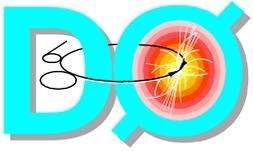


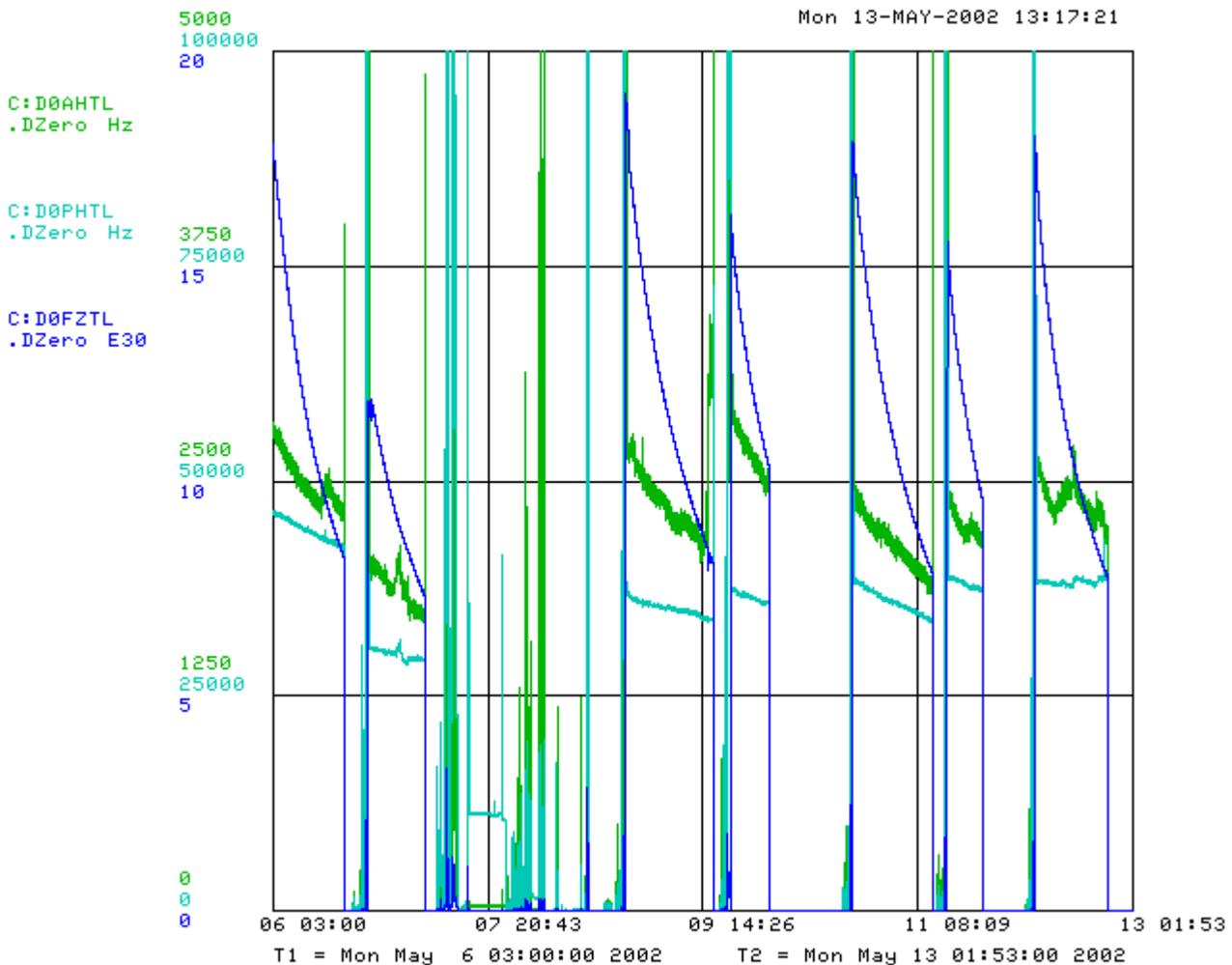
DO Status: 05/06-05/13

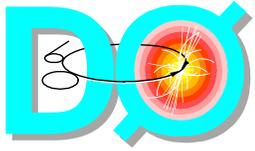
- Week integrated luminosity
 - ◆ 3.5pb^{-1} delivered
 - ◆ 2.1pb^{-1} utilized (60%)
- Data collection
 - ◆ global data collections during each store
 - ▲ full detector in readout: 5mln events collected
 - ▲ physics trigger menu: v5.1
 - v7.0 tried, but backed due to data corruption
 - ◆ major sources of downtime last week
 - ▲ DAQ system/L2/on-line debugging
 - ▲ sub-detectors readout problems
 - ◆ special runs collected
 - ▲ L2 calorimeter trigger test
- Access last week
 - ◆ 9(!) jobs accumulated over Monday-Wednesday
 - ▲ muon HV problem in 4 PDTs
 - ▲ muon firmware upgrade
 - ▲ CFT AFE installation, firmware debugging
 - ▲ LVPS swaps
 - ▲ others
- Currently no requests for the hall access



Background Conditions

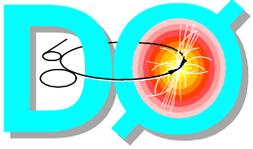
- Plot of the DO luminosity, p and p -bar halo last week
 - ◆ halo is stable and within acceptable limits





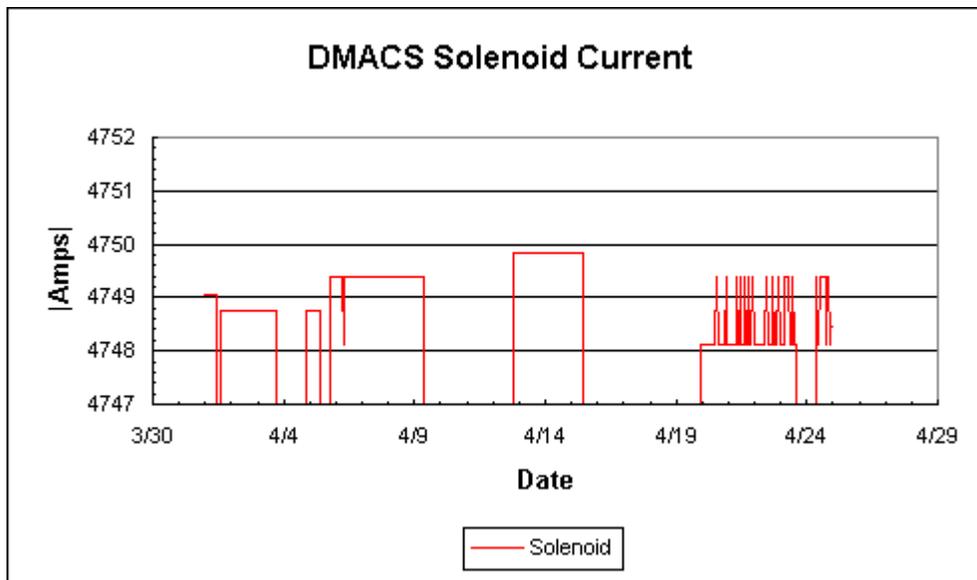
D0 Detector Status

- Luminosity detector
 - ◆ stable operation
- Silicon detector
 - ◆ silicon detector is running well (1 out of 8 LVPS is OFF)
 - ◆ high voltage turn OFF time is down to ~3 minutes
 - ▲ this is time we need to end stores gracefully
- Fiber tracker
 - ◆ fully instrumented with electronics and in global readout
 - ◆ finishing temperature stabilization upgrade for all AFEs
 - ◆ working on CFT and CPS commissioning
 - ◆ populating forward preshower detector with AFE boards
- Calorimeter
 - ◆ stable operation
- Muon system
 - ◆ stable operation
 - ◆ fixed two HV problems last week
 - ▲ both related to metal pcs fallen into the chambers HV compartments
- Forward Proton Detector
 - ◆ routine pots insertion during stores
 - ◆ integrating with calorimeter shifts
- Trigger
 - ◆ L1 trigger is running stable
 - ◆ L2 trigger is finishing full integration - talk by Reinhard Schwienhorst
 - ◆ L3 trigger: calorimeter algorithm is running well, while attempt to include muon filtering did not succeed last week

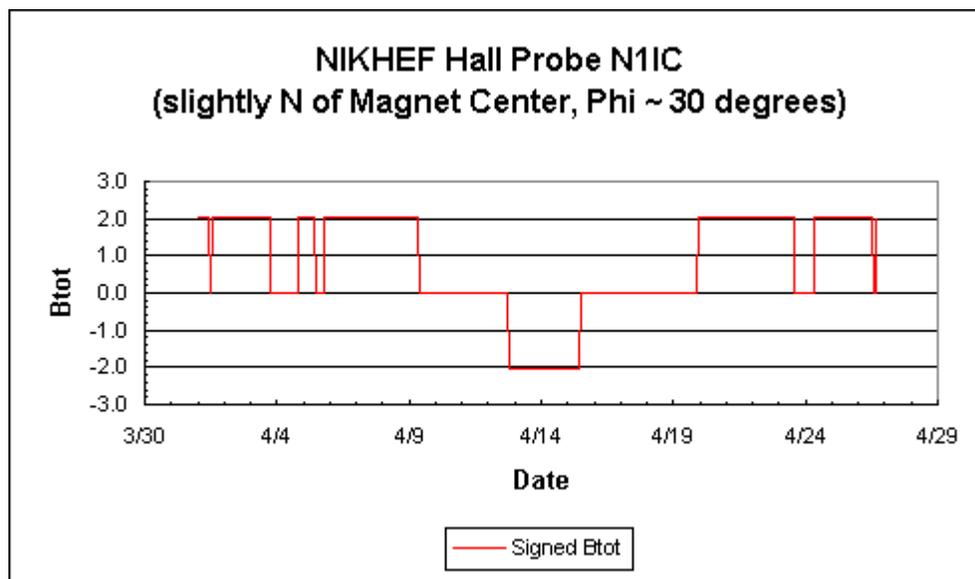


Stability of the D0 Solenoid Field

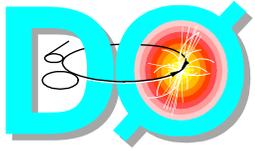
- Design field is 2T monitored by power supply current, hall probes, and NMR probe
 - ◆ current stability is $1/4749$ or 2.10^{-4}



- field stability is 2 Gauss at 20 kGauss or 1.10^{-4}



- Direct measurement of K^0 mass is accurate within 0.5% (current mass error limit)



This Week DO Run Plan

- Global data collection today and tomorrow
- During accelerator studies
 - ◆ calibrations for different sub-systems
 - ◆ installation of muon MFC cards
 - ◆ multi-buffer firmware download into tracking crates (major reason for current front-end busy fraction)
 - ◆ Level 2 system commissioning
 - ◆ on-line cluster software release
- Continue physics data taking with full detector in readout starting owl shift Thursday
 - ◆ global trigger list v5.1
 - ▲ Level 2 rejection on “copies” of muon triggers
 - ◆ readout rate 100Hz (or more if multi-buffer fully implemented)
 - ◆ rate to tape ~30-40Hz
- Planning day-by-day schedule for June shutdown
 - ◆ ready to start access on June 3rd (or earlier)
 - ◆ planning to accomplish critical jobs within 12 days