



D0 Status Report

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FNAL

All Experimenters' Meeting
18 December 2006



Data Taking

| Day | Delivered Lum (pb ⁻¹) | Recorded Lum (pb ⁻¹) | Efficiency (%) | Comment |
|---|-----------------------------------|----------------------------------|----------------|---|
| 11 Dec | 3.66 | 2.48 | 68 | Two hour downtime for loss of Silicon interface board power supply. |
| 12 Dec | 5.10 | 4.39 | 86 | Stores used for special runs and calibration data. |
| 13 Dec | 1.52 | 1.40 | 92 | Special runs taken. 11 hour Access to fix Silicon power supply. |
| 14 Dec | 3.13 | 1.71 | 55 | Two hours down due to network problems. Access for muon Latency applied between stores. |
| 15 Dec | 5.56 | 4.81 | 86 | Special runs to test latency change. 30 min down due to L3 readout problem. |
| 16 Dec | 6.00 | 4.87 | 81 | Special muon cross-section runs taken at high luminosity. |
| 17 Dec | 4.95 | 3.90 | 79 | Muon PDT problem at start of store. Silicon sequencer readout problems. |
| * 1/6 th of silicon out for these stores | | | | |
| 11-17 Dec | 29.9 | 23.6 | 79 | |



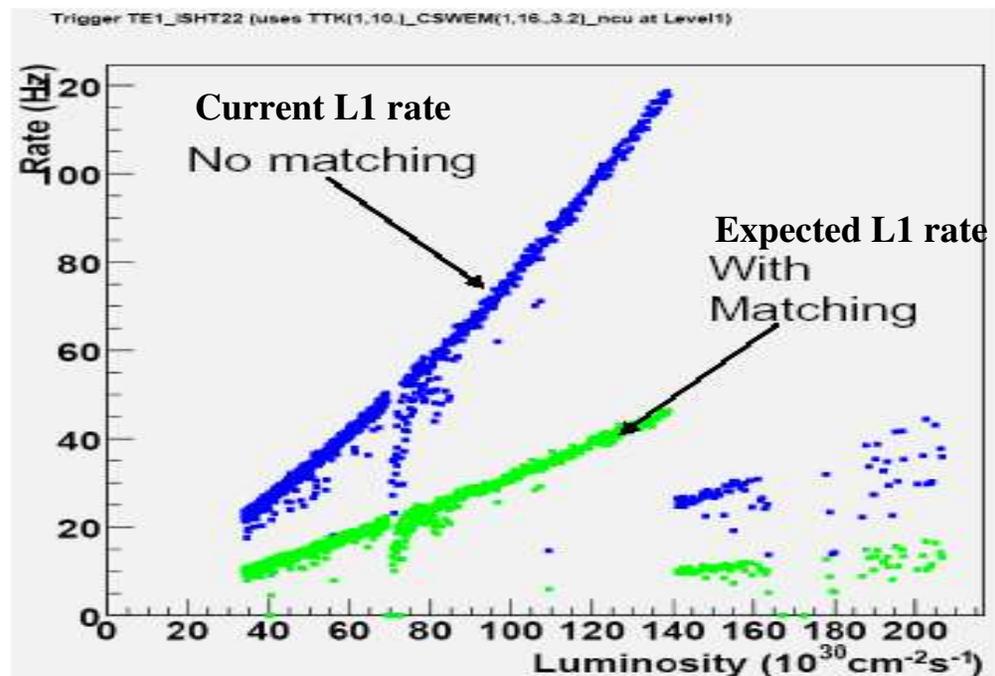
Significant Events

- Two hours into Store 5118 a silicon interface board power supply failed.
 - This typically requires an eight hour access to open the detector for the repair.
 - Unfortunately we could not schedule the repair after store 5118 as our mechanical crew was short handed.
 - The access occurred following store 5119 and took 11 hours.
 - During the opening of the detector, a cable was damaged and required the extra three hours to repair.
 - The D0 interlocks were dropped.
 - Our apologies for the additional delay this caused.
- Following the access, a problem developed with the D0 online nameserver computer.
 - There were problems getting the helpdesk ticket assigned properly, so it took four hours to get the problem resolved.



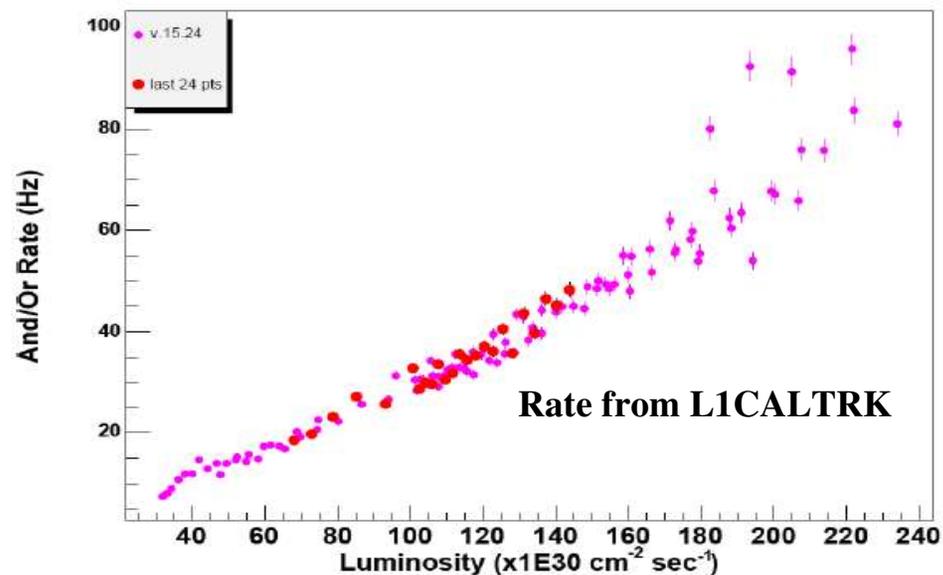
Latency change

- The L1CALTRK trigger required a 3 tick additional delay to make its trigger decisions
 - This trigger allows D0 to match calorimeter towers to tracks at Level 1.
 - The latency was applied to the trigger framework and all detectors last Thursday.
 - So far we do not see any problems associated with the change.



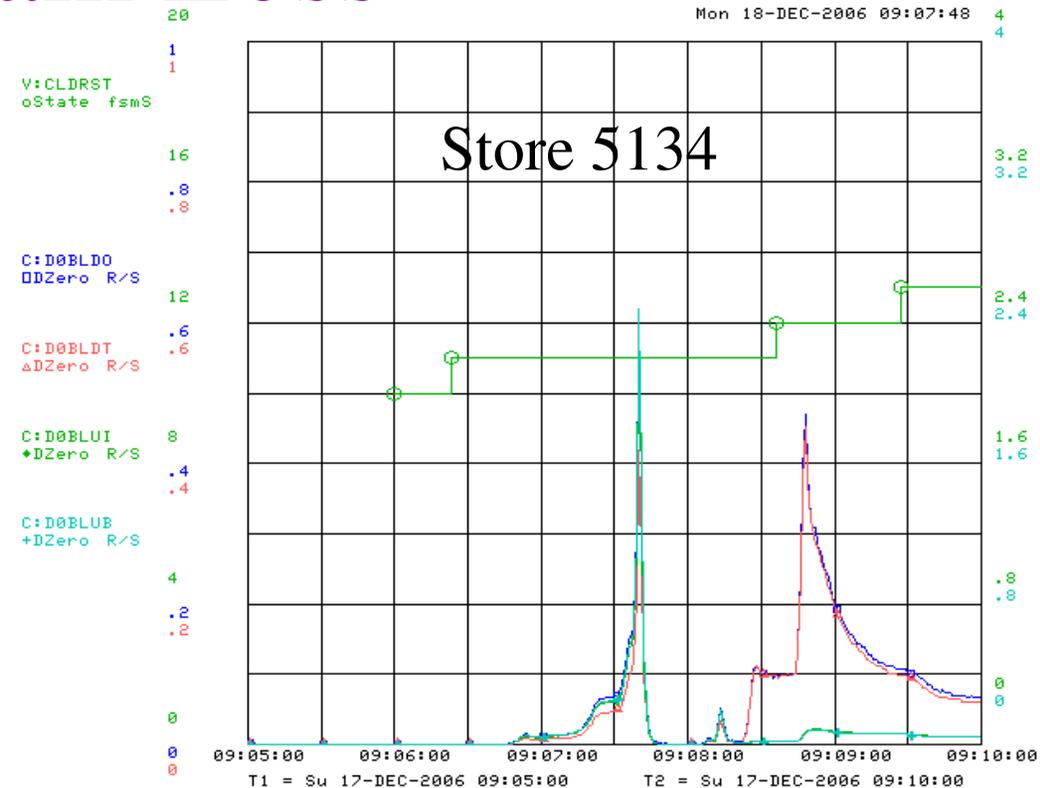
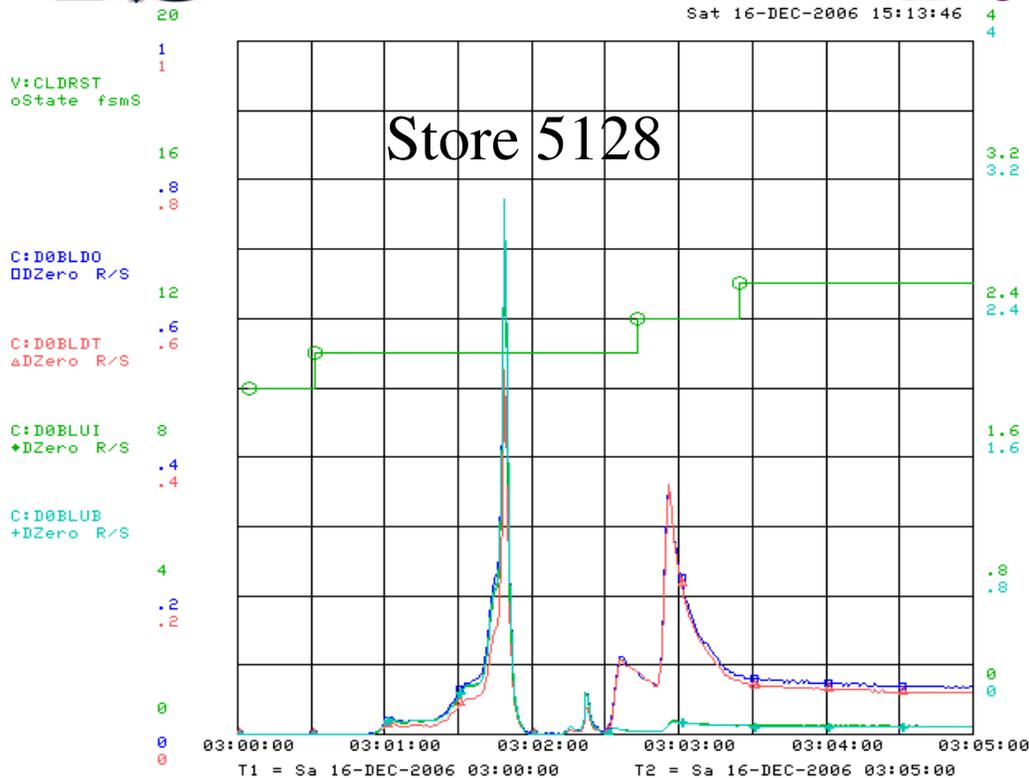
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Beam Loss

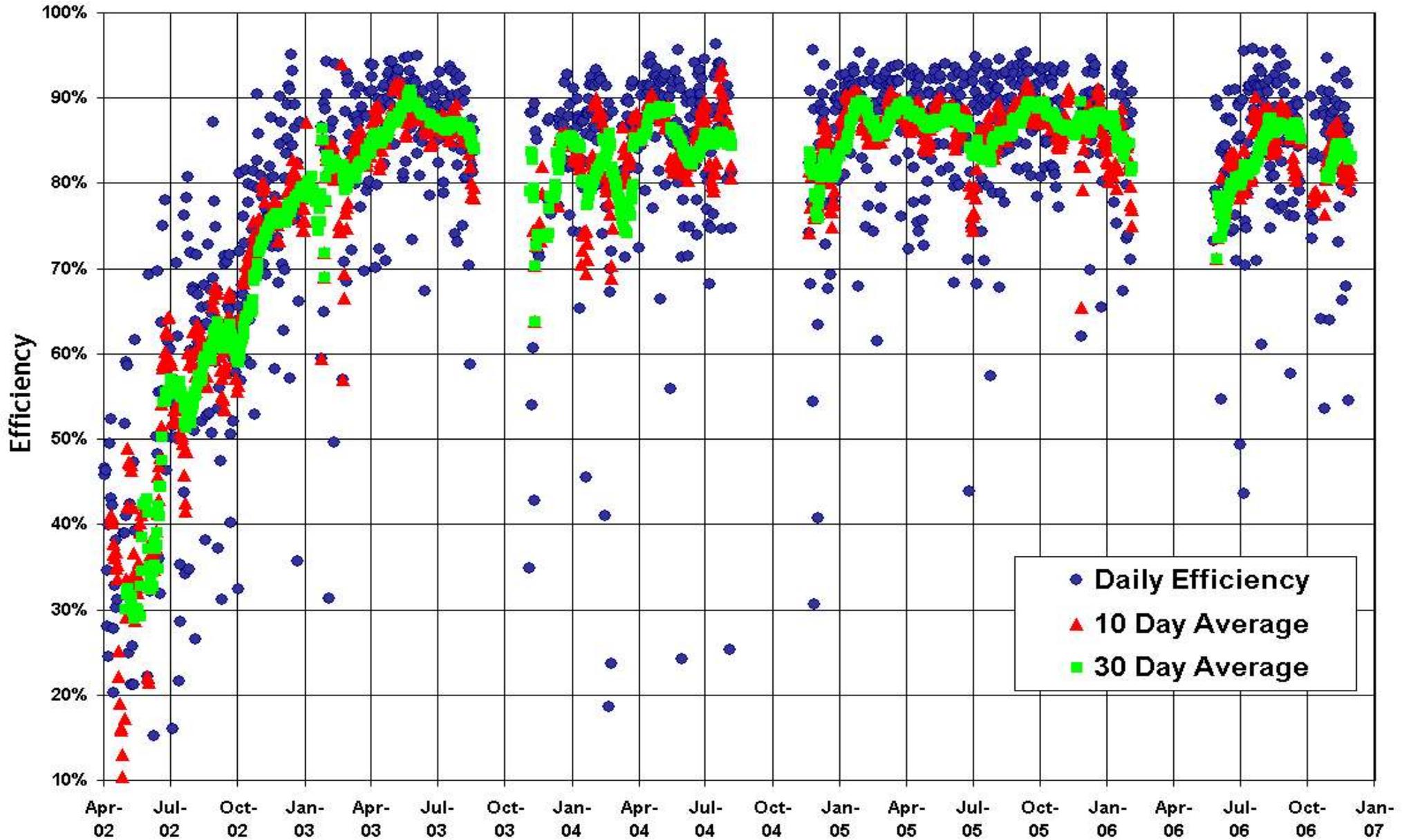


- D0 has been seeing high beam losses as the Tevatron transitions from their injection to collision helix.
 - For store 5128 losses reached 3.1 Rad/s.
 - D0 automatically pulls the abort at 12.6 Rad/s



Daily Data Taking Efficiency

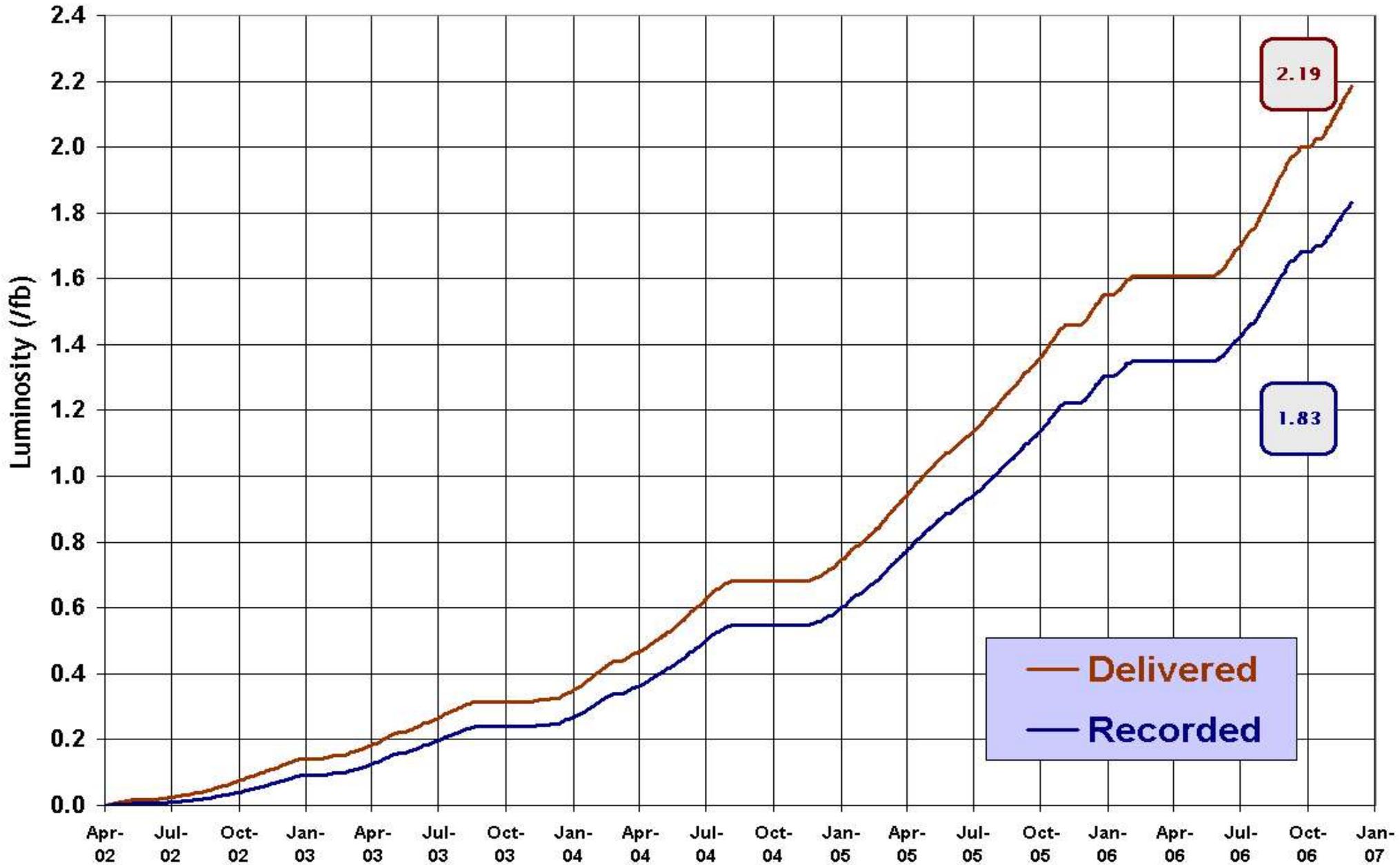
19 April 2002 - 17 December 2006





Run II Integrated Luminosity

19 April 2002 - 17 December 2006



18 December 2006

AEM

Bill Lee