

PHENIX Run-12 510 GeV Run Status

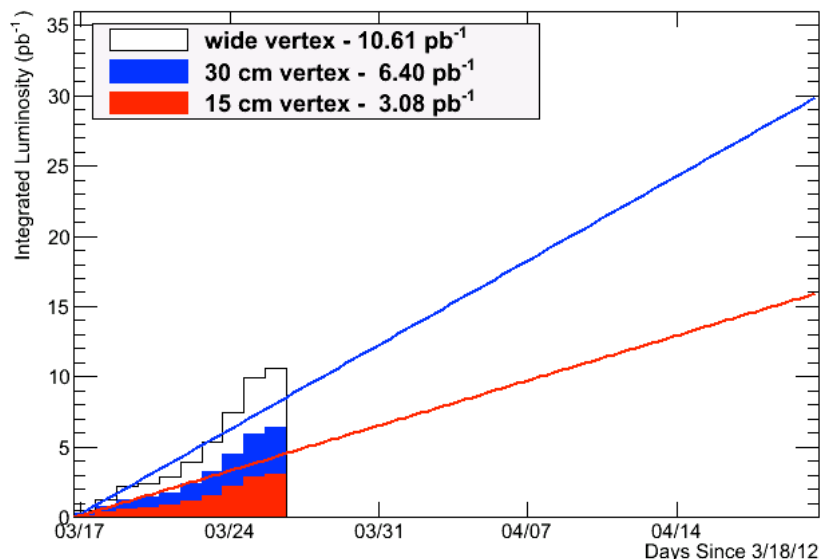
Xiaochun He

- PHENIX runs well at 510 GeV so far. We sampled 6.4 pb^{-1} as of 9am this morning within $\pm 30 \text{ cm}$ vertex region.
- PHENIX vertex detectors (VTX/FVTX) have been in data taking position since Tuesday last week (3/20). FVTX commissioning continues.
- The collision vertex distribution is much better than that we saw from 200 GeV run.
- Continuing on refining W trigger.
- One issue: Need to reduce and stabilize the transverse components. [Our LPOL experts are working with Vincent to improve the situation. Thank you, Vincent and the C-AD crew]

Sampled Luminosity in PHENIX

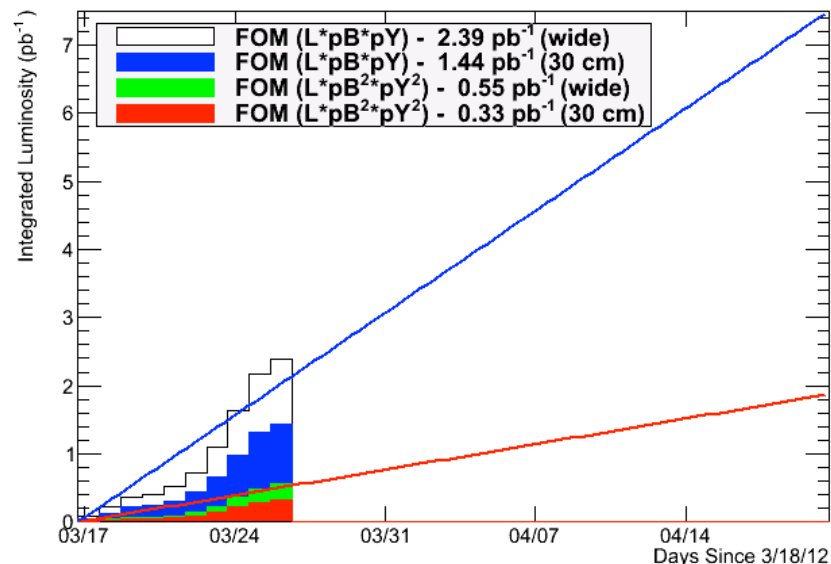
PHENIX Integr. Sampled Lumi vs Day

Tue Mar 27 09:01:50 2012



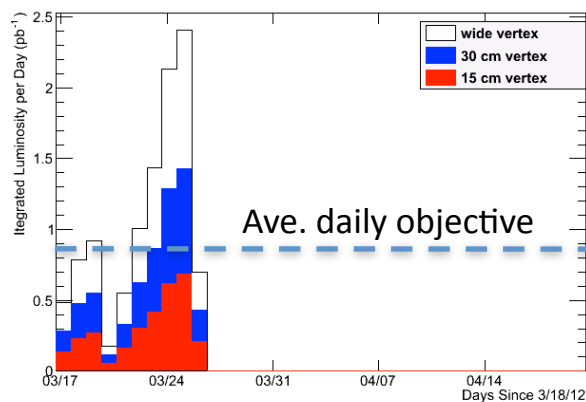
PHENIX Integr. FOM vs Day

Tue Mar 27 09:01:50 2012



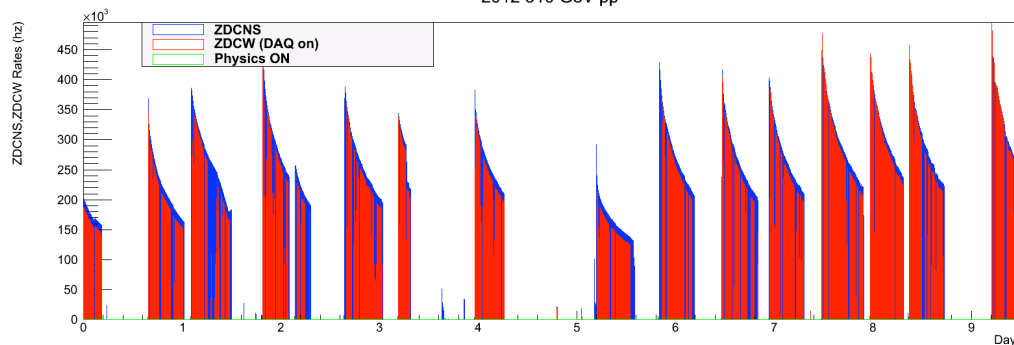
PHENIX Integr. Sampled Lumi/Day vs Day

Tue Mar 27 09:01:50 2012



2012 510 GeV pp

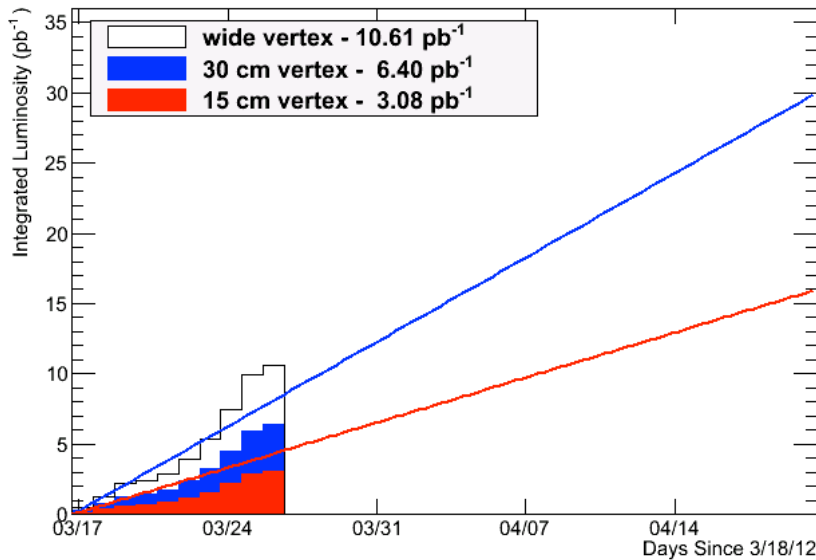
Tue Mar 27 11:00:09 2012



Sampled Luminosity in PHENIX

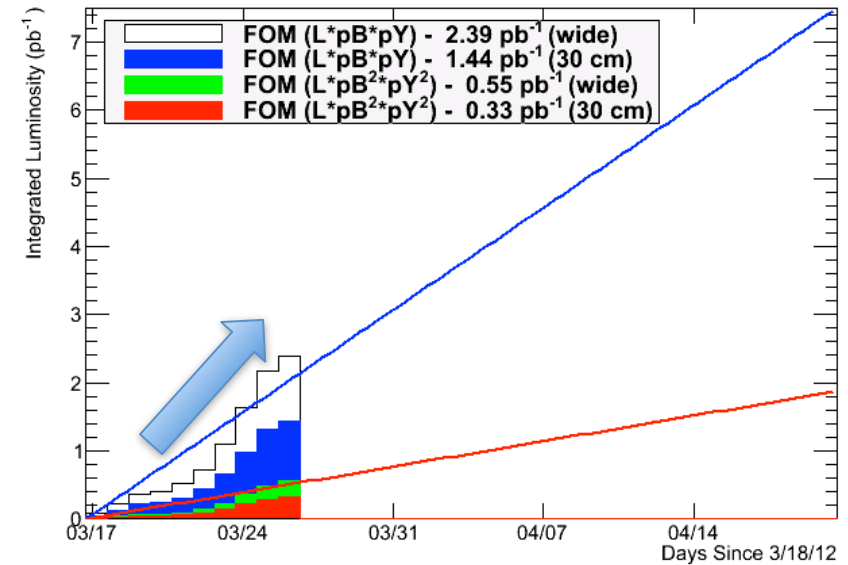
PHENIX Integr. Sampled Lumi vs Day

Tue Mar 27 09:01:50 2012



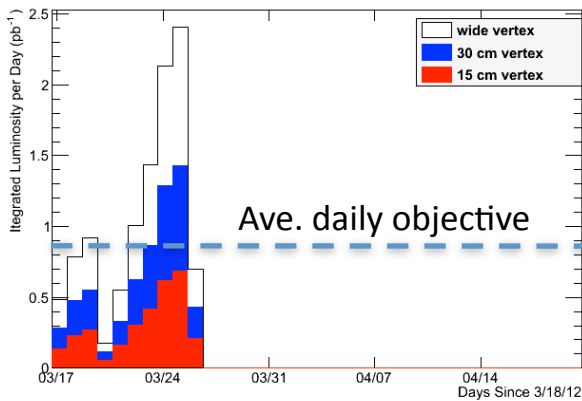
PHENIX Integr. FOM vs Day

Tue Mar 27 09:01:50 2012



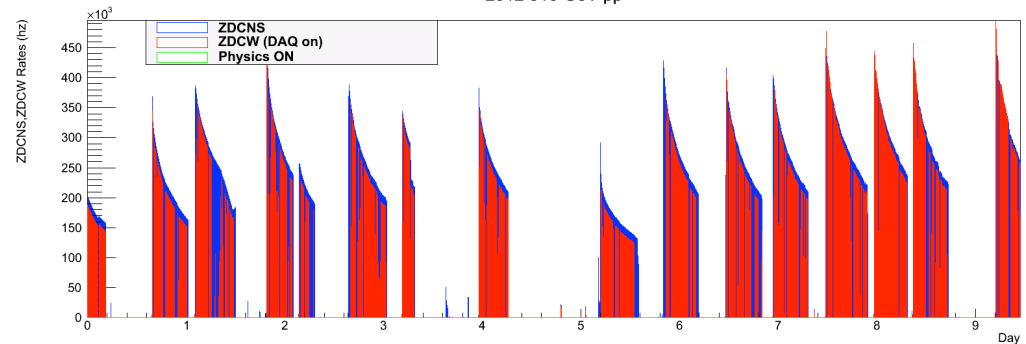
PHENIX Integr. Sampled Lumi/Day vs Day

ue Mar 27 09:01:50 2012



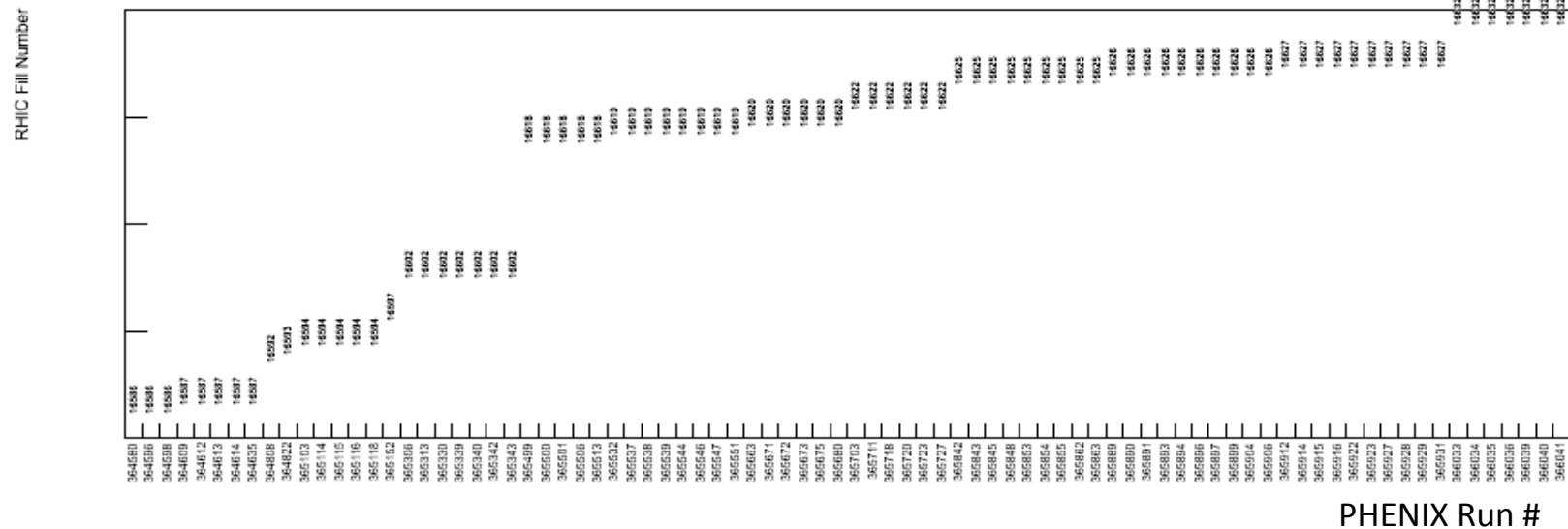
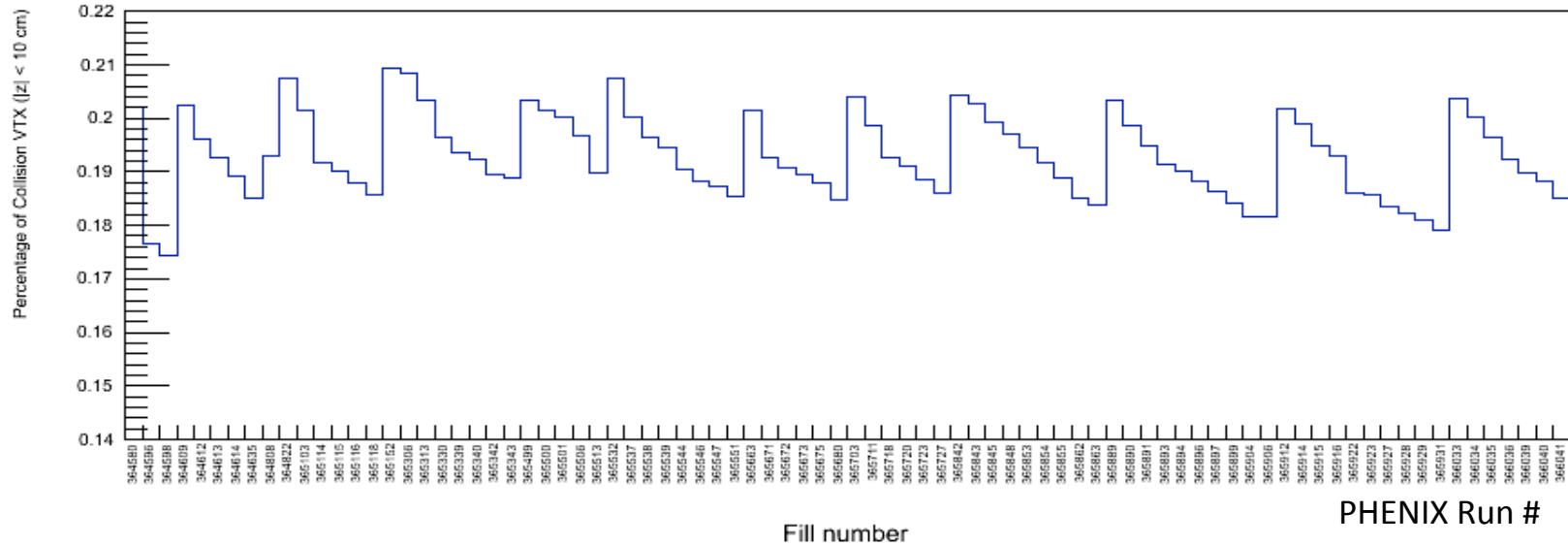
2012 510 GeV pp

Tue Mar 27 11:00:09 2012



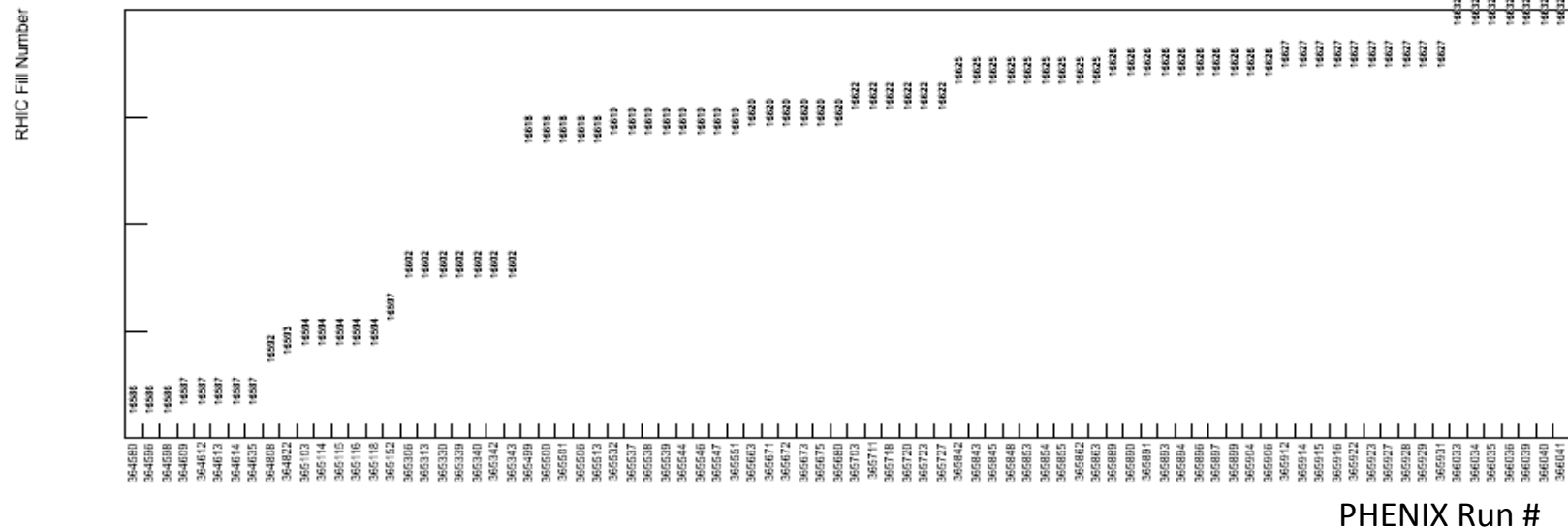
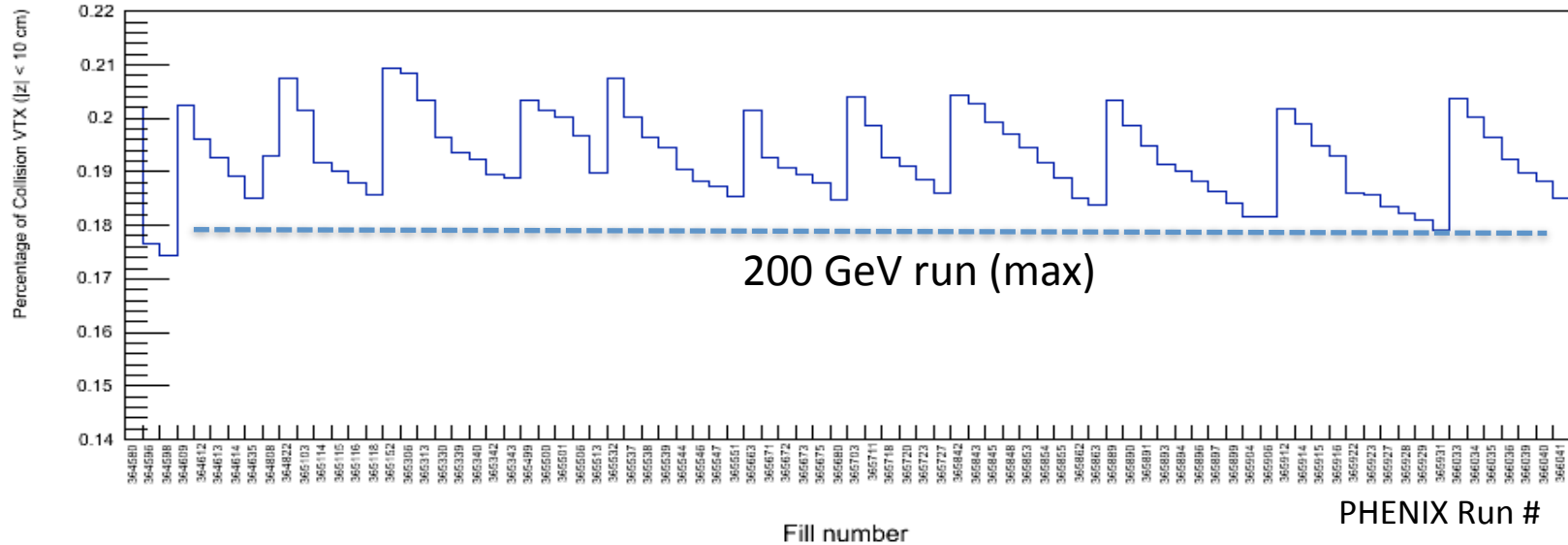
Better Vertex Distribution Seen in PHENIX in Comparison with 200 GeV Run

Narrow VTX Distribution in PHENIX



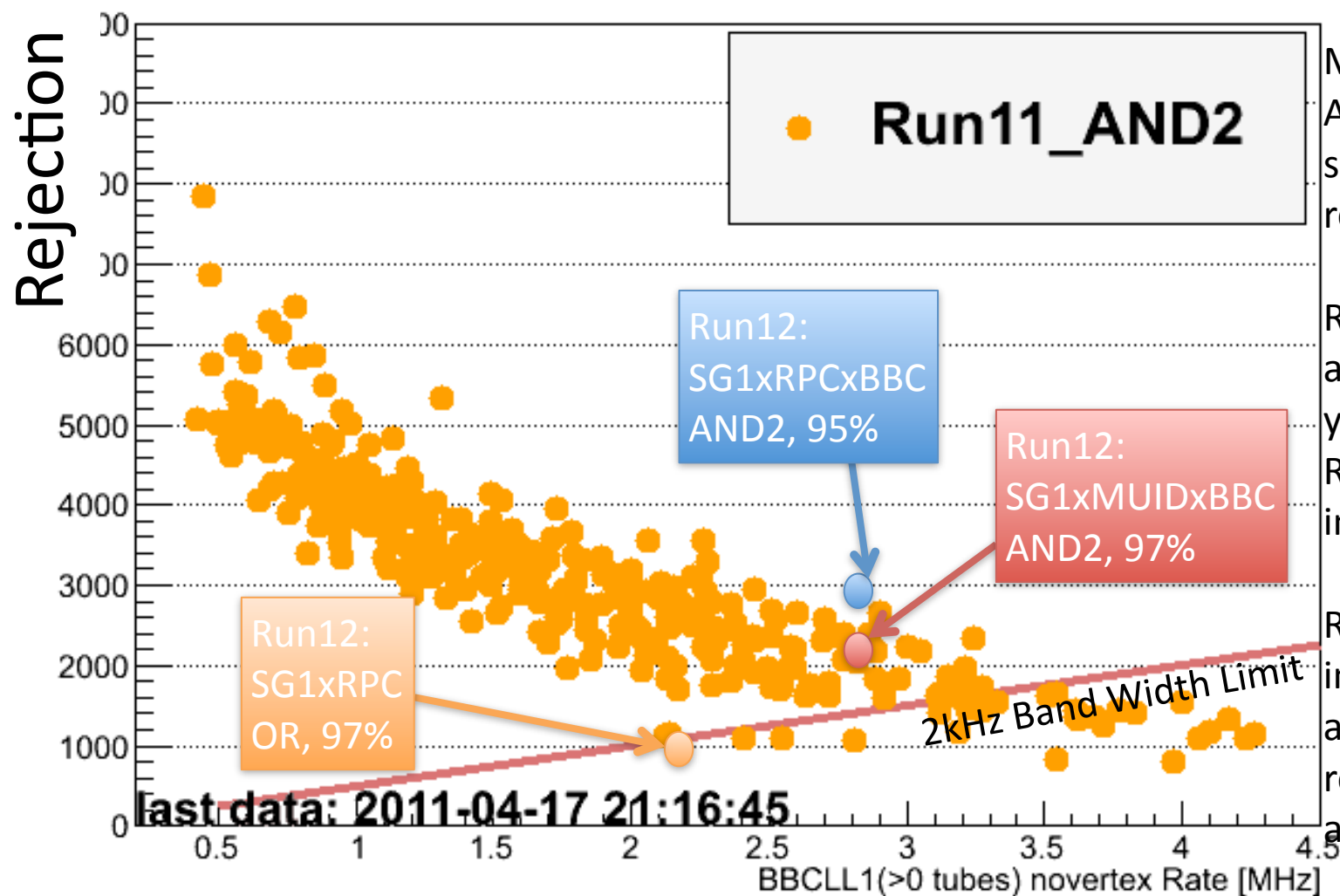
Better Vertex Distribution Seen in PHENIX in Comparison with 200 GeV Run

Narrow VTX Distribution in PHENIX



Muon Trigger Rejections, 510 GeV

North+South SG1xMUIDxBBC Rejection Power



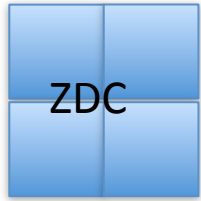
Muon Trigger:
Achieves
sufficient
rejection!

RPC3 timing cuts
are not finalized
yet.
Rejection will
improve.

RPC1 will be
implemented for
additional
rejection and
acceptance.

PHENIX W→muon trigger can handle high luminosity

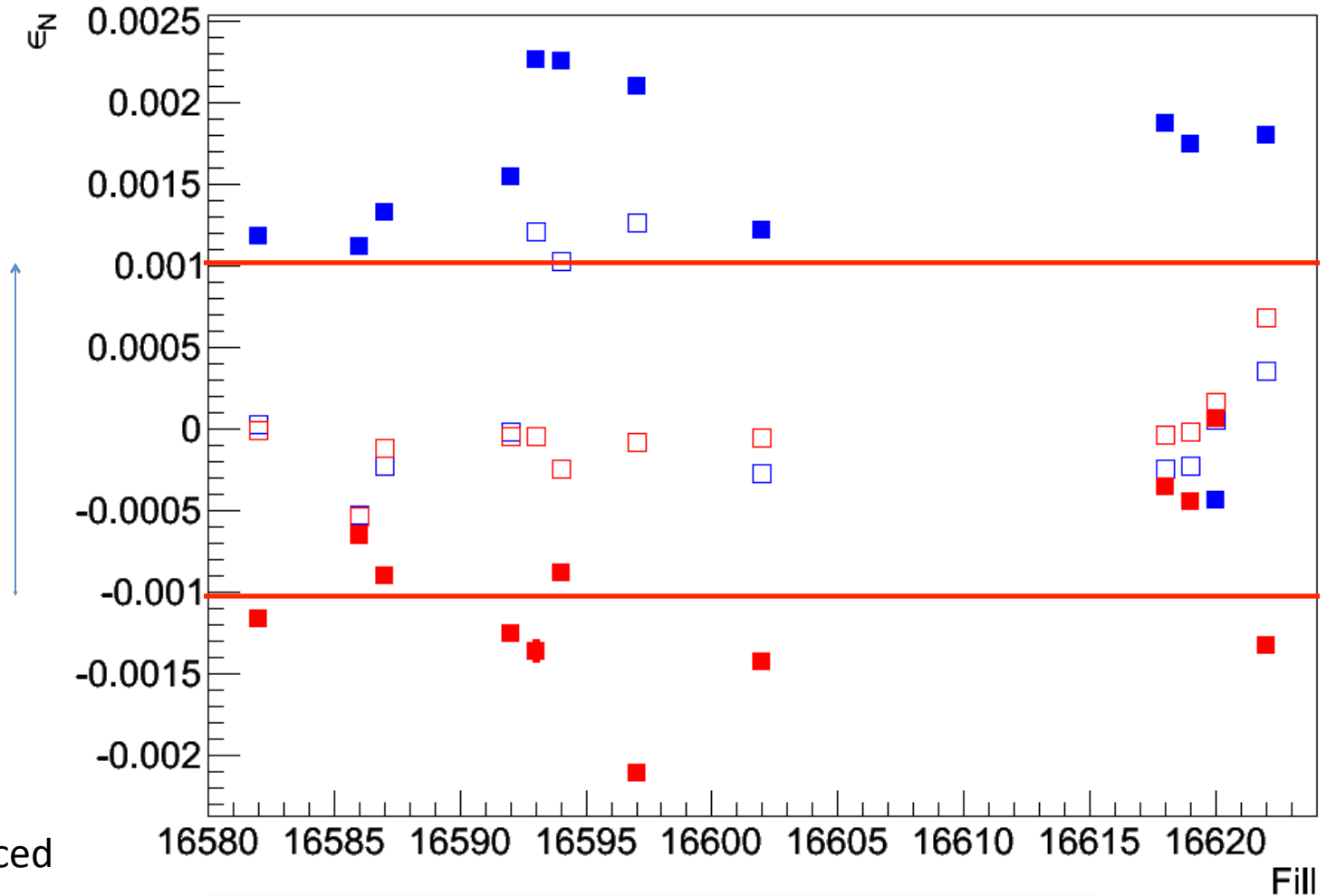
Run12pp510 PHENIX LPOL Forward



For LPOL

Target Region

Corresponding to
approximately:
 $P_{\text{transverse}}/P_{\text{total}}=5\%$



■ BNUD □ BNLR ■ YSUD □ YSLR

We would like:
Transverse
component reduced
and stabilized