



# D0 Status Report

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All Experimenters' Meeting  
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# Store Summary I

- Store 4089, Sun Apr 10 10:59 - Mon Apr 11 13:09
  - D0 Initial Luminosity =  $95.01E30$ 
    - Recorded Luminosity  $3.27 \text{ pb}^{-1}$ , efficiency 88%
- Store 4095, Tue Apr 12 03:19 - Tue Apr 12 22:19
  - D0 Initial Luminosity =  $58.18E30$ 
    - Recorded Luminosity  $1.49 \text{ pb}^{-1}$ , efficiency 75%
      - Includes  $0.43 \text{ pb}^{-1}$  of bad data due to Calorimeter and Muon noise.
- One hour access on Tue Apr 12



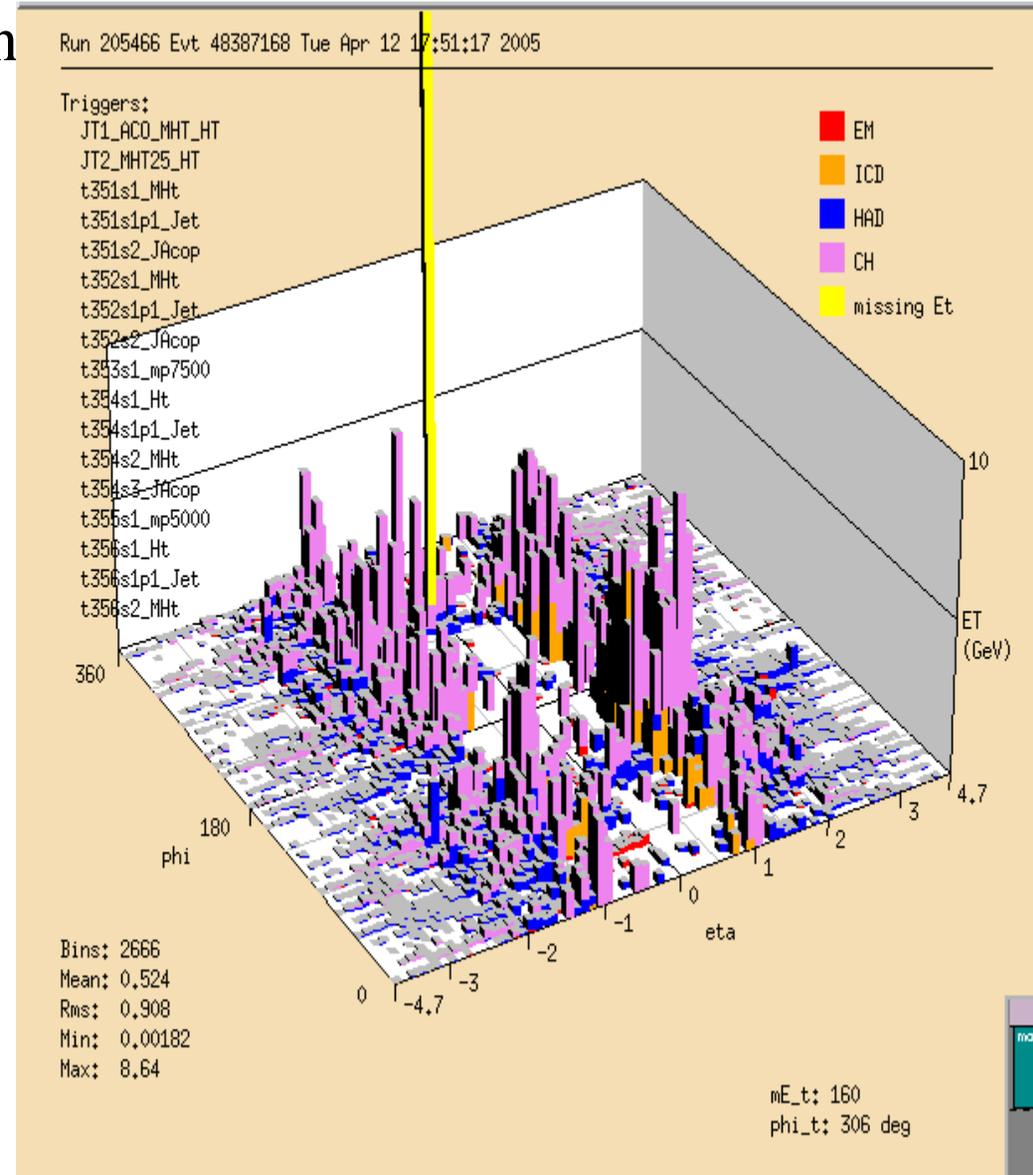
# Store Summary II

- Store 4097, Wed Apr 13 04:28 - Thu Apr 14 06:57
  - D0 Initial Luminosity =  $74.88E30$ 
    - Recorded Luminosity  $2.56 \text{ pb}^{-1}$ , efficiency 85%
- Store 4098, Thu Apr 14 11:08 - Fri Apr 15 11:29
  - D0 Initial Luminosity =  $105.98E30$  (2<sup>nd</sup> best ever)
    - Recorded Luminosity  $3.54 \text{ pb}^{-1}$ , efficiency 88%
- Five hour access on Fri Apr 15.
- Store 4100, Sun Apr 17 06:16 - Mon Apr 18 11:02
  - D0 Initial Luminosity =  $93.61E30$ 
    - Recorded Luminosity  $3.38 \text{ pb}^{-1}$ , efficiency 89%



# Noise

- An unknown source for noise began around noon on Tuesday.
  - Seen in both the Muon and Calorimeter detectors.
- Searched for possible external sources.
- At 17:00 ramped down Toroid.
- Requested access, Granted for 22:00.
- At 21:00 ramped down Solenoid.
  - 21:10 Solenoid is off.
- At 21:30 noise disappears.





# Accesses

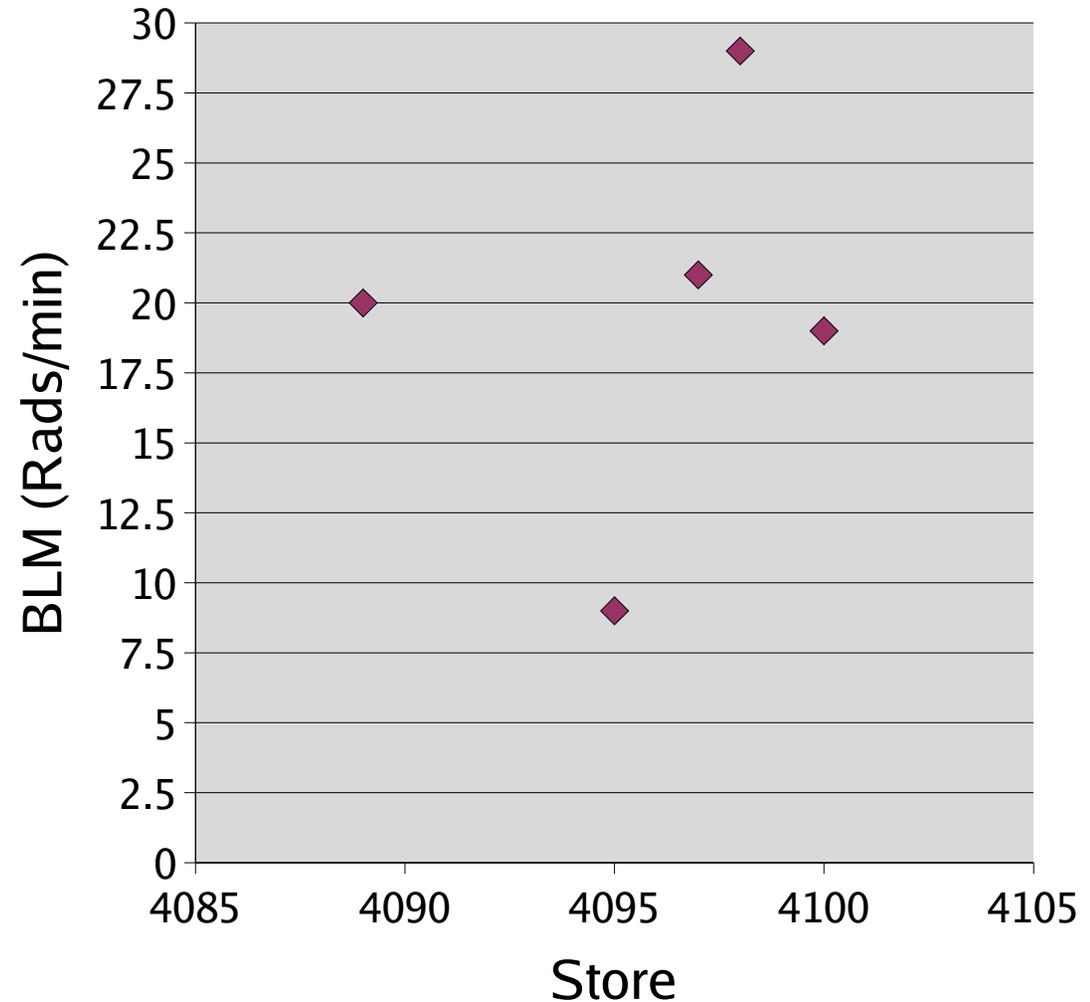
- Access Tue Apr 12
  - Search for possible noise source (unsuccessfully).
  - Replace two PDT Front End Boards.
- Access Fri Apr 15
  - Replace FPD dipole power supply.
  - Repair Muon PDT 240.
  - Replace BLS Crate Controller.
  - Replace ODH sensor.
  - Replace broken recirculation fan belts.



# Beam Loss during Squeeze

- AD has been making incremental changes in chromaticity, but with little effect.
- Two PDT FEBs were replaced on Tuesday due to these losses.

## BLM Values for Last 5 Stores





# Summary

- From Monday to Sunday
  - Recorded  $11.3 \text{ pb}^{-1}$ , efficiency 87%
- Noise has not returned, and is still a mystery.
- D0 is still looking for a reduction of beam loss during the squeeze.

