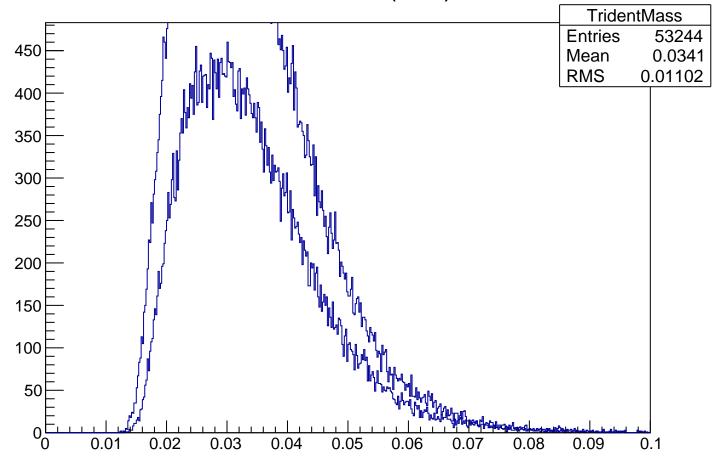
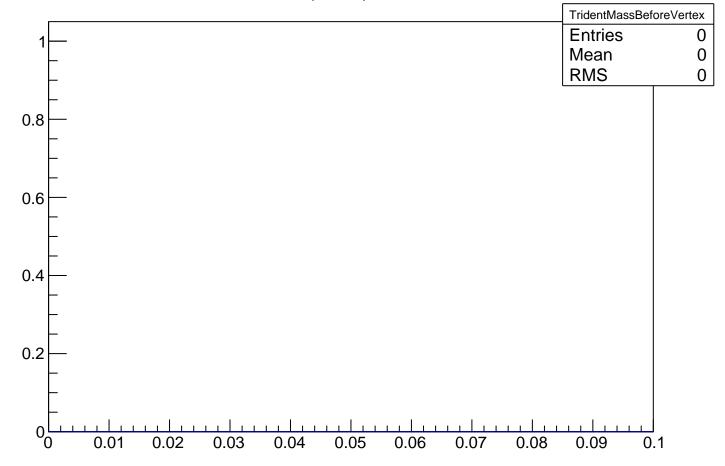
Trident Mass (GeV)

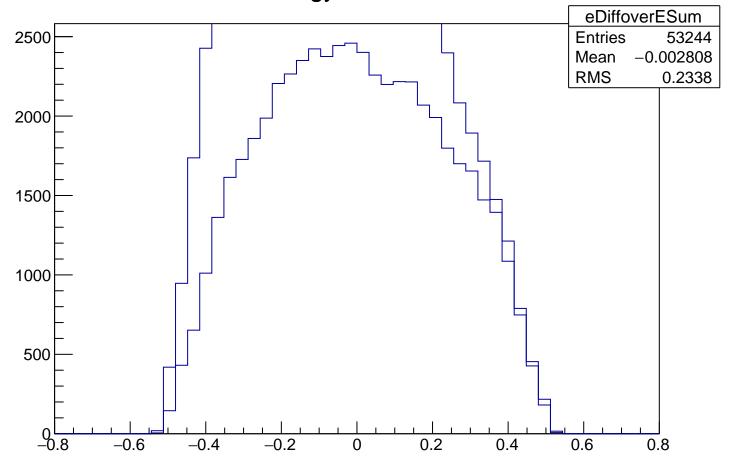


Trident Mass (GeV): Before VtxCut

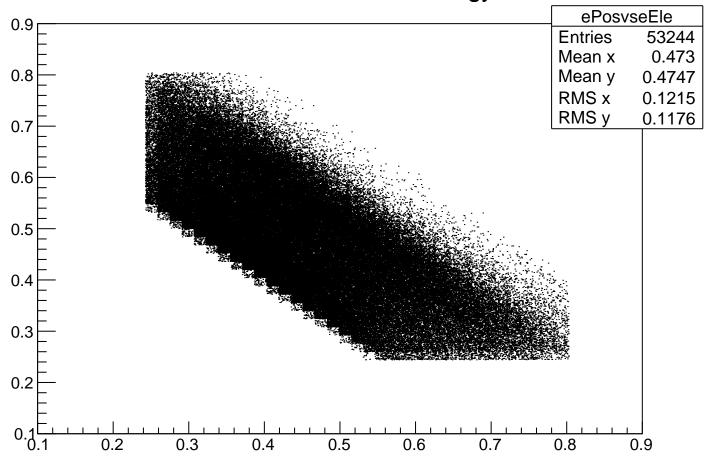


Energy Sum eSum Entries 53244 4000 Mean 0.9476 **RMS** 0.08145 3500 3000 2500 2000 1500 1000 500 0.3 0.5 0.7 0.4 0.6 8.0 0.9

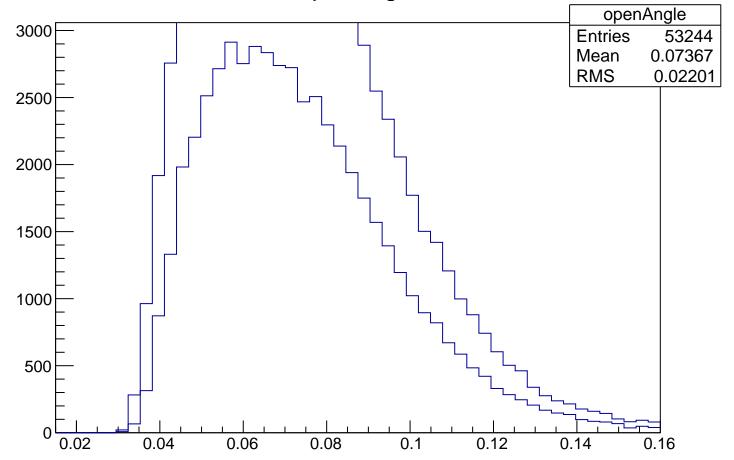
Energy Difference



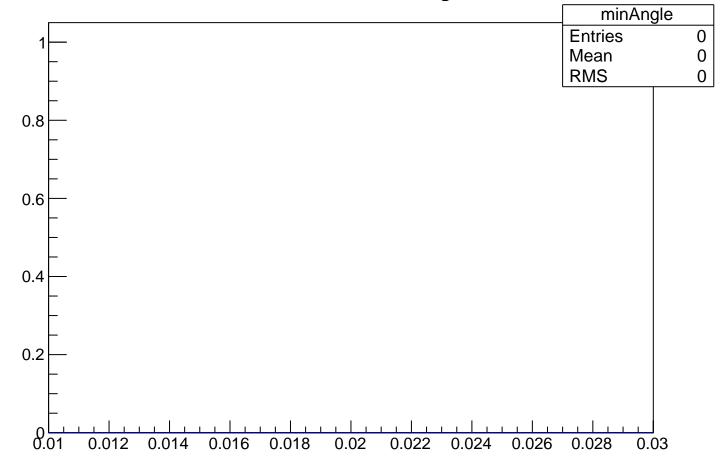
Positron vs Electron Energy



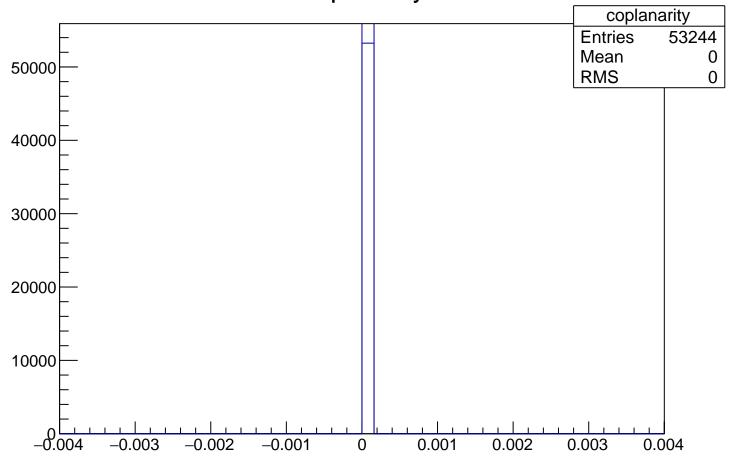
openAngle



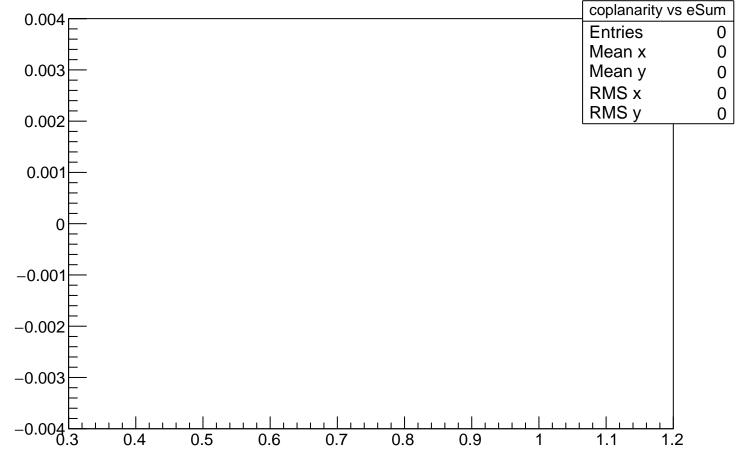
Minimum Track Angle



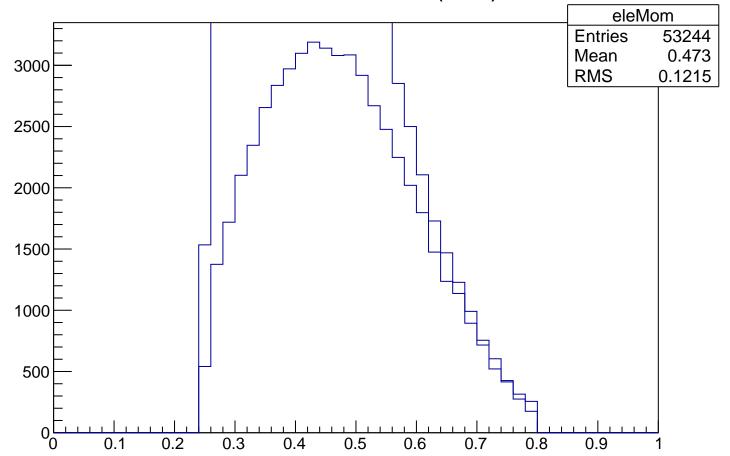
Coplanarity



coplanarity vs eSum

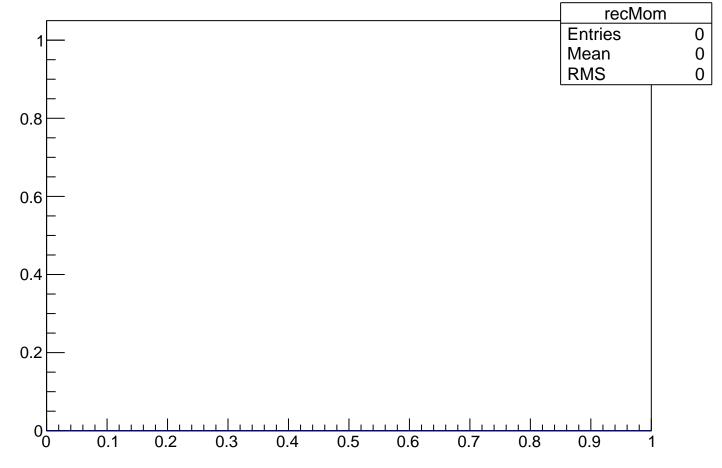


Electron Momentum (GeV)



Positron Momentum (GeV) posMom **Entries** 53244 Mean 0.4747 3000 **RMS** 0.1176 2500 2000 1500 1000 500 0.2 0.3 0.4 0.5 0.6 0.7 8.0 0.9

Recoil Momentum (GeV)



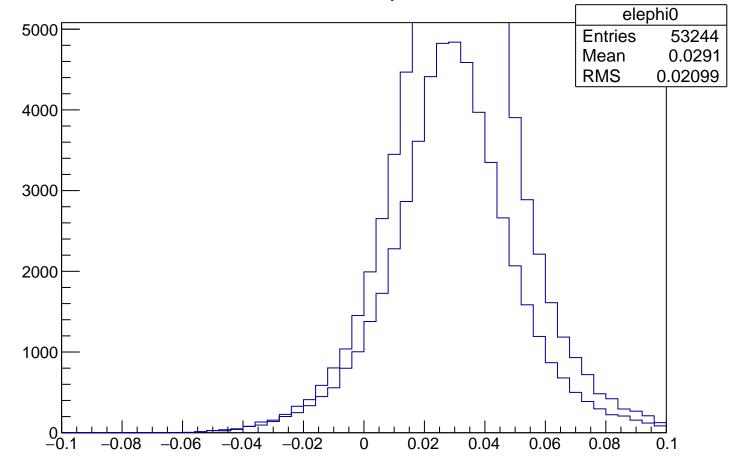
Electron d0 (mm) eled0 Entries 53244 -0.05577Mean **RMS** 0.4873 5000 4000 3000 2000 1000

Positron d0 (mm) posd0 **Entries** 53244 Mean 0.1777 4500 **RMS** 0.6357 4000 3500 3000 2500 2000 1500 1000 500

Electron z0 (mm) elez0 **Entries** 53244 6000 -0.01349Mean **RMS** 0.2054 5000 4000 3000 2000 1000 -0.50.5 1.5

Positron z0 (mm) posz0 6000 **Entries** 53244 -0.01358Mean **RMS** 0.2158 5000 4000 3000 2000 1000 -0.50.5 1.5

Electron phi0



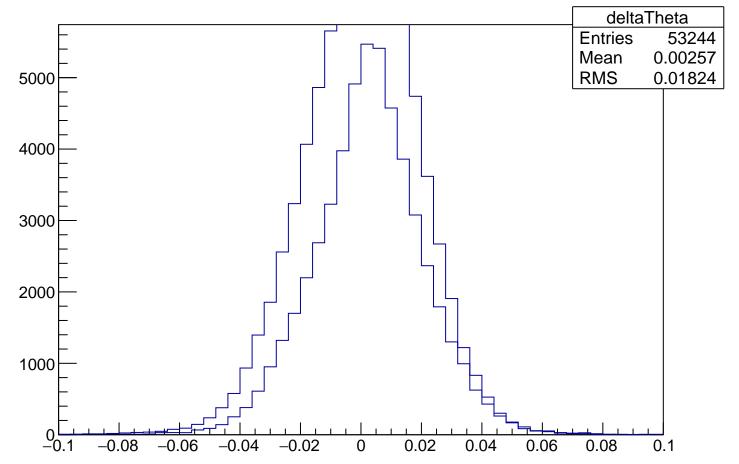
Positron phi0 posphi0 5000 **Entries** 53244 Mean 0.0291 0.02099 RMS 4000 3000 2000 1000 0 -0.1 -0.08 -0.020.02 0.08 -0.06-0.040.04 0.06 0.1

Electron slope eleslope 4000 **Entries** 53244 Mean 9.482e-05 3500 **RMS** 0.03591 3000 2500 2000 1500 1000 500 -8.08 -0.06 -0.04 -0.02 0.02 0.06 0.04 0.08

Positron slope posslope 4000 **Entries** 53244 Mean 9.482e-05 3500 **RMS** 0.03591 3000 2500 2000 1500 1000 500 -8.08 -0.06 -0.04 -0.02 0.02 0.06 0.04 0.08

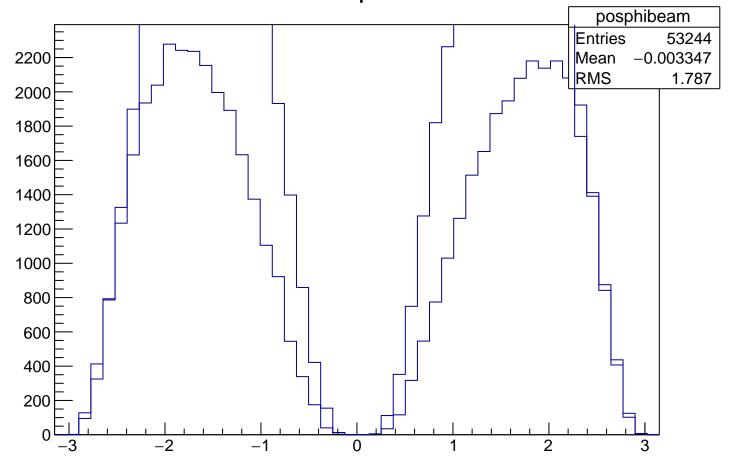
DeltaPhi deltaPhi 1800 Entries 53244 0.03593 Mean 1600 **RMS** 0.8737 1400 1200 1000 800 600 400 200 -0.5 0.5 1.5 -1.5

DeltaTheta

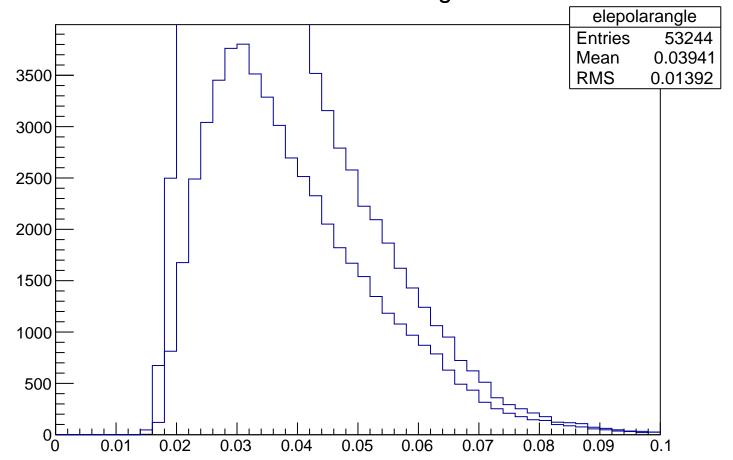


Electron phibeam elephibeam Entries 2500 53244 Mean 0.03939 RMS 1.674 2000 1500 1000 500

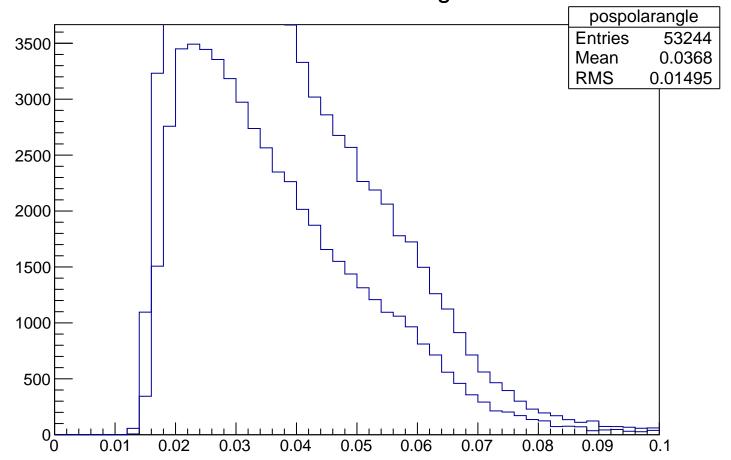
Positron phibeam



Electron Polar Angle

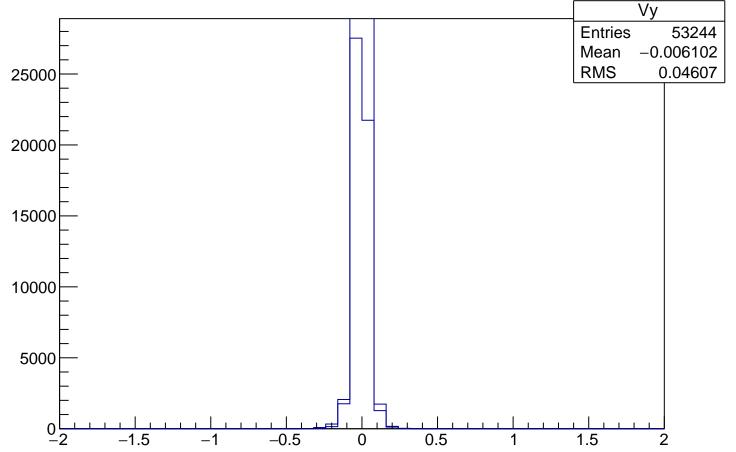


Positron Polar Angle

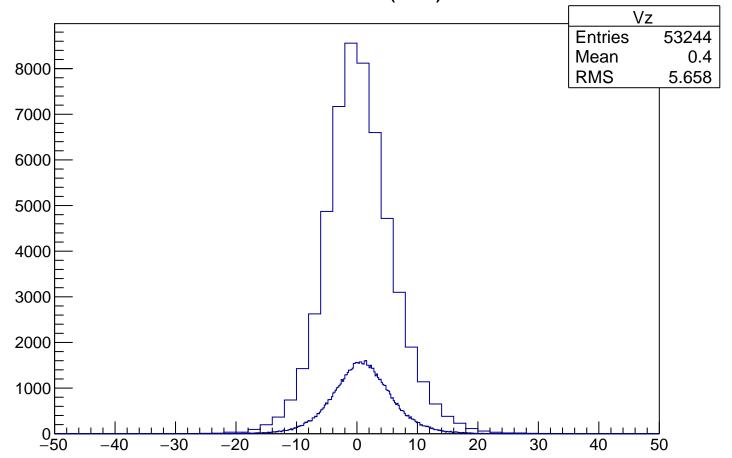


Trident Vx (mm) Vx 18000 **Entries** 53244 Mean 0.02182 16000 **RMS** 0.1973 14000 12000 10000 8000 6000 4000 2000 0[[]

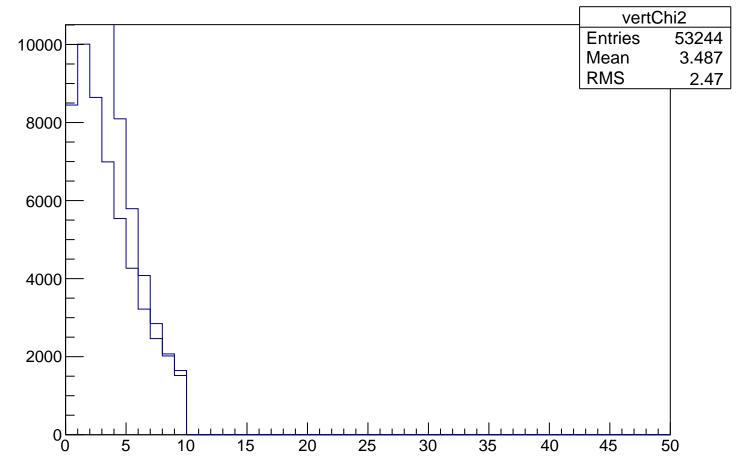
Trident Vy (mm)



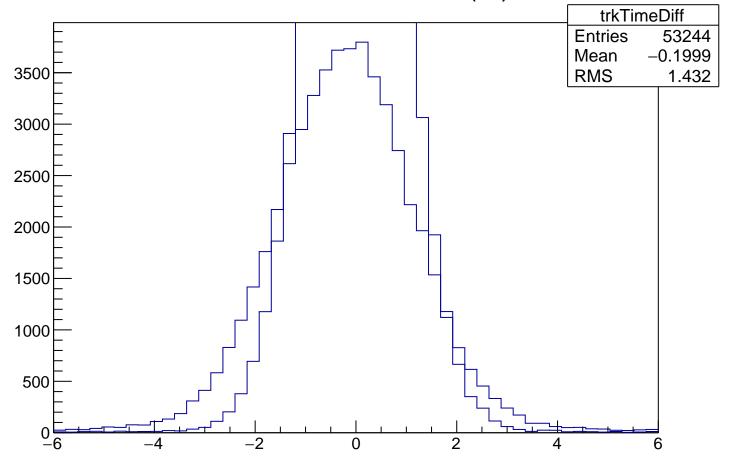
Trident Vz (mm)



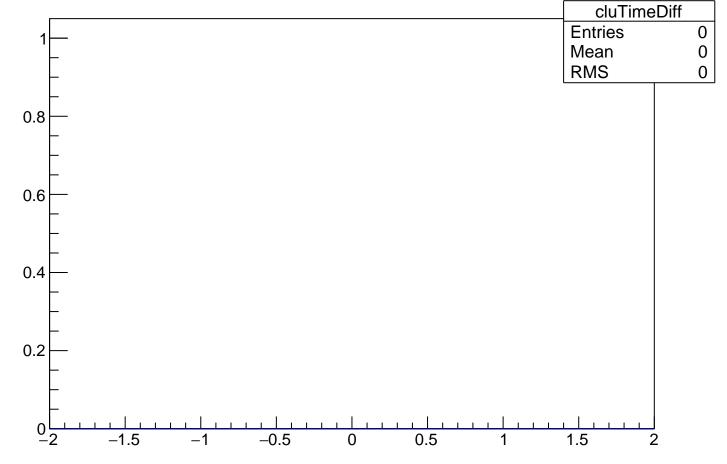
V0 Chi2



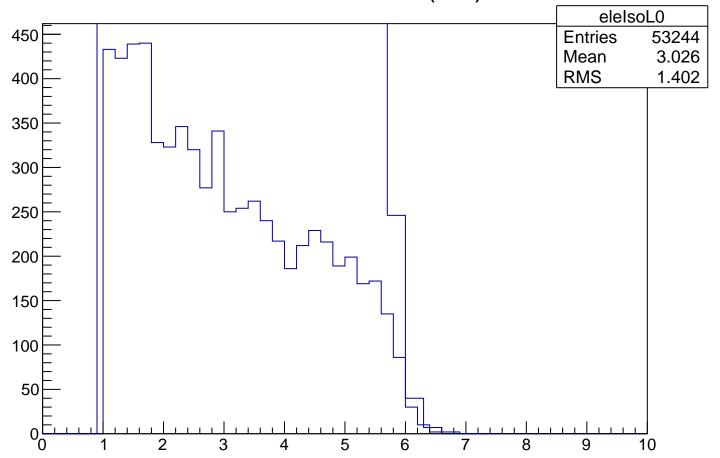
Ele-Pos Time Difference (ns)



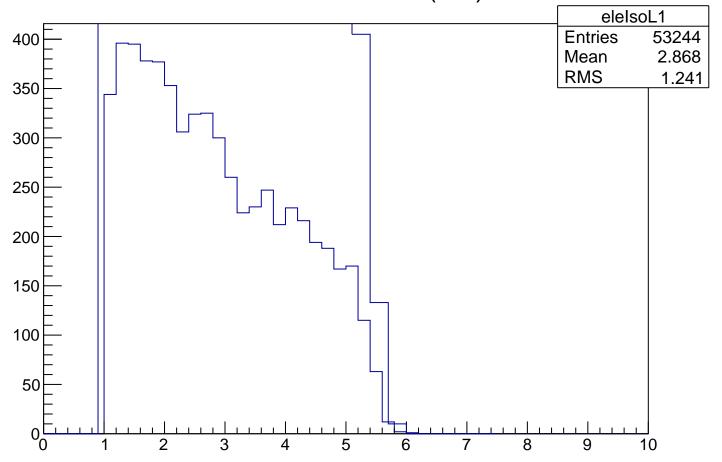
Cluster Time Difference (ns)



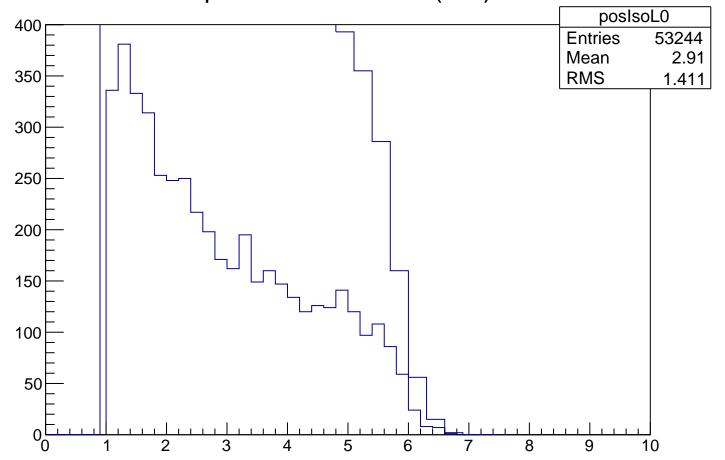
electron isolation L0 (mm)



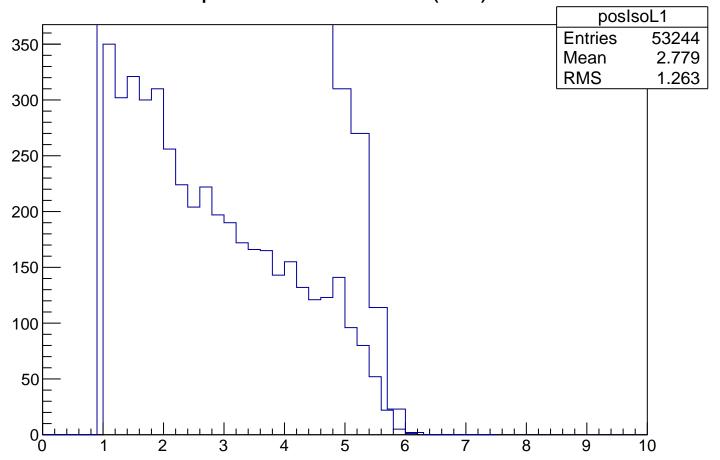
electron isolation L1 (mm)



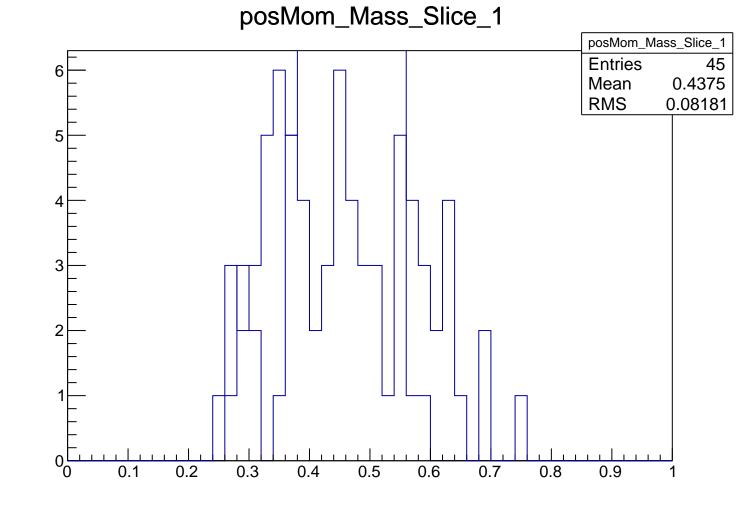
positron isolation L0 (mm)

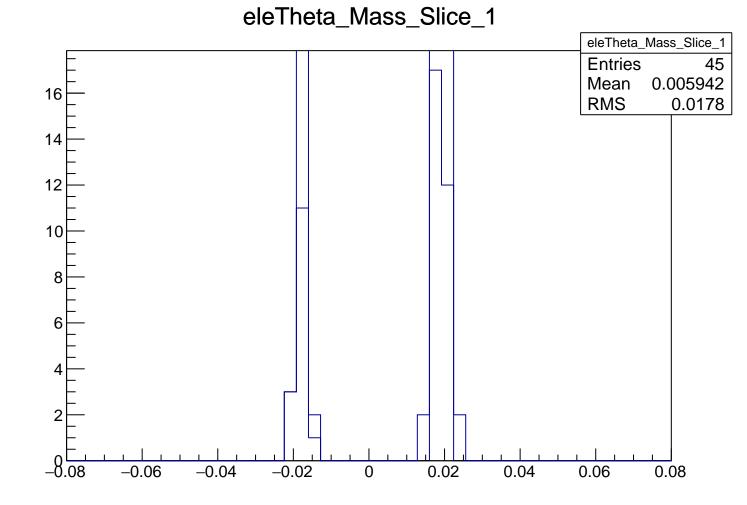


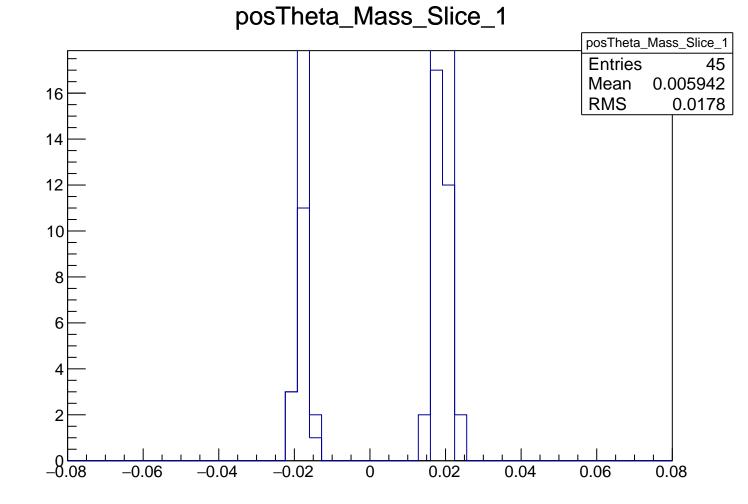
positron isolation L1 (mm)



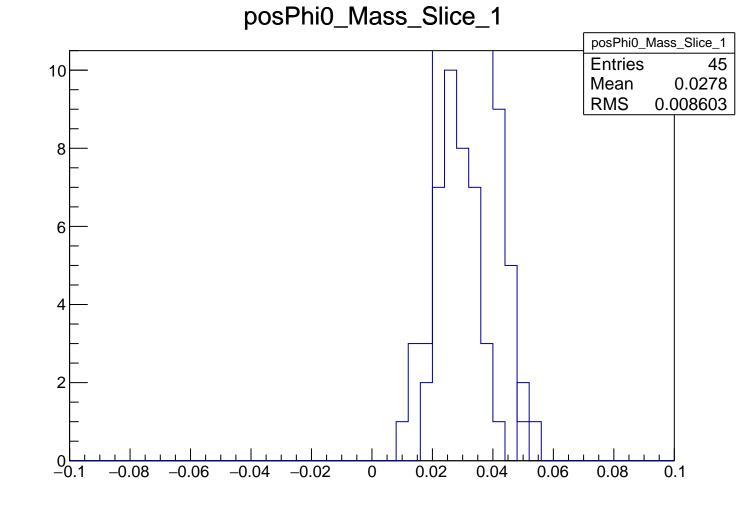
eleMom_Mass_Slice_1 eleMom_Mass_Slice_1 **Entries** 45 8 0.4005 Mean **RMS** 0.07665 7 6 5 4 3 2 0, 0.2 0.6 0.1 0.3 0.4 0.5 0.7 8.0 0.9



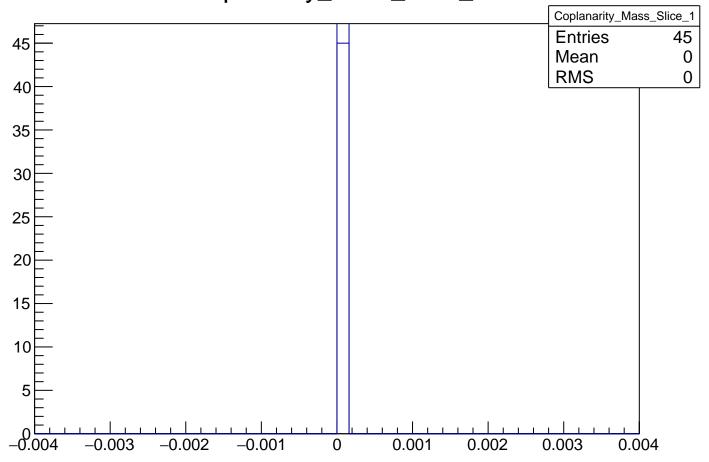




elePhi0_Mass_Slice_1 elePhi0_Mass_Slice_1 **Entries** 45 10 Mean 0.0278 RMS 0.008603 8 6 4 2 0 -0.1 -0.06 0.02 -0.08-0.04-0.020.04 0.06 0.08 0.1

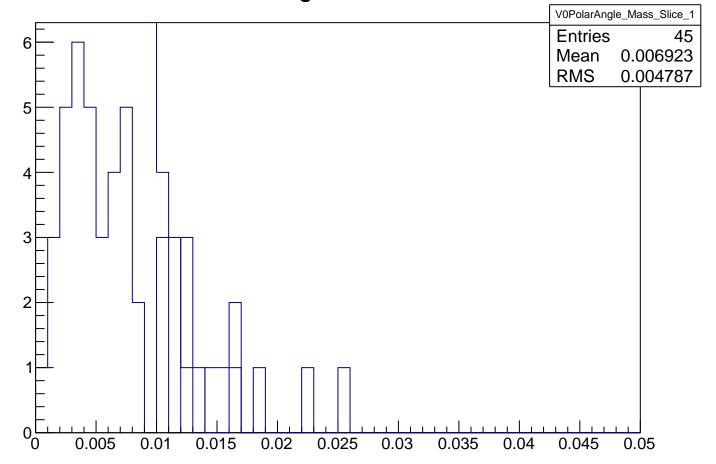


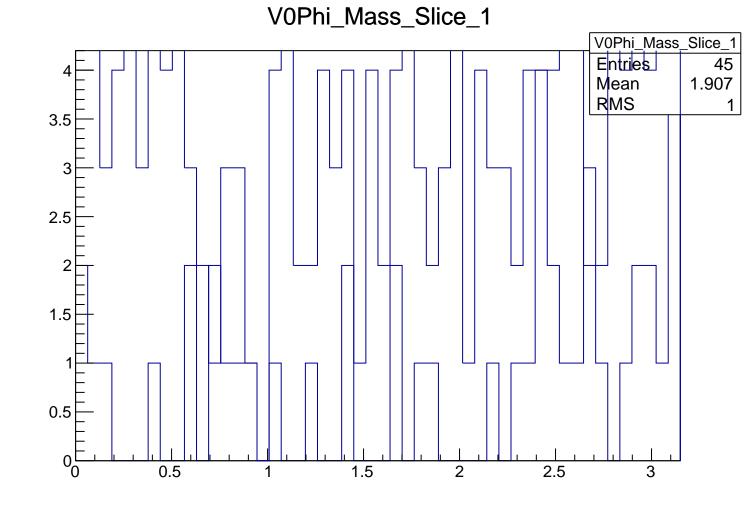
Coplanarity_Mass_Slice_1



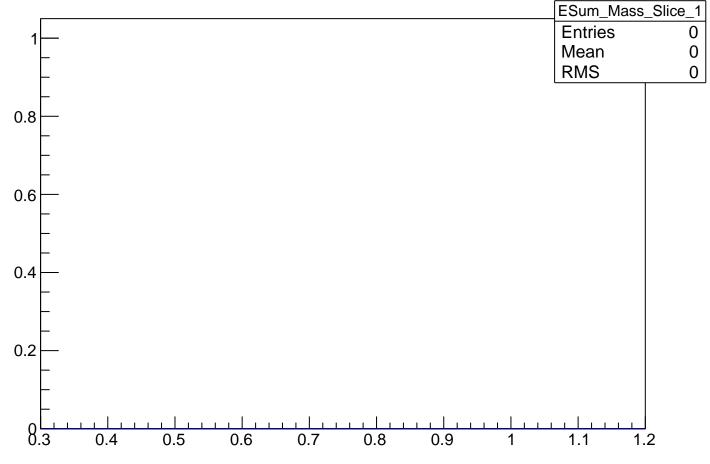
Ediff_Mass_Slice_1 Ediff_Mass_Slice_1 **Entries** 45 6 -0.04291Mean **RMS** 0.1839 5 4 3 2 ___0 __0.8 0.2 -0.20.6 -0.6-0.40.4 8.0

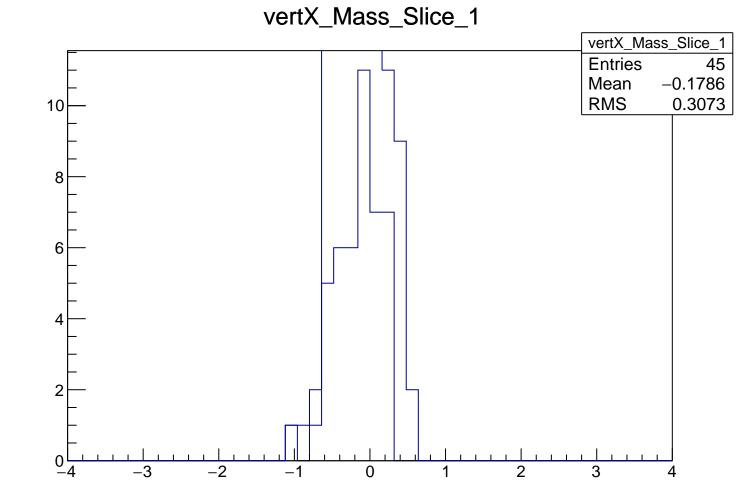
V0PolarAngle_Mass_Slice_1





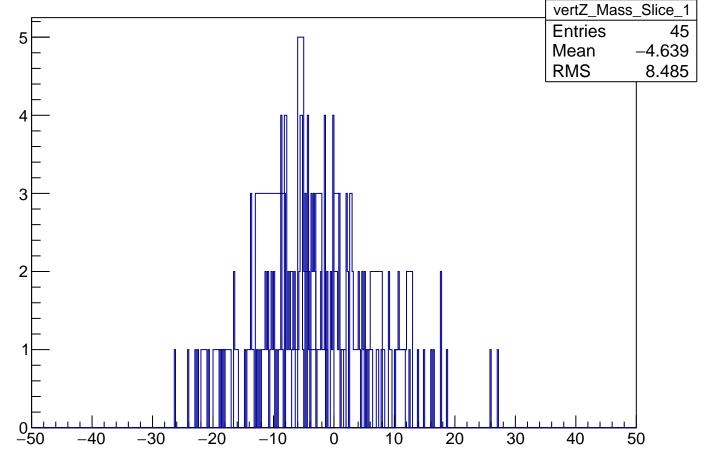
ESum_Mass_Slice_1





vertY_Mass_Slice_1 vertY_Mass_Slice_1 25 **Entries** 45 -0.004883Mean RMS 0.06737 20 15 10 5 0<u>L</u> -0.5 0.5 1.5 -1.5

vertZ_Mass_Slice_1



eleMom_Mass_Slice_2 eleMom_Mass_Slice_2 250 **Entries** 2746 Mean 0.4198 **RMS** 0.096 200 150 100 50

0,

0.2

0.1

0.3

0.4

0.5

0.6

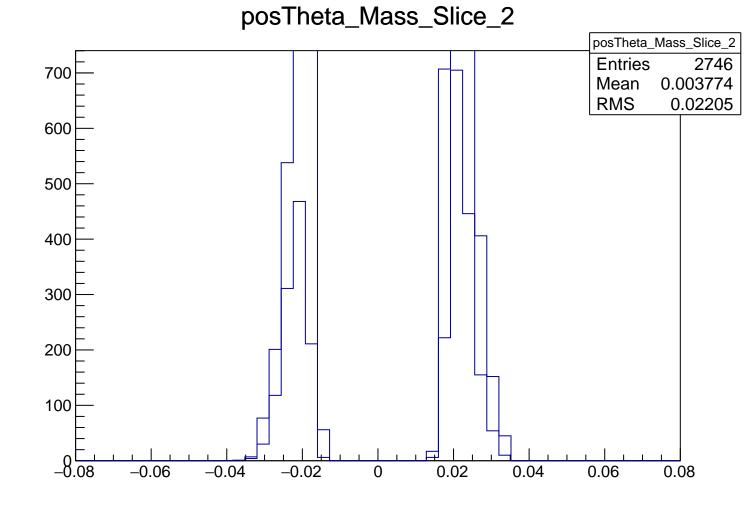
0.7

8.0

0.9

posMom_Mass_Slice_2 posMom_Mass_Slice_2 **Entries** 2746 200 Mean 0.4711 **RMS** 0.1047 180 160 140 120 100 80 60 40 20 0, 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9

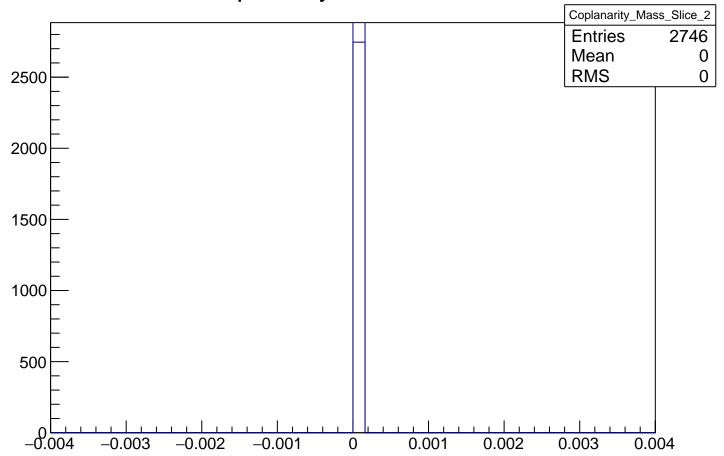
eleTheta_Mass_Slice_2 eleTheta_Mass_Slice_2 **Entries** 2746 700 0.003774 Mean RMS 0.02205 600 500 400 300 200 100 -8.08 -0.06 -0.04-0.02 0.02 0.04 0.06 0.08

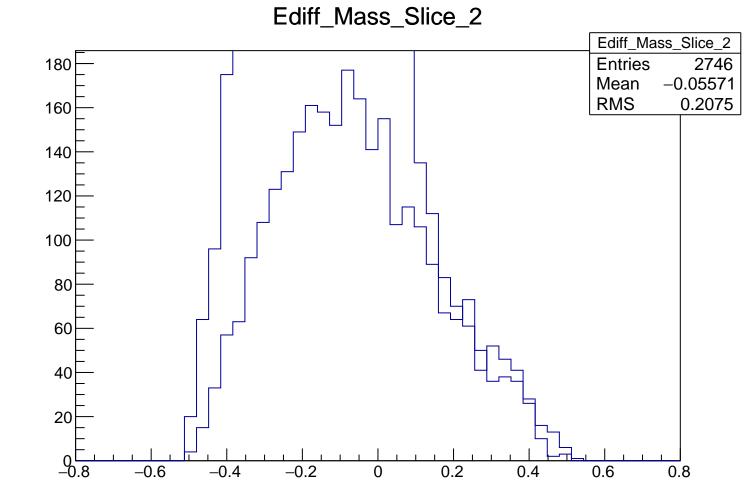


elePhi0_Mass_Slice_2 elePhi0_Mass_Slice_2 **Entries** 2746 0.02837 Mean 500 RMS 0.009325 400 300 200 100 0 -0.1 -0.06 -0.08-0.04-0.020.02 0.04 0.06 0.08 0.1

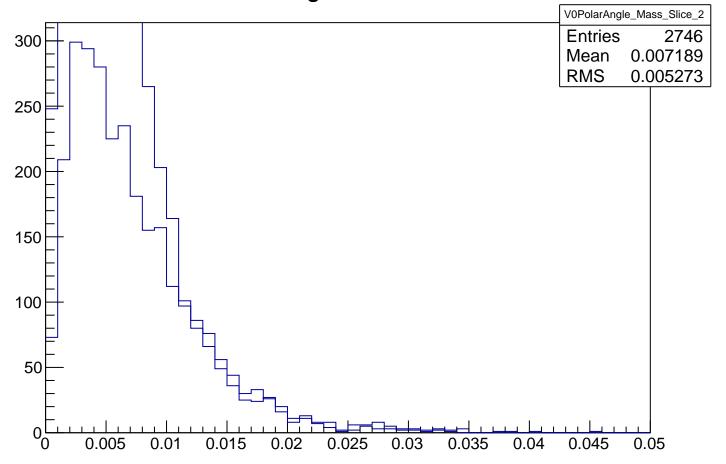
posPhi0_Mass_Slice_2 posPhi0_Mass_Slice_2 **Entries** 2746 Mean 0.02837 500 RMS 0.009325 400 300 200 100 0 -0.1 -0.06 -0.08-0.04-0.020.02 0.04 0.06 0.08 0.1

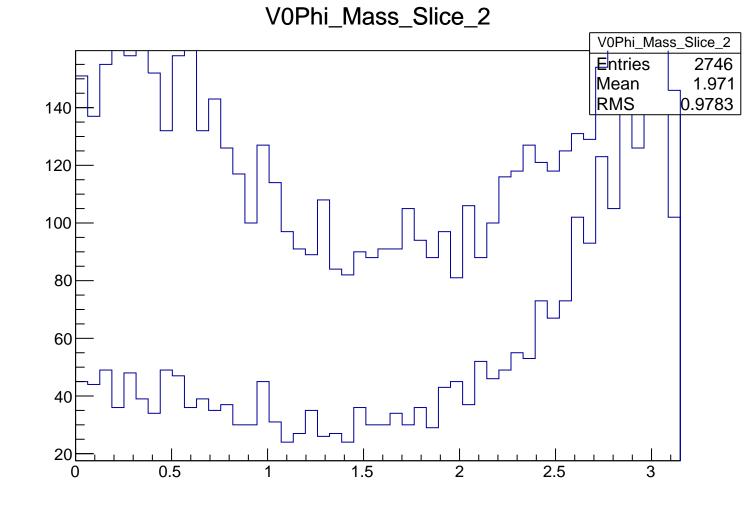
Coplanarity_Mass_Slice_2



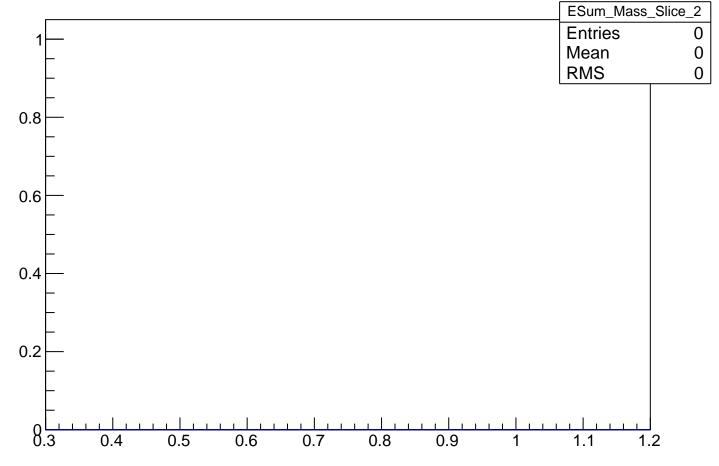


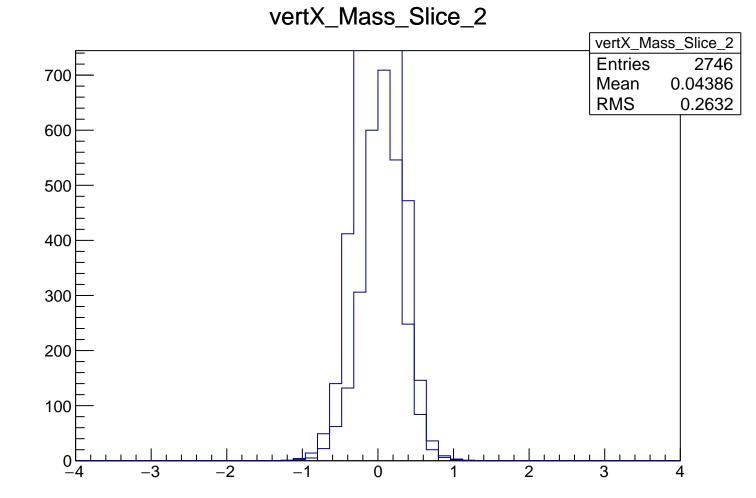
V0PolarAngle_Mass_Slice_2





ESum_Mass_Slice_2





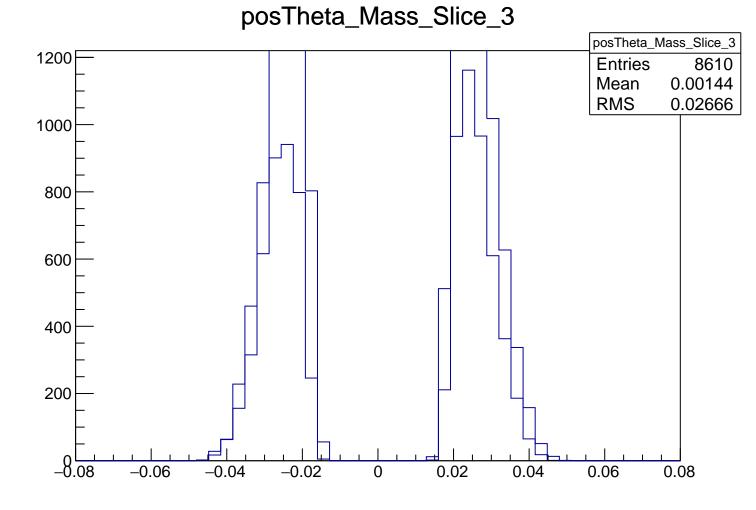
vertY_Mass_Slice_2 vertY_Mass_Slice_2 1400 **Entries** 2746 -0.002369Mean **RMS** 0.04332 1200 1000 800 600 400 200 -0.5 -1.50.5 1.5

vertZ_Mass_Slice_2 vertZ_Mass_Slice_2 **Entries** 2746 1.643 Mean 140 **RMS** 8.662 120 100 80 60 40 20 0 -50 -40 -30-20 -1010 20 30 40 50

eleMom_Mass_Slice_3 eleMom_Mass_Slice_3 **Entries** 8610 Mean 0.4402 600 **RMS** 0.1077 500 400 300 200 100 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9

posMom_Mass_Slice_3 posMom_Mass_Slice_3 600 **Entries** 8610 Mean 0.4845 **RMS** 0.1139 500 400 300 200 100 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9

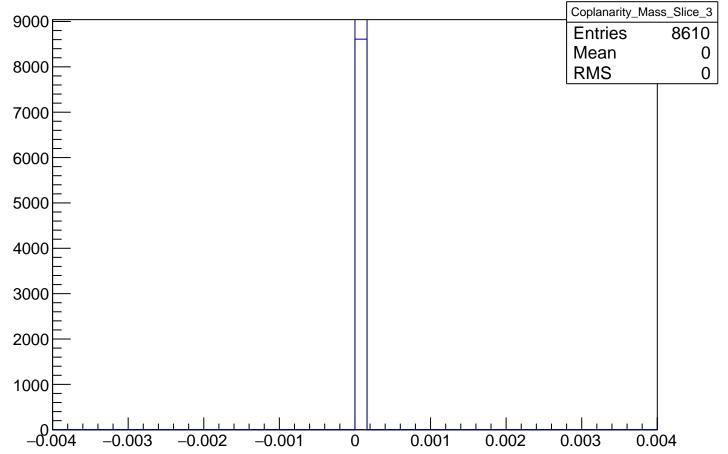
eleTheta_Mass_Slice_3 eleTheta_Mass_Slice_3 1200 **Entries** 8610 0.00144 Mean RMS 0.02666 1000 800 600 400 200 -8.08 -0.06 -0.04 -0.02 0.02 0.04 0.06 0.08

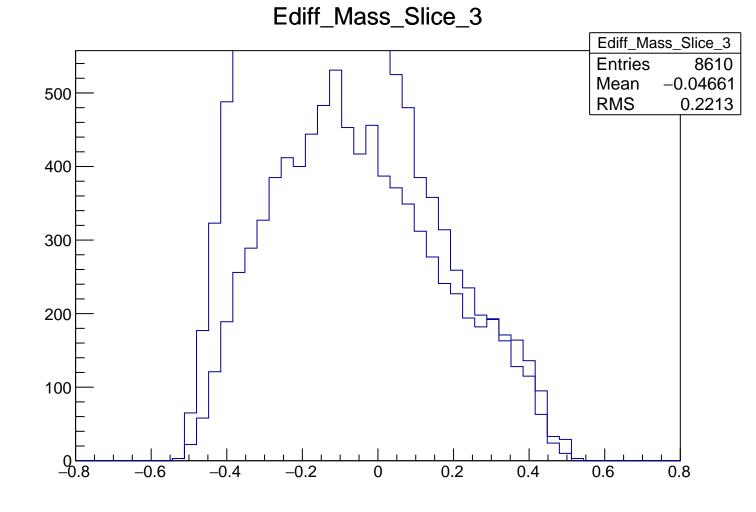


elePhi0_Mass_Slice_3 elePhi0_Mass_Slice_3 **Entries** 8610 1200 0.02849 Mean RMS 0.01193 1000 800 600 400 200 0 -0.1 -0.06 -0.08-0.04-0.020.02 0.04 0.06 0.08 0.1

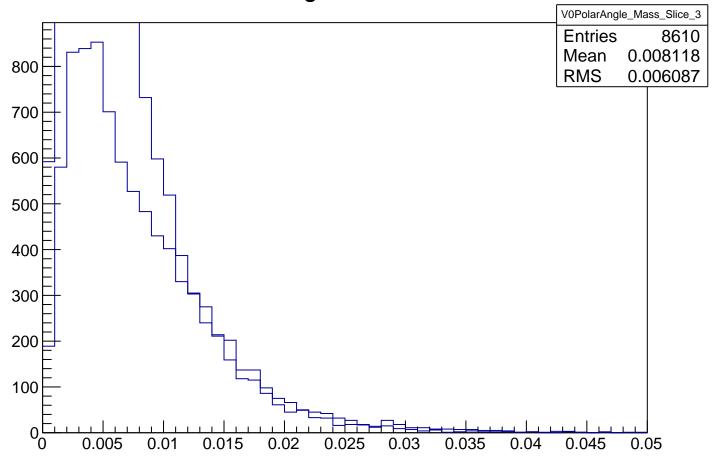
posPhi0_Mass_Slice_3 posPhi0_Mass_Slice_3 **Entries** 8610 1200 Mean 0.02849 **RMS** 0.01193 1000 800 600 400 200 0 -0.1 -0.06 0.08 -0.08-0.04-0.020.02 0.04 0.06 0.1

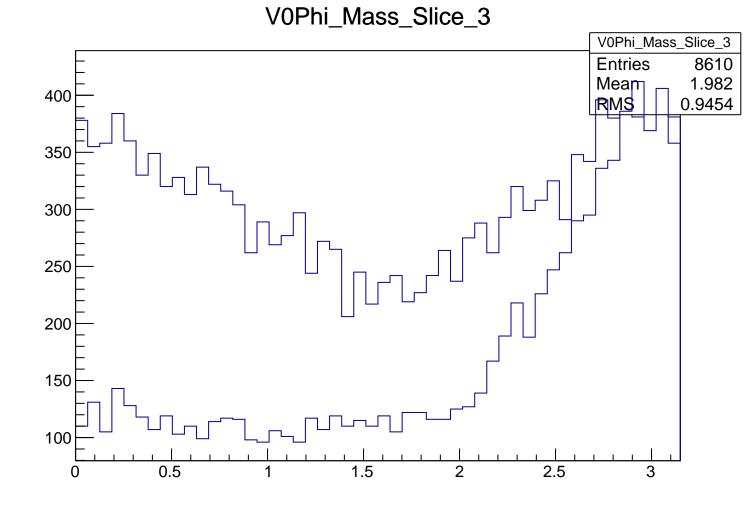
Coplanarity_Mass_Slice_3



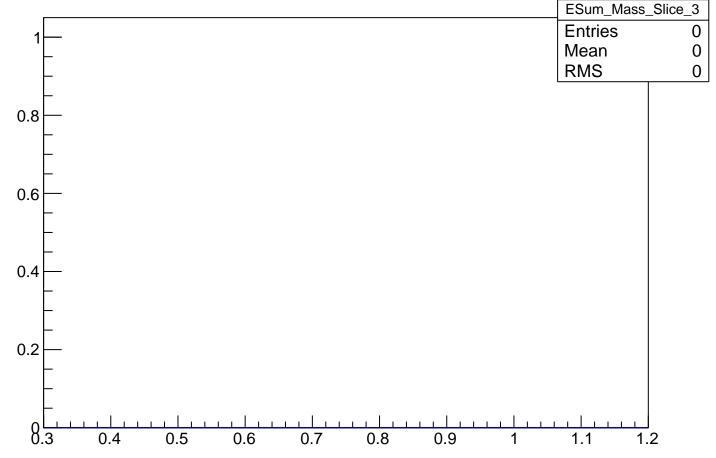


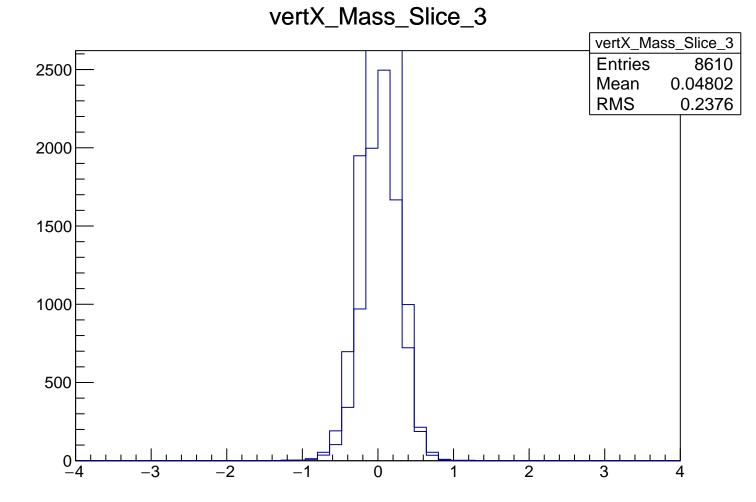
V0PolarAngle_Mass_Slice_3





ESum_Mass_Slice_3

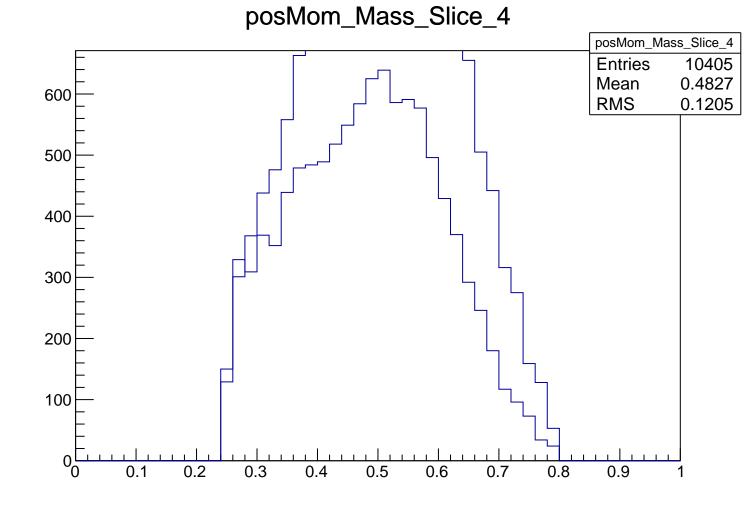


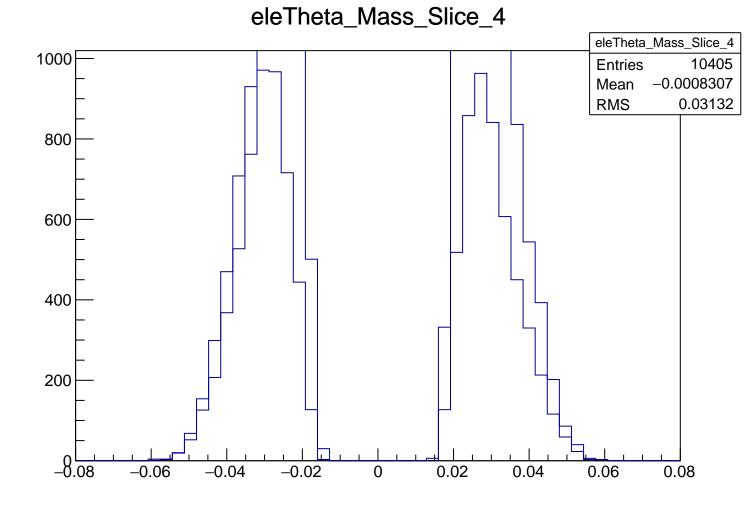


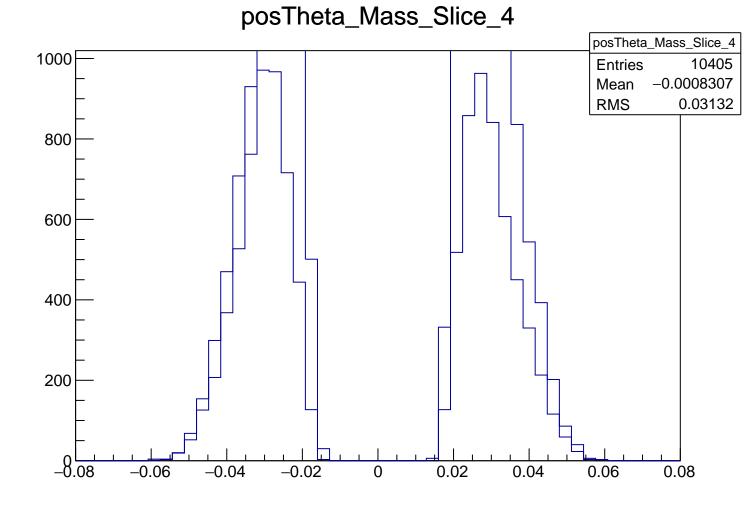
vertY_Mass_Slice_3 vertY_Mass_Slice_3 4500 **Entries** 8610 -0.005664Mean 4000 **RMS** 0.04661 3500 3000 2500 2000 1500 1000 500 -1.5 -0.5 0.5 1.5

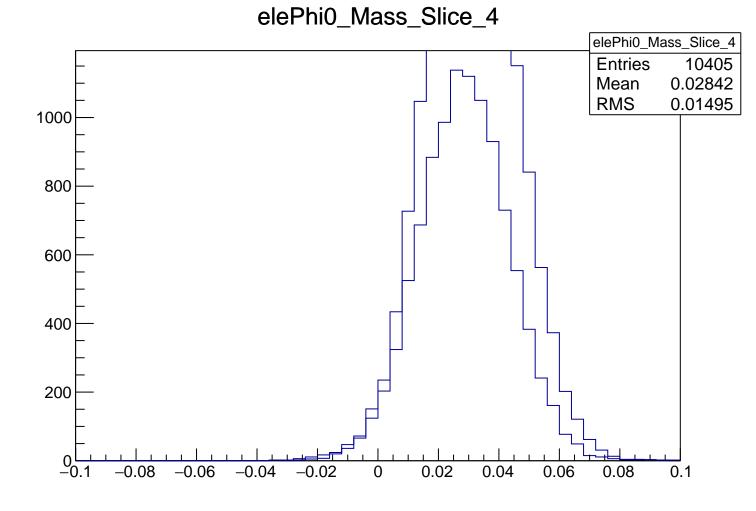
vertZ_Mass_Slice_3 vertZ_Mass_Slice_3 **Entries** 8610 500 Mean 1.651 **RMS** 7.157 400 300 200 100 0 -50 -30 -40-20 -1010 20 30 40 50

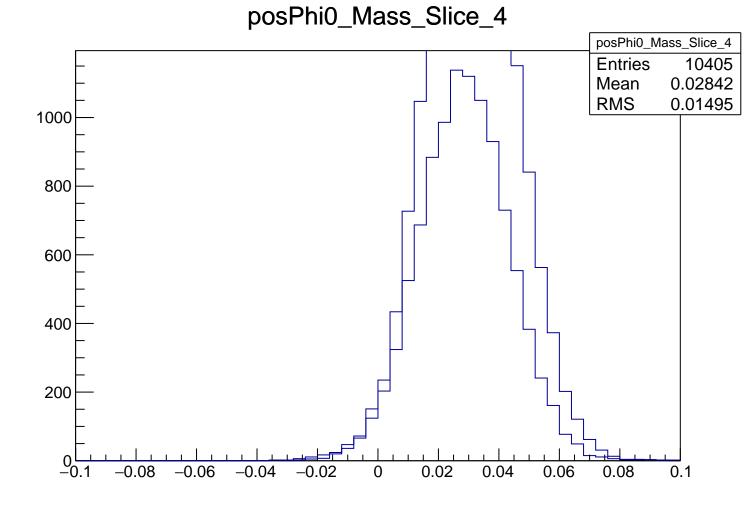
eleMom_Mass_Slice_4 eleMom_Mass_Slice_4 **Entries** 10405 Mean 0.4574 600 **RMS** 0.1184 500 400 300 200 100 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9



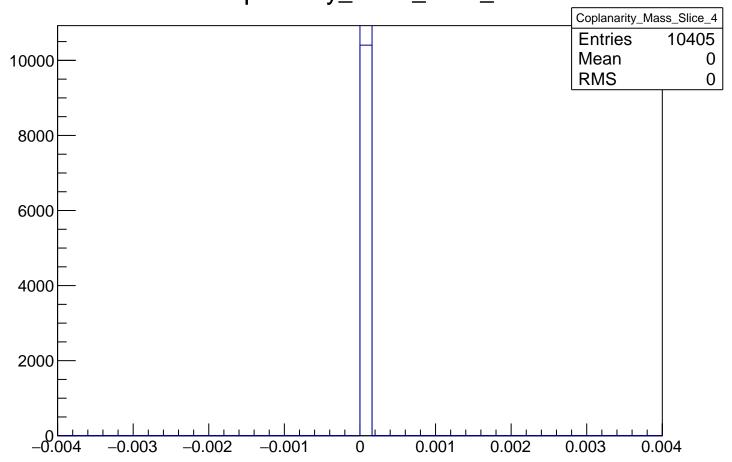


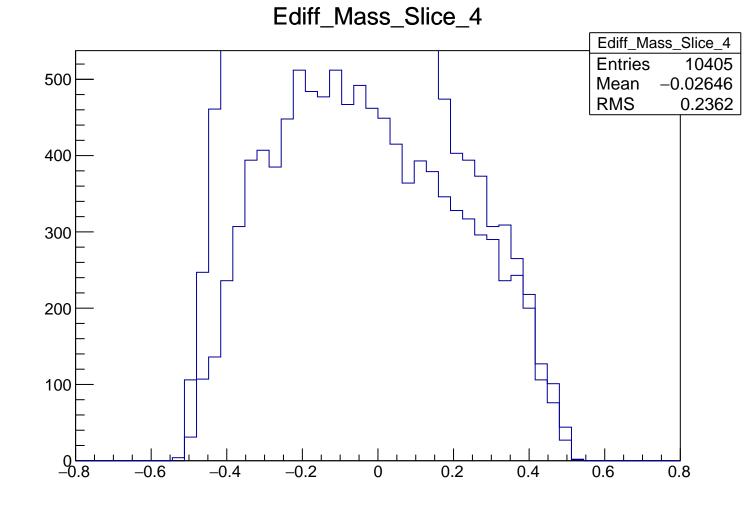




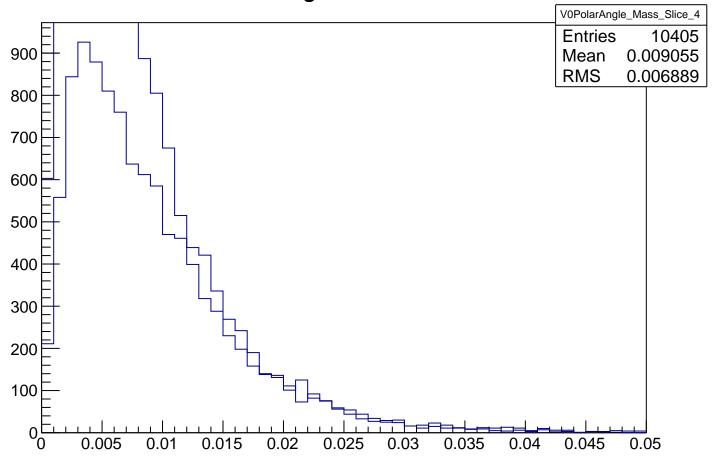


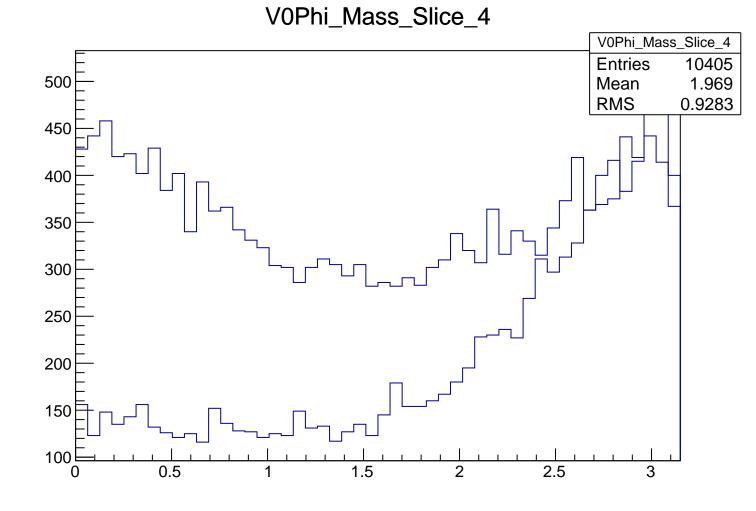
Coplanarity_Mass_Slice_4



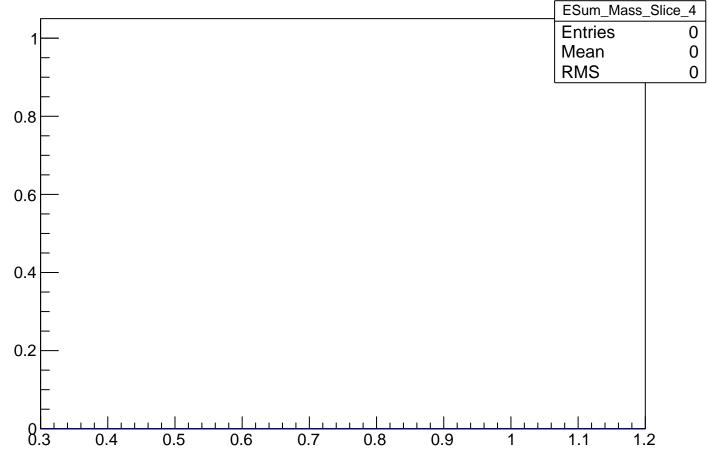


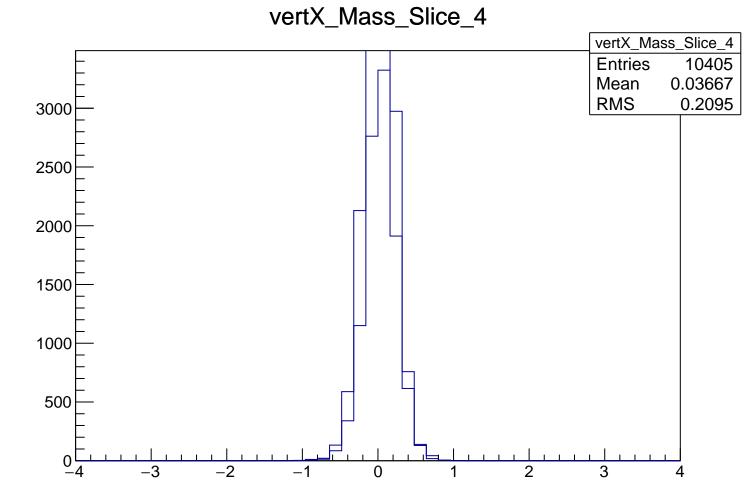
V0PolarAngle_Mass_Slice_4





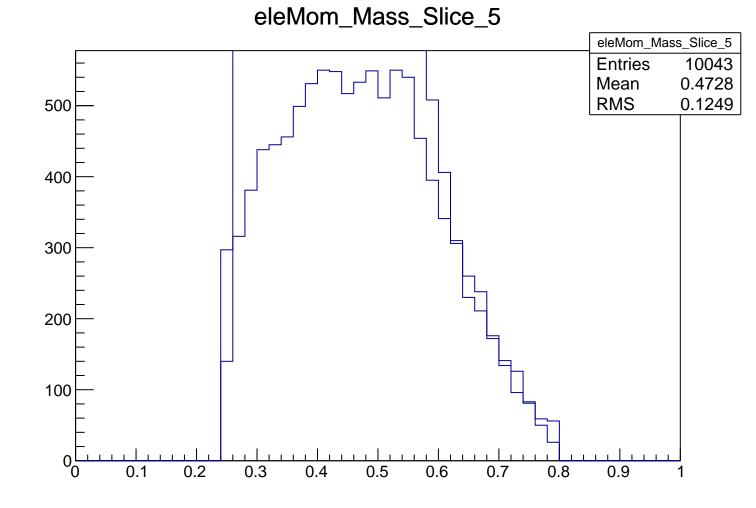
ESum_Mass_Slice_4

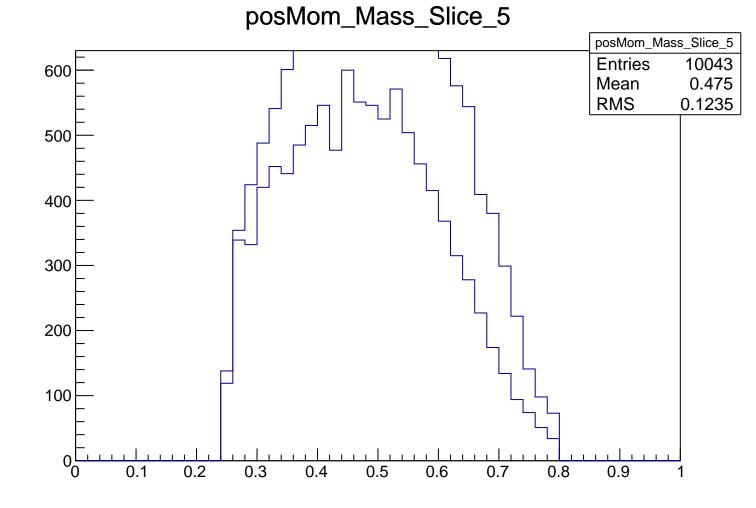


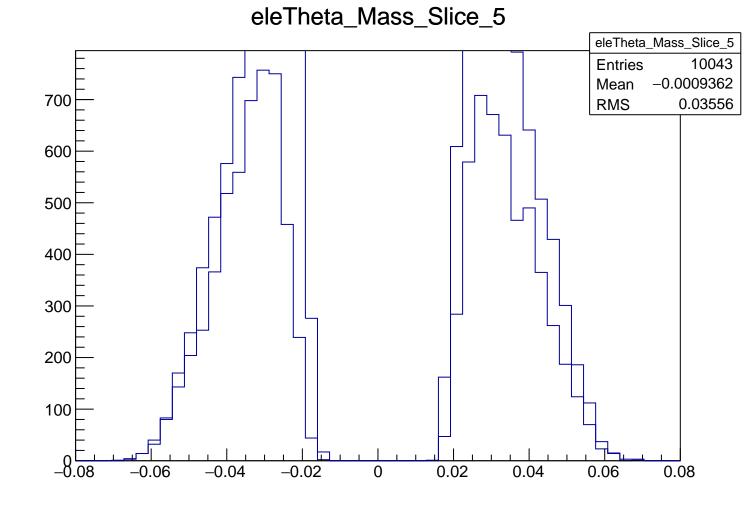


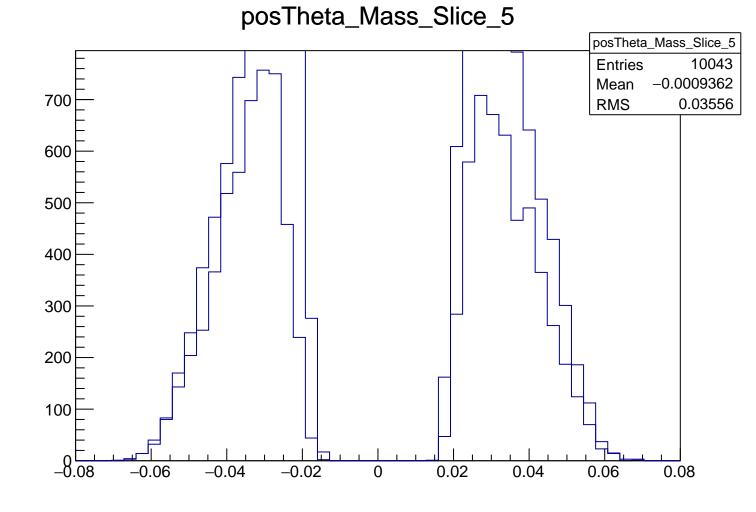
vertY_Mass_Slice_4 vertY_Mass_Slice_4 **Entries** 10405 Mean -0.007545000 **RMS** 0.04699 4000 3000 2000 1000 -1.5 -0.5 1.5 0.5

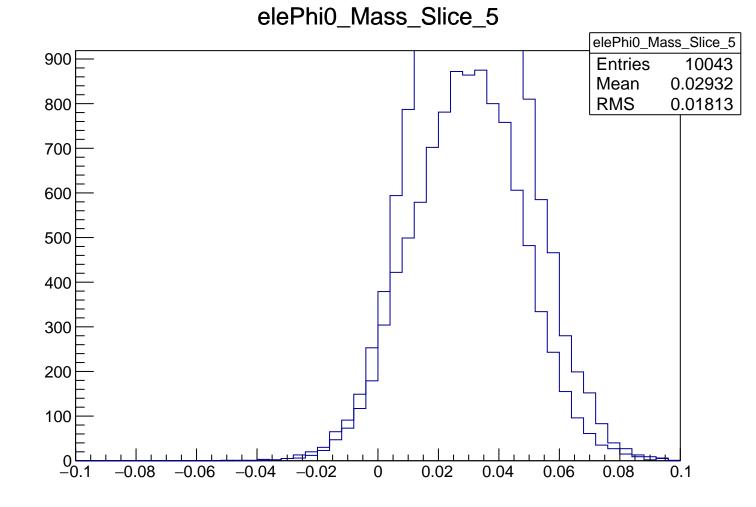
vertZ_Mass_Slice_4 vertZ_Mass_Slice_4 **Entries** 10405 Mean 1.019 700 **RMS** 6.08 600 500 400 300 200 100 0 -50 -30 -20 -40-1010 20 30 40 50

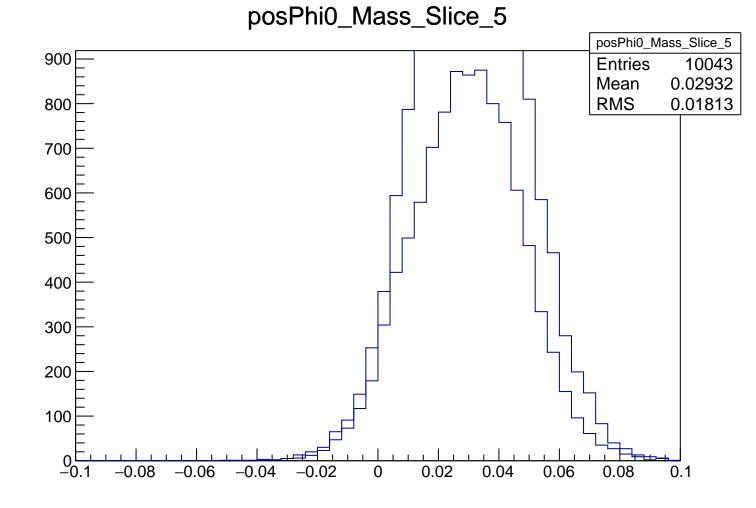




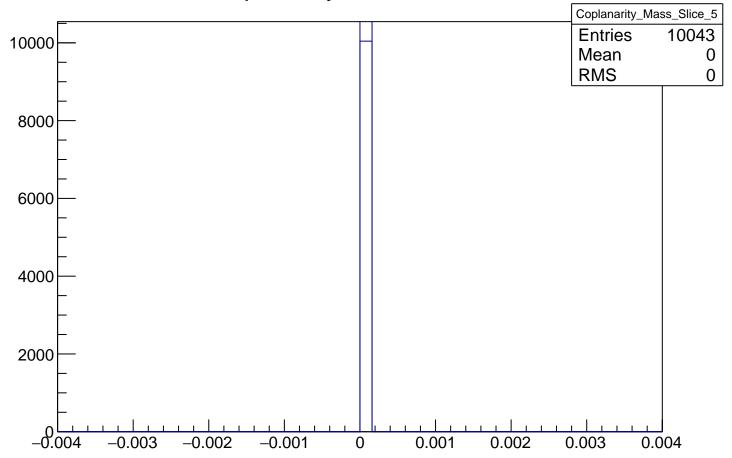


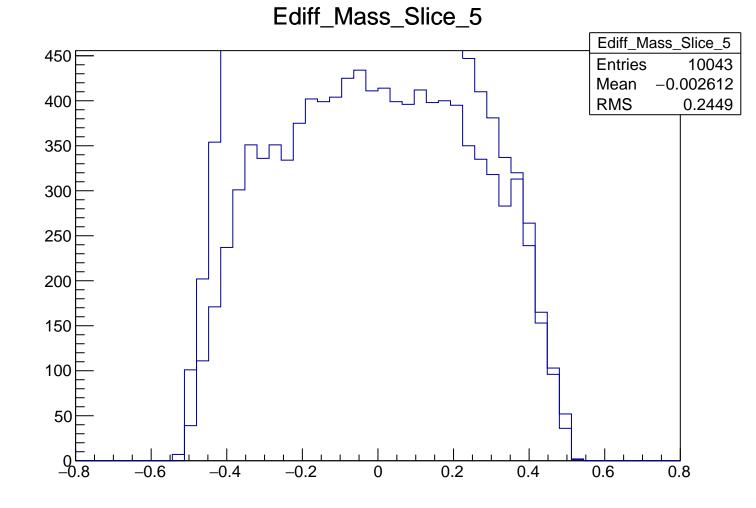




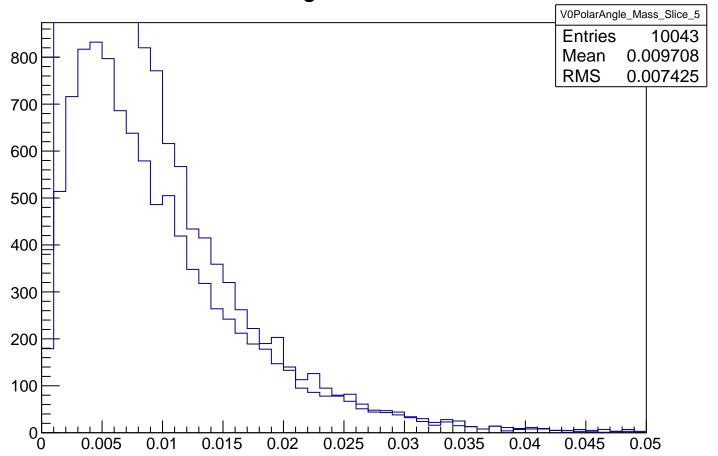


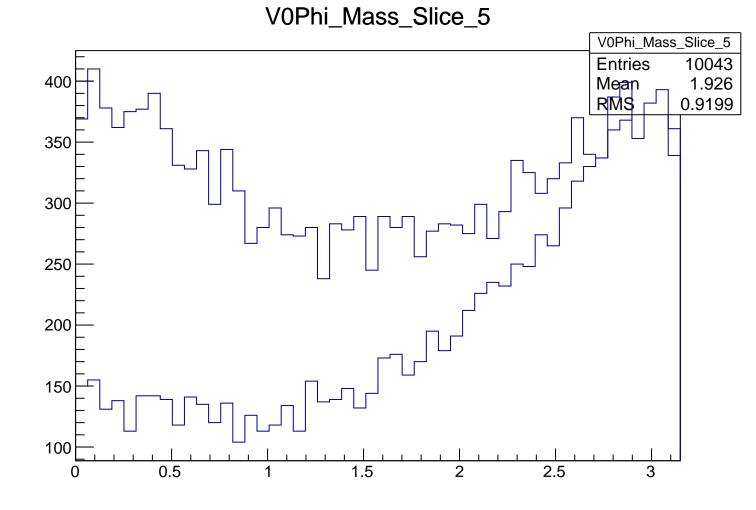
Coplanarity_Mass_Slice_5



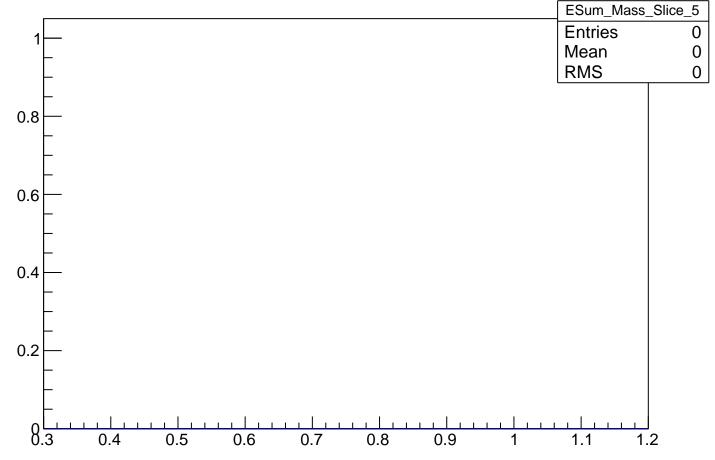


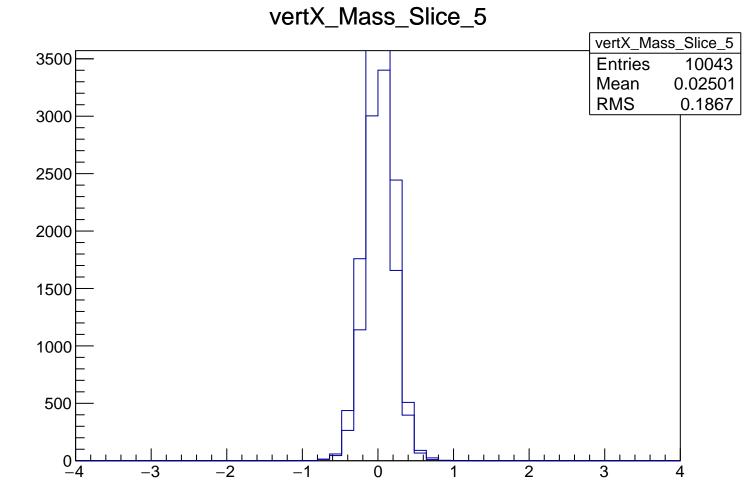
V0PolarAngle_Mass_Slice_5





ESum_Mass_Slice_5





vertY_Mass_Slice_5 vertY_Mass_Slice_5 **Entries** 10043 -0.006271Mean 5000 **RMS** 0.04765 4000 3000 2000 1000 -1.5 -0.5 0.5 1.5

vertZ_Mass_Slice_5 vertZ_Mass_Slice_5 **Entries** 10043 Mean 0.3778 800 **RMS** 5.225 700 600 500 400 300 200 100

10

20

30

40

50

0 -50

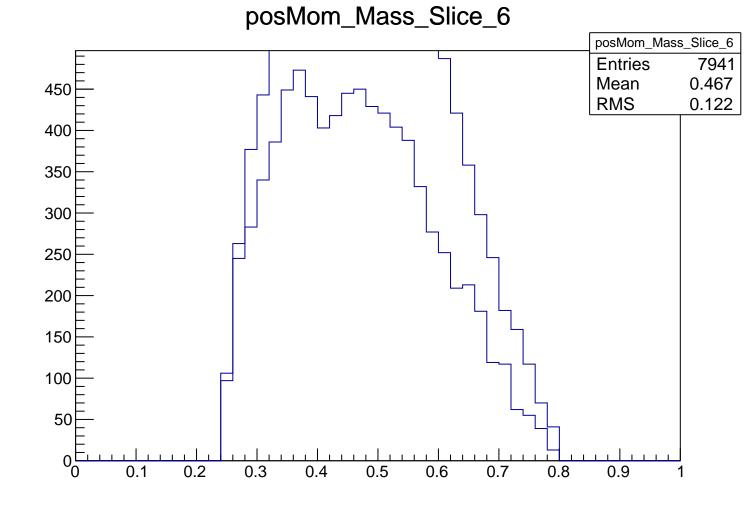
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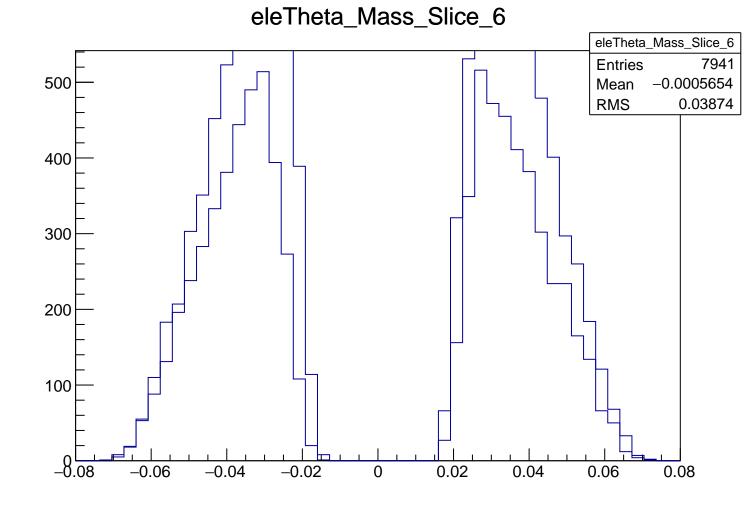
-20

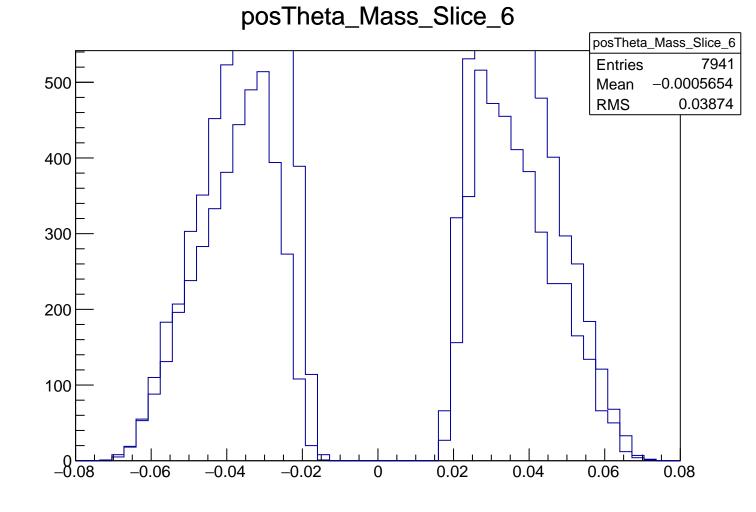
-10

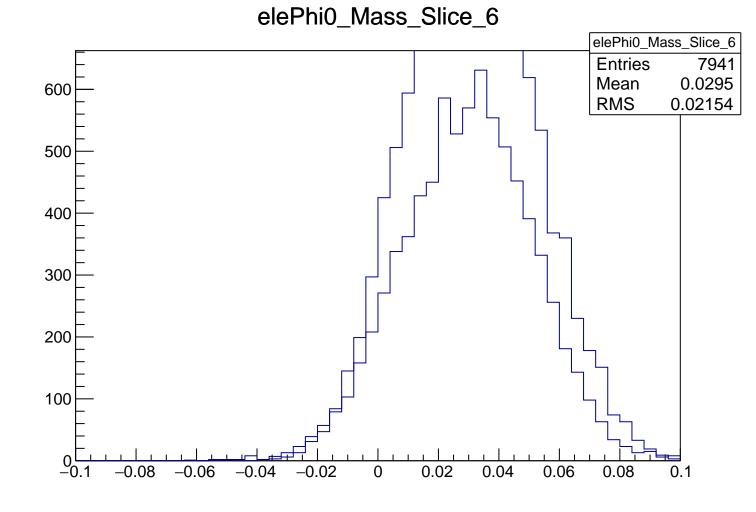
-40

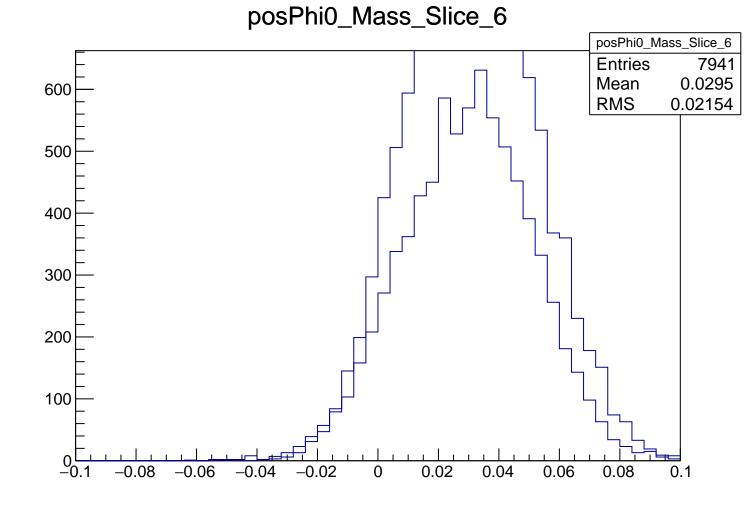
eleMom_Mass_Slice_6 eleMom_Mass_Slice_6 **Entries** 7941 450 Mean 0.4907 **RMS** 0.1275 400 350 300 250 200 150 100 50 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9



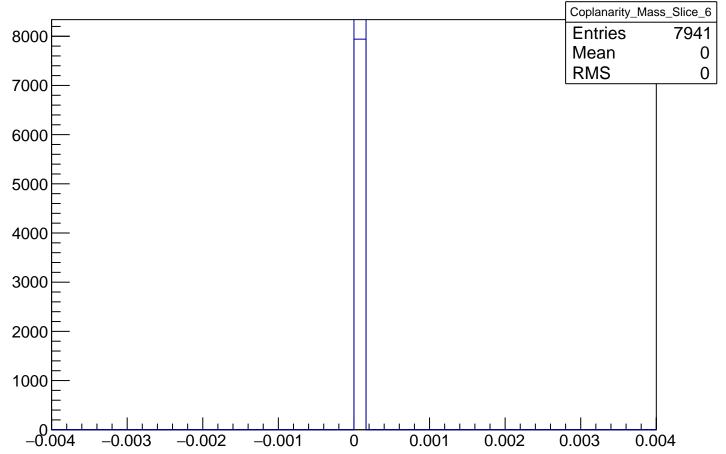


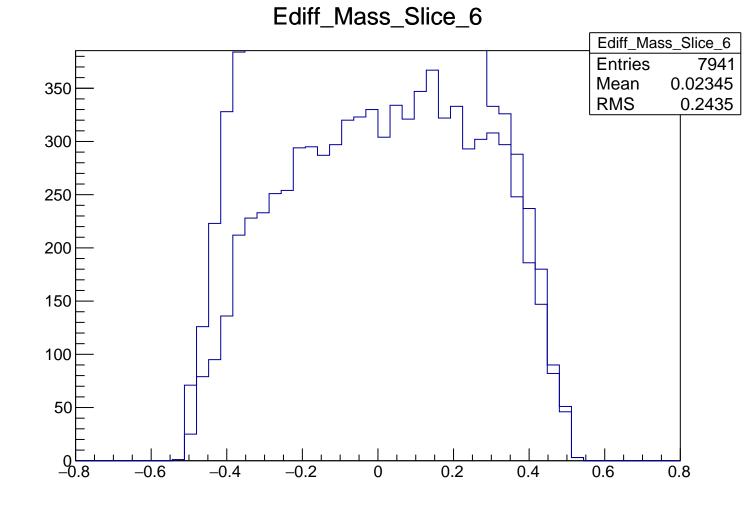




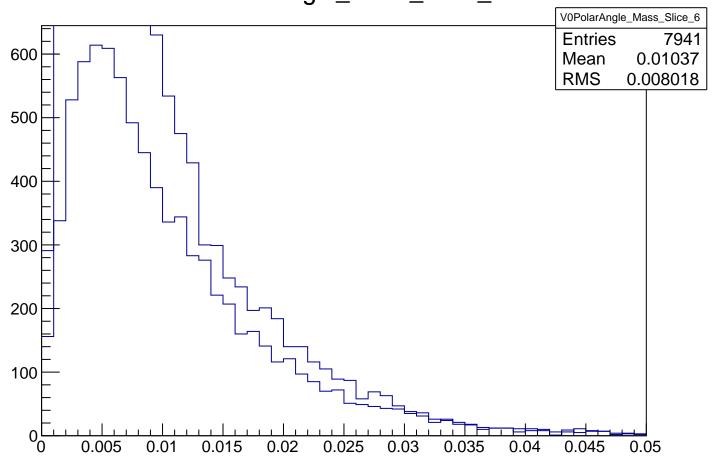


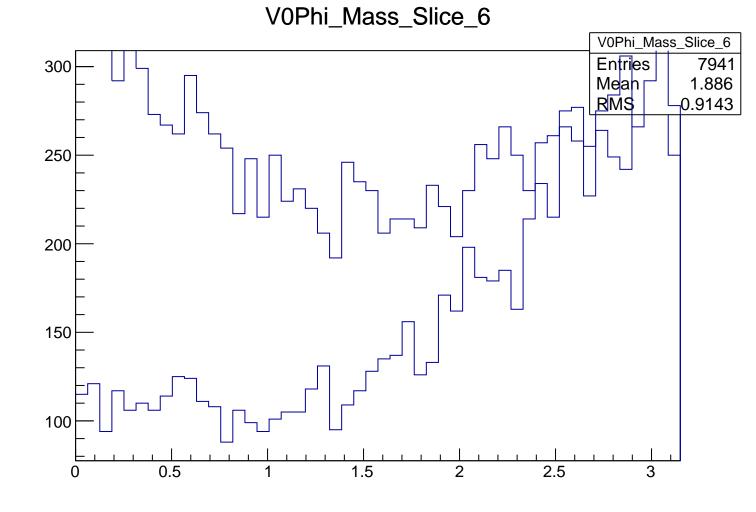
Coplanarity_Mass_Slice_6



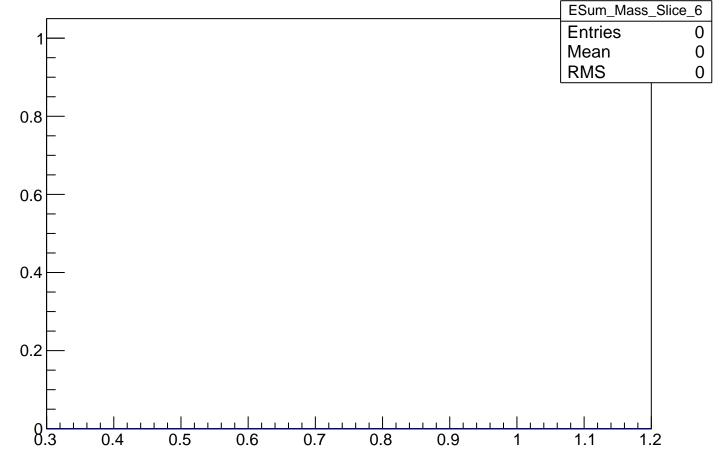


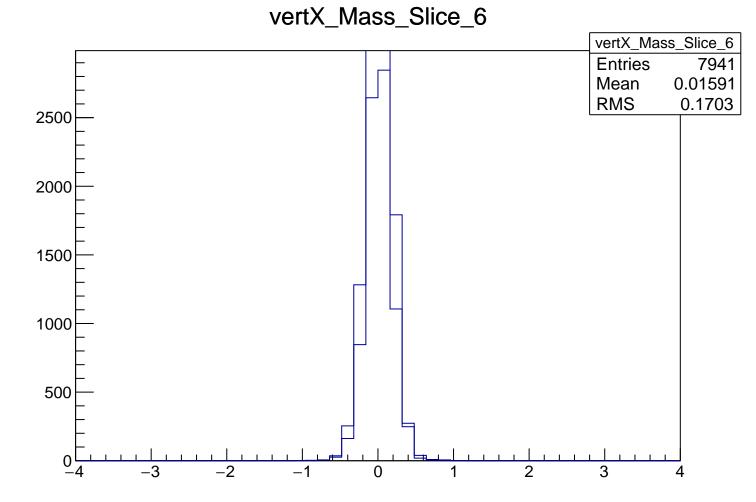
V0PolarAngle_Mass_Slice_6





ESum_Mass_Slice_6





vertY_Mass_Slice_6 vertY_Mass_Slice_6 **Entries** 7941 4000 Mean -0.006954RMS 0.04621 3500 3000 2500 2000 1500 1000 500 -1.5 -0.5 0.5 1.5

vertZ_Mass_Slice_6 vertZ_Mass_Slice_6 **Entries** 7941 Mean 0.007676 700 **RMS** 4.497 600 500 400 300 200 100 0 -50 -30

10

20

30

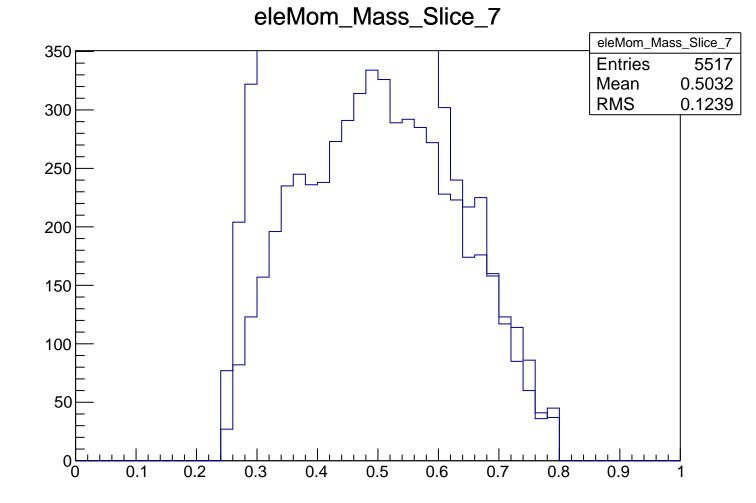
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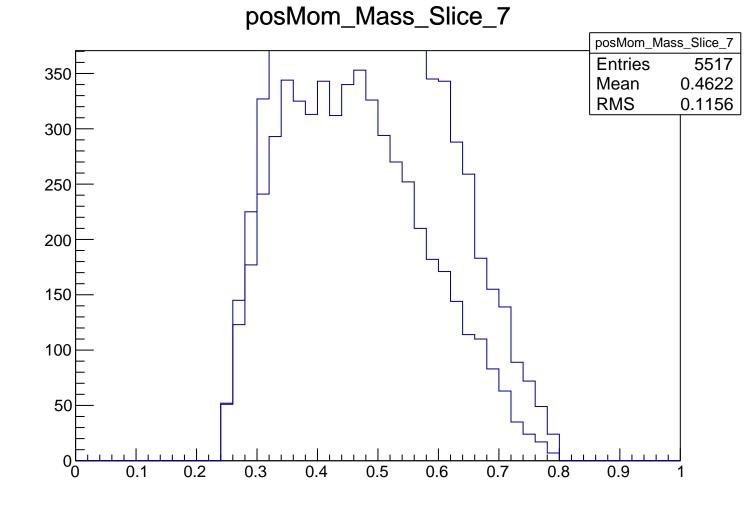
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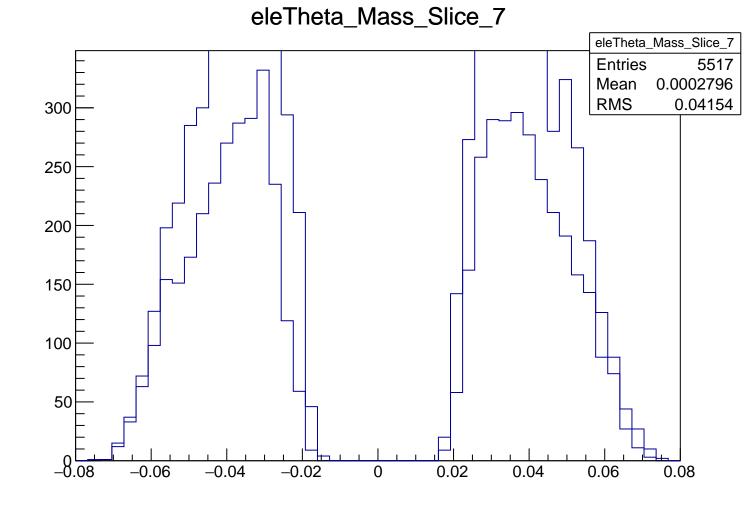
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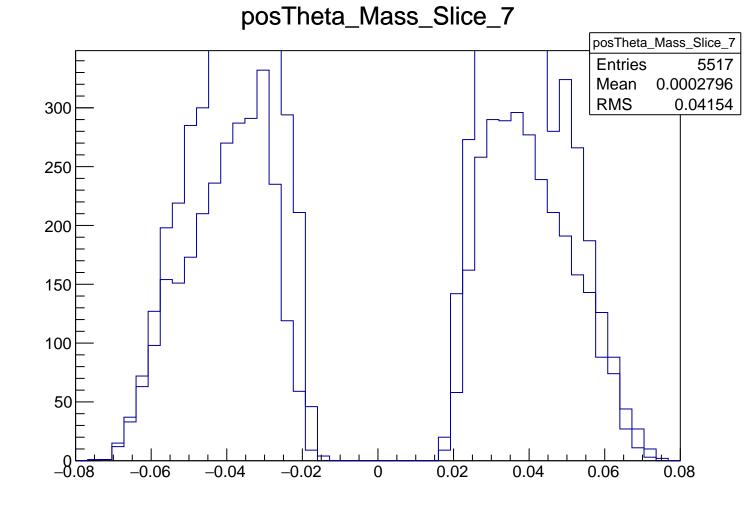
-20

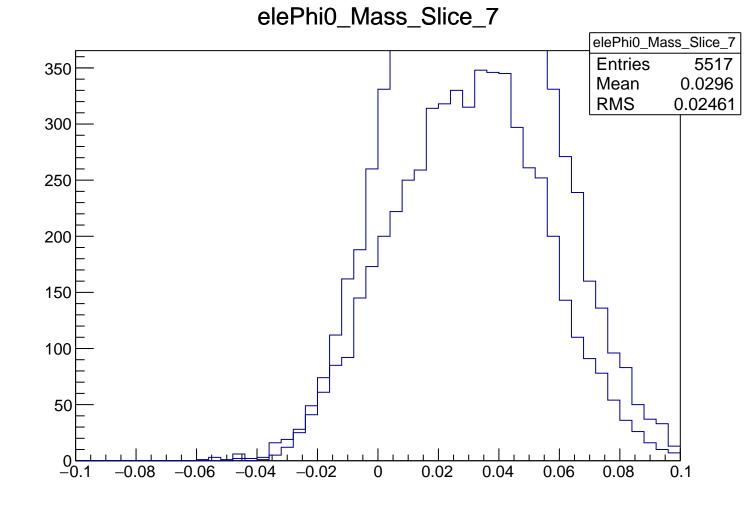
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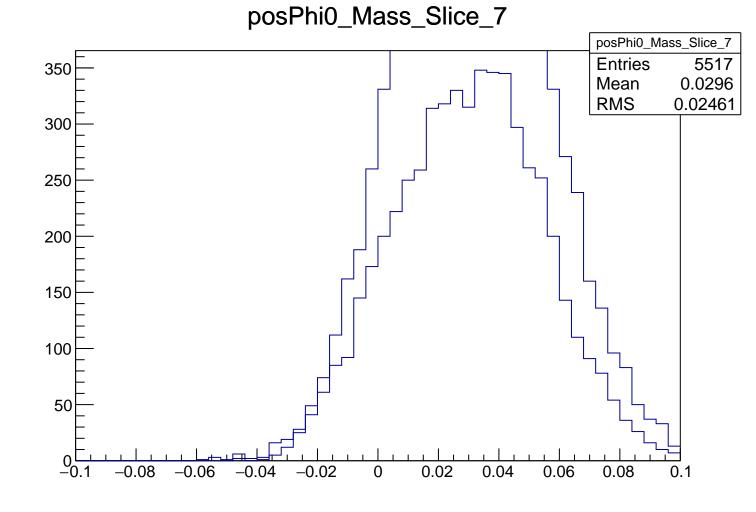




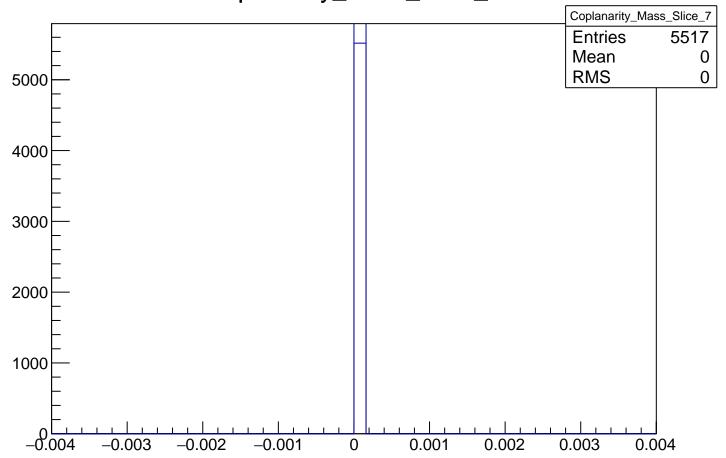


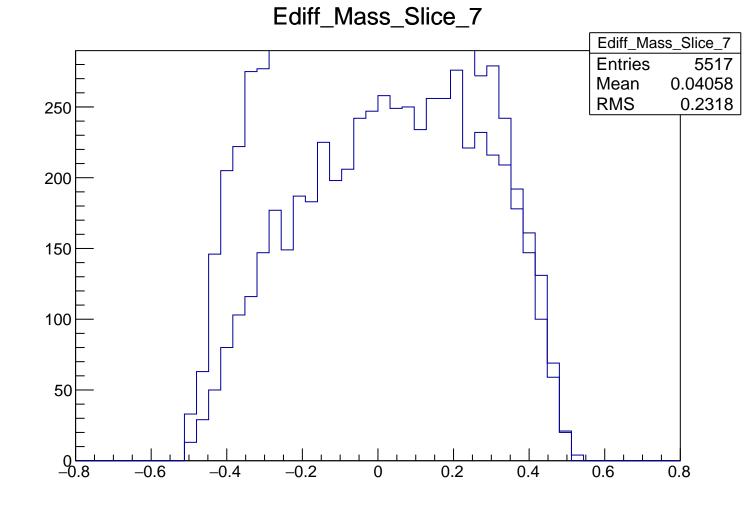




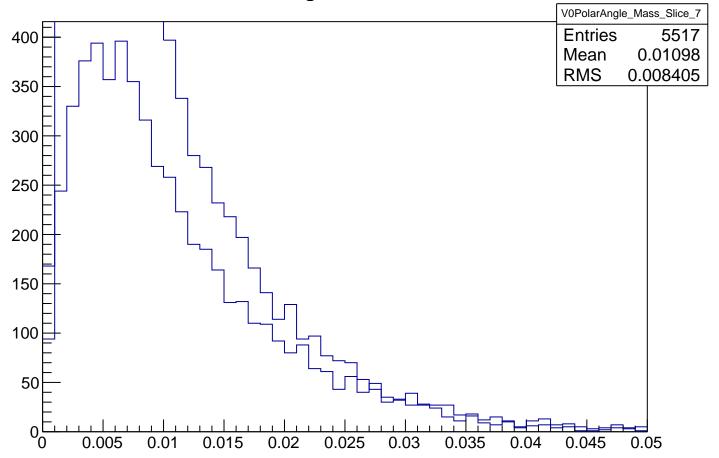


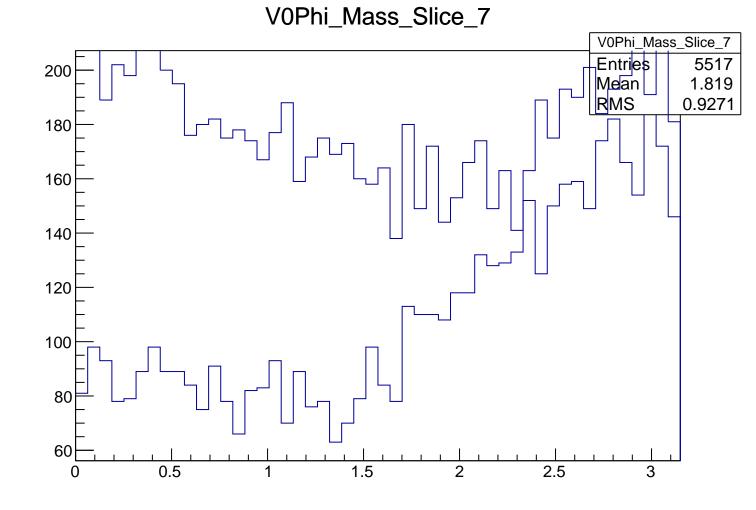
Coplanarity_Mass_Slice_7



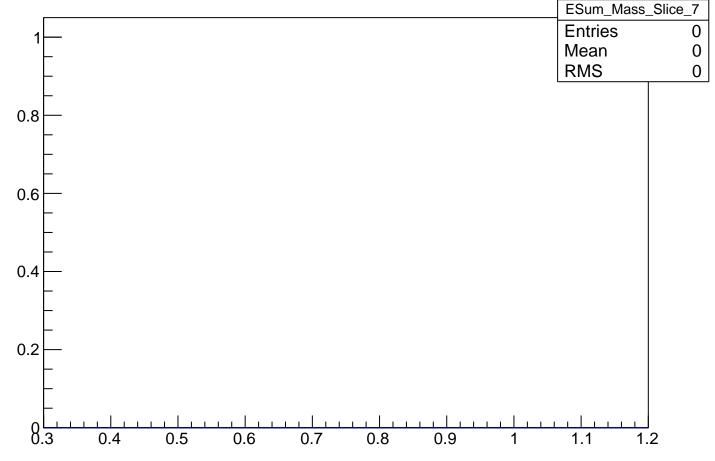


V0PolarAngle_Mass_Slice_7





ESum_Mass_Slice_7



vertX_Mass_Slice_7 vertX_Mass_Slice_7 **Entries** 5517 2000 Mean 0.001462 **RMS** 0.1608 1800 1600 1400 1200 1000 800 600 400 200 0^L

vertY_Mass_Slice_7 vertY_Mass_Slice_7 3000 **Entries** 5517 -0.007655Mean RMS 0.0466 2500 2000 1500 1000 500 -0.5 -1.50.5 1.5

vertZ_Mass_Slice_7 vertZ_Mass_Slice_7 600 **Entries** 5517 Mean -0.5314**RMS** 4.021 500 400 300 200 100 0 -50

10

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50

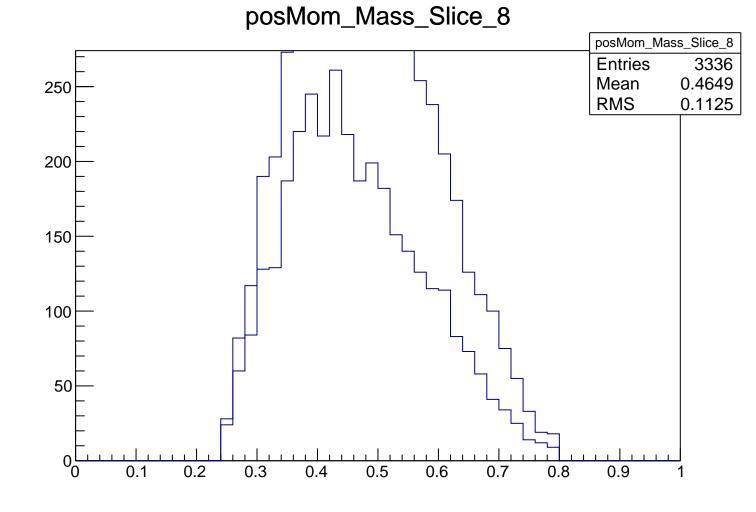
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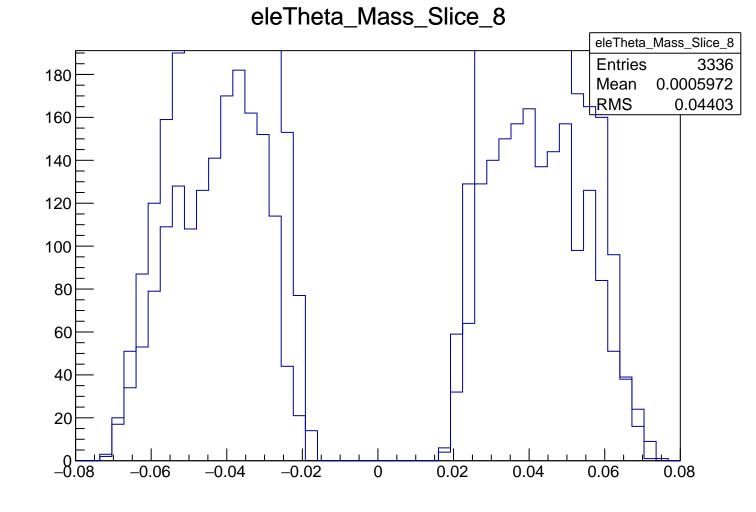
-20

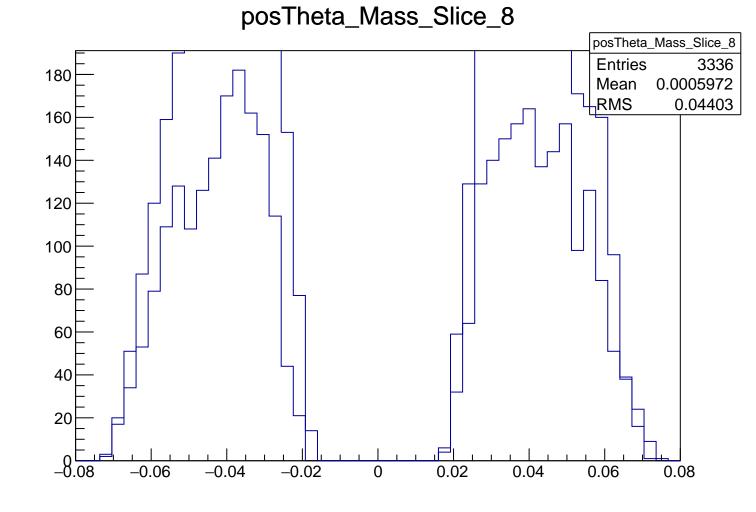
-10

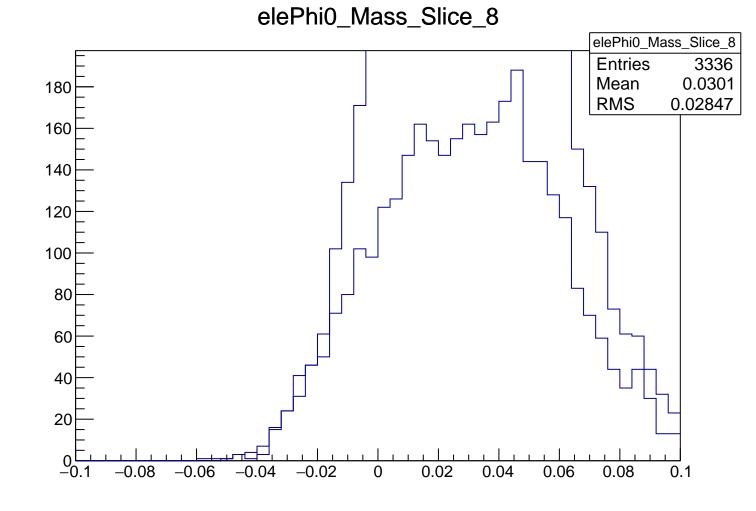
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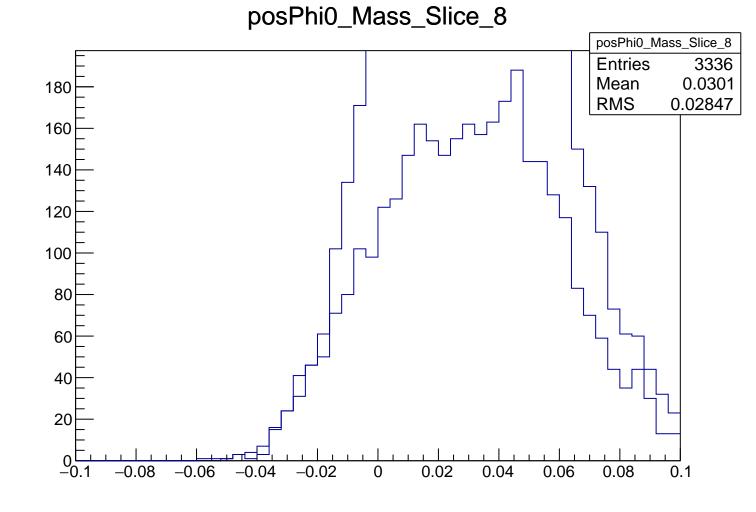
eleMom_Mass_Slice_8 eleMom_Mass_Slice_8 **Entries** 3336 200 Mean 0.5079 **RMS** 0.1211 180 160 140 120 100 80 60 40 20 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9



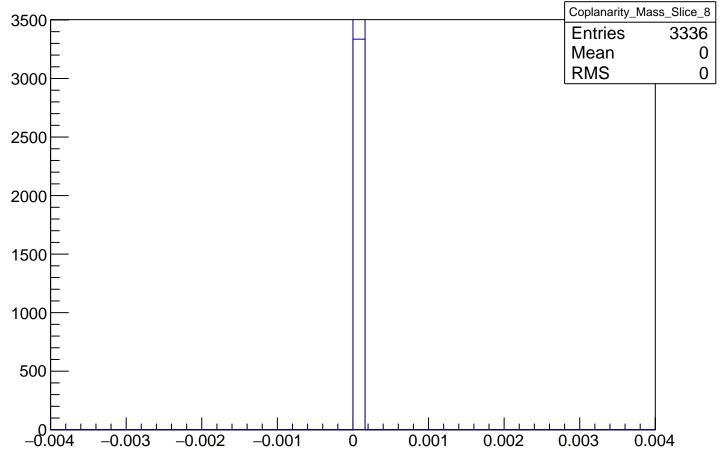


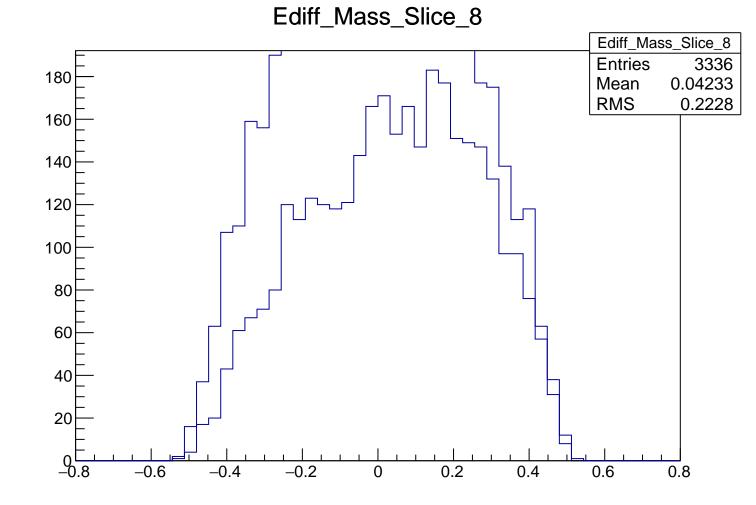




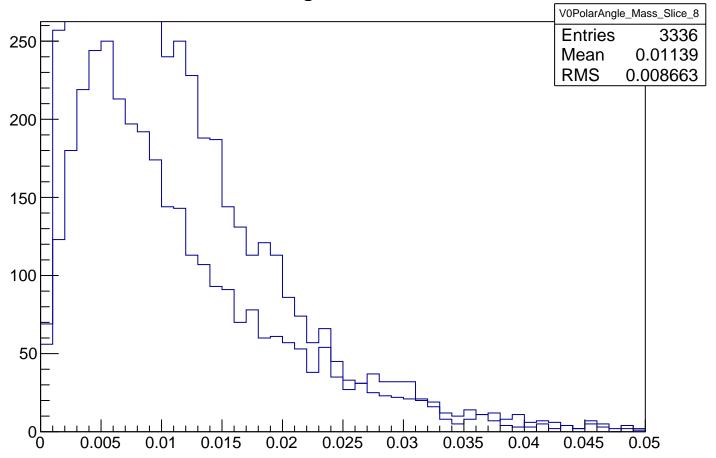


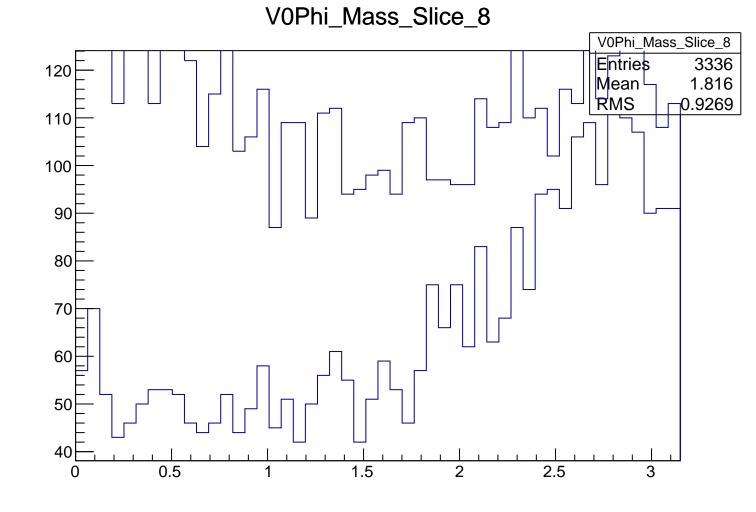
Coplanarity_Mass_Slice_8



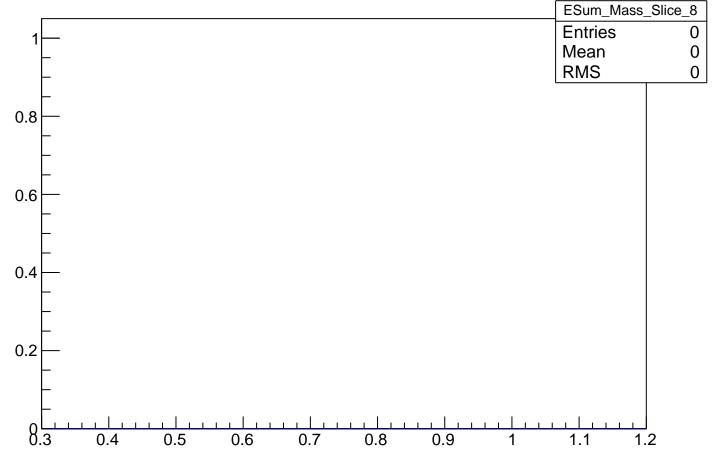


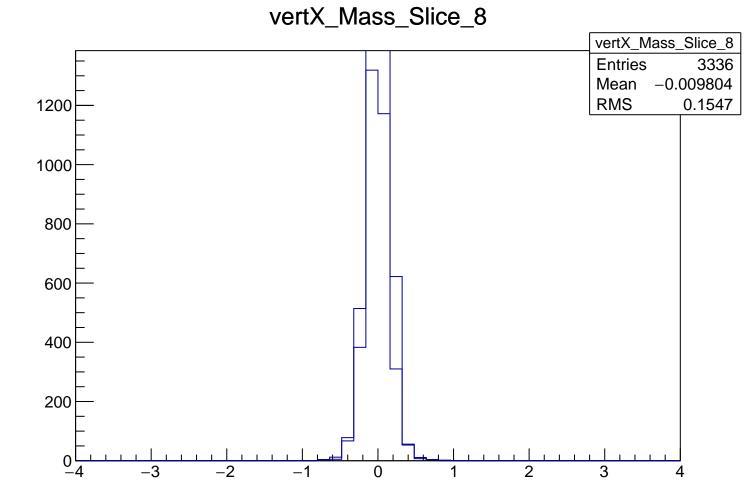
V0PolarAngle_Mass_Slice_8





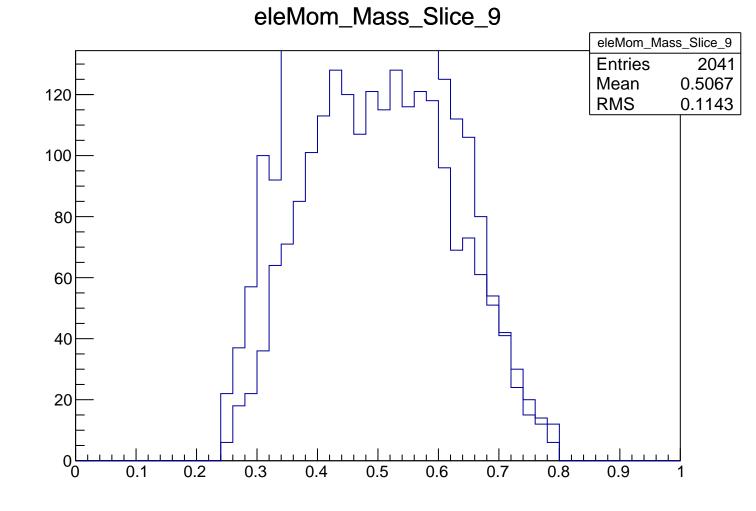
ESum_Mass_Slice_8

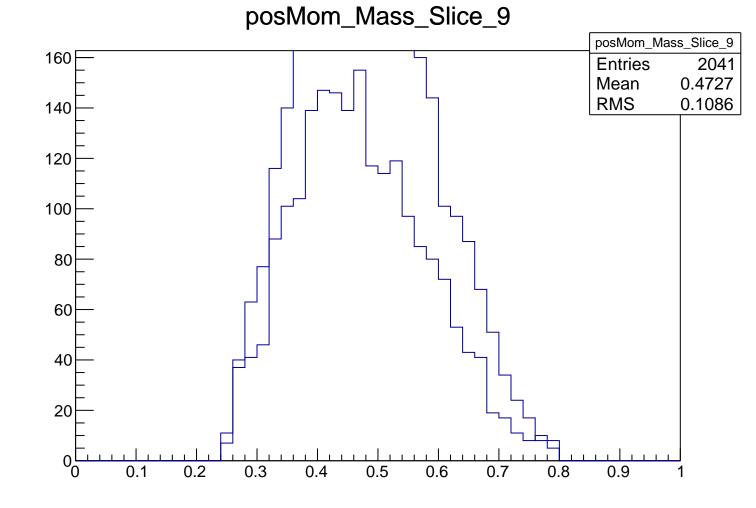


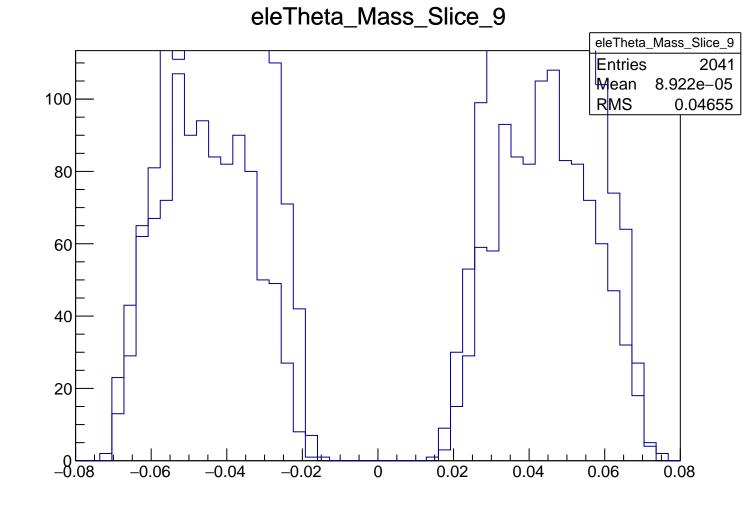


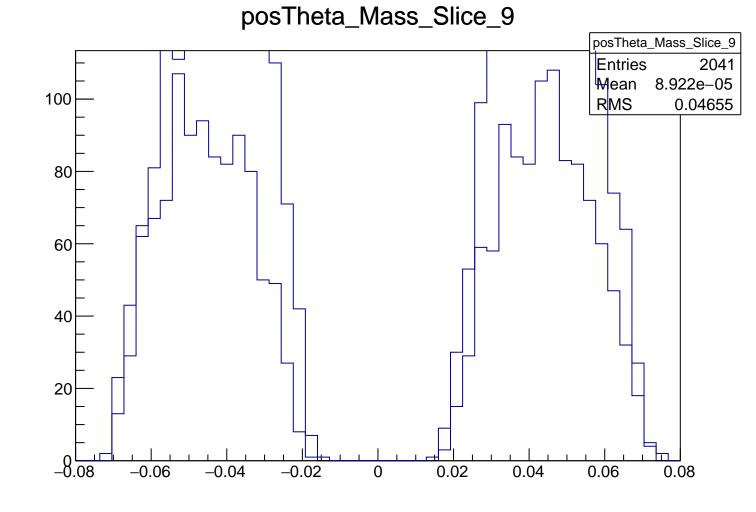
vertY_Mass_Slice_8 vertY_Mass_Slice_8 **Entries** 3336 Mean -0.0047641600 **RMS** 0.04343 1400 1200 1000 800 600 400 200 -0.5 1.5 -1.50.5

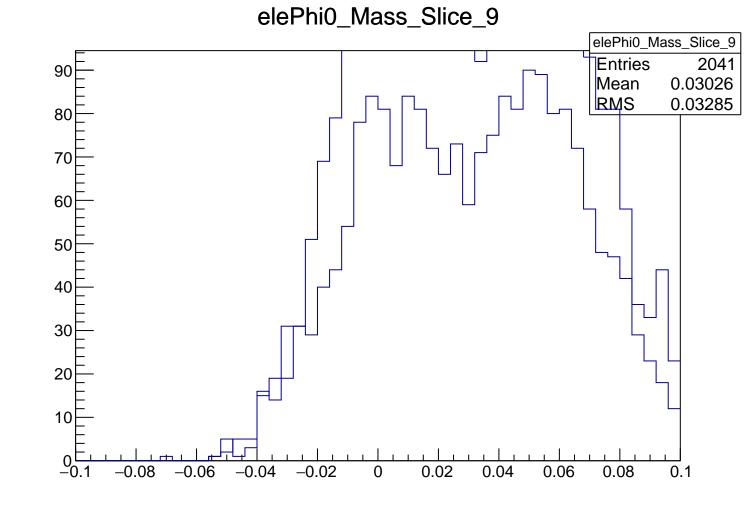
vertZ_Mass_Slice_8 vertZ_Mass_Slice_8 **Entries** 3336 400 Mean -0.8106**RMS** 3.791 350 300 250 200 150 100 50 0 −50 -30 -40-20 -1010 20 30 40 50

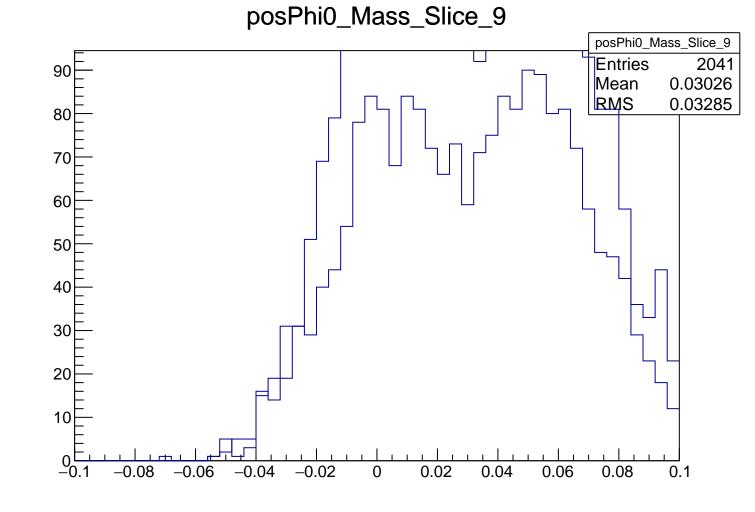




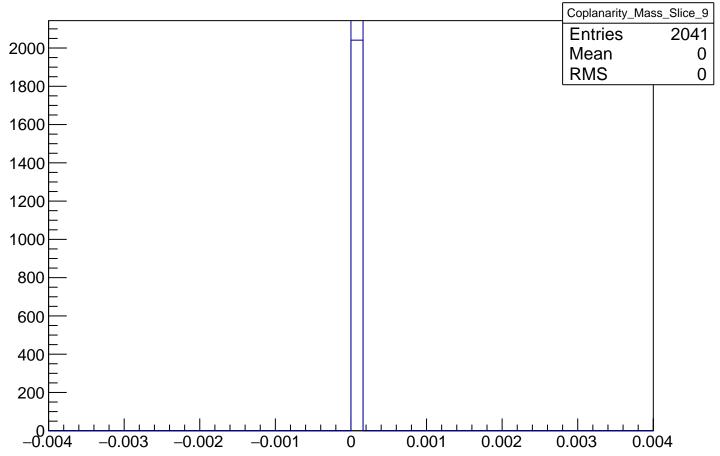


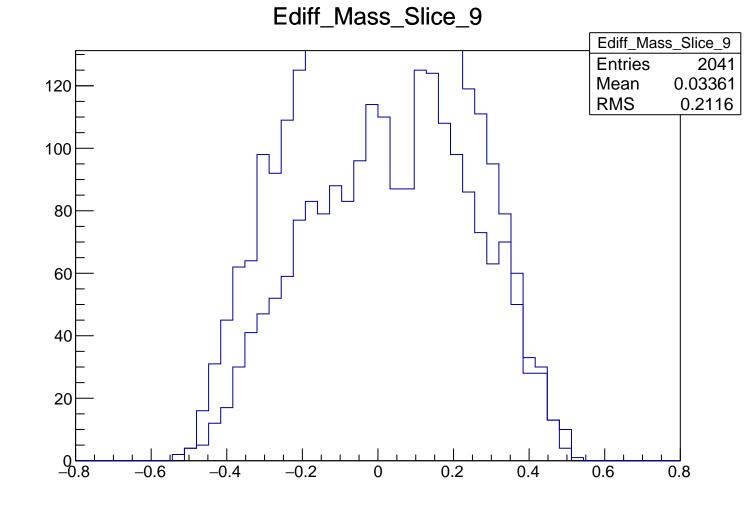




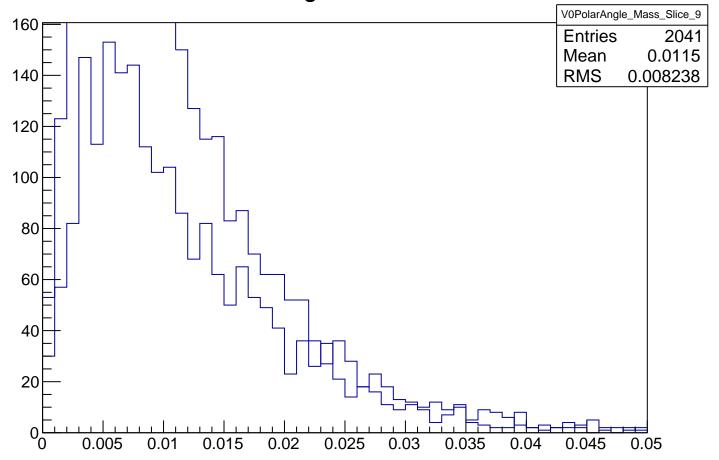


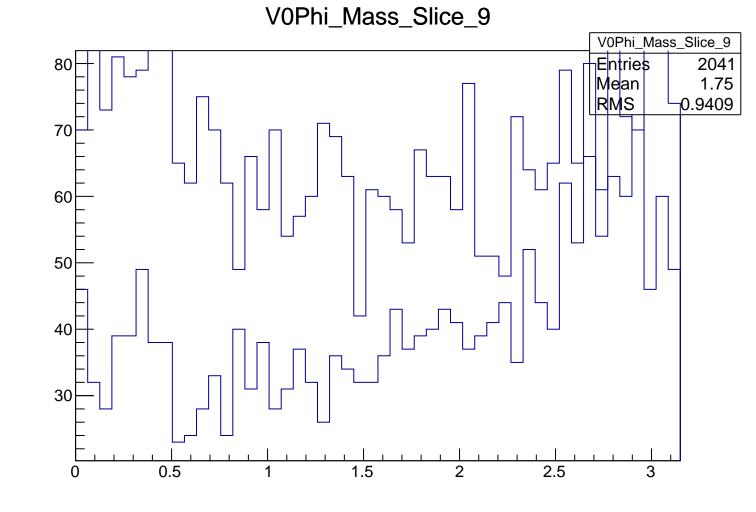
Coplanarity_Mass_Slice_9



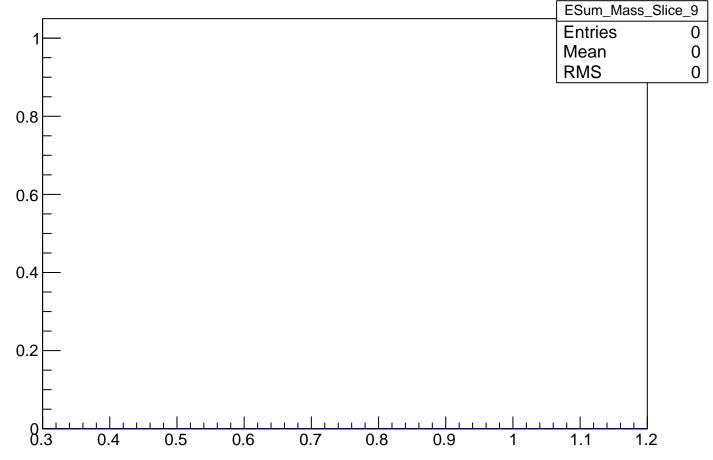


V0PolarAngle_Mass_Slice_9

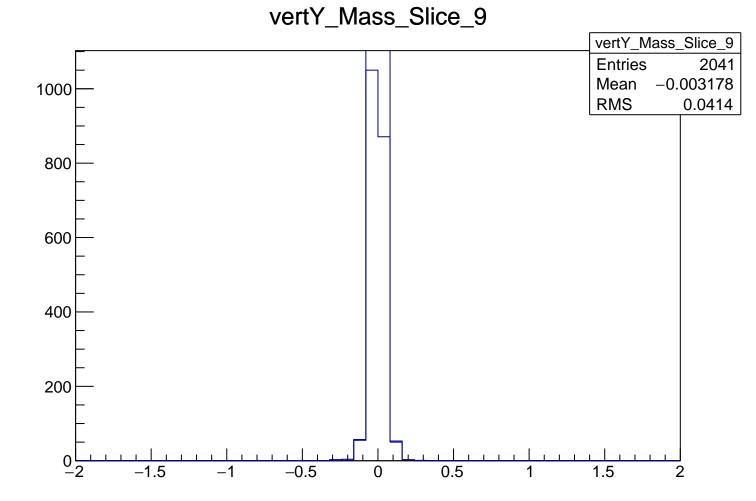




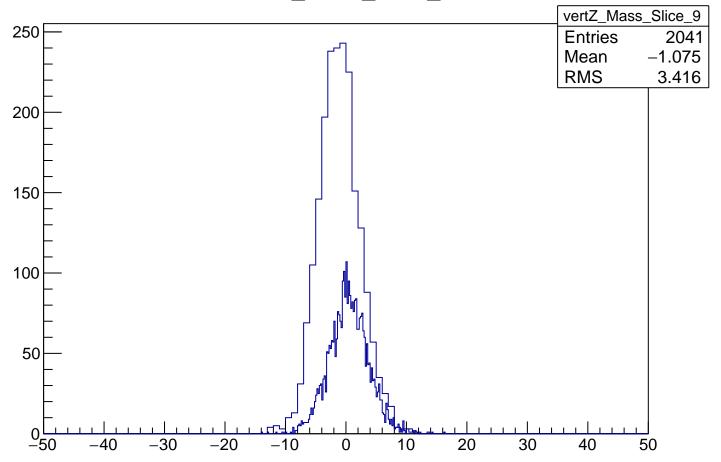
ESum_Mass_Slice_9

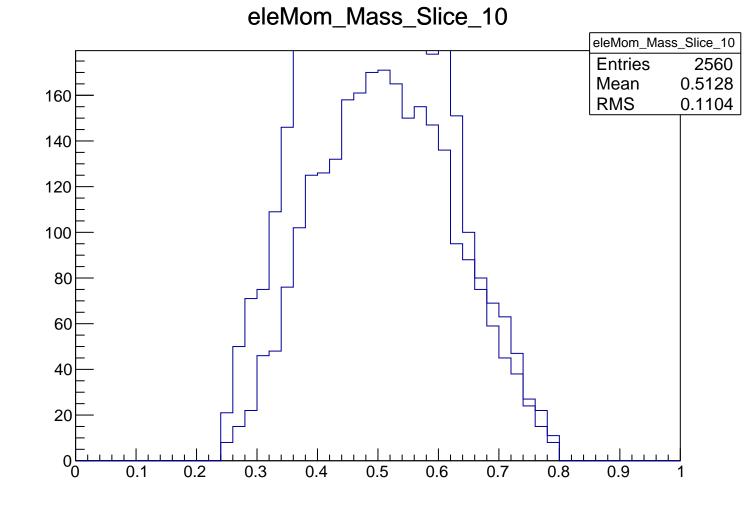


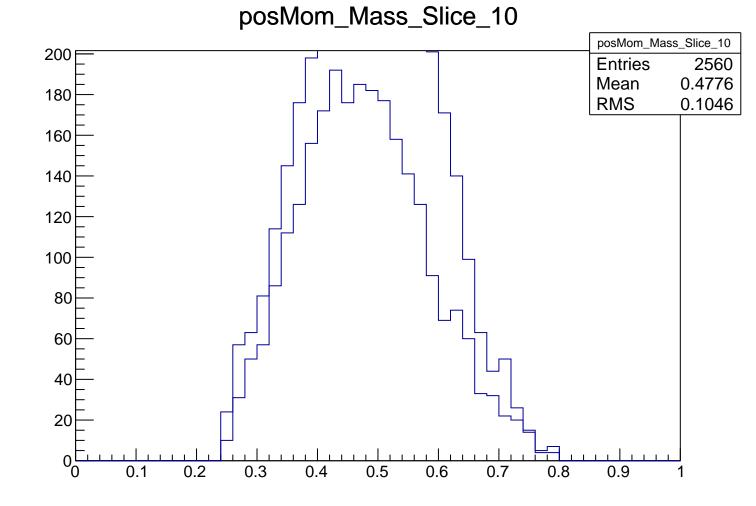
vertX_Mass_Slice_9 vertX_Mass_Slice_9 900 **Entries** 2041 -0.01579Mean 800 **RMS** 0.1468 700 600 500 400 300 200 100 0^L

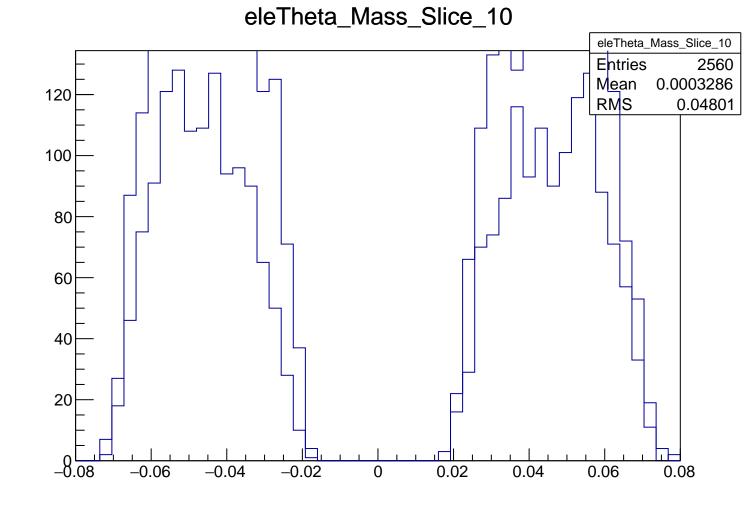


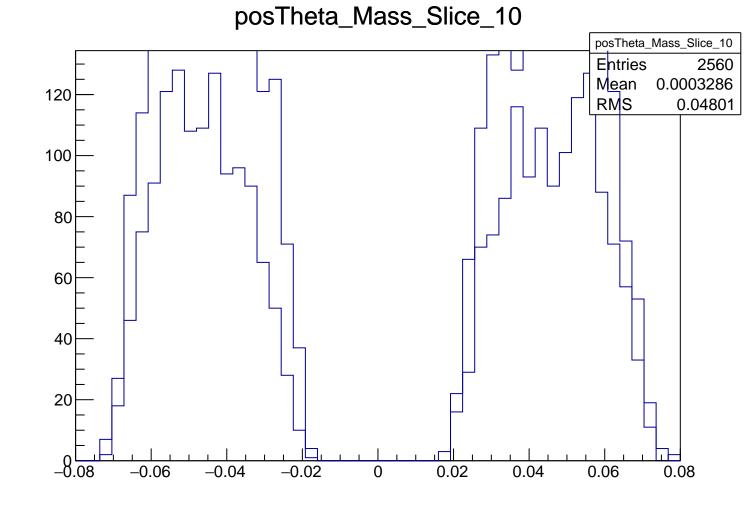
vertZ_Mass_Slice_9

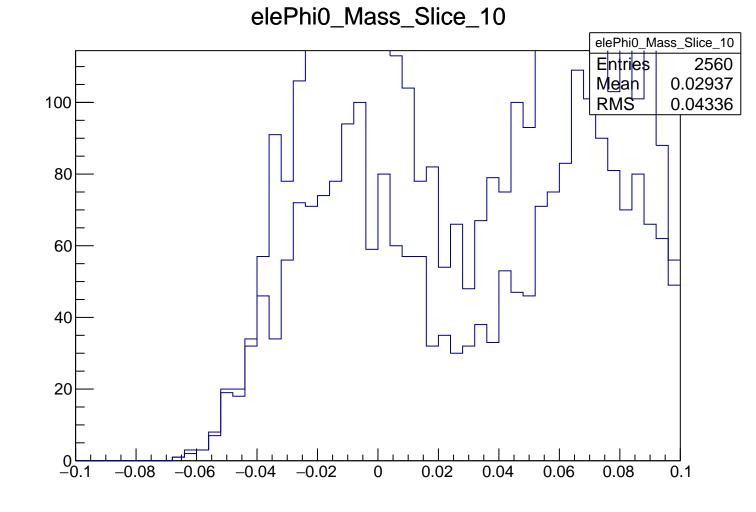


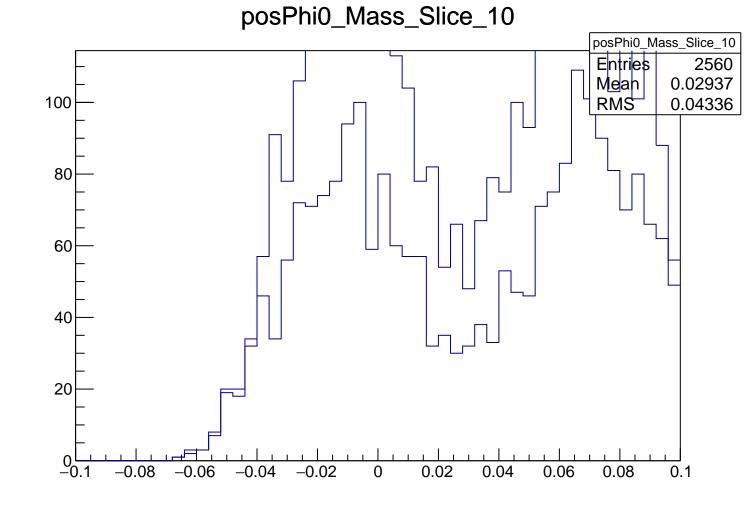




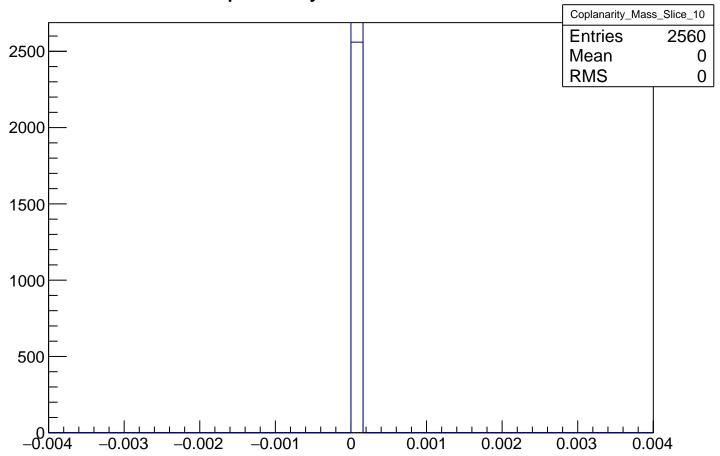


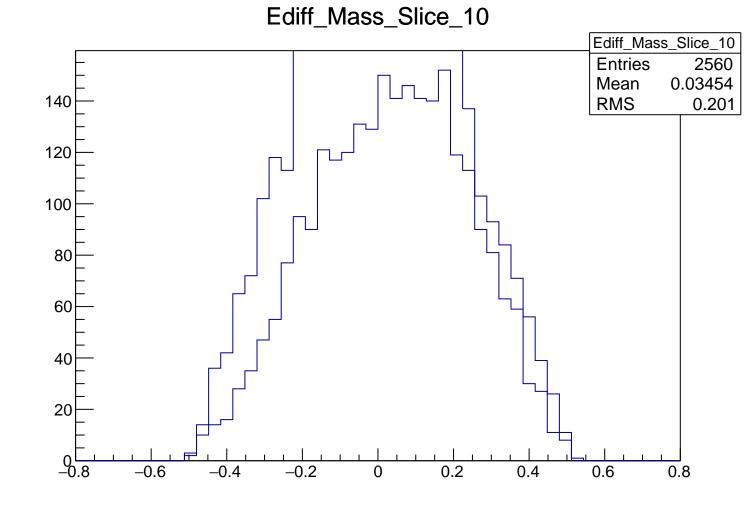




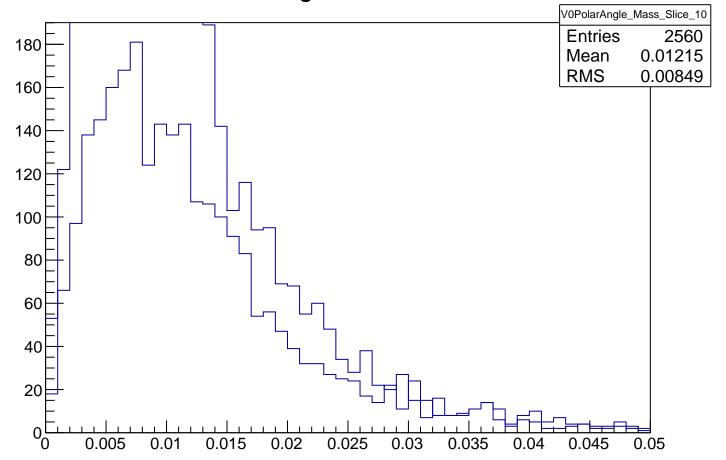


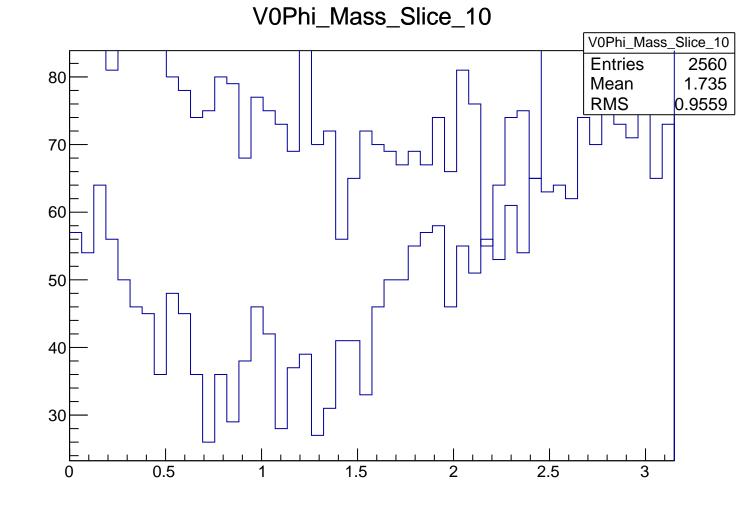
Coplanarity_Mass_Slice_10



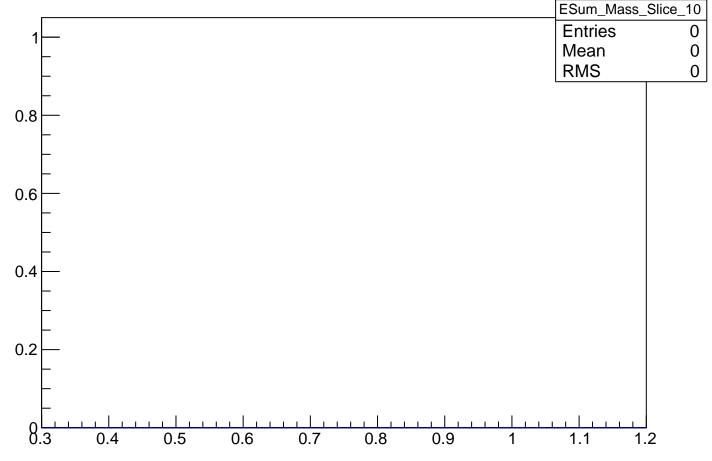


V0PolarAngle_Mass_Slice_10





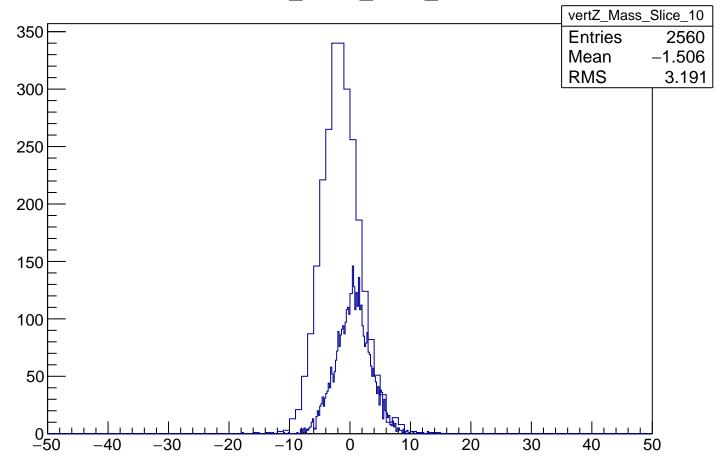
ESum_Mass_Slice_10



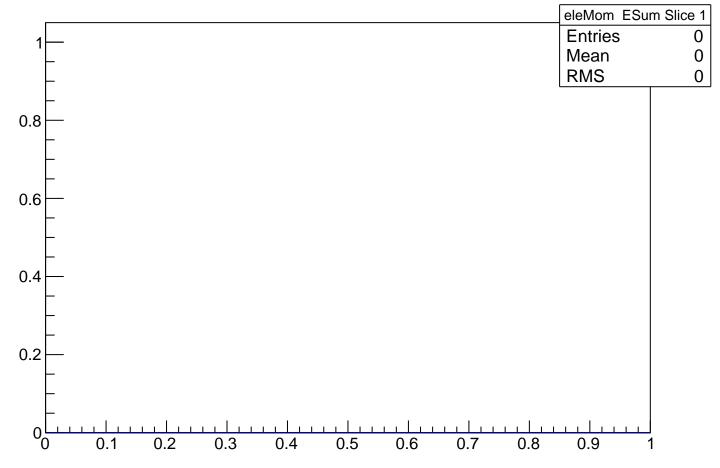
vertX_Mass_Slice_10 vertX_Mass_Slice_10 **Entries** 2560 -0.02578Mean **RMS** 0.1565 1000 800 600 400 200 $_{-4}^{0}$

vertY_Mass_Slice_10 vertY_Mass_Slice_10 **Entries** 2560 -0.003175Mean 1200 **RMS** 0.04114 1000 800 600 400 200 -1.5 -0.5 0.5 1.5

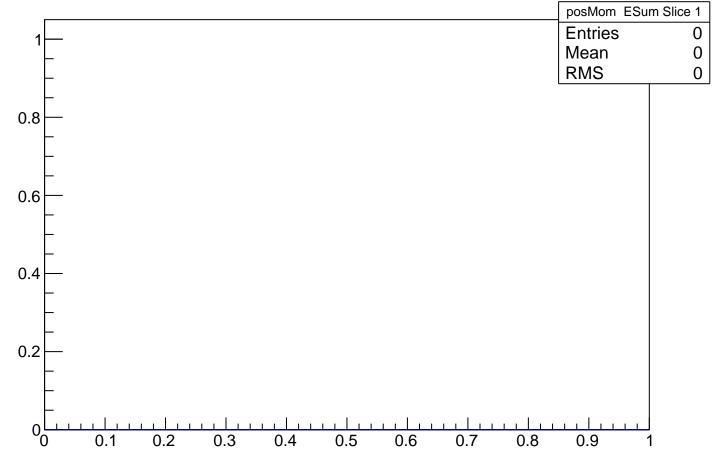
vertZ_Mass_Slice_10



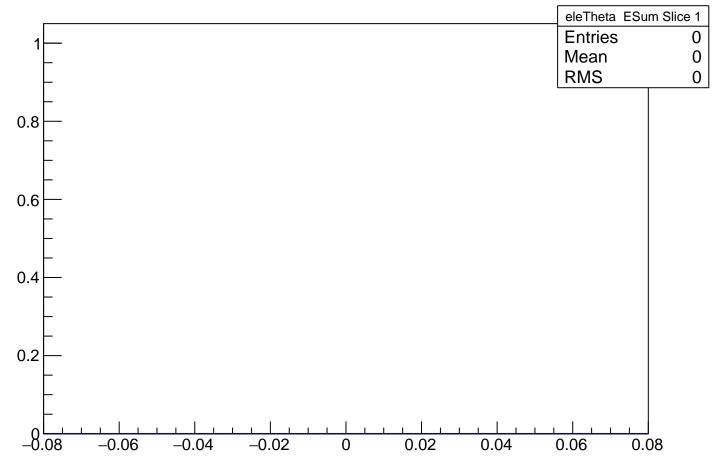
eleMom ESum Slice 1



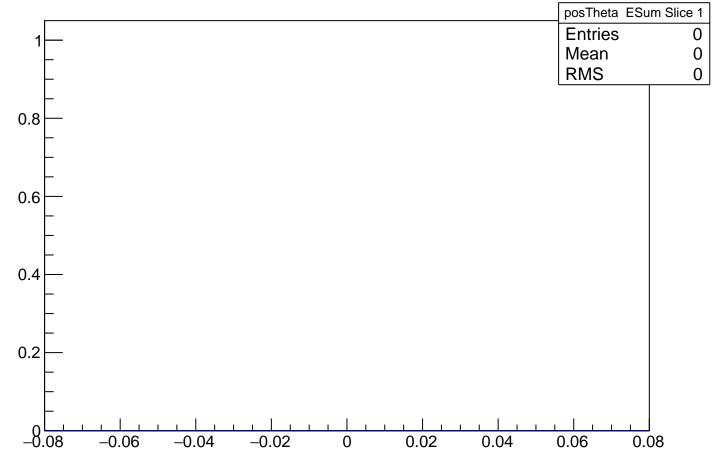
posMom ESum Slice 1



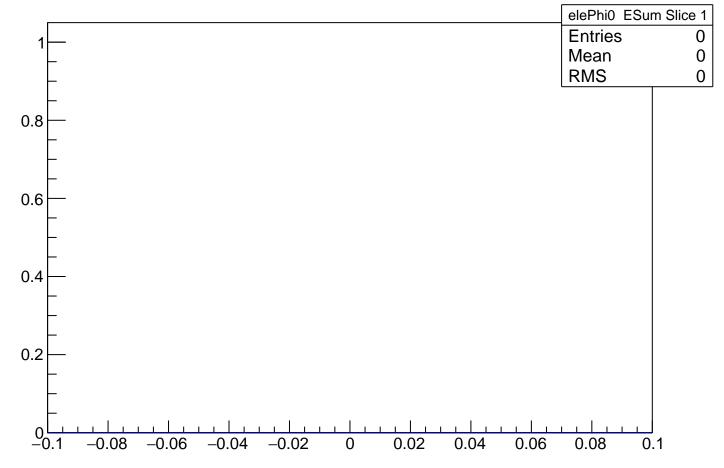
eleTheta ESum Slice 1



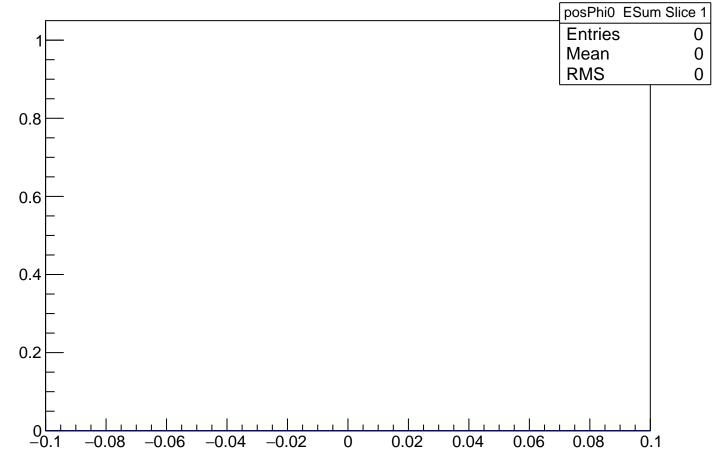
posTheta ESum Slice 1



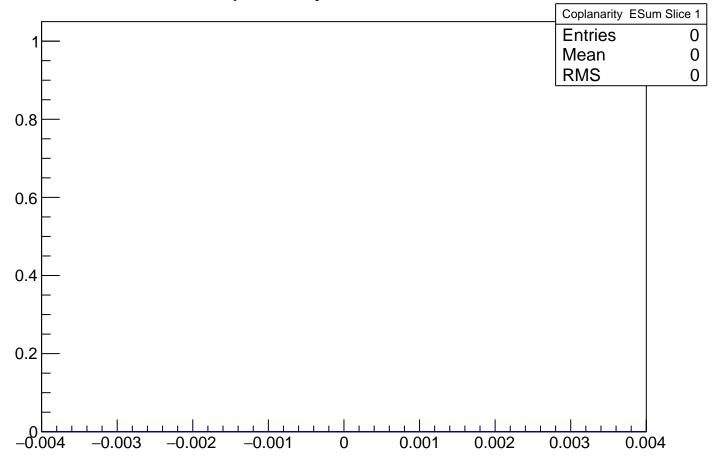
elePhi0 ESum Slice 1



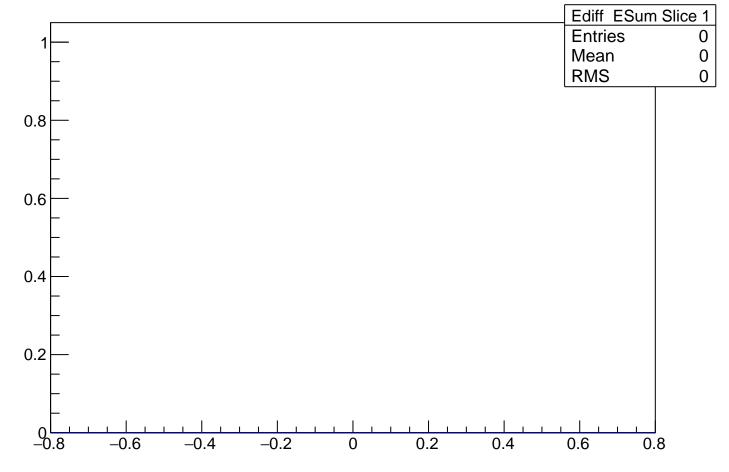
posPhi0 ESum Slice 1



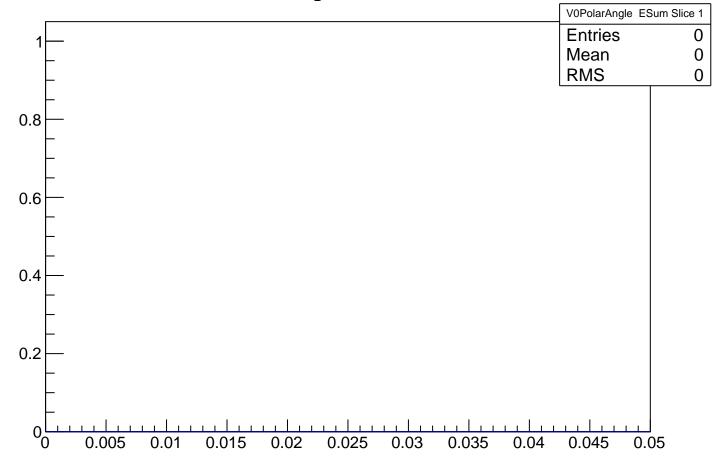
Coplanarity ESum Slice 1



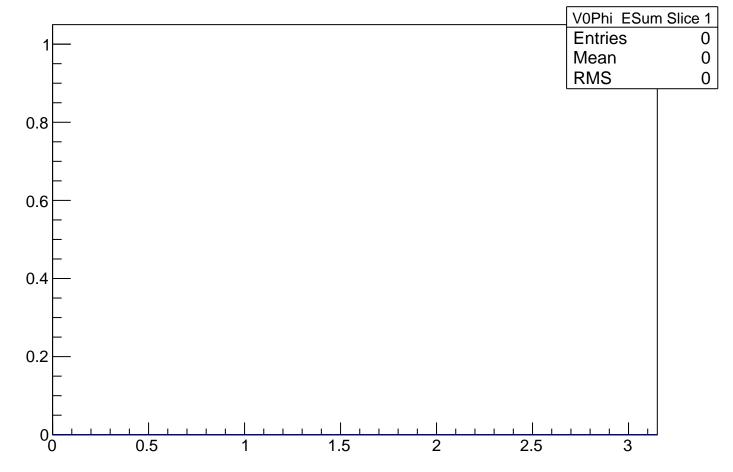
Ediff ESum Slice 1



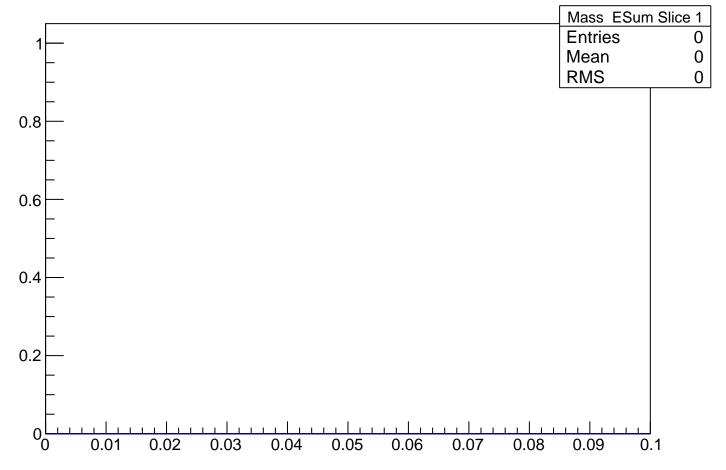
V0PolarAngle ESum Slice 1



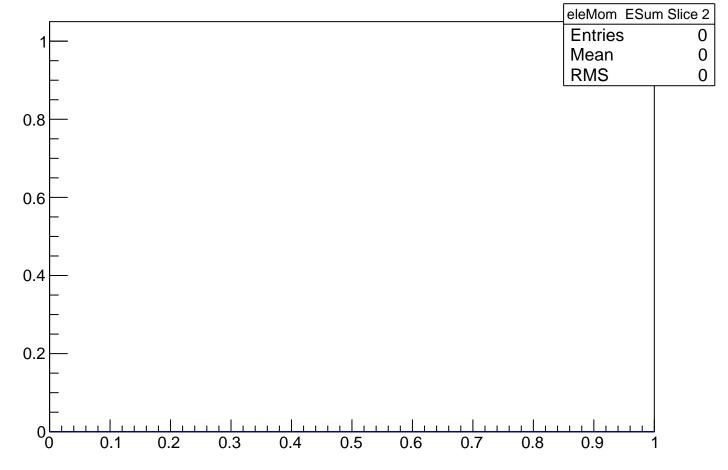
V0Phi ESum Slice 1



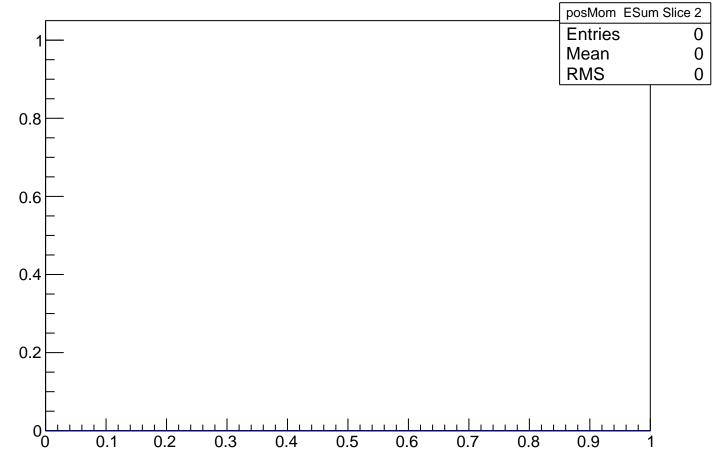
Mass ESum Slice 1



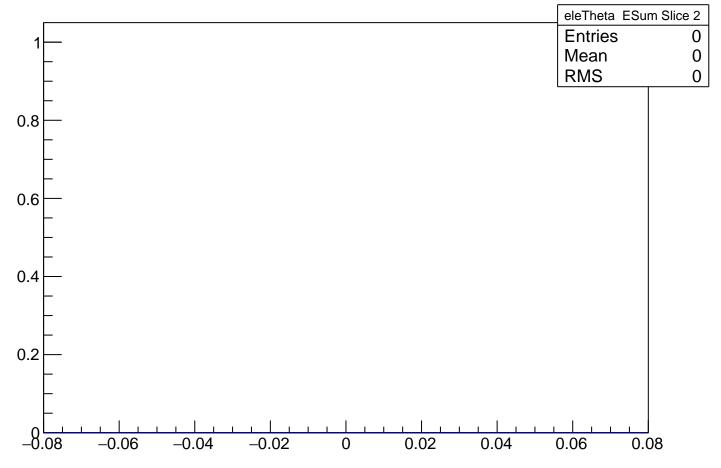
eleMom ESum Slice 2



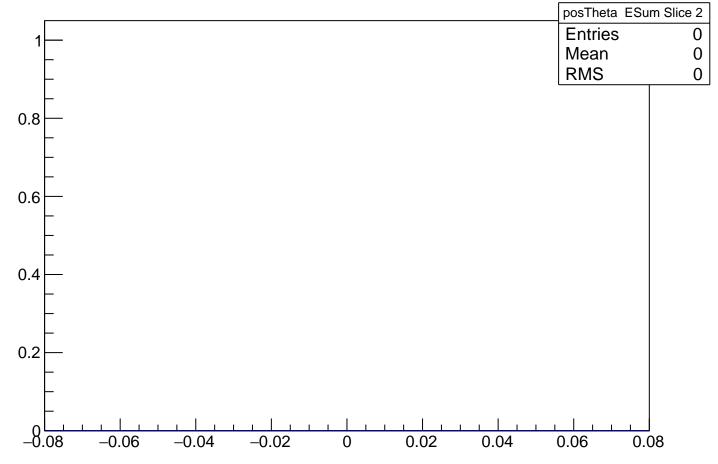
posMom ESum Slice 2



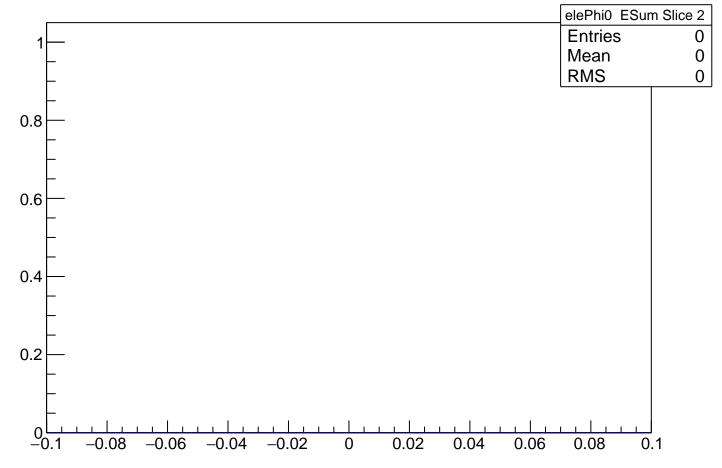
eleTheta ESum Slice 2



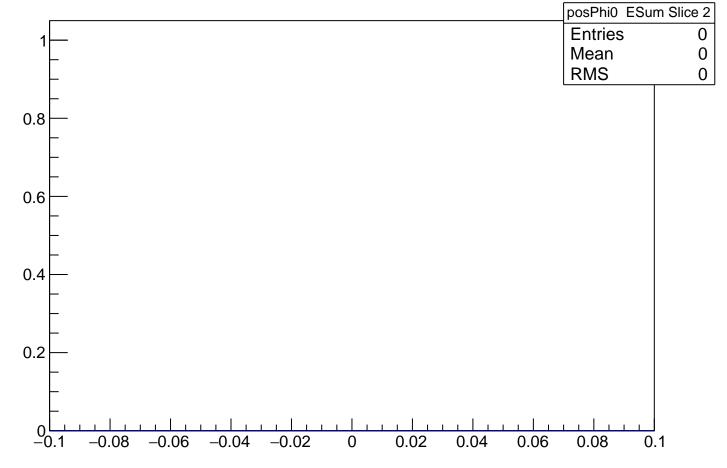
posTheta ESum Slice 2



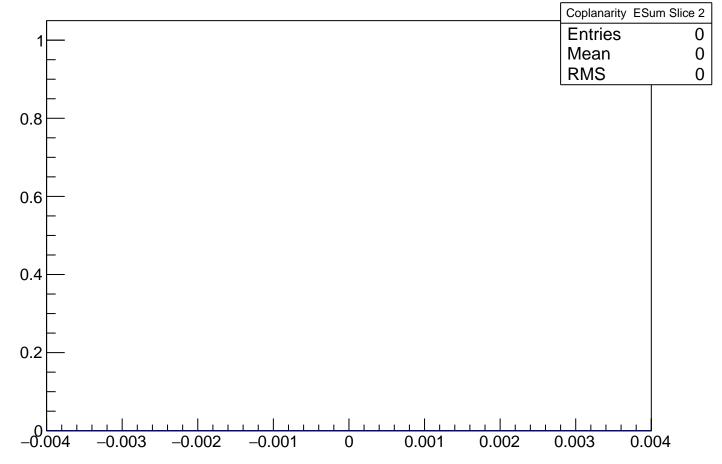
elePhi0 ESum Slice 2



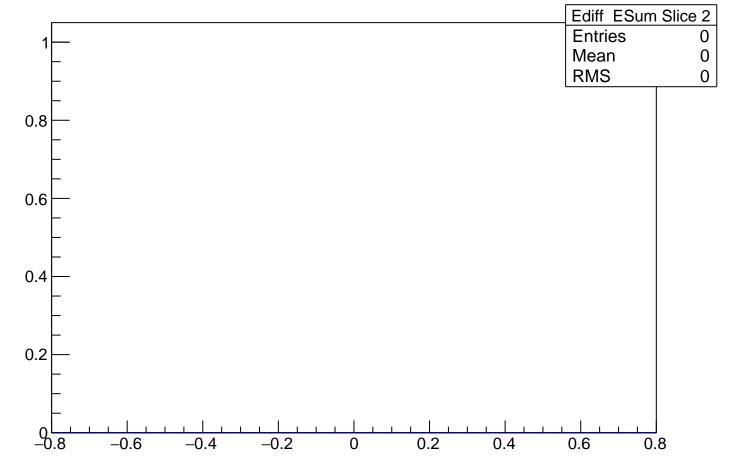
posPhi0 ESum Slice 2



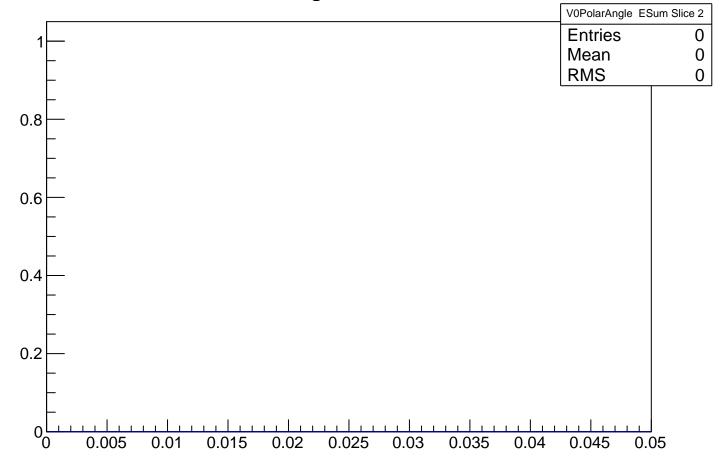
Coplanarity ESum Slice 2



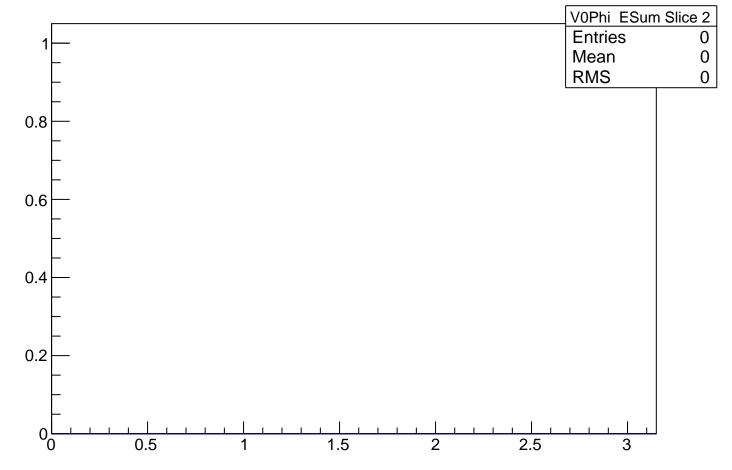
Ediff ESum Slice 2



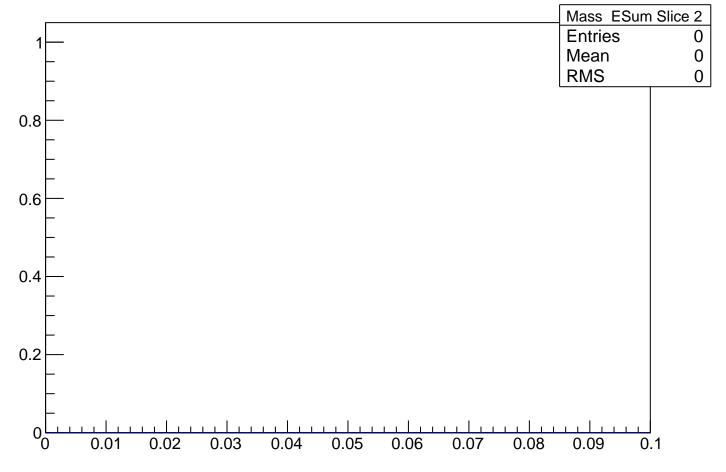
V0PolarAngle ESum Slice 2



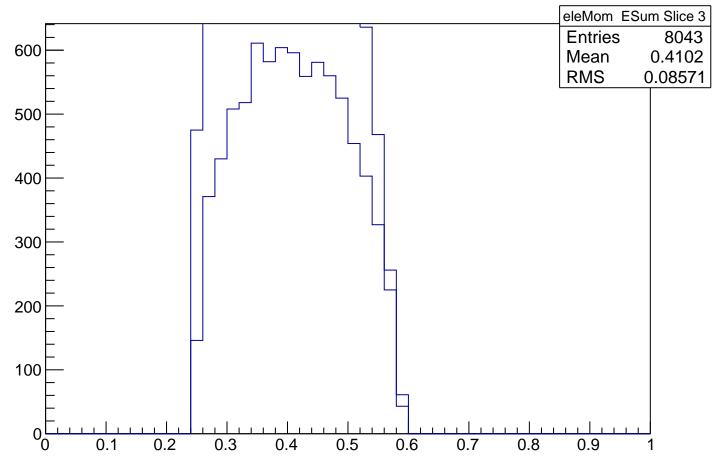
V0Phi ESum Slice 2



Mass ESum Slice 2

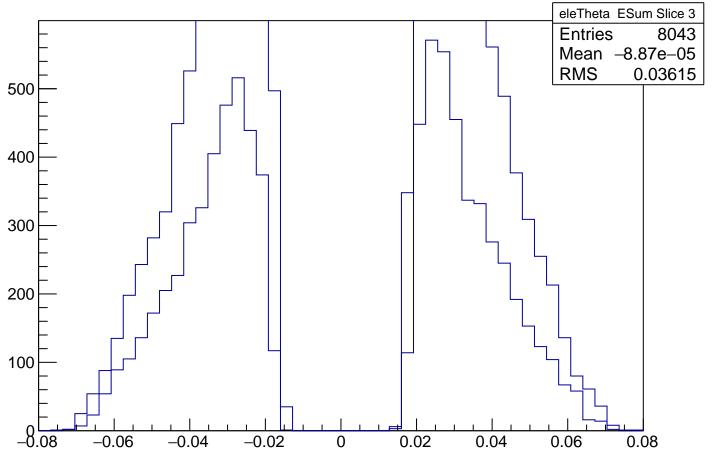


eleMom ESum Slice 3



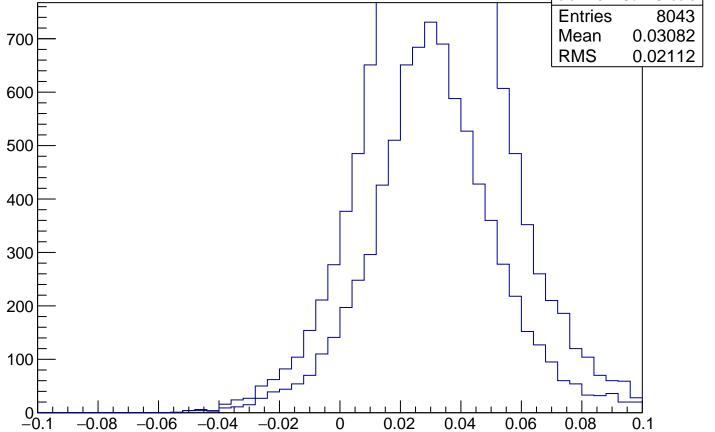
posMom ESum Slice 3 posMom ESum Slice 3 **Entries** 8043 Mean 0.4151 600 **RMS** 0.08574 500 400 300 200 100 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9

eleTheta ESum Slice 3

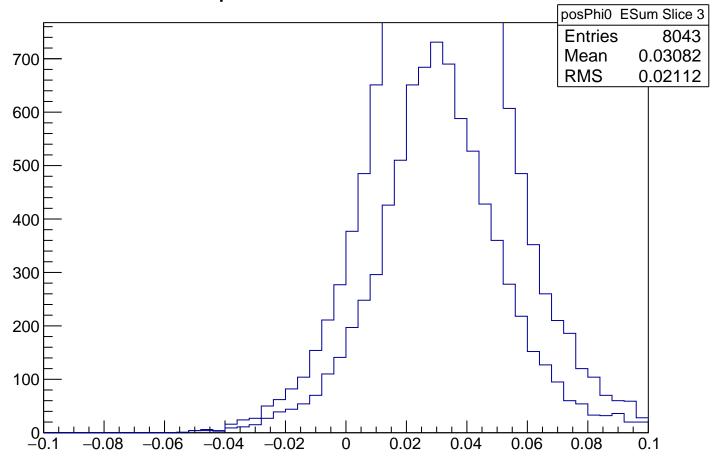


posTheta ESum Slice 3 posTheta ESum Slice 3 **Entries** 8043 Mean -8.87e-05 RMS 0.03615 500 400 300 200 100 -8.08 $-0.0\overline{6}$ -0.04 -0.020.02 0.06 0.04 0.08

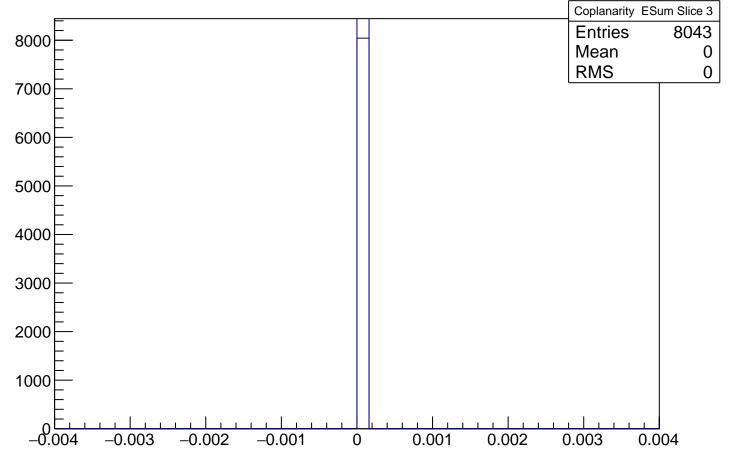
elePhi0 ESum Slice 3 elePhi0 ESum Slice 3 **Entries** 8043 0.03082 Mean 0.02112 RMS



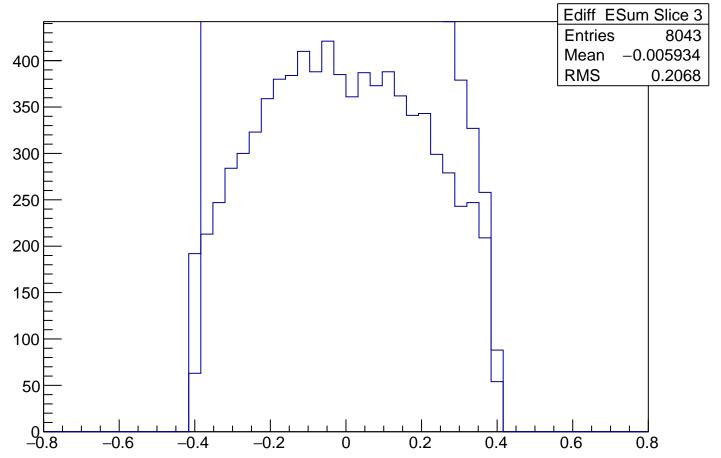
posPhi0 ESum Slice 3



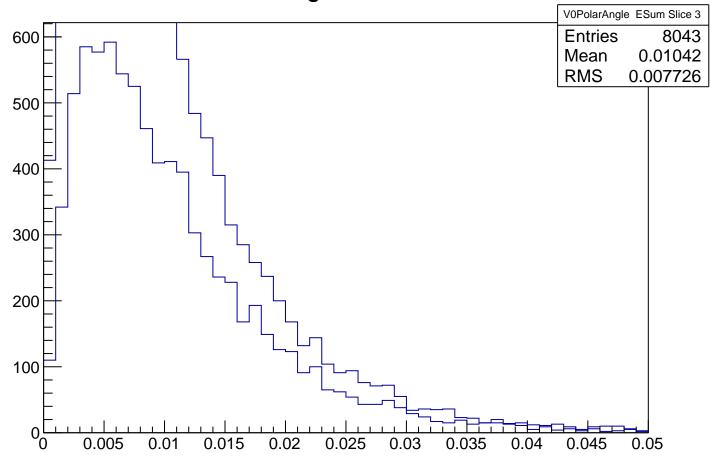
Coplanarity ESum Slice 3



Ediff ESum Slice 3

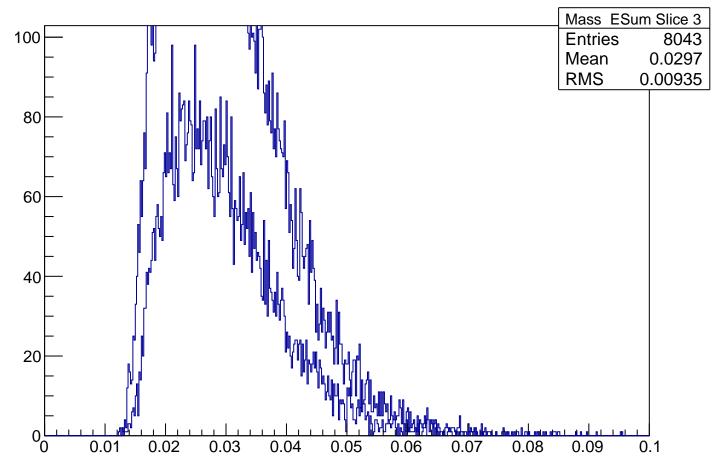


V0PolarAngle ESum Slice 3

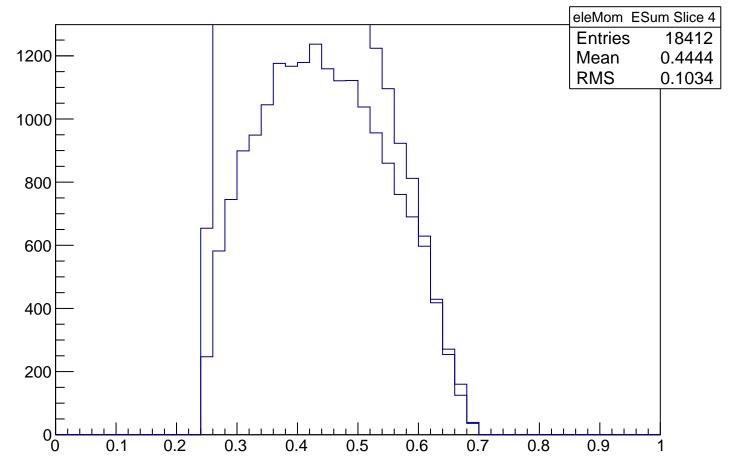


V0Phi ESum Slice 3 V0Phi ESum Slice 3 **Entries** 8043 Mean 1.841 280 RMS 0.9551 260 240 220 200 180 160 140 120 100 1.5 0.5 2.5

Mass ESum Slice 3

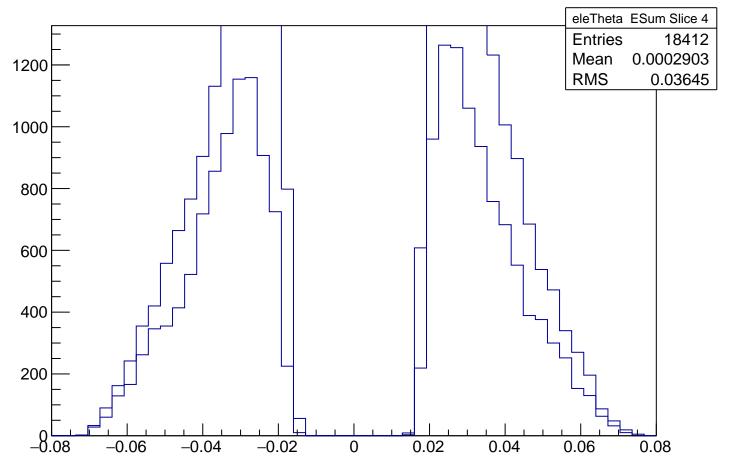


eleMom ESum Slice 4



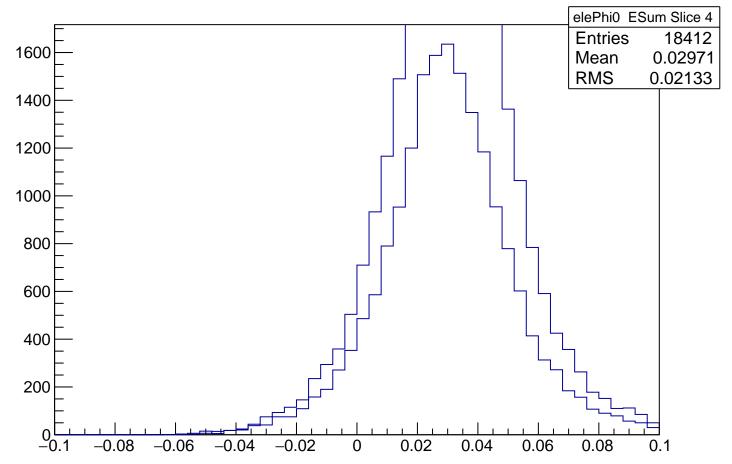
posMom ESum Slice 4 posMom ESum Slice 4 **Entries** 18412 1200 Mean 0.4573 **RMS** 0.1033 1000 800 600 400 200 0, 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9

eleTheta ESum Slice 4

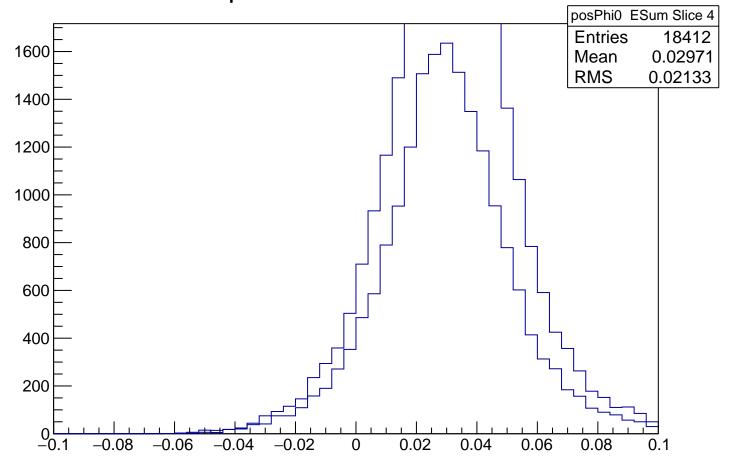


posTheta ESum Slice 4 posTheta ESum Slice 4 **Entries** 18412 0.0002903 Mean 1200 RMS 0.03645 1000 800 600 400 200 -8.08 -0.06 -0.04 -0.020.02 0.06 0.04 0.08

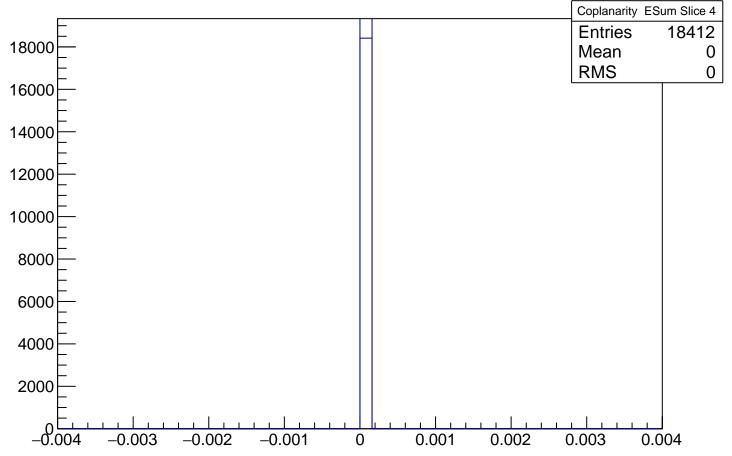
elePhi0 ESum Slice 4



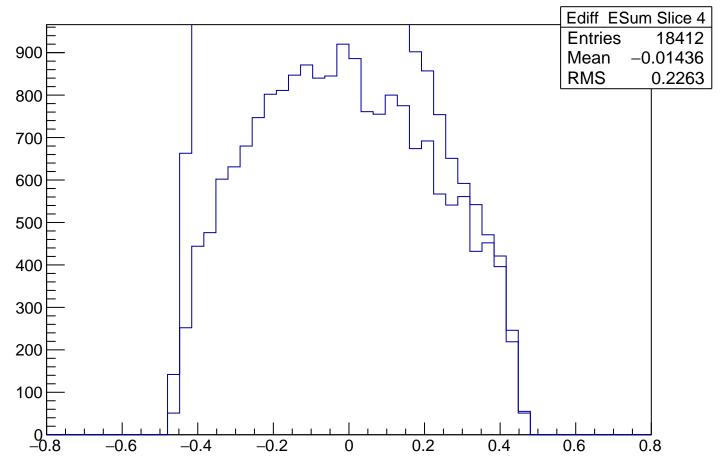
posPhi0 ESum Slice 4



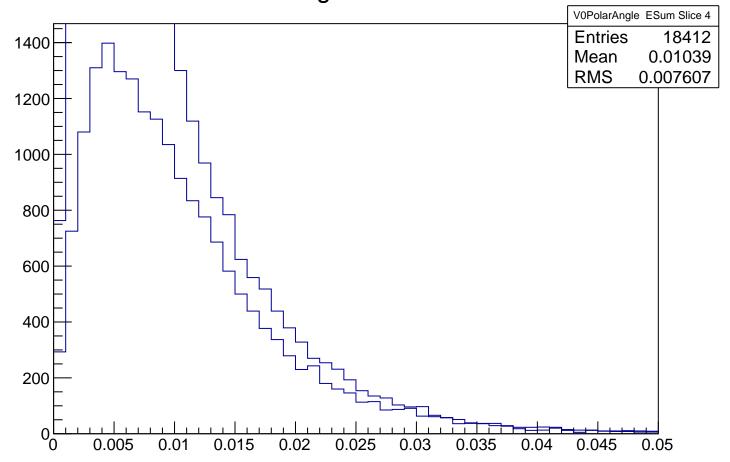
Coplanarity ESum Slice 4



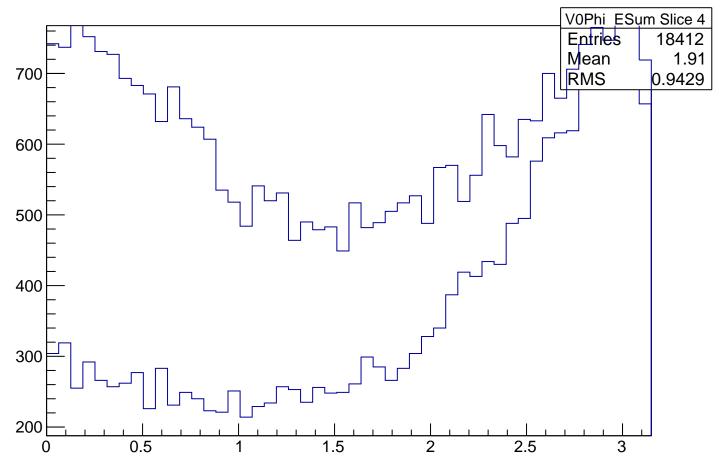
Ediff ESum Slice 4



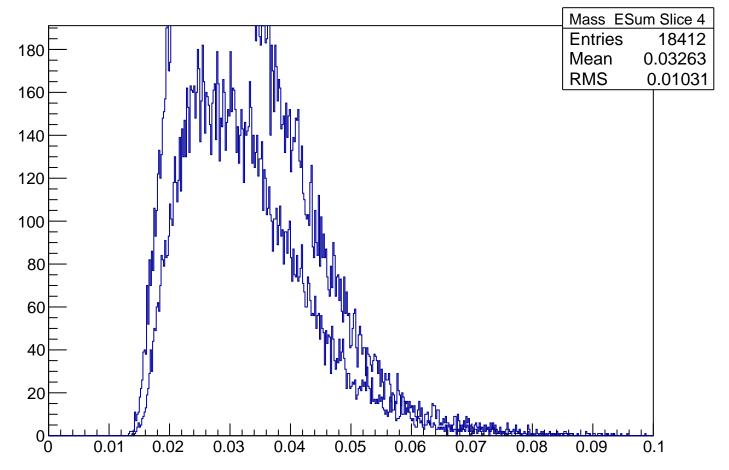
V0PolarAngle ESum Slice 4



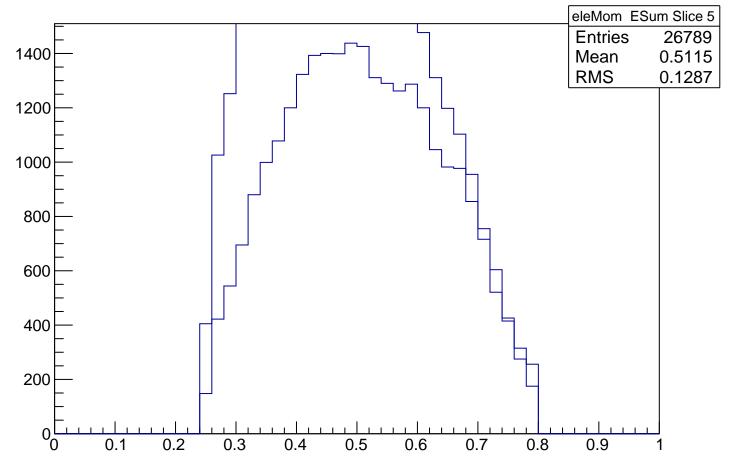
V0Phi ESum Slice 4



Mass ESum Slice 4

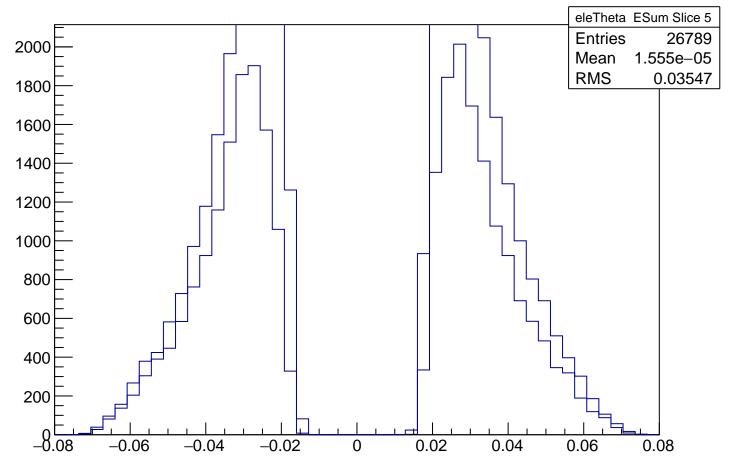


eleMom ESum Slice 5



posMom ESum Slice 5 posMom ESum Slice 5 **Entries** 26789 Mean 0.5045 1400 **RMS** 0.1256 1200 1000 800 600 400 200 0.2 0.3 0.1 0.4 0.5 0.6 0.7 8.0 0.9

eleTheta ESum Slice 5



posTheta ESum Slice 5 posTheta ESum Slice 5 **Entries** 26789 2000 1.555e-05 Mean **RMS** 0.03547 1800 1600 1400 1200 1000 800 600 400 200 -8.08

0.02

0.06

0.08

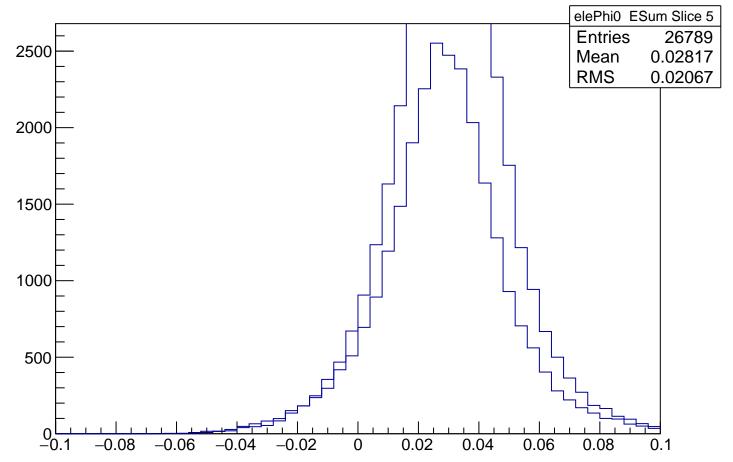
0.04

 $-0.0\overline{6}$

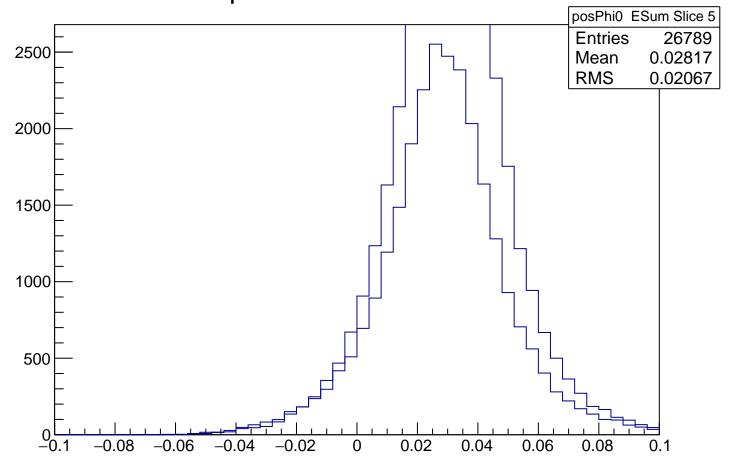
-0.04

-0.02

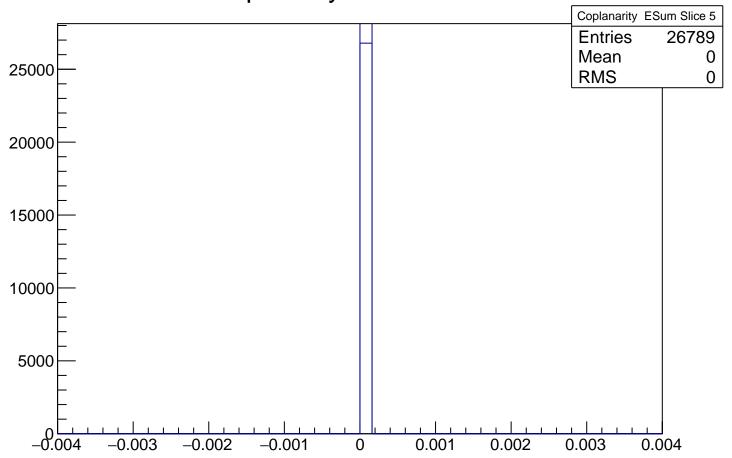
elePhi0 ESum Slice 5



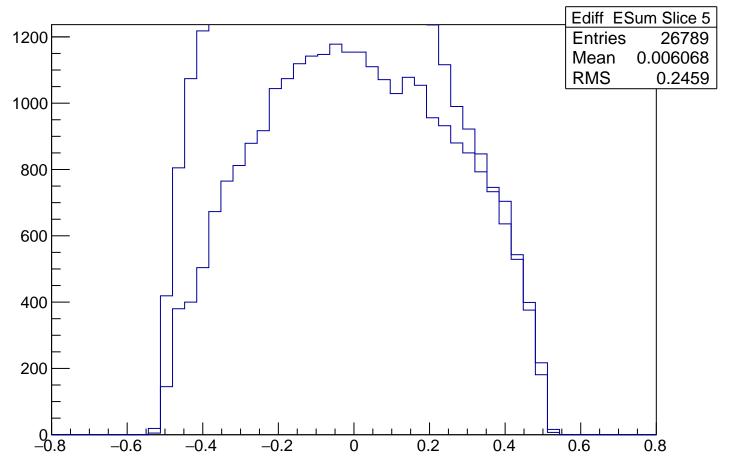
posPhi0 ESum Slice 5



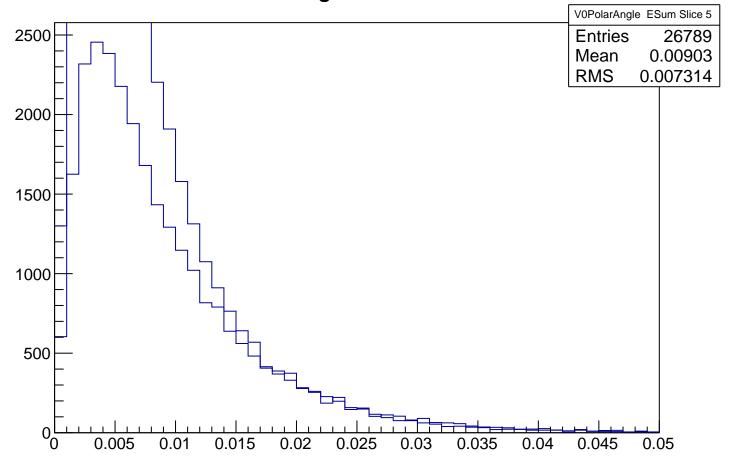
Coplanarity ESum Slice 5



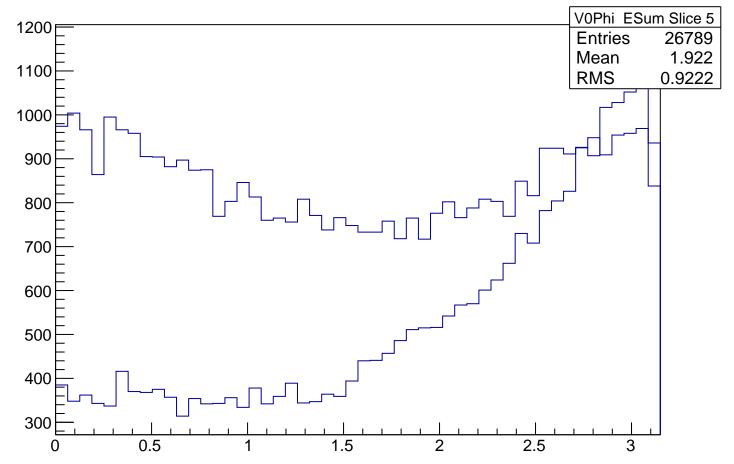
Ediff ESum Slice 5



V0PolarAngle ESum Slice 5



V0Phi ESum Slice 5



Mass ESum Slice 5

