D0 Status Report

Bill Lee
FSU

All Experimenters' Meeting
8 August 2005

Daily Data Taking

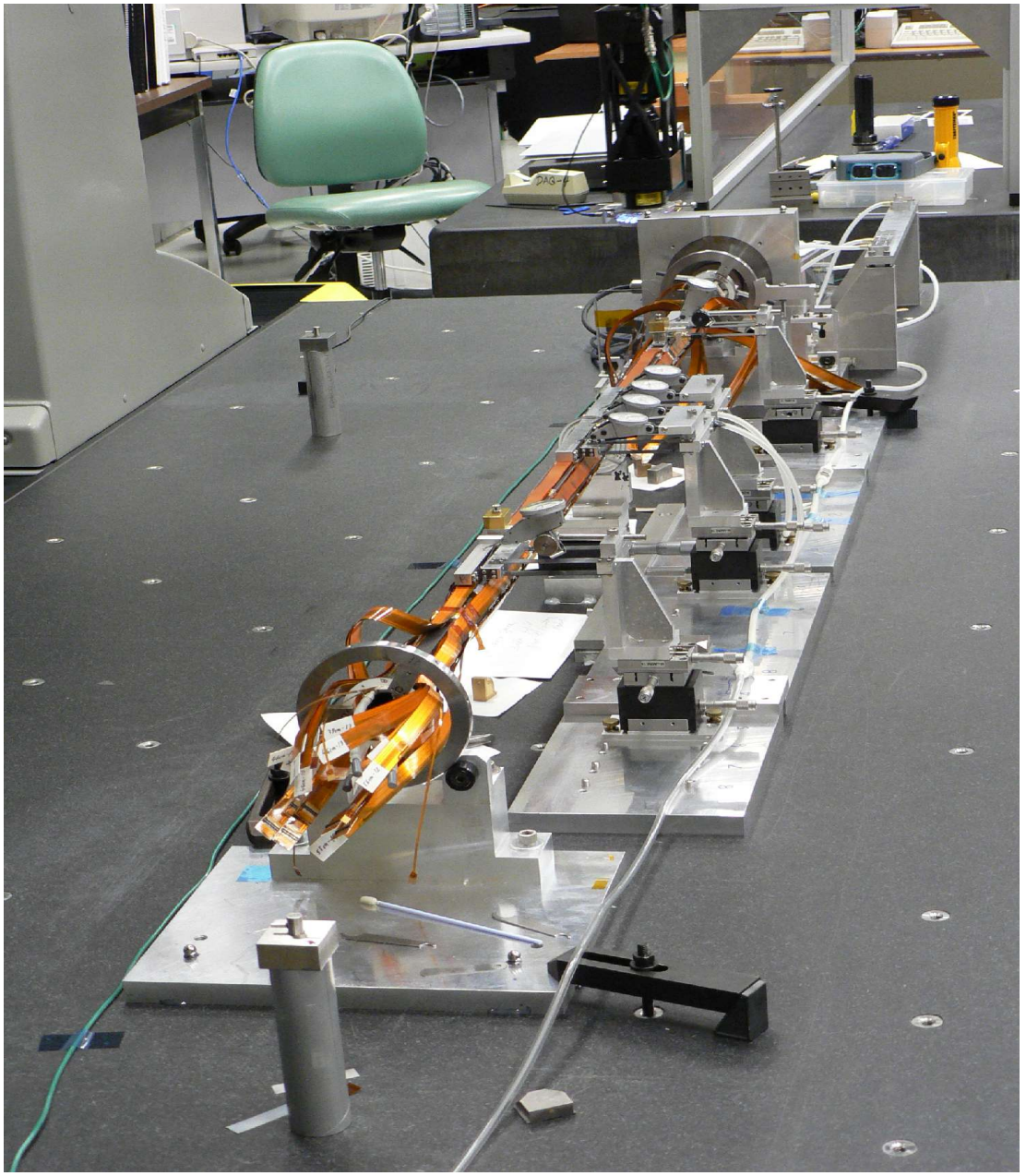
Day	Delivered Lum (pb^{-1})	Recorded Lum (pb^{-1})	Efficiency (%)	Comment
1 Aug	2.84	2.29	81	1hour downtime for CAL ADC PS problem. Took muon special run
2 Aug	2.07	1.85	90	
3 Aug	2.81	2.58	92	
4 Aug	1.98	1.41	71	Access, RunIIb tests, Cal card, FPD PS. Record initial Luminosity, 118.3. 80 minutes downtime due to muon PDT trip
5 Aug	2.55	2.39	94	
6 Aug	3.58	3.19	89	5th best day recorded luminosity
7 Aug	3.08	2.76	90	
1-7 Aug	18.9	16.5	87	3rd best week recorded luminosity

Notable events

- Downtime
  - 1 August – 60 minutes to recover from a Calorimeter ADC power supply trip.
  - 4 August – 80 minutes for muon PDT trip.
    - Very difficult to ramp back up. Left off for the run. Cause unknown, but we had a similar instance last month.
- Access
  - 4 August – Testing for RunIIb. Replaced a Calorimeter card. FPD replaced a bad power supply.
- Records
  - 4 August – D0's best initial luminosity, 118E30
  - 6 August – 5th best day for recorded luminosity, 3.19 pb^{-1}
  - 1 - 8 August – 3rd best week for recorded luminosity, 16.5 pb^{-1}

Layer 0 Silicon

- Construction of D0's Layer 0 silicon was completed on the 1st of August.
  - Quality is excellent with only one bad chip out of 96. All detectors are within 2 microns of their nominal positions
  - Preliminary read-out tests show good data quality and low noise.
  - Several weeks of detailed testing and measurements are planned



Summary

- D0 operated well for the week.
  - 2 major downtimes limited efficiency to 87%.
- Thanks
  - to AD for providing D0 the opportunity to set three luminosity top ten records this week.
  - to the engineers, technicians, and physicists who contributed to Layer 0 design and fabrication.