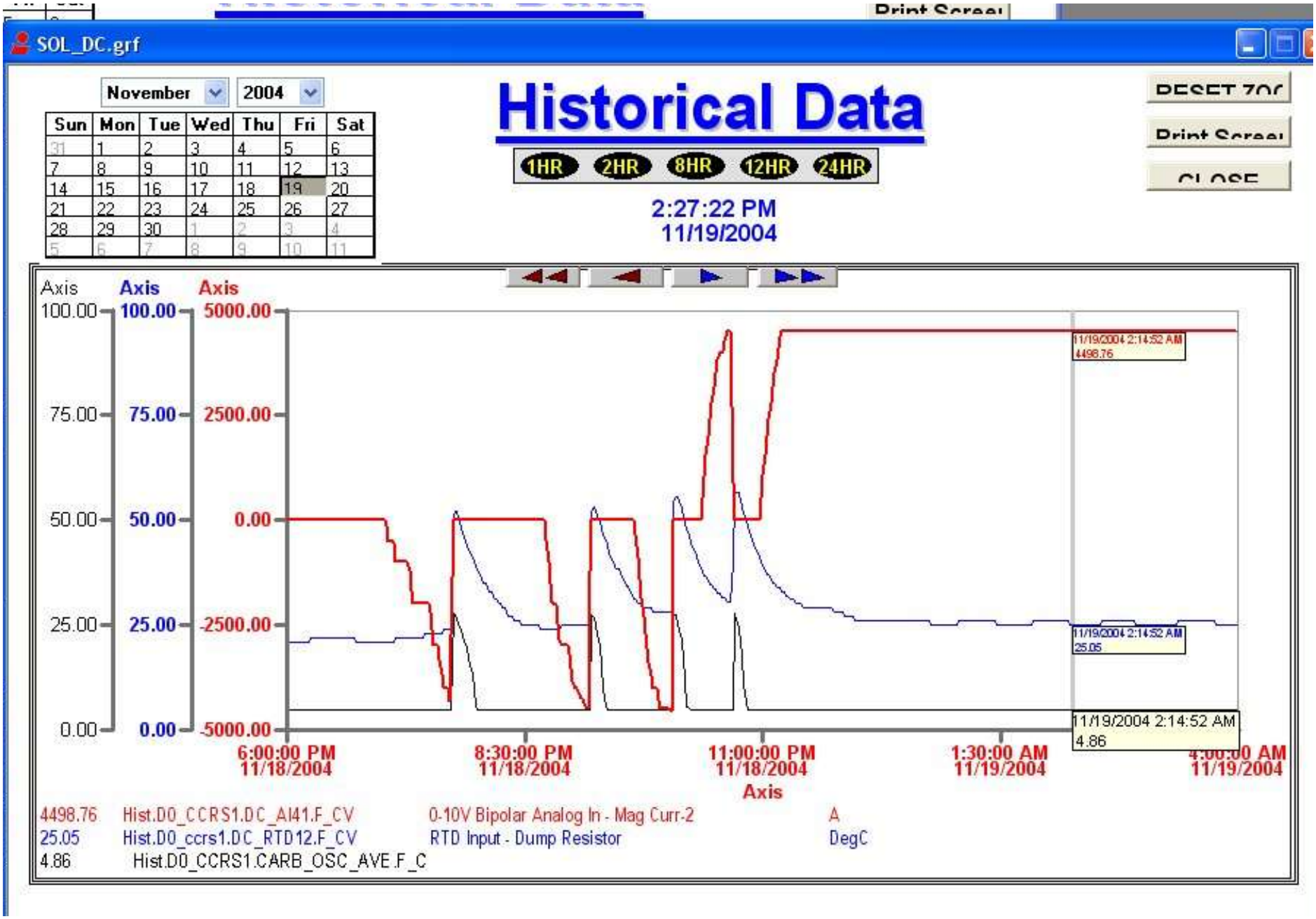
Past Week Activities

- Closed detector Mon-Tue (CF and EF) after finishing up central muon (PDT) modifications
- Forward muon (MDT) disabled wire on Tuesday
  - Discovered two weeks ago a broken wire in North B layer
- Since Tuesday SNEG pipe drying and activation (somewhat longer than anticipated)
- Solenoid cold on Tuesday
- Calorimeter “noise” tests since Thursday
  - “Welder noise” is back – not as bad as before the shutdown, but much worse than 6 weeks ago
- All week: moved many DAQ/online services to the new Linux server
  - NFS, Run control, data logging, ...
  - Mostly running fine now. Some outstanding issues – e.g. Data logger hangs at ~35MB/sec (but much higher than ~12MB/sec of old system)
- Magnet tests (since) Thursday evening
  - Toroid ramped up OK after connecting forgotten cables

Solenoid

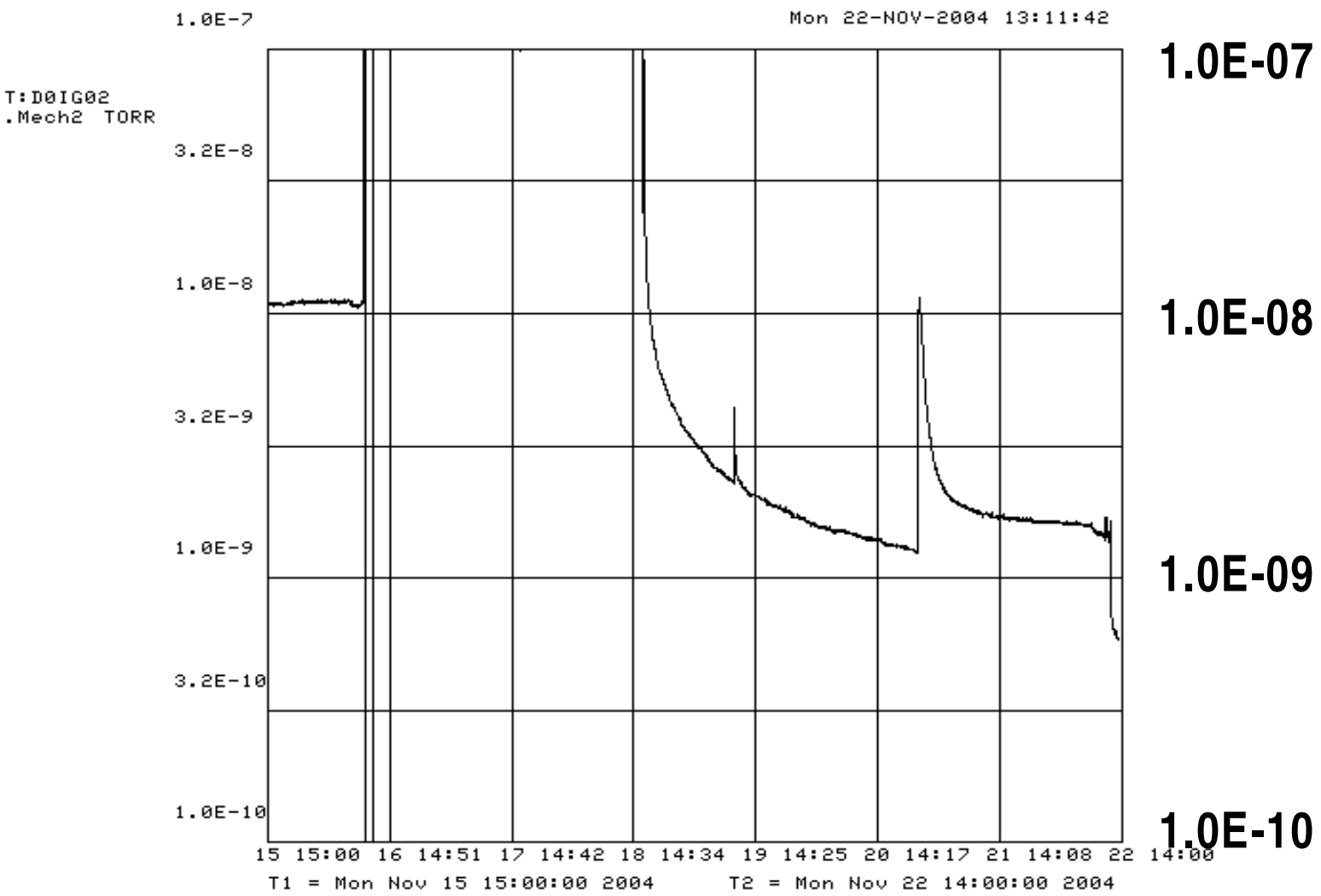
- Solenoid had been warmed up to room temperature during the shutdown to repair an external Helium leak on the vapor cooled current leads
- Thursday evening
  - On first attempt, solenoid quenched at ~4535A. The interlock control system said the first fault was an unbalance voltage on a quarter tap. The peak coil temperature after the quench (~35K) was at the north end
  - Appears to be a real quench in the solenoid itself. Not an instrumentation problem
  - Next 3 attempts (slower ramping rate, reverse polarity): quenches at 4559A, 4571A, 4555A
  - Operating current for 2T field is 4750A
  - Ran stable overnight (~7 hrs) at 4500A
- Friday evening
  - Tried normal ramping sequence, colder magnet temperature, increased LHe flow
  - Quenched at 4627A, 4636A, 4663A
  - Quenched the solenoid at 4620A by slowly raising the LHe temperature again
  - Again ran overnight (4 hrs) at ~4500A

Solenoid


SOL_DC.grf
November
2004
Historical Data
1HR
2HR
8HR
12HR
24HR
2:27:22 PM
11/19/2004
Print Screen
CLOSE
Axis
Axis
Axis
100.00
75.00
50.00
25.00
0.00
5000.00
2500.00
0.00
-2500.00
-5000.00
11/19/2004 2:14:52 AM
4498.76
11/19/2004 2:14:52 AM
25.05
11/19/2004 2:14:52 AM
4.86
6:00:00 PM
11/18/2004
8:30:00 PM
11/18/2004
11:00:00 PM
11/18/2004
1:30:00 AM
11/19/2004
11/19/2004
Axis
4498.76 Hist.D0_CCRS1.DC_AI41.F_CV 0-10V Bipolar Analog In - Mag Curr-2 A
25.05 Hist.D0_ccrs1.DC_RTD12.F_CV RTD Input - Dump Resistor DegC
4.86 Hist.D0_CCRS1.CARB_OSC_AVE.F_C

Vacuum

- Beam pipe vacuum looks good. Pressure was ~1E-8 Torr with ion pumps
- ~1E-9 after SNEG activation



This Week

- Install veto counters on beam pipe (after heaters have been removed from SNEG pipe)
- Move additional services to new online/DAQ servers
- Search and Secure of Collision Hall on Wednesday Nov 24
- Complete outstanding survey tasks
- Open questions...
  - Solenoid – understanding data, evaluating options
  - Detector grounding – might opt to devote Tuesday/Wednesday to “ground short hunting”