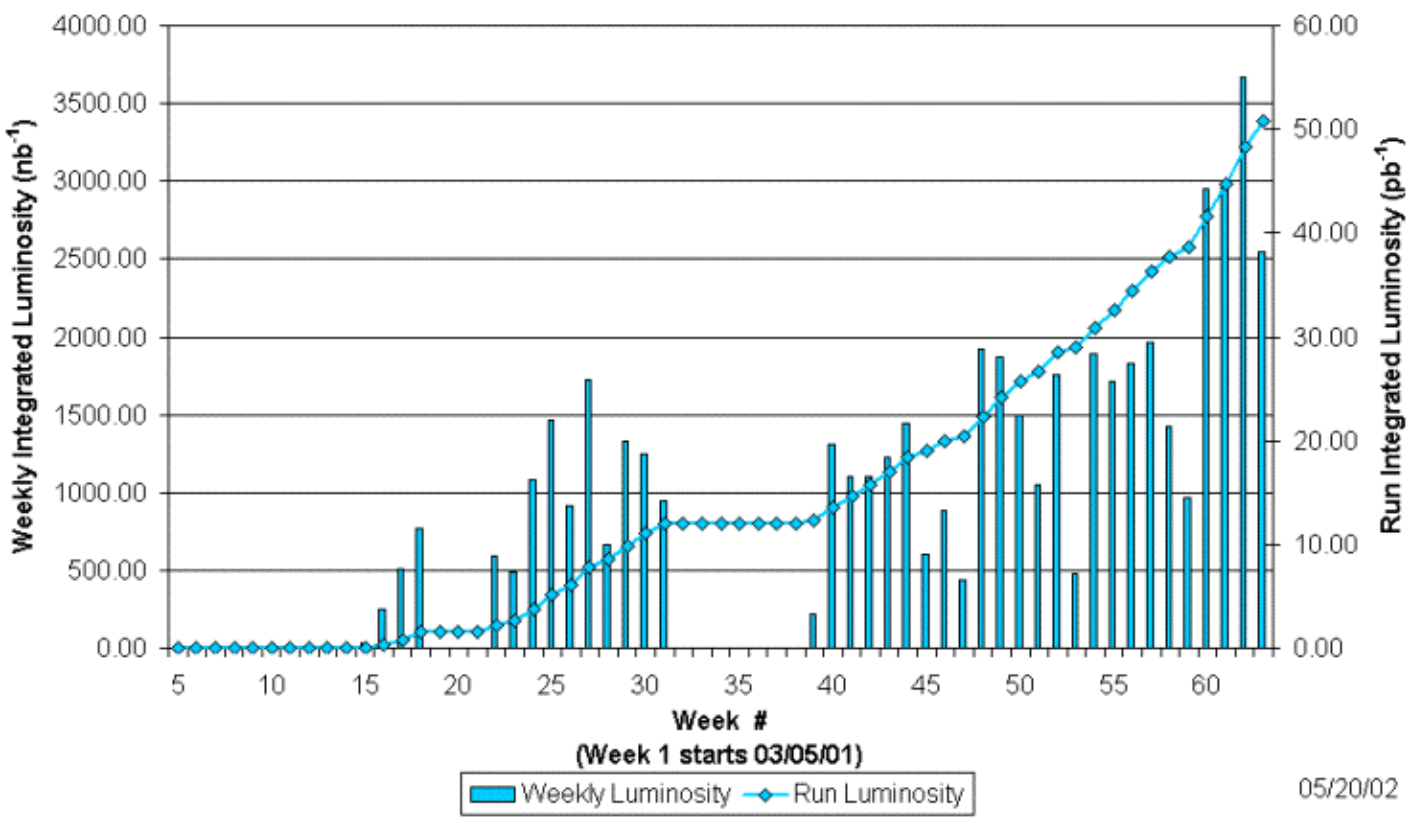
Beams Week in Review

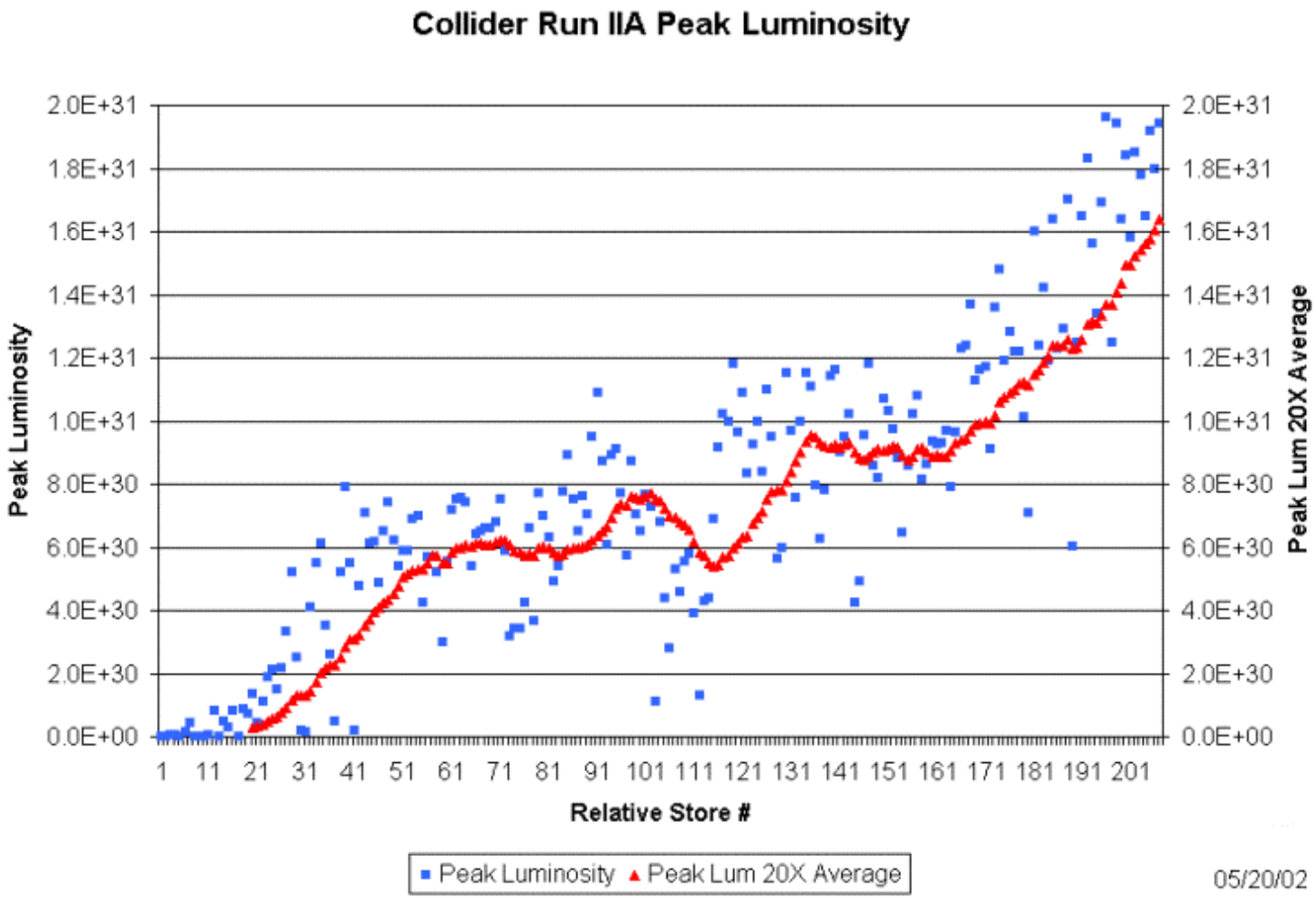
- 6 stores
- No Records
- Average Initial Luminosity – 18.25 E30
- Machine studies
- Shutdown date still 3 June for ~12 days

Pbar New Core Cooling Tank

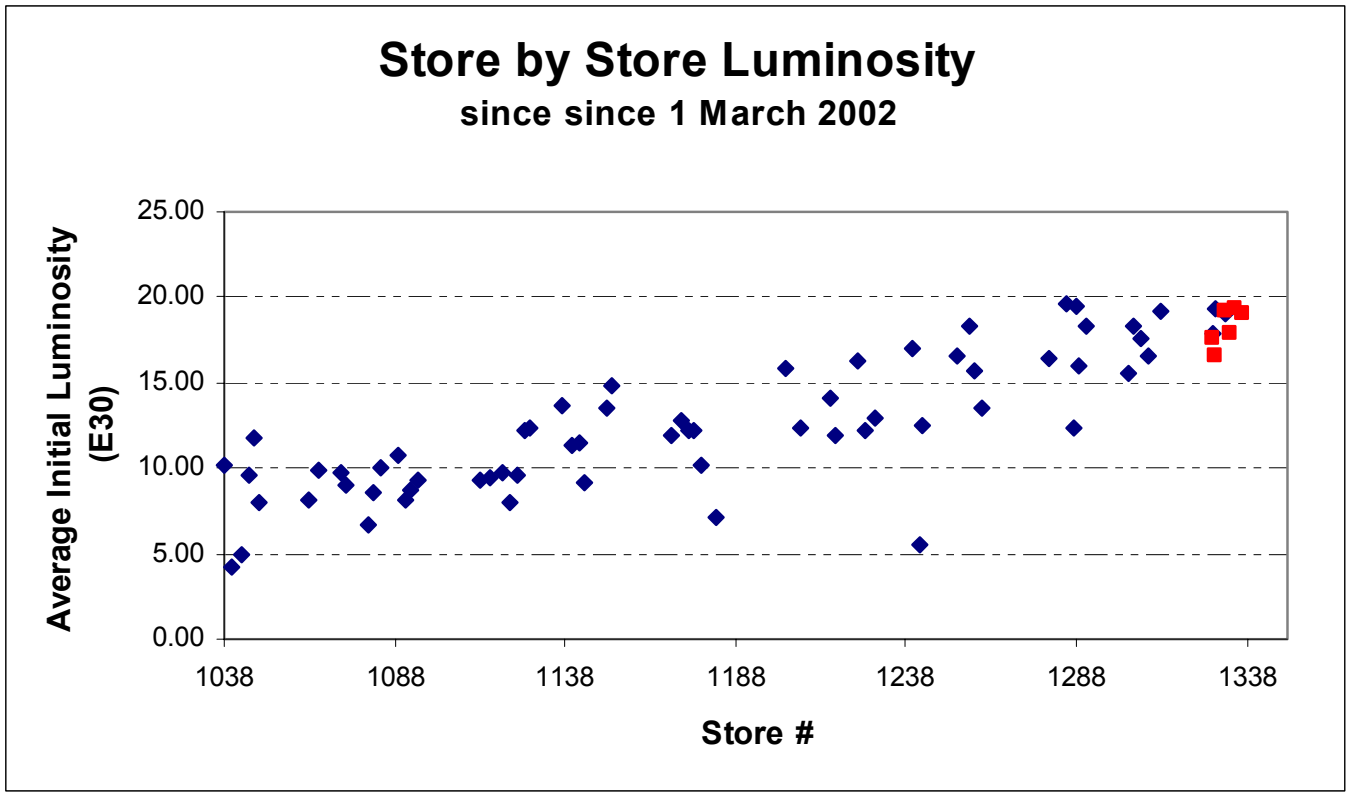
Integrated Luminosity



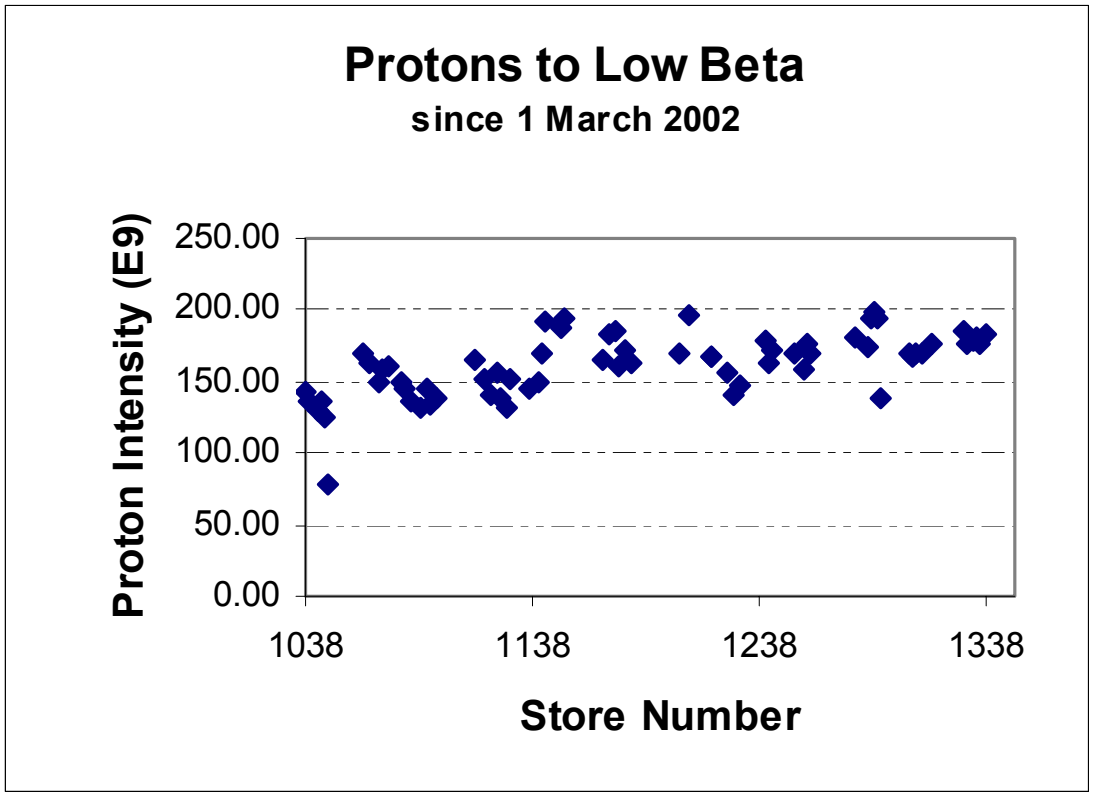
Peak Luminosity



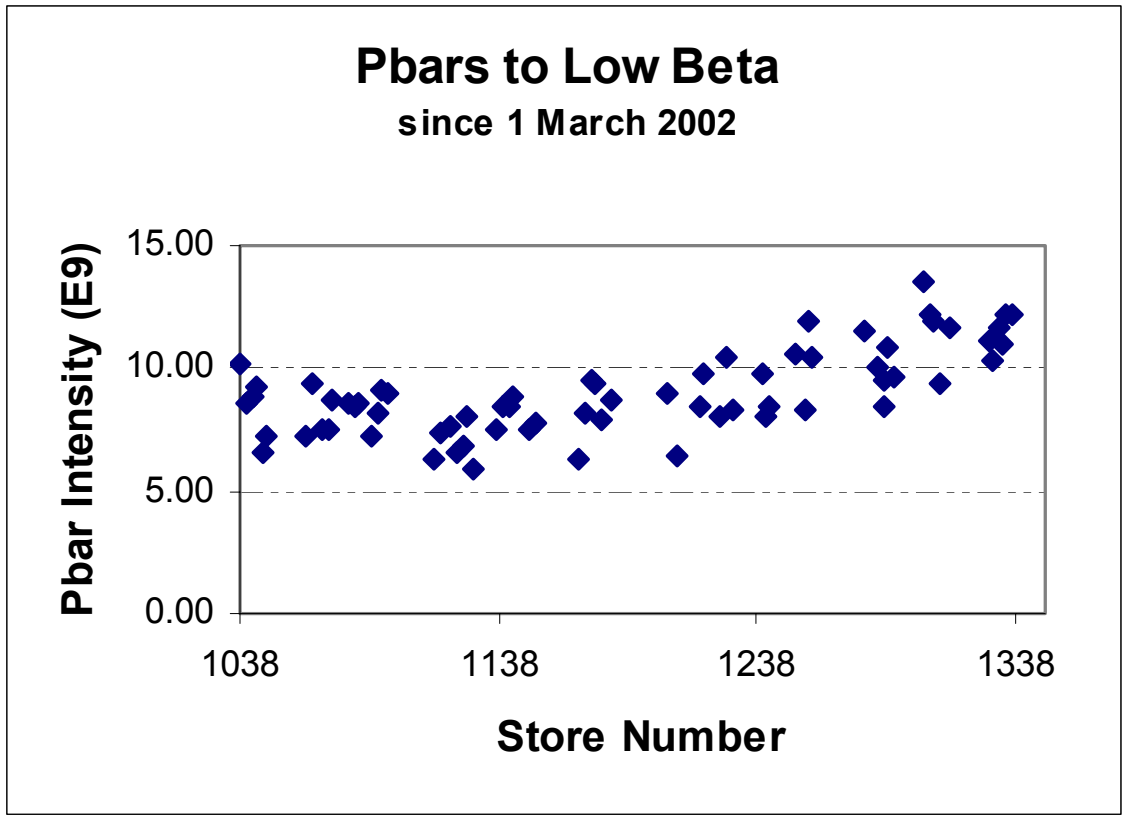
Initial Luminosity



Protons to Collision



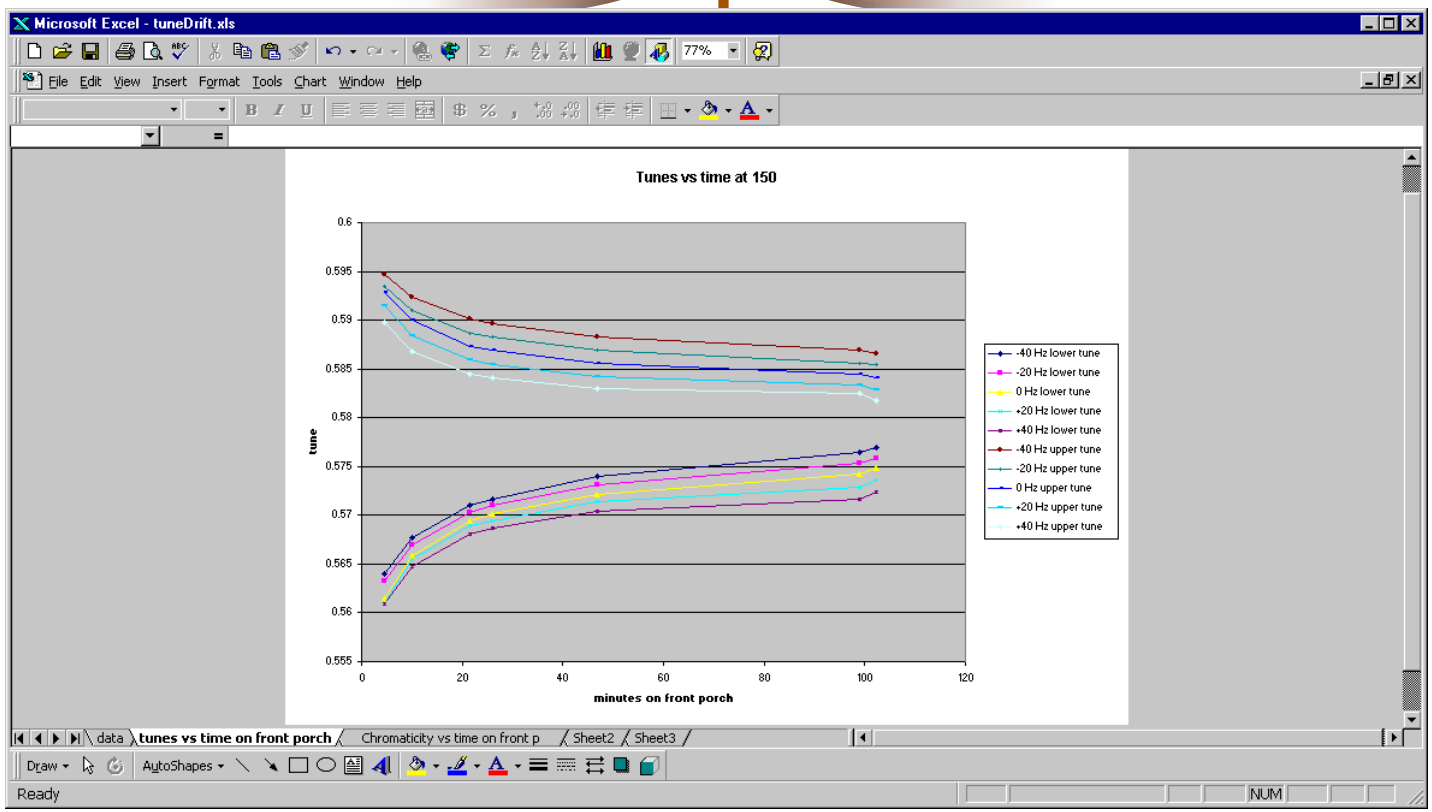
Pbars to Collision



Tevatron Studies Summary

- Ad hoc after store failure
  - 0X4 store for D0 FPD timing
- Completed
  - New 150 GeV Helix (36X4)
  - Tune Drift Measurements
- Not Completed or Inconclusive
  - End of Store – Remove Pbars and study Proton losses
  - Synch Light calibration
  - TEL at 150 to Inject more Protons
  - Ramp tune up

Tevatron Studies Summary

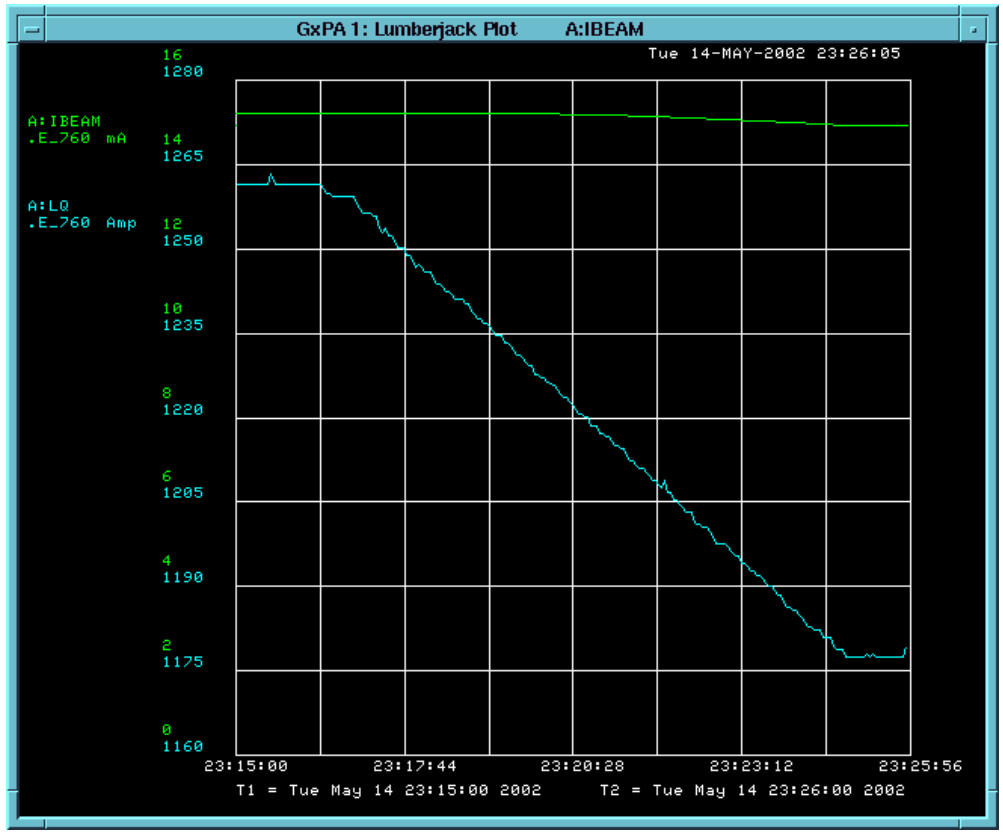


Tevatron tunes vs. Radial Offset over time

Pbar Studies Summary

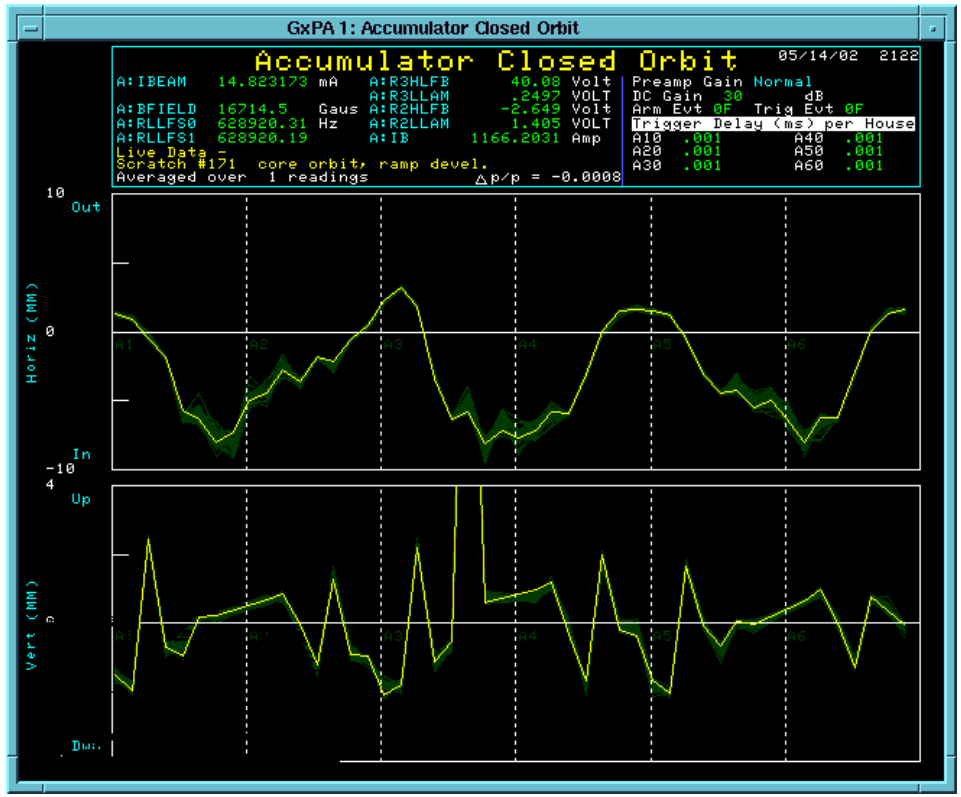
- Core 2-4 momentum phasing
- Accumulator ramp development studies
  - Successful after first week
  - Extraction frequency similar to Run I value
  - Refinements this week
  - Try next week for real?

Pbar Studies Summary



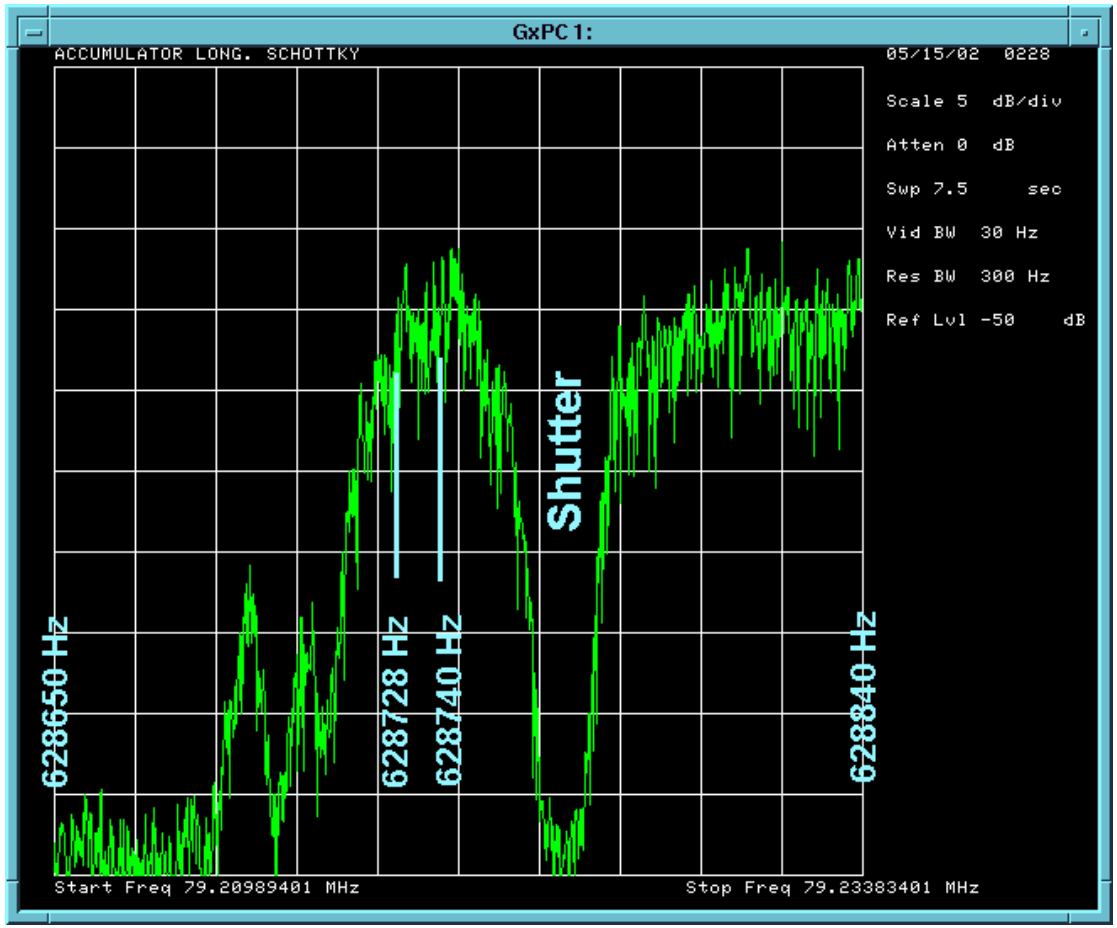
Third Ramp attempt

Pbar Studies Summary



Core Orbit difference: old vs. new lattice

Pbar Studies Summary

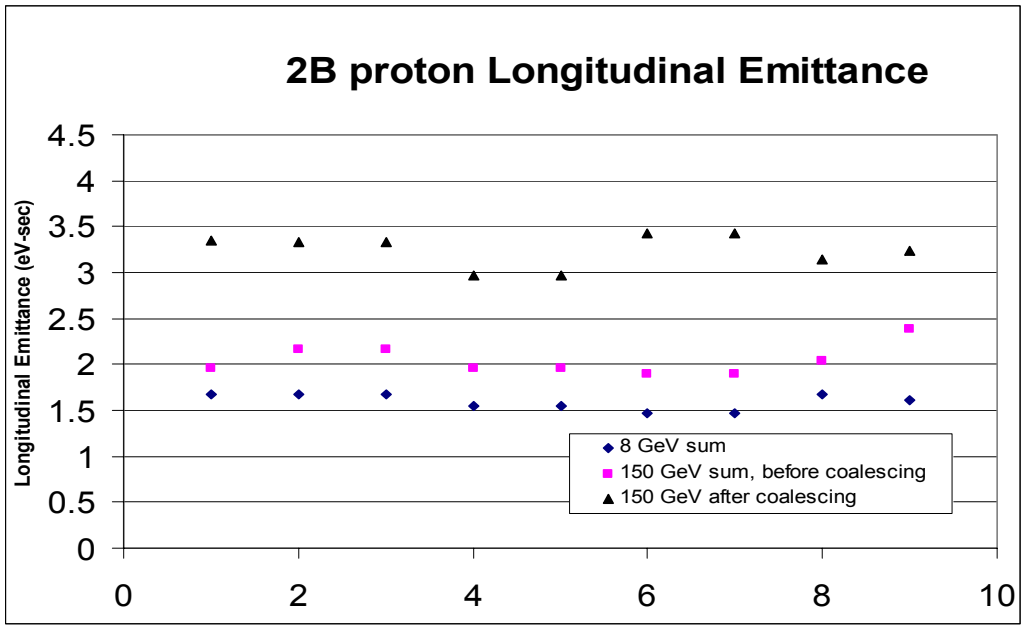


MI Studies Summary

- $2B Coalescing
  - Beam in DC form and in satellites
  - Longitudinal Emittance in MI on protons to Tev shots
- $2A with protons
  - Tune and emittance measurements
- BLT responses
  - Number of bunches 3 and up with beam intensity comparable to that of pbars
  - BLT responses compared with BPM responses
- Slip stacking studies

MI Studies Summary

(Without scraping)

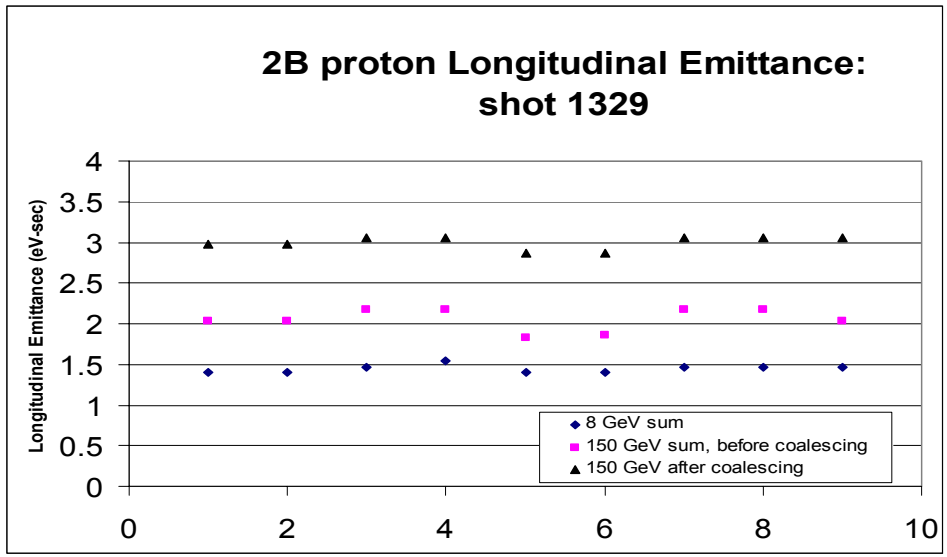


Shot No.

The error in measured emittance is about 30% which arises from Bunch length and rf voltage measurements.

MI Studies Summary

(Scraped at about 25 GeV)



Shot No.

The error in measured emittance is about 30% which arises from Bunch length and rf voltage measurements.

Recycler Studies Summary

- Work continues with both protons and pbars
  - Dedicated large pbar stack, no lifetime degradation
  - RF manipulations
  - Tune space exploration
  - Transfer line admittance measurements

Recycler Studies Summary