



D0 Status Report

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FNAL

All Experimenters' Meeting
19 February 2007



Data Taking

Day	Delivered Lum (pb^{-1})	Recorded Lum (pb^{-1})	Efficiency (%)	Comment
12 Feb	6.11	4.75	78	VESDA investigation access continued from Sunday. Central muon triggers off. 1 hour down for CTT/controls problem. Special CAL study.
13 Feb	4.63	2.90	63	Silicon bias scans performed. Access for VESDA and L1Muon. 90 min down for L1muon.
14 Feb	5.04	4.40	87	Access to replace L1 muon concentrator card. 25 min down due to L2CAL readout problem.
15 Feb	6.22	5.81	93	
16 Feb	5.60	5.01	90	Access to repair PDT and adjust AFE PS.
17 Feb	2.81	2.67	95	
18 Feb	8.16	6.54	80	Incorrect preshower threshold causes high deadtime at start of store. 40 min down for Muon/L2 problem.
Record Daily delivered Luminosity				
5-11 Feb	38.6	32.1	83	



VESDA Alarms (Last week's slide)

- On Sunday we had alarms from our VESDA and FIRUS systems.
 - After consultation with the Fire Techs, the alarms were interpreted as potentially consistent with smoke in our collision hall.
 - Accesses were made by D0 and Fire Department personnel.
 - No smoke found, but some sensors still detect smoke.
 - The power supplies were re-energized to search for bad electronics.
 - This investigation was hampered by problems with the controls system.
 - There is still no sign of a cause of smoke.
 - Our investigation is continuing into possible VESDA problems.
- Thanks to the AD for graciously allowing D0 the time needed to investigate this situation.
 - We will need an access following this store to repair a L1 Muon PS and likely assess VESDA issues at detector as well.



Accesses

- Monday February 12 – 5 ½ hours
 - Continued investigation of VESDA alarm from Sunday
- Tuesday February 13 – 7 hours
 - Muon PDT Repair
 - Replace L1 Muon power supply
 - VESDA Repair
 - Replaced bad sensor with no effect
 - Called in more personnel to diagnose problem
 - Several trips to get parts
 - In the end replaced 3 sensors (plus bad spare), a fan, and a bad control card.
 - Had to borrow two sensors from elsewhere and one from D0
 - Interlocks not made up when bypass disengaged which dropped power to the collision hall.



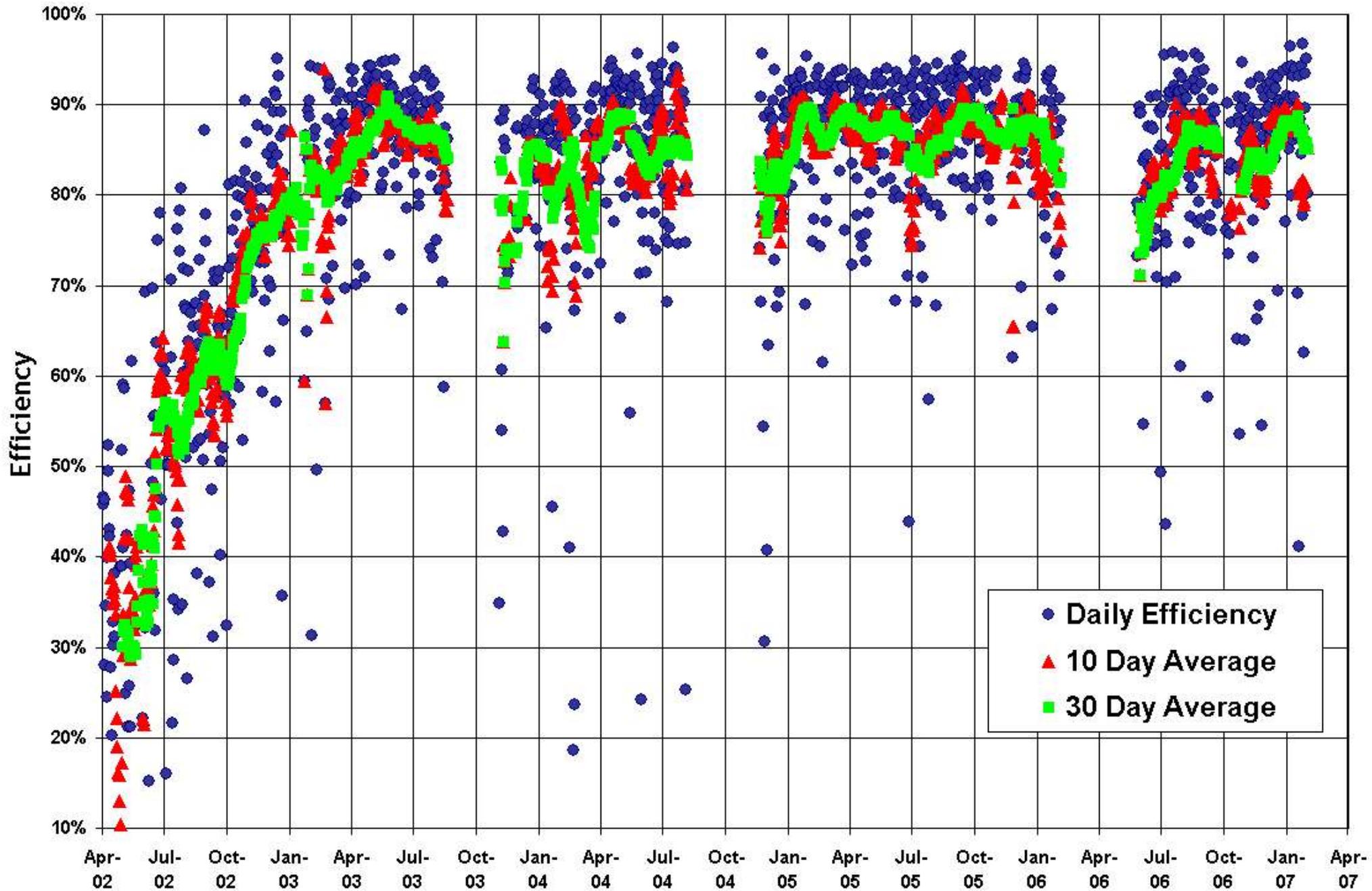
Accesses (Cont.)

- Wednesday February 14 – 25 minutes
 - Replace L1muon concentrator card
- Friday February 16 – 2 hours
 - Repair Muon PDT
 - Re-terminate L1muon trigger cable
 - Adjust voltage on AFE power supply



Daily Data Taking Efficiency

19 April 2002 - 18 February 2007





Run II Integrated Luminosity

19 April 2002 - 18 February 2007

