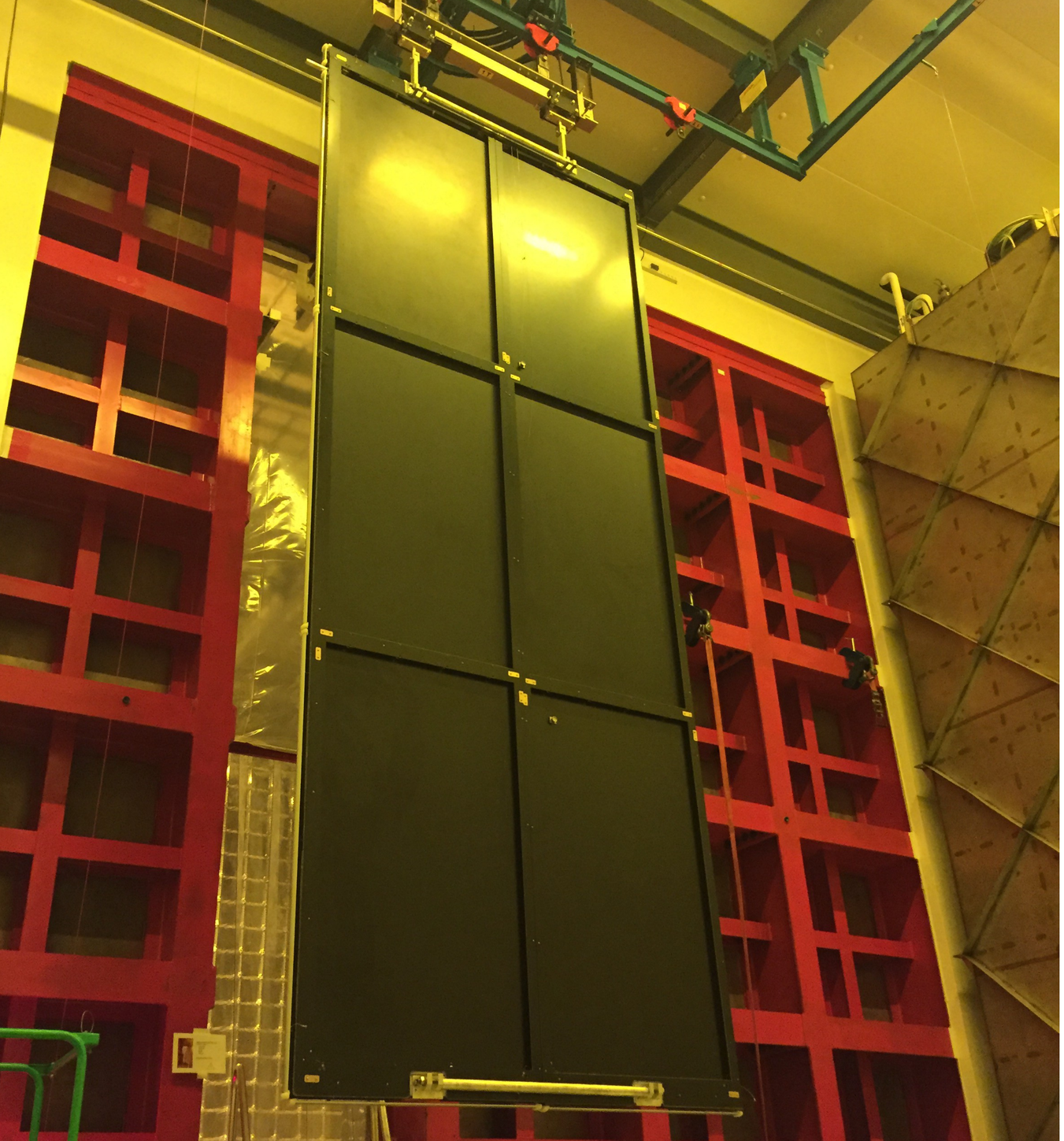
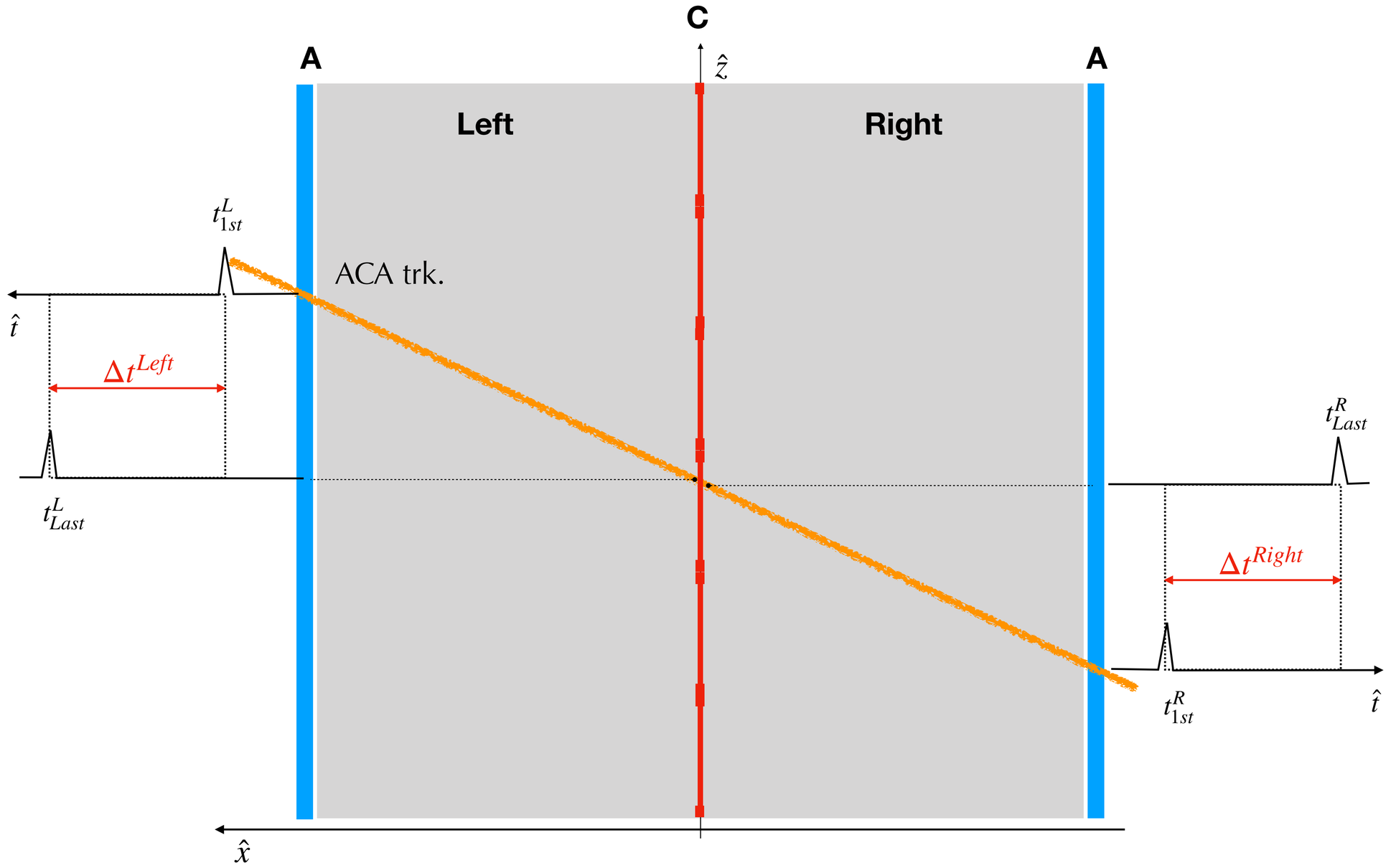
CPAs planarity vs shift/rotation

Main Data Analysis: Ajib Paudel

Contributions: Richie Diurba (MNU), Mike Mooney (CSU), Tingjun Yang (FNAL)

Report: F. Cavanna



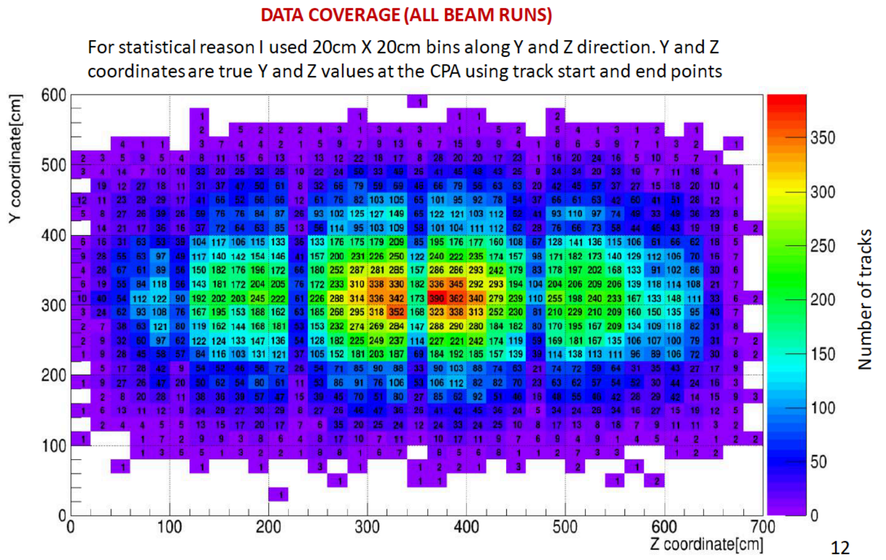


$\Delta t^L = \Delta t^R$

$\Delta t = (t_{Last} - t_{1st})$

for CPA at the center of TPC (x=0) and parallel to APAs

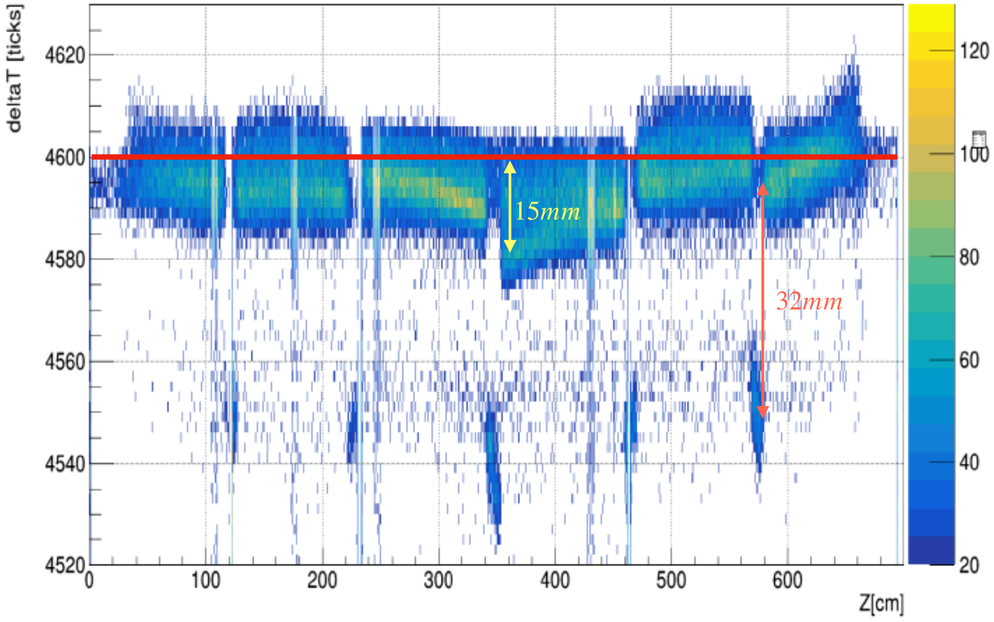
7M tracks sample —> 60k ACA tracks (crossing and distributed over the CPA plane)



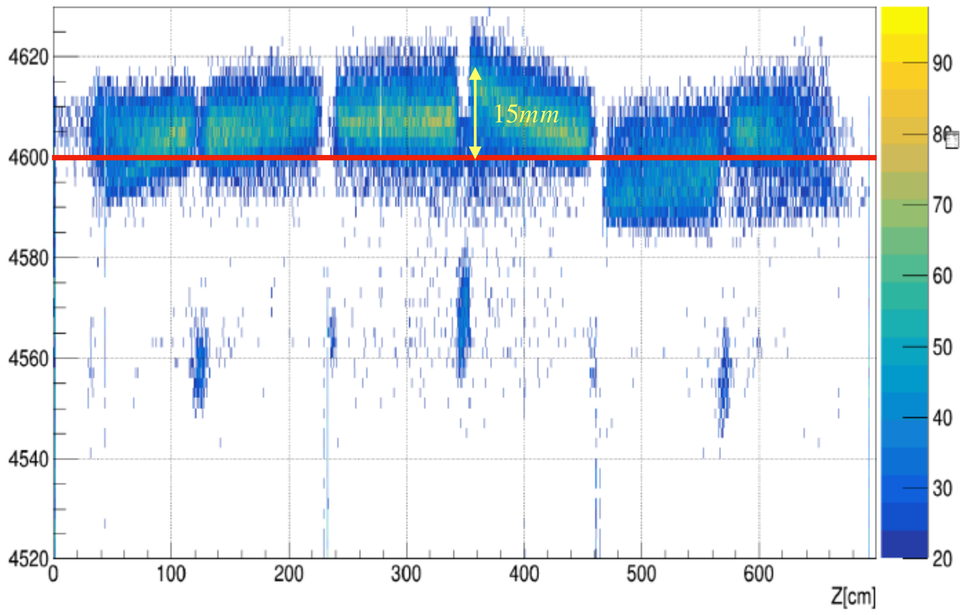
Study made by
Ajib Paudel (KSU)

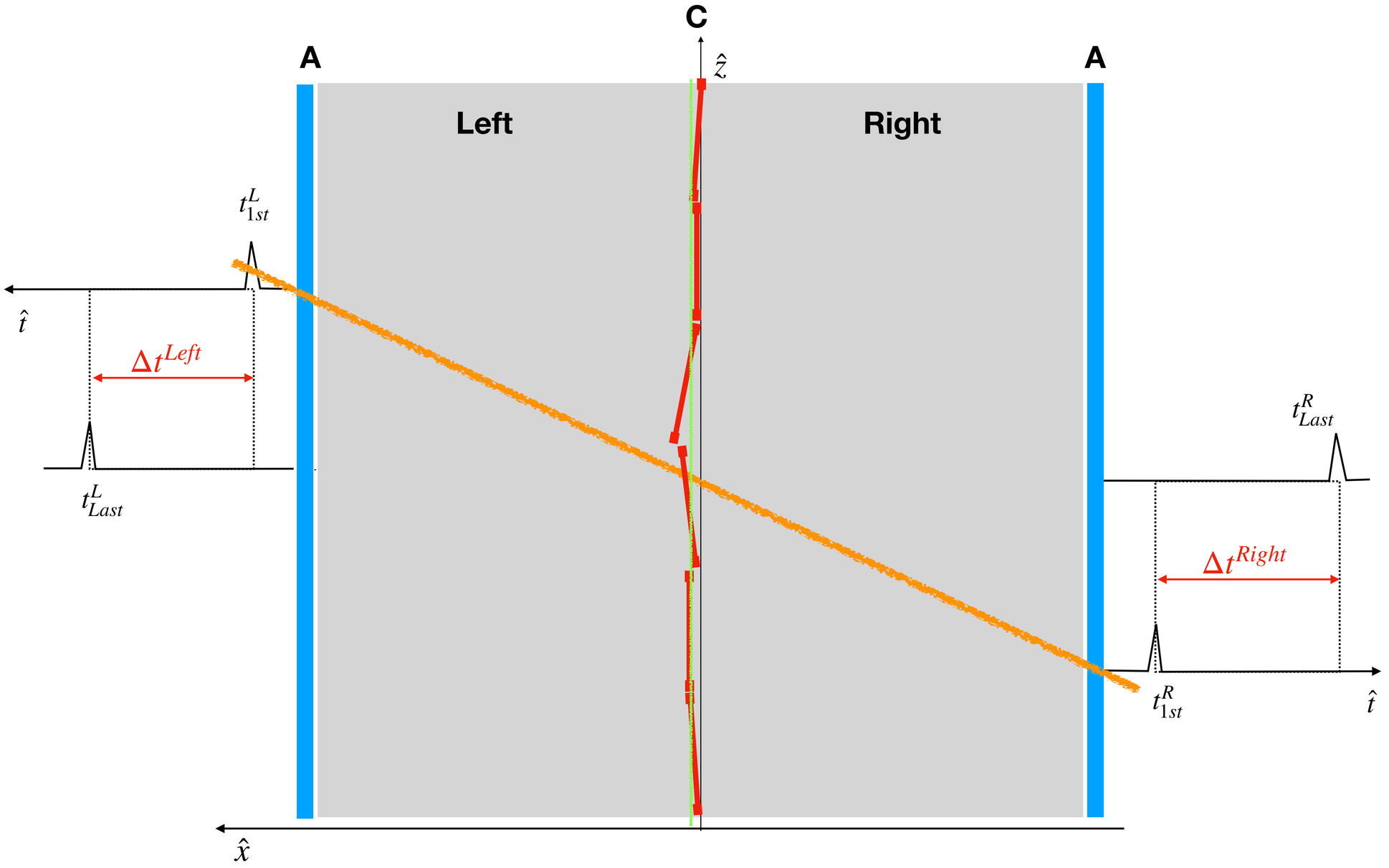
(+ M. Mooney - SC Grp
T. Yang - DRA Grp, ..)

Δt^L *vs* $\hat{z}$



Δt^R *vs* $\hat{z}$



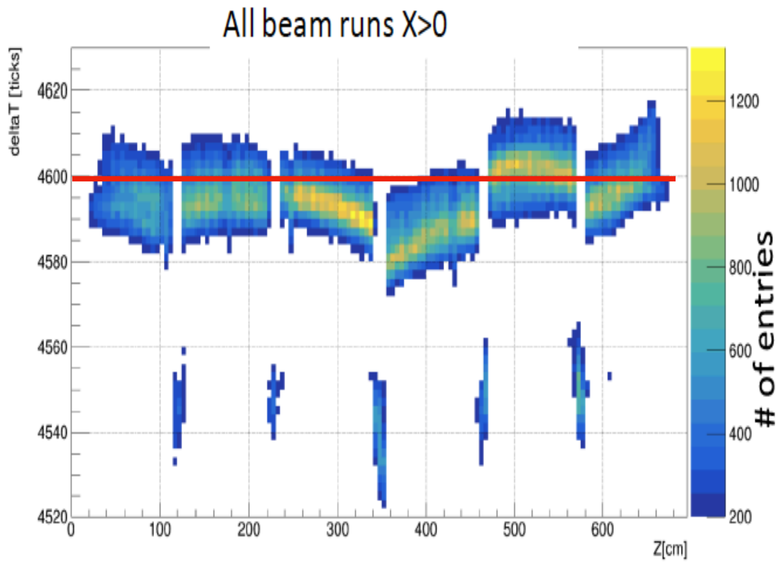


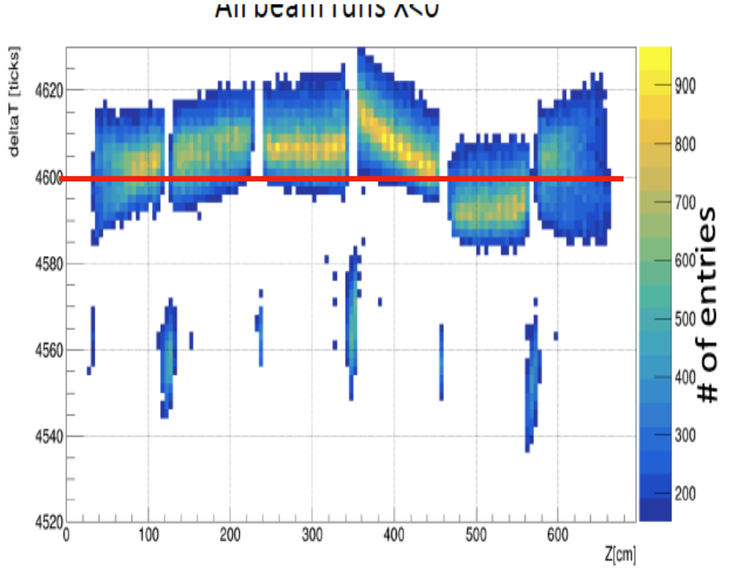
$$\Delta t^L \neq \Delta t^R$$

for CPAs tilted and/or shifted L/R

Oct-Nov 2018 (Beam Run period)

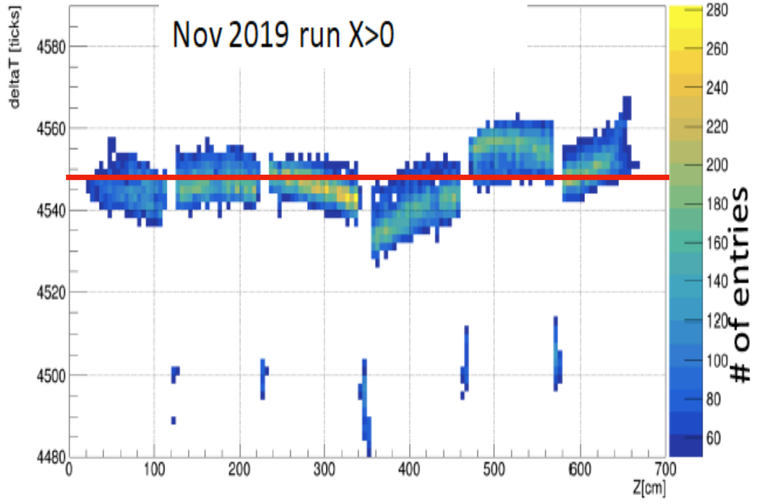
Applied Nominal Efield= 0.4867kV/cm

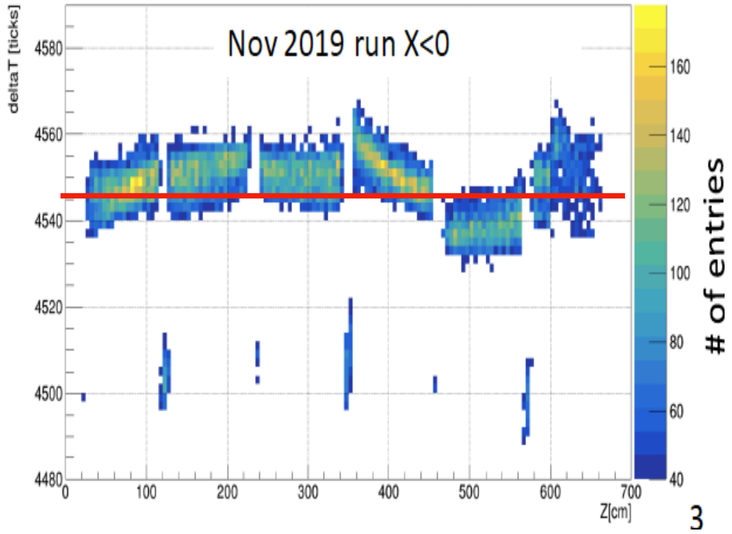




Nov-Dec 2019 (CRT Run period)

Applied Nominal Efield= 0.4993kV/cm

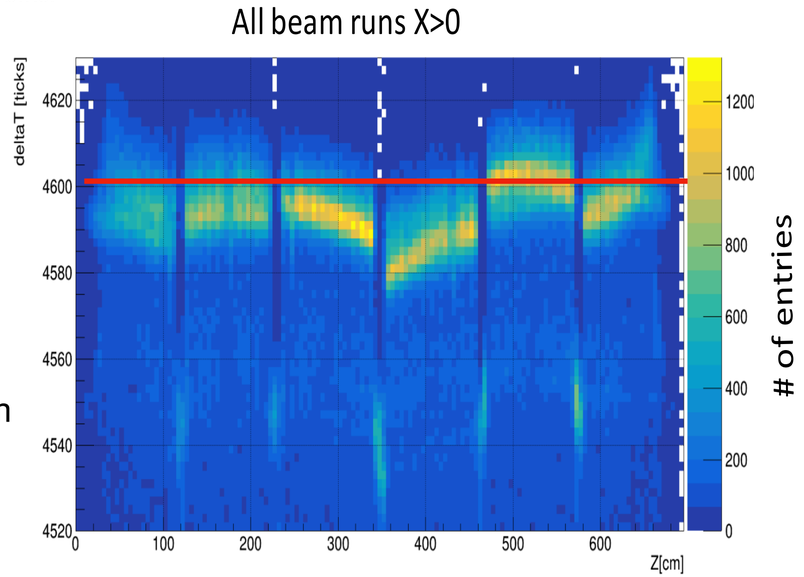


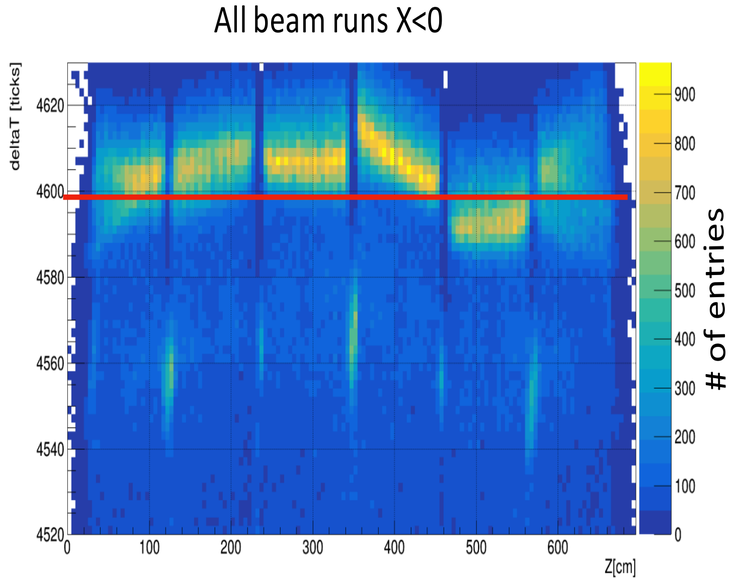


bins.

Oct-Nov 2018 (Beam Run period)

Applied Nominal Efield= 0.4867kV/cm





Nov-Dec 2019 (CRT Run period)

Applied Nominal Efield= 0.4993kV/cm