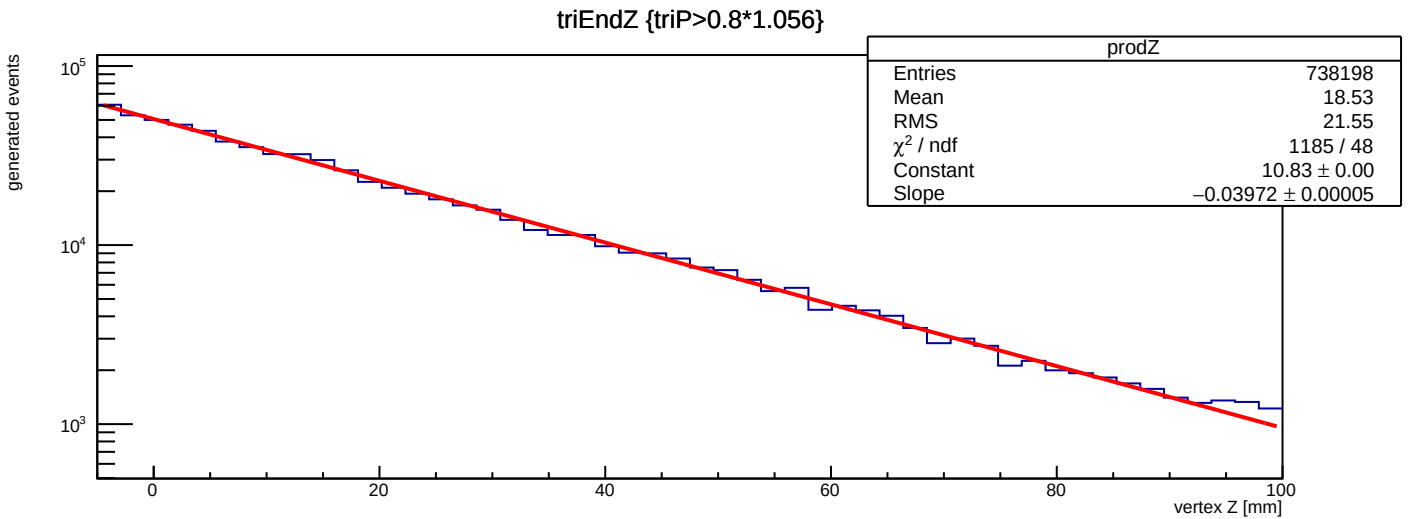
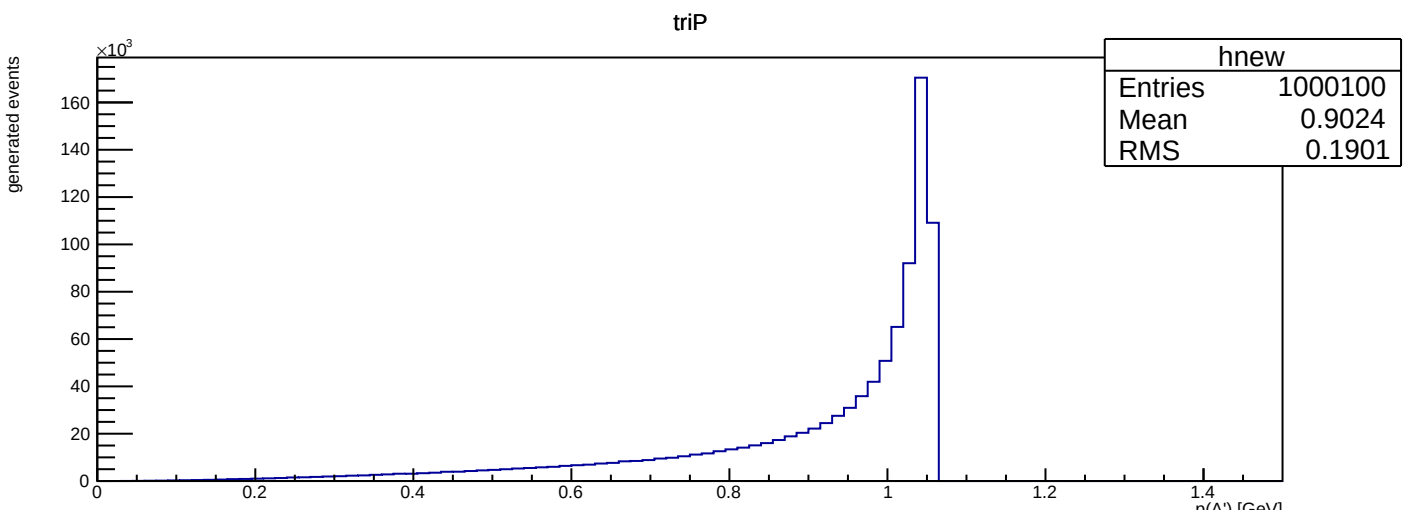
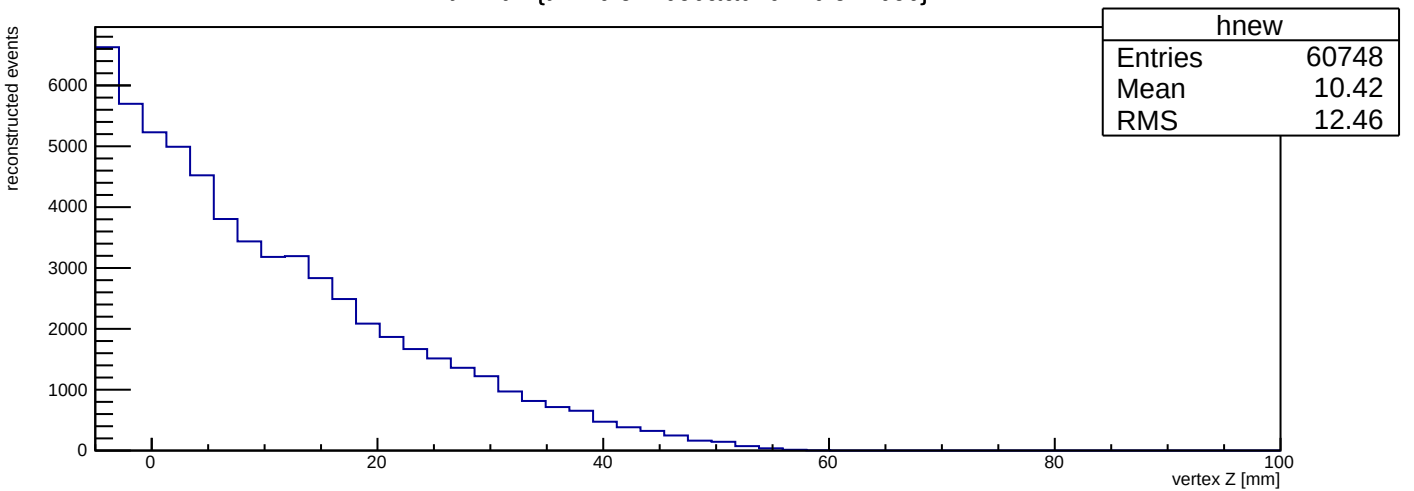
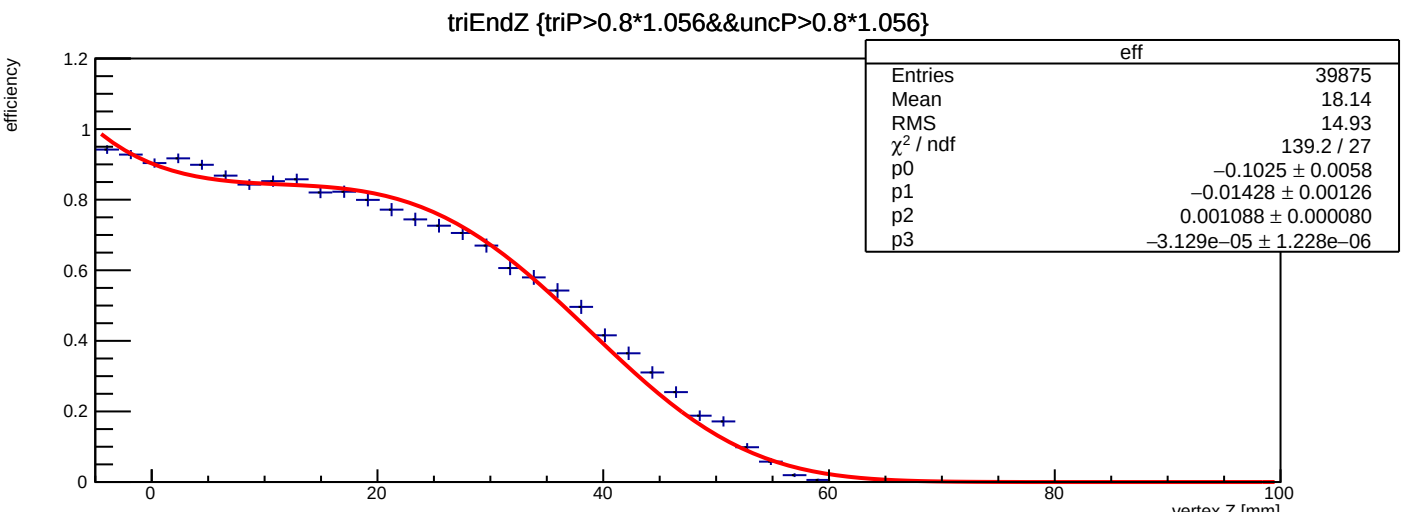
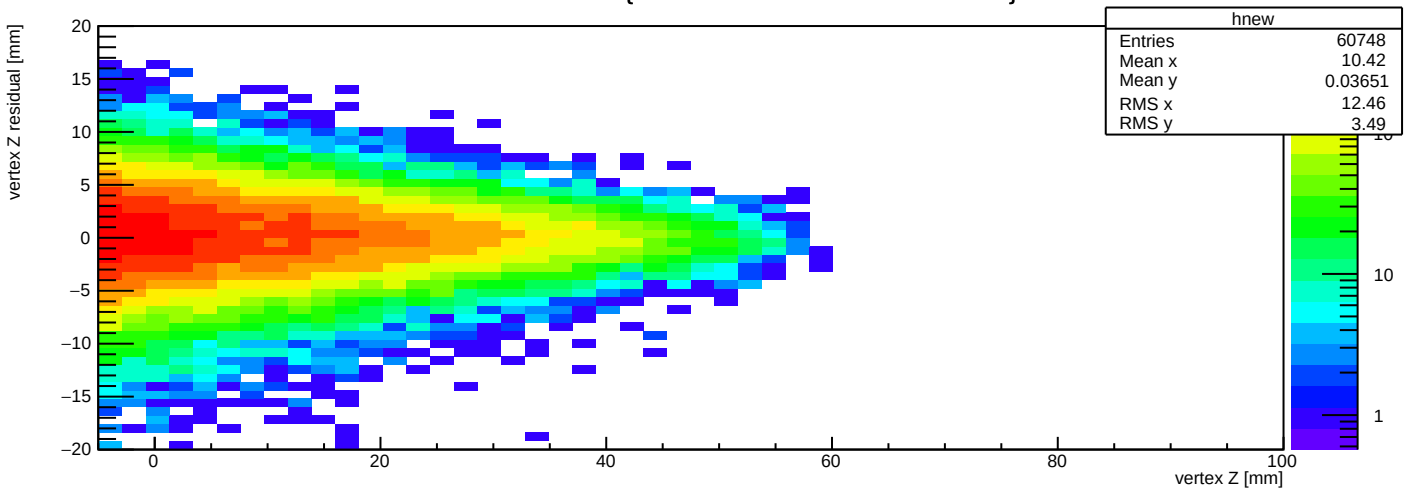
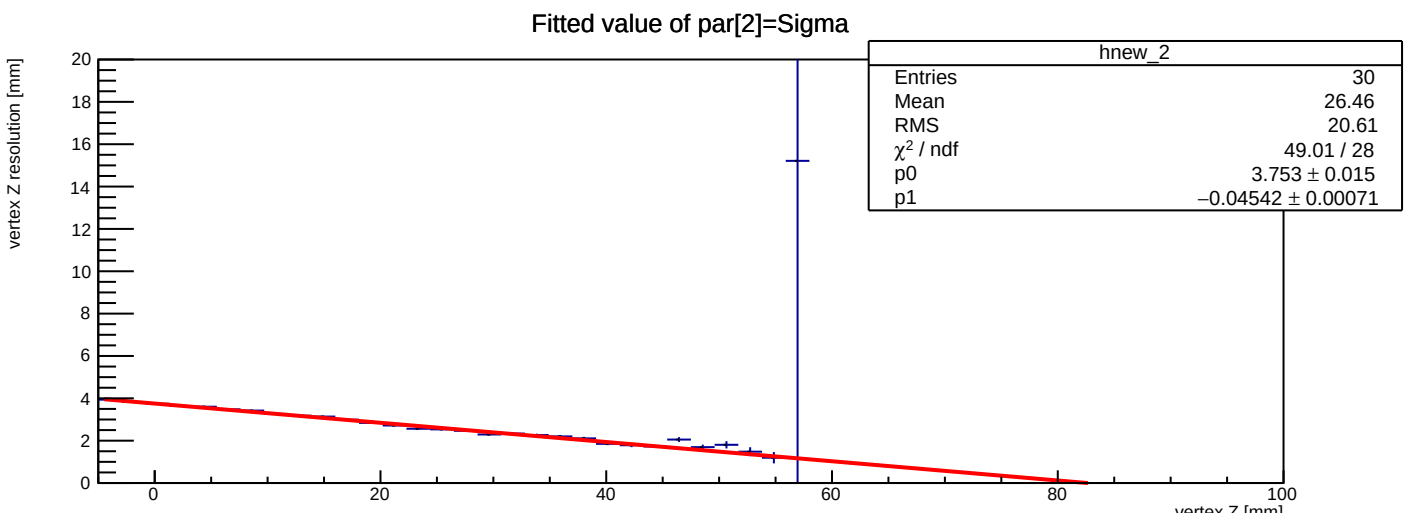

triEndZ {triP>0.8*1.056}
prodZ
Entries 738198
Mean 18.53
RMS 21.55
χ² / ndf 1185 / 48
Constant 10.83 ± 0.00
Slope −0.03972 ± 0.00005
generated events
vertex Z [mm]

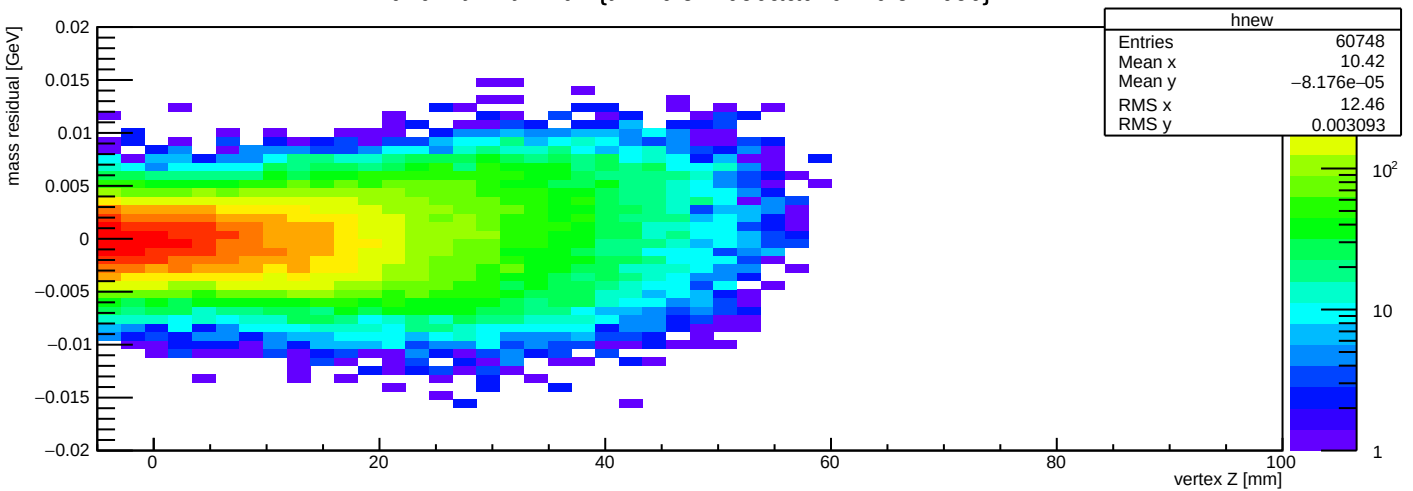

triP
hnew
Entries 1000100
Mean 0.9024
RMS 0.1901
generated events
p(A') [GeV]

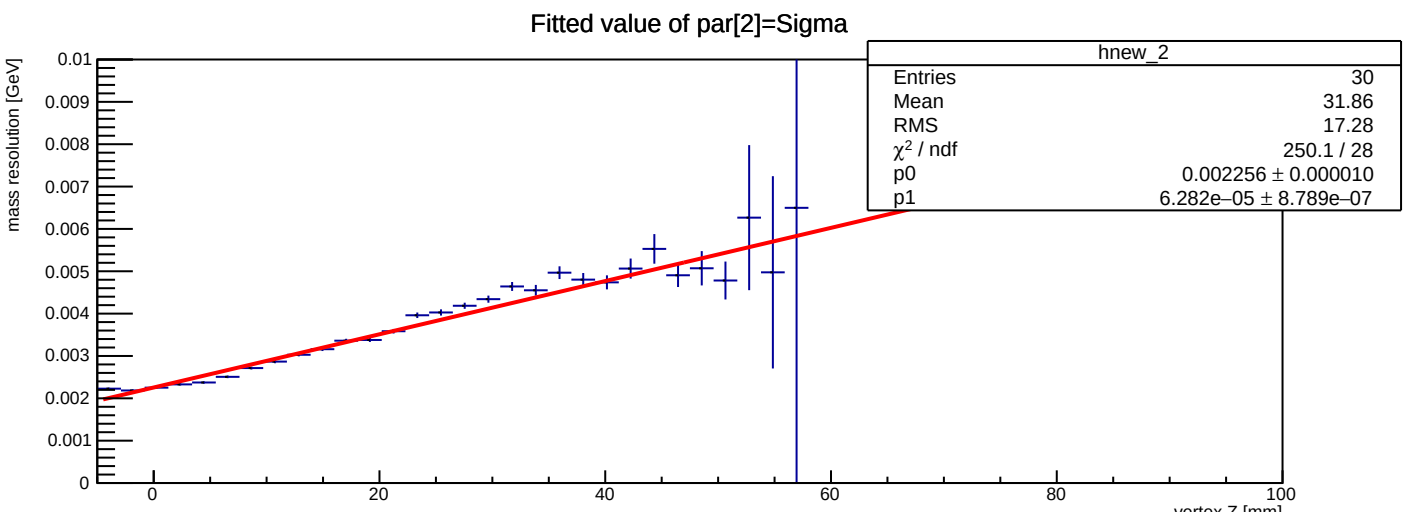

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
hnew
Entries 60748
Mean 10.42
RMS 12.46
reconstructed events
0
1000
2000
3000
4000
5000
6000
0
20
40
60
80
100
vertex Z [mm]

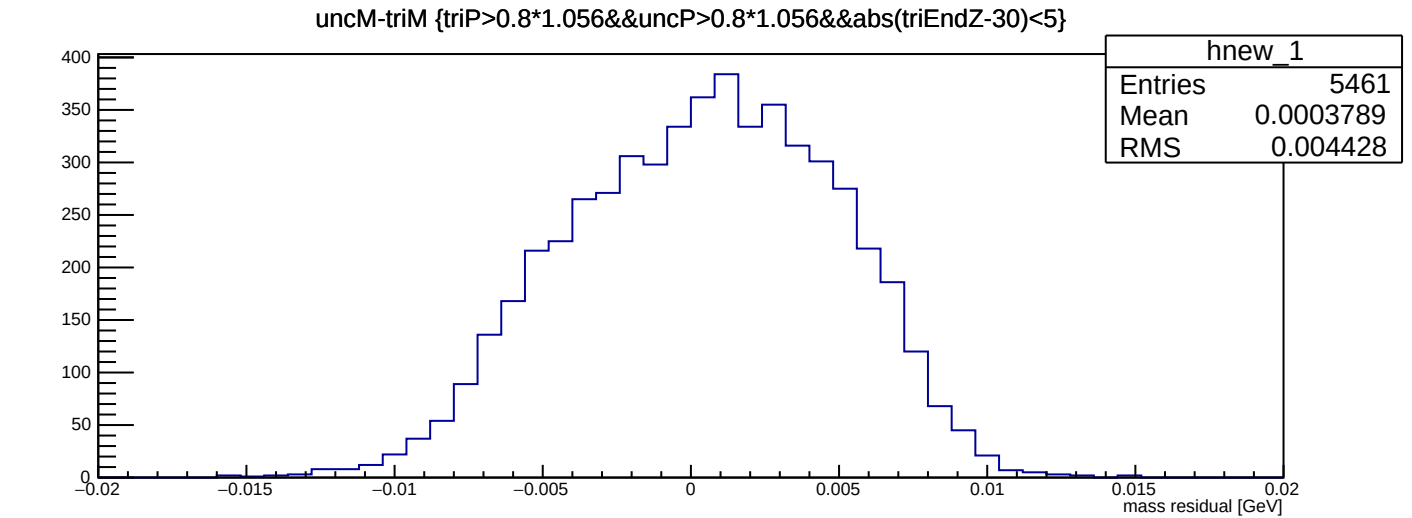

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 39875
Mean 18.14
RMS 14.93
χ² / ndf 139.2 / 27
p0 −0.1025 ± 0.0058
p1 −0.01428 ± 0.00126
p2 0.001088 ± 0.000080
p3 −3.129e−05 ± 1.228e−06
efficiency
0
0.2
0.4
0.6
0.8
1
1.2
0
20
40
60
80
100
vertex Z [mm]

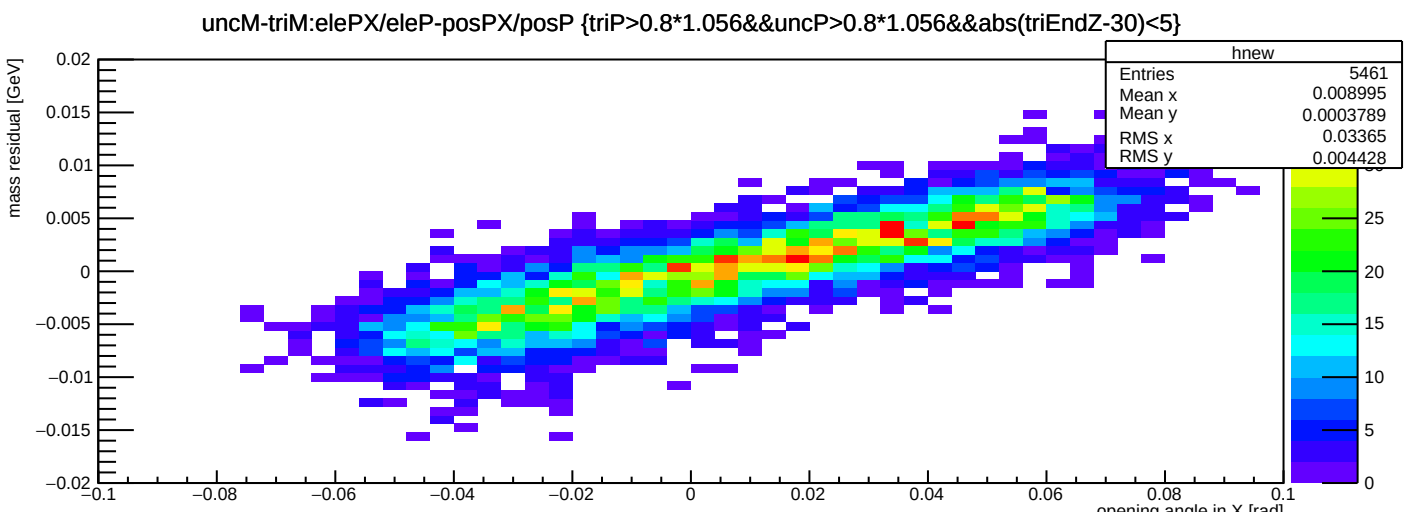

uncVZ-triEndZ:triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
hnew
Entries 60748
Mean x 10.42
Mean y 0.03651
RMS x 12.46
RMS y 3.49
vertex Z residual [mm]
vertex Z [mm]

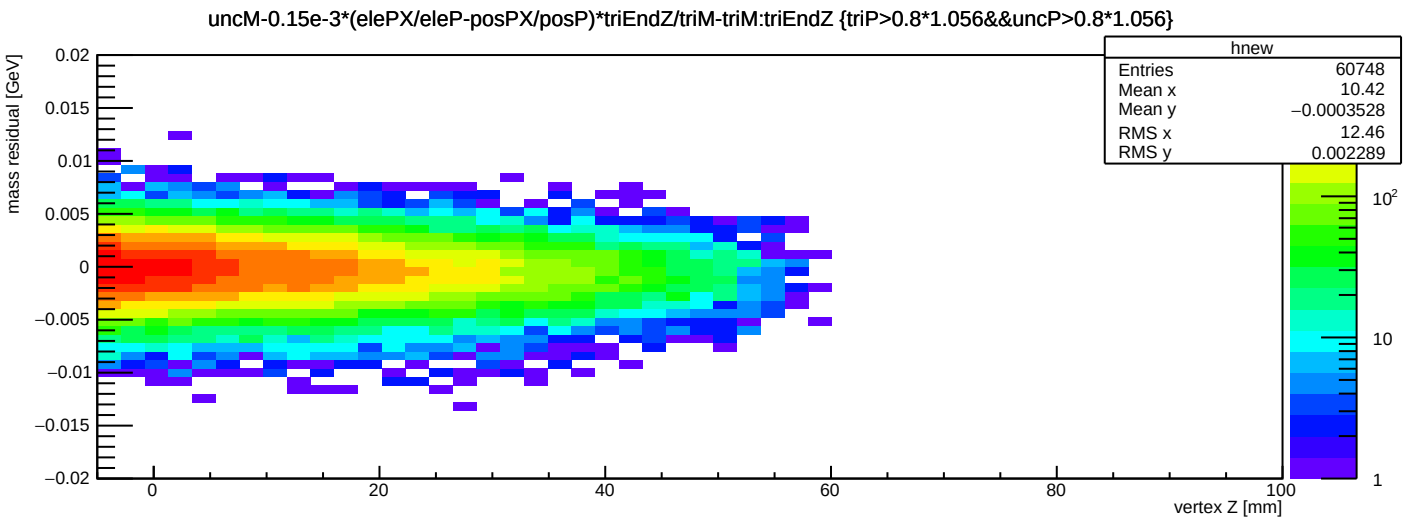

Fitted value of par[2]=Sigma
hnew_2
Entries 30
Mean 26.46
RMS 20.61
χ² / ndf 49.01 / 28
p0 3.753 ± 0.015
p1 −0.04542 ± 0.00071
vertex Z resolution [mm]
vertex Z [mm]

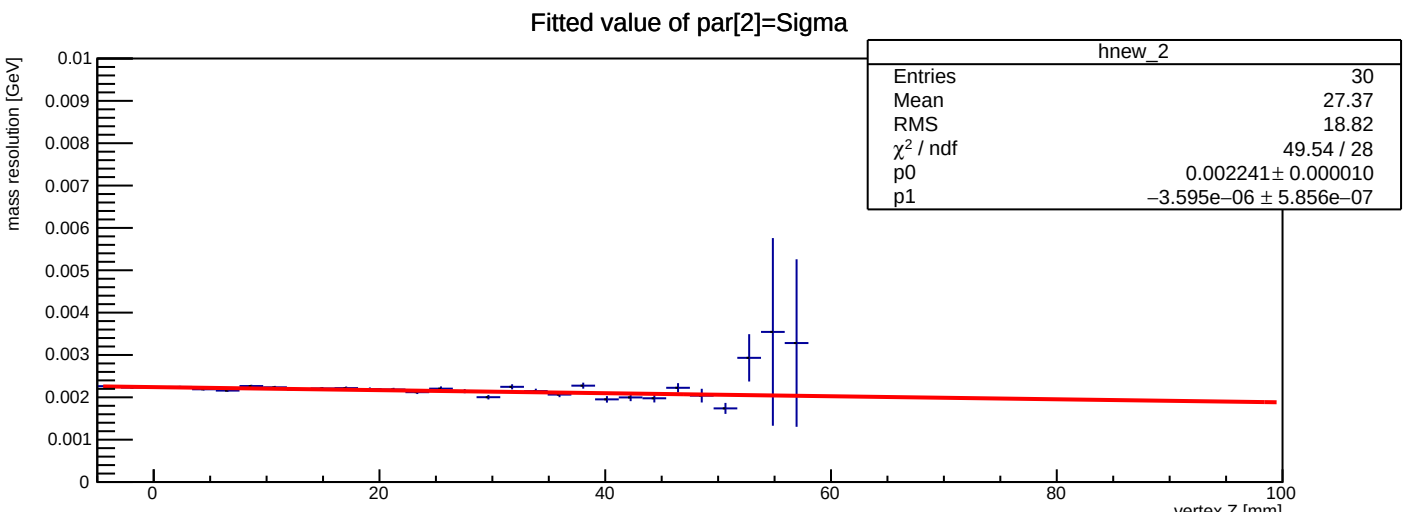

uncM-triM:triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
hnew
Entries 60748
Mean x 10.42
Mean y −8.176e−05
RMS x 12.46
RMS y 0.003093
mass residual [GeV]
vertex Z [mm]


Fitted value of par[2]=Sigma
hnew_2
Entries 30
Mean 31.86
RMS 17.28
χ² / ndf 250.1 / 28
p0 0.002256 ± 0.000010
p1 6.282e−05 ± 8.789e−07
mass resolution [GeV]
vertex Z [mm]


uncM-triM {triP>0.8*1.056&&uncP>0.8*1.056&&abs(triEndZ-30)<5}
hnew_1
Entries 5461
Mean 0.0003789
RMS 0.004428
mass residual [GeV]


uncM-triM:elePX/eleP-posPX/posP {triP>0.8*1.056&&uncP>0.8*1.056&&abs(triEndZ-30)<5}
hnew
Entries 5461
Mean x 0.008995
Mean y 0.0003789
RMS x 0.03365
RMS y 0.004428
mass residual [GeV]
opening angle in X [rad]


uncM-0.15e-3*(elePX/eleP-posPX/posP)*triEndZ/triM-triM:triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
hnew
Entries 60748
Mean x 10.42
Mean y −0.0003528
RMS x 12.46
RMS y 0.002289
mass residual [GeV]
vertex Z [mm]


Fitted value of par[2]=Sigma
hnew_2
Entries 30
Mean 27.37
RMS 18.82
χ² / ndf 49.54 / 28
p0 0.002241± 0.000010
p1 −3.595e−06 ± 5.856e−07
mass resolution [GeV]
vertex Z [mm]