



NORTHERN ILLINOIS
UNIVERSITY

D0 Status Report

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All Experimenters' Meeting
20 February 2006



Data Taking

Day	Delivered Lum (pb^{-1})	Recorded Lum (pb^{-1})	Efficiency (%)	Comment
13 Feb	3.76	3.26	87	Muon hardware special runs.
14 Feb	1.41	1.13	80	Access to fix Cal rack trip, PDT test. In limit test done for FPD.
15 Feb	0.01	0.01	74	FPD Special 1X1 run.
16 Feb	0.03	0.02	74	FPD Special 1X1 run. 2 hours down due to problems with DAQ.
17 Feb	0.01	0.01	84	FPD Special 1X1 run. Test for cal noise with magnet off. D0 pulled abort. Two accesses.
18 Feb	1.09	0.95	87	
19 Feb	2.10	.63 (1.68)	30 (80)	3 hours of alignment studies. SMT LVPS failed (1/6 th off). Cal test run taken.
13-19 Feb	8.4	6.0 (7.0)	71 (84)	(Including 1.05 pb^{-1} from Calorimeter test)



Significant Events

- 13 February
 - Special muon runs to test new readout crate Input-Output Controller.
- 14 February
 - 1 hour special FPD run.
 - Multiple trips of CAL BLS PS rack due to low water flow.
 - Access found worn impeller in the flow sensor.
 - Thanks for extra access time.
 - 3 hour in limit test for roman pots performed.
- 15 February
 - 1X1 special D0 FPD store.
- 16 February (1X1 continues)
 - 2 hours down as DAQ datalogger nodes reboot.



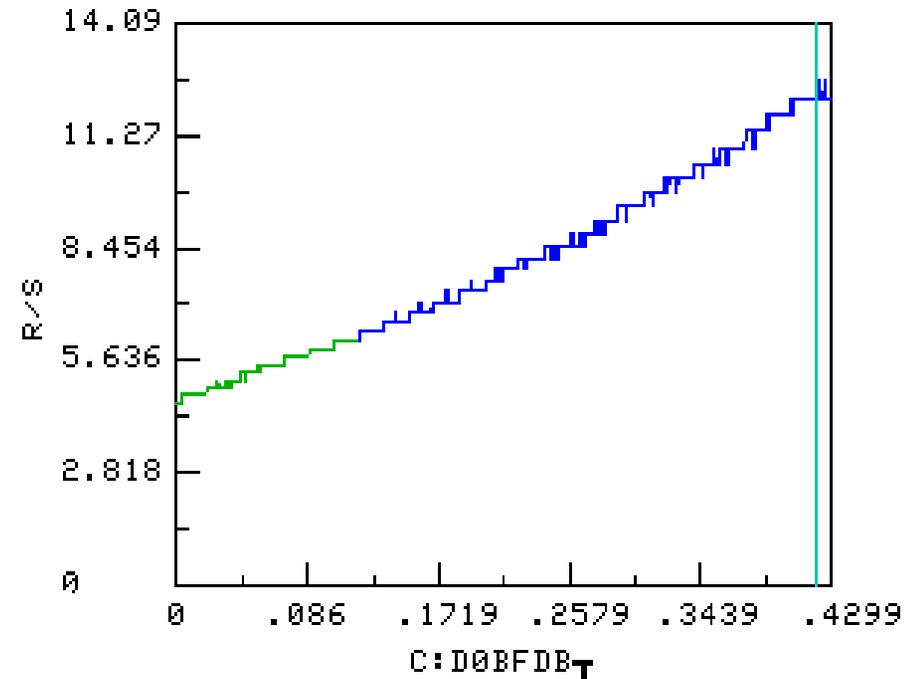
Significant Events

- 17 February
 - 08:30 1X1 store ends.
 - Again thank you for the extra half hour.
 - Controlled Access
 - Install prototype AFE II board again.
 - Reading out without errors.
 - D0 magnets off during shot setup to test for Cal noise.
 - 2nd access to test Silicon Layer 0 firmware on the platform.
- 19 February
 - Three ours of tracking alignment studies with magnet off.
 - Lost Silicon LVPS during the final phases of shot setup. Store 4654 didn't readout 1/6th of silicon (repaired today).
 - Took special Calorimeter studies.



Abort

- D0 pulled the abort during the squeeze of store 4648.
 - The downstream bottom BLM reached its abort limit of 12.6 R/s.
 - This was a slow loss and the total dose received was 25 Rad.
 - No problems found with our silicon.





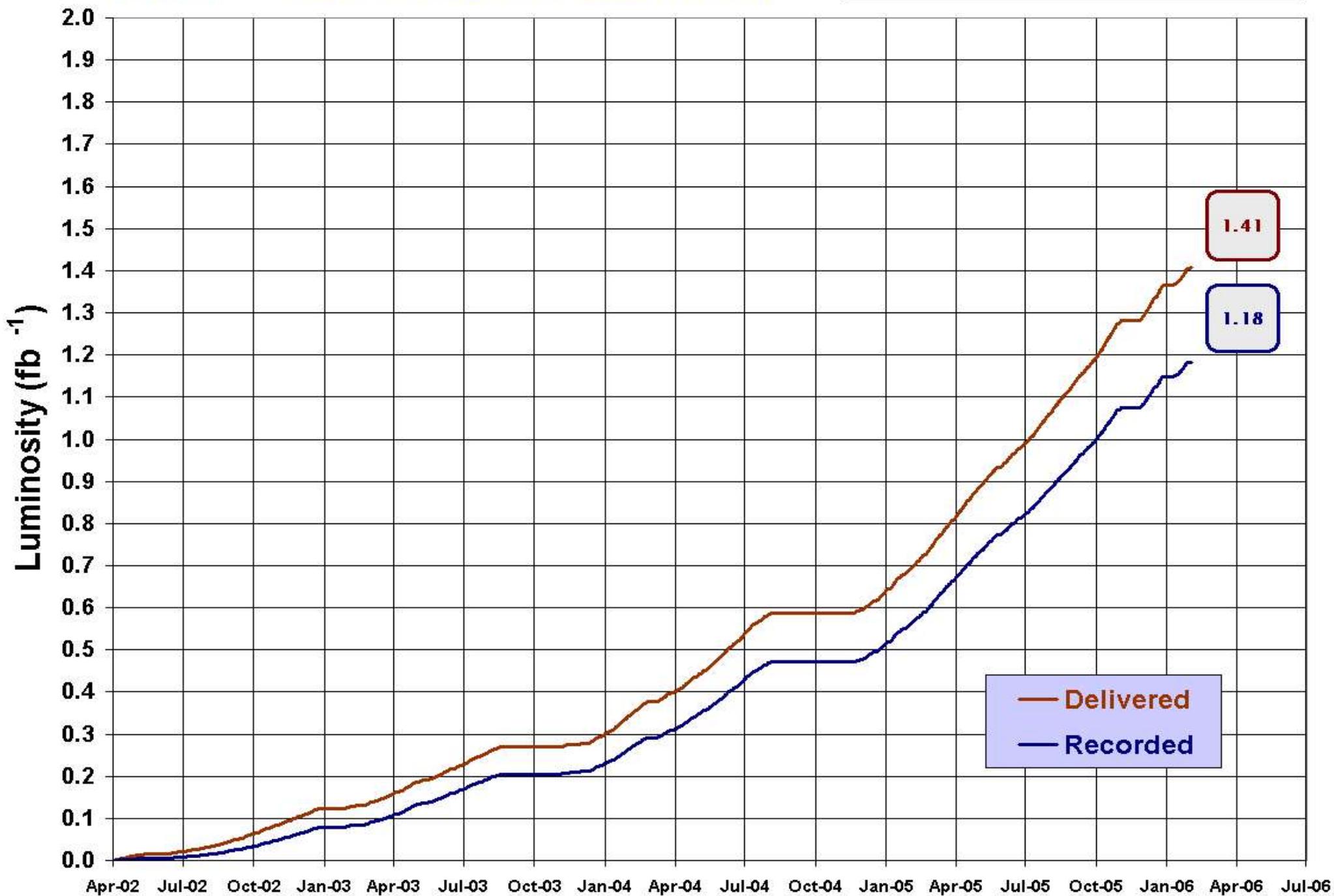
1X1 Low Luminosity Store

- D0's many thanks go out to the Accelerator Division and Tevatron experts that managed to get this store in.
 - This store required a special shot from the recycler.
 - Then the unwanted pbar bunches were swept away using the TEL.
 - The beams were hand scraped to make them as clean as possible.
 - Before the store was declared, the FPD group tested the beams.
 - Finally, the beams were brought together to begin the store at 15:45.
 - D0 was able to get their Roman pots closer to the beam than ever before.
 - The store also extended 16 hours to get additional data and perform studies of systematics.
- Thank you to everyone who helped make this store possible.



Run II Integrated Luminosity

19 April 2002 - 19 February 2006



20 February 2006

AEM

Bill Lee