

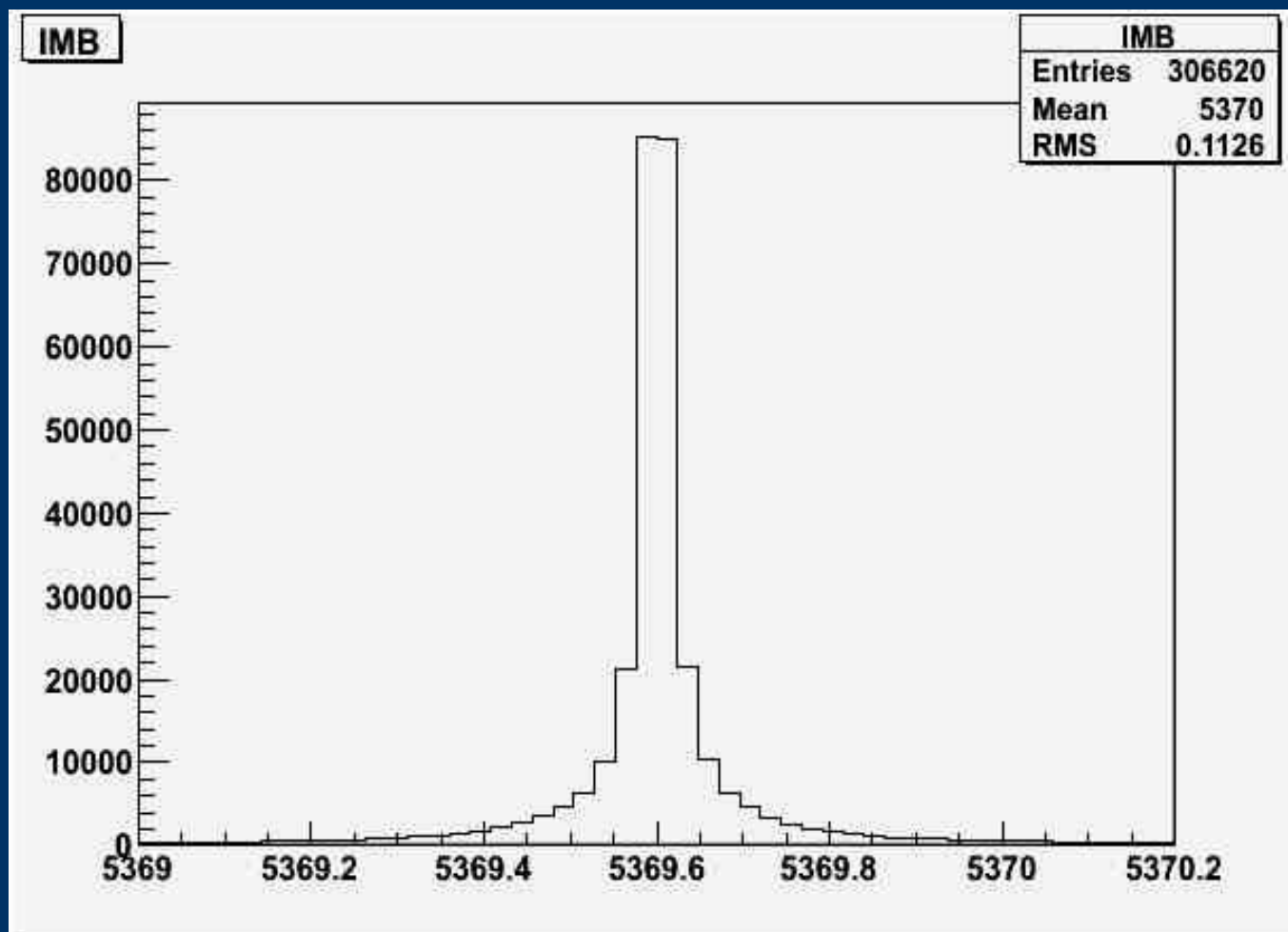
Status of Phi Studies

Celestino Rodríguez Cobo

DC06 MCTRUTH Update

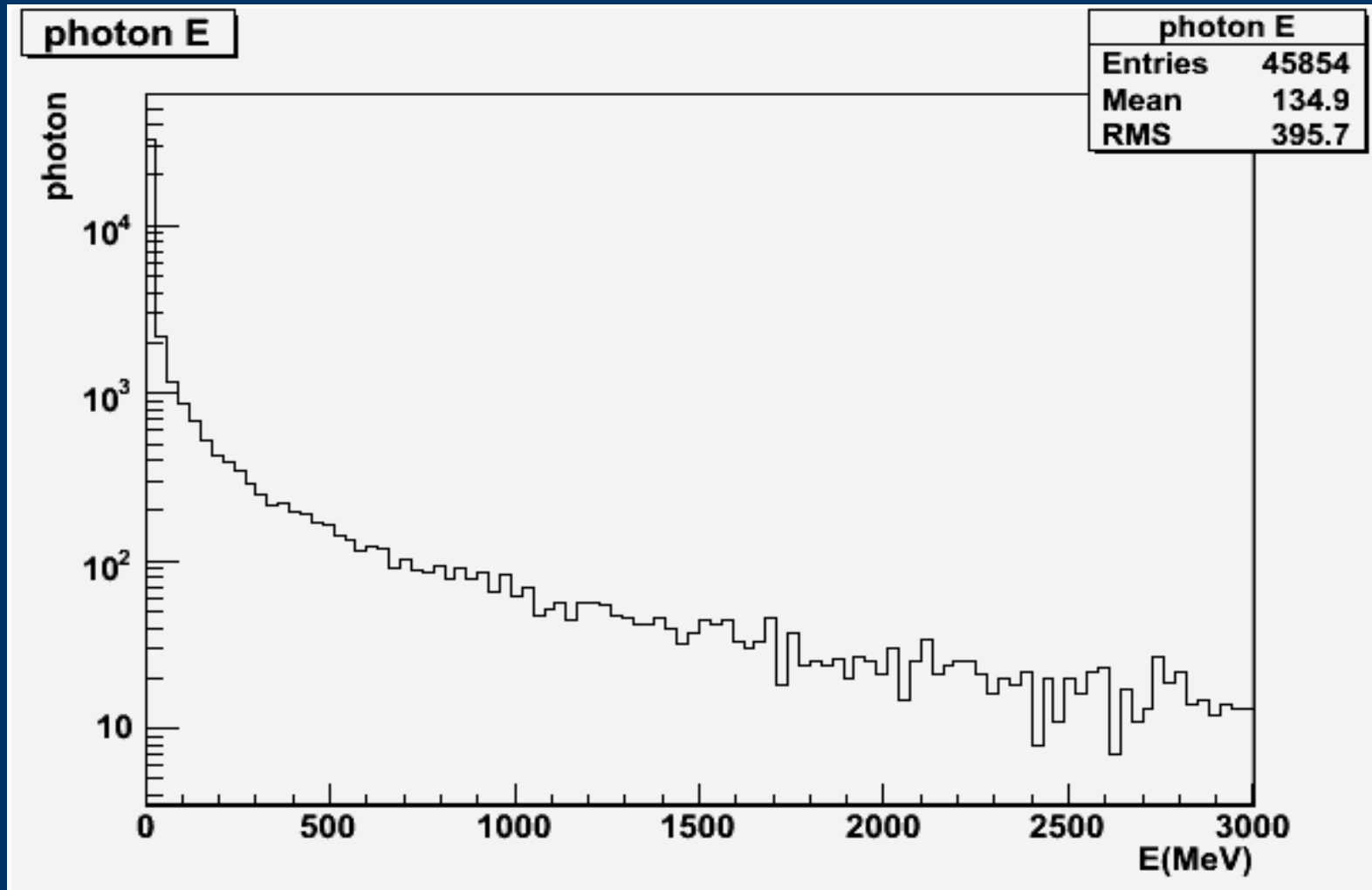
- DC06 tuple corrected now with photon events.
- Full statistics now in data card.
- Up to three photons in each desintegration of K^*
- Not a substantial change in behaviour of Φ .
- B_s mass seems to be conserved.

DC06 MCTRUTH Update



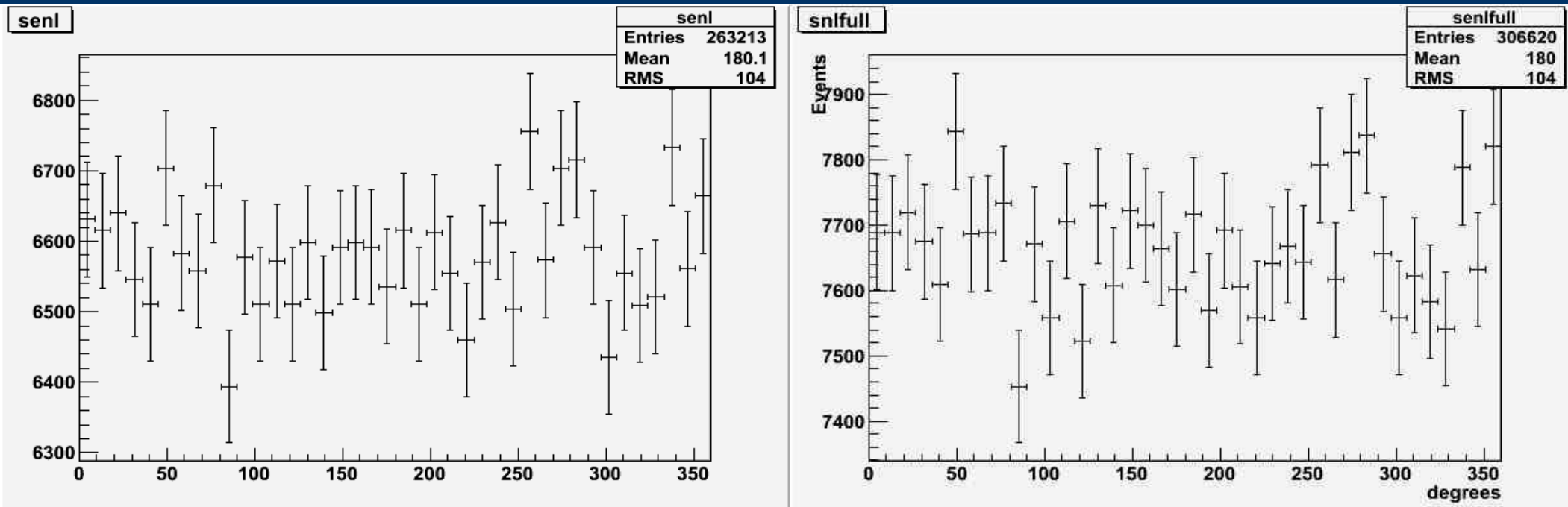
- Bs Invariant Mass(MeV)

DC06 MCTRUTH Update



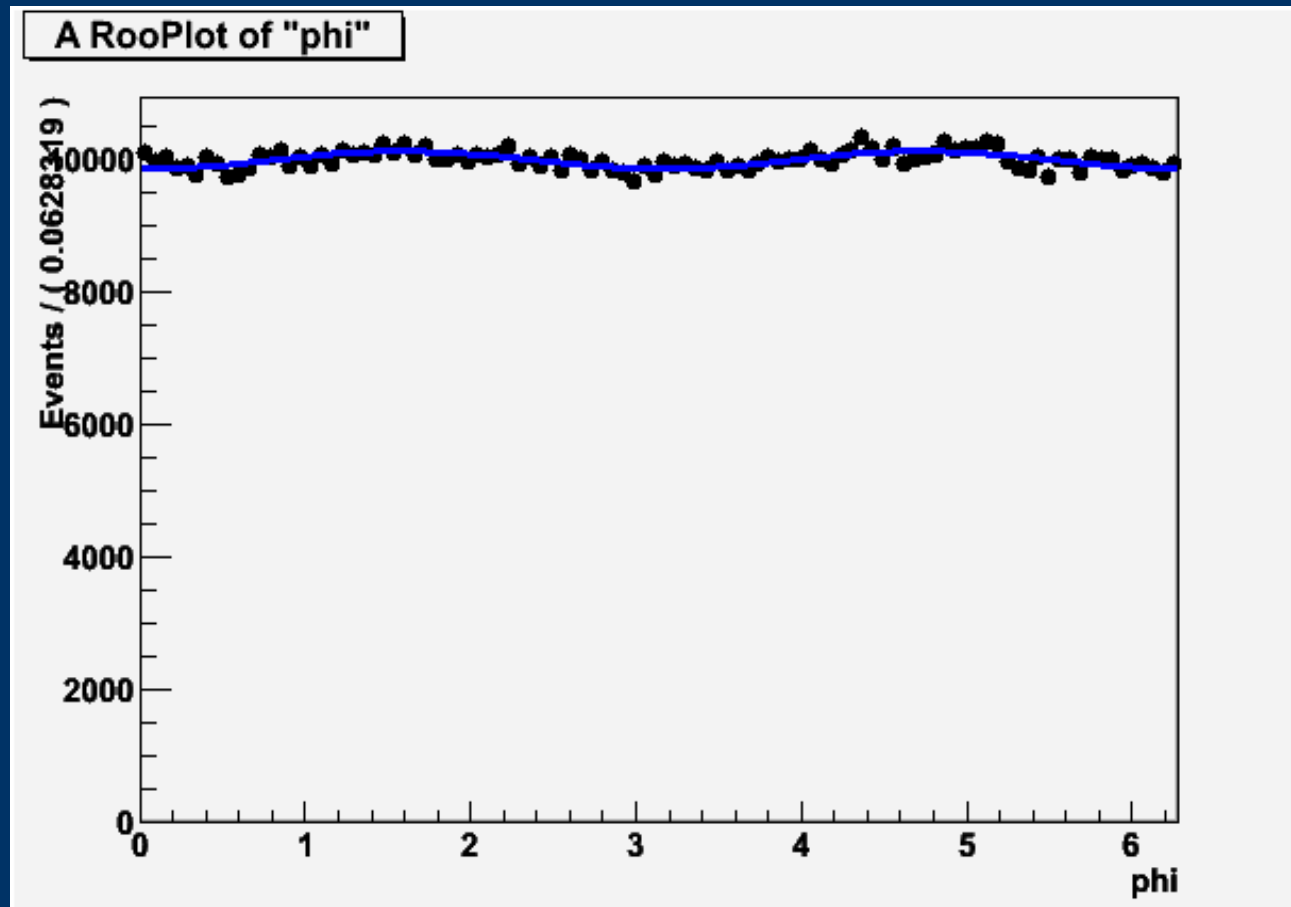
- Photon Spectrum(MeV)

DC06 MCTruth Update (Phi)



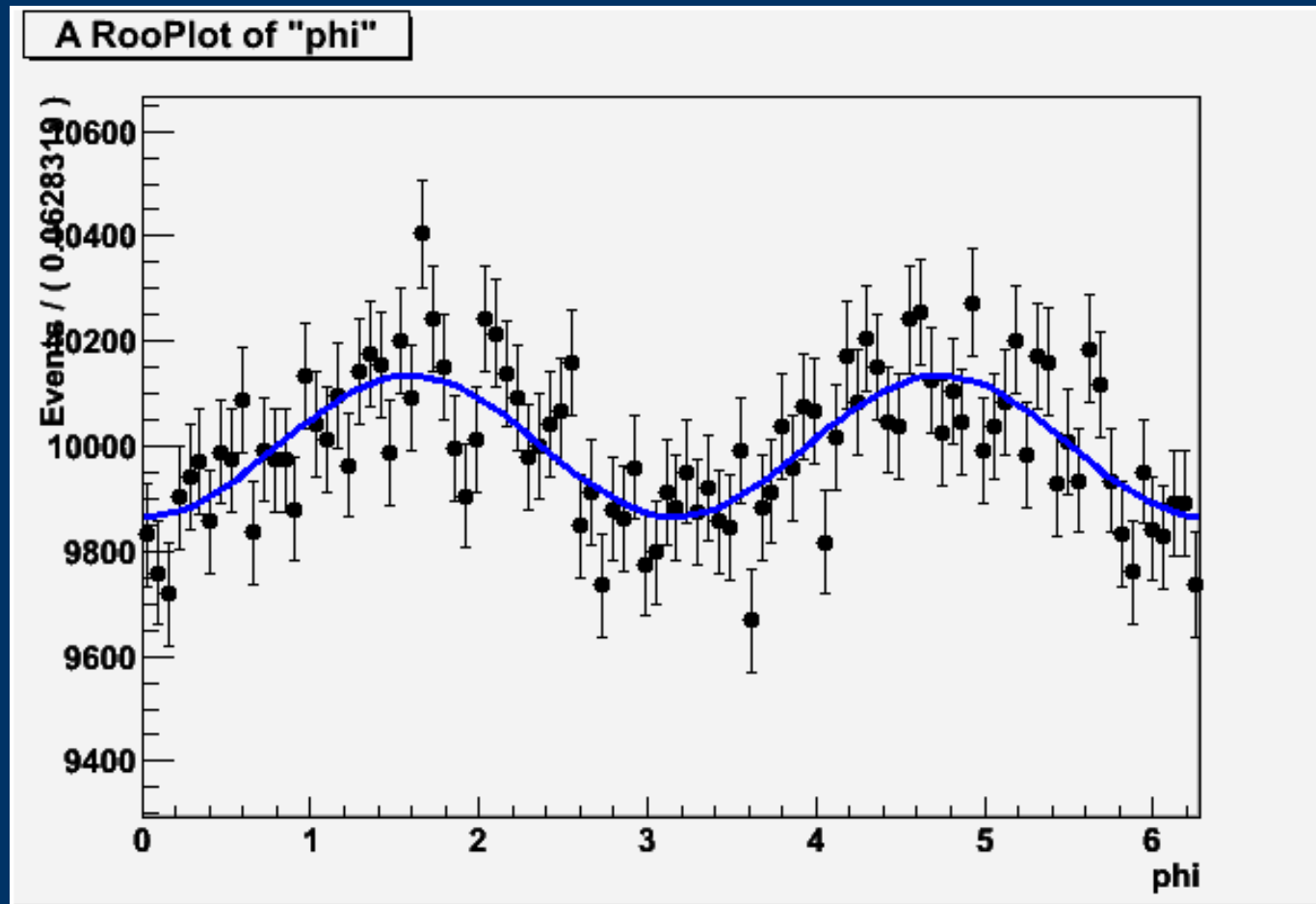
- Before and After.
- Not a substantial change.

Phi Toy MC oscillation



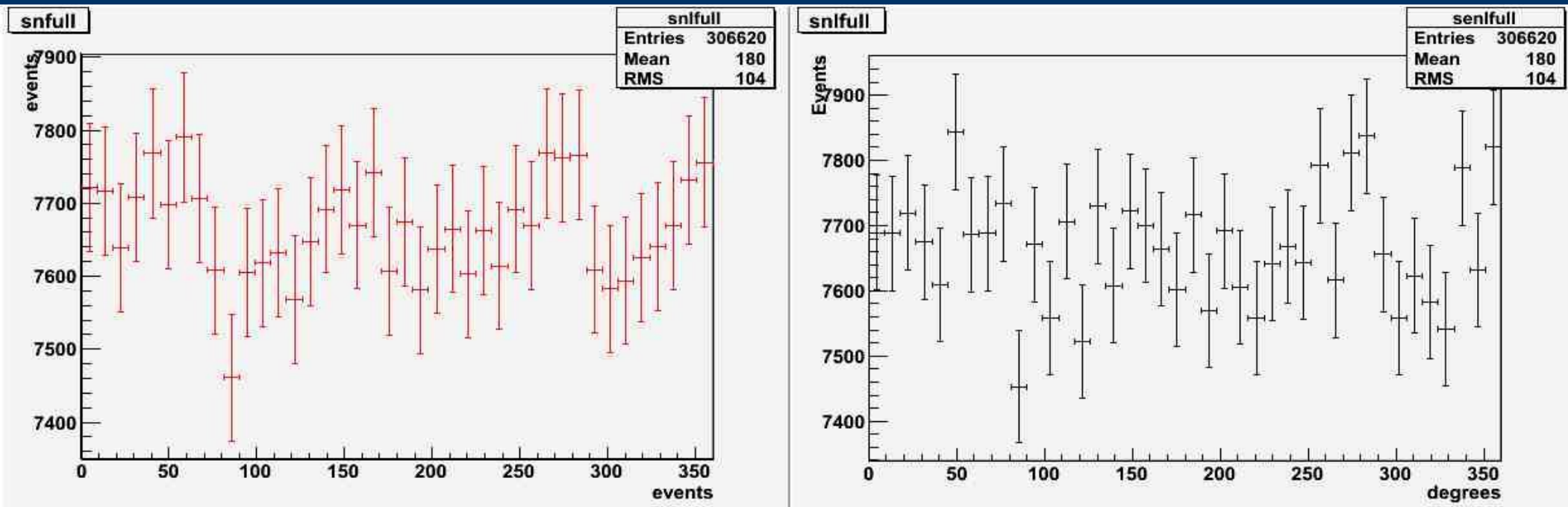
- 1 M events.
- Oscillation is present.

Phi Toy MC oscillation



- Zoomed

LorentzVector vs “manual” method



- Root has a Lorentz Vector implementation.(red)
- Slight Improvement?

Some mysteries yet unsolved.

- Toy MC is not the same as DC06 MC...
- Data writing error?
- Wrong angle extraction method?
- Wrong ToyMC?
- Binning?

Invariant mass?

- Retrieved – Calculated differ substantially?

