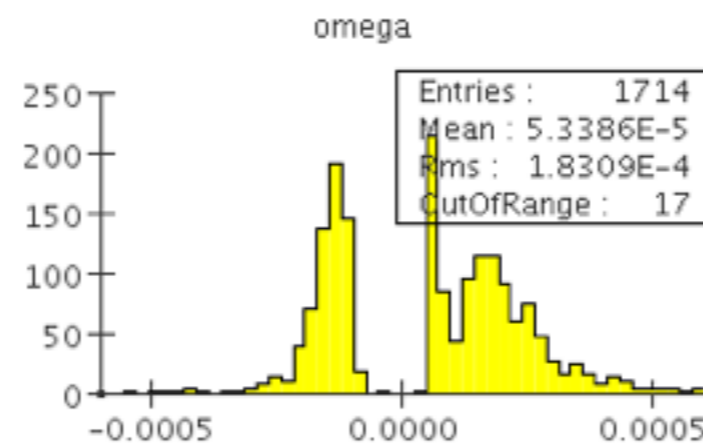
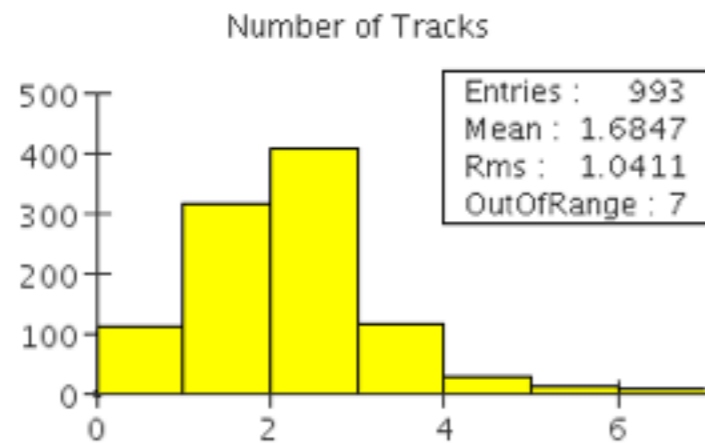


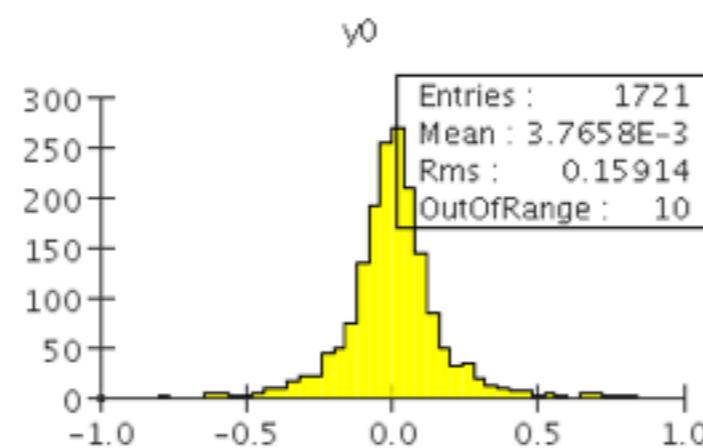
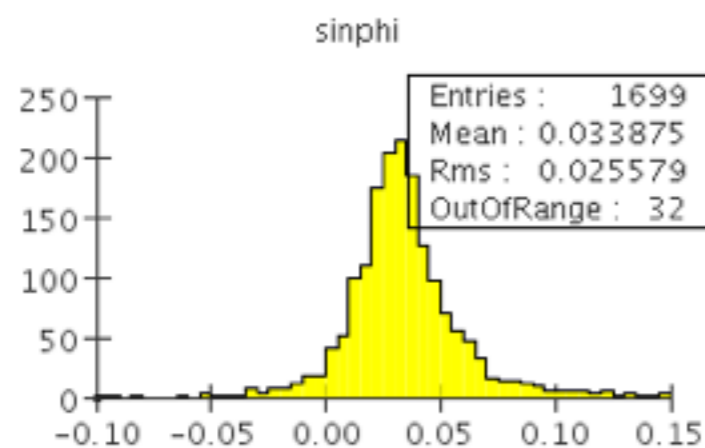
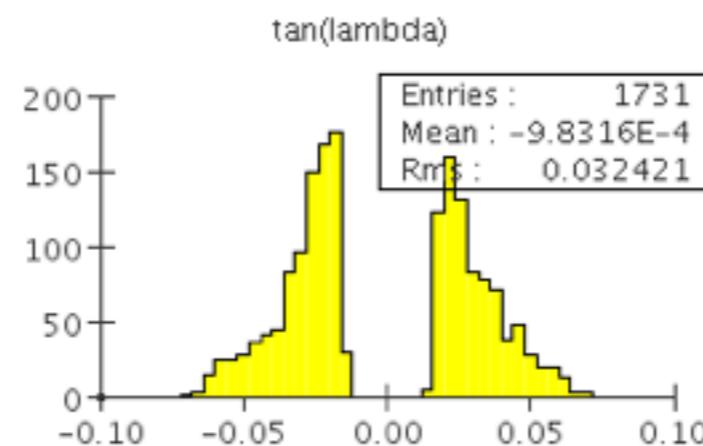
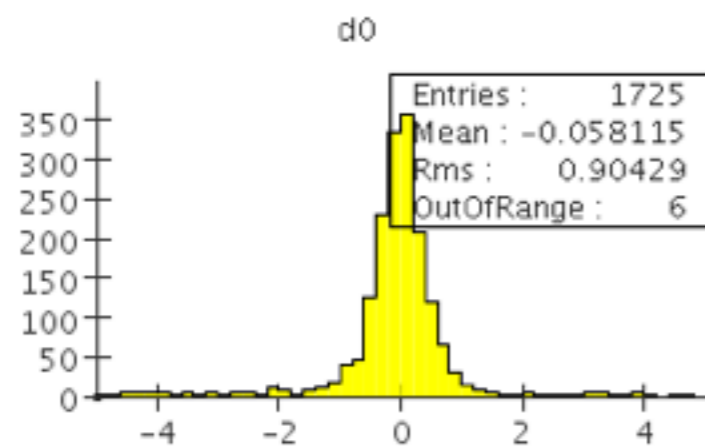
Online & Offline Monitoring: Tracking and Vertexing

Matt Graham
HPS Software Meeting
March 5, 2015

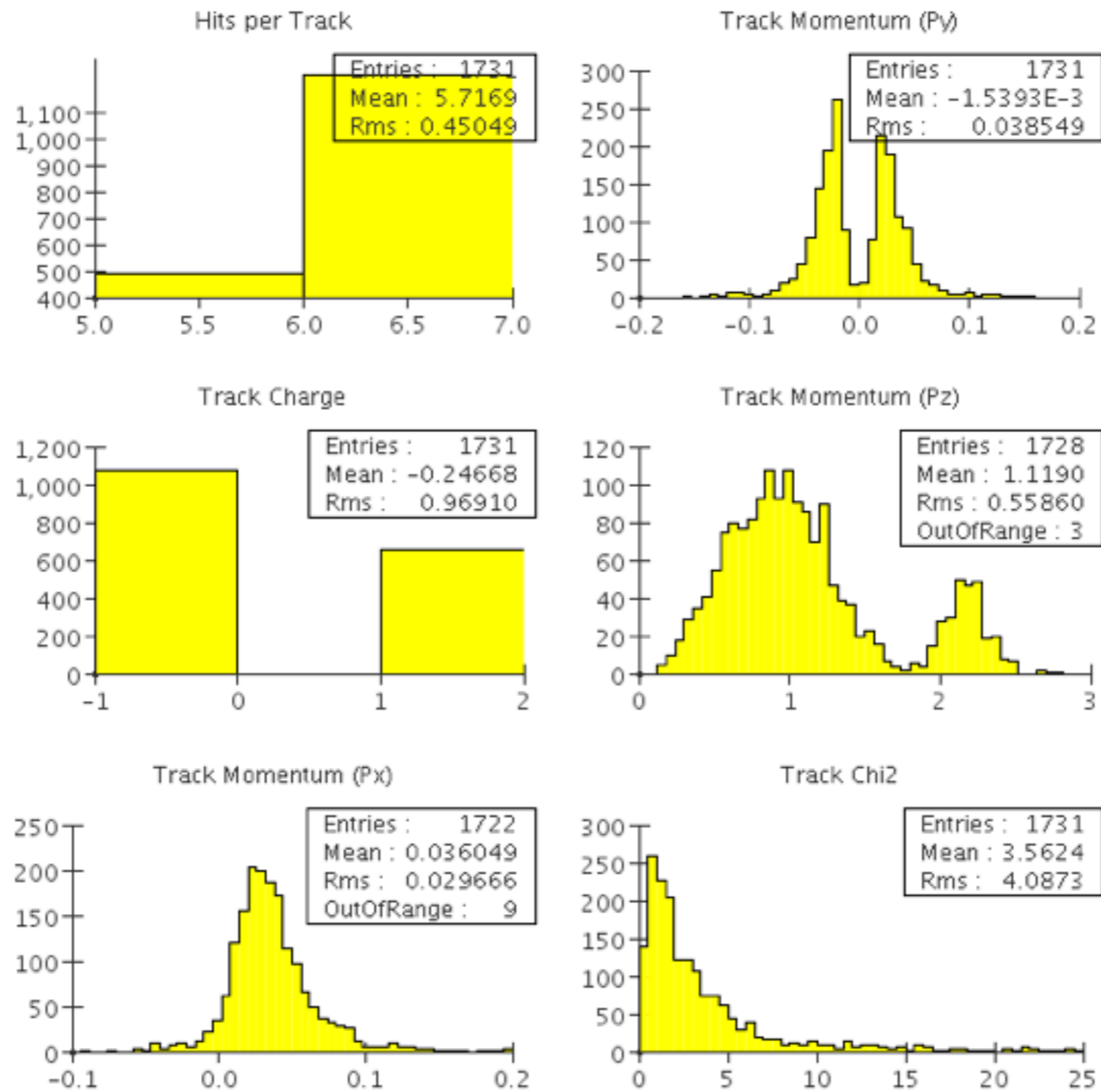
Online Monitoring: Track Parameters Page



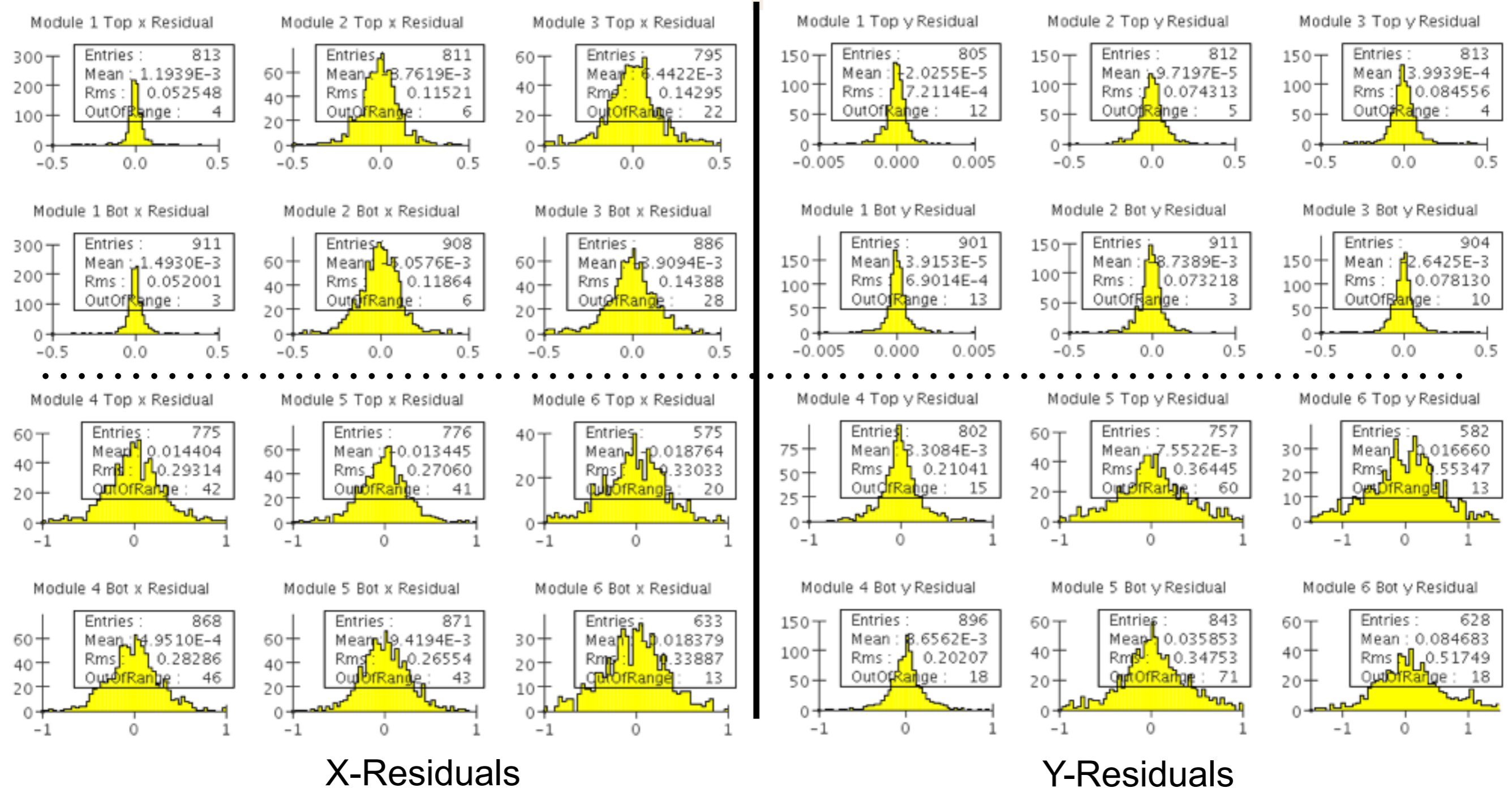
The input is 1000 triggered trident events



Online Monitoring: Track Momentum etc.

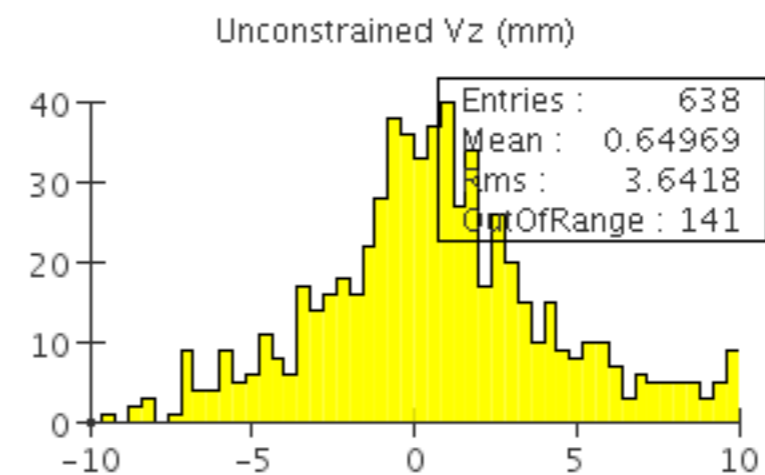
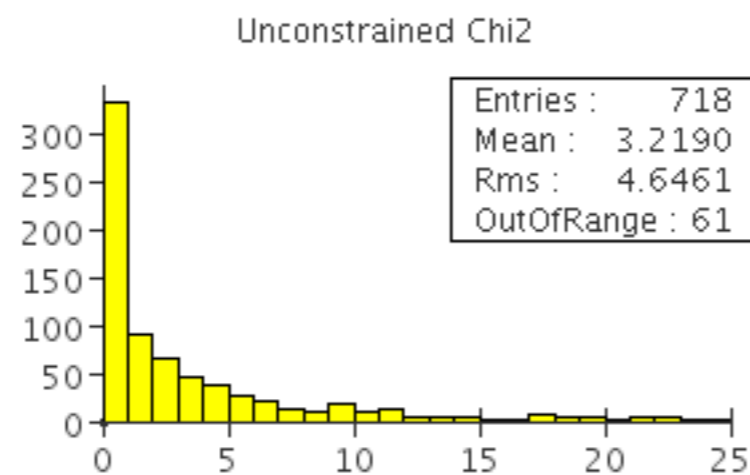
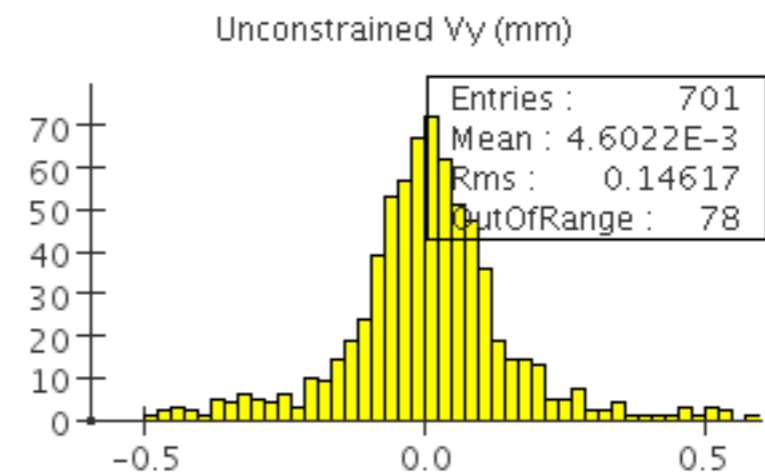
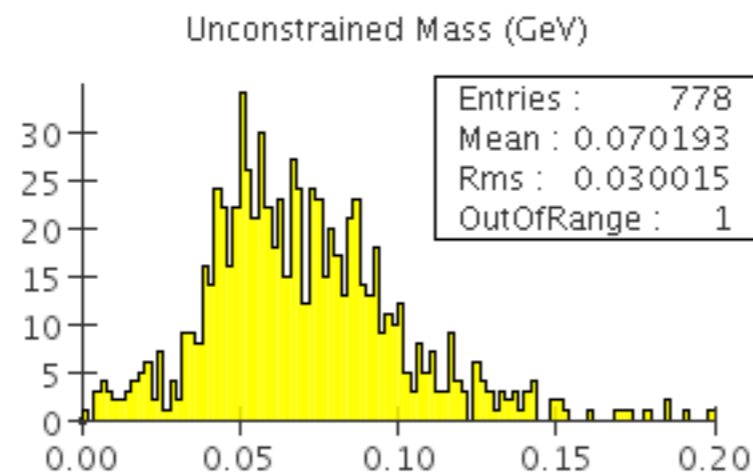
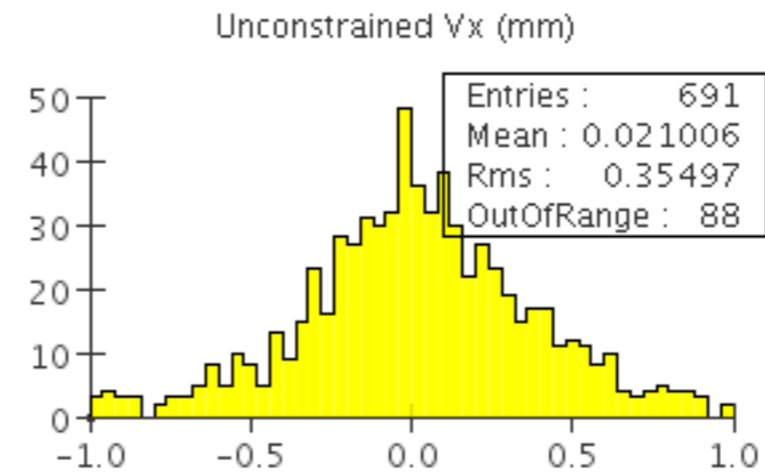
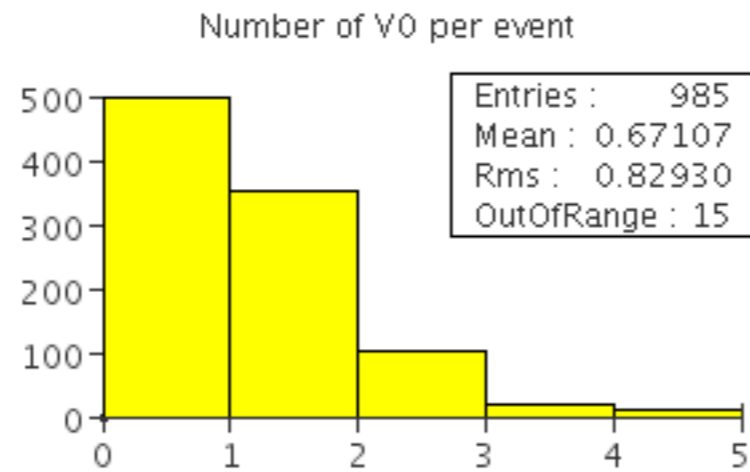


Online Monitoring: Track Residuals (X & Y)

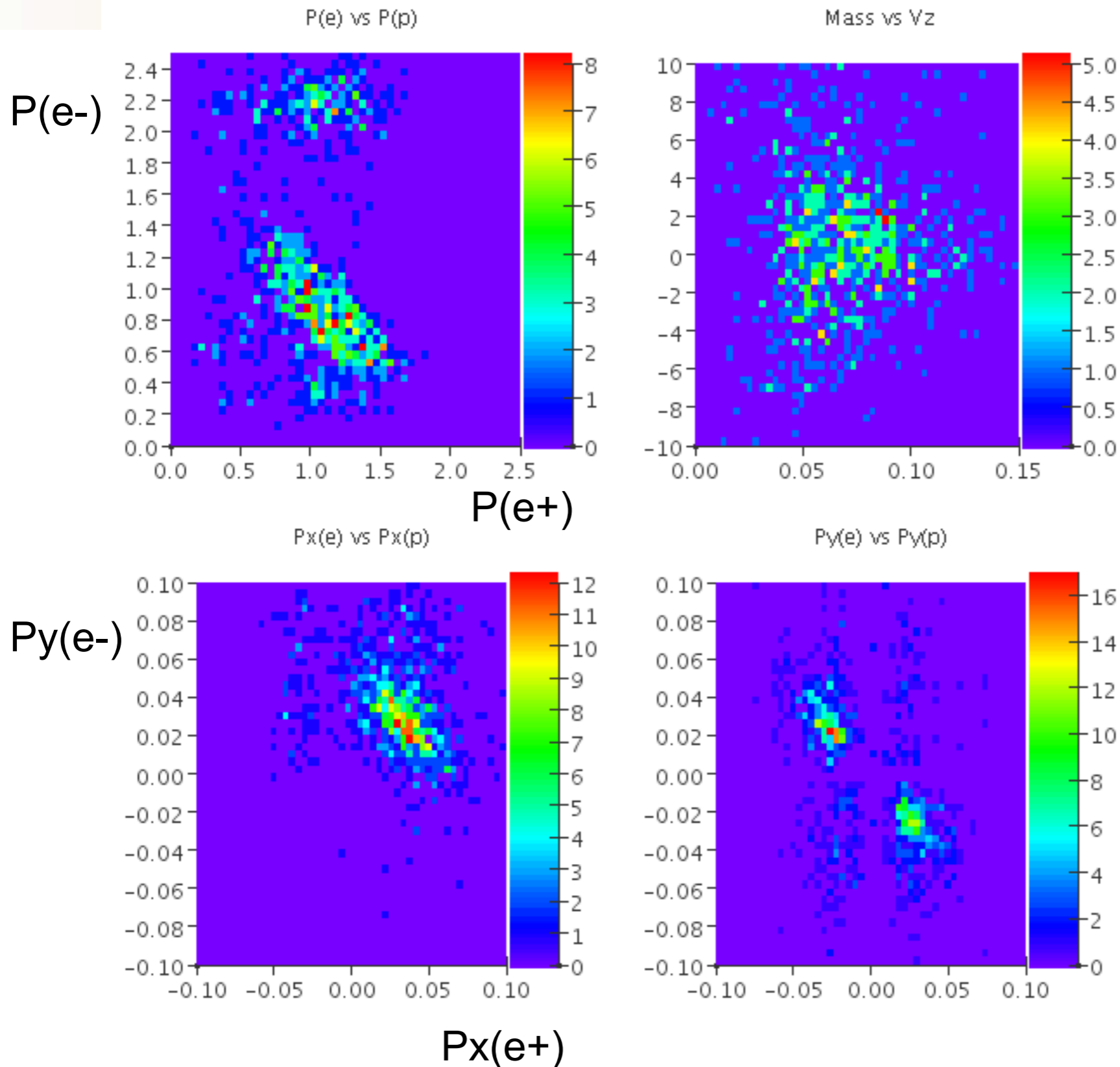


These are 2 IPlotter pages (4x3 plots each)...need to reduce stats box size

Online Monitoring: V0 (unconstrained)

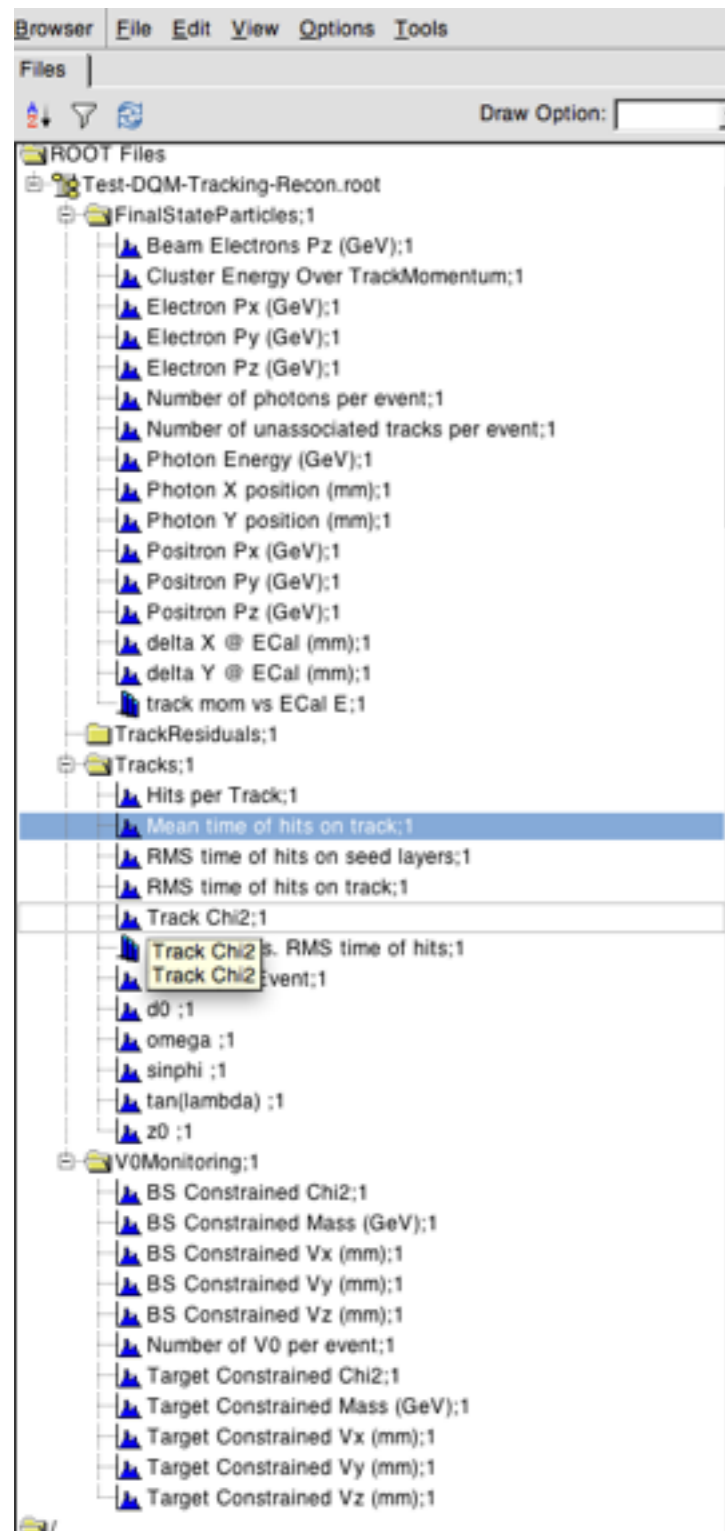


Online Monitoring: V0 2D plots



...only ~700 entries here, but I think these will be useful plots

Offline Monitoring: DQM plots & numbers



Much of offline monitoring is similar to online...run for every pass so we can monitor changes (hopefully improvements) with reconstruction

Plots:

- Track parameters
- Track residuals (including time and per-sensor)
- FinalStateParticles (includes simple PID)
- V0 (including BS & target constrained)

Numbers:

- <#tracks/event> & <#hits/track>
- parameter averages; d0 & z0 sigmas
- residuals mean & sigma/module & sensor
- Beam energy electrons <E> & sigma(E)
- # electrons & positrons/event
- # of "photons" per event (unassoc. clusters)
- <E/p>; <delta X,Y> (track-cluster positions)
- <V(x,y,z)> & sigma(V(x,y,z))