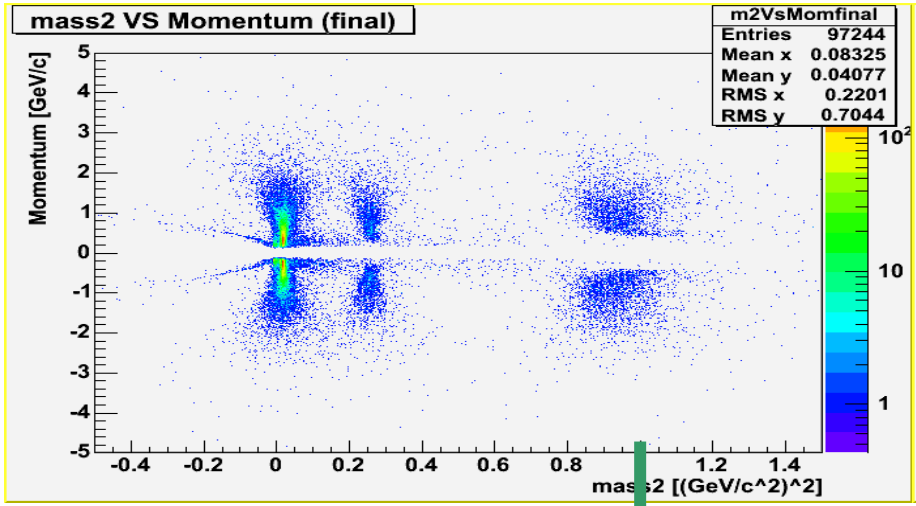
PHENIX Status

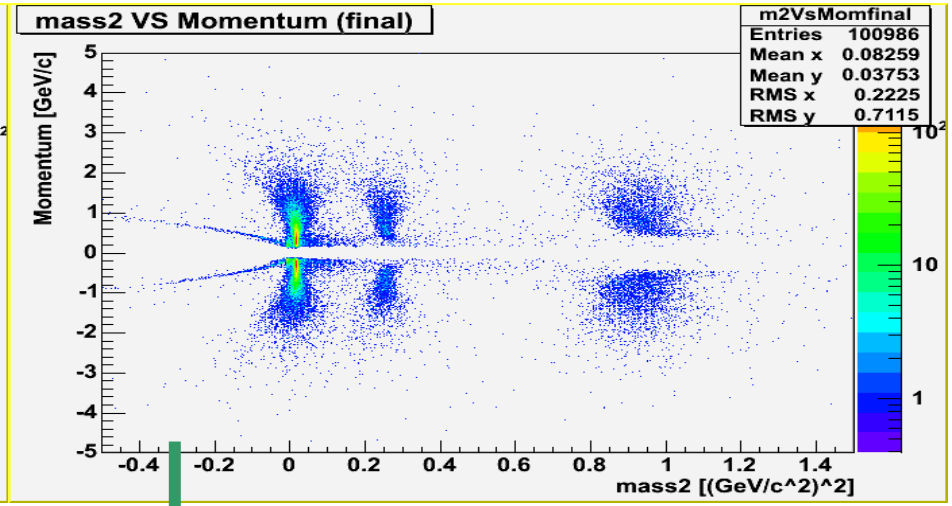
- Confirmation of multievent buffering for full detector
  - Jan 11th -17th consumed by detector setup, rare trigger setup, confirmation of multievent buffering (special runs).
  - Offline calibration and reconstruction of initial CuCu data

Multievent Buffering: TOF

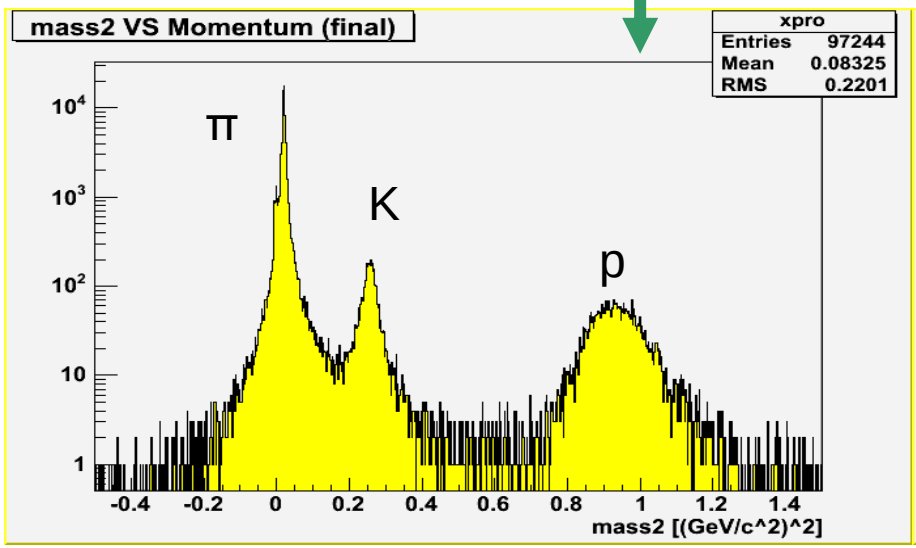
Mass² vs Momentum distribution after timing calibration.

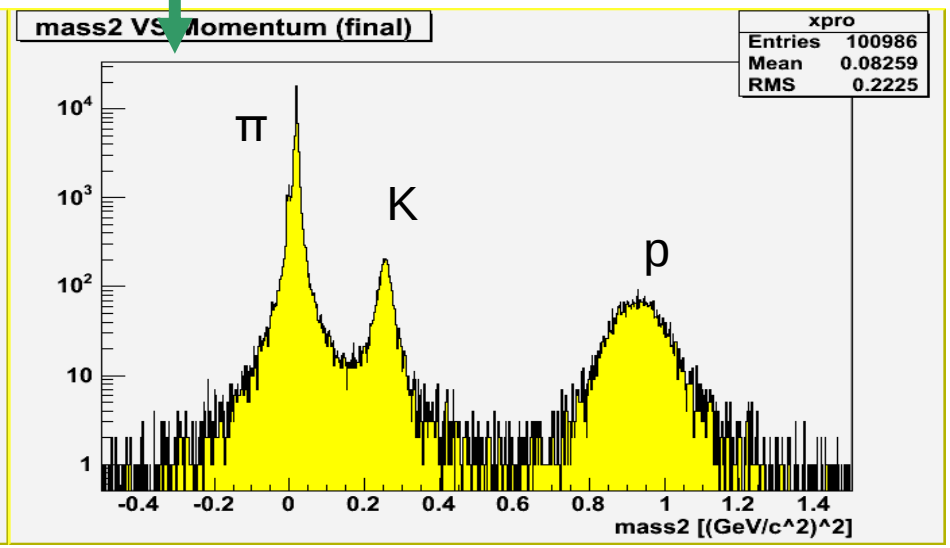
Run 147564 (single) **Run 148047 (multi)**



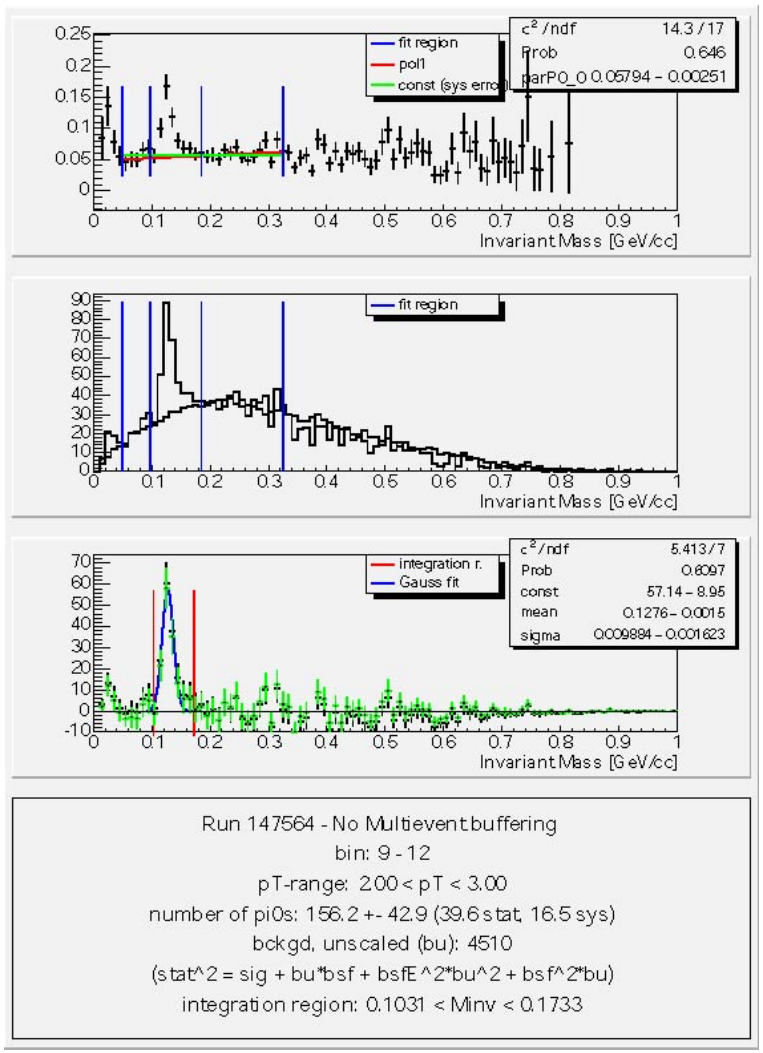


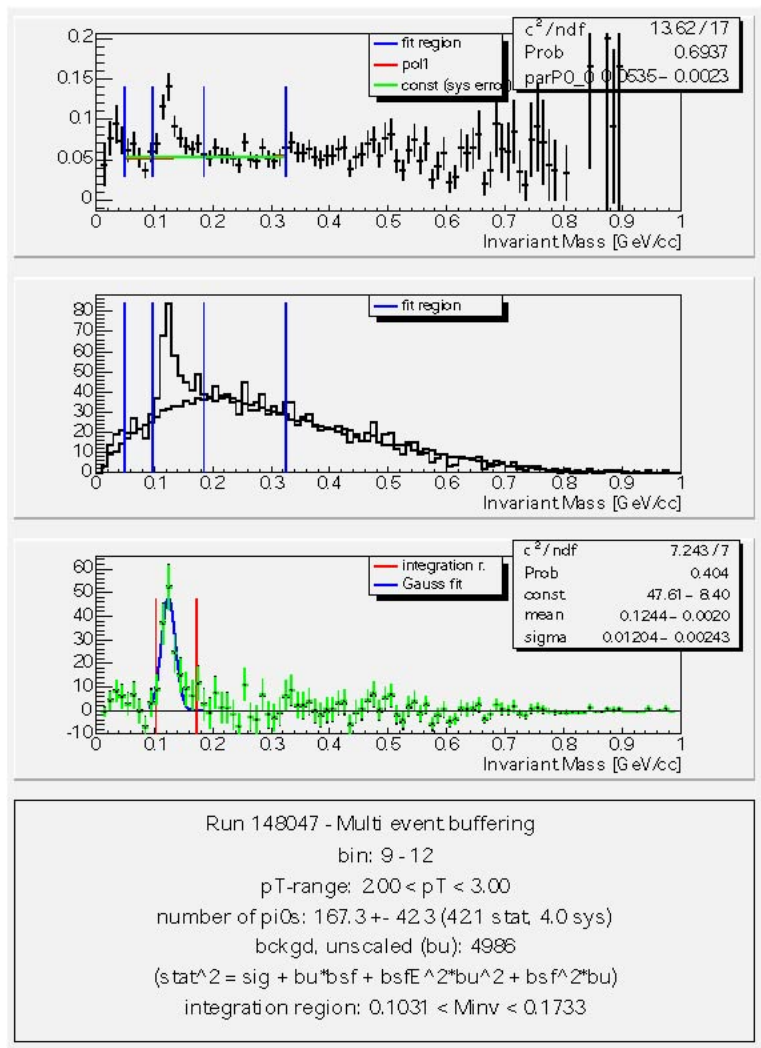
Projection X





Multievent Buffering: π^0

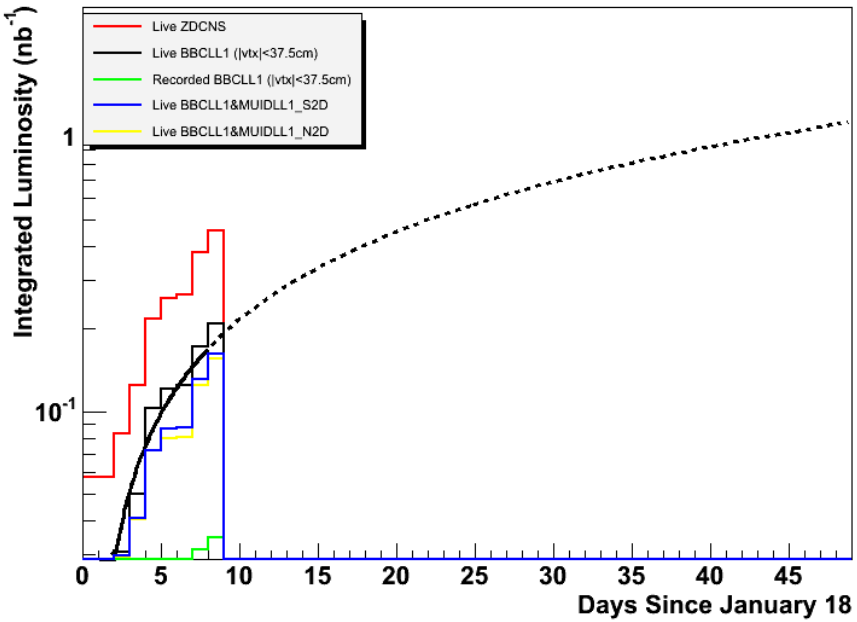




Integrated Luminosity

- PHENIX Physics data taking since Jan 18th.
  - Since Jan 18th (start of PHENIX physics)
    - 209 μb^{-1} BBCLL1(|vtx|<37.5cm) Live (365 μb^{-1} ZDCNS Live)
    - 162 μb^{-1} BBCLL1(|vtx|<37.5cm) Live w/MuID South
    - 156 μb^{-1} BBCLL1(|vtx|<37.5cm) Live w/MuID North
  - RHIC delivered ~6-700 μb^{-1} (ZDC) since Jan 18th

PHENIX goal 2.9 nb^{-1}



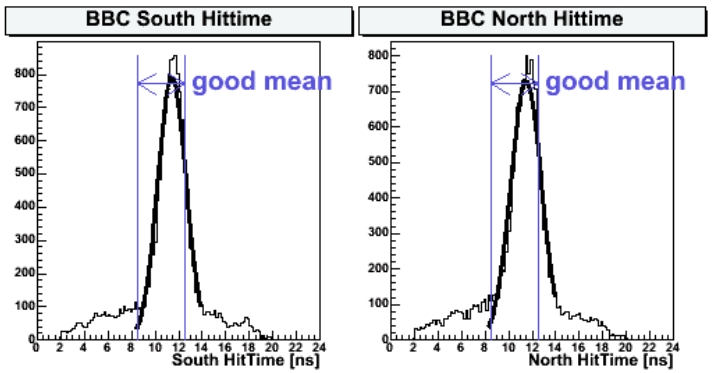
PHENIX Needs...

- Stable, reproducible stores.
  - Storage RF working (narrow vertex)
  - Low Backgrounds
    - No continuous gap cleaning
    - Automated collimation working
- Luminosity!
  - Rare triggers rejection good to ~90kHz ZDC
- Shorter store length
  - ~3.5-4hrs optimal for PHENIX

Storage RF

Storage RF working….

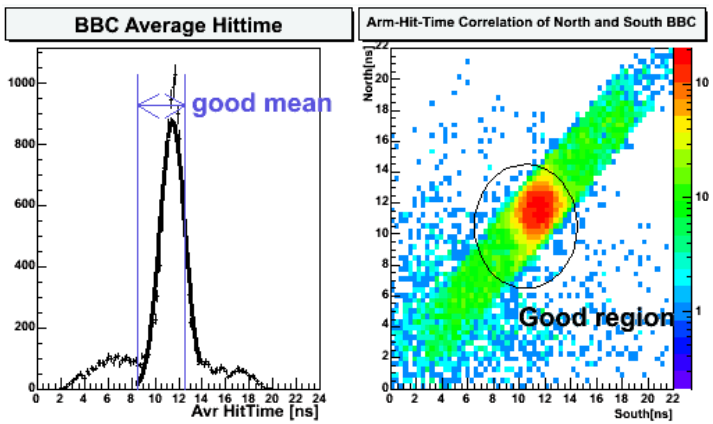
Run #151114 Events: 17109 Date:Tue Jan 25 05:09:52 2005



South:11.4[ns] North:11.4[ns] ... OK

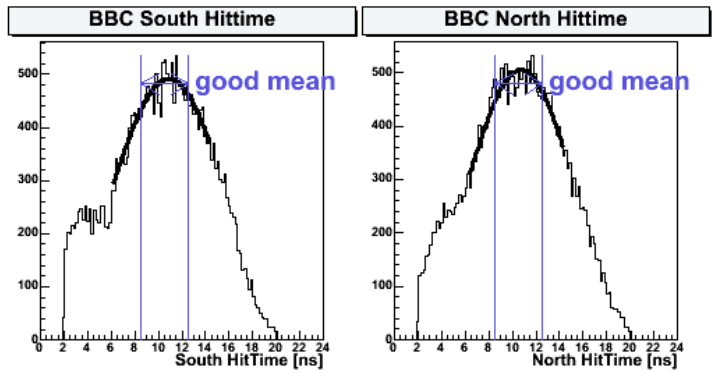
(Global offset : ... OK)

Shown data are triggered by BBLL1 |z|<130cm



Storage RF troubles….

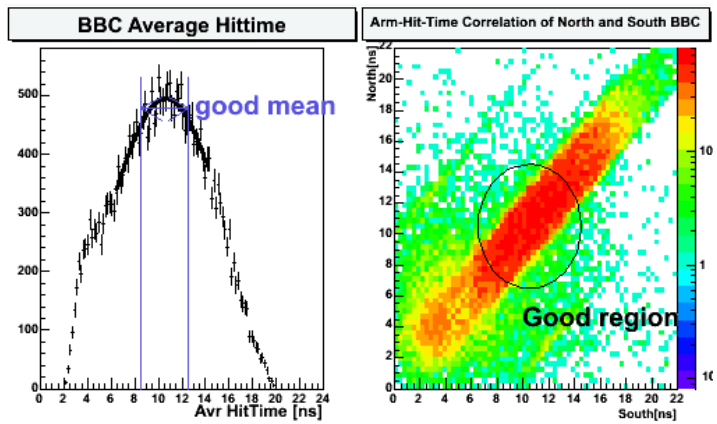
Run #151084 Events: 33084 Date:Mon Jan 24 20:22:15 2005



South:10.8[ns] North:10.7[ns] ... OK

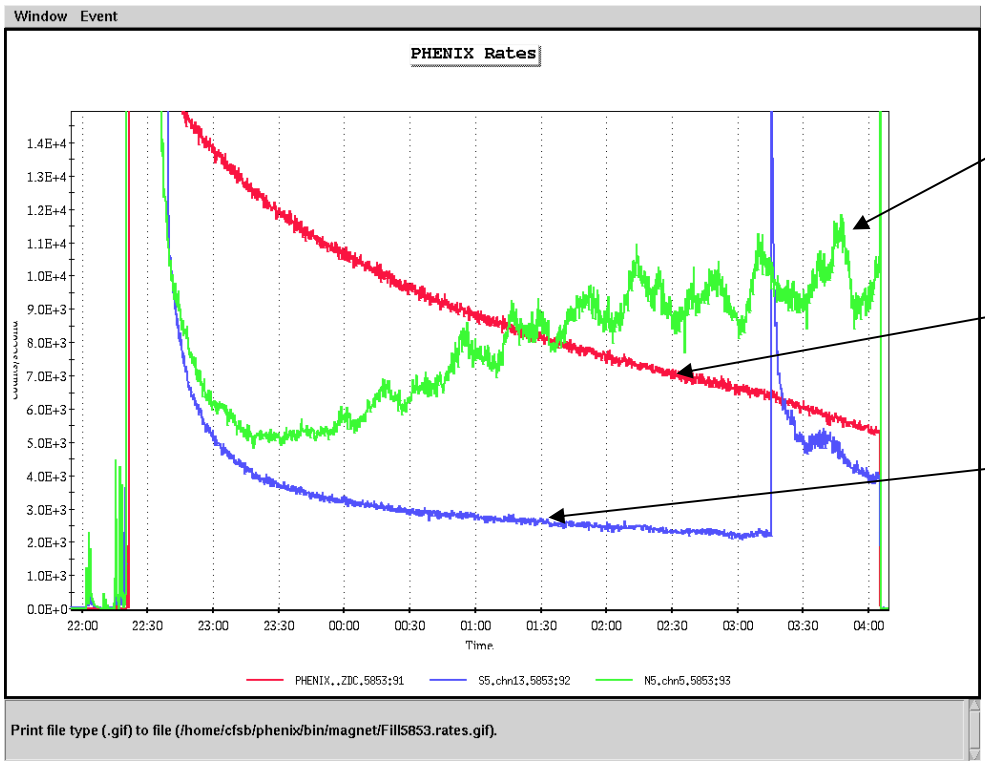
(Global offset : ... OK)

Shown data are triggered by BBLL1 |z|<130cm



Backgrounds

- Backgrounds, especially with MuID-N (Yellow beam) have been high and difficult to control.
  - Related to yellow beam emittance problem, debunched beam



MuID N background counters

ZDC coincidence

MuID S background counters

Length of Store

- PHENIX would prefer a shorter store length (~3.5-4 hrs)
  - Optimize luminosity sampled by rare triggers