Basic electron cuts

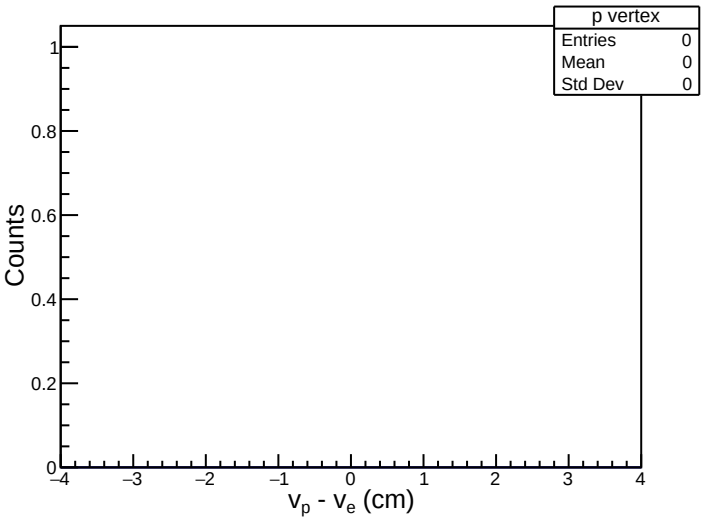
Deuterium run 015053

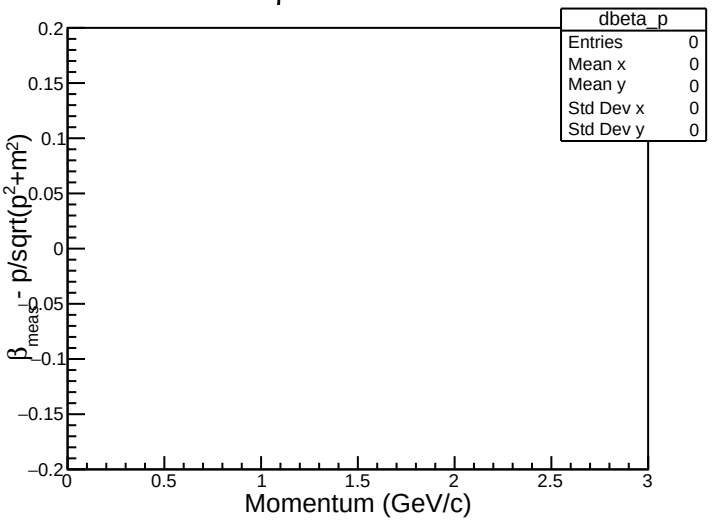
d(e,e'p)n

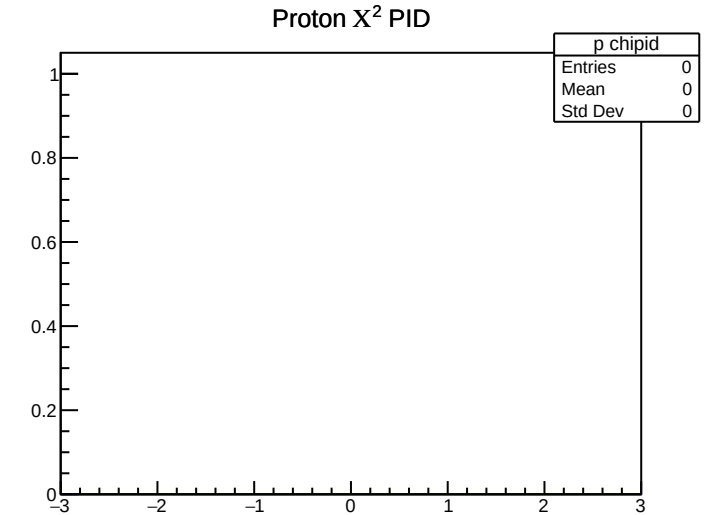
allow only PID=0,11,22,2212,2112

exactly 1p, 1e

proton in FD


Proton vertex - electron vertex
p vertex
Entries 0
Mean 0
Std Dev 0
Counts
v_p - v_e (cm)


Δ β vs Momentum
dbeta_p
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
β_{meas} - p/sqrt(p²+m²)
Momentum (GeV/c)


Proton X^2 PID
p chipid
Entries 0
Mean 0
Std Dev 0

Basic electron cuts

Deuterium run 015053

d(e,e'p)n

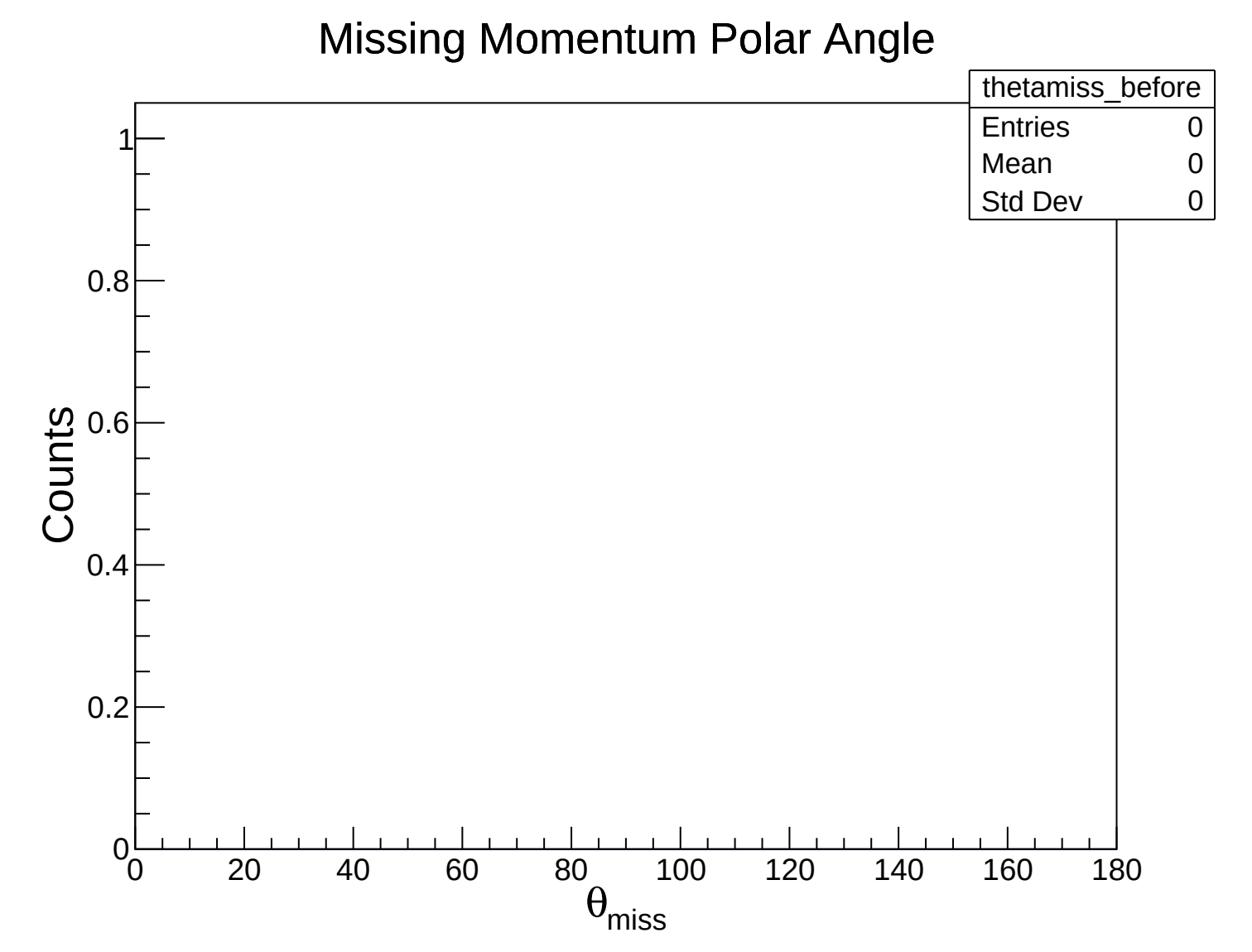
Require proton in FTOF

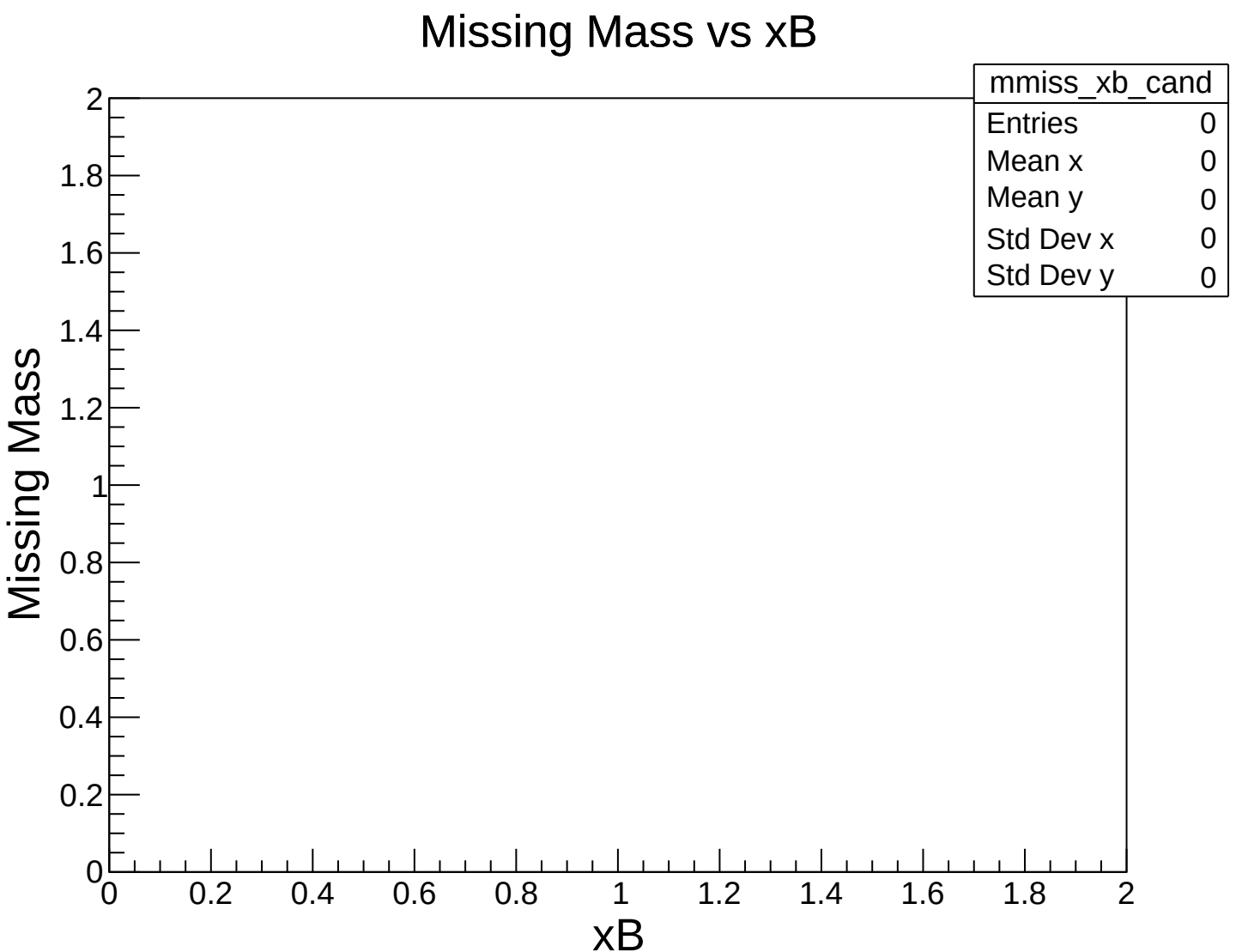
$-4\ \text{cm} < v_p - v_e < 2\ \text{cm}$

$-0.02 < \Delta\beta < 0.02$

$p_p > 0.3\ \text{GeV/c}$

$-3 <$ proton $\chi^2_{PID} < 3$


Missing Momentum Polar Angle
thetamiss_before
Entries 0
Mean 0
Std Dev 0
Counts
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
160
180
θmiss


Missing Mass vs xB
mmiss_xb_cand
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Mass
xB
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

Basic electron cuts

Deuterium run 015053

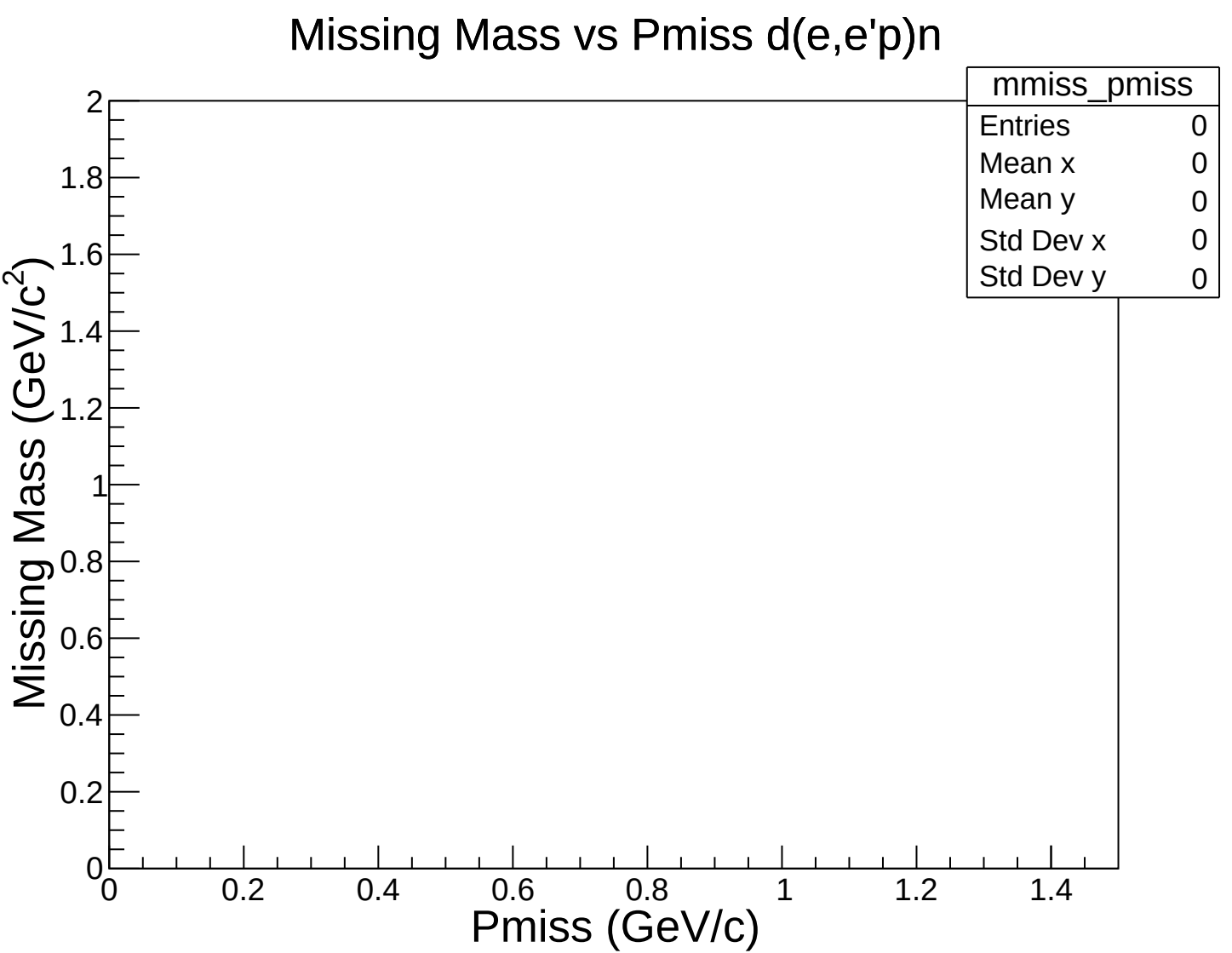
d(e,e'pn)

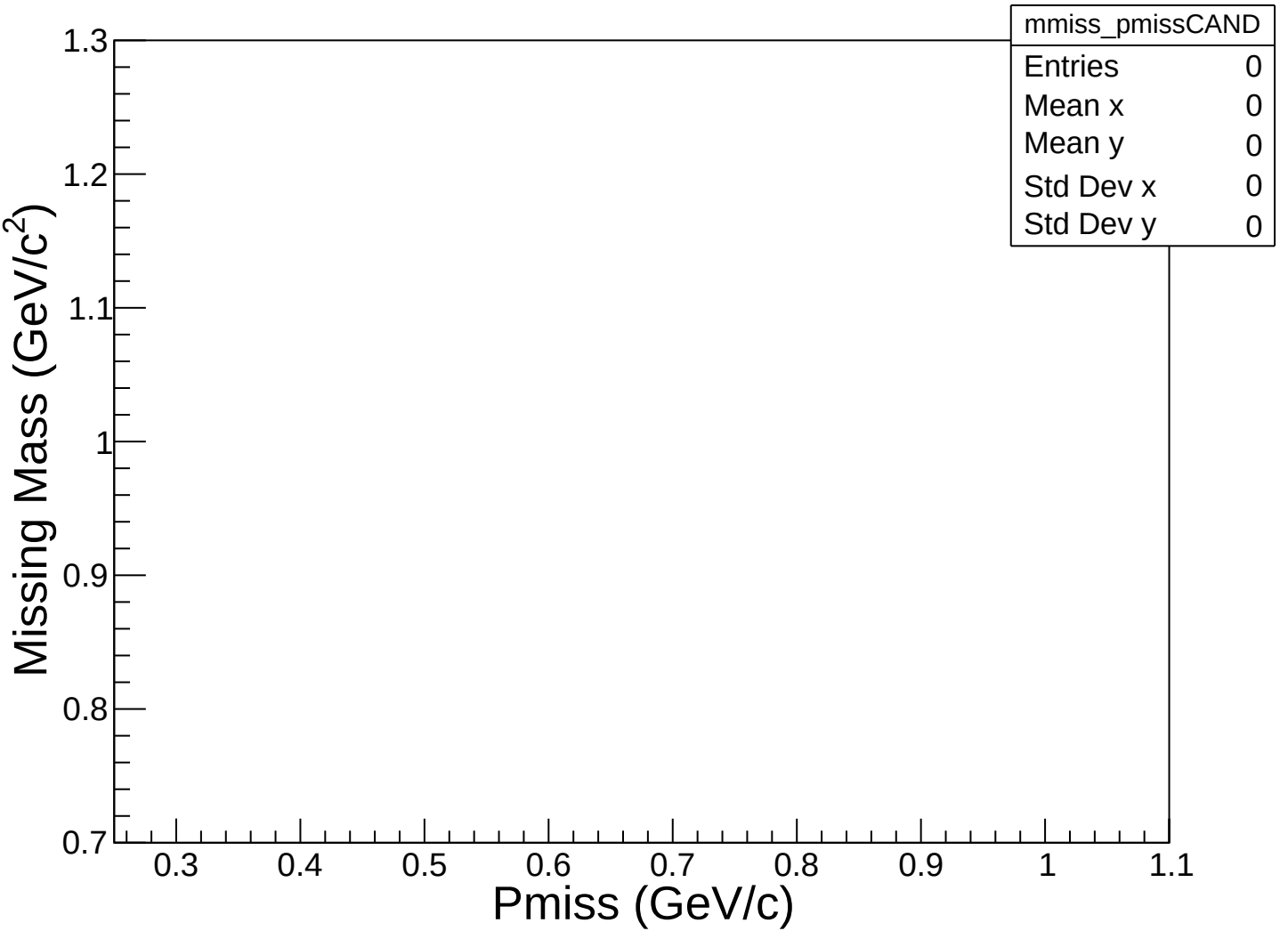
proton cuts

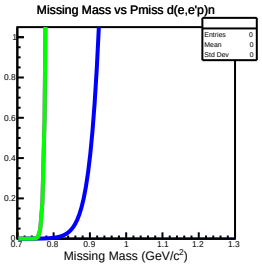
40 deg < θ_{miss} < 140 deg

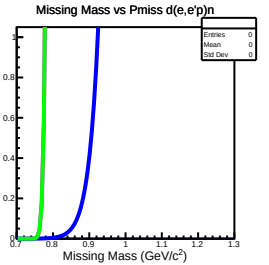
0.24 GeV/c < p_{miss} < 1.25 GeV/c

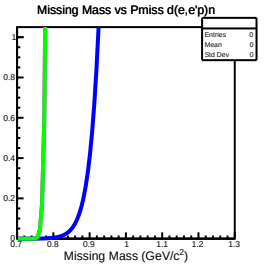
EFFICIENCY BY MOMENTUM - CANDIDATES

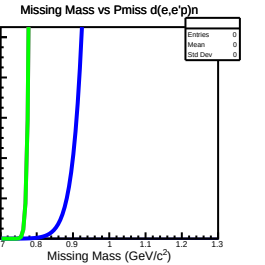

Missing Mass vs Pmiss d(e,e'p)n
mmiss_pmiss
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Mass (GeV/c^2)
Pmiss (GeV/c)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2


Missing Mass vs Pmiss d(e,e'p)n
mmiss_pmissCAND
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Mass (GeV/c^2)
1.3
1.2
1.1
1
0.9
0.8
0.7
Pmiss (GeV/c)
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1

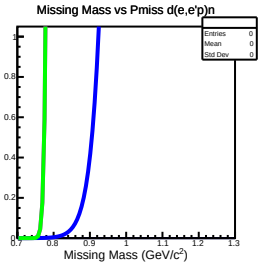

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

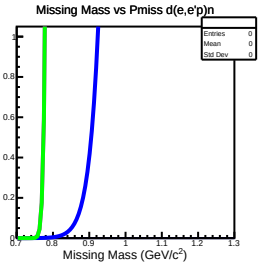

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

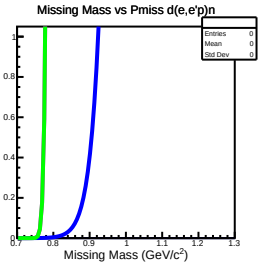

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

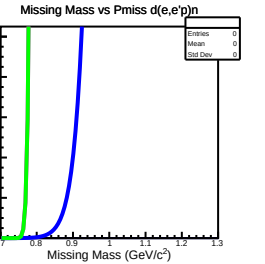

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

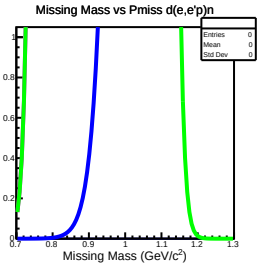

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

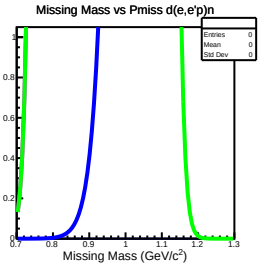

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

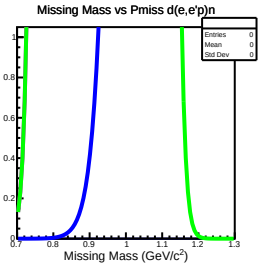

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

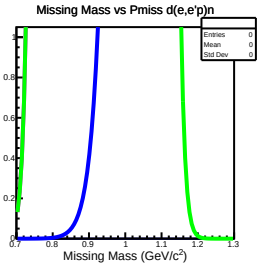

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

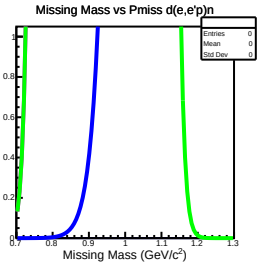

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

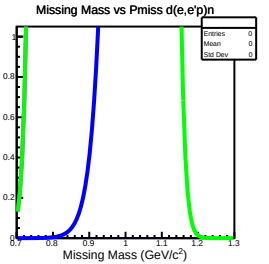

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

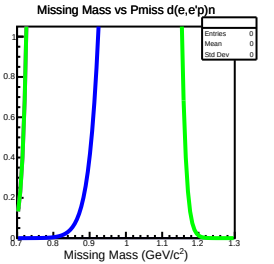

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

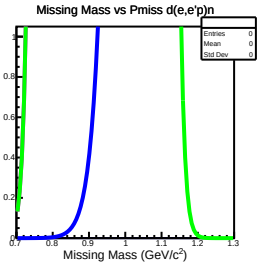

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

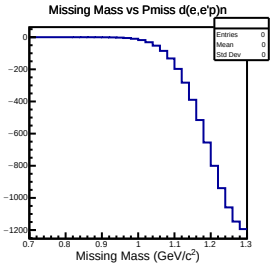

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

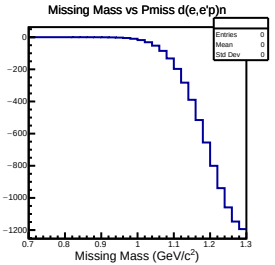

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

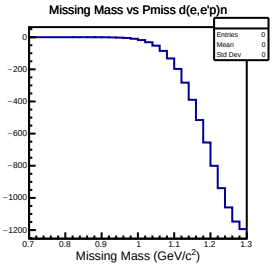

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

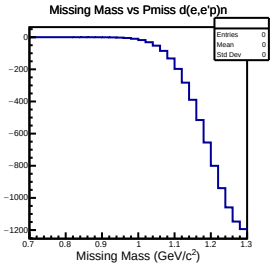

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

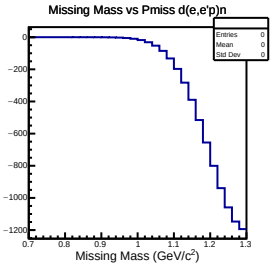
Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

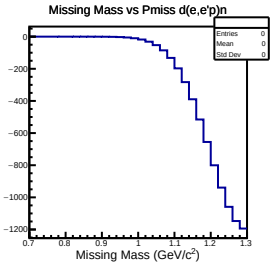

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

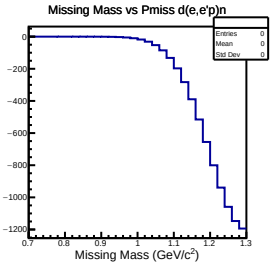

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

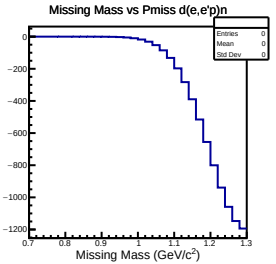

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

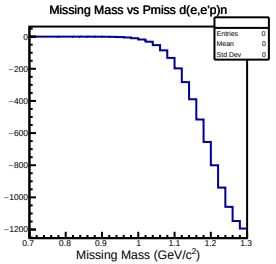

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

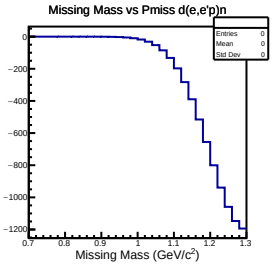

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

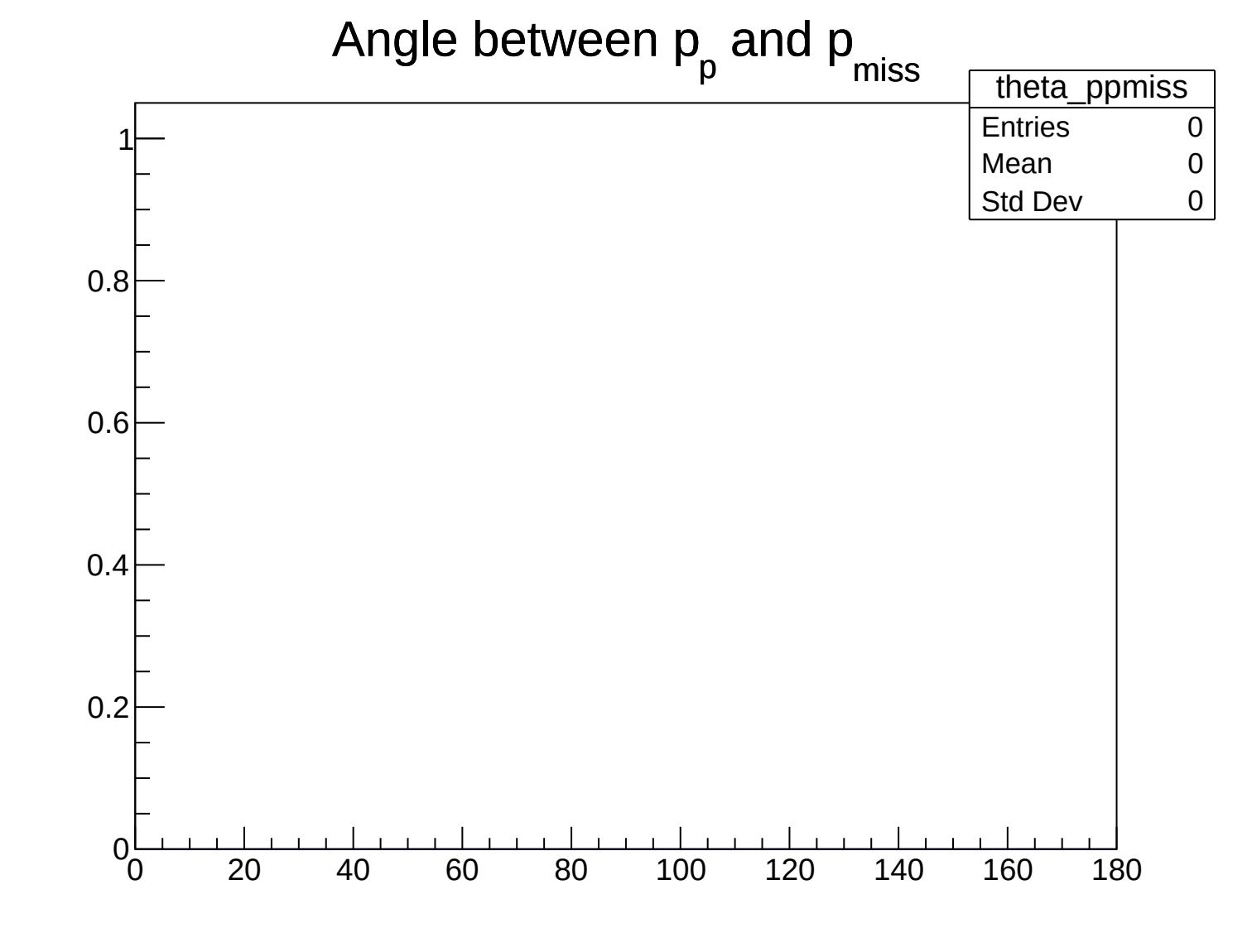

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

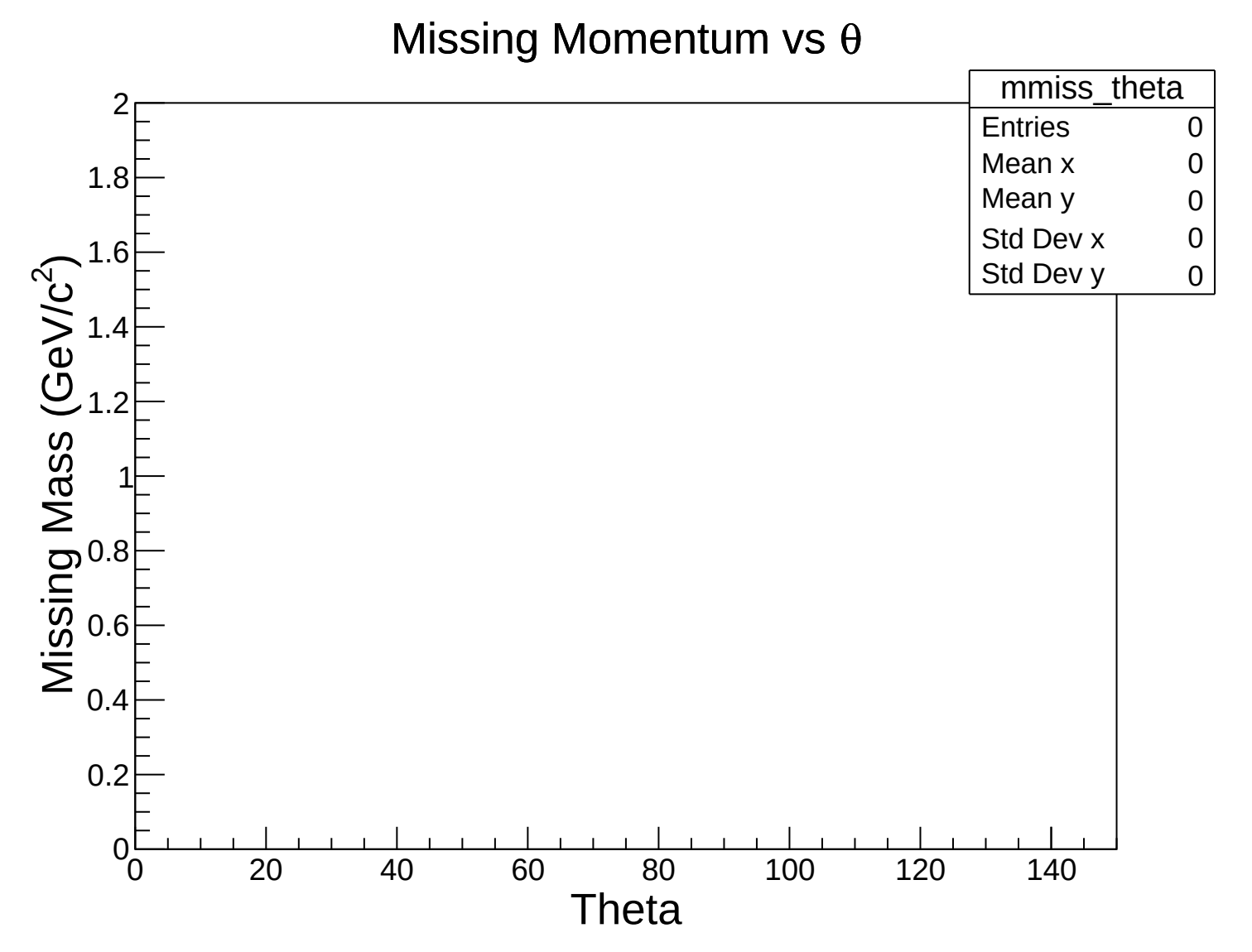

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

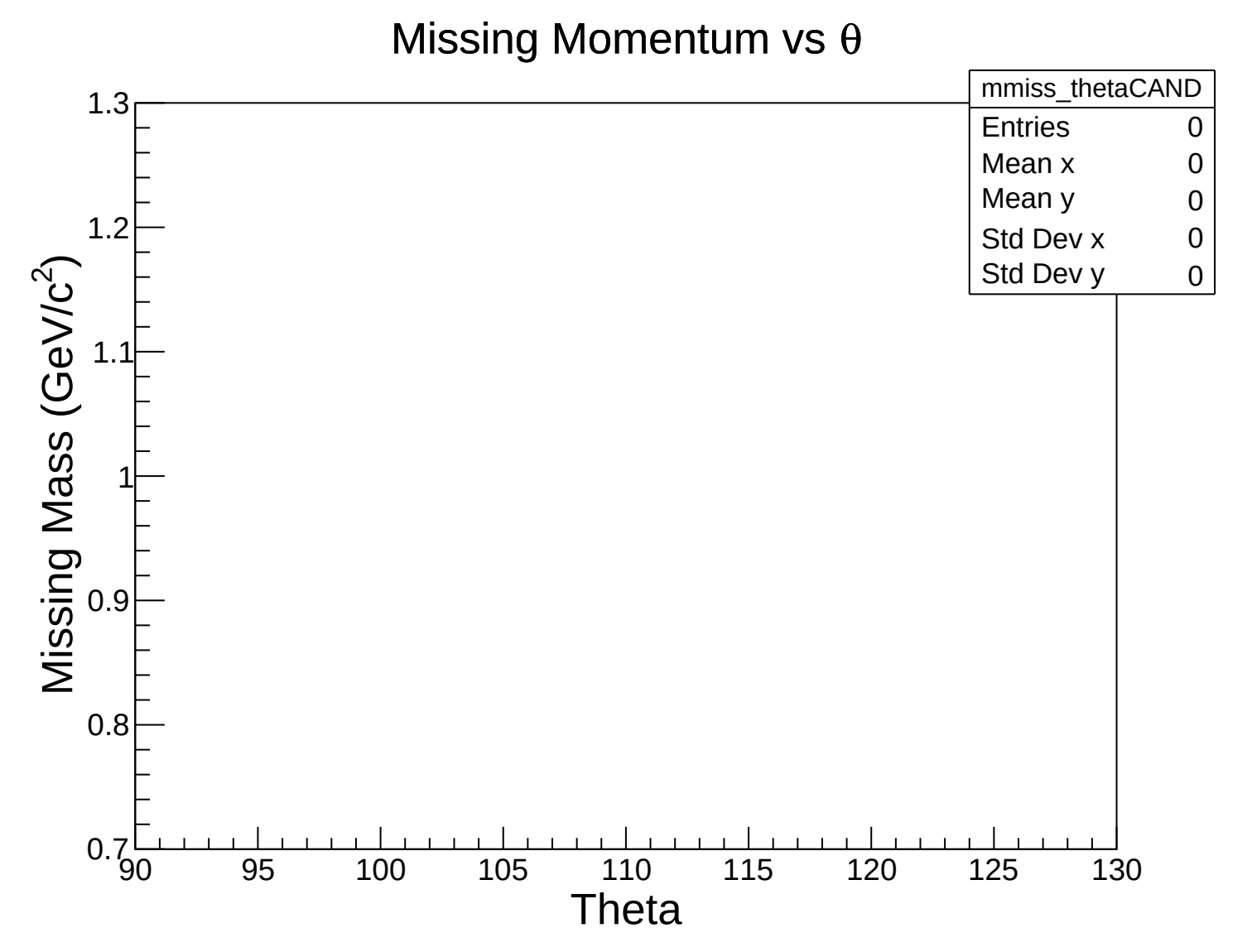

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

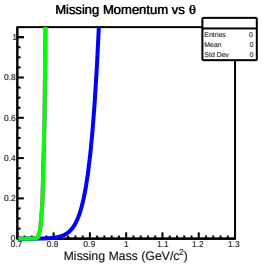
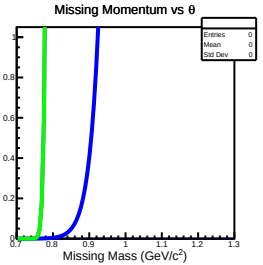
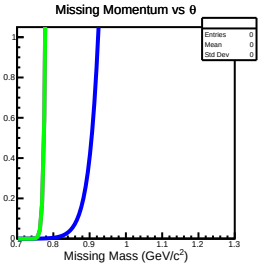
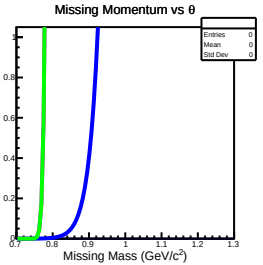
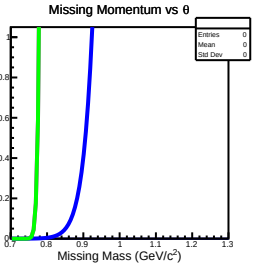
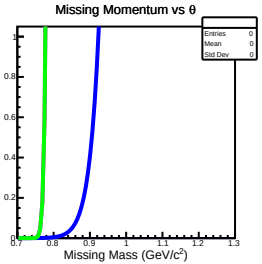
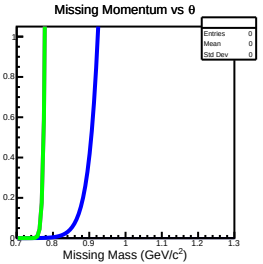
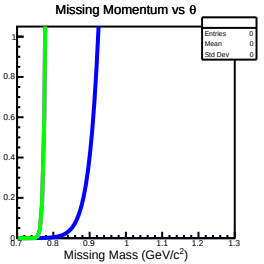
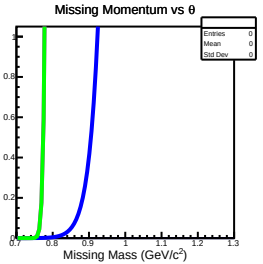
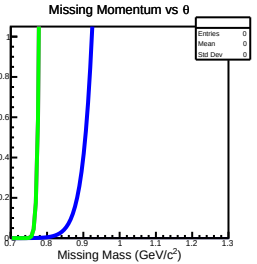

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

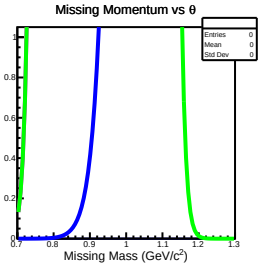
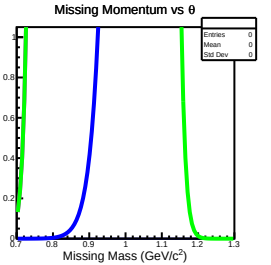
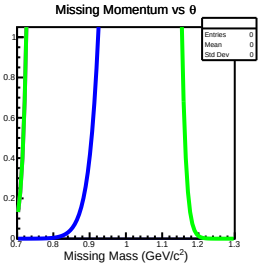
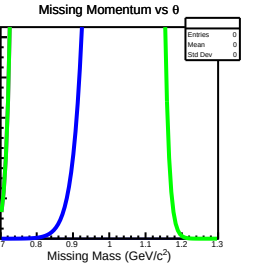

Angle between p_p and p_miss
theta_ppmiss
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
160
180

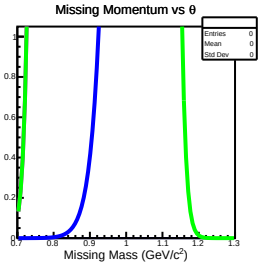
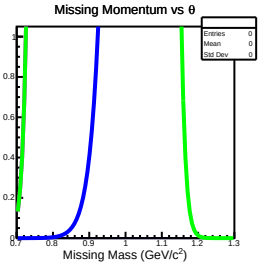
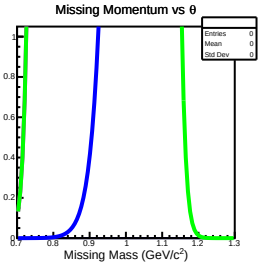
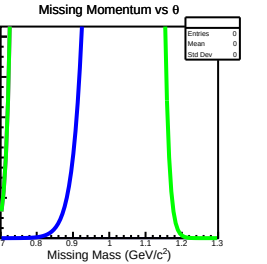
EFFICIENCY BY THETA - CANDIDATES


Missing Momentum vs θ
mmiss_theta
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Mass (GeV/c²)
Theta
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
0
20
40
60
80
100
120
140

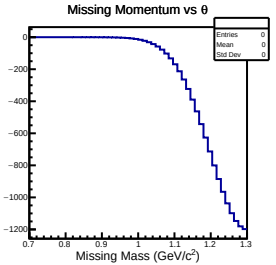

Missing Momentum vs θ
mmiss_thetaCAND
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Mass (GeV/c²)
1.3
1.2
1.1
1
0.9
0.8
0.7
90
95
100
105
110
115
120
125
130
Theta

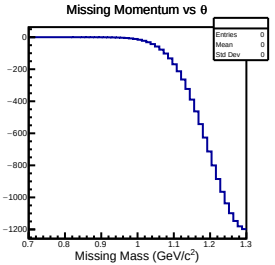

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

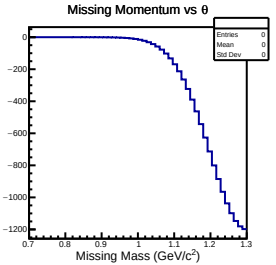

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

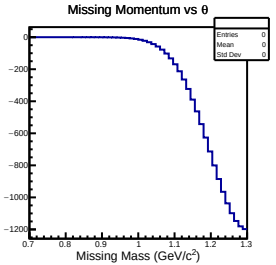
Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

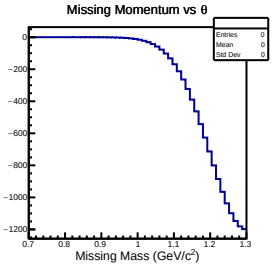
Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

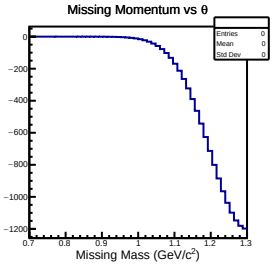

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)

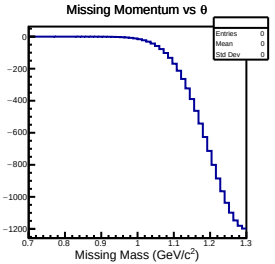

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)

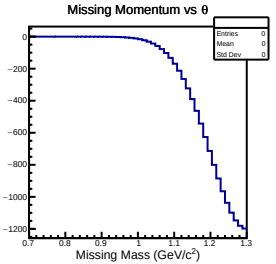

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)

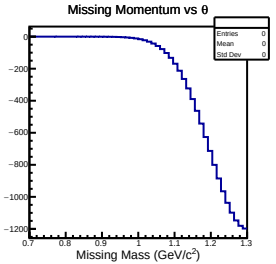

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)

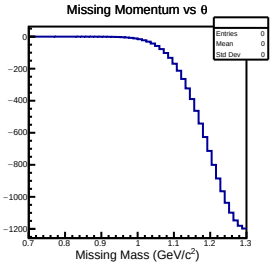

Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)

Basic electron cuts

Deuterium run 015053

d(e,e'pn)

proton cuts

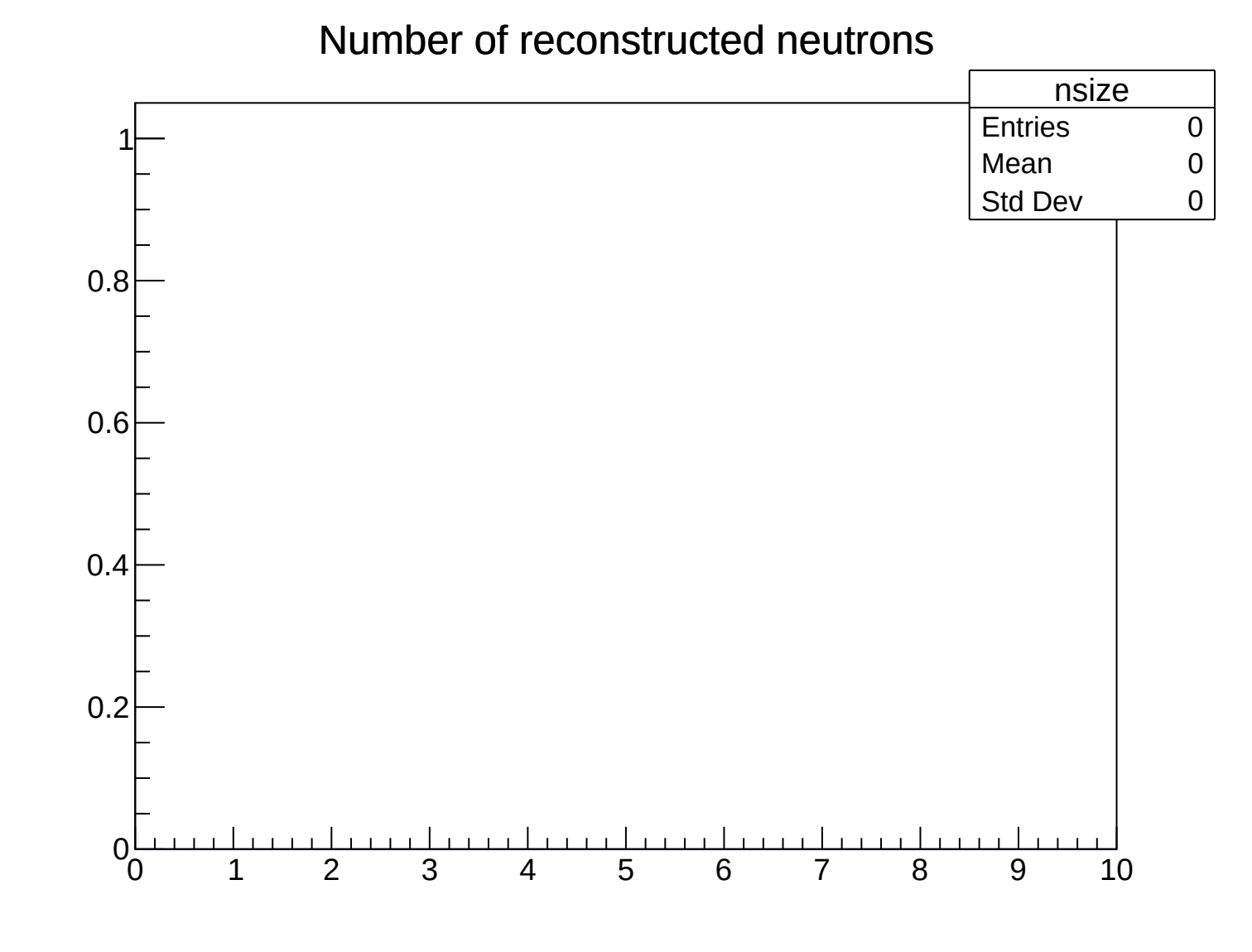
p_{miss} cuts

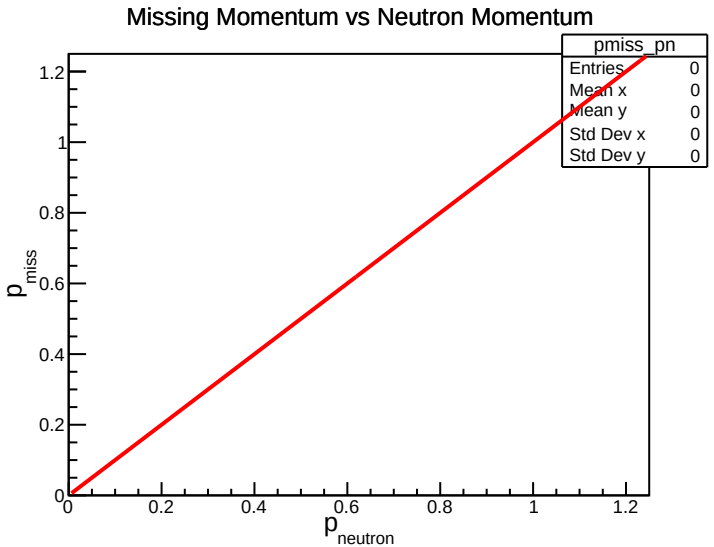
Require neutron in CND

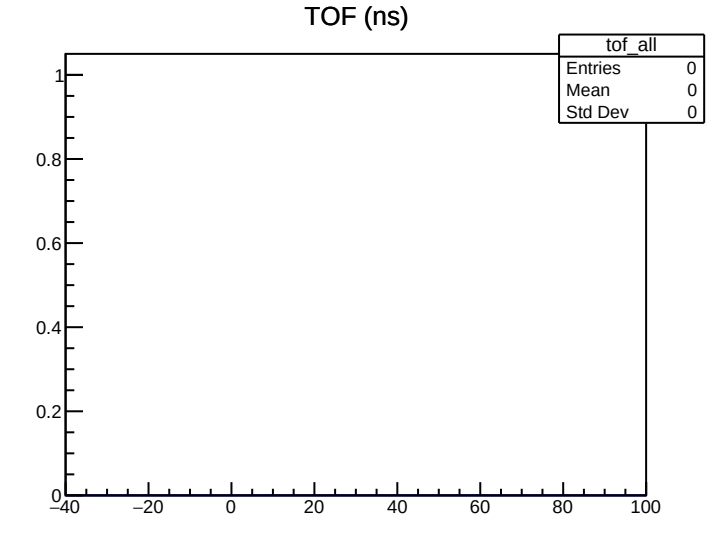
exclude θ_n=0, ϕ_n=0

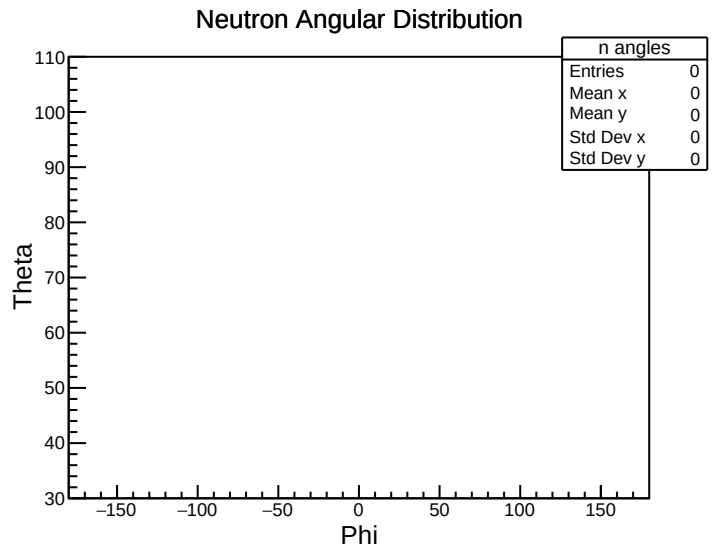
40 deg < θ_n < 140 deg

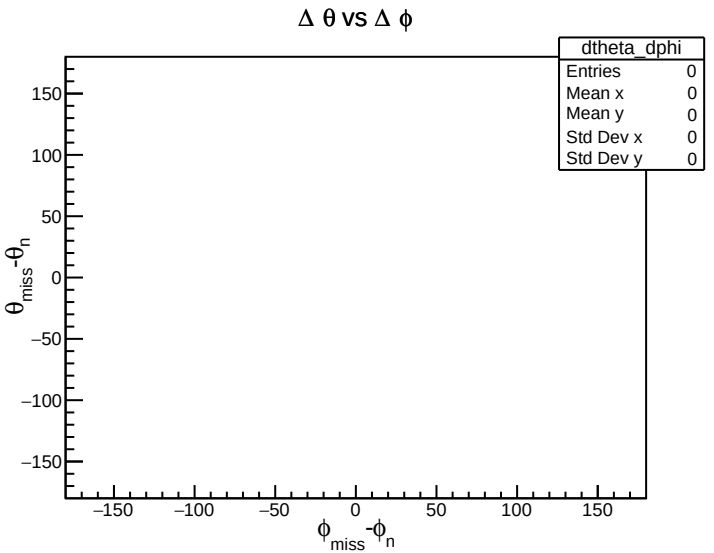
0.25 < β_n < 0.8

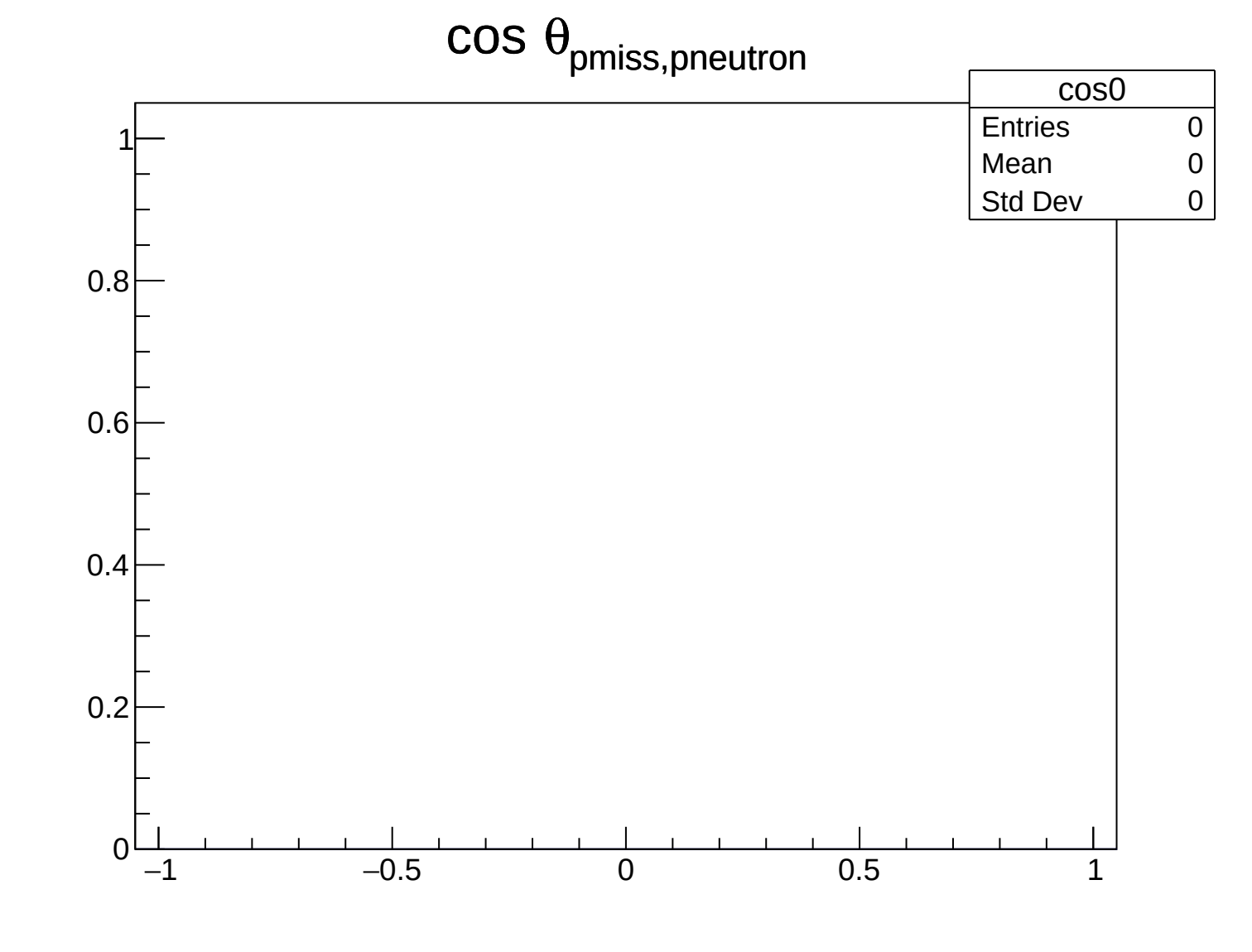

Number of reconstructed neutrons
nsize
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0 1 2 3 4 5 6 7 8 9 10

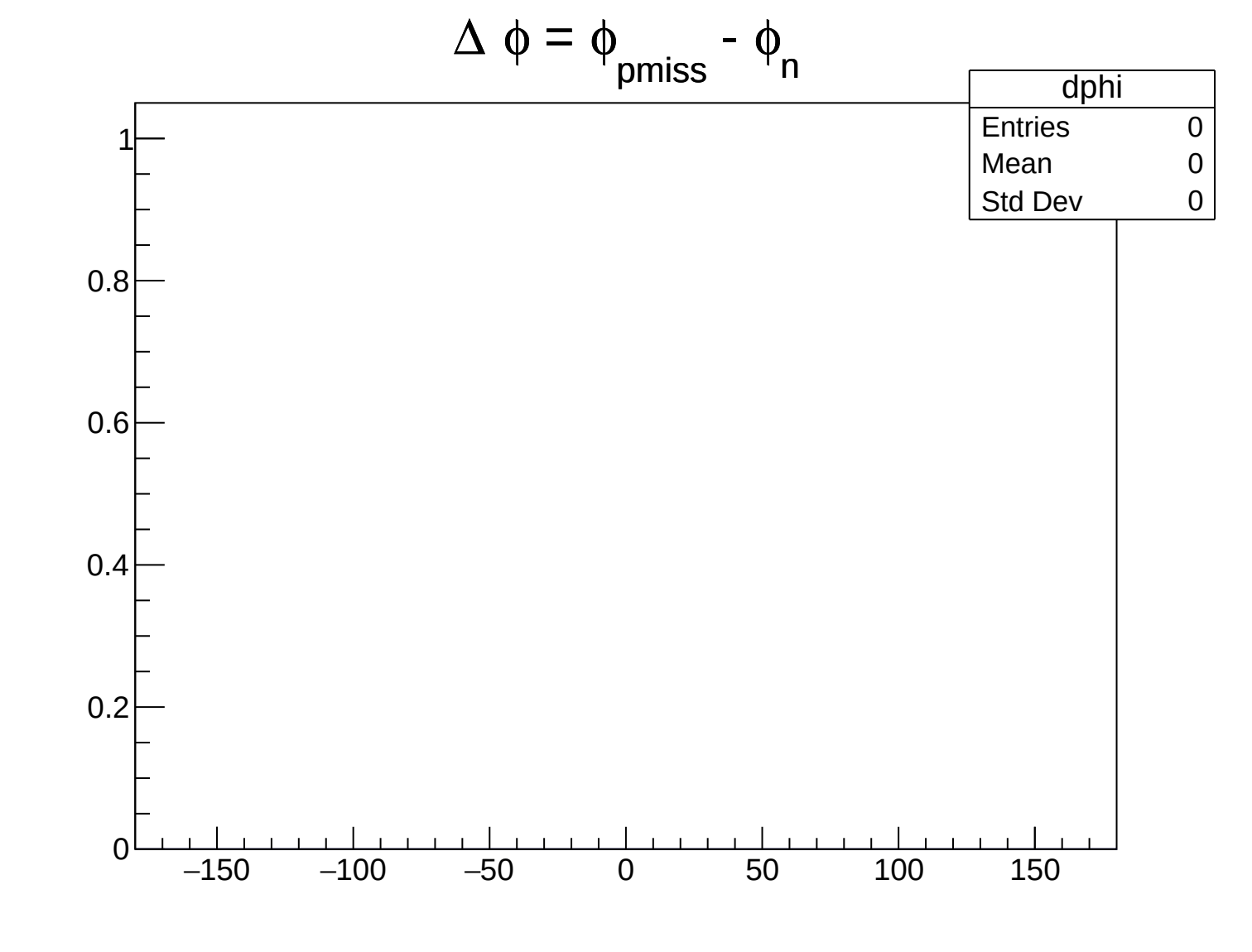

Missing Momentum vs Neutron Momentum
pmiss_pn
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss
p_neutron


TOF (ns)
tof_all
Entries 0
Mean 0
Std Dev 0


Neutron Angular Distribution
n angles
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Theta
Phi


Δ θ vs Δ ϕ
dtheta_dphi
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
θ_miss-θ_n
ϕ_miss-ϕ_n


cos θpmiss,pneutron
cos0
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–1
–0.5
0
0.5
1


Δ ϕ = ϕ pmiss - ϕ n
dphi
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–150
–100
–50
0
50
100
150

Basic electron cuts

Deuterium run 015053

d(e,e'pn)

proton cuts

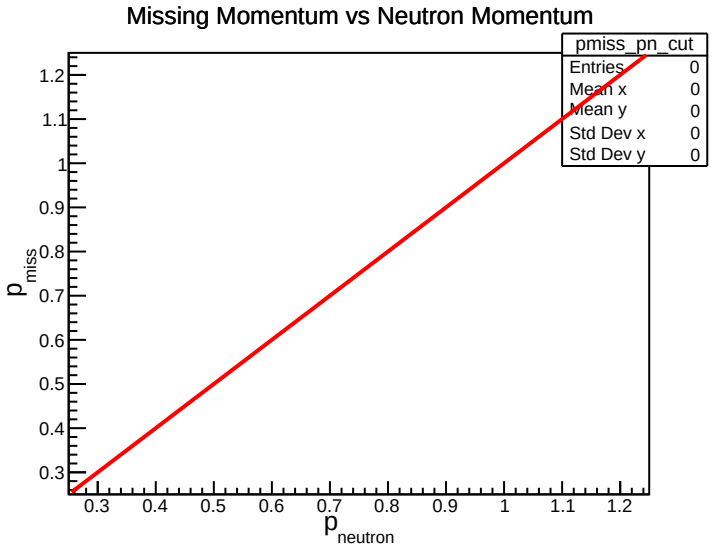
p_{miss} cuts

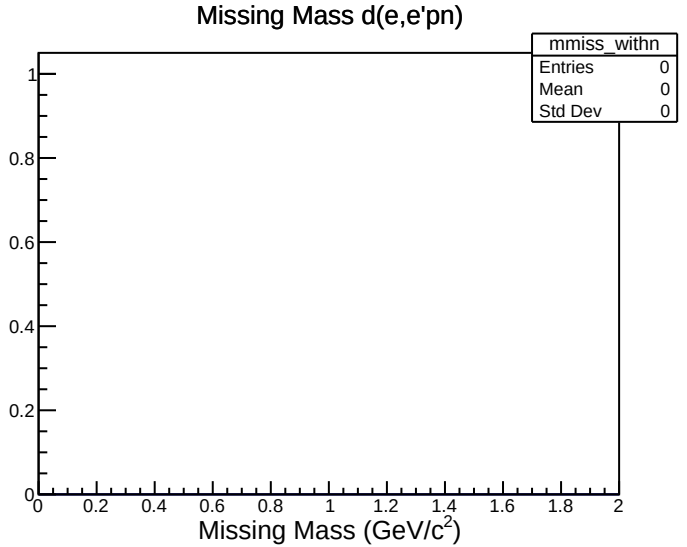
exclude θ_n=0, ϕ_n=0

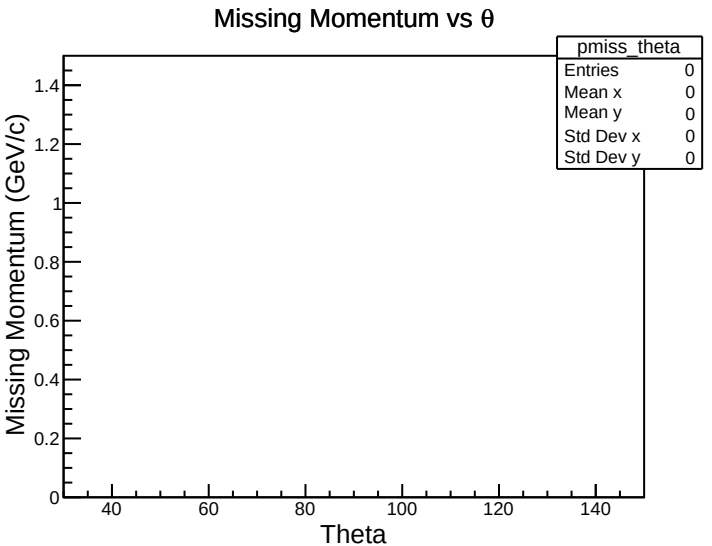
40 deg < θ_n < 140 deg

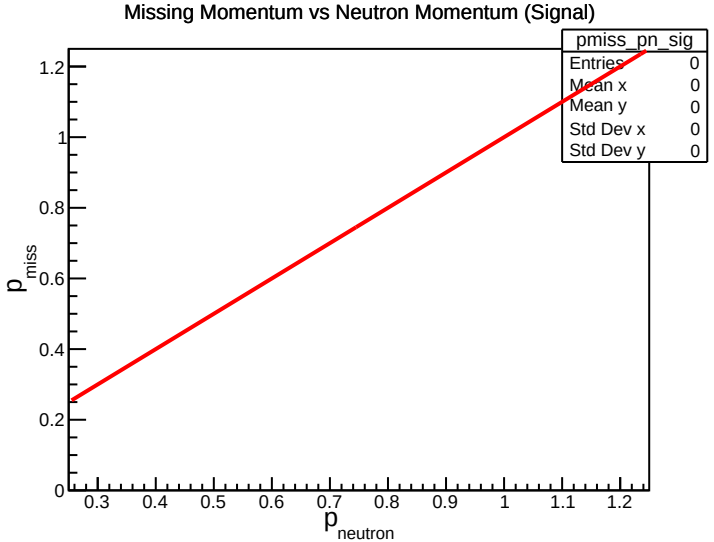
0.25 < β_n < 0.8

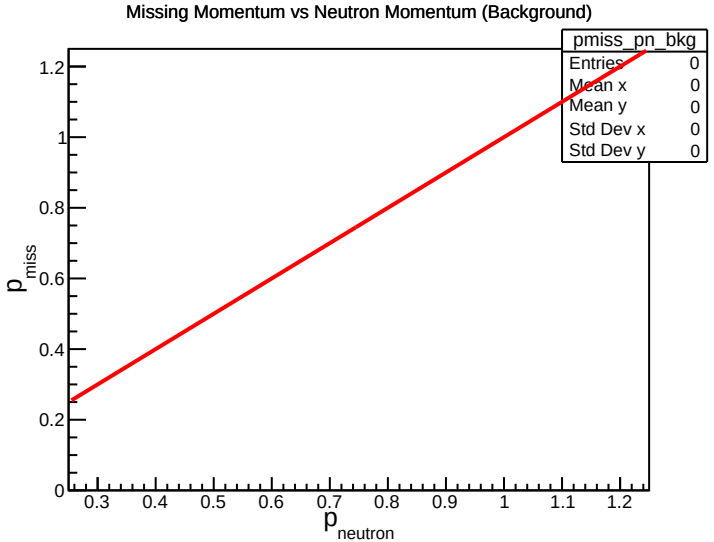
cos $\theta_{pmiss,pn}$ > 0.9, -20 < $\Delta\ \phi$ < 20

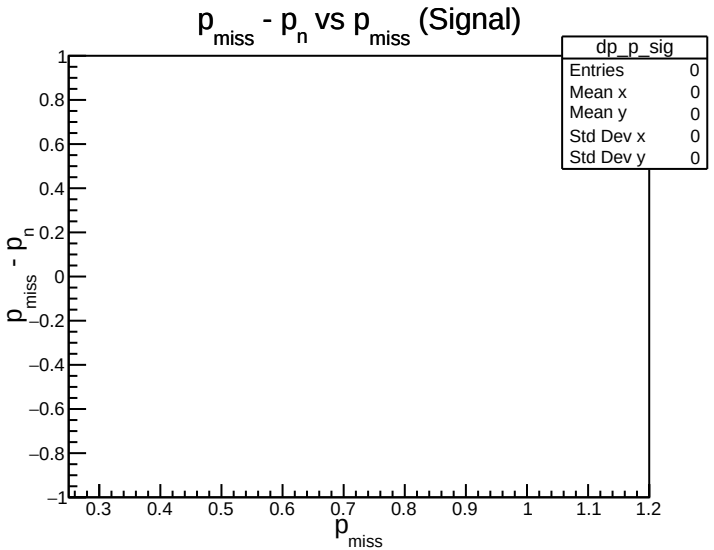

Missing Momentum vs Neutron Momentum
pmiss_pn_cut
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss
p_neutron

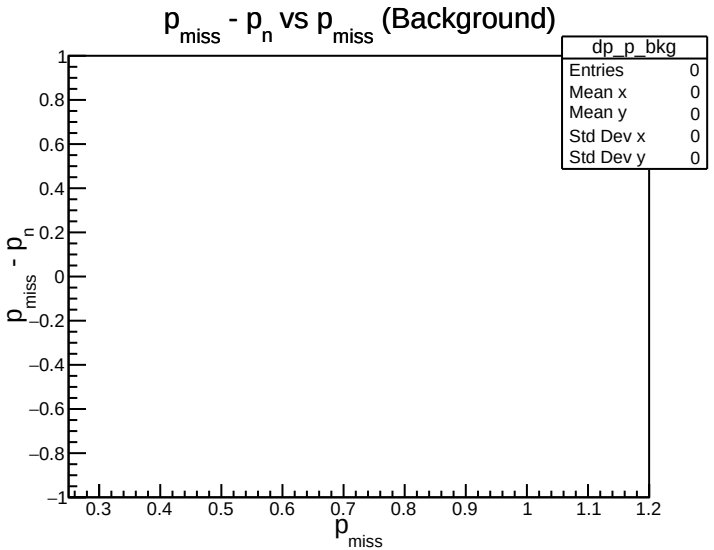

Missing Mass d(e,e'pn)
mmiss_withn
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c²)

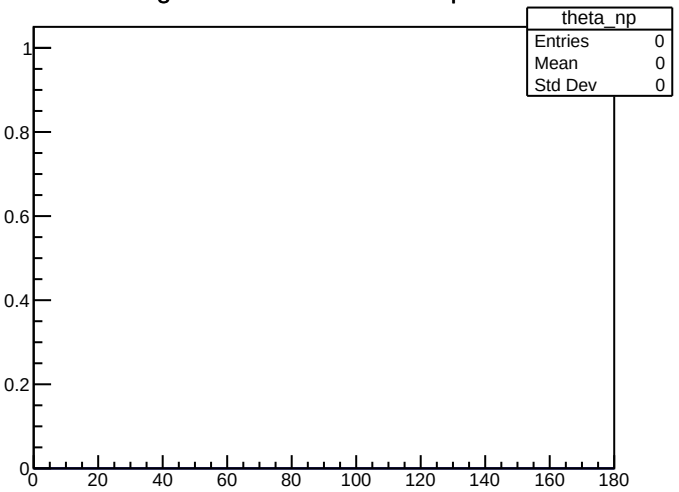

Missing Momentum vs θ
pmiss_theta
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Momentum (GeV/c)
Theta

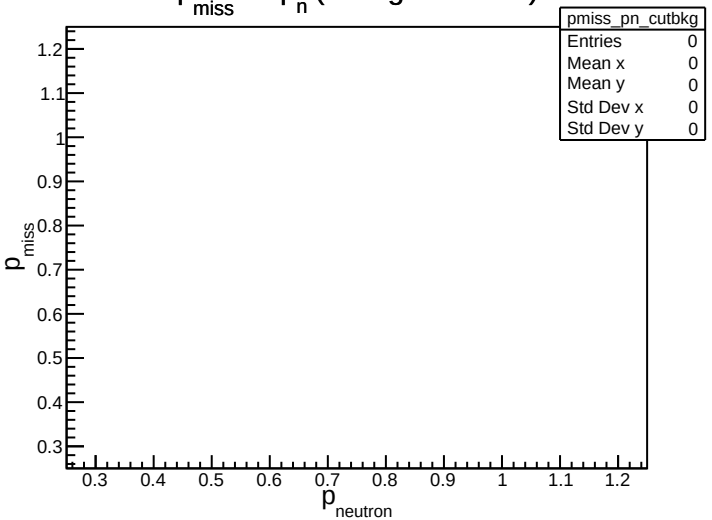

Missing Momentum vs Neutron Momentum (Signal)
pmiss_pn_sig
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss
p_neutron

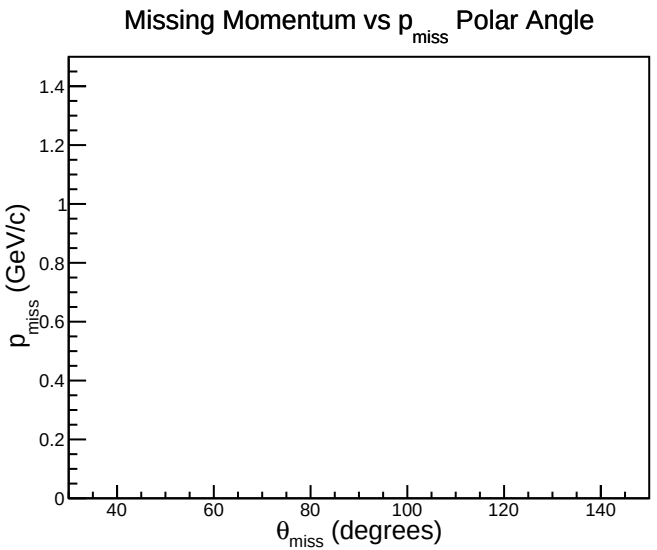

Missing Momentum vs Neutron Momentum (Background)
pmiss_pn_bkg
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss
p_neutron


p_miss - p_n vs p_miss (Signal)
dp_p_sig
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss - p_n
p_miss

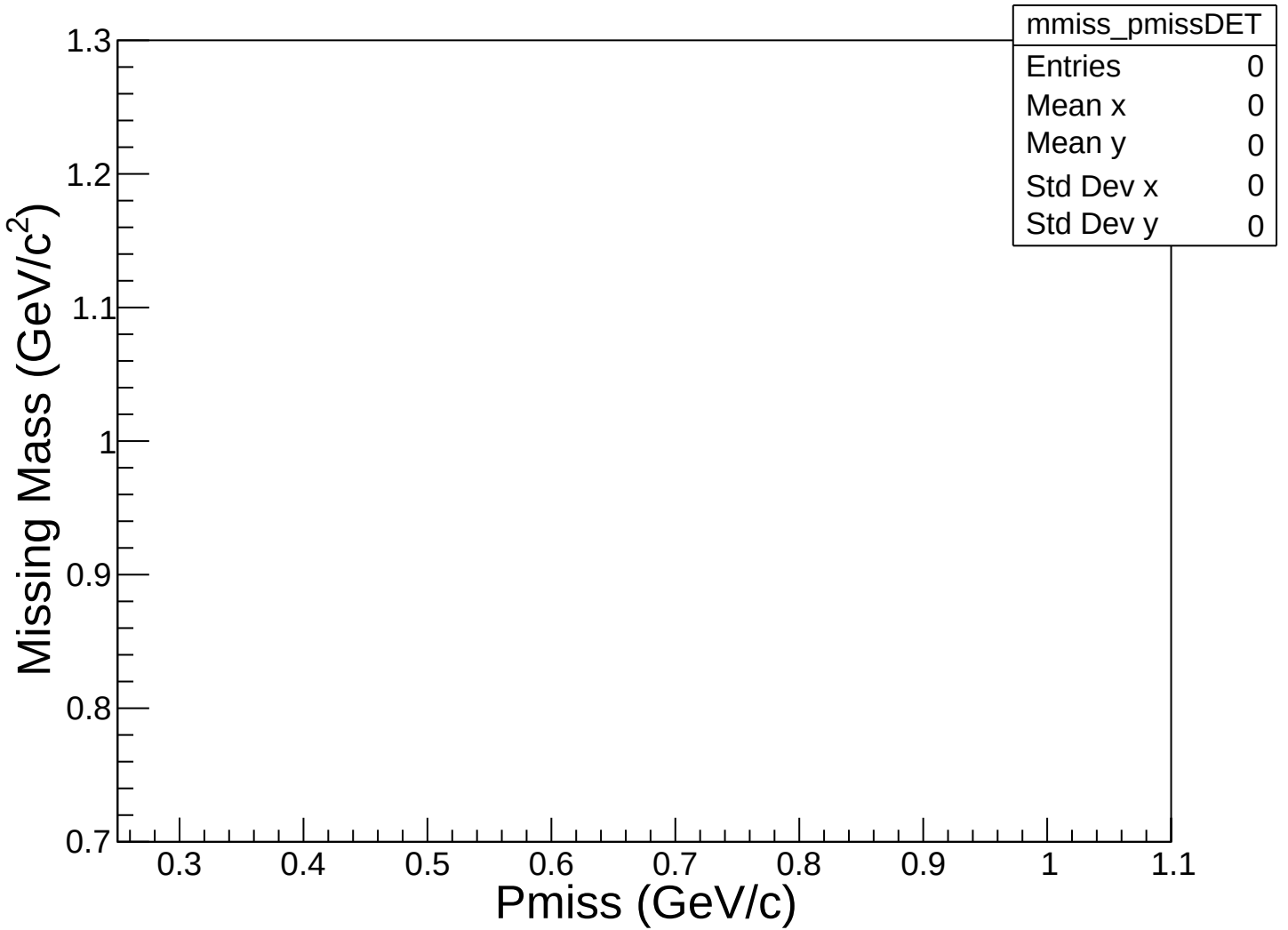

p_miss - p_n vs p_miss (Background)
dp_p_bkg
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss - p_n
p_miss

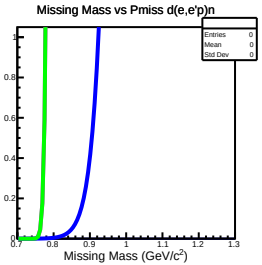

Angle between neutron and proton
theta_np
Entries 0
Mean 0
Std Dev 0
0 0.2 0.4 0.6 0.8 1
0 20 40 60 80 100 120 140 160 180

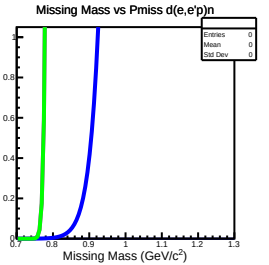

p_miss vs p_n (background cut)
pmiss_pn_cutbkg
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
p_miss
0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2
0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2
p_neutron

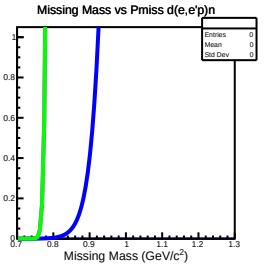

Missing Momentum vs p_miss Polar Angle
p_miss (GeV/c)
0 0.2 0.4 0.6 0.8 1 1.2 1.4
40 60 80 100 120 140
θ_miss (degrees)

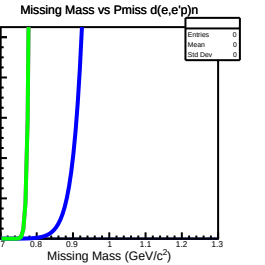
EFFICIENCY BY MOMENTUM - DETECTED


Missing Mass vs Pmiss d(e,e'p)n
mmiss_pmissDET
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Missing Mass (GeV/c^2)
1.3
1.2
1.1
1
0.9
0.8
0.7
Pmiss (GeV/c)
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1

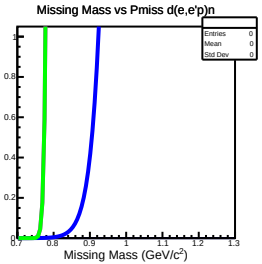

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

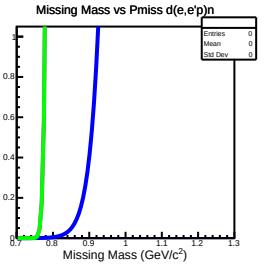

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

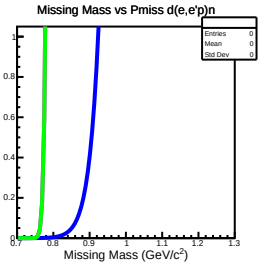

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

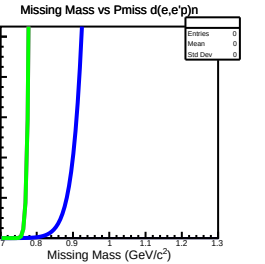

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

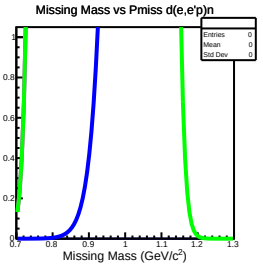

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

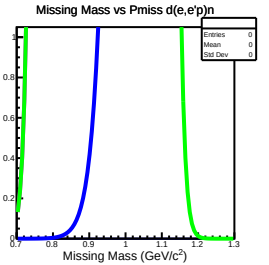

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

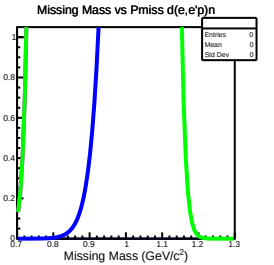

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

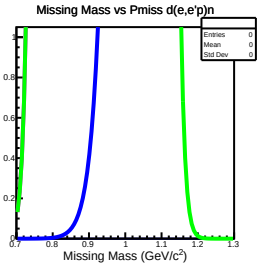

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

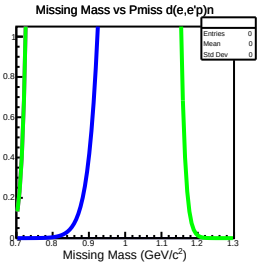

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

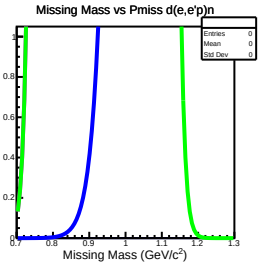

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

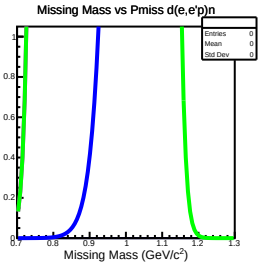

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

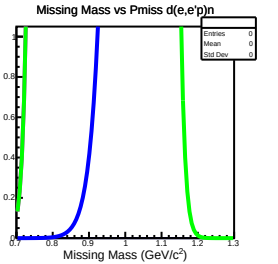

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

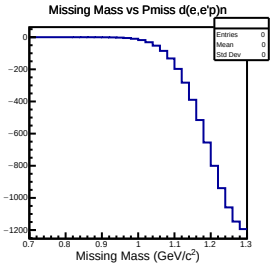

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

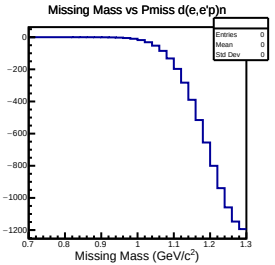

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
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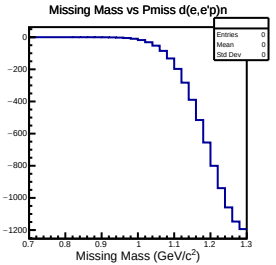
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
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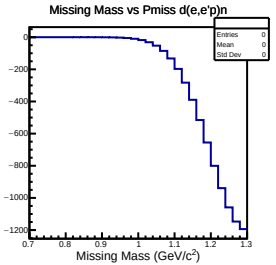
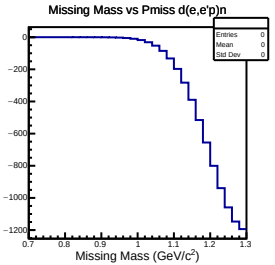
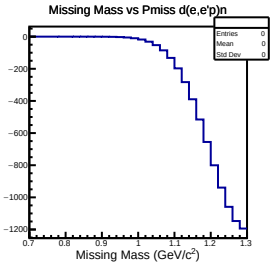
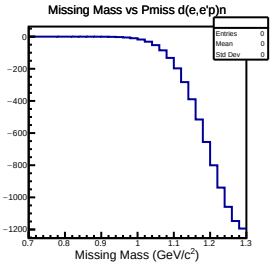
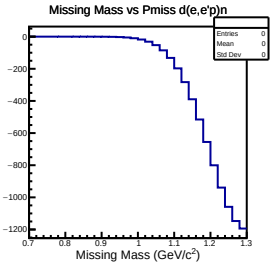
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
−800
−1000
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
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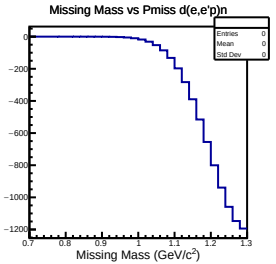
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
−400
−600
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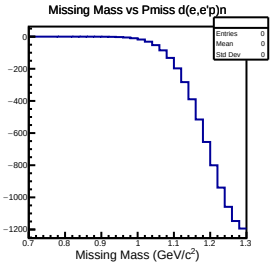
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
0
−200
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−600
−800
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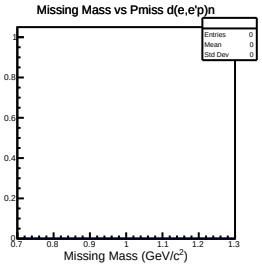
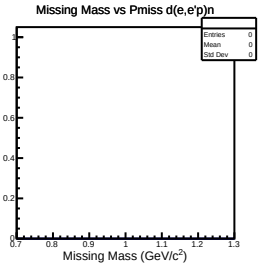
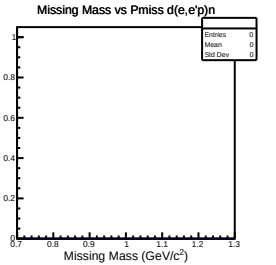
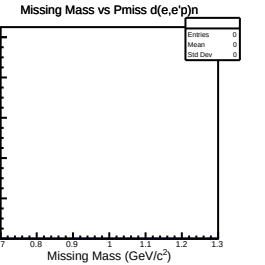
−1200
0.7
0.8
0.9
1
1.1
1.2
1.3
Missing Mass (GeV/c²)

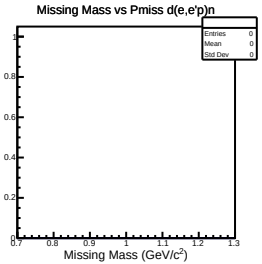

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

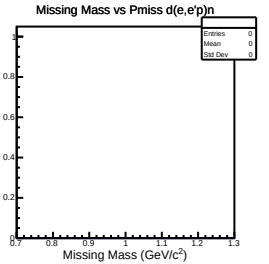

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

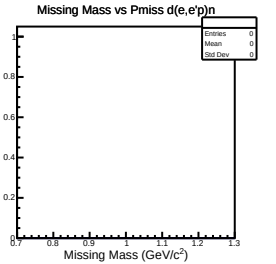

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

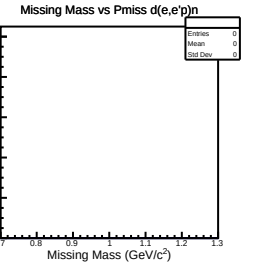

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

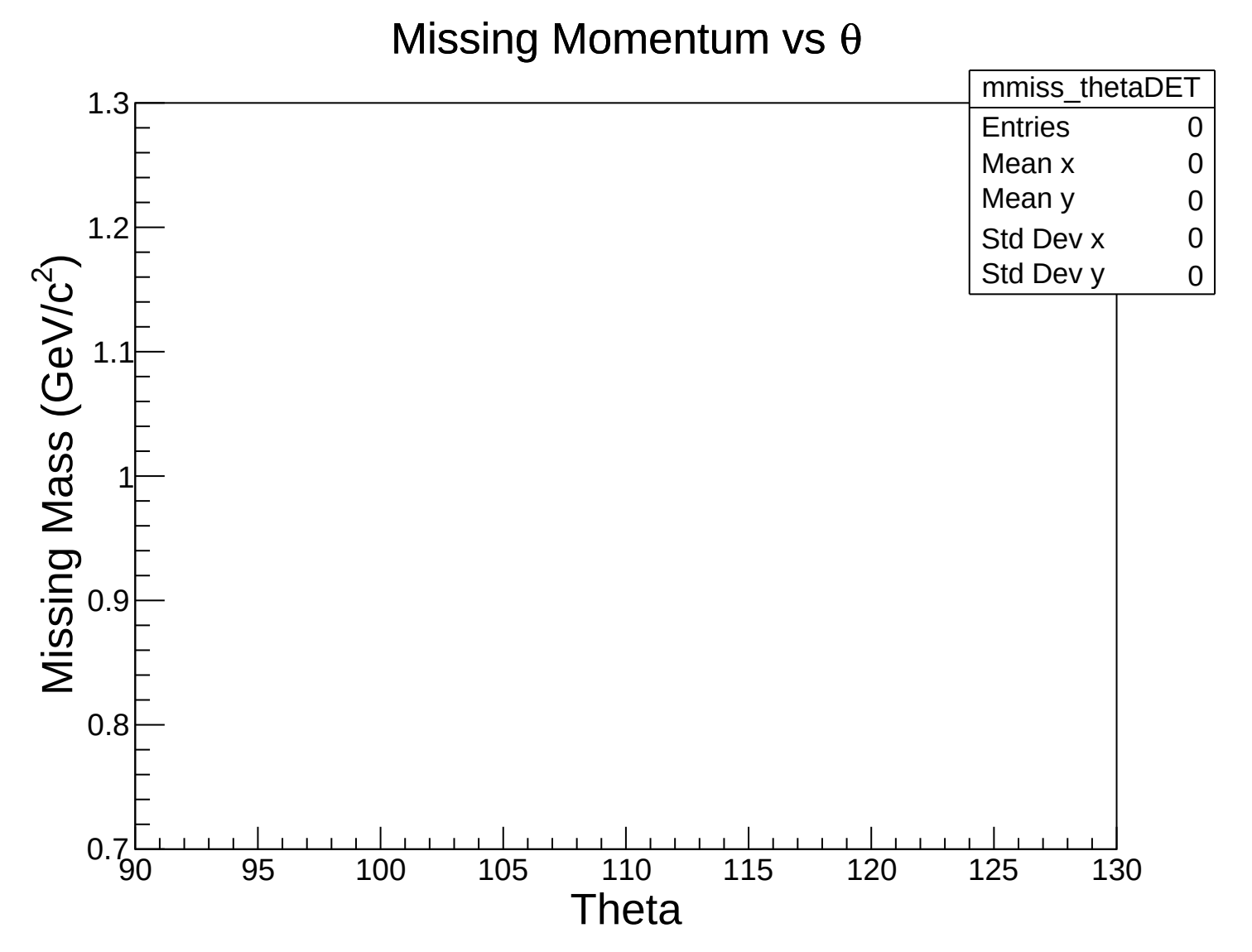

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)


Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

Missing Mass vs Pmiss d(e,e'p)n
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

EFFICIENCY BY THETA - DETECTED


Missing Momentum vs θ
mmiss_thetaDET
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Mean y 0
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Missing Mass (GeV/c²)
1.3
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1.1
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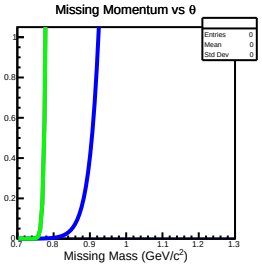
0.9
0.8
0.7
90
95
100
105
110
115
120
125
130
Theta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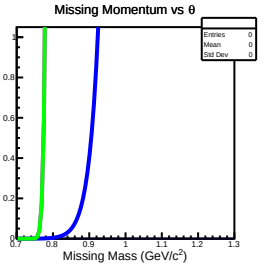
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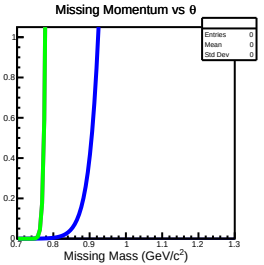
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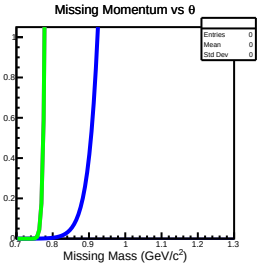
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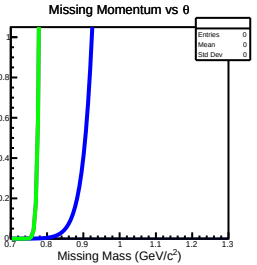
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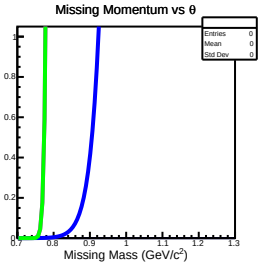
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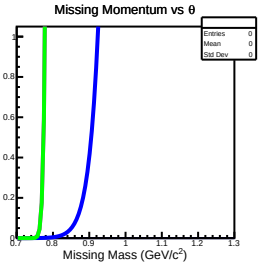
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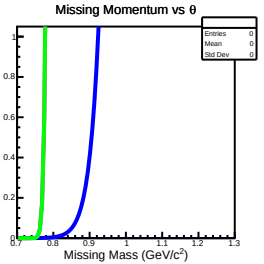
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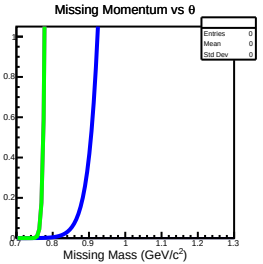
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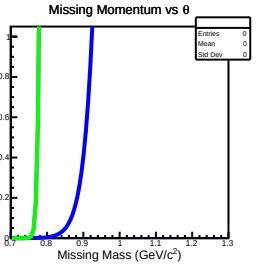
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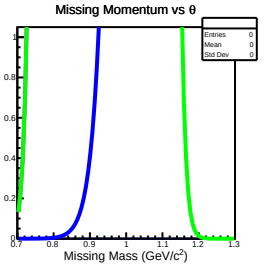
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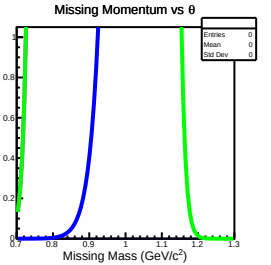
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Mean 0
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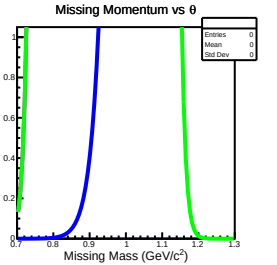
Missing Mass (GeV/c²)

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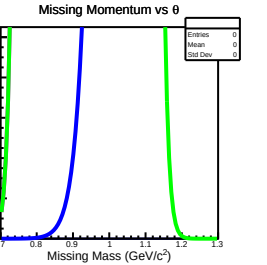
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Mean 0
Std Dev 0
Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
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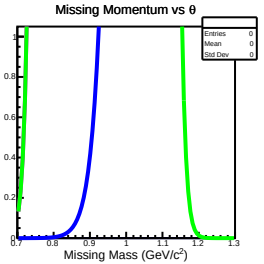
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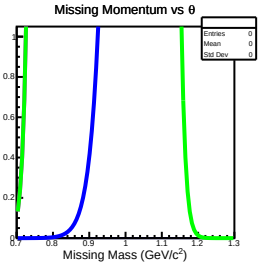
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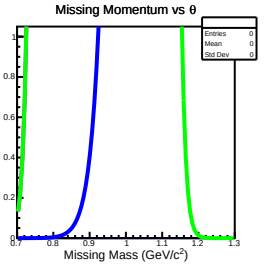
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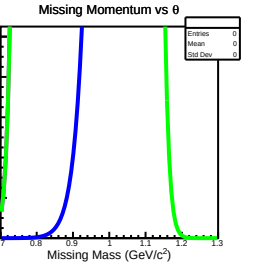
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Mean 0
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Missing Mass (GeV/c²)

Missing Momentum vs θ
Entries 0
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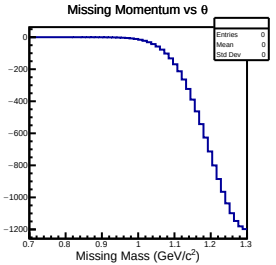
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
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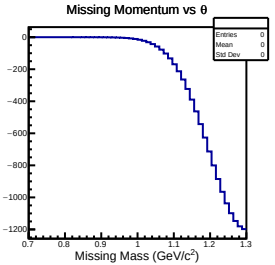
−800
−1000
−1200
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)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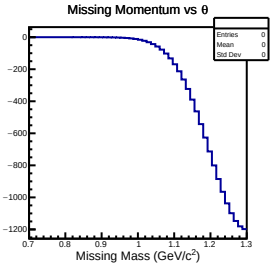
Missing Mass (GeV/c²)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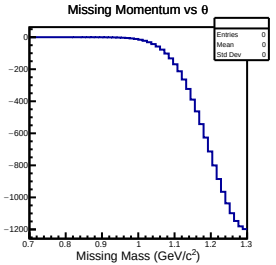
Missing Mass (GeV/c²)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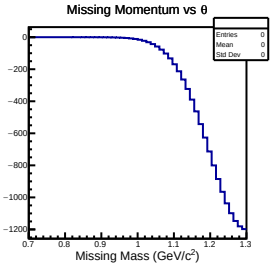
Missing Mass (GeV/c²)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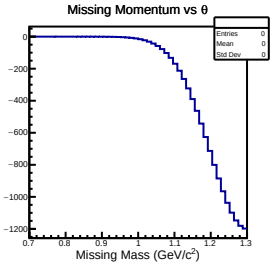
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
Mean 0
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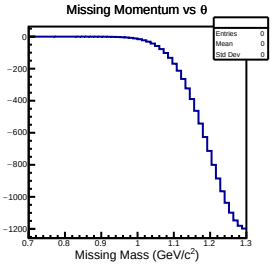
0.7 0.8 0.9 1 1.1 1.2 1.3
Missing Mass (GeV/c²)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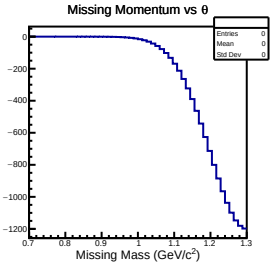
Missing Mass (GeV/c²)


Missing Momentum vs θ
Entries 0
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Std Dev 0
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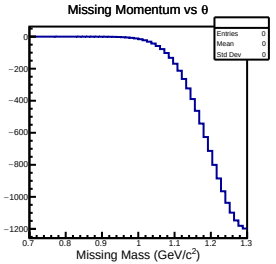
Missing Mass (GeV/c²)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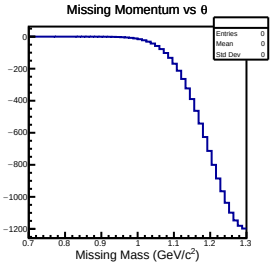
Missing Mass (GeV/c²)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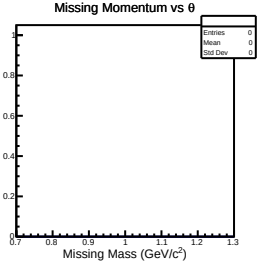
Missing Mass (GeV/c²)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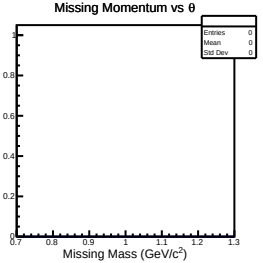
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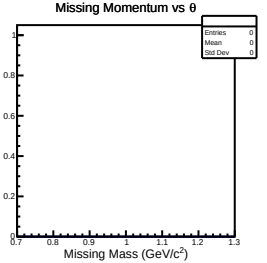
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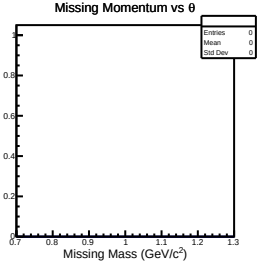
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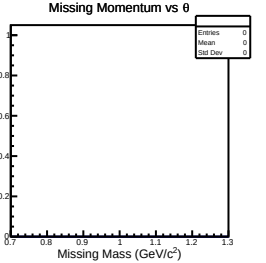
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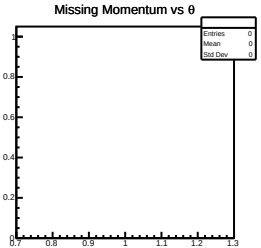
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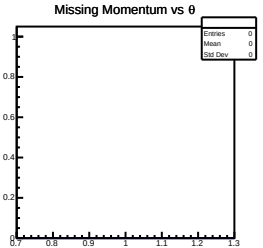
Missing Mass (GeV/c^2)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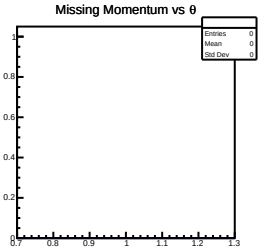
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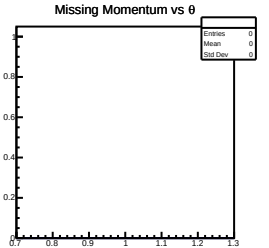
Missing Mass (GeV/c^2)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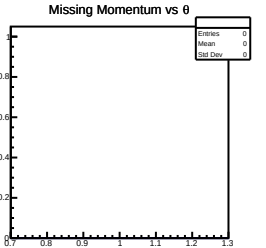
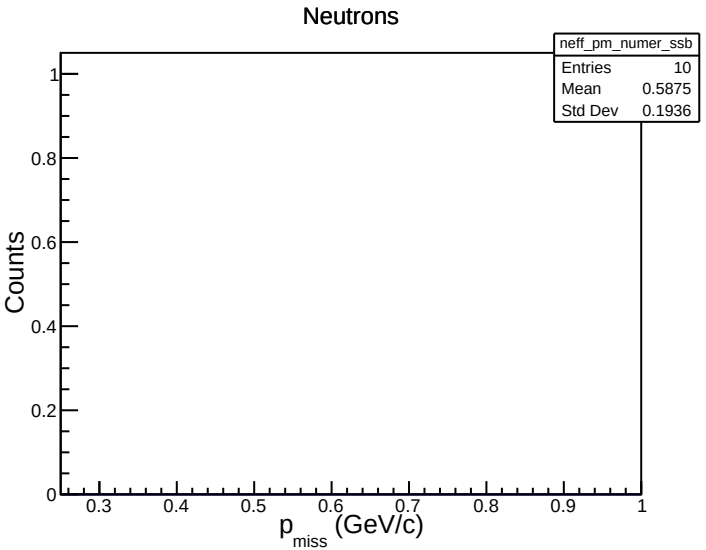
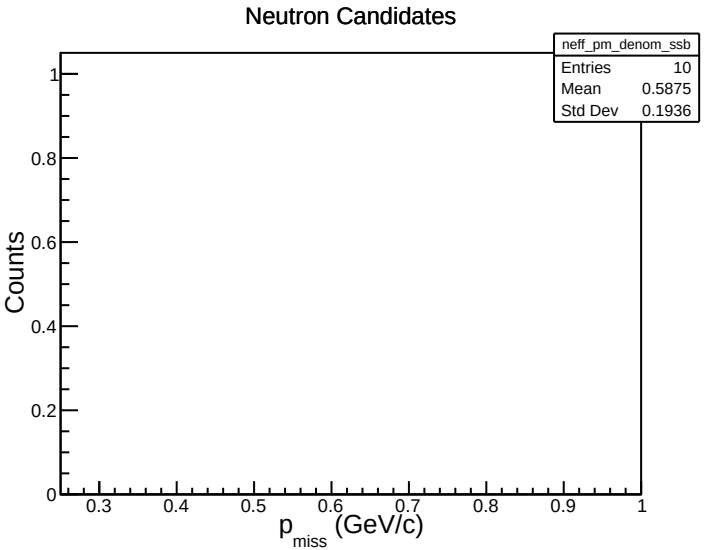
Missing Mass (GeV/c^2)


Missing Momentum vs θ
Entries 0
Mean 0
Std Dev 0
Missing Mass (GeV/c^2)

EFFICIENCY RESULTS


Neutrons
neff_pm_numer_ssb
Entries 10
Mean 0.5875
Std Dev 0.1936
Counts
p miss (GeV/c)


Neutron Candidates
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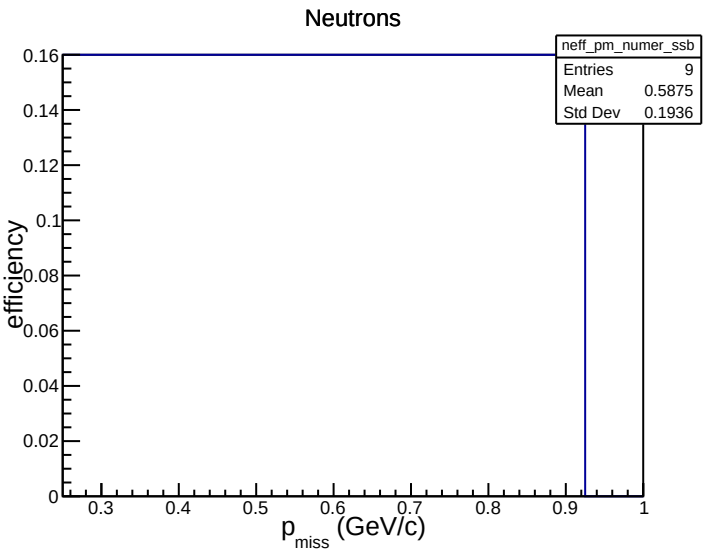
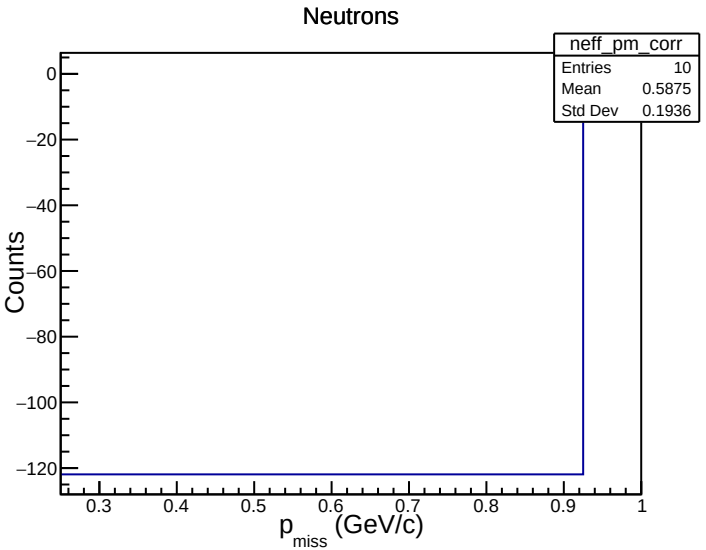
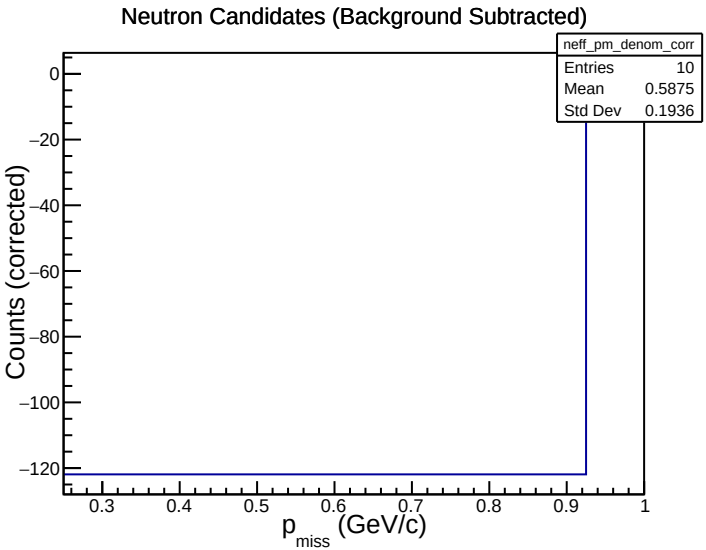
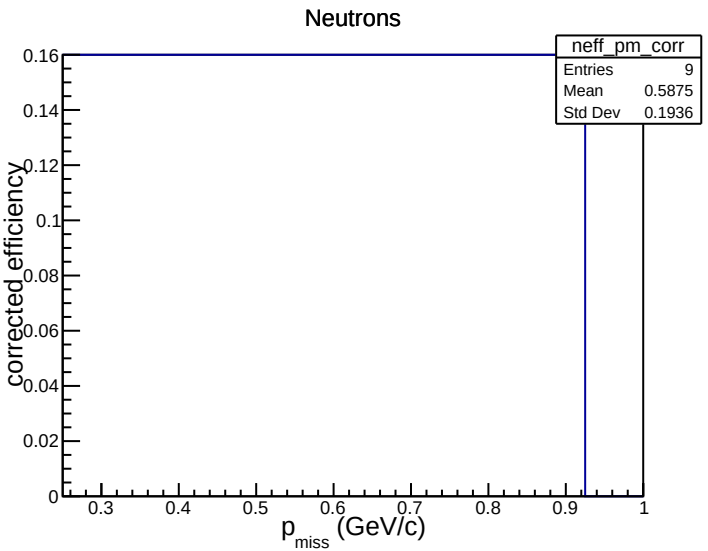
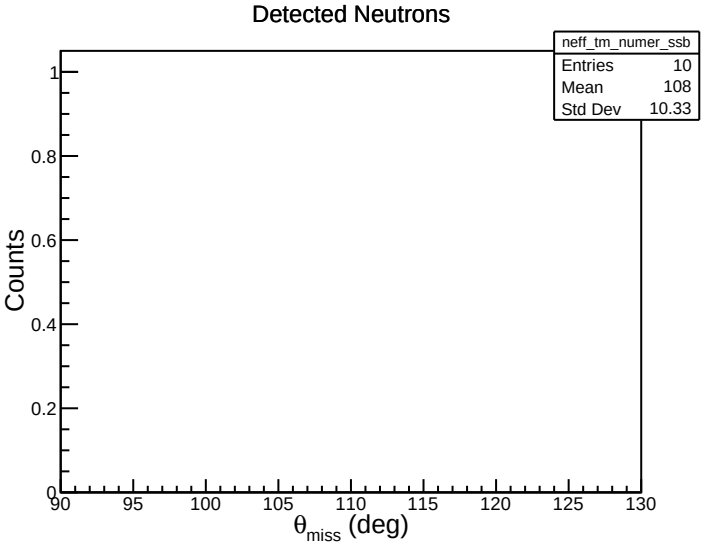
Mean 0.5875
Std Dev 0.1936
Counts
p miss (GeV/c)

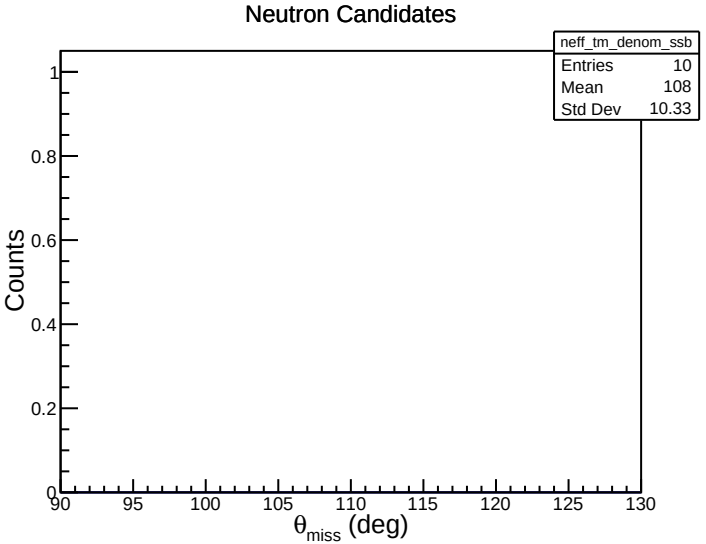

Neutrons
neff_pm_numer_ssb
Entries 9
Mean 0.5875
Std Dev 0.1936
efficiency
p miss (GeV/c)

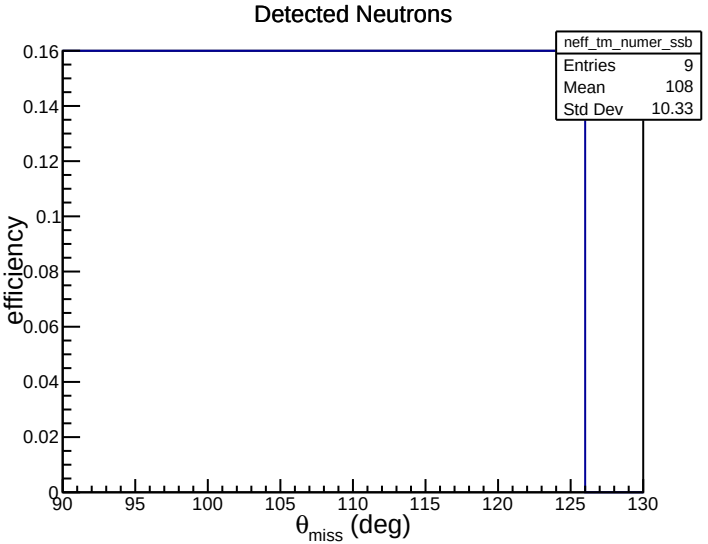

Neutrons
neff_pm_corr
Entries 10
Mean 0.5875
Std Dev 0.1936
Counts
0
−20
−40
−60
−80
−100
−120
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
p miss (GeV/c)

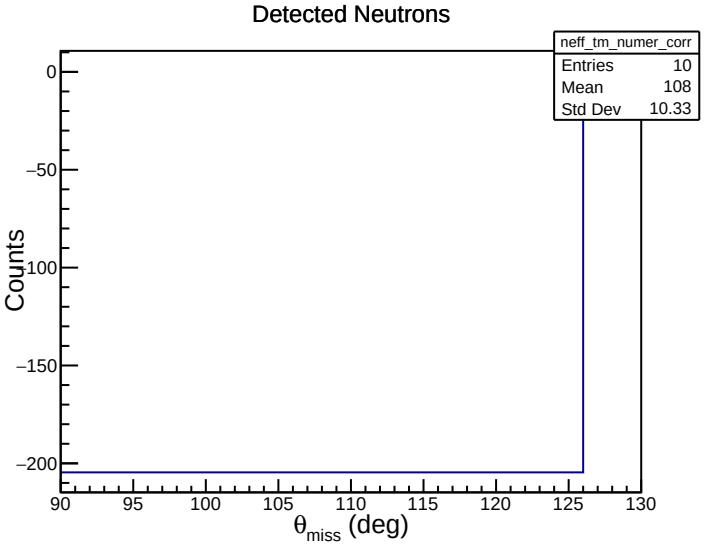

Neutron Candidates (Background Subtracted)
neff_pm_denom_corr
Entries 10
Mean 0.5875
Std Dev 0.1936
Counts (corrected)
0
−20
−40
−60
−80
−100
−120
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
p miss (GeV/c)

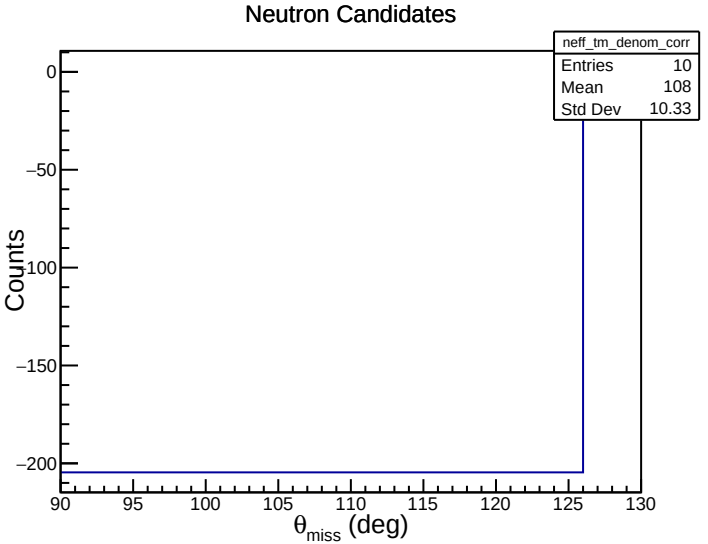

Neutrons
neff_pm_corr
Entries 9
Mean 0.5875
Std Dev 0.1936
corrected efficiency
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
p miss (GeV/c)

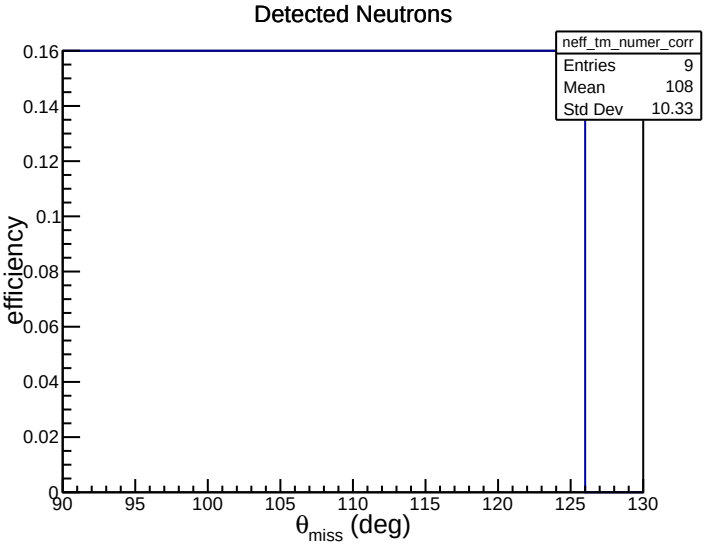

Detected Neutrons
neff_tm_numer_ssb
Entries 10
Mean 108
Std Dev 10.33
Counts
θmiss (deg)


Neutron Candidates
neff_tm_denom_ssb
Entries 10
Mean 108
Std Dev 10.33
Counts
θmiss (deg)


Detected Neutrons
neff_tm_numer_ssb
Entries 9
Mean 108
Std Dev 10.33
efficiency
θmiss (deg)


Detected Neutrons
neff_tm_numer_corr
Entries 10
Mean 108
Std Dev 10.33
Counts
0
−50
−100
−150
−200
90 95 100 105 110 115 120 125 130
θmiss (deg)


Neutron Candidates
neff_tm_denom_corr
Entries 10
Mean 108
Std Dev 10.33
Counts
0
−50
−100
−150
−200
90 95 100 105 110 115 120 125 130
θmiss (deg)


Detected Neutrons
neff_tm_numer_corr
Entries 9
Mean 108
Std Dev 10.33
efficiency
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
90 95 100 105 110 115 120 125 130
θmiss (deg)