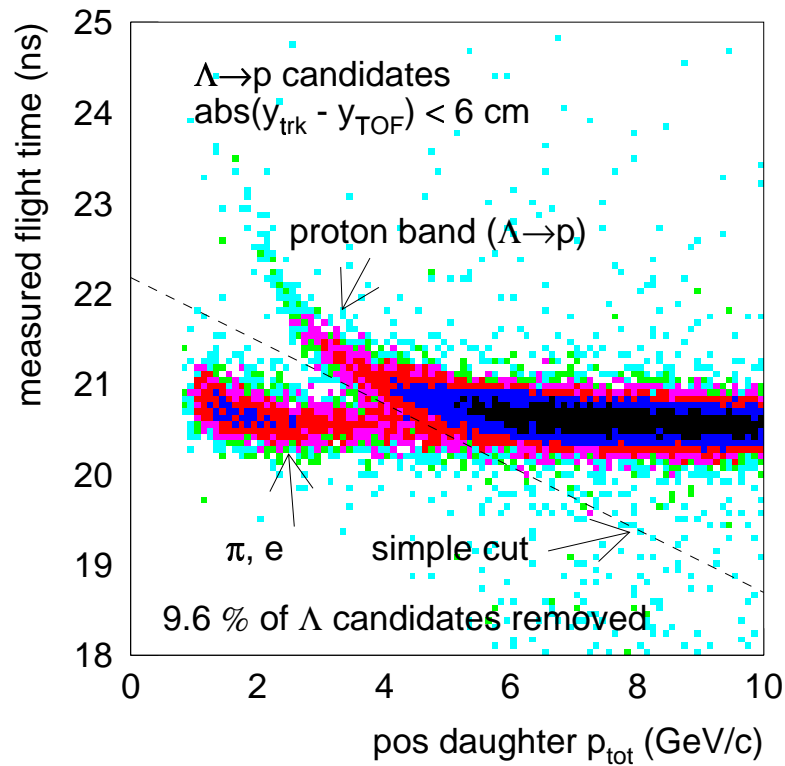
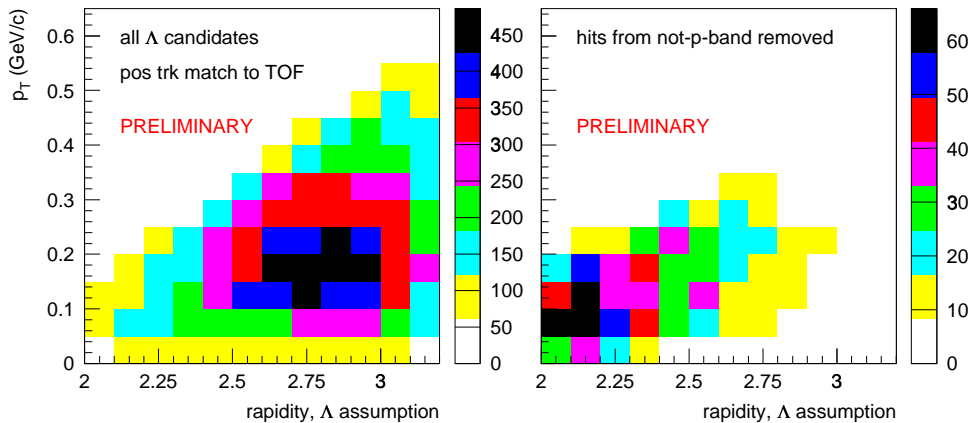


TOF PID Separation



Use TOF to remove $\Lambda \rightarrow p$ candidates whose positive daughter's measured flight time is not consistent with a proton hypothesis

Simple TOF PID cut removes 9.6 % of E896 Λ candidates (i.e. ~ 10 % of Λ s in previous analyses not really Λ s!)



- background concentrated at lowest rapidities in the acceptance
- $\sim \frac{1}{3}$ of background vertices are clearly K_S ; $\sim \frac{2}{3}$ from other processes