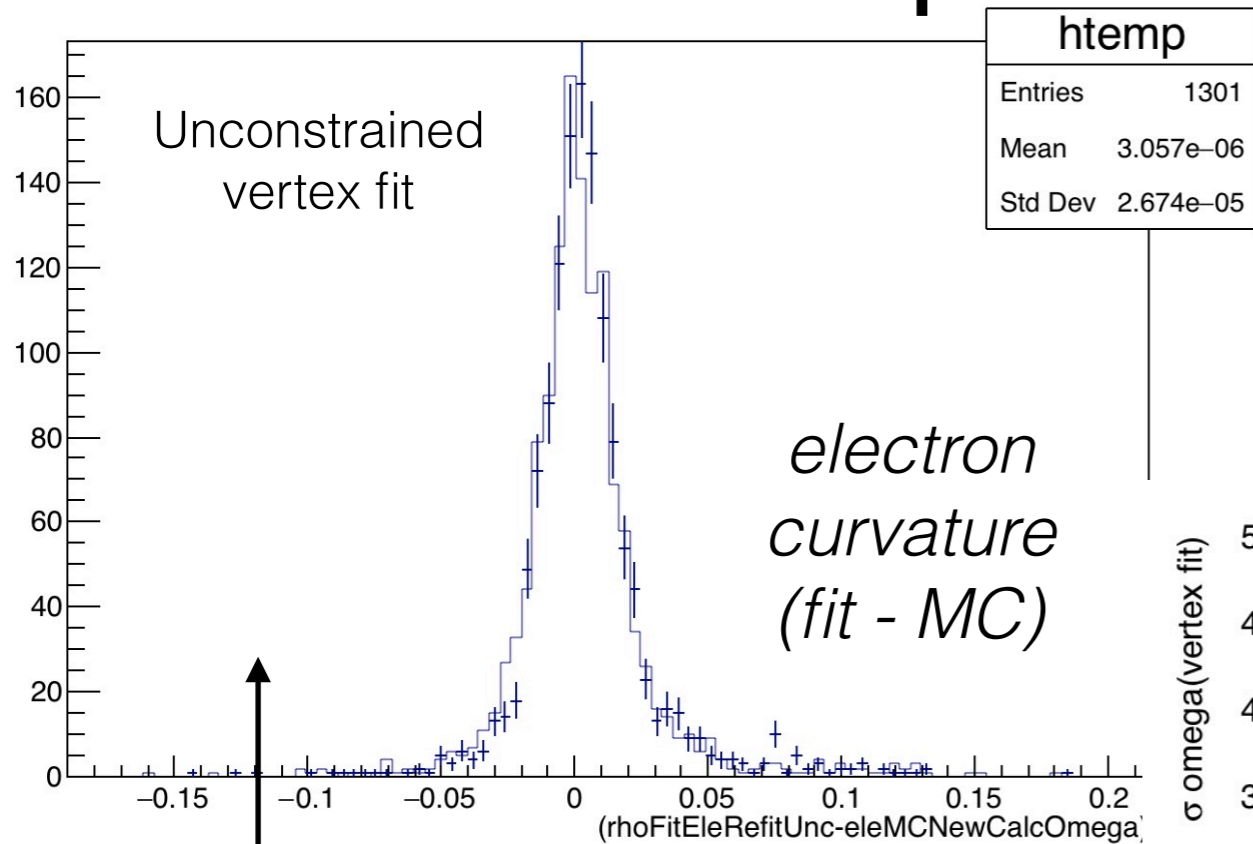


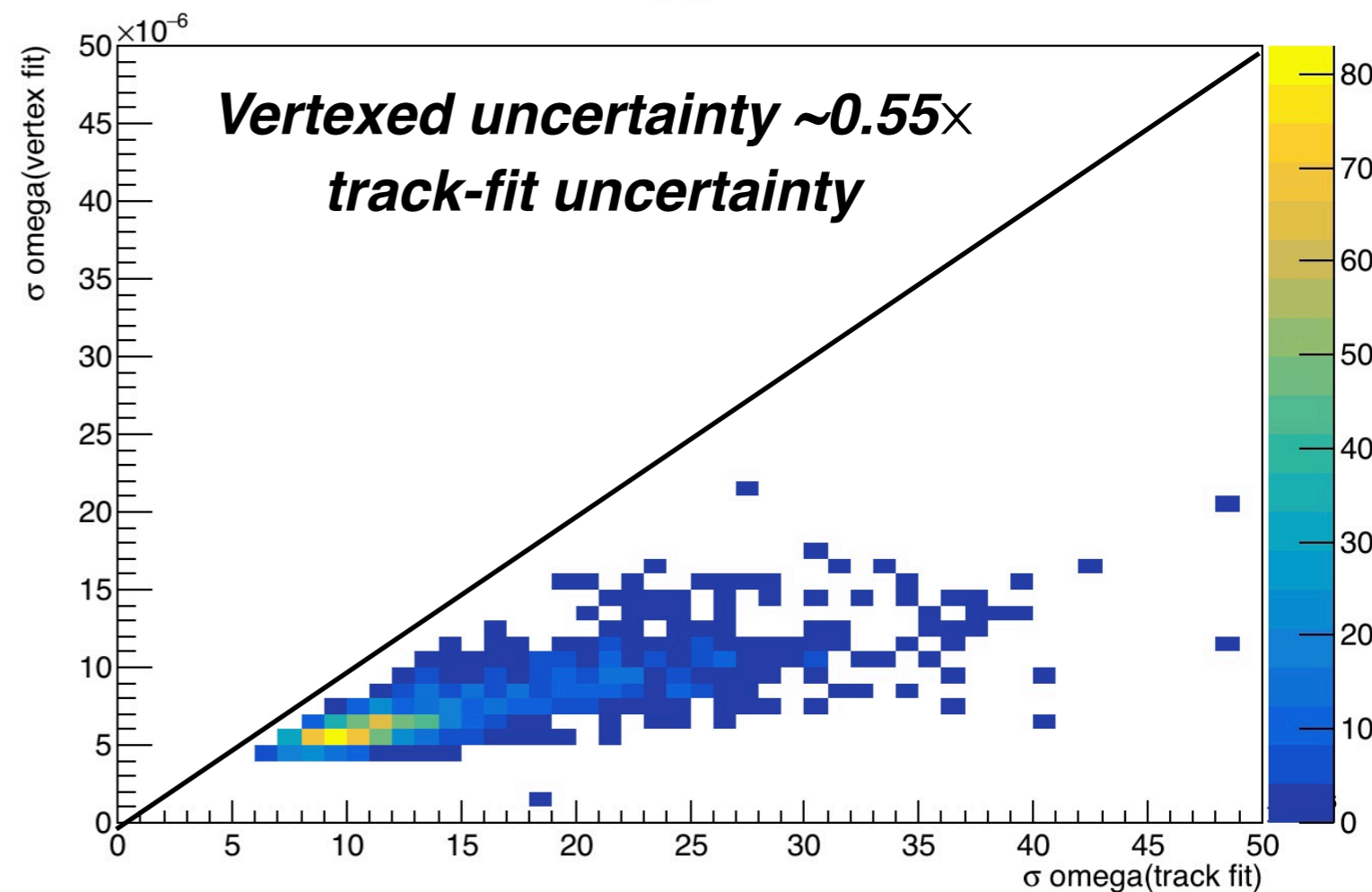
At least part of $\sigma(p)$ problem...



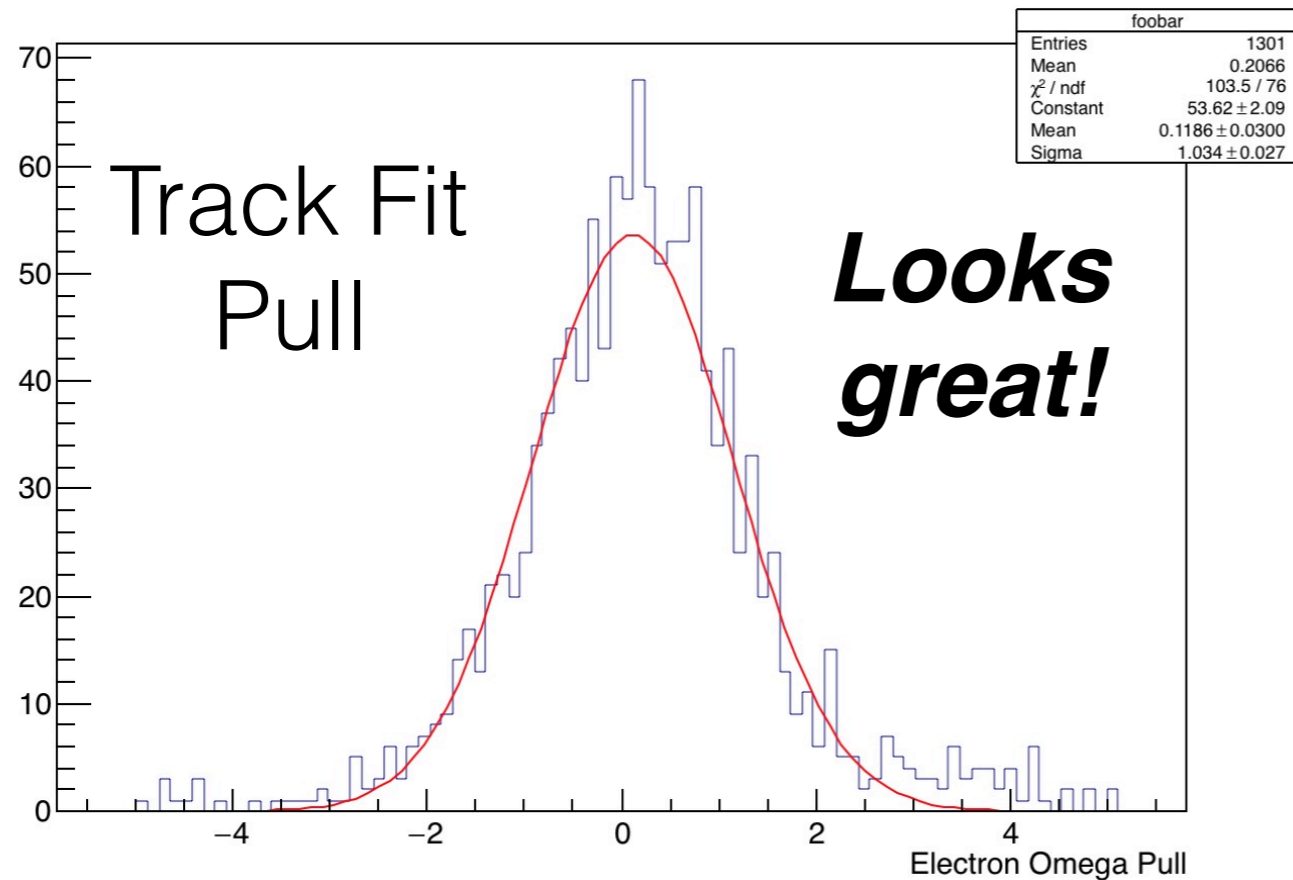
dataset=new field, 40 MeV A'
w/ctau = 10mm
running off the iss-330 branch

solid= Δ curvature
from vertex fit
errors= Δ curvature
from track fit

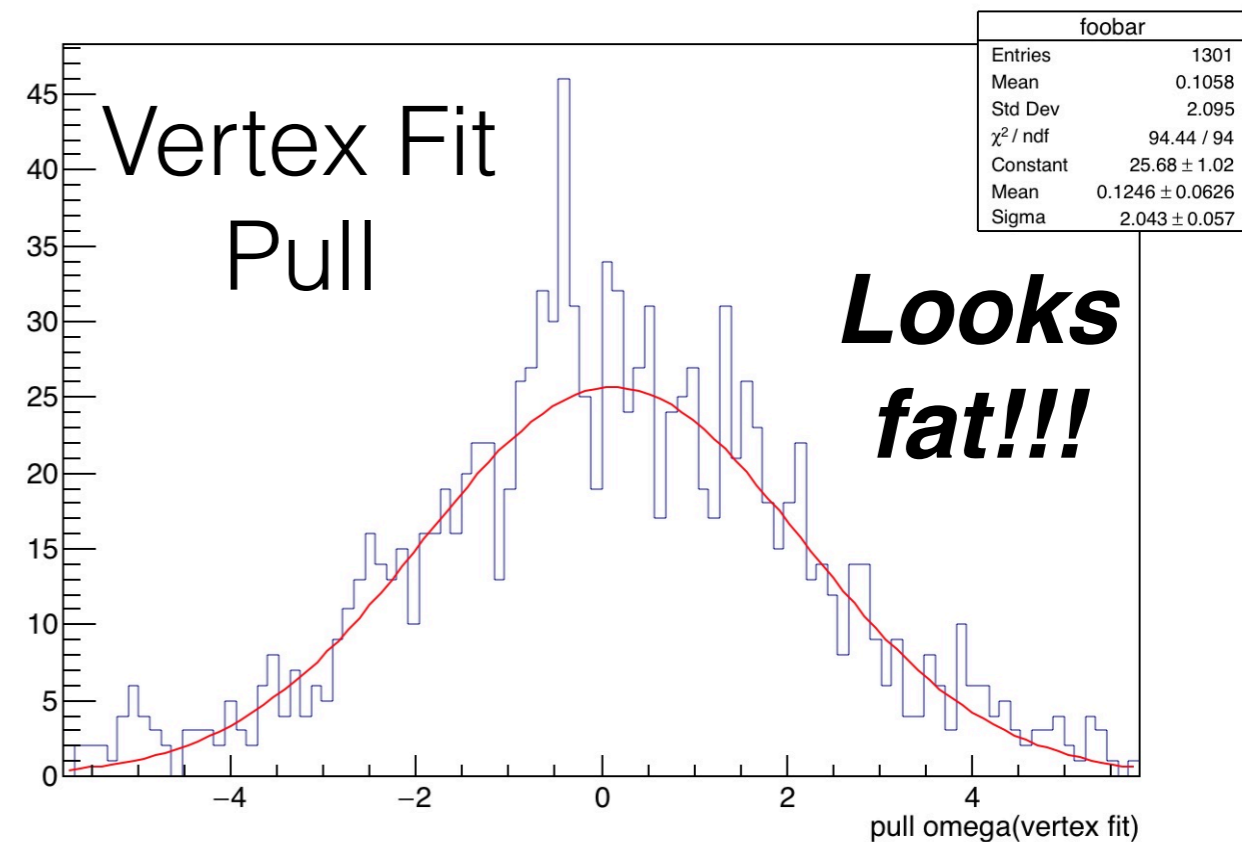
Vertexing does not improve Δ !



This leads to wide pulls in vertex-fit curvature.

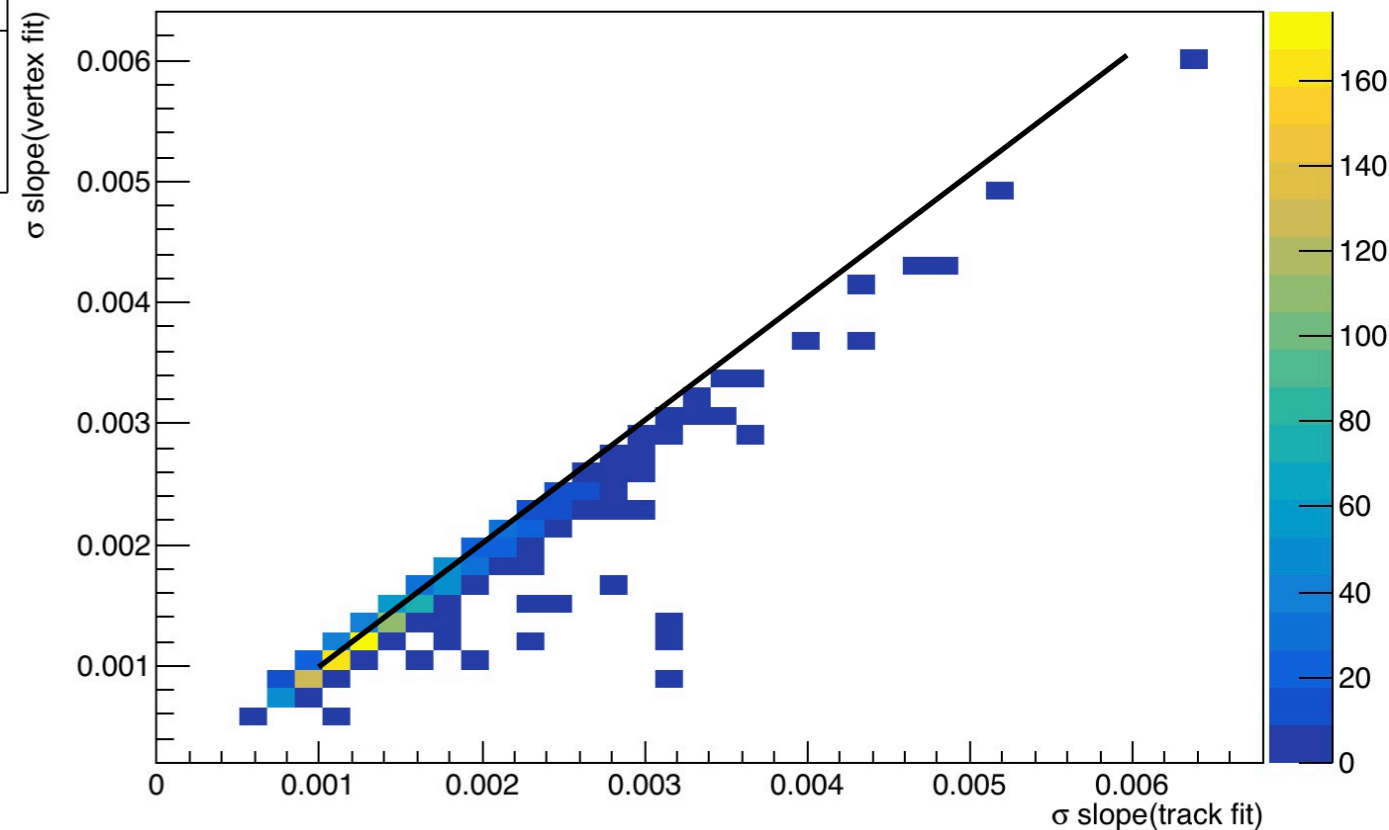
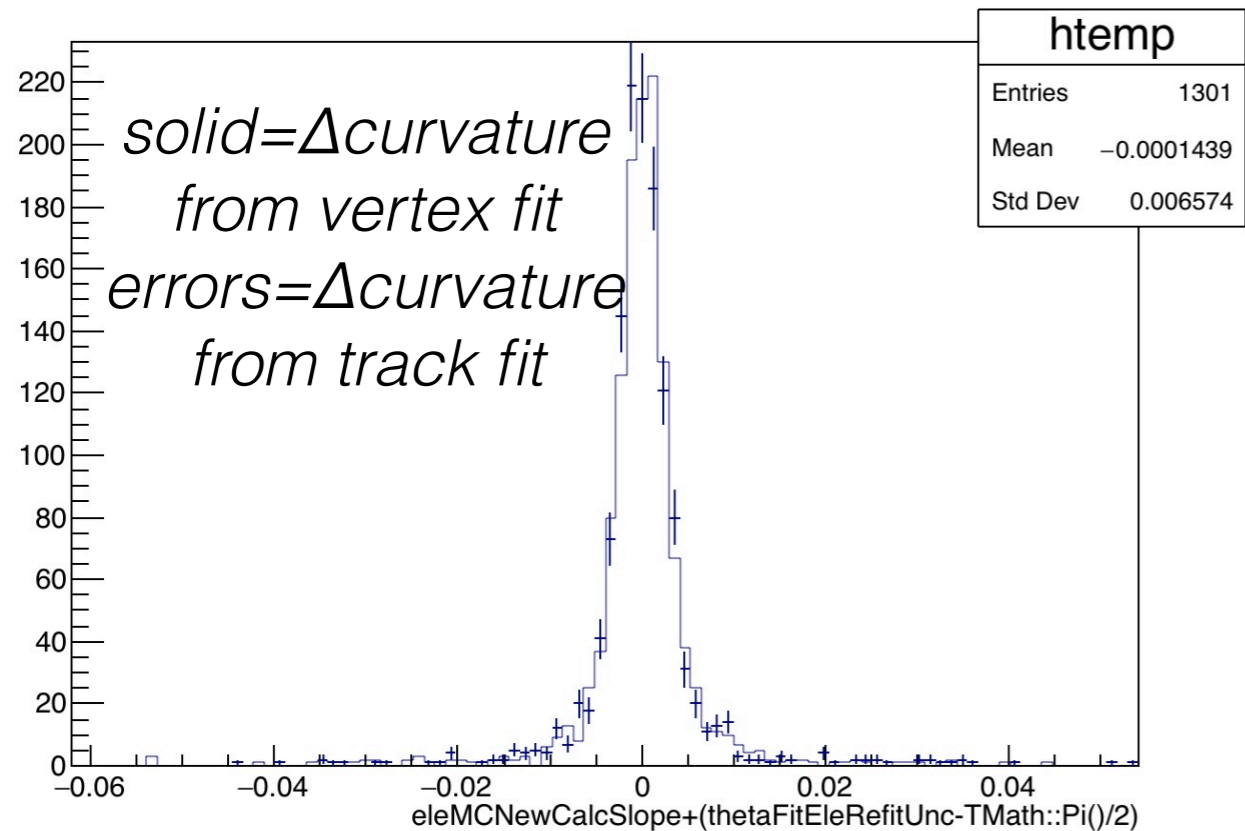


both plots for electrons

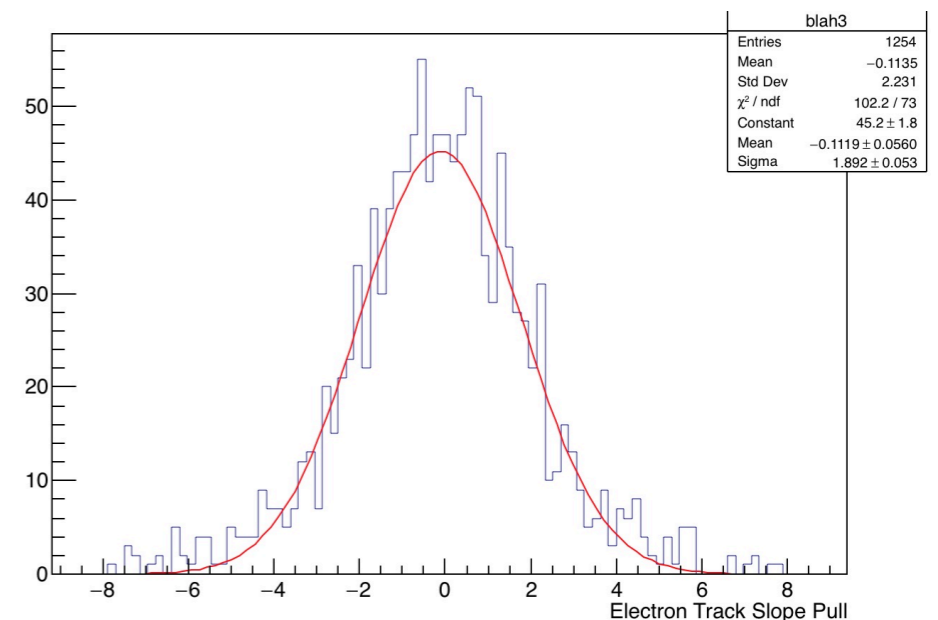


What about slope & phi?

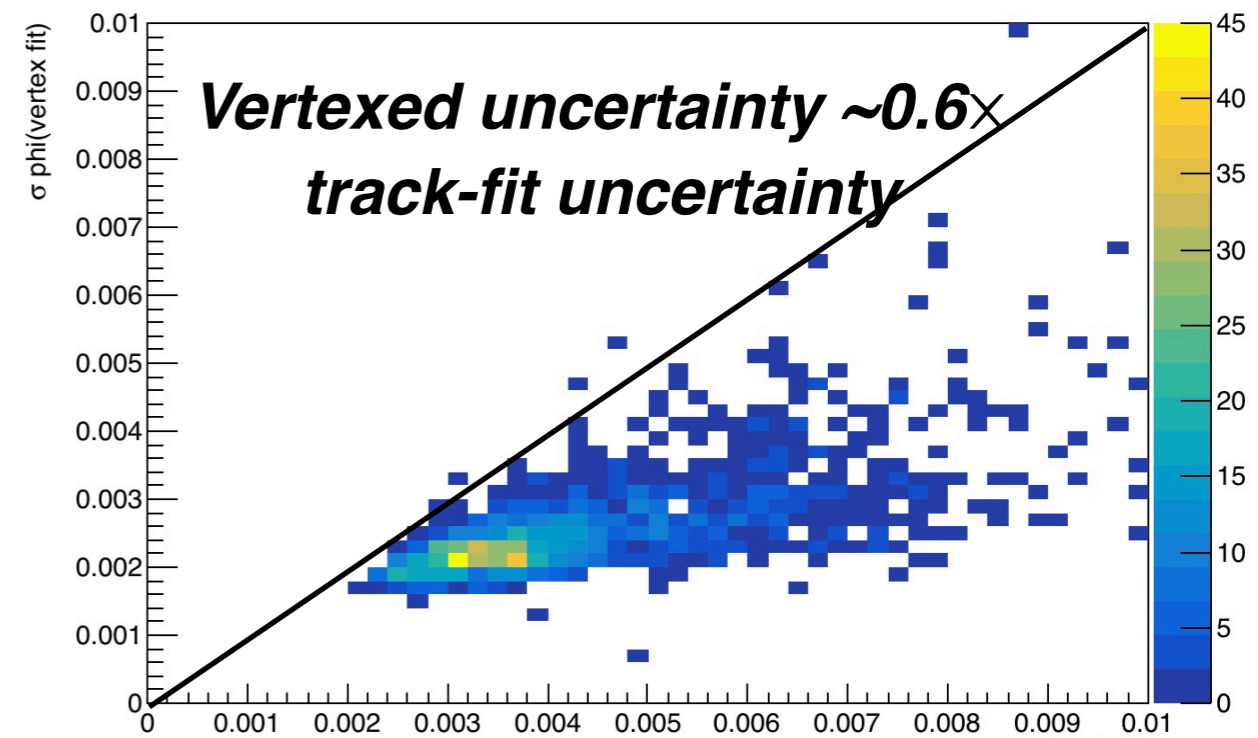
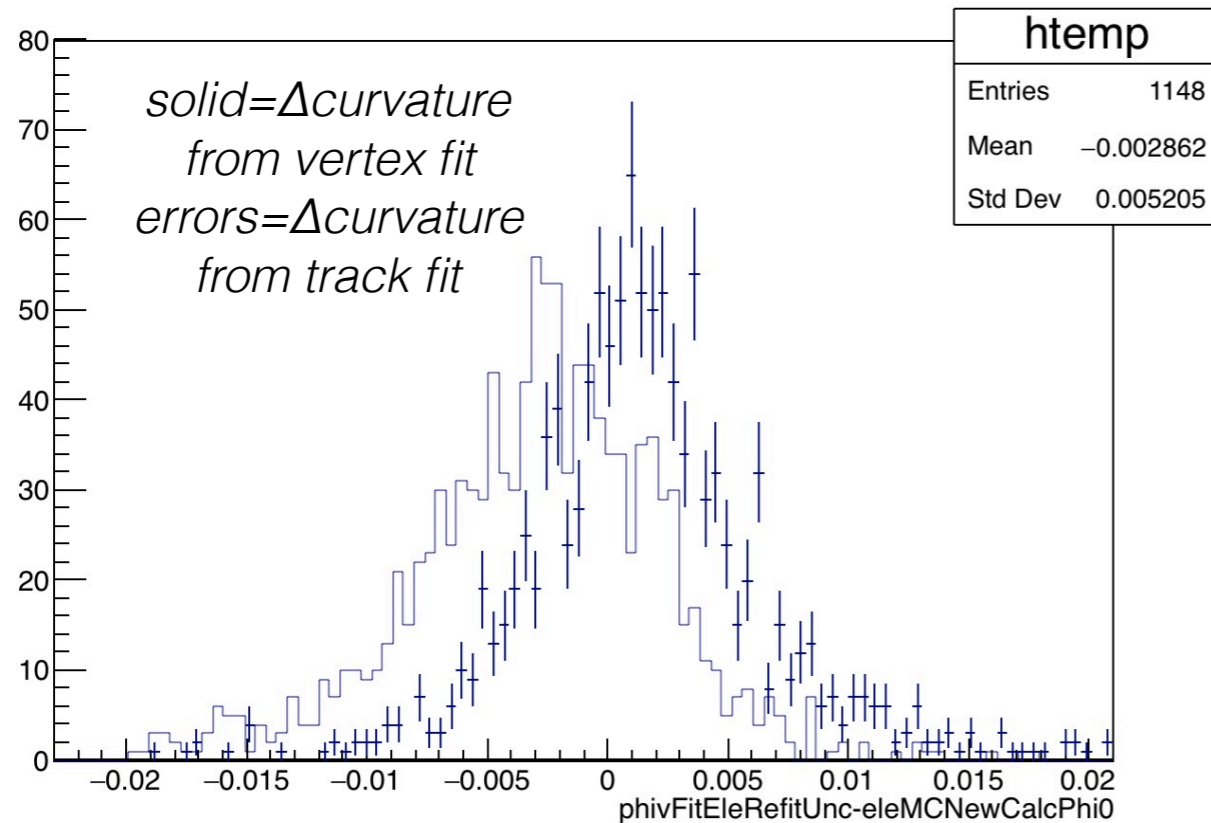
Slope looks ok (but pull $\sigma \sim 2$)



These all look reasonable, but the pull width is ~ 2 even at track level



What about slope & phi? Phi generally looks screwy, but yes vertex fit errors seem suspicious



Note that these ϕ are all calculated at different places:

- MC: A' decay
- track fit: DOCA
- unc. vertex fit: @vertex

Ideally, these are all the same place! But measurement errors (in Z vertex e.g.) can lead to funny behavior here

