

Beam Charge Asymmetry

Melissa Cummings

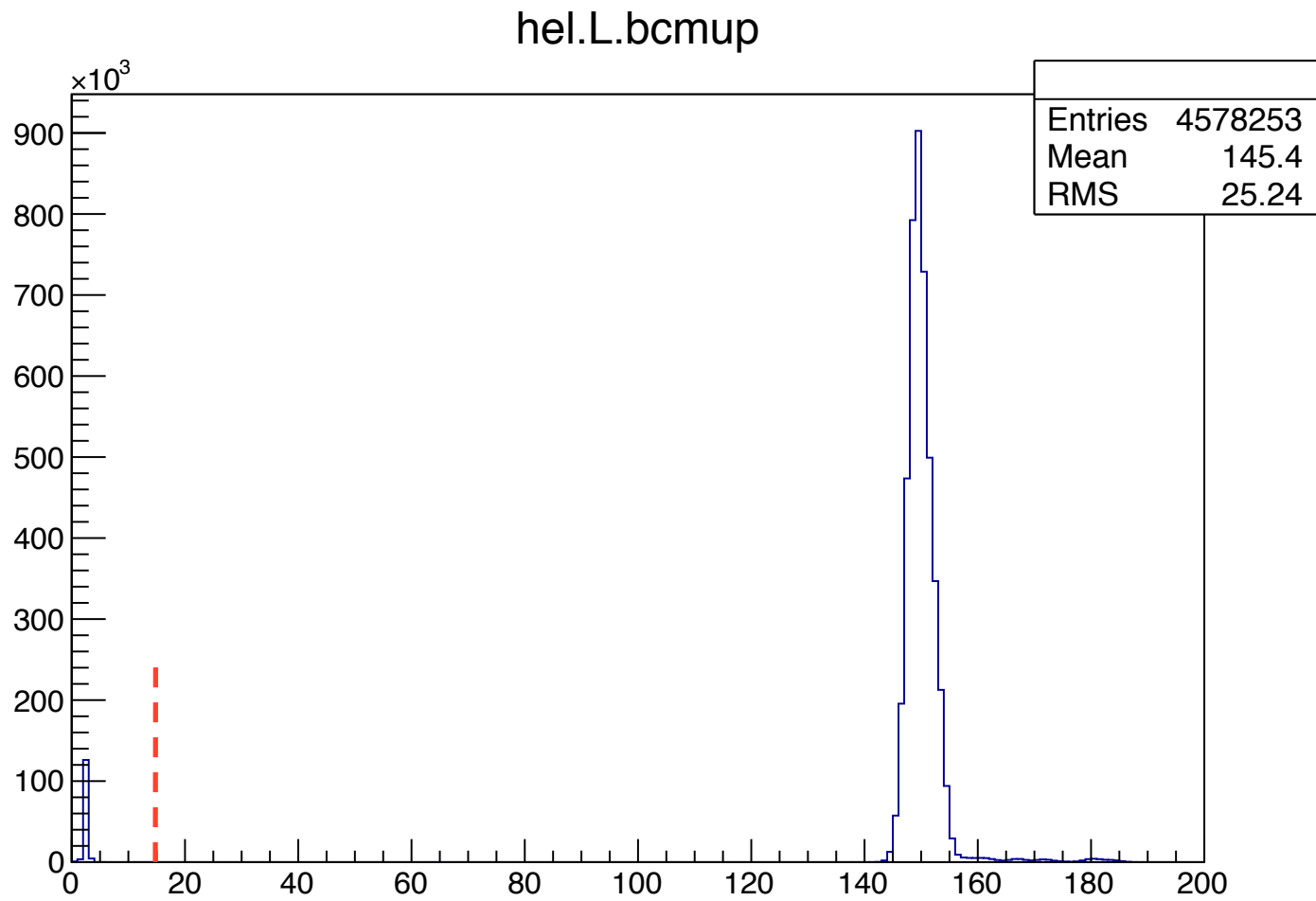
06/25/13

From Last Time

- Some discrepancy with Pengjia's Results
 - Pengjia accounted for beam trips, I did not
- Updated results to include beam trip cuts

Beam Trip Cuts (LHRS)

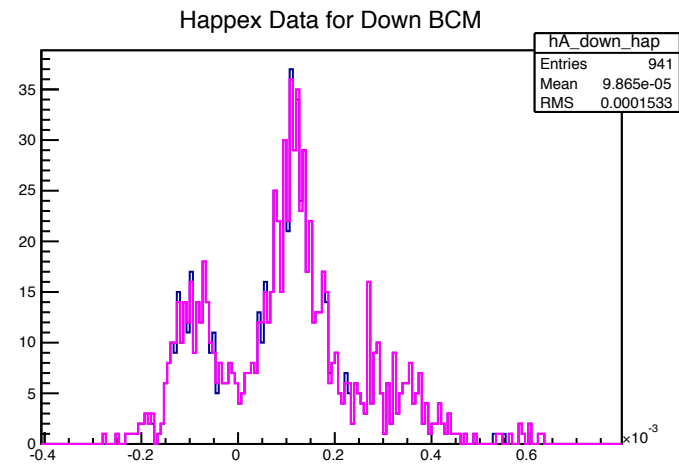
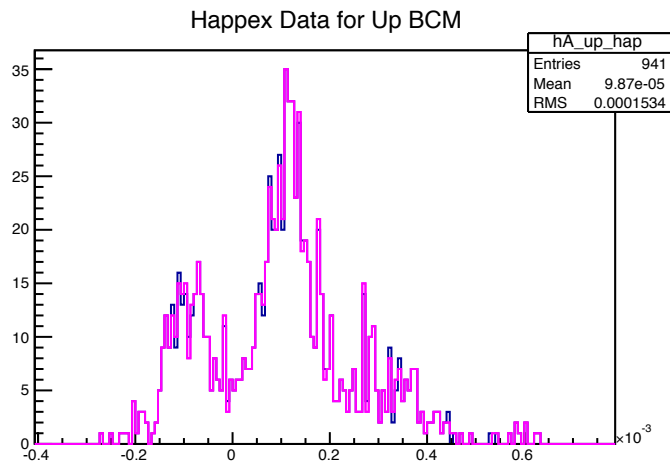
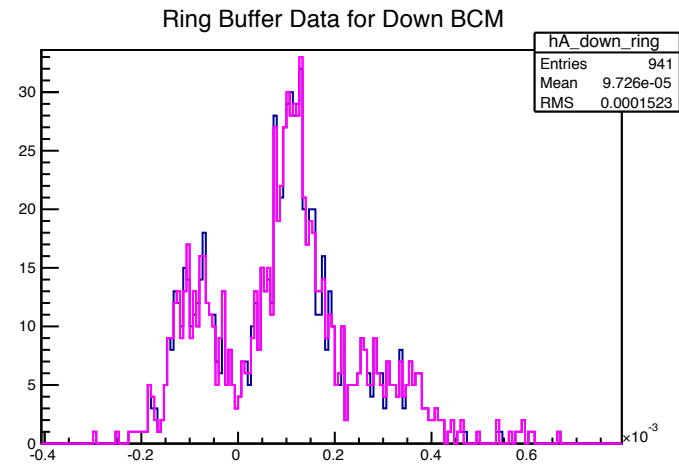
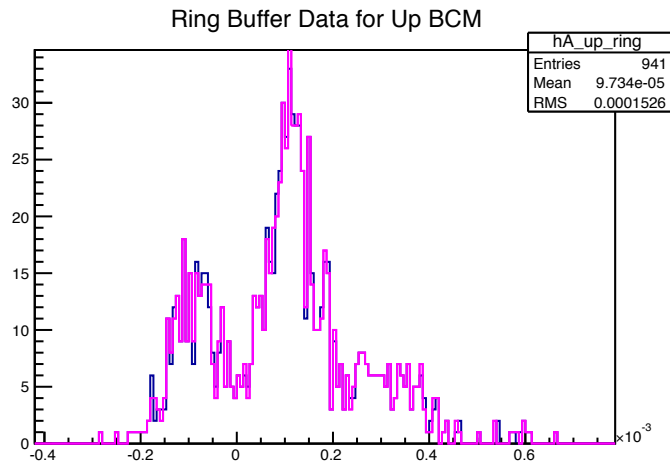
Exclude events with charge < 5e-6 C



Addition of Beam Trip Cuts (LHRS)

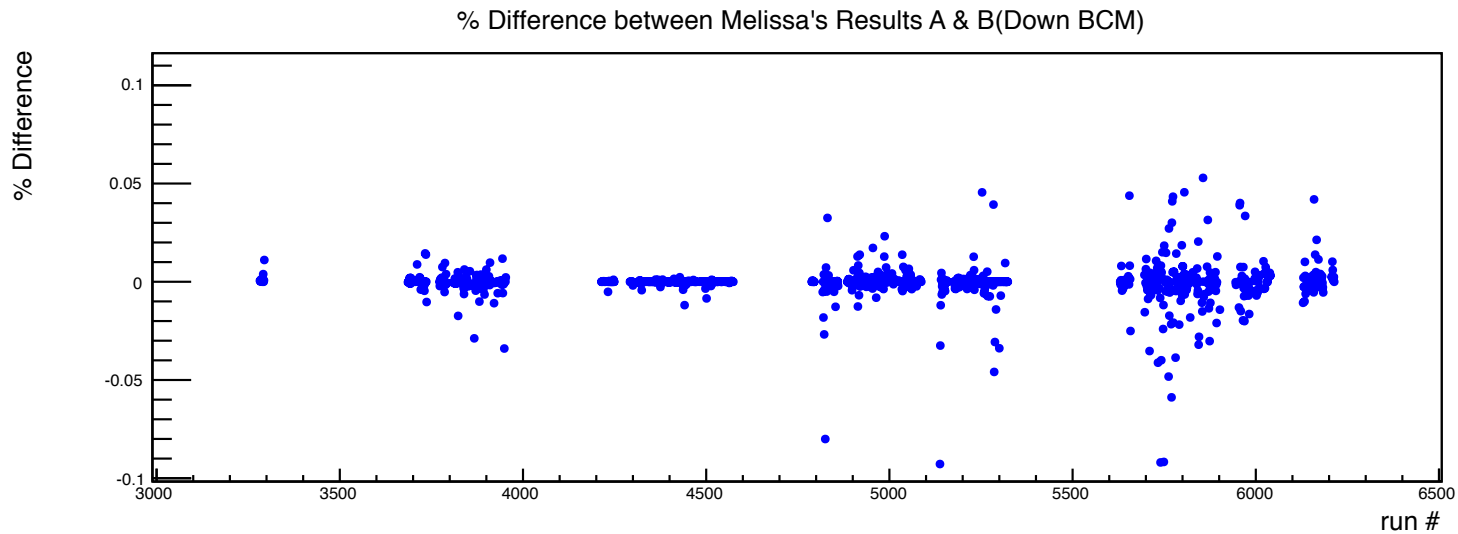
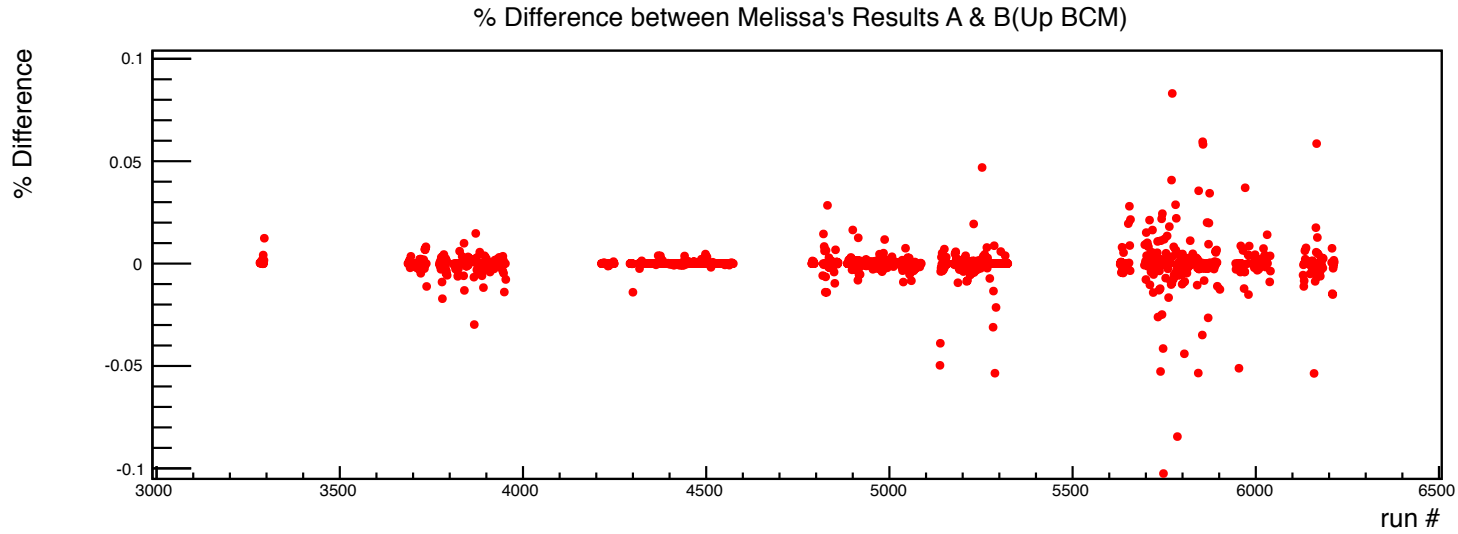
Blue: No Beam Trip Cuts

Magenta: With Beam Trip Cuts



Includes all production runs with Data Quality = 3 (no problems)

Addition of Beam Trip Cuts (LHRS)



Includes all production runs with Data Quality = 3 (no problems)

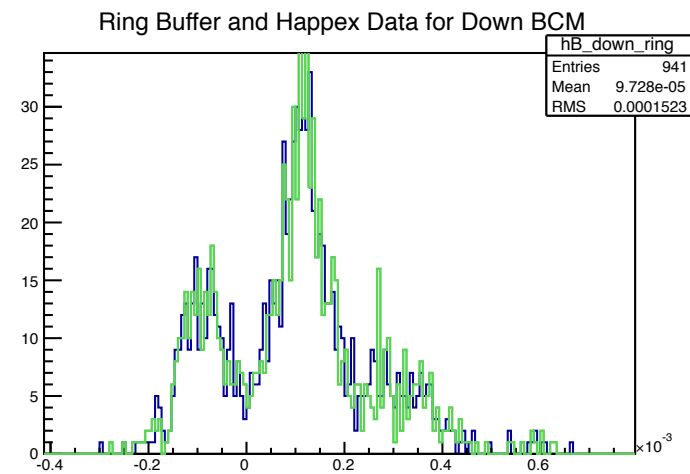
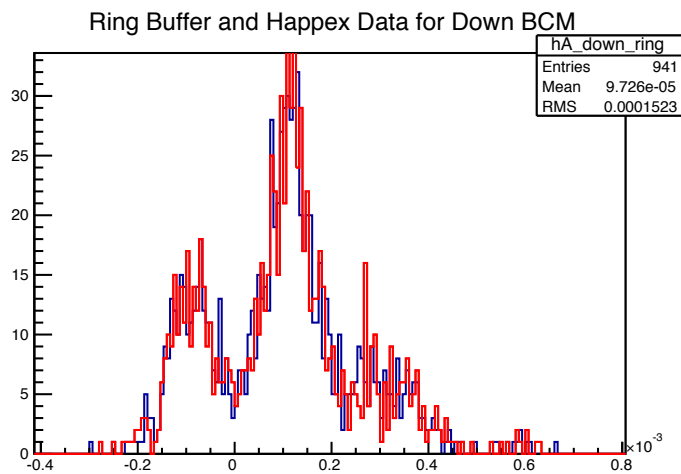
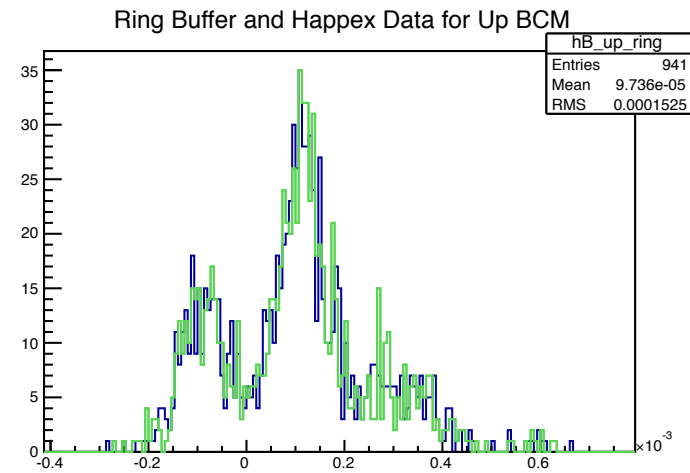
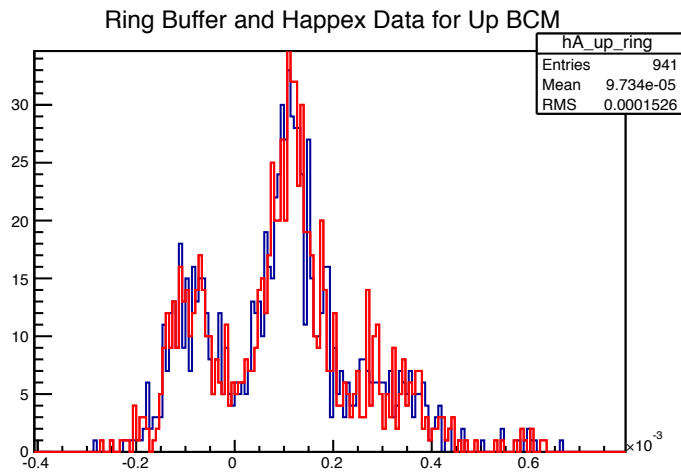
Comparison with Ring Buffer and Happex Results (LHRS)

Blue: Ring Buffer

Red/Green: Happex

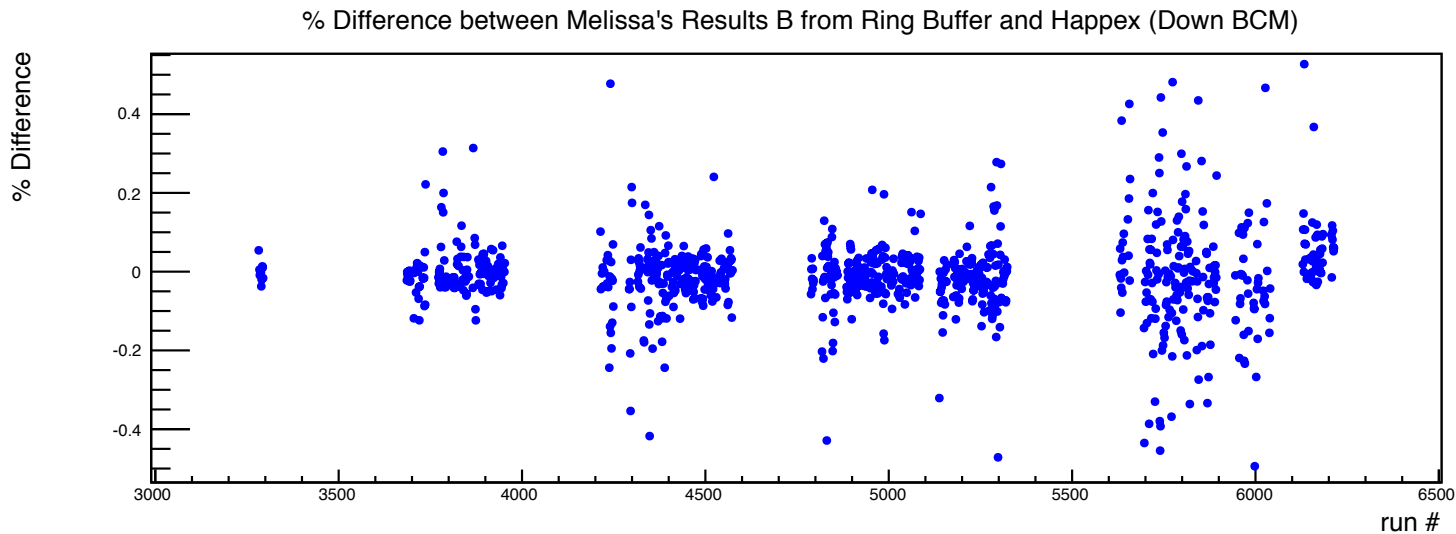
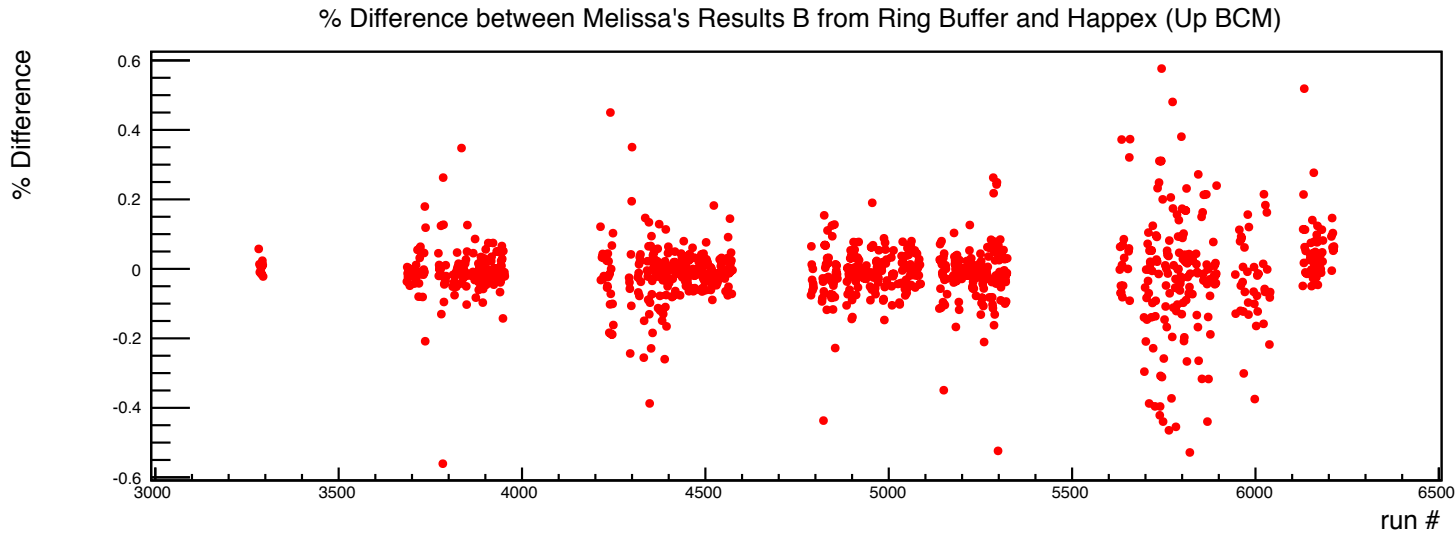
w/out beam
trip cuts

w/ beam trip
cuts



Includes all production runs with Data Quality = 3 (no problems)

Difference between Ring Buffer and Happex Data (LHRs) (w/ beam trip cuts)



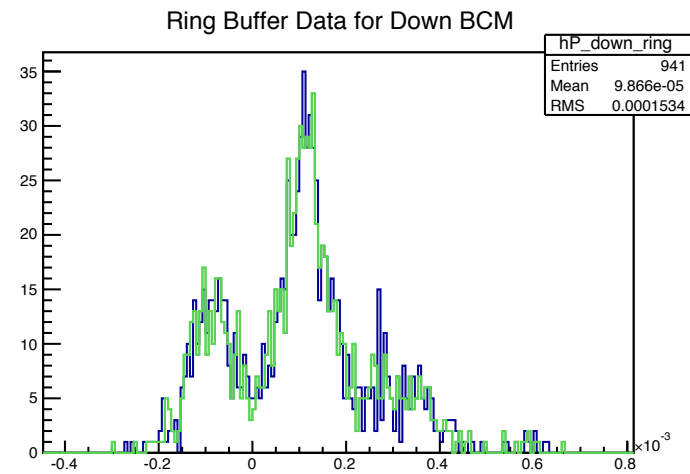
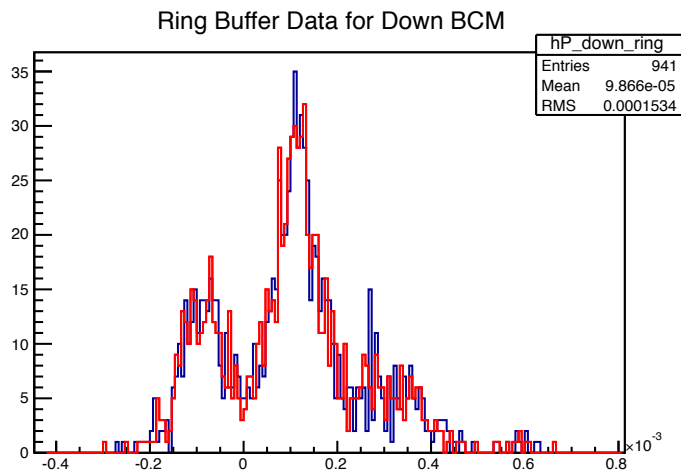
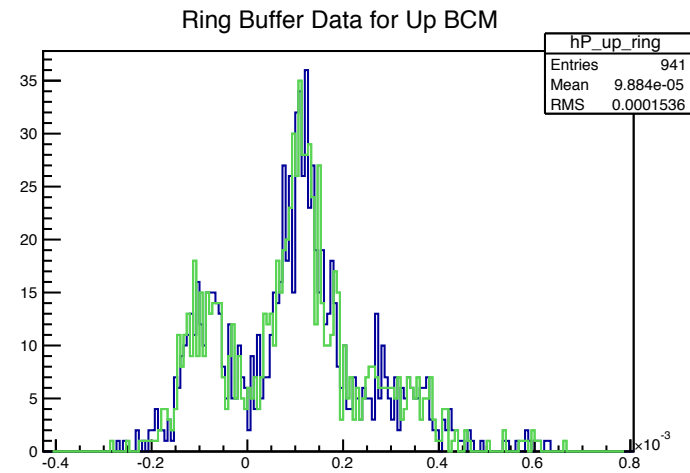
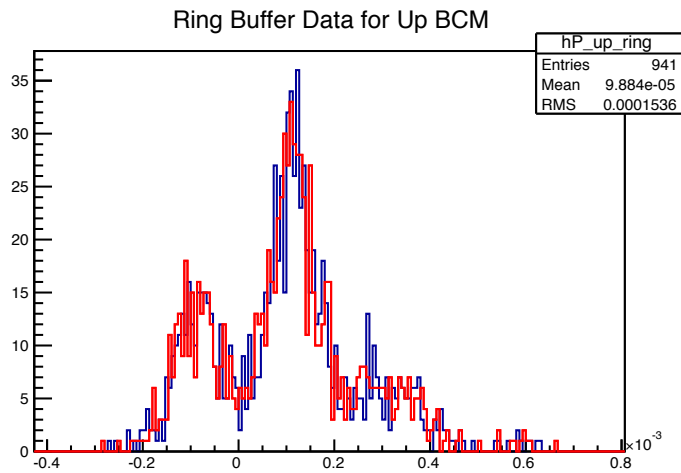
Includes all production runs with Data Quality = 3 (no problems)

Comparison with Pengjia's Results (LHRS - Ring Buffer Data)

Blue: Pengjia's Results

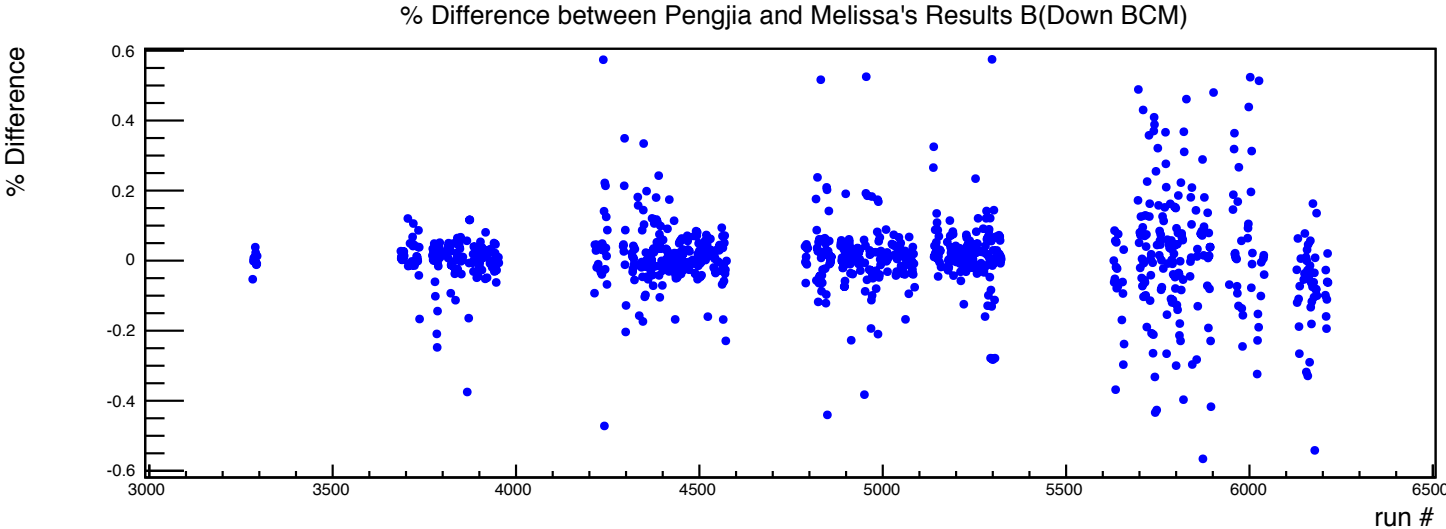
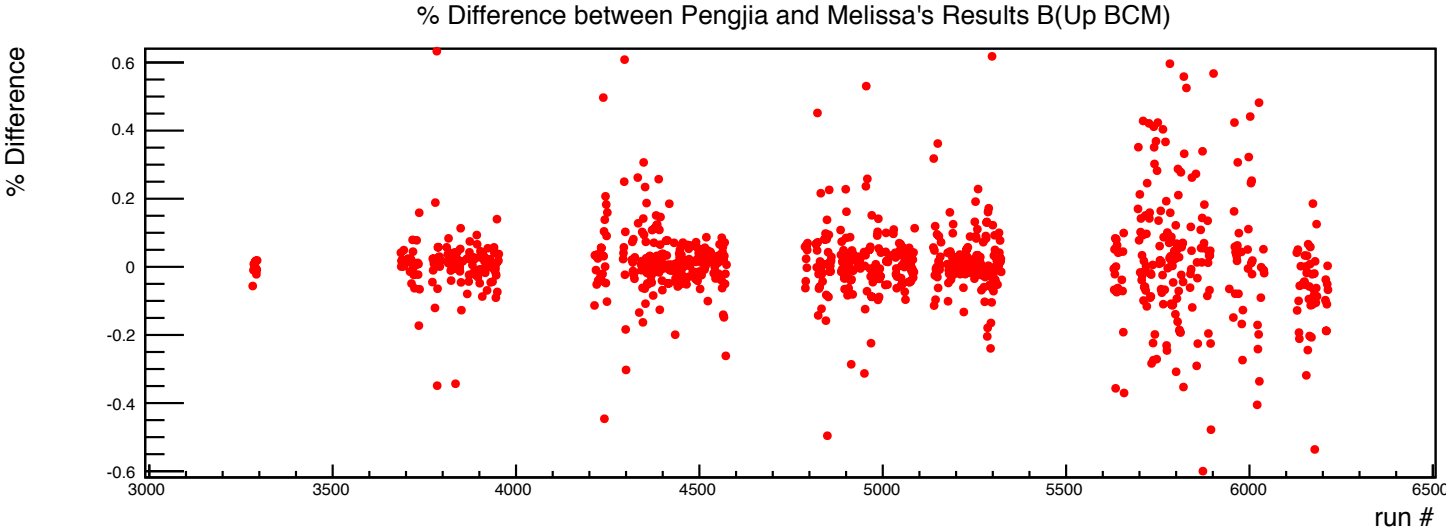
Red: Melissa's Results w/out Beam Trip Cuts

Green: Melissa's Results w/ Beam Trip Cuts



Includes all production runs with Data Quality = 3 (no problems)

Difference between Pengjia & Melissa's Results (Ring Buffer - LHRS) (w/ beam trip cuts)



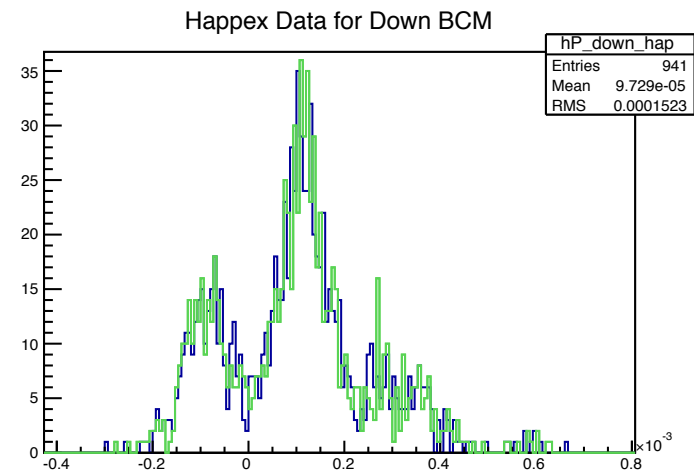
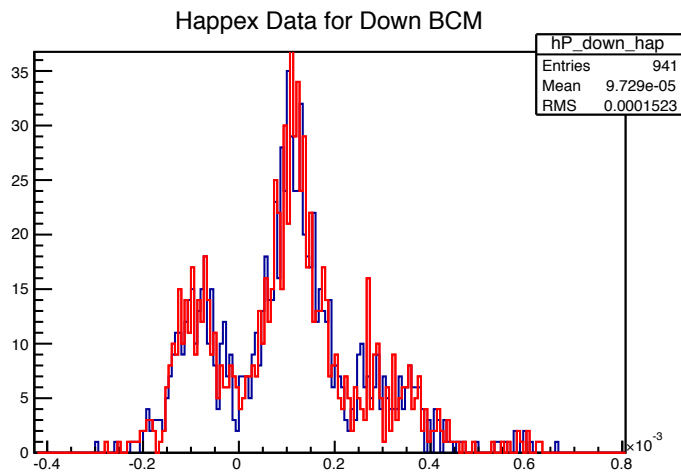
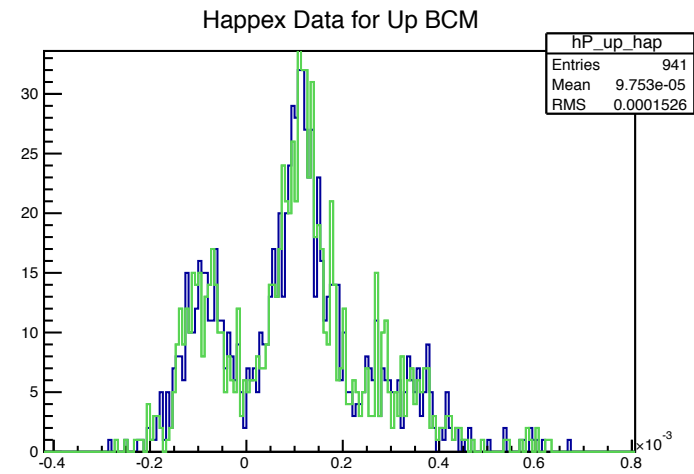
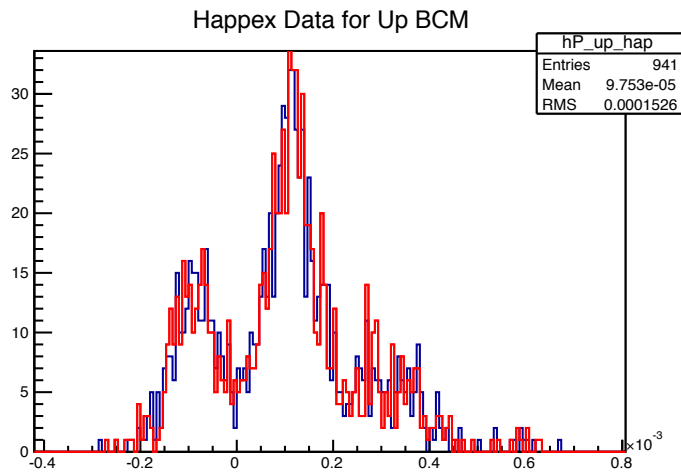
Includes all production runs with Data Quality = 3 (no problems)

Comparison with Pengjia's Results (LHRS – Happex Data)

Blue: Pengjia's Results

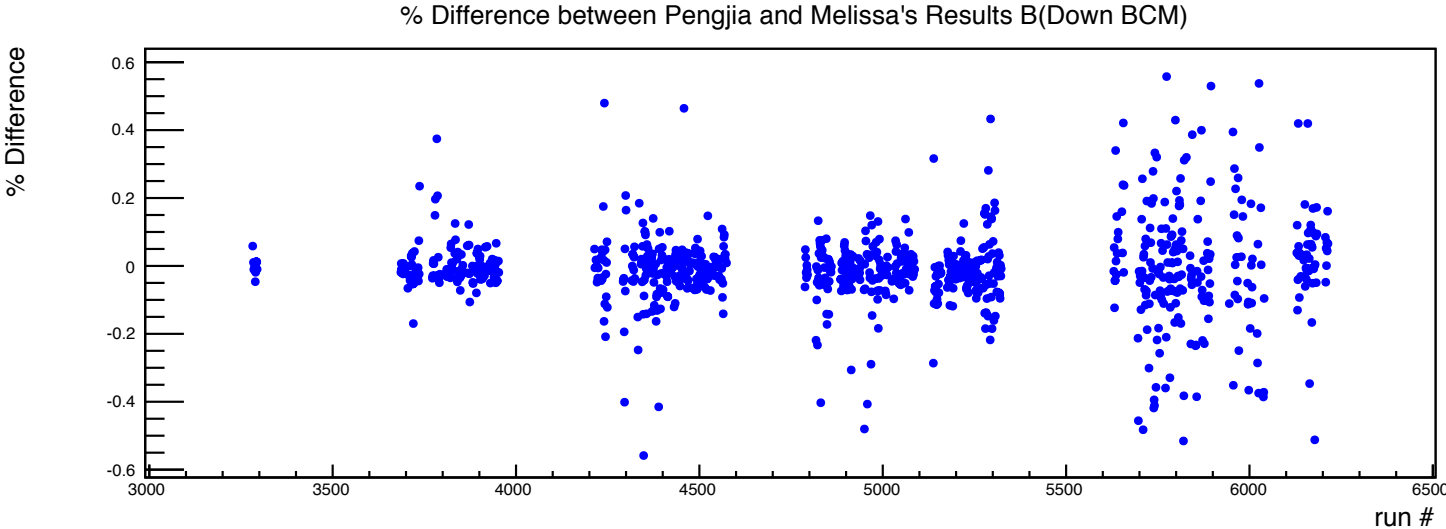
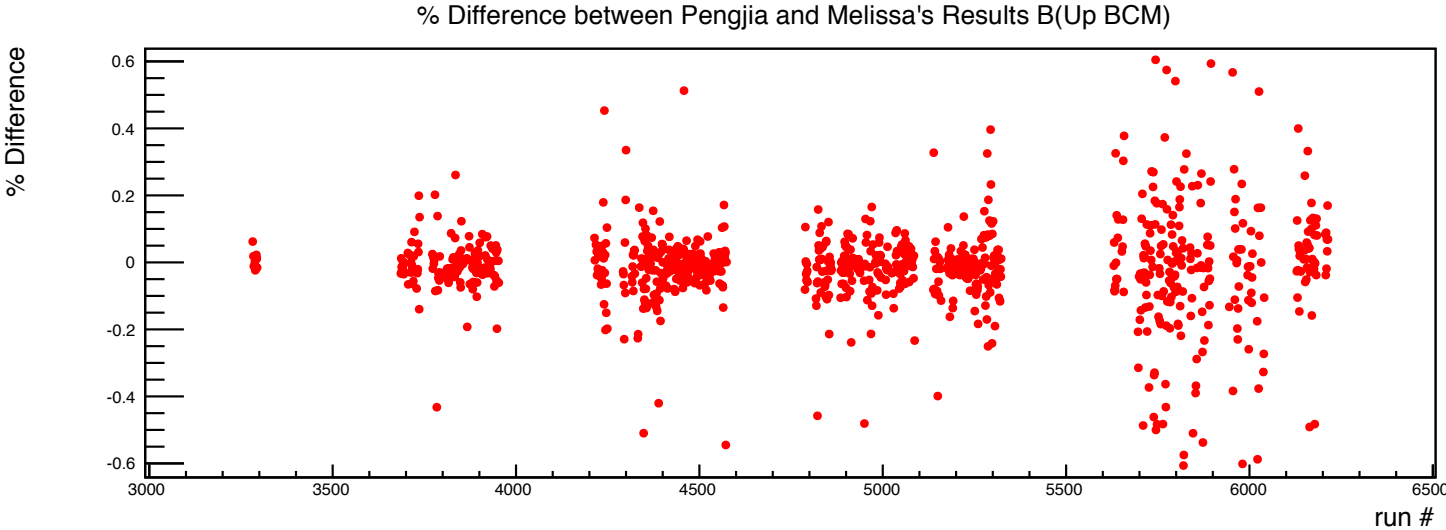
Red: Melissa's Results w/out Beam Trip Cuts

Green: Melissa's Results w/ Beam Trip Cuts



Includes all production runs with Data Quality = 3 (no problems)

Difference between Pengjia & Melissa's Results (Happex- LHRS) (w/ beam trip cuts)



Includes all production runs with Data Quality = 3 (no problems)

Up Next

- Any suggestions from this meeting?
- Asymmetries!