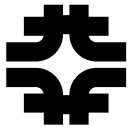
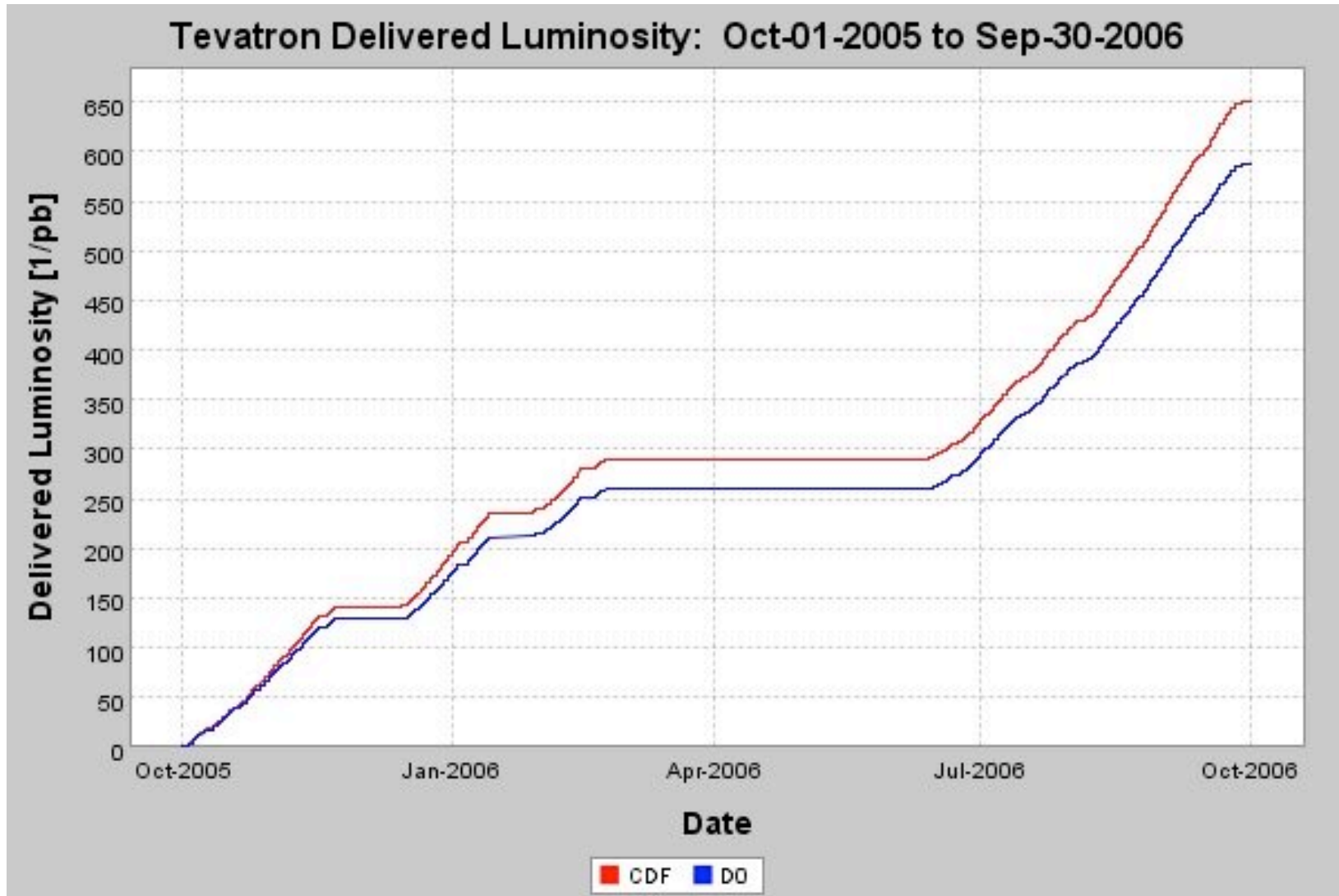


Run II Operations Summary

R. Dixon

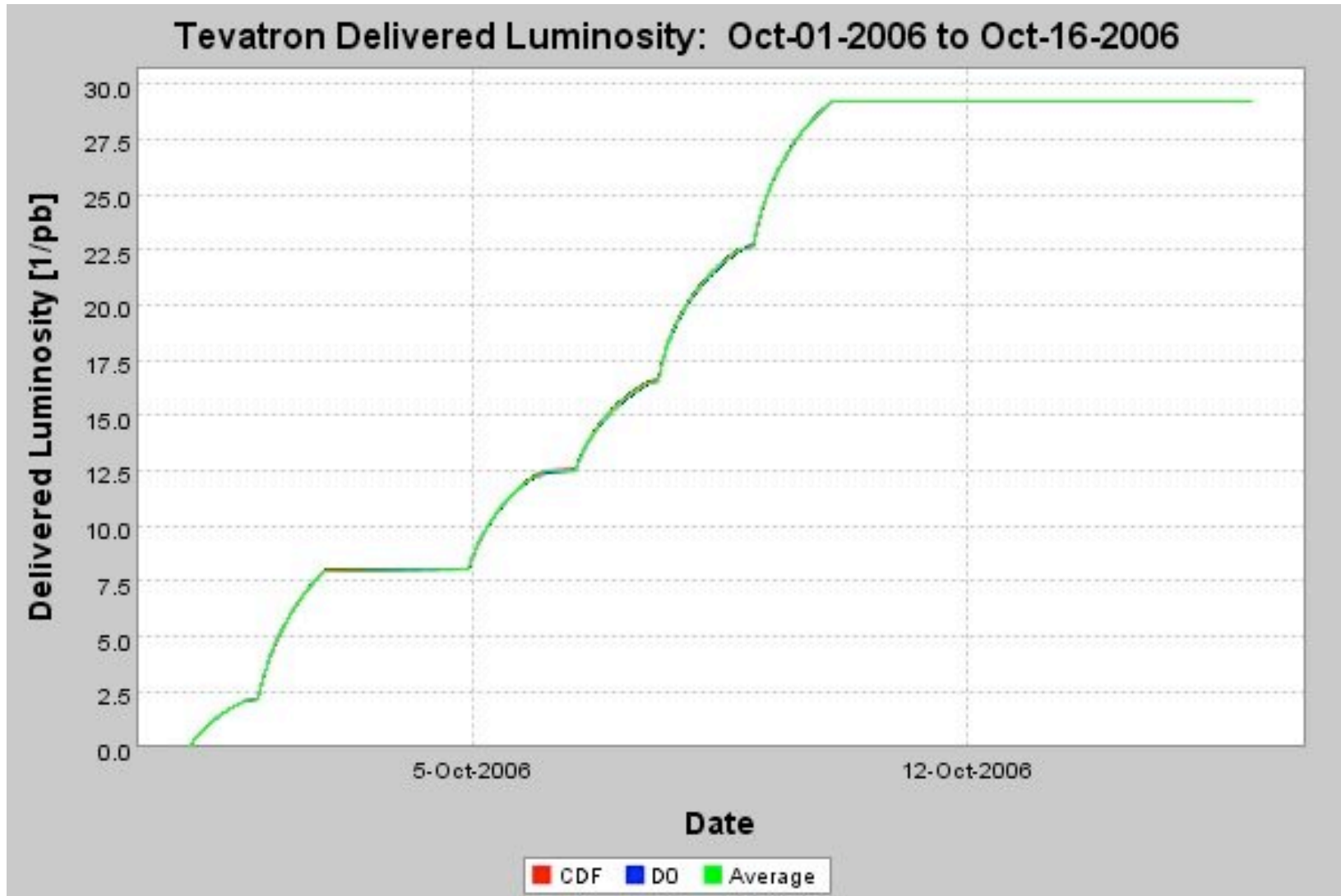


FY06 Integrated Luminosity



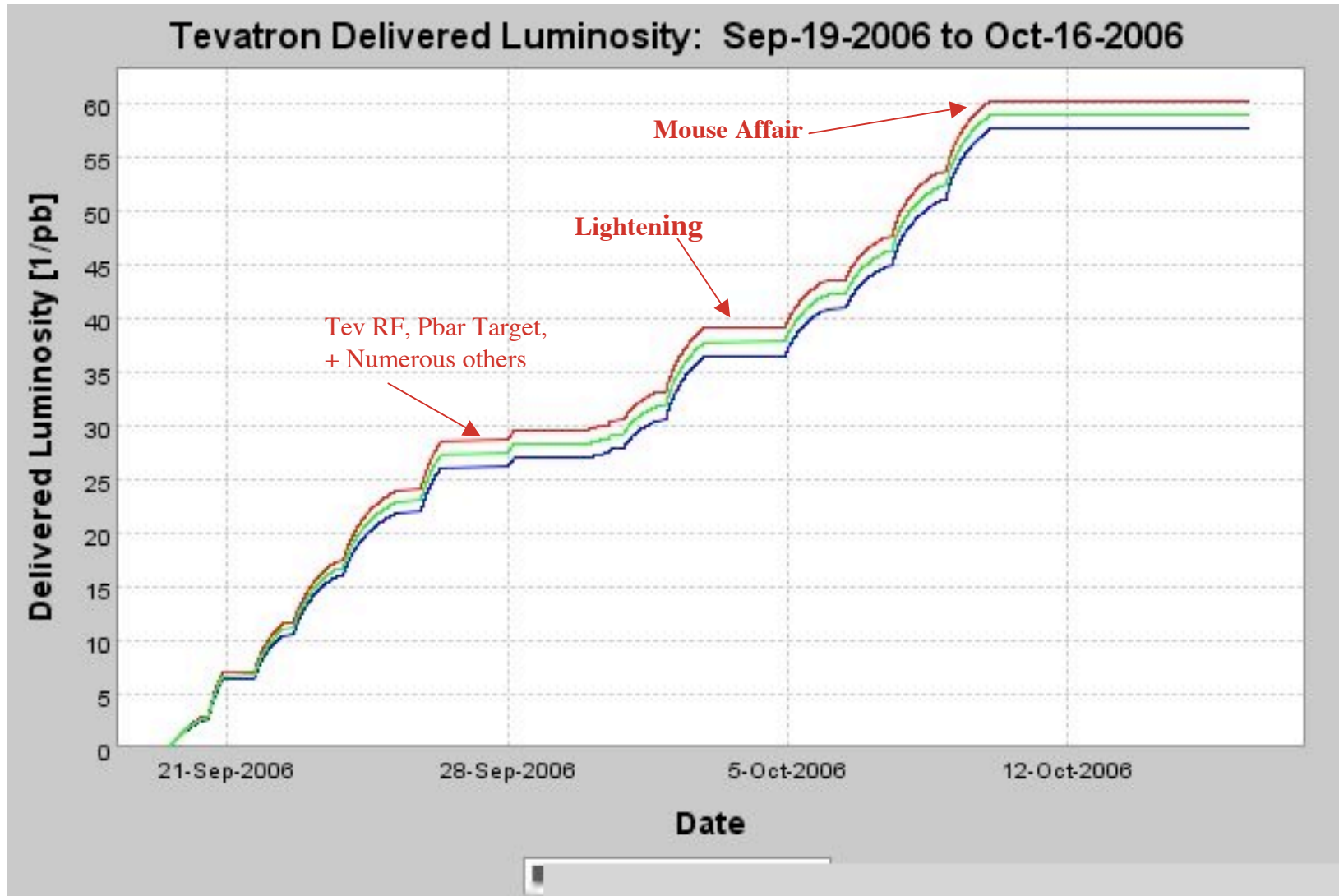


FY07 Luminosity





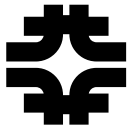
Monthly Integrated Luminosity



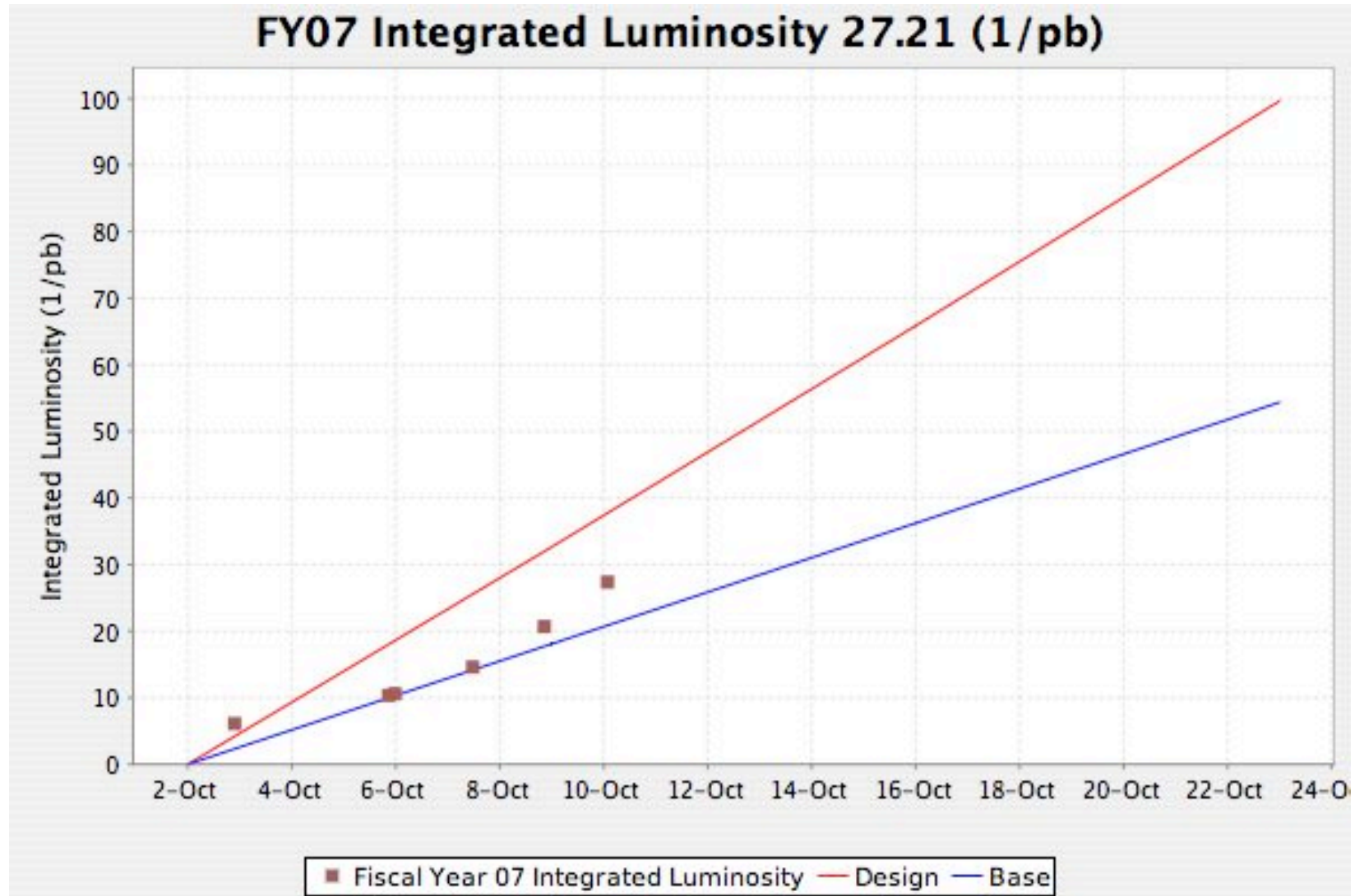


Downtime Synopsis

- Store 4975 was lost at 08:30 when TRF1 tripped off due to cavity water flow.
- F17 kicker would not come on due to low fluorinert level.
- The Tevatron turn on was delayed due to problems with D0Q2. Stacking was also held off until later in the day after the target rotation was repaired. Stacking began at 14:27.
- Shot set up did finally begin on the evening shift after a set of Tevatron IPM studies were completed. Store 4975 was colliding by 19:56 with an initial luminosity of $186.8E30$.
- The horizontal sextupole power supply in Main Injector tripped off at 01:18 and again at 03:16. Experts were called in to inspect the supply after it failed to turn on following the second trip.
- Store 4975 was lost at 08:30 when TRF1 tripped off due to cavity water flow. The loss of the store prompted a 12 hour period of maintenance that was originally scheduled for later in the week.
- There were problems with the TEL while loading protons, and the Tev ended up quenching while beam was ramping for the store.
- The Tevatron was recovering from the quench caused by the DQ0 reversing switch.
- An HEP shot followed the first pbar transfer and store 4990 was colliding by 12:30 with an AIL = $85 E30$. The store lasted just short of two hours when it was lost due to a quench at F4
- Store 4996 collided until 22:08 when it was aborted during a lightning storm due to a D0 SVX indication.
- The complex was down for controlled access into the Booster, MI, Tevatron, and Antiproton Source. Numerous shutdown jobs were completed, but the accesses were driven by failures related to the previous night's lightning storms.

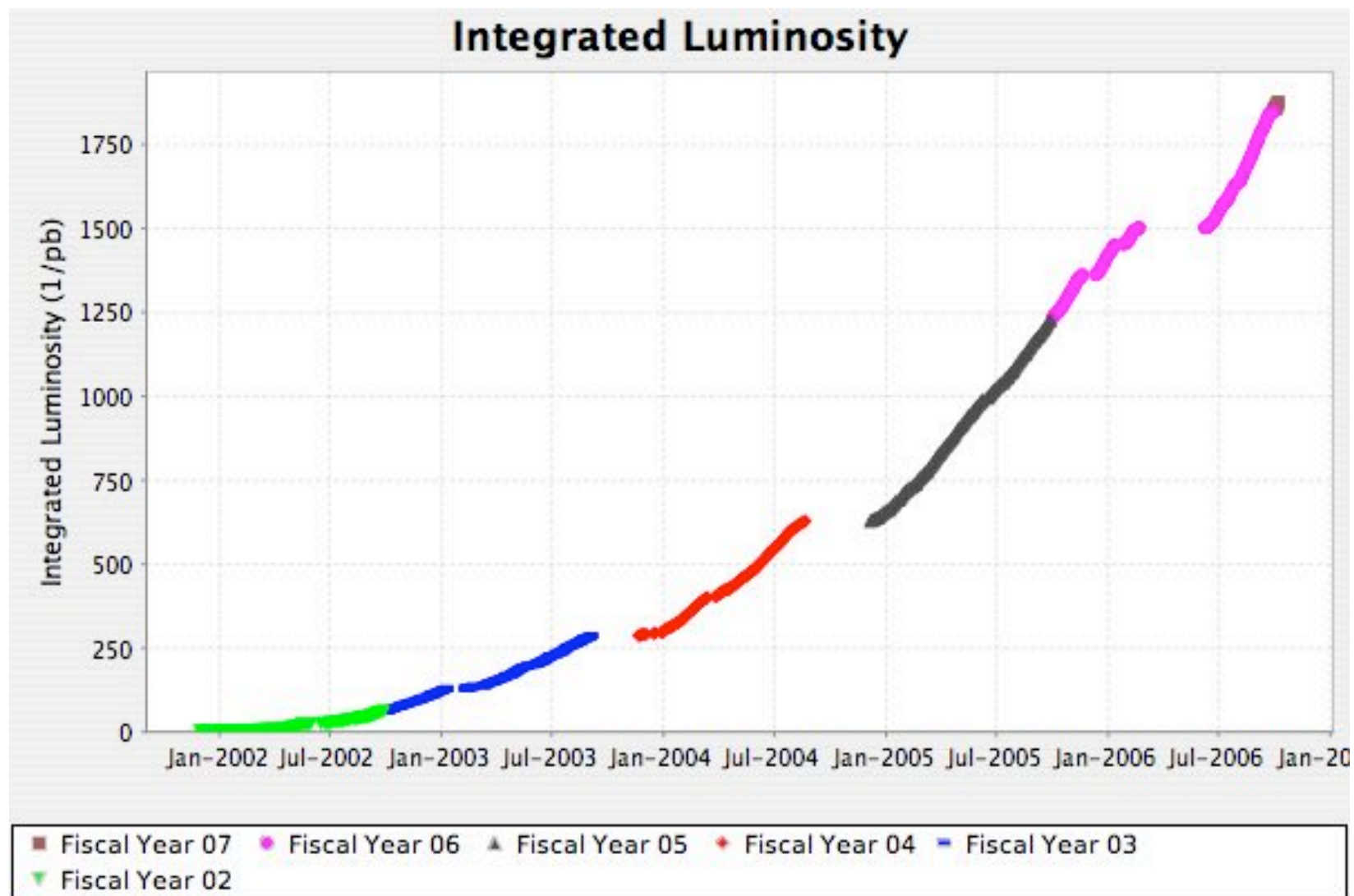


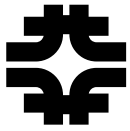
Yearly To Date



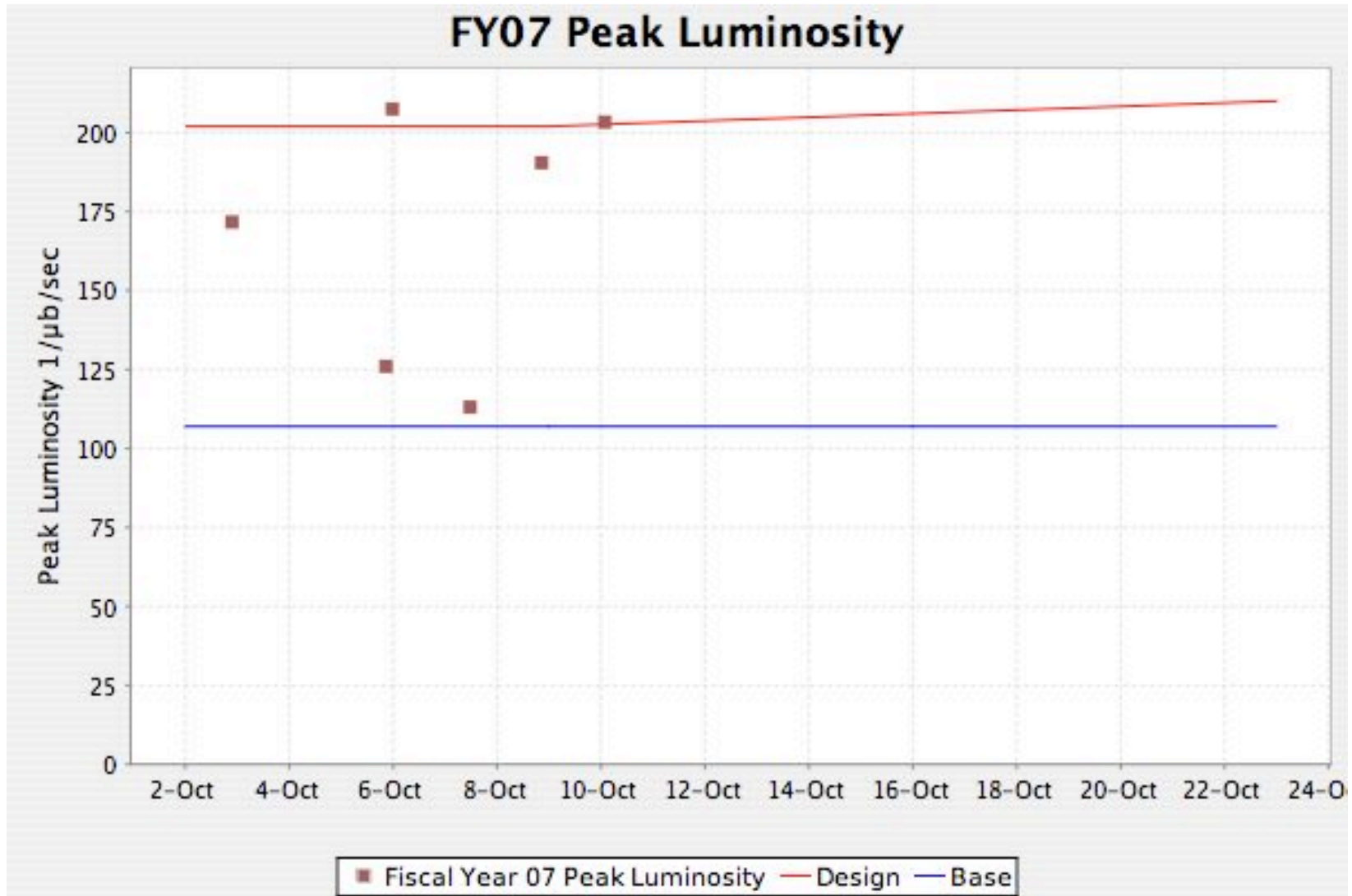


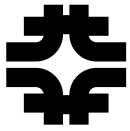
Total Integrated Luminosity for Run II



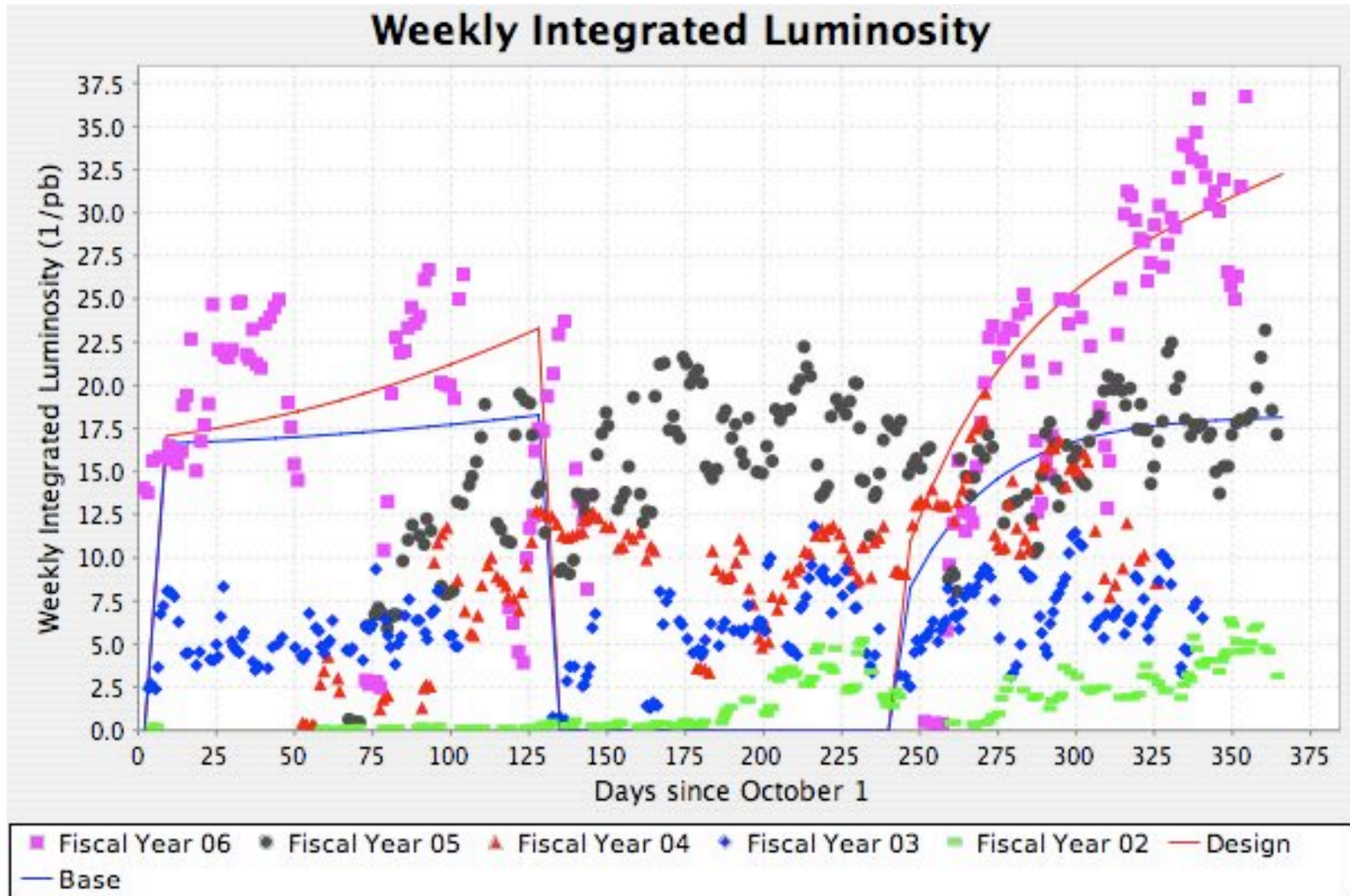


Peak Luminosity





Weekly Luminosities (X5)





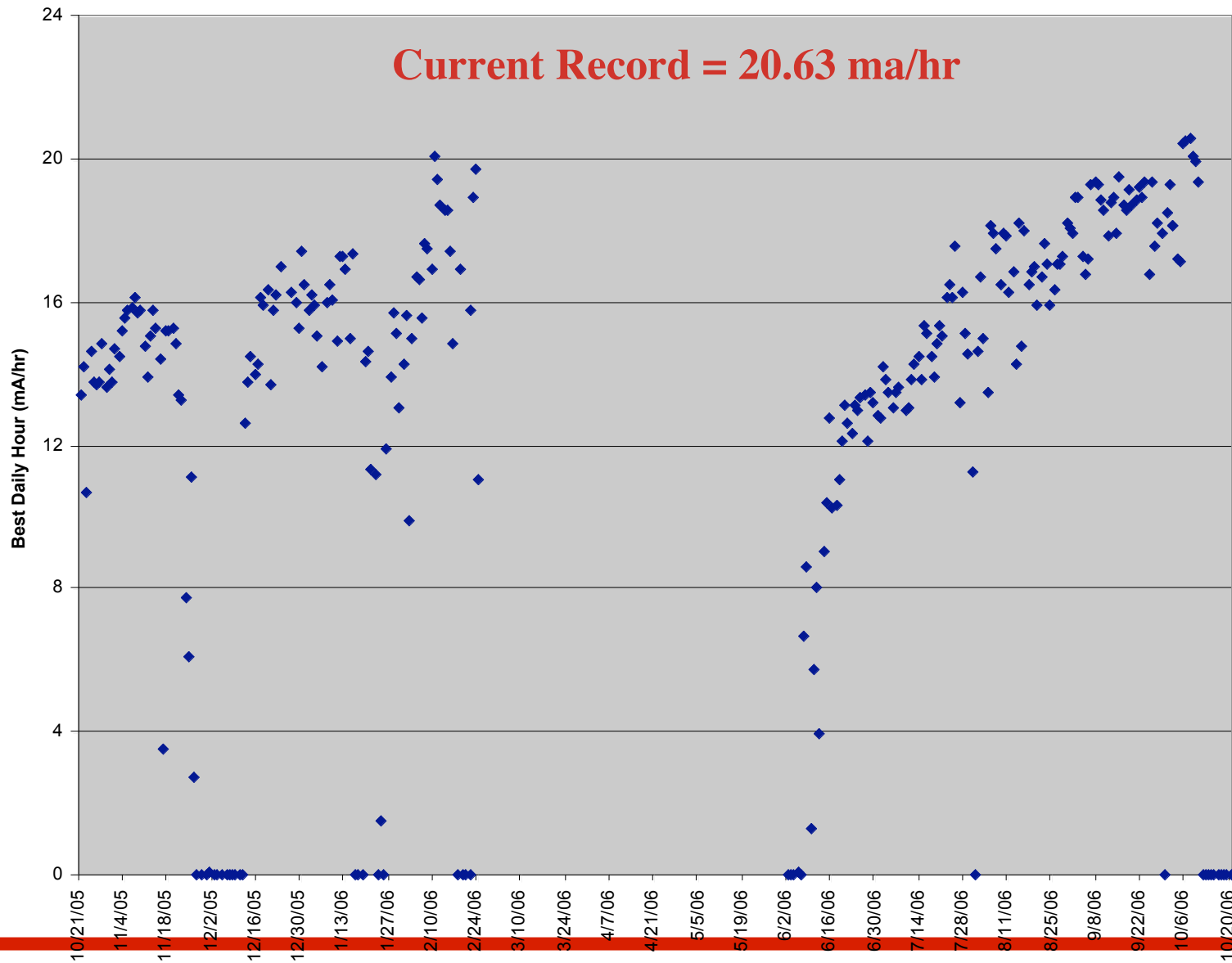
Store Log to Show Records

1	5003	10/5/06	0.33	Abort	209.13	1933.99
2	5008	10/8/06	27	LowBetaQuench	206.95	1950.75
3	5007	10/7/06	30.16	Normal	192.58	1944.03
4	4975	9/25/06	12.5	Abort	186.81	1919.02
5	4996	10/1/06	23.17	Abort	171.97	1929.51
6	4970	9/22/06	25.9	Normal	167.92	1907.82
7	4972	9/23/06	33.74	Normal	163.29	1914.47
8	4967	9/21/06	17.17	Abort	154.76	1902.13
9	5002	10/4/06	22.64	Normal	127.04	1933.76
10	5006	10/6/06	25.16	Normal	114.2	1938.04
11	4981	9/27/06	3.83	TevQuench	90.59	1920
12	4990	9/30/06	1.84	TevQuench	85.12	1920.9
13	4994	9/30/06	20.87	Normal	81.28	1923.54
14	4989	9/29/06	11.26	Normal	16.98	1920.44

7 out of 14 “Normal” Terminations



Best Hour of Stacking Each Day



PAC October, 2006 - R. Dixon



Activities During Present Downtime

- Replaced Accumulator Quad (A:6Q14)
- Fixed Water Leak in HV101
- Replaced D32-5, D33-1, and D35 spool (broken corrector-- not damaged in Mouse Incident)



The Chain of Events

- HEP store 5008 happily spinning
 - Record # pbars injected into Tev, record # pbars reach HEP start
- Mouse seeks Feeder 46B cubicle as possible new, cozy home
 - Flashover + resulting nasty power glitch affects many systems
 - Many UPS units switched over
- Tevatron ramp begins to dump on A2 power supply trip
 - Beams aborted cleanly
- 1.2 sec into ramp dump, D3 QPM reboots (Quench Protection Monitor)
 - Why? Glitch not filtered out by UPS? UPS tested fine later...
 - As designed, QPM fired heaters, generating whole-house quench
- ≈4 sec into ramp dump, ground fault developed in D3
 - D32-5 dipole failed

The Culprit



D32-5 dipole
beam tube

*Holes from
arcing?*



HV101 Magnet Showing Magnetic Shielding





Summary

- Performance-- not so good
- Stacking-- still trying to get on improvement curve