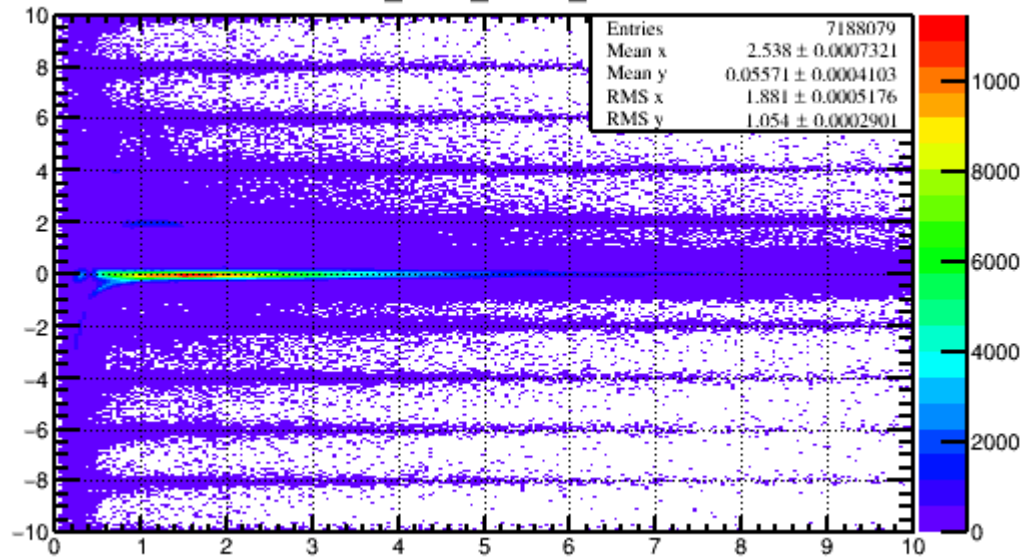


TOF Timing Resolution Study

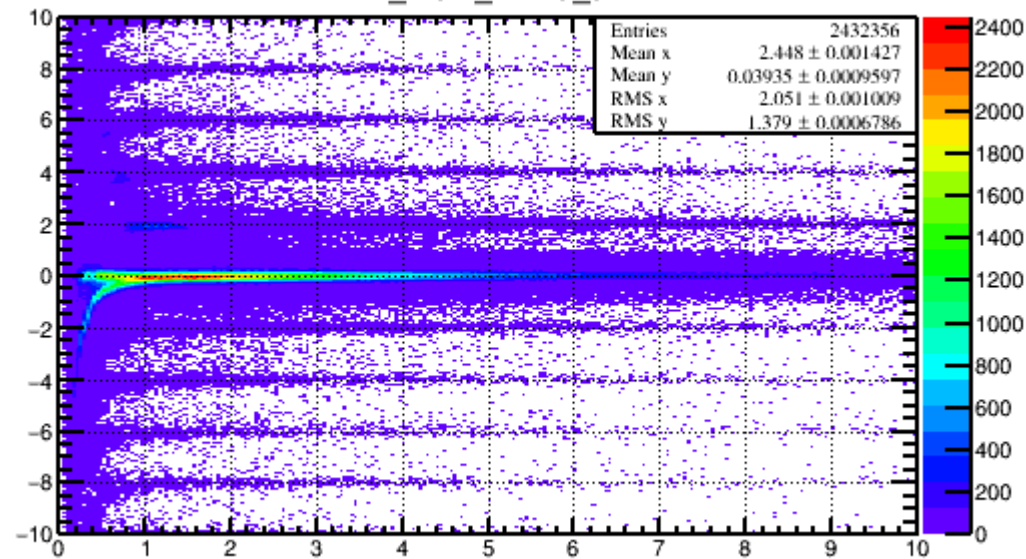
- How does the timing resolution change as a function of the number of PMT hits?
- 5 combinations: 4 Hits, 3 Hits, 2 Hits (same plane), ~~2 Hits (different plane)~~, 1 Hit
- The data presented here is Pi^- -charged track hypothesis from run number 11569

Delta T vs P Distributions

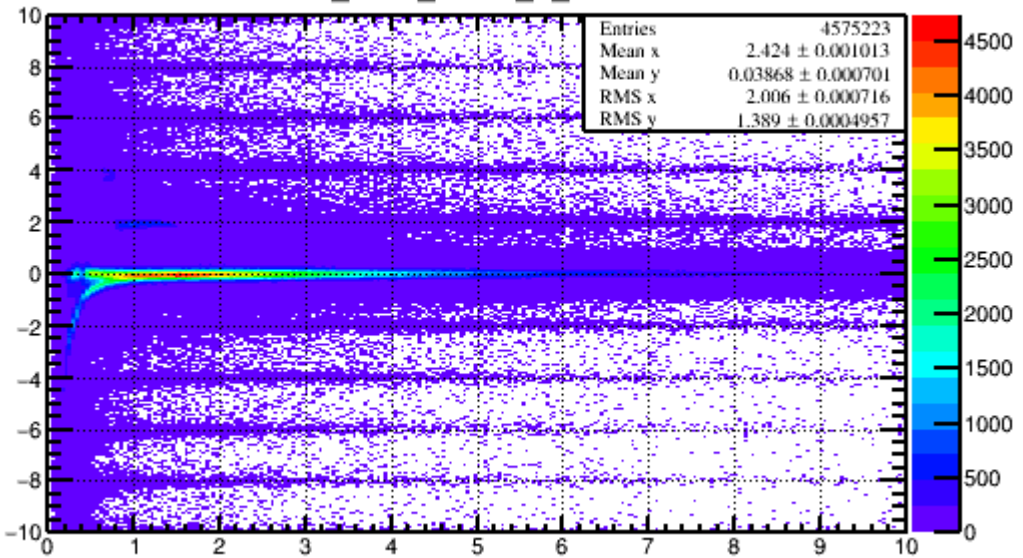
P_TOF_HITS_4



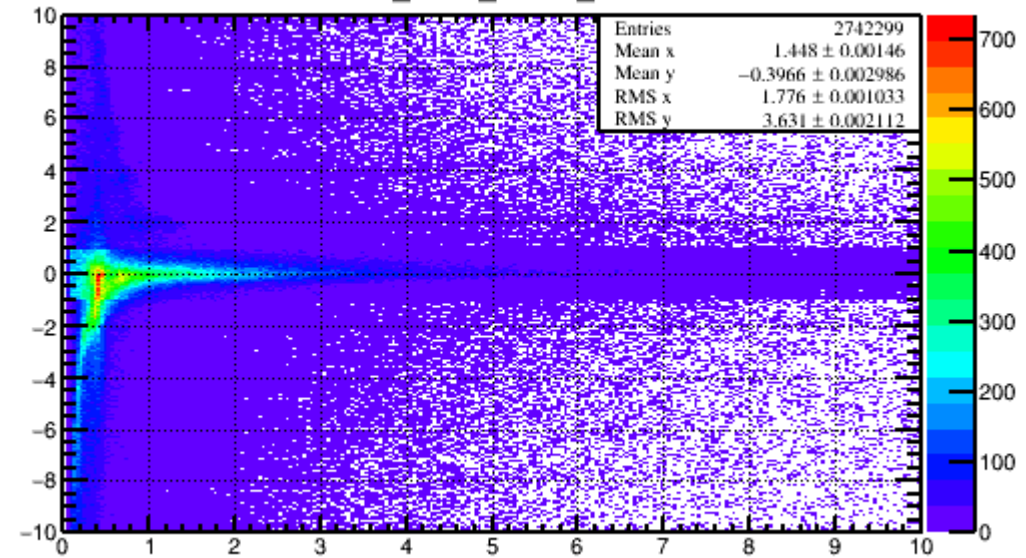
P_TOF_HITS_3



P_TOF_HITS_2_same

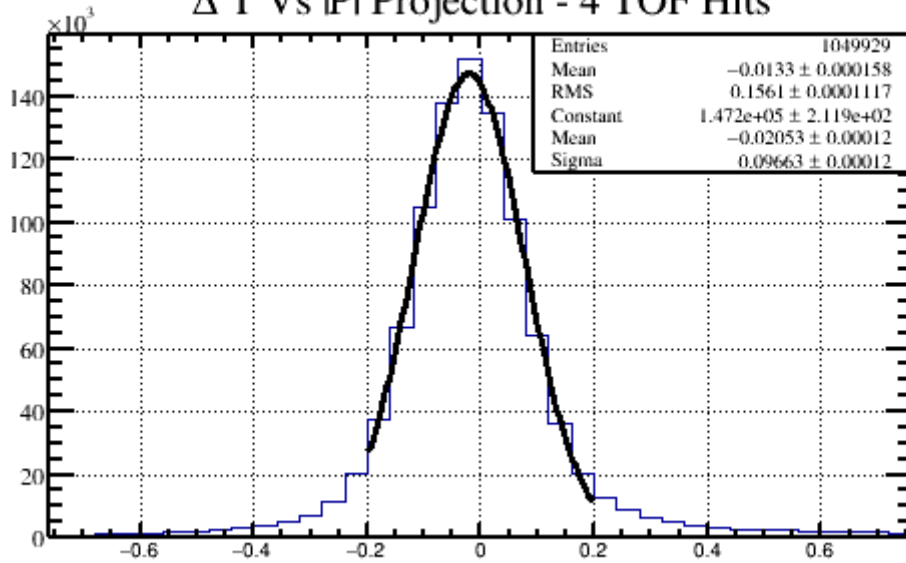


P_TOF_HITS_1

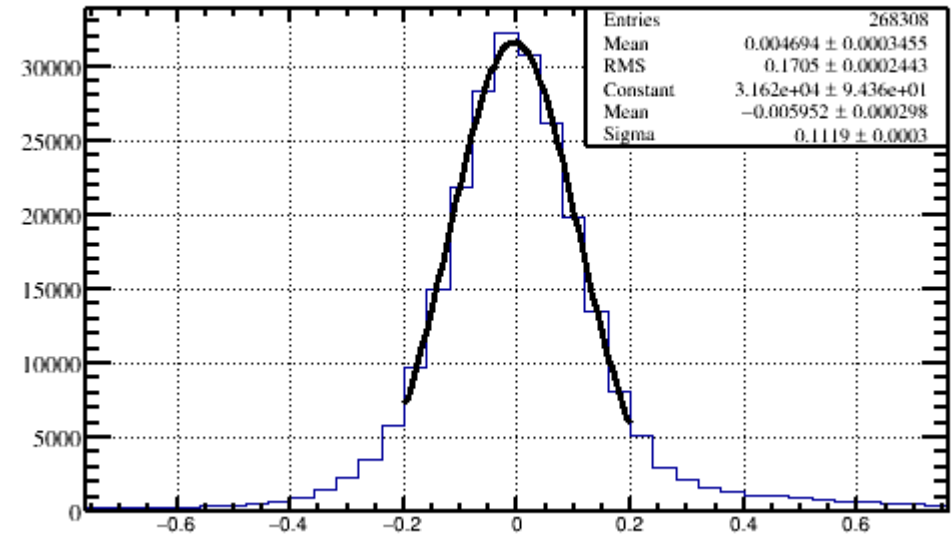


Timing Projection and Fits (1.5-2.0 GeV)

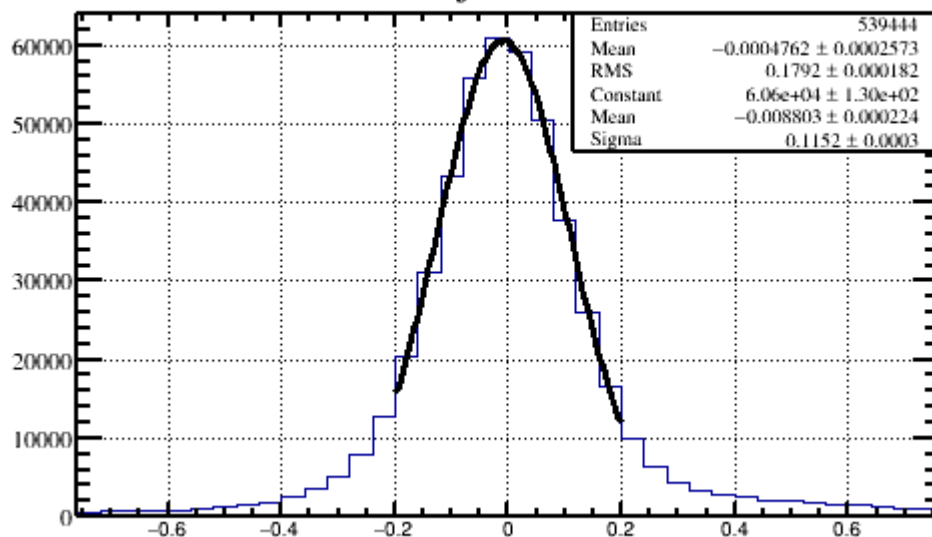
ΔT Vs $|\vec{p}|$ Projection - 4 TOF Hits



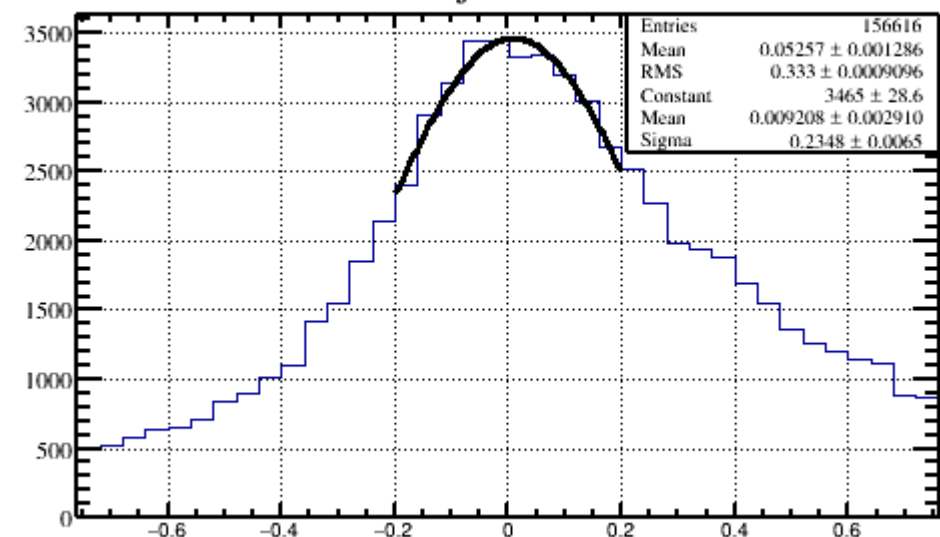
ΔT Vs $|\vec{p}|$ Projection - 3 TOF Hits



ΔT Vs $|\vec{p}|$ Projection - 2 TOF Hits



ΔT Vs $|\vec{p}|$ Projection - 1 TOF Hits



Number of PMT Hits	Timing Resolution (ns)
4	96
3	112
2	115
1	234