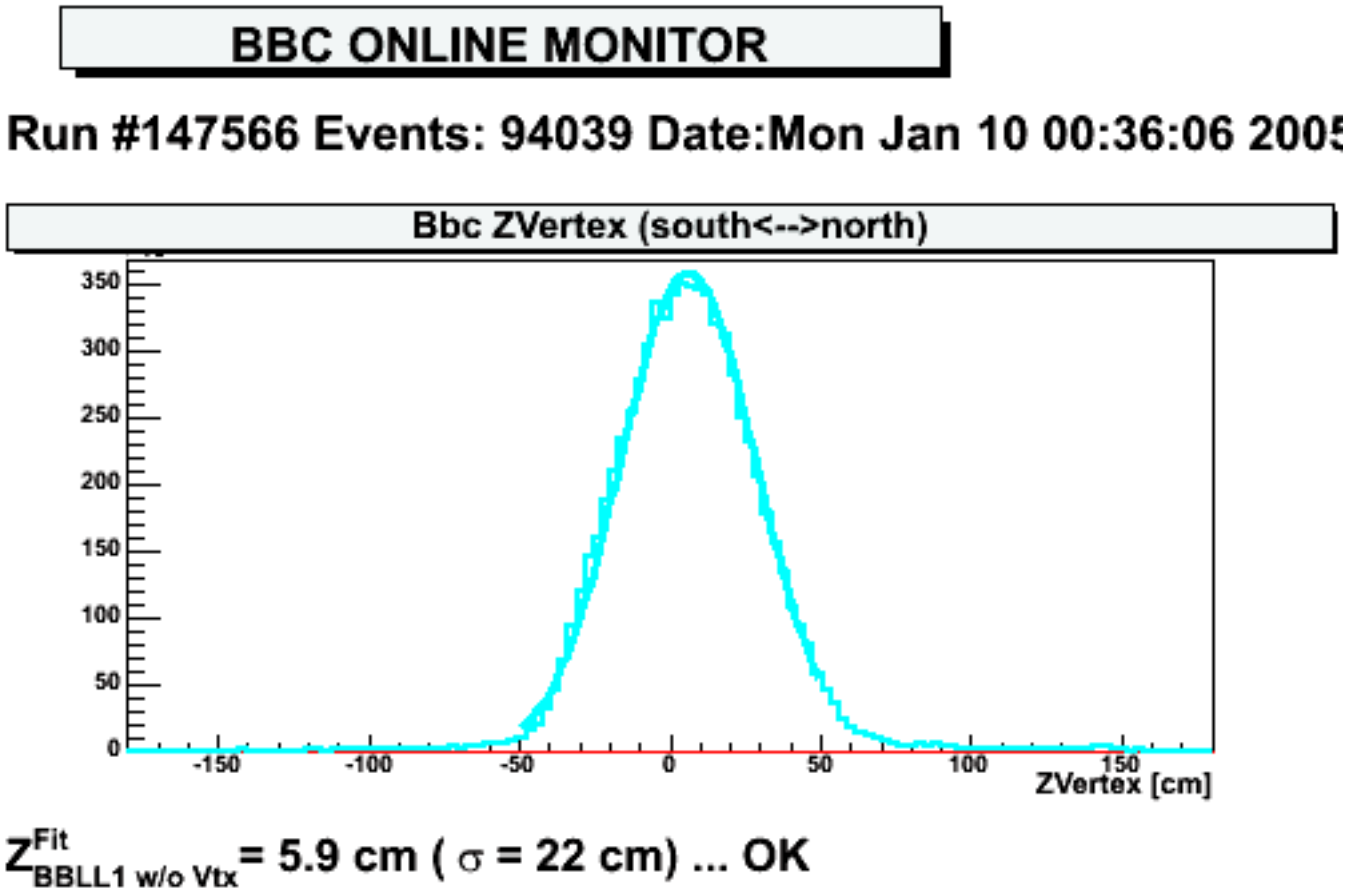
PHENIX Status

- Continued Work on Detector Commissioning and Setup.
  - Minbias trigger detectors setup
    - Beam Quality – vertex, backgrounds
  - Level-1 trigger setup
  - DAQ development and setup

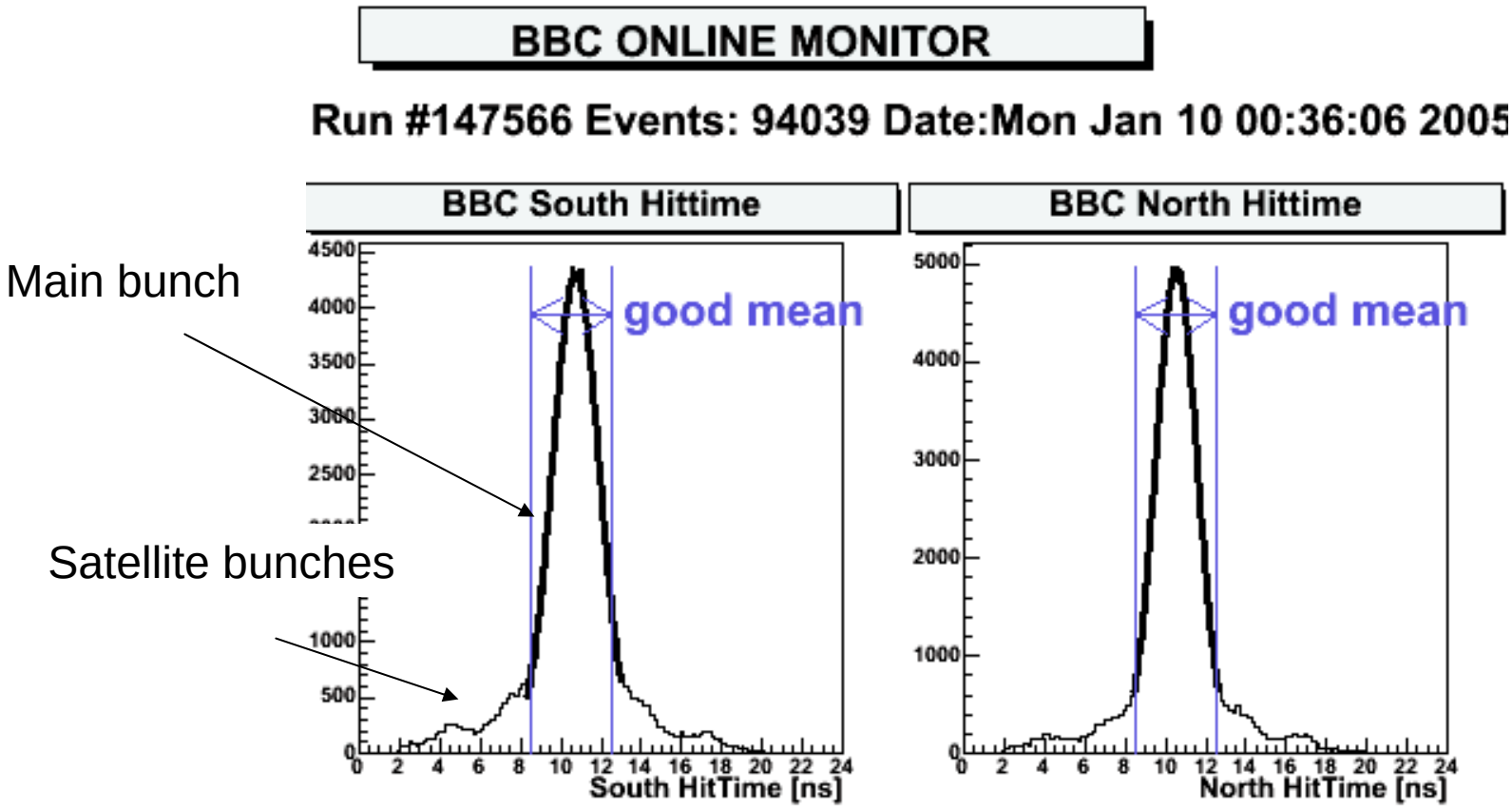
Vertex Distribution

- Vertex distribution looks very nice!
  - PHENIX BUP request (70% delivered in +/- 30cm)



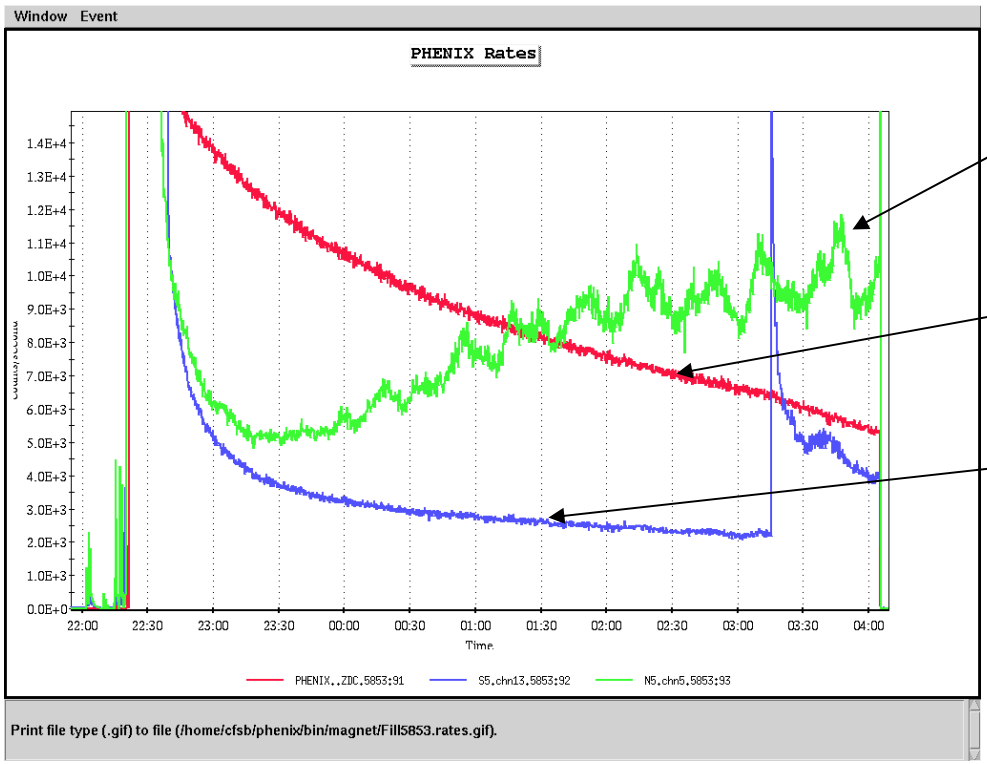
Satellite Bunches

- Little intensity in satellite bunches
  - Doesn't appear to grow dramatically within a store



Backgrounds

- Backgrounds, particularly in MUID North (yellow beam), have been a problem
  - Fixed with collimation early morning Jan 11 (thanks Angelika!)



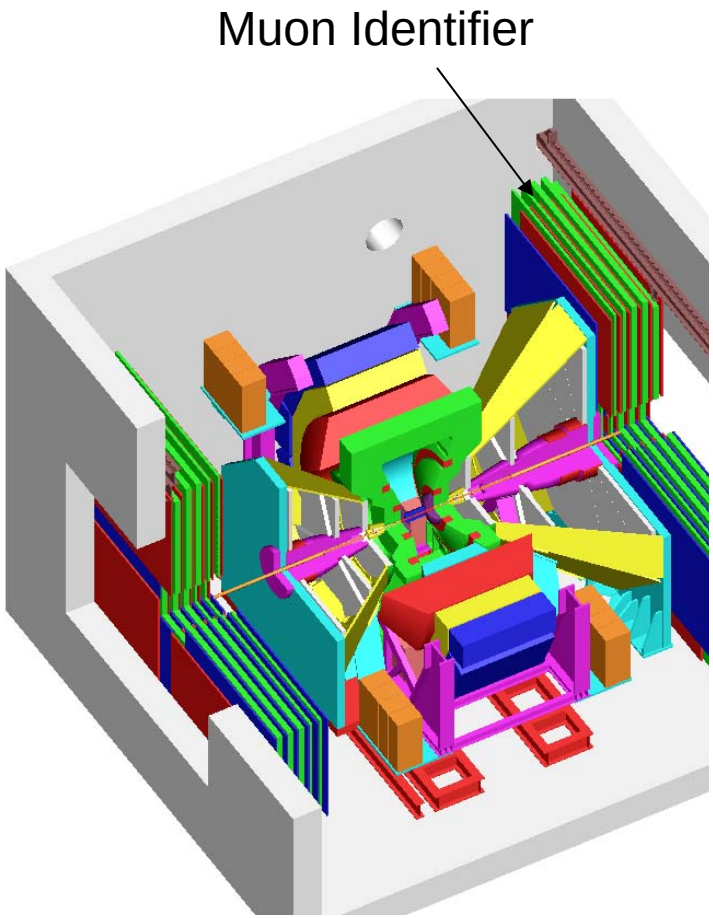
MuID N background counters

ZDC coincidence

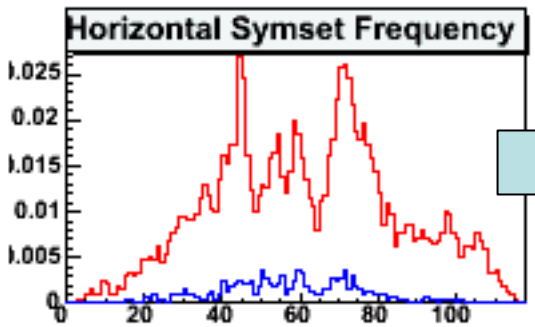
MuID S background counters

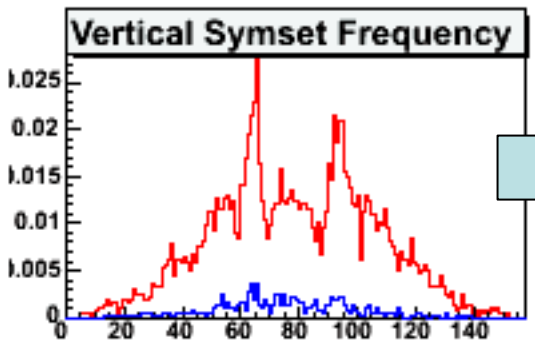
MuID LL1 Trigger Setup

- New Level-1 Trigger for Muon Identifier:
  - South arm timed in and ready, north arm underway…

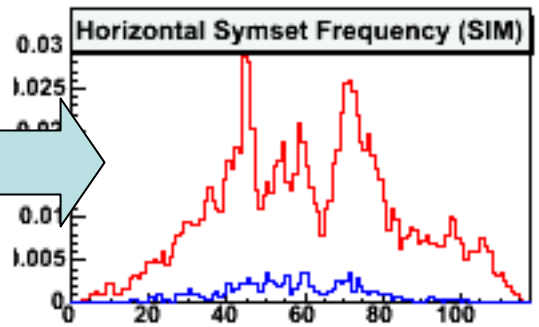


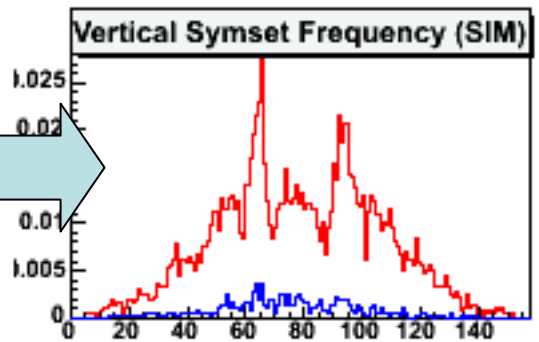
LL1 Data:





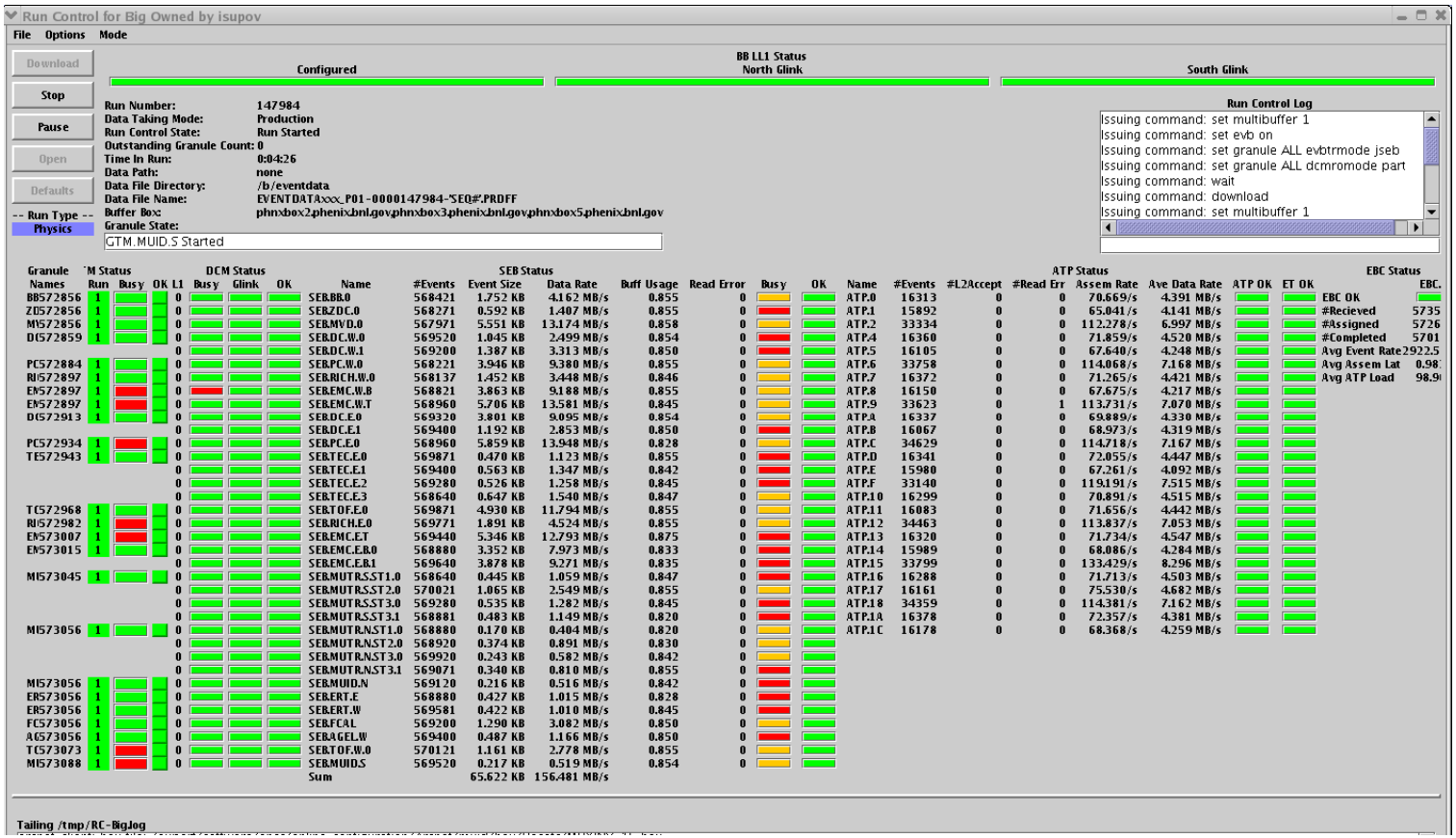
Simulation:





DAQ

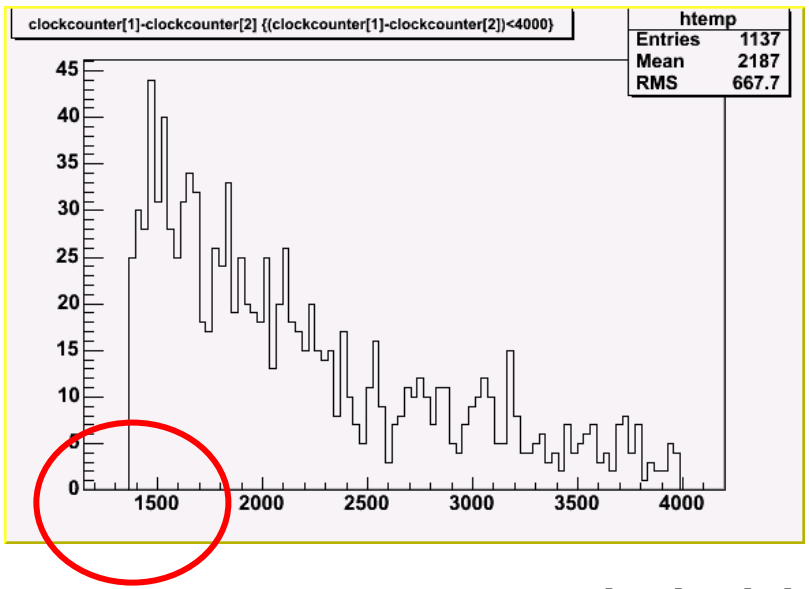
- Redesigned Event Builder up and running.
  - 24 subsystem elements (granules)
  - ~4.5kHz with six buffer boxes



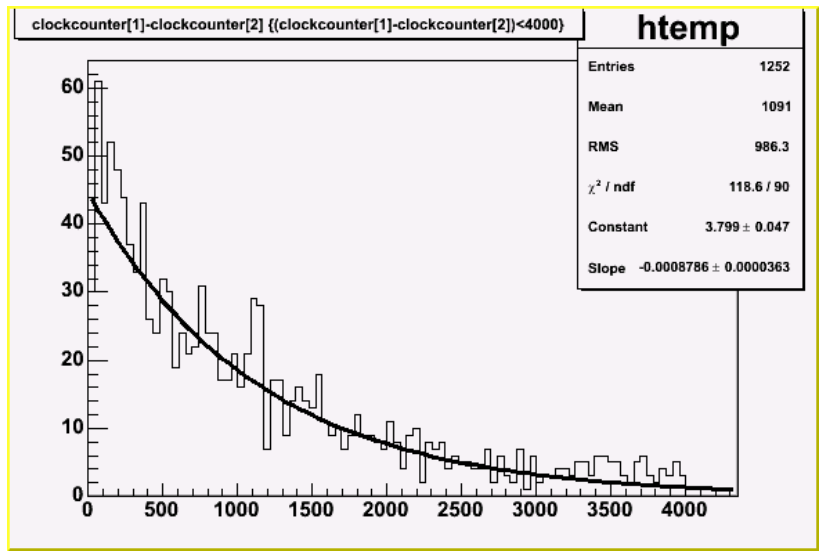
DAQ: Multi-Event Buffering

- This year we will exercise a feature of our front-end electronics that allows concurrent readout and digitization.
  - Reduces dead-time at high trigger rates

Single-Event Buffered



Multi-Event Buffered



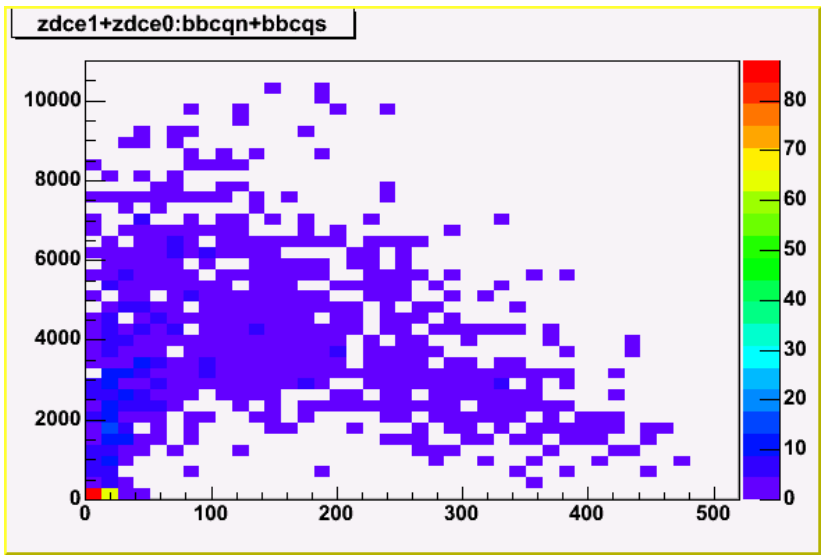
Note suppressed zero!

Clock Ticks Between Events

Tests of Multievent Buffering

- Need to evaluate the effect of multievent buffering on data
  - Alignment, calibration and production run on 3M events
  - QA ongoing, looks good so far

Single-Event Buffered



Multi-Event Buffered: ΔT<500 clks