

2.254GeV 5T Longitudinal Packing Fraction (Material 17)

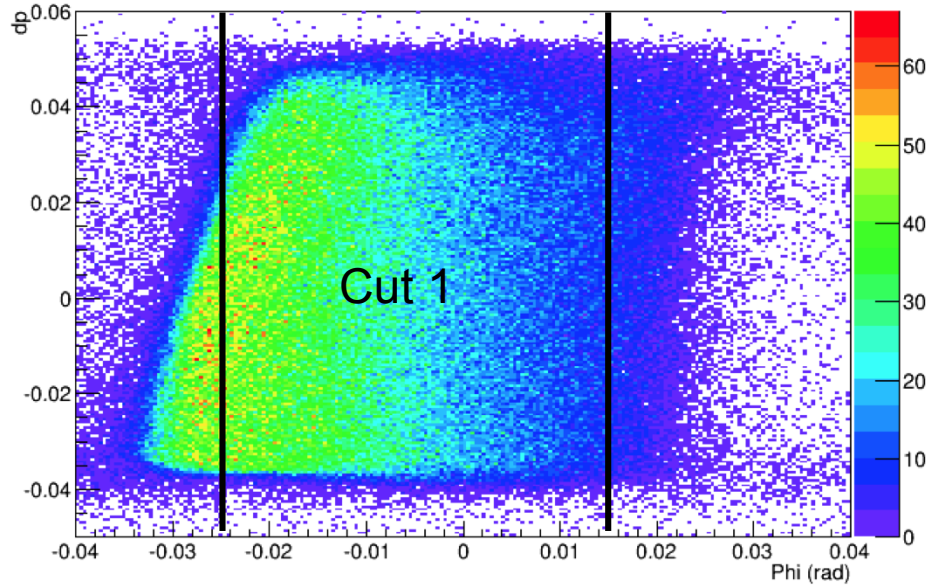
Packing Fraction	Uncertainty (+/-)
0.446	0.018
0.531	0.022
0.525	0.021
0.546	0.023
0.619	0.027
0.519	0.010

Weighted Average

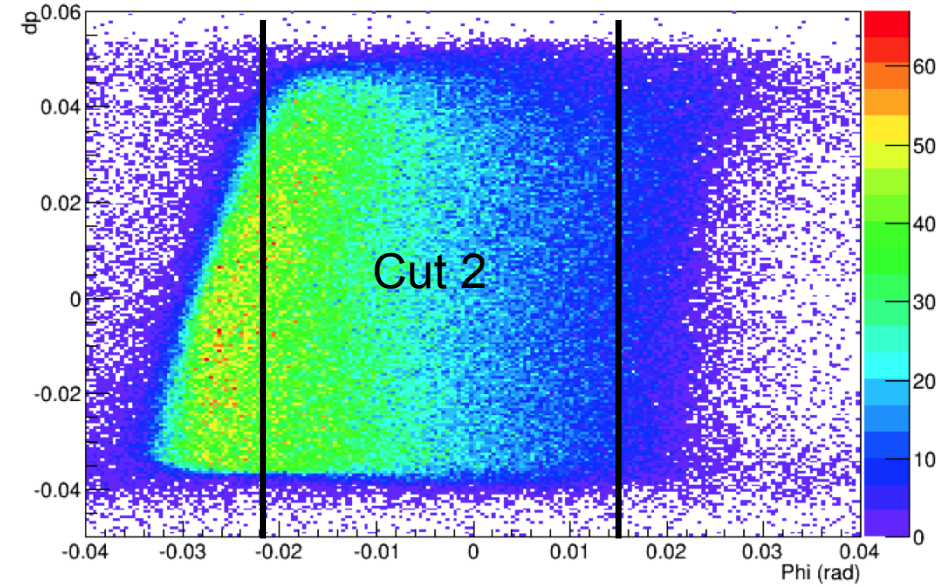
Phi Acceptance Cuts used:

((Always used $\text{abs}(\theta) < 0.05$))

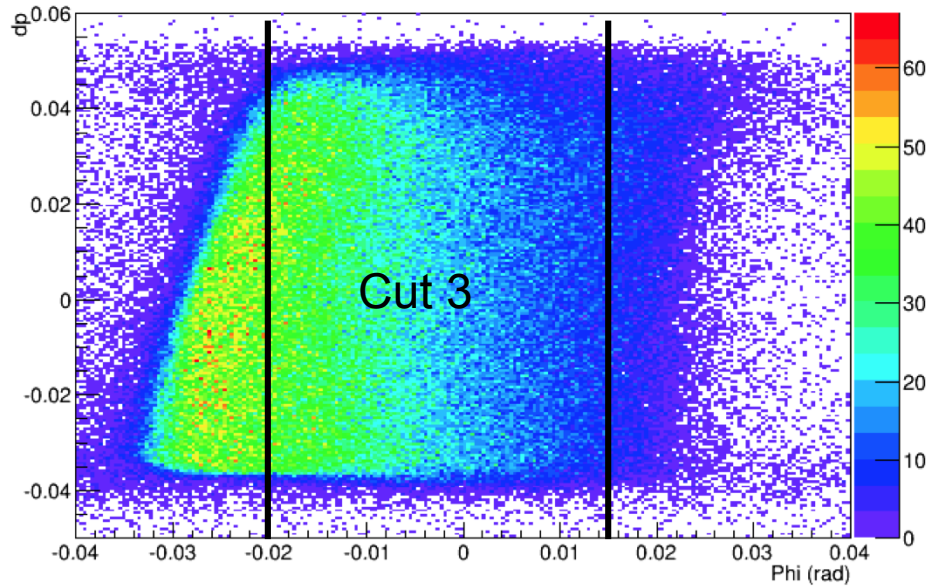
2.254GeV 5T Long. dp vs. phi



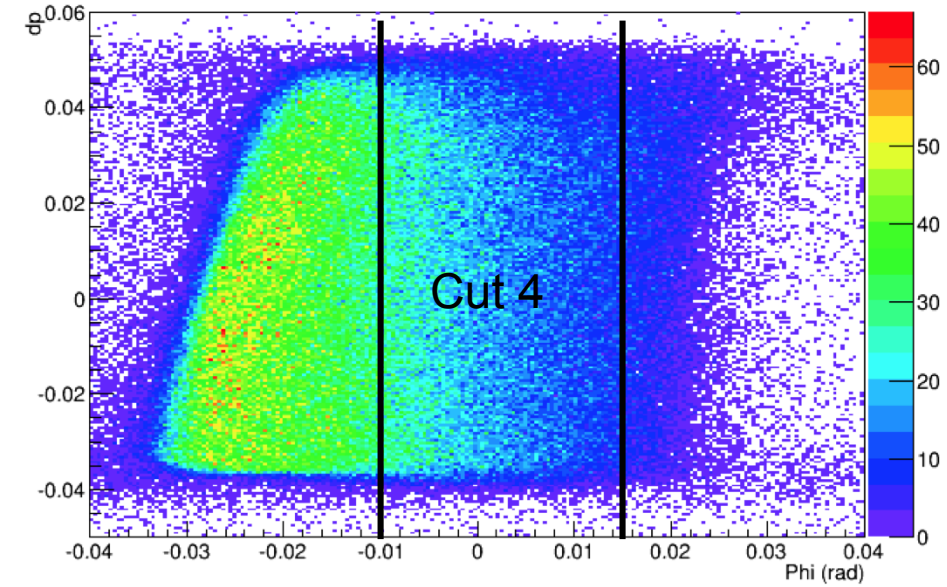
2.254GeV 5T Long. dp vs. phi



2.254GeV 5T Long. dp vs. phi



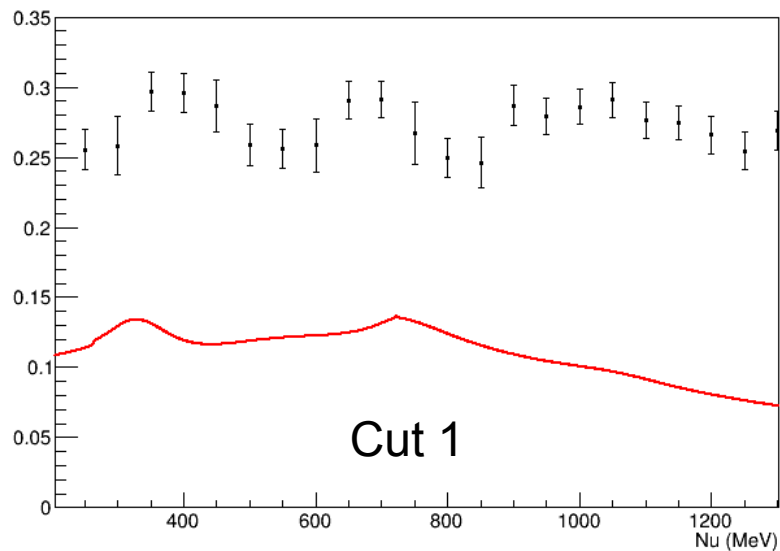
2.254GeV 5T Long. dp vs. phi



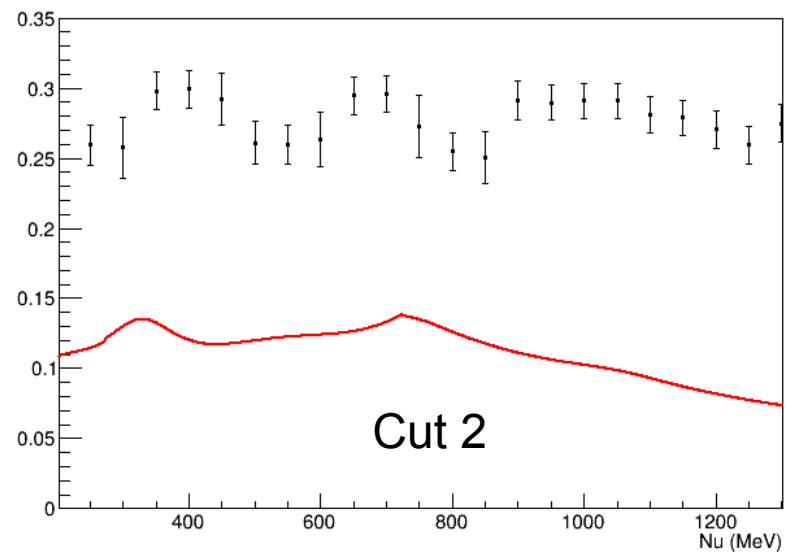
2.254 GeV 5T Longitudinal Dilution

Using $pf = 0.446 \pm 0.018$

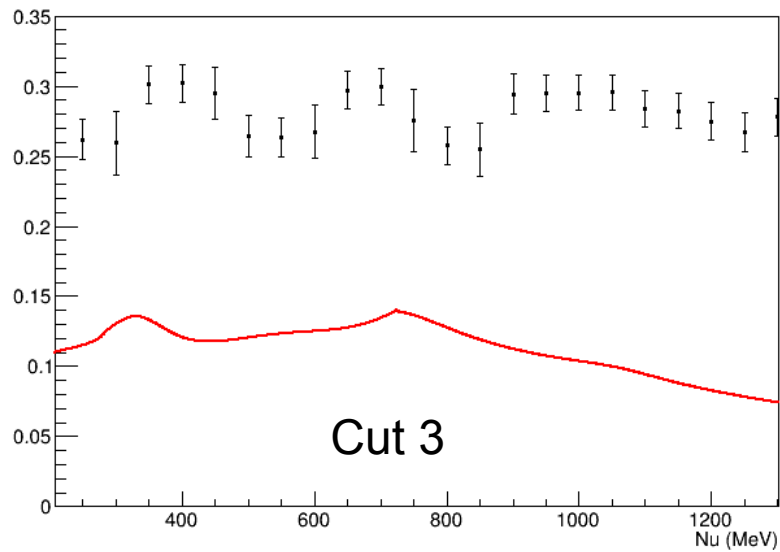
2.254 GeV 5T Longitudinal Dilution



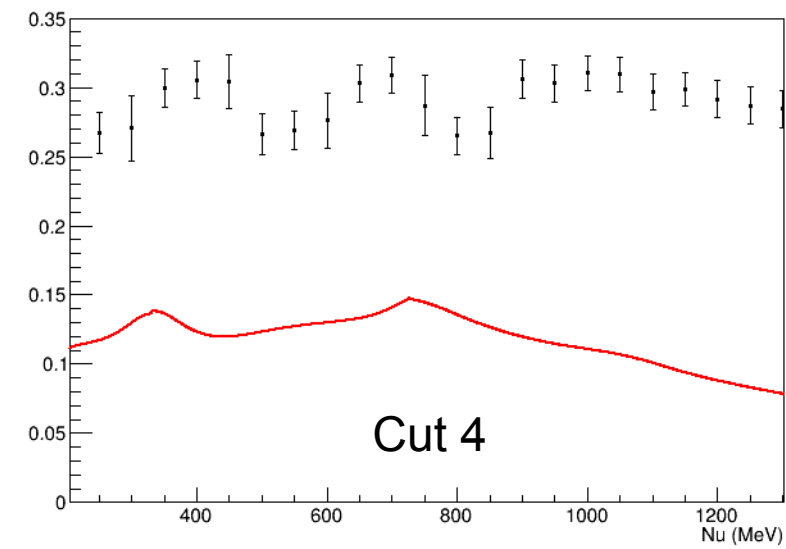
2.254 GeV 5T Longitudinal Dilution



2.254 GeV 5T Longitudinal Dilution



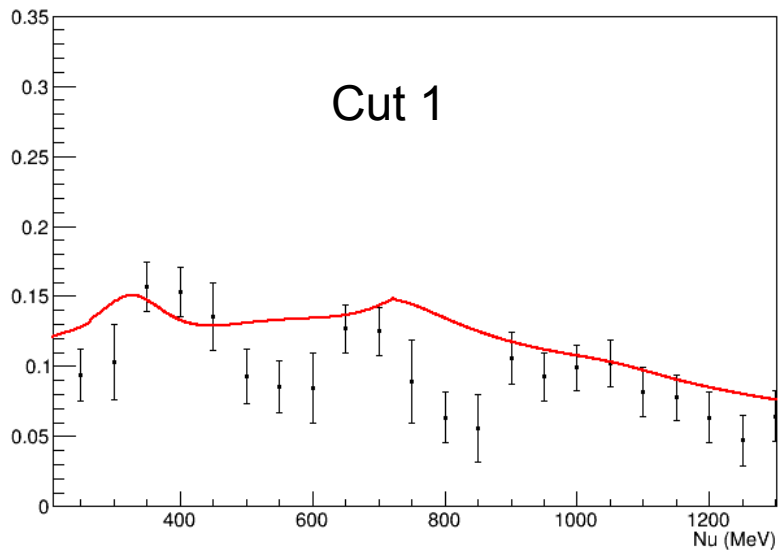
2.254 GeV 5T Longitudinal Dilution



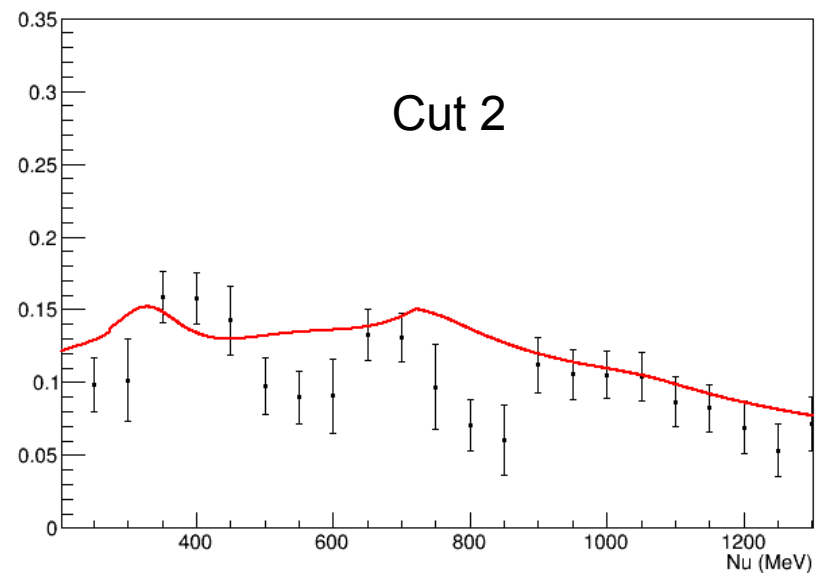
2.254 GeV 5T Longitudinal Dilution

Using $pf = 0.619 \pm 0.027$

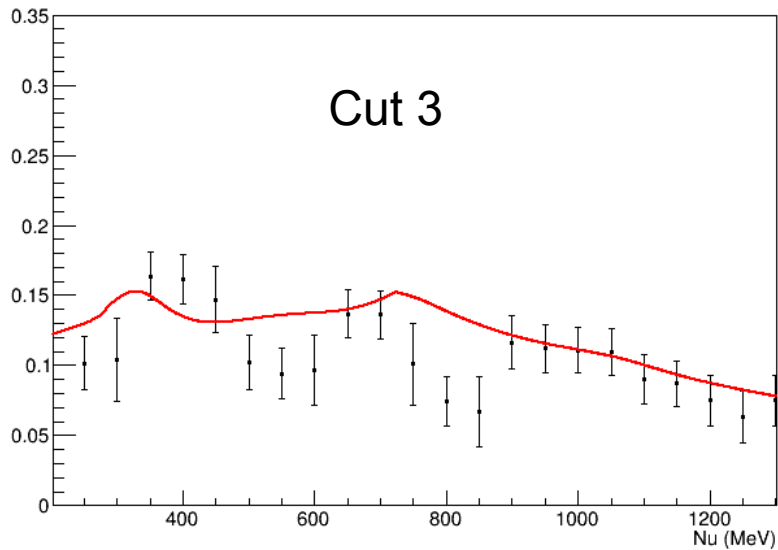
2.254 GeV 5T Longitudinal Dilution



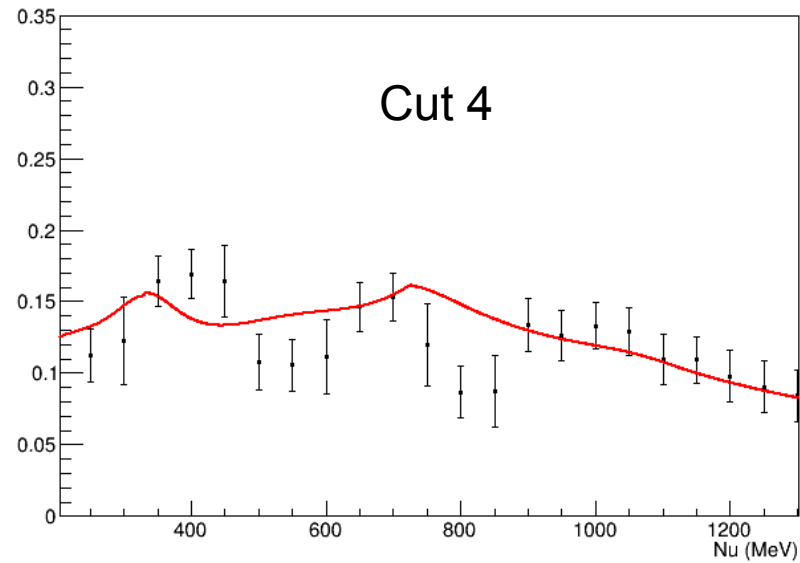
2.254 GeV 5T Longitudinal Dilution



2.254 GeV 5T Longitudinal Dilution



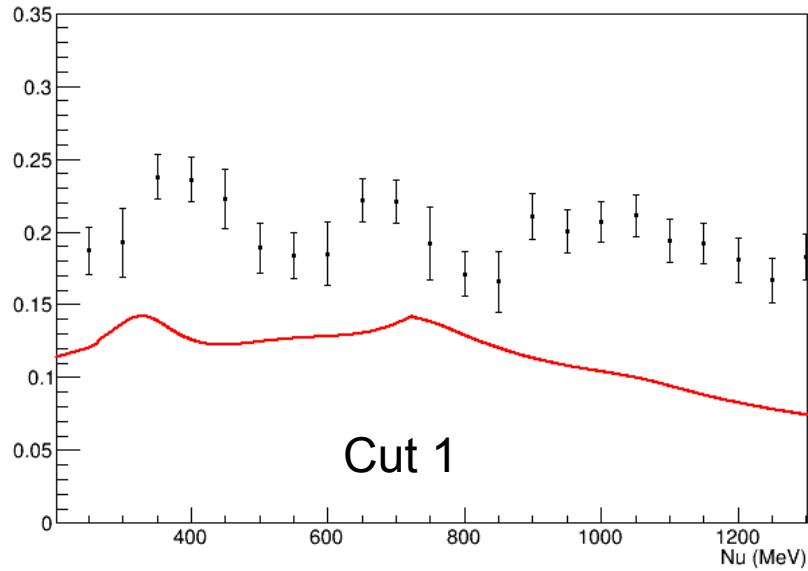
2.254 GeV 5T Longitudinal Dilution



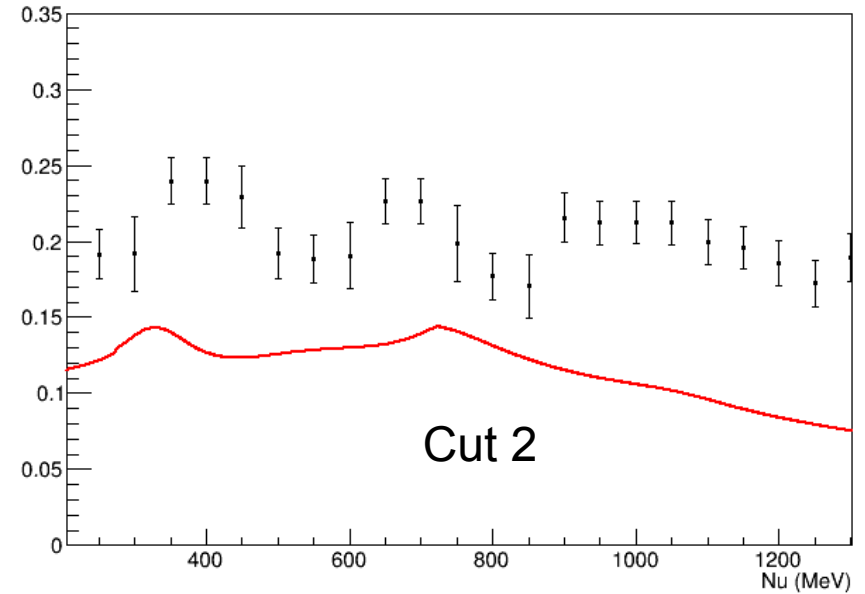
2.254 GeV 5T Longitudinal Dilution

Using $pf = 0.519 \pm 0.006$ (weighted average)

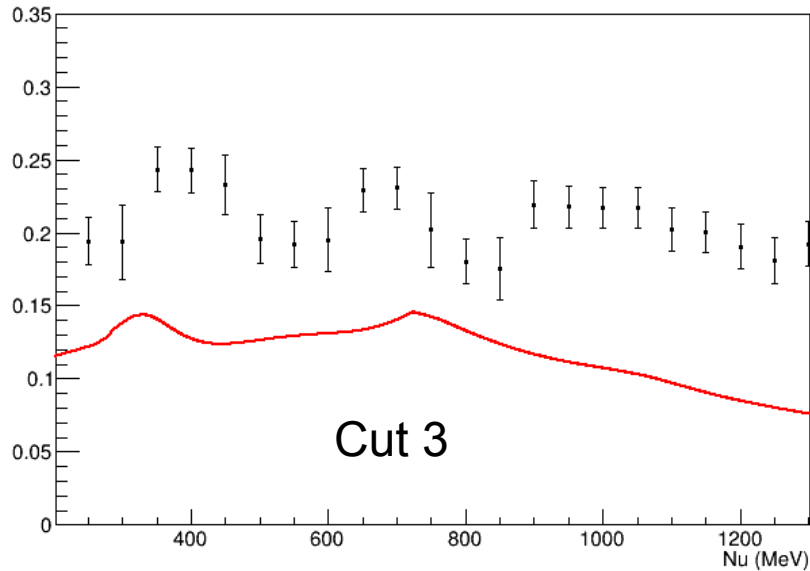
2.254 GeV 5T Longitudinal Dilution



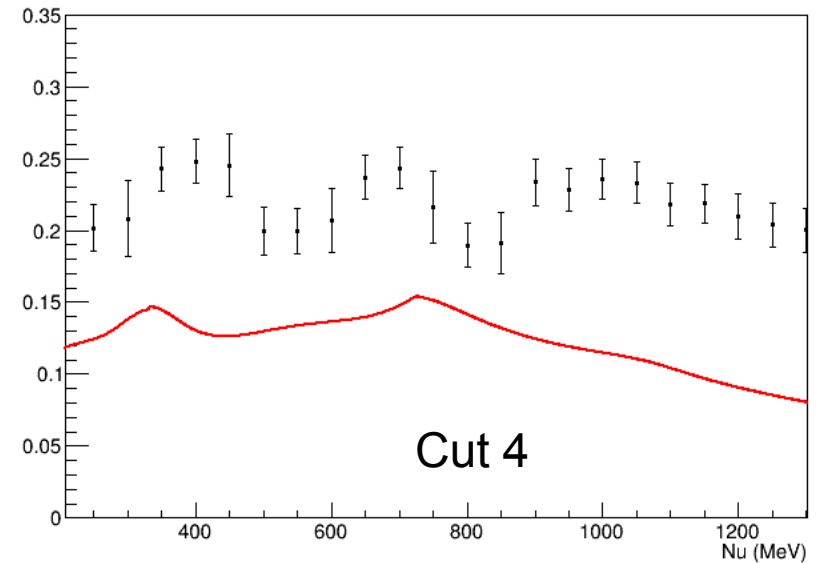
2.254 GeV 5T Longitudinal Dilution



2.254 GeV 5T Longitudinal Dilution

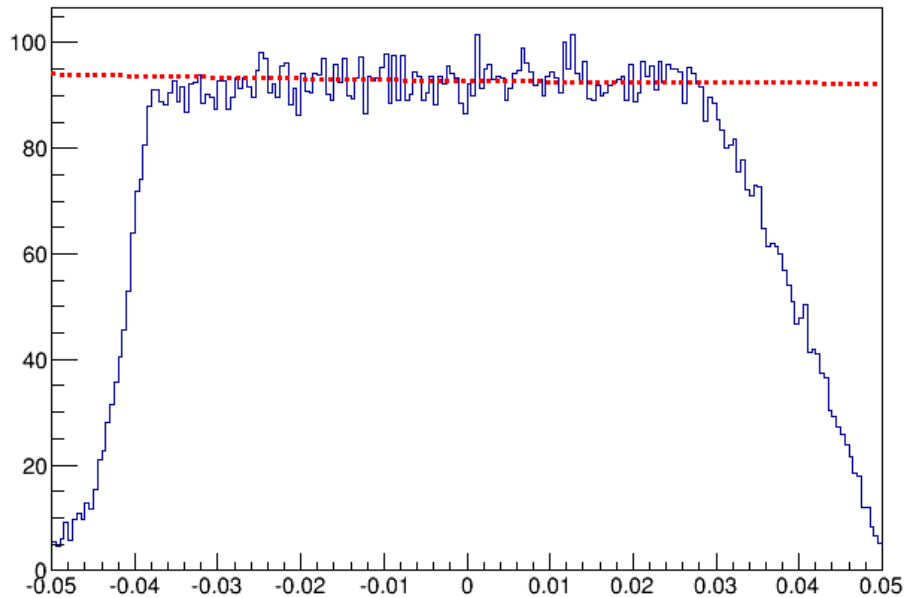


2.254 GeV 5T Longitudinal Dilution

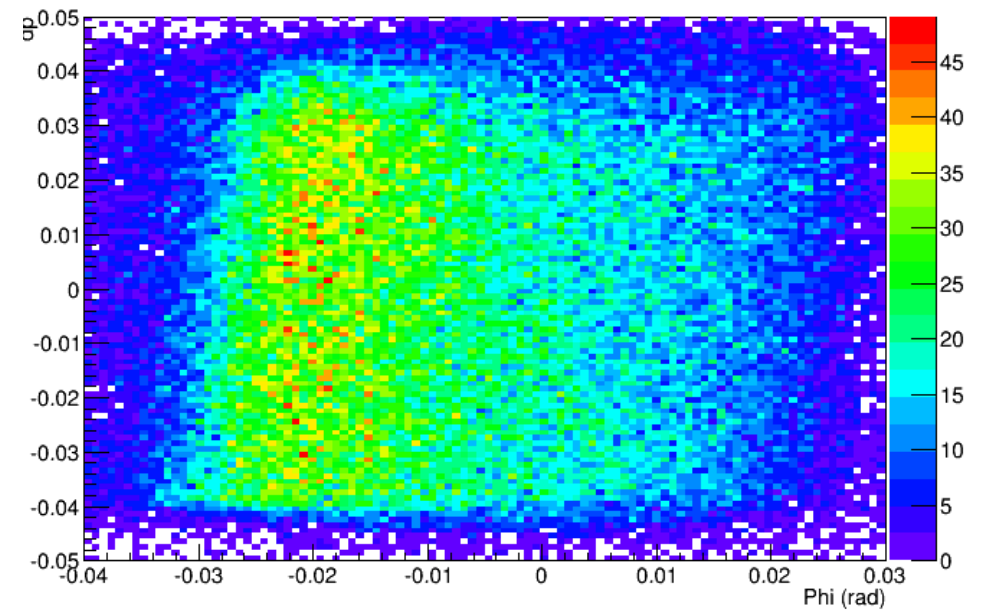


2.254GeV 5T Transverse Acceptance

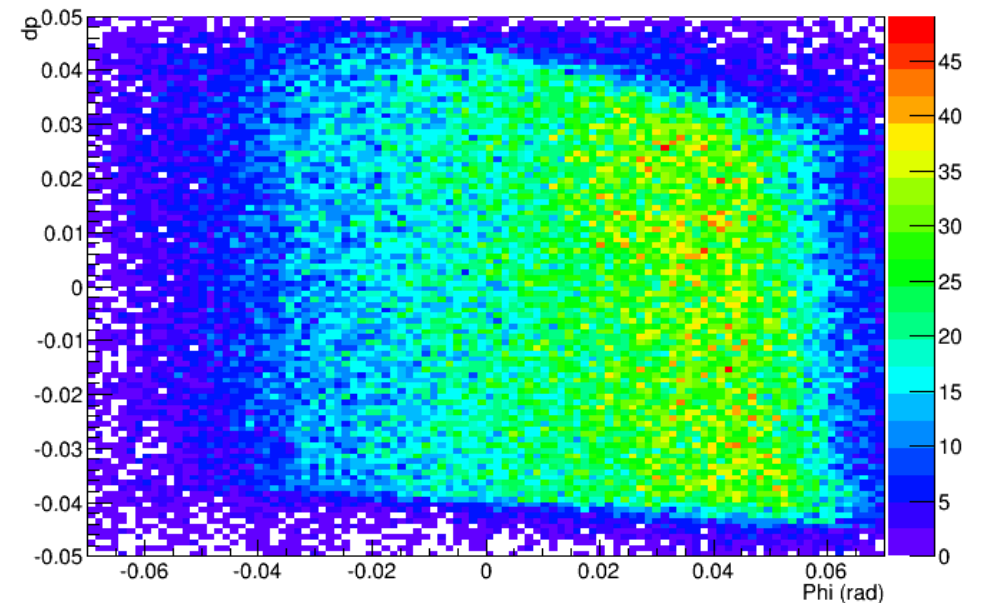
$p_0=919\text{GeV}$ dp, no acc cuts



dp vs target phi



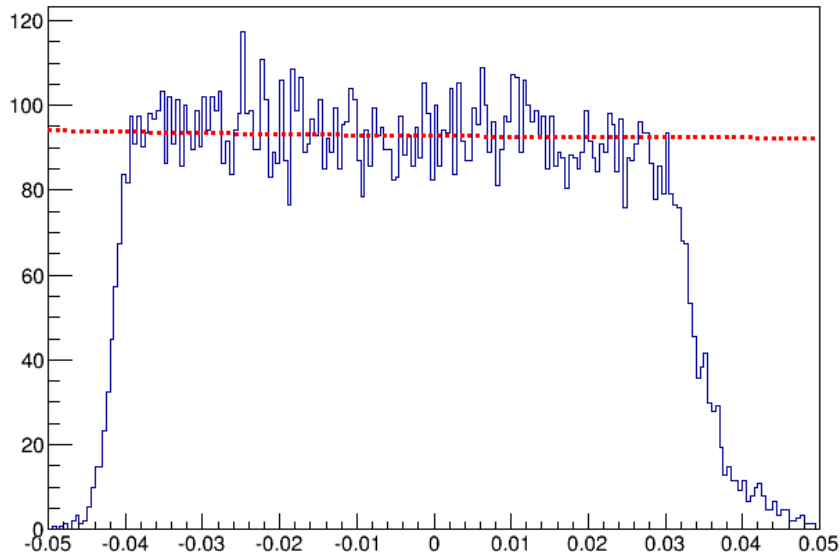
dp vs target theta



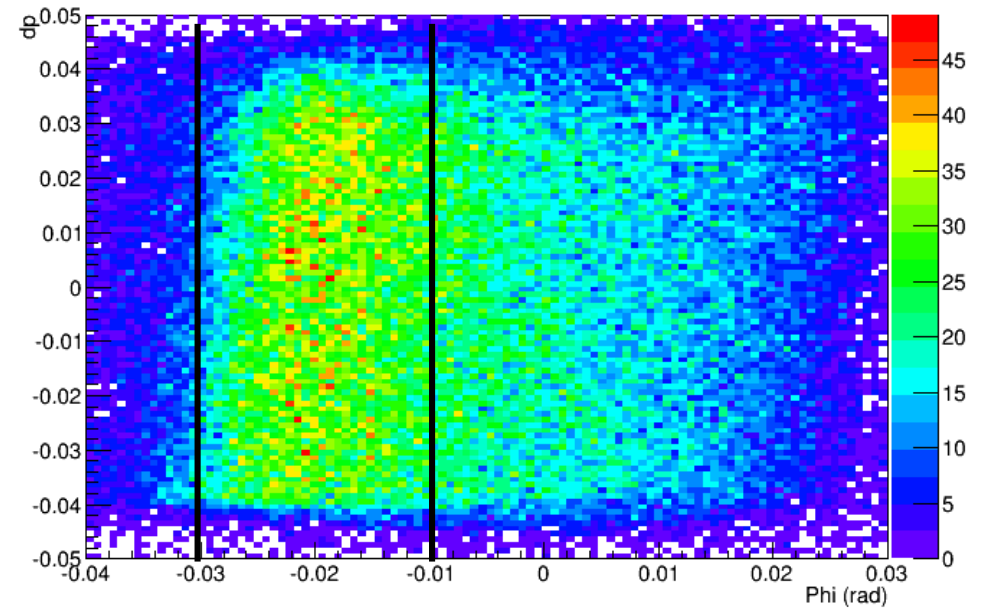
- No cut on theta or phi
- Red line is radiated P.Bosted (using scattering angle weight method).
- Already good agreement, no correction needed?

2.254GeV 5T Transverse Acceptance

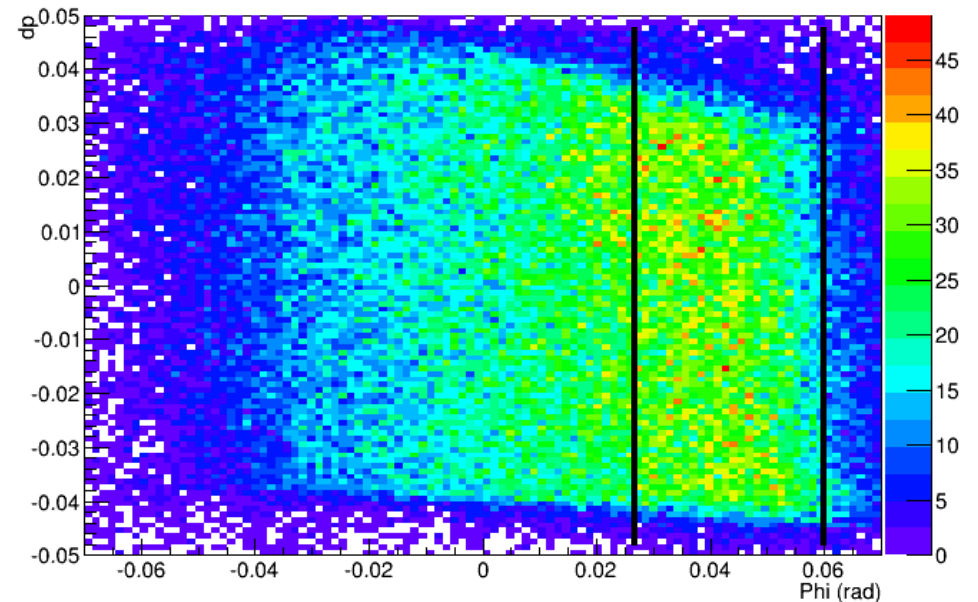
$p_0=0.919\text{GeV}$ dp



dp vs target phi



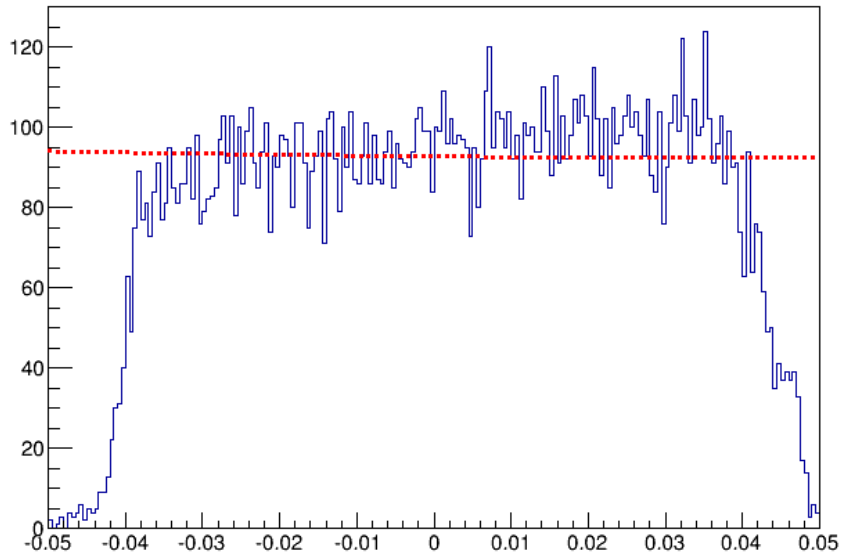
dp vs target theta



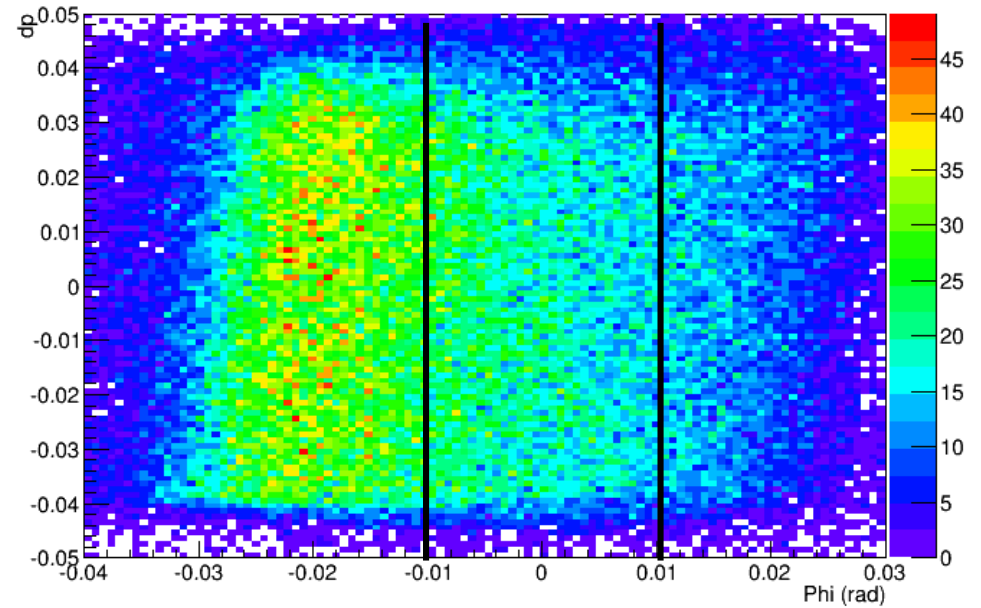
- Dp is scaled to match simulation.
- This cut causes about a 40% loss in statistics.
- Distribution looks exactly the same, probably not necessary.

2.254GeV 5T Transverse Acceptance

$p_0=0.919\text{GeV}$ dp



dp vs target phi



- Actually starts to look worse after cutting on the center of the acceptance.
- It looks like I won't need to do theta/phi cuts for the transverse setting.
- No acceptance effects??

dp vs target theta

