



NORTHERN ILLINOIS
UNIVERSITY

D0 Status Report

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All Experimenters' Meeting
3 July 2006



Data Taking

Day	Delivered Lum (pb^{-1})	Recorded Lum (pb^{-1})	Efficiency (%)	Comment
26 June	3.11	2.34	75	Hour lost at beginning of store
27 June	1.58	1.26	80	Hour lost to tracking crates Access
28 June	2.89	2.35	81	Separator Spark Access
29 June	3.66	3.09	84	
30 June	4.23	3.33	79	High L3 disables at start of store 30 min. down for Silicon readout
1 July	3.00	2.62	88	
2 July	2.74	2.28	83	1 hour of downtime for STT/L3 3 hours down for tracking crates.
26 June - 2 July	21.2	17.3	81	



Significant Events

- Monday – 26 June
 - Slow start to store
 - 10 minutes for Luminosity HV scans.
 - 20 minutes to recover from datalogger error due to hitting file size limit in monitor stream due to an incorrect trigger prescale.
 - 20 minutes for Fiber Tracker problem.
- Tuesday – 27 June
 - 15 minutes for Fiber Tracker problems which then confused L2
 - 45 minutes for Silicon crate sync loss
 - Access for L1MUO, PDT and AFE2.



Significant Events

- Wednesday – 28 June
 - At 13:30 – C4 separator spark
 - Trips Muon, Lumi, and L0.
 - Lost 50% of luminosity
 - Could see spikes in the halo rates.
 - Inspected detector for 30 minutes with HV down
 - 30 min global run with silicon off.
 - 90 special muon runs with silicon off.
 - 20 min rescrrape of the beam
 - Found a broken wire in MDT octant
 - Access to disable broken wire at end of store



Significant Events

- Friday – 30 June
 - The triggers were disabled 25% due to L3
 - A new L3 executable took longer than expected to download between stores.
 - So only half the farm was available at the start of the store.
 - After 30 minutes, enough farm nodes were added and the luminosity had decreased enough, such that the trigger was no longer disabled.
 - 30 minutes down for silicon readout crate problem.

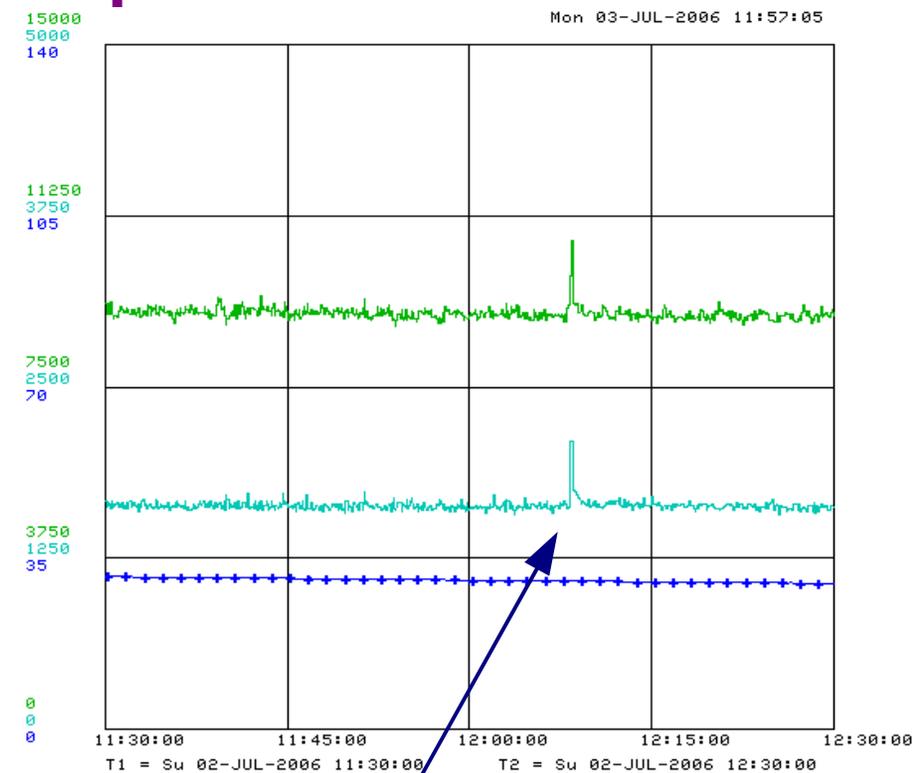
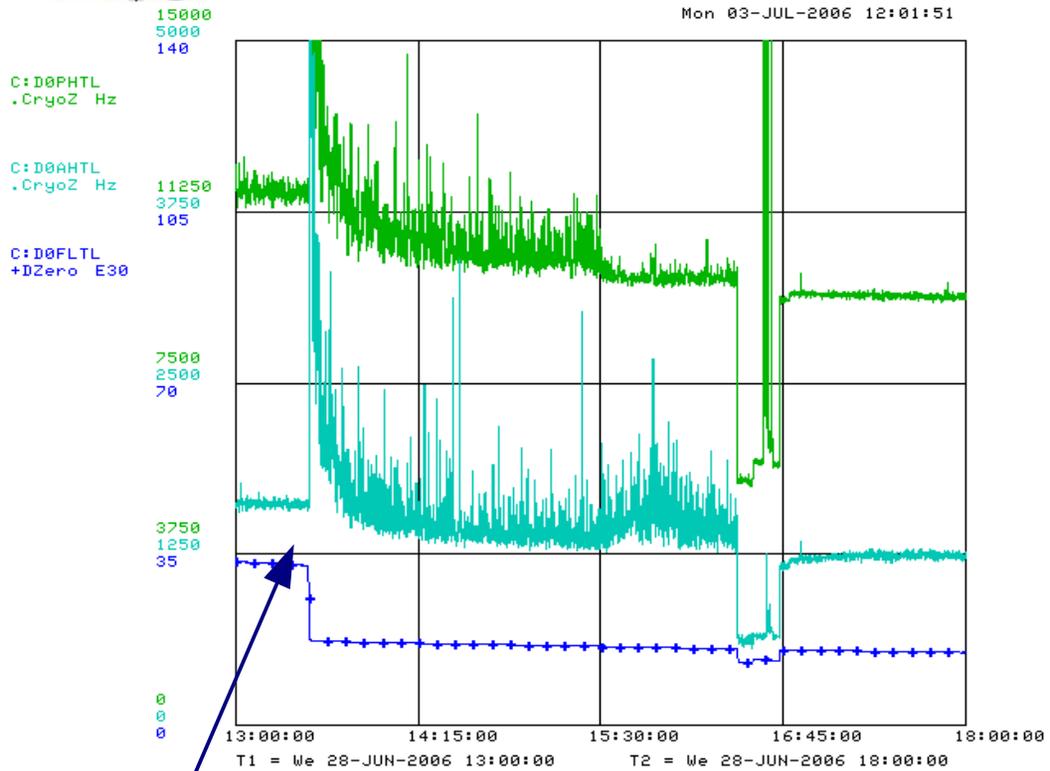


Significant Events

- Sunday – 2 July
 - Silicon L0 and some Muon MDT trip.
 - Small spike in halo rates seen.
 - This was followed by problems with a Silicon Track Trigger readout crate and a L3 farm node.
 - There was about an hour of down time.
 - A three hour downtime was caused by a variety of the tracking crates.
 - It was the second fresh restart that cleared it.



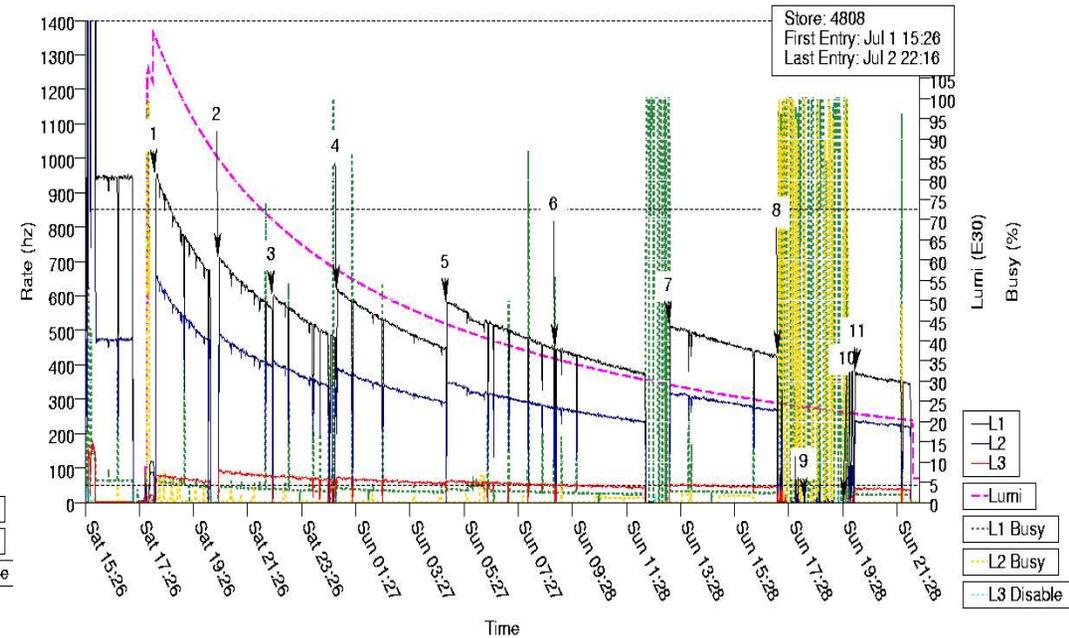
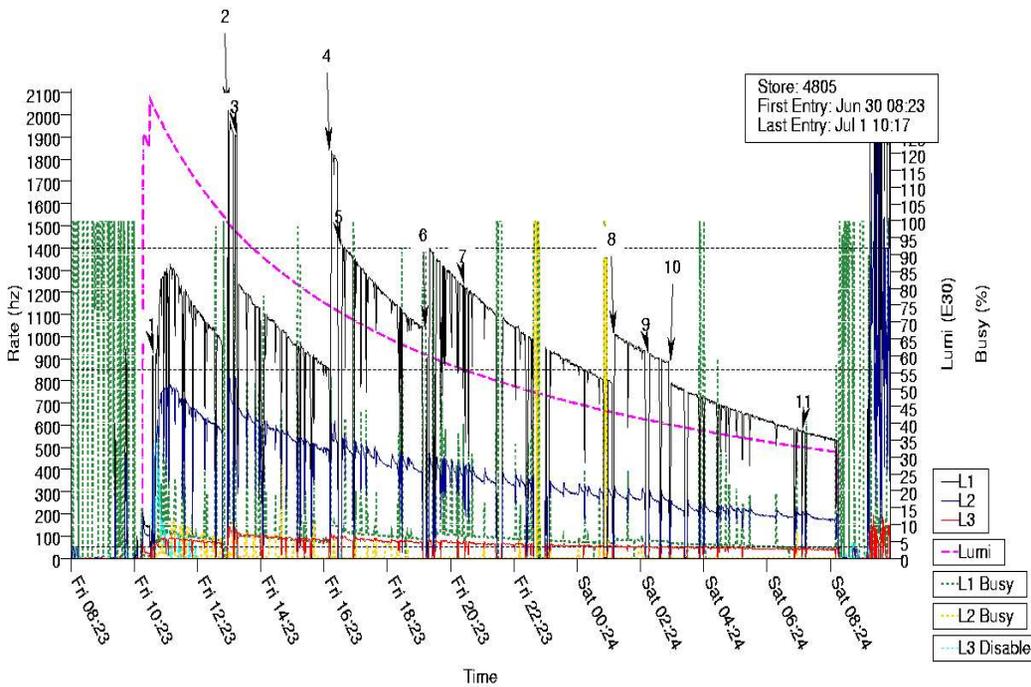
HV Trips



- Store 4802 Separator spark.
- Store 4808 halo spike. Tripped off forward muon HV and L0 HV.



Improving Performance



- We have been having brief interruptions due to the RunIIB L1CAL crate hanging. This was addressed via a general resync, but causes ~30s downtime.
 - On Saturday, a fix was implemented, which should improve our efficiency.