



# D0 Status Report

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All Experimenters' Meeting  
19 December 2005



# Data Taking

Store	Delivered Lum (pb <sup>-1</sup> )	Recorded Lum (pb <sup>-1</sup> )	Efficiency (%)	Init Lum (E30)	Comment
4543	0.19	0.17	90	33.8	20% of CTT trigger not working
4549	1.00	0.63	63	43.8	1/12 of Calorimeter not read out. Special Muon runs taken.
4553	3.01	?		87.8	Special CTT run taken. 40 minutes down for setup
4554	2.27	?		77.6	15 Minutes down for STT 80 Minutes Down due to Silicon Chiller trip.
4555	> 0.94	?		83.2	Ongoing
Week	7.4	?			



# Significant Events

- 12 December
  - Access to repair tripped L1 Muon Power Supply.
    - Found swapped control/sense cables.
- 13 December
  - Access to replace Central Fiber Tracker Analog Front End board.
    - Fixes problem with Central Track Trigger.
  - Calorimeter Readout crate having problems.
    - Temporarily fixed by swapping an ADC Card.



# Significant Events II

- 14 December
  - Calorimeter readout crate problems for entire store.
    - Found water leak dripping on crate backplane.
  - Took Forward Muon special runs
  - Luminosity information becomes temporarily unavailable.
- 15 December
  - Access to install new hot spare AFE card and repair a few CAL channels.
- 17 December
  - New Trigger List 14.90 used
    - Includes new limited singlet equations for CTT to keep down rate.
- 18 December
  - The silicon chiller is tripped off while changing a light bulb.



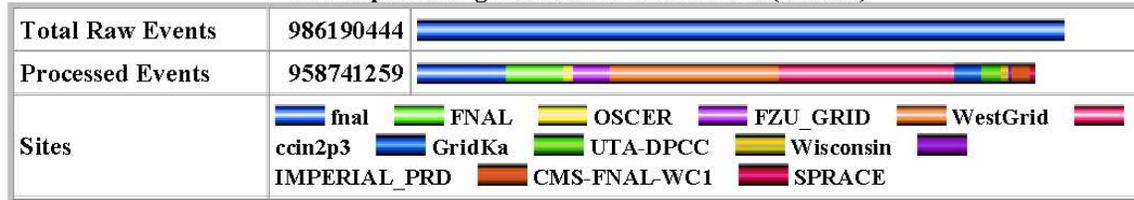
# D0 Processing Summary

- As of Dec 12, 2005 Recorded 1.08 fb<sup>-1</sup>, 1.7B events
- CY05 Goal: Fully processed data set
- Data prior to FY04 Shutdown
  - 470 pb<sup>-1</sup>, 1.0B events
  - Processed Remotely
  - 97% complete, 3% in recovery
- Data post FY04 Shutdown
  - 538 pb<sup>-1</sup>, 0.7B events
  - Processed on Site
  - 94% complete, 6% by end of CY05
- Data promptly available for spring conferences

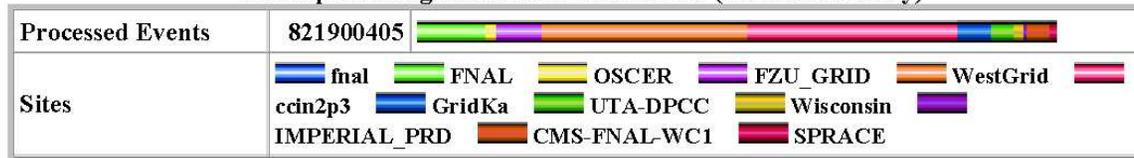


# Sites/Status of Remote Processing

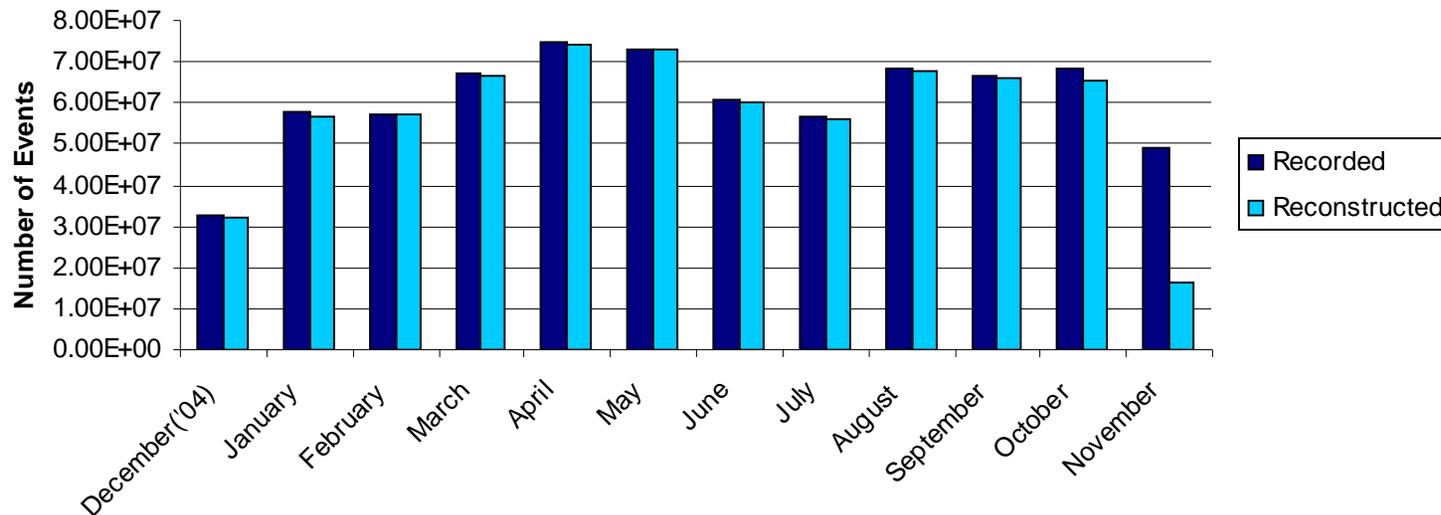
P17 Reprocessing Status as of 12-Dec-2005 (all sites)



P17 Reprocessing Status as of 12-Dec-2005 (Remote sites only)



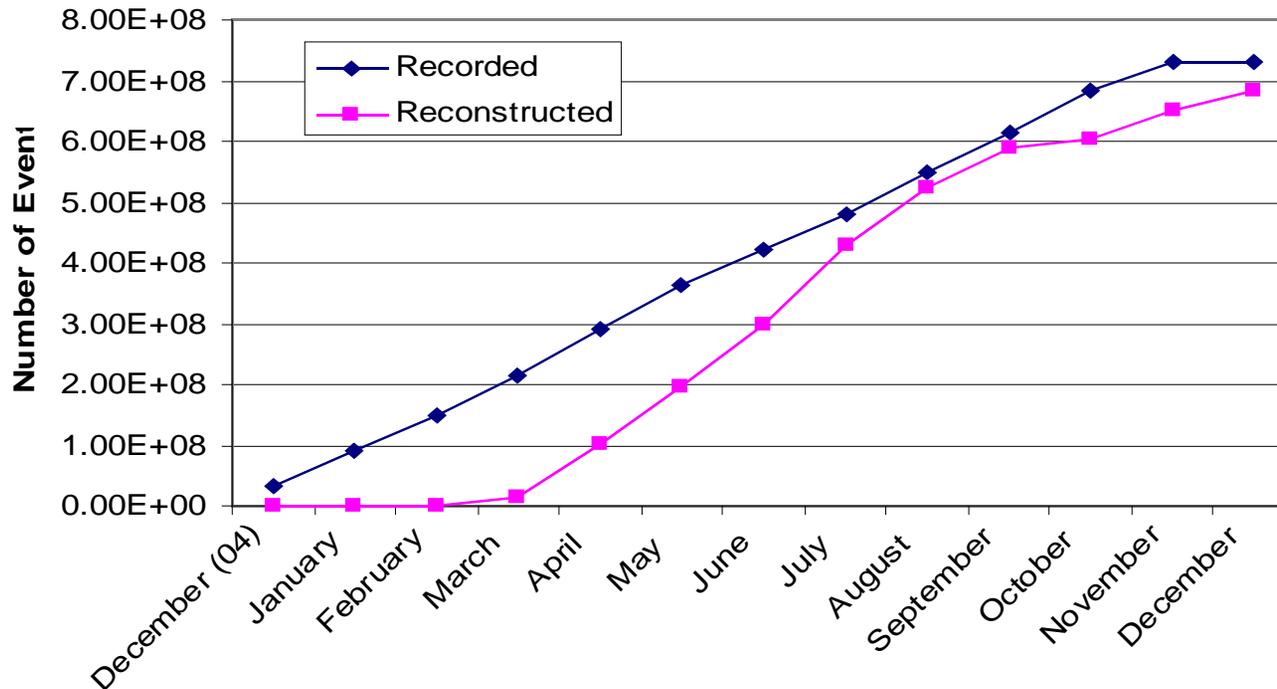
Recorded and Reconstructed Events after 04 shutdown



Number of events taken by month and number of those events reconstructed (not necessarily at the same time)



# P17 Processing of Data Taken After the 2004 Shutdown



- **Comments**

- **Start of post-shutdown processing delayed to upgrade/verify reconstruction.**
- **Excess capacity offers flexibility.**
- **Recent reduction in processing rate introduced to expedite post-processing.**
  - **Skimming**
  - **Common analysis format production**

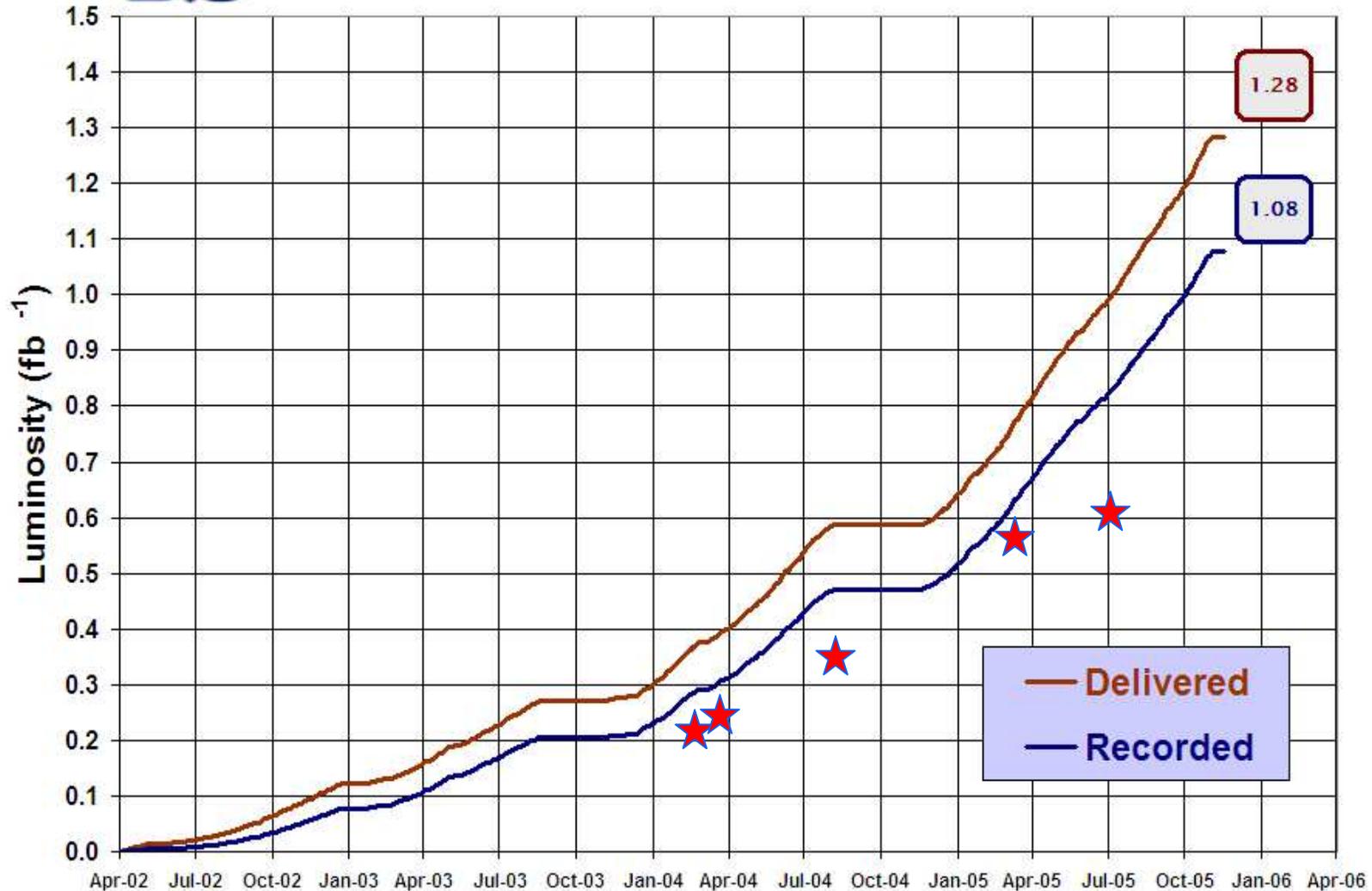


# Luminosity vs Time of Approval for Preliminary Results



Run II Integrated Luminosity

19 April 2002 - 5 December 2005



**First results as early as one month**



# Conclusions

- Return to Data taking
  - The first two stores after the mini-shutdown did not have the complete D0 detector operational.
    - Although problems were not related to the shutdown.
  - Since then we have been running fairly well.
- Data processing
  - We have a uniform data set processed with the p17 version.
  - This data set is essentially available now.
  - The capacity of our farms allow us to keep up and provides flexibility.
  - We can prepare approved preliminary results in as little as one month.