Gem Detector Simulation

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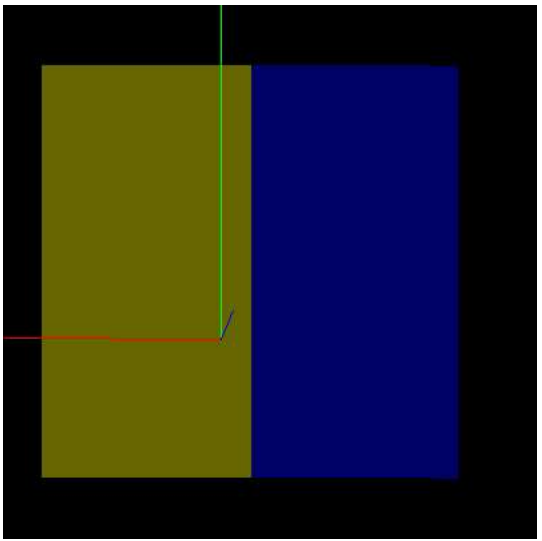
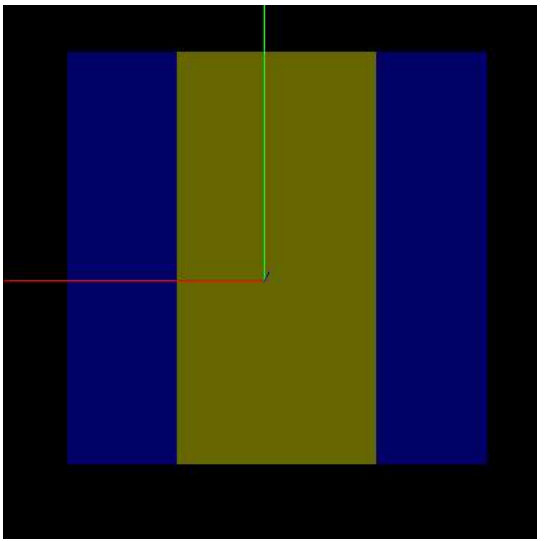
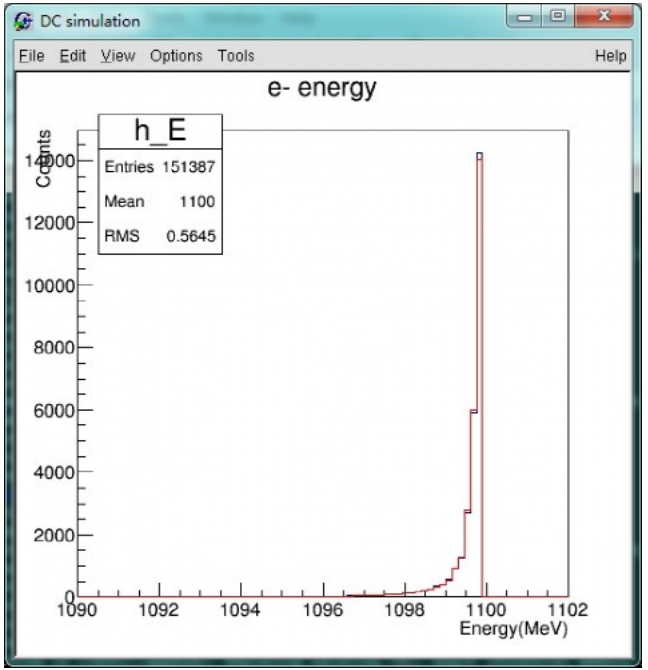
Two types of Gem Detector



1 cm Overlap at x=0



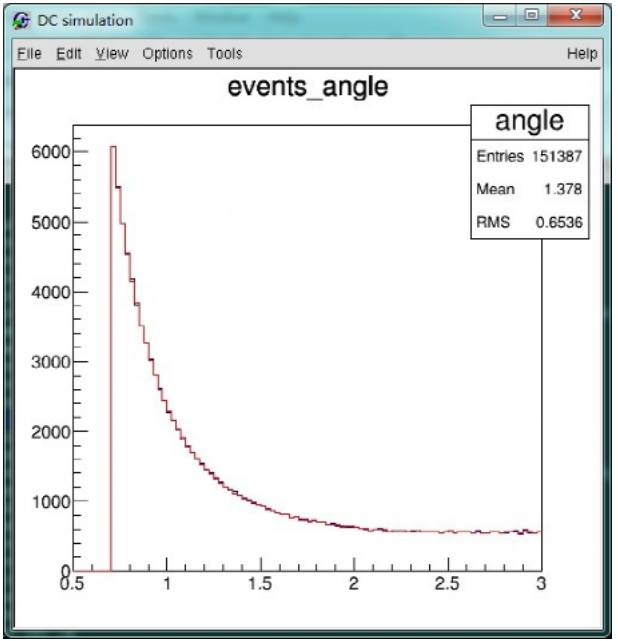
1cm Overlaps at x= -/+30cm

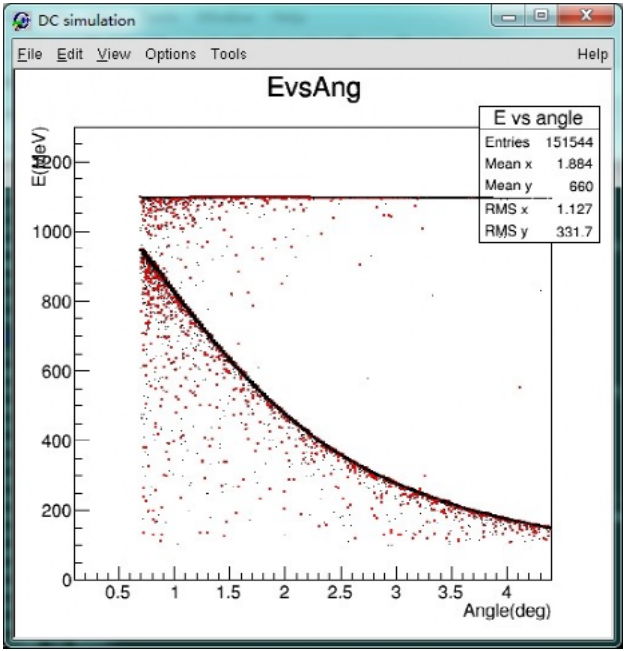


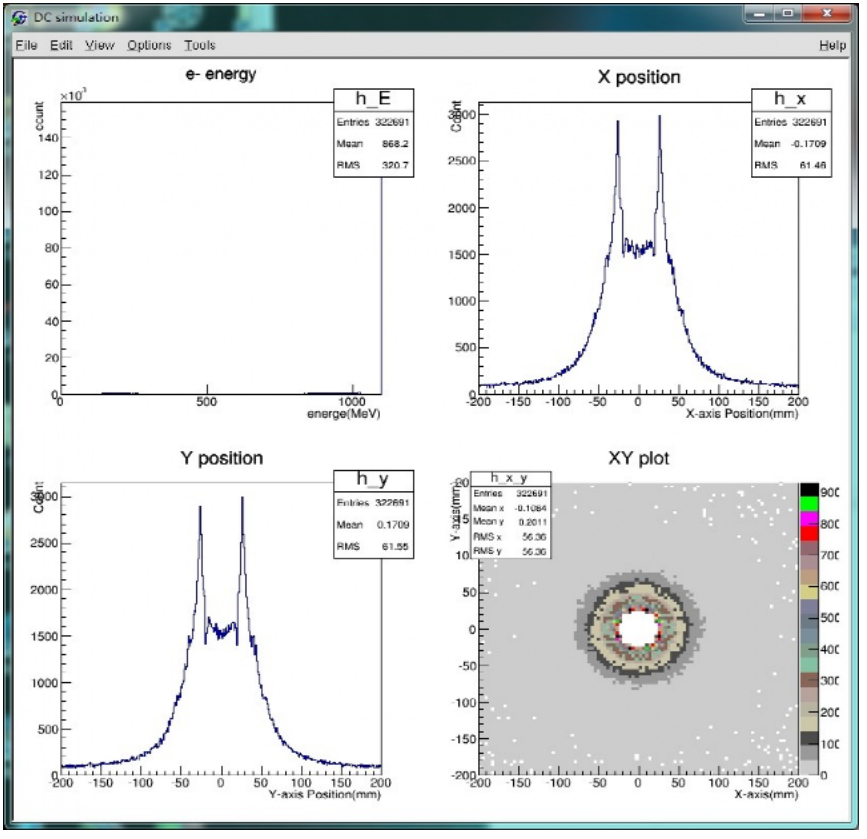
For all plots:

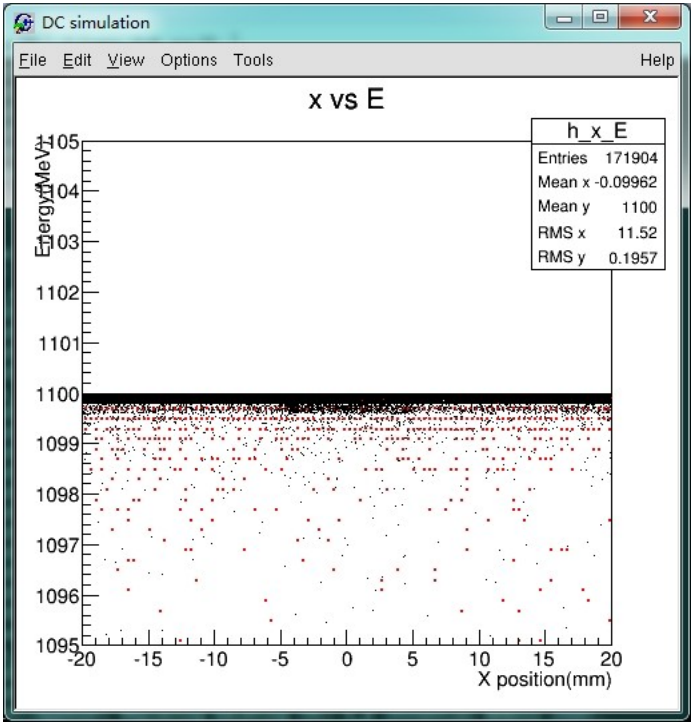
Red: 3-Gems

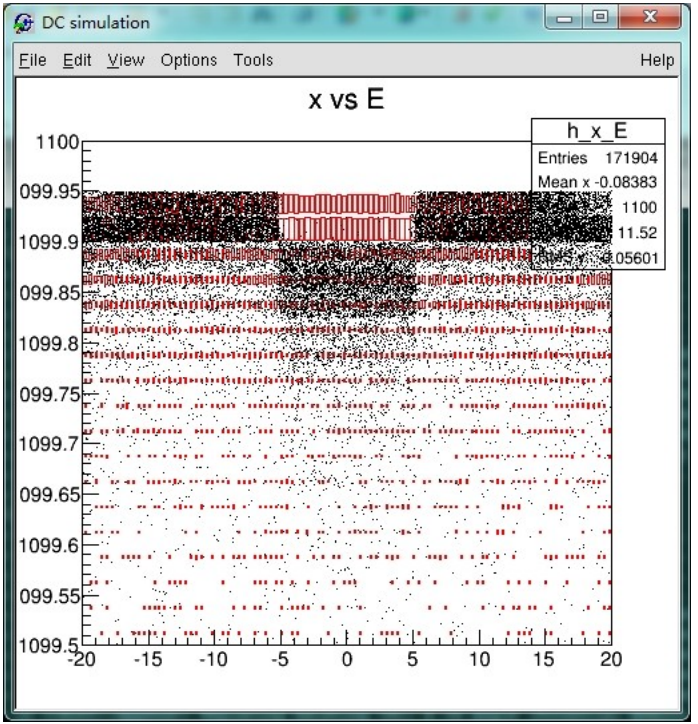
Black: 2-Gems


DC simulation
File Edit View Options Tools Help
events_angle
angle
Entries 151387
Mean 1.378
RMS 0.6536
6000
5000
4000
3000
2000
1000
0
0.5
1
1.5
2
2.5
3


DC simulation
File Edit View Options Tools Help
EvsAng
E vs angle
Entries 151544
Mean x 1.884
Mean y 660
RMS x 1.127
RMS y 331.7
E(MeV)
1200
1000
800
600
400
200
0
0.5
1
1.5
2
2.5
3
3.5
4
Angle(deg)


DC simulation
File Edit View Options Tools
Help
e- energy
h_E
Entries 322691
Mean 868.2
RMS 320.7
count
energe(MeV)
X position
h_x
Entries 322691
Mean -0.1709
RMS 61.46
Count
X-axis Position(mm)
Y position
h_y
Entries 322691
Mean 0.1709
RMS 61.55
Count
Y-axis Position(mm)
XY plot
h_x_y
Entries 322691
Mean x -0.1084
Mean y 0.2011
RMS x 56.36
RMS y 56.36
Y-axis(mm)
X-axis(mm)


DC simulation
File Edit View Options Tools Help
x vs E
h_x_E
Entries 171904
Mean x -0.09962
Mean y 1100
RMS x 11.52
RMS y 0.1957
Energy(MeV)
1105
1104
1103
1102
1101
1100
1099
1098
1097
1096
1095
-20 -15 -10 -5 0 5 10 15 20
X position(mm)


DC simulation
File Edit View Options Tools Help
x vs E
h_x_E
Entries 171904
Mean x -0.08383
1100
11.52
1100
099.95
1099.9
099.85
1099.8
099.75
1099.7
099.65
1099.6
099.55
1099.5
-20 -15 -10 -5 0 5 10 15 20