Cut Optimization

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01/25/13

Cuts

- Cherenkov Sum

  R.cer.asum_c > #

- Layer 1 of lead glass

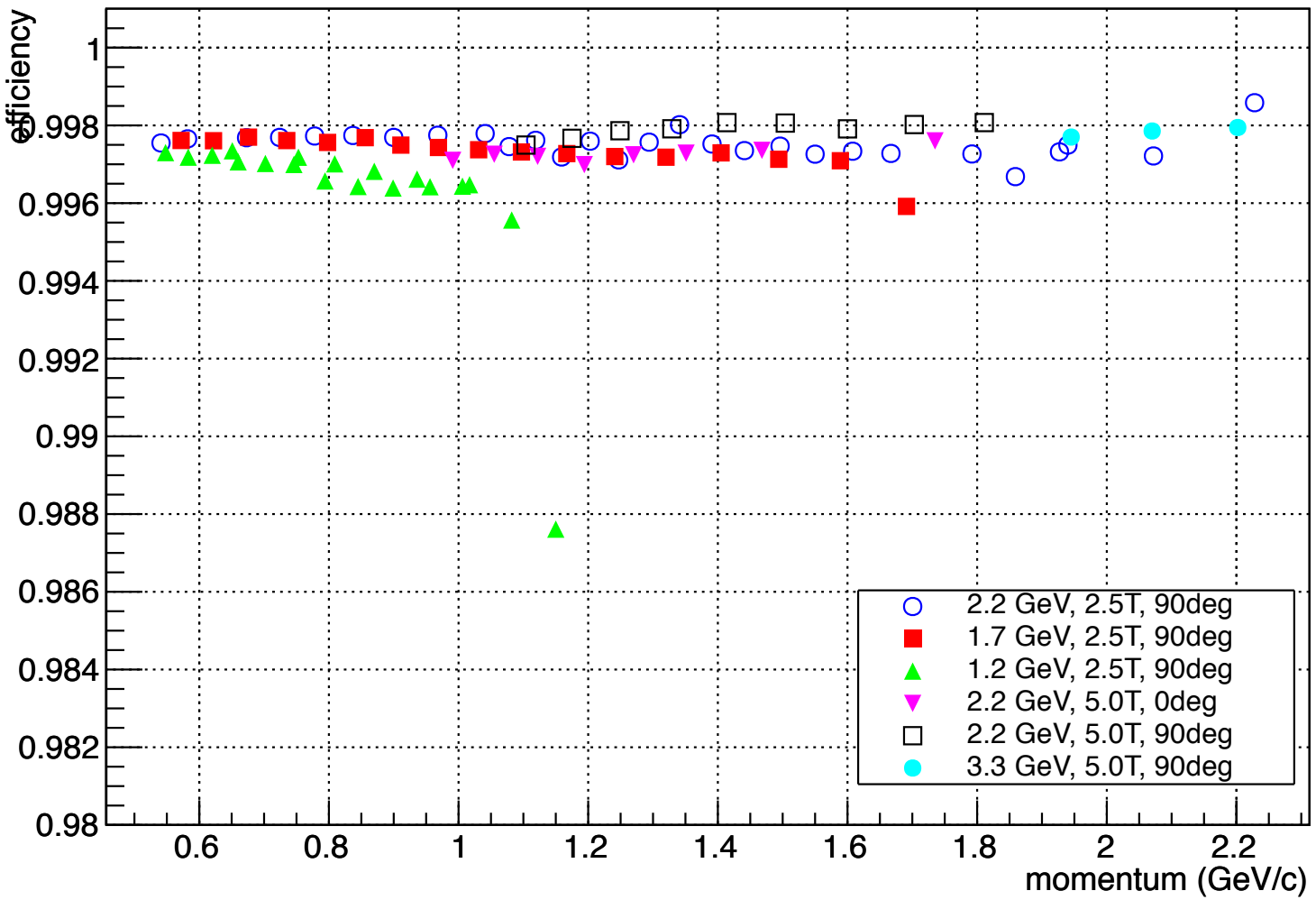
  (R.ps.e/p0) > #

- E/p

  (R.ps.e+R.sh.e)/p0 > #

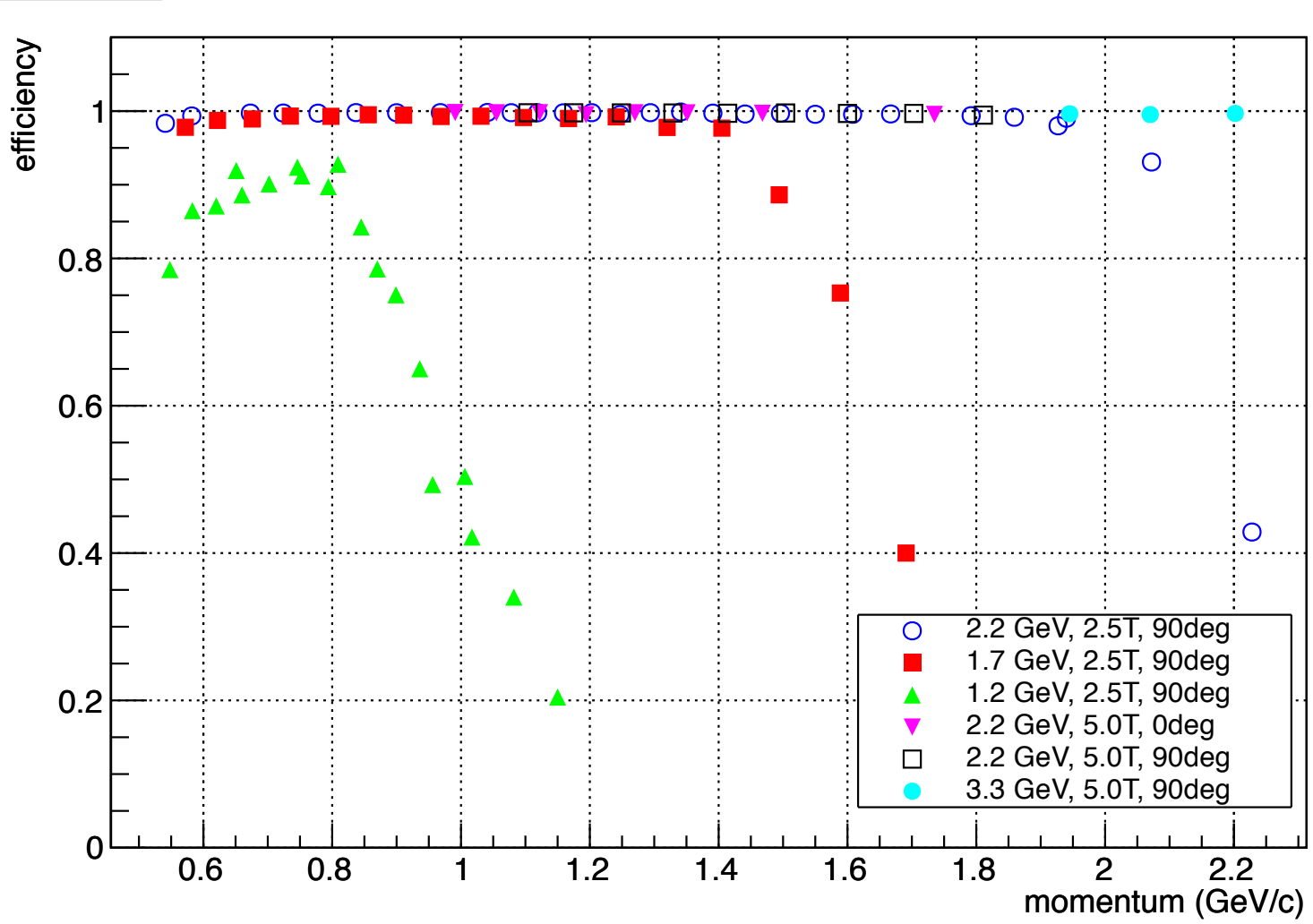
Cut Efficiencies (RHRS)

Electron Efficiency

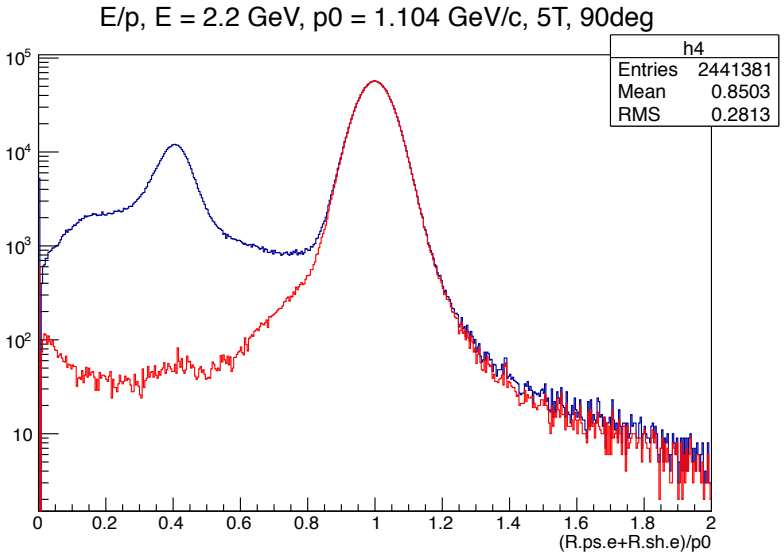


Cut Efficiencies (RHRS)

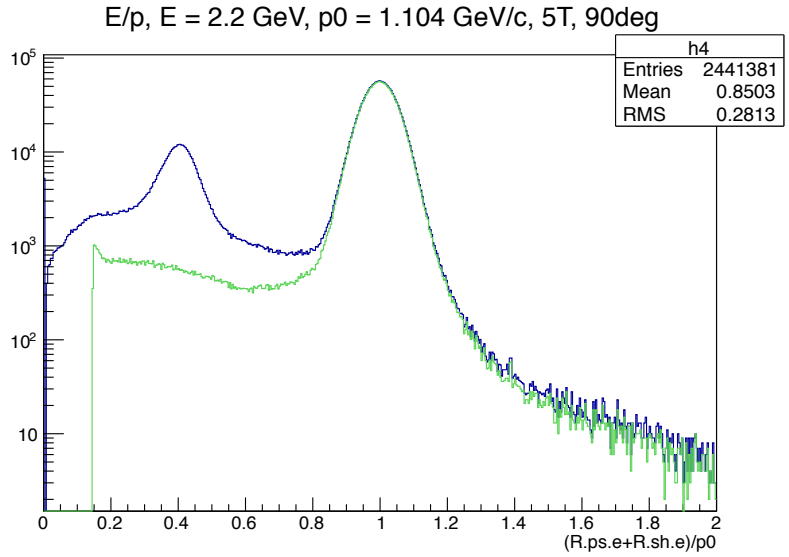
Pion Rejection Efficiency



Pion Contamination (RHRS)

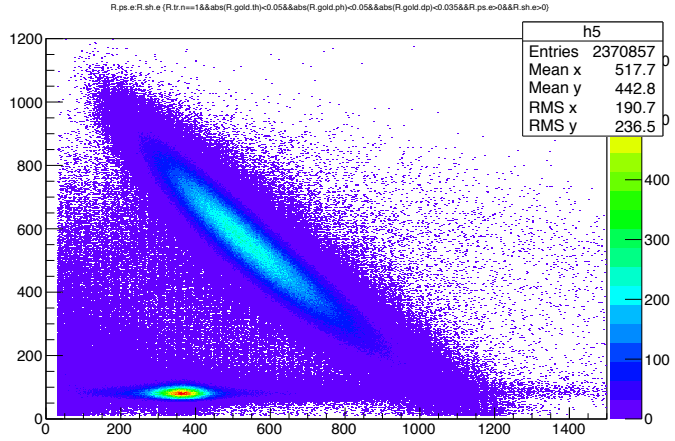


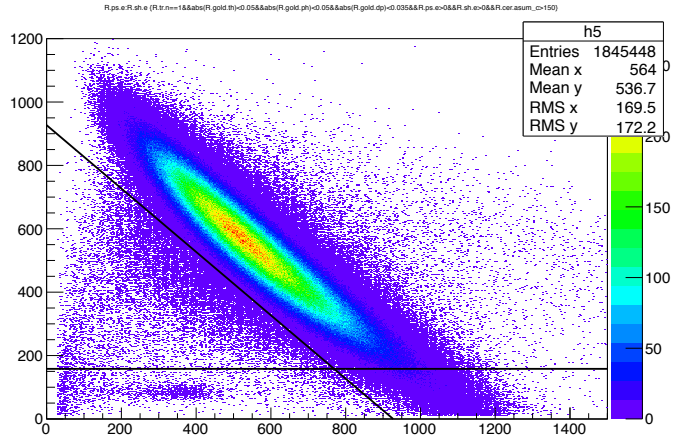
R.cer.asum_c > 150

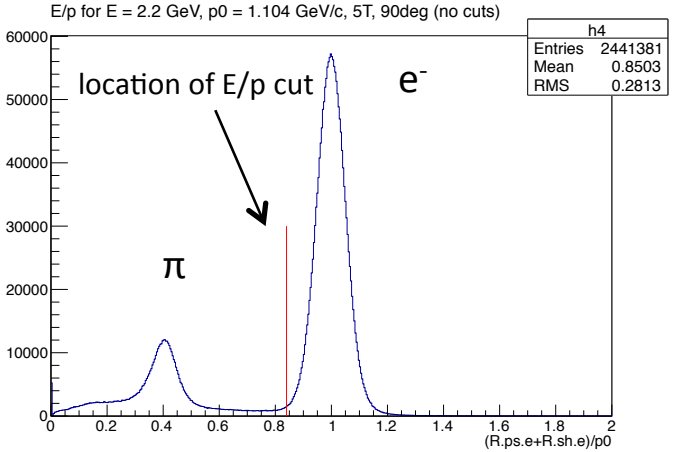


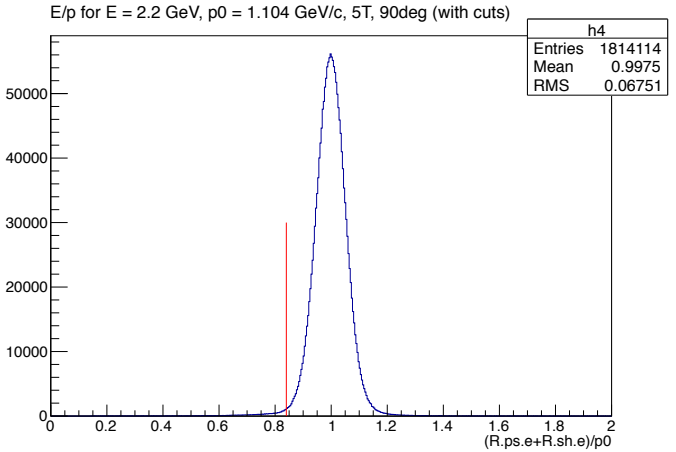
R.ps.e/p0 > 0.147

Pion Contamination (RHRS)









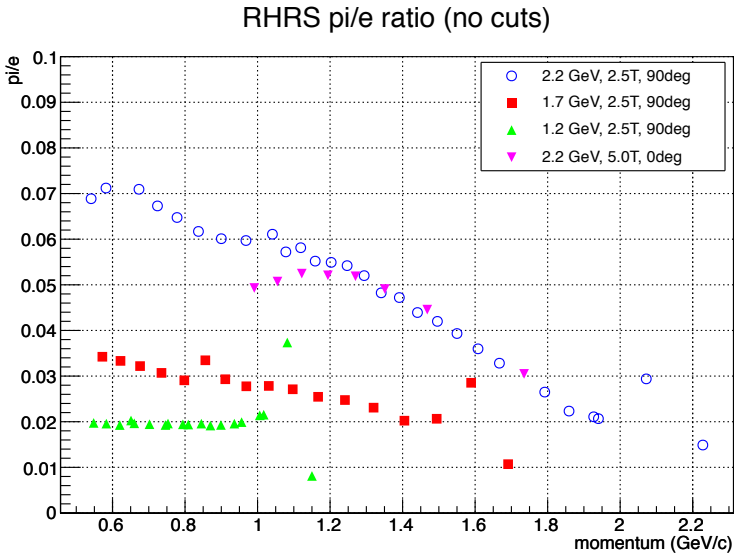
No cuts:

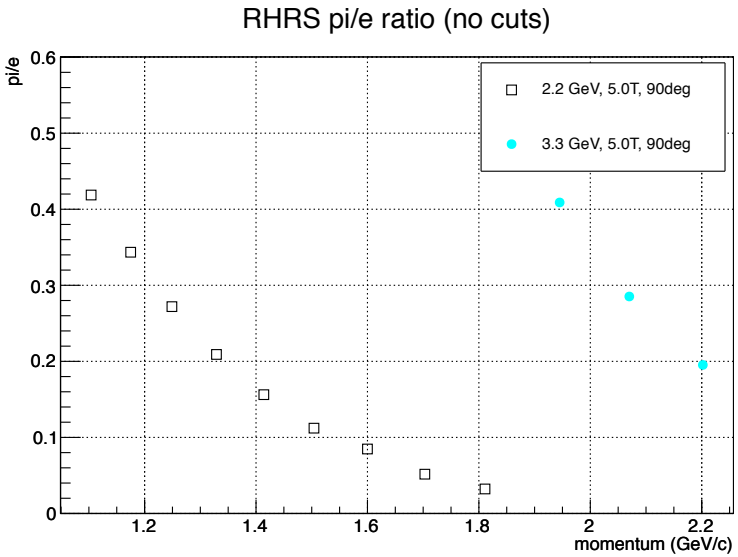
π/e = 0.4187

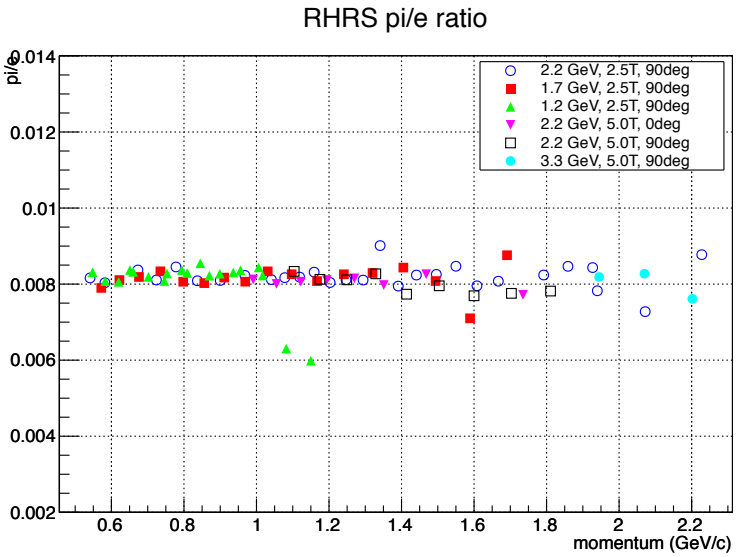
With Cherenkov and pre-shower cuts:

π/e = 0.0083

Pion Contamination (RHRS)

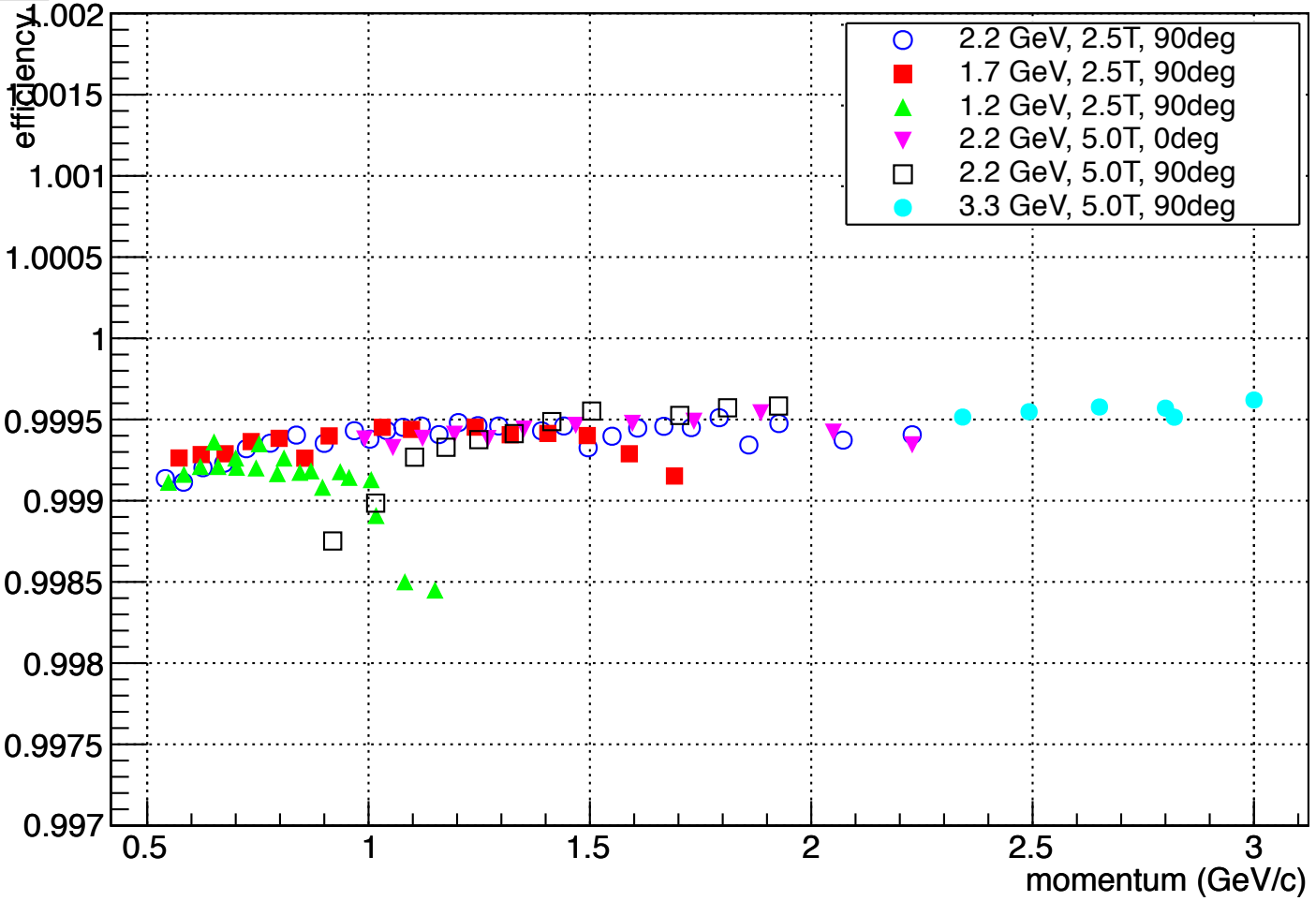






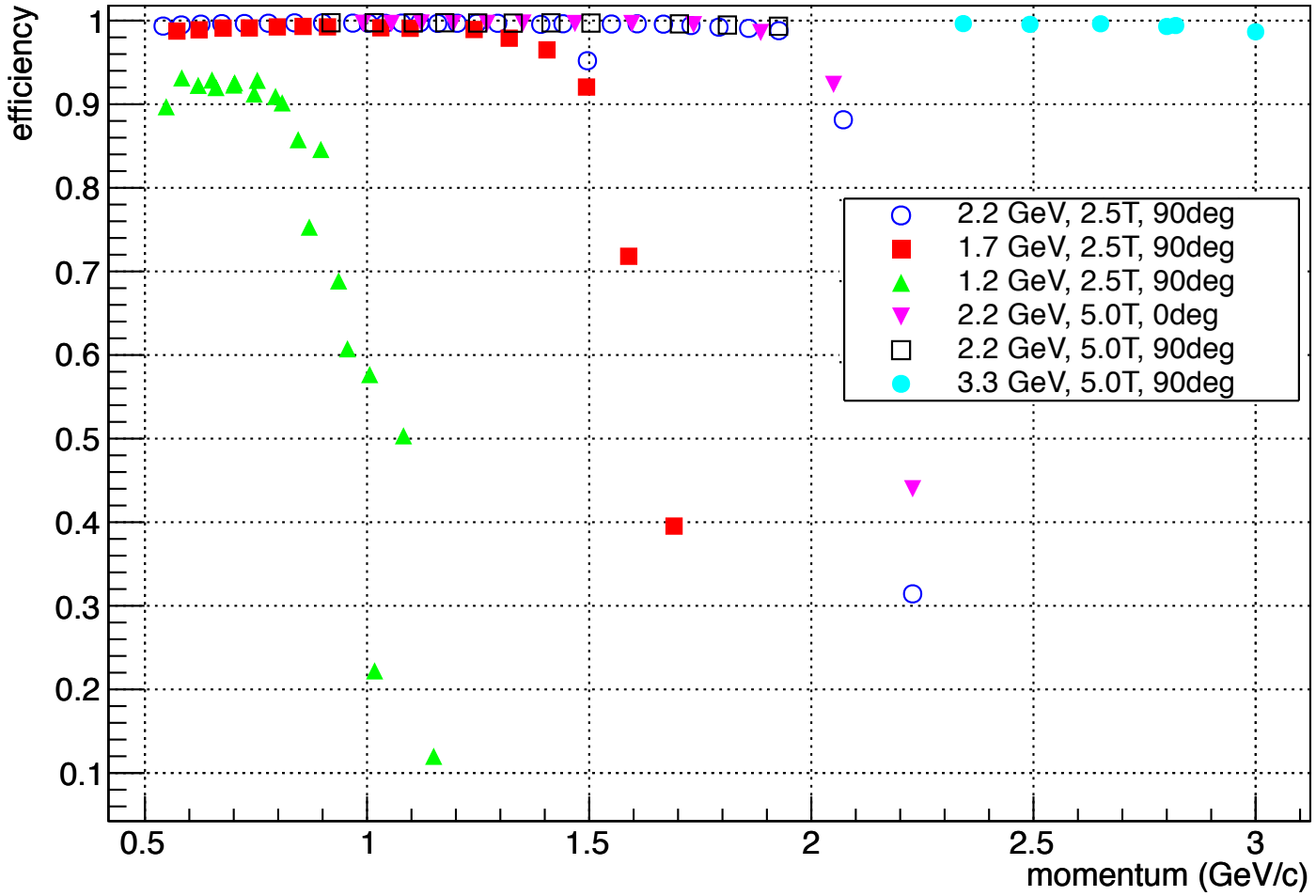
Cut Efficiencies (LHRS)

Electron Efficiency

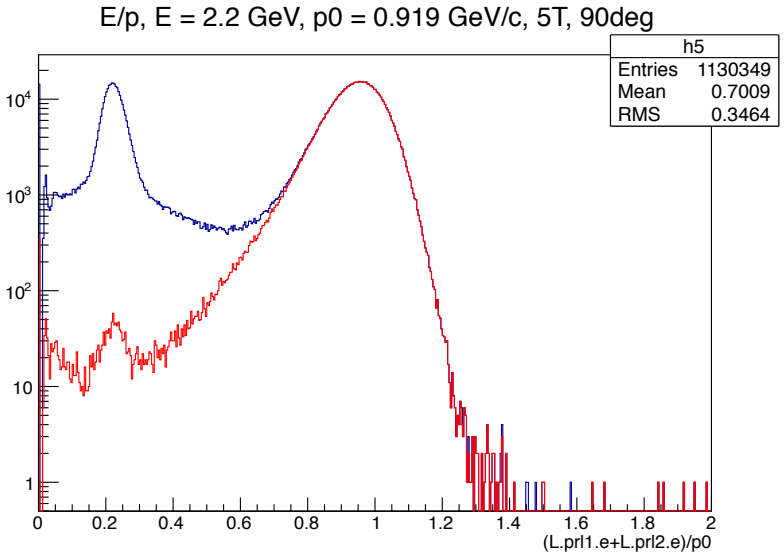


Cut Efficiencies (LHRS)

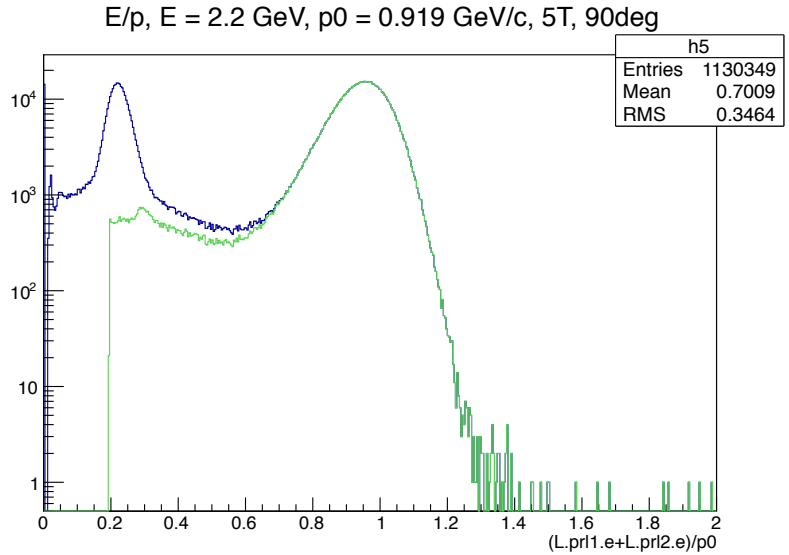
Pion Rejection Efficiency



Pion Contamination (LHRS)

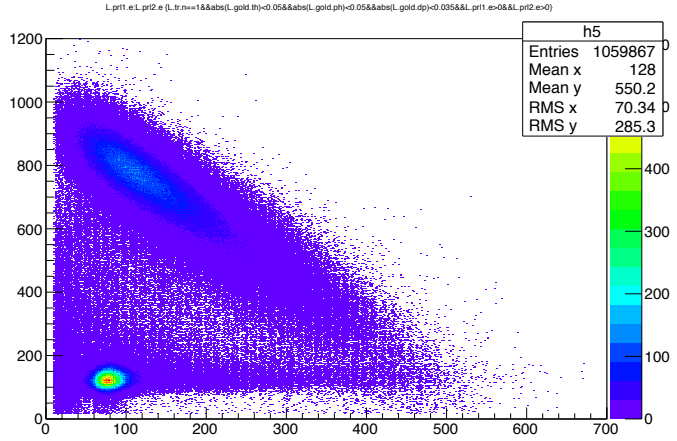


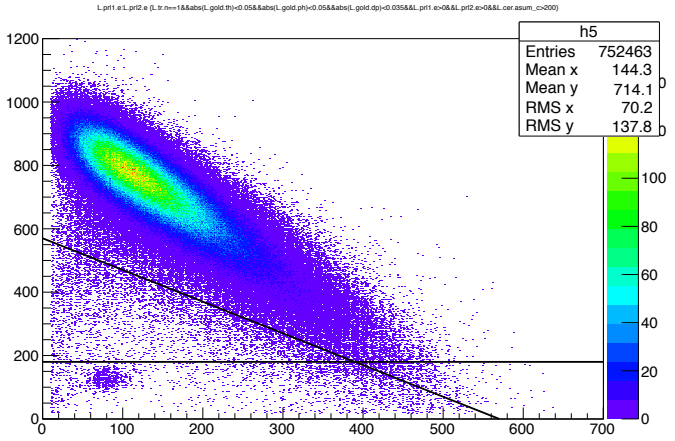
L.cer.asum_c > 200

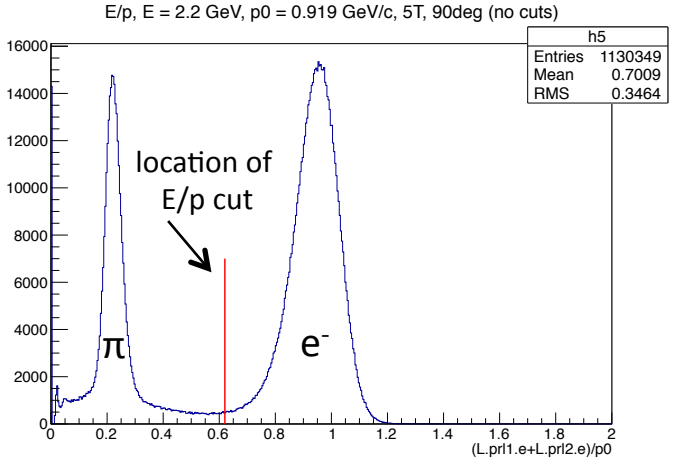


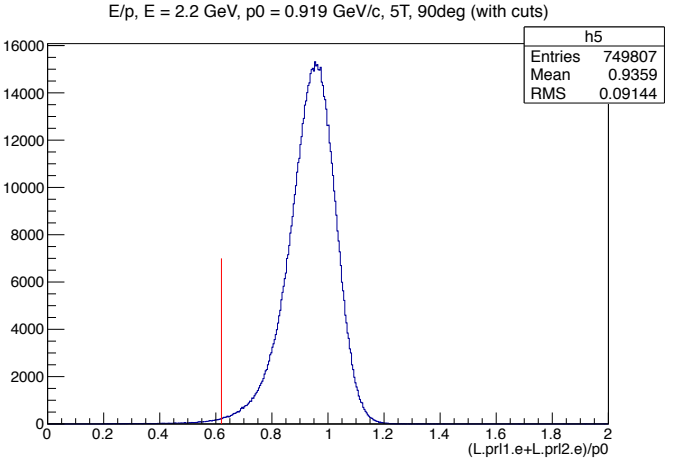
L.prl1.e/p0 > 0.196

Pion Contamination (LHRS)









No cuts:

π/e = 0.681

With Cherenkov and pre-shower cuts:

π/e = 0.0071

Pion Contamination (LHRS)