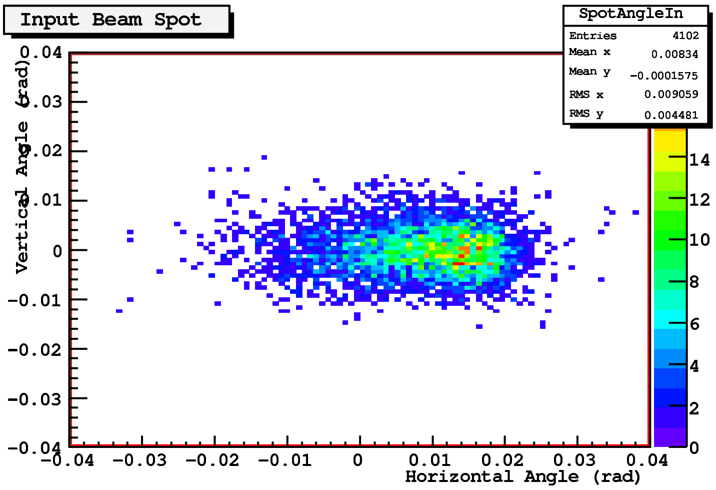

Input Horizontal coordinate
HorCoordIn
Entries 4102
Mean 5.061
RMS 9.193
700001311
180
160
140
120
100
80
60
40
20
0
-50
-40
-30
-20
-10
0
10
20
30
40
50
Position (mm)

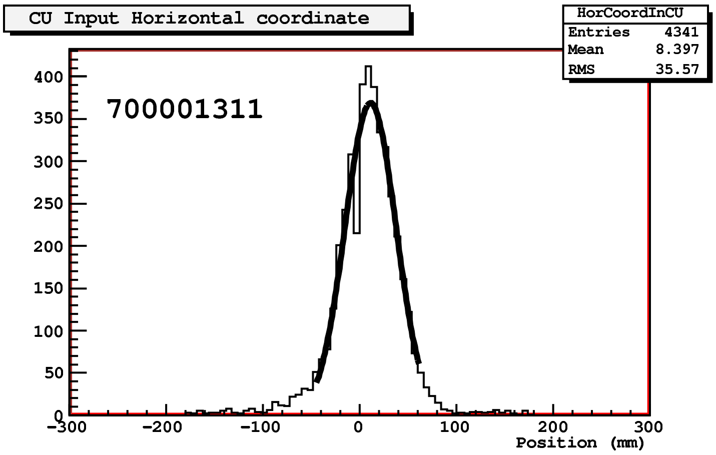

Input vertical coordinate
VertCoordIn
Entries 4102
Mean -9.919
RMS 8.957
180
160
140
120
100
80
60
40
20
0
-50
-40
-30
-20
-10
0
10
20
30
40
50
Position (mm)

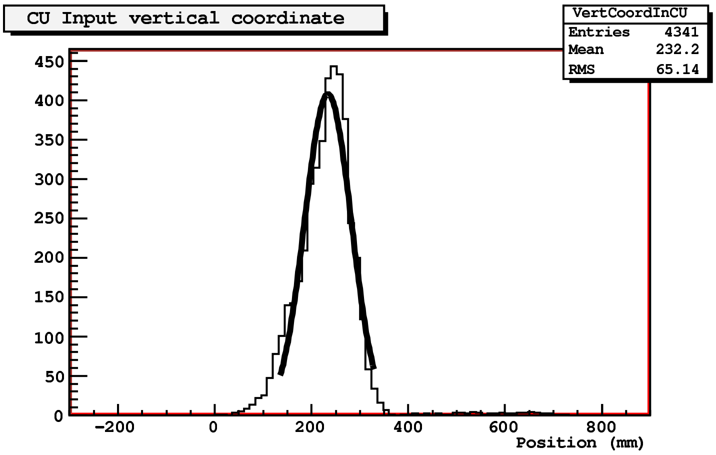

Input horizontal angle
HorAngleIn
Entries 4102
Mean 0.00834
RMS 0.009059
200
180
160
140
120
100
80
60
40
20
0
-0.04
-0.03
-0.02
-0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

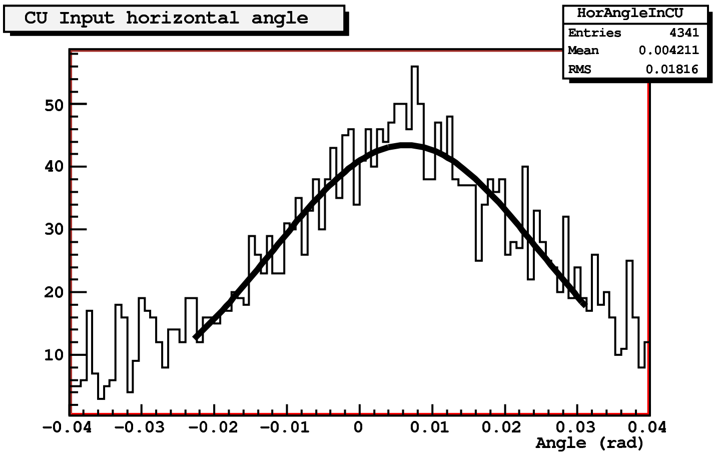

Input vertical angle
VertAngleIn
Entries 4102
Mean -0.0001549
RMS 0.004482
300
250
200
150
100
50
0
-0.04
-0.03
-0.02
-0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

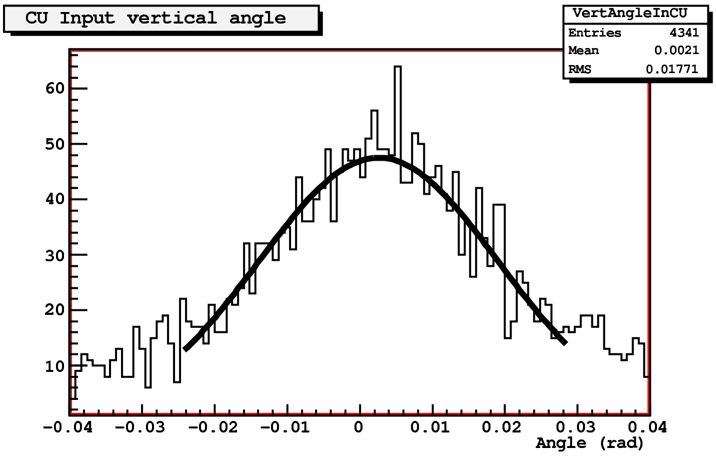

Input Beam Spot
SpotCoordIn
Entries 4102
Mean x 5.061
Mean y -9.919
RMS x 9.193
RMS y 8.957
Vertical Position (mm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
-50
-40
-30
-20
-10
0
10
20
30
40
50
Horizontal Position (mm)
20
15
10
5
0

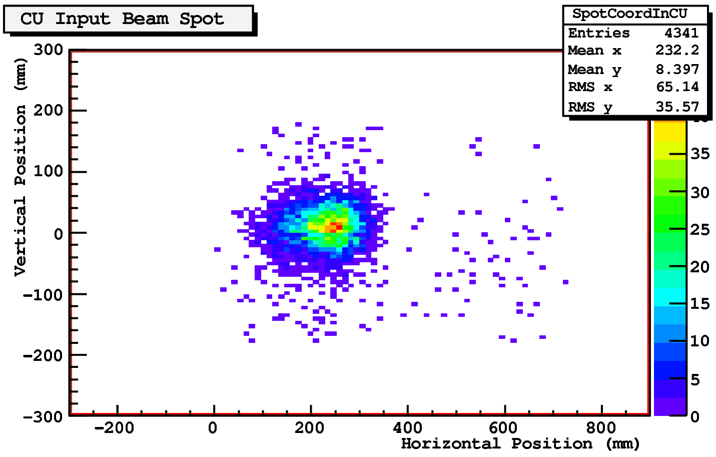

Input Beam Spot
SpotAngleIn
Entries 4102
Mean x 0.00834
Mean y -0.0001575
RMS x 0.009059
RMS y 0.004481
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.04
-0.03
-0.02
-0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
14
12
10
8
6
4
2
0

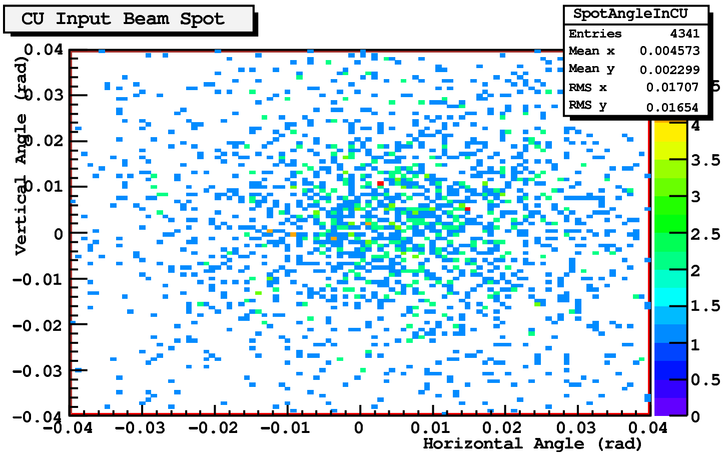

CU Input Horizontal coordinate
HorCoordInCU
Entries 4341
Mean 8.397
RMS 35.57
700001311
0
50
100
150
200
250
300
350
400
−300
−200
−100
0
100
200
300
Position (mm)

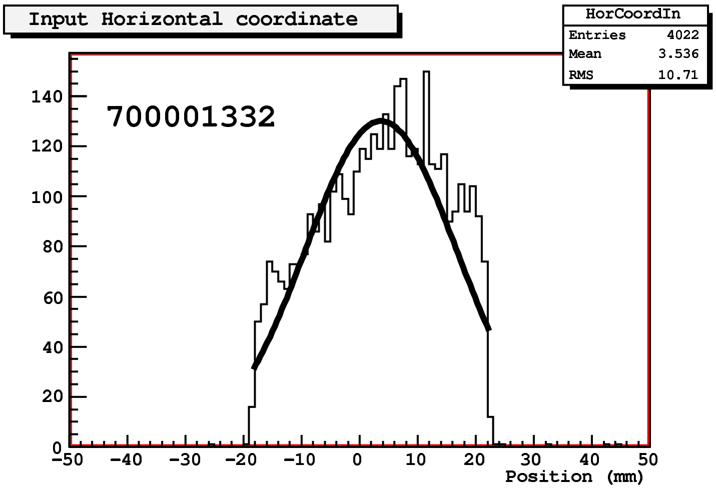

CU Input vertical coordinate
VertCoordInCU
Entries 4341
Mean 232.2
RMS 65.14
0
50
100
150
200
250
300
350
400
450
−200
0
200
400
600
800
Position (mm)

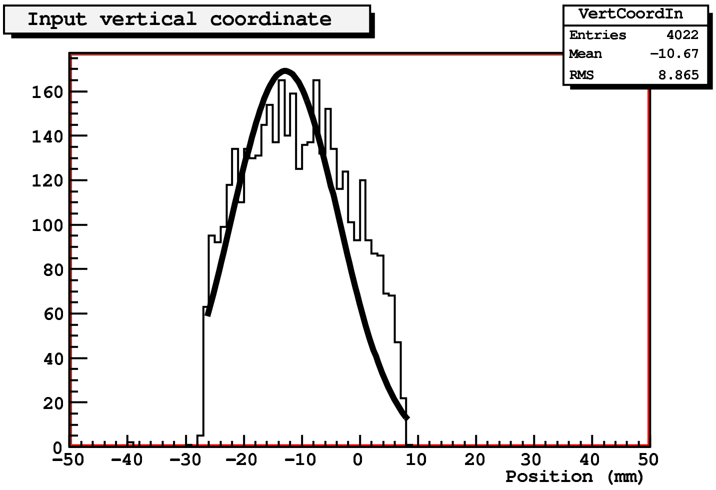

CU Input horizontal angle
HorAngleInCU
Entries 4341
Mean 0.004211
RMS 0.01816
10
20
30
40
50
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

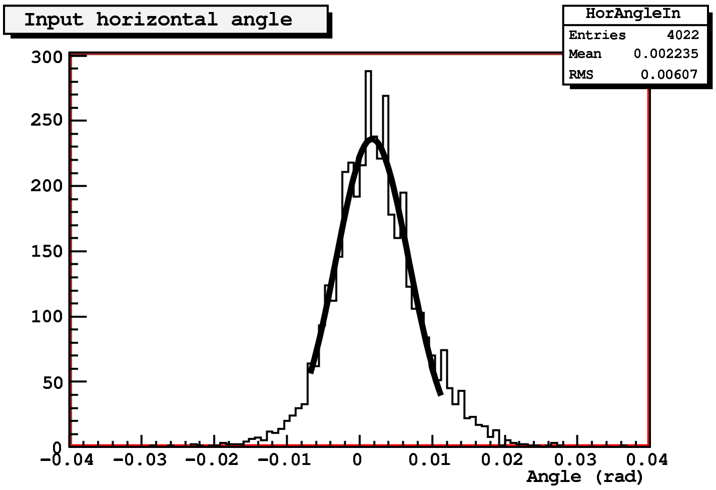

CU Input vertical angle
VertAngleInCU
Entries 4341
Mean 0.0021
RMS 0.01771
10
20
30
40
50
60
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

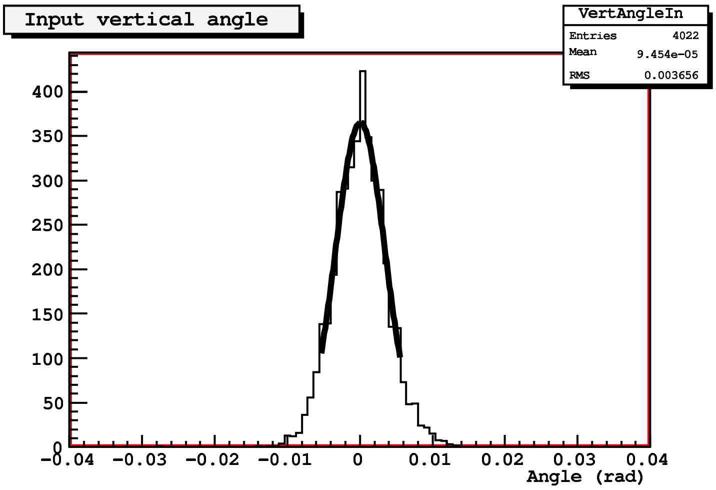

CU Input Beam Spot
SpotCoordInCU
Entries 4341
Mean x 232.2
Mean y 8.397
RMS x 65.14
RMS y 35.57
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
35
30
25
20
15
10
5
0

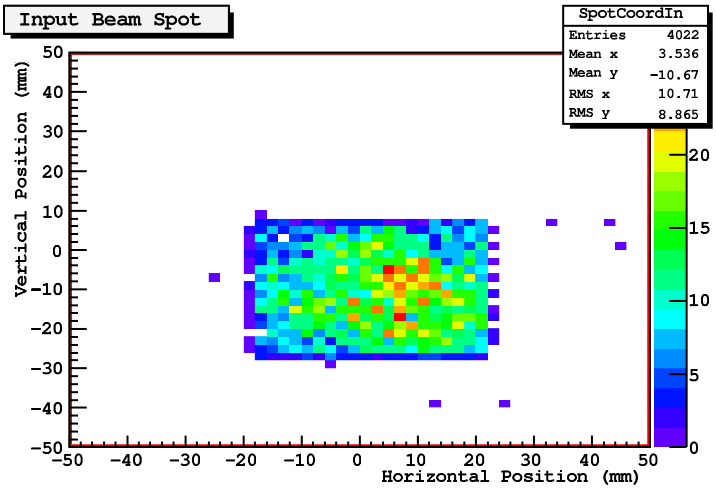

CU Input Beam Spot
SpotAngleInCU
Entries 4341
Mean x 0.004573
Mean y 0.002299
RMS x 0.01707
RMS y 0.01654
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
4
3.5
3
2.5
2
1.5
1
0.5
0

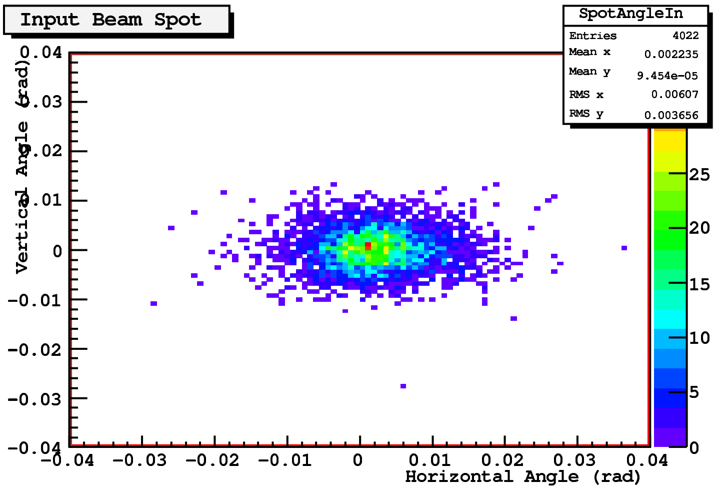

Input Horizontal coordinate
HorCoordIn
Entries 4022
Mean 3.536
RMS 10.71
700001332
Position (mm)

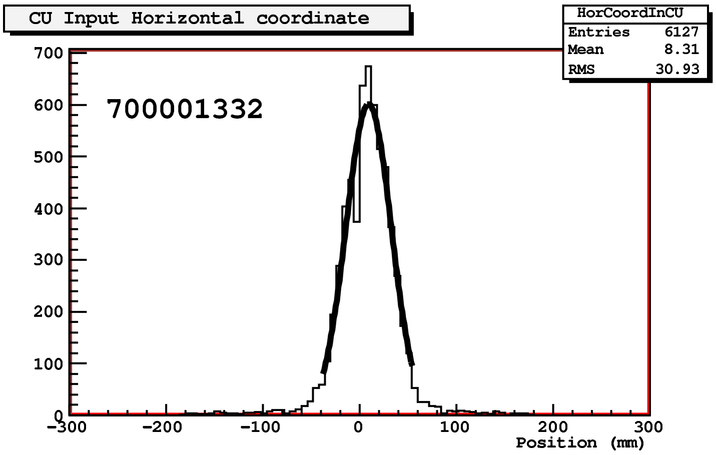

Input vertical coordinate
VertCoordIn
Entries 4022
Mean −10.67
RMS 8.865
Position (mm)

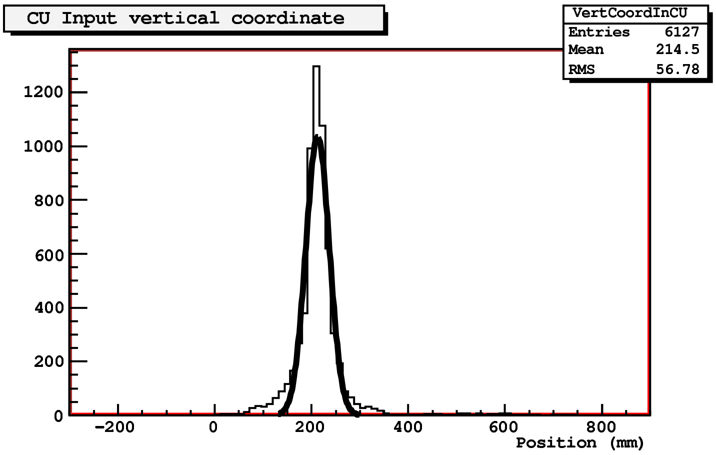

Input horizontal angle
HorAngleIn
Entries 4022
Mean 0.002235
RMS 0.00607
Angle (rad)

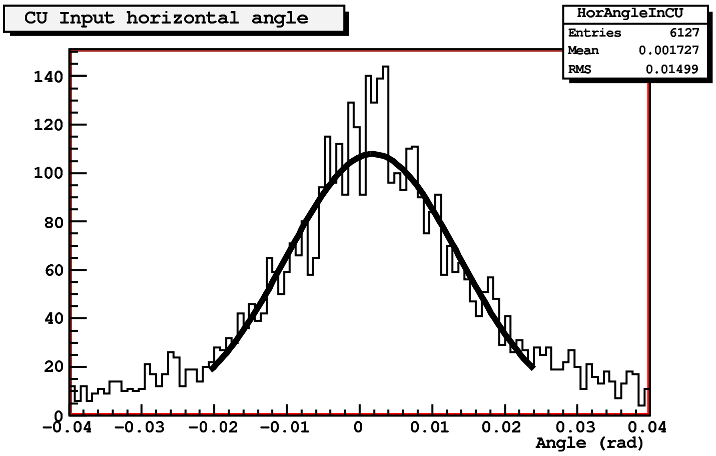

Input vertical angle
VertAngleIn
Entries 4022
Mean 9.454e-05
RMS 0.003656
Angle (rad)

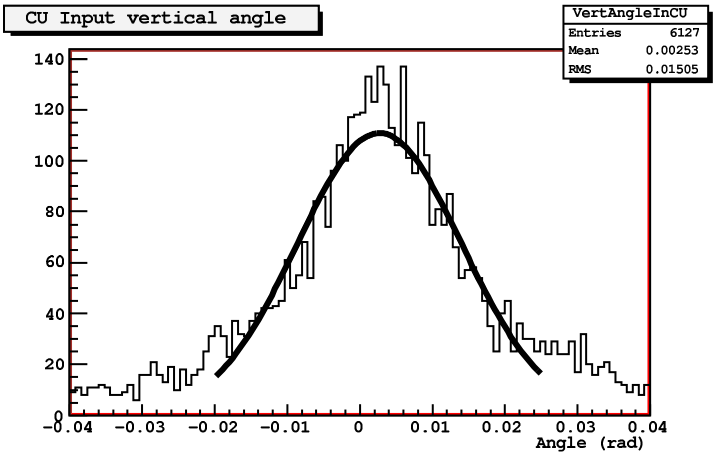

Input Beam Spot
SpotCoordIn
Entries 4022
Mean x 3.536
Mean y −10.67
RMS x 10.71
RMS y 8.865
Vertical Position (mm)
Horizontal Position (mm)

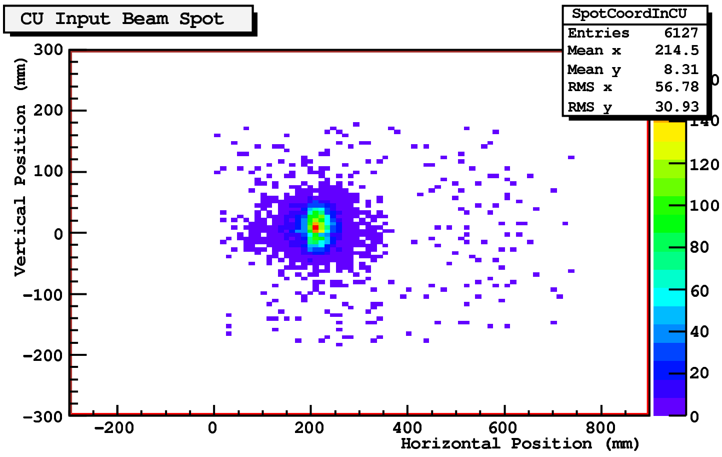

Input Beam Spot
SpotAngleIn
Entries 4022
Mean x 0.002235
Mean y 9.454e-05
RMS x 0.00607
RMS y 0.003656
Vertical Angle (rad)
Horizontal Angle (rad)

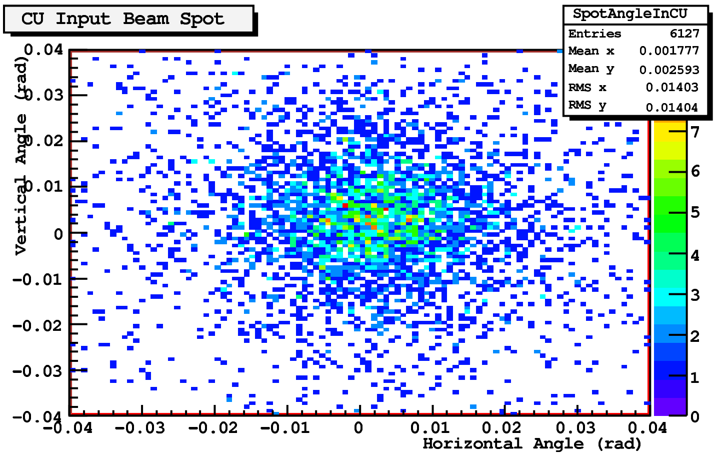

CU Input Horizontal coordinate
HorCoordInCU
Entries 6127
Mean 8.31
RMS 30.93
700001332
0
100
200
300
400
500
600
700
−300
−200
−100
0
100
200
300
Position (mm)

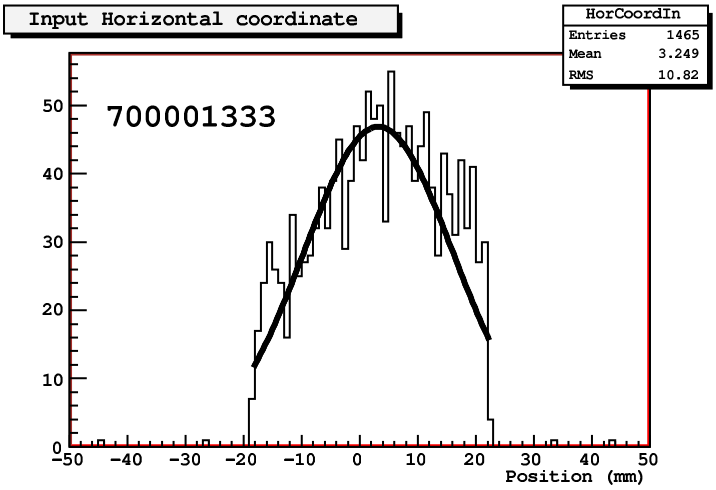

CU Input vertical coordinate
VertCoordInCU
Entries 6127
Mean 214.5
RMS 56.78
0
200
400
600
800
1000
1200
−200
0
200
400
600
800
Position (mm)

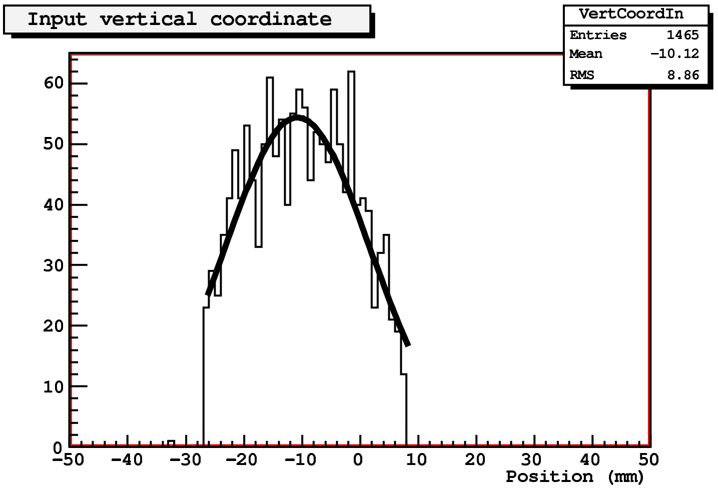

CU Input horizontal angle
HorAngleInCU
Entries 6127
Mean 0.001727
RMS 0.01499
0
20
40
60
80
100
120
140
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

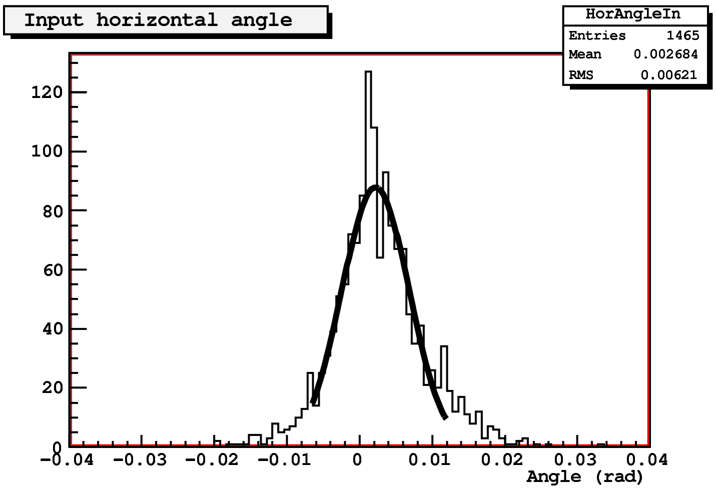

CU Input vertical angle
VertAngleInCU
Entries 6127
Mean 0.00253
RMS 0.01505
0
20
40
60
80
100
120
140
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

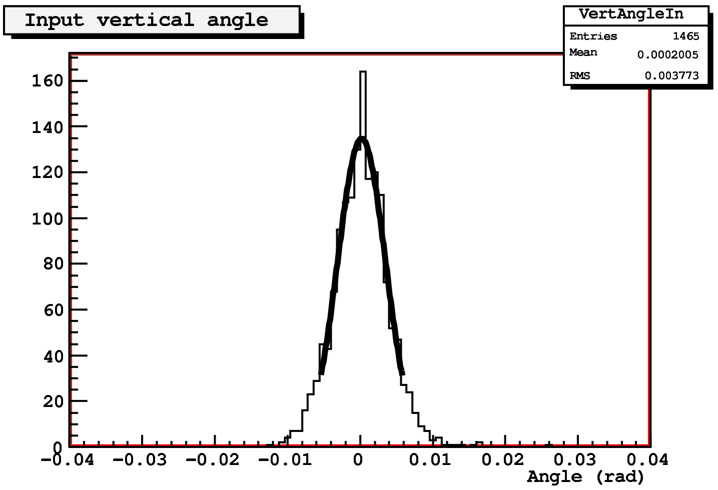

CU Input Beam Spot
SpotCoordInCU
Entries 6127
Mean x 214.5
Mean y 8.31
RMS x 56.78
RMS y 30.93
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
140
120
100
80
60
40
20
0

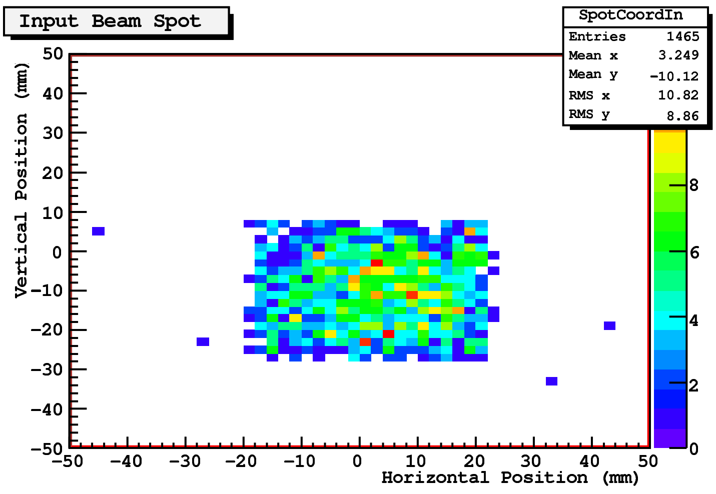

CU Input Beam Spot
SpotAngleInCU
Entries 6127
Mean x 0.001777
Mean y 0.002593
RMS x 0.01403
RMS y 0.01404
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
7
6
5
4
3
2
1
0

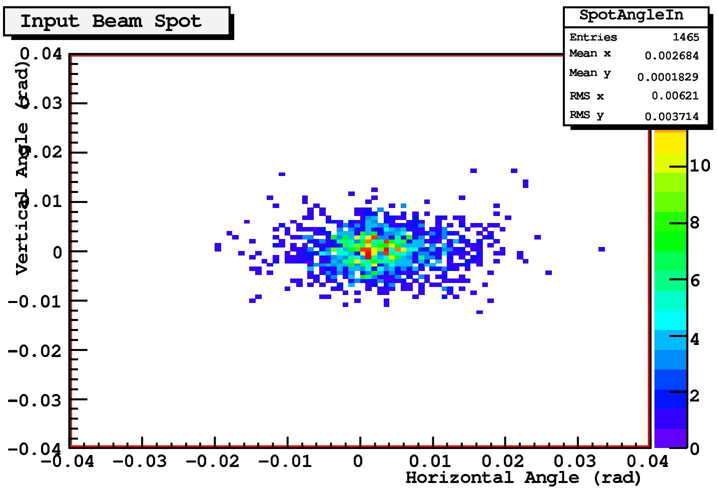

Input Horizontal coordinate
HorCoordIn
Entries 1465
Mean 3.249
RMS 10.82
700001333
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

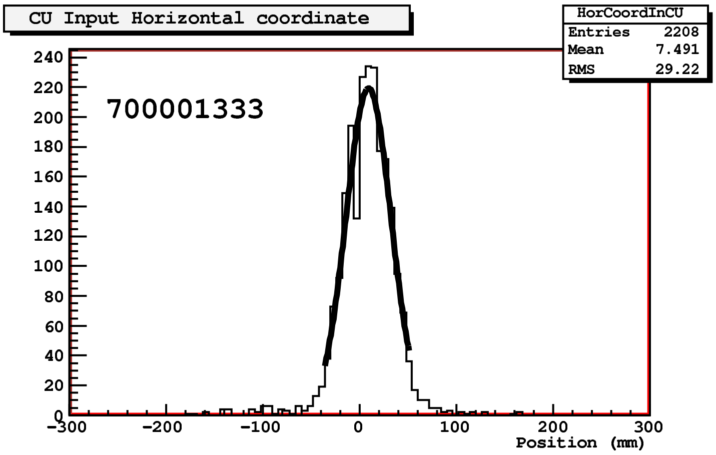

Input vertical coordinate
VertCoordIn
Entries 1465
Mean −10.12
RMS 8.86
0
10
20
30
40
50
60
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

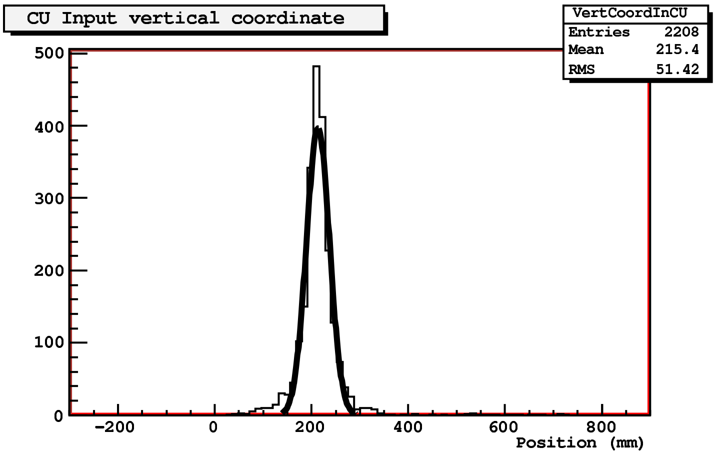

Input horizontal angle
HorAngleIn
Entries 1465
Mean 0.002684
RMS 0.00621
0
20
40
60
80
100
120
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

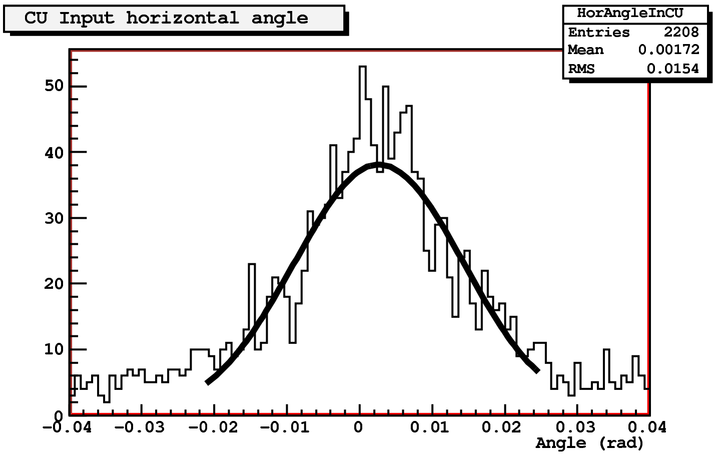

Input vertical angle
VertAngleIn
Entries 1465
Mean 0.0002005
RMS 0.003773
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

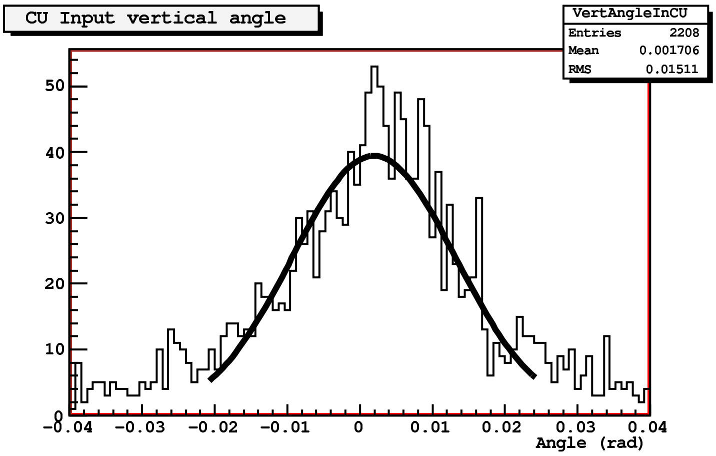

Input Beam Spot
SpotCoordIn
Entries 1465
Mean x 3.249
Mean y −10.12
RMS x 10.82
RMS y 8.86
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
2
4
6
8

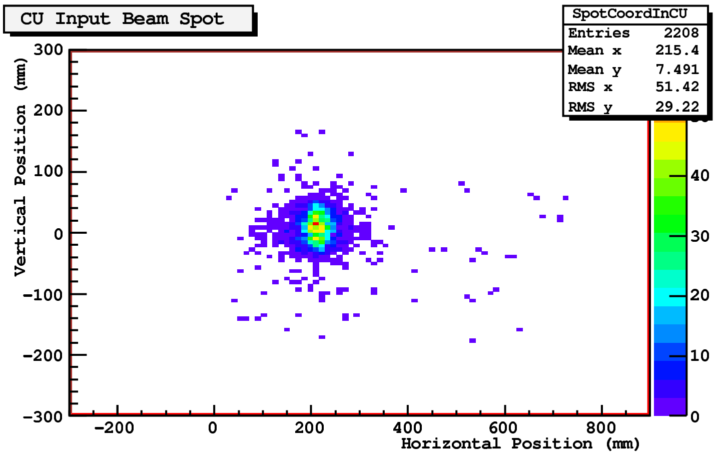

Input Beam Spot
SpotAngleIn
Entries 1465
Mean x 0.002684
Mean y 0.0001829
RMS x 0.00621
RMS y 0.003714
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

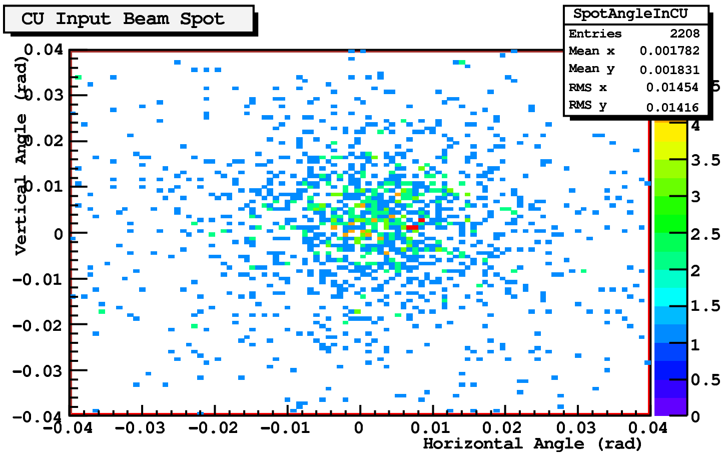

CU Input Horizontal coordinate
HorCoordInCU
Entries 2208
Mean 7.491
RMS 29.22
700001333
0
20
40
60
80
100
120
140
160
180
200
220
240
−300
−200
−100
0
100
200
300
Position (mm)

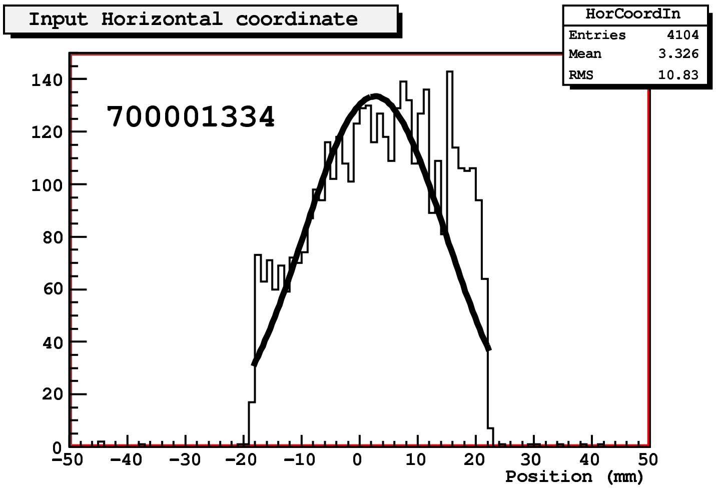

CU Input vertical coordinate
VertCoordInCU
Entries 2208
Mean 215.4
RMS 51.42
0
100
200
300
400
500
−200
0
200
400
600
800
Position (mm)

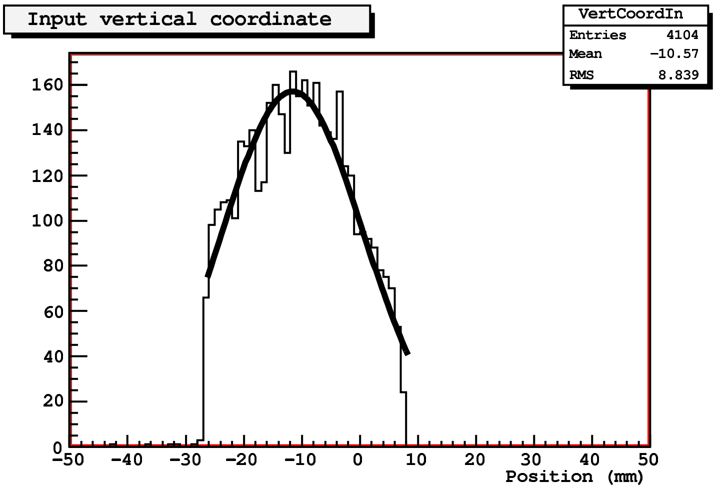

CU Input horizontal angle
HorAngleInCU
Entries 2208
Mean 0.00172
RMS 0.0154
0
10
20
30
40
50
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

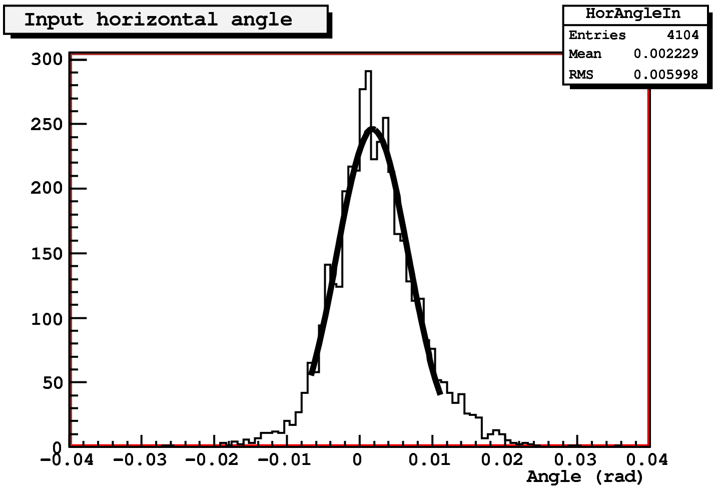

CU Input vertical angle
VertAngleInCU
Entries 2208
Mean 0.001706
RMS 0.01511
0
10
20
30
40
50
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

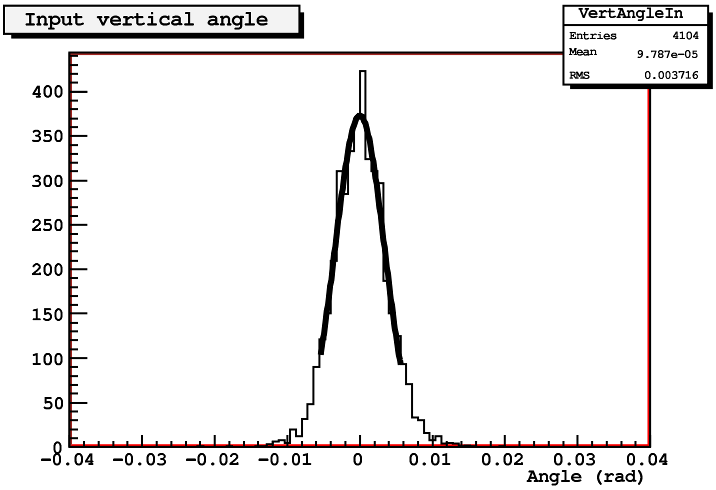

CU Input Beam Spot
SpotCoordInCU
Entries 2208
Mean x 215.4
Mean y 7.491
RMS x 51.42
RMS y 29.22
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
10
20
30
40

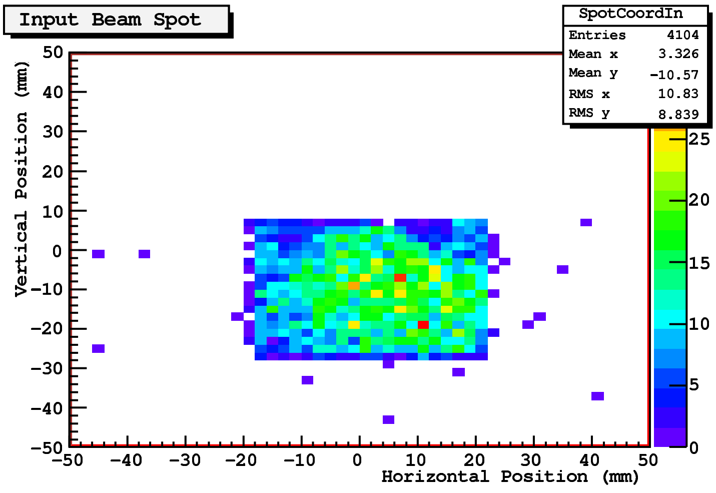

CU Input Beam Spot
SpotAngleInCU
Entries 2208
Mean x 0.001782
Mean y 0.001831
RMS x 0.01454
RMS y 0.01416
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
2.5
3
3.5
4

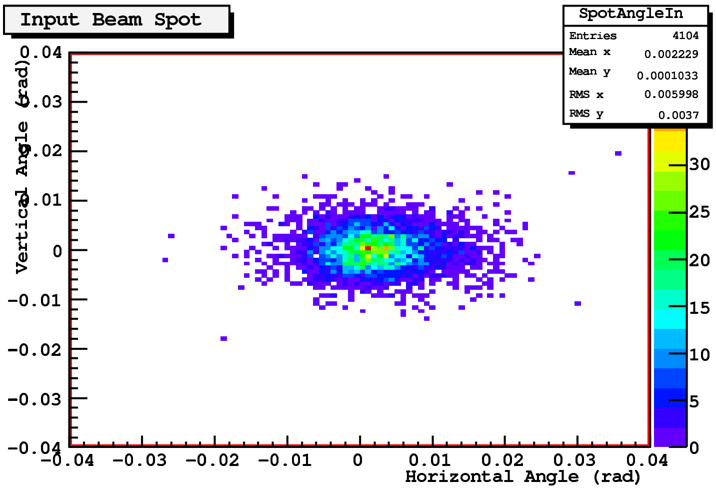

Input Horizontal coordinate
HorCoordIn
Entries 4104
Mean 3.326
RMS 10.83
700001334
Position (mm)

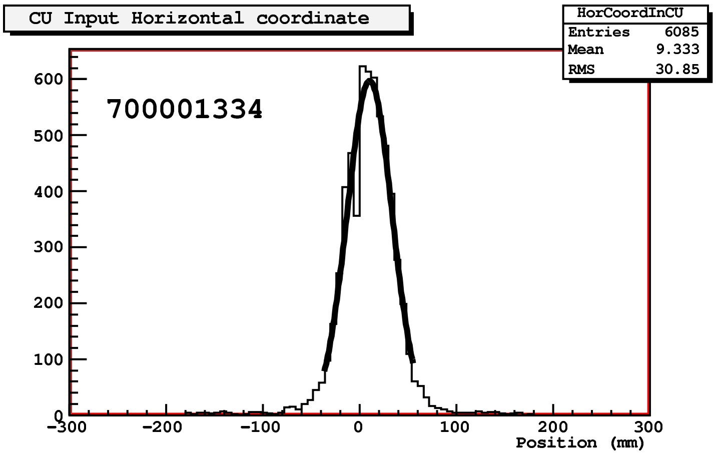

Input vertical coordinate
VertCoordIn
Entries 4104
Mean −10.57
RMS 8.839
Position (mm)

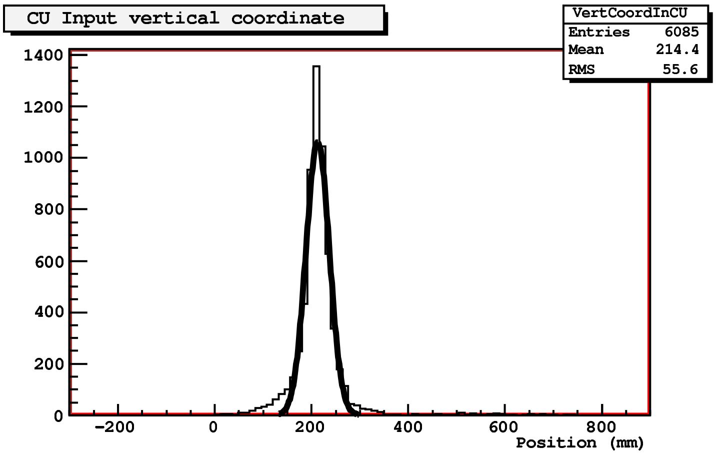

Input horizontal angle
HorAngleIn
Entries 4104
Mean 0.002229
RMS 0.005998
Angle (rad)

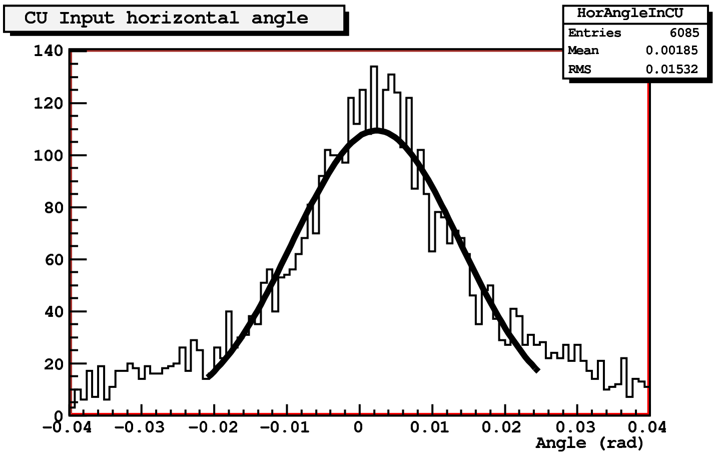

Input vertical angle
VertAngleIn
Entries 4104
Mean 9.787e−05
RMS 0.003716
Angle (rad)

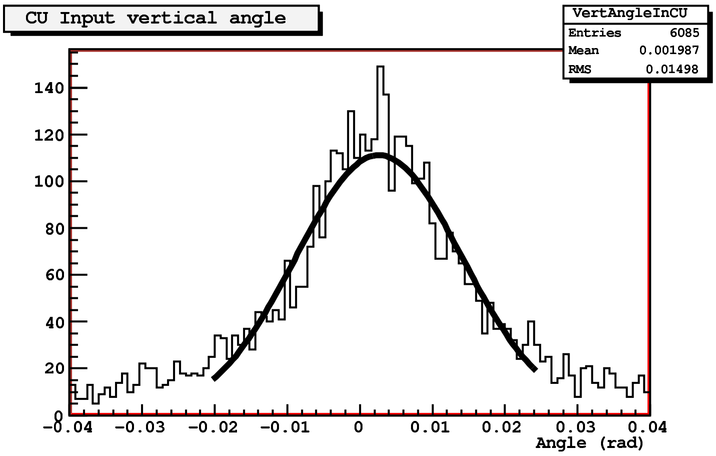

Input Beam Spot
SpotCoordIn
Entries 4104
Mean x 3.326
Mean y −10.57
RMS x 10.83
RMS y 8.839
Vertical Position (mm)
Horizontal Position (mm)

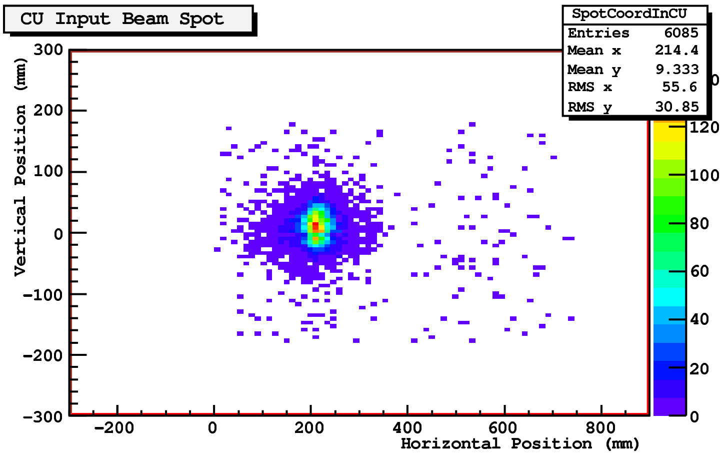

Input Beam Spot
SpotAngleIn
Entries 4104
Mean x 0.002229
Mean y 0.0001033
RMS x 0.005998
RMS y 0.0037
Vertical Angle (rad)
Horizontal Angle (rad)

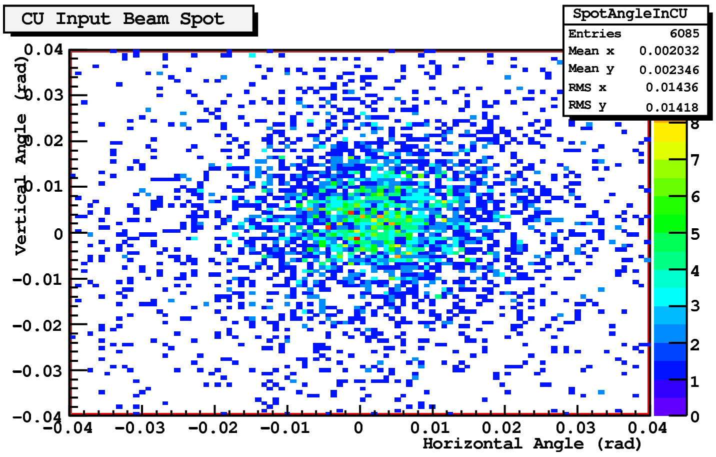

CU Input Horizontal coordinate
HorCoordInCU
Entries 6085
Mean 9.333
RMS 30.85
700001334
600
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

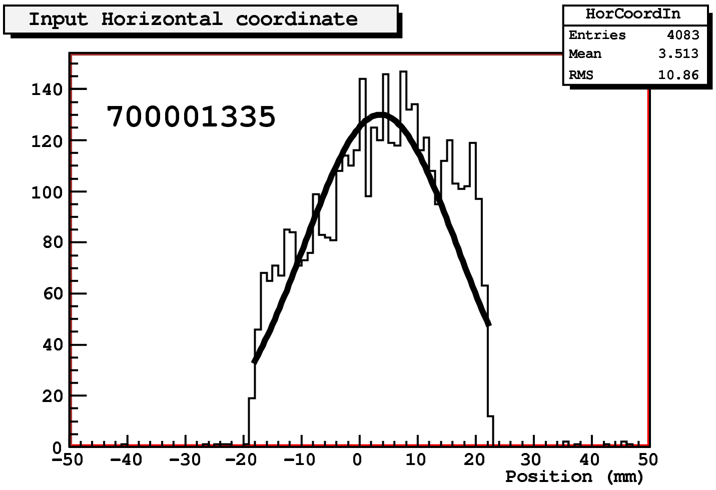

CU Input vertical coordinate
VertCoordInCU
Entries 6085
Mean 214.4
RMS 55.6
1400
1200
1000
800
600
400
200
0
−200
0
200
400
600
800
Position (mm)

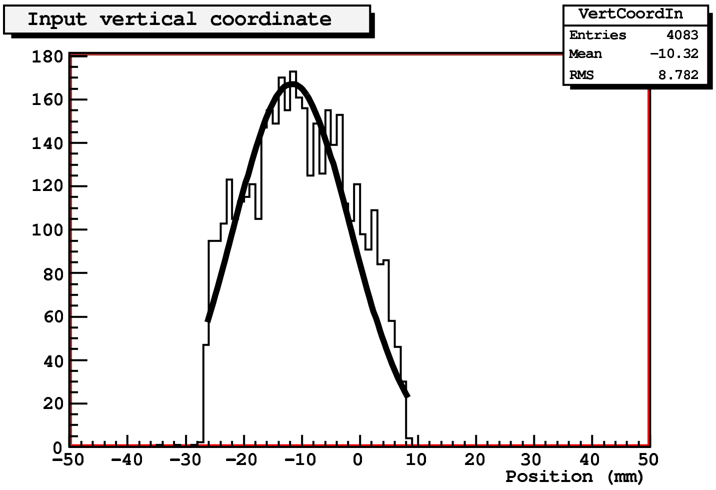

CU Input horizontal angle
HorAngleInCU
Entries 6085
Mean 0.00185
RMS 0.01532
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

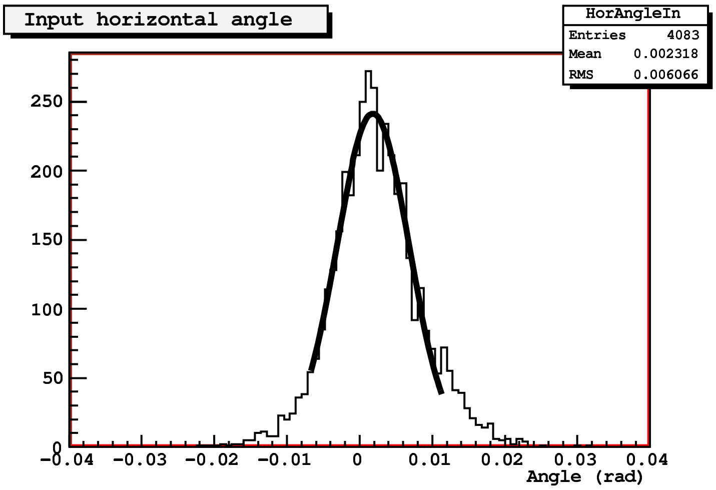

CU Input vertical angle
VertAngleInCU
Entries 6085
Mean 0.001987
RMS 0.01498
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

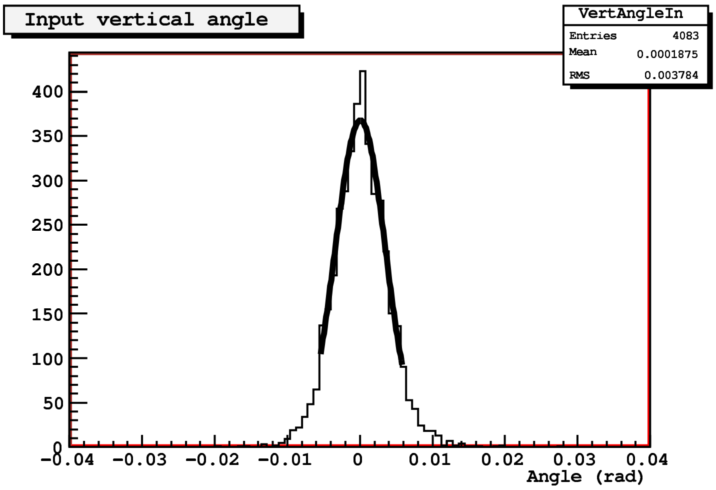

CU Input Beam Spot
SpotCoordInCU
Entries 6085
Mean x 214.4
Mean y 9.333
RMS x 55.6
RMS y 30.85
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
120
100
80
60
40
20
0

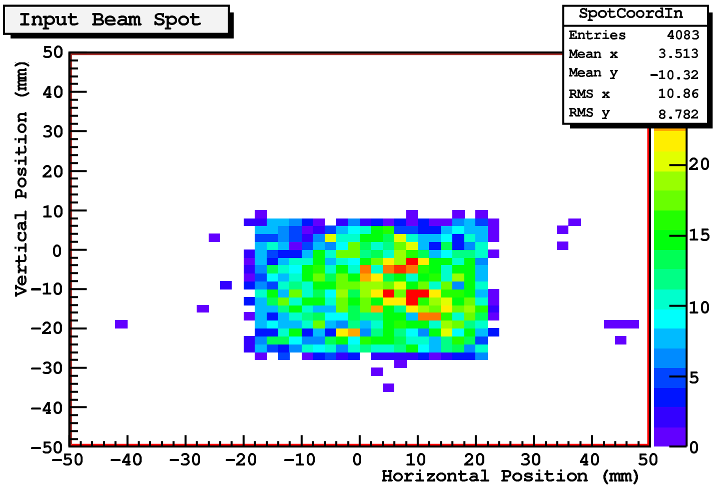

CU Input Beam Spot
SpotAngleInCU
Entries 6085
Mean x 0.002032
Mean y 0.002346
RMS x 0.01436
RMS y 0.01418
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
8
7
6
5
4
3
2
1
0

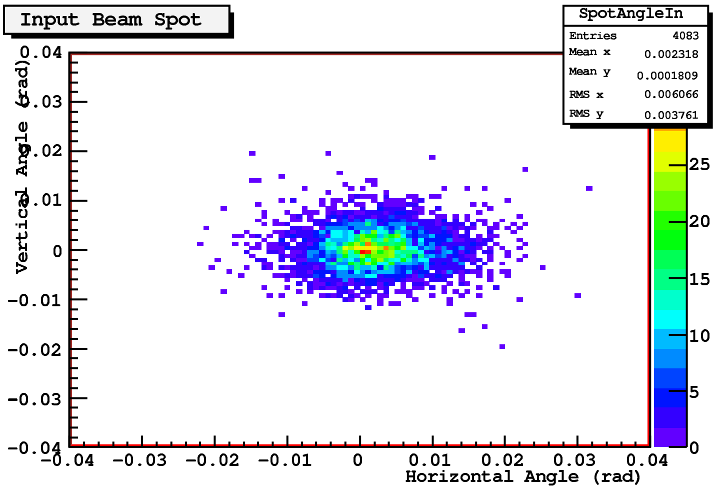

Input Horizontal coordinate
HorCoordIn
Entries 4083
Mean 3.513
RMS 10.86
700001335
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

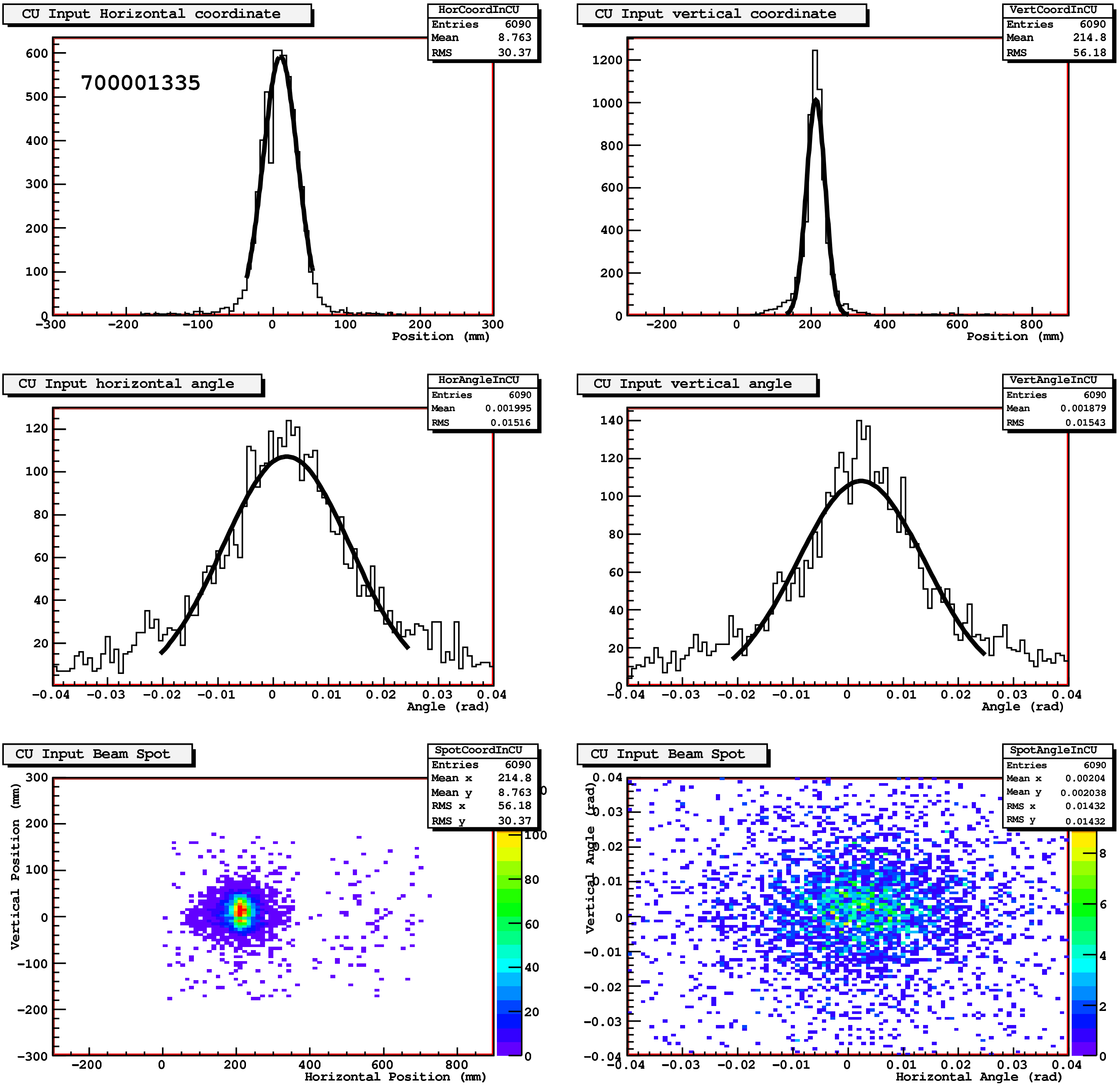

Input vertical coordinate
VertCoordIn
Entries 4083
Mean −10.32
RMS 8.782
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

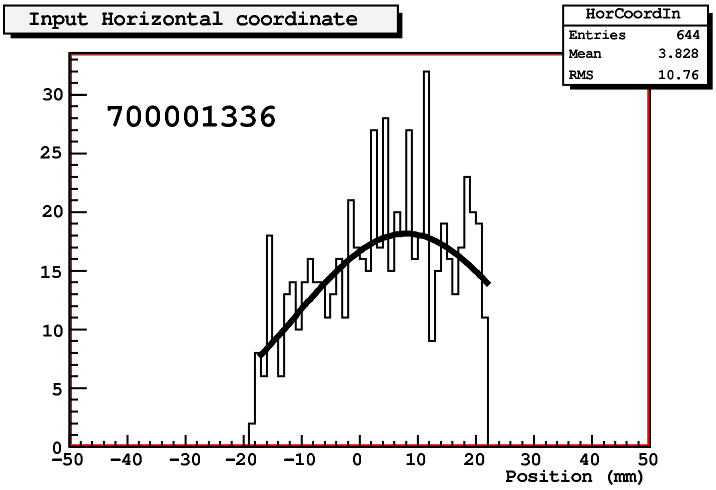

Input horizontal angle
HorAngleIn
Entries 4083
Mean 0.002318
RMS 0.006066
0
50
100
150
200
250
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

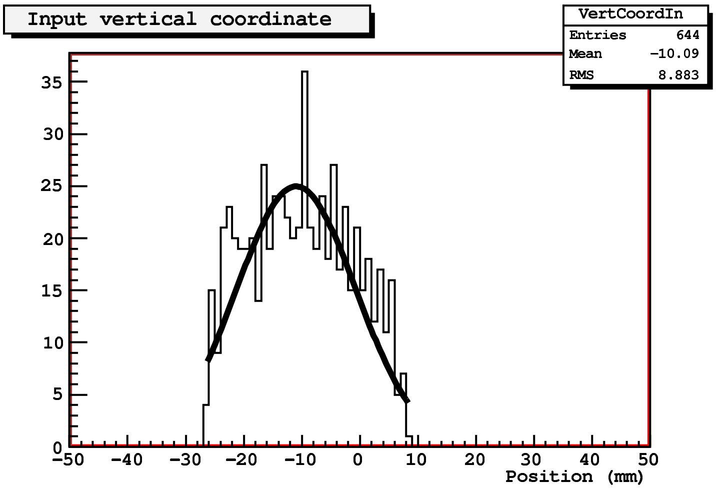

Input vertical angle
VertAngleIn
Entries 4083
Mean 0.0001875
RMS 0.003784
0
50
100
150
200
250
300
350
400
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

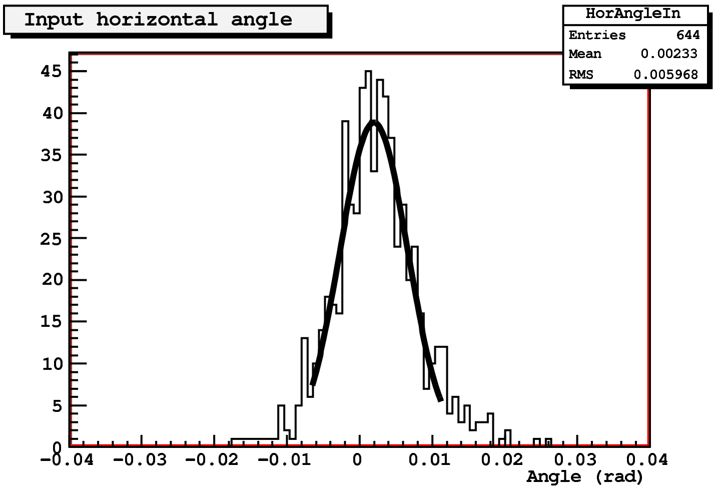

Input Beam Spot
SpotCoordIn
Entries 4083
Mean x 3.513
Mean y −10.32
RMS x 10.86
RMS y 8.782
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

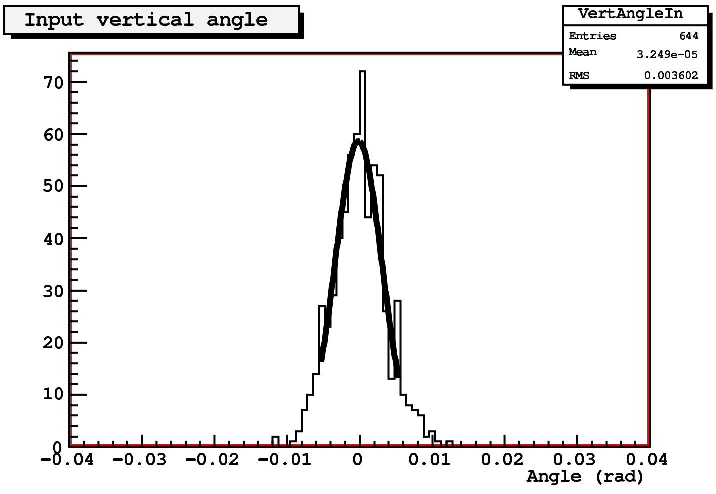

Input Beam Spot
SpotAngleIn
Entries 4083
Mean x 0.002318
Mean y 0.0001809
RMS x 0.006066
RMS y 0.003761
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
5
10
15
20
25

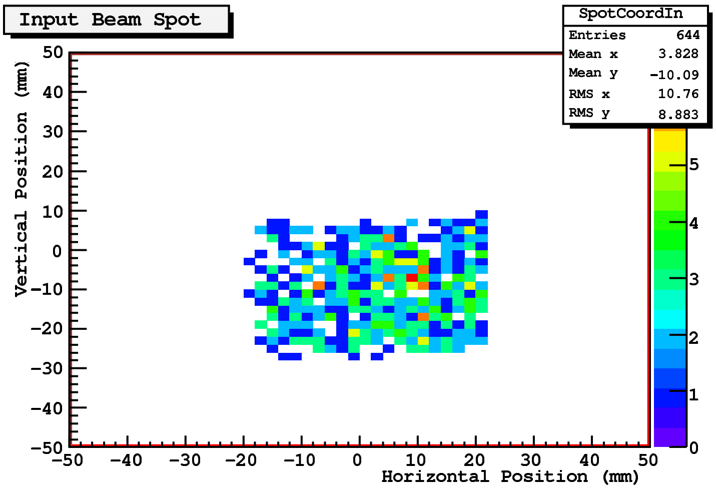

CU Input Horizontal coordinate
HorCoordInCU
Entries 6090
Mean 8.763
RMS 30.37
700001335
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 6090
Mean 214.8
RMS 56.18
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 6090
Mean 0.001995
RMS 0.01516
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 6090
Mean 0.001879
RMS 0.01543
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 6090
Mean x 214.8
Mean y 8.763
RMS x 56.18
RMS y 30.37
Vertical Position (mm)
Horizontal Position (mm)
CU Input Beam Spot
SpotAngleInCU
Entries 6090
Mean x 0.00204
Mean y 0.002038
RMS x 0.01432
RMS y 0.01432
Vertical Angle (rad)
Horizontal Angle (rad)

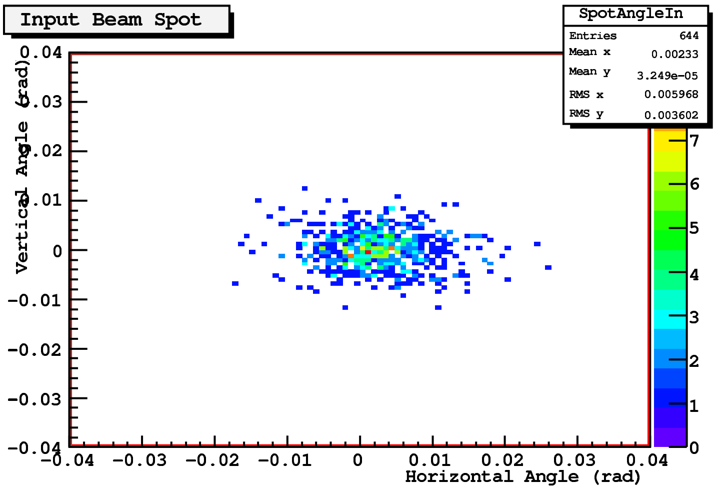

Input Horizontal coordinate
HorCoordIn
Entries 644
Mean 3.828
RMS 10.76
700001336
0
5
10
15
20
25
30
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

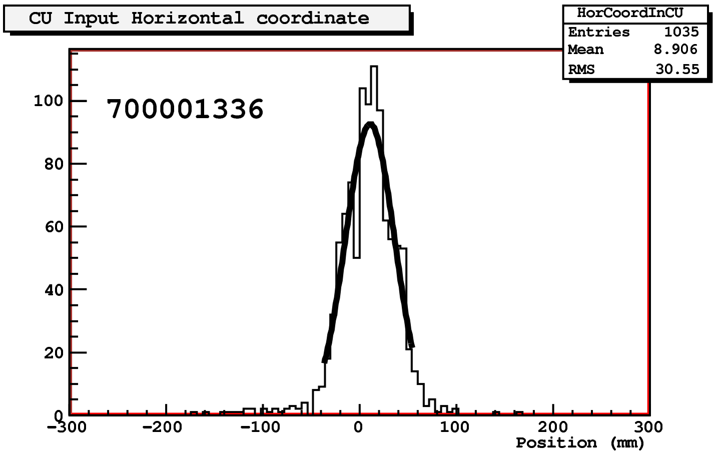

Input vertical coordinate
VertCoordIn
Entries 644
Mean −10.09
RMS 8.883
0
5
10
15
20
25
30
35
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

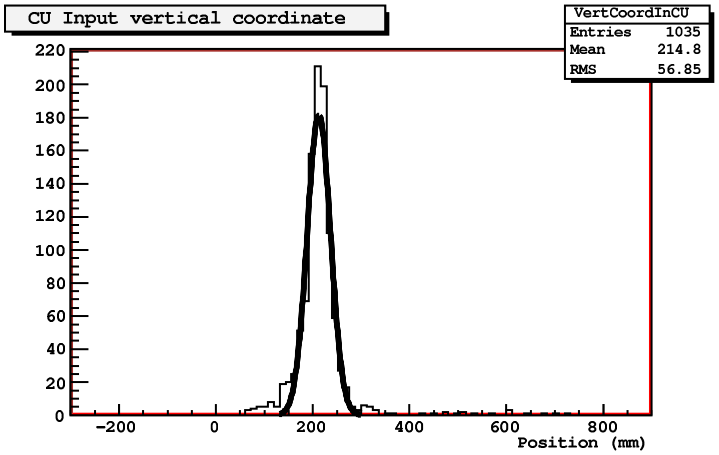

Input horizontal angle
HorAngleIn
Entries 644
Mean 0.00233
RMS 0.005968
0
5
10
15
20
25
30
35
40
45
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

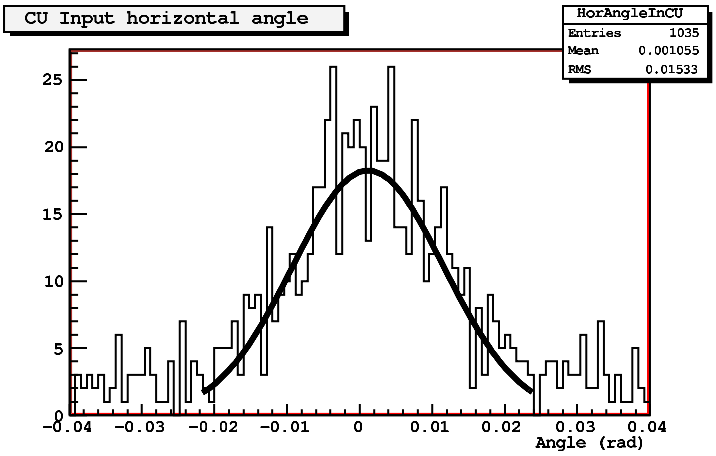

Input vertical angle
VertAngleIn
Entries 644
Mean 3.249e−05
RMS 0.003602
0
10
20
30
40
50
60
70
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

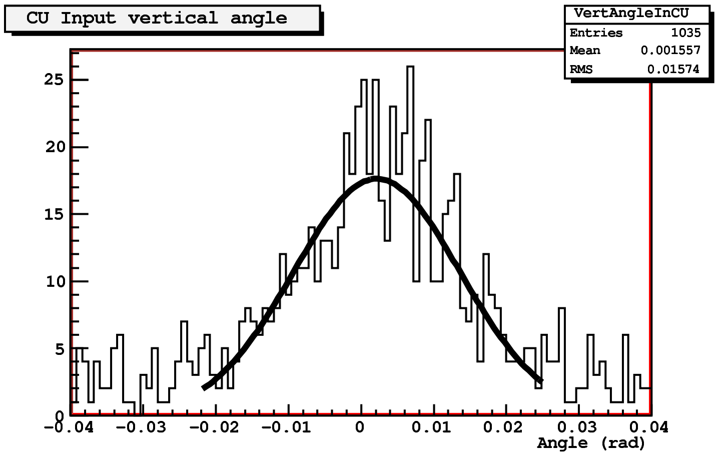

Input Beam Spot
SpotCoordIn
Entries 644
Mean x 3.828
Mean y −10.09
RMS x 10.76
RMS y 8.883
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
1
2
3
4
5

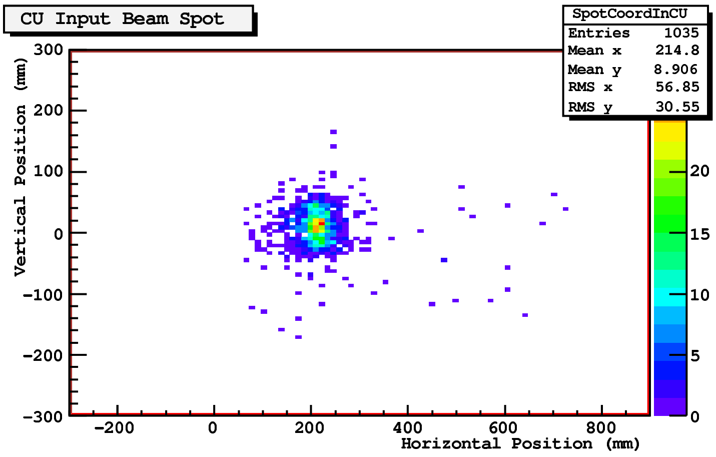

Input Beam Spot
SpotAngleIn
Entries 644
Mean x 0.00233
Mean y 3.249e−05
RMS x 0.005968
RMS y 0.003602
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
1
2
3
4
5
6
7

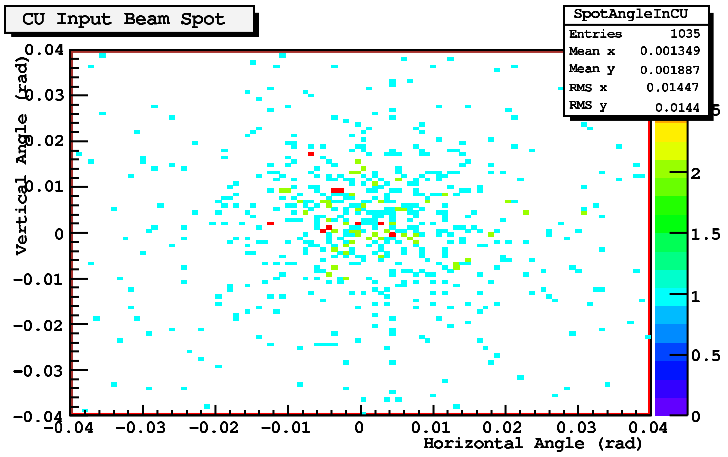

CU Input Horizontal coordinate
HorCoordInCU
Entries 1035
Mean 8.906
RMS 30.55
700001336
0
20
40
60
80
100
−300
−200
−100
0
100
200
300
Position (mm)

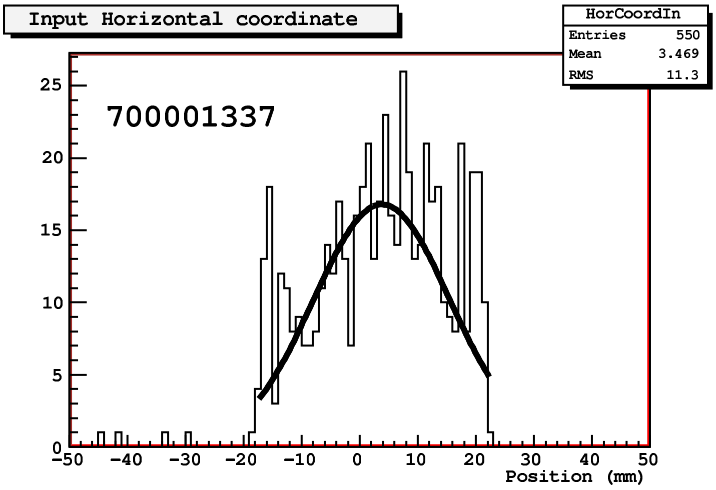

CU Input vertical coordinate
VertCoordInCU
Entries 1035
Mean 214.8
RMS 56.85
0
20
40
60
80
100
120
140
160
180
200
220
−200
0
200
400
600
800
Position (mm)

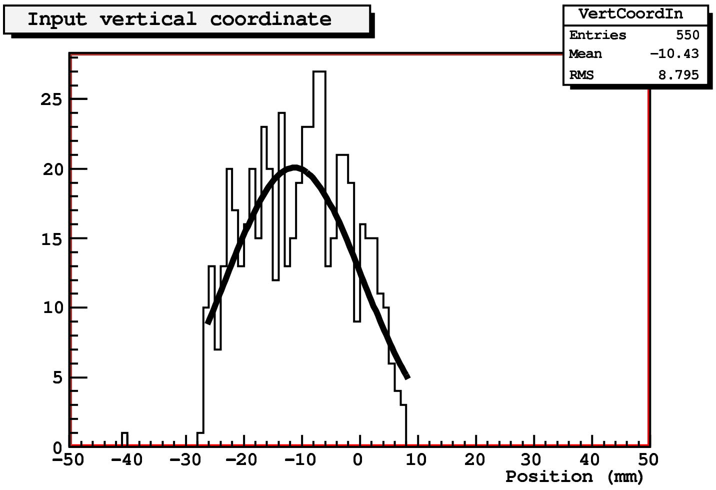

CU Input horizontal angle
HorAngleInCU
Entries 1035
Mean 0.001055
RMS 0.01533
0
5
10
15
20
25
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

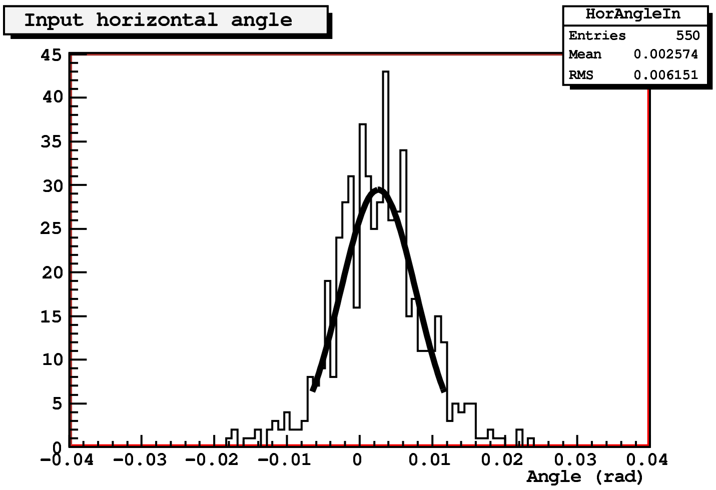

CU Input vertical angle
VertAngleInCU
Entries 1035
Mean 0.001557
RMS 0.01574
0
5
10
15
20
25
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

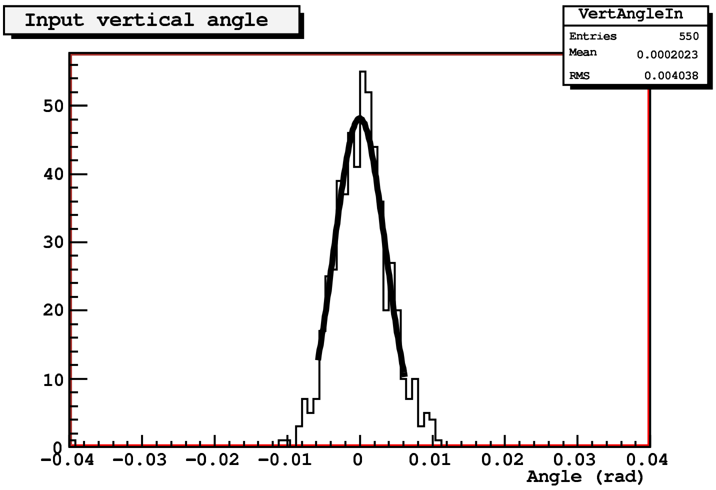

CU Input Beam Spot
SpotCoordInCU
Entries 1035
Mean x 214.8
Mean y 8.906
RMS x 56.85
RMS y 30.55
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
20
15
10
5
0

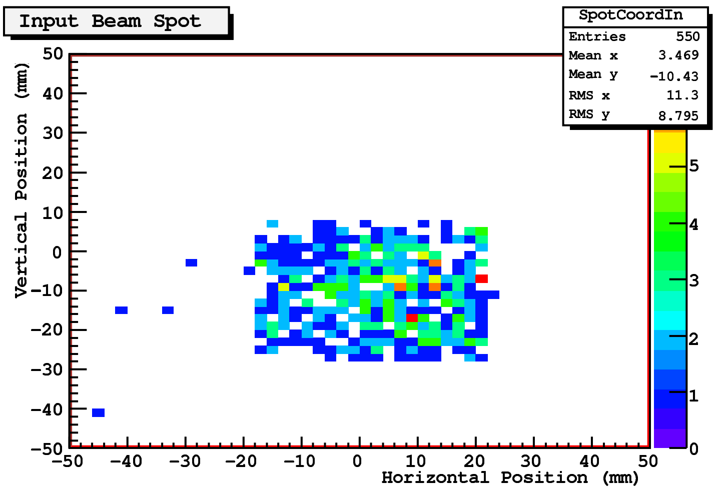

CU Input Beam Spot
SpotAngleInCU
Entries 1035
Mean x 0.001349
Mean y 0.001887
RMS x 0.01447
RMS y 0.0144
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0

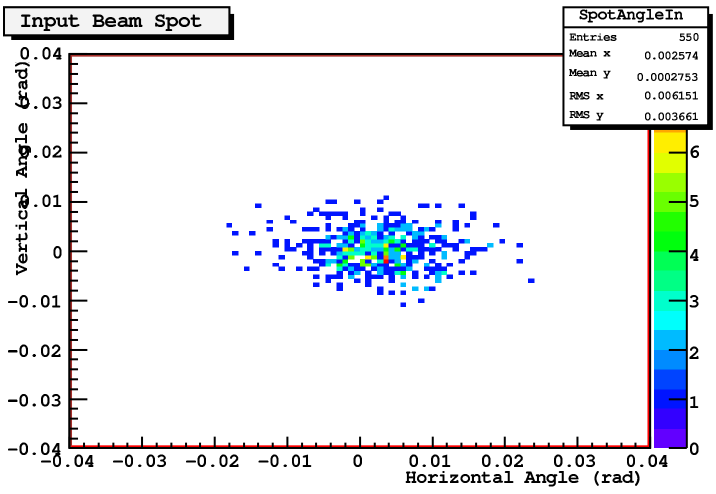

Input Horizontal coordinate
HorCoordIn
Entries 550
Mean 3.469
RMS 11.3
700001337
0
5
10
15
20
25
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

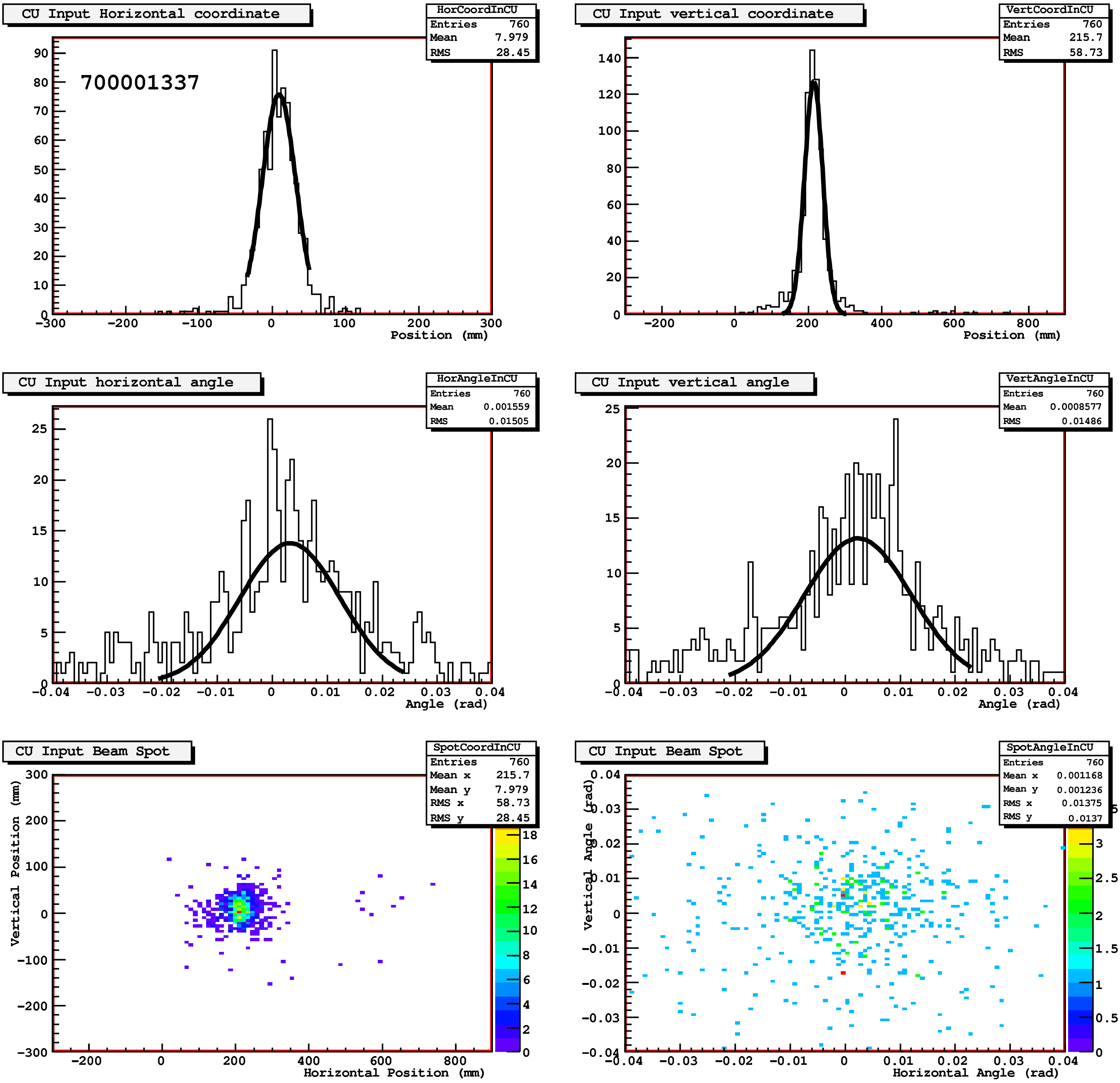

Input vertical coordinate
VertCoordIn
Entries 550
Mean −10.43
RMS 8.795
0
5
10
15
20
25
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

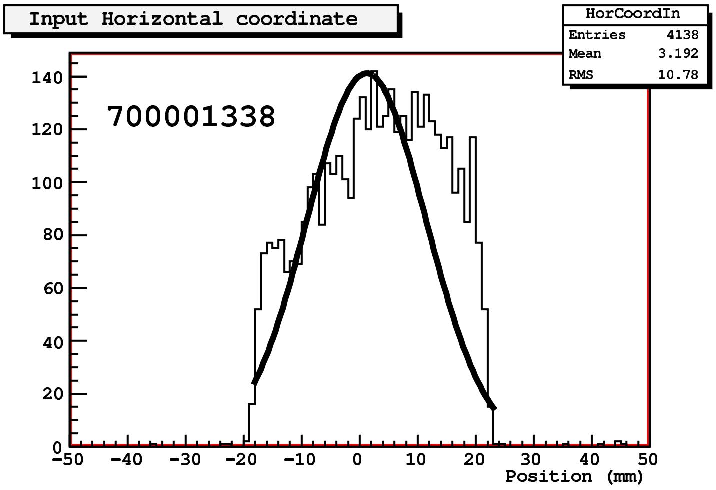

Input horizontal angle
HorAngleIn
Entries 550
Mean 0.002574
RMS 0.006151
0
5
10
15
20
25
30
35
40
45
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

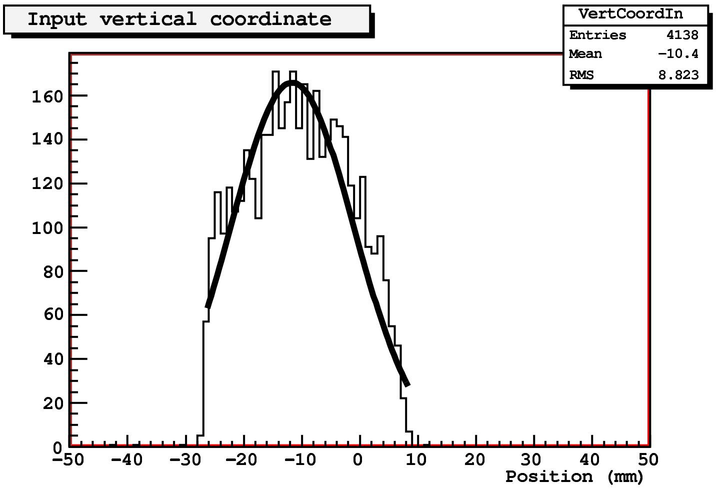

Input vertical angle
VertAngleIn
Entries 550
Mean 0.0002023
RMS 0.004038
0
10
20
30
40
50
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

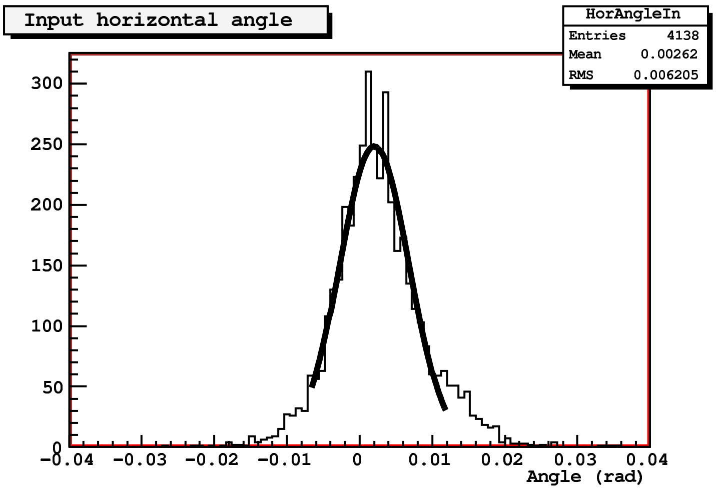

Input Beam Spot
SpotCoordIn
Entries 550
Mean x 3.469
Mean y −10.43
RMS x 11.3
RMS y 8.795
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
5
4
3
2
1
0

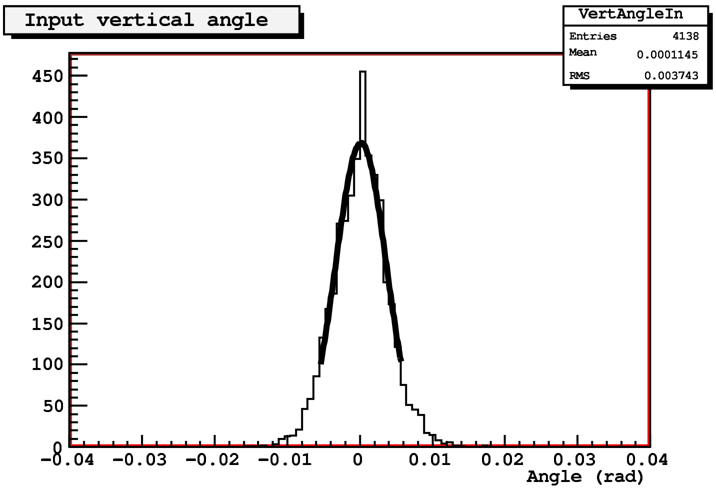

Input Beam Spot
SpotAngleIn
Entries 550
Mean x 0.002574
Mean y 0.0002753
RMS x 0.006151
RMS y 0.003661
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
6
5
4
3
2
1
0

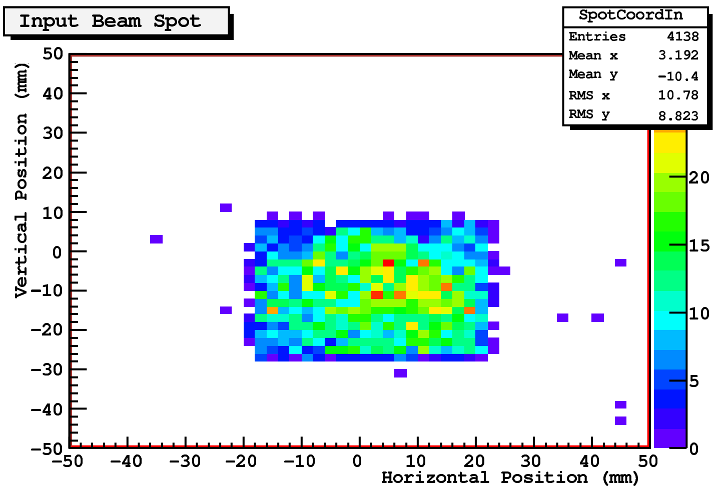

CU Input Horizontal coordinate
HorCoordInCU
Entries 760
Mean 7.979
RMS 28.45
700001337
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 760
Mean 215.7
RMS 58.73
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 760
Mean 0.001559
RMS 0.01505
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 760
Mean 0.0008577
RMS 0.01486
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 760
Mean x 215.7
Mean y 7.979
RMS x 58.73
RMS y 28.45
Vertical Position (mm)
Horizontal Position (mm)
CU Input Beam Spot
SpotAngleInCU
Entries 760
Mean x 0.001168
Mean y 0.001236
RMS x 0.01375
RMS y 0.0137
Vertical Angle (rad)
Horizontal Angle (rad)

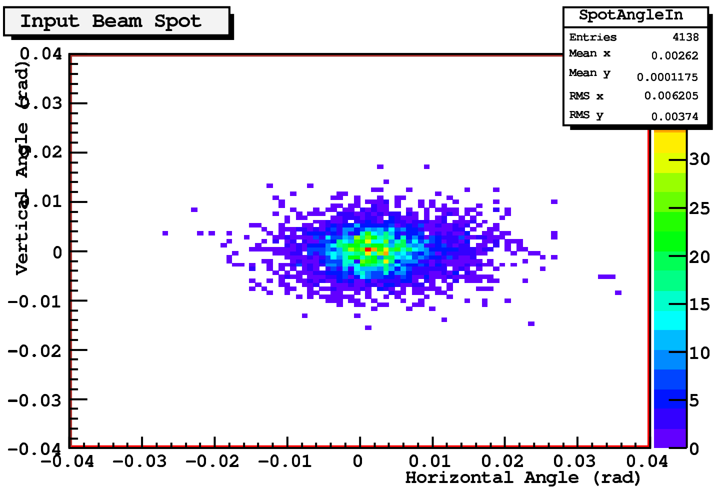

Input Horizontal coordinate
HorCoordIn
Entries 4138
Mean 3.192
RMS 10.78
700001338
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

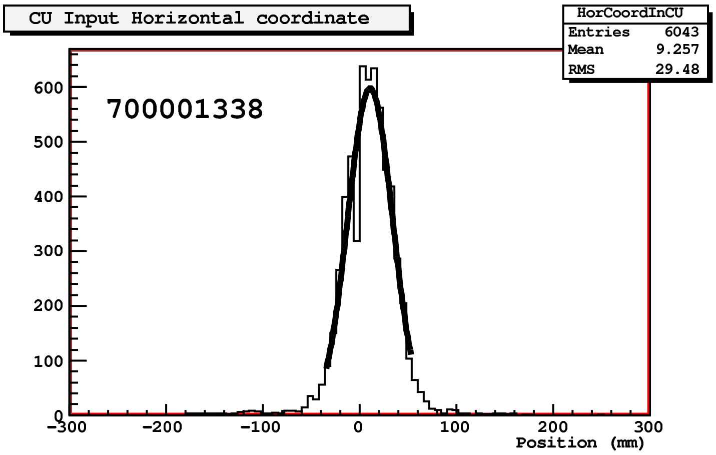

Input vertical coordinate
VertCoordIn
Entries 4138
Mean −10.4
RMS 8.823
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

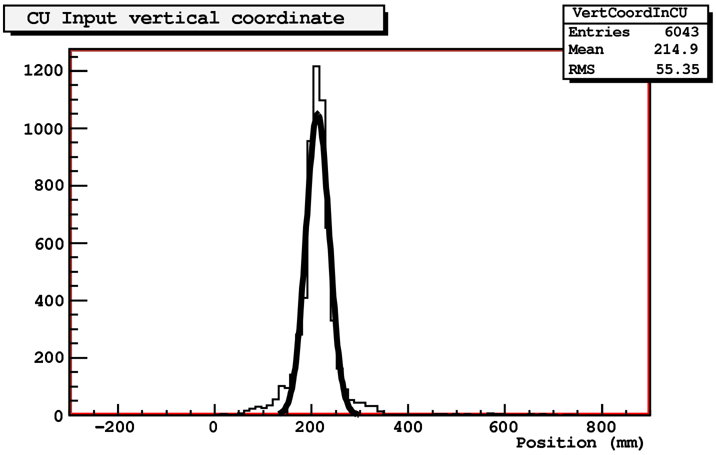

Input horizontal angle
HorAngleIn
Entries 4138
Mean 0.00262
RMS 0.006205
0
50
100
150
200
250
300
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

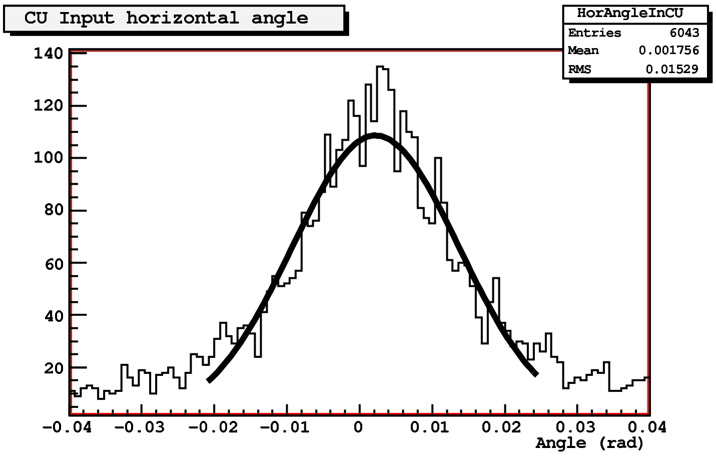

Input vertical angle
VertAngleIn
Entries 4138
Mean 0.0001145
RMS 0.003743
0
50
100
150
200
250
300
350
400
450
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

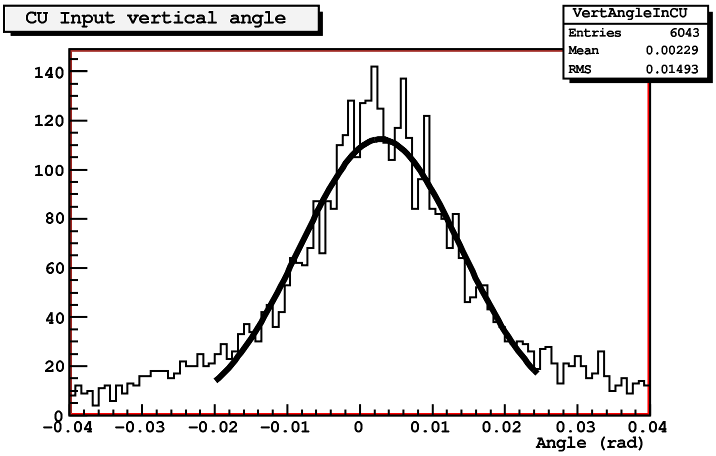

Input Beam Spot
SpotCoordIn
Entries 4138
Mean x 3.192
Mean y −10.4
RMS x 10.78
RMS y 8.823
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

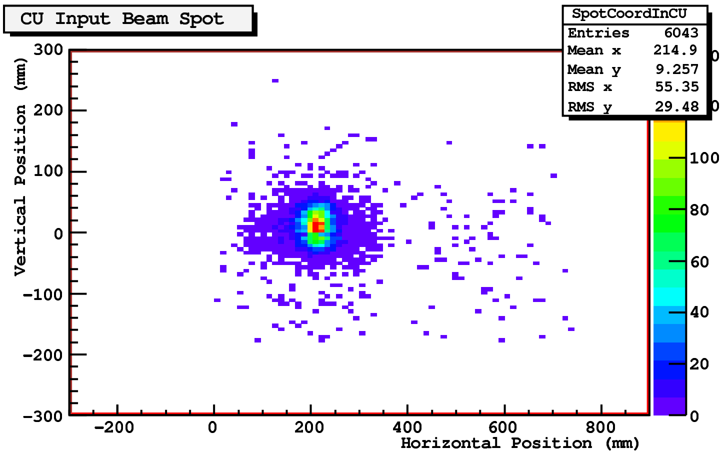

Input Beam Spot
SpotAngleIn
Entries 4138
Mean x 0.00262
Mean y 0.0001175
RMS x 0.006205
RMS y 0.00374
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
5
10
15
20
25
30

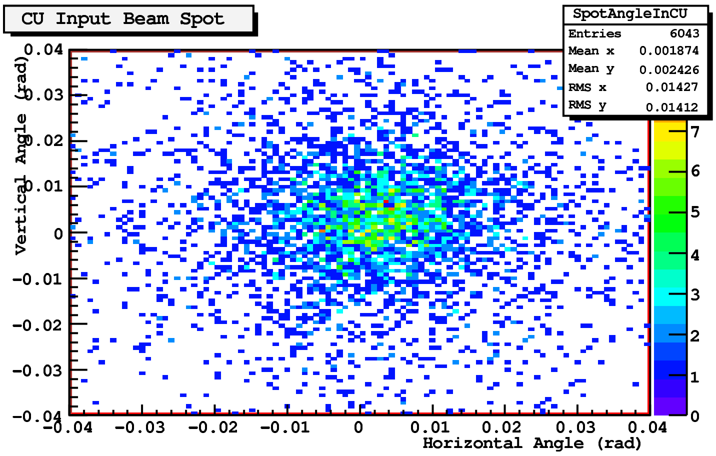

CU Input Horizontal coordinate
HorCoordInCU
Entries 6043
Mean 9.257
RMS 29.48
700001338
600
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

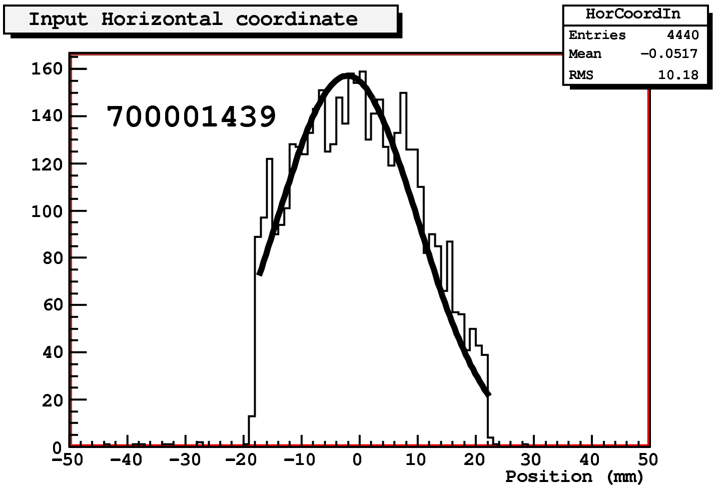

CU Input vertical coordinate
VertCoordInCU
Entries 6043
Mean 214.9
RMS 55.35
1200
1000
800
600
400
200
0
−200
0
200
400
600
800
Position (mm)

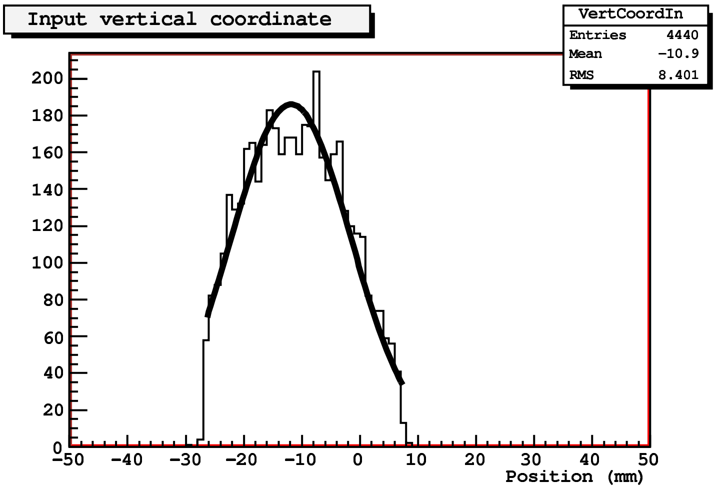

CU Input horizontal angle
HorAngleInCU
Entries 6043
Mean 0.001756
RMS 0.01529
140
120
100
80
60
40
20
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

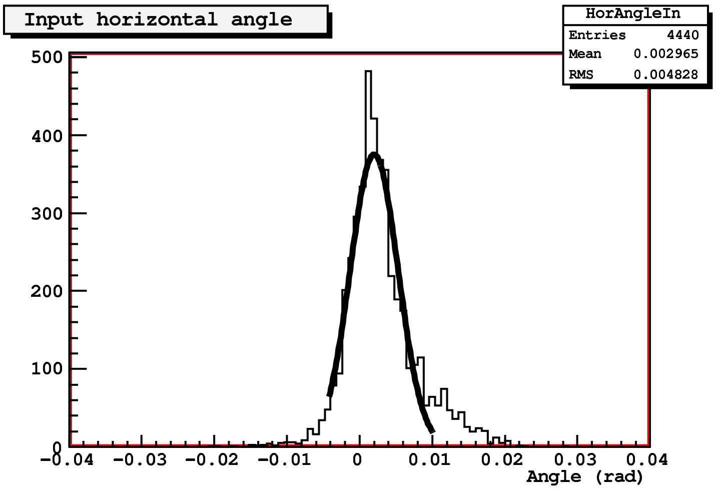

CU Input vertical angle
VertAngleInCU
Entries 6043
Mean 0.00229
RMS 0.01493
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

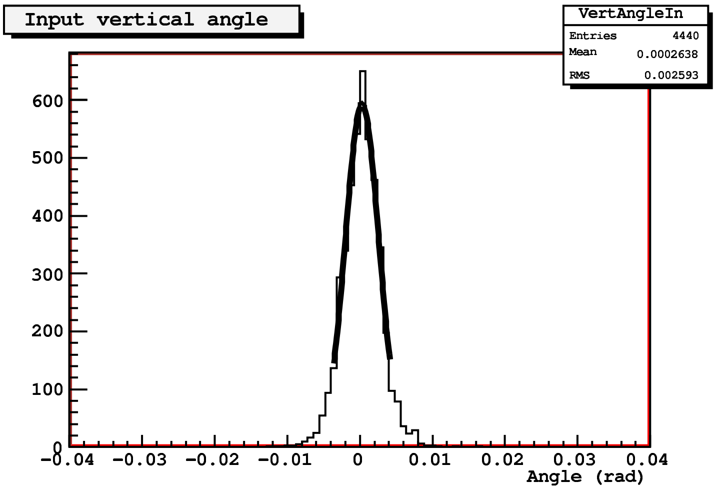

CU Input Beam Spot
SpotCoordInCU
Entries 6043
Mean x 214.9
Mean y 9.257
RMS x 55.35
RMS y 29.48
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
100
80
60
40
20
0

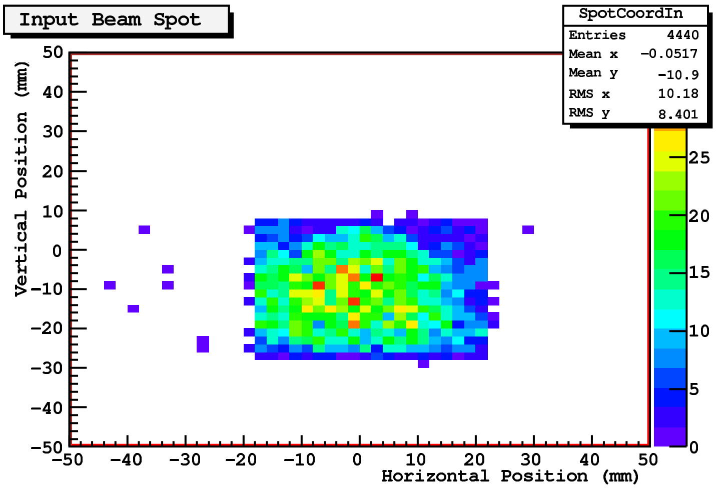

CU Input Beam Spot
SpotAngleInCU
Entries 6043
Mean x 0.001874
Mean y 0.002426
RMS x 0.01427
RMS y 0.01412
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
7
6
5
4
3
2
1
0

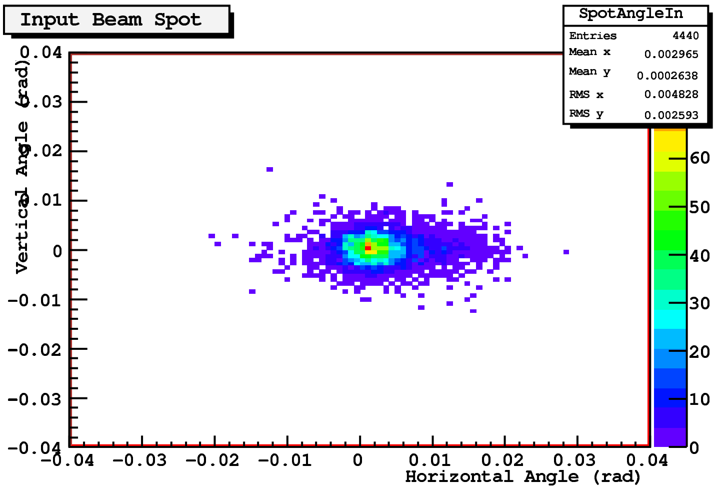

Input Horizontal coordinate
HorCoordIn
Entries 4440
Mean -0.0517
RMS 10.18
700001439
160
140
120
100
80
60
40
20
0
-50 -40 -30 -20 -10 0 10 20 30 40 50
Position (mm)

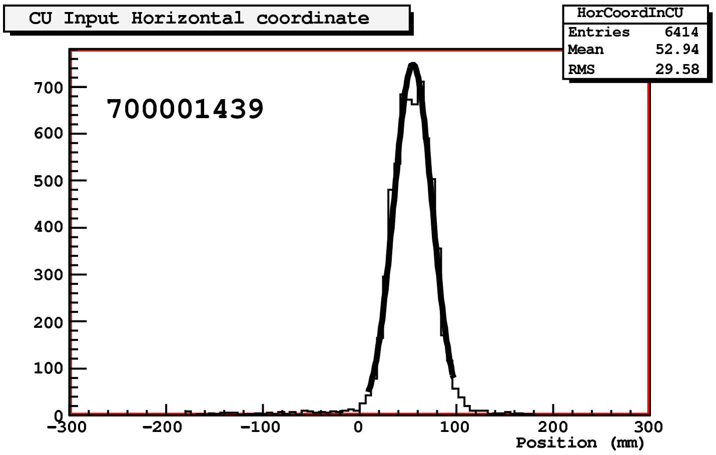

Input vertical coordinate
VertCoordIn
Entries 4440
Mean -10.9
RMS 8.401
200
180
160
140
120
100
80
60
40
20
0
-50 -40 -30 -20 -10 0 10 20 30 40 50
Position (mm)

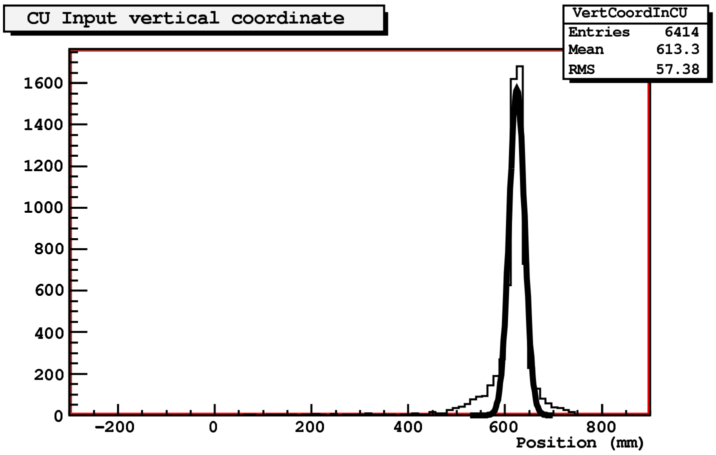

Input horizontal angle
HorAngleIn
Entries 4440
Mean 0.002965
RMS 0.004828
500
400
300
200
100
0
-0.04 -0.03 -0.02 -0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

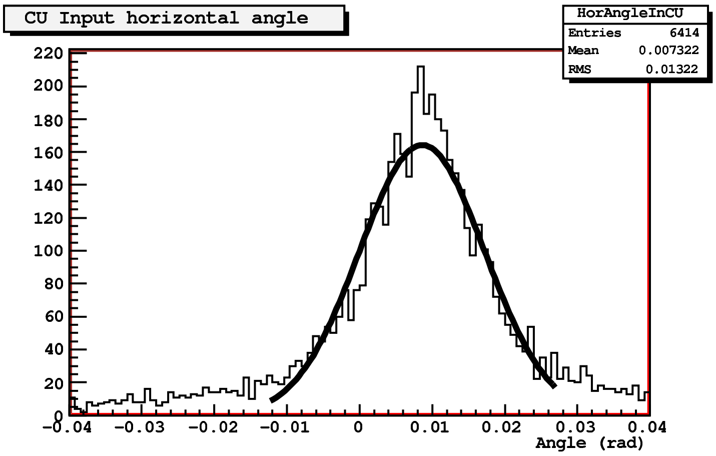

Input vertical angle
VertAngleIn
Entries 4440
Mean 0.0002638
RMS 0.002593
600
500
400
300
200
100
0
-0.04 -0.03 -0.02 -0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

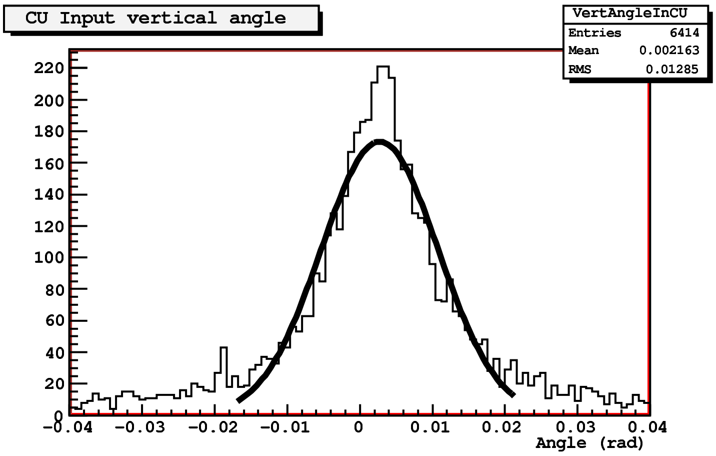

Input Beam Spot
SpotCoordIn
Entries 4440
Mean x -0.0517
Mean y -10.9
RMS x 10.18
RMS y 8.401
Vertical Position (mm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
-50 -40 -30 -20 -10 0 10 20 30 40 50
Horizontal Position (mm)
25
20
15
10
5
0

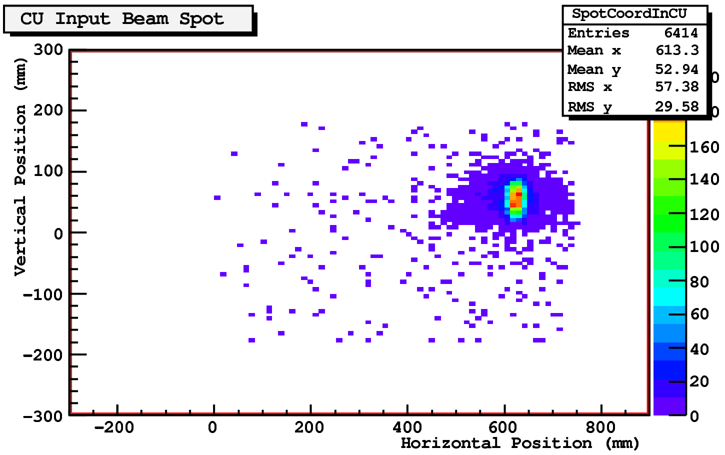

Input Beam Spot
SpotAngleIn
Entries 4440
Mean x 0.002965
Mean y 0.0002638
RMS x 0.004828
RMS y 0.002593
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.04 -0.03 -0.02 -0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
60
50
40
30
20
10
0

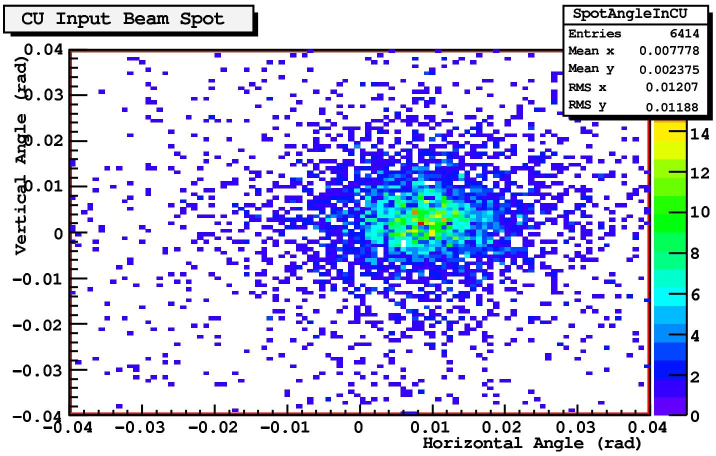

CU Input Horizontal coordinate
HorCoordInCU
Entries 6414
Mean 52.94
RMS 29.58
700001439
0
100
200
300
400
500
600
700
−300
−200
−100
0
100
200
300
Position (mm)

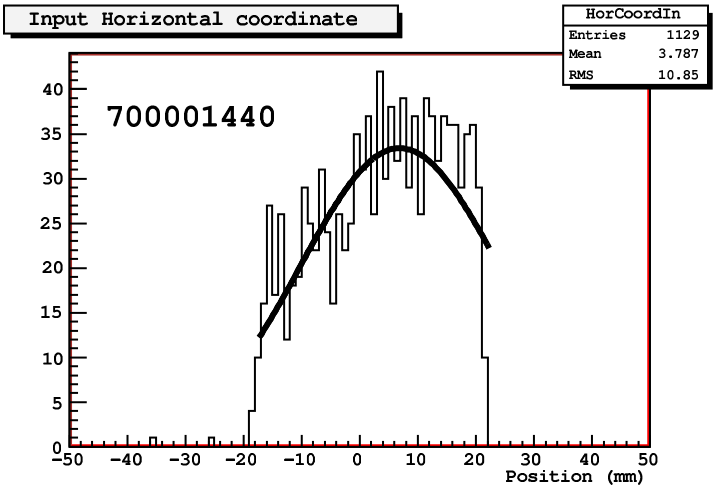

CU Input vertical coordinate
VertCoordInCU
Entries 6414
Mean 613.3
RMS 57.38
0
200
400
600
800
1000
1200
1400
1600
−200
0
200
400
600
800
Position (mm)

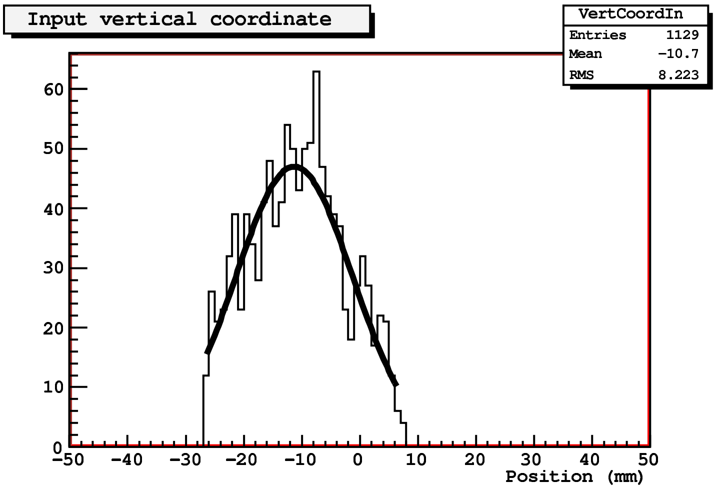

CU Input horizontal angle
HorAngleInCU
Entries 6414
Mean 0.007322
RMS 0.01322
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

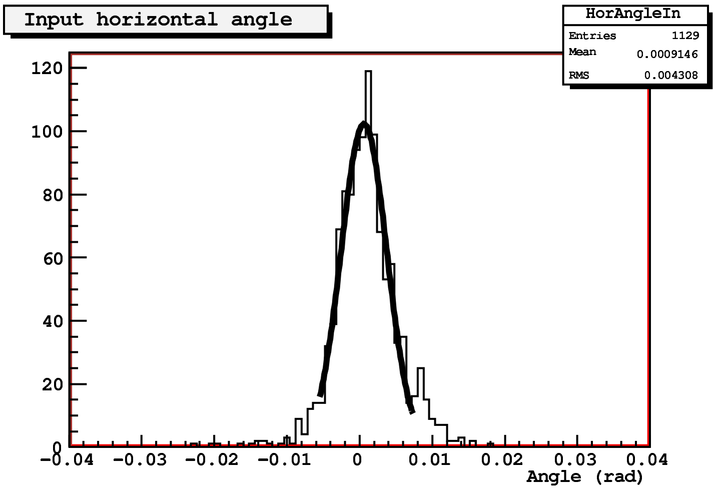

CU Input vertical angle
VertAngleInCU
Entries 6414
Mean 0.002163
RMS 0.01285
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

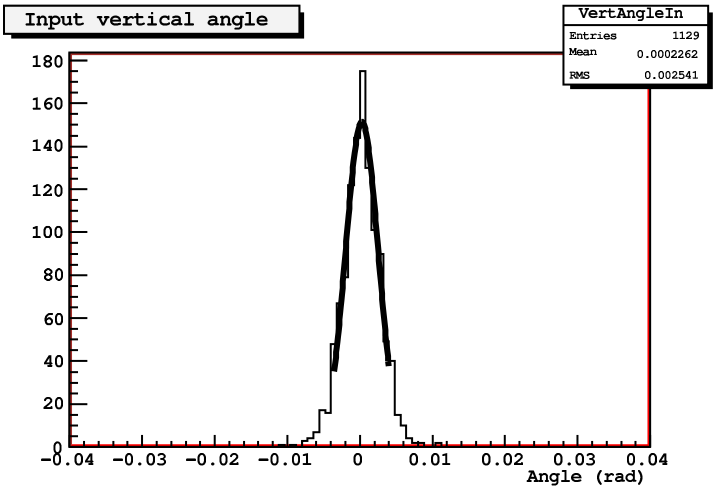

CU Input Beam Spot
SpotCoordInCU
Entries 6414
Mean x 613.3
Mean y 52.94
RMS x 57.38
RMS y 29.58
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
20
40
60
80
100
120
140
160

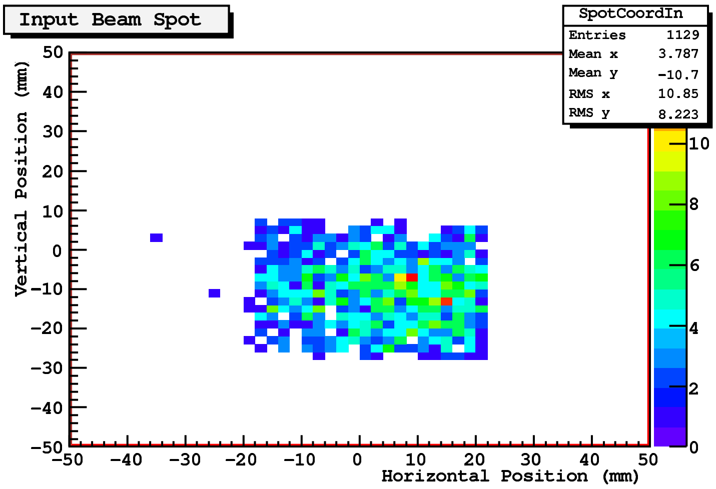

CU Input Beam Spot
SpotAngleInCU
Entries 6414
Mean x 0.007778
Mean y 0.002375
RMS x 0.01207
RMS y 0.01188
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14

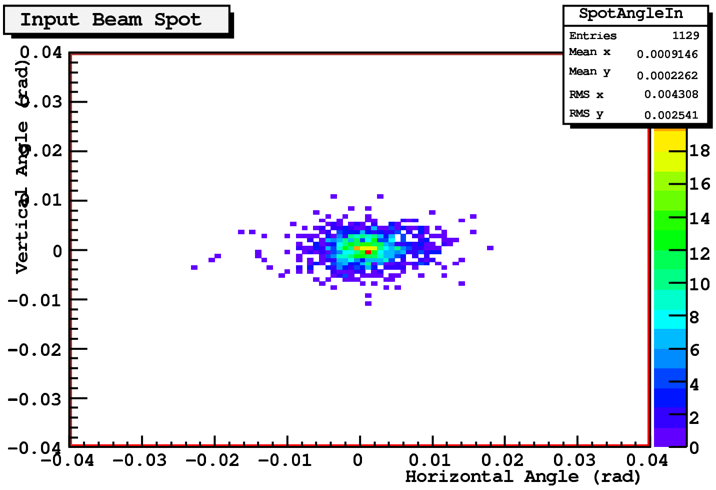

Input Horizontal coordinate
HorCoordIn
Entries 1129
Mean 3.787
RMS 10.85
700001440
0
5
10
15
20
25
30
35
40
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

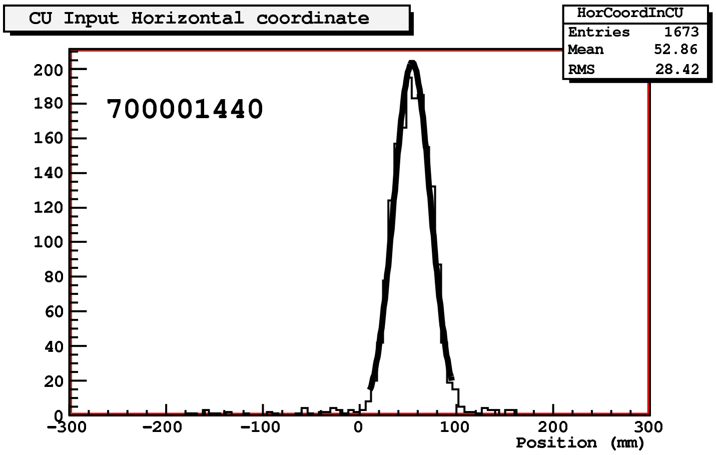

Input vertical coordinate
VertCoordIn
Entries 1129
Mean −10.7
RMS 8.223
0
10
20
30
40
50
60
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

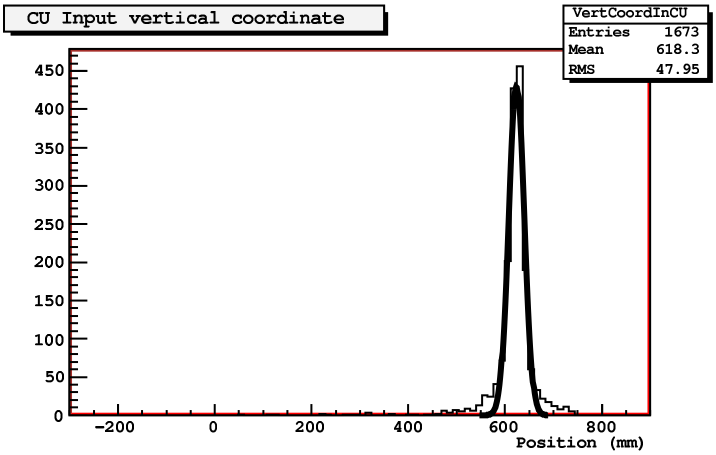

Input horizontal angle
HorAngleIn
Entries 1129
Mean 0.0009146
RMS 0.004308
0
20
40
60
80
100
120
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

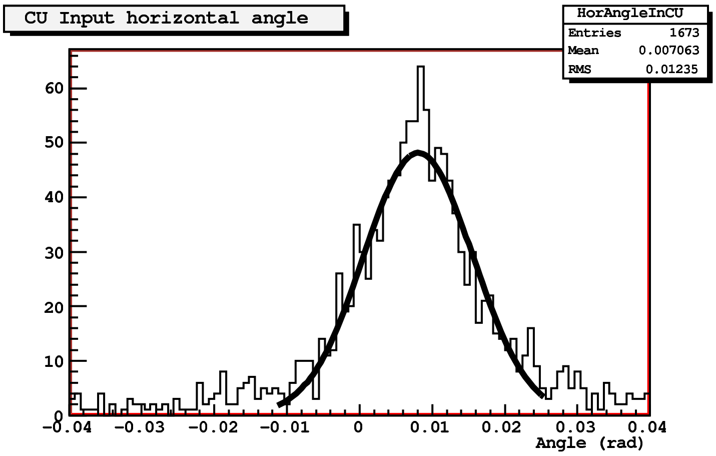

Input vertical angle
VertAngleIn
Entries 1129
Mean 0.0002262
RMS 0.002541
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

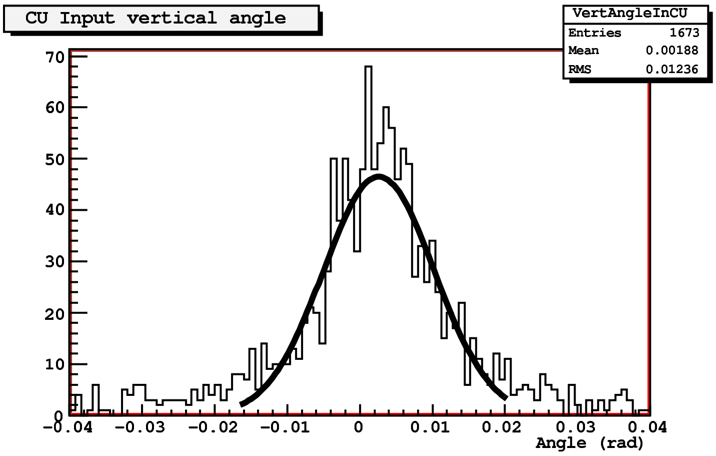

Input Beam Spot
SpotCoordIn
Entries 1129
Mean x 3.787
Mean y −10.7
RMS x 10.85
RMS y 8.223
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
2
4
6
8
10

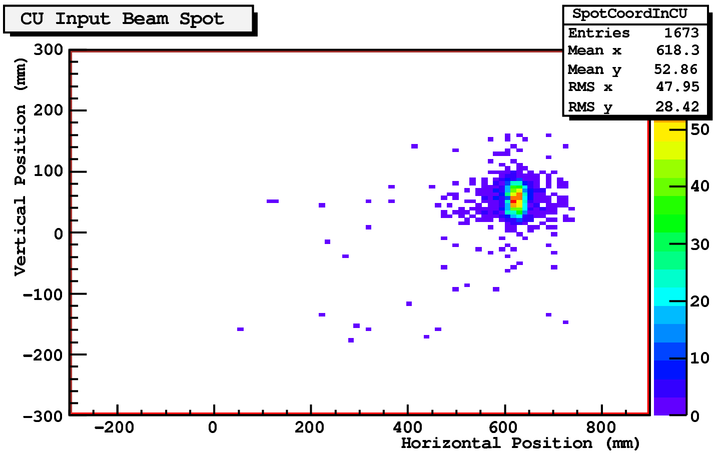

Input Beam Spot
SpotAngleIn
Entries 1129
Mean x 0.0009146
Mean y 0.0002262
RMS x 0.004308
RMS y 0.002541
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14
16
18

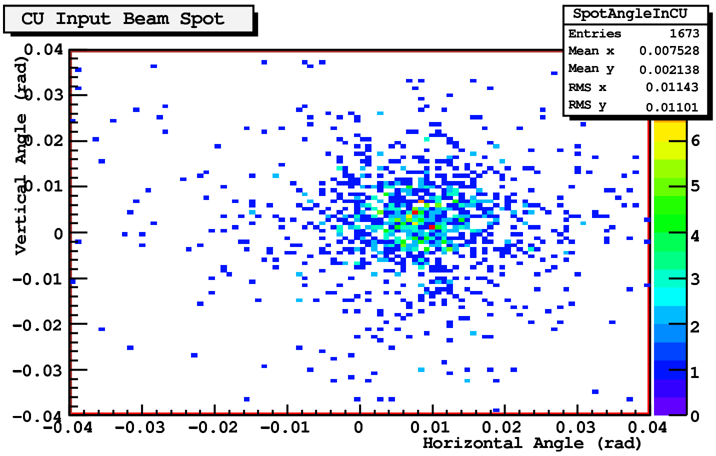

CU Input Horizontal coordinate
HorCoordInCU
Entries 1673
Mean 52.86
RMS 28.42
700001440
0
20
40
60
80
100
120
140
160
180
200
−300
−200
−100
0
100
200
300
Position (mm)

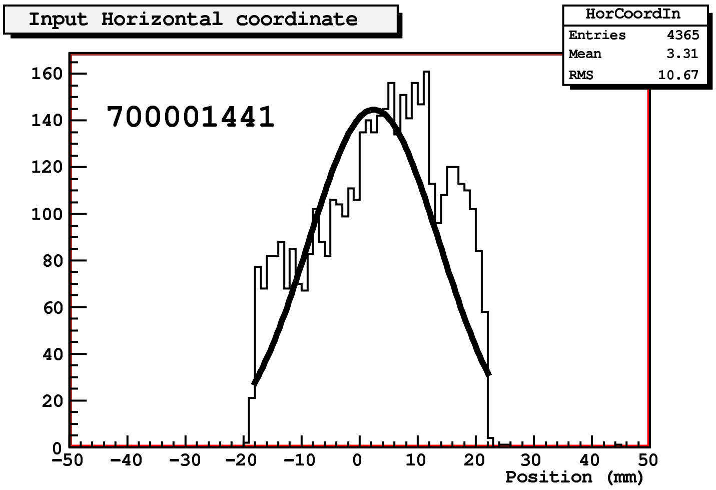

CU Input vertical coordinate
VertCoordInCU
Entries 1673
Mean 618.3
RMS 47.95
0
50
100
150
200
250
300
350
400
450
−200
0
200
400
600
800
Position (mm)

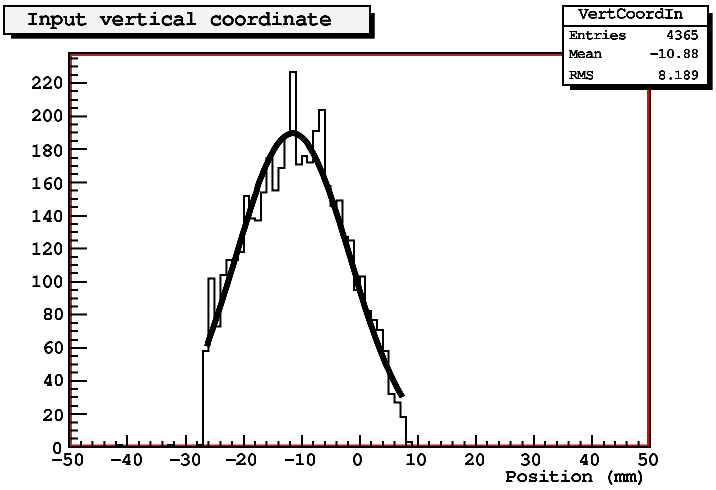

CU Input horizontal angle
HorAngleInCU
Entries 1673
Mean 0.007063
RMS 0.01235
0
10
20
30
40
50
60
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

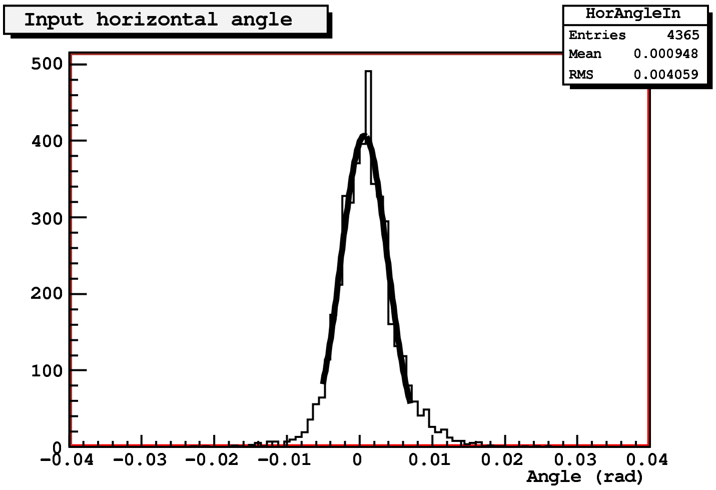

CU Input vertical angle
VertAngleInCU
Entries 1673
Mean 0.00188
RMS 0.01236
0
10
20
30
40
50
60
70
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

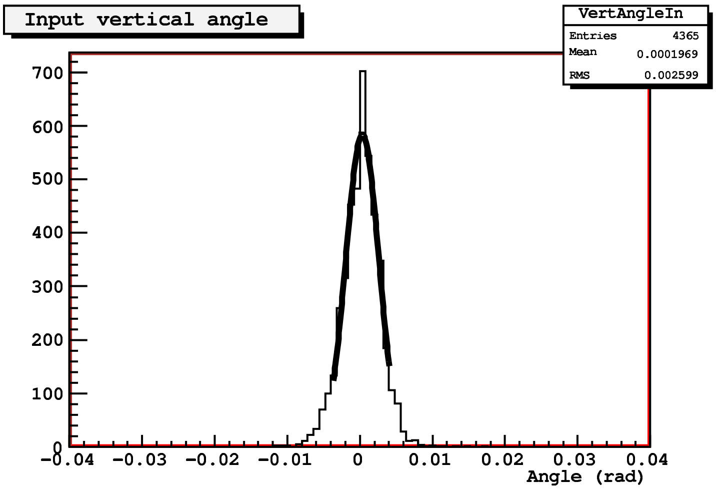

CU Input Beam Spot
SpotCoordInCU
Entries 1673
Mean x 618.3
Mean y 52.86
RMS x 47.95
RMS y 28.42
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
50
40
30
20
10
0

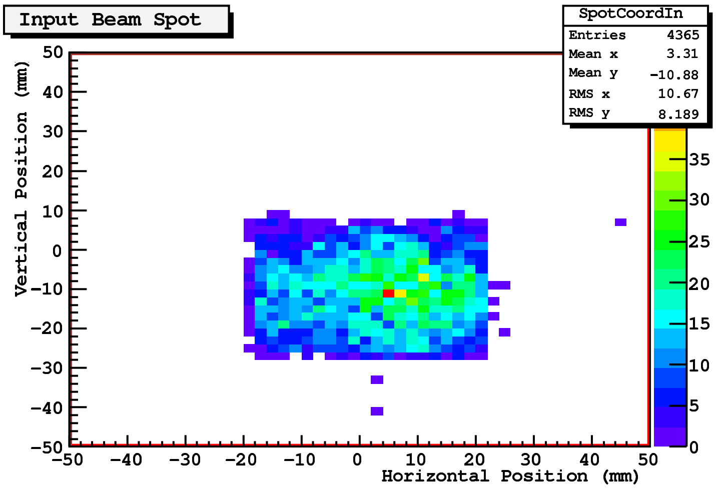

CU Input Beam Spot
SpotAngleInCU
Entries 1673
Mean x 0.007528
Mean y 0.002138
RMS x 0.01143
RMS y 0.01101
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
6
5
4
3
2
1
0

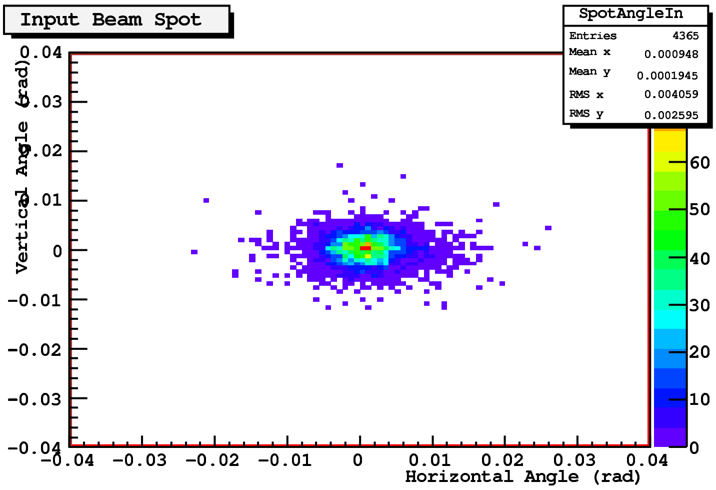

Input Horizontal coordinate
HorCoordIn
Entries 4365
Mean 3.31
RMS 10.67
700001441
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

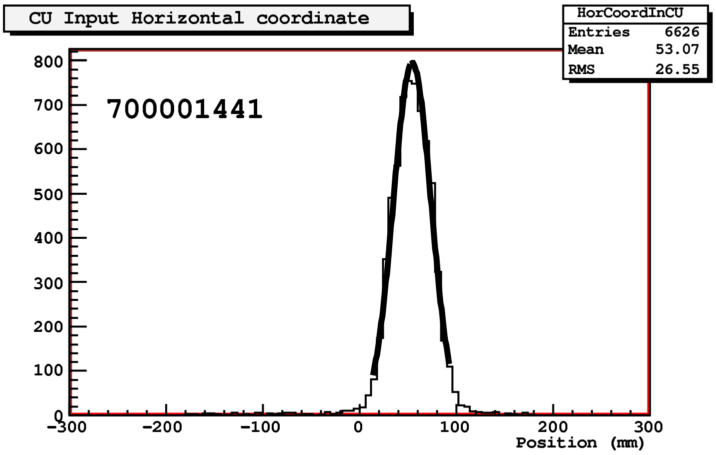

Input vertical coordinate
VertCoordIn
Entries 4365
Mean −10.88
RMS 8.189
0
20
40
60
80
100
120
140
160
180
200
220
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

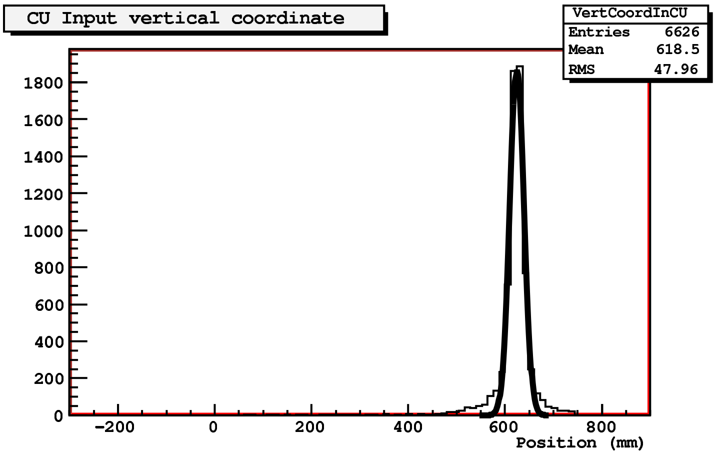

Input horizontal angle
HorAngleIn
Entries 4365
Mean 0.000948
RMS 0.004059
0
100
200
300
400
500
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

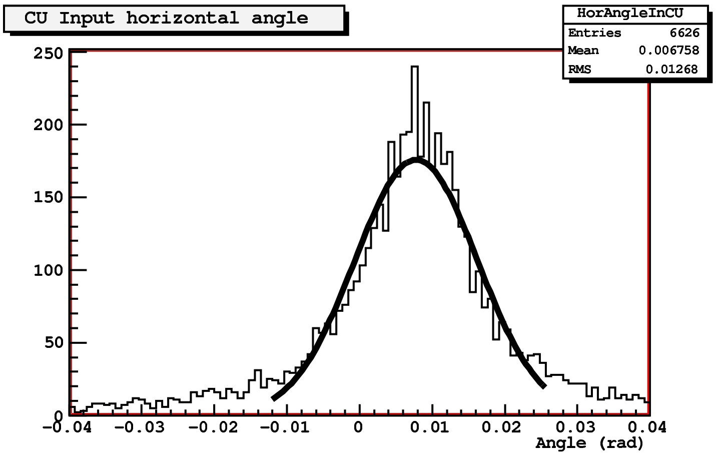

Input vertical angle
VertAngleIn
Entries 4365
Mean 0.0001969
RMS 0.002599
0
100
200
300
400
500
600
700
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

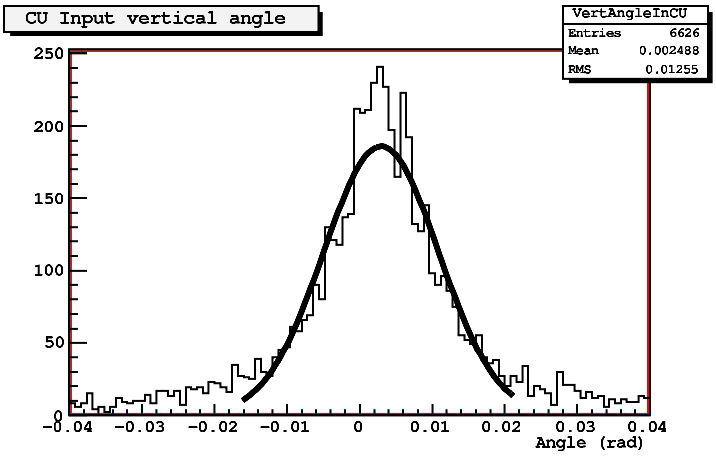

Input Beam Spot
SpotCoordIn
Entries 4365
Mean x 3.31
Mean y −10.88
RMS x 10.67
RMS y 8.189
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25
30
35

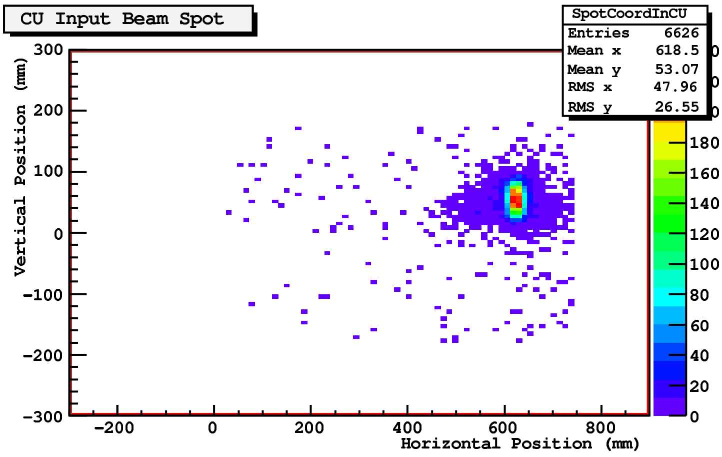

Input Beam Spot
SpotAngleIn
Entries 4365
Mean x 0.000948
Mean y 0.0001945
RMS x 0.004059
RMS y 0.002595
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
10
20
30
40
50
60

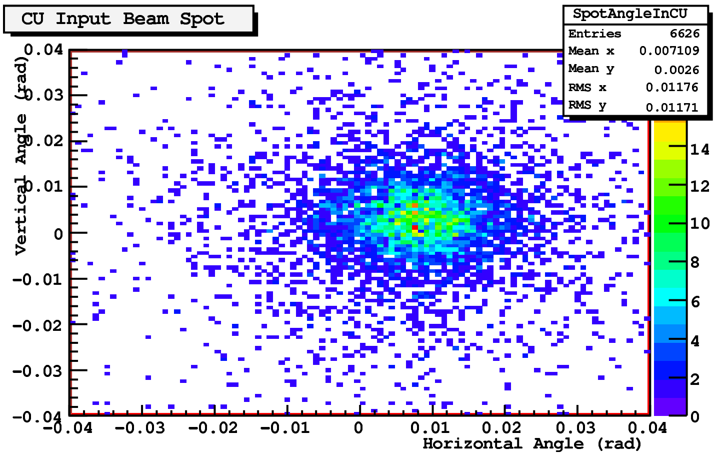

CU Input Horizontal coordinate
HorCoordInCU
Entries 6626
Mean 53.07
RMS 26.55
700001441
0
100
200
300
400
500
600
700
800
−300
−200
−100
0
100
200
300
Position (mm)

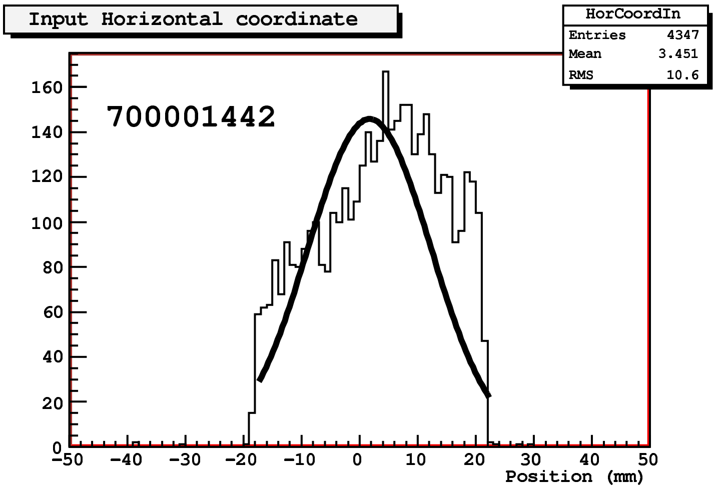

CU Input vertical coordinate
VertCoordInCU
Entries 6626
Mean 618.5
RMS 47.96
0
200
400
600
800
1000
1200
1400
1600
1800
−200
0
200
400
600
800
Position (mm)

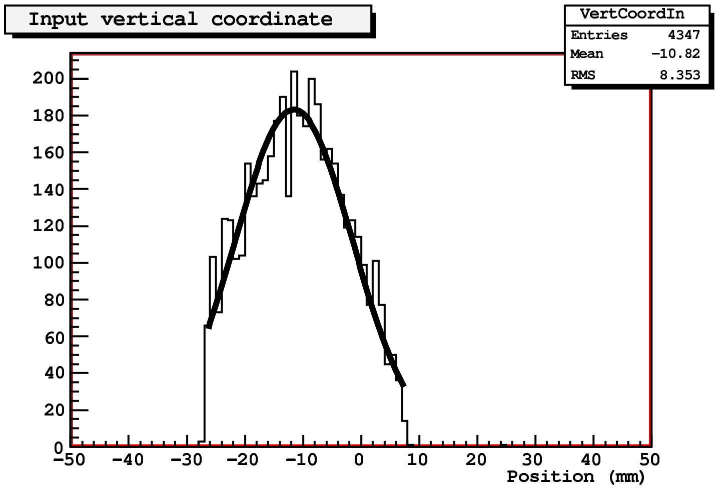

CU Input horizontal angle
HorAngleInCU
Entries 6626
Mean 0.006758
RMS 0.01268
0
50
100
150
200
250
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

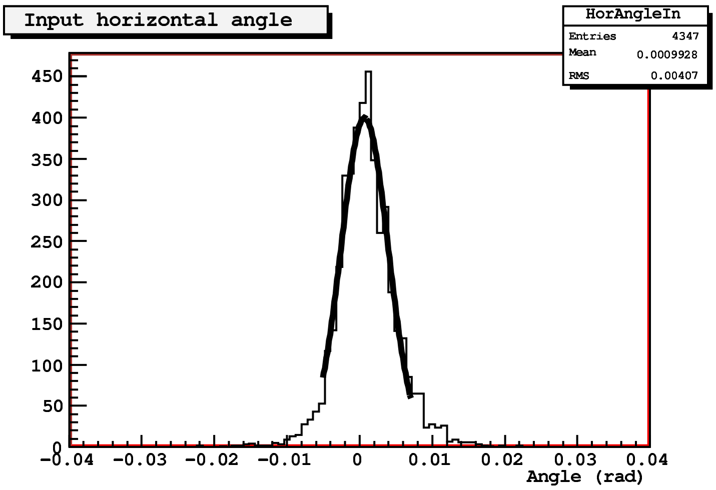

CU Input vertical angle
VertAngleInCU
Entries 6626
Mean 0.002488
RMS 0.01255
0
50
100
150
200
250
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

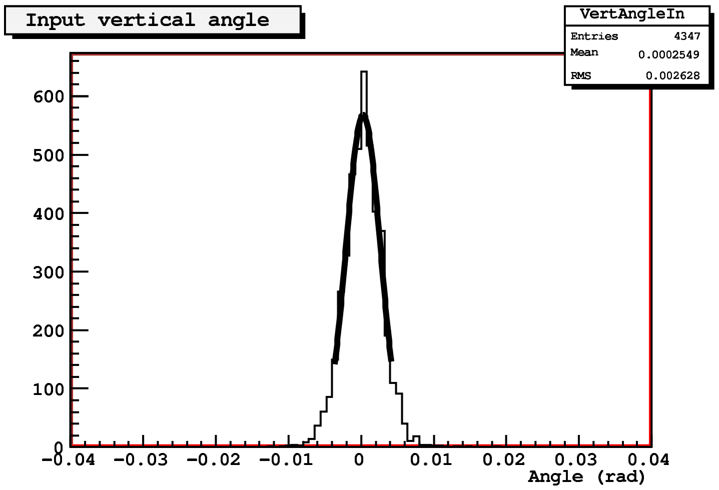

CU Input Beam Spot
SpotCoordInCU
Entries 6626
Mean x 618.5
Mean y 53.07
RMS x 47.96
RMS y 26.55
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
20
40
60
80
100
120
140
160
180

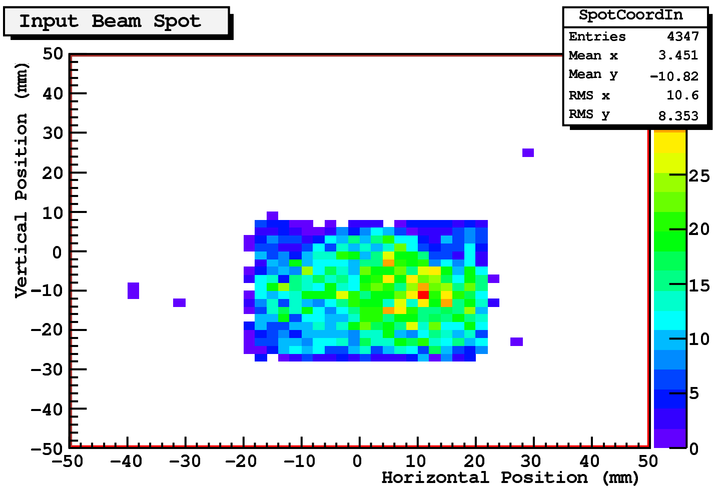

CU Input Beam Spot
SpotAngleInCU
Entries 6626
Mean x 0.007109
Mean y 0.0026
RMS x 0.01176
RMS y 0.01171
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14

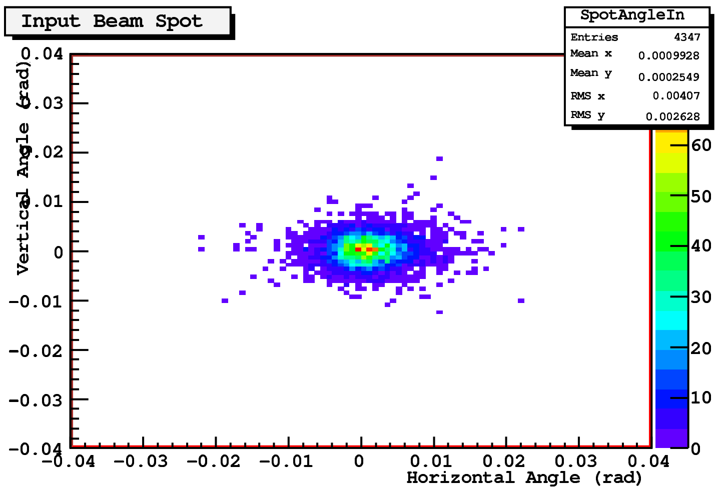

Input Horizontal coordinate
HorCoordIn
Entries 4347
Mean 3.451
RMS 10.6
700001442
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

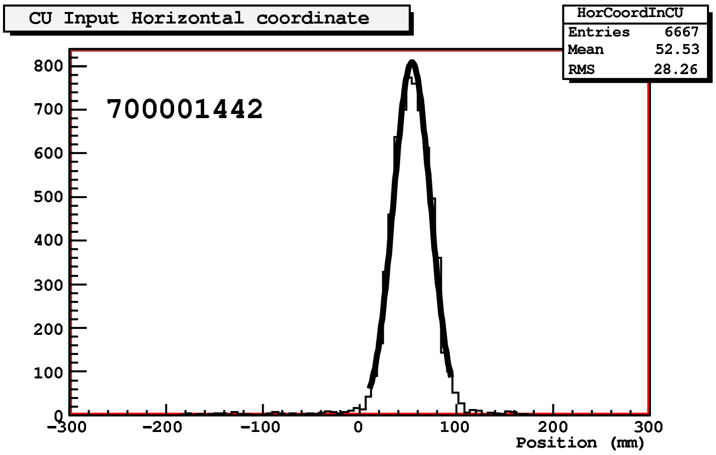

Input vertical coordinate
VertCoordIn
Entries 4347
Mean −10.82
RMS 8.353
0
20
40
60
80
100
120
140
160
180
200
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

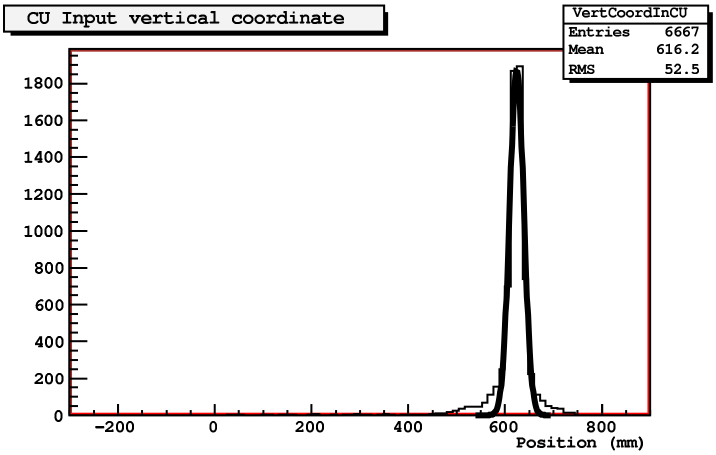

Input horizontal angle
HorAngleIn
Entries 4347
Mean 0.0009928
RMS 0.00407
0
50
100
150
200
250
300
350
400
450
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

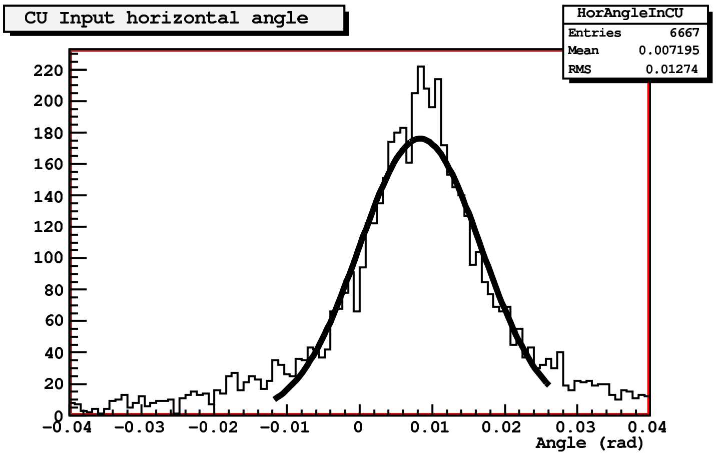

Input vertical angle
VertAngleIn
Entries 4347
Mean 0.0002549
RMS 0.002628
0
100
200
300
400
500
600
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

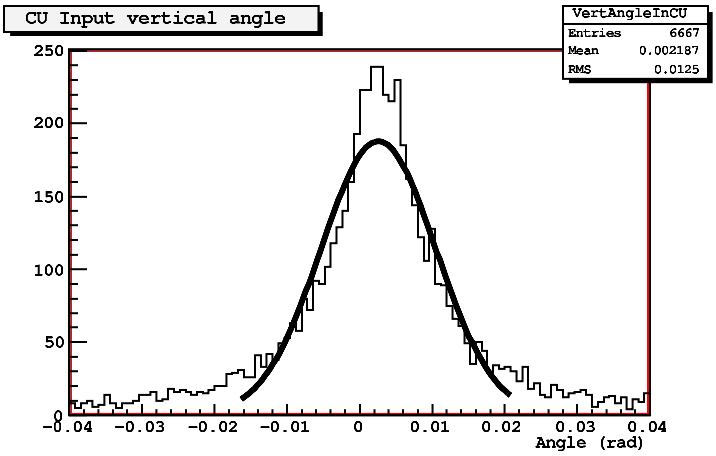

Input Beam Spot
SpotCoordIn
Entries 4347
Mean x 3.451
Mean y −10.82
RMS x 10.6
RMS y 8.353
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

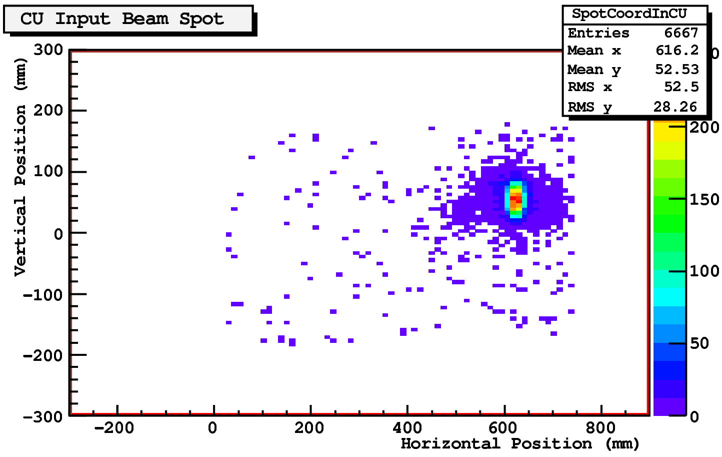

Input Beam Spot
SpotAngleIn
Entries 4347
Mean x 0.0009928
Mean y 0.0002549
RMS x 0.00407
RMS y 0.002628
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
10
20
30
40
50
60

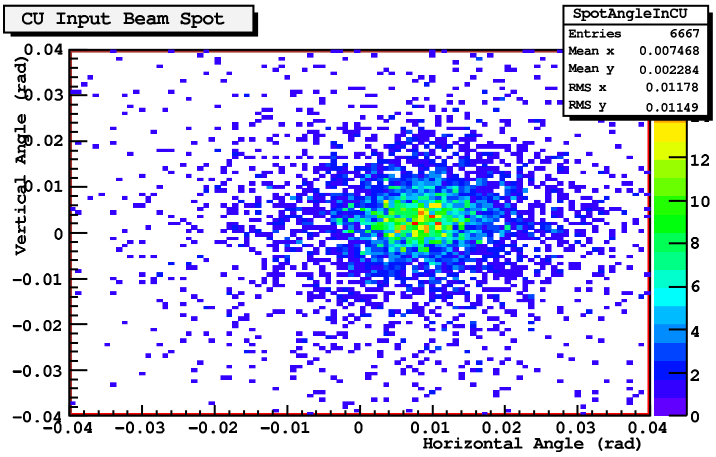

CU Input Horizontal coordinate
HorCoordInCU
Entries 6667
Mean 52.53
RMS 28.26
700001442
0
100
200
300
400
500
600
700
800
−300
−200
−100
0
100
200
300
Position (mm)

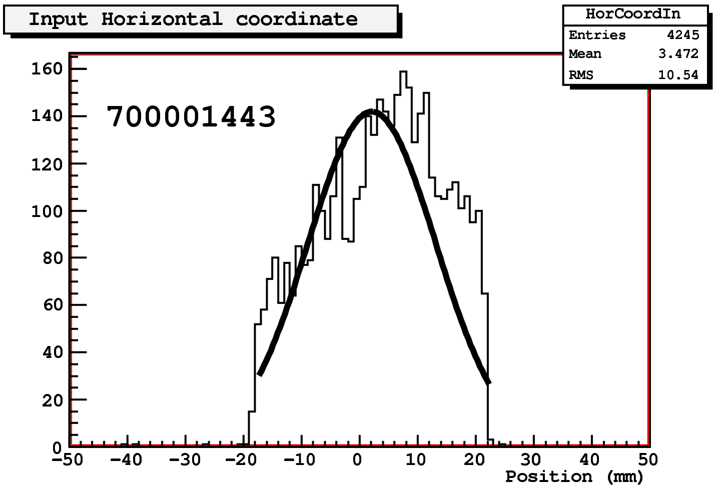

CU Input vertical coordinate
VertCoordInCU
Entries 6667
Mean 616.2
RMS 52.5
0
200
400
600
800
1000
1200
1400
1600
1800
−200
0
200
400
600
800
Position (mm)

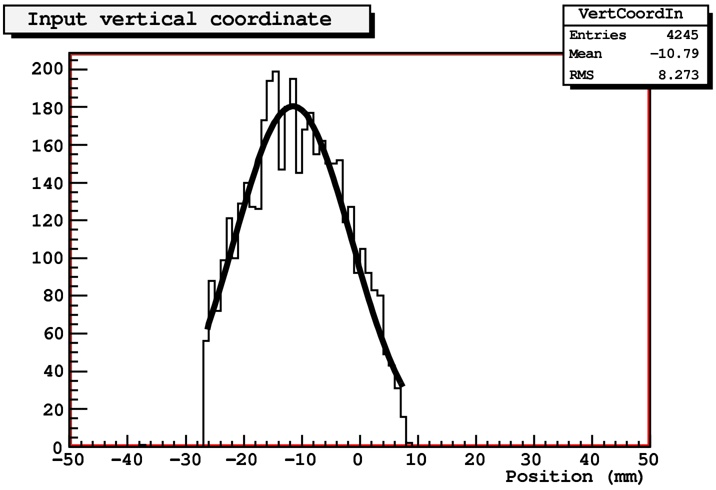

CU Input horizontal angle
HorAngleInCU
Entries 6667
Mean 0.007195
RMS 0.01274
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

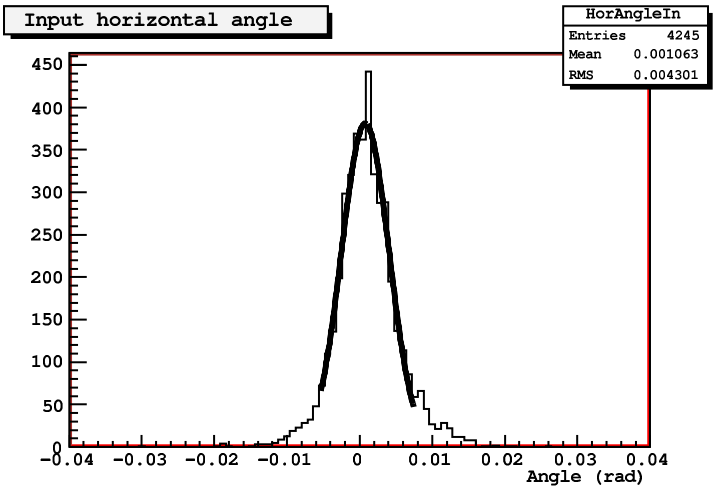

CU Input vertical angle
VertAngleInCU
Entries 6667
Mean 0.002187
RMS 0.0125
0
50
100
150
200
250
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

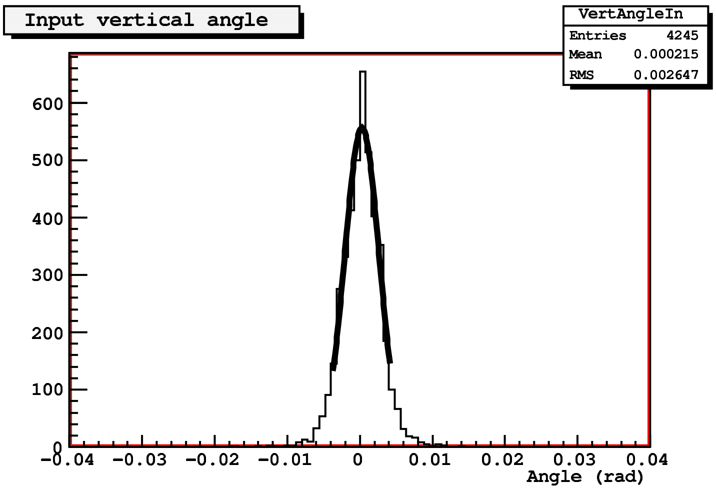

CU Input Beam Spot
SpotCoordInCU
Entries 6667
Mean x 616.2
Mean y 52.53
RMS x 52.5
RMS y 28.26
Vertical Position (mm)
−300
−200
−100
0
100
200
300
−200
0
200
400
600
800
Horizontal Position (mm)
0
50
100
150
200

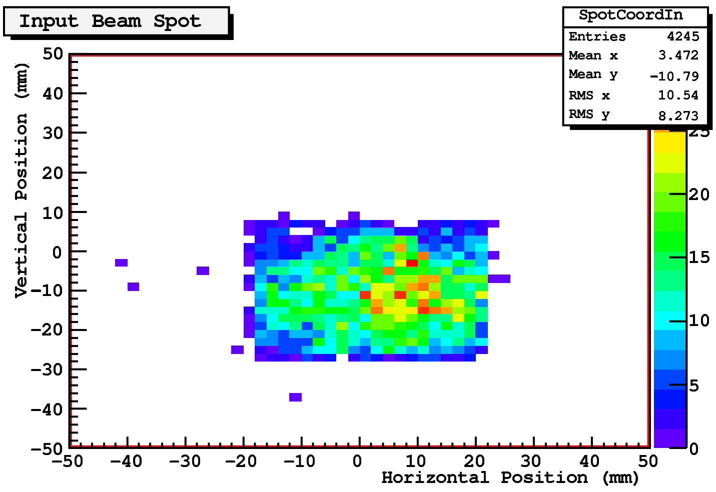

CU Input Beam Spot
SpotAngleInCU
Entries 6667
Mean x 0.007468
Mean y 0.002284
RMS x 0.01178
RMS y 0.01149
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12

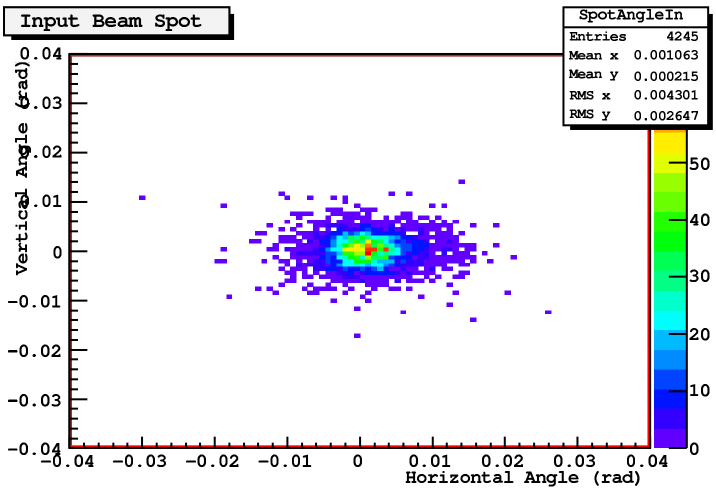

Input Horizontal coordinate
HorCoordIn
Entries 4245
Mean 3.472
RMS 10.54
700001443
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

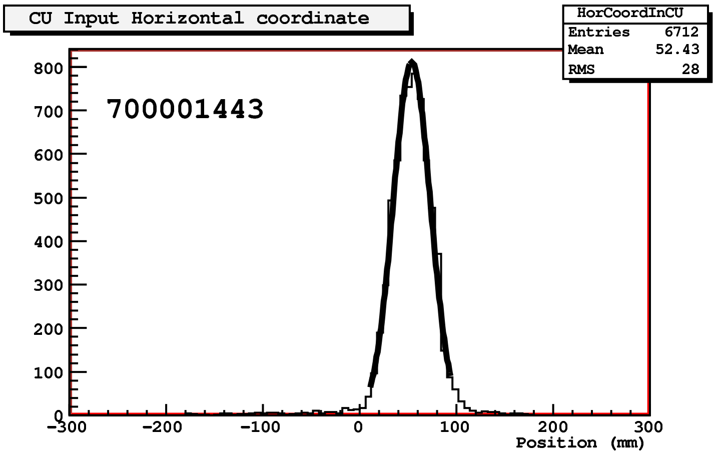

Input vertical coordinate
VertCoordIn
Entries 4245
Mean −10.79
RMS 8.273
0
20
40
60
80
100
120
140
160
180
200
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

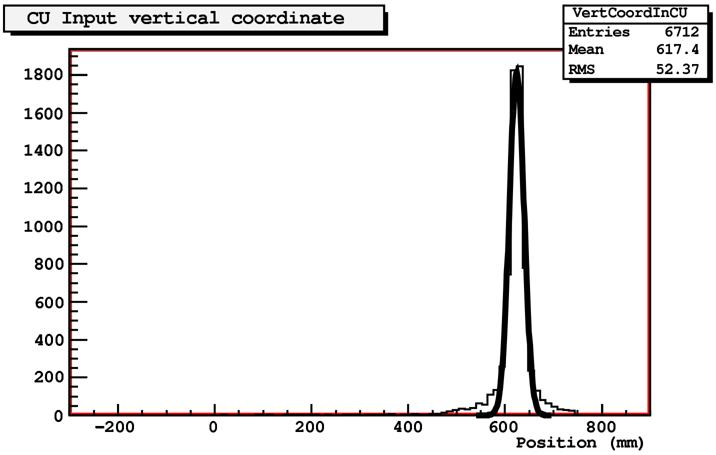

Input horizontal angle
HorAngleIn
Entries 4245
Mean 0.001063
RMS 0.004301
0
50
100
150
200
250
300
350
400
450
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

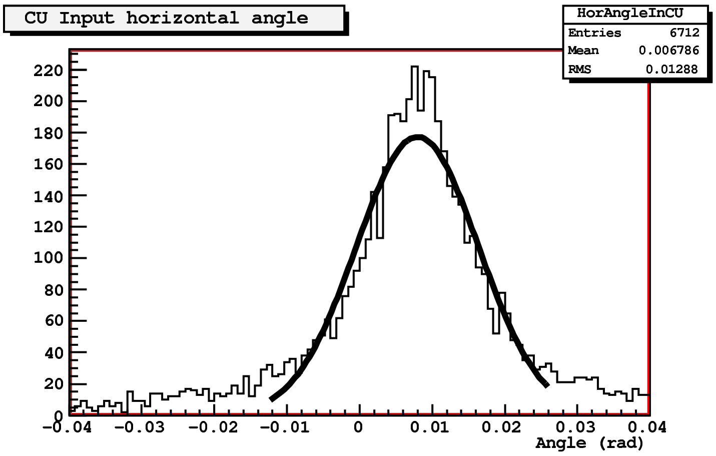

Input vertical angle
VertAngleIn
Entries 4245
Mean 0.000215
RMS 0.002647
0
100
200
300
400
500
600
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

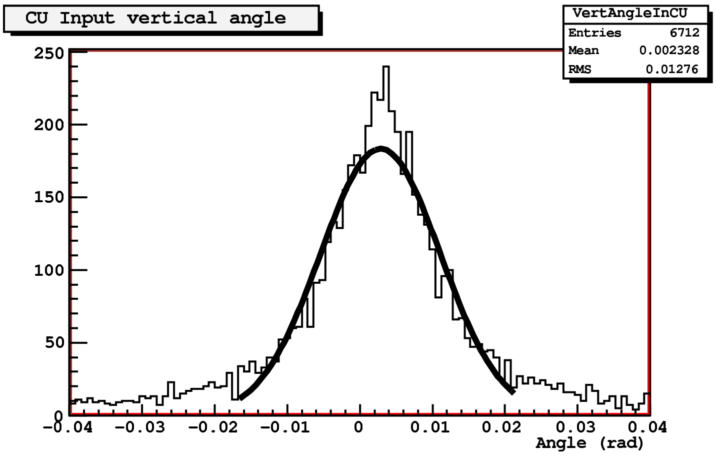

Input Beam Spot
SpotCoordIn
Entries 4245
Mean x 3.472
Mean y −10.79
RMS x 10.54
RMS y 8.273
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
25
20
15
10
5
0

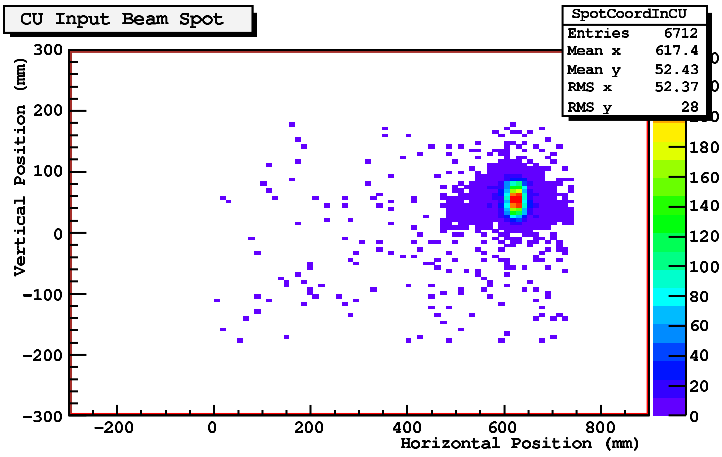

Input Beam Spot
SpotAngleIn
Entries 4245
Mean x 0.001063
Mean y 0.000215
RMS x 0.004301
RMS y 0.002647
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
50
40
30
20
10
0

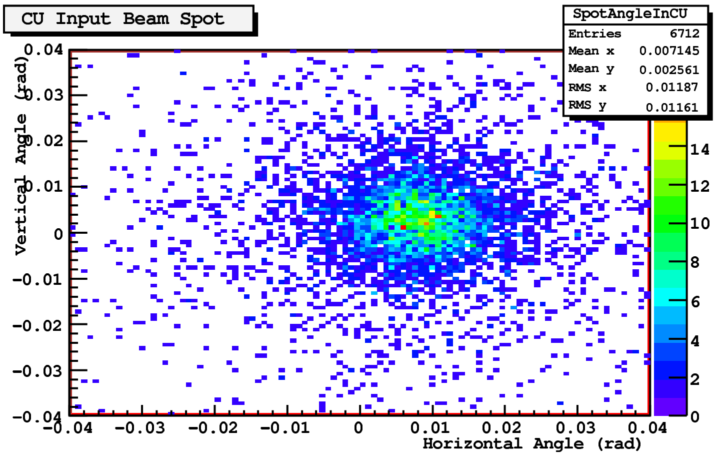

CU Input Horizontal coordinate

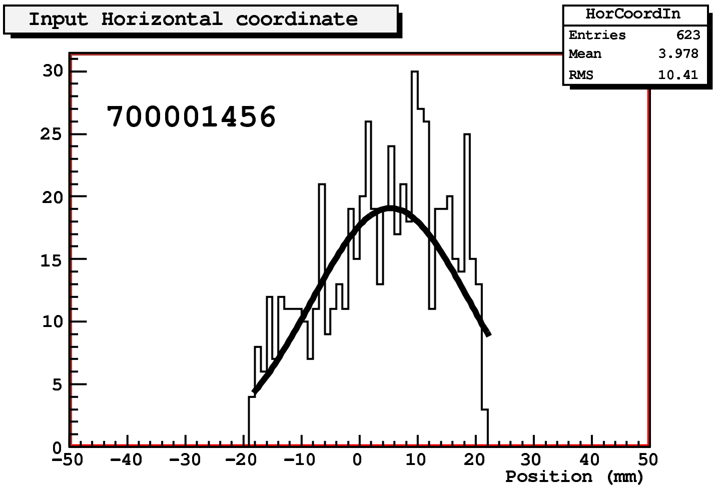

CU Input vertical coordinate

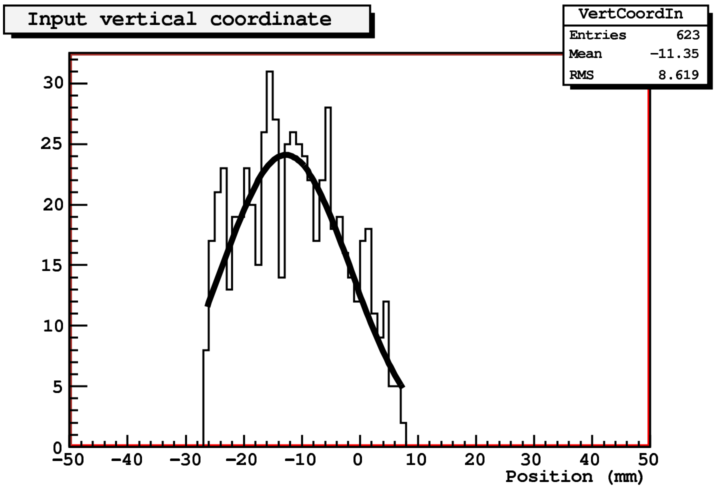

CU Input horizontal angle

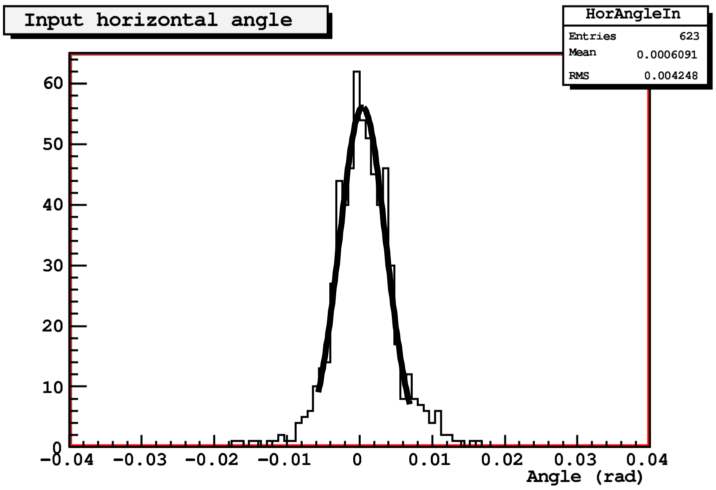

CU Input vertical angle

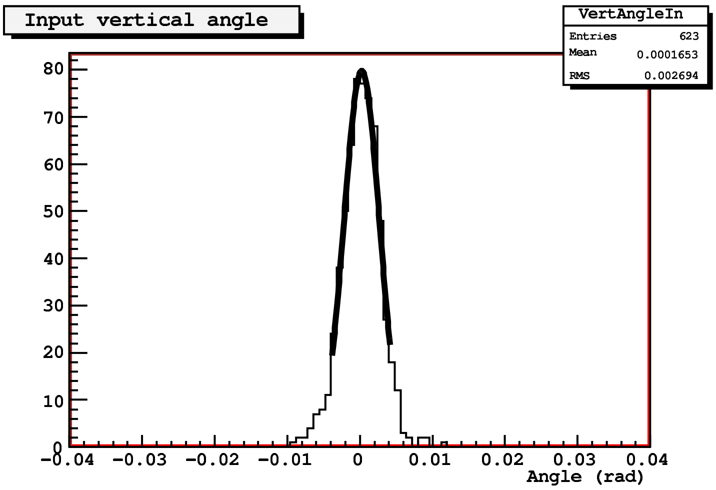

CU Input Beam Spot

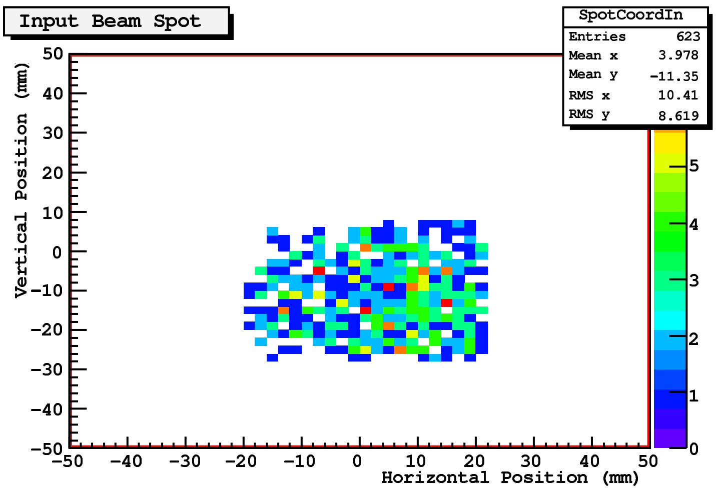

CU Input Beam Spot

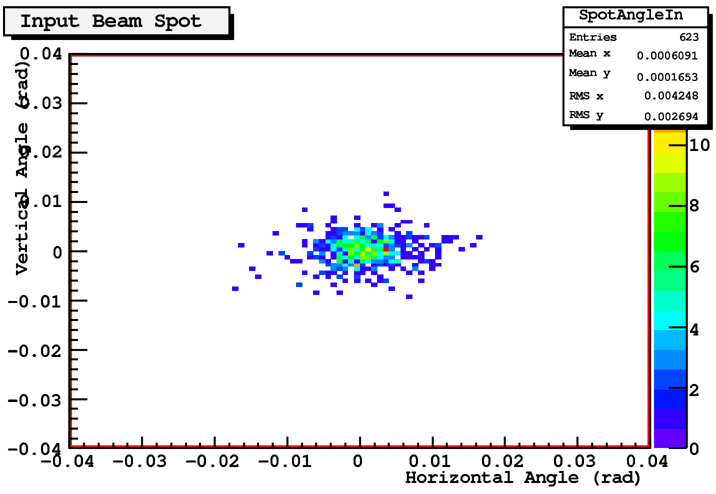

Input Horizontal coordinate
HorCoordIn
Entries 623
Mean 3.978
RMS 10.41
700001456
0
5
10
15
20
25
30
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

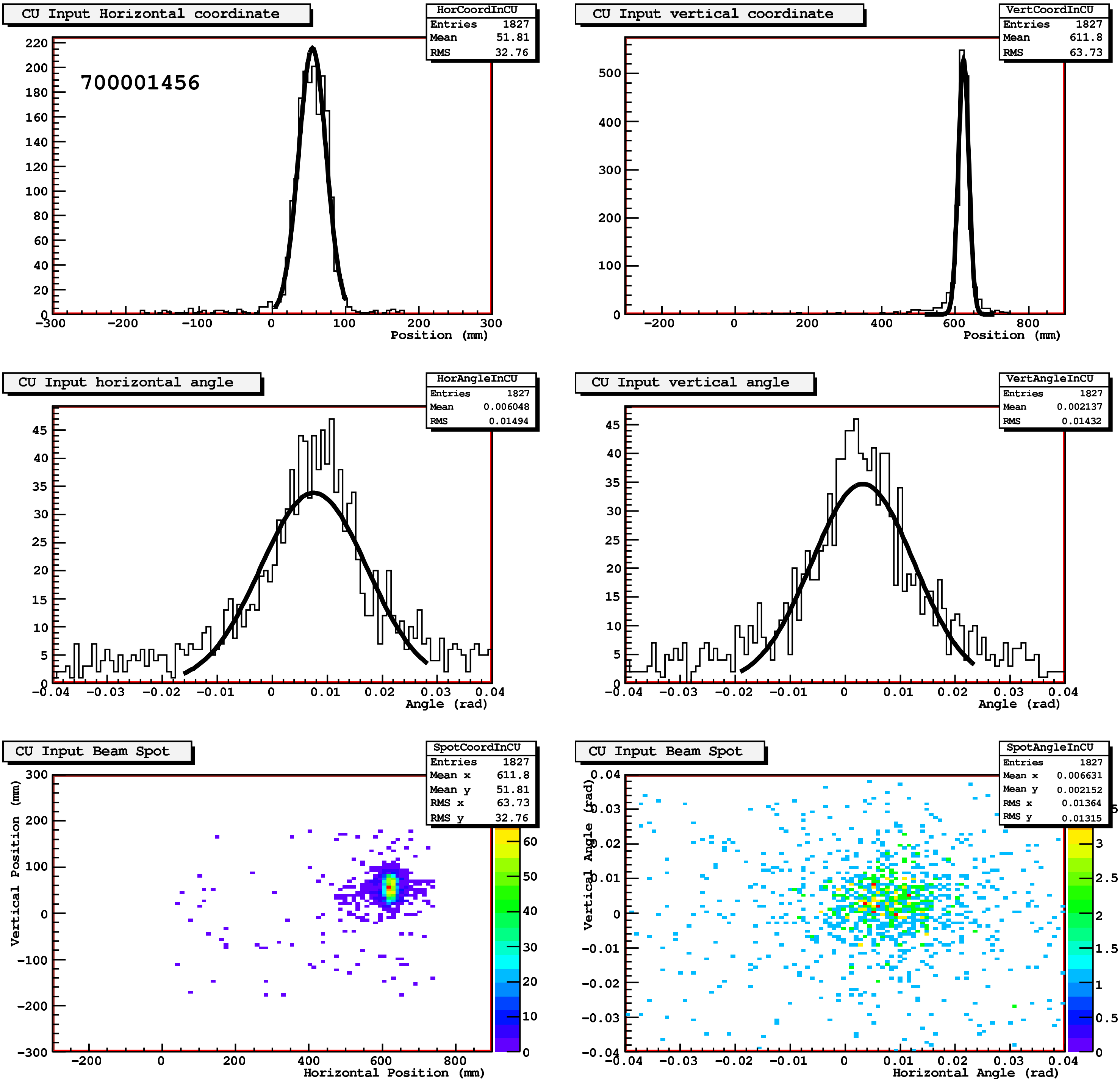

Input vertical coordinate
VertCoordIn
Entries 623
Mean −11.35
RMS 8.619
0
5
10
15
20
25
30
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

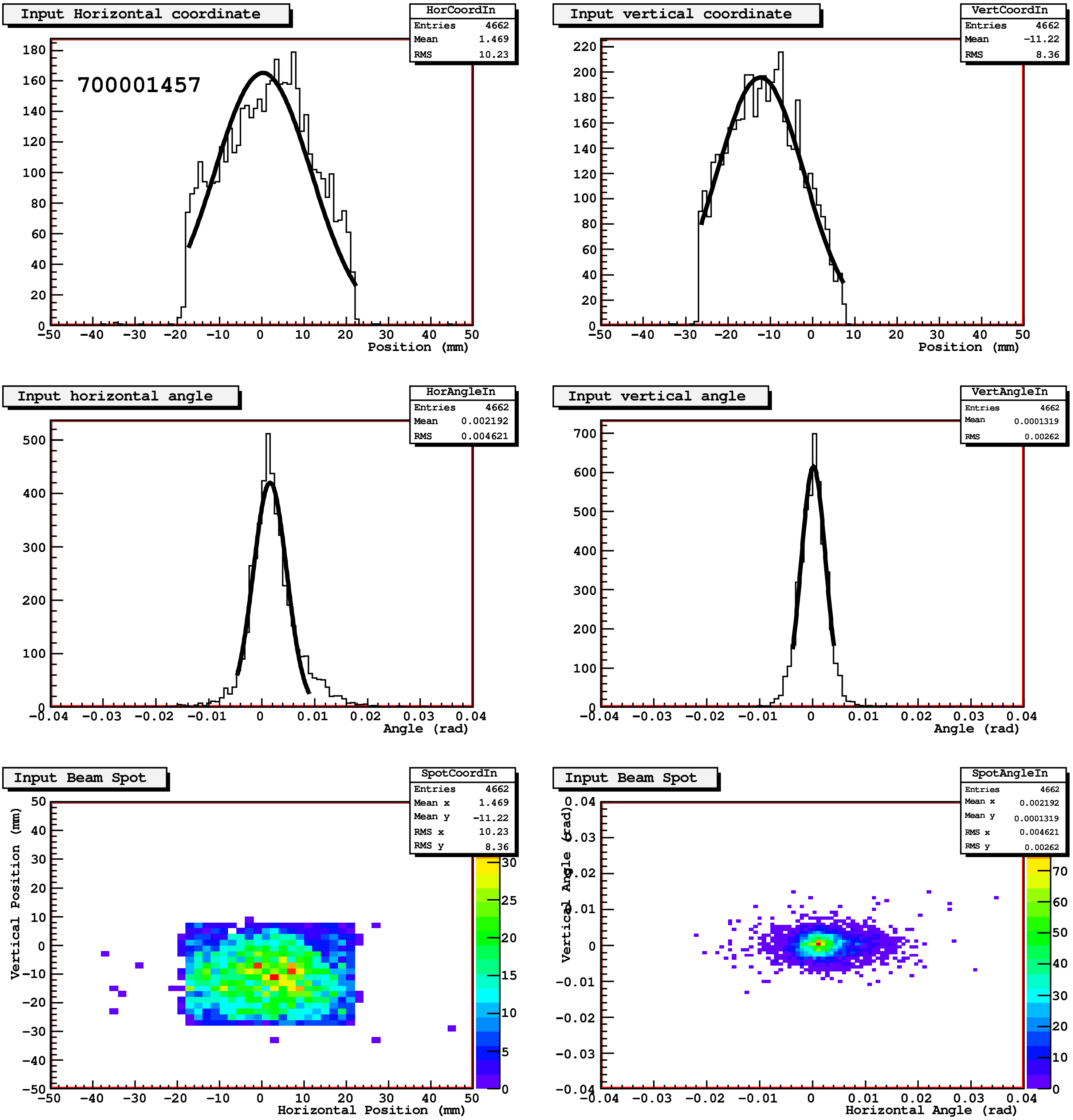

Input horizontal angle
HorAngleIn
Entries 623
Mean 0.0006091
RMS 0.004248
0
10
20
30
40
50
60
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

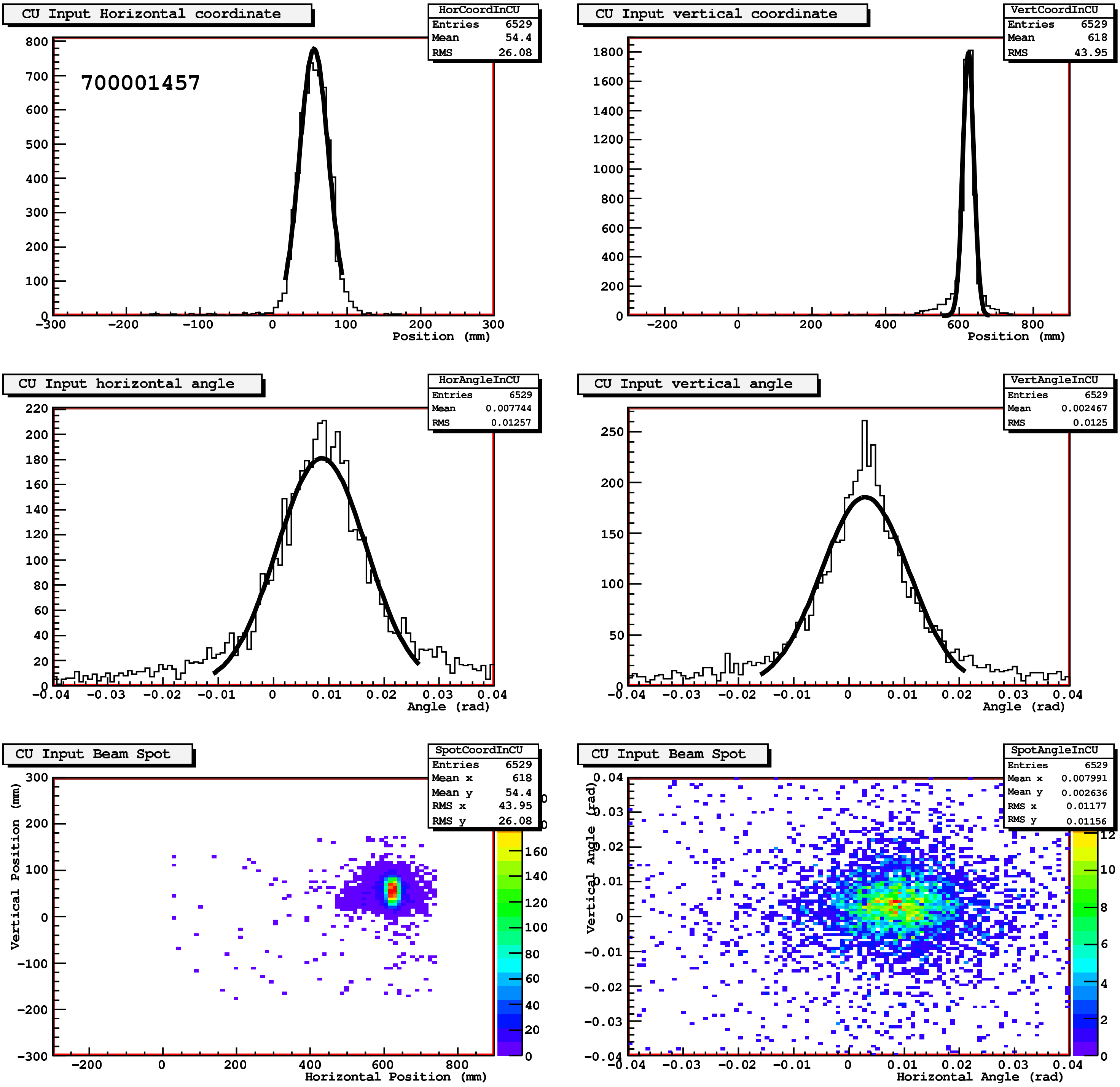

Input vertical angle
VertAngleIn
Entries 623
Mean 0.0001653
RMS 0.002694
0
10
20
30
40
50
60
70
80
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

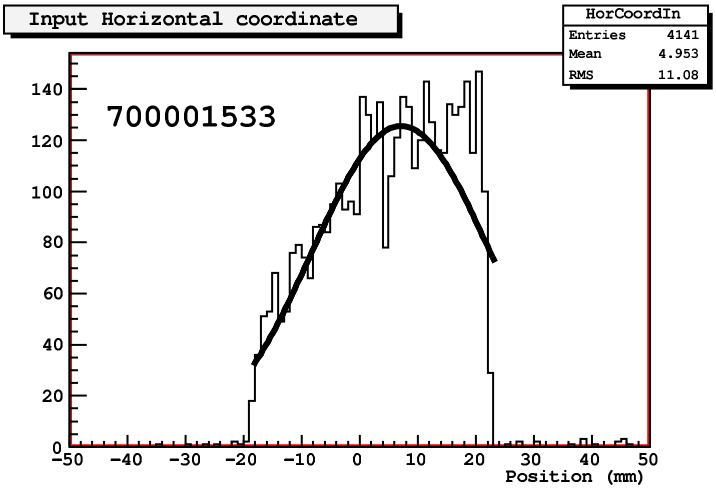

Input Beam Spot
SpotCoordIn
Entries 623
Mean x 3.978
Mean y −11.35
RMS x 10.41
RMS y 8.619
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
1
2
3
4
5

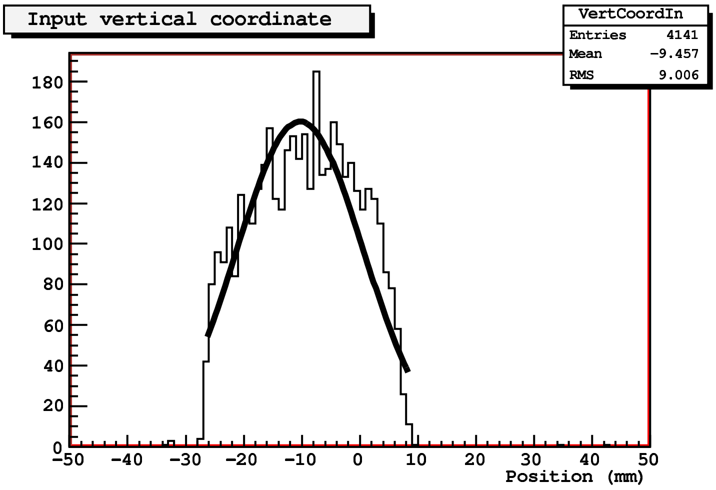

Input Beam Spot
SpotAngleIn
Entries 623
Mean x 0.0006091
Mean y 0.0001653
RMS x 0.004248
RMS y 0.002694
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

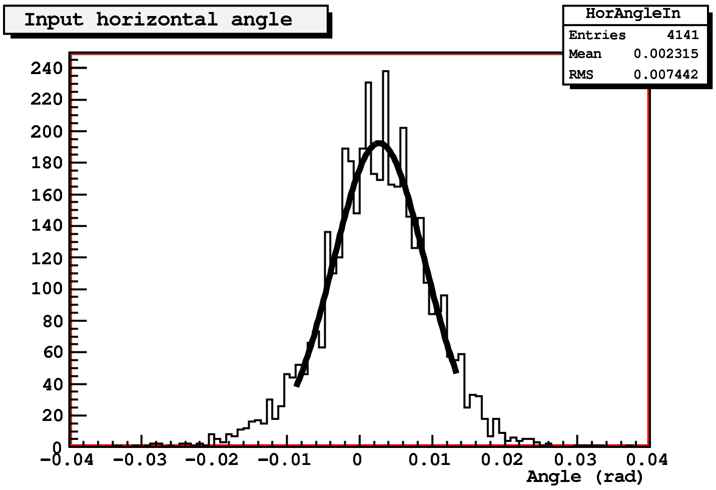

CU Input Horizontal coordinate
HorCoordInCU
Entries 1827
Mean 51.81
RMS 32.76
700001456
0
20
40
60
80
100
120
140
160
180
200
220
−300
−200
−100
0
100
200
300
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 1827
Mean 611.8
RMS 63.73
0
100
200
300
400
500
−200
0
200
400
600
800
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 1827
Mean 0.006048
RMS 0.01494
0
5
10
15
20
25
30
35
40
45
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 1827
Mean 0.002137
RMS 0.01432
0
5
10
15
20
25
30
35
40
45
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 1827
Mean x 611.8
Mean y 51.81
RMS x 63.73
RMS y 32.76
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
10
20
30
40
50
60
CU Input Beam Spot
SpotAngleInCU
Entries 1827
Mean x 0.006631
Mean y 0.002152
RMS x 0.01364
RMS y 0.01315
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
2.5
3
3.5

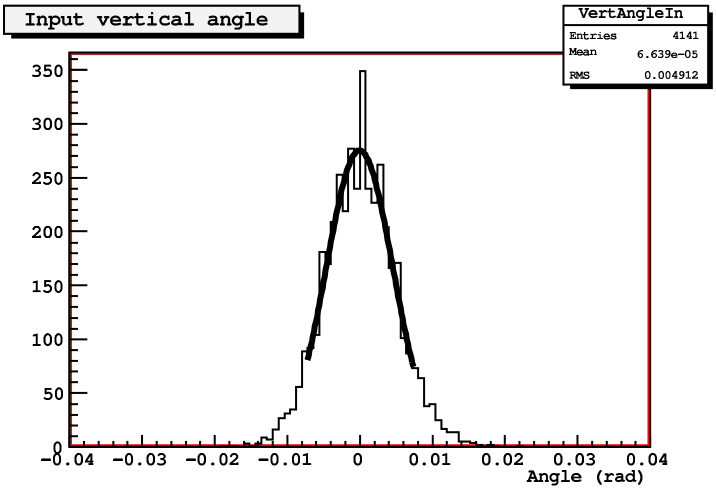

Input Horizontal coordinate
HorCoordIn
Entries 4662
Mean 1.469
RMS 10.23
700001457
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)
Input vertical coordinate
VertCoordIn
Entries 4662
Mean −11.22
RMS 8.36
0
20
40
60
80
100
120
140
160
180
200
220
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)
Input horizontal angle
HorAngleIn
Entries 4662
Mean 0.002192
RMS 0.004621
0
100
200
300
400
500
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
Input vertical angle
VertAngleIn
Entries 4662
Mean 0.0001319
RMS 0.00262
0
100
200
300
400
500
600
700
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
Input Beam Spot
SpotCoordIn
Entries 4662
Mean x 1.469
Mean y −11.22
RMS x 10.23
RMS y 8.36
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25
30
Input Beam Spot
SpotAngleIn
Entries 4662
Mean x 0.002192
Mean y 0.0001319
RMS x 0.004621
RMS y 0.00262
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
10
20
30
40
50
60
70

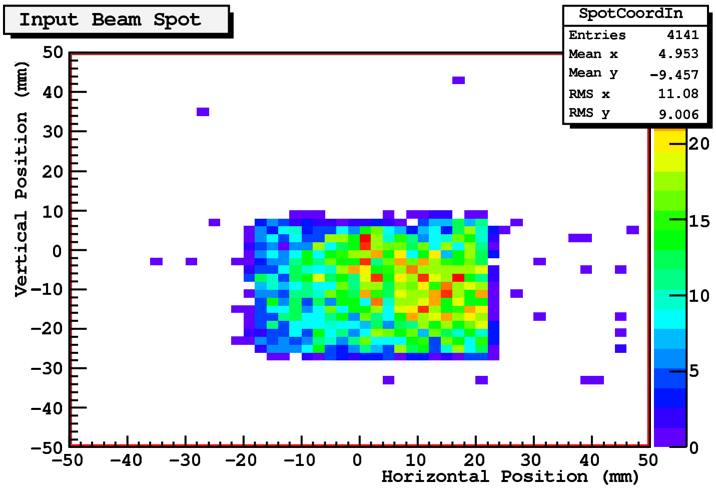

CU Input Horizontal coordinate
HorCoordInCU
Entries 6529
Mean 54.4
RMS 26.08
700001457
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 6529
Mean 618
RMS 43.95
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 6529
Mean 0.007744
RMS 0.01257
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 6529
Mean 0.002467
RMS 0.0125
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 6529
Mean x 618
Mean y 54.4
RMS x 43.95
RMS y 26.08
Vertical Position (mm)
Horizontal Position (mm)
CU Input Beam Spot
SpotAngleInCU
Entries 6529
Mean x 0.007991
Mean y 0.002636
RMS x 0.01177
RMS y 0.01156
Vertical Angle (rad)
Horizontal Angle (rad)

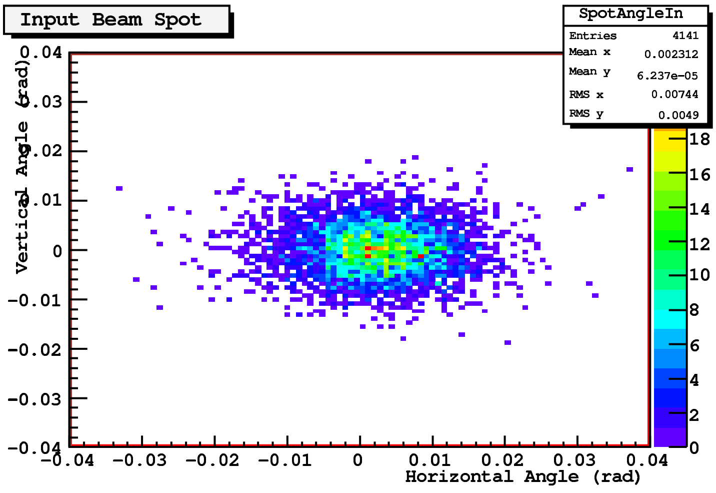

Input Horizontal coordinate
HorCoordIn
Entries 4141
Mean 4.953
RMS 11.08
700001533
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

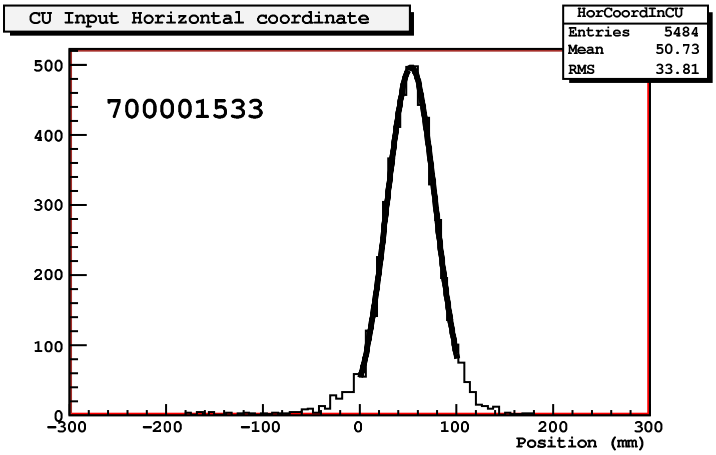

Input vertical coordinate
VertCoordIn
Entries 4141
Mean −9.457
RMS 9.006
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

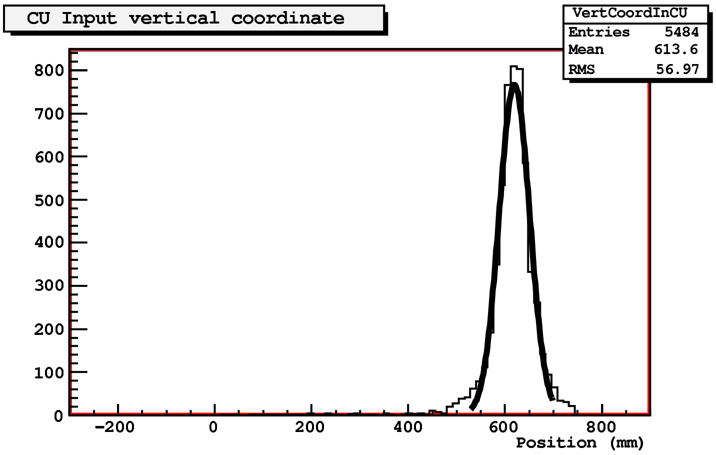

Input horizontal angle
HorAngleIn
Entries 4141
Mean 0.002315
RMS 0.007442
0
20
40
60
80
100
120
140
160
180
200
220
240
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

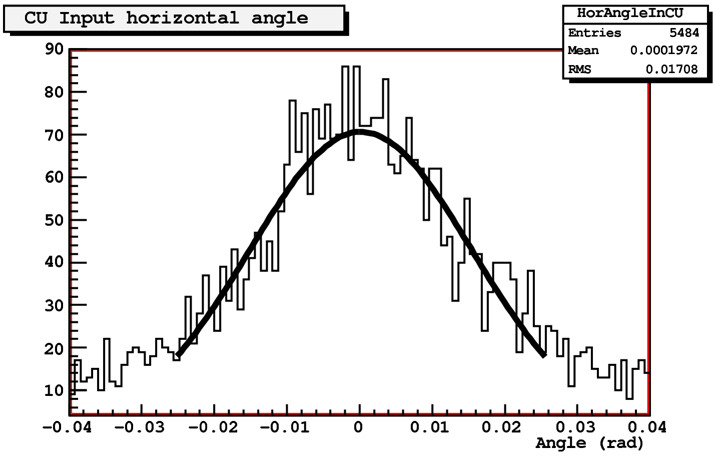

Input vertical angle
VertAngleIn
Entries 4141
Mean 6.639e-05
RMS 0.004912
0
50
100
150
200
250
300
350
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

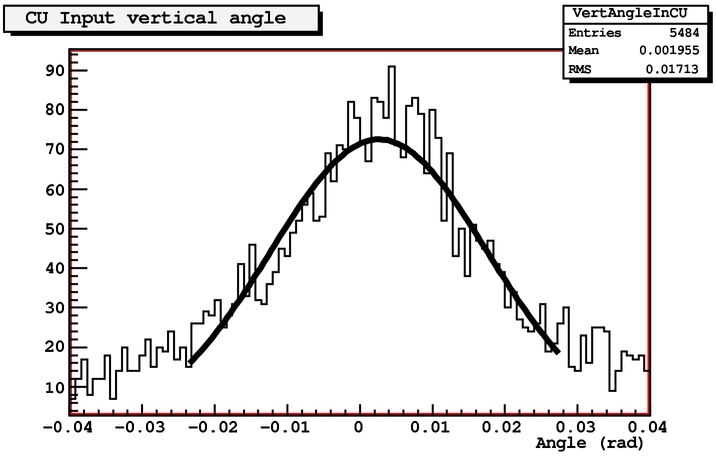

Input Beam Spot
SpotCoordIn
Entries 4141
Mean x 4.953
Mean y −9.457
RMS x 11.08
RMS y 9.006
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

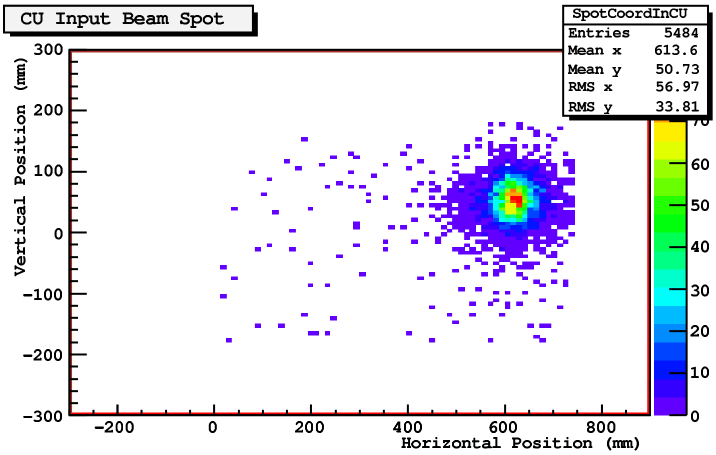

Input Beam Spot
SpotAngleIn
Entries 4141
Mean x 0.002312
Mean y 6.237e-05
RMS x 0.00744
RMS y 0.0049
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14
16
18

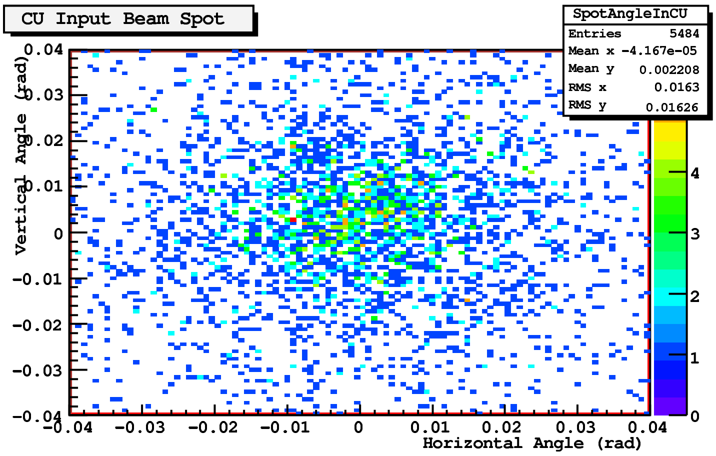

CU Input Horizontal coordinate
HorCoordInCU
Entries 5484
Mean 50.73
RMS 33.81
700001533
Position (mm)
−300
−200
−100
0
100
200
300
0
100
200
300
400
500

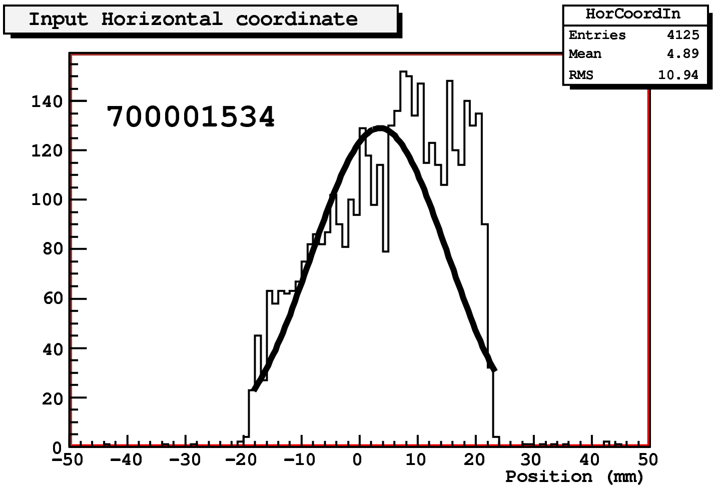

CU Input vertical coordinate
VertCoordInCU
Entries 5484
Mean 613.6
RMS 56.97
Position (mm)
−200
0
200
400
600
800
0
100
200
300
400
500
600
700
800

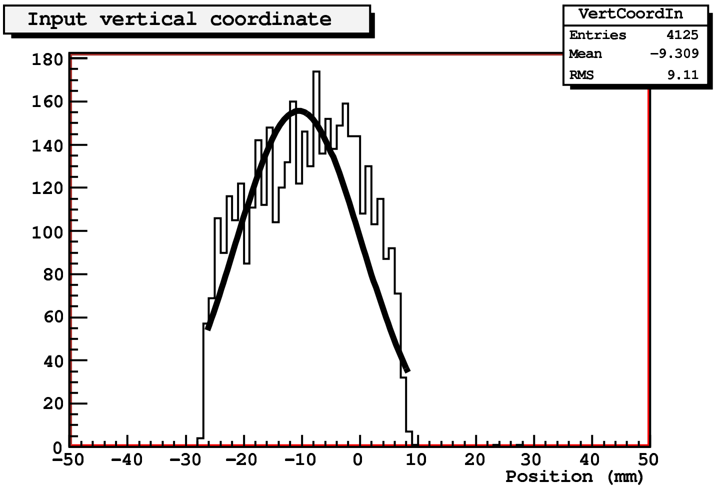

CU Input horizontal angle
HorAngleInCU
Entries 5484
Mean 0.0001972
RMS 0.01708
Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
10
20
30
40
50
60
70
80
90

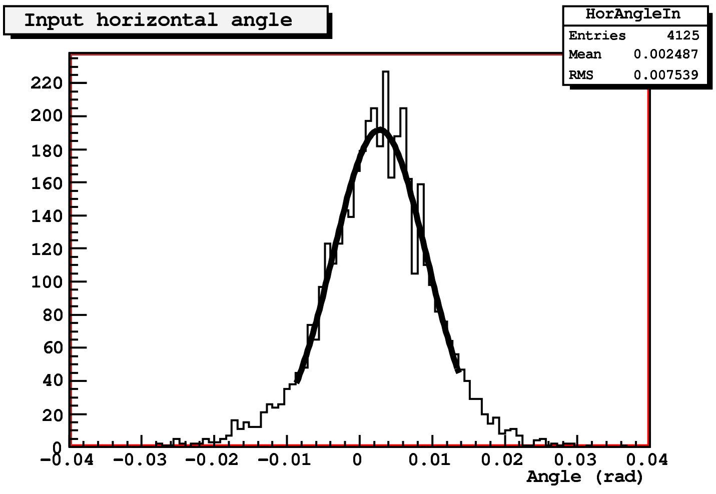

CU Input vertical angle
VertAngleInCU
Entries 5484
Mean 0.001955
RMS 0.01713
Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
10
20
30
40
50
60
70
80
90

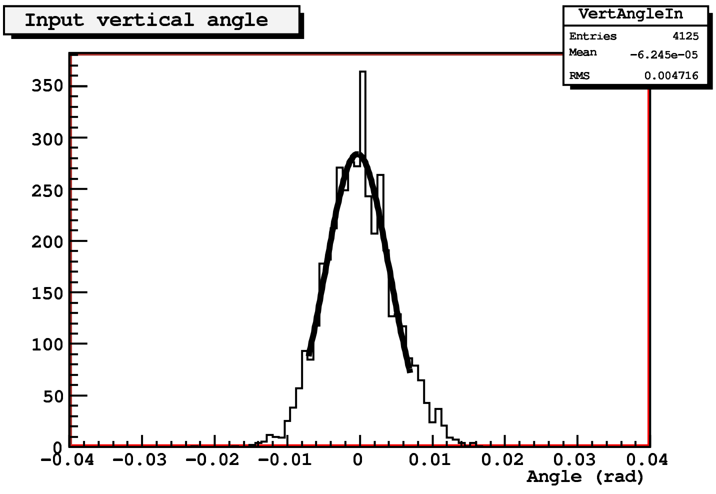

CU Input Beam Spot
SpotCoordInCU
Entries 5484
Mean x 613.6
Mean y 50.73
RMS x 56.97
RMS y 33.81
Vertical Position (mm)
Horizontal Position (mm)
−200
0
200
400
600
800
−300
−200
−100
0
100
200
300
0
10
20
30
40
50
60
70

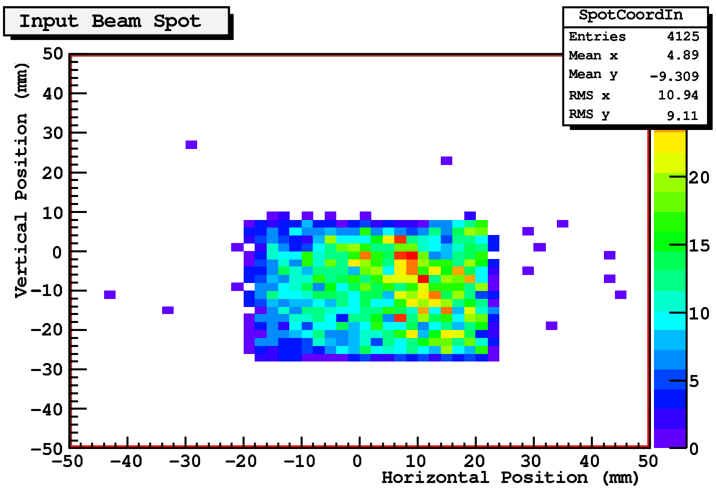

CU Input Beam Spot
SpotAngleInCU
Entries 5484
Mean x −4.167e−05
Mean y 0.002208
RMS x 0.0163
RMS y 0.01626
Vertical Angle (rad)
Horizontal Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
0
1
2
3
4

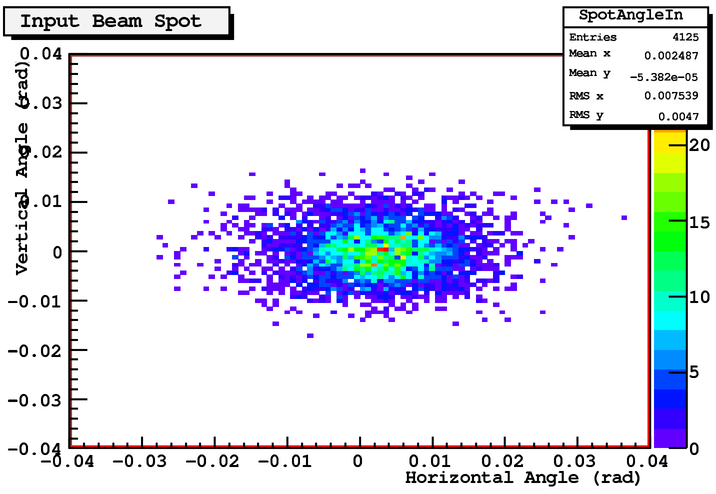

Input Horizontal coordinate
HorCoordIn
Entries 4125
Mean 4.89
RMS 10.94
700001534
0
20
40
60
80
100
120
140
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

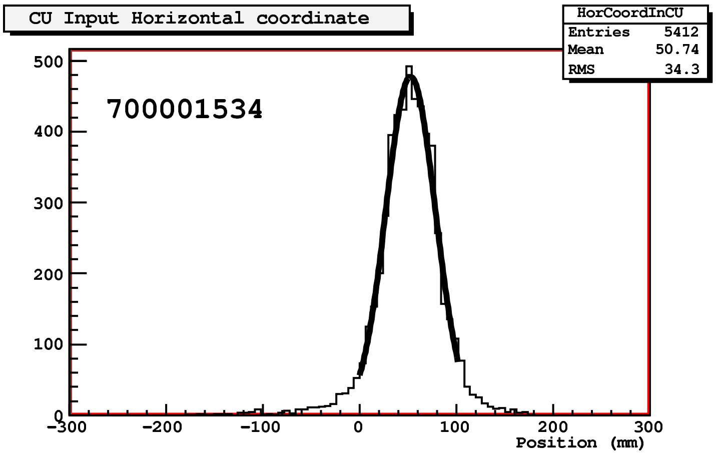

Input vertical coordinate
VertCoordIn
Entries 4125
Mean −9.309
RMS 9.11
0
20
40
60
80
100
120
140
160
180
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

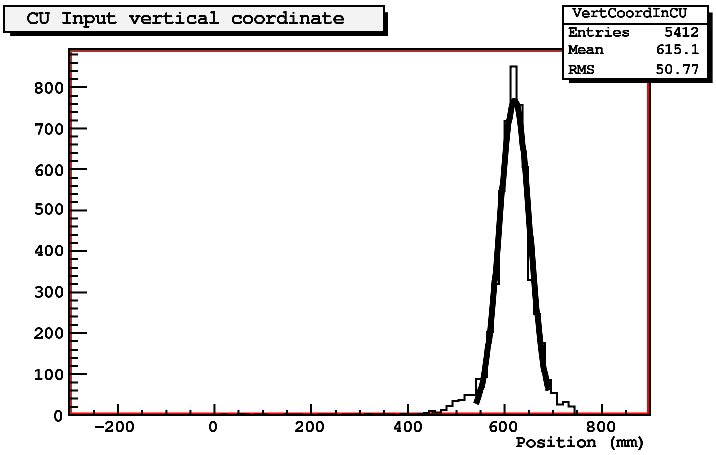

Input horizontal angle
HorAngleIn
Entries 4125
Mean 0.002487
RMS 0.007539
0
20
40
60
80
100
120
140
160
180
200
220
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

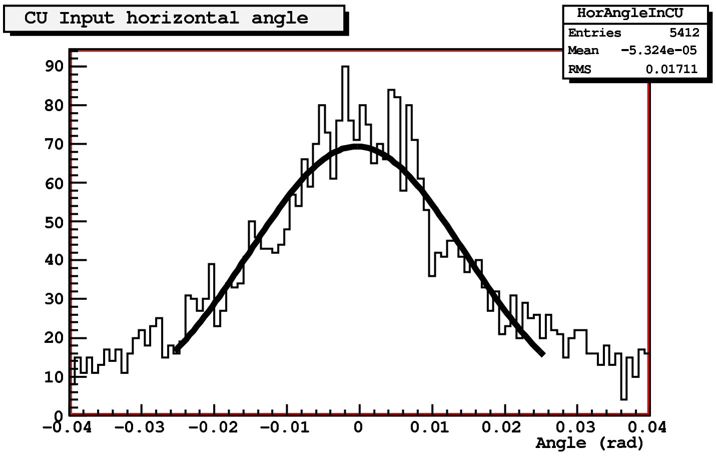

Input vertical angle
VertAngleIn
Entries 4125
Mean −6.245e−05
RMS 0.004716
0
50
100
150
200
250
300
350
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

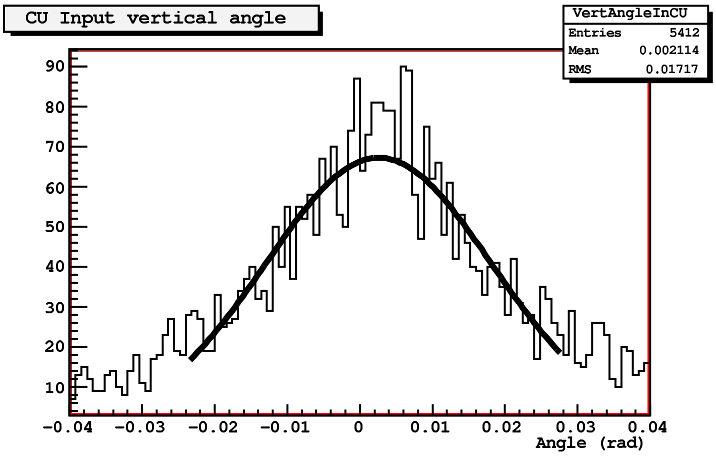

Input Beam Spot
SpotCoordIn
Entries 4125
Mean x 4.89
Mean y −9.309
RMS x 10.94
RMS y 9.11
Vertical Position (mm)
−50 −40 −30 −20 −10 0 10 20 30 40 50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
0
5
10
15
20

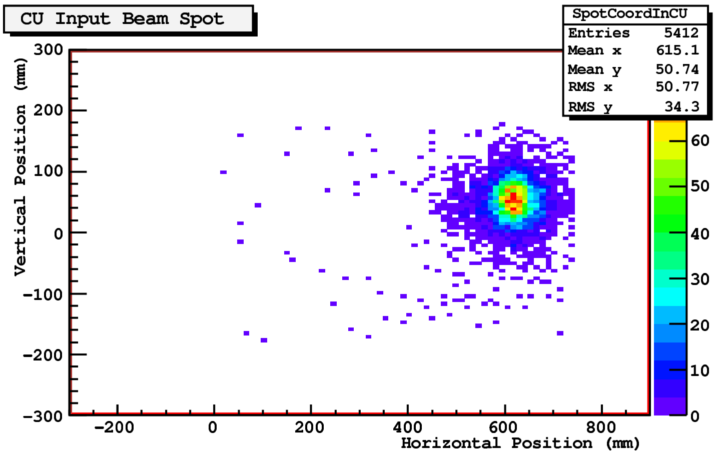

Input Beam Spot
SpotAngleIn
Entries 4125
Mean x 0.002487
Mean y −5.382e−05
RMS x 0.007539
RMS y 0.0047
Vertical Angle (rad)
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
0
5
10
15
20

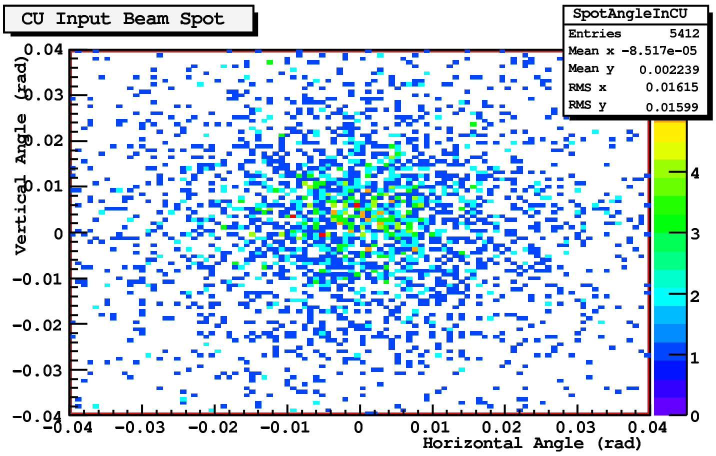

CU Input Horizontal coordinate
HorCoordInCU
Entries 5412
Mean 50.74
RMS 34.3
700001534
0
100
200
300
400
500
−300
−200
−100
0
100
200
300
Position (mm)

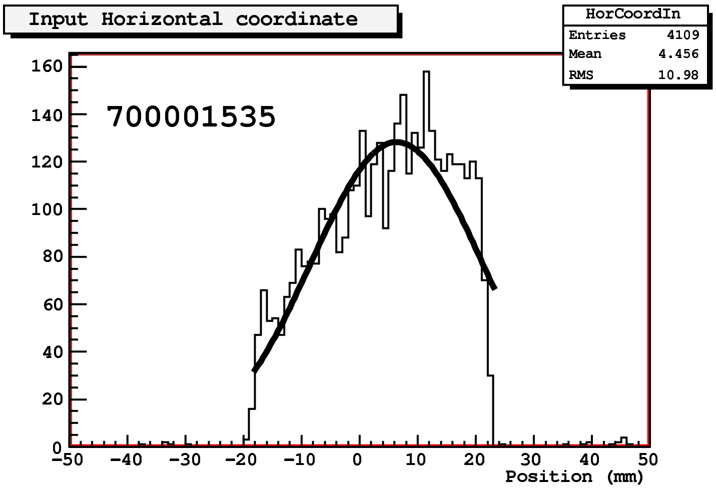

CU Input vertical coordinate
VertCoordInCU
Entries 5412
Mean 615.1
RMS 50.77
0
100
200
300
400
500
600
700
800
−200
0
200
400
600
800
Position (mm)

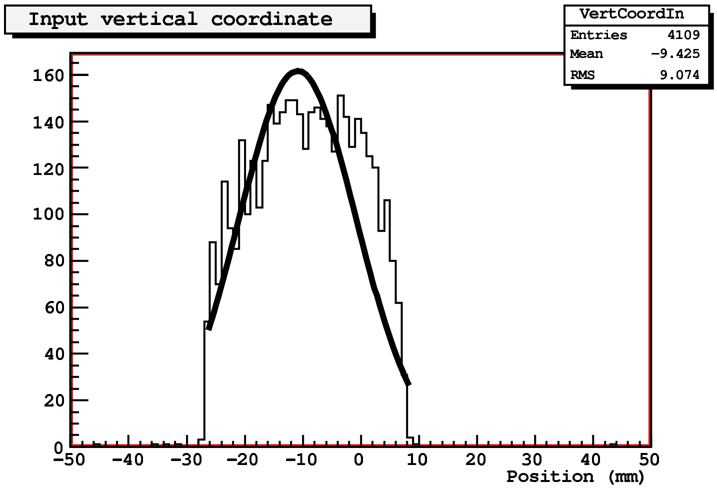

CU Input horizontal angle
HorAngleInCU
Entries 5412
Mean −5.324e−05
RMS 0.01711
0
10
20
30
40
50
60
70
80
90
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

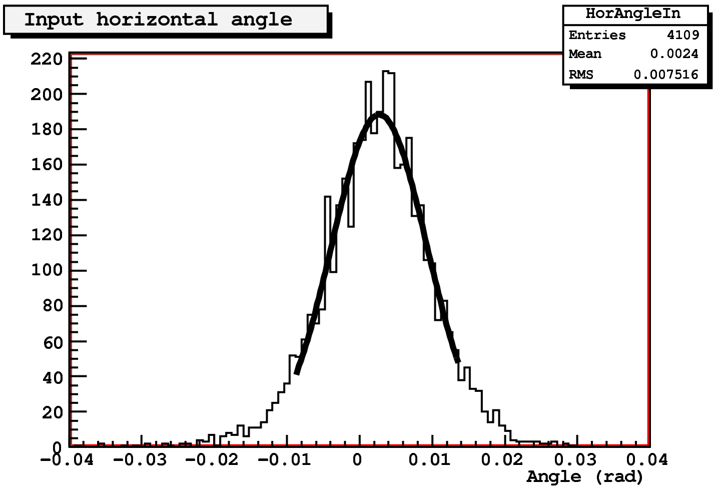

CU Input vertical angle
VertAngleInCU
Entries 5412
Mean 0.002114
RMS 0.01717
10
20
30
40
50
60
70
80
90
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

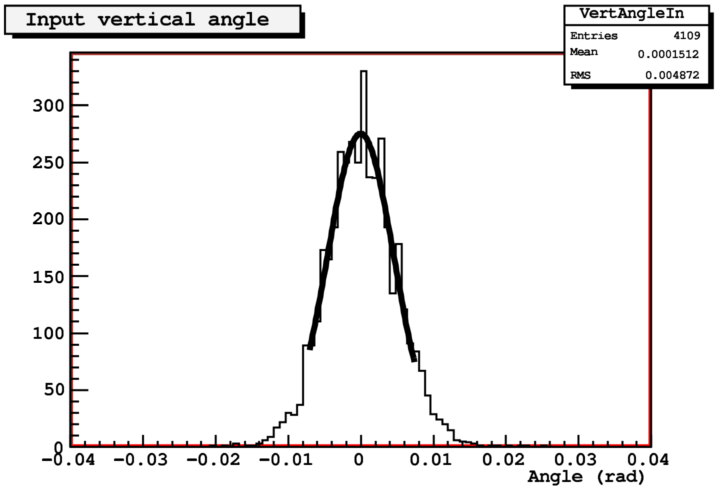

CU Input Beam Spot
SpotCoordInCU
Entries 5412
Mean x 615.1
Mean y 50.74
RMS x 50.77
RMS y 34.3
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
10
20
30
40
50
60

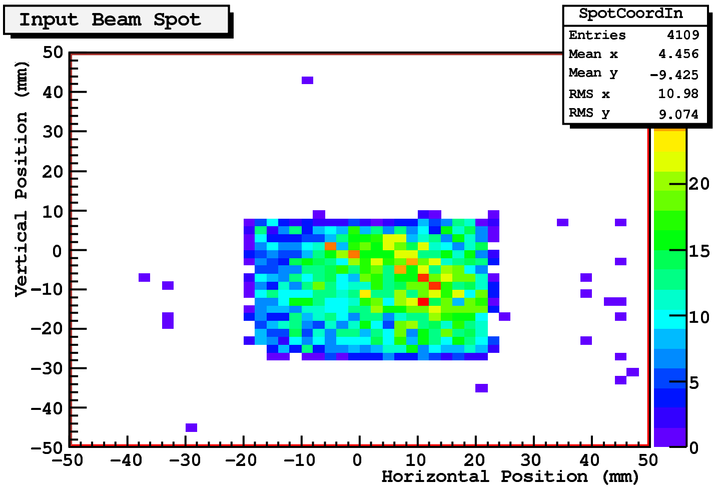

CU Input Beam Spot
SpotAngleInCU
Entries 5412
Mean x −8.517e−05
Mean y 0.002239
RMS x 0.01615
RMS y 0.01599
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
1
2
3
4

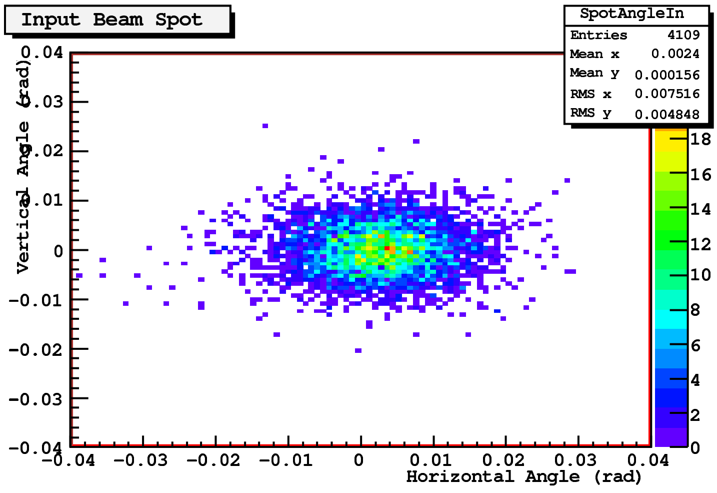

Input Horizontal coordinate
HorCoordIn
Entries 4109
Mean 4.456
RMS 10.98
700001535
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

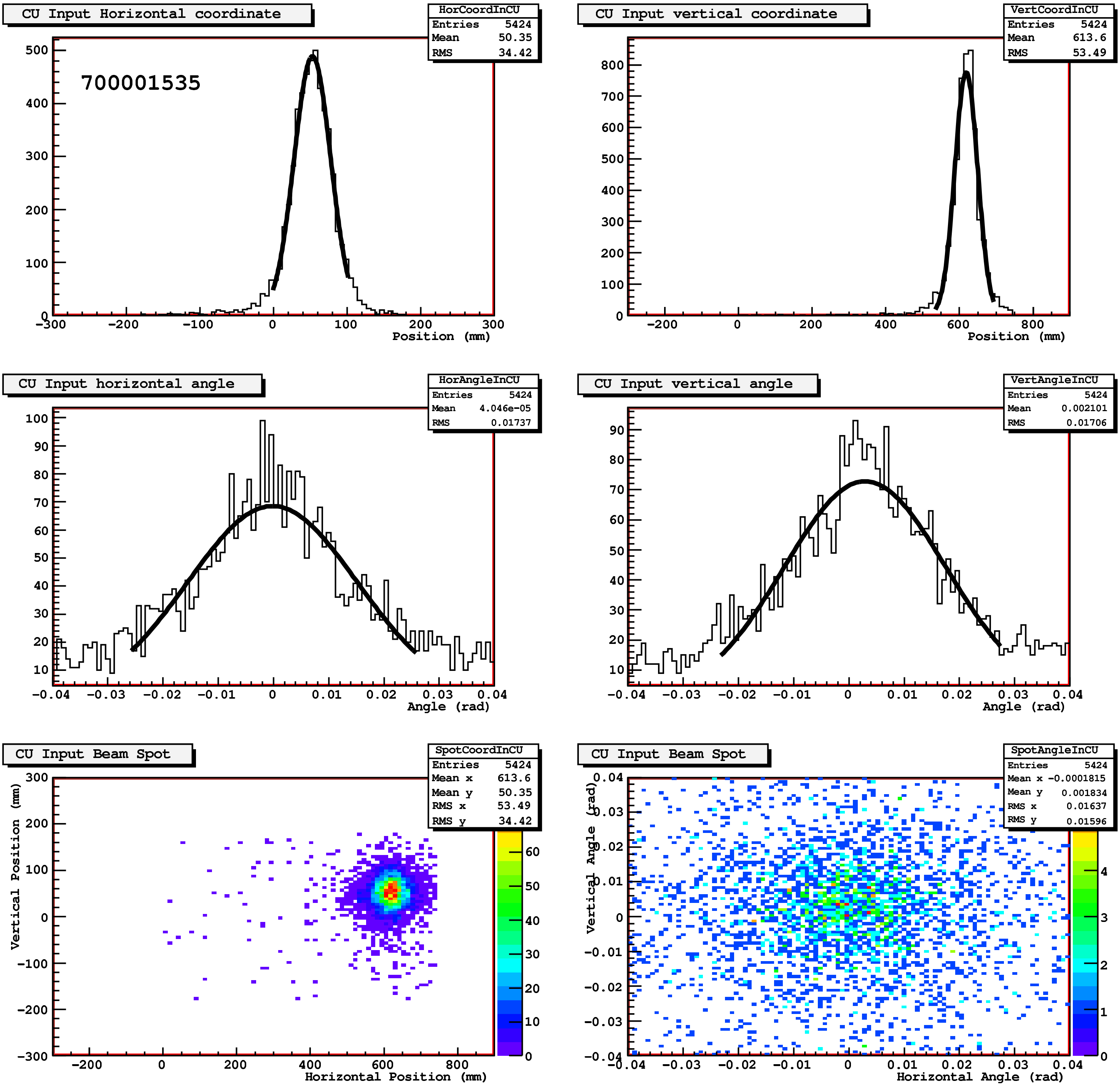

Input vertical coordinate
VertCoordIn
Entries 4109
Mean −9.425
RMS 9.074
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

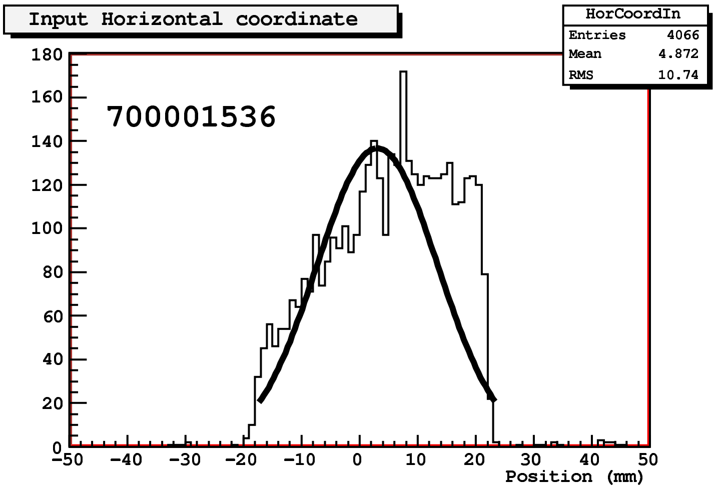

Input horizontal angle
HorAngleIn
Entries 4109
Mean 0.0024
RMS 0.007516
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

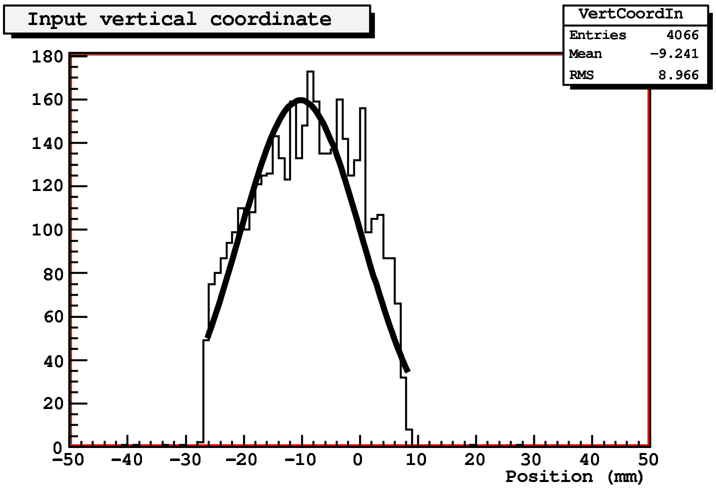

Input vertical angle
VertAngleIn
Entries 4109
Mean 0.0001512
RMS 0.004872
0
50
100
150
200
250
300
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

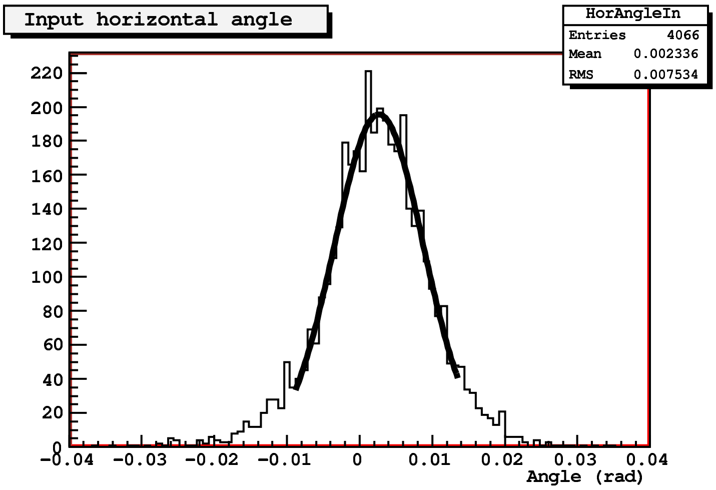

Input Beam Spot
SpotCoordIn
Entries 4109
Mean x 4.456
Mean y −9.425
RMS x 10.98
RMS y 9.074
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

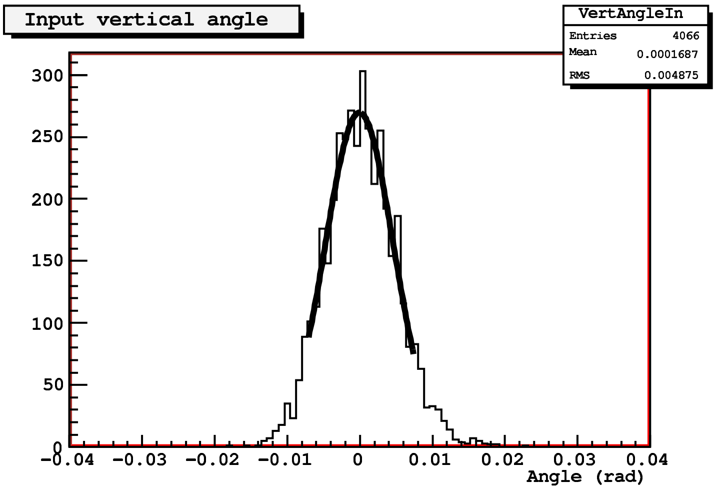

Input Beam Spot
SpotAngleIn
Entries 4109
Mean x 0.0024
Mean y 0.000156
RMS x 0.007516
RMS y 0.004848
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14
16
18

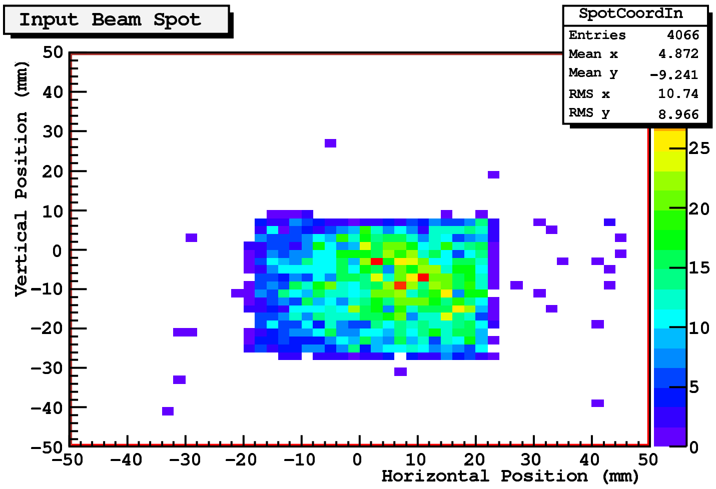

CU Input Horizontal coordinate
HorCoordInCU
Entries 5424
Mean 50.35
RMS 34.42
700001535
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 5424
Mean 613.6
RMS 53.49
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 5424
Mean 4.046e-05
RMS 0.01737
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 5424
Mean 0.002101
RMS 0.01706
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 5424
Mean x 613.6
Mean y 50.35
RMS x 53.49
RMS y 34.42
Vertical Position (mm)
Horizontal Position (mm)
CU Input Beam Spot
SpotAngleInCU
Entries 5424
Mean x -0.0001815
Mean y 0.001834
RMS x 0.01637
RMS y 0.01596
Vertical Angle (rad)
Horizontal Angle (rad)

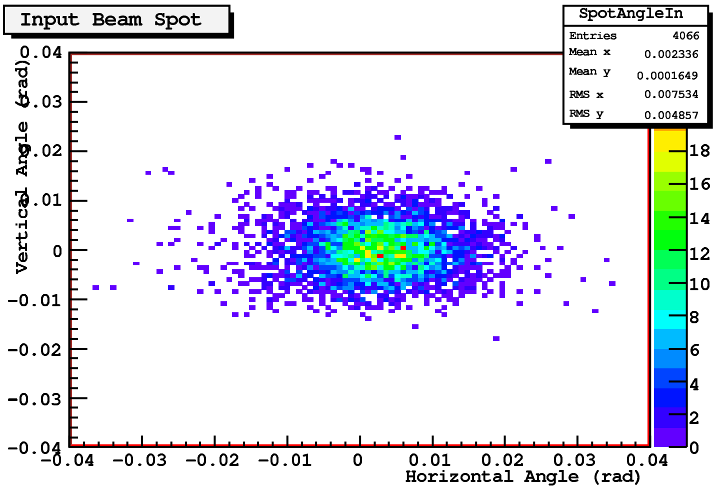

Input Horizontal coordinate
HorCoordIn
Entries 4066
Mean 4.872
RMS 10.74
700001536
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

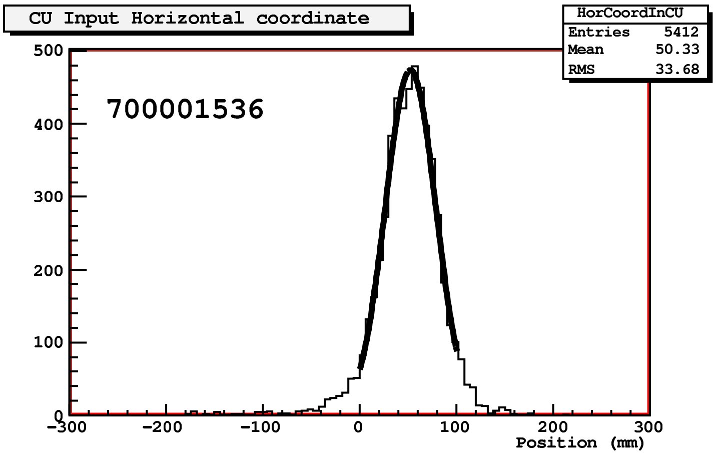

Input vertical coordinate
VertCoordIn
Entries 4066
Mean −9.241
RMS 8.966
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

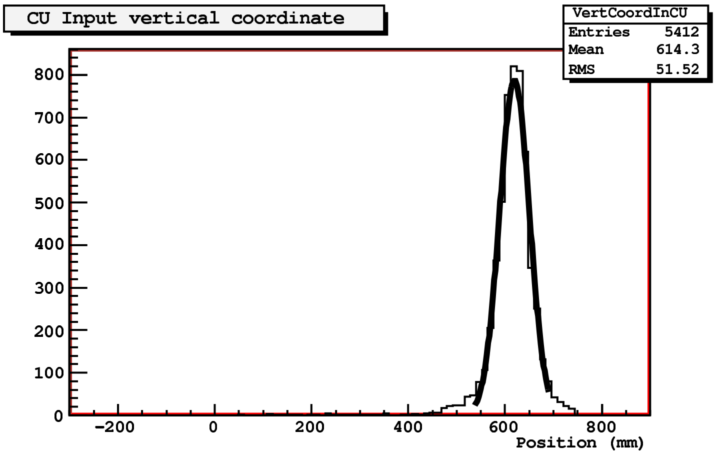

Input horizontal angle
HorAngleIn
Entries 4066
Mean 0.002336
RMS 0.007534
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

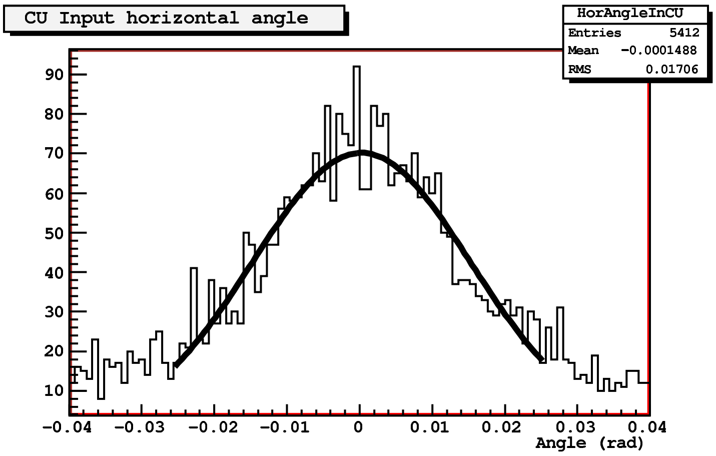

Input vertical angle
VertAngleIn
Entries 4066
Mean 0.0001687
RMS 0.004875
0
50
100
150
200
250
300
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

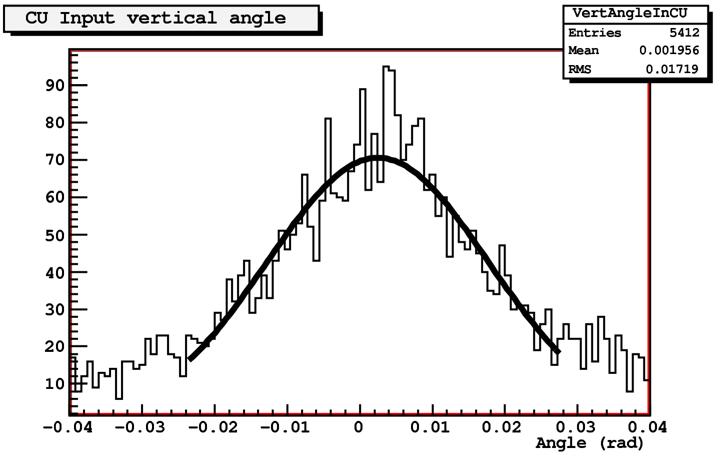

Input Beam Spot
SpotCoordIn
Entries 4066
Mean x 4.872
Mean y −9.241
RMS x 10.74
RMS y 8.966
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

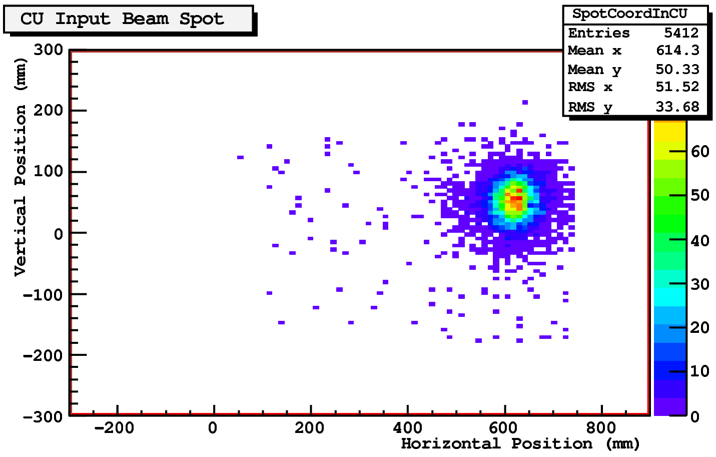

Input Beam Spot
SpotAngleIn
Entries 4066
Mean x 0.002336
Mean y 0.0001649
RMS x 0.007534
RMS y 0.004857
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10
12
14
16
18

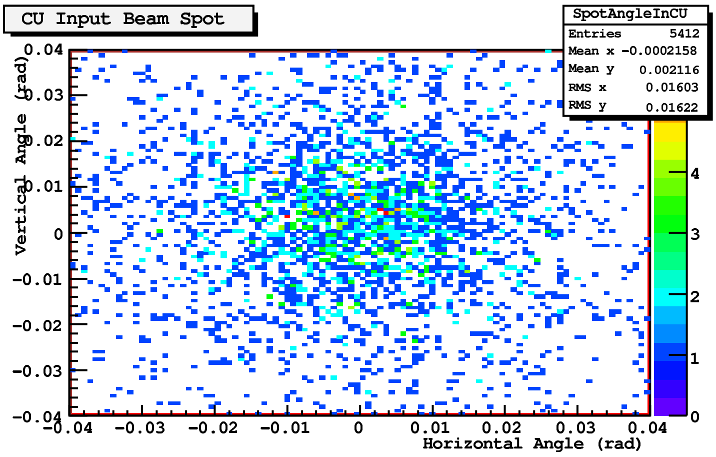

CU Input Horizontal coordinate
HorCoordInCU
Entries 5412
Mean 50.33
RMS 33.68
700001536
500
400
300
200
100
0
−300 −200 −100 0 100 200 300
Position (mm)

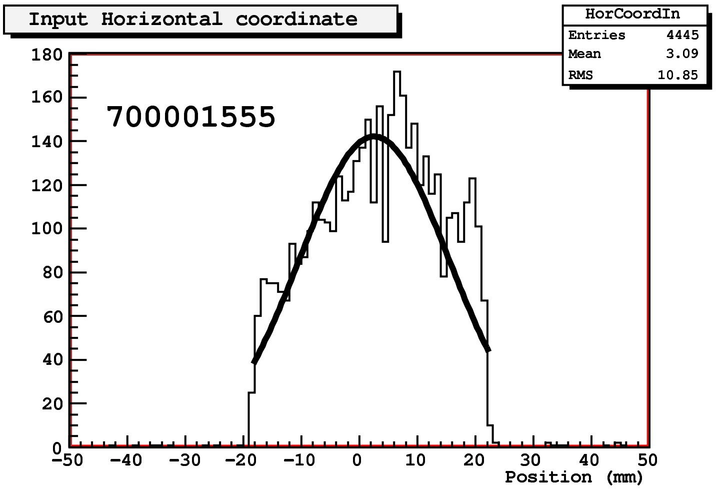

CU Input vertical coordinate
VertCoordInCU
Entries 5412
Mean 614.3
RMS 51.52
800
700
600
500
400
300
200
100
0
−200 0 200 400 600 800
Position (mm)

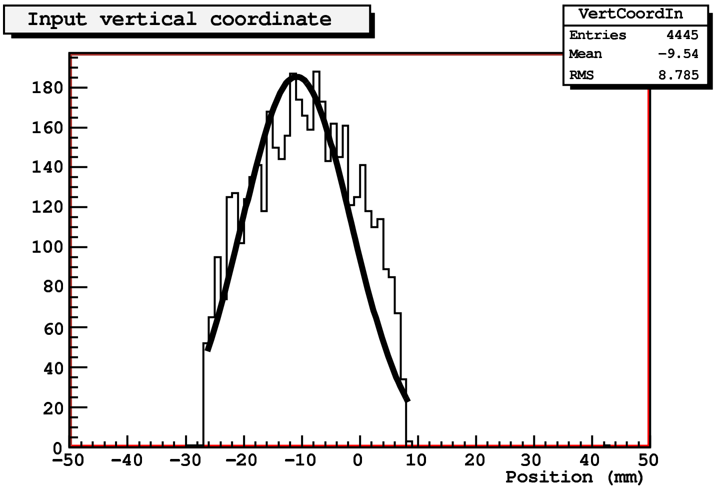

CU Input horizontal angle
HorAngleInCU
Entries 5412
Mean −0.0001488
RMS 0.01706
90
80
70
60
50
40
30
20
10
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

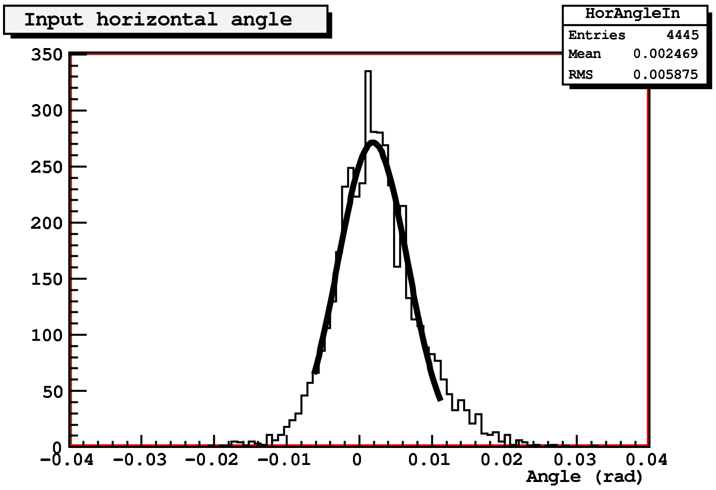

CU Input vertical angle
VertAngleInCU
Entries 5412
Mean 0.001956
RMS 0.01719
90
80
70
60
50
40
30
20
10
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

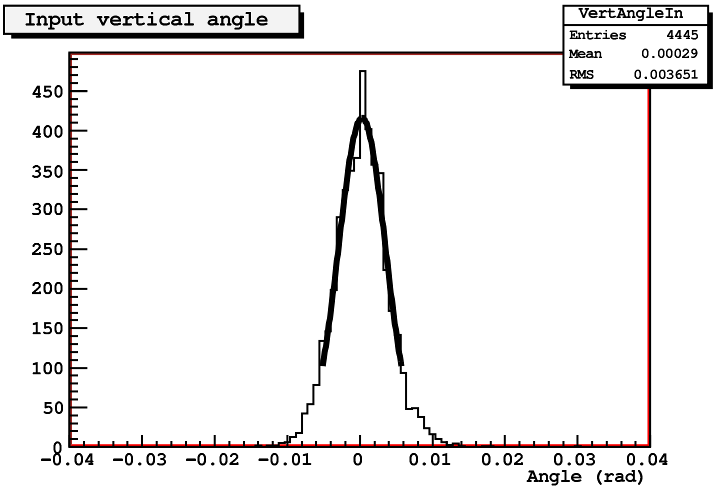

CU Input Beam Spot
SpotCoordInCU
Entries 5412
Mean x 614.3
Mean y 50.33
RMS x 51.52
RMS y 33.68
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200 0 200 400 600 800
Horizontal Position (mm)
60
50
40
30
20
10
0

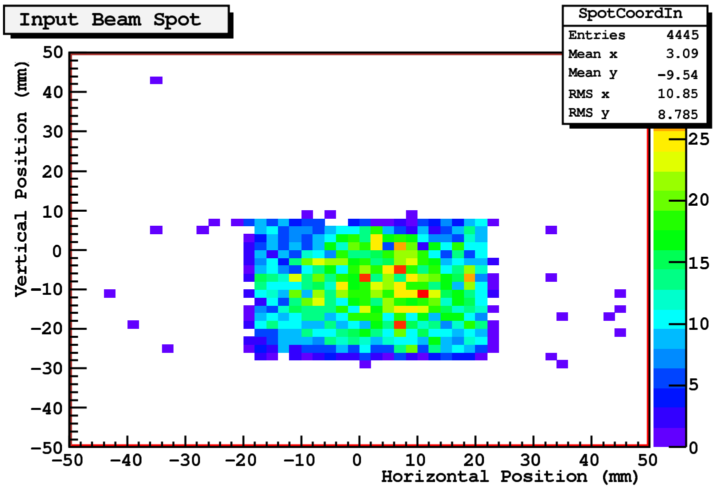

CU Input Beam Spot
SpotAngleInCU
Entries 5412
Mean x −0.0002158
Mean y 0.002116
RMS x 0.01603
RMS y 0.01622
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
4
3
2
1
0

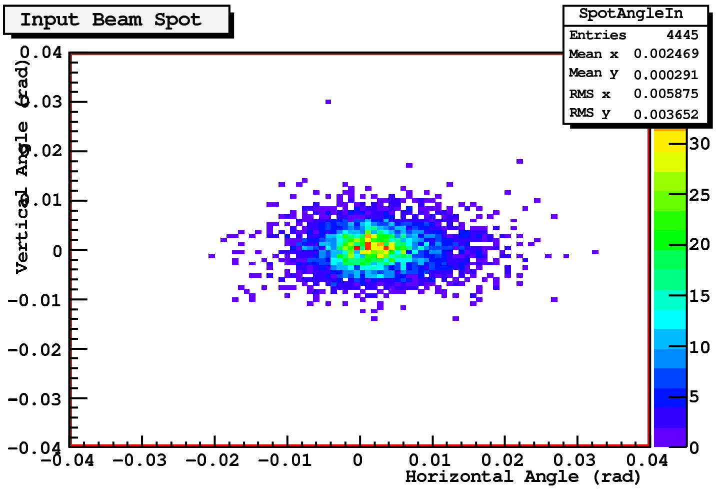

Input Horizontal coordinate
HorCoordIn
Entries 4445
Mean 3.09
RMS 10.85
700001555
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

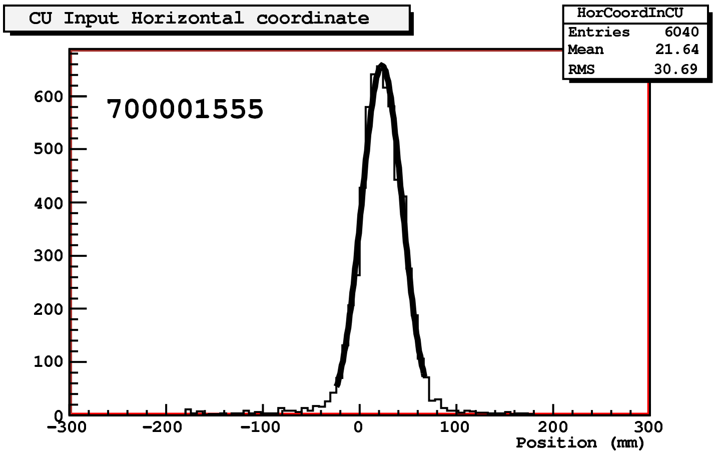

Input vertical coordinate
VertCoordIn
Entries 4445
Mean −9.54
RMS 8.785
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

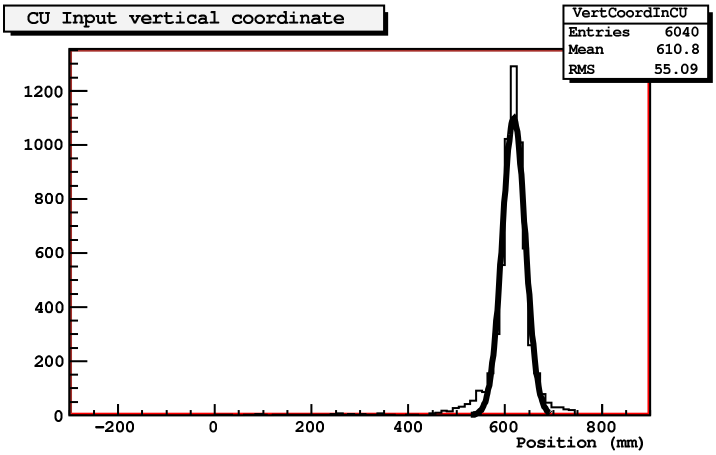

Input horizontal angle
HorAngleIn
Entries 4445
Mean 0.002469
RMS 0.005875
0
50
100
150
200
250
300
350
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

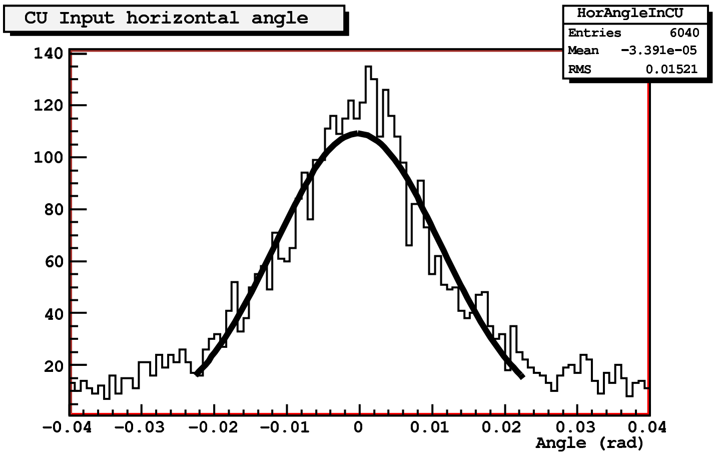

Input vertical angle
VertAngleIn
Entries 4445
Mean 0.00029
RMS 0.003651
0
50
100
150
200
250
300
350
400
450
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

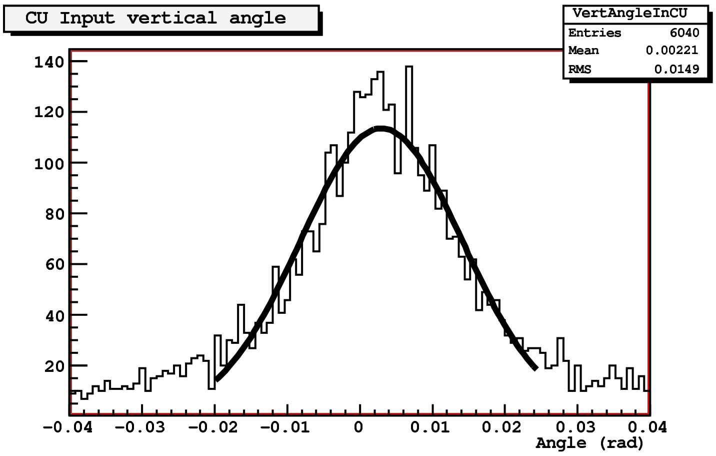

Input Beam Spot
SpotCoordIn
Entries 4445
Mean x 3.09
Mean y −9.54
RMS x 10.85
RMS y 8.785
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

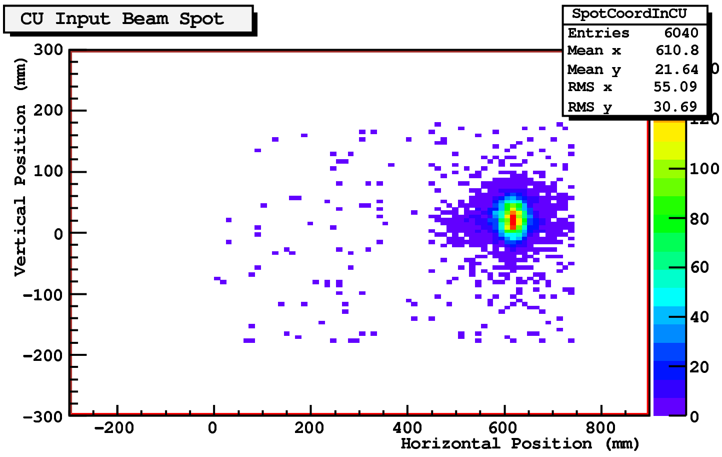

Input Beam Spot
SpotAngleIn
Entries 4445
Mean x 0.002469
Mean y 0.000291
RMS x 0.005875
RMS y 0.003652
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
5
10
15
20
25
30

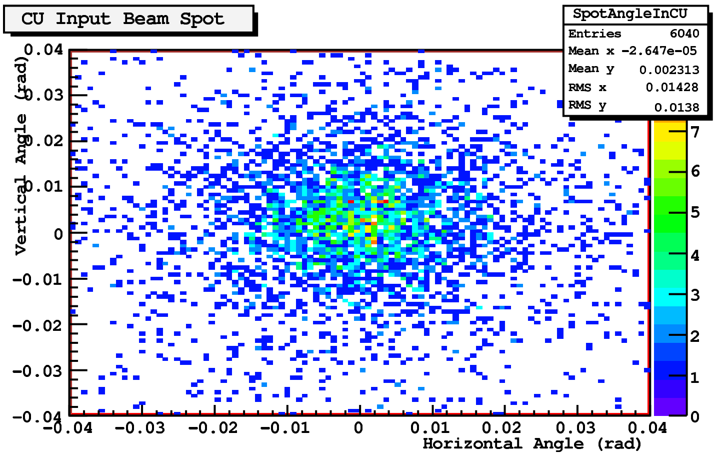

CU Input Horizontal coordinate

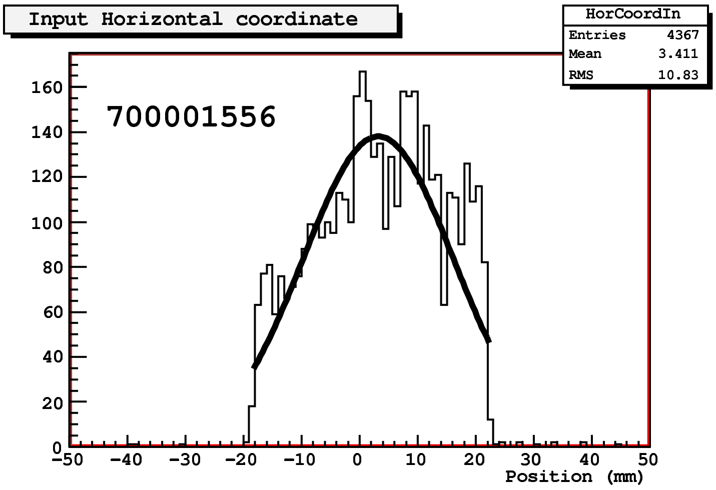

CU Input vertical coordinate

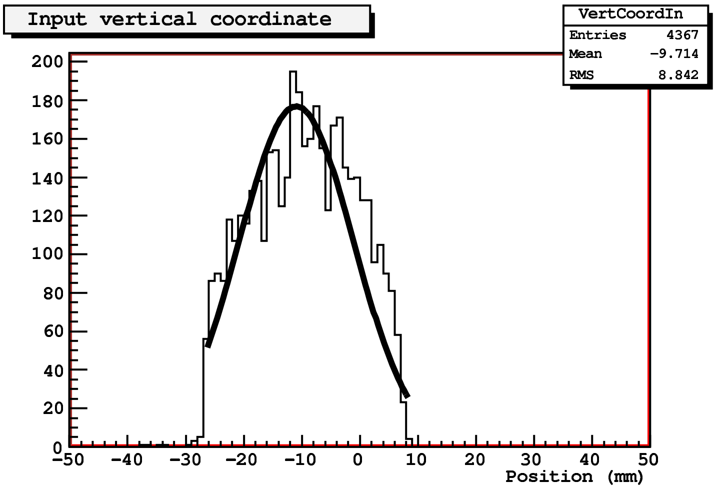

CU Input horizontal angle

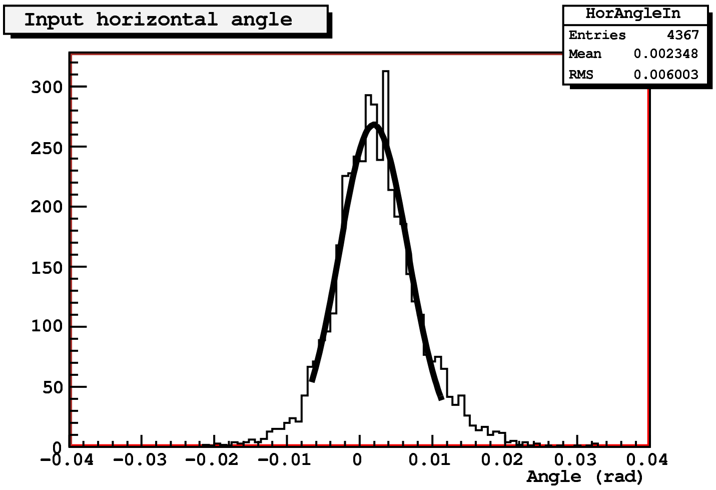

CU Input vertical angle

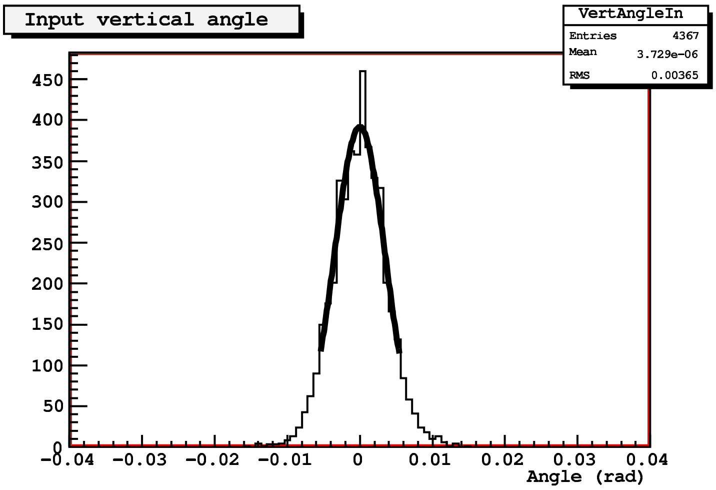

CU Input Beam Spot

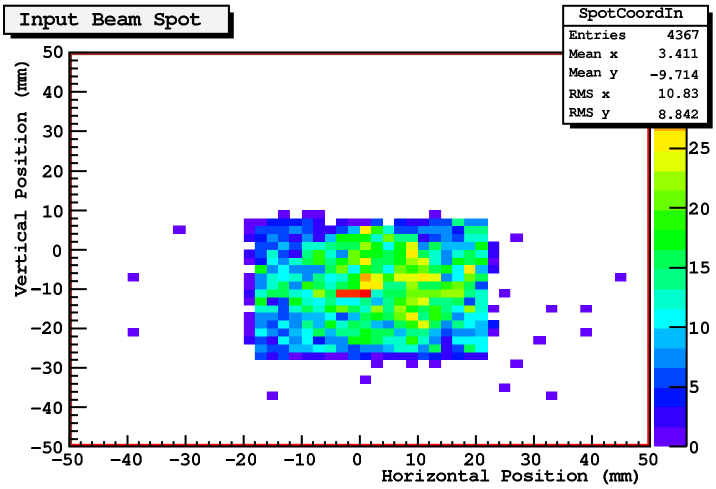

CU Input Beam Spot

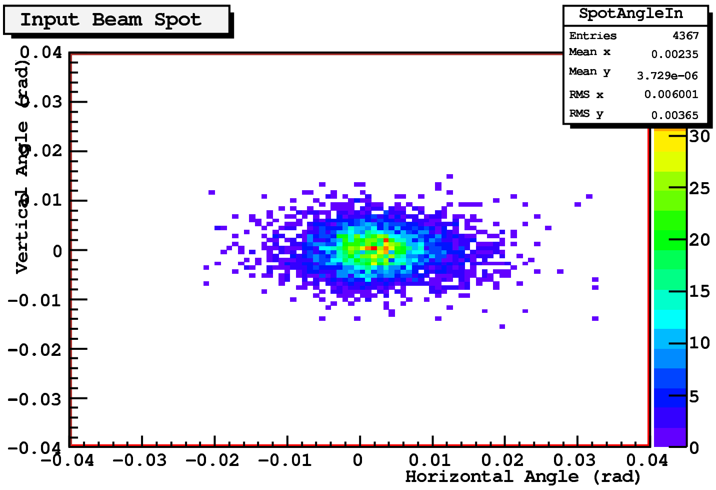

Input Horizontal coordinate
HorCoordIn
Entries 4367
Mean 3.411
RMS 10.83
700001556
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

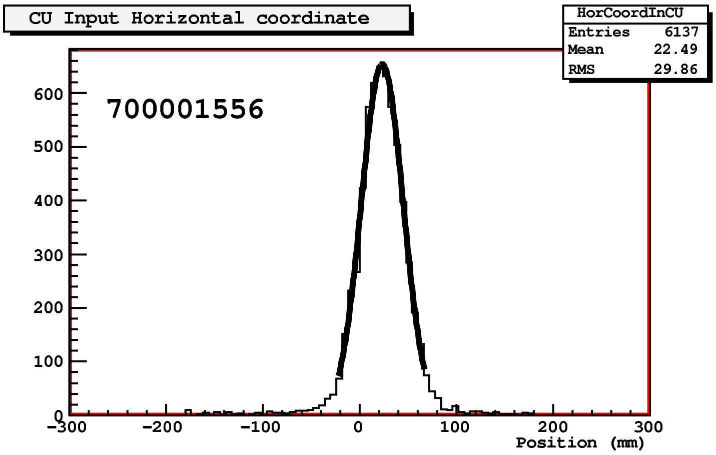

Input vertical coordinate
VertCoordIn
Entries 4367
Mean −9.714
RMS 8.842
0
20
40
60
80
100
120
140
160
180
200
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

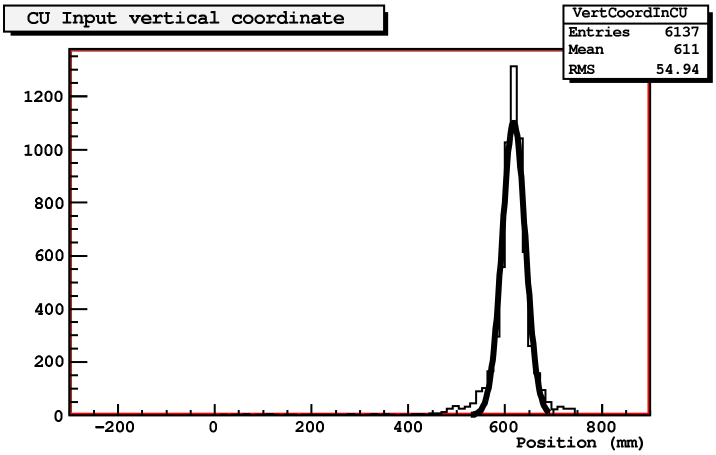

Input horizontal angle
HorAngleIn
Entries 4367
Mean 0.002348
RMS 0.006003
0
50
100
150
200
250
300
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

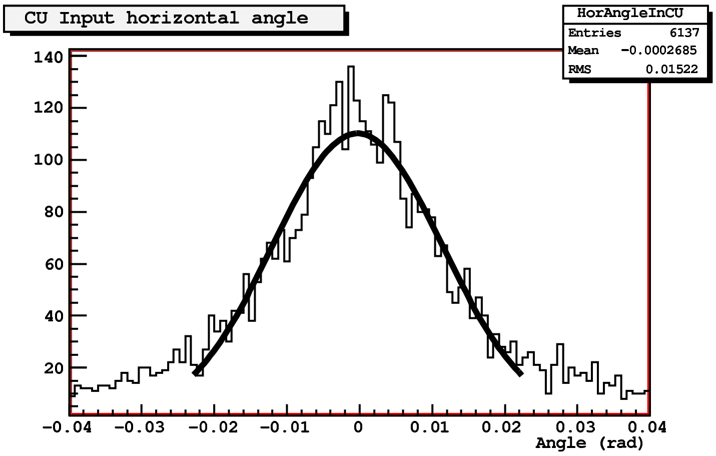

Input vertical angle
VertAngleIn
Entries 4367
Mean 3.729e−06
RMS 0.00365
0
50
100
150
200
250
300
350
400
450
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

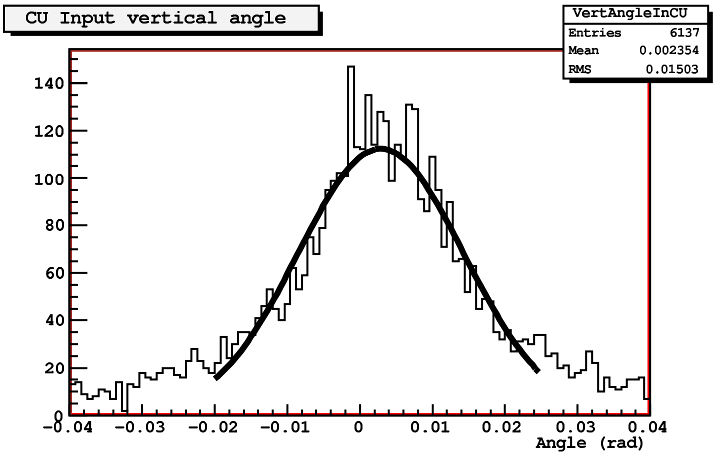

Input Beam Spot
SpotCoordIn
Entries 4367
Mean x 3.411
Mean y −9.714
RMS x 10.83
RMS y 8.842
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

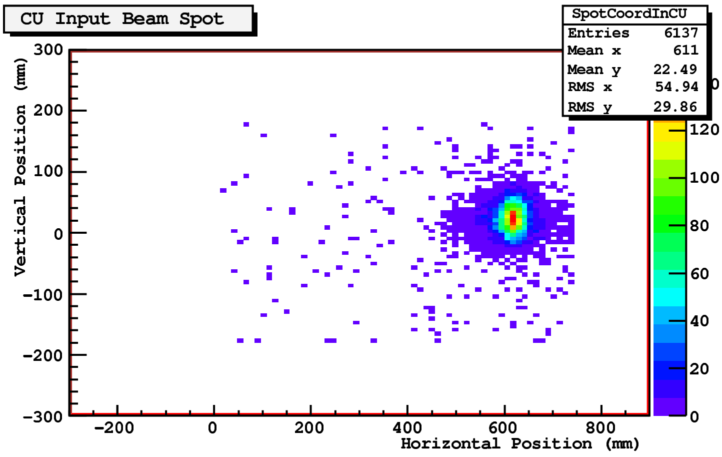

Input Beam Spot
SpotAngleIn
Entries 4367
Mean x 0.00235
Mean y 3.729e−06
RMS x 0.006001
RMS y 0.00365
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
5
10
15
20
25
30

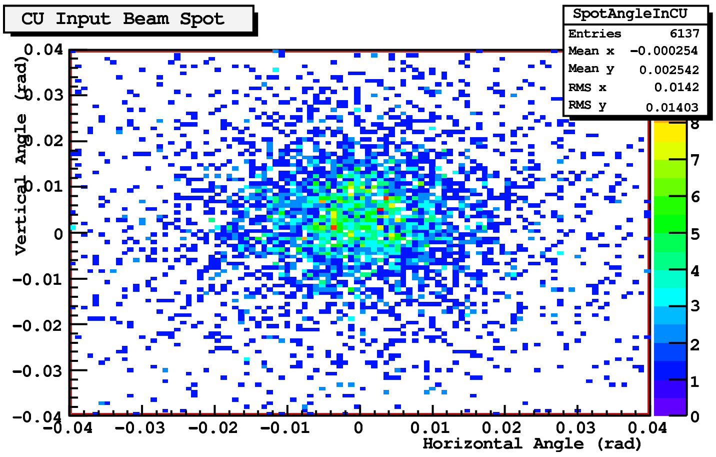

CU Input Horizontal coordinate
HorCoordInCU
Entries 6137
Mean 22.49
RMS 29.86
700001556
600
500
400
300
200
100
0
−300
−200
−100
0
100
200
300
Position (mm)

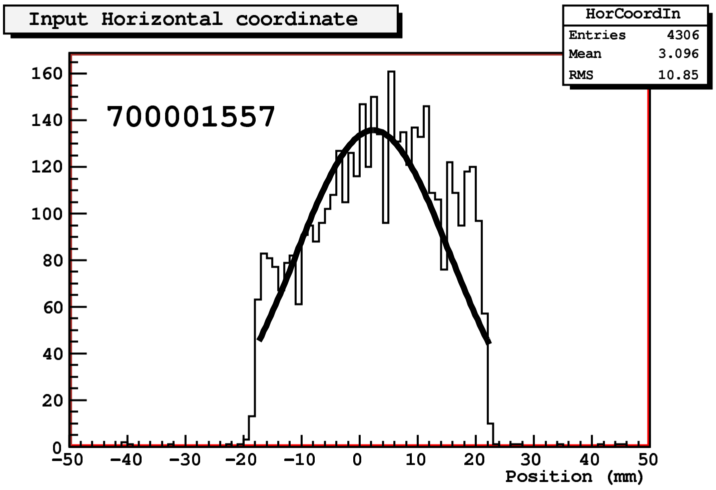

CU Input vertical coordinate
VertCoordInCU
Entries 6137
Mean 611
RMS 54.94
1200
1000
800
600
400
200
0
−200
0
200
400
600
800
Position (mm)

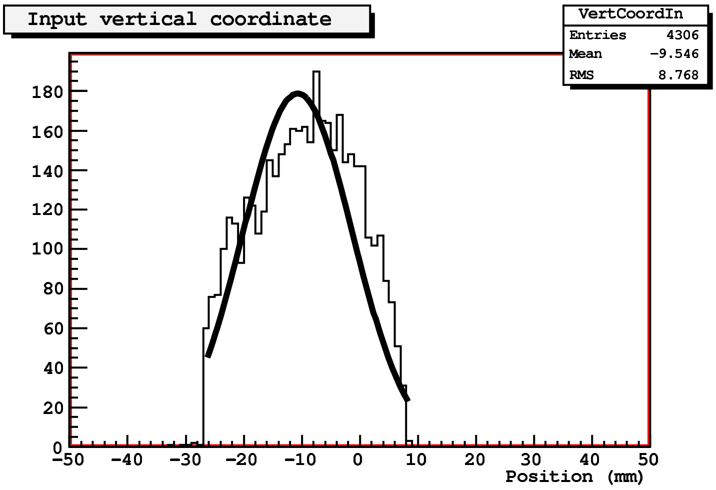

CU Input horizontal angle
HorAngleInCU
Entries 6137
Mean −0.0002685
RMS 0.01522
140
120
100
80
60
40
20
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

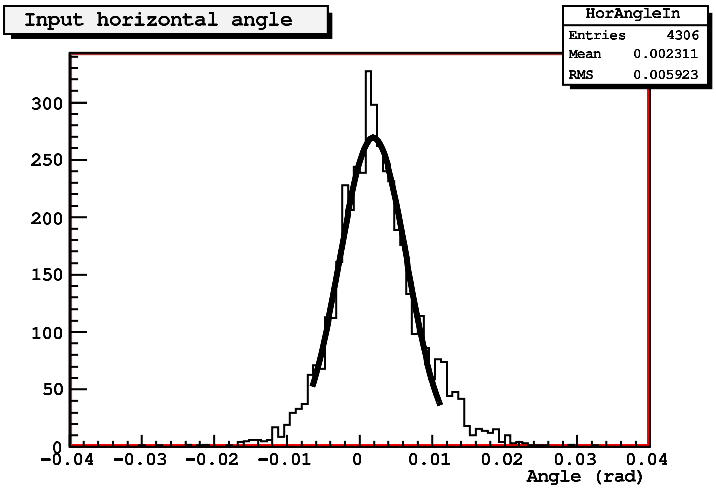

CU Input vertical angle
VertAngleInCU
Entries 6137
Mean 0.002354
RMS 0.01503
140
120
100
80
60
40
20
0
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

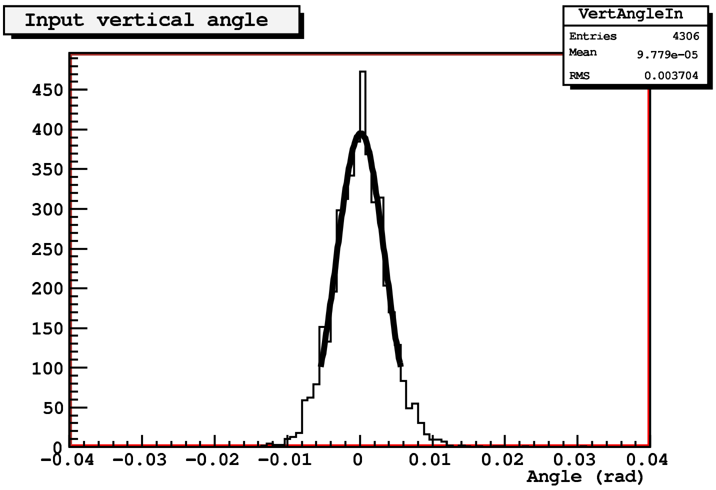

CU Input Beam Spot
SpotCoordInCU
Entries 6137
Mean x 611
Mean y 22.49
RMS x 54.94
RMS y 29.86
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
120
100
80
60
40
20
0

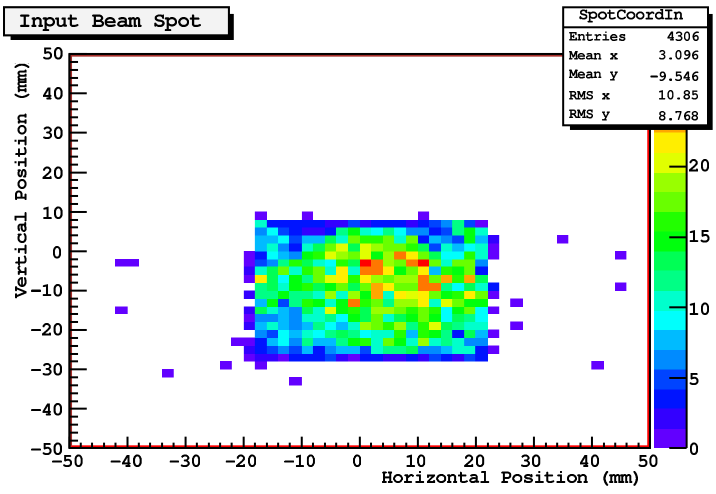

CU Input Beam Spot
SpotAngleInCU
Entries 6137
Mean x −0.000254
Mean y 0.002542
RMS x 0.0142
RMS y 0.01403
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
8
7
6
5
4
3
2
1
0

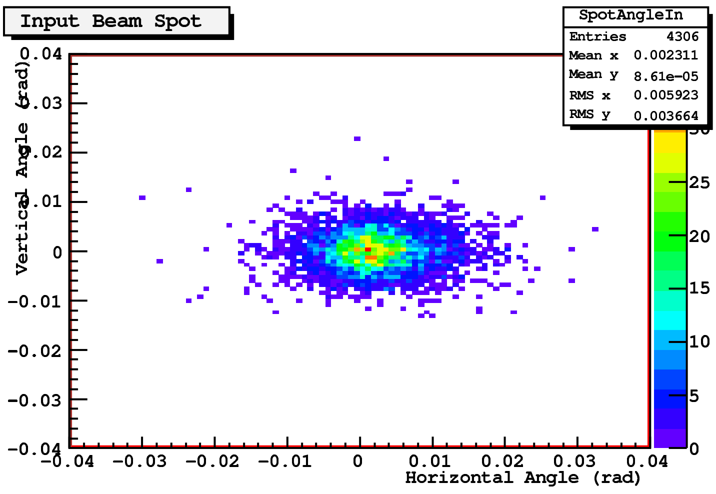

Input Horizontal coordinate
HorCoordIn
Entries 4306
Mean 3.096
RMS 10.85
700001557
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

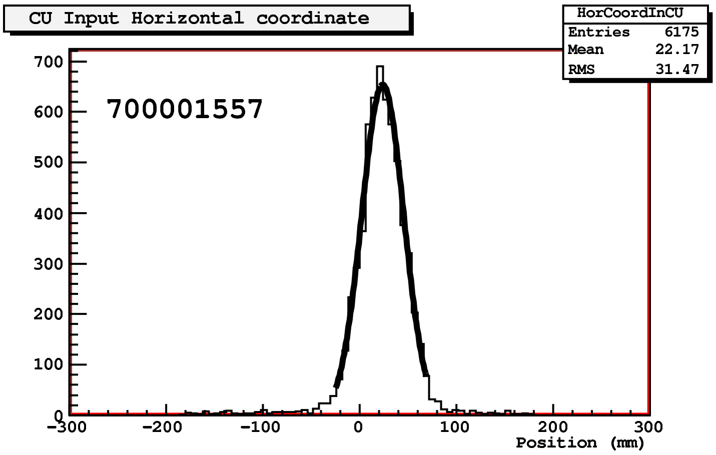

Input vertical coordinate
VertCoordIn
Entries 4306
Mean −9.546
RMS 8.768
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

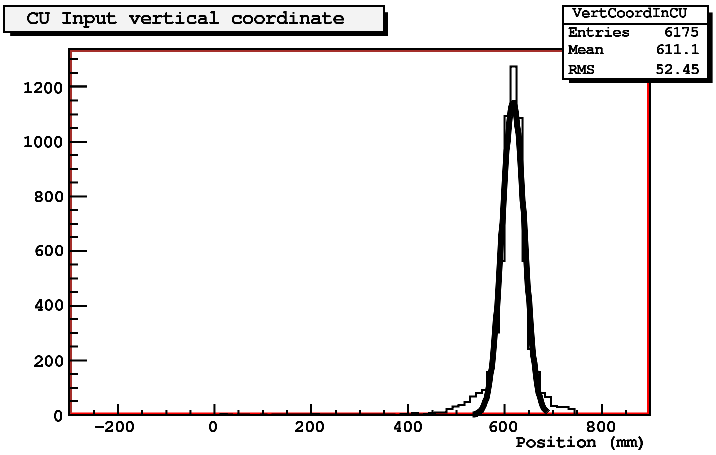

Input horizontal angle
HorAngleIn
Entries 4306
Mean 0.002311
RMS 0.005923
0
50
100
150
200
250
300
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

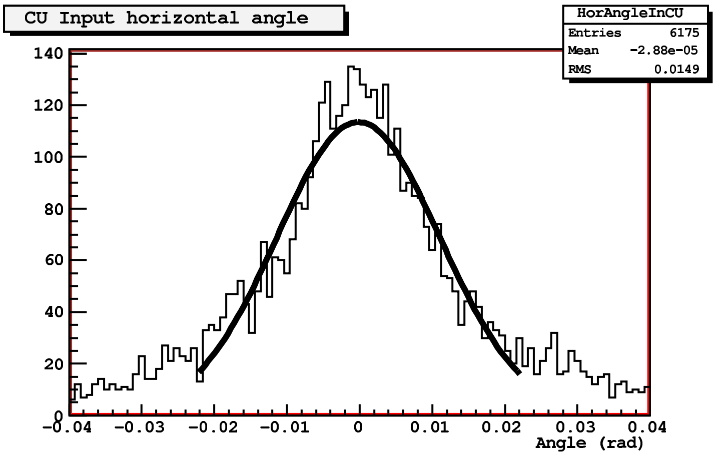

Input vertical angle
VertAngleIn
Entries 4306
Mean 9.779e−05
RMS 0.003704
0
50
100
150
200
250
300
350
400
450
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

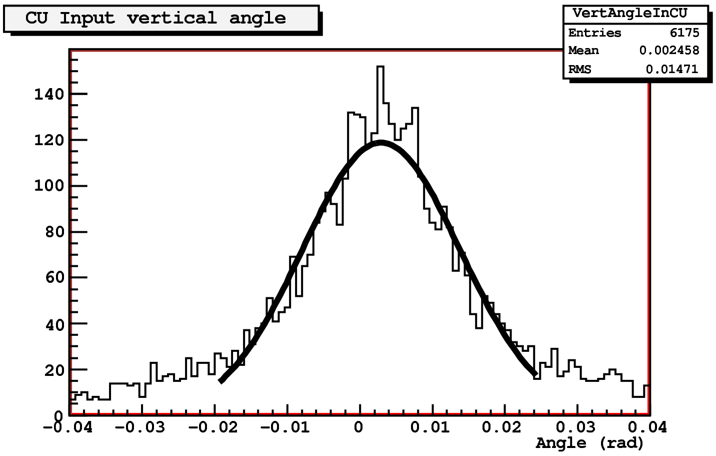

Input Beam Spot
SpotCoordIn
Entries 4306
Mean x 3.096
Mean y −9.546
RMS x 10.85
RMS y 8.768
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

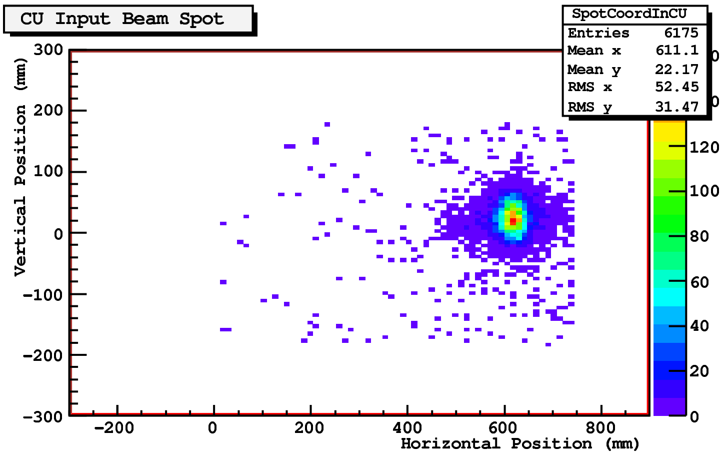

Input Beam Spot
SpotAngleIn
Entries 4306
Mean x 0.002311
Mean y 8.61e−05
RMS x 0.005923
RMS y 0.003664
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
5
10
15
20
25
30

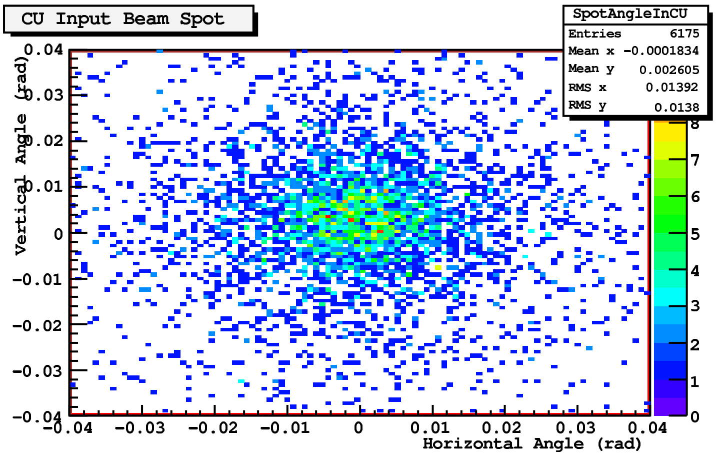

CU Input Horizontal coordinate
HorCoordInCU
Entries 6175
Mean 22.17
RMS 31.47
700001557
0
100
200
300
400
500
600
700
−300
−200
−100
0
100
200
300
Position (mm)

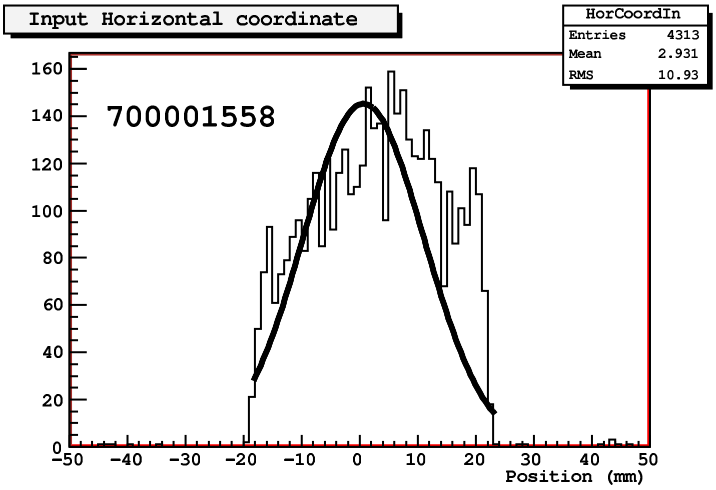

CU Input vertical coordinate
VertCoordInCU
Entries 6175
Mean 611.1
RMS 52.45
0
200
400
600
800
1000
1200
−200
0
200
400
600
800
Position (mm)

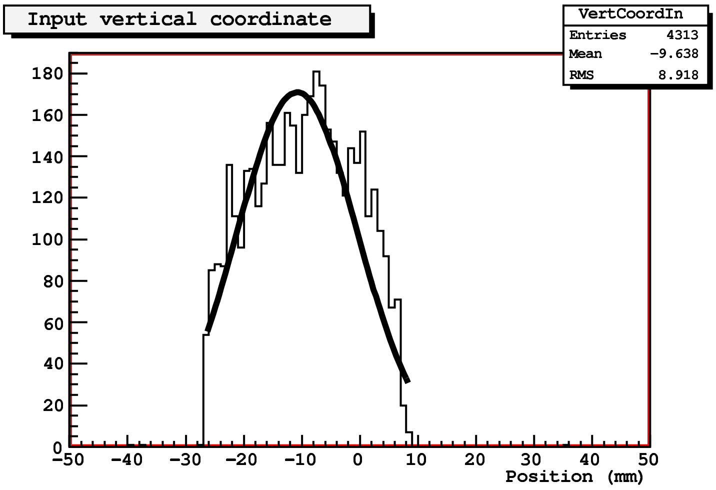

CU Input horizontal angle
HorAngleInCU
Entries 6175
Mean -2.88e-05
RMS 0.0149
0
20
40
60
80
100
120
140
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

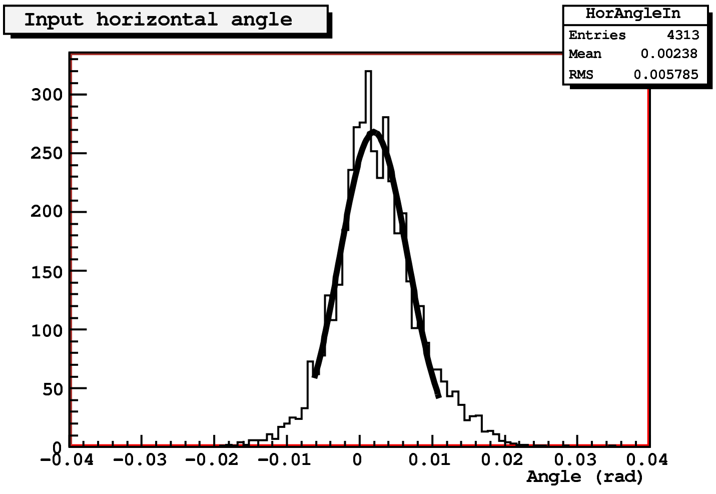

CU Input vertical angle
VertAngleInCU
Entries 6175
Mean 0.002458
RMS 0.01471
0
20
40
60
80
100
120
140
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

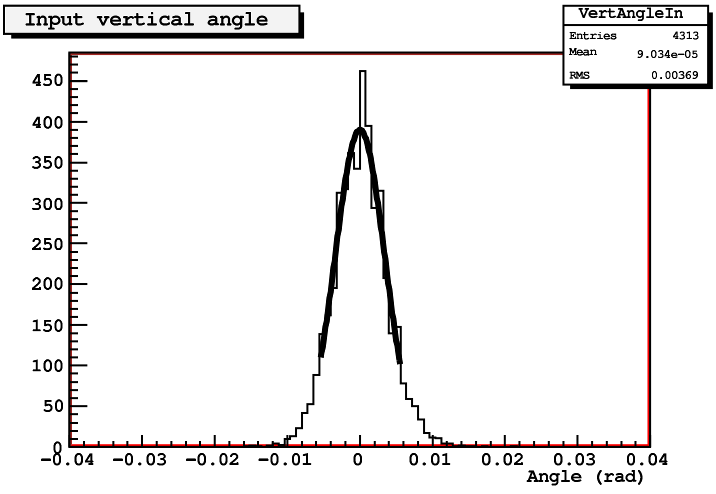

CU Input Beam Spot
SpotCoordInCU
Entries 6175
Mean x 611.1
Mean y 22.17
RMS x 52.45
RMS y 31.47
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
20
40
60
80
100
120

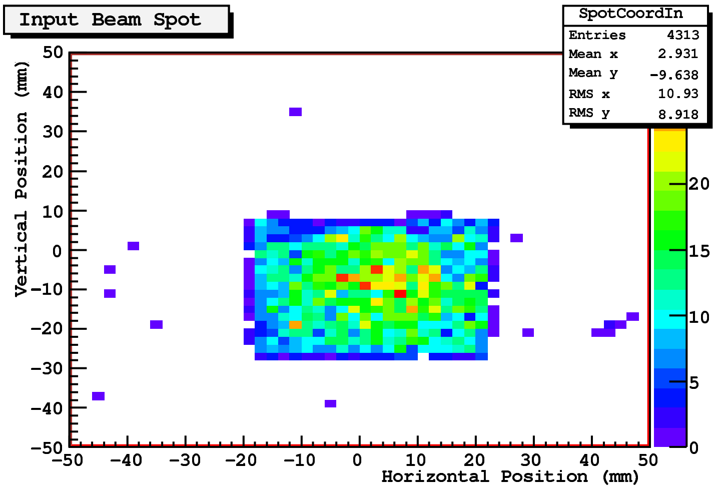

CU Input Beam Spot
SpotAngleInCU
Entries 6175
Mean x -0.0001834
Mean y 0.002605
RMS x 0.01392
RMS y 0.0138
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
1
2
3
4
5
6
7
8

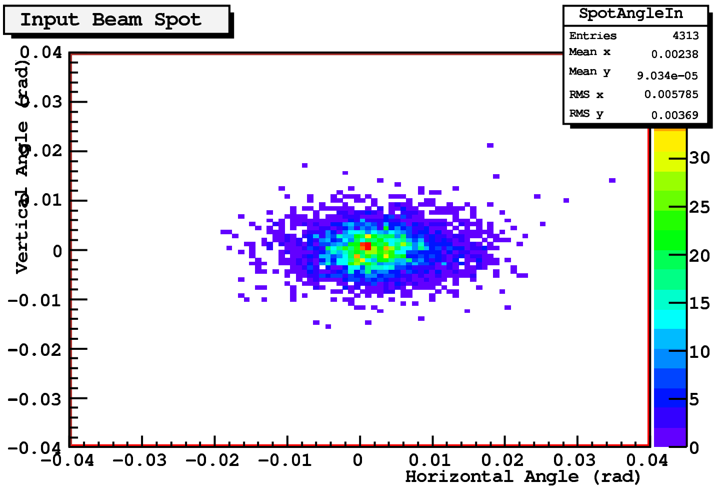

Input Horizontal coordinate
HorCoordIn
Entries 4313
Mean 2.931
RMS 10.93
700001558
160
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

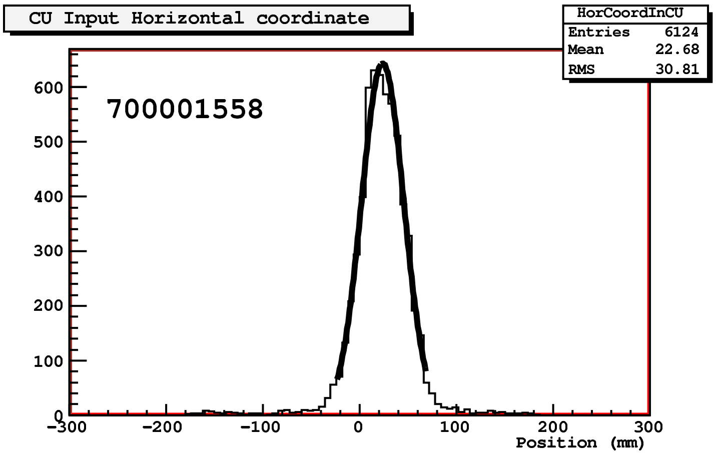

Input vertical coordinate
VertCoordIn
Entries 4313
Mean −9.638
RMS 8.918
180
160
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

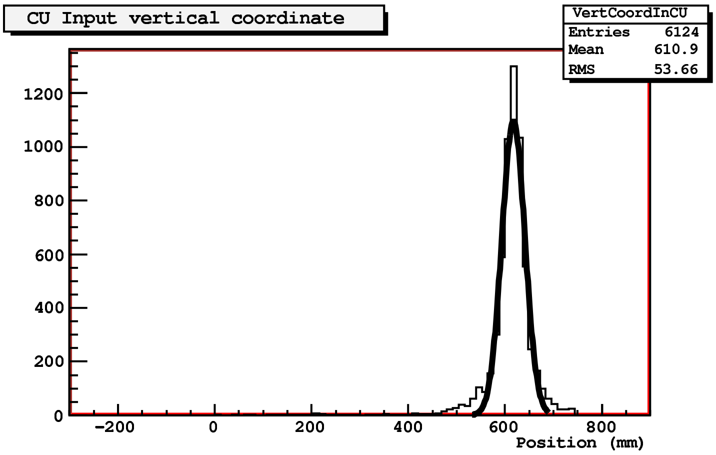

Input horizontal angle
HorAngleIn
Entries 4313
Mean 0.00238
RMS 0.005785
300
250
200
150
100
50
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

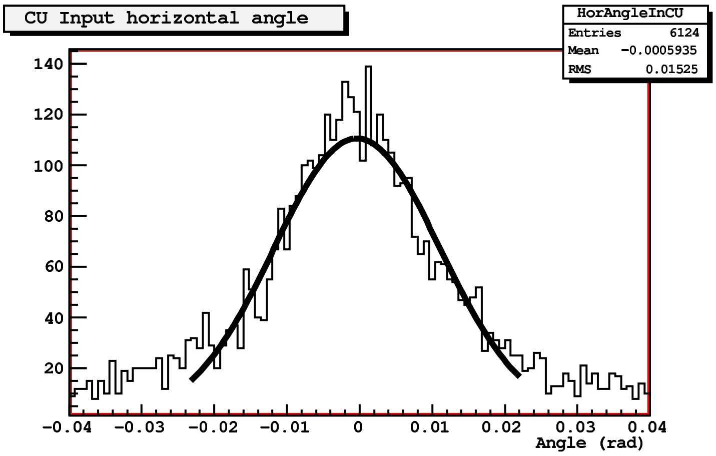

Input vertical angle
VertAngleIn
Entries 4313
Mean 9.034e−05
RMS 0.00369
450
400
350
300
250
200
150
100
50
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

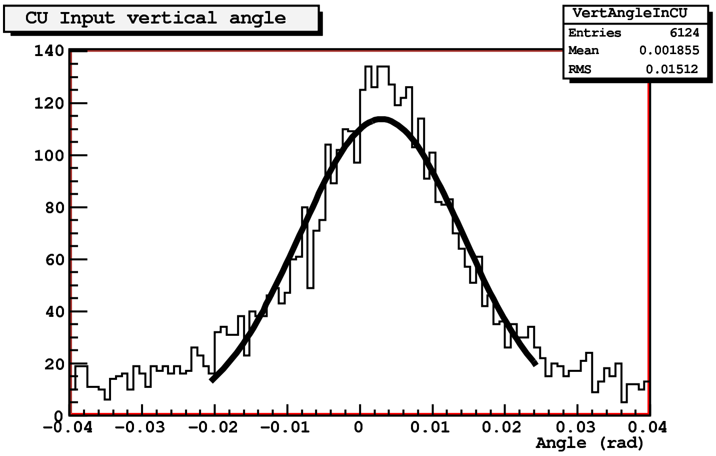

Input Beam Spot
SpotCoordIn
Entries 4313
Mean x 2.931
Mean y −9.638
RMS x 10.93
RMS y 8.918
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
20
15
10
5
0

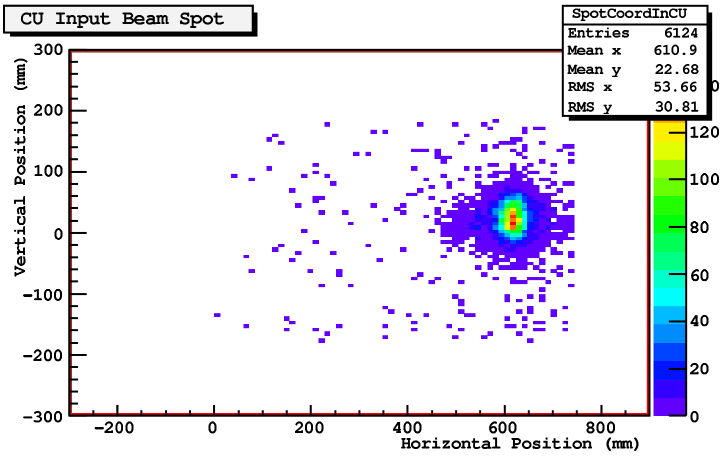

Input Beam Spot
SpotAngleIn
Entries 4313
Mean x 0.00238
Mean y 9.034e−05
RMS x 0.005785
RMS y 0.00369
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
30
25
20
15
10
5
0

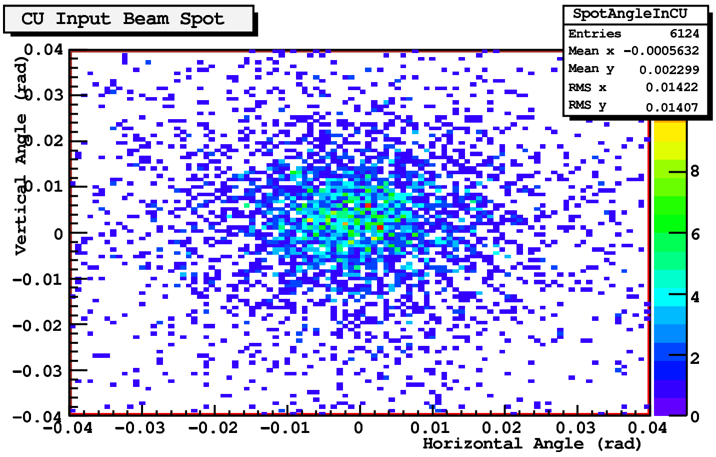

CU Input Horizontal coordinate
HorCoordInCU
Entries 6124
Mean 22.68
RMS 30.81
700001558
0
100
200
300
400
500
600
−300
−200
−100
0
100
200
300
Position (mm)

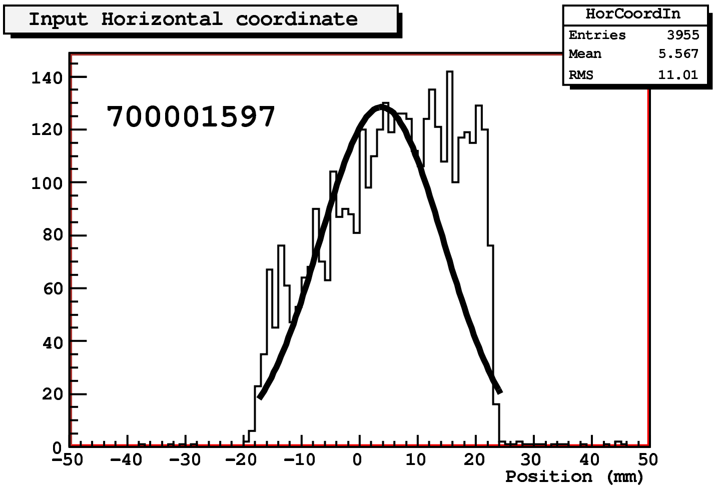

CU Input vertical coordinate
VertCoordInCU
Entries 6124
Mean 610.9
RMS 53.66
0
200
400
600
800
1000
1200
−200
0
200
400
600
800
Position (mm)

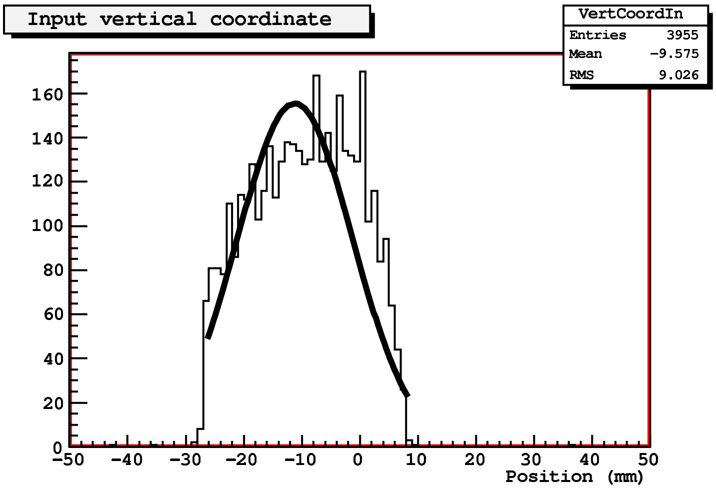

CU Input horizontal angle
HorAngleInCU
Entries 6124
Mean −0.0005935
RMS 0.01525
20
40
60
80
100
120
140
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

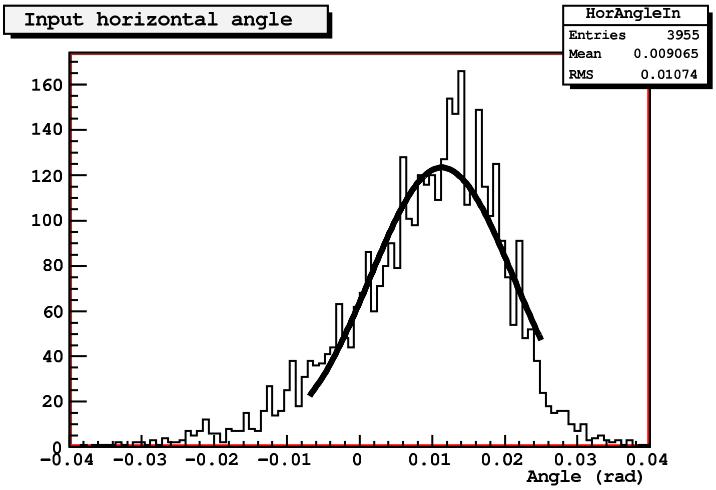

CU Input vertical angle
VertAngleInCU
Entries 6124
Mean 0.001855
RMS 0.01512
0
20
40
60
80
100
120
140
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

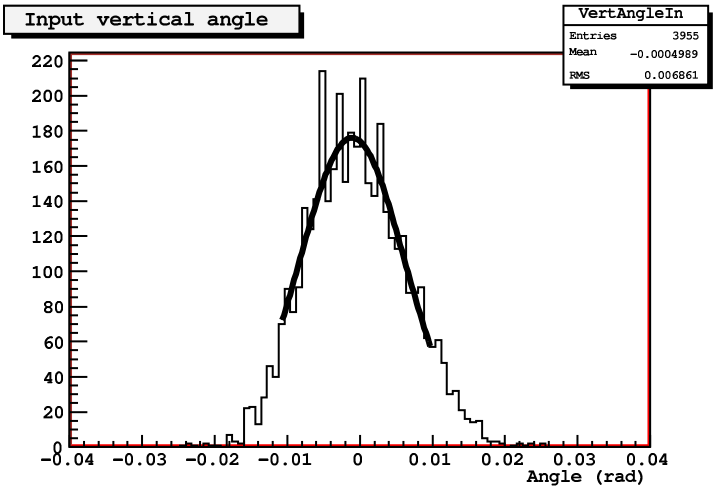

CU Input Beam Spot
SpotCoordInCU
Entries 6124
Mean x 610.9
Mean y 22.68
RMS x 53.66
RMS y 30.81
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
120
100
80
60
40
20
0

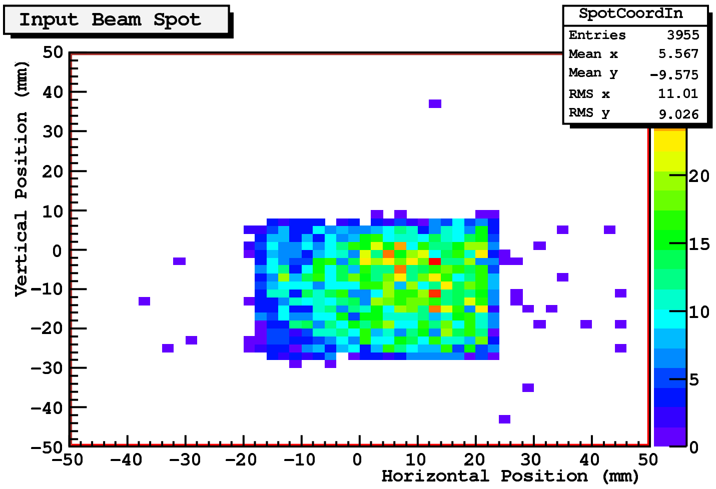

CU Input Beam Spot
SpotAngleInCU
Entries 6124
Mean x −0.0005632
Mean y 0.002299
RMS x 0.01422
RMS y 0.01407
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
8
6
4
2
0

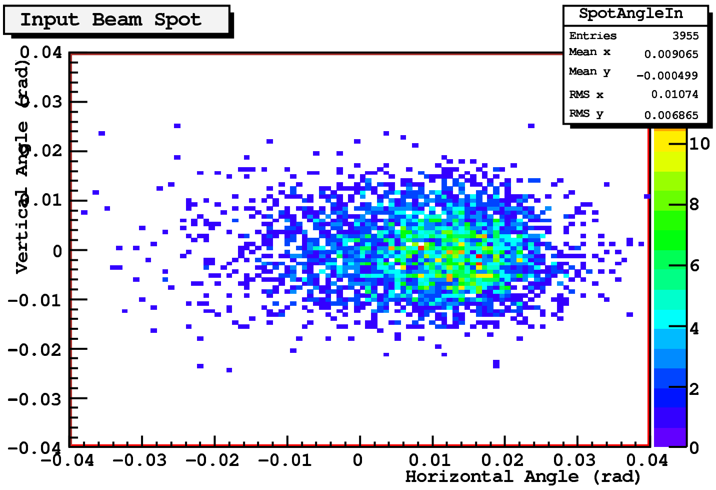

Input Horizontal coordinate
HorCoordIn
Entries 3955
Mean 5.567
RMS 11.01
700001597
Position (mm)

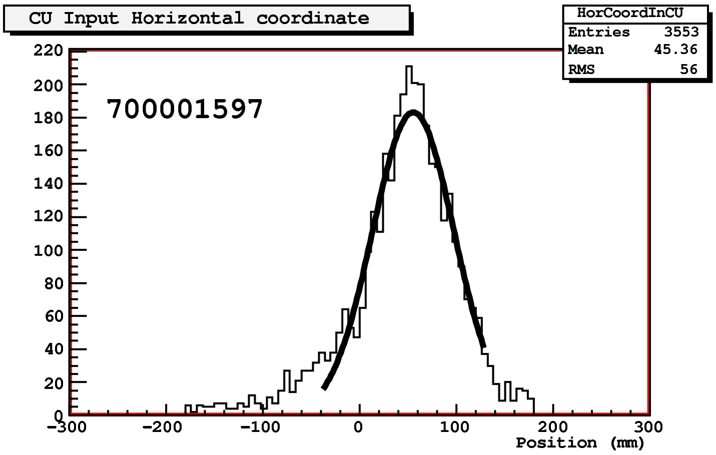

Input vertical coordinate
VertCoordIn
Entries 3955
Mean −9.575
RMS 9.026
Position (mm)

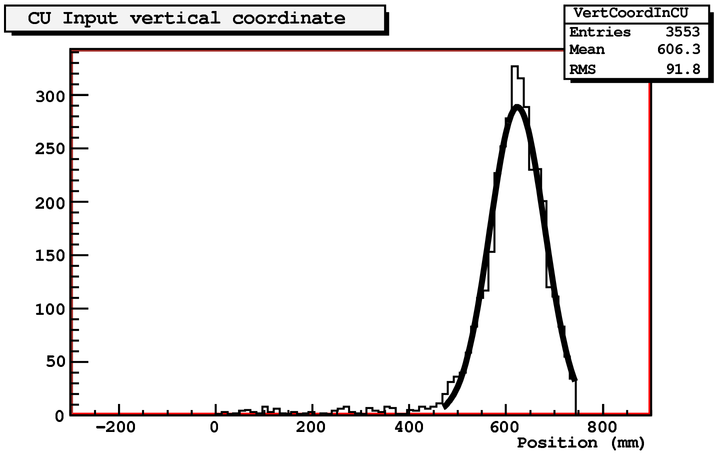

Input horizontal angle
HorAngleIn
Entries 3955
Mean 0.009065
RMS 0.01074
Angle (rad)

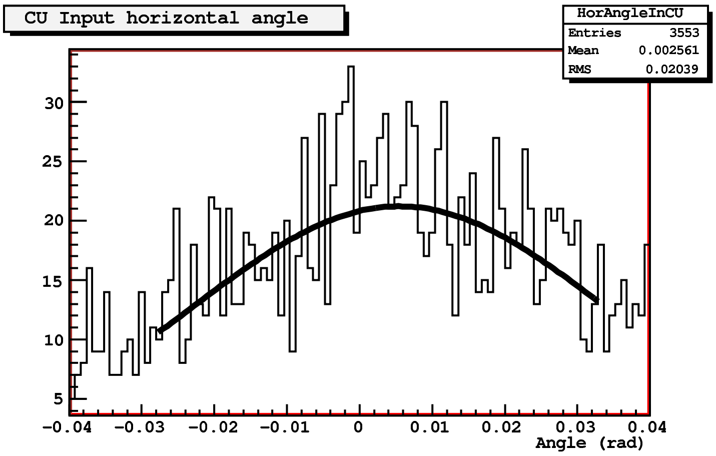

Input vertical angle
VertAngleIn
Entries 3955
Mean −0.0004989
RMS 0.006861
Angle (rad)

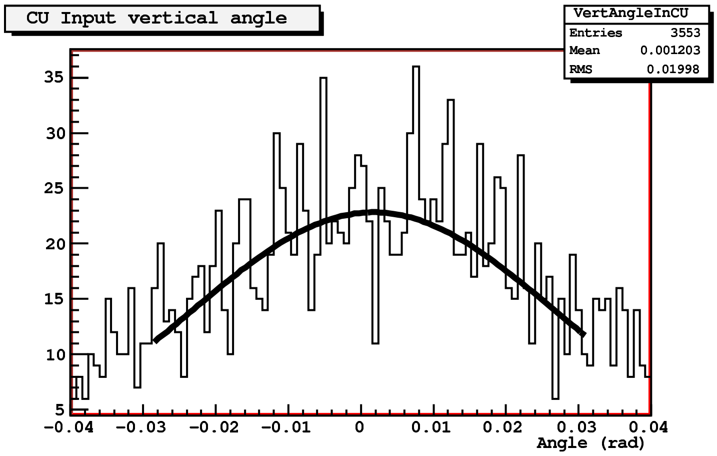

Input Beam Spot
SpotCoordIn
Entries 3955
Mean x 5.567
Mean y −9.575
RMS x 11.01
RMS y 9.026
Vertical Position (mm)
Horizontal Position (mm)

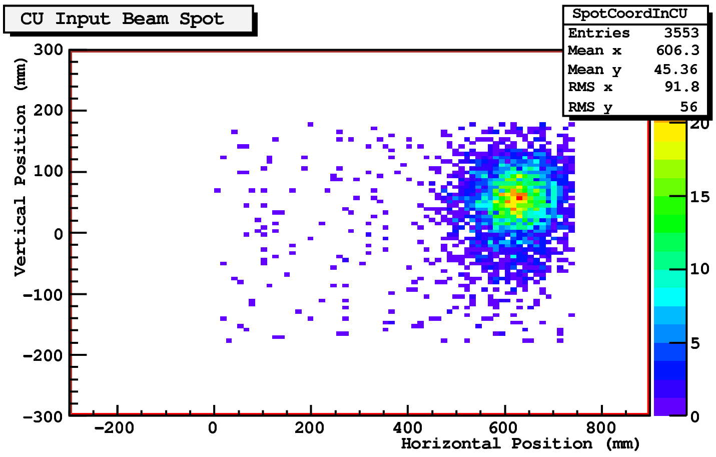

Input Beam Spot
SpotAngleIn
Entries 3955
Mean x 0.009065
Mean y −0.000499
RMS x 0.01074
RMS y 0.006865
Vertical Angle (rad)
Horizontal Angle (rad)

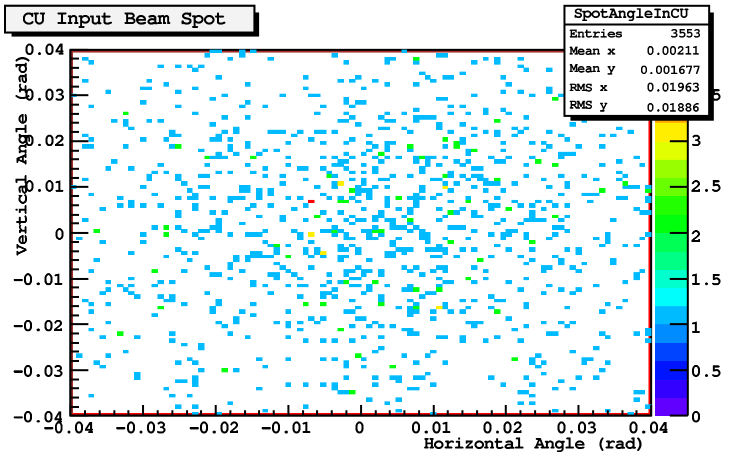

CU Input Horizontal coordinate
HorCoordInCU
Entries 3553
Mean 45.36
RMS 56
700001597
220
200
180
160
140
120
100
80
60
40
20
0
−300
−200
−100
0
100
200
300
Position (mm)

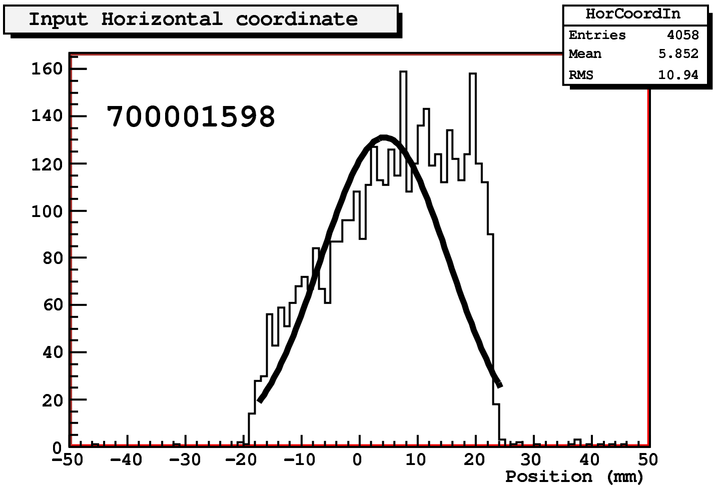

CU Input vertical coordinate
VertCoordInCU
Entries 3553
Mean 606.3
RMS 91.8
300
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)

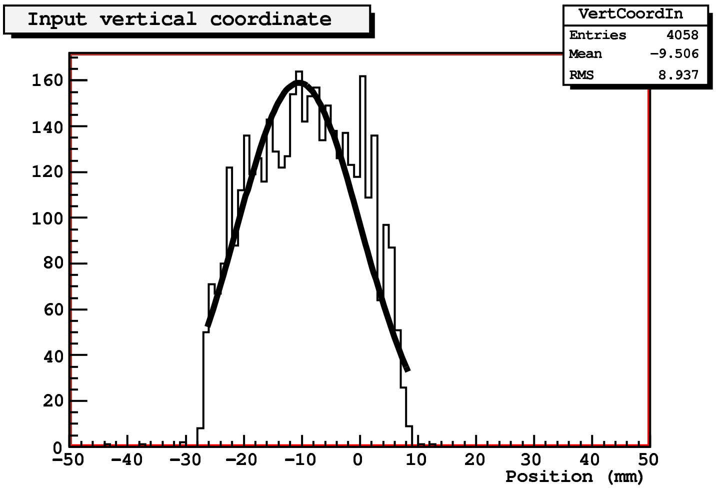

CU Input horizontal angle
HorAngleInCU
Entries 3553
Mean 0.002561
RMS 0.02039
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

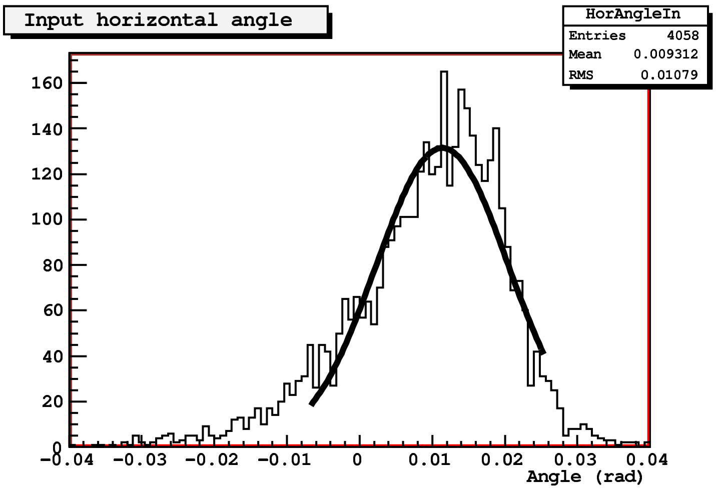

CU Input vertical angle
VertAngleInCU
Entries 3553
Mean 0.001203
RMS 0.01998
35
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

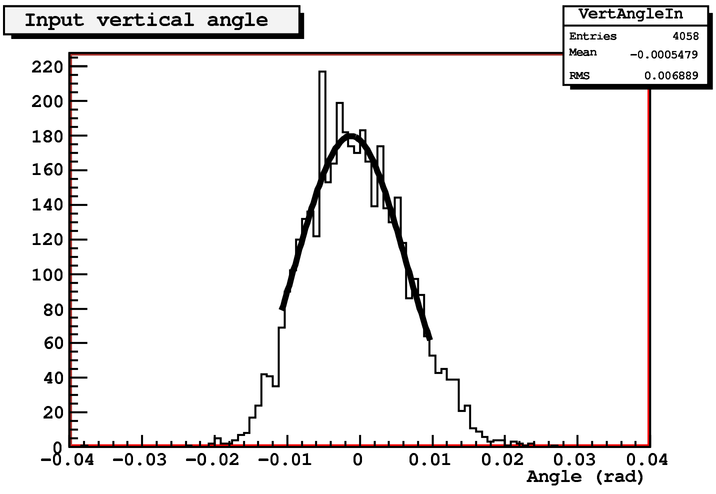

CU Input Beam Spot
SpotCoordInCU
Entries 3553
Mean x 606.3
Mean y 45.36
RMS x 91.8
RMS y 56
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
20
15
10
5
0

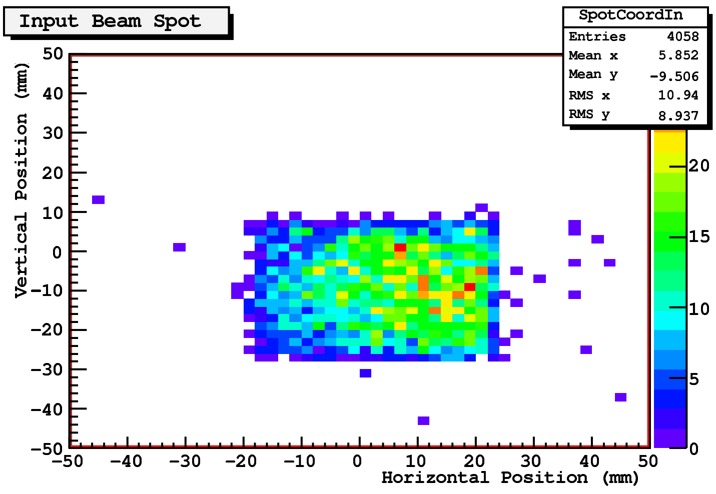

CU Input Beam Spot
SpotAngleInCU
Entries 3553
Mean x 0.00211
Mean y 0.001677
RMS x 0.01963
RMS y 0.01886
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
3
2.5
2
1.5
1
0.5
0

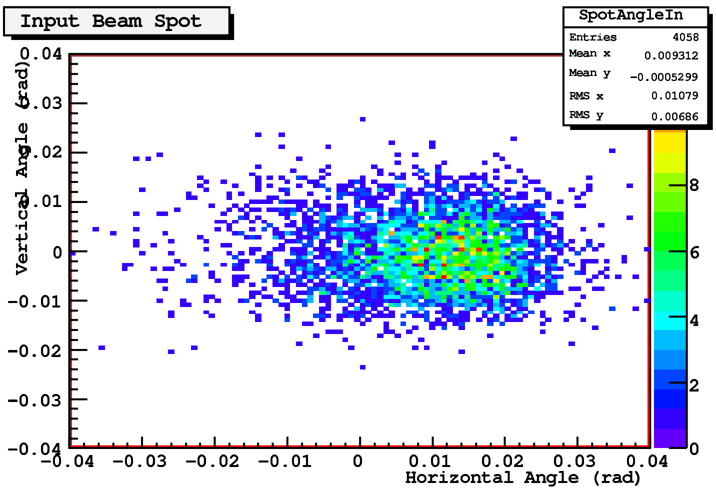

Input Horizontal coordinate
HorCoordIn
Entries 4058
Mean 5.852
RMS 10.94
700001598
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

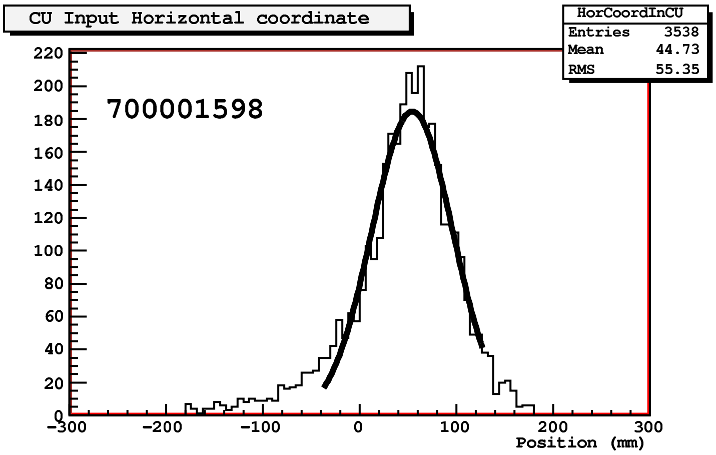

Input vertical coordinate
VertCoordIn
Entries 4058
Mean −9.506
RMS 8.937
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

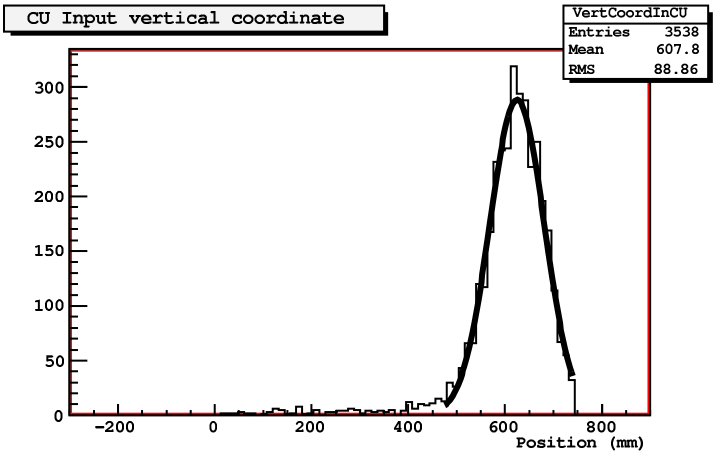

Input horizontal angle
HorAngleIn
Entries 4058
Mean 0.009312
RMS 0.01079
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

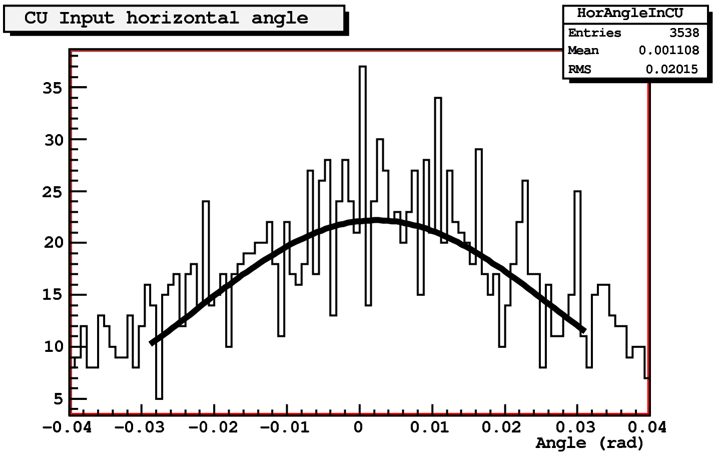

Input vertical angle
VertAngleIn
Entries 4058
Mean −0.0005479
RMS 0.006889
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

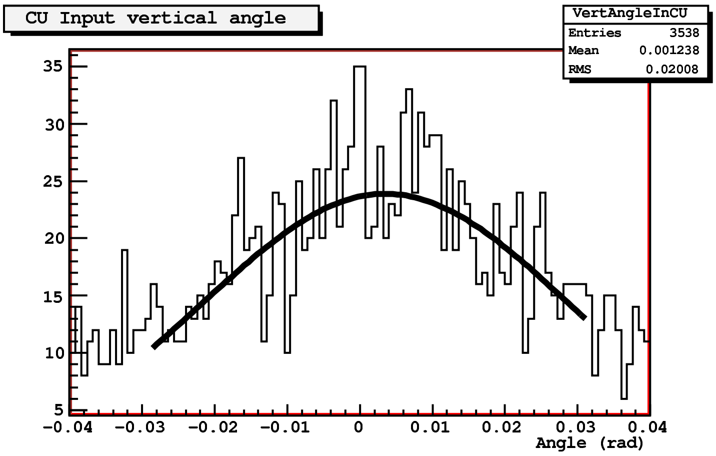

Input Beam Spot
SpotCoordIn
Entries 4058
Mean x 5.852
Mean y −9.506
RMS x 10.94
RMS y 8.937
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

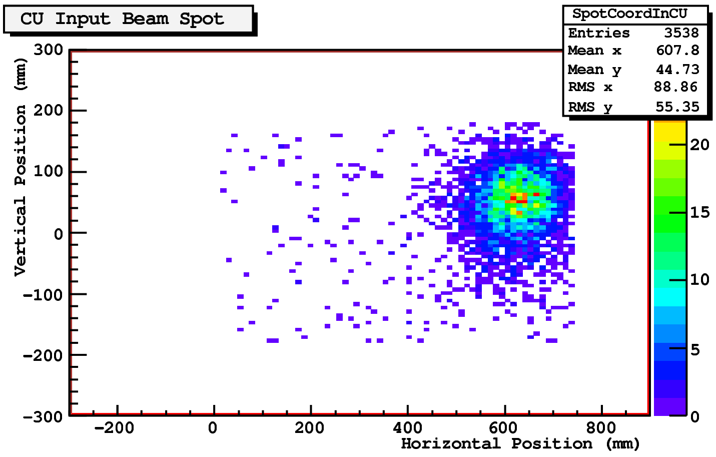

Input Beam Spot
SpotAngleIn
Entries 4058
Mean x 0.009312
Mean y −0.0005299
RMS x 0.01079
RMS y 0.00686
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8

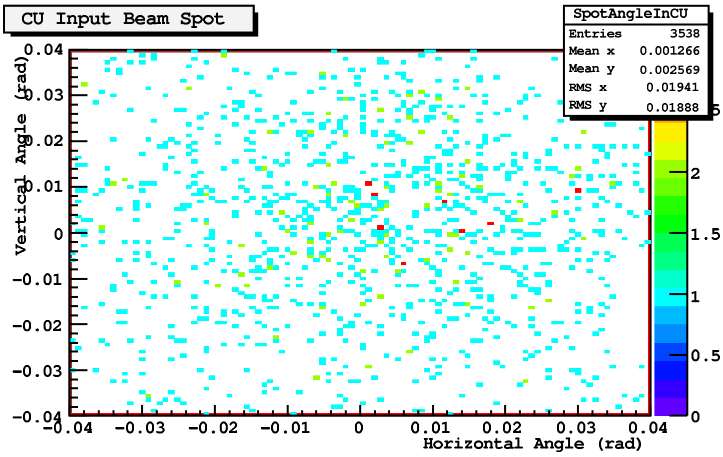

CU Input Horizontal coordinate
HorCoordInCU
Entries 3538
Mean 44.73
RMS 55.35
700001598
0
20
40
60
80
100
120
140
160
180
200
220
−300
−200
−100
0
100
200
300
Position (mm)

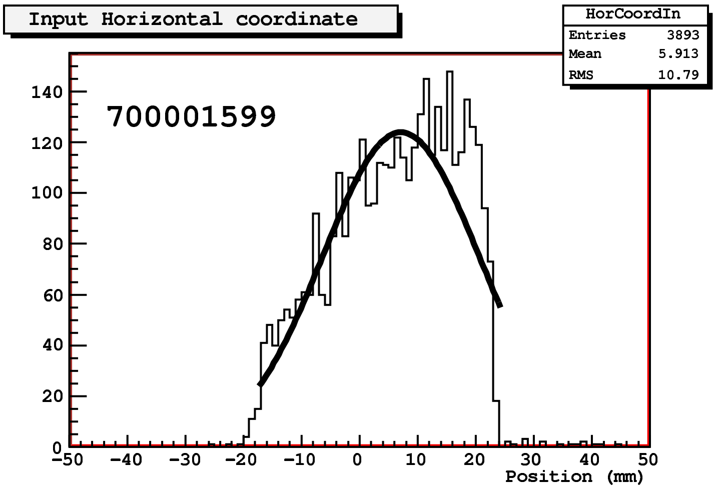

CU Input vertical coordinate
VertCoordInCU
Entries 3538
Mean 607.8
RMS 88.86
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)

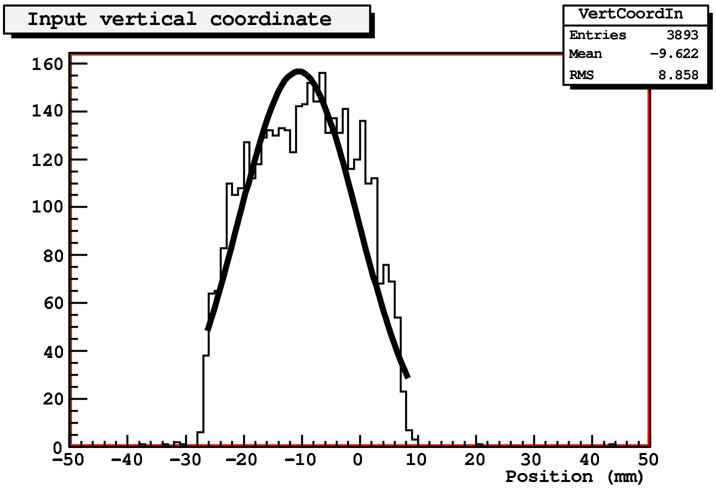

CU Input horizontal angle
HorAngleInCU
Entries 3538
Mean 0.001108
RMS 0.02015
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

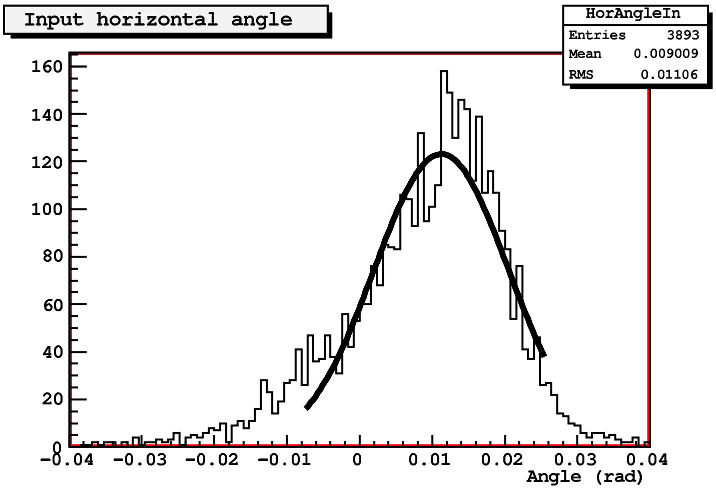

CU Input vertical angle
VertAngleInCU
Entries 3538
Mean 0.001238
RMS 0.02008
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

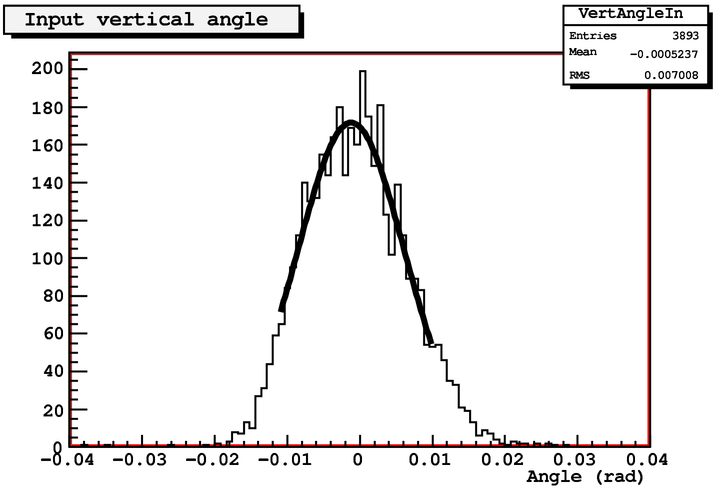

CU Input Beam Spot
SpotCoordInCU
Entries 3538
Mean x 607.8
Mean y 44.73
RMS x 88.86
RMS y 55.35
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
5
10
15
20

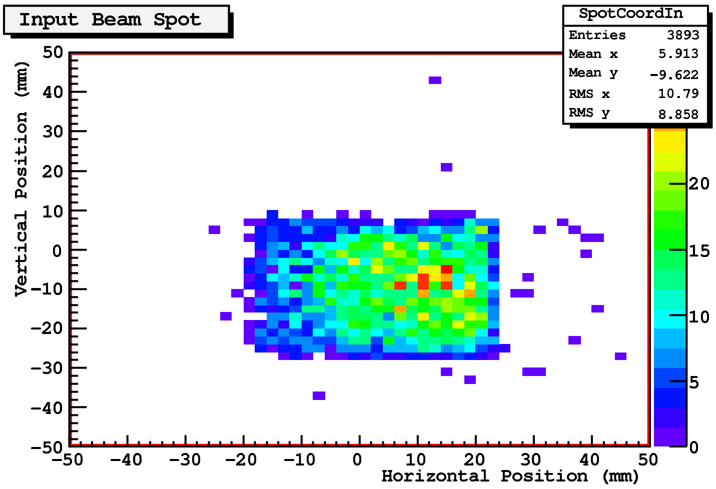

CU Input Beam Spot
SpotAngleInCU
Entries 3538
Mean x 0.001266
Mean y 0.002569
RMS x 0.01941
RMS y 0.01888
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
.5

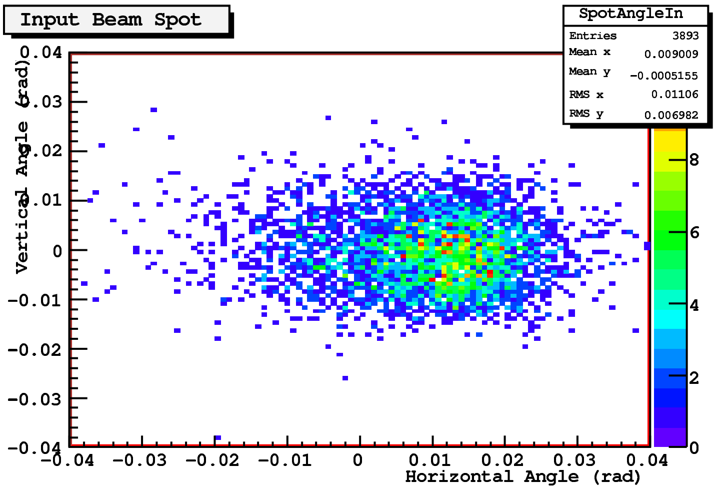

Input Horizontal coordinate
HorCoordIn
Entries 3893
Mean 5.913
RMS 10.79
700001599
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

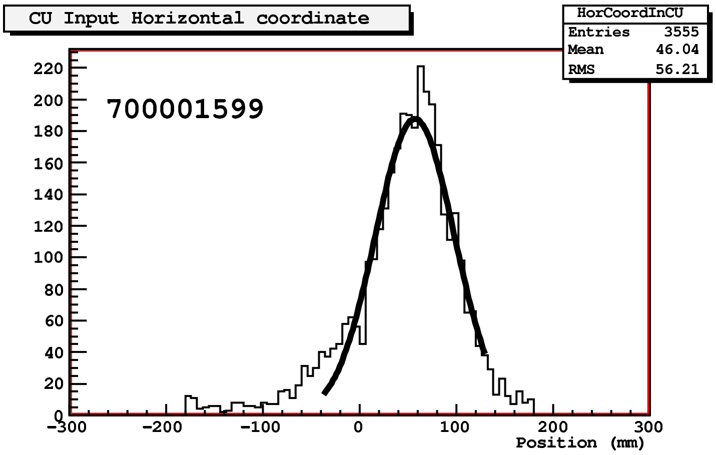

Input vertical coordinate
VertCoordIn
Entries 3893
Mean −9.622
RMS 8.858
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

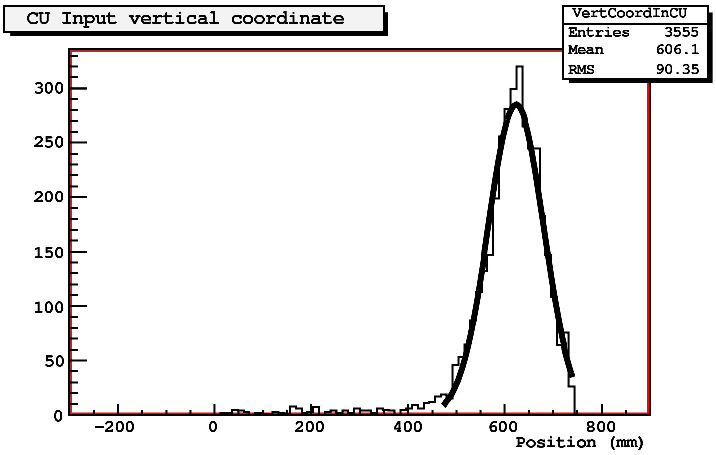

Input horizontal angle
HorAngleIn
Entries 3893
Mean 0.009009
RMS 0.01106
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

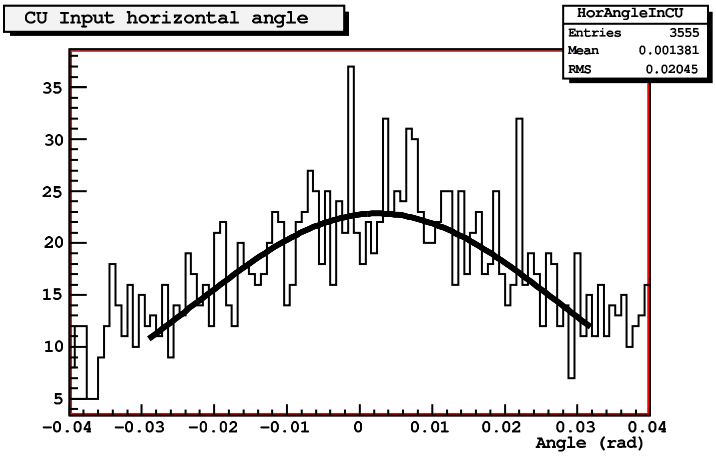

Input vertical angle
VertAngleIn
Entries 3893
Mean −0.0005237
RMS 0.007008
0
20
40
60
80
100
120
140
160
180
200
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

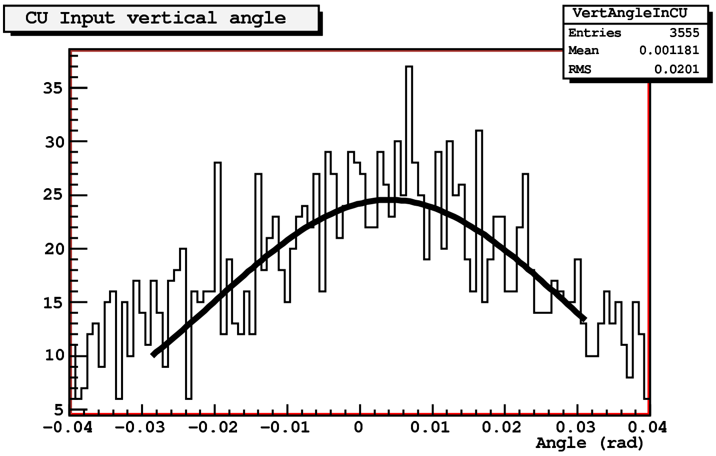

Input Beam Spot
SpotCoordIn
Entries 3893
Mean x 5.913
Mean y −9.622
RMS x 10.79
RMS y 8.858
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

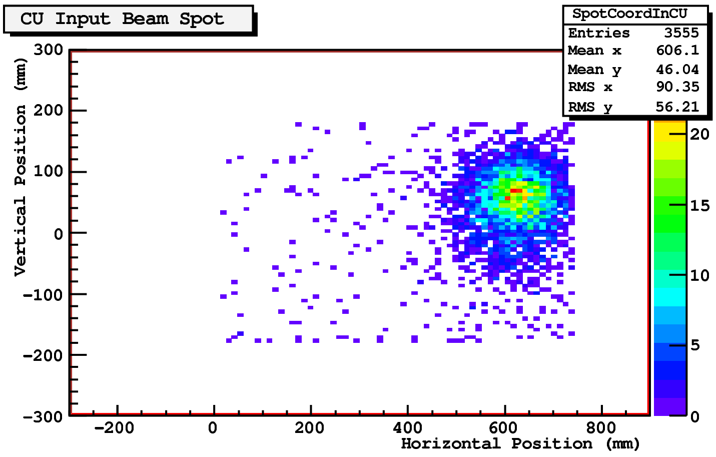

Input Beam Spot
SpotAngleIn
Entries 3893
Mean x 0.009009
Mean y −0.0005155
RMS x 0.01106
RMS y 0.006982
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8

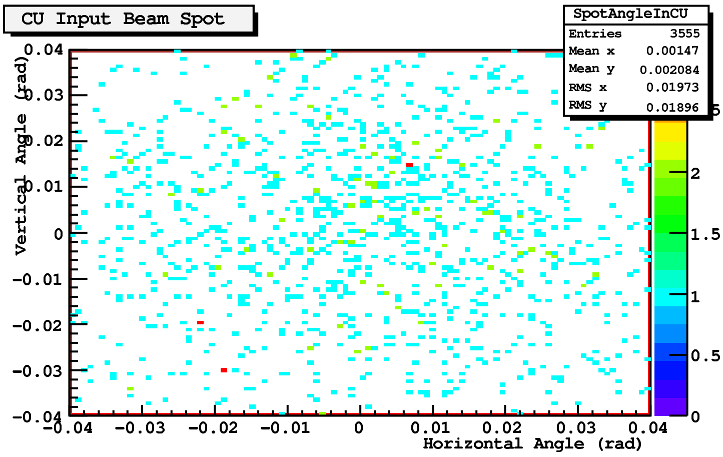

CU Input Horizontal coordinate
HorCoordInCU
Entries 3555
Mean 46.04
RMS 56.21
700001599
0
20
40
60
80
100
120
140
160
180
200
220
−300
−200
−100
0
100
200
300
Position (mm)

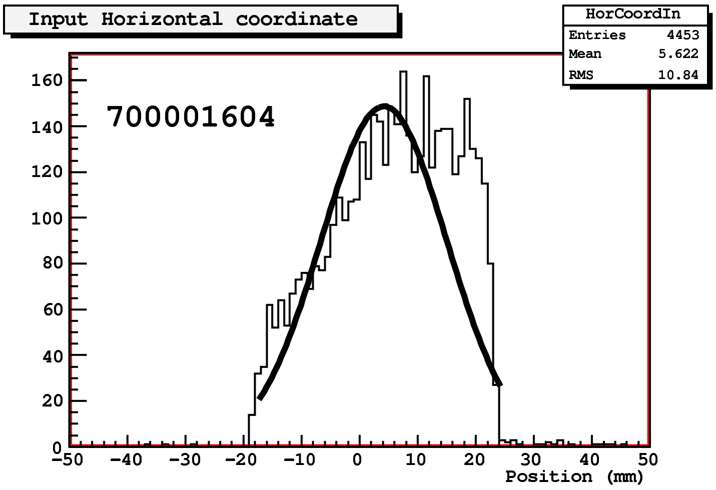

CU Input vertical coordinate
VertCoordInCU
Entries 3555
Mean 606.1
RMS 90.35
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)

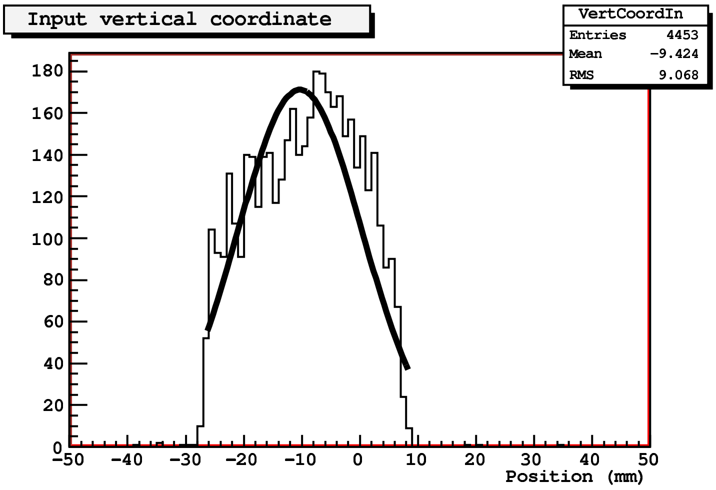

CU Input horizontal angle
HorAngleInCU
Entries 3555
Mean 0.001381
RMS 0.02045
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

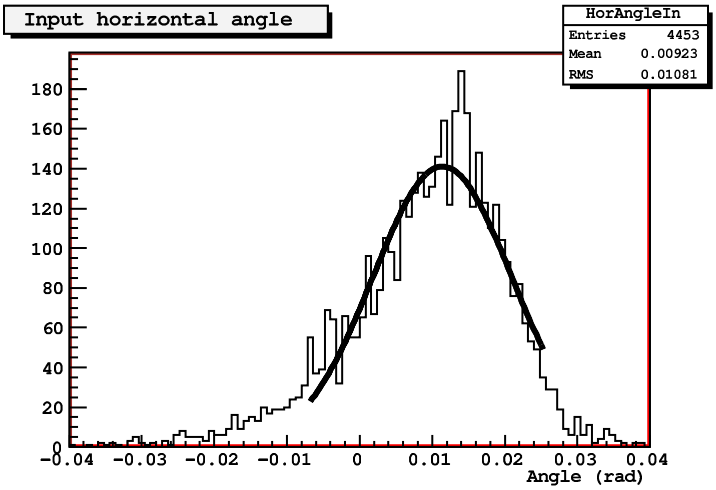

CU Input vertical angle
VertAngleInCU
Entries 3555
Mean 0.001181
RMS 0.0201
5
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

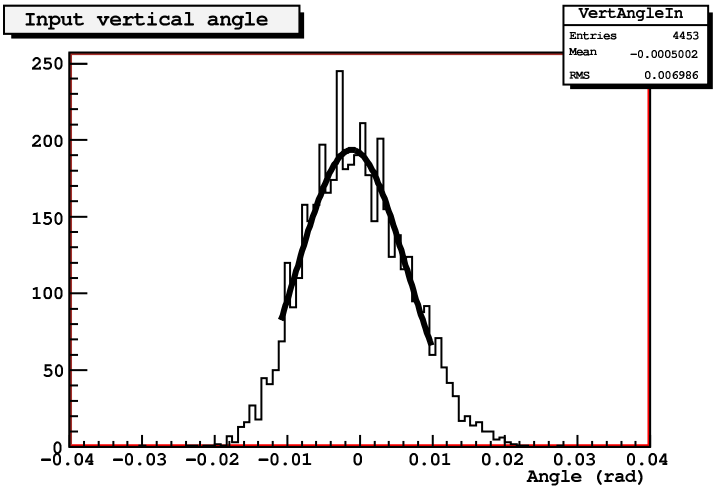

CU Input Beam Spot
SpotCoordInCU
Entries 3555
Mean x 606.1
Mean y 46.04
RMS x 90.35
RMS y 56.21
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
20
15
10
5
0

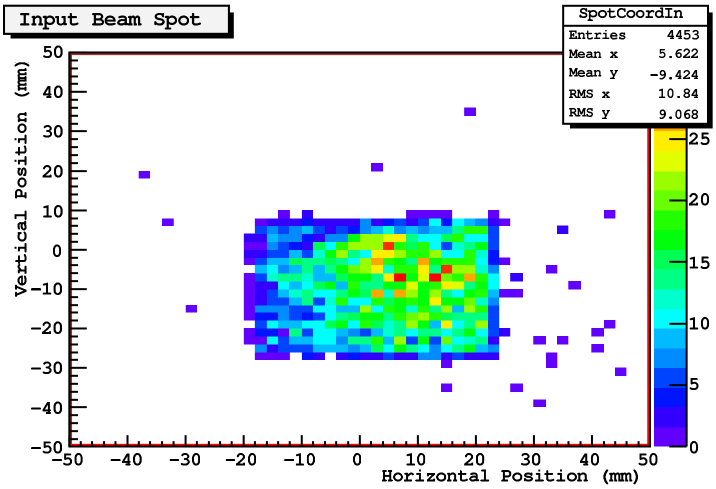

CU Input Beam Spot
SpotAngleInCU
Entries 3555
Mean x 0.00147
Mean y 0.002084
RMS x 0.01973
RMS y 0.01896
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0

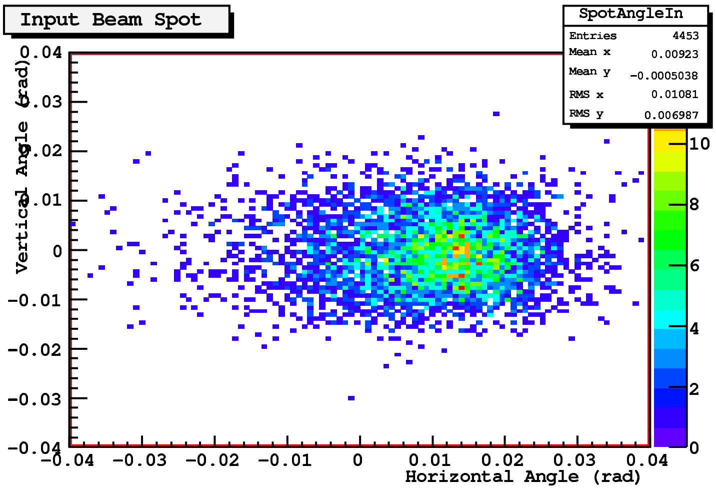

Input Horizontal coordinate
HorCoordIn
Entries 4453
Mean 5.622
RMS 10.84
700001604
0
20
40
60
80
100
120
140
160
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

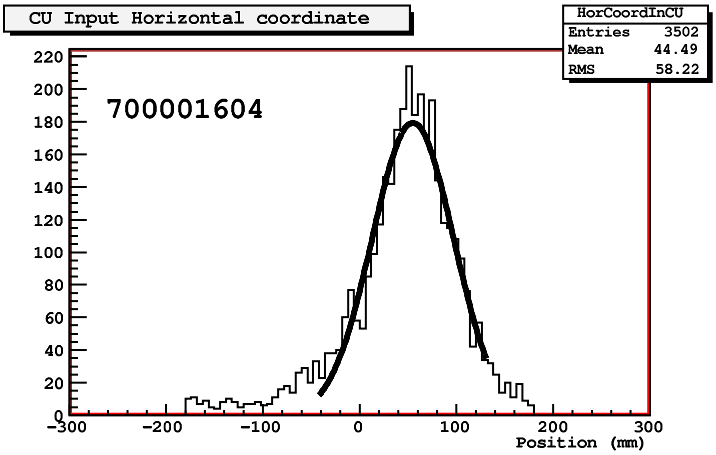

Input vertical coordinate
VertCoordIn
Entries 4453
Mean −9.424
RMS 9.068
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

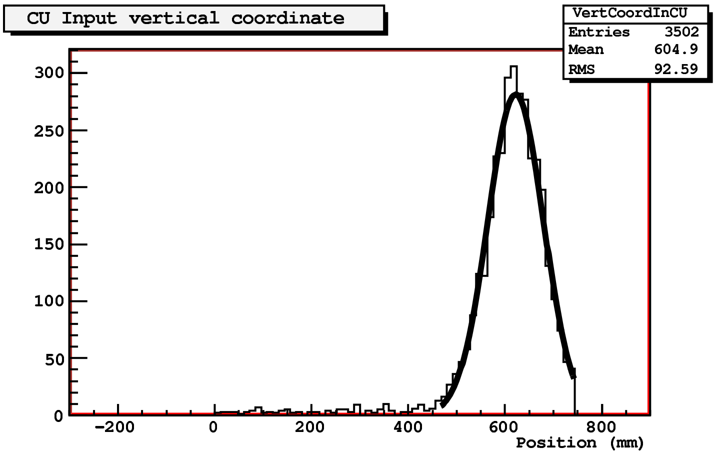

Input horizontal angle
HorAngleIn
Entries 4453
Mean 0.00923
RMS 0.01081
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

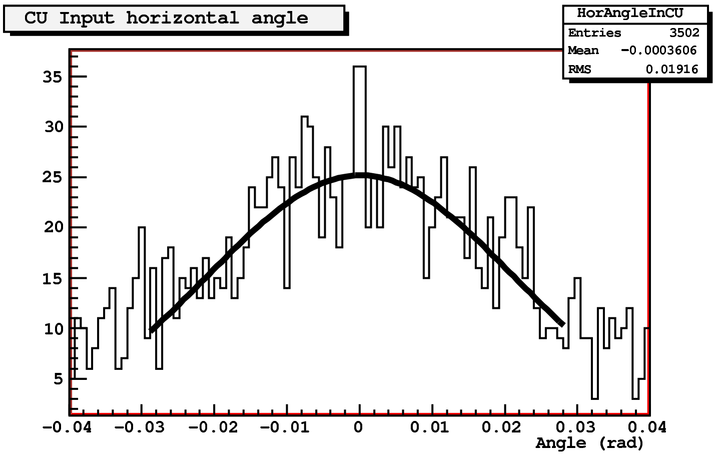

Input vertical angle
VertAngleIn
Entries 4453
Mean −0.0005002
RMS 0.006986
0
50
100
150
200
250
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

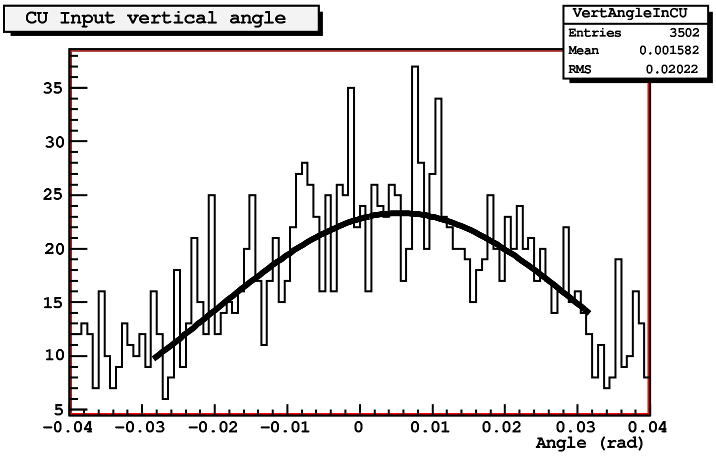

Input Beam Spot
SpotCoordIn
Entries 4453
Mean x 5.622
Mean y −9.424
RMS x 10.84
RMS y 9.068
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

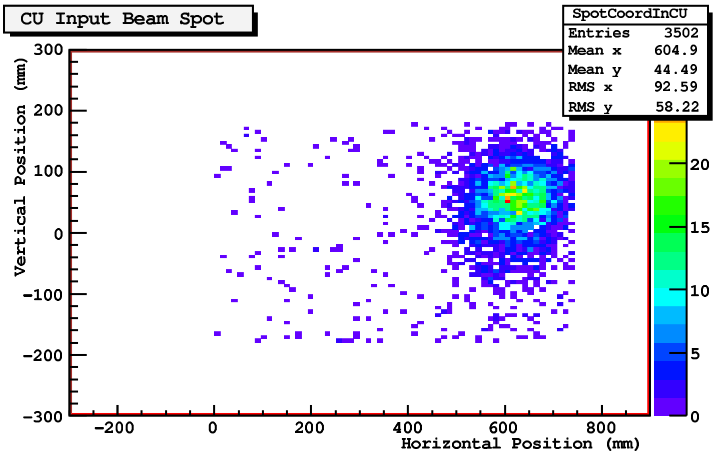

Input Beam Spot
SpotAngleIn
Entries 4453
Mean x 0.00923
Mean y −0.0005038
RMS x 0.01081
RMS y 0.006987
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

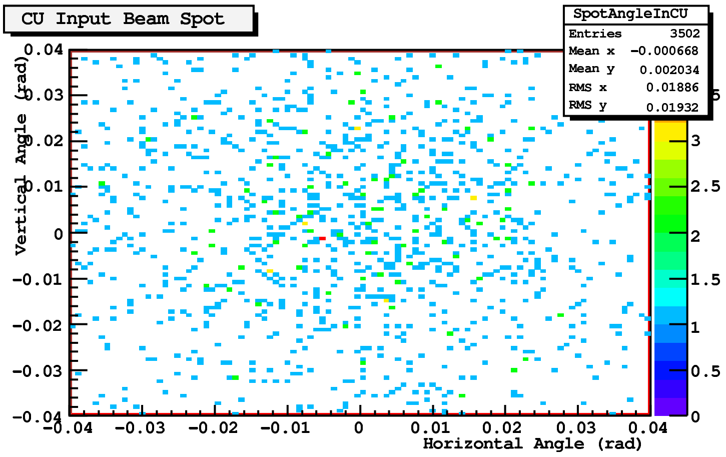

CU Input Horizontal coordinate
HorCoordInCU
Entries 3502
Mean 44.49
RMS 58.22
700001604
220
200
180
160
140
120
100
80
60
40
20
0
−300
−200
−100
0
100
200
300
Position (mm)

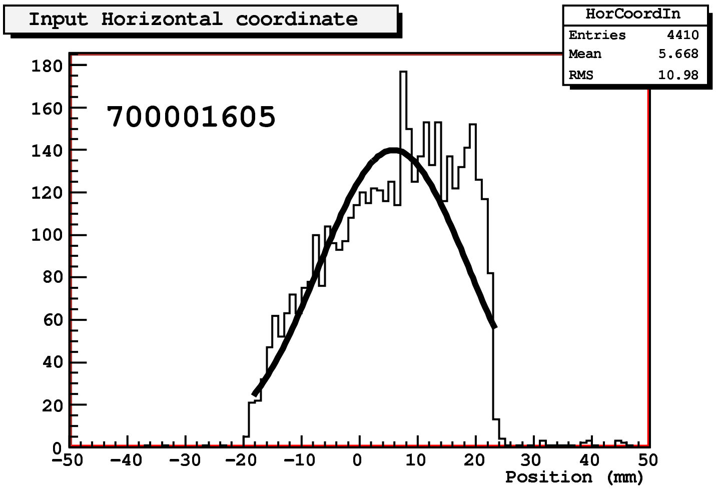

CU Input vertical coordinate
VertCoordInCU
Entries 3502
Mean 604.9
RMS 92.59
300
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)

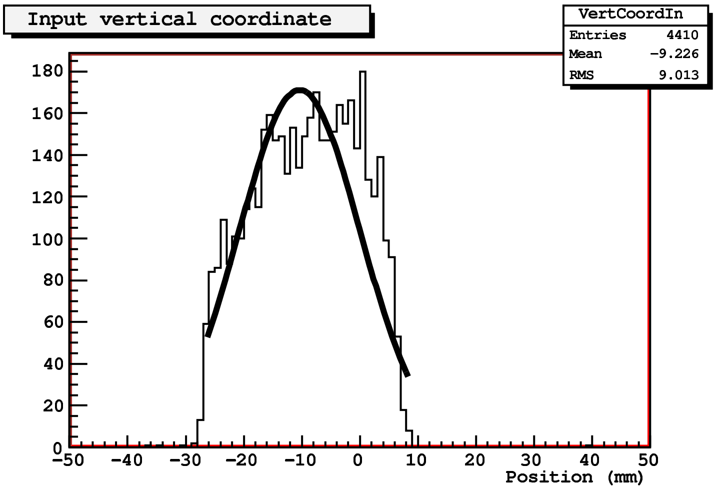

CU Input horizontal angle
HorAngleInCU
Entries 3502
Mean −0.0003606
RMS 0.01916
35
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

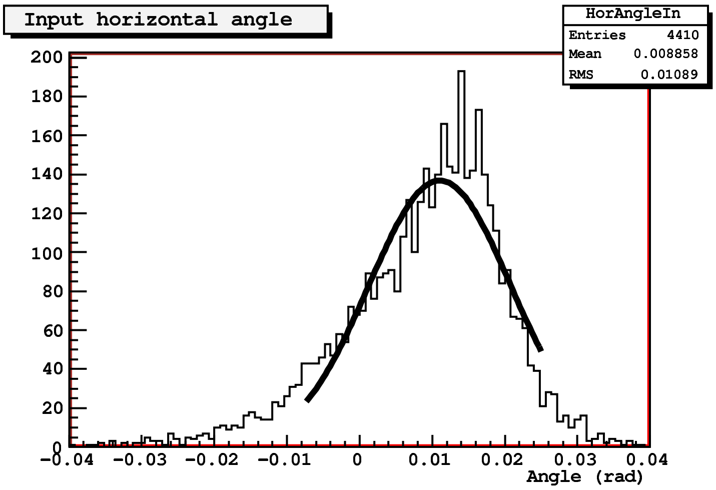

CU Input vertical angle
VertAngleInCU
Entries 3502
Mean 0.001582
RMS 0.02022
35
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

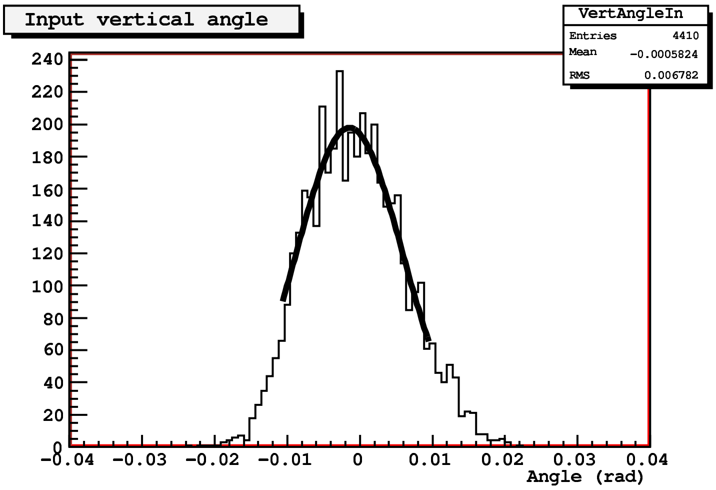

CU Input Beam Spot
SpotCoordInCU
Entries 3502
Mean x 604.9
Mean y 44.49
RMS x 92.59
RMS y 58.22
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
20
15
10
5
0

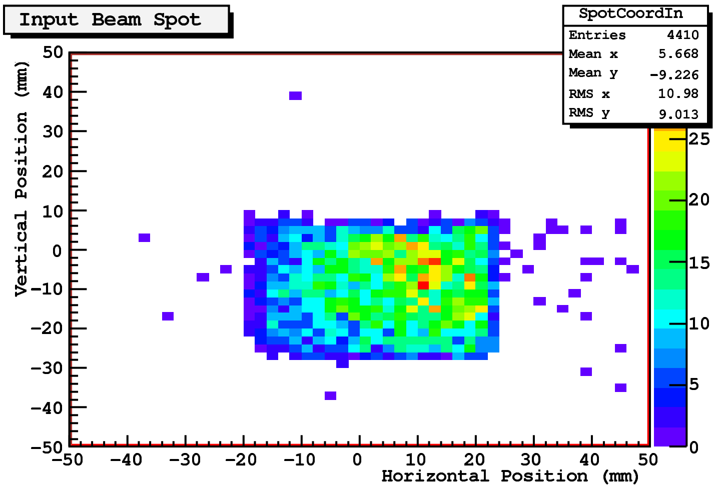

CU Input Beam Spot
SpotAngleInCU
Entries 3502
Mean x −0.000668
Mean y 0.002034
RMS x 0.01886
RMS y 0.01932
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
5
3
2.5
2
1.5
1
0.5
0

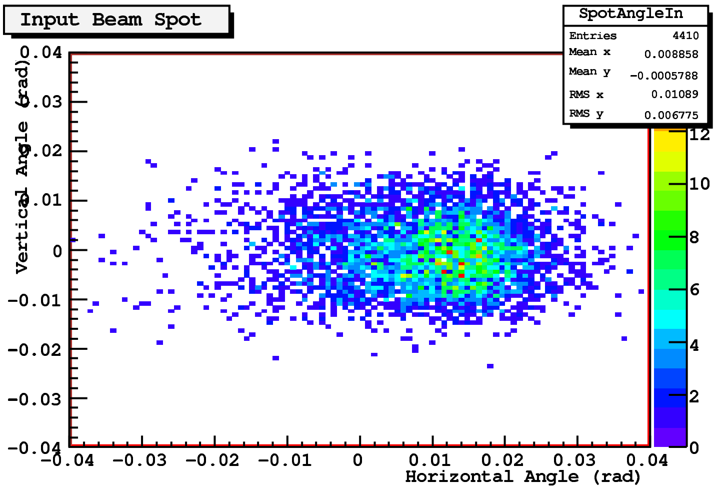

Input Horizontal coordinate
HorCoordIn
Entries 4410
Mean 5.668
RMS 10.98
700001605
180
160
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

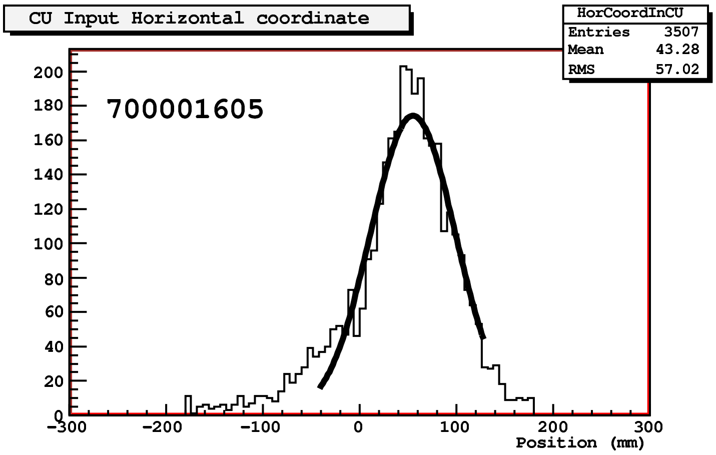

Input vertical coordinate
VertCoordIn
Entries 4410
Mean −9.226
RMS 9.013
180
160
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

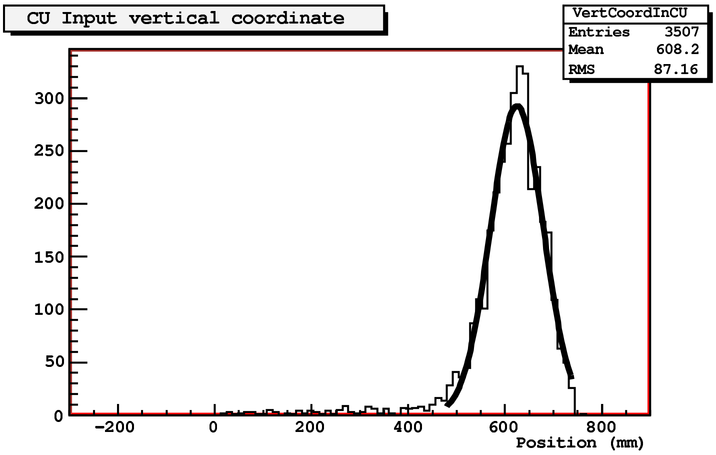

Input horizontal angle
HorAngleIn
Entries 4410
Mean 0.008858
RMS 0.01089
200
180
160
140
120
100
80
60
40
20
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

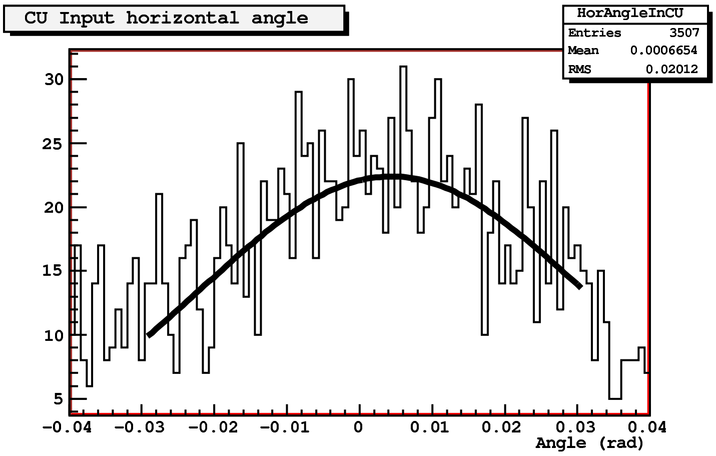

Input vertical angle
VertAngleIn
Entries 4410
Mean −0.0005824
RMS 0.006782
240
220
200
180
160
140
120
100
80
60
40
20
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

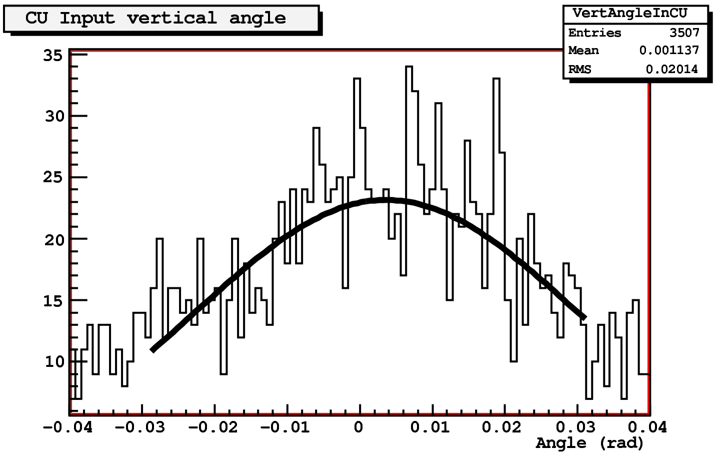

Input Beam Spot
SpotCoordIn
Entries 4410
Mean x 5.668
Mean y −9.226
RMS x 10.98
RMS y 9.013
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
25
20
15
10
5
0

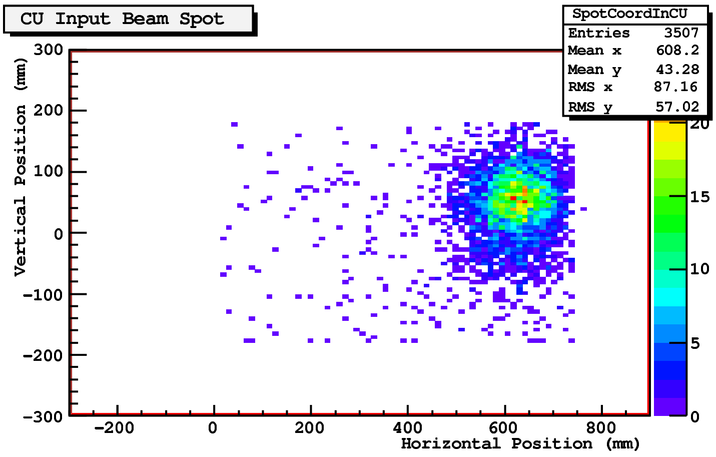

Input Beam Spot
SpotAngleIn
Entries 4410
Mean x 0.008858
Mean y −0.0005788
RMS x 0.01089
RMS y 0.006775
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
12
10
8
6
4
2
0

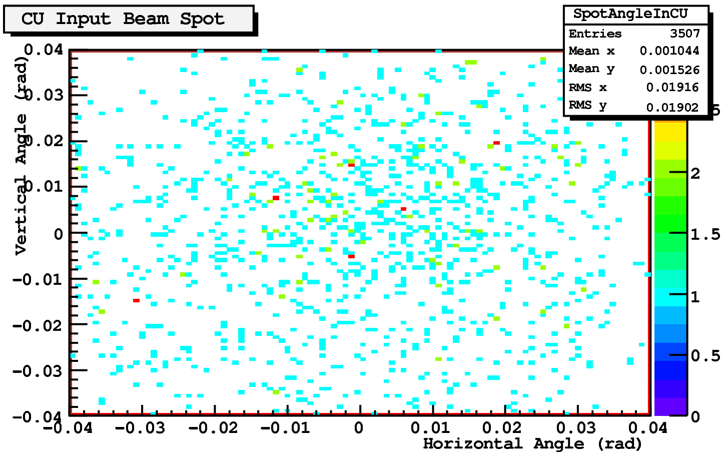

CU Input Horizontal coordinate
HorCoordInCU
Entries 3507
Mean 43.28
RMS 57.02
700001605
0
20
40
60
80
100
120
140
160
180
200
−300
−200
−100
0
100
200
300
Position (mm)

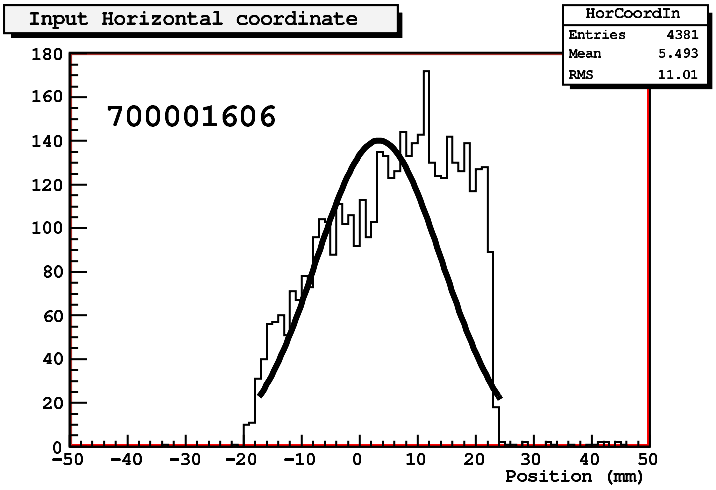

CU Input vertical coordinate
VertCoordInCU
Entries 3507
Mean 608.2
RMS 87.16
0
50
100
150
200
250
300
−200
0
200
400
600
800
Position (mm)

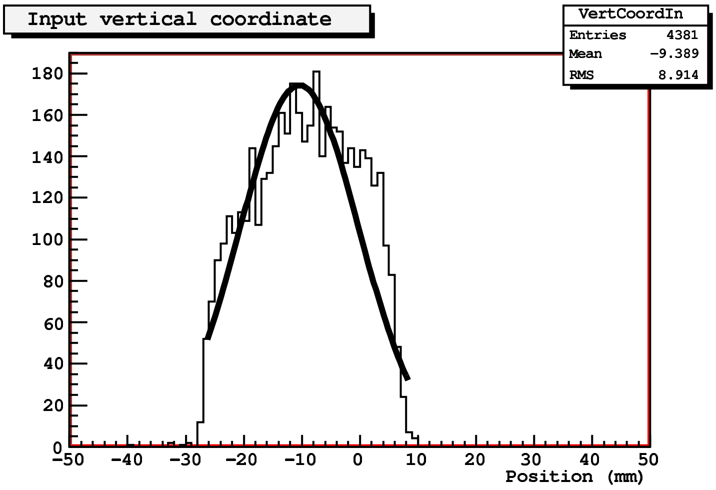

CU Input horizontal angle
HorAngleInCU
Entries 3507
Mean 0.0006654
RMS 0.02012
5
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

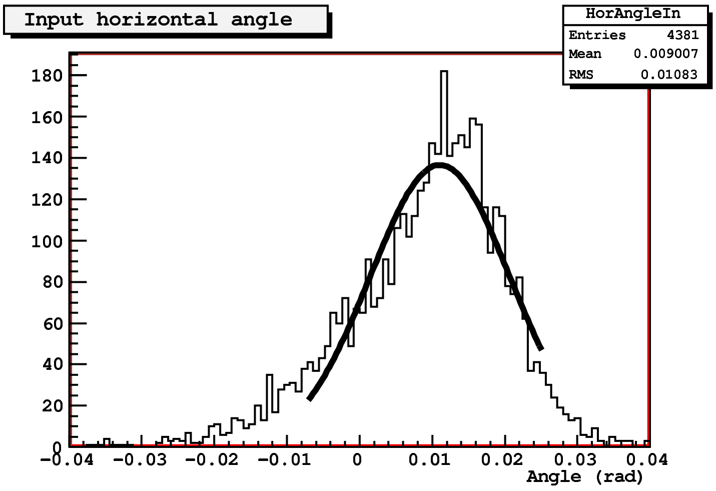

CU Input vertical angle
VertAngleInCU
Entries 3507
Mean 0.001137
RMS 0.02014
10
15
20
25
30
35
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

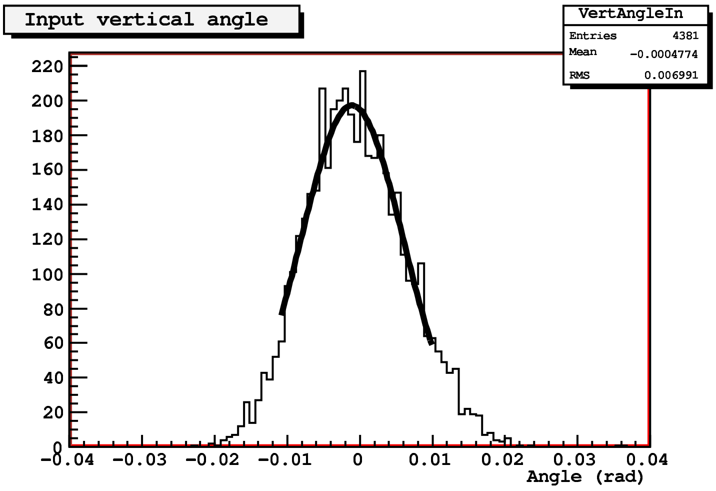

CU Input Beam Spot
SpotCoordInCU
Entries 3507
Mean x 608.2
Mean y 43.28
RMS x 87.16
RMS y 57.02
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
5
10
15
20

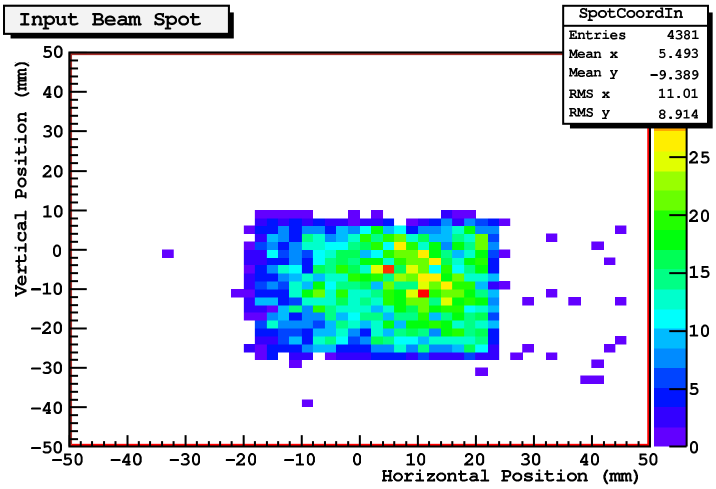

CU Input Beam Spot
SpotAngleInCU
Entries 3507
Mean x 0.001044
Mean y 0.001526
RMS x 0.01916
RMS y 0.01902
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2

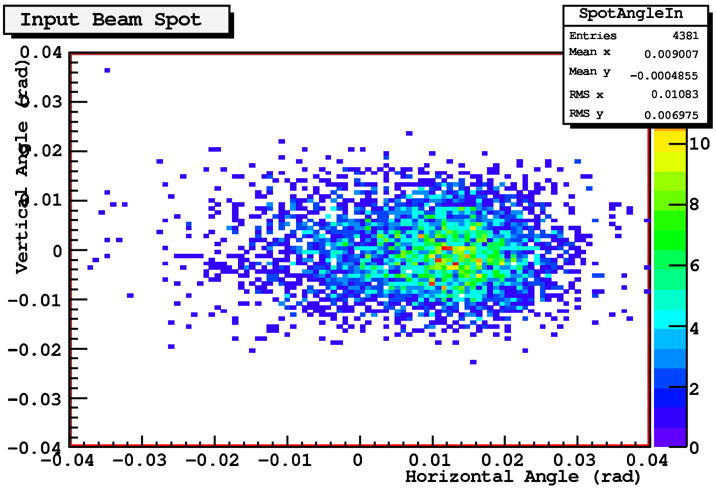

Input Horizontal coordinate
HorCoordIn
Entries 4381
Mean 5.493
RMS 11.01
700001606
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

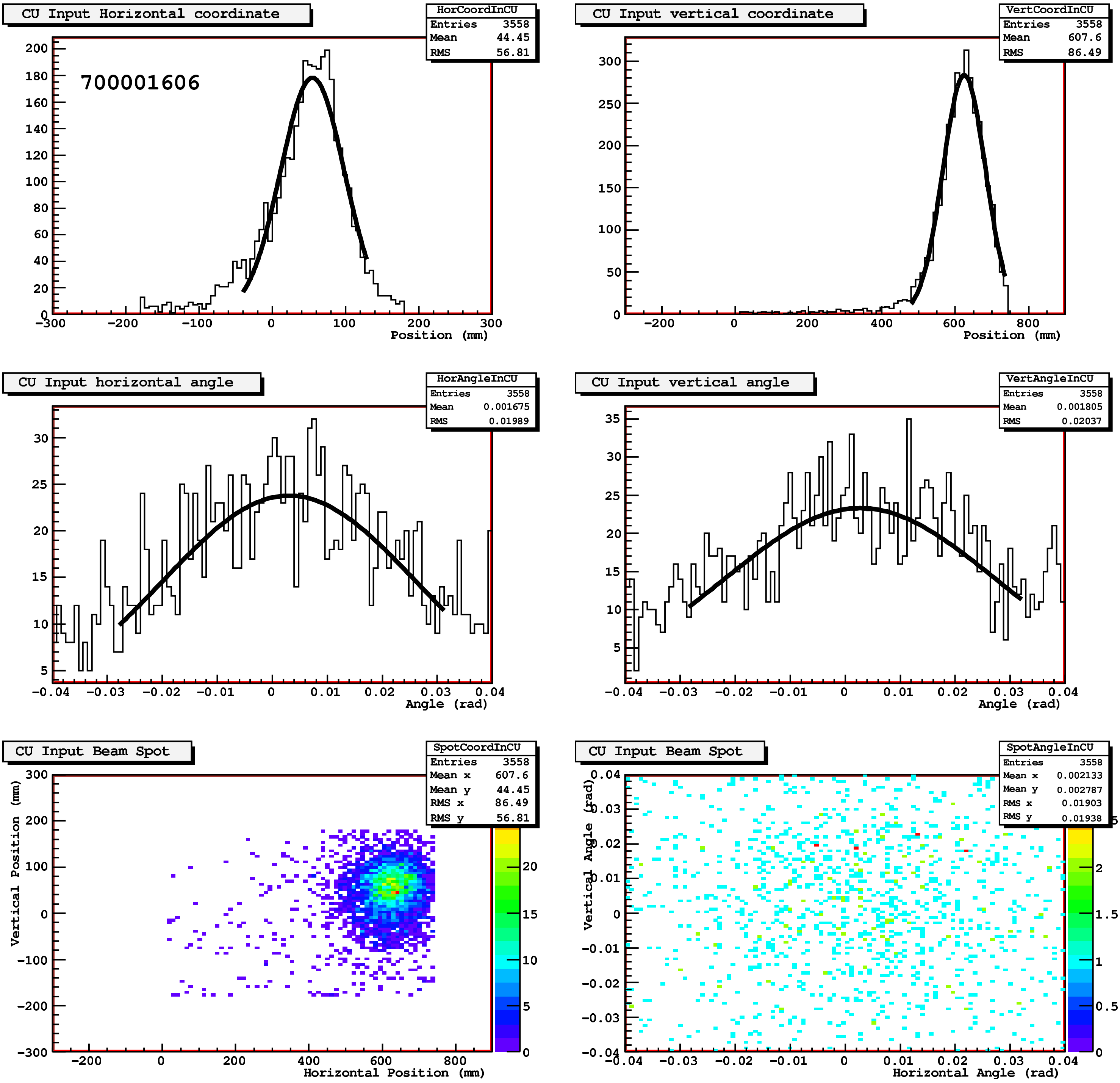

Input vertical coordinate
VertCoordIn
Entries 4381
Mean −9.389
RMS 8.914
0
20
40
60
80
100
120
140
160
180
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

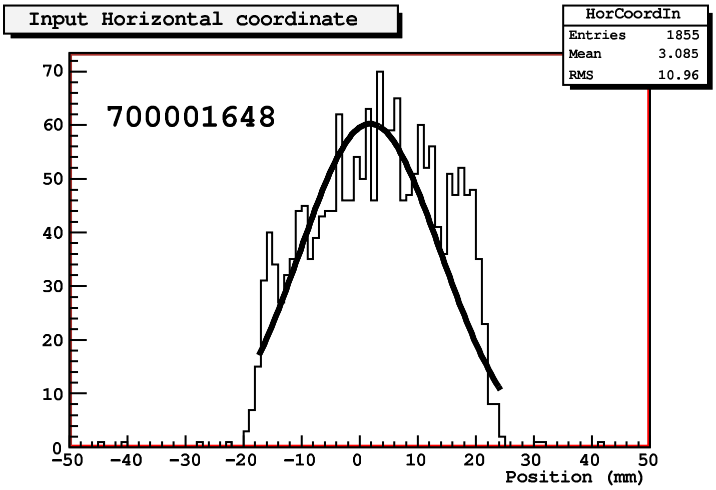

Input horizontal angle
HorAngleIn
Entries 4381
Mean 0.009007
RMS 0.01083
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

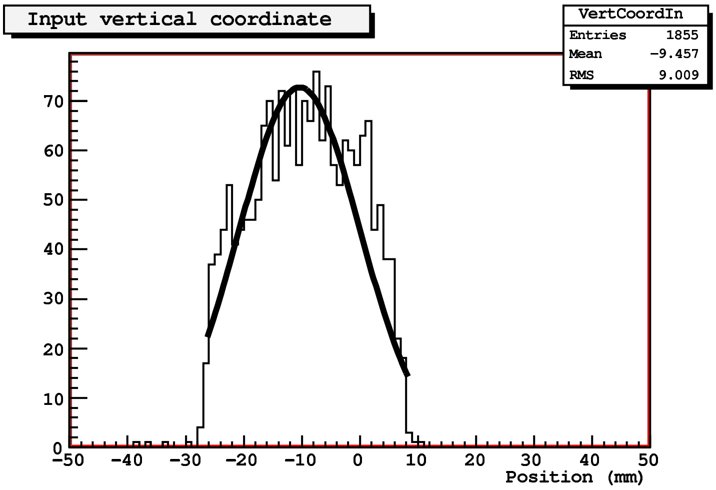

Input vertical angle
VertAngleIn
Entries 4381
Mean −0.0004774
RMS 0.006991
0
20
40
60
80
100
120
140
160
180
200
220
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

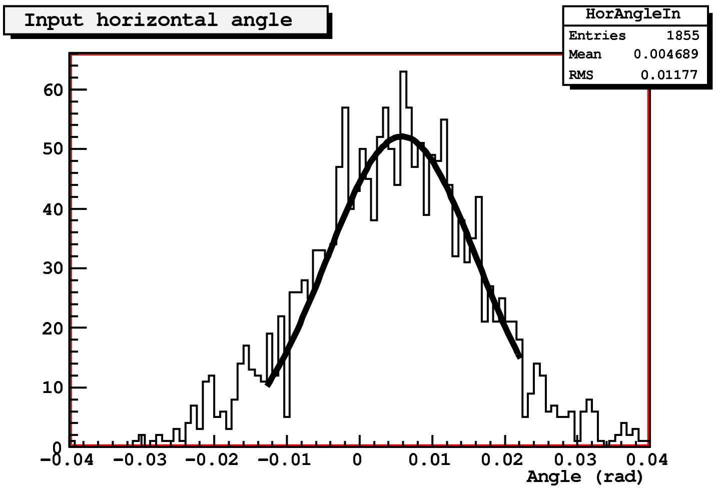

Input Beam Spot
SpotCoordIn
Entries 4381
Mean x 5.493
Mean y −9.389
RMS x 11.01
RMS y 8.914
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20
25

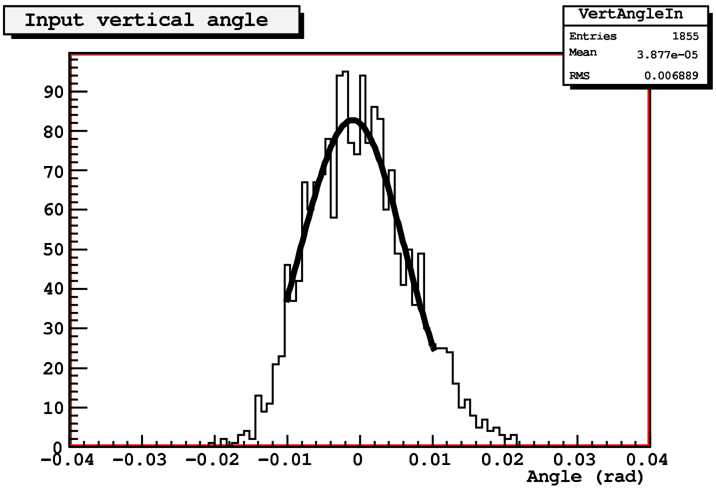

Input Beam Spot
SpotAngleIn
Entries 4381
Mean x 0.009007
Mean y −0.0004855
RMS x 0.01083
RMS y 0.006975
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8
10

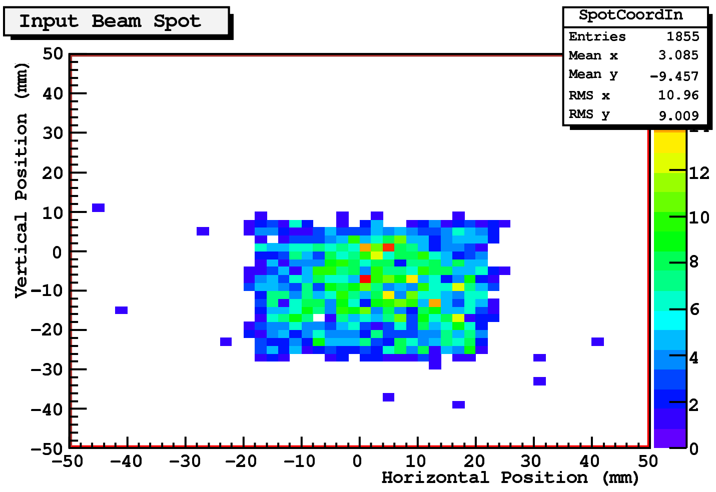

CU Input Horizontal coordinate
HorCoordInCU
Entries 3558
Mean 44.45
RMS 56.81
700001606
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 3558
Mean 607.6
RMS 86.49
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 3558
Mean 0.001675
RMS 0.01989
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 3558
Mean 0.001805
RMS 0.02037
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 3558
Mean x 607.6
Mean y 44.45
RMS x 86.49
RMS y 56.81
Vertical Position (mm)
Horizontal Position (mm)
CU Input Beam Spot
SpotAngleInCU
Entries 3558
Mean x 0.002133
Mean y 0.002787
RMS x 0.01903
RMS y 0.01938
Vertical Angle (rad)
Horizontal Angle (rad)

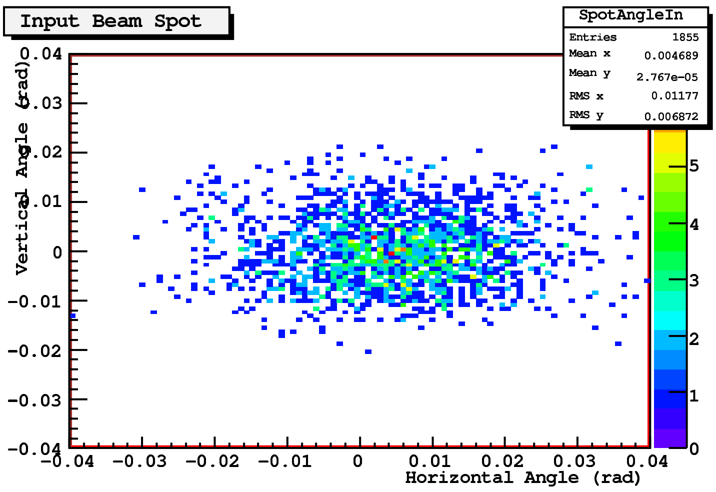

Input Horizontal coordinate
HorCoordIn
Entries 1855
Mean 3.085
RMS 10.96
700001648
0
10
20
30
40
50
60
70
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

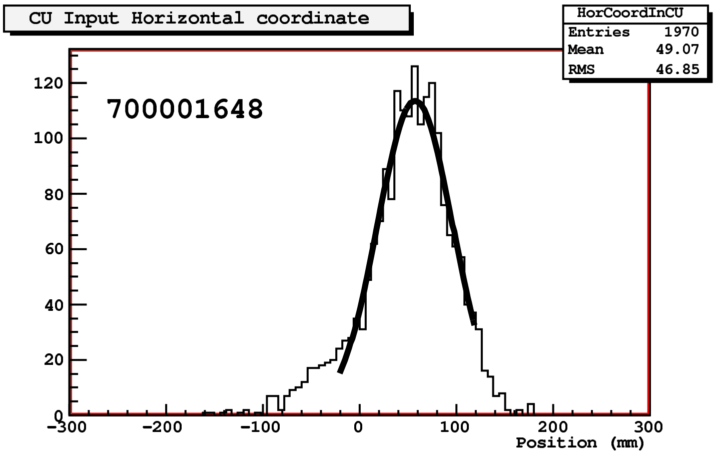

Input vertical coordinate
VertCoordIn
Entries 1855
Mean −9.457
RMS 9.009
0
10
20
30
40
50
60
70
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

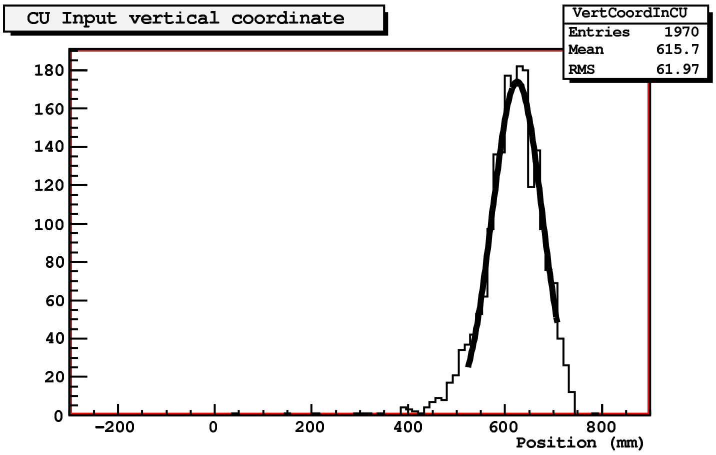

Input horizontal angle
HorAngleIn
Entries 1855
Mean 0.004689
RMS 0.01177
0
10
20
30
40
50
60
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

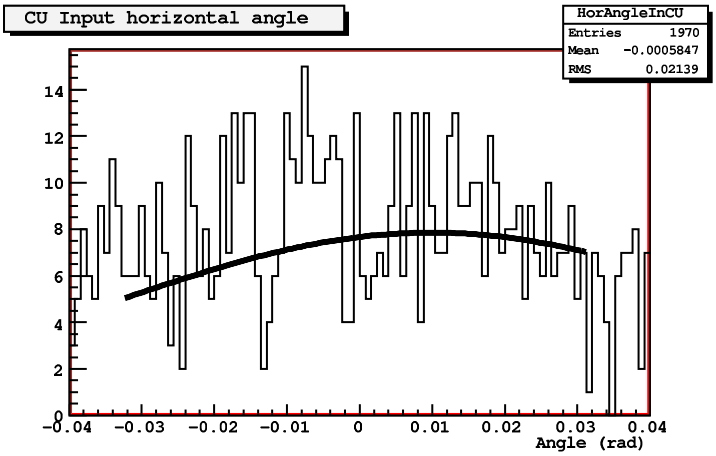

Input vertical angle
VertAngleIn
Entries 1855
Mean 3.877e−05
RMS 0.006889
0
10
20
30
40
50
60
70
80
90
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

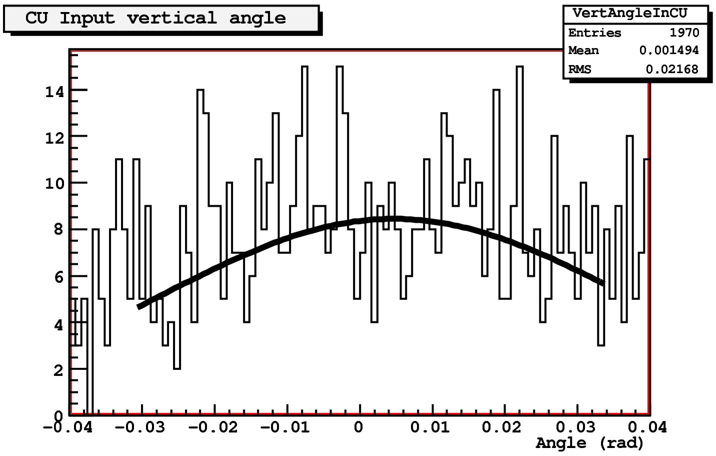

Input Beam Spot
SpotCoordIn
Entries 1855
Mean x 3.085
Mean y −9.457
RMS x 10.96
RMS y 9.009
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
2
4
6
8
10
12

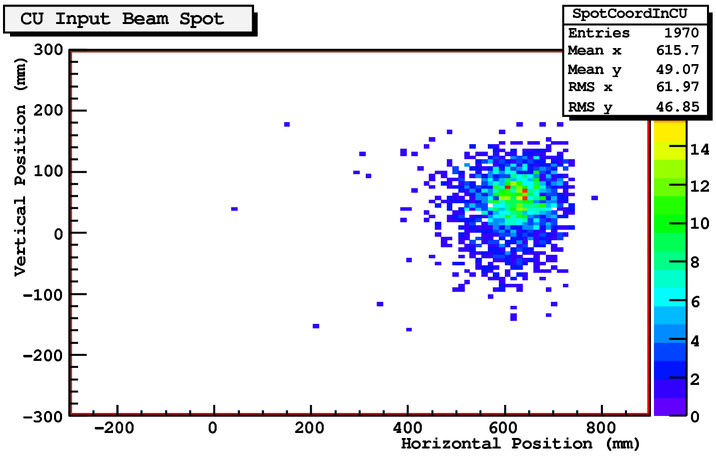

Input Beam Spot
SpotAngleIn
Entries 1855
Mean x 0.004689
Mean y 2.767e−05
RMS x 0.01177
RMS y 0.006872
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
1
2
3
4
5

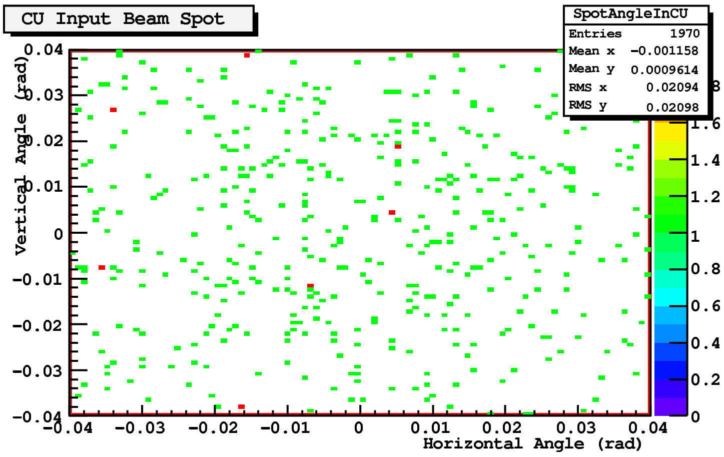

CU Input Horizontal coordinate

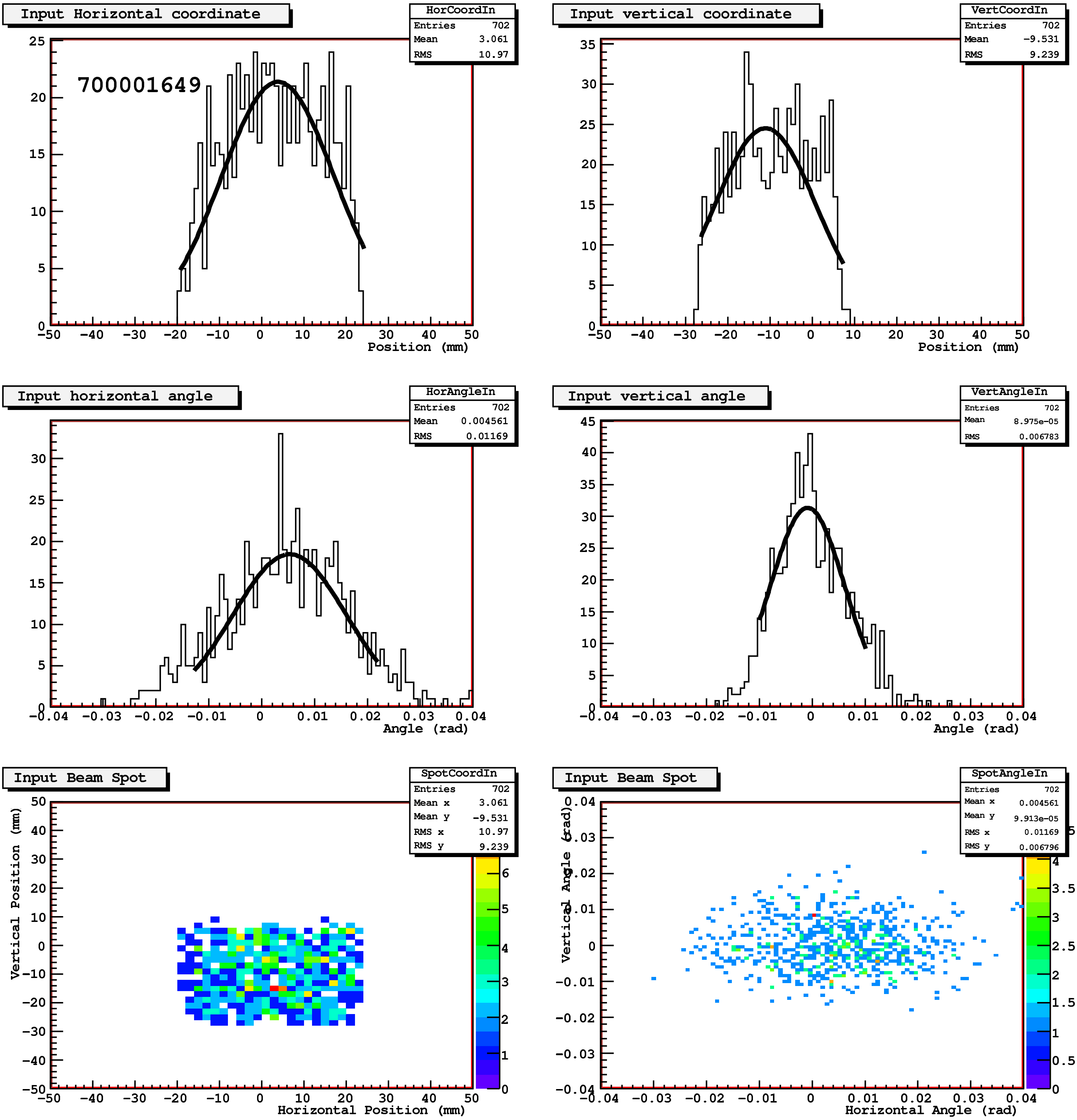

CU Input vertical coordinate

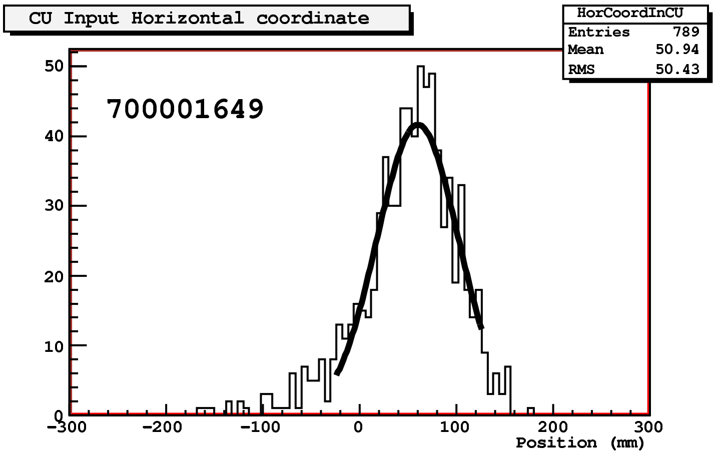

CU Input horizontal angle

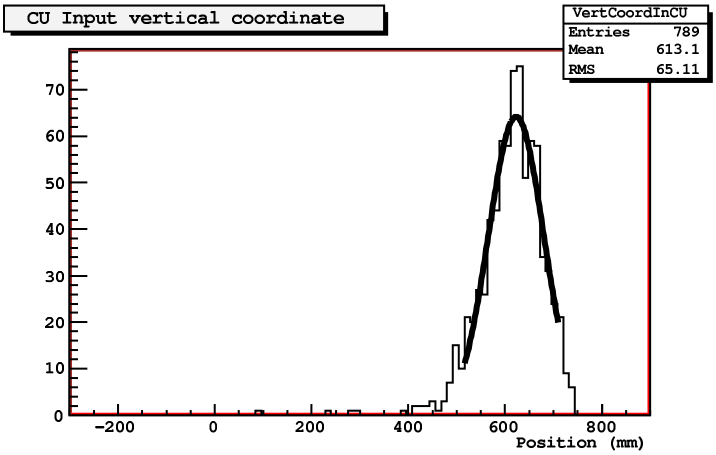

CU Input vertical angle

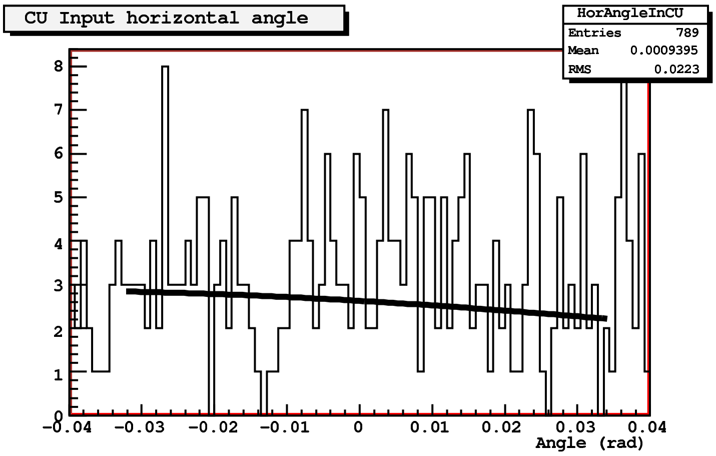

CU Input Beam Spot

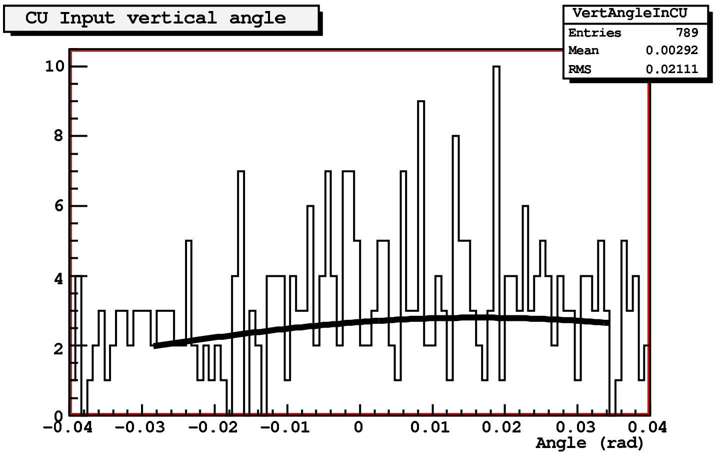

CU Input Beam Spot

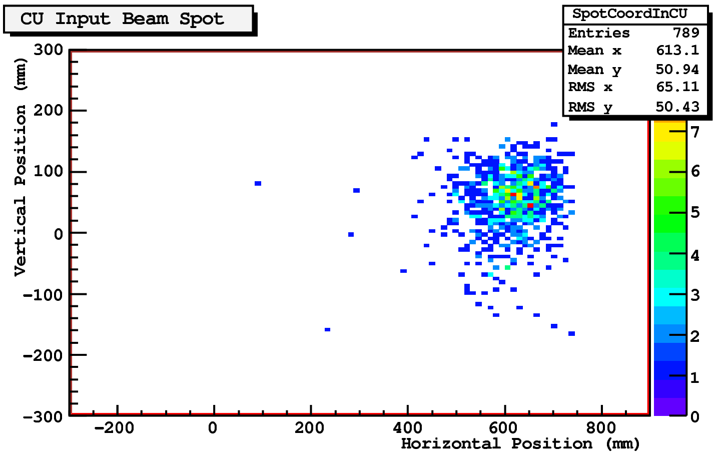

Input Horizontal coordinate
HorCoordIn
Entries 702
Mean 3.061
RMS 10.97
700001649
Position (mm)
Input vertical coordinate
VertCoordIn
Entries 702
Mean -9.531
RMS 9.239
Position (mm)
Input horizontal angle
HorAngleIn
Entries 702
Mean 0.004561
RMS 0.01169
Angle (rad)
Input vertical angle
VertAngleIn
Entries 702
Mean 8.975e-05
RMS 0.006783
Angle (rad)
Input Beam Spot
SpotCoordIn
Entries 702
Mean x 3.061
Mean y -9.531
RMS x 10.97
RMS y 9.239
Vertical Position (mm)
Horizontal Position (mm)
Input Beam Spot
SpotAngleIn
Entries 702
Mean x 0.004561
Mean y 9.913e-05
RMS x 0.01169
RMS y 0.006796
Vertical Angle (rad)
Horizontal Angle (rad)

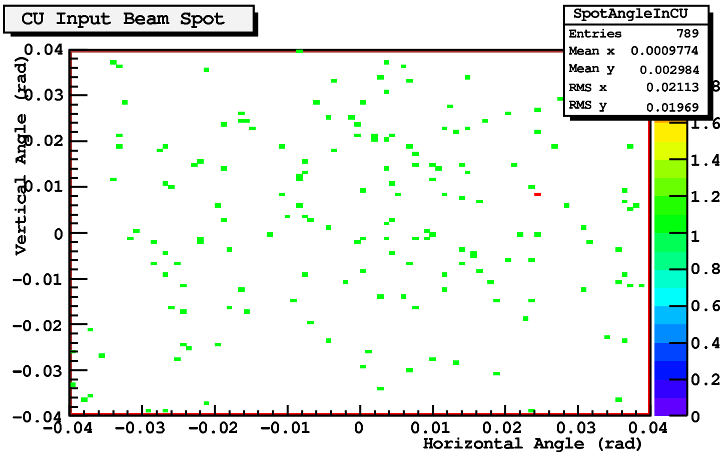

CU Input Horizontal coordinate
HorCoordInCU
Entries 789
Mean 50.94
RMS 50.43
700001649
0
10
20
30
40
50
−300
−200
−100
0
100
200
300
Position (mm)

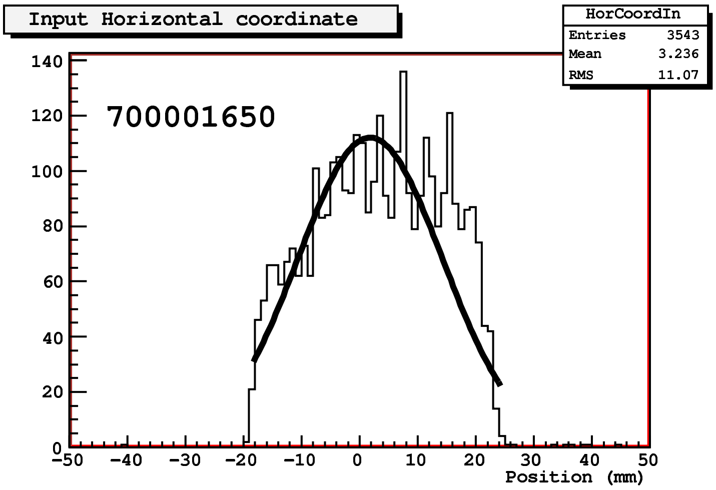

CU Input vertical coordinate
VertCoordInCU
Entries 789
Mean 613.1
RMS 65.11
0
10
20
30
40
50
60
70
−200
0
200
400
600
800
Position (mm)

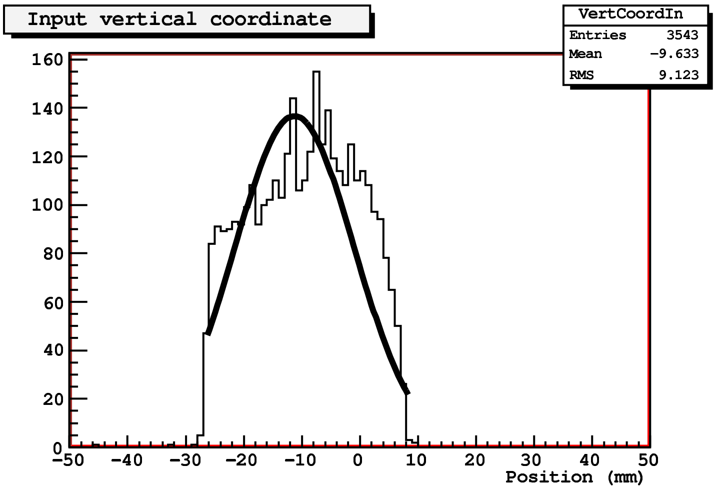

CU Input horizontal angle
HorAngleInCU
Entries 789
Mean 0.0009395
RMS 0.0223
0
1
2
3
4
5
6
7
8
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

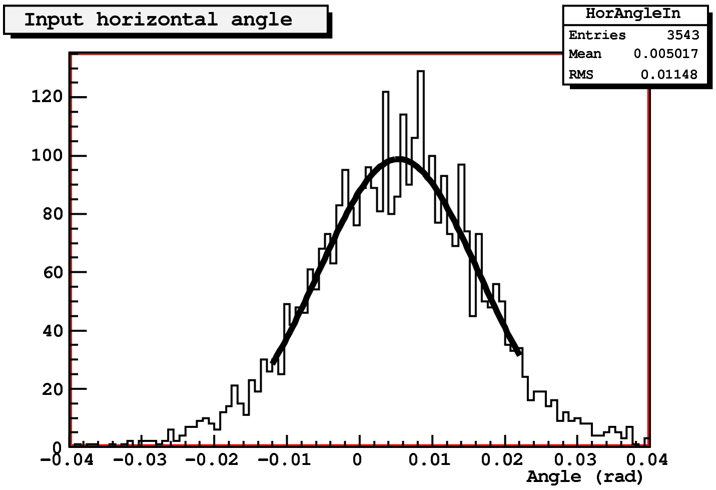

CU Input vertical angle
VertAngleInCU
Entries 789
Mean 0.00292
RMS 0.02111
0
2
4
6
8
10
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

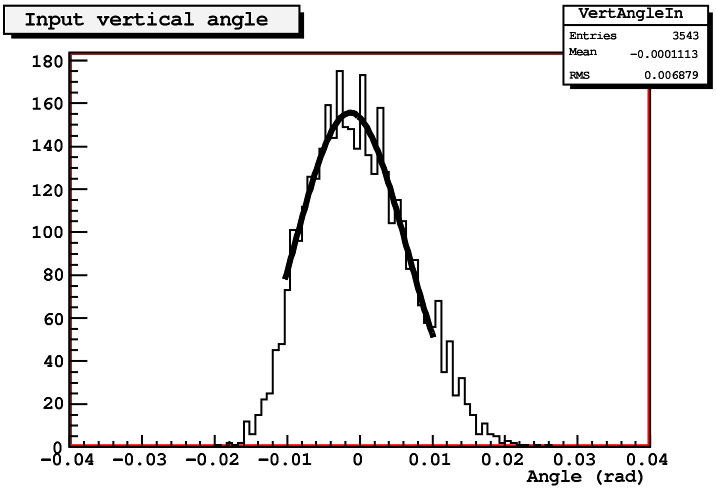

CU Input Beam Spot
SpotCoordInCU
Entries 789
Mean x 613.1
Mean y 50.94
RMS x 65.11
RMS y 50.43
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
0
1
2
3
4
5
6
7

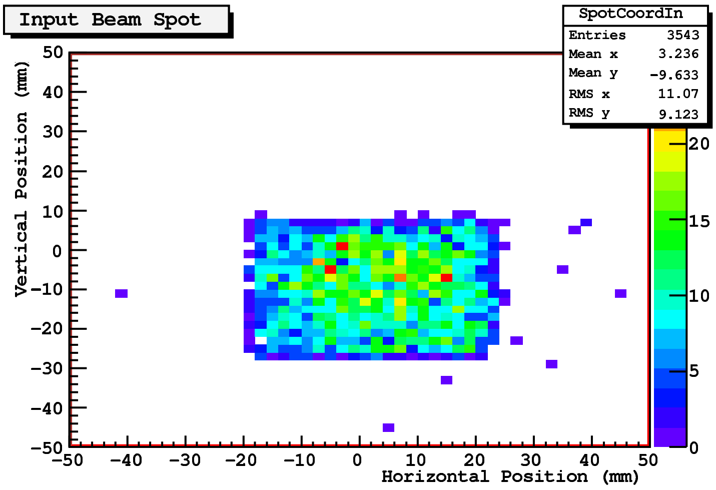

CU Input Beam Spot
SpotAngleInCU
Entries 789
Mean x 0.0009774
Mean y 0.002984
RMS x 0.02113
RMS y 0.01969
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
8

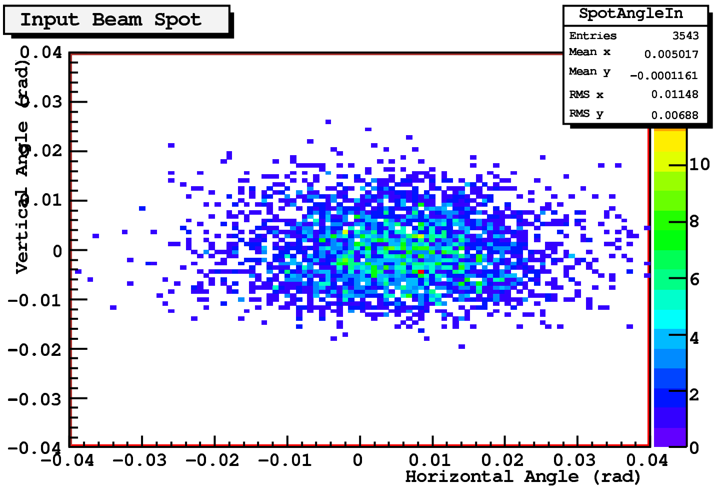

Input Horizontal coordinate
HorCoordIn
Entries 3543
Mean 3.236
RMS 11.07
700001650
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

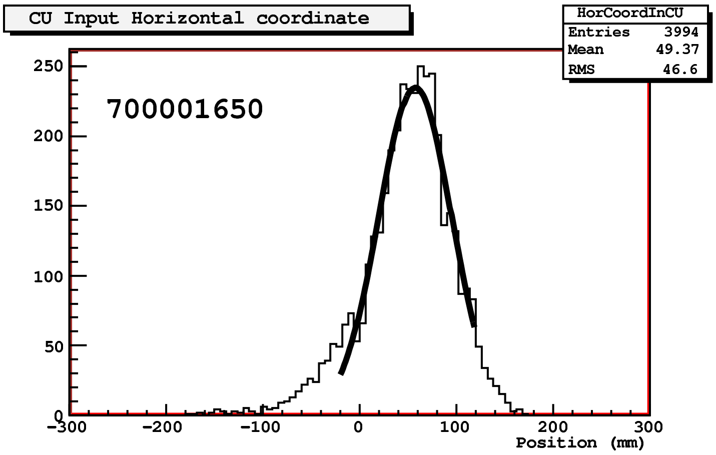

Input vertical coordinate
VertCoordIn
Entries 3543
Mean −9.633
RMS 9.123
160
140
120
100
80
60
40
20
0
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

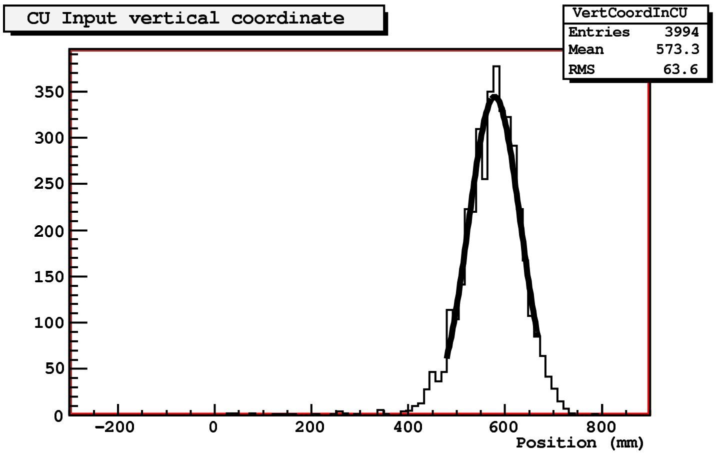

Input horizontal angle
HorAngleIn
Entries 3543
Mean 0.005017
RMS 0.01148
120
100
80
60
40
20
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

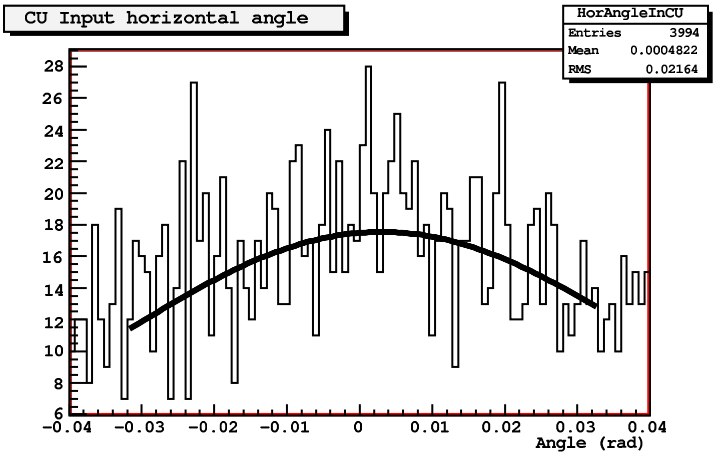

Input vertical angle
VertAngleIn
Entries 3543
Mean −0.0001113
RMS 0.006879
180
160
140
120
100
80
60
40
20
0
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

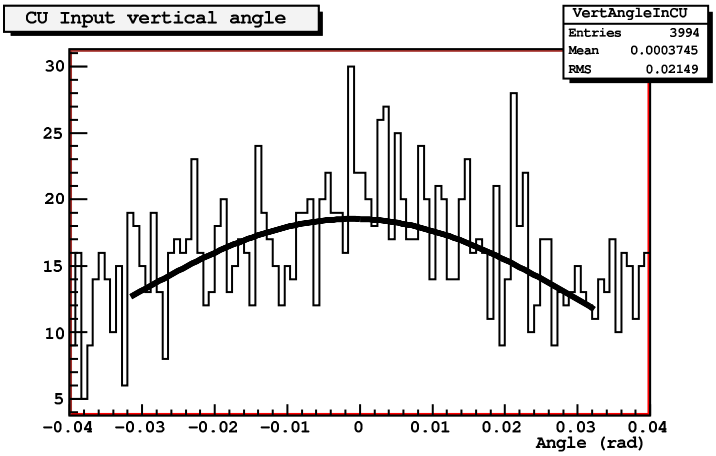

Input Beam Spot
SpotCoordIn
Entries 3543
Mean x 3.236
Mean y −9.633
RMS x 11.07
RMS y 9.123
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
20
15
10
5
0

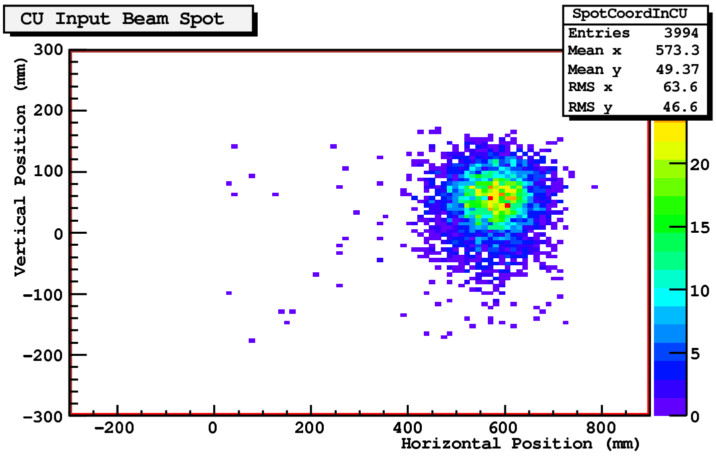

Input Beam Spot
SpotAngleIn
Entries 3543
Mean x 0.005017
Mean y −0.0001161
RMS x 0.01148
RMS y 0.00688
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
10
8
6
4
2
0

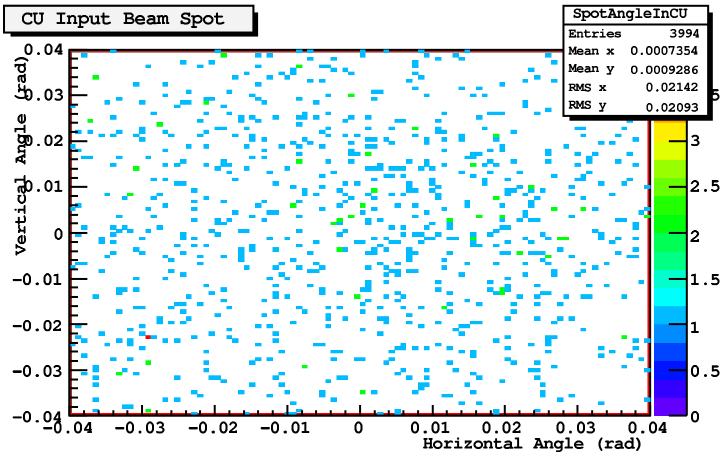

CU Input Horizontal coordinate
HorCoordInCU
Entries 3994
Mean 49.37
RMS 46.6
700001650
250
200
150
100
50
0
−300
−200
−100
0
100
200
300
Position (mm)

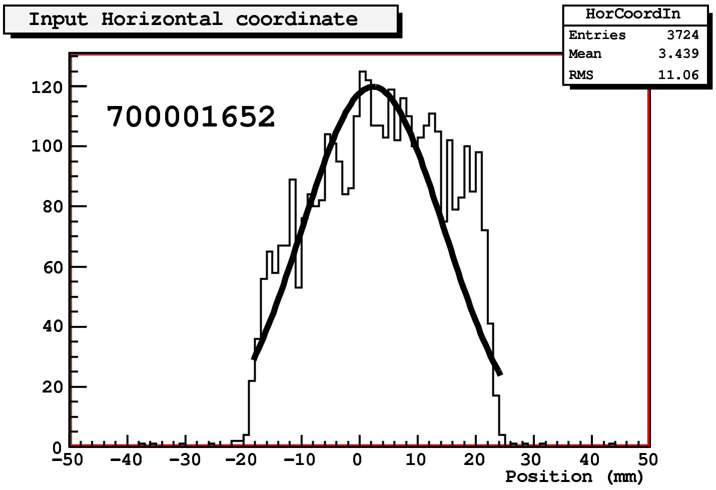

CU Input vertical coordinate
VertCoordInCU
Entries 3994
Mean 573.3
RMS 63.6
350
300
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)

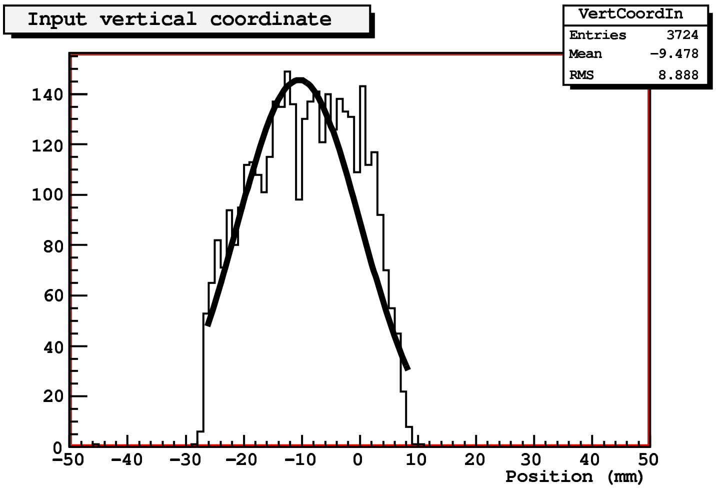

CU Input horizontal angle
HorAngleInCU
Entries 3994
Mean 0.0004822
RMS 0.02164
28
26
24
22
20
18
16
14
12
10
8
6
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

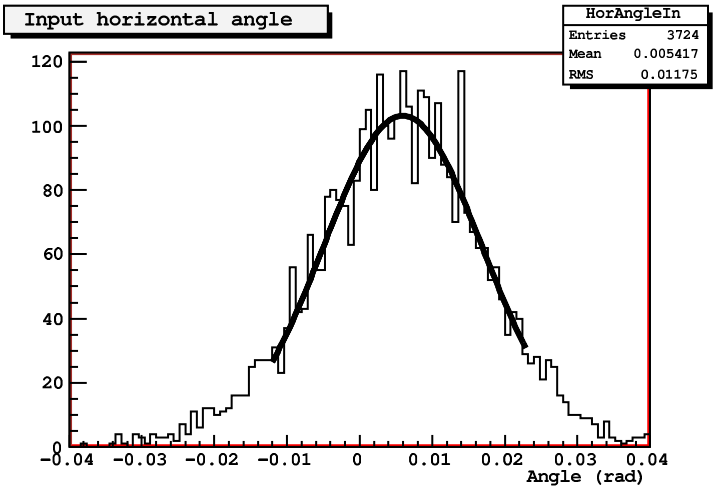

CU Input vertical angle
VertAngleInCU
Entries 3994
Mean 0.0003745
RMS 0.02149
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

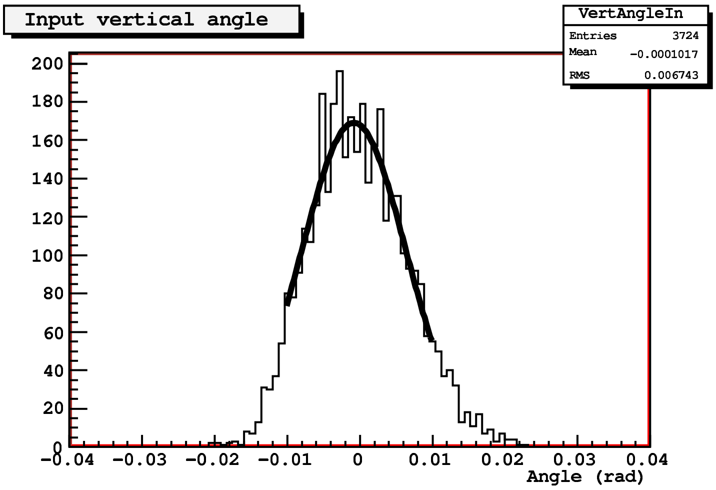

CU Input Beam Spot
SpotCoordInCU
Entries 3994
Mean x 573.3
Mean y 49.37
RMS x 63.6
RMS y 46.6
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
20
15
10
5
0

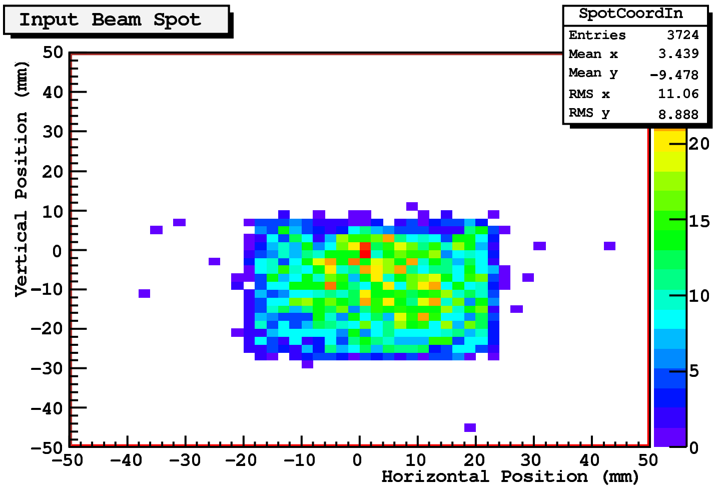

CU Input Beam Spot
SpotAngleInCU
Entries 3994
Mean x 0.0007354
Mean y 0.0009286
RMS x 0.02142
RMS y 0.02093
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
3
2.5
2
1.5
1
0.5
0

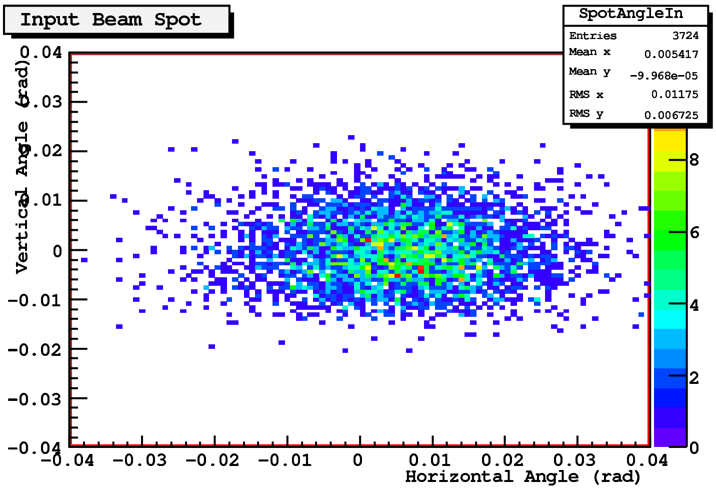

Input Horizontal coordinate
HorCoordIn
Entries 3724
Mean 3.439
RMS 11.06
700001652
0
20
40
60
80
100
120
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

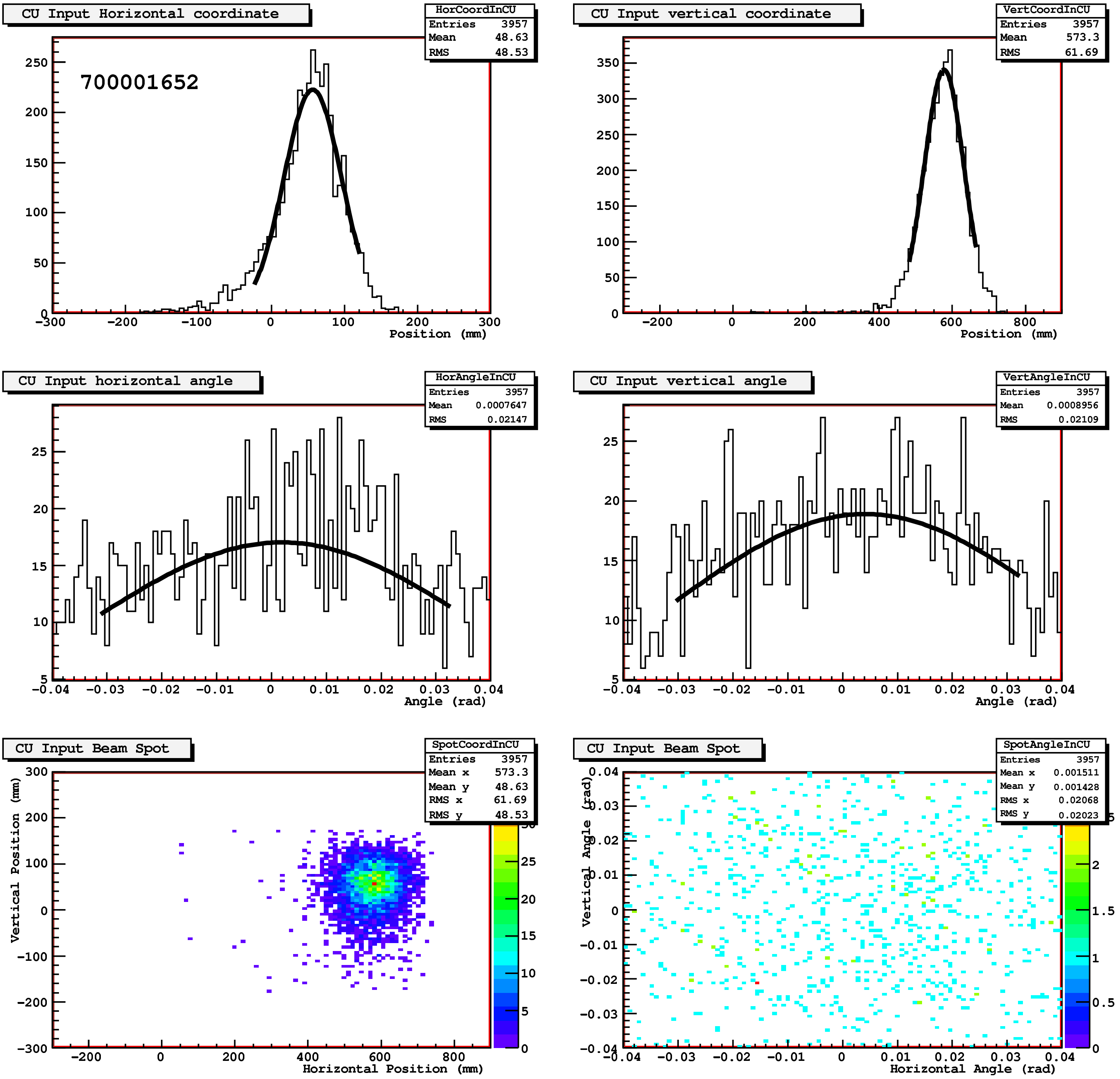

Input vertical coordinate
VertCoordIn
Entries 3724
Mean −9.478
RMS 8.888
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

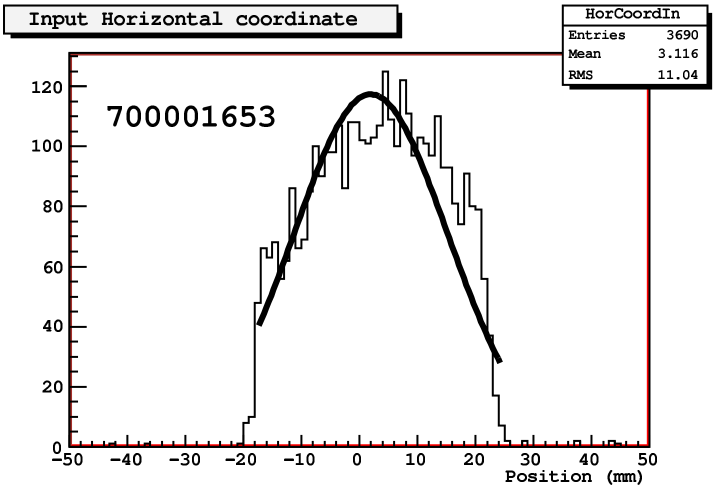

Input horizontal angle
HorAngleIn
Entries 3724
Mean 0.005417
RMS 0.01175
0
20
40
60
80
100
120
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

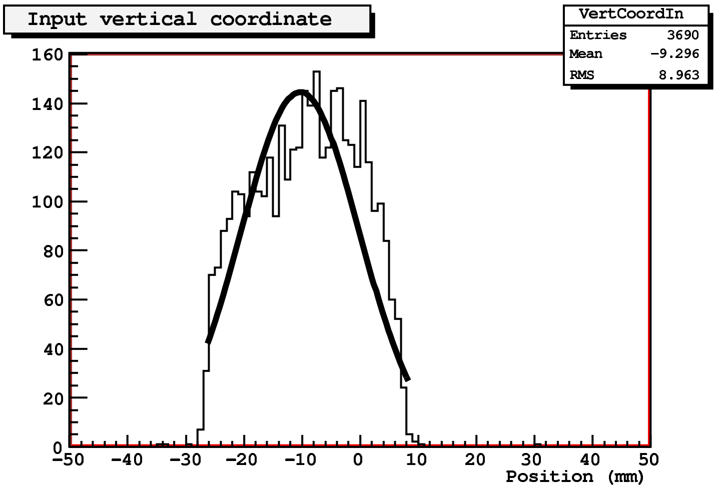

Input vertical angle
VertAngleIn
Entries 3724
Mean −0.0001017
RMS 0.006743
0
20
40
60
80
100
120
140
160
180
200
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

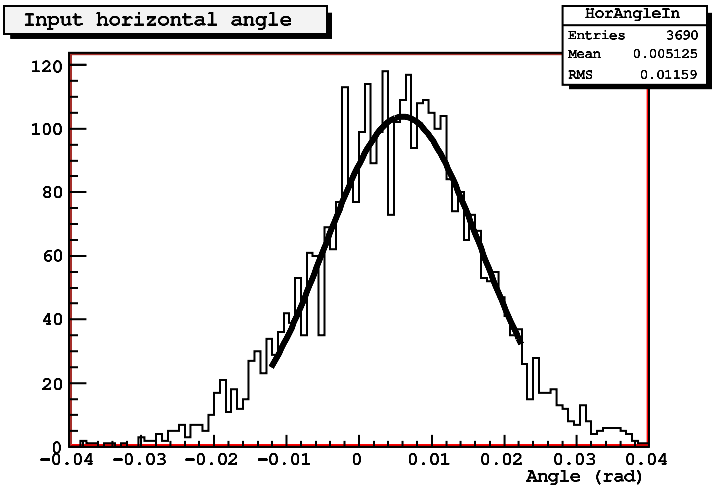

Input Beam Spot
SpotCoordIn
Entries 3724
Mean x 3.439
Mean y −9.478
RMS x 11.06
RMS y 8.888
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
5
10
15
20

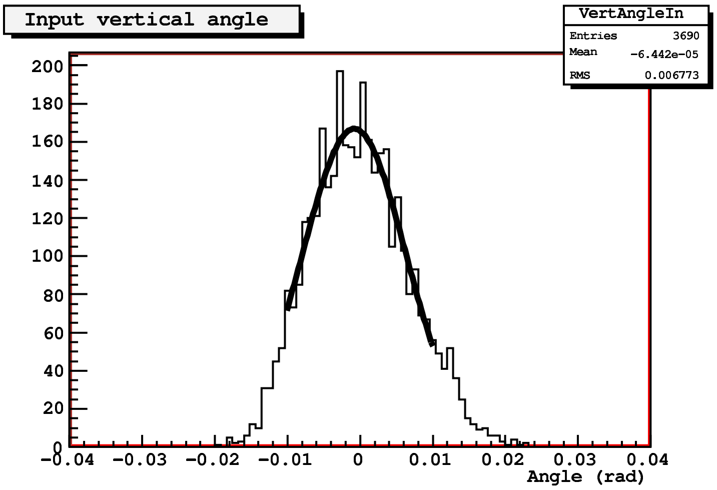

Input Beam Spot
SpotAngleIn
Entries 3724
Mean x 0.005417
Mean y −9.968e−05
RMS x 0.01175
RMS y 0.006725
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8

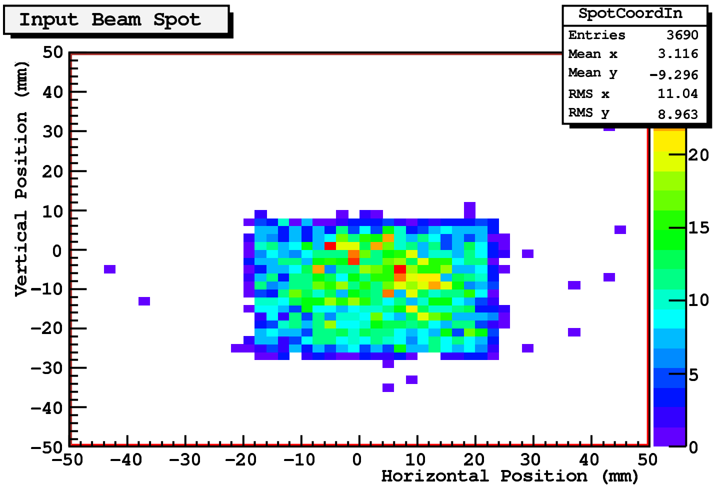

CU Input Horizontal coordinate
HorCoordInCU
Entries 3957
Mean 48.63
RMS 48.53
700001652
250
200
150
100
50
0
−300
−200
−100
0
100
200
300
Position (mm)
CU Input vertical coordinate
VertCoordInCU
Entries 3957
Mean 573.3
RMS 61.69
350
300
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)
CU Input horizontal angle
HorAngleInCU
Entries 3957
Mean 0.0007647
RMS 0.02147
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
CU Input vertical angle
VertAngleInCU
Entries 3957
Mean 0.0008956
RMS 0.02109
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)
CU Input Beam Spot
SpotCoordInCU
Entries 3957
Mean x 573.3
Mean y 48.63
RMS x 61.69
RMS y 48.53
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
25
20
15
10
5
0
CU Input Beam Spot
SpotAngleInCU
Entries 3957
Mean x 0.001511
Mean y 0.001428
RMS x 0.02068
RMS y 0.02023
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0

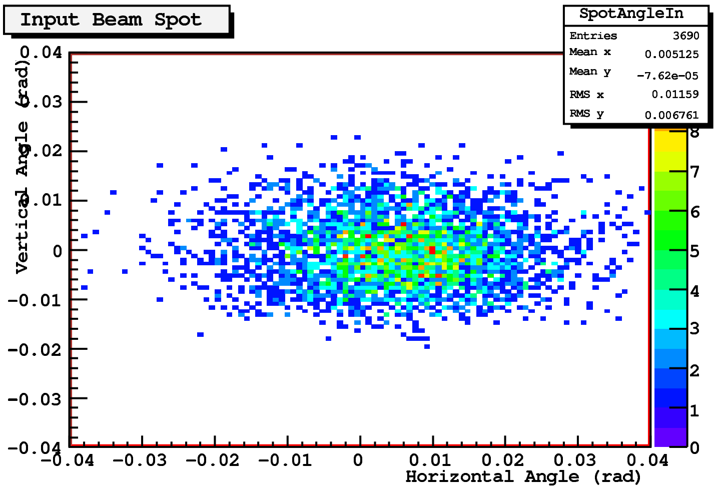

Input Horizontal coordinate
HorCoordIn
Entries 3690
Mean 3.116
RMS 11.04
700001653
0
20
40
60
80
100
120
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

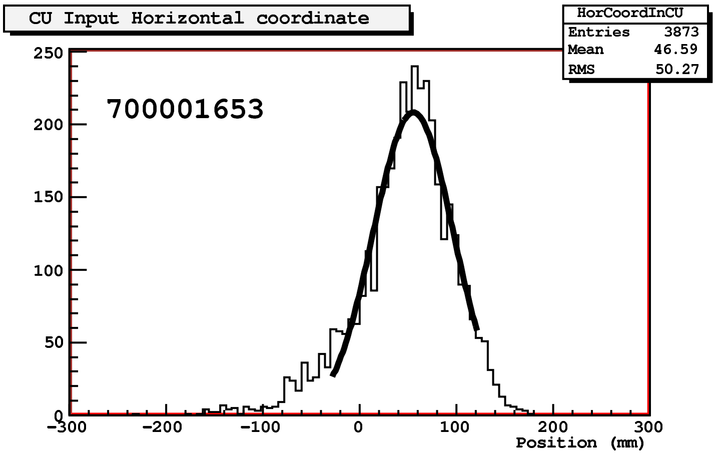

Input vertical coordinate
VertCoordIn
Entries 3690
Mean −9.296
RMS 8.963
0
20
40
60
80
100
120
140
160
−50 −40 −30 −20 −10 0 10 20 30 40 50
Position (mm)

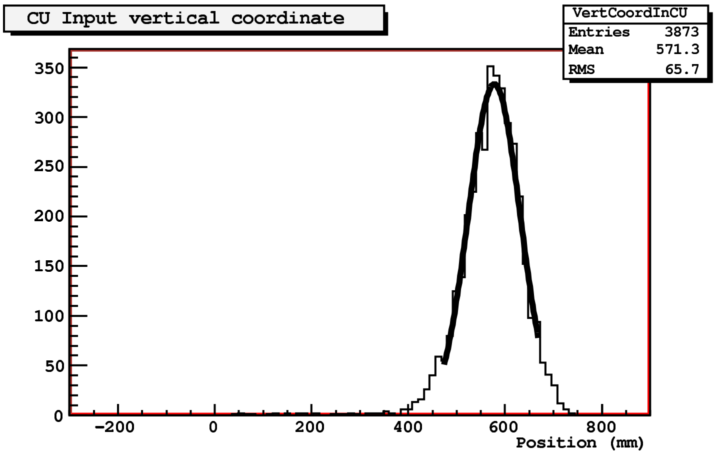

Input horizontal angle
HorAngleIn
Entries 3690
Mean 0.005125
RMS 0.01159
0
20
40
60
80
100
120
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

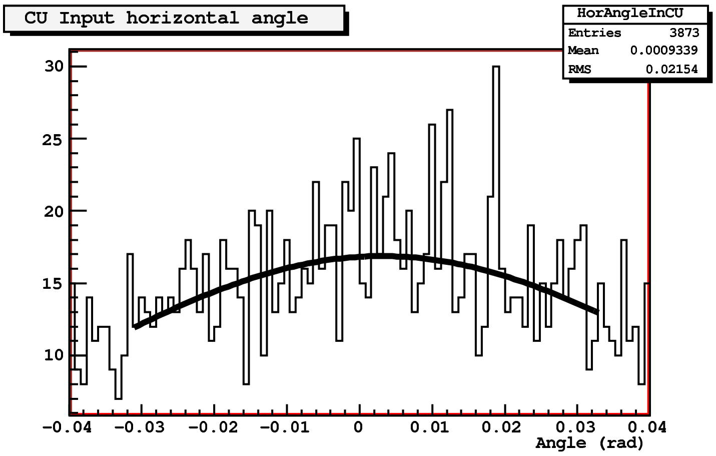

Input vertical angle
VertAngleIn
Entries 3690
Mean −6.442e−05
RMS 0.006773
0
20
40
60
80
100
120
140
160
180
200
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Angle (rad)

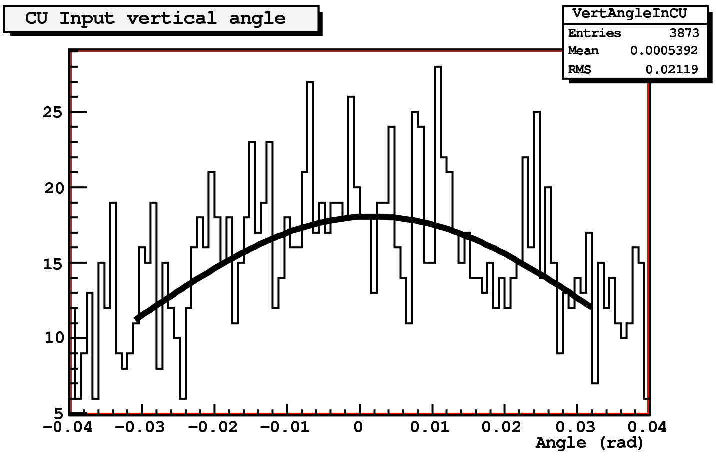

Input Beam Spot
SpotCoordIn
Entries 3690
Mean x 3.116
Mean y −9.296
RMS x 11.04
RMS y 8.963
Vertical Position (mm)
−50
−40
−30
−20
−10
0
10
20
30
40
50
−50 −40 −30 −20 −10 0 10 20 30 40 50
Horizontal Position (mm)
0
5
10
15
20

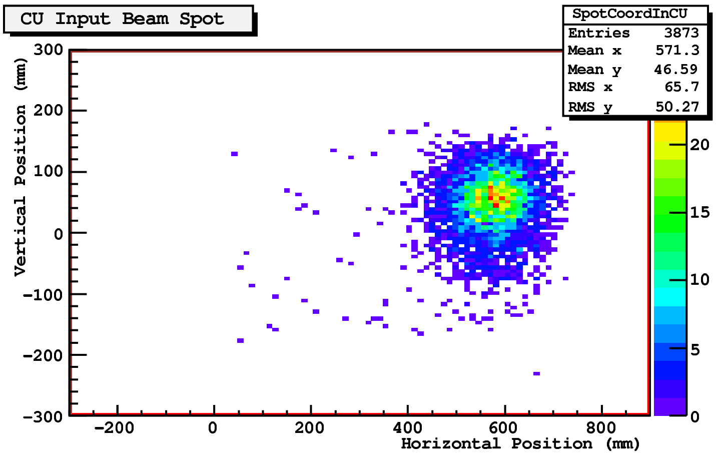

Input Beam Spot
SpotAngleIn
Entries 3690
Mean x 0.005125
Mean y −7.62e−05
RMS x 0.01159
RMS y 0.006761
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
−0.04 −0.03 −0.02 −0.01 0 0.01 0.02 0.03 0.04
Horizontal Angle (rad)
0
1
2
3
4
5
6
7
8

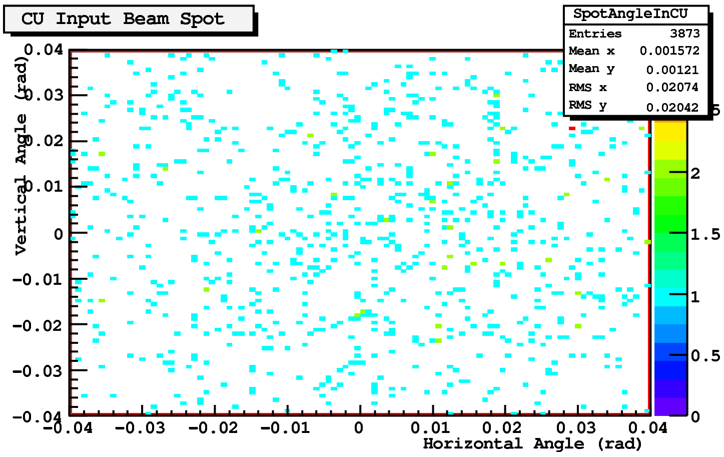

CU Input Horizontal coordinate
HorCoordInCU
Entries 3873
Mean 46.59
RMS 50.27
700001653
0
50
100
150
200
250
−300
−200
−100
0
100
200
300
Position (mm)

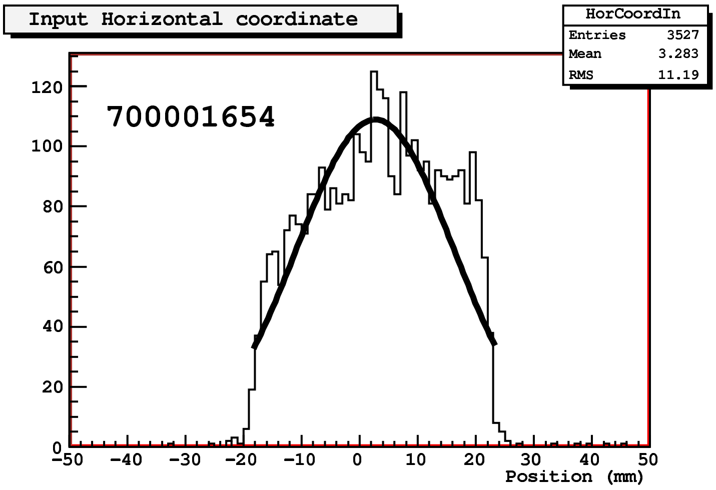

CU Input vertical coordinate
VertCoordInCU
Entries 3873
Mean 571.3
RMS 65.7
0
50
100
150
200
250
300
350
−200
0
200
400
600
800
Position (mm)

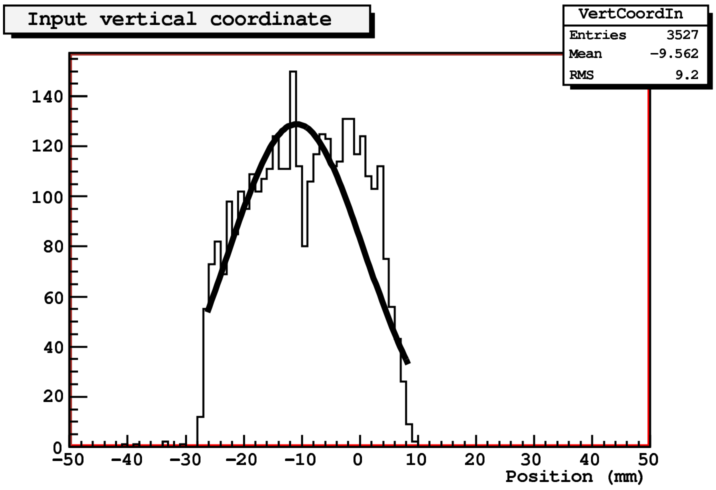

CU Input horizontal angle
HorAngleInCU
Entries 3873
Mean 0.0009339
RMS 0.02154
10
15
20
25
30
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

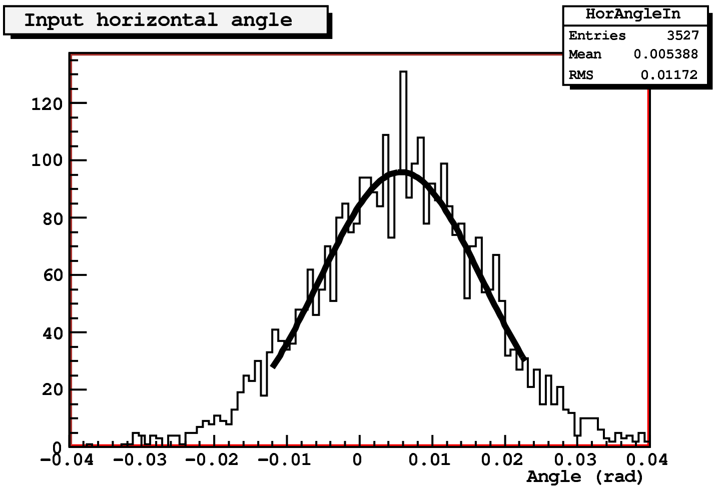

CU Input vertical angle
VertAngleInCU
Entries 3873
Mean 0.0005392
RMS 0.02119
5
10
15
20
25
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

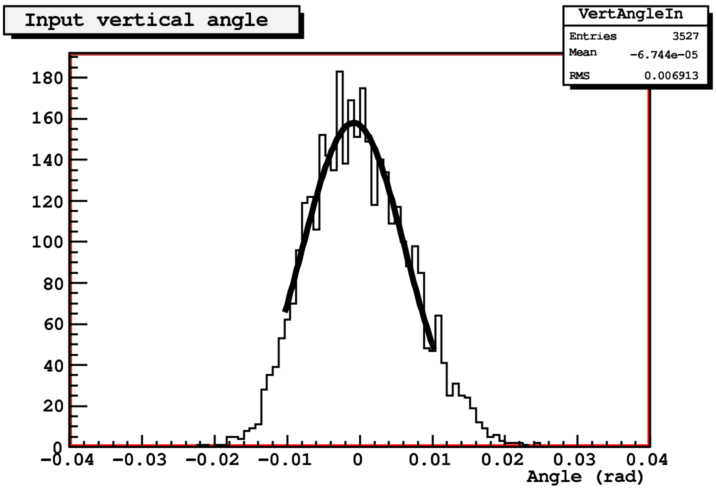

CU Input Beam Spot
SpotCoordInCU
Entries 3873
Mean x 571.3
Mean y 46.59
RMS x 65.7
RMS y 50.27
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
0
5
10
15
20

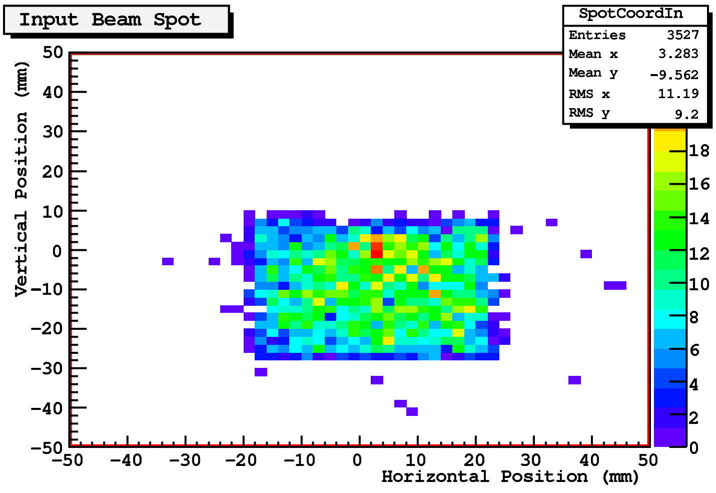

CU Input Beam Spot
SpotAngleInCU
Entries 3873
Mean x 0.001572
Mean y 0.00121
RMS x 0.02074
RMS y 0.02042
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
0.5
1
1.5
2
2.5

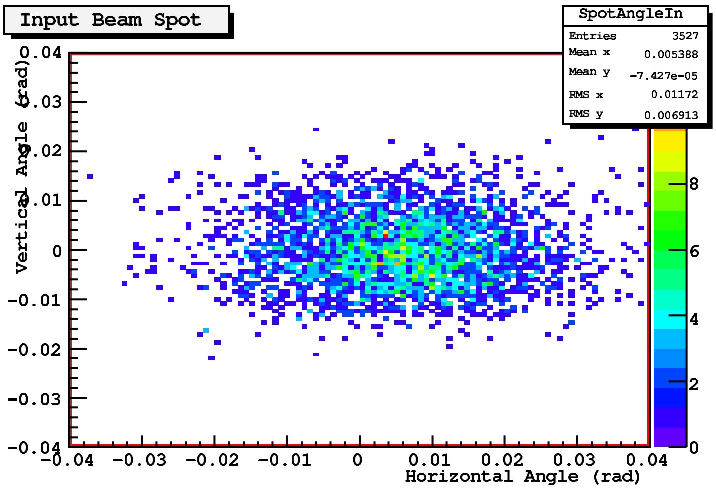

Input Horizontal coordinate
HorCoordIn
Entries 3527
Mean 3.283
RMS 11.19
700001654
0
20
40
60
80
100
120
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

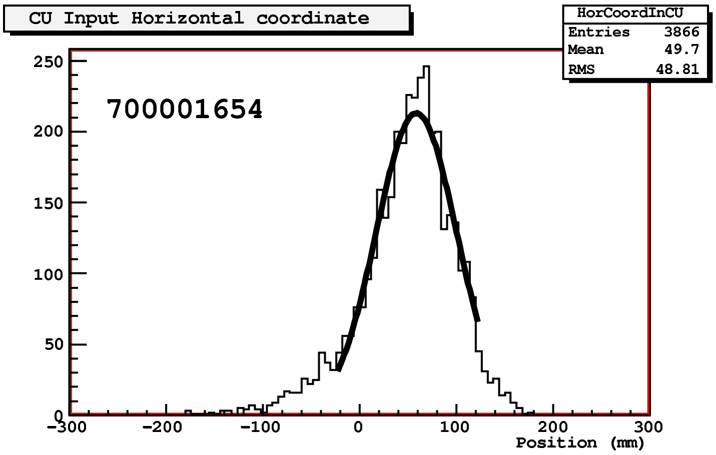

Input vertical coordinate
VertCoordIn
Entries 3527
Mean −9.562
RMS 9.2
0
20
40
60
80
100
120
140
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

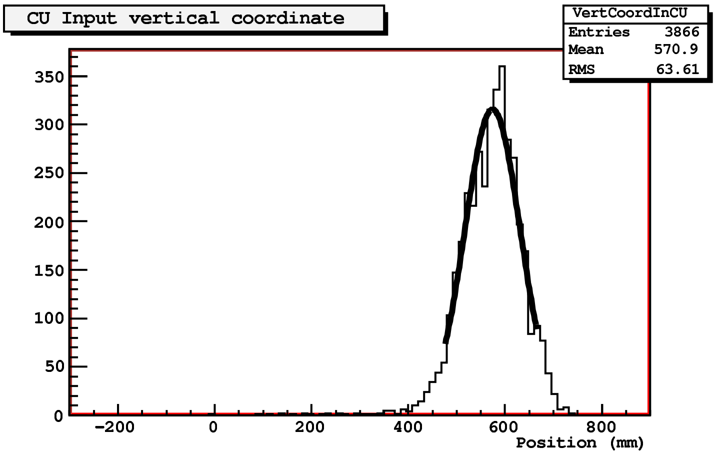

Input horizontal angle
HorAngleIn
Entries 3527
Mean 0.005388
RMS 0.01172
0
20
40
60
80
100
120
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

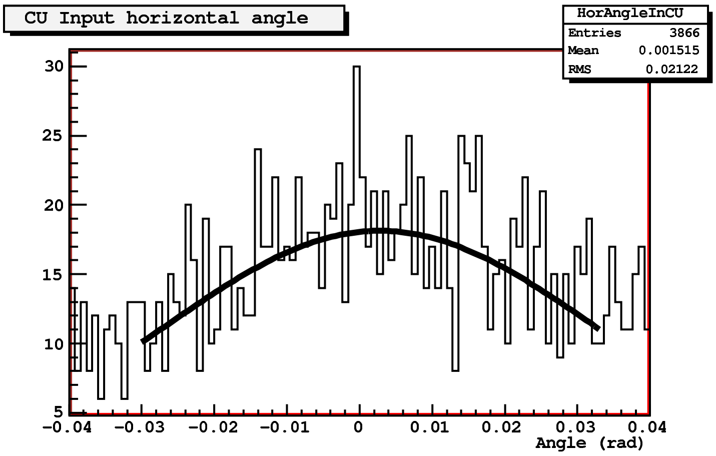

Input vertical angle
VertAngleIn
Entries 3527
Mean −6.744e−05
RMS 0.006913
0
20
40
60
80
100
120
140
160
180
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

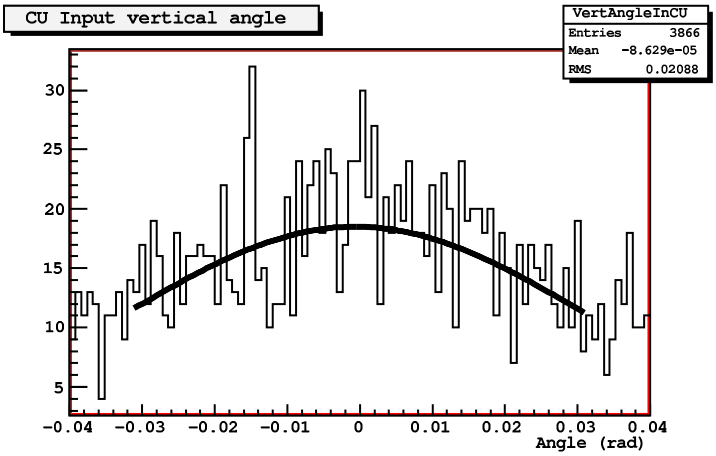

Input Beam Spot
SpotCoordIn
Entries 3527
Mean x 3.283
Mean y −9.562
RMS x 11.19
RMS y 9.2
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
2
4
6
8
10
12
14
16
18

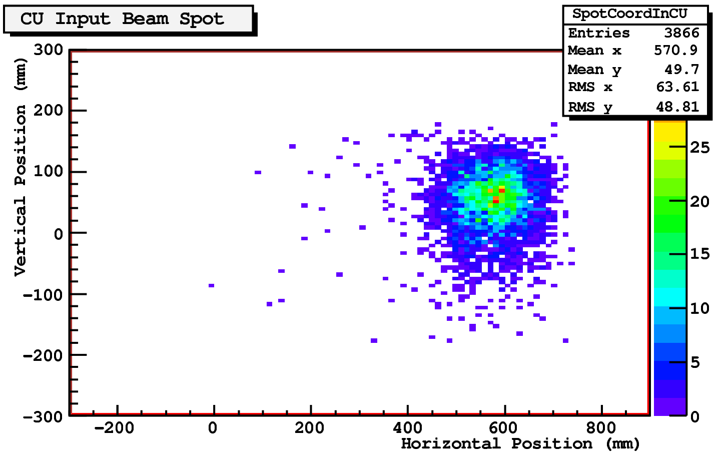

Input Beam Spot
SpotAngleIn
Entries 3527
Mean x 0.005388
Mean y −7.427e−05
RMS x 0.01172
RMS y 0.006913
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
2
4
6
8

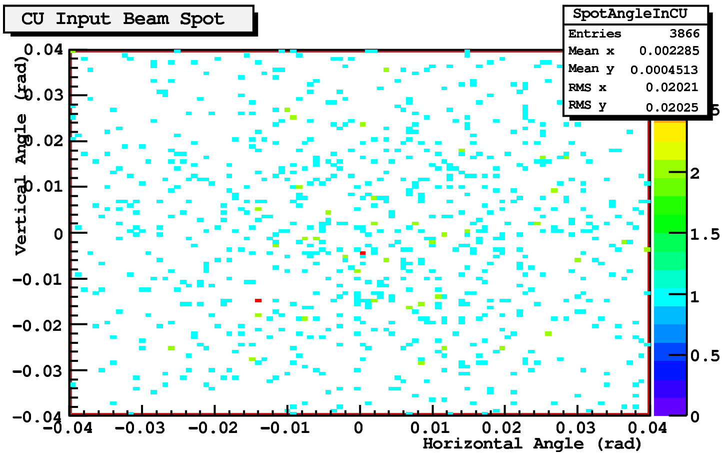

CU Input Horizontal coordinate
HorCoordInCU
Entries 3866
Mean 49.7
RMS 48.81
700001654
250
200
150
100
50
0
−300
−200
−100
0
100
200
300
Position (mm)

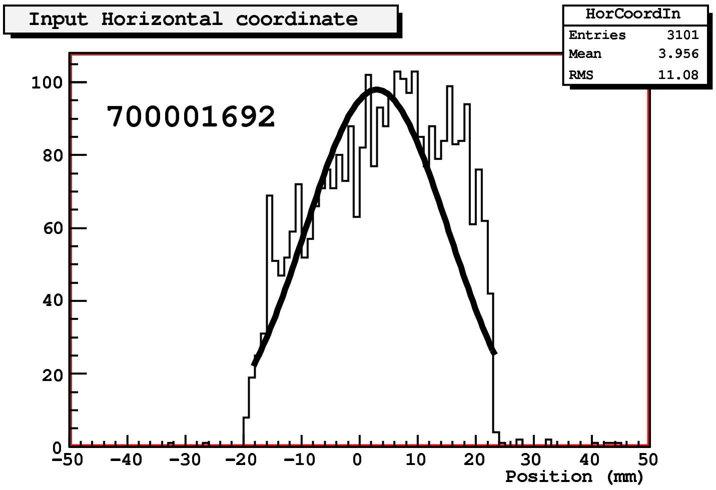

CU Input vertical coordinate
VertCoordInCU
Entries 3866
Mean 570.9
RMS 63.61
350
300
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)

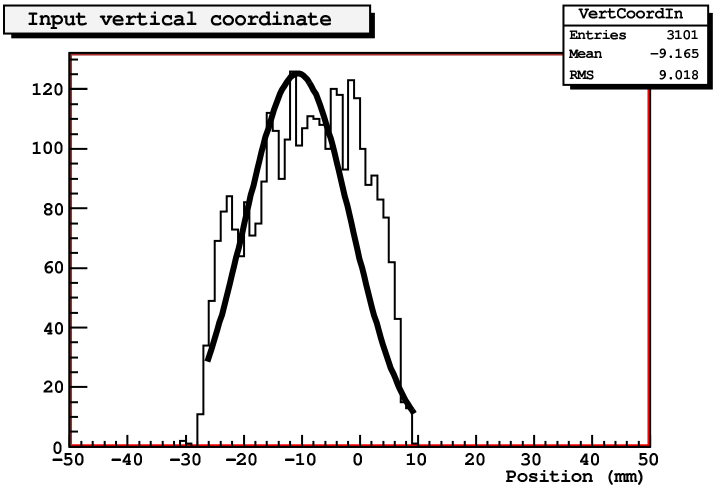

CU Input horizontal angle
HorAngleInCU
Entries 3866
Mean 0.001515
RMS 0.02122
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

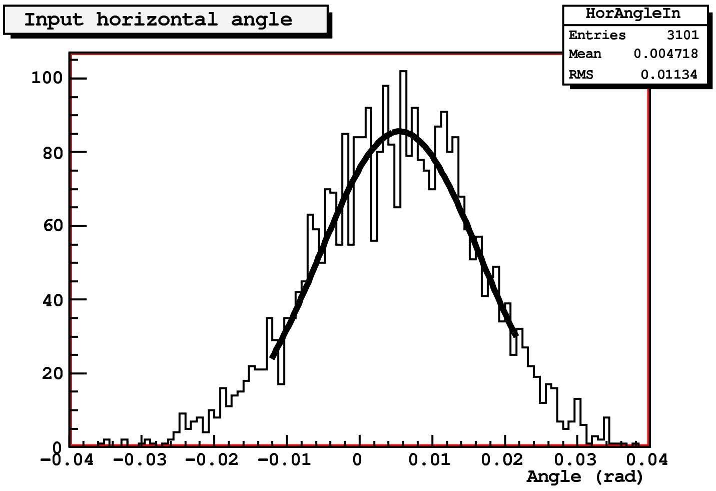

CU Input vertical angle
VertAngleInCU
Entries 3866
Mean −8.629e−05
RMS 0.02088
30
25
20
15
10
5
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

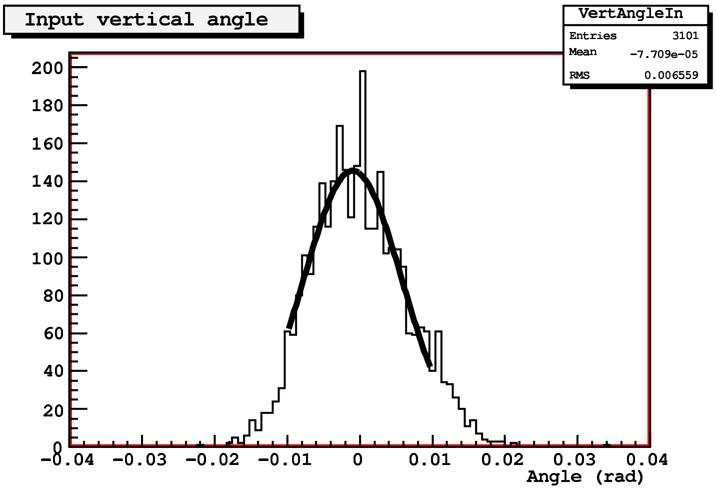

CU Input Beam Spot
SpotCoordInCU
Entries 3866
Mean x 570.9
Mean y 49.7
RMS x 63.61
RMS y 48.81
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
25
20
15
10
5
0

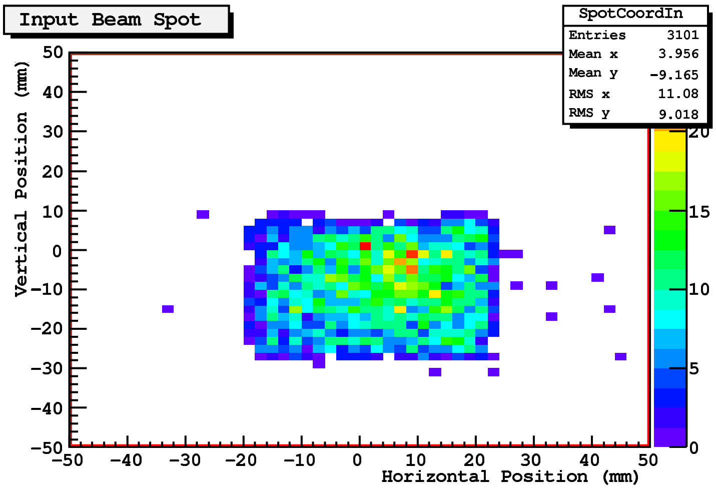

CU Input Beam Spot
SpotAngleInCU
Entries 3866
Mean x 0.002285
Mean y 0.0004513
RMS x 0.02021
RMS y 0.02025
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0

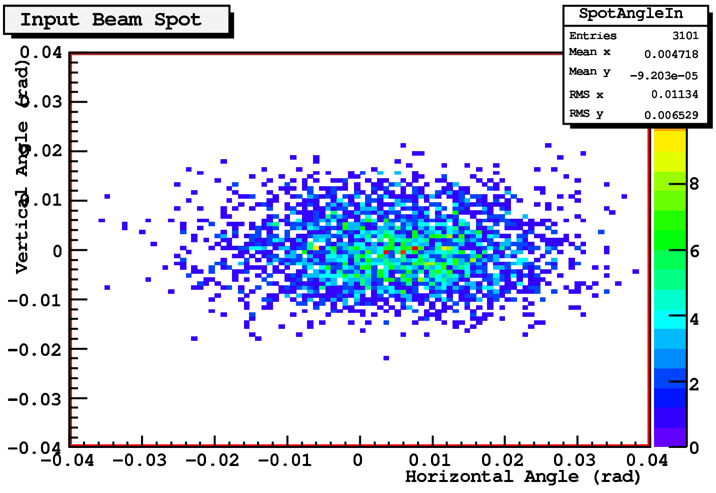

Input Horizontal coordinate
HorCoordIn
Entries 3101
Mean 3.956
RMS 11.08
700001692
Position (mm)

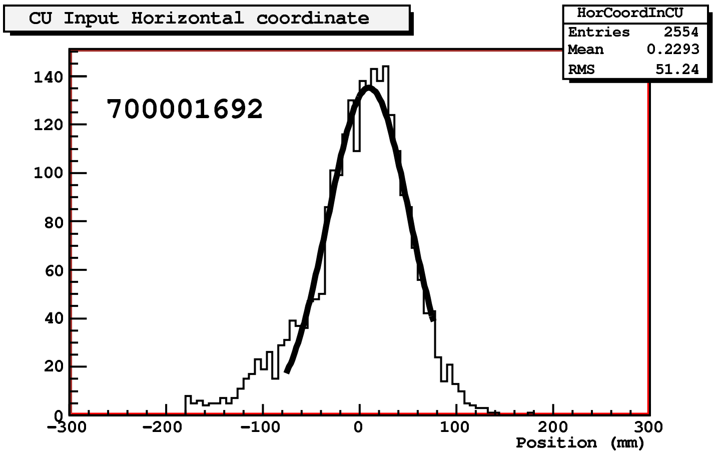

Input vertical coordinate
VertCoordIn
Entries 3101
Mean -9.165
RMS 9.018
Position (mm)

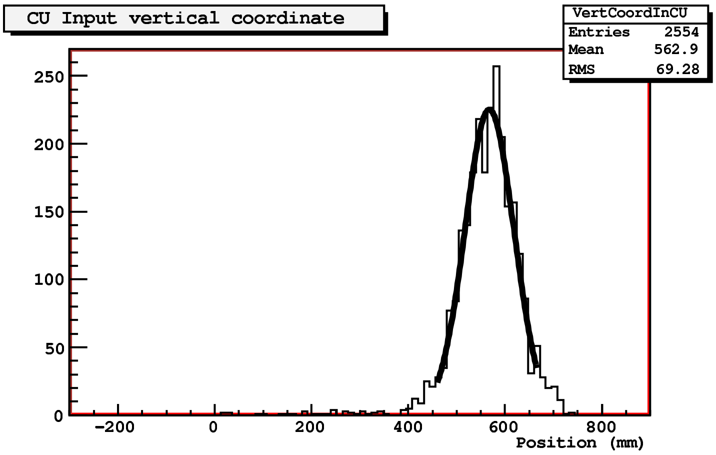

Input horizontal angle
HorAngleIn
Entries 3101
Mean 0.004718
RMS 0.01134
Angle (rad)

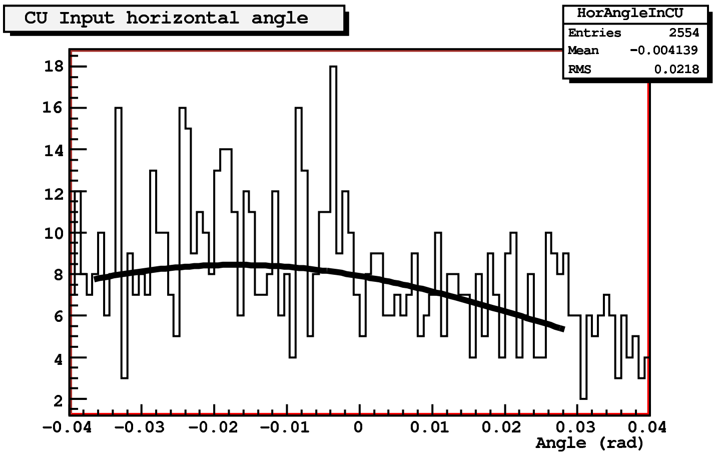

Input vertical angle
VertAngleIn
Entries 3101
Mean -7.709e-05
RMS 0.006559
Angle (rad)

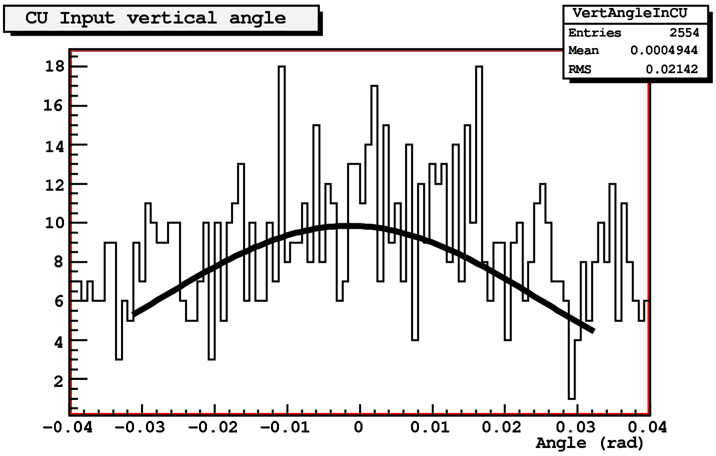

Input Beam Spot
SpotCoordIn
Entries 3101
Mean x 3.956
Mean y -9.165
RMS x 11.08
RMS y 9.018
Vertical Position (mm)
Horizontal Position (mm)

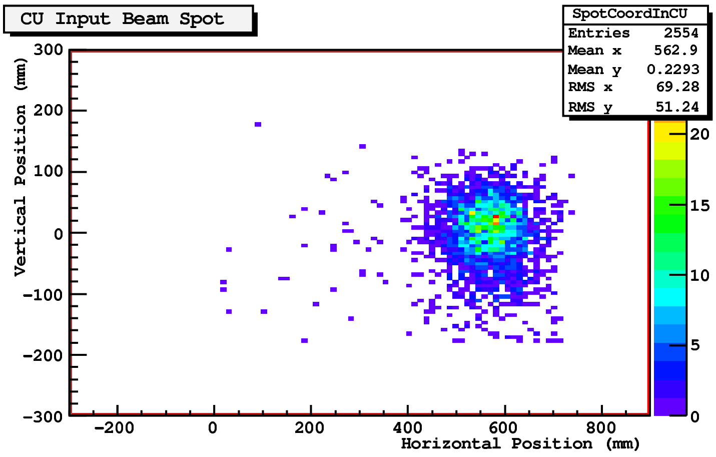

Input Beam Spot
SpotAngleIn
Entries 3101
Mean x 0.004718
Mean y -9.203e-05
RMS x 0.01134
RMS y 0.006529
Vertical Angle (rad)
Horizontal Angle (rad)

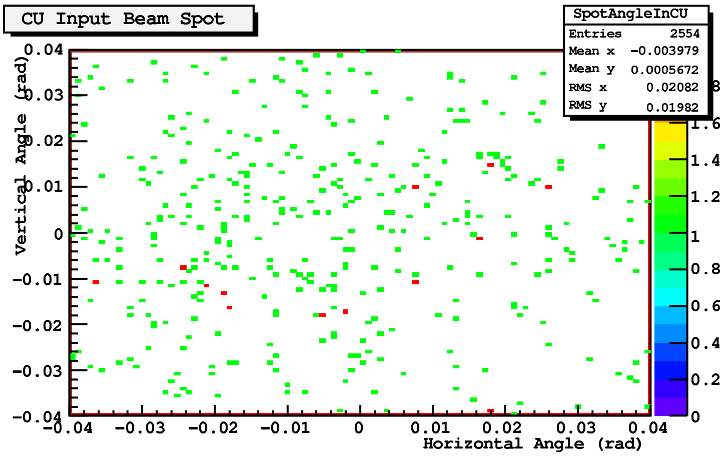

CU Input Horizontal coordinate
HorCoordInCU
Entries 2554
Mean 0.2293
RMS 51.24
700001692
Position (mm)
−300
−200
−100
0
100
200
300
0
20
40
60
80
100
120
140

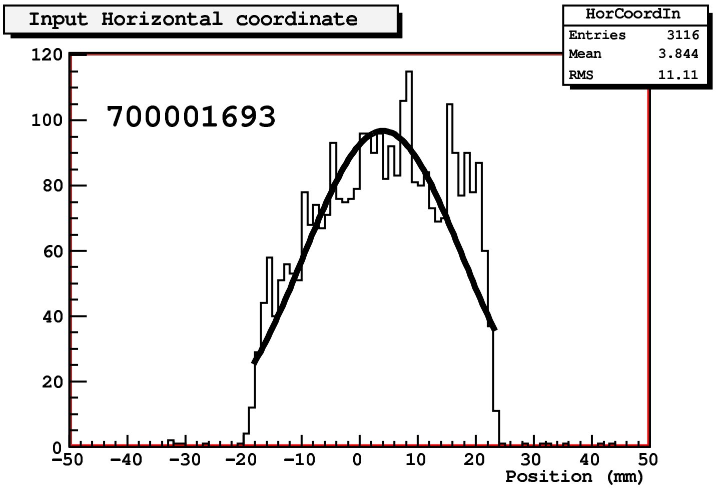

CU Input vertical coordinate
VertCoordInCU
Entries 2554
Mean 562.9
RMS 69.28
Position (mm)
−200
0
200
400
600
800
0
50
100
150
200
250

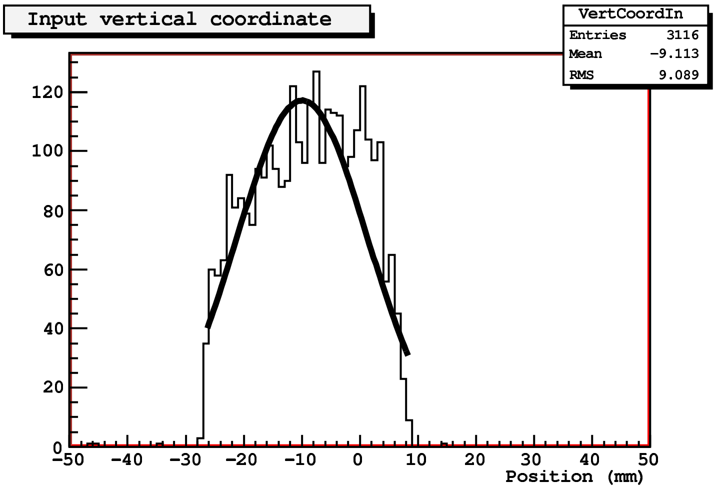

CU Input horizontal angle
HorAngleInCU
Entries 2554
Mean −0.004139
RMS 0.0218
Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
2
4
6
8
10
12
14
16
18

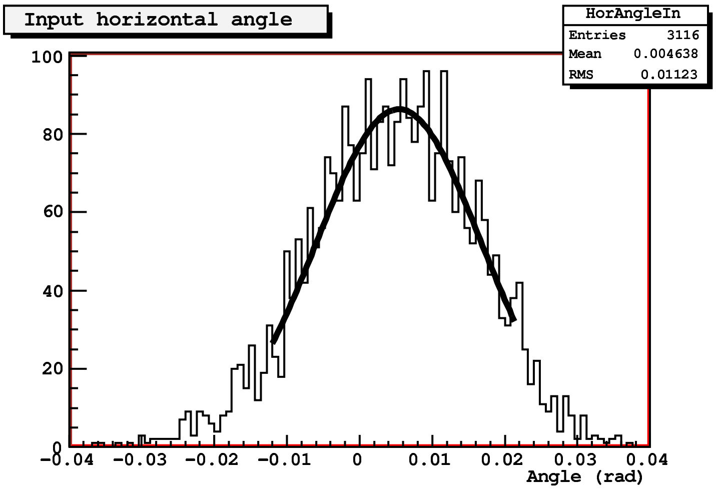

CU Input vertical angle
VertAngleInCU
Entries 2554
Mean 0.0004944
RMS 0.02142
Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
2
4
6
8
10
12
14
16
18

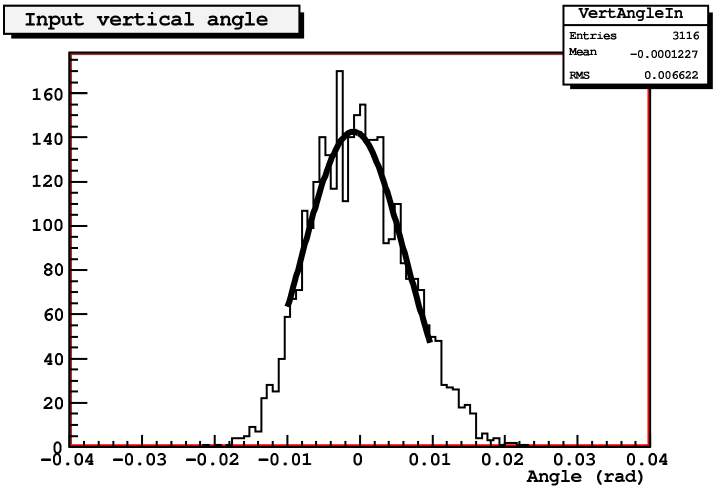

CU Input Beam Spot
SpotCoordInCU
Entries 2554
Mean x 562.9
Mean y 0.2293
RMS x 69.28
RMS y 51.24
Horizontal Position (mm)
Vertical Position (mm)
−200
0
200
400
600
800
−300
−200
−100
0
100
200
300
0
5
10
15
20

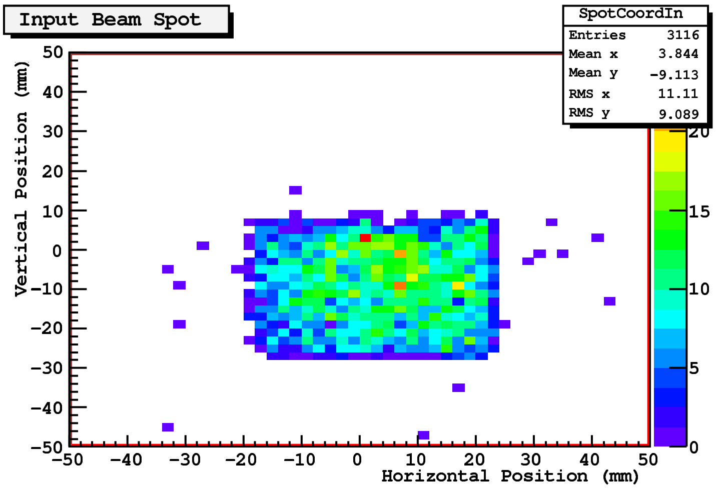

CU Input Beam Spot
SpotAngleInCU
Entries 2554
Mean x −0.003979
Mean y 0.0005672
RMS x 0.02082
RMS y 0.01982
Horizontal Angle (rad)
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
8

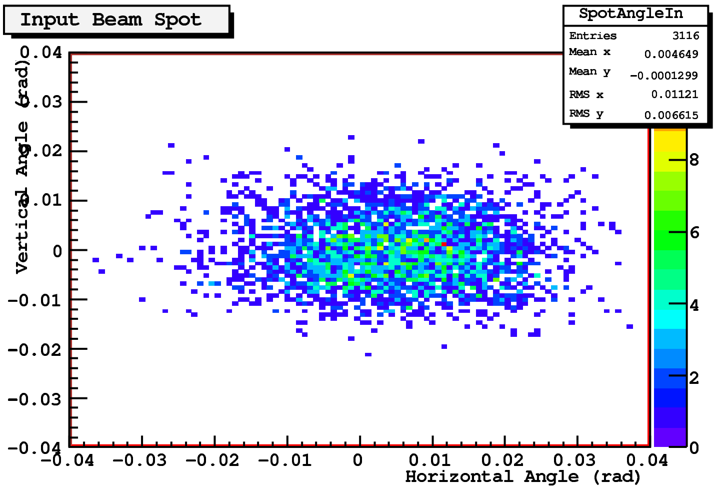

Input Horizontal coordinate
HorCoordIn
Entries 3116
Mean 3.844
RMS 11.11
700001693
0
20
40
60
80
100
120
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

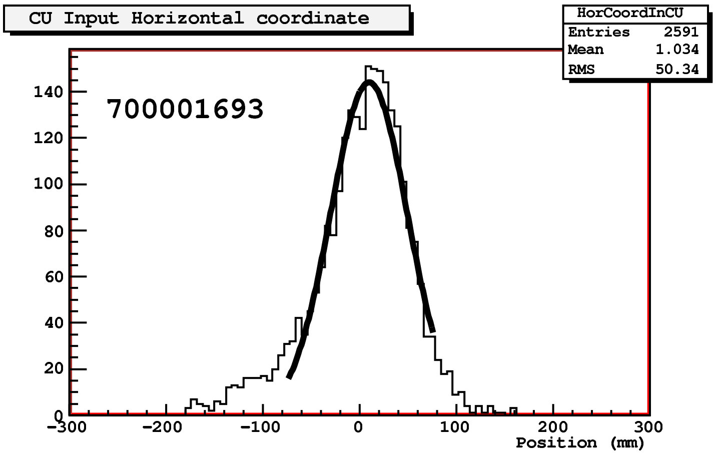

Input vertical coordinate
VertCoordIn
Entries 3116
Mean −9.113
RMS 9.089
0
20
40
60
80
100
120
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

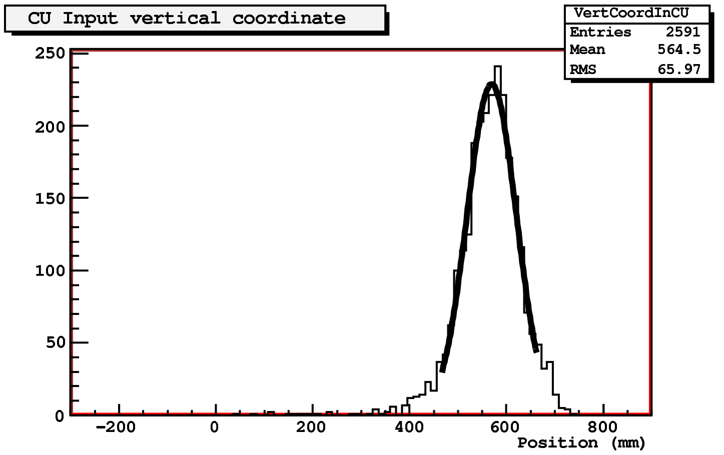

Input horizontal angle
HorAngleIn
Entries 3116
Mean 0.004638
RMS 0.01123
0
20
40
60
80
100
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

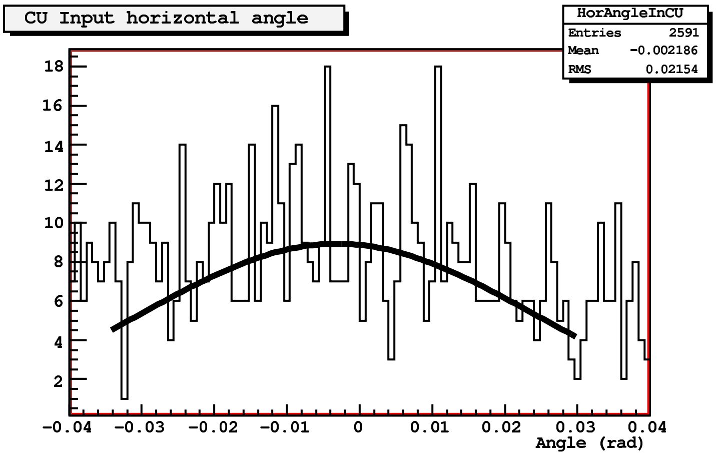

Input vertical angle
VertAngleIn
Entries 3116
Mean −0.0001227
RMS 0.006622
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

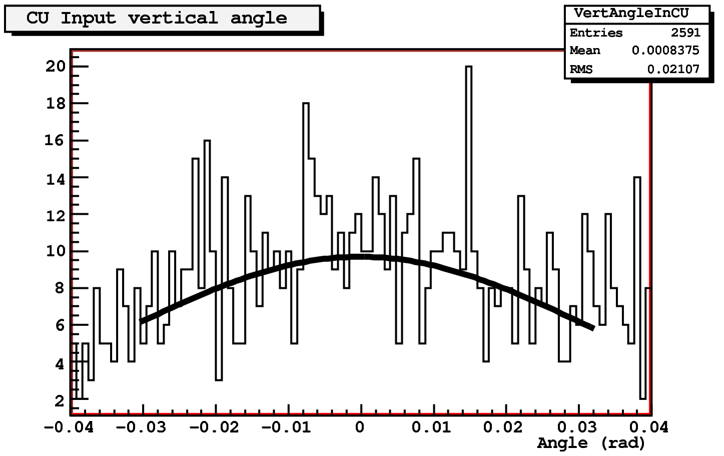

Input Beam Spot
SpotCoordIn
Entries 3116
Mean x 3.844
Mean y −9.113
RMS x 11.11
RMS y 9.089
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
20
15
10
5
0

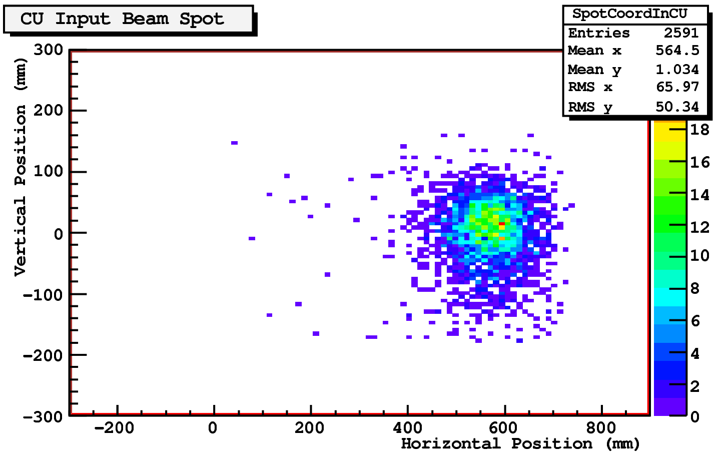

Input Beam Spot
SpotAngleIn
Entries 3116
Mean x 0.004649
Mean y −0.0001299
RMS x 0.01121
RMS y 0.006615
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
8
6
4
2
0

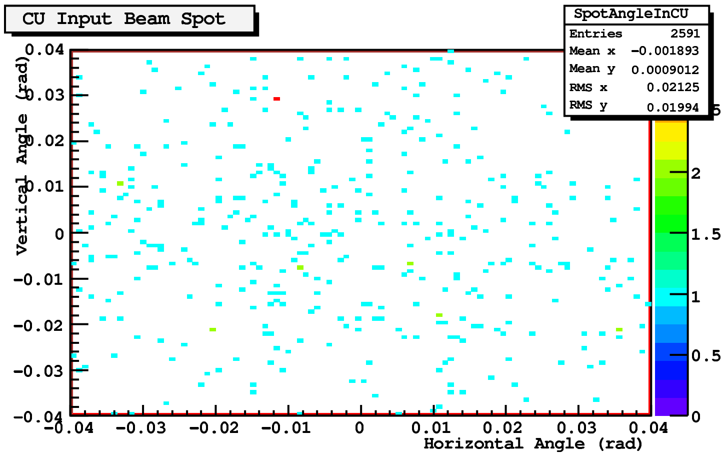

CU Input Horizontal coordinate
HorCoordInCU
Entries 2591
Mean 1.034
RMS 50.34
700001693
140
120
100
80
60
40
20
0
−300
−200
−100
0
100
200
300
Position (mm)

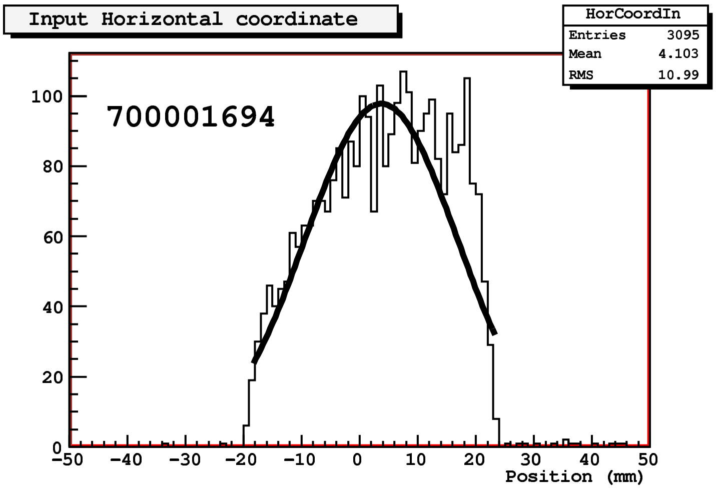

CU Input vertical coordinate
VertCoordInCU
Entries 2591
Mean 564.5
RMS 65.97
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)

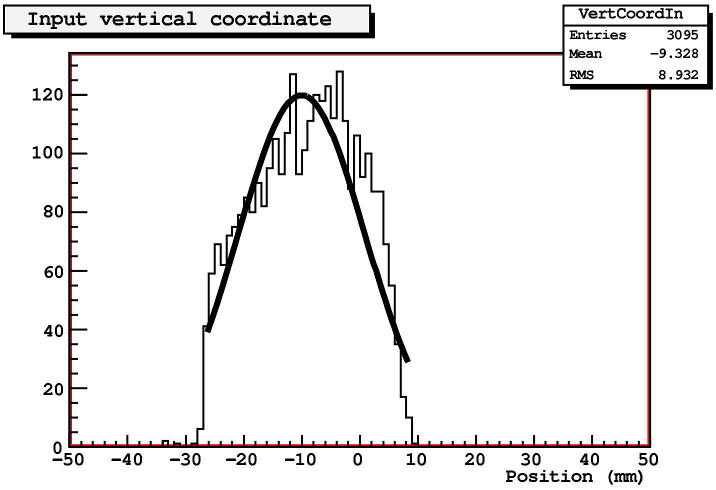

CU Input horizontal angle
HorAngleInCU
Entries 2591
Mean −0.002186
RMS 0.02154
18
16
14
12
10
8
6
4
2
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

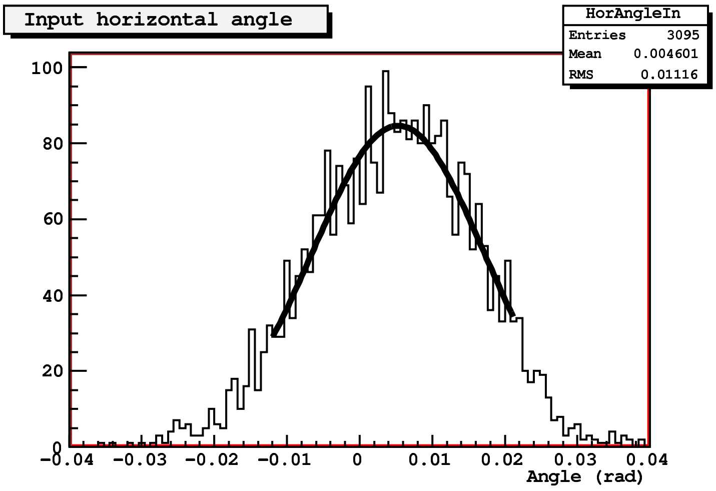

CU Input vertical angle
VertAngleInCU
Entries 2591
Mean 0.0008375
RMS 0.02107
20
18
16
14
12
10
8
6
4
2
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

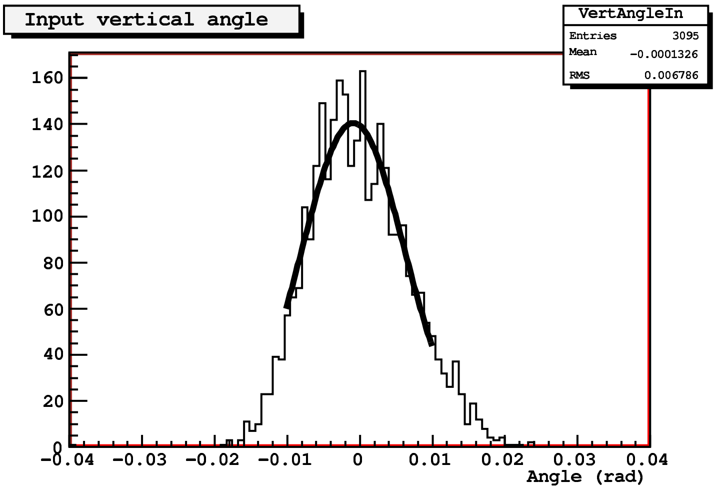

CU Input Beam Spot
SpotCoordInCU
Entries 2591
Mean x 564.5
Mean y 1.034
RMS x 65.97
RMS y 50.34
Vertical Position (mm)
300
200
100
0
−100
−200
−300
−200
0
200
400
600
800
Horizontal Position (mm)
18
16
14
12
10
8
6
4
2
0

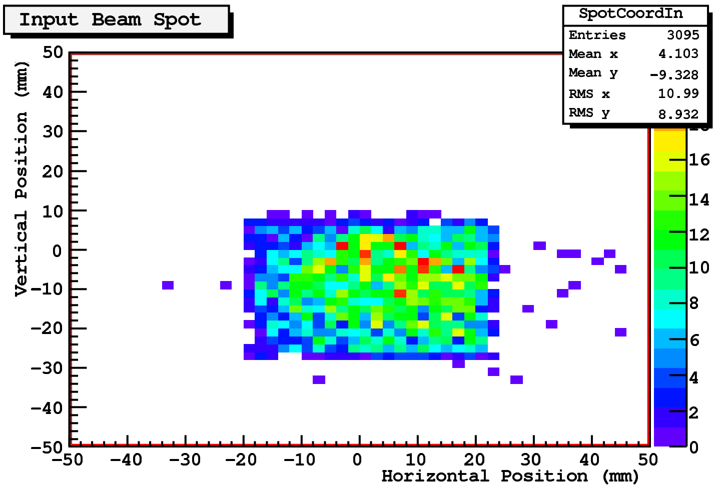

CU Input Beam Spot
SpotAngleInCU
Entries 2591
Mean x −0.001893
Mean y 0.0009012
RMS x 0.02125
RMS y 0.01994
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
2
1.5
1
0.5
0

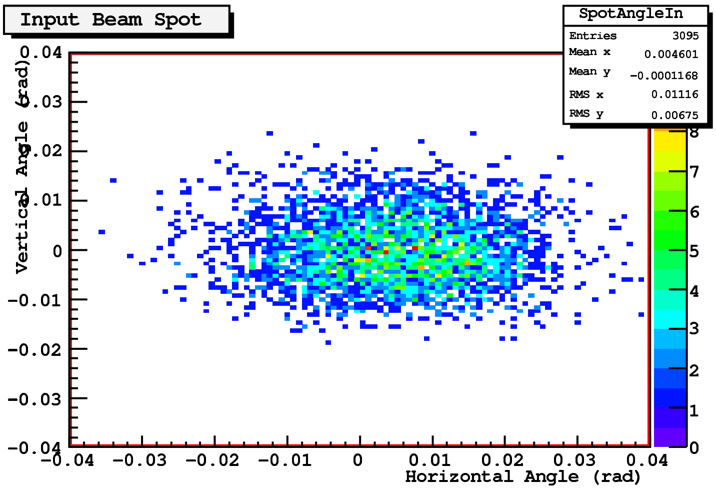

Input Horizontal coordinate
HorCoordIn
Entries 3095
Mean 4.103
RMS 10.99
700001694
0
20
40
60
80
100
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

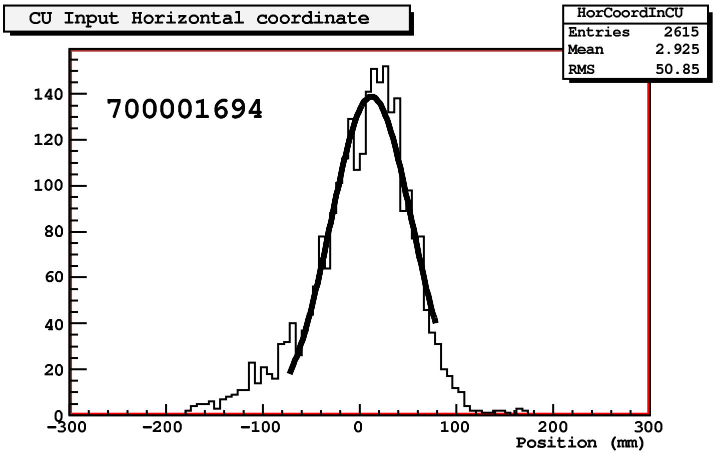

Input vertical coordinate
VertCoordIn
Entries 3095
Mean −9.328
RMS 8.932
0
20
40
60
80
100
120
−50
−40
−30
−20
−10
0
10
20
30
40
50
Position (mm)

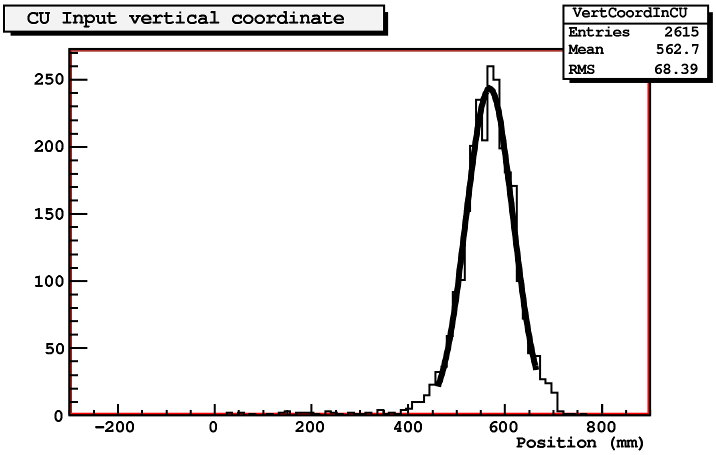

Input horizontal angle
HorAngleIn
Entries 3095
Mean 0.004601
RMS 0.01116
0
20
40
60
80
100
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

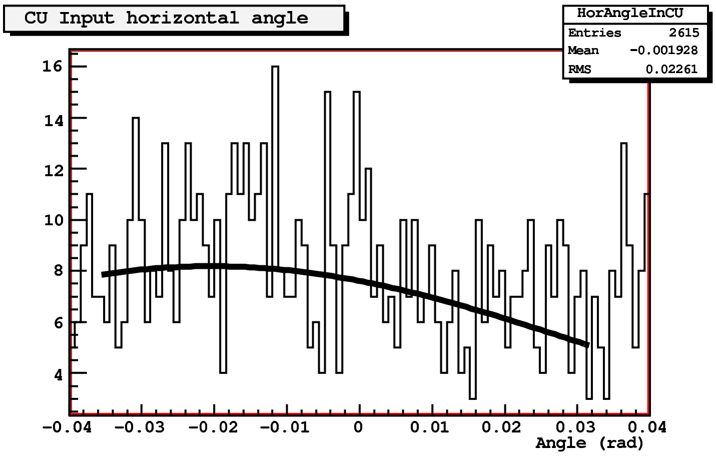

Input vertical angle
VertAngleIn
Entries 3095
Mean −0.0001326
RMS 0.006786
0
20
40
60
80
100
120
140
160
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)

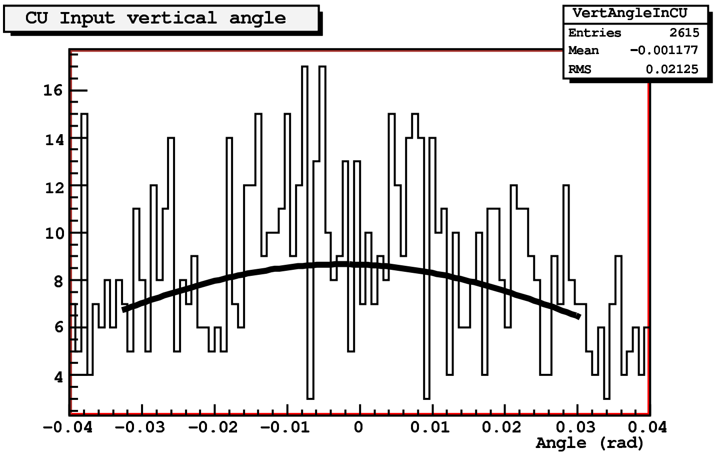

Input Beam Spot
SpotCoordIn
Entries 3095
Mean x 4.103
Mean y −9.328
RMS x 10.99
RMS y 8.932
Vertical Position (mm)
50
40
30
20
10
0
−10
−20
−30
−40
−50
−50
−40
−30
−20
−10
0
10
20
30
40
50
Horizontal Position (mm)
0
2
4
6
8
10
12
14
16

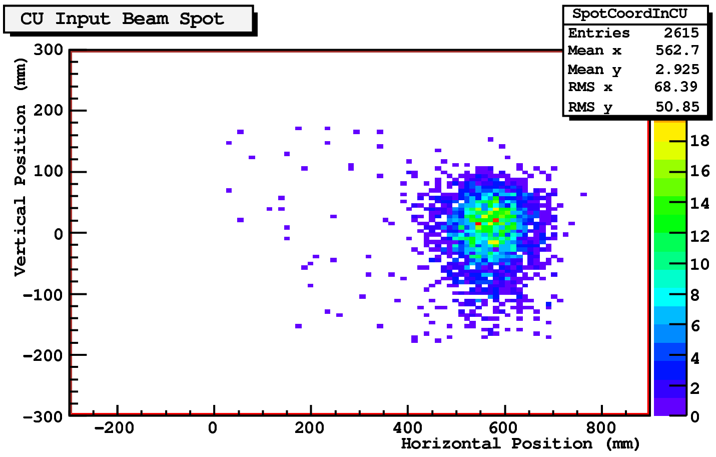

Input Beam Spot
SpotAngleIn
Entries 3095
Mean x 0.004601
Mean y −0.0001168
RMS x 0.01116
RMS y 0.00675
Vertical Angle (rad)
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
0
1
2
3
4
5
6
7
8

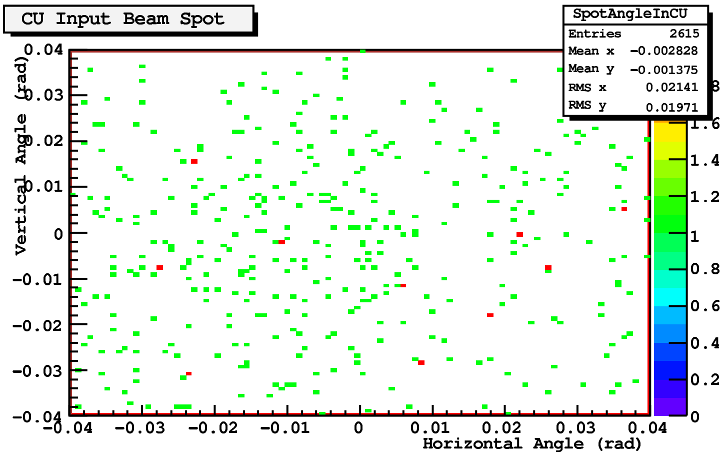

CU Input Horizontal coordinate
HorCoordInCU
Entries 2615
Mean 2.925
RMS 50.85
700001694
140
120
100
80
60
40
20
0
−300
−200
−100
0
100
200
300
Position (mm)


CU Input vertical coordinate
VertCoordInCU
Entries 2615
Mean 562.7
RMS 68.39
250
200
150
100
50
0
−200
0
200
400
600
800
Position (mm)


CU Input horizontal angle
HorAngleInCU
Entries 2615
Mean −0.001928
RMS 0.02261
16
14
12
10
8
6
4
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)


CU Input vertical angle
VertAngleInCU
Entries 2615
Mean −0.001177
RMS 0.02125
16
14
12
10
8
6
4
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Angle (rad)


CU Input Beam Spot
SpotCoordInCU
Entries 2615
Mean x 562.7
Mean y 2.925
RMS x 68.39
RMS y 50.85
300
200
100
0
−100
−200
−300
Vertical Position (mm)
−200
0
200
400
600
800
Horizontal Position (mm)
18
16
14
12
10
8
6
4
2
0


CU Input Beam Spot
SpotAngleInCU
Entries 2615
Mean x −0.002828
Mean y −0.001375
RMS x 0.02141
RMS y 0.01971
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
Vertical Angle (rad)
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
Horizontal Angle (rad)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0