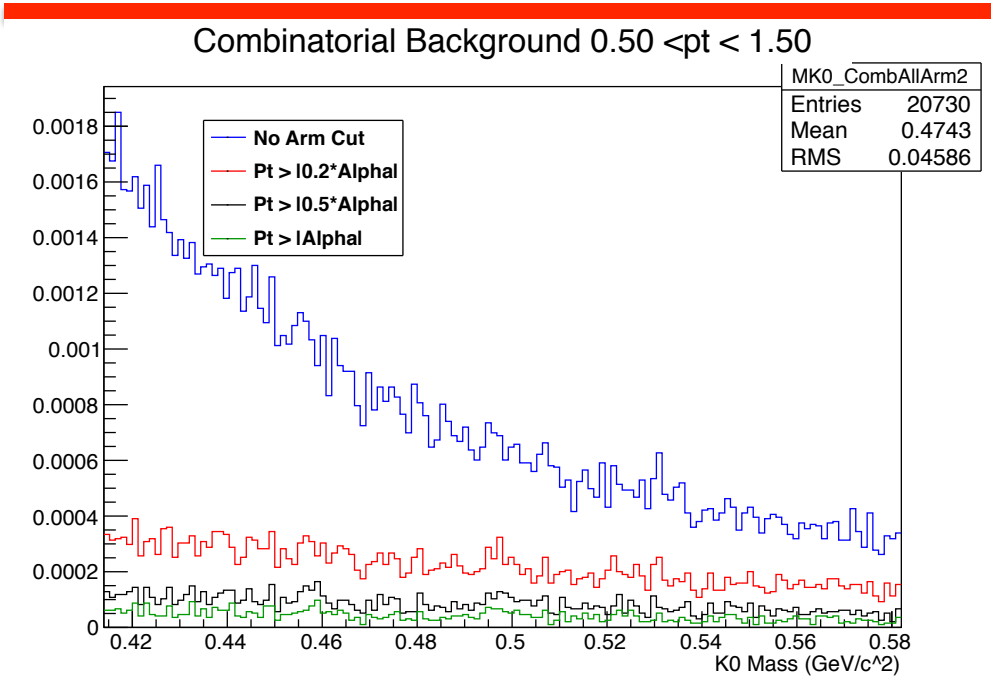
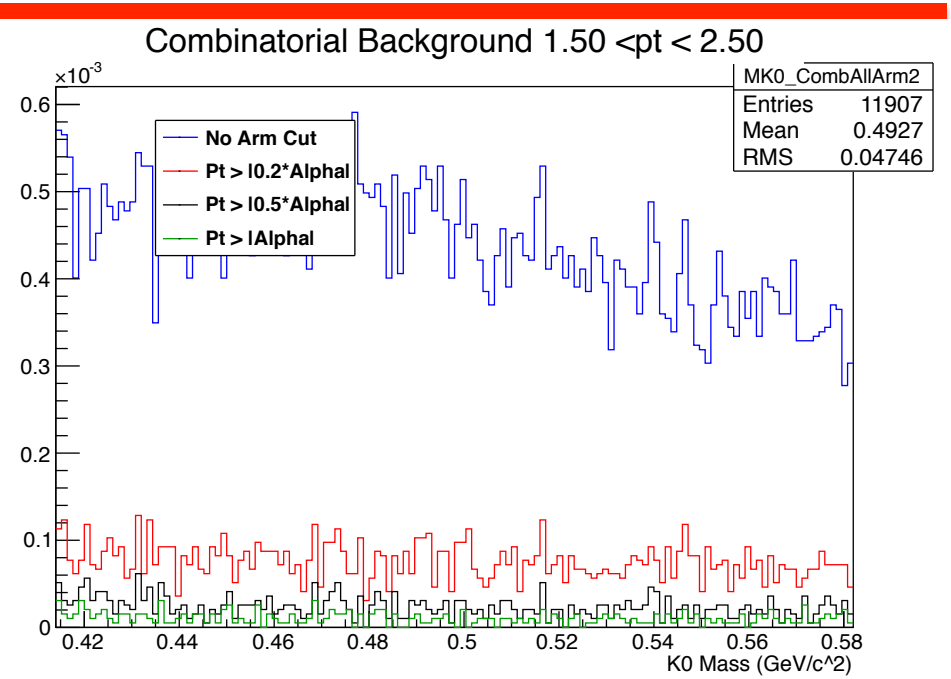
- MainStream analysis with Armenteros cut underway using LEGO trains
  - Data & LHC11a10a ~~essentially~~ **done** ~~(waiting on final merging)~~, took 2-3 days
  - Should be able to start LHC11a10b_plus immediately afterwards

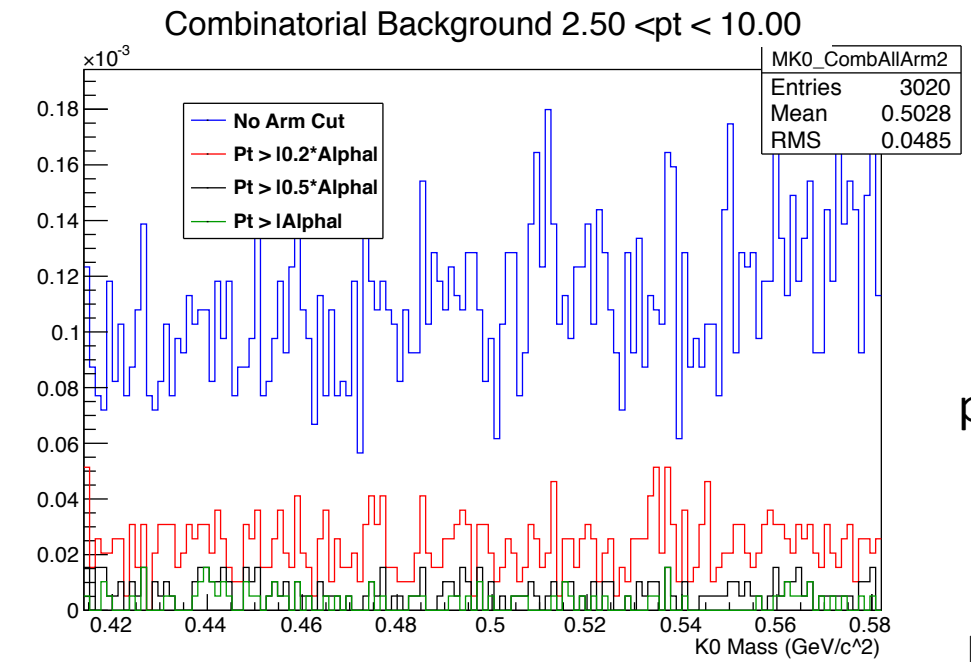
  - SO, assuming no problems, might be possible to have new K0s spectra by next week

- Have set up my AOD task to look at some systematics related to the Armenteros cut, can submit as soon as next tag generated (**18:00 today in theory**).

- Have been asked several times about possible false peaks introduced by the Armenteros cut - > have created some background distributions for this...





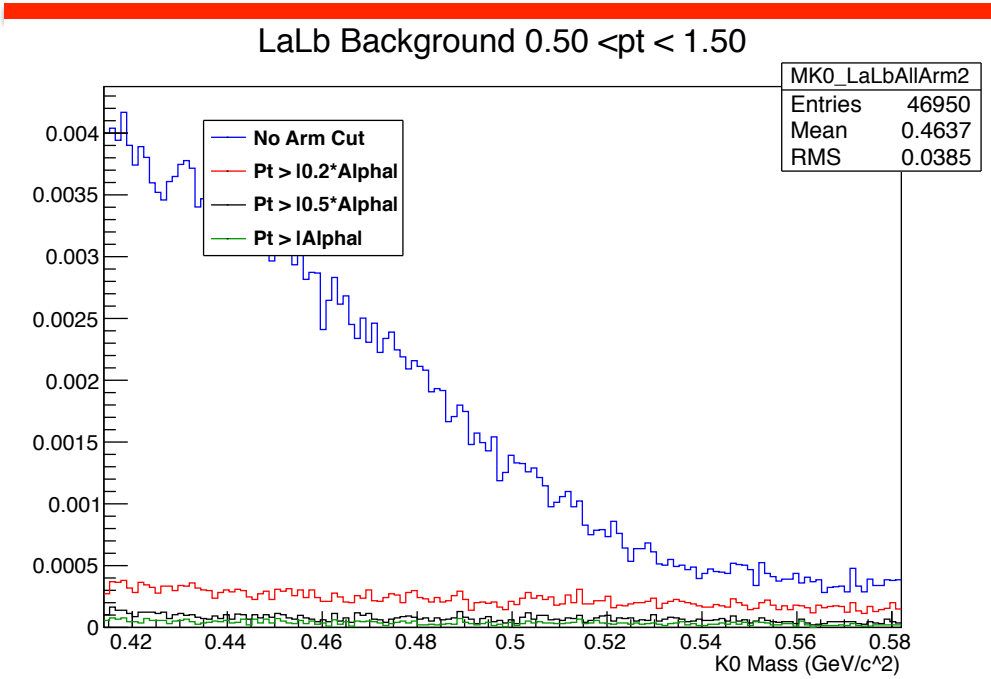


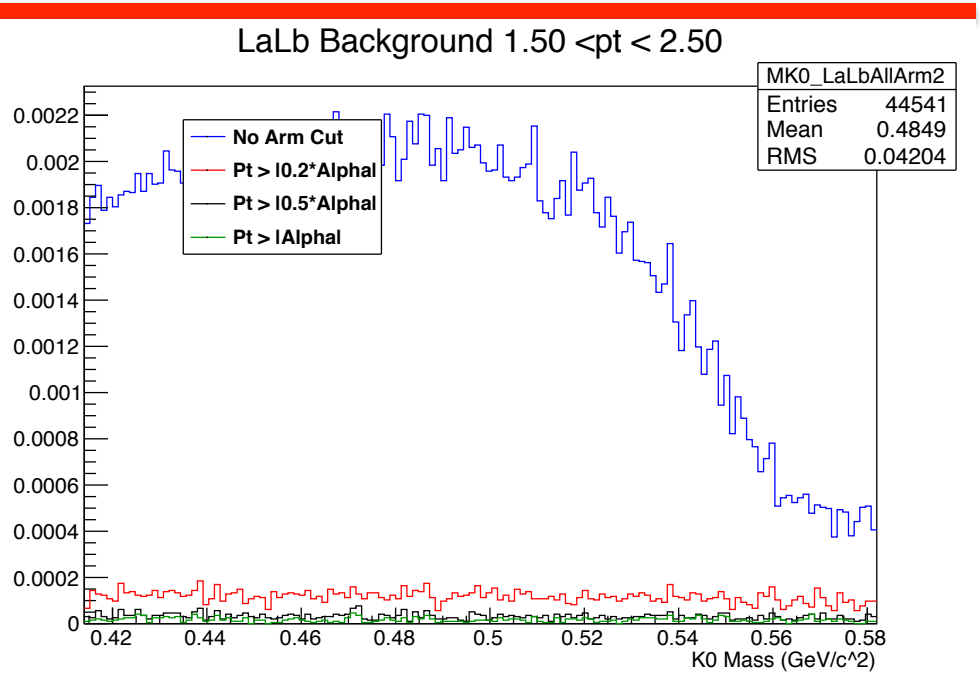
From LHC11a10a, this shows K0 candidates which are not K0 or Λ/Λbar

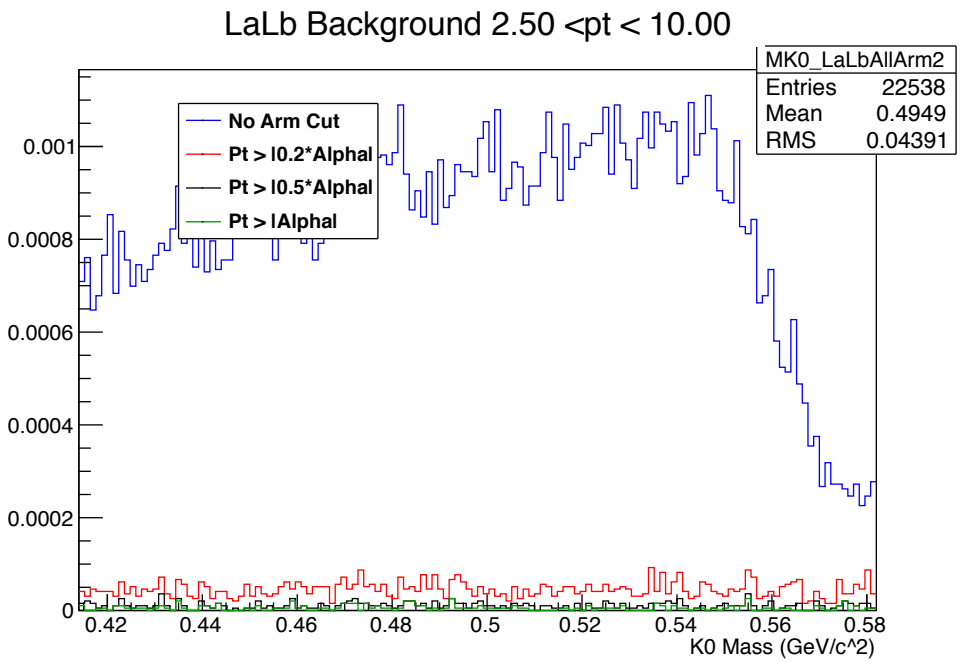
Stats aren't great, but clearly no major peak

I did a crude comparison of the height in the peak region to the sidebands, any possible excess is ~0.01% of the peak - and looks statistical

I think this shows that the effects of the perpendicular cut on the background are benign.



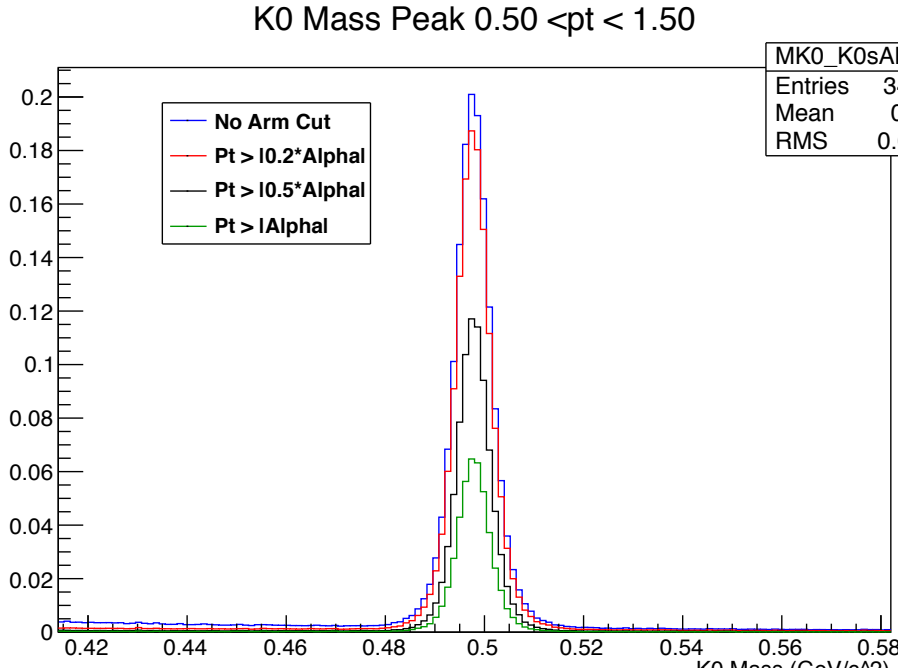


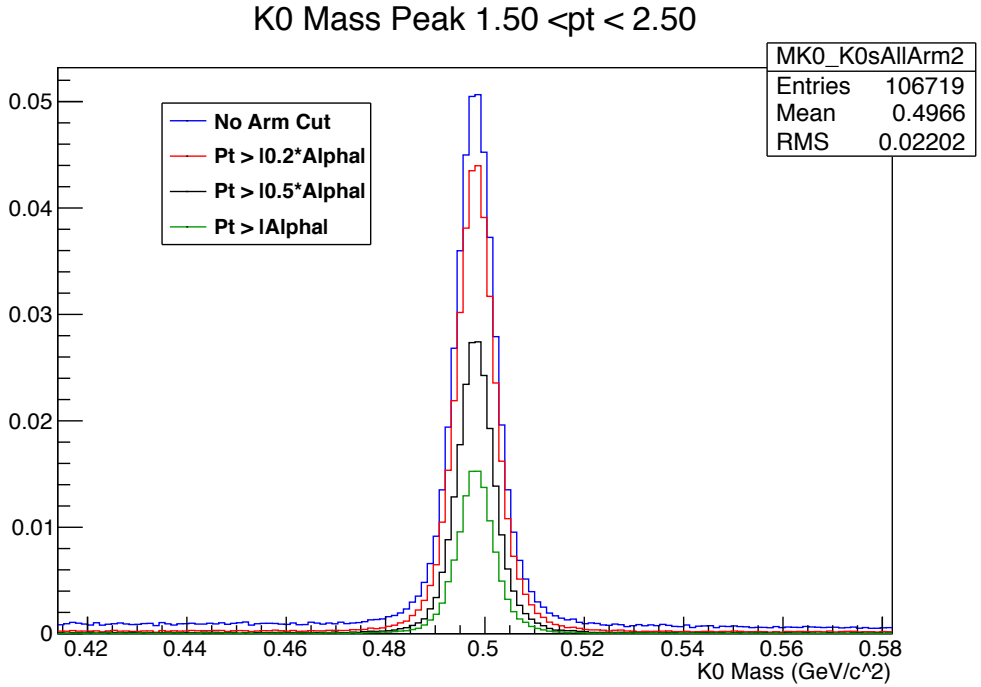


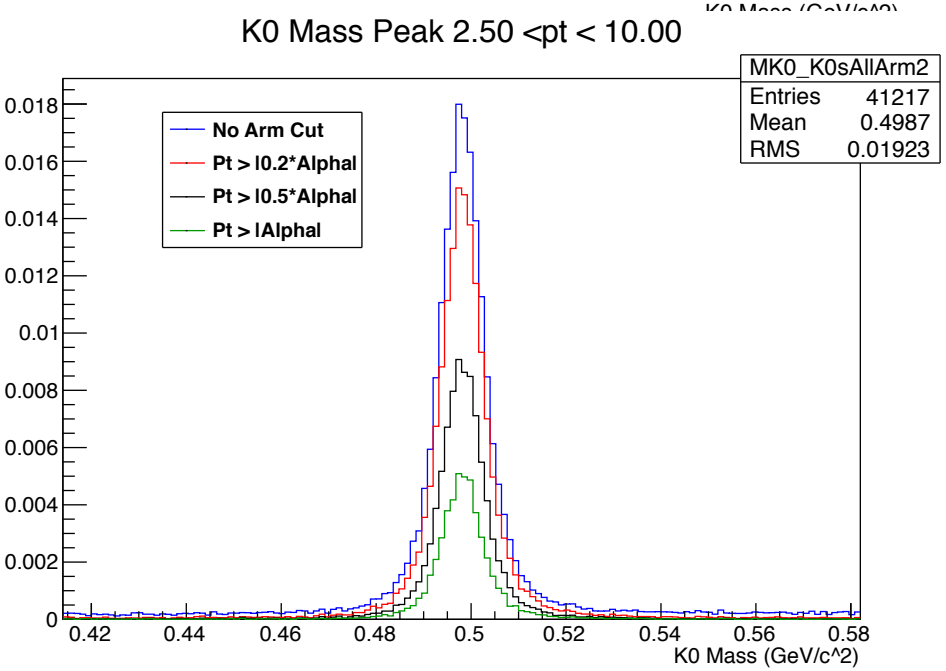
This shows K0 candidates which are Λ/Λbar.

Nicely shows the benefits of this cut – background is flattened and effectively eliminated.

Stronger cuts would be unnecessary.

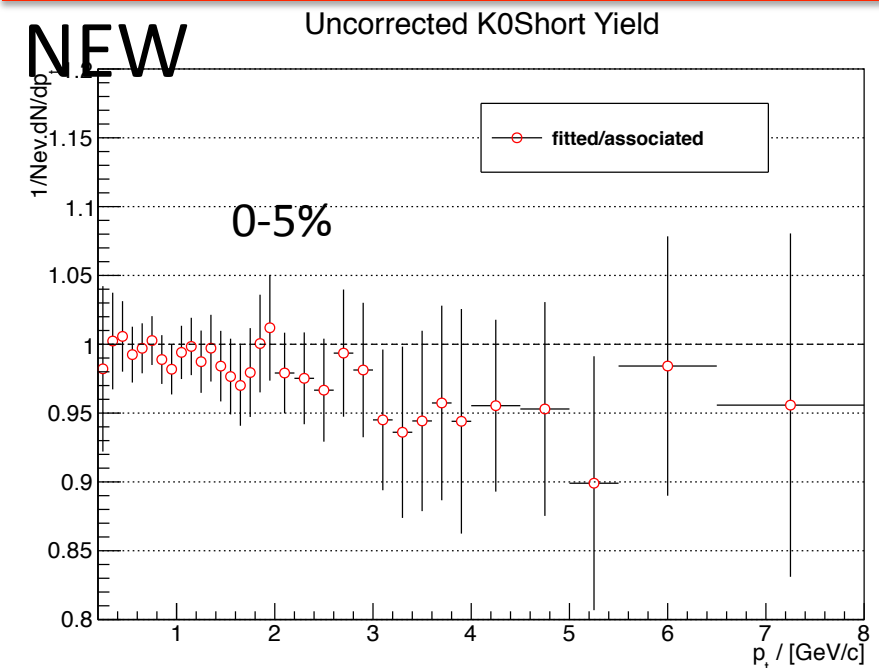


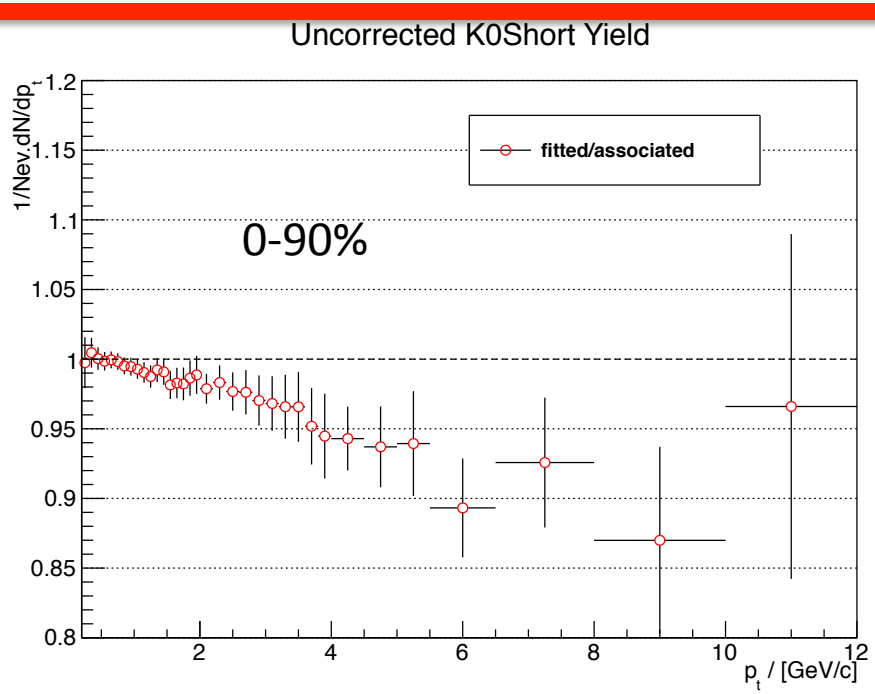


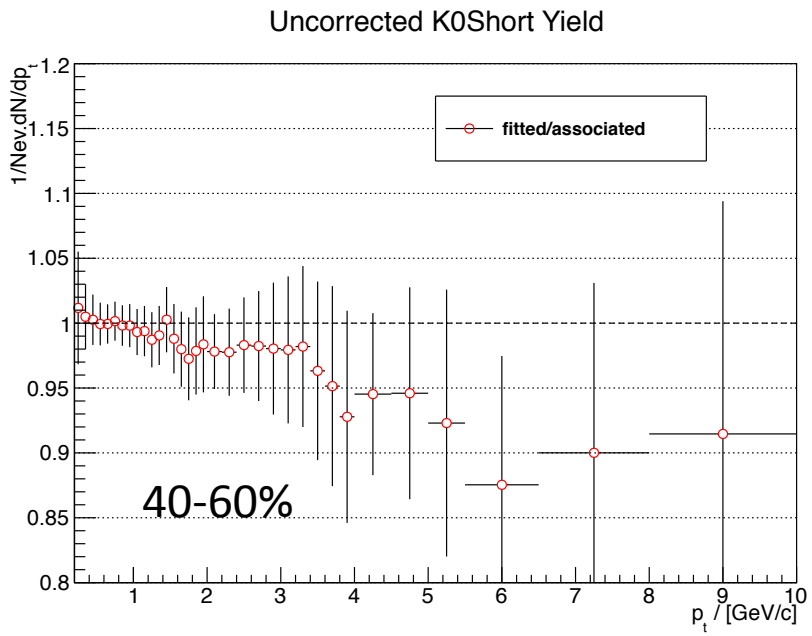


For completeness, this shows K0 candidates which are K0s. Clearly the stronger two cuts would be excessive

NEW







Within errors everything's ok, BUT it seems somewhat unlikely that the <1 trend will dissapear when errors are reduced

Am checking 'tail cut-off' effect to see how much of this is due to that

(NB – these are now linear fits, quad same but a bit worse)